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1.323 json-iterator-go 1.1.11

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1.324 ps 0.0.0-20150810152359-62de8c46ede0

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1.337 github.com/moby/locker 1.0.1

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1.357 chokidar 3.5.3

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1.368 xxhash 0.8.1-1
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1.371 fonts-dejavu 2.37-2build1
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1.612 markupsafe 2.0.1-2build1

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1.614 gzip 1.10-4ubuntu4.1

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1.616 theckman-yacspin 0.13.12

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1.622 yargs 16.2.0

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1.623 jetty-continuation 9.4.49.v20220914

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1.624 github.com/prometheus/common/assets 0.2.0

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1.625 nodemon 2.0.20

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1.626 libyaml 0.2.2-1build2

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1.627 minimist 1.2.7

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1.628 coreutils 9.1-1

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1.631 libtasn 4.19.0-2

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1.638 python-babel-localedata 2.8.0+dfsg.1-7

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1.640 docker-credential-helpers 0.7.0
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1.641 go-errors-errors 1.4.2
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1.642 hashstructure 1.1.0
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1.643 hashicorp-serf 0.10.1
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1.644 d-bus 1.12.20-2ubuntu4.1
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1.645 gofuzz 1.2.0
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1.647 githubcomgoopenapierrors 0.20.3
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1.648 fluent-logger-golang 1.10.0
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1.649 cristalhq-jwt 4.0.2
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1.650 loupe 2.3.6
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1.651 serf 1.3.9-10ubuntu2
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1.654 libffi 3.4.4-1
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1.656 pcre2 10.39-3ubuntu0.1
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1.674 cloud-utils 0.32-22-g45fe84a5-0ubuntu1

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1.675 ansi-styles 6.2.1

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1.677 go-autorest-tracing v0.6.0

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1.678 prometheus-client-model 0.2.0
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1.679 bridgeutils 1.6-2ubuntu1
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1.680 javassist 3.29.2-GA
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1.681 deep-eql 4.1.3
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1.682 jetty-util-ajax 9.4.49.v20220914
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1.684 libmd 1.0.4-2
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1.688 libgcrypt 1.10.1-3
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1.689 go.uber.org/atomi 1.9.0
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1.697 httpcomponents-core 4.4.16

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1.698 libffi-dev 3.4.2-4

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1.704 sed 4.9-1

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1.715 go-isatty 0.0.17

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1.765 go-humanize 1.0.1

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1.766 go-openapi-validate 0.22.1

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1.771 libwww-robotrules-perl 6.02-1

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1.787 go-patricia 2.3.1

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1.789 jackson-annotations 2.14.2

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1.804 patch 2.7.6-r10

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1.816 @pkgjs/parseargs 0.11.0

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1.817 @isaacs/cliui 8.0.2

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1.818 readline 8.1.2-1

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1.819 github.com/go-gorp/gorp/v3 3.1.0

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1.820 go-playground-universal-translator 0.18.1

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1.856 hashicorp-golang-lru 0.6.0

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1.857 opencensus-proto 0.4.1

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1.858 go.etcd.io/etcd/client/v3 3.5.4

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1.864 github.com/x448/float16 0.8.4

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1.865 go-flags 1.5.0

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1.1059 github.com/pbnjay/memory 0.0.0-20210728143218-7b4eea64cf58

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1.1221 github.com/pires/go-proxyproto 0.7.0

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1.1774 go-ieproxy 0.0.12

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1.1776 github.com/expr-lang/expr 1.16.9

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1.2005 alpine-keys 2.5-r0

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1.2006 libpsl5t64 0.21.2-1.1build1

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1.2014 pyparsing 3.1.1-1

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1.2019 libimobiledevice 1.3.0-8.1build3

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1.2314.1 Available under license
1.2315 @npmcli/fs 4.0.0
1.2315.1 Available under license
1.2316 npm-bundled 4.0.0
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1.2943 github.com/pierrec/lz4/v4 4.1.22

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1.3058 @ungap/promise-all-settled 1.1.2

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1.3126 github.com/containerd/errdefs 1.0.0

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1.3394 github.com/open-telemetry/opentelemetry-collector-contrib/pkg/pdatautil 0.116.0

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1.3675 mathutil 1.7.1

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1.3676 cel.dev/expr 0.19.2

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1.3677 genproto-googleapis-rpc 0.0.0-20250218202821-56aae31c358a

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1.3678 github.com/envoyproxy/go-control-plane/envoy 1.32.4

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1.3679 genproto-googleapis-api 0.0.0-20250218202821-56aae31c358a

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1.3684 google-cloud-go-monitoring 1.24.0

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1.3688 x-oauth2 0.27.0

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1.3693 smallstep-pkcs7 0.1.1

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1.3694 github.com/tchap/go-patricia/v2 2.3.2

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1.3695 github.com/containers/ocicrypt 1.2.1

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1.3697 ebpf 0.17.3

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1.3888 github.com/cenkalti/backoff/v5 5.0.2

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1.3916 cloud.google.com/go/monitoring 1.24.0

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1.3925 golang-jwt 5.2.2

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1.4195 v1-gonum 0.16.0

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1.4197 invopop-jsonschema 0.13.0

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1.4198 modernc.org/libc 1.61.13

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1.4206 github.com/prometheus/sigv4 0.1.2

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1.4245 @npmcli/redact 3.2.2

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1.4246 stdlib go1.24.3

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1.4247 github.com/shirou/gopsutil/v4 4.25.2

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1.4248 snappy 0.0.4

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1.4270 github.com/cyberphone/json-canonicalization 0.0.0-20241213102144-19d51d7fe467

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1.4271 github.com/zeebo/errs 1.4.0

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1.4272 kernel.org/pub/linux/libs/security/libcap/psx 1.2.73

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1.4309 github.com/gophercloud/gophercloud/v2 2.7.0

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1.4430 github.com/containerd/containerd/api 1.9.0

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1.4436 github.com/rubenv/sql-migrate 1.8.0

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1.5022 sqlite 3.37.2-2ubuntu0.5

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1.5023 go.opentelemetry.io/collector/processor 1.34.0

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1.5024 go.opentelemetry.io/collector/featuregate 1.34.0

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1.5025 go.opentelemetry.io/collector/internal/telemetry 0.128.0

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1.5027 go.opentelemetry.io/collector/consumer 1.34.0

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1.5028 go.opentelemetry.io/collector/confmap/xconfmap 0.128.0

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1.5030 go.opentelemetry.io/contrib/bridges/otelzap 0.11.0

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1.5055 github.com/google/uuid 1.6.0

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1.5110 github.com/dgryski/go-metro 0.0.0-20250106013310-edb8663e5e33

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1.5130 lightstep-tracer-go 0.26.0

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1.5189 github.com/stackitcloud/stackit-sdk-go/core 0.17.2

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1.5257 afflib 3.7.20-1.1ubuntu5

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1.5264 icoutils 0.32.3-4build2

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1.5265 github.com/operator-framework/operator-registry 1.56.0

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1.5269 github.com/operator-framework/operator-manifest-tools 0.10.0

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1.5270 operator-framework-operator-sdk 1.41.1

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1.5271 yara 4.5.0-1build2

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1.5272 rng-tools 5-4.1

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1.5273 guestfs-tools 1.52.0-2ubuntu5

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1.5274 github.com/cert-manager/cert-manager 1.18.2

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1.5275 hwloc 2.10.0-1build1

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1.5276 github.com/sigstore/fulcio 1.7.1

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1.5278 github.com/vbauerster/mpb/v8 8.10.2

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1.5293 cloud-utils 0.32-22-g45fe84a5-0ubuntu1

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1.5418 github.com/cert-manager/cmctl/v2 0.0.0-20250711115830-29b59b934c5a

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1.3 taglibs-standard-spec 1.2.5

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1.7 libyaml 0.1.7

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1.8 hk2-utils 2.5.0

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1.11 hk2-api 2.5.0

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1.20 net-tools 2.10

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1.21 mchange-commons-java 0.2.15

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1.22 java-semver 0.9.0

1.23 lua 5.2.4

1.24 bean-validation-api 2.0.1.Final

1.24.1 Available under license :

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1.25 disruptor 3.4.2

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* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/InsufficientCapacityException.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/Cursored.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/dsl/ProducerType.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/SequenceGroups.java
*
 /disruptor-3-4-2-sources-jar/com/lmax/disruptor/DataProvider.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/FixedSequenceGroup.java
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* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/EventReleaser.java
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* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/AggregateEventHandler.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/EventFactory.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/SequenceReportingEventHandler.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/SleepingWaitStrategy.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/ExceptionHandler.java
*
 /disruptor-3-4-2-sources-jar/com/lmax/disruptor/EventProcessor.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/SequenceBarrier.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/BusySpinWaitStrategy.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/EventTranslatorTwoArg.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/IgnoreExceptionHandler.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/NoOpEventProcessor.java
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* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/dsl/ExceptionHandlerSetting.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/WorkerPool.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/util/DaemonThreadFactory.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/LiteBlockingWaitStrategy.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/dsl/EventProcessorInfo.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/PhasedBackoffWaitStrategy.java
*
 /disruptor-3-4-2-sources-jar/com/lmax/disruptor/SingleProducerSequencer.java
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* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/WorkHandler.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/RingBuffer.java

* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/EventTranslatorThreeArg.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/WaitStrategy.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/MultiProducerSequencer.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/LifecycleAware.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/dsl/EventHandlerGroup.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/AlertException.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/SequenceGroup.java
*
/disruptor-3-4-2-sources-jar/com/lmax/disruptor/EventTranslatorVararg.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/YieldingWaitStrategy.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/dsl/ConsumerRepository.java
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* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/EventTranslator.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/EventTranslatorOneArg.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/WorkProcessor.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/dsl/Disruptor.java
* /disruptor-3-4-2-sources-jar/com/lmax/disruptor/FatalExceptionHandler.java

1.26 libsmi 0.4.8

1.26.1 Available under license :

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---

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---

tools/shhopt.c, tools/shhopt.h:

Title: shhopt - library for parsing command line options.
Version: 1.1.2
Entered-date: 23MAR97
Description: C-functions for parsing command line options, both
traditional one-character options, and GNU'ish
--long-options.
Keywords: programming, library, lib, commandline, options
Author: s.h.huseby@usit.uio.no (Sverre H. Huseby)
Primary-site: http://www.ifi.uio.no/~sverrehu/pub-unix/
Alternate-site: sunsite.unc.edu /pub/Linux/libs
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Platforms: Requires ANSI C-compiler.
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1.27 jsonpath-rw 1.4.0

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1.28 esprima 4.0.1

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Other developers who have contributed code are:

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1.30 commons-beanutils 1.9.4

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1.38 opencensus 0.24.0

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1.39 x-sys 0.34.0

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1.42 c3p0 0.9.5.4

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1.43 thrift 0.13.0

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1.44 hashicorp-serf 0.8.5

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1.47 x-kit 0.0.0

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1.49 msgp 1.3.0

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1.50 rtmpdump 2.4+20151223.gitfa8646d.1-2+b2

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1.54 commons-lang3 3.11

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1.56 fs-minipass 2.1.0

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1.58 jackson-datatype-joda 2.10.5

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1.60 jackson-datatype-guava 2.10.5

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1.61 protobuf 1.3.2

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1.62 golang-snappy 1.0.0

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   * <p>
   * The authorizer attempts to perform matching (including the use of the wildcard) in accordance with RFC 6125.
   * </p>
   * <p>
   * Known suffixes is a list of public domain suffixes that can't be used as wild cards for
   * example *.com, or c*c.com, as a dns wildcard could match every/most .com domains if a registrar were issue it.
   * If *.com is in the known suffixes list will not be allowed to match.
   * </p>
   *
   * @param knownSuffixes a set of suffixes that cannot be wild-carded, e.g. { ".com", ".net", ".org" }
   */
```

Found in path(s):
* /bcpkix-fips-1-0-3-sources-1-jar/org/bouncycastle/est/jcajce/JsseDefaultHostnameAuthorizer.java

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1.81 jboss-logging 3.4.1.Final

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1.82 winston-transport 4.4.0

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1.83 triple-beam 1.3.0

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1.88 go-spew 1.1.1

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1.89 go-hostpool 0.0.0-20160125115350-e80d13ce29ed

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1.90 ulid 1.3.1

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1.101 hashicorp-serf 0.8.5

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1.104 glob 0.2.3

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1.105 errors 0.9.1

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1.108 expect 5.45.4-2build1

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1.110 go-sockaddr 1.0.2

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1.112 asm 5.0.3

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*/
/**
   * Constructs a new {@link LocalVariableAnnotationNode}. <i>Subclasses must
   * not use this constructor</i>. Instead, they must use the
   * {@link #LocalVariableAnnotationNode(int, TypePath, LabelNode[], LabelNode[], int[], String)}
   * version.
   *

   * @param typeRef
   *          a reference to the annotated type. See {@link TypeReference}.
   * @param typePath
   *          the path to the annotated type argument, wildcard bound, array
   *          element type, or static inner type within 'typeRef'. May be
```

```
   *          <tt>null</tt> if the annotation targets 'typeRef' as a whole.
   * @param start
   *          the fist instructions corresponding to the continuous ranges
   *          that make the scope of this local variable (inclusive).
   * @param end
   *          the last instructions corresponding to the continuous ranges
   *          that make the scope of this local variable (exclusive). This
   *          array must have the same size as the 'start' array.
   * @param index
   *          the local variable's index in each range. This array must have
   *          the same size as the 'start' array.
   * @param desc
   *          the class descriptor of
 the annotation class.
   */
```

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*/
/**
 * Creates a new {@link AnalyzerAdapter}. Subclasses must not use this
 * constructor. Instead, they must use the
 * {@link #AnalyzerAdapter(int, String, int, String, String, MethodVisitor)}
 * version.
 *
 * @param owner
 *
   the owner's class name.
 * @param access
 *   the method's access flags (see {@link Opcodes}).
 * @param name
 *   the method's name.
 * @param desc
 *   the method's descriptor (see {@link Type Type}).
 * @param mv
 *   the method visitor to which this adapter delegates calls. May
 *   be <tt>null</tt>.
 * @throws IllegalStateException
 *   If a subclass calls this constructor.
 */

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/**
   * Constructs a new {@link Textifier}. <i>Subclasses must not use this

```
    * constructor</i>. Instead, they must use the {@link #Textifier(int)}
    * version.
    *
    * @throws IllegalStateException
    *         If a subclass calls this constructor.
     */
```

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* /asm-5-0-3-sources-4-jar/org/objectweb/asm/optimizer/ClassOptimizer.java
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*
 /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/LabelNode.java
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* /asm-5-0-3-sources-4-jar/org/objectweb/asm/commons/RemappingMethodAdapter.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/ByteVector.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/util/CheckClassAdapter.java
*

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* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/analysis/Subroutine.java
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* /asm-5-0-3-sources-4-jar/org/objectweb/asm/util/TraceMethodVisitor.java
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* /asm-5-0-3-sources-4-jar/org/objectweb/asm/Handler.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/analysis/SourceInterpreter.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/util/ASMifier.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/TypeAnnotationNode.java
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* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/FrameNode.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/MethodVisitor.java

* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/MultiANewArrayInsnNode.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/optimizer/AnnotationConstantsCollector.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/AnnotationVisitor.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/LocalVariableNode.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/FieldWriter.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/AnnotationWriter.java
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* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/analysis/BasicVerifier.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/InsnList.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/optimizer/MethodConstantsCollector.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/analysis/SourceValue.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/AbstractInsnNode.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/tree/IntInsnNode.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/commons/RemappingClassAdapter.java
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```
/**
    * Constructs a new {@link ClassNode}. <i>Subclasses must not use this
    * constructor</i>. Instead, they must use the {@link #ClassNode(int)}
    * version.
    *
    * @throws IllegalStateException
    *          If a subclass calls this constructor.
     */
```

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/**
    * Creates a new {@link GeneratorAdapter}. <i>Subclasses must not use this
    * constructor</i>. Instead, they must use the
    * {@link #GeneratorAdapter(int, MethodVisitor, int, String, String)}
    * version.
```

```
   *
   * @param mv
   *          the
 method visitor to which this adapter delegates calls.
   * @param access
   *          the method's access flags (see {@link Opcodes}).
   * @param name
   *          the method's name.
   * @param desc
   *          the method's descriptor (see {@link Type Type}).
   * @throws IllegalStateException
   *           If a subclass calls this constructor.
   */
```

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* /asm-5-0-3-sources-4-jar/org/objectweb/asm/optimizer/shrink-writer.properties
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/optimizer/shrink-resize.properties
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/optimizer/shrink-signatures.properties
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/optimizer/shrink-annotations.properties
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/optimizer/shrink-frames.properties
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* /asm-5-0-3-sources-4-jar/org/objectweb/asm/xml/SAXAdapter.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/xml/SAXCodeAdapter.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/xml/Processor.java
*
 /asm-5-0-3-sources-4-jar/org/objectweb/asm/xml/SAXClassAdapter.java
* /asm-5-0-3-sources-4-jar/org/objectweb/asm/xml/ASMContentHandler.java
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```
/**
   * Creates a new JSRInliner. <i>Subclasses must not use this
   * constructor</i>. Instead, they must use the
   * {@link #JSRInlinerAdapter(int, MethodVisitor, int, String, String, String, String[])}
   * version.
   *
   * @param mv
   *
  the <code>MethodVisitor</code> to send the resulting inlined
   *          method code to (use <code>null</code> for none).
   * @param access
   *          the method's access flags (see {@link Opcodes}). This
   *          parameter also indicates if the method is synthetic and/or
   *          deprecated.
   * @param name
   *          the method's name.
   * @param desc
   *          the method's descriptor (see {@link Type}).
   * @param signature
   *          the method's signature. May be <tt>null</tt>.
   * @param exceptions
   *          the internal names of the method's exception classes (see
   *          {@link Type#getInternalName() getInternalName}). May be
   *          <tt>null</tt>.
   * @throws IllegalStateException
   *           If a subclass calls this constructor.
   */
```

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* /asm-5-0-3-sources-4-jar/org/objectweb/asm/commons/JSRInlinerAdapter.java

1.113 robfig-cron 3.0.1

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1.114 libsmi 0.4.8+dfsg2-16

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---

tools/shhopt.c, tools/shhopt.h:

Title: shhopt - library for parsing command line options.
Version: 1.1.2
Entered-date: 23MAR97
Description: C-functions for parsing command line options, both
 traditional one-character options, and GNU'ish
 --long-options.
Keywords: programming, library, lib, commandline, options
Author: s.h.huseby@usit.uio.no (Sverre H. Huseby)
Primary-site: http://www.ifi.uio.no/~sverrehu/pub-unix/

Alternate-site: sunsite.unc.edu /pub/Linux/libs
shhopt-1.1.2.tar.gz
Platforms: Requires ANSI C-compiler.
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1.115 tre 0.8.0

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1.116 httpcomponents-core 4.4.13

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1.117 commons-lang3 2.6

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1.119 jakarta-annotation-api 1.3.4

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Source Code

The project maintains the following source code repositories:

* https://github.com/eclipse-ee4j/common-annotations-api

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1.120 javassist 3.22.0-CR2

1.120.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
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Found in path(s):
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/NoFieldException.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/InnerClassesAttribute.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/analysis/Subroutine.java
*
 /javassist-3-22-0-cr2-sources-4-jar/javassist/runtime/Cflow.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/AnnotationImpl.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/util/proxy/FactoryHelper.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/convert/Transformer.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/SyntheticAttribute.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/tools/reflect/Reflection.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/expr/Instanceof.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/util/proxy/SecurityActions.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/ByteStream.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/SyntaxError.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/tools/reflect/CannotReflectException.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/convert/TransformCall.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtNewWrappedMethod.java
*
 /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/ClassFilePrinter.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/AssignExpr.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtArray.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtPrimitiveType.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/NewExpr.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/DeprecatedAttribute.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/MemberResolver.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/MethodDecl.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/stackmap/Tracer.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/stackmap/BasicBlock.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/CodeAnalyzer.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/JvstCodeGen.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/StackMap.java
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 /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/LocalVariableAttribute.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/CodeGen.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/Declarator.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/util/proxy/ProxyObject.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/analysis/Util.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/EnclosingMethodAttribute.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/DoubleConst.java

* /javassist-3-22-0-cr2-sources-4-jar/javassist/tools/Dump.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/analysis/ControlFlow.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtMethod.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/LineNumberAttribute.java
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/javassist-3-22-0-cr2-sources-4-jar/javassist/scopedpool/ScopedClassPoolRepository.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/Stmnt.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/NoSuchClassError.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/stackmap/TypedBlock.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CodeConverter.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/convert/TransformNewClass.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/Visitor.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtMember.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/ByteArray.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/tools/framedump.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/expr/Cast.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/util/proxy/ProxyFactory.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/SignatureAttribute.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/ClassClassPath.java
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/javassist-3-22-0-cr2-sources-4-jar/javassist/expr/MethodCall.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/CannotCompileException.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/convert/TransformReadField.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/stackmap/TypeData.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtNewClass.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/tools/Callback.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/stackmap/TypeTag.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/runtime/Inner.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/tools/rmi/StubGenerator.java
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/javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/TypeChecker.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtClass.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/scopedpool/SoftValueHashMap.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtConstructor.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/AnnotationsWriter.java

* /javassist-3-22-0-cr2-sources-4-jar/javassist/tools/rmi/Sample.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/AttributeInfo.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/FieldInfo.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/BadBytecode.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/Expr.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtNewWrappedConstructor.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/ByteArrayClassPath.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtBehavior.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/ExceptionTable.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ProceedHandler.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/expr/NewArray.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/scopedpool/ScopedClassPoolFactoryImpl.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/SourceFileAttribute.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/convert/TransformAccessArrayField.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/tools/web/Viewer.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/tools/reflect/CannotCreateException.java

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* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/Parser.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/Loader.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/expr/Expr.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/ClassPoolTail.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtNewConstructor.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/CastExpr.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/Variable.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/CtNewMethod.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/ast/ASTree.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/Mnemonic.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/ClassMap.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/CompileError.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/tools/rmi/RemoteException.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/ConstantAttribute.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/compiler/AccessorMaker.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/util/proxy/SerializedProxy.java
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*/

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* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/ClassMemberValue.java
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/javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/Annotation.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/ShortMemberValue.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/DoubleMemberValue.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/EnumMemberValue.java
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* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/MemberValueVisitor.java
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/javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/CharMemberValue.java
* /javassist-3-22-0-cr2-sources-4-jar/javassist/bytecode/annotation/LongMemberValue.java

1.121 inf 0.9.1

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1.122 jakarta-annotation-api 1.3.5

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1.123 x-text 0.3.3

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1.124 jakarta-validation-api 2.0.2

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* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/CascadableDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintTarget.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/FutureOrPresent.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Null.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintValidatorContext.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ExecutableDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/groups/Default.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/MessageInterpolator.java
*
/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/package-info.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/valueextraction/Unwrapping.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/valueextraction/ValueExtractor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraintvalidation/ValidationTarget.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/MethodDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/package-info.java

* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/UnexpectedTypeException.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/BeanDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Digits.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/bootstrap/ProviderSpecificBootstrap.java
*
/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/valueextraction/UnwrapByDefault.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/NegativeOrZero.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintViolation.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintDefinitionException.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ValidateUnwrappedValue.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraintvalidation/SupportedValidationTarget.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/groups/package-info.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/spi/ValidationProvider.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ElementKind.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/GroupConversionDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/valueextraction/ExtractedValue.java
*
/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/bootstrap/GenericBootstrap.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/MethodType.java
* /jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/valueextraction/ValueExtractorDeclarationException.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ConstructorDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraintvalidation/package-info.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/AssertTrue.java
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* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/executable/package-info.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/valueextraction/package-info.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/PositiveOrZero.java
*
/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/valueextraction/ValueExtractorDefinitionException.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/BootstrapConfiguration.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ElementDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ContainerElementTypeDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/GroupDefinitionException.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Min.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/groups/ConvertGroup.java
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* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ReportAsSingleViolation.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ReturnValueDescriptor.java
*
/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ParameterNameProvider.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Pattern.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/NoProviderFoundException.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/Validation.java
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* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/NotBlank.java

* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/spi/package-info.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/Constraint.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/Valid.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/CrossParameterDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ClockProvider.java
*
/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/Configuration.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/executable/ValidateOnExecution.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Size.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/PastOrPresent.java
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* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/TraversableResolver.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/executable/ExecutableValidator.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ValidationProviderResolver.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ValidatorFactory.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ContainerDescriptor.java
*
/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ConstraintDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ParameterDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/NotNull.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/package-info.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/GroupSequence.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Negative.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintValidatorFactory.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ValidationException.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/OverridesAttribute.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/spi/BootstrapState.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Email.java
*
/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintDeclarationException.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/PropertyDescriptor.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintValidator.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/executable/ExecutableType.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/AssertFalse.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Future.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/DecimalMax.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Positive.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/NotEmpty.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/spi/ConfigurationState.java
* /jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/Payload.java
*
/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/DecimalMin.java
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* Source: https://github.com/mockito/mockito/releases/tag/v2.16.0

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1.130 jakarta-ws-rs-api 2.1.5

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1.136 txw2 2.3.0

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1.140 hk2-utils 2.6.1

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1.141 hk2-api 2.6.1

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1.142 resourcelocator 1.0.3

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1.143 jakarta-inject 2.6.1

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* /logstash-logback-encoder-6-6-sources-jar/net/logstash/logback/mask/PathBasedFieldMasker.java
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1.154 inf v0.9.1

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1.155 source-map 2.1.3+incompatible

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1.156 ms 2.1.3

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1.157 mxj 1.8.4

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1.158 tablewriter 0.0.5

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1.160 go-yaml v2.2.4

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1.162 ghodss-yaml v1.0.0

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1.163 tacacs-plus 2.6

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1.164 is-plain-obj 2.1.0

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1.165 chownr 2.0.0

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1.167 env-paths 2.2.1

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1.168 ansi-colors 4.1.1

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1.170 vault-sdk v0.1.14-0.20200519221838-e0cfd64bc267

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```
// Features is a bitmask of feature flags
type Features uint

const FeatureNone Features = 0

func (f Features) HasFeature(flag Features) bool {
 return false
}
```

otp
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mgo - MongoDB driver for Go

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BSON library for Go

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```
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 <p.levelLeft>
  <h1 class="title is-3">License</h1>
 </p.levelLeft>
</PageHeader>
<MessageError @model={{model}} />
{{#if isTemporary}}
 <section class="box is-sideless is-fullwidth">
  <AlertBanner
   @type="warning"
   @message="Your temporary license expires in {{date-from-now expirationTime}} and your vault will seal.
Please enter a valid license below."
   @class="license-warning"
   data-test-cluster-status
```

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    data-test-warning-text
  />
  <span class="title is-5" data-test-temp-license>Temporary license</span>
  <form {{action "saveModel" text on="submit"}}>
    <div class="box is-shadowless is-fullwidth is-marginless">
      <div class="field">
        <label for="license-id" class="is-label">License</label>
        <div class="control">
          {{input id="license-id" value=text autocomplete="off" class="input" data-test-text-input="data-test-text-
input"}}
        </div>
      </div>
    </div>
    <div class="field">
      <div class="control">
        <button type="submit" class="button is-primary" data-test-save-button>Save</button>
      </div>
    </div>
  </form>
 </section>
{{else}}
 <section class="box is-sideless is-fullwidth">
  <span class="title is-5">Details</span>
  {{#if showForm}}
    <form {{action "saveModel" text on="submit"}}>
      <div class="field">
        <label for="license-id" class="is-label">License</label>
        <div class="control">
          {{input id="license-id" value=text autocomplete="off" class="input" data-test-text-input="data-test-text-
input"}}
        </div>
      </div>
      <div class="field is-grouped">
        <div class="control">
          <button type="submit" class="button is-primary" data-test-save-button>Save</button>
        </div>
        <div class="control">
          <button type="button" {{action "toggleForm"}} class="button" data-test-cancel-button>Cancel</button>
        </div>

  </div>
    </form>
  {{else}}
    <div class="field box is-fullwidth is-shadowless is-paddingless is-marginless">
      {{info-table-row label="License ID" value=licenseId}}
      {{#info-table-row label="Valid from" value=startTime}}
        {{date-format model.startTime 'MMM DD, YYYY hh:mm:ss A'}} to {{date-format expirationTime 'MMM
DD, YYYY hh:mm:ss A'}}
```

```
      {{/info-table-row}}
    </div>
    <div class="field box is-fullwidth is-shadowless is-paddingless is-marginless">
      <div class="control">
        <button type="button" {{action "toggleForm"}} class="button" data-test-enter-button>Enter new
license</button>
      </div>
    </div>
  {{/if}}
  </section>
 {{/if}}
<section class="box is-sideless is-marginless is-shadowless is-fullwidth">
 <span class="title is-5">Features</span>
 <div class="field box is-fullwidth is-shadowless is-paddingless is-marginless">
  {{#each featuresInfo as |info|}}
    {{#info-table-row label=info.name value=(if
 info.active "Active" "Not Active") data-test-feature-row="data-test-feature-row"}}
      {{#if info.active}}
      <Icon
        @glyph="check-circle-outline"
        @size="l"
        class="icon-true"
        aria-hidden="true"
      /><span data-test-feature-status>Active {{#if info.count}}&mdash;
       {{info.count}} standby nodes allotted{{/if}}</span>
      {{else}}
        <Icon
          @glyph="cancel-circle-outline"
          @size="l"
          class="icon-false"
          aria-hidden="true"
        /><span data-test-feature-status>Not Active</span>
      {{/if}}
    {{/info-table-row}}
  {{/each}}
 </div>
</section>
```

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<LicenseInfo
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@expirationTime={{model.expirationTime}}
@licenseId={{model.licenseId}}
@features={{model.features}}

@text={{model.text}}
@saveModel={{action "saveModel"}}
@model={{model}}
/>

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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```
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package github

import (
 "context"
 "fmt"
)

// LicensesService handles communication with the license related
// methods of the GitHub API.
//
// GitHub API docs: https://developer.github.com/v3/licenses/
type LicensesService service

// RepositoryLicense represents the license for a repository.
type RepositoryLicense struct {
 Name *string `json:"name,omitempty"`
 Path *string `json:"path,omitempty"`
```

```
 SHA         *string  `json:"sha,omitempty"`
 Size        *int     `json:"size,omitempty"`
 URL         *string  `json:"url,omitempty"`
 HTMLURL     *string  `json:"html_url,omitempty"`
 GitURL      *string  `json:"git_url,omitempty"`
 DownloadURL *string  `json:"download_url,omitempty"`
 Type        *string  `json:"type,omitempty"`
 Content     *string  `json:"content,omitempty"`
 Encoding    *string  `json:"encoding,omitempty"`
 License
     *License `json:"license,omitempty"`
}

func (l RepositoryLicense) String() string {
 return Stringify(l)
}

// License represents an open source license.
type License struct {
 Key  *string `json:"key,omitempty"`
 Name *string `json:"name,omitempty"`
 URL  *string `json:"url,omitempty"`

 SPDXID         *string   `json:"spdx_id,omitempty"`
 HTMLURL        *string   `json:"html_url,omitempty"`
 Featured       *bool     `json:"featured,omitempty"`
 Description    *string   `json:"description,omitempty"`
 Implementation *string   `json:"implementation,omitempty"`
 Permissions    *[]string `json:"permissions,omitempty"`
 Conditions     *[]string `json:"conditions,omitempty"`
 Limitations    *[]string `json:"limitations,omitempty"`
 Body           *string   `json:"body,omitempty"`
}

func (l License) String() string {
 return Stringify(l)
}

// List popular open source licenses.
//
// GitHub API docs: https://developer.github.com/v3/licenses/#list-all-licenses
func (s
 *LicensesService) List(ctx context.Context) ([]*License, *Response, error) {
 req, err := s.client.NewRequest("GET", "licenses", nil)
 if err != nil {
  return nil, nil, err
 }
```

```
 var licenses []*License
 resp, err := s.client.Do(ctx, req, &licenses)
 if err != nil {
  return nil, resp, err
 }

 return licenses, resp, nil
}

// Get extended metadata for one license.
//
// GitHub API docs: https://developer.github.com/v3/licenses/#get-an-individual-license
func (s *LicensesService) Get(ctx context.Context, licenseName string) (*License, *Response, error) {
 u := fmt.Sprintf("licenses/%s", licenseName)

 req, err := s.client.NewRequest("GET", u, nil)
 if err != nil {
  return nil, nil, err
 }

 license := new(License)
 resp, err := s.client.Do(ctx, req, license)
 if err != nil {
  return nil, resp, err
 }

 return license, resp, nil
}
```

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---
layout: "api"
page_title: "/sys/license - HTTP API"

sidebar_title: "<code>/sys/license</code>"
sidebar_current: "api-http-system-license"
description: |-
 The `/sys/license` endpoint is used to view and update the license used in
 Vault.

`/sys/license`

~> **Enterprise Only** These endpoints require Vault Enterprise.

The `/sys/license` endpoint is used to view and update the license used in
Vault.

Read License

This endpoint returns information about the currently installed license.

Method	Path
`GET`	`/sys/license`

Sample Request

```
$ curl \
  --header "X-Vault-Token: ..." \
  http://127.0.0.1:8200/v1/sys/license
```

Sample Response

```json
{
 "data": {
  "expiration_time": "2017-11-14T16:34:36.546753-05:00",
  "features": [
    "UI",
    "HSM",
    "Performance Replication",
    "DR Replication"
  ],
  "license_id": "temporary",
   "start_time": "2017-11-14T16:04:36.546753-05:00"
 },
 "warnings": [
  "time left on license is 29m33s"
 ]
```

}
```

## Install License

This endpoint is used to install a license into Vault.

| Method | Path |
| :---------- | :---------- |
| `PUT` | `/sys/license` |

### Parameters

- `text` `(string: <required>)` The text of the license.

*DR Secondary Specific Parameters*

 - `dr_operation_token` `(string: <required>)` - DR operation token used to authorize this request.

### Sample Payload

```json
{
 "text": "01ABCDEFG..."
}
```

Sample Request

```
$ curl \
   --header "X-Vault-Token: ..." \
   --request PUT \
   --data @payload.json \
   http://127.0.0.1:8200/v1/sys/license
```

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1.171 zstd 1.3.6

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1.193 golang-genproto v0.0.0-20200526211855-cb27e3aa2013

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1.194 jersey-container-servlet 2.33

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1.198 jackson-datatype-jdk8 2.10.5

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```
Manifest-Version: 1.0
Bnd-LastModified: 1595301005506
Build-Jdk: 1.8.0_162
Built-By: tatu
Bundle-Description: Add-on module for Jackson (http://jackson.codehaus
.org) to supportJDK 8 data types.
Bundle-DocURL: https://github.com/FasterXML/jackson-modules-java8/jack
son-datatype-jdk8
Bundle-License: http://www.apache.org/licenses/LICENSE-2.0.txt
Bundle-ManifestVersion: 2
Bundle-Name: Jackson datatype: jdk8
Bundle-SymbolicName: com.fasterxml.jackson.datatype.jackson-datatype-j
dk8
Bundle-Vendor: FasterXML
Bundle-Version: 2.10.5
Created-By: Apache Maven Bundle Plugin
Export-Package: com.fasterxml.jackson.datatype.jdk8;version="2.10.5";u
ses:="com.fasterxml.jackson.core,com.fasterxml.jackson.core.io,com.fa
sterxml.jackson.databind,com.fasterxml.jackson.databind.deser,com.fas
terxml.jackson.databind.deser.std,com.fasterxml.jackson.databind.json
FormatVisitors,com.fasterxml.jackson.databind.jsontype,com.fasterxml.
 jackson.databind.ser,com.fasterxml.jackson.databind.ser.impl,com.fast
erxml.jackson.databind.ser.std,com.fasterxml.jackson.databind.type,co
m.fasterxml.jackson.databind.util"
Implementation-Build-Date: 2020-07-21 03:09:44+0000
Implementation-Title: Jackson datatype: jdk8
Implementation-Vendor: FasterXML
Implementation-Vendor-Id: com.fasterxml.jackson.datatype
Implementation-Version: 2.10.5
Import-Package: com.fasterxml.jackson.core;version="[2.10,3)",com.fast
erxml.jackson.core.io;version="[2.10,3)",com.fasterxml.jackson.core.u
til;version="[2.10,3)",com.fasterxml.jackson.databind;version="[2.10,
```

3)",com.fasterxml.jackson.databind.deser;version="[2.10,3)",com.faste
rxml.jackson.databind.deser.std;version="[2.10,3)",com.fasterxml.jack
son.databind.jsonFormatVisitors;version="[2.10,3)",com.fasterxml.jack
son.databind.jsontype;version="[2.10,3)",com.fasterxml.jackson.databi
nd.ser;version="[2.10,3)",com.fasterxml.jackson.databind.ser.impl;ver
sion="[2.10,3)",com.fasterxml.jackson.databind.ser.std;version="[2.10
,3)",com.fasterxml.jackson.databind.type;version="[2.10,3)",com.faste
rxml.jackson.databind.util;version="[2.10,3)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Specification-Title: Jackson datatype: jdk8
Specification-Vendor: FasterXML
Specification-Version: 2.10.5
Tool: Bnd-4.2.0.201903051501
X-Compile-Source-JDK: 1.8
X-Compile-Target-JDK: 1.8

Found in path(s):
* /jackson-datatype-jdk8-2-10-5-5-jar/META-INF/MANIFEST.MF

1.199 opentracing-go-stdlib 1.1.0

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1.200 msgpack 3.3.0

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1.201 diff 5.0.0

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1.202 commons-compress 1.21

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1.204 python3-certifi 2020.6.20-1

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1.205 erlang-otp 22.3.4.17

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 */
```

[zlib]

```
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 the 'zlib' general purpose compression library
 version 1.2.3, July 18th, 2005

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```

Jean-loup
Gailly Mark Adler
jloup@gzip.org madler@alumni.caltech.edu

The data format used by the zlib library is described by RFCs (Request for
Comments) 1950 to 1952 in the files http://www.ietf.org/rfc/rfc1950.txt
(zlib format), rfc1951.txt (deflate format) and rfc1952.txt (gzip format).
*/

[dialyzer]

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[edoc, syntax_tools]

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1.206 ghodss-yaml v1.0.0

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1.207 go-grpc-prometheus v1.2.0

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1.208 x-crypto v0.0.0-20210817164053-32db794688a5

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1.214 command-exists 1.2.8

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1.216 python-chardet 4.0.0-1

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1.234 fullsailor-pkcs7 0.0.0-20190404230743-d7302db945fa

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1.237 jaeger-lib 2.4.1+incompatible

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1.238 geo 0.0.0-20190916061304-5b978397cfec

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1.242 gojsondiff 1.0.0

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1.243 com 1.0.1

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1.244 h2non-go-is-svg 0.0.0-20160927212452-35e8c4b0612c

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1.245 go-testing-interface 1.14.1

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1.246 ncabatoff-go-seq 0.0.0-20180805175032-b08ef85ed833

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1.247 prometheus-common 0.1.0

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1.248 go-hclog 0.16.2

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1.249 go-redis-redis 6.15.9+incompatible

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1.250 hashstructure 2.0.2

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1.266 virtuald-go-ordered-json 0.0.0-20170621173500-b18e6e673d74

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1.267 fluent-bit-go 0.0.0-20190925192703-ea13c021720c

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1.268 cyberdelia-go-metrics-graphite 0.0.0-20161219230853-39f87cc3b432

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1.269 x-sys 0.0.0-20200413165638-669c56c373c4

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1.270 go-sniff 0.0.0-20200207005214-cf7e4d167732

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1.271 golang 1.12.17

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#     Individual's name <submission email address> <email2> <emailN>
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1.273 md5-simd 1.1.2

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1.279 go-shellwords 1.0.12

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1.281 scrub 2.6.1-1build2

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c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable

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an offer, in accord with Subsection b above.)

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Appendix: How to Apply These Terms to Your New Programs

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free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest

to attach them to the start of each source file to most effectively
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The hypothetical commands `show w' and
`show c' should show the appropriate
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`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

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Version 2.1, February 1999

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"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

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This option is useful when you wish to copy part of the code of

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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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e) Verify that the user has already received a copy of these

materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally
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1.283 jigit 1.22-3build1

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object

file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate
properly with a modified version of the library, if
the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at

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1.284 more-itertools 8.12.0

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1.288 rimraf 2.6.2

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1.289 liberror-perl 0.17029-1

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1.290 coredns-caddy 1.1.1

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1.301 argparse 1.0.10

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1.302 chalk 4.1.2

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1.304 core-util-is 1.0.3

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1.305 jackson 2.15.0

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It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has
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1.306 python-setuptools 59.6.0

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1.307 go-capability 0.0.0-20200815063812-42c35b437635

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1.308 locales 0.12.1

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1.309 coreos-go-systemd 0.0.0-20190719114852-fd7a80b32e1f

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1.311 universal-translator 0.0.0-20170327191703-71201497bace

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1.312 sigs-k8s-io-yaml 1.2.0

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1.313 hashicorp-golang-lru 0.5.4

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1.317 mux 1.7.4

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1.324 ps 0.0.0-20150810152359-62de8c46ede0

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1.336 go-flowrate 0.0.0-20140419014527-cca7078d478f

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1.337 github.com/moby/locker 1.0.1

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1.338 sigs.k8s.io/json 0.0.0-20211020170558-c049b76a60c6

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1.339 log4j-api 2.17.1

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1.340 log4j-to-slf4j 2.17.1

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1.342 github.com/eapache/channels 1.1.0

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1.343 go-playground-universal-translator 0.0.0-20170327191703-71201497bace

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1.344 github.com/makenowjust/heredoc 1.0.0

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1.346 urllib3 1.26.8

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1.347 go-grpc-prometheus 1.2.1-0.20191002090509-6af20e3a5340

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1.348 tcl-expect 5.45.4-2build1

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1.349 github.com/mitchellh/hashstructure/v2 2.0.2

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1.350 mwitkow-go-conntrack 0.0.0-20190716064945-2f068394615f

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1.351 google-apis 1.4.1

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1.352 go-context 0.0.0-20150711004518-d14ea06fba99

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1.353 vividcortex/ewma 1.2.0

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1.354 json-iterator-go 1.1.7

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1.355 go-metrics 0.0.1

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1.356 github.com/acarl005/stripansi 0.0.0-20180116102854-5a71ef0e047d

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1.357 chokidar 3.5.3

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1.358 pault.ag/go/sniff 0.0.0-20200207005214-cf7e4d167732

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1.359 github.com/mitchellh/go-ps 1.0.0

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1.360 gopkg.in/go-playground/pool.v3 3.1.1

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1.361 logging-interceptor 3.12.12

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1.362 stateless4j 2.5.0

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1.363 gofuzz 1.2.0

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1.364 github.com/themihai/gomemcache 0.0.0-20180902122335-24332e2d58ab

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1.366 mccabe 0.7.0

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1.367 sensible-utils 0.0.17

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1.368 xxhash 0.8.1-1

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JSR-166 Extension - JEP 266

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1.372 smistrip 0.4.8+dfsg2-16

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---

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---

tools/shhopt.c, tools/shhopt.h:

Title: shhopt - library for parsing command line options.
Version: 1.1.2
Entered-date: 23MAR97
Description: C-functions for parsing command line options, both
traditional one-character options, and GNU'ish
--long-options.
Keywords: programming, library, lib, commandline, options
Author: s.h.huseby@usit.uio.no (Sverre H. Huseby)
Primary-site: http://www.ifi.uio.no/~sverrehu/pub-unix/
Alternate-site: sunsite.unc.edu /pub/Linux/libs
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1.373 keyutils 1.5.8

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is invoked, then you must make a good faith effort to ensure that,
in the event an application does not supply such function or
table, the facility still operates, and performs whatever part of
its purpose remains meaningful.

(For example, a function in a library to compute square roots has
a purpose that is entirely well-defined independent of the
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1.374 error_prone_annotations 2.11.0

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* /error-prone-annotations-2-11-0-jar/META-INF/maven/com.google.errorprone/error_prone_annotations/pom.xml

1.375 workerpool 6.2.0

1.375.1 Available under license :

```
/**
* workerpool.js
* https://github.com/josdejong/workerpool
*
* Offload tasks to a pool of workers on node.js and in the browser.
*
* @version 6.2.0
* @date    2022-01-15
*
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1.376 minimatch 3.1.2

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1.377 go-strcase 1.2.0

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1.378 jackson-jaxrs-base 2.9.9

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1.380 jackson-xc 2.9.8

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1.381 slf4j 1.7.36

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1.382 jul-to-slf4j 1.7.36

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* /jul-to-slf4j-1-7-36-sources-jar/org/slf4j/bridge/SLF4JBridgeHandler.java

1.383 spf13-pflag 1.0.1

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1.384 log4j-over-slf4j 1.7.36

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* /log4j-over-slf4j-1-7-36-jar/META-INF/maven/org.slf4j/log4j-over-slf4j/pom.xml

1.385 container-storage-interface-spec 1.5.0

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1.386 go-jmespath 0.4.0

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1.387 xstrings 1.3.2

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1.388 masterminds-goutils 1.1.1

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1.391 easyjson 0.7.7

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1.399 zap 1.21.0

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1.402 github.com/godbus/dbus/v5 5.0.4

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1.403 mocha 9.2.2

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1.404 shibumi-go-pathspec 1.3.0

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1.413 mmap-go 1.1.0

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1.414 prometheus-client 1.12.1

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1.416 groupcache 0.0.0-20210331224755-41bb18bfe9da

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1.417 glob 0.2.3

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1.418 golang-protobuf-extensions 1.0.2-0.20181231171920-c182affec369

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1.421 goexpect 0.0.0-20210430020637-ab937bf7fd6f

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1.422 go-colorable 0.1.8

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1.423 color 1.10.0

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1.424 lumberjack 2.0.0

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1.425 cmux 0.1.5

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      -- 6 Aug 2006
  DESCRIPTION
        "Initial version of MIB module ACCEDIAN-SMI."

  ::= { enterprises 22420 }

--
-- Accedian MIB tree structure
--

acdProducts OBJECT-IDENTITY
  STATUS  current
  DESCRIPTION
        "The root of Accedian's Product OIDs."
  ::= { accedianMIB 1 }

acdMibs OBJECT-IDENTITY
  STATUS  current
  DESCRIPTION
        "The root of Accedian's MIB objects."
  ::= { accedianMIB 2 }

acdTraps OBJECT-IDENTITY
  STATUS  current
  DESCRIPTION
        "The root of Accedian's Trap OIDs."
  ::= { accedianMIB 3 }

  id OBJECT IDENTIFIER ::= {acdTraps 1}

  objectId OBJECT-TYPE
     SYNTAX OCTET STRING (SIZE (0..255))
     MAX-ACCESS  read-write
     STATUS current
     DESCRIPTION
        "The Monitored Object Id in Skylight Analytics"
     ::= {acdTraps 2}

  skylightObjectName OBJECT-TYPE
     SYNTAX OCTET STRING (SIZE (0..255))
     MAX-ACCESS  read-write
     STATUS current
      DESCRIPTION
        "The Monitored Object Name in Skylight Analytics"
     ::= {acdTraps 3}

  objectType OBJECT-TYPE
     SYNTAX OCTET STRING (SIZE (0..255))
```

```
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "The Monitored Object Type in Skylight Analytics"
    ::= {acdTraps 4}

direction OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "Direction of measurement"
    ::= {acdTraps 5}

policy OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "The ID of AlertPolicy hat was used to trigger this Alert"
    ::= {acdTraps 6}

metric OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "The assoicated metric"
    ::= {acdTraps 7}

 alertType OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "The alert type"
    ::= {acdTraps 8}

source OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "The entity that detected the alert"
    ::= {acdTraps 9}

processedTime OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
```

```
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "The time when this alert was processed"
    ::= {acdTraps 10}

startTime OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "The time when this alert actually started"
    ::= {acdTraps 11}

timestamp OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current

  DESCRIPTION
        "The trap timestamp"
    ::= {acdTraps 12}

policyName OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "The name of the policy that was configured to raise the alert"
    ::= {acdTraps 13}

alertState OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "The current alert state"
    ::= {acdTraps 14}

thresholdValue OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "The configured  threshold value"
    ::= {acdTraps 15}
```

```
metaDataKey1 OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "Alert Metadata Key Name 1"
    ::= {acdTraps 16}

metaDataKey2 OBJECT-TYPE
     SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "Alert Metadata Key Name 2"
    ::= {acdTraps 17}

metaDataKey3 OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "Alert Metadata Key Name 3"
    ::= {acdTraps 18}

metaDataKey4 OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "Alert Metadata Key Name 4"
    ::= {acdTraps 19}

metaDataKey5 OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "Alert Metadata Key Name 5"
    ::= {acdTraps 20}

metaDataVal1 OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE (0..255))
    MAX-ACCESS  read-write
    STATUS current
    DESCRIPTION
        "Alert Metadata
Value 1"
    ::= {acdTraps 21}
```

```
  metaDataVal2 OBJECT-TYPE
     SYNTAX OCTET STRING (SIZE (0..255))
     MAX-ACCESS  read-write
     STATUS current
     DESCRIPTION
        "Alert Metadata Value 2"
     ::= {acdTraps 22}

  metaDataVal3 OBJECT-TYPE
     SYNTAX OCTET STRING (SIZE (0..255))
     MAX-ACCESS  read-write
     STATUS current
     DESCRIPTION
        "Alert Metadata Value 3"
     ::= {acdTraps 23}

  metaDataVal4 OBJECT-TYPE
     SYNTAX OCTET STRING (SIZE (0..255))
     MAX-ACCESS  read-write
     STATUS current
     DESCRIPTION
        "Alert Metadata Value 4"
     ::= {acdTraps 24}

  metaDataVal5 OBJECT-TYPE
     SYNTAX OCTET STRING (SIZE (0..255))
     MAX-ACCESS  read-write
     STATUS current
     DESCRIPTION
        "Alert Metadata Value 5"
     ::= {acdTraps 25}

acdTrapsConformance OBJECT IDENTIFIER ::= { acdTraps 500 }

acdTrapsCompliances  OBJECT IDENTIFIER ::= { acdTrapsConformance
 1 }
acdTrapsGroups       OBJECT IDENTIFIER ::= { acdTrapsConformance 2 }

acdTrapsNotifications OBJECT IDENTIFIER ::= { acdTraps 50 }

acdTrapSkylight NOTIFICATION-TYPE
  OBJECTS  {  objectId,
              skylightObjectName,
              objectType,
              direction,
              policy,
              metric,
```

```
            alertType,
            source,
            processedTime,
            startTime,
            timestamp,
            policyName,
            alertState,
            thresholdValue,
            metaDataKey1,
            metaDataKey2,
            metaDataKey3,
            metaDataKey4,
            metaDataKey5,
            metaDataVal1,
            metaDataVal2,
            metaDataVal3,
            metaDataVal4,
            metaDataVal5 }
  STATUS      current
  DESCRIPTION
     "The SNMP trap that is generated by Skylight Analytics
     when a policies threshold
 is crossed"

  ::= { acdTrapsNotifications 1 }


acdTrapsSkylightGroup OBJECT-GROUP
  OBJECTS {   objectId,
            skylightObjectName,
            objectType,
            direction,
            policy,
            metric,
            alertType,
            source,
            processedTime,
            startTime,
            timestamp,
            policyName,
            alertState,
            thresholdValue,
            metaDataKey1,
            metaDataKey2,
            metaDataKey3,
            metaDataKey4,
            metaDataKey5,
            metaDataVal1,
```

```
            metaDataVal2,
            metaDataVal3,
            metaDataVal4,
            metaDataVal5
  }
  STATUS      current
  DESCRIPTION
    "."
  ::= { acdTrapsGroups 1 }


acdTrapsSkylightNotificationsGroup NOTIFICATION-GROUP
  NOTIFICATIONS {
     acdTrapSkylight
  }
  STATUS      current
  DESCRIPTION
     "Objects for Skylight Notifications group."
  ::= { acdTraps 100 }

acdTrapsSkylightComplience MODULE-COMPLIANCE
  STATUS      current
  DESCRIPTION
    "The compliance statement for support of the skylight module."
  MODULE
     MANDATORY-GROUPS {
        acdTrapsSkylightGroup,
        acdTrapsSkylightNotificationsGroup
     }
  ::= { acdTrapsCompliances 1}

--  This is the top-level object identifier registry used by Accedian
--  products for SNMP modules containing experimental MIB definitions.
--  In this context, experimental MIBs are defined as:
--    1) IETF work-in-process MIBs which have not been assigned a permanent
--       object identifier by the IANA.
--    2) Accedian work-in-process MIBs that have not achieved final
--       production quality or field experience.
--   NOTE: Support for MIBs under the this OID subtree is temporary and
--         changes to objects may occur without notice."

acdExperiment  OBJECT IDENTIFIER ::=
 { accedianMIB 4 }

acdServices OBJECT-IDENTITY
  STATUS  current
  DESCRIPTION
        "The root of Accedian's Services OIDs."
```

::= { accedianMIB 5 }

END

Found in path(s):
* /adh-roadrunner-0-580-0-tar-gz/adh-roadrunner-0.580.0/mibs/ACCEDIAN-SMI.mib
No license file was found, but licenses were detected in source scan.

// Special handling for the Flex's semi-proprietary 'compressed' overloading

Found in path(s):
* /adh-roadrunner-0-580-0-tar-gz/adh-roadrunner-0.580.0/datasources/openMetricsParsing.go

1.428 runc v1.1.0

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1.433 cryptsetup 2.4.3

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1.434 semantic-version 2.10.0

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1.435 kubernetes-apimachinery 0.23.4

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1.436 go-redis-redis 8.11.5

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1.444 libsepol 3.3-1build1

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1.445 libffi 3.4.2-4

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Version 3, 29 June 2007

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1.448 init-system-helpers 1.62

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1.449 findutils 4.8.0-1ubuntu3

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the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.
^L
6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a)
Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will

operate properly with a modified version of the library, if
the user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least
three years, to give the same user the materials specified in
Subsection 6a, above, for a charge no more than the cost of
performing this distribution.

d) If distribution of the work is made by offering access to copy
from a designated place, offer equivalent access to copy the above
specified materials from the same place.

e) Verify that the user has already received a copy of these
materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the
Library" must include any data and utility programs needed for
reproducing the executable from it. However, as a special exception,
the materials to be distributed need not include anything that
is
normally distributed (in either source or binary form) with the major
components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
the executable.

It may happen that this requirement contradicts the license
restrictions of other proprietary libraries that do not normally
accompany the operating system. Such a contradiction means you cannot
use both them and the Library together in an executable that you
distribute.
^L
7. You may place library facilities that are a work based on the
Library side-by-side in a single library together with other library
facilities not covered by this License, and distribute such a combined
library, provided that the separate distribution of the work based on
the Library and of the other library facilities is otherwise
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a) Accompany the combined library with a copy of the same work
based on the Library, uncombined
with any other library
facilities. This must be distributed under the terms of the
Sections above.

b) Give prominent notice with the combined library of the fact
that part of it is a work based on the Library, and explaining
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^L

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Ty Coon, President of Vice

That's all there is to it!

1.453 pcre 8.39-13ubuntu0.22.04.1

1.453.1 Available under license :

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PCRE is a library of functions to support regular expressions whose syntax
and semantics are as close as possible to those of the Perl 5 language.

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The basic library functions are written in C and are freestanding. Also
included in the distribution is a set of C++ wrapper functions, and a
just-in-time compiler that can be used to optimize pattern matching. These
are both optional features that can be omitted when the library is built.

THE BASIC LIBRARY FUNCTIONS

Written by: Philip Hazel
Email local part: ph10
Email domain: cam.ac.uk

University of Cambridge Computing Service,
Cambridge, England.

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1.454 iconv 2.35

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When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a

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General Public License therefore permits such linking only if the
entire combination fits its criteria of freedom. The Lesser General
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are the reason we use the ordinary General Public License for many
libraries. However, the Lesser license provides advantages in certain
special circumstances.

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encourage the widest possible use of a certain library, so that it becomes
a de-facto standard. To achieve this, non-free programs must be
allowed to use the library. A more frequent case is that a free
library does the
same job as widely used non-free libraries. In this
case, there is little to gain by limiting the free library to free
software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free
programs enables a greater number of people to use a large body of
free software. For example, permission to use the GNU C Library in
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operating system, as well as its variant, the GNU/Linux operating
system.

Although the Lesser General Public License is Less protective of the
users' freedom, it does ensure that the user of a program that is
linked with the Library has the freedom and the wherewithal to run
that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and
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``work based on the library'' and a ``work that uses the library''. The
former
contains code derived from the library, whereas the latter must
be combined with the library in order to run.

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@item
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in the event an application does not supply such function or
table, the facility still operates, and performs whatever part of
its purpose remains meaningful.

(For example, a function in a library to compute square roots has
a purpose that is entirely well-defined independent of the
application. Therefore, Subsection 2d requires that any
application-supplied function or table used by this function must
be optional: if the application does not supply it, the square
root function must still compute square roots.)
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If distribution of object code is made by offering access to copy
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source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not
compelled to copy the source along with the object code.

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A program that contains no derivative of any portion of the
Library, but is designed to work with the Library by being compiled or
linked with it, is called a ``work that uses the Library''. Such a
work, in isolation, is not a derivative work of the Library, and
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However, linking a ``work that uses the Library'' with the Library
creates an executable that is a derivative of the Library (because
it
contains portions of the Library), rather than a ``work that uses the
library''. The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a ``work that uses the Library'' uses material from a header file
that is part of the Library, the object code for the work may be a
derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be
linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
file is unrestricted, regardless of whether it is legally a derivative
work. (Executables containing this object code plus portions of the
Library will still fall under Section 6.)

Otherwise,
if the work is a derivative of the Library, you may
distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

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of these things:

@enumerate a
@item
Accompany the work with the complete corresponding
machine-readable source code for the Library including whatever

changes were used in the work (which must be distributed under
Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable ``work that
uses the Library'', as object code and/or source code, so that the
user can modify the Library and then relink to produce a modified
executable containing the modified Library. (It is understood
that the user who changes the contents of definitions files in the
Library will not necessarily be able to recompile the application
to use the modified definitions.)

@item
Use a suitable shared library mechanism for linking with the Library. A
suitable mechanism is one that (1) uses at run time a copy of the
library already present on the user's computer system, rather than
copying library functions into the executable,
and (2) will operate
properly with a modified version of the library, if the user installs
one, as long as the modified version is interface-compatible with the
version that the work was made with.

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Accompany the work with a written offer, valid for at
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specified materials from the same place.

@item
Verify that the user has already received a copy of these
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is
normally distributed (in either source or binary form) with the major
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which the executable runs, unless that component itself accompanies the
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It may happen that this requirement contradicts the license
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Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.
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1.455 sysv-init 3.01-1ubuntu1

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1.457 libsepol2 3.3-1build1

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1.458 sed 4.8-1ubuntu2

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1.459 keyutils 1.6.1-2ubuntu3

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b) Use a suitable shared library mechanism for linking with the
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copy of the library already present on the user's computer system,
rather than copying library functions into the executable, and (2)
will operate properly with a modified version of the library,
if
the user installs one, as long as the modified version is
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c) Accompany the work with a written offer, valid for at
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1.460 lz4 1.9.3-2build2

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No license file was found, but licenses were detected in source scan.

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Found in path(s):
* /debianutils-5-5-orig-tar-xz/debianutils-5.5/po4a/fr/run-parts.8
No license file was found, but licenses were detected in source scan.

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Found in path(s):
* /debianutils-5-5-orig-tar-xz/debianutils-5.5/po4a/ja/run-parts.8
No license file was found, but licenses were detected in source scan.

der GNU GPL Version 2 (oder neuer).

Found in path(s):
* /debianutils-5-5-orig-tar-xz/debianutils-5.5/po4a/de/remove-shell.8
* /debianutils-5-5-orig-tar-xz/debianutils-5.5/po4a/de/which.1
* /debianutils-5-5-orig-tar-xz/debianutils-5.5/po4a/de/add-shell.8
* /debianutils-5-5-orig-tar-xz/debianutils-5.5/po4a/de/savelog.8
* /debianutils-5-5-orig-tar-xz/debianutils-5.5/po4a/de/installkernel.8

1.462 acl 2.3.1-1

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1.467 cdebconf 0.261ubuntu1

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1.476 brotli 1.0.9-2build6

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1.477 isl 0.24-2build1

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1.484 patch 2.7.6-7build2

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1.490 build-essential 12.9ubuntu3

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1.494 libassuan 2.5.5-1build1

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly
with a modified version of the library, if
the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

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1.499 gogo-protobuf 1.2.1

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1.500 ory-go-convenience 0.1.0

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1.501 seatgeek-logrus-gelf-formatter 0.0.0-20210414080842-5b05eb8ff761

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1.502 armon-go-metrics 0.3.3

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1.503 jetty-continuation 9.4.48.v20220622

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* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
 * javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

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module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications
are hosted at github and both modified and original are under GPL v2 with
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http://openjdk.java.net/legal/gplv2+ce.html

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org.ow2.asm:asm-commons
org.ow2.asm:asm

Apache

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org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

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org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

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1.504 go.starlark.net 0.0.0-20220328144851-d1966c6b9fcd

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1.505 aws-sdk-go-v2 1.16.2

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * Fingerprint
 //
 // * IssuerName
 //
 // * Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
```

```
 return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
 nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
```

```
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err
 = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack,
 options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil
 {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
```

```
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure
 the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional configuration
 // for workloads running with continuous connectivity. Choose a borrow
 // configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
```

```
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 //
 Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
```

```
err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return
err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This
 member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
```

```
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "DisassociateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {
```

```
 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if
 err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
```

```
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 //
 Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err
 != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
 // * Fingerprint
 //
 //
 * Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the
 license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "DeleteLicense",
 }
}
```

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package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out
 := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
```

```
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if
 err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
```

```
 return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  SigningName:   "grafana",
  OperationName: "AssociateLicense",
 }
}
```

1.506 gonum 0.11.0

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1.507 shared-mime-info 2.1-2

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1.513 libpsl 0.21.0-1.2build2

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1.514 libcbor0.8 0.8.0-2ubuntu1

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1.515 rtmpdump 2.4+20151223.gitfa8646d.1-2build4

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1.517 libicu70 70.1-2

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## Commands to generate dependency files
GEN_DEPS.c= $(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc= $(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
```

```
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE= -Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic

## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation
 rules
%.$(STATIC_O): $(srcdir)/%.c
 $(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
 $(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
 $(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
 $(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<


## Dependency rules
%.d: $(srcdir)/%.c
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.c) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

%.d: $(srcdir)/%.cpp
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.cc) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

## Versioned libraries rules

%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)
 $(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)
```

```
 $(RM) $@ && ln -s ${*F}.$(SO).$(SO_TARGET_VERSION) $@

##  Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

## End BSD-specific setup
```

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1.518 icu 70.1-2

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## Commands to generate dependency files
GEN_DEPS.c= $(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc= $(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE= -Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic
```

```
## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation
 rules
%.$(STATIC_O): $(srcdir)/%.c
 $(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
 $(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
 $(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
 $(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<


## Dependency rules
%.d: $(srcdir)/%.c
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.c) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

%.d: $(srcdir)/%.cpp
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.cc) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

## Versioned libraries rules

%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)
 $(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)
 $(RM) $@ && ln -s ${*F}.$(SO).$(SO_TARGET_VERSION) $@

##  Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
```

STATIC_PREFIX =

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localtime.go, localtime_test.go:

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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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1.524 opencore-amr 0.1.5-1

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1.525 libmnl 1.0.4-3build2

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1.529 publicsuffix-go 0.15.1-0.20210511084619-b1f36a2d6c0b

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1.530 github.com/go-kit/log 0.2.1

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1.531 libtirpc 1.3.2-2ubuntu0.1

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1.533 influxdata-tail 1.0.1-0.20210707231403-b283181d1fa7

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1.534 kubernetes-api 0.23.4

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1.546 pep517 0.12.0

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1.547 pwgen 2.08-2build1

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1.549 kmod 29-1ubuntu1

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1.552 tcp-wrappers 7.6.q-31build2

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1.555 github.com/chai2010/gettext-go 1.0.2

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1.556 popt 1.18-3build1

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1.563 jetty-util 9.4.48.v20220622

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Eclipse

The following artifacts are EPL.
* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.
https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
 * javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following
artifacts may be included in the distribution or downloaded when ALPN
module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications
are hosted at github and both modified and original are under GPL v2 with
classpath exceptions.
http://openjdk.java.net/legal/gplv2+ce.html

OW2

The following artifacts are licensed by the OW2 Foundation according to the
terms of http://asm.ow2.org/license.html

org.ow2.asm:asm-commons
org.ow2.asm:asm

Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

The following artifacts are ASL2 licensed. Based on selected classes from

following Apache Tomcat jars, all ASL2
licensed.

org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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From: Brian Kelk <Brian.Kelk@cl.cam.ac.uk>

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"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation
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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

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^L
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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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"work that uses the
library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data

structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute
the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.
^L
6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2)

will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
least three years, to give the same user the materials
specified in Subsection 6a, above, for a charge no more
than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy
from a designated place, offer equivalent access to copy the above
specified materials from the same place.

e) Verify that the user has already received a copy of these
materials or that you have already sent this user a copy.

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Library" must include any data and utility programs needed for
reproducing the executable from it. However, as a special exception,
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that is
normally distributed (in either source or binary form) with the major
components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
the executable.

It may happen that this requirement contradicts the license
restrictions of other proprietary libraries that do not normally
accompany the operating system. Such a contradiction means you cannot
use both them and the Library together in an executable that you
distribute.
^L
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Library side-by-side in a single library together with other library
facilities not covered by this License, and distribute such a combined
library, provided that the separate distribution of the work based on
the Library and of the other library facilities is otherwise
permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work
based on the Library, uncombined
with any other library
facilities. This must be distributed under the terms of the
Sections above.

b) Give prominent notice with the combined library of the fact
that part of it is a work based on the Library, and explaining
where to find the accompanying uncombined form of the same work.

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effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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Also add information on how to contact you by electronic and paper
mail.

You should also get your employer (if you work as a programmer) or
your
school, if any, to sign a "copyright disclaimer" for the library, if
necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the
library `Frob' (a library for tweaking knobs) written by James
Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!
This package was debianized by Jean Pierre LeJacq
<jplejacq@quoininc.com> on Wed, 25 Feb 1998. Martin Pitt
<martin@piware.de> was the package's maintainer up to version
2.7.19-1. The current maintainer is Jan Dittberner
<jandd@debian.org>.

It was downloaded from http://sourceforge.net/projects/cracklib

Copyright (c) 1993 Alec Muffett <alecm@crypto.dircon.co.uk>,
Copyright (c) 2005-2009 Nathan Neulinger <nneul@umr.edu>,
Copyright (c) 2008-2009 Jan Dittberner <jan@dittberner.info>

Modifications: Added cronjob, configuration file, and man pages.

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obtain it by writing to the Free Software Foundation, Inc., 51
Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

Copyright information:

CrackLib was originally licensed with a variant of the Artistic
license. In the interests of wider acceptance and more modern
licensing, it was switched with the original author's blessing to GPL
v2.

This approval was carried out in email discussions in 2005, and has
been reconfirmed as of 2007-10-01 with the following email from Alec
Muffett. Cracklib's license was changed from the GPL to the LGPL after
consensus of all previous developers in October 2008, effective with
release 2.8.15 released on 2009-11-19. See the email discussion below
for both license changes.

EFFECTIVE
OCT 2008, LICENSE IS BEING CHANGED TO LGPL-2.1 (though not reflected
in released code until Nov 2009 - slow release cycle...)

Discussion thread from mailing list archive, with approval from everyone actively
involved or holding original licensing rights included.

[Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:16

Attachments: Message as HTML
looks like 2.8.11 is out and marked as "GPL-2" ... releasing libraries unde=
r=20
GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
=2Dmike

Re: [Cracklib-devel] cracklib license
From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:18
I understand that, and you're welcome to bring it up with Alec directly
and see if he wants to relicense his code as LGPL... but at this point,
it was enough to just get it consistent and documented as to what it was
released under. This wasn't
actually a license change, just a
clarification of the licensing that was already in place.=20

-- Nathan
=20

Nathan Neulinger EMail: nneul@um...
University of Missouri - Rolla Phone: (573) 341-6679
UMR Information Technology Fax: (573) 341-4216

> -----Original Message-----
> From: cracklib-devel-bounces@li...
> [mailto:cracklib-devel-bounces@li...] On Behalf Of
> Mike Frysinger
> Sent: Monday, October 01, 2007 8:15 PM
> To: cracklib-devel@li...
> Subject: [Cracklib-devel] cracklib license
>=20
> looks like 2.8.11 is out and marked as "GPL-2" ... releasing
> libraries under
> GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
> -mike

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:33

Attachments: Message as HTML

On Monday 01 October 2007, Neulinger, Nathan wrote:
> I understand that, and you're welcome to bring it up with Alec directly
> and see if he wants to relicense his code as LGPL... but at this point,
> it was enough to just get it consistent and documented as to what it was
> released under. This wasn't actually a license change, just a
> clarification of the licensing that was already in place.

the original license (before moving to sourceforge -- aka, 2.7) was not=20
GPL-2 ... it was a modified artistic license ... i didnt notice the license=
=20
change until it was mentioned in the latest notes.

unlike the old license, GPL-2 prevents people from using cracklib unless th=

eir=20
applications are also GPL-2 which imo is just wrong. it isnt the place of =
a=20
library to dictact to application writes what license they should be using.=
=20
thus LGPL-2.1 enters to fill this void.
=2Dmike

Re: [Cracklib-devel] cracklib license
From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:46
Seems like the ideal thing here would be for you and the other distro
maintainers to get together with Alec in a conversation and come to a
decision as to what licensing scheme y'all want. I haven't really done
much other than cleaning up the packaging and patches and a small bit of
additional code, so whatever licensing y'all come up with is fine by me.

-- Nathan
=20

Nathan Neulinger EMail: nneul@um...
University of Missouri - Rolla Phone: (573) 341-6679
UMR Information Technology Fax: (573) 341-4216

> -----Original Message-----
> From: cracklib-devel-bounces@li...
> [mailto:cracklib-devel-bounces@li...] On Behalf Of
> Mike Frysinger
> Sent: Monday, October 01, 2007 8:33 PM
> To: Neulinger, Nathan
>
Cc: cracklib-devel@li...; Alec Muffett
> Subject: Re: [Cracklib-devel] cracklib license
>=20
> On Monday 01 October 2007, Neulinger, Nathan wrote:
> > I understand that, and you're welcome to bring it up with Alec
> directly
> > and see if he wants to relicense his code as LGPL... but at this
> point,
> > it was enough to just get it consistent and documented as to what
> it was
> > released under. This wasn't actually a license change, just a
> > clarification of the licensing that was already in place.
>=20
> the original license (before moving to sourceforge -- aka, 2.7) was
> not
> GPL-2 ... it was a modified artistic license ... i didnt notice the
> license

> change until it was mentioned in the latest notes.
>=20
> unlike the old license, GPL-2 prevents people from using cracklib
> unless their
> applications are also GPL-2 which imo is just wrong. it isnt
the
> place of a
> library to dictact to application writes what license they should
> be using.
> thus LGPL-2.1 enters to fill this void.
> -mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...> - 2007-10-02 08:57
> Seems like the ideal thing here would be for you and the other distro
> maintainers to get together with Alec in a conversation and come to a
> decision as to what licensing scheme y'all want. I haven't really done
> much other than cleaning up the packaging and patches and a small
> bit of
> additional code, so whatever licensing y'all come up with is fine
> by me.

I am sympathetic. Guys, what do you reckon?

What I am hearing so far is that LGPL makes sense, since it can be
linked with any code, not just GPL...

-a

Re: [Cracklib-devel] cracklib license
From: Devin Reade <gdr@gn...> - 2007-10-02 15:04
I would
like to see it under LGPL as well. I think it is in everyone's
best interests to have as secure systems as possible, and I think tainting
it via GPL will just make it less likely that the library gets used, and
will not usually cause companies/developers to GPL the dependent code
(where it is not already GPL).

I like GPL, I use it when I can, but I don't think that it's the correct
license in this situation.

Devin
--
If it's sinful, it's more fun.

Re: [Cracklib-devel] cracklib license
From: Nalin Dahyabhai <nalin@re...> - 2008-01-28 16:32
On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
> > Seems like the ideal thing here would be for you and the other distro
> > maintainers to get together with Alec in a conversation and come to a
> > decision as to what licensing scheme y'all want. I haven't really done
> > much other than cleaning up the packaging and patches
and a small
> > bit of
> > additional code, so whatever licensing y'all come up with is fine
> > by me.
>
> I am sympathetic. Guys, what do you reckon?
>
> What I am hearing so far is that LGPL makes sense, since it can be
> linked with any code, not just GPL...

My apologies for not chiming in in anything resembling a reasonable
timeframe.

I'd also suggest the LGPL, for the reason you noted above. Alternately,
GPLv2 with the option of using the library under a later version of the
GPL would permit applications which were released under version 3 of the
GPL to use the library, too, which would be sufficient for the packages
which are included in Fedora. FWIW, I'd personally lean toward LGPL.

In any case, I thank you both for working on sorting this out.

Cheers,

Nalin

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-05 21:27

Attachments: Message as HTML
On Monday 28 January 2008, Nalin Dahyabhai wrote:
> On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
> > > Seems like the ideal thing here would be for you and the other distro
> > > maintainers to get together with Alec in a conversation and come to a
> > > decision as to what licensing scheme y'all want. I haven't really done
> > > much other than cleaning up the packaging and patches and a small
> > > bit of
> > > additional code, so whatever licensing y'all come up with is fine
> > > by me.
> >
> > I am sympathetic. Guys, what do you reckon?

> >
> > What I am hearing so far is that LGPL makes sense, since it can be
> > linked with any code, not just GPL...
>
> My apologies for not chiming in in anything resembling a reasonable
> timeframe.
>
> I'd also suggest the LGPL, for the reason you noted above. Alternately,
> GPLv2 with the option of using the library under a later version of the
> GPL would permit applications which were released under version 3 of the
> GPL to use the library, too, which would be sufficient for the packages
> which are included in Fedora. FWIW, I'd personally lean toward LGPL.
>
> In any case, I thank you both for working on sorting this out.

looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
the change now ?
-mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...> - 2008-10-05 23:18
>> In any case, I thank you both for working on sorting this out.
>
> looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
> the change now ?

yes. go for it. thanks++

-a

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-25 22:34

Attachments: Message
as HTML
On Sunday 05 October 2008, Alec Muffett wrote:
> >> In any case, I thank you both for working on sorting this out.
> >
> > looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we
> > make the change now ?
>
> yes. go for it. thanks++

Nathan Neulinger is the only one who can actually make said change ...
-mike

BELOW IS ORIGINAL LICENSING DISCUSSION RE CHANGING TO GPL from Artistic.

CrackLib was originally licensed with a variant of the Artistic license. In the
interests of wider acceptance and more modern licensing, it was switched with
the original author's blessing to GPL v2.

This approval was carried out in email discussions in 2005, and has been reconfirmed
as of 2007-10-01 with the following email from Alec Muffett.

The below email references nneul@umr.edu address, as that is the address
that was used at the time. For any future emails regarding this, please
use
 nneul@neulinger.org.

From alecm@crypticide.com Mon Oct 1 12:26:03 2007
Received: from umr-exproto2.cc.umr.edu ([131.151.0.192]) by UMR-CMAIL1.umr.edu with Microsoft
SMTPSVC(6.0.3790.3959);
  Mon, 1 Oct 2007 12:26:03 -0500
Received: from scansrv2.srv.mst.edu ([131.151.1.114]) by umr-exproto2.cc.umr.edu with Microsoft
SMTPSVC(6.0.3790.3959);
  Mon, 1 Oct 2007 12:26:02 -0500
Received: (qmail 8022 invoked from network); 1 Oct 2007 16:59:55 -0000
Received: from smtp1.srv.mst.edu (131.151.1.43)
 by scanin-ipvs.cc.umr.edu with SMTP; 1 Oct 2007 16:59:55 -0000
Received: from spunkymail-mx8.g.dreamhost.com (mx1.spunky.mail.dreamhost.com [208.97.132.47])
 by smtp1.srv.mst.edu (8.13.1/8.13.1) with ESMTP id l91Gxtpr020623
 for <nneul@umr.edu>; Mon, 1 Oct 2007 11:59:55 -0500
Received: from rutherford.zen.co.uk (rutherford.zen.co.uk [212.23.3.142])
 by spunkymail-mx8.g.dreamhost.com (Postfix) with ESMTP id 2C7734D311
 for <nneul@neulinger.org>; Mon, 1 Oct
 2007 09:59:50 -0700 (PDT)
Received: from [82.68.43.14] (helo=[192.168.1.3])
 by rutherford.zen.co.uk with esmtp (Exim 4.50)
 id 1IcOcX-0004Qt-6L
 for nneul@neulinger.org; Mon, 01 Oct 2007 16:59:49 +0000
Mime-Version: 1.0 (Apple Message framework v752.2)
In-Reply-To: <1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>
References: <1190922867.3457.147.camel@localhost.localdomain>
<EC90713277D2BE41B7110CCD74E235CEF44F38@UMR-CMAIL1.umr.edu>
<1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>

Content-Type: text/plain; charset=US-ASCII; delsp=yes; format=flowed
Message-Id: <117A1264-F6DC-4E25-B0DD-56FBFEBE6E9F@crypticide.com>
Content-Transfer-Encoding: 7bit
From: Alec Muffett <alecm@crypticide.com>
Subject: Re: cracklib license
Date: Mon, 1 Oct 2007 17:59:46 +0100
To: Nathan Neulinger <nneul@neulinger.org>
X-Mailer: Apple Mail (2.752.2)
X-Originating-Rutherford-IP: [82.68.43.14]
Return-Path: alecm@crypticide.com
X-OriginalArrivalTime: 01 Oct 2007 17:26:03.0008 (UTC) FILETIME=[2420C000:01C80450]
Status:
 RO
Content-Length: 585
Lines: 21

>
> ---------- Forwarded message ----------
> From: Neulinger, Nathan <nneul@umr.edu>
> Date: Sep 27, 2007 2:58 PM
> Subject: RE: cracklib license
> To: alecm@crypto.dircon.co.uk
>
> Any chance you could write me a self-contained email stating clearly
> that the license is being changed to GPL, so I could include that
> email
> in the repository and clean up the repository/tarballs? I have all the
> original discussion, but something succinct and self contained
> would be
> ideal.

The license for my code in the Cracklib distribution is henceforth GPL.

Happy now? :-)

 -a

EFFECTIVE OCT 2008, LICENSE IS BEING CHANGED TO LGPL-2.1 (though not reflected in released code until Nov 2009 - slow release cycle...)

Discussion thread from mailing list archive, with approval from everyone actively involved or holding original licensing rights included.

[Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:16

Attachments: Message as HTML
looks like 2.8.11 is out and marked as "GPL-2" ... releasing libraries unde=
r=20
GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
=2Dmike

Re: [Cracklib-devel] cracklib license
From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:18
I understand that, and you're welcome to bring it up with Alec directly
and see if he wants to relicense his code as LGPL... but at this point,
it was enough to just get it consistent and documented as to what it was
released under. This wasn't actually a license change, just a
clarification of the licensing that was already in place.=20

-- Nathan
=20

Nathan Neulinger EMail: nneul@um...
University of Missouri - Rolla Phone: (573) 341-6679
UMR Information Technology Fax: (573) 341-4216

> -----Original Message-----
> From: cracklib-devel-bounces@li...
> [mailto:cracklib-devel-bounces@li...] On Behalf Of
> Mike Frysinger
> Sent: Monday, October 01, 2007 8:15 PM
> To: cracklib-devel@li...
> Subject: [Cracklib-devel] cracklib license
>=20
> looks like 2.8.11 is out and marked as "GPL-2" ... releasing
> libraries under
> GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
> -mike

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:33

Attachments: Message as HTML
On Monday 01 October 2007, Neulinger, Nathan
wrote:
> I understand that, and you're welcome to bring it up with Alec directly
> and see if he wants to relicense his code as LGPL... but at this point,
> it was enough to just get it consistent and documented as to what it was
> released under. This wasn't actually a license change, just a
> clarification of the licensing that was already in place.

the original license (before moving to sourceforge -- aka, 2.7) was not=20
GPL-2 ... it was a modified artistic license ... i didnt notice the license=
=20
change until it was mentioned in the latest notes.

unlike the old license, GPL-2 prevents people from using cracklib unless th=
eir=20
applications are also GPL-2 which imo is just wrong. it isnt the place of =
a=20
library to dictact to application writes what license they should be using.=
=20
thus LGPL-2.1 enters to fill this void.
=2Dmike

Re: [Cracklib-devel]
cracklib license
From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:46
Seems like the ideal thing here would be for you and the other distro
maintainers to get together with Alec in a conversation and come to a
decision as to what licensing scheme y'all want. I haven't really done
much other than cleaning up the packaging and patches and a small bit of
additional code, so whatever licensing y'all come up with is fine by me.

-- Nathan
=20

Nathan Neulinger EMail: nneul@um...
University of Missouri - Rolla Phone: (573) 341-6679
UMR Information Technology Fax: (573) 341-4216

> -----Original Message-----
> From: cracklib-devel-bounces@li...
> [mailto:cracklib-devel-bounces@li...] On Behalf Of
> Mike Frysinger
> Sent: Monday, October 01, 2007 8:33 PM
> To: Neulinger, Nathan
> Cc: cracklib-devel@li...; Alec Muffett
> Subject: Re: [Cracklib-devel] cracklib license
>=20
> On Monday 01 October 2007, Neulinger, Nathan wrote:
> > I understand that, and you're welcome to bring it up with Alec
> directly
> > and see if he wants to relicense his code as LGPL... but at this
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>=20
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> unless their
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> place of a
> library
to dictact to application writes what license they should
> be using.
> thus LGPL-2.1 enters to fill this void.
> -mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...> - 2007-10-02 08:57
> Seems like the ideal thing here would be for you and the other distro
> maintainers to get together with Alec in a conversation and come to a
> decision as to what licensing scheme y'all want. I haven't really done
> much other than cleaning up the packaging and patches and a small
> bit of
> additional code, so whatever licensing y'all come up with is fine
> by me.

I am sympathetic. Guys, what do you reckon?

What I am hearing so far is that LGPL makes sense, since it can be
linked with any code, not just GPL...

-a

Re: [Cracklib-devel] cracklib license
From: Devin Reade <gdr@gn...> - 2007-10-02 15:04
I would like to see it under LGPL as well. I
think it is in everyone's
best interests to have as secure systems as possible, and I think tainting
it via GPL will just make it less likely that the library gets used, and
will not usually cause companies/developers to GPL the dependent code
(where it is not already GPL).

I like GPL, I use it when I can, but I don't think that it's the correct

license in this situation.

Devin
--
If it's sinful, it's more fun.

Re: [Cracklib-devel] cracklib license
From: Nalin Dahyabhai <nalin@re...> - 2008-01-28 16:32
On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
> > Seems like the ideal thing here would be for you and the other distro
> > maintainers to get together with Alec in a conversation and come to a
> > decision as to what licensing scheme y'all want. I haven't really done
> > much other than cleaning up the packaging and patches and a small
> > bit of
> > additional
code, so whatever licensing y'all come up with is fine
> > by me.
>
> I am sympathetic. Guys, what do you reckon?
>
> What I am hearing so far is that LGPL makes sense, since it can be
> linked with any code, not just GPL...

My apologies for not chiming in in anything resembling a reasonable
timeframe.

I'd also suggest the LGPL, for the reason you noted above. Alternately,
GPLv2 with the option of using the library under a later version of the
GPL would permit applications which were released under version 3 of the
GPL to use the library, too, which would be sufficient for the packages
which are included in Fedora. FWIW, I'd personally lean toward LGPL.

In any case, I thank you both for working on sorting this out.

Cheers,

Nalin

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-05 21:27

Attachments: Message as HTML

On Monday 28 January 2008, Nalin Dahyabhai wrote:
> On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
> > > Seems like the ideal thing here would be for you and the other distro

> > > maintainers to get together with Alec in a conversation and come to a
> > > decision as to what licensing scheme y'all want. I haven't really done
> > > much other than cleaning up the packaging and patches and a small
> > > bit of
> > > additional code, so whatever licensing y'all come up with is fine
> > > by me.
> >
> > I am sympathetic. Guys, what do you reckon?
> >
> > What I am hearing so far is that LGPL makes sense, since it can be
> > linked with any code, not just GPL...
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> My apologies for not chiming in in anything resembling a reasonable
> timeframe.
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> I'd also suggest the LGPL, for the reason you noted above. Alternately,
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the library under a later version of the
> GPL would permit applications which were released under version 3 of the
> GPL to use the library, too, which would be sufficient for the packages
> which are included in Fedora. FWIW, I'd personally lean toward LGPL.
>
> In any case, I thank you both for working on sorting this out.

looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
the change now ?
-mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...> - 2008-10-05 23:18
>> In any case, I thank you both for working on sorting this out.
>
> looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
> the change now ?

yes. go for it. thanks++

-a

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-25 22:34

Attachments: Message as HTML
On Sunday 05 October
2008, Alec Muffett wrote:
> >> In any case, I thank you both for working on sorting this out.

> >
> > looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we
> > make the change now ?
>
> yes. go for it. thanks++

Nathan Neulinger is the only one who can actually make said change ...
-mike

BELOW IS ORIGINAL LICENSING DISCUSSION RE CHANGING TO GPL from Artistic.

CrackLib was originally licensed with a variant of the Artistic license. In the
interests of wider acceptance and more modern licensing, it was switched with
the original author's blessing to GPL v2.

This approval was carried out in email discussions in 2005, and has been reconfirmed
as of 2007-10-01 with the following email from Alec Muffett.

The below email references nneul@umr.edu address, as that is the address
that was used at the time. For any future emails regarding this, please
use nneul@neulinger.org.

From
 alecm@crypticide.com Mon Oct 1 12:26:03 2007
Received: from umr-exproto2.cc.umr.edu ([131.151.0.192]) by UMR-CMAIL1.umr.edu with Microsoft
SMTPSVC(6.0.3790.3959);
  Mon, 1 Oct 2007 12:26:03 -0500
Received: from scansrv2.srv.mst.edu ([131.151.1.114]) by umr-exproto2.cc.umr.edu with Microsoft
SMTPSVC(6.0.3790.3959);
  Mon, 1 Oct 2007 12:26:02 -0500
Received: (qmail 8022 invoked from network); 1 Oct 2007 16:59:55 -0000
Received: from smtp1.srv.mst.edu (131.151.1.43)
 by scanin-ipvs.cc.umr.edu with SMTP; 1 Oct 2007 16:59:55 -0000
Received: from spunkymail-mx8.g.dreamhost.com (mx1.spunky.mail.dreamhost.com [208.97.132.47])
 by smtp1.srv.mst.edu (8.13.1/8.13.1) with ESMTP id l91Gxtpr020623
 for <nneul@umr.edu>; Mon, 1 Oct 2007 11:59:55 -0500
Received: from rutherford.zen.co.uk (rutherford.zen.co.uk [212.23.3.142])
 by spunkymail-mx8.g.dreamhost.com (Postfix) with ESMTP id 2C7734D311
 for <nneul@neulinger.org>; Mon, 1 Oct 2007 09:59:50 -0700 (PDT)
Received: from

[82.68.43.14] (helo=[192.168.1.3])
by rutherford.zen.co.uk with esmtp (Exim 4.50)
id 1IcOcX-0004Qt-6L
for nneul@neulinger.org; Mon, 01 Oct 2007 16:59:49 +0000
Mime-Version: 1.0 (Apple Message framework v752.2)
In-Reply-To: <1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>
References: <1190922867.3457.147.camel@localhost.localdomain>
<EC90713277D2BE41B7110CCD74E235CEF44F38@UMR-CMAIL1.umr.edu>
<1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>
Content-Type: text/plain; charset=US-ASCII; delsp=yes; format=flowed
Message-Id: <117A1264-F6DC-4E25-B0DD-56FBFEBE6E9F@crypticide.com>
Content-Transfer-Encoding: 7bit
From: Alec Muffett <alecm@crypticide.com>
Subject: Re: cracklib license
Date: Mon, 1 Oct 2007 17:59:46 +0100
To: Nathan Neulinger <nneul@neulinger.org>
X-Mailer: Apple Mail (2.752.2)
X-Originating-Rutherford-IP: [82.68.43.14]
Return-Path: alecm@crypticide.com
X-OriginalArrivalTime: 01 Oct 2007 17:26:03.0008 (UTC) FILETIME=[2420C000:01C80450]
Status: RO
Content-Length:
585
Lines: 21

>
> ---------- Forwarded message ----------
> From: Neulinger, Nathan <nneul@umr.edu>
> Date: Sep 27, 2007 2:58 PM
> Subject: RE: cracklib license
> To: alecm@crypto.dircon.co.uk
>
> Any chance you could write me a self-contained email stating clearly
> that the license is being changed to GPL, so I could include that
> email
> in the repository and clean up the repository/tarballs? I have all the
> original discussion, but something succinct and self contained
> would be
> ideal.

The license for my code in the Cracklib distribution is henceforth GPL.

Happy now? :-)

-a

1.566 gobject-introspection 1.72.0-1

1.566.1 Available under license :

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1.567 gpm 1.20.7-10build1

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```

1.572 fuse 3.10.5-1build1

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To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

{one line to give the program's name and a brief idea of what it does.}
Copyright (C) {year} {name of author}

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Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

{project} Copyright (C) {year} {fullname}
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
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The hypothetical commands `show w' and `show c' should show the appropriate
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1.574 libteam 1.31-1build2

1.574.1 Available under license :

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Version 2.1, February 1999

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We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order

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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

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Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

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Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the
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6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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the work with the complete corresponding
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e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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1.575 pygobject 3.42.1-0ubuntu1

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Finally, software patents pose a constant threat to the existence

of
any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

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In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

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above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices
stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no
charge to all third parties under the terms of this License.

d) If a facility in the modified
Library refers to a function or a
table of data to be supplied by an application program that uses
the facility, other than as an argument passed when the facility
is invoked, then you must make a good faith effort to ensure that,
in the event an application does not supply such function or
table, the facility still operates, and performs whatever part of
its purpose remains meaningful.

(For example, a function in a library to compute square roots has
a purpose that is entirely well-defined independent of the
application. Therefore, Subsection 2d requires that any
application-supplied function or table used by this function must
be optional: if the application does not supply it, the square
root function must still compute square roots.)

These requirements apply to the modified work as a whole. If
identifiable sections of that work are not derived from the Library,
and can be reasonably considered independent and separate works in
themselves,
then this License, and its terms, do not apply to those
sections when you distribute them as separate works. But when you
distribute the same sections as part of a whole which is a work based
on the Library, the distribution of the whole must be on the terms of

this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

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Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a

work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable

source code for the Library including whatever
changes were used in the work (which must be distributed under
Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable "work that
uses the Library", as object code and/or source code, so that the
user can modify the Library and then relink to produce a modified
executable containing the modified Library. (It is understood
that the user who changes the contents of definitions files in the
Library will not necessarily be able to recompile the application
to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the
Library. A suitable mechanism is one that (1) uses at run time a
copy of the library already present on the user's computer system,
rather than copying library functions into the executable, and (2)
will operate properly with a modified version of the library, if
the
user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
least three years, to give the same user the materials
specified in Subsection 6a, above, for a charge no more
than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy
from a designated place, offer equivalent access to copy the above
specified materials from the same place.

e) Verify that the user has already received a copy of these
materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the
Library" must include any data and utility programs needed for
reproducing the executable from it. However, as a special exception,
the materials to be distributed need not include anything that is
normally distributed (in either source or binary form) with
the major
components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
the executable.

It may happen that this requirement contradicts the license
restrictions of other proprietary libraries that do not normally
accompany the operating system. Such a contradiction means you cannot
use both them and the Library together in an executable that you
distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

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1. Source Code.

The "source code" for a work means the preferred form of the work
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(if any) on which the executable work runs, or a compiler used to
produce the work, or an object code interpreter used to run it.

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System Libraries, or general-purpose tools or generally
available free
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which are not part of the work. For example, Corresponding Source
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b) Convey the object code in, or embodied in, a physical product
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written offer, valid for at least three years
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long as you offer spare parts or customer support for that product
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@C{[(----------}
@manual{

@sect1{@title{Introduction}

Lua is a powerful, efficient, lightweight, embeddable scripting language.
It supports procedural programming,
object-oriented programming, functional programming,
data-driven programming, and data description.

Lua combines simple procedural syntax with powerful data description
constructs based on associative arrays and extensible semantics.
Lua is dynamically typed,
runs by interpreting bytecode with a register-based
virtual machine,
and has automatic memory management with
incremental garbage collection,
making it ideal for configuration, scripting,
and rapid prototyping.

Lua is implemented as a library, written in @emphx{clean C},
the common subset of @N{Standard C} and C++.
The Lua distribution includes a host program called @id{lua},
which
 uses the Lua library to offer a complete,
standalone Lua interpreter,
for interactive or batch use.
Lua is intended to be used both as a powerful, lightweight,
embeddable scripting language for any program that needs one,
and as a powerful but lightweight and efficient stand-alone language.

As an extension language, Lua has no notion of a @Q{main} program:
it works @emph{embedded} in a host client,
called the @emph{embedding program} or simply the @emphx{host}.

(Frequently, this host is the stand-alone @id{lua} program.)
The host program can invoke functions to execute a piece of Lua code,
can write and read Lua variables,
and can register @N{C functions} to be called by Lua code.
Through the use of @N{C functions}, Lua can be augmented to cope with
a wide range of different domains,
thus creating customized programming languages sharing a syntactical framework.

Lua is free software,
and is provided as usual with no guarantees,
as stated in its license.
The implementation
described in this manual is available
at Lua's official web site, @id{www.lua.org}.

Like any other reference manual,
this document is dry in places.
For a discussion of the decisions behind the design of Lua,
see the technical papers available at Lua's web site.
For a detailed introduction to programming in Lua,
see Roberto's book, @emphx{Programming in Lua}.

}

@C{----------}
@sect1{basic| @title{Basic Concepts}

This section describes the basic concepts of the language.

@sect2{TypesSec| @title{Values and Types}

Lua is a @emph{dynamically typed language}.
This means that
variables do not have types; only values do.
There are no type definitions in the language.
All values carry their own type.

All values in Lua are @emph{first-class values}.
This means that all values can be stored in variables,
passed as arguments to other functions, and returned as results.

There are eight @x{basic types} in Lua:
@def{nil}, @def{boolean},
@def{number},
@def{string}, @def{function}, @def{userdata},
@def{thread}, and @def{table}.
The type @emph{nil} has one single value, @nil,

whose main property is to be different from any other value;
it usually represents the absence of a useful value.
The type @emph{boolean} has two values, @false and @true.
Both @nil and @false make a condition false;
any other value makes it true.
The type @emph{number} represents both
integer numbers and real (floating-point) numbers.
The type @emph{string} represents immutable sequences of bytes.
@index{eight-bit clean}
Lua is 8-bit clean:
strings can contain any 8-bit value,
including @x{embedded zeros} (@Char{\0}).
Lua is also encoding-agnostic;
it makes no assumptions about the contents of a string.

The type @emph{number} uses two internal representations,
or two @x{subtypes},
one called @def{integer} and the other called @def{float}.
Lua has explicit rules about when each representation is used,
but it also converts between them automatically
as needed @see{coercion}.
Therefore,
the programmer may choose to mostly ignore the difference
between integers and floats
or to assume complete control over the representation of each number.
Standard Lua uses 64-bit integers and double-precision (64-bit) floats,
but you can also compile Lua so that it
uses 32-bit integers and/or single-precision (32-bit) floats.
The option with 32 bits for both integers and floats
is particularly attractive
for small machines and embedded systems.
(See macro @id{LUA_32BITS} in file @id{luaconf.h}.)

Lua can call (and manipulate) functions written in Lua and
functions written in C @see{functioncall}.
Both are represented by the type @emph{function}.

The type @emph{userdata} is provided to allow arbitrary @N{C data} to
be stored in Lua variables.
A userdata value represents a block of raw memory.
There are two kinds of userdata:
@emphx{full userdata},
which is an object with a block of memory managed by Lua,
and @emphx{light userdata},
which
is simply a @N{C pointer} value.
Userdata has no predefined operations in Lua,
except assignment and identity test.

By using @emph{metatables},
the programmer can define operations for full userdata values
@see{metatable}.
Userdata values cannot be created or modified in Lua,
only through the @N{C API}.
This guarantees the integrity of data owned by the host program.

The type @def{thread} represents independent threads of execution
and it is used to implement coroutines @see{coroutine}.
Lua threads are not related to operating-system threads.
Lua supports coroutines on all systems,
even those that do not support threads natively.

The type @emph{table} implements @x{associative arrays},
that is, @x{arrays} that can have as indices not only numbers,
but any Lua value except @nil and @x{NaN}.
(@emphx{Not a Number} is a special value used to represent
undefined or unrepresentable numerical results, such as @T{0/0}.)
Tables can be @emph{heterogeneous};
that is, they can contain values of
all types (except @nil).
Any key with value @nil is not considered part of the table.
Conversely, any key that is not part of a table has
an associated value @nil.

Tables are the sole data-structuring mechanism in Lua;
they can be used to represent ordinary arrays, lists,
symbol tables, sets, records, graphs, trees, etc.
To represent @x{records}, Lua uses the field name as an index.
The language supports this representation by
providing @id{a.name} as syntactic sugar for @T{a["name"]}.
There are several convenient ways to create tables in Lua
@see{tableconstructor}.

Like indices,
the values of table fields can be of any type.
In particular,
because functions are first-class values,
table fields can contain functions.
Thus tables can also carry @emph{methods} @see{func-def}.

The indexing of tables follows
the definition of raw equality in the language.
The expressions @T{a[i]} and @T{a[j]}
denote the same table element
if and only if @id{i} and @id{j} are raw equal
(that is, equal

without metamethods).
In particular, floats with integral values
are equal to their respective integers
(e.g., @T{1.0 == 1}).
To avoid ambiguities,
any float with integral value used as a key
is converted to its respective integer.
For instance, if you write @T{a[2.0] = true},
the actual key inserted into the table will be the
integer @T{2}.
(On the other hand,
2 and @St{2} are different Lua values and therefore
denote different table entries.)

Tables, functions, threads, and (full) userdata values are @emph{objects}:
variables do not actually @emph{contain} these values,
only @emph{references} to them.
Assignment, parameter passing, and function returns
always manipulate references to such values;
these operations do not imply any kind of copy.

The library function @Lid{type} returns a string describing the type
of a given value @see{predefined}.

}

@sect2{globalenv| @title{Environments and the Global Environment}

As will be discussed in @refsec{variables} and @refsec{assignment},
any
reference to a free name
(that is, a name not bound to any declaration) @id{var}
is syntactically translated to @T{_ENV.var}.
Moreover, every chunk is compiled in the scope of
an external local variable named @id{_ENV} @see{chunks},
so @id{_ENV} itself is never a free name in a chunk.

Despite the existence of this external @id{_ENV} variable and
the translation of free names,
@id{_ENV} is a completely regular name.
In particular,
you can define new variables and parameters with that name.
Each reference to a free name uses the @id{_ENV} that is
visible at that point in the program,
following the usual visibility rules of Lua @see{visibility}.

Any table used as the value of @id{_ENV} is called an @def{environment}.

Lua keeps a distinguished environment called the @def{global environment}.
This value is kept at a special index in the C registry @see{registry}.
In Lua, the global variable @Lid{_G} is initialized with this same value.
(@Lid{_G} is never used internally.)

When Lua
loads a chunk,
the default value for its @id{_ENV} upvalue
is the global environment @seeF{load}.
Therefore, by default,
free names in Lua code refer to entries in the global environment
(and, therefore, they are also called @def{global variables}).
Moreover, all standard libraries are loaded in the global environment
and some functions there operate on that environment.
You can use @Lid{load} (or @Lid{loadfile})
to load a chunk with a different environment.
(In C, you have to load the chunk and then change the value
of its first upvalue.)

}

@sect2{error| @title{Error Handling}

Because Lua is an embedded extension language,
all Lua actions start from @N{C code} in the host program
calling a function from the Lua library.
(When you use Lua standalone,
the @id{lua} application is the host program.)
Whenever an error occurs during
the compilation or execution of a Lua chunk,
control returns to the host,
which can take appropriate measures
(such as printing an error message).

Lua code
can explicitly generate an error by calling the
@Lid{error} function.
If you need to catch errors in Lua,
you can use @Lid{pcall} or @Lid{xpcall}
to call a given function in @emphx{protected mode}.

Whenever there is an error,
an @def{error object} (also called an @def{error message})
is propagated with information about the error.
Lua itself only generates errors whose error object is a string,
but programs may generate errors with
any value as the error object.

It is up to the Lua program or its host to handle such error objects.

When you use @Lid{xpcall} or @Lid{lua_pcall},
you may give a @def{message handler}
to be called in case of errors.
This function is called with the original error object
and returns a new error object.
It is called before the error unwinds the stack,
so that it can gather more information about the error,
for instance by inspecting the stack and creating a stack traceback.
This message handler is still protected by the protected call;
so, an error inside
the message handler
will call the message handler again.
If this loop goes on for too long,
Lua breaks it and returns an appropriate message.
(The message handler is called only for regular runtime errors.
It is not called for memory-allocation errors
nor for errors while running finalizers.)

}

@sect2{metatable| @title{Metatables and Metamethods}

Every value in Lua can have a @emph{metatable}.
This @def{metatable} is an ordinary Lua table
that defines the behavior of the original value
under certain special operations.
You can change several aspects of the behavior
of operations over a value by setting specific fields in its metatable.
For instance, when a non-numeric value is the operand of an addition,
Lua checks for a function in the field @St{__add} of the value's metatable.
If it finds one,
Lua calls this function to perform the addition.

The key for each event in a metatable is a string
with the event name prefixed by two underscores;
the corresponding values are called @def{metamethods}.
In
the previous example, the key is @St{__add}
and the metamethod is the function that performs the addition.
Unless stated otherwise,
metamethods should be function values.

You can query the metatable of any value
using the @Lid{getmetatable} function.
Lua queries metamethods in metatables using a raw access @seeF{rawget}.

So, to retrieve the metamethod for event @id{ev} in object @id{o},
Lua does the equivalent to the following code:
@verbatim{
rawget(getmetatable(@rep{o}) or {}, "__@rep{ev}")
}

You can replace the metatable of tables
using the @Lid{setmetatable} function.
You cannot change the metatable of other types from Lua code
(except by using the @link{debuglib|debug library});
you should use the @N{C API} for that.

Tables and full userdata have individual metatables
(although multiple tables and userdata can share their metatables).
Values of all other types share one single metatable per type;
that is, there is one single metatable for all numbers,
one for all
 strings, etc.
By default, a value has no metatable,
but the string library sets a metatable for the string type @see{strlib}.

A metatable controls how an object behaves in
arithmetic operations, bitwise operations,
order comparisons, concatenation, length operation, calls, and indexing.
A metatable also can define a function to be called
when a userdata or a table is @link{GC|garbage collected}.

For the unary operators (negation, length, and bitwise NOT),
the metamethod is computed and called with a dummy second operand,
equal to the first one.
This extra operand is only to simplify Lua's internals
(by making these operators behave like a binary operation)
and may be removed in future versions.
(For most uses this extra operand is irrelevant.)

A detailed list of events controlled by metatables is given next.
Each operation is identified by its corresponding key.

@description{

@item{@idx{__add}|
the addition (@T{+}) operation.
If any operand for an addition is not a number
(nor
 a string coercible to a number),
Lua will try to call a metamethod.
First, Lua will check the first operand (even if it is valid).
If that operand does not define a metamethod for @idx{__add},

then Lua will check the second operand.
If Lua can find a metamethod,
it calls the metamethod with the two operands as arguments,
and the result of the call
(adjusted to one value)
is the result of the operation.
Otherwise,
it raises an error.
}

@item{@idx{__sub}|
the subtraction (@T{-}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__mul}|
the multiplication (@T{*}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__div}|
the division (@T{/}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__mod}|
the modulo (@T{%}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__pow}|
the exponentiation (@T{^}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__unm}|
the negation (unary @T{-}) operation.
Behavior
 similar to the addition operation.
}

@item{@idx{__idiv}|
the floor division (@T{//}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__band}|
the bitwise AND (@T{&}) operation.

Behavior similar to the addition operation,
except that Lua will try a metamethod
if any operand is neither an integer
nor a value coercible to an integer @see{coercion}.
}

@item{@idx{__bor}|
the bitwise OR (@T{|}) operation.
Behavior similar to the bitwise AND operation.
}

@item{@idx{__bxor}|
the bitwise exclusive OR (binary @T{~}) operation.
Behavior similar to the bitwise AND operation.
}

@item{@idx{__bnot}|
the bitwise NOT (unary @T{~}) operation.
Behavior similar to the bitwise AND operation.
}

@item{@idx{__shl}|
the bitwise left shift (@T{<<}) operation.
Behavior similar to the bitwise AND operation.
}

@item{@idx{__shr}|
the bitwise right shift (@T{>>}) operation.
Behavior similar to the bitwise AND operation.
}

@item{@idx{__concat}|
the concatenation (@T{..}) operation.
Behavior
 similar to the addition operation,
except that Lua will try a metamethod
if any operand is neither a string nor a number
(which is always coercible to a string).
}

@item{@idx{__len}|
the length (@T{#}) operation.
If the object is not a string,
Lua will try its metamethod.
If there is a metamethod,
Lua calls it with the object as argument,
and the result of the call
(always adjusted to one value)

is the result of the operation.
If there is no metamethod but the object is a table,
then Lua uses the table length operation @see{len-op}.
Otherwise, Lua raises an error.
}

@item{@idx{__eq}|
the equal (@T{==}) operation.
Behavior similar to the addition operation,
except that Lua will try a metamethod only when the values
being compared are either both tables or both full userdata
and they are not primitively equal.
The result of the call is always converted to a boolean.
}

@item{@idx{__lt}|
the less than (@T{<}) operation.
Behavior similar to the addition operation,
except that
 Lua will try a metamethod only when the values
being compared are neither both numbers nor both strings.
The result of the call is always converted to a boolean.
}

@item{@idx{__le}|
the less equal (@T{<=}) operation.
Unlike other operations,
the less-equal operation can use two different events.
First, Lua looks for the @idx{__le} metamethod in both operands,
like in the less than operation.
If it cannot find such a metamethod,
then it will try the @idx{__lt} metamethod,
assuming that @T{a <= b} is equivalent to @T{not (b < a)}.
As with the other comparison operators,
the result is always a boolean.
(This use of the @idx{__lt} event can be removed in future versions;
it is also slower than a real @idx{__le} metamethod.)
}

@item{@idx{__index}|
The indexing access operation @T{table[key]}.
This event happens when @id{table} is not a table or
when @id{key} is not present in @id{table}.
The metamethod is looked up in @id{table}.

Despite the name,
the metamethod for this event can be either

a function or a table.
If it is a function,
it is called with @id{table} and @id{key} as arguments,
and the result of the call
(adjusted to one value)
is the result of the operation.
If it is a table,
the final result is the result of indexing this table with @id{key}.
(This indexing is regular, not raw,
and therefore can trigger another metamethod.)
}

@item{@idx{__newindex}|
The indexing assignment @T{table[key] = value}.
Like the index event,
this event happens when @id{table} is not a table or
when @id{key} is not present in @id{table}.
The metamethod is looked up in @id{table}.

Like with indexing,
the metamethod for this event can be either a function or a table.
If it is a function,
it is called with @id{table}, @id{key}, and @id{value} as arguments.
If it is a table,
Lua does an indexing assignment to this table with the same key and value.
(This assignment is regular, not raw,
and therefore can trigger another metamethod.)

Whenever there is a @idx{__newindex} metamethod,
Lua
does not perform the primitive assignment.
(If necessary,
the metamethod itself can call @Lid{rawset}
to do the assignment.)
}

@item{@idx{__call}|
The call operation @T{func(args)}.
This event happens when Lua tries to call a non-function value
(that is, @id{func} is not a function).
The metamethod is looked up in @id{func}.
If present,
the metamethod is called with @id{func} as its first argument,
followed by the arguments of the original call (@id{args}).
All results of the call
are the result of the operation.
(This is the only metamethod that allows multiple results.)
}

}

It is a good practice to add all needed metamethods to a table
before setting it as a metatable of some object.
In particular, the @idx{__gc} metamethod works only when this order
is followed @see{finalizers}.

Because metatables are regular tables,
they can contain arbitrary fields,
not only the event names defined above.
Some functions in the standard library
(e.g., @Lid{tostring})
use other fields in metatables
for their own purposes.

}

@sect2{GC| @title{Garbage Collection}

Lua performs automatic memory management.
This means that
you do not have to worry about allocating memory for new objects
or freeing it when the objects are no longer needed.
Lua manages memory automatically by running
a @def{garbage collector} to collect all @emph{dead objects}
(that is, objects that are no longer accessible from Lua).
All memory used by Lua is subject to automatic management:
strings, tables, userdata, functions, threads, internal structures, etc.

Lua implements an incremental mark-and-sweep collector.
It uses two numbers to control its garbage-collection cycles:
the @def{garbage-collector pause} and
the @def{garbage-collector step multiplier}.
Both use percentage points as units
(e.g., a value of 100 means an internal value of 1).

The garbage-collector pause
controls how long the collector waits before starting a new cycle.
Larger values make the collector less aggressive.
Values smaller than
100 mean the collector will not wait to
start a new cycle.
A value of 200 means that the collector waits for the total memory in use
to double before starting a new cycle.

The garbage-collector step multiplier
controls the relative speed of the collector relative to

memory allocation.
Larger values make the collector more aggressive but also increase
the size of each incremental step.
You should not use values smaller than 100,
because they make the collector too slow and
can result in the collector never finishing a cycle.
The default is 200,
which means that the collector runs at @Q{twice}
the speed of memory allocation.

If you set the step multiplier to a very large number
(larger than 10% of the maximum number of
bytes that the program may use),
the collector behaves like a stop-the-world collector.
If you then set the pause to 200,
the collector behaves as in old Lua versions,
doing a complete collection every time Lua doubles its
memory usage.

You can change these numbers
by calling @Lid{lua_gc} in C
or @Lid{collectgarbage} in Lua.
You can also use these functions to control
the collector directly (e.g., stop and restart it).

@sect3{finalizers| @title{Garbage-Collection Metamethods}

You can set garbage-collector metamethods for tables
and, using the @N{C API},
for full userdata @see{metatable}.
These metamethods are also called @def{finalizers}.
Finalizers allow you to coordinate Lua's garbage collection
with external resource management
(such as closing files, network or database connections,
or freeing your own memory).

For an object (table or userdata) to be finalized when collected,
you must @emph{mark} it for finalization.
@index{mark (for finalization)}
You mark an object for finalization when you set its metatable
and the metatable has a field indexed by the string @St{__gc}.
Note that if you set a metatable without a @idx{__gc} field
and later create that field in the metatable,
the object will not be marked for finalization.

When a marked

object becomes garbage,
it is not collected immediately by the garbage collector.
Instead, Lua puts it in a list.
After the collection,
Lua goes through that list.
For each object in the list,
it checks the object's @idx{__gc} metamethod:
If it is a function,
Lua calls it with the object as its single argument;
if the metamethod is not a function,
Lua simply ignores it.

At the end of each garbage-collection cycle,
the finalizers for objects are called in
the reverse order that the objects were marked for finalization,
among those collected in that cycle;
that is, the first finalizer to be called is the one associated
with the object marked last in the program.
The execution of each finalizer may occur at any point during
the execution of the regular code.

Because the object being collected must still be used by the finalizer,
that object (and other objects accessible only through it)
must be @emph{resurrected} by Lua.@index{resurrection}
Usually, this resurrection is transient,
and the
object memory is freed in the next garbage-collection cycle.
However, if the finalizer stores the object in some global place
(e.g., a global variable),
then the resurrection is permanent.
Moreover, if the finalizer marks a finalizing object for finalization again,
its finalizer will be called again in the next cycle where the
object is unreachable.
In any case,
the object memory is freed only in a GC cycle where
the object is unreachable and not marked for finalization.

When you close a state @seeF{lua_close},
Lua calls the finalizers of all objects marked for finalization,
following the reverse order that they were marked.
If any finalizer marks objects for collection during that phase,
these marks have no effect.

}

@sect3{weak-table| @title{Weak Tables}

A @def{weak table} is a table whose elements are

@def{weak references}.
A weak reference is ignored by the garbage collector.
In other words,
if the only references to an object are weak references,
then the garbage collector
will collect that object.

A weak table can have weak keys, weak values, or both.
A table with weak values allows the collection of its values,
but prevents the collection of its keys.
A table with both weak keys and weak values allows the collection of
both keys and values.
In any case, if either the key or the value is collected,
the whole pair is removed from the table.
The weakness of a table is controlled by the
@idx{__mode} field of its metatable.
If the @idx{__mode} field is a string containing the @N{character @Char{k}},
the keys in the table are weak.
If @idx{__mode} contains @Char{v},
the values in the table are weak.

A table with weak keys and strong values
is also called an @def{ephemeron table}.
In an ephemeron table,
a value is considered reachable only if its key is reachable.
In particular,
if the only reference to a key comes through its value,
the pair is removed.

Any change in the weakness of a table may take effect only
at the next collect cycle.
In particular, if
you change the weakness to a stronger mode,
Lua may still collect some items from that table
before the change takes effect.

Only objects that have an explicit construction
are removed from weak tables.
Values, such as numbers and @x{light @N{C functions}},
are not subject to garbage collection,
and therefore are not removed from weak tables
(unless their associated values are collected).
Although strings are subject to garbage collection,
they do not have an explicit construction,
and therefore are not removed from weak tables.

Resurrected objects
(that is, objects being finalized

and objects accessible only through objects being finalized)
have a special behavior in weak tables.
They are removed from weak values before running their finalizers,
but are removed from weak keys only in the next collection
after running their finalizers, when such objects are actually freed.
This behavior allows the finalizer to access properties
associated with the object through weak tables.

If a weak
 table is among the resurrected objects in a collection cycle,
it may not be properly cleared until the next cycle.

}

}

@sect2{coroutine| @title{Coroutines}

Lua supports coroutines,
also called @emphx{collaborative multithreading}.
A coroutine in Lua represents an independent thread of execution.
Unlike threads in multithread systems, however,
a coroutine only suspends its execution by explicitly calling
a yield function.

You create a coroutine by calling @Lid{coroutine.create}.
Its sole argument is a function
that is the main function of the coroutine.
The @id{create} function only creates a new coroutine and
returns a handle to it (an object of type @emph{thread});
it does not start the coroutine.

You execute a coroutine by calling @Lid{coroutine.resume}.
When you first call @Lid{coroutine.resume},
passing as its first argument
a thread returned by @Lid{coroutine.create},
the coroutine starts its execution by
calling its main function.
Extra arguments passed to @Lid{coroutine.resume}
 are passed
as arguments to that function.
After the coroutine starts running,
it runs until it terminates or @emph{yields}.

A coroutine can terminate its execution in two ways:
normally, when its main function returns
(explicitly or implicitly, after the last instruction);
and abnormally, if there is an unprotected error.

In case of normal termination,
@Lid{coroutine.resume} returns @true,
plus any values returned by the coroutine main function.
In case of errors, @Lid{coroutine.resume} returns @false
plus an error object.

A coroutine yields by calling @Lid{coroutine.yield}.
When a coroutine yields,
the corresponding @Lid{coroutine.resume} returns immediately,
even if the yield happens inside nested function calls
(that is, not in the main function,
but in a function directly or indirectly called by the main function).
In the case of a yield, @Lid{coroutine.resume} also returns @true,
plus any values passed to @Lid{coroutine.yield}.
The next time you resume the same coroutine,
it
 continues its execution from the point where it yielded,
with the call to @Lid{coroutine.yield} returning any extra
arguments passed to @Lid{coroutine.resume}.

Like @Lid{coroutine.create},
the @Lid{coroutine.wrap} function also creates a coroutine,
but instead of returning the coroutine itself,
it returns a function that, when called, resumes the coroutine.
Any arguments passed to this function
go as extra arguments to @Lid{coroutine.resume}.
@Lid{coroutine.wrap} returns all the values returned by @Lid{coroutine.resume},
except the first one (the boolean error code).
Unlike @Lid{coroutine.resume},
@Lid{coroutine.wrap} does not catch errors;
any error is propagated to the caller.

As an example of how coroutines work,
consider the following code:
@verbatim{
```
function foo (a)
 print("foo", a)
 return coroutine.yield(2*a)
end

co = coroutine.create(function (a,b)
    print("co-body", a, b)
    local r = foo(a+1)
    print("co-body", r)
    local r, s = coroutine.yield(a+b,
 a-b)
    print("co-body", r, s)
    return b, "end"
```

```
end)

print("main", coroutine.resume(co, 1, 10))
print("main", coroutine.resume(co, "r"))
print("main", coroutine.resume(co, "x", "y"))
print("main", coroutine.resume(co, "x", "y"))
}
```

When you run it, it produces the following output:

```
@verbatim{
co-body 1       10
foo     2
main    true    4
co-body r
main    true    11      -9
co-body x       y
main    true    10      end
main    false   cannot resume dead coroutine
}
```

You can also create and manipulate coroutines through the C API:
see functions @Lid{lua_newthread}, @Lid{lua_resume},
and @Lid{lua_yield}.

}

}

```
@C{-----------------------------------------------------------------------}
@sect1{language| @title{The Language}
```

This section describes the lexis, the syntax, and the semantics of Lua.
In other words,
this section describes
which tokens are valid,
how they can be combined,
and what their combinations mean.

Language constructs will be explained using the usual extended
 BNF notation,
in which
@N{@bnfrep{@rep{a}} means 0} or more @rep{a}'s, and
@N{@bnfopt{@rep{a}} means} an optional @rep{a}.
Non-terminals are shown like @bnfNter{non-terminal},
keywords are shown like @rw{kword},
and other terminal symbols are shown like @bnfter{=}.
The complete syntax of Lua can be found in @refsec{BNF}
at the end of this manual.

@sect2{lexical| @title{Lexical Conventions}

Lua is a @x{free-form} language.
It ignores spaces (including new lines) and comments
between lexical elements (@x{tokens}),
except as delimiters between @x{names} and @x{keywords}.

@def{Names}
(also called @def{identifiers})
in Lua can be any string of letters,
digits, and underscores,
not beginning with a digit and
not being a reserved word.
Identifiers are used to name variables, table fields, and labels.

The following @def{keywords} are reserved
and cannot be used as names:
@index{reserved words}
@verbatim{
and break do else elseif end
false for function
goto if in
local nil not or repeat return
then true until while
}

Lua is a case-sensitive language:
@id{and} is a reserved word, but @id{And} and @id{AND}
are two different, valid names.
As a convention,
programs should avoid creating
names that start with an underscore followed by
one or more uppercase letters (such as @Lid{_VERSION}).

The following strings denote other @x{tokens}:
@verbatim{
+ - * / % ^ #
& ~ | << >> //
== ~= <= >= < > =
( ) { } [ ] ::
; : , ...
}

A @def{short literal string}
can be delimited by matching single or double quotes,
and can contain the following C-like escape sequences:
@Char{\a} (bell),

@Char{\b} (backspace),
@Char{\f} (form feed),
@Char{\n} (newline),
@Char{\r} (carriage return),
@Char{\t} (horizontal tab),
@Char{\v} (vertical tab),
@Char{\\} (backslash),
@Char{\"} (quotation mark [double
quote]),
and @Char{\'} (apostrophe [single quote]).
A backslash followed by a line break
results in a newline in the string.
The escape sequence @Char{\z} skips the following span
of white-space characters,
including line breaks;
it is particularly useful to break and indent a long literal string
into multiple lines without adding the newlines and spaces
into the string contents.
A short literal string cannot contain unescaped line breaks
nor escapes not forming a valid escape sequence.

We can specify any byte in a short literal string by its numeric value
(including @x{embedded zeros}).
This can be done
with the escape sequence @T{\x@rep{XX}},
where @rep{XX} is a sequence of exactly two hexadecimal digits,
or with the escape sequence @T{\@rep{ddd}},
where @rep{ddd} is a sequence of up to three decimal digits.
(Note that if a decimal escape sequence is to be followed by a digit,
it must be expressed using exactly three digits.)

The @x{UTF-8} encoding of a @x{Unicode} character
can
be inserted in a literal string with
the escape sequence @T{\u{@rep{XXX}}}
(note the mandatory enclosing brackets),
where @rep{XXX} is a sequence of one or more hexadecimal digits
representing the character code point.

Literal strings can also be defined using a long format
enclosed by @def{long brackets}.
We define an @def{opening long bracket of level @rep{n}} as an opening
square bracket followed by @rep{n} equal signs followed by another
opening square bracket.
So, an opening long bracket of @N{level 0} is written as @T{[[}, @C{]]}
an opening long bracket of @N{level 1} is written as @T{[=[}, @C{]]}
and so on.
A @emph{closing long bracket} is defined similarly;

for instance,
a closing long bracket of @N{level 4} is written as @C{[[} @T{]====]}.
A @def{long literal} starts with an opening long bracket of any level and
ends at the first closing long bracket of the same level.
It can contain any text except a closing bracket of the same level.
Literals in this bracketed form can run
 for several lines,
do not interpret any escape sequences,
and ignore long brackets of any other level.
Any kind of end-of-line sequence
(carriage return, newline, carriage return followed by newline,
or newline followed by carriage return)
is converted to a simple newline.

For convenience,
when the opening long bracket is immediately followed by a newline,
the newline is not included in the string.
As an example, in a system using ASCII
(in which @Char{a} is coded @N{as 97},
newline is coded @N{as 10}, and @Char{1} is coded @N{as 49}),
the five literal strings below denote the same string:
@verbatim{
a = 'alo\n123'"
a = "alo\n123\""
a = '\97lo\10\04923'"
a = [[alo
123"]]
a = [==[
alo
123"]==]
}

Any byte in a literal string not
explicitly affected by the previous rules represents itself.
However, Lua opens files for parsing in text mode,
and the system file functions may have problems with
some control characters.
So, it is safer to represent
non-text data as a quoted literal with
explicit
 escape sequences for the non-text characters.

A @def{numeric constant} (or @def{numeral})
can be written with an optional fractional part
and an optional decimal exponent,
marked by a letter @Char{e} or @Char{E}.
Lua also accepts @x{hexadecimal constants},
which start with @T{0x} or @T{0X}.

Hexadecimal constants also accept an optional fractional part
plus an optional binary exponent,
marked by a letter @Char{p} or @Char{P}.
A numeric constant with a radix point or an exponent
denotes a float;
otherwise,
if its value fits in an integer,
it denotes an integer.
Examples of valid integer constants are
@verbatim{
3 345 0xff 0xBEBADA
}
Examples of valid float constants are
@verbatim{
3.0 3.1416 314.16e-2 0.31416E1 34e1
0x0.1E 0xA23p-4 0X1.921FB54442D18P+1
}

A @def{comment} starts with a double hyphen (@T{--})
anywhere outside a string.
If the text immediately after @T{--} is not an opening long bracket,
the comment is a @def{short comment},
which runs until
 the end of the line.
Otherwise, it is a @def{long comment},
which runs until the corresponding closing long bracket.
Long comments are frequently used to disable code temporarily.

}

@sect2{variables| @title{Variables}

Variables are places that store values.
There are three kinds of variables in Lua:
global variables, local variables, and table fields.

A single name can denote a global variable or a local variable
(or a function's formal parameter,
which is a particular kind of local variable):
@Produc{
@producname{var}@producbody{@bnfNter{Name}}
}
@bnfNter{Name} denotes identifiers, as defined in @See{lexical}.

Any variable name is assumed to be global unless explicitly declared
as a local @see{localvar}.
@x{Local variables} are @emph{lexically scoped}:
local variables can be freely accessed by functions

defined inside their scope @see{visibility}.

Before the first assignment to a variable, its value is @nil.

Square brackets are used to index a table:
@Produc{
@producname{var}@producbody{prefixexp
 @bnfter{[} exp @bnfter{]}}
}
The meaning of accesses to table fields can be changed via metatables
@see{metatable}.

The syntax @id{var.Name} is just syntactic sugar for
@T{var["Name"]}:
@Produc{
@producname{var}@producbody{prefixexp @bnfter{.} @bnfNter{Name}}
}

An access to a global variable @id{x}
is equivalent to @id{_ENV.x}.
Due to the way that chunks are compiled,
@id{_ENV} is never a global name @see{globalenv}.

}

@sect2{stats| @title{Statements}

Lua supports an almost conventional set of @x{statements},
similar to those in Pascal or C.
This set includes
assignments, control structures, function calls,
and variable declarations.

@sect3{@title{Blocks}

A @x{block} is a list of statements,
which are executed sequentially:
@Produc{
@producname{block}@producbody{@bnfrep{stat}}
}
Lua has @def{empty statements}
that allow you to separate statements with semicolons,
start a block with a semicolon
or write two semicolons in sequence:
@Produc{
@producname{stat}@producbody{@bnfter{;}}
}

Function
 calls and assignments
can start with an open parenthesis.
This possibility leads to an ambiguity in Lua's grammar.
Consider the following fragment:
@verbatim{
a = b + c
(print or io.write)('done')
}
The grammar could see it in two ways:
@verbatim{
a = b + c(print or io.write)('done')

a = b + c; (print or io.write)('done')
}
The current parser always sees such constructions
in the first way,
interpreting the open parenthesis
as the start of the arguments to a call.
To avoid this ambiguity,
it is a good practice to always precede with a semicolon
statements that start with a parenthesis:
@verbatim{
;(print or io.write)('done')
}

A block can be explicitly delimited to produce a single statement:
@Produc{
@producname{stat}@producbody{@Rw{do} block @Rw{end}}
}
Explicit blocks are useful
to control the scope of variable declarations.
Explicit blocks are also sometimes used to
add a @Rw{return} statement in the middle
of another block @see{control}.

}

@sect3{chunks|
 @title{Chunks}

The unit of compilation of Lua is called a @def{chunk}.
Syntactically,
a chunk is simply a block:
@Produc{
@producname{chunk}@producbody{block}
}

Lua handles a chunk as the body of an anonymous function
with a variable number of arguments
@see{func-def}.
As such, chunks can define local variables,
receive arguments, and return values.
Moreover, such anonymous function is compiled as in the
scope of an external local variable called @id{_ENV} @see{globalenv}.
The resulting function always has @id{_ENV} as its only upvalue,
even if it does not use that variable.

A chunk can be stored in a file or in a string inside the host program.
To execute a chunk,
Lua first @emph{loads} it,
precompiling the chunk's code into instructions for a virtual machine,
and then Lua executes the compiled code
with an interpreter for the virtual machine.

Chunks can also be precompiled into binary form;
see program @idx{luac} and function @Lid{string.dump} for details.
Programs in
 source and compiled forms are interchangeable;
Lua automatically detects the file type and acts accordingly @seeF{load}.

}

@sect3{assignment| @title{Assignment}

Lua allows @x{multiple assignments}.
Therefore, the syntax for assignment
defines a list of variables on the left side
and a list of expressions on the right side.
The elements in both lists are separated by commas:
@Produc{
@producname{stat}@producbody{varlist @bnfter{=} explist}
@producname{varlist}@producbody{var @bnfrep{@bnfter{,} var}}
@producname{explist}@producbody{exp @bnfrep{@bnfter{,} exp}}
}
Expressions are discussed in @See{expressions}.

Before the assignment,
the list of values is @emph{adjusted} to the length of
the list of variables.@index{adjustment}
If there are more values than needed,
the excess values are thrown away.
If there are fewer values than needed,
the list is extended with as many @nil's as needed.
If the list of expressions ends with a function call,
then all values returned by that call enter

the list of values,
before the adjustment
(except when the call is enclosed in parentheses; see @See{expressions}).

The assignment statement first evaluates all its expressions
and only then the assignments are performed.
Thus the code
@verbatim{
i = 3
i, a[i] = i+1, 20
}
sets @T{a[3]} to 20, without affecting @T{a[4]}
because the @id{i} in @T{a[i]} is evaluated (to 3)
before it is @N{assigned 4}.
Similarly, the line
@verbatim{
x, y = y, x
}
exchanges the values of @id{x} and @id{y},
and
@verbatim{
x, y, z = y, z, x
}
cyclically permutes the values of @id{x}, @id{y}, and @id{z}.

An assignment to a global name @T{x = val}
is equivalent to the assignment
@T{_ENV.x = val} @see{globalenv}.

The meaning of assignments to table fields and
global variables (which are actually table fields, too)
can be changed via metatables @see{metatable}.

}

@sect3{control| @title{Control Structures}
The control structures
@Rw{if}, @Rw{while}, and @Rw{repeat} have the usual meaning and
familiar syntax:
@index{while-do
statement}
@index{repeat-until statement}
@index{if-then-else statement}
@Produc{
@producname{stat}@producbody{@Rw{while} exp @Rw{do} block @Rw{end}}
@producname{stat}@producbody{@Rw{repeat} block @Rw{until} exp}
@producname{stat}@producbody{@Rw{if} exp @Rw{then} block
@bnfrep{@Rw{elseif} exp @Rw{then} block}

@bnfopt{@Rw{else} block} @Rw{end}}
}
Lua also has a @Rw{for} statement, in two flavors @see{for}.

The @x{condition expression} of a
control structure can return any value.
Both @false and @nil are considered false.
All values different from @nil and @false are considered true
(in particular, the number 0 and the empty string are also true).

In the @Rw{repeat}@En@Rw{until} loop,
the inner block does not end at the @Rw{until} keyword,
but only after the condition.
So, the condition can refer to local variables
declared inside the loop block.

The @Rw{goto} statement transfers the program control to a label.
For syntactical reasons,
labels in Lua are considered
statements too:
@index{goto statement}
@index{label}
@Produc{
@producname{stat}@producbody{@Rw{goto} Name}
@producname{stat}@producbody{label}
@producname{label}@producbody{@bnfter{::} Name @bnfter{::}}
}

A label is visible in the entire block where it is defined,
except
inside nested blocks where a label with the same name is defined and
inside nested functions.
A goto may jump to any visible label as long as it does not
enter into the scope of a local variable.

Labels and empty statements are called @def{void statements},
as they perform no actions.

The @Rw{break} statement terminates the execution of a
@Rw{while}, @Rw{repeat}, or @Rw{for} loop,
skipping to the next statement after the loop:
@index{break statement}
@Produc{
@producname{stat}@producbody{@Rw{break}}
}
A @Rw{break} ends the innermost enclosing loop.

The @Rw{return} statement is used to return values

from a function or a chunk
(which is an anonymous function).
@index{return statement}
Functions can return more than
 one value,
so the syntax for the @Rw{return} statement is
@Produc{
@producname{stat}@producbody{@Rw{return} @bnfopt{explist} @bnfopt{@bnfter{;}}}
}

The @Rw{return} statement can only be written
as the last statement of a block.
If it is really necessary to @Rw{return} in the middle of a block,
then an explicit inner block can be used,
as in the idiom @T{do return end},
because now @Rw{return} is the last statement in its (inner) block.

}

@sect3{for| @title{For Statement}

@index{for statement}
The @Rw{for} statement has two forms:
one numerical and one generic.

The numerical @Rw{for} loop repeats a block of code while a
control variable runs through an arithmetic progression.
It has the following syntax:
@Produc{
@producname{stat}@producbody{@Rw{for} @bnfNter{Name} @bnfter{=}
 exp @bnfter{,} exp @bnfopt{@bnfter{,} exp} @Rw{do} block @Rw{end}}
}
The @emph{block} is repeated for @emph{name} starting at the value of
the first @emph{exp}, until it passes the second @emph{exp} by steps
 of the
third @emph{exp}.
More precisely, a @Rw{for} statement like
@verbatim{
for v = @rep{e1}, @rep{e2}, @rep{e3} do @rep{block} end
}
is equivalent to the code:
@verbatim{
do
 local @rep{var}, @rep{limit}, @rep{step} = tonumber(@rep{e1}), tonumber(@rep{e2}), tonumber(@rep{e3})
 if not (@rep{var} and @rep{limit} and @rep{step}) then error() end
 @rep{var} = @rep{var} - @rep{step}
 while true do
   @rep{var} = @rep{var} + @rep{step}

```
   if (@rep{step} >= 0 and @rep{var} > @rep{limit}) or (@rep{step} < 0 and @rep{var} < @rep{limit}) then
     break
   end
   local v = @rep{var}
   @rep{block}
 end
end
}
```

Note the following:
@itemize{

@item{
All three control expressions are evaluated only once,
before the loop starts.
They must all result in numbers.
}

@item{
@T{@rep{var}}, @T{@rep{limit}}, and @T{@rep{step}} are invisible variables.
The names shown here are for explanatory purposes only.
}

@item{
If the third expression (the step) is absent,
then a step @N{of 1} is used.
}

@item{
You
 can use @Rw{break} and @Rw{goto} to exit a @Rw{for} loop.
}

@item{
The loop variable @T{v} is local to the loop body.
If you need its value after the loop,
assign it to another variable before exiting the loop.
}

}

The generic @Rw{for} statement works over functions,
called @def{iterators}.
On each iteration, the iterator function is called to produce a new value,
stopping when this new value is @nil.
The generic @Rw{for} loop has the following syntax:
@Produc{
@producname{stat}@producbody{@Rw{for} namelist @Rw{in} explist

```
                @Rw{do} block @Rw{end}}
@producname{namelist}@producbody{@bnfNter{Name} @bnfrep{@bnfter{,} @bnfNter{Name}}}
}
A @Rw{for} statement like
@verbatim{
for @rep{var_1}, @Cdots, @rep{var_n} in @rep{explist} do @rep{block} end
}
is equivalent to the code:
@verbatim{
do
 local @rep{f}, @rep{s}, @rep{var} = @rep{explist}
 while true do
   local @rep{var_1}, @Cdots, @rep{var_n} = @rep{f}(@rep{s}, @rep{var})
   if @rep{var_1} == nil then
 break end
   @rep{var} = @rep{var_1}
   @rep{block}
 end
end
}
Note the following:
@itemize{

@item{
@T{@rep{explist}} is evaluated only once.
Its results are an @emph{iterator} function,
a @emph{state},
and an initial value for the first @emph{iterator variable}.
}

@item{
@T{@rep{f}}, @T{@rep{s}}, and @T{@rep{var}} are invisible variables.
The names are here for explanatory purposes only.
}

@item{
You can use @Rw{break} to exit a @Rw{for} loop.
}

@item{
The loop variables @T{@rep{var_i}} are local to the loop;
you cannot use their values after the @Rw{for} ends.
If you need these values,
then assign them to other variables before breaking or exiting the loop.
}

}
```

}

@sect3{funcstat| @title{Function Calls as Statements}
To allow possible side-effects,
function calls can be executed as statements:
@Produc{
@producname{stat}@producbody{functioncall}
}
In this case, all returned values are thrown away.
Function calls are explained in @See{functioncall}.

}

@sect3{localvar| @title{Local
 Declarations}
@x{Local variables} can be declared anywhere inside a block.
The declaration can include an initial assignment:
@Produc{
@producname{stat}@producbody{@Rw{local} namelist @bnfopt{@bnfter{=} explist}}
}
If present, an initial assignment has the same semantics
of a multiple assignment @see{assignment}.
Otherwise, all variables are initialized with @nil.

A chunk is also a block @see{chunks},
and so local variables can be declared in a chunk outside any explicit block.

The visibility rules for local variables are explained in @See{visibility}.

}

}

@sect2{expressions| @title{Expressions}

The basic expressions in Lua are the following:
@Produc{
@producname{exp}@producbody{prefixexp}
@producname{exp}@producbody{@Rw{nil} @Or @Rw{false} @Or @Rw{true}}
@producname{exp}@producbody{@bnfNter{Numeral}}
@producname{exp}@producbody{@bnfNter{LiteralString}}
@producname{exp}@producbody{functiondef}
@producname{exp}@producbody{tableconstructor}
@producname{exp}@producbody{@bnfter{...}}
@producname{exp}@producbody{exp
 binop exp}
@producname{exp}@producbody{unop exp}
@producname{prefixexp}@producbody{var @Or functioncall @Or

@bnfter{(} exp @bnfter{)}}}
}

Numerals and literal strings are explained in @See{lexical};
variables are explained in @See{variables};
function definitions are explained in @See{func-def};
function calls are explained in @See{functioncall};
table constructors are explained in @See{tableconstructor}.
Vararg expressions,
denoted by three dots (@Char{...}), can only be used when
directly inside a vararg function;
they are explained in @See{func-def}.

Binary operators comprise arithmetic operators @see{arith},
bitwise operators @see{bitwise},
relational operators @see{rel-ops}, logical operators @see{logic},
and the concatenation operator @see{concat}.
Unary operators comprise the unary minus @see{arith},
the unary bitwise NOT @see{bitwise},
the unary logical @Rw{not} @see{logic},
and the unary @def{length operator}
@see{len-op}.

Both function calls and vararg expressions can result in multiple values.
If a function call is used as a statement @see{funcstat},
then its return list is adjusted to zero elements,
thus discarding all returned values.
If an expression is used as the last (or the only) element
of a list of expressions,
then no adjustment is made
(unless the expression is enclosed in parentheses).
In all other contexts,
Lua adjusts the result list to one element,
either discarding all values except the first one
or adding a single @nil if there are no values.

Here are some examples:
@verbatim{
```
f()             -- adjusted to 0 results
g(f(), x)       -- f() is adjusted to 1 result
g(x, f())       -- g gets x plus all results from f()
a,b,c = f(), x  -- f() is adjusted to 1 result (c gets nil)
a,b = ...       -- a gets the first vararg argument, b gets
                -- the second (both a and b can get nil if there
                -- is no corresponding vararg
 argument)

a,b,c = x, f()  -- f() is adjusted to 2 results
```

```
a,b,c = f()        -- f() is adjusted to 3 results
return f()         -- returns all results from f()
return ...         -- returns all received vararg arguments
return x,y,f()     -- returns x, y, and all results from f()
{f()}              -- creates a list with all results from f()
{...}              -- creates a list with all vararg arguments
{f(), nil}         -- f() is adjusted to 1 result
}
```

Any expression enclosed in parentheses always results in only one value.
Thus,
@T{(f(x,y,z))} is always a single value,
even if @id{f} returns several values.
(The value of @T{(f(x,y,z))} is the first value returned by @id{f}
or @nil if @id{f} does not return any values.)

@sect3{arith| @title{Arithmetic Operators}
Lua supports the following @x{arithmetic operators}:
@description{
@item{@T{+}|addition}
@item{@T{-}|subtraction}
@item{@T{*}|multiplication}
@item{@T{/}|float division}
@item{@T{//}|floor division}
@item{@T{%}|modulo}
@item{@T{^}|exponentiation}
@item{@T{-}|unary
 minus}
}

With the exception of exponentiation and float division,
the arithmetic operators work as follows:
If both operands are integers,
the operation is performed over integers and the result is an integer.
Otherwise, if both operands are numbers
or strings that can be converted to
numbers @see{coercion},
then they are converted to floats,
the operation is performed following the usual rules
for floating-point arithmetic
(usually the @x{IEEE 754} standard),
and the result is a float.

Exponentiation and float division (@T{/})
always convert their operands to floats
and the result is always a float.

Exponentiation uses the @ANSI{pow},
so that it works for non-integer exponents too.

Floor division (@T{//}) is a division
that rounds the quotient towards minus infinity,
that is, the floor of the division of its operands.

Modulo is defined as the remainder of a division
that rounds the quotient towards minus infinity (floor division).

In
 case of overflows in integer arithmetic,
all operations @emphx{wrap around},
according to the usual rules of two-complement arithmetic.
(In other words,
they return the unique representable integer
that is equal modulo @M{2@sp{64}} to the mathematical result.)
}

@sect3{bitwise| @title{Bitwise Operators}
Lua supports the following @x{bitwise operators}:
@description{
@item{@T{&}|bitwise AND}
@item{@T{@VerBar}|bitwise OR}
@item{@T{~}|bitwise exclusive OR}
@item{@T{>>}|right shift}
@item{@T{<<}|left shift}
@item{@T{~}|unary bitwise NOT}
}

All bitwise operations convert its operands to integers
@see{coercion},
operate on all bits of those integers,
and result in an integer.

Both right and left shifts fill the vacant bits with zeros.
Negative displacements shift to the other direction;
displacements with absolute values equal to or higher than
the number of bits in an integer
result in zero (as all bits are shifted out).

}

@sect3{coercion| @title{Coercions and Conversions}
Lua provides
 some automatic conversions between some
types and representations at run time.
Bitwise operators always convert float operands to integers.

Exponentiation and float division
always convert integer operands to floats.
All other arithmetic operations applied to mixed numbers
(integers and floats) convert the integer operand to a float;
this is called the @def{usual rule}.
The C API also converts both integers to floats and
floats to integers, as needed.
Moreover, string concatenation accepts numbers as arguments,
besides strings.

Lua also converts strings to numbers,
whenever a number is expected.

In a conversion from integer to float,
if the integer value has an exact representation as a float,
that is the result.
Otherwise,
the conversion gets the nearest higher or
the nearest lower representable value.
This kind of conversion never fails.

The conversion from float to integer
checks whether the float has an exact representation as an integer
(that is, the float has an integral
value and
it is in the range of integer representation).
If it does, that representation is the result.
Otherwise, the conversion fails.

The conversion from strings to numbers goes as follows:
First, the string is converted to an integer or a float,
following its syntax and the rules of the Lua lexer.
(The string may have also leading and trailing spaces and a sign.)
Then, the resulting number (float or integer)
is converted to the type (float or integer) required by the context
(e.g., the operation that forced the conversion).

All conversions from strings to numbers
accept both a dot and the current locale mark
as the radix character.
(The Lua lexer, however, accepts only a dot.)

The conversion from numbers to strings uses a
non-specified human-readable format.
For complete control over how numbers are converted to strings,
use the @id{format} function from the string library
@seeF{string.format}.

}

@sect3{rel-ops| @title{Relational Operators}
Lua supports the following @x{relational
operators}:
@description{
@item{@T{==}|equality}
@item{@T{~=}|inequality}
@item{@T{<}|less than}
@item{@T{>}|greater than}
@item{@T{<=}|less or equal}
@item{@T{>=}|greater or equal}
}
These operators always result in @false or @true.

Equality (@T{==}) first compares the type of its operands.
If the types are different, then the result is @false.
Otherwise, the values of the operands are compared.
Strings are compared in the obvious way.
Numbers are equal if they denote the same mathematical value.

Tables, userdata, and threads
are compared by reference:
two objects are considered equal only if they are the same object.
Every time you create a new object
(a table, userdata, or thread),
this new object is different from any previously existing object.
A closure is always equal to itself.
Closures with any detectable difference
(different behavior, different definition) are always different.
Closures created at different times but with no detectable differences
may be classified as
equal or not
(depending on internal caching details).

You can change the way that Lua compares tables and userdata
by using the @Q{eq} metamethod @see{metatable}.

Equality comparisons do not convert strings to numbers
or vice versa.
Thus, @T{"0"==0} evaluates to @false,
and @T{t[0]} and @T{t["0"]} denote different
entries in a table.

The operator @T{~=} is exactly the negation of equality (@T{==}).

The order operators work as follows.
If both arguments are numbers,

then they are compared according to their mathematical values
(regardless of their subtypes).
Otherwise, if both arguments are strings,
then their values are compared according to the current locale.
Otherwise, Lua tries to call the @Q{lt} or the @Q{le}
metamethod @see{metatable}.
A comparison @T{a > b} is translated to @T{b < a}
and @T{a >= b} is translated to @T{b <= a}.

Following the @x{IEEE 754} standard,
@x{NaN} is considered neither smaller than,
nor equal to, nor greater than any value (including itself).

}

@sect3{logic|
 @title{Logical Operators}
The @x{logical operators} in Lua are
@Rw{and}, @Rw{or}, and @Rw{not}.
Like the control structures @see{control},
all logical operators consider both @false and @nil as false
and anything else as true.

The negation operator @Rw{not} always returns @false or @true.
The conjunction operator @Rw{and} returns its first argument
if this value is @false or @nil;
otherwise, @Rw{and} returns its second argument.
The disjunction operator @Rw{or} returns its first argument
if this value is different from @nil and @false;
otherwise, @Rw{or} returns its second argument.
Both @Rw{and} and @Rw{or} use @x{short-circuit evaluation};
that is,
the second operand is evaluated only if necessary.
Here are some examples:
@verbatim{
10 or 20 --> 10
10 or error() --> 10
nil or "a" --> "a"
nil and 10 --> nil
false and error() --> false
false and nil --> false
false or nil --> nil
10 and 20 --> 20
}
(In this manual,
@T{-->}
 indicates the result of the preceding expression.)

}

@sect3{concat| @title{Concatenation}
The string @x{concatenation} operator in Lua is
denoted by two dots (@Char{..}).
If both operands are strings or numbers, then they are converted to
strings according to the rules described in @See{coercion}.
Otherwise, the @idx{__concat} metamethod is called @see{metatable}.

}

@sect3{len-op| @title{The Length Operator}

The length operator is denoted by the unary prefix operator @T{#}.

The length of a string is its number of bytes
(that is, the usual meaning of string length when each
character is one byte).

The length operator applied on a table
returns a @x{border} in that table.
A @def{border} in a table @id{t} is any natural number
that satisfies the following condition:
@verbatim{
(border == 0 or t[border] ~= nil) and t[border + 1] == nil
}
In words,
a border is any (natural) index in a table
where a non-nil value is followed by a nil value
(or zero, when index 1 is nil).

A
 table with exactly one border is called a @def{sequence}.
For instance, the table @T{{10, 20, 30, 40, 50}} is a sequence,
as it has only one border (5).
The table @T{{10, 20, 30, nil, 50}} has two borders (3 and 5),
and therefore it is not a sequence.
The table @T{{nil, 20, 30, nil, nil, 60, nil}}
has three borders (0, 3, and 6),
so it is not a sequence, too.
The table @T{{}} is a sequence with border 0.
Note that non-natural keys do not interfere
with whether a table is a sequence.

When @id{t} is a sequence,
@T{#t} returns its only border,
which corresponds to the intuitive notion of the length of the sequence.
When @id{t} is not a sequence,

@T{#t} can return any of its borders.
(The exact one depends on details of
the internal representation of the table,
which in turn can depend on how the table was populated and
the memory addresses of its non-numeric keys.)

The computation of the length of a table
has a guaranteed worst time of @M{O(log n)},
where @M{n} is the largest natural key
in the table.

A program can modify the behavior of the length operator for
any value but strings through the @idx{__len} metamethod @see{metatable}.

}

@sect3{prec| @title{Precedence}
@x{Operator precedence} in Lua follows the table below,
from lower to higher priority:
@verbatim{
or
and
< > <= >= ~= ==
|
~
&
<< >>
..
+ -
* / // %
unary operators (not # - ~)
^
}
As usual,
you can use parentheses to change the precedences of an expression.
The concatenation (@Char{..}) and exponentiation (@Char{^})
operators are right associative.
All other binary operators are left associative.

}

@sect3{tableconstructor| @title{Table Constructors}
Table @x{constructors} are expressions that create tables.
Every time a constructor is evaluated, a new table is created.
A constructor can be used to create an empty table
or to create a table and initialize some of its fields.
The general syntax for constructors is
@Produc{

@producname{tableconstructor}@producbody{@bnfter{@Open}
 @bnfopt{fieldlist} @bnfter{@Close}}
@producname{fieldlist}@producbody{field @bnfrep{fieldsep field} @bnfopt{fieldsep}}
@producname{field}@producbody{@bnfter{[} exp @bnfter{]} @bnfter{=} exp @Or
@bnfNter{Name} @bnfter{=} exp @Or exp}
@producname{fieldsep}@producbody{@bnfter{,} @Or @bnfter{;}}
}

Each field of the form @T{[exp1] = exp2} adds to the new table an entry
with key @id{exp1} and value @id{exp2}.
A field of the form @T{name = exp} is equivalent to
@T{["name"] = exp}.
Finally, fields of the form @id{exp} are equivalent to
@T{[i] = exp}, where @id{i} are consecutive integers
starting with 1.
Fields in the other formats do not affect this counting.
For example,
@verbatim{
a = { [f(1)] = g; "x", "y"; x = 1, f(x), [30] = 23; 45 }
}
is equivalent to
@verbatim{
do
 local t = {}
 t[f(1)] = g
 t[1] = "x" -- 1st exp
 t[2] = "y" -- 2nd exp
 t.x = 1 -- t["x"] = 1
 t[3] = f(x) -- 3rd exp
 t[30] = 23
 t[4] = 45
  -- 4th exp
 a = t
end
}

The order of the assignments in a constructor is undefined.
(This order would be relevant only when there are repeated keys.)

If the last field in the list has the form @id{exp}
and the expression is a function call or a vararg expression,
then all values returned by this expression enter the list consecutively
@see{functioncall}.

The field list can have an optional trailing separator,
as a convenience for machine-generated code.

}

@sect3{functioncall| @title{Function Calls}
A @x{function call} in Lua has the following syntax:
@Produc{
@producname{functioncall}@producbody{prefixexp args}
}
In a function call,
first @bnfNter{prefixexp} and @bnfNter{args} are evaluated.
If the value of @bnfNter{prefixexp} has type @emph{function},
then this function is called
with the given arguments.
Otherwise, the @bnfNter{prefixexp} @Q{call} metamethod is called,
having as first argument the value of @bnfNter{prefixexp},
followed by the original call arguments
@see{metatable}.

The
 form
@Produc{
@producname{functioncall}@producbody{prefixexp @bnfter{:} @bnfNter{Name} args}
}
can be used to call @Q{methods}.
A call @T{v:name(@rep{args})}
is syntactic sugar for @T{v.name(v,@rep{args})},
except that @id{v} is evaluated only once.

Arguments have the following syntax:
@Produc{
@producname{args}@producbody{@bnfter{(} @bnfopt{explist} @bnfter{)}}
@producname{args}@producbody{tableconstructor}
@producname{args}@producbody{@bnfNter{LiteralString}}
}
All argument expressions are evaluated before the call.
A call of the form @T{f{@rep{fields}}} is
syntactic sugar for @T{f({@rep{fields}})};
that is, the argument list is a single new table.
A call of the form @T{f'@rep{string}'}
(or @T{f"@rep{string}"} or @T{f[[@rep{string}]]})
is syntactic sugar for @T{f('@rep{string}')};
that is, the argument list is a single literal string.

A call of the form @T{return @rep{functioncall}} is called
a @def{tail call}.
Lua implements @def{proper tail calls}
(or @emph{proper
 tail recursion}):
in a tail call,
the called function reuses the stack entry of the calling function.

Therefore, there is no limit on the number of nested tail calls that
a program can execute.
However, a tail call erases any debug information about the
calling function.
Note that a tail call only happens with a particular syntax,
where the @Rw{return} has one single function call as argument;
this syntax makes the calling function return exactly
the returns of the called function.
So, none of the following examples are tail calls:
@verbatim{
return (f(x)) -- results adjusted to 1
return 2 * f(x)
return x, f(x) -- additional results
f(x); return -- results discarded
return x or f(x) -- results adjusted to 1
}

}

@sect3{func-def| @title{Function Definitions}

The syntax for function definition is
@Produc{
@producname{functiondef}@producbody{@Rw{function} funcbody}
@producname{funcbody}@producbody{@bnfter{(} @bnfopt{parlist} @bnfter{)} block @Rw{end}}
}

The
following syntactic sugar simplifies function definitions:
@Produc{
@producname{stat}@producbody{@Rw{function} funcname funcbody}
@producname{stat}@producbody{@Rw{local} @Rw{function} @bnfNter{Name} funcbody}
@producname{funcname}@producbody{@bnfNter{Name} @bnfrep{@bnfter{.} @bnfNter{Name}}
@bnfopt{@bnfter{:} @bnfNter{Name}}}
}
The statement
@verbatim{
function f () @rep{body} end
}
translates to
@verbatim{
f = function () @rep{body} end
}
The statement
@verbatim{
function t.a.b.c.f () @rep{body} end
}
translates to

@verbatim{
t.a.b.c.f = function () @rep{body} end
}
The statement
@verbatim{
local function f () @rep{body} end
}
translates to
@verbatim{
local f; f = function () @rep{body} end
}
not to
@verbatim{
local f = function () @rep{body} end
}
(This only makes a difference when the body of the function
contains references to @id{f}.)

A function definition is an executable expression,
whose value has type @emph{function}.
When Lua precompiles a chunk,
all its function bodies are
precompiled too.
Then, whenever Lua executes the function definition,
the function is @emph{instantiated} (or @emph{closed}).
This function instance (or @emphx{closure})
is the final value of the expression.

Parameters act as local variables that are
initialized with the argument values:
@Produc{
@producname{parlist}@producbody{namelist @bnfopt{@bnfter{,} @bnfter{...}} @Or
@bnfter{...}}
}
When a function is called,
the list of @x{arguments} is adjusted to
the length of the list of parameters,
unless the function is a @def{vararg function},
which is indicated by three dots (@Char{...})
at the end of its parameter list.
A vararg function does not adjust its argument list;
instead, it collects all extra arguments and supplies them
to the function through a @def{vararg expression},
which is also written as three dots.
The value of this expression is a list of all actual extra arguments,
similar to a function with multiple results.
If a vararg expression is used inside another expression
or

in the middle of a list of expressions,
then its return list is adjusted to one element.
If the expression is used as the last element of a list of expressions,
then no adjustment is made
(unless that last expression is enclosed in parentheses).

As an example, consider the following definitions:
@verbatim{
function f(a, b) end
function g(a, b, ...) end
function r() return 1,2,3 end
}
Then, we have the following mapping from arguments to parameters and
to the vararg expression:
@verbatim{
CALL PARAMETERS

f(3) a=3, b=nil
f(3, 4) a=3, b=4
f(3, 4, 5) a=3, b=4
f(r(), 10) a=1, b=10
f(r()) a=1, b=2

g(3) a=3, b=nil, ... --> (nothing)
g(3, 4) a=3, b=4, ... --> (nothing)
g(3, 4, 5, 8) a=3, b=4, ... --> 5 8
g(5, r()) a=5, b=1, ... --> 2 3
}

Results are returned using the @Rw{return} statement @see{control}.
If control reaches the end of a function
without encountering a @Rw{return} statement,
then
the function returns with no results.

@index{multiple return}
There is a system-dependent limit on the number of values
that a function may return.
This limit is guaranteed to be larger than 1000.

The @emphx{colon} syntax
is used for defining @def{methods},
that is, functions that have an implicit extra parameter @idx{self}.
Thus, the statement
@verbatim{
function t.a.b.c:f (@rep{params}) @rep{body} end
}

is syntactic sugar for
@verbatim{
t.a.b.c.f = function (self, @rep{params}) @rep{body} end
}

}

}

@sect2{visibility| @title{Visibility Rules}

@index{visibility}
Lua is a lexically scoped language.
The scope of a local variable begins at the first statement after
its declaration and lasts until the last non-void statement
of the innermost block that includes the declaration.
Consider the following example:
@verbatim{
```
x = 10                -- global variable
do                    -- new block
 local x = x          -- new 'x', with value 10
 print(x)             --> 10
 x =
 x+1
 do                   -- another block
   local x = x+1      -- another 'x'
   print(x)           --> 12
 end
 print(x)             --> 11
end
print(x)              --> 10  (the global one)
```
}

Notice that, in a declaration like @T{local x = x},
the new @id{x} being declared is not in scope yet,
and so the second @id{x} refers to the outside variable.

Because of the @x{lexical scoping} rules,
local variables can be freely accessed by functions
defined inside their scope.
A local variable used by an inner function is called
an @def{upvalue}, or @emphx{external local variable},
inside the inner function.

Notice that each execution of a @Rw{local} statement
defines new local variables.
Consider the following example:
@verbatim{

```
a = {}
local x = 20
for i=1,10 do
 local y = 0
 a[i] = function () y=y+1; return x+y end
end
}
```

The loop creates ten closures
(that is, ten instances of the anonymous function).
Each of these closures uses a different @id{y} variable,
while all of them share
 the same @id{x}.

}

}

@C{----------}
@sect1{API| @title{The Application Program Interface}

@index{C API}
This section describes the @N{C API} for Lua, that is,
the set of @N{C functions} available to the host program to communicate
with Lua.
All API functions and related types and constants
are declared in the header file @defid{lua.h}.

Even when we use the term @Q{function},
any facility in the API may be provided as a macro instead.
Except where stated otherwise,
all such macros use each of their arguments exactly once
(except for the first argument, which is always a Lua state),
and so do not generate any hidden side-effects.

As in most @N{C libraries},
the Lua API functions do not check their arguments for validity or consistency.
However, you can change this behavior by compiling Lua
with the macro @defid{LUA_USE_APICHECK} defined.

The Lua library is fully reentrant:
it has no global variables.
It keeps all information
 it needs in a dynamic structure,
called the @def{Lua state}.

Each Lua state has one or more threads,
which correspond to independent, cooperative lines of execution.

The type @Lid{lua_State} (despite its name) refers to a thread.
(Indirectly, through the thread, it also refers to the
Lua state associated to the thread.)

A pointer to a thread must be passed as the first argument to
every function in the library, except to @Lid{lua_newstate},
which creates a Lua state from scratch and returns a pointer
to the @emph{main thread} in the new state.

@sect2{@title{The Stack}

Lua uses a @emph{virtual stack} to pass values to and from C.
Each element in this stack represents a Lua value
(@nil, number, string, etc.).
Functions in the API can access this stack through the
Lua state parameter that they receive.

Whenever Lua calls C, the called function gets a new stack,
which is independent of previous stacks and of stacks of
@N{C functions} that are still active.
This stack initially
 contains any arguments to the @N{C function}
and it is where the @N{C function} can store temporary
Lua values and must push its results
to be returned to the caller @seeC{lua_CFunction}.

For convenience,
most query operations in the API do not follow a strict stack discipline.
Instead, they can refer to any element in the stack
by using an @emph{index}:@index{index (API stack)}
A positive index represents an absolute stack position
(starting @N{at 1});
a negative index represents an offset relative to the top of the stack.
More specifically, if the stack has @rep{n} elements,
then @N{index 1} represents the first element
(that is, the element that was pushed onto the stack first)
and
@N{index @rep{n}} represents the last element;
@N{index @num{-1}} also represents the last element
(that is, the element at @N{the top})
and index @M{-n} represents the first element.

}

@sect2{stacksize| @title{Stack Size}

When you interact with the Lua API,

you are responsible for ensuring consistency.
In
particular,
@emph{you are responsible for controlling stack overflow}.
You can use the function @Lid{lua_checkstack}
to ensure that the stack has enough space for pushing new elements.

Whenever Lua calls C,
it ensures that the stack has space for
at least @defid{LUA_MINSTACK} extra slots.
@id{LUA_MINSTACK} is defined as 20,
so that usually you do not have to worry about stack space
unless your code has loops pushing elements onto the stack.

When you call a Lua function
without a fixed number of results @seeF{lua_call},
Lua ensures that the stack has enough space for all results,
but it does not ensure any extra space.
So, before pushing anything in the stack after such a call
you should use @Lid{lua_checkstack}.

}

@sect2{@title{Valid and Acceptable Indices}

Any function in the API that receives stack indices
works only with @emphx{valid indices} or @emphx{acceptable indices}.

A @def{valid index} is an index that refers to a
position that stores a modifiable Lua value.
It
comprises stack indices @N{between 1} and the stack top
(@T{1 @leq abs(index) @leq top})
@index{stack index}
plus @def{pseudo-indices},
which represent some positions that are accessible to @N{C code}
but that are not in the stack.
Pseudo-indices are used to access the registry @see{registry}
and the upvalues of a @N{C function} @see{c-closure}.

Functions that do not need a specific mutable position,
but only a value (e.g., query functions),
can be called with acceptable indices.
An @def{acceptable index} can be any valid index,
but it also can be any positive index after the stack top
within the space allocated for the stack,
that is, indices up to the stack size.
(Note that 0 is never an acceptable index.)

Except when noted otherwise,
functions in the API work with acceptable indices.

Acceptable indices serve to avoid extra tests
against the stack top when querying the stack.
For instance, a @N{C function} can query its third argument
without the need to first check whether there
is a third argument,
that is, without the need to check whether 3 is a valid index.

For functions that can be called with acceptable indices,
any non-valid index is treated as if it
contains a value of a virtual type @defid{LUA_TNONE},
which behaves like a nil value.

}

@sect2{c-closure| @title{C Closures}

When a @N{C function} is created,
it is possible to associate some values with it,
thus creating a @def{@N{C closure}}
@seeC{lua_pushcclosure};
these values are called @def{upvalues} and are
accessible to the function whenever it is called.

Whenever a @N{C function} is called,
its upvalues are located at specific pseudo-indices.
These pseudo-indices are produced by the macro
@Lid{lua_upvalueindex}.
The first upvalue associated with a function is at index
@T{lua_upvalueindex(1)}, and so on.
Any access to @T{lua_upvalueindex(@rep{n})},
where @rep{n} is greater than the number of upvalues of the
current function
(but not greater than 256,
which is one plus the maximum number of upvalues
in a closure),
produces an acceptable but invalid index.

}

@sect2{registry| @title{Registry}

Lua provides a @def{registry},
a predefined table that can be used by any @N{C code} to
store whatever Lua values it needs to store.
The registry table is always located at pseudo-index

@defid{LUA_REGISTRYINDEX}.
Any @N{C library} can store data into this table,
but it must take care to choose keys
that are different from those used
by other libraries, to avoid collisions.
Typically, you should use as key a string containing your library name,
or a light userdata with the address of a @N{C object} in your code,
or any Lua object created by your code.
As with variable names,
string keys starting with an underscore followed by
uppercase letters are reserved for Lua.

The integer keys in the registry are used
by the reference mechanism @seeC{luaL_ref}
and by some predefined values.
Therefore, integer keys must not be used for other purposes.

When you create a new Lua state,
its registry comes
with some predefined values.
These predefined values are indexed with integer keys
defined as constants in @id{lua.h}.
The following constants are defined:
@description{
@item{@defid{LUA_RIDX_MAINTHREAD}| At this index the registry has
the main thread of the state.
(The main thread is the one created together with the state.)
}

@item{@defid{LUA_RIDX_GLOBALS}| At this index the registry has
the @x{global environment}.
}
}

}

@sect2{C-error|@title{Error Handling in C}

Internally, Lua uses the C @id{longjmp} facility to handle errors.
(Lua will use exceptions if you compile it as C++;
search for @id{LUAI_THROW} in the source code for details.)
When Lua faces any error
(such as a @x{memory allocation error} or a type error)
it @emph{raises} an error;
that is, it does a long jump.
A @emphx{protected environment} uses @id{setjmp}
to set a recovery point;
any error jumps to the most recent active recovery point.

Inside a @N{C function} you can raise an error by calling @Lid{lua_error}.

Most
functions in the API can raise an error,
for instance due to a @x{memory allocation error}.
The documentation for each function indicates whether
it can raise errors.

If an error happens outside any protected environment,
Lua calls a @def{panic function} (see @Lid{lua_atpanic})
and then calls @T{abort},
thus exiting the host application.
Your panic function can avoid this exit by
never returning
(e.g., doing a long jump to your own recovery point outside Lua).

The panic function,
as its name implies,
is a mechanism of last resort.
Programs should avoid it.
As a general rule,
when a @N{C function} is called by Lua with a Lua state,
it can do whatever it wants on that Lua state,
as it should be already protected.
However,
when C code operates on other Lua states
(e.g., a Lua argument to the function,
a Lua state stored in the registry, or
the result of @Lid{lua_newthread}),
it should use them only in API calls that cannot raise errors.

The panic function runs as if it were a
@x{message handler} @see{error};
in particular, the error object is at the top of the stack.
However, there is no guarantee about stack space.
To push anything on the stack,
the panic function must first check the available space @see{stacksize}.

}

@sect2{continuations|@title{Handling Yields in C}

Internally, Lua uses the C @id{longjmp} facility to yield a coroutine.
Therefore, if a @N{C function} @id{foo} calls an API function
and this API function yields
(directly or indirectly by calling another function that yields),
Lua cannot return to @id{foo} any more,

because the @id{longjmp} removes its frame from the C stack.

To avoid this kind of problem,
Lua raises an error whenever it tries to yield across an API call,
except for three functions:
@Lid{lua_yieldk}, @Lid{lua_callk}, and @Lid{lua_pcallk}.
All those functions receive a @def{continuation function}
(as a parameter named @id{k}) to continue execution after a yield.

We need to set some terminology to explain continuations.
We
have a @N{C function} called from Lua which we will call
the @emph{original function}.
This original function then calls one of those three functions in the C API,
which we will call the @emph{callee function},
that then yields the current thread.
(This can happen when the callee function is @Lid{lua_yieldk},
or when the callee function is either @Lid{lua_callk} or @Lid{lua_pcallk}
and the function called by them yields.)

Suppose the running thread yields while executing the callee function.
After the thread resumes,
it eventually will finish running the callee function.
However,
the callee function cannot return to the original function,
because its frame in the C stack was destroyed by the yield.
Instead, Lua calls a @def{continuation function},
which was given as an argument to the callee function.
As the name implies,
the continuation function should continue the task
of the original function.

As an illustration, consider the following function:
@verbatim{
```
int original_function
 (lua_State *L) {
 ...     /* code 1 */
 status = lua_pcall(L, n, m, h);  /* calls Lua */
 ...     /* code 2 */
}
```
}
Now we want to allow
the Lua code being run by @Lid{lua_pcall} to yield.
First, we can rewrite our function like here:
@verbatim{
```
int k (lua_State *L, int status, lua_KContext ctx) {
 ...  /* code 2 */
}
```

```
int original_function (lua_State *L) {
 ...     /* code 1 */
 return k(L, lua_pcall(L, n, m, h), ctx);
}
}
```

In the above code,
the new function @id{k} is a
@emph{continuation function} (with type @Lid{lua_KFunction}),
which should do all the work that the original function
was doing after calling @Lid{lua_pcall}.
Now, we must inform Lua that it must call @id{k} if the Lua code
being executed by @Lid{lua_pcall} gets interrupted in some way
(errors or yielding),
so we rewrite the code as here,
replacing @Lid{lua_pcall} by @Lid{lua_pcallk}:
@verbatim{

```
int original_function (lua_State *L) {
 ...     /* code 1 */
 return k(L, lua_pcallk(L, n, m, h, ctx2, k), ctx1);
}
}
```

Note
 the external, explicit call to the continuation:
Lua will call the continuation only if needed, that is,
in case of errors or resuming after a yield.
If the called function returns normally without ever yielding,
@Lid{lua_pcallk} (and @Lid{lua_callk}) will also return normally.
(Of course, instead of calling the continuation in that case,
you can do the equivalent work directly inside the original function.)

Besides the Lua state,
the continuation function has two other parameters:
the final status of the call plus the context value (@id{ctx}) that
was passed originally to @Lid{lua_pcallk}.
(Lua does not use this context value;
it only passes this value from the original function to the
continuation function.)
For @Lid{lua_pcallk},
the status is the same value that would be returned by @Lid{lua_pcallk},
except that it is @Lid{LUA_YIELD} when being executed after a yield
(instead of @Lid{LUA_OK}).
For @Lid{lua_yieldk} and @Lid{lua_callk},
the status is always @Lid{LUA_YIELD} when
 Lua calls the continuation.
(For these two functions,
Lua will not call the continuation in case of errors,
because they do not handle errors.)

Similarly, when using @Lid{lua_callk},
you should call the continuation function
with @Lid{LUA_OK} as the status.
(For @Lid{lua_yieldk}, there is not much point in calling
directly the continuation function,
because @Lid{lua_yieldk} usually does not return.)

Lua treats the continuation function as if it were the original function.
The continuation function receives the same Lua stack
from the original function,
in the same state it would be if the callee function had returned.
(For instance,
after a @Lid{lua_callk} the function and its arguments are
removed from the stack and replaced by the results from the call.)
It also has the same upvalues.
Whatever it returns is handled by Lua as if it were the return
of the original function.

}

@sect2{@title{Functions and Types}

Here we list all functions and types from the @N{C API} in
alphabetical
order.
Each function has an indicator like this:
@apii{o,p,x}

The first field, @T{o},
is how many elements the function pops from the stack.
The second field, @T{p},
is how many elements the function pushes onto the stack.
(Any function always pushes its results after popping its arguments.)
A field in the form @T{x|y} means the function can push (or pop)
@T{x} or @T{y} elements,
depending on the situation;
an interrogation mark @Char{?} means that
we cannot know how many elements the function pops/pushes
by looking only at its arguments
(e.g., they may depend on what is on the stack).
The third field, @T{x},
tells whether the function may raise errors:
@Char{-} means the function never raises any error;
@Char{m} means the function may raise out-of-memory errors
and errors running a @idx{__gc} metamethod;
@Char{e} means the function may raise any errors
(it can run arbitrary Lua code,
either directly or through metamethods);

@Char{v} means the function may raise an error on purpose.

@APIEntry{int
 lua_absindex (lua_State *L, int idx);|
@apii{0,0,-}

Converts the @x{acceptable index} @id{idx}
into an equivalent @x{absolute index}
(that is, one that does not depend on the stack top).

}

@APIEntry{
typedef void * (*lua_Alloc) (void *ud,
                void *ptr,
                size_t osize,
                size_t nsize);|

The type of the @x{memory-allocation function} used by Lua states.
The allocator function must provide a
functionality similar to @id{realloc},
but not exactly the same.
Its arguments are
@id{ud}, an opaque pointer passed to @Lid{lua_newstate};
@id{ptr}, a pointer to the block being allocated/reallocated/freed;
@id{osize}, the original size of the block or some code about what
is being allocated;
and @id{nsize}, the new size of the block.

When @id{ptr} is not @id{NULL},
@id{osize} is the size of the block pointed by @id{ptr},
that is, the size given when it was allocated or reallocated.

When @id{ptr} is
 @id{NULL},
@id{osize} encodes the kind of object that Lua is allocating.
@id{osize} is any of
@Lid{LUA_TSTRING}, @Lid{LUA_TTABLE}, @Lid{LUA_TFUNCTION},
@Lid{LUA_TUSERDATA}, or @Lid{LUA_TTHREAD} when (and only when)
Lua is creating a new object of that type.
When @id{osize} is some other value,
Lua is allocating memory for something else.

Lua assumes the following behavior from the allocator function:

When @id{nsize} is zero,

the allocator must behave like @id{free}
and return @id{NULL}.

When @id{nsize} is not zero,
the allocator must behave like @id{realloc}.
The allocator returns @id{NULL}
if and only if it cannot fulfill the request.
Lua assumes that the allocator never fails when
@T{osize >= nsize}.

Here is a simple implementation for the @x{allocator function}.
It is used in the auxiliary library by @Lid{luaL_newstate}.
@verbatim{
```
static void *l_alloc (void *ud, void *ptr, size_t osize,
                      size_t nsize) {
 (void)ud;  (void)osize;  /* not
 used */
 if (nsize == 0) {
   free(ptr);
   return NULL;
 }
 else
   return realloc(ptr, nsize);
}
```
}
Note that @N{Standard C} ensures
that @T{free(NULL)} has no effect and that
@T{realloc(NULL,size)} is equivalent to @T{malloc(size)}.
This code assumes that @id{realloc} does not fail when shrinking a block.
(Although @N{Standard C} does not ensure this behavior,
it seems to be a safe assumption.)

}

@APIEntry{void lua_arith (lua_State *L, int op);|
@apii{2|1,1,e}

Performs an arithmetic or bitwise operation over the two values
(or one, in the case of negations)
at the top of the stack,
with the value at the top being the second operand,
pops these values, and pushes the result of the operation.
The function follows the semantics of the corresponding Lua operator
(that is, it may call metamethods).

The value of @id{op} must be one of the following constants:
@description{

@item{@defid{LUA_OPADD}| performs addition (@T{+})}
@item{@defid{LUA_OPSUB}| performs subtraction (@T{-})}
@item{@defid{LUA_OPMUL}|
 performs multiplication (@T{*})}
@item{@defid{LUA_OPDIV}| performs float division (@T{/})}
@item{@defid{LUA_OPIDIV}| performs floor division (@T{//})}
@item{@defid{LUA_OPMOD}| performs modulo (@T{%})}
@item{@defid{LUA_OPPOW}| performs exponentiation (@T{^})}
@item{@defid{LUA_OPUNM}| performs mathematical negation (unary @T{-})}
@item{@defid{LUA_OPBNOT}| performs bitwise NOT (@T{~})}
@item{@defid{LUA_OPBAND}| performs bitwise AND (@T{&})}
@item{@defid{LUA_OPBOR}| performs bitwise OR (@T{|})}
@item{@defid{LUA_OPBXOR}| performs bitwise exclusive OR (@T{~})}
@item{@defid{LUA_OPSHL}| performs left shift (@T{<<})}
@item{@defid{LUA_OPSHR}| performs right shift (@T{>>})}

}

}

@APIEntry{lua_CFunction lua_atpanic (lua_State *L, lua_CFunction panicf);|
@apii{0,0,-}

Sets a new panic function and returns the old one @see{C-error}.

}

@APIEntry{void lua_call (lua_State *L, int nargs, int nresults);|
@apii{nargs+1,nresults,e}

Calls a function.

To call a function you
 must use the following protocol:
first, the function to be called is pushed onto the stack;
then, the arguments to the function are pushed
in direct order;
that is, the first argument is pushed first.
Finally you call @Lid{lua_call};
@id{nargs} is the number of arguments that you pushed onto the stack.
All arguments and the function value are popped from the stack
when the function is called.
The function results are pushed onto the stack when the function returns.
The number of results is adjusted to @id{nresults},
unless @id{nresults} is @defid{LUA_MULTRET}.
In this case, all results from the function are pushed;
Lua takes care that the returned values fit into the stack space,

but it does not ensure any extra space in the stack.
The function results are pushed onto the stack in direct order
(the first result is pushed first),
so that after the call the last result is on the top of the stack.

Any error inside the called function is propagated upwards
(with a @id{longjmp}).

The following
 example shows how the host program can do the
equivalent to this Lua code:
@verbatim{
a = f("how", t.x, 14)
}
Here it is @N{in C}:
@verbatim{
```
lua_getglobal(L, "f");                  /* function to be called */
lua_pushliteral(L, "how");                      /* 1st argument */
lua_getglobal(L, "t");                  /* table to be indexed */
lua_getfield(L, -1, "x");       /* push result of t.x (2nd arg) */
lua_remove(L, -2);                  /* remove 't' from the stack */
lua_pushinteger(L, 14);                         /* 3rd argument */
lua_call(L, 3, 1);     /* call 'f' with 3 arguments and 1 result */
lua_setglobal(L, "a");                          /* set global 'a' */
```
}
Note that the code above is @emph{balanced}:
at its end, the stack is back to its original configuration.
This is considered good programming practice.

}

@APIEntry{
```
void lua_callk (lua_State *L,
                int nargs,
                int nresults,
                lua_KContext ctx,
                lua_KFunction
 k);|
```
@apii{nargs + 1,nresults,e}

This function behaves exactly like @Lid{lua_call},
but allows the called function to yield @see{continuations}.

}

@APIEntry{typedef int (*lua_CFunction) (lua_State *L);|

Type for @N{C functions}.

In order to communicate properly with Lua,
a @N{C function} must use the following protocol,
which defines the way parameters and results are passed:
a @N{C function} receives its arguments from Lua in its stack
in direct order (the first argument is pushed first).
So, when the function starts,
@T{lua_gettop(L)} returns the number of arguments received by the function.
The first argument (if any) is at index 1
and its last argument is at index @T{lua_gettop(L)}.
To return values to Lua, a @N{C function} just pushes them onto the stack,
in direct order (the first result is pushed first),
and returns the number of results.
Any other value in the stack below the results will be properly
discarded by Lua.
Like a Lua function, a @N{C function} called
by Lua can also return
many results.

As an example, the following function receives a variable number
of numeric arguments and returns their average and their sum:
@verbatim{
```
static int foo (lua_State *L) {
 int n = lua_gettop(L);    /* number of arguments */
 lua_Number sum = 0.0;
 int i;
 for (i = 1; i <= n; i++) {
   if (!lua_isnumber(L, i)) {
     lua_pushliteral(L, "incorrect argument");
     lua_error(L);
   }
   sum += lua_tonumber(L, i);
 }
 lua_pushnumber(L, sum/n);        /* first result */
 lua_pushnumber(L, sum);         /* second result */
 return 2;                   /* number of results */
}
```
}

}

@APIEntry{int lua_checkstack (lua_State *L, int n);|
@apii{0,0,-}

Ensures that the stack has space for at least @id{n} extra slots

(that is, that you can safely push up to @id{n} values into it).
It returns false if it cannot fulfill the request,
either because it would cause the stack
to be larger than a fixed maximum size
(typically at least several thousand
 elements) or
because it cannot allocate memory for the extra space.
This function never shrinks the stack;
if the stack already has space for the extra slots,
it is left unchanged.

}

@APIEntry{void lua_close (lua_State *L);|
@apii{0,0,-}

Destroys all objects in the given Lua state
(calling the corresponding garbage-collection metamethods, if any)
and frees all dynamic memory used by this state.
In several platforms, you may not need to call this function,
because all resources are naturally released when the host program ends.
On the other hand, long-running programs that create multiple states,
such as daemons or web servers,
will probably need to close states as soon as they are not needed.

}

@APIEntry{int lua_compare (lua_State *L, int index1, int index2, int op);|
@apii{0,0,e}

Compares two Lua values.
Returns 1 if the value at index @id{index1} satisfies @id{op}
when compared with the value at index @id{index2},
following the semantics of the corresponding Lua operator
(that
 is, it may call metamethods).
Otherwise @N{returns 0}.
Also @N{returns 0} if any of the indices is not valid.

The value of @id{op} must be one of the following constants:
@description{

@item{@defid{LUA_OPEQ}| compares for equality (@T{==})}
@item{@defid{LUA_OPLT}| compares for less than (@T{<})}
@item{@defid{LUA_OPLE}| compares for less or equal (@T{<=})}

}

```
}

@APIEntry{void lua_concat (lua_State *L, int n);|
@apii{n,1,e}

Concatenates the @id{n} values at the top of the stack,
pops them, and leaves the result at the top.
If @N{@T{n} is 1}, the result is the single value on the stack
(that is, the function does nothing);
if @id{n} is 0, the result is the empty string.
Concatenation is performed following the usual semantics of Lua
@see{concat}.

}

@APIEntry{void lua_copy (lua_State *L, int fromidx, int toidx);|
@apii{0,0,-}

Copies the element at index @id{fromidx}
into the valid index @id{toidx},
replacing the value at that position.
Values at other positions are not affected.

}

@APIEntry{void
 lua_createtable (lua_State *L, int narr, int nrec);|
@apii{0,1,m}

Creates a new empty table and pushes it onto the stack.
Parameter @id{narr} is a hint for how many elements the table
will have as a sequence;
parameter @id{nrec} is a hint for how many other elements
the table will have.
Lua may use these hints to preallocate memory for the new table.
This preallocation is useful for performance when you know in advance
how many elements the table will have.
Otherwise you can use the function @Lid{lua_newtable}.

}

@APIEntry{int lua_dump (lua_State *L,
                lua_Writer writer,
                void *data,
                int strip);|
@apii{0,0,-}

Dumps a function as a binary chunk.
```

Receives a Lua function on the top of the stack
and produces a binary chunk that,
if loaded again,
results in a function equivalent to the one dumped.
As it produces parts of the chunk,
@Lid{lua_dump} calls function @id{writer} @seeC{lua_Writer}
with the
 given @id{data}
to write them.

If @id{strip} is true,
the binary representation may not include all debug information
about the function,
to save space.

The value returned is the error code returned by the last
call to the writer;
@N{0 means} no errors.

This function does not pop the Lua function from the stack.

}

@APIEntry{int lua_error (lua_State *L);|
@apii{1,0,v}

Generates a Lua error,
using the value at the top of the stack as the error object.
This function does a long jump,
and therefore never returns
@seeC{luaL_error}.

}

@APIEntry{int lua_gc (lua_State *L, int what, int data);|
@apii{0,0,m}

Controls the garbage collector.

This function performs several tasks,
according to the value of the parameter @id{what}:
@description{

@item{@id{LUA_GCSTOP}|
stops the garbage collector.
}

@item{@id{LUA_GCRESTART}|

```
restarts the garbage collector.
}

@item{@id{LUA_GCCOLLECT}|
performs a full garbage-collection cycle.
}

@item{@id{LUA_GCCOUNT}|
returns the current amount of memory
 (in Kbytes) in use by Lua.
}

@item{@id{LUA_GCCOUNTB}|
returns the remainder of dividing the current amount of bytes of
memory in use by Lua by 1024.
}

@item{@id{LUA_GCSTEP}|
performs an incremental step of garbage collection.
}

@item{@id{LUA_GCSETPAUSE}|
sets @id{data} as the new value
for the @emph{pause} of the collector @see{GC}
and returns the previous value of the pause.
}

@item{@id{LUA_GCSETSTEPMUL}|
sets @id{data} as the new value for the @emph{step multiplier} of
the collector @see{GC}
and returns the previous value of the step multiplier.
}

@item{@id{LUA_GCISRUNNING}|
returns a boolean that tells whether the collector is running
(i.e., not stopped).
}

}

For more details about these options,
see @Lid{collectgarbage}.

}

@APIEntry{lua_Alloc lua_getallocf (lua_State *L, void **ud);|
@apii{0,0,-}
```

Returns the @x{memory-allocation function} of a given state.
If @id{ud} is not @id{NULL}, Lua stores in @T{*ud} the
opaque pointer given when the memory-allocator function was set.

}

@APIEntry{int
 lua_getfield (lua_State *L, int index, const char *k);|
@apii{0,1,e}

Pushes onto the stack the value @T{t[k]},
where @id{t} is the value at the given index.
As in Lua, this function may trigger a metamethod
for the @Q{index} event @see{metatable}.

Returns the type of the pushed value.

}

@APIEntry{void *lua_getextraspace (lua_State *L);|
@apii{0,0,-}

Returns a pointer to a raw memory area associated with the
given Lua state.
The application can use this area for any purpose;
Lua does not use it for anything.

Each new thread has this area initialized with a copy
of the area of the @x{main thread}.

By default, this area has the size of a pointer to void,
but you can recompile Lua with a different size for this area.
(See @id{LUA_EXTRASPACE} in @id{luaconf.h}.)

}

@APIEntry{int lua_getglobal (lua_State *L, const char *name);|
@apii{0,1,e}

Pushes onto the stack the value of the global @id{name}.
Returns the type of that value.

}

@APIEntry{int lua_geti (lua_State
 *L, int index, lua_Integer i);|
@apii{0,1,e}

Pushes onto the stack the value @T{t[i]},
where @id{t} is the value at the given index.
As in Lua, this function may trigger a metamethod
for the @Q{index} event @see{metatable}.

Returns the type of the pushed value.

}

@APIEntry{int lua_getmetatable (lua_State *L, int index);|
@apii{0,0|1,-}

If the value at the given index has a metatable,
the function pushes that metatable onto the stack and @N{returns 1}.
Otherwise,
the function @N{returns 0} and pushes nothing on the stack.

}

@APIEntry{int lua_gettable (lua_State *L, int index);|
@apii{1,1,e}

Pushes onto the stack the value @T{t[k]},
where @id{t} is the value at the given index
and @id{k} is the value at the top of the stack.

This function pops the key from the stack,
pushing the resulting value in its place.
As in Lua, this function may trigger a metamethod
for the @Q{index} event @see{metatable}.

Returns the type of the pushed value.

}

@APIEntry{int lua_gettop (lua_State
 *L);|
@apii{0,0,-}

Returns the index of the top element in the stack.
Because indices start @N{at 1},
this result is equal to the number of elements in the stack;
in particular, @N{0 means} an empty stack.

}

@APIEntry{int lua_getuservalue (lua_State *L, int index);|
@apii{0,1,-}

Pushes onto the stack the Lua value associated with the full userdata
at the given index.

Returns the type of the pushed value.

}

@APIEntry{void lua_insert (lua_State *L, int index);|
@apii{1,1,-}

Moves the top element into the given valid index,
shifting up the elements above this index to open space.
This function cannot be called with a pseudo-index,
because a pseudo-index is not an actual stack position.

}

@APIEntry{typedef @ldots lua_Integer;|

The type of integers in Lua.

By default this type is @id{long long},
(usually a 64-bit two-complement integer),
but that can be changed to @id{long} or @id{int}
(usually a 32-bit two-complement integer).
(See @id{LUA_INT_TYPE} in @id{luaconf.h}.)

Lua also
 defines the constants
@defid{LUA_MININTEGER} and @defid{LUA_MAXINTEGER},
with the minimum and the maximum values that fit in this type.

}

@APIEntry{int lua_isboolean (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a boolean,
and @N{0 otherwise}.

}

@APIEntry{int lua_iscfunction (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a @N{C function},
and @N{0 otherwise}.

}

@APIEntry{int lua_isfunction (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a function
(either C or Lua), and @N{0 otherwise}.

}

@APIEntry{int lua_isinteger (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is an integer
(that is, the value is a number and is represented as an integer),
and @N{0 otherwise}.

}

@APIEntry{int lua_islightuserdata (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a light userdata,
and @N{0 otherwise}.

}

@APIEntry{int
 lua_isnil (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is @nil,
and @N{0 otherwise}.

}

@APIEntry{int lua_isnone (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the given index is not valid,
and @N{0 otherwise}.

}

@APIEntry{int lua_isnoneornil (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the given index is not valid
or if the value at this index is @nil,
and @N{0 otherwise}.

}

@APIEntry{int lua_isnumber (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a number
or a string convertible to a number,
and @N{0 otherwise}.

}

@APIEntry{int lua_isstring (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a string
or a number (which is always convertible to a string),
and @N{0 otherwise}.

}

@APIEntry{int lua_istable (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a table,
and @N{0 otherwise}.

}

@APIEntry{int
 lua_isthread (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a thread,
and @N{0 otherwise}.

}

@APIEntry{int lua_isuserdata (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a userdata
(either full or light), and @N{0 otherwise}.

}

```
@APIEntry{int lua_isyieldable (lua_State *L);|
@apii{0,0,-}

Returns 1 if the given coroutine can yield,
and @N{0 otherwise}.

}

@APIEntry{typedef @ldots lua_KContext;|

The type for continuation-function contexts.
It must be a numeric type.
This type is defined as @id{intptr_t}
when @id{intptr_t} is available,
so that it can store pointers too.
Otherwise, it is defined as @id{ptrdiff_t}.

}

@APIEntry{
typedef int (*lua_KFunction) (lua_State *L, int status, lua_KContext ctx);|

Type for continuation functions @see{continuations}.

}

@APIEntry{void lua_len (lua_State *L, int index);|
@apii{0,1,e}

Returns the length of the value at the given index.
It is equivalent to
 the @Char{#} operator in Lua @see{len-op} and
may trigger a metamethod for the @Q{length} event @see{metatable}.
The result is pushed on the stack.

}

@APIEntry{
int lua_load (lua_State *L,
          lua_Reader reader,
          void *data,
          const char *chunkname,
          const char *mode);|
@apii{0,1,-}

Loads a Lua chunk without running it.
If there are no errors,
```

@id{lua_load} pushes the compiled chunk as a Lua
function on top of the stack.
Otherwise, it pushes an error message.

The return values of @id{lua_load} are:
@description{

@item{@Lid{LUA_OK}| no errors;}

@item{@defid{LUA_ERRSYNTAX}|
syntax error during precompilation;}

@item{@Lid{LUA_ERRMEM}|
@x{memory allocation (out-of-memory) error};}

@item{@Lid{LUA_ERRGCMM}|
error while running a @idx{__gc} metamethod.
(This error has no relation with the chunk being loaded.
It is generated by the garbage collector.)
}

}

The @id{lua_load} function uses a user-supplied @id{reader} function
to read the
 chunk @seeC{lua_Reader}.
The @id{data} argument is an opaque value passed to the reader function.

The @id{chunkname} argument gives a name to the chunk,
which is used for error messages and in debug information @see{debugI}.

@id{lua_load} automatically detects whether the chunk is text or binary
and loads it accordingly (see program @idx{luac}).
The string @id{mode} works as in function @Lid{load},
with the addition that
a @id{NULL} value is equivalent to the string @St{bt}.

@id{lua_load} uses the stack internally,
so the reader function must always leave the stack
unmodified when returning.

If the resulting function has upvalues,
its first upvalue is set to the value of the @x{global environment}
stored at index @id{LUA_RIDX_GLOBALS} in the registry @see{registry}.
When loading main chunks,
this upvalue will be the @id{_ENV} variable @see{globalenv}.
Other upvalues are initialized with @nil.

}

@APIEntry{lua_State *lua_newstate (lua_Alloc f, void *ud);|
@apii{0,0,-}

Creates a new
 thread running in a new, independent state.
Returns @id{NULL} if it cannot create the thread or the state
(due to lack of memory).
The argument @id{f} is the @x{allocator function};
Lua does all memory allocation for this state
through this function @seeF{lua_Alloc}.
The second argument, @id{ud}, is an opaque pointer that Lua
passes to the allocator in every call.

}

@APIEntry{void lua_newtable (lua_State *L);|
@apii{0,1,m}

Creates a new empty table and pushes it onto the stack.
It is equivalent to @T{lua_createtable(L, 0, 0)}.

}

@APIEntry{lua_State *lua_newthread (lua_State *L);|
@apii{0,1,m}

Creates a new thread, pushes it on the stack,
and returns a pointer to a @Lid{lua_State} that represents this new thread.
The new thread returned by this function shares with the original thread
its global environment,
but has an independent execution stack.

There is no explicit function to close or to destroy a thread.
Threads are subject to garbage collection,
like any Lua object.

}

@APIEntry{void
 *lua_newuserdata (lua_State *L, size_t size);|
@apii{0,1,m}

This function allocates a new block of memory with the given size,
pushes onto the stack a new full userdata with the block address,
and returns this address.
The host program can freely use this memory.

}

@APIEntry{int lua_next (lua_State *L, int index);|
@apii{1,2|0,e}

Pops a key from the stack,
and pushes a key@En{}value pair from the table at the given index
(the @Q{next} pair after the given key).
If there are no more elements in the table,
then @Lid{lua_next} returns 0 (and pushes nothing).

A typical traversal looks like this:
@verbatim{
/* table is in the stack at index 't' */
lua_pushnil(L); /* first key */
while (lua_next(L, t) != 0) {
 /* uses 'key' (at index -2) and 'value' (at index -1) */
 printf("%s - %s\n",
        lua_typename(L, lua_type(L, -2)),
        lua_typename(L, lua_type(L, -1)));
 /* removes 'value'; keeps 'key' for next iteration */
 lua_pop(L, 1);
}
}

While traversing a table,
do
 not call @Lid{lua_tolstring} directly on a key,
unless you know that the key is actually a string.
Recall that @Lid{lua_tolstring} may change
the value at the given index;
this confuses the next call to @Lid{lua_next}.

See function @Lid{next} for the caveats of modifying
the table during its traversal.

}

@APIEntry{typedef @ldots lua_Number;|

The type of floats in Lua.

By default this type is double,
but that can be changed to a single float or a long double.
(See @id{LUA_FLOAT_TYPE} in @id{luaconf.h}.)

}

@APIEntry{int lua_numbertointeger (lua_Number n, lua_Integer *p);|

Converts a Lua float to a Lua integer.
This macro assumes that @id{n} has an integral value.
If that value is within the range of Lua integers,
it is converted to an integer and assigned to @T{*p}.
The macro results in a boolean indicating whether the
conversion was successful.
(Note that this range test can be tricky to do
correctly without this macro,
due to roundings.)

This macro may evaluate its arguments
more than once.

}

@APIEntry{int lua_pcall (lua_State *L, int nargs, int nresults, int msgh);|
@apii{nargs + 1,nresults|1,-}

Calls a function in protected mode.

Both @id{nargs} and @id{nresults} have the same meaning as
in @Lid{lua_call}.
If there are no errors during the call,
@Lid{lua_pcall} behaves exactly like @Lid{lua_call}.
However, if there is any error,
@Lid{lua_pcall} catches it,
pushes a single value on the stack (the error object),
and returns an error code.
Like @Lid{lua_call},
@Lid{lua_pcall} always removes the function
and its arguments from the stack.

If @id{msgh} is 0,
then the error object returned on the stack
is exactly the original error object.
Otherwise, @id{msgh} is the stack index of a
@emph{message handler}.
(This index cannot be a pseudo-index.)
In case of runtime errors,
this function will be called with the error object
and its return value will be the object
returned on the stack by @Lid{lua_pcall}.

Typically, the message handler is used to add

more debug
information to the error object, such as a stack traceback.
Such information cannot be gathered after the return of @Lid{lua_pcall},
since by then the stack has unwound.

The @Lid{lua_pcall} function returns one of the following constants
(defined in @id{lua.h}):
@description{

@item{@defid{LUA_OK} (0)|
success.}

@item{@defid{LUA_ERRRUN}|
a runtime error.
}

@item{@defid{LUA_ERRMEM}|
@x{memory allocation error}.
For such errors, Lua does not call the @x{message handler}.
}

@item{@defid{LUA_ERRERR}|
error while running the @x{message handler}.
}

@item{@defid{LUA_ERRGCMM}|
error while running a @idx{__gc} metamethod.
For such errors, Lua does not call the @x{message handler}
(as this kind of error typically has no relation
with the function being called).
}

}

}

@APIEntry{
int lua_pcallk (lua_State *L,
int nargs,
int nresults,
int msgh,
lua_KContext ctx,
lua_KFunction k);|
@apii{nargs + 1,nresults|1,-}

This
function behaves exactly like @Lid{lua_pcall},
but allows the called function to yield @see{continuations}.

}

@APIEntry{void lua_pop (lua_State *L, int n);|
@apii{n,0,-}

Pops @id{n} elements from the stack.

}

@APIEntry{void lua_pushboolean (lua_State *L, int b);|
@apii{0,1,-}

Pushes a boolean value with value @id{b} onto the stack.

}

@APIEntry{void lua_pushcclosure (lua_State *L, lua_CFunction fn, int n);|
@apii{n,1,m}

Pushes a new @N{C closure} onto the stack.

When a @N{C function} is created,
it is possible to associate some values with it,
thus creating a @x{@N{C closure}} @see{c-closure};
these values are then accessible to the function whenever it is called.
To associate values with a @N{C function},
first these values must be pushed onto the stack
(when there are multiple values, the first value is pushed first).
Then @Lid{lua_pushcclosure}
is called to create and push the @N{C function} onto the stack,
with the argument @id{n} telling how many values will
be
associated with the function.
@Lid{lua_pushcclosure} also pops these values from the stack.

The maximum value for @id{n} is 255.

When @id{n} is zero,
this function creates a @def{light @N{C function}},
which is just a pointer to the @N{C function}.
In that case, it never raises a memory error.

}

@APIEntry{void lua_pushcfunction (lua_State *L, lua_CFunction f);|
@apii{0,1,-}

Pushes a @N{C function} onto the stack.
This function receives a pointer to a @N{C function}
and pushes onto the stack a Lua value of type @id{function} that,
when called, invokes the corresponding @N{C function}.

Any function to be callable by Lua must
follow the correct protocol to receive its parameters
and return its results @seeC{lua_CFunction}.

}

@APIEntry{const char *lua_pushfstring (lua_State *L, const char *fmt, ...);|
@apii{0,1,e}

Pushes onto the stack a formatted string
and returns a pointer to this string.
It is similar to the @ANSI{sprintf},
but has some important differences:
@itemize{

@item{
You
 do not have to allocate space for the result:
the result is a Lua string and Lua takes care of memory allocation
(and deallocation, through garbage collection).
}

@item{
The conversion specifiers are quite restricted.
There are no flags, widths, or precisions.
The conversion specifiers can only be
@Char{%%} (inserts the character @Char{%}),
@Char{%s} (inserts a zero-terminated string, with no size restrictions),
@Char{%f} (inserts a @Lid{lua_Number}),
@Char{%I} (inserts a @Lid{lua_Integer}),
@Char{%p} (inserts a pointer as a hexadecimal numeral),
@Char{%d} (inserts an @T{int}),
@Char{%c} (inserts an @T{int} as a one-byte character), and
@Char{%U} (inserts a @T{long int} as a @x{UTF-8} byte sequence).
}

}

Unlike other push functions,
this function checks for the stack space it needs,
including the slot for its result.

}

@APIEntry{void lua_pushglobaltable (lua_State *L);|
@apii{0,1,-}

Pushes the @x{global environment} onto the stack.

}

@APIEntry{void lua_pushinteger (lua_State
 *L, lua_Integer n);|
@apii{0,1,-}

Pushes an integer with value @id{n} onto the stack.

}

@APIEntry{void lua_pushlightuserdata (lua_State *L, void *p);|
@apii{0,1,-}

Pushes a light userdata onto the stack.

Userdata represent @N{C values} in Lua.
A @def{light userdata} represents a pointer, a @T{void*}.
It is a value (like a number):
you do not create it, it has no individual metatable,
and it is not collected (as it was never created).
A light userdata is equal to @Q{any}
light userdata with the same @N{C address}.

}

@APIEntry{const char *lua_pushliteral (lua_State *L, const char *s);|
@apii{0,1,m}

This macro is equivalent to @Lid{lua_pushstring},
but should be used only when @id{s} is a literal string.

}

@APIEntry{const char *lua_pushlstring (lua_State *L, const char *s, size_t len);|
@apii{0,1,m}

Pushes the string pointed to by @id{s} with size @id{len}
onto the stack.
Lua makes (or reuses) an internal copy of the given string,
so the memory at @id{s} can be freed
 or reused immediately after
the function returns.

The string can contain any binary data,
including @x{embedded zeros}.

Returns a pointer to the internal copy of the string.

}

@APIEntry{void lua_pushnil (lua_State *L);|
@apii{0,1,-}

Pushes a nil value onto the stack.

}

@APIEntry{void lua_pushnumber (lua_State *L, lua_Number n);|
@apii{0,1,-}

Pushes a float with value @id{n} onto the stack.

}

@APIEntry{const char *lua_pushstring (lua_State *L, const char *s);|
@apii{0,1,m}

Pushes the zero-terminated string pointed to by @id{s}
onto the stack.
Lua makes (or reuses) an internal copy of the given string,
so the memory at @id{s} can be freed or reused immediately after
the function returns.

Returns a pointer to the internal copy of the string.

If @id{s} is @id{NULL}, pushes @nil and returns @id{NULL}.

}

@APIEntry{int lua_pushthread (lua_State *L);|
@apii{0,1,-}

Pushes the thread represented by @id{L} onto the stack.
Returns 1 if this thread is the @x{main thread} of its state.

}

@APIEntry{void
 lua_pushvalue (lua_State *L, int index);|
@apii{0,1,-}

Pushes a copy of the element at the given index
onto the stack.

}

@APIEntry{
const char *lua_pushvfstring (lua_State *L,
                const char *fmt,
                va_list argp);|
@apii{0,1,m}

Equivalent to @Lid{lua_pushfstring}, except that it receives a @id{va_list}
instead of a variable number of arguments.

}

@APIEntry{int lua_rawequal (lua_State *L, int index1, int index2);|
@apii{0,0,-}

Returns 1 if the two values in indices @id{index1} and
@id{index2} are primitively equal
(that is, without calling the @idx{__eq} metamethod).
Otherwise @N{returns 0}.
Also @N{returns 0} if any of the indices are not valid.

}

@APIEntry{int lua_rawget (lua_State *L, int index);|
@apii{1,1,-}

Similar to @Lid{lua_gettable}, but does a raw access
(i.e., without metamethods).

}

@APIEntry{int lua_rawgeti (lua_State *L, int index, lua_Integer n);|
@apii{0,1,-}

Pushes onto the stack the
 value @T{t[n]},
where @id{t} is the table at the given index.
The access is raw,
that is, it does not invoke the @idx{__index} metamethod.

Returns the type of the pushed value.

}

@APIEntry{int lua_rawgetp (lua_State *L, int index, const void *p);|
@apii{0,1,-}

Pushes onto the stack the value @T{t[k]},
where @id{t} is the table at the given index and
@id{k} is the pointer @id{p} represented as a light userdata.
The access is raw;
that is, it does not invoke the @idx{__index} metamethod.

Returns the type of the pushed value.

}

@APIEntry{size_t lua_rawlen (lua_State *L, int index);|
@apii{0,0,-}

Returns the raw @Q{length} of the value at the given index:
for strings, this is the string length;
for tables, this is the result of the length operator (@Char{#})
with no metamethods;
for userdata, this is the size of the block of memory allocated
for the userdata;
for other values, it @N{is 0}.

}

@APIEntry{void lua_rawset (lua_State *L, int index);|
@apii{2,0,m}

Similar to @Lid{lua_settable},
 but does a raw assignment
(i.e., without metamethods).

}

@APIEntry{void lua_rawseti (lua_State *L, int index, lua_Integer i);|
@apii{1,0,m}

Does the equivalent of @T{t[i] = v},
where @id{t} is the table at the given index
and @id{v} is the value at the top of the stack.

This function pops the value from the stack.
The assignment is raw,
that is, it does not invoke the @idx{__newindex} metamethod.

}

```
@APIEntry{void lua_rawsetp (lua_State *L, int index, const void *p);|
@apii{1,0,m}

Does the equivalent of @T{t[p] = v},
where @id{t} is the table at the given index,
@id{p} is encoded as a light userdata,
and @id{v} is the value at the top of the stack.

This function pops the value from the stack.
The assignment is raw,
that is, it does not invoke @idx{__newindex} metamethod.

}

@APIEntry{
typedef const char * (*lua_Reader) (lua_State *L,
                                    void *data,
                                    size_t *size);|

The reader function used by @Lid{lua_load}.
Every
 time it needs another piece of the chunk,
@Lid{lua_load} calls the reader,
passing along its @id{data} parameter.
The reader must return a pointer to a block of memory
with a new piece of the chunk
and set @id{size} to the block size.
The block must exist until the reader function is called again.
To signal the end of the chunk,
the reader must return @id{NULL} or set @id{size} to zero.
The reader function may return pieces of any size greater than zero.

}

@APIEntry{void lua_register (lua_State *L, const char *name, lua_CFunction f);|
@apii{0,0,e}

Sets the @N{C function} @id{f} as the new value of global @id{name}.
It is defined as a macro:
@verbatim{
#define lua_register(L,n,f) \
     (lua_pushcfunction(L, f), lua_setglobal(L, n))
}

}

@APIEntry{void lua_remove (lua_State *L, int index);|
@apii{1,0,-}
```

Removes the element at the given valid index,
shifting down the elements above this index to fill the gap.
This function cannot be called with a pseudo-index,
because
 a pseudo-index is not an actual stack position.

}

@APIEntry{void lua_replace (lua_State *L, int index);|
@apii{1,0,-}

Moves the top element into the given valid index
without shifting any element
(therefore replacing the value at that given index),
and then pops the top element.

}

@APIEntry{int lua_resume (lua_State *L, lua_State *from, int nargs);|
@apii{?,?,-}

Starts and resumes a coroutine in the given thread @id{L}.

To start a coroutine,
you push onto the thread stack the main function plus any arguments;
then you call @Lid{lua_resume},
with @id{nargs} being the number of arguments.
This call returns when the coroutine suspends or finishes its execution.
When it returns, the stack contains all values passed to @Lid{lua_yield},
or all values returned by the body function.
@Lid{lua_resume} returns
@Lid{LUA_YIELD} if the coroutine yields,
@Lid{LUA_OK} if the coroutine finishes its execution
without errors,
or an error code in case of errors @seeC{lua_pcall}.

In case of errors,
the
 stack is not unwound,
so you can use the debug API over it.
The error object is on the top of the stack.

To resume a coroutine,
you remove any results from the last @Lid{lua_yield},
put on its stack only the values to
be passed as results from @id{yield},
and then call @Lid{lua_resume}.

The parameter @id{from} represents the coroutine that is resuming @id{L}.
If there is no such coroutine,
this parameter can be @id{NULL}.

}

@APIEntry{void lua_rotate (lua_State *L, int idx, int n);|
@apii{0,0,-}

Rotates the stack elements between the valid index @id{idx}
and the top of the stack.
The elements are rotated @id{n} positions in the direction of the top,
for a positive @id{n},
or @T{-n} positions in the direction of the bottom,
for a negative @id{n}.
The absolute value of @id{n} must not be greater than the size
of the slice being rotated.
This function cannot be called with a pseudo-index,
because a pseudo-index is not an actual stack position.

}

@APIEntry{void lua_setallocf
 (lua_State *L, lua_Alloc f, void *ud);|
@apii{0,0,-}

Changes the @x{allocator function} of a given state to @id{f}
with user data @id{ud}.

}

@APIEntry{void lua_setfield (lua_State *L, int index, const char *k);|
@apii{1,0,e}

Does the equivalent to @T{t[k] = v},
where @id{t} is the value at the given index
and @id{v} is the value at the top of the stack.

This function pops the value from the stack.
As in Lua, this function may trigger a metamethod
for the @Q{newindex} event @see{metatable}.

}

@APIEntry{void lua_setglobal (lua_State *L, const char *name);|
@apii{1,0,e}

Pops a value from the stack and
sets it as the new value of global @id{name}.

}

@APIEntry{void lua_seti (lua_State *L, int index, lua_Integer n);|
@apii{1,0,e}

Does the equivalent to @T{t[n] = v},
where @id{t} is the value at the given index
and @id{v} is the value at the top of the stack.

This function pops the value from the stack.
As in Lua, this function may trigger a metamethod
for the @Q{newindex} event
 @see{metatable}.

}

@APIEntry{void lua_setmetatable (lua_State *L, int index);|
@apii{1,0,-}

Pops a table from the stack and
sets it as the new metatable for the value at the given index.

}

@APIEntry{void lua_settable (lua_State *L, int index);|
@apii{2,0,e}

Does the equivalent to @T{t[k] = v},
where @id{t} is the value at the given index,
@id{v} is the value at the top of the stack,
and @id{k} is the value just below the top.

This function pops both the key and the value from the stack.
As in Lua, this function may trigger a metamethod
for the @Q{newindex} event @see{metatable}.

}

@APIEntry{void lua_settop (lua_State *L, int index);|
@apii{?,?,-}

Accepts any index, @N{or 0},
and sets the stack top to this index.
If the new top is larger than the old one,
then the new elements are filled with @nil.

If @id{index} @N{is 0}, then all stack elements are removed.

}

@APIEntry{void lua_setuservalue (lua_State *L, int index);|
@apii{1,0,-}

Pops a value from the stack and sets it as
the
 new value associated to the full userdata at the given index.

}

@APIEntry{typedef struct lua_State lua_State;|

An opaque structure that points to a thread and indirectly
(through the thread) to the whole state of a Lua interpreter.
The Lua library is fully reentrant:
it has no global variables.
All information about a state is accessible through this structure.

A pointer to this structure must be passed as the first argument to
every function in the library, except to @Lid{lua_newstate},
which creates a Lua state from scratch.

}

@APIEntry{int lua_status (lua_State *L);|
@apii{0,0,-}

Returns the status of the thread @id{L}.

The status can be 0 (@Lid{LUA_OK}) for a normal thread,
an error code if the thread finished the execution
of a @Lid{lua_resume} with an error,
or @defid{LUA_YIELD} if the thread is suspended.

You can only call functions in threads with status @Lid{LUA_OK}.
You can resume threads with status @Lid{LUA_OK}
(to start a new coroutine) or @Lid{LUA_YIELD}
(to
 resume a coroutine).

}

@APIEntry{size_t lua_stringtonumber (lua_State *L, const char *s);|
@apii{0,1,-}

Converts the zero-terminated string @id{s} to a number,
pushes that number into the stack,
and returns the total size of the string,
that is, its length plus one.
The conversion can result in an integer or a float,
according to the lexical conventions of Lua @see{lexical}.
The string may have leading and trailing spaces and a sign.
If the string is not a valid numeral,
returns 0 and pushes nothing.
(Note that the result can be used as a boolean,
true if the conversion succeeds.)

}

@APIEntry{int lua_toboolean (lua_State *L, int index);|
@apii{0,0,-}

Converts the Lua value at the given index to a @N{C boolean}
value (@N{0 or 1}).
Like all tests in Lua,
@Lid{lua_toboolean} returns true for any Lua value
different from @false and @nil;
otherwise it returns false.
(If you want to accept only actual boolean values,
use @Lid{lua_isboolean} to test the value's type.)

}

@APIEntry{lua_CFunction
 lua_tocfunction (lua_State *L, int index);|
@apii{0,0,-}

Converts a value at the given index to a @N{C function}.
That value must be a @N{C function};
otherwise, returns @id{NULL}.

}

@APIEntry{lua_Integer lua_tointeger (lua_State *L, int index);|
@apii{0,0,-}

Equivalent to @Lid{lua_tointegerx} with @id{isnum} equal to @id{NULL}.

}

@APIEntry{lua_Integer lua_tointegerx (lua_State *L, int index, int *isnum);|
@apii{0,0,-}

Converts the Lua value at the given index
to the signed integral type @Lid{lua_Integer}.
The Lua value must be an integer,
or a number or string convertible to an integer @see{coercion};
otherwise, @id{lua_tointegerx} @N{returns 0}.

If @id{isnum} is not @id{NULL},
its referent is assigned a boolean value that
indicates whether the operation succeeded.

}

@APIEntry{const char *lua_tolstring (lua_State *L, int index, size_t *len);|
@apii{0,0,m}

Converts the Lua value at the given index to a @N{C string}.
If @id{len} is not @id{NULL},
it sets @T{*len}
 with the string length.
The Lua value must be a string or a number;
otherwise, the function returns @id{NULL}.
If the value is a number,
then @id{lua_tolstring} also
@emph{changes the actual value in the stack to a string}.
(This change confuses @Lid{lua_next}
when @id{lua_tolstring} is applied to keys during a table traversal.)

@id{lua_tolstring} returns a pointer
to a string inside the Lua state.
This string always has a zero (@Char{\0})
after its last character (as @N{in C}),
but can contain other zeros in its body.

Because Lua has garbage collection,
there is no guarantee that the pointer returned by @id{lua_tolstring}
will be valid after the corresponding Lua value is removed from the stack.

}

@APIEntry{lua_Number lua_tonumber (lua_State *L, int index);|
@apii{0,0,-}

Equivalent to @Lid{lua_tonumberx} with @id{isnum} equal to @id{NULL}.

}

@APIEntry{lua_Number lua_tonumberx (lua_State *L, int index, int *isnum);|
@apii{0,0,-}

Converts the Lua value at the given index
to the
 @N{C type} @Lid{lua_Number} @seeC{lua_Number}.
The Lua value must be a number or a string convertible to a number
@see{coercion};
otherwise, @Lid{lua_tonumberx} @N{returns 0}.

If @id{isnum} is not @id{NULL},
its referent is assigned a boolean value that
indicates whether the operation succeeded.

}

@APIEntry{const void *lua_topointer (lua_State *L, int index);|
@apii{0,0,-}

Converts the value at the given index to a generic
@N{C pointer} (@T{void*}).
The value can be a userdata, a table, a thread, or a function;
otherwise, @id{lua_topointer} returns @id{NULL}.
Different objects will give different pointers.
There is no way to convert the pointer back to its original value.

Typically this function is used only for hashing and debug information.

}

@APIEntry{const char *lua_tostring (lua_State *L, int index);|
@apii{0,0,m}

Equivalent to @Lid{lua_tolstring} with @id{len} equal to @id{NULL}.

}

@APIEntry{lua_State *lua_tothread (lua_State *L, int index);|
@apii{0,0,-}

Converts the
 value at the given index to a Lua thread
(represented as @T{lua_State*}).
This value must be a thread;
otherwise, the function returns @id{NULL}.

}

@APIEntry{void *lua_touserdata (lua_State *L, int index);|
@apii{0,0,-}

If the value at the given index is a full userdata,
returns its block address.
If the value is a light userdata,
returns its pointer.
Otherwise, returns @id{NULL}.

}

@APIEntry{int lua_type (lua_State *L, int index);|
@apii{0,0,-}

Returns the type of the value in the given valid index,
or @id{LUA_TNONE} for a non-valid (but acceptable) index.
The types returned by @Lid{lua_type} are coded by the following constants
defined in @id{lua.h}:
@defid{LUA_TNIL} (0),
@defid{LUA_TNUMBER},
@defid{LUA_TBOOLEAN},
@defid{LUA_TSTRING},
@defid{LUA_TTABLE},
@defid{LUA_TFUNCTION},
@defid{LUA_TUSERDATA},
@defid{LUA_TTHREAD},
and
@defid{LUA_TLIGHTUSERDATA}.

}

@APIEntry{const char *lua_typename (lua_State *L, int tp);|
@apii{0,0,-}

Returns the name of the type encoded by the value
@id{tp},
which must be one the values returned by @Lid{lua_type}.

}

@APIEntry{typedef @ldots lua_Unsigned;|

The unsigned version of @Lid{lua_Integer}.

}

@APIEntry{int lua_upvalueindex (int i);|
@apii{0,0,-}

Returns the pseudo-index that represents the @id{i}-th upvalue of

the running function @see{c-closure}.

}

@APIEntry{const lua_Number *lua_version (lua_State *L);|
@apii{0,0,-}

Returns the address of the version number
(a C static variable)
stored in the Lua core.
When called with a valid @Lid{lua_State},
returns the address of the version used to create that state.
When called with @id{NULL},
returns the address of the version running the call.

}

@APIEntry{
typedef int (*lua_Writer) (lua_State *L,
const void* p,
size_t sz,
void* ud);|

The type of the writer function used by @Lid{lua_dump}.
Every time it produces another piece of chunk,
@Lid{lua_dump} calls the writer,
passing along the buffer
to be written (@id{p}),
its size (@id{sz}),
and the @id{data} parameter supplied to @Lid{lua_dump}.

The writer returns an error code:
@N{0 means} no errors;
any other value means an error and stops @Lid{lua_dump} from
calling the writer again.

}

@APIEntry{void lua_xmove (lua_State *from, lua_State *to, int n);|
@apii{?,?,-}

Exchange values between different threads of the same state.

This function pops @id{n} values from the stack @id{from},
and pushes them onto the stack @id{to}.

}

```
@APIEntry{int lua_yield (lua_State *L, int nresults);|
@apii{?,?,e}

This function is equivalent to @Lid{lua_yieldk},
but it has no continuation @see{continuations}.
Therefore, when the thread resumes,
it continues the function that called
the function calling @id{lua_yield}.

}


@APIEntry{
int lua_yieldk (lua_State *L,
            int nresults,
            lua_KContext ctx,
            lua_KFunction k);|
@apii{?,?,e}

Yields a coroutine (thread).

When a @N{C function} calls @Lid{lua_yieldk},
the
 running coroutine suspends its execution,
and the call to @Lid{lua_resume} that started this coroutine returns.
The parameter @id{nresults} is the number of values from the stack
that will be passed as results to @Lid{lua_resume}.

When the coroutine is resumed again,
Lua calls the given @x{continuation function} @id{k} to continue
the execution of the @N{C function} that yielded @see{continuations}.
This continuation function receives the same stack
from the previous function,
with the @id{n} results removed and
replaced by the arguments passed to @Lid{lua_resume}.
Moreover,
the continuation function receives the value @id{ctx}
that was passed to @Lid{lua_yieldk}.

Usually, this function does not return;
when the coroutine eventually resumes,
it continues executing the continuation function.
However, there is one special case,
which is when this function is called
from inside a line or a count hook @see{debugI}.
In that case, @id{lua_yieldk} should be called with no continuation
(probably
```

in the form of @Lid{lua_yield}) and no results,
and the hook should return immediately after the call.
Lua will yield and,
when the coroutine resumes again,
it will continue the normal execution
of the (Lua) function that triggered the hook.

This function can raise an error if it is called from a thread
with a pending C call with no continuation function,
or it is called from a thread that is not running inside a resume
(e.g., the main thread).

}

}

@sect2{debugI| @title{The Debug Interface}

Lua has no built-in debugging facilities.
Instead, it offers a special interface
by means of functions and @emph{hooks}.
This interface allows the construction of different
kinds of debuggers, profilers, and other tools
that need @Q{inside information} from the interpreter.

```
@APIEntry{
typedef struct lua_Debug {
 int event;
 const char *name;          /* (n) */
 const char *namewhat;      /* (n) */
 const char *what;          /* (S) */
 const char *source;        /*
 (S) */
 int currentline;           /* (l) */
 int linedefined;           /* (S) */
 int lastlinedefined;       /* (S) */
 unsigned char nups;        /* (u) number of upvalues */
 unsigned char nparams;     /* (u) number of parameters */
 char isvararg;             /* (u) */
 char istailcall;           /* (t) */
 char short_src[LUA_IDSIZE]; /* (S) */
 /* private part */
 @rep{other fields}
} lua_Debug;
|
```

A structure used to carry different pieces of

information about a function or an activation record.
@Lid{lua_getstack} fills only the private part
of this structure, for later use.
To fill the other fields of @Lid{lua_Debug} with useful information,
call @Lid{lua_getinfo}.

The fields of @Lid{lua_Debug} have the following meaning:
@description{

@item{@id{source}|
the name of the chunk that created the function.
If @T{source} starts with a @Char{@At},
it means that the function was defined in a file where
the file name follows the @Char{@At}.
If @T{source} starts with
 a @Char{=},
the remainder of its contents describe the source in a user-dependent manner.
Otherwise,
the function was defined in a string where
@T{source} is that string.
}

@item{@id{short_src}|
a @Q{printable} version of @T{source}, to be used in error messages.
}

@item{@id{linedefined}|
the line number where the definition of the function starts.
}

@item{@id{lastlinedefined}|
the line number where the definition of the function ends.
}

@item{@id{what}|
the string @T{"Lua"} if the function is a Lua function,
@T{"C"} if it is a @N{C function},
@T{"main"} if it is the main part of a chunk.
}

@item{@id{currentline}|
the current line where the given function is executing.
When no line information is available,
@T{currentline} is set to @num{-1}.
}

@item{@id{name}|
a reasonable name for the given function.

Because functions in Lua are first-class values,
they do not have a fixed name:
some functions can be the value of multiple global variables,
while others can be stored only in a table
field.
The @T{lua_getinfo} function checks how the function was
called to find a suitable name.
If it cannot find a name,
then @id{name} is set to @id{NULL}.
}

@item{@id{namewhat}|
explains the @T{name} field.
The value of @T{namewhat} can be
@T{"global"}, @T{"local"}, @T{"method"},
@T{"field"}, @T{"upvalue"}, or @T{""} (the empty string),
according to how the function was called.
(Lua uses the empty string when no other option seems to apply.)
}

@item{@id{istailcall}|
true if this function invocation was called by a tail call.
In this case, the caller of this level is not in the stack.
}

@item{@id{nups}|
the number of upvalues of the function.
}

@item{@id{nparams}|
the number of fixed parameters of the function
(always @N{0 for} @N{C functions}).
}

@item{@id{isvararg}|
true if the function is a vararg function
(always true for @N{C functions}).
}

}

}

@APIEntry{lua_Hook lua_gethook (lua_State *L);|
@apii{0,0,-}

Returns the current hook function.

}

@APIEntry{int lua_gethookcount
 (lua_State *L);|
@apii{0,0,-}

Returns the current hook count.

}

@APIEntry{int lua_gethookmask (lua_State *L);|
@apii{0,0,-}

Returns the current hook mask.

}

@APIEntry{int lua_getinfo (lua_State *L, const char *what, lua_Debug *ar);|
@apii{0|1,0|1|2,e}

Gets information about a specific function or function invocation.

To get information about a function invocation,
the parameter @id{ar} must be a valid activation record that was
filled by a previous call to @Lid{lua_getstack} or
given as argument to a hook @seeC{lua_Hook}.

To get information about a function, you push it onto the stack
and start the @id{what} string with the character @Char{>}.
(In that case,
@id{lua_getinfo} pops the function from the top of the stack.)
For instance, to know in which line a function @id{f} was defined,
you can write the following code:
@verbatim{
lua_Debug ar;
lua_getglobal(L, "f"); /* get global 'f' */
lua_getinfo(L, ">S", &ar);
printf("%d\n", ar.linedefined);
}

Each character in the
 string @id{what}
selects some fields of the structure @id{ar} to be filled or
a value to be pushed on the stack:
@description{

@item{@Char{n}| fills in the field @id{name} and @id{namewhat};
}

@item{@Char{S}|
fills in the fields @id{source}, @id{short_src},
@id{linedefined}, @id{lastlinedefined}, and @id{what};
}

@item{@Char{l}| fills in the field @id{currentline};
}

@item{@Char{t}| fills in the field @id{istailcall};
}

@item{@Char{u}| fills in the fields
@id{nups}, @id{nparams}, and @id{isvararg};
}

@item{@Char{f}|
pushes onto the stack the function that is
running at the given level;
}

@item{@Char{L}|
pushes onto the stack a table whose indices are the
numbers of the lines that are valid on the function.
(A @emph{valid line} is a line with some associated code,
that is, a line where you can put a break point.
Non-valid lines include empty lines and comments.)

If this option is given together with option @Char{f},
its table is pushed after the function.
}

}

This function
returns 0 on error
(for instance, an invalid option in @id{what}).

}

@APIEntry{const char *lua_getlocal (lua_State *L, const lua_Debug *ar, int n);|
@apii{0,0|1,-}

Gets information about a local variable of
a given activation record or a given function.

In the first case,
the parameter @id{ar} must be a valid activation record that was

filled by a previous call to @Lid{lua_getstack} or
given as argument to a hook @seeC{lua_Hook}.
The index @id{n} selects which local variable to inspect;
see @Lid{debug.getlocal} for details about variable indices
and names.

@Lid{lua_getlocal} pushes the variable's value onto the stack
and returns its name.

In the second case, @id{ar} must be @id{NULL} and the function
to be inspected must be at the top of the stack.
In this case, only parameters of Lua functions are visible
(as there is no information about what variables are active)
and no values are pushed onto the stack.

Returns @id{NULL} (and pushes nothing)
when the index is greater than
the
 number of active local variables.

}

@APIEntry{int lua_getstack (lua_State *L, int level, lua_Debug *ar);|
@apii{0,0,-}

Gets information about the interpreter runtime stack.

This function fills parts of a @Lid{lua_Debug} structure with
an identification of the @emph{activation record}
of the function executing at a given level.
@N{Level 0} is the current running function,
whereas level @M{n+1} is the function that has called level @M{n}
(except for tail calls, which do not count on the stack).
When there are no errors, @Lid{lua_getstack} returns 1;
when called with a level greater than the stack depth,
it returns 0.

}

@APIEntry{const char *lua_getupvalue (lua_State *L, int funcindex, int n);|
@apii{0,0|1,-}

Gets information about the @id{n}-th upvalue
of the closure at index @id{funcindex}.
It pushes the upvalue's value onto the stack
and returns its name.
Returns @id{NULL} (and pushes nothing)
when the index @id{n} is greater than the number of upvalues.

For @N{C functions}, this
function uses the empty string @T{""}
as a name for all upvalues.
(For Lua functions,
upvalues are the external local variables that the function uses,
and that are consequently included in its closure.)

Upvalues have no particular order,
as they are active through the whole function.
They are numbered in an arbitrary order.

}

@APIEntry{typedef void (*lua_Hook) (lua_State *L, lua_Debug *ar);|

Type for debugging hook functions.

Whenever a hook is called, its @id{ar} argument has its field
@id{event} set to the specific event that triggered the hook.
Lua identifies these events with the following constants:
@defid{LUA_HOOKCALL}, @defid{LUA_HOOKRET},
@defid{LUA_HOOKTAILCALL}, @defid{LUA_HOOKLINE},
and @defid{LUA_HOOKCOUNT}.
Moreover, for line events, the field @id{currentline} is also set.
To get the value of any other field in @id{ar},
the hook must call @Lid{lua_getinfo}.

For call events, @id{event} can be @id{LUA_HOOKCALL},
the normal value, or @id{LUA_HOOKTAILCALL}, for a tail
call;
in this case, there will be no corresponding return event.

While Lua is running a hook, it disables other calls to hooks.
Therefore, if a hook calls back Lua to execute a function or a chunk,
this execution occurs without any calls to hooks.

Hook functions cannot have continuations,
that is, they cannot call @Lid{lua_yieldk},
@Lid{lua_pcallk}, or @Lid{lua_callk} with a non-null @id{k}.

Hook functions can yield under the following conditions:
Only count and line events can yield;
to yield, a hook function must finish its execution
calling @Lid{lua_yield} with @id{nresults} equal to zero
(that is, with no values).

}

@APIEntry{void lua_sethook (lua_State *L, lua_Hook f, int mask, int count);|
@apii{0,0,-}

Sets the debugging hook function.

Argument @id{f} is the hook function.
@id{mask} specifies on which events the hook will be called:
it is formed by a bitwise OR of the constants
@defid{LUA_MASKCALL},
@defid{LUA_MASKRET},
@defid{LUA_MASKLINE},
and @defid{LUA_MASKCOUNT}.
The
@id{count} argument is only meaningful when the mask
includes @id{LUA_MASKCOUNT}.
For each event, the hook is called as explained below:
@description{

@item{The call hook| is called when the interpreter calls a function.
The hook is called just after Lua enters the new function,
before the function gets its arguments.
}

@item{The return hook| is called when the interpreter returns from a function.
The hook is called just before Lua leaves the function.
There is no standard way to access the values
to be returned by the function.
}

@item{The line hook| is called when the interpreter is about to
start the execution of a new line of code,
or when it jumps back in the code (even to the same line).
(This event only happens while Lua is executing a Lua function.)
}

@item{The count hook| is called after the interpreter executes every
@T{count} instructions.
(This event only happens while Lua is executing a Lua function.)
}

}

A hook is disabled by setting @id{mask} to zero.

}

@APIEntry{const

char *lua_setlocal (lua_State *L, const lua_Debug *ar, int n);|
@apii{0|1,0,-}

Sets the value of a local variable of a given activation record.
It assigns the value at the top of the stack
to the variable and returns its name.
It also pops the value from the stack.

Returns @id{NULL} (and pops nothing)
when the index is greater than
the number of active local variables.

Parameters @id{ar} and @id{n} are as in function @Lid{lua_getlocal}.

}

@APIEntry{const char *lua_setupvalue (lua_State *L, int funcindex, int n);|
@apii{0|1,0,-}

Sets the value of a closure's upvalue.
It assigns the value at the top of the stack
to the upvalue and returns its name.
It also pops the value from the stack.

Returns @id{NULL} (and pops nothing)
when the index @id{n} is greater than the number of upvalues.

Parameters @id{funcindex} and @id{n} are as in function @Lid{lua_getupvalue}.

}

@APIEntry{void *lua_upvalueid (lua_State *L, int funcindex, int n);|
@apii{0,0,-}

Returns a unique identifier
for the upvalue numbered @id{n}
from the closure at index @id{funcindex}.

These unique identifiers allow a program to check whether different
closures share upvalues.
Lua closures that share an upvalue
(that is, that access a same external local variable)
will return identical ids for those upvalue indices.

Parameters @id{funcindex} and @id{n} are as in function @Lid{lua_getupvalue},
but @id{n} cannot be greater than the number of upvalues.

}

```
@APIEntry{
void lua_upvaluejoin (lua_State *L, int funcindex1, int n1,
                      int funcindex2, int n2);|
@apii{0,0,-}

Make the @id{n1}-th upvalue of the Lua closure at index @id{funcindex1}
refer to the @id{n2}-th upvalue of the Lua closure at index @id{funcindex2}.

}

}

}


@C{-----------------------------------------------------------------------}
@sect1{@title{The Auxiliary Library}

@index{lauxlib.h}
The @def{auxiliary library} provides several convenient functions
to interface C with Lua.
While the basic
 API provides the primitive functions for all
interactions between C and Lua,
the auxiliary library provides higher-level functions for some
common tasks.

All functions and types from the auxiliary library
are defined in header file @id{lauxlib.h} and
have a prefix @id{luaL_}.

All functions in the auxiliary library are built on
top of the basic API,
and so they provide nothing that cannot be done with that API.
Nevertheless, the use of the auxiliary library ensures
more consistency to your code.


Several functions in the auxiliary library use internally some
extra stack slots.
When a function in the auxiliary library uses less than five slots,
it does not check the stack size;
it simply assumes that there are enough slots.

Several functions in the auxiliary library are used to
check @N{C function} arguments.
Because the error message is formatted for arguments
```

(e.g., @St{bad argument #1}),
you should not use these functions for other stack values.

Functions called @id{luaL_check*}
always
 raise an error if the check is not satisfied.

@sect2{@title{Functions and Types}

Here we list all functions and types from the auxiliary library
in alphabetical order.

@APIEntry{void luaL_addchar (luaL_Buffer *B, char c);|
@apii{?,?,m}

Adds the byte @id{c} to the buffer @id{B}
@seeC{luaL_Buffer}.

}

@APIEntry{void luaL_addlstring (luaL_Buffer *B, const char *s, size_t l);|
@apii{?,?,m}

Adds the string pointed to by @id{s} with length @id{l} to
the buffer @id{B}
@seeC{luaL_Buffer}.
The string can contain @x{embedded zeros}.

}

@APIEntry{void luaL_addsize (luaL_Buffer *B, size_t n);|
@apii{?,?,-}

Adds to the buffer @id{B} @seeC{luaL_Buffer}
a string of length @id{n} previously copied to the
buffer area @seeC{luaL_prepbuffer}.

}

@APIEntry{void luaL_addstring (luaL_Buffer *B, const char *s);|
@apii{?,?,m}

Adds the zero-terminated string pointed to by @id{s}
to the buffer @id{B}
@seeC{luaL_Buffer}.

}

@APIEntry{void luaL_addvalue (luaL_Buffer *B);|
@apii{1,?,m}

Adds
 the value at the top of the stack
to the buffer @id{B}
@seeC{luaL_Buffer}.
Pops the value.

This is the only function on string buffers that can (and must)
be called with an extra element on the stack,
which is the value to be added to the buffer.

}

@APIEntry{
void luaL_argcheck (lua_State *L,
                int cond,
                int arg,
                const char *extramsg);|
@apii{0,0,v}

Checks whether @id{cond} is true.
If it is not, raises an error with a standard message @seeF{luaL_argerror}.

}

@APIEntry{int luaL_argerror (lua_State *L, int arg, const char *extramsg);|
@apii{0,0,v}

Raises an error reporting a problem with argument @id{arg}
of the @N{C function} that called it,
using a standard message
that includes @id{extramsg} as a comment:
@verbatim{
bad argument #@rep{arg} to '@rep{funcname}' (@rep{extramsg})
}
This function never returns.

}

@APIEntry{typedef struct luaL_Buffer luaL_Buffer;|

Type for a @def{string buffer}.

A string buffer allows @N{C

code} to build Lua strings piecemeal.
Its pattern of use is as follows:
@itemize{

@item{First declare a variable @id{b} of type @Lid{luaL_Buffer}.}

@item{Then initialize it with a call @T{luaL_buffinit(L, &b)}.}

@item{
Then add string pieces to the buffer calling any of
the @id{luaL_add*} functions.
}

@item{
Finish by calling @T{luaL_pushresult(&b)}.
This call leaves the final string on the top of the stack.
}

}

If you know beforehand the total size of the resulting string,
you can use the buffer like this:
@itemize{

@item{First declare a variable @id{b} of type @Lid{luaL_Buffer}.}

@item{Then initialize it and preallocate a space of
size @id{sz} with a call @T{luaL_buffinitsize(L, &b, sz)}.}

@item{Then copy the string into that space.}

@item{
Finish by calling @T{luaL_pushresultsize(&b, sz)},
where @id{sz} is the total size of the resulting string
copied into that space.
}

}

During its normal operation,
a string buffer uses a variable number of stack slots.
So, while using
a buffer, you cannot assume that you know where
the top of the stack is.
You can use the stack between successive calls to buffer operations
as long as that use is balanced;
that is,
when you call a buffer operation,

the stack is at the same level
it was immediately after the previous buffer operation.
(The only exception to this rule is @Lid{luaL_addvalue}.)
After calling @Lid{luaL_pushresult} the stack is back to its
level when the buffer was initialized,
plus the final string on its top.

}

@APIEntry{void luaL_buffinit (lua_State *L, luaL_Buffer *B);|
@apii{0,0,-}

Initializes a buffer @id{B}.
This function does not allocate any space;
the buffer must be declared as a variable
@seeC{luaL_Buffer}.

}

@APIEntry{char *luaL_buffinitsize (lua_State *L, luaL_Buffer *B, size_t sz);|
@apii{?,?,m}

Equivalent to the sequence
@Lid{luaL_buffinit}, @Lid{luaL_prepbuffsize}.

}

@APIEntry{int luaL_callmeta (lua_State *L, int obj, const char *e);|
@apii{0,0|1,e}

Calls a metamethod.

If the object
 at index @id{obj} has a metatable and this
metatable has a field @id{e},
this function calls this field passing the object as its only argument.
In this case this function returns true and pushes onto the
stack the value returned by the call.
If there is no metatable or no metamethod,
this function returns false (without pushing any value on the stack).

}

@APIEntry{void luaL_checkany (lua_State *L, int arg);|
@apii{0,0,v}

Checks whether the function has an argument
of any type (including @nil) at position @id{arg}.

```
}

@APIEntry{lua_Integer luaL_checkinteger (lua_State *L, int arg);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is an integer
(or can be converted to an integer)
and returns this integer cast to a @Lid{lua_Integer}.

}

@APIEntry{const char *luaL_checklstring (lua_State *L, int arg, size_t *l);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is a string
and returns this string;
if @id{l} is not @id{NULL} fills @T{*l}
with the string's length.

This
 function uses @Lid{lua_tolstring} to get its result,
so all conversions and caveats of that function apply here.

}

@APIEntry{lua_Number luaL_checknumber (lua_State *L, int arg);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is a number
and returns this number.

}

@APIEntry{
int luaL_checkoption (lua_State *L,
                      int arg,
                      const char *def,
                      const char *const lst[]);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is a string and
searches for this string in the array @id{lst}
(which must be NULL-terminated).
Returns the index in the array where the string was found.
Raises an error if the argument is not a string or
if the string cannot be found.
```

If @id{def} is not @id{NULL},
the function uses @id{def} as a default value when
there is no argument @id{arg} or when this argument is @nil.

This is a useful function for mapping strings to @N{C enums}.
(The usual convention in Lua libraries
is
to use strings instead of numbers to select options.)

}

@APIEntry{void luaL_checkstack (lua_State *L, int sz, const char *msg);|
@apii{0,0,v}

Grows the stack size to @T{top + sz} elements,
raising an error if the stack cannot grow to that size.
@id{msg} is an additional text to go into the error message
(or @id{NULL} for no additional text).

}

@APIEntry{const char *luaL_checkstring (lua_State *L, int arg);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is a string
and returns this string.

This function uses @Lid{lua_tolstring} to get its result,
so all conversions and caveats of that function apply here.

}

@APIEntry{void luaL_checktype (lua_State *L, int arg, int t);|
@apii{0,0,v}

Checks whether the function argument @id{arg} has type @id{t}.
See @Lid{lua_type} for the encoding of types for @id{t}.

}

@APIEntry{void *luaL_checkudata (lua_State *L, int arg, const char *tname);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is a userdata
of the
type @id{tname} @seeC{luaL_newmetatable} and
returns the userdata address @seeC{lua_touserdata}.

}

@APIEntry{void luaL_checkversion (lua_State *L);|
@apii{0,0,v}

Checks whether the core running the call,
the core that created the Lua state,
and the code making the call are all using the same version of Lua.
Also checks whether the core running the call
and the core that created the Lua state
are using the same address space.

}

@APIEntry{int luaL_dofile (lua_State *L, const char *filename);|
@apii{0,?,e}

Loads and runs the given file.
It is defined as the following macro:
@verbatim{
(luaL_loadfile(L, filename) || lua_pcall(L, 0, LUA_MULTRET, 0))
}
It returns false if there are no errors
or true in case of errors.

}

@APIEntry{int luaL_dostring (lua_State *L, const char *str);|
@apii{0,?,-}

Loads and runs the given string.
It is defined as the following macro:
@verbatim{
(luaL_loadstring(L, str) || lua_pcall(L, 0, LUA_MULTRET, 0))
}
It returns false if there are no errors
or true
 in case of errors.

}

@APIEntry{int luaL_error (lua_State *L, const char *fmt, ...);|
@apii{0,0,v}

Raises an error.
The error message format is given by @id{fmt}
plus any extra arguments,
following the same rules of @Lid{lua_pushfstring}.

It also adds at the beginning of the message the file name and
the line number where the error occurred,
if this information is available.

This function never returns,
but it is an idiom to use it in @N{C functions}
as @T{return luaL_error(@rep{args})}.

}

@APIEntry{int luaL_execresult (lua_State *L, int stat);|
@apii{0,3,m}

This function produces the return values for
process-related functions in the standard library
(@Lid{os.execute} and @Lid{io.close}).

}

@APIEntry{
int luaL_fileresult (lua_State *L, int stat, const char *fname);|
@apii{0,1|3,m}

This function produces the return values for
file-related functions in the standard library
(@Lid{io.open}, @Lid{os.rename}, @Lid{file:seek}, etc.).

}

@APIEntry{int luaL_getmetafield (lua_State
 *L, int obj, const char *e);|
@apii{0,0|1,m}

Pushes onto the stack the field @id{e} from the metatable
of the object at index @id{obj} and returns the type of the pushed value.
If the object does not have a metatable,
or if the metatable does not have this field,
pushes nothing and returns @id{LUA_TNIL}.

}

@APIEntry{int luaL_getmetatable (lua_State *L, const char *tname);|
@apii{0,1,m}

Pushes onto the stack the metatable associated with name @id{tname}
in the registry @seeC{luaL_newmetatable}
(@nil if there is no metatable associated with that name).
Returns the type of the pushed value.

```
}

@APIEntry{int luaL_getsubtable (lua_State *L, int idx, const char *fname);|
@apii{0,1,e}

Ensures that the value @T{t[fname]},
where @id{t} is the value at index @id{idx},
is a table,
and pushes that table onto the stack.
Returns true if it finds a previous table there
and false if it creates a new table.

}

@APIEntry{
const char *luaL_gsub (lua_State *L,
                       const char *s,
                        const char *p,
                       const char *r);|
@apii{0,1,m}

Creates a copy of string @id{s} by replacing
any occurrence of the string @id{p}
with the string @id{r}.
Pushes the resulting string on the stack and returns it.

}

@APIEntry{lua_Integer luaL_len (lua_State *L, int index);|
@apii{0,0,e}

Returns the @Q{length} of the value at the given index
as a number;
it is equivalent to the @Char{#} operator in Lua @see{len-op}.
Raises an error if the result of the operation is not an integer.
(This case only can happen through metamethods.)

}

@APIEntry{
int luaL_loadbuffer (lua_State *L,
                     const char *buff,
                     size_t sz,
                     const char *name);|
@apii{0,1,-}

Equivalent to @Lid{luaL_loadbufferx} with @id{mode} equal to @id{NULL}.
```

```
}


@APIEntry{
int luaL_loadbufferx (lua_State *L,
                const char *buff,
                size_t sz,
                const char *name,

          const char *mode);|
@apii{0,1,-}

Loads a buffer as a Lua chunk.
This function uses @Lid{lua_load} to load the chunk in the
buffer pointed to by @id{buff} with size @id{sz}.

This function returns the same results as @Lid{lua_load}.
@id{name} is the chunk name,
used for debug information and error messages.
The string @id{mode} works as in function @Lid{lua_load}.

}


@APIEntry{int luaL_loadfile (lua_State *L, const char *filename);|
@apii{0,1,m}

Equivalent to @Lid{luaL_loadfilex} with @id{mode} equal to @id{NULL}.

}

@APIEntry{int luaL_loadfilex (lua_State *L, const char *filename,
                              const char *mode);|
@apii{0,1,m}

Loads a file as a Lua chunk.
This function uses @Lid{lua_load} to load the chunk in the file
named @id{filename}.
If @id{filename} is @id{NULL},
then it loads from the standard input.
The first line in the file is ignored if it starts with a @T{#}.

The string @id{mode} works as in function @Lid{lua_load}.

This function
 returns the same results as @Lid{lua_load},
but it has an extra error code @defid{LUA_ERRFILE}
```

for file-related errors
(e.g., it cannot open or read the file).

As @Lid{lua_load}, this function only loads the chunk;
it does not run it.

}

@APIEntry{int luaL_loadstring (lua_State *L, const char *s);|
@apii{0,1,-}

Loads a string as a Lua chunk.
This function uses @Lid{lua_load} to load the chunk in
the zero-terminated string @id{s}.

This function returns the same results as @Lid{lua_load}.

Also as @Lid{lua_load}, this function only loads the chunk;
it does not run it.

}

@APIEntry{void luaL_newlib (lua_State *L, const luaL_Reg l[]);|
@apii{0,1,m}

Creates a new table and registers there
the functions in list @id{l}.

It is implemented as the following macro:
@verbatim{
(luaL_newlibtable(L,l), luaL_setfuncs(L,l,0))
}
The array @id{l} must be the actual array,
not a pointer to it.

}

@APIEntry{void luaL_newlibtable (lua_State *L, const luaL_Reg l[]);|
@apii{0,1,m}

Creates a new
 table with a size optimized
to store all entries in the array @id{l}
(but does not actually store them).
It is intended to be used in conjunction with @Lid{luaL_setfuncs}
@seeF{luaL_newlib}.

It is implemented as a macro.
The array @id{l} must be the actual array,
not a pointer to it.

}

@APIEntry{int luaL_newmetatable (lua_State *L, const char *tname);|
@apii{0,1,m}

If the registry already has the key @id{tname},
returns 0.
Otherwise,
creates a new table to be used as a metatable for userdata,
adds to this new table the pair @T{__name = tname},
adds to the registry the pair @T{[tname] = new table},
and returns 1.
(The entry @idx{__name} is used by some error-reporting functions.)

In both cases pushes onto the stack the final value associated
with @id{tname} in the registry.

}

@APIEntry{lua_State *luaL_newstate (void);|
@apii{0,0,-}

Creates a new Lua state.
It calls @Lid{lua_newstate} with an
allocator based on the @N{standard C} @id{realloc} function
and then sets a panic function
@see{C-error} that prints
an error message to the standard error output in case of fatal
errors.

Returns the new state,
or @id{NULL} if there is a @x{memory allocation error}.

}

@APIEntry{void luaL_openlibs (lua_State *L);|
@apii{0,0,e}

Opens all standard Lua libraries into the given state.

}

@APIEntry{
T luaL_opt (L, func, arg, dflt);|

@apii{0,0,e}

This macro is defined as follows:
@verbatim{
(lua_isnoneornil(L,(arg)) ? (dflt) : func(L,(arg)))
}
In words, if the argument @id{arg} is nil or absent,
the macro results in the default @id{dflt}.
Otherwise, it results in the result of calling @id{func}
with the state @id{L} and the argument index @id{arg} as
arguments.
Note that it evaluates the expression @id{dflt} only if needed.

}

@APIEntry{
lua_Integer luaL_optinteger (lua_State *L,
                int arg,
                lua_Integer d);|
@apii{0,0,v}

If the function argument @id{arg} is an integer
(or convertible to an integer),
returns this integer.
If
 this argument is absent or is @nil,
returns @id{d}.
Otherwise, raises an error.

}

@APIEntry{
const char *luaL_optlstring (lua_State *L,
                int arg,
                const char *d,
                size_t *l);|
@apii{0,0,v}

If the function argument @id{arg} is a string,
returns this string.
If this argument is absent or is @nil,
returns @id{d}.
Otherwise, raises an error.

If @id{l} is not @id{NULL},
fills the position @T{*l} with the result's length.
If the result is @id{NULL}
(only possible when returning @id{d} and @T{d == NULL}),

its length is considered zero.

This function uses @Lid{lua_tolstring} to get its result,
so all conversions and caveats of that function apply here.

}

@APIEntry{lua_Number luaL_optnumber (lua_State *L, int arg, lua_Number d);|
@apii{0,0,v}

If the function argument @id{arg} is a number,
returns this number.
If this argument is absent or is @nil,
returns @id{d}.
Otherwise, raises an error.

}

@APIEntry{
const
 char *luaL_optstring (lua_State *L,
                int arg,
                const char *d);|
@apii{0,0,v}

If the function argument @id{arg} is a string,
returns this string.
If this argument is absent or is @nil,
returns @id{d}.
Otherwise, raises an error.

}

@APIEntry{char *luaL_prepbuffer (luaL_Buffer *B);|
@apii{?,?,m}

Equivalent to @Lid{luaL_prepbuffsize}
with the predefined size @defid{LUAL_BUFFERSIZE}.

}

@APIEntry{char *luaL_prepbuffsize (luaL_Buffer *B, size_t sz);|
@apii{?,?,m}

Returns an address to a space of size @id{sz}
where you can copy a string to be added to buffer @id{B}
@seeC{luaL_Buffer}.
After copying the string into this space you must call

@Lid{luaL_addsize} with the size of the string to actually add
it to the buffer.

}

@APIEntry{void luaL_pushresult (luaL_Buffer *B);|
@apii{?,1,m}

Finishes the use of buffer @id{B} leaving the final string on
the top of the stack.

}

@APIEntry{void luaL_pushresultsize (luaL_Buffer
 *B, size_t sz);|
@apii{?,1,m}

Equivalent to the sequence @Lid{luaL_addsize}, @Lid{luaL_pushresult}.

}

@APIEntry{int luaL_ref (lua_State *L, int t);|
@apii{1,0,m}

Creates and returns a @def{reference},
in the table at index @id{t},
for the object at the top of the stack (and pops the object).

A reference is a unique integer key.
As long as you do not manually add integer keys into table @id{t},
@Lid{luaL_ref} ensures the uniqueness of the key it returns.
You can retrieve an object referred by reference @id{r}
by calling @T{lua_rawgeti(L, t, r)}.
Function @Lid{luaL_unref} frees a reference and its associated object.

If the object at the top of the stack is @nil,
@Lid{luaL_ref} returns the constant @defid{LUA_REFNIL}.
The constant @defid{LUA_NOREF} is guaranteed to be different
from any reference returned by @Lid{luaL_ref}.

}

@APIEntry{
typedef struct luaL_Reg {
 const char *name;
 lua_CFunction func;
} luaL_Reg;
|

Type for arrays of functions to be registered by
@Lid{luaL_setfuncs}.
@id{name}
 is the function name and @id{func} is a pointer to
the function.
Any array of @Lid{luaL_Reg} must end with a sentinel entry
in which both @id{name} and @id{func} are @id{NULL}.

}

@APIEntry{
void luaL_requiref (lua_State *L, const char *modname,
                lua_CFunction openf, int glb);|
@apii{0,1,e}

If @id{modname} is not already present in @Lid{package.loaded},
calls function @id{openf} with string @id{modname} as an argument
and sets the call result in @T{package.loaded[modname]},
as if that function has been called through @Lid{require}.

If @id{glb} is true,
also stores the module into global @id{modname}.

Leaves a copy of the module on the stack.

}

@APIEntry{void luaL_setfuncs (lua_State *L, const luaL_Reg *l, int nup);|
@apii{nup,0,m}

Registers all functions in the array @id{l}
@seeC{luaL_Reg} into the table on the top of the stack
(below optional upvalues, see next).

When @id{nup} is not zero,
all functions are created sharing @id{nup} upvalues,
which
 must be previously pushed on the stack
on top of the library table.
These values are popped from the stack after the registration.

}

@APIEntry{void luaL_setmetatable (lua_State *L, const char *tname);|
@apii{0,0,-}

Sets the metatable of the object at the top of the stack

as the metatable associated with name @id{tname}
in the registry @seeC{luaL_newmetatable}.

}

@APIEntry{
typedef struct luaL_Stream {
 FILE *f;
 lua_CFunction closef;
} luaL_Stream;
|

The standard representation for @x{file handles},
which is used by the standard I/O library.

A file handle is implemented as a full userdata,
with a metatable called @id{LUA_FILEHANDLE}
(where @id{LUA_FILEHANDLE} is a macro with the actual metatable's name).
The metatable is created by the I/O library
@seeF{luaL_newmetatable}.

This userdata must start with the structure @id{luaL_Stream};
it can contain other data after this initial structure.
Field @id{f} points to the corresponding C stream
(or it can be @id{NULL} to
 indicate an incompletely created handle).
Field @id{closef} points to a Lua function
that will be called to close the stream
when the handle is closed or collected;
this function receives the file handle as its sole argument and
must return either @Rw{true} (in case of success)
or @nil plus an error message (in case of error).
Once Lua calls this field,
it changes the field value to @id{NULL}
to signal that the handle is closed.

}

@APIEntry{void *luaL_testudata (lua_State *L, int arg, const char *tname);|
@apii{0,0,m}

This function works like @Lid{luaL_checkudata},
except that, when the test fails,
it returns @id{NULL} instead of raising an error.

}

@APIEntry{const char *luaL_tolstring (lua_State *L, int idx, size_t *len);|

@apii{0,1,e}

Converts any Lua value at the given index to a @N{C string}
in a reasonable format.
The resulting string is pushed onto the stack and also
returned by the function.
If @id{len} is not @id{NULL},
the function also sets @T{*len} with the string length.

If
 the value has a metatable with a @idx{__tostring} field,
then @id{luaL_tolstring} calls the corresponding metamethod
with the value as argument,
and uses the result of the call as its result.

}

@APIEntry{
void luaL_traceback (lua_State *L, lua_State *L1, const char *msg,
                int level);|
@apii{0,1,m}

Creates and pushes a traceback of the stack @id{L1}.
If @id{msg} is not @id{NULL} it is appended
at the beginning of the traceback.
The @id{level} parameter tells at which level
to start the traceback.

}

@APIEntry{const char *luaL_typename (lua_State *L, int index);|
@apii{0,0,-}

Returns the name of the type of the value at the given index.

}

@APIEntry{void luaL_unref (lua_State *L, int t, int ref);|
@apii{0,0,-}

Releases reference @id{ref} from the table at index @id{t}
@seeC{luaL_ref}.
The entry is removed from the table,
so that the referred object can be collected.
The reference @id{ref} is also freed to be used again.

If @id{ref} is @Lid{LUA_NOREF} or

@Lid{LUA_REFNIL},
@Lid{luaL_unref} does nothing.

}

@APIEntry{void luaL_where (lua_State *L, int lvl);|
@apii{0,1,m}

Pushes onto the stack a string identifying the current position
of the control at level @id{lvl} in the call stack.
Typically this string has the following format:
@verbatim{
@rep{chunkname}:@rep{currentline}:
}
@N{Level 0} is the running function,
@N{level 1} is the function that called the running function,
etc.

This function is used to build a prefix for error messages.

}

}

}

@C{----------}
@sect1{libraries| @title{Standard Libraries}

The standard Lua libraries provide useful functions
that are implemented directly through the @N{C API}.
Some of these functions provide essential services to the language
(e.g., @Lid{type} and @Lid{getmetatable});
others provide access to @Q{outside} services (e.g., I/O);
and others could be implemented in Lua itself,
but are quite useful or have critical performance
requirements that
deserve an implementation in C (e.g., @Lid{table.sort}).

All libraries are implemented through the official @N{C API}
and are provided as separate @N{C modules}.
Currently, Lua has the following standard libraries:
@itemize{

@item{@link{predefined|basic library};}

@item{@link{corolib|coroutine library};}

@item{@link{packlib|package library};}

@item{@link{strlib|string manipulation};}

@item{@link{utf8|basic UTF-8 support};}

@item{@link{tablib|table manipulation};}

@item{@link{mathlib|mathematical functions} (sin, log, etc.);}

@item{@link{iolib|input and output};}

@item{@link{oslib|operating system facilities};}

@item{@link{debuglib|debug facilities}.}

}
Except for the basic and the package libraries,
each library provides all its functions as fields of a global table
or as methods of its objects.

To have access to these libraries,
the @N{C host} program should call the @Lid{luaL_openlibs} function,
which opens all standard libraries.
Alternatively,
the
 host program can open them individually by using
@Lid{luaL_requiref} to call
@defid{luaopen_base} (for the basic library),
@defid{luaopen_package} (for the package library),
@defid{luaopen_coroutine} (for the coroutine library),
@defid{luaopen_string} (for the string library),
@defid{luaopen_utf8} (for the UTF8 library),
@defid{luaopen_table} (for the table library),
@defid{luaopen_math} (for the mathematical library),
@defid{luaopen_io} (for the I/O library),
@defid{luaopen_os} (for the operating system library),
and @defid{luaopen_debug} (for the debug library).
These functions are declared in @defid{lualib.h}.

@sect2{predefined| @title{Basic Functions}

The basic library provides core functions to Lua.
If you do not include this library in your application,
you should check carefully whether you need to provide
implementations for some of its facilities.

@LibEntry{assert (v [, message])|

Calls @Lid{error} if
the value of its argument @id{v} is false (i.e., @nil or @false);
otherwise,
 returns all its arguments.
In case of error,
@id{message} is the error object;
when absent, it defaults to @St{assertion failed!}

}

@LibEntry{collectgarbage ([opt [, arg]])|

This function is a generic interface to the garbage collector.
It performs different functions according to its first argument, @id{opt}:
@description{

@item{@St{collect}|
performs a full garbage-collection cycle.
This is the default option.
}

@item{@St{stop}|
stops automatic execution of the garbage collector.
The collector will run only when explicitly invoked,
until a call to restart it.
}

@item{@St{restart}|
restarts automatic execution of the garbage collector.
}

@item{@St{count}|
returns the total memory in use by Lua in Kbytes.
The value has a fractional part,
so that it multiplied by 1024
gives the exact number of bytes in use by Lua
(except for overflows).
}

@item{@St{step}|
performs a garbage-collection step.
The step @Q{size} is controlled by @id{arg}.
With a zero value,
the collector will

perform one basic (indivisible) step.
For non-zero values,
the collector will perform as if that amount of memory
(in KBytes) had been allocated by Lua.
Returns @Rw{true} if the step finished a collection cycle.
}

@item{@St{setpause}|
sets @id{arg} as the new value for the @emph{pause} of
the collector @see{GC}.
Returns the previous value for @emph{pause}.
}

@item{@St{setstepmul}|
sets @id{arg} as the new value for the @emph{step multiplier} of
the collector @see{GC}.
Returns the previous value for @emph{step}.
}

@item{@St{isrunning}|
returns a boolean that tells whether the collector is running
(i.e., not stopped).
}

}

}

@LibEntry{dofile ([filename])|
Opens the named file and executes its contents as a Lua chunk.
When called without arguments,
@id{dofile} executes the contents of the standard input (@id{stdin}).
Returns all values returned by the chunk.
In case of errors, @id{dofile} propagates the error
to its caller (that is, @id{dofile} does not run in protected mode).

}

@LibEntry{error
(message [, level])|
Terminates the last protected function called
and returns @id{message} as the error object.
Function @id{error} never returns.

Usually, @id{error} adds some information about the error position
at the beginning of the message, if the message is a string.
The @id{level} argument specifies how to get the error position.
With @N{level 1} (the default), the error position is where the

@id{error} function was called.
@N{Level 2} points the error to where the function
that called @id{error} was called; and so on.
Passing a @N{level 0} avoids the addition of error position information
to the message.

}

@LibEntry{_G|
A global variable (not a function) that
holds the @x{global environment} @see{globalenv}.
Lua itself does not use this variable;
changing its value does not affect any environment,
nor vice versa.

}

@LibEntry{getmetatable (object)|

If @id{object} does not have a metatable, returns @nil.
Otherwise,
if the object's metatable has a @idx{__metatable}
 field,
returns the associated value.
Otherwise, returns the metatable of the given object.

}

@LibEntry{ipairs (t)|

Returns three values (an iterator function, the table @id{t}, and 0)
so that the construction
@verbatim{
for i,v in ipairs(t) do @rep{body} end
}
will iterate over the key@En{}value pairs
(@T{1,t[1]}), (@T{2,t[2]}), @ldots,
up to the first nil value.

}

@LibEntry{load (chunk [, chunkname [, mode [, env]]])|

Loads a chunk.

If @id{chunk} is a string, the chunk is this string.
If @id{chunk} is a function,
@id{load} calls it repeatedly to get the chunk pieces.

Each call to @id{chunk} must return a string that concatenates
with previous results.
A return of an empty string, @nil, or no value signals the end of the chunk.

If there are no syntactic errors,
returns the compiled chunk as a function;
otherwise, returns @nil plus the error message.

If the resulting function has upvalues,
the first upvalue is set to the value of @id{env},
if that parameter is given,
or
 to the value of the @x{global environment}.
Other upvalues are initialized with @nil.
(When you load a main chunk,
the resulting function will always have exactly one upvalue,
the @id{_ENV} variable @see{globalenv}.
However,
when you load a binary chunk created from a function @seeF{string.dump},
the resulting function can have an arbitrary number of upvalues.)
All upvalues are fresh, that is,
they are not shared with any other function.

@id{chunkname} is used as the name of the chunk for error messages
and debug information @see{debugI}.
When absent,
it defaults to @id{chunk}, if @id{chunk} is a string,
or to @St{=(load)} otherwise.

The string @id{mode} controls whether the chunk can be text or binary
(that is, a precompiled chunk).
It may be the string @St{b} (only @x{binary chunk}s),
@St{t} (only text chunks),
or @St{bt} (both binary and text).
The default is @St{bt}.

Lua does not check the consistency of binary chunks.
Maliciously crafted binary chunks can crash
the interpreter.

}

@LibEntry{loadfile
 ([filename [, mode [, env]]])|

Similar to @Lid{load},
but gets the chunk from file @id{filename}
or from the standard input,

if no file name is given.

}

@LibEntry{next (table [, index])|

Allows a program to traverse all fields of a table.
Its first argument is a table and its second argument
is an index in this table.
@id{next} returns the next index of the table
and its associated value.
When called with @nil as its second argument,
@id{next} returns an initial index
and its associated value.
When called with the last index,
or with @nil in an empty table,
@id{next} returns @nil.
If the second argument is absent, then it is interpreted as @nil.
In particular,
you can use @T{next(t)} to check whether a table is empty.

The order in which the indices are enumerated is not specified,
@emph{even for numeric indices}.
(To traverse a table in numerical order,
use a numerical @Rw{for}.)

The behavior of @id{next} is undefined if,
during the traversal,
you assign
 any value to a non-existent field in the table.
You may however modify existing fields.
In particular, you may clear existing fields.

}

@LibEntry{pairs (t)|

If @id{t} has a metamethod @idx{__pairs},
calls it with @id{t} as argument and returns the first three
results from the call.

Otherwise,
returns three values: the @Lid{next} function, the table @id{t}, and @nil,
so that the construction
@verbatim{
for k,v in pairs(t) do @rep{body} end
}
will iterate over all key@En{}value pairs of table @id{t}.

See function @Lid{next} for the caveats of modifying
the table during its traversal.

}

@LibEntry{pcall (f [, arg1, @Cdots])|

Calls function @id{f} with
the given arguments in @def{protected mode}.
This means that any error @N{inside @T{f}} is not propagated;
instead, @id{pcall} catches the error
and returns a status code.
Its first result is the status code (a boolean),
which is true if the call succeeds without errors.
In such case, @id{pcall} also returns all results from the call,
after
 this first result.
In case of any error, @id{pcall} returns @false plus the error message.

}

@LibEntry{print (@Cdots)|
Receives any number of arguments
and prints their values to @id{stdout},
using the @Lid{tostring} function to convert each argument to a string.
@id{print} is not intended for formatted output,
but only as a quick way to show a value,
for instance for debugging.
For complete control over the output,
use @Lid{string.format} and @Lid{io.write}.

}

@LibEntry{rawequal (v1, v2)|
Checks whether @id{v1} is equal to @id{v2},
without invoking the @idx{__eq} metamethod.
Returns a boolean.

}

@LibEntry{rawget (table, index)|
Gets the real value of @T{table[index]},
without invoking the @idx{__index} metamethod.
@id{table} must be a table;
@id{index} may be any value.

}

@LibEntry{rawlen (v)|
Returns the length of the object @id{v},
which must be a table or a string,
without invoking the @idx{__len} metamethod.
Returns an integer.

}

@LibEntry{rawset (table, index, value)|
Sets
 the real value of @T{table[index]} to @id{value},
without invoking the @idx{__newindex} metamethod.
@id{table} must be a table,
@id{index} any value different from @nil and @x{NaN},
and @id{value} any Lua value.

This function returns @id{table}.

}

@LibEntry{select (index, @Cdots)|

If @id{index} is a number,
returns all arguments after argument number @id{index};
a negative number indexes from the end (@num{-1} is the last argument).
Otherwise, @id{index} must be the string @T{"#"},
and @id{select} returns the total number of extra arguments it received.

}

@LibEntry{setmetatable (table, metatable)|

Sets the metatable for the given table.
(To change the metatable of other types from Lua code,
you must use the @link{debuglib|debug library}.)
If @id{metatable} is @nil,
removes the metatable of the given table.
If the original metatable has a @idx{__metatable} field,
raises an error.

This function returns @id{table}.

}

@LibEntry{tonumber (e [, base])|

When called with

no @id{base},
@id{tonumber} tries to convert its argument to a number.
If the argument is already a number or
a string convertible to a number,
then @id{tonumber} returns this number;
otherwise, it returns @nil.

The conversion of strings can result in integers or floats,
according to the lexical conventions of Lua @see{lexical}.
(The string may have leading and trailing spaces and a sign.)

When called with @id{base},
then @id{e} must be a string to be interpreted as
an integer numeral in that base.
The base may be any integer between 2 and 36, inclusive.
In bases @N{above 10}, the letter @Char{A} (in either upper or lower case)
@N{represents 10}, @Char{B} @N{represents 11}, and so forth,
with @Char{Z} representing 35.
If the string @id{e} is not a valid numeral in the given base,
the function returns @nil.

}

@LibEntry{tostring (v)|
Receives a value of any type and
converts it to a string in a human-readable format.
(For complete control of how numbers are converted,
use @Lid{string.format}.)

If
the metatable of @id{v} has a @idx{__tostring} field,
then @id{tostring} calls the corresponding value
with @id{v} as argument,
and uses the result of the call as its result.

}

@LibEntry{type (v)|
Returns the type of its only argument, coded as a string.
The possible results of this function are
@St{nil} (a string, not the value @nil),
@St{number},
@St{string},
@St{boolean},
@St{table},
@St{function},
@St{thread},
and @St{userdata}.

}

@LibEntry{_VERSION|

A global variable (not a function) that
holds a string containing the running Lua version.
The current value of this variable is @St{Lua 5.3}.

}

@LibEntry{xpcall (f, msgh [, arg1, @Cdots])|

This function is similar to @Lid{pcall},
except that it sets a new @x{message handler} @id{msgh}.

}

}

@sect2{corolib| @title{Coroutine Manipulation}

This library comprises the operations to manipulate coroutines,
which come inside the table @defid{coroutine}.
See @See{coroutine} for a general description of coroutines.

@LibEntry{coroutine.create
(f)|

Creates a new coroutine, with body @id{f}.
@id{f} must be a function.
Returns this new coroutine,
an object with type @T{"thread"}.

}

@LibEntry{coroutine.isyieldable ()|

Returns true when the running coroutine can yield.

A running coroutine is yieldable if it is not the main thread and
it is not inside a non-yieldable @N{C function}.

}

@LibEntry{coroutine.resume (co [, val1, @Cdots])|

Starts or continues the execution of coroutine @id{co}.
The first time you resume a coroutine,
it starts running its body.
The values @id{val1}, @ldots are passed
as the arguments to the body function.
If the coroutine has yielded,
@id{resume} restarts it;
the values @id{val1}, @ldots are passed
as the results from the yield.

If the coroutine runs without any errors,
@id{resume} returns @true plus any values passed to @id{yield}
(when the coroutine yields) or any values returned by the body function
(when the coroutine terminates).
If there is any error,
@id{resume}
returns @false plus the error message.

}

@LibEntry{coroutine.running ()|

Returns the running coroutine plus a boolean,
true when the running coroutine is the main one.

}

@LibEntry{coroutine.status (co)|

Returns the status of coroutine @id{co}, as a string:
@T{"running"},
if the coroutine is running (that is, it called @id{status});
@T{"suspended"}, if the coroutine is suspended in a call to @id{yield},
or if it has not started running yet;
@T{"normal"} if the coroutine is active but not running
(that is, it has resumed another coroutine);
and @T{"dead"} if the coroutine has finished its body function,
or if it has stopped with an error.

}

@LibEntry{coroutine.wrap (f)|

Creates a new coroutine, with body @id{f}.
@id{f} must be a function.
Returns a function that resumes the coroutine each time it is called.
Any arguments passed to the function behave as the
extra arguments to @id{resume}.

Returns the same values returned by @id{resume},
except the first boolean.
In case of error,
 propagates the error.

}

@LibEntry{coroutine.yield (@Cdots)|

Suspends the execution of the calling coroutine.
Any arguments to @id{yield} are passed as extra results to @id{resume}.

}

}

@sect2{packlib| @title{Modules}

The package library provides basic
facilities for loading modules in Lua.
It exports one function directly in the global environment:
@Lid{require}.
Everything else is exported in a table @defid{package}.

@LibEntry{require (modname)|

Loads the given module.
The function starts by looking into the @Lid{package.loaded} table
to determine whether @id{modname} is already loaded.
If it is, then @id{require} returns the value stored
at @T{package.loaded[modname]}.
Otherwise, it tries to find a @emph{loader} for the module.

To find a loader,
@id{require} is guided by the @Lid{package.searchers} sequence.
By changing this sequence,
we can change how @id{require} looks for a module.
The following explanation is based on the default configuration
for @Lid{package.searchers}.

First
 @id{require} queries @T{package.preload[modname]}.
If it has a value,
this value (which must be a function) is the loader.
Otherwise @id{require} searches for a Lua loader using the
path stored in @Lid{package.path}.
If that also fails, it searches for a @N{C loader} using the

path stored in @Lid{package.cpath}.
If that also fails,
it tries an @emph{all-in-one} loader @seeF{package.searchers}.

Once a loader is found,
@id{require} calls the loader with two arguments:
@id{modname} and an extra value dependent on how it got the loader.
(If the loader came from a file,
this extra value is the file name.)
If the loader returns any non-nil value,
@id{require} assigns the returned value to @T{package.loaded[modname]}.
If the loader does not return a non-nil value and
has not assigned any value to @T{package.loaded[modname]},
then @id{require} assigns @Rw{true} to this entry.
In any case, @id{require} returns the
final value of @T{package.loaded[modname]}.

If there is any error
 loading or running the module,
or if it cannot find any loader for the module,
then @id{require} raises an error.

}

@LibEntry{package.config|

A string describing some compile-time configurations for packages.
This string is a sequence of lines:
@itemize{

@item{The first line is the @x{directory separator} string.
Default is @Char{\} for @x{Windows} and @Char{/} for all other systems.}

@item{The second line is the character that separates templates in a path.
Default is @Char{;}.}

@item{The third line is the string that marks the
substitution points in a template.
Default is @Char{?}.}

@item{The fourth line is a string that, in a path in @x{Windows},
is replaced by the executable's directory.
Default is @Char{!}.}

@item{The fifth line is a mark to ignore all text after it
when building the @id{luaopen_} function name.
Default is @Char{-}.}

}

}

@LibEntry{package.cpath|

The path used by @Lid{require} to search for a @N{C loader}.

Lua initializes the @N{C path} @Lid{package.cpath}
 in the same way
it initializes the Lua path @Lid{package.path},
using the environment variable @defid{LUA_CPATH_5_3},
or the environment variable @defid{LUA_CPATH},
or a default path defined in @id{luaconf.h}.

}

@LibEntry{package.loaded|

A table used by @Lid{require} to control which
modules are already loaded.
When you require a module @id{modname} and
@T{package.loaded[modname]} is not false,
@Lid{require} simply returns the value stored there.

This variable is only a reference to the real table;
assignments to this variable do not change the
table used by @Lid{require}.

}

@LibEntry{package.loadlib (libname, funcname)|

Dynamically links the host program with the @N{C library} @id{libname}.

If @id{funcname} is @St{*},
then it only links with the library,
making the symbols exported by the library
available to other dynamically linked libraries.
Otherwise,
it looks for a function @id{funcname} inside the library
and returns this function as a @N{C function}.
So, @id{funcname}
 must follow the @Lid{lua_CFunction} prototype
@seeC{lua_CFunction}.

This is a low-level function.
It completely bypasses the package and module system.

Unlike @Lid{require},
it does not perform any path searching and
does not automatically adds extensions.
@id{libname} must be the complete file name of the @N{C library},
including if necessary a path and an extension.
@id{funcname} must be the exact name exported by the @N{C library}
(which may depend on the @N{C compiler} and linker used).

This function is not supported by @N{Standard C}.
As such, it is only available on some platforms
(Windows, Linux, Mac OS X, Solaris, BSD,
plus other Unix systems that support the @id{dlfcn} standard).

}

@LibEntry{package.path|

The path used by @Lid{require} to search for a Lua loader.

At start-up, Lua initializes this variable with
the value of the environment variable @defid{LUA_PATH_5_3} or
the environment variable @defid{LUA_PATH} or
with a default path defined in @id{luaconf.h},
if those
 environment variables are not defined.
Any @St{;;} in the value of the environment variable
is replaced by the default path.

}

@LibEntry{package.preload|

A table to store loaders for specific modules
@seeF{require}.

This variable is only a reference to the real table;
assignments to this variable do not change the
table used by @Lid{require}.

}

@LibEntry{package.searchers|

A table used by @Lid{require} to control how to load modules.

Each entry in this table is a @def{searcher function}.
When looking for a module,
@Lid{require} calls each of these searchers in ascending order,

with the module name (the argument given to @Lid{require}) as its
sole parameter.
The function can return another function (the module @def{loader})
plus an extra value that will be passed to that loader,
or a string explaining why it did not find that module
(or @nil if it has nothing to say).

Lua initializes this table with four searcher functions.

The first searcher simply looks for a loader in
the
@Lid{package.preload} table.

The second searcher looks for a loader as a Lua library,
using the path stored at @Lid{package.path}.
The search is done as described in function @Lid{package.searchpath}.

The third searcher looks for a loader as a @N{C library},
using the path given by the variable @Lid{package.cpath}.
Again,
the search is done as described in function @Lid{package.searchpath}.
For instance,
if the @N{C path} is the string
@verbatim{
"./?.so;./?.dll;/usr/local/?/init.so"
}
the searcher for module @id{foo}
will try to open the files @T{./foo.so}, @T{./foo.dll},
and @T{/usr/local/foo/init.so}, in that order.
Once it finds a @N{C library},
this searcher first uses a dynamic link facility to link the
application with the library.
Then it tries to find a @N{C function} inside the library to
be used as the loader.
The name of this @N{C function} is the string @St{luaopen_}
concatenated with a copy of the module name where each dot
is replaced by an underscore.
Moreover, if
the module name has a hyphen,
its suffix after (and including) the first hyphen is removed.
For instance, if the module name is @id{a.b.c-v2.1},
the function name will be @id{luaopen_a_b_c}.

The fourth searcher tries an @def{all-in-one loader}.
It searches the @N{C path} for a library for
the root name of the given module.
For instance, when requiring @id{a.b.c},
it will search for a @N{C library} for @id{a}.

If found, it looks into it for an open function for
the submodule;
in our example, that would be @id{luaopen_a_b_c}.
With this facility, a package can pack several @N{C submodules}
into one single library,
with each submodule keeping its original open function.

All searchers except the first one (preload) return as the extra value
the file name where the module was found,
as returned by @Lid{package.searchpath}.
The first searcher returns no extra value.

}

@LibEntry{package.searchpath (name, path [, sep [, rep]])|

Searches for the given @id{name} in the given @id{path}.

A path
 is a string containing a sequence of
@emph{templates} separated by semicolons.
For each template,
the function replaces each interrogation mark (if any)
in the template with a copy of @id{name}
wherein all occurrences of @id{sep}
(a dot, by default)
were replaced by @id{rep}
(the system's directory separator, by default),
and then tries to open the resulting file name.

For instance, if the path is the string
@verbatim{
"./?.lua;./?.lc;/usr/local/?/init.lua"
}
the search for the name @id{foo.a}
will try to open the files
@T{./foo/a.lua}, @T{./foo/a.lc}, and
@T{/usr/local/foo/a/init.lua}, in that order.

Returns the resulting name of the first file that it can
open in read mode (after closing the file),
or @nil plus an error message if none succeeds.
(This error message lists all file names it tried to open.)

}

}

@sect2{strlib| @title{String Manipulation}

This library provides generic functions for string manipulation,
such as finding and extracting substrings, and pattern matching.
When
indexing a string in Lua, the first character is at @N{position 1}
(not @N{at 0}, as in C).
Indices are allowed to be negative and are interpreted as indexing backwards,
from the end of the string.
Thus, the last character is at position @num{-1}, and so on.

The string library provides all its functions inside the table
@defid{string}.
It also sets a @x{metatable for strings}
where the @idx{__index} field points to the @id{string} table.
Therefore, you can use the string functions in object-oriented style.
For instance, @T{string.byte(s,i)}
can be written as @T{s:byte(i)}.

The string library assumes one-byte character encodings.

@LibEntry{string.byte (s [, i [, j]])|
Returns the internal numeric codes of the characters @T{s[i]},
@T{s[i+1]}, @ldots, @T{s[j]}.
The default value for @id{i} @N{is 1};
the default value for @id{j} @N{is @id{i}}.
These indices are corrected
following the same rules of function @Lid{string.sub}.

Numeric codes are not necessarily portable across
platforms.

}

@LibEntry{string.char (@Cdots)|
Receives zero or more integers.
Returns a string with length equal to the number of arguments,
in which each character has the internal numeric code equal
to its corresponding argument.

Numeric codes are not necessarily portable across platforms.

}

@LibEntry{string.dump (function [, strip])|

Returns a string containing a binary representation

(a @emph{binary chunk})
of the given function,
so that a later @Lid{load} on this string returns
a copy of the function (but with new upvalues).
If @id{strip} is a true value,
the binary representation may not include all debug information
about the function,
to save space.

Functions with upvalues have only their number of upvalues saved.
When (re)loaded,
those upvalues receive fresh instances containing @nil.
(You can use the debug library to serialize
and reload the upvalues of a function
in a way adequate to your needs.)

}

@LibEntry{string.find (s, pattern [, init [, plain]])|

Looks for the
 first match of
@id{pattern} @see{pm} in the string @id{s}.
If it finds a match, then @id{find} returns the indices @N{of @T{s}}
where this occurrence starts and ends;
otherwise, it returns @nil.
A third, optional numeric argument @id{init} specifies
where to start the search;
its default value @N{is 1} and can be negative.
A value of @true as a fourth, optional argument @id{plain}
turns off the pattern matching facilities,
so the function does a plain @Q{find substring} operation,
with no characters in @id{pattern} being considered magic.
Note that if @id{plain} is given, then @id{init} must be given as well.

If the pattern has captures,
then in a successful match
the captured values are also returned,
after the two indices.

}

@LibEntry{string.format (formatstring, @Cdots)|

Returns a formatted version of its variable number of arguments
following the description given in its first argument (which must be a string).
The format string follows the same rules as the @ANSI{sprintf}.
The

only differences are that the options/modifiers
@T{*}, @id{h}, @id{L}, @id{l}, @id{n},
and @id{p} are not supported
and that there is an extra option, @id{q}.

The @id{q} option formats a string between double quotes,
using escape sequences when necessary to ensure that
it can safely be read back by the Lua interpreter.
For instance, the call
@verbatim{
string.format('%q', 'a string with "quotes" and \n new line')
}
may produce the string:
@verbatim{
"a string with \"quotes\" and \
new line"
}

Options
@id{A}, @id{a}, @id{E}, @id{e}, @id{f},
@id{G}, and @id{g} all expect a number as argument.
Options @id{c}, @id{d},
@id{i}, @id{o}, @id{u}, @id{X}, and @id{x}
expect an integer.
When Lua is compiled with a C89 compiler,
options @id{A} and @id{a} (hexadecimal floats)
do not support any modifier (flags, width, length).

Option @id{s} expects a string;
if its argument is not a string,
it is converted to one following the same rules of @Lid{tostring}.
If the option has any modifier (flags,
width, length),
the string argument should not contain @x{embedded zeros}.

}

@LibEntry{string.gmatch (s, pattern)|
Returns an iterator function that,
each time it is called,
returns the next captures from @id{pattern} @see{pm}
over the string @id{s}.
If @id{pattern} specifies no captures,
then the whole match is produced in each call.

As an example, the following loop
will iterate over all the words from string @id{s},
printing one per line:

@verbatim{
s = "hello world from Lua"
for w in string.gmatch(s, "%a+") do
 print(w)
end
}
The next example collects all pairs @T{key=value} from the
given string into a table:
@verbatim{
t = {}
s = "from=world, to=Lua"
for k, v in string.gmatch(s, "(%w+)=(%w+)") do
 t[k] = v
end
}

For this function, a caret @Char{^} at the start of a pattern does not
work as an anchor, as this would prevent the iteration.

}

@LibEntry{string.gsub (s, pattern, repl [, n])|
Returns a copy of @id{s}
in which all (or the first @id{n}, if given)
occurrences of
 the @id{pattern} @see{pm} have been
replaced by a replacement string specified by @id{repl},
which can be a string, a table, or a function.
@id{gsub} also returns, as its second value,
the total number of matches that occurred.
The name @id{gsub} comes from @emph{Global SUBstitution}.

If @id{repl} is a string, then its value is used for replacement.
The @N{character @T{%}} works as an escape character:
any sequence in @id{repl} of the form @T{%@rep{d}},
with @rep{d} between 1 and 9,
stands for the value of the @rep{d}-th captured substring.
The sequence @T{%0} stands for the whole match.
The sequence @T{%%} stands for a @N{single @T{%}}.

If @id{repl} is a table, then the table is queried for every match,
using the first capture as the key.

If @id{repl} is a function, then this function is called every time a
match occurs, with all captured substrings passed as arguments,
in order.

In any case,

if the pattern specifies no captures,
then it behaves as if the whole pattern was inside
 a capture.

If the value returned by the table query or by the function call
is a string or a number,
then it is used as the replacement string;
otherwise, if it is @Rw{false} or @nil,
then there is no replacement
(that is, the original match is kept in the string).

Here are some examples:
@verbatim{
x = string.gsub("hello world", "(%w+)", "%1 %1")
--> x="hello hello world world"

x = string.gsub("hello world", "%w+", "%0 %0", 1)
--> x="hello hello world"

x = string.gsub("hello world from Lua", "(%w+)%s*(%w+)", "%2 %1")
--> x="world hello Lua from"

x = string.gsub("home = $HOME, user = $USER", "%$(%w+)", os.getenv)
--> x="home = /home/roberto, user = roberto"

x = string.gsub("4+5 = $return 4+5$", "%$(.-)%$", function (s)
    return load(s)()
  end)
--> x="4+5 = 9"

local t = {name="lua", version="5.3"}
x = string.gsub("$name-$version.tar.gz", "%$(%w+)", t)
--> x="lua-5.3.tar.gz"
}

}

@LibEntry{string.len (s)|
Receives a string and returns its length.
The empty string @T{""} has
 length 0.
Embedded zeros are counted,
so @T{"a\000bc\000"} has length 5.

}

@LibEntry{string.lower (s)|
Receives a string and returns a copy of this string with all

uppercase letters changed to lowercase.
All other characters are left unchanged.
The definition of what an uppercase letter is depends on the current locale.

}

@LibEntry{string.match (s, pattern [, init])|
Looks for the first @emph{match} of
@id{pattern} @see{pm} in the string @id{s}.
If it finds one, then @id{match} returns
the captures from the pattern;
otherwise it returns @nil.
If @id{pattern} specifies no captures,
then the whole match is returned.
A third, optional numeric argument @id{init} specifies
where to start the search;
its default value @N{is 1} and can be negative.

}

@LibEntry{string.pack (fmt, v1, v2, @Cdots)|

Returns a binary string containing the values @id{v1}, @id{v2}, etc.
packed (that is, serialized in binary form)
according to the format string @id{fmt} @see{pack}.

}

@LibEntry{string.packsize
(fmt)|

Returns the size of a string resulting from @Lid{string.pack}
with the given format.
The format string cannot have the variable-length options
@Char{s} or @Char{z} @see{pack}.

}

@LibEntry{string.rep (s, n [, sep])|
Returns a string that is the concatenation of @id{n} copies of
the string @id{s} separated by the string @id{sep}.
The default value for @id{sep} is the empty string
(that is, no separator).
Returns the empty string if @id{n} is not positive.

(Note that it is very easy to exhaust the memory of your machine
with a single call to this function.)

}

@LibEntry{string.reverse (s)|
Returns a string that is the string @id{s} reversed.

}

@LibEntry{string.sub (s, i [, j])|
Returns the substring of @id{s} that
starts at @id{i} and continues until @id{j};
@id{i} and @id{j} can be negative.
If @id{j} is absent, then it is assumed to be equal to @num{-1}
(which is the same as the string length).
In particular,
the call @T{string.sub(s,1,j)} returns a prefix of @id{s}
with
 length @id{j},
and @T{string.sub(s, -i)} (for a positive @id{i})
returns a suffix of @id{s}
with length @id{i}.

If, after the translation of negative indices,
@id{i} is less than 1,
it is corrected to 1.
If @id{j} is greater than the string length,
it is corrected to that length.
If, after these corrections,
@id{i} is greater than @id{j},
the function returns the empty string.

}

@LibEntry{string.unpack (fmt, s [, pos])|

Returns the values packed in string @id{s} @seeF{string.pack}
according to the format string @id{fmt} @see{pack}.
An optional @id{pos} marks where
to start reading in @id{s} (default is 1).
After the read values,
this function also returns the index of the first unread byte in @id{s}.

}

@LibEntry{string.upper (s)|
Receives a string and returns a copy of this string with all
lowercase letters changed to uppercase.
All other characters are left unchanged.
The definition of what a lowercase letter is depends on the current locale.

}

@sect3{pm| @title{Patterns}

Patterns
 in Lua are described by regular strings,
which are interpreted as patterns by the pattern-matching functions
@Lid{string.find},
@Lid{string.gmatch},
@Lid{string.gsub},
and @Lid{string.match}.
This section describes the syntax and the meaning
(that is, what they match) of these strings.

@sect4{@title{Character Class:}
A @def{character class} is used to represent a set of characters.
The following combinations are allowed in describing a character class:
@description{

@item{@rep{x}|
(where @rep{x} is not one of the @emphx{magic characters}
@T{^$()%.[]*+-?})
represents the character @emph{x} itself.
}

@item{@T{.}| (a dot) represents all characters.}

@item{@T{%a}| represents all letters.}

@item{@T{%c}| represents all control characters.}

@item{@T{%d}| represents all digits.}

@item{@T{%g}| represents all printable characters except space.}

@item{@T{%l}| represents all lowercase letters.}

@item{@T{%p}| represents all punctuation characters.}

@item{@T{%s}| represents all space
 characters.}

@item{@T{%u}| represents all uppercase letters.}

@item{@T{%w}| represents all alphanumeric characters.}

@item{@T{%x}| represents all hexadecimal digits.}

@item{@T{%@rep{x}}| (where @rep{x} is any non-alphanumeric character)
represents the character @rep{x}.
This is the standard way to escape the magic characters.
Any non-alphanumeric character
(including all punctuation characters, even the non-magical)
can be preceded by a @Char{%}
when used to represent itself in a pattern.
}

@item{@T{[@rep{set}]}|
represents the class which is the union of all
characters in @rep{set}.
A range of characters can be specified by
separating the end characters of the range,
in ascending order, with a @Char{-}.
All classes @T{%}@emph{x} described above can also be used as
components in @rep{set}.
All other characters in @rep{set} represent themselves.
For example, @T{[%w_]} (or @T{[_%w]})
represents all alphanumeric characters plus the underscore,
@T{[0-7]} represents the octal digits,
and
@T{[0-7%l%-]} represents the octal digits plus
the lowercase letters plus the @Char{-} character.

You can put a closing square bracket in a set
by positioning it as the first character in the set.
You can put a hyphen in a set
by positioning it as the first or the last character in the set.
(You can also use an escape for both cases.)

The interaction between ranges and classes is not defined.
Therefore, patterns like @T{[%a-z]} or @T{[a-%%]}
have no meaning.
}

@item{@T{[^@rep{set}]}|
represents the complement of @rep{set},
where @rep{set} is interpreted as above.
}

}
For all classes represented by single letters (@T{%a}, @T{%c}, etc.),
the corresponding uppercase letter represents the complement of the class.
For instance, @T{%S} represents all non-space characters.

The definitions of letter, space, and other character groups
depend on the current locale.
In particular, the class @T{[a-z]} may not be equivalent to @T{%l}.

}

@sect4{@title{Pattern Item:}
A @def{pattern item}
can be
@itemize{

@item{
a single character class,
which matches any single character in the class;
}

@item{
a single character class followed by @Char{*},
which matches zero or more repetitions of characters in the class.
These repetition items will always match the longest possible sequence;
}

@item{
a single character class followed by @Char{+},
which matches one or more repetitions of characters in the class.
These repetition items will always match the longest possible sequence;
}

@item{
a single character class followed by @Char{-},
which also matches zero or more repetitions of characters in the class.
Unlike @Char{*},
these repetition items will always match the shortest possible sequence;
}

@item{
a single character class followed by @Char{?},
which matches zero or one occurrence of a character in the class.
It always matches one occurrence if possible;
}

@item{
@T{%@rep{n}}, for @rep{n} between 1 and 9;
such item matches a substring equal to the @rep{n}-th captured string
(see
below);
}

@item{
@T{%b@rep{xy}}, where @rep{x} and @rep{y} are two distinct characters;
such item matches strings that start @N{with @rep{x}}, end @N{with @rep{y}},
and where the @rep{x} and @rep{y} are @emph{balanced}.
This means that, if one reads the string from left to right,
counting @M{+1} for an @rep{x} and @M{-1} for a @rep{y},
the ending @rep{y} is the first @rep{y} where the count reaches 0.
For instance, the item @T{%b()} matches expressions with
balanced parentheses.
}

@item{
@T{%f[@rep{set}]}, a @def{frontier pattern};
such item matches an empty string at any position such that
the next character belongs to @rep{set}
and the previous character does not belong to @rep{set}.
The set @rep{set} is interpreted as previously described.
The beginning and the end of the subject are handled as if
they were the character @Char{\0}.
}

}

}

@sect4{@title{Pattern:}
A @def{pattern} is a sequence of pattern items.
A caret @Char{^} at the beginning of a pattern anchors the match
 at the
beginning of the subject string.
A @Char{$} at the end of a pattern anchors the match at the
end of the subject string.
At other positions,
@Char{^} and @Char{$} have no special meaning and represent themselves.

}

@sect4{@title{Captures:}
A pattern can contain sub-patterns enclosed in parentheses;
they describe @def{captures}.
When a match succeeds, the substrings of the subject string
that match captures are stored (@emph{captured}) for future use.
Captures are numbered according to their left parentheses.
For instance, in the pattern @T{"(a*(.)%w(%s*))"},
the part of the string matching @T{"a*(.)%w(%s*)"} is
stored as the first capture (and therefore has @N{number 1});
the character matching @St{.} is captured with @N{number 2},
and the part matching @St{%s*} has @N{number 3}.

As a special case, the empty capture @T{()} captures
the current string position (a number).
For instance, if we apply the pattern @T{"()aa()"} on the
string @T{"flaaap"}, there will be two captures:
 @N{3 and 5}.

}

}

@sect3{pack| @title{Format Strings for Pack and Unpack}

The first argument to @Lid{string.pack},
@Lid{string.packsize}, and @Lid{string.unpack}
is a format string,
which describes the layout of the structure being created or read.

A format string is a sequence of conversion options.
The conversion options are as follows:
@description{
@item{@T{<}|sets little endian}
@item{@T{>}|sets big endian}
@item{@T{=}|sets native endian}
@item{@T{![@rep{n}]}|sets maximum alignment to @id{n}
(default is native alignment)}
@item{@T{b}|a signed byte (@id{char})}
@item{@T{B}|an unsigned byte (@id{char})}
@item{@T{h}|a signed @id{short} (native size)}
@item{@T{H}|an unsigned @id{short} (native size)}
@item{@T{l}|a signed @id{long} (native size)}
@item{@T{L}|an unsigned @id{long} (native size)}
@item{@T{j}|a @id{lua_Integer}}
@item{@T{J}|a @id{lua_Unsigned}}
@item{@T{T}|a @id{size_t} (native size)}
@item{@T{i[@rep{n}]}|a signed @id{int} with @id{n} bytes
(default is native size)}
@item{@T{I[@rep{n}]}|an
 unsigned @id{int} with @id{n} bytes
(default is native size)}
@item{@T{f}|a @id{float} (native size)}
@item{@T{d}|a @id{double} (native size)}
@item{@T{n}|a @id{lua_Number}}
@item{@T{c@rep{n}}|a fixed-sized string with @id{n} bytes}
@item{@T{z}|a zero-terminated string}
@item{@T{s[@emph{n}]}|a string preceded by its length
coded as an unsigned integer with @id{n} bytes

(default is a @id{size_t})}
@item{@T{x}|one byte of padding}
@item{@T{X@rep{op}}|an empty item that aligns
according to option @id{op}
(which is otherwise ignored)}
@item{@Char{ }|(empty space) ignored}
}
(A @St{[@rep{n}]} means an optional integral numeral.)
Except for padding, spaces, and configurations
(options @St{xX <=>!}),
each option corresponds to an argument (in @Lid{string.pack})
or a result (in @Lid{string.unpack}).

For options @St{!@rep{n}}, @St{s@rep{n}}, @St{i@rep{n}}, and @St{I@rep{n}},
@id{n} can be any integer between 1 and 16.
All integral options check overflows;
@Lid{string.pack}
 checks whether the given value fits in the given size;
@Lid{string.unpack} checks whether the read value fits in a Lua integer.

Any format string starts as if prefixed by @St{!1=},
that is,
with maximum alignment of 1 (no alignment)
and native endianness.

Alignment works as follows:
For each option,
the format gets extra padding until the data starts
at an offset that is a multiple of the minimum between the
option size and the maximum alignment;
this minimum must be a power of 2.
Options @St{c} and @St{z} are not aligned;
option @St{s} follows the alignment of its starting integer.

All padding is filled with zeros by @Lid{string.pack}
(and ignored by @Lid{string.unpack}).

}

}

@sect2{utf8| @title{UTF-8 Support}

This library provides basic support for @x{UTF-8} encoding.
It provides all its functions inside the table @defid{utf8}.
This library does not provide any support for @x{Unicode} other
than the handling of the encoding.
Any operation that needs the meaning of a character,

such
as character classification, is outside its scope.

Unless stated otherwise,
all functions that expect a byte position as a parameter
assume that the given position is either the start of a byte sequence
or one plus the length of the subject string.
As in the string library,
negative indices count from the end of the string.

@LibEntry{utf8.char (@Cdots)|
Receives zero or more integers,
converts each one to its corresponding UTF-8 byte sequence
and returns a string with the concatenation of all these sequences.

}

@LibEntry{utf8.charpattern|
The pattern (a string, not a function) @St{[\0-\x7F\xC2-\xF4][\x80-\xBF]*}
@see{pm},
which matches exactly one UTF-8 byte sequence,
assuming that the subject is a valid UTF-8 string.

}

@LibEntry{utf8.codes (s)|

Returns values so that the construction
@verbatim{
for p, c in utf8.codes(s) do @rep{body} end
}
will iterate over all characters in string @id{s},
with @id{p} being the position (in bytes) and @id{c} the code point
of each
character.
It raises an error if it meets any invalid byte sequence.

}

@LibEntry{utf8.codepoint (s [, i [, j]])|
Returns the codepoints (as integers) from all characters in @id{s}
that start between byte position @id{i} and @id{j} (both included).
The default for @id{i} is 1 and for @id{j} is @id{i}.
It raises an error if it meets any invalid byte sequence.

}

@LibEntry{utf8.len (s [, i [, j]])|
Returns the number of UTF-8 characters in string @id{s}
that start between positions @id{i} and @id{j} (both inclusive).
The default for @id{i} is @num{1} and for @id{j} is @num{-1}.
If it finds any invalid byte sequence,
returns a false value plus the position of the first invalid byte.

}

@LibEntry{utf8.offset (s, n [, i])|
Returns the position (in bytes) where the encoding of the
@id{n}-th character of @id{s}
(counting from position @id{i}) starts.
A negative @id{n} gets characters before position @id{i}.
The default for @id{i} is 1 when @id{n} is non-negative
and @T{#s + 1} otherwise,
so
 that @T{utf8.offset(s, -n)} gets the offset of the
@id{n}-th character from the end of the string.
If the specified character is neither in the subject
nor right after its end,
the function returns @nil.

As a special case,
when @id{n} is 0 the function returns the start of the encoding
of the character that contains the @id{i}-th byte of @id{s}.

This function assumes that @id{s} is a valid UTF-8 string.

}

}

@sect2{tablib| @title{Table Manipulation}

This library provides generic functions for table manipulation.
It provides all its functions inside the table @defid{table}.

Remember that, whenever an operation needs the length of a table,
all caveats about the length operator apply @see{len-op}.
All functions ignore non-numeric keys
in the tables given as arguments.

@LibEntry{table.concat (list [, sep [, i [, j]]])|

Given a list where all elements are strings or numbers,
returns the string @T{list[i]..sep..list[i+1] @Cdots sep..list[j]}.

The default value for @id{sep} is the
 empty string,
the default for @id{i} is 1,
and the default for @id{j} is @T{#list}.
If @id{i} is greater than @id{j}, returns the empty string.

}

@LibEntry{table.insert (list, [pos,] value)|

Inserts element @id{value} at position @id{pos} in @id{list},
shifting up the elements
@T{list[pos], list[pos+1], @Cdots, list[#list]}.
The default value for @id{pos} is @T{#list+1},
so that a call @T{table.insert(t,x)} inserts @id{x} at the end
of list @id{t}.

}

@LibEntry{table.move (a1, f, e, t [,a2])|

Moves elements from table @id{a1} to table @id{a2},
performing the equivalent to the following
multiple assignment:
@T{a2[t],@Cdots = a1[f],@Cdots,a1[e]}.
The default for @id{a2} is @id{a1}.
The destination range can overlap with the source range.
The number of elements to be moved must fit in a Lua integer.

Returns the destination table @id{a2}.

}

@LibEntry{table.pack (@Cdots)|

Returns a new table with all arguments stored into keys 1, 2, etc.
and with a field @St{n} with the total number
 of arguments.
Note that the resulting table may not be a sequence.

}

@LibEntry{table.remove (list [, pos])|

Removes from @id{list} the element at position @id{pos},
returning the value of the removed element.
When @id{pos} is an integer between 1 and @T{#list},
it shifts down the elements

@T{list[pos+1], list[pos+2], @Cdots, list[#list]}
and erases element @T{list[#list]};
The index @id{pos} can also be 0 when @T{#list} is 0,
or @T{#list + 1};
in those cases, the function erases the element @T{list[pos]}.

The default value for @id{pos} is @T{#list},
so that a call @T{table.remove(l)} removes the last element
of list @id{l}.

}

@LibEntry{table.sort (list [, comp])|

Sorts list elements in a given order, @emph{in-place},
from @T{list[1]} to @T{list[#list]}.
If @id{comp} is given,
then it must be a function that receives two list elements
and returns true when the first element must come
before the second in the final order
(so that, after the sort,
@T{i < j} implies @T{not comp(list[j],list[i])}).
If
 @id{comp} is not given,
then the standard Lua operator @T{<} is used instead.

Note that the @id{comp} function must define
a strict partial order over the elements in the list;
that is, it must be asymmetric and transitive.
Otherwise, no valid sort may be possible.

The sort algorithm is not stable:
elements considered equal by the given order
may have their relative positions changed by the sort.

}

@LibEntry{table.unpack (list [, i [, j]])|

Returns the elements from the given list.
This function is equivalent to
@verbatim{
return list[i], list[i+1], @Cdots, list[j]
}
By default, @id{i} @N{is 1} and @id{j} is @T{#list}.

}

}

@sect2{mathlib| @title{Mathematical Functions}

This library provides basic mathematical functions.
It provides all its functions and constants inside the table @defid{math}.
Functions with the annotation @St{integer/float} give
integer results for integer arguments
and float results for float (or mixed) arguments.
Rounding functions
(@Lid{math.ceil},
 @Lid{math.floor}, and @Lid{math.modf})
return an integer when the result fits in the range of an integer,
or a float otherwise.

@LibEntry{math.abs (x)|

Returns the absolute value of @id{x}. (integer/float)

}

@LibEntry{math.acos (x)|

Returns the arc cosine of @id{x} (in radians).

}

@LibEntry{math.asin (x)|

Returns the arc sine of @id{x} (in radians).

}

@LibEntry{math.atan (y [, x])|

@index{atan2}
Returns the arc tangent of @T{y/x} (in radians),
but uses the signs of both arguments to find the
quadrant of the result.
(It also handles correctly the case of @id{x} being zero.)

The default value for @id{x} is 1,
so that the call @T{math.atan(y)}
returns the arc tangent of @id{y}.

}

@LibEntry{math.ceil (x)|

Returns the smallest integral value larger than or equal to @id{x}.

}

@LibEntry{math.cos (x)|

Returns the cosine of @id{x} (assumed to be in radians).

}

@LibEntry{math.deg (x)|

Converts the angle @id{x} from radians to degrees.

}

@LibEntry{math.exp
(x)|

Returns the value @M{e@sp{x}}
(where @id{e} is the base of natural logarithms).

}

@LibEntry{math.floor (x)|

Returns the largest integral value smaller than or equal to @id{x}.

}

@LibEntry{math.fmod (x, y)|

Returns the remainder of the division of @id{x} by @id{y}
that rounds the quotient towards zero. (integer/float)

}

@LibEntry{math.huge|

The float value @idx{HUGE_VAL},
a value larger than any other numeric value.

}

@LibEntry{math.log (x [, base])|

Returns the logarithm of @id{x} in the given base.

The default for @id{base} is @M{e}
(so that the function returns the natural logarithm of @id{x}).

}

@LibEntry{math.max (x, @Cdots)|

Returns the argument with the maximum value,
according to the Lua operator @T{<}. (integer/float)

}

@LibEntry{math.maxinteger|
An integer with the maximum value for an integer.

}

@LibEntry{math.min (x, @Cdots)|

Returns the argument with the minimum value,
according to the Lua operator @T{<}. (integer/float)

}

@LibEntry{math.mininteger|
An
 integer with the minimum value for an integer.

}

@LibEntry{math.modf (x)|

Returns the integral part of @id{x} and the fractional part of @id{x}.
Its second result is always a float.

}

@LibEntry{math.pi|

The value of @M{@pi}.

}

@LibEntry{math.rad (x)|

Converts the angle @id{x} from degrees to radians.

}

@LibEntry{math.random ([m [, n]])|

When called without arguments,
returns a pseudo-random float with uniform distribution
in the range @C{(} @M{[0,1)}. @C{]}
When called with two integers @id{m} and @id{n},
@id{math.random} returns a pseudo-random integer
with uniform distribution in the range @M{[m, n]}.
(The value @M{n-m} cannot be negative and must fit in a Lua integer.)
The call @T{math.random(n)} is equivalent to @T{math.random(1,n)}.

This function is an interface to the underling
pseudo-random generator function provided by C.

}

@LibEntry{math.randomseed (x)|

Sets @id{x} as the @Q{seed}
for the pseudo-random generator:
equal seeds produce equal sequences of
numbers.

}

@LibEntry{math.sin (x)|

Returns the sine of @id{x} (assumed to be in radians).

}

@LibEntry{math.sqrt (x)|

Returns the square root of @id{x}.
(You can also use the expression @T{x^0.5} to compute this value.)

}

@LibEntry{math.tan (x)|

Returns the tangent of @id{x} (assumed to be in radians).

}

@LibEntry{math.tointeger (x)|

If the value @id{x} is convertible to an integer,

returns that integer.
Otherwise, returns @nil.

}

@LibEntry{math.type (x)|

Returns @St{integer} if @id{x} is an integer,
@St{float} if it is a float,
or @nil if @id{x} is not a number.

}

@LibEntry{math.ult (m, n)|

Returns a boolean,
true if and only if integer @id{m} is below integer @id{n} when
they are compared as @x{unsigned integers}.

}

}

@sect2{iolib| @title{Input and Output Facilities}

The I/O library provides two different styles for file manipulation.
The first one uses implicit file handles;
that is, there are operations to set a default input file and a
default output file,
and
 all input/output operations are over these default files.
The second style uses explicit file handles.

When using implicit file handles,
all operations are supplied by table @defid{io}.
When using explicit file handles,
the operation @Lid{io.open} returns a file handle
and then all operations are supplied as methods of the file handle.

The table @id{io} also provides
three predefined file handles with their usual meanings from C:
@defid{io.stdin}, @defid{io.stdout}, and @defid{io.stderr}.
The I/O library never closes these files.

Unless otherwise stated,
all I/O functions return @nil on failure
(plus an error message as a second result and

a system-dependent error code as a third result)
and some value different from @nil on success.
In non-POSIX systems,
the computation of the error message and error code
in case of errors
may be not @x{thread safe},
because they rely on the global C variable @id{errno}.

@LibEntry{io.close ([file])|

Equivalent to @T{file:close()}.
Without a @id{file},
 closes the default output file.

}

@LibEntry{io.flush ()|

Equivalent to @T{io.output():flush()}.

}

@LibEntry{io.input ([file])|

When called with a file name, it opens the named file (in text mode),
and sets its handle as the default input file.
When called with a file handle,
it simply sets this file handle as the default input file.
When called without arguments,
it returns the current default input file.

In case of errors this function raises the error,
instead of returning an error code.

}

@LibEntry{io.lines ([filename, @Cdots])|

Opens the given file name in read mode
and returns an iterator function that
works like @T{file:lines(@Cdots)} over the opened file.
When the iterator function detects the end of file,
it returns no values (to finish the loop) and automatically closes the file.

The call @T{io.lines()} (with no file name) is equivalent
to @T{io.input():lines("*l")};
that is, it iterates over the lines of the default input file.
In this case, the iterator does

not close the file when the loop ends.

In case of errors this function raises the error,
instead of returning an error code.

}

@LibEntry{io.open (filename [, mode])|

This function opens a file,
in the mode specified in the string @id{mode}.
In case of success,
it returns a new file handle.

The @id{mode} string can be any of the following:
@description{
@item{@St{r}| read mode (the default);}
@item{@St{w}| write mode;}
@item{@St{a}| append mode;}
@item{@St{r+}| update mode, all previous data is preserved;}
@item{@St{w+}| update mode, all previous data is erased;}
@item{@St{a+}| append update mode, previous data is preserved,
 writing is only allowed at the end of file.}
}
The @id{mode} string can also have a @Char{b} at the end,
which is needed in some systems to open the file in binary mode.

}

@LibEntry{io.output ([file])|

Similar to @Lid{io.input}, but operates over the default output file.

}

@LibEntry{io.popen (prog [, mode])|

This function is system dependent and is not
 available
on all platforms.

Starts program @id{prog} in a separated process and returns
a file handle that you can use to read data from this program
(if @id{mode} is @T{"r"}, the default)
or to write data to this program
(if @id{mode} is @T{"w"}).

}

@LibEntry{io.read (@Cdots)|

Equivalent to @T{io.input():read(@Cdots)}.

}

@LibEntry{io.tmpfile ()|

In case of success,
returns a handle for a temporary file.
This file is opened in update mode
and it is automatically removed when the program ends.

}

@LibEntry{io.type (obj)|

Checks whether @id{obj} is a valid file handle.
Returns the string @T{"file"} if @id{obj} is an open file handle,
@T{"closed file"} if @id{obj} is a closed file handle,
or @nil if @id{obj} is not a file handle.

}

@LibEntry{io.write (@Cdots)|

Equivalent to @T{io.output():write(@Cdots)}.

}

@LibEntry{file:close ()|

Closes @id{file}.
Note that files are automatically closed when
their handles are garbage collected,
but that takes an unpredictable amount of
time to happen.

When closing a file handle created with @Lid{io.popen},
@Lid{file:close} returns the same values
returned by @Lid{os.execute}.

}

@LibEntry{file:flush ()|

Saves any written data to @id{file}.

}

@LibEntry{file:lines (@Cdots)|

Returns an iterator function that,
each time it is called,
reads the file according to the given formats.
When no format is given,
uses @St{l} as a default.
As an example, the construction
@verbatim{
for c in file:lines(1) do @rep{body} end
}
will iterate over all characters of the file,
starting at the current position.
Unlike @Lid{io.lines}, this function does not close the file
when the loop ends.

In case of errors this function raises the error,
instead of returning an error code.

}

@LibEntry{file:read (@Cdots)|

Reads the file @id{file},
according to the given formats, which specify what to read.
For each format,
the function returns a string or a number with the characters read,
or @nil if it cannot read data with the specified format.
(In
 this latter case,
the function does not read subsequent formats.)
When called without formats,
it uses a default format that reads the next line
(see below).

The available formats are
@description{

@item{@St{n}|
reads a numeral and returns it as a float or an integer,
following the lexical conventions of Lua.
(The numeral may have leading spaces and a sign.)
This format always reads the longest input sequence that
is a valid prefix for a numeral;

if that prefix does not form a valid numeral
(e.g., an empty string, @St{0x}, or @St{3.4e-}),
it is discarded and the function returns @nil.
}

@item{@St{a}|
reads the whole file, starting at the current position.
On end of file, it returns the empty string.
}

@item{@St{l}|
reads the next line skipping the end of line,
returning @nil on end of file.
This is the default format.
}

@item{@St{L}|
reads the next line keeping the end-of-line character (if present),
returning @nil on end of file.
}

@item{@emph{number}|
reads a string with
 up to this number of bytes,
returning @nil on end of file.
If @id{number} is zero,
it reads nothing and returns an empty string,
or @nil on end of file.
}

}
The formats @St{l} and @St{L} should be used only for text files.

}

@LibEntry{file:seek ([whence [, offset]])|

Sets and gets the file position,
measured from the beginning of the file,
to the position given by @id{offset} plus a base
specified by the string @id{whence}, as follows:
@description{
@item{@St{set}| base is position 0 (beginning of the file);}
@item{@St{cur}| base is current position;}
@item{@St{end}| base is end of file;}
}
In case of success, @id{seek} returns the final file position,
measured in bytes from the beginning of the file.

If @id{seek} fails, it returns @nil,
plus a string describing the error.

The default value for @id{whence} is @T{"cur"},
and for @id{offset} is 0.
Therefore, the call @T{file:seek()} returns the current
file position, without changing it;
the call @T{file:seek("set")} sets the position
 to the
beginning of the file (and returns 0);
and the call @T{file:seek("end")} sets the position to the
end of the file, and returns its size.

}

@LibEntry{file:setvbuf (mode [, size])|

Sets the buffering mode for an output file.
There are three available modes:
@description{

@item{@St{no}|
no buffering; the result of any output operation appears immediately.
}

@item{@St{full}|
full buffering; output operation is performed only
when the buffer is full or when
you explicitly @T{flush} the file @seeF{io.flush}.
}

@item{@St{line}|
line buffering; output is buffered until a newline is output
or there is any input from some special files
(such as a terminal device).
}

}
For the last two cases, @id{size}
specifies the size of the buffer, in bytes.
The default is an appropriate size.

}

@LibEntry{file:write (@Cdots)|

Writes the value of each of its arguments to @id{file}.
The arguments must be strings or numbers.

In case of success, this function returns @id{file}.
Otherwise it
returns @nil plus a string describing the error.

}

}

@sect2{oslib| @title{Operating System Facilities}

This library is implemented through table @defid{os}.

@LibEntry{os.clock ()|

Returns an approximation of the amount in seconds of CPU time
used by the program.

}

@LibEntry{os.date ([format [, time]])|

Returns a string or a table containing date and time,
formatted according to the given string @id{format}.

If the @id{time} argument is present,
this is the time to be formatted
(see the @Lid{os.time} function for a description of this value).
Otherwise, @id{date} formats the current time.

If @id{format} starts with @Char{!},
then the date is formatted in Coordinated Universal Time.
After this optional character,
if @id{format} is the string @St{*t},
then @id{date} returns a table with the following fields:
@id{year}, @id{month} (1@En{}12), @id{day} (1@En{}31),
@id{hour} (0@En{}23), @id{min} (0@En{}59), @id{sec} (0@En{}61),
@id{wday} (weekday, 1@En{}7, Sunday @N{is 1}),
@id{yday}
(day of the year, 1@En{}366),
and @id{isdst} (daylight saving flag, a boolean).
This last field may be absent
if the information is not available.

If @id{format} is not @St{*t},
then @id{date} returns the date as a string,
formatted according to the same rules as the @ANSI{strftime}.

When called without arguments,
@id{date} returns a reasonable date and time representation that depends on
the host system and on the current locale.
(More specifically, @T{os.date()} is equivalent to @T{os.date("%c")}.)

In non-POSIX systems,
this function may be not @x{thread safe}
because of its reliance on @CId{gmtime} and @CId{localtime}.

}

@LibEntry{os.difftime (t2, t1)|

Returns the difference, in seconds,
from time @id{t1} to time @id{t2}
(where the times are values returned by @Lid{os.time}).
In @x{POSIX}, @x{Windows}, and some other systems,
this value is exactly @id{t2}@M{-}@id{t1}.

}

@LibEntry{os.execute ([command])|

This function is equivalent to the @ANSI{system}.
It passes @id{command}
 to be executed by an operating system shell.
Its first result is @true
if the command terminated successfully,
or @nil otherwise.
After this first result
the function returns a string plus a number,
as follows:
@description{

@item{@St{exit}|
the command terminated normally;
the following number is the exit status of the command.
}

@item{@St{signal}|
the command was terminated by a signal;
the following number is the signal that terminated the command.
}

}

When called without a @id{command},

@id{os.execute} returns a boolean that is true if a shell is available.

}

@LibEntry{os.exit ([code [, close]])|

Calls the @ANSI{exit} to terminate the host program.
If @id{code} is @Rw{true},
the returned status is @idx{EXIT_SUCCESS};
if @id{code} is @Rw{false},
the returned status is @idx{EXIT_FAILURE};
if @id{code} is a number,
the returned status is this number.
The default value for @id{code} is @Rw{true}.

If the optional second argument @id{close} is true,
closes the Lua state before
exiting.

}

@LibEntry{os.getenv (varname)|

Returns the value of the process environment variable @id{varname},
or @nil if the variable is not defined.

}

@LibEntry{os.remove (filename)|

Deletes the file (or empty directory, on @x{POSIX} systems)
with the given name.
If this function fails, it returns @nil,
plus a string describing the error and the error code.
Otherwise, it returns true.

}

@LibEntry{os.rename (oldname, newname)|

Renames the file or directory named @id{oldname} to @id{newname}.
If this function fails, it returns @nil,
plus a string describing the error and the error code.
Otherwise, it returns true.

}

@LibEntry{os.setlocale (locale [, category])|

Sets the current locale of the program.
@id{locale} is a system-dependent string specifying a locale;
@id{category} is an optional string describing which category to change:
@T{"all"}, @T{"collate"}, @T{"ctype"},
@T{"monetary"}, @T{"numeric"}, or @T{"time"};
the default category is @T{"all"}.
The function returns
 the name of the new locale,
or @nil if the request cannot be honored.

If @id{locale} is the empty string,
the current locale is set to an implementation-defined native locale.
If @id{locale} is the string @St{C},
the current locale is set to the standard C locale.

When called with @nil as the first argument,
this function only returns the name of the current locale
for the given category.

This function may be not @x{thread safe}
because of its reliance on @CId{setlocale}.

}

@LibEntry{os.time ([table])|

Returns the current time when called without arguments,
or a time representing the local date and time specified by the given table.
This table must have fields @id{year}, @id{month}, and @id{day},
and may have fields
@id{hour} (default is 12),
@id{min} (default is 0),
@id{sec} (default is 0),
and @id{isdst} (default is @nil).
Other fields are ignored.
For a description of these fields, see the @Lid{os.date} function.

The values in these fields do not need to be inside their valid
 ranges.
For instance, if @id{sec} is -10,
it means -10 seconds from the time specified by the other fields;
if @id{hour} is 1000,
it means +1000 hours from the time specified by the other fields.

The returned value is a number, whose meaning depends on your system.
In @x{POSIX}, @x{Windows}, and some other systems,
this number counts the number

of seconds since some given start time (the @Q{epoch}).
In other systems, the meaning is not specified,
and the number returned by @id{time} can be used only as an argument to
@Lid{os.date} and @Lid{os.difftime}.

}

@LibEntry{os.tmpname ()|

Returns a string with a file name that can
be used for a temporary file.
The file must be explicitly opened before its use
and explicitly removed when no longer needed.

In @x{POSIX} systems,
this function also creates a file with that name,
to avoid security risks.
(Someone else might create the file with wrong permissions
in the time between getting the name and creating the file.)
You still have to
 open the file to use it
and to remove it (even if you do not use it).

When possible,
you may prefer to use @Lid{io.tmpfile},
which automatically removes the file when the program ends.

}

}

@sect2{debuglib| @title{The Debug Library}

This library provides
the functionality of the @link{debugI|debug interface} to Lua programs.
You should exert care when using this library.
Several of its functions
violate basic assumptions about Lua code
(e.g., that variables local to a function
cannot be accessed from outside;
that userdata metatables cannot be changed by Lua code;
that Lua programs do not crash)
and therefore can compromise otherwise secure code.
Moreover, some functions in this library may be slow.

All functions in this library are provided
inside the @defid{debug} table.
All functions that operate over a thread

have an optional first argument which is the
thread to operate over.
The default is always the current thread.

@LibEntry{debug.debug ()|

Enters an interactive mode with
 the user,
running each string that the user enters.
Using simple commands and other debug facilities,
the user can inspect global and local variables,
change their values, evaluate expressions, and so on.
A line containing only the word @id{cont} finishes this function,
so that the caller continues its execution.

Note that commands for @id{debug.debug} are not lexically nested
within any function and so have no direct access to local variables.

}

@LibEntry{debug.gethook ([thread])|

Returns the current hook settings of the thread, as three values:
the current hook function, the current hook mask,
and the current hook count
(as set by the @Lid{debug.sethook} function).

}

@LibEntry{debug.getinfo ([thread,] f [, what])|

Returns a table with information about a function.
You can give the function directly
or you can give a number as the value of @id{f},
which means the function running at level @id{f} of the call stack
of the given thread:
@N{level 0} is the current function (@id{getinfo}
 itself);
@N{level 1} is the function that called @id{getinfo}
(except for tail calls, which do not count on the stack);
and so on.
If @id{f} is a number larger than the number of active functions,
then @id{getinfo} returns @nil.

The returned table can contain all the fields returned by @Lid{lua_getinfo},
with the string @id{what} describing which fields to fill in.
The default for @id{what} is to get all information available,

except the table of valid lines.
If present,
the option @Char{f}
adds a field named @id{func} with the function itself.
If present,
the option @Char{L}
adds a field named @id{activelines} with the table of
valid lines.

For instance, the expression @T{debug.getinfo(1,"n").name} returns
a name for the current function,
if a reasonable name can be found,
and the expression @T{debug.getinfo(print)}
returns a table with all available information
about the @Lid{print} function.

}

@LibEntry{debug.getlocal ([thread,] f, local)|

This function returns the name
 and the value of the local variable
with index @id{local} of the function at level @id{f} of the stack.
This function accesses not only explicit local variables,
but also parameters, temporaries, etc.

The first parameter or local variable has @N{index 1}, and so on,
following the order that they are declared in the code,
counting only the variables that are active
in the current scope of the function.
Negative indices refer to vararg arguments;
@num{-1} is the first vararg argument.
The function returns @nil if there is no variable with the given index,
and raises an error when called with a level out of range.
(You can call @Lid{debug.getinfo} to check whether the level is valid.)

Variable names starting with @Char{(} (open parenthesis) @C{)}
represent variables with no known names
(internal variables such as loop control variables,
and variables from chunks saved without debug information).

The parameter @id{f} may also be a function.
In that case, @id{getlocal} returns only the
 name of function parameters.

}

@LibEntry{debug.getmetatable (value)|

Returns the metatable of the given @id{value}
or @nil if it does not have a metatable.

}

@LibEntry{debug.getregistry ()|

Returns the registry table @see{registry}.

}

@LibEntry{debug.getupvalue (f, up)|

This function returns the name and the value of the upvalue
with index @id{up} of the function @id{f}.
The function returns @nil if there is no upvalue with the given index.

Variable names starting with @Char{(} (open parenthesis) @C{)}
represent variables with no known names
(variables from chunks saved without debug information).

}

@LibEntry{debug.getuservalue (u)|

Returns the Lua value associated to @id{u}.
If @id{u} is not a full userdata,
returns @nil.

}

@LibEntry{debug.sethook ([thread,] hook, mask [, count])|

Sets the given function as a hook.
The string @id{mask} and the number @id{count} describe
when the hook will be called.
The string mask may have any combination of the following characters,
with
 the given meaning:
@description{
@item{@Char{c}| the hook is called every time Lua calls a function;}
@item{@Char{r}| the hook is called every time Lua returns from a function;}
@item{@Char{l}| the hook is called every time Lua enters a new line of code.}
}
Moreover,
with a @id{count} different from zero,
the hook is called also after every @id{count} instructions.

When called without arguments,
@Lid{debug.sethook} turns off the hook.

When the hook is called, its first argument is a string
describing the event that has triggered its call:
@T{"call"} (or @T{"tail call"}),
@T{"return"},
@T{"line"}, and @T{"count"}.
For line events,
the hook also gets the new line number as its second parameter.
Inside a hook,
you can call @id{getinfo} with @N{level 2} to get more information about
the running function
(@N{level 0} is the @id{getinfo} function,
and @N{level 1} is the hook function).

}

@LibEntry{debug.setlocal ([thread,] level, local, value)|

This function assigns the value @id{value}
 to the local variable
with index @id{local} of the function at level @id{level} of the stack.
The function returns @nil if there is no local
variable with the given index,
and raises an error when called with a @id{level} out of range.
(You can call @id{getinfo} to check whether the level is valid.)
Otherwise, it returns the name of the local variable.

See @Lid{debug.getlocal} for more information about
variable indices and names.

}

@LibEntry{debug.setmetatable (value, table)|

Sets the metatable for the given @id{value} to the given @id{table}
(which can be @nil).
Returns @id{value}.

}

@LibEntry{debug.setupvalue (f, up, value)|

This function assigns the value @id{value} to the upvalue
with index @id{up} of the function @id{f}.
The function returns @nil if there is no upvalue

with the given index.
Otherwise, it returns the name of the upvalue.

}

@LibEntry{debug.setuservalue (udata, value)|

Sets the given @id{value} as
the Lua value associated to the given @id{udata}.
@id{udata}
 must be a full userdata.

Returns @id{udata}.

}

@LibEntry{debug.traceback ([thread,] [message [, level]])|

If @id{message} is present but is neither a string nor @nil,
this function returns @id{message} without further processing.
Otherwise,
it returns a string with a traceback of the call stack.
The optional @id{message} string is appended
at the beginning of the traceback.
An optional @id{level} number tells at which level
to start the traceback
(default is 1, the function calling @id{traceback}).

}

@LibEntry{debug.upvalueid (f, n)|

Returns a unique identifier (as a light userdata)
for the upvalue numbered @id{n}
from the given function.

These unique identifiers allow a program to check whether different
closures share upvalues.
Lua closures that share an upvalue
(that is, that access a same external local variable)
will return identical ids for those upvalue indices.

}

@LibEntry{debug.upvaluejoin (f1, n1, f2, n2)|

Make the @id{n1}-th upvalue of the Lua closure @id{f1}
refer

to the @id{n2}-th upvalue of the Lua closure @id{f2}.

}

}

}

@C{----------}
@sect1{lua-sa| @title{Lua Standalone}

Although Lua has been designed as an extension language,
to be embedded in a host @N{C program},
it is also frequently used as a standalone language.
An interpreter for Lua as a standalone language,
called simply @id{lua},
is provided with the standard distribution.
The @x{standalone interpreter} includes
all standard libraries, including the debug library.
Its usage is:
@verbatim{
lua [options] [script [args]]
}
The options are:
@description{
@item{@T{-e @rep{stat}}| executes string @rep{stat};}
@item{@T{-l @rep{mod}}| @Q{requires} @rep{mod} and assigns the
result to global @@rep{mod};}
@item{@T{-i}| enters interactive mode after running @rep{script};}
@item{@T{-v}| prints version information;}
@item{@T{-E}| ignores environment variables;}
@item{@T{--}| stops handling options;}
@item{@T{-}| executes
@id{stdin} as a file and stops handling options.}
}
After handling its options, @id{lua} runs the given @emph{script}.
When called without arguments,
@id{lua} behaves as @T{lua -v -i}
when the standard input (@id{stdin}) is a terminal,
and as @T{lua -} otherwise.

When called without option @T{-E},
the interpreter checks for an environment variable @defid{LUA_INIT_5_3}
(or @defid{LUA_INIT} if the versioned name is not defined)
before running any argument.
If the variable content has the format @T{@At@rep{filename}},
then @id{lua} executes the file.

Otherwise, @id{lua} executes the string itself.

When called with option @T{-E},
besides ignoring @id{LUA_INIT},
Lua also ignores
the values of @id{LUA_PATH} and @id{LUA_CPATH},
setting the values of
@Lid{package.path} and @Lid{package.cpath}
with the default paths defined in @id{luaconf.h}.

All options are handled in order, except @T{-i} and @T{-E}.
For instance, an invocation like
@verbatim{
$ lua -e'a=1' -e 'print(a)' script.lua
}
will
 first set @id{a} to 1, then print the value of @id{a},
and finally run the file @id{script.lua} with no arguments.
(Here @T{$} is the shell prompt. Your prompt may be different.)

Before running any code,
@id{lua} collects all command-line arguments
in a global table called @id{arg}.
The script name goes to index 0,
the first argument after the script name goes to index 1,
and so on.
Any arguments before the script name
(that is, the interpreter name plus its options)
go to negative indices.
For instance, in the call
@verbatim{
$ lua -la b.lua t1 t2
}
the table is like this:
@verbatim{
arg = { [-2] = "lua", [-1] = "-la",
      [0] = "b.lua",
      [1] = "t1", [2] = "t2" }
}
If there is no script in the call,
the interpreter name goes to index 0,
followed by the other arguments.
For instance, the call
@verbatim{
$ lua -e "print(arg[1])"
}
will print @St{-e}.
If there is a script,

the script is called with arguments
@T{arg[1]}, @Cdots, @T{arg[#arg]}.
(Like all chunks in Lua,
the
 script is compiled as a vararg function.)

In interactive mode,
Lua repeatedly prompts and waits for a line.
After reading a line,
Lua first try to interpret the line as an expression.
If it succeeds, it prints its value.
Otherwise, it interprets the line as a statement.
If you write an incomplete statement,
the interpreter waits for its completion
by issuing a different prompt.

If the global variable @defid{_PROMPT} contains a string,
then its value is used as the prompt.
Similarly, if the global variable @defid{_PROMPT2} contains a string,
its value is used as the secondary prompt
(issued during incomplete statements).

In case of unprotected errors in the script,
the interpreter reports the error to the standard error stream.
If the error object is not a string but
has a metamethod @idx{__tostring},
the interpreter calls this metamethod to produce the final message.
Otherwise, the interpreter converts the error object to a string
and adds a stack traceback to it.

When finishing normally,
the
 interpreter closes its main Lua state
@seeF{lua_close}.
The script can avoid this step by
calling @Lid{os.exit} to terminate.

To allow the use of Lua as a
script interpreter in Unix systems,
the standalone interpreter skips
the first line of a chunk if it starts with @T{#}.
Therefore, Lua scripts can be made into executable programs
by using @T{chmod +x} and @N{the @T{#!}} form,
as in
@verbatim{
#!/usr/local/bin/lua
}
(Of course,

the location of the Lua interpreter may be different in your machine.
If @id{lua} is in your @id{PATH},
then
@verbatim{
#!/usr/bin/env lua
}
is a more portable solution.)

}

@sect1{incompat| @title{Incompatibilities with the Previous Version}

Here we list the incompatibilities that you may find when moving a program
from @N{Lua 5.2} to @N{Lua 5.3}.
You can avoid some incompatibilities by compiling Lua with
appropriate options (see file @id{luaconf.h}).
However,
all these compatibility options will be removed in the future.

Lua versions can always
change the C API in ways that
do not imply source-code changes in a program,
such as the numeric values for constants
or the implementation of functions as macros.
Therefore,
you should not assume that binaries are compatible between
different Lua versions.
Always recompile clients of the Lua API when
using a new version.

Similarly, Lua versions can always change the internal representation
of precompiled chunks;
precompiled chunks are not compatible between different Lua versions.

The standard paths in the official distribution may
change between versions.

@sect2{@title{Changes in the Language}
@itemize{

@item{
The main difference between @N{Lua 5.2} and @N{Lua 5.3} is the
introduction of an integer subtype for numbers.
Although this change should not affect @Q{normal} computations,
some computations
(mainly those that involve some kind of overflow)
can give different results.

You can fix these differences by forcing a number to be a float
(in @N{Lua 5.2} all numbers were float),
in
 particular writing constants with an ending @T{.0}
or using @T{x = x + 0.0} to convert a variable.
(This recommendation is only for a quick fix
for an occasional incompatibility;
it is not a general guideline for good programming.
For good programming,
use floats where you need floats
and integers where you need integers.)
}

@item{
The conversion of a float to a string now adds a @T{.0} suffix
to the result if it looks like an integer.
(For instance, the float 2.0 will be printed as @T{2.0},
not as @T{2}.)
You should always use an explicit format
when you need a specific format for numbers.

(Formally this is not an incompatibility,
because Lua does not specify how numbers are formatted as strings,
but some programs assumed a specific format.)
}

@item{
The generational mode for the garbage collector was removed.
(It was an experimental feature in @N{Lua 5.2}.)
}

}

}

@sect2{@title{Changes in the Libraries}
@itemize{

@item{
The @id{bit32} library has been deprecated.
It is
 easy to require a compatible external library or,
better yet, to replace its functions with appropriate bitwise operations.
(Keep in mind that @id{bit32} operates on 32-bit integers,
while the bitwise operators in @N{Lua 5.3} operate on Lua integers,
which by default have @N{64 bits}.)
}

```
@item{
The Table library now respects metamethods
for setting and getting elements.
}

@item{
The @Lid{ipairs} iterator now respects metamethods and
its @idx{__ipairs} metamethod has been deprecated.
}


@item{
Option names in @Lid{io.read} do not have a starting @Char{*} anymore.
For compatibility, Lua will continue to accept (and ignore) this character.
}

@item{
The following functions were deprecated in the mathematical library:
@id{atan2}, @id{cosh}, @id{sinh}, @id{tanh}, @id{pow},
@id{frexp}, and @id{ldexp}.
You can replace @T{math.pow(x,y)} with @T{x^y};
you can replace @id{math.atan2} with @id{math.atan},
which now accepts one or two arguments;
you can replace @T{math.ldexp(x,exp)} with @T{x
 * 2.0^exp}.
For the other operations,
you can either use an external library or
implement them in Lua.
}

@item{
The searcher for C loaders used by @Lid{require}
changed the way it handles versioned names.
Now, the version should come after the module name
(as is usual in most other tools).
For compatibility, that searcher still tries the old format
if it cannot find an open function according to the new style.
(@N{Lua 5.2} already worked that way,
but it did not document the change.)
}

@item{
The call @T{collectgarbage("count")} now returns only one result.
(You can compute that second result from the fractional part
of the first result.)
}
```

```
}

}

@sect2{@title{Changes in the API}

@itemize{

@item{
Continuation functions now receive as arguments what they needed
to get through @id{lua_getctx},
so @id{lua_getctx} has been removed.
Adapt your code accordingly.
}

@item{
Function @Lid{lua_dump} has an extra parameter, @id{strip}.
Use 0 as the value of this parameter to get the old behavior.
}

@item{
Functions
 to inject/project unsigned integers
(@id{lua_pushunsigned}, @id{lua_tounsigned}, @id{lua_tounsignedx},
@id{luaL_checkunsigned}, @id{luaL_optunsigned})
were deprecated.
Use their signed equivalents with a type cast.
}

@item{
Macros to project non-default integer types
(@id{luaL_checkint}, @id{luaL_optint}, @id{luaL_checklong}, @id{luaL_optlong})
were deprecated.
Use their equivalent over @Lid{lua_Integer} with a type cast
(or, when possible, use @Lid{lua_Integer} in your code).
}

}

}

}


@C{[==============================================================}

@sect1{BNF| @title{The Complete Syntax of Lua}
```

```
Here is the complete syntax of Lua in extended BNF.
As usual in extended BNF,
@bnfNter{{A}} means 0 or more @bnfNter{A}s,
and @bnfNter{[A]} means an optional @bnfNter{A}.
(For operator precedences, see @See{prec};
for a description of the terminals
@bnfNter{Name}, @bnfNter{Numeral},
and @bnfNter{LiteralString}, see @See{lexical}.)
@index{grammar}

@Produc{

@producname{chunk}@producbody{block}

@producname{block}@producbody{@bnfrep{stat}
 @bnfopt{retstat}}

@producname{stat}@producbody{
 @bnfter{;}
@OrNL varlist @bnfter{=} explist
@OrNL functioncall
@OrNL label
@OrNL   @Rw{break}
@OrNL   @Rw{goto} Name
@OrNL @Rw{do} block @Rw{end}
@OrNL @Rw{while} exp @Rw{do} block @Rw{end}
@OrNL @Rw{repeat} block @Rw{until} exp
@OrNL @Rw{if} exp @Rw{then} block
 @bnfrep{@Rw{elseif} exp @Rw{then} block}
 @bnfopt{@Rw{else} block} @Rw{end}
@OrNL @Rw{for} @bnfNter{Name} @bnfter{=} exp @bnfter{,} exp @bnfopt{@bnfter{,} exp}
 @Rw{do} block @Rw{end}
@OrNL   @Rw{for} namelist @Rw{in} explist @Rw{do} block @Rw{end}
@OrNL @Rw{function} funcname funcbody
@OrNL @Rw{local} @Rw{function} @bnfNter{Name} funcbody
@OrNL @Rw{local} namelist @bnfopt{@bnfter{=} explist}
}

@producname{retstat}@producbody{@Rw{return}
                        @bnfopt{explist} @bnfopt{@bnfter{;}}}

@producname{label}@producbody{@bnfter{::} Name @bnfter{::}}

@producname{funcname}@producbody{@bnfNter{Name}
 @bnfrep{@bnfter{.} @bnfNter{Name}}
                     @bnfopt{@bnfter{:} @bnfNter{Name}}}

@producname{varlist}@producbody{var @bnfrep{@bnfter{,} var}}
```

```
@producname{var}@producbody{
 @bnfNter{Name}
@Or prefixexp @bnfter{[} exp @bnfter{]}
@Or prefixexp @bnfter{.} @bnfNter{Name}
}

@producname{namelist}@producbody{@bnfNter{Name} @bnfrep{@bnfter{,} @bnfNter{Name}}}


@producname{explist}@producbody{exp @bnfrep{@bnfter{,} exp}}

@producname{exp}@producbody{
 @Rw{nil}
@Or @Rw{false}
@Or @Rw{true}
@Or @bnfNter{Numeral}
@Or @bnfNter{LiteralString}
@Or @bnfter{...}
@Or functiondef
@OrNL prefixexp
@Or tableconstructor
@Or exp binop exp
@Or unop exp
}

@producname{prefixexp}@producbody{var @Or functioncall @Or @bnfter{(} exp @bnfter{)}}

@producname{functioncall}@producbody{
 prefixexp args
@Or prefixexp @bnfter{:} @bnfNter{Name} args
}

@producname{args}@producbody{
 @bnfter{(} @bnfopt{explist} @bnfter{)}
@Or tableconstructor
@Or @bnfNter{LiteralString}
}

@producname{functiondef}@producbody{@Rw{function}
 funcbody}

@producname{funcbody}@producbody{@bnfter{(} @bnfopt{parlist} @bnfter{)} block @Rw{end}}

@producname{parlist}@producbody{namelist @bnfopt{@bnfter{,} @bnfter{...}}
 @Or @bnfter{...}}

@producname{tableconstructor}@producbody{@bnfter{@Open} @bnfopt{fieldlist} @bnfter{@Close}}
```

```
@producname{fieldlist}@producbody{field @bnfrep{fieldsep field} @bnfopt{fieldsep}}

@producname{field}@producbody{@bnfter{[} exp @bnfter{]} @bnfter{=} exp @Or @bnfNter{Name}
@bnfter{=} exp @Or exp}

@producname{fieldsep}@producbody{@bnfter{,} @Or @bnfter{;}}

@producname{binop}@producbody{
 @bnfter{+} @Or @bnfter{-} @Or @bnfter{*} @Or @bnfter{/} @Or @bnfter{//}
   @Or @bnfter{^} @Or @bnfter{%}
      @OrNL
 @bnfter{&} @Or @bnfter{~} @Or @bnfter{|} @Or @bnfter{>>} @Or @bnfter{<<}
   @Or @bnfter{..}
      @OrNL
 @bnfter{<} @Or @bnfter{<=} @Or @bnfter{>} @Or @bnfter{>=}
   @Or @bnfter{==} @Or @bnfter{~=}
      @OrNL
 @Rw{and} @Or @Rw{or}}

@producname{unop}@producbody{@bnfter{-}
 @Or @Rw{not} @Or @bnfter{#} @Or
 @bnfter{~}}

}

}

@C{]==============================================================}

}
@C{)]-----------------------------------------------------------------}
```

Found in path(s):
* /lua-5-3-6-1-tar-gz/lua-5.3.6/manual/manual.of
No license file was found, but licenses were detected in source scan.

© 2015 Lua.org, PUC-Rio. All rights reserved.
header = string.gsub(header, "All rights reserved",

Found in path(s):
* /lua-5-3-6-1-tar-gz/lua-5.3.6/manual/2html
No license file was found, but licenses were detected in source scan.

```
--[[
*****************************************************************************
* Copyright (C) 1994-2016 Lua.org, PUC-Rio.
*
```

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****
]]

Found in path(s):
* /lua-5-3-6-1-tar-gz/lua-5.3.6/testes/all.lua

1.579 lmdb 0.9.24-1build2

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1.580 libyaml 0.2.2-1build2

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1.581 six 1.16.0-3ubuntu1

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1.583 zip 3.0-12build2

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1.584 fuse3 3.10.5-1build1

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1.591 tcl 8.6.12+dfsg-1build1

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1.593 libhogweed6 3.8.1-2

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1.599 python-six 1.16.0-3ubuntu1

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@C{[(----------}
@manual{

@sect1{@title{Introduction}

Lua is a powerful, efficient, lightweight, embeddable scripting language.
It supports procedural programming,
object-oriented programming, functional programming,
data-driven programming, and data description.

Lua combines simple procedural syntax with powerful data description
constructs based on associative arrays and extensible semantics.
Lua is dynamically typed,
runs by interpreting bytecode with a register-based
virtual machine,
and has automatic memory management with
incremental garbage collection,
making it ideal for configuration, scripting,
and rapid prototyping.

Lua is implemented as a library, written in @emphx{clean C},
the common subset of @N{Standard C} and C++.
The Lua distribution includes a host program called @id{lua},
which
 uses the Lua library to offer a complete,
standalone Lua interpreter,
for interactive or batch use.
Lua is intended to be used both as a powerful, lightweight,
embeddable scripting language for any program that needs one,
and as a powerful but lightweight and efficient stand-alone language.

As an extension language, Lua has no notion of a @Q{main} program:
it works @emph{embedded} in a host client,
called the @emph{embedding program} or simply the @emphx{host}.
(Frequently, this host is the stand-alone @id{lua} program.)
The host program can invoke functions to execute a piece of Lua code,

can write and read Lua variables,
and can register @N{C functions} to be called by Lua code.
Through the use of @N{C functions}, Lua can be augmented to cope with
a wide range of different domains,
thus creating customized programming languages sharing a syntactical framework.

Lua is free software,
and is provided as usual with no guarantees,
as stated in its license.
The implementation
described in this manual is available
at Lua's official web site, @id{www.lua.org}.

Like any other reference manual,
this document is dry in places.
For a discussion of the decisions behind the design of Lua,
see the technical papers available at Lua's web site.
For a detailed introduction to programming in Lua,
see Roberto's book, @emphx{Programming in Lua}.

}

@C{----------}
@sect1{basic| @title{Basic Concepts}

This section describes the basic concepts of the language.

@sect2{TypesSec| @title{Values and Types}

Lua is a @emph{dynamically typed language}.
This means that
variables do not have types; only values do.
There are no type definitions in the language.
All values carry their own type.

All values in Lua are @emph{first-class values}.
This means that all values can be stored in variables,
passed as arguments to other functions, and returned as results.

There are eight @x{basic types} in Lua:
@def{nil}, @def{boolean},
@def{number},
@def{string}, @def{function}, @def{userdata},
@def{thread}, and @def{table}.
The type @emph{nil} has one single value, @nil,
whose main property is to be different from any other value;
it usually represents the absence of a useful value.

The type @emph{boolean} has two values, @false and @true.
Both @nil and @false make a condition false;
any other value makes it true.
The type @emph{number} represents both
integer numbers and real (floating-point) numbers.
The type @emph{string} represents immutable sequences of bytes.
@index{eight-bit clean}
Lua is 8-bit clean:
strings can contain any 8-bit value,
including @x{embedded zeros} (@Char{\0}).
Lua is also encoding-agnostic;
it makes no assumptions about the contents of a string.

The type @emph{number} uses two internal representations,
or two @x{subtypes},
one called @def{integer} and the other called @def{float}.
Lua has explicit rules about when each representation is used,
but it also converts between them automatically
as needed @see{coercion}.
Therefore,
the programmer may choose to mostly ignore the difference
between integers and floats
or to assume complete control over the representation of each number.
Standard Lua uses 64-bit integers and double-precision (64-bit) floats,
but you can also compile Lua so that it
uses 32-bit integers and/or single-precision (32-bit) floats.
The option with 32 bits for both integers and floats
is particularly attractive
for small machines and embedded systems.
(See macro @id{LUA_32BITS} in file @id{luaconf.h}.)

Lua can call (and manipulate) functions written in Lua and
functions written in C @see{functioncall}.
Both are represented by the type @emph{function}.

The type @emph{userdata} is provided to allow arbitrary @N{C data} to
be stored in Lua variables.
A userdata value represents a block of raw memory.
There are two kinds of userdata:
@emphx{full userdata},
which is an object with a block of memory managed by Lua,
and @emphx{light userdata},
which
is simply a @N{C pointer} value.
Userdata has no predefined operations in Lua,
except assignment and identity test.
By using @emph{metatables},
the programmer can define operations for full userdata values

@see{metatable}.
Userdata values cannot be created or modified in Lua,
only through the @N{C API}.
This guarantees the integrity of data owned by the host program.

The type @def{thread} represents independent threads of execution
and it is used to implement coroutines @see{coroutine}.
Lua threads are not related to operating-system threads.
Lua supports coroutines on all systems,
even those that do not support threads natively.

The type @emph{table} implements @x{associative arrays},
that is, @x{arrays} that can have as indices not only numbers,
but any Lua value except @nil and @x{NaN}.
(@emphx{Not a Number} is a special value used to represent
undefined or unrepresentable numerical results, such as @T{0/0}.)
Tables can be @emph{heterogeneous};
that is, they can contain values of
all types (except @nil).
Any key with value @nil is not considered part of the table.
Conversely, any key that is not part of a table has
an associated value @nil.

Tables are the sole data-structuring mechanism in Lua;
they can be used to represent ordinary arrays, lists,
symbol tables, sets, records, graphs, trees, etc.
To represent @x{records}, Lua uses the field name as an index.
The language supports this representation by
providing @id{a.name} as syntactic sugar for @T{a["name"]}.
There are several convenient ways to create tables in Lua
@see{tableconstructor}.

Like indices,
the values of table fields can be of any type.
In particular,
because functions are first-class values,
table fields can contain functions.
Thus tables can also carry @emph{methods} @see{func-def}.

The indexing of tables follows
the definition of raw equality in the language.
The expressions @T{a[i]} and @T{a[j]}
denote the same table element
if and only if @id{i} and @id{j} are raw equal
(that is, equal
without metamethods).
In particular, floats with integral values
are equal to their respective integers

(e.g., @T{1.0 == 1}).
To avoid ambiguities,
any float with integral value used as a key
is converted to its respective integer.
For instance, if you write @T{a[2.0] = true},
the actual key inserted into the table will be the
integer @T{2}.
(On the other hand,
2 and @St{2} are different Lua values and therefore
denote different table entries.)

Tables, functions, threads, and (full) userdata values are @emph{objects}:
variables do not actually @emph{contain} these values,
only @emph{references} to them.
Assignment, parameter passing, and function returns
always manipulate references to such values;
these operations do not imply any kind of copy.

The library function @Lid{type} returns a string describing the type
of a given value @see{predefined}.

}

@sect2{globalenv| @title{Environments and the Global Environment}

As will be discussed in @refsec{variables} and @refsec{assignment},
any
reference to a free name
(that is, a name not bound to any declaration) @id{var}
is syntactically translated to @T{_ENV.var}.
Moreover, every chunk is compiled in the scope of
an external local variable named @id{_ENV} @see{chunks},
so @id{_ENV} itself is never a free name in a chunk.

Despite the existence of this external @id{_ENV} variable and
the translation of free names,
@id{_ENV} is a completely regular name.
In particular,
you can define new variables and parameters with that name.
Each reference to a free name uses the @id{_ENV} that is
visible at that point in the program,
following the usual visibility rules of Lua @see{visibility}.

Any table used as the value of @id{_ENV} is called an @def{environment}.

Lua keeps a distinguished environment called the @def{global environment}.
This value is kept at a special index in the C registry @see{registry}.

In Lua, the global variable @Lid{_G} is initialized with this same value.
(@Lid{_G} is never used internally.)

When Lua
 loads a chunk,
the default value for its @id{_ENV} upvalue
is the global environment @seeF{load}.
Therefore, by default,
free names in Lua code refer to entries in the global environment
(and, therefore, they are also called @def{global variables}).
Moreover, all standard libraries are loaded in the global environment
and some functions there operate on that environment.
You can use @Lid{load} (or @Lid{loadfile})
to load a chunk with a different environment.
(In C, you have to load the chunk and then change the value
of its first upvalue.)

}

@sect2{error| @title{Error Handling}

Because Lua is an embedded extension language,
all Lua actions start from @N{C code} in the host program
calling a function from the Lua library.
(When you use Lua standalone,
the @id{lua} application is the host program.)
Whenever an error occurs during
the compilation or execution of a Lua chunk,
control returns to the host,
which can take appropriate measures
(such as printing an error message).

Lua code
 can explicitly generate an error by calling the
@Lid{error} function.
If you need to catch errors in Lua,
you can use @Lid{pcall} or @Lid{xpcall}
to call a given function in @emphx{protected mode}.

Whenever there is an error,
an @def{error object} (also called an @def{error message})
is propagated with information about the error.
Lua itself only generates errors whose error object is a string,
but programs may generate errors with
any value as the error object.
It is up to the Lua program or its host to handle such error objects.

When you use @Lid{xpcall} or @Lid{lua_pcall},
you may give a @def{message handler}
to be called in case of errors.
This function is called with the original error object
and returns a new error object.
It is called before the error unwinds the stack,
so that it can gather more information about the error,
for instance by inspecting the stack and creating a stack traceback.
This message handler is still protected by the protected call;
so, an error inside
the message handler
will call the message handler again.
If this loop goes on for too long,
Lua breaks it and returns an appropriate message.
(The message handler is called only for regular runtime errors.
It is not called for memory-allocation errors
nor for errors while running finalizers.)

}

@sect2{metatable| @title{Metatables and Metamethods}

Every value in Lua can have a @emph{metatable}.
This @def{metatable} is an ordinary Lua table
that defines the behavior of the original value
under certain special operations.
You can change several aspects of the behavior
of operations over a value by setting specific fields in its metatable.
For instance, when a non-numeric value is the operand of an addition,
Lua checks for a function in the field @St{__add} of the value's metatable.
If it finds one,
Lua calls this function to perform the addition.

The key for each event in a metatable is a string
with the event name prefixed by two underscores;
the corresponding values are called @def{metamethods}.
In
the previous example, the key is @St{__add}
and the metamethod is the function that performs the addition.
Unless stated otherwise,
metamethods should be function values.

You can query the metatable of any value
using the @Lid{getmetatable} function.
Lua queries metamethods in metatables using a raw access @seeF{rawget}.
So, to retrieve the metamethod for event @id{ev} in object @id{o},
Lua does the equivalent to the following code:
@verbatim{

rawget(getmetatable(@rep{o}) or {}, "__@rep{ev}")
}

You can replace the metatable of tables
using the @Lid{setmetatable} function.
You cannot change the metatable of other types from Lua code
(except by using the @link{debuglib|debug library});
you should use the @N{C API} for that.

Tables and full userdata have individual metatables
(although multiple tables and userdata can share their metatables).
Values of all other types share one single metatable per type;
that is, there is one single metatable for all numbers,
one for all
 strings, etc.
By default, a value has no metatable,
but the string library sets a metatable for the string type @see{strlib}.

A metatable controls how an object behaves in
arithmetic operations, bitwise operations,
order comparisons, concatenation, length operation, calls, and indexing.
A metatable also can define a function to be called
when a userdata or a table is @link{GC|garbage collected}.

For the unary operators (negation, length, and bitwise NOT),
the metamethod is computed and called with a dummy second operand,
equal to the first one.
This extra operand is only to simplify Lua's internals
(by making these operators behave like a binary operation)
and may be removed in future versions.
(For most uses this extra operand is irrelevant.)

A detailed list of events controlled by metatables is given next.
Each operation is identified by its corresponding key.

@description{

@item{@idx{__add}|
the addition (@T{+}) operation.
If any operand for an addition is not a number
(nor
 a string coercible to a number),
Lua will try to call a metamethod.
First, Lua will check the first operand (even if it is valid).
If that operand does not define a metamethod for @idx{__add},
then Lua will check the second operand.
If Lua can find a metamethod,
it calls the metamethod with the two operands as arguments,

and the result of the call
(adjusted to one value)
is the result of the operation.
Otherwise,
it raises an error.
}

@item{@idx{__sub}|
the subtraction (@T{-}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__mul}|
the multiplication (@T{*}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__div}|
the division (@T{/}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__mod}|
the modulo (@T{%}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__pow}|
the exponentiation (@T{^}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__unm}|
the negation (unary @T{-}) operation.
Behavior
 similar to the addition operation.
}

@item{@idx{__idiv}|
the floor division (@T{//}) operation.
Behavior similar to the addition operation.
}

@item{@idx{__band}|
the bitwise AND (@T{&}) operation.
Behavior similar to the addition operation,
except that Lua will try a metamethod
if any operand is neither an integer

nor a value coercible to an integer @see{coercion}.
}

@item{@idx{__bor}|
the bitwise OR (@T{|}) operation.
Behavior similar to the bitwise AND operation.
}

@item{@idx{__bxor}|
the bitwise exclusive OR (binary @T{~}) operation.
Behavior similar to the bitwise AND operation.
}

@item{@idx{__bnot}|
the bitwise NOT (unary @T{~}) operation.
Behavior similar to the bitwise AND operation.
}

@item{@idx{__shl}|
the bitwise left shift (@T{<<}) operation.
Behavior similar to the bitwise AND operation.
}

@item{@idx{__shr}|
the bitwise right shift (@T{>>}) operation.
Behavior similar to the bitwise AND operation.
}

@item{@idx{__concat}|
the concatenation (@T{..}) operation.
Behavior
 similar to the addition operation,
except that Lua will try a metamethod
if any operand is neither a string nor a number
(which is always coercible to a string).
}

@item{@idx{__len}|
the length (@T{#}) operation.
If the object is not a string,
Lua will try its metamethod.
If there is a metamethod,
Lua calls it with the object as argument,
and the result of the call
(always adjusted to one value)
is the result of the operation.
If there is no metamethod but the object is a table,
then Lua uses the table length operation @see{len-op}.

Otherwise, Lua raises an error.
}

@item{@idx{__eq}|
the equal (@T{==}) operation.
Behavior similar to the addition operation,
except that Lua will try a metamethod only when the values
being compared are either both tables or both full userdata
and they are not primitively equal.
The result of the call is always converted to a boolean.
}

@item{@idx{__lt}|
the less than (@T{<}) operation.
Behavior similar to the addition operation,
except that
 Lua will try a metamethod only when the values
being compared are neither both numbers nor both strings.
The result of the call is always converted to a boolean.
}

@item{@idx{__le}|
the less equal (@T{<=}) operation.
Unlike other operations,
the less-equal operation can use two different events.
First, Lua looks for the @idx{__le} metamethod in both operands,
like in the less than operation.
If it cannot find such a metamethod,
then it will try the @idx{__lt} metamethod,
assuming that @T{a <= b} is equivalent to @T{not (b < a)}.
As with the other comparison operators,
the result is always a boolean.
(This use of the @idx{__lt} event can be removed in future versions;
it is also slower than a real @idx{__le} metamethod.)
}

@item{@idx{__index}|
The indexing access operation @T{table[key]}.
This event happens when @id{table} is not a table or
when @id{key} is not present in @id{table}.
The metamethod is looked up in @id{table}.

Despite the name,
the metamethod for this event can be either
 a function or a table.
If it is a function,
it is called with @id{table} and @id{key} as arguments,
and the result of the call

(adjusted to one value)
is the result of the operation.
If it is a table,
the final result is the result of indexing this table with @id{key}.
(This indexing is regular, not raw,
and therefore can trigger another metamethod.)
}

@item{@idx{__newindex}|
The indexing assignment @T{table[key] = value}.
Like the index event,
this event happens when @id{table} is not a table or
when @id{key} is not present in @id{table}.
The metamethod is looked up in @id{table}.

Like with indexing,
the metamethod for this event can be either a function or a table.
If it is a function,
it is called with @id{table}, @id{key}, and @id{value} as arguments.
If it is a table,
Lua does an indexing assignment to this table with the same key and value.
(This assignment is regular, not raw,
and therefore can trigger another metamethod.)

Whenever there is a @idx{__newindex} metamethod,
Lua
 does not perform the primitive assignment.
(If necessary,
the metamethod itself can call @Lid{rawset}
to do the assignment.)
}

@item{@idx{__call}|
The call operation @T{func(args)}.
This event happens when Lua tries to call a non-function value
(that is, @id{func} is not a function).
The metamethod is looked up in @id{func}.
If present,
the metamethod is called with @id{func} as its first argument,
followed by the arguments of the original call (@id{args}).
All results of the call
are the result of the operation.
(This is the only metamethod that allows multiple results.)
}

}

It is a good practice to add all needed metamethods to a table

before setting it as a metatable of some object.
In particular, the @idx{__gc} metamethod works only when this order
is followed @see{finalizers}.

Because metatables are regular tables,
they can contain arbitrary fields,
not only the event names defined above.
Some functions in the standard library
(e.g., @Lid{tostring})
use other fields in metatables
 for their own purposes.

}

@sect2{GC| @title{Garbage Collection}

Lua performs automatic memory management.
This means that
you do not have to worry about allocating memory for new objects
or freeing it when the objects are no longer needed.
Lua manages memory automatically by running
a @def{garbage collector} to collect all @emph{dead objects}
(that is, objects that are no longer accessible from Lua).
All memory used by Lua is subject to automatic management:
strings, tables, userdata, functions, threads, internal structures, etc.

Lua implements an incremental mark-and-sweep collector.
It uses two numbers to control its garbage-collection cycles:
the @def{garbage-collector pause} and
the @def{garbage-collector step multiplier}.
Both use percentage points as units
(e.g., a value of 100 means an internal value of 1).

The garbage-collector pause
controls how long the collector waits before starting a new cycle.
Larger values make the collector less aggressive.
Values smaller than
 100 mean the collector will not wait to
start a new cycle.
A value of 200 means that the collector waits for the total memory in use
to double before starting a new cycle.

The garbage-collector step multiplier
controls the relative speed of the collector relative to
memory allocation.
Larger values make the collector more aggressive but also increase
the size of each incremental step.
You should not use values smaller than 100,

because they make the collector too slow and
can result in the collector never finishing a cycle.
The default is 200,
which means that the collector runs at @Q{twice}
the speed of memory allocation.

If you set the step multiplier to a very large number
(larger than 10% of the maximum number of
bytes that the program may use),
the collector behaves like a stop-the-world collector.
If you then set the pause to 200,
the collector behaves as in old Lua versions,
doing a complete collection every time Lua doubles its
memory usage.

You can change these numbers
by calling @Lid{lua_gc} in C
or @Lid{collectgarbage} in Lua.
You can also use these functions to control
the collector directly (e.g., stop and restart it).

@sect3{finalizers| @title{Garbage-Collection Metamethods}

You can set garbage-collector metamethods for tables
and, using the @N{C API},
for full userdata @see{metatable}.
These metamethods are also called @def{finalizers}.
Finalizers allow you to coordinate Lua's garbage collection
with external resource management
(such as closing files, network or database connections,
or freeing your own memory).

For an object (table or userdata) to be finalized when collected,
you must @emph{mark} it for finalization.
@index{mark (for finalization)}
You mark an object for finalization when you set its metatable
and the metatable has a field indexed by the string @St{__gc}.
Note that if you set a metatable without a @idx{__gc} field
and later create that field in the metatable,
the object will not be marked for finalization.

When a marked
object becomes garbage,
it is not collected immediately by the garbage collector.
Instead, Lua puts it in a list.
After the collection,
Lua goes through that list.

For each object in the list,
it checks the object's @idx{__gc} metamethod:
If it is a function,
Lua calls it with the object as its single argument;
if the metamethod is not a function,
Lua simply ignores it.

At the end of each garbage-collection cycle,
the finalizers for objects are called in
the reverse order that the objects were marked for finalization,
among those collected in that cycle;
that is, the first finalizer to be called is the one associated
with the object marked last in the program.
The execution of each finalizer may occur at any point during
the execution of the regular code.

Because the object being collected must still be used by the finalizer,
that object (and other objects accessible only through it)
must be @emph{resurrected} by Lua.@index{resurrection}
Usually, this resurrection is transient,
and the
object memory is freed in the next garbage-collection cycle.
However, if the finalizer stores the object in some global place
(e.g., a global variable),
then the resurrection is permanent.
Moreover, if the finalizer marks a finalizing object for finalization again,
its finalizer will be called again in the next cycle where the
object is unreachable.
In any case,
the object memory is freed only in a GC cycle where
the object is unreachable and not marked for finalization.

When you close a state @seeF{lua_close},
Lua calls the finalizers of all objects marked for finalization,
following the reverse order that they were marked.
If any finalizer marks objects for collection during that phase,
these marks have no effect.

}

@sect3{weak-table| @title{Weak Tables}

A @def{weak table} is a table whose elements are
@def{weak references}.
A weak reference is ignored by the garbage collector.
In other words,
if the only references to an object are weak references,
then the garbage collector

will collect that object.

A weak table can have weak keys, weak values, or both.
A table with weak values allows the collection of its values,
but prevents the collection of its keys.
A table with both weak keys and weak values allows the collection of
both keys and values.
In any case, if either the key or the value is collected,
the whole pair is removed from the table.
The weakness of a table is controlled by the
@idx{__mode} field of its metatable.
If the @idx{__mode} field is a string containing the @N{character @Char{k}},
the keys in the table are weak.
If @idx{__mode} contains @Char{v},
the values in the table are weak.

A table with weak keys and strong values
is also called an @def{ephemeron table}.
In an ephemeron table,
a value is considered reachable only if its key is reachable.
In particular,
if the only reference to a key comes through its value,
the pair is removed.

Any change in the weakness of a table may take effect only
at the next collect cycle.
In particular, if
you change the weakness to a stronger mode,
Lua may still collect some items from that table
before the change takes effect.

Only objects that have an explicit construction
are removed from weak tables.
Values, such as numbers and @x{light @N{C functions}},
are not subject to garbage collection,
and therefore are not removed from weak tables
(unless their associated values are collected).
Although strings are subject to garbage collection,
they do not have an explicit construction,
and therefore are not removed from weak tables.

Resurrected objects
(that is, objects being finalized
and objects accessible only through objects being finalized)
have a special behavior in weak tables.
They are removed from weak values before running their finalizers,
but are removed from weak keys only in the next collection
after running their finalizers, when such objects are actually freed.

This behavior allows the finalizer to access properties
associated with the object through weak tables.

If a weak
 table is among the resurrected objects in a collection cycle,
it may not be properly cleared until the next cycle.

}

}

@sect2{coroutine| @title{Coroutines}

Lua supports coroutines,
also called @emphx{collaborative multithreading}.
A coroutine in Lua represents an independent thread of execution.
Unlike threads in multithread systems, however,
a coroutine only suspends its execution by explicitly calling
a yield function.

You create a coroutine by calling @Lid{coroutine.create}.
Its sole argument is a function
that is the main function of the coroutine.
The @id{create} function only creates a new coroutine and
returns a handle to it (an object of type @emph{thread});
it does not start the coroutine.

You execute a coroutine by calling @Lid{coroutine.resume}.
When you first call @Lid{coroutine.resume},
passing as its first argument
a thread returned by @Lid{coroutine.create},
the coroutine starts its execution by
calling its main function.
Extra arguments passed to @Lid{coroutine.resume}
 are passed
as arguments to that function.
After the coroutine starts running,
it runs until it terminates or @emph{yields}.

A coroutine can terminate its execution in two ways:
normally, when its main function returns
(explicitly or implicitly, after the last instruction);
and abnormally, if there is an unprotected error.
In case of normal termination,
@Lid{coroutine.resume} returns @true,
plus any values returned by the coroutine main function.
In case of errors, @Lid{coroutine.resume} returns @false
plus an error object.

A coroutine yields by calling @Lid{coroutine.yield}.
When a coroutine yields,
the corresponding @Lid{coroutine.resume} returns immediately,
even if the yield happens inside nested function calls
(that is, not in the main function,
but in a function directly or indirectly called by the main function).
In the case of a yield, @Lid{coroutine.resume} also returns @true,
plus any values passed to @Lid{coroutine.yield}.
The next time you resume the same coroutine,
it
 continues its execution from the point where it yielded,
with the call to @Lid{coroutine.yield} returning any extra
arguments passed to @Lid{coroutine.resume}.

Like @Lid{coroutine.create},
the @Lid{coroutine.wrap} function also creates a coroutine,
but instead of returning the coroutine itself,
it returns a function that, when called, resumes the coroutine.
Any arguments passed to this function
go as extra arguments to @Lid{coroutine.resume}.
@Lid{coroutine.wrap} returns all the values returned by @Lid{coroutine.resume},
except the first one (the boolean error code).
Unlike @Lid{coroutine.resume},
@Lid{coroutine.wrap} does not catch errors;
any error is propagated to the caller.

As an example of how coroutines work,
consider the following code:
@verbatim{
```
function foo (a)
 print("foo", a)
 return coroutine.yield(2*a)
end

co = coroutine.create(function (a,b)
    print("co-body", a, b)
    local r = foo(a+1)
    print("co-body", r)
    local r, s = coroutine.yield(a+b,
 a-b)
    print("co-body", r, s)
    return b, "end"
end)

print("main", coroutine.resume(co, 1, 10))
print("main", coroutine.resume(co, "r"))
print("main", coroutine.resume(co, "x", "y"))
```

```
print("main", coroutine.resume(co, "x", "y"))
}
```

When you run it, it produces the following output:

```
@verbatim{
co-body 1       10
foo     2
main    true    4
co-body r
main    true    11      -9
co-body x       y
main    true    10      end
main    false   cannot resume dead coroutine
}
```

You can also create and manipulate coroutines through the C API:
see functions @Lid{lua_newthread}, @Lid{lua_resume},
and @Lid{lua_yield}.

}

}

```
@C{----------------------------------------------------------------------}
@sect1{language| @title{The Language}
```

This section describes the lexis, the syntax, and the semantics of Lua.
In other words,
this section describes
which tokens are valid,
how they can be combined,
and what their combinations mean.

Language constructs will be explained using the usual extended
 BNF notation,
in which
@N{@bnfrep{@rep{a}} means 0} or more @rep{a}'s, and
@N{@bnfopt{@rep{a}} means} an optional @rep{a}.
Non-terminals are shown like @bnfNter{non-terminal},
keywords are shown like @rw{kword},
and other terminal symbols are shown like @bnfter{=}.
The complete syntax of Lua can be found in @refsec{BNF}
at the end of this manual.

@sect2{lexical| @title{Lexical Conventions}

Lua is a @x{free-form} language.
It ignores spaces (including new lines) and comments

between lexical elements (@x{tokens}),
except as delimiters between @x{names} and @x{keywords}.

@def{Names}
(also called @def{identifiers})
in Lua can be any string of letters,
digits, and underscores,
not beginning with a digit and
not being a reserved word.
Identifiers are used to name variables, table fields, and labels.

The following @def{keywords} are reserved
and cannot be used as names:
@index{reserved words}
@verbatim{
and break do else elseif end
false for function
goto if in
local nil not or repeat return
then true until while
}

Lua is a case-sensitive language:
@id{and} is a reserved word, but @id{And} and @id{AND}
are two different, valid names.
As a convention,
programs should avoid creating
names that start with an underscore followed by
one or more uppercase letters (such as @Lid{_VERSION}).

The following strings denote other @x{tokens}:
@verbatim{
+ - * / % ^ #
& ~ | << >> //
== ~= <= >= < > =
( ) { } [ ] ::
; : , ...
}

A @def{short literal string}
can be delimited by matching single or double quotes,
and can contain the following C-like escape sequences:
@Char{\a} (bell),
@Char{\b} (backspace),
@Char{\f} (form feed),
@Char{\n} (newline),
@Char{\r} (carriage return),
@Char{\t} (horizontal tab),

@Char{\v} (vertical tab),
@Char{\\} (backslash),
@Char{\"} (quotation mark [double
quote]),
and @Char{\'} (apostrophe [single quote]).
A backslash followed by a line break
results in a newline in the string.
The escape sequence @Char{\z} skips the following span
of white-space characters,
including line breaks;
it is particularly useful to break and indent a long literal string
into multiple lines without adding the newlines and spaces
into the string contents.
A short literal string cannot contain unescaped line breaks
nor escapes not forming a valid escape sequence.

We can specify any byte in a short literal string by its numeric value
(including @x{embedded zeros}).
This can be done
with the escape sequence @T{\x@rep{XX}},
where @rep{XX} is a sequence of exactly two hexadecimal digits,
or with the escape sequence @T{\@rep{ddd}},
where @rep{ddd} is a sequence of up to three decimal digits.
(Note that if a decimal escape sequence is to be followed by a digit,
it must be expressed using exactly three digits.)

The @x{UTF-8} encoding of a @x{Unicode} character
can
be inserted in a literal string with
the escape sequence @T{\u{@rep{XXX}}}
(note the mandatory enclosing brackets),
where @rep{XXX} is a sequence of one or more hexadecimal digits
representing the character code point.

Literal strings can also be defined using a long format
enclosed by @def{long brackets}.
We define an @def{opening long bracket of level @rep{n}} as an opening
square bracket followed by @rep{n} equal signs followed by another
opening square bracket.
So, an opening long bracket of @N{level 0} is written as @T{[[}, @C{]]}
an opening long bracket of @N{level 1} is written as @T{[=[}, @C{]]}
and so on.
A @emph{closing long bracket} is defined similarly;
for instance,
a closing long bracket of @N{level 4} is written as @C{[[} @T{]====]}.
A @def{long literal} starts with an opening long bracket of any level and
ends at the first closing long bracket of the same level.
It can contain any text except a closing bracket of the same level.

Literals in this bracketed form can run
 for several lines,
do not interpret any escape sequences,
and ignore long brackets of any other level.
Any kind of end-of-line sequence
(carriage return, newline, carriage return followed by newline,
or newline followed by carriage return)
is converted to a simple newline.

For convenience,
when the opening long bracket is immediately followed by a newline,
the newline is not included in the string.
As an example, in a system using ASCII
(in which @Char{a} is coded @N{as 97},
newline is coded @N{as 10}, and @Char{1} is coded @N{as 49}),
the five literal strings below denote the same string:
@verbatim{
a = 'alo\n123'"
a = "alo\n123\""
a = '\97lo\10\04923'"
a = [[alo
123"]]
a = [==[
alo
123"]==]
}

Any byte in a literal string not
explicitly affected by the previous rules represents itself.
However, Lua opens files for parsing in text mode,
and the system file functions may have problems with
some control characters.
So, it is safer to represent
non-text data as a quoted literal with
explicit
 escape sequences for the non-text characters.

A @def{numeric constant} (or @def{numeral})
can be written with an optional fractional part
and an optional decimal exponent,
marked by a letter @Char{e} or @Char{E}.
Lua also accepts @x{hexadecimal constants},
which start with @T{0x} or @T{0X}.
Hexadecimal constants also accept an optional fractional part
plus an optional binary exponent,
marked by a letter @Char{p} or @Char{P}.
A numeric constant with a radix point or an exponent
denotes a float;

otherwise,
if its value fits in an integer,
it denotes an integer.
Examples of valid integer constants are
@verbatim{
3 345 0xff 0xBEBADA
}
Examples of valid float constants are
@verbatim{
3.0 3.1416 314.16e-2 0.31416E1 34e1
0x0.1E 0xA23p-4 0X1.921FB54442D18P+1
}

A @def{comment} starts with a double hyphen (@T{--})
anywhere outside a string.
If the text immediately after @T{--} is not an opening long bracket,
the comment is a @def{short comment},
which runs until
 the end of the line.
Otherwise, it is a @def{long comment},
which runs until the corresponding closing long bracket.
Long comments are frequently used to disable code temporarily.

}

@sect2{variables| @title{Variables}

Variables are places that store values.
There are three kinds of variables in Lua:
global variables, local variables, and table fields.

A single name can denote a global variable or a local variable
(or a function's formal parameter,
which is a particular kind of local variable):
@Produc{
@producname{var}@producbody{@bnfNter{Name}}
}
@bnfNter{Name} denotes identifiers, as defined in @See{lexical}.

Any variable name is assumed to be global unless explicitly declared
as a local @see{localvar}.
@x{Local variables} are @emph{lexically scoped}:
local variables can be freely accessed by functions
defined inside their scope @see{visibility}.

Before the first assignment to a variable, its value is @nil.

Square brackets are used to index a table:

@Produc{
@producname{var}@producbody{prefixexp
 @bnfter{[} exp @bnfter{]}}
}
The meaning of accesses to table fields can be changed via metatables
@see{metatable}.

The syntax @id{var.Name} is just syntactic sugar for
@T{var["Name"]}:
@Produc{
@producname{var}@producbody{prefixexp @bnfter{.} @bnfNter{Name}}
}

An access to a global variable @id{x}
is equivalent to @id{_ENV.x}.
Due to the way that chunks are compiled,
@id{_ENV} is never a global name @see{globalenv}.

}

@sect2{stats| @title{Statements}

Lua supports an almost conventional set of @x{statements},
similar to those in Pascal or C.
This set includes
assignments, control structures, function calls,
and variable declarations.

@sect3{@title{Blocks}

A @x{block} is a list of statements,
which are executed sequentially:
@Produc{
@producname{block}@producbody{@bnfrep{stat}}
}
Lua has @def{empty statements}
that allow you to separate statements with semicolons,
start a block with a semicolon
or write two semicolons in sequence:
@Produc{
@producname{stat}@producbody{@bnfter{;}}
}

Function
 calls and assignments
can start with an open parenthesis.
This possibility leads to an ambiguity in Lua's grammar.
Consider the following fragment:

@verbatim{
a = b + c
(print or io.write)('done')
}
The grammar could see it in two ways:
@verbatim{
a = b + c(print or io.write)('done')

a = b + c; (print or io.write)('done')
}
The current parser always sees such constructions
in the first way,
interpreting the open parenthesis
as the start of the arguments to a call.
To avoid this ambiguity,
it is a good practice to always precede with a semicolon
statements that start with a parenthesis:
@verbatim{
;(print or io.write)('done')
}

A block can be explicitly delimited to produce a single statement:
@Produc{
@producname{stat}@producbody{@Rw{do} block @Rw{end}}
}
Explicit blocks are useful
to control the scope of variable declarations.
Explicit blocks are also sometimes used to
add a @Rw{return} statement in the middle
of another block @see{control}.

}

@sect3{chunks|
 @title{Chunks}

The unit of compilation of Lua is called a @def{chunk}.
Syntactically,
a chunk is simply a block:
@Produc{
@producname{chunk}@producbody{block}
}

Lua handles a chunk as the body of an anonymous function
with a variable number of arguments
@see{func-def}.
As such, chunks can define local variables,
receive arguments, and return values.

Moreover, such anonymous function is compiled as in the
scope of an external local variable called @id{_ENV} @see{globalenv}.
The resulting function always has @id{_ENV} as its only upvalue,
even if it does not use that variable.

A chunk can be stored in a file or in a string inside the host program.
To execute a chunk,
Lua first @emph{loads} it,
precompiling the chunk's code into instructions for a virtual machine,
and then Lua executes the compiled code
with an interpreter for the virtual machine.

Chunks can also be precompiled into binary form;
see program @idx{luac} and function @Lid{string.dump} for details.
Programs in
source and compiled forms are interchangeable;
Lua automatically detects the file type and acts accordingly @seeF{load}.

}

@sect3{assignment| @title{Assignment}

Lua allows @x{multiple assignments}.
Therefore, the syntax for assignment
defines a list of variables on the left side
and a list of expressions on the right side.
The elements in both lists are separated by commas:
@Produc{
@producname{stat}@producbody{varlist @bnfter{=} explist}
@producname{varlist}@producbody{var @bnfrep{@bnfter{,} var}}
@producname{explist}@producbody{exp @bnfrep{@bnfter{,} exp}}
}
Expressions are discussed in @See{expressions}.

Before the assignment,
the list of values is @emph{adjusted} to the length of
the list of variables.@index{adjustment}
If there are more values than needed,
the excess values are thrown away.
If there are fewer values than needed,
the list is extended with as many @nil's as needed.
If the list of expressions ends with a function call,
then all values returned by that call enter
the list of values,
before the adjustment
(except when the call is enclosed in parentheses; see @See{expressions}).

The assignment statement first evaluates all its expressions

and only then the assignments are performed.
Thus the code
@verbatim{
i = 3
i, a[i] = i+1, 20
}
sets @T{a[3]} to 20, without affecting @T{a[4]}
because the @id{i} in @T{a[i]} is evaluated (to 3)
before it is @N{assigned 4}.
Similarly, the line
@verbatim{
x, y = y, x
}
exchanges the values of @id{x} and @id{y},
and
@verbatim{
x, y, z = y, z, x
}
cyclically permutes the values of @id{x}, @id{y}, and @id{z}.

An assignment to a global name @T{x = val}
is equivalent to the assignment
@T{_ENV.x = val} @see{globalenv}.

The meaning of assignments to table fields and
global variables (which are actually table fields, too)
can be changed via metatables @see{metatable}.

}

@sect3{control| @title{Control Structures}
The control structures
@Rw{if}, @Rw{while}, and @Rw{repeat} have the usual meaning and
familiar syntax:
@index{while-do
 statement}
@index{repeat-until statement}
@index{if-then-else statement}
@Produc{
@producname{stat}@producbody{@Rw{while} exp @Rw{do} block @Rw{end}}
@producname{stat}@producbody{@Rw{repeat} block @Rw{until} exp}
@producname{stat}@producbody{@Rw{if} exp @Rw{then} block
 @bnfrep{@Rw{elseif} exp @Rw{then} block}
  @bnfopt{@Rw{else} block} @Rw{end}}
}
Lua also has a @Rw{for} statement, in two flavors @see{for}.

The @x{condition expression} of a

control structure can return any value.
Both @false and @nil are considered false.
All values different from @nil and @false are considered true
(in particular, the number 0 and the empty string are also true).

In the @Rw{repeat}@En@Rw{until} loop,
the inner block does not end at the @Rw{until} keyword,
but only after the condition.
So, the condition can refer to local variables
declared inside the loop block.

The @Rw{goto} statement transfers the program control to a label.
For syntactical reasons,
labels in Lua are considered
statements too:
@index{goto statement}
@index{label}
@Produc{
@producname{stat}@producbody{@Rw{goto} Name}
@producname{stat}@producbody{label}
@producname{label}@producbody{@bnfter{::} Name @bnfter{::}}
}

A label is visible in the entire block where it is defined,
except
inside nested blocks where a label with the same name is defined and
inside nested functions.
A goto may jump to any visible label as long as it does not
enter into the scope of a local variable.

Labels and empty statements are called @def{void statements},
as they perform no actions.

The @Rw{break} statement terminates the execution of a
@Rw{while}, @Rw{repeat}, or @Rw{for} loop,
skipping to the next statement after the loop:
@index{break statement}
@Produc{
@producname{stat}@producbody{@Rw{break}}
}
A @Rw{break} ends the innermost enclosing loop.

The @Rw{return} statement is used to return values
from a function or a chunk
(which is an anonymous function).
@index{return statement}
Functions can return more than

one value,
so the syntax for the @Rw{return} statement is
@Produc{
@producname{stat}@producbody{@Rw{return} @bnfopt{explist} @bnfopt{@bnfter{;}}}
}

The @Rw{return} statement can only be written
as the last statement of a block.
If it is really necessary to @Rw{return} in the middle of a block,
then an explicit inner block can be used,
as in the idiom @T{do return end},
because now @Rw{return} is the last statement in its (inner) block.

}

@sect3{for| @title{For Statement}

@index{for statement}
The @Rw{for} statement has two forms:
one numerical and one generic.

The numerical @Rw{for} loop repeats a block of code while a
control variable runs through an arithmetic progression.
It has the following syntax:
@Produc{
@producname{stat}@producbody{@Rw{for} @bnfNter{Name} @bnfter{=}
exp @bnfter{,} exp @bnfopt{@bnfter{,} exp} @Rw{do} block @Rw{end}}
}
The @emph{block} is repeated for @emph{name} starting at the value of
the first @emph{exp}, until it passes the second @emph{exp} by steps
of the
third @emph{exp}.
More precisely, a @Rw{for} statement like
@verbatim{
for v = @rep{e1}, @rep{e2}, @rep{e3} do @rep{block} end
}
is equivalent to the code:
@verbatim{
do
local @rep{var}, @rep{limit}, @rep{step} = tonumber(@rep{e1}), tonumber(@rep{e2}), tonumber(@rep{e3})
if not (@rep{var} and @rep{limit} and @rep{step}) then error() end
@rep{var} = @rep{var} - @rep{step}
while true do
  @rep{var} = @rep{var} + @rep{step}
  if (@rep{step} >= 0 and @rep{var} > @rep{limit}) or (@rep{step} < 0 and @rep{var} < @rep{limit}) then
    break
  end
  local v = @rep{var}

```
   @rep{block}
 end
end
}
```

Note the following:
@itemize{

@item{
All three control expressions are evaluated only once,
before the loop starts.
They must all result in numbers.
}

@item{
@T{@rep{var}}, @T{@rep{limit}}, and @T{@rep{step}} are invisible variables.
The names shown here are for explanatory purposes only.
}

@item{
If the third expression (the step) is absent,
then a step @N{of 1} is used.
}

@item{
You
 can use @Rw{break} and @Rw{goto} to exit a @Rw{for} loop.
}

@item{
The loop variable @T{v} is local to the loop body.
If you need its value after the loop,
assign it to another variable before exiting the loop.
}

}

The generic @Rw{for} statement works over functions,
called @def{iterators}.
On each iteration, the iterator function is called to produce a new value,
stopping when this new value is @nil.
The generic @Rw{for} loop has the following syntax:
@Produc{
@producname{stat}@producbody{@Rw{for} namelist @Rw{in} explist
                @Rw{do} block @Rw{end}}
@producname{namelist}@producbody{@bnfNter{Name} @bnfrep{@bnfter{,} @bnfNter{Name}}}
}
A @Rw{for} statement like

```
@verbatim{
for @rep{var_1}, @Cdots, @rep{var_n} in @rep{explist} do @rep{block} end
}
is equivalent to the code:
@verbatim{
do
 local @rep{f}, @rep{s}, @rep{var} = @rep{explist}
 while true do
   local @rep{var_1}, @Cdots, @rep{var_n} = @rep{f}(@rep{s}, @rep{var})
   if @rep{var_1} == nil then
 break end
   @rep{var} = @rep{var_1}
   @rep{block}
 end
end
}
Note the following:
@itemize{

@item{
@T{@rep{explist}} is evaluated only once.
Its results are an @emph{iterator} function,
a @emph{state},
and an initial value for the first @emph{iterator variable}.
}

@item{
@T{@rep{f}}, @T{@rep{s}}, and @T{@rep{var}} are invisible variables.
The names are here for explanatory purposes only.
}

@item{
You can use @Rw{break} to exit a @Rw{for} loop.
}

@item{
The loop variables @T{@rep{var_i}} are local to the loop;
you cannot use their values after the @Rw{for} ends.
If you need these values,
then assign them to other variables before breaking or exiting the loop.
}

}

}

@sect3{funcstat| @title{Function Calls as Statements}
To allow possible side-effects,
```

function calls can be executed as statements:
@Produc{
@producname{stat}@producbody{functioncall}
}
In this case, all returned values are thrown away.
Function calls are explained in @See{functioncall}.

}

@sect3{localvar| @title{Local
 Declarations}
@x{Local variables} can be declared anywhere inside a block.
The declaration can include an initial assignment:
@Produc{
@producname{stat}@producbody{@Rw{local} namelist @bnfopt{@bnfter{=} explist}}
}
If present, an initial assignment has the same semantics
of a multiple assignment @see{assignment}.
Otherwise, all variables are initialized with @nil.

A chunk is also a block @see{chunks},
and so local variables can be declared in a chunk outside any explicit block.

The visibility rules for local variables are explained in @See{visibility}.

}

}

@sect2{expressions| @title{Expressions}

The basic expressions in Lua are the following:
@Produc{
@producname{exp}@producbody{prefixexp}
@producname{exp}@producbody{@Rw{nil} @Or @Rw{false} @Or @Rw{true}}
@producname{exp}@producbody{@bnfNter{Numeral}}
@producname{exp}@producbody{@bnfNter{LiteralString}}
@producname{exp}@producbody{functiondef}
@producname{exp}@producbody{tableconstructor}
@producname{exp}@producbody{@bnfter{...}}
@producname{exp}@producbody{exp
 binop exp}
@producname{exp}@producbody{unop exp}
@producname{prefixexp}@producbody{var @Or functioncall @Or
                @bnfter{(} exp @bnfter{)}}
}

Numerals and literal strings are explained in @See{lexical};

variables are explained in @See{variables};
function definitions are explained in @See{func-def};
function calls are explained in @See{functioncall};
table constructors are explained in @See{tableconstructor}.
Vararg expressions,
denoted by three dots (@Char{...}), can only be used when
directly inside a vararg function;
they are explained in @See{func-def}.

Binary operators comprise arithmetic operators @see{arith},
bitwise operators @see{bitwise},
relational operators @see{rel-ops}, logical operators @see{logic},
and the concatenation operator @see{concat}.
Unary operators comprise the unary minus @see{arith},
the unary bitwise NOT @see{bitwise},
the unary logical @Rw{not} @see{logic},
and the unary @def{length operator}
@see{len-op}.

Both function calls and vararg expressions can result in multiple values.
If a function call is used as a statement @see{funcstat},
then its return list is adjusted to zero elements,
thus discarding all returned values.
If an expression is used as the last (or the only) element
of a list of expressions,
then no adjustment is made
(unless the expression is enclosed in parentheses).
In all other contexts,
Lua adjusts the result list to one element,
either discarding all values except the first one
or adding a single @nil if there are no values.

Here are some examples:
@verbatim{

```
f()              -- adjusted to 0 results
g(f(), x)        -- f() is adjusted to 1 result
g(x, f())        -- g gets x plus all results from f()
a,b,c = f(), x   -- f() is adjusted to 1 result (c gets nil)
a,b = ...        -- a gets the first vararg argument, b gets
                 -- the second (both a and b can get nil if there
                 -- is no corresponding vararg
 argument)

a,b,c = x, f()   -- f() is adjusted to 2 results
a,b,c = f()      -- f() is adjusted to 3 results
return f()       -- returns all results from f()
return ...       -- returns all received vararg arguments
return x,y,f()   -- returns x, y, and all results from f()
```

```
{f()}            -- creates a list with all results from f()
{...}            -- creates a list with all vararg arguments
{f(), nil}       -- f() is adjusted to 1 result
}
```

Any expression enclosed in parentheses always results in only one value.
Thus,
@T{(f(x,y,z))} is always a single value,
even if @id{f} returns several values.
(The value of @T{(f(x,y,z))} is the first value returned by @id{f}
or @nil if @id{f} does not return any values.)

```
@sect3{arith| @title{Arithmetic Operators}
Lua supports the following @x{arithmetic operators}:
@description{
@item{@T{+}|addition}
@item{@T{-}|subtraction}
@item{@T{*}|multiplication}
@item{@T{/}|float division}
@item{@T{//}|floor division}
@item{@T{%}|modulo}
@item{@T{^}|exponentiation}
@item{@T{-}|unary
 minus}
}
```

With the exception of exponentiation and float division,
the arithmetic operators work as follows:
If both operands are integers,
the operation is performed over integers and the result is an integer.
Otherwise, if both operands are numbers
or strings that can be converted to
numbers @see{coercion},
then they are converted to floats,
the operation is performed following the usual rules
for floating-point arithmetic
(usually the @x{IEEE 754} standard),
and the result is a float.

Exponentiation and float division (@T{/})
always convert their operands to floats
and the result is always a float.
Exponentiation uses the @ANSI{pow},
so that it works for non-integer exponents too.

Floor division (@T{//}) is a division

that rounds the quotient towards minus infinity,
that is, the floor of the division of its operands.

Modulo is defined as the remainder of a division
that rounds the quotient towards minus infinity (floor division).

In
 case of overflows in integer arithmetic,
all operations @emphx{wrap around},
according to the usual rules of two-complement arithmetic.
(In other words,
they return the unique representable integer
that is equal modulo @M{2@sp{64}} to the mathematical result.)
}

@sect3{bitwise| @title{Bitwise Operators}
Lua supports the following @x{bitwise operators}:
@description{
@item{@T{&}|bitwise AND}
@item{@T{@VerBar}|bitwise OR}
@item{@T{~}|bitwise exclusive OR}
@item{@T{>>}|right shift}
@item{@T{<<}|left shift}
@item{@T{~}|unary bitwise NOT}
}

All bitwise operations convert its operands to integers
@see{coercion},
operate on all bits of those integers,
and result in an integer.

Both right and left shifts fill the vacant bits with zeros.
Negative displacements shift to the other direction;
displacements with absolute values equal to or higher than
the number of bits in an integer
result in zero (as all bits are shifted out).

}

@sect3{coercion| @title{Coercions and Conversions}
Lua provides
 some automatic conversions between some
types and representations at run time.
Bitwise operators always convert float operands to integers.
Exponentiation and float division
always convert integer operands to floats.
All other arithmetic operations applied to mixed numbers
(integers and floats) convert the integer operand to a float;

this is called the @def{usual rule}.
The C API also converts both integers to floats and
floats to integers, as needed.
Moreover, string concatenation accepts numbers as arguments,
besides strings.

Lua also converts strings to numbers,
whenever a number is expected.

In a conversion from integer to float,
if the integer value has an exact representation as a float,
that is the result.
Otherwise,
the conversion gets the nearest higher or
the nearest lower representable value.
This kind of conversion never fails.

The conversion from float to integer
checks whether the float has an exact representation as an integer
(that is, the float has an integral
value and
it is in the range of integer representation).
If it does, that representation is the result.
Otherwise, the conversion fails.

The conversion from strings to numbers goes as follows:
First, the string is converted to an integer or a float,
following its syntax and the rules of the Lua lexer.
(The string may have also leading and trailing spaces and a sign.)
Then, the resulting number (float or integer)
is converted to the type (float or integer) required by the context
(e.g., the operation that forced the conversion).

All conversions from strings to numbers
accept both a dot and the current locale mark
as the radix character.
(The Lua lexer, however, accepts only a dot.)

The conversion from numbers to strings uses a
non-specified human-readable format.
For complete control over how numbers are converted to strings,
use the @id{format} function from the string library
@seeF{string.format}.

}

@sect3{rel-ops| @title{Relational Operators}
Lua supports the following @x{relational

operators}:
@description{
@item{@T{==}|equality}
@item{@T{~=}|inequality}
@item{@T{<}|less than}
@item{@T{>}|greater than}
@item{@T{<=}|less or equal}
@item{@T{>=}|greater or equal}
}
These operators always result in @false or @true.

Equality (@T{==}) first compares the type of its operands.
If the types are different, then the result is @false.
Otherwise, the values of the operands are compared.
Strings are compared in the obvious way.
Numbers are equal if they denote the same mathematical value.

Tables, userdata, and threads
are compared by reference:
two objects are considered equal only if they are the same object.
Every time you create a new object
(a table, userdata, or thread),
this new object is different from any previously existing object.
A closure is always equal to itself.
Closures with any detectable difference
(different behavior, different definition) are always different.
Closures created at different times but with no detectable differences
may be classified as
equal or not
(depending on internal caching details).

You can change the way that Lua compares tables and userdata
by using the @Q{eq} metamethod @see{metatable}.

Equality comparisons do not convert strings to numbers
or vice versa.
Thus, @T{"0"==0} evaluates to @false,
and @T{t[0]} and @T{t["0"]} denote different
entries in a table.

The operator @T{~=} is exactly the negation of equality (@T{==}).

The order operators work as follows.
If both arguments are numbers,
then they are compared according to their mathematical values
(regardless of their subtypes).
Otherwise, if both arguments are strings,
then their values are compared according to the current locale.

Otherwise, Lua tries to call the @Q{lt} or the @Q{le}
metamethod @see{metatable}.
A comparison @T{a > b} is translated to @T{b < a}
and @T{a >= b} is translated to @T{b <= a}.

Following the @x{IEEE 754} standard,
@x{NaN} is considered neither smaller than,
nor equal to, nor greater than any value (including itself).

}

@sect3{logic|
 @title{Logical Operators}
The @x{logical operators} in Lua are
@Rw{and}, @Rw{or}, and @Rw{not}.
Like the control structures @see{control},
all logical operators consider both @false and @nil as false
and anything else as true.

The negation operator @Rw{not} always returns @false or @true.
The conjunction operator @Rw{and} returns its first argument
if this value is @false or @nil;
otherwise, @Rw{and} returns its second argument.
The disjunction operator @Rw{or} returns its first argument
if this value is different from @nil and @false;
otherwise, @Rw{or} returns its second argument.
Both @Rw{and} and @Rw{or} use @x{short-circuit evaluation};
that is,
the second operand is evaluated only if necessary.
Here are some examples:
@verbatim{
10 or 20 --> 10
10 or error() --> 10
nil or "a" --> "a"
nil and 10 --> nil
false and error() --> false
false and nil --> false
false or nil --> nil
10 and 20 --> 20
}
(In this manual,
@T{-->}
 indicates the result of the preceding expression.)

}

@sect3{concat| @title{Concatenation}
The string @x{concatenation} operator in Lua is

denoted by two dots (@Char{..}).
If both operands are strings or numbers, then they are converted to
strings according to the rules described in @See{coercion}.
Otherwise, the @idx{__concat} metamethod is called @see{metatable}.

}

@sect3{len-op| @title{The Length Operator}

The length operator is denoted by the unary prefix operator @T{#}.

The length of a string is its number of bytes
(that is, the usual meaning of string length when each
character is one byte).

The length operator applied on a table
returns a @x{border} in that table.
A @def{border} in a table @id{t} is any natural number
that satisfies the following condition:
@verbatim{
(border == 0 or t[border] ~= nil) and t[border + 1] == nil
}
In words,
a border is any (natural) index in a table
where a non-nil value is followed by a nil value
(or zero, when index 1 is nil).

A
table with exactly one border is called a @def{sequence}.
For instance, the table @T{{10, 20, 30, 40, 50}} is a sequence,
as it has only one border (5).
The table @T{{10, 20, 30, nil, 50}} has two borders (3 and 5),
and therefore it is not a sequence.
The table @T{{nil, 20, 30, nil, nil, 60, nil}}
has three borders (0, 3, and 6),
so it is not a sequence, too.
The table @T{{}} is a sequence with border 0.
Note that non-natural keys do not interfere
with whether a table is a sequence.

When @id{t} is a sequence,
@T{#t} returns its only border,
which corresponds to the intuitive notion of the length of the sequence.
When @id{t} is not a sequence,
@T{#t} can return any of its borders.
(The exact one depends on details of
the internal representation of the table,
which in turn can depend on how the table was populated and

the memory addresses of its non-numeric keys.)

The computation of the length of a table
has a guaranteed worst time of @M{O(log n)},
where @M{n} is the largest natural key
 in the table.

A program can modify the behavior of the length operator for
any value but strings through the @idx{__len} metamethod @see{metatable}.

}

@sect3{prec| @title{Precedence}
@x{Operator precedence} in Lua follows the table below,
from lower to higher priority:
@verbatim{
or
and
< > <= >= ~= ==
|
~
&
<< >>
..
+ -
* / // %
unary operators (not # - ~)
^
}
As usual,
you can use parentheses to change the precedences of an expression.
The concatenation (@Char{..}) and exponentiation (@Char{^})
operators are right associative.
All other binary operators are left associative.

}

@sect3{tableconstructor| @title{Table Constructors}
Table @x{constructors} are expressions that create tables.
Every time a constructor is evaluated, a new table is created.
A constructor can be used to create an empty table
or to create a table and initialize some of its fields.
The general syntax for constructors is
@Produc{
@producname{tableconstructor}@producbody{@bnfter{@Open}
 @bnfopt{fieldlist} @bnfter{@Close}}
@producname{fieldlist}@producbody{field @bnfrep{fieldsep field} @bnfopt{fieldsep}}
@producname{field}@producbody{@bnfter{[} exp @bnfter{]} @bnfter{=} exp @Or

```
            @bnfNter{Name} @bnfter{=} exp @Or exp}
@producname{fieldsep}@producbody{@bnfter{,} @Or @bnfter{;}}
}
```

Each field of the form @T{[exp1] = exp2} adds to the new table an entry
with key @id{exp1} and value @id{exp2}.
A field of the form @T{name = exp} is equivalent to
@T{["name"] = exp}.
Finally, fields of the form @id{exp} are equivalent to
@T{[i] = exp}, where @id{i} are consecutive integers
starting with 1.
Fields in the other formats do not affect this counting.
For example,

```
@verbatim{
a = { [f(1)] = g; "x", "y"; x = 1, f(x), [30] = 23; 45 }
}
```

is equivalent to

```
@verbatim{
do
 local t = {}
 t[f(1)] = g
 t[1] = "x"         -- 1st exp
 t[2] = "y"         -- 2nd exp
 t.x = 1            -- t["x"] = 1
 t[3] = f(x)        -- 3rd exp
 t[30] = 23
 t[4] = 45
        -- 4th exp
 a = t
end
}
```

The order of the assignments in a constructor is undefined.
(This order would be relevant only when there are repeated keys.)

If the last field in the list has the form @id{exp}
and the expression is a function call or a vararg expression,
then all values returned by this expression enter the list consecutively
@see{functioncall}.

The field list can have an optional trailing separator,
as a convenience for machine-generated code.

}

@sect3{functioncall| @title{Function Calls}
A @x{function call} in Lua has the following syntax:
@Produc{

@producname{functioncall}@producbody{prefixexp args}
}
In a function call,
first @bnfNter{prefixexp} and @bnfNter{args} are evaluated.
If the value of @bnfNter{prefixexp} has type @emph{function},
then this function is called
with the given arguments.
Otherwise, the @bnfNter{prefixexp} @Q{call} metamethod is called,
having as first argument the value of @bnfNter{prefixexp},
followed by the original call arguments
@see{metatable}.

The
form
@Produc{
@producname{functioncall}@producbody{prefixexp @bnfter{:} @bnfNter{Name} args}
}
can be used to call @Q{methods}.
A call @T{v:name(@rep{args})}
is syntactic sugar for @T{v.name(v,@rep{args})},
except that @id{v} is evaluated only once.

Arguments have the following syntax:
@Produc{
@producname{args}@producbody{@bnfter{(} @bnfopt{explist} @bnfter{)}}
@producname{args}@producbody{tableconstructor}
@producname{args}@producbody{@bnfNter{LiteralString}}
}
All argument expressions are evaluated before the call.
A call of the form @T{f{@rep{fields}}} is
syntactic sugar for @T{f({@rep{fields}})};
that is, the argument list is a single new table.
A call of the form @T{f'@rep{string}'}
(or @T{f"@rep{string}"} or @T{f[[@rep{string}]]})
is syntactic sugar for @T{f('@rep{string}')};
that is, the argument list is a single literal string.

A call of the form @T{return @rep{functioncall}} is called
a @def{tail call}.
Lua implements @def{proper tail calls}
(or @emph{proper
tail recursion}):
in a tail call,
the called function reuses the stack entry of the calling function.
Therefore, there is no limit on the number of nested tail calls that
a program can execute.
However, a tail call erases any debug information about the
calling function.

Note that a tail call only happens with a particular syntax,
where the @Rw{return} has one single function call as argument;
this syntax makes the calling function return exactly
the returns of the called function.
So, none of the following examples are tail calls:
@verbatim{
return (f(x)) -- results adjusted to 1
return 2 * f(x)
return x, f(x) -- additional results
f(x); return -- results discarded
return x or f(x) -- results adjusted to 1
}

}

@sect3{func-def| @title{Function Definitions}

The syntax for function definition is
@Produc{
@producname{functiondef}@producbody{@Rw{function} funcbody}
@producname{funcbody}@producbody{@bnfter{(} @bnfopt{parlist} @bnfter{)} block @Rw{end}}
}

The
following syntactic sugar simplifies function definitions:
@Produc{
@producname{stat}@producbody{@Rw{function} funcname funcbody}
@producname{stat}@producbody{@Rw{local} @Rw{function} @bnfNter{Name} funcbody}
@producname{funcname}@producbody{@bnfNter{Name} @bnfrep{@bnfter{.} @bnfNter{Name}}
@bnfopt{@bnfter{:} @bnfNter{Name}}}
}
The statement
@verbatim{
function f () @rep{body} end
}
translates to
@verbatim{
f = function () @rep{body} end
}
The statement
@verbatim{
function t.a.b.c.f () @rep{body} end
}
translates to
@verbatim{
t.a.b.c.f = function () @rep{body} end
}
The statement

@verbatim{
local function f () @rep{body} end
}
translates to
@verbatim{
local f; f = function () @rep{body} end
}
not to
@verbatim{
local f = function () @rep{body} end
}
(This only makes a difference when the body of the function
contains references to @id{f}.)

A function definition is an executable expression,
whose value has type @emph{function}.
When Lua precompiles a chunk,
all its function bodies are
precompiled too.
Then, whenever Lua executes the function definition,
the function is @emph{instantiated} (or @emph{closed}).
This function instance (or @emphx{closure})
is the final value of the expression.

Parameters act as local variables that are
initialized with the argument values:
@Produc{
@producname{parlist}@producbody{namelist @bnfopt{@bnfter{,} @bnfter{...}} @Or
@bnfter{...}}
}
When a function is called,
the list of @x{arguments} is adjusted to
the length of the list of parameters,
unless the function is a @def{vararg function},
which is indicated by three dots (@Char{...})
at the end of its parameter list.
A vararg function does not adjust its argument list;
instead, it collects all extra arguments and supplies them
to the function through a @def{vararg expression},
which is also written as three dots.
The value of this expression is a list of all actual extra arguments,
similar to a function with multiple results.
If a vararg expression is used inside another expression
or
in the middle of a list of expressions,
then its return list is adjusted to one element.
If the expression is used as the last element of a list of expressions,
then no adjustment is made

(unless that last expression is enclosed in parentheses).

As an example, consider the following definitions:
@verbatim{
function f(a, b) end
function g(a, b, ...) end
function r() return 1,2,3 end
}
Then, we have the following mapping from arguments to parameters and
to the vararg expression:
@verbatim{
CALL PARAMETERS

f(3) a=3, b=nil
f(3, 4) a=3, b=4
f(3, 4, 5) a=3, b=4
f(r(), 10) a=1, b=10
f(r()) a=1, b=2

g(3) a=3, b=nil, ... --> (nothing)
g(3, 4) a=3, b=4, ... --> (nothing)
g(3, 4, 5, 8) a=3, b=4, ... --> 5 8
g(5, r()) a=5, b=1, ... --> 2 3
}

Results are returned using the @Rw{return} statement @see{control}.
If control reaches the end of a function
without encountering a @Rw{return} statement,
then
the function returns with no results.

@index{multiple return}
There is a system-dependent limit on the number of values
that a function may return.
This limit is guaranteed to be larger than 1000.

The @emphx{colon} syntax
is used for defining @def{methods},
that is, functions that have an implicit extra parameter @idx{self}.
Thus, the statement
@verbatim{
function t.a.b.c:f (@rep{params}) @rep{body} end
}
is syntactic sugar for
@verbatim{
t.a.b.c.f = function (self, @rep{params}) @rep{body} end
}

}

}

@sect2{visibility| @title{Visibility Rules}

@index{visibility}
Lua is a lexically scoped language.
The scope of a local variable begins at the first statement after
its declaration and lasts until the last non-void statement
of the innermost block that includes the declaration.
Consider the following example:
@verbatim{
```
x = 10                -- global variable
do                    -- new block
 local x = x          -- new 'x', with value 10
 print(x)             --> 10
 x =
 x+1
 do                   -- another block
   local x = x+1      -- another 'x'
   print(x)           --> 12
 end
 print(x)             --> 11
end
print(x)              --> 10  (the global one)
```
}

Notice that, in a declaration like @T{local x = x},
the new @id{x} being declared is not in scope yet,
and so the second @id{x} refers to the outside variable.

Because of the @x{lexical scoping} rules,
local variables can be freely accessed by functions
defined inside their scope.
A local variable used by an inner function is called
an @def{upvalue}, or @emphx{external local variable},
inside the inner function.

Notice that each execution of a @Rw{local} statement
defines new local variables.
Consider the following example:
@verbatim{
```
a = {}
local x = 20
for i=1,10 do
 local y = 0
```

```
 a[i] = function () y=y+1; return x+y end
end
}
```

The loop creates ten closures
(that is, ten instances of the anonymous function).
Each of these closures uses a different @id{y} variable,
while all of them share
 the same @id{x}.

```
}

}
```

@C{----------}
@sect1{API| @title{The Application Program Interface}

@index{C API}
This section describes the @N{C API} for Lua, that is,
the set of @N{C functions} available to the host program to communicate
with Lua.
All API functions and related types and constants
are declared in the header file @defid{lua.h}.

Even when we use the term @Q{function},
any facility in the API may be provided as a macro instead.
Except where stated otherwise,
all such macros use each of their arguments exactly once
(except for the first argument, which is always a Lua state),
and so do not generate any hidden side-effects.

As in most @N{C libraries},
the Lua API functions do not check their arguments for validity or consistency.
However, you can change this behavior by compiling Lua
with the macro @defid{LUA_USE_APICHECK} defined.

The Lua library is fully reentrant:
it has no global variables.
It keeps all information
 it needs in a dynamic structure,
called the @def{Lua state}.

Each Lua state has one or more threads,
which correspond to independent, cooperative lines of execution.
The type @Lid{lua_State} (despite its name) refers to a thread.
(Indirectly, through the thread, it also refers to the
Lua state associated to the thread.)

A pointer to a thread must be passed as the first argument to
every function in the library, except to @Lid{lua_newstate},
which creates a Lua state from scratch and returns a pointer
to the @emph{main thread} in the new state.

@sect2{@title{The Stack}

Lua uses a @emph{virtual stack} to pass values to and from C.
Each element in this stack represents a Lua value
(@nil, number, string, etc.).
Functions in the API can access this stack through the
Lua state parameter that they receive.

Whenever Lua calls C, the called function gets a new stack,
which is independent of previous stacks and of stacks of
@N{C functions} that are still active.
This stack initially
 contains any arguments to the @N{C function}
and it is where the @N{C function} can store temporary
Lua values and must push its results
to be returned to the caller @seeC{lua_CFunction}.

For convenience,
most query operations in the API do not follow a strict stack discipline.
Instead, they can refer to any element in the stack
by using an @emph{index}:@index{index (API stack)}
A positive index represents an absolute stack position
(starting @N{at 1});
a negative index represents an offset relative to the top of the stack.
More specifically, if the stack has @rep{n} elements,
then @N{index 1} represents the first element
(that is, the element that was pushed onto the stack first)
and
@N{index @rep{n}} represents the last element;
@N{index @num{-1}} also represents the last element
(that is, the element at @N{the top})
and index @M{-n} represents the first element.

}

@sect2{stacksize| @title{Stack Size}

When you interact with the Lua API,
you are responsible for ensuring consistency.
In
 particular,
@emph{you are responsible for controlling stack overflow}.

You can use the function @Lid{lua_checkstack}
to ensure that the stack has enough space for pushing new elements.

Whenever Lua calls C,
it ensures that the stack has space for
at least @defid{LUA_MINSTACK} extra slots.
@id{LUA_MINSTACK} is defined as 20,
so that usually you do not have to worry about stack space
unless your code has loops pushing elements onto the stack.

When you call a Lua function
without a fixed number of results @seeF{lua_call},
Lua ensures that the stack has enough space for all results,
but it does not ensure any extra space.
So, before pushing anything in the stack after such a call
you should use @Lid{lua_checkstack}.

}

@sect2{@title{Valid and Acceptable Indices}

Any function in the API that receives stack indices
works only with @emphx{valid indices} or @emphx{acceptable indices}.

A @def{valid index} is an index that refers to a
position that stores a modifiable Lua value.
It
 comprises stack indices @N{between 1} and the stack top
(@T{1 @leq abs(index) @leq top})
@index{stack index}
plus @def{pseudo-indices},
which represent some positions that are accessible to @N{C code}
but that are not in the stack.
Pseudo-indices are used to access the registry @see{registry}
and the upvalues of a @N{C function} @see{c-closure}.

Functions that do not need a specific mutable position,
but only a value (e.g., query functions),
can be called with acceptable indices.
An @def{acceptable index} can be any valid index,
but it also can be any positive index after the stack top
within the space allocated for the stack,
that is, indices up to the stack size.
(Note that 0 is never an acceptable index.)
Except when noted otherwise,
functions in the API work with acceptable indices.

Acceptable indices serve to avoid extra tests

against the stack top when querying the stack.
For instance, a @N{C function} can query its third argument
without the need to first check whether there
is a third argument,
that is, without the need to check whether 3 is a valid index.

For functions that can be called with acceptable indices,
any non-valid index is treated as if it
contains a value of a virtual type @defid{LUA_TNONE},
which behaves like a nil value.

}

@sect2{c-closure| @title{C Closures}

When a @N{C function} is created,
it is possible to associate some values with it,
thus creating a @def{@N{C closure}}
@seeC{lua_pushcclosure};
these values are called @def{upvalues} and are
accessible to the function whenever it is called.

Whenever a @N{C function} is called,
its upvalues are located at specific pseudo-indices.
These pseudo-indices are produced by the macro
@Lid{lua_upvalueindex}.
The first upvalue associated with a function is at index
@T{lua_upvalueindex(1)}, and so on.
Any access to @T{lua_upvalueindex(@rep{n})},
where @rep{n} is greater than the number of upvalues of the
current function
(but not greater than 256,
which is one plus the maximum number of upvalues
in a closure),
produces an acceptable but invalid index.

}

@sect2{registry| @title{Registry}

Lua provides a @def{registry},
a predefined table that can be used by any @N{C code} to
store whatever Lua values it needs to store.
The registry table is always located at pseudo-index
@defid{LUA_REGISTRYINDEX}.
Any @N{C library} can store data into this table,
but it must take care to choose keys
that are different from those used

by other libraries, to avoid collisions.
Typically, you should use as key a string containing your library name,
or a light userdata with the address of a @N{C object} in your code,
or any Lua object created by your code.
As with variable names,
string keys starting with an underscore followed by
uppercase letters are reserved for Lua.

The integer keys in the registry are used
by the reference mechanism @seeC{luaL_ref}
and by some predefined values.
Therefore, integer keys must not be used for other purposes.

When you create a new Lua state,
its registry comes
with some predefined values.
These predefined values are indexed with integer keys
defined as constants in @id{lua.h}.
The following constants are defined:
@description{
@item{@defid{LUA_RIDX_MAINTHREAD}| At this index the registry has
the main thread of the state.
(The main thread is the one created together with the state.)
}

@item{@defid{LUA_RIDX_GLOBALS}| At this index the registry has
the @x{global environment}.
}
}

}

@sect2{C-error|@title{Error Handling in C}

Internally, Lua uses the C @id{longjmp} facility to handle errors.
(Lua will use exceptions if you compile it as C++;
search for @id{LUAI_THROW} in the source code for details.)
When Lua faces any error
(such as a @x{memory allocation error} or a type error)
it @emph{raises} an error;
that is, it does a long jump.
A @emphx{protected environment} uses @id{setjmp}
to set a recovery point;
any error jumps to the most recent active recovery point.

Inside a @N{C function} you can raise an error by calling @Lid{lua_error}.

Most

functions in the API can raise an error,
for instance due to a @x{memory allocation error}.
The documentation for each function indicates whether
it can raise errors.

If an error happens outside any protected environment,
Lua calls a @def{panic function} (see @Lid{lua_atpanic})
and then calls @T{abort},
thus exiting the host application.
Your panic function can avoid this exit by
never returning
(e.g., doing a long jump to your own recovery point outside Lua).

The panic function,
as its name implies,
is a mechanism of last resort.
Programs should avoid it.
As a general rule,
when a @N{C function} is called by Lua with a Lua state,
it can do whatever it wants on that Lua state,
as it should be already protected.
However,
when C code operates on other Lua states
(e.g., a Lua argument to the function,
a Lua state stored in the registry, or
the result of @Lid{lua_newthread}),
it should use them only in API calls that cannot raise errors.

The panic function runs as if it were a
@x{message handler} @see{error};
in particular, the error object is at the top of the stack.
However, there is no guarantee about stack space.
To push anything on the stack,
the panic function must first check the available space @see{stacksize}.

}

@sect2{continuations|@title{Handling Yields in C}

Internally, Lua uses the C @id{longjmp} facility to yield a coroutine.
Therefore, if a @N{C function} @id{foo} calls an API function
and this API function yields
(directly or indirectly by calling another function that yields),
Lua cannot return to @id{foo} any more,
because the @id{longjmp} removes its frame from the C stack.

To avoid this kind of problem,
Lua raises an error whenever it tries to yield across an API call,

except for three functions:
@Lid{lua_yieldk}, @Lid{lua_callk}, and @Lid{lua_pcallk}.
All those functions receive a @def{continuation function}
(as a parameter named @id{k}) to continue execution after a yield.

We need to set some terminology to explain continuations.
We
have a @N{C function} called from Lua which we will call
the @emph{original function}.
This original function then calls one of those three functions in the C API,
which we will call the @emph{callee function},
that then yields the current thread.
(This can happen when the callee function is @Lid{lua_yieldk},
or when the callee function is either @Lid{lua_callk} or @Lid{lua_pcallk}
and the function called by them yields.)

Suppose the running thread yields while executing the callee function.
After the thread resumes,
it eventually will finish running the callee function.
However,
the callee function cannot return to the original function,
because its frame in the C stack was destroyed by the yield.
Instead, Lua calls a @def{continuation function},
which was given as an argument to the callee function.
As the name implies,
the continuation function should continue the task
of the original function.

As an illustration, consider the following function:
@verbatim{
```
int original_function
 (lua_State *L) {
 ...     /* code 1 */
 status = lua_pcall(L, n, m, h);  /* calls Lua */
 ...     /* code 2 */
}
```
}
Now we want to allow
the Lua code being run by @Lid{lua_pcall} to yield.
First, we can rewrite our function like here:
@verbatim{
```
int k (lua_State *L, int status, lua_KContext ctx) {
 ...  /* code 2 */
}

int original_function (lua_State *L) {
 ...     /* code 1 */
 return k(L, lua_pcall(L, n, m, h), ctx);
```

}
}
In the above code,
the new function @id{k} is a
@emph{continuation function} (with type @Lid{lua_KFunction}),
which should do all the work that the original function
was doing after calling @Lid{lua_pcall}.
Now, we must inform Lua that it must call @id{k} if the Lua code
being executed by @Lid{lua_pcall} gets interrupted in some way
(errors or yielding),
so we rewrite the code as here,
replacing @Lid{lua_pcall} by @Lid{lua_pcallk}:
@verbatim{
int original_function (lua_State *L) {
 ... /* code 1 */
 return k(L, lua_pcallk(L, n, m, h, ctx2, k), ctx1);
}
}
Note
 the external, explicit call to the continuation:
Lua will call the continuation only if needed, that is,
in case of errors or resuming after a yield.
If the called function returns normally without ever yielding,
@Lid{lua_pcallk} (and @Lid{lua_callk}) will also return normally.
(Of course, instead of calling the continuation in that case,
you can do the equivalent work directly inside the original function.)

Besides the Lua state,
the continuation function has two other parameters:
the final status of the call plus the context value (@id{ctx}) that
was passed originally to @Lid{lua_pcallk}.
(Lua does not use this context value;
it only passes this value from the original function to the
continuation function.)
For @Lid{lua_pcallk},
the status is the same value that would be returned by @Lid{lua_pcallk},
except that it is @Lid{LUA_YIELD} when being executed after a yield
(instead of @Lid{LUA_OK}).
For @Lid{lua_yieldk} and @Lid{lua_callk},
the status is always @Lid{LUA_YIELD} when
 Lua calls the continuation.
(For these two functions,
Lua will not call the continuation in case of errors,
because they do not handle errors.)
Similarly, when using @Lid{lua_callk},
you should call the continuation function
with @Lid{LUA_OK} as the status.
(For @Lid{lua_yieldk}, there is not much point in calling

directly the continuation function,
because @Lid{lua_yieldk} usually does not return.)

Lua treats the continuation function as if it were the original function.
The continuation function receives the same Lua stack
from the original function,
in the same state it would be if the callee function had returned.
(For instance,
after a @Lid{lua_callk} the function and its arguments are
removed from the stack and replaced by the results from the call.)
It also has the same upvalues.
Whatever it returns is handled by Lua as if it were the return
of the original function.

}

@sect2{@title{Functions and Types}

Here we list all functions and types from the @N{C API} in
alphabetical
 order.
Each function has an indicator like this:
@apii{o,p,x}

The first field, @T{o},
is how many elements the function pops from the stack.
The second field, @T{p},
is how many elements the function pushes onto the stack.
(Any function always pushes its results after popping its arguments.)
A field in the form @T{x|y} means the function can push (or pop)
@T{x} or @T{y} elements,
depending on the situation;
an interrogation mark @Char{?} means that
we cannot know how many elements the function pops/pushes
by looking only at its arguments
(e.g., they may depend on what is on the stack).
The third field, @T{x},
tells whether the function may raise errors:
@Char{-} means the function never raises any error;
@Char{m} means the function may raise out-of-memory errors
and errors running a @idx{__gc} metamethod;
@Char{e} means the function may raise any errors
(it can run arbitrary Lua code,
either directly or through metamethods);
@Char{v} means the function may raise an error on purpose.

@APIEntry{int

```
 lua_absindex (lua_State *L, int idx);|
@apii{0,0,-}

Converts the @x{acceptable index} @id{idx}
into an equivalent @x{absolute index}
(that is, one that does not depend on the stack top).

}



@APIEntry{
typedef void * (*lua_Alloc) (void *ud,
                             void *ptr,
                             size_t osize,
                             size_t nsize);|

The type of the @x{memory-allocation function} used by Lua states.
The allocator function must provide a
functionality similar to @id{realloc},
but not exactly the same.
Its arguments are
@id{ud}, an opaque pointer passed to @Lid{lua_newstate};
@id{ptr}, a pointer to the block being allocated/reallocated/freed;
@id{osize}, the original size of the block or some code about what
is being allocated;
and @id{nsize}, the new size of the block.

When @id{ptr} is not @id{NULL},
@id{osize} is the size of the block pointed by @id{ptr},
that is, the size given when it was allocated or reallocated.

When @id{ptr} is
 @id{NULL},
@id{osize} encodes the kind of object that Lua is allocating.
@id{osize} is any of
@Lid{LUA_TSTRING}, @Lid{LUA_TTABLE}, @Lid{LUA_TFUNCTION},
@Lid{LUA_TUSERDATA}, or @Lid{LUA_TTHREAD} when (and only when)
Lua is creating a new object of that type.
When @id{osize} is some other value,
Lua is allocating memory for something else.

Lua assumes the following behavior from the allocator function:

When @id{nsize} is zero,
the allocator must behave like @id{free}
and return @id{NULL}.

When @id{nsize} is not zero,
```

the allocator must behave like @id{realloc}.
The allocator returns @id{NULL}
if and only if it cannot fulfill the request.
Lua assumes that the allocator never fails when
@T{osize >= nsize}.

Here is a simple implementation for the @x{allocator function}.
It is used in the auxiliary library by @Lid{luaL_newstate}.
@verbatim{
```
static void *l_alloc (void *ud, void *ptr, size_t osize,
                                  size_t nsize) {
 (void)ud;  (void)osize;  /* not
 used */
 if (nsize == 0) {
   free(ptr);
   return NULL;
 }
 else
   return realloc(ptr, nsize);
}
```
}
Note that @N{Standard C} ensures
that @T{free(NULL)} has no effect and that
@T{realloc(NULL,size)} is equivalent to @T{malloc(size)}.
This code assumes that @id{realloc} does not fail when shrinking a block.
(Although @N{Standard C} does not ensure this behavior,
it seems to be a safe assumption.)

}

@APIEntry{void lua_arith (lua_State *L, int op);|
@apii{2|1,1,e}

Performs an arithmetic or bitwise operation over the two values
(or one, in the case of negations)
at the top of the stack,
with the value at the top being the second operand,
pops these values, and pushes the result of the operation.
The function follows the semantics of the corresponding Lua operator
(that is, it may call metamethods).

The value of @id{op} must be one of the following constants:
@description{

@item{@defid{LUA_OPADD}| performs addition (@T{+})}
@item{@defid{LUA_OPSUB}| performs subtraction (@T{-})}
@item{@defid{LUA_OPMUL}|

performs multiplication (@T{*})}
@item{@defid{LUA_OPDIV}| performs float division (@T{/})}
@item{@defid{LUA_OPIDIV}| performs floor division (@T{//})}
@item{@defid{LUA_OPMOD}| performs modulo (@T{%})}
@item{@defid{LUA_OPPOW}| performs exponentiation (@T{^})}
@item{@defid{LUA_OPUNM}| performs mathematical negation (unary @T{-})}
@item{@defid{LUA_OPBNOT}| performs bitwise NOT (@T{~})}
@item{@defid{LUA_OPBAND}| performs bitwise AND (@T{&})}
@item{@defid{LUA_OPBOR}| performs bitwise OR (@T{|})}
@item{@defid{LUA_OPBXOR}| performs bitwise exclusive OR (@T{~})}
@item{@defid{LUA_OPSHL}| performs left shift (@T{<<})}
@item{@defid{LUA_OPSHR}| performs right shift (@T{>>})}

}

}

@APIEntry{lua_CFunction lua_atpanic (lua_State *L, lua_CFunction panicf);|
@apii{0,0,-}

Sets a new panic function and returns the old one @see{C-error}.

}

@APIEntry{void lua_call (lua_State *L, int nargs, int nresults);|
@apii{nargs+1,nresults,e}

Calls a function.

To call a function you
must use the following protocol:
first, the function to be called is pushed onto the stack;
then, the arguments to the function are pushed
in direct order;
that is, the first argument is pushed first.
Finally you call @Lid{lua_call};
@id{nargs} is the number of arguments that you pushed onto the stack.
All arguments and the function value are popped from the stack
when the function is called.
The function results are pushed onto the stack when the function returns.
The number of results is adjusted to @id{nresults},
unless @id{nresults} is @defid{LUA_MULTRET}.
In this case, all results from the function are pushed;
Lua takes care that the returned values fit into the stack space,
but it does not ensure any extra space in the stack.
The function results are pushed onto the stack in direct order
(the first result is pushed first),

so that after the call the last result is on the top of the stack.

Any error inside the called function is propagated upwards
(with a @id{longjmp}).

The following
example shows how the host program can do the
equivalent to this Lua code:
@verbatim{
a = f("how", t.x, 14)
}
Here it is @N{in C}:
@verbatim{
```
lua_getglobal(L, "f");                  /* function to be called */
lua_pushliteral(L, "how");                      /* 1st argument */
lua_getglobal(L, "t");                  /* table to be indexed */
lua_getfield(L, -1, "x");       /* push result of t.x (2nd arg) */
lua_remove(L, -2);                  /* remove 't' from the stack */
lua_pushinteger(L, 14);                         /* 3rd argument */
lua_call(L, 3, 1);     /* call 'f' with 3 arguments and 1 result */
lua_setglobal(L, "a");                          /* set global 'a' */
```
}
Note that the code above is @emph{balanced}:
at its end, the stack is back to its original configuration.
This is considered good programming practice.

}

@APIEntry{
```
void lua_callk (lua_State *L,
                int nargs,
                int nresults,
                lua_KContext ctx,
                lua_KFunction
 k);|
```
@apii{nargs + 1,nresults,e}

This function behaves exactly like @Lid{lua_call},
but allows the called function to yield @see{continuations}.

}

@APIEntry{typedef int (*lua_CFunction) (lua_State *L);|

Type for @N{C functions}.

In order to communicate properly with Lua,
a @N{C function} must use the following protocol,

which defines the way parameters and results are passed:
a @N{C function} receives its arguments from Lua in its stack
in direct order (the first argument is pushed first).
So, when the function starts,
@T{lua_gettop(L)} returns the number of arguments received by the function.
The first argument (if any) is at index 1
and its last argument is at index @T{lua_gettop(L)}.
To return values to Lua, a @N{C function} just pushes them onto the stack,
in direct order (the first result is pushed first),
and returns the number of results.
Any other value in the stack below the results will be properly
discarded by Lua.
Like a Lua function, a @N{C function} called
by Lua can also return
many results.

As an example, the following function receives a variable number
of numeric arguments and returns their average and their sum:
@verbatim{
```
static int foo (lua_State *L) {
 int n = lua_gettop(L);    /* number of arguments */
 lua_Number sum = 0.0;
 int i;
 for (i = 1; i <= n; i++) {
   if (!lua_isnumber(L, i)) {
     lua_pushliteral(L, "incorrect argument");
     lua_error(L);
   }
   sum += lua_tonumber(L, i);
 }
 lua_pushnumber(L, sum/n);        /* first result */
 lua_pushnumber(L, sum);         /* second result */
 return 2;                    /* number of results */
}
```
}

}

@APIEntry{int lua_checkstack (lua_State *L, int n);|
@apii{0,0,-}

Ensures that the stack has space for at least @id{n} extra slots
(that is, that you can safely push up to @id{n} values into it).
It returns false if it cannot fulfill the request,
either because it would cause the stack

to be larger than a fixed maximum size
(typically at least several thousand
 elements) or
because it cannot allocate memory for the extra space.
This function never shrinks the stack;
if the stack already has space for the extra slots,
it is left unchanged.

}

@APIEntry{void lua_close (lua_State *L);|
@apii{0,0,-}

Destroys all objects in the given Lua state
(calling the corresponding garbage-collection metamethods, if any)
and frees all dynamic memory used by this state.
In several platforms, you may not need to call this function,
because all resources are naturally released when the host program ends.
On the other hand, long-running programs that create multiple states,
such as daemons or web servers,
will probably need to close states as soon as they are not needed.

}

@APIEntry{int lua_compare (lua_State *L, int index1, int index2, int op);|
@apii{0,0,e}

Compares two Lua values.
Returns 1 if the value at index @id{index1} satisfies @id{op}
when compared with the value at index @id{index2},
following the semantics of the corresponding Lua operator
(that
 is, it may call metamethods).
Otherwise @N{returns 0}.
Also @N{returns 0} if any of the indices is not valid.

The value of @id{op} must be one of the following constants:
@description{

@item{@defid{LUA_OPEQ}| compares for equality (@T{==})}
@item{@defid{LUA_OPLT}| compares for less than (@T{<})}
@item{@defid{LUA_OPLE}| compares for less or equal (@T{<=})}

}

}

@APIEntry{void lua_concat (lua_State *L, int n);|

```
@apii{n,1,e}

Concatenates the @id{n} values at the top of the stack,
pops them, and leaves the result at the top.
If @N{@T{n} is 1}, the result is the single value on the stack
(that is, the function does nothing);
if @id{n} is 0, the result is the empty string.
Concatenation is performed following the usual semantics of Lua
@see{concat}.

}

@APIEntry{void lua_copy (lua_State *L, int fromidx, int toidx);|
@apii{0,0,-}

Copies the element at index @id{fromidx}
into the valid index @id{toidx},
replacing the value at that position.
Values at other positions are not affected.

}

@APIEntry{void
 lua_createtable (lua_State *L, int narr, int nrec);|
@apii{0,1,m}

Creates a new empty table and pushes it onto the stack.
Parameter @id{narr} is a hint for how many elements the table
will have as a sequence;
parameter @id{nrec} is a hint for how many other elements
the table will have.
Lua may use these hints to preallocate memory for the new table.
This preallocation is useful for performance when you know in advance
how many elements the table will have.
Otherwise you can use the function @Lid{lua_newtable}.

}

@APIEntry{int lua_dump (lua_State *L,
                lua_Writer writer,
                void *data,
                int strip);|
@apii{0,0,-}

Dumps a function as a binary chunk.
Receives a Lua function on the top of the stack
and produces a binary chunk that,
if loaded again,
```

results in a function equivalent to the one dumped.
As it produces parts of the chunk,
@Lid{lua_dump} calls function @id{writer} @seeC{lua_Writer}
with the
 given @id{data}
to write them.

If @id{strip} is true,
the binary representation may not include all debug information
about the function,
to save space.

The value returned is the error code returned by the last
call to the writer;
@N{0 means} no errors.

This function does not pop the Lua function from the stack.

}

@APIEntry{int lua_error (lua_State *L);|
@apii{1,0,v}

Generates a Lua error,
using the value at the top of the stack as the error object.
This function does a long jump,
and therefore never returns
@seeC{luaL_error}.

}

@APIEntry{int lua_gc (lua_State *L, int what, int data);|
@apii{0,0,m}

Controls the garbage collector.

This function performs several tasks,
according to the value of the parameter @id{what}:
@description{

@item{@id{LUA_GCSTOP}|
stops the garbage collector.
}

@item{@id{LUA_GCRESTART}|
restarts the garbage collector.
}

@item{@id{LUA_GCCOLLECT}|
performs a full garbage-collection cycle.
}

@item{@id{LUA_GCCOUNT}|
returns the current amount of memory
 (in Kbytes) in use by Lua.
}

@item{@id{LUA_GCCOUNTB}|
returns the remainder of dividing the current amount of bytes of
memory in use by Lua by 1024.
}

@item{@id{LUA_GCSTEP}|
performs an incremental step of garbage collection.
}

@item{@id{LUA_GCSETPAUSE}|
sets @id{data} as the new value
for the @emph{pause} of the collector @see{GC}
and returns the previous value of the pause.
}

@item{@id{LUA_GCSETSTEPMUL}|
sets @id{data} as the new value for the @emph{step multiplier} of
the collector @see{GC}
and returns the previous value of the step multiplier.
}

@item{@id{LUA_GCISRUNNING}|
returns a boolean that tells whether the collector is running
(i.e., not stopped).
}

}

For more details about these options,
see @Lid{collectgarbage}.

}

@APIEntry{lua_Alloc lua_getallocf (lua_State *L, void **ud);|
@apii{0,0,-}

Returns the @x{memory-allocation function} of a given state.
If @id{ud} is not @id{NULL}, Lua stores in @T{*ud} the
opaque pointer given when the memory-allocator function was set.

}

@APIEntry{int
 lua_getfield (lua_State *L, int index, const char *k);|
@apii{0,1,e}

Pushes onto the stack the value @T{t[k]},
where @id{t} is the value at the given index.
As in Lua, this function may trigger a metamethod
for the @Q{index} event @see{metatable}.

Returns the type of the pushed value.

}

@APIEntry{void *lua_getextraspace (lua_State *L);|
@apii{0,0,-}

Returns a pointer to a raw memory area associated with the
given Lua state.
The application can use this area for any purpose;
Lua does not use it for anything.

Each new thread has this area initialized with a copy
of the area of the @x{main thread}.

By default, this area has the size of a pointer to void,
but you can recompile Lua with a different size for this area.
(See @id{LUA_EXTRASPACE} in @id{luaconf.h}.)

}

@APIEntry{int lua_getglobal (lua_State *L, const char *name);|
@apii{0,1,e}

Pushes onto the stack the value of the global @id{name}.
Returns the type of that value.

}

@APIEntry{int lua_geti (lua_State
 *L, int index, lua_Integer i);|
@apii{0,1,e}

Pushes onto the stack the value @T{t[i]},
where @id{t} is the value at the given index.
As in Lua, this function may trigger a metamethod

for the @Q{index} event @see{metatable}.

Returns the type of the pushed value.

}

@APIEntry{int lua_getmetatable (lua_State *L, int index);|
@apii{0,0|1,-}

If the value at the given index has a metatable,
the function pushes that metatable onto the stack and @N{returns 1}.
Otherwise,
the function @N{returns 0} and pushes nothing on the stack.

}

@APIEntry{int lua_gettable (lua_State *L, int index);|
@apii{1,1,e}

Pushes onto the stack the value @T{t[k]},
where @id{t} is the value at the given index
and @id{k} is the value at the top of the stack.

This function pops the key from the stack,
pushing the resulting value in its place.
As in Lua, this function may trigger a metamethod
for the @Q{index} event @see{metatable}.

Returns the type of the pushed value.

}

@APIEntry{int lua_gettop (lua_State
 *L);|
@apii{0,0,-}

Returns the index of the top element in the stack.
Because indices start @N{at 1},
this result is equal to the number of elements in the stack;
in particular, @N{0 means} an empty stack.

}

@APIEntry{int lua_getuservalue (lua_State *L, int index);|
@apii{0,1,-}

Pushes onto the stack the Lua value associated with the full userdata
at the given index.

Returns the type of the pushed value.

}

@APIEntry{void lua_insert (lua_State *L, int index);|
@apii{1,1,-}

Moves the top element into the given valid index,
shifting up the elements above this index to open space.
This function cannot be called with a pseudo-index,
because a pseudo-index is not an actual stack position.

}

@APIEntry{typedef @ldots lua_Integer;|

The type of integers in Lua.

By default this type is @id{long long},
(usually a 64-bit two-complement integer),
but that can be changed to @id{long} or @id{int}
(usually a 32-bit two-complement integer).
(See @id{LUA_INT_TYPE} in @id{luaconf.h}.)

Lua also
 defines the constants
@defid{LUA_MININTEGER} and @defid{LUA_MAXINTEGER},
with the minimum and the maximum values that fit in this type.

}

@APIEntry{int lua_isboolean (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a boolean,
and @N{0 otherwise}.

}

@APIEntry{int lua_iscfunction (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a @N{C function},
and @N{0 otherwise}.

}

@APIEntry{int lua_isfunction (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a function
(either C or Lua), and @N{0 otherwise}.

}

@APIEntry{int lua_isinteger (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is an integer
(that is, the value is a number and is represented as an integer),
and @N{0 otherwise}.

}

@APIEntry{int lua_islightuserdata (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a light userdata,
and @N{0 otherwise}.

}

@APIEntry{int
 lua_isnil (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is @nil,
and @N{0 otherwise}.

}

@APIEntry{int lua_isnone (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the given index is not valid,
and @N{0 otherwise}.

}

@APIEntry{int lua_isnoneornil (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the given index is not valid
or if the value at this index is @nil,
and @N{0 otherwise}.

}

@APIEntry{int lua_isnumber (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a number
or a string convertible to a number,
and @N{0 otherwise}.

}

@APIEntry{int lua_isstring (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a string
or a number (which is always convertible to a string),
and @N{0 otherwise}.

}

@APIEntry{int lua_istable (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a table,
and @N{0 otherwise}.

}

@APIEntry{int
 lua_isthread (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a thread,
and @N{0 otherwise}.

}

@APIEntry{int lua_isuserdata (lua_State *L, int index);|
@apii{0,0,-}

Returns 1 if the value at the given index is a userdata
(either full or light), and @N{0 otherwise}.

}

@APIEntry{int lua_isyieldable (lua_State *L);|
@apii{0,0,-}

```
Returns 1 if the given coroutine can yield,
and @N{0 otherwise}.

}

@APIEntry{typedef @ldots lua_KContext;|

The type for continuation-function contexts.
It must be a numeric type.
This type is defined as @id{intptr_t}
when @id{intptr_t} is available,
so that it can store pointers too.
Otherwise, it is defined as @id{ptrdiff_t}.

}

@APIEntry{
typedef int (*lua_KFunction) (lua_State *L, int status, lua_KContext ctx);|

Type for continuation functions @see{continuations}.

}

@APIEntry{void lua_len (lua_State *L, int index);|
@apii{0,1,e}

Returns the length of the value at the given index.
It is equivalent to
 the @Char{#} operator in Lua @see{len-op} and
may trigger a metamethod for the @Q{length} event @see{metatable}.
The result is pushed on the stack.

}

@APIEntry{
int lua_load (lua_State *L,
        lua_Reader reader,
        void *data,
        const char *chunkname,
        const char *mode);|
@apii{0,1,-}

Loads a Lua chunk without running it.
If there are no errors,
@id{lua_load} pushes the compiled chunk as a Lua
function on top of the stack.
Otherwise, it pushes an error message.
```

The return values of @id{lua_load} are:
@description{

@item{@Lid{LUA_OK}| no errors;}

@item{@defid{LUA_ERRSYNTAX}|
syntax error during precompilation;}

@item{@Lid{LUA_ERRMEM}|
@x{memory allocation (out-of-memory) error};}

@item{@Lid{LUA_ERRGCMM}|
error while running a @idx{__gc} metamethod.
(This error has no relation with the chunk being loaded.
It is generated by the garbage collector.)
}

}

The @id{lua_load} function uses a user-supplied @id{reader} function
to read the
chunk @seeC{lua_Reader}.
The @id{data} argument is an opaque value passed to the reader function.

The @id{chunkname} argument gives a name to the chunk,
which is used for error messages and in debug information @see{debugI}.

@id{lua_load} automatically detects whether the chunk is text or binary
and loads it accordingly (see program @idx{luac}).
The string @id{mode} works as in function @Lid{load},
with the addition that
a @id{NULL} value is equivalent to the string @St{bt}.

@id{lua_load} uses the stack internally,
so the reader function must always leave the stack
unmodified when returning.

If the resulting function has upvalues,
its first upvalue is set to the value of the @x{global environment}
stored at index @id{LUA_RIDX_GLOBALS} in the registry @see{registry}.
When loading main chunks,
this upvalue will be the @id{_ENV} variable @see{globalenv}.
Other upvalues are initialized with @nil.

}

@APIEntry{lua_State *lua_newstate (lua_Alloc f, void *ud);|

@apii{0,0,-}

Creates a new
 thread running in a new, independent state.
Returns @id{NULL} if it cannot create the thread or the state
(due to lack of memory).
The argument @id{f} is the @x{allocator function};
Lua does all memory allocation for this state
through this function @seeF{lua_Alloc}.
The second argument, @id{ud}, is an opaque pointer that Lua
passes to the allocator in every call.

}

@APIEntry{void lua_newtable (lua_State *L);|
@apii{0,1,m}

Creates a new empty table and pushes it onto the stack.
It is equivalent to @T{lua_createtable(L, 0, 0)}.

}

@APIEntry{lua_State *lua_newthread (lua_State *L);|
@apii{0,1,m}

Creates a new thread, pushes it on the stack,
and returns a pointer to a @Lid{lua_State} that represents this new thread.
The new thread returned by this function shares with the original thread
its global environment,
but has an independent execution stack.

There is no explicit function to close or to destroy a thread.
Threads are subject to garbage collection,
like any Lua object.

}

@APIEntry{void
 *lua_newuserdata (lua_State *L, size_t size);|
@apii{0,1,m}

This function allocates a new block of memory with the given size,
pushes onto the stack a new full userdata with the block address,
and returns this address.
The host program can freely use this memory.

}

@APIEntry{int lua_next (lua_State *L, int index);|
@apii{1,2|0,e}

Pops a key from the stack,
and pushes a key@En{}value pair from the table at the given index
(the @Q{next} pair after the given key).
If there are no more elements in the table,
then @Lid{lua_next} returns 0 (and pushes nothing).

A typical traversal looks like this:
@verbatim{
/* table is in the stack at index 't' */
lua_pushnil(L); /* first key */
while (lua_next(L, t) != 0) {
 /* uses 'key' (at index -2) and 'value' (at index -1) */
 printf("%s - %s\n",
        lua_typename(L, lua_type(L, -2)),
        lua_typename(L, lua_type(L, -1)));
 /* removes 'value'; keeps 'key' for next iteration */
 lua_pop(L, 1);
}
}

While traversing a table,
do
 not call @Lid{lua_tolstring} directly on a key,
unless you know that the key is actually a string.
Recall that @Lid{lua_tolstring} may change
the value at the given index;
this confuses the next call to @Lid{lua_next}.

See function @Lid{next} for the caveats of modifying
the table during its traversal.

}

@APIEntry{typedef @ldots lua_Number;|

The type of floats in Lua.

By default this type is double,
but that can be changed to a single float or a long double.
(See @id{LUA_FLOAT_TYPE} in @id{luaconf.h}.)

}

@APIEntry{int lua_numbertointeger (lua_Number n, lua_Integer *p);|

Converts a Lua float to a Lua integer.
This macro assumes that @id{n} has an integral value.
If that value is within the range of Lua integers,
it is converted to an integer and assigned to @T{*p}.
The macro results in a boolean indicating whether the
conversion was successful.
(Note that this range test can be tricky to do
correctly without this macro,
due to roundings.)

This macro may evaluate its arguments
more than once.

}

@APIEntry{int lua_pcall (lua_State *L, int nargs, int nresults, int msgh);|
@apii{nargs + 1,nresults|1,-}

Calls a function in protected mode.

Both @id{nargs} and @id{nresults} have the same meaning as
in @Lid{lua_call}.
If there are no errors during the call,
@Lid{lua_pcall} behaves exactly like @Lid{lua_call}.
However, if there is any error,
@Lid{lua_pcall} catches it,
pushes a single value on the stack (the error object),
and returns an error code.
Like @Lid{lua_call},
@Lid{lua_pcall} always removes the function
and its arguments from the stack.

If @id{msgh} is 0,
then the error object returned on the stack
is exactly the original error object.
Otherwise, @id{msgh} is the stack index of a
@emph{message handler}.
(This index cannot be a pseudo-index.)
In case of runtime errors,
this function will be called with the error object
and its return value will be the object
returned on the stack by @Lid{lua_pcall}.

Typically, the message handler is used to add
more debug
information to the error object, such as a stack traceback.
Such information cannot be gathered after the return of @Lid{lua_pcall},
since by then the stack has unwound.

```
The @Lid{lua_pcall} function returns one of the following constants
(defined in @id{lua.h}):
@description{

@item{@defid{LUA_OK} (0)|
success.}

@item{@defid{LUA_ERRRUN}|
a runtime error.
}

@item{@defid{LUA_ERRMEM}|
@x{memory allocation error}.
For such errors, Lua does not call the @x{message handler}.
}

@item{@defid{LUA_ERRERR}|
error while running the @x{message handler}.
}

@item{@defid{LUA_ERRGCMM}|
error while running a @idx{__gc} metamethod.
For such errors, Lua does not call the @x{message handler}
(as this kind of error typically has no relation
with the function being called).
}

}

}

@APIEntry{
int lua_pcallk (lua_State *L,
            int nargs,
            int nresults,
            int msgh,
            lua_KContext ctx,
            lua_KFunction k);|
@apii{nargs + 1,nresults|1,-}

This
 function behaves exactly like @Lid{lua_pcall},
but allows the called function to yield @see{continuations}.

}

@APIEntry{void lua_pop (lua_State *L, int n);|
```

@apii{n,0,-}

Pops @id{n} elements from the stack.

}

@APIEntry{void lua_pushboolean (lua_State *L, int b);|
@apii{0,1,-}

Pushes a boolean value with value @id{b} onto the stack.

}

@APIEntry{void lua_pushcclosure (lua_State *L, lua_CFunction fn, int n);|
@apii{n,1,m}

Pushes a new @N{C closure} onto the stack.

When a @N{C function} is created,
it is possible to associate some values with it,
thus creating a @x{@N{C closure}} @see{c-closure};
these values are then accessible to the function whenever it is called.
To associate values with a @N{C function},
first these values must be pushed onto the stack
(when there are multiple values, the first value is pushed first).
Then @Lid{lua_pushcclosure}
is called to create and push the @N{C function} onto the stack,
with the argument @id{n} telling how many values will
be
associated with the function.
@Lid{lua_pushcclosure} also pops these values from the stack.

The maximum value for @id{n} is 255.

When @id{n} is zero,
this function creates a @def{light @N{C function}},
which is just a pointer to the @N{C function}.
In that case, it never raises a memory error.

}

@APIEntry{void lua_pushcfunction (lua_State *L, lua_CFunction f);|
@apii{0,1,-}

Pushes a @N{C function} onto the stack.
This function receives a pointer to a @N{C function}
and pushes onto the stack a Lua value of type @id{function} that,
when called, invokes the corresponding @N{C function}.

Any function to be callable by Lua must
follow the correct protocol to receive its parameters
and return its results @seeC{lua_CFunction}.

}

@APIEntry{const char *lua_pushfstring (lua_State *L, const char *fmt, ...);|
@apii{0,1,e}

Pushes onto the stack a formatted string
and returns a pointer to this string.
It is similar to the @ANSI{sprintf},
but has some important differences:
@itemize{

@item{
You
 do not have to allocate space for the result:
the result is a Lua string and Lua takes care of memory allocation
(and deallocation, through garbage collection).
}

@item{
The conversion specifiers are quite restricted.
There are no flags, widths, or precisions.
The conversion specifiers can only be
@Char{%%} (inserts the character @Char{%}),
@Char{%s} (inserts a zero-terminated string, with no size restrictions),
@Char{%f} (inserts a @Lid{lua_Number}),
@Char{%I} (inserts a @Lid{lua_Integer}),
@Char{%p} (inserts a pointer as a hexadecimal numeral),
@Char{%d} (inserts an @T{int}),
@Char{%c} (inserts an @T{int} as a one-byte character), and
@Char{%U} (inserts a @T{long int} as a @x{UTF-8} byte sequence).
}

}

Unlike other push functions,
this function checks for the stack space it needs,
including the slot for its result.

}

@APIEntry{void lua_pushglobaltable (lua_State *L);|
@apii{0,1,-}

Pushes the @x{global environment} onto the stack.

}

@APIEntry{void lua_pushinteger (lua_State
 *L, lua_Integer n);|
@apii{0,1,-}

Pushes an integer with value @id{n} onto the stack.

}

@APIEntry{void lua_pushlightuserdata (lua_State *L, void *p);|
@apii{0,1,-}

Pushes a light userdata onto the stack.

Userdata represent @N{C values} in Lua.
A @def{light userdata} represents a pointer, a @T{void*}.
It is a value (like a number):
you do not create it, it has no individual metatable,
and it is not collected (as it was never created).
A light userdata is equal to @Q{any}
light userdata with the same @N{C address}.

}

@APIEntry{const char *lua_pushliteral (lua_State *L, const char *s);|
@apii{0,1,m}

This macro is equivalent to @Lid{lua_pushstring},
but should be used only when @id{s} is a literal string.

}

@APIEntry{const char *lua_pushlstring (lua_State *L, const char *s, size_t len);|
@apii{0,1,m}

Pushes the string pointed to by @id{s} with size @id{len}
onto the stack.
Lua makes (or reuses) an internal copy of the given string,
so the memory at @id{s} can be freed
 or reused immediately after
the function returns.
The string can contain any binary data,
including @x{embedded zeros}.

Returns a pointer to the internal copy of the string.

}

@APIEntry{void lua_pushnil (lua_State *L);|
@apii{0,1,-}

Pushes a nil value onto the stack.

}

@APIEntry{void lua_pushnumber (lua_State *L, lua_Number n);|
@apii{0,1,-}

Pushes a float with value @id{n} onto the stack.

}

@APIEntry{const char *lua_pushstring (lua_State *L, const char *s);|
@apii{0,1,m}

Pushes the zero-terminated string pointed to by @id{s}
onto the stack.
Lua makes (or reuses) an internal copy of the given string,
so the memory at @id{s} can be freed or reused immediately after
the function returns.

Returns a pointer to the internal copy of the string.

If @id{s} is @id{NULL}, pushes @nil and returns @id{NULL}.

}

@APIEntry{int lua_pushthread (lua_State *L);|
@apii{0,1,-}

Pushes the thread represented by @id{L} onto the stack.
Returns 1 if this thread is the @x{main thread} of its state.

}

@APIEntry{void
 lua_pushvalue (lua_State *L, int index);|
@apii{0,1,-}

Pushes a copy of the element at the given index
onto the stack.

}

```
@APIEntry{
const char *lua_pushvfstring (lua_State *L,
                              const char *fmt,
                              va_list argp);|
@apii{0,1,m}

Equivalent to @Lid{lua_pushfstring}, except that it receives a @id{va_list}
instead of a variable number of arguments.

}

@APIEntry{int lua_rawequal (lua_State *L, int index1, int index2);|
@apii{0,0,-}

Returns 1 if the two values in indices @id{index1} and
@id{index2} are primitively equal
(that is, without calling the @idx{__eq} metamethod).
Otherwise @N{returns 0}.
Also @N{returns 0} if any of the indices are not valid.

}

@APIEntry{int lua_rawget (lua_State *L, int index);|
@apii{1,1,-}

Similar to @Lid{lua_gettable}, but does a raw access
(i.e., without metamethods).

}

@APIEntry{int lua_rawgeti (lua_State *L, int index, lua_Integer n);|
@apii{0,1,-}

Pushes onto the stack the
 value @T{t[n]},
where @id{t} is the table at the given index.
The access is raw,
that is, it does not invoke the @idx{__index} metamethod.

Returns the type of the pushed value.

}

@APIEntry{int lua_rawgetp (lua_State *L, int index, const void *p);|
@apii{0,1,-}

Pushes onto the stack the value @T{t[k]},
```

where @id{t} is the table at the given index and
@id{k} is the pointer @id{p} represented as a light userdata.
The access is raw;
that is, it does not invoke the @idx{__index} metamethod.

Returns the type of the pushed value.

}

@APIEntry{size_t lua_rawlen (lua_State *L, int index);|
@apii{0,0,-}

Returns the raw @Q{length} of the value at the given index:
for strings, this is the string length;
for tables, this is the result of the length operator (@Char{#})
with no metamethods;
for userdata, this is the size of the block of memory allocated
for the userdata;
for other values, it @N{is 0}.

}

@APIEntry{void lua_rawset (lua_State *L, int index);|
@apii{2,0,m}

Similar to @Lid{lua_settable},
 but does a raw assignment
(i.e., without metamethods).

}

@APIEntry{void lua_rawseti (lua_State *L, int index, lua_Integer i);|
@apii{1,0,m}

Does the equivalent of @T{t[i] = v},
where @id{t} is the table at the given index
and @id{v} is the value at the top of the stack.

This function pops the value from the stack.
The assignment is raw,
that is, it does not invoke the @idx{__newindex} metamethod.

}

@APIEntry{void lua_rawsetp (lua_State *L, int index, const void *p);|
@apii{1,0,m}

Does the equivalent of @T{t[p] = v},

where @id{t} is the table at the given index,
@id{p} is encoded as a light userdata,
and @id{v} is the value at the top of the stack.

This function pops the value from the stack.
The assignment is raw,
that is, it does not invoke @idx{__newindex} metamethod.

}

@APIEntry{
typedef const char * (*lua_Reader) (lua_State *L,
                void *data,
                size_t *size);|

The reader function used by @Lid{lua_load}.
Every
 time it needs another piece of the chunk,
@Lid{lua_load} calls the reader,
passing along its @id{data} parameter.
The reader must return a pointer to a block of memory
with a new piece of the chunk
and set @id{size} to the block size.
The block must exist until the reader function is called again.
To signal the end of the chunk,
the reader must return @id{NULL} or set @id{size} to zero.
The reader function may return pieces of any size greater than zero.

}

@APIEntry{void lua_register (lua_State *L, const char *name, lua_CFunction f);|
@apii{0,0,e}

Sets the @N{C function} @id{f} as the new value of global @id{name}.
It is defined as a macro:
@verbatim{
#define lua_register(L,n,f) \
    (lua_pushcfunction(L, f), lua_setglobal(L, n))
}

}

@APIEntry{void lua_remove (lua_State *L, int index);|
@apii{1,0,-}

Removes the element at the given valid index,
shifting down the elements above this index to fill the gap.
This function cannot be called with a pseudo-index,

because
 a pseudo-index is not an actual stack position.

}

@APIEntry{void lua_replace (lua_State *L, int index);|
@apii{1,0,-}

Moves the top element into the given valid index
without shifting any element
(therefore replacing the value at that given index),
and then pops the top element.

}

@APIEntry{int lua_resume (lua_State *L, lua_State *from, int nargs);|
@apii{?,?,-}

Starts and resumes a coroutine in the given thread @id{L}.

To start a coroutine,
you push onto the thread stack the main function plus any arguments;
then you call @Lid{lua_resume},
with @id{nargs} being the number of arguments.
This call returns when the coroutine suspends or finishes its execution.
When it returns, the stack contains all values passed to @Lid{lua_yield},
or all values returned by the body function.
@Lid{lua_resume} returns
@Lid{LUA_YIELD} if the coroutine yields,
@Lid{LUA_OK} if the coroutine finishes its execution
without errors,
or an error code in case of errors @seeC{lua_pcall}.

In case of errors,
the
 stack is not unwound,
so you can use the debug API over it.
The error object is on the top of the stack.

To resume a coroutine,
you remove any results from the last @Lid{lua_yield},
put on its stack only the values to
be passed as results from @id{yield},
and then call @Lid{lua_resume}.

The parameter @id{from} represents the coroutine that is resuming @id{L}.
If there is no such coroutine,
this parameter can be @id{NULL}.

}

@APIEntry{void lua_rotate (lua_State *L, int idx, int n);|
@apii{0,0,-}

Rotates the stack elements between the valid index @id{idx}
and the top of the stack.
The elements are rotated @id{n} positions in the direction of the top,
for a positive @id{n},
or @T{-n} positions in the direction of the bottom,
for a negative @id{n}.
The absolute value of @id{n} must not be greater than the size
of the slice being rotated.
This function cannot be called with a pseudo-index,
because a pseudo-index is not an actual stack position.

}

@APIEntry{void lua_setallocf
 (lua_State *L, lua_Alloc f, void *ud);|
@apii{0,0,-}

Changes the @x{allocator function} of a given state to @id{f}
with user data @id{ud}.

}

@APIEntry{void lua_setfield (lua_State *L, int index, const char *k);|
@apii{1,0,e}

Does the equivalent to @T{t[k] = v},
where @id{t} is the value at the given index
and @id{v} is the value at the top of the stack.

This function pops the value from the stack.
As in Lua, this function may trigger a metamethod
for the @Q{newindex} event @see{metatable}.

}

@APIEntry{void lua_setglobal (lua_State *L, const char *name);|
@apii{1,0,e}

Pops a value from the stack and
sets it as the new value of global @id{name}.

}

@APIEntry{void lua_seti (lua_State *L, int index, lua_Integer n);|
@apii{1,0,e}

Does the equivalent to @T{t[n] = v},
where @id{t} is the value at the given index
and @id{v} is the value at the top of the stack.

This function pops the value from the stack.
As in Lua, this function may trigger a metamethod
for the @Q{newindex} event
 @see{metatable}.

}

@APIEntry{void lua_setmetatable (lua_State *L, int index);|
@apii{1,0,-}

Pops a table from the stack and
sets it as the new metatable for the value at the given index.

}

@APIEntry{void lua_settable (lua_State *L, int index);|
@apii{2,0,e}

Does the equivalent to @T{t[k] = v},
where @id{t} is the value at the given index,
@id{v} is the value at the top of the stack,
and @id{k} is the value just below the top.

This function pops both the key and the value from the stack.
As in Lua, this function may trigger a metamethod
for the @Q{newindex} event @see{metatable}.

}

@APIEntry{void lua_settop (lua_State *L, int index);|
@apii{?,?,-}

Accepts any index, @N{or 0},
and sets the stack top to this index.
If the new top is larger than the old one,
then the new elements are filled with @nil.
If @id{index} @N{is 0}, then all stack elements are removed.

}

@APIEntry{void lua_setuservalue (lua_State *L, int index);|
@apii{1,0,-}

Pops a value from the stack and sets it as
the
 new value associated to the full userdata at the given index.

}

@APIEntry{typedef struct lua_State lua_State;|

An opaque structure that points to a thread and indirectly
(through the thread) to the whole state of a Lua interpreter.
The Lua library is fully reentrant:
it has no global variables.
All information about a state is accessible through this structure.

A pointer to this structure must be passed as the first argument to
every function in the library, except to @Lid{lua_newstate},
which creates a Lua state from scratch.

}

@APIEntry{int lua_status (lua_State *L);|
@apii{0,0,-}

Returns the status of the thread @id{L}.

The status can be 0 (@Lid{LUA_OK}) for a normal thread,
an error code if the thread finished the execution
of a @Lid{lua_resume} with an error,
or @defid{LUA_YIELD} if the thread is suspended.

You can only call functions in threads with status @Lid{LUA_OK}.
You can resume threads with status @Lid{LUA_OK}
(to start a new coroutine) or @Lid{LUA_YIELD}
(to
 resume a coroutine).

}

@APIEntry{size_t lua_stringtonumber (lua_State *L, const char *s);|
@apii{0,1,-}

Converts the zero-terminated string @id{s} to a number,
pushes that number into the stack,
and returns the total size of the string,
that is, its length plus one.

The conversion can result in an integer or a float,
according to the lexical conventions of Lua @see{lexical}.
The string may have leading and trailing spaces and a sign.
If the string is not a valid numeral,
returns 0 and pushes nothing.
(Note that the result can be used as a boolean,
true if the conversion succeeds.)

}

@APIEntry{int lua_toboolean (lua_State *L, int index);|
@apii{0,0,-}

Converts the Lua value at the given index to a @N{C boolean}
value (@N{0 or 1}).
Like all tests in Lua,
@Lid{lua_toboolean} returns true for any Lua value
different from @false and @nil;
otherwise it returns false.
(If you want to accept only actual boolean values,
use @Lid{lua_isboolean} to test the value's type.)

}

@APIEntry{lua_CFunction
 lua_tocfunction (lua_State *L, int index);|
@apii{0,0,-}

Converts a value at the given index to a @N{C function}.
That value must be a @N{C function};
otherwise, returns @id{NULL}.

}

@APIEntry{lua_Integer lua_tointeger (lua_State *L, int index);|
@apii{0,0,-}

Equivalent to @Lid{lua_tointegerx} with @id{isnum} equal to @id{NULL}.

}

@APIEntry{lua_Integer lua_tointegerx (lua_State *L, int index, int *isnum);|
@apii{0,0,-}

Converts the Lua value at the given index
to the signed integral type @Lid{lua_Integer}.
The Lua value must be an integer,
or a number or string convertible to an integer @see{coercion};

otherwise, @id{lua_tointegerx} @N{returns 0}.

If @id{isnum} is not @id{NULL},
its referent is assigned a boolean value that
indicates whether the operation succeeded.

}

@APIEntry{const char *lua_tolstring (lua_State *L, int index, size_t *len);|
@apii{0,0,m}

Converts the Lua value at the given index to a @N{C string}.
If @id{len} is not @id{NULL},
it sets @T{*len}
 with the string length.
The Lua value must be a string or a number;
otherwise, the function returns @id{NULL}.
If the value is a number,
then @id{lua_tolstring} also
@emph{changes the actual value in the stack to a string}.
(This change confuses @Lid{lua_next}
when @id{lua_tolstring} is applied to keys during a table traversal.)

@id{lua_tolstring} returns a pointer
to a string inside the Lua state.
This string always has a zero (@Char{\0})
after its last character (as @N{in C}),
but can contain other zeros in its body.

Because Lua has garbage collection,
there is no guarantee that the pointer returned by @id{lua_tolstring}
will be valid after the corresponding Lua value is removed from the stack.

}

@APIEntry{lua_Number lua_tonumber (lua_State *L, int index);|
@apii{0,0,-}

Equivalent to @Lid{lua_tonumberx} with @id{isnum} equal to @id{NULL}.

}

@APIEntry{lua_Number lua_tonumberx (lua_State *L, int index, int *isnum);|
@apii{0,0,-}

Converts the Lua value at the given index
to the

@N{C type} @Lid{lua_Number} @seeC{lua_Number}.
The Lua value must be a number or a string convertible to a number
@see{coercion};
otherwise, @Lid{lua_tonumberx} @N{returns 0}.

If @id{isnum} is not @id{NULL},
its referent is assigned a boolean value that
indicates whether the operation succeeded.

}

@APIEntry{const void *lua_topointer (lua_State *L, int index);|
@apii{0,0,-}

Converts the value at the given index to a generic
@N{C pointer} (@T{void*}).
The value can be a userdata, a table, a thread, or a function;
otherwise, @id{lua_topointer} returns @id{NULL}.
Different objects will give different pointers.
There is no way to convert the pointer back to its original value.

Typically this function is used only for hashing and debug information.

}

@APIEntry{const char *lua_tostring (lua_State *L, int index);|
@apii{0,0,m}

Equivalent to @Lid{lua_tolstring} with @id{len} equal to @id{NULL}.

}

@APIEntry{lua_State *lua_tothread (lua_State *L, int index);|
@apii{0,0,-}

Converts the
value at the given index to a Lua thread
(represented as @T{lua_State*}).
This value must be a thread;
otherwise, the function returns @id{NULL}.

}

@APIEntry{void *lua_touserdata (lua_State *L, int index);|
@apii{0,0,-}

If the value at the given index is a full userdata,
returns its block address.

If the value is a light userdata,
returns its pointer.
Otherwise, returns @id{NULL}.

}

@APIEntry{int lua_type (lua_State *L, int index);|
@apii{0,0,-}

Returns the type of the value in the given valid index,
or @id{LUA_TNONE} for a non-valid (but acceptable) index.
The types returned by @Lid{lua_type} are coded by the following constants
defined in @id{lua.h}:
@defid{LUA_TNIL} (0),
@defid{LUA_TNUMBER},
@defid{LUA_TBOOLEAN},
@defid{LUA_TSTRING},
@defid{LUA_TTABLE},
@defid{LUA_TFUNCTION},
@defid{LUA_TUSERDATA},
@defid{LUA_TTHREAD},
and
@defid{LUA_TLIGHTUSERDATA}.

}

@APIEntry{const char *lua_typename (lua_State *L, int tp);|
@apii{0,0,-}

Returns the name of the type encoded by the value
@id{tp},
which must be one the values returned by @Lid{lua_type}.

}

@APIEntry{typedef @ldots lua_Unsigned;|

The unsigned version of @Lid{lua_Integer}.

}

@APIEntry{int lua_upvalueindex (int i);|
@apii{0,0,-}

Returns the pseudo-index that represents the @id{i}-th upvalue of
the running function @see{c-closure}.

}

```
@APIEntry{const lua_Number *lua_version (lua_State *L);|
@apii{0,0,-}

Returns the address of the version number
(a C static variable)
stored in the Lua core.
When called with a valid @Lid{lua_State},
returns the address of the version used to create that state.
When called with @id{NULL},
returns the address of the version running the call.

}

@APIEntry{
typedef int (*lua_Writer) (lua_State *L,
                    const void* p,
                    size_t sz,
                    void* ud);|

The type of the writer function used by @Lid{lua_dump}.
Every time it produces another piece of chunk,
@Lid{lua_dump} calls the writer,
passing along the buffer
 to be written (@id{p}),
its size (@id{sz}),
and the @id{data} parameter supplied to @Lid{lua_dump}.

The writer returns an error code:
@N{0 means} no errors;
any other value means an error and stops @Lid{lua_dump} from
calling the writer again.

}

@APIEntry{void lua_xmove (lua_State *from, lua_State *to, int n);|
@apii{?,?,-}

Exchange values between different threads of the same state.

This function pops @id{n} values from the stack @id{from},
and pushes them onto the stack @id{to}.

}

@APIEntry{int lua_yield (lua_State *L, int nresults);|
@apii{?,?,e}
```

This function is equivalent to @Lid{lua_yieldk},
but it has no continuation @see{continuations}.
Therefore, when the thread resumes,
it continues the function that called
the function calling @id{lua_yield}.

}

@APIEntry{
int lua_yieldk (lua_State *L,
int nresults,
lua_KContext ctx,
lua_KFunction k);|
@apii{?,?,e}

Yields a coroutine (thread).

When a @N{C function} calls @Lid{lua_yieldk},
the
running coroutine suspends its execution,
and the call to @Lid{lua_resume} that started this coroutine returns.
The parameter @id{nresults} is the number of values from the stack
that will be passed as results to @Lid{lua_resume}.

When the coroutine is resumed again,
Lua calls the given @x{continuation function} @id{k} to continue
the execution of the @N{C function} that yielded @see{continuations}.
This continuation function receives the same stack
from the previous function,
with the @id{n} results removed and
replaced by the arguments passed to @Lid{lua_resume}.
Moreover,
the continuation function receives the value @id{ctx}
that was passed to @Lid{lua_yieldk}.

Usually, this function does not return;
when the coroutine eventually resumes,
it continues executing the continuation function.
However, there is one special case,
which is when this function is called
from inside a line or a count hook @see{debugI}.
In that case, @id{lua_yieldk} should be called with no continuation
(probably
in the form of @Lid{lua_yield}) and no results,
and the hook should return immediately after the call.
Lua will yield and,
when the coroutine resumes again,

it will continue the normal execution
of the (Lua) function that triggered the hook.

This function can raise an error if it is called from a thread
with a pending C call with no continuation function,
or it is called from a thread that is not running inside a resume
(e.g., the main thread).

}

}

@sect2{debugI| @title{The Debug Interface}

Lua has no built-in debugging facilities.
Instead, it offers a special interface
by means of functions and @emph{hooks}.
This interface allows the construction of different
kinds of debuggers, profilers, and other tools
that need @Q{inside information} from the interpreter.

```
@APIEntry{
typedef struct lua_Debug {
 int event;
 const char *name;          /* (n) */
 const char *namewhat;      /* (n) */
 const char *what;          /* (S) */
 const char *source;        /*
 (S) */
 int currentline;           /* (l) */
 int linedefined;           /* (S) */
 int lastlinedefined;       /* (S) */
 unsigned char nups;        /* (u) number of upvalues */
 unsigned char nparams;     /* (u) number of parameters */
 char isvararg;             /* (u) */
 char istailcall;           /* (t) */
 char short_src[LUA_IDSIZE]; /* (S) */
 /* private part */
 @rep{other fields}
} lua_Debug;
|
```

A structure used to carry different pieces of
information about a function or an activation record.
@Lid{lua_getstack} fills only the private part
of this structure, for later use.
To fill the other fields of @Lid{lua_Debug} with useful information,

call @Lid{lua_getinfo}.

The fields of @Lid{lua_Debug} have the following meaning:
@description{

@item{@id{source}|
the name of the chunk that created the function.
If @T{source} starts with a @Char{@At},
it means that the function was defined in a file where
the file name follows the @Char{@At}.
If @T{source} starts with
 a @Char{=},
the remainder of its contents describe the source in a user-dependent manner.
Otherwise,
the function was defined in a string where
@T{source} is that string.
}

@item{@id{short_src}|
a @Q{printable} version of @T{source}, to be used in error messages.
}

@item{@id{linedefined}|
the line number where the definition of the function starts.
}

@item{@id{lastlinedefined}|
the line number where the definition of the function ends.
}

@item{@id{what}|
the string @T{"Lua"} if the function is a Lua function,
@T{"C"} if it is a @N{C function},
@T{"main"} if it is the main part of a chunk.
}

@item{@id{currentline}|
the current line where the given function is executing.
When no line information is available,
@T{currentline} is set to @num{-1}.
}

@item{@id{name}|
a reasonable name for the given function.
Because functions in Lua are first-class values,
they do not have a fixed name:
some functions can be the value of multiple global variables,
while others can be stored only in a table

field.
The @T{lua_getinfo} function checks how the function was
called to find a suitable name.
If it cannot find a name,
then @id{name} is set to @id{NULL}.
}

@item{@id{namewhat}|
explains the @T{name} field.
The value of @T{namewhat} can be
@T{"global"}, @T{"local"}, @T{"method"},
@T{"field"}, @T{"upvalue"}, or @T{""} (the empty string),
according to how the function was called.
(Lua uses the empty string when no other option seems to apply.)
}

@item{@id{istailcall}|
true if this function invocation was called by a tail call.
In this case, the caller of this level is not in the stack.
}

@item{@id{nups}|
the number of upvalues of the function.
}

@item{@id{nparams}|
the number of fixed parameters of the function
(always @N{0 for} @N{C functions}).
}

@item{@id{isvararg}|
true if the function is a vararg function
(always true for @N{C functions}).
}

}

}

@APIEntry{lua_Hook lua_gethook (lua_State *L);|
@apii{0,0,-}

Returns the current hook function.

}

@APIEntry{int lua_gethookcount

(lua_State *L);|
@apii{0,0,-}

Returns the current hook count.

}

@APIEntry{int lua_gethookmask (lua_State *L);|
@apii{0,0,-}

Returns the current hook mask.

}

@APIEntry{int lua_getinfo (lua_State *L, const char *what, lua_Debug *ar);|
@apii{0|1,0|1|2,e}

Gets information about a specific function or function invocation.

To get information about a function invocation,
the parameter @id{ar} must be a valid activation record that was
filled by a previous call to @Lid{lua_getstack} or
given as argument to a hook @seeC{lua_Hook}.

To get information about a function, you push it onto the stack
and start the @id{what} string with the character @Char{>}.
(In that case,
@id{lua_getinfo} pops the function from the top of the stack.)
For instance, to know in which line a function @id{f} was defined,
you can write the following code:
@verbatim{
lua_Debug ar;
lua_getglobal(L, "f"); /* get global 'f' */
lua_getinfo(L, ">S", &ar);
printf("%d\n", ar.linedefined);
}

Each character in the
string @id{what}
selects some fields of the structure @id{ar} to be filled or
a value to be pushed on the stack:
@description{

@item{@Char{n}| fills in the field @id{name} and @id{namewhat};
}

@item{@Char{S}|
fills in the fields @id{source}, @id{short_src},

@id{linedefined}, @id{lastlinedefined}, and @id{what};
}

@item{@Char{l}| fills in the field @id{currentline};
}

@item{@Char{t}| fills in the field @id{istailcall};
}

@item{@Char{u}| fills in the fields
@id{nups}, @id{nparams}, and @id{isvararg};
}

@item{@Char{f}|
pushes onto the stack the function that is
running at the given level;
}

@item{@Char{L}|
pushes onto the stack a table whose indices are the
numbers of the lines that are valid on the function.
(A @emph{valid line} is a line with some associated code,
that is, a line where you can put a break point.
Non-valid lines include empty lines and comments.)

If this option is given together with option @Char{f},
its table is pushed after the function.
}

}

This function
returns 0 on error
(for instance, an invalid option in @id{what}).

}

@APIEntry{const char *lua_getlocal (lua_State *L, const lua_Debug *ar, int n);|
@apii{0,0|1,-}

Gets information about a local variable of
a given activation record or a given function.

In the first case,
the parameter @id{ar} must be a valid activation record that was
filled by a previous call to @Lid{lua_getstack} or
given as argument to a hook @seeC{lua_Hook}.
The index @id{n} selects which local variable to inspect;

see @Lid{debug.getlocal} for details about variable indices
and names.

@Lid{lua_getlocal} pushes the variable's value onto the stack
and returns its name.

In the second case, @id{ar} must be @id{NULL} and the function
to be inspected must be at the top of the stack.
In this case, only parameters of Lua functions are visible
(as there is no information about what variables are active)
and no values are pushed onto the stack.

Returns @id{NULL} (and pushes nothing)
when the index is greater than
the
 number of active local variables.

}

@APIEntry{int lua_getstack (lua_State *L, int level, lua_Debug *ar);|
@apii{0,0,-}

Gets information about the interpreter runtime stack.

This function fills parts of a @Lid{lua_Debug} structure with
an identification of the @emph{activation record}
of the function executing at a given level.
@N{Level 0} is the current running function,
whereas level @M{n+1} is the function that has called level @M{n}
(except for tail calls, which do not count on the stack).
When there are no errors, @Lid{lua_getstack} returns 1;
when called with a level greater than the stack depth,
it returns 0.

}

@APIEntry{const char *lua_getupvalue (lua_State *L, int funcindex, int n);|
@apii{0,0|1,-}

Gets information about the @id{n}-th upvalue
of the closure at index @id{funcindex}.
It pushes the upvalue's value onto the stack
and returns its name.
Returns @id{NULL} (and pushes nothing)
when the index @id{n} is greater than the number of upvalues.

For @N{C functions}, this

function uses the empty string @T{""}
as a name for all upvalues.
(For Lua functions,
upvalues are the external local variables that the function uses,
and that are consequently included in its closure.)

Upvalues have no particular order,
as they are active through the whole function.
They are numbered in an arbitrary order.

}

@APIEntry{typedef void (*lua_Hook) (lua_State *L, lua_Debug *ar);|

Type for debugging hook functions.

Whenever a hook is called, its @id{ar} argument has its field
@id{event} set to the specific event that triggered the hook.
Lua identifies these events with the following constants:
@defid{LUA_HOOKCALL}, @defid{LUA_HOOKRET},
@defid{LUA_HOOKTAILCALL}, @defid{LUA_HOOKLINE},
and @defid{LUA_HOOKCOUNT}.
Moreover, for line events, the field @id{currentline} is also set.
To get the value of any other field in @id{ar},
the hook must call @Lid{lua_getinfo}.

For call events, @id{event} can be @id{LUA_HOOKCALL},
the normal value, or @id{LUA_HOOKTAILCALL}, for a tail
call;
in this case, there will be no corresponding return event.

While Lua is running a hook, it disables other calls to hooks.
Therefore, if a hook calls back Lua to execute a function or a chunk,
this execution occurs without any calls to hooks.

Hook functions cannot have continuations,
that is, they cannot call @Lid{lua_yieldk},
@Lid{lua_pcallk}, or @Lid{lua_callk} with a non-null @id{k}.

Hook functions can yield under the following conditions:
Only count and line events can yield;
to yield, a hook function must finish its execution
calling @Lid{lua_yield} with @id{nresults} equal to zero
(that is, with no values).

}

@APIEntry{void lua_sethook (lua_State *L, lua_Hook f, int mask, int count);|

@apii{0,0,-}

Sets the debugging hook function.

Argument @id{f} is the hook function.
@id{mask} specifies on which events the hook will be called:
it is formed by a bitwise OR of the constants
@defid{LUA_MASKCALL},
@defid{LUA_MASKRET},
@defid{LUA_MASKLINE},
and @defid{LUA_MASKCOUNT}.
The
 @id{count} argument is only meaningful when the mask
includes @id{LUA_MASKCOUNT}.
For each event, the hook is called as explained below:
@description{

@item{The call hook| is called when the interpreter calls a function.
The hook is called just after Lua enters the new function,
before the function gets its arguments.
}

@item{The return hook| is called when the interpreter returns from a function.
The hook is called just before Lua leaves the function.
There is no standard way to access the values
to be returned by the function.
}

@item{The line hook| is called when the interpreter is about to
start the execution of a new line of code,
or when it jumps back in the code (even to the same line).
(This event only happens while Lua is executing a Lua function.)
}

@item{The count hook| is called after the interpreter executes every
@T{count} instructions.
(This event only happens while Lua is executing a Lua function.)
}

}

A hook is disabled by setting @id{mask} to zero.

}

@APIEntry{const
 char *lua_setlocal (lua_State *L, const lua_Debug *ar, int n);|
@apii{0|1,0,-}

Sets the value of a local variable of a given activation record.
It assigns the value at the top of the stack
to the variable and returns its name.
It also pops the value from the stack.

Returns @id{NULL} (and pops nothing)
when the index is greater than
the number of active local variables.

Parameters @id{ar} and @id{n} are as in function @Lid{lua_getlocal}.

}

@APIEntry{const char *lua_setupvalue (lua_State *L, int funcindex, int n);|
@apii{0|1,0,-}

Sets the value of a closure's upvalue.
It assigns the value at the top of the stack
to the upvalue and returns its name.
It also pops the value from the stack.

Returns @id{NULL} (and pops nothing)
when the index @id{n} is greater than the number of upvalues.

Parameters @id{funcindex} and @id{n} are as in function @Lid{lua_getupvalue}.

}

@APIEntry{void *lua_upvalueid (lua_State *L, int funcindex, int n);|
@apii{0,0,-}

Returns a unique identifier
 for the upvalue numbered @id{n}
from the closure at index @id{funcindex}.

These unique identifiers allow a program to check whether different
closures share upvalues.
Lua closures that share an upvalue
(that is, that access a same external local variable)
will return identical ids for those upvalue indices.

Parameters @id{funcindex} and @id{n} are as in function @Lid{lua_getupvalue},
but @id{n} cannot be greater than the number of upvalues.

}

@APIEntry{

```
void lua_upvaluejoin (lua_State *L, int funcindex1, int n1,
                      int funcindex2, int n2);|
```
@apii{0,0,-}

Make the @id{n1}-th upvalue of the Lua closure at index @id{funcindex1}
refer to the @id{n2}-th upvalue of the Lua closure at index @id{funcindex2}.

}

}

}

@C{----------}
@sect1{@title{The Auxiliary Library}

@index{lauxlib.h}
The @def{auxiliary library} provides several convenient functions
to interface C with Lua.
While the basic
 API provides the primitive functions for all
interactions between C and Lua,
the auxiliary library provides higher-level functions for some
common tasks.

All functions and types from the auxiliary library
are defined in header file @id{lauxlib.h} and
have a prefix @id{luaL_}.

All functions in the auxiliary library are built on
top of the basic API,
and so they provide nothing that cannot be done with that API.
Nevertheless, the use of the auxiliary library ensures
more consistency to your code.

Several functions in the auxiliary library use internally some
extra stack slots.
When a function in the auxiliary library uses less than five slots,
it does not check the stack size;
it simply assumes that there are enough slots.

Several functions in the auxiliary library are used to
check @N{C function} arguments.
Because the error message is formatted for arguments
(e.g., @St{bad argument #1}),
you should not use these functions for other stack values.

Functions called @id{luaL_check*}
always
 raise an error if the check is not satisfied.

@sect2{@title{Functions and Types}

Here we list all functions and types from the auxiliary library
in alphabetical order.

@APIEntry{void luaL_addchar (luaL_Buffer *B, char c);|
@apii{?,?,m}

Adds the byte @id{c} to the buffer @id{B}
@seeC{luaL_Buffer}.

}

@APIEntry{void luaL_addlstring (luaL_Buffer *B, const char *s, size_t l);|
@apii{?,?,m}

Adds the string pointed to by @id{s} with length @id{l} to
the buffer @id{B}
@seeC{luaL_Buffer}.
The string can contain @x{embedded zeros}.

}

@APIEntry{void luaL_addsize (luaL_Buffer *B, size_t n);|
@apii{?,?,-}

Adds to the buffer @id{B} @seeC{luaL_Buffer}
a string of length @id{n} previously copied to the
buffer area @seeC{luaL_prepbuffer}.

}

@APIEntry{void luaL_addstring (luaL_Buffer *B, const char *s);|
@apii{?,?,m}

Adds the zero-terminated string pointed to by @id{s}
to the buffer @id{B}
@seeC{luaL_Buffer}.

}

@APIEntry{void luaL_addvalue (luaL_Buffer *B);|

@apii{1,?,m}

Adds
 the value at the top of the stack
to the buffer @id{B}
@seeC{luaL_Buffer}.
Pops the value.

This is the only function on string buffers that can (and must)
be called with an extra element on the stack,
which is the value to be added to the buffer.

}

@APIEntry{
void luaL_argcheck (lua_State *L,
                int cond,
                int arg,
                const char *extramsg);|
@apii{0,0,v}

Checks whether @id{cond} is true.
If it is not, raises an error with a standard message @seeF{luaL_argerror}.

}

@APIEntry{int luaL_argerror (lua_State *L, int arg, const char *extramsg);|
@apii{0,0,v}

Raises an error reporting a problem with argument @id{arg}
of the @N{C function} that called it,
using a standard message
that includes @id{extramsg} as a comment:
@verbatim{
bad argument #@rep{arg} to '@rep{funcname}' (@rep{extramsg})
}
This function never returns.

}

@APIEntry{typedef struct luaL_Buffer luaL_Buffer;|

Type for a @def{string buffer}.

A string buffer allows @N{C
 code} to build Lua strings piecemeal.
Its pattern of use is as follows:
@itemize{

@item{First declare a variable @id{b} of type @Lid{luaL_Buffer}.}

@item{Then initialize it with a call @T{luaL_buffinit(L, &b)}.}

@item{
Then add string pieces to the buffer calling any of
the @id{luaL_add*} functions.
}

@item{
Finish by calling @T{luaL_pushresult(&b)}.
This call leaves the final string on the top of the stack.
}

}

If you know beforehand the total size of the resulting string,
you can use the buffer like this:
@itemize{

@item{First declare a variable @id{b} of type @Lid{luaL_Buffer}.}

@item{Then initialize it and preallocate a space of
size @id{sz} with a call @T{luaL_buffinitsize(L, &b, sz)}.}

@item{Then copy the string into that space.}

@item{
Finish by calling @T{luaL_pushresultsize(&b, sz)},
where @id{sz} is the total size of the resulting string
copied into that space.
}

}

During its normal operation,
a string buffer uses a variable number of stack slots.
So, while using
 a buffer, you cannot assume that you know where
the top of the stack is.
You can use the stack between successive calls to buffer operations
as long as that use is balanced;
that is,
when you call a buffer operation,
the stack is at the same level
it was immediately after the previous buffer operation.
(The only exception to this rule is @Lid{luaL_addvalue}.)

After calling @Lid{luaL_pushresult} the stack is back to its
level when the buffer was initialized,
plus the final string on its top.

}

@APIEntry{void luaL_buffinit (lua_State *L, luaL_Buffer *B);|
@apii{0,0,-}

Initializes a buffer @id{B}.
This function does not allocate any space;
the buffer must be declared as a variable
@seeC{luaL_Buffer}.

}

@APIEntry{char *luaL_buffinitsize (lua_State *L, luaL_Buffer *B, size_t sz);|
@apii{?,?,m}

Equivalent to the sequence
@Lid{luaL_buffinit}, @Lid{luaL_prepbuffsize}.

}

@APIEntry{int luaL_callmeta (lua_State *L, int obj, const char *e);|
@apii{0,0|1,e}

Calls a metamethod.

If the object
 at index @id{obj} has a metatable and this
metatable has a field @id{e},
this function calls this field passing the object as its only argument.
In this case this function returns true and pushes onto the
stack the value returned by the call.
If there is no metatable or no metamethod,
this function returns false (without pushing any value on the stack).

}

@APIEntry{void luaL_checkany (lua_State *L, int arg);|
@apii{0,0,v}

Checks whether the function has an argument
of any type (including @nil) at position @id{arg}.

}

@APIEntry{lua_Integer luaL_checkinteger (lua_State *L, int arg);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is an integer
(or can be converted to an integer)
and returns this integer cast to a @Lid{lua_Integer}.

}

@APIEntry{const char *luaL_checklstring (lua_State *L, int arg, size_t *l);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is a string
and returns this string;
if @id{l} is not @id{NULL} fills @T{*l}
with the string's length.

This
 function uses @Lid{lua_tolstring} to get its result,
so all conversions and caveats of that function apply here.

}

@APIEntry{lua_Number luaL_checknumber (lua_State *L, int arg);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is a number
and returns this number.

}

@APIEntry{
int luaL_checkoption (lua_State *L,
                int arg,
                const char *def,
                const char *const lst[]);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is a string and
searches for this string in the array @id{lst}
(which must be NULL-terminated).
Returns the index in the array where the string was found.
Raises an error if the argument is not a string or
if the string cannot be found.

If @id{def} is not @id{NULL},
the function uses @id{def} as a default value when
there is no argument @id{arg} or when this argument is @nil.

This is a useful function for mapping strings to @N{C enums}.
(The usual convention in Lua libraries
is
to use strings instead of numbers to select options.)

}

@APIEntry{void luaL_checkstack (lua_State *L, int sz, const char *msg);|
@apii{0,0,v}

Grows the stack size to @T{top + sz} elements,
raising an error if the stack cannot grow to that size.
@id{msg} is an additional text to go into the error message
(or @id{NULL} for no additional text).

}

@APIEntry{const char *luaL_checkstring (lua_State *L, int arg);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is a string
and returns this string.

This function uses @Lid{lua_tolstring} to get its result,
so all conversions and caveats of that function apply here.

}

@APIEntry{void luaL_checktype (lua_State *L, int arg, int t);|
@apii{0,0,v}

Checks whether the function argument @id{arg} has type @id{t}.
See @Lid{lua_type} for the encoding of types for @id{t}.

}

@APIEntry{void *luaL_checkudata (lua_State *L, int arg, const char *tname);|
@apii{0,0,v}

Checks whether the function argument @id{arg} is a userdata
of the
type @id{tname} @seeC{luaL_newmetatable} and
returns the userdata address @seeC{lua_touserdata}.

}

@APIEntry{void luaL_checkversion (lua_State *L);|

@apii{0,0,v}

Checks whether the core running the call,
the core that created the Lua state,
and the code making the call are all using the same version of Lua.
Also checks whether the core running the call
and the core that created the Lua state
are using the same address space.

}

@APIEntry{int luaL_dofile (lua_State *L, const char *filename);|
@apii{0,?,e}

Loads and runs the given file.
It is defined as the following macro:
@verbatim{
(luaL_loadfile(L, filename) || lua_pcall(L, 0, LUA_MULTRET, 0))
}
It returns false if there are no errors
or true in case of errors.

}

@APIEntry{int luaL_dostring (lua_State *L, const char *str);|
@apii{0,?,-}

Loads and runs the given string.
It is defined as the following macro:
@verbatim{
(luaL_loadstring(L, str) || lua_pcall(L, 0, LUA_MULTRET, 0))
}
It returns false if there are no errors
or true
 in case of errors.

}

@APIEntry{int luaL_error (lua_State *L, const char *fmt, ...);|
@apii{0,0,v}

Raises an error.
The error message format is given by @id{fmt}
plus any extra arguments,
following the same rules of @Lid{lua_pushfstring}.
It also adds at the beginning of the message the file name and
the line number where the error occurred,
if this information is available.

This function never returns,
but it is an idiom to use it in @N{C functions}
as @T{return luaL_error(@rep{args})}.

}

@APIEntry{int luaL_execresult (lua_State *L, int stat);|
@apii{0,3,m}

This function produces the return values for
process-related functions in the standard library
(@Lid{os.execute} and @Lid{io.close}).

}

@APIEntry{
int luaL_fileresult (lua_State *L, int stat, const char *fname);|
@apii{0,1|3,m}

This function produces the return values for
file-related functions in the standard library
(@Lid{io.open}, @Lid{os.rename}, @Lid{file:seek}, etc.).

}

@APIEntry{int luaL_getmetafield (lua_State
 *L, int obj, const char *e);|
@apii{0,0|1,m}

Pushes onto the stack the field @id{e} from the metatable
of the object at index @id{obj} and returns the type of the pushed value.
If the object does not have a metatable,
or if the metatable does not have this field,
pushes nothing and returns @id{LUA_TNIL}.

}

@APIEntry{int luaL_getmetatable (lua_State *L, const char *tname);|
@apii{0,1,m}

Pushes onto the stack the metatable associated with name @id{tname}
in the registry @seeC{luaL_newmetatable}
(@nil if there is no metatable associated with that name).
Returns the type of the pushed value.

}

```
@APIEntry{int luaL_getsubtable (lua_State *L, int idx, const char *fname);|
@apii{0,1,e}

Ensures that the value @T{t[fname]},
where @id{t} is the value at index @id{idx},
is a table,
and pushes that table onto the stack.
Returns true if it finds a previous table there
and false if it creates a new table.

}

@APIEntry{
const char *luaL_gsub (lua_State *L,
                       const char *s,
                        const char *p,
                       const char *r);|
@apii{0,1,m}

Creates a copy of string @id{s} by replacing
any occurrence of the string @id{p}
with the string @id{r}.
Pushes the resulting string on the stack and returns it.

}

@APIEntry{lua_Integer luaL_len (lua_State *L, int index);|
@apii{0,0,e}

Returns the @Q{length} of the value at the given index
as a number;
it is equivalent to the @Char{#} operator in Lua @see{len-op}.
Raises an error if the result of the operation is not an integer.
(This case only can happen through metamethods.)

}

@APIEntry{
int luaL_loadbuffer (lua_State *L,
                     const char *buff,
                     size_t sz,
                     const char *name);|
@apii{0,1,-}

Equivalent to @Lid{luaL_loadbufferx} with @id{mode} equal to @id{NULL}.

}
```

```
@APIEntry{
int luaL_loadbufferx (lua_State *L,
                      const char *buff,
                      size_t sz,
                      const char *name,

              const char *mode);|
@apii{0,1,-}

Loads a buffer as a Lua chunk.
This function uses @Lid{lua_load} to load the chunk in the
buffer pointed to by @id{buff} with size @id{sz}.

This function returns the same results as @Lid{lua_load}.
@id{name} is the chunk name,
used for debug information and error messages.
The string @id{mode} works as in function @Lid{lua_load}.

}


@APIEntry{int luaL_loadfile (lua_State *L, const char *filename);|
@apii{0,1,m}

Equivalent to @Lid{luaL_loadfilex} with @id{mode} equal to @id{NULL}.

}

@APIEntry{int luaL_loadfilex (lua_State *L, const char *filename,
                              const char *mode);|
@apii{0,1,m}

Loads a file as a Lua chunk.
This function uses @Lid{lua_load} to load the chunk in the file
named @id{filename}.
If @id{filename} is @id{NULL},
then it loads from the standard input.
The first line in the file is ignored if it starts with a @T{#}.

The string @id{mode} works as in function @Lid{lua_load}.

This function
 returns the same results as @Lid{lua_load},
but it has an extra error code @defid{LUA_ERRFILE}
for file-related errors
(e.g., it cannot open or read the file).
```

As @Lid{lua_load}, this function only loads the chunk;
it does not run it.

}

@APIEntry{int luaL_loadstring (lua_State *L, const char *s);|
@apii{0,1,-}

Loads a string as a Lua chunk.
This function uses @Lid{lua_load} to load the chunk in
the zero-terminated string @id{s}.

This function returns the same results as @Lid{lua_load}.

Also as @Lid{lua_load}, this function only loads the chunk;
it does not run it.

}

@APIEntry{void luaL_newlib (lua_State *L, const luaL_Reg l[]);|
@apii{0,1,m}

Creates a new table and registers there
the functions in list @id{l}.

It is implemented as the following macro:
@verbatim{
(luaL_newlibtable(L,l), luaL_setfuncs(L,l,0))
}
The array @id{l} must be the actual array,
not a pointer to it.

}

@APIEntry{void luaL_newlibtable (lua_State *L, const luaL_Reg l[]);|
@apii{0,1,m}

Creates a new
 table with a size optimized
to store all entries in the array @id{l}
(but does not actually store them).
It is intended to be used in conjunction with @Lid{luaL_setfuncs}
@seeF{luaL_newlib}.

It is implemented as a macro.
The array @id{l} must be the actual array,
not a pointer to it.

}

@APIEntry{int luaL_newmetatable (lua_State *L, const char *tname);|
@apii{0,1,m}

If the registry already has the key @id{tname},
returns 0.
Otherwise,
creates a new table to be used as a metatable for userdata,
adds to this new table the pair @T{__name = tname},
adds to the registry the pair @T{[tname] = new table},
and returns 1.
(The entry @idx{__name} is used by some error-reporting functions.)

In both cases pushes onto the stack the final value associated
with @id{tname} in the registry.

}

@APIEntry{lua_State *luaL_newstate (void);|
@apii{0,0,-}

Creates a new Lua state.
It calls @Lid{lua_newstate} with an
allocator based on the @N{standard C} @id{realloc} function
and then sets a panic function
 @see{C-error} that prints
an error message to the standard error output in case of fatal
errors.

Returns the new state,
or @id{NULL} if there is a @x{memory allocation error}.

}

@APIEntry{void luaL_openlibs (lua_State *L);|
@apii{0,0,e}

Opens all standard Lua libraries into the given state.

}

@APIEntry{
T luaL_opt (L, func, arg, dflt);|
@apii{0,0,e}

This macro is defined as follows:

@verbatim{
(lua_isnoneornil(L,(arg)) ? (dflt) : func(L,(arg)))
}
In words, if the argument @id{arg} is nil or absent,
the macro results in the default @id{dflt}.
Otherwise, it results in the result of calling @id{func}
with the state @id{L} and the argument index @id{arg} as
arguments.
Note that it evaluates the expression @id{dflt} only if needed.

}

@APIEntry{
lua_Integer luaL_optinteger (lua_State *L,
                int arg,
                lua_Integer d);|
@apii{0,0,v}

If the function argument @id{arg} is an integer
(or convertible to an integer),
returns this integer.
If
 this argument is absent or is @nil,
returns @id{d}.
Otherwise, raises an error.

}

@APIEntry{
const char *luaL_optlstring (lua_State *L,
                int arg,
                const char *d,
                size_t *l);|
@apii{0,0,v}

If the function argument @id{arg} is a string,
returns this string.
If this argument is absent or is @nil,
returns @id{d}.
Otherwise, raises an error.

If @id{l} is not @id{NULL},
fills the position @T{*l} with the result's length.
If the result is @id{NULL}
(only possible when returning @id{d} and @T{d == NULL}),
its length is considered zero.

This function uses @Lid{lua_tolstring} to get its result,

so all conversions and caveats of that function apply here.

}

@APIEntry{lua_Number luaL_optnumber (lua_State *L, int arg, lua_Number d);|
@apii{0,0,v}

If the function argument @id{arg} is a number,
returns this number.
If this argument is absent or is @nil,
returns @id{d}.
Otherwise, raises an error.

}

@APIEntry{
const
 char *luaL_optstring (lua_State *L,
                int arg,
                const char *d);|
@apii{0,0,v}

If the function argument @id{arg} is a string,
returns this string.
If this argument is absent or is @nil,
returns @id{d}.
Otherwise, raises an error.

}

@APIEntry{char *luaL_prepbuffer (luaL_Buffer *B);|
@apii{?,?,m}

Equivalent to @Lid{luaL_prepbuffsize}
with the predefined size @defid{LUAL_BUFFERSIZE}.

}

@APIEntry{char *luaL_prepbuffsize (luaL_Buffer *B, size_t sz);|
@apii{?,?,m}

Returns an address to a space of size @id{sz}
where you can copy a string to be added to buffer @id{B}
@seeC{luaL_Buffer}.
After copying the string into this space you must call
@Lid{luaL_addsize} with the size of the string to actually add
it to the buffer.

}

@APIEntry{void luaL_pushresult (luaL_Buffer *B);|
@apii{?,1,m}

Finishes the use of buffer @id{B} leaving the final string on
the top of the stack.

}

@APIEntry{void luaL_pushresultsize (luaL_Buffer
 *B, size_t sz);|
@apii{?,1,m}

Equivalent to the sequence @Lid{luaL_addsize}, @Lid{luaL_pushresult}.

}

@APIEntry{int luaL_ref (lua_State *L, int t);|
@apii{1,0,m}

Creates and returns a @def{reference},
in the table at index @id{t},
for the object at the top of the stack (and pops the object).

A reference is a unique integer key.
As long as you do not manually add integer keys into table @id{t},
@Lid{luaL_ref} ensures the uniqueness of the key it returns.
You can retrieve an object referred by reference @id{r}
by calling @T{lua_rawgeti(L, t, r)}.
Function @Lid{luaL_unref} frees a reference and its associated object.

If the object at the top of the stack is @nil,
@Lid{luaL_ref} returns the constant @defid{LUA_REFNIL}.
The constant @defid{LUA_NOREF} is guaranteed to be different
from any reference returned by @Lid{luaL_ref}.

}

@APIEntry{
typedef struct luaL_Reg {
 const char *name;
 lua_CFunction func;
} luaL_Reg;
|

Type for arrays of functions to be registered by
@Lid{luaL_setfuncs}.

@id{name}
 is the function name and @id{func} is a pointer to
the function.
Any array of @Lid{luaL_Reg} must end with a sentinel entry
in which both @id{name} and @id{func} are @id{NULL}.

}

@APIEntry{
void luaL_requiref (lua_State *L, const char *modname,
                lua_CFunction openf, int glb);|
@apii{0,1,e}

If @id{modname} is not already present in @Lid{package.loaded},
calls function @id{openf} with string @id{modname} as an argument
and sets the call result in @T{package.loaded[modname]},
as if that function has been called through @Lid{require}.

If @id{glb} is true,
also stores the module into global @id{modname}.

Leaves a copy of the module on the stack.

}

@APIEntry{void luaL_setfuncs (lua_State *L, const luaL_Reg *l, int nup);|
@apii{nup,0,m}

Registers all functions in the array @id{l}
@seeC{luaL_Reg} into the table on the top of the stack
(below optional upvalues, see next).

When @id{nup} is not zero,
all functions are created sharing @id{nup} upvalues,
which
 must be previously pushed on the stack
on top of the library table.
These values are popped from the stack after the registration.

}

@APIEntry{void luaL_setmetatable (lua_State *L, const char *tname);|
@apii{0,0,-}

Sets the metatable of the object at the top of the stack
as the metatable associated with name @id{tname}
in the registry @seeC{luaL_newmetatable}.

}

@APIEntry{
typedef struct luaL_Stream {
 FILE *f;
 lua_CFunction closef;
} luaL_Stream;
|

The standard representation for @x{file handles},
which is used by the standard I/O library.

A file handle is implemented as a full userdata,
with a metatable called @id{LUA_FILEHANDLE}
(where @id{LUA_FILEHANDLE} is a macro with the actual metatable's name).
The metatable is created by the I/O library
@seeF{luaL_newmetatable}.

This userdata must start with the structure @id{luaL_Stream};
it can contain other data after this initial structure.
Field @id{f} points to the corresponding C stream
(or it can be @id{NULL} to
 indicate an incompletely created handle).
Field @id{closef} points to a Lua function
that will be called to close the stream
when the handle is closed or collected;
this function receives the file handle as its sole argument and
must return either @Rw{true} (in case of success)
or @nil plus an error message (in case of error).
Once Lua calls this field,
it changes the field value to @id{NULL}
to signal that the handle is closed.

}

@APIEntry{void *luaL_testudata (lua_State *L, int arg, const char *tname);|
@apii{0,0,m}

This function works like @Lid{luaL_checkudata},
except that, when the test fails,
it returns @id{NULL} instead of raising an error.

}

@APIEntry{const char *luaL_tolstring (lua_State *L, int idx, size_t *len);|
@apii{0,1,e}

Converts any Lua value at the given index to a @N{C string}

in a reasonable format.
The resulting string is pushed onto the stack and also
returned by the function.
If @id{len} is not @id{NULL},
the function also sets @T{*len} with the string length.

If
 the value has a metatable with a @idx{__tostring} field,
then @id{luaL_tolstring} calls the corresponding metamethod
with the value as argument,
and uses the result of the call as its result.

}

@APIEntry{
void luaL_traceback (lua_State *L, lua_State *L1, const char *msg,
                int level);|
@apii{0,1,m}

Creates and pushes a traceback of the stack @id{L1}.
If @id{msg} is not @id{NULL} it is appended
at the beginning of the traceback.
The @id{level} parameter tells at which level
to start the traceback.

}

@APIEntry{const char *luaL_typename (lua_State *L, int index);|
@apii{0,0,-}

Returns the name of the type of the value at the given index.

}

@APIEntry{void luaL_unref (lua_State *L, int t, int ref);|
@apii{0,0,-}

Releases reference @id{ref} from the table at index @id{t}
@seeC{luaL_ref}.
The entry is removed from the table,
so that the referred object can be collected.
The reference @id{ref} is also freed to be used again.

If @id{ref} is @Lid{LUA_NOREF} or
 @Lid{LUA_REFNIL},
@Lid{luaL_unref} does nothing.

}

@APIEntry{void luaL_where (lua_State *L, int lvl);|
@apii{0,1,m}

Pushes onto the stack a string identifying the current position
of the control at level @id{lvl} in the call stack.
Typically this string has the following format:
@verbatim{
@rep{chunkname}:@rep{currentline}:
}
@N{Level 0} is the running function,
@N{level 1} is the function that called the running function,
etc.

This function is used to build a prefix for error messages.

}

}

}

@C{----------}
@sect1{libraries| @title{Standard Libraries}

The standard Lua libraries provide useful functions
that are implemented directly through the @N{C API}.
Some of these functions provide essential services to the language
(e.g., @Lid{type} and @Lid{getmetatable});
others provide access to @Q{outside} services (e.g., I/O);
and others could be implemented in Lua itself,
but are quite useful or have critical performance
 requirements that
deserve an implementation in C (e.g., @Lid{table.sort}).

All libraries are implemented through the official @N{C API}
and are provided as separate @N{C modules}.
Currently, Lua has the following standard libraries:
@itemize{

@item{@link{predefined|basic library};}

@item{@link{corolib|coroutine library};}

@item{@link{packlib|package library};}

@item{@link{strlib|string manipulation};}

@item{@link{utf8|basic UTF-8 support};}

@item{@link{tablib|table manipulation};}

@item{@link{mathlib|mathematical functions} (sin, log, etc.);}

@item{@link{iolib|input and output};}

@item{@link{oslib|operating system facilities};}

@item{@link{debuglib|debug facilities}.}

}
Except for the basic and the package libraries,
each library provides all its functions as fields of a global table
or as methods of its objects.

To have access to these libraries,
the @N{C host} program should call the @Lid{luaL_openlibs} function,
which opens all standard libraries.
Alternatively,
the
 host program can open them individually by using
@Lid{luaL_requiref} to call
@defid{luaopen_base} (for the basic library),
@defid{luaopen_package} (for the package library),
@defid{luaopen_coroutine} (for the coroutine library),
@defid{luaopen_string} (for the string library),
@defid{luaopen_utf8} (for the UTF8 library),
@defid{luaopen_table} (for the table library),
@defid{luaopen_math} (for the mathematical library),
@defid{luaopen_io} (for the I/O library),
@defid{luaopen_os} (for the operating system library),
and @defid{luaopen_debug} (for the debug library).
These functions are declared in @defid{lualib.h}.

@sect2{predefined| @title{Basic Functions}

The basic library provides core functions to Lua.
If you do not include this library in your application,
you should check carefully whether you need to provide
implementations for some of its facilities.

@LibEntry{assert (v [, message])|

Calls @Lid{error} if

the value of its argument @id{v} is false (i.e., @nil or @false);
otherwise,
returns all its arguments.
In case of error,
@id{message} is the error object;
when absent, it defaults to @St{assertion failed!}

}

@LibEntry{collectgarbage ([opt [, arg]])|

This function is a generic interface to the garbage collector.
It performs different functions according to its first argument, @id{opt}:
@description{

@item{@St{collect}|
performs a full garbage-collection cycle.
This is the default option.
}

@item{@St{stop}|
stops automatic execution of the garbage collector.
The collector will run only when explicitly invoked,
until a call to restart it.
}

@item{@St{restart}|
restarts automatic execution of the garbage collector.
}

@item{@St{count}|
returns the total memory in use by Lua in Kbytes.
The value has a fractional part,
so that it multiplied by 1024
gives the exact number of bytes in use by Lua
(except for overflows).
}

@item{@St{step}|
performs a garbage-collection step.
The step @Q{size} is controlled by @id{arg}.
With a zero value,
the collector will
perform one basic (indivisible) step.
For non-zero values,
the collector will perform as if that amount of memory
(in KBytes) had been allocated by Lua.
Returns @Rw{true} if the step finished a collection cycle.

}

@item{@St{setpause}|
sets @id{arg} as the new value for the @emph{pause} of
the collector @see{GC}.
Returns the previous value for @emph{pause}.
}

@item{@St{setstepmul}|
sets @id{arg} as the new value for the @emph{step multiplier} of
the collector @see{GC}.
Returns the previous value for @emph{step}.
}

@item{@St{isrunning}|
returns a boolean that tells whether the collector is running
(i.e., not stopped).
}

}

}

@LibEntry{dofile ([filename])|
Opens the named file and executes its contents as a Lua chunk.
When called without arguments,
@id{dofile} executes the contents of the standard input (@id{stdin}).
Returns all values returned by the chunk.
In case of errors, @id{dofile} propagates the error
to its caller (that is, @id{dofile} does not run in protected mode).

}

@LibEntry{error
 (message [, level])|
Terminates the last protected function called
and returns @id{message} as the error object.
Function @id{error} never returns.

Usually, @id{error} adds some information about the error position
at the beginning of the message, if the message is a string.
The @id{level} argument specifies how to get the error position.
With @N{level 1} (the default), the error position is where the
@id{error} function was called.
@N{Level 2} points the error to where the function
that called @id{error} was called; and so on.
Passing a @N{level 0} avoids the addition of error position information
to the message.

}

@LibEntry{_G|
A global variable (not a function) that
holds the @x{global environment} @see{globalenv}.
Lua itself does not use this variable;
changing its value does not affect any environment,
nor vice versa.

}

@LibEntry{getmetatable (object)|

If @id{object} does not have a metatable, returns @nil.
Otherwise,
if the object's metatable has a @idx{__metatable}
 field,
returns the associated value.
Otherwise, returns the metatable of the given object.

}

@LibEntry{ipairs (t)|

Returns three values (an iterator function, the table @id{t}, and 0)
so that the construction
@verbatim{
for i,v in ipairs(t) do @rep{body} end
}
will iterate over the key@En{}value pairs
(@T{1,t[1]}), (@T{2,t[2]}), @ldots,
up to the first nil value.

}

@LibEntry{load (chunk [, chunkname [, mode [, env]]])|

Loads a chunk.

If @id{chunk} is a string, the chunk is this string.
If @id{chunk} is a function,
@id{load} calls it repeatedly to get the chunk pieces.
Each call to @id{chunk} must return a string that concatenates
with previous results.
A return of an empty string, @nil, or no value signals the end of the chunk.

If there are no syntactic errors,

returns the compiled chunk as a function;
otherwise, returns @nil plus the error message.

If the resulting function has upvalues,
the first upvalue is set to the value of @id{env},
if that parameter is given,
or
 to the value of the @x{global environment}.
Other upvalues are initialized with @nil.
(When you load a main chunk,
the resulting function will always have exactly one upvalue,
the @id{_ENV} variable @see{globalenv}.
However,
when you load a binary chunk created from a function @seeF{string.dump},
the resulting function can have an arbitrary number of upvalues.)
All upvalues are fresh, that is,
they are not shared with any other function.

@id{chunkname} is used as the name of the chunk for error messages
and debug information @see{debugI}.
When absent,
it defaults to @id{chunk}, if @id{chunk} is a string,
or to @St{=(load)} otherwise.

The string @id{mode} controls whether the chunk can be text or binary
(that is, a precompiled chunk).
It may be the string @St{b} (only @x{binary chunk}s),
@St{t} (only text chunks),
or @St{bt} (both binary and text).
The default is @St{bt}.

Lua does not check the consistency of binary chunks.
Maliciously crafted binary chunks can crash
the interpreter.

}

@LibEntry{loadfile
 ([filename [, mode [, env]]])|

Similar to @Lid{load},
but gets the chunk from file @id{filename}
or from the standard input,
if no file name is given.

}

@LibEntry{next (table [, index])|

Allows a program to traverse all fields of a table.
Its first argument is a table and its second argument
is an index in this table.
@id{next} returns the next index of the table
and its associated value.
When called with @nil as its second argument,
@id{next} returns an initial index
and its associated value.
When called with the last index,
or with @nil in an empty table,
@id{next} returns @nil.
If the second argument is absent, then it is interpreted as @nil.
In particular,
you can use @T{next(t)} to check whether a table is empty.

The order in which the indices are enumerated is not specified,
@emph{even for numeric indices}.
(To traverse a table in numerical order,
use a numerical @Rw{for}.)

The behavior of @id{next} is undefined if,
during the traversal,
you assign
 any value to a non-existent field in the table.
You may however modify existing fields.
In particular, you may clear existing fields.

}

@LibEntry{pairs (t)|

If @id{t} has a metamethod @idx{__pairs},
calls it with @id{t} as argument and returns the first three
results from the call.

Otherwise,
returns three values: the @Lid{next} function, the table @id{t}, and @nil,
so that the construction
@verbatim{
for k,v in pairs(t) do @rep{body} end
}
will iterate over all key@En{}value pairs of table @id{t}.

See function @Lid{next} for the caveats of modifying
the table during its traversal.

}

@LibEntry{pcall (f [, arg1, @Cdots])|

Calls function @id{f} with
the given arguments in @def{protected mode}.
This means that any error @N{inside @T{f}} is not propagated;
instead, @id{pcall} catches the error
and returns a status code.
Its first result is the status code (a boolean),
which is true if the call succeeds without errors.
In such case, @id{pcall} also returns all results from the call,
after
 this first result.
In case of any error, @id{pcall} returns @false plus the error message.

}

@LibEntry{print (@Cdots)|
Receives any number of arguments
and prints their values to @id{stdout},
using the @Lid{tostring} function to convert each argument to a string.
@id{print} is not intended for formatted output,
but only as a quick way to show a value,
for instance for debugging.
For complete control over the output,
use @Lid{string.format} and @Lid{io.write}.

}

@LibEntry{rawequal (v1, v2)|
Checks whether @id{v1} is equal to @id{v2},
without invoking the @idx{__eq} metamethod.
Returns a boolean.

}

@LibEntry{rawget (table, index)|
Gets the real value of @T{table[index]},
without invoking the @idx{__index} metamethod.
@id{table} must be a table;
@id{index} may be any value.

}

@LibEntry{rawlen (v)|
Returns the length of the object @id{v},
which must be a table or a string,
without invoking the @idx{__len} metamethod.

Returns an integer.

}

@LibEntry{rawset (table, index, value)|
Sets
 the real value of @T{table[index]} to @id{value},
without invoking the @idx{__newindex} metamethod.
@id{table} must be a table,
@id{index} any value different from @nil and @x{NaN},
and @id{value} any Lua value.

This function returns @id{table}.

}

@LibEntry{select (index, @Cdots)|

If @id{index} is a number,
returns all arguments after argument number @id{index};
a negative number indexes from the end (@num{-1} is the last argument).
Otherwise, @id{index} must be the string @T{"#"},
and @id{select} returns the total number of extra arguments it received.

}

@LibEntry{setmetatable (table, metatable)|

Sets the metatable for the given table.
(To change the metatable of other types from Lua code,
you must use the @link{debuglib|debug library}.)
If @id{metatable} is @nil,
removes the metatable of the given table.
If the original metatable has a @idx{__metatable} field,
raises an error.

This function returns @id{table}.

}

@LibEntry{tonumber (e [, base])|

When called with
 no @id{base},
@id{tonumber} tries to convert its argument to a number.
If the argument is already a number or
a string convertible to a number,
then @id{tonumber} returns this number;

otherwise, it returns @nil.

The conversion of strings can result in integers or floats,
according to the lexical conventions of Lua @see{lexical}.
(The string may have leading and trailing spaces and a sign.)

When called with @id{base},
then @id{e} must be a string to be interpreted as
an integer numeral in that base.
The base may be any integer between 2 and 36, inclusive.
In bases @N{above 10}, the letter @Char{A} (in either upper or lower case)
@N{represents 10}, @Char{B} @N{represents 11}, and so forth,
with @Char{Z} representing 35.
If the string @id{e} is not a valid numeral in the given base,
the function returns @nil.

}

@LibEntry{tostring (v)|
Receives a value of any type and
converts it to a string in a human-readable format.
(For complete control of how numbers are converted,
use @Lid{string.format}.)

If
 the metatable of @id{v} has a @idx{__tostring} field,
then @id{tostring} calls the corresponding value
with @id{v} as argument,
and uses the result of the call as its result.

}

@LibEntry{type (v)|
Returns the type of its only argument, coded as a string.
The possible results of this function are
@St{nil} (a string, not the value @nil),
@St{number},
@St{string},
@St{boolean},
@St{table},
@St{function},
@St{thread},
and @St{userdata}.

}

@LibEntry{_VERSION|

A global variable (not a function) that
holds a string containing the running Lua version.
The current value of this variable is @St{Lua 5.3}.

}

@LibEntry{xpcall (f, msgh [, arg1, @Cdots])|

This function is similar to @Lid{pcall},
except that it sets a new @x{message handler} @id{msgh}.

}

}

@sect2{corolib| @title{Coroutine Manipulation}

This library comprises the operations to manipulate coroutines,
which come inside the table @defid{coroutine}.
See @See{coroutine} for a general description of coroutines.

@LibEntry{coroutine.create
(f)|

Creates a new coroutine, with body @id{f}.
@id{f} must be a function.
Returns this new coroutine,
an object with type @T{"thread"}.

}

@LibEntry{coroutine.isyieldable ()|

Returns true when the running coroutine can yield.

A running coroutine is yieldable if it is not the main thread and
it is not inside a non-yieldable @N{C function}.

}

@LibEntry{coroutine.resume (co [, val1, @Cdots])|

Starts or continues the execution of coroutine @id{co}.
The first time you resume a coroutine,
it starts running its body.
The values @id{val1}, @ldots are passed
as the arguments to the body function.

If the coroutine has yielded,
@id{resume} restarts it;
the values @id{val1}, @ldots are passed
as the results from the yield.

If the coroutine runs without any errors,
@id{resume} returns @true plus any values passed to @id{yield}
(when the coroutine yields) or any values returned by the body function
(when the coroutine terminates).
If there is any error,
@id{resume}
returns @false plus the error message.

}

@LibEntry{coroutine.running ()|

Returns the running coroutine plus a boolean,
true when the running coroutine is the main one.

}

@LibEntry{coroutine.status (co)|

Returns the status of coroutine @id{co}, as a string:
@T{"running"},
if the coroutine is running (that is, it called @id{status});
@T{"suspended"}, if the coroutine is suspended in a call to @id{yield},
or if it has not started running yet;
@T{"normal"} if the coroutine is active but not running
(that is, it has resumed another coroutine);
and @T{"dead"} if the coroutine has finished its body function,
or if it has stopped with an error.

}

@LibEntry{coroutine.wrap (f)|

Creates a new coroutine, with body @id{f}.
@id{f} must be a function.
Returns a function that resumes the coroutine each time it is called.
Any arguments passed to the function behave as the
extra arguments to @id{resume}.
Returns the same values returned by @id{resume},
except the first boolean.
In case of error,
propagates the error.

}

@LibEntry{coroutine.yield (@Cdots)|

Suspends the execution of the calling coroutine.
Any arguments to @id{yield} are passed as extra results to @id{resume}.

}

}

@sect2{packlib| @title{Modules}

The package library provides basic
facilities for loading modules in Lua.
It exports one function directly in the global environment:
@Lid{require}.
Everything else is exported in a table @defid{package}.

@LibEntry{require (modname)|

Loads the given module.
The function starts by looking into the @Lid{package.loaded} table
to determine whether @id{modname} is already loaded.
If it is, then @id{require} returns the value stored
at @T{package.loaded[modname]}.
Otherwise, it tries to find a @emph{loader} for the module.

To find a loader,
@id{require} is guided by the @Lid{package.searchers} sequence.
By changing this sequence,
we can change how @id{require} looks for a module.
The following explanation is based on the default configuration
for @Lid{package.searchers}.

First
 @id{require} queries @T{package.preload[modname]}.
If it has a value,
this value (which must be a function) is the loader.
Otherwise @id{require} searches for a Lua loader using the
path stored in @Lid{package.path}.
If that also fails, it searches for a @N{C loader} using the
path stored in @Lid{package.cpath}.
If that also fails,
it tries an @emph{all-in-one} loader @seeF{package.searchers}.

Once a loader is found,

@id{require} calls the loader with two arguments:
@id{modname} and an extra value dependent on how it got the loader.
(If the loader came from a file,
this extra value is the file name.)
If the loader returns any non-nil value,
@id{require} assigns the returned value to @T{package.loaded[modname]}.
If the loader does not return a non-nil value and
has not assigned any value to @T{package.loaded[modname]},
then @id{require} assigns @Rw{true} to this entry.
In any case, @id{require} returns the
final value of @T{package.loaded[modname]}.

If there is any error
 loading or running the module,
or if it cannot find any loader for the module,
then @id{require} raises an error.

}

@LibEntry{package.config|

A string describing some compile-time configurations for packages.
This string is a sequence of lines:
@itemize{

@item{The first line is the @x{directory separator} string.
Default is @Char{\} for @x{Windows} and @Char{/} for all other systems.}

@item{The second line is the character that separates templates in a path.
Default is @Char{;}.}

@item{The third line is the string that marks the
substitution points in a template.
Default is @Char{?}.}

@item{The fourth line is a string that, in a path in @x{Windows},
is replaced by the executable's directory.
Default is @Char{!}.}

@item{The fifth line is a mark to ignore all text after it
when building the @id{luaopen_} function name.
Default is @Char{-}.}

}

}

@LibEntry{package.cpath|

The path used by @Lid{require} to search for a @N{C loader}.

Lua initializes the @N{C path} @Lid{package.cpath}
 in the same way
it initializes the Lua path @Lid{package.path},
using the environment variable @defid{LUA_CPATH_5_3},
or the environment variable @defid{LUA_CPATH},
or a default path defined in @id{luaconf.h}.

}

@LibEntry{package.loaded|

A table used by @Lid{require} to control which
modules are already loaded.
When you require a module @id{modname} and
@T{package.loaded[modname]} is not false,
@Lid{require} simply returns the value stored there.

This variable is only a reference to the real table;
assignments to this variable do not change the
table used by @Lid{require}.

}

@LibEntry{package.loadlib (libname, funcname)|

Dynamically links the host program with the @N{C library} @id{libname}.

If @id{funcname} is @St{*},
then it only links with the library,
making the symbols exported by the library
available to other dynamically linked libraries.
Otherwise,
it looks for a function @id{funcname} inside the library
and returns this function as a @N{C function}.
So, @id{funcname}
 must follow the @Lid{lua_CFunction} prototype
@seeC{lua_CFunction}.

This is a low-level function.
It completely bypasses the package and module system.
Unlike @Lid{require},
it does not perform any path searching and
does not automatically adds extensions.
@id{libname} must be the complete file name of the @N{C library},
including if necessary a path and an extension.

@id{funcname} must be the exact name exported by the @N{C library}
(which may depend on the @N{C compiler} and linker used).

This function is not supported by @N{Standard C}.
As such, it is only available on some platforms
(Windows, Linux, Mac OS X, Solaris, BSD,
plus other Unix systems that support the @id{dlfcn} standard).

}

@LibEntry{package.path|

The path used by @Lid{require} to search for a Lua loader.

At start-up, Lua initializes this variable with
the value of the environment variable @defid{LUA_PATH_5_3} or
the environment variable @defid{LUA_PATH} or
with a default path defined in @id{luaconf.h},
if those
 environment variables are not defined.
Any @St{;;} in the value of the environment variable
is replaced by the default path.

}

@LibEntry{package.preload|

A table to store loaders for specific modules
@seeF{require}.

This variable is only a reference to the real table;
assignments to this variable do not change the
table used by @Lid{require}.

}

@LibEntry{package.searchers|

A table used by @Lid{require} to control how to load modules.

Each entry in this table is a @def{searcher function}.
When looking for a module,
@Lid{require} calls each of these searchers in ascending order,
with the module name (the argument given to @Lid{require}) as its
sole parameter.
The function can return another function (the module @def{loader})
plus an extra value that will be passed to that loader,
or a string explaining why it did not find that module

(or @nil if it has nothing to say).

Lua initializes this table with four searcher functions.

The first searcher simply looks for a loader in
the
@Lid{package.preload} table.

The second searcher looks for a loader as a Lua library,
using the path stored at @Lid{package.path}.
The search is done as described in function @Lid{package.searchpath}.

The third searcher looks for a loader as a @N{C library},
using the path given by the variable @Lid{package.cpath}.
Again,
the search is done as described in function @Lid{package.searchpath}.
For instance,
if the @N{C path} is the string
@verbatim{
"./?.so;./?.dll;/usr/local/?/init.so"
}
the searcher for module @id{foo}
will try to open the files @T{./foo.so}, @T{./foo.dll},
and @T{/usr/local/foo/init.so}, in that order.
Once it finds a @N{C library},
this searcher first uses a dynamic link facility to link the
application with the library.
Then it tries to find a @N{C function} inside the library to
be used as the loader.
The name of this @N{C function} is the string @St{luaopen_}
concatenated with a copy of the module name where each dot
is replaced by an underscore.
Moreover, if
the module name has a hyphen,
its suffix after (and including) the first hyphen is removed.
For instance, if the module name is @id{a.b.c-v2.1},
the function name will be @id{luaopen_a_b_c}.

The fourth searcher tries an @def{all-in-one loader}.
It searches the @N{C path} for a library for
the root name of the given module.
For instance, when requiring @id{a.b.c},
it will search for a @N{C library} for @id{a}.
If found, it looks into it for an open function for
the submodule;
in our example, that would be @id{luaopen_a_b_c}.
With this facility, a package can pack several @N{C submodules}
into one single library,

with each submodule keeping its original open function.

All searchers except the first one (preload) return as the extra value
the file name where the module was found,
as returned by @Lid{package.searchpath}.
The first searcher returns no extra value.

}

@LibEntry{package.searchpath (name, path [, sep [, rep]])|

Searches for the given @id{name} in the given @id{path}.

A path
 is a string containing a sequence of
@emph{templates} separated by semicolons.
For each template,
the function replaces each interrogation mark (if any)
in the template with a copy of @id{name}
wherein all occurrences of @id{sep}
(a dot, by default)
were replaced by @id{rep}
(the system's directory separator, by default),
and then tries to open the resulting file name.

For instance, if the path is the string
@verbatim{
"./?.lua;./?.lc;/usr/local/?/init.lua"
}
the search for the name @id{foo.a}
will try to open the files
@T{./foo/a.lua}, @T{./foo/a.lc}, and
@T{/usr/local/foo/a/init.lua}, in that order.

Returns the resulting name of the first file that it can
open in read mode (after closing the file),
or @nil plus an error message if none succeeds.
(This error message lists all file names it tried to open.)

}

}

@sect2{strlib| @title{String Manipulation}

This library provides generic functions for string manipulation,
such as finding and extracting substrings, and pattern matching.
When

indexing a string in Lua, the first character is at @N{position 1}
(not @N{at 0}, as in C).
Indices are allowed to be negative and are interpreted as indexing backwards,
from the end of the string.
Thus, the last character is at position @num{-1}, and so on.

The string library provides all its functions inside the table
@defid{string}.
It also sets a @x{metatable for strings}
where the @idx{__index} field points to the @id{string} table.
Therefore, you can use the string functions in object-oriented style.
For instance, @T{string.byte(s,i)}
can be written as @T{s:byte(i)}.

The string library assumes one-byte character encodings.

@LibEntry{string.byte (s [, i [, j]])|
Returns the internal numeric codes of the characters @T{s[i]},
@T{s[i+1]}, @ldots, @T{s[j]}.
The default value for @id{i} @N{is 1};
the default value for @id{j} @N{is @id{i}}.
These indices are corrected
following the same rules of function @Lid{string.sub}.

Numeric codes are not necessarily portable across
platforms.

}

@LibEntry{string.char (@Cdots)|
Receives zero or more integers.
Returns a string with length equal to the number of arguments,
in which each character has the internal numeric code equal
to its corresponding argument.

Numeric codes are not necessarily portable across platforms.

}

@LibEntry{string.dump (function [, strip])|

Returns a string containing a binary representation
(a @emph{binary chunk})
of the given function,
so that a later @Lid{load} on this string returns
a copy of the function (but with new upvalues).
If @id{strip} is a true value,

the binary representation may not include all debug information
about the function,
to save space.

Functions with upvalues have only their number of upvalues saved.
When (re)loaded,
those upvalues receive fresh instances containing @nil.
(You can use the debug library to serialize
and reload the upvalues of a function
in a way adequate to your needs.)

}

@LibEntry{string.find (s, pattern [, init [, plain]])|

Looks for the
first match of
@id{pattern} @see{pm} in the string @id{s}.
If it finds a match, then @id{find} returns the indices @N{of @T{s}}
where this occurrence starts and ends;
otherwise, it returns @nil.
A third, optional numeric argument @id{init} specifies
where to start the search;
its default value @N{is 1} and can be negative.
A value of @true as a fourth, optional argument @id{plain}
turns off the pattern matching facilities,
so the function does a plain @Q{find substring} operation,
with no characters in @id{pattern} being considered magic.
Note that if @id{plain} is given, then @id{init} must be given as well.

If the pattern has captures,
then in a successful match
the captured values are also returned,
after the two indices.

}

@LibEntry{string.format (formatstring, @Cdots)|

Returns a formatted version of its variable number of arguments
following the description given in its first argument (which must be a string).
The format string follows the same rules as the @ANSI{sprintf}.
The
only differences are that the options/modifiers
@T{*}, @id{h}, @id{L}, @id{l}, @id{n},
and @id{p} are not supported
and that there is an extra option, @id{q}.

The @id{q} option formats a string between double quotes,
using escape sequences when necessary to ensure that
it can safely be read back by the Lua interpreter.
For instance, the call
@verbatim{
string.format('%q', 'a string with "quotes" and \n new line')
}
may produce the string:
@verbatim{
"a string with \"quotes\" and \
new line"
}

Options
@id{A}, @id{a}, @id{E}, @id{e}, @id{f},
@id{G}, and @id{g} all expect a number as argument.
Options @id{c}, @id{d},
@id{i}, @id{o}, @id{u}, @id{X}, and @id{x}
expect an integer.
When Lua is compiled with a C89 compiler,
options @id{A} and @id{a} (hexadecimal floats)
do not support any modifier (flags, width, length).

Option @id{s} expects a string;
if its argument is not a string,
it is converted to one following the same rules of @Lid{tostring}.
If the option has any modifier (flags,
 width, length),
the string argument should not contain @x{embedded zeros}.

}

@LibEntry{string.gmatch (s, pattern)|
Returns an iterator function that,
each time it is called,
returns the next captures from @id{pattern} @see{pm}
over the string @id{s}.
If @id{pattern} specifies no captures,
then the whole match is produced in each call.

As an example, the following loop
will iterate over all the words from string @id{s},
printing one per line:
@verbatim{
s = "hello world from Lua"
for w in string.gmatch(s, "%a+") do
 print(w)
end

}
The next example collects all pairs @T{key=value} from the
given string into a table:
@verbatim{
t = {}
s = "from=world, to=Lua"
for k, v in string.gmatch(s, "(%w+)=(%w+)") do
 t[k] = v
end
}

For this function, a caret @Char{^} at the start of a pattern does not
work as an anchor, as this would prevent the iteration.

}

@LibEntry{string.gsub (s, pattern, repl [, n])|
Returns a copy of @id{s}
in which all (or the first @id{n}, if given)
occurrences of
 the @id{pattern} @see{pm} have been
replaced by a replacement string specified by @id{repl},
which can be a string, a table, or a function.
@id{gsub} also returns, as its second value,
the total number of matches that occurred.
The name @id{gsub} comes from @emph{Global SUBstitution}.

If @id{repl} is a string, then its value is used for replacement.
The @N{character @T{%}} works as an escape character:
any sequence in @id{repl} of the form @T{%@rep{d}},
with @rep{d} between 1 and 9,
stands for the value of the @rep{d}-th captured substring.
The sequence @T{%0} stands for the whole match.
The sequence @T{%%} stands for a @N{single @T{%}}.

If @id{repl} is a table, then the table is queried for every match,
using the first capture as the key.

If @id{repl} is a function, then this function is called every time a
match occurs, with all captured substrings passed as arguments,
in order.

In any case,
if the pattern specifies no captures,
then it behaves as if the whole pattern was inside
 a capture.

If the value returned by the table query or by the function call

is a string or a number,
then it is used as the replacement string;
otherwise, if it is @Rw{false} or @nil,
then there is no replacement
(that is, the original match is kept in the string).

Here are some examples:
@verbatim{
x = string.gsub("hello world", "(%w+)", "%1 %1")
--> x="hello hello world world"

x = string.gsub("hello world", "%w+", "%0 %0", 1)
--> x="hello hello world"

x = string.gsub("hello world from Lua", "(%w+)%s*(%w+)", "%2 %1")
--> x="world hello Lua from"

x = string.gsub("home = $HOME, user = $USER", "%$(%w+)", os.getenv)
--> x="home = /home/roberto, user = roberto"

x = string.gsub("4+5 = $return 4+5$", "%$(.-)%$", function (s)
    return load(s)()
  end)
--> x="4+5 = 9"

local t = {name="lua", version="5.3"}
x = string.gsub("$name-$version.tar.gz", "%$(%w+)", t)
--> x="lua-5.3.tar.gz"
}

}

@LibEntry{string.len (s)|
Receives a string and returns its length.
The empty string @T{""} has
 length 0.
Embedded zeros are counted,
so @T{"a\000bc\000"} has length 5.

}

@LibEntry{string.lower (s)|
Receives a string and returns a copy of this string with all
uppercase letters changed to lowercase.
All other characters are left unchanged.
The definition of what an uppercase letter is depends on the current locale.

}

@LibEntry{string.match (s, pattern [, init])|
Looks for the first @emph{match} of
@id{pattern} @see{pm} in the string @id{s}.
If it finds one, then @id{match} returns
the captures from the pattern;
otherwise it returns @nil.
If @id{pattern} specifies no captures,
then the whole match is returned.
A third, optional numeric argument @id{init} specifies
where to start the search;
its default value @N{is 1} and can be negative.

}

@LibEntry{string.pack (fmt, v1, v2, @Cdots)|

Returns a binary string containing the values @id{v1}, @id{v2}, etc.
packed (that is, serialized in binary form)
according to the format string @id{fmt} @see{pack}.

}

@LibEntry{string.packsize
(fmt)|

Returns the size of a string resulting from @Lid{string.pack}
with the given format.
The format string cannot have the variable-length options
@Char{s} or @Char{z} @see{pack}.

}

@LibEntry{string.rep (s, n [, sep])|
Returns a string that is the concatenation of @id{n} copies of
the string @id{s} separated by the string @id{sep}.
The default value for @id{sep} is the empty string
(that is, no separator).
Returns the empty string if @id{n} is not positive.

(Note that it is very easy to exhaust the memory of your machine
with a single call to this function.)

}

@LibEntry{string.reverse (s)|
Returns a string that is the string @id{s} reversed.

}

@LibEntry{string.sub (s, i [, j])|
Returns the substring of @id{s} that
starts at @id{i} and continues until @id{j};
@id{i} and @id{j} can be negative.
If @id{j} is absent, then it is assumed to be equal to @num{-1}
(which is the same as the string length).
In particular,
the call @T{string.sub(s,1,j)} returns a prefix of @id{s}
with
 length @id{j},
and @T{string.sub(s, -i)} (for a positive @id{i})
returns a suffix of @id{s}
with length @id{i}.

If, after the translation of negative indices,
@id{i} is less than 1,
it is corrected to 1.
If @id{j} is greater than the string length,
it is corrected to that length.
If, after these corrections,
@id{i} is greater than @id{j},
the function returns the empty string.

}

@LibEntry{string.unpack (fmt, s [, pos])|

Returns the values packed in string @id{s} @seeF{string.pack}
according to the format string @id{fmt} @see{pack}.
An optional @id{pos} marks where
to start reading in @id{s} (default is 1).
After the read values,
this function also returns the index of the first unread byte in @id{s}.

}

@LibEntry{string.upper (s)|
Receives a string and returns a copy of this string with all
lowercase letters changed to uppercase.
All other characters are left unchanged.
The definition of what a lowercase letter is depends on the current locale.

}

@sect3{pm| @title{Patterns}

Patterns
in Lua are described by regular strings,
which are interpreted as patterns by the pattern-matching functions
@Lid{string.find},
@Lid{string.gmatch},
@Lid{string.gsub},
and @Lid{string.match}.
This section describes the syntax and the meaning
(that is, what they match) of these strings.

@sect4{@title{Character Class:}
A @def{character class} is used to represent a set of characters.
The following combinations are allowed in describing a character class:
@description{

@item{@rep{x}|
(where @rep{x} is not one of the @emphx{magic characters}
@T{^$()%.[]*+-?})
represents the character @emph{x} itself.
}

@item{@T{.}| (a dot) represents all characters.}

@item{@T{%a}| represents all letters.}

@item{@T{%c}| represents all control characters.}

@item{@T{%d}| represents all digits.}

@item{@T{%g}| represents all printable characters except space.}

@item{@T{%l}| represents all lowercase letters.}

@item{@T{%p}| represents all punctuation characters.}

@item{@T{%s}| represents all space
characters.}

@item{@T{%u}| represents all uppercase letters.}

@item{@T{%w}| represents all alphanumeric characters.}

@item{@T{%x}| represents all hexadecimal digits.}

@item{@T{%@rep{x}}| (where @rep{x} is any non-alphanumeric character)
represents the character @rep{x}.
This is the standard way to escape the magic characters.

Any non-alphanumeric character
(including all punctuation characters, even the non-magical)
can be preceded by a @Char{%}
when used to represent itself in a pattern.
}

@item{@T{[@rep{set}]}|
represents the class which is the union of all
characters in @rep{set}.
A range of characters can be specified by
separating the end characters of the range,
in ascending order, with a @Char{-}.
All classes @T{%}@emph{x} described above can also be used as
components in @rep{set}.
All other characters in @rep{set} represent themselves.
For example, @T{[%w_]} (or @T{[_%w]})
represents all alphanumeric characters plus the underscore,
@T{[0-7]} represents the octal digits,
and
@T{[0-7%l%-]} represents the octal digits plus
the lowercase letters plus the @Char{-} character.

You can put a closing square bracket in a set
by positioning it as the first character in the set.
You can put a hyphen in a set
by positioning it as the first or the last character in the set.
(You can also use an escape for both cases.)

The interaction between ranges and classes is not defined.
Therefore, patterns like @T{[%a-z]} or @T{[a-%%]}
have no meaning.
}

@item{@T{[^@rep{set}]}|
represents the complement of @rep{set},
where @rep{set} is interpreted as above.
}

}
For all classes represented by single letters (@T{%a}, @T{%c}, etc.),
the corresponding uppercase letter represents the complement of the class.
For instance, @T{%S} represents all non-space characters.

The definitions of letter, space, and other character groups
depend on the current locale.
In particular, the class @T{[a-z]} may not be equivalent to @T{%l}.

}

@sect4{@title{Pattern Item:}
A @def{pattern item}
 can be
@itemize{

@item{
a single character class,
which matches any single character in the class;
}

@item{
a single character class followed by @Char{*},
which matches zero or more repetitions of characters in the class.
These repetition items will always match the longest possible sequence;
}

@item{
a single character class followed by @Char{+},
which matches one or more repetitions of characters in the class.
These repetition items will always match the longest possible sequence;
}

@item{
a single character class followed by @Char{-},
which also matches zero or more repetitions of characters in the class.
Unlike @Char{*},
these repetition items will always match the shortest possible sequence;
}

@item{
a single character class followed by @Char{?},
which matches zero or one occurrence of a character in the class.
It always matches one occurrence if possible;
}

@item{
@T{%@rep{n}}, for @rep{n} between 1 and 9;
such item matches a substring equal to the @rep{n}-th captured string
(see
 below);
}

@item{
@T{%b@rep{xy}}, where @rep{x} and @rep{y} are two distinct characters;
such item matches strings that start @N{with @rep{x}}, end @N{with @rep{y}},
and where the @rep{x} and @rep{y} are @emph{balanced}.
This means that, if one reads the string from left to right,

counting @M{+1} for an @rep{x} and @M{-1} for a @rep{y},
the ending @rep{y} is the first @rep{y} where the count reaches 0.
For instance, the item @T{%b()} matches expressions with
balanced parentheses.
}

@item{
@T{%f[@rep{set}]}, a @def{frontier pattern};
such item matches an empty string at any position such that
the next character belongs to @rep{set}
and the previous character does not belong to @rep{set}.
The set @rep{set} is interpreted as previously described.
The beginning and the end of the subject are handled as if
they were the character @Char{\0}.
}

}

}

@sect4{@title{Pattern:}
A @def{pattern} is a sequence of pattern items.
A caret @Char{^} at the beginning of a pattern anchors the match
 at the
beginning of the subject string.
A @Char{$} at the end of a pattern anchors the match at the
end of the subject string.
At other positions,
@Char{^} and @Char{$} have no special meaning and represent themselves.

}

@sect4{@title{Captures:}
A pattern can contain sub-patterns enclosed in parentheses;
they describe @def{captures}.
When a match succeeds, the substrings of the subject string
that match captures are stored (@emph{captured}) for future use.
Captures are numbered according to their left parentheses.
For instance, in the pattern @T{"(a*(.)%w(%s*))"},
the part of the string matching @T{"a*(.)%w(%s*)"} is
stored as the first capture (and therefore has @N{number 1});
the character matching @St{.} is captured with @N{number 2},
and the part matching @St{%s*} has @N{number 3}.

As a special case, the empty capture @T{()} captures
the current string position (a number).
For instance, if we apply the pattern @T{"()aa()"} on the
string @T{"flaaap"}, there will be two captures:

@N{3 and 5}.

}

}

@sect3{pack| @title{Format Strings for Pack and Unpack}

The first argument to @Lid{string.pack},
@Lid{string.packsize}, and @Lid{string.unpack}
is a format string,
which describes the layout of the structure being created or read.

A format string is a sequence of conversion options.
The conversion options are as follows:
@description{
@item{@T{<}|sets little endian}
@item{@T{>}|sets big endian}
@item{@T{=}|sets native endian}
@item{@T{![@rep{n}]}|sets maximum alignment to @id{n}
(default is native alignment)}
@item{@T{b}|a signed byte (@id{char})}
@item{@T{B}|an unsigned byte (@id{char})}
@item{@T{h}|a signed @id{short} (native size)}
@item{@T{H}|an unsigned @id{short} (native size)}
@item{@T{l}|a signed @id{long} (native size)}
@item{@T{L}|an unsigned @id{long} (native size)}
@item{@T{j}|a @id{lua_Integer}}
@item{@T{J}|a @id{lua_Unsigned}}
@item{@T{T}|a @id{size_t} (native size)}
@item{@T{i[@rep{n}]}|a signed @id{int} with @id{n} bytes
(default is native size)}
@item{@T{I[@rep{n}]}|an
 unsigned @id{int} with @id{n} bytes
(default is native size)}
@item{@T{f}|a @id{float} (native size)}
@item{@T{d}|a @id{double} (native size)}
@item{@T{n}|a @id{lua_Number}}
@item{@T{c@rep{n}}|a fixed-sized string with @id{n} bytes}
@item{@T{z}|a zero-terminated string}
@item{@T{s[@emph{n}]}|a string preceded by its length
coded as an unsigned integer with @id{n} bytes
(default is a @id{size_t})}
@item{@T{x}|one byte of padding}
@item{@T{X@rep{op}}|an empty item that aligns
according to option @id{op}
(which is otherwise ignored)}

@item{@Char{ }|(empty space) ignored}
}
(A @St{[@rep{n}]} means an optional integral numeral.)
Except for padding, spaces, and configurations
(options @St{xX <=>!}),
each option corresponds to an argument (in @Lid{string.pack})
or a result (in @Lid{string.unpack}).

For options @St{!@rep{n}}, @St{s@rep{n}}, @St{i@rep{n}}, and @St{I@rep{n}},
@id{n} can be any integer between 1 and 16.
All integral options check overflows;
@Lid{string.pack}
 checks whether the given value fits in the given size;
@Lid{string.unpack} checks whether the read value fits in a Lua integer.

Any format string starts as if prefixed by @St{!1=},
that is,
with maximum alignment of 1 (no alignment)
and native endianness.

Alignment works as follows:
For each option,
the format gets extra padding until the data starts
at an offset that is a multiple of the minimum between the
option size and the maximum alignment;
this minimum must be a power of 2.
Options @St{c} and @St{z} are not aligned;
option @St{s} follows the alignment of its starting integer.

All padding is filled with zeros by @Lid{string.pack}
(and ignored by @Lid{string.unpack}).

}

}

@sect2{utf8| @title{UTF-8 Support}

This library provides basic support for @x{UTF-8} encoding.
It provides all its functions inside the table @defid{utf8}.
This library does not provide any support for @x{Unicode} other
than the handling of the encoding.
Any operation that needs the meaning of a character,
such
 as character classification, is outside its scope.

Unless stated otherwise,
all functions that expect a byte position as a parameter

assume that the given position is either the start of a byte sequence
or one plus the length of the subject string.
As in the string library,
negative indices count from the end of the string.

@LibEntry{utf8.char (@Cdots)|
Receives zero or more integers,
converts each one to its corresponding UTF-8 byte sequence
and returns a string with the concatenation of all these sequences.

}

@LibEntry{utf8.charpattern|
The pattern (a string, not a function) @St{[\0-\x7F\xC2-\xF4][\x80-\xBF]*}
@see{pm},
which matches exactly one UTF-8 byte sequence,
assuming that the subject is a valid UTF-8 string.

}

@LibEntry{utf8.codes (s)|

Returns values so that the construction
@verbatim{
for p, c in utf8.codes(s) do @rep{body} end
}
will iterate over all characters in string @id{s},
with @id{p} being the position (in bytes) and @id{c} the code point
of each
character.
It raises an error if it meets any invalid byte sequence.

}

@LibEntry{utf8.codepoint (s [, i [, j]])|
Returns the codepoints (as integers) from all characters in @id{s}
that start between byte position @id{i} and @id{j} (both included).
The default for @id{i} is 1 and for @id{j} is @id{i}.
It raises an error if it meets any invalid byte sequence.

}

@LibEntry{utf8.len (s [, i [, j]])|
Returns the number of UTF-8 characters in string @id{s}
that start between positions @id{i} and @id{j} (both inclusive).
The default for @id{i} is @num{1} and for @id{j} is @num{-1}.
If it finds any invalid byte sequence,

returns a false value plus the position of the first invalid byte.

}

@LibEntry{utf8.offset (s, n [, i])|
Returns the position (in bytes) where the encoding of the
@id{n}-th character of @id{s}
(counting from position @id{i}) starts.
A negative @id{n} gets characters before position @id{i}.
The default for @id{i} is 1 when @id{n} is non-negative
and @T{#s + 1} otherwise,
so
 that @T{utf8.offset(s, -n)} gets the offset of the
@id{n}-th character from the end of the string.
If the specified character is neither in the subject
nor right after its end,
the function returns @nil.

As a special case,
when @id{n} is 0 the function returns the start of the encoding
of the character that contains the @id{i}-th byte of @id{s}.

This function assumes that @id{s} is a valid UTF-8 string.

}

}

@sect2{tablib| @title{Table Manipulation}

This library provides generic functions for table manipulation.
It provides all its functions inside the table @defid{table}.

Remember that, whenever an operation needs the length of a table,
all caveats about the length operator apply @see{len-op}.
All functions ignore non-numeric keys
in the tables given as arguments.

@LibEntry{table.concat (list [, sep [, i [, j]]])|

Given a list where all elements are strings or numbers,
returns the string @T{list[i]..sep..list[i+1] @Cdots sep..list[j]}.
The default value for @id{sep} is the
 empty string,
the default for @id{i} is 1,
and the default for @id{j} is @T{#list}.
If @id{i} is greater than @id{j}, returns the empty string.

}

@LibEntry{table.insert (list, [pos,] value)|

Inserts element @id{value} at position @id{pos} in @id{list},
shifting up the elements
@T{list[pos], list[pos+1], @Cdots, list[#list]}.
The default value for @id{pos} is @T{#list+1},
so that a call @T{table.insert(t,x)} inserts @id{x} at the end
of list @id{t}.

}

@LibEntry{table.move (a1, f, e, t [,a2])|

Moves elements from table @id{a1} to table @id{a2},
performing the equivalent to the following
multiple assignment:
@T{a2[t],@Cdots = a1[f],@Cdots,a1[e]}.
The default for @id{a2} is @id{a1}.
The destination range can overlap with the source range.
The number of elements to be moved must fit in a Lua integer.

Returns the destination table @id{a2}.

}

@LibEntry{table.pack (@Cdots)|

Returns a new table with all arguments stored into keys 1, 2, etc.
and with a field @St{n} with the total number
of arguments.
Note that the resulting table may not be a sequence.

}

@LibEntry{table.remove (list [, pos])|

Removes from @id{list} the element at position @id{pos},
returning the value of the removed element.
When @id{pos} is an integer between 1 and @T{#list},
it shifts down the elements
@T{list[pos+1], list[pos+2], @Cdots, list[#list]}
and erases element @T{list[#list]};
The index @id{pos} can also be 0 when @T{#list} is 0,
or @T{#list + 1};
in those cases, the function erases the element @T{list[pos]}.

The default value for @id{pos} is @T{#list},
so that a call @T{table.remove(l)} removes the last element
of list @id{l}.

}

@LibEntry{table.sort (list [, comp])|

Sorts list elements in a given order, @emph{in-place},
from @T{list[1]} to @T{list[#list]}.
If @id{comp} is given,
then it must be a function that receives two list elements
and returns true when the first element must come
before the second in the final order
(so that, after the sort,
@T{i < j} implies @T{not comp(list[j],list[i])}).
If
 @id{comp} is not given,
then the standard Lua operator @T{<} is used instead.

Note that the @id{comp} function must define
a strict partial order over the elements in the list;
that is, it must be asymmetric and transitive.
Otherwise, no valid sort may be possible.

The sort algorithm is not stable:
elements considered equal by the given order
may have their relative positions changed by the sort.

}

@LibEntry{table.unpack (list [, i [, j]])|

Returns the elements from the given list.
This function is equivalent to
@verbatim{
return list[i], list[i+1], @Cdots, list[j]
}
By default, @id{i} @N{is 1} and @id{j} is @T{#list}.

}

}

@sect2{mathlib| @title{Mathematical Functions}

This library provides basic mathematical functions.

It provides all its functions and constants inside the table @defid{math}.
Functions with the annotation @St{integer/float} give
integer results for integer arguments
and float results for float (or mixed) arguments.
Rounding functions
(@Lid{math.ceil},
 @Lid{math.floor}, and @Lid{math.modf})
return an integer when the result fits in the range of an integer,
or a float otherwise.

@LibEntry{math.abs (x)|

Returns the absolute value of @id{x}. (integer/float)

}

@LibEntry{math.acos (x)|

Returns the arc cosine of @id{x} (in radians).

}

@LibEntry{math.asin (x)|

Returns the arc sine of @id{x} (in radians).

}

@LibEntry{math.atan (y [, x])|

@index{atan2}
Returns the arc tangent of @T{y/x} (in radians),
but uses the signs of both arguments to find the
quadrant of the result.
(It also handles correctly the case of @id{x} being zero.)

The default value for @id{x} is 1,
so that the call @T{math.atan(y)}
returns the arc tangent of @id{y}.

}

@LibEntry{math.ceil (x)|

Returns the smallest integral value larger than or equal to @id{x}.

}

@LibEntry{math.cos (x)|

Returns the cosine of @id{x} (assumed to be in radians).

}

@LibEntry{math.deg (x)|

Converts the angle @id{x} from radians to degrees.

}

@LibEntry{math.exp
(x)|

Returns the value @M{e@sp{x}}
(where @id{e} is the base of natural logarithms).

}

@LibEntry{math.floor (x)|

Returns the largest integral value smaller than or equal to @id{x}.

}

@LibEntry{math.fmod (x, y)|

Returns the remainder of the division of @id{x} by @id{y}
that rounds the quotient towards zero. (integer/float)

}

@LibEntry{math.huge|

The float value @idx{HUGE_VAL},
a value larger than any other numeric value.

}

@LibEntry{math.log (x [, base])|

Returns the logarithm of @id{x} in the given base.
The default for @id{base} is @M{e}
(so that the function returns the natural logarithm of @id{x}).

}

@LibEntry{math.max (x, @Cdots)|

Returns the argument with the maximum value,
according to the Lua operator @T{<}. (integer/float)

}

@LibEntry{math.maxinteger|
An integer with the maximum value for an integer.

}

@LibEntry{math.min (x, @Cdots)|

Returns the argument with the minimum value,
according to the Lua operator @T{<}. (integer/float)

}

@LibEntry{math.mininteger|
An
 integer with the minimum value for an integer.

}

@LibEntry{math.modf (x)|

Returns the integral part of @id{x} and the fractional part of @id{x}.
Its second result is always a float.

}

@LibEntry{math.pi|

The value of @M{@pi}.

}

@LibEntry{math.rad (x)|

Converts the angle @id{x} from degrees to radians.

}

@LibEntry{math.random ([m [, n]])|

When called without arguments,
returns a pseudo-random float with uniform distribution

in the range @C{(} @M{[0,1)}. @C{]}
When called with two integers @id{m} and @id{n},
@id{math.random} returns a pseudo-random integer
with uniform distribution in the range @M{[m, n]}.
(The value @M{n-m} cannot be negative and must fit in a Lua integer.)
The call @T{math.random(n)} is equivalent to @T{math.random(1,n)}.

This function is an interface to the underling
pseudo-random generator function provided by C.

}

@LibEntry{math.randomseed (x)|

Sets @id{x} as the @Q{seed}
for the pseudo-random generator:
equal seeds produce equal sequences of
 numbers.

}

@LibEntry{math.sin (x)|

Returns the sine of @id{x} (assumed to be in radians).

}

@LibEntry{math.sqrt (x)|

Returns the square root of @id{x}.
(You can also use the expression @T{x^0.5} to compute this value.)

}

@LibEntry{math.tan (x)|

Returns the tangent of @id{x} (assumed to be in radians).

}

@LibEntry{math.tointeger (x)|

If the value @id{x} is convertible to an integer,
returns that integer.
Otherwise, returns @nil.

}

@LibEntry{math.type (x)|

Returns @St{integer} if @id{x} is an integer,
@St{float} if it is a float,
or @nil if @id{x} is not a number.

}

@LibEntry{math.ult (m, n)|

Returns a boolean,
true if and only if integer @id{m} is below integer @id{n} when
they are compared as @x{unsigned integers}.

}

}

@sect2{iolib| @title{Input and Output Facilities}

The I/O library provides two different styles for file manipulation.
The first one uses implicit file handles;
that is, there are operations to set a default input file and a
default output file,
and
 all input/output operations are over these default files.
The second style uses explicit file handles.

When using implicit file handles,
all operations are supplied by table @defid{io}.
When using explicit file handles,
the operation @Lid{io.open} returns a file handle
and then all operations are supplied as methods of the file handle.

The table @id{io} also provides
three predefined file handles with their usual meanings from C:
@defid{io.stdin}, @defid{io.stdout}, and @defid{io.stderr}.
The I/O library never closes these files.

Unless otherwise stated,
all I/O functions return @nil on failure
(plus an error message as a second result and
a system-dependent error code as a third result)
and some value different from @nil on success.
In non-POSIX systems,
the computation of the error message and error code
in case of errors

may be not @x{thread safe},
because they rely on the global C variable @id{errno}.

@LibEntry{io.close ([file])|

Equivalent to @T{file:close()}.
Without a @id{file},
 closes the default output file.

}

@LibEntry{io.flush ()|

Equivalent to @T{io.output():flush()}.

}

@LibEntry{io.input ([file])|

When called with a file name, it opens the named file (in text mode),
and sets its handle as the default input file.
When called with a file handle,
it simply sets this file handle as the default input file.
When called without arguments,
it returns the current default input file.

In case of errors this function raises the error,
instead of returning an error code.

}

@LibEntry{io.lines ([filename, @Cdots])|

Opens the given file name in read mode
and returns an iterator function that
works like @T{file:lines(@Cdots)} over the opened file.
When the iterator function detects the end of file,
it returns no values (to finish the loop) and automatically closes the file.

The call @T{io.lines()} (with no file name) is equivalent
to @T{io.input():lines("*l")};
that is, it iterates over the lines of the default input file.
In this case, the iterator does
 not close the file when the loop ends.

In case of errors this function raises the error,
instead of returning an error code.

}

@LibEntry{io.open (filename [, mode])|

This function opens a file,
in the mode specified in the string @id{mode}.
In case of success,
it returns a new file handle.

The @id{mode} string can be any of the following:
@description{
@item{@St{r}| read mode (the default);}
@item{@St{w}| write mode;}
@item{@St{a}| append mode;}
@item{@St{r+}| update mode, all previous data is preserved;}
@item{@St{w+}| update mode, all previous data is erased;}
@item{@St{a+}| append update mode, previous data is preserved,
 writing is only allowed at the end of file.}
}
The @id{mode} string can also have a @Char{b} at the end,
which is needed in some systems to open the file in binary mode.

}

@LibEntry{io.output ([file])|

Similar to @Lid{io.input}, but operates over the default output file.

}

@LibEntry{io.popen (prog [, mode])|

This function is system dependent and is not
 available
on all platforms.

Starts program @id{prog} in a separated process and returns
a file handle that you can use to read data from this program
(if @id{mode} is @T{"r"}, the default)
or to write data to this program
(if @id{mode} is @T{"w"}).

}

@LibEntry{io.read (@Cdots)|

Equivalent to @T{io.input():read(@Cdots)}.

}

@LibEntry{io.tmpfile ()|

In case of success,
returns a handle for a temporary file.
This file is opened in update mode
and it is automatically removed when the program ends.

}

@LibEntry{io.type (obj)|

Checks whether @id{obj} is a valid file handle.
Returns the string @T{"file"} if @id{obj} is an open file handle,
@T{"closed file"} if @id{obj} is a closed file handle,
or @nil if @id{obj} is not a file handle.

}

@LibEntry{io.write (@Cdots)|

Equivalent to @T{io.output():write(@Cdots)}.

}

@LibEntry{file:close ()|

Closes @id{file}.
Note that files are automatically closed when
their handles are garbage collected,
but that takes an unpredictable amount of
time to happen.

When closing a file handle created with @Lid{io.popen},
@Lid{file:close} returns the same values
returned by @Lid{os.execute}.

}

@LibEntry{file:flush ()|

Saves any written data to @id{file}.

}

@LibEntry{file:lines (@Cdots)|

Returns an iterator function that,
each time it is called,
reads the file according to the given formats.
When no format is given,
uses @St{l} as a default.
As an example, the construction
@verbatim{
for c in file:lines(1) do @rep{body} end
}
will iterate over all characters of the file,
starting at the current position.
Unlike @Lid{io.lines}, this function does not close the file
when the loop ends.

In case of errors this function raises the error,
instead of returning an error code.

}

@LibEntry{file:read (@Cdots)|

Reads the file @id{file},
according to the given formats, which specify what to read.
For each format,
the function returns a string or a number with the characters read,
or @nil if it cannot read data with the specified format.
(In
 this latter case,
the function does not read subsequent formats.)
When called without formats,
it uses a default format that reads the next line
(see below).

The available formats are
@description{

@item{@St{n}|
reads a numeral and returns it as a float or an integer,
following the lexical conventions of Lua.
(The numeral may have leading spaces and a sign.)
This format always reads the longest input sequence that
is a valid prefix for a numeral;
if that prefix does not form a valid numeral
(e.g., an empty string, @St{0x}, or @St{3.4e-}),
it is discarded and the function returns @nil.
}

@item{@St{a}|
reads the whole file, starting at the current position.
On end of file, it returns the empty string.
}

@item{@St{l}|
reads the next line skipping the end of line,
returning @nil on end of file.
This is the default format.
}

@item{@St{L}|
reads the next line keeping the end-of-line character (if present),
returning @nil on end of file.
}

@item{@emph{number}|
reads a string with
 up to this number of bytes,
returning @nil on end of file.
If @id{number} is zero,
it reads nothing and returns an empty string,
or @nil on end of file.
}

}
The formats @St{l} and @St{L} should be used only for text files.

}

@LibEntry{file:seek ([whence [, offset]])|

Sets and gets the file position,
measured from the beginning of the file,
to the position given by @id{offset} plus a base
specified by the string @id{whence}, as follows:
@description{
@item{@St{set}| base is position 0 (beginning of the file);}
@item{@St{cur}| base is current position;}
@item{@St{end}| base is end of file;}
}
In case of success, @id{seek} returns the final file position,
measured in bytes from the beginning of the file.
If @id{seek} fails, it returns @nil,
plus a string describing the error.

The default value for @id{whence} is @T{"cur"},
and for @id{offset} is 0.

Therefore, the call @T{file:seek()} returns the current
file position, without changing it;
the call @T{file:seek("set")} sets the position
 to the
beginning of the file (and returns 0);
and the call @T{file:seek("end")} sets the position to the
end of the file, and returns its size.

}

@LibEntry{file:setvbuf (mode [, size])|

Sets the buffering mode for an output file.
There are three available modes:
@description{

@item{@St{no}|
no buffering; the result of any output operation appears immediately.
}

@item{@St{full}|
full buffering; output operation is performed only
when the buffer is full or when
you explicitly @T{flush} the file @seeF{io.flush}.
}

@item{@St{line}|
line buffering; output is buffered until a newline is output
or there is any input from some special files
(such as a terminal device).
}

}
For the last two cases, @id{size}
specifies the size of the buffer, in bytes.
The default is an appropriate size.

}

@LibEntry{file:write (@Cdots)|

Writes the value of each of its arguments to @id{file}.
The arguments must be strings or numbers.

In case of success, this function returns @id{file}.
Otherwise it
 returns @nil plus a string describing the error.

}

}

@sect2{oslib| @title{Operating System Facilities}

This library is implemented through table @defid{os}.

@LibEntry{os.clock ()|

Returns an approximation of the amount in seconds of CPU time
used by the program.

}

@LibEntry{os.date ([format [, time]])|

Returns a string or a table containing date and time,
formatted according to the given string @id{format}.

If the @id{time} argument is present,
this is the time to be formatted
(see the @Lid{os.time} function for a description of this value).
Otherwise, @id{date} formats the current time.

If @id{format} starts with @Char{!},
then the date is formatted in Coordinated Universal Time.
After this optional character,
if @id{format} is the string @St{*t},
then @id{date} returns a table with the following fields:
@id{year}, @id{month} (1@En{}12), @id{day} (1@En{}31),
@id{hour} (0@En{}23), @id{min} (0@En{}59), @id{sec} (0@En{}61),
@id{wday} (weekday, 1@En{}7, Sunday @N{is 1}),
@id{yday}
 (day of the year, 1@En{}366),
and @id{isdst} (daylight saving flag, a boolean).
This last field may be absent
if the information is not available.

If @id{format} is not @St{*t},
then @id{date} returns the date as a string,
formatted according to the same rules as the @ANSI{strftime}.

When called without arguments,
@id{date} returns a reasonable date and time representation that depends on
the host system and on the current locale.
(More specifically, @T{os.date()} is equivalent to @T{os.date("%c")}.)

In non-POSIX systems,
this function may be not @x{thread safe}
because of its reliance on @CId{gmtime} and @CId{localtime}.

}

@LibEntry{os.difftime (t2, t1)|

Returns the difference, in seconds,
from time @id{t1} to time @id{t2}
(where the times are values returned by @Lid{os.time}).
In @x{POSIX}, @x{Windows}, and some other systems,
this value is exactly @id{t2}@M{-}@id{t1}.

}

@LibEntry{os.execute ([command])|

This function is equivalent to the @ANSI{system}.
It passes @id{command}
 to be executed by an operating system shell.
Its first result is @true
if the command terminated successfully,
or @nil otherwise.
After this first result
the function returns a string plus a number,
as follows:
@description{

@item{@St{exit}|
the command terminated normally;
the following number is the exit status of the command.
}

@item{@St{signal}|
the command was terminated by a signal;
the following number is the signal that terminated the command.
}

}

When called without a @id{command},
@id{os.execute} returns a boolean that is true if a shell is available.

}

@LibEntry{os.exit ([code [, close]])|

Calls the @ANSI{exit} to terminate the host program.
If @id{code} is @Rw{true},
the returned status is @idx{EXIT_SUCCESS};
if @id{code} is @Rw{false},
the returned status is @idx{EXIT_FAILURE};
if @id{code} is a number,
the returned status is this number.
The default value for @id{code} is @Rw{true}.

If the optional second argument @id{close} is true,
closes the Lua state before
exiting.

}

@LibEntry{os.getenv (varname)|

Returns the value of the process environment variable @id{varname},
or @nil if the variable is not defined.

}

@LibEntry{os.remove (filename)|

Deletes the file (or empty directory, on @x{POSIX} systems)
with the given name.
If this function fails, it returns @nil,
plus a string describing the error and the error code.
Otherwise, it returns true.

}

@LibEntry{os.rename (oldname, newname)|

Renames the file or directory named @id{oldname} to @id{newname}.
If this function fails, it returns @nil,
plus a string describing the error and the error code.
Otherwise, it returns true.

}

@LibEntry{os.setlocale (locale [, category])|

Sets the current locale of the program.
@id{locale} is a system-dependent string specifying a locale;
@id{category} is an optional string describing which category to change:
@T{"all"}, @T{"collate"}, @T{"ctype"},

@T{"monetary"}, @T{"numeric"}, or @T{"time"};
the default category is @T{"all"}.
The function returns
 the name of the new locale,
or @nil if the request cannot be honored.

If @id{locale} is the empty string,
the current locale is set to an implementation-defined native locale.
If @id{locale} is the string @St{C},
the current locale is set to the standard C locale.

When called with @nil as the first argument,
this function only returns the name of the current locale
for the given category.

This function may be not @x{thread safe}
because of its reliance on @CId{setlocale}.

}

@LibEntry{os.time ([table])|

Returns the current time when called without arguments,
or a time representing the local date and time specified by the given table.
This table must have fields @id{year}, @id{month}, and @id{day},
and may have fields
@id{hour} (default is 12),
@id{min} (default is 0),
@id{sec} (default is 0),
and @id{isdst} (default is @nil).
Other fields are ignored.
For a description of these fields, see the @Lid{os.date} function.

The values in these fields do not need to be inside their valid
 ranges.
For instance, if @id{sec} is -10,
it means -10 seconds from the time specified by the other fields;
if @id{hour} is 1000,
it means +1000 hours from the time specified by the other fields.

The returned value is a number, whose meaning depends on your system.
In @x{POSIX}, @x{Windows}, and some other systems,
this number counts the number
of seconds since some given start time (the @Q{epoch}).
In other systems, the meaning is not specified,
and the number returned by @id{time} can be used only as an argument to
@Lid{os.date} and @Lid{os.difftime}.

}

@LibEntry{os.tmpname ()|

Returns a string with a file name that can
be used for a temporary file.
The file must be explicitly opened before its use
and explicitly removed when no longer needed.

In @x{POSIX} systems,
this function also creates a file with that name,
to avoid security risks.
(Someone else might create the file with wrong permissions
in the time between getting the name and creating the file.)
You still have to
 open the file to use it
and to remove it (even if you do not use it).

When possible,
you may prefer to use @Lid{io.tmpfile},
which automatically removes the file when the program ends.

}

}

@sect2{debuglib| @title{The Debug Library}

This library provides
the functionality of the @link{debugI|debug interface} to Lua programs.
You should exert care when using this library.
Several of its functions
violate basic assumptions about Lua code
(e.g., that variables local to a function
cannot be accessed from outside;
that userdata metatables cannot be changed by Lua code;
that Lua programs do not crash)
and therefore can compromise otherwise secure code.
Moreover, some functions in this library may be slow.

All functions in this library are provided
inside the @defid{debug} table.
All functions that operate over a thread
have an optional first argument which is the
thread to operate over.
The default is always the current thread.

@LibEntry{debug.debug ()|

Enters an interactive mode with
 the user,
running each string that the user enters.
Using simple commands and other debug facilities,
the user can inspect global and local variables,
change their values, evaluate expressions, and so on.
A line containing only the word @id{cont} finishes this function,
so that the caller continues its execution.

Note that commands for @id{debug.debug} are not lexically nested
within any function and so have no direct access to local variables.

}

@LibEntry{debug.gethook ([thread])|

Returns the current hook settings of the thread, as three values:
the current hook function, the current hook mask,
and the current hook count
(as set by the @Lid{debug.sethook} function).

}

@LibEntry{debug.getinfo ([thread,] f [, what])|

Returns a table with information about a function.
You can give the function directly
or you can give a number as the value of @id{f},
which means the function running at level @id{f} of the call stack
of the given thread:
@N{level 0} is the current function (@id{getinfo}
 itself);
@N{level 1} is the function that called @id{getinfo}
(except for tail calls, which do not count on the stack);
and so on.
If @id{f} is a number larger than the number of active functions,
then @id{getinfo} returns @nil.

The returned table can contain all the fields returned by @Lid{lua_getinfo},
with the string @id{what} describing which fields to fill in.
The default for @id{what} is to get all information available,
except the table of valid lines.
If present,
the option @Char{f}
adds a field named @id{func} with the function itself.
If present,

the option @Char{L}
adds a field named @id{activelines} with the table of
valid lines.

For instance, the expression @T{debug.getinfo(1,"n").name} returns
a name for the current function,
if a reasonable name can be found,
and the expression @T{debug.getinfo(print)}
returns a table with all available information
about the @Lid{print} function.

}

@LibEntry{debug.getlocal ([thread,] f, local)|

This function returns the name
 and the value of the local variable
with index @id{local} of the function at level @id{f} of the stack.
This function accesses not only explicit local variables,
but also parameters, temporaries, etc.

The first parameter or local variable has @N{index 1}, and so on,
following the order that they are declared in the code,
counting only the variables that are active
in the current scope of the function.
Negative indices refer to vararg arguments;
@num{-1} is the first vararg argument.
The function returns @nil if there is no variable with the given index,
and raises an error when called with a level out of range.
(You can call @Lid{debug.getinfo} to check whether the level is valid.)

Variable names starting with @Char{(} (open parenthesis) @C{)}
represent variables with no known names
(internal variables such as loop control variables,
and variables from chunks saved without debug information).

The parameter @id{f} may also be a function.
In that case, @id{getlocal} returns only the
 name of function parameters.

}

@LibEntry{debug.getmetatable (value)|

Returns the metatable of the given @id{value}
or @nil if it does not have a metatable.

}

@LibEntry{debug.getregistry ()|

Returns the registry table @see{registry}.

}

@LibEntry{debug.getupvalue (f, up)|

This function returns the name and the value of the upvalue
with index @id{up} of the function @id{f}.
The function returns @nil if there is no upvalue with the given index.

Variable names starting with @Char{(} (open parenthesis) @C{)}
represent variables with no known names
(variables from chunks saved without debug information).

}

@LibEntry{debug.getuservalue (u)|

Returns the Lua value associated to @id{u}.
If @id{u} is not a full userdata,
returns @nil.

}

@LibEntry{debug.sethook ([thread,] hook, mask [, count])|

Sets the given function as a hook.
The string @id{mask} and the number @id{count} describe
when the hook will be called.
The string mask may have any combination of the following characters,
with
 the given meaning:
@description{
@item{@Char{c}| the hook is called every time Lua calls a function;}
@item{@Char{r}| the hook is called every time Lua returns from a function;}
@item{@Char{l}| the hook is called every time Lua enters a new line of code.}
}
Moreover,
with a @id{count} different from zero,
the hook is called also after every @id{count} instructions.

When called without arguments,
@Lid{debug.sethook} turns off the hook.

When the hook is called, its first argument is a string

describing the event that has triggered its call:
@T{"call"} (or @T{"tail call"}),
@T{"return"},
@T{"line"}, and @T{"count"}.
For line events,
the hook also gets the new line number as its second parameter.
Inside a hook,
you can call @id{getinfo} with @N{level 2} to get more information about
the running function
(@N{level 0} is the @id{getinfo} function,
and @N{level 1} is the hook function).

}

@LibEntry{debug.setlocal ([thread,] level, local, value)|

This function assigns the value @id{value}
 to the local variable
with index @id{local} of the function at level @id{level} of the stack.
The function returns @nil if there is no local
variable with the given index,
and raises an error when called with a @id{level} out of range.
(You can call @id{getinfo} to check whether the level is valid.)
Otherwise, it returns the name of the local variable.

See @Lid{debug.getlocal} for more information about
variable indices and names.

}

@LibEntry{debug.setmetatable (value, table)|

Sets the metatable for the given @id{value} to the given @id{table}
(which can be @nil).
Returns @id{value}.

}

@LibEntry{debug.setupvalue (f, up, value)|

This function assigns the value @id{value} to the upvalue
with index @id{up} of the function @id{f}.
The function returns @nil if there is no upvalue
with the given index.
Otherwise, it returns the name of the upvalue.

}

@LibEntry{debug.setuservalue (udata, value)|

Sets the given @id{value} as
the Lua value associated to the given @id{udata}.
@id{udata}
 must be a full userdata.

Returns @id{udata}.

}

@LibEntry{debug.traceback ([thread,] [message [, level]])|

If @id{message} is present but is neither a string nor @nil,
this function returns @id{message} without further processing.
Otherwise,
it returns a string with a traceback of the call stack.
The optional @id{message} string is appended
at the beginning of the traceback.
An optional @id{level} number tells at which level
to start the traceback
(default is 1, the function calling @id{traceback}).

}

@LibEntry{debug.upvalueid (f, n)|

Returns a unique identifier (as a light userdata)
for the upvalue numbered @id{n}
from the given function.

These unique identifiers allow a program to check whether different
closures share upvalues.
Lua closures that share an upvalue
(that is, that access a same external local variable)
will return identical ids for those upvalue indices.

}

@LibEntry{debug.upvaluejoin (f1, n1, f2, n2)|

Make the @id{n1}-th upvalue of the Lua closure @id{f1}
refer
 to the @id{n2}-th upvalue of the Lua closure @id{f2}.

}

}

}

@C{----------}
@sect1{lua-sa| @title{Lua Standalone}

Although Lua has been designed as an extension language,
to be embedded in a host @N{C program},
it is also frequently used as a standalone language.
An interpreter for Lua as a standalone language,
called simply @id{lua},
is provided with the standard distribution.
The @x{standalone interpreter} includes
all standard libraries, including the debug library.
Its usage is:
@verbatim{
lua [options] [script [args]]
}
The options are:
@description{
@item{@T{-e @rep{stat}}| executes string @rep{stat};}
@item{@T{-l @rep{mod}}| @Q{requires} @rep{mod} and assigns the
 result to global @@rep{mod};}
@item{@T{-i}| enters interactive mode after running @rep{script};}
@item{@T{-v}| prints version information;}
@item{@T{-E}| ignores environment variables;}
@item{@T{--}| stops handling options;}
@item{@T{-}| executes
 @id{stdin} as a file and stops handling options.}
}
After handling its options, @id{lua} runs the given @emph{script}.
When called without arguments,
@id{lua} behaves as @T{lua -v -i}
when the standard input (@id{stdin}) is a terminal,
and as @T{lua -} otherwise.

When called without option @T{-E},
the interpreter checks for an environment variable @defid{LUA_INIT_5_3}
(or @defid{LUA_INIT} if the versioned name is not defined)
before running any argument.
If the variable content has the format @T{@At@rep{filename}},
then @id{lua} executes the file.
Otherwise, @id{lua} executes the string itself.

When called with option @T{-E},
besides ignoring @id{LUA_INIT},
Lua also ignores

the values of @id{LUA_PATH} and @id{LUA_CPATH},
setting the values of
@Lid{package.path} and @Lid{package.cpath}
with the default paths defined in @id{luaconf.h}.

All options are handled in order, except @T{-i} and @T{-E}.
For instance, an invocation like
@verbatim{
$ lua -e'a=1' -e 'print(a)' script.lua
}
will
 first set @id{a} to 1, then print the value of @id{a},
and finally run the file @id{script.lua} with no arguments.
(Here @T{$} is the shell prompt. Your prompt may be different.)

Before running any code,
@id{lua} collects all command-line arguments
in a global table called @id{arg}.
The script name goes to index 0,
the first argument after the script name goes to index 1,
and so on.
Any arguments before the script name
(that is, the interpreter name plus its options)
go to negative indices.
For instance, in the call
@verbatim{
$ lua -la b.lua t1 t2
}
the table is like this:
@verbatim{
arg = { [-2] = "lua", [-1] = "-la",
      [0] = "b.lua",
      [1] = "t1", [2] = "t2" }
}
If there is no script in the call,
the interpreter name goes to index 0,
followed by the other arguments.
For instance, the call
@verbatim{
$ lua -e "print(arg[1])"
}
will print @St{-e}.
If there is a script,
the script is called with arguments
@T{arg[1]}, @Cdots, @T{arg[#arg]}.
(Like all chunks in Lua,
the

script is compiled as a vararg function.)

In interactive mode,
Lua repeatedly prompts and waits for a line.
After reading a line,
Lua first try to interpret the line as an expression.
If it succeeds, it prints its value.
Otherwise, it interprets the line as a statement.
If you write an incomplete statement,
the interpreter waits for its completion
by issuing a different prompt.

If the global variable @defid{_PROMPT} contains a string,
then its value is used as the prompt.
Similarly, if the global variable @defid{_PROMPT2} contains a string,
its value is used as the secondary prompt
(issued during incomplete statements).

In case of unprotected errors in the script,
the interpreter reports the error to the standard error stream.
If the error object is not a string but
has a metamethod @idx{__tostring},
the interpreter calls this metamethod to produce the final message.
Otherwise, the interpreter converts the error object to a string
and adds a stack traceback to it.

When finishing normally,
the
interpreter closes its main Lua state
@seeF{lua_close}.
The script can avoid this step by
calling @Lid{os.exit} to terminate.

To allow the use of Lua as a
script interpreter in Unix systems,
the standalone interpreter skips
the first line of a chunk if it starts with @T{#}.
Therefore, Lua scripts can be made into executable programs
by using @T{chmod +x} and @N{the @T{#!}} form,
as in
@verbatim{
#!/usr/local/bin/lua
}
(Of course,
the location of the Lua interpreter may be different in your machine.
If @id{lua} is in your @id{PATH},
then
@verbatim{

#!/usr/bin/env lua
}
is a more portable solution.)

}

@sect1{incompat| @title{Incompatibilities with the Previous Version}

Here we list the incompatibilities that you may find when moving a program
from @N{Lua 5.2} to @N{Lua 5.3}.
You can avoid some incompatibilities by compiling Lua with
appropriate options (see file @id{luaconf.h}).
However,
all these compatibility options will be removed in the future.

Lua versions can always
change the C API in ways that
do not imply source-code changes in a program,
such as the numeric values for constants
or the implementation of functions as macros.
Therefore,
you should not assume that binaries are compatible between
different Lua versions.
Always recompile clients of the Lua API when
using a new version.

Similarly, Lua versions can always change the internal representation
of precompiled chunks;
precompiled chunks are not compatible between different Lua versions.

The standard paths in the official distribution may
change between versions.

@sect2{@title{Changes in the Language}
@itemize{

@item{
The main difference between @N{Lua 5.2} and @N{Lua 5.3} is the
introduction of an integer subtype for numbers.
Although this change should not affect @Q{normal} computations,
some computations
(mainly those that involve some kind of overflow)
can give different results.

You can fix these differences by forcing a number to be a float
(in @N{Lua 5.2} all numbers were float),
in

particular writing constants with an ending @T{.0}
or using @T{x = x + 0.0} to convert a variable.
(This recommendation is only for a quick fix
for an occasional incompatibility;
it is not a general guideline for good programming.
For good programming,
use floats where you need floats
and integers where you need integers.)
}

@item{
The conversion of a float to a string now adds a @T{.0} suffix
to the result if it looks like an integer.
(For instance, the float 2.0 will be printed as @T{2.0},
not as @T{2}.)
You should always use an explicit format
when you need a specific format for numbers.

(Formally this is not an incompatibility,
because Lua does not specify how numbers are formatted as strings,
but some programs assumed a specific format.)
}

@item{
The generational mode for the garbage collector was removed.
(It was an experimental feature in @N{Lua 5.2}.)
}

}

}

@sect2{@title{Changes in the Libraries}
@itemize{

@item{
The @id{bit32} library has been deprecated.
It is
easy to require a compatible external library or,
better yet, to replace its functions with appropriate bitwise operations.
(Keep in mind that @id{bit32} operates on 32-bit integers,
while the bitwise operators in @N{Lua 5.3} operate on Lua integers,
which by default have @N{64 bits}.)
}

@item{
The Table library now respects metamethods
for setting and getting elements.

```
}

@item{
The @Lid{ipairs} iterator now respects metamethods and
its @idx{__ipairs} metamethod has been deprecated.
}


@item{
Option names in @Lid{io.read} do not have a starting @Char{*} anymore.
For compatibility, Lua will continue to accept (and ignore) this character.
}

@item{
The following functions were deprecated in the mathematical library:
@id{atan2}, @id{cosh}, @id{sinh}, @id{tanh}, @id{pow},
@id{frexp}, and @id{ldexp}.
You can replace @T{math.pow(x,y)} with @T{x^y};
you can replace @id{math.atan2} with @id{math.atan},
which now accepts one or two arguments;
you can replace @T{math.ldexp(x,exp)} with @T{x
 * 2.0^exp}.
For the other operations,
you can either use an external library or
implement them in Lua.
}

@item{
The searcher for C loaders used by @Lid{require}
changed the way it handles versioned names.
Now, the version should come after the module name
(as is usual in most other tools).
For compatibility, that searcher still tries the old format
if it cannot find an open function according to the new style.
(@N{Lua 5.2} already worked that way,
but it did not document the change.)
}

@item{
The call @T{collectgarbage("count")} now returns only one result.
(You can compute that second result from the fractional part
of the first result.)
}

}

}
```

```
@sect2{@title{Changes in the API}

@itemize{

@item{
Continuation functions now receive as arguments what they needed
to get through @id{lua_getctx},
so @id{lua_getctx} has been removed.
Adapt your code accordingly.
}

@item{
Function @Lid{lua_dump} has an extra parameter, @id{strip}.
Use 0 as the value of this parameter to get the old behavior.
}

@item{
Functions
 to inject/project unsigned integers
(@id{lua_pushunsigned}, @id{lua_tounsigned}, @id{lua_tounsignedx},
@id{luaL_checkunsigned}, @id{luaL_optunsigned})
were deprecated.
Use their signed equivalents with a type cast.
}

@item{
Macros to project non-default integer types
(@id{luaL_checkint}, @id{luaL_optint}, @id{luaL_checklong}, @id{luaL_optlong})
were deprecated.
Use their equivalent over @Lid{lua_Integer} with a type cast
(or, when possible, use @Lid{lua_Integer} in your code).
}

}

}

}


@C{[==============================================================}

@sect1{BNF| @title{The Complete Syntax of Lua}

Here is the complete syntax of Lua in extended BNF.
As usual in extended BNF,
@bnfNter{{A}} means 0 or more @bnfNter{A}s,
and @bnfNter{[A]} means an optional @bnfNter{A}.
```

```
(For operator precedences, see @See{prec};
for a description of the terminals
@bnfNter{Name}, @bnfNter{Numeral},
and @bnfNter{LiteralString}, see @See{lexical}.)
@index{grammar}

@Produc{

@producname{chunk}@producbody{block}

@producname{block}@producbody{@bnfrep{stat}
 @bnfopt{retstat}}

@producname{stat}@producbody{
 @bnfter{;}
@OrNL varlist @bnfter{=} explist
@OrNL functioncall
@OrNL label
@OrNL   @Rw{break}
@OrNL   @Rw{goto} Name
@OrNL @Rw{do} block @Rw{end}
@OrNL @Rw{while} exp @Rw{do} block @Rw{end}
@OrNL @Rw{repeat} block @Rw{until} exp
@OrNL @Rw{if} exp @Rw{then} block
 @bnfrep{@Rw{elseif} exp @Rw{then} block}
 @bnfopt{@Rw{else} block} @Rw{end}
@OrNL @Rw{for} @bnfNter{Name} @bnfter{=} exp @bnfter{,} exp @bnfopt{@bnfter{,} exp}
 @Rw{do} block @Rw{end}
@OrNL   @Rw{for} namelist @Rw{in} explist @Rw{do} block @Rw{end}
@OrNL @Rw{function} funcname funcbody
@OrNL @Rw{local} @Rw{function} @bnfNter{Name} funcbody
@OrNL @Rw{local} namelist @bnfopt{@bnfter{=} explist}
}

@producname{retstat}@producbody{@Rw{return}
                        @bnfopt{explist} @bnfopt{@bnfter{;}}}

@producname{label}@producbody{@bnfter{::} Name @bnfter{::}}

@producname{funcname}@producbody{@bnfNter{Name}
 @bnfrep{@bnfter{.} @bnfNter{Name}}
                      @bnfopt{@bnfter{:} @bnfNter{Name}}}

@producname{varlist}@producbody{var @bnfrep{@bnfter{,} var}}

@producname{var}@producbody{
 @bnfNter{Name}
@Or prefixexp @bnfter{[} exp @bnfter{]}
```

```
@Or prefixexp @bnfter{.} @bnfNter{Name}
}

@producname{namelist}@producbody{@bnfNter{Name} @bnfrep{@bnfter{,} @bnfNter{Name}}}


@producname{explist}@producbody{exp @bnfrep{@bnfter{,} exp}}

@producname{exp}@producbody{
 @Rw{nil}
@Or @Rw{false}
@Or @Rw{true}
@Or @bnfNter{Numeral}
@Or @bnfNter{LiteralString}
@Or @bnfter{...}
@Or functiondef
@OrNL prefixexp
@Or tableconstructor
@Or exp binop exp
@Or unop exp
}

@producname{prefixexp}@producbody{var @Or functioncall @Or @bnfter{(} exp @bnfter{)}}

@producname{functioncall}@producbody{
 prefixexp args
@Or prefixexp @bnfter{:} @bnfNter{Name} args
}

@producname{args}@producbody{
 @bnfter{(} @bnfopt{explist} @bnfter{)}
@Or tableconstructor
@Or @bnfNter{LiteralString}
}

@producname{functiondef}@producbody{@Rw{function}
 funcbody}

@producname{funcbody}@producbody{@bnfter{(} @bnfopt{parlist} @bnfter{)} block @Rw{end}}

@producname{parlist}@producbody{namelist @bnfopt{@bnfter{,} @bnfter{...}}
 @Or @bnfter{...}}

@producname{tableconstructor}@producbody{@bnfter{@Open} @bnfopt{fieldlist} @bnfter{@Close}}

@producname{fieldlist}@producbody{field @bnfrep{fieldsep field} @bnfopt{fieldsep}}

@producname{field}@producbody{@bnfter{[} exp @bnfter{]} @bnfter{=} exp @Or @bnfNter{Name}
```

```
@bnfter{=} exp @Or exp}

@producname{fieldsep}@producbody{@bnfter{,} @Or @bnfter{;}}

@producname{binop}@producbody{
 @bnfter{+} @Or @bnfter{-} @Or @bnfter{*} @Or @bnfter{/} @Or @bnfter{//}
   @Or @bnfter{^} @Or @bnfter{%}
      @OrNL
 @bnfter{&} @Or @bnfter{~} @Or @bnfter{|} @Or @bnfter{>>} @Or @bnfter{<<}
   @Or @bnfter{..}
      @OrNL
 @bnfter{<} @Or @bnfter{<=} @Or @bnfter{>} @Or @bnfter{>=}
   @Or @bnfter{==} @Or @bnfter{~=}
      @OrNL
 @Rw{and} @Or @Rw{or}}

@producname{unop}@producbody{@bnfter{-}
 @Or @Rw{not} @Or @bnfter{#} @Or
 @bnfter{~}}

}

}

@C{]==================================================================}

}
@C{)]-----------------------------------------------------------------------}

Found in path(s):
* /v5-3-6-zip/lua-5.3.6/manual/manual.of
```

1.604 libsodium23 1.0.18-1build2

1.604.1 Available under license :

```
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1.611 jetty-servlets 9.4.48.v20220622

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* org.eclipse.jetty.orbit:javax.mail.glassfish

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* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

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* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.
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org.ow2.asm:asm-commons
org.ow2.asm:asm

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org.apache.taglibs:taglibs-standard-impl

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org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api

org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

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org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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*          bug 292478 - Report potentially null across variable assignment
*          bug 332637 - Dead Code detection removing code that isn't dead
*       bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
*       Bug 411964 - [1.8][null] leverage null type annotation in foreach statement
*       Bug 421035 - [resource]
```

False alarm of resource leak warning when casting a closeable in its assignment
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* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 370639 - [compiler][resource] restore the default for resource leak warnings
* bug 265744 - Enum switch should warn about missing default
* bug 374605 - Unreasonable warning for enum-based switch statements
* bug 381443
- [compiler][null] Allow parameter widening from @NonNull to unannotated
* Bug 441208 - [1.8][null]SuppressWarnings("null") does not suppress / marked Unnecessary
* Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object),
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*       bug 383368 - [compiler][null] syntactic null analysis for field references
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*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*       Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
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*       bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
*       Bug 415790 - [compiler][resource]Incorrect potential resource leak warning in for loop
 with close in try/catch
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*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 358903 - Filter practically unimportant resource leak warnings
*       bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
 *       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
```

```
*       bug 400421 - [compiler] Null analysis for fields does not take @com.google.inject.Inject into account
*       bug 382069 - [null] Make the null analysis consider JUnit's assertNotNull similarly to assertions
*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
*       Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*       Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*       Bug
 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*       Bug 426792 - [1.8][inference][impl] generify new type inference engine
*       Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.
*       Bug 427199 - [1.8][resource] avoid resource leak warnings on Streams that have no resource
*       Bug 418743 - [1.8][null] contradictory annotations on invocation of generic method not reported
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 431581 - Eclipse compiles what it should not
*       Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*       Bug 446442 - [1.8] merge null annotations from
 super methods
*       Bug 456532 - [1.8][null] ReferenceBinding.appendNullAnnotation() includes phantom annotations in error
messages
*       Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object),
Collection#remove(Object) et al.
*     Jesper S Moller - Contributions for
*       bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
*       bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*       bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*     Ulrich Grave <ulrich.grave@gmx.de> - Contributions for
*                       bug 386692 - Missing "unused" warning on "autowired" fields
*     Pierre-Yves B. <pyvesdev@gmail.com> - Contribution for
*                       bug 542520 - [JUnit 5] Warning The method xxx from the type X is never used locally is shown
when using MethodSource
*     Sebastian Zarnekow - Contributions
 for
*       bug 544921 - [performance] Poor performance with large source files
*******************************************************************************/
```

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ReferenceBinding.java
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*        Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*        Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*******************************************************************************/
```

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/SingleTypeReference.java
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* Contributors:
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*     Stephan Herrmann - Contributions for
*           bug 343713 - [compiler] bogus line number in constructor of inner class in 1.5 compliance
*           bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 361407 - Resource leak warning when resource is assigned to a field outside of constructor
*       bug 368546 - [compiler][resource] Avoid
 remaining false positives found when compiling the Eclipse SDK
*       bug 383690 - [compiler] location of error re uninitialized final field should be aligned
*       bug 331649 - [compiler][null] consider null annotations for fields
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       bug 400421 - [compiler] Null analysis for fields does not take @com.google.inject.Inject into account
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 415399 - [1.8][compiler] Type annotations on constructor results dropped by the code
generator
*     Ulrich Grave <ulrich.grave@gmx.de> - Contributions
 for
*                         bug 386692 - Missing "unused" warning on "autowired" fields
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*     Stephan Herrmann - Contributions for
*       Bug 360328 - [compiler][null] detect null problems in nested code (local class inside a loop)
*       Bug 388630 - @NonNull diagnostics at line 0
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*       Bug 424727 - [compiler][null] NullPointerException
 in nullAnnotationUnsupportedLocation(ProblemReporter.java:5708)
*       Bug 457210 - [1.8][compiler][null] Wrong Nullness errors given on full build build but not on incremental build?
*     Keigo Imai - Contribution for  bug 388903 - Cannot extend inner class as an anonymous class when it extends
the outer class
 *    Pierre-Yves B. <pyvesdev@gmail.com> - Contributions for
*                       Bug 542520 - [JUnit 5] Warning The method xxx from the type X is never used locally is shown
when using MethodSource
*                       Bug 546084 - Using Junit 5s MethodSource leads to ClassCastException
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* Contributors:
*    wharley@bea.com - initial API and implementation
*    philippe.marschall@netcetera.ch - Fix for 338370
*    IBM Corporation - Fix for validating relative name
*******************************************************************************/
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/apt/dispatch/BatchFilerImpl.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/batch/BatchCompilerRequestor.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/tool/EclipseCompilerRequestor.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/Constant.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/ByteConstant.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/AccessRuleSet.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/DoubleConstant.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/FloatConstant.java
*
 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/CharConstant.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/StringConstant.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/BooleanConstant.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/LongConstant.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfObject.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/JavadocArgumentExpression.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/ShortConstant.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/IntConstant.java

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*     IBM Corporation - initial API and implementation
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                    Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/AnnotationContext.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ImportBinding.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ASTVisitor.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/JavadocTagConstants.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/MissingTypeBinding.java
*
 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/JavadocParser.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ImportReference.java
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* IBM Corporation - initial API and implementation
* Stephen Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* bug 133125 - [compiler][null] need to report the null status of expressions and analyze them simultaneously
* bug 292478 - Report potentially null across variable assignment
* bug 324178 - [null] ConditionalExpression.nullStatus(..) doesn't take into account the analysis of condition itself
* bug 354554 - [null] conditional with redundant condition
 yields weak error message
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 426078 - [1.8] VerifyError when conditional expression passed as an argument
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
 * Bug 418537 - [1.8][null] Fix null type annotation analysis for poly conditional expressions
* Bug 428352 - [1.8][compiler] Resolution errors don't always surface

*	Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
***/

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*		Bug 412149: [1.8][compiler] Emit repeated annotations into the designated container
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*		bug 358827 - [1.7] exception analysis for t-w-r spoils null analysis
*	bug 186342 - [compiler][null] Using annotations for null checking
*	bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*	bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
*	bug 345305 - [compiler][null]
 Compiler misidentifies a case of "variable can only be null"
*	bug 383368 - [compiler][null] syntactic null analysis for field references
*	bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check

*	bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
*	bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
*	Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*	Bug 455723 - Nonnull argument not correctly inferred in loop
*	Bug 415790 - [compiler][resource]Incorrect potential resource leak warning in for loop with close in try/catch
*	Bug 446691 - [1.8][null][compiler] NullPointerException in SingleNameReference.analyseCode
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*	bug 349326 - [1.7] new warning for missing try-with-resources
*	bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*	Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*	Bug 467032 - TYPE_USE Null Annotations: IllegalStateException with annotated arrays of Enum when accessed via BinaryTypeBinding
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/UnresolvedReferenceBinding.java
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* Bug 407191 - [1.8] Binary access support for type annotations
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* Jesper S Moller - Contributions for
* Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
* Bug 406982 - [1.8][compiler] Generation of MethodParameters Attribute in classfile
* Bug 416885 - [1.8][compiler]IncompatibleClassChange error (edit)
* Bug 412149 - [1.8][compiler] Emit repeated annotations into the designated container
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com
 - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's

work)
* Bug 409236 - [1.8][compiler] Type annotations on intersection cast types dropped by code generator
* Bug 409246 - [1.8][compiler] Type annotations on catch parameters not handled properly
* Bug 415541 - [1.8][compiler] Type annotations in the body of static initializer get dropped
* Bug 415399 - [1.8][compiler] Type annotations on constructor results dropped by the code generator
* Bug 415470 - [1.8][compiler] Type annotations on class declaration go vanishing
* Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
* Bug 434556 - Broken class file generated for incorrect annotation usage
* Bug 442416
 - $deserializeLambda$ missing cases for nested lambdas
* Stephan Herrmann - Contribution for
* Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
* Olivier Tardieu tardieu@us.ibm.com - Contributions for
* Bug 442416 - $deserializeLambda$ missing cases for nested lambdas
**********/

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* Stephan Herrmann - Contributions for
* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug 415790
 - [compiler][resource]Incorrect potential resource leak warning in for loop with close in try/catch
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Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/WhileStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ForStatement.java
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*     Matt McCutchen - partial fix for https://bugs.eclipse.org/bugs/show_bug.cgi?id=122995
*     Karen Moore - fix for https://bugs.eclipse.org/bugs/show_bug.cgi?id=207411
*     Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
*           bug 185682 - Increment/decrement operators mark local variables as read
*           bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365519 - editorial cleanup after
 bug 186342 and bug 365387
*       bug 374605 - Unreasonable warning for enum-based switch statements
*       bug 384870 - [compiler] @Deprecated annotation not detected if preceded by other annotation
*       bug 393719 - [compiler] inconsistent warnings on iteration variables
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 424742 - [1.8] NPE in LambdaExpression.isCompatibleWith
*       Bug 424710 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
*       Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
*       Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
*       Bug 426366
 - [1.8][compiler] Type inference doesn't handle multiple candidate target types in outer overload context
*       Bug 427282 - [1.8][compiler] AIOOB (-1) at
org.eclipse.jdt.internal.compiler.ClassFile.traverse(ClassFile.java:6209)
*       Bug 427483 - [Java 8] Variables in lambdas sometimes can't be resolved
*       Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*       Bug 427163 - [1.8][null] bogus error "Contradictory null specification" on varags
*       Bug 432348 - [1.8] Internal compiler error (NPE) after upgrade to 1.8
*       Bug 440143 - [1.8][null] one more case of contradictory null annotations regarding type variables
*       Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
*       Bug 434483 - [1.8][compiler][inference] Type inference not picked up with method reference
*       Bug 446442 - [1.8] merge null annotations from super methods
*       Bug 437072 - [compiler][null] Null analysis emits
 possibly incorrect warning for new int[][] despite @NonNullByDefault
*     Jesper S Moller - Contributions for
*       bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
*       bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*       bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*       bug 412149 - [1.8][compiler] Emit repeated annotations into the designated container
*       bug 419209 - [1.8] Repeating container annotations should be rejected in the presence of annotation it contains
*     Till Brychcy - Contributions for
*             bug 467094 - [1.8][null] TYPE_USE NullAnnotations of array contents are applied to field.
*******************************************************************************/
```

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* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/AbstractVariableDeclaration.java
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* wharley@bea.com - initial API and implementation
* IBM Corporation - Java 8 support
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/apt/model/PrimitiveTypeImpl.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/batch/BasicModule.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/ModuleReferenceImpl.java
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* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ContinueStatement.java

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*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
*       Stephan Herrmann - Contribution for
*       Bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*******************************************************************************/
```

Found in
 path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/AnnotationTargetTypeConstants.java
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*   Bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
*   Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*   Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*   Keigo Imai - Contribution for bug 388903 - Cannot extend inner class as an anonymous class when it
 extends the outer class
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/NestedTypeBinding.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredInitializer.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/MemberTypeBinding.java
*
 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/problem/ProblemSeverities.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/SuffixConstants.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/SourceTypeCollisionException.java
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* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)

*	Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredOpensStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredModuleStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredUsesStatement.java
*
 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfModule.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredExport.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ExportsStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredProvidesStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredTypeReference.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredExportsStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredPackageVisibilityStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredModuleReference.java
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* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 359362 - FUP of bug 349326: Resource leak on non-Closeable resource
* bug 358903 - Filter practically unimportant resource leak warnings
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 400874 - [1.8][compiler] Inference infrastructure
should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
* Bug 426676 - [1.8][compiler] Wrong generic method type inferred from lambda expression
* Bug 427411 - [1.8][generics] JDT reports type mismatch when using method that returns generic type
* Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.
* Bug 435962 - [RC2] StackOverFlowError when building
* Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
* Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
* Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
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* Jesper S Moller - Bug 392671
* NPE with a method with explicit this and a following incomplete parameter
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/apt/model/ElementImpl.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ClassFilePool.java
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*       bug 384380 - False positive on a "Potential null pointer access" after a continue
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
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*     Perry James - nullStatus method improvement (165346)
*     Stephan Herrmann - Contribution for
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*******************************************************************************/
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```
*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       bug 402993 - [null] Follow up
 of bug 401088: Missing warning about redundant null check
*       Bug 440282 - [resource] Resource leak detection false negative with empty finally block
*******************************************************************************/
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IBinaryNestedType.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IGenericType.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/ISourceField.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IGenericField.java
*
 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/ISourceMethod.java
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*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 388795 - [compiler] detection of name clash depends on order of super interfaces
*       bug 388739 - [1.8][compiler] consider default methods when detecting whether
 a class needs to be declared abstract
*       bug 390883 - [1.8][compiler] Unable to override default method
*       bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug 401246 - [1.8][compiler] abstract class method should now trump conflicting default methods
*       bug 401796 - [1.8][compiler] don't treat default methods as overriding an independent inherited abstract method
*       bug 403867 - [1.8][compiler] Suspect error about duplicate default methods
*       bug 391376 - [1.8] check interaction of default methods with bridge methods and generics
*       bug 395681 - [compiler] Improve simulation of javac6 behavior from bug 317719 after fixing bug 388795
*       bug 409473 - [compiler] JDT cannot compile against JRE 1.8
*       Bug 420080 - [1.8] Overridden Default method is reported as duplicated
*       Bug 404690 - [1.8][compiler] revisit bridge generation after VM bug is fixed
 *       Bug 410325 - [1.7][compiler] Generified method override different between javac and eclipse compiler
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 390889 - [1.8][compiler] Evaluate options to support 1.7- projects against 1.8 JRE.
*       Bug 440773 - [1.8][null]DefaultLocation.RETURN_TYPE erroneously affects method parameters in
@NonNullByDefault
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 446442 - [1.8] merge null annotations from super methods
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*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 364890 - BinaryTypeBinding should use char constants from Util
*       bug 365387 - [compiler][null] bug 186342: Issues to follow up post review and verification.
```

```
*       bug 358903 - Filter practically unimportant resource leak warnings
*       bug
 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
*       bug 388800 - [1.8][compiler] detect default methods in class files
*       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 331649 - [compiler][null] consider null annotations for fields
*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*       Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 427199 - [1.8][resource] avoid resource leak warnings on Streams that have no resource
*       Bug 392245 - [1.8][compiler][null] Define whether
 / how @NonNullByDefault applies to TYPE_USE locations
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 390889 - [1.8][compiler] Evaluate options to support 1.7- projects against 1.8 JRE.
*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*       Bug 439516 - [1.8][null] NonNullByDefault wrongly applied to implicit type bound of binary type
*       Bug 434602 - Possible error with inferred null annotations leading to contradictory null annotations
*       Bug 440477 - [null] Infrastructure for feeding external annotations into compilation
*       Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 453475 - [1.8][null] Contradictory null annotations (4.5 M3 edition)
*       Bug 454182 - Internal compiler error when using
 1.8 compliance for simple project
*       Bug 470467 - [null] Nullness of special Enum methods not detected from .class file
*       Bug 447661 - [1.8][null] Incorrect 'expression needs unchecked conversion' warning
*    Jesper Steen Moller - Contributions for
*       Bug 412150 [1.8] [compiler] Enable reflected parameter names during annotation processing
*       Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*    Sebastian Zarnekow - Contributions for
*       bug 544921 - [performance] Poor performance with large source files
*    Alexander Lehmann - Contributions for
*       bug 566258 - Intermittent NPE in APT RoundDispatcher
*******************************************************************************/
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/BinaryTypeBinding.java
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* Contributors:
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* Stephan Herrmann - Contributions for
* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug
 422796 - [compiler][null] boxed boolean reported as potentially null after null test in lazy disjunction
**********/

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/OR_OR_Expression.java
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* Contributors:
* IBM Corporation - initial API and implementation
* IBM Corporation - fix for 342936
* Kenneth Olson - Contribution for bug 188796 - [jsr199] Using JSR199 to extend ECJ
* Dennis Hendriks - Contribution for bug 188796 - [jsr199] Using JSR199 to extend ECJ
* Frits Jalvingh - fix for bug 533830.
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/tool/EclipseCompilerImpl.java
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* Contributors:
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* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 361407 - Resource leak warning when resource is assigned to a field outside of constructor
* bug 370639 - [compiler][resource] restore the default for resource leak warnings
* bug 388996 - [compiler][resource] Incorrect
 'potential resource leak'
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 424710 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
* Bug 425152 - [1.8] [compiler] Lambda Expression not resolved but flow analyzed leading to NPE.
* Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
* Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
* Bug 426366 - [1.8][compiler] Type inference doesn't handle multiple candidate target types in outer overload context
* Bug 426290 - [1.8][compiler] Inference + overloading => wrong method resolution ?
* Bug 427483 - [Java 8] Variables in lambdas sometimes can't be resolved
* Bug 427438 - [1.8][compiler]
 NPE at org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 428352 - [1.8][compiler] Resolution errors don't always surface
* Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 409245 - [1.8][compiler] Type annotations dropped when call is routed through a synthetic bridge method
**********/

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* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for

```
*       Bug 407191 - [1.8] Binary access support for type annotations
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```

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IBinaryField.java
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*     Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
*         Bug 473178
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* Stephan Herrmann - Contribution for
* bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 429403 - [1.8][null] null mismatch from type arguments is not reported at field initializer
* Bug 453483 - [compiler][null][loop] Improve null analysis for loops
* Bug 458396 - NPE in CodeStream.invoke()
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/FieldDeclaration.java
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* Contributors:
* IBM Corporation - initial API and implementation
* Genady Beriozkin - added support for reporting assignment with no effect
* Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 292478 - Report potentially null across variable assignment
* bug 335093 - [compiler][null] minimal hook for future null annotation support
* bug 349326 - [1.7] new warning for missing
try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 358903 - Filter practically unimportant resource leak warnings
* bug 370639 - [compiler][resource] restore the default for resource leak warnings

*	bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
*	bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*	bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*	bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
*	bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*	bug 331649 - [compiler][null] consider null annotations for fields
*	bug 383368 - [compiler][null] syntactic null analysis for field references
*	bug 402993 - [null] Follow up of bug 401088: Missing
 warning about redundant null check
*	bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
*	Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*	Bug 427438 - [1.8][compiler] NPE at org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*	Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*	Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/Assignment.java
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* Stephan Herrmann - Contribution for
*	bug 400710 - [1.8][compiler] synthetic access to default method generates wrong code
*	Bug 459967 - [null] compiler should know about nullness of special methods like MyEnum.valueOf()
*	Bug 470467 - [null] Nullness of special Enum methods not detected from .class file
*	Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*	Bug 405104 -
 [1.8][compiler][codegen] Implement support for serializeable lambdas
**********/

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*   Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
*   bug 292478 - Report potentially null across variable assignment,
*   bug 185682 - Increment/decrement operators mark local variables as read
*   bug 331649 - [compiler][null] consider null annotations for fields
*   bug 383368 - [compiler][null] syntactic null analysis for field references
*   Bug 412203 - [compiler] Internal compiler error: java.lang.IllegalArgumentException:
 info cannot be null
*   Bug 458396 - NPE in CodeStream.invoke()
*   Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
*   Jesper S Moller - <jesper@selskabet.org>   - Contributions for
*   bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
*   bug 378674 - "The method can be declared as static" is wrong
*   bug 404657 - [1.8][compiler] Analysis for effectively final variables fails to consider loops
*   bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
**********/

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*   Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*   Bug 426676 - [1.8][compiler] Wrong generic method type inferred from lambda expression
*   Bug 426542 - [1.8] Most specific method not picked when one method has intersection type as type parameter
*   Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.

```
*     Andy
 Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                    Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
*     Jesper S Møller - Contributions for bug 381345 : [1.8] Take care of the Java 8 major version
*                    Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
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*     IBM Corporation - Bug fixes
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*       bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
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* bug 186342 - [compiler][null] Using annotations for null checking
* bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* bug 388281 - [compiler][null] inheritance of null annotations as an option
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
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*                    Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
*                    Bug 409246 - [1.8][compiler] Type annotations on catch parameters not handled properly
*******************************************************************************/
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* bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
* bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 415850 - [1.8] Ensure RunJDTCoreTests
 can cope with null annotations enabled
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 427163 - [1.8][null] bogus error "Contradictory null specification" on varags
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 434570 - Generic type mismatch for parametrized class annotation attribute with inner class
* Bug 434600 - Incorrect null analysis error reporting on type parameters
* Bug 439516 - [1.8][null] NonNullByDefault wrongly applied to implicit type bound of binary type
* Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
* Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
* Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
* Bug 437072 - [compiler][null] Null analysis
 emits possibly incorrect warning for new int[][] despite @NonNullByDefault
* Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
* Bug 409236 - [1.8][compiler] Type annotations on intersection cast types dropped by code generator

* Bug 415399 - [1.8][compiler] Type annotations on constructor results dropped by the code generator
* Jesper S Møller <jesper@selskabet.org> - Contributions for
* bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
* bug 529556 - [18.3] Add content assist support for 'var' as a type
*
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/StackMapFrameCodeStream.java
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*     Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
*       bug 328281 - visibility leaks not detected when analyzing unused field in private class
*       bug 382353 - [1.8][compiler] Implementation property modifiers should be accepted on default methods.
*******************************************************************************/
```

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/GenericXMLWriter.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/ManifestAnalyzer.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/UnresolvedAnnotationBinding.java
*
 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/ReferenceContext.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/DefaultErrorHandlingPolicies.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/problem/DefaultProblemFactory.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/Receiver.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/flow/InsideSubRoutineFlowContext.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/core/JDTCompilerAdapter.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/CompilerStats.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/IErrorHandlingPolicy.java
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* Contributors:
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*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*******************************************************************************/
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*       bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
*    Stephan Herrmann - Contribution for
*       bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 416182 - [1.8][compiler][null]
 Contradictory null annotations not rejected
*******************************************************************************/
```

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* Stephan Herrmann - Contribution for
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 383368 - [compiler][null] syntactic null analysis for field references
***/

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* Bug 428811 - [1.8][compiler] Type witness unnecessarily required
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* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 358903 - Filter practically unimportant resource leak warnings
* bug 381445 - [compiler][resource] Can the resource leak check be made aware of Closeables.closeQuietly?
* bug 400421 - [compiler] Null analysis for fields does not take @com.google.inject.Inject into account
* bug 382069 - [null] Make
the null analysis consider JUnit's assertNotNull similarly to assertions
* Bug 405569 - Resource leak check false positive when using DbUtils.closeQuietly
* Bug 427199 - [1.8][resource] avoid resource leak warnings on Streams that have no resource
* Bug 425183 - [1.8][inference] make CaptureBinding18 safe
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object),
Collection#remove(Object) et al.
* Jesper S Moller - Contributions for
* Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
* Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
* bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 405104 - [1.8][compiler][codegen]
Implement support for serializeable lambdas
* Ulrich Grave <ulrich.grave@gmx.de> - Contributions for
* bug 386692 - Missing "unused" warning on "autowired" fields
* Pierre-Yves B. <pyvesdev@gmail.com> - Contribution for
* bug 542520 - [JUnit 5] Warning The method xxx from the type X is never used locally is shown
when using MethodSource
**********/

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*        bug 331649 - [compiler][null] consider null annotations for fields
*        Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*        Bug 458396 - NPE in CodeStream.invoke()
*******************************************************************************/
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/VariableBinding.java
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* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 360328 - [compiler][null] detect null problems in nested code (local class inside a loop)
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365835 - [compiler][null] inconsistent error reporting.
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* bug 358903 - Filter practically unimportant resource leak warnings
* bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
* bug 370639 - [compiler][resource] restore the default for resource leak warnings
* bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
* bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
* bug 401030 - [1.8][null] Null analysis support for lambda
methods.
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
* Bug 417758 - [1.8][null] Null safety compromise during array creation.
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 430150 - [1.8][null] stricter checking against type variables
* Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
* Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
* Bug 453483 - [compiler][null][loop] Improve null analysis for loops
* Bug 455723 - Nonnull argument not correctly inferred in loop
* Jesper S Moller - Contributions
for
* bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
**********/

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*       bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*       bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
*       Bug 422796 - [compiler][null] boxed boolean reported as potentially null after
 null test in lazy disjunction
*******************************************************************************/
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*       bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
*       Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
*     Stephan Herrmann - Contribution for
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 423504 - [1.8] Implement "18.5.3
 Functional Interface Parameterization Inference"
*       Bug 425142 - [1.8][compiler] NPE in ConstraintTypeFormula.reduceSubType
*       Bug 425153 - [1.8] Having wildcard allows incompatible types in a lambda expression
```

```
*       Bug 425156 - [1.8] Lambda as an argument is flagged with incompatible error
*       Bug 424403 - [1.8][compiler] Generic method call with method reference argument fails to resolve properly.
*       Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*       Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*       Bug 446442 - [1.8] merge null annotations from super methods
*     Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
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*    IBM Corporation - fix for 342598
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*     Stephan Herrmann - Contributions for
*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
```

```
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*    IBM Corporation - fix for 342598
*    IBM Corporation - Java 8 support
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*       bug 185682 - Increment/decrement operators mark local variables as read
*       bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*       bug 331649 - [compiler][null] consider null annotations for fields
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       bug 392384 - [1.8][compiler][null] Restore nullness
 info from type annotations in class files
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 411964 - [1.8][null] leverage null type annotation in foreach statement
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*   Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
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*   Jesper S Moller - Contributions for
*   bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
*   Bug 384687 - [1.8] Wildcard type arguments should be rejected for lambda and reference
expressions
*   Bug 416885 - [1.8][compiler]IncompatibleClassChange error (edit)
*   Stephan Herrmann - Contribution for
*   bug 402028 - [1.8][compiler] null analysis for reference
 expressions
*   bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super via I.super.m() syntax
*   Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*   Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled

```
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*       Bug 424637 - [1.8][compiler][null] AIOOB in ReferenceExpression.resolveType with a method reference to
Files::walk
*       Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
*       Bug 424403 - [1.8][compiler] Generic method call with method reference argument fails to resolve properly.
*       Bug 427196 - [1.8][compiler] Compiler error for method reference to overloaded method
*       Bug 427438
 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*       Bug 428264 - [1.8] method reference of generic class causes problems (wrong inference result or NPE)
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 426537 - [1.8][inference] Eclipse compiler thinks I<? super J> is compatible with I<J<?>> - raw type J
involved
*       Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*       Bug 435689 - [1.8][inference] Type inference not occurring with lambda expression and method reference
*       Bug 438383 - [1.8][null] Bogus warning: Null type safety at method return type
*       Bug 434483 - [1.8][compiler][inference] Type inference not picked up with method reference
*       Bug 441734 - [1.8][inference] Generic method with nested parameterized type argument fails on method reference
*       Bug 438945 - [1.8] NullPointerException
 InferenceContext18.checkExpression in java 8 with generics, primitives, and overloading
*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*       Bug 448709 - [1.8][null] ensure we don't infer types that violate null constraints on a type parameter's bound
*       Bug 459967 - [null] compiler should know about nullness of special methods like MyEnum.valueOf()
*       Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*       Bug 470542 - NullPointerException in ReferenceExpression.isPotentiallyCompatibleWith (962)
*        Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contribution for
*                        Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
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```

```
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
*       bug 331649 - [compiler][null] consider null annotations for fields
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 415043 - [1.8][null] Follow-up re null type annotations
 after bug 392099
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 424728 - [1.8][null] Unexpected error: The nullness annotation 'XXXX' is not applicable at this location
*       Bug 392245 - [1.8][compiler][null] Define whether / how @NonNullByDefault applies to TYPE_USE locations
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 457210 - [1.8][compiler][null] Wrong Nullness errors given on full build build but not on incremental build?
*       Bug 469584 - ClassCastException in Annotation.detectStandardAnnotation (320)
*       Andy Clement (GoPivotal,
 Inc) aclement@gopivotal.com - Contributions for
*                       Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
*                       Bug 409517 - [1.8][compiler] Type annotation problems on more elaborate array references
*                       Bug 415397 - [1.8][compiler] Type Annotations on wildcard type argument dropped
*                       Bug 414384 - [1.8] type annotation on abbreviated inner class is not marked as inner type
*     Jesper S Moller <jesper@selskabet.org> -  Contributions for
*                       Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*                       Bug 412151 - [1.8][compiler] Check repeating annotation's collection type
*                       Bug 412149 - [1.8][compiler] Emit repeated annotations into the designated container
*                       Bug 419209 - [1.8] Repeating container annotations
 should be rejected in the presence of annotation it contains
*******************************************************************************/
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*     Stephan Herrmann - Contribution for
*       Bug 440687 - [compiler][batch][null] improve command line option for external annotations
```

*   Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
*   Bug 473178
**********/

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*   bug 383368 - [compiler][null] syntactic null analysis for field references
*   Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*   Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
*   Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*   Bug 417295 - [1.8[[null]
 Massage type annotated null analysis to gel well with deep encoded type bindings.
*   Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*   Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*   Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*   Andy Clement - Contributions for
*   Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
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*   bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
*   bug 401030 - [1.8][null] Null analysis support for lambda methods.
*   Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*   Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
**********/

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*   bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*   bug 292478 - Report potentially null across variable assignment
*   bug 335093 - [compiler][null] minimal hook for future null annotation support

*	bug 349326 - [1.7] new warning for missing try-with-resources
*	bug 186342 - [compiler][null] Using annotations for null checking
*	bug 358903 - Filter practically unimportant resource leak warnings
*	bug 370639 - [compiler][resource] restore the default for resource leak warnings
*	bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
*	bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*	bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
*	bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*	bug 383368 - [compiler][null] syntactic null analysis for field references
*	bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
*	Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*	Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*	Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*	Bug 430150 - [1.8][null] stricter checking against type variables
*	Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*	Jesper S Moller - Contributions for
*	Bug 378674 - "The method can be declared as static" is wrong
*	Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*	Bug 529556 - [18.3] Add content assist support for 'var' as a type
*	Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*	Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
*	Bug 426616 - [1.8][compiler] Type Annotations, multiple problems
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/diagnose/LexStream.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/NormalAnnotation.java

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*    wharley@bea.com - derived base class from BatchMessagerImpl
```

*
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* Bug 440474 - [null] textual encoding of external null annotations
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* bug 342671 - ClassCastException: org.eclipse.jdt.internal.compiler.lookup.SourceTypeBinding cannot be cast to org.eclipse.jdt.internal.compiler.lookup.ArrayBinding
* Bug 420894 - ClassCastException in DefaultBindingResolver.resolveType(Type)
* bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type
 annotations after bug 392099
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 434600 - Incorrect null analysis error reporting on type parameters
* Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
* Bug 456508 - Unexpected RHS PolyTypeBinding for: <code-snippet>
* Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
* Andy Clement - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
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*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/JavadocImplicitTypeReference.java
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*     Carmi Grushko - Bug 465048 - Binding is null for class literals in synchronized blocks
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*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/flow/SwitchFlowContext.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/BreakStatement.java
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* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* Bug 434570 - Generic type mismatch for parametrized class annotation attribute with inner class
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* bug 325755 - [compiler] wrong initialization state after conditional expression
* bug 320170 - [compiler] [null] Whitebox issues in null analysis

```
*          bug 292478 - Report potentially null across variable assignment
*          bug 332637 - Dead Code detection removing code that isn't dead
*          bug 341499 - [compiler][null] allocate extra bits in all methods of UnconditionalFlowInfo
 *          bug 349326 - [1.7] new warning for missing try-with-resources
*      bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*      bug 386181 - [compiler][null] wrong transition in UnconditionalFlowInfo.mergedWith()
*      bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
*      Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*      Bug 454031 - [compiler][null][loop] bug in null analysis; wrong "dead code" detection
*      Bug 421035 - [resource] False alarm of resource leak warning when casting a closeable in its assignment
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/batch/messages.properties
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/problem/messages.properties
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* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 429384 - [1.8][null] implement conformance rules for null-annotated lower / upper type bounds
* Bug 441797 - [1.8] synchronize type annotations on capture and its wildcard
* Bug 456497 - [1.8][null] during inference nullness from target type is lost against weaker
 hint from applicability analysis
* Bug 456924 - StackOverflowError during compilation
* Bug 462790 - [null] NPE in Expression.computeConversion()
* Jesper S Møller - Contributions for bug 381345 : [1.8] Take care of the Java 8 major version
* Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
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* Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* Bug 328281 - visibility leaks not detected when analyzing unused field in private class
* Bug 300576 - NPE Computing type hierarchy when compliance doesn't match libraries
* Bug 354536 - compiling package-info.java still depends on the order of compilation units
* Bug 349326 - [1.7] new warning for missing try-with-resources
* Bug
358903 - Filter practically unimportant resource leak warnings
* Bug 395977 - [compiler][resource] Resource leak warning behavior possibly incorrect for anonymous inner class
* Bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
* Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
* Bug 427199 - [1.8][resource] avoid resource leak warnings on Streams that have no resource
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 434570 - Generic type mismatch for parametrized class annotation attribute with inner class
* Bug 444024 - [1.8][compiler][null] Type mismatch error in annotation generics assignment which happens
"sometimes"
* Bug 459967 - [null] compiler should know about nullness of special methods like MyEnum.valueOf()
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com -
Contributions for
* Bug 415821 - [1.8][compiler] CLASS_EXTENDS target type annotation missing for anonymous
classes
* het@google.com - Bug 456986 - Bogus error when annotation processor generates annotation type
* Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
* Bug 473178
**********/

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ClassScope.java
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* Contributors:
*     IBM Corporation - initial API and implementation
*     Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
*       bug 328281 - visibility leaks not detected when analyzing unused field in private class
*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365836 - [compiler][null] Incomplete propagation of null defaults.
*       bug 365519 - editorial cleanup after bug 186342
 and bug 365387
*       bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
*       bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
*       bug 366063 - Compiler should not add synthetic @NonNull annotations
*       bug 384663 - Package Based Annotation Compilation Error in JDT 3.8/4.2 (works in 3.7.2)
*       bug 386356 - Type mismatch error with annotations and generics
*       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 331649 - [compiler][null] consider null annotations for fields
*       bug 380896 - [compiler][null] Enum constants not recognised as being NonNull.
*       bug 391376 - [1.8] check interaction of default methods with bridge methods and generics
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
 *       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*       Bug 416172 - [1.8][compiler][null] null type annotation not evaluated on method return type
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 426048 - [1.8] NPE in TypeVariableBinding.internalBoundCheck when parentheses are not balanced
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 432348 - [1.8] Internal compiler error (NPE) after upgrade to 1.8
*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*       Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*       Bug 441693 - [1.8][null]
 Bogus warning for type argument annotated with @NonNull
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
```

```
*       Bug 457210 - [1.8][compiler][null] Wrong Nullness errors given on full build build but not on incremental build?
*       Bug 461250 - ArrayIndexOutOfBoundsException in SourceTypeBinding.fields
*       Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*     Jesper S Moller <jesper@selskabet.org> -  Contributions for
*       Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*     Till Brychcy - Contributions for
*          bug 415269 - NonNullByDefault is not always inherited to nested classes
*     Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                    Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
*     Sebastian Zarnekow - Contributions
 for
*       bug 544921 - [performance] Poor performance with large source files
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* Contributors:
*     IBM Corporation - initial API and implementation
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*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/JavadocQualifiedTypeReference.java
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* Contributors:
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* Stephan Herrmann - Contribution for
* bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
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* Contributors:
* IBM Corporation - initial API and implementation
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* bug 407191 - [1.8] Binary access support for type annotations
* Stephan Herrmann - Contribution for
* Bug 440474 - [null] textual encoding of external null annotations
**********/

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* Benjamin Muskalla - Contribution for bug 239066
* Stephan Herrmann - Contributions for
* bug 236385 - [compiler] Warn for potential programming problem if an object is created but not used
* bug 338303 - Warning about Redundant assignment conflicts with definite assignment
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
* bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
* bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
* bug 374605 - Unreasonable warning for enum-based switch statements
* bug 382353 - [1.8][compiler] Implementation property modifiers should be accepted on default methods.
* bug 382347 - [1.8][compiler] Compiler accepts incorrect default method inheritance
* bug 388281 - [compiler][null] inheritance of null annotations as an option
* bug 376053 - [compiler][resource] Strange potential resource leak problems
* bug 381443 - [compiler][null] Allow parameter widening from @NonNull to unannotated
* bug 393719 - [compiler] inconsistent warnings on iteration
variables
* bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
* bug 388739 - [1.8][compiler] consider default methods when detecting whether a class needs to be declared abstract
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 382789 - [compiler][null] warn when syntactically-nonnull expression is compared against null
* bug 376590 - Private fields with @Inject are ignored by unused field validation
* bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
* bug 402028 - [1.8][compiler] null analysis for reference expressions
* bug 401796 - [1.8][compiler] don't treat default methods as overriding an independent inherited abstract method
* bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
* bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
* Bug
392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
* Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
* Bug 414380 - [compiler][internal] QualifiedNameReference#indexOfFirstFieldBinding does not point to the first field
* Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
* Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 424637 - [1.8][compiler][null] AIOOB in ReferenceExpression.resolveType with a method reference to Files::walk
* Bug 428294 - [1.8][compiler] Type mismatch: cannot convert
from List<Object> to Collection<Object[]>
* Bug 428366 - [1.8] [compiler] The method valueAt(ObservableList<Object>, int) is ambiguous for the type Bindings
* Bug 416190 - [1.8][null] detect incompatible overrides due to null type annotations
* Bug 392245 - [1.8][compiler][null] Define whether / how @NonNullByDefault applies to TYPE_USE locations
* Bug 390889 - [1.8][compiler] Evaluate options to support 1.7- projects against 1.8 JRE.

```
*       Bug 430150 - [1.8][null] stricter checking against type variables
*       Bug 434600 - Incorrect null analysis error reporting on type parameters
*       Bug 439516 - [1.8][null] NonNullByDefault wrongly applied to implicit type bound of binary type
*       Bug 438467 - [compiler][null] Better error position for "The method _ cannot implement the corresponding
method _ due to incompatible nullness constraints"
*       Bug 439298 - [null] "Missing code implementation in the compiler" when using @NonNullByDefault
 in package-info.java
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 446442 - [1.8] merge null annotations from super methods
*       Bug 455723 - Nonnull argument not correctly inferred in loop
*       Bug 458361 - [1.8][null] reconciler throws NPE in ProblemReporter.illegalReturnRedefinition()
*       Bug 459967 - [null] compiler should know about nullness of special methods like MyEnum.valueOf()
*       Bug 461878 - [1.7][1.8][compiler][null] ECJ compiler does not allow to use null annotations on annotations
*       Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object),
Collection#remove(Object) et al.
*     Jesper S Moller <jesper@selskabet.org> -  Contributions for
*       bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
*       bug 382721 - [1.8][compiler] Effectively final variables needs
 special treatment
*       bug 384567 - [1.5][compiler] Compiler accepts illegal modifiers on package declaration
*       bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*       bug 412151 - [1.8][compiler] Check repeating annotation's collection type
*       bug 419209 - [1.8] Repeating container annotations should be rejected in the presence of annotation it contains
*       Bug 429384 - [1.8][null] implement conformance rules for null-annotated lower / upper type bounds
*       Bug 416182 - [1.8][compiler][null] Contradictory null annotations not rejected
*       bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*     Ulrich Grave <ulrich.grave@gmx.de> - Contributions for
*                         bug 386692 - Missing "unused" warning on "autowired" fields
*******************************************************************************/
```

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/problem/ProblemReporter.java
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*     IBM Corporation - initial API and implementation
*     Nick Teryaev - fix for bug (https://bugs.eclipse.org/bugs/show_bug.cgi?id=40752)
*     Stephan Herrmann - Contributions for
```

* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 358903 - Filter practically unimportant resource leak warnings
* bug
370639 - [compiler][resource] restore the default for resource leak warnings
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
* bug 379784 - [compiler] "Method can be static" is not getting reported
* bug 379834 - Wrong "method can be static" in presence of qualified super and different staticness of nested super class.
* bug 388281 - [compiler][null] inheritance of null annotations as an option
* bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
* bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
* bug 381445 - [compiler][resource] Can the resource leak check be made aware of Closeables.closeQuietly?
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 383368 - [compiler][null] syntactic null
analysis for field references
* bug 382069 - [null] Make the null analysis consider JUnit's assertNotNull similarly to assertions
* bug 382350 - [1.8][compiler] Unable to invoke inherited default method via I.super.m() syntax
* bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
* bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 405569 - Resource leak check false positive when using DbUtils.closeQuietly
* Bug 411964 - [1.8][null] leverage null type annotation in foreach statement
* Bug 417295 - [1.8[[null] Massage type annotated null analysis
to gel well with deep encoded type bindings.
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
* Bug 424710 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
* Bug 425152 - [1.8] [compiler] Lambda Expression not resolved but flow analyzed leading to NPE.
* Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
* Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
* Bug 426366 - [1.8][compiler] Type inference doesn't handle multiple candidate target types in outer overload context
* Bug 426290 - [1.8][compiler] Inference + overloading => wrong method resolution ?
* Bug 427483 - [Java 8] Variables in lambdas sometimes can't be resolved
* Bug 427438 - [1.8][compiler]
NPE at org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 426996 - [1.8][inference] try to avoid method Expression.unresolve()?
* Bug 428352 - [1.8][compiler] Resolution errors don't always surface
* Bug 429430 - [1.8] Lambdas and method reference infer wrong exception type with generics (RuntimeException instead of IOException)
* Bug 441734 - [1.8][inference] Generic method with nested parameterized type argument fails on method reference
* Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression

*	Bug 456487 - [1.8][null] @Nullable type variant of @NonNull-constrained type parameter causes grief
*	Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
*	Bug 472618 - [compiler][null] assertNotNull vs. Assert.assertNotNull
*	Bug 470958 - [1.8] Unable to convert lambda
*	Bug 410218 - Optional warning
 for arguments of "unexpected" types to Map#get(Object), Collection#remove(Object) et al.
*	Jesper S Moller - Contributions for
*	Bug 378674 - "The method can be declared as static" is wrong
*	Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*	Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
*	Bug 409245 - [1.8][compiler] Type annotations dropped when call is routed through a synthetic bridge method
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*     Nick Teryaev - fix for bug (https://bugs.eclipse.org/bugs/show_bug.cgi?id=40752)
*     Stephan Herrmann - Contributions for
*       bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug
 383368 - [compiler][null] syntactic null analysis for field references
*       bug 401017 - [compiler][null] casted reference to @Nullable field lacks a warning
*       bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*       Bug 430150 - [1.8][null] stricter checking against type variables
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style
 null annotations
*       Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 415541 - [1.8][compiler] Type annotations in the body of static initializer get dropped
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*    IBM Corporation - initial API and implementation
*    IBM Corporation - Fix for bug 328575
*    het@google.com - Bug 415274 - Annotation processing throws a NPE in getElementsAnnotatedWith()
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/HashSetOfInt.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/core/compiler/InvalidInputException.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/BranchLabel.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/ObjectVector.java
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 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/VerificationTypeInfo.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IModuleAwareNameEnvironment.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ProvidesStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/INameEnvironmentExtension.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IMultiModuleEntry.java
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* Contributors:
* IBM Corporation - initial API and implementation
* Jesper S Moller - Contributions for
* Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
* Bug 406973 - [compiler] Parse MethodParameters attribute
* Andy Clement - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/AttributeNamesConstants.java
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* Contributors:
* tyeung@bea.com - initial API and implementation
* IBM Corporation - fix for bug 342757
* Stephan Herrmann - Contribution for bug 186342 - [compiler][null] Using annotations for null checking
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*   Bug 473178
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ConstraintExceptionFormula.java
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*   Bug 440687 - [compiler][batch][null] improve command line option for external annotations
**********/

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*     Benjamin Muskalla - Contribution for bug 239066
*     Stephan Herrmann - Contribution for
*          bug 382347 - [1.8][compiler] Compiler accepts incorrect default method inheritance
*       bug 388954 - [1.8][compiler] detect default methods in class files
*       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 388739 - [1.8][compiler] consider default methods when detecting whether a class needs
 to be declared abstract
*       bug 390883 - [1.8][compiler] Unable to override default method
*       bug 401796 - [1.8][compiler] don't treat default methods as overriding an independent inherited abstract method
*       bug 395681 - [compiler] Improve simulation of javac6 behavior from bug 317719 after fixing bug 388795
*       bug 406928 - computation of inherited methods seems damaged (affecting @Overrides)
*       bug 409473 - [compiler] JDT cannot compile against JRE 1.8
*       Bug 420080 - [1.8] Overridden Default method is reported as duplicated
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*     IBM Corporation - initial API and implementation
*     Stephan Herrmann - Contribution for bug 186342 - [compiler][null] Using annotations for null checking
*     Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*         Bug 407191 - [1.8] Binary access support for type annotations
*******************************************************************************/
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*     Jesper S Moller - Contributions for
*       bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
*       bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
*       Bug 416885 - [1.8][compiler]IncompatibleClassChange error (edit)
*     Stephan Herrmann - Contribution for
*       bug 401030 - [1.8][null] Null analysis support for lambda methods.
*       Bug 392099
```

- [1.8][compiler][null] Apply null annotation on types for null analysis
*	Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*	Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*	Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*	Bug 425142 - [1.8][compiler] NPE in ConstraintTypeFormula.reduceSubType
*	Bug 425153 - [1.8] Having wildcard allows incompatible types in a lambda expression
*	Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
*	Bug 425798 - [1.8][compiler] Another NPE in ConstraintTypeFormula.reduceSubType
*	Bug 425156 - [1.8] Lambda as an argument is flagged with incompatible error
*	Bug 424403 - [1.8][compiler] Generic method call with method reference argument fails to resolve properly.
*	Bug 426563 - [1.8] AIOOBE when method with error
invoked with lambda expression as argument
*	Bug 420525 - [1.8] [compiler] Incorrect error "The type Integer does not define sum(Object, Object) that is applicable here"
*	Bug 427438 - [1.8][compiler] NPE at org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*	Bug 428294 - [1.8][compiler] Type mismatch: cannot convert from List<Object> to Collection<Object[]>
*	Bug 428786 - [1.8][compiler] Inference needs to compute the "ground target type" when reducing a lambda compatibility constraint
*	Bug 428980 - [1.8][null] simple expression as lambda body doesn't leverage null annotation on argument
*	Bug 429430 - [1.8] Lambdas and method reference infer wrong exception type with generics (RuntimeException instead of IOException)
*	Bug 432110 - [1.8][compiler] nested lambda type incorrectly inferred vs javac
*	Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type
variables
*	Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
*	Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*	Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*	Bug 455723 - Nonnull argument not correctly inferred in loop
*	Bug 463728 - [1.8][compiler][inference] Ternary operator in lambda derives wrong type
*	Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*	Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
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* Stephan Herrmann - Contributions for
* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug 417758 - [1.8][null] Null safety compromise during array creation.
* Bug
 427163 - [1.8][null] bogus error "Contradictory null specification" on varags
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
* Bug 409247 - [1.8][compiler] Verify error with code allocating multidimensional array
**********/

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* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
* bug 370639 - [compiler][resource] restore the
default for resource leak warnings
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
* bug 395977 - [compiler][resource] Resource leak warning behavior possibly incorrect for anonymous inner class
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
* Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
* Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 416267 - NPE in QualifiedAllocationExpression.resolveType
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 424415 - [1.8][compiler] Eventual
resolution of ReferenceExpression is not seen to be happening.
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Jesper S Moller <jesper@selskabet.org> - Contributions for
* bug 378674 - "The method can be declared as static" is wrong
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
* Bug 409245 - [1.8][compiler] Type annotations dropped when call is routed through a synthetic
bridge method
* Till Brychcy - Contributions for
* bug 413460 - NonNullByDefault is not inherited to Constructors when accessed via Class File
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*         Bug 473178
*     IBM Corporation - Bug fixes
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*    IBM Corporation - Bug 513790
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*     Stephan Herrmann - Contributions for
*         bug 186342 - [compiler][null] Using annotations for null checking
*         bug 387612 - Unreachable catch block...exception is never thrown from the try
*         bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*         bug 401456 - Code compiles from javac/intellij, but fails from eclipse
*         bug 401271 - StackOverflowError
 when searching for a methods references
*         bug 405706 - Eclipse compiler fails to give compiler error when return type is a inferred generic
*         Bug 408441 - Type mismatch using Arrays.asList with 3 or more implementations of an interface with the
interface type as the last parameter
*         Bug 413958 - Function override returning inherited Generic Type
*         Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*         Bug 416183 - [1.8][compiler][null] Overload resolution fails with null annotations
*         Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*         Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*         Bug 424710 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
*         Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
*         Bug 424415 - [1.8][compiler]
 Eventual resolution of ReferenceExpression is not seen to be happening.
*         Bug 426366 - [1.8][compiler] Type inference doesn't handle multiple candidate target types in outer overload
context
*         Bug 426290 - [1.8][compiler] Inference + overloading => wrong method resolution ?
*         Bug 426589 - [1.8][compiler] Compiler error with generic method/constructor invocation as vargs argument
*         Bug 426590 - [1.8][compiler] Compiler error with tenary operator
*         Bug 426764 - [1.8] Presence of conditional expression as method argument confuses compiler
*         Bug 426998 - [1.8][compiler] method(java.lang.Class, java.lang.String) not applicable for the arguments
(java.lang.Class, java.lang.String)
*         Bug 423505 - [1.8] Implement "18.5.4 More Specific Method Inference"
*         Bug 427196 - [1.8][compiler] Compiler error for method reference to overloaded method
*         Bug 427483 - [Java 8] Variables in lambdas sometimes can't be resolved
*         Bug
 427728 - [1.8] Type Inference rejects calls requiring boxing/unboxing
*         Bug 427218 - [1.8][compiler] Verify error varargs + inference
*         Bug 426836 - [1.8] special handling for return type in references to method getClass()?
```

```
*       Bug 427628 - [1.8] regression : The method * is ambiguous for the type *
*       Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*       Bug 428366 - [1.8] [compiler] The method valueAt(ObservableList<Object>, int) is ambiguous for the type
Bindings
*       Bug 424728 - [1.8][null] Unexpected error: The nullness annotation 'XXXX' is not applicable at this location
*       Bug 428811 - [1.8][compiler] Type witness unnecessarily required
*       Bug 429424 - [1.8][inference] Problem inferring type of method's parameter
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 434570 - Generic type mismatch for parametrized class annotation attribute with inner
 class
*       Bug 434483 - [1.8][compiler][inference] Type inference not picked up with method reference
*       Bug 441734 - [1.8][inference] Generic method with nested parameterized type argument fails on method reference
*       Bug 452194 - Code no longer compiles in 4.4.1, but with confusing error
*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*       Bug 456236 - [1.8][null] Cannot infer type when constructor argument is annotated with @Nullable
*       Bug 437072 - [compiler][null] Null analysis emits possibly incorrect warning for new int[][] despite
@NonNullByDefault
*       Bug 462083 - [1.8][inference] Java 8 generic return type mismatch with interface involving type parameter.
*     Jesper S Moller - Contributions for
*       Bug 378674 - "The method can be declared as static" is wrong
*        Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
*     Andy Clement (GoPivotal, Inc)
 aclement@gopivotal.com - Contributions for
*                       Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
*     Pierre-Yves B. <pyvesdev@gmail.com> - Contributions for
*                         Bug 559618 - No compiler warning for import from same package
*                         Bug 560630 - No warning on unused import on class from same package
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/SimpleSetOfCharArray.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/CachedIndexEntry.java
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* bug 400710 - [1.8][compiler] synthetic access to default method generates wrong code
* bug 391376 - [1.8] check interaction of default methods with bridge methods and generics
* bug 421543 - [1.8][compiler] Compiler fails to recognize default method being turned into abstract by subtytpe
* Jesper S Moller - Contributions for
* Bug 405066 - [1.8][compiler][codegen] Implement
 code generation infrastructure for JSR335
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
* Bug 409247 - [1.8][compiler] Verify error with code allocating multidimensional array
* Bug 409236 - [1.8][compiler] Type annotations on intersection cast types dropped by code
generator
* Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
* Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
* Bug 449467 - [1.8][compiler] Invalid lambda deserialization with anonymous class
* Olivier Tardieu (tardieu@us.ibm.com) - Contributions for
* Bug 442418 - $deserializeLambda$ off-by-one error when deserializing the captured arguments
 of a lambda that also capture this
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/CodeStream.java

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*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
*       Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*       Bug 421035 - [resource] False alarm of resource leak warning when casting a closeable in its assignment
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/flow/ExceptionHandlingFlowContext.java
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* Contributors:
*   tyeung@bea.com - initial API and implementation
*   olivier_thomann@ca.ibm.com - add hashCode() and equals(..) methods
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/ClassSignature.java
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*   Benjamin Muskalla - Contribution for bug 239066
*   Stephan Herrmann - Contributions for
*   bug 236385 - [compiler] Warn for potential programming problem if an object is created but not used
*   bug 295551 - Add option to automatically promote all warnings to errors
*   bug 359721 - [options] add command line option
 for new warning token "resource"
*   bug 365208 - [compiler][batch] command line options for annotation based null analysis
*   bug 374605 - Unreasonable warning for enum-based switch statements
*   bug 375366 - ECJ ignores unusedParameterIncludeDocCommentReference unless enableJavadoc option is set
*   bug 388281 - [compiler][null] inheritance of null annotations as an option
*   bug 381443 - [compiler][null] Allow parameter widening from @NonNull to unannotated
*   Bug 440477 - [null] Infrastructure for feeding external annotations into compilation
*   Bug 440687 - [compiler][batch][null] improve command line option for external annotations
*   Bug 408815 - [batch][null] Add CLI option for
COMPILER_PB_SYNTACTIC_NULL_ANALYSIS_FOR_FIELDS
*   Jesper S Moller   - Contributions for
*   bug 407297 - [1.8][compiler] Control generation of parameter names by option

*   Mat Booth - Contribution for bug 405176
*   Frits Jalvingh -
 fix for bug 533830.
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/batch/Main.java
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*Contributors:
*   IBM Corporation - initial API and implementation
*   Stephan Herrmann - Contribution for
*   Bug 429813 - [1.8][dom ast] IMethodBinding#getJavaElement() should return IMethod for lambda
**********/

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/Initializer.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/InferenceVariable.java
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* Contributors:
* IBM Corporation - initial API and implementation
* Stephen Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* bug 317046 - Exception during debugging when hover mouse over a field
* bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
* bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
* bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class
 files
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
* Bug 424712 - [1.8][compiler] NPE in TypeBinding.isProvablyDistinctTypeArgument
* Bug 426792 - [1.8][inference][impl] generify new type inference engine
* Bug 426764 - [1.8] Presence of conditional expression as method argument confuses compiler
* Bug 423505 - [1.8] Implement "18.5.4 More Specific Method Inference"
* Bug 427626 - [1.8] StackOverflow while typing new ArrayList<String>().toArray(and asking for code completion
 * Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.
* Bug 435962 - [RC2] StackOverFlowError when building
* Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
* Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
* Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
* Bug 446434 - [1.8][null] Enable interned captures also when analysing null type annotations
* Jesper S Moller <jesper@selskabet.org> - Contributions for
* bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
* bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*
**/

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* Contributors:
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*     Stephan Herrmann - Contribution for
*       bug 331649 - [compiler][null] consider null annotations for fields
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*     Jesper S Moller - Contributions for
*       Bug 378674 - "The method can be declared as static" is wrong
*******************************************************************************/
```

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ThisReference.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/apt/util/Options.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/tool/ArchiveFileObject.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/apt/util/Util.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/tool/Util.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/apt/util/ArchiveFileObject.java
*
 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/tool/Archive.java
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* Contributors:
* wharley@bea.com - initial API and implementation
* IBM Corporation - fix for 342598
* IBM Corporation - Java 8 support
* het@google.com - Bug 427943 - The method
org.eclipse.jdt.internal.compiler.apt.model.Factory.getPrimitiveType does not throw IllegalArgumentException
**********/

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/apt/model/Factory.java
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* Contributors:
* Andrey Loskutov <loskutov@gmx.de> - initial API and implementation
**********/

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* Contributors:
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* Stephan Herrmann - Contribution for
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
***/

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ExpressionContext.java
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* Contributors:
* Stephan Herrmann - initial API and implementation
* Till Brychcy - Contributions for
* Bug 467482 - TYPE_USE null annotations: Incorrect "Redundant null check"-warning
***/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/NullAnnotationMatching.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/core/compiler/CompilationProgress.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredAnnotation.java
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* Contributors:
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* Frits Jalvingh - fix for bug 533830.
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/PackageExportImpl.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/UsesStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/OpensStatement.java
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* Contributors:
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*     Stephan Herrmann - Contributions for
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*       Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*       Bug 417295 - [1.8[[null] Massage type annotated
 null analysis to gel well with deep encoded type bindings.
*       Bug 425152 - [1.8] [compiler] Lambda Expression not resolved but flow analyzed leading to NPE.
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*******************************************************************************/
```

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ParameterizedMethodBinding.java
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* Contributors:
* IBM Corporation - initial API and implementation
* Tom Tromey - patch for readTable(String) as described in http://bugs.eclipse.org/bugs/show_bug.cgi?id=32196
* Stephan Herrmann - Contributions for
* bug 366003 - CCE in ASTNode.resolveAnnotations(ASTNode.java:639)
* bug 374605 - Unreasonable warning for enum-based switch statements
* bug 393719 - [compiler] inconsistent warnings on iteration variables
* bug 382353 - [1.8][compiler] Implementation property modifiers
 should be accepted on default methods.
* bug 383973 - [1.8][compiler] syntax recovery in the presence of default methods
* bug 401035 - [1.8] A few tests have started failing recently
* Jesper S Moller - Contributions for
* bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
* bug 399695 - [1.8][compiler] [1.8][compiler] migrate parser to other syntax for default methods
* bug 384567 - [1.5][compiler] Compiler accepts illegal modifiers on package declaration
* bug 393192 - Incomplete type hierarchy with > 10 annotations
* bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
* Andy Clement - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
* Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
*
 Bug 415821 - [1.8][compiler] CLASS_EXTENDS target type annotation missing for anonymous classes
***/

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*     Stephan Herrmann - Contribution for
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*******************************************************************************/
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/flow/LabelFlowContext.java
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* Contributors:
*     IBM Corporation - initial API and implementation
*     IBM Corporation - added the following constants
*         NonStaticAccessToStaticField
*         NonStaticAccessToStaticMethod
*         Task
*         ExpressionShouldBeAVariable
*         AssignmentHasNoEffect
*     IBM Corporation - added the following constants
*         TooManySyntheticArgumentSlots
*         TooManyArrayDimensions
*         TooManyBytesForStringConstant
*         TooManyMethods
*         TooManyFields
 *         NonBlankFinalLocalAssignment
*         ObjectCannotHaveSuperTypes
*         MissingSemiColon
*         InvalidParenthesizedExpression
*         EnclosingInstanceInConstructorCall
*         BytecodeExceeds64KLimitForConstructor
*         IncompatibleReturnTypeForNonInheritedInterfaceMethod
*         UnusedPrivateMethod
*         UnusedPrivateConstructor
```

```
*         UnusedPrivateType
*         UnusedPrivateField
*         IncompatibleExceptionInThrowsClauseForNonInheritedInterfaceMethod
*         InvalidExplicitConstructorCall
*    IBM Corporation - added the following constants
*         PossibleAccidentalBooleanAssignment
*         SuperfluousSemicolon
*         IndirectAccessToStaticField
*         IndirectAccessToStaticMethod
*         IndirectAccessToStaticType
*         BooleanMethodThrowingException
*         UnnecessaryCast
*         UnnecessaryArgumentCast
*         UnnecessaryInstanceof
*
  FinallyMustCompleteNormally
*         UnusedMethodDeclaredThrownException
*         UnusedConstructorDeclaredThrownException
*         InvalidCatchBlockSequence
*         UnqualifiedFieldAccess
*    IBM Corporation - added the following constants
*         Javadoc
*         JavadocUnexpectedTag
*         JavadocMissingParamTag
*         JavadocMissingParamName
*         JavadocDuplicateParamName
*         JavadocInvalidParamName
*         JavadocMissingReturnTag
*         JavadocDuplicateReturnTag
*         JavadocMissingThrowsTag
*         JavadocMissingThrowsClassName
*         JavadocInvalidThrowsClass
*         JavadocDuplicateThrowsClassName
*         JavadocInvalidThrowsClassName
*         JavadocMissingSeeReference
*         JavadocInvalidSeeReference
*         JavadocInvalidSeeHref
*         JavadocInvalidSeeArgs
*         JavadocMissing
*         JavadocInvalidTag
*         JavadocMessagePrefix
 *         EmptyControlFlowStatement
*    IBM Corporation - added the following constants
*         IllegalUsageOfQualifiedTypeReference
*         InvalidDigit
*    IBM Corporation - added the following constants
*         ParameterAssignment
*         FallthroughCase
```

```
*    IBM Corporation - added the following constants
*                        UnusedLabel
*                        UnnecessaryNLSTag
*                        LocalVariableMayBeNull
*                        EnumConstantsCannotBeSurroundedByParenthesis
*                        JavadocMissingIdentifier
*                        JavadocNonStaticTypeFromStaticInvocation
*                        RawTypeReference
*                        NoAdditionalBoundAfterTypeVariable
*                        UnsafeGenericArrayForVarargs
*                        IllegalAccessFromTypeVariable
*
  AnnotationValueMustBeArrayInitializer
*                        InvalidEncoding
*                        CannotReadSource
*                        EnumStaticFieldInInInitializerContext
*                        ExternalProblemNotFixable
*                        ExternalProblemFixable
*    IBM Corporation - added the following constants
*                        AnnotationValueMustBeAnEnumConstant
*                        OverridingMethodWithoutSuperInvocation
*                        MethodMustOverrideOrImplement
*                        TypeHidingTypeParameterFromType
*                        TypeHidingTypeParameterFromMethod
*                        TypeHidingType
*    IBM Corporation - added the following constants
*        NullLocalVariableReference
*        PotentialNullLocalVariableReference
*        RedundantNullCheckOnNullLocalVariable
*         NullLocalVariableComparisonYieldsFalse
 *         RedundantLocalVariableNullAssignment
*         NullLocalVariableInstanceofYieldsFalse
*         RedundantNullCheckOnNonNullLocalVariable
*         NonNullLocalVariableComparisonYieldsFalse
*    IBM Corporation - added the following constants
*                        InvalidUsageOfTypeParametersForAnnotationDeclaration
*                        InvalidUsageOfTypeParametersForEnumDeclaration
*    IBM Corporation - added the following constants
*        RedundantSuperinterface
*  Benjamin Muskalla - added the following constants
*       MissingSynchronizedModifierInInheritedMethod
*  Stephan Herrmann  - added the following constants
*       UnusedObjectAllocation
*       PotentiallyUnclosedCloseable
*       PotentiallyUnclosedCloseableAtExit
*       UnclosedCloseable
*       UnclosedCloseableAtExit
*       ExplicitlyClosedAutoCloseable
```

* RequiredNonNullButProvidedNull
* RequiredNonNullButProvidedPotentialNull
* RequiredNonNullButProvidedUnknown
* NullAnnotationNameMustBeQualified
* IllegalReturnNullityRedefinition
* IllegalRedefinitionToNonNullParameter
* IllegalDefinitionToNonNullParameter
* ParameterLackingNonNullAnnotation
* ParameterLackingNullableAnnotation
* PotentialNullMessageSendReference
* RedundantNullCheckOnNonNullMessageSend
* CannotImplementIncompatibleNullness
* RedundantNullAnnotation
* RedundantNullDefaultAnnotation
* RedundantNullDefaultAnnotationPackage
* RedundantNullDefaultAnnotationType
* RedundantNullDefaultAnnotationMethod
* ContradictoryNullAnnotations
* IllegalAnnotationForBaseType
* RedundantNullCheckOnSpecdNonNullLocalVariable
* SpecdNonNullLocalVariableComparisonYieldsFalse
* RequiredNonNullButProvidedSpecdNullable
* MissingDefaultCase
* MissingEnumConstantCaseDespiteDefault
* UninitializedLocalVariableHintMissingDefault
* UninitializedBlankFinalFieldHintMissingDefault
* ShouldReturnValueHintMissingDefault
* IllegalModifierForInterfaceDefaultMethod
* InheritedDefaultMethodConflictsWithOtherInherited
* ConflictingNullAnnotations
* ConflictingInheritedNullAnnotations
* UnsafeElementTypeConversion
* ArrayReferencePotentialNullReference
* DereferencingNullableExpression
* NullityMismatchingTypeAnnotation
* NullityMismatchingTypeAnnotationSuperHint
* NullityUncheckedTypeAnnotationDetail
* NullityUncheckedTypeAnnotationDetailSuperHint
* NullableFieldReference
* UninitializedNonNullField
* UninitializedNonNullFieldHintMissingDefault
* NonNullMessageSendComparisonYieldsFalse
* RedundantNullCheckOnNonNullSpecdField
* NonNullSpecdFieldComparisonYieldsFalse
* NonNullExpressionComparisonYieldsFalse
* RedundantNullCheckOnNonNullExpression
* ReferenceExpressionParameterNullityMismatch
* ReferenceExpressionParameterNullityUnchecked

```
*       ReferenceExpressionReturnNullRedef
*       ReferenceExpressionReturnNullRedefUnchecked
*       DuplicateInheritedDefaultMethods
*       SuperAccessCannotBypassDirectSuper
*       SuperCallCannotBypassOverride
*       ConflictingNullAnnotations
*       ConflictingInheritedNullAnnotations
*       UnsafeElementTypeConversion
*       PotentialNullUnboxing
*       NullUnboxing
*       NullExpressionReference
*       PotentialNullExpressionReference
*       RedundantNullCheckAgainstNonNullType
*       NullAnnotationUnsupportedLocation
*       NullAnnotationUnsupportedLocationAtType
*       NullityMismatchTypeArgument
*       ContradictoryNullAnnotationsOnBound
*       UnsafeNullnessCast
*       ContradictoryNullAnnotationsInferred
*       NonNullDefaultDetailIsNotEvaluated
*       NullNotCompatibleToFreeTypeVariable
*       NullityMismatchAgainstFreeTypeVariable
*       ImplicitObjectBoundNoNullDefault
*       IllegalParameterNullityRedefinition
*       ContradictoryNullAnnotationsInferredFunctionType
*       IllegalReturnNullityRedefinitionFreeTypeVariable
*       UnlikelyCollectionMethodArgumentType
*       UnlikelyEqualsArgumentType
*     Jesper S Moller  - added the following constants
*       TargetTypeNotAFunctionalInterface
*       OuterLocalMustBeEffectivelyFinal
*       IllegalModifiersForPackage
*       DuplicateAnnotationNotMarkedRepeatable
*       DisallowedTargetForContainerAnnotation
*       RepeatedAnnotationWithContainerAnnotation
*       ContainingAnnotationMustHaveValue
*       ContainingAnnotationHasNonDefaultMembers
*       ContainingAnnotationHasWrongValueType
*       ContainingAnnotationHasShorterRetention
*       RepeatableAnnotationHasTargets
*       RepeatableAnnotationTargetMismatch
*       RepeatableAnnotationIsDocumented
*       RepeatableAnnotationIsInherited
*       RepeatableAnnotationWithRepeatingContainerAnnotation
*       VarLocalMultipleDeclarators
*       VarLocalCannotBeArray
*       VarLocalReferencesItself
*       VarLocalWithoutInitizalier
```

```
*       VarLocalInitializedToNull
*       VarLocalCannotBeArrayInitalizers
*       VarLocalCannotBeLambda
*       VarLocalCannotBeMethodReference
*       VarIsReserved
*       VarIsReservedInFuture
*       VarIsNotAllowedHere
*******************************************************************************/
```

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/core/compiler/IProblem.java
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*     Stephan Herrmann - Contribution for
*       bug 382350 - [1.8][compiler] Unable to invoke inherited default method via I.super.m() syntax
*       bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
*     Jesper S Moller <jesper@selskabet.org> - Contributions for
*       bug 378674 - "The method can be declared as static" is wrong
*******************************************************************************/
```

Found
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/QualifiedThisReference.java
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*   Stephan Herrmann - initial API and implementation
*   Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
*   Bug 473178
**********/

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*   Stephan Herrmann - Contribution for
*   bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*   bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*   bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*   Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*   Bug
 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
*   Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*   Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*   Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*   Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*   Bug 425460 - [1.8] [inference] Type not inferred on stream.toArray
*   Bug 426792 - [1.8][inference][impl] generify new type inference engine
*   Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.
*   Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*   Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
*   Bug 441693 -
 [1.8][null] Bogus warning for type argument annotated with @NonNull
*   Jesper S Møller - Contributions for bug 381345 : [1.8] Take care of the Java 8 major version
*   Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
**********/

Found in path(s):
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* Bug 186342 - [compiler][null] Using annotations for null checking
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
**********/

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/MostSpecificExceptionMethodBinding.java
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* Walter Harley - Patch for ensuring the parent folders are created
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/apt/util/EclipseFileObject.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/tool/EclipseFileObject.java
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* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 370930 - NonNull annotation not considered for enhanced for loops
* bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 393719 - [compiler] inconsistent warnings
on iteration variables
* Bug 411964 - [1.8][null] leverage null type annotation in foreach statement
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 453483 - [compiler][null][loop] Improve null analysis for loops
* Bug 415790 - [compiler][resource]Incorrect potential resource leak warning in for loop with close in try/catch
* Jesper S Moller - Contribution for
* bug 401853 - Eclipse Java compiler creates invalid bytecode (java.lang.VerifyError)
* bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ForeachStatement.java
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* Jesper Steen Moller - Bug 412150 [1.8] [compiler] Enable reflected parameter names during annotation
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/PackageVisibilityStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredModule.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ModuleReference.java
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*     Erling Ellingsen -  patch for bug 125570
*     Stephan Herrmann - Contribution for
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 434570 - Generic type mismatch for parametrized class annotation attribute with inner class
*     Sebastian Zarnekow - Contribution for
*       Bug 544921 - [performance] Poor performance with large source files
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/CompilationUnitScope.java
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* Contributors:
*    tyeung@bea.com - initial API and implementation
*    olivier_thomann@ca.ibm.com - add hashCode() and equals(..) methods
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/classfmt/AnnotationInfo.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/classfmt/ElementValuePairInfo.java

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*   Igor Fedorenko - extracted from ElementsImpl
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*   Stephan Herrmann <stephan@cs.tu-berlin.de> - Contribution for bug 185682 - Increment/decrement operators mark local variables as read
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* Jesper Steen Moeller - Contributions for:
* Bug 407297: [1.8][compiler] Control generation of parameter names by option
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* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
* bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
* bug 385626 - @NonNull fails across
 loop boundaries
* bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug 453483 - [compiler][null][loop] Improve null analysis for loops
* Bug 455723 - Nonnull argument not correctly inferred in loop
* Jesper S Moller - Contributions for
* bug 404657 - [1.8][compiler] Analysis for effectively final variables fails to consider loops
**********/

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*          bug 332637 - Dead Code detection removing code that isn't dead
*          bug 358827 - [1.7] exception analysis for t-w-r spoils null analysis
*          bug 349326 - [1.7] new warning for missing try-with-resources
*          bug 359334 - Analysis for resource leak warnings does not consider exceptions as method exit points
*       bug 358903 - Filter practically unimportant resource
 leak warnings
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*       bug 401088 - [compiler][null] Wrong warning "Redundant null check" inside nested try statement
*       bug 401092 - [compiler][null] Wrong warning "Redundant null check" in outer catch of nested try
*       bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
*       bug 384380 - False positive on a ?? Potential null pointer access ?? after a continue
*       Bug 415790 - [compiler][resource]Incorrect potential resource leak warning in for loop with close in try/catch
*       Bug 371614 - [compiler][resource] Wrong "resource leak" problem on return/throw inside while loop
```

*	Bug 444964 - [1.7+][resource] False resource leak warning (try-with-resources for ByteArrayOutputStream - return inside for loop)
*	Jesper Steen Moller -
Contributions for
*	bug 404146 - [1.7][compiler] nested try-catch-finally-blocks leads to unrunnable Java byte code
*	Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*	Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
*
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*	bug 382350 - [1.8][compiler] Unable to invoke inherited default method via I.super.m() syntax
*	bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super

```
*       bug 404728 - [1.8]NPE on QualifiedSuperReference error
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*       bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*       bug 370639 - [compiler][resource] restore the default for resource leak warnings
*       bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*       Bug 417758 - [1.8][null] Null safety compromise during array creation.
*       Bug 427438 - [1.8][compiler] NPE at
 org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
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*     Stephan Herrmann - Contribution for
*       bug 331649 - [compiler][null] consider null annotations for fields
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 426996 - [1.8][inference] try to avoid method Expression.unresolve()?
*     Jesper S Moller - Contributions for
*       bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IBinaryModule.java

* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IUpdatableModule.java
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*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/VoidTypeBinding.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/NullTypeBinding.java
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*     het@google.com - Bug 441790
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*     Stephan Herrmann - Contributions for
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
*******************************************************************************/
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* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
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* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
* Bug 409247 - [1.8][compiler] Verify error with code allocating multidimensional array
* Bug 409517 - [1.8][compiler] Type annotation problems on more elaborate array references
*
  Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
**********/

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* Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* bug 185682 - Increment/decrement operators mark local variables as read
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
* bug 331649 - [compiler][null] consider
null annotations for fields
* Bug 466308 - [hovering] Javadoc header for parameter is wrong with annotation-based null analysis
* Jesper S Møller <jesper@selskabet.org> - Contributions for
* Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/LocalVariableBinding.java
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* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
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*   bug 185682 - Increment/decrement operators mark local variables as read
*   bug 331649 - [compiler][null] consider null annotations for fields
*   Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*   Bug 447088 - [null] @Nullable on fully qualified field type is ignored
*   Bug 435805 - [1.8][compiler][null]
 Java 8 compiler does not recognize declaration style null annotations
*   Bug 458396 - NPE in CodeStream.invoke()
*   Bug 446217 - [null] @NonNullByDefault in package-info.java causes bogus "null type safety" warning
*   Till Brychcy - Contribution for
*   bug 467094 - [1.8][null] TYPE_USE NullAnnotations of array contents are applied to field.
***/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredUnit.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredField.java
*
/ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/AnnotationMethodDeclaration.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/batch/ClasspathLocation.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/ICompilationUnit.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/NameEnvironmentAnswer.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ClassLiteralAccess.java
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* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
* Jesper S Moller - Contributions for
* bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
**********/

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*     Jesper Steen Moeller - Contribution for bug 406973 - [compiler] Parse MethodParameters attribute
*     Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*         Bug 407191 - [1.8] Binary access support for type annotations
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*          bug 282152 - [1.5][compiler] Generics code rejected by Eclipse but accepted by javac
*          bug 349326 - [1.7] new warning for missing try-with-resources
```

```
*           bug 359362 - FUP of bug 349326: Resource leak on non-Closeable resource
*       bug 358903 - Filter practically unimportant resource leak warnings
*       bug 395002 - Self bound generic class
 doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*       Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 426792 - [1.8][inference][impl] generify new type inference engine
*       Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.
*       Bug 429384 - [1.8][null] implement conformance rules for null-annotated lower / upper type bounds
*       Bug 431269 - [1.8][compiler][null] StackOverflow in nullAnnotatedReadableName
*       Bug 431408 - Java 8 (1.8) generics bug
*       Bug 435962 - [RC2] StackOverFlowError when building
*       Bug
 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*       Bug 438250 - [1.8][null] NPE trying to report bogus null annotation conflict
*       Bug 438179 - [1.8][null] 'Contradictory null annotations' error on type variable with explicit null-annotation.
*       Bug 440143 - [1.8][null] one more case of contradictory null annotations regarding type variables
*       Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
*       Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
*       Bug 456497 - [1.8][null] during inference nullness from target type is lost against weaker hint from applicability
analysis
*       Bug 456459 - Discrepancy between Eclipse compiler and javac - Enums, interfaces, and generics
*       Bug 456487 - [1.8][null] @Nullable type variant of @NonNull-constrained type parameter causes grief
*       Bug 462790 - [null] NPE in Expression.computeConversion()
 *       Bug 456532 - [1.8][null] ReferenceBinding.appendNullAnnotation() includes phantom annotations in error
messages
*     Jesper S Møller <jesper@selskabet.org>  - Contributions for bug 381345 : [1.8] Take care of the Java 8 major
version
*       Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
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*	Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
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*	Luiz-Otavio Zorzella <zorzella at gmail dot com> - Improve CamelCase algorithm
*	Gábor Kövesdán - Contribution for Bug 350000 - [content assist] Include non-prefix matches in auto-complete suggestions
*	Stefan Xenos <sxenos@gmail.com> (Google) - Bug 501283 - Lots of hash collisions during indexing
**********/

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*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 433478 - [compiler][null] NPE in ReferenceBinding.isCompatibleWith
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* Stephan Herrmann - Contributions for
* bug 292478 - Report potentially null across variable assignment
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 383368 - [compiler][null] syntactic null analysis for field
 references
* bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
* bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 426792 - [1.8][inference][impl] generify new type inference engine
* Bug 423505 - [1.8] Implement "18.5.4 More Specific Method Inference"
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 426996 - [1.8][inference]
 try to avoid method Expression.unresolve()?
* Bug 428274 - [1.8] [compiler] Cannot cast from Number to double
* Bug 428352 - [1.8][compiler] Resolution errors don't always surface
* Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression

*   Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
*   Bug 473178
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*   bug 349326 - [1.7] new warning for missing try-with-resources
*   bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*   bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*   bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*   Bug 392099
 - [1.8][compiler][null] Apply null annotation on types for null analysis
*   Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
*   Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*   Bug 412076 - [compiler] @NonNullByDefault doesn't work for varargs parameter when in generic interface
*   Bug 403216 - [1.8][null] TypeReference#captureTypeAnnotations treats type annotations as type argument
annotations
*   Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*   Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*   Bug 416175 - [1.8][compiler][null] NPE with a code snippet that used null annotations on wildcards
*   Bug 416174 - [1.8][compiler][null] Bogus name clash error with null annotations
*   Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*   Bug 400874 - [1.8][compiler]
 Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*   Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*   Bug 425278 - [1.8][compiler] Suspect error: The target type of this expression is not a well formed parameterized
type due to bound(s) mismatch
*   Bug 425798 - [1.8][compiler] Another NPE in ConstraintTypeFormula.reduceSubType
*   Bug 425156 - [1.8] Lambda as an argument is flagged with incompatible error
*   Bug 426563 - [1.8] AIOOBE when method with error invoked with lambda expression as argument
*   Bug 426792 - [1.8][inference][impl] generify new type inference engine
*   Bug 428294 - [1.8][compiler] Type mismatch: cannot convert from List<Object> to Collection<Object[]>
*   Bug 427199 - [1.8][resource] avoid resource leak warnings on Streams that have no resource

```
*       Bug 416182 - [1.8][compiler][null] Contradictory null annotations not rejected
 *       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*       Bug 438179 - [1.8][null] 'Contradictory null annotations' error on type variable with explicit null-annotation.
*       Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
*       Bug 446434 - [1.8][null] Enable interned captures also when analysing null type annotations
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 456508 - Unexpected RHS PolyTypeBinding for: <code-snippet>
*       Bug 390064 - [compiler][resource] Resource leak warning missing when extending parameterized class
*     Jesper S Møller  - Contributions for bug 381345 : [1.8] Take care of the Java 8 major version
*       Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*******************************************************************************/
```

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ParameterizedTypeBinding.java
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*     Stephan Herrmann - Contribution for bug 186342 - [compiler][null] Using annotations for null checking
*     Jesper S Moller  -. Contribution for bug 400830: [1.8][formatter] Code formatter for Java 8
*******************************************************************************/
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*     Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
*       bug 185682 - Increment/decrement operators mark local variables as read
*       bug 331649 - [compiler][null] consider null annotations for fields
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       Bug 412203 - [compiler] Internal compiler error: java.lang.IllegalArgumentException: info cannot be null
*       Bug 400874 - [1.8][compiler]
 Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 458396 - NPE in CodeStream.invoke()
*     Jesper S Moller - Contributions for
*       Bug 378674 - "The method can be declared as static" is wrong
*     Robert Roth <robert.roth.off@gmail.com> - Contributions for
*       Bug 361039 - NPE in FieldReference.optimizedBooleanConstant
```

**********/

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*   Walter Harley - initial API and implementation
*   IBM Corporation - fix for 342598, 382590
*   Jean-Marie Henaff <jmhenaff@google.com> (Google) - Bug 481555
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*   Jesper S Moller - Contributions for
*   Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/flow/FieldInitsFakingFlowContext.java
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* Bug 378674 - "The method can be declared as static" is wrong
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* Contributors:
*     Stephan Herrmann - initial API and implementation
*     Nikolay Metchev (nikolaymetchev@gmail.com) - Contributions for
*       bug 411098 - [compiler][resource] Invalid Resource Leak Warning using ternary operator inside try-with-resource
*******************************************************************************/
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/LabeledStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/batch/CompilationUnit.java
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 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/impl/ITypeRequestor.java
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* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 407191 - [1.8] Binary access support for type annotations
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* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 403147 - [compiler][null] FUP of bug 400761:

consolidate interaction between unboxing, NPE, and deferred checking
**********/

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* bug 186342 - [compiler][null] Using annotations for null checking
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 382069 - [null] Make the null analysis consider JUnit's assertNotNull similarly to assertions
* bug 403086 - [compiler][null] include the effect of 'assert'
in syntactic null analysis for fields
**********/

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* bug 236385 - [compiler] Warn for potential programming problem if an object is created but not used
* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 349326 - [1.7] new warning for missing try-with-resources

```
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 358903 - Filter practically unimportant resource
 leak warnings
*       bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*       bug 370639 - [compiler][resource] restore the default for resource leak warnings
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 424727 - [compiler][null] NullPointerException in
nullAnnotationUnsupportedLocation(ProblemReporter.java:5708)
*       Bug 424710
 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
*       Bug 425152 - [1.8] [compiler] Lambda Expression not resolved but flow analyzed leading to NPE.
*       Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
*       Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
*       Bug 426366 - [1.8][compiler] Type inference doesn't handle multiple candidate target types in outer overload
context
*       Bug 426290 - [1.8][compiler] Inference + overloading => wrong method resolution ?
*       Bug 426764 - [1.8] Presence of conditional expression as method argument confuses compiler
*       Bug 424930 - [1.8][compiler] Regression: "Cannot infer type arguments" error from compiler.
*       Bug 427483 - [Java 8] Variables in lambdas sometimes can't be resolved
*       Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
 *       Bug 426996 - [1.8][inference] try to avoid method Expression.unresolve()?
*       Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*       Bug 429203 - [1.8][compiler] NPE in AllocationExpression.binding
*       Bug 429430 - [1.8] Lambdas and method reference infer wrong exception type with generics (RuntimeException
instead of IOException)
*       Bug 434297 - [1.8] NPE in LamdaExpression.analyseCode with lamda expression nested in a conditional
expression
*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*       Bug 448709 - [1.8][null] ensure we don't infer types that violate null constraints on a type parameter's bound
*     Jesper S Moller <jesper@selskabet.org> - Contributions for
*       bug 378674 - "The method can be declared as static" is wrong
*     Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                     Bug 383624 - [1.8][compiler] Revive
 code generation support for type annotations (from Olivier's work)
*                     Bug 409245 - [1.8][compiler] Type annotations dropped when call is routed through a synthetic
bridge method
*     Till Brychcy - Contributions for
*          bug 413460 - NonNullByDefault is not inherited to Constructors when accessed via Class File
*     Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
*          Bug 473178
*******************************************************************************/
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* Bug 432977 - [1.8][null] Incorrect 'type is not visible' compiler error
* Bug 446434 - [1.8][null] Enable interned captures also when analysing null type annotations
**********/
/* Taking the binding of QTR as an example, there could be different annotatable components, but we come in a with a single binding, e.g:

@T Z; type => Z annotations => [[@T]]
@T Y.@T Z type => Z annotations => [[@T][@T]]
@T X.@T Y.@T Z type => Z annotations => [[@T][@T][@T]]
java.lang.@T X.@T Y.@T Z type => Z annotations => [[][][@T][@T][@T]]
in all these cases the incoming type binding is for Z, but annotations are for different levels. We need to align their layout for proper attribution.
*/

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* Stephan Herrmann - Contributions for
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
* Bug 435570 - [1.8][null] @NonNullByDefault
illegally tries to affect "throws E"
* Bug 438012 - [1.8][null] Bogus Warning: The nullness annotation is redundant with a default that applies to this location
* Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for

```
*                    Bug 409246 - [1.8][compiler] Type annotations on catch parameters not handled properly
*******************************************************************************/
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*     Stephan Herrmann - Contributions for
*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*       Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                    Bug 415543 - [1.8][compiler] Incorrect bound index in RuntimeInvisibleTypeAnnotations attribute
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/BranchStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/JavadocAllocationExpression.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ProblemPackageBinding.java
*
 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/JavadocMessageSend.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/CaseStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/ParserBasicInformation.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/classfmt/ClassFormatException.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/ConflictedParser.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/diagnose/DiagnoseParser.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/QualifiedTypeReference.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/TerminalTokens.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/core/compiler/CategorizedProblem.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredStatement.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ICompilerRequestor.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/AccessRestriction.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/diagnose/RangeUtil.java
*
/ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/OperatorIds.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/AccessRule.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/FalseLiteral.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/classfmt/ClassFileStruct.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IDependent.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ProblemBinding.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfIntValues.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/SimpleLookupTable.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/ISourceImport.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/problem/AbortMethod.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/problem/ShouldNotImplement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredImport.java
*
/ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfType.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/DoubleCache.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/InnerEmulationDependency.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/JavadocReturnStatement.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/problem/AbortCompilationUnit.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/NLSTag.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/PrefixExpression.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/IDebugRequestor.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/TrueLiteral.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/SimpleSet.java
*
/ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/CharLiteral.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/antadapter/AntAdapterMessages.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/problem/AbortType.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfObjectToInt.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/problem/AbortCompilation.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/IProblemFactory.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/SyntheticFieldBinding.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfInt.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/FloatCache.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ImportConflictBinding.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ExtendedStringLiteral.java
*
/ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/Label.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/AnnotationHolder.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/classfmt/InnerClassInfo.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/PostfixExpression.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/JavadocArrayQualifiedTypeReference.java

* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfLong.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ProblemFieldBinding.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/JavadocSingleNameReference.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/IntegerCache.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/ObjectCache.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/SyntheticArgumentBinding.java
*
 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/MagicLiteral.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/ParameterizedFieldBinding.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfObjectToIntArray.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/LongCache.java
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*   bug 383368 - [compiler][null] syntactic null analysis for field references
*   bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
***/

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*          bug 349326 - [1.7] new warning for missing try-with-resources
*          bug 359362 - FUP of bug 349326: Resource leak on non-Closeable resource
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 358903 - Filter practically unimportant resource leak warnings
*       bug 400421 - [compiler] Null analysis for fields does not take @com.google.inject.Inject
 into account
*       bug 382069 - [null] Make the null analysis consider JUnit's assertNotNull similarly to assertions
*       Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object),
Collection#remove(Object) et al.
*     Jesper S Moller <jesper@selskabet.org> -  Contributions for
*       Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*     Ulrich Grave <ulrich.grave@gmx.de> - Contributions for
*                         bug 386692 - Missing "unused" warning on "autowired" fields
*     Pierre-Yves B. <pyvesdev@gmail.com> - Contribution for
*                         bug 542520 - [JUnit 5] Warning The method xxx from the type X is never used locally is shown
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*   Bug 407191 - [1.8] Binary access support for type annotations
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*     Jesper S Moller   - Contributions for
*         Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
*     Frits Jalvingh    - contributions for bug 533830.
*     Red Hat Inc.      - add module-info Javadoc support
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*       bug 332637 - Dead Code detection removing code that isn't dead
*       bug 391517 - java.lang.VerifyError on code that runs correctly in Eclipse 3.7 and eclipse 3.6
*       bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
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* bug 337868 - [compiler][model] incomplete support for package-info.java when using SearchableEnvironment
* bug 186342 - [compiler][null] Using annotations for null checking
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* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 409236 - [1.8][compiler] Type annotations on intersection cast types dropped by code generator
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*       Bug 440477 - [null] Infrastructure for feeding external annotations into compilation
*       Bug 440687 - [compiler][batch][null] improve command line option for external annotations
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* bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Jesper Steen Moller - Contributions for
* Bug 412150 [1.8] [compiler]
 Enable reflected parameter names during annotation processing
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* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
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* Stephan Herrmann - Contributions for
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 374605 - Unreasonable warning for enum-based switch statements
* bug 382353 - [1.8][compiler] Implementation property modifiers should be accepted on default methods.
* bug 382354 - [1.8][compiler] Compiler silent on conflicting modifier
* bug 401030 - [1.8][null] Null analysis support for lambda methods.
* Bug
 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Jesper S Moller - Contributions for
* bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
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Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/classfmt/RecordComponentInfo.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IRecordComponent.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/DoubleLiteral.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/NumberLiteral.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/LongLiteral.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/flow/InitializationFlowContext.java

*
 /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/IntLiteral.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/FloatLiteral.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/IntLiteralMinValue.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/InferenceContext.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/LongLiteralMinValue.java
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*   Stephan Herrmann - contributions for
*   bug 337868 - [compiler][model] incomplete support for package-info.java when using SearchableEnvironment
*   bug 186342 - [compiler][null] Using annotations for null checking
*   bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
*   bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*   bug
 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*   bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*   Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*   Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
*   Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*   Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*   Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*   Bug 416183 - [1.8][compiler][null] Overload resolution fails with null annotations
*   Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
*   Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*   Bug 416190 - [1.8][null]
 detect incompatible overrides due to null type annotations
*   Bug 424624 - [1.8][null] if a static-object with annotation @NonNull is used, a warning is shown
*   Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*   Bug 439516 - [1.8][null] NonNullByDefault wrongly applied to implicit type bound of binary type
*   Bug 434602 - Possible error with inferred null annotations leading to contradictory null annotations
*   Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*   Bug 453475 - [1.8][null] Contradictory null annotations (4.5 M3 edition)
*   Bug 457079 - Regression: type inference
*   Bug 440477 - [null] Infrastructure for feeding external annotations into compilation
*   Bug 455180 - IllegalStateException in AnnotatableTypeSystem.getRawType
*   Bug 470467 - [null] Nullness of special Enum methods not detected from .class file

```
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* Contributors:
*    wharley@bea.com - initial API and implementation
*    IBM Corporation - fix for 342598
*    IBM Corporation - Java 8 support
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*     Stephan Herrmann - Contributions for
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 367203 - [compiler][null] detect assigning null to nonnull argument
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
*       bug 382353 - [1.8][compiler] Implementation property modifiers
 should be accepted on default methods.
*       bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 401030 - [1.8][null] Null analysis support for lambda methods.
```

```
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 403216 - [1.8][null] TypeReference#captureTypeAnnotations treats type annotations as type argument
annotations
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize
 declaration style null annotations
*       Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*******************************************************************************/
```

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/AbstractMethodDeclaration.java
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*     IBM Corporation - initial API and implementation
*     David Foerster - patch for toUpperCase as described in https://bugs.eclipse.org/bugs/show_bug.cgi?id=153125
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/parser/ScannerHelper.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/SortedCharArrays.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/SortedSimpleNameVector.java
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*   Jesper S Moller - Contributions for
*   Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
*   Bug 406982 - [1.8][compiler] Generation of MethodParameters Attribute in classfile
*   Bug 416885 - [1.8][compiler]IncompatibleClassChange error (edit)
*   Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*   Andy Clement (GoPivotal, Inc) aclement@gopivotal.com
 - Contributions for
*   Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
*   Bug 439889 - [1.8][compiler] [lambda] Deserializing lambda fails with IllegalArgumentException:
"Invalid lambda deserialization"
***/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/codegen/ConstantPool.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/tool/JrtFileSystem.java
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*        bug 186342 - [compiler][null] Using annotations for null checking
*        bug 367203 - [compiler][null] detect assigning null to nonnull argument
*        bug 365519 - editorial cleanup after bug 186342 and bug 365387
*        bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
*        bug 365531 - [compiler][null] investigate alternative strategy for internally
 encoding nullness defaults
*        bug 388281 - [compiler][null] inheritance of null annotations as an option
*        Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*        Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*        Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*        Bug 425152 - [1.8] [compiler] Lambda Expression not resolved but flow analyzed leading to NPE.
*        Bug 423505 - [1.8] Implement "18.5.4 More Specific Method Inference"
*        Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*        Bug 438012 - [1.8][null] Bogus Warning: The nullness annotation is redundant with a default that applies to this
location
*        Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
*        Bug 443347 - [1.8][null]
 @NonNullByDefault should not affect constructor arguments of an anonymous instantiation
*        Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*        Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*        Bug 456584 - [1.8][null] Bogus warning for return type variable's @NonNull annotation being 'redundant'
*        Bug 471611 - Error on hover on call to generic method with null annotation
*     Jesper Steen Moller - Contributions for
*        Bug 412150 [1.8] [compiler] Enable reflected parameter names during annotation processing
*******************************************************************************/
```

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/MethodBinding.java

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/classfmt/AnnotationMethodInfo.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/classfmt/AnnotationMethodInfoWithAnnotations.java
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*
* Contributors:
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* Stephan Herrmann - Contributions for
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
* bug 382353 - [1.8][compiler] Implementation property modifiers should
 be accepted on default methods.
* bug 383368 - [compiler][null] syntactic null analysis for field references
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
* Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
* Bug 438012 - [1.8][null] Bogus Warning: The nullness annotation is redundant with a default that applies to this
location
* Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
* Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
* Jesper S Moller <jesper@selskabet.org> - Contributions for
* bug 378674 - "The method can be declared as static" is wrong
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/MethodDeclaration.java
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* bug 342671 - ClassCastException: org.eclipse.jdt.internal.compiler.lookup.SourceTypeBinding cannot be cast to
org.eclipse.jdt.internal.compiler.lookup.ArrayBinding
* bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 416181 - [1.8][compiler][null] Invalid assignment
 is not rejected by the compiler
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 434600 - Incorrect null analysis error reporting on type parameters
* Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"

*	Bug 456508 - Unexpected RHS PolyTypeBinding for: <code-snippet>
*	Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*	Andy Clement - Contributions for
*		Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ParameterizedQualifiedTypeReference.java
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*		Bug 415397 - [1.8][compiler] Type Annotations on wildcard type argument dropped
*	Stephan Herrmann - Contribution for
*	Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*	Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*	Bug 429958

- [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 440462 - [null][compiler]NPE in EJC for erroneous null annotations
* Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfInteger.java
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*   Stephan Herrmann - Contributions for
*   bug 359334 - Analysis for resource leak warnings does not consider exceptions as method exit points
*   bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*   bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*   Bug 429430 - [1.8] Lambdas and method reference infer wrong exception type with
 generics (RuntimeException instead of IOException)
**********/

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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/ThrowStatement.java
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/apt/dispatch/BatchProcessingEnvImpl.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/apt/dispatch/RoundDispatcher.java
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*     Stephan Herrmann - Contribution for
*       Bug 434602 - Possible error with inferred null annotations leading to contradictory null annotations
*       Bug 456497 - [1.8][null] during inference nullness from target type is lost against weaker hint from applicability
analysis
*       Bug 456487 - [1.8][null] @Nullable type variant of @NonNull-constrained type parameter causes grief
*     Till Brychcy - Contribution for
*       Bug 473713
 - [1.8][null] Type mismatch: cannot convert from @NonNull A1 to @NonNull A1
*******************************************************************************/
/* Cache the derived type, tagging it as a derivative of both the key type and the naked type.
    E.g: int @NonNull [] would be tagged as a derived type of both int and int []. This is not
    needed for correctness, but for annotated object reuse. We provide two alternate ways to
    annotate a type:

    Taking parameterized types as an example, a call to getParamaterizedType can be made with annotations
    to create @NonNull List<@NonNull String> in one stroke. Or a parameterized type can be created first
    and then annotated via getAnnotatedType. In the former case, the tables get looked up with List as
    the key, in the latter with List<String> as the key.

    Binary vs source, substitutions, annotation re-attribution from SE7 locations etc trigger these
    alternate code paths. Unless care is exercised,
 we will end up with duplicate objects (that share
    the same TypeBinding.id => correctness is not an issue, but memory wastage is)
```

```
 */
```

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/lookup/TypeSystem.java
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* Contributors:
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*         Bug 407191 - [1.8] Binary access support for type annotations
*******************************************************************************/
```

Found in path(s):
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/env/IBinaryTypeAnnotation.java
* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/classfmt/FieldInfoWithTypeAnnotation.java
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*       Bug 458396 - NPE in CodeStream.invoke()
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*   bug 331649 - [compiler][null] consider null annotations for fields
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* IBM Corporation - Fix for bug 341494
* IBM Corporation - Fix for bug 328575
* IBM Corporation - Java 8 support
**********/

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* bug 335093 - [compiler][null] minimal hook for future null annotation support
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365983 - [compiler][null] AIOOB with null annotation analysis and varargs
* bug 368546 - [compiler][resource] Avoid remaining false positives found when

compiling the Eclipse SDK
*	bug 370930 - NonNull annotation not considered for enhanced for loops
*	bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
*	bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*	bug 331649 - [compiler][null] consider null annotations for fields
*	bug 383368 - [compiler][null] syntactic null analysis for field references
*	Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*	Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*	Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
*	Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*	Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
*	Bug 417758 - [1.8][null] Null safety compromise
during array creation.
*	Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*	Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
*	Bug 418537 - [1.8][null] Fix null type annotation analysis for poly conditional expressions
*	Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*	Bug 429430 - [1.8] Lambdas and method reference infer wrong exception type with generics (RuntimeException instead of IOException)
*	Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*	Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*	Bug 455723 - Nonnull argument not correctly inferred in loop
*	Andy Clement - Contributions for
*		Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
*		Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
**********/

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*		bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*		bug 349326 - [1.7] new warning for missing try-with-resources
*	bug 265744 - Enum switch should warn about missing default

```
*       bug 374605 - Unreasonable warning for enum-based switch statements
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
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* /ecj-3-26-0-sources-3-jar/org/eclipse/jdt/internal/compiler/ast/SwitchStatement.java
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*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*       Bug 416174 - [1.8][compiler][null] Bogus name clash error with null annotations
*       Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*       Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*       Bug 425783 - An
 internal error occurred during: "Requesting Java AST from selection". java.lang.StackOverflowError
*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*       Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
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*       Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
*       Bug 406982 - [1.8][compiler] Generation of MethodParameters Attribute in classfile
*     Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                    Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
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*          bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 359334 - Analysis for resource leak warnings does not consider exceptions as method exit points
*       bug 358903 - Filter practically unimportant resource leak warnings
*       bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*       bug 370639 - [compiler][resource]
```

restore the default for resource leak warnings
*	bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*	bug 379784 - [compiler] "Method can be static" is not getting reported
*	bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
*	bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
*	Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*	Bug 371614 - [compiler][resource] Wrong "resource leak" problem on return/throw inside while loop
*	Bug 421035 - [resource] False alarm of resource leak warning when casting a closeable in its assignment
*	Bug 444964 - [1.7+][resource] False resource leak warning (try-with-resources for ByteArrayOutputStream - return inside for loop)
*	Bug 396575 - [compiler][resources] Incorrect Errors/Warnings check for potential resource leak when surrounding with try-catch
*	Jesper S Moller <jesper@selskabet.org> - Contributions for
*	bug 378674 - "The method can be declared as static" is wrong
*	Keigo Imai - Contribution for bug 388903 - Cannot extend inner class as an anonymous class when it extends the outer class
**********/

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*	Stephan Herrmann - Contribution for
*	Bug 365992 - [builder] [null] Change of nullness for a parameter doesn't trigger a build for the files that call the method
*	Bug 440477 - [null] Infrastructure for feeding external annotations into compilation
*	Bug 440687 - [compiler][batch][null] improve command line option for external annotations
*	Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*
		bug 407191 - [1.8] Binary access support for type annotations
**********/

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*   Stephan Herrmann - Contributions for
*   bug 236385 - [compiler] Warn for potential programming problem if an object is created but not used
*   bug 295551 - Add option to automatically promote all warnings to errors
*   bug 349326 - [1.7] new warning for missing try-with-resources
*   bug 186342 - [compiler][null] Using annotations for null checking
*   bug
 370639 - [compiler][resource] restore the default for resource leak warnings
*   bug 366063 - Compiler should not add synthetic @NonNull annotations
*   bug 374605 - Unreasonable warning for enum-based switch statements
*   bug 388281 - [compiler][null] inheritance of null annotations as an option
*   bug 381443 - [compiler][null] Allow parameter widening from @NonNull to unannotated
*   bug 383368 - [compiler][null] syntactic null analysis for field references
*   Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*   Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object),
Collection#remove(Object) et al.
*   Jesper Steen Moller - Contributions for
*   bug 404146 - [1.7][compiler] nested try-catch-finally-blocks leads to unrunnable Java byte code

*	bug 407297 - [1.8][compiler] Control generation of parameter names by option
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*	bug 186342 - [compiler][null] Using annotations for null checking
*	bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*	Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*	bug 413958 - Function override returning inherited Generic Type
*	Bug 400874 - [1.8][compiler] Inference infrastructure
 should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*	Bug 424710 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
*	Bug 423505 - [1.8] Implement "18.5.4 More Specific Method Inference"
*	Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*	Bug 418743 - [1.8][null] contradictory annotations on invocation of generic method not reported
*	Bug 416182 - [1.8][compiler][null] Contradictory null annotations not rejected
*	Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*	Bug 434602 - Possible error with inferred null annotations leading to contradictory null annotations
*	Bug 434483 - [1.8][compiler][inference] Type inference not picked up with method reference
*	Bug 446442 - [1.8] merge null annotations from super methods
*	Bug 457079 - Regression: type
 inference
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* bug 366003 - CCE in ASTNode.resolveAnnotations(ASTNode.java:639)
* bug 383973 - [1.8][compiler] syntax recovery in the presence of default methods
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*           bug 336428 - [compiler][null] bogus warning "redundant null check" in condition of do {} while() loop
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*       bug 365859 - [compiler][null]
 distinguish warnings based on flow analysis vs. null annotations
*       bug 385626 - @NonNull fails across loop boundaries
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 376263 - Bogus "Potential null pointer access" warning
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
*       bug 406384 - Internal error with I20130413
*       Bug 415413 - [compiler][null] NullpointerException in Null Analysis caused by interaction of
LoopingFlowContext and FinallyFlowContext
*       Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*       Bug 455557 - [jdt] NPE LoopingFlowContext.recordNullReference
*       Bug 455723 - Nonnull argument not correctly inferred in loop
*       Bug 415790 - [compiler][resource]Incorrect potential resource leak warning in for loop with close in try/catch
*       Bug 421035 - [resource]
 False alarm of resource leak warning when casting a closeable in its assignment
*     Jesper S Moller - contributions for
*       bug 404657 - [1.8][compiler] Analysis for effectively final variables fails to consider loops
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* bug 185682 - Increment/decrement operators mark local variables as read
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
* bug 345305 - [compiler][null]
Compiler misidentifies a case of "variable can only be null"
* Bug 414380 - [compiler][internal] QualifiedNameReference#indexOfFirstFieldBinding does not point to the first
field
* Bug 458396 - NPE in CodeStream.invoke()
* Jesper S Moller - Contributions for
* bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
* Jesper S Moller <jesper@selskabet.org> - Contributions for
* bug 378674 - "The method can be declared as static" is wrong
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When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits
such linking only if the
entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages

are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

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copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the

object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany
the work with the complete corresponding
machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate
properly with a modified version of the library, if
the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

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It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

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Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

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To "modify" a work means to copy from or adapt all or part of the work

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1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

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d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

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b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

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the same way through the same place at no
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e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded
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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.
https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following
artifacts may be included in the distribution or downloaded when ALPN
module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications
are hosted at github and both modified and original are under GPL v2 with
classpath exceptions.
http://openjdk.java.net/legal/gplv2+ce.html

OW2

The following artifacts are licensed by the OW2 Foundation according to the

terms of http://asm.ow2.org/license.html

org.ow2.asm:asm-commons
org.ow2.asm:asm

Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

The following artifacts are ASL2 licensed. Based on selected classes from
following Apache Tomcat jars, all ASL2
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org.mortbay.jasper:apache-jsp
 org.apache.tomcat:tomcat-jasper
 org.apache.tomcat:tomcat-juli
 org.apache.tomcat:tomcat-jsp-api
 org.apache.tomcat:tomcat-el-api
 org.apache.tomcat:tomcat-jasper-el
 org.apache.tomcat:tomcat-api
 org.apache.tomcat:tomcat-util-scan
 org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
 org.apache.tomcat:tomcat-jasper-el
 org.apache.tomcat:tomcat-el-api

Mortbay

The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

The UnixCrypt.java code implements the one way cryptography used by
Unix systems for simple password protection. Copyright 1996 Aki Yoshida,
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1.624 github.com/prometheus/common/assets 0.2.0

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1.625 nodemon 2.0.20

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1.626 libyaml 0.2.2-1build2

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1.628 coreutils 9.1-1

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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.
http://openjdk.java.net/legal/gplv2+ce.html

OW2

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org.ow2.asm:asm-commons
org.ow2.asm:asm

Apache

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org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

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licensed.

org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

Mortbay

The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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1.635 jetty-util 9.4.49.v20220914

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Eclipse

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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
 * javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following
artifacts may be included in the distribution or downloaded when ALPN
module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications
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http://openjdk.java.net/legal/gplv2+ce.html

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org.ow2.asm:asm-commons
org.ow2.asm:asm

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org.apache.taglibs:taglibs-standard-spec
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org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
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org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

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org.apache.tomcat:tomcat-el-api

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org.eclipse.jetty.toolchain:jetty-schemas

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1.642 hashstructure 1.1.0

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1.656 pcre2 10.39-3ubuntu0.1

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1.657 fsnotify 1.6.0

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1.658 gogo-status 1.1.1

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1.659 metrics-httpclient 4.1.33

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1.660 metrics-health-checks 4.1.33

1.660.1 Available under license :

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.health
Build-Jdk-Spec: 1.8

Bundle-Description: An addition to Metrics which provides the ability
to run application-specific health checks, allowing you to che
ck your application's heath in production.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Health Checks
Bundle-SymbolicName: io.dropwizard.metrics.healthchecks
Bundle-Version: 4.1.33
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: com.codahale.metrics.health;uses:="com.codahale.metric
s";version="4.1.33",com.codahale.metrics.health.jvm;uses:="com.codaha
le.metrics.health,com.codahale.metrics.jvm";version="4.1.33",com.coda
hale.metrics.health.annotation;version="4.1.33"
Implementation-Title: Metrics Health Checks
Implementation-Version: 4.1.33
Import-Package: org.slf4j;version="[1.6.0,2.0.0)",com.codahale.metrics
 ;version="[4.1,5)",com.codahale.metrics.health,com.codahale.metrics.h
ealth.annotation,com.codahale.metrics.jvm;version="[4.1,5)";resolutio
n:=optional
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-healthchecks-4-1-33-jar/META-INF/MANIFEST.MF

1.661 metrics-jvm 4.1.33

1.661.1 Available under license :

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jvm
Build-Jdk-Spec: 1.8
Bundle-Description: A set of classes which allow you to monitor critic
al aspects of your Java Virtual Machine using Metrics.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: JVM Integration for Metrics
Bundle-SymbolicName: io.dropwizard.metrics.jvm
Bundle-Version: 4.1.33
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: com.codahale.metrics.jvm;uses:="com.codahale.metrics,j
avax.management";version="4.1.33"
Implementation-Title: JVM Integration for Metrics
Implementation-Version: 4.1.33
Import-Package: org.slf4j;version="[1.6.0,2.0.0)",com.sun.management;r
esolution:=optional,com.codahale.metrics;version="[4.1,5)",javax.mana

gement
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-jvm-4-1-33-jar/META-INF/MANIFEST.MF

1.662 metrics-servlets 4.1.33

1.662.1 Available under license :

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.servlets
Build-Jdk-Spec: 1.8
Bundle-Description: A set of utility servlets for Metrics, allowing yo
u to expose valuable information about your production environ
ment.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Utility Servlets
Bundle-SymbolicName: io.dropwizard.metrics.servlets
Bundle-Version: 4.1.33
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: com.codahale.metrics.servlets;uses:="com.codahale.metr
ics,com.codahale.metrics.health,com.fasterxml.jackson.databind,javax.
servlet,javax.servlet.http";version="4.1.33"
Implementation-Title: Metrics Utility Servlets
Implementation-Version: 4.1.33
Import-Package: javax.servlet;version="[2.5.0,4.0.0)",javax.servlet.ht
tp;version="[2.5.0,4.0.0)",com.codahale.metrics;version="[4.1,5)",com
.codahale.metrics.health;version="[4.1,5)",com.codahale.metrics.json;
 version="[4.1,5)",com.codahale.metrics.jvm;version="[4.1,5)",com.fast
erxml.jackson.databind;version="[2.9,3)",com.fasterxml.jackson.databi
nd.util;version="[2.9,3)",com.papertrail.profiler;version="[1.1,2)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-servlets-4-1-33-jar/META-INF/MANIFEST.MF

1.663 metrics-jetty 4.1.33

1.663.1 Available under license :

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jetty9
Build-Jdk-Spec: 1.8
Bundle-Description: A set of extensions for Jetty 9.3 and higher which
 provide instrumentation of thread pools, connector        metrics, a
nd application latency and utilization.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Jetty 9.3 and higher
Bundle-SymbolicName: io.dropwizard.metrics.jetty9
Bundle-Version: 4.1.33
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: com.codahale.metrics.jetty9;uses:="com.codahale.metric
s,javax.servlet,javax.servlet.http,org.eclipse.jetty.io,org.eclipse.j
etty.server,org.eclipse.jetty.server.handler,org.eclipse.jetty.util.a
nnotation,org.eclipse.jetty.util.component,org.eclipse.jetty.util.thr
ead";version="4.1.33"
Implementation-Title: Metrics Integration for Jetty 9.3 and higher
Implementation-Version:
 4.1.33
Import-Package: javax.servlet;version="[2.5.0,4.0.0)",javax.servlet.ht
tp;version="[2.5.0,4.0.0)",com.codahale.metrics;version="[4.1,5)",org
.eclipse.jetty.http;version="[9.4,10)",org.eclipse.jetty.io;version="
[9.4,10)",org.eclipse.jetty.server;version="[9.4,10)",org.eclipse.jet
ty.server.handler;version="[9.4,10)",org.eclipse.jetty.util.annotatio
n;version="[9.4,10)",org.eclipse.jetty.util.component;version="[9.4,1
0)",org.eclipse.jetty.util.thread;version="[9.4,10)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316
```

Found in path(s):
* /metrics-jetty9-4-1-33-jar/META-INF/MANIFEST.MF

1.664 metrics-logback 4.1.33

1.664.1 Available under license :

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.logback
Build-Jdk-Spec: 1.8
Bundle-Description: An instrumented appender for Logback.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
```

Bundle-Name: Metrics Integration for Logback
Bundle-SymbolicName: io.dropwizard.metrics.logback
Bundle-Version: 4.1.33
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: com.codahale.metrics.logback;uses:="ch.qos.logback.cla
ssic.spi,ch.qos.logback.core,com.codahale.metrics";version="4.1.33"
Implementation-Title: Metrics Integration for Logback
Implementation-Version: 4.1.33
Import-Package: ch.qos.logback.classic;version="[1.2,2)",ch.qos.logbac
k.classic.spi;version="[1.2,2)",ch.qos.logback.core;version="[1.2,2)"
,com.codahale.metrics;version="[4.1,5)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
*
 /metrics-logback-4-1-33-jar/META-INF/MANIFEST.MF

1.665 metrics-jmx 4.1.33

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jmx
Build-Jdk-Spec: 1.8
Bundle-Description: A set of classes which allow you to report metrics
 via JMX.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration with JMX
Bundle-SymbolicName: io.dropwizard.metrics.jmx
Bundle-Version: 4.1.33
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: com.codahale.metrics.jmx;uses:="com.codahale.metrics,j
avax.management";version="4.1.33"
Implementation-Title: Metrics Integration with JMX
Implementation-Version: 4.1.33
Import-Package: org.slf4j;version="[1.6.0,2.0.0)",com.codahale.metrics
;version="[4.1,5)",javax.management
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

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1.666 metrics-annotation 4.1.33

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.annotation
Build-Jdk-Spec: 1.8
Bundle-Description: A dependency-less package of just the annotations
used by other Metrics modules.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Annotations for Metrics
Bundle-SymbolicName: io.dropwizard.metrics.annotation
Bundle-Version: 4.1.33
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: com.codahale.metrics.annotation;version="4.1.33"
Implementation-Title: Annotations for Metrics
Implementation-Version: 4.1.33
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

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1.667 metrics-json 4.1.33

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.json
Build-Jdk-Spec: 1.8
Bundle-Description: A set of Jackson modules which provide serializers
 for most Metrics classes.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Jackson Integration for Metrics
Bundle-SymbolicName: io.dropwizard.metrics.json
Bundle-Version: 4.1.33
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: com.codahale.metrics.json;uses:="com.codahale.metrics,
com.fasterxml.jackson.core,com.fasterxml.jackson.databind";version="4
.1.33"
Implementation-Title: Jackson Integration for Metrics
Implementation-Version: 4.1.33

Import-Package: com.codahale.metrics;version="[4.1,5)",com.codahale.me
trics.health;version="[4.1,5)";resolution:=optional,com.fasterxml.jac
kson.core;version="[2.9,3)",com.fasterxml.jackson.databind;version="[
2.9,3)",com.fasterxml.jackson.databind.module;version="[2.9,3)",com.f
asterxml.jackson.databind.ser;version="[2.9,3)",com.fasterxml.jackson
.databind.ser.std;version="[2.9,3)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-json-4-1-33-jar/META-INF/MANIFEST.MF

1.668 metrics-jersey2 4.1.33

1.668.1 Available under license :

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jersey2
Build-Jdk-Spec: 1.8
Bundle-Description: A set of class providing Metrics integration for J
ersey, the reference JAX-RS implementation.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Jersey 2.x
Bundle-SymbolicName: io.dropwizard.metrics.jersey2
Bundle-Version: 4.1.33
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: com.codahale.metrics.jersey2;uses:="com.codahale.metri
cs,javax.ws.rs.core,javax.ws.rs.ext,org.glassfish.jersey.server.model
,org.glassfish.jersey.server.monitoring";version="4.1.33"
Implementation-Title: Metrics Integration for Jersey 2.x
Implementation-Version: 4.1.33
Import-Package: com.codahale.metrics;version="[4.1,5)",com.codahale.me
trics.annotation;version="[4.1,5)",javax.ws.rs.core;version="[2.1,3)"
,javax.ws.rs.ext;version="[2.1,3)",org.glassfish.jersey.server;versio
n="[2.36,3)",org.glassfish.jersey.server.model;version="[2.36,3)",org
.glassfish.jersey.server.monitoring;version="[2.36,3)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-jersey2-4-1-33-jar/META-INF/MANIFEST.MF

1.669 simpleclient_tracer_common 0.16.0

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Found in path(s):
* /simpleclient-tracer-common-0-16-0-sources-2-jar/META-INF/maven/io.prometheus/simpleclient_tracer_common/pom.xml

1.670 simpleclient-common 0.16.0

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Manifest-Version: 1.0
Bnd-LastModified: 1655327905690
Build-Jdk: 11.0.15
Built-By: fabian
Bundle-Description: Common code used by various modules of the Simplecli
ent.
Bundle-License: http://www.apache.org/licenses/LICENSE-2.0.txt
Bundle-ManifestVersion: 2
Bundle-Name: Prometheus Java Simpleclient Common
Bundle-SymbolicName: io.prometheus.simpleclient_common
Bundle-Version: 0.16.0
Created-By: Apache Maven Bundle Plugin
Export-Package: io.prometheus.client.exporter.common;uses:="io.prometheu
s.client";version="0.16.0"
Import-Package: io.prometheus.client;version="[0.16,1)",io.prometheus.cl
ient.exemplars;version="[0.16,1)"
Tool: Bnd-2.1.0.20130426-122213

Found in path(s):
* /simpleclient-common-0-16-0-2-jar/META-INF/MANIFEST.MF
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Found in path(s):
* /simpleclient-common-0-16-0-2-jar/META-INF/maven/io.prometheus/simpleclient_common/pom.xml

1.671 simpleclient_tracer_otel 0.16.0

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Found in path(s):
* /simpleclient-tracer-otel-0-16-0-sources-jar/META-INF/maven/io.prometheus/simpleclient_tracer_otel/pom.xml

1.672 simpleclient_tracer_otel_agent 0.16.0

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1.673 simpleclient 0.16.0

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*
* Source: http://gee.cs.oswego.edu/cgi-bin/viewcvs.cgi/jsr166/src/jsr166e/DoubleAdder.java?revision=1.12
*/

Found in path(s):
* /simpleclient-0-16-0-sources-3-jar/io/prometheus/client/DoubleAdder.java
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* /simpleclient-0-16-0-sources-3-jar/io/prometheus/client/CKMSQuantiles.java
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*
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*/

Found in path(s):
* /simpleclient-0-16-0-sources-3-jar/io/prometheus/client/Striped64.java

1.674 cloud-utils 0.32-22-g45fe84a5-0ubuntu1

1.674.1 Available under license :

Format: https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/
Upstream-Name: cloud-utils
Source: https://code.launchpad.net/cloud-utils
Upstream-Contact: Scott Moser <scott.moser@canonical.com>

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1.676 github.com/exponent-io/jsonpath 0.0.0-20210407135951-1de76d718b3f

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1.678 prometheus-client-model 0.2.0

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1.680 javassist 3.29.2-GA

1.680.1 Available under license :

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```
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*/
```

Found in path(s):

* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/ByteMemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/DoubleMemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/LongMemberValue.java
*
 /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/StringMemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/IntegerMemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/EnumMemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/AnnotationMemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/ArrayMemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/FloatMemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/ClassMemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/BooleanMemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/MemberValue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/Annotation.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/ShortMemberValue.java
*
 /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/MemberValueVisitor.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/CharMemberValue.java
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Found in path(s):
* /javassist-3-29-2-ga-sources-1-jar/javassist/convert/TransformAccessArrayField.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/Bytecode.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/Keyword.java
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 /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/TypeChecker.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/Translator.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/Variable.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/StackMapTable.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/scopedpool/ScopedClassPoolFactory.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/util/proxy/DefinePackageHelper.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/CtMember.java

* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/BadBytecode.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/LocalVariableTypeAttribute.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/analysis/MultiArrayType.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/convert/TransformNew.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/SyntheticAttribute.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/CtClassType.java
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/javassist-3-29-2-ga-sources-1-jar/javassist/ByteArrayClassPath.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/CodeGen.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/convert/TransformReadField.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/util/proxy/MethodFilter.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/SyntaxError.java
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* /javassist-3-29-2-ga-sources-1-jar/javassist/convert/TransformBefore.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/EnclosingMethodAttribute.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/ClassPath.java
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* /javassist-3-29-2-ga-sources-1-jar/javassist/runtime/Cflow.java
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* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/ClassFilePrinter.java
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* /javassist-3-29-2-ga-sources-1-jar/javassist/util/proxy/ProxyObjectInputStream.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/CannotCompileException.java
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* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/AnnotationsWriter.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/reflect/CannotCreateException.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/Declarator.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/convert/TransformFieldAccess.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/util/proxy/SerializedProxy.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/TokenId.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/expr/Cast.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/Descriptor.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/LineNumberAttribute.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/CtConstructor.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/expr/FieldAccess.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/convert/TransformNewClass.java
*
/javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/Member.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/NotFoundException.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/expr/NewArray.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/KeywordTable.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/CtNewMethod.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/StringL.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/Symbol.java

* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/Visitor.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/rmi/Proxy.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/rmi/StubGenerator.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/reflect/ClassMetaobject.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/InstanceOfExpr.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/analysis/Util.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/Opcode.java
*
 /javassist-3-29-2-ga-sources-1-jar/javassist/Modifier.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/JvstTypeChecker.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/CompileError.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/MemberResolver.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/reflect/Sample.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/convert/TransformWriteField.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/URLClassPath.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/LoaderClassPath.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/Callback.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/NestHostAttribute.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/rmi/ObjectNotFoundException.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/SourceFileAttribute.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/rmi/RemoteException.java
*
 /javassist-3-29-2-ga-sources-1-jar/javassist/Loader.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/expr/NewExpr.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/AssignExpr.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/SignatureAttribute.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/expr/ExprEditor.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/LocalVariableAttribute.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/annotation/AnnotationImpl.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/ConstantAttribute.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/DuplicateMemberException.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/Parser.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/runtime/Inner.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/AttributeInfo.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/CtPrimitiveType.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/ExceptionsAttribute.java
*
 /javassist-3-29-2-ga-sources-1-jar/javassist/util/proxy/RuntimeSupport.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/CtNewWrappedConstructor.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/Expr.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/rmi/AppletServer.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/framedump.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/ClassPoolTail.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/SymbolTable.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/util/HotSwapAgent.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/ByteArray.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/analysis/IntQueue.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ProceedHandler.java

* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/reflect/CannotInvokeException.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/CtArray.java
*
/javassist-3-29-2-ga-sources-1-jar/javassist/tools/rmi/Sample.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/util/proxy/ProxyObjectOutputStream.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/CtClass.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/analysis/ControlFlow.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/CodeIterator.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/compiler/ast/ASTree.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/rmi/ObjectImporter.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/tools/web/BadHttpRequest.java
* /javassist-3-29-2-ga-sources-1-jar/javassist/bytecode/stackmap/Tracer.java

1.681 deep-eql 4.1.3

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1.682 jetty-util-ajax 9.4.49.v20220914

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* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

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* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

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* java.sun.security.ssl

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org.ow2.asm:asm-commons
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org.apache.taglibs:taglibs-standard-impl

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org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
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org.eclipse.jetty.toolchain:jetty-schemas

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1.685 mawk 1.3.4.20200120-3.1

1.685.1 Available under license :

Upstream source http://invisible-island.net/mawk/mawk.html

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1.687 cyrus-sasl 2.1.28+dfsg-10

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* Rob Earhart
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1.692 python-colorama 0.4.4-1

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1.695 python-babel 2.8.0+dfsg.1-7

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==========

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1.698 libffi-dev 3.4.2-4

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1.699 go-openapi-jsonpointer 0.19.6

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1.701 keyutils 1.6.3-2

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medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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hostname -- set the host name or show the host/domain name

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1.703 libpkit 0.24.1-2

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1.722 gcc-12-base 12.2.0-14

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  iconv (Charset Conversion Library) v2.0

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For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link a program with the library, you must provide complete object files to the recipients so that they can relink them with the library, after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

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The reason we have a separate public license for some libraries is
that they blur the distinction we usually make between modifying or
adding to a program and simply using it. Linking a program with a
library, without changing the library, is in some sense simply using
the library, and is analogous to running a utility program or
application program. However, in a textual and legal sense, the linked
executable is a combined work, a derivative
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Because of this blurred distinction, using the ordinary General
Public License for libraries did not effectively promote software
sharing, because most developers did not use the libraries. We
concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the
users of those programs of all benefit from the free status of the
libraries themselves. This Library General Public License is intended
to permit developers of non-free programs to use free libraries, while
preserving your freedom as a user of such programs to change the free
libraries that are incorporated in them. (We have not seen how to
achieve this as regards changes in header files, but we have achieved
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facility is invoked, then you must make a good faith effort
to ensure that, in the event an application does not supply
such function or table, the facility still operates, and

performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots
has a purpose that is entirely well-defined independent of the
application. Therefore, Subsection 2d requires that any
application-supplied function or table used by this function
must be optional: if the application does not supply it, the
square root function must still compute square roots.)

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It may happen that this requirement contradicts the license restrictions of other proprietary libraries
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SIGNATURE OF TY COON, 1 April 1990
Ty Coon, President of Vice

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Library. A suitable mechanism is one that (a) uses at run time
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```
<!-- Creator     : groff version 1.20.1 -->
<!-- CreationDate: Fri Jan 14 19:57:50 2011 -->
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta name="generator" content="groff -Thtml, see www.gnu.org">
<meta http-equiv="Content-Type" content="text/html; charset=US-ASCII">
<meta name="Content-Style" content="text/css">
<link rel="stylesheet" type="text/css" href="texi2tr.css" />
<title>GNU Modula-2</title>
</head>

<body>
 <!-- site wide top running header menu -->

 <ul id="overview">
   <li class="home">
     HOME_HREF
   </li>
   <li class="release">
     12_HREF
   </li>

   <li>
     <a href="news.html" title="News">News</a>
   </li>
   <li>
     <a href="development.html" title="Development">Development</a>
   </li>
   <li>
     <a href="community.html" title="Community">Community</a>
   </li>
 </ul>

 <div id="header">
   <h1>
```

```
    <span style="display:inline-block; vertical-align:middle">
 <img
 src="200px-Heckert_GNU_white.png" alt="Heckert_GNU_white.png">
    </span>
    <span style="display:inline-block; vertical-align:middle; font-size: 50px">
 GNU Modula-2
    </span>
  </h1>

  <!-- homepage tab menu -->

  <div id="tabmenu">
    <ul id="tab">
 <li><a href="about.html"><span>About</span></a></li>
 <li><a href="download.html"><span>Download</span></a></li>
 <li><a href="release.html"><span>Latest Release</span></a></li>
 <li class="selected"><a href="license.html"><span>License</span></a></li>
 <li><a href="platforms.html"><span>Platforms</span></a></li>
 <li><a href="users.html"><span>Users</span></a></li>
    </ul>
  </div>
 </div>

<div id="page">
 <div class="plain">
  <h2>The home of the GNU Modula-2 compiler</h2>
  <p>The compiler is held under the GNU Public Licence v3.</p>
  <p>The ISO and PIM libraries are under the GPL v3.1 with GCC runtime extensions.  Copies of the
    licences can be found on the
    <a href="http://www.gnu.org/licenses">GNU</a>
 web site.</p>
 </div>
</div>
</body>
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  Gnomovision version 69, Copyright (C) year name of author
  Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
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it
  under certain conditions; type `show c' for details.
```

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necessary. Here is a sample; alter the names:

```
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 `Gnomovision' (which makes passes at compilers) written by James Hacker.

 <signature of Ty Coon>, 1 April 1989
 Ty Coon, President of Vice
```

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Version 3, 29 June 2007

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In addition, mere aggregation of another work not based on the Library
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subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of
the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or
derivative of it, under Section 2) in object code or executable form
under the terms of Sections 1 and 2 above provided that you accompany
it with the complete corresponding machine-readable source code,
which
must be distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not
compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the
Library, but is designed to work with the Library by being compiled or
linked with it, is called a "work that uses the Library". Such a
work, in isolation, is not a derivative work of the Library, and
therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library
creates an executable that is a derivative of the Library (because it
contains portions of the Library), rather than a "work that uses the

library". The executable is therefore
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Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of
Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding
machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the

Library will not necessarily be able to recompile the application
to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the
Library. A suitable mechanism is one that (1) uses at run time a
copy of the library already present on the user's computer system,
rather than copying library functions into the executable, and (2)
will operate properly with a modified version of the library,
if
the user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
least three years, to give the same user the materials
specified in Subsection 6a, above, for a charge no more
than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy
from a designated place, offer equivalent access to copy the above
specified materials from the same place.

e) Verify that the user has already received a copy of these
materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the
Library" must include any data and utility programs needed for
reproducing the executable from it. However, as a special exception,
the materials to be distributed need not include anything that is
normally distributed (in either source or binary
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components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
the executable.

It may happen that this requirement contradicts the license
restrictions of other proprietary libraries that do not normally
accompany the operating system. Such a contradiction means you cannot
use both them and the Library together in an executable that you
distribute.

7. You may place library facilities that are a work based on the
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facilities not covered by this License, and distribute such a combined
library, provided that the separate distribution of the work based on
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a) Accompany the combined library with a copy of the same work

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facilities. This must
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b) Give prominent notice with the combined library of the fact
that part of it is a work based on the Library, and explaining
where to find the accompanying uncombined form of the same work.

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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does

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These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be

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Thus, it is not the intent of this section to claim rights or contest
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In addition, mere aggregation of another work not based on the Library
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Once this change is made in a given copy, it is irreversible for
that copy, so the ordinary GNU General Public License applies to all
subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of
the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or
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under the terms of Sections 1 and 2 above provided that you accompany
it with the complete corresponding
machine-readable source code, which
must be distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
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compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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a) Accompany
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b) Use a suitable shared library mechanism for linking with the
Library. A suitable mechanism is one that (1) uses at run time a
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For an executable, the required form of the "work that uses the
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It may happen that this requirement contradicts the license
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1.752 pcre 2:8.39-13ubuntu0.22.04.1

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1.753 python3-decorator 4.4.2-0ubuntu1

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1.755 open-ldap 2.5.13+dfsg-5

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1.759 tonistiigi-go-archvariant 1.0.0

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1.761 cyrus-sasl 2.1.27+dfsg2-3ubuntu1.2

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*
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* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/representer/BaseRepresenter.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/SequenceEndEvent.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/util/PlatformFeatureDetector.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/parser/VersionTagsTuple.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/Yaml.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/inspector/UnTrustedTagInspector.java
*
 /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/parser/ParserException.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/error/MarkedYAMLException.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/representer/Representer.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/nodes/NodeTuple.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/inspector/TrustedTagInspector.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/serializer/Serializer.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/emitter/EmitterException.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/FieldProperty.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/BeanAccess.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/comments/CommentLine.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/LoaderOptions.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/CommentToken.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/extensions/compactnotation/PackageCompactConstructor.java
*

/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/inspector/TrustedPrefixesTagInspector.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/BlockEndToken.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/serializer/SerializerException.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/error/Mark.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/util/ArrayUtils.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/error/YAMLException.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/DocumentEndEvent.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/emitter/Emitter.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/MappingEndEvent.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/util/ArrayStack.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/util/EnumUtils.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/TypeDescription.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/scanner/ScannerException.java
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/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/FlowSequenceStartToken.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/nodes/SequenceNode.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/resolver/Resolver.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/inspector/TagInspector.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/constructor/Constructor.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/scanner/SimpleKey.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/DocumentStartEvent.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/FlowEntryToken.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/comments/CommentEventsCollector.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/TagToken.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/Token.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/serializer/NumberAnchorGenerator.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/AnchorToken.java
*
/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/error/MissingEnvironmentVariableException.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/constructor/BaseConstructor.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/StreamEndToken.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/composer/Composer.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/extensions/compactnotation/CompactData.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/PropertyUtils.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/nodes/Tag.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/NodeEvent.java
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/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/KeyToken.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/TagTuple.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/BlockEntryToken.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/MissingProperty.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/Event.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/constructor/DuplicateKeyException.java

* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/extensions/compactnotation/CompactConstructor.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/comments/CommentType.java
* /snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/GenericProperty.java

1.763 systemd 249

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1.764 msgp 1.1.8

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1.765 go-humanize 1.0.1

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1.766 go-openapi-validate 0.22.1

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1.767 fwd 1.1.2

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1.770 libtool 2.4.7

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1.772 pcre 2:8.39-13ubuntu0.22.04.1

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This gmp package was built for Debian by

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derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be
linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
file is unrestricted, regardless of whether it is legally a derivative
work. (Executables containing this object code plus portions of the
Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may
distribute
the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.
^L
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will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

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1.780 go-toml 1.9.5

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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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1.781 json-java 20131018

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1.787 go-patricia 2.3.1

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1.788 tomb 1.0.0-20141024135613-dd632973f1e7

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tomb - support for clean goroutine termination in Go.

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1.789 jackson-annotations 2.14.2

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Jackson JSON processor

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1.790 libfuse3-3 3.10.5-1build1

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1.794 grub2 2.06-2ubuntu14.1

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and valid for as
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*
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1.804 patch 2.7.6-r10

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1.806 pcre 8.45-r3

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1.808 golang-org-x-exp 0.0.0-20230425010034-47ecfdc1ba53

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Jackson JSON processor

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It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has
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It is currently developed by a community of developers.

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1.810 x-oauth2 0.7.0

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1.811 opentelemetry-collector-contrib 0.61.0

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1.812 gofrs-uuid 4.4.0+incompatible

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1.813 lib-pq 1.10.9

1.813.1 Available under license :

```
//go:build go1.10
// +build go1.10

package pq

import (
 "context"
 "database/sql/driver"
)

// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
 return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
 c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
 on it.
type NoticeHandlerConnector struct {
 driver.Connector
 noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
 c, err := n.Connector.Connect(ctx)
 if err == nil {
  SetNoticeHandler(c, n.noticeHandler)
 }
 return c, err
```

```
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  return c.noticeHandler
 }
 return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
 setting the notice
// handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  c.noticeHandler = handler
  return c
 }
 return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
```

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1.814 joda-time 2.12.5

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1.819 github.com/go-gorp/gorp/v3 3.1.0

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1.820 go-playground-universal-translator 0.18.1

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1.821 lto-disabled-list 24

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1.822 python3-click 8.0.3-1

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==========
click-contrib
==========

As the userbase of Click grows, more and more major feature requests pop up in Click's bugtracker. As reasonable as it may be for those features to be bundled with Click instead of being a standalone project, many of those requested features are either highly experimental or have unproven practical use, while potentially being a burden to maintain.

This is why click-contrib_ exists. The GitHub organization is a collection of possibly experimental third-party packages whose featureset does not belong into Click, but also a playground for major features that may be added to Click in the future. It is also meant to coordinate and concentrate effort on writing third-party extensions for Click, and to ease the effort of searching for such extensions. In that sense it could be described as a low-maintenance alternative to extension repositories of other frameworks.

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1.823 python-tz 2022.1-1ubuntu0.22.04.1

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1.824 python3-itsdangerous 2.1.0-1

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1.825 klog 1.0.0

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1.826 githubcomgooglegofuzz 1.1.0

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1.828 gopkg-in-yaml-v2 2.3.0

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your
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 library `Frob' (a library for tweaking knobs) written by James
Random Hacker.

 <signature of Ty Coon>, 1 April 1990
 Ty Coon, President of Vice

That's all there is to it!

EFFECTIVE OCT 2008, LICENSE IS BEING CHANGED TO LGPL-2.1 (though not reflected
in released code until Nov 2009 - slow release cycle...)

Discussion thread from mailing list archive, with approval from everyone actively
involved or holding original licensing rights included.

[Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:16

Attachments: Message as HTML
looks like 2.8.11 is out and marked as "GPL-2" ... releasing libraries unde=
r=20
GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
=2Dmike

Re: [Cracklib-devel] cracklib license
From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:18
I understand that, and you're welcome to bring it up with Alec directly
and see if he wants to relicense his code as LGPL... but at this point,
it was enough to just get it consistent and documented as to what it was
released under. This wasn't actually a license change, just a
 clarification of the licensing that was already in place.=20

-- Nathan
=20

Nathan Neulinger EMail: nneul@um...

University of Missouri - Rolla Phone: (573) 341-6679
UMR Information Technology Fax: (573) 341-4216

> -----Original Message-----
> From: cracklib-devel-bounces@li...
> [mailto:cracklib-devel-bounces@li...] On Behalf Of
> Mike Frysinger
> Sent: Monday, October 01, 2007 8:15 PM
> To: cracklib-devel@li...
> Subject: [Cracklib-devel] cracklib license
>=20
> looks like 2.8.11 is out and marked as "GPL-2" ... releasing
> libraries under
> GPL-2 is not desirable at all ... this is why the LGPL-2.1 exists
> -mike

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2007-10-02 01:33

Attachments: Message as HTML
On Monday 01 October 2007, Neulinger, Nathan
wrote:
> I understand that, and you're welcome to bring it up with Alec directly
> and see if he wants to relicense his code as LGPL... but at this point,
> it was enough to just get it consistent and documented as to what it was
> released under. This wasn't actually a license change, just a
> clarification of the licensing that was already in place.

the original license (before moving to sourceforge -- aka, 2.7) was not=20
GPL-2 ... it was a modified artistic license ... i didnt notice the license=
=20
change until it was mentioned in the latest notes.

unlike the old license, GPL-2 prevents people from using cracklib unless th=
eir=20
applications are also GPL-2 which imo is just wrong. it isnt the place of =
a=20
library to dictact to application writes what license they should be using.=
=20
thus LGPL-2.1 enters to fill this void.
=2Dmike

Re: [Cracklib-devel]
cracklib license
From: Neulinger, Nathan <nneul@um...> - 2007-10-02 01:46
Seems like the ideal thing here would be for you and the other distro

maintainers to get together with Alec in a conversation and come to a
decision as to what licensing scheme y'all want. I haven't really done
much other than cleaning up the packaging and patches and a small bit of
additional code, so whatever licensing y'all come up with is fine by me.

-- Nathan
=20

Nathan Neulinger EMail: nneul@um...
University of Missouri - Rolla Phone: (573) 341-6679
UMR Information Technology Fax: (573) 341-4216

> -----Original Message-----
> From: cracklib-devel-bounces@li...
> [mailto:cracklib-devel-bounces@li...] On Behalf Of
> Mike Frysinger
> Sent: Monday, October 01, 2007 8:33 PM
> To: Neulinger, Nathan
> Cc: cracklib-devel@li...; Alec Muffett
> Subject: Re: [Cracklib-devel] cracklib license
>=20
> On Monday 01 October 2007, Neulinger, Nathan wrote:
> > I understand that, and you're welcome to bring it up with Alec
> directly
> > and see if he wants to relicense his code as LGPL... but at this
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> place of a
> library
to dictact to application writes what license they should
> be using.
> thus LGPL-2.1 enters to fill this void.
> -mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...> - 2007-10-02 08:57
> Seems like the ideal thing here would be for you and the other distro
> maintainers to get together with Alec in a conversation and come to a
> decision as to what licensing scheme y'all want. I haven't really done
> much other than cleaning up the packaging and patches and a small
> bit of
> additional code, so whatever licensing y'all come up with is fine
> by me.

I am sympathetic. Guys, what do you reckon?

What I am hearing so far is that LGPL makes sense, since it can be
linked with any code, not just GPL...

-a

Re: [Cracklib-devel] cracklib license
From: Devin Reade <gdr@gn...> - 2007-10-02 15:04
I would like to see it under LGPL as well. I
think it is in everyone's
best interests to have as secure systems as possible, and I think tainting
it via GPL will just make it less likely that the library gets used, and
will not usually cause companies/developers to GPL the dependent code
(where it is not already GPL).

I like GPL, I use it when I can, but I don't think that it's the correct
license in this situation.

Devin
--
If it's sinful, it's more fun.

Re: [Cracklib-devel] cracklib license
From: Nalin Dahyabhai <nalin@re...> - 2008-01-28 16:32
On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
> > Seems like the ideal thing here would be for you and the other distro
> > maintainers to get together with Alec in a conversation and come to a
> > decision as to what licensing scheme y'all want. I haven't really done
> > much other than cleaning up the packaging and patches and a small
> > bit of
> > additional
code, so whatever licensing y'all come up with is fine
> > by me.
>
> I am sympathetic. Guys, what do you reckon?

>
> What I am hearing so far is that LGPL makes sense, since it can be
> linked with any code, not just GPL...

My apologies for not chiming in in anything resembling a reasonable
timeframe.

I'd also suggest the LGPL, for the reason you noted above. Alternately,
GPLv2 with the option of using the library under a later version of the
GPL would permit applications which were released under version 3 of the
GPL to use the library, too, which would be sufficient for the packages
which are included in Fedora. FWIW, I'd personally lean toward LGPL.

In any case, I thank you both for working on sorting this out.

Cheers,

Nalin

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-05 21:27

Attachments: Message as HTML

On Monday 28 January 2008, Nalin Dahyabhai wrote:
> On Tue, Oct 02, 2007 at 09:57:31AM +0100, Alec Muffett wrote:
> > > Seems like the ideal thing here would be for you and the other distro
> > > maintainers to get together with Alec in a conversation and come to a
> > > decision as to what licensing scheme y'all want. I haven't really done
> > > much other than cleaning up the packaging and patches and a small
> > > bit of
> > > additional code, so whatever licensing y'all come up with is fine
> > > by me.
> >
> > I am sympathetic. Guys, what do you reckon?
> >
> > What I am hearing so far is that LGPL makes sense, since it can be
> > linked with any code, not just GPL...
>
> My apologies for not chiming in in anything resembling a reasonable
> timeframe.
>
> I'd also suggest the LGPL, for the reason you noted above. Alternately,
> GPLv2 with the option of using
the library under a later version of the
> GPL would permit applications which were released under version 3 of the
> GPL to use the library, too, which would be sufficient for the packages

> which are included in Fedora. FWIW, I'd personally lean toward LGPL.
>
> In any case, I thank you both for working on sorting this out.

looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
the change now ?
-mike

Re: [Cracklib-devel] cracklib license
From: Alec Muffett <alecm@cr...> - 2008-10-05 23:18
>> In any case, I thank you both for working on sorting this out.
>
> looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we make
> the change now ?

yes. go for it. thanks++

-a

Re: [Cracklib-devel] cracklib license
From: Mike Frysinger <vapier@ge...> - 2008-10-25 22:34

Attachments: Message as HTML
On Sunday 05 October
2008, Alec Muffett wrote:
> >> In any case, I thank you both for working on sorting this out.
> >
> > looks like everyone is OK with LGPL-2.1 (GNU Lesser license), so can we
> > make the change now ?
>
> yes. go for it. thanks++

Nathan Neulinger is the only one who can actually make said change ...
-mike

BELOW IS ORIGINAL LICENSING DISCUSSION RE CHANGING TO GPL from Artistic.

CrackLib was originally licensed with a variant of the Artistic license. In the
interests of wider acceptance and more modern licensing, it was switched with
the original author's blessing to GPL v2.

This approval was carried out in email discussions in 2005, and has been reconfirmed

as of 2007-10-01 with the following email from Alec Muffett.

The below email references nneul@umr.edu address, as that is the address
that was used at the time. For any future emails regarding this, please
use nneul@neulinger.org.

From
 alecm@crypticide.com Mon Oct 1 12:26:03 2007
Received: from umr-exproto2.cc.umr.edu ([131.151.0.192]) by UMR-CMAIL1.umr.edu with Microsoft SMTPSVC(6.0.3790.3959);
  Mon, 1 Oct 2007 12:26:03 -0500
Received: from scansrv2.srv.mst.edu ([131.151.1.114]) by umr-exproto2.cc.umr.edu with Microsoft SMTPSVC(6.0.3790.3959);
  Mon, 1 Oct 2007 12:26:02 -0500
Received: (qmail 8022 invoked from network); 1 Oct 2007 16:59:55 -0000
Received: from smtp1.srv.mst.edu (131.151.1.43)
 by scanin-ipvs.cc.umr.edu with SMTP; 1 Oct 2007 16:59:55 -0000
Received: from spunkymail-mx8.g.dreamhost.com (mx1.spunky.mail.dreamhost.com [208.97.132.47])
 by smtp1.srv.mst.edu (8.13.1/8.13.1) with ESMTP id l91Gxtpr020623
 for <nneul@umr.edu>; Mon, 1 Oct 2007 11:59:55 -0500
Received: from rutherford.zen.co.uk (rutherford.zen.co.uk [212.23.3.142])
 by spunkymail-mx8.g.dreamhost.com (Postfix) with ESMTP id 2C7734D311
 for <nneul@neulinger.org>; Mon, 1 Oct 2007 09:59:50 -0700 (PDT)
Received: from
 [82.68.43.14] (helo=[192.168.1.3])
 by rutherford.zen.co.uk with esmtp (Exim 4.50)
 id 1IcOcX-0004Qt-6L
 for nneul@neulinger.org; Mon, 01 Oct 2007 16:59:49 +0000
Mime-Version: 1.0 (Apple Message framework v752.2)
In-Reply-To: <1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>
References: <1190922867.3457.147.camel@localhost.localdomain>
<EC90713277D2BE41B7110CCD74E235CEF44F38@UMR-CMAIL1.umr.edu>
<1b1b3fd80710010908k11dac0afp1f2dd471059ff9a4@mail.gmail.com>
Content-Type: text/plain; charset=US-ASCII; delsp=yes; format=flowed
Message-Id: <117A1264-F6DC-4E25-B0DD-56FBFEBE6E9F@crypticide.com>
Content-Transfer-Encoding: 7bit
From: Alec Muffett <alecm@crypticide.com>
Subject: Re: cracklib license
Date: Mon, 1 Oct 2007 17:59:46 +0100
To: Nathan Neulinger <nneul@neulinger.org>
X-Mailer: Apple Mail (2.752.2)
X-Originating-Rutherford-IP: [82.68.43.14]
Return-Path: alecm@crypticide.com
X-OriginalArrivalTime: 01 Oct 2007 17:26:03.0008 (UTC) FILETIME=[2420C000:01C80450]

Status: RO
Content-Length:
585
Lines: 21

>
> ---------- Forwarded message ----------
> From: Neulinger, Nathan <nneul@umr.edu>
> Date: Sep 27, 2007 2:58 PM
> Subject: RE: cracklib license
> To: alecm@crypto.dircon.co.uk
>
> Any chance you could write me a self-contained email stating clearly
> that the license is being changed to GPL, so I could include that
> email
> in the repository and clean up the repository/tarballs? I have all the
> original discussion, but something succinct and self contained
> would be
> ideal.

The license for my code in the Cracklib distribution is henceforth GPL.

Happy now? :-)

-a

1.841 githubcommiekgdns 1.1.41

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1.842 githubcommitchellhmapstructure 1.5.0

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import: ../../../../fossene/db/schema/thing.yml
fields:
  site: string
  author: root

1.845 term 0.5.0

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1.846 x-time 0.3.0

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1.850 errors 1.4.2

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1.854 k8s-io-kube-openapi 0.0.0-20211115234752-e816edb12b65

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package spec

// License information for the exposed API.
```

```
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
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// limitations under the License.

package spec

import "testing"

func TestIntegrationLicense(t *testing.T) {
 license := License{Name: "the name", URL: "the url"}
 const licenseJSON = `{"name":"the name","url":"the url"}`
 const licenseYAML = "name: the name\nurl: the url\n"

 assertSerializeJSON(t, license, licenseJSON)
 assertParsesJSON(t, licenseJSON, license)
}
```

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1.855 flock 0.8.1

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1.856 hashicorp-golang-lru 0.6.0

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1.861 githubcompelletiergotoml 1.9.5

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1.863 ncurses 6.3-2ubuntu0.1

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                    section #3.6.5 of OSGi R4 spec.\
                    Why is this required?\
                    See https://glassfish.dev.java.net/issues/show_bug.cgi?id=5385\
                    By doing this, we allow user have any version of apache-commons lib\
                    in their application class loader hierarchy. They don't even have to\
                    set delegation=false in sun-web.xml! This is the true advantage of\
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Sahoo.\
\
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1.867 prometheus-common 0.44.0

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^L

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Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.
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COPYING.other -*- org -*-
#+TITLE: List of code with permissive licenses as used by GnuPG.
#+STARTUP: showall

* DNS resolver (dirmngr/dns.c)

dns.c - Recursive, Reentrant DNS Resolver.

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* Regular
expression support

regexp/jimregexp.[ch]:

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Subsequently modified by:

1986 John Gilmore hoptoad!gnu
1987 James A. Woods ames!jaw
1993 Christopher Seiwald seiwald@vix.com
2000, 2002 Christopher Seiwald <seiwald@perforce.com>
2010 Steve Bennett <steveb@workware.net.au>
2020 NIIBE Yutaka <gniibe@fsij.org>

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regexp/utf8.[ch] (see regexp/LICENSE):

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That's all there is to it!
#
This is a Makefile stub which handles the creation of BSD shared
libraries.

```
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
 @echo " MKDIR pic"
 @mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:  $(BSD_LIB)

$(BSD_LIB): $(OBJS)
 (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
 $(MV) pic/$(BSD_LIB) .
 $(RM) -f ../$(BSD_LIB)
 (cd ..; $(LN) $(LINK_BUILD_FLAGS) \
  `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
 @echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
 @$(INSTALL_PROGRAM) $(BSD_LIB) \
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
 @-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
 $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
 $(RM)
 -rf pic
 $(RM) -f $(BSD_LIB)
 $(RM) -f ../$(BSD_LIB)
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```

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1.871 brotli 1.0.9-2+b6

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1.872 grep 3.8-5

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To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

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<program> Copyright (C) <year> <name of author>
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
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The hypothetical commands `show w' and `show c' should show the appropriate
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1.873 xz 5.4.1-0.2

1.873.1 Available under license :

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In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

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customarily used for software interchange; or,

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and only if you
received the program in object code or executable form with such
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special exception, the source code distributed need not include
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code, even though third parties are not
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Ty Coon, President of Vice

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b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

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==========

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1.874 libcap-ng 0.8.3-1+b3

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1.876 libsemanage-common 3.4-1+b5

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1.879 sysv-init 3.06-4

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1.883 k8s-io-apimachinery 0.23.4

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```
package api

import (
 "io/ioutil"
 "strings"
 "time"
)

type License struct {
```

```
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`

 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // The product the license is valid for
 Product string `json:"product"`

 // License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list
 of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}

type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
```

```
 return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := ioutil.ReadAll(resp.Body)
 if err != nil {
  return "", err
 }

 return string(data), nil
}

// LicenseReset will reset the license to the builtin one if it is still valid.
// If
 the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}
```

```
// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r
 := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
```

1.885 k8s-io-client-go 0.23.3

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1.888 fonts-dejavu-core 2.37-2build1

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Id

1.889 libncurses 6.3-2ubuntu0.1

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Upstream source https://invisible-island.net/ncurses/ncurses.html
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1.890 libnpth0 1.6-3build2

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1.891 libnlroute 3.5.0-0.1

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1.895 mongo-driver 1.11.2

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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1.898 go-strcase 1.3.0

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1.899 busybox 1.36.1

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1.904 python-dbus 1.2.18-3build1

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threshold for this to be true is not precisely defined by law.

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Otherwise, if the work is a derivative of the Library, you may
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========

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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Library. A suitable mechanism is one that (a) uses at run time
a copy of the Library already present on the user's computer
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```
<!-- Creator     : groff version 1.20.1 -->
<!-- CreationDate: Fri Jan 14 19:57:50 2011 -->
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta name="generator" content="groff -Thtml, see www.gnu.org">
<meta http-equiv="Content-Type" content="text/html; charset=US-ASCII">
<meta name="Content-Style" content="text/css">
<link rel="stylesheet" type="text/css" href="texi2tr.css" />
<title>GNU Modula-2</title>
</head>

<body>
 <!-- site wide top running header menu -->

 <ul id="overview">
   <li class="home">
     HOME_HREF
   </li>
   <li class="release">
     12_HREF
   </li>

   <li>
     <a href="news.html" title="News">News</a>
   </li>
   <li>
     <a href="development.html" title="Development">Development</a>
   </li>
   <li>
     <a href="community.html" title="Community">Community</a>
   </li>
 </ul>

 <div id="header">
```

```
  <h1>
    <span style="display:inline-block; vertical-align:middle">
 <img
 src="200px-Heckert_GNU_white.png" alt="Heckert_GNU_white.png">
    </span>
    <span style="display:inline-block; vertical-align:middle; font-size: 50px">
 GNU Modula-2
    </span>
  </h1>

  <!-- homepage tab menu -->

  <div id="tabmenu">
    <ul id="tab">
 <li><a href="about.html"><span>About</span></a></li>
 <li><a href="download.html"><span>Download</span></a></li>
 <li><a href="release.html"><span>Latest Release</span></a></li>
 <li class="selected"><a href="license.html"><span>License</span></a></li>
 <li><a href="platforms.html"><span>Platforms</span></a></li>
 <li><a href="users.html"><span>Users</span></a></li>
    </ul>
  </div>
 </div>

<div id="page">
 <div class="plain">
  <h2>The home of the GNU Modula-2 compiler</h2>
  <p>The compiler is held under the GNU Public Licence v3.</p>
  <p>The ISO and PIM libraries are under the GPL v3.1 with GCC runtime extensions.  Copies of the
    licences can be found on the
    <a href="http://www.gnu.org/licenses">GNU</a>
 web site.</p>
 </div>
</div>
</body>
</html>
```

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1.909 libpsl5 0.21.2-1

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1.910 libgdbm6 1.23-3

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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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Version 3.1, 31 March 2009

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In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of

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b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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Appendix: How to Apply These Terms to Your New Programs

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To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

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The hypothetical commands `show
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<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

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Version 2.1, February 1999

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In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

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This option is useful when you wish to copy part of the code of
the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or
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it with the complete corresponding machine-readable source code,
which
must be distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not
compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the
Library, but is designed to work with the Library by being compiled or
linked with it, is called a "work that uses the Library". Such a
work, in isolation, is not a derivative work of the Library, and
therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library
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contains portions of the Library), rather than a "work that uses the
library". The executable is therefore
covered by this License.
Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file
that is part of the Library, the object code for the work may be a

derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system,

rather than copying library functions into the executable, and (2)
will operate properly with a modified version of the library,
if
the user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
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d) If distribution of the work is made by offering access to copy
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specified materials from the same place.

e) Verify that the user has already received a copy of these
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For an executable, the required form of the "work that uses the
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normally distributed (in either source or binary
form) with the major
components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
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* DNS resolver (dirmngr/dns.c)

dns.c - Recursive, Reentrant DNS Resolver.

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1.930 hashicorp-consul-api 1.21.0

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```
<div
 ...attributes
 class="consul-intention-permission-form"
>
<FormGroup
 @name={{name}}
as |group|>

 {{yield (hash
   submit=(action 'submit' changeset)
   reset=(action 'reset' changeset)

   isDirty=(and changeset.isValid)
   changeset=changeset
 )}}

 <fieldset>
   <div data-property="action">
     <span class="label">
       Should this permission allow the source connect to the destination?
     </span>
     <div role="radiogroup" class={{if changeset.error.Action ' has-error'}}>
       {{#each intents as |intent|}}
         <label>
           <span>{{capitalize intent}}</span>
           <input
             type="radio"
             name="Action"
             value={{intent}}
             checked={{if (eq changeset.Action intent) 'checked'}}
             onchange={{action (changeset-set changeset 'Action') value="target.value"}}
```

```
          />
        </label>
      {{/each}}
    </div>
  </div>
</fieldset>

<fieldset>
  <header>
    <h2>Path</h2>
   </header>
  <div>
      <group.Element
        @name="PathType"
        @type="select"
      as |el|>
        <el.Label>
          Path type
        </el.Label>
        <PowerSelect
          @options={{pathTypes}}
          @selected={{pathType}}
          @onChange={{action 'change' 'HTTP.PathType' changeset}} as |Type|>
            {{get pathLabels Type}}
        </PowerSelect>
      </group.Element>

{{#if shouldShowPathField}}
      <group.Element
        @name="Path"
        @error={{changeset-get changeset 'error.HTTP.Path'}}
      as |el|>
        <el.Label>
          {{get pathLabels pathType}}
        </el.Label>
        <el.Text
          @value={{changeset-get changeset 'HTTP.Path'}}
          oninput={{action 'change' 'HTTP.Path' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{#if (eq (changeset-get changeset 'HTTP.Path') 'Regex')}}

          Path Regex should not be blank
            {{else}}
              Path should begin with a '/'
            {{/if}}
          </el.Error>
```

```
        </State>
      </group.Element>
{{/if}}

  </div>
 </fieldset>

 <fieldset>
  <h2>Methods</h2>
  <div class="type-toggle">
    <span>All methods are applied by default unless specified</span>
    <group.Element
      @name="allMethods"
    as |el|>
      <el.Checkbox
        checked={{if allMethods 'checked'}}
        onchange={{action 'change' 'allMethods' changeset}}
      />
      <el.Label>
        All Methods
      </el.Label>
    </group.Element>
  </div>

{{#if shouldShowMethods}}
  <div class="checkbox-group" role="group">
    {{#each methods as |method|}}
      <label class="type-checkbox">
        <input
          type="checkbox"
          name="method"
          value={{method}}
          checked={{if (includes method changeset.HTTP.Methods) 'checked'}}

    onchange={{action 'change' 'method' changeset}}
        />
        <span>{{method}}</span>
      </label>
    {{/each}}
  </div>
{{/if}}
 </fieldset>

 <fieldset>
  <h2>Headers</h2>

  <Consul::Intention::Permission::Header::List
    @items={{changeset-get changeset 'HTTP.Header'}}
```

```
    @ondelete={{action 'delete' 'HTTP.Header' changeset}}
  as |headerList|>

  </Consul::Intention::Permission::Header::List>

  <Consul::Intention::Permission::Header::Form
    @onsubmit={{action 'add' 'HTTP.Header' changeset}}
  as |headerForm|>
    <Ref @target={{this}} @name="headerForm" @value={{headerForm}} />
  </Consul::Intention::Permission::Header::Form>

  <button
    data-test-add-header
    type="button"
    class="type-submit"
    disabled={{if (not this.headerForm.isDirty) 'disabled'}}
    onclick={{action this.headerForm.submit}}
  >
    Add{{#if (gt (get (changeset-get changeset 'HTTP.Header') 'length') 0)}} another{{/if}} header
  </button>
   <button
    type="button"
    class="type-cancel"
    onclick={{action this.headerForm.reset}}
  >
    Cancel
  </button>

 </fieldset>
 </FormGroup>
</div>
<div
 ...attributes
 class="consul-intention-permission-header-form"
>
 <FormGroup
   @name={{name}}
 as |group|>

   {{yield (hash
     submit=(action 'submit' changeset)
     reset=(action 'reset' changeset)

     isDirty=(and changeset.isValid changeset.isDirty)
     changeset=changeset
   )}}

   <fieldset>
```

```
  <div>
    <group.Element
      @name="HeaderType"
      @type="select"
    as |el|>
      <el.Label>Header type</el.Label>
      <PowerSelect
        @options={{headerTypes}}
        @selected={{headerType}}
        @onChange={{action 'change' 'HeaderType' changeset}} as |Type|>
          {{get headerLabels Type}}
      </PowerSelect>
    </group.Element>


    <group.Element
      @name="Name"
      @error={{changeset-get changeset 'error.Name'}}
    as |el|>
      <el.Label>Header name</el.Label>
      <el.Text
        @value={{changeset-get changeset 'Name'}}
        oninput={{action
'change' 'Name' changeset}}
      />
      <State @state={{el.state}} @matches="error">
        <el.Error>
          {{changeset-get changeset 'error.Name.validation'}}
        </el.Error>
      </State>
    </group.Element>

{{#if shouldShowValueField}}
    <group.Element
      @name="Value"
      @error={{changeset-get changeset 'error.Value'}}
    as |el|>
      <el.Label>Header {{lowercase (get headerLabels headerType)}}</el.Label>
      <el.Text
        @value={{changeset-get changeset 'Value'}}
        oninput={{action 'change' 'Value' changeset}}
      />
      <State @state={{el.state}} @matches="error">
        <el.Error>
          {{changeset-get changeset 'error.Value.validation'}}
        </el.Error>
      </State>
    </group.Element>
```

{{/if}}

</fieldset>
</FormGroup>

---
layout: api
page_title: License - Operator - HTTP API
description: |-
The /operator/license endpoint allows for retrieving the Consul
Enterprise License.

License - Operator HTTP API

<EnterpriseAlert />

The licensing functionality described here is available only in
[Consul Enterprise](https://www.hashicorp.com/products/consul/) version 1.1.0 and later.

Getting the Consul License

This endpoint gets information about the current license.

Method	Path	Produces
`GET`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

| Blocking Queries | Consistency Modes | Agent Caching | ACL Required |
| ----------
| ---------- | ---------- | ---------- |
| `NO` | `all` | `none` | `none` |

The corresponding CLI command is [`consul license get`](/consul/commands/license#get).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be retrieved.
This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",

     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
     "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

Updating the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with the ability to manage the cluster's license via the API.

This endpoint updates the Consul license and returns some of the license contents as well as any warning messages regarding its validity.

Method	Path	Produces
`PUT`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license put`](/consul/commands/license#put).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Payload

The payload is the raw license blob.

Sample Request

```shell-session
$ curl \
   --request PUT \
   --data @consul.license \
   http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product":
 "consul",
   "flags": {
     "package": "premium"
```

```
  },
  "features": [
    "Automated Backups",
    "Automated Upgrades",
    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```

Resetting the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint resets the Consul license to the license included in the Enterprise binary. If the included license is not valid, the replace will fail.

Method	Path	Produces
`DELETE`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching),
 and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license reset`](/consul/commands/license#reset).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
```

```
$ curl \
  --request DELETE \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
    "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
     "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

```
.consul-intention-permission-form {
 h2 {
   padding-top: 1.4em;
   margin-top: 0.2em;
   margin-bottom: 0.6em;
 }
 .consul-intention-permission-header-form {
   margin-top: 10px;
 }
 fieldset:nth-child(2) > div,
 .consul-intention-permission-header-form fieldset > div {
   display: grid;
   grid-template-columns: repeat(auto-fit, minmax(160px, 1fr));
   grid-gap: 12px;
```

```
 }
 fieldset:nth-child(2) > div label:last-child {
   grid-column: span 2;
 }
 .ember-basic-dropdown-trigger {
   padding: 5px;
 }
 .checkbox-group {
   flex-direction: column;
 }
}
<Notice
 @type="info"
as |notice|>
 <notice.Body>
   <p>
     {{t "components.consul.intention.notice.permissions.body"}}
   </p>
 </notice.Body>
 <notice.Footer>
   <p>
     <a href="{{env 'CONSUL_DOCS_URL'}}/connect/intentions" target="_blank" rel="noopener noreferrer">
       {{t "components.consul.intention.notice.permissions.footer"}}
     </a>
   </p>
 </notice.Footer>
</Notice>
---
layout: docs
page_title: Storing the Enterprise License in Vault
description: >-
 Configuring the Consul Helm chart to use an enterprise license stored in Vault.
---

# Storing the Enterprise License in Vault

This topic describes how to configure the Consul Helm chart to use an enterprise license stored in Vault.
## Overview
Complete the steps outlined in the [Data Integration](/consul/docs/k8s/deployment-configurations/vault/data-integration) section to use an enterprise license stored in Vault.

Complete the following steps once:
 1. Store the secret in Vault.
 1. Create a Vault policy that authorizes the desired level of access to the secret.

Repeat the following steps for each datacenter in the cluster:
 1. Create Vault Kubernetes auth roles that link the policy to each Consul on Kubernetes service account that requires access.
```

1. Update the Consul on Kubernetes helm chart.

Prerequisites
Prior to setting up the data integration between Vault and Consul on Kubernetes,
you will need to have:
1. Read and completed the steps in the [Systems Integration](/consul/docs/k8s/deployment-configurations/vault/systems-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).
2. Read the [Data Integration Overview](/consul/docs/k8s/deployment-configurations/vault/data-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).

Store the Secret in Vault

First, store the enterprise license in Vault:

```shell-session
$ vault kv put secret/consul/license key="<enterprise license>"
```

Create Vault policy

Next, you will need to create a policy that allows read access to this secret.

The path to the secret referenced in the `path` resource is the same value that you will configure in the `global.enterpriseLicense.secretName` Helm configuration (refer to [Update Consul on Kubernetes Helm chart](#update-consul-on-kubernetes-helm-chart)).

<CodeBlockConfig filename="license-policy.hcl">

```HCL
path
 "secret/data/consul/license" {
 capabilities = ["read"]
}
```

</CodeBlockConfig>

Apply the Vault policy by issuing the `vault policy write` CLI command:

```shell-session
$ vault policy write license-policy license-policy.hcl
```

Create Vault Authorization Roles for Consul

Next, you will create Kubernetes auth roles for the Consul server and client:

```shell-session
$ vault write auth/kubernetes/role/consul-server \
   bound_service_account_names=<Consul server service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

```shell-session
$ vault write auth/kubernetes/role/consul-client \
   bound_service_account_names=<Consul client service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

To find out the service account names of the Consul server and client,
you can run the following `helm
 template` commands with your Consul on Kubernetes values file:

- Generate Consul server service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/server-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

- Generate Consul client service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/client-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

Update Consul on Kubernetes Helm chart.

Now that you have configured Vault, you can configure the Consul Helm chart to
use the enterprise enterprise license in Vault:

<CodeBlockConfig filename="values.yaml">

```yaml
global:
 image: hashicorp/consul-enterprise:1.12.0-ent
 secretsBackend:
   vault:
     enabled: true
     consulServerRole: consul-server
     consulClientRole: consul-client
 enterpriseLicense:
```

```
  secretName: secret/data/consul/enterpriselicense
  secretKey: key
```

</CodeBlockConfig>

Note that `global.enterpriseLicense.secretName`
 is the path of the secret in Vault.
This should be the same path as the one you included in your Vault policy.
`global.enterpriseLicense.secretKey` is the key inside the secret data. This should be the same
as the key you passed when creating the enterprise license secret in Vault.
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```
.consul-intention-permission-header-list {
 max-height: 200px;
 overflow: auto;
}
@import './skin';
@import './layout';
.consul-intention-permission-header-list {
 > ul > li {
   @extend %list-row-200;
 }
}
```

---
layout: docs
page_title: Consul-Terraform-Sync Enterprise License
description: >-
 Consul-Terraform-Sync Enterprise License

Consul-Terraform-Sync Enterprise License

<EnterpriseAlert>
 Licenses are only required for Consul-Terraform-Sync (CTS) Enterprise
</EnterpriseAlert>

CTS Enterprise binaries require a [Consul Enterprise license](/consul/docs/enterprise/license/overview) to run. There is no CTS Enterprise specific license. As a result, CTS Enterprise's licensing is very similar to Consul Enterprise.

All CTS Enterprise features are available with a valid Consul Enterprise license, regardless of your Consul Enterprise packaging or pricing model.

To get a trial license for CTS, you can sign-up for the [trial license for Consul Enterprise](/consul/docs/enterprise/license/faq#q-where-can-users-get-a-trial-license-for-consul-enterprise).

Automatic License Retrieval
CTS automatically retrieves a license from Consul on startup and then attempts to retrieve a new license
 once a day. If the current license is reaching its expiration date, CTS attempts to retrieve a license with increased frequency, as defined by the [License Expiration Date Handling](/consul/docs/nia/enterprise/license#license-expiration-handling).

~> Enabling automatic license retrieval is recommended when using HCP Consul, as HCP Consul licenses expire

more frequently than Consul Enterprise licenses. Without auto-retrieval enabled, you have to restart CTS every time you load a new license.

Setting the License Manually

If a license needs to be manually set, choose one of the following methods (in order of precedence) to set the license:

1. Set the `CONSUL_LICENSE` environment variable to the license string.

  ```shell-session
  export CONSUL_LICENSE=<LICENSE_VALUE>
  ```

1. Set the `CONSUL_LICENSE_PATH` environment variable to the path of the file containing the license.

  ```shell-session
  export CONSUL_LICENSE_PATH=<PATH>/<TO>/<FILE>
  ```

1. To point to the file containing
 the license, in the configuration file, configure the [`license`](/consul/docs/nia/configuration#license) path option.

  ```hcl
  license {
    path = "<PATH>/<TO>/<FILE>"
  }
  ```

1. To point to the file containing the license, in the configuration file, configure the [`license_path`](/consul/docs/nia/configuration#license_path) option i. **Deprecated in CTS 0.6.0 and will be removed in a future release. Use [license block](/consul/docs/nia/configuration#license) instead.**

  ```hcl
  license_path = "<PATH>/<TO>/<FILE>"
  ```

~> **Note**: the [options to set the license and the order of precedence](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses) are the same as Consul Enterprise server agents.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Updating the License Manually
To update the license when it expires or is
 near the expiration date and automatic license retrieval is disabled:

1. Update the license environment variable or configuration with the new license value or path to the new license

file
1. Stop and restart CTS Enterprise

Once CTS Enterprise starts again, it will pick up the new license and run the tasks with any changes that may have occurred between the stop and restart period.

License Expiration Handling

Licenses have an expiration date and a termination date. The termination date is a time at or after the license expires. CTS Enterprise will cease to function once the termination date has passed.

The time between the expiration and termination dates is a grace period. Grace periods are generally 24-hours, but you should refer to your license agreement for complete terms of your grace period.

When approaching expiration and termination, by default, CTS Enterprise will attempt to retrieve a new license. If auto-retrieval is disabled, CTS Enterprise will provide notifications
 in the system logs:

Time period	Behavior - auto-retrieval enabled (default)	Behavior - auto-retrieval disabled
30 days before expiration	License retrieval attempt every 24-hours	Warning-level log every 24-hours
7 days before expiration	License retrieval attempt every 1 hour	Warning-level log every 1 hour
1 day before expiration	License retrieval attempt every 5 minutes	Warning-level log every 5 minutes
1 hour before expiration	License retrieval attempt every 1 minute	Warning-level log every 1 minute
At or after expiration (before termination)	License retrieval attempt every 1 minute	Error-level log every 1 minute
At or after termination	Error-level log
and exit	Error-level log and exit

~> **Note**: Notification frequency and [grace period](/consul/docs/enterprise/license/faq#q-is-there-a-grace-period-when-licenses-expire) behavior is the same as Consul Enterprise.

```
@import './skin';
@import './layout';
.consul-intention-permission-list > ul > li {
 @extend %list-row-200;
}
.consul-intention-permission-list:not(.readonly) > ul > li {
 @extend %with-composite-row-intent;
}
.consul-intention-permission-list strong {
 @extend %pill-500;
}
.consul-intention-permission-list .intent-allow {
 @extend %pill-allow;
}
```

```
.consul-intention-permission-list .intent-deny {
 @extend %pill-deny;
}
<div
 class="notice {{or @type 'info'}}"
 ...attributes
>
{{yield (hash
 Header=(component 'anonymous' tagName="header")
 Body=(component 'anonymous')
 Footer=(component 'anonymous' tagName="footer")
)}}
</div>
<Route
 @name={{routeName}}
as |route|>
 <DataLoader
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition=route.params.partition
       nspace=route.params.nspace
       dc=route.params.dc
     )
   }}
 as |loader|>

{{#let
 loader.data
as |item|}}
   <BlockSlot @name="error">
     <ErrorState
       @error={{loader.error}}
       @login={{route.model.app.login.open}}
     />
   </BlockSlot>

   <BlockSlot @name="disconnected" as |after|>
     {{#if (eq loader.error.status "404")}}
       <Notice
         {{notification
           sticky=true
         }}
         class="notification-update"
         @type="warning"
       as |notice|>
         <notice.Header>
           <strong>Warning!</strong>
```

```
      </notice.Header>
      <notice.Body>
        <p>
          This service has been deregistered and no longer exists in the catalog.
        </p>
      </notice.Body>
    </Notice>
  {{else if (eq
loader.error.status "403")}}
    <Notice
      {{notification
        sticky=true
      }}
      class="notification-update"
      @type="error"
    as |notice|>
      <notice.Header>
        <strong>Error!</strong>
      </notice.Header>
      <notice.Body>
        <p>
          You no longer have access to this service
        </p>
      </notice.Body>
    </Notice>
  {{else}}
    <Notice
      {{notification
        sticky=true
      }}
      class="notification-update"
      @type="warning"
    as |notice|>
      <notice.Header>
        <strong>Warning!</strong>
      </notice.Header>
      <notice.Body>
        <p>
          An error was returned whilst loading this data, refresh to try again.
        </p>
      </notice.Body>
    </Notice>
  {{/if}}
</BlockSlot>

<BlockSlot @name="loaded">
  <div class="tab-section">
    <section
```

```
      class={{class-map
       'validity'
       (array 'valid' item.Valid)
      }}
    >
      <header>
        <h2>
          {{compute (fn route.t 'expiry.header')}}
        </h2>
      </header>

      <p>
        {{compute (fn route.t 'expiry.${type}.body'
          (hash
            type=(if item.Valid 'valid' 'expired')
            date=(format-time item.License.expiration_time
              year='numeric'
              month='long'
              day='numeric'
            )
            time=(format-time item.License.expiration_time
              hour12=true
              hour='numeric'
              hourCycle='h12'
              minute='numeric'
              second='numeric'
              timeZoneName='short'
            )
            htmlSafe=true
          )
        )}}
      </p>

      <dl>
        <dt class={{class-map
            (array
'valid' item.Valid)
            (array 'expired' (not item.Valid))
            (array 'warning' (temporal-within item.License.expiration_time 2629800000))
          }}
        >
          {{compute (fn route.t 'expiry.${type}.header'
            (hash
              type=(if item.Valid 'valid' 'expired')
            )
          )}}
        </dt>
        <dd>
```

```
            {{temporal-format item.License.expiration_time}}
          </dd>
        </dl>

        <aside>
          <header>
            <h3>
              {{compute (fn route.t 'documentation.title')}}
            </h3>
          </header>
          {{compute (fn route.t 'documentation.body'
            (hash
              htmlSafe=true
            )
          )}}
        </aside>

      </section>
    </div>
  </BlockSlot>
{{/let}}
 </DataLoader>
</Route>
.consul-intention-permission-list {
 .detail > div {
   display: flex;
   width: 100%;
 }
 strong {
   margin-right: 8px;
 }
}
{
 "Valid": true,
 "License": {
   "license_id": "${fake.random.uuid()}",
   "customer_id": "${fake.random.uuid()}",
   "installation_id": "*",
   "issue_time": "2021-01-13T15:25:19.052900132Z",
   "start_time": "2021-01-13T00:00:00Z",
   "expiration_time": "${env('CONSUL_LICENSE_EXPIRATION', '2022-05-02T23:59:59.999Z')}",
   "termination_time": "${env('CONSUL_LICENSE_TERMINATION', '2022-01-13T23:59:59.999Z')}",
   "product": "consul",
   "flags": {
     "modules": [
       "global-visibility-routing-scale",
       "governance-policy"
     ]
```

```
  },
  "modules": [
    "Global Visibility, Routing and Scale",
    "Governance and Policy"
  ],
  "features": [
    "Automated Backups",
    "Automated Upgrades",
    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation",
    "Namespaces",
    "SSO",
    "Audit Logging",
    "Admin Partitions"
  ]
 },
 "Warnings": [
 ]
}
.consul-intention-permission-header-list {
 dt::before {
   @extend %with-glyph-icon;
   content: 'H';
 }
}
package api

import (
 "io"
 "strings"
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`
```

```
 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // Whether the license will ignore termination
 IgnoreTermination bool `json:"ignore_termination"`

 // The product the license is valid for
 Product string `json:"product"`

 //
 License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}

type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
```

```
 if err != nil {
  return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := io.ReadAll(resp.Body)
 if err != nil {
  return "", err
 }

 return string(data), nil
}

//
 LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator)
 LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("PUT", "/v1/operator/license")
```

```
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
# Proprietary License

This license is temporary while a more official one is drafted. However,
this should make it clear:

The text contents of this website are MPL 2.0 licensed.

The design contents of this website are proprietary and may not be reproduced
or reused in any way other than to run the website locally. The license for
the design is owned solely by HashiCorp, Inc.
# License

```hbs preview-template
<figure>
 <figcaption>URI: <code>/:partition/:nspace/:dc/license</code></figcaption>
 <DataSource
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition='partition'
       nspace='ns'
       dc='dc-1'
     )
   }}
   @onchange={{action (mut data) value="data"}}
 />
 <pre><code>{{json-stringify data null 4}}</code></pre>
</figure>
```
.agentless-node-notice header {
 display: flex;
```

```
 justify-content: space-between;
}
---
layout: commands
page_title: 'Commands: License'
description: >
 The license command provides a datacenter-level view of the Consul
 Enterprise license.
---

# Consul License

Command: `consul license`

<EnterpriseAlert />

The `license` command provides a list of all datacenters that use the Consul Enterprise license applied to the current datacenter.

~> **Warning**: Consul 1.10.0 removed the ability to set and reset the license using the CLI.
See the [licensing documentation](/consul/docs/enterprise/license/overview) for more information about
Consul Enterprise license management.

If ACLs are enabled then a token with operator privileges may be required in
order to use this command. Requests are forwarded internally to the leader
if required, so this can be run from any Consul node in a cluster. See the
[ACL Guide](/consul/tutorials/security/access-control-setup-production) for more information.

```text
Usage: consul license <subcommand> [options] [args]

 This command has subcommands
 for managing the Consul Enterprise license
 Here are some simple examples, and more detailed examples are
 available in the subcommands or the documentation.

 Install a new license from a file:

    $ consul license put @consul.license

 Install a new license from stdin:

    $ consul license put -

 Install a new license from a string:

    $ consul license put "<license blob>"
```
```

Retrieve the current license:

$ consul license get

Inspect a license:

$ consul license inspect "<path to license file>"

Reset the current license:

$ consul license reset

For more examples, ask for subcommand help or view the documentation.

Subcommands:
  get Get the active license
  inspect Inspect a signed license
  put Puts a new license in the datacenter
  reset Resets the license in the datacenter

```

## inspect

This command inspects and validates a license. Just like a Consul agent it
can load the license from a file
 on disk or from the `CONSUL_LICENSE` and
`CONSUL_LICENSE_PATH` environment variables.

Usage: `consul license inspect [<options>] [<license file>]`

Inspect a license contained in a file:

```
$ consul license inspect consul.hclic
```

Inspect a license loaded from the environment:

```
$ consul license inspect
```

This will look at the CONSUL_LICENSE environment variable first
and if not present then we will look for the file specified
by the CONSUL_LICENSE_PATH environment variable.

The output looks like this:
```

```
Source: /consul/config/consul.hclic (path from the CONSUL_LICENSE_PATH environment variable)
Product: consul
License ID: 6089174b-a713-74cf-4c8d-856b86f1ce50
Customer ID: 7c020610-60a2-7ccb-c210-20d899e5f3b4
Installation ID: *
Issue Time: 2020-09-14 19:45:56.212195875 +0000 UTC
Start Time: 2020-09-14 00:00:00 +0000 UTC
Expiration Time: 2021-09-14 23:59:59.999 +0000 UTC
Termination Time: 2021-09-14 23:59:59.999 +0000 UTC
Modules:
      Global Visibility, Routing and Scale
       Governance and Policy
Features:
      Automated Backups
      Automated Upgrades
      Enhanced Read Scalability
      Network Segments
      Redundancy Zone
      Advanced Network Federation
      Namespaces
      SSO
      Audit Logging
      Admin Partitions

License is valid

```

put

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[PUT\] /v1/operator/license](/consul/api-docs/operator/license#updating-the-consul-license)

This command sets the Consul Enterprise license.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be
 from the corresponding HTTP endpoint.

| ACL Required |

| ---------- |
| `operator:write` |

Usage: `consul license put [options] LICENSE`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

get

Corresponding HTTP API Endpoint: [\[GET\] /v1/operator/license](/consul/api-docs/operator/license#getting-the-consul-license)

This command gets the Consul Enterprise license.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking)
 and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`none`

Usage: `consul license get [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

reset

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed
 in a future release.

Corresponding HTTP API Endpoint: [\[DELETE\] /v1/operator/license](/consul/api-docs/operator/license#resetting-the-consul-license)

Resets license for the datacenter to the one builtin in Consul binary, if it is still valid.
If the builtin license is invalid, the current one stays active.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license reset [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
      Automated Backups
       Automated Upgrades
      Enhanced Read Scalability
      Network Segments
      Redundancy Zone
      Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

```
.consul-intention-permission-list {
 dt::before {
   @extend %with-glyph-icon;
 }
 dl.permission-methods dt::before {
   content: 'M';
 }
 dl.permission-path dt::before {
   content: 'P';
 }
 dl.permission-header dt::before {
   content: 'H';
 }
}
{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-header-list"
 @items={{items}}
 @scroll="native"
 @cellHeight={{42}}
as |item|>
 <BlockSlot @name="details">
   <dl>
     <dt>
       <Tooltip>
```

```
        Header
      </Tooltip>
    </dt>
    <dd>
      {{item.Name}} {{route-match item}}
    </dd>
  </dl>
</BlockSlot>
<BlockSlot @name="actions" as |Actions|>
  <Actions as |Action|>
    <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you want to delete this header?
            </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
</BlockSlot>
</ListCollection>
{{/if}}
---
layout: docs
page_title: Enterprise Licenses
description: >-
 Consul Enterprise server, client, and snapshot agents require a license on startup in order to use Enterprise features.
Learn how to apply licenses using environment variables or configuration files.
---

# Consul Enterprise License

## Licensing Overview

All Consul Enterprise agents must be licensed when they are started. Where that license comes from will depend
on which binary is in use, whether the agent is a server, client or snapshot agent, and whether ACLs have been
```

enabled for the cluster.

-> ** Consul Enterprise 1.10.0 removed temporary licensing.** Prior to 1.10.0, Consul Enterprise agents could start without a license and then have a license applied to them later on via the CLI or API. That functionality has been removed and replaced with the ability to load licenses from the agent's configuration or environment. Also, prior to 1.10.0, server agents would automatically propagate the license between themselves.
This no longer occurs and the license must be present on each server agent when it is started.

Consul Enterprise 1.14.0, when running on Kubernetes, removed client agents and replaced these with virtual agents.
Virtual agents are nodes that Consul service mesh services run on. HashiCorp uses virtual agents to determine license entitlements for customers on per-node licensing and pricing agreements.

-> Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Applying a License

For Consul Enterprise 1.10.0 or greater, a license must be available at the time the agent starts.
For server agents this means that they must either have the [`license_path`](/consul/docs/agent/config/config-files#license_path)
configuration set or have a license configured in the servers environment with the `CONSUL_LICENSE` or `CONSUL_LICENSE_PATH` environment variables. Both the configuration
item and the `CONSUL_LICENSE_PATH`
environment variable point to a file containing the license whereas the `CONSUL_LICENSE` environment variable should contain the license as the value. If multiple variables are set,
the following order of precedence applies:

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Client agents and [snapshot agents](/consul/docs/enterprise/backups)
may also be licensed in the very same manner.
However, to avoid the need to configure the license on many client agents and snapshot agents,
those agents have the capability to retrieve the license automatically under the conditions described below.

Virtual agents do not need the license to run.

Updating the license for an agent depends on the method you used to apply the license.
- **If you used the `CONSUL_LICENSE`
environment variable**: After updating the environment variable, restart the affected agents.
- **If you used the
`CONSUL_LICENSE_PATH`
environment variable**: Update the license file first. Then, restart the affected agents.
- **If you used the `license_path` configuration item**: Update the license file first. Then, run [`consul

reload`](/consul/commands/reload) for the affected agents.

Client Agent License Retrieval

When a client agent starts without a license in its configuration or environment, it will try to retrieve the license from the servers via RPCs. That RPC always requires a valid non-anonymous ACL token to authorize the request but the token doesn't need any particular permissions. As the license is required before the client actually joins the cluster, where to make those RPC requests to is inferred from the [`retry_join`](/consul/docs/agent/config/config-files#retry_join) configuration. If `retry_join` is unset or no [`agent` token](/consul/docs/agent/config/config-files#acl_tokens_agent) is set then the client agent will immediately shut itself down.

If all preliminary checks
 pass the client agent will attempt to reach out to any server on its RPC port to
request the license. These requests will be retried for up to 5 minutes and if it is unable to retrieve a license within that time frame it will shut itself down.

If ACLs are disabled then the license must be provided to the client agent through one of the three methods listed below.
Failure in providing the client agent with a licence will prevent the client agent from joining the cluster.

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Snapshot Agent License Retrieval

The snapshot agent has similar functionality to the client agent for automatically retrieving the license. However, instead of requiring a server agent to talk to, the snapshot agent can request the license from the server or client agent it would use for all other operations. It still requires an ACL token to authorize the request. Also like client agents,
 the snapshot agent will shut itself down after being unable to retrieve the license for 5
minutes.
---
layout: docs
page_title: Enterprise License FAQ
description: >-
 Review frequently asked questions (FAQs) about Consul Enterprise licenses to learn more about how licenses work, what happens when they expire, and how to get a trial license.

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Consul Enterprise version 1.10.0.
Consul Enterprise automatically loads Consul licenses when the server agent starts.

Q: Can I get a quick summary of the Consul changes?

Starting with Consul Enterprise 1.10.0, the license enablement process is different.

HashiCorp Enterprise servers will no longer start without a license. Servers require licenses to be provided from either an environment variable or file.
If the license is missing, invalid, or expired, the server will immediately exit.
This check is part of the server boot-up process.

In previous versions of HashiCorp enterprise products, one server could distribute a license to other servers via the Raft protocol.
This will no longer work since each server must be able to find a valid license during the startup process.

Q: What are the upgrade requirements?

All customers on Consul Enterprise 1.8/1.9 must first upgrade their client and server agents to the latest patch release.
During the upgrade the license file must also be configured on client agents in an environment variable or file path, otherwise the Consul agents will fail to retrieve the license with a valid agent token.
The upgrade process varies if ACLs are enabled or disabled in the cluster.
Refer to the instructions on [upgrading to 1.10.x](/consul/docs/upgrading/instructions/upgrade-to-1-10-x) for details.

Q: Is there a tutorial available for the license configuration steps?

Please visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs).

Q: What resources are available?

The list below is a great starting point for learning more about the license changes introduced in Consul Enterprise 1.10.0+ent.

- [Consul Enterprise Upgrade Documentation](/consul/docs/enterprise/upgrades)

- [Consul License Documentation](/consul/docs/enterprise/license/overview)

- [License configuration values documentation](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses)

- [Install a HashiCorp Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs)

Q: Do these changes impact all customers/licenses?

The license changes introduced in 1.10.0 only affect Consul Enterprise.
This impacts customers that have an enterprise binary (trial or non-trial licenses) downloaded from https://releases.hashicorp.com.
The license changes do not impact customers with the baked-in licensed binaries. In a later release of Consul Enterprise, baked-in binaries will be deprecated.

Q: What is the product behavior change introduced by the licensing changes?

Starting with Consul Enterprise 1.10.0,
 a valid license is required on-disk (auto-loading) or as an environment variable for Consul Enterprise to successfully boot-up.
The in-storage license feature will not be supported starting with Consul Enterprise 1.10.0+ent. All Consul Enterprise clusters using 1.10.0+ent must ensure that there is a valid license on-disk (auto-loaded) or as an environment variable.

Q: What is the impact on trial licenses due to this change? ((#q-what-is-the-impact-on-evaluation-licenses-due-to-this-change))

Consul Enterprise 1.10.0+ server agents require a valid license to start.
The license can be provided on disk (auto-loaded) or as an environment variable.
There is no longer a 6-hour trial period in which Consul Enterprise server agents
can operate without a license.

Q: Is there a grace period when licenses expire?

YesConsul will continue normal operation and can be restarted after license *expiration* as defined in [`expiration_time`](/consul/api-docs/operator/license#getting-the-consul-license).
As
 license expiration is approached or passed, Consul will issue warnings in the system logs.

Consul will only cease operation after license *termination*, which occurs 10 years
after license expiration and is defined in
[`termination_time`](/consul/api-docs/operator/license#getting-the-consul-license).

~> **Starting with Consul 1.14, and patch releases 1.13.3 and 1.12.6, Consul will support non-terminating licenses**:
  Please contact your support representative for more details on non-terminating licenses.
  An expired license will not allow Consul versions released after the expiration date to run.
  It will not be possible to upgrade to a new version of Consul released after license expiration.

Q: Does this affect client agents?

There are upgrade requirements that affect Consul Enterprise clients.
Please review the [upgrade requirements](#q-what-are-the-upgrade-requirements) documentation.

Q: Does this affect snapshot agents?

Same behavior as Consul clients.
 See answer for [Does this affect client agents?](#q-does-this-affect-client-agents)

Q: What is the behavior if the license is missing?

Consul server agents will detect the absence of the license and immediately exit.

Consul client agents will attempt to retrieve the license from servers if certain conditions are met:

- ACLs are enabled.
- An ACL token is provided to the client agent.
- The client agents configuration contains `retry_join` addresses.
- The retry join addresses are addresses of the Consul servers.

Consul snapshot agents will attempt to retrieve the license from servers if certain conditions are met: ACLs are enabled, a ACL token is provided to the client agent, the client agents configuration contains `retry_join` addresses, the retry join addresses are addresses of the Consul servers.

Q: Where can users get a trial license for Consul Enterprise?

Contact your [HashiCorp Support contact](https://support.hashicorp.com/) for a development license.

~> **Trial
 install will cease operation 24 hours after 30-day license expiration**:
  Trial licenses are not meant to be used in production.
  This is unlike non-trial licenses which provide a 10 year grace period as described in
  the answer for [Q: Is there a grace period when licenses expire?](#q-is-there-a-grace-period-when-licenses-expire).

Q: How can I renew a license?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: I'm an existing enterprise customer but don't have my license, how can I get it?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: Are the license files locked to a specific cluster?

The license files are not locked to a specific cluster or cluster node. The above changes apply to all nodes in a cluster.

Q: Will this
 impact HCP Consul?

This will not impact HCP Consul.

Q: Does this need to happen every time a node restarts, or is this a one-time check?

Consul Enterprise binaries starting with 1.10.0+ent, will be subject to EULA check. Release 1.10.0+ent introduces the EULA check for trial licenses (non-trial licenses already go through EULA check during contractual agreement).

The agreement to a EULA happens only once (when the user gets their license), Consul Enterprise **will check for the presence of a valid license every time a node restarts**.

When a customer upgrades existing clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be auto-loaded.

When a customer deploys new clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be on-disk (auto-loaded).

Q: What are the scenarios that a customer must plan for because of these changes?

New Consul cluster deployments
using 1.10.0+ent will need to have a valid license on servers to successfully deploy.
This valid license must be on-disk (auto-loaded) or as an environment variable.
Please see the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?

VM

1. Run [`consul license get -signed`](/consul/commands/license#get) to extract the license from their running cluster. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have access to the required license. This could be via the client agent configuration file or an environment variable.
1. Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Follow the
Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

NOTE: If you are not upgrading Consul or your Helm chart version then no action is required.

1. In order to use Consul Enterprise 1.10.0 or greater on Kubernetes you must use version 0.32.0 or greater of the Helm chart.
1. You should already have a Consul Enterprise license set as a Kubernetes secret. If you do not, refer to [how to obtain a copy of your license](/consul/docs/enterprise/license/faq#q-i-m-an-existing-enterprise-customer-but-don-t-have-my-license-how-can-i-get-it).
Once you have the license then create a Kubernetes secret containing the license as described in [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise).
1. Follow the [Kubernetes Upgrade Docs](/consul/docs/k8s/upgrade) to upgrade. No changes to your `values.yaml` file are needed to enable enterprise autoloading since this support is built in to consul-helm 0.32.0 and greater.

!> **Warning:**
If you are upgrading the Helm chart but **not** upgrading the Consul version, you must set `server.enterpriseLicense.enableLicenseAutoload: false`. See [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise) for more details.

Q: What is the migration path for customers who want to migrate from their existing perpetually-licensed

binaries to the license on disk flow?

VM

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Proceed with the `helm` [upgrade instructions](/consul/docs/k8s/upgrade)

Q: Will Consul downgrades/rollbacks work?

When downgrading to a version
 of Consul before 1.10.0+ent, customers will need to follow the previous process for applying an enterprise licenses to Consul Enterprise.

Q: Are there potential pitfalls when downgrading or upgrading Consul server instances?

~> Verify that you meet the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Assume a scenario where there are three Consul server nodes:

- Node A: v1.9.5
- Node B: v1.10.0 [Leader]
- Node C: v1.9.5

The command `consul license put` is issued from Node A. This will result in an error due to how Consul routes calls to the server node, Node B in this example.
Because Node A is a follower when the call `consul license put` is issued, the call will be redirected to Node B (leader).
The `consul license put` operation will fail due to being removed from 1.10.0.
This is a scenario that could occur if a customer downgrades from 1.10.0+ and the Consul leadership has not

transferred back over to a node not running 1.10.0+.
This
 also has the potential of occurring when upgrading if scheduled license updates or autoscaling groups recoveries are in place.

Q: Any impacts to Consul Kubernetes?

If you are using a Consul Enterprise version prior to 1.10.0 and decide to upgrade the Helm chart to version 0.32.0 or newer, but not the Consul version.
You will need to add the following configuration.

```
server:
 enterpriseLicense:
   enableLicenseAutoload: false
```

```
{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-list{{if (not onclick) ' readonly'}}"
 @scroll="native"
 @items={{items}}
 @partial={{5}}
as |item|>
 <BlockSlot @name="details">
   <div onclick={{action (optional onclick) item}}>
     <strong class={{concat 'intent-' item.Action}}>{{capitalize item.Action}}</strong>
{{#if (gt item.HTTP.Methods.length 0)}}
       <dl class="permission-methods">
         <dt>
           <Tooltip>
             Methods
           </Tooltip>
         </dt>
         <dd>
{{#each item.HTTP.Methods as |item|}}
           {{item}}
{{/each}}
         </dd>
       </dl>
{{/if}}
{{#if item.HTTP.Path}}
       <dl class="permission-path">
         <dt>
           <Tooltip>
             {{item.HTTP.PathType}}
           </Tooltip>
         </dt>
         <dd>
```

```
          {{item.HTTP.Path}}
        </dd>
      </dl>
{{/if}}
{{#each item.HTTP.Header as |item|}}
      <dl class="permission-header">
        <dt>
          <Tooltip>
            Header
          </Tooltip>
        </dt>
        <dd>
          {{item.Name}} {{route-match item}}
        </dd>
      </dl>
{{/each}}
  </div>
 </BlockSlot>
{{#if onclick}}
 <BlockSlot @name="actions" as |Actions|>
  <Actions as |Action|>
    <Action data-test-edit-action @onclick={{action (optional onclick) item}} @close={{true}}>
      <BlockSlot @name="label">
        Edit
      </BlockSlot>
    </Action>
    <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you want to delete this permission?
            </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
```

{{/if}}
</ListCollection>
{{/if}}
Notice

Presentational component for informational/warning/error banners/notices.

```hbs preview-template
<Notice
 @type={{this.type}}
as |notice|>
 <notice.Header>
   <h3>Header</h3>
 </notice.Header>
 <notice.Body>
   <p>
     Body
   </p>
 </notice.Body>
 <notice.Footer>
   <p>
     <a href="">Footer link</a>
   </p>
 </notice.Footer>
</Notice>

<figure>
 <figcaption>Provide a widget to change the <code>@type</code></figcaption>

 <select
   onchange={{action (mut this.type) value="target.value"}}
 >
   <option>info</option>
   <option>success</option>
   <option>warning</option>
   <option>error</option>
 </select>

</figure>
```

Arguments

Argument/Attribute	Type	Default	Description
`type`	`String`	`info`	Type of notice [info|warning|error]

See

- [Template Source Code](./index.hbs)

%notice {
 position: relative;
 padding: 0.8rem;
}
%notice header {
 margin-bottom: 0.1rem;
}
%notice header > * {
 margin-bottom: 0;
}
%notice p {
 margin-bottom: 0.3rem;
 line-height: 1.4;
}
/* this is probably skin */
%notice {
 padding-left: calc(0.8rem + 1.4rem);
}
%notice::before {
 position: absolute;
 top: 0.8rem;
 left: 0.6rem;
 font-size: 1rem;
}
@import './skin';
@import './layout';
section[data-route='dc.show.license'] {
 @extend %license-route;
}
%license-route .validity {
 @extend %license-validity;
}
%license-route aside {
 @extend %license-route-learn-more;
}

%license-route h2 {
 @extend %h200;
}

%license-validity p {
 color: rgb(var(--tone-gray-700));
}

```
%license-validity dl {
 @extend %horizontal-kv-list;
 font-size: var(--typo-size-400);
}
%license-validity dl .expired + dd {
 @extend %visually-hidden;
}
%license-validity dl dt::before {
 content: '';
 margin-right: 0.25rem; /* 4px */
}
%license-validity dl .expired::before {
 --icon-name: icon-x-circle;
 --icon-color: rgb(var(--red-500));
}
%license-validity dl .warning::before {
 --icon-name: icon-alert-circle;
 --icon-color: rgb(var(--orange-500));
}
%license-validity dl .valid:not(.warning)::before {
 --icon-name: icon-check-circle;
 --icon-color: rgb(var(--green-500));
}

%license-route-learn-more {
 @extend %panel;
 box-shadow: var(--decor-elevation-000);
 padding: var(--padding-y)
 var(--padding-x);
 width: 40%;
 min-width: 413px;
 margin-top: 1rem; /* 16px */
}
%license-route-learn-more header > :first-child {
 @extend %h300;
}
%license-route-learn-more header {
 margin-bottom: 1rem; /* 16px */
}
%license-route-learn-more li {
 margin-bottom: 0.25rem; /* 4px */
}
%license-route-learn-more a::before {
 --icon-name: icon-docs-link;
 content: '';
 margin-right: 0.375rem; /* 6px */
}
```

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```
<Notice
 class="consul-intention-notice-custom-resource crd"
 ...attributes
 @type={{or @type "info"}}
as |notice|>
 <notice.Header>
   <h3>
     Intention Custom Resource
   </h3>
 </notice.Header>
 <notice.Body>
   <p>
     Some of your intentions are being managed through an Intention Custom Resource in your Kubernetes cluster. Those managed intentions will be view only in the UI. Any intentions created in the UI will work but will not be synced to the Custom Resource Definition (CRD) datastore.
   </p>
 </notice.Body>
 <notice.Footer>
   <p>
     <a href="{{env 'CONSUL_DOCS_URL'}}/k8s/crds" target="_blank" rel="noopener noreferrer">Learn more about CRDs</a>
   </p>
 </notice.Footer>
</Notice>
.consul-intention-permission-form {
 h2 {
   border-top: 1px solid rgb(var(--tone-blue-500));
   @extend %h200;
 }
 button.type-submit {
   @extend %frame-blue-300;
 }
 button.type-submit:hover:not(:disabled),
 button.type-submit:focus:not(:disabled) {
   @extend %frame-blue-500;
 }
 button.type-submit:disabled {
   @extend %frame-blue-200;
 }
}

.consul-intention-view {
 h2 {
   @extend %h200;
```

```
 }
}
@import './skin';
@import './layout';

%notice {
 margin: 1em 0;
}
/**/
.notice.success {
 @extend %notice-success;
}
.notice.warning {
 @extend %notice-warning;
}
.notice.error {
 @extend %notice-error;
}
.notice.info {
 @extend %notice-info;
}
.notice.highlight {
 @extend %notice-highlight;
}
.notice.policy-management {
 @extend %notice-highlight;
}
.notice.crd::before {
 -webkit-mask-image: none;
 mask-image: none;
 background-color: transparent;
 @extend %with-logo-kubernetes-color-icon;
}
%notice {
 border-radius: var(--decor-radius-100);
 border: var(--decor-border-100);
 color: rgb(var(--tone-gray-999));
}
%notice::before {
 @extend %as-pseudo;
}
%notice header > * {
 @extend %h300;
}
%notice footer * {
 @extend %p3;
 font-weight: var(--typo-weight-bold);
}
```

```
%notice-success,
%notice-info,
%notice-highlight,
%notice-error,
%notice-warning {
 @extend %notice;
}
%notice-success {
 background-color: rgb(var(--tone-green-050));
 border-color: rgb(var(--tone-green-500));
}
%notice-success header * {
 color: rgb(var(--tone-green-800));
}
%notice-info {
 border-color: rgb(var(--tone-blue-100));
 background-color: rgb(var(--tone-blue-010));
}
%notice-info header * {
 color: rgb(var(--tone-blue-700));
}
%notice-highlight {
 background-color: rgb(var(--tone-gray-050));
 border-color: rgb(var(--tone-gray-300));
}
%notice-info header * {
 color: rgb(var(--tone-blue-700));
}
%notice-warning {
 border-color: rgb(var(--tone-yellow-100));
 background-color: rgb(var(--tone-yellow-050));
}
%notice-warning
 header * {
 color: rgb(var(--tone-yellow-800));
}
%notice-error {
 background-color: rgb(var(--tone-red-050));
 border-color: rgb(var(--tone-red-500));
}
%notice-error header * {
 color: rgb(var(--tone-red-500));
}
%notice-success::before {
 @extend %with-check-circle-fill-mask;
 color: rgb(var(--tone-green-500));
}
%notice-info::before {
```

```
 @extend %with-info-circle-fill-mask;
 color: rgb(var(--tone-blue-500));
}
%notice-highlight::before {
 @extend %with-star-fill-mask;
 color: rgb(var(--tone-yellow-500));
}
%notice-warning::before {
 @extend %with-alert-triangle-mask;
 color: rgb(var(--tone-orange-500));
}
%notice-error::before {
 @extend %with-cancel-square-fill-mask;
 color: rgb(var(--tone-red-500));
}
{{#if isVisible}}
 <Notice data-test-node-agentless-notice @type='info' class='agentless-node-notice' as |notice|>
   <notice.Header>
     <h3>
       {{t 'routes.dc.nodes.index.agentless.notice.header'}}
     </h3>
     <button type='button' aria-label='Dismiss notice' {{on 'click' this.dismissAgentlessNotice}}>
       <FlightIcon @name='x' />
     </button>
   </notice.Header>
   <notice.Body>
     <p>
       {{t 'routes.dc.nodes.index.agentless.notice.body'}}
     </p>
   </notice.Body>
   <notice.Footer>
     <p class='docs-link'>
       <a
         href='{{env "CONSUL_DOCS_DEVELOPER_URL"}}/connect/dataplane'
         target='_blank'
         rel='noopener noreferrer'
       >
         {{t 'routes.dc.nodes.index.agentless.notice.footer'}}
       </a>
     </p>
   </notice.Footer>
 </Notice>
{{/if}}
```

1.931 netlink 1.7.2

1.931.1 Available under license :

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1.932 prometheus-community-go-runit 0.1.0

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1.933 sirupsen-logrus 1.5.0

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1.934 githubcomgoopenapispec 0.20.8

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```
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// limitations under the License.

package spec

import (
```

```
 "encoding/json"
 "testing"

 "github.com/stretchr/testify/assert"
)

var license = License{
 LicenseProps:     LicenseProps{Name: "the name", URL: "the url"},
 VendorExtensible: VendorExtensible{Extensions: map[string]interface{}{"x-license": "custom term"}}}

const licenseJSON = `{
 "name": "the name",
 "url": "the url",
 "x-license": "custom term"
}`

func TestIntegrationLicense(t
 *testing.T) {

 // const licenseYAML = "name: the name\nurl: the url\n"

 b, err := json.MarshalIndent(license, "", "\t")
 if assert.NoError(t, err) {
  assert.Equal(t, licenseJSON, string(b))
 }

 actual := License{}
 err = json.Unmarshal([]byte(licenseJSON), &actual)
 if assert.NoError(t, err) {
  assert.EqualValues(t, license, actual)
 }
}
// Copyright 2015 go-swagger maintainers
//
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//    http://www.apache.org/licenses/LICENSE-2.0
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// limitations under the License.

package spec
```

```
import (
 "encoding/json"

 "github.com/go-openapi/swag"
)

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 LicenseProps
 VendorExtensible
}

// LicenseProps holds the properties of a License object
type LicenseProps struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}

// UnmarshalJSON
 hydrates License from json
func (l *License) UnmarshalJSON(data []byte) error {
 if err := json.Unmarshal(data, &l.LicenseProps); err != nil {
  return err
 }
 return json.Unmarshal(data, &l.VendorExtensible)
}

// MarshalJSON produces License as json
func (l License) MarshalJSON() ([]byte, error) {
 b1, err := json.Marshal(l.LicenseProps)
 if err != nil {
  return nil, err
 }
 b2, err := json.Marshal(l.VendorExtensible)
 if err != nil {
  return nil, err
 }
 return swag.ConcatJSON(b1, b2), nil
}
```

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## Commands to generate dependency files
GEN_DEPS.c= $(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc= $(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE= -Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic
```

```
## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation
 rules
%.$(STATIC_O): $(srcdir)/%.c
 $(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
 $(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
 $(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
 $(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<


## Dependency rules
%.d: $(srcdir)/%.c
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.c) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

%.d: $(srcdir)/%.cpp
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.cc) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

## Versioned libraries rules

%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)
 $(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)
 $(RM) $@ && ln -s ${*F}.$(SO).$(SO_TARGET_VERSION) $@

##  Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
```

STATIC_PREFIX =

End BSD-specific setup

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1.940 libxslt 1.1.35-1

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file (certdata.txt). This file can be found in the mozilla source tree:
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@(#) $RCSfile: certdata.txt,v $
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1.942 libjansson4 2.13.1-1.1build3

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1.945 sha256-simd 1.0.1

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1.946 squirrel 1.5.4

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1.947 githubcommiekgdns 1.1.53

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1.948 python-setuptools 68.0.0

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1.949 libicu72 72.1-3

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## Commands to generate dependency files
GEN_DEPS.c= $(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc= $(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE= -Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))
```

```
## Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic

## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation
 rules
%.$(STATIC_O): $(srcdir)/%.c
 $(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
 $(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
 $(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
 $(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<


## Dependency rules
%.d: $(srcdir)/%.c
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.c) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

%.d: $(srcdir)/%.cpp
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.cc) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

## Versioned libraries rules

%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)
 $(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)
 $(RM) $@ && ln -s ${*F}.$(SO).$(SO_TARGET_VERSION) $@

##  Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=
```

Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

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Section: pkg.m4 - Macros to locate and utilise pkg-config.

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1.951 flask 2.0.1-2ubuntu1.1

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Flask Extension Development
==========

Flask, being a microframework, often requires some repetitive steps to get
a third party library working. Many such extensions are already available
on `PyPI`_.

If you want to create your own Flask extension for something that does not
exist yet, this guide to extension development will help you get your
extension running in no time and to feel like users would expect your
extension to behave.

Anatomy of an Extension

Extensions are all located in a package called ``flask_something``
where "something" is the name of the library you want to bridge. So for
example if you plan to add support for a library named `simplexml` to
Flask, you would name your extension's package ``flask_simplexml``.

The name of the actual extension (the human readable name) however would
be something like "Flask-SimpleXML". Make sure to include the name
"Flask"
somewhere in that name and that you check the capitalization.
This is how users can then register dependencies to your extension in
their :file:`setup.py` files.

But what do extensions look like themselves? An extension has to ensure
that it works with multiple Flask application instances at once. This is
a requirement because many people will use patterns like the
:doc:`/patterns/appfactories` pattern to create their application as
needed to aid unittests and to support multiple configurations. Because
of that it is crucial that your application supports that kind of
behavior.

Most importantly the extension must be shipped with a :file:`setup.py` file and
registered on PyPI. Also the development checkout link should work so
that people can easily install the development version into their
virtualenv without having to download the library by hand.

Flask extensions must be licensed under a BSD, MIT or more liberal license
in order to be listed in the Flask Extension Registry.

Keep in mind
that the Flask Extension Registry is a moderated place and libraries will
be reviewed upfront if they behave as required.

"Hello Flaskext!"

So let's get started with creating such a Flask extension. The extension
we want to create here will provide very basic support for SQLite3.

First we create the following folder structure::

```
flask-sqlite3/
    flask_sqlite3.py
    LICENSE
    README
```

Here's the contents of the most important files:

setup.py
```

The next file that is absolutely required is the :file:`setup.py` file which is
used to install your Flask extension. The following contents are
something you can work with::

```
"""
Flask-SQLite3

This is the description for that library
"""
from setuptools import setup

setup(
    name='Flask-SQLite3',
    version='1.0',
    url='http://example.com/flask-sqlite3/',
    license='BSD',
    author='Your Name',
    author_email='your-email@example.com',
     description='Very short description',
    long_description=__doc__,
    py_modules=['flask_sqlite3'],
    # if you would be using a package instead use packages instead
    # of py_modules:
    # packages=['flask_sqlite3'],
```
```

```
    zip_safe=False,
    include_package_data=True,
    platforms='any',
    install_requires=[
        'Flask'
    ],
    classifiers=[
        'Environment :: Web Environment',
        'Intended Audience :: Developers',
        'License :: OSI Approved :: BSD License',
        'Operating System :: OS Independent',
        'Programming Language :: Python',
        'Topic :: Internet :: WWW/HTTP :: Dynamic Content',
        'Topic :: Software Development :: Libraries :: Python Modules'
    ]
)
```

That's a lot of code but you can really just copy/paste that from existing extensions and adapt.

flask_sqlite3.py
``` ```

Now this is where your extension code goes. But how exactly should such an extension look like? What are the best practices? Continue reading for some insight.

Initializing Extensions

Many extensions will need some kind of initialization step. For example, consider an application that's currently connecting to SQLite like the documentation suggests (:doc:`/patterns/sqlite3`). So how does the extension know the name of the application object?

Quite simple: you pass it to it.

There are two recommended ways for an extension to initialize:

initialization functions:

If your extension is called `helloworld` you might have a function called ``init_helloworld(app[, extra_args])`` that initializes the extension for that application. It could attach before / after handlers etc.

classes:
```

Classes work mostly like initialization functions but can later be
used to further change the behavior.

What to use depends on what you have in mind. For the SQLite 3 extension we
will use the class-based approach because it will provide users with an object that handles opening and closing database connections.

When designing your classes, it's important to make them easily reusable at the module level. This means the object itself must not under any circumstances store any application specific state and must be shareable between different applications.

The Extension Code

Here's the contents of the `flask_sqlite3.py` for copy/paste::

```
import sqlite3
from flask import current_app, _app_ctx_stack


class SQLite3(object):
    def __init__(self, app=None):
        self.app = app
        if app is not None:
            self.init_app(app)

    def init_app(self, app):
        app.config.setdefault('SQLITE3_DATABASE', ':memory:')
        app.teardown_appcontext(self.teardown)

    def connect(self):
        return sqlite3.connect(current_app.config['SQLITE3_DATABASE'])

    def teardown(self,
exception):
        ctx = _app_ctx_stack.top
        if hasattr(ctx, 'sqlite3_db'):
            ctx.sqlite3_db.close()

    @property
    def connection(self):
        ctx = _app_ctx_stack.top
        if ctx is not None:
            if not hasattr(ctx, 'sqlite3_db'):
                ctx.sqlite3_db = self.connect()
```

```
        return ctx.sqlite3_db
```

So here's what these lines of code do:

1. The ``__init__`` method takes an optional app object and, if supplied, will call ``init_app``.
2. The ``init_app`` method exists so that the ``SQLite3`` object can be instantiated without requiring an app object. This method supports the factory pattern for creating applications. The ``init_app`` will set the configuration for the database, defaulting to an in memory database if no configuration is supplied. In addition, the ``init_app`` method attaches the ``teardown`` handler.
3. Next, we define a ``connect`` method that opens a database connection.
4. Finally, we add a ``connection`` property that on first access opens the database connection and stores it on the context. This is also the recommended way to handling resources: fetch resources lazily the first time they are used.

   Note here that we're attaching our database connection to the top application context via ``_app_ctx_stack.top``. Extensions should use the top context for storing their own information with a sufficiently complex name.

So why did we decide on a class-based approach here? Because using our extension looks something like this::

```
from flask import Flask
from flask_sqlite3 import SQLite3

app = Flask(__name__)
app.config.from_pyfile('the-config.cfg')
db = SQLite3(app)
```

You can then use the database from views like this::

```
@app.route('/')
def show_all():
    cur = db.connection.cursor()
    cur.execute(...)
```

Likewise if you are outside of a request you can use the database by pushing an app context::

```
with app.app_context():
    cur = db.connection.cursor()
```

```
    cur.execute(...)
```

At the end of the ``with`` block the teardown handles will be executed automatically.

Additionally, the ``init_app`` method is used to support the factory pattern for creating apps::

```
db = SQLite3()
# Then later on.
app = create_app('the-config.cfg')
db.init_app(app)
```

Keep in mind that supporting this factory pattern for creating apps is required for approved flask extensions (described below).

.. admonition:: Note on ``init_app``

As you noticed, ``init_app`` does not assign ``app`` to ``self``. This is intentional! Class based Flask extensions must only store the application on the object when the application was passed to the constructor. This tells the extension: I am not interested in using multiple applications.

When the extension needs to find the current application and it does not have a reference to it,
it must either use the
:data:`~flask.current_app` context local or change the API in a way that you can pass the application explicitly.

Using _app_ctx_stack

In the example above, before every request, a ``sqlite3_db`` variable is assigned to ``_app_ctx_stack.top``. In a view function, this variable is accessible using the ``connection`` property of ``SQLite3``. During the teardown of a request, the ``sqlite3_db`` connection is closed. By using this pattern, the *same* connection to the sqlite3 database is accessible to anything that needs it for the duration of the request.

Learn from Others

This documentation only touches the bare minimum for extension development. If you want to learn more, it's a very good idea to check out existing extensions on the `PyPI`_. If you feel lost there is still the `mailinglist`_ and the

`Discord server`_ to get some ideas for nice looking APIs. Especially if you do something nobody before you did,
it might be a very good idea to get some more
input. This not only generates useful feedback on what people might want from an extension, but also avoids having multiple developers working in isolation on pretty much the same problem.

Remember: good API design is hard, so introduce your project on the mailing list, and let other developers give you a helping hand with designing the API.

The best Flask extensions are extensions that share common idioms for the API. And this can only work if collaboration happens early.

Approved Extensions

Flask previously had the concept of approved extensions. These came with some vetting of support and compatibility. While this list became too difficult to maintain over time, the guidelines are still relevant to all extensions maintained and developed today, as they help the Flask ecosystem remain consistent and compatible.

0. An approved Flask extension requires a maintainer. In the event an extension author would
like to move beyond the project, the project
should find a new maintainer and transfer access to the repository, documentation, PyPI, and any other services. If no maintainer is available, give access to the Pallets core team.
1. The naming scheme is *Flask-ExtensionName* or *ExtensionName-Flask*. It must provide exactly one package or module named ``flask_extension_name``.
2. The extension must be BSD or MIT licensed. It must be open source and publicly available.
3. The extension's API must have the following characteristics:

    - It must support multiple applications running in the same Python process. Use ``current_app`` instead of ``self.app``, store configuration and state per application instance.
    - It must be possible to use the factory pattern for creating applications. Use the ``ext.init_app()`` pattern.

4. From a clone of the repository, an extension with its dependencies must be installable with ``pip install
-e .``.
5. It must ship a testing suite that can be invoked with ``tox -e py`` or ``pytest``. If not using ``tox``, the test dependencies should be specified in a ``requirements.txt`` file. The tests must be part of

the sdist distribution.
6. The documentation must use the ``flask`` theme from the
`Official Pallets Themes`_. A link to the documentation or project
website must be in the PyPI metadata or the readme.
7. For maximum compatibility, the extension should support the same
versions of Python that Flask supports. 3.6+ is recommended as of
2020. Use ``python_requires=">= 3.6"`` in ``setup.py`` to indicate
supported versions.

.. _PyPI: https://pypi.org/search/?c=Framework+%3A%3A+Flask
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```
[metadata]
name = Flask
version = attr: flask.__version__
url = https://palletsprojects.com/p/flask
project_urls =
 Donate = https://palletsprojects.com/donate
 Documentation = https://flask.palletsprojects.com/
 Changes = https://flask.palletsprojects.com/changes/
 Source Code = https://github.com/pallets/flask/
 Issue Tracker = https://github.com/pallets/flask/issues/
 Twitter = https://twitter.com/PalletsTeam
 Chat = https://discord.gg/pallets
license = BSD-3-Clause
author = Armin Ronacher
author_email = armin.ronacher@active-4.com
maintainer = Pallets
maintainer_email = contact@palletsprojects.com
description = A simple framework for building complex web applications.
long_description = file: README.rst
long_description_content_type = text/x-rst
classifiers =
 Development Status :: 5 - Production/Stable
 Environment :: Web Environment
 Framework :: Flask
 Intended Audience :: Developers
 License :: OSI Approved
 :: BSD License
 Operating System :: OS Independent
 Programming Language :: Python
```

```
 Topic :: Internet :: WWW/HTTP :: Dynamic Content
 Topic :: Internet :: WWW/HTTP :: WSGI
 Topic :: Internet :: WWW/HTTP :: WSGI :: Application
 Topic :: Software Development :: Libraries :: Application Frameworks

[options]
packages = find:
package_dir = = src
include_package_data = true
python_requires = >= 3.6

[options.packages.find]
where = src

[options.entry_points]
console_scripts =
 flask = flask.cli:main

[tool:pytest]
testpaths = tests
filterwarnings =
 error

[coverage:run]
branch = True
source =
 flask
 tests

[coverage:paths]
source =
 src
 */site-packages

[flake8]
select = B, E, F, W, B9, ISC
ignore =
 E203
 E402
 E501
 E722
 W503
max-line-length = 80
per-file-ignores =
 src/flask/__init__.py: F401

[mypy]
files = src/flask
```

python_version = 3.6
allow_redefinition = True
disallow_subclassing_any = True
no_implicit_optional = True
local_partial_types = True
strict_equality = True
warn_redundant_casts
 = True
warn_unused_configs = True
warn_unused_ignores = True

[mypy-asgiref.*]
ignore_missing_imports = True

[mypy-blinker.*]
ignore_missing_imports = True

[mypy-dotenv.*]
ignore_missing_imports = True

[egg_info]
tag_build =
tag_date = 0

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1.952 swift 1.0.53

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1.956 mergo 0.3.16

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fields:
  site: string
  author: root

1.957 prometheus-client 1.16.0

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1.958 jackson-dataformat-yaml 2.15.0

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1.964 godbus 5.1.0

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1.967 python-httplib2 0.20.4-3

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1.968 python-debian 0.1.49ubuntu2

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1.969 libjpeg 8c-2ubuntu11

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1.970 python-oauthlib 3.2.2-1

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1.971 libburn 1.5.4-1

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1.974 github.com/fullsailor/pkcs7 0.0.0-20190404230743-d7302db945fa

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1.975 netlink 1.2.1-beta.2

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1.982 xalan 2.7.3

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1.985 segmentio-encoding 0.3.6

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1.986 invopop-yaml 0.2.0

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Julian Seward, jseward@bzip.org
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Version 3.1, 31 March 2009

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1.992 gcc-12-base 12.3.0-1ubuntu1~22.04

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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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bzip2/libbzip2 version 1.0.6 of 6 September 2010

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Python was created in the early 1990s by Guido van Rossum at Stichting
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as a successor of a language called ABC. Guido remains Python's
principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for
National Research Initiatives
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in Reston, Virginia where he released several versions of the

software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	2.1.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
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2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes
2.4	2.3	2004	PSF	yes
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1.996 jmespath 1.0.1

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1.997 gax-go 2.12.0

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1.998 grpc-gateway 2.16.0

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1.999 cockroachdb-errors 1.9.1

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1.1000 gopkg-in-yaml-v2 2.4.0

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1.1001 go-uber-org-multierr 1.6.0

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1.1002 go-sysconf 0.3.12

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1.1003 fs-minipass 3.0.3

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1.1005 netlink 1.2.1-beta.2

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1.1006 pgzip 1.2.6

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1.1007 simple-update-notifier 2.0.0

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1.1009 metalmatze-signal 0.0.0-20210307161603-1c9aa721a97a

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1.1010 compress 1.16.7

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* /okio-3-5-0-sources-1-jar/commonMain/okio/internal/RealBufferedSink.kt
* /okio-3-5-0-sources-1-jar/commonMain/okio/internal/RealBufferedSource.kt
* /okio-3-5-0-sources-1-jar/commonMain/okio/internal/SegmentedByteString.kt
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* /okio-3-5-0-sources-1-jar/hashFunctions/okio/internal/Sha1.kt
* /okio-3-5-0-sources-1-jar/hashFunctions/okio/internal/Sha512.kt
* /okio-3-5-0-sources-1-jar/hashFunctions/okio/internal/Sha256.kt
* /okio-3-5-0-sources-1-jar/hashFunctions/okio/internal/Md5.kt
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* /okio-3-5-0-sources-1-jar/commonMain/okio/HashingSink.kt
* /okio-3-5-0-sources-1-jar/nativeMain/okio/PosixVariant.kt
* /okio-3-5-0-sources-1-jar/nonJvmMain/okio/HashingSink.kt
* /okio-3-5-0-sources-1-jar/appleMain/okio/ApplePosixVariant.kt
* /okio-3-5-0-sources-1-jar/nonJvmMain/okio/Path.kt
* /okio-3-5-0-sources-1-jar/commonMain/okio/FileSystem.kt
*
 /okio-3-5-0-sources-1-jar/commonMain/okio/ForwardingFileSystem.kt
* /okio-3-5-0-sources-1-jar/commonMain/okio/HashingSource.kt
* /okio-3-5-0-sources-1-jar/nativeMain/okio/FileSource.kt
* /okio-3-5-0-sources-1-jar/nonJvmMain/okio/HashingSource.kt
* /okio-3-5-0-sources-1-jar/commonMain/okio/FileMetadata.kt
* /okio-3-5-0-sources-1-jar/commonMain/okio/ExperimentalFileSystem.kt
* /okio-3-5-0-sources-1-jar/nativeMain/okio/FileSink.kt
* /okio-3-5-0-sources-1-jar/unixMain/okio/UnixPosixVariant.kt
* /okio-3-5-0-sources-1-jar/nativeMain/okio/PosixFileSystem.kt
* /okio-3-5-0-sources-1-jar/nativeMain/okio/Cinterop.kt
* /okio-3-5-0-sources-1-jar/commonMain/okio/Path.kt
* /okio-3-5-0-sources-1-jar/hashFunctions/okio/internal/Hmac.kt
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* /okio-3-5-0-sources-1-jar/commonMain/okio/SegmentPool.kt
* /okio-3-5-0-sources-1-jar/commonMain/okio/ForwardingSource.kt
* /okio-3-5-0-sources-1-jar/nonJvmMain/okio/SegmentPool.kt
* /okio-3-5-0-sources-1-jar/nonJvmMain/okio/ForwardingSource.kt

1.1014 json-c 0.15-3~ubuntu1.22.04.2

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1.1015 fsnotify 1.6.0

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1.1016 package-url-packageurl-go 0.1.1

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1.1017 snake-yaml 2.2

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* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/resolver/Resolver.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/constructor/CustomClassLoaderConstructor.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/error/MarkedYAMLException.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/scanner/ScannerImpl.java
*
 /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/representer/SafeRepresenter.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/nodes/Node.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/serializer/SerializerException.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/inspector/TagInspector.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/error/YAMLException.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/Event.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/Yaml.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/DocumentEndEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/inspector/UnTrustedTagInspector.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/SequenceStartEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/serializer/NumberAnchorGenerator.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/nodes/CollectionNode.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/constructor/BaseConstructor.java
*
 /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/emitter/EmitterState.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/FlowSequenceStartToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/comments/CommentEventsCollector.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/util/ArrayUtils.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/composer/ComposerException.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/comments/CommentType.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/nodes/SequenceNode.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/parser/VersionTagsTuple.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/ValueToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/nodes/NodeTuple.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/util/ArrayStack.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/reader/StreamReader.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/composer/Composer.java
*
 /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/emitter/ScalarAnalysis.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/internal/Logger.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/FlowMappingStartToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/NodeEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/reader/ReaderException.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/DocumentEndToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/util/EnumUtils.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/parser/ParserImpl.java

* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/emitter/Emitter.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/CollectionEndEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/introspector/PropertySubstitute.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/introspector/Property.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/nodes/ScalarNode.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/TagTuple.java
*
/snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/serializer/Serializer.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/constructor/SafeConstructor.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/StreamStartEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/representer/BaseRepresenter.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/BlockEntryToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/CommentToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/StreamEndToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/SequenceEndEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/scanner/ScannerException.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/emitter/Emitable.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/AliasEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/DirectiveToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/DocumentStartEvent.java
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/snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/CollectionStartEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/AliasToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/emitter/EmitterException.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/env/EnvScalarConstructor.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/introspector/GenericProperty.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/AnchorToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/util/PlatformFeatureDetector.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/nodes/NodeId.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/DocumentStartToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/BlockMappingStartToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/introspector/BeanAccess.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/StreamStartToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/parser/Production.java
*
/snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/parser/ParserException.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/nodes/AnchorNode.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/FlowSequenceEndToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/scanner/Constant.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/scanner/Scanner.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/ScalarToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/comments/CommentLine.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/CommentEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/constructor/Construct.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/ImplicitTuple.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/ScalarEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/error/MissingEnvironmentVariableException.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/representer/Represent.java

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 /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/nodes/Tag.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/StreamEndEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/extensions/compactnotation/PackageCompactConstructor.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/constructor/AbstractConstruct.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/constructor/Constructor.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/introspector/PropertyUtils.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/DumperOptions.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/introspector/MissingProperty.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/nodes/MappingNode.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/FlowEntryToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/TagToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/parser/Parser.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/MappingEndEvent.java
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 /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/constructor/ConstructorException.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/extensions/compactnotation/CompactConstructor.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/extensions/compactnotation/CompactData.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/reader/UnicodeReader.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/representer/Representer.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/util/UriEncoder.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/KeyToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/events/MappingStartEvent.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/TypeDescription.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/LoaderOptions.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/introspector/MethodProperty.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/BlockEndToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/resolver/ResolverTuple.java
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 /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/BlockSequenceStartToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/serializer/AnchorGenerator.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/introspector/FieldProperty.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/FlowMappingEndToken.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/tokens/Token.java
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/constructor/DuplicateKeyException.java
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* /snakeyaml-2-2-sources-jar/META-INF/maven/org.yaml/snakeyaml/pom.xml
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/**
* A Base64 encoder/decoder.
*
* <p>
* This class is used to encode and decode data in Base64 format as described in RFC 1521.
*
* <p>
* Project home page: <a href="http://www.source-code.biz/base64coder/java/">www.
* source-code.biz/base64coder/java</a><br>
* Author: Christian d'Heureuse, Inventec Informatik AG, Zurich, Switzerland<br>
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*/
```

Found in path(s):
* /snakeyaml-2-2-sources-jar/org/yaml/snakeyaml/external/biz/base64Coder/Base64Coder.java

1.1018 russellhaering-goxmldsig 1.4.0

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1.1031 globintersection 0.2.0

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1.1038 golang-genproto 0.0.0-20230822172742-b8732ec3820d

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1.1039 klauspost-compress 1.16.7

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1.1042 alertmanager 0.25.1

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1.1043 zap 1.26.0

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1.1044 gotenv 1.6.0

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1.1045 go-restful 3.11.0

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1.1046 bufbuild-connect-go 1.10.0

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1.1047 isexe 3.1.1

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1.1048 zlib 1:1.2.11.dfsg-2ubuntu9.2

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  Version 1.7 12 August 2012 Mark Adler */

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/* gzwrite.c -- zlib functions for writing gzip files
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/* unzip.c -- IO for uncompress .zip files using zlib
  Version 1.1, February 14h, 2010
  part of the MiniZip project - (http://www.winimage.com/zLibDll/minizip.html)

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Modifications of Unzip for Zip64
Copyright (C) 2007-2008 Even Rouault

Modifications for Zip64 support on both zip and unzip
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For more info read MiniZip_info.txt

Decryption code comes from crypt.c by Info-ZIP but has been greatly reduced in terms of compatibility with older software. The following is from the original crypt.c.
Code woven in by Terry Thorsen 1/2003.

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crypt.c (full version) by Info-ZIP. Last revised: [see crypt.h]

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This encryption code is a direct transcription of the algorithm from Roger Schlafly, described by Phil Katz in the file appnote.txt. This file (appnote.txt) is distributed with the PKZIP program (even in the version without encryption capabilities).

Changes in unzip.c

2007-2008 - Even Rouault - Addition of cpl_unzGetCurrentFileZStreamPos
2007-2008 - Even Rouault - Decoration of symbol names unz* -> cpl_unz*
2007-2008 - Even Rouault - Remove old C style function prototypes
2007-2008 - Even Rouault - Add unzip support for ZIP64

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Oct-2009 - Mathias Svensson - Removed cpl_* from symbol names (Even Rouault added them but since this is now moved to a new project (minizip64) I renamed them again).
Oct-2009 - Mathias Svensson - Fixed problem if uncompressed size was > 4G and compressed size was <4G
should only read the compressed/uncompressed size from the Zip64 format if
the size from normal header was 0xFFFFFFFF
Oct-2009 - Mathias Svensson - Applied some bug fixes from paches recived from Gilles Vollant
Oct-2009 - Mathias Svensson - Applied support to unzip files with compression mathod

BZIP2 (bzip2 lib is required)
Patch created by Daniel Borca

Jan-2010 - back to unzip and minizip 1.0 name scheme, with compatibility layer

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*/

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* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/msdos/Makefile.emx
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/* inflate.c -- zlib decompression
* Copyright (C) 1995-2016 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/inflate.c
No license file was found, but licenses were detected in source scan.

/* infback.c -- inflate using a call-back interface
* Copyright (C) 1995-2016 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/infback.c

No license file was found, but licenses were detected in source scan.

```
/* gzlog.h
 Copyright (C) 2004, 2008, 2012 Mark Adler, all rights reserved
 version 2.2, 14 Aug 2012

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 distribution.

 Mark Adler    madler@alumni.caltech.edu
*/
```

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/examples/gzlog.h
No license file was found, but licenses were detected in source scan.

```
/* uncompr.c -- decompress a memory buffer
* Copyright (C) 1995-2003, 2010, 2014, 2016 Jean-loup Gailly, Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/
```

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/uncompr.c
No license file was found, but licenses were detected in source scan.

```
/* inflate.h -- internal inflate state definition
* Copyright (C) 1995-2016 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/
```

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/inflate.h
No license file was found, but licenses were detected in source scan.

```
/* zip.h -- IO on .zip files using zlib
   Version 1.1, February 14h, 2010
   part of the MiniZip project - ( http://www.winimage.com/zLibDll/minizip.html )

         Copyright (C) 1998-2010 Gilles Vollant (minizip) ( http://www.winimage.com/zLibDll/minizip.html )

         Modifications for Zip64 support
         Copyright (C) 2009-2010 Mathias Svensson ( http://result42.com )

         For more info read MiniZip_info.txt

         ---------------------------------------------------------------------------

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         ---------------------------------------------------------------------------

         Changes

         See header of zip.h

*/
```

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/contrib/minizip/zip.h
No license file was found, but licenses were detected in source scan.

```
/*
* gzlog.c
* Copyright (C) 2004, 2008, 2012, 2016 Mark Adler, all rights reserved
* For conditions of distribution and use, see copyright notice in gzlog.h
```

* version 2.2, 14 Aug 2012
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/examples/gzlog.c
No license file was found, but licenses were detected in source scan.

/* gzjoin -- command to join gzip files into one gzip file

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version 1.2, 14 Aug 2012

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Mark Adler madler@alumni.caltech.edu
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/examples/gzjoin.c
No license file was found, but licenses were detected in source scan.

ZLIB DATA COMPRESSION LIBRARY

zlib 1.2.11 is a general purpose data compression library. All the code is
thread safe. The data format used by the zlib library is described by RFCs
(Request for Comments) 1950 to 1952 in the files
http://tools.ietf.org/html/rfc1950 (zlib format), rfc1951 (deflate format) and
rfc1952 (gzip format).

All functions of the compression library are documented in the file zlib.h
(volunteer to write man pages welcome, contact zlib@gzip.org). A usage example
of the library is given in the file test/example.c which also tests that
the library is working correctly. Another example is given in the file

test/minigzip.c. The compression library itself is composed of all source files in the root directory.

To compile all files and run the test program, follow the instructions given at the top of Makefile.in. In short "./configure; make test", and if that goes well, "make install" should work
 for most flavors of Unix. For Windows, use
one of the special makefiles in win32/ or contrib/vstudio/ . For VMS, use make_vms.com.

Questions about zlib should be sent to <zlib@gzip.org>, or to Gilles Vollant <info@winimage.com> for the Windows DLL version. The zlib home page is http://zlib.net/ . Before reporting a problem, please check this site to verify that you have the latest version of zlib; otherwise get the latest version and check whether the problem still exists or not.

PLEASE read the zlib FAQ http://zlib.net/zlib_faq.html before asking for help.

Mark Nelson <markn@ieee.org> wrote an article about zlib for the Jan. 1997 issue of Dr. Dobb's Journal; a copy of the article is available at http://marknelson.us/1997/01/01/zlib-engine/ .

The changes made in version 1.2.11 are documented in the file ChangeLog.

Unsupported third party contributions are provided in directory contrib/ .

zlib is available in Java using the java.util.zip package, documented at http://java.sun.com/developer/technicalArticles/Programming/compression/
 .

A Perl interface to zlib written by Paul Marquess <pmqs@cpan.org> is available at CPAN (Comprehensive Perl Archive Network) sites, including http://search.cpan.org/~pmqs/IO-Compress-Zlib/ .

A Python interface to zlib written by A.M. Kuchling <amk@amk.ca> is available in Python 1.5 and later versions, see http://docs.python.org/library/zlib.html .

zlib is built into tcl: http://wiki.tcl.tk/4610 .

An experimental package to read and write files in .zip format, written on top of zlib by Gilles Vollant <info@winimage.com>, is available in the contrib/minizip directory of zlib.

Notes for some targets:

- For Windows DLL versions, please see win32/DLL_FAQ.txt

- For 64-bit Irix, deflate.c must be compiled without any optimization. With -O, one libpng test fails. The test works in 32 bit mode (with the -n32 compiler flag). The compiler bug has been reported to SGI.

- zlib doesn't work with gcc 2.6.3 on a DEC 3000/300LX under OSF/1 2.1 it works when compiled with cc.

- On Digital Unix 4.0D (formely OSF/1) on AlphaServer, the cc option -std1 is necessary to get gzprintf working correctly. This is done by configure.

- zlib doesn't work on HP-UX 9.05 with some versions of /bin/cc. It works with other compilers. Use "make test" to check your compiler.

- gzdopen is not supported on RISCOS or BEOS.

- For PalmOs, see http://palmzlib.sourceforge.net/

Acknowledgments:

The deflate format used by zlib was defined by Phil Katz. The deflate and zlib specifications were written by L. Peter Deutsch. Thanks to all the people who reported problems and suggested various improvements in zlib; they are too numerous to cite here.

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jloup@gzip.org madler@alumni.caltech.edu

If you use the zlib library in a product, we would appreciate *not* receiving lengthy legal documents to sign. The sources are provided for free but without warranty of any kind. The library has been entirely written by Jean-loup Gailly and Mark Adler; it does not include third-party code.

If you redistribute modified sources, we would appreciate that you include in the file ChangeLog history information documenting your changes. Please read the FAQ for more information on the distribution of modified source versions.

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/README
No license file was found, but licenses were detected in source scan.

/* fitblk.c: example of fitting compressed output to a specified size
Not copyrighted -- provided to the public domain
Version 1.1 25 November 2004 Mark Adler */

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/examples/fitblk.c
No license file was found, but licenses were detected in source scan.

/* gzread.c -- zlib functions for reading gzip files
* Copyright (C) 2004, 2005, 2010, 2011, 2012, 2013, 2016 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/gzread.c
No license file was found, but licenses were detected in source scan.

/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.11, January 15th, 2017

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jloup@gzip.org madler@alumni.caltech.edu

The data format used by the zlib library is described by RFCs (Request for
Comments) 1950 to 1952 in the files http://tools.ietf.org/html/rfc1950
(zlib format), rfc1951 (deflate format) and rfc1952 (gzip format).
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/zlib.h
No license file was found, but licenses were detected in source scan.

/* inftrees.h -- header to use inftrees.c
* Copyright (C) 1995-2005, 2010 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/inftrees.h
No license file was found, but licenses were detected in source scan.

/* deflate.c -- compress data using the deflation algorithm
* Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/deflate.c
No license file was found, but licenses were detected in source scan.

/* deflate.h -- internal compression state
* Copyright (C) 1995-2016 Jean-loup Gailly
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/deflate.h
No license file was found, but licenses were detected in source scan.

/* zconf.h -- configuration of the zlib compression library

* Copyright (C) 1995-2016 Jean-loup Gailly, Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/zconf.h
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/zconf.h.in
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/zconf.h.cmakein
No license file was found, but licenses were detected in source scan.

/* minigzip.c -- simulate gzip using the zlib compression library
* Copyright (C) 1995-2006, 2010, 2011, 2016 Jean-loup Gailly
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/test/minigzip.c
No license file was found, but licenses were detected in source scan.

/* gzlib.c -- zlib functions common to reading and writing gzip files
* Copyright (C) 2004-2017 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/gzlib.c
No license file was found, but licenses were detected in source scan.

/* inftrees.c -- generate Huffman trees for efficient decoding
* Copyright (C) 1995-2017 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/inftrees.c
No license file was found, but licenses were detected in source scan.

/* infcover.c -- test zlib's inflate routines with full code coverage
* Copyright (C) 2011, 2016 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/test/infcover.c
No license file was found, but licenses were detected in source scan.

/* zutil.c -- target dependent utility functions for the compression library
* Copyright (C) 1995-2017 Jean-loup Gailly

* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/zutil.c
No license file was found, but licenses were detected in source scan.

/* example.c -- usage example of the zlib compression library
* Copyright (C) 1995-2006, 2011, 2016 Jean-loup Gailly
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/test/example.c
No license file was found, but licenses were detected in source scan.

/*
 Additional tools for Minizip
 Code: Xavier Roche '2004
 License: Same as ZLIB (www.gzip.org)
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/contrib/minizip/mztools.h
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/contrib/minizip/mztools.c
No license file was found, but licenses were detected in source scan.

/* trees.c -- output deflated data using Huffman coding
* Copyright (C) 1995-2017 Jean-loup Gailly
* detect_data_type() function provided freely by Cosmin Truta, 2006
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/trees.c
No license file was found, but licenses were detected in source scan.

MiniZip - Copyright (c) 1998-2010 - by Gilles Vollant - version 1.1 64 bits from Mathias Svensson

Introduction

MiniZip 1.1 is built from MiniZip 1.0 by Gilles Vollant (http://www.winimage.com/zLibDll/minizip.html)

When adding ZIP64 support into minizip it would result into risk of breaking compatibility with minizip 1.0.
All possible work was done for compatibility.

Background

When adding ZIP64 support Mathias Svensson found that Even Rouault have added ZIP64
support for unzip.c into minizip for a open source project called gdal (http://www.gdal.org/)

That was used as a starting point. And after that ZIP64 support was added to zip.c
some refactoring and code cleanup was also done.

Changed from MiniZip 1.0 to MiniZip 1.1
---
* Added ZIP64 support for unzip (by Even Rouault)
* Added ZIP64 support for zip (by Mathias Svensson
)
* Reverted some changed that Even Rouault did.
* Bunch of patches received from Gulles Vollant that he received for MiniZip from various users.
* Added unzip patch for BZIP Compression method (patch create by Daniel Borca)
* Added BZIP Compress method for zip
* Did some refactoring and code cleanup

Credits

Gilles Vollant - Original MiniZip author
Even Rouault - ZIP64 unzip Support
Daniel Borca - BZip Compression method support in unzip
Mathias Svensson - ZIP64 zip support
Mathias Svensson - BZip Compression method support in zip

Resources

ZipLayout http://result42.com/projects/ZipFileLayout
Command line tool for Windows that shows the layout and information of the headers in a zip archive.
Used when debugging and validating the creation of zip files using MiniZip64

ZIP App Note http://www.pkware.com/documents/casestudies/APPNOTE.TXT
Zip File specification

Notes.
* To be able to use BZip compression method in
 zip64.c or unzip64.c the BZIP2 lib is needed and HAVE_BZIP2 need to be defined.

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Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/contrib/minizip/MiniZip64_info.txt
No license file was found, but licenses were detected in source scan.

/* compress.c -- compress a memory buffer
* Copyright (C) 1995-2005, 2014, 2016 Jean-loup Gailly, Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/compress.c
No license file was found, but licenses were detected in source scan.

/* gzclose.c -- zlib gzclose() function
* Copyright (C) 2004, 2010 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/gzclose.c
No license file was found, but licenses were detected in source scan.

/* unzip.h -- IO for uncompress .zip files using zlib
  Version 1.1, February 14h, 2010
  part of the MiniZip project - (http://www.winimage.com/zLibDll/minizip.html)

Copyright (C) 1998-2010 Gilles Vollant (minizip) (http://www.winimage.com/zLibDll/minizip.html)

Modifications of Unzip for Zip64
Copyright (C) 2007-2008 Even Rouault

Modifications for Zip64 support on both zip and unzip
Copyright (C) 2009-2010 Mathias Svensson (http://result42.com)

For more info read MiniZip_info.txt

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Changes

See header of unzip64.c

*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/contrib/minizip/unzip.h
No license file was found, but licenses were detected in source scan.

/* zran.c -- example of zlib/gzip stream indexing and random access
* Copyright (C) 2005, 2012 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
  Version 1.1 29 Sep 2012 Mark Adler */

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/examples/zran.c
No license file was found, but licenses were detected in source scan.

/* inffast.c -- fast decoding
* Copyright (C) 1995-2017 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/inffast.c
No license file was found, but licenses were detected in source scan.

/* crc32.c -- compute the CRC-32 of a data stream
* Copyright (C) 1995-2006, 2010, 2011, 2012, 2016 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*
* Thanks to Rodney Brown <rbrown64@csc.com.au> for his contribution of faster
* CRC methods: exclusive-oring 32 bits of data at a time, and pre-computing
* tables for updating the shift register in one step with three exclusive-ors
* instead of four steps with four exclusive-ors. This results in about a
* factor of two increase in speed on a Power PC G4 (PPC7455) using gcc -O3.
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/crc32.c
No license file was found, but licenses were detected in source scan.

/* adler32.c -- compute the Adler-32 checksum of a data stream
* Copyright (C) 1995-2011, 2016 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/adler32.c
No license file was found, but licenses were detected in source scan.

/* zutil.h -- internal interface and configuration of the compression library
* Copyright (C) 1995-2016 Jean-loup Gailly, Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/zutil.h
No license file was found, but licenses were detected in source scan.

/* gzguts.h -- zlib internal header definitions for gz* operations
* Copyright (C) 2004, 2005, 2010, 2011, 2012, 2013, 2016 Mark Adler
* For conditions of distribution and use, see copyright notice in zlib.h
*/

Found in path(s):

* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/gzguts.h
No license file was found, but licenses were detected in source scan.

/* zpipe.c: example of proper use of zlib's inflate() and deflate()
  Not copyrighted -- provided to the public domain
  Version 1.4 11 December 2005 Mark Adler */

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/examples/zpipe.c
No license file was found, but licenses were detected in source scan.

/* gzappend -- command to append to a gzip file

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 version 1.2, 11 Oct 2012

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 Mark Adler   madler@alumni.caltech.edu
*/

Found in path(s):
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No license file was found, but licenses were detected in source scan.

Frequently Asked Questions about zlib

If your question is not there, please check the zlib home page
http://zlib.net/ which may have more recent information.
The lastest zlib FAQ is at http://zlib.net/zlib_faq.html

1. Is zlib Y2K-compliant?

Yes. zlib doesn't handle dates.

2. Where can I get a Windows DLL version?

The zlib sources can be compiled without change to produce a DLL. See the file win32/DLL_FAQ.txt in the zlib distribution. Pointers to the precompiled DLL are found in the zlib web site at http://zlib.net/ .

3. Where can I get a Visual Basic interface to zlib?

See
* http://marknelson.us/1997/01/01/zlib-engine/
* win32/DLL_FAQ.txt in the zlib distribution

4. compress() returns Z_BUF_ERROR.

Make sure that before the call of compress(), the length of the compressed buffer is equal to the available size of the compressed buffer and not zero. For Visual
Basic, check that this parameter is passed by reference ("as any"), not by value ("as long").

5. deflate() or inflate() returns Z_BUF_ERROR.

Before making the call, make sure that avail_in and avail_out are not zero. When setting the parameter flush equal to Z_FINISH, also make sure that avail_out is big enough to allow processing all pending input. Note that a Z_BUF_ERROR is not fatal--another call to deflate() or inflate() can be made with more input or output space. A Z_BUF_ERROR may in fact be unavoidable depending on how the functions are used, since it is not possible to tell whether or not there is more output pending when strm.avail_out returns with zero. See http://zlib.net/zlib_how.html for a heavily annotated example.

6. Where's the zlib documentation (man pages, etc.)?

It's in zlib.h . Examples of zlib usage are in the files test/example.c and test/minigzip.c, with more in examples/ .

7. Why don't you use GNU
autoconf or libtool or ...?

Because we would like to keep zlib as a very small and simple package. zlib is rather portable and doesn't need much configuration.

8. I found a bug in zlib.

Most of the time, such problems are due to an incorrect usage of zlib. Please try to reproduce the problem with a small program and send the corresponding source to us at zlib@gzip.org . Do not send multi-megabyte data files without prior agreement.

9. Why do I get "undefined reference to gzputc"?

If "make test" produces something like

```
example.o(.text+0x154): undefined reference to `gzputc'
```

check that you don't have old files libz.* in /usr/lib, /usr/local/lib or /usr/X11R6/lib. Remove any old versions, then do "make install".

10. I need a Delphi interface to zlib.

See the contrib/delphi directory in the zlib distribution.

11. Can zlib handle .zip archives?

Not by itself, no. See the directory contrib/minizip in the zlib distribution.

12.
Can zlib handle .Z files?

No, sorry. You have to spawn an uncompress or gunzip subprocess, or adapt the code of uncompress on your own.

13. How can I make a Unix shared library?

By default a shared (and a static) library is built for Unix. So:

```
make distclean
./configure
make
```

14. How do I install a shared zlib library on Unix?

After the above, then:

```
make install
```

However, many flavors of Unix come with a shared zlib already installed. Before going to the trouble of compiling a shared version of zlib and trying to install it, you may want to check if it's already there! If you can #include <zlib.h>, it's there. The -lz option will probably link to

it. You can check the version at the top of zlib.h or with the ZLIB_VERSION symbol defined in zlib.h .

15. I have a question about OttoPDF.

We are not the authors of OttoPDF. The real author is on the OttoPDF web site: Joel Hainley, jhainley@myndkryme.com.

16.
Can zlib decode Flate data in an Adobe PDF file?

Yes. See http://www.pdflib.com/ . To modify PDF forms, see http://sourceforge.net/projects/acroformtool/ .

17. Why am I getting this "register_frame_info not found" error on Solaris?

After installing zlib 1.1.4 on Solaris 2.6, running applications using zlib generates an error such as:

```
ld.so.1: rpm: fatal: relocation error: file /usr/local/lib/libz.so:
symbol __register_frame_info: referenced symbol not found
```

The symbol __register_frame_info is not part of zlib, it is generated by the C compiler (cc or gcc). You must recompile applications using zlib which have this problem. This problem is specific to Solaris. See http://www.sunfreeware.com for Solaris versions of zlib and applications using zlib.

18. Why does gzip give an error on a file I make with compress/deflate?

The compress and deflate functions produce data in the zlib format, which is different and incompatible
with the gzip format. The gz* functions in
zlib on the other hand use the gzip format. Both the zlib and gzip formats use the same compressed data format internally, but have different headers and trailers around the compressed data.

19. Ok, so why are there two different formats?

The gzip format was designed to retain the directory information about a single file, such as the name and last modification date. The zlib format on the other hand was designed for in-memory and communication channel applications, and has a much more compact header and trailer and uses a faster integrity check than gzip.

20. Well that's nice, but how do I make a gzip file in memory?

You can request that deflate write the gzip format instead of the zlib

format using deflateInit2(). You can also request that inflate decode the gzip format using inflateInit2(). Read zlib.h for more details.

21. Is zlib thread-safe?

Yes. However any library routines that zlib uses and any application-provided memory allocation routines must also be thread-safe. zlib's gz* functions use stdio library routines, and most of zlib's functions use the library memory allocation routines by default. zlib's *Init* functions allow for the application to provide custom memory allocation routines.

Of course, you should only operate on any given zlib or gzip stream from a single thread at a time.

22. Can I use zlib in my commercial application?

Yes. Please read the license in zlib.h.

23. Is zlib under the GNU license?

No. Please read the license in zlib.h.

24. The license says that altered source versions must be "plainly marked". So what exactly do I need to do to meet that requirement?

You need to change the ZLIB_VERSION and ZLIB_VERNUM #defines in zlib.h. In particular, the final version number needs to be changed to "f", and an identification string should be appended to ZLIB_VERSION. Version numbers x.x.x.f are reserved for modifications to zlib by others than the zlib maintainers. For example, if the version of the base zlib you are altering is "1.2.3.4", then in zlib.h you should change ZLIB_VERNUM to 0x123f, and ZLIB_VERSION to something like "1.2.3.f-zachary-mods-v3". You can also update the version strings in deflate.c and inftrees.c.

For altered source distributions, you should also note the origin and nature of the changes in zlib.h, as well as in ChangeLog and README, along with the dates of the alterations. The origin should include at least your name (or your company's name), and an email address to contact for help or issues with the library.

Note that distributing a compiled zlib library along with zlib.h and zconf.h is also a source distribution, and so you should change ZLIB_VERSION and ZLIB_VERNUM and note the origin and nature of the changes in zlib.h as you would for a full source distribution.

25.

Will zlib work on a big-endian or little-endian architecture, and can I exchange compressed data between them?

Yes and yes.

26. Will zlib work on a 64-bit machine?

Yes. It has been tested on 64-bit machines, and has no dependence on any data types being limited to 32-bits in length. If you have any difficulties, please provide a complete problem report to zlib@gzip.org

27. Will zlib decompress data from the PKWare Data Compression Library?

No. The PKWare DCL uses a completely different compressed data format than does PKZIP and zlib. However, you can look in zlib's contrib/blast directory for a possible solution to your problem.

28. Can I access data randomly in a compressed stream?

No, not without some preparation. If when compressing you periodically use Z_FULL_FLUSH, carefully write all the pending data at those points, and keep an index of those locations, then you can start decompression at those points. You have to be careful to not use Z_FULL_FLUSH too often, since it can significantly degrade compression. Alternatively, you can scan a deflate stream once to generate an index, and then use that index for random access. See examples/zran.c .

29. Does zlib work on MVS, OS/390, CICS, etc.?

It has in the past, but we have not heard of any recent evidence. There were working ports of zlib 1.1.4 to MVS, but those links no longer work. If you know of recent, successful applications of zlib on these operating systems, please let us know. Thanks.

30. Is there some simpler, easier to read version of inflate I can look at to understand the deflate format?

First off, you should read RFC 1951. Second, yes. Look in zlib's contrib/puff directory.

31. Does zlib infringe on any patents?

As far as we know, no. In fact, that was originally the whole point behind zlib. Look here for some more information:

http://www.gzip.org/#faq11

32. Can zlib work
with greater than 4 GB of data?

Yes. inflate() and deflate() will process any amount of data correctly. Each call of inflate() or deflate() is limited to input and output chunks of the maximum value that can be stored in the compiler's "unsigned int" type, but there is no limit to the number of chunks. Note however that the strm.total_in and strm_total_out counters may be limited to 4 GB. These counters are provided as a convenience and are not used internally by inflate() or deflate(). The application can easily set up its own counters updated after each call of inflate() or deflate() to count beyond 4 GB. compress() and uncompress() may be limited to 4 GB, since they operate in a single call. gzseek() and gztell() may be limited to 4 GB depending on how zlib is compiled. See the zlibCompileFlags() function in zlib.h.

The word "may" appears several times above since there is a 4 GB limit only if the compiler's "long" type is
32 bits. If the compiler's "long" type is
64 bits, then the limit is 16 exabytes.

33. Does zlib have any security vulnerabilities?

The only one that we are aware of is potentially in gzprintf(). If zlib is compiled to use sprintf() or vsprintf(), then there is no protection against a buffer overflow of an 8K string space (or other value as set by gzbuffer()), other than the caller of gzprintf() assuring that the output will not exceed 8K. On the other hand, if zlib is compiled to use snprintf() or vsnprintf(), which should normally be the case, then there is no vulnerability. The ./configure script will display warnings if an insecure variation of sprintf() will be used by gzprintf(). Also the zlibCompileFlags() function will return information on what variant of sprintf() is used by gzprintf().

If you don't have snprintf() or vsnprintf() and would like one, you can find a portable implementation here:

http://www.ijs.si/software/snprintf/

Note that you should be using the most recent version of zlib. Versions 1.1.3 and before were subject to a double-free vulnerability, and versions 1.2.1 and 1.2.2 were subject to an access exception when decompressing invalid compressed data.

34. Is there a Java version of zlib?

Probably what you want is to use zlib in Java. zlib is already included as part of the Java SDK in the java.util.zip package. If you really want a version of zlib written in the Java language, look on the zlib home

page for links: http://zlib.net/ .

35. I get this or that compiler or source-code scanner warning when I crank it up to maximally-pedantic. Can't you guys write proper code?

Many years ago, we gave up attempting to avoid warnings on every compiler in the universe. It just got to be a waste of time, and some compilers were downright silly as well as contradicted each other. So now, we simply make sure that the code always works.

36. Valgrind (or some similar memory access checker) says that deflate is performing a conditional jump that depends on an uninitialized value. Isn't that a bug?

No. That is intentional for performance reasons, and the output of deflate is not affected. This only started showing up recently since zlib 1.2.x uses malloc() by default for allocations, whereas earlier versions used calloc(), which zeros out the allocated memory. Even though the code was correct, versions 1.2.4 and later was changed to not stimulate these checkers.

37. Will zlib read the (insert any ancient or arcane format here) compressed data format?

Probably not. Look in the comp.compression FAQ for pointers to various formats and associated software.

38. How can I encrypt/decrypt zip files with zlib?

zlib doesn't support encryption. The original PKZIP encryption is very weak and can be broken with freely available programs. To get strong encryption, use GnuPG, http://www.gnupg.org/ , which already includes zlib compression. For PKZIP compatible "encryption", look at http://www.info-zip.org/

39. What's the difference between the "gzip" and "deflate" HTTP 1.1 encodings?

"gzip" is the gzip format, and "deflate" is the zlib format. They should probably have called the second one "zlib" instead to avoid confusion with the raw deflate compressed data format. While the HTTP 1.1 RFC 2616 correctly points to the zlib specification in RFC 1950 for the "deflate" transfer encoding, there have been reports of servers and browsers that incorrectly produce or expect raw deflate data per the deflate specification in RFC 1951, most notably Microsoft. So even though the "deflate" transfer encoding using the zlib format would be the more efficient approach (and in fact exactly what the zlib format was designed

for), using the "gzip" transfer encoding is probably more reliable due to an
unfortunate choice of name on the part of the HTTP 1.1 authors.

Bottom line: use the gzip format for HTTP 1.1 encoding.

40. Does zlib support the new "Deflate64" format introduced by PKWare?

No. PKWare has apparently decided to keep that format proprietary, since they have not documented it as they have previous compression formats. In any case, the compression improvements are so modest compared to other more modern approaches, that it's not worth the effort to implement.

41. I'm having a problem with the zip functions in zlib, can you help?

There are no zip functions in zlib. You are probably using minizip by Giles Vollant, which is found in the contrib directory of zlib. It is not part of zlib. In fact none of the stuff in contrib is part of zlib. The files in there are not supported by the zlib authors. You need to contact the authors of the respective contribution for help.

42. The match.asm code in contrib is under the GNU General Public License.
Since it's part of zlib, doesn't that mean that all of zlib falls under the GNU GPL?

No. The files in contrib are not part of zlib. They were contributed by other authors and are provided as a convenience to the user within the zlib distribution. Each item in contrib has its own license.

43. Is zlib subject to export controls? What is its ECCN?

zlib is not subject to export controls, and so is classified as EAR99.

44. Can you please sign these lengthy legal documents and fax them back to us so that we can use your software in our product?

No. Go away. Shoo.

Found in path(s):
* /zlib-1-2-11-dfsg-orig-2-tar-gz/zlib-1.2.11.dfsg/FAQ

1.1049 go-criu 6.3.0

1.1049.1 Available under license :

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Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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```
general:
  exclude:
    - "\\.git.*"
    - ".*\\.sh"
    - unittest/config.*
    - unittest/expected.*
    - ".*\\.adb"
    - ".*\\.asm"
    - ".*\\.bmp"
    - ".*\\.bin"
    - ".*\\.BIN"
    - ".*\\.cfg"
    - ".*\\.com"
    - ".*\\.conf"
    - ".*\\.cproject"
    - ".*\\.crt"
    - ".*\\.css"
    - ".*\\.csv"
    - ".*\\.dat"
    - ".*\\.db"
    - ".*\\.dec"
    - ".*\\.def"
    - ".*\\.dev"
    - ".*dirs"
    - ".*\\.dox"
    - ".*\\.dsc"
    - ".*\\.dyn"
```

```
    - ".*\\.ext"
    - ".*\\.ggo"
    - ".*\\.gif"
    - ".*\\.gz"
    - ".*\\.ico"
    - ".*\\.in"
    - ".*\\.inf"
    - ".*\\.int"
    - ".*\\.IMG"
    - ".*\\.INI"
    - ".*\\.jpg"
    - ".*\\.json"
    - ".*\\.lex"
    - ".*\\.log"
    - ".*\\.lst"
    - ".*\\.Lattice"
    - ".*\\.make"
    - ".*\\.manual"
    - ".*\\.map"
    - ".*\\.md"
    -
".*\\.msi"
    - ".*\\.m4"
    - ".*MAKE_TEST_CMD"
    - ".*\\.pem"
    - ".*\\.pdf"
    - ".*\\.php"
    - ".*\\.png"
    - ".*\\.pri"
    - ".*\\.pro"
    - ".*\\.ps1"
    - ".*\\.pyx"
    - ".*\\.pxd"
    - ".*qmake"
    - ".*\\.qrc"
    - ".*\\.qss"
    - ".*qt4_6_env"
    - ".*qt4_7_env"
    - ".*readme"
    - ".*README"
    - ".*\\.rc"
    - ".*\\.rtf"
    - ".*\\.scss"
    - ".*\\.sln"
    - ".*sources"
    - ".*SOURCES"
    - ".*startemmap"
    - ".*stopemmap"
```

- ".*\\.str"
- ".*\\.tcl"
- ".*\\.ttf"
- ".*\\.txt"
- ".*\\.TXT"
- ".*\\.ui"
- ".*\\.user"
- ".*\\.vcxproj"
- ".*\\.whl"
- ".*\\.win"
- ".*\\.wxs"
- ".*\\.xls"
- ".*\\.y"
- ".*\\.zip"
- ".*\\.1"
- "COPYING"
- "LICENSE"
- "configure.ac"

bsd:
  include:
    - .*
  exclude:
    - common/autocomplete/mft_autocomplete_skeleton
    - common/autocomplete/mft_base_autocomplete
    - cmdparser/my_getopt.c
    - cmdparser/my_getopt.h
    - debian
    - ext_libs
    - license_map.yaml
    - kernel/mstflint_kernel.spec

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==========
LuaJIT -- a Just-In-Time Compiler for Lua. https://luajit.org/

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librdkafka - Apache Kafka C driver library

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parts of src/rdmurmur2.c: git@github.com:abrandoned/murmur2.git

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- javaee_web_services_1_2.xsd
- javaee_web_services_client_1_2.xsd
- javaee_6.xsd
- javaee_web_services_1_3.xsd
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- javaee_web_services_client_1_2.xsd
- javaee_6.xsd
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- jsp_2_2.xsd
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- web-common_3_0.xsd
- web-fragment_3_0.xsd
- javaee_7.xsd
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- web-app_3_1.xsd
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* /debianutils-5-7-orig-1-tar-gz/debianutils-5.7/po4a/de/which.1
* /debianutils-5-7-orig-1-tar-gz/debianutils-5.7/po4a/de/translator_german.add
* /debianutils-5-7-orig-1-tar-gz/debianutils-5.7/po4a/de/add-shell.8
* /debianutils-5-7-orig-1-tar-gz/debianutils-5.7/po4a/de/remove-shell.8
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Found in path(s):
* /debianutils-5-7-orig-1-tar-gz/debianutils-5.7/po4a/sl/run-parts.8
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/* run-parts: run a bunch of scripts in a directory
*
* Debian run-parts program
* Copyright (C) 1996 Jeff Noxon <jeff@router.patch.net>,
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*
* Based on run-parts.pl version 0.2, Copyright (C) 1994 Ian Jackson.
*
*/

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1.1070 psycopg 2.9.9

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1.1071 httpcomponents-client 4.5.13

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1.1072 gjson 1.10.2

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* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

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* java.sun.security.ssl

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org.ow2.asm:asm-commons
org.ow2.asm:asm

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org.apache.taglibs:taglibs-standard-impl

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org.apache.tomcat:tomcat-jasper
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org.apache.tomcat:tomcat-jasper-el
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org.apache.tomcat:tomcat-util-scan
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org.eclipse.jetty.toolchain:jetty-schemas

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1.1077 cyrus-sasl 2.1.28

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1.1081 libcrypt-dev 1:4.4.27-1

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1.1082 google-golang-org-grpc 1.56.3

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1.1093 attr 1:2.5.1-4

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1.1098 github.com/distribution/reference 0.5.0

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1.1105 glob-parent 5.1.2

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1.1106 pathval 1.1.1

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1.1107 python-certifi 2021.10.08

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ca-bundle.crt -- Bundle of CA Root Certificates

Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011#
This is a bundle of X.509 certificates of public Certificate Authorities
(CA). These were automatically extracted from Mozilla's root certificates
file (certdata.txt). This file can be found in the mozilla source tree:
http://mxr.mozilla.org/mozilla/source/security/nss/lib/ckfw/builtins/certdata.txt?raw=1#
It contains the certificates in PEM format and therefore
can be directly used with curl / libcurl / php_curl, or with
an Apache+mod_ssl webserver for SSL client authentication.
Just configure this file as the SSLCACertificateFile.#

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@(#) $RCSfile: certdata.txt,v $
$Revision: 1.80 $ $Date: 2011/11/03 15:11:58 $

1.1108 google-golang-org-grpc 1.59.0

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1.1109 kuler 2.0.0

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1.1110 libxrender 1:0.9.10-1build4

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1.1111 klauspost-compress 1.16.7

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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

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* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
 * javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following
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module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications
are hosted at github and both modified and original are under GPL v2 with
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http://openjdk.java.net/legal/gplv2+ce.html

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The following artifacts are licensed by the OW2 Foundation according to the
terms of http://asm.ow2.org/license.html

org.ow2.asm:asm-commons
org.ow2.asm:asm

Apache

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org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

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org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

Mortbay

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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Eclipse

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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
 * javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following
artifacts may be included in the distribution or downloaded when ALPN
module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications
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http://openjdk.java.net/legal/gplv2+ce.html

OW2

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org.ow2.asm:asm-commons
org.ow2.asm:asm

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The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

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org.mortbay.jasper:apache-jsp
 org.apache.tomcat:tomcat-jasper
 org.apache.tomcat:tomcat-juli
 org.apache.tomcat:tomcat-jsp-api
 org.apache.tomcat:tomcat-el-api
 org.apache.tomcat:tomcat-jasper-el
 org.apache.tomcat:tomcat-api
 org.apache.tomcat:tomcat-util-scan
 org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
 org.apache.tomcat:tomcat-jasper-el
 org.apache.tomcat:tomcat-el-api

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

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1.1116 get-func-name 2.0.2

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1.1117 combined-stream 1.0.8

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1.1118 delayed-stream 1.0.0

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delayed-stream

Buffers events from a stream until you are ready to handle them.

Installation

```bash
npm install delayed-stream
```

Usage

The following example shows how to write a http echo server that delays its response by 1000 ms.

```javascript
var DelayedStream = require('delayed-stream');
var http = require('http');

http.createServer(function(req, res) {
 var delayed = DelayedStream.create(req);

 setTimeout(function() {
   res.writeHead(200);
   delayed.pipe(res);
 }, 1000);
});
```

If you are not using `Stream#pipe`, you can also manually release the buffered events by calling `delayedStream.resume()`:

```javascript
var delayed = DelayedStream.create(req);
```

```
setTimeout(function() {
 // Emit all buffered events and resume underlaying source
 delayed.resume();
}, 1000);
```

Implementation

In order to use this meta stream properly, here are a few things you should know about the implementation.

Event Buffering / Proxying

All events of the `source` stream are hijacked by overwriting the `source.emit` method. Until node implements a catch-all event listener, this is the only way.

However, delayed-stream still continues to emit all events it captures on the `source`, regardless of whether you have released the delayed stream yet or not.

Upon creation, delayed-stream captures all `source` events and stores them in an internal event buffer. Once `delayedStream.release()` is called, all buffered events are emitted on the `delayedStream`, and the event buffer is cleared. After that, delayed-stream merely acts as a proxy for the underlaying source.

Error handling

Error events on `source` are buffered / proxied just like any other events. However, `delayedStream.create` attaches a no-op `'error'` listener to the `source`. This way you only have to handle errors on the `delayedStream` object, rather than in two places.

Buffer limits

delayed-stream provides a `maxDataSize` property that can be used to limit the amount of data being buffered. In order to protect you from bad `source` streams that don't react to `source.pause()`, this feature is enabled by default.

API

DelayedStream.create(source, [options])

Returns a new `delayedStream`. Available options are:

* `pauseStream`
* `maxDataSize`

The description for those properties can be found below.

delayedStream.source

The `source` stream managed by this object. This is useful if you are passing your `delayedStream` around, and you still want to access properties on the `source` object.

delayedStream.pauseStream = true

Whether to pause the underlaying `source` when calling `DelayedStream.create()`. Modifying this property afterwards has no effect.

delayedStream.maxDataSize = 1024 * 1024

The amount of data to buffer before emitting an `error`.

If the underlaying source is emitting `Buffer` objects, the `maxDataSize` refers to bytes.

If the underlaying source
 is emitting JavaScript strings, the size refers to
characters.

If you know what you are doing, you can set this property to `Infinity` to disable this feature. You can also modify this property during runtime.

delayedStream.dataSize = 0

The amount of data buffered so far.

delayedStream.readable

An ECMA5 getter that returns the value of `source.readable`.

delayedStream.resume()

If the `delayedStream` has not been released so far, `delayedStream.release()` is called.

In either case, `source.resume()` is called.

delayedStream.pause()

Calls `source.pause()`.

delayedStream.pipe(dest)

Calls `delayedStream.resume()` and then proxies the arguments to `source.pipe`.

delayedStream.release()

Emits and clears all events that have been buffered up so far. This does not
resume the underlaying source, use `delayedStream.resume()` instead.

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* /fis-components-delayed-stream-1-0-0-0-g42ac44e-1-tar-gz/fis-components-delayed-stream-3c3d86f/Readme.md

1.1119 has-flag 3.0.0

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1.1120 array-flatten 1.1.1

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1.1121 depd 2.0.0

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1.1123 fresh 0.5.2

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1.1126 github.com/containerd/log 0.1.0

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1.1128 cert-chain-resolver 0.0.0-20221221105603-fcedb00c5b30

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1.1129 github.com/zakjan/cert-chain-resolver 0.0.0-20221221105603-fcedb00c5b30

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1.1130 jetty 9.4.53.v20231009

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* org.eclipse.jetty.orbit:org.eclipse.jdt.core

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* org.eclipse.jetty.orbit:javax.security.auth.message

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* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following
artifacts may be included in the distribution or downloaded when ALPN
module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications
are hosted at github and both modified and original are under GPL v2 with

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http://openjdk.java.net/legal/gplv2+ce.html

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org.ow2.asm:asm-commons
org.ow2.asm:asm

Apache

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org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

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org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

Mortbay

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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1.1131 function-bind 1.1.2

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1.1132 ip-regex 5.0.0

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1.1133 net 1.0.2

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1.1134 color-string 1.7.4

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1.1135 jersey-client 2.41

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Source Code
The project maintains the following source code repositories:

* https://github.com/eclipse-ee4j/jersey

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1.1147 libcrypt 1:4.4.33-2

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```
--- /dev/null
+++ b/build-aux/m4/symbol_uscore.m4
@@ -0,0 +1,50 @@
+# ltdl.m4 - Configure ltdl for the target system. -*-Autoconf-*-
+#
+#   Copyright (C) 1999-2008, 2011-2015 Free Software Foundation, Inc.
+#   Written by Thomas Tanner, 1999
+#
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+
+# This macro has been copied from /usr/share/aclocal/ltdl.m4,
+# part of libltdl-dev 2.4.6-15.
+
+# LT_SYS_SYMBOL_USCORE
+# --------------------
+# does the compiler prefix global symbols with an underscore?
+AC_DEFUN([LT_SYS_SYMBOL_USCORE],
+[m4_require([_LT_CMD_GLOBAL_SYMBOLS])dnl
+AC_CACHE_CHECK([for _ prefix in compiled symbols],
+  [lt_cv_sys_symbol_underscore],
+  [lt_cv_sys_symbol_underscore=no
+  cat > conftest.$ac_ext <<_LT_EOF
+void nm_test_func(){}
+int main(){nm_test_func;return
 0;}
+_LT_EOF
+  if AC_TRY_EVAL(ac_compile); then
+    # Now try to grab the symbols.
+    ac_nlist=conftest.nm
+    if AC_TRY_EVAL(NM conftest.$ac_objext \| $lt_cv_sys_global_symbol_pipe \> $ac_nlist) && test -s
"$ac_nlist"; then
+      # See whether the symbols have a leading underscore.
+      if grep '^. _nm_test_func' "$ac_nlist" >/dev/null; then
+        lt_cv_sys_symbol_underscore=yes
+      else
+        if grep '^. nm_test_func ' "$ac_nlist" >/dev/null; then
+   :
```

```
+       else
+   echo "configure: cannot find nm_test_func in $ac_nlist" >&AS_MESSAGE_LOG_FD
+       fi
+     fi
+    else
+      echo "configure: cannot run $lt_cv_sys_global_symbol_pipe" >&AS_MESSAGE_LOG_FD
+    fi
+  else
+    echo "configure: failed program was:" >&AS_MESSAGE_LOG_FD
+    cat conftest.c >&AS_MESSAGE_LOG_FD
+  fi
+  rm -rf conftest*
+  ])
+  sys_symbol_underscore=$lt_cv_sys_symbol_underscore
+  AC_SUBST([sys_symbol_underscore])
+])# LT_SYS_SYMBOL_USCORE
```

Found in path(s):
* /libxcrypt-4-4-33-2-debian-tar-xz/debian/patches/include_ltdlm4

1.1148 libaudit 1:3.0.9-1

1.1148.1 Available under license :

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1.1153 github.com/hashicorp/golang-lru/v2 2.0.7

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1.1156 github.com/knadh/koanf/maps 0.1.1

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they blur the distinction we usually make between modifying or adding to a
program and simply using it. Linking a program with a library, without
changing the library, is in some sense simply using the library, and is
analogous to running a utility program or application program. However, in
a textual and legal sense, the linked executable is a combined work, a
derivative of the original library, and the ordinary
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treats it as such.

Because of this blurred distinction, using the ordinary General
Public License for libraries did not effectively promote software
sharing, because most developers did not use the libraries. We
concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the
users of those programs of all benefit from the free status of the
libraries themselves. This Library General Public License is intended to
permit developers of non-free programs to use free libraries, while
preserving your freedom as a user of such programs to change the free
libraries that are incorporated in them. (We have not seen how to achieve
this as regards changes in header files, but we have achieved it as regards
changes in the actual functions of the Library.) The hope is that this
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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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1.1160 mux 1.8.1

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1.1161 cloudflare-cfssl 1.6.4

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procfs provides functions to retrieve system, kernel and process
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```
// +build go1.10

package pq

import (
 "context"
 "database/sql/driver"
)

// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
 return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
```

```
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
 c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
// on it.
type NoticeHandlerConnector
 struct {
 driver.Connector
 noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
 c, err := n.Connector.Connect(ctx)
 if err == nil {
  SetNoticeHandler(c, n.noticeHandler)
 }
 return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  return c.noticeHandler
 }
 return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and setting the notice
//
 handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
 if c, ok := c.(*NoticeHandlerConnector); ok {
```

```
  c.noticeHandler = handler
  return c
 }
 return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
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```

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1.1168 sigs-k8s-io-yaml 1.4.0

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1.1170 go-errors-errors 1.5.1

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1.1171 prometheus-client 1.16.0

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in blind modecompcmdlen too longnetbsdunknown disk type nameonly device specifications of form <type><number><lowercase letter> are supportedonly com0-com3 are supportedkFreeBSD./boot/zfs/zpool.cacherawno FreeBSD loadedtype=elf64 kernelelf kernelzfsgzioLoad kernel of FreeBSD.FILEkfreebsdLoad kernel of OpenBSD.kopenbsdLoad kernel of NetBSD.knetbsdLoad FreeBSD env.kfreebsd_loadenvLoad FreeBSD kernel module.kfreebsd_moduleLoad NetBSD kernel module.knetbsd_moduleLoad NetBSD kernel module (ELF).Load FreeBSD kernel module (ELF).kfreebsd_module_elfLoad kOpenBSD ramdisk.kopenbsd_ramdiskwdfdsdcdvndrdno-smpDisable SMP.no-acpiDisable ACPI.asknameAsk for file name to reboot from.haltDon't reboot, just halt.configChange configured devices.kdbEnter in KDB on boot.minirootquietDon't display boot diagnostic messages.singleBoot into single

mode.verboseBoot with verbose messages.debugBoot with debug messages.silentSuppress normal output (warnings remain).rootSet root device.DEVICEserialUse serial
console.[ADDR|comUNIT][,SPEED]wdXYcomUNIT[,SPEED]dualDisplay output on all consoles.cdromUse CD-ROM as root.Invoke user configuration routing.gdbUse GDB remote debugger instead of DDB.muteDisable all boot output.nointrpauseWait for keypress after every line of output.dfltrootUse compiled-in root device.premature end of file %sinvalid arch-independent ELF magicinvalid arch-dependent ELF magicno symbol table_DYNAMICdynamic = %llx
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'3"3:"C')Q'4_')j'q'M"'4"'X(C('(()?(4S()^(e(M(X(\ )r)`))')4))))M *'*)**4A*F*:d*i*s*x*A*\*\*\*P:+XU+_+`+,,',,,A,*b-
l-5y-P-B-P-)-
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P4H)HPHPHt#HzLHHLHPLL111DEtH<tD
HUHAUIATASI|$APHu1L`HH@HpXIEH8uCHu1Ht,xHtHHHH9u6HH'HHHtH
HHH
1Z[A\A]]HUHAUATSHHHHEHIHILLLEHH1IAHHIHtJCt2ww4HHs1AuHssL1AHH[A\A]]HUHATSH8HHt
L'LH111HHHHH0HH8HH;H11H;[A\]tH1HFHUHAVAUIATSHu&HHA[[[A\A]A^]HH8uII<$uH1I}HHHLw@M
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HLA[A\A]A^]HUHAWAVAUATASHHHt H8t+H1HH[A\A]A^A_]Eu'H1H1E1NH;
HIHtLh@1M#HA}HcHHMcHLHLL9II
LAIH@Mt+I9s@ t
uH8"uH@IA?#t}=LAHtmA?tdHHx"HMtHHEHL1HHHt9HuHEHH}HtMtM.HHMtHLH[A\A]A^A_]HUHAWAV
IAUATASHHhI>H1HHEu"H1H<H; HIHHIIEHuHLHH3LIHHHHxHE1LIHLI$^AG
LH%HHMOHI$E1H31LHtMAW4HLH9s<Iw'PAI9rI@PH9sHAH
LEtH3@tI$H8I$HHuHI}H)HH}HE1E1HxHI+$LHHRH8?HI$IHHxI?HLHHH8HIW 8uH
H1%HHLHHMOHI$E1H31LHtCAG@Hk8LH9s2w#HB%H9sH@HB(H9sHAH8EtH3@tI$H8I1LHHM$HIAI$H
HuHI}H)HH}HE1E1HxHI+$LHHuUH8uFHI$IHHxI?H1HHLE1E11LDHDHH@HuLHH@t<H8gHx1HH>HH}tH
EU%f}HtA
%1AH=w"H1HMUHHHHtHHUE1H;Lxt"HtHHHH)HxHHI}HuH)Hu<HH}MLxDHHMLHHLHHHH%HH;tHI>H
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A}usWHxOHuH1EEx`HA@XEA@\HHtL
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HXHAHc]AEHHkuH uHHMHIMHIA}HuHP1H}HUHuHUHAA}DEHUu
 DEH|1HDE1HHHIAAMLH t1tLHAHX[A\A]A^A_]HUHAWAVAUATSHHI1IHt!HrtHL1H
HL1HHH0HuIHI<$THH}ILh$IMIHt?CHSI~HsH}ABAFAH}H{HHL)AFI11HI1AFHE111H11HM)HEAIGAGA
GHH
AGHH0Ew H
AG HHuAGI$H]H1HH0He[A\A]A^A_]HUHAWAVAUATSHHPHHHHtY8tTH1HIM
L11HLAHH11HAEHHHH}HHEE10HPDXH\EfEfdHHHPEgEjEhEkEiElHt0HHH1H8IE1IHtHAHDHk\HIHuHb
D HAEIHtHpHHk\I|Ak\LHLHRHH(IE1E1IHt$HJtNd!I Nd!IHAHHuII>H8IcH8ILHHH}M?N
HE(IIMt]LH(IH)8IwL0ADAGIWAEBAELAMoM?H(L0j
HujAI>AHY^HH}H}IHE111I11HHD}1D}EAEAUAE1AE8AHEeH
AEHH0 HuH
HAEH1I>H0He[A\A]A^A_]HUAHHAWAVAUATISHHHHHDH(HH;8u"H;/HLhHupL+kH HHHH8HHH8tH
Hx1PHHLHOIIAHP1AID$t;1HID$HHAHAID$1HIILHA1IA%ID$HHHLHIHu!H1HHAA1HAIA
H?,u>H1HHAAtHHAIHAI~
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A 1HID$0Ht}HHxHu>@HHfXfA+I|$(uHID$0HxtA$D
HAHHHH1HHH[A\A]A^A_]HUHAWIAVAUATISH8HuHHHUPA$JHGXH=HEE1IKHtxIHAH}HHHIuDHAH
E
HuHEHHHUr@v(HIIrHza D IG1H}x`HIGHxhHH}HHt&H1H-
1HE1HuIHxH}AAwH}%?,u0H1HuH}AH%E1DEDHUHuEHA$ 2HuEHEA$$Hu}Hu-
H1HHH8[A\A]A^A_]UT1HHAWAVH|AUIATS1HET|EHIMtQI<$ LHu.I<$ t$IH
AI|$IAJ\3HMd$0HtHHHH)H8HH111HH1Ht!HqtHT2H HT2HH
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ADADHH1HIT$$H0A\$HADEADIEAD$
H1I?H0He[A\A]A^A_]HUHAWAVIAUAATSHH8Hu/LEDMHtHXIH}HILIDIHAHPAEH8tQHEH}HEEHEAHu
PAHuAHu8H}AHuPAusHuAu^HuAuIE1E1A9~I<HAEdEDHuHtZHE1HEIIA9~ I4LAI<HAL
L`A$H}HtEEH8[A\A]A^A_]HUHAWAVAUAATISH8Ht9HH8uH8u+H1HH8[A\A]A^A_]EuH1GI<$HIHHHH@
HIHuHH8HIHH}HS@HHHA?DIL$IEtILUI|$HHHMHMLUuIDILLPAEEDK@MLHUI<$uIHC@HH%IHHAH
8[A\A]A^A_]HUHAWAVAHAUIATSHHHLDHIHILHI8M 31I}AVHLHHMIMEAAHHEE)H%
I}HHH;IULHH8Hu
HHuIADHuADHuA|H1IAHHtMHHt+H@(Ht"HP(D
HtED"AAAAAHAAH1;H1AIHHHHHtiHx@tbHHxHuDHuLS@u6H}Ht-
1HH}HHAAHA1HC,HHH[A\A]A^A_]UHAUIATIHSHPHL1IIHHL1IIHHHL1IIHHHE11HHHHHE11IHHHHLE
11HHHLE11HHHE11HHHH1E1HHHHHHLHZ[A\A]]UHSHPHH8HH8HH8HHH8HH8HH8HH8HH8HH8Z[H]H
UHAVIAUIHSLHH}H}HtNHHLH9t5u*HLHH[A]A^]1H[A]A^]UHAWIAVAUIATISH(Hu1H}AHH}4LIAH4tC
H?HUH(1H[A\HA]A^A_]A<$ELFuA|$uA|$tHA|$t+HH(1H[A\A]A^A_]HuLHAt$.}HIEHtAt$
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EHHtH}HLe4HuHULtLH9sxt'HH1HMPHHuHDpPHIAD`LAD$dADAEIHD`HADHH}DxPHCD<HhI|D3AHt`
DHHhIHPHAHPH9upHdLHPHhAHPHu*DdHBHhHPHLAL9uD`E1dHXHHHP;MHHHt
LE9rXDC1HHHIDEAHuHu4HxHuH|hH}Hhu|I]H[A\A]A^A_]HUHAWAVMAUIHMATSHDM
HUH`1HHH`HuIuYHxH}H8HEH|H}HPH}xHPHHH1H9sDAEtAtDAL9IBH4I}IH9HB|HHuHHHHLHHsHH}Lh
LPHXExHPHI9EOEAGPAG
HDhHHIP1AAZEGAWYt8HXLI+HAOH`HIuHt)HXLI+>1HLHHAGAWHLH9hHChHhEIHXLI+1IuA4H`IHAH
hM\$4MHXDxII9H`LBELI+LhHLIuALhMIDxHXDD|H`D)EELELMLI+LhHIuADI}MLhIMD|HDD)EELHMME
)HH}u#IUH`LHHHHe[A\A]A^A_]HUHAWAVAUIHxATSHHH@1HhH@HxHhHUt!HHxHtH}HLxu(UMtHI<I9
sAt%IhLHhAWAGHu8IHP@X8\X\HHD4HHIEHHHHH`HHHH}IH4HuH`EHH4EEA1fCLC
H"HCUtLH9saH0HHAH0I9uEt4#HP1H9uEt\D4CCEHHAwHhIAHtI8HHhIH8AH8H9uGHPHhpAHunDX\HhH4
LAL9t1u>H@HHHuHhLHhu!HHH`HHIUH[A\A]A^A_]U1HAWAVAUATSHHHHUH@HMHEHHpH`LXtH}A
H}HuHH}u#UHuHH9sxtHHHPIIDpTH$HPH@<8ATHhHAHxHDHpIAHtUHhHxIHpAHhH9tHx8HhHAIHu
Hx"<HpAHu!HxALAHHhHpLAHhH9tYHxALAHH`H1H[A\HA]A^A_]LxE11xD)T9sAFufA>t_LHpHIAHpA>H
IDLHpAHpMDHtMu.PIlHtMuHxIIAt>HxALAH1H[A\HA]A^A_]JHXHxHBHHH@%H)HXHHHHBAGH@%H)
HXHHAALAH[A\A]A^A_]UHAWIAVAUIATISH(Hu1H}AHH}@LIAH@tCH?HUH(1H[A\HA]A^A_]A<$ELF
uA|$uA|$tHA|$t+HH(1H[A\A]A^A_]HuLHAt$:H}HIEHtIt$(H}AHuH\AT$:IuHUH}AHAD$:HEH9t3Hu#HU1HH
H([A\A]A^A_]HUHAWAVAUIHxATI1SH<IHUHhIuHxHhL`HuH}H}HuHLxHHHLLH9s%L@
MtHP0HtHL
HH!LHH`HHH)H%HuHLHH}IMHH@EHELI9SMN M:IF0HtJT III!MfEHRHHIP1AH@LH)HA~HPIF
Y^HXIEIvHhHHHHt`HXHPHHhHXH9tXHHHHt!HX1HPHMf
EI<EIMIH`A)I$HH%HI}Hu0@HuHuULU
hHxHhHe[A\A]A^A_]U1HAWAVAUATSHHHXHXHPHUHPH8HhHhHAHpH}HALh@HuHAuHpLHHLH9sxt'
HH1HmP(HHHuHLh H0HH8IIDMt HHH(CD5HH@H8H@HH
HHHIHAH}EHLx0HH@HXLIHEL+AHtOHLHXHHL9umHE(HXL2H@AH@HuHD89LbLHXHLL9uIdHD8EH
P1HHH;LLt"HHAHHHDHL9r[LC1HHHILEAHuHAu7HxHAuHuAHhHEuHEH8HH%HHD[A\A]A^A_]HUHA
WAVAUI1ATSHHHhHhH@HUH@HpHpt!HHpHxH}HLpu*uHxMHHI<I9sAt%IhLHhAW(IG HuH8IHPH@
H08\0\HHD@HHIEHHHHH`HHHH}IH@HuH`EHH@EEAfC11HCLSHC@UHxHLH9seH(HHAH(UI9uHxHH
@$HP1H9uHx\HHD@HCHHCHIwHhIAHtJ8HHhIH8AH8H9uHHPHhHpAHunD0\HhH4LAL9t1u>H@HHHuHh
LHhu!HHH`HHIUH[A\A]A^A_]U1HAWAVAUATSHHHHUH@HMHEHHpHhL`t

H}ADH}HuHH}Au%uHMHHHHH9sztHH%HZ B(ILrHXHZ8HHPHXH@
H8HH0ADXLHxHHpDHHtCHxLHpIAL9tHxD0LHHu
Hx+8HpHHu"HxAHAHD8HpLHAL9uDX1E1E1DPLxsHxAHAHD8EHhH1H[A\HA]A^A_]AD$tPDID9rA<$tX
HHHDhDpA<$HHMDHDpDhXMDMoMf
MtMuHxIII}t>HxAHAH1H[A\HA]A^A_]IFH`H@HxHIFHH%H)H`HHHHAIEH@%H)H`HHBAHAHD[A\]A^
A_] @12abcdmqsvxzrh@abcsdrh @ DhaCcdgmnpqrsvsizeaddrtypename %-18s %-18s%14s%14s
%-18s 0x%08x 0x%08x
filename expectedyou need to
load the kernel firstno kOpenBSD loadedyour kOpenBSD doesn't support ramdiskyour kOpenBSD supports ramdisk only up to %lu bytes, however you supplied a %lu bytes onepremature end of file %sonly FreeBSD supports moduleonly ELF kernel supports moduleonly FreeBSD supports environmentkFreeBSD.%syour CPU does not implement AMD64 architecturekern_start = %lx, kern_end = %lx
bsdloader/i386/bsd.cinvalid arch-dependent ELF magicinvalid a.out headerload address below 1Mno NetBSD loaded %-18s%14s%14s%14s
%-18s 0x%08x 0x%08x 0x%08xknetbsd_module_elf%u entries in smap
textgfxpayload%s;800x600800x600Booting in blind modecompcmdlen too longnetbsdunknown disk type nameonly device specifications of form <type><number><lowercase letter> are supportedonly com0-com3 are supportedkFreeBSD./boot/zfs/zpool.cacherawno FreeBSD loadedtype=elf64 kernelelf kernelzfsgzioLoad kernel of FreeBSD.FILEkfreebsdLoad kernel of OpenBSD.kopenbsdLoad kernel of NetBSD.knetbsdLoad FreeBSD env.kfreebsd_loadenvLoad FreeBSD
kernel module.kfreebsd_moduleLoad NetBSD kernel module.knetbsd_moduleLoad NetBSD kernel module (ELF).Load FreeBSD kernel module (ELF).kfreebsd_module_elfLoad kOpenBSD ramdisk.kopenbsd_ramdiskwdfdsdcdvndrdno-smpDisable SMP.no-acpiDisable ACPI.asknameAsk for file name to reboot from.haltDon't reboot, just halt.configChange configured devices.kdbEnter in KDB on boot.minirootquietDon't display boot diagnostic messages.singleBoot into single mode.verboseBoot with verbose messages.debugBoot with debug messages.silentSuppress normal output (warnings remain).rootSet root device.DEVICEserialUse serial console.[ADDR|comUNIT][,SPEED]wdXYcomUNIT[,SPEED]dualDisplay output on all consoles.cdromUse CD-ROM as root.Invoke user configuration routing.gdbUse GDB remote debugger instead of DDB.muteDisable all boot output.nointrpauseWait for keypress after every line of output.dfltrootUse compiled-in root device.premature end of file %sinvalid arch-independent ELF magicinvalid arch-dependent ELF magicno symbol
table_DYNAMICdynamic = %llx
bsdloader/i386/bsd32.cloading section to %x, size %d, align %d
elf modulerd_root_imagerd_root_sizeunexpected size of rd_root_sizepremature end of file %sinvalid arch-independent ELF magicinvalid arch-dependent ELF magicloading section to %x, size %d, align %d
bsdloader/i386/bsd64.celf obj moduleno symbol table_DYNAMICdynamic = %llx
rd_root_imagerd_root_sizeunexpected size of
rd_root_sizeLICENSE=GPLv3+aoutbootcpuidcryptoelfextcmdgcry_md5mmaprelocatorserialvideobsd2*4)NEcv&3
I_:}4CZlx%B(<PG:r~*"8HWi(7|J>*R0ALi)6VHWsgrub_mod_initgrub_mod_finigrub_strlengrub_netbsd_load_elf
_meta64grub_efi_finish_boot_servicesgrub_aout_get_typegrub_puts_grub_strncmpgrub_strtoullgrub_efi_system_ta
blegrub_env_update_get_sortedgrub_strcpygrub_elf_is_elf32grub_loader_is_loadedgrub_strrchrgrub_ns8250_hw_g
et_portgrub_dl_loadgrub_elf32_load_phdrsgrub_relocator32_bootgrub_freebsd_load_elfmodule32grub_elf_filegrub
_xasprintfget_virtual_current_addressgrub_video_set_mode_gcry_digest_spec_md5grub_memmovegrub_device_o
pengrub_relocator_alloc_chunk_aligngrub_elf64_get_shnumgrub_disk_readgrub_unregister_extcmdgrub_loader_u
nsetgrub_dl_refgrub_mmap_iterategrub_file_seekgrub_relocator_unloadgrub_errnogrub_memsetgrub_openbsd_fin
d_ramdisk32grub_register_command_priogrub_elf_is_elf64grub_video_get_driver_idgrub_mmap_get_lowergrub_
mmap_get_uppergrub_freebsd_load_elfmodule_obj64grub_printfgrub_unregister_commandgrub_file_readgrub_fre
ebsd_add_meta_modulegrub_elf_closegrub_print_errorgrub_zallocgrub_strcmpgrub_strchrgrub_elf64_loadgrub_m

allocgrub_relocator64_bootgrub_file_closegrub_file_opengrub_real_dprintfgrub_freebsd_load_elf_meta32grub_callocgrub_freebsd_load_elf_meta64grub_netbsd_load_elf_meta32grub_device_closegrub_elf64_load_phdrsgrub_openbsd_find_ramdisk64grub_fs_probegrub_relocator_newgrub_crypto_hashgrub_errorgrub_video_get_info_and_finigrub_cpuid_has_longmodegrub_freegrub_dl_unrefgrub_register_extcmdgrub_env_setgrub_gettextgrub_memcmpgrub_loader_setgrub_verify_stringgrub_elf32_get_shnumgrub_elf32_loadgrub_env_getgrub_strtoulgrub_bsd_add_metagrub_aout_loadget_physical_target_addressgrub_elf32_get_phnumgrub_relocator_alloc_chunk_addrN<v)phh p
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&3&f&&&p&Q'k'"*(G(](\{((*%)2)a)r)=)))* -*D*d*w*T*H**.+<+9F+[+Z+a,Lp,),,U,-]!-+-:-I-HZ-Ky--?-)---^-
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1H61HQ1_191
1H1N1711#1T1T1)2*252P@2Q2[2e2.o22`22 2-2@226212M282,2U33g30+353x?3,I3S3(g3q3{3
33333h333%334<
4414#<4@K48Z40i43s4(4 444444'5)54-
5)G5JQ5Kv5'545)5J5K#6c76L6Ki6V6B6)6)7J7Kn7n57V7Z77Kb8^}88'84#9)d9)9J9K9999999@:Z9:Zf:N:n5;V=;]
;^;Q<b<l<v<@<4<*C=4p=4=4)> F>5_>N>A>n5?N?)-
?Vu?N@^@'@A'#A4[A)A)AJAKAZANWBn5BVBNBNB<JC'jC4C)
D)IDJVDKD D9D+ EN)ENXE8 eEKE';F4NF)qFX ~FKFq F FKF!GB7G)nG)GX GKGEH!H^H I +I 5I ?I@I'I)I4I)IX
JK'J*eJ ~J5JZJN:KE\K!KZK
KK[L^yLL'L4M).M4BM
NM)rMX |MKM9M
M M M@NZ3NZ`NNNENNO)&O!pONP^P%PQ"Q4`Q)Q)QX QKQZQN\RER!RNRNS<SS'uS4S'S)4T)_TX lTKT/
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T98UNGUNvUJ
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FMdl.symtab.strtab.shstrtab.rela.text.rela.rodata.rodata.str1.1.data.module_license.bss.moddeps.modname
@V@x?+`V8 &@32]j
BhHhX h] hGfghph XqXo

1.1177 grpc-go 1.59.0

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1.1178 btree 1.0.0

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1.1179 go-humanize 1.0.1

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1.1180 go-toml 1.9.5

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localtime.go, localtime_test.go:

Originals:
https://raw.githubusercontent.com/googleapis/google-cloud-
go/ed46f5086358513cf8c25f8e3f022cb838a49d66/civil/civil.go
https://raw.githubusercontent.com/googleapis/google-cloud-
go/ed46f5086358513cf8c25f8e3f022cb838a49d66/civil/civil_test.go
Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.

* 'Local' prefix added to all structs.
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1.1181 gax-go 2.12.0

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1.1182 backoff 4.2.1

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1.1183 go-runewidth 0.0.15

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1.1189 dumb-init 1.2.5-r3

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1.1190 python-ldap 3.4.4

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1.1196 google-uuid 1.4.0

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1.1197 go-isatty 0.0.20

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1.1198 opencensus 0.24.0

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1.1200 pmezard-godifflib 1.0.1-0.20181226105442-5d4384ee4fb2

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?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldconfig.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:06:39  ram
?RCS: patch61: added support for src.U
?RCS: patch61: new OSNAME define
?RCS: patch61: can now sense new OSes
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  13:40:51  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:04:18  ram
?RCS: patch54: config.sh reload logic now knows about new -K switch
?RCS: patch54: cleaned up and extended osvers for DEC OSF/1 (ADO)
?RCS: patch54: added MachTen detection
 (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:13:41  ram
?RCS: patch51: adapted osvers computation for AIX (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1995/01/30  14:27:15  ram
```

```
?RCS: patch49: unit Options.U now exports file optdef.sh, not a variable
?RCS: patch49: update code for myuname changed (WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:15:36  ram
?RCS: patch45: added quotes around the INITPROG variable (ADO)
?RCS: patch45: allows variable overriding after config file loading
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:57:05  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: merged with the version used for perl5's Configure (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:24:17  ram
?RCS: patch23: added support for osf1 hints
?RCS: patch23: new support for solaris and i386 systems (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:05:02  ram
?RCS: patch16: added post-processing on myuname for Xenix targets
?RCS: patch16: message proposing config.sh
 defaults made consistent
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:32  ram
?RCS: patch10: force use of config.sh when -d option is used (WAD)
?RCS: patch10: complain about non-existent hint files (WAD)
?RCS: patch10: added Options dependency for fastread variable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit tries to remember what we did last time we ran Configure, mostly
?X: for the sake of setting defaults.
?X:
?MAKE:Oldconfig hint myuname osname osvers: Instruct Myread Checkcc \
 Mksymlinks Loc Options Tr src trnl ln uname sh awk sed test cat grep \
 rm lns tr n c contains targetarch
?MAKE: -pick wipe $@ %<
?S:myuname:
?S: The output of 'uname -a' if available, otherwise the hostname. On Xenix,
?S: pseudo variables assignments in the output are stripped, thank you. The
?S: whole thing is then lower-cased.
?S:.
?S:hint:
?S: Gives the type of hints used for previous answers. May be one of
?S: "default",
 "recommended" or "previous".
?S:.
?S:osname:
?S: This variable contains the operating system name (e.g. sunos,
```

```
?S: solaris, hpux, etc.).  It can be useful later on for setting
?S: defaults.  Any spaces are replaced with underscores.  It is set
?S: to a null string if we can't figure it out.
?S:.
?S:osvers:
?S: This variable contains the operating system version (e.g.
?S: 4.1.3, 5.2, etc.).  It is primarily used for helping select
?S: an appropriate hints file, but might be useful elsewhere for
?S: setting defaults.  It is set to '' if we can't figure it out.
?S: We try to be flexible about how much of the version number
?S: to keep, e.g. if 4.1.1, 4.1.2, and 4.1.3 are essentially the
?S: same for this package, hints files might just be os_4.0 or
?S: os_4.1, etc., not keeping separate files for each little release.
?S:.
?C:OSNAME:
?C: This symbol contains the name of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature
 tests from Configure are generally more reliable.
?C:.
?C:OSVERS:
?C: This symbol contains the version of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests from Configure are generally more reliable.
?C:.
?H:#define OSNAME "$osname"  /**/
?H:#define OSVERS "$osvers"  /**/
?H:.
?F:!config.sh
?T:tmp tmp_n tmp_c tmp_sh file
?T:xxxxfile xxxfile xxfile xfile hintfile newmyuname
?T:tans _ isesix INITPROG DJGPP has_uname
?D:osname=''
?LINT:change n c sh
?LINT:extern hostarch
?LINT:change hostarch
: Determine the name of the machine
myuname=`$uname -a 2>/dev/null`
$test -z "$myuname" && myuname=`hostname 2>/dev/null`
?X: Special mention for Xenix, whose 'uname -a' gives us output like this:
?X:  sysname=XENIX
?X:  nodename=whatever
?X:  release=2.3.2 .. etc...
?X: Therefore, we strip all this variable assignment junk and remove all the
?X: new lines to keep the myuname variable sane... --RAM
myuname=`echo $myuname | $sed -e
 's/^[^=]*=//' -e 's/\//g' | \
 ./tr '[A-Z]' '[a-z]' | $tr $trnl ' '`
```

```
?X: Save the value we just computed to reset myuname after we get done here.
newmyuname="$myuname"
$test -f "$uname$_exe" && has_uname=y

: Guessing of the OS name -- half the following guesses are probably wrong...
: If you have better tests or hints, please send them to the metaconfig
: authors and to <MAINTLOC>
$test -f /irix && osname=irix
$test -f /xenix && osname=sco_xenix
$test -f /dynix && osname=dynix
$test -f /dnix && osname=dnix
$test -f /lynx.os && osname=lynxos
$test -f /unicos && osname=unicos && osvers=`$uname -r`
$test -f /unicosmk && osname=unicosmk && osvers=`$uname -r`
$test -f /unicosmk.ar && osname=unicosmk && osvers=`$uname -r`
$test -f /bin/mips && /bin/mips && osname=mips
$test -d /NextApps && set X `hostinfo | $grep 'NeXT Mach.*:' | \
 $sed -e 's/://' -e 's/\./_/'` && osname=next && osvers=$4
$test -d /usr/apollo/bin && osname=apollo
$test -f /etc/saf/_sactab && osname=svr4
$test -d /usr/include/minix
 && osname=minix
$test -f /system/gnu_library/bin/ar.pm && osname=vos
if $test -d /MachTen -o -d /MachTen_Folder; then
?X:  MachTen uname -a output looks like
?X:  xxx 4 0.0 Macintosh
?X:  MachTen /sbin/version output looks like
?X:  MachTen 4.0 Mon Aug 28 10:18:00 1995
?X:  MachTen 3.x had the 'version' command in /usr/etc/version.
 osname=machten
 if $test -x /sbin/version; then
  osvers=`/sbin/version | $awk '{print $2}' |
  $sed -e 's/[A-Za-z]$//'`
 elif $test -x /usr/etc/version; then
  osvers=`/usr/etc/version | $awk '{print $2}' |
  $sed -e 's/[A-Za-z]$//'`
 else
  osvers="$2.$3"
 fi
fi
$test -f /sys/posix.dll &&
 $test -f /usr/bin/what &&
 set X `/usr/bin/what /sys/posix.dll` &&
 $test "$3" = UWIN &&
 osname=uwin &&
 osvers="$5"
?X: If we have uname, we already computed a suitable uname -a output, correctly
?X: formatted for Xenix, and it lies in $myuname.
```

```
if $test "X$has_uname" != X; then
 set X $myuname
 shift
 case "$5" in
 fps*) osname=fps ;;
 mips*)
  case "$4"
 in
  umips) osname=umips ;;
  *) osname=mips ;;
  esac;;
 [23]100) osname=mips ;;
 next*) osname=next ;;
?X: Interactive Unix.
 i386*)
  tmp=`/bin/uname -X 2>/dev/null|awk '/3\.2v[45]/{ print $(NF) }'`
  if $test "$tmp" != "" -a "$3" = "3.2" -a -f '/etc/systemid'; then
   osname='sco'
   osvers=$tmp
  elif $test -f /etc/kconfig; then
   osname=isc
   if $test "$lns" = "$ln -s"; then
    osvers=4
   elif $contains _SYSV3 /usr/include/stdio.h > /dev/null 2>&1 ; then
    osvers=3
   elif $contains _POSIX_SOURCE /usr/include/stdio.h > /dev/null 2>&1 ; then
    osvers=2
   fi
  fi
  tmp=''
  ;;
?X: MS-DOS djgpp uname -a output looks like:
?X: ms-dos xxx 6 22 pc
?X:  $1 is the "dos flavor" (need not be "ms-dos").
?X:  $2 is the node name
?X:  $3 and $4 are version/subversion
?X:  $5 is always "pc", but that might not be unique to DJGPP.
?X: (e.g. Solaris_x86 has $5 = i86pc, which doesn't actually conflict,
?X: but it's close enought that I can easily imagine other vendors also
?X: using variants
 of pc* in $5.)
?X:  The "DJGPP" environment variable is always set when djgpp is active.
 pc*)
  if $test -n "$DJGPP"; then
   osname=dos
   osvers=djgpp
  fi
  ;;
```

```
 esac
 case "$1" in
 aix) osname=aix
?X: aix 4.1 uname -a output looks like
?X:  AIX  foo  1 4 000123456789
?X: where $4 is the major release number and $3 is the (minor) version.
?X: More detail on the version is available with the oslevel command.
?X: in 3.2.x, it output a string (see case statements below).  In 4.1,
?X: it puts out something like  4.1.1.0
  tmp=`( (oslevel) 2>/dev/null || echo "not found") 2>&1`
  case "$tmp" in
  'not found') osvers="$4"."$3" ;;
  '<3240'|'<>3240') osvers=3.2.0 ;;
  '=3240'|'>3240'|'<3250'|'<>3250') osvers=3.2.4 ;;
  '=3250'|'>3250') osvers=3.2.5 ;;
  *) osvers=$tmp;;
  esac
  ;;
 bsd386) osname=bsd386
  osvers=`$uname -r`
  ;;
 cygwin*) osname=cygwin
  osvers="$3"
  ;;
 *dc.osx) osname=dcosx
  osvers="$3"
  ;;
 dnix) osname=dnix
  osvers="$3"
  ;;
 domainos) osname=apollo
  osvers="$3"
  ;;
 dgux)
 osname=dgux
  osvers="$3"
  ;;
?X:  uname -a returns
?X:  DYNIX/ptx xxx 4.0 V4.1.2 i386
 dynixptx*) osname=dynixptx
  osvers=`echo "$4"|sed 's/^v//'`
  ;;
 freebsd) osname=freebsd
  osvers="$3" ;;
 genix) osname=genix ;;
?X: HP-UX uname -a gives something like
?X: HP-UX foobar B.10.20 A 9000/735 2016483812 two-user license
?X: Preserve the full 10.20 string instead of the previous plain '10'.
```

```
?X:  Thanks to Graham Barr.    --AD 6/30/1998
hp*) osname=hpux
 osvers=`echo "$3" | $sed 's,.*\.\([0-9]*\.[0-9]*\),\1,'`
 ;;
irix*) osname=irix
 case "$3" in
 4*) osvers=4 ;;
 5*) osvers=5 ;;
 *) osvers="$3" ;;
 esac
 ;;
linux) osname=linux
 case "$3" in
 *) osvers="$3" ;;
 esac
 ;;
MiNT) osname=mint
 ;;
netbsd*) osname=netbsd
 osvers="$3"
 ;;
news-os) osvers="$3"
 case "$3" in
 4*) osname=newsos4 ;;
 *) osname=newsos ;;
 esac
 ;;
next*) osname=next ;;
nonstop-ux) osname=nonstopux ;;
openbsd) osname=openbsd
   osvers="$3"
   ;;
POSIX-BC | posix-bc
) osname=posix-bc
 osvers="$3"
 ;;
powerux | power_ux | powermax_os | powermaxos | \
powerunix | power_unix) osname=powerux
 osvers="$3"
 ;;
qnx) osname=qnx
 osvers="$4"
 ;;
solaris) osname=solaris
 case "$3" in
 5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
 *) osvers="$3" ;;
 esac
```

```
 ;;
sunos) osname=sunos
 case "$3" in
 5*) osname=solaris
  osvers=`echo $3 | $sed 's/^5/2/g'` ;;
 *) osvers="$3" ;;
 esac
 ;;
titanos) osname=titanos
 case "$3" in
 1*) osvers=1 ;;
 2*) osvers=2 ;;
 3*) osvers=3 ;;
 4*) osvers=4 ;;
 *) osvers="$3" ;;
 esac
 ;;
ultrix) osname=ultrix
 osvers="$3"
 ;;
osf1|mls+) case "$5" in
 alpha)
?X: DEC OSF/1 myuname -a output looks like:  osf1 xxxx t3.2 123.4 alpha
?X: where the version number can be something like [xvt]n.n
  osname=dec_osf
?X: sizer knows the minor minor version: the letter
  osvers=`sizer -v | awk '{print $3}' | \
   ./tr '[A-Z]' '[a-z]' | sed 's/^[xvt]//'`
  case "$osvers" in
  [1-9].[0-9]*) ;;
  *) osvers=`echo
"$3" | sed 's/^[xvt]//'` ;;
  esac
  ;;
 hp*) osname=hp_osf1 ;;
 mips) osname=mips_osf1 ;;
?X: hp and mips were unsupported Technology Releases -- ADO, 24/10/94
 esac
 ;;
unixware) osname=svr5
 osvers="$4"
 ;;
uts) osname=uts
 osvers="$3"
 ;;
vos) osvers="$3"
 ;;
$2) case "$osname" in
```

```
*isc*) ;;
*freebsd*) ;;
svr*)
 : svr4.x or possibly later
 case "svr$3" in
 ${osname}*)
  osname=svr$3
  osvers=$4
  ;;
 esac
 case "$osname" in
 svr4.0)
  : Check for ESIX
  if $test -f /stand/boot ; then
   eval `$grep '^INITPROG=[a-z/0-9]*$' /stand/boot`
   if $test -n "$INITPROG" -a -f "$INITPROG"; then
    isesix=`strings -a $INITPROG | \
     $grep 'ESIX SYSTEM V/386 Release 4.0'`
    if $test -n "$isesix"; then
     osname=esix4
    fi
   fi
  fi
  ;;
 esac
 ;;
*) if $test -f /etc/systemid; then
  osname=sco
  set `echo $3 | $sed 's/\./ /g'` $4
  if $test -f $src/hints/sco_$1_$2_$3.sh; then
   osvers=$1.$2.$3
  elif $test
-f $src/hints/sco_$1_$2.sh; then
   osvers=$1.$2
  elif $test -f $src/hints/sco_$1.sh; then
   osvers=$1
  fi
 else
  case "$osname" in
  ") : Still unknown.  Probably a generic Sys V.
   osname="sysv"
   osvers="$3"
   ;;
  esac
 fi
 ;;
esac
;;
```

```
 *) case "$osname" in
  ") : Still unknown.  Probably a generic BSD.
   osname="$1"
   osvers="$3"
   ;;
  esac
  ;;
 esac
else
?X: Try to identify sony's NEWS-OS (BSD unix)
 if $test -f /vmunix -a -f $src/hints/news_os.sh; then
  (what /vmunix | UU/tr '[A-Z]' '[a-z]') > UU/kernel.what 2>&1
  if $contains news-os UU/kernel.what >/dev/null 2>&1; then
   osname=news_os
  fi
  $rm -f UU/kernel.what
?X: Maybe it's OS/2 or DOS or something similar
 elif $test -d c:/.; then
  set X $myuname
  osname=os2
  osvers="$5"
 fi
fi

: Try to determine whether config.sh was made on this system
case "$config_sh" in
")
?X: indentation wrong on purpose--RAM
dflt=n
case "$knowitall" in
")
 if test -f ../config.sh; then
  if $contains
 myuname= ../config.sh >/dev/null 2>&1; then
   eval "`$grep myuname= ../config.sh`"
  fi
  if test "X$myuname" = "X$newmyuname"; then
   dflt=y
  fi
 fi
 ;;
*) dflt=y;;
esac

: Get old answers from config file if it was generated on the same system
hint=default
if $test -f ../config.sh; then
 echo " "
```

```
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . ./myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it."
  mv ../config.sh ../config.sh.old
  myuname="$newmyuname"
  ;;
 *)  echo "Fetching default answers from your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  tmp_sh="$sh"
  . ../config.sh
  cp ../config.sh .
  n="$tmp_n"
  c="$tmp_c"
  hint=previous
  ;;
 esac
fi
?X: remember, case indentation is wrong--RAM
;;
*)
 echo " "
 echo "Fetching default answers from $config_sh..." >&4
 tmp_n="$n"
 tmp_c="$c"
 tmp_sh="$sh"
 cd ..
?X: preserve symbolic links, if any
 cp $config_sh config.sh 2>/dev/null
 chmod +w config.sh
 . ./config.sh
 cd UU
 cp ../config.sh
 .
 n="$tmp_n"
 c="$tmp_c"
 hint=previous
 ;;
esac
?X: Older versions did not always set $sh.
case "$sh" in
") sh="$tmp_sh" ;;
esac
$test "$override" && . ./optdef.sh

: Restore computed paths
for file in $loclist $trylist; do
```

```
 eval $file="\$_$file"
done

. ./checkcc
?X: Cross-compiling support
case "$targetarch" in
") ;;
*)  hostarch=$osname
 osname=`echo $targetarch|sed 's,^[^-]*-,,'`
 osvers="
 ;;
esac

@if {test -d ../hints}
: Offer them some hints based on their OS
cd ..
?X: Since we are now at the root of the source tree, we must use $src
?X: to access the sources and not $rsrc. See src.U for details...
if $test ! -f config.sh; then
 $cat <<EOM

First time through, eh?  I have some defaults handy for some systems
that need some extra help getting the Configure answers right:

EOM
 (cd $src/hints; ls -C *.sh) | $sed 's/\.sh/   /g' >&4
 dflt="

 : Now look for a hint file osname_osvers, unless one has been
 : specified already.
 case "$hintfile" in
 "|' ')
  file=`echo "${osname}_${osvers}"
 | $sed -e 's%\.%_%g' -e 's%_$%%'`
  : Also try without trailing minor version numbers.
  xfile=`echo $file | $sed -e 's%_[^_]*$%%'`
  xxfile=`echo $xfile | $sed -e 's%_[^_]*$%%'`
  xxxfile=`echo $xxfile | $sed -e 's%_[^_]*$%%'`
  xxxxfile=`echo $xxxfile | $sed -e 's%_[^_]*$%%'`
  case "$file" in
  ") dflt=none ;;
  *)  case "$osvers" in
   ") dflt=$file
    ;;
   *)  if $test -f $src/hints/$file.sh ; then
     dflt=$file
    elif $test -f $src/hints/$xfile.sh ; then
     dflt=$xfile
```

```
    elif $test -f $src/hints/$xxfile.sh ; then
     dflt=$xxfile
    elif $test -f $src/hints/$xxxfile.sh ; then
     dflt=$xxxfile
    elif $test -f $src/hints/$xxxxfile.sh ; then
     dflt=$xxxxfile
    elif $test -f "$src/hints/${osname}.sh" ; then
     dflt="${osname}"
    else
     dflt=none
    fi
    ;;
   esac
   ;;
  esac
  if $test -f Policy.sh ; then
   case "$dflt" in
   *Policy*) ;;
   none) dflt="Policy" ;;
   *) dflt="Policy $dflt" ;;
   esac
  fi
  ;;
 *)
  dflt=`echo
 $hintfile | $sed 's/\.sh$//'`
  ;;
 esac

 if $test -f Policy.sh ; then
  $cat <<EOM

There's also a Policy hint file available, which should make the
site-specific (policy) questions easier to answer.
EOM

 fi

 $cat <<EOM

You may give one or more space-separated answers, or "none" if appropriate.
A well-behaved OS will have no hints, so answering "none" or just "Policy"
is a good thing.  DO NOT give a wrong version or a wrong OS.

EOM

 rp="Which of these apply, if any?"
 . UU/myread
```

```
 tans=$ans
 for file in $tans; do
  if $test X$file = XPolicy -a -f Policy.sh; then
   . Policy.sh
   $cat Policy.sh >> UU/config.sh
  elif $test -f $src/hints/$file.sh; then
   . $src/hints/$file.sh
   $cat $src/hints/$file.sh >> UU/config.sh
  elif $test X"$tans" = X -o X"$tans" = Xnone ; then
   : nothing
  else
   : Give one chance to correct a possible typo.
   echo "$file.sh does not exist"
   dflt=$file
   rp="hint to use instead?"
   . UU/myread
   for file in $ans; do
    if $test -f "$src/hints/$file.sh";
 then
     . $src/hints/$file.sh
     $cat $src/hints/$file.sh >> UU/config.sh
    elif $test X$ans = X -o X$ans = Xnone ; then
     : nothing
    else
     echo "$file.sh does not exist -- ignored."
    fi
   done
  fi
 done

 hint=recommended
 : Remember our hint file for later.
 if $test -f "$src/hints/$file.sh" ; then
  hintfile="$file"
 else
  hintfile="
 fi
fi
cd UU
?X: From here on, we must use $rsrc instead of $src

@end
: Process their -A options
. ./posthint.sh

@if osname || osvers
: Ask them to confirm the OS name
cat << EOM
```

```
Configure uses the operating system name and version to set some defaults.
The default value is probably right if the name rings a bell. Otherwise,
since spelling matters for me, either accept the default or answer "none"
to leave it blank.

EOM
@end
@if osname
case "$osname" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *)  dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/_.*$//'` ;;
  esac
  ;;
 *) dflt="$osname" ;;
esac
rp="Operating
 system name?"
. ./myread
case "$ans" in
none)  osname=" ;;
*) osname=`echo "$ans" | $sed -e 's/[  ][ ]*/_/g' | ./tr '[A-Z]' '[a-z]'`;;
esac
@end
@if osvers
@if osname
echo " "
@end
case "$osvers" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *) dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/^[^_]*//'`
   dflt=`echo $dflt | $sed -e 's/^_//' -e 's/_/./g'`
   case "$dflt" in
   "|' ') dflt=none ;;
   esac
   ;;
  esac
  ;;
 *) dflt="$osvers" ;;
esac
rp="Operating system version?"
. ./myread
case "$ans" in
none)  osvers=" ;;
```

```
*) osvers="$ans" ;;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Oldconfig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_syscallproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_syscallproto:
?S: This variable conditionally defines the HAS_SYSCALL_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the syscall() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SYSCALL_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the syscall() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
 int syscall(int,  ...);
?C:  extern int syscall(long, ...);
?C:.
?H:#$d_syscallproto HAS_SYSCALL_PROTO /**/
?H:.
?LINT:set d_syscallproto
: see if prototype for syscall is available
echo " "
set d_syscallproto syscall $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_syscallproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cppstdin.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cppstdin.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:08:34  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:05:38  ram
?RCS: patch16: comment for CPPLAST was missing
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:18:58  ram
?RCS: patch15: new variables cpprun and cpplast, guaranteed wrapper-free
?RCS: patch15: cppstdin now tries to use cc, even at the cost of a wrapper
?RCS:
?RCS: Revision 3.0.1.1
  1993/08/25  14:00:53  ram
?RCS: patch6: remove wrapper when not actually used
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppstdin cppminus cpprun cpplast: contains test \
 Myread Oldconfig Loc cpp +cc rm hint osname gccversion
?MAKE: -pick add $@ %<
?S:cppstdin:
?S: This variable contains the command which will invoke the C
?S: preprocessor on standard input and put the output to stdout.
?S: It is primarily used by other Configure units that ask about
?S: preprocessor symbols.
?S:.
?S:cppminus:
?S: This variable contains the second part of the string which will invoke
?S: the C preprocessor on the standard input and produce to standard
?S: output.  This variable will have the value "-" if cppstdin needs
?S: a minus to specify standard input, otherwise the value is "".
?S:.
?S:cpprun:
?S: This variable contains the command which will invoke a C preprocessor
?S: on standard input and put the output to stdout. It is guaranteed
 not
?S: to be a wrapper and may be a null string if no preprocessor can be
?S: made directly available. This preprocessor might be different from the
```

```
?S: one used by the C compiler. Don't forget to append cpplast after the
?S: preprocessor options.
?S:.
?S:cpplast:
?S: This variable has the same functionality as cppminus, only it applies
?S: to cpprun and not cppstdin.
?S:.
?C:CPPSTDIN:
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  Typical value of "cc -E" or "/lib/cpp", but it can also
?C: call a wrapper. See CPPRUN.
?C:.
?C:CPPMINUS:
?C: This symbol contains the second part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  This symbol will have the value "-" if CPPSTDIN needs a minus
?C: to specify standard input, otherwise the value is "".
?C:.
?C:CPPRUN:
?C: This symbol contains the string which will invoke
 a C preprocessor on
?C: the standard input and produce to standard output. It needs to end
?C: with CPPLAST, after all other preprocessor flags have been specified.
?C: The main difference with CPPSTDIN is that this program will never be a
?C: pointer to a shell wrapper, i.e. it will be empty if no preprocessor is
?C: available directly to the user. Note that it may well be different from
?C: the preprocessor used to compile the C program.
?C:.
?C:CPPLAST:
?C: This symbol is intended to be used along with CPPRUN in the same manner
?C: symbol CPPMINUS is used with CPPSTDIN. It contains either "-" or "".
?C:.
?H:#define CPPSTDIN "$cppstdin"
?H:#define CPPMINUS "$cppminus"
?H:#define CPPRUN "$cpprun"
?H:#define CPPLAST "$cpplast"
?H:.
?F:cppstdin !testcpp.out !testcpp.c
?T:wrapper x_cpp x_minus ok
?LINT:extern cppflags
: see how we invoke the C preprocessor
echo " "
echo "Now, how can we feed standard input to your C preprocessor..." >&4
cat <<'EOT' >testcpp.c
#define ABC abc
#define
```

```
 XYZ xyz
ABC.XYZ
EOT
cd ..
if test ! -f cppstdin; then
 if test "X$osname" = "Xaix" -a "X$gccversion" = X; then
  # AIX cc -E doesn't show the absolute headerfile
  # locations but we'll cheat by using the -M flag.
  echo 'cat >.$$.c; rm -f .$$.u; "'"$cc"' ${1+"$@"} -M -c .$$.c 2>/dev/null; test -s .$$.u && awk '"""$2 ~ /\.h$/ { print
"# 0 \""$2"\"" }"""' .$$.u; rm -f .$$.o .$$.u; "'"$cc"' -E ${1+"$@"} .$$.c; rm .$$.c' > cppstdin
 else
  echo 'cat >.$$.c; "'"$cc $cppflags"' -E ${1+"$@"} .$$.c; rm .$$.c' >cppstdin
 fi
else
 echo "Keeping your $hint cppstdin wrapper."
fi
chmod 755 cppstdin
wrapper=`pwd`/cppstdin
ok='false'
cd UU

?X:
?X: We'll run the cpp tests again if we don't have any valid C preprocessor
?X: yet or don't know how to proceed without a wrapper (in which case cpprun
?X: is empty and that's really annoying...)
?X:
if $test "X$cppstdin" != "X" && \
 $cppstdin $cppminus <testcpp.c >testcpp.out 2>&1 && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
then
 echo "You used
 to use $cppstdin $cppminus so we'll use that again."
 case "$cpprun" in
 '') echo "But let's see if we can live without a wrapper..." ;;
 *)
  if $cpprun $cpplast <testcpp.c >testcpp.out 2>&1 && \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
   echo "(And we'll use $cpprun $cpplast to preprocess directly.)"
   ok='true'
  else
   echo "(However, $cpprun $cpplast does not work, let's see...)"
  fi
  ;;
 esac
else
 case "$cppstdin" in
 '') ;;
```

```
 *)
  echo "Good old $cppstdin $cppminus does not seem to be of any help..."
  ;;
 esac
fi

if $ok; then
 : nothing
elif echo 'Maybe """$cc"' -E" will work...'; \
 $cc -E <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc $cppflags -E"
 x_minus="";
elif echo 'Nope...maybe """$cc"' -E -" will work...'; \
 $cc -E - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc $cppflags -E"
 x_minus='-';
elif
 echo 'Nope...maybe """$cc"' -P" will work...'; \
 $cc -P <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yipee, that works!"
 x_cpp="$cc $cppflags -P"
 x_minus="";
elif echo 'Nope...maybe """$cc"' -P -" will work...'; \
 $cc -P - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "At long last!"
 x_cpp="$cc $cppflags -P"
 x_minus='-';
elif echo 'No such luck, maybe "'$cpp"' will work...'; \
 $cpp <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "It works!"
 x_cpp="$cpp $cppflags"
 x_minus="";
elif echo 'Nixed again...maybe "'$cpp' -" will work...'; \
 $cpp - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Hooray, it works!  I was beginning to wonder."
 x_cpp="$cpp $cppflags"
 x_minus='-';
elif echo 'Uh-uh.  Time to get fancy.  Trying a wrapper...'; \
 $wrapper <testcpp.c >testcpp.out 2>&1; \
 $contains
```

```
 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 x_cpp="$wrapper"
 x_minus=''
 echo "Eureka!"
else
 dflt=''
 rp="No dice.  I can't find a C preprocessor.  Name one:"
 . ./myread
 x_cpp="$ans"
 x_minus=''
 $x_cpp <testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
  echo "OK, that will do." >&4
 else
echo "Sorry, I can't get that to work.  Go find one and rerun Configure." >&4
  exit 1
 fi
fi

case "$ok" in
false)
 cppstdin="$x_cpp"
 cppminus="$x_minus"
 cpprun="$x_cpp"
 cpplast="$x_minus"
?X:
?X: If /lib/cpp is used, try using a wrapper to increase our chances to have
?X: the C compiler and our $cppstdin agree on the same symbols... However,
?X: since cpprun is guaranteed not to be a wrapper, we must clear it if the
?X: only preprocessor we found was a wrapper, with all our luck...
?X:
 set X $x_cpp
 shift
 case "$1" in
 "$cpp")
  echo "Perhaps can we force $cc -E using a wrapper..."
  if $wrapper <testcpp.c >testcpp.out 2>&1; \
   $contains 'abc.*xyz'
 testcpp.out >/dev/null 2>&1
  then
   echo "Yup, we can."
   cppstdin="$wrapper"
   cppminus=';
  else
   echo "Nope, we'll have to live without it..."
  fi
  ;;
 esac
```

```
 case "$cpprun" in
 "$wrapper")
  cpprun=''
  cpplast=''
  ;;
 esac
 ;;
esac

case "$cppstdin" in
"$wrapper"|'cppstdin') ;;
*) $rm -f $wrapper;;
esac
$rm -f testcpp.c testcpp.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/cppstdin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strdup.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strdup.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:21:41  ram
?RCS: patch15: created
?RCS:
?MAKE:d_strdup: Inlibc
?MAKE: -pick add $@ %<
?S:d_strdup:
?S: This variable conditionally defines HAS_STRDUP if strdup() is
?S: available to duplicate strings in memory.
?S:.
?C:HAS_STRDUP:
?C: This symbol, if defined, indicates that the strdup routine is
?C: available to duplicate strings in memory. Otherwise, roll up
?C: your own...
?C:.
?H:#$d_strdup HAS_STRDUP  /**/
?H:.
?LINT:set
```

```
 d_strdup
: see if strdup exists
set strdup d_strdup
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strdup.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_expm1: Inlibc
?MAKE: -pick add $@ %<
?S:d_expm1:
?S: This variable conditionally defines the HAS_EXPM1 symbol, which
?S: indicates to the C program that the expm1() routine is available.
?S:.
?C:HAS_EXPM1:
?C: This symbol, if defined, indicates that the expm1 routine is
?C: available to do the exp(x) - 1 when x is near 1 function.
?C:.
?H:#$d_expm1 HAS_EXPM1  /**/
?H:.
?LINT:set d_expm1
: see if expm1 exists
set expm1 d_expm1
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_expm1.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: kernel.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: kernel.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:kernel: Getfile test
```

```
?MAKE: -pick add $@ %<
?S:kernel:
?S: This variable becomes the (fully rooted) path name of the kernel.
?S:.
: find the name of the kernel.
echo " "
case "$kernel" in
")
 if $test -r /unix; then
  dflt=/unix
 elif $test -r /vmunix; then
  dflt=/vmunix
 elif $test -r /xenix; then
  dflt=/xenix
 elif $test -r /mach; then
  dflt=/mach
 elif
 $test -r /dgux; then
  dflt=/dgux
 elif $test -r /hp-ux; then
  dflt=/hp-ux
 elif $test -r /syst; then
  dflt=/syst
 elif $test -r /arix; then
  dflt=/arix
 elif $test -r /irix; then
  dflt=/arix
 else
  dflt='unknown'
  set X /*x
  shift
  case $# in
  1)
   if $test -r "$1"; then
    dflt="$1"
   fi
   ;;
  esac
 fi
 ;;
*)
 dflt="$kernel"
 ;;
esac
fn=f
rp='What is the name of your kernel?'
. ./getfile
kernel="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/kernel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Csym.U,v 3.0.1.4 1995/07/25 13:36:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Csym.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:36:29  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS: patch56: added quotes for OS/2 support
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:00:33  ram
?RCS: patch54: fixed C test program to bypass gcc builtin type checks (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/31  09:34:13  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision
 3.0.1.1  1993/08/25  14:00:05  ram
?RCS: patch6: added ldflags as a conditional dependency and to compile line
?RCS: patch6: a final double quote was missing in csym variable after eval
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Csym mistrustnm extern_C: Options contains libc libs runnm test \
 +cc +optimize +ccflags +ldflags run rm_try _exe d_cplusplus
?MAKE: -pick add $@ %<
?LINT:define csym
?LINT:use libc
?LINT:extern mistrustnm
?LINT:set mistrustnm
?S:csym:
?S: This shell variable is used internally by Configure to check
?S: whether a given C symbol is defined or not. A typical use is:
?S:  set symbol result [-fva] [previous]
?S:  eval $csym
?S: That will set result to 'true' if the function [-f], variable [-v]
?S: or array [-a] is defined, 'false' otherwise. If a previous value is
```

```
?S: given and the -r flag was provided on the command line, that value
?S: is reused without questioning.
?S:.
?S:extern_C:
?S: ANSI C
 requires 'extern' where C++ requires 'extern "C"'. This
?S: variable can be used in Configure to do the right thing.
?S:.
?S:mistrustnm:
?S: This variable can be used to establish a fallthrough for the cases
?S: where nm fails to find a symbol.  If usenm is false or usenm is true
?S: and mistrustnm is false, this variable has no effect.  If usenm is true
?S: and mistrustnm is "compile", a test program will be compiled to try to
?S: find any symbol that can't be located via nm lookup.  If mistrustnm is
?S: "run", the test program will be run as well as being compiled.
?S:.
?V:csym
?T:tval tx tlook tf tdc
?F:!try
: is a C symbol defined?
csym='tlook=$1;
case "$3" in
-v) tf=libc.tmp; tdc="";;
-a) tf=libc.tmp; tdc="[]";;
*) tlook="^$1\$"; tf=libc.list; tdc="()";;
esac;
case "$d_cplusplus" in
   $define) extern_C="extern \"C\"" ;;
   *)  extern_C="extern" ;;
esac;
tx=yes;
case "$reuseval-$4" in
true-) ;;
true-*) tx=no; eval "tval=\$$4"; case "$tval" in "") tx=yes;; esac;;
esac;
case "$tx"
 in
yes)
?X:
?X: Put symbol inside a printf to fool optimizing compilers...
?X:
?X: We use 'short' instead of 'int' to try to circumvent overzealous
?X: optimizing compilers using built-in prototypes for commonly used
?X: routines to complain when seeing a different external declaration. For
?X: instance, gcc 2.6.3 fails if we use 'int' and we attempt a test against
?X: memcpy() on machines where sizeof(int) == sizeof(char *) (the usual return
?X: type), the compiler assuming it's a built-in declaration given that the
?X: returned size matches. At least with 'short' we are safe! -- RAM, for ADO
```

```
?X:
?X: Let's thank GNU cc for making our lives so easy! :-)
?X: (An alternative for the future would be to use our knowledge about gcc
?X: to force a -fno-builtin option in the compile test, in case the 'short'
?X: trick is obsoleted by future gcc releases). -- RAM
?X:
 tval=false;
 if $test "$runnm" = true; then
  if $contains $tlook $tf >/dev/null 2>&1; then
   tval=true;
  elif $test "$mistrustnm"
 = compile -o "$mistrustnm" = run; then
   echo "$extern_C void *$1$tdc; void *(*(p()))$tdc { return &$1; } int main(int argc, char **argv) { if(p() && p() !=
(void *)argv[0]) return(0); else return(1); }"> try.c;
   $cc -o try $optimize $ccflags $ldflags try.c >/dev/null 2>&1 $libs && tval=true;
   $test "$mistrustnm" = run -a -x try && { $run ./try$_exe >/dev/null 2>&1 || tval=false; };
   $rm_try;
  fi;
 else
  echo "$extern_C void *$1$tdc; void *(*(p()))$tdc { return &$1; } int main(int argc, char **argv) { if(p() && p() !=
(void *)argv[0]) return(0); else return(1); }"> try.c;
  $cc -o try $optimize $ccflags $ldflags try.c $libs >/dev/null 2>&1 && tval=true;
  $rm_try;
 fi;
 ;;
*)
 case "$tval" in
 $define) tval=true;;
 *) tval=false;;
 esac;
 ;;
esac;
eval "$2=$tval"'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/Csym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gnulibc.U,v 3.0.1.1 1997/02/28 15:34:33 ram Exp $
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
?RCS: Copyright (c) 1996, Sven Verdoolaege
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_gnulibc.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_gnulibc gnulibc_version: Myread Oldconfig Setvar rm_try \
 cat Compile run
?MAKE: -pick add $@ %<
?S:d_gnulibc:
?S: Defined if we're dealing with the GNU C Library.
?S:.
?S:gnulibc_version:
?S: This variable contains the version number of the GNU C library.
?S: It is
 usually something like '2.2.5'.  It is a plain '' if this
?S: is not the GNU C library, or if the version is unknown.
?S:.
?C:HAS_GNULIBC:
?C: This symbol, if defined, indicates to the C program that
?C: the GNU C library is being used.  A better check is to use
?C: the __GLIBC__ and __GLIBC_MINOR__ symbols supplied with glibc.
?C:.
?H:#$d_gnulibc HAS_GNULIBC /**/
?H:?%<:#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)
?H:?%<:#   define _GNU_SOURCE
?H:?%<:#endif
?H:.
?F:!glibc.ver !try
?LINT: set d_gnulibc
?X: gnulibc can be executed by calling __libc_main().
?X: Ulrich Drepper doesn't think any other libc does that,
?X: but we check if it says 'GNU C Library' to be sure.
?X:
?X: Alas, as of 3/1998 glibc 2.0.7 reportedly isn't going to
?X: have __libc_main() anymore. :-(.  Fortunately, all released
?X: versions of glibc 2.x.x _do_ have CPP variables.  For 2.0.6,
?X: they are:
?X: #define __GLIBC__  2
?X: #define__GLIBC_MINOR__ 0.
?X: (The '6' isn't available :-(.
?X: glibc2.1 will also
 have
?X:  extern const char * __gnu_get_libc_release(void);
?X:  extern const char * __gnu_get_libc_version(void);
?X: functions.   --thanks to Andreas Jaeger.   --AD  6/1998.
?X: Although the exact format isn't documented, __gnu_get_libc_version()
?X: returns a simple string '2.1.3' in glibc 2.1.3.
```

```
?X:
: Check if we are using the GNU C library
echo " "
echo "Checking for GNU C Library..." >&4
cat >try.c <<'EOCP'
/* Find out version of GNU C library.  __GLIBC__ and __GLIBC_MINOR__
  alone are insufficient to distinguish different versions, such as
  2.0.6 and 2.0.7.  The function gnu_get_libc_version() appeared in
  libc version 2.1.0.      A. Dougherty,  June 3, 2002.
*/
#include <stdio.h>
int main(void)
{
#ifdef __GLIBC__
#   ifdef __GLIBC_MINOR__
#       if __GLIBC__ >= 2 && __GLIBC_MINOR__ >= 1 && !defined(__cplusplus)
#           include <gnu/libc-version.h>
     printf("%s\n",  gnu_get_libc_version());
#       else
     printf("%d.%d\n",  __GLIBC__, __GLIBC_MINOR__);
#
   endif
#   else
 printf("%d\n",  __GLIBC__);
#   endif
   return 0;
#else
   return 1;
#endif
}
EOCP
set try
if eval $compile_ok && $run ./try > glibc.ver; then
 val="$define"
 gnulibc_version=`$cat glibc.ver`
 echo "You are using the GNU C Library version $gnulibc_version"
else
 val="$undef"
 gnulibc_version=''
 echo "You are not using the GNU C Library"
fi
$rm_try glibc.ver
set d_gnulibc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_gnulibc.U

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```
?RCS: $Id: netdbtype.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: netdbtype.U,v $
?RCS:
?MAKE:netdb_host_type netdb_hlen_type netdb_name_type netdb_net_type: \
 Protochk Oldconfig Myread cat \
 d_gethbyaddr d_gethbyname d_getnbyaddr \
 i_niin i_netdb i_unistd d_socket sizetype extern_C
?MAKE: -pick add $@ %<
?S:netdb_host_type:
?S: This variable holds the type used for the 1st argument to
?S: gethostbyaddr().  Usually, this is char * or void *,  possibly
?S: with or without a const prefix.
?S: This is only useful if you have gethostbyaddr(), naturally.
?S:.
?S:netdb_hlen_type:
?S: This variable holds the type used for the 2nd argument to
?S: gethostbyaddr().  Usually,
 this is int or size_t or unsigned.
?S: This is only useful if you have gethostbyaddr(), naturally.
?S:.
?S:netdb_name_type:
?S: This variable holds the type used for the argument to
?S: gethostbyname().  Usually, this is char * or const char *.
?S: This is only useful if you have gethostbyname(), naturally.
?S:.
?S:netdb_net_type:
?S: This variable holds the type used for the 1st argument to
?S: getnetbyaddr().  Usually, this is int or long.
?S: This is only useful if you have getnetbyaddr(), naturally.
?S:.
?C:Netdb_host_t:
?C: This symbol holds the type used for the 1st argument
?C: to gethostbyaddr().
?C:.
?C:Netdb_hlen_t:
?C: This symbol holds the type used for the 2nd argument
?C: to gethostbyaddr().
?C:.
```

```
?C:Netdb_name_t:
?C: This symbol holds the type used for the argument to
?C: gethostbyname().
?C:.
?C:Netdb_net_t:
?C: This symbol holds the type used for the 1st argument to
?C: getnetbyaddr().
?C:.
?H:#define Netdb_host_t  $netdb_host_type /**/
?H:#define Netdb_hlen_t  $netdb_hlen_type
 /**/
?H:#define Netdb_name_t  $netdb_name_type /**/
?H:#define Netdb_net_t  $netdb_net_type /**/
?H:.
?T:xxx yyy try hdrs
@if netdb_host_type || Netdb_host_t || netdb_hlen_type || Netdb_hlen_t
: check for type of arguments to gethostbyaddr.
if test "X$netdb_host_type" = X -o "X$netdb_hlen_type" = X; then
 case "$d_gethbyaddr" in
 $define)
  $cat <<EOM

Checking to see what type of arguments are accepted by gethostbyaddr().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin netinet/in.h
   $i_netdb netdb.h
   $i_unistd unistd.h"
  : The first arg can 'char *' or 'void *'
  : The second arg is some of integral type
  for xxx in in_addr_t 'const void *' 'const char *' 'void *' 'char *'; do
   for yyy in size_t long int; do
    case "$netdb_host_type" in
    ") try="$extern_C struct hostent *gethostbyaddr($xxx, $yyy, int);"
     if ./protochk "$try" $hdrs; then
      echo "Your system accepts $xxx for the first arg."
      echo "...and $yyy for the second arg."
      netdb_host_type="$xxx"
      netdb_hlen_type="$yyy"
     fi
     ;;
    esac
   done
  done
  :
 In case none of those worked, prompt the user.
  case "$netdb_host_type" in
```

```
  ") rp='What is the type for the 1st argument to gethostbyaddr?'
   dflt='char *'
   . ./myread
   netdb_host_type=$ans
   rp='What is the type for the 2nd argument to gethostbyaddr?'
   dflt="$sizetype"
   . ./myread
   netdb_hlen_type=$ans
   ;;
  esac
  ;;
 *) : no gethostbyaddr, so pick harmless defaults
  netdb_host_type='char *'
  netdb_hlen_type="$sizetype"
  ;;
 esac
 # Remove the "const" if needed. -- but then we'll have a
 # prototype clash!
 # netdb_host_type=`echo "$netdb_host_type" | sed 's/^const //'`
fi
@end

@if netdb_name_type || Netdb_name_t
: check for type of argument to gethostbyname.
if test "X$netdb_name_type" = X ; then
 case "$d_gethbyname" in
 $define)
  $cat <<EOM

Checking to see what type of argument is accepted by gethostbyname().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin
 netinet/in.h
   $i_netdb netdb.h
   $i_unistd unistd.h"
  for xxx in "const char *" "char *"; do
   case "$netdb_name_type" in
   ") try="$extern_C struct hostent *gethostbyname($xxx);"
    if ./protochk "$try" $hdrs; then
     echo "Your system accepts $xxx."
     netdb_name_type="$xxx"
    fi
    ;;
   esac
  done
  : In case none of those worked, prompt the user.
```

```
  case "$netdb_name_type" in
  ") rp='What is the type for the 1st argument to gethostbyname?'
   dflt='char *'
   . ./myread
   netdb_name_type=$ans
   ;;
  esac
  ;;
 *) : no gethostbyname, so pick harmless default
  netdb_name_type='char *'
  ;;
 esac
fi
@end

@if netdb_net_type || Netdb_net_t
: check for type of 1st argument to getnetbyaddr.
if test "X$netdb_net_type" = X ; then
 case "$d_getnbyaddr" in
 $define)
  $cat <<EOM

Checking to see what type of 1st argument is accepted by getnetbyaddr().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin netinet/in.h
   $i_netdb netdb.h
   $i_unistd
 unistd.h"
  for xxx in in_addr_t "unsigned long" long "unsigned int" int; do
   case "$netdb_net_type" in
   ") try="$extern_C struct netent *getnetbyaddr($xxx, int);"
    if ./protochk "$try" $hdrs; then
     echo "Your system accepts $xxx."
     netdb_net_type="$xxx"
    fi
    ;;
   esac
  done
  : In case none of those worked, prompt the user.
  case "$netdb_net_type" in
  ") rp='What is the type for the 1st argument to getnetbyaddr?'
   dflt='long'
   . ./myread
   netdb_net_type=$ans
   ;;
  esac
```

```
  ;;
 *) : no getnetbyaddr, so pick harmless default
  netdb_net_type='long'
  ;;
 esac
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/netdbtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS:
?X:
?X: This unit is just a quick shorthand for the compile command
?X: to be used in all the other metaconfig units.
?X:
?MAKE:Compile: +cc +optimize +ccflags +ldflags +libs
?MAKE: -pick add $@ %<
?LINT:define compile compile_ok
?V:compile compile_ok mc_file
?S:compile:
?S: This shell variable is used internally
 by Configure to provide
?S: a convenient shorthand for the typical compile command, namely
?S: $cc $optimize $ccflags $ldflags -o $1 $1.c $libs > /dev/null 2>&1
?S: Note that the output filename does _not_ include the _exe
?S: extension.  Instead we assume that the linker will be
?S: "helpful" and automatically appending the correct suffix.
?S: OS/2 users will apparently need to supply the -Zexe flag to
?S: get this behavior.
?S:
?S: To use this variable, say something like:
```

```
?S:  echo 'int main() { exit(0); }' > try.c
?S:  set try
?S:  if eval $compile; then
?S:   echo "success"   # and do whatever . . .
?S:  else
?S:   echo "failure"   # and do whatever . . .
?S:  fi
?S: To add extra flags cc flags (e.g. -DWHATEVER) just put them
?S: in $*, e.g.
?S:  set try -DTRY_THIS_FLAG
?S:.
?S:compile_ok:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command that you
?S: expect to work ok.  It is the same as $compile,
 except we
?S: deliberately let the user see any error messages.
?S:.
: define a shorthand compile call
compile='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
: define a shorthand compile call for compilations that should be ok.
compile_ok='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs;'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Compile.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmat.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:04:23  ram
?RCS: patch56: use findhdr to find <sys/shm.h>, to get the right one (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:18:56  ram
```

```
?RCS: patch27: added new symbol HAS_SHMAT_PROTOTYPE (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:54:18  ram
?RCS: patch23: new Shmat_t symbol to declare return type of shmat()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmat shmattype
 d_shmatprototype: Inlibc cat +cc +ccflags \
 rm cppstdin cppflags cppminus Findhdr Setvar contains
?MAKE: -pick add $@ %<
?S:d_shmat:
?S: This variable conditionally defines the HAS_SHMAT symbol, which
?S: indicates to the C program that the shmat() routine is available.
?S:.
?S:shmattype:
?S: This symbol contains the type of pointer returned by shmat().
?S: It can be 'void *' or 'char *'.
?S:.
?S:d_shmatprototype:
?S: This variable conditionally defines the HAS_SHMAT_PROTOTYPE
?S: symbol, which indicates that sys/shm.h has a prototype for
?S: shmat.
?S:.
?C:HAS_SHMAT:
?C: This symbol, if defined, indicates that the shmat() routine is
?C: available to attach a shared memory segment to the process space.
?C:.
?C:Shmat_t:
?C: This symbol holds the return type of the shmat() system call.
?C: Usually set to 'void *' or 'char *'.
?C:.
?C:HAS_SHMAT_PROTOTYPE:
?C: This symbol, if defined, indicates that the sys/shm.h includes
?C: a prototype for shmat().  Otherwise, it is up to the program
 to
?C: guess one.  Shmat_t shmat _((int, Shmat_t, int)) is a good guess,
?C: but not always right so it should be emitted by the program only
?C: when HAS_SHMAT_PROTOTYPE is not defined to avoid conflicting defs.
?C:.
?H:#$d_shmat HAS_SHMAT  /**/
?H:#define Shmat_t $shmattype /**/
?H:#$d_shmatprototype HAS_SHMAT_PROTOTYPE /**/
?H:.
?LINT:set d_shmat d_shmatprototype
?T:xxx
: see if shmat exists
```

```
set shmat d_shmat
eval $inlibc
: see what shmat returns
case "$d_shmat" in
"$define")
 $cat >shmat.c <<'END'
#include <sys/shm.h>
void *shmat();
END
 if $cc $ccflags -c shmat.c >/dev/null 2>&1; then
  shmattype='void *'
 else
  shmattype='char *'
 fi
 echo "and it returns ($shmattype)." >&4
 : see if a prototype for shmat is available
 xxx=`./findhdr sys/shm.h`
 $cppstdin $cppflags $cppminus < $xxx > shmat.c 2>/dev/null
 if $contains 'shmat.*(' shmat.c >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 $rm -f shmat.[co]
 ;;
*)
 val="$undef"
 ;;
esac
set d_shmatprototype
eval $setvar
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmat.U
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```
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?RCS:
?RCS: $Log: i_varhdr.U,v $
```

```
?RCS: Revision 3.0.1.3  1997/02/28  15:54:42  ram
?RCS: patch61: varargs script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:21:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:26:05  ram
?RCS: patch27: this unit now supersedes old i_stdarg.U and i_varargs.U
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:49  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?MAKE:i_stdarg i_varargs i_varhdr: cat +cc +ccflags rm test Setvar \
 Findhdr Warn startsh _o
?MAKE: -pick add $@ %<
?S:i_stdarg:
?S: This variable conditionally defines the I_STDARG symbol, which
?S: indicates to the C program that <stdarg.h> exists and should
?S: be included.
?S:.
?S:i_varargs:
?S: This variable conditionally defines I_VARARGS, which indicates
?S: to the C program that it should include <varargs.h>.
?S:.
?S:i_varhdr:
?S: Contains the name of the header to be included to get va_dcl definition.
?S: Typically one of varargs.h or stdarg.h.
?S:.
?C:I_STDARG:
?C: This symbol, if defined, indicates that <stdarg.h> exists and should
?C: be included.
?C:.
?C:I_VARARGS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <varargs.h>.
?C:.
?H:#$i_stdarg I_STDARG  /**/
?H:#$i_varargs I_VARARGS /**/
?H:.
?W:%<:va_dcl
?F:!varargs
?T:valstd
?LINT:set i_stdarg i_varargs
?X:
?X: Don't use setvar because the varags test
```

```
 below might override these.
?X: Actually, the messages here are just informative. We don't wish to set
?X: i_varargs or i_stdarg to their final value before knowing which of the
?X: two we'll include.
?X:
: see if stdarg is available
echo " "
if $test `./findhdr stdarg.h`; then
 echo "<stdarg.h> found." >&4
 valstd="$define"
else
 echo "<stdarg.h> NOT found." >&4
 valstd="$undef"
fi

: see if varags is available
echo " "
if $test `./findhdr varargs.h`; then
 echo "<varargs.h> found." >&4
else
 echo "<varargs.h> NOT found, but that's ok (I hope)." >&4
fi

?X:
?X: if you have stdarg.h, you need to support prototypes to actually use it;
?X: but if stdarg.h exists and the compiler doesn't support prototypes (for some
?X: bizarre reason), we'll fall back to varargs.h anyway so it's not so bad.
?X:
: set up the varargs testing programs
$cat > varargs.c <<EOP
#ifdef I_STDARG
#include <stdarg.h>
#endif
#ifdef I_VARARGS
#include <varargs.h>
#endif

#ifdef I_STDARG
int f(char *p, ...)
#else
int
 f(va_alist)
va_dcl
#endif
{
 va_list ap;
#ifndef I_STDARG
 char *p;
```

```
#endif
#ifdef I_STDARG
 va_start(ap,p);
#else
 va_start(ap);
 p = va_arg(ap, char *);
#endif
 va_end(ap);
}
EOP
$cat > varargs <<EOP
$startsh
if $cc -c $ccflags -D\$1 varargs.c >/dev/null 2>&1; then
 echo "true"
else
 echo "false"
fi
$rm -f varargs$_o
EOP
chmod +x varargs

: now check which varargs header should be included
echo " "
i_varhdr=''
case "$valstd" in
"$define")
 if `./varargs I_STDARG`; then
  val='stdarg.h'
 elif `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
*)
 if `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
esac
case "$val" in
'')
 ./warn "I could not find the definition for va_dcl... You have problems..."
 val="$undef"; set i_stdarg; eval $setvar
 val="$undef"; set i_varargs; eval $setvar
 ;;
*)
 set i_varhdr
 eval $setvar
 case "$i_varhdr" in
```

```
 stdarg.h)
  val="$define"; set i_stdarg; eval $setvar
  val="$undef"; set i_varargs; eval $setvar
  ;;
 varargs.h)
  val="$undef"; set i_stdarg;
 eval $setvar
  val="$define"; set i_varargs; eval $setvar
  ;;
 esac
 echo "We'll include <$i_varhdr> to get va_dcl definition." >&4;;
esac
$rm -f varargs*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_varhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_raster.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_raster.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_raster rasterlib: cat test Setvar Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_raster:
?S: Conditionally defines RASTER_TEK if this is a raster tech machine.
?S:.
?S:rasterlib (d_rasterlib):
?S: Set to the needed compile flag if this is a raster tech machine.
?S: It is up to the Makefile to use this variable.
?S:.
?C:RASTER_TEK:
?C: Defined
 if this is a rastertech machine.
?C:.
?H:#$d_raster RASTER_TEK /**/
?H:.
?LINT:set d_raster
```

```
: See if this is a raster tech machine.
val="$undef"
rasterlib="
if $test -r /dev/mirage; then
 $cat <<'EOM'

You seem to have a mirage device... this is normally associated with a raster
technologies graphics workstation. If this is right, you may want to use raster
tech in this program.

EOM
 dflt=y
 case "$d_raster" in
 "$undef") dflt=n;;
 esac
 rp='Use raster tech?'
 . ./myread
 case "$ans" in
 y*) val="$define";;
 esac
fi
set d_raster
eval $setvar

case "$d_raster" in
"$define") rasterlib='-lphigs';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_raster.U
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```
?RCS: $Id: d_pause.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pause.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:54  ram
?RCS: patch32: created by ADO
?RCS:
```

```
?MAKE:d_pause: Inlibc
?MAKE: -pick add $@ %<
?S:d_pause:
?S: This variable conditionally defines the HAS_PAUSE symbol, which
?S: indicates to the C program that the pause() routine is available
?S: to suspend a process until a signal is received.
?S:.
?C:HAS_PAUSE :
?C: This symbol,
 if defined, indicates that the pause routine is
?C: available to suspend a process until a signal is received.
?C:.
?H:#$d_pause HAS_PAUSE  /**/
?H:.
?LINT:set d_pause
: see if pause exists
set pause d_pause
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pause.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_pwd.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:10:57  ram
?RCS: patch56: use setvar so hint file values can override our guesses (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:03:27  ram
?RCS: patch23: had forgotten cppminus in cppstdin test (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks whether there is a pwd system or not
?X:
?MAKE:i_pwd d_pwquota d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment:
```

```
 \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_pwd:
?S: This variable conditionally defines I_PWD, which indicates
?S: to the C program that it should include <pwd.h>.
?S:.
?S:d_pwquota:
?S: This varaible conditionally defines PWQUOTA, which indicates
?S: that struct passwd contains pw_quota.
?S:.
?S:d_pwage:
?S: This varaible conditionally defines PWAGE, which indicates
?S: that struct passwd contains pw_age.
?S:.
?S:d_pwchange:
?S: This varaible conditionally defines PWCHANGE, which indicates
?S: that struct passwd contains pw_change.
?S:.
?S:d_pwclass:
?S: This varaible conditionally defines PWCLASS, which indicates
?S: that struct passwd contains pw_class.
?S:.
?S:d_pwexpire:
?S: This varaible conditionally defines PWEXPIRE, which indicates
?S: that struct passwd contains pw_expire.
?S:.
?S:d_pwcomment:
?S: This varaible conditionally defines PWCOMMENT, which indicates
?S: that struct passwd contains pw_comment.
?S:.
?C:I_PWD:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include <pwd.h>.
?C:.
?C:PWQUOTA:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_quota.
?C:.
?C:PWAGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_age.
?C:.
?C:PWCHANGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_change.
?C:.
```

```
?C:PWCLASS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_class.
?C:.
?C:PWEXPIRE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_expire.
?C:.
?C:PWCOMMENT:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_comment.
?C:.
?H:#$i_pwd I_PWD  /**/
?H:#$d_pwquota PWQUOTA /**/
?H:#$d_pwage PWAGE /**/
?H:#$d_pwchange PWCHANGE /**/
?H:#$d_pwclass PWCLASS /**/
?H:#$d_pwexpire PWEXPIRE /**/
?H:#$d_pwcomment PWCOMMENT /**/
?H:.
?LINT: set i_pwd d_pwquota
 d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment
?T:xxx
: see if this is a pwd.h system
set pwd.h i_pwd
eval $inhdr

case "$i_pwd" in
$define)
 xxx=`./findhdr pwd.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'pw_quota' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwquota
 eval $setvar

 if $contains 'pw_age' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwage
 eval $setvar
```

```
 if $contains 'pw_change' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwchange
 eval $setvar

 if $contains 'pw_class' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwclass
 eval $setvar

 if $contains 'pw_expire' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwexpire
 eval $setvar

 if $contains 'pw_comment' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwcomment
 eval $setvar

 $rm -f $$.h
 ;;
*)
 val="$undef";
 set
 d_pwquota; eval $setvar
 set d_pwage; eval $setvar
 set d_pwchange; eval $setvar
 set d_pwclass; eval $setvar
 set d_pwexpire; eval $setvar
 set d_pwcomment; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_pwd.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:versionony: cat Myread Setvar Devel
?MAKE: -pick add $@ %<
?LINT:set versionony
?Y:TOP
?S:versionony:
?S: If set, this symbol indicates that only the version-specific
?S: components of a perl installation should be installed.
?S: This may be useful for making a test installation of a new
?S: version without disturbing the existing installation.
?S: Setting versionony is equivalent to setting installperl's -v option.
?S: In particular, the non-versioned scripts and programs such as
?S: a2p, c2ph, h2xs, pod2*, and perldoc
 are not installed
?S: (see INSTALL for a more complete list).  Nor are the man
?S: pages installed.
?S: Usually, this is undef.
?S:.
?LINT:extern inc_version_list
?LINT:change inc_version_list
?LINT:extern inc_version_list_init
?LINT:change inc_version_list_init
?LINT:extern version
: determine whether to use a version number suffix for installed binaries
echo " "
$cat <<EOM
Do you want to use a version number suffix for installed binaries? This
will install 'perl$version' instead of 'perl', and likewise for other
binaries like 'perldoc' and 'cpan'. This allows many versions of perl
to be installed side-by-side. Unless you are a developer, you probably
do *not* want to do this.
EOM
case "$versionony" in
"$define"|[Yy]*|true) dflt='y' ;;
*) dflt='n';
esac
rp="Do you want to use a version number suffix for installed binaries?"
```

```
. ./myread
case "$ans" in
[yY]*) val="$define";;
*) val="$undef" ;;
esac
set versionononly
eval $setvar

case "$versionononly" in
"$define") inc_version_list="
        inc_version_list_init=0
       ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/versionononly.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nan: Inlibc
?MAKE: -pick add $@ %<
?S:d_nan:
?S: This variable conditionally defines HAS_NAN if nan() is
?S: available to generate NaN.
?S:.
?C:HAS_NAN:
?C: This symbol, if defined, indicates that the nan routine is
?C: available to generate NaN.
?C:.
?H:#$d_nan HAS_NAN  /**/
?H:.
?LINT:set d_nan
: see if nan exists
set nan d_nan
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nan.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perlxv.U,v 1.1 2000/08/31 17:53:56 jhi Exp jhi $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:ivtype uvtype nvtype ivsize uvsize nvsize \
    i8type u8type i16type u16type i32type u32type i64type u64type \
    i8size u8size i16size u16size i32size u32size i64size u64size \
    d_nv_preserves_uv nv_preserves_uv_bits nv_overflows_integers_at \
    d_nv_zero_is_allbits_zero: \
 echo rm_try use64bitint d_quad quadtype uquadtype usequadmath \
 d_longdbl uselongdouble longdblsize doublesize i_quadmath \
 shortsize intsize longsize i_stdlib libs gccversion \
 cat Compile i_inttypes test signal_t run
?MAKE: -pick add $@ %<
?S:ivtype:
?S: This variable contains the C type used for Perl's IV.
?S:.
?S:uvtype:
?S: This variable contains the C type
 used for Perl's UV.
?S:.
?S:nvtype:
?S: This variable contains the C type used for Perl's NV.
?S:.
?S:i8type:
?S: This variable contains the C type used for Perl's I8.
?S:.
?S:u8type:
?S: This variable contains the C type used for Perl's U8.
?S:.
?S:i16type:
?S: This variable contains the C type used for Perl's I16.
?S:.
?S:u16type:
?S: This variable contains the C type used for Perl's U16.
?S:.
?S:i32type:
?S: This variable contains the C type used for Perl's I32.
?S:.
?S:u32type:
?S: This variable contains the C type used for Perl's U32.
?S:.
?S:i64type:
?S: This variable contains the C type used for Perl's I64.
?S:.
?S:u64type:
?S: This variable contains the C type used for Perl's U64.
?S:.
?S:ivsize:
?S: This variable is the size of an IV in bytes.
?S:.
```

```
?S:uvsize:
?S: This variable is the size of a UV in bytes.
?S:.
?S:i8size:
?S: This variable is the size of an I8 in bytes.
?S:.
?S:u8size:
?S: This variable is the size of an U8 in bytes.
?S:.
?S:i16size:
?S: This variable is the
 size of an I16 in bytes.
?S:.
?S:u16size:
?S: This variable is the size of an U16 in bytes.
?S:.
?S:i32size:
?S: This variable is the size of an I32 in bytes.
?S:.
?S:u32size:
?S: This variable is the size of an U32 in bytes.
?S:.
?S:i64size:
?S: This variable is the size of an I64 in bytes.
?S:.
?S:u64size:
?S: This variable is the size of an U64 in bytes.
?S:.
?S:nvsize:
?S: This variable is the size of a Perl NV in bytes.
?S: Note that some floating point formats have unused bytes.
?S:.
?S:d_nv_preserves_uv:
?S: This variable indicates whether a variable of type nvtype
?S: can preserve all the bits a variable of type uvtype.
?S:.
?S:nv_preserves_uv_bits:
?S: This variable indicates how many of bits type uvtype
?S: a variable nvtype can preserve.
?S:.
?S:nv_overflows_integers_at:
?S: This variable gives the largest integer value that NVs can hold
?S: as a constant floating point expression.
?S: If it could not be determined, it holds the value 0.
?S:.
?S:d_nv_zero_is_allbits_zero:
?S: This
```

variable indicates whether a variable of type nvtype
?S: stores 0.0 in memory as all bits zero.
?S:.
?C:IVTYPE:
?C: This symbol defines the C type used for Perl's IV.
?C:.
?C:UVTYPE:
?C: This symbol defines the C type used for Perl's UV.
?C:.
?C:I8TYPE:
?C: This symbol defines the C type used for Perl's I8.
?C:.
?C:U8TYPE:
?C: This symbol defines the C type used for Perl's U8.
?C:.
?C:I16TYPE:
?C: This symbol defines the C type used for Perl's I16.
?C:.
?C:U16TYPE:
?C: This symbol defines the C type used for Perl's U16.
?C:.
?C:I32TYPE:
?C: This symbol defines the C type used for Perl's I32.
?C:.
?C:U32TYPE:
?C: This symbol defines the C type used for Perl's U32.
?C:.
?C:I64TYPE:
?C: This symbol defines the C type used for Perl's I64.
?C:.
?C:U64TYPE:
?C: This symbol defines the C type used for Perl's U64.
?C:.
?C:NVTYPE:
?C: This symbol defines the C type used for Perl's NV.
?C:.
?C:IVSIZE:
?C: This symbol contains the sizeof(IV).
?C:.
?C:UVSIZE:
?C: This symbol contains the
sizeof(UV).
?C:.
?C:I8SIZE:
?C: This symbol contains the sizeof(I8).
?C:.
?C:U8SIZE:
?C: This symbol contains the sizeof(U8).

```
?C:.
?C:I16SIZE:
?C: This symbol contains the sizeof(I16).
?C:.
?C:U16SIZE:
?C: This symbol contains the sizeof(U16).
?C:.
?C:I32SIZE:
?C: This symbol contains the sizeof(I32).
?C:.
?C:U32SIZE:
?C: This symbol contains the sizeof(U32).
?C:.
?C:I64SIZE:
?C: This symbol contains the sizeof(I64).
?C:.
?C:U64SIZE:
?C: This symbol contains the sizeof(U64).
?C:.
?C:NVSIZE:
?C: This symbol contains the sizeof(NV).
?C: Note that some floating point formats have unused bytes.
?C: The most notable example is the x86* 80-bit extended precision
?C: which comes in byte sizes of 12 and 16 (for 32 and 64 bit
?C: platforms, respectively), but which only uses 10 bytes.
?C: Perl compiled with -Duselongdouble on x86* is like this.
?C:.
?C:NV_PRESERVES_UV:
?C: This symbol, if defined, indicates that a variable of type NVTYPE
?C: can preserve all the bits of a variable of type UVTYPE.
?C:.
?C:NV_PRESERVES_UV_BITS:
?C: This
 symbol contains the number of bits a variable of type NVTYPE
?C: can preserve of a variable of type UVTYPE.
?C:.
?C:NV_OVERFLOWS_INTEGERS_AT:
?C: This symbol gives the largest integer value that NVs can hold. This
?C: value + 1.0 cannot be stored accurately. It is expressed as constant
?C: floating point expression to reduce the chance of decimal/binary
?C: conversion issues. If it can not be determined, the value 0 is given.
?C:.
?C:NV_ZERO_IS_ALLBITS_ZERO:
?C: This symbol, if defined, indicates that a variable of type NVTYPE
?C: stores 0.0 in memory as all bits zero.
?C:.
?H:#define IVTYPE  $ivtype  /**/
?H:#define UVTYPE  $uvtype  /**/
```

```
?H:#define I8TYPE  $i8type  /**/
?H:#define U8TYPE  $u8type  /**/
?H:#define I16TYPE  $i16type /**/
?H:#define U16TYPE  $u16type /**/
?H:#define I32TYPE  $i32type /**/
?H:#define U32TYPE  $u32type /**/
?H:?%<:#ifdef HAS_QUAD
?H:?%<:#define I64TYPE  $i64type /**/
?H:?%<:#define U64TYPE  $u64type /**/
?H:?%<:#endif
?H:#define NVTYPE  $nvtype  /**/
?H:#define IVSIZE  $ivsize  /**/
?H:#define UVSIZE  $uvsize  /**/
?H:#define I8SIZE  $i8size  /**/
?H:#define U8SIZE  $u8size  /**/
?H:#define I16SIZE  $i16size /**/
?H:#define U16SIZE  $u16size /**/
?H:#define I32SIZE  $i32size /**/
?H:#define U32SIZE  $u32size /**/
?H:?%<:#ifdef
 HAS_QUAD
?H:?%<:#define I64SIZE  $i64size /**/
?H:?%<:#define U64SIZE  $u64size /**/
?H:?%<:#endif
?H:#define NVSIZE  $nvsize  /**/
?H:#$d_nv_preserves_uv NV_PRESERVES_UV
?H:#define NV_PRESERVES_UV_BITS $nv_preserves_uv_bits
?H:#define NV_OVERFLOWS_INTEGERS_AT ($nv_overflows_integers_at)
?H:#$d_nv_zero_is_allbits_zero NV_ZERO_IS_ALLBITS_ZERO
?H:?%<:#if UVSIZE == 8
?H:?%<:#   ifdef BYTEORDER
?H:?%<:#       if BYTEORDER == 0x1234
?H:?%<:#           undef BYTEORDER
?H:?%<:#           define BYTEORDER 0x12345678
?H:?%<:#       else
?H:?%<:#           if BYTEORDER == 0x4321
?H:?%<:#               undef BYTEORDER
?H:?%<:#               define BYTEORDER 0x87654321
?H:?%<:#
    endif
?H:?%<:#       endif
?H:?%<:#   endif
?H:?%<:#endif
?H:.
?T:xxx
?T:d
?F:!try
: Check basic sizes
```

```
echo " "
$echo "Choosing the C types to be used for Perl's internal types..." >&4

case "$use64bitint:$d_quad:$quadtype" in
define:define:?*)
 ivtype="$quadtype"
 uvtype="$uquadtype"
 ivsize=8
 uvsize=8
 ;;
*) ivtype="long"
 uvtype="unsigned long"
 ivsize=$longsize
 uvsize=$longsize
 ;;
esac

case "$uselongdouble:$d_longdbl" in
define:define)
 nvtype="long double"
 nvsize=$longdblsize
 ;;
*) nvtype=double
 nvsize=$doublesize
 ;;
esac

case "$usequadmath:$i_quadmath" in
define:define)
 nvtype="__float128"
 nvsize=16
 case "$libs" in
 *quadmath*) ;;
 *) $cat <<EOM >&4

*** You requested the use of the quadmath library, but you
*** do not seem to have the quadmath library installed.
*** Cannot continue, aborting.
EOM
   exit 1
   ;;
 esac
 ;;
define:*) $cat <<EOM >&4

*** You requested the use of the quadmath library, but you
*** do not seem to have the required header, <quadmath.h>.
EOM
```

```
  case "$gccversion" in
 [23].*|4.[0-5]*)
  $cat <<EOM >&4
*** Your gcc looks a bit old:
*** $gccversion
EOM
   ;;
 ")
  $cat <<EOM >&4
*** You are not running a gcc.
EOM
   ;;
 esac
 $cat <<EOM >&4
*** For the quadmath library you need at least gcc 4.6.
*** Cannot continue, aborting.
EOM
 exit 1
 ;;
esac

$echo "(IV will be "$ivtype", $ivsize bytes)"
$echo "(UV will be "$uvtype", $uvsize bytes)"
$echo "(NV will be "$nvtype", $nvsize bytes)"

$cat >try.c <<EOCP
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#include <stdio.h>
int main() {
#ifdef INT8
  int8_t i =  INT8_MAX;
 uint8_t u = UINT8_MAX;
 printf("int8_t\n");
#endif
#ifdef INT16
  int16_t i =  INT16_MAX;
 uint16_t u = UINT16_MAX;
 printf("int16_t\n");
#endif
#ifdef INT32
  int32_t i =  INT32_MAX;
 uint32_t u = UINT32_MAX;
 printf("int32_t\n");
#endif
}
```

```
EOCP

i8type="signed char"
u8type="unsigned char"
i8size=1
u8size=1

case "$i16type" in
") case "$shortsize" in
 2) i16type=short
  u16type="unsigned
 short"
  i16size=$shortsize
  u16size=$shortsize
  ;;
 esac
 ;;
esac
case "$i16type" in
") set try -DINT16
 if eval $compile; then
  case "`$run ./try`" in
  int16_t)
   i16type=int16_t
   u16type=uint16_t
   i16size=2
   u16size=2
   ;;
  esac
 fi
 ;;
esac
case "$i16type" in
") if $test $shortsize -ge 2; then
  i16type=short
  u16type="unsigned short"
  i16size=$shortsize
  u16size=$shortsize
 fi
 ;;
esac

case "$i32type" in
") case "$longsize" in
 4) i32type=long
  u32type="unsigned long"
  i32size=$longsize
  u32size=$longsize
```

```
  ;;
 *) case "$intsize" in
  4) i32type=int
   u32type="unsigned int"
   i32size=$intsize
   u32size=$intsize
   ;;
  esac
  ;;
 esac
 ;;
esac
case "$i32type" in
") set try -DINT32
 if eval $compile; then
  case "`$run ./try`" in
  int32_t)
   i32type=int32_t
   u32type=uint32_t
   i32size=4
   u32size=4
   ;;
  esac
 fi
 ;;
esac
case "$i32type" in
") if $test $intsize -ge 4; then
  i32type=int
  u32type="unsigned int"
  i32size=$intsize
  u32size=$intsize
 fi
 ;;
esac

case
 "$i64type" in
") case "$d_quad:$quadtype" in
 define:?*)
  i64type="$quadtype"
  u64type="$uquadtype"
  i64size=8
  u64size=8
  ;;
 esac
 ;;
esac
```

```
$echo "Checking how many bits of your UVs your NVs can preserve..." >&4
$cat <<EOP >try.c
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
#ifdef SIGFPE
/* volatile so that the compiler has to store it out to memory */
volatile int bletched = 0;
$signal_t blech(int s) { bletched = 1; }
#endif
int main() {
   $uvtype u = 0;
   $nvtype d;
   int     n = 8 * $uvsize;
   int     i;
#ifdef SIGFPE
   signal(SIGFPE, blech);
#endif

   for (i = 0; i < n; i++) {
     u = u << 1 | ($uvtype)1;
     d = ($nvtype)u;
     if (($uvtype)d != u)
       break;
     if (d <= 0)
 break;
     d = ($nvtype)(u - 1);
     if (($uvtype)d != (u - 1))
       break;
#ifdef SIGFPE
     if (bletched)
 break;
#endif
   }
   printf("%d\n",
 ((i == n) ? -n : i));
   exit(0);
}
EOP
set try

d_nv_preserves_uv="$undef"
if eval $compile; then
```

```
 nv_preserves_uv_bits="`$run ./try`"
fi
case "$nv_preserves_uv_bits" in
\-[1-9]*)
 nv_preserves_uv_bits=`expr 0 - $nv_preserves_uv_bits`
 $echo "Your NVs can preserve all $nv_preserves_uv_bits bits of your UVs."  >&4
 d_nv_preserves_uv="$define"
 ;;
[1-9]*) $echo "Your NVs can preserve only $nv_preserves_uv_bits bits of your UVs."  >&4
 d_nv_preserves_uv="$undef" ;;
*) $echo "Can't figure out how many bits your NVs preserve." >&4
 nv_preserves_uv_bits="0" ;;
esac
$rm_try

$echo "Checking to find the largest integer value your NVs can hold..." >&4
$cat <<EOP >try.c
#include <stdio.h>

typedef $nvtype NV;

int
main() {
 NV value = 2;
 int count = 1;

 while(count < 256) {
   /* volatile so that the compiler has to store it out to memory */
   volatile NV up = value + 1.0;
   volatile NV negated = -value;
   volatile NV down = negated - 1.0;
   volatile NV got_up = up -
 value;
   int up_good = got_up == 1.0;
   int got_down = down - negated;
   int down_good = got_down == -1.0;

   if (down_good != up_good) {
     fprintf(stderr,
       "Inconsistency - up %d %f; down %d %f; for 2**%d (%.20f)\n",
       up_good, (double) got_up, down_good, (double) got_down,
       count, (double) value);
     return 1;
   }
   if (!up_good) {
     while (1) {
 if (count > 8) {
   count -= 8;
```

```
  fputs("256.0", stdout);
 } else {
  count--;
  fputs("2.0", stdout);
 }
 if (!count) {
  puts("");
  return 0;
 }
 fputs("*", stdout);
    }
  }
  value *= 2;
  ++count;
 }
 fprintf(stderr, "Cannot overflow integer range, even at 2**%d (%.20f)\n",
  count, (double) value);
 return 1;
}
EOP
set try

nv_overflows_integers_at='0'
if eval $compile; then
  xxx="`$run ./try`"
  case "$?" in
 0)
    case "$xxx" in
  2*)  cat >&4 <<EOM
The largest integer your NVs can preserve is equal to $xxx
EOM
     nv_overflows_integers_at="$xxx"
     ;;
  *)  cat
 >&4 <<EOM
Cannot determine the largest integer value your NVs can hold, unexpected output
'$xxx'
EOM
     ;;
    esac
    ;;
 *)  cat >&4 <<EOM
Cannot determine the largest integer value your NVs can hold
EOM
    ;;
  esac
fi
$rm_try
```

```
$echo "Checking whether NV 0.0 is all bits zero in memory..." >&4
$cat <<EOP >try.c
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>
#include <sys/types.h>
#include <signal.h>
#ifdef SIGFPE
/* volatile so that the compiler has to store it out to memory */
volatile int bletched = 0;
$signal_t blech(int s) { bletched = 1; }
#endif

int checkit($nvtype d, const char *where) {
   void *v = &d;
   unsigned char *p = (unsigned char *)v;
   unsigned char *end = p + sizeof(d);
   int fail = 0;

   while (p < end)
 fail += *p++;

   if (!fail)
 return 0;

   p = (unsigned char *)v;
   printf("No - %s: 0x", where);
   while (p < end)
 printf ("%02X", *p++);
   printf("\n");
   return 1;
}

int main(int
 argc, char **argv) {
   $nvtype d = 0.0;
   int fail = 0;
   fail += checkit(d, "0.0");

   /* The compiler shouldn't be assuming that bletched is 0  */
   d = bletched;

   fail += checkit(d, "bleched");
```

```
#ifdef SIGFPE
   signal(SIGFPE, blech);
#endif

   /* Paranoia - the compiler should have no way of knowing that ANSI says
      that argv[argc] will always be NULL.  Actually, if it did assume this it
      would be buggy, as this is C and main() can be called from elsewhere in
      the program.  */
   d = argv[argc] ? 1 : 0;

   if (d) {
 printf("Odd argv[argc]=%p, d=%g\n", argv[argc], d);
   }

   fail += checkit(d, "ternary");

   memset(&d, sizeof(d), argv[argc] ? 1 : 0);

   if (d != 0.0) {
 printf("No - memset doesn't give 0.0\n");
 /* This might just blow up:  */
 printf("(gives %g)\n", d);
 return 1;
   }

#ifdef SIGFPE
   if (bletched) {
 printf("No - something bleched\n");
 return 1;
   }
#endif
   if (fail) {
     printf("No - %d fail(s)\n",
 fail);
     return 1;
   }
   printf("Yes\n");
   return 0;
}
EOP
set try

d_nv_zero_is_allbits_zero="$undef"
if eval $compile; then
   xxx="`$run ./try`"
   case "$?" in
 0)
     case "$xxx" in
```

```
  Yes)  cat >&4 <<EOM
0.0 is represented as all bits zero in memory
EOM
     d_nv_zero_is_allbits_zero="$define"
     ;;
  *)  cat >&4 <<EOM
0.0 is not represented as all bits zero in memory
EOM
     d_nv_zero_is_allbits_zero="$undef"
     ;;
    esac
    ;;
 *)  cat >&4 <<EOM
0.0 is not represented as all bits zero in memory
EOM
    d_nv_zero_is_allbits_zero="$undef"
    ;;
   esac
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlxv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: fpostype.U,v 3.0.1.2 1994/08/29 16:20:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: fpostype.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:20:52  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:59  ram
?RCS: patch30: created
?RCS:
?MAKE:fpostype: Myread Typedef
?MAKE: -pick add $@ %<
?S:fpostype:
?S: This variable defines Fpos_t to be something like fpos_t, long,
?S: uint, or whatever type is used to declare file positions in libc.
?S:.
```

```
?C:Fpos_t:
?C: This symbol holds
 the type used to declare file positions in libc.
?C: It can be fpos_t, long, uint, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Fpos_t $fpostype  /* File position type */
?H:.
?LINT:set fpostype
: see what type file positions are declared as in the library
rp="What is the type for file position used by fsetpos()?"
set fpos_t fpostype long stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/fpostype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: randfunc.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the new unit that should be used when random
?X: functions are to be used. It thus makes randbits.U obsolete.
?X:
?MAKE:randfunc mrand seedfunc nrandbits: cat +cc rm test Myread Csym
?MAKE: -pick add $@ %<
?S:randfunc:
?S: Indicates the name of the random number function to use.
?S: Values include drand48, random, and rand. In C programs,
?S: the 'nrand' macro is defined
 to generate uniformly distributed
?S: random numbers over the range [0., 1.] (see mrand and nrand).
?S:.
?S:mrand:
?S: Indicates the macro to be used to generate normalized
?S: random numbers.  Uses randfunc, often divided by
```

```
?S: (double) ((1 << nrandbits) -1) in order to normalize the result.
?S: In C programs, the macro 'nrand' is maped on mrand.
?S:.
?S:seedfunc:
?S: Indicates the random number generating seed function.
?S: Values include srand48, srandom, and srand.
?S:.
?S:nrandbits:
?S: Indicates how many bits are produced by the function used to
?S: generate normalized random numbers.
?S:.
?C:nrand:
?C: This macro is to be used to generate uniformly distributed
?C: random numbers over the range [0., 1.].
?C:.
?C:seednrand:
?C: This symbol defines the macro to be used in seeding the
?C: random number generator (see nrand).
?C:.
?H:#define nrand()  $mrand  /**/
?H:#define seednrand(x) $seedfunc(x) /**/
?H:.
?T:cont val
?LINT:nothere $nrandbits)
: How can we generate normalized
 random numbers ?
echo " "
case "$randfunc" in
")
 if set drand48 val -f; eval $csym; $val; then
  dflt="drand48"
  echo "Good, found drand48()." >&4
 elif set random val -f; eval $csym; $val; then
  dflt="random"
  echo "OK, found random()." >&4
 else
  dflt="rand"
  echo "Yick, looks like I have to use rand()." >&4
 fi
 echo " "
 ;;
*)
 dflt="$randfunc"
 ;;
esac
cont=true
while $test "$cont"; do
 rp="Use which function to generate random numbers?"
```

```
 . ./myread
?X: Invalidates nrandbits if the answer is not the default so
?X: that the value stored in config.sh will not be used when
?X: we change our random function.
 if $test "$ans" = "$dflt"; then
  : null
 else
  nrandbits=''
 fi
 randfunc="$ans"
 if set $ans val -f; eval $csym; $val; then
  cont=''
 else
  dflt=n
  rp="Function $ans does not exists. Use that name anyway?"
  . ./myread
  dflt=rand
  case "$ans" in
   [yY]*) cont='';;
  esac
 fi
 case "$cont" in
 '')
  case "$randfunc" in
  drand48)
   mrand="drand48()"
   seedfunc="srand48"
   ;;
  rand*)
   case
 "$nrandbits" in
   '')
echo "Checking to see how many bits your $randfunc() function produces..." >&4
   $cat >try.c <<EOCP
#include <stdio.h>
int main()
{
 register int i;
 register unsigned long tmp;
 register unsigned long max = 0L;
 extern long random();

 for (i = 1000; i; i--) {
  tmp = (unsigned long)$randfunc();
  if (tmp > max) max = tmp;
 }
 for (i = 0; max; i++)
  max /= 2;
```

```
 printf("%d\n",i);
}
EOCP
   if $cc -o try try.c >/dev/null 2>&1 ; then
   dflt=`try`
   else
   dflt='?'
   echo "(I can't seem to compile the test program...)"
   fi
   ;;
   *)
    dflt="$nrandbits"
    ;;
   esac
   rp="How many bits does your $randfunc() function produce?"
   . ./myread
   nrandbits="$ans"
   $rm -f try.c try
   mrand="($randfunc() / (double) ((1 << $nrandbits) -1))"
   seedfunc="srand"
   ;;
?X: The following is provided just in case...
  *)
   dflt="31"
   rp="How many bits does your $randfunc() function produce?"
   . ./myread
   nrandbits="$ans"
   seedfunc="s$randfunc"
   mrand="($randfunc()
 / (double) ((1 << $nrandbits) -1))"
   if set $seedfunc val -f; eval $csym; $val; then
    echo "(Using $seedfunc() to seed random generator)"
   else
    echo "(Warning: no $seedfunc() to seed random generator)"
    seedfunc=rand
   fi
   ;;
  esac
  ;;
 esac
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/randfunc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: filexp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: filexp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:filexp: privlib
?MAKE: -pick add $@ %<
?S:filexp:
?S: This symbol contains the full pathname of the filexp script, in case we
?S: are saving the script for posterity.
?S:.
: must not allow self reference
case "$privlib" in
 /*)
 filexp=$privlib/filexp
 ;;
 *)
 filexp=`pwd`/filexp
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/filexp_path.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Hasproto.U $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasproto string that is used internally
?X: by Configure to check if this system has a prototype for a
?X: particular function
?X:
?X: To use it, say something like:
?X:  set d_getnetent_proto getnetent $i_netdb netdb.h
?X:  eval $hasproto
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/types.h
```

```
?X:  $i_systime sys/time.h
?X:  $i_sysselct sys/select.h
?X:  $i_netdb netdb.h"
?X: set d_getnetent_proto getnetent $hdrs
?X: eval $hasproto
?X:
?X: There is also an 'escape' hatch built in.  If you have a pair
?X: of args   'literal 'stuff' then 'stuff' gets included literally
?X: into the test program.  See Protochk.U for more details.
?X:
?MAKE:Hasproto:
 Setvar cppstdin cppflags cppminus contains rm_try test
?MAKE: -pick add $@ %<
?T:func varname
?F:!try.c
?V:hasproto
: Define hasproto macro for Configure internal use
hasproto='varname=$1; func=$2; shift; shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 literal) echo "$2" ;;
 esac ;
   shift 2;
done > try.c;
$cppstdin $cppflags $cppminus < try.c > tryout.c 2>/dev/null;
if $contains "$func.*(" tryout.c >/dev/null 2>&1; then
 echo "$func() prototype found.";
 val="$define";
else
 echo "$func() prototype NOT found.";
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try tryout.c'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_tgamma: Inlibc
?MAKE: -pick add $@ %<
?S:d_tgamma:
?S: This variable conditionally defines the HAS_TGAMMA symbol, which
```

```
?S: indicates to the C program that the tgamma() routine is available
?S: for the gamma function.  See also d_lgamma.
?S:.
?C:HAS_TGAMMA:
?C: This symbol, if defined, indicates that the tgamma routine is
?C: available to do the gamma function. See also HAS_LGAMMA.
?C:.
?H:#$d_tgamma HAS_TGAMMA  /**/
?H:.
?LINT:set d_tgamma
: see if tgamma exists
set tgamma d_tgamma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_tgamma.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Options.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Options.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:08:15  ram
?RCS: patch61: optdef.sh now starts with a "startsh"
?RCS: patch61: moved some code from Head.U
?RCS:
?RCS: Revision 3.0.1.6  1995/09/25  09:14:46  ram
?RCS: patch59: protected option parsing code against 'echo -*' option failure
?RCS:
?RCS: Revision 3.0.1.5  1995/05/12  12:04:52  ram
?RCS: patch54: added -K option for experts
?RCS:
?RCS: Revision 3.0.1.4  1995/01/30  14:27:52  ram
?RCS:
 patch49: this unit now exports file optdef.sh, not a variable
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:19:00  ram
?RCS: patch45: new -O option allowing -D and -U to override config.sh settings
?RCS: patch45: file optdef.sh is no longer removed after sourcing
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  15:58:06  ram
```

```
?RCS: patch36: ensure option definition file is removed before appending
?RCS: patch36: protect variable definitions with spaces in them
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:55:44  ram
?RCS: patch30: now uses new me symbol to tag error messages
?RCS: patch30: new -D and -U options to define/undef symbols (JHI)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Command line parsing. It is really important that the variables used here
?X: be not listed in the MAKE line, or they will be saved in config.sh and
?X: loading this file to fetch default answers would clobber the values set
?X: herein.
?X:
?MAKE:Options:
 startsh
?MAKE: -pick wipe $@ %<
?V:reuseval alldone error realsilent silent extractsh fastread \
 knowitall: config_sh
?T:arg argn symbol config_arg0 config_args config_argc xxx yyy zzz uuu
?T:args_exp args_sep arg_exp ccflags
?F:!Configure
?F:./optdef.sh ./cmdline.opt ./posthint.sh ./cmdl.opt
: Save command line options in file UU/cmdline.opt for later use in
: generating config.sh.
?X: This temporary file will be read by Oldsym.U.  I used a temporary
?X: file to preserve all sorts of potential command line quotes and
?X: also because we don't know in advance how many variables we'll
?X: need, so I can't actually declare them on the MAKE line.
?X: The config_args variable won't be quite correct if Configure is
?X: fed something like    ./Configure -Dcc="gcc -B/usr/ccs/bin/"
?X: since the quotes are gone by the time we see them.  You'd have to
?X: reconstruct the command line from the config_arg? lines, but since
?X: I don't imagine anyone actually having to do that, I'm not going
?X:
 to worry too much.
cat > cmdline.opt <<EOSH
: Configure command line arguments.
config_arg0='$0'
config_args='$*'
config_argc=$#
EOSH
argn=1
args_exp=''
args_sep=''
for arg in "$@"; do
```

```
 cat >>cmdline.opt <<EOSH
config_arg$argn='$arg'
EOSH
?X: Extreme backslashitis: replace each ' by '''''
 cat <<EOC | sed -e "s/'/'''''''''''''/g" > cmdl.opt
$arg
EOC
 arg_exp=`cat cmdl.opt`
 args_exp="$args_exp$args_sep'$arg_exp'"
 argn=`expr $argn + 1`
 args_sep=' '
done
?X: args_exp is good for restarting self: eval "set X $args_exp"; shift; $0 "$@"
?X: used by hints/os2.sh in Perl, for instance
rm -f cmdl.opt

: produce awk script to parse command line options
cat >options.awk <<'EOF'
BEGIN {
 optstr = "A:dD:eEf:hKOrsSU:V"; # getopt-style specification

 len = length(optstr);
 for (i = 1; i <= len; i++) {
  c = substr(optstr, i, 1);
?X: some older awk's do not have the C ?: construct
  if (i < len) a = substr(optstr, i + 1, 1); else a = "";
  if (a == ":") {
   arg[c] = 1;
   i++;
  }
  opt[c]
 = 1;
 }
}
{
 expect = 0;
 str = $0;
 if (substr(str, 1, 1) != "-") {
  printf("'%s'\n", str);
  next;
 }
 len = length($0);
 for (i = 2; i <= len; i++) {
  c = substr(str, i, 1);
  if (!opt[c]) {
   printf("-%s\n", substr(str, i));
   next;
  }
```

```
  printf("-%s\n", c);
  if (arg[c]) {
   if (i < len)
    printf("'%s'\n", substr(str, i + 1));
   else
    expect = 1;
   next;
  }
 }
}
END {
 if (expect)
  print "?";
}
EOF

: process the command line options
?X: Use "$@" to keep arguments with spaces in them from being split apart.
?X: For the same reason, awk will output quoted arguments and the final eval
?X: removes them and sets a proper $* array. An 'X' is prepended to each
?X: argument before being fed to echo to guard against 'echo -x', where -x
?X: would be understood as an echo option! It is removed before feeding awk.
set X `for arg in "$@"; do echo "X$arg"; done |
 sed -e s/X// | awk -f options.awk`
eval "set $*"
shift
rm -f options.awk

: set up default values
fastread=''
reuseval=false
config_sh=''
alldone=''
error=''
silent=''
extractsh=''
knowitall=''
rm
 -f optdef.sh posthint.sh
cat >optdef.sh <<EOS
$startsh
EOS

?X:
?X: Given that we now have the possibility to execute Configure remotely
?X: thanks to the new src.U support, we have to face the possibility
?X: of having to ask where the source lie, which means we need the Myread.U
?X: stuff and possibly other things that might echo something on the
```

```
?X: screen...
?X:
?X: That's not pretty, and might be confusing in 99% of the time. So...
?X: We introduce a new realsilent variable which is set when -s is given,
?X: and we force silent=true if -S is supplied. The Extractall.U unit
?X: will then undo the >&4 redirection based on the value of the
?X: realsilent variable... -- RAM, 18/93/96
?X:

: option parsing
while test $# -gt 0; do
 case "$1" in
 -d) shift; fastread=yes;;
 -e) shift; alldone=cont;;
 -f)
  shift
  cd ..
  if test -r "$1"; then
   config_sh="$1"
  else
   echo "$me: cannot read config file $1."
 >&2
   error=true
  fi
  cd UU
  shift;;
 --help|\
 -h) shift; error=true;;
 -r) shift; reuseval=true;;
 -s) shift; silent=true; realsilent=true;;
 -E) shift; alldone=exit;;
 -K) shift; knowitall=true;;
 -O) shift;;
 -S) shift; silent=true; extractsh=true;;
 -D)
  shift
  case "$1" in
  *=)
   echo "$me: use '-U symbol=', not '-D symbol='." >&2
   echo "$me: ignoring -D $1" >&2
   ;;
  *=*) echo "$1" | \
    sed -e "s/'/'\''\''/g" -e "s/=\(.*\)/='\1'/" >> optdef.sh;;
  *) echo "$1='define'" >> optdef.sh;;
  esac
  shift
  ;;
 -U)
```

```
 shift
 case "$1" in
 *=) echo "$1" >> optdef.sh;;
 *=*)
  echo "$me: use '-D symbol=val', not '-U symbol=val'." >&2
  echo "$me: ignoring -U $1" >&2
  ;;
 *) echo "$1='undef'" >> optdef.sh;;
 esac
 shift
 ;;
-A)
   shift
   xxx=''
   yyy="$1"
   zzz=''
   uuu=undef
   case "$yyy" in
        *=*) zzz=`echo "$yyy"|sed 's!=.*!!'`
             case "$zzz" in
             *:*) zzz='' ;;
             *)   xxx=append

             zzz=' '`echo "$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             esac
             ;;
        esac
        case "$xxx" in
        '')  case "$yyy" in
             *:*) xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'`
                  zzz=`echo "$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             *)   xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'` ;;
             esac
             ;;
        esac
   case "$xxx" in
   append)
 echo "$yyy=\"\${$yyy}$zzz\"" >> posthint.sh ;;
   clear)
 echo "$yyy=''"   >> posthint.sh ;;
   define)
       case "$zzz" in
 '') zzz=define ;;
 esac
```

```
 echo "$yyy='$zzz'"  >> posthint.sh ;;
    eval)
 echo "eval \"$yyy=$zzz\"" >> posthint.sh ;;
    prepend)
 echo "$yyy=\"$zzz\${$yyy}\"" >> posthint.sh ;;
    undef)

      case "$zzz" in
 ") zzz="$uuu" ;;
 esac
 echo "$yyy=$zzz"  >> posthint.sh ;;
          *)  echo "$me: unknown -A command '$xxx', ignoring -A $1" >&2 ;;
    esac
    shift
    ;;
 -V) echo "$me generated by metaconfig <VERSION> PL<PATCHLEVEL>." >&2
    exit 0;;
 --) break;;
 -*) echo "$me: unknown option $1" >&2; shift; error=true;;
 *) break;;
 esac
done

case "$error" in
true)
 cat >&2 <<EOM
Usage: $me [-dehrsEKOSV] [-f config.sh] [-D symbol] [-D symbol=value]
               [-U symbol] [-U symbol=] [-A command:symbol...]
 -d : use defaults for all answers.
 -e : go on without questioning past the production of config.sh.
 -f : specify an alternate default configuration file.
 -h : print this help message and exit (with an error status).
 -r : reuse C symbols value if possible (skips costly nm extraction).
 -s : silent mode, only echoes questions and essential information.
 -D : define symbol to have some value:
       -D symbol               symbol gets the
 value 'define'
       -D symbol='some value'   symbol is set to 'some value'
     common used examples (see INSTALL for more info):
       -Duse64bitint           use 64bit integers
       -Duse64bitall           use 64bit integers and pointers
       -Dusethreads            use thread support
       -Dinc_version_list=none  do not include older perl trees in @INC
       -DEBUGGING=none          DEBUGGING options
       -Dcc=gcc                choose your compiler
       -Dprefix=/opt/perl5      choose your destination
 -E : stop at the end of questions, after having produced config.sh.
 -K : do not use unless you know what you are doing.
```

```
 -O : ignored for backward compatibility
 -S : perform variable substitutions on all .SH files (can mix with -f)
 -U : undefine symbol:
       -U symbol    symbol gets the value 'undef'
       -U symbol=   symbol gets completely empty
     e.g.:  -Uversiononly
 -A : manipulate symbol after the platform specific hints
 have been applied:
       -A append:symbol=value   append value to symbol
       -A symbol=value          like append:, but with a separating space
       -A define:symbol=value   define symbol to have value
       -A clear:symbol          define symbol to be ''
       -A define:symbol         define symbol to be 'define'
       -A eval:symbol=value     define symbol to be eval of value
       -A prepend:symbol=value  prepend value to symbol
       -A undef:symbol          define symbol to be 'undef'
       -A undef:symbol=         define symbol to be ''
     e.g.:  -A prepend:libswanted='cl pthread '
            -A ccflags=-DSOME_MACRO
 -V : print version number and exit (with a zero status).
EOM
 exit 1
 ;;
esac

?X:
?X: Unless they specified either -S or both -d and -e/E, make sure we're
?X: running interactively, i.e. attached to a terminal. Moved from Head.U to
?X: be able to handle batch configurations...
?X:
?X: We have to hardwire the Configure name and
 cannot use $me, since if they
?X: said 'sh <Configure', then $me is 'sh'...
?X:
: Sanity checks
case "$fastread$alldone" in
yescont|yesexit) ;;
*)
 case "$extractsh" in
 true) ;;
 *)
  if test ! -t 0; then
   echo "Say 'sh Configure', not 'sh <Configure'"
   exit 1
  fi
  ;;
 esac
 ;;
```

```
esac

?X: In silent mode, the standard output is closed. Questions are asked by
?X: outputing on file descriptor #4, which is the original stdout descriptor.
?X: This filters out all the "junk", since all the needed information is written
?X: on #4. Note that ksh will not let us redirect output if the file descriptor
?X: has not be defined yet, unlike sh, hence the following line...--RAM.
exec 4>&1
case "$silent" in
true) exec 1>/dev/null;;
esac

: run the defines and the undefines, if any, but leave the file out there...
touch optdef.sh
?X: -q is POSIX
?X: It does not work in SysV (solaris) or old BSD greps.
grep '\\' optdef.sh >/dev/null 2>&1
if test $? = 0; then
   echo "Configure does not support \\
 in -D arguments"
   exit 1
fi
. ./optdef.sh
: create the posthint manipulation script and leave the file out there...
?X: this file will be perused by Oldconfig.U
touch posthint.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Options.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memccpy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memccpy.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memccpy: Inlibc
?MAKE: -pick add $@ %<
?S:d_memccpy:
```

```
?S: This variable conditionally defines the HAS_MEMCCPY symbol, which
?S: indicates to the C program that the memccpy() routine is available
?S: to copy a character into a block of memory.
?S:.
?C:HAS_MEMCCPY (MEMCCPY):
?C: This symbol, if defined, indicates that the memccpy routine
 is available
?C: to copy a character into a block of memory.  Otherwise you should
?C: roll your own.
?C:.
?H:#$d_memccpy HAS_MEMCCPY  /**/
?H:.
?LINT:set d_memccpy
: see if memccpy exists
set memccpy d_memccpy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memccpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_inetpton: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetpton:
?S: This variable conditionally defines the HAS_INETPTON symbol,
?S: which indicates to the C program that the inet_pton() function
?S: is available.
?S:.
?C:HAS_INETPTON:
?C: This symbol, if defined, indicates that the inet_pton() function
?C: is available to parse IPv4 and IPv6 strings.
?C:.
?H:#$d_inetpton HAS_INETPTON  /**/
?H:.
?LINT:set d_inetpton
: see if inet_pton exists
set inet_pton d_inetpton
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_inetpton.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlocale.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setlocale.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:51  ram
?RCS: patch30: created
?RCS:
?MAKE:d_setlocale: Inlibc
?MAKE: -pick add $@ %<
?S:d_setlocale:
?S: This variable conditionally defines HAS_SETLOCALE if setlocale() is
?S: available to handle locale-specific ctype implementations.
?S:.
?C:HAS_SETLOCALE:
?C: This symbol, if defined, indicates that the setlocale
 routine is
?C: available to handle locale-specific ctype implementations.
?C:.
?H:#$d_setlocale HAS_SETLOCALE /**/
?H:.
?LINT:set d_setlocale
: see if setlocale exists
set setlocale d_setlocale
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setlocale.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorhtml3dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorhtml3dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorhtml3dir vendorhtml3direxp installvendorhtml3dir: html3dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorhtml3dir:
?S: This variable contains the name of the directory for html
?S: library pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing
 in this directory.
?S: Vendors who distribute perl may wish to place their own
?S: html pages for modules and extensions in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorhtml3direxp:
?S: This variable is the ~name expanded version of vendorhtml3dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorhtml3dir="
?S:installvendorhtml3dir:
?S: This variable is really the same as vendorhtml3direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorhtml3dir
: Set the vendorhtml3dir variables
case "$vendorprefix" in
") vendorhtml3dir="
 vendorhtml3direxp="
 ;;
*) : determine where vendor-supplied module html pages go.
 : There is no standard location, so try to copy the previously-selected
 : directory structure for the core html pages.
 : XXX Better default
 suggestions would be welcome.
 case "$vendorhtml3dir" in
 ") dflt=`echo "$html3dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorhtml3dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
```

```
 esac
 fn=dn+~
 rp='Pathname for the vendor-supplied html pages?'
 . ./getfile
 vendorhtml3dir="$ans"
 vendorhtml3direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorhtml3dir" = "X" && vendorhtml3dir=' '
prefixvar=vendorhtml3dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorhtml3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_dbminitproto: Hasproto i_dbm
?MAKE: -pick add $@ %<
?S:d_dbminitproto:
?S: This variable conditionally defines the HAS_DBMINIT_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the dbminit() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_DBMINIT_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the dbminit() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern
 int dbminit(char *);
?C:.
?H:#$d_dbminitproto HAS_DBMINIT_PROTO /**/
?H:.
?LINT:set d_dbminitproto
: see if prototype for dbminit is available
echo " "
set d_dbminitproto dbminit $i_dbm dbm.h
```

```
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dbminitproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Tr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  18:00:54  ram
?RCS: patch43: forgot to quote $@ to protect against "evil" characters
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:58:35  ram
?RCS: patch36: created
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a character translation. It catches translations to uppercase or
?X: to lowercase, and then invokes the real tr to perform the job.
?X:
?X: This unit is necessary on HP machines (HP strikes again!)
 with non-ascii
?X: ROMAN8-charset, where normal letters are not arranged in a row, so a-z
?X: covers not the whole alphabet but lots of special chars. This was reported
?X: by Andreas Sahlbach <a.sahlbach@tu-bs.de>.
?X:
?X: Units performing a tr '[A-Z]' '[a-z]' or the other way round should include
?X: us in their dependency and use ./tr instead.
?X:
?MAKE:Tr: startsh tr eunicefix
?MAKE: -pick add $@ %<
?F:./tr
?T:up low LC_ALL
: see whether [:lower:] and [:upper:] are supported character classes
echo " "
case "`echo AbyZ | LC_ALL=C $tr '[:lower:]' '[:upper:]' 2>/dev/null`" in
ABYZ)
 echo "Good, your tr supports [:lower:] and [:upper:] to convert case." >&4
 up='[:upper:]'
 low='[:lower:]'
```

```
 ;;
*) # There is a discontinuity in EBCDIC between 'I' and 'J'
      # (0xc9 and 0xd1), therefore that is a nice testing point.
      if test "X$up" = X -o "X$low" = X; then
    case "`echo IJ | LC_ALL=C $tr '[I-J]' '[i-j]' 2>/dev/null`" in
    ij) up='[A-Z]'
        low='[a-z]'
  ;;

 esac
      fi
 if test "X$up" = X -o "X$low" = X; then
    case "`echo IJ | LC_ALL=C $tr I-J i-j 2>/dev/null`" in
    ij) up='A-Z'
  low='a-z'
  ;;
    esac
      fi
 if test "X$up" = X -o "X$low" = X; then
    case "`echo IJ | od -x 2>/dev/null`" in
    *C9D1*|*c9d1*)
  echo "Hey, this might be EBCDIC." >&4
  if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | \
   LC_ALL=C $tr '[A-IJ-RS-Z]' '[a-ij-rs-z]' 2>/dev/null`" in
     ij) up='[A-IJ-RS-Z]'
         low='[a-ij-rs-z]'
   ;;
     esac
  fi
  if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | LC_ALL=C $tr A-IJ-RS-Z a-ij-rs-z 2>/dev/null`" in
     ij) up='A-IJ-RS-Z'
         low='a-ij-rs-z'
   ;;
     esac
  fi
  ;;
    esac
 fi
esac
case "`echo IJ | LC_ALL=C $tr \"$up\" \"$low\" 2>/dev/null`" in
ij)
   echo "Using $up and $low to convert case." >&4
   ;;
*)
   echo "I don't know how to translate letters from upper to lower case." >&4
   echo "Your tr is not acting any way I know of." >&4
```

```
    exit 1
   ;;
esac
: set up the translation script tr, must be called with ./tr of course
cat >tr <<EOSC
$startsh
case "\$1\$2" in
'[A-Z][a-z]') LC_ALL=C exec $tr '$up' '$low';;
'[a-z][A-Z]') LC_ALL=C exec $tr '$low' '$up';;
esac
LC_ALL=C exec $tr "\$@"
EOSC
chmod +x tr
$eunicefix tr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Tr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: rootid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: rootid.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:45:36  ram
?RCS: patch49: now only prints a single empty line when outputting something
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:rootid: sed
?MAKE: -pick add $@ %<
?S:rootid:
?S: This variable contains the eventual value of the ROOTID symbol,
?S: which is the uid of root.
?S:.
?C:ROOTID:
?C: This symbol contains the uid of root, normally
 0.
?C:.
?H:#define ROOTID $rootid  /**/
?H:.
```

```
: determine root id
rootid=`$sed -e "/^root:/{s/^[^:]*:[^:]*:\([^:]*\).*'''$'''/\1/" -e "q" -e "}" -e "d" </etc/passwd`
case "$rootid" in
") rootid=0 ;;
*) echo " "; echo "Root uid = $rootid" >&4 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/rootid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigvec.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigvec.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:45:37  ram
?RCS: patch61: there is now a separate routine for sigaction()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: d_sigvec.U, from d_ftime.U 1.0
?X:
?MAKE:d_sigvec d_sigvectr d_sigintrp: Csym Inlibc Setvar
?MAKE: -pick add $@ %<
?S:d_sigvec:
?S: This variable conditionally defines the HAS_SIGVEC symbol, which indicates
?S: that BSD
 reliable signals are supported.
?S:.
?S:d_sigvectr:
?S: This variable conditionally defines the HAS_SIGVECTOR symbol, which
?S: indicates that the sigvec() routine is called sigvector() instead, for
?S: reasons known only to Hewlett-Packard.
?S:.
?S:d_sigintrp:
?S: This variable conditionally defines the HAS_SIGINTRP symbol, which
?S: indicates that the siginterrupt() routine is available.
?S:.
?C:HAS_SIGVEC (SIGVEC):
?C: This symbol, if defined, indicates that BSD reliable signals are
```

```
?C: supported.
?C:.
?C:HAS_SIGVECTOR (SIGVECTOR):
?C: This symbol, if defined, indicates that the sigvec() routine is called
?C: sigvector() instead, and that sigspace() is provided instead of
?C: sigstack().  This is probably only true for HP-UX.
?C:.
?C:HAS_SIGINTRP (SIGINTRP):
?C: This symbol, if defined, indicates that the siginterrupt() routine
?C: is available.
?C:.
?H:#$d_sigvec HAS_SIGVEC /**/
?H:#$d_sigvectr HAS_SIGVECTOR /**/
?H:#$d_sigintrp HAS_SIGINTRP /**/
?H:.
?T:val
?LINT:set d_sigvec d_sigintrp
@if
 d_sigvectr || d_sigvec || HAS_SIGVEC || HAS_SIGVECTOR
: see if sigvector exists -- since sigvec will match the substring
echo " "
if set sigvector val -f d_sigvectr; eval $csym; $val; then
 echo 'sigvector() found--you must be running HP-UX.' >&4
 val="$define"; set d_sigvectr; eval $setvar
 val="$define"; set d_sigvec; eval $setvar
else
: try the original name
 d_sigvectr="$undef"
 if set sigvec val -f d_sigvec; eval $csym; $val; then
  echo 'sigvec() found.' >&4
  val="$define"; set d_sigvec; eval $setvar
 else
  echo 'sigvec() not found--race conditions with signals may occur.' >&4
  val="$undef"; set d_sigvec; eval $setvar
 fi
fi

@end
@if d_sigintrp || HAS_SIGINTRP
: see if we have siginterrupt
set siginterrupt d_sigintrp
eval $inlibc

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigvec.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getwd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getwd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getwd: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_getwd:
?S: This variable conditionally defines HAS_GETWD if getwd() is
?S: available to get working directory. If not, you should
?S: probably use getcwd().
?S:.
?C:HAS_GETWD (GETWD):
?C: This symbol, if defined, indicates that the getwd routine is
?C: available to get working directory.
 If not, you should
?C: probably use getcwd().
?C:.
?H:#$d_getwd HAS_GETWD  /**/
?H:.
?LINT:set d_getwd
: see if getwd exists
echo " "
if set getwd val -f d_getwd; eval $csym; $val; then
 echo 'getwd() found.' >&4
 val="$define"
else
 echo 'getwd() not found. Assuming getcwd() exists.' >&4
 val="$undef"
fi
set d_getwd
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservent_r getservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservent_r:
?S: This variable conditionally defines the HAS_GETSERVENT_R symbol,
?S: which indicates to the C program that the getservent_r()
?S: routine is available.
?S:.
?S:getservent_r_proto:
?S: This variable encodes the prototype of getservent_r.
?S: It is zero if d_getservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservent_r
?S: is defined.
?S:.
?C:HAS_GETSERVENT_R:
?C: This symbol, if defined, indicates that the getservent_r routine
?C: is
 available to getservent re-entrantly.
?C:.
?C:GETSERVENT_R_PROTO:
?C: This symbol encodes the prototype of getservent_r.
?C: It is zero if d_getservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservent_r
?C: is defined.
?C:.
?H:#$d_getservent_r HAS_GETSERVENT_R /**/
?H:#define GETSERVENT_R_PROTO $getservent_r_proto /**/
?H:.
?T:try hdrs d_getservent_r_proto
: see if getservent_r exists
set getservent_r d_getservent_r
eval $inlibc
case "$d_getservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservent_r_proto:$usethreads" in
 ":define") d_getservent_r_proto=define
  set d_getservent_r_proto getservent_r $hdrs
  eval $hasproto ;;
 *) ;;
```

```
 esac
 case "$d_getservent_r_proto" in
 define)
 case "$getservent_r_proto" in
 "|0) try='int getservent_r(struct servent*, char*, size_t, struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SBWR ;;
 esac
 case "$getservent_r_proto"
 in
 "|0) try='int getservent_r(struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SBI ;;
 esac
 case "$getservent_r_proto" in
 "|0) try='struct servent* getservent_r(struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=S_SBI ;;
 esac
 case "$getservent_r_proto" in
 "|0) try='int getservent_r(struct servent*, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SD ;;
 esac
 case "$getservent_r_proto" in
 "|0) d_getservent_r=undef
  getservent_r_proto=0
  echo "Disabling getservent_r, cannot determine prototype." >&4 ;;
 * ) case "$getservent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getservent_r_proto="REENTRANT_PROTO_$getservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getservent_r has no prototype, not using it." >&4 ;;
  esac
  d_getservent_r=undef
  getservent_r_proto=0
  ;;
 esac
 ;;
*) getservent_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extractall.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:00:43  ram
?RCS: patch61: created
?RCS:
?X:
?X: If extraction has been requested, load the configuration file, perform
?X: the extraction and exit.
?X:
?X: This unit was originally a part of Options.U. It had to be removed from
?X: it to prevent a dependency cycle: Extract -> src -> Options -> Extract
?X: The Begin.U unit now requires us before beginning to do anything
?X: interesting, to ensure proper semantics. -- RAM, 15/03/96
?X:
?MAKE:Extractall:
 Extract Options
?MAKE: -pick wipe $@ %<
: extract files and exit if asked to do so
case "$extractsh" in
true)
?X: Undo the forced silent=true when -S was supplied, by probing realsilent
?X: which was set iff -s was also given. See Options.U for details.
 case "$realsilent" in
 true) ;;
 *) exec 1>&4;;
 esac
 case "$config_sh" in
 ") config_sh='config.sh';;
 esac
 echo " "
 echo "Fetching answers from $config_sh..."
 cd ..
 . $config_sh
 test "$override" && . ./optdef.sh
 echo " "
?X: extract has to be run from the top directory, not within UU.
 . UU/extract
 rm -rf UU
 echo "Extraction done."
```

```
 exit 0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Extractall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endhostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endhostent_r endhostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endhostent_r:
?S: This variable conditionally defines the HAS_ENDHOSTENT_R symbol,
?S: which indicates to the C program that the endhostent_r()
?S: routine is available.
?S:.
?S:endhostent_r_proto:
?S: This variable encodes the prototype of endhostent_r.
?S: It is zero if d_endhostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endhostent_r
?S: is defined.
?S:.
?C:HAS_ENDHOSTENT_R:
?C: This symbol, if defined, indicates that the endhostent_r routine
?C: is
 available to endhostent re-entrantly.
?C:.
?C:ENDHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of endhostent_r.
?C: It is zero if d_endhostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endhostent_r
?C: is defined.
?C:.
?H:#$d_endhostent_r HAS_ENDHOSTENT_R /**/
?H:#define ENDHOSTENT_R_PROTO $endhostent_r_proto /**/
?H:.
?T:try hdrs d_endhostent_r_proto
: see if endhostent_r exists
set endhostent_r d_endhostent_r
eval $inlibc
```

```
case "$d_endhostent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endhostent_r_proto:$usethreads" in
 ":define") d_endhostent_r_proto=define
  set d_endhostent_r_proto endhostent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endhostent_r_proto" in
 define)
 case "$endhostent_r_proto" in
 "|0) try='int endhostent_r(struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && endhostent_r_proto=I_D ;;
 esac
 case "$endhostent_r_proto" in
 "|0) try='void endhostent_r(struct
 hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && endhostent_r_proto=V_D ;;
 esac
 case "$endhostent_r_proto" in
 "|0) d_endhostent_r=undef
  endhostent_r_proto=0
  echo "Disabling endhostent_r, cannot determine prototype." >&4 ;;
 * ) case "$endhostent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endhostent_r_proto="REENTRANT_PROTO_$endhostent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endhostent_r has no prototype, not using it." >&4 ;;
  esac
  d_endhostent_r=undef
  endhostent_r_proto=0
  ;;
 esac
 ;;
*) endhostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endhostent_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fcntl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fcntl:
?S: This variable conditionally defines the HAS_FCNTL symbol, and indicates
?S: whether the fcntl() function exists
?S:.
?C:HAS_FCNTL:
?C: This symbol, if defined, indicates to the C program that
?C: the fcntl() function exists.
?C:.
?H:#$d_fcntl HAS_FCNTL  /**/
?H:.
?LINT:set d_fcntl
:
 see if this is an fcntl system
set fcntl d_fcntl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fcntl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_vprintf.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:59  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_vprintf d_charvspr: Guess cat +cc +ccflags Csym Setvar
?MAKE: -pick add $@ %<
?S:d_vprintf:
?S: This variable conditionally defines the HAS_VPRINTF symbol, which
?S: indicates to the C program that the vprintf() routine is available
?S: to printf with a pointer to an argument list.
?S:.
?S:d_charvspr:
?S: This variable conditionally defines CHARVSPRINTF if this system
?S: has
 vsprintf returning type (char*).  The trend seems to be to
?S: declare it as "int vsprintf()".
?S:.
?C:HAS_VPRINTF (VPRINTF):
?C: This symbol, if defined, indicates that the vprintf routine is available
?C: to printf with a pointer to an argument list.  If unavailable, you
?C: may need to write your own, probably in terms of _doprnt().
?C:.
?C:USE_CHAR_VSPRINTF (CHARVSPRINTF):
?C: This symbol is defined if this system has vsprintf() returning type
?C: (char*).  The trend seems to be to declare it as "int vsprintf()".  It
?C: is up to the package author to declare vsprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_vprintf HAS_VPRINTF /**/
?H:#$d_charvspr USE_CHAR_VSPRINTF  /**/
?H:.
?F:!vprintf !vprintf.c
?T:val2
?LINT:set d_vprintf d_charvspr
: see if vprintf exists
echo " "
if set vprintf val -f d_vprintf; eval $csym; $val; then
 echo 'vprintf() found.' >&4
 val="$define"
 $cat >vprintf.c <<'EOF'
#include <varargs.h>

int main() { xxx("foo"); }

xxx(va_alist)
va_dcl
{
 va_list args;
 char
 buf[10];
```

```
 va_start(args);
 exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
EOF
 if $cc $ccflags -o vprintf vprintf.c >/dev/null 2>&1 && ./vprintf; then
  echo "Your vsprintf() returns (int)." >&4
  val2="$undef"
 else
  echo "Your vsprintf() returns (char*)." >&4
  val2="$define"
 fi
else
 echo 'vprintf() NOT found.' >&4
  val="$undef"
  val2="$undef"
fi
set d_vprintf
eval $setvar
val=$val2
set d_charvspr
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_vprintf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strchr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strchr.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:49:20  ram
?RCS: patch12: added support for HAS_INDEX
?RCS: patch12: added magic for index() and rindex()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:05:26  ram
?RCS: patch10: now only defines HAS_STRCHR, no macro remap of index (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strchr d_index: contains strings Setvar Myread Oldconfig
```

```
 Csym
?MAKE: -pick add $@ %<
?S:d_strchr:
?S: This variable conditionally defines HAS_STRCHR if strchr() and
?S: strrchr() are available for string searching.
?S:.
?S:d_index:
?S: This variable conditionally defines HAS_INDEX if index() and
?S: rindex() are available for string searching.
?S:.
?C:HAS_STRCHR:
?C: This symbol is defined to indicate that the strchr()/strrchr()
?C: functions are available for string searching. If not, try the
?C: index()/rindex() pair.
?C:.
?C:HAS_INDEX:
?C: This symbol is defined to indicate that the index()/rindex()
?C: functions are available for string searching.
?C:.
?H:#$d_strchr HAS_STRCHR /**/
?H:#$d_index HAS_INDEX /**/
?H:.
?M:index: HAS_INDEX
?M:#ifndef HAS_INDEX
?M:#ifndef index
?M:#define index strchr
?M:#endif
?M:#endif
?M:.
?M:rindex: HAS_INDEX
?M:#ifndef HAS_INDEX
?M:#ifndef rindex
?M:#define rindex strrchr
?M:#endif
?M:#endif
?M:.
?T:vali
?LINT:set d_strchr d_index
: index or strchr
echo " "
if set index val -f; eval $csym; $val; then
 if
 set strchr val -f d_strchr; eval $csym; $val; then
  if $contains strchr "$strings" >/dev/null 2>&1 ; then
?X: has index, strchr, and strchr in string header
   val="$define"
   vali="$undef"
   echo "strchr() found." >&4
```

```
  else
?X: has index, strchr, and no strchr in string header
   val="$undef"
   vali="$define"
   echo "index() found." >&4
  fi
 else
?X: has only index, no strchr, string header is a moot point
  val="$undef"
  vali="$define"
  echo "index() found." >&4
 fi
else
 if set strchr val -f d_strchr; eval $csym; $val; then
  val="$define"
  vali="$undef"
  echo "strchr() found." >&4
 else
  echo "No index() or strchr() found!" >&4
  val="$undef"
  vali="$undef"
 fi
fi
set d_strchr; eval $setvar
val="$vali"
set d_index; eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: yacc.U,v 3.0.1.1 1994/05/13 15:28:48 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: yacc.U,v $
?RCS: Revision 3.0.1.1  1994/05/13  15:28:48  ram
?RCS: patch27: added byacc as another alternative (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:yacc yaccflags: Guess Myread Oldconfig byacc bison cat test _exe
?MAKE: -pick add $@ %<
?S:yacc:
?S: This variable holds the name of the compiler compiler we
?S: want to use in the Makefile. It can be yacc, byacc, or bison -y.
?S:.
?S:yaccflags:
?S: This
 variable contains any additional yacc flags desired by the
?S: user.  It is up to the Makefile to use this.
?S:.
?T:comp
: determine compiler compiler
case "$yacc" in
")
 dflt=yacc;;
*)
 dflt="$yacc";;
esac
echo " "
comp='yacc'
if $test -f "$byacc$_exe"; then
 dflt="$byacc"
 comp="byacc or $comp"
fi
if $test -f "$bison$_exe"; then
 comp="$comp or bison -y"
fi
rp="Which compiler compiler ($comp) shall I use?"
. ./myread
yacc="$ans"
case "$yacc" in
*bis*)
 case "$yacc" in
 *-y*) ;;
 *)
  yacc="$yacc -y"
  echo "(Adding -y option to bison to get yacc-compatible behavior.)"
  ;;
 esac
 ;;
esac

@if yaccflags
: see if we need extra yacc flags
dflt="$yaccflags"
case "$dflt" in
") dflt=none;;
```

```
esac
$cat <<EOH

Your yacc program may need extra flags to normally process the parser sources.
Do NOT specify any -d or -v flags here, since those are explicitly known
by the various Makefiles. However, if your machine has strange/undocumented
options (like -Sr# on SCO to specify the
 maximum number of grammar rules), then
please add them here.  To use no flags, specify the word "none".

EOH
rp="Any additional yacc flags?"
. ./myread
case "$ans" in
none) yaccflags="";;
*) yaccflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/yacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usenm.U,v 3.0.1.1 1997/02/28 16:26:40 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: usenm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:26:40  ram
?RCS: patch61: don't use nm with the GNU C library
?RCS: patch61: added support for Linux shared libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usenm runnm nm_opt nm_so_opt: cat test Myread Oldconfig myuname grep \
 nm d_gnulibc osname egrep rsrc
?MAKE: -pick add $@ %<
?S:usenm:
?S: This variable contains 'true' or 'false' depending
```

```
 whether the
?S: nm extraction is wanted or not.
?S:.
?S:runnm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction should be performed or not, according to the value
?S: of usenm and the flags on the Configure command line.
?S:.
?S:nm_opt:
?S: This variable holds the options that may be necessary for nm.
?S:.
?S:nm_so_opt:
?S: This variable holds the options that may be necessary for nm
?S: to work on a shared library but that can not be used on an
?S: archive library.  Currently, this is only used by Linux, where
?S: nm --dynamic is *required* to get symbols from an ELF library which
?S: has been stripped, but nm --dynamic is *fatal* on an archive library.
?S: Maybe Linux should just always set usenm=false.
?S:.
: see if nm is to be used to determine whether a symbol is defined or not
?X: If there is enough inquiries, it might be worth to wait for the nm
?X: extraction. Otherwise, the C compilations might be a better deal.
?X:
?X: Don't bother if we're
 using GNU libc -- skimo
?LINT:extern PASE
case "$usenm" in
")
 dflt="
 case "$d_gnulibc" in
 "$define")
  echo " "
  echo "nm probably won't work on the GNU C Library." >&4
  dflt=n
  ;;
 esac
 case "$dflt" in
 ")
  if $test "$osname" = aix -a "X$PASE" != "Xdefine" -a ! -f /lib/syscalls.exp; then
   echo " "
   echo "Whoops!  This is an AIX system without /lib/syscalls.exp!" >&4
   echo "'nm' won't be sufficient on this system." >&4
   dflt=n
  fi
  ;;
 esac
 case "$dflt" in
 ") dflt=`$egrep 'inlibc|csym' $rsrc/Configure | wc -l 2>/dev/null`
```

```
  if $test $dflt -gt 20; then
   dflt=y
  else
   dflt=n
  fi
  ;;
 esac
 ;;
*)
 case "$usenm" in
 true|$define) dflt=y;;
 *) dflt=n;;
 esac
 ;;
esac
$cat <<EOM

I can use $nm to extract the symbols from your C libraries. This
is a time consuming task which may generate huge output on the disk (up
to 3 megabytes) but that should make the symbols extraction faster. The
alternative is to skip the 'nm' extraction part and to compile a small
test
 program instead to determine whether each symbol is present. If
you have a fast C compiler and/or if your 'nm' output cannot be parsed,
this may be the best solution.

You probably shouldn't let me use 'nm' if you are using the GNU C Library.

EOM
rp="Shall I use $nm to extract C symbols from the libraries?"
. ./myread
case "$ans" in
[Nn]*) usenm=false;;
*) usenm=true;;
esac

?X: Name extraction is to be run if 'nm' usage is wanted and if no -r flag
?X: was provided to configure (in which case we simply re-use the previous
?X: values).
runnm=$usenm
case "$reuseval" in
true) runnm=false;;
esac

: nm options which may be necessary
case "$nm_opt" in
") if $test -f /mach_boot; then
  nm_opt=" # Mach
```

```
 elif $test -d /usr/ccs/lib; then
  nm_opt='-p' # Solaris (and SunOS?)
 elif $test -f /dgux; then
  nm_opt='-p' # DG-UX
 elif $test -f /lib64/rld; then
  nm_opt='-p' # 64-bit Irix
 else
  nm_opt=''
 fi;;
esac

: nm options which may be necessary for shared libraries but illegal
: for archive
 libraries.  Thank you, Linux.
case "$nm_so_opt" in
'') case "$myuname" in
 *linux*|gnu*)
  if $nm --help | $grep 'dynamic' > /dev/null 2>&1; then
   nm_so_opt='--dynamic'
  fi
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/usenm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getsrvby.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getsbyname d_getsbyport: Inlibc
?MAKE: -pick add $@ %<
?S:d_getsbyname:
?S: This variable conditionally defines the HAS_GETSERVBYNAME
?S: symbol, which indicates to the C program that the
?S: getservbyname() routine is available to look up services
?S: by their name.
?S:.
?S:d_getsbyport:
?S: This variable conditionally defines the HAS_GETSERVBYPORT
?S: symbol, which indicates to the C program that the
?S: getservbyport() routine is available to look up services
```

```
?S: by their port.
?S:.
?C:HAS_GETSERVBYNAME:
?C: This symbol, if defined, indicates that the getservbyname()
?C: routine is available to look up services by their name.
?C:.
?C:HAS_GETSERVBYPORT:
?C: This symbol, if defined,
 indicates that the getservbyport()
?C: routine is available to look up services by their port.
?C:.
?H:#$d_getsbyname HAS_GETSERVBYNAME  /**/
?H:#$d_getsbyport HAS_GETSERVBYPORT  /**/
?H:.
?LINT:set d_getsbyname d_getsbyport
: Optional checks for getsbyname and getsbyport

@if d_getsbyname || HAS_GETSERVBYNAME
: see if getservbyname exists
set getservbyname d_getsbyname
eval $inlibc
@end

@if d_getsbyport || HAS_GETSERVBYPORT
: see if getservbyport exists
set getservbyport d_getsbyport
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getsrvby.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_scalbnl: Inlibc
?MAKE: -pick add $@ %<
?S:d_scalbnl:
?S: This variable conditionally defines the HAS_SCALBNL symbol, which
?S: indicates to the C program that the scalbnl() routine is available.
?S: If ilogbl is also present we can emulate frexpl.
?S:.
?C:HAS_SCALBNL:
```

```
?C: This symbol, if defined, indicates that the scalbnl routine is
?C: available.  If ilogbl is also present we can emulate frexpl.
?C:.
?H:#$d_scalbnl HAS_SCALBNL  /**/
?H:.
?LINT:set d_scalbnl
: see if scalbnl exists
set scalbnl d_scalbnl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_scalbnl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vaproto.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: vaproto.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:17:16  ram
?RCS: patch16: definition of _V now appears only when needed
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:vaproto: prototype i_stdarg Setvar
?MAKE: -pick add $@ %<
?S:vaproto:
?S: This variable conditionally defines CAN_VAPROTO on systems supporting
?S: prototype
 declaration of functions with a variable number of
?S: arguments. See also prototype.
?S:.
?C:CAN_VAPROTO ~ %<:
?C: This variable is defined on systems supporting prototype declaration
?C: of functions with a variable number of arguments.
?C:.
?C:_V:
?C: This macro is used to declare function parameters in prototypes for
?C: functions with a variable number of parameters. Use double parentheses.
```

```
?C: For example:
?C:
?C:  int printf _V((char *fmt, ...));
?C:
?C: Remember to use the plain simple _() macro when declaring a function
?C: with no variable number of arguments, since it might be possible to
?C: have a non-effect _V() macro and still get prototypes via _().
?C:.
?H:?%<:#$vaproto CAN_VAPROTO /**/
?H:?_V:#ifdef CAN_VAPROTO
?H:?_V:#define _V(args) args
?H:?_V:#else
?H:?_V:#define _V(args) ()
?H:?_V:#endif
?H:.
?W:%<:_V
?LINT:set vaproto
: see if prototypes support variable argument declarations
echo " "
case "$prototype$i_stdarg" in
$define$define)
 echo "It appears we'll
 be able to prototype varargs functions." >&4
 val="$define"
 ;;
*)
 echo "Too bad... We won't be using prototyped varargs functions..." >&4
 val="$undef"
 ;;
esac
set vaproto
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/vaproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_csh.U,v $
```

```
?RCS: Revision 3.0.1.1  1997/02/28  15:32:18  ram
?RCS: patch61: added full_csh to preserve the full path even when portable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_csh full_csh: csh Setvar
?MAKE: -pick add $@ %<
?S:d_csh:
?S: This variable conditionally defines the CSH symbol, which
?S: indicates to the C program that the C-shell exists.
?S:.
?S:full_csh:
?S: This variable contains the full pathname to 'csh', whether
 or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'csh.'
?S:.
?X: Yes, I know about the C symbol PORTABLE, but I think csh
?X: is unlikely to move, and I'm too lazy to add all the
?X: #ifdef PORTABLE sections to the perl source.
?X:
?C:HAS_CSH:
?C: This symbol, if defined, indicates that the C-shell exists.
?C:.
?C:CSH:
?C: This symbol, if defined, contains the full pathname of csh.
?C:.
?X: Previously, I just did $d_csh CSH "$full_csh", but that caused
?X: problems on VMS where the config.sh extraction program changes
?X: $undef to a real cpp undef, and they then had  #undef CSH ""
?X: which the compiler didn't like.  It's easy to work around this,
?X: so I did.  --AD  3/1998.
?X: And we don't want to define CSH if !HAS_CSH, but we don't want
?X: those lines in config.h if they don't need CSH, so protect with ?CSH
?X: and not
 ?%<. --RAM, 15/02/2004
?H:?%<:#$d_csh HAS_CSH  /**/
?H:?CSH:#ifdef HAS_CSH
?H:?CSH:#define CSH "$full_csh" /**/
?H:?CSH:#endif
?H:.
?LINT:set d_csh
: get csh whereabouts
case "$csh" in
'csh') val="$undef" ;;
```

```
*) val="$define" ;;
esac
set d_csh
eval $setvar
: Respect a hint or command line value for full_csh.
case "$full_csh" in
") full_csh=$csh ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_csh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: myhostname.U,v 3.0.1.3 1997/02/28 16:15:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: myhostname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:15:55  ram
?RCS: patch61: improved hostname lookup by using ypmatch when NIS is used
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:25:43  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS: patch36: now uses new Tr unit to convert to/from lowercase
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:20  ram
?RCS: patch30: now a little more clever for domain name guessing
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:myhostname phostname mydomain: contains sed test Myread Oldconfig \
 Guess Loc awk echo sort uniq +usrinc rm hostcat Tr
?MAKE: -pick add $@ %<
?S:myhostname (hostname):
?S: This variable contains the eventual value of the MYHOSTNAME symbol,
?S: which is the name of the host the program is going to run on.
?S: The domain is not kept with hostname, but must be gotten from mydomain.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:mydomain:
```

```
?S: This variable contains the eventual value of the MYDOMAIN symbol,
?S: which is the domain of the host the program is going to run on.
?S: The domain must be appended to myhostname to form a complete host name.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:phostname:
?S: This variable contains the eventual value of the PHOSTNAME symbol,
?S: which is a command that can be fed to popen()
 to get the host name.
?S: The program should probably not presume that the domain is or isn't
?S: there already.
?S:.
?C:MYHOSTNAME (HOSTNAME):
?C: This symbol contains name of the host the program is going to run on.
?C: The domain is not kept with hostname, but must be gotten from MYDOMAIN.
?C: The dot comes with MYDOMAIN, and need not be supplied by the program.
?C: If gethostname() or uname() exist, MYHOSTNAME may be ignored. If MYDOMAIN
?C: is not used, MYHOSTNAME will hold the name derived from PHOSTNAME.
?C:.
?C:MYDOMAIN:
?C: This symbol contains the domain of the host the program is going to
?C: run on.  The domain must be appended to HOSTNAME to form a complete
?C: host name.  The dot comes with MYDOMAIN, and need not be supplied by
?C: the program.  If the host name is derived from PHOSTNAME, the domain
?C: may or may not already be there, and the program should check.
?C:.
?H:#define MYHOSTNAME "$myhostname"  /**/
?H:#define MYDOMAIN "$mydomain"  /**/
?H:.
?LINT:extern osname
?T:cont
 i tans tmp_re
: now get the host name
echo " "
echo "Figuring out host name..." >&4
case "$myhostname" in
") cont=true
 echo 'Maybe "hostname" will work...'
 if tans=`sh -c hostname 2>&1` ; then
  myhostname=$tans
  phostname=hostname
  cont=''
 fi
 ;;
*) cont='';;
esac
if $test "$cont"; then
 if ./xenix; then
```

```
  echo 'Oh, dear.  Maybe "/etc/systemid" is the key...'
  if tans=`cat /etc/systemid 2>&1` ; then
   myhostname=$tans
   phostname='cat /etc/systemid'
   echo "Whadyaknow.  Xenix always was a bit strange..."
   cont=''
  fi
 elif $test -r /etc/systemid; then
  echo "(What is a non-Xenix system doing with /etc/systemid?)"
 fi
fi
if $test "$cont"; then
 echo 'No, maybe "uuname -l" will work...'
 if tans=`sh -c 'uuname -l' 2>&1` ; then
  myhostname=$tans
  phostname='uuname -l'
 else
  echo 'Strange.  Maybe "uname -n" will work...'
  if tans=`sh -c 'uname -n' 2>&1` ; then
   myhostname=$tans
   phostname='uname -n'
  else
   echo 'Oh well, maybe I can mine it out of whoami.h...'
   if
 tans=`sh -c $contains' sysname $usrinc/whoami.h' 2>&1` ; then
    myhostname=`echo "$tans" | $sed 's/^.*"\(.*\)"/\1/'`
    phostname="sed -n -e ""/sysname/s/^.*\"\\(.*\\)\"/\1/{"" -e p -e q -e '}' <$usrinc/whoami.h"
   else
    case "$myhostname" in
    '') echo "Does this machine have an identity crisis or something?"
     phostname='';;
    *)
     echo "Well, you said $myhostname before..."
     phostname='echo $myhostname';;
    esac
   fi
  fi
 fi
fi
case "$myhostname" in
'') myhostname=noname ;;
esac
: you do not want to know about this
set $myhostname
myhostname=$1

: verify guess
if $test "$myhostname" ; then
```

```
 dflt=y
 rp='Your host name appears to be "'$myhostname'".' Right?"
 . ./myread
 case "$ans" in
 y*) ;;
 *) myhostname='';;
 esac
fi

: bad guess or no guess
while $test "X$myhostname" = X ; do
 dflt=''
 rp="Please type the (one word) name of your host:"
 . ./myread
 myhostname="$ans"
done

: translate upper to lower if necessary
case "$myhostname" in
*[A-Z]*)
 echo
 "(Normalizing case in your host name)"
 myhostname=`echo $myhostname | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

?X: Do not ask for domain name if this is not used later on. In that
?X: case, the hostname may keep its domain name, but it doesn't matter.
@if MYDOMAIN || mydomain
case "$myhostname" in
*.*)
 dflt=`expr "X$myhostname" : "X[^.]*\(\..*\)"`
 myhostname=`expr "X$myhostname" : "X\([^.]*\)\."`
 echo "(Trimming domain name from host name--host name is now $myhostname)"
 ;;
*) case "$mydomain" in
 '')
?X:
?X: There is currently no way to say we do not want hostcat if mydomain is not
?X: used. One way to achieve that would be to put that code in a mydomain.U
?X: unit. However, we want to stick the sanity checks right after the domain
?X: name computation, or if none is done, right after the hostname computation.
?X:
  {
?X: If we use NIS, try ypmatch.
   test "X$hostcat" = "Xypcat hosts" &&
   ypmatch "$myhostname" hosts 2>/dev/null |\
    $sed -e 's/[  ]*#.*//; s/$/ /' > hosts
```

```
 && \
  $test -s hosts
  } || {
?X: Extract only the relevant hosts, reducing file size,
?X: remove comments, insert trailing space for later use.
?X: Test to be sure we *have* a hostcat command.  os390 doesn't.
   test "X$hostcat" != "X" &&
   $hostcat | $sed -n -e "s/[  ]*#.*//; s/\$/ /
     /[  ]$myhostname[ . ]/p" > hosts
  }
  tmp_re="[ . ]"
  if $test -f hosts; then
   $test x`$awk "/[0-9].*[  ]$myhostname$tmp_re/ { sum++ }
       END { print sum }" hosts` = x1 || tmp_re="[  ]"
   dflt=.`$awk "/[0-9].*[  ]$myhostname$tmp_re/ {for(i=2; i<=NF;i++) print \\\$i}" \
    hosts | $sort | $uniq | \
    $sed -n -e "s/$myhostname\.\([-a-zA-Z0-9_.]\)/\1/p"`
   case `$echo X$dflt` in
   X*\ *) echo "(Several hosts in the database matched hostname)"
    dflt=.
    ;;
   X.) echo "(You do not have fully-qualified names in the hosts database)"
    ;;
   esac
  else
   echo "(I cannot locate a hosts database anywhere)"
   dflt=.
  fi
  case "$dflt" in
  .)
   tans=`./loc resolv.conf X /etc /usr/etc`
   if
 $test -f "$tans"; then
    echo "(Attempting domain name extraction from $tans)"
?X: Look for either a search or a domain directive.
    dflt=.`$sed -n -e 's/ / /g' \
      -e 's/^search  *\([^ ]*\).*/\1/p' $tans \
      -e 1q 2>/dev/null`
    case "$dflt" in
    .) dflt=.`$sed -n -e 's/ / /g' \
         -e 's/^domain  *\([^ ]*\).*/\1/p' $tans \
         -e 1q 2>/dev/null`
     ;;
    esac
   fi
   ;;
  esac
  case "$dflt" in
```

```
  .) echo "(No help from resolv.conf either -- attempting clever guess)"
   dflt=.`sh -c domainname 2>/dev/null`
   case "$dflt" in
   ") dflt='.';;
   .nis.*|.yp.*|.main.*) dflt=`echo $dflt | $sed -e 's/^\.[^.]*//'`;;
   esac
   ;;
  esac
  case "$dflt$osname" in
  .os390) echo "(Attempting domain name extraction from //'SYS1.TCPPARMS(TCPDATA)')"
   dflt=.`awk '/^DOMAINORIGIN/ {print $2}' "//'SYS1.TCPPARMS(TCPDATA)'" 2>/dev/null`
   ;;
  esac
  case "$dflt" in
  .) echo "(Lost all hope -- silly guess then)"
   dflt='.nonet'
   ;;
  esac
  $rm -f hosts
  ;;
 *)
 dflt="$mydomain";;
 esac;;
esac
echo " "
rp="What is your domain name?"
. ./myread
tans="$ans"
case "$ans" in
") ;;
.*) ;;
*) tans=".$tans";;
esac
mydomain="$tans"

: translate upper to lower if necessary
case "$mydomain" in
*[A-Z]*)
 echo "(Normalizing case in your domain name)"
 mydomain=`echo $mydomain | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

@end
: a little sanity check here
case "$phostname" in
") ;;
*)
```

```
 case `$phostname | ./tr '[A-Z]' '[a-z]'` in
 $myhostname$mydomain|$myhostname) ;;
 *)
  case "$phostname" in
  sed*)
   echo "(That doesn't agree with your whoami.h file, by the way.)"
   ;;
  *)
   echo "(That doesn't agree with your $phostname command, by the way.)"
   ;;
  esac
 ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/myhostname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mailfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mailfile.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:24:57  ram
?RCS: patch36: the Loc unit was missing from the dependency line
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:22:08  ram
?RCS: patch15: now also looks under /var/mail for BSD/386
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mailfile: Myread Oldconfig Filexp Loc
?MAKE: -pick add $@ %<
?S:mailfile:
?S: This variable contains
 the eventual value of the MAILFILE symbol,
?S: which contains an interpretable name of the mail spool file for the
?S: current user.
?S:.
```

```
?C:MAILFILE:
?C: This symbol contains the interpretable name of the mail spool file
?C: for the current user.  The program must be prepared to substitute
?C: the HOME directory for %~, and the login id for %L.
?C:.
?H:#define MAILFILE "$mailfile"  /**/
?H:.
: determine where mail is spooled
case "$mailfile" in
")
 dflt=`./loc . XXX /usr/spool/mail /usr/mail /var/mail`
 case "$dflt" in
 XXX) dflt='%~/mailbox';;
 *) dflt="$dflt/%L";;
 esac
 ;;
*)  dflt="$mailfile"
 ;;
esac
cat <<'EOM'

In the following question, you may use %~ to represent the user's home
directory, and %L to represent a users name.

EOM
rp='In which file is yet-to-be-read mail spooled? (~name ok)'
. ./myread
mailfile=`./filexp "$ans"`

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mailfile.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_inetd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_inetd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_inetd: cat test package Myread Setvar
```

```
?MAKE: -pick add $@ %<
?S:d_inetd:
?S: This symbol conditionally defines USE_INETD which indicates to the C
?S: program that the initial socket connection will be done via inetd.
?S:.
?C:USE_INETD (INETD):
?C: This symbol if defined indicates to the C program that inetd will be
?C: in charge of the
 initial socket connection. The file descriptors 0 and
?C: 1 have been dup()ed from the original connected socket descriptor and
?C: are ready for send() and recv().
?C:.
?H:#$d_inetd USE_INETD  /**/
?H:.
?LINT:set d_inetd
: ask whether initial socket connection is to be done via inetd
echo " "
dflt=n
case "$d_inetd" in
") if $test -f /etc/inetd.conf; then
  $cat <<EOM
Your system provides a so called "Internet super-server", the inetd daemon.
Network services like ftp or rlogin are usually handled via ftpd and rlogind
daemons. Without inetd, these daemons must always be running for the service
to be on. On the contrary, inetd listens to specific ports defined in file
/etc/inetd.conf and will run the appropriate daemon upon request. This scheme
avoids eating up the process table and memory with useless daemons.

I can set up things so that internet connections for $package will be done
using inetd, in which case you will have to edit /etc/inetd.conf to add some
specific informations.

EOM
  dflt=y
 else
  $cat
 <<EOM
I do not see any trace of a configuration file for inetd, hence I assume your
system does not support the so called "Internet super-server". This means
$package will need to have a daemon process running on this machine to allow
network connections.

EOM
 fi;;
*) case "$d_inetd" in
 "$define") dflt=y;;
 esac;;
esac
```

```
rp='Do you wish to use inetd for network connections?'
. ./myread
val="$undef"
case "$ans" in
y*|Y*) val="$define";;
esac
set d_inetd
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_inetd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mktime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mktime.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:44  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_mktime: Inlibc
?MAKE: -pick add $@ %<
?S:d_mktime:
?S: This variable conditionally defines the HAS_MKTIME symbol, which
?S: indicates to the C program that the mktime() routine is available.
?S:.
?C:HAS_MKTIME :
?C: This symbol, if defined, indicates that the mktime routine
 is
?C: available.
?C:.
?H:#$d_mktime HAS_MKTIME  /**/
?H:.
?LINT:set d_mktime
: see if mktime exists
set mktime d_mktime
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mktime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memset.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memset.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:03:11  ram
?RCS: patch10: removed text recommending bzero over memset (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memset: Inlibc
?MAKE: -pick add $@ %<
?S:d_memset:
?S: This variable conditionally defines the HAS_MEMSET symbol, which
?S: indicates to the C program that the memset() routine is available
?S: to set blocks of memory.
?S:.
?C:HAS_MEMSET
 (MEMSET):
?C: This symbol, if defined, indicates that the memset routine is available
?C: to set blocks of memory.
?C:.
?H:#$d_memset HAS_MEMSET /**/
?H:.
?LINT:set d_memset
: see if memset exists
set memset d_memset
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memset.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017 Dagfinn Ilmari Mannsåker
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strnlen: Inlibc
?MAKE: -pick add $@ %<
?S:d_strnlen:
?S: This variable conditionally defines the HAS_STRNLEN symbol, which
?S: indicates to the C program that the strnlen () routine is available.
?S:.
?C:HAS_STRNLEN:
?C: This symbol, if defined, indicates that the strnlen () routine is
?C: available to check the length of a string up to a maximum.
?C:.
?H:#$d_strnlen HAS_STRNLEN  /**/
?H:.
?LINT:set d_strnlen
: see if strnlen exists
set strnlen d_strnlen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strnlen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_closedir.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:31:26  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:11:18  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:21  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_closedir d_void_closedir: Inlibc i_dirent i_sysdir i_sysndir \
 cc ccflags ldflags libs Setvar rm
?MAKE: -pick
```

```
 add $@ %<
?S:d_closedir:
?S: This variable conditionally defines HAS_CLOSEDIR if closedir() is
?S: available.
?S:.
?C:HAS_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine is
?C: available.
?C:.
?H:#$d_closedir HAS_CLOSEDIR  /**/
?H:.
?S:d_void_closedir:
?S: This variable conditionally defines VOID_CLOSEDIR if closedir()
?S: does not return a value.
?S:.
?C:VOID_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine
?C: does not return a value.
?C:.
?H:#$d_void_closedir VOID_CLOSEDIR  /**/
?H:.
?F:!closedir
?LINT:set d_closedir d_void_closedir
: see if closedir exists
set closedir d_closedir
eval $inlibc

@if VOID_CLOSEDIR || d_void_closedir
?X: The following contortions are designed so we can call closedir()
?X: and check whether it returns a value.  The contortions are designed
?X: to portably pick up the correct directory header, for those
?X: systems that support various mutually incompatible directory functions.
?X: This
 is from perl5's perl.h
case "$d_closedir" in
"$define")
 echo " "
 echo "Checking whether closedir() returns a status..." >&4
 cat > closedir.c <<EOM
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/

#if defined(I_DIRENT)
#include <dirent.h>
#if defined(NeXT) && defined(I_SYS_DIR) /* NeXT needs dirent + sys/dir.h */
#include <sys/dir.h>
#endif
```

```
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#ifdef hp9000s500
#include <ndir.h> /* may be wrong in the future */
#else
#include <sys/dir.h>
#endif
#endif
#endif
#endif
int main() { return closedir(opendir(".")); }
EOM
 if $cc $ccflags $ldflags -o closedir closedir.c $libs > /dev/null 2>&1; then
  if ./closedir > /dev/null 2>&1 ; then
   echo "Yes, it does."
   val="$undef"
  else
   echo "No, it doesn't."
   val="$define"
  fi
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  val="$define"
 fi
 ;;
*)
 val="$undef";
 ;;
esac
set d_void_closedir
eval $setvar
$rm
 -f closedir*
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_closedir.U
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```
?RCS: $Id: i_sysparam.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysparam.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:22:43  ram
?RCS: patch32: created
?RCS:
?MAKE:i_sysparam: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysparam:
?S: This variable conditionally defines the I_SYS_PARAM symbol, and indicates
?S: whether a C program should include <sys/param.h>.
?S:.
?C:I_SYS_PARAM:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/param.h>.
?C:.
?H:#$i_sysparam I_SYS_PARAM  /**/
?H:.
?LINT:set
 i_sysparam
: see if this is a sys/param system
set sys/param.h i_sysparam
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysparam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorarch.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorarch.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorarch vendorarch vendorarchexp installvendorarch: sed Getfile \
 Setprefixvar Oldconfig Prefixit archname vendorlib vendorprefix test
?MAKE: -pick add $@ %<
?Y:TOP
```

```
?S:vendorarch:
?S: This variable contains the value of the PERL_VENDORARCH symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: architecture-dependent modules and extensions in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorarchexp:
?S: This variable is the ~name expanded version of vendorarch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorarch=''
?S:installvendorarch:
?S: This variable is really the same as vendorarchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorarch:
?S: This variable conditionally defined PERL_VENDORARCH.
?S:.
?C:PERL_VENDORARCH:
?C: If defined, this symbol contains the name of a private library.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this
 directory.
?C: Vendors who distribute perl may wish to place their own
?C: architecture-dependent modules and extensions in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORARCH_EXP:
?C: This symbol contains the ~name expanded version of PERL_VENDORARCH, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorarch PERL_VENDORARCH "$vendorarch"  /**/
?H:#$d_vendorarch PERL_VENDORARCH_EXP "$vendorarchexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorarch
: Set the vendorarch variables
case "$vendorprefix" in
'') d_vendorarch="$undef"
 vendorarch=''
```

```
 vendorarchexp="
 ;;
*) d_vendorarch="$define"
 : determine where vendor-supplied architecture-dependent libraries go.
 : vendorlib  default is /usr/local/lib/perl5/vendor_perl/$version
 : vendorarch default is /usr/local/lib/perl5/vendor_perl/$version/$archname
 : vendorlib may have an optional trailing
 /share.
 case "$vendorarch" in
 ") dflt=`echo $vendorlib | $sed 's,/share$,,'`
  dflt="$dflt/$archname"
  ;;
 *) dflt="$vendorarch" ;;
 esac
 fn=d~+
 rp='Pathname for vendor-supplied architecture-dependent files?'
 . ./getfile
 vendorarch="$ans"
 vendorarchexp="$ansexp"
 ;;
esac
prefixvar=vendorarch
. ./installprefix
if $test X"$vendorarch" = X"$vendorlib"; then
 d_vendorarch="$undef"
else
 d_vendorarch="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorarch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Typedef.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  13:42:07  ram
?RCS: patch56: added backslash escapes within evals to prevent space problems
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:01:16  ram
```

```
?RCS: patch36: don't clobber visible 'val' variable, use 'varval' instead
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:05:14  ram
?RCS: patch32: created
?RCS:
?X:
?X: This unit checks for the definition of a given typedef.
?X:
?X: To use it, say:
?X: set typedef val_t default [includes]
?X: eval $typedef
?X:
?MAKE:Typedef:
 cppstdin cppminus cppflags rm contains Oldconfig
?MAKE: -pick add $@ %<
?F:!temp.c
?LINT:define typedef
?V:typedef
?S:typedef:
?S: This shell variable is used internally by Configure to check
?S: wether a given typedef is defined or not. A typical use is:
?S:  set typedef val_t default [includes]
?S:  eval $typedef
?S: That will return val_t set to default if the typedef was not found,
?S: to typedef otherwise. If no includes are specified, look in sys/types.h.
?S:.
?T:type var def inclist varval inc
: define an is-a-typedef? function
typedef='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 if $contains $type temp.E >/dev/null 2>&1; then
  eval "$var=\$type";
 else
  eval "$var=\$def";
 fi;
 $rm -f temp.?;;
*) eval
```

```
 "$var=\$varval";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Typedef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nlist_pfx.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nlist_pfx.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:26:18  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:nlist_pfx nlist_fnd: cat test Myread Oldconfig libnlist \
 +cc +ccflags
?MAKE: -pick add $@ %<
?S:nlist_pfx:
?S: This variable holds any characters which precede the symbol name
?S: when doing an nlist search.
?S:.
?S:nlist_fnd:
?S: This
 variable holds the member of the nlist structure which is
?S: nonzero if an nlist search succeeds.  Presently, it is always "n_value".
?S:.
?C:NLIST_PREFIX:
?C: This manifest constant holds the string of characters which should
?C: precede the symbol name when doing an nlist search.
?C:.
?C:NLIST_FOUND:
?C: This manifest constant holds the member of the nlist structure which
?C: is nonzero if an nlist search succeeds.
?C:.
?H:#define NLIST_PREFIX $nlist_pfx /**/
?H:#define NLIST_FOUND $nlist_fnd /**/
?H:.
?F:!nlisttest
```

```
?T:nlist_loc
: Nose around for nlist stuff
echo " "
echo "Checking out nlist stuff..." >&4
$cat >nlisttest.c <<'EOCP'
#include <stdio.h>
#include <nlist.h>

main(argc, argv)
int argc;
char **argv;
{
 int (*loc)();
 extern int hereIam();
 static struct nlist nl[] = {
  { "IamNotFound", 0 },
  { "hereIam", 0 },
  { "_hereIam", 0 },
  { ".hereIam", 0 },
  { "", 0 }
 };

 loc = hereIam;

 if(argc == 1) {
  printf("%ld\n", loc);}
 else {
  int i;
  int rc;

  if(nlist("./nlisttest",
 nl) == -1) exit(-1);
  i = argv[1][0] - '0';
  printf("%d %d %d\n", nl[i].n_name, nl[i].n_type, nl[i].n_value);
  }
 exit(0);}

int hereIam() {

 return;}
EOCP
nlist_fnd=n_value
if $cc $ccflags -o nlisttest nlisttest.c $libnlist >/dev/null 2>&1 ; then
 set `./nlisttest`
 nlist_loc=$1

 set `./nlisttest 0`
 if $test "$3" = "0" ; then
```

```
  echo "$nlist_fnd is 0 if nlist() fails, as I expected."
 else
  $cat <<EOM
Hello, Jim.  We have just discovered that $nlist_fnd was nonzero on an
nlist() lookup failure!  Your mission, should you choose to accept it, is to
edit either config.sh (to provide a Good value for nlist_fnd) or The Code
(to find an alternative to NLIST_FOUND), and reporting the full details of
your success to the MetaConfig Police.  Of course, should you fail...
EOM
  nlist_fnd="/* Bletch! */ */"
 fi

 set `./nlisttest 1`
 if $test "$nlist_loc" = "$3" ; then
  echo "Symbols are stored with no initial characters."
  nlist_pfx=
 else
  set `./nlisttest 2`
  if
 $test "$nlist_loc" = "$3" ; then
   echo "Symbols are stored with an initial underscore."
   nlist_pfx=_
  else
   set `./nlisttest 3`
   if $test "$nlist_loc" = "$3" ; then
    echo "Symbols are stored with an initial dot."
    nlist_pfx=.
   else
    $cat <<EOM
I can't figure out the symbol prefix!
You get to edit config.sh and fix 'nlist_pfx' (Configure will let you do this
at the end of its configuration questions), or config.h and fix the value of
the NLIST_PREFIX symbol.
EOM
    nlist_pfx="/* Bletch! */ */"
   fi
  fi
 fi
else
 $cat <<EOM
I can't get the nlist test program working!
You get to edit config.sh and fix 'nlist_pfx' (Configure will let you do this
at the end of its configuration questions) and 'nlist_fnd', or config.h and
fix the value of the NLIST_PREFIX and NLIST_FOUND symbols.
EOM
 nlist_pfx="/* Bletch! */ */"
 nlist_fnd="/* Bletch! */ */"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nlist_pfx.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_exp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_exp2:
?S: This variable conditionally defines the HAS_EXP2 symbol, which
?S: indicates to the C program that the exp2() routine is available.
?S:.
?C:HAS_EXP2:
?C: This symbol, if defined, indicates that the exp2 routine is
?C: available to do the 2**x function.
?C:.
?H:#$d_exp2 HAS_EXP2  /**/
?H:.
?LINT:set d_exp2
: see if exp2 exists
set exp2 d_exp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_exp2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_quadmath: Inhdr
?MAKE: -pick add $@ %<
?S:i_quadmath:
?S: This variable conditionally defines I_QUADMATH, which indicates
?S: to the C program that it should include <quadmath.h>.
?S:.
?C:I_QUADMATH:
?C: This symbol, if defined, indicates that <quadmath.h> exists and
?C: should be included.
?C:.
?H:#$i_quadmath I_QUADMATH  /**/
?H:.
?LINT:set i_quadmath
: see if this is a quadmath.h system
set quadmath.h i_quadmath
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_quadmath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getppid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_getppid.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:45  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_getppid: Inlibc
?MAKE: -pick add $@ %<
?S:d_getppid:
?S: This variable conditionally defines the HAS_GETPPID symbol, which
?S: indicates to the C program that the getppid() routine is available
?S: to get the parent process ID.
?S:.
?C:HAS_GETPPID :
?C: This symbol,
 if defined, indicates that the getppid routine is
?C: available to get the parent process ID.
?C:.
?H:#$d_getppid HAS_GETPPID  /**/
?H:.
?LINT:set d_getppid
: see if getppid exists
set getppid d_getppid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getppid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libflex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libflex.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:57:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:07:02  ram
?RCS: patch23: now uses full library path instead of -l notation
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:13:25  ram
?RCS: patch16: un-obsoleted this unit to allow smooth lex/flex compilations
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:59  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:libflex: Loc lex libpth _a
?MAKE: -pick add $@ %<
?S:libflex:
?S: This variable contains the argument to pass to the loader in order
?S: to get the flex/lex library routines.  If there is no flex or flex
?S: library, it is null.
?S:.
?T:xxx
: see if we should include -lfl
echo " "
case "$lex" in
*flex)
 xxx=`./loc libfl$_a x $libpth`
 case "$xxx" in
 x)
  echo "No flex library found." >&4
  libflex=''
  ;;
 *)
  echo "flex library found in $xxx." >&4
  libflex="$xxx"
  ;;
 esac
 ;;
*lex)
 xxx=`./loc libl$_a x $libpth`
 case "$xxx" in
 x)
```

```
  echo "No lex library found." >&4
  libflex=''
  ;;
 *)
  echo "lex library found in $xxx." >&4
  libflex="$xxx"
  ;;
 esac
 ;;
*)
echo "You don't seem to have lex or flex, so I won't look for libraries." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libflex.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:sysroot: Head
?MAKE: -pick add $@ %<
?S:sysroot:
?S: This variable is empty unless supplied by the Configure user.
?S: It can contain a path to an alternative root directory, under which
?S: headers and libraries for the compilation target can be found. This
?S: is generally used when cross-compiling using a gcc-like compiler.
?S:.
?LINT:extern cc
?LINT:extern cppflags
?LINT:change cppflags
?LINT:extern ccflags
?LINT:change ccflags
?LINT:extern ldflags
?LINT:change ldflags
?LINT:extern cccdlflags
?X: _sysroot is later used in ccflags, but we do not want it in config.sh
?T:var xxx path _sysroot
: Set 'sysroot' to change the logical root directory to your headers and libraries see man gcc
: This is primarily meant for cross-compile environments, and
 may fail to be useful in other cases
if test "X$sysroot" = X; then
   sysroot=""
else
   case "$cc" in
```

```
 *gcc*|*g++*)
    echo "Using $sysroot to find your headers and libraries, adding to ccflags"
    # _sysroot is used in places where we need --sysroot=foo
    # but using the rest of the flags could cause issues.
    _sysroot="--sysroot=$sysroot";
    case "$ccflags" in
  *sysroot*) ;;
  'undef'|*)
  ccflags="$ccflags $_sysroot"
    esac
    case "$ldflags" in
  *sysroot*) ;;
  'undef'|*)
  ldflags="$ldflags $_sysroot"
    esac
    case "$cppflags" in
  *sysroot*) ;;
  'undef'|*)
  cppflags="$cppflags $_sysroot"
    esac
    # lddlflags updated below in lddlflags section;
    # same with cccdlflags
    ;;
   esac

   # Adjust some defaults to also use $sysroot
   for var in xlibpth loclibpth locincpth glibpth; do
 eval xxx=\$$var
 eval $var=''
 for path in $xxx; do
    eval $var=\"\$$var $sysroot$path\"
 done
   done

fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Sysroot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_unistd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_unistd.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_unistd: Inhdr
?MAKE: -pick add $@ %<
?S:i_unistd:
?S: This variable conditionally defines the I_UNISTD symbol, and indicates
?S: whether a C program should include <unistd.h>.
?S:.
?C:I_UNISTD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <unistd.h>.
?C:.
?H:#$i_unistd I_UNISTD  /**/
?H:.
?LINT:set
 i_unistd
: see if this is a unistd.h system
set unistd.h i_unistd
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_unistd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctermid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ctermid_r ctermid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_ctermid_r:
?S: This variable conditionally defines the HAS_CTERMID_R symbol,
?S: which indicates to the C program that the ctermid_r()
?S: routine is available.
?S:.
?S:ctermid_r_proto:
?S: This variable encodes the prototype of ctermid_r.
?S: It is zero if d_ctermid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctermid_r
```

```
?S: is defined.
?S:.
?C:HAS_CTERMID_R:
?C: This symbol, if defined, indicates that the ctermid_r routine
?C: is available to ctermid re-entrantly.
?C:.
?C:CTERMID_R_PROTO:
?C: This
 symbol encodes the prototype of ctermid_r.
?C: It is zero if d_ctermid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctermid_r
?C: is defined.
?C:.
?H:#$d_ctermid_r HAS_CTERMID_R /**/
?H:#define CTERMID_R_PROTO $ctermid_r_proto /**/
?H:.
?T:try hdrs d_ctermid_r_proto
: see if ctermid_r exists
set ctermid_r d_ctermid_r
eval $inlibc
case "$d_ctermid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h "
 case "$d_ctermid_r_proto:$usethreads" in
 ":define") d_ctermid_r_proto=define
  set d_ctermid_r_proto ctermid_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ctermid_r_proto" in
 define)
 case "$ctermid_r_proto" in
 "|0) try='char* ctermid_r(char*);'
 ./protochk "$extern_C $try" $hdrs && ctermid_r_proto=B_B ;;
 esac
 case "$ctermid_r_proto" in
 "|0) d_ctermid_r=undef
  ctermid_r_proto=0
  echo "Disabling ctermid_r, cannot determine prototype." >&4 ;;
 * ) case "$ctermid_r_proto" in
  REENTRANT_PROTO*) ;;
  *)
 ctermid_r_proto="REENTRANT_PROTO_$ctermid_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
```

```
  define) echo "ctermid_r has no prototype, not using it." >&4 ;;
  esac
  d_ctermid_r=undef
  ctermid_r_proto=0
  ;;
 esac
 ;;
*) ctermid_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ctermid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strerror.U,v 3.0.1.3 1994/05/13 15:20:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_strerror.U,v $
?RCS: Revision 3.0.1.3  1994/05/13  15:20:27  ram
?RCS: patch27: now uses new macro support for cleaner Strerror def
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  14:58:26  ram
?RCS: patch23: renamed strerror into Strerror to protect name space (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:56  ram
?RCS: patch16: protected code looking for sys_errnolist[] with @if
?RCS: patch16: added default value for d_sysernlst
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:07:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syserrlst d_sysernlst: Csym Findhdr
?MAKE: -pick add $@ %<
?S:d_syserrlst:
?S: This variable conditionally defines HAS_SYS_ERRLIST if sys_errlist[] is
?S: available to translate error numbers to strings.
?S:.
?S:d_sysernlst:
?S: This variable conditionally defines HAS_SYS_ERRNOLIST if sys_errnolist[]
```

```
?S: is available to translate error numbers to the symbolic name.
?S:.
?C:HAS_SYS_ERRLIST (SYSERRLIST):
?C: This symbol, if defined, indicates that the sys_errlist array is
?C: available to translate error numbers to strings. The extern int
?C: sys_nerr gives the size of that table.
?C:.
?C:HAS_SYS_ERRNOLIST (SYSERRNOLIST):
?C: This symbol, if defined, indicates that the sys_errnolist array is
?C: available to translate an errno code into its symbolic name (e.g.
?C: ENOENT). The extern int sys_nerrno gives the size of that table.
?C:.
?H:#$d_syserrlst HAS_SYS_ERRLIST /**/
?H:#$d_sysernlst HAS_SYS_ERRNOLIST /**/
?H:.
?D:d_sysernlst="
?T:val
:
 see if sys_errlist[] exists
echo " "
if test "X$d_syserrlst" = X; then
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "You have sys_errlist[], so we could roll our own strerror."
  d_syserrlst="$define"
 else
  echo "You don't have sys_errlist[], so strerror() is welcome."
  d_syserrlst="$undef"
 fi
fi
@if d_sysernlst || HAS_SYS_ERRNOLIST
if set sys_errnolist val -a d_sysernlst; eval $csym; $val; then
 echo "(Symbolic error codes can be fetched via the sys_errnolist[] array.)"
 d_sysernlst="$define"
else
 echo "(However, I can't extract the symbolic error code out of errno.)"
 d_sysernlst="$undef"
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_strerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?X:
?X: This unit produces a shell script which can be run in order to emit
?X: an important warning to the user, which will be remembered and shown
?X: at the end of the Configure run as well.
?X:
?X: A typical use would be:
?X:
?X:  ./warn <<EOM
?X:  Problem with your C compiler: can't turn debugging on.
?X:  EOM
?X:
?X: or:
?X:
?X:  ./warn "Problem with your C compiler: can't turn debugging on."
?X:
?X: Which will both display to the user:
?X:
?X:  ***
 WARNING:
?X:  *** Problem with your C compiler: can't turn debugging on.
?X:  ***
?X:
?MAKE:Warn: startsh eunicefix
?MAKE: -pick add $@ %<
?F:./warn
: script used to emit important warnings
cat >warn <<EOS
$startsh
?X: Read the whole warning message from stdin into a temporary file
?X: when no argument was supplied.
if test \$# -gt 0; then
 echo "\$@" >msg
else
 cat >msg
fi
?X: Emit the warning, prefixing all lines with '*** '
echo "*** WARNING:" >&4
sed -e 's/^/*** /' <msg >&4
echo "*** " >&4
?X: Save the warning in the logs, which will be shown again at the end
cat msg >>config.msg
echo " " >>config.msg
```

```
rm -f msg
EOS
chmod +x warn
$eunicefix warn
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysstatvfs.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysstatvfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysstatvfs:
?S: This variable conditionally defines the I_SYSSTATVFS symbol,
?S: and indicates whether a C program should include <sys/statvfs.h>.
?S:.
?C:I_SYS_STATVFS:
?C: This symbol, if defined, indicates that <sys/statvfs.h> exists and
?C: should be included.
?C:.
?H:#$i_sysstatvfs I_SYS_STATVFS  /**/
?H:.
?LINT:set i_sysstatvfs
: see if this is a sys/statvfs.h system
set sys/statvfs.h i_sysstatvfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysstatvfs.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: setsid.C,v 3.0.1.1 1994/01/24 13:58:47 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
```

```
* $Log: setsid.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:47  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/setsid.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fseeko: Inlibc longsize
?MAKE: -pick add $@ %<
?S:d_fseeko:
?S: This variable conditionally defines the HAS_FSEEKO symbol, which
?S: indicates to the C program that the fseeko() routine is available.
?S:.
?C:HAS_FSEEKO:
?C: This symbol, if defined, indicates that the fseeko routine is
?C: available to fseek beyond 32 bits (useful for ILP32 hosts).
?C:.
?H:#$d_fseeko HAS_FSEEKO  /**/
?H:.
?LINT:set d_fseeko
: see if fseeko exists
set fseeko d_fseeko
eval $inlibc
case "$longsize" in
8) echo "(Your long is 64 bits, so you could use fseek.)" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fseeko.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_setitimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_setitimer:
?S: This variable conditionally defines the HAS_SETITIMER symbol, which
?S: indicates to the C program that the setitimer() routine is available.
?S:.
?C:HAS_SETITIMER:
?C: This symbol, if defined, indicates that the setitimer routine is
?C: available to set interval timers.
?C:.
?H:#$d_setitimer HAS_SETITIMER  /**/
?H:.
?LINT:set d_setitimer
: see if setitimer exists
set setitimer d_setitimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setitimer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_machcthr: Inhdr usethreads
?MAKE: -pick add $@ %<
?S:i_machcthr:
?S: This variable conditionally defines the I_MACH_CTHREADS symbol,
?S: and indicates whether a C program should include <mach/cthreads.h>.
?S:.
?C:I_MACH_CTHREADS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <mach/cthreads.h>.
?C:.
?H:#$i_machcthr   I_MACH_CTHREADS /**/
?H:.
: see if mach cthreads are available
if test "X$usethreads" = "X$define"; then
 set mach/cthreads.h i_machcthr
 eval $inhdr
else
```

```
 i_machcthr="$undef"
fi
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/i_machcthr.U
No license file was found, but licenses were detected in source scan.

Perl5 Metaconfig Units

Copyright (c) 1996-1998, Andy Dougherty
Copyright (c) 1999-2011, H.Merijn Brand
All rights reserved.

These units are the ones I used to build Configure and config_h.SH
in the Perl5 distribution.

The Configure script and config_h.SH file in the Perl distribution are
generated by a program called metaconfig. To run metaconfig, you will
need the full dist 3.0 distribution, maintained by Raphael Manfredi.
As of this writing, the current version is dist3.0, patchlevel 70.
Dist version dist-3.0@70.tar.gz is available on CPAN (the Comprehensive
Perl Archive Network) as
<http://www.perl.com/perl/CPAN/authors/id/RAM/dist-3.0@70.tar.gz>.

Instructions:

1. Unpack the full perl5 sources. Execute the following command

```
 chmod +w Configure config_h.SH Porting/Glossary Porting/config*
```

2. Unpack the archive containing this file in the perl5 source
   directory. This will create a directory
 'U' under the perl5
   sources. That directory will contain the metaconfig units for perl5.
   This will also create two files in the perl5 source tree:
   MANIFEST.new and .package.

3. Apply any patches to perl in the perl_patches/ directory.
   (This may well be empty.)

4. Obtain and install dist-3.0pl70.

4. Apply any patches to dist under the dist_patches subdirectory.

5. From your main perl5 source directory, run packinit to
   regenerate the .package file. IMPORTANT: Change the name and
   address of the maintainer to your own name and address. I don't

want bug reports intended for you coming to me.

6. From your main perl5 source directory, run

metalint (or mlint)

and repair every failure it reports.

7. From your main perl5 source directory, run

metaconfig -m (or mconfig -m)

8. Edit U/mkglossary and/or U/mkgloss.pl to point to your dist-3.0pl70 location. (See comments at the top.)

9. Run the Porting/mksample script to update the contents of the Porting/ subdirectory, or run all parts by hand. (see README)

NB: this script used to be U/mksample replaced by Porting/mksample; see Porting/pumpkin.pod instead for current documentation on its use.

10. Let me know about any changes, corrections, or enhancements.

Things to watch out for:

1. Future support of better random number generators should probably start with the randfunc.U unit included here. It's currently broken, but well commented and probably a good place to start.

Descriptions:

The units and other related files have been broken up into the following directories:

acl/
This is an old patch to begin to detect and use ACL (access control list) file protection schemes.

compline/
These are similar to the standard units, but I have modified them to have a more uniform compile command line, usually using the new Compile.U unit. I have submitted these for inclusion into the regular dist distribution. (The ccflags.U unit is actually perl-specific since it mentions -DDEBUGGING and -DPOSIX_SOURCE, but that's the only place it is perl-specific.)

dist_patches/

These are patches to dist that must be applied before it is built and installed. I have submitted these for inclusion in the regular dist distribution.

modified/

These are modified versions of the standard units. Also included in this directory are new units that are clearly derived from existing units. I have submitted these for inclusion in the regular dist distribution.

perl/

These are specific to perl. Some are heavily derived from original dist units, and are marked as such. Others are original.

perl_patches/

These are patches to the perl source. This directory should ordinarily be empty, but there may have been drift between the standard version of perl and the one associated with these units.

protos/

These are units modified to use the new Hasproto.U or Protochk.U units to check for prototypes. I have submitted these for inclusion into the regular dist distribution.

target/

This is the very, very beginning of cross-compiler support. It doesn't work yet, and many standard units will need modification.

typedefs/

These are standard units modified to use the modified Typedef.U unit to check for typedefs. (The modified Typdef.U includes a function to avoid unnecessary prompts if the typdef being searched for exists.) I have submitted these for inclusion into the regular dist distribution.

threads/

These are specific to threading perl.

Copyright Information:

Unless otherwise indicated, the files contained in this distribution are:

Copyright (c) 1996-1998, Andy Dougherty

The following licensing terms apply to all files contained in
this distribution:

You may distribute the files contained in this distribution
under the terms of either

a) the "Artistic License" which comes with Perl,
or

b) the "Artistic License" which comes with dist, or

c) the GNU General Public License as published by the Free
Software Foundation; either version 1, or (at your option) any
later version (see the file "Copying" that comes with the
Perl distribution).

Which one to use is your choice.

The units in the "modified" directory have been derived from units
associated with the metaconfig program of Raphael Manfredi's "dist"
distribution. These units list Raphael Manfredi as the Copyright holder.
dist is distributed under a modified version of the Perl Artistic License.
Clause 7 of this modified license as contained in dist-3.0-pl60 provides:

7. You may reuse parts of this Package in your own programs, provided
that you explicitly state where you got them from, in the source code
(and, left to your courtesy, in the documentation), duplicating
all the associated copyright notices and disclaimers. Besides
your changes, if any, must be clearly marked
as such. Parts reused
that way will no longer fall under this license if, and only if,
the name of your program(s) have no immediate connection with the
name of the Package itself or its associated programs. You may then
apply whatever restrictions you wish on the reused parts or choose
to place them in the Public Domain--this will apply only within the
context of your package.

In accordance with this clause, the versions of these units
contained here are made available under the same terms as the
rest of the units.

If you have any questions about the use of these units or about
the differences between these units and the standard versions, please
feel free to ask.

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Lafayette College
Easton, PA 18042-1782

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/README.dist
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Finish.U,v $
?RCS: Revision 3.0.1.6  1995/02/15  14:09:30  ram
?RCS: patch51: now clearer about how to edit config.sh at the prompt (WED)
?RCS:
?RCS: Revision 3.0.1.5  1994/10/29  15:53:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:19:37  ram
?RCS: patch23: added blank lines around 'End of Configure'
?RCS:
?RCS: Revision 3.0.1.3  1993/10/16  13:46:09  ram
?RCS: patch12: replaced Config_h by Magic_h in the dependency line
?RCS:
?RCS:
 Revision 3.0.1.2  1993/09/13  15:45:26  ram
?RCS: patch10: fixed shell evaluation w/o shell escape while in silent mode
?RCS:
?RCS: Revision 3.0.1.1  1993/08/30  08:55:59  ram
?RCS: patch8: prevents myread from blocking on empty answers, exceptionally
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit is the very last one in the Configure script.  It runs all the
?X: SH files, which among other things produce config.h and (usually) Makefile.
?X: It offers to do a make depend if the Makefile contains that target.
?X:
?MAKE:Finish: Chk_MANI Extract Myread Oldsym Magic_h cat rm contains \
 test package make
?MAKE: -pick add $@ %<
```

```
?F:!config.sh
?T:pwd
: Finish up by extracting the .SH files
case "$alldone" in
exit)
?X: They supplied the -E switch
 echo "Stopping at your request, leaving temporary files around."
 exit 0
 ;;
cont)
 ;;
")
 dflt=''
 nostick=true
 $cat <<EOM

If you'd like to make any changes to the config.sh
 file before I begin
to configure things, do it as a shell escape now (e.g. !vi config.sh).

EOM
 rp="Press return or use a shell escape to edit config.sh:"
 . UU/myread
 nostick=''
 case "$ans" in
 '') ;;
 *) : in case they cannot read
  sh 1>&4 -c "$ans";;
 esac
 ;;
esac

: if this fails, just run all the .SH files by hand
. ./config.sh

?X:
?X: Turn silent mode off from now on (we want a verbose file extraction).
?X: This means we have to explicitly test for '$silent' from now on to
?X: strip off any verbose messages.
?X:
echo " "
exec 1>&4
pwd=`pwd`
. ./UU/extract
cd "$pwd"

if $contains '^depend:' [Mm]akefile >/dev/null 2>&1; then
 dflt=y
```

```
 case "$silent" in
 true) ;;
 *)
  $cat <<EOM

Now you need to generate make dependencies by running "$make depend".
You might prefer to run it in background: "$make depend > makedepend.out &"
It can take a while, so you might not want to run it right now.

EOM
  ;;
 esac
 rp="Run $make depend now?"
 . UU/myread
 case "$ans" in
 y*)
  $make depend
 && echo "Now you must run '$make'."
  ;;
 *)
  echo "You must run '$make depend' then '$make'."
  ;;
 esac
elif test -f [Mm]akefile; then
 echo " "
 echo "Now you must run a $make."
else
 echo "Configure done."
fi

if $test -f Policy.sh; then
   $cat <<EOM

If you compile $package on a different machine or from a different object
directory, copy the Policy.sh file from this object directory to the
new one before you run Configure -- this will help you with most of
the policy defaults.

EOM
fi
if $test -f UU/config.msg; then
   echo "Hmm.  I also noted the following information while running:"
   echo " "
   $cat UU/config.msg >&4
fi
?X:
?X: kit*isdone files are left over by shell archives built using the makedist
?X: script which comes from dist, while ark*isdone files are left over by
```

```
?X: the cshar archive maker.
?X:
$rm -f kit*isdone ark*isdone
$rm -rf UU

: End of Configure
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Finish.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: usenm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:26:40  ram
?RCS: patch61: don't use nm with the GNU C library
?RCS: patch61: added support for Linux shared libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usenm runnm nm_opt nm_so_opt: cat test Myread Oldconfig grep \
 d_gnulibc nm egrep rsrc osname Guess
?MAKE: -pick add $@ %<
?S:usenm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction is wanted
 or not.
?S:.
?S:runnm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction should be performed or not, according to the value
?S: of usenm and the flags on the Configure command line.
?S:.
?S:nm_opt:
?S: This variable holds the options that may be necessary for nm.
?S:.
?S:nm_so_opt:
?S: This variable holds the options that may be necessary for nm
?S: to work on a shared library but that can not be used on an
```

```
?S: archive library.  Currently, this is only used by Linux, where
?S: nm --dynamic is *required* to get symbols from an ELF library which
?S: has been stripped, but nm --dynamic is *fatal* on an archive library.
?S: Maybe Linux should just always set usenm=false.
?S:.
: see if nm is to be used to determine whether a symbol is defined or not
?X: If there is enough inquiries, it might be worth to wait for the nm
?X: extraction. Otherwise, the C compilations might be a better deal.
?X:
?X: Don't bother if we're using GNU libc -- skimo
case "$usenm"
 in
")
 dflt="
 case "$d_gnulibc" in
 "$define")
  echo " "
  echo "$nm probably won't work on the GNU C Library." >&4
  dflt=n
  ;;
 esac
 case "$dflt" in
 ")
  if $test "$osname" = aix -a ! -f /lib/syscalls.exp; then
   echo " "
   echo "Whoops!  This is an AIX system without /lib/syscalls.exp!" >&4
   echo "'nm' won't be sufficient on this system." >&4
   dflt=n
  fi
  ;;
 esac
 case "$dflt" in
 ")
  if ./gnu; then
   echo " "
   echo "Hmm...  A GNU system without a GNU C Library?  Weird..." >&4
   dflt=n
  else
   dflt=`$egrep 'inlibc|csym' $rsrc/Configure | wc -l 2>/dev/null`
   if $test $dflt -gt 20; then
    dflt=y
   else
    dflt=n
   fi
  fi
  ;;
 esac
 ;;
```

```
*)
 case "$usenm" in
 true|$define) dflt=y;;
 *) dflt=n;;
 esac
 ;;
esac
$cat <<EOM

I can use $nm to extract the symbols from your C libraries. This
is a time consuming task which may generate huge output on the disk (up
to 3 megabytes) but that should make the symbols extraction faster. The
alternative is to skip the
 'nm' extraction part and to compile a small
test program instead to determine whether each symbol is present. If
you have a fast C compiler and/or if your 'nm' output cannot be parsed,
this may be the best solution.

EOM
rp='Shall I use nm to extract C symbols from the libraries?'
. ./myread
case "$ans" in
[Nn]*) usenm=false;;
*) usenm=true;;
esac

?X: Name extraction is to be run if 'nm' usage is wanted and if no -r flag
?X: was provided to configure (in which case we simply re-use the previous
?X: values).
runnm=$usenm
case "$reuseval" in
true) runnm=false;;
esac

: nm options which may be necessary
case "$nm_opt" in
") if $test -f /mach_boot; then
  nm_opt="  # Mach
 elif $test -d /usr/ccs/lib; then
  nm_opt='-p'  # Solaris (and SunOS?)
 elif $test -f /dgux; then
  nm_opt='-p'  # DG-UX
 elif $test -f /lib64/rld; then
  nm_opt='-p'  # 64-bit Irix
 else
  nm_opt="
 fi;;
esac
```

```
?X: nm options which may be necessary for shared libraries but illegal
?X: for archive libraries.  Thank you,
 Linux.
case "$nm_so_opt" in
") case "$osname" in
 *linux*)
  if $nm --help | $grep 'dynamic' > /dev/null 2>&1; then
   nm_so_opt='--dynamic'
  fi
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usenm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_attribut.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 2020, Raphael Manfredi, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_non_int_bitfields: \
    Myread Oldconfig cat cc ccflags Setvar compiler_warning rm_try
?MAKE: -pick add $@ %<
?S:d_non_int_bitfields:
?S: This variable conditionally defines HAS_NON_INT_BITFIELDS
?S: which indicates that the C compiler accepts struct bitfields of sizes
?S: that aren't 'int' or 'unsigned int'
?S:.
?C:HAS_NON_INT_BITFIELDS:
?C: This symbol, if defined, indicates that the C compiler accepts, without
?C: error or warning, struct bitfields
 that are declared with sizes other
?C: than plain 'int'; for example 'unsigned char' is accepted.
?C:.
?H:?%<:#$d_non_int_bitfields HAS_NON_INT_BITFIELDS /**/
?H:.
?LINT:set d_non_int_bitfields
?F:!try.out !try.c
: Look for non 'int'-sized bitfields
```

```
case "$d_non_int_bitfields" in
")
echo " " >&4
echo "Checking whether your compiler can handle struct bitfields that aren't 'int' or 'unsigned int' ..." >&4
$cat >try.c <<'EOCP'
#include <stdio.h>
struct foo {
   unsigned char byte:1;
   unsigned short halfword:1;
} bar;
EOCP
if $cc $ccflags -c try.c >try.out 2>&1 ; then
 if $compiler_warning try.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support struct bitfields that aren't 'int' or 'unsigned int'." >&4
  val="$undef"
 else
  echo "Your C compiler supports struct bitfields besides 'int' and 'unsigned int'." >&4
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand struct bitfields that aren't 'int' or 'unsigned int' at all." >&4
 val="$undef"
fi
;;
*)
 val="$d_non_int_bitfields" ;;
esac
set d_non_int_bitfields
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_bitfield.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bcopy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bcopy.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:48:04  ram
?RCS: patch12: added magic support for bcopy()
```

```
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:01:11  ram
?RCS: patch10: now only defines HAS_BCOPY, no macro remap on memcpy (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bcopy: Inlibc
?MAKE: -pick add $@ %<
?S:d_bcopy:
?S: This variable conditionally defines the HAS_BCOPY
 symbol if
?S: the bcopy() routine is available to copy strings.
?S:.
?C:HAS_BCOPY:
?C: This symbol is defined if the bcopy() routine is available to
?C: copy blocks of memory.
?C:.
?H:#$d_bcopy HAS_BCOPY /**/
?H:.
?M:bcopy: HAS_BCOPY
?M:#ifndef HAS_BCOPY
?M:#ifndef bcopy
?M:#define bcopy(s,d,l) memcpy((d),(s),(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bcopy
: see if bcopy exists
set bcopy d_bcopy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bcopy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcrtomb: Inlibc
?MAKE: -pick add $@ %<
?S:d_wcrtomb:
?S: This variable conditionally defines the HAS_WCRTOMB symbol if the
```

```
?S: wcrtomb() routine is available to be used to convert a wide character
?S: into a multi-byte character.
?S:.
?C:HAS_WCRTOMB:
?C: This symbol, if defined, indicates that the wcrtomb routine is
?C: available to convert a wide character into a multi-byte character.
?C:.
?H:#$d_wcrtomb HAS_WCRTOMB /**/
?H:.
?LINT: set d_wcrtomb
: see if wcrtomb exists
set wcrtomb d_wcrtomb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_wcrtomb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sigprocmask: Inlibc
?MAKE: -pick add $@ %<
?S:d_sigprocmask:
?S: This variable conditionally defines HAS_SIGPROCMASK
?S: if sigprocmask() is available to examine or change the signal mask
?S: of the calling process.
?S:.
?C:HAS_SIGPROCMASK:
?C: This symbol, if defined, indicates that the sigprocmask
?C: system call is available to examine or change the signal mask
?C: of the calling process.
?C:.
?H:#$d_sigprocmask HAS_SIGPROCMASK  /**/
?H:.
?LINT:set d_sigprocmask
: see if sigprocmask exists
set sigprocmask d_sigprocmask
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sigprocmask.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Compile.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS:
?X:
?X: This unit is just a quick shorthand for the compile command
?X: to be used in all the other metaconfig units.
?X:
?MAKE:Compile: +cc +optimize +ccflags +ldflags +libs test
?MAKE: -pick wipe $@ %<
?LINT:extern usedevel maintloc
?LINT:define compile compile_ok
?V:compile compile_ok mc_file
?S:compile:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command, namely
?S: $cc $optimize $ccflags $ldflags -o $1 $1.c $libs > /dev/null 2>&1
?S: Note that the output filename does _not_ include the _exe
?S: extension.  Instead we assume that the linker will be
?S: "helpful" and automatically appending the correct suffix.
?S: OS/2
 users will apparently need to supply the -Zexe flag to
?S: get this behavior.
?S:
?S: To use this variable, say something like:
?S:  echo 'int main() { exit(0); }' > try.c
?S:  set try
?S:  if eval $compile; then
?S:   echo "success"   # and do whatever . . .
?S:  else
?S:   echo "failure"   # and do whatever . . .
?S:  fi
?S: To add extra flags cc flags (e.g. -DWHATEVER) just put them
?S: in $*, e.g.
?S:  set try -DTRY_THIS_FLAG
?S:.
?S:compile_ok:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command that you
?S: expect to work ok.  It is the same as $compile, except we
```

```
?S: deliberately let the user see any error messages.
?S:.
: define a shorthand compile call
compile='
mc_file=$1;
shift;
case "$usedevel" in $define|true|[yY]*) if $test ! -f "${mc_file}.c"; then
echo "Internal Configure script bug - compiler test file ${mc_file}.c is missing. Please report this to <$maintloc>"
>&4;
exit 1;
fi;
esac;
$cc
 -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
: define a shorthand compile call for compilations that should be ok.
compile_ok='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/Compile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?MAKE:run to from targetarch usecrosscompile: src awk cat grep test rm \
 echo sed mkdir cp touch chmod
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecrosscompile:
?S: This variable conditionally defines the USE_CROSS_COMPILE symbol,
?S: and indicates that our package has been cross-compiled.
?S:.
?S:run:
?S: This variable contains the command used by Configure
?S: to copy and execute a cross-compiled executable in the
?S: target host.  Useful and available only during
```

```
 the build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:from:
?S: This variable contains the command used by Configure
?S: to copy files from the target host.  Useful and available
?S: only during the build.
?S: The string ':' if not cross-compiling.
?S:.
?S:to:
?S: This variable contains the command used by Configure
?S: to copy to from the target host.  Useful and available
?S: only during the build.
?S: The string ':' if not cross-compiling.
?S:.
?S:targetarch:
?S: If cross-compiling, this variable contains the target architecture.
?S: If not, this will be empty.
?S:.
?C:USE_CROSS_COMPILE:
?C: This symbol, if defined, indicates that the package is being
?C: cross-compiled.
?C:.
?C:CROSS_TARGET_ARCH:
?C: This symbol, if defined, indicates the target architecture
?C: the package has been cross-compiled to.
?C: Undefined if not a cross-compile.
?C:.
?H:?usecrosscompile:#ifndef USE_CROSS_COMPILE
?H:?usecrosscompile:#$usecrosscompile USE_CROSS_COMPILE /**/
?H:?usecrosscompile:#define
 CROSS_TARGET_ARCH "$targetarch" /**/
?H:?usecrosscompile:#endif
?H:.
?T:croak pwd exe f q i j cwd
?LINT:extern usecrosscompile
?LINT:extern cc
?LINT:extern usrinc
?LINT:change usrinc
?LINT:change ar
?LINT:change nm
?LINT:change ranlib
?LINT:extern targethost
?LINT:extern targetdir
?LINT:change targetdir
?LINT:extern targetuser
?LINT:change targetuser
?LINT:extern targetrun
```

```
?LINT:extern targetfrom
?LINT:extern targetto
?LINT:extern targetmkdir
?LINT:change targetrun
?LINT:change targetfrom
?LINT:change targetto
?LINT:change targetmkdir
?LINT:extern incpth
?LINT:extern libpth
?LINT:change incpth
?LINT:change libpth
?LINT:extern locincpth
?LINT:extern loclibpth
?LINT:change locincpth
?LINT:change loclibpth
?LINT:extern TMPDIR
: setup for possible cross-compilation
run=''
to=:
from=:
usecrosscompile='undef'
targetarch=''
case "$usecrosscompile" in
$define|true|[yY]*)
@if { test -d ../Cross }
?X:
?X: Cross-compilation is enabled when there is a 'Cross' directory found
?X: at the root
 of the package.  This directory must contain the following
?X: entries for defining the cross-compilation process:
?X:
?X: FIXME FIXME
?X: WE MUST DISTINGUISH BETWEEN LOCAL cross-compiling AND REMOTE ONE
?X: ACTUALLY, REMOTE COMPILATION SHOULD BE CONFIGURED INTERACTIVELY
?X: IT WILL COPY ALL THE FILES FROM THE MANIFEST DOWN TO THE REMOTE DIR...
?X: (and copy things like 'mkdep', etc...)
?X:
 $echo "Cross-compiling..."
 croak=''
 case "$cc" in
 *-*-gcc)
?X: A cross-compiling gcc, probably.
    targetarch=`$echo $cc|$sed 's/-gcc$//'`
    ar=$targetarch-ar
?X: leave out ld, choosing it is more complex
    nm=$targetarch-nm
    ranlib=$targetarch-ranlib
    $echo 'extern int foo;' > try.c
```

```
    set X `$cc -v -E try.c 2>&1 | \
  $awk '/^#include </,/^End of search /'|$grep '/include'`
    shift
 if $test $# -gt 0; then
        incpth="$incpth $*"
  incpth="`$echo $incpth|$sed 's/^ //'`"
  echo "Guessing incpth '$incpth'." >&4
  for i in $*; do
   j="`$echo $i|$sed 's,/include$,/lib,'`"
   if
$test -d $j; then
    libpth="$libpth $j"
   fi
  done
  libpth="`$echo $libpth|$sed 's/^ //'`"
  echo "Guessing libpth '$libpth'." >&4
    fi
    $rm -f try.c
    ;;
esac
case "$targetarch" in
") echo "Targetarch not defined." >&4; croak=y ;;
*)  echo "Using targetarch $targetarch." >&4 ;;
esac
case "$incpth" in
") echo "Incpth not defined." >&4; croak=y ;;
*)  echo "Using incpth '$incpth'." >&4 ;;
esac
case "$libpth" in
") echo "Libpth not defined." >&4; croak=y ;;
*)  echo "Using libpth '$libpth'." >&4 ;;
esac
case "$usrinc" in
")
 for i in $incpth; do
  if $test -f $i/errno.h -a -f $i/stdio.h -a -f $i/time.h; then
   usrinc=$i
   echo "Guessing usrinc $usrinc." >&4
   break
  fi
    done
    case "$usrinc" in
    ") echo "Usrinc not defined." >&4; croak=y ;;
    esac
 ;;
*)  echo "Using usrinc $usrinc." >&4 ;;
esac
case "$targethost" in
```

```
") echo "Targethost not defined." >&4; croak=y ;;
*)  echo "Using targethost $targethost."
>&4
esac
locincpth=' '
loclibpth=' '
case "$croak" in
y) echo "Cannot continue, aborting." >&4; exit 1 ;;
esac
case "$src" in
/*) run=$src/Cross/run
    targetmkdir=$src/Cross/mkdir
    to=$src/Cross/to
    from=$src/Cross/from
    ;;
*)  pwd=`$test -f ../Configure & cd ..; pwd`
    run=$pwd/Cross/run
    targetmkdir=$pwd/Cross/mkdir
    to=$pwd/Cross/to
    from=$pwd/Cross/from
    ;;
esac
case "$targetrun" in
") targetrun=ssh ;;
esac
case "$targetto" in
") targetto=scp ;;
esac
case "$targetfrom" in
") targetfrom=scp ;;
esac
run=$run-$targetrun
to=$to-$targetto
from=$from-$targetfrom
case "$targetdir" in
")
 targetdir="${TMPDIR:-/tmp}"
 echo "Guessing targetdir $targetdir." >&4
 ;;
esac
case "$targetuser" in
")
 targetuser=root
 echo "Guessing targetuser $targetuser." >&4
 ;;
esac
case "$targetfrom" in
scp) q=-q ;;
```

```
 *) q=" ;;
 esac
 case "$targetrun" in
 ssh|rsh)
  $cat >$run <<EOF
#!/bin/sh
case "\$1" in
-cwd)
 shift
 cwd=\$1
  shift
 ;;
esac
case "\$cwd" in
") cwd=$targetdir ;;
esac
exe=\$1
shift
if $test ! -f \$exe.xok; then
 $to \$exe
 $touch \$exe.xok
fi
$targetrun -l $targetuser $targethost "cd \$cwd && ./\$exe \$@"
EOF
  ;;
 *)  echo "Unknown targetrun '$targetrun'" >&4
     exit 1
     ;;
 esac
 case "$targetmkdir" in
 */Cross/mkdir)
  $cat >$targetmkdir <<EOF
#!/bin/sh
$targetrun -l $targetuser $targethost "mkdir -p \$@"
EOF
     $chmod a+rx $targetmkdir
     ;;
 *)  echo "Unknown targetmkdir '$targetmkdir'" >&4
     exit 1
     ;;
 esac
 case "$targetto" in
 scp|rcp)
     $cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
```

```
 /*)
   $targetmkdir \`dirname \$f\`
   $targetto $q \$f $targetuser@$targethost:\$f            || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $targetto $q \$f $targetuser@$targethost:$targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 cp) $cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $mkdir -p $targetdir/\`dirname
 \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 *)  echo "Unknown targetto '$targetto'" >&4
     exit 1
     ;;
 esac
 case "$targetfrom" in
 scp|rcp)
   $cat >$from <<EOF
#!/bin/sh
for f in \$@
do
 $rm -f \$f
 $targetfrom $q $targetuser@$targethost:$targetdir/\$f . || exit 1
done
exit 0
EOF
     ;;
```

```
 cp) $cat >$from <<EOF
#!/bin/sh
for f in \$@
do
 $rm -f \$f
 cp $targetdir/\$f . || exit 1
done
exit 0
EOF
    ;;
 *)  echo "Unknown targetfrom '$targetfrom'" >&4
    exit 1
    ;;
 esac
 if $test ! -f $run; then
    echo "Target 'run' script '$run' not found." >&4
 else
    $chmod a+rx $run
 fi
 if $test ! -f $to; then
    echo "Target 'to' script '$to' not found." >&4
 else
    $chmod a+rx $to
 fi
 if $test ! -f $from; then
    echo "Target 'from' script '$from' not found." >&4
 else
    $chmod a+rx $from
 fi
 if $test ! -f $run -o ! -f $to -o !
 -f $from; then
    exit 1
 fi
 $cat >&4 <<EOF
Using '$run' for remote execution,
and '$from' and '$to'
for remote file transfer.
EOF
@else
 echo "Cross-compilation is not supported for this package." >&4
 exit 1
@end
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Cross.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmget.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmget: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmget:
?S: This variable conditionally defines the HAS_SHMGET symbol, which
?S: indicates to the C program that the shmget() routine is available.
?S:.
?C:HAS_SHMGET:
?C: This symbol, if defined, indicates that the shmget() routine is
?C: available to request a shared memory segment from
 the kernel.
?C:.
?H:#$d_shmget HAS_SHMGET  /**/
?H:.
?LINT:set d_shmget
: see if shmget exists
set shmget d_shmget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fork.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_fork.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:38  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_fork: Inlibc
?MAKE: -pick add $@ %<
?S:d_fork:
?S: This variable conditionally defines the HAS_FORK symbol, which
?S: indicates to the C program that the fork() routine is available.
?S:.
?C:HAS_FORK :
?C: This symbol, if defined, indicates that the fork routine is
?C: available.
?C:.
?H:#$d_fork
 HAS_FORK  /**/
?H:.
?LINT:set d_fork
: see if fork exists
set fork d_fork
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_remquo: Inlibc
?MAKE: -pick add $@ %<
?S:d_remquo:
?S: This variable conditionally defines the HAS_REMQUO symbol, which
?S: indicates to the C program that the remquo() routine is available.
?S:.
?C:HAS_REMQUO:
?C: This symbol, if defined, indicates that the remquo routine is
?C: available to return the remainder and part of quotient.
?C:.
?H:#$d_remquo HAS_REMQUO  /**/
?H:.
?LINT:set d_remquo
: see if remquo exists
set remquo d_remquo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_remquo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Nothing.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Nothing.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this file is to supply an empty target for the private
?X: Makefile built by metaconfig to order the units.
?X:
?MAKE:Nothing: Head
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Nothing.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: startperl.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:25:06  ram
?RCS: patch61: warn them if the #! line is too long for their OS
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startperl: cat rm sharpbang perlpath d_portable Myread
?MAKE: -pick add $@ %<
?S:startperl:
```

```
?S: This variable contains the string to put on the front of a perl
?S: script to make sure (hopefully) that it runs with perl and not some
?S: shell. Of course, that
 leading line must be followed by the classical
?S: perl idiom:
?S:  eval 'exec perl -S $0 ${1+"$@"}'
?S:   if $running_under_some_shell;
?S: to guarantee perl startup should the shell execute the script. Note
?S: that this magic incantation is not understood by csh.
?S:.
?C:STARTPERL:
?C: This symbol is the string that should be put on the front of a
?C: perl script to make sure (hopefully) that it runs with perl and
?C: not under some shell. That line should be followed by the classical
?C: invocation magic:
?C:  eval 'exec perl -S $0 ${1+"$@"}'
?C:   if $running_under_some_shell;
?C: to guarantee perl startup should the shell execute the script at first.
?C:.
?H:#define STARTPERL "$startperl"
?H:.
?T:pdflt
?F:!xtry
: figure out how to guarantee perl startup
case "$sharpbang" in
*!)
?X:
?X: Make sure the #!$perlpath magic incantation indeed works on this
?X: system... It might not if the length of the #! hook is greater
?X: than some hardwired kernel limit. -- RAM, 15/03/96
?X:
 $cat
 >xtry <<EOP
#!$perlpath
system("exit 0");
EOP
 chmod a+x xtry
 if ./xtry >/dev/null 2>&1; then
  $cat <<EOH

I can use the #! construct to start perl on your system. This will make
startup of perl scripts faster, but may cause problems if you want to share
those scripts and perl is not in a standard place (/usr/bin/perl) on all your
platforms. The alternative is to force a shell by starting the script with a
single ':' character.

EOH
  pdflt=y
```

```
 else
  $cat <<EOH

I could use the #! construct to start perl on your system, but using
   #!$perlpath
would be too long for your kernel to grok. Indeed, most systems do
limit the size of the leading #! string to 32 characters.

EOH
  pdflt=n
 fi
 $rm -f xtry
 case "$startperl" in
 *!*) dflt=y;;
 ") case "$d_portable" in
  "$define") dflt=n;;
  *) dflt=$pdflt;;
  esac;;
 *) dflt=n;;
 esac
 rp='Shall I use #! to start up perl?'
 . ./myread
 case "$ans" in
 y*|Y*) startperl="#!$perlpath";;
 *) startperl=": # use perl";;
 esac;;
*) startperl=":
 # use perl";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/startperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isinf: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isinf:
?S: This variable conditionally defines the HAS_ISINF symbol, which
?S: indicates to the C program that the isinf() routine is available.
?S:.
?C:HAS_ISINF:
```

```
?C: This symbol, if defined, indicates that the isinf routine is
?C: available to check whether a double is an infinity.
?C:.
?H:#$d_isinf HAS_ISINF  /**/
?H:.
?LINT:set d_isinf
: check for isinf
echo "Checking to see if you have isinf..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isinf(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isinf."
else
 val="$undef"
 echo "You do not have isinf."
fi
$rm_try
set d_isinf
eval $setvar
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isinf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_gdbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_gdbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:39  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_gdbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
```

```
?S:i_gdbm (d_gdbm):
?S: This variable conditionally defines the I_GDBM symbol, which
?S: indicates to the C program that <gdbm.h> exists and should
?S: be included.
?S:.
?C:I_GDBM
 (HAS_GDBM):
?C: This symbol, if defined, indicates that <gdbm.h> exists and should
?C: be included.
?C:.
?H:#$i_gdbm I_GDBM /**/
?H:.
?T:t_gdbm d_gdbm_open
?LINT:set i_gdbm
: see if gdbm.h is available
?X: t_gdbm is a tentative check. We might just have the .h, not the lib -- ADO
set gdbm.h t_gdbm
eval $inhdr
case "$t_gdbm" in
$define)
 : see if gdbm_open exists
 set gdbm_open d_gdbm_open
 eval $inlibc
 case "$d_gdbm_open" in
 $undef)
  t_gdbm="$undef"
  echo "We won't be including <gdbm.h>"
  ;;
 esac
 ;;
esac
val="$t_gdbm"
set i_gdbm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_gdbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Loc_sed.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?X: This is used in perl.c.
?MAKE:full_sed: sed
?MAKE: -pick add $@ %<
?S:full_sed:
?S: This variable contains the full pathname to 'sed', whether or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'sed.'
?S:.
?X: Yes, I know about the C symbol PORTABLE, but I think sed
?X: is
 unlikely to move, and I'm too lazy to add all the
?X: #ifdef PORTABLE sections to the perl source.
?X:
?C:LOC_SED:
?C: This symbol holds the complete pathname to the sed program.
?C:.
?H:#define LOC_SED  "$full_sed" /**/
?H:.
: Store the full pathname to the sed program for use in the C program
full_sed=$sed
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Loc_sed.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: selecttype.U,v 3.0.1.3 1997/02/28 16:20:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: selecttype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:20:09  ram
?RCS: patch61: always include <sys/select.h> when available for test
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:14:06  ram
?RCS: patch56: removed harmful spaces in assignment
?RCS:
```

```
?RCS: Revision 3.0.1.1  1994/06/20  07:06:31  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:selecttype: Protochk Oldconfig Myread cat
 \
 d_fd_set d_select d_socket i_systime i_sysselct extern_C
?MAKE: -pick add $@ %<
?S:selecttype:
?S: This variable holds the type used for the 2nd, 3rd, and 4th
?S: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?S: is defined, and 'int *' otherwise.  This is only useful if you
?S: have select(), naturally.
?S:.
?C:Select_fd_set_t:
?C: This symbol holds the type used for the 2nd, 3rd, and 4th
?C: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?C: is defined, and 'int *' otherwise.  This is only useful if you
?C: have select(), of course.
?C:.
?H:#define Select_fd_set_t $selecttype /**/
?H:.
?T:xxx nfd tmo try hdrs val
: check for type of arguments to select.
case "$selecttype" in
") case "$d_select" in
 $define)
  echo " "
  $cat <<EOM
Checking to see what type of arguments are accepted by select().
EOM
  hdrs="$define sys/types.h
   $i_systime sys/time.h
   $i_sysselct sys/select.h
   $d_socket sys/socket.h"
  : The first arg can be int, unsigned,
 or size_t
  : The last arg may or may not be 'const'
  val="
  : void pointer has been seen but using that
  : breaks the selectminbits test
  for xxx in 'fd_set *' 'int *'; do
   for nfd in 'int' 'size_t' 'unsigned long' 'unsigned' ; do
    for tmo in 'struct timeval *' 'const struct timeval *'; do
     case "$val" in
     ") try="$extern_C select _(($nfd, $xxx, $xxx, $xxx, $tmo));"
      if ./protochk "$try" $hdrs; then
       echo "Your system accepts $xxx."
       val="$xxx"
```

```
      fi
      ;;
     esac
    done
   done
  done
?X: In the unlikely event that none of those worked, prompt the user.
  case "$val" in
  ") rp='What is the type for the 2nd, 3rd, and 4th arguments to select?'
   case "$d_fd_set" in
    $define) dflt="fd_set *" ;;
    *)  dflt="int *" ;;
   esac
   . ./myread
   val=$ans
   ;;
  esac
  selecttype="$val"
  ;;
 *) : no select, so pick a harmless default
  selecttype='int *'
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/selecttype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dirent.U,v 3.0.1.4 1994/10/29 16:20:01 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_dirent.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:01  ram
?RCS: patch36: failed scanning for 'd_namlen' with missing <dirent.h> (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:01:25  ram
?RCS: patch30: added direntrytype for hints, merely for NeXT (ADO)
?RCS: patch30: now checks for both struct dirent and direct (ADO)
?RCS:
```

```
?RCS: Revision 3.0.1.2  1994/05/13  15:22:37  ram
?RCS: patch27: new variable direntrytype for proper type setting (ADO)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/01/24  14:11:15  ram
?RCS: patch16: added new Direntry_t pseudo-type for directory entries
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks whether there is a dirent system or not
?X:
?MAKE:i_dirent d_dirnamlen direntrytype: test contains Setvar \
 Myread Findhdr cppstdin cppflags cppminus rm_try
?MAKE: -pick add $@ %<
?S:i_dirent:
?S: This variable conditionally defines I_DIRENT, which indicates
?S: to the C program that it should include <dirent.h>.
?S:.
?S:d_dirnamlen:
?S: This variable conditionally defines DIRNAMLEN, which indicates
?S: to the C program that the length of directory entry names is
?S: provided by a d_namelen field.
?S:.
?S:direntrytype:
?S: This symbol is set to 'struct direct' or 'struct dirent' depending on
?S: whether dirent is available or not. You should use this pseudo type to
?S: portably declare your directory entries.
?S:.
?C:I_DIRENT:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include <dirent.h>. Using this symbol also triggers the definition
?C: of the Direntry_t define which ends up being 'struct dirent' or
?C: 'struct direct' depending on the availability of <dirent.h>.
?C:.
?C:DIRNAMLEN:
?C: This symbol, if defined, indicates to the C program that the length
?C: of directory entry names is provided by a d_namlen field.  Otherwise
?C: you need to do strlen() on the d_name field.
?C:.
?C:Direntry_t:
?C: This symbol is set to 'struct direct' or 'struct dirent' depending on
?C: whether dirent is available or not. You should use this pseudo type to
?C: portably declare your directory entries.
?C:.
?H:#$i_dirent I_DIRENT  /**/
```

```
?H:#$d_dirnamlen DIRNAMLEN /**/
?H:?%<:@if I_DIRENT && Direntry_t
?H:?%<:#define Direntry_t $direntrytype
?H:?%<:@end
?H:.
?T:xinc guess1 guess2
?LINT:set i_dirent d_dirnamlen
: see if this is a dirent system
echo " "
if xinc=`./findhdr dirent.h`; $test "$xinc"; then
 val="$define"
 echo
 "<dirent.h> found." >&4
else
 val="$undef"
 if xinc=`./findhdr sys/dir.h`; $test "$xinc"; then
  echo "<sys/dir.h> found." >&4
  echo " "
 else
  xinc=`./findhdr sys/ndir.h`
 fi
 echo "<dirent.h> NOT found." >&4
fi
set i_dirent
eval $setvar

?X: Use struct dirent or struct direct?   If we're using dirent.h,
?X: it's probably struct dirent, but apparently not always.
?X: Assume $xinc still contains the name of the header file we're using.
@if direntrytype || Direntry_t
: Look for type of directory structure.
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c

case "$direntrytype" in
"|' ')
 case "$i_dirent" in
 $define) guess1='struct dirent' ;;
 *) guess1='struct direct'  ;;
 esac
 ;;
*) guess1="$direntrytype"
 ;;
esac

case "$guess1" in
'struct dirent') guess2='struct direct' ;;
*) guess2='struct dirent' ;;
```

```
esac

if $contains "$guess1" try.c >/dev/null 2>&1; then
 direntrytype="$guess1"
 echo "Your directory entries are $direntrytype." >&4
elif $contains "$guess2"
 try.c >/dev/null 2>&1; then
 direntrytype="$guess2"
 echo "Your directory entries seem to be $direntrytype." >&4
else
 echo "I don't recognize your system's directory entries." >&4
 rp="What type is used for directory entries on this system?"
 dflt="$guess1"
 . ./myread
 direntrytype="$ans"
fi
$rm_try

@end
@if d_dirnamlen || DIRNAMLEN
: see if the directory entry stores field length
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c
if $contains 'd_namlen' try.c >/dev/null 2>&1; then
 echo "Good, your directory entry keeps length information in d_namlen." >&4
 val="$define"
else
 echo "Your directory entry does not know about the d_namlen field." >&4
 val="$undef"
fi
set d_dirnamlen
eval $setvar
$rm_try

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_dirent.U
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```
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_malloc_size d_malloc_good_size d_malloc_usable_size: Inlibc
?MAKE: -pick add $@ %<
?S:d_malloc_size:
?S: This symbol, if defined, indicates that the malloc_size
?S: routine is available for use.
?S:.
?S:d_malloc_good_size:
?S: This symbol, if defined, indicates that the malloc_good_size
?S: routine is available for use.
?S:.
?S:d_malloc_usable_size:
?S: This symbol, if defined, indicates that the malloc_usable_size
?S: routine is available for use.
?S:.
?C:HAS_MALLOC_SIZE:
?C: This symbol, if defined, indicates that
 the malloc_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_size HAS_MALLOC_SIZE  /**/
?H:.
?C:HAS_MALLOC_GOOD_SIZE:
?C: This symbol, if defined, indicates that the malloc_good_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_good_size HAS_MALLOC_GOOD_SIZE /**/
?H:.
?C:HAS_MALLOC_USABLE_SIZE:
?C: This symbol, if defined, indicates that the malloc_usable_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_usable_size HAS_MALLOC_USABLE_SIZE  /**/
?H:.
?LINT:set d_malloc_size
?LINT:set d_malloc_good_size
?LINT:set d_malloc_usable_size
: see if malloc_size exists
set malloc_size d_malloc_size
eval $inlibc

: see if malloc_size_good exists
set malloc_good_size d_malloc_good_size
eval $inlibc

: see if malloc_usable_size exists
set malloc_usable_size d_malloc_usable_size
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_malloc_size.U
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```
?RCS: $Id: d_pwrite.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pwrite.U,v $
?RCS:
?MAKE:d_pwrite: Inlibc
?MAKE: -pick add $@ %<
?S:d_pwrite:
?S: This variable conditionally defines the HAS_PWRITE symbol, which
?S: indicates to the C program that the pwrite() routine is available.
?S:.
?C:HAS_PWRITE :
?C: This symbol, if defined, indicates that the pwrite routine is
?C: available to perform writes on a file descriptor at a given offset.
?C:.
?H:#$d_pwrite HAS_PWRITE  /**/
?H:.
?LINT:set d_pwrite
: see if pwrite
 exists
set pwrite d_pwrite
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pwrite.U
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```
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Cppsym.U,v $
?RCS: Revision 3.0.1.5  1995/05/12  11:59:11  ram
?RCS: patch54: split awk command onto two lines for older awks (ADO)
?RCS:
?RCS: Revision 3.0.1.4  1995/01/11  14:55:57  ram
?RCS: patch45: new cc vs. cpp symbol checking suggested by JHI
?RCS: patch45: added more cpp symbols (JHI)
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  15:51:32  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: new symbols ardent and titan (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20
  06:53:32  ram
?RCS: patch30: extended cpp symbol lookup list (JHI)
?RCS: patch30: renamed attrlist symbol into al for brevity
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:14:14  ram
?RCS: patch15: added new cpp symbols __bsdi__ and BSD_NET2
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script called Cppsym, which can be used to
?X: determine whether any in a list of symbols is defined by the C compilation
?X: chain (C preprocessor symbols plus C compiler native ones).
?X: It can determine the status of any symbol, though the symbols in $al
?X: are more easily determined.  If you want to add to $al you can do
?X: it in Myinit.U.
?X:
?MAKE:Cppsym ccsymbols cppsymbols cppccsymbols: run \
 eunicefix Guess awk cat tr sed sort rm startsh osname \
 +cc gccversion test comm uniq echo Options trnl \
 optimize ccflags ldflags libs
?MAKE: -pick add $@ %<
?S:ccsymbols:
?S: The variable contains the symbols
 defined by the C compiler alone.
?S: The symbols defined by cpp or by cc when it calls cpp are not in
?S: this list, see cppsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppsymbols:
?S: The variable contains the symbols defined by the C preprocessor
?S: alone.  The symbols defined by cc or by cc when it calls cpp are
```

```
?S: not in this list, see ccsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppccsymbols:
?S: The variable contains the symbols defined by the C compiler
?S: when it calls cpp.  The symbols defined by the cc alone or cpp
?S: alone are not in this list, see ccsymbols and cppsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?T:also symbols i postprocess_cc_v flags
?F:./Cppsym
?F:!Cppsym.true !Cppsym.know !ccsym.com !ccsym.cpp !ccsym.own
: determine known pre-processor and compiler symbols
echo " "
$echo "Guessing which symbols your C compiler and preprocessor
 define..." >&4
?X:
?X: The symbol list is in alpha order for ease of maintenance...
?X:
?X: Lots of new symbols (mostly rummaged from gcc), courtesy of
?X: Jarkko Hietaniemi <jhi@snakemail.hut.fi> -- RAM, 06/06/94
?X:
?X: If your symbol is mixed case, just add it as-is.
?X: All symbols will be transformed to both all-lower and all-upper.
?X: Also drop any leading/trailing underscores, the scan will try all those.
?X:
$cat <<'EOSH' > Cppsym.know
a29k ABI64 aegis AES_SOURCE AIX AIX32 AIX370
AIX41 AIX42 AIX43 AIX_SOURCE aixpc ALL_SOURCE
alliant alpha am29000 AM29000 AMD64 amiga AMIGAOS AMIX
ansi ANSI_C_SOURCE apollo ardent ARM32 atarist att386 att3b
BeOS BIG_ENDIAN BIT_MSF bsd BSD bsd43 bsd4_2 bsd4_3 BSD4_3 bsd4_4
BSD_4_3 BSD_4_4 BSD_NET2 BSD_TIME BSD_TYPES BSDCOMPAT bsdi
bull c cadmus clipper CMU COFF COMPILER_VERSION
concurrent convex cpu cray CRAY CRAYMPP ctix CX_UX
CYGWIN DGUX DGUX_SOURCE DJGPP dmert DOLPHIN DPX2 DSO
Dynix DynixPTX ELF encore EPI EXTENSIONS FAVOR_BSD
FILE_OFFSET_BITS
 FreeBSD GCC_NEW_VARARGS gcos gcx gimpel
GLIBC GLIBC_MINOR
GNU_SOURCE GNUC GNUC_MINOR GNU_LIBRARY GO32 gould GOULD_PN
H3050R H3050RX hbullx20 hcx host_mips
hp200 hp300 hp700 HP700 hp800 hp9000
hp9000s200 hp9000s300 hp9000s400 hp9000s500
hp9000s700 hp9000s800 hp9k8 hp_osf hppa hpux HPUX_SOURCE
i186 i286 i386 i486 i586 i686 i8086 i80960 i860 I960
IA64 iAPX286 ibm ibm032 ibmesa IBMR2 ibmrt ILP32 ILP64
INLINE_INTRINSICS INTRINSICS INT64 interdata is68k ksr1
```

LANGUAGE_C LARGE_FILE_API LARGEFILE64_SOURCE
LARGEFILE_SOURCE LFS64_LARGEFILE LFS_LARGEFILE
Linux LITTLE_ENDIAN LONG64 LONG_DOUBLE LONG_LONG
LONGDOUBLE LONGLONG LP64 luna luna88k Lynx
M68000 m68k m88100 m88k M88KBCS_TARGET M_COFF
M_I186 M_I286 M_I386 M_I8086 M_I86 M_I86SM M_SYS3
M_SYS5 M_SYSIII M_SYSV M_UNIX M_XENIX MACH machine MachTen
MATH_HAS_NO_SIDE_EFFECTS
mc300 mc500 mc68000 mc68010 mc68020 mc68030 mc68040
mc68060 mc68k mc68k32 mc700 mc88000 mc88100 merlin
mert MiNT mips MIPS_FPSET MIPS_ISA MIPS_SIM MIPS_SZINT
MIPS_SZLONG
MIPS_SZPTR MIPSEB MIPSEL MODERN_C motorola
mpeix MSDOS MTXINU MULTIMAX mvs MVS n16 ncl_el ncl_mr
NetBSD news1500 news1700 news1800 news1900 news3700
news700 news800 news900 NeXT NLS nonstopux ns16000 ns32000
ns32016 ns32332 ns32k nsc32000
OCS88 OEMVS OpenBSD os OS2 OS390 osf OSF1 OSF_SOURCE
pa_risc PA_RISC1_1 PA_RISC2_0 PARAGON parisc
pc532 pdp11 PGC PIC plexus PORTAR posix
POSIX1B_SOURCE POSIX2_SOURCE POSIX4_SOURCE
POSIX_C_SOURCE POSIX_SOURCE POWER
PROTOTYPES PWB pyr QNX R3000 REENTRANT RES Rhapsody RISC6000
riscix riscos RT S390 SA110 scs SCO sequent sgi SGI_SOURCE SH3 sinix
SIZE_INT SIZE_LONG SIZE_PTR SOCKET_SOURCE SOCKETS_SOURCE
sony sony_news sonyrisc sparc sparclite spectrum
stardent stdc STDC_EXT stratos sun sun3 sun386
Sun386i svr3 svr4 SVR4_2 SVR4_SOURCE svr5
SX system SYSTYPE_BSD SYSTYPE_BSD43 SYSTYPE_BSD44
SYSTYPE_SVR4 SYSTYPE_SVR5 SYSTYPE_SYSV SYSV SYSV3 SYSV4 SYSV5
sysV68 sysV88 Tek4132 Tek4300 titan
TM3200 TM5400 TM5600
tower tower32 tower32_200 tower32_600 tower32_700
tower32_800
tower32_850 tss
u370 u3b u3b2 u3b20 u3b200 u3b20d u3b5
ultrix UMAXV UnicomPBB UnicomPBD UNICOS UNICOSMK
unix UNIX95 UNIX99 unixpc unos
USE_BSD USE_FILE_OFFSET64 USE_GNU USE_ISOC9X USE_LARGEFILE USE_LARGEFILE64
USE_MISC USE_POSIX USE_POSIX199309 USE_POSIX199506 USE_POSIX2
USE_REENTRANT USE_SVID USE_UNIX98 USE_XOPEN USE_XOPEN_EXTENDED
USGr4 USGr4_2
Utek UTek UTS UWIN uxpm uxps vax venix VMESA vms xenix Xenix286
XOPEN_SOURCE XOPEN_SOURCE_EXTENDED XPG2 XPG2_EXTENDED
XPG3 XPG3_EXTENDED XPG4 XPG4_EXTENDED
z8000
EOSH
?X: Maybe put other stuff here too.

```
cat <<EOSH >>Cppsym.know
$osname
EOSH
./tr '[a-z]' '[A-Z]' < Cppsym.know > Cppsym.a
./tr '[A-Z]' '[a-z]' < Cppsym.know > Cppsym.b
$cat Cppsym.know > Cppsym.c
$cat Cppsym.a Cppsym.b Cppsym.c | $tr ' ' $trnl | $sort | $uniq > Cppsym.know
$rm -f Cppsym.a Cppsym.b Cppsym.c
cat <<EOSH > Cppsym
$startsh
if $test \$# -gt 0; then
   echo \$* | $tr " " "$trnl" | ./Cppsym.try > Cppsym.got
   if $test -s Cppsym.got; then
       $rm -f Cppsym.got
        exit 0
   fi
   $rm -f Cppsym.got
   exit 1
else
   $tr " " "$trnl" | ./Cppsym.try
   exit 0
fi
EOSH
chmod +x Cppsym
$eunicefix Cppsym
?X: The below awk script will die a horrible death if
?X: some of the tested symbols are not long ints.
?X: Also, we do not make difference between just defined and defined zero.
cat <<EOSH > Cppsym.try
$startsh
cat <<'EOCP' > try.c
#include <stdio.h>
int main() {
EOCP
?X: The length($1) command guards against possible empty entries.
?X: The awk snippet is know to give heartburn to UNICOS/mk awk.
$awk \\
EOSH
cat <<'EOSH' >> Cppsym.try
'length($1) > 0 {
   printf "#ifdef %s\n#if %s+0\nprintf(\"%s=%%ld\\n\", (long)%s);\n#else\nprintf(\"%s\\n\");\n#endif\n#endif\n", $1,
$1, $1, $1, $1
   printf "#ifdef _%s\n#if _%s+0\nprintf(\"_%s=%%ld\\n\",
(long)_%s);\n#else\nprintf(\"_%s\\n\");\n#endif\n#endif\n", $1, $1, $1, $1, $1
   printf "#ifdef __%s\n#if __%s+0\nprintf(\"__%s=%%ld\\n\",
(long)__%s);\n#else\nprintf(\"__%s\\n\");\n#endif\n#endif\n",
 $1, $1, $1, $1, $1
   printf "#ifdef __%s__\n#if __%s__+0\nprintf(\"__%s__=%%ld\\n\",
```

```
(long)__%s__);\n#else\nprintf(\"__%s__\\n\");\n#endif\n#endif\n", $1, $1, $1, $1, $1
}'  >> try.c
echo 'return 0;}' >> try.c
EOSH
cat <<EOSH >> Cppsym.try
flags="$ccflags"
case "$osname-$gccversion" in
irix-) flags="\$flags -woff 1178" ;;
os2-*) flags="\$flags -Zlinker /PM:VIO" ;;
esac
$cc -o try $optimize \$flags $ldflags try.c $libs && $run ./try
EOSH
chmod +x Cppsym.try
$eunicefix Cppsym.try
./Cppsym < Cppsym.know > Cppsym.true
: now check the C compiler for additional symbols
?X: suggested by Jarkko Hietaniemi <jhi@snakemail.hut.fi>, thanks!
postprocess_cc_v="
case "$osname" in
aix) postprocess_cc_v="|$tr , ' '" ;;
esac
$cat >ccsym <<EOS
$startsh
$cat >tmp.c <<EOF
extern int foo;
EOF
for i in \`$cc -v -c tmp.c 2>&1 $postprocess_cc_v\`
do
 case "\$i" in
 -D*) echo "\$i" | $sed 's/^-D//';;
 -A*) $test "$gccversion" && echo "\$i" | $sed 's/^-A//' | $sed 's/\(.*\)(\(.*\))/\1=\2/';;
 esac
done
$rm
 -f try.c
EOS
postprocess_cc_v="
chmod +x ccsym
$eunicefix ccsym
./ccsym > ccsym1.raw
?X: AIX complains if $uniq is passed an empty file.  ($sort apparently
?X: doesn't care.)  --AD  14 July 1998
if $test -s ccsym1.raw; then
	$sort ccsym1.raw | $uniq >ccsym.raw
else
	mv ccsym1.raw ccsym.raw
fi
```

```
?X: canonicalize symbols for easier sort/uniq/comm usage: append =1 if no = sign
?X: the awk script must be on two lines for older awk programs, sigh! -- ADO
$awk '/\=/ { print $0; next }
 { print $0"=1" }' ccsym.raw >ccsym.list
$awk '/\=/ { print $0; next }
 { print $0"=1" }' Cppsym.true >ccsym.true
$comm -13 ccsym.true ccsym.list >ccsym.own
$comm -12 ccsym.true ccsym.list >ccsym.com
$comm -23 ccsym.true ccsym.list >ccsym.cpp
also=''
if $test -z ccsym.raw; then
 echo "Your C compiler doesn't seem to define any symbols!" >&4
 echo " "
 echo "However, your C preprocessor defines the following symbols:"
 $cat Cppsym.true
    ccsymbols=''
 cppsymbols=`$cat Cppsym.true`
       cppsymbols=`echo
 $cppsymbols`
 cppccsymbols="$cppsymbols"
else
 if $test -s ccsym.com; then
  echo "Your C compiler and pre-processor define these symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.com
  also='also '
  symbols='ones'
  cppccsymbols=`$cat ccsym.com`
  cppccsymbols=`echo $cppccsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.cpp; then
  $test "$also" && echo " "
  echo "Your C pre-processor ${also}defines the following symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.cpp
  also='further '
  cppsymbols=`$cat ccsym.cpp`
  cppsymbols=`echo $cppsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.own; then
  $test "$also" && echo " "
  echo "Your C compiler ${also}defines the following cpp symbols:"
  $sed -e 's/\(..*\)=1/\1/' ccsym.own
  $sed -e 's/\(..*\)=.*/\1/' ccsym.own | $uniq >>Cppsym.true
         ccsymbols=`$cat ccsym.own`
         ccsymbols=`echo $ccsymbols`
  $test "$silent" || sleep 1
 fi
```

```
fi
$rm -f Cppsym.know Cppsym.true
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Cppsym.U
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```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?MAKE:gccversion gccosandvers: cat cpp rm +cc \
 Myread Guess Options Oldconfig Loc osname osvers grep run ccname
?MAKE: -pick add $@ %<
?S:gccversion:
?S: If GNU cc (gcc) is used, this variable holds '1' or '3' (for instance)
?S: to indicate whether the compiler is version 1 or 3.  This is used in
?S: setting some of the default cflags.  It is set to '' if not gcc.
?S:.
?S:gccosandvers:
?S: If GNU cc (gcc) is used, this variable the operating system and
?S: version
 used to compile the gcc.  It is set to '' if not gcc,
?S: or if nothing useful can be parsed as the os version.
?S:.
?T:gccshortvers incdir d
?F:!try.c !try
?LINT:extern locincpth ccflags ldflags
?LINT:change locincpth ccname cpp
: Check whether they have gcc in any guise.
echo " "
echo "Checking for GNU cc in disguise and/or its version number..." >&4
$cat >try.c <<EOM
#include <stdio.h>
int main() {
#ifdef __GNUC__
#ifdef __VERSION__
 printf("%s\n", __VERSION__);
#else
 printf("%s\n", "1");
```

```
#endif
#endif
 exit(0);
}
EOM
if $cc -o try $ccflags $ldflags try.c >/dev/null 2>&1; then
 gccversion=`$run ./try`
 case "$gccversion" in
 ") echo "You are not using GNU cc." ;;
 *)  echo "You are using GNU cc $gccversion."
     ccname=gcc
     ;;
 esac
else
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to be working!" >&4
?X: using -K will prevent aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
 echo "    You'd better
 start hunting for one and let me know about it." >&4
  exit 1
  ;;
 esac
fi
$rm -f try try.*
case "$gccversion" in
1*) cpp=`./loc gcc-cpp $cpp $pth` ;;
esac
case "$gccversion" in
") gccosandvers=" ;;
*) gccshortvers=`echo "$gccversion"|sed 's/ .*//'`
  gccosandvers=`$cc -v 2>&1 | \
 $grep '/specs$'|sed "s!.*/[^-/]*-[^-/]*-\([^-/]*\)/$gccshortvers/specs!\1!"`
  gccshortvers="
  case "$gccosandvers" in
  $osname) gccosandvers=" ;; # linux gccs seem to have no linux osvers, grr
  $osname$osvers) ;; # looking good
  $osname*) cat <<EOM >&4

*** WHOA THERE!!! ***

   Your gcc has not been compiled for the exact release of
   your operating system ($gccosandvers versus $osname$osvers).

   In general it is a good idea to keep gcc synchronized with
   the operating system because otherwise serious problems
```

```
   may ensue when trying to compile software, like Perl.

   I'm trying to be optimistic here, though, and will continue.
   If later during the configuration and build icky
 compilation
   problems appear (headerfile conflicts being the most common
   manifestation), I suggest reinstalling the gcc to match
   your operating system release.

EOM
     ;;
  *) gccosandvers=" ;; # failed to parse, better be silent
  esac
  ;;
esac
case "$ccname" in
") ccname="$cc" ;;
esac

: gcc 3.1 complains about adding -Idirectories that it already knows about,
: so we will take those off from locincpth.
case "$gccversion" in
3*)
   echo "main(){}">try.c
   for incdir in `$cc -v -c try.c 2>&1 | \
      sed '1,/^#include <\.\.\.>/d;/^End of search list/,$d;s/^ //'` ; do
      locincpth=`echo $locincpth | sed s!$incdir!!`
   done
   $rm -f try try.*
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/gccvers.U
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?RCS: $Id: Cppsym.U,v 3.0.1.5 1995/05/12 11:59:11 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Cppsym.U,v $
?RCS: Revision 3.0.1.5  1995/05/12  11:59:11  ram
?RCS: patch54: split awk command onto two lines for older awk's (ADO)
```

```
?RCS:
?RCS: Revision 3.0.1.4  1995/01/11  14:55:57  ram
?RCS: patch45: new cc vs. cpp symbol checking suggested by JHI
?RCS: patch45: added more cpp symbols (JHI)
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  15:51:32  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: new symbols ardent and titan (ADO)
?RCS:
?RCS:
 Revision 3.0.1.2  1994/06/20  06:53:32  ram
?RCS: patch30: extended cpp symbol lookup list (JHI)
?RCS: patch30: renamed attrlist symbol into al for brevity
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:14:14  ram
?RCS: patch15: added new cpp symbols __bsdi__ and BSD_NET2
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: This unit produces a shell script called Cppsym, which can be used to
?X: determine whether any in a list of symbols is defined by the C compilation
?X: chain (C preprocessor symbols plus C compiler native ones).
?X: It can determine the status of any symbol, though the symbols in $al
?X: are more easily determined.  If you want to add to $al you can do
?X: it in Myinit.U.
?MAKE:Cppsym ccsymbols cppsymbols cppccsymbols: run \
 eunicefix Guess awk cat tr sed sort rm rm_try startsh osname \
 +cc +gccversion test comm uniq echo Options trnl \
 optimize ccflags ldflags libs cpp_stuff cpp
?MAKE: -pick add $@ %<
?T:also
 symbols i postprocess_cc_v tHdrH
?X:
?X: The symbol list is in alpha order for ease of maintenance...
?X:
?X: Lots of new symbols (mostly rummaged from gcc), courtesy of
?X: Jarkko Hietaniemi <jhi@snakemail.hut.fi> -- RAM, 06/06/94
?X:
?S:ccsymbols:
?S: The variable contains the symbols defined by the C compiler alone.
?S: The symbols defined by cpp or by cc when it calls cpp are not in
?S: this list, see cppsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppsymbols:
?S: The variable contains the symbols defined by the C preprocessor
?S: alone.  The symbols defined by cc or by cc when it calls cpp are
```

```
?S: not in this list, see ccsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppccsymbols:
?S: The variable contains the symbols defined by the C compiler
?S: when it calls cpp.  The symbols defined by the cc alone or cpp
?S: alone are not in this list, see ccsymbols and cppsymbols.
?S: The
 list is a space-separated list of symbol=value tokens.
?S:.
?F:./Cppsym
?F:./Cppsym.know
?F:!Cppsym.true
?F:!ccsym.com
?F:!ccsym.cpp
?F:!ccsym.own
?X: fake LINT hints
?LINT:change ccflags
?LINT:extern s
?LINT:extern s__
: Preprocessor symbols
echo " "
$echo "Guessing which symbols your C compiler and preprocessor define..." >&4
?X: If your symbol is mixed case, just add it as-is.
?X: All symbols will be transformed to both all-lower and all-upper.
?X: Also drop any leading/trailing underscores, the scan will try all those.
$cat <<'EOSH' > Cppsym.know
a29k aarch64 ABI64 aegis AES_SOURCE AIX AIX32 AIX370 AIX41 AIX42
AIX43 aixpc AIX_SOURCE alliant ALL_SOURCE alpha AM29000 am29000
AMD64 amd64 amiga AMIGAOS AMIX ansi ANSI_C_SOURCE apollo arch_ppc
arch_pwr ardent ARM ARM32 atarist att386 att3b
BeOS BIG_ENDIAN BIT_MSF BSD bsd bsd43 bsd4_2 BSD4_3 bsd4_3 bsd4_4
BSDCOMPAT bsdi BSD_4_3 BSD_4_4 BSD_NET2 BSD_TIME BSD_TYPES bull
byteorder byte_order
c cadmus clang clipper CMU COFF COMPILER_VERSION
 concurrent
convex cpu CRAY cray CRAYMPP ctix CX_UX CYGWIN
DECC DGUX DGUX_SOURCE DJGPP dmert DOLPHIN DPX2 DSO Dynix DynixPTX
ELF encore EPI EXTENSIONS
FAVOR_BSD FILE_OFFSET_BITS FORTIFY_SOURCE FreeBSD
GCC_NEW_VARARGS gcos gcx gimpel GLIBC GLIBC_MINOR GNUC GNUC_MINOR
GNU_LIBRARY GNU_SOURCE GO32 gould GOULD_PN
H3050R H3050RX hbullx20 hcx host_mips hp200 hp300 HP700 hp700
hp800 hp9000 hp9000s200 hp9000s300 hp9000s400
hp9000s700 hp9000s800 hp9k8 hppa hpux HPUX_SOURCE hp_osf
i186 i286 i386 i486 i586 i686 i8086 i80960 i860 I960 IA32 IA64
iAPX286 ibm ibm032 ibmesa IBMR2 ibmrt ILP32 ILP64
INLINE_INTRINSICS INT64 INTEL interdata INTRINSICS is68k itanium
```

ksr1
LANGUAGE_C LARGEFILE64_SOURCE LARGEFILE_SOURCE LARGE_FILE_API
LFS64_LARGEFILE LFS_LARGEFILE LIBCATAMOUNT Linux LITTLE_ENDIAN
LONG64 LONGDOUBLE LONGLONG LONG_DOUBLE LONG_LONG LP64 luna
luna88k Lynx
M68000 m68k m88100 m88k M88KBCS_TARGET MACH machine MachTen
MATH_HAS_NO_SIDE_EFFECTS mc300 mc500 mc68000 mc68010 mc68020
mc68030 mc68040 mc68060
mc68k mc68k32 mc700 mc88000 mc88100
merlin mert MiNT mips MIPSEB MIPSEL MIPS_FPSET MIPS_ISA MIPS_SIM
MIPS_SZINT MIPS_SZLONG MIPS_SZPTR MODERN_C motorola MSDOS
MTXINU MULTIMAX MVS mvs M_AMD64 M_ARM M_ARMT M_COFF M_I186 M_I286
M_I386 M_I8086 M_I86 M_I86SM M_IA64 M_IX86 M_PPC M_SYS3 M_SYS5
M_SYSIII M_SYSV M_UNIX M_X86 M_XENIX
n16 ncl_el ncl_mr NetBSD news1500 news1700 news1800 news1900
news3700 news700 news800 news900 NeXT NLS nonstopux ns16000
ns32000 ns32016 ns32332 ns32k nsc32000
OCS88 OEMVS OpenBSD os OS2 OS390 osf OSF1 OSF_SOURCE
PARAGON parisc pa_risc PA_RISC1_1 PA_RISC2_0 pc532 pdp11 PGC PIC
plexus PORTAR posix POSIX1B_SOURCE POSIX2_SOURCE POSIX4_SOURCE
POSIX_C_SOURCE POSIX_SOURCE POWER powerpc ppc PROTOTYPES PWB pyr
QK_USER QNX
R3000 REENTRANT RES Rhapsody RISC6000 riscix riscos RT
S390 S390x SA110 SCO scs sequent sgi SGI_SOURCE SH SH3 sinix
SIZE_INT SIZE_LONG SIZE_PTR SOCKETS_SOURCE SOCKET_SOURCE sony
sonyrisc sony_news sparc sparclite sparcv8 sparcv9 spectrum
stardent stdc
STDC_EXT stratos sun sun3 sun386 Sun386i svr3 svr4
SVR4_2 SVR4_SOURCE svr5 SX system SYSTYPE_BSD SYSTYPE_BSD43
SYSTYPE_BSD44 SYSTYPE_SVR4 SYSTYPE_SVR5 SYSTYPE_SYSV SYSV SYSV3
SYSV4 SYSV5 sysV68 sysV88
Tek4132 Tek4300 thumb thw_370 thw_intel thw_rs6000 titan TM3200
TM5400 TM5600 tower tower32 tower32_200 tower32_600 tower32_700
tower32_800 tower32_850 tss
u370 u3b u3b2 u3b20 u3b200 u3b20d u3b5 ultrix UMAXV UnicomPBB
UnicomPBD UNICOS UNICOSMK unix UNIX95 UNIX99 unixpc unos USE_BSD
USE_FILE_OFFSET64 USE_GNU USE_ISOC9X USE_LARGEFILE
USE_LARGEFILE64 USE_MISC USE_POSIX USE_POSIX199309
USE_POSIX199506 USE_POSIX2 USE_REENTRANT USE_SVID USE_UNIX98
USE_XOPEN USE_XOPEN_EXTENDED USGr4 USGr4_2 UTek Utek UTS UWIN
uxpm uxps
vax venix VMESA vms
x86_64 xenix Xenix286 XOPEN_SOURCE XOPEN_SOURCE_EXTENDED XPG2
XPG2_EXTENDED XPG3 XPG3_EXTENDED XPG4 XPG4_EXTENDED
z8000 zarch
EOSH
Maybe put other stuff here too.
?X:Some OS's will have a dash in their $osname

```
?X:e.g. Android is known as linux-android
?X:The
 preprocessor will interpret the dash as a minus
./tr '-' '_' <<EOSH >>Cppsym.know
$osname
EOSH
./tr '[a-z]' '[A-Z]' < Cppsym.know > Cppsym.a
./tr '[A-Z]' '[a-z]' < Cppsym.know > Cppsym.b
$cat Cppsym.know > Cppsym.c
$cat Cppsym.a Cppsym.b Cppsym.c | $tr ' ' $trnl | $sort | $uniq > Cppsym.know
$rm -f Cppsym.a Cppsym.b Cppsym.c
cat <<EOSH > Cppsym
$startsh
if $test \$# -gt 0; then
   echo \$* | $tr " " "$trnl" | ./Cppsym.try > Cppsym.got
   if $test -s Cppsym.got; then
 $rm -f Cppsym.got
 exit 0
   fi
   $rm -f Cppsym.got
   exit 1
else
   $tr " " "$trnl" | ./Cppsym.try
   exit 0
fi
EOSH
chmod +x Cppsym
$eunicefix Cppsym
?X: The below awk script will die a horrible death if
?X: some of the tested symbols are not long ints.
?X: Also, we do not make difference between just defined and defined zero.
cat <<EOSH > Cppsym.try
$startsh
cat <<'EOCP' > try.c
#include <stdio.h>
#if cpp_stuff == 1
#define STRINGIFY(a)    "a"
#endif
#if cpp_stuff == 42
#define StGiFy(a)  #a
#define STRINGIFY(a)
    StGiFy(a)
#endif
#if $cpp_stuff != 1 && $cpp_stuff != 42
#   include "Bletch: How does this C preprocessor stringify macros?"
#endif
int main() {
EOCP
```

```
?X: The length($1) command guards against possible empty entries.
?X: The awk snippet is know to give heartburn to UNICOS/mk awk.
$awk \\
EOSH
cat <<'EOSH' >> Cppsym.try
'length($1) > 0 {
   printf "#ifdef %s\nprintf(\"%s=%%s\\n\", STRINGIFY(%s));\n#endif\n", $1, $1, $1
   printf "#ifdef _%s\nprintf(\"_%s=%%s\\n\", STRINGIFY(_%s));\n#endif\n", $1, $1, $1
   printf "#ifdef __%s\nprintf(\"__%s=%%s\\n\", STRINGIFY(__%s));\n#endif\n", $1, $1, $1
   printf "#ifdef __%s__\nprintf(\"__%s__=%%s\\n\", STRINGIFY(__%s__));\n#endif\n", $1, $1, $1
}' >> try.c
echo 'return 0;}' >> try.c
EOSH
cat <<EOSH >> Cppsym.try
ccflags="$ccflags"
case "$osname-$gccversion" in
irix-) ccflags="\$ccflags -woff 1178" ;;
os2-*) ccflags="\$ccflags -Zlinker /PM:VIO" ;;
esac
$cc -o try -Dcpp_stuff=$cpp_stuff $optimize \$ccflags $ldflags try.c $libs 2>/dev/null
 && $run ./try | $sed 's/ /\\\\ /g'
EOSH
chmod +x Cppsym.try
$eunicefix Cppsym.try
./Cppsym < Cppsym.know | $sort | $uniq > Cppsym.true
: Add in any Linux cpp "predefined macros":
case "$osname::$gccversion" in
 *linux*::*.*|*gnukfreebsd*::*.*|gnu::*.*)
   tHdrH=_tmpHdr
   rm -f $tHdrH'.h' $tHdrH
   touch $tHdrH'.h'
   # Filter out macro arguments, such as Linux's __INT8_C(c)
   if $cpp -dM $tHdrH'.h' > $tHdrH'_cppsym.h' && [ -s $tHdrH'_cppsym.h' ]; then
      sed -e 's/#define[\ \  ]*//;s/[\ \     ].*$//' -e 's/(.*//' <$tHdrH'_cppsym.h' >$tHdrH'_cppsym.real'
      if [ -s $tHdrH'_cppsym.real' ]; then
   cat $tHdrH'_cppsym.real' Cppsym.know | sort | uniq | ./Cppsym | sort | uniq > Cppsym.true
      fi
   fi
   rm -f $tHdrH'.h' $tHdrH'_cppsym.h' $tHdrH'_cppsym.real'
 ;;
esac
: now check the C compiler for additional symbols
?X: suggested by Jarkko Hietaniemi <jhi@snakemail.hut.fi>, thanks!
postprocess_cc_v="
case "$osname" in
aix) postprocess_cc_v="|$tr , ' '" ;;
esac
$cat >ccsym
```

```
 <<EOS
$startsh
$cat >tmp.c <<EOF
extern int foo;
EOF
for i in \`$cc -v -c tmp.c 2>&1 $postprocess_cc_v\`
do
 case "\$i" in
 -D*) echo "\$i" | $sed 's/^-D//';;
 -A*) $test "$gccversion" && echo "\$i" | $sed 's/^-A//' | $sed 's/\(.*\)(\(.*\))/\1=\2/';;
 esac
done
$rm_try
EOS
postprocess_cc_v="
chmod +x ccsym
$eunicefix ccsym
./ccsym > ccsym1.raw
?X: AIX complains if $uniq is passed an empty file.  ($sort apparently
?X: doesn't care.)  --AD  14 July 1998
if $test -s ccsym1.raw; then
   $sort ccsym1.raw | $uniq >ccsym.raw
else
   mv ccsym1.raw ccsym.raw
fi

?X: canonicalize symbols for easier sort/uniq/comm usage: append =1 if no = sign
?X: the awk script must be on two lines for older awk programs, sigh! -- ADO
$awk '/\=/ { print $0; next }
 { print $0"=1" }' ccsym.raw >ccsym.list
$comm -13 Cppsym.true ccsym.list >ccsym.own
$comm -12 Cppsym.true ccsym.list >ccsym.com
$comm -23 Cppsym.true ccsym.list >ccsym.cpp
also="
if $test -z ccsym.raw; then
 echo "Your C compiler doesn't seem
 to define any symbols!" >&4
 echo " "
 echo "However, your C preprocessor defines the following symbols:"
 $cat Cppsym.true
 ccsymbols="
 cppsymbols=`$cat Cppsym.true`
 cppsymbols=`echo $cppsymbols`
 cppccsymbols="$cppsymbols"
else
 if $test -s ccsym.com; then
  echo "Your C compiler and pre-processor define these symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.com
```

```
  also='also '
  symbols='ones'
  cppccsymbols=`$cat ccsym.com`
  cppccsymbols=`echo $cppccsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.cpp; then
  $test "$also" && echo " "
  echo "Your C pre-processor ${also}defines the following symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.cpp
  also='further '
  cppsymbols=`$cat ccsym.cpp`
  cppsymbols=`echo $cppsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.own; then
  $test "$also" && echo " "
  echo "Your C compiler ${also}defines the following cpp symbols:"
  $sed -e 's/\(..*\)=1/\1/' ccsym.own
  $sed -e 's/\(..*\)=.*/\1/' ccsym.own | $uniq >>Cppsym.true
  ccsymbols=`$cat
 ccsym.own`
  ccsymbols=`echo $ccsymbols`
  $test "$silent" || sleep 1
 fi
fi

: add -D_FORTIFY_SOURCE if feasible and not already there
case "$gccversion" in
[456789].*|[1-9][0-9]*) case "$optimize$ccflags" in
 *-O*) case "$ccflags$cppsymbols" in
  *_FORTIFY_SOURCE=*) # Don't add it again.
   echo "You seem to have -D_FORTIFY_SOURCE already, not adding it." >&4
   ;;
  *) echo "Adding -D_FORTIFY_SOURCE=2 to ccflags..." >&4
   ccflags="$ccflags -D_FORTIFY_SOURCE=2"
   ;;
  esac
  ;;
 *) echo "You have gcc 4.* or later but not optimizing, not adding -D_FORTIFY_SOURCE." >&4
  ;;
 esac
 ;;
*) echo "You seem not to have gcc 4.* or later, not adding -D_FORTIFY_SOURCE." >&4
 ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Cppsym.U
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```
?RCS: $Id: d_nolnbuf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_nolnbuf.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  14:46:07  ram
?RCS: patch23: avoid looping in the "see that again?" prompt (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_nolnbuf: test +cc cat rm Setvar Myread
?MAKE: -pick add $@ %<
?S:d_nolnbuf:
?S: This variable conditionally defines the NOLINEBUF symbol, which
?S: indicates to the C program that stdout is not buffered, so that
?S: the
 program can call setbuf() or setlinebuf() for efficiency.
?S:.
?C:NOLINEBUF:
?C: This symbol, if defined, indicates that stdout is not buffered, so that
?C: the program can call setbuf() or setlinebuf() for efficiency.
?C:.
?H:#$d_nolnbuf NOLINEBUF /**/
?H:.
?T:xxx
?F:!blurfl
?LINT:set d_nolnbuf
: check for buffering of stdout
echo " "
case "$d_nolnbuf" in
")
 $cat <<'EOT' >blurfl.c
#include <stdio.h>
int main()
{
 int i;

 for (i = 0; i < 5; i++) {
```

```
  putchar(i+'a');
  sleep(1);
 }
 putchar('\n');
}
EOT
 $cc -o blurfl blurfl.c >/dev/null 2>&1;
 $rm -f blurfl.c
 $cat >&4 <<'EOM'
Checking for buffering of stdout to terminal.

Observe the following characters as they are printed out, to see whether they
print out all at once, or with a 1 second pause between each of them.  If they
print out one by one, you don't have buffering.  If they print together (after
about a 5 second pause), you do have buffering.

EOM
 dflt='Type return to start printing the test characters'
 rp="
 .
 ./myread
 xxx=y
 while $test "$xxx" = 'y'; do
  ./blurfl 1>&4
  dflt=n
  rp='Would you like to see that again?'
  . ./myread
  case "$ans" in
  [yY]*) xxx="y";;
  *) xxx="n";;
  esac
 done
 dflt=y
 rp="Do you have buffering (printed all at once)?"
 . ./myread
 case "$ans" in
 n*) val="$define";;
 *)  val="$undef";;
 esac
 ;;
*)
 case "$d_nolnbuf" in
 "$define") dflt=n;;
 *) dflt=y;;
 esac
 rp="Do you have buffering on stdout to terminals?"
 . ./myread
 case "$ans" in
```

```
 n*) val="$define";;
 *)  val="$undef";;
 esac
 ;;
esac
set d_nolnbuf
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_nolnbuf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitearch.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitearch.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:21:30  ram
?RCS: patch61: created
?RCS:
?MAKE:sitearch sitearchexp installsitearch d_sitearch: cat sed Getfile \
 Oldconfig Setprefixvar Prefixit test archname sitelib
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitearch="
?S:sitearch:
?S: This variable contains the eventual
 value of the SITEARCH symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S: The standard distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: architecture-dependent modules in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitearchexp="
```

```
?S:sitearchexp:
?S: This variable is the ~name expanded version of sitearch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installsitearch="
?S:installsitearch:
?S: This variable is really the same as sitearchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?D:d_sitearch="
?S:d_sitearch:
?S: This variable conditionally defines SITEARCH to hold the
 pathname
?S: of architecture-dependent library files for $package.  If
?S: $sitearch is the same as $archlib, then this is set to undef.
?S:.
?C:SITEARCH:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: After perl has been installed, users may install their own local
?C: architecture-dependent modules in this directory with
?C:  MakeMaker Makefile.PL
?C: or equivalent.  See INSTALL for details.
?C:.
?C:SITEARCH_EXP:
?C: This symbol contains the ~name expanded version of SITEARCH, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_sitearch SITEARCH "$sitearch"  /**/
?H:#$d_sitearch SITEARCH_EXP "$sitearchexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installsitearch
?LINT:set
 sitearch
?LINT:set sitearchexp
: determine where site specific architecture-dependent libraries go.
: sitelib  default is /usr/local/lib/perl5/site_perl/$version
: sitearch default is /usr/local/lib/perl5/site_perl/$version/$archname
: sitelib may have an optional trailing /share.
case "$sitearch" in
") dflt=`echo $sitelib | $sed 's,/share$,,'`
 dflt="$dflt/$archname"
 ;;
```

```
*) dflt="$sitearch"
 ;;
esac
set sitearch sitearch none
eval $prefixit
$cat <<EOM

The installation process will also create a directory for
architecture-dependent site-specific extensions and modules.

EOM
fn=d~+
rp='Pathname for the site-specific architecture-dependent library files?'
. ./getfile
prefixvar=sitearch
. ./setprefixvar
if $test X"$sitearch" = X"$sitelib"; then
 d_sitearch="$undef"
else
 d_sitearch="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitearch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libnm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libnm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:08:26  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libnm: test Loc libpth _a
?MAKE: -pick add $@ %<
?S:libnm:
?S: This variable contains the argument to pass to the loader in order
?S: to get the new math library routines.  If there is no new math
```

```
?S: library, it is null.
?S:.
?T:ans
?O:
 use libswanted='-lnm' instead (see libs.U).
: see if we should include -lnm
echo " "
if $test -r /usr/lib/libnm$_a || $test -r /usr/local/lib/libnm$_a ; then
 echo "New math library found." >&4
 libnm='-lnm'
else
 ans=`./loc libnm$_a x $libpth`
 case "$ans" in
 x)
  echo "No nm library found--the normal math library will have to do." >&4
  libnm=''
  ;;
 *)
  echo "New math library found in $ans." >&4
  libnm="$ans"
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libnm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: maildir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: maildir.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:21:56  ram
?RCS: patch15: now also looks under /var/mail for BSD/386
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:maildir maildirexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:maildir:
```

```
?S: This variable contains the name of the directory in which mail is
?S: spooled. Programs using this variable must be prepared to deal with
?S: ~name
 substitutions.
?S:.
?S:maildirexp:
?S: This is the same as the maildir variable, but is filename expanded
?S: at configuration time, for programs not willing to deal with it at
?S: run-time.
?S:.
: determine where mail is spooled
case "$maildir" in
") dflt=`./loc . /usr/spool/mail /usr/spool/mail /usr/mail /var/mail`;;
*) dflt="$maildir";;
esac
echo " "
fn=d~
rp='Where is yet-to-be-read mail spooled?'
. ./getfile
maildir="$ans"
maildirexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/maildir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_xdrs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_xdrs.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_xdrs: cat Csym Setvar
?MAKE: -pick add $@ %<
?S:d_xdrs:
?S: This symbol conditionally defines HAS_XDRS which indicates to the C
?S: program that XDR serialization routines are available.
?S:.
?C:HAS_XDRS (XDRS):
?C: This symbol if defined indicates to the C program that the XDR
```

```
?C: serialization routines are available to transfer data
 accross
?C: various architectures.
?C:.
?H:#$d_xdrs HAS_XDRS /**/
?H:.
?LINT:set d_xdrs
: see if XDR is available
echo " "
if set xdr_int val -f d_xdrs; eval $csym; $val; then
 echo "Ahh! You have XDR routines for network communications." >&4
 val="$define"
else
 $cat >&4 <<EOM
Sigh! You do not have XDR routines -- Network communications may be hazardous.
EOM
 val="$undef"
fi
set d_xdrs
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_xdrs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: voidflags.U,v 3.0.1.2 1997/02/28 16:27:58 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: voidflags.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:27:58  ram
?RCS: patch61: don't prompt them if the void support is high enough for us
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:37:44  ram
?RCS: patch45: cosmetic change to avoid spurious blank lines when using -s
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:voidflags defvoidused: cat rm_try compiler_warning +cc +ccflags package \
 Oldconfig
```

```
 Myread i_stdlib
?MAKE: -pick add $@ %<
?S:voidflags:
?S: This variable contains the eventual value of the VOIDFLAGS symbol,
?S: which indicates how much support of the void type is given by this
?S: compiler.  See VOIDFLAGS for more info.
?S:.
?S:defvoidused:
?S: This variable contains the default value of the VOIDUSED symbol (15).
?S:.
?X: Exceptionally, we have to explicitly alias the symbol name for
?X: config_h.SH, otherwise the comment would not appear.
?C:VOIDFLAGS ~ %<:
?C: This symbol indicates how much support of the void type is given by this
?C: compiler.  What various bits mean:
?C:
?C:     1 = supports declaration of void
?C:     2 = supports arrays of pointers to functions returning void
?C:     4 = supports comparisons between pointers to void functions and
?C:      addresses of void functions
?C:     8 = supports declaration of generic void pointers
?C:
?C: The package designer should define VOIDUSED to indicate the requirements
?C: of the package.  This can be
 done either by #defining VOIDUSED before
?C: including config.h, or by defining defvoidused in Myinit.U.  If the
?C: latter approach is taken, only those flags will be tested.  If the
?C: level of void support necessary is not present, defines void to int.
?C:.
?H:?%<:#ifndef VOIDUSED
?H:?%<:#define VOIDUSED $defvoidused
?H:?%<:#endif
?H:?%<:#define VOIDFLAGS $voidflags
?H:?%<:#if (VOIDFLAGS & VOIDUSED) != VOIDUSED
?H:?%<:#define void int  /* is void to be avoided? */
?H:?%<:#define M_VOID   /* Xenix strikes again */
?H:?%<:#endif
?H:.
?INIT:: full support for void wanted by default
?INIT:defvoidused=15
?INIT:
?LINT:known void M_VOID VOIDUSED
: check for void type
echo " "
echo "Checking to see how well your C compiler groks the void type..." >&4
case "$voidflags" in
")
 $cat >try.c <<EOCP
```

```
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#if TRY & 1
void sub() {
#else
sub() {
#endif
 extern void moo(); /* function returning void */
 void (*goo)();  /* ptr to func returning
 void */
#if TRY & 8
 void *hue;  /* generic ptr */
#endif
#if TRY & 2
 void (*foo[10])();
#endif

#if TRY & 4
 if(goo == moo) {
  exit(0);
 }
#endif
 exit(0);
}
int main() { sub(); }
EOCP
?X: This unit used to use cc -S in those tests to try to speed up things, but
?X: unfortunately, AIX 3.2 does not support this option.
 if $cc $ccflags -c -DTRY=$defvoidused try.c >.out 2>&1 ; then
  voidflags=$defvoidused
 echo "Good.  It appears to support void to the level $package wants.">&4
  if $compiler_warning .out >/dev/null 2>&1; then
   echo "However, you might get some warnings that look like this:"
   $cat .out
  fi
 else
echo "Hmm, your compiler has some difficulty with void. Checking further..." >&4
  if $cc $ccflags -c -DTRY=1 try.c >/dev/null 2>&1; then
   echo "It supports 1..."
   if $cc $ccflags -c -DTRY=3 try.c >/dev/null 2>&1; then
    echo "It also supports 2..."
    if $cc $ccflags -c -DTRY=7 try.c >/dev/null 2>&1; then
     voidflags=7
     echo "And it supports 4 but not 8
 definitely."
    else
```

```
    echo "It doesn't support 4..."
    if $cc $ccflags -c -DTRY=11 try.c >/dev/null 2>&1; then
     voidflags=11
     echo "But it supports 8."
    else
     voidflags=3
     echo "Neither does it support 8."
    fi
   fi
  else
   echo "It does not support 2..."
   if $cc $ccflags -c -DTRY=13 try.c >/dev/null 2>&1; then
    voidflags=13
    echo "But it supports 4 and 8."
   else
    if $cc $ccflags -c -DTRY=5 try.c >/dev/null 2>&1; then
     voidflags=5
     echo "And it supports 4 but has not heard about 8."
    else
     echo "However it supports 8 but not 4."
    fi
   fi
  fi
 else
  echo "There is no support at all for void."
  voidflags=0
 fi
fi
esac
?X: Only prompt user if support does not match the level we want
case "$voidflags" in
"$defvoidused") ;;
*) $cat >&4 <<'EOM'
 Support flag bits are:
   1: basic void declarations.
   2: arrays of pointers to functions returning void.
   4: operations between pointers to and addresses
 of void functions.
   8: generic void pointers.
EOM
 dflt="$voidflags";
 rp="Your void support flags add up to what?"
 . ./myread
 voidflags="$ans"
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/voidflags.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_fmin: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmin:
?S: This variable conditionally defines the HAS_FMIN symbol, which
?S: indicates to the C program that the fmin() routine is available.
?S:.
?C:HAS_FMIN:
?C: This symbol, if defined, indicates that the fmin routine is
?C: available to do the minimum function.
?C:.
?H:#$d_fmin HAS_FMIN  /**/
?H:.
?LINT:set d_fmin
: see if fmin exists
set fmin d_fmin
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fmin.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_clearenv: Inlibc
?MAKE: -pick add $@ %<
?S:d_clearenv:
?S: This variable conditionally defines the HAS_CLEARENV symbol, which
?S: indicates to the C program that the clearenv () routine is available.
?S:.
?C:HAS_CLEARENV:
?C: This symbol, if defined, indicates that the clearenv () routine is
?C: available for use.
?C:.
?H:#$d_clearenv HAS_CLEARENV  /**/
?H:.
?LINT:set d_clearenv
```

```
: see if clearenv exists
set clearenv d_clearenv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_clearenv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getaddrinfo: Inlibc
?MAKE: -pick add $@ %<
?S:d_getaddrinfo:
?S: This variable conditionally defines the HAS_GETADDRINFO symbol,
?S: which indicates to the C program that the getaddrinfo() function
?S: is available.
?S:.
?C:HAS_GETADDRINFO:
?C: This symbol, if defined, indicates that the getaddrinfo() function
?C: is available for use.
?C:.
?H:#$d_getaddrinfo HAS_GETADDRINFO  /**/
?H:.
?LINT:set d_getaddrinfo
: see if getaddrinfo exists
set getaddrinfo d_getaddrinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getaddrinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: models.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: models.U,v $
```

```
?RCS: Revision 3.0.1.2  1997/02/28  16:13:17  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:39  ram
?RCS: patch6: added default for large
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:models split small medium large huge: test cat Myread sysman Oldconfig \
 Loc contains rm
?MAKE: -pick add $@ %<
?S:models:
?S: This variable contains
 the list of memory models supported by this
?S: system.  Possible component values are none, split, unsplit, small,
?S: medium, large, and huge.  The component values are space separated.
?S:.
?S:split:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program that will run in separate I and D space, for those
?S: machines that support separation of instruction and data space.  It is
?S: up to the Makefile to use this.
?S:.
?S:small:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a small memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:medium:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a medium memory model.  If the
?S: medium model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?S:large:
?S: This variable contains a flag
 which will tell the C compiler and loader
?S: to produce a program running with a large memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:huge:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a huge memory model.  If the
?S: huge model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?T:unsplit tans modelcc
```

```
?F:!pdp11
?D:large="
?LINT:extern cc
: see what memory models we can support
case "$models" in
")
?X: We may not use Cppsym or we get a circular dependency through cc.
?X: But this should work regardless of which cc we eventually use.
 $cat >pdp11.c <<'EOP'
int main() {
#ifdef pdp11
 exit(0);
#else
 exit(1);
#endif
}
EOP
?X: Run cc in a subshell in case they don't have a 'cc' command.
?X: Presumably they do have gcc or something.
 case "$cc" in
 ") modelcc="$cc" ;;
 *) modelcc="cc" ;;
 esac
 ( $modelcc -o pdp11 pdp11.c ) >/dev/null 2>&1
 if
 $test -f pdp11 && ./pdp11 2>/dev/null; then
  dflt='unsplit split'
 else
  tans=`./loc . X /lib/small /lib/large /usr/lib/small /usr/lib/large /lib/medium /usr/lib/medium /lib/huge`
  case "$tans" in
  X) dflt='none';;
  *) if $test -d /lib/small || $test -d /usr/lib/small; then
    dflt='small'
   else
    dflt="
   fi
   if $test -d /lib/medium || $test -d /usr/lib/medium; then
    dflt="$dflt medium"
   fi
   if $test -d /lib/large || $test -d /usr/lib/large; then
    dflt="$dflt large"
   fi
   if $test -d /lib/huge || $test -d /usr/lib/huge; then
    dflt="$dflt huge"
   fi
  esac
 fi;;
*) dflt="$models";;
```

```
esac
$cat <<EOM

Some systems have different model sizes.  On most systems they are called
small, medium, large, and huge.  On the PDP11 they are called unsplit and
split.  If your system doesn't support different memory models, say "none".
If you wish to force everything to one memory model, say "none" here and
put the appropriate flags later when it asks you for other
 cc and ld flags.
Venix systems may wish to put "none" and let the compiler figure things out.
(In the following question multiple model names should be space separated.)

The default for most systems is "none".

EOM
rp="Which memory models are supported?"
. ./myread
models="$ans"

case "$models" in
none)
 small=''
 medium=''
 large=''
 huge=''
 unsplit=''
 split=''
 ;;
*split)
 case "$split" in
 '') if $contains '\-i' $sysman/ld.1 >/dev/null 2>&1 || \
    $contains '\-i' $sysman/cc.1 >/dev/null 2>&1; then
   dflt='-i'
  else
   dflt='none'
  fi;;
 *) dflt="$split";;
 esac
 rp="What flag indicates separate I and D space?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans='';;
 esac
 split="$tans"
 unsplit='';;
*large*|*small*|*medium*|*huge*)
 case "$models" in
```

```
*large*)
 case "$large" in
 ") dflt='-Ml';;
 *) dflt="$large";;
 esac
rp="What flag indicates large model?"
. ./myread
tans="$ans"
case "$tans" in
none) tans=";
esac
large="$tans";;
*) large=";;
esac
case "$models"
in
*huge*) case "$huge" in
 ") dflt='-Mh';;
 *) dflt="$huge";;
 esac
 rp="What flag indicates huge model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 huge="$tans";;
*) huge="$large";;
esac
case "$models" in
*medium*) case "$medium" in
 ") dflt='-Mm';;
 *) dflt="$medium";;
 esac
 rp="What flag indicates medium model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 medium="$tans";;
*) medium="$large";;
esac
case "$models" in
*small*) case "$small" in
 ") dflt='none';;
 *) dflt="$small";;
 esac
```

```
  rp="What flag indicates small model?"
  . ./myread
  tans="$ans"
  case "$tans" in
  none) tans=";
  esac
  small="$tans";;
 *) small=";;
 esac
 ;;
*)
 echo "Unrecognized memory models--you may have to edit Makefile.SH" >&4
 ;;
esac
$rm -f pdp11.* pdp11
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/models.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cpp_trad.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?MAKE:cpp_trad: cpp cat contains rm
?MAKE: -pick add $@ %<
?S:cpp_trad:
?S: This variable contains the program to run to get traditional C
?S: preprocessor semantics and not ISO C semantics: we want something
?S: that knows as little about C as possible to use as a more general
?S: purpose preprocessor.
?S:.
?F:!foo.c !foo.cpp
: how do we get traditional cpp semantics?
echo " "
echo "Checking to see how to get traditional cpp semantics..."
 >&4
$cat >foo.c <<'EOF'
#define A(x) x
#define B(y) y
A(a)B(b)
```

```
EOF
if $cpp foo.c >foo.cpp; $contains ab foo.cpp >/dev/null 2>&1; then
 echo "Plain '$cpp' works just fine."
 cpp_trad="$cpp"
elif $cpp -traditional foo.c >foo.cpp; \
 $contains ab foo.cpp >/dev/null 2>&1; then
 echo "We'll use '$cpp -traditional' to get proper semantics."
 cpp_trad="$cpp -traditional"
else
 echo "I don't know how to get traditional semantics with '$cpp'." >&4
 cpp_trad="$cpp"
fi
$rm -f foo.c foo.cpp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cpp_trad.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_lroundl: Inlibc
?MAKE: -pick add $@ %<
?S:d_lroundl:
?S: This variable conditionally defines the HAS_LROUNDL symbol, which
?S: indicates to the C program that the lroundl() routine is available
?S: to return the integral value nearest to x away from zero.
?S:.
?C:HAS_LROUNDL:
?C: This symbol, if defined, indicates that the lroundl routine is
?C: available to return the nearest integral value away from zero of
?C: the long double argument value.
?C:.
?H:#$d_lroundl HAS_LROUNDL  /**/
?H:.
?LINT:set d_lroundl
: see if lroundl exists
set lroundl d_lroundl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lroundl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: fpu.U,v 3.0 1993/08/18 12:08:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: fpu.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?LINT: empty
?X:?MAKE:fpu: test cat cc Myread
?X:?MAKE: -pick add $@ %<
?X:?S:fpu (fpunit):
?X:?S: Set to be the compile flag for the local floating point unit.
?X:?S:.
?X:?C:FPU (FPUNIT):
?X:?C: String containing the flags for the local floating point unit.
?X:?C:.
?X:?H:#define FPU "$fpu" /**/
?X:?H:.
?X:: see what floating point compile flags should be used.
?X:fpu="
?X:if
 $test -r /dev/fpa; then
?X: $cat>fpa.c << GOOP
?X: main(){return(1);}
?X:GOOP
?X: $cc -ffpa -o fpa fpa.c
?X: fpa > fpa.out 2>&1
?X: if $test ! -s fpa.out; then
?X:  dflt='y'
?X:  $cat <<'EOM'
?X:
?X:You seem to have a sun fpa...  I can compile the code to use the fpa but it will
?X:mean that the code can ONLY run on a machine with a fpa...
?X:
?X:EOM
?X:  rp="Should I compile for fpa?"
?X:  . ./myread
?X:  if $test $ans = "n"; then
?X:   fpu="
?X:  else
?X:   fpu='-ffpa'
?X:  fi
?X: else
?X:  $cat <<'EOM'
?X:
```

```
?X:You have the fpa device but I can't seem to use it.  Maybe you should talk to
?X:your sysadmin about this.  For now, I am not going to compile it in.
?X:
?X:EOM
?X: fi
?X:fi
?X:if $test "$fpu" = ''; then
?X: if $test -r /usr/etc/mc68881version; then
?X:  dflt='y'
?X:  $cat <<'EOM'
?X:
?X:There also seems to be the pieces for a 68881.  If I compile this in, it will
?X:work on almost all Sun 3's except for a few Sun-3/50s without a 68881...
?X:
?X:EOM
?X:  rp="Should
 I compile for a 68881?"
?X:  . ./myread
?X:  if $test $ans = "y"; then
?X:   fpu='-f68881'
?X:  fi
?X: fi
?X:fi
?X:
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/nullified/fpu.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_remainder: Inlibc
?MAKE: -pick add $@ %<
?S:d_remainder:
?S: This variable conditionally defines the HAS_REMAINDER symbol, which
?S: indicates to the C program that the remainder() routine is available.
?S:.
?C:HAS_REMAINDER:
?C: This symbol, if defined, indicates that the remainder routine is
?C: available to return the floating-point remainder.
?C:.
?H:#$d_remainder HAS_REMAINDER  /**/
?H:.
?LINT:set d_remainder
: see if remainder exists
set remainder d_remainder
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_remainder.U
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```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?X:
?X: This unit checks whether symbolic links are really supported.
?X: We can't rely on d_symlink because that may be listed in the
?X: C library but unimplemented.
?X:
?MAKE:lns: ln rm touch test
?MAKE: -pick add $@ %<
?S:lns:
?S: This variable holds the name of the command to make
?S: symbolic links (if they are supported).
  It can be used
?S: in the Makefile. It is either 'ln -s' or 'ln'
?S:.
: determine whether symbolic links are supported
echo " "
$rm -f blurfl sym
$touch blurfl
if $ln -s blurfl sym > /dev/null 2>&1 && $test -f sym; then
 echo "Symbolic links are supported." >&4
 lns="$ln -s"
else
 echo "Symbolic links are NOT supported." >&4
 lns="$ln"
fi
$rm -f blurfl sym
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lns.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: charorder.U,v 3.0.1.1 1994/10/29 16:07:08 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: charorder.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:chorder_int chorder_short chorder_long: Myread cat Compile rm
?MAKE: -pick add $@ %<
?S:chorder_short (d_cos d_bos):
?S: Holds the value describing the byte ordering of characters in a short.
?S: On a Big-Endian machine, that
 would be "c0c1".
?S:.
?S:chorder_int (charoder):
?S: Holds the value describing the byte ordering of characters in an int.
?S: For instance, on a Big-Endian machine, this would be: "c0c1c2c3".
?S:.
?S:chorder_long (d_col d_bol):
?S: Holds the value describing the byte ordering of characters in a long.
?S: On a 64 bits Big-Endian machine, that would yield: "c0c1c2c3c4c5c6c7".
?S:.
?C:CHAR_ORDER_SHORT:
?C: Holds the byte ordering of characters in a short. It's a string
?C: value like "c0c1" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_INT:
?C: Holds the byte ordering of characters in an int. It's a string
?C: value like "c0c1c2c3" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_LONG:
?C: Holds the byte ordering of characters in a long. It's a string
?C: value like "c0c1c2c3c4c5c6c7" on a 64 bits Big-Endian machine.
?C:.
?H:#define CHAR_ORDER_SHORT "$chorder_short" /* byte order in a short */
```

```
?H:#define CHAR_ORDER_INT "$chorder_int" /* byte order in an int */
?H:#define CHAR_ORDER_LONG "$chorder_long"
 /* byte order in a long */
?H:.
?F:!byteorder
: check for character ordering
echo " "
echo "Checking out byte order..." >&4
$cat >byteorder.c <<'EOCP'
#include <stdio.h>

int main(argc, argv)
 int argc;
 char *argv[]; {
 int i;
 int max;
 union {
  short u_s;
  int u_i;
  long u_l;
  char u_c[sizeof(long)];
 } u;
 switch (argv[1][0]) {
 case 'l':
  u.u_l = 0L;
  /* HMS: ASSERT: sizeof(long) < 10. */
  for(i = 0; i < sizeof(long); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(long);
  break;
 case 's':
  u.u_s = 0;
  /* HMS: ASSERT: sizeof(short) < 10. */
  for(i = 0; i < sizeof(short); ++i) {
   u.u_s *= 0x100L;
   u.u_s += (0xc0 + i);
  }
  max = sizeof(short);
  break;
 case 'i':
  u.u_i = 0;
  /* RAM: ASSERT: sizeof(int) < 10. */
  for(i = 0; i < sizeof(int); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
```

```
  max = sizeof(int);
  break;
 default:
  max = 0;
  break;
 }
 for(i = 0; i < max; i++) {
  printf("%x", u.u_c[i] & 0x00FF);
 }
 printf("\n");
 exit(0);
}
EOCP
set
 byteorder
if eval $compile_ok ; then
 : null statement
@if chorder_short
   chorder_short=`./byteorder s`
@end
@if chorder_int
   chorder_int=`./byteorder i`
@end
@if chorder_long
   chorder_long=`./byteorder l`
@end
else
 $cat <<EOM
(I can't seem to get my test program to work.  Guessing 32 bits big-endian.)
EOM
   chorder_short="c0c1"
   chorder_int="c0c1c2c3"
   chorder_long="c0c1c2c3"
fi
@if chorder_short
dflt=$chorder_short
rp='What is the order of characters in a short?'
. ./myread
chorder_short="$ans"
@end
@if chorder_int
dflt=$chorder_int
rp='What is the order of characters in an int?'
. ./myread
chorder_int="$ans"
@end
@if chorder_long
dflt=$chorder_long
```

```
rp='What is the order of characters in a long?'
. ./myread
chorder_long="$ans"
@end
$rm -f byteorder* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/charorder.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_PRId64 d_PRIi64 d_PRIu64 d_PRIo64 d_PRIx64 d_PRIXU64 \
 sPRId64 sPRIi64 sPRIu64 sPRIo64 sPRIx64 sPRIXU64: \
 quadtype i_inttypes test cat rm_try Setvar Compile run
?MAKE: -pick add $@ %<
?S:d_PRId64:
?S: This variable conditionally defines the PERL_PRId64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit decimal numbers.
?S:.
?S:d_PRIi64:
?S: This variable conditionally defines the PERL_PRIi64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit decimal numbers.
?S:.
?S:d_PRIu64:
?S: This variable conditionally defines the PERL_PRIu64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit unsigned decimal
?S: numbers.
?S:.
?S:d_PRIo64:
?S: This variable
 conditionally defines the PERL_PRIo64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit octal numbers.
?S:.
?S:d_PRIx64:
?S: This variable conditionally defines the PERL_PRIx64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit hexadecimal numbers.
?S:.
?S:d_PRIXU64:
?S: This variable conditionally defines the PERL_PRIXU64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit hExADECimAl numbers.
?S: The 'U' in the name is to separate this from d_PRIx64 so that even
?S: case-blind systems can see the difference.
```

?S:.
?S:sPRId64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit decimal numbers (format 'd') for output.
?S:.
?S:sPRIi64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit decimal numbers (format 'i') for output.
?S:.
?S:sPRIu64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit unsigned decimal numbers (format 'u')
for output.
?S:.
?S:sPRIo64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit octal numbers (format 'o') for output.
?S:.
?S:sPRIx64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit hexadecimal numbers (format 'x') for output.
?S:.
?S:sPRIXU64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit hExADECimAl numbers (format 'X') for output.
?S: The 'U' in the name is to separate this from sPRIx64 so that even
?S: case-blind systems can see the difference.
?S:.
?C:PERL_PRId64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit decimal numbers (format 'd') for output.
?C:.
?C:PERL_PRIi64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit decimal numbers (format 'i') for output.
?C:.
?C:PERL_PRIu64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit unsigned decimal numbers (format 'u')
for output.
?C:.
?C:PERL_PRIo64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit octal numbers (format 'o') for output.
?C:.
?C:PERL_PRIx64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit hexadecimal numbers (format 'x') for output.

```
?C:.
?C:PERL_PRIXU64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit hExADECimAl numbers (format 'X') for output.
?C:.
?H:#$d_PRId64 PERL_PRId64 $sPRId64 /**/
?H:#$d_PRIi64 PERL_PRIi64 $sPRIi64 /**/
?H:#$d_PRIu64 PERL_PRIu64 $sPRIu64 /**/
?H:#$d_PRIo64 PERL_PRIo64 $sPRIo64 /**/
?H:#$d_PRIx64 PERL_PRIx64 $sPRIx64 /**/
?H:#$d_PRIx64 PERL_PRIXU64 $sPRIXU64 /**/
?H:.
?T:yyy
?F:!try
: Check 64bit sizes
echo " "

if $test X"$quadtype" != X; then

echo "Checking how to print 64-bit integers..." >&4

if $test X"$sPRId64" = X -a X"$quadtype" = Xint; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 int q = 12345678901;

 printf("%ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"d"'; sPRIi64='"i"'; sPRIu64='"u"';
   sPRIo64='"o"'; sPRIx64='"x"'; sPRIXU64='"X"';
   echo "We will use %d."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" = Xlong; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
```

```
int main() {
 long q = 12345678901;
 printf("%ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"ld"'; sPRIi64='"li"'; sPRIu64='"lu"';
   sPRIo64='"lo"'; sPRIx64='"lx"'; sPRIXU64='"lX"';
   echo "We will use %ld."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$i_inttypes" = X"$define" -a X"$quadtype" = Xint64_t; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <inttypes.h>
#include <stdio.h>
int main() {
 int64_t q = 12345678901;
 printf("%" PRId64 "\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64=PRId64;
 sPRIi64=PRIi64; sPRIu64=PRIu64;
   sPRIo64=PRIo64; sPRIx64=PRIx64; sPRIXU64=PRIXU64;
   echo "We will use the C9X style."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" != X; then
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main() {
 $quadtype q = 12345678901;
```

```
 printf("%Ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"Ld"'; sPRIi64='"Li"'; sPRIu64='"Lu"';
   sPRIo64='"Lo"'; sPRIx64='"Lx"'; sPRIXU64='"LX"';
   echo "We will use %Ld."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" = X"long long"; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long long q = 12345678901LL; /* AIX cc requires the LL suffix. */
 printf("%lld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"lld"'; sPRIi64='"lli"'; sPRIu64='"llu"';
   sPRIo64='"llo"'; sPRIx64='"llx"';
 sPRIXU64='"llX"';
   echo "We will use the %lld style."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" != X; then
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main() {
 $quadtype q = 12345678901;
 printf("%qd\n", q);
}
EOCP
```

```
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"qd"'; sPRIi64='"qi"'; sPRIu64='"qu"';
   sPRIo64='"qo"'; sPRIx64='"qx"'; sPRIXU64='"qX"';
   echo "We will use %qd."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X; then
 echo "Cannot figure out how to print 64-bit integers." >&4
fi
$rm_try

fi

case "$sPRId64" in
") d_PRId64="$undef"; d_PRIi64="$undef"; d_PRIu64="$undef";
 d_PRIo64="$undef"; d_PRIx64="$undef"; d_PRIXU64="$undef";
 ;;
*) d_PRId64="$define"; d_PRIi64="$define"; d_PRIu64="$define";
 d_PRIo64="$define"; d_PRIx64="$define"; d_PRIXU64="$define";
 ;;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/quadfio.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_getprotobyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotobyname_r getprotobyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotobyname_r:
?S: This variable conditionally defines the HAS_GETPROTOBYNAME_R symbol,
?S: which indicates to the C program that the getprotobyname_r()
?S: routine is available.
```

```
?S:.
?S:getprotobyname_r_proto:
?S: This variable encodes the prototype of getprotobyname_r.
?S: It is zero if d_getprotobyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobyname_r
?S: is defined.
?S:.
?C:HAS_GETPROTOBYNAME_R:
?C: This symbol, if
 defined, indicates that the getprotobyname_r routine
?C: is available to getprotobyname re-entrantly.
?C:.
?C:GETPROTOBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getprotobyname_r.
?C: It is zero if d_getprotobyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobyname_r
?C: is defined.
?C:.
?H:#$d_getprotobyname_r HAS_GETPROTOBYNAME_R /**/
?H:#define GETPROTOBYNAME_R_PROTO $getprotobyname_r_proto /**/
?H:.
?T:try hdrs d_getprotobyname_r_proto
: see if getprotobyname_r exists
set getprotobyname_r d_getprotobyname_r
eval $inlibc
case "$d_getprotobyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotobyname_r_proto:$usethreads" in
 ":define") d_getprotobyname_r_proto=define
  set d_getprotobyname_r_proto getprotobyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getprotobyname_r_proto" in
 define)
 case "$getprotobyname_r_proto" in
 "|0) try='int getprotobyname_r(const char*, struct
 protoent*, char*, size_t, struct protoent**);'
 ./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=I_CSBWR ;;
 esac
 case "$getprotobyname_r_proto" in
 "|0) try='struct protoent* getprotobyname_r(const char*, struct protoent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=S_CSBI ;;
 esac
 case "$getprotobyname_r_proto" in
 "|0) try='int getprotobyname_r(const char*, struct protoent*, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=I_CSD ;;
```

```
 esac
 case "$getprotobyname_r_proto" in
 "|0) d_getprotobyname_r=undef
  getprotobyname_r_proto=0
  echo "Disabling getprotobyname_r, cannot determine prototype." >&4 ;;
 * ) case "$getprotobyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getprotobyname_r_proto="REENTRANT_PROTO_$getprotobyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getprotobyname_r has no prototype, not using it." >&4 ;;
  esac
  d_getprotobyname_r=undef
  getprotobyname_r_proto=0
  ;;
 esac
 ;;
*) getprotobyname_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotobyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:issymlink: lns test rm
?MAKE: -pick add $@ %<
?S:issymlink:
```

```
?S: This variable holds the test command to test for a symbolic link
?S: (if they are supported).  Typical values include 'test -h' and
?S: 'test -L'.
?S:.
?T:pth p
?LINT:change PATH test
?LINT:extern newsh
: determine whether symbolic links are supported
echo
 " "
case "$lns" in
*"ln"*" -s")
 echo "Checking how to test for symbolic links..." >&4
 $lns blurfl sym
 if $test "X$issymlink" = X; then
?X:
?X: In some AIX 4 versions the (ksh) builtin test (-h) is broken.
?X:
  case "$newsh" in
  ") sh     -c "PATH= test -h sym" >/dev/null 2>&1 ;;
  *)  $newsh -c "PATH= test -h sym" >/dev/null 2>&1 ;;
  esac
  if test $? = 0; then
   issymlink="test -h"
  else
   echo "Your builtin 'test -h' may be broken." >&4
   case "$test" in
   /*) ;;
   *) pth=`echo $PATH | sed -e "s/$p_/ /g"`
    for p in $pth
    do
     if test -f "$p/$test"; then
      test="$p/$test"
      break
     fi
    done
    ;;
   esac
   case "$test" in
   /*)
    echo "Trying external '$test -h'." >&4
    issymlink="$test -h"
    if $test ! -h sym >/dev/null 2>&1; then
     echo "External '$test -h' is broken, too." >&4
     issymlink="
    fi
    ;;
   *) issymlink=" ;;
```

```
  esac
 fi
fi
if $test "X$issymlink" = X; then
 if $test -L sym 2>/dev/null; then
  issymlink="$test
-L"
  echo "The builtin '$test -L' worked." >&4
 fi
fi
if $test "X$issymlink" != X; then
 echo "You can test for symbolic links with '$issymlink'." >&4
else
 echo "I do not know how you can test for symbolic links." >&4
fi
$rm -f blurfl sym
;;
*) echo "No symbolic links, so not testing for their testing..." >&4
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/issymlink.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: gidtype.U,v 3.0.1.3 1994/08/29 16:21:44 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: gidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:21:44  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS: patch32: removed useless usage of Setvar (for now)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:21:07  ram
?RCS: patch27: added lint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:01:51  ram
?RCS: patch23: protected gidtype setting via setvar (ADO)
?RCS: patch23: made Gid_t comment more explicit (ADO)
?RCS:
?RCS: Revision
```

```
 3.0  1993/08/18  12:08:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:gidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:gidtype:
?S: This variable defines Gid_t to be something like gid_t, int,
?S: ushort, or whatever type is used to declare the return type
?S: of getgid().  Typically, it is the type of group ids in the kernel.
?S:.
?C:Gid_t (GIDTYPE):
?C: This symbol holds the return type of getgid() and the type of
?C: argument to setrgid() and related functions.  Typically,
?C: it is the type of group ids in the kernel. It can be int, ushort,
?C: gid_t, etc... It may be necessary to include <sys/types.h> to get
?C: any typedef'ed information.
?C:.
?H:#define Gid_t $gidtype  /* Type for getgid(), etc... */
?H:.
?T:xxx
: see what type gids are declared as in the kernel
echo " "
echo "Looking for the type for group ids returned by getgid()."
set gid_t gidtype xxx stdio.h sys/types.h
eval $typedef
case "$gidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep
 'groups\[NGROUPS\];' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$gidtype";;
esac
case "$gidtype" in
gid_t) echo "gid_t found." ;;
*) rp="What is the type for group ids returned by getgid()?"
 . ./myread
 gidtype="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidtype.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rusage.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rusage.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: We may need to include <sys/resource.h> and <sys/time.h> FIXME
?X:INC: i_sysresrc i_systime
?MAKE:d_rusage: Inlibc
?MAKE: -pick add $@ %<
?S:d_rusage (d_getrusg):
?S: This variable conditionally defines the HAS_GETRUSAGE symbol, which
?S: indicates that the getrusage() routine exists.  The getrusage() routine
?S: supports sub-second accuracy
 for process cpu accounting. You may need
?S: to include <sys/resource.h> and <sys/time.h>.
?S:.
?C:HAS_GETRUSAGE (RUSAGE GETRUSAGE):
?C: This symbol, if defined, indicates that the getrusage() routine is
?C: available to get process statistics with a sub-second accuracy.
?C: Inclusion of <sys/resource.h> and <sys/time.h> may be necessary.
?C:.
?H:#$d_rusage HAS_GETRUSAGE  /**/
?H:.
?LINT:set d_rusage
: see if getrusage exists
set getrusage d_rusage
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rusage.U
No license file was found, but licenses were detected in source scan.

```
# $Id: errnolist.a,v 3.0 1993/08/18 12:04:35 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
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```

```
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Harlan Stenn <harlan@mumps.pfcs.com>
#
# $Log: errnolist.a,v $
# Revision 3.0  1993/08/18 12:04:35  ram
# Baseline for dist 3.0 netwide release.
#
#
# This is a simple-minded awk script to generate an initialization for
# sys_errnolist on systems that don't have it.
# This file now depends only on sys/errno.h error numbers under maxerr being
# in order.  It will complain and die if not.  NOTE: It will still produce
# a compilable output file, even with errors, so you
 must check the output.


BEGIN  {
   format = "\t\"%s\",\n"
   printf("/*\n** This is a generated file.  Do NOT edit it unless you really have to...\n*/\n\n")
   printf("char *sys_errnolist[] = {\n")
   maxerr = 89
  }

$1=="#define" {
   if(count > maxerr || substr($2,1,1) != "E")
    next   # we're not interested
   if($3 < count) { # this is bad
    printf("Fatal error: %s out of order at %s\n",\
    FILENAME, $2)>"/dev/tty"
    exit 1
   }
   # fill in the blanks
   while($3 > count) {
    dummy=sprintf("EDUMMY%d",count)
    printf(format,dummy)
    count++
   }
   printf(format,$2)
   count++
  }

END  {
   printf("\t0\n};\n")
  }
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.a
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnbyaddr: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnbyaddr:
?S: This variable conditionally defines the HAS_GETNETBYADDR symbol, which
?S: indicates to the C program that the getnetbyaddr() routine is available
?S: to look up networks by their IP addresses.
?S:.
?C:HAS_GETNETBYADDR:
?C: This symbol, if defined, indicates that the getnetbyaddr() routine is
?C: available to look up networks by their IP addresses.
?C:.
?H:#$d_getnbyaddr HAS_GETNETBYADDR  /**/
?H:.
?LINT:set d_getnbyaddr
: see if getnetbyaddr exists
set getnetbyaddr d_getnbyaddr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnbyad.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dbl_dig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dbl_dig.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:28  ram
```

```
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dbl_dig: Myread contains cat rm Setvar \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_dbl_dig:
?S: This variable conditionally defines d_dbl_dig if this system's
?S: header files provide DBL_DIG, which is the number of significant
?S: digits in a double precision
 number.
?S:.
?C:HAS_DBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol DBL_DIG, which is the number
?C: of significant digits in a double precision number.  If this
?C: symbol is not defined, a guess of 15 is usually pretty good.
?C:.
?H:#$d_dbl_dig HAS_DBL_DIG /**/
?H:.
?F:!dbl_dig.c
?LINT:set d_dbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >dbl_dig.c <<EOM
#include <limits.h>
#include <float.h>
#ifdef DBL_DIG
printf("Contains DBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < dbl_dig.c >dbl_dig.E 2>/dev/null
if $contains 'DBL_DIG' dbl_dig.E >/dev/null 2>&1; then
 echo "DBL_DIG found." >&4
 val="$define"
else
 echo "DBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f dbl_dig.?
set d_dbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dbl_dig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoll: Inlibc d_longlong Compile cat run
?MAKE: -pick add $@ %<
?S:d_strtoll:
?S: This variable conditionally defines the HAS_STRTOLL symbol, which
?S: indicates to the C program that the strtoll() routine is available.
?S:.
?C:HAS_STRTOLL:
?C: This symbol, if defined, indicates that the strtoll routine is
?C: available to convert strings to long longs.
?C:.
?H:#$d_strtoll HAS_STRTOLL  /**/
?H:.
?T:yyy
?F:!try
: see if strtoll exists
set strtoll d_strtoll
eval $inlibc

case "$d_longlong-$d_strtoll" in
"$define-$define")
 $cat <<EOM
Checking whether your strtoll() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <errno.h>
#ifdef __hpux
#define strtoll __strtoll
#endif
#ifdef __EMX__
#define strtoll
 _strtoll
#endif
#include <stdio.h>
#include <stdlib.h>
static int bad = 0;
void check(const char *s, long long ell, int een) {
 long long gll;
 errno = 0;
 gll = strtoll(s, 0, 10);
 if (!((gll == ell) && (errno == een)))
  bad++;
}
int main() {
```

```
 check(" 1",                          1LL, 0);
 check(" 0",                          0LL, 0);
 check("-1",                         -1LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check(" 9223372036854775807",  9223372036854775807LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check(" 9223372036854775808",  9223372036854775807LL, ERANGE);
 check("-9223372036854775809", -9223372036854775808LL, ERANGE);
 if (!bad)
  printf("ok\n");
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  ok) echo "Your strtoll() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtoll() doesn't seem
 to be working okay.
EOM
     d_strtoll="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtoll="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetbyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetbyname_r getnetbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetbyname_r:
```

```
?S: This variable conditionally defines the HAS_GETNETBYNAME_R symbol,
?S: which indicates to the C program that the getnetbyname_r()
?S: routine is available.
?S:.
?S:getnetbyname_r_proto:
?S: This variable encodes the prototype of getnetbyname_r.
?S: It is zero if d_getnetbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyname_r
?S: is defined.
?S:.
?C:HAS_GETNETBYNAME_R:
?C: This symbol, if defined, indicates that
 the getnetbyname_r routine
?C: is available to getnetbyname re-entrantly.
?C:.
?C:GETNETBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getnetbyname_r.
?C: It is zero if d_getnetbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyname_r
?C: is defined.
?C:.
?H:#$d_getnetbyname_r HAS_GETNETBYNAME_R /**/
?H:#define GETNETBYNAME_R_PROTO $getnetbyname_r_proto /**/
?H:.
?T:try hdrs d_getnetbyname_r_proto
: see if getnetbyname_r exists
set getnetbyname_r d_getnetbyname_r
eval $inlibc
case "$d_getnetbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetbyname_r_proto:$usethreads" in
 ":define") d_getnetbyname_r_proto=define
  set d_getnetbyname_r_proto getnetbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getnetbyname_r_proto" in
 define)
 case "$getnetbyname_r_proto" in
 "|0) try='int getnetbyname_r(const char*, struct netent*, char*, size_t, struct netent**, int*);'
 ./protochk "$extern_C
 $try" $hdrs && getnetbyname_r_proto=I_CSBWRE ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) try='int getnetbyname_r(const char*, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=I_CSBI ;;
 esac
```

```
 case "$getnetbyname_r_proto" in
 "|0) try='struct netent* getnetbyname_r(const char*, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=S_CSBI ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) try='int getnetbyname_r(const char*, struct netent*, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=I_CSD ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) d_getnetbyname_r=undef
  getnetbyname_r_proto=0
  echo "Disabling getnetbyname_r, cannot determine prototype." >&4 ;;
 * ) case "$getnetbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getnetbyname_r_proto="REENTRANT_PROTO_$getnetbyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo
 "getnetbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_getnetbyname_r=undef
  getnetbyname_r_proto=0
  ;;
 esac
 ;;
*) getnetbyname_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetbyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sbrksmart.U,v 3.0.1.2 1995/01/11 15:35:41 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sbrksmart.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:35:41  ram
```

```
?RCS: patch45: now sets sbrksmart to undef explicitly when lacking sbrk()
?RCS: patch45: forgot a cast when using return value from sbrk()
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:16:45  ram
?RCS: patch16: created
?RCS:
?MAKE:sbrksmart: cat d_sbrk Compile rm
?MAKE: -pick add $@ %<
?S:sbrksmart:
?S: This variable conditionally defines HAS_SMART_SBRK if the sbrk()
?S: routine honors a negative
 argument to lower the break value.
?S:.
?C:HAS_SMART_SBRK:
?C: This symbol is defined when the sbrk() system call may be used with
?C: a negative argument to lower the break value, therefore releasing
?C: core to the system. If not, you'd probably be better off using the
?C: mmap() system call.
?C:.
?H:#$sbrksmart HAS_SMART_SBRK /**/
?H:.
?T:dumb
?F:!sbrk
: see if sbrk can release core to the kernel
echo " "
case "$d_sbrk" in
"$define")
 echo "Let's see if your sbrk() is smart enough to release core..." >&4
 $cat > sbrk.c <<'EOC'
#define INC 256  /* Small enough to be less than a page size */

int main()
{
 char *obrk = (char *) sbrk(0);
 char *nbrk;

 nbrk = (char *) sbrk(INC);
 if (nbrk == (char *) -1)
  exit(1); /* Not enough memory */
 if (nbrk != obrk)
  exit(2); /* Unreliable sbrk() */
 nbrk = (char *) sbrk(-INC);
 if (nbrk == (char *) -1)
  exit(3); /* May have understood negative arg as huge positive */
 if (obrk != (char *) sbrk(0))
  exit(4); /* Not smart, definitely */

 exit(0);  /*
```

```
 Ok */
}
EOC
 sbrksmart="$undef"
 dumb='-- assuming dumb sbrk().'
 set sbrk
 if eval $compile_ok; then
  ./sbrk >/dev/null 2>&1
  case $? in
  0) sbrksmart="$define"
   echo "Yes, it can be used with negative values." ;;
  1) echo "Sorry, not enough memory $dumb" ;;
  2) echo "No it's not, and besides it seems to be buggy..." ;;
  3) echo "No, it fails with negative values." ;;
  4) echo "Nope, your sbrk() is too dumb." ;;
  *) echo "Err... Unexpected result $dumb" ;;
  esac
 else
  echo "(Could not compile test program $dumb)"
 fi
 ;;
*)
 echo "Since you don't have sbrk(), let's forget about the smart test!"
 sbrksmart="$undef"
 ;;
esac
$rm -f sbrk sbrk.* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sbrksmart.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Magic_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Magic_h.U,v $
?RCS: Revision 3.0.1.2  1993/11/10  17:32:58  ram
?RCS: patch14: forgot to mention Id in the dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:46:59  ram
?RCS: patch12: created for ?M: lines support (magic symbols)
```

```
?RCS:
?X:
?X: This file ends up producing the confmagic.h include, which is used to
?X: automagically remap some C symbols via cpp redefinitions.
?X:
?X: The file ./Magic_h below contains all the ?M: lines extracted out
 of all
?X: the units.  Metaconfig itself adds the final #endif statement.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?MAKE:Magic_h: Id Config_h
?MAKE: -pick cm_h_weed $@ %<
?MAKE: -pick cm_h_weed $@ ./Magic_h
?LINT:nocomment
/*
* This file was produced by running metaconfig and is intended to be included
* after config.h and after all the other needed includes have been dealt with.
*
* This file may be empty, and should not be edited. Rerun metaconfig instead.
* If you wish to get rid of this magic, remove this file and rerun metaconfig
* without the -M option.
*
*  $Id: Magic_h.U 1 2006-08-24 12:32:52Z rmanfredi $
*/

#ifndef _confmagic_h_
#define _confmagic_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Magic_h.U
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```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysun.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <inttypes.h> is available or not
```

```
?X:
?MAKE:i_inttypes: Inhdr
?MAKE: -pick add $@ %<
?S:i_inttypes:
?S: This variable conditionally defines I_INTTYPES, which indicates
?S: to the C program that it should include <inttypes.h> to get
?S: format conversions of integer types.
?S:.
?C:I_INTTYPES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
 <inttypes.h> to get format conversions of integer types.
?C:.
?H:#$i_inttypes I_INTTYPES  /**/
?H:.
?LINT:set i_inttypes
: see if this is a inttypes.h system
set inttypes.h i_inttypes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_inttypes.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcsxfrm: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_wcsxfrm:
?S: This variable conditionally defines the HAS_WCSXFRM symbol if the
?S: wcsxfrm() routine is available and can be used to compare wide
?S: character strings.
?S:.
?C:HAS_WCSXFRM:
?C: This symbol, if defined, indicates that the wcsxfrm routine is
?C: available to tranform a wide character string for wcscmp().
?C:.
?H:#$d_wcsxfrm HAS_WCSXFRM /**/
?H:.
?F:!try
?LINT: set d_wcsxfrm
: look for wcsxfrm
```

```
echo " "
$cat >try.c <<'EOCP'
#include
 <errno.h>
#include <wchar.h>
int main ()
{
   wchar_t dst[4], *src = L" ";
   errno = 0;
   return (wcsxfrm (dst, src, 1) ? errno ? errno : 0 : 1);
   }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working wcsxfrm() found." >&4
     val="$define" ;;
 *)  echo "wcsxfrm() found, but it doesn't work" >&4
     ;;
 esac
else
   echo "wcsxfrm() NOT found." >&4
   fi
set d_wcsxfrm
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_wcsxfrm.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fmax: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmax:
?S: This variable conditionally defines the HAS_FMAX symbol, which
?S: indicates to the C program that the fmax() routine is available.
?S:.
?C:HAS_FMAX:
?C: This symbol, if defined, indicates that the fmax routine is
?C: available to do the maximum function.
?C:.
?H:#$d_fmax HAS_FMAX  /**/
```

```
?H:.
?LINT:set d_fmax
: see if fmax exists
set fmax d_fmax
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fmax.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_portable.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:28:52  ram
?RCS: patch45: executable path stripping moved to the end in Config_sh.U
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:21:17  ram
?RCS: patch15: did not strip variables properly when needed
?RCS: patch15: now also strips down variables from trylist
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The Loc unit is wanted to get the definition of all the locating variables.
?X:
?MAKE:d_portable:
 cat Loc Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_portable:
?S: This variable conditionally defines the PORTABLE symbol, which
?S: indicates to the C program that it should not assume that it is
?S: running on the machine it was compiled on.
?S:.
?C:PORTABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: not assume that it is running on the machine it was compiled on.
?C: The program should be prepared to look up the host name, translate
?C: generic filenames, use PATH, etc.
?C:.
```

```
?H:#$d_portable PORTABLE /**/
?H:.
?D:d_portable="
: decide how portable to be
case "$d_portable" in
"$define") dflt=y;;
*) dflt=n;;
esac
$cat <<'EOH'

I can set things up so that your shell scripts and binaries are more portable,
at what may be a noticable cost in performance.  In particular, if you
ask to be portable, the following happens:

    1) Shell scripts will rely on the PATH variable rather than using
 the paths derived above.
    2) ~username
 interpretations will be done at run time rather than
 by Configure.
@if PHOSTNAME
    3) The system name will be determined at run time, if at all possible.
@end

EOH
rp="Do you expect to run these scripts and binaries on multiple machines?"
. ./myread
case "$ans" in
 y*) d_portable="$define"
?X:
?X: Paths will be stripped down (/usr/bin/vi -> vi) in Config_sh.U if needed.
?X:
 ;;
 *)  d_portable="$undef" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_portable.U
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```
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?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: bin.U,v $
?RCS: Revision 3.0.1.4  1995/09/25  09:15:32  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:32:40  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:05:28  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:51  ram
?RCS: patch10: made prompting more explicit (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18
  12:05:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bin binexp installbin: Prefixit Getfile Oldconfig afs cat test
?MAKE: -pick add $@ %<
?Y:TOP
?S:bin:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly executable images for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S:.
?S:binexp:
?S: This is the same as the bin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?S:installbin:
?S: This variable is the same as binexp unless AFS is running in which case
?S: the user is explicitly prompted for it. This variable should always
?S: be used in your makefiles for maximum portability.
?S:.
?C:BIN:
?C: This symbol holds the path of the bin directory where the package will
?C: be installed. Program must be prepared to deal with ~name substitution.
?C:.
?C:BIN_EXP:
?C: This
 symbol is the filename expanded version of the BIN symbol, for
?C: programs that do not want to deal with that at run-time.
?C:.
?H:#define BIN "$bin" /**/
?H:#define BIN_EXP "$binexp" /**/
?H:.
```

```
?D:bin='/usr/local/bin'
: determine where public executables go
echo " "
set dflt bin bin
eval $prefixit
fn=d~
rp='Pathname where the public executables will reside?'
. ./getfile
if $test "X$ansexp" != "X$binexp"; then
 installbin=''
fi
bin="$ans"
binexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
executables reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installbin" in
 '') dflt=`echo $binexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installbin";;
 esac
 fn=de~
 rp='Where will public executables be installed?'
 . ./getfile
 installbin="$ans"
else
 installbin="$binexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/bin.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_erf: Inlibc
?MAKE: -pick add $@ %<
?S:d_erf:
?S: This variable conditionally defines the HAS_ERF symbol, which
?S: indicates to the C program that the erf() routine is available.
?S:.
?C:HAS_ERF:
?C: This symbol, if defined, indicates that the erf routine is
```

```
?C: available to do the error function.
?C:.
?H:#$d_erf HAS_ERF  /**/
?H:.
?LINT:set d_erf
: see if erf exists
set erf d_erf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_erf.U
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```
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?RCS:
?MAKE:d_timegm: Inlibc
?MAKE: -pick add $@ %<
?S:d_timegm:
?S: This variable conditionally defines the HAS_TIMEGM symbol, which
?S: indicates to the C program that the timegm () routine is available.
?S:.
?C:HAS_TIMEGM:
?C: This symbol, if defined, indicates that the timegm routine is
?C: available to do the opposite of gmtime ()
?C:.
?H:#$d_timegm HAS_TIMEGM  /**/
?H:.
?LINT:set d_timegm
: see if timegm exists
set timegm d_timegm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_timegm.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
?MAKE:d_libm_lib_version: Compile cat run rm_try
?MAKE: -pick add $@ %<
```

```
?S:d_libm_lib_version:
?S: This variable conditionally defines the LIBM_LIB_VERSION symbol,
?S: which indicates to the C program that math.h defines _LIB_VERSION
?S: being available in libm
?S:.
?C:LIBM_LIB_VERSION:
?C: This symbol, if defined, indicates that libm exports _LIB_VERSION
?C: and that math.h defines the enum to manipulate it.
?C:.
?H:#$d_libm_lib_version LIBM_LIB_VERSION  /**/
?H:.
?T:foo
?F:!try
: check to see if math.h defines _LIB_VERSION
d_libm_lib_version="$undef"
echo " "
echo "Checking to see if your libm supports _LIB_VERSION..." >&4
$cat >try.c <<EOCP
#include <unistd.h>
#include <math.h>
int main (int argc, char *argv[])
{
    printf ("%d\n", _LIB_VERSION);
   return (0);
   } /* main */
EOCP
set try
if eval $compile; then
   foo=`$run ./try`
   echo "Yes, it does ($foo)" >&4
   d_libm_lib_version="$define"
else
   echo "No, it does not (probably harmless)" >&4
   fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_libm_lib_version.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setegid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setegid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setegid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setegid:
?S: This variable conditionally defines the HAS_SETEGID symbol, which
?S: indicates to the C program that the setegid() routine is available
?S: to change the effective gid of the current program.
?S:.
?C:HAS_SETEGID (SETEGID):
?C: This symbol, if defined, indicates that the setegid
 routine is available
?C: to change the effective gid of the current program.
?C:.
?H:#$d_setegid HAS_SETEGID  /**/
?H:.
?LINT:set d_setegid
: see if setegid exists
set setegid d_setegid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setegid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_srandom_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_srandom_r srandom_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_srandom_r:
?S: This variable conditionally defines the HAS_SRANDOM_R symbol,
?S: which indicates to the C program that the srandom_r()
?S: routine is available.
?S:.
?S:srandom_r_proto:
?S: This variable encodes the prototype of srandom_r.
?S: It is zero if d_srandom_r is undef, and one of the
```

```
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srandom_r
?S: is defined.
?S:.
?C:HAS_SRANDOM_R:
?C: This symbol, if defined, indicates that the srandom_r routine
?C: is available to srandom re-entrantly.
?C:.
?C:SRANDOM_R_PROTO:
?C: This
 symbol encodes the prototype of srandom_r.
?C: It is zero if d_srandom_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srandom_r
?C: is defined.
?C:.
?H:#$d_srandom_r HAS_SRANDOM_R /**/
?H:#define SRANDOM_R_PROTO $srandom_r_proto /**/
?H:.
?T:try hdrs d_srandom_r_proto
: see if srandom_r exists
set srandom_r d_srandom_r
eval $inlibc
case "$d_srandom_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_srandom_r_proto:$usethreads" in
 ":define") d_srandom_r_proto=define
  set d_srandom_r_proto srandom_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_srandom_r_proto" in
 define)
 case "$srandom_r_proto" in
 "|0) try='int srandom_r(unsigned int, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && srandom_r_proto=I_TS ;;
 esac
 case "$srandom_r_proto" in
 "|0) d_srandom_r=undef
  srandom_r_proto=0
  echo "Disabling srandom_r, cannot determine prototype." >&4 ;;
 *
 ) case "$srandom_r_proto" in
  REENTRANT_PROTO*) ;;
  *) srandom_r_proto="REENTRANT_PROTO_$srandom_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
```

```
 *) case "$usethreads" in
  define) echo "srandom_r has no prototype, not using it." >&4 ;;
  esac
  d_srandom_r=undef
  srandom_r_proto=0
  ;;
 esac
 ;;
*) srandom_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_srandom_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_libutil.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_libutil: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_libutil:
?S: This variable conditionally defines the I_LIBUTIL symbol, and indicates
?S: whether a C program should include <libutil.h>.
?S:.
?C:I_LIBUTIL:
?C: This symbol, if defined, indicates that <libutil.h> exists and
?C: should be included.
?C:.
?H:#$i_libutil I_LIBUTIL  /**/
?H:.
?LINT:set i_libutil
: see if this is a libutil.h system
set libutil.h i_libutil
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_libutil.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ccflags.U,v 3.0.1.9 1997/02/28 15:27:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: ccflags.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:27:07  ram
?RCS: patch61: removed support for NO_PROTOTYPE detection on SCO
?RCS: patch61: new locincpth variable
?RCS: patch61: added info on the "additional ld flags" question
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:48:54  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.7  1995/05/12  12:08:33  ram
?RCS: patch54: now checks for cc/ccflags/ldflags
 coherency
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  16:07:02  ram
?RCS: patch36: gcc versioning no longer relies on the C compiler's name
?RCS: patch36: simplified check for gcc version checking (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:06:35  ram
?RCS: patch32: propagate -posix flag from ccflags to ldflags
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:28:45  ram
?RCS: patch23: -fpcc-struct-return only needed in gcc 1.x (ADO)
?RCS: patch23: cppflags now computed on an option-by-option basis
?RCS: patch23: magically added cc flags now only done the first time
?RCS:
?RCS: Revision 3.0.1.3  1993/09/13  15:58:29  ram
?RCS: patch10: explicitly mention -DDEBUG just in case they need it (WAD)
?RCS: patch10: removed all the "tans" variable usage (WAD)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/27  14:39:38  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:24  ram
?RCS: patch6: added defaults for cppflags, ccflags and ldflags
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:05:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ccflags ldflags lkflags cppflags optimize locincpth: test cat \
 Myread Guess Options Oldconfig +gccversion mips_type +usrinc \
 package contains rm +cc cppstdin cppminus cpprun cpplast libpth \
```

```
 libs loclibpth hint usesocks sh run rm_try sysroot
?MAKE: -pick add $@ %<
?S:ccflags:
?S: This variable contains any additional C compiler flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:cppflags:
?S: This variable holds the flags that will be passed to the C pre-
?S: processor. It is up to the Makefile to use it.
?S:.
?S:optimize:
?S: This variable contains any optimizer/debugger flag that should be used.
?S: It is up to the Makefile to use it.
?S:.
?S:ldflags:
?S: This variable contains any additional C loader flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:lkflags:
?S: This variable contains any additional C partial linker flags desired
 by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:locincpth:
?S: This variable contains a list of additional directories to be
?S: searched by the compiler.  The appropriate '-I' directives will
?S: be added to ccflags.  This is intended to simplify setting
?S: local directories from the Configure command line.
?S: It's not much, but it parallels the loclibpth stuff in libpth.U.
?S:.
?T:inctest thisincl xxx inclwanted ftry previous thislibdir
?T:EBUGGING DEBUGGING
?T:check flag callback checkccflag
?F:!cpp.c !gcctest !try
?D:cppflags=''
?D:ccflags=''
?D:ldflags=''
?D:optimize=''
?LINT:extern _sysroot
?INIT:: Possible local include directories to search.
?INIT:: Set locincpth to "" in a hint file to defeat local include searches.
?INIT:locincpth="/usr/local/include /opt/local/include /usr/gnu/include"
?INIT:locincpth="$locincpth /opt/gnu/include /usr/GNU/include /opt/GNU/include"
?INIT::
?INIT:: no include file wanted by default
?INIT:inclwanted=''
?INIT:
?INIT:: Enable
```

```
 -DEBUGGING and -DDEBUGGING from the command line
?INIT:EBUGGING="
?INIT:DEBUGGING="
?INIT:
: determine optimization, if desired, or use for debug flag also
?X: Allow for Configure -Uoptimize -- it's not strictly sensible, but
?X: it has happened and we know what they mean.   AD  2/16/98
case "$optimize" in
' '|$undef) dflt='none';;
") dflt='-O';;
*) dflt="$optimize";;
esac
$cat <<EOH

By default, $package compiles with the -O flag to use the optimizer.
Alternately, you might want to use the symbolic debugger, which uses
the -g flag (on traditional Unix systems).  Either flag can be
specified here.  To use neither flag, specify the word "none".

EOH
rp="What optimizer/debugger flag should be used?"
. ./myread
optimize="$ans"
case "$optimize" in
'none') optimize=" ";;
esac

: Check what DEBUGGING is required from the command line
: -DEBUGGING      or -DDEBUGGING or
: -DEBUGGING=both   = -g + -DDEBUGGING
: -DEBUGGING=-g   or -Doptimize=-g = -g
: -DEBUGGING=none or -UDEBUGGING =
: -DEBUGGING=old
  or -DEBUGGING=default = ? $optimize
case "$EBUGGING" in
") ;;
*) DEBUGGING=$EBUGGING ;;
esac

case "$DEBUGGING" in
-g|both|$define)
   case "$optimize" in
 *-g*) ;;
 *)    optimize="$optimize -g" ;;
   esac ;;
none|$undef)
   case "$optimize" in
 *-g*) set `echo "X $optimize " | sed 's/ -g / /'`
```

```
  shift
  optimize="$*"
  ;;
   esac ;;
esac

dflt=''
case "$DEBUGGING" in
both|$define) dflt='-DDEBUGGING'
esac

: argument order is deliberate, as the flag will start with - which set could
: think is an option
checkccflag='check=$1; flag=$2; callback=$3;
echo " ";
echo "Checking if your compiler accepts $flag" >&4;
[ "X$sysroot" != "X" ] && echo "For sysroot = $sysroot";
echo "int main(void) { return 0; }" > gcctest.c;
if $cc $_sysroot -O2 $flag -o gcctest gcctest.c 2>gcctest.out && $run ./gcctest; then
   echo "Yes, it does." >&4;
   if $test -s gcctest.out ; then
       echo "But your platform does not like it:";
       cat gcctest.out;
   else
 case "$ccflags" in
 *$check*)

    echo "Leaving current flags $ccflags alone." >&4
     ;;
 *) dflt="$dflt $flag";
     eval $callback
     ;;
 esac
   fi
else
   echo "Nope, it does not, but that is ok." >&4;
fi
'

: We will not override a previous value, but we might want to
: augment a hint file
case "$hint" in
default|recommended)
 case "$gccversion" in
 1.*) dflt="$dflt -fpcc-struct-return" ;;
 esac
 case "$optimize:$DEBUGGING" in
 *-g*:old) dflt="$dflt -DDEBUGGING";;
```

```
 esac
?X: check for POSIXized ISC
 case "$gccversion" in
 2.*) if $test -d /etc/conf/kconfig.d &&
   $contains _POSIX_VERSION $usrinc/sys/unistd.h >/dev/null 2>&1
  then
   # Interactive Systems (ISC) POSIX mode.
   dflt="$dflt -posix"
  fi
  ;;
 esac
?X: If the user has gcc-2.95 or greater, try adding -fno-strict-alias.
?X: Since the gcc "version" can be non-numeric, e.g.
?X: "2.95.1 19990809 (prerelease)" , we'll do the test on any version
?X: greater than 2.8.
?X: --Andy Dougherty  27 Aug 1999
 case "$gccversion" in
 1.*) ;;
 2.[0-8]*)
 ;;
 ?*) set strict-aliasing -fno-strict-aliasing
  eval $checkccflag
  ;;
 esac
?X: HMB 200405
?X: -pipe has shown a compile time speedup of about 40% on Linux and HP-UX
?X: and also worked on cygwin-1.5.9
?X: If a system fails, disable it in the hints. 99% of gcc uses binutils
 # For gcc, adding -pipe speeds up compilations for some, but apparently
 # some assemblers can't read from stdin.  (It also slows down compilations
 # in other cases, but those are apparently rarer these days.)  AD 5/2004.
 case "$gccversion" in
 ?*) set pipe -pipe
  eval $checkccflag
  ;;
 esac

?X: NWC 200712
 # on x86_64 (at least) we require an extra library (libssp) in the
 # link command line. This library is not named, so I infer that it is
 # an implementation detail that may change. Hence the safest approach
 # is to add the flag to the flags passed to the compiler at link time,
 # as that way the compiler can do the right implementation dependant
 # thing. (NWC)
 case "$ccflags" in
 *-fno-stack-protector*)
```

```
    echo "Do not add -fstack-protector nor -fstack-protector-strong" 2>&1
     ;;
 *) case "$gccversion" in
    ?*) set stack-protector-strong -fstack-protector-strong
  eval $checkccflag
  case "$dflt" in
  *-fstack-protector-strong*) ;; # It got added.
  *) # Try the plain/older -fstack-protector.
     set stack-protector -fstack-protector
     eval $checkccflag
     ;;
  esac
  ;;
     esac
     ;;
 esac
esac

?X: In USG mode, a MIPS system may need some BSD includes
case "$mips_type" in
*BSD*|'') inclwanted="$locincpth $usrinc";;
*) inclwanted="$locincpth $inclwanted $usrinc/bsd";;
esac
for thisincl in $inclwanted; do
 if $test -d $thisincl; then
  if $test x$thisincl != x$usrinc; then
   case "$dflt" in
   *" -I$thisincl "*);;
   *) dflt="$dflt -I$thisincl ";;
   esac
  fi
 fi
done

?X: Include test function (header, symbol)
inctest='if $contains $2 $usrinc/$1 >/dev/null 2>&1; then
 xxx=true;
elif $contains $2 $usrinc/sys/$1 >/dev/null 2>&1; then
 xxx=true;
else
 xxx=false;
fi;
if
 $xxx; then
 case "$dflt" in
 *$2*);;
 *) dflt="$dflt -D$2";;
 esac;
```

```
fi'

set signal.h LANGUAGE_C; eval $inctest

case "$usesocks" in
$define)
 ccflags="$ccflags -DSOCKS"
 ;;
esac

case "$hint" in
default|recommended) dflt="$ccflags $dflt" ;;
*) dflt="$ccflags";;
esac

case "$dflt" in
"|' ') dflt=none;;
esac

$cat <<EOH

Your C compiler may want other flags.  For this question you should include
-I/whatever and -DWHATEVER flags and any other flags used by the C compiler,
but you should NOT include libraries or ld flags like -lwhatever.  If you
want $package to honor its debug switch, you should include -DDEBUGGING here.
Your C compiler might also need additional flags, such as -D_POSIX_SOURCE.

To use no flags, specify the word "none".

EOH
?X: strip leading space
set X $dflt
shift
dflt=${1+"$@"}
rp="Any additional cc flags?"
. ./myread
case "$ans" in
none) ccflags="";;
*) ccflags="$ans";;
esac

: the following weeds options from ccflags that are of no interest to cpp
case
 "$cppflags" in
") cppflags="$ccflags" ;;
*)  set X $ccflags; shift
   case " $cppflags " in
   *" $1 "*) ;;  # Try to avoid doubling the cppflags.
```

```
   *) cppflags="$cppflags $ccflags" ;;
   esac
   ;;
esac
case "$gccversion" in
1.*) cppflags="$cppflags -D__GNUC__"
esac
case "$mips_type" in
");;
*BSD*) cppflags="$cppflags -DSYSTYPE_BSD43";;
esac
case "$cppflags" in
");;
*)
 echo " "
 echo "Let me guess what the preprocessor flags are..." >&4
 set X $cppflags
 shift
 cppflags="
 $cat >cpp.c <<'EOM'
#define BLURFL foo

BLURFL xx LFRULB
EOM
?X:
?X: For each cc flag, try it out with both cppstdin and cpprun, since the
?X: first is almost surely a cc wrapper. We have to try both in case
?X: of cc flags like '-Olimit 2900' that are actually two words...
?X:
 previous="
 for flag in $*
 do
  case "$flag" in
  -*) ftry="$flag";;
  *) ftry="$previous $flag";;
  esac
  if $cppstdin -DLFRULB=bar $cppflags $ftry $cppminus <cpp.c \
   >cpp1.out 2>/dev/null && \
   $cpprun -DLFRULB=bar $cppflags
 $ftry $cpplast <cpp.c \
   >cpp2.out 2>/dev/null && \
   $contains 'foo.*xx.*bar' cpp1.out >/dev/null 2>&1 && \
   $contains 'foo.*xx.*bar' cpp2.out >/dev/null 2>&1
  then
   cppflags="$cppflags $ftry"
   previous="
  else
   previous="$flag"
```

```
  fi
 done
 set X $cppflags
 shift
 cppflags=${1+"$@"}
 case "$cppflags" in
 *-*)  echo "They appear to be: $cppflags";;
 esac
 $rm -f cpp.c cpp?.out
 ;;
esac

: flags used in final linking phase
case "$ldflags" in
") if ./venix; then
  dflt='-i -z'
 else
  dflt=''
 fi
 case "$ccflags" in
 *-posix*) dflt="$dflt -posix" ;;
 esac
 ;;
*) dflt="$ldflags";;
esac
# See note above about -fstack-protector
case "$ccflags" in
*-fstack-protector-strong*)
 case "$dflt" in
 *-fstack-protector-strong*) ;; # Don't add it again
 *) dflt="$dflt -fstack-protector-strong" ;;
 esac
 ;;
*-fstack-protector*)
 case "$dflt" in
 *-fstack-protector*) ;; # Don't add it again
 *) dflt="$dflt -fstack-protector" ;;
 esac
 ;;
esac

: Try to guess additional flags to pick
 up local libraries.
for thislibdir in $libpth; do
 case " $loclibpth " in
 *" $thislibdir "*)
  case "$dflt " in
  *"-L$thislibdir "*) ;;
```

```
  *)  dflt="$dflt -L$thislibdir" ;;
  esac
  ;;
 esac
done

case "$dflt" in
") dflt='none' ;;
esac

$cat <<EOH

Your C linker may need flags.  For this question you should
include -L/whatever and any other flags used by the C linker, but you
should NOT include libraries like -lwhatever.

Make sure you include the appropriate -L/path flags if your C linker
does not normally search all of the directories you specified above,
namely
 $libpth
To use no flags, specify the word "none".

EOH

rp="Any additional ld flags (NOT including libraries)?"
. ./myread
case "$ans" in
none) ldflags=";;
*) ldflags="$ans";;
esac
rmlist="$rmlist pdp11"

@if lkflags
: partial linking may need other flags
case "$lkflags" in
") case "$ldflags" in
 ") dflt='none';;
 *) dflt="$ldflags";;
 esac;;
*) dflt="$lkflags";;
esac
echo " "
rp="Partial linking flags to be used (NOT
 including -r)?"
. ./myread
case "$ans" in
none) lkflags=";;
*) lkflags="$ans";;
```

```
esac

@end
?X:
?X: If the user changes compilers after selecting a hint file, it's
?X: possible that the suggested ccflags/ldflags will be wrong.  Try to
?X: compile and run a simple test program.  Let the user see all the
?X: error messages. -- ADO and RAM
?X: Sometimes, particularly on Linux systems, there is a bad library
?X: (e.g. a dangling symlink or incompatible library or a "run-time"
?X: version but not a "development" version of a library).  This test
?X: will catch those sorts of problems too, though how to fix them
?X: may not be obvious.
?X:
: coherency check
echo " "
echo "Checking your choice of C compiler and flags for coherency..." >&4
$cat > try.c <<'EOF'
#include <stdio.h>
int main() { printf("Ok\n"); return(0); }
EOF
?X: Strip extra blanks in case some of the following variables are empty
set X $cc -o try $optimize $ccflags $ldflags try.c $libs
shift
$cat >try.msg <<'EOM'
I've tried to
 compile and run the following simple program:

EOM
$cat try.c >> try.msg

$cat >> try.msg <<EOM

I used the command:

 $*
 $run ./try

and I got the following output:

EOM
dflt=y
?X: Use "sh -c" to avoid error messages tagged with leading "Configure:".
?X: We need to try the resulting executable, because cc might yield a 0 status
?X: even when ld failed, in which case the executable will not run properly,
?X: if its x bit is set at all...
if $sh -c "$cc -o try $optimize $ccflags $ldflags try.c $libs" >>try.msg 2>&1; then
 if $sh -c "$run ./try " >>try.msg 2>&1; then
```

```
  xxx=`$run ./try`
  case "$xxx" in
  "Ok") dflt=n ;;
  *)    echo 'The program compiled OK, but produced no output.' >> try.msg ;;
  esac
 else
  echo "The program compiled OK, but exited with status $?." >>try.msg
  rp="You have a problem.  Shall I abort Configure"
  dflt=y
 fi
else
 echo "I can't compile the test program." >>try.msg
 rp="You have a BIG problem.  Shall I abort Configure"
 dflt=y
fi
case "$dflt" in
y)
 $cat
 try.msg >&4
?X: using -K will prevent default aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
  echo "(The supplied flags or libraries might be incorrect.)"
  ;;
 *) dflt=n;;
 esac
 echo " "
 . ./myread
 case "$ans" in
 n*|N*) ;;
 *) echo "Ok.  Stopping Configure." >&4
  exit 1
  ;;
 esac
 ;;
n) echo "OK, that should do.";;
esac
$rm_try gcctest gcctest.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ccflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Inhdr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Inhdr.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:01:31  ram
?RCS: patch54: deleted tabs that caused some /bin/sh to core dump (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:55:01  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks wether a set of header files exists or not.
?X: If the first header is not
 found, the function tries to locate
?X: the next header, and so on, until one is found or there is no
?X: more header in the list.
?X:
?X: To use it, say:
?X: set header i_header [ header2 i_header2 ... ]
?X: eval $inhdr
?X:
?MAKE:Inhdr: test Findhdr Whoa
?MAKE: -pick add $@ %<
?LINT:define inhdr
?V:inhdr
?S:inhdr:
?S: This shell variable is used internally by Configure to check
?S: wether a set of headers exist or not. A typical use is:
?S:  set header i_header [ header2 i_header2 ... ]
?S:  eval $inhdr
?S: That will print a message, saying wether header was found or not
?S: and set i_header* accordingly. If the first header is not found,
?S: we try the next one, until the list is empty or one is found.
?S:.
?T:xxx xxf var td xxnf tu yyy instead was cont
: define an alternate in-header-list? function
inhdr='echo " "; td=$define; tu=$undef; yyy=$@;
cont=true; xxf="echo \"<\$1> found.\" >&4";
case $# in 2) xxnf="echo \"<\$1> NOT found.\" >&4";;
*) xxnf="echo \"<\$1> NOT found, ...\" >&4";;
esac;
case
```

```
 $# in 4) instead=instead;; *) instead="at last";; esac;
while $test "$cont"; do
 xxx=`./findhdr $1`
 var=$2; eval "was=\$$2";
 if $test "$xxx" && $test -r "$xxx";
 then eval $xxf;
?X: Next line shifted left 1 tabstop to avoid sh core dump on MachTen 2.1.1.
 eval "case \"\$$var\" in $undef) . ./whoa; esac"; eval "$var=\$td";
  cont="";
 else eval $xxnf;
?X: Likewise, the next line has been shifted left 1 tabstop -- ADO, 08/03/95
 eval "case \"\$$var\" in $define) . ./whoa; esac"; eval "$var=\$tu"; fi;
 set $yyy; shift; shift; yyy=$@;
 case $# in 0) cont="";;
 2) xxf="echo \"but I found <\$1> $instead.\" >&4";
  xxnf="echo \"and I did not find <\$1> either.\" >&4";;
 *) xxf="echo \"but I found <\$1\> instead.\" >&4";
  xxnf="echo \"there is no <\$1>, ...\" >&4";;
 esac;
done;
?X: Remaining values are set to 'undef'
while $test "$yyy";
do set $yyy; var=$2; eval "was=\$$2";
 eval "case \"\$$var\" in $define) . ./whoa; esac"; eval "$var=\$tu";
 set $yyy; shift; shift; yyy=$@;
done'
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Inhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: orderlib.U,v 3.0.1.4 1997/02/28 16:18:18 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: orderlib.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:18:18  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS: patch61: now uses the ar located by Loc.U
?RCS:
```

```
?RCS: Revision 3.0.1.3  1995/01/11  15:33:04  ram
?RCS: patch45: allows hint files to specify their own value for 'ranlib'
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:26:48  ram
?RCS: patch36: now performs a real small compile for accurate
 checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:31:17  ram
?RCS: patch32: use cc variable instead of hardwired 'cc' in 1st compile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orderlib ranlib: Loc ar cat test rm +cc +ccflags +ldflags +libs i_stdlib _a _o run
?MAKE: -pick add $@ %<
?S:orderlib:
?S: This variable is "true" if the components of libraries must be ordered
?S: (with `lorder $* | tsort`) before placing them in an archive.  Set to
?S: "false" if ranlib or ar can generate random libraries.
?S:.
?S:ranlib:
?S: This variable is set to the pathname of the ranlib program, if it is
?S: needed to generate random libraries.  Set to ":" if ar can generate
?S: random libraries or if random libraries are not supported
?S:.
?F:!foobar
: see if ar generates random libraries by itself
echo " "
echo "Checking how to generate random libraries on your machine..." >&4
?X: Some systems (like MIPS) complain when running
 ar... Others like Ultrix
?X: need an explicit 'ar ts' to add the table of contents.
?X: Still others like Linux run ar ts successfully, but still need ranlib.
?X: This set of tests seems the minimum necessary to check out Linux.
?X: We need to explicitly put the entries in out-of-order so that Sun's ld
?X: will fail.  (Otherwise it complains, but gives an exit status of 0.)
echo 'int bar1() { return bar2(); }' > bar1.c
echo 'int bar2() { return 2; }' > bar2.c
$cat > foo.c <<EOP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() { printf("%d\n", bar1()); exit(0); }
EOP
$cc $ccflags -c bar1.c >/dev/null 2>&1
$cc $ccflags -c bar2.c >/dev/null 2>&1
$cc $ccflags -c foo.c >/dev/null 2>&1
```

```
$ar rc bar$_a bar2$_o bar1$_o >/dev/null 2>&1
if $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
 echo "$ar appears to generate random libraries itself."
 orderlib=false
 if [ "X$ranlib" = "X" ]; then
     ranlib=":"
 fi
elif
 $ar s bar$_a >/dev/null 2>&1 &&
 $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
  echo "a table of contents needs to be added with '$ar s'."
  orderlib=false
  ranlib="$ar s"
elif $ar ts bar$_a >/dev/null 2>&1 &&
 $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
  echo "a table of contents needs to be added with '$ar ts'."
  orderlib=false
  ranlib="$ar ts"
else
?X: Allow hints to specify their own ranlib "script". For instance, on
?X: some NeXT machines, the timestamp put by ranlib is not correct, and this
?X: may raise tedious recompiles for nothing. Therefore, NeXT may add the
?X: ranlib='sleep 5; /bin/ranlib' line in their hints to "fix" that.
?X: (reported by Andreas Koenig <k@franz.ww.tu-berlin.de>)
 case "$ranlib" in
 :) ranlib=";;
 ")
  ranlib=`./loc ranlib X /usr/bin /bin /usr/local/bin`
  $test -f $ranlib || ranlib="
  ;;
 esac
 if $test -n "$ranlib";
 then
  echo "your system has '$ranlib'; we'll use that."
  orderlib=false
 else
  echo "your system doesn't seem to support random libraries"
  echo "so we'll use lorder and tsort to order the libraries."
  orderlib=true
  ranlib=":"
 fi
fi
$rm -f foo* bar*
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/orderlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlnbuf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setlnbuf.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:57  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_setlinebuf: Inlibc
?MAKE: -pick add $@ %<
?S:d_setlinebuf:
?S: This variable conditionally defines the HAS_SETLINEBUF symbol, which
?S: indicates to the C program that the setlinebuf() routine is available
?S: to change stderr or stdout from block-buffered or unbuffered
 to a
?S: line-buffered mode.
?S:.
?C:HAS_SETLINEBUF :
?C: This symbol, if defined, indicates that the setlinebuf routine is
?C: available to change stderr or stdout from block-buffered or unbuffered
?C: to a line-buffered mode.
?C:.
?H:#$d_setlinebuf HAS_SETLINEBUF  /**/
?H:.
?LINT:set d_setlinebuf
: see if setlinebuf exists
set setlinebuf d_setlinebuf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setlnbuf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mailer.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mailer.U,v $
?RCS: Revision 3.0.1.3  1995/01/11  15:32:11  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:10:04  ram
?RCS: patch23: ensure full path value is used for rmail also
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:14:18  ram
?RCS: patch16: now use _sendmail vars and friends for portability issues
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:10  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:mailer: test cat rmail mail smail sendmail Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:mailer:
?S: This variable contains the full pathname of a reasonable mailer.
?S: By reasonable, we mean some program which can understand internet
?S: addresses or at least forward them to some internet router. This
?S: mailer should be invoked as "mailer [options] recipients <mail".
?S:.
: determine the name of a reasonable mailer
case "$mailer" in
")
 if $test -f "$sendmail"; then
  dflt="$sendmail"
 elif $test -f "$smail"; then
  dflt="$smail"
 elif $test -f "$rmail"; then
  dflt="$rmail"
 elif $test -f /bin/mail; then
  dflt=/bin/mail
 else
  dflt=$mail
 fi
 ;;
*)  dflt="$mailer";;
esac
$cat <<EOM

I need the full pathname of the program used to deliver mail on your system.
```

```
A typical answer would be /usr/lib/sendmail or /bin/rmail, but you may choose
any other program, as long as it can be fed from standard input and will
honour any user-supplied headers.

EOM
fn=f
rp='Mail
 transport agent to be used?'
. ./getfile
mailer="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mailer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysmode.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysmode: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysmode:
?S: This variable conditionally defines the I_SYSMODE symbol,
?S: and indicates whether a C program should include <sys/mode.h>.
?S:.
?C:I_SYSMODE:
?C: This symbol, if defined, indicates that <sys/mode.h> exists and
?C: should be included.
?C:.
?H:#$i_sysmode I_SYSMODE  /**/
?H:.
?LINT:set i_sysmode
: see if this is a sys/mode.h system
set sys/mode.h i_sysmode
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysmode.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_wchar: Inhdr
?MAKE: -pick add $@ %<
?S:i_wchar:
?S: This variable conditionally defines the I_WCHAR symbol,
?S: that indicates whether a C program may include <wchar.h>.
?S:.
?C:I_WCHAR:
?C: This symbol, if defined, indicates to the C program that <wchar.h>
?C: is available for inclusion
?C:.
?H:#$i_wchar   I_WCHAR /**/
?H:.
?LINT:set i_wchar
: see if wchar.h is present
set wchar.h i_wchar
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_wchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_copysignl: Inlibc
?MAKE: -pick add $@ %<
?S:d_copysignl:
?S: This variable conditionally defines the HAS_COPYSIGNL symbol, which
?S: indicates to the C program that the copysignl() routine is available.
?S: If aintl is also present we can emulate modfl.
?S:.
?C:HAS_COPYSIGNL:
?C: This symbol, if defined, indicates that the copysignl routine is
?C: available.  If aintl is also present we can emulate modfl.
?C:.
?H:#$d_copysignl HAS_COPYSIGNL  /**/
?H:.
?LINT:set d_copysignl
: see if copysignl exists
```

```
set copysignl d_copysignl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_copysignl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_truncate.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_truncate.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_truncate: Inlibc
?MAKE: -pick add $@ %<
?S:d_truncate:
?S: This variable conditionally defines HAS_TRUNCATE if truncate() is
?S: available to truncate files.
?S:.
?C:HAS_TRUNCATE (TRUNCATE):
?C: This symbol, if defined, indicates that the truncate routine is
?C: available to truncate files.
?C:.
?H:#$d_truncate HAS_TRUNCATE /**/
?H:.
?LINT:set
 d_truncate
: see if truncate exists
set truncate d_truncate
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_truncate.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Null.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Null.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit ends up producing shell code to set all variables to ".  This
?X: probably isn't necessary, but I'm paranoid.  About certain things.
?X:
?MAKE:Null: Head
?MAKE: -pick add.Null $@ %<
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Null.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Init.U,v 3.0.1.1 1994/10/31 09:45:59 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Init.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:45:59  ram
?RCS: patch44: removed Options from MAKE to prevent Init overrides
?RCS: patch44: option processing now done after Myinit thanks to new Begin.U
?RCS: patch44: moved "Beginning of configuration questions" to Begin.U
?RCS: patch44: moved signal trapping instruction to Begin.U as well
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file
 initializes certain default variables used by Configure.  They
?X: may be overridden or added to by definitions in Myinit.U.
?X:
?MAKE:Init eunicefix: Null
?MAKE: -pick add $@ %<
?MAKE: -pick weed $@ ./Init
```

```
?S:eunicefix:
?S: When running under Eunice this variable contains a command which will
?S: convert a shell script to the proper form of text file for it to be
?S: executable by the shell.  On other systems it is a no-op.
?S:.
?V:define undef smallmach:rmlist
?X:
?X: Throughout the units, one may make use of $define and $undef to reference
?X: a defined symbol or an undefined one. There is no need to add them in
?X: the dependency line since this unit makes them visible via ?V:, and
?X: everyone inherits from those symbols since by convention Init.U is the
?X: root dependency.
?X:
?LINT:extern DJGPP
?LINT:extern _exe
?LINT:change _exe
?LINT:extern is_os2
: Detect odd OSs
define='define'
undef='undef'
smallmach='pdp11 i8086 z8000 i80286 iAPX286'
rmlist=''

: We must find out about
 Eunice early
eunicefix=':'
if test -f /etc/unixtovms; then
 eunicefix=/etc/unixtovms
fi
if test -f /etc/unixtovms.exe; then
 eunicefix=/etc/unixtovms.exe
fi

: Set executable suffix now -- needed before hints available
if test -f "/libs/version.library"; then
: Amiga OS
   _exe=""
elif test -f "/system/gnu_library/bin/ar.pm"; then
: Stratus VOS
   _exe=".pm"
elif test -n "$DJGPP"; then
: DOS DJGPP
   _exe=".exe"
elif test -f /kern/cookiejar; then
: MiNT
   _exe=""
elif test -d c:/. -o -n "$is_os2" ; then
: OS/2 or cygwin
```

```
   _exe=".exe"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Init.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gidsize: Myread Typedef gidtype Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:gidsize:
?S: This variable contains the size of a gidtype in bytes.
?S:.
?C:Gid_t_size:
?C: This symbol holds the size of a Gid_t in bytes.
?C:.
?H:#define Gid_t_size $gidsize  /* GID size */
?H:.
?T:yyy zzz
?F:!try
: Check the size of GID
echo " "
case "$gidtype" in
*_t) zzz="$gidtype" ;;
*)   zzz="gid"  ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($gidtype));
   exit(0);
}
EOCP
```

```
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") gidsize=4
  echo "(I can't execute the test program--guessing $gidsize.)" >&4
  ;;
 *) gidsize=$yyy
  echo "Your $zzz is $gidsize bytes long."
  ;;
 esac
else
 gidsize=4
 echo "(I can't compile the test program--guessing $gidsize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libs.U,v 3.0.1.6 1997/02/28 16:09:11 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: libs.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:09:11  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.5  1995/07/25  14:12:05  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  16:24:22  ram
?RCS: patch36: removed old broken thislib/thatlib processing (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:05:44  ram
?RCS: patch30: code cleanup with if/elif by ADO and RAM
?RCS: patch30:
 undone patch23 for libswanted default setting
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:08:45  ram
?RCS: patch23: now includes ordered default libswanted variable (ADO)
?RCS: patch23: major cleanup for library lookups (ADO)
```

```
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:31  ram
?RCS: patch6: added default for libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libs ignore_versioned_solibs libsfound libsfiles libsdirs libspath: \
 test cat Myread Oldconfig Loc libpth package xlibpth so _a \
 usesocks sed uselongdouble usequadmath
?MAKE: -pick add $@ %<
?S:libs:
?S: This variable holds the additional libraries we want to use.
?S: It is up to the Makefile to deal with it.  The list can be empty.
?S:.
?S:libsfound:
?S: This variable holds the full pathnames of the libraries
?S: we found and accepted.
?S:.
?S:libsfiles:
?S: This variable holds the filenames aka basenames of the libraries
?S: we found and accepted.
?S:.
?S:libsdirs:
?S: This
 variable holds the directory names aka dirnames of the libraries
?S: we found and accepted, duplicates are removed.
?S:.
?S:libspath:
?S: This variable holds the directory names probed for libraries.
?S:.
?S:ignore_versioned_solibs:
?S: This variable should be non-empty if non-versioned shared
?S: libraries (libfoo.so.x.y) are to be ignored (because they
?S: cannot be linked against).
?S:.
?T:xxx yyy thislib thisdir libswanted libstyle
?D:libs="
?X:
?X: This order is chosen so that libraries  -lndir, -ldir, -lucb, -lbsd,
?X: -lBSD, -lPW, and -lx only get used if there are unresolved
?X: routines at link time.  Usually, these are backwards compatibility
?X: libraries, and may not be as reliable as the standard c library.
?X:
?X: The -lsocket -linet -lnsl order has been reported to be necessary
?X: for at least one SVR4 implementation.
?X: -lc must proceed -lucb or -lbsd for most Solaris applications.
?X: -lc_s proceeds -lc so we pick up the shared library version,
```

```
 if
?X: it is available.
?X:
?X: The ordering of c, posix, and cposix is a guess and almost
?X: certainly wrong on about half of all systems.
?X:
?X: Set proper libswanted in your private Myinit.U if needed.
?X:
?X:: default ordered library list
?X:libswanted='net socket inet bind nsl nm sdbm gdbm ndbm dbm malloc dl'
?X:libswanted="$libswanted dld sun m c_s c posix cposix ndir dir ucb"
?X:libswanted="$libswanted bsd BSD PW x"
?X:
?INIT:: default library list
?INIT:libswanted="
?INIT:: some systems want to use only the non-versioned libso:s
?INIT:ignore_versioned_solibs="
?LINT:extern usecbacktrace
?LINT:extern libscheck
?LINT:extern p
?LINT:use uselongdouble
: Looking for optional libraries
echo " "
echo "Checking for optional libraries..." >&4
case "$libs" in
' '|'') dflt='';;
*) dflt="$libs";;
esac
case "$libswanted" in
'') libswanted='c_s';;
esac
?X: libsocks has nasty naming scheme.
?X: This does not work if somebody wants SOCKS 4.
case "$usesocks" in
"$define") libswanted="$libswanted
 socks5 socks5_sh" ;;
esac
case "$usecbacktrace" in
"$define") libswanted="$libswanted bfd" ;;
esac
case "$usequadmath" in
"$define") libswanted="$libswanted quadmath" ;;
esac
libsfound="
libsfiles="
libsdirs="
libspath="
for thisdir in $libpth $xlibpth; do
```

```
 test -d $thisdir && libspath="$libspath $thisdir"
done
for thislib in $libswanted; do
 for thisdir in $libspath; do
    xxx=''
    if $test ! -f "$xxx" -a "X$ignore_versioned_solibs" = "X"; then
  xxx=`ls $thisdir/lib$thislib.$so.[0-9] 2>/dev/null|sed -n '$p'`
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
  xxx=`ls $thisdir/lib$thislib.[0-9].$so 2>/dev/null|sed -n '$p'`
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib$thislib.$so
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib$thislib$_a
        $test -f "$xxx"
 && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib${thislib}_s$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
  $test -f "$xxx" && thislib=${thislib}_s
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/Slib$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if $test -f "$xxx"; then
  case "$libstyle" in
  shared) echo "Found -l$thislib (shared)." ;;
  static) echo "Found -l$thislib." ;;
  *)      echo "Found -l$thislib ($libstyle)." ;;
  esac
  case " $dflt " in
  *"-l$thislib "*);;
```

```
  *) dflt="$dflt -l$thislib"
                libsfound="$libsfound $xxx"
                yyy=`basename $xxx`
                libsfiles="$libsfiles $yyy"
                yyy=`echo $xxx|$sed -e
 "s%/$yyy\\$%%"`
                case " $libsdirs " in
                *" $yyy "*) ;;
                *) libsdirs="$libsdirs $yyy" ;;
                esac
    ;;
  esac
  break
    fi
 done
 if $test ! -f "$xxx"; then
    echo "No -l$thislib."
 fi
done
set X $dflt
shift
dflt="$*"
case "$libs" in
") dflt="$dflt";;
*) dflt="$libs";;
esac
case "$dflt" in
' '|") dflt='none';;
esac

$cat <<EOM

In order to compile $package on your machine, a number of libraries
are usually needed.  Include any other special libraries here as well.
Say "none" for none.  The default list is almost always right.
EOM

echo " "
rp="What libraries to use?"
. ./myread
case "$ans" in
none) libs=' ';;
*) libs="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libs.U

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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sresuproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sresuproto:
?S: This variable conditionally defines the HAS_SETRESUID_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the setresuid() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SETRESUID_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the setresuid() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
 int setresuid(uid_t ruid, uid_t euid, uid_t suid);
?C:.
?H:#$d_sresuproto HAS_SETRESUID_PROTO /**/
?H:.
?LINT:set d_sresuproto
: see if prototype for setresuid is available
echo " "
set d_sresuproto setresuid $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sresuproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tmpnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_tmpnam_r tmpnam_r_proto: Inlibc Protochk Hasproto i_systypes \
```

```
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_tmpnam_r:
?S: This variable conditionally defines the HAS_TMPNAM_R symbol,
?S: which indicates to the C program that the tmpnam_r()
?S: routine is available.
?S:.
?S:tmpnam_r_proto:
?S: This variable encodes the prototype of tmpnam_r.
?S: It is zero if d_tmpnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_tmpnam_r
?S: is defined.
?S:.
?C:HAS_TMPNAM_R:
?C: This symbol, if defined, indicates that the tmpnam_r routine
?C: is available to tmpnam re-entrantly.
?C:.
?C:TMPNAM_R_PROTO:
?C: This
 symbol encodes the prototype of tmpnam_r.
?C: It is zero if d_tmpnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_tmpnam_r
?C: is defined.
?C:.
?H:#$d_tmpnam_r HAS_TMPNAM_R /**/
?H:#define TMPNAM_R_PROTO $tmpnam_r_proto /**/
?H:.
?T:try hdrs d_tmpnam_r_proto
: see if tmpnam_r exists
set tmpnam_r d_tmpnam_r
eval $inlibc
case "$d_tmpnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h "
 case "$d_tmpnam_r_proto:$usethreads" in
 ":define") d_tmpnam_r_proto=define
  set d_tmpnam_r_proto tmpnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_tmpnam_r_proto" in
 define)
 case "$tmpnam_r_proto" in
 "|0) try='char* tmpnam_r(char*);'
 ./protochk "$extern_C $try" $hdrs && tmpnam_r_proto=B_B ;;
 esac
 case "$tmpnam_r_proto" in
 "|0) d_tmpnam_r=undef
```

```
  tmpnam_r_proto=0
  echo "Disabling tmpnam_r, cannot determine prototype." >&4 ;;
 * ) case "$tmpnam_r_proto" in
  REENTRANT_PROTO*) ;;
  *) tmpnam_r_proto="REENTRANT_PROTO_$tmpnam_r_proto"
 ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "tmpnam_r has no prototype, not using it." >&4 ;;
  esac
  d_tmpnam_r=undef
  tmpnam_r_proto=0
  ;;
 esac
 ;;
*) tmpnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_tmpnam_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_pthread: Inhdr
?MAKE: -pick add $@ %<
?S:i_pthread:
?S: This variable conditionally defines the I_PTHREAD symbol,
?S: and indicates whether a C program should include <pthread.h>.
?S:.
?C:I_PTHREAD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <pthread.h>.
?C:.
?H:#$i_pthread   I_PTHREAD /**/
?H:.
```

```
?LINT:set i_pthread
: see if POSIX threads are available
set pthread.h i_pthread
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/i_pthread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libyacc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libyacc.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:09:19  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.3  1994/05/13  15:27:12  ram
?RCS: patch27: added byacc case (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:09:01  ram
?RCS: patch23: now uses full library path instead of -l notation
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:13:49  ram
?RCS: patch16: un-obsoleted this unit for smooth yacc compilations
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libyacc: Loc yacc libpth _a
?MAKE: -pick add $@ %<
?S:libyacc:
?S: This variable contains the argument to pass to the loader in order
?S: to get the yacc library routines.  If there is no yacc or yacc
?S: library, it is null.
?S:.
?T:xxx
: see if we should include -ly
echo " "
case "$yacc" in
*byacc*)
```

```
 echo "You are using byacc, so I won't look for a yacc library." >&4
 libyacc=''
 ;;
*yacc)
 xxx=`./loc liby$_a x $libpth`
 case "$xxx" in
 x)
  echo "No yacc library found." >&4
  libyacc=''
  ;;
 *)
  echo "yacc library found in $xxx." >&4
  libyacc="$xxx"
  ;;
 esac
 ;;
*bison*)
 echo "You are using bison, so I won't look for a yacc library." >&4
 libyacc=''
 ;;
*)
echo "You don't seem to have yacc, so I won't look for the yacc library." >&4
 libyacc=''
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libyacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strlcpy: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_strlcpy:
?S: This variable conditionally defines the HAS_STRLCPY symbol, which
?S: indicates to the C program that the strlcpy () routine is available.
?S:.
?C:HAS_STRLCPY:
?C: This symbol, if defined, indicates that the strlcpy () routine is
?C: available to do string copying.
?C:.
?H:#$d_strlcpy HAS_STRLCPY  /**/
```

```
?H:.
?T:d_strlcpy_proto xx1 xx2 xx3 xx4
?LINT:set d_strlcpy
: see if strlcpy exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_strlcpy_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_strlcpy_proto strlcpy
 literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_strlcpy_proto" in
   define) # see if strlcpy exists
 set strlcpy d_strlcpy
 eval $inlibc
 ;;
   *)  val=$undef
 set d_strlcpy
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strlcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: AAAAA.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: AAAAA.U,v $
?RCS: Revision 3.0.1.4  1994/06/20  06:50:26  ram
?RCS: patch30: changes from Jarkko Hietaniemi are tagged with JHI
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:01:39  ram
?RCS: patch23: initials for Wayne Davison are now WED
?RCS: patch23: added initials for new unit contributor Andy Dougherty
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:01:09  ram
```

```
?RCS: patch16: make metalint shut up on special unit definition for All target
?RCS:
?RCS: Revision
 3.0.1.1  1993/09/13  15:43:57  ram
?RCS: patch10: documents initials used for Wayne Davison's contributions
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this file is to supply the head of the Makefile created
?X: by metaconfig.  For this reason it must be first in alphabetical order.
?X: The leading '+' in front of the unit name is a hint for metalint, since
?X: the use of that special unit name as a "made" unit is legitimate here.
?X:
?MAKE:+All: Finish
?X:
?X: Throughout the units, the following initials are used to identify comments:
?X:
?X:  HMS: Harlan Stenn
?X:  RAM: Raphael Manfredi
?X:  WED: Wayne Davison (was WAD by mistake--RAM)
?X:  ADO: Andy Dougherty
?X:  JHI: Jarkko Hietaniemi
?X:
?X: Agreed, this is a weird place to document it, but I couldn't find a better
?X: place to do so. I've bet on the curiosity of users, who would probably
?X: want to know what's in this strangely-named file--RAM.

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/AAAAA.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_sitecustomize.U,v $
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_sitecustomize.U,v $
?RCS:
?MAKE:usesitecustomize: Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:usesitecustomize:
?S: This variable is set to true when the user requires a mechanism that
?S: allows the sysadmin to add entries to @INC at runtime.  This variable
```

```
?S: being set, makes perl run '$sitelib/sitecustomize.pl' at startup.
?S:.
?C:USE_SITECUSTOMIZE:
?C: This symbol, if defined, indicates that sitecustomize should
?C: be used.
?C:.
?H:?%<:@if USE_SITECUSTOMIZE
?H:?%<:#ifndef USE_SITECUSTOMIZE
?H:?%<:#$usesitecustomize USE_SITECUSTOMIZE  /**/
?H:?%<:#endif
?H:?%<:@end
?H:.
: Check if site customization support was requested
case "$usesitecustomize" in
   $define|true|[Yy]*)
 usesitecustomize="$define"
 ;;
    *)
 usesitecustomize="$undef"
 ;;
   esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sitecustomize.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_builtin_choose_expr d_builtin_expect : Compile Setvar cat run rm_try
?MAKE: -pick add $@ %<
?S:d_builtin_choose_expr:
?S: This conditionally defines HAS_BUILTIN_CHOOSE_EXPR, which
?S: indicates that the compiler supports __builtin_choose_expr(x,y,z).
?S: This built-in function is analogous to the "x?y:z" operator in C,
?S: except that the expression returned has its type unaltered by
?S: promotion rules. Also, the built-in function does not evaluate
?S: the expression that was not chosen.
?S:.
?S:d_builtin_expect:
?S: This conditionally
 defines HAS_BUILTIN_EXPECT, which indicates
?S: that the compiler supports __builtin_expect(exp,c).  You may use
```

```
?S: __builtin_expect to provide the compiler with branch prediction
?S: information.
?S:.
?C:HAS_BUILTIN_CHOOSE_EXPR:
?C: Can we handle GCC builtin for compile-time ternary-like expressions
?C:.
?C:HAS_BUILTIN_EXPECT:
?C: Can we handle GCC builtin for telling that certain values are more
?C: likely
?C:.
?H:#$d_builtin_expect HAS_BUILTIN_EXPECT /**/
?H:#$d_builtin_choose_expr HAS_BUILTIN_CHOOSE_EXPR /**/
?H:.
?F:!try
?LINT:set d_builtin_expect d_builtin_choose_expr
: Look for GCC-style __builtin_choose_expr
case "$d_builtin_choose_expr" in
")
   echo " "
   echo "Checking whether your compiler can handle __builtin_choose_expr ..." >&4
   $cat >try.c <<'EOCP'
#include <assert.h>
#include <stdlib.h>
#include <stdio.h>

#define SYRINX(x) __builtin_choose_expr( x, (1056*2), (103*50) )

int main(void) {
   assert( SYRINX(1) == 2112 );
   assert( SYRINX(1) != 5150 );
    assert( SYRINX(0) == 5150 );
   assert( SYRINX(0) != 2112 );
   puts( "All good!" );
   exit(0);
}

EOCP
   set try
   if eval $compile && $run ./try; then
 echo "Your C compiler supports __builtin_choose_expr."
 val="$define"
   else
 echo "Your C compiler doesn't seem to understand __builtin_choose_expr."
 val="$undef"
   fi
;;
*) val="$d_builtin_choose_expr" ;;
esac
```

```
set d_builtin_choose_expr
eval $setvar
$rm_try

: Look for GCC-style __builtin_expect
case "$d_builtin_expect" in
")
   echo " "
   echo "Checking whether your compiler can handle __builtin_expect ..." >&4
   $cat >try.c <<'EOCP'
int main(void) {
   int n = 50;
   if ( __builtin_expect(n, 0) ) n = 1;
   /* Remember shell exit code truth is 0, C truth is non-zero */
   return !(n == 1);
}
EOCP
   set try
   if eval $compile && $run ./try; then
 echo "Your C compiler supports __builtin_expect."
 val="$define"
   else
 echo "Your C compiler doesn't seem to understand __builtin_expect."
 val="$undef"
    fi
   ;;
*) val="$d_builtin_expect" ;;
esac

set d_builtin_expect
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_builtin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: i_time.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit finds which "time" include to use. If 'timezone' is used by the
?X: program, we also try to find which header should be included. Eventually,
?X: we look for <sys/select.h> if I_SYSSELECT is used, to get struct timeval.
?X:
?MAKE:i_time i_systime i_systimek timeincl: cat cc ccflags contains rm_try \
 echo n c +i_sysselct Findhdr
?MAKE: -pick add $@ %<
?S:i_time:
?S: This
 variable conditionally defines I_TIME, which indicates
?S: to the C program that it should include <time.h>.
?S:.
?S:i_systime:
?S: This variable conditionally defines I_SYS_TIME, which indicates
?S: to the C program that it should include <sys/time.h>.
?S:.
?S:i_systimek:
?S: This variable conditionally defines I_SYS_TIME_KERNEL, which
?S: indicates to the C program that it should include <sys/time.h>
?S: with KERNEL defined.
?S:.
?S:timeincl:
?S: This variable holds the full path of the included time header(s).
?S:.
?C:I_TIME (USE_TIME_H):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <time.h>.
?C:.
?C:I_SYS_TIME (I_SYSTIME USE_SYS_TIME_H NO_TIME_WITH_SYS_TIME):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h>.
?C:.
?C:I_SYS_TIME_KERNEL (I_SYSTIMEKERNEL):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h> with KERNEL defined.
?C:.
?H:#$i_time I_TIME  /**/
?H:#$i_systime
 I_SYS_TIME  /**/
?H:#$i_systimek I_SYS_TIME_KERNEL  /**/
?H:.
?W::timezone
?T:xselect flags sysselect s_timeval s_timezone
```

```
?LINT:change i_sysselct
: see if we should include time.h, sys/time.h, or both
echo " "
echo "Testing to see if we should include <time.h>, <sys/time.h> or both." >&4
$echo $n "I'm now running the test program...$c"
$cat >try.c <<'EOCP'
#include <sys/types.h>
#ifdef I_TIME
#include <time.h>
#endif
#ifdef I_SYSTIME
#ifdef SYSTIMEKERNEL
#define KERNEL
#endif
#include <sys/time.h>
#endif
#ifdef I_SYSSELECT
#include <sys/select.h>
#endif
int main()
{
 struct tm foo;
#ifdef S_TIMEVAL
 struct timeval bar;
#endif
#ifdef S_TIMEZONE
 struct timezone tzp;
#endif
 if (foo.tm_sec == foo.tm_sec)
  exit(0);
#ifdef S_TIMEVAL
 if (bar.tv_sec == bar.tv_sec)
  exit(0);
#endif
 exit(1);
}
EOCP
flags=''
@if I_SYSSELECT
if $contains 'timeval.*{' `./findhdr sys/select.h` >/dev/null 2>&1; then
 xselect='-DI_SYSSELECT'
else
 xselect=''
fi
@end
@if timezone
for s_timezone
```

```
 in '-DS_TIMEZONE' ''; do
@else
s_timezone=''
@end
?X: Every package is given a try with 'struct timeval'
@if I_SYSSELECT
for sysselect in $xselect ''; do
@else
sysselect=''
@end
for s_timeval in '-DS_TIMEVAL' ''; do
for i_systimek in '' '-DSYSTIMEKERNEL'; do
for i_time in '' '-DI_TIME'; do
for i_systime in '-DI_SYSTIME' ''; do
 case "$flags" in
 '') $echo $n ".$c"
  if $cc $ccflags \
  $i_time $i_systime $i_systimek $sysselect $s_timeval $s_timezone \
  -o try try.c >/dev/null 2>&1 ; then
   set X $i_time $i_systime $i_systimek $sysselect $s_timeval
   shift
   flags="$*"
   echo " "
   $echo $n "Succeeded with $flags$c"
  fi
  ;;
 esac
done
done
done
done
@if I_SYSSELECT
done
@end
@if timezone
done
@end
timeincl=''
echo " "
case "$flags" in
*SYSTIMEKERNEL*) i_systimek="$define"
 timeincl=`./findhdr sys/time.h`
 echo "We'll include <sys/time.h> with KERNEL defined." >&4;;
*) i_systimek="$undef";;
esac
case "$flags" in
*I_TIME*) i_time="$define"
 timeincl=`./findhdr time.h`" $timeincl"
```

```
 echo
 "We'll include <time.h>." >&4;;
*) i_time="$undef";;
esac
case "$flags" in
*I_SYSTIME*) i_systime="$define"
 timeincl=`./findhdr sys/time.h`" $timeincl"
 echo "We'll include <sys/time.h>." >&4;;
*) i_systime="$undef";;
esac
@if I_SYSSELECT
case "$flags" in
*I_SYSSELECT*) i_sysselct="$define"
 timeincl=`./findhdr sys/select.h`" $timeincl"
 echo "We'll also include <sys/select.h> to get struct timeval." >&4;;
*) case "$i_sysselct" in
 ") i_sysselct="$undef";;
 esac
esac
@end
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_localeconv_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_localeconv_l:
?S: This variable conditionally defines the HAS_LOCALECONV_L symbol, which
?S: indicates to the C program that the localeconv_l() routine is available.
?S:.
?C:HAS_LOCALECONV_L:
?C: This symbol, if defined, indicates that the localeconv_l routine is
?C: available to query certain information about a locale.
?C:.
?H:#$d_localeconv_l HAS_LOCALECONV_L  /**/
?H:.
?LINT:set d_localeconv_l
: see if localeconv_l exists
set localeconv_l d_localeconv_l
```

```
eval $inlibc

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_localeconv_l.U
No license file was found, but licenses were detected in source scan.

* Feel free to modify any of this as the need arises.  Note, however,

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/metaconfig.html
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Guess.U,v $
?RCS: Revision 3.0.1.5  1995/07/25  13:37:14  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:53:55  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:14:35  ram
?RCS: patch15: variable d_bsd was not always set properly
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:14  ram
?RCS: patch8: fixed comment which wrongly
 attributed the usrinc symbol
?RCS: patch8: no more ugly messages when no /usr/include/ctype.h
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:37:37  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit hazards some guesses as to what the general nature of the system
?X: is.  The information it collects here is used primarily to establish default
?X: answers to other questions.
```

```
?X:
?MAKE:Guess d_eunice d_xenix d_bsd d_linux d_dos d_os2: cat test echo n c \
 contains rm tr Loc eunicefix
?MAKE: -pick add $@ %<
?S:d_eunice:
?S: This variable conditionally defines the symbols EUNICE_SYSTEM, which
?S: alerts the C program that it must deal with ideosyncracies of VMS.
?S:.
?S:d_xenix:
?S: This variable conditionally defines the symbol XENIX_SYSTEM, which alerts
?S: the C program that it runs under Xenix.
?S:.
?S:d_dos:
?S: This symbol conditionally defines the symbol DOS_SYSTEM
 when running on
?S: DOS with DJGPP or Cygwin.
?S:.
?S:d_os2:
?S: This symbol conditionally defines the symbol OS2_SYSTEM when running on
?S: an OS/2 system.
?S:.
?S:d_bsd:
?S: This symbol conditionally defines the symbol BSD_SYSTEM when running on a
?S: BSD system.
?S:.
?S:d_linux:
?S: This symbol conditionally defines the symbol LINUX_SYSTEM when running
?S: on a Linux system.
?S:.
?C:EUNICE_SYSTEM (EUNICE):
?C: This symbol, if defined, indicates that the program is being compiled
?C: under the EUNICE package under VMS.  The program will need to handle
?C: things like files that don't go away the first time you unlink them,
?C: due to version numbering.  It will also need to compensate for lack
?C: of a respectable link() command.
?C:.
?C:VMS_SYSTEM (VMS):
?C: This symbol, if defined, indicates that the program is running under
?C: VMS.  It is currently only set in conjunction with the EUNICE symbol.
?C:.
?C:XENIX_SYSTEM (XENIX):
?C: This symbol, if defined, indicates that the program
 is running under
?C: Xenix (at least 3.0 ?).
?C:.
?C:DOS_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: DOS with DJGPP.
```

```
?C:.
?C:OS2_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: an OS/2 system.
?C:.
?C:BSD_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: a BSD system.
?C:.
?C:LINUX_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: a Linux system.
?C:.
?H:#$d_eunice EUNICE_SYSTEM  /**/
?H:#$d_eunice VMS_SYSTEM  /**/
?H:#$d_xenix XENIX_SYSTEM  /**/
?H:#$d_dos DOS_SYSTEM  /**/
?H:#$d_os2 OS2_SYSTEM  /**/
?H:#$d_bsd BSD_SYSTEM  /**/
?H:#$d_linux LINUX_SYSTEM  /**/
?H:.
?F:./bsd ./usg ./v7 ./osf1 ./eunice ./xenix ./venix ./dos ./os2 ./gnu ./linux
?T:xxx DJGPP MACHTYPE
: make some quick guesses about what we are up against
echo " "
$echo $n "Hmm...  $c"
echo exit 1 >bsd
echo exit 1 >usg
echo exit 1 >v7
echo exit 1 >osf1
echo exit 1 >eunice
echo
 exit 1 >xenix
echo exit 1 >venix
echo exit 1 >os2
echo exit 1 >gnu
echo exit 1 >linux
echo exit 1 >dos
d_bsd="$undef"
d_linux="$undef"
d_dos="$undef"
d_os2="$undef"
?X:
?X: Do not use 'usrinc', or we get a circular dependency. because
?X: usrinc is defined in usrinc.U, which relies on us...
?X:
$cat /usr/include/signal.h /usr/include/sys/signal.h >foo 2>/dev/null
if test -f /osf_boot || $contains 'OSF/1' /usr/include/ctype.h >/dev/null 2>&1
```

```
then
 echo "Looks kind of like an OSF/1 system, but we'll see..."
 echo exit 0 >osf1
elif test `echo abc | $tr a-z A-Z` = Abc ; then
 xxx=`./loc addbib blurfl $pth`
 if $test -f $xxx; then
 echo "Looks kind of like a USG system with BSD features, but we'll see..."
  echo exit 0 >bsd
  echo exit 0 >usg
 else
  if $contains SIGTSTP foo >/dev/null 2>&1 ; then
   echo "Looks kind of like an extended USG system, but we'll see..."
  else
   echo "Looks kind of like a USG system, but we'll see..."
  fi
  echo exit 0 >usg
 fi
elif $contains SIGTSTP foo >/dev/null
 2>&1 ; then
 echo "Looks kind of like a BSD system, but we'll see..."
 d_bsd="$define"
 echo exit 0 >bsd
elif
 $rm --version 2>/dev/null >foo;
 $contains "Free Software Foundation" foo >/dev/null
then
 xxx=`uname`
 echo exit 0 >gnu
 echo "Looks kind of like a GNU/$xxx system, but we'll see..."
 if $test X$xxx = XLinux; then
  d_linux="$define"
  echo exit 0 >linux
 fi
else
 echo "Looks kind of like a Version 7 system, but we'll see..."
 echo exit 0 >v7
fi
case "$eunicefix" in
*unixtovms*)
 $cat <<'EOI'
There is, however, a strange, musty smell in the air that reminds me of
something...hmm...yes...I've got it...there's a VMS nearby, or I'm a Blit.
EOI
 echo exit 0 >eunice
 d_eunice="$define"
: it so happens the Eunice I know will not run shell scripts in Unix format
 ;;
*)
```

```
 echo " "
 echo "Congratulations.  You aren't running Eunice."
 d_eunice="$undef"
 ;;
esac
case "$p_" in
:) ;;
*)
 $cat <<'EOI'
I have the feeling something is not exactly right, however...don't tell me...
EOI
 if
 test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
  cygwin) echo "hah!... you're running under Cygwin!";;
  *) echo "got it... you're running DOS with DJGPP!";;
  esac
  echo exit 0 >dos
  d_dos="$define"
 else
  $cat <<'EOI'
lemme think...does HAL ring a bell?...no, of course, you're only running OS/2!
EOI
  echo exit 0 >os2
  d_os2="$define"
 fi
 ;;
esac
if test -f /xenix; then
 echo "Actually, this looks more like a XENIX system..."
 echo exit 0 >xenix
 d_xenix="$define"
else
 echo " "
 echo "It's not Xenix..."
 d_xenix="$undef"
fi
chmod +x xenix
$eunicefix xenix
if test -f /venix; then
 echo "Actually, this looks more like a VENIX system..."
 echo exit 0 >venix
else
 echo " "
 if ./xenix; then
  : null
 else
  echo "Nor is it Venix..."
```

```
 fi
fi
chmod +x bsd usg v7 osf1 eunice xenix venix dos os2 gnu linux
$eunicefix bsd usg v7 osf1 eunice xenix venix dos os2 gnu linux
$rm -f foo
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Guess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dbl_dig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dbl_dig.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:28  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dbl_dig: Myread contains cat rm Setvar i_limits i_float \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_dbl_dig:
?S: This variable conditionally defines d_dbl_dig if this system's
?S: header files provide DBL_DIG, which is the number of significant
?S: digits
 in a double precision number.
?S:.
?C:HAS_DBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol DBL_DIG, which is the number
?C: of significant digits in a double precision number.  If this
?C: symbol is not defined, a guess of 15 is usually pretty good.
?C:.
?H:#$d_dbl_dig HAS_DBL_DIG  /**/
?H:.
?F:!dbl_dig.c
?LINT:set d_dbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >dbl_dig.c <<EOM
```

```
#$i_limits I_LIMITS
#$i_float I_FLOAT
#ifdef I_LIMITS
#include <limits.h>
#endif
#ifdef I_FLOAT
#include <float.h>
#endif
#ifdef DBL_DIG
printf("Contains DBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < dbl_dig.c >dbl_dig.E 2>/dev/null
if $contains 'DBL_DIG' dbl_dig.E >/dev/null 2>&1; then
 echo "DBL_DIG found." >&4
 val="$define"
else
 echo "DBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f dbl_dig.?
set d_dbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dbl_dig.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: perlpath.U,v $
?RCS: Revision 3.0.1.2  1995/09/25  09:17:04  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:33:53  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?X:
?X: The purpose of this unit is to locate perl good enough to construct a #!
?X:
?MAKE:perlpath: Getfile Oldconfig Loc perl
?MAKE: -pick
 add $@ %<
?Y:TOP
?S:perlpath:
?S: This variable contains the eventual value of the PERLPATH symbol,
?S: which contains the absolute location of the perl interpreter.
?S:.
?C:PERLPATH:
?C: This symbol contains the absolute location of the perl interpreter.
?C:.
?H:#define PERLPATH "$perlpath"  /**/
?H:.
: determine perl absolute location
case "$perlpath" in
")
 if test -f /usr/bin/perl; then
  dflt=/usr/bin/perl
 else
  case "$perl" in
  */*) dflt="$perl";;
  *) dflt=/usr/bin/perl;;
  esac
 fi
 ;;
*)  dflt="$perlpath"
 ;;
esac
echo " "
fn=f~/
rp="Where is perl located on your system?"
. ./getfile
perlpath="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/perlpath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_eofpipe.U,v 3.0.1.1 1994/10/29 16:12:40 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_eofpipe.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:40  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_eofpipe: Compile cat rm Oldconfig Guess echo n c
?MAKE: -pick add $@ %<
?S:d_eofpipe:
?S: This variable conditionally defines the EOFPIPE symbol, which
?S: indicates to the C program that select will correctly detect
 the EOF
?S: condition when pipe is closed from the other end.
?S:.
?C:EOFPIPE:
?C: This symbol, if defined, indicates that EOF condition will be detected
?C: by the reader of the pipe when it is closed by the writing process.
?C: That is, a select() call on that file descriptor will not block when
?C: only an EOF remains (typical behavior for BSD systems).
?C:.
?H:#$d_eofpipe EOFPIPE  /**/
?H:.
?F:!mpipe
: see if pipe correctly gives the EOF condition
echo " "
case "$d_eofpipe" in
")
 echo "Let's see if your pipes return EOF to select() upon closing..." >&4
 $cat >pipe.c <<'EOP'
int main()
{
 int pd[2];
 int mask;

 pipe(pd);
 if (0 == fork()) {
  close(pd[0]);
  close(pd[1]);
  exit(0);
 }

 close(pd[1]);
 mask = 1 << pd[0];
 alarm(2);
```

```
 select(32, &mask, (int *) 0, (int *) 0, (char *) 0);
 if (0 == read(pd[0], &mask, 1))
  exit(0);

 exit(1);
}
EOP
 set pipe
 if eval $compile_ok; then
?X: Use a script to avoid the possible 'alarm call' message
  echo "./pipe || exit 1" > mpipe
  chmod
 +x mpipe
  ./mpipe >/dev/null 2>&1
  case $? in
  0) d_eofpipe="$define";;
  *) d_eofpipe="$undef";;
  esac
 else
  echo "(The test program did not compile correctly -- Guessing.)"
  if ./bsd; then
   d_eofpipe="$define"
  else
   d_eofpipe="$undef"
  fi
 fi
 case "$d_eofpipe" in
 "$define") echo "Yes, they do.";;
 *) echo "No, they don't! (sigh)";;
 esac
 ;;
*)
 $echo $n "Your pipes $c"
 case "$d_eofpipe" in
 "$define") echo "allow select() to see EOF upon closing.";;
 *) echo "won't let select() see EOF on closing.";;
 esac
 ;;
esac
$rm -f *pipe* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_eofpipe.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_strftime:
?S: This variable conditionally defines the HAS_STRFTIME symbol, which
?S: indicates to the C program that the strftime() routine is available.
?S:.
?C:HAS_STRFTIME:
?C: This symbol, if defined, indicates that the strftime routine is
?C: available to do time formatting.
?C:.
?H:#$d_strftime HAS_STRFTIME  /**/
?H:.
?LINT:set d_strftime
: see if strftime exists
set strftime d_strftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libpth.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libpth.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:08:49  ram
?RCS: patch61: new loclibpth variable
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:31:30  ram
?RCS: patch45: call ./mips instead of just mips (WED)
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:29:15  ram
?RCS: patch32: added /lib/pa1.1 for HP-UX specially tuned PA-RISC libs (ADO)
?RCS: patch32: fixed information message, making it clearer (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:03:54
```

```
  ram
?RCS: patch30: added /usr/shlib to glibpth for shared-only libraries
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:26:57  ram
?RCS: patch27: fixed a typo (libpth -> glibpth)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:07:53  ram
?RCS: patch23: now asks for library directories to be searched (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit initializes the path for C library lookup.
?X:
?MAKE:libpth glibpth xlibpth plibpth loclibpth incpth: \
 usrinc incpath test cat Myread Oldconfig sysroot osname \
 ccname echo cppstdin awk grep sed rm usecrosscompile
?MAKE: -pick add $@ %<
?S:libpth:
?S: This variable holds the general path (space-separated) used to find
?S: libraries. It is intended to be used by other units.
?S:.
?S:glibpth:
?S: This variable holds the general path (space-separated) used to
?S: find libraries.  It may contain directories that do not exist on
?S: this platform, libpth is the cleaned-up
 version.
?S:.
?S:xlibpth:
?S: This variable holds extra path (space-separated) used to find
?S: libraries on this platform, for example CPU-specific libraries
?S: (on multi-CPU platforms) may be listed here.
?S:.
?S:loclibpth:
?S: This variable holds the paths (space-separated) used to find local
?S: libraries.  It is prepended to libpth, and is intended to be easily
?S: set from the command line.
?S:.
?S:plibpth:
?S: Holds the private path used by Configure to find out the libraries.
?S: Its value is prepend to libpth. This variable takes care of special
?S: machines, like the mips.  Usually, it should be empty.
?S:.
?S:incpth:
?S: This variable must precede the normal include path to get the
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
```

```
?S:.
?T: xxx dlist i j croak realpath inclibpth
?LINT:extern incpth
?LINT:change usrinc
?INIT:: change the next line if compiling for Xenix/286 on Xenix/386
?INIT:xlibpth='/usr/lib/386
 /lib/386'
?INIT:: Possible local library directories to search.
?INIT:loclibpth="/usr/local/lib /opt/local/lib /usr/gnu/lib"
?INIT:loclibpth="$loclibpth /opt/gnu/lib /usr/GNU/lib /opt/GNU/lib"
?INIT:
?INIT:: general looking path for locating libraries
?INIT:glibpth="/lib /usr/lib $xlibpth"
?INIT:glibpth="$glibpth /usr/ccs/lib /usr/ucblib /usr/local/lib"
?X: /shlib is for Digital Unix 4.0
?X: /usr/shlib is for OSF/1 systems.
?INIT:test -f /usr/shlib/libc.so && glibpth="/usr/shlib $glibpth"
?INIT:test -f /shlib/libc.so     && glibpth="/shlib $glibpth"
?INIT:test -d /usr/lib64         && glibpth="$glibpth /lib64 /usr/lib64 /usr/local/lib64"
?INIT:
?INIT:: Private path used by Configure to find libraries.  Its value
?INIT:: is prepended to libpth. This variable takes care of special
?INIT:: machines, like the mips.  Usually, it should be empty.
?INIT:plibpth=''
?INIT:
?X:cppfilter is later used in Findhdr.U, but we not want to expose it to config.h
?T:cppfilter
: Adjust cppfilter for path
 component separator
case "$osname" in
vos) cppfilter="tr '\\\\>' '/' |" ;; # path component separator is >
os2) cppfilter="sed -e 's|\\\\\\\\|/|g' |" ;; # path component separator is \
*)   cppfilter='' ;;
esac

: Use gcc to determine libpth and incpth
# If using gcc or clang, we can get better values for libpth, incpth
# and usrinc directly from the compiler.
# Note that ccname for clang is also gcc.
case "$ccname" in
   gcc)
 realpath=`which realpath 2>/dev/null | sed 's/no realpath in.*//'`
 $echo 'extern int foo;' > try.c
 set X `$cppstdin -v try.c 2>&1 | $awk '/^#include <,/^End of search /'|$cppfilter $grep '/include'`
 shift
 inclibpth=""
 if $test $# -gt 0; then
     for i in $*; do
```

```
 case $realpath in
     */realpath) i=`$realpath $i` ;;
 esac
 incpth="$incpth $i"
 j="`$echo $i | $sed 's,/include[^/]*,/lib,'`"
 if $test -d $j; then
     inclibpth="$inclibpth $j"
 fi
    done
    incpth="`$echo $incpth | $sed 's/^ //'`"
    for xxx in $inclibpth $loclibpth $plibpth
$glibpth; do
 if $test -d $xxx; then
     case $realpath in
  */realpath) xxx=`$realpath $xxx` ;;
     esac
     case " $libpth " in
     *" $xxx "*) ;;
     *) libpth="$libpth $xxx";;
     esac
 fi
    done
    libpth="`$echo $libpth | $sed 's/^ //'`"
fi
$rm -f try.c
case "$usrinc" in
") for i in $incpth; do
 if $test -f $i/errno.h -a -f $i/stdio.h -a -f $i/time.h; then
     usrinc="$i"
     break
 fi
    done
    ;;
esac

case "$usecrosscompile" in
$define|true|[yY]*)
    case "$incpth" in
 ") echo "Incpth not defined." >&4; croak=y ;;
 *)  echo "Using incpth '$incpth'." >&4 ;;
    esac
    case "$libpth" in
 ") echo "Libpth not defined." >&4; croak=y ;;
 *)  echo "Using libpth '$libpth'." >&4 ;;
    esac
    case "$usrinc" in
 ") echo "Usrinc not defined." >&4; croak=y ;;
 *)  echo "Using usrinc $usrinc." >&4 ;;
```

```
    esac
    case "$croak" in
  y)
  if test "X$sysroot" = X; then
     echo "Cannot continue, aborting." >&4; exit 1
  else

   echo "Cross-compiling using sysroot $sysroot, failing to guess inc/lib paths is not fatal" >&4
  fi
  ;;
    esac
    ;;
 esac
   ;;
esac

: Default value for incpth is just usrinc
case "$incpth" in
") incpth="$usrinc";;
esac

: Set private lib path
case "$plibpth" in
") if ./mips; then
?X: on mips, we DO NOT want /lib, and we want $incpath/usr/lib
 plibpth="$incpath/usr/lib $sysroot/usr/local/lib $sysroot/usr/ccs/lib"
   fi;;
esac
case "$libpth" in
' ') dlist=";;
") dlist="$loclibpth $plibpth $glibpth";;
*) dlist="$libpth";;
esac

: Now check and see which directories actually exist, avoiding duplicates
for xxx in $dlist
do
   if $test -d $xxx; then
  case " $libpth " in
  *" $xxx "*) ;;
  *) libpth="$libpth $xxx";;
  esac
   fi
done
$cat <<'EOM'

Some systems have incompatible or broken versions of libraries.  Among
the directories listed in the question below, please remove any you
```

```
know not to be holding relevant libraries, and add any that are needed.
Say "none" for none.

EOM

if
 test "X$sysroot" != X; then
   $cat <<EOM
You have set sysroot to $sysroot, please supply the directories excluding sysroot

EOM
fi

case "$libpth" in
") dflt='none';;
*)
?X: strip leading space
 set X $libpth
 shift
 dflt=${1+"$@"}
 ;;
esac
rp="Directories to use for library searches?"
. ./myread
case "$ans" in
none) libpth=' ';;
*) libpth="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libpth.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:ivdformat uvuformat uvoformat uvxformat uvXUformat \
 nvEUformat nvFUformat nvGUformat \
 nveformat nvfformat nvgformat: \
 ivsize longsize intsize shortsize \
 sPRId64 sPRIu64 sPRIo64 sPRIx64 sPRIXU64 \
 uselongdouble d_longdbl usequadmath d_PRIgldbl \
 sPRIEUldbl sPRIFUldbl sPRIGUldbl sPRIeldbl sPRIfldbl sPRIgldbl \
 test echo
```

```
?MAKE: -pick add $@ %<
?S:ivdformat:
?S: This variable contains the format string used for printing
?S: a Perl IV as a signed decimal integer.
?S:.
?S:uvuformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned decimal integer.
?S:.
?S:uvoformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned
 octal integer.
?S:.
?S:uvxformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned hexadecimal integer in lowercase abcdef.
?S:.
?S:uvXUformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned hexadecimal integer in uppercase ABCDEF.
?S:.
?S:nveformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %e-ish floating point format.
?S:.
?S:nvfformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %f-ish floating point format.
?S:.
?S:nvgformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %g-ish floating point format.
?S:.
?S:nvEUformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %E-ish floating point format.
?S:.
?S:nvFUformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %F-ish floating point format.
?S:.
?S:nvGUformat:
?S: This
 variable contains the format string used for printing
?S: a Perl NV using %G-ish floating point format.
?S:.
?C:IVdf:
```

```
?C: This symbol defines the format string used for printing a Perl IV
?C: as a signed decimal integer.
?C:.
?C:UVuf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned decimal integer.
?C:.
?C:UVof:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned octal integer.
?C:.
?C:UVxf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned hexadecimal integer in lowercase abcdef.
?C:.
?C:UVXf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned hexadecimal integer in uppercase ABCDEF.
?C:.
?C:NVef:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %e-ish floating point format.
?C:.
?C:NVff:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %f-ish floating point
 format.
?C:.
?C:NVgf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %g-ish floating point format.
?C:.
?C:NVEf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %E-ish floating point format.
?C:.
?C:NVFf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %F-ish floating point format.
?C:.
?C:NVGf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %G-ish floating point format.
?C:.
?H:#define IVdf  $ivdformat  /**/
?H:#define UVuf  $uvuformat  /**/
?H:#define UVof  $uvoformat  /**/
?H:#define UVxf  $uvxformat  /**/
```

```
?H:#define UVXf  $uvXUformat  /**/
?H:#define NVef  $nveformat  /**/
?H:#define NVff  $nvfformat  /**/
?H:#define NVgf  $nvgformat  /**/
?H:#define NVEf  $nvEUformat  /**/
?H:#define NVFf  $nvFUformat  /**/
?H:#define NVGf  $nvGUformat  /**/
?H:.
: Check format strings for internal types
echo " "
$echo "Checking the format strings to be used for Perl's
 internal types..." >&4

if $test X"$ivsize" = X8; then
 ivdformat="$sPRId64"
 uvuformat="$sPRIu64"
 uvoformat="$sPRIo64"
 uvxformat="$sPRIx64"
 uvXUformat="$sPRIXU64"
else
 if $test X"$ivsize" = X"$longsize"; then
  ivdformat="'ld'"
  uvuformat="'lu'"
  uvoformat="'lo'"
  uvxformat="'lx'"
  uvXUformat="'lX'"
 else
  if $test X"$ivsize" = X"$intsize"; then
   ivdformat="'d'"
   uvuformat="'u'"
   uvoformat="'o'"
   uvxformat="'x'"
   uvXUformat="'X'"
  else
   : far out
   if $test X"$ivsize" = X"$shortsize"; then
    ivdformat="'hd'"
    uvuformat="'hu'"
    uvoformat="'ho'"
    uvxformat="'hx'"
    uvXUformat="'hX'"
   fi
  fi
 fi
fi

if $test X"$usequadmath" = X"$define"; then
   nveformat="'Qe'"
```

```
   nvfformat="'Qf'"
   nvgformat="'Qg'"
   nvEUformat="'QE'"
   nvFUformat="'QF'"
   nvGUformat="'QG'"
else
   if $test X"$uselongdouble" = X"$define" -a X"$d_longdbl" = X"$define" -a X"$d_PRIgldbl" = X"$define"; then
 nveformat="$sPRIeldbl"
 nvfformat="$sPRIfldbl"
 nvgformat="$sPRIgldbl"
 nvEUformat="$sPRIEUldbl"
 nvFUformat="$sPRIFUldbl"
 nvGUformat="$sPRIGUldbl"
    else
 nveformat="'e'"
 nvfformat="'f'"
 nvgformat="'g'"
 nvEUformat="'E'"
 nvFUformat="'F'"
 nvGUformat="'G'"
   fi
fi

case "$ivdformat" in
") echo "$0: Fatal: failed to find format strings, cannot continue." >&4
   exit 1
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlxvf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ipc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: ipc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ipc serve_shm serve_msg serve_inet_udp serve_inet_tcp serve_unix_udp \
```

```
 serve_unix_tcp: test Myread Oldconfig d_socket d_msg d_shm d_sem
?MAKE: -pick add $@ %<
?LINT:use d_msg d_sem
?S:ipc:
?S: This variable holds the type of IPC service we'll be using.  Values
?S: include "ip", "shm", "msg", "cms" and "os9".  We don't worry about
?S: cms or os9
 here, because Configure doesn't run in those places--HMS.
?S:.
?S:serve_shm:
?S: This variable controls the definition of SERVE_SHM, which tells the
?S: C program to use USG shared memory for IPC.
?S:.
?S:serve_msg:
?S: This variable controls the definition of SERVE_MSG, which tells the
?S: C program to use USG message queues for IPC.
?S:.
?S:serve_inet_udp:
?S: This variable controls the definition of SERVE_INET_UDP, which tells
?S: the C program to enable InterNet-domain UDP support for IPC.
?S:.
?S:serve_inet_tcp:
?S: This variable controls the definition of SERVE_INET_TCP, which tells
?S: the C program to enable InterNet-domain TCP support for IPC.
?S:.
?S:serve_unix_udp:
?S: This variable controls the definition of SERVE_UNIX_UDP, which tells
?S: the C program to enable Unix-domain UDP support for IPC.
?S:.
?S:serve_unix_tcp:
?S: This variable controls the definition of SERVE_UNIX_TCP, which tells
?S: the C program to enable Unix-domain TCP support for IPC.
?S:.
?C:SERVE_SHM:
?C: If
 defined, tells the C program to use USG shared memory for IPC.
?C:.
?C:SERVE_MSG:
?C: If defined, tells the C program to use USG message queues for IPC.
?C:.
?C:SERVE_INET_UDP:
?C: If defined, tells the C program to enable InterNet-domain UDP
?C: support for IPC.
?C:.
?C:SERVE_INET_TCP:
?C: If defined, tells the C program to enable InterNet-domain TCP
?C: support for IPC.
?C:.
```

```
?C:SERVE_UNIX_UDP:
?C: If defined, tells the C program to enable Unix-domain UDP
?C: support for IPC.
?C:.
?C:SERVE_UNIX_TCP:
?C: If defined, tells the C program to enable Unix-domain TCP
?C: support for IPC.
?C:.
?H:#$serve_shm SERVE_SHM /**/
?H:#$serve_msg SERVE_MSG /**/
?H:#$serve_inet_udp SERVE_INET_UDP /**/
?H:#$serve_inet_tcp SERVE_INET_TCP /**/
?H:#$serve_unix_udp SERVE_UNIX_UDP /**/
?H:#$serve_unix_tcp SERVE_UNIX_TCP /**/
?H:.
?X: FIXME -- RAM
?INIT:serve_shm=''
?INIT:serve_msg="$undef"
?INIT:serve_inet_udp=''
?INIT:serve_inet_tcp=''
?INIT:serve_unix_udp=''
?INIT:serve_unix_tcp=''
: get IPC mechanism
echo
 " "
ipc=''
while $test -z "$ipc"
do
 if $test "$ipc" != "shm" -a "$d_socket" = "$define"; then
  ipc=''
  if $test "$serve_inet_udp" = "$undef"; then
   dflt=n
  else
   dflt=y
  fi
  rp='Provide InterNet-domain UDP service?'
  . ./myread
  dflt=''
  case "$ans" in
  n*) serve_inet_udp="$undef";;
  *)
   serve_inet_udp="$define"
   ipc='ip'
   ;;
  esac

  if $test "$serve_inet_tcp" = "$define"; then
   dflt=y
```

```
else
 dflt=n
fi
rp='Provide InterNet-domain TCP service?'
. ./myread
dflt=''
case "$ans" in
n*) serve_inet_tcp="$undef";;
*)
 serve_inet_tcp="$define"
 ipc='ip'
 ;;
esac

if $test "$serve_unix_udp" = "$define"; then
 dflt=y
else
 dflt=n
fi
rp='Provide Unix-domain UDP service?'
. ./myread
dflt=''
case "$ans" in
n*) serve_unix_udp="$undef";;
*)
 serve_unix_udp="$define"
 ipc='ip'
 ;;
esac

if $test "$serve_unix_tcp" = "$define"; then
 dflt=y
else
 dflt=n
fi
rp='Provide Unix-domain TCP service?'
. ./myread
dflt=''
case
"$ans" in
n*) serve_unix_tcp="$undef";;
*)
 serve_unix_tcp="$define"
 ipc='ip'
 ;;
esac
else
 serve_inet_udp="$undef"
```

```
  serve_inet_tcp="$undef"
  serve_unix_udp="$undef"
  serve_unix_tcp="$undef"
 fi
 if $test "$ipc" != "ip" -a "$d_shm" = "$define"; then
  echo "Providing USG shared memory IPC support." >&4
  serve_shm="$define"
  ipc='shm'
 else
  serve_shm="$undef"
 fi
 if $test -z "$ipc"; then
  echo "You must select an IPC mechanism." >&4
 fi
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ipc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_static_inline.U,v $
?RCS:
?RCS: Copyright (c) 2010 Andrew Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafayette.edu>
?RCS:
?MAKE:d_static_inline perl_static_inline: Compile Setvar gccversion \
 cat echo run hint rm rm_try
?MAKE: -pick add $@ %<
?S:d_static_inline:
?S: This variable conditionally defines the HAS_STATIC_INLINE symbol,
?S: which indicates that the C compiler supports C99-style static
?S: inline.  That is, the function can't be called from another
?S: translation unit.
?S:.
?S:perl_static_inline:
?S: This variable defines the PERL_STATIC_INLINE
 symbol to
?S: the best-guess incantation to use for static inline functions.
?S: Possibilities include
?S:  static inline       (c99)
?S:  static __inline__   (gcc -ansi)
```

```
?S:  static __inline     (MSVC)
?S:  static _inline      (older MSVC)
?S:  static              (c89 compilers)
?S:.
?C:HAS_STATIC_INLINE :
?C: This symbol, if defined, indicates that the C compiler supports
?C: C99-style static inline.  That is, the function can't be called
?C: from another translation unit.
?C:.
?C:PERL_STATIC_INLINE:
?C: This symbol gives the best-guess incantation to use for static
?C: inline functions.  If HAS_STATIC_INLINE is defined, this will
?C: give C99-style inline.  If HAS_STATIC_INLINE is not defined,
?C: this will give a plain 'static'.  It will always be defined
?C: to something that gives static linkage.
?C: Possibilities include
?C:  static inline       (c99)
?C:  static __inline__   (gcc -ansi)
?C:  static __inline     (MSVC)
?C:  static _inline      (older MSVC)
?C:  static
        (c89 compilers)
?C:.
?H:#$d_static_inline HAS_STATIC_INLINE    /**/
?H:#define PERL_STATIC_INLINE $perl_static_inline /**/
?H:.
?LINT:set d_static_inline
?T:inline xxx
?F:!try
: see what flavor, if any, of static inline is supported
echo " "
echo "Checking to see if your system supports static inline..."
?X: Build two programs.  The first uses static inline in file a.c and
?X: should work.  The second also includes b.c which tries to link against
?X: the static function in a.c.  This should fail.
?X:.
$cat > try.c <<'EOCP'
#include <stdlib.h>
extern int f_via_a(int x);
extern int f_via_b(int x);
int main(int argc, char **argv)
{
   int y;

   y = f_via_a(0);
#ifdef USE_B
   y = f_via_b(0);
#endif
```

```
  if (y == 42) {
      return EXIT_SUCCESS;
  }
  else {
      return EXIT_FAILURE;
  }
}
EOCP
$cat > a.c <<'EOCP'
static INLINE int f(int x) {
  int y;
  y = x + 42;
  return y;
}

int f_via_a(int x)
{
  return f(x);
}
EOCP
$cat > b.c <<'EOCP'
extern int f(int x);

int
 f_via_b(int x)
{
  return f(x);
}
EOCP

# Respect a hint (or previous) value for perl_static_inline, if there is one.
case "$perl_static_inline" in
") # Check the various possibilities, and break out on success.
 # For gcc, prefer __inline__, which will still permit
 # cflags.SH to add in -ansi.
 case "$gccversion" in
  ") xxx="inline __inline__ __inline _inline";;
  *)  xxx="__inline__ inline __inline _inline";;
 esac
 for inline in $xxx; do
  set try -DINLINE=$inline a.c
  if eval $compile && $run ./try; then
   # Now make sure there is no external linkage of static
   # functions
   set try -DINLINE=$inline -DUSE_B a.c b.c
   if eval $compile && $run ./try; then
    $echo "Your compiler supports static $inline, " >&4
    $echo "but it also creates an external definition," >&4
```

```
    $echo "so I won't use it." >&4
    val=$undef
   else
    $echo "Your compiler supports static $inline." >&4
    val=$define
    perl_static_inline="static $inline";
    break;
   fi
  else
   $echo
 "Your compiler does NOT support static $inline." >&4
   val="$undef"
  fi
 done
 ;;
*inline*) # Some variant of inline exists.
 echo "Keeping your $hint value of $perl_static_inline."
 val=$define
 ;;
static)  # No inline capabilities
 echo "Keeping your $hint value of $perl_static_inline."
 val=$undef
 ;;
*)  # Unrecognized previous value -- blindly trust the supplied
 # value and hope it makes sense.  Use old value for
 # d_static_inline, if there is one.
 echo "Keeping your $hint value of $perl_static_inline."
 case "$d_static_inline" in
  ") val=$define ;;
  *)  val=$d_static_inline ;;
 esac
 ;;
esac
# Fallback to plain 'static' if nothing worked.
case "$perl_static_inline" in
")
 perl_static_inline="static"
 val=$undef
 ;;
esac
set d_static_inline
eval $setvar
$rm -f a.[co] b.[co]
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_static_inline.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysioctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysioctl.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  15:04:57  ram
?RCS: patch23: added knowledge for <sys/filio.h> (WED)
?RCS: patch23: optimized amount of findhdr calls
?RCS:
?RCS: Revision 3.0.1.1  1993/11/10  17:36:09  ram
?RCS: patch14: now use a compiler check for TIOCNOTTY because of HP-UX 9.x
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysioctl i_bsdioctl i_sysfilio i_syssockio
 d_voidtty: test contains \
 cat i_termio i_termios i_sgtty Setvar Findhdr +cc rm Inhdr
?MAKE: -pick add $@ %<
?S:i_sysioctl:
?S: This variable conditionally defines the I_SYS_IOCTL symbol, which
?S: indicates to the C program that <sys/ioctl.h> exists and should
?S: be included.
?S:.
?S:i_sysfilio:
?S: This variable conditionally defines the I_SYS_FILIO symbol, which
?S: indicates to the C program that <sys/filio.h> exists and should
?S: be included in preference to <sys/ioctl.h>.
?S:.
?S:i_bsdioctl:
?S: This variable conditionally defines the I_SYS_BSDIOCTL symbol, which
?S: indicates to the C program that <sys/bsdioctl.h> exists and should
?S: be included.
?S:.
?S:i_syssockio:
?S: This variable conditionally defines I_SYS_SOCKIO to indicate to the
?S: C program that socket ioctl codes may be found in <sys/sockio.h>
?S: instead of <sys/ioctl.h>.
?S:.
?S:d_voidtty:
```

```
?S: This variable conditionally defines USE_IOCNOTTY to indicate that the
?S: ioctl() call with TIOCNOTTY should be used
 to void tty association.
?S: Otherwise (on USG probably), it is enough to close the standard file
?S: descriptors and do a setpgrp().
?S:.
?C:I_SYS_IOCTL (I_SYSIOCTL):
?C: This symbol, if defined, indicates that <sys/ioctl.h> exists and should
?C: be included. Otherwise, include <sgtty.h> or <termio.h>.
?C:.
?C:I_SYS_FILIO:
?C: This symbol, if defined, indicates that <sys/filio.h> exists and
?C: should be included instead of <sys/ioctl.h>.
?C:.
?C:I_SYS_BSDIOCTL (I_BSDIOCTL):
?C: This symbol, if defined, indicates that <sys/bsdioctl.h> exists and should
?C: be included. Otherwise, try <sys/ioctl.h>. This is primarly intended for
?C: definitions of sockets options, like SIOCATMARK.
?C:.
?C:I_SYS_SOCKIO (I_SYSSOCKIO):
?C: This symbol, if defined, indicates the <sys/sockio.h> should be included
?C: to get socket ioctl options, like SIOCATMARK.
?C:.
?C:USE_TIOCNOTTY (VOIDTTY):
?C: This symbol, if defined indicate to the C program that the ioctl()
?C: call with TIOCNOTTY should be used
 to void tty association.
?C: Otherwise (on USG probably), it is enough to close the standard file
?C: descriptors and do a setpgrp().
?C:.
?H:#$i_sysioctl I_SYS_IOCTL  /**/
?H:#$i_sysfilio I_SYS_FILIO  /**/
?H:#$i_bsdioctl I_SYS_BSDIOCTL  /**/
?H:#$i_syssockio I_SYS_SOCKIO /**/
?H:#$d_voidtty USE_TIOCNOTTY /**/
?H:.
?T:xxx
: see if ioctl defs are in sgtty, termio, sys/filio or sys/ioctl
?LINT:set i_sysfilio
set sys/filio.h i_sysfilio
eval $inhdr
echo " "
if $test `./findhdr sys/ioctl.h`; then
 val="$define"
 echo '<sys/ioctl.h> found.' >&4
else
 val="$undef"
 if $test $i_sysfilio = "$define"; then
```

```
    echo '<sys/ioctl.h> NOT found.' >&4
 else
  $test $i_sgtty = "$define" && xxx="sgtty.h"
  $test $i_termio = "$define" && xxx="termio.h"
  $test $i_termios = "$define" && xxx="termios.h"
echo "No <sys/ioctl.h> found, assuming ioctl args are defined in <$xxx>." >&4
 fi
fi
?LINT:set i_sysioctl
set i_sysioctl
eval $setvar

@if I_BSDIOCTL || i_bsdioctl
?X:
?X: The only machine I know where this
 inclusion was necessary is a
?X: BULL DPX 5000 (a French machine).
?X:
: see if socket ioctl defs are in sys/bsdioctl or sys/ioctl
echo " "
xxx=`./findhdr sys/bsdioctl.h`
if $test "$xxx"; then
 if $contains SIOCATMARK $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have socket ioctls defined in <sys/bsdioctl.h>." >&4
 else
  val="$undef"
  echo "No socket ioctls found in <sys/bsdioctl.h>." >&4
 fi
else
 val="$undef"
 echo "<sys/bsdioctl.h> not found, but that's ok." >&4
fi
?LINT:set i_bsdioctl
set i_bsdioctl
eval $setvar

@end
@if I_SYSSOCKIO || i_syssockio
: see if socket ioctl defs are in sys/sockio.h
echo " "
xxx=`./findhdr sys/sockio.h`
if $test "$xxx"; then
 if $contains SIOCATMARK $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have socket ioctls defined in <sys/sockio.h>." >&4
 else
  val="$undef"
```

```
  echo "No socket ioctls found in <sys/sockio.h>." >&4
 fi
else
 val="$undef"
@if I_BSDIOCTL
 case "$i_bsdioctl" in
 "$define") $cat <<EOM
<sys/sockio.h> not found, using
 ioctls from <sys/bsdioctl.h>.
EOM
 ;;
 *) $cat <<EOM
<sys/sockio.h> not found, assuming socket ioctls are in <sys/ioctl.h>.
EOM
 ;;
 esac
@else
 $cat <<EOM
<sys/sockio.h> not found, assuming socket ioctls are in <sys/ioctl.h>.
EOM
@end
fi
?LINT:set i_syssockio
set i_syssockio
eval $setvar

@end
@if VOIDTTY || d_voidtty
: check how to void tty association
echo " "
case "$i_sysioctl" in
"$define") xxx='sys/ioctl.h';;
?X: otherwise $xxx was set during the determination of i_sysioctl, above.
esac
?X:
?X: Can't use $contains here since HP-UX 9.x has TIOCNOTTY between a pair
?X: of #ifdef/#endif and is never actually defined. Oh well...
?X:
$cat > tcio.c <<EOM
#include <sys/types.h> /* Just in case */
#include <$xxx>

int main()
{
#ifdef TIOCNOTTY
 exit(0);
#else
 exit(1);
```

```
#endif
}
EOM
if ($cc -o tcio tcio.c && ./tcio) >/dev/null 2>&1; then
 val="$define"
 echo "TIOCNOTTY found in <$xxx>." >&4
 echo "Using ioctl() call on /dev/tty to void tty association." >&4
else
 val="$undef"
 echo "Closing
 standard file descriptors should void tty association." >&4
fi
?LINT:set d_voidtty
set d_voidtty
eval $setvar
$rm -f tcio tcio.? core

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysioctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_scalbn: Inlibc
?MAKE: -pick add $@ %<
?S:d_scalbn:
?S: This variable conditionally defines the HAS_SCALBN symbol, which
?S: indicates to the C program that the scalbn() routine is available.
?S:.
?C:HAS_SCALBN:
?C: This symbol, if defined, indicates that the scalbn routine is
?C: available to multiply floating-point number by integral power
?C: of radix.
?C:.
?H:#$d_scalbn HAS_SCALBN  /**/
?H:.
?LINT:set d_scalbn
: see if scalbn exists
set scalbn d_scalbn
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_scalbn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memalign.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memalign.U,v $
?RCS:
?MAKE:d_memalign: Inlibc
?MAKE: -pick add $@ %<
?S:d_memalign:
?S: This variable conditionally defines the HAS_MEMALIGN symbol, which
?S: indicates to the C program that the memalign() routine is available.
?S:.
?C:HAS_MEMALIGN :
?C: This symbol, if defined, indicates that the memalign routine is
?C: available to allocate aligned memory.
?C:.
?H:#$d_memalign HAS_MEMALIGN  /**/
?H:.
?LINT:set d_memalign
: see if memalign exists
set
 memalign d_memalign
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memalign.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Head.U 6 2006-08-25 22:21:46Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Head.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:02:09  ram
?RCS: patch61: make sure we unset CDPATH for shells that support this
?RCS: patch61: improved Korn shell detection and handling
```

```
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:02  ram
?RCS: patch56: added SVR4-ish /opt directories to path list (ADO)
?RCS: patch56: OS/2 platforms are using another path separator
?RCS:
?RCS: Revision 3.0.1.7  1995/03/21  08:46:15  ram
?RCS: patch52: definition of
 paths wrongly added spurious ':' chars
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:54:19  ram
?RCS: patch36: make sure ENV is unset before calling /bin/ksh
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:03:44  ram
?RCS: patch32: now sets PATH only using existing directories
?RCS:
?RCS: Revision 3.0.1.4  1994/06/20  06:54:28  ram
?RCS: patch30: now computes its invocation name into 'me'
?RCS: patch30: symbol me is made visible to all units read-only
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:15:07  ram
?RCS: patch15: added /sbin:/usr/sbin:/usr/libexec in PATH for BSD/386
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:32:35  ram
?RCS: patch14: ensure PATH is reset to '.' before testing for alias
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:07  ram
?RCS: patch7: not all 'test' programs support the -x option
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the very first unit in the Configure script.  It is mostly just
?X:
 things to keep people from getting into a tizzy right off the bat.
?X:
?MAKE:Head:
?MAKE: -pick wipe $@ %<
?V:PATH p_ _exe me newsh
?T:argv p paths OS2_SHELL DJGPP
?T:inksh needksh avoidksh newsh changesh reason
?F:!*
?LINT:extern ENV CDPATH SHELL MACHTYPE _exe is_os2
?LINT:change ENV CDPATH is_os2
?LINT:nocomment
#! /bin/sh
#
# If these # comments don't work, trim them. Don't worry about any other
```

```
# shell scripts, Configure will trim # comments from them for you.
#
# (If you are trying to port this package to a machine without sh,
# I would suggest you have a look at the prototypical config_h.SH file
# and edit it to reflect your system. Some packages may include samples
# of config.h for certain machines, so you might look for one of those.)
#
?X:
?X: NOTE THAT A CONFIGURE SCRIPT IS IN THE PUBLIC DOMAIN (whether or not
?X: the software which uses it is in the public domain).
?X:
# Yes, you may rip this off to use in other distribution packages. This
# script belongs to the public
 domain and cannot be copyrighted.
#
?X:
?X: WE ASK YOU NOT TO REMOVE OR ALTER THE FOLLOWING PARAGRAPH, PLEASE:
?X:
# Note: this Configure script was generated automatically by the tool
# called "metaconfig". Rather than working with this copy of Configure,
# you should use metaconfig. Perl uses a modified version of this
# tool, and this, together with the metaconfig units, are available
# in the git repository:
#    $ git clone https://github.com/Perl/metaconfig metaconfig
# The original dist package (including metaconfig) is available on github:
#    $ git clone https://github.com/rmanfredi/dist.git dist-git
#
?X: OK, I'll not alter, but I'll add to it then ...
# Though this script was generated by metaconfig from metaunits, it is
# OK to send patches against Configure itself (but not to commit them
# to blead). It's up to
# the Configure maintainers to backport the patch to the metaunits if it
# is accepted. Exceptions to this rule, and more information, is in
# Porting/pumpkin.pod.
?X:
?X:
 NOTA BENE:
?X: If you develop you own version of metaconfig based on this work,
?X: you have to add some comments telling that the script was generated
?X: by your version, not mine: It credits your work.
?X:

# Generated using [metaconfig <VERSION> PL<PATCHLEVEL>]
# with additional metaconfig patches from https://github.com/Perl/metaconfig

cat >c1$$ <<EOF
ARGGGHHHH!!!!!
```

```
SCO csh still thinks true is false.  Write to SCO today and tell them that next
year Configure ought to "rm /bin/csh" unless they fix their blasted shell. :-)

(Actually, Configure ought to just patch csh in place.  Hmm.  Hmmmmm.  All
we'd have to do is go in and swap the && and || tokens, wherever they are.)

[End of diatribe. We now return you to your regularly scheduled programming...]
EOF
cat >c2$$ <<EOF

OOPS!  You naughty creature!  You didn't run Configure with sh!
I will attempt to remedy the situation by running sh for you...
EOF

true || cat c1$$ c2$$
true || exec sh $0 $argv:q

(exit $?0) || cat
 c2$$
(exit $?0) || exec sh $0 $argv:q
rm -f c1$$ c2$$

if test -f /dev/cputype -a -f /dev/drivers -a -f /dev/osversion; then
 cat <<EOF
***
*** I'm sorry but this system looks like Plan 9 and Plan 9 doesn't do
*** Configure that well.  (Plan 9 is close to UNIX but not close enough.)
*** Please read the README.plan9 for further instructions.
*** Cannot continue, aborting.
***
EOF
 exit 1
fi

if test -f /sys/utilities/MultiView ; then
 # AmigaOS, test -c for /dev/null is not useful
 :
elif test ! -c /dev/null ; then
 cat <<EOF
***
*** I'm sorry, but /dev/null appears to be a file rather than a device.
*** Please consult your operating sytem's notes for making a device
*** in /dev.
*** Cannot continue, aborting.
***
EOF
 exit 1
fi
```

```
: compute my invocation name
me=$0
case "$0" in
*/*)
 me=`echo $0 | sed -e 's!.*/\(.*\)!\1!' 2>/dev/null`
 test "$me" || me=$0
 ;;
esac

?X:
?X: To be able to run under OS/2, we must detect that early enough to use
?X: the proper path separator, stored in $p_.
 It is : on UNIX and ; on
?X: DOS-ish systems such as OS/2.
?X:
: Proper separator for the PATH environment variable
p_=:
: On OS/2 this directory should exist if this is not floppy only system ":-]"
if test -d c:/. || ( uname -a | grep -i 'os\(/\|\)2' 2>&1 ) 2>&1 >/dev/null ; then
 if test -n "$OS2_SHELL"; then
  p_=\;
  PATH=`cmd /c "echo %PATH%" | tr '\\\\' / `
?X: That's a bug in ksh5.22
  OS2_SHELL=`cmd /c "echo %OS2_SHELL%" | tr '\\\\' / | tr '[A-Z]' '[a-z]'`
  is_os2=yes
 elif test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
  *cygwin|*msys) ;;
  *) p_=\; ;;
  esac
 fi
fi

?X:
?X: There are two schools of thoughts here. Some people correctly argue that
?X: the user has a better chance than we do of setting a reasonable PATH and
?X: others argue that Configure is the best place there is to set up a suitable
?X: PATH. Well, here we try to compromise by keeping the user's PATH and
?X: appending some directories which are known to work on some machine or the
?X: other.
 The rationale behind this being that a novice user might not have a
?X: proper environment variable set, and some directories like /etc (where
?X: chown is located on some BSD systems) may be missing--RAM.
?X:
?X: SVR4 adds an /opt directory for optional packages.  Some sites use
?X: various permutations on /opt as opposed to /usr or /usr/local.-- ADO
?X:
```

```
?X: We only add directories that are not already in the PATH of the
?X: user and the directories must exist also.
?X:
?X: 20040627, Merijn, HP-UX's ANSI compiler is in /opt/ansic/bin if present
?X:  and should be before /usr/ccs/bin, where the braindead bundled compiler
?X:  can be found. The /usr/ccs/bin compiler cannot be used to build perl.
?X:
: Proper PATH setting
paths='/bin /usr/bin /usr/local/bin /usr/ucb /usr/local /usr/lbin'
paths="$paths /opt/bin /opt/local/bin /opt/local /opt/lbin"
paths="$paths /usr/5bin /etc /usr/gnu/bin /usr/new /usr/new/bin /usr/nbin"
paths="$paths /opt/gnu/bin /opt/new /opt/new/bin /opt/nbin"
paths="$paths
 /sys5.3/bin /sys5.3/usr/bin /bsd4.3/bin /bsd4.3/usr/ucb"
paths="$paths /bsd4.3/usr/bin /usr/bsd /bsd43/bin /opt/ansic/bin /usr/ccs/bin"
paths="$paths /etc /usr/lib /usr/ucblib /lib /usr/ccs/lib"
paths="$paths /sbin /usr/sbin /usr/libexec"
paths="$paths /system/gnu_library/bin"

for p in $paths
do
 case "$p_$PATH$p_" in
 *$p_$p$p_*) ;;
 *) test -d $p && PATH=$PATH$p_$p ;;
 esac
done

PATH=.$p_$PATH
export PATH

: shall we be using ksh?
inksh=''
needksh=''
avoidksh=''
newsh=/bin/ksh
changesh=''
?X: Use (alias -x) and not (alias) since zsh and bash recognize the alias
?X: builtin but not the -x option which is typically ksh...
?X: We need to set up PATH before calling the "alias" built-in since some
?X: systems like HP-UX have a binary called /bin/alias.
if (PATH=.; alias -x) >/dev/null 2>&1; then
  inksh=true
fi
?X: On HP-UX, large Configure scripts may exercise a bug in /bin/sh, use ksh
if test -f /hp-ux -a -f /bin/ksh; then
 needksh='to avoid sh bug in "here document" expansion'
fi
?X:
```

```
 On AIX4, /bin/sh is really ksh and it causes problems, use sh
if test -d /usr/lpp -a -f /usr/bin/bsh -a -f /usr/bin/uname; then
 if test X`/usr/bin/uname -v` = X4; then
  avoidksh="to avoid AIX 4's /bin/sh"
  newsh=/usr/bin/bsh
 fi
fi
?X: On Digital UNIX, /bin/sh may start up buggy /bin/ksh, use sh
if test -f /osf_boot -a -f /usr/sbin/setld; then
 if test X`/usr/bin/uname -s` = XOSF1; then
  avoidksh="to avoid Digital UNIX' ksh"
  newsh=/bin/sh
?X: if BIN_SH is set to 'xpg4', sh will start up ksh
  unset BIN_SH
 fi
fi
?X: If we are not in ksh and need it, then feed us back to it
case "$inksh/$needksh" in
/[a-z]*)
?X: Clear ENV to avoid any ~/.kshrc that could alias cd or whatever...
?X: Don't use "unset ENV", that is not portable enough
  ENV=''
  changesh=true
  reason="$needksh"
 ;;
esac
?X: If we are in ksh and must avoid it, then feed us back to a new shell
case "$inksh/$avoidksh" in
true/[a-z]*)
 changesh=true
 reason="$avoidksh"
 ;;
esac
?X: Warn them if they use ksh on
 other systems, which are those where
?X: we don't need ksh nor want to avoid it explicitly, yet are using it.
case "$inksh/$needksh-$avoidksh-" in
true/--)
  cat <<EOM
(I see you are using the Korn shell.  Some ksh's blow up on $me,
mainly on older exotic systems.  If yours does, try the Bourne shell instead.)
EOM
 ;;
esac
case "$changesh" in
true)
 export newsh
 echo "(Feeding myself to $newsh $reason.)"
```

```
?X: Make sure they didn't say sh <Configure by checking whether $0 ends
?X: with Configure or not. If they did say sh <../../Configure, then too
?X: bad for them anyway, since we lost that path indication...
?X: Otherwise, execing $0 ensures we keep the full remote source dir
?X: indication for src.U.
 case "$0" in
 Configure|*/Configure) exec $newsh $0 "$@";;
 *) exec $newsh Configure "$@";;
 esac
 ;;
esac
?X: 2004.06.09 rac
?X: having $newsh persist as ksh here is bad news if ksh doesn't really
?X: exist. this causes us to toss away a perfectly good working test in
?X: bash in favor
 of more exotic external options. see bug 42665.
test -x "${newsh}" || unset newsh

?X: Unset CDPATH to avoid surprises when using cd under some shells
?X: Can't unset it because that's not portable to very old shells.
?X: Can't set it to '' because then bash 2.02 won't do "cd UU"  --AD  6/98.
?X: Don't want to set it to '.' because then ksh prints out the
?X: name of the directory every time you cd to it. --AD 6/98
?X: In order to inflict the least harm, change it only if it's set.
: if needed, set CDPATH to a harmless value that is not chatty
: avoid bash 2.02 problems with empty CDPATH.
case "$CDPATH" in
'') ;;
*) case "$SHELL" in
 *bash*) CDPATH='.' ;;
 *) CDPATH='' ;;
 esac
 ;;
esac

: Configure runs within the UU subdirectory
test -d UU || mkdir UU
?X: Use ./* to avoid any confirmation prompts from enhanced shells -- WED
cd UU && rm -f ./*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Head.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: inc_version_list.U,v $
?RCS:
?RCS: Copyright (c) 2000 Andy Dougherty
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: inc_version_list.U,v $
?RCS:
?MAKE:inc_version_list inc_version_list_init d_inc_version_list: cat sed \
 Getfile perl5 version api_versionstring rm Myread archname \
 prefix sitelib_stem exe_ext
?MAKE: -pick add $@ %<
?Y:TOP
?S:inc_version_list:
?S: This variable specifies the list of subdirectories in over
?S: which perl.c:incpush() and lib/lib.pm will automatically
?S: search when adding directories to @INC.  The elements in
?S: the list are separated by spaces.  This is only useful
?S: if
 you have a perl library directory tree structured like the
?S: default one.  See INSTALL for how this works.  The versioned
?S: site_perl directory was introduced in 5.005, so that is the
?S: lowest possible value.
?S:
?S: This list includes architecture-dependent directories back to
?S: version $api_versionstring (e.g. 5.5.640) and
?S: architecture-independent directories all the way back to
?S: 5.005.
?S:.
?S:inc_version_list_init:
?S: This variable holds the same list as inc_version_list, but
?S: each item is enclosed in double quotes and separated by commas,
?S: suitable for use in the PERL_INC_VERSION_LIST initialization.
?S:.
?S:d_inc_version_list:
?S: This variable conditionally defines PERL_INC_VERSION_LIST.
?S: It is set to undef when PERL_INC_VERSION_LIST is empty.
?S:.
?C:PERL_INC_VERSION_LIST:
?C: This variable specifies the list of subdirectories in over
?C: which perl.c:incpush() and lib/lib.pm will automatically
?C: search when adding directories to @INC, in a format suitable
?C: for
 a C initialization string.  See the inc_version_list entry
?C: in Porting/Glossary for more details.
?C:.
?H:#$d_inc_version_list PERL_INC_VERSION_LIST $inc_version_list_init  /**/
?H:.
```

```
?T:stem
: Determine list of previous versions to include in @INC
$cat > getverlist <<EOPL
#!$perl5
use strict;
use warnings;
use File::Basename;
my \$api_versionstring = "$api_versionstring";
my \$version = "$version";
my \$stem = "$sitelib_stem";
my \$archname = "$archname";
EOPL
 $cat >> getverlist <<'EOPL'
# The list found is stored twice for each entry: the original name, and
# the binary broken down version into pack "s>s>s>", so sorting is easy
# and unambiguous.  This will work for all versions that have a maximum
# of three digit per group separate by '.'s or '_'s. Names are extended
# with ".0.0" to ensure at least three elements for the pack.
#                                -- H.Merijn Brand (m)'06 23-10-2006

my @inc_version_list;
my @candidates;
# XXX Redo to do opendir/readdir?
if
 (-d $stem) {
   chdir($stem);
   ;@candidates = map {
 [ $_, pack "s>s>s>", split m/[._]/, "$_.0.0" ] } glob("5.*");
   ;@candidates = sort { $a->[1] cmp $b->[1]} @candidates;
}
else {
   ;@candidates = ();
}

my ($pversion, $aversion, $vsn5005) = map {
   pack "s>s>s>", split m/[._]/, "$_.0.0" } $version, $api_versionstring, "5.005";
foreach my $d (@candidates) {
   if ($d->[1] lt $pversion) {
 if ($d->[1] ge $aversion) {
     unshift(@inc_version_list, grep { -d } $d->[0]."/$archname", $d->[0]);
 }
 elsif ($d->[1] ge $vsn5005) {
     unshift(@inc_version_list, grep { -d } $d->[0]);
 }
   }
   else {
 # Skip newer version.  I.e. don't look in
 # 5.7.0 if we're installing 5.6.1.
```

```
   }
}

if (@inc_version_list) {
   print join(' ', @inc_version_list);
}
else {
   # Blank space to preserve value for next Configure run.
   print " ";
}
EOPL
chmod +x getverlist
case "$inc_version_list" in
") if test -x "$perl5$exe_ext"; then
  dflt=`$perl5 getverlist`
 else
  dflt='none'
 fi
 ;;
$undef)
 dflt='none' ;;
?X:     Configure -Dinc_version_list='5.6.0/$archname 5.6.0' ...
*)  eval dflt=\"$inc_version_list\" ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
case "$dflt" in
5.005) dflt=none ;;
esac
$cat <<EOM

In order to ease the process of upgrading, this version of perl
can be configured to use modules built and installed with earlier
versions of perl that were installed under $prefix.  Specify here
the list of earlier versions that this version of perl should check.
If Configure detected no earlier versions of perl installed under
$prefix, then the list will be empty.  Answer 'none' to tell perl
to not search earlier versions.

The default should almost always be sensible, so if you're not sure,
just accept the default.
EOM

rp='List of earlier versions to include in @INC?'
. ./myread
case "$ans" in
[Nn]one|"|' '|$undef) inc_version_list=' ' ;;
```

```
*) inc_version_list="$ans" ;;
esac
case "$inc_version_list" in
"|' ')
 inc_version_list_init='0'
 d_inc_version_list="$undef"
 ;;
*) inc_version_list_init=`echo
 $inc_version_list |
  $sed -e 's/^/"/' -e 's/ /","/g' -e 's/$/",0/'`
 d_inc_version_list="$define"
 ;;
esac
$rm -f getverlist
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/inc_version_list.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_poll.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_poll: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_poll:
?S: This variable conditionally defines the I_POLL symbol, and indicates
?S: whether a C program should include <poll.h>.
?S:.
?C:I_POLL:
?C: This symbol, if defined, indicates that <poll.h> exists and
?C: should be included. (see also HAS_POLL)
?C:.
?H:#$i_poll I_POLL  /**/
?H:.
?LINT:set i_poll
: see if this is a poll.h system
set poll.h i_poll
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_poll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
?RCS: Copyright (c) 2008 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:sGMTIME_max sGMTIME_min sLOCALTIME_max sLOCALTIME_min: cat rm_try \
 Setvar Compile run
?MAKE: -pick add $@ %<
?S:sGMTIME_max:
?S: This variable defines the maximum value of the time_t offset that
?S: the system function gmtime () accepts
?S:.
?S:sGMTIME_min:
?S: This variable defines the minimum value of the time_t offset that
?S: the system function gmtime () accepts
?S:.
?S:sLOCALTIME_max:
?S: This variable defines the maximum value of the time_t offset that
?S: the system function localtime () accepts
?S:.
?S:sLOCALTIME_min:
?S: This variable defines the minimum value of the time_t offset that
?S: the system function localtime () accepts
?S:.
?C:GMTIME_MAX:
?C: This symbol contains the maximum value
 for the time_t offset that
?C: the system function gmtime () accepts, and defaults to 0
?C:.
?C:GMTIME_MIN:
?C: This symbol contains the minimum value for the time_t offset that
?C: the system function gmtime () accepts, and defaults to 0
?C:.
?C:LOCALTIME_MAX:
?C: This symbol contains the maximum value for the time_t offset that
?C: the system function localtime () accepts, and defaults to 0
?C:.
?C:LOCALTIME_MIN:
?C: This symbol contains the minimum value for the time_t offset that
?C: the system function localtime () accepts, and defaults to 0
?C:.
?H:#define GMTIME_MAX  $sGMTIME_max /**/
?H:#define GMTIME_MIN  $sGMTIME_min /**/
?H:#define LOCALTIME_MAX $sLOCALTIME_max /**/
?H:#define LOCALTIME_MIN $sLOCALTIME_min /**/
?H:.
?D:sGMTIME_max=0
```

```
?D:sGMTIME_min=0
?D:sLOCALTIME_max=0
?D:sLOCALTIME_min=0
?F:!try
: Check the max offset that gmtime and localtime accept
echo "Checking max offsets that gmtime () accepts"

case "$sGMTIME_min/$sGMTIME_max" in
   0/0|/)
 $cat >try.c <<EOCP
#include
 <sys/types.h>
#include <stdio.h>
#include <time.h>

int i;
struct tm *tmp;
time_t pt;

void gm_check (time_t t, int min_year, int max_year)
{
   tmp = gmtime (&t);
   if ( tmp == NULL ||
 /* Check tm_year overflow */
  tmp->tm_year < min_year || tmp->tm_year > max_year)
 tmp = NULL;
   else
 pt = t;
   } /* gm_check */

int check_max ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MAXLONG
   gm_check (MAXLONG, 69, 0x7fffffff);
#endif
   if (tmp == NULL || tmp->tm_year < 0) {
 for (i = 63; i >= 0; i--) {
     time_t x = pt | ((time_t)1 << i);
     if (x < 0 || x < pt) continue;
     gm_check (x, 69, 0x7fffffff);
     }
 }
   printf ("sGMTIME_max=%ld\n", pt);
   return (0);
   } /* check_max */
```

```
int check_min ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MINLONG
   gm_check (MINLONG, -1900, 70);
#endif
   if (tmp == NULL) {
 for (i = 36; i >= 0; i--) {
     time_t x = pt - ((time_t)1 << i);
     if (x > 0) continue;
     gm_check (x, -1900, 70);
     }
 }
   printf ("sGMTIME_min=%ld\n",
 pt);
   return (0);
   } /* check_min */

int main (int argc, char *argv[])
{
   /* fprintf (stderr, "Sizeof time_t = %ld\n", sizeof (time_t)); */
   check_max ();
   check_min ();
   return (0);
   } /* main */
EOCP
 set try
 if eval $compile; then
     eval `$run ./try 2>/dev/null`
 else
     echo "Cannot determine sGMTIME_max and sGMTIME_min." >&4
     fi
 $rm_try
 ;;
   esac

echo "Checking max offsets that localtime () accepts"

case "$sLOCALTIME_min/$sLOCALTIME_max" in
   0/0|/)
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#include <time.h>

int i;
struct tm *tmp;
```

```
time_t pt;

void local_check (time_t t, int min_year, int max_year)
{
   if (sizeof (time_t) > 4 && t > 0x7fffffffffff000LL)
 tmp = NULL;
   else
 tmp = localtime (&t);
   if ( tmp == NULL ||
 /* Check tm_year overflow */
  tmp->tm_year < min_year || tmp->tm_year > max_year)
 tmp = NULL;
   else
 pt = t;
   } /* local_check */

int check_max ()
{
   tmp = NULL;
   pt  = 0;
#ifdef
 MAXLONG
   local_check (MAXLONG, 69, 0x7fffffff);
#endif
   if (tmp == NULL || tmp->tm_year < 0) {
 for (i = 63; i >= 0; i--) {
     time_t x = pt | ((time_t)1 << i);
     if (x < 0 || x < pt) continue;
     local_check (x, 69, 0x7fffffff);
     }
 }
   printf ("sLOCALTIME_max=%ld\n", pt);
   return (0);
  } /* check_max */

int check_min ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MINLONG
   local_check (MINLONG, -1900, 70);
#endif
   if (tmp == NULL) {
 for (i = 36; i >= 0; i--) {
     time_t x = pt - ((time_t)1 << i);
     if (x > 0) continue;
     local_check (x, -1900, 70);
     }
```

```
 }
   printf ("sLOCALTIME_min=%ld\n", pt);
   return (0);
   } /* check_min */

int main (int argc, char *argv[])
{
   check_max ();
   check_min ();
   return (0);
   } /* main */
EOCP
 set try
 if eval $compile; then
     eval `$run ./try 2>/dev/null`
 else
     echo "Cannot determine sLOCALTIME_max and sLOCALTIME_min." >&4
     fi
 $rm_try
 ;;
   esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/time_size.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_gethostprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_gethostprotos:
?S: This variable conditionally defines the HAS_GETHOST_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various gethost*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETHOST_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for gethostent(), gethostbyname(), and
?C: gethostbyaddr().  Otherwise,
```

```
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_gethostprotos HAS_GETHOST_PROTOS /**/
?H:.
?LINT:set d_gethostprotos
?X: This test actually only checks for gethostent() and assumes the
?X: others follow suit.  This test fails for ChorusOS, which has
?X: gethostbyname and gethostbyaddr, but not gethostent.
: see if prototypes for various gethostxxx netdb.h functions are available
echo " "
set d_gethostprotos gethostent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_gethostprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fmod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_fmod.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:46  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_fmod: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmod:
?S: This variable conditionally defines the HAS_FMOD symbol, which
?S: indicates to the C program that the fmod() routine is available.
?S: See also d_drem for the drem() routine which does roughly the same.
?S:.
?C:HAS_FMOD
 :
?C: This symbol, if defined, indicates that the fmod routine is
?C: available to compute the remainder r=x-n*y where n=trunc(x/y).
?C:.
?H:#$d_fmod HAS_FMOD  /**/
?H:.
```

```
?LINT:set d_fmod
: see if fmod exists
set fmod d_fmod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fmod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethid.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethid: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethid:
?S: This variable conditionally defines HAS_GETHOSTID if gethostid() is
?S: available to get the host id.
?S:.
?C:HAS_GETHOSTID (GETHOSTID):
?C: This symbol, if defined, indicates that the gethostid system call is
?C: available to get the host id.
?C:.
?H:#$d_gethid HAS_GETHOSTID  /**/
?H:.
?LINT:set
 d_gethid
: see if gethid exists
set gethostid d_gethid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_siglist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_siglist.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_siglist: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_siglist:
?S: This variable conditionally defines HAS_SYS_SIGLIST if sys_siglist[] is
?S: available to translate signal numbers to strings.
?S:.
?C:HAS_SYS_SIGLIST (SYS_SIGLIST):
?C: This symbol, if defined, indicates that the sys_siglist array is
?C: available to translate signal numbers
 to strings.
?C:.
?H:#$d_siglist HAS_SYS_SIGLIST  /**/
?H:.
?LINT:set d_siglist
: see if sys_siglist[] exist
echo " "
if set sys_siglist val -a d_siglist; eval $csym; $val; then
 echo "You have sys_siglist[] for signal description." >&4
 val="$define"
else
 echo "You don't have sys_siglist[]." >&4
 val="$undef"
fi
set d_siglist
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_siglist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?X:
?X: Useless unit dropped.  Use randfunc instead.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/randbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_vfork.U,v 3.0.1.6 1994/08/29 16:18:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_vfork.U,v $
?RCS: Revision 3.0.1.6  1994/08/29  16:18:21  ram
?RCS: patch32: set default to 'y' the first time
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:59:14  ram
?RCS: patch30: usevfork was not always properly set
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:20:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:59:09  ram
?RCS: patch23: now explicitly ask whether vfork() should be used
 (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1993/10/16  13:49:39  ram
?RCS: patch12: added magic for vfork()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:06:57  ram
?RCS: patch10: removed automatic remapping of vfork on fork (WAD)
?RCS: patch10: added compatibility code for older config.sh (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vfork usevfork d_pseudofork: Inlibc Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_vfork:
```

```
?S: This variable conditionally defines the HAS_VFORK symbol, which
?S: indicates the vfork() routine is available.
?S:.
?S:usevfork:
?S: This variable is set to true when the user accepts to use vfork.
?S: It is set to false when no vfork is available or when the user
?S: explicitly requests not to use vfork.
?S:.
?S:d_pseudofork:
?S: This variable conditionally defines the HAS_PSEUDOFORK symbol,
?S: which indicates that an emulation of the fork routine is available.
?S:.
?C:HAS_VFORK (VFORK):
?C: This
 symbol, if defined, indicates that vfork() exists.
?C:.
?H:#$d_vfork HAS_VFORK /**/
?H:.
?C:HAS_PSEUDOFORK:
?C: This symbol, if defined, indicates that an emulation of the
?C: fork routine is available.
?C:.
?H:#$d_pseudofork HAS_PSEUDOFORK /**/
?H:.
?M:vfork: HAS_VFORK
?M:#ifndef HAS_VFORK
?M:#define vfork fork
?M:#endif
?M:.
?T:d_hvfork
: backward compatibility for d_hvfork
if test X$d_hvfork != X; then
 d_vfork="$d_hvfork"
 d_hvfork="
fi
?X:==========================
: see if there is a vfork
val="
set vfork val
eval $inlibc

d_pseudofork=$undef

: Ok, but do we want to use it. vfork is reportedly unreliable in
: perl on Solaris 2.x, and probably elsewhere.
case "$val" in
$define)
 echo " "
```

```
 case "$usevfork" in
 false) dflt='n';;
 *) dflt='y';;
 esac
 cat <<'EOM'

Perl can only use a vfork() that doesn't suffer from strict
restrictions on calling functions or modifying global data in
the child.  For example, glibc-2.1 contains such a vfork()
that is unsuitable.  If your system
 provides a proper fork()
call, chances are that you do NOT want perl to use vfork().

EOM
 rp="Do you still want to use vfork()?"
 . ./myread
 case "$ans" in
 y|Y) ;;
 *)
  echo "Ok, we won't use vfork()."
  val="$undef"
  ;;
 esac
 ;;
esac
?X:
?X: Only set it when final value is known to avoid spurious Whoa's
?X: Then set usevfork accordingly to the current value, for next run
?X:
set d_vfork
eval $setvar
case "$d_vfork" in
$define) usevfork='true';;
*) usevfork='false';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_vfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Instruct.U,v 3.0.1.3 1997/02/28 15:02:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Instruct.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:02:55  ram
?RCS: patch61: logname / whoami sequence rewritten to use case
?RCS:
?RCS: Revision 3.0.1.2  1995/02/15  14:11:34  ram
?RCS: patch51: author name now appears at the end of the paragraph (WED)
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:12:05  ram
?RCS: patch45: now documents the & escape to turn -d on at the read prompt
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:04  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?X:
?X: This unit spew out the directions that we want everyone to read.  I try to
?X: keep the first "pagefull" much less than a page since they don't know it
?X: isn't going to go shooting off the top of the screen, and we don't want
?X: to panic them yet.
?X:
?MAKE:Instruct: Myread Configdir Devel contains
?MAKE: -pick wipe $@ %<
?T:user needman firsttime
: general instructions
needman=true
firsttime=true
user=`(logname) 2>/dev/null`
case "$user" in
") user=`whoami 2>&1`;;
esac
if $contains "^$user\$" ../.config/instruct >/dev/null 2>&1; then
 firsttime=false
 echo " "
 rp='Would you like to see the instructions?'
 dflt=n
 . ./myread
 case "$ans" in
 [yY]*) ;;
 *) needman=false;;
 esac
fi
if $needman; then
 cat <<EOH

This installation shell script will examine your system and ask you questions
to determine how the <PACKAGENAME> package should be installed. If you get
```

```
stuck on a question, you may use a ! shell escape to start a subshell or
execute a
 command.  Many of the questions will have default answers in square
brackets; typing carriage return will give you the default.

On some of the questions which ask for file or directory names you are allowed
to use the ~name construct to specify the login directory belonging to "name",
even if you don't have a shell which knows about that.  Questions where this is
allowed will be marked "(~name ok)".

EOH
 rp=''
 dflt='Type carriage return to continue'
 . ./myread
 cat <<'EOH'

The prompter used in this script allows you to use shell variables and
backticks in your answers.  You may use $1, $2, etc...  to refer to the words
in the default answer, as if the default line was a set of arguments given to a
script shell.  This means you may also use $* to repeat the whole default line,
so you do not have to re-type everything to add something to the default.

Every time there is a substitution, you will have to confirm.  If there is an
error (e.g. an unmatched backtick), the default answer
 will remain unchanged
and you will be prompted again.

If you are in a hurry, you may run 'Configure -d'.  This will bypass nearly all
the questions and use the computed defaults (or the previous answers if there
was already a config.sh file). Type 'Configure -h' for a list of options.
You may also start interactively and then answer '& -d' at any prompt to turn
on the non-interactive behaviour for the remainder of the execution.

EOH
 . ./myread
 cat <<EOH

Much effort has been expended to ensure that this shell script will run on any
Unix system.  If despite that it blows up on yours, your best bet is to edit
Configure and run it again.  If you can't run Configure for some reason,
you'll have to generate a config.sh file by hand.  Whatever problems you
have, let me (<MAINTLOC>) know how I blew it.

This installation script affects things in two ways:

1) it may do direct variable substitutions on some of the files included
  in this kit.
2) it builds a config.h file for inclusion in
```

```
 C programs.  You may edit
  any of these files as the need arises after running this script.

If you make a mistake on a question, there is no easy way to back up to it
currently.  The easiest thing to do is to edit config.sh and rerun all the SH
files.  Configure will offer to let you do this before it runs the SH files.

EOH
?X: In case they played with the prompter...
 dflt='Type carriage return to continue'
 . ./myread
 case "$firsttime" in
 true) echo $user >>../.config/instruct;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Instruct.U
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```
?RCS: $Id: i_limits.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_limits.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_limits: Inhdr
?MAKE: -pick add $@ %<
?S:i_limits:
?S: This variable conditionally defines the I_LIMITS symbol, and indicates
?S: whether a C program may include <limits.h> to get symbols like WORD_BIT
?S: and friends.
?S:.
?C:I_LIMITS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <limits.h> to
 get definition of symbols like WORD_BIT or
?C: LONG_MAX, i.e. machine dependant limitations.
?C:.
?H:#$i_limits I_LIMITS  /**/
```

```
?H:.
?LINT:set i_limits
: see if this is a limits.h system
set limits.h i_limits
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_limits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_log1p: Inlibc
?MAKE: -pick add $@ %<
?S:d_log1p:
?S: This variable conditionally defines the HAS_LOG1P symbol, which
?S: indicates to the C program that the logp1() routine is available
?S: to compute log(1 + x) for values of x close to zero.
?S:.
?C:HAS_LOG1P:
?C: This symbol, if defined, indicates that the log1p routine is
?C: available to do the logarithm of 1 plus argument function.
?C:.
?H:#$d_log1p HAS_LOG1P  /**/
?H:.
?LINT:set d_log1p
: see if log1p exists
set log1p d_log1p
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_log1p.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: fpu.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:10  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:fpu: test cat cc Myread
?MAKE: -pick add $@ %<
?S:fpu (fpunit):
?S: Set to be the compile flag for the local floating point unit.
?S:.
?C:FPU (FPUNIT):
?C: String containing the flags for the local floating point unit.
?C:.
?H:#define FPU "$fpu" /**/
?H:.
: see what floating point compile flags should be used.
fpu=''
if $test -r /dev/fpa; then
 $cat>fpa.c << GOOP
 main(){return(1);}
GOOP
 $cc
 -ffpa -o fpa fpa.c
 fpa > fpa.out 2>&1
 if $test ! -s fpa.out; then
  dflt='y'
  $cat <<'EOM'

You seem to have a sun fpa...  I can compile the code to use the fpa but it will
mean that the code can ONLY run on a machine with a fpa...

EOM
  rp="Should I compile for fpa?"
  . ./myread
  if $test $ans = "n"; then
   fpu=''
  else
   fpu='-ffpa'
  fi
 else
  $cat <<'EOM'

You have the fpa device but I can't seem to use it.  Maybe you should talk to
your sysadmin about this.  For now, I am not going to compile it in.

EOM
 fi
fi
if $test "$fpu" = ''; then
 if $test -r /usr/etc/mc68881version; then
  dflt='y'
  $cat <<'EOM'
```

```
There also seems to be the pieces for a 68881.  If I compile this in, it will
work on almost all Sun 3's except for a few Sun-3/50s without a 68881...

EOM
  rp="Should I compile for a 68881?"
  . ./myread
  if $test $ans = "y"; then
   fpu='-f68881'
  fi
 fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/fpu.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS: Copyright (c) 2019, Karl Williamson
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_setlocale d_setlocale_accepts_any_locale_name d_has_C_UTF8: \
 cat Compile run rm_try i_locale i_wctype d_towupper Setvar Myread
?MAKE: -pick add $@ %<
?S:d_has_C_UTF8:
?S: This variable is set to either "true" or "false" depending on
?S: whether the compilation system supports the C.UTF-8 locale.
?S:.
?S:d_setlocale:
?S: This variable conditionally defines HAS_SETLOCALE if setlocale() is
?S: available to handle locale-specific ctype implementations.
?S:.
?S:d_setlocale_accepts_any_locale_name:
?S: This
 variable conditionally defines SETLOCALE_ACCEPTS_ANY_LOCALE_NAME
?S: if setlocale() accepts any locale name.
?S:.
?C:HAS_SETLOCALE:
?C: This symbol, if defined, indicates that the setlocale routine is
?C: available to handle locale-specific ctype implementations.
?C:.
?C:SETLOCALE_ACCEPTS_ANY_LOCALE_NAME:
?C: This symbol, if defined, indicates that the setlocale routine is
```

```
?C: available and it accepts any input locale name as valid.
?C:.
?H:#$d_setlocale HAS_SETLOCALE /**/
?H:#$d_setlocale_accepts_any_locale_name SETLOCALE_ACCEPTS_ANY_LOCALE_NAME /**/
?H:.
?F:!try
?T:LC_CTYPE c_utf8_locale
: check for setlocale function and behavior
case "$d_setlocale" in
")
$cat >&4 <<EOM

Checking to see if you have setlocale() and its behavior
EOM
$cat >try.c <<EOCP
#include <stdlib.h>
#include <string.h>
#$i_locale I_LOCALE
#ifdef I_LOCALE
#  include <locale.h>
#endif
#$i_wctype I_WCTYPE
#ifdef I_WCTYPE
#  include <wctype.h>
#endif

int main() {
   const char * invalid_name
 = "\a";   /* This is really invalid! */
   int accepts_any_locale_name = 0;
   int has_C_UTF8 = 0;
   unsigned char bad_setlocale = 255;

   /* If LC_CTYPE isn't defined the compilation will fail, and locales will be
    * disabled.  It's hard to imagine an instance where meaningful locale
    * handling could be done without LC_CTYPE */
   const char *  name = setlocale(LC_CTYPE, "C");

   if (name == NULL || strcmp(name, "C") != 0) {
       exit(bad_setlocale);
   }

   name = setlocale(LC_CTYPE, invalid_name);
   if (name != NULL) {

       /* Let it pass if it accepts the name but gives back one of the C
        * locales */
       if (strcmp(name, "C") != 0 && strcmp(name, "C.UTF-8") != 0) {
```

```
            accepts_any_locale_name = 1;
        }
    }

    name = setlocale(LC_CTYPE, "C.UTF-8");
    if (name != NULL) {
        unsigned char y_with_diaeresis = ('A' == 193) ? 0xDF : 0xFF;

#$d_towupper HAS_TOWUPPER
#ifdef HAS_TOWUPPER

        /* We assume that if
 the machine doesn't have the C99 towupper, it
         * doesn't have C.UTF-8, even if we successfully changed locales to
         * include it.  This seems safer even on platforms that didn't accept
         * the really invalid name */

        if (towupper(y_with_diaeresis) == 0x178) {
            has_C_UTF8 = 1;
        }

#endif

    }

#if 0

    /* Currently unused code to determine if LC_ALL with disparate values uses
     * category = value pairs or positional, and to determine the separator
     * between the categories.  We could add code so that if the separator were
     * > '9', we subtract 10; similarly for 'Z' and 'z', and then just about
     * every possible ASCII separator would fit in the 5 bits available in the
     * exit code.  This would not be true in EBCDIC.  And then if LC_ALL is
     * positional, we probably would want to know the order of the categories.
     * Using a file between the C program and the shell script would really be
     * require to do that
 */
#ifdef LC_ALL

    unsigned char min_separator = ' ' - 1;
    unsigned char separator = min_separator;
    int uses_name_value_pair_names = 0;

    name = setlocale(LC_ALL, "C");
    if (name == NULL || strcmp(name, "C") != 0) {
        exit(bad_setlocale);
    }
```

```
  if (has_C_UTF8) {
      char * pos;

      name = setlocale(LC_CTYPE, "C.UTF-8");
      if (name == NULL) {
          exit(bad_setlocale);
      }
      name = setlocale(LC_ALL, NULL);
      if (name == NULL) {
          exit(bad_setlocale);
      }

      pos = strstr(name, "LC_CTYPE" "=C.UTF-8");
      if (pos != NULL) {
          uses_name_value_pair_names = 1;
          if (pos == name) {
              separator = name[sizeof("LC_CTYPE=C.UTF-8") - 1];
          }
          else {
              separator = *(pos - 1);
          }
      }
      else {
          pos = strstr(name, "C.UTF-8");
          if (pos == NULL) {
              /* bad */
          }

  else if (pos == name) {
              separator = name[sizeof("C.UTF-8") - 1];
          }
          else {
              separator = *(pos - 1);
          }
      }
  }

#endif
#endif

  exit( 0 /* (separator - min_separator) << 3
      | uses_name_value_pair_names      << 2
        */
      | has_C_UTF8                      << 1
      | accepts_any_locale_name);

}
EOCP
```

```
val=
set d_setlocale
eval $setvar
case $d_setlocale in
  $undef) d_setlocale_accepts_any_locale_name="$undef"
          d_has_C_UTF8="false"
          ;;
  *) set try
     if eval $compile; then
        echo "Your system has setlocale()..." >&4
        $run ./try
        case $? in
           0) echo "and it seems sane; you don't have a C.UTF-8 locale" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$undef"
              d_has_C_UTF8="false"
              ;;
           1) echo "and it seems sane, but accepts
 any locale name as valid" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$define"
              d_has_C_UTF8="false"
              ;;
           2) echo "and it seems sane; you have a C.UTF-8 locale" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$undef"
              d_has_C_UTF8="true"
              ;;
           3) echo "and it seems sane, but accepts any locale name as valid" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$define"
              d_has_C_UTF8="true"
              ;;
           *) echo "but it doesn't seem to work, so we won't use it." >&4
              d_setlocale="$undef"
              d_setlocale_accepts_any_locale_name="$undef"
              d_has_C_UTF8="false"
              ;;
        esac
     else
        echo "your system does not have setlocale()"
 >&4
        d_setlocale="$undef"
        d_setlocale_accepts_any_locale_name="$undef"
        d_has_C_UTF8="false"
     fi
esac
$rm_try
```

```
;;
*) val="$d_setlocale"
   set d_setlocale
   eval $setvar
   case "$d_setlocale" in
      $undef) echo "There may be other ways to set the locale on your system, so we need to ask:" >&4
      ;;
   esac
   rp="Does your system have the C.UTF-8 locale?"
   dflt=n
   . ./myread
   case "$ans" in
      [Yy]*) d_has_C_UTF8="true"
             c_utf8_locale=" or C.UTF-8"
             ;;
      *)     d_has_C_UTF8="false"
             c_utf8_locale=""
             ;;
   esac
   case "$d_setlocale" in
      $define)
         rp="When you set your locale to something besides C$c_utf8_locale, does it do so, or just pretend to?" >&4
         dflt=n
         . ./myread
         case "$ans" in
            true|[Yy]*)
    d_setlocale_accepts_any_locale_name="$undef"
    ;;
  *) d_setlocale_accepts_any_locale_name="$define"

   ;;
         esac
         ;;
      *) d_setlocale_accepts_any_locale_name="$undef"
    ;;
   esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setlocale.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:d_fpclassl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpclassl:
?S: This variable conditionally defines the HAS_FPCLASSL symbol, which
?S: indicates to the C program that the fpclassl() routine is available.
?S:.
?C:HAS_FPCLASSL:
?C: This symbol, if defined, indicates that the fpclassl routine is
?C: available to classify long doubles.  Available for example in IRIX.
?C: The returned values are defined in <ieeefp.h> and are:
?C:
?C: FP_SNAN  signaling NaN
?C: FP_QNAN  quiet NaN
?C: FP_NINF  negative infinity
?C: FP_PINF  positive infinity
?C: FP_NDENORM negative denormalized non-zero
?C: FP_PDENORM positive denormalized non-zero
?C: FP_NZERO negative zero
?C: FP_PZERO positive zero
?C: FP_NNORM negative
 normalized non-zero
?C: FP_PNORM positive normalized non-zero
?C:.
?H:#$d_fpclassl HAS_FPCLASSL  /**/
?H:.
?LINT:set d_fpclassl
: see if fpclassl exists
set fpclassl d_fpclassl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclassl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systypes.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systypes.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:41  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?X:
?X: Look wether <sys/types.h> needs to be included.
?X:
?MAKE:i_systypes: Inhdr
?MAKE: -pick add $@ %<
?S:i_systypes:
?S: This variable conditionally defines the I_SYS_TYPES symbol,
?S: and indicates whether a C program should include <sys/types.h>.
?S:.
?C:I_SYS_TYPES (I_SYSTYPES):
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <sys/types.h>.
?C:.
?H:#$i_systypes I_SYS_TYPES  /**/
?H:.
?LINT:set i_systypes
: see if sys/types.h has to be included
set sys/types.h i_systypes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systypes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_open3.U,v 3.0.1.2 1997/02/28 15:37:12 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_open3.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:12  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:58:26  ram
?RCS: patch56: added knowledge of the O_NONBLOCK symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_open3: Compile test cat h_fcntl h_sysfile rm_try Setvar Findhdr run i_stdlib
?MAKE: -pick add $@ %<
```

```
?X: It would be easy to separate the
 h_O_stuff from this.
?X: Is there a reason to do so? -- HMS
?S:d_open3:
?S: This variable conditionally defines the HAS_OPEN3 manifest constant,
?S: which indicates to the C program that the 3 argument version of
?S: the open(2) function is available.
?S:.
?C:HAS_OPEN3 (OPEN3):
?C: This manifest constant lets the C program know that the three
?C: argument form of open(2) is available.
?C:.
?H:#$d_open3 HAS_OPEN3  /**/
?H:.
?W:%<:O_RDONLY O_WRONLY O_RDWR O_NDELAY O_APPEND O_SYNC O_CREAT O_TRUNC
?W:%<:O_EXCL O_NONBLOCK
?F:!try
?LINT:set d_open3
?LINT:change h_fcntl h_sysfile
: Locate the flags for 'open()'
echo " "
$cat >try.c <<EOCP
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 if(O_RDONLY);
#ifdef O_TRUNC
 exit(0);
#else
 exit(1);
#endif
}
EOCP
: check sys/file.h first to get FREAD on Sun
if $test `./findhdr sys/file.h` && \
  set try -DI_SYS_FILE
 && eval $compile; then
 h_sysfile=true;
 echo "<sys/file.h> defines the O_* constants..." >&4
```

```
 if $run ./try; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
elif $test `./findhdr fcntl.h` && \
  set try -DI_FCNTL && eval $compile; then
 h_fcntl=true;
 echo "<fcntl.h> defines the O_* constants..." >&4
 if $run ./try; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
else
 val="$undef"
 echo "I can't find the O_* constant definitions!  You got problems." >&4
fi
set d_open3
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_open3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_socket.U,v 3.0.1.2 1997/02/28 15:46:00 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_socket.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:46:00  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:04  ram
?RCS: patch16: can now safely declare private nm_extract in dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:26  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_socket d_oldsock d_sockpair socketlib sockethdr \
 d_msg_ctrunc d_msg_dontroute d_msg_oob d_msg_peek
 d_msg_proxy \
 d_scm_rights d_sockaddr_sa_len d_sockaddr_in6 d_sin6_scope_id \
 d_ip_mreq d_ip_mreq_source d_ipv6_mreq d_ipv6_mreq_source \
 d_sockaddr_storage: \
 contains echo n c ar nm nm_opt nm_extract Inlibc Csym _a \
 Compile cat rm_try Setvar Hasfield sysroot
?MAKE: -pick add $@ %<
?S:d_socket:
?S: This variable conditionally defines HAS_SOCKET, which indicates
?S: that the BSD socket interface is supported.
?S:.
?S:d_sockpair:
?S: This variable conditionally defines the HAS_SOCKETPAIR symbol, which
?S: indicates that the BSD socketpair() is supported.
?S:.
?S:d_oldsock:
?S: This variable conditionally defines the OLDSOCKET symbol, which
?S: indicates that the BSD socket interface is based on 4.1c and not 4.2.
?S:.
?S:d_msg_ctrunc:
?S: This variable conditionally defines the HAS_MSG_CTRUNC symbol,
?S: which indicates that the MSG_CTRUNC is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_dontroute:
?S: This variable
 conditionally defines the HAS_MSG_DONTROUTE symbol,
?S: which indicates that the MSG_DONTROUTE is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_oob:
?S: This variable conditionally defines the HAS_MSG_OOB symbol,
?S: which indicates that the MSG_OOB is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_peek:
?S: This variable conditionally defines the HAS_MSG_PEEK symbol,
?S: which indicates that the MSG_PEEK is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_proxy:
?S: This variable conditionally defines the HAS_MSG_PROXY symbol,
?S: which indicates that the MSG_PROXY is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
```

```
?S:.
?S:d_scm_rights:
?S: This variable conditionally defines the HAS_SCM_RIGHTS symbol,
?S: which indicates that the SCM_RIGHTS is available.
  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_sockaddr_sa_len:
?S: This variable conditionally defines the HAS_SOCKADDR_SA_LEN symbol,
?S: which indicates that a struct sockaddr structure has the sa_len
?S: member.
?S:.
?S:d_sockaddr_in6:
?S: This variable conditionally defines the HAS_SOCKADDR_IN6 symbol, which
?S: indicates the availability of a struct sockaddr_in6.
?S:.
?S:d_sockaddr_storage:
?S: This variable conditionally defines the HAS_SOCKADDR_STORAGE symbol,
?S: which indicates the availability of a struct sockaddr_storage.
?S:.
?S:d_sin6_scope_id:
?S: This variable conditionally defines the HAS_SIN6_SCOPE_ID symbol, which
?S: indicates that a struct sockaddr_in6 structure has the sin6_scope_id
?S: member.
?S:.
?S:d_ip_mreq:
?S: This variable conditionally defines the HAS_IP_MREQ symbol, which
?S: indicates the availability of a struct ip_mreq.
?S:.
?S:d_ip_mreq_source:
?S: This variable conditionally defines the HAS_IP_MREQ_SOURCE
 symbol,
?S: which indicates the availability of a struct ip_mreq_source.
?S:.
?S:d_ipv6_mreq:
?S: This variable conditionally defines the HAS_IPV6_MREQ symbol, which
?S: indicates the availability of a struct ipv6_mreq.
?S:.
?S:d_ipv6_mreq_source:
?S: This variable conditionally defines the HAS_IPV6_MREQ_SOURCE symbol,
?S: which indicates the availability of a struct ipv6_mreq_source.
?S:.
?S:socketlib:
?S: This variable has the names of any libraries needed for socket support.
?S:.
?S:sockethdr:
?S: This variable has any cpp '-I' flags needed for socket support.
?S:.
```

```
?C:HAS_SOCKET (SOCKET):
?C: This symbol, if defined, indicates that the BSD socket interface is
?C: supported.
?C:.
?C:HAS_SOCKETPAIR (SOCKETPAIR):
?C: This symbol, if defined, indicates that the BSD socketpair() call is
?C: supported.
?C:.
?C:USE_OLDSOCKET (OLDSOCKET):
?C: This symbol, if defined, indicates that the 4.1c BSD socket interface
?C: is supported instead of the 4.2/4.3 BSD socket interface. For instance,
?C: there
 is no setsockopt() call.
?C:.
?C:HAS_MSG_CTRUNC:
?C: This symbol, if defined, indicates that the MSG_CTRUNC is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_DONTROUTE:
?C: This symbol, if defined, indicates that the MSG_DONTROUTE is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_OOB:
?C: This symbol, if defined, indicates that the MSG_OOB is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_PEEK:
?C: This symbol, if defined, indicates that the MSG_PEEK is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_PROXY:
?C: This symbol, if defined, indicates that the MSG_PROXY is supported.
?C: Checking just with #ifdef might not be enough because this
 symbol
?C: has been known to be an enum.
?C:.
?C:HAS_SCM_RIGHTS:
?C: This symbol, if defined, indicates that the SCM_RIGHTS is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_SOCKADDR_SA_LEN:
?C: This symbol, if defined, indicates that the struct sockaddr
?C: structure has a member called sa_len, indicating the length of
```

```
?C: the structure.
?C:.
?C:HAS_SOCKADDR_IN6:
?C: This symbol, if defined, indicates the availability of
?C: struct sockaddr_in6;
?C:.
?C:HAS_SOCKADDR_STORAGE:
?C: This symbol, if defined, indicates the availability of
?C: struct sockaddr_storage;
?C:.
?C:HAS_SIN6_SCOPE_ID:
?C: This symbol, if defined, indicates that the struct sockaddr_in6
?C: structure has a member called sin6_scope_id.
?C:.
?C:HAS_IP_MREQ:
?C: This symbol, if defined, indicates the availability of
?C: struct ip_mreq;
?C:.
?C:HAS_IP_MREQ_SOURCE:
?C: This symbol, if defined, indicates the availability of
?C: struct ip_mreq_source;
?C:.
?C:HAS_IPV6_MREQ:
?C: This
 symbol, if defined, indicates the availability of
?C: struct ipv6_mreq;
?C:.
?C:HAS_IPV6_MREQ_SOURCE:
?C: This symbol, if defined, indicates the availability of
?C: struct ipv6_mreq_source;
?C:.
?H:#$d_socket HAS_SOCKET  /**/
?H:#$d_sockpair HAS_SOCKETPAIR /**/
?H:#$d_sockaddr_sa_len HAS_SOCKADDR_SA_LEN /**/
?H:#$d_oldsock USE_OLDSOCKET /**/
?H:#$d_msg_ctrunc HAS_MSG_CTRUNC /**/
?H:#$d_msg_dontroute HAS_MSG_DONTROUTE /**/
?H:#$d_msg_oob HAS_MSG_OOB /**/
?H:#$d_msg_peek HAS_MSG_PEEK /**/
?H:#$d_msg_proxy HAS_MSG_PROXY /**/
?H:#$d_scm_rights HAS_SCM_RIGHTS /**/
?H:#$d_sockaddr_in6 HAS_SOCKADDR_IN6 /**/
?H:#$d_sockaddr_storage HAS_SOCKADDR_STORAGE /**/
?H:#$d_sin6_scope_id HAS_SIN6_SCOPE_ID /**/
?H:#$d_ip_mreq HAS_IP_MREQ /**/
?H:#$d_ip_mreq_source HAS_IP_MREQ_SOURCE /**/
?H:#$d_ipv6_mreq HAS_IPV6_MREQ /**/
?H:#$d_ipv6_mreq_source HAS_IPV6_MREQ_SOURCE /**/
```

```
?H:.
?T:val net ENUM enum
?LINT:set d_sockpair d_sockaddr_sa_len
?LINT:set d_msg_ctrunc d_msg_dontroute
 d_msg_oob d_msg_peek d_msg_proxy
?LINT:set d_scm_rights d_sockaddr_in6 d_sin6_scope_id d_ip_mreq
?LINT:set d_ip_mreq_source d_ipv6_mreq d_ipv6_mreq_source d_sockaddr_storage
: see whether socket exists
socketlib=''
sockethdr=''
echo " "
$echo $n "Hmm... $c" >&4
if set socket val -f d_socket; eval $csym; $val; then
   echo "Looks like you have Berkeley networking support." >&4
   d_socket="$define"
?X: now check for advanced features
   if set setsockopt val -f; eval $csym; $val; then
 d_oldsock="$undef"
   else
 echo "...but it uses the old BSD 4.1c interface, rather than 4.2." >&4
 d_oldsock="$define"
   fi
else
?X: HP-UX, for one, puts all the socket stuff in socklib.o. Note that if we
?X: come here on HP-UX, then we must have used nm to get symbols, or we really
?X: don't have sockets anyway...
   if $contains socklib libc.list >/dev/null 2>&1; then
 echo "Looks like you have Berkeley networking support." >&4
 d_socket="$define"
 : we will have to assume that it supports
 the 4.2 BSD interface
 d_oldsock="$undef"
   else
 echo "You don't have Berkeley networking in libc$_a..." >&4
?X: look for optional networking libraries
 if test "X$d_socket" = "X$define"; then
     echo "...but you seem to believe that you have sockets." >&4
 else
     for net in net socket
     do
  if test -f $sysroot/usr/lib/lib$net$_a; then
?X: space between two  '(' needed for ksh
      ( ($nm $nm_opt $sysroot/usr/lib/lib$net$_a | eval $nm_extract) ||  \
      $ar t $sysroot/usr/lib/lib$net$_a) 2>/dev/null >> libc.list
      if $contains socket libc.list >/dev/null 2>&1; then
   d_socket="$define"
   socketlib="-l$net"
   case "$net" in
```

```
  net)
      echo "...but the Wollongong group seems to have hacked it in." >&4
      sockethdr="-I$sysroot/usr/netinclude"
      ;;
  esac
  echo "Found Berkeley sockets interface in lib$net." >&4
?X: now check for advanced features
  if $contains setsockopt libc.list >/dev/null 2>&1; then
      d_oldsock="$undef"
  else
      echo
 "...using the old BSD 4.1c interface, rather than 4.2." >&4
      d_oldsock="$define"
  fi
  break
     fi
  fi
    done
    if test "X$d_socket" != "X$define"; then
       echo "or anywhere else I see." >&4
       d_socket="$undef"
       d_oldsock="$undef"
    fi
 fi
  fi
fi

@if HAS_SOCKETPAIR || d_sockpair
: see if socketpair exists
set socketpair d_sockpair
eval $inlibc

@end

echo "Checking the availability sa_len in the sock struct ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
int main() {
struct sockaddr sa;
return (sa.sa_len);
}
EOF
val="$undef"
set try; if eval $compile; then
  val="$define"
fi
set d_sockaddr_sa_len; eval $setvar
```

```
$rm_try

echo "Checking the availability struct sockaddr_in6 ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_in6 sin6;
return (sin6.sin6_family);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sockaddr_in6;
 eval $setvar
$rm_try

echo "Checking the availability struct sockaddr_storage ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_storage sastor;
return (sastor.ss_family);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sockaddr_storage; eval $setvar
$rm_try

echo "Checking the availability sin6_scope_id in struct sockaddr_in6 ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_in6 sin6;
return (sin6.sin6_scope_id);
}
EOF
val="$undef"
```

```
set try; if eval $compile; then
   val="$define"
fi
set d_sin6_scope_id; eval $setvar
$rm_try

echo "Checking the availability struct ip_mreq ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ip_mreq mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile; then

 val="$define"
fi
set d_ip_mreq; eval $setvar
$rm_try

echo "Checking the availability struct ip_mreq_source ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ip_mreq_source mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile; then
      val="$define"
fi
set d_ip_mreq_source; eval $setvar
$rm_try

echo "Checking the availability struct ipv6_mreq ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ipv6_mreq mreq;
```

```
return (mreq.ipv6mr_interface);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_ipv6_mreq; eval $setvar
$rm_try

echo "Checking the availability struct ipv6_mreq_source ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ipv6_mreq_source mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile;
 then
      val="$define"
fi
set d_ipv6_mreq_source; eval $setvar
$rm_try

?X: these constants are known to be troublesomely defined as enums
?X: so that ifdef will not work for detecting their presence.
echo "Checking the availability of certain socket constants..." >&4
for ENUM in MSG_CTRUNC MSG_DONTROUTE MSG_OOB MSG_PEEK MSG_PROXY SCM_RIGHTS; do
   enum=`$echo $ENUM|./tr '[A-Z]' '[a-z]'`
   $cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
int main() {
   int i = $ENUM;
}
EOF
   val="$undef"
   set try; if eval $compile; then
 val="$define"
   fi
   set d_${enum}; eval $setvar
   $rm_try
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_socket.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_group.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_group.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:34:52  ram
?RCS: patch61: useless unit dropped.
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:48  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Useless unit dropped.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_group.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setprotoent_r setprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setprotoent_r:
?S: This variable conditionally defines the HAS_SETPROTOENT_R symbol,
?S: which indicates to the C program that the setprotoent_r()
?S: routine is available.
?S:.
```

```
?S:setprotoent_r_proto:
?S: This variable encodes the prototype of setprotoent_r.
?S: It is zero if d_setprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setprotoent_r
?S: is defined.
?S:.
?C:HAS_SETPROTOENT_R:
?C: This symbol, if defined, indicates that the setprotoent_r
 routine
?C: is available to setprotoent re-entrantly.
?C:.
?C:SETPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of setprotoent_r.
?C: It is zero if d_setprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setprotoent_r
?C: is defined.
?C:.
?H:#$d_setprotoent_r HAS_SETPROTOENT_R /**/
?H:#define SETPROTOENT_R_PROTO $setprotoent_r_proto /**/
?H:.
?T:try hdrs d_setprotoent_r_proto
: see if setprotoent_r exists
set setprotoent_r d_setprotoent_r
eval $inlibc
case "$d_setprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setprotoent_r_proto:$usethreads" in
 ":define") d_setprotoent_r_proto=define
  set d_setprotoent_r_proto setprotoent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setprotoent_r_proto" in
 define)
 case "$setprotoent_r_proto" in
 "|0) try='int setprotoent_r(int, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && setprotoent_r_proto=I_ID ;;
 esac
 case "$setprotoent_r_proto"
 in
 "|0) try='void setprotoent_r(int, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && setprotoent_r_proto=V_ID ;;
 esac
 case "$setprotoent_r_proto" in
 "|0) d_setprotoent_r=undef
  setprotoent_r_proto=0
  echo "Disabling setprotoent_r, cannot determine prototype." >&4 ;;
```

```
 * ) case "$setprotoent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setprotoent_r_proto="REENTRANT_PROTO_$setprotoent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setprotoent_r has no prototype, not using it." >&4 ;;
  esac
  d_setprotoent_r=undef
  setprotoent_r_proto=0
  ;;
 esac
 ;;
*) setprotoent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setprotoent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:siteman3dir siteman3direxp installsiteman3dir: Getfile \
 Setprefixvar prefix siteprefix man3dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:siteman3dir="
?S:siteman3dir:
?S: This variable contains the name of the directory in which site-specific
?S: library man source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After
 perl has been installed, users may install their own local
?S: man3 pages in this directory with
?S:  MakeMaker Makefile.PL
```

```
?S: or equivalent.  See INSTALL for details.
?S:.
?D:siteman3direxp="
?S:siteman3direxp:
?S: This variable is the same as the siteman3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsiteman3dir="
?S:installsiteman3dir:
?S: This variable is really the same as siteman3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsiteman3dir
?LINT:set siteman3dir
?LINT:set siteman3direxp
: determine where add-on library man pages go
case "$siteman3dir" in
") dflt=`echo $man3dir | $sed "s#^$prefix#$siteprefix#"` ;;
*) dflt=$siteman3dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname
 where the site-specific library manual pages should be installed?'
. ./getfile
prefixvar=siteman3dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteman3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: newslib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: newslib.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:09:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:newslib newslibexp: test inews Oldconfig Getfile
?MAKE: -pick add $@ %<
?S:newslib:
?S: This variable contains the eventual value of the NEWSLIB symbol,
?S: which holds the name of the directory serving as the news library.
?S: It may have a ~ on the front.  See newslibexp for expanded version.
?S:.
?S:newslibexp:
?S: This variable contains
 the ~ expanded name of the news library
?S: directory.  See newslib.
?S:.
?C:NEWSLIB:
?C: This symbol contains the name of the directory serving as the news
?C: library.  The program must be prepared to do ~ expansion on it.
?C:.
?C:NEWSLIB_EXP:
?C: This symbol is the ~ expanded version of NEWSLIB, for programs that
?C: do not wish to deal with it at run-time.
?C:.
?H:#define NEWSLIB "$newslib"  /**/
?H:#define NEWSLIB_EXP "$newslibexp" /**/
?H:.
?LINT:change inews
: figure out news library
case "$newslib" in
")
 dflt=/usr/lib/news
 ;;
*)  dflt=$newslib ;;
esac
echo " "
fn=d~
rp='Where is your news library?'
. ./getfile
newslib="$ans"
newslibexp="$ansexp"
if $test -f $newslibexp/inews; then
 echo "Aha!  Inews is really in $newslibexp!  Maybe this is 2.10.2..." >&4
 case "$inews" in
 inews)
  : null
  ;;
 *) echo "(Make sure $inews isn't an old version.)";;
 esac
```

```
 inews=$newslibexp/inews
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/newslib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: errnolist.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:01  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:10:54  ram
?RCS: patch16: created
?RCS:
?MAKE:errnolist errnolist_SH errnolist_a errnolist_c errnolist_o: cat +cc \
 +ccflags +libs +d_sysernlst _a _o
?MAKE: -pick add $@ %<
?S:errnolist:
?S: This variable holds the base name of a file containing the
?S: definition of the sys_errnolist
 array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S: The following lines should be included in your Makefile.SH:
?S:
?S:  case "$errnolist" in
?S:  ") ;;
?S:  *)
?S:   $spitshell >>Makefile <<!GROK!THIS!
?S:  $errnolist_c: $errnolist_SH $errnolist_a
?S:   sh ./$errnolist_SH
?S:
?S:  !GROK!THIS!
?S:   ;;
?S:  esac
?S:
?S: You may define the 'errnolist' variable in your Myinit.U if you
?S: wish to override its default value "errnolist".
```

```
?S:.
?S:errnolist_SH:
?S: This is the name of a file which will generate errnolistc.
?S:.
?S:errnolist_a:
?S: This is the name of the awk script called by errnolist_SH.
?S:.
?S:errnolist_c:
?S: This is the name of a generated C file which provides the
?S: definition of the sys_errnolist array.
?S:.
?S:errnolist_o:
?S: This is the name of the object file which provides the
?S: definition of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S:.
?INIT:errnolist=errnolist
:
 check for sys_errnolist
@if d_sysernlst || HAS_SYS_ERRNOLIST
case "$d_sysernlst" in
"$define")
   errnolist=''
   errnolist_SH=''
   errnolist_a=''
   errnolist_c=''
   errnolist_o=''
 ;;
*)
 echo " "
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
 ;;
esac
@else
echo " "
$cat <<EOM
Checking to see if your C library provides us with sys_errnolist[]...
EOM
$cat >errnolist.c <<'EOCP'
extern char *sys_errnolist[];
int main() {
   char *p0 = sys_errnolist[0];
   char *p1 = sys_errnolist[1];
```

```
   return (p0 == p1); /* Make sure they're not optimized away */
}
EOCP
if $cc $ccflags -o errnolist errnolist.c $libs >/dev/null 2>&1 ; then
   echo "It does."
   errnolist=''
   errnolist_SH=''
   errnolist_a=''
   errnolist_c=''
   errnolist_o=''
else
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"

   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/errnolist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_readv: Inlibc
?MAKE: -pick add $@ %<
?S:d_readv:
?S: This variable conditionally defines the HAS_READV symbol, which
?S: indicates to the C program that the readv() routine is available.
?S:.
?C:HAS_READV:
?C: This symbol, if defined, indicates that the readv routine is
?C: available to do gather reads.  You will also need <sys/uio.h>
?C: and there I_SYSUIO.
?C:.
?H:#$d_readv HAS_READV  /**/
?H:.
?LINT:set d_readv
: see if readv exists
set readv d_readv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_readv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_usleep.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_usleep.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_usleep: Inlibc
?MAKE: -pick add $@ %<
?S:d_usleep:
?S: This variable conditionally defines HAS_USLEEP if usleep() is
?S: available to do high granularity sleeps.
?S:.
?C:HAS_USLEEP (USLEEP):
?C: This symbol, if defined, indicates that the usleep routine is
?C: available to let the process sleep on a sub-second accuracy.
?C:.
?H:#$d_usleep
 HAS_USLEEP  /**/
?H:.
?LINT:set d_usleep
: see if usleep exists
set usleep d_usleep
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_usleep.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
```

```
?RCS:
?MAKE:d_endpwent_r endpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_endpwent_r:
?S: This variable conditionally defines the HAS_ENDPWENT_R symbol,
?S: which indicates to the C program that the endpwent_r()
?S: routine is available.
?S:.
?S:endpwent_r_proto:
?S: This variable encodes the prototype of endpwent_r.
?S: It is zero if d_endpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endpwent_r
?S: is defined.
?S:.
?C:HAS_ENDPWENT_R:
?C: This symbol, if defined, indicates that the endpwent_r routine
?C: is available to
 endpwent re-entrantly.
?C:.
?C:ENDPWENT_R_PROTO:
?C: This symbol encodes the prototype of endpwent_r.
?C: It is zero if d_endpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endpwent_r
?C: is defined.
?C:.
?H:#$d_endpwent_r HAS_ENDPWENT_R /**/
?H:#define ENDPWENT_R_PROTO $endpwent_r_proto /**/
?H:.
?T:try hdrs d_endpwent_r_proto
: see if endpwent_r exists
set endpwent_r d_endpwent_r
eval $inlibc
case "$d_endpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_endpwent_r_proto:$usethreads" in
 ":define") d_endpwent_r_proto=define
  set d_endpwent_r_proto endpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endpwent_r_proto" in
 define)
 case "$endpwent_r_proto" in
 "|0) try='int endpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endpwent_r_proto=I_H ;;
 esac
```

```
 case "$endpwent_r_proto" in
 "|0) try='void endpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endpwent_r_proto=V_H ;;
 esac
 case "$endpwent_r_proto"
 in
 "|0) d_endpwent_r=undef
  endpwent_r_proto=0
  echo "Disabling endpwent_r, cannot determine prototype." >&4 ;;
 * ) case "$endpwent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endpwent_r_proto="REENTRANT_PROTO_$endpwent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endpwent_r has no prototype, not using it." >&4 ;;
  esac
  d_endpwent_r=undef
  endpwent_r_proto=0
  ;;
 esac
 ;;
*) endpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endpwent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lintlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lintlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lintlib lintlibexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
```

```
?S:lintlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put public lint-library files for the package in question.  It is
?S: most often a local directory such as /usr/local/lib/lint. Programs using
?S: this variable must be prepared to
 deal with ~name expansion.
?S:.
?S:lintlibexp:
?S: This variable is the same as the lintlib variable, but is filename
?S: expanded at configuration time, for convenient use in your makefiles.
?S:.
: determine where public lint libraries go
case "$lintlib" in
") dflt=`./loc . "." /usr/local/lib/lint /usr/lib/lint /usr/lib`;;
*) dflt="$lintlib" ;;
esac
echo " "
fn=d~
rp='Where do you want to put the public lint libraries?'
. ./getfile
lintlib="$ans"
lintlibexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lintlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_rint: Inlibc
?MAKE: -pick add $@ %<
?S:d_rint:
?S: This variable conditionally defines the HAS_RINT symbol, which
?S: indicates to the C program that the rint() routine is available.
?S:.
?C:HAS_RINT:
?C: This symbol, if defined, indicates that the rint routine is
?C: available to return the nearest integral value to x as double
?C: using the current rounding mode.
?C:.
?H:#$d_rint HAS_RINT  /**/
?H:.
?LINT:set d_rint
: see if rint exists
set rint d_rint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_rint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_ustat: Inlibc
?MAKE: -pick add $@ %<
?S:d_ustat:
?S: This variable conditionally defines HAS_USTAT if ustat() is
?S: available to query file system statistics by dev_t.
?S:.
?C:HAS_USTAT:
?C: This symbol, if defined, indicates that the ustat system call is
?C: available to query file system statistics by dev_t.
?C:.
?H:#$d_ustat HAS_USTAT  /**/
?H:.
?LINT:set d_ustat
: see if ustat exists
set ustat d_ustat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ustat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotby.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getpbyname d_getpbynumber: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpbyname:
?S: This variable conditionally defines the HAS_GETPROTOBYNAME
?S: symbol, which indicates to the C program that the
?S: getprotobyname() routine is available to look up protocols
```

```
?S: by their name.
?S:.
?S:d_getpbynumber:
?S: This variable conditionally defines the HAS_GETPROTOBYNUMBER
?S: symbol, which indicates to the C program that the
?S: getprotobynumber() routine is available to look up protocols
?S: by their number.
?S:.
?C:HAS_GETPROTOBYNAME:
?C: This symbol, if defined, indicates that the getprotobyname()
?C: routine is available to look up protocols by their name.
?C:.
?C:HAS_GETPROTOBYNUMBER:
?C: This
 symbol, if defined, indicates that the getprotobynumber()
?C: routine is available to look up protocols by their number.
?C:.
?H:#$d_getpbyname HAS_GETPROTOBYNAME  /**/
?H:#$d_getpbynumber HAS_GETPROTOBYNUMBER  /**/
?H:.
?LINT:set d_getpbyname d_getpbynumber
: Optional checks for getprotobyname and getprotobynumber

@if d_getpbyname || HAS_GETPROTOBYNAME
: see if getprotobyname exists
set getprotobyname d_getpbyname
eval $inlibc
@end

@if d_getpbynumber || HAS_GETPROTOBYNUMBER
: see if getprotobynumber exists
set getprotobynumber d_getpbynumber
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getprotby.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Mkdirp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can launched to create a
?X: directory path like "mkdir -p" would do.
?X:
?MAKE:Mkdirp:
 eunicefix startsh
?MAKE: -pick add $@ %<
?F:./mkdirp
?T:name create file
: script used to emulate mkdir -p
cat >mkdirp <<EOS
$startsh
EOS
cat >>mkdirp <<'EOS'
name=$1;
create="";
while test $name; do
 if test ! -d "$name"; then
  create="$name $create"
  name=`echo $name | sed -e "s|^[^/]*$||"`
  name=`echo $name | sed -e "s|\(.*\)/.*|\1|"`
 else
  name=""
 fi
done
for file in $create; do
 mkdir $file
done
EOS
chmod +x mkdirp
$eunicefix mkdirp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Mkdirp.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: Rcs.U 1 2006-08-24 12:32:52Z rmanfredi $

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Rcs.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is a unit that helps people who write SH scripts and keep them under
?X: RCS, but don't think to protect the $Log and other $Id keywords from
?X: variable substitution (or people like me who do not like to).
?X:
?MAKE:Author Date Header Id Locker Log RCSfile Revision Source State: Oldconfig
?MAKE: -pick weed $@ %<
?LINT:describe Author
 Date Header Id Locker Log RCSfile Revision Source State
: preserve RCS keywords in files with variable substitution, grrr
?Author:Author='$Author'
?Date:Date='$Date'
?Header:Header='$Header'
?Id:Id='$Id'
?$Locker'
?Log:Log='$Log'
?RCSfile:RCSfile='$RCSfile'
?Revision:Revision='$Revision'
?Source:Source='$Source'
?State:State='$State'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Rcs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: d_getpgid.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:33:44  ram
?RCS: patch61: created
?RCS:
?MAKE:d_getpgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpgid:
?S: This variable conditionally defines the HAS_GETPGID symbol, which
?S: indicates to the C program that the getpgid(pid) function
?S: is available to get the process group id.
?S:.
?C:HAS_GETPGID:
?C: This symbol, if defined, indicates to the C program
 that
?C: the getpgid(pid) function is available to get the
?C: process group id.
?C:.
?H:#$d_getpgid HAS_GETPGID  /**/
?H:.
?LINT:set d_getpgid
: see if getpgid exists
set getpgid d_getpgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strstr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strstr.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strstr: Inlibc
?MAKE: -pick add $@ %<
?S:d_strstr:
?S: This variable conditionally defines HAS_STRSTR if strstr() is
?S: available to find substrings.
```

```
?S:.
?C:HAS_STRSTR (STRSTR):
?C: This symbol, if defined, indicates that the strstr routine is
?C: available to find substrings.
?C:.
?H:#$d_strstr HAS_STRSTR /**/
?H:.
?LINT:set d_strstr
:
 see if strstr exists
set strstr d_strstr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strstr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017 H.Merijn Brand (original change by Tony Cook)
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_openat d_unlinkat d_renameat d_linkat d_fchmodat: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchmodat:
?S: This variable conditionally defines the HAS_FCHMODAT symbol, which
?S: indicates the POSIX fchmodat() function is available.
?S:.
?S:d_linkat:
?S: This variable conditionally defines the HAS_LINKAT symbol, which
?S: indicates the POSIX linkat() function is available.
?S:.
?S:d_openat:
?S: This variable conditionally defines the HAS_OPENAT symbol, which
?S: indicates the POSIX openat() function is available.
?S:.
?S:d_renameat:
?S: This variable conditionally defines the HAS_RENAMEAT symbol, which
?S: indicates the POSIX renameat() function is available.
?S:.
?S:d_unlinkat:
?S: This variable
 conditionally defines the HAS_UNLINKAT symbol, which
?S: indicates the POSIX unlinkat() function isavailable.
?S:.
?C:HAS_FCHMODAT:
?C: This symbol is defined if the fchmodat() routine is available.
?C:.
```

```
?C:HAS_LINKAT:
?C: This symbol is defined if the linkat() routine is available.
?C:.
?C:HAS_OPENAT:
?C: This symbol is defined if the openat() routine is available.
?C:.
?C:HAS_RENAMEAT:
?C: This symbol is defined if the renameat() routine is available.
?C:.
?C:HAS_UNLINKAT:
?C: This symbol is defined if the unlinkat() routine is available.
?C:.
?H:#$d_fchmodat HAS_FCHMODAT /**/
?H:#$d_linkat HAS_LINKAT /**/
?H:#$d_openat HAS_OPENAT /**/
?H:#$d_renameat HAS_RENAMEAT /**/
?H:#$d_unlinkat HAS_UNLINKAT /**/
?H:.
?LINT:set d_openat d_unlinkat d_renameat d_linkat d_fchmodat
: check for openat, unlinkat, renameat, linkat, fchmodat
set openat d_openat
eval $inlibc

set unlinkat d_unlinkat
eval $inlibc

set renameat d_renameat
eval $inlibc

set linkat d_linkat
eval $inlibc

set fchmodat d_fchmodat
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fsat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perlpath.U,v 3.0.1.2 1995/09/25 09:17:04 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
```

```
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: perlpath.U,v $
?RCS:
?RCS: Special perl5 unit -- we haven't installed perl yet.
?RCS:
?RCS: Revision 3.0.1.2  1995/09/25  09:17:04  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:33:53  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:32  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this unit is to locate perl good enough to construct a #!
?X:
?MAKE:perlpath: cat Getfile Loc Myread Oldconfig initialinstalllocation \
 startperl version versiononly
?MAKE: -pick add $@ %<
?Y:TOP
?S:perlpath:
?S: This variable contains the eventual value of the PERLPATH symbol,
?S: which contains the name of the perl interpreter to be used in
?S: shell scripts and in the "eval 'exec'" idiom.  This variable is
?S: not necessarily the pathname of the file containing the perl
?S: interpreter; you must append the executable extension (_exe) if
?S: it is not already present.  Note that Perl code that runs during
?S: the Perl build process cannot reference this variable, as Perl
?S: may not have been installed, or even if installed, may be a
?S: different version of Perl.
?S:.
?C:PERLPATH:
?C: This symbol contains the name of the perl interpreter to be
?C: used in shell scripts and in the "eval 'exec'" idiom.
?C:.
?H:#define PERLPATH "$perlpath"  /**/
?H:.
:
 figure best path for perl in scripts
case "$perlpath" in
")
 case "$versiononly" in
 "$define") perlpath="$initialinstalllocation/perl$version";;
 *)  perlpath="$initialinstalllocation/perl";;
```

```
 esac
 case "$startperl" in
 *!*) ;;
 *)
  $cat <<EOH

I will use the "eval 'exec'" idiom to start Perl on your system.
I can use the full path of your Perl binary for this purpose, but
doing so may cause problems if you want to share those scripts and
Perl is not always in a standard place ($initialinstalllocation/perl).

EOH
  dflt="$initialinstalllocation/perl"
  rp="What path shall I use in \"eval 'exec'\"?"
  . ./myread
  perlpath="$ans"
  ;;
 esac
 ;;
esac
case "$startperl" in
*!*) ;;
*) echo "I'll use $perlpath in \"eval 'exec'\"" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlpath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_inttypes: Inhdr cat rm_try Setvar Compile
?MAKE: -pick add $@ %<
?S:i_inttypes:
?S: This variable conditionally defines the I_INTTYPES symbol,
?S: and indicates whether a C program should include <inttypes.h>.
?S:.
?C:I_INTTYPES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <inttypes.h>.
```

```
?C:.
?H:#$i_inttypes   I_INTTYPES              /**/
?H:.
?LINT:set i_inttypes
: see if inttypes.h is available
: we want a real compile instead of Inhdr because some systems
: have an inttypes.h
 which includes non-existent headers
echo " "
$cat >try.c <<EOCP
#include <inttypes.h>
int main() {
 static int32_t foo32 = 0x12345678;
}
EOCP
set try
if eval $compile; then
 echo "<inttypes.h> found." >&4
 val="$define"
else
 echo "<inttypes.h> NOT found." >&4
 val="$undef"
fi
$rm_try
set i_inttypes
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_inttypes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rename.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rename.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_rename: Inlibc
?MAKE: -pick add $@ %<
?S:d_rename:
```

```
?S: This variable conditionally defines the HAS_RENAME symbol, which
?S: indicates to the C program that the rename() routine is available
?S: to rename files.
?S:.
?C:HAS_RENAME (RENAME):
?C: This symbol, if defined, indicates that the rename routine is available
?C: to rename files.
  Otherwise you should do the unlink(), link(), unlink()
?C: trick.
?C:.
?H:#$d_rename HAS_RENAME /**/
?H:.
?LINT:set d_rename
: see if rename exists
set rename d_rename
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rename.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_hypot: Inlibc
?MAKE: -pick add $@ %<
?S:d_hypot:
?S: This variable conditionally defines HAS_HYPOT if hypot is available
?S: for numerically stable hypotenuse function.
?S:.
?C:HAS_HYPOT:
?C: This symbol, if defined, indicates that the hypot routine is
?C: available to do the hypotenuse function.
?C:.
?H:#$d_hypot HAS_HYPOT  /**/
?H:.
?LINT:set d_hypot
: see if hypot exists
set hypot d_hypot
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_hypot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_portable.U,v 3.0.1.2 1995/01/11 15:28:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
```

```
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_portable.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:28:52  ram
?RCS: patch45: executable path stripping moved to the end in Config_sh.U
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:21:17  ram
?RCS: patch15: did not strip variables properly when needed
?RCS: patch15: now also strips down variables from trylist
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
   This is the same as the dist version, except I don't bother
?X:   prompting people since it makes no difference for perl5,
?X:   and only confuses people.
?X:
?X: The Loc unit is wanted to get the definition of all the locating variables.
?X:
?MAKE:d_portable: Loc Oldconfig
?MAKE: -pick add $@ %<
?S:d_portable:
?S: This variable conditionally defines the PORTABLE symbol, which
?S: indicates to the C program that it should not assume that it is
?S: running on the machine it was compiled on.
?S:.
?C:PORTABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: not assume that it is running on the machine it was compiled on.
?C: The program should be prepared to look up the host name, translate
?C: generic filenames, use PATH, etc.
?C:.
?H:#$d_portable PORTABLE /**/
?H:.
?D:d_portable="
: decide how portable to be.  Allow command line overrides.
case "$d_portable" in
"$undef") ;;
*) d_portable="$define" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_portable.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ilogb: Inlibc
?MAKE: -pick add $@ %<
?S:d_ilogb:
?S: This variable conditionally defines the HAS_ILOGB symbol, which
?S: indicates to the C program that the ilogb() routine is available
?S: for extracting the exponent of double x as a signed integer.
?S:.
?C:HAS_ILOGB:
?C: This symbol, if defined, indicates that the ilogb routine is
?C: available to get integer exponent of a floating-point value.
?C:.
?H:#$d_ilogb HAS_ILOGB  /**/
?H:.
?LINT:set d_ilogb
: see if ilogb exists
set ilogb d_ilogb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ilogb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:selectminbits: Compile cat rm_try Oldconfig d_select \
 i_time i_systime i_systimek i_sysselct selecttype d_socket \
 byteorder Myread Setvar run i_stdlib ptrsize
?MAKE: -pick add $@ %<
?S:selectminbits:
?S: This variable holds the minimum number of bits operated by select.
?S: That is, if you do select(n, ...), how many bits at least will be
?S: cleared in the masks if some activity is detected.  Usually this
?S: is either n or 32*ceil(n/32), especially many little-endians do
```

```
?S: the latter.  This is only useful if
 you have select(), naturally.
?S:.
?C:SELECT_MIN_BITS:
?C: This symbol holds the minimum number of bits operated by select.
?C: That is, if you do select(n, ...), how many bits at least will be
?C: cleared in the masks if some activity is detected.  Usually this
?C: is either n or 32*ceil(n/32), especially many little-endians do
?C: the latter.  This is only useful if you have select(), naturally.
?C:.
?H:#define SELECT_MIN_BITS $selectminbits /**/
?H:.
?T:bits
?T:safebits
?F:!try
: check for the select 'width'
case "$selectminbits" in
") safebits=`expr $ptrsize \* 8`
   case "$d_select" in
 $define)
  $cat <<EOM

Checking to see on how many bits at a time your select() operates...
EOM
  $cat >try.c <<EOCP
#include <sys/types.h>
#$i_time I_TIME
#$i_systime I_SYS_TIME
#$i_systimek I_SYS_TIME_KERNEL
#ifdef I_TIME
#   include <time.h>
#endif
#ifdef I_SYS_TIME
#   ifdef I_SYS_TIME_KERNEL
# define KERNEL
#   endif
#   include <sys/time.h>
#   ifdef I_SYS_TIME_KERNEL
# undef KERNEL
#   endif
#endif
#$i_sysselct
 I_SYS_SELECT
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
#$d_socket HAS_SOCKET
#ifdef HAS_SOCKET
```

```
#   include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
$selecttype b;
#define S sizeof(*(b))
#define MINBITS 64
#define NBYTES (S * 8 > MINBITS ? S : MINBITS/8)
#define NBITS  (NBYTES * 8)
int main() {
   char *s = (char *)malloc(NBYTES);
   struct timeval t;
   int i;
   FILE* fp;
   int fd;

   if (!s)
 exit(1);
   fclose(stdin);
   fp = fopen("try.c", "r");
   if (fp == 0)
     exit(2);
   fd = fileno(fp);
   if (fd < 0)
     exit(3);
   b = ($selecttype)s;
   for (i = 0; i < NBITS; i++)
 FD_SET(i, b);
   t.tv_sec  = 0;
   t.tv_usec = 0;
   select(fd + 1, b, 0, 0, &t);
   for (i = NBITS - 1; i > fd && FD_ISSET(i, b); i--);
   free(s);
   printf("%d\n", i + 1);
   return 0;
}
EOCP
  set try
  if eval $compile_ok; then
   selectminbits=`$run
 ./try 2>/dev/null`
   case "$selectminbits" in
   ") cat >&4 <<EOM
Cannot figure out on how many bits at a time your select() operates.
I'll play safe and guess it is $safebits bits.
```

```
EOM
    selectminbits=$safebits
    bits="$safebits bits"
    ;;
   1) bits="1 bit" ;;
   *) bits="$selectminbits bits" ;;
   esac
   echo "Your select() operates on $bits at a time." >&4
  else
   rp='What is the minimum number of bits your select() operates on?'
   case "$byteorder" in
   12345678) dflt=64 ;;
   1234)  dflt=32 ;;
   *)  dflt=1 ;;
   esac
   . ./myread
   val=$ans
   selectminbits="$val"
  fi
  $rm_try
  ;;
 *) : no select, so pick a harmless default
  selectminbits=$safebits
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/selectminbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getnetprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getnetprotos:
?S: This variable conditionally defines the HAS_GETNET_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getnet*() functions.
```

```
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETNET_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getnetent(), getnetbyname(), and
?C: getnetbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getnetprotos HAS_GETNET_PROTOS /**/
?H:.
?LINT:set d_getnetprotos
: see if prototypes for various getnetxxx netdb.h functions are available
echo " "
set d_getnetprotos getnetent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getnetprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgrp.U,v 3.0.1.3 1997/02/28 15:44:16 ram Exp $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setpgrp.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:44:16  ram
?RCS: patch61: obsoleted USE_BSDGRP in favor of USE_BSD_SETPGRP
?RCS: patch61: another unit now also defines a USE_BSD_GETPGRP
?RCS: patch61: fallback for test program failure improved
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:59:30  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:15:37  ram
?RCS: patch36: added
 'ldflags' to the test compile line (ADO)
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_setpgrp d_bsdsetpgrp: cat rm_try +cc +libs +ccflags \
 +ldflags Inlibc Guess Setvar i_unistd i_stdlib run
?MAKE: -pick add $@ %<
?S:d_setpgrp:
?S: This variable conditionally defines HAS_SETPGRP if setpgrp() is
?S: available to set the current process group.
?S:.
?S:d_bsdsetpgrp (d_bsdpgrp):
?S: This variable conditionally defines USE_BSD_SETPGRP if
?S: setpgrp needs two arguments whereas USG one needs none.
?S: See also d_setpgid for a POSIX interface.
?S:.
?C:HAS_SETPGRP (SETPGRP):
?C: This symbol, if defined, indicates that the setpgrp routine is
?C: available to set the current process group.
?C:.
?C:USE_BSD_SETPGRP (USE_BSDPGRP BSDPGRP):
?C: This symbol, if defined, indicates that setpgrp needs two
?C: arguments whereas USG one needs none.  See also HAS_SETPGID
?C: for
 a POSIX interface.
?C:.
?H:#$d_setpgrp HAS_SETPGRP  /**/
?H:#$d_bsdsetpgrp USE_BSD_SETPGRP /**/
?H:.
?T:xxx
?F:!try
?LINT:set d_setpgrp d_bsdsetpgrp
: see if setpgrp exists
set setpgrp d_setpgrp
eval $inlibc

@if USE_BSD_SETPGRP || d_bsdsetpgrp
case "$d_setpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of setpgrp is in use..."
 $cat >try.c <<EOP
#include <stdio.h>
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
```

```
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (-1 == setpgrp(1, 1))
  exit(0);
#else
 if (setpgrp() != -1)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -o try -DTRY_BSD_PGRP $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo 'You have to use setpgrp(pid,pgrp) instead of setpgrp().' >&4
  val="$define"
 elif $cc -o try $ccflags $ldflags try.c $libs
 >/dev/null 2>&1 && $run ./try; then
  echo 'You have to use setpgrp() instead of setpgrp(pid,pgrp).' >&4
  val="$undef"
 else
  echo "(I can't seem to compile and run the test program.)"
  if ./usg; then
   xxx="a USG one, i.e. you use setpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use setpgrp(pid,pgrp)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use setpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your setpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set d_bsdsetpgrp
eval $setvar
$rm_try
```

```
@end

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpgrp.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_getpwuid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwuid_r getpwuid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwuid_r:
?S: This variable conditionally defines the HAS_GETPWUID_R symbol,
?S: which indicates to the C program that the getpwuid_r()
?S: routine is available.
?S:.
?S:getpwuid_r_proto:
?S: This variable encodes the prototype of getpwuid_r.
?S: It is zero if d_getpwuid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwuid_r
?S: is defined.
?S:.
?C:HAS_GETPWUID_R:
?C: This symbol, if defined, indicates that the getpwuid_r routine
?C: is available to
 getpwuid re-entrantly.
?C:.
?C:GETPWUID_R_PROTO:
?C: This symbol encodes the prototype of getpwuid_r.
?C: It is zero if d_getpwuid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwuid_r
?C: is defined.
?C:.
?H:#$d_getpwuid_r HAS_GETPWUID_R /**/
?H:#define GETPWUID_R_PROTO $getpwuid_r_proto /**/
?H:.
?T:try hdrs d_getpwuid_r_proto
: see if getpwuid_r exists
set getpwuid_r d_getpwuid_r
eval $inlibc
case "$d_getpwuid_r" in
"$define")
```

```
hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
case "$d_getpwuid_r_proto:$usethreads" in
":define") d_getpwuid_r_proto=define
 set d_getpwuid_r_proto getpwuid_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_getpwuid_r_proto" in
define)
case "$getpwuid_r_proto" in
"|0) try='int getpwuid_r(uid_t, struct passwd*, char*, size_t, struct passwd**);'
./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBWR ;;
esac
case "$getpwuid_r_proto" in
"|0) try='int getpwuid_r(uid_t, struct passwd*, char*, int,
struct passwd**);'
./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBIR ;;
esac
case "$getpwuid_r_proto" in
"|0) try='int getpwuid_r(uid_t, struct passwd*, char*, int);'
./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBI ;;
esac
case "$getpwuid_r_proto" in
"|0) try='struct passwd* getpwuid_r(uid_t, struct passwd*, char*, int);'
./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=S_TSBI ;;
esac
case "$getpwuid_r_proto" in
"|0) d_getpwuid_r=undef
 getpwuid_r_proto=0
 echo "Disabling getpwuid_r, cannot determine prototype." >&4 ;;
* ) case "$getpwuid_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getpwuid_r_proto="REENTRANT_PROTO_$getpwuid_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getpwuid_r has no prototype, not using it." >&4 ;;
 esac
 d_getpwuid_r=undef
 getpwuid_r_proto=0
 ;;
esac
;;
*) getpwuid_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwuid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sysman.U,v $
?RCS: Revision 3.0.1.2  1994/06/20  07:08:43  ram
?RCS: patch30: now explicitly states that /usr/man/man1 is the default
?RCS: patch30: added /usr/local/man/man1 to the search list
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:13:50  ram
?RCS: patch10: added support for /local/man/man1 (WAD)
?RCS: patch10: added temporary syspath variable to cut down on line length
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sysman: test
 Loc Oldconfig
?MAKE: -pick add $@ %<
?S:sysman:
?S: This variable holds the place where the manual is located on this
?S: system. It is not the place where the user wants to put his manual
?S: pages. Rather it is the place where Configure may look to find manual
?S: for unix commands (section 1 of the manual usually). See mansrc.
?S:.
?T:syspath
: determine where manual pages are on this system
echo " "
case "$sysman" in
")
 syspath='/usr/share/man/man1 /usr/man/man1'
 syspath="$syspath /usr/man/mann /usr/man/manl /usr/man/local/man1"
 syspath="$syspath /usr/man/u_man/man1 /usr/share/man/man1"
 syspath="$syspath /usr/catman/u_man/man1 /usr/man/l_man/man1"
 syspath="$syspath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 syspath="$syspath /usr/man/man.L /local/man/man1 /usr/local/man/man1"
 sysman=`./loc . /usr/man/man1 $syspath`
```

```
 ;;
esac
if $test -d "$sysman"; then
 echo "System manual is in $sysman." >&4
else
 echo "Could not find manual pages in source form." >&4
fi
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sysman.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: startsh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: startsh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:25:31  ram
?RCS: patch61: avoid needless chatter since this is now done very early
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startsh: sh sharpbang eunicefix
?MAKE: -pick add $@ %<
?S:startsh:
?S: This variable contains the string to put on the front of a shell
?S: script to make sure (hopefully) that it runs with sh and not some
?S: other
 shell.
?S:.
?F:!sharp
: figure out how to guarantee sh startup
?X: Avoid needless chatter since this is now done very early.
?X: echo " "
?X: echo "Checking out how to guarantee sh startup..." >&2
case "$startsh" in
") startsh=${sharpbang}${sh} ;;
*)
?X: echo "Let's see if '$startsh' works..." ;;
esac
```

```
cat >sharp <<EOSS
$startsh
set abc
test "$?abc" != 1
EOSS

chmod +x sharp
$eunicefix sharp
if ./sharp; then
 : echo "Yup, it does."
else
 echo "Hmm... '$startsh' does not guarantee sh startup..."
 echo "You may have to fix up the shell scripts to make sure $sh runs them."
fi
rm -f sharp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/startsh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_vfork.U,v $
?RCS: Revision 3.0.1.6  1994/08/29  16:18:21  ram
?RCS: patch32: set default to 'y' the first time
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:59:14  ram
?RCS: patch30: usevfork was not always properly set
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:20:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:59:09  ram
?RCS: patch23: now explicitly ask whether vfork() should be used (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1993/10/16
  13:49:39  ram
?RCS: patch12: added magic for vfork()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:06:57  ram
```

```
?RCS: patch10: removed automatic remapping of vfork on fork (WAD)
?RCS: patch10: added compatibility code for older config.sh (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vfork usevfork: Inlibc Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_vfork:
?S: This variable conditionally defines the HAS_VFORK symbol, which
?S: indicates the vfork() routine is available.
?S:.
?S:usevfork:
?S: This variable is set to true when the user accepts to use vfork.
?S: It is set to false when no vfork is available or when the user
?S: explicitly requests not to use vfork.
?S:.
?C:HAS_VFORK (VFORK):
?C: This symbol, if defined, indicates that vfork() exists.
?C:.
?H:#$d_vfork HAS_VFORK /**/
?H:.
?M:vfork: HAS_VFORK
?M:#ifndef HAS_VFORK
?M:#define vfork fork
?M:#endif
?M:.
?LINT:set d_vfork
: see if there is a vfork
val=''
set
 vfork val
eval $inlibc

: Ok, but do we want to use it. vfork is reportedly unreliable in
: perl on Solaris 2.x, and probably elsewhere.
case "$val" in
$define)
 echo " "
 case "$usevfork" in
 false) dflt='n';;
 *) dflt='y';;
 esac
 rp="Some systems have problems with vfork().  Do you want to use it?"
 . ./myread
 case "$ans" in
 y|Y) ;;
 *)
```

```
  echo "Ok, we won't use vfork()."
  val="$undef"
  ;;
 esac
 ;;
esac
?X:
?X: Only set it when final value is known to avoid spurious Whoas
?X: Then set usevfork accordingly to the current value, for next run
?X:
set d_vfork
eval $setvar
case "$d_vfork" in
$define) usevfork='true';;
*) usevfork='false';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_vfork.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: alignbytes.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:02:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:25:20  ram
?RCS: patch23: avoid ALIGNBYTES, since it conflicts on NetBSD
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:alignbytes: Assert Myread Trylink cat i_inttypes i_limits i_math
?MAKE: -pick add $@ %<
?S:alignbytes:
?S: This variable holds the number of bytes required
 to align an
?S: arbitrary standard type. Usual values are 2, 4 and 8.
?S:.
```

```
?X: This used to be called ALIGNBYTES, but that conflicts with
?X: <machines/param.h> in NetBSD.
?C:MEM_ALIGNBYTES (ALIGNBYTES):
?C: This symbol contains the number of bytes required to align a
?C: double. Usual values are 2, 4 and 8.
?C:.
?H:#define MEM_ALIGNBYTES $alignbytes /**/
?H:.
?T:alignment result
: check for alignment requirements
echo " "
case "$alignbytes" in
")
 echo "Checking alignment constraints..." >&4

 for alignment in 8 4 2 1 16 32 error
 do
  $cat >try.c <<EOCP
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#$i_limits I_LIMITS
#ifdef I_LIMITS
#include <limits.h>
#endif
#$i_math I_MATH
#ifdef I_MATH
#include <math.h>
#endif

union u {
 void *void_ptr;
 void (*func_ptr)(void);
 char c;
 short s;
 int i;
 long l;
 float f;
 double d;
#ifdef LLONG_MAX
 long long ll;
#else
#warning "LLONG_MAX undefined"
#endif
#if defined(HUGE_VALL)
 long double ld;
#else
```

```
#warning
 "HUGE_VALL undefined"
#endif
#ifdef UINT32_MAX
 uint32_t u32;
#else
#warning "UINT32_MAX undefined"
#endif
#ifdef UINT16_MAX
 uint16_t u16;
#else
#warning "UINT32_MAX undefined"
#endif
#ifdef UINT64_MAX
 uint64_t u64;
#else
#warning "UINT64_MAX undefined"
#endif
#ifdef UINTMAX_MAX
 uintmax_t m;
#else
#warning "UINTMAX_MAX undefined"
#endif
#ifdef UINTPTR_MAX
 uintptr_t up;
#else
#warning "UINTPTR_MAX undefined"
#endif
};

struct s {
 char a;
 union u b;
};

#include "static_assert.h"

int
main(void)
{
 STATIC_ASSERT($alignment == ((sizeof (struct s) - (sizeof (union u)))));
 return 0;
}
EOCP

  result="
  set result
  eval $trylink
```

```
  case "$result" in
  "$define") break;;
  esac
 done

 case "$alignment" in
 error) dflt='8'
  echo "(I can't seem to compile the test program...)" >&4
  ;;
 *) dflt=$alignment
  ;;
 esac
;;
*) dflt="$alignbytes"
 ;;
esac
rp="What is the maximum alignment in bytes required for a standard type?"
. ./myread
alignbytes="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/alignbytes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
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?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fp_classl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fp_classl:
?S: This variable conditionally defines the HAS_FP_CLASSL symbol, which
?S: indicates to the C program that the fp_classl() routine is available.
?S:.
?C:HAS_FP_CLASSL:
?C: This symbol, if defined, indicates that the fp_classl routine is
?C: available to classify long doubles.  Available for example in
?C: Digital UNIX.  See for possible values HAS_FP_CLASS.
?C:.
?H:#$d_fp_classl HAS_FP_CLASSL  /**/
?H:.
?LINT:set d_fp_classl
: see if fp_classl exists
set fp_classl d_fp_classl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fp_classl.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Tye McQueen <tye@metronet.com>
?RCS:
?RCS: $Log: d_stdstdio.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:46:32  ram
?RCS: patch61: merged with perl5's unit
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:06:54  ram
?RCS: patch56: typo fix on ?C: line for FILE_bufsiz
?RCS: patch56: fixed unbalanced parenthesis (ADO)
?RCS: patch56: check whether FILE_cnt and FILE_ptr can be assigned to (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:12:11  ram
?RCS: patch54: complete rewrite by Tye McQueen
 to fit modern systems
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stdstdio d_stdiobase stdio_ptr stdio_cnt stdio_base \
 stdio_bufsiz d_stdio_cnt_lval d_stdio_ptr_lval stdio_filbuf: cat \
 +cc +ccflags contains +ldflags +libs rm_try \
 Setvar Findhdr Oldconfig
?MAKE: -pick add $@ %<
?S:d_stdstdio:
?S: This variable conditionally defines USE_STDIO_PTR if this system
?S: has a FILE structure declaring usable _ptr and _cnt fields (or
?S: equivalent) in stdio.h.
?S:.
?S:stdio_ptr:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _ptr field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_ptr(fp).
?S:.
```

```
?S:d_stdio_ptr_lval:
?S: This variable conditionally defines STDIO_PTR_LVALUE if the
?S: FILE_ptr macro can be used as an lvalue.
?S:.
?S:stdio_cnt:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _cnt field (or equivalent) of
 stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_cnt(fp).
?S:.
?S:d_stdio_cnt_lval:
?S: This variable conditionally defines STDIO_CNT_LVALUE if the
?S: FILE_cnt macro can be used as an lvalue.
?S:.
?S:stdio_filbuf:
?S: This variable defines how, given a FILE pointer, fp, to tell
?S: stdio to refill it's internal buffers (?).  This will
?S: be used to define the macro FILE_filbuf(fp).
?S:.
?S:d_stdiobase:
?S: This variable conditionally defines USE_STDIO_BASE if this system
?S: has a FILE structure declaring a usable _base field (or equivalent)
?S: in stdio.h.
?S:.
?S:stdio_base:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _base field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_base(fp).
?S:.
?S:stdio_bufsiz:
?S: This variable defines how, given a FILE pointer, fp, to determine
?S: the number of bytes store in the I/O buffer pointer to by the
?S: _base field (or equivalent) of stdio.h's
 FILE structure.  This will
?S: be used to define the macro FILE_bufsiz(fp).
?S:.
?C:USE_STDIO_PTR ~ d_stdstdio (USE_STD_STDIO STDSTDIO):
?C: This symbol is defined if the _ptr and _cnt fields (or similar)
?C: of the stdio FILE structure can be used to access the stdio buffer
?C: for a file handle.  If this is defined, then the FILE_ptr(fp)
?C: and FILE_cnt(fp) macros will also be defined and should be used
?C: to access these fields.
?C:.
?C:FILE_ptr:
?C: This macro is used to access the _ptr field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
```

```
?C:STDIO_PTR_LVALUE:
?C: This symbol is defined if the FILE_ptr macro can be used as an
?C: lvalue.
?C:.
?C:FILE_cnt:
?C: This macro is used to access the _cnt field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_CNT_LVALUE:
?C: This symbol is defined
 if the FILE_cnt macro can be used as an
?C: lvalue.
?C:.
?C:FILE_filbuf:
?C: This macro is used to access the internal stdio _filbuf function
?C: (or equivalent), if STDIO_CNT_LVALUE and STDIO_PTR_LVALUE
?C: are defined.  It is typically either _filbuf or __filbuf.
?C: This macro will only be defined if both STDIO_CNT_LVALUE and
?C: STDIO_PTR_LVALUE are defined.
?C:.
?H:?d_stdstdio:#$d_stdstdio USE_STDIO_PTR  /**/
?H:?d_stdstdio:#ifdef USE_STDIO_PTR
?H:#define FILE_ptr(fp) $stdio_ptr
?H:#$d_stdio_ptr_lval STDIO_PTR_LVALUE   /**/
?H:#define FILE_cnt(fp) $stdio_cnt
?H:#$d_stdio_cnt_lval STDIO_CNT_LVALUE   /**/
?H:?d_stdstdio:#if defined(STDIO_PTR_LVALUE) && defined(STDIO_CNT_LVALUE)
?H:#define FILE_filbuf(fp) $stdio_filbuf   /**/
?H:?d_stdstdio:#endif
?H:?d_stdstdio:#endif
?H:.
?W:d_stdstdio:FILE_ptr FILE_cnt FILE_filbuf
?C:USE_STDIO_BASE ~ d_stdiobase:
?C: This symbol is defined if the _base field (or similar) of the
?C: stdio FILE structure can be used to access the stdio buffer
 for
?C: a file handle.  If this is defined, then the FILE_base(fp) macro
?C: will also be defined and should be used to access this field.
?C: Also, the FILE_bufsiz(fp) macro will be defined and should be used
?C: to determine the number of bytes in the buffer.  USE_STDIO_BASE
?C: will never be defined unless USE_STDIO_PTR is.
?C:.
?C:FILE_base:
?C: This macro is used to access the _base field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_BASE is defined.
?C:.
```

```
?C:FILE_bufsiz:
?C: This macro is used to determine the number of bytes in the I/O
?C: buffer pointed to by _base field (or equivalent) of the FILE
?C: structure pointed to its argument. This macro will always be defined
?C: if USE_STDIO_BASE is defined.
?C:.
?H:?d_stdiobase:#$d_stdiobase USE_STDIO_BASE  /**/
?H:?d_stdiobase:#ifdef USE_STDIO_BASE
?H:#define FILE_base(fp) $stdio_base
?H:#define FILE_bufsiz(fp) $stdio_bufsiz
?H:?d_stdiobase:#endif
?H:.
?W:d_stdiobase:FILE_base
 FILE_bufsiz
?LINT:set d_stdstdio d_stdiobase
?T:ptr_lval cnt_lval filbuf xxx
?F:!try
: see if _ptr and _cnt from stdio act std
echo " "
if $contains '_IO_fpos_t' `./findhdr stdio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from Linux.)"
 case "$stdio_ptr" in
 '') stdio_ptr='((fp)->_IO_read_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 '') stdio_cnt='((fp)->_IO_read_end - (fp)->_IO_read_ptr)'
  cnt_lval=$undef
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 '') stdio_base='((fp)->_IO_read_base)';;
 esac
 case "$stdio_bufsiz" in
 '') stdio_bufsiz='((fp)->_IO_read_end - (fp)->_IO_read_base)';;
 esac
else
 case "$stdio_ptr" in
 '') stdio_ptr='((fp)->_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 '') stdio_cnt='((fp)->_cnt)'
```

```
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_base)';;
 esac
 case
 "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_cnt + (fp)->_ptr - (fp)->_base)';;
 esac
fi
: test whether _ptr and _cnt really work
echo "Checking how std your stdio is..." >&4
$cat >try.c <<EOP
#include <stdio.h>
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  18 <= FILE_cnt(fp) &&
  strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
 )
  exit(0);
 exit(1);
}
EOP
val="$undef"
if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1; then
 if ./try; then
  echo "Your stdio acts pretty std."
  val="$define"
 else
  echo "Your stdio isn't very std."
 fi
else
 echo "Your stdio doesn't appear very std."
fi
$rm_try
set d_stdstdio
eval $setvar

@if STDIO_PTR_LVALUE || d_stdio_ptr_lval
: Can _ptr be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$ptr_lval" in
```

```
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_ptr_lval
eval
 $setvar

@end
@if STDIO_CNT_LVALUE || d_stdio_cnt_lval
: Can _cnt be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$cnt_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_cnt_lval
eval $setvar

@end
@if FILE_filbuf
: How to access the stdio _filbuf or __filbuf function.
: If this fails, check how the getc macro in stdio.h works.
case "${d_stdio_ptr_lval}${d_stdio_cnt_lval}" in
${define}${define})
 : Try hint value, if any, then _filbuf, __filbuf, _fill, then punt.
 : _fill is for OS/2.
 xxx='notok'
 for filbuf in $stdio_filbuf '_filbuf(fp)' '__filbuf(fp) ' '_fill(fp)' ; do
  $cat >try.c <<EOP
#include <stdio.h>
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#define FILE_filbuf(fp) $filbuf
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 c = getc(fp);
 c = FILE_filbuf(fp);  /* Just looking for linker errors.*/
 exit(0);
}
EOP
  if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 &&
 ./try; then
   echo "Your stdio appears to use $filbuf"
   stdio_filbuf="$filbuf"
   xxx='ok'
   break
  else
```

```
  echo "Hmm.  $filbuf doesn't seem to work."
  fi
  $rm_try
 done
 case "$xxx" in
 notok) echo "I can't figure out how to access _filbuf"
   echo "I'll just have to work around it."
   d_stdio_ptr_lval="$undef"
   d_stdio_cnt_lval="$undef"
   ;;
 esac
 ;;
esac
@end
@if d_stdiobase || USE_STDIO_BASE || FILE_base || FILE_bufsiz
: see if _base is also standard
val="$undef"
case "$d_stdstdio" in
$define)
 $cat >try.c <<EOP
#include <stdio.h>
#define FILE_base(fp) $stdio_base
#define FILE_bufsiz(fp) $stdio_bufsiz
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  19 <= FILE_bufsiz(fp) &&
  strncmp(FILE_base(fp), "#include <stdio.h>\n", 19) == 0
 )
  exit(0);
 exit(1);
}
EOP
 if $cc $ccflags $ldflags -o try try.c $libs > /dev/null 2>&1; then
  if ./try; then
   echo "And its _base field acts std."
   val="$define"
  else
   echo "But its _base field isn't std."
  fi
 else
  echo
 "However, it seems to be lacking the _base field."
 fi
 $rm_try
 ;;
esac
```

```
set d_stdiobase
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_stdstdio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sitelib.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:21:35  ram
?RCS: patch61: created
?RCS:
?MAKE:sitelib sitelibexp installsitelib: afs cat Getfile \
 Oldconfig Prefixit test privlib package sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:sitelib:
?S: This variable contains the eventual value of the SITELIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this
 directory while performing installation (with ~ substitution).
?S:.
?S:sitelibexp:
?S: This variable is the ~name expanded version of sitelib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installsitelib:
?S: This variable is really the same as sitelibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:SITELIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
```

```
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Individual sites may place their own extensions and modules in
?C: this directory.
?C:.
?C:SITELIB_EXP:
?C: This symbol contains the ~name expanded version of SITELIB, to be used
?C: in programs that are not prepared to deal with ~ expansion
 at run-time.
?C:.
?H:#define SITELIB "$sitelib"  /**/
?H:#define SITELIB_EXP "$sitelibexp"  /**/
?H:.
?T:prog
: determine where site specific libraries go.
set sitelib sitelib
eval $prefixit
case "$sitelib" in
")
?X: remove any trailing -3.0 or other version indentification
 prog=`echo $package | $sed 's/-*[0-9.]*$//'`
 dflt="$privlib/site_$prog" ;;
*) dflt="$sitelib" ;;
esac
$cat <<EOM

The installation process will also create a directory for
site-specific extensions and modules.  Some users find it convenient
to place all local files in this directory rather than in the main
distribution directory.

EOM
fn=d~+
rp='Pathname for the site-specific library files?'
. ./getfile
if $test "X$sitelibexp" != "X$ansexp"; then
 installsitelib=''
fi
sitelib="$ans"
sitelibexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to
 the former directory by occult means).
```

```
EOM
 case "$installsitelib" in
 ") dflt=`echo $sitelibexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installsitelib";;
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installsitelib="$ans"
else
 installsitelib="$sitelibexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sitelib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_locconv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_locconv.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:11  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_locconv: Inlibc
?MAKE: -pick add $@ %<
?S:d_locconv:
?S: This variable conditionally defines HAS_LOCALECONV if localeconv() is
?S: available for numeric and monetary formatting conventions.
?S:.
?C:HAS_LOCALECONV:
?C: This symbol, if defined, indicates that the localeconv
 routine is
?C: available for numeric and monetary formatting conventions.
?C:.
?H:#$d_locconv HAS_LOCALECONV /**/
?H:.
?LINT:set d_locconv
: see if localeconv exists
```

```
set localeconv d_locconv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_locconv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: dlsrc.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: dlsrc.U,v $
?RCS:
?X:  hpux support thanks to Jeff Okamoto <okamoto@hpcc101.corp.hp.com>
?X:
?X:  To create a shared library, you must compile ALL source files in the
?X:  library with +z (or possibly +Z if the library is whopping huge),
?X:  then link the library with -b.  Example:
?X:   cc -c +z module_a.c
?X:   cc -c +z module_b.c
?X:   ld -b module_a.o module_b.o -o module.sl
?X:
?MAKE:usedl ld dlsrc cccdlflags lddlflags ccdlflags bin_ELF ld_can_script: \
 rm_try Getfile Myread test osname sed d_dlopen Findhdr Setvar \
 src run cc ccflags ldflags optimize ls gccversion cat rsrc i_stdlib \
 i_unistd osvers sysroot
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:usedl:
?S: This variable
 indicates if the system supports dynamic
?S: loading of some sort.  See also dlsrc and dlobj.
?S:.
?S:ld:
?S: This variable indicates the program to be used to link
?S: libraries for dynamic loading.  On some systems, it is 'ld'.
?S: On ELF systems, it should be $cc.  Mostly, we'll try to respect
?S: the hint file setting.
?S:.
?S:dlsrc:
?S: This variable contains the name of the dynamic loading file that
?S: will be used with the package.
?S:.
?S:cccdlflags:
?S: This variable contains any special flags that might need to be
```

```
?S: passed with 'cc -c' to compile modules to be used to create a shared
?S: library that will be used for dynamic loading.  For hpux, this
?S: should be +z.  It is up to the makefile to use it.
?S:.
?S:lddlflags:
?S: This variable contains any special flags that might need to be
?S: passed to $ld to create a shared library suitable for dynamic
?S: loading.  It is up to the makefile to use it.  For hpux, it
?S: should be '-b'.  For sunos 4.1, it is empty.
?S:.
?S:ccdlflags:
?S: This
 variable contains any special flags that might need to be
?S: passed to cc to link with a shared library for dynamic loading.
?S: It is up to the makefile to use it.  For sunos 4.1, it should
?S: be empty.
?S:.
?S:bin_ELF:
?S: This variable saves the result from configure if generated binaries
?S: are in ELF format. Only set to defined when the test has actually
?S: been performed, and the result was positive.
?S:.
?S:ld_can_script:
?S: This variable shows if the loader accepts scripts in the form of
?S: -Wl,--version-script=ld.script. This is currently only supported
?S: for GNU ld on ELF in dynamic loading builds.
?S:.
?C:USE_DYNAMIC_LOADING ~ %<:
?C: This symbol, if defined, indicates that dynamic loading of
?C: some sort is available.
?C:.
?H:?%<:#$usedl USE_DYNAMIC_LOADING  /**/
?H:.
?W:%<:dlopen
?T:dldir thisflag tdir
?F:!a.out
: determine which dynamic loading, if any, to compile in
echo " "
dldir="ext/DynaLoader"
case "$usedl" in
   $define|y|true)
 dflt='y'
 usedl="$define"
 ;;
    $undef|n|false)
 dflt='n'
 usedl="$undef"
 ;;
```

```
  *)
 dflt='n'
 case "$d_dlopen" in
    $define) dflt='y' ;;
 esac
 : Does a dl_xxx.xs file exist for this operating system
 $test -f $rsrc/$dldir/dl_${osname}.xs && dflt='y'
 ;;
esac
rp="Do you wish to use dynamic loading?"
. ./myread
usedl="$ans"
bin_ELF="$undef"
case "$ans" in
  y*) usedl="$define"
 case "$dlsrc" in
    ") if $test -f $rsrc/$dldir/dl_${osname}.xs ; then
     dflt="$dldir/dl_${osname}.xs"
  elif $test "$d_dlopen" = "$define" ; then
     dflt="$dldir/dl_dlopen.xs"
  else
     dflt="
  fi
  ;;
    *)  dflt="$dldir/$dlsrc"
  ;;
 esac
 echo "The following dynamic loading files are available:"
 : Can not go over to $dldir because getfile has path hard-coded in.
 tdir=`pwd`; cd "$rsrc"; $ls -C $dldir/dl*.xs; cd "$tdir"
 rp="Source file to use for dynamic loading"
 fn="fne"
 gfpth="$src"
 . ./getfile
 usedl="$define"
 : emulate basename
 dlsrc=`echo $ans | $sed -e 's%.*/\([^/]*\)$%\1%'`

 $cat
 << EOM

Some systems may require passing special flags to $cc -c to
compile modules that will be used to create a shared library.
To use no flags, say "none".

EOM
 case "$cccdlflags" in
    ") case "$gccversion" in
```

```
 ") case "$osname" in
  hpux) dflt='+z' ;;
  irix*) dflt='-KPIC' ;;
  svr4*|esix*|solaris|nonstopux) dflt='-KPIC' ;;
  sunos) dflt='-pic' ;;
  *) dflt='none' ;;
     esac
     ;;
 *)  case "$osname" in
  darwin) dflt='none' ;;
  *linux*|svr4*|esix*|solaris|nonstopux) dflt='-fPIC' ;;
  *) dflt='-fpic' ;;
     esac ;;
 esac ;;
    ' ') dflt='none' ;;
    *)   dflt="$cccdlflags" ;;
esac

case "$dflt" in
    none) dflt=" ;;
esac

# If -Dsysroot was specified, now's the time to add it
# to cccdlflags
if test "X$sysroot" != X; then
    case "$gccversion" in
 ") ;;
 *)  case "$dflt" in
  *sysroot*) ;;
  'undef'|*)
      dflt="$dflt --sysroot=$sysroot" ;;
     esac
     ;;
    esac
fi

case "$dflt" in
    ") dflt='none';;
esac

rp="Any
special flags to pass to $cc -c to compile shared library modules?"
. ./myread
case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
    none) cccdlflags=' ' ;;
    *)    cccdlflags="$ans" ;;
esac
```

```
 cat << EOM

Some systems use ld to create libraries that can be dynamically loaded,
while other systems (such as those using ELF) use $cc.

EOM

: Determine if this is ELF
 $cat >try.c <<EOM
/* Test for whether ELF binaries are produced */
#include <fcntl.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#include <unistd.h>
#endif
int main() {
   char b[4];
   int i = open("a.out",O_RDONLY);
   if(i == -1)
 exit(1); /* fail */
   if(read(i,b,4)==4 && b[0]==127 && b[1]=='E' && b[2]=='L' && b[3]=='F')
 exit(0); /* succeed (yes, it is ELF) */
   exit(1); /* fail */
}
EOM
 if $cc $ccflags $ldflags -o a.out try.c >/dev/null 2>&1 && $run ./a.out; then
     bin_ELF="$define"
 fi
 $rm_try

 case "$ld" in

    ") if $test $bin_ELF = "$define"; then
      cat <<EOM
You appear to have ELF support.  I'll use $cc to build dynamic libraries.
EOM
      dflt="$cc"
  else
      echo "I'll use ld to build dynamic libraries."
      dflt='ld'
  fi
  ;;
     *)  dflt="$ld"
```

```
 ;;
esac

rp="What command should be used to create dynamic libraries?"
. ./myread
ld="$ans"

cat << EOM

Some systems may require passing special flags to $ld to create a
library that can be dynamically loaded.  If your ld flags include
-L/other/path options to locate libraries outside your loader's normal
search path, you may need to specify those -L options here as well.  To
use no flags, say "none".

EOM
case "$lddlflags" in
    ") case "$osname" in
     haiku) dflt='-shared' ;;
     hpux) dflt='-b';
    case "$gccversion" in
        ") dflt="$dflt +vnocompatwarnings" ;;
    esac
    ;;
     *linux*|irix*|gnu*)  dflt="-shared $optimize" ;;
     solaris) # See [perl #66604].
      # On Solaris 11, gcc -m64
on amd64
      # appears not to understand -G.  gcc versions at
      # least as old as 3.4.3 support -shared, so just
      # use that with Solaris 11 and later, but keep
      # the old behavior for older Solaris versions.
      case "$gccversion" in
   ") dflt='-G' ;;
   *)  case "$osvers" in
    2.?|2.10) dflt='-G' ;;
    *) dflt='-shared' ;;
       esac
       ;;
      esac
      ;;
     sunos) dflt='-assert nodefinitions' ;;
     svr4*|esix*|nonstopux) dflt="-G $ldflags" ;;
     *)     dflt='none' ;;
 esac
 ;;
    *) dflt="$lddlflags" ;;
esac
```

```
: Only do this for gcc, since, for example, qcc has no concept
: of --sysroot.
if $test "X$sysroot" != X; then
    case "$gccversion" in
 ") ;;
 *)  dflt="$dflt --sysroot=$sysroot" ;;
    esac
fi

: Try to guess additional flags to pick up local libraries.
: Be careful not to append to a plain 'none'
case "$dflt" in
    none) dflt=" ;;
esac
for thisflag in $ldflags; do
    case "$thisflag" in
 -L*|-R*|-Wl,-R*)

   case " $dflt " in
  *" $thisflag "*) ;;
  *) dflt="$dflt $thisflag" ;;
     esac
     ;;
    esac
done

case "$dflt" in
    "|' ') dflt='none' ;;
esac

case "$ldflags" in
    *-fstack-protector-strong*)
 case "$dflt" in
     *-fstack-protector-strong*) ;; # Don't add it again
     *) dflt="$dflt -fstack-protector-strong" ;;
 esac
 ;;
    *-fstack-protector*)
 case "$dflt" in
     *-fstack-protector*) ;; # Don't add it again
     *) dflt="$dflt -fstack-protector" ;;
 esac
 ;;
esac

rp="Any special flags to pass to $ld to create a dynamically loaded library?"
. ./myread
```

```
 case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
     none) lddlflags=' ' ;;
     *) lddlflags="$ans" ;;
 esac

 cat <<EOM

Some systems may require passing special flags to $cc to indicate that
the resulting executable will use dynamic linking.  To use no flags,
say "none".

EOM
 case "$ccdlflags" in
     ") case "$osname" in
      *linux*|hpux|gnu*)
 dflt='-Wl,-E' ;;
      sunos)             dflt='none'   ;;
      *)                 dflt='none'   ;;
  esac ;;
     ' ') dflt='none' ;;
     *)   dflt="$ccdlflags" ;;
 esac
 rp="Any special flags to pass to $cc to use dynamic linking?"
 . ./myread
 case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
     none) ccdlflags=' ' ;;
     *)    ccdlflags="$ans" ;;
 esac
 ;;
?X: End of usedl=y section

   *)  usedl="$undef"
 ld='ld'
 dlsrc='dl_none.xs'
 lddlflags=''
 ccdlflags=''
 ;;
esac

ld_can_script="$undef"
case "$bin_ELF$usedl" in
   $define$define)
 # Abuse try.h and a.out names for neat cleanup
 $cat >try.c <<EOM
void foo() {}
void bar() {}
```

```
EOM
 $cat >try.h <<EOM
LIBTEST_42 {
global:
 foo;
local: *;
};
EOM
 if $cc $cccdlflags $ccdlflags $ccflags \
        $ldflags $lddlflags -o a.out try.c \
        -Wl,--version-script=try.h >/dev/null 2>&1 \
    &&  $test -s a.out ; then
     echo "ld supports scripting" >&4
     ld_can_script="$define"
 else

    echo "ld does not support scripting" >&4
 fi
 $rm_try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dlsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_crypt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_crypt.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:31:47  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_crypt cryptlib: Loc test xlibpth libpth Csym Setvar _a Inlibc
?MAKE: -pick add $@ %<
?S:d_crypt:
?S: This variable conditionally defines the CRYPT symbol, which
?S: indicates to the C program that the crypt() routine is available
```

```
?S: to
 encrypt passwords and the like.
?S:.
?S:cryptlib:
?S: This variable holds -lcrypt or the path to a libcrypt.a archive if
?S: the crypt() function is not defined in the standard C library. It is
?S: up to the Makefile to use this.
?S:.
?C:HAS_CRYPT (CRYPT):
?C: This symbol, if defined, indicates that the crypt routine is available
?C: to encrypt passwords and the like.
?C:.
?H:#$d_crypt HAS_CRYPT  /**/
?H:.
?LINT:set d_crypt
?T:val
: see if crypt exists
echo " "
set crypt d_crypt
eval $inlibc
case "$d_crypt" in
$define) cryptlib=" ;;
*) if set crypt val -f d_crypt; eval $csym; $val; then
  echo 'crypt() found.' >&4
  val="$define"
  cryptlib="
 else
  cryptlib=`./loc Slibcrypt$_a "" $xlibpth`
  if $test -z "$cryptlib"; then
   cryptlib=`./loc Mlibcrypt$_a "" $xlibpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   cryptlib=`./loc Llibcrypt$_a "" $xlibpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   cryptlib=`./loc libcrypt$_a ""
 $libpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   echo 'crypt() NOT found.' >&4
   val="$undef"
  else
```

```
   val="$define"
  fi
 fi
 set d_crypt
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_crypt.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strctcpy.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strctcpy: cat rm_try cc Setvar
?MAKE: -pick add $@ %<
?S:d_strctcpy:
?S: This variable conditionally defines the USE_STRUCT_COPY symbol, which
?S: indicates to the C program that this C compiler knows how to copy
?S: structures.
?S:.
?C:USE_STRUCT_COPY (STRUCTCOPY):
?C: This symbol, if defined, indicates that this C compiler knows how
?C: to copy structures.  If undefined, you'll
 need to use a block copy
?C: routine of some sort instead.
?C:.
?H:#$d_strctcpy USE_STRUCT_COPY /**/
?H:.
?LINT:set d_strctcpy
: check for structure copying
echo " "
echo "Checking to see if your C compiler can copy structs..." >&4
$cat >try.c <<'EOCP'
int main()
{
```

```
 struct blurfl {
  int dyick;
 } foo, bar;

 foo = bar;
}
EOCP
if $cc -c try.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup, it can."
else
 val="$undef"
 echo "Nope, it can't."
fi
set d_strctcpy
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strctcpy.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: yacc.U,v $
?RCS: Revision 3.0.1.1  1994/05/13  15:28:48  ram
?RCS: patch27: added byacc as another alternative (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:yacc yaccflags: Guess Myread Loc Oldconfig byacc bison cat test
?MAKE: -pick add $@ %<
?S:yacc:
?S: This variable holds the name of the compiler compiler we
?S: want to use in the Makefile. It can be yacc, byacc, or bison -y.
?S:.
?S:yaccflags:
?S: This variable contains any
```

```
 additional yacc flags desired by the
?S: user.  It is up to the Makefile to use this.
?S:.
?T:comp
: determine compiler compiler
echo " "
comp='yacc'
if $test -f "$byacc$_exe"; then
 comp="byacc or $comp"
fi
if $test -f "$bison$_exe"; then
 comp="$comp or bison -y"
fi
case "$yacc" in
")
 yacc=`./loc yacc yacc $pth`
 if $test -f "$yacc$_exe"; then
  dflt='yacc'
 elif $test -f "$byacc$_exe"; then
  dflt='byacc'
 elif $test -f "$bison$_exe"; then
  dflt='bison'
 else
  dflt=''
 fi
 ;;
*) dflt="$yacc";;
esac
rp="Which compiler compiler ($comp) shall I use?"
. ./myread
yacc="$ans"
case "$yacc" in
*bis*)
 case "$yacc" in
 *-y*) ;;
 *)
  yacc="$yacc -y"
  echo "(Adding -y option to bison to get yacc-compatible behaviour.)"
  ;;
 esac
 ;;
esac

@if yaccflags
: see if we need extra yacc flags
dflt="$yaccflags"
case "$dflt" in
") dflt=none;;
```

```
esac
$cat <<EOH

Your yacc program may need extra flags to normally process the parser sources.
Do NOT specify any -d or -v flags here, since those are
 explicitly known
by the various Makefiles. However, if your machine has strange/undocumented
options (like -Sr# on SCO to specify the maximum number of grammar rules), then
please add them here.  To use no flags, specify the word "none".

EOH
rp="Any additional yacc flags?"
. ./myread
case "$ans" in
none) yaccflags="";;
*) yaccflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/yacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: inc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: inc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:inc incexp: Loc Oldconfig Getfile usrinc
?MAKE: -pick add $@ %<
?S:inc:
?S: This variable holds the name of the directory in which the user wants
?S: to put public header files for the package in question.  It is most
?S: often a local directory such as /usr/local/include.
?S:.
?S:incexp:
?S: This is the same as the inc variable, but is filename
```

```
 expaned
?S: at configuration time for convenient use in your makefiles.
?S:.
: determine where public header files go
case "$inc" in
")
 dflt=`./loc . "." /usr/local/include /usr/include/local $usrinc`
 ;;
*)  dflt="$inc"
 ;;
esac
fn=d~
rp='Where do you want to put the public header files?'
. ./getfile
inc="$ans"
incexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/inc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_class: Inlibc
?MAKE: -pick add $@ %<
?S:d_class:
?S: This variable conditionally defines the HAS_CLASS symbol, which
?S: indicates to the C program that the class() routine is available.
?S:.
?C:HAS_CLASS:
?C: This symbol, if defined, indicates that the class routine is
?C: available to classify doubles.  Available for example in AIX.
?C: The returned values are defined in <float.h> and are:
?C:
?C: FP_PLUS_NORM Positive normalized, nonzero
?C: FP_MINUS_NORM Negative normalized, nonzero
?C: FP_PLUS_DENORM Positive denormalized, nonzero
?C: FP_MINUS_DENORM Negative denormalized, nonzero
?C: FP_PLUS_ZERO +0.0
?C: FP_MINUS_ZERO -0.0
?C: FP_PLUS_INF +INF
?C: FP_MINUS_INF -INF
?C: FP_NANS  Signaling
```

```
 Not a Number (NaNS)
?C: FP_NANQ  Quiet Not a Number (NaNQ)
?C:.
?H:#$d_class HAS_CLASS  /**/
?H:.
?LINT:set d_class
: see if class exists
set class d_class
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_class.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorbin.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorbin.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorbin vendorbin vendorbinexp installvendorbin: Getfile \
 Setprefixvar Oldconfig Prefixit vendorprefix
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorbin:
?S: This variable contains the eventual value of the VENDORBIN symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors who distribute perl
 may wish to place additional
?S: binaries in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorbinexp:
?S: This variable is the ~name expanded version of vendorbin, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorbin="
?S:installvendorbin:
```

```
?S: This variable is really the same as vendorbinexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorbin:
?S: This variable conditionally defines PERL_VENDORBIN.
?S:.
?C:PERL_VENDORBIN:
?C: If defined, this symbol contains the name of a directory
?C: for holding vendor-supplied executables.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place additional
?C: binaries in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.
  See INSTALL for details.
?C:.
?C:PERL_VENDORBIN_EXP:
?C: This symbol contains the ~name expanded version of VENDORBIN, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorbin PERL_VENDORBIN "$vendorbin"  /**/
?H:#$d_vendorbin PERL_VENDORBIN_EXP "$vendorbinexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorbin
: Set the vendorbin variables
case "$vendorprefix" in
") d_vendorbin="$undef"
 vendorbin="
 vendorbinexp="
 ;;
*) d_vendorbin="$define"
 : determine where vendor-supplied executables go.
 case "$vendorbin" in
 ") dflt=$vendorprefix/bin ;;
 *) dflt="$vendorbin" ;;
 esac
 fn=d~+
 rp='Pathname for the vendor-supplied executables directory?'
 . ./getfile
 vendorbin="$ans"
 vendorbinexp="$ansexp"
 ;;
esac
prefixvar=vendorbin
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorbin.U
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```
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?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasstruct string that is used internally
?X: by Configure to check if this system has a field for a
?X: particular struct (of if this system has a particular struct!)
?X:
?X: To use it, say something like:
?X:  set d_statblocks stat i_sysstat sys/stat.h
?X:  eval $hasstruct
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/foo.h
?X:  $i_sysbar sys/bar.h
?X:  $i_syszot sys/zot.h
?X:  $i_zappa zappa.h"
?X: set d_statblocks stat $hdrs
?X: eval $hasstruct
?X:
?MAKE:Hasstruct: Setvar rm_try test Compile
?MAKE: -pick add $@ %<
?T:varname struct
?V:hasstruct
: Define hasstruct macro for Configure internal use
hasstruct='varname=$1; struct=$2; shift;
 shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 esac ;
   shift 2;
done > try.c;
echo "int main () { struct $struct foo; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
```

```
eval $setvar;
$rm_try'

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasstruct.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Init.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:45:59  ram
?RCS: patch44: removed Options from MAKE to prevent Init overrides
?RCS: patch44: option processing now done after Myinit thanks to new Begin.U
?RCS: patch44: moved "Beginning of configuration questions" to Begin.U
?RCS: patch44: moved signal trapping instruction to Begin.U as well
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file initializes certain default variables
 used by Configure.  They
?X: may be overridden or added to by definitions in Myinit.U.
?X:
?MAKE:Init eunicefix _exe: Null
?MAKE: -pick add $@ %<
?MAKE: -pick weed $@ ./Init
?S:eunicefix:
?S: When running under Eunice this variable contains a command which will
?S: convert a shell script to the proper form of text file for it to be
?S: executable by the shell.  On other systems it is a no-op.
?S:.
?S:_exe (exe_ext):
?S: This variable defines the extension used for executable files.
?S: For unix it is empty.  Other possible values include '.exe'.
?S: DJGPP, Cygwin and OS/2 use '.exe'.  Stratus VOS uses '.pm'.
?S: On operating systems which do not require a specific extension
?S: for executable files, this variable is empty.
?S:.
?V:define undef smallmach:rmlist
```

```
?X:
?X: Throughout the units, one may make use of $define and $undef to reference
?X: a defined symbol or an undefined one. There is no need to add them in
?X: the dependency line since this unit makes them visible via ?V:, and
?X:
 everyone inherits from those symbols since by convention Init.U is the
?X: root dependency.
?X:
?T: DJGPP
: Initialize wide constants
define='define'
undef='undef'
smallmach='pdp11 i8086 z8000 i80286 iAPX286'
rmlist=''

: We must find out about Eunice early
eunicefix=':'
if test -f /etc/unixtovms; then
 eunicefix=/etc/unixtovms
fi
if test -f /etc/unixtovms.exe; then
 eunicefix=/etc/unixtovms.exe
fi

: Set executable suffix now -- needed before hints available
if test -f "/libs/version.library"; then
 : Amiga OS
  _exe=""
elif test -f "/system/gnu_library/bin/ar.pm"; then
 : Stratus VOS
 _exe=".pm"
elif test -n "$DJGPP"; then
 : DOS DJGPP
  _exe=".exe"
elif test -d c:/. ; then
 : OS/2 or cygwin
 _exe=".exe"
else
 : All other UNIX systems
 _exe=""
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Init.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_netdb.U,v $
?RCS:
```

```
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_netdb: Inhdr
?MAKE: -pick add $@ %<
?S:i_netdb:
?S: This variable conditionally defines the I_NETDB symbol, and indicates
?S: whether a C program should include <netdb.h>.
?S:.
?C:I_NETDB:
?C: This symbol, if defined, indicates that <netdb.h> exists and
?C: should be included.
?C:.
?H:#$i_netdb I_NETDB  /**/
?H:.
?LINT:set i_netdb
: see if this is a netdb.h system
set netdb.h i_netdb
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_netdb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_flexfnam.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_flexfnam.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flexfnam: cat rm test Setvar
?MAKE: -pick add $@ %<
?S:d_flexfnam:
?S: This variable conditionally defines the FLEXFILENAMES symbol, which
?S: indicates that the system supports filenames longer than 14 characters.
?S:.
?C:FLEXFILENAMES:
?C: This symbol, if defined, indicates that the system supports filenames
```

```
?C: longer than 14
 characters.
?C:.
?H:#$d_flexfnam FLEXFILENAMES  /**/
?H:.
?T:first
?LINT:set d_flexfnam
: see if we can have long filenames
echo " "
?X:
?X: We have to test in both /tmp and . because of NFS (remote server may allow
?X: long filenames while the local filesystem cannot support them). If at least
?X: one of those file systems cannot support long filenames, then we assume the
?X: whole system can't.
?X:
first=123456789abcdef
$rm -f $first
if (echo hi >$first) 2>/dev/null; then
 if $test -f 123456789abcde; then
  echo 'You cannot have filenames longer than 14 characters.  Sigh.' >&4
  val="$undef"
 else
  echo 'You can have filenames longer than 14 characters.'>&4
  val="$define"
 fi
else
 $cat <<'EOM'
You can't have filenames longer than 14 chars.
You can't even think about them!
EOM
 val="$undef"
fi
set d_flexfnam
eval $setvar
$rm -rf 123456789abcde*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_flexfnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getsent:
?S: This variable conditionally defines HAS_GETSERVENT if getservent() is
?S: available to look up network services in some data base or another.
?S:.
?C:HAS_GETSERVENT:
?C: This symbol, if defined, indicates that the getservent() routine is
?C: available to look up network services in some
 data base or another.
?C:.
?H:#$d_getsent HAS_GETSERVENT  /**/
?H:.
?LINT:set d_getsent
: see if getservent exists
set getservent d_getsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mbtowc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mbtowc.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mbtowc: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbtowc:
?S: This variable conditionally defines the HAS_MBTOWC symbol, which
?S: indicates to the C program that the mbtowc() routine is available
?S: to convert multibyte to a wide character.
```

```
?S:.
?C:HAS_MBTOWC (MBTOWC):
?C: This symbol, if defined, indicates that the mbtowc routine is available
?C: to
 convert a multibyte to a wide character.
?C:.
?H:#$d_mbtowc HAS_MBTOWC  /**/
?H:.
?LINT:set d_mbtowc
: see if mbtowc exists
set mbtowc d_mbtowc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mbtowc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ulimit.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ulimit.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ulimit: Inlibc
?MAKE: -pick add $@ %<
?S:d_ulimit:
?S: This variable conditionally defines HAS_ULIMIT if ulimit() is
?S: available to get the user limits.
?S:.
?C:HAS_ULIMIT (ULIMIT):
?C: This symbol, if defined, indicates that the ulimit system call is
?C: available to get the user limits.
?C:.
?H:#$d_ulimit HAS_ULIMIT  /**/
?H:.
?LINT:set
 d_ulimit
: see if ulimit exists
set ulimit d_ulimit
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ulimit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetbyaddr_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetbyaddr_r getnetbyaddr_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetbyaddr_r:
?S: This variable conditionally defines the HAS_GETNETBYADDR_R symbol,
?S: which indicates to the C program that the getnetbyaddr_r()
?S: routine is available.
?S:.
?S:getnetbyaddr_r_proto:
?S: This variable encodes the prototype of getnetbyaddr_r.
?S: It is zero if d_getnetbyaddr_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyaddr_r
?S: is defined.
?S:.
?C:HAS_GETNETBYADDR_R:
?C: This symbol, if defined, indicates that
 the getnetbyaddr_r routine
?C: is available to getnetbyaddr re-entrantly.
?C:.
?C:GETNETBYADDR_R_PROTO:
?C: This symbol encodes the prototype of getnetbyaddr_r.
?C: It is zero if d_getnetbyaddr_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyaddr_r
?C: is defined.
?C:.
?H:#$d_getnetbyaddr_r HAS_GETNETBYADDR_R /**/
?H:#define GETNETBYADDR_R_PROTO $getnetbyaddr_r_proto /**/
?H:.
?T:try hdrs d_getnetbyaddr_r_proto
: see if getnetbyaddr_r exists
set getnetbyaddr_r d_getnetbyaddr_r
eval $inlibc
case "$d_getnetbyaddr_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
```

```
case "$d_getnetbyaddr_r_proto:$usethreads" in
":define") d_getnetbyaddr_r_proto=define
 set d_getnetbyaddr_r_proto getnetbyaddr_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_getnetbyaddr_r_proto" in
define)
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(unsigned long, int, struct netent*, char*, size_t, struct netent**, int*);'
./protochk
"$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_UISBWRE ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(long, int, struct netent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_LISBI ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='struct netent* getnetbyaddr_r(in_addr_t, int, struct netent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=S_TISBI ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='struct netent* getnetbyaddr_r(long, int, struct netent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=S_LISBI ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(in_addr_t, int, struct netent*, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_TISD ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(long, int, struct netent*, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_LISD
;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(int, int, struct netent*, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_IISD ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(uint32_t, int, struct netent*, char*, size_t, struct netent**, int*);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_uISBWRE ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) d_getnetbyaddr_r=undef
 getnetbyaddr_r_proto=0
 echo "Disabling getnetbyaddr_r, cannot determine prototype." >&4 ;;
* ) case "$getnetbyaddr_r_proto" in
 REENTRANT_PROTO*) ;;
```

```
  *) getnetbyaddr_r_proto="REENTRANT_PROTO_$getnetbyaddr_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getnetbyaddr_r has no prototype, not using it." >&4 ;;
  esac
  d_getnetbyaddr_r=undef
  getnetbyaddr_r_proto=0
  ;;
 esac
 ;;
*) getnetbyaddr_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetbyaddr_r.U
No license file was found, but licenses were detected in source scan.

```
case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting makedepend (with variable substitutions)"
$spitshell >makedepend <<!GROK!THIS!
$startsh
# $Id: makedepend.sh,v 3.0.1.1 1994/01/24 14:00:05 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
```

```
#  of the source tree for dist 4.0.
#
#
 Original Author: Larry Wall <lwall@netlabs.com>
#
# $Log: makedepend.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:05  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:37  ram
# Baseline for dist 3.0 netwide release.
#

export PATH || (echo "OOPS, this isn't sh.  Desperation time.  I will feed myself to sh."; sh \$0; kill \$\$)

cat='$cat'
cppflags='$cppflags'
cp='$cp'
cpp='$cppstdin'
echo='$echo'
egrep='$egrep'
expr='$expr'
mv='$mv'
rm='$rm'
sed='$sed'
sort='$sort'
test='$test'
tr='$tr'
uniq='$uniq'
!GROK!THIS!

$spitshell >>makedepend <<'!NO!SUBS!'

$cat /dev/null >.deptmp
$rm -f *.c.c c/*.c.c
if test -f Makefile; then
   mf=Makefile
else
   mf=makefile
fi
if test -f $mf; then
   defrule=`<$mf sed -n  \
 -e '/^\.c\.o:.*;/{'  \
 -e    's/\$\*\.c//'  \
 -e    's/^[^;]*;[  ]*//p' \
 -e    q    \
 -e '}'    \
 -e '/^\.c\.o: *$/{'  \
```

```
 -e    N    \
 -e    's/\$\*\.c//'  \
 -e    's/^.*\n[   ]*//p'  \
 -e    q    \
 -e '}'`
fi
case
 "$defrule" in
") defrule='$(CC) -c $(CFLAGS)' ;;
esac

make clist || ($echo "Searching for .c files..."; \
 $echo *.c | $tr ' ' '\012' | $egrep -v '\*' >.clist)
gotnone=true
for file in `$cat .clist`; do
# for file in `cat /dev/null`; do
   case "$file" in
   *.c) filebase=`basename $file .c` ;;
   *.y) filebase=`basename $file .c` ;;
   ")  continue ;;
   esac
   gotnone=false
   $echo "Finding dependencies for $filebase.o."
   $sed -n <$file >$file.c \
 -e "/^${filebase}_init(/q" \
 -e '/^#/{' \
 -e 's|/\*.*$||' \
 -e 's|\\$||' \
 -e p \
 -e '}'
   $cpp -I/usr/local/include -I. $cppflags $file.c | \
   $sed \
 -e '/^# *[0-9]/!d' \
 -e 's/^.*"\(.*\)".*$/'$filebase'.o: \1/' \
 -e 's|: \./|: |' \
 -e 's|\.c\.c|.c|' | \
   $uniq | $sort | $uniq >> .deptmp
done

$sed <Makefile >Makefile.new -e '1,/^# AUTOMATICALLY/!d'

make shlist || ($echo "Searching for .SH files..."; \
 $echo *.SH | $tr ' ' '\012' | $egrep -v '\*' >.shlist)
if $gotnone || $test -s .deptmp; then

  for file in `cat .shlist`; do
 $echo `$expr X$file : 'X\(.*\).SH`: $file config.sh \; \
     /bin/sh $file >> .deptmp
```

```
  done
  $echo "Updating Makefile..."
  $echo "# If this runs make out of memory, delete /usr/include lines." \
 >> Makefile.new
  $sed 's|^\(.*\.o:\) *\(.*/.*\.c\) *$|\1 \2; '"$defrule \2|" .deptmp \
    >>Makefile.new
else
  make hlist || ($echo "Searching for .h files..."; \
 $echo *.h | $tr ' ' '\012' | $egrep -v '\*' >.hlist)
  $echo "You don't seem to have a proper C preprocessor.  Using grep instead."
  $egrep '^#include ' `cat .clist` `cat .hlist`  >.deptmp
  $echo "Updating Makefile..."
  <.clist $sed -n       \
 -e '/\//{'       \
 -e   's|^\(.*\)/\(.*\)\.c|\2.o: \1/\2.c; '"$defrule \1/\2.c|p" \
 -e   d        \
 -e '}'        \
 -e 's|^\(.*\)\.c|\1.o: \1.c|p' >> Makefile.new
  <.hlist $sed -n 's|\(.*/\)\(.*\)|s= \2= \1\2=|p' >.hsed
  <.deptmp $sed -n 's|c:#include "\(.*\)".*$|o: \1|p' | \
    $sed 's|^[^;]*/||' | \
    $sed -f
 .hsed >> Makefile.new
  <.deptmp $sed -n 's|c:#include <\(.*\)>.*$|o: /usr/include/\1|p' \
    >> Makefile.new
  <.deptmp $sed -n 's|h:#include "\(.*\)".*$|h: \1|p' | \
    $sed -f .hsed >> Makefile.new
  <.deptmp $sed -n 's|h:#include <\(.*\)>.*$|h: /usr/include/\1|p' \
    >> Makefile.new
  for file in `$cat .shlist`; do
 $echo `$expr X$file : 'X\(.*\).SH`: $file config.sh \; \
   /bin/sh $file >> Makefile.new
  done
fi
$rm -f Makefile.old
$cp Makefile Makefile.old
$cp Makefile.new Makefile
$rm Makefile.new
$echo "# WARNING: Put nothing here or make depend will gobble it up!" >> Makefile
$rm -f .deptmp `sed 's/\.c/.c.c/' .clist` .shlist .clist .hlist .hsed

!NO!SUBS!
$eunicefix makedepend
chmod +x makedepend
case `pwd` in
*SH)
  $rm -f ../makedepend
  ln makedepend ../makedepend
```

```
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/makedepend.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Myinit.U,v 3.0 1993/08/18 12:05:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: Myinit.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: If you want to initialize any default values, copy this unit to your
?X: personal U directory and add the assignments to the end.  This file
?X: is included after variables are initialized but before any old
?X: config.sh file is read in and before any Configure switch processing.
?X:
?MAKE:Myinit
 libswanted: Init
?MAKE: -pick add $@ %<
?S:libswanted:
?S: This variable holds a list of all the libraries we want to
?S: search.  The order is chosen to pick up the c library
?S: ahead of ucb or bsd libraries for SVR4.
?S:.
?LINT:extern usevfork glibpth
?LINT:change usevfork glibpth
: List of libraries we want.
?X: Put crypt here, even though I should really fix d_crypt.U to look
?X: for it correctly, including possible shared library versions.
: If anyone needs extra -lxxx, put those in a hint file.
libswanted="cl pthread socket bind inet nsl ndbm gdbm dbm db malloc dl ld"
libswanted="$libswanted sun m crypt sec util c cposix posix ucb bsd BSD"
: We probably want to search /usr/shlib before most other libraries.
: This is only used by the lib/ExtUtils/MakeMaker.pm routine extliblist.
glibpth=`echo " $glibpth " | sed -e 's! /usr/shlib ! !'`
glibpth="/usr/shlib $glibpth"
```

```
: Do not use vfork unless overridden by a hint file.
usevfork=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Myinit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_poll.U 15 2006-08-30 18:21:51Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_poll.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:38:17  ram
?RCS: patch61: mention that <poll.h> can be included if HAS_POLL defined
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:26:31  ram
?RCS: patch45: created
?RCS:
?MAKE:d_poll: Inlibc
?MAKE: -pick add $@ %<
?S:d_poll:
?S: This variable conditionally defines the HAS_POLL symbol, which
?S: indicates to the C program that the poll() routine is available
?S: to poll active file descriptors.
?S:.
?C:HAS_POLL
 :
?C: This symbol, if defined, indicates that the poll routine is
?C: available to poll active file descriptors.  Please check I_POLL and
?C: I_SYS_POLL to know which header should be included as well.
?C:.
?H:#$d_poll HAS_POLL  /**/
?H:.
?LINT:set d_poll
: see if poll exists
set poll d_poll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_poll.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 2012 Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:ilp d_ilp32 d_ilp64 d_lp64 d_can64: Assert Myread Setvar \
 cat rm +cc +ccflags echo n c intsize longsize ptrsize
?MAKE: -pick add $@ %<
?S:ilp:
?S: This variable contains the largest amount of bits that the CPU supports,
?S: from the compiler's point of view.  Typically 32 or 64.
?S:.
?S:d_ilp32:
?S: This variable conditionally defines the CPU_IS_ILP32.
?S:.
?S:d_ilp64:
?S: This variable conditionally defines the CPU_IS_ILP64.
?S:.
?S:d_lp64:
?S: This variable conditionally defines the CPU_IS_LP64.
?S:.
?S:d_can64:
?S: This variable
 conditionally defines CAN_HANDLE_64BITS.
?S:.
?C:CPU_ILP_MAXBITS:
?C: This symbol contains the largest amount of bits that the CPU natively
?C: supports from the compiler's point of view.  Typically 32 or 64.
?C:.
?C:CPU_IS_ILP32:
?C: When defined, this indicates that the integer, long and pointer variables
?C: hold 32-bit values.
?C:.
?C:CPU_IS_ILP64:
?C: When defined, this indicates that the integer, long and pointer variables
?C: hold 64-bit values.
?C:.
?C:CPU_IS_LP64:
?C: When defined, this indicates that the long and pointer variables hold
?C: 64-bit values but integers are smaller (probably only 32-bit wide).
?C:.
?C:CAN_HANDLE_64BITS:
?C: When defined, this indicates that the compiler can handle 64-bit values
?C: despite the CPU having only 32-bit registers.  These are available using
```

```
?C: the "long long" C type.  It is only defined for ILP32 machines, since
?C: 64-bit support is naturally available on ILP64 and LP64 machines.
?C:.
?H:#define CPU_ILP_MAXBITS $ilp
?H:#$d_ilp32
 CPU_IS_ILP32 /**/
?H:#$d_ilp64 CPU_IS_ILP64 /**/
?H:#$d_lp64 CPU_IS_LP64  /**/
?H:#$d_can64 CAN_HANDLE_64BITS /**/
?H:.
?LINT: set d_ilp32 d_ilp64 d_lp64 d_can64
: check for architecture type
echo " "
$echo $n "Computing CPU architecture type...$c" >&4
ilp=`expr $longsize \* 8`
case "$ptrsize" in
8)
 val=$undef; set d_ilp32; eval $setvar
 case "$intsize" in
 8)
  echo " ILP64." >&4
  val=$define; set d_ilp64; eval $setvar
  val=$undef; set d_lp64; eval $setvar
  ;;
 *)
  echo " LP64." >&4
  val=$define; set d_lp64; eval $setvar
  val=$undef; set d_ilp64; eval $setvar
  ;;
 esac
 ;;
*)
 echo " ILP${ilp}." >&4
 case "$ilp" in
 32) val=$define;;
 *) val=$undef;;
 esac
 set d_ilp32; eval $setvar
 val=$undef; set d_ilp64; eval $setvar
 val=$undef; set d_lp64; eval $setvar
 ;;
esac

@if CAN_HANDLE_64BITS || d_can64
: see whether compiler supports 64-bit emulation
val=$undef
case "$ilp" in
64) val=$define;;
```

```
*)
 $cat >try.c <<EOCP
#include "static_assert.h"
long long foo;
int main()
{
 STATIC_ASSERT(8
 == sizeof(foo));
 return 0;
}
EOCP
 if $cc -c $ccflags try.c >/dev/null 2>&1; then
  echo " "
  echo "Your compiler also supports 64-bit emulation." >&4
  val=$define
 fi
 $rm -f try.*
 ;;
esac
set d_can64
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ilp.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_syssecrt: Inhdr
?MAKE: -pick add $@ %<
?S:i_syssecrt:
?S: This variable conditionally defines the I_SYS_SECURITY symbol,
?S: and indicates whether a C program should include <sys/security.h>.
?S:.
?C:I_SYS_SECURITY:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/security.h>.
?C:.
```

```
?H:#$i_syssecrt   I_SYS_SECURITY /**/
?H:.
?LINT:set i_syssecrt
: see if sys/security.h is available
set sys/security.h i_syssecrt
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/i_syssecrt.U
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```
?RCS: $Id: i_sysun.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysun.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/un.h> is available or not
?X:
?MAKE:i_sysun: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysun:
?S: This variable conditionally defines I_SYS_UN, which indicates
?S: to the C program that it should include <sys/un.h> to get UNIX
?S: domain socket definitions.
?S:.
?C:I_SYS_UN:
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <sys/un.h> to get UNIX domain socket definitions.
?C:.
?H:#$i_sysun I_SYS_UN  /**/
?H:.
?LINT:set i_sysun
: see if this is a sys/un.h system
set sys/un.h i_sysun
eval $inhdr
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysun.U
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```
?RCS: $Id: d_strxfrm_l.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_strxfrm_l.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:04  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strxfrm_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strxfrm_l:
?S: This variable conditionally defines HAS_STRXFRM_L if strxfrm_l() is
?S: available to transform strings.
?S:.
?C:HAS_STRXFRM_L:
?C: This symbol, if defined, indicates that the strxfrm_l() routine is
?C: available
 to transform strings.
?C:.
?H:#$d_strxfrm_l HAS_STRXFRM_L /**/
?H:.
?LINT:set d_strxfrm_l
: see if strxfrm_l exists
set strxfrm_l d_strxfrm_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strxfrm_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
```

```
?MAKE:d_fchdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchdir:
?S: This variable conditionally defines the HAS_FCHDIR symbol, which
?S: indicates to the C program that the fchdir() routine is available.
?S:.
?C:HAS_FCHDIR:
?C: This symbol, if defined, indicates that the fchdir routine is
?C: available to change directory using a file descriptor.
?C:.
?H:#$d_fchdir HAS_FCHDIR  /**/
?H:.
?LINT:set d_fchdir
: see if fchdir exists
set fchdir d_fchdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fchdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wcstombs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wcstombs.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wcstombs: Inlibc
?MAKE: -pick add $@ %<
?S:d_wcstombs:
?S: This variable conditionally defines the HAS_WCSTOMBS symbol, which
?S: indicates to the C program that the wcstombs() routine is available
?S: to convert wide character strings to multibyte strings.
?S:.
?C:HAS_WCSTOMBS:
?C: This symbol, if defined, indicates that the wcstombs
 routine is
?C: available to convert wide character strings to multibyte strings.
?C:.
?H:#$d_wcstombs HAS_WCSTOMBS /**/
```

```
?H:.
?LINT:set d_wcstombs
: see if wcstombs exists
set wcstombs d_wcstombs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wcstombs.U
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```
?RCS: $Id: d_setprior.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setprior.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setprior: Inlibc
?MAKE: -pick add $@ %<
?S:d_setprior:
?S: This variable conditionally defines HAS_SETPRIORITY if setpriority()
?S: is available to set a process's priority.
?S:.
?C:HAS_SETPRIORITY (SETPRIORITY):
?C: This symbol, if defined, indicates that the setpriority routine is
?C: available to set a process's priority.
?C:.
?H:#$d_setprior
 HAS_SETPRIORITY  /**/
?H:.
?LINT:set d_setprior
: see if setpriority exists
set setpriority d_setprior
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setprior.U
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```
?RCS: $Id: Setvar.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Setvar.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  15:58:28  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a variable that is intended to be eval'ed in
?X: order to define/undefine a symbol. A consistency check is made
?X: regarding any previous value and a warning is issued if there
?X: is any discrepancy.
?X:
?X:
 To use it, say:
?X: val=<value>
?X: set d_variable
?X: eval $setvar
?X:
?MAKE:Setvar: Whoa
?MAKE: -pick add $@ %<
?LINT:define setvar
?S:setvar:
?S: This shell variable is used internally by Configure to set a value
?S: to a given symbol that is defined or not. A typical use is:
?S: val=<value computed>
?S:  set d_variable
?S:  eval $setvar
?S: That will print a message in case the $val value is not the same
?S: as the previous value of $d_variable.
?S:.
?V:setvar:val
?T:var was td tu
: function used to set '$1' to '$val'
setvar='var=$1; eval "was=\$$1"; td=$define; tu=$undef;
case "$val$was" in
$define$undef) . ./whoa; eval "$var=\$td";;
$undef$define) . ./whoa; eval "$var=\$tu";;
*) eval "$var=$val";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Setvar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrnam_r.U,v 0RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrnam_r getgrnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrnam_r:
?S: This variable conditionally defines the HAS_GETGRNAM_R symbol,
?S: which indicates to the C program that the getgrnam_r()
?S: routine is available.
?S:.
?S:getgrnam_r_proto:
?S: This variable encodes the prototype of getgrnam_r.
?S: It is zero if d_getgrnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrnam_r
?S: is defined.
?S:.
?C:HAS_GETGRNAM_R:
?C: This symbol, if defined, indicates that the getgrnam_r routine
?C: is available to
 getgrnam re-entrantly.
?C:.
?C:GETGRNAM_R_PROTO:
?C: This symbol encodes the prototype of getgrnam_r.
?C: It is zero if d_getgrnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrnam_r
?C: is defined.
?C:.
?H:#$d_getgrnam_r HAS_GETGRNAM_R /**/
?H:#define GETGRNAM_R_PROTO $getgrnam_r_proto /**/
?H:.
?T:try hdrs d_getgrnam_r_proto
: see if getgrnam_r exists
set getgrnam_r d_getgrnam_r
eval $inlibc
case "$d_getgrnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
```

```
case "$d_getgrnam_r_proto:$usethreads" in
":define") d_getgrnam_r_proto=define
 set d_getgrnam_r_proto getgrnam_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_getgrnam_r_proto" in
define)
case "$getgrnam_r_proto" in
"|0) try='int getgrnam_r(const char*, struct group*, char*, size_t, struct group**);'
./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBWR ;;
esac
case "$getgrnam_r_proto" in
"|0) try='int getgrnam_r(const char*, struct group*, char*,
int, struct group**);'
./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBIR ;;
esac
case "$getgrnam_r_proto" in
"|0) try='struct group* getgrnam_r(const char*, char*, int);'
./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=S_CBI ;;
esac
case "$getgrnam_r_proto" in
"|0) try='int getgrnam_r(const char*, struct group*, char*, int);'
./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBI ;;
esac
case "$getgrnam_r_proto" in
"|0) try='struct group* getgrnam_r(const char*, struct group*, char*, int);'
./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=S_CSBI ;;
esac
case "$getgrnam_r_proto" in
"|0) d_getgrnam_r=undef
 getgrnam_r_proto=0
 echo "Disabling getgrnam_r, cannot determine prototype." >&4 ;;
* ) case "$getgrnam_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getgrnam_r_proto="REENTRANT_PROTO_$getgrnam_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getgrnam_r has no prototype, not using it."
>&4 ;;
 esac
 d_getgrnam_r=undef
 getgrnam_r_proto=0
 ;;
esac
```

```
 ;;
*) getgrnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrnam_r.U
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```
?RCS: $Id: d_msgget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgget.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgget: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgget:
?S: This variable conditionally defines the HAS_MSGGET symbol, which
?S: indicates to the C program that the msgget() routine is available.
?S:.
?C:HAS_MSGGET:
?C: This symbol, if defined, indicates that the msgget() routine is
?C: available to get a new message queue.
?C:.
?H:#$d_msgget
 HAS_MSGGET  /**/
?H:.
?LINT:set d_msgget
: see if msgget exists
set msgget d_msgget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: doublesize.U,v 3.0.1.1 1994/10/29 16:17:06 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
```

```
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: doublesize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:doublesize: cat rm_try Myread Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:doublesize:
?S: This variable contains the value of the DOUBLESIZE symbol, which
?S: indicates to the C program how many bytes there are in a double.
?S:.
?C:DOUBLESIZE:
?C: This
 symbol contains the size of a double, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define DOUBLESIZE $doublesize  /**/
?H:.
?F:!try
: check for length of double
echo " "
case "$doublesize" in
")
 echo "Checking to see how big your double precision numbers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
   printf("%d\n", (int)sizeof(double));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  doublesize=`$run ./try`
```

```
  echo "Your double is $doublesize bytes long."
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a double precision number (in bytes)?"
  . ./myread
  doublesize="$ans"
 fi
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/doublesize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: patchlevel.U,v 3.0.1.1 1997/02/28 16:18:41 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: patchlevel.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:18:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:patchlevel revision version subversion \
 perl_patchlevel version_patchlevel_string \
 api_revision api_version api_subversion api_versionstring: \
 package test rsrc echo awk osname
?MAKE: -pick
 add $@ %<
?S:revision:
?S: The value of revision comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "5".
?S: In patchlevel.h, this is referred to as "PERL_REVISION".
?S:.
?S:patchlevel:
?S: The patchlevel level of this package.
?S: The value of patchlevel comes from the patchlevel.h file.
```

```
?S: In a version number such as 5.6.1, this is the "6".
?S: In patchlevel.h, this is referred to as "PERL_VERSION".
?S:.
?S:subversion:
?S: The subversion level of this package.
?S: The value of subversion comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "1".
?S: In patchlevel.h, this is referred to as "PERL_SUBVERSION".
?S: This is unique to perl.
?S:.
?S:version:
?S: The full version number of this package, such as 5.6.1 (or 5_6_1).
?S: This combines revision, patchlevel, and subversion to get the
?S: full version number, including any possible subversions.
?S: This is suitable for use as a directory name, and hence is
?S: filesystem
 dependent.
?S:.
?S:api_revision:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_revision is the '5'.
?S: Prior to 5.5.640, the format was a floating point number,
?S: like 5.00563.
?S:
?S: perl.c:incpush() and lib/lib.pm will automatically search in
?S: $sitelib/.. for older directories back to the limit specified
?S: by these api_ variables.  This is only useful if you have a
?S: perl library directory tree structured like the default one.
?S: See INSTALL for how this works.  The versioned site_perl
?S: directory was introduced in 5.005, so that is the lowest
?S: possible value.  The version list appropriate for the current
?S: system is determined in inc_version_list.U.
?S:
?S: XXX To do:  Since compatibility can depend on compile time
?S: options (such as bincompat, longlong, etc.) it should
?S: (perhaps) be set by
 Configure, but currently it isn't.
?S: Currently, we read a hard-wired value from patchlevel.h.
?S: Perhaps what we ought to do is take the hard-wired value from
?S: patchlevel.h but then modify it if the current Configure
?S: options warrant.  patchlevel.h then would use an #ifdef guard.
?S:.
?S:api_version:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
```

```
?S: such as '5.6.1', api_version is the '6'.  See api_revision for
?S: full details.  As a special case, 5.5.0 is rendered in the
?S: old-style as 5.005.  (In the 5.005_0x maintenance series,
?S: this was the only versioned directory in $sitelib.)
?S:.
?S:api_subversion:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_subversion is the
 '1'.  See api_revision for
?S: full details.
?S:.
?S:api_versionstring:
?S: This variable combines api_revision, api_version, and
?S: api_subversion in a format such as 5.6.1 (or 5_6_1) suitable
?S: for use as a directory name.  This is filesystem dependent.
?S:.
?S:perl_patchlevel:
?S: This is the Perl patch level, a numeric change identifier,
?S: as defined by whichever source code maintenance system
?S: is used to maintain the patches; currently Perforce.
?S: It does not correlate with the Perl version numbers or
?S: the maintenance versus development dichotomy except
?S: by also being increasing.
?S:.
?S:version_patchlevel_string:
?S: This is a string combining version, subversion and
?S: perl_patchlevel (if perl_patchlevel is non-zero).
?S: It is typically something like
?S: 'version 7 subversion 1'  or
?S: 'version 7 subversion 1 patchlevel 11224'
?S: It is computed here to avoid duplication of code in myconfig.SH
?S: and lib/Config.pm.
?S:.
?LINT:extern LC_ALL
?LINT:extern LANGUAGE
:
 get the patchlevel
echo " "
echo "Getting the current patchlevel..." >&4
if $test -r $rsrc/patchlevel.h;then
 revision=`awk '/define[  ]+PERL_REVISION/ {print $3}' $rsrc/patchlevel.h`
 patchlevel=`awk '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
 subversion=`awk '/define[  ]+PERL_SUBVERSION/ {print $3}' $rsrc/patchlevel.h`
 api_revision=`awk '/define[  ]+PERL_API_REVISION/ {print $3}' $rsrc/patchlevel.h`
 api_version=`awk '/define[  ]+PERL_API_VERSION/ {print $3}' $rsrc/patchlevel.h`
 api_subversion=`awk '/define[  ]+PERL_API_SUBVERSION/ {print $3}' $rsrc/patchlevel.h`
```

```
 perl_patchlevel=`egrep ',"(MAINT|SMOKE)[0-9][0-9]*"' $rsrc/patchlevel.h|tail -1|sed 's/[^0-9]//g'`
else
 revision=0
 patchlevel=0
 subversion=0
 api_revision=0
 api_version=0
 api_subversion=0
 perl_patchlevel=0
 $echo "(You do not have patchlevel.h.  Eek.)"
fi
: Define a handy string here to avoid duplication in myconfig.SH and configpm.
version_patchlevel_string="version $patchlevel subversion $subversion"
case
 "$perl_patchlevel" in
0|'') ;;
*)  perl_patchlevel=`echo $perl_patchlevel | sed 's/.* //'`
   version_patchlevel_string="$version_patchlevel_string patch $perl_patchlevel"
   ;;
esac

$echo "(You have $package $version_patchlevel_string.)"

case "$osname" in
dos|vms)
 : XXX Should be a Configure test for double-dots in filenames.
 version=`echo $revision $patchlevel $subversion | \
   $awk '{ printf "%d_%d_%d", $1, $2, $3 }'`
 api_versionstring=`echo $api_revision $api_version $api_subversion | \
   $awk '{ printf "%d_%d_%d", $1, $2, $3 }'`
 ;;
*)
 version=`echo $revision $patchlevel $subversion | \
   $awk '{ printf "%d.%d.%d", $1, $2, $3 }'`
 api_versionstring=`echo $api_revision $api_version $api_subversion | \
   $awk '{ printf "%d.%d.%d", $1, $2, $3 }'`
 ;;
esac
: Special case the 5.005_xx maintenance series, which used 5.005
: without any subversion label as a subdirectory in $sitelib
if test "${api_revision}${api_version}${api_subversion}" = "550"; then
 api_versionstring='5.005'
fi

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/patchlevel.U
```

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systwgcf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systwgcf.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_systwgcf: Inhdr
?MAKE: -pick add $@ %<
?S:i_systwgcf:
?S: This variable conditionally defines the I_SYS_TWG_CF symbol, and
?S: indicates whether a C program should include sys/twg_config.h.
?S:.
?C:I_SYS_TWG_CF:
?C: This symbol, if defined, indicates to the C program that it should
?C: include sys/twg_config.h.
?C:.
?H:#$i_systwgcf
 I_SYS_TWG_CF /**/
?H:.
?LINT:set i_systwgcf
: see if this is a sys/twg_config.h system
set sys/twg_config.h i_systwgcf
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systwgcf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sockopt.U,v 3.0.1.1 1995/07/25 14:16:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: sockopt.U,v $
?RCS: Revision 3.0.1.1  1995/07/25  14:16:14  ram
?RCS: patch56: obsoleted KEEPALIVE in favor of CAN_KEEPALIVE for consistency
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepalive: cat rm contains +cc +ccflags +ldflags socketlib sockethdr \
 d_oldsock libs Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_keepalive:
?S: This symbol conditionally defines CAN_KEEPALIVE which
 indicates to the C
?S: program that setsockopt SO_KEEPALIVE will work properly.
?S:.
?C:CAN_KEEPALIVE (KEEPALIVE):
?C: This symbol if defined indicates to the C program that the SO_KEEPALIVE
?C: option of setsockopt() will work as advertised in the manual.
?C:.
?H:#$d_keepalive CAN_KEEPALIVE  /**/
?H:.
?F:!socket
?LINT:set d_keepalive
: see if setsockopt with SO_KEEPALIVE works as advertised
echo " "
case "$d_oldsock" in
"$undef")
 if $contains SO_KEEPALIVE `./findhdr sys/socket.h` \
  /dev/null >/dev/null 2>&1
 then
  echo "OK, let's see if SO_KEEPALIVE works as advertised..." >&4
  $cat > socket.c <<EOP
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netdb.h>

int main()
{
 int s = socket(AF_INET, SOCK_STREAM, 0);
 if (s == -1)
  exit(1);
 if (-1 == setsockopt(s, SOL_SOCKET, SO_KEEPALIVE, 0, 0))
  exit(2);
 exit(0);
}
EOP
  if $cc $ccflags $sockethdr $ldflags -o socket socket.c $libs \
```

```
   $socketlib >/dev/null 2>&1; then
   ./socket >/dev/null 2>&1
   case
 $? in
   0) echo "Yes, it does!"
    val="$define";;
   1) $cat <<EOM
(Something went wrong -- Assuming SO_KEEPALIVE is broken)
EOM
    val="$undef";;
   2) echo "No, it doesn't.  Don't trust your manuals!!"
    val="$undef";;
   esac
  else
   cat <<EOM
(I can't compile the test program -- Assuming SO_KEEPALIVE is broken)
EOM
   val="$undef"
  fi
 else
  echo "Strange!! You have BSD 4.2 sockets but no SO_KEEPALIVE option."
  val="$undef"
 fi;;
*) cat <<EOM
As you have an old socket interface, you can't have heard of SO_KEEPALIVE.
EOM
 val="$undef";;
esac
set d_keepalive
eval $setvar
$rm -f socket socket.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sockopt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: startperl.U,v 3.0 1993/08/18 12:09:50 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: startperl.U,v $
```

```
?RCS: Perl5 version -- I always have d_portable=define.
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startperl: cat Myread sharpbang initialinstalllocation test \
 versiononly version
?MAKE: -pick add $@ %<
?Y:TOP
?X: This is different from dist's standard startperl.U unit because
?X: we can't directly test #!/usr/local/bin/perl (or
 whatever) because
?X: we haven't built and installed perl yet.
?S:startperl:
?S: This variable contains the string to put on the front of a perl
?S: script to make sure (hopefully) that it runs with perl and not some
?S: shell. Of course, that leading line must be followed by the classical
?S: perl idiom:
?S:  eval 'exec perl -S $0 ${1+"$@"}'
?S:   if $running_under_some_shell;
?S: to guarantee perl startup should the shell execute the script. Note
?S: that this magic incantation is not understood by csh.
?S:.
?C:STARTPERL:
?C: This variable contains the string to put in front of a perl
?C: script to make sure (one hopes) that it runs with perl and not
?C: some shell.
?C:.
?H:#define STARTPERL "$startperl"  /**/
?H:.
: figure out how to guarantee perl startup
: XXX Note that this currently takes advantage of the bug that binexp ignores
:     the Configure -Dinstallprefix setting, which in turn means that under
:     relocatable @INC, initialinstalllocation is what binexp started as.
case
 "$startperl" in
")
 case "$sharpbang" in
 *!)
  $cat <<EOH

I can use the #! construct to start perl on your system. This will
make startup of perl scripts faster, but may cause problems if you
want to share those scripts and perl is not in a standard place
($initialinstalllocation/perl) on all your platforms. The alternative
is to force a shell by starting the script with a single ':' character.

EOH
```

```
  case "$versionony" in
  "$define")      dflt="$initialinstalllocation/perl$version";;
  *)              dflt="$initialinstalllocation/perl";;
  esac
  rp='What shall I put after the #! to start up perl ("none" to not use #!)?'
  . ./myread
  case "$ans" in
  none) startperl=": # use perl";;
  *) startperl="#!$ans"
   if $test 30 -lt `echo "$ans" | wc -c`; then
    $cat >&4 <<EOM

WARNING:  Some systems limit the #! command to 32 characters.
If you experience difficulty running Perl scripts with #!, try
installing Perl in a directory with a shorter pathname.

EOM
    fi ;;
  esac
  ;;
 *)
 startperl=": # use perl"
  ;;
 esac
 ;;
esac
echo "I'll use $startperl to start perl scripts."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/startperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lseektype.U,v 3.0.1.1 1994/08/29 16:30:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: lseektype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:30:10  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:08  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:lseektype lseeksize: Myread Typedef cat Compile rm_try longsize run
?MAKE: -pick add $@ %<
?S:lseektype:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare
 lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?S:lseeksize:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?C:Off_t (LSEEKTYPE):
?C: This symbol holds the type used to declare offsets in the kernel.
?C: It can be int, long, off_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?C:LSEEKSIZE:
?C: This symbol holds the number of bytes used by the Off_t.
?C:.
?C:Off_t_size:
?C: This symbol holds the number of bytes used by the Off_t.
?C:.
?H:#define Off_t $lseektype  /* <offset> type */
?H:#define LSEEKSIZE $lseeksize  /* <offset> size */
?H:#define Off_t_size $lseeksize /* <offset> size */
?H:.
?F:!try
?LINT:set lseektype
: see what type lseek is declared as in the kernel
rp="What is the type used for lseek's offset on this system?"
set off_t lseektype
 long stdio.h sys/types.h
eval $typedef_ask

echo " "
echo "Checking to see how big your file offsets are..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof($lseektype));
   return(0);
}
EOCP
```

```
set try
if eval $compile_ok; then
 lseeksize=`$run ./try`
 echo "Your file offsets are $lseeksize bytes long."
else
 dflt=$longsize
 echo " "
 echo "(I can't seem to compile the test program.  Guessing...)"
 rp="What is the size of your file offsets (in bytes)?"
 . ./myread
 lseeksize="$ans"
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/lseektype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setreuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setreuid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setreuid d_setresuid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setreuid:
?S: This variable conditionally defines HAS_SETREUID if setreuid() is
?S: available to change the real and effective uid of the current
?S: process.
?S:.
?S:d_setresuid:
?S: This variable conditionally defines HAS_SETREUID if setresuid() is
?S: available to change
 the real, effective and saved uid of the current
?S: process.
?S:.
?C:HAS_SETREUID (SETREUID):
?C: This symbol, if defined, indicates that the setreuid routine is
?C: available to change the real and effective uid of the current
```

```
?C: process.
?C:.
?C:HAS_SETRESUID (SETRESUID):
?C: This symbol, if defined, indicates that the setresuid routine is
?C: available to change the real, effective and saved uid of the current
?C: process.
?C:.
?H:#$d_setreuid HAS_SETREUID  /**/
?H:#$d_setresuid HAS_SETRESUID  /**/
?H:.
?LINT:set d_setreuid d_setresuid
: see if setreuid exists
set setreuid d_setreuid
eval $inlibc
set setresuid d_setresuid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setreuid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getspnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getspnam_r getspnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_shadow extern_C
?MAKE: -pick add $@ %<
?S:d_getspnam_r:
?S: This variable conditionally defines the HAS_GETSPNAM_R symbol,
?S: which indicates to the C program that the getspnam_r()
?S: routine is available.
?S:.
?S:getspnam_r_proto:
?S: This variable encodes the prototype of getspnam_r.
?S: It is zero if d_getspnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getspnam_r
?S: is defined.
?S:.
?C:HAS_GETSPNAM_R:
?C: This symbol, if defined, indicates that the getspnam_r routine
?C: is available
 to getspnam re-entrantly.
?C:.
```

```
?C:GETSPNAM_R_PROTO:
?C: This symbol encodes the prototype of getspnam_r.
?C: It is zero if d_getspnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getspnam_r
?C: is defined.
?C:.
?H:#$d_getspnam_r HAS_GETSPNAM_R /**/
?H:#define GETSPNAM_R_PROTO $getspnam_r_proto /**/
?H:.
?T:try hdrs d_getspnam_r_proto
: see if getspnam_r exists
set getspnam_r d_getspnam_r
eval $inlibc
case "$d_getspnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_shadow shadow.h"
 case "$d_getspnam_r_proto:$usethreads" in
 ":define") d_getspnam_r_proto=define
  set d_getspnam_r_proto getspnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getspnam_r_proto" in
 define)
 case "$getspnam_r_proto" in
 "|0) try='int getspnam_r(const char*, struct spwd*, char*, size_t, struct spwd**);'
 ./protochk "$extern_C $try" $hdrs && getspnam_r_proto=I_CSBWR ;;
 esac
 case "$getspnam_r_proto" in
 "|0) try='struct spwd* getspnam_r(const char*, struct
 spwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getspnam_r_proto=S_CSBI ;;
 esac
 case "$getspnam_r_proto" in
 "|0) d_getspnam_r=undef
  getspnam_r_proto=0
  echo "Disabling getspnam_r, cannot determine prototype." >&4 ;;
 * ) case "$getspnam_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getspnam_r_proto="REENTRANT_PROTO_$getspnam_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getspnam_r has no prototype, not using it." >&4 ;;
  esac
  d_getspnam_r=undef
```

```
  getspnam_r_proto=0
  ;;
 esac
 ;;
*) getspnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getspnam_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2010 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_prctl d_prctl_set_name: Inlibc cat Compile run rm_try
?MAKE: -pick add $@ %<
?S:d_prctl:
?S: This variable conditionally defines the HAS_PRCTL symbol, which
?S: indicates to the C program that the prctl() routine is available.
?S: Note that there are at least two prctl variants: Linux and Irix.
?S: While they are somewhat similar, they are incompatible.
?S:.
?S:d_prctl_set_name:
?S: This variable conditionally defines the HAS_PRCTL_SET_NAME symbol,
?S: which indicates to the C program that the prctl() routine supports
?S: the PR_SET_NAME option.
?S:.
?C:HAS_PRCTL:
?C: This symbol, if defined, indicates that the prctl routine is
?C: available to set process title.
?C: Note that there are at least two
 prctl variants: Linux and Irix.
?C: While they are somewhat similar, they are incompatible.
?C:.
?C:HAS_PRCTL_SET_NAME:
?C: This symbol, if defined, indicates that the prctl routine is
?C: available to set process title and supports PR_SET_NAME.
?C:.
?H:#$d_prctl HAS_PRCTL  /**/
?H:#$d_prctl_set_name HAS_PRCTL_SET_NAME  /**/
?H:.
?F:!try
?LINT:set d_prctl
```

```
: see if prctl exists
set prctl d_prctl
eval $inlibc

: see if prctl supports PR_SET_NAME
d_prctl_set_name=$undef
case $d_prctl in
   $define)
 $cat >try.c <<EOM
#ifdef __ANDROID__
#include <unistd.h>
#endif
#include <sys/prctl.h>

int main (int argc, char *argv[])
{
   return (prctl (PR_SET_NAME, "Test"));
   } /* main */
EOM
 set try
 if eval $compile_ok && $run ./try; then
     echo "Your prctl (PR_SET_NAME, ...) works"
     d_prctl_set_name=$define
     fi
 $rm_try
 ;;
   esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_prctl.U
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```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_keepsig.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:57:56  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:26:25  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
```

```
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:13:59  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:48:47  ram
?RCS: patch12: comment for SIGNALS_KEPT was the other way round
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:06:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepsig: cat Compile rm Guess contains echo n c Setvar run
?MAKE: -pick add $@ %<
?S:d_keepsig:
?S: This variable contains the eventual value of the SIGNALS_KEPT symbol,
?S: which indicates to the C program if signal handlers need not reinstated
?S: after receipt of a signal.
?S:.
?C:SIGNALS_KEPT (PERSISTENT_SIGNAL):
?C: This symbol is defined if signal handlers needn't be reinstated after
?C: receipt of a signal.
?C:.
?H:#$d_keepsig SIGNALS_KEPT /**/
?H:.
?F:!try !try.out
?LINT:set d_keepsig
: see if signals are kept
val="$undef";
echo " "
echo "Checking to see if signal handlers stick around..." >&4
$cat >try.c <<'EOCP'
foo() {}

int main()
{
 signal(2, foo);
 kill(getpid(), 2);
 kill(getpid(), 2);
 printf("abc\n");
}
EOCP
set try
if eval $compile; then
?X: On AIX a single ./try will not work (with ksh)
?X: Backquotes required on Linux and SGI (prevents "ambiguous output redirect")
?X:
 (reported by Xavier LeVourch <xavierl@eiffel.com>)
 echo `sh -c $run ./try >try.out 2>/dev/null` >/dev/null
```

```
 if $contains abc try.out >/dev/null 2>&1; then
  echo "Yes, they do."
  val="$define";
 else
  echo "No, they don't."
 fi
else
 $echo $n "(I can't seem to compile the test program. Assuming $c"
 if ./bsd; then
  echo "they do.)"
  val="$define"
 else
  echo "they don't.)"
 fi
fi
set d_keepsig
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_keepsig.U
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```
?RCS: $Id: bin.U,v 3.1 1999/07/09 18:20:13 doughera Exp doughera $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: bin.U,v $
?RCS: Revision 3.1  1999/07/09 18:20:13  doughera
?RCS: Updated for installprefix
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:32  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:32:40  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:05:28  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS:
```

```
 Revision 3.0.1.1  1993/09/13  15:56:51  ram
?RCS: patch10: made prompting more explicit (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bin binexp installbin userelocatableinc initialinstalllocation: \
 Myread Prefixit Getfile Setvar Setprefixvar Oldconfig \
 test prefix prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:bin=''
?S:bin:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly executable images for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S:.
?D:binexp=''
?S:binexp:
?S: This is the same as the bin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installbin=''
?S:installbin:
?S: This variable is the same as binexp unless AFS is running in which case
?S: the user is explicitly prompted for it. This variable
 should always
?S: be used in your makefiles for maximum portability.
?S:.
?D:userelocatableinc=''
?S:userelocatableinc:
?S: This variable is set to true to indicate that perl should relocate
?S: @INC entries at runtime based on the path to the perl binary.
?S: Any @INC paths starting "../" are relocated relative to the directory
?S: containing the perl binary, and a logical cleanup of the path is then
?S: made around the join point (removing "dir/../" pairs)
?S:.
?S:initialinstalllocation:
?S: When userelocatableinc is true, this variable holds the location
?S: that make install should copy the perl binary to, with all the
?S: run-time relocatable paths calculated from this at install time.
?S: When used, it is initialized to the original value of binexp, and
?S: then binexp is set to '../', as the other binaries are found
?S: relative to the perl binary.
?S:.
?C:BIN:
?C: This symbol holds the path of the bin directory where the package will
```

```
?C: be installed. Program must be
 prepared to deal with ~name substitution.
?C:.
?C:BIN_EXP:
?C: This symbol is the filename expanded version of the BIN symbol, for
?C: programs that do not want to deal with that at run-time.
?C:.
?C:PERL_RELOCATABLE_INC:
?C: This symbol, if defined, indicates that we'd like to relocate entries
?C: in @INC at run time based on the location of the perl binary.
?C:.
?H:#define BIN "$bin" /**/
?H:#define BIN_EXP "$binexp" /**/
?H:#define PERL_RELOCATABLE_INC "$userelocatableinc"  /**/
?H:.
?D:bin='/usr/local/bin'
?LINT:change prefix
?LINT:change prefixexp
?LINT:change prefixvar
?LINT:change installprefixexp
?LINT:set userelocatableinc
: determine where public executables go
echo " "
set dflt bin bin
eval $prefixit
fn=d~
rp='Pathname where the public executables will reside?'
. ./getfile
if $test "X$ansexp" != "X$binexp"; then
 installbin="
fi
prefixvar=bin
: XXX Bug? -- ignores Configure -Dinstallprefix setting.
: XXX If this is fixed, also fix the "start perl" hunk below, which relies on
:
    this via initialinstalllocation
. ./setprefixvar

case "$userelocatableinc" in
$define|true|[yY]*) dflt='y' ;;
*)   dflt='n' ;;
esac
cat <<EOM

Would you like to build Perl so that the installation is relocatable, so that
library paths in @INC are determined relative to the path of the perl binary?
This is not advised for system Perl installs, or if you need to run setid
scripts or scripts under taint mode.
```

```
If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Use relocatable @INC?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*) val="$undef"  ;;
esac
set userelocatableinc
eval $setvar

initialinstalllocation="$binexp"
: Default prefix is now "up one level from where the binaries are"
case "$userelocatableinc" in
$define|true|[yY]*)
   bin=".../"
   binexp=".../"
   prefix=".../.."
   prefixexp=".../.."
   installprefixexp=".../.."
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/bin.U
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```
?RCS: $Id: i_varhdr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_varhdr.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:54:42  ram
?RCS: patch61: varargs script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:21:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:26:05  ram
?RCS: patch27: this unit now supersedes old i_stdarg.U and i_varargs.U
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
```

```
?RCS:
?RCS: Revision 3.0
  1993/08/18  12:08:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdarg i_varargs i_varhdr: cat +cc +ccflags rm test Setvar \
 Findhdr startsh _o
?MAKE: -pick add $@ %<
?S:i_stdarg:
?S: This variable conditionally defines the I_STDARG symbol, which
?S: indicates to the C program that <stdarg.h> exists and should
?S: be included.
?S:.
?S:i_varargs:
?S: This variable conditionally defines I_VARARGS, which indicates
?S: to the C program that it should include <varargs.h>.
?S:.
?S:i_varhdr:
?S: Contains the name of the header to be included to get va_dcl definition.
?S: Typically one of varargs.h or stdarg.h.
?S:.
?C:I_STDARG:
?C: This symbol, if defined, indicates that <stdarg.h> exists and should
?C: be included.
?C:.
?C:I_VARARGS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <varargs.h>.
?C:.
?H:#$i_stdarg I_STDARG  /**/
?H:#$i_varargs I_VARARGS /**/
?H:.
?W:%<:va_dcl
?F:!varargs
?T:valstd
?LINT:set i_stdarg i_varargs
?X:
?X:
 Don't use setvar because the varargs test below might override these.
?X: Actually, the messages here are just informative. We don't wish to set
?X: i_varargs or i_stdarg to their final value before knowing which of the
?X: two we'll include.
?X:
: see if stdarg is available
echo " "
if $test `./findhdr stdarg.h`; then
 echo "<stdarg.h> found." >&4
 valstd="$define"
```

```
else
 echo "<stdarg.h> NOT found." >&4
 valstd="$undef"
fi

: see if varargs is available
echo " "
if $test `./findhdr varargs.h`; then
 echo "<varargs.h> found." >&4
else
 echo "<varargs.h> NOT found, but that's ok (I hope)." >&4
fi

?X:
?X: if you have stdarg.h, you need to support prototypes to actually use it;
?X: but if stdarg.h exists and the compiler doesn't support prototypes (for some
?X: bizarre reason), we'll fall back to varargs.h anyway so it's not so bad.
?X:
: set up the varargs testing programs
$cat > varargs.c <<EOP
#ifdef I_STDARG
#include <stdarg.h>
#endif
#ifdef I_VARARGS
#include <varargs.h>
#endif

#ifdef
 I_STDARG
int f(char *p, ...)
#else
int f(va_alist)
va_dcl
#endif
{
 va_list ap;
#ifndef I_STDARG
 char *p;
#endif
#ifdef I_STDARG
 va_start(ap,p);
#else
 va_start(ap);
 p = va_arg(ap, char *);
#endif
 va_end(ap);
 return 0;
}
```

```
EOP
$cat > varargs <<EOP
$startsh
if $cc -c $ccflags -D\$1 varargs.c >/dev/null 2>&1; then
 echo "true"
else
 echo "false"
fi
$rm -f varargs$_o
EOP
chmod +x varargs

: now check which varargs header should be included
echo " "
i_varhdr=''
val=''
case "$valstd" in
"$define")
 if `./varargs I_STDARG`; then
  val='stdarg.h'
 elif `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
*)
 if `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
esac
case "$val" in
'')
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to support stdarg or varargs!" >&4
 case "$knowitall" in
 '')
 echo "    I'm giving up; maybe you can try again with a different compiler?" >&4
  exit 1
  ;;
 esac
echo "I could not find the definition for va_dcl...
 You have problems..." >&4
 val="$undef"; set i_stdarg; eval $setvar
 val="$undef"; set i_varargs; eval $setvar
 ;;
*)
 set i_varhdr
```

```
 eval $setvar
 case "$i_varhdr" in
 stdarg.h)
  val="$define"; set i_stdarg; eval $setvar
  val="$undef"; set i_varargs; eval $setvar
  ;;
 varargs.h)
  val="$undef"; set i_stdarg; eval $setvar
  val="$define"; set i_varargs; eval $setvar
  ;;
 esac
 echo "We'll include <$i_varhdr> to get va_dcl definition." >&4;;
esac
$rm -f varargs*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_varhdr.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: archname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:24:32  ram
?RCS: patch61: changed the way the archname is mangled from uname
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:05:24  ram
?RCS: patch54: protect against spaces in "uname -m" output (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:14:21  ram
?RCS: patch51: created
?RCS:
?MAKE:archname myarchname: sed Loc Myread Oldconfig osname test rm
?MAKE: -pick add $@ %<
?S:archname:
?S: This variable is a short name to characterize the current
?S: architecture.
  It is used mainly to construct the default archlib.
?S:.
?S:myarchname:
?S: This variable holds the architecture name computed by Configure in
```

```
?S: a previous run. It is not intended to be perused by any user and
?S: should never be set in a hint file.
?S:.
?C:ARCHNAME:
?C: This symbol holds a string representing the architecture name.
?C: It may be used to construct an architecture-dependant pathname
?C: where library files may be held under a private library, for
?C: instance.
?C:.
?H:#define ARCHNAME "$archname"  /**/
?H:.
?T:xxx tarch
: determine the architecture name
echo " "
?X: We always recompute archname in case osname changes. However, we need
?X: to be careful since, as ADO rightfully pointed out, some systems pick
?X: silly architecture names (0001307135000-aix on AIX or 9000/715-ux under
?X: HP-UX). Therefore, we allow hint files to superseed our guess and ask
?X: the user for confirmation.
if xxx=`./loc arch blurfl $pth`; $test -f "$xxx"; then
 tarch=`arch`"-$osname"
elif
 xxx=`./loc uname blurfl $pth`; $test -f "$xxx" ; then
 if uname -m > tmparch 2>&1 ; then
  tarch=`$sed -e 's/ *$//' -e 's/ /_/g' \
   -e 's/$/"'-$osname/" tmparch`
 else
  tarch="$osname"
 fi
 $rm -f tmparch
else
 tarch="$osname"
fi
case "$myarchname" in
"|"$tarch") ;;
*)
 echo "(Your architecture name used to be $myarchname.)"
 archname=''
 ;;
esac
case "$archname" in
'') dflt="$tarch";;
*) dflt="$archname";;
esac
rp='What is your architecture name'
. ./myread
archname="$ans"
myarchname="$tarch"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/archname.U
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```
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?RCS:
?MAKE:d_qgcvt: Inlibc
?MAKE: -pick add $@ %<
?S:d_qgcvt:
?S: This variable conditionally defines the HAS_QGCVT symbol, which
?S: indicates to the C program that the qgcvt() routine is available.
?S:.
?C:HAS_QGCVT:
?C: This symbol, if defined, indicates that the qgcvt routine is
?C: available to convert long doubles ("quad doubles") to strings.
?C: This is a low-level routine hopefully faster than sprintf.
?C:.
?H:#$d_qgcvt HAS_QGCVT  /**/
?H:.
?LINT:set d_qgcvt
: see if qgcvt exists
set qgcvt d_qgcvt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_qgcvt.U
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```
?RCS: $Id: d_shmat.U,v 3.0.1.3 1995/07/25 14:04:23 ram Exp $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_shmat.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:04:23  ram
?RCS: patch56: use findhdr to find <sys/shm.h>, to get the right one (ADO)
?RCS:
```

```
?RCS: Revision 3.0.1.2  1994/05/13  15:18:56  ram
?RCS: patch27: added new symbol HAS_SHMAT_PROTOTYPE (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:54:18  ram
?RCS: patch23: new Shmat_t symbol to declare return type of shmat()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:d_shmat shmattype d_shmatprototype: Inlibc cat +cc +ccflags \
 rm cppstdin cppflags cppminus Findhdr Setvar contains
?MAKE: -pick add $@ %<
?S:d_shmat:
?S: This variable conditionally defines the HAS_SHMAT symbol, which
?S: indicates to the C program that the shmat() routine is available.
?S:.
?S:shmattype:
?S: This symbol contains the type of pointer returned by shmat().
?S: It can be 'void *' or 'char *'.
?S:.
?S:d_shmatprototype:
?S: This variable conditionally defines the HAS_SHMAT_PROTOTYPE
?S: symbol, which indicates that sys/shm.h has a prototype for
?S: shmat.
?S:.
?C:HAS_SHMAT:
?C: This symbol, if defined, indicates that the shmat() routine is
?C: available to attach a shared memory segment to the process space.
?C:.
?C:Shmat_t:
?C: This symbol holds the return type of the shmat() system call.
?C: Usually set to 'void *' or 'char *'.
?C:.
?C:HAS_SHMAT_PROTOTYPE:
?C: This symbol, if defined, indicates that the sys/shm.h includes
?C: a prototype for shmat().
  Otherwise, it is up to the program to
?C: guess one.  Shmat_t shmat(int, Shmat_t, int) is a good guess,
?C: but not always right so it should be emitted by the program only
?C: when HAS_SHMAT_PROTOTYPE is not defined to avoid conflicting defs.
?C:.
?H:#$d_shmat HAS_SHMAT  /**/
?H:#define Shmat_t $shmattype /**/
?H:#$d_shmatprototype HAS_SHMAT_PROTOTYPE /**/
?H:.
?LINT:set d_shmat d_shmatprototype
?T:xxx
```

```
: see if shmat exists
set shmat d_shmat
eval $inlibc
: see what shmat returns
case "$d_shmat" in
"$define")
 $cat >shmat.c <<'END'
#include <sys/shm.h>
void *shmat();
END
 if $cc $ccflags -c shmat.c >/dev/null 2>&1; then
  shmattype='void *'
 else
  shmattype='char *'
 fi
 echo "and it returns ($shmattype)." >&4
 : see if a prototype for shmat is available
 xxx=`./findhdr sys/shm.h`
 $cppstdin $cppflags $cppminus < $xxx > shmat.c 2>/dev/null
 if $contains 'shmat.*(' shmat.c >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 $rm -f shmat.[co]
 ;;
*)
 val="$undef"
 ;;
esac
set
 d_shmatprototype
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_shmat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_hasmntopt: Inlibc
?MAKE: -pick add $@ %<
?S:d_hasmntopt:
```

```
?S: This variable conditionally defines the HAS_HASMNTOPT symbol, which
?S: indicates to the C program that the hasmntopt() routine is available
?S: to query the mount options of file systems.
?S:.
?C:HAS_HASMNTOPT:
?C: This symbol, if defined, indicates that the hasmntopt routine is
?C: available to query the mount options of file systems.
?C:.
?H:#$d_hasmntopt HAS_HASMNTOPT  /**/
?H:.
?LINT:set d_hasmntopt
: see if hasmntopt exists
set hasmntopt d_hasmntopt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_hasmntopt.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_const.U,v $
?RCS: Revision 3.0.1.1  1993/11/10  17:33:41  ram
?RCS: patch14: stronger const check with added typedef for MIPS cc
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_const: cat rm cc ccflags Setvar
?MAKE: -pick add $@ %<
?S:d_const:
?S: This variable conditionally defines the HASCONST symbol, which
?S: indicates to the C program that this C compiler knows about the
?S: const type.
?S:.
?C:HASCONST ~ %<:
?C: This symbol,
 if defined, indicates that this C compiler knows about
?C: the const type. There is no need to actually test for that symbol
?C: within your programs. The mere use of the "const" keyword will
```

```
?C: trigger the necessary tests.
?C:.
?H:?%<:#$d_const HASCONST /**/
?H:?%<:#ifndef HASCONST
?H:?%<:#define const
?H:?%<:#endif
?H:.
?W:%<:const
?F:const.c const.o
?LINT:set d_const
?LINT:known const
: check for const keyword
echo " "
echo 'Checking to see if your C compiler knows about "const"...' >&4
$cat >const.c <<'EOCP'
?X: mmcg@bruce.cs.monash.edu.au reports that:
?X: The MIPS cc compiler (V2.10) on a dec 5000 running Ultrix 4.2A
?X: pretends to understand `const' but doesn't - it'll also fail to
?X: handle typedefs properly if they're declared const. To guard
?X: against this, boost up the test by using an explicit typedef...
typedef struct spug { int drokk; } spug;
int main()
{
 const char *foo;
 const spug y;
}
EOCP
if $cc -c $ccflags const.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup,
 it does."
else
 val="$undef"
 echo "Nope, it doesn't."
fi
set d_const
eval $setvar
$rm -f const.c const.o
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_const.U
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```
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```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fs_data_s: Hasstruct i_sysparam i_sysmount i_systypes Setvar
?MAKE: -pick add $@ %<
?S:d_fs_data_s:
?S: This variable conditionally defines the HAS_STRUCT_FS_DATA symbol,
?S: which indicates that the struct fs_data is supported.
?S:.
?C:HAS_STRUCT_FS_DATA:
?C: This symbol, if defined, indicates that the struct fs_data
?C: to do statfs() is supported.
?C:.
?H:#$d_fs_data_s HAS_STRUCT_FS_DATA /**/
?H:.
?LINT:set d_fs_data_s
: Check for fs_data_s
echo " "
echo "Checking to see if your system supports struct fs_data..." >&4
set d_fs_data_s fs_data $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h
eval $hasstruct
case "$d_fs_data_s" in
"$define")      echo "Yes, it does."   ;;
*)
            echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fs_data_s.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: longsize.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: longsize.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:09:35  ram
?RCS: patch61: code moved to intsize.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:24:31  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:07  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: 'longsize' is now defined within intsize.U
?X:
?LINT: empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/longsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pidcheck.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pidcheck.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:37:55  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_pidcheck: cat rm +cc _o
?MAKE: -pick add $@ %<
?S:d_pidcheck:
?S: This variable conditionally defines the variable PIDCHECK
?S: which indicates that kill(pid, 0) will check for an
 active pid.
?S:.
?C:PIDCHECK:
?C: This symbol, if defined, means that the kill(pid, 0) will
?C: check for an active pid (i.e. the kernel will run all the
?C: necessary pid checks, but no signal is actually sent).
?C:.
?H:#$d_pidcheck PIDCHECK  /**/
?H:.
?F:!try
: check for "kill(pid, 0)"
echo " "
case "$d_pidcheck" in
"$define")
```

```
echo "I already know your system supports kill(pid, 0) for pid checks." >&4
 ;;
"$undef")
echo "We both know your system does not support signal #0 for pid checks." >&4
 ;;
*)
 echo "Checking to see if kill(pid, 0) works..." >&4
 $cat >try.c <<'EOCP'
int main()
 {
 int pid, status0, status9;

 if ((pid = fork()) == 0)
  {
  sleep(30);
  exit(1);
  }
 status0 = kill(pid, 0);
 status9 = kill(pid, 9);
 exit(status0 == status9);
 }
EOCP
 if $cc -o try try.c >/dev/null 2>&1 ; then
  if ./try >/dev/null 2>&1 ; then
   echo "Yes, it does marvels."
   d_pidcheck="$undef"
  else
   d_pidcheck="$define"
   echo "No, it doesn't."
  fi
 else
  echo "(I was unable to compile
 the test program.)"
  echo "Your system does not appear to support kill(pid, 0)."
  d_pidcheck="$undef"
 fi
 $rm -f try.c try$_o try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pidcheck.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_attribut.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_attribut.U,v $
?RCS: Revision 3.0.1.3  1995/01/30  14:33:45  ram
?RCS: patch49: test C program now includes <stdio.h> (WED)
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:25:47  ram
?RCS: patch45: fixed typo in the d_attribut variable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:55  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_attribute_deprecated d_attribute_format
 d_attribute_malloc \
 d_attribute_nonnull d_attribute_noreturn d_attribute_pure \
 d_attribute_unused d_attribute_warn_unused_result \
 d_printf_format_null d_attribute_always_inline: \
    Myread Oldconfig cat cc ccflags rm Setvar compiler_warning \
        i_stdlib run i_inttypes
?MAKE: -pick add $@ %<
?S:d_attribute_format:
?S: This variable conditionally defines HASATTRIBUTE_FORMAT, which
?S: indicates the C compiler can check for printf-like formats.
?S:.
?S:d_attribute_deprecated:
?S: This variable conditionally defines HASATTRIBUTE_DEPRECATED, which
?S: indicates that GCC can handle the attribute for marking deprecated
?S: APIs
?S:.
?S:d_printf_format_null:
?S: This variable conditionally defines PRINTF_FORMAT_NULL_OK, which
?S: indicates the C compiler allows printf-like formats to be null.
?S:.
?S:d_attribute_malloc:
?S: This variable conditionally defines HASATTRIBUTE_MALLOC, which
?S: indicates the C compiler can understand functions as having
?S: malloc-like semantics.
?S:.
?S:d_attribute_nonnull:
?S: This
 variable conditionally defines HASATTRIBUTE_NONNULL, which
?S: indicates that the C compiler can know that certain arguments
```

```
?S: must not be NULL, and will check accordingly at compile time.
?S:.
?S:d_attribute_noreturn:
?S: This variable conditionally defines HASATTRIBUTE_NORETURN, which
?S: indicates that the C compiler can know that certain functions
?S: are guaranteed never to return.
?S:.
?S:d_attribute_pure:
?S: This variable conditionally defines HASATTRIBUTE_PURE, which
?S: indicates that the C compiler can know that certain functions
?S: are "pure" functions, meaning that they have no side effects, and
?S: only rely on function input and/or global data for their results.
?S:.
?S:d_attribute_unused:
?S: This variable conditionally defines HASATTRIBUTE_UNUSED, which
?S: indicates that the C compiler can know that certain variables
?S: and arguments may not always be used, and to not throw warnings
?S: if they don't get used.
?S:.
?S:d_attribute_warn_unused_result:
?S: This
 variable conditionally defines
?S: HASATTRIBUTE_WARN_UNUSED_RESULT, which indicates that the C
?S: compiler can know that certain functions have a return values
?S: that must not be ignored, such as malloc() or open().
?S:.
?S:d_attribute_always_inline:
?S: This variable conditionally defines HASATTRIBUTE_ALWAYS_INLINE,
?S: which indicates that the C compiler can know that certain
?S: functions should always be inlined.
?S:.
?C:HASATTRIBUTE_FORMAT ~ %< (GNUC_ATTRIBUTE_CHECK):
?C: Can we handle GCC attribute for checking printf-style formats
?C:.
?C:PRINTF_FORMAT_NULL_OK:
?C: Allows __printf__ format to be null when checking printf-style
?C:.
?C:HASATTRIBUTE_MALLOC:
?C: Can we handle GCC attribute for malloc-style functions.
?C:.
?C:HASATTRIBUTE_NONNULL:
?C: Can we handle GCC attribute for nonnull function parms.
?C:.
?C:HASATTRIBUTE_NORETURN:
?C: Can we handle GCC attribute for functions that do not return
?C:.
?C:HASATTRIBUTE_PURE:
?C: Can we handle
```

```
 GCC attribute for pure functions
?C:.
?C:HASATTRIBUTE_UNUSED:
?C: Can we handle GCC attribute for unused variables and arguments
?C:.
?C:HASATTRIBUTE_DEPRECATED:
?C: Can we handle GCC attribute for marking deprecated APIs
?C:.
?C:HASATTRIBUTE_WARN_UNUSED_RESULT ~ %< (HASATTRIBUTE):
?C: Can we handle GCC attribute for warning on unused results
?C:.
?C:HASATTRIBUTE_ALWAYS_INLINE:
?C: Can we handle GCC attribute for functions that should always be
?C: inlined.
?C:.
?H:?%<:#$d_attribute_deprecated HASATTRIBUTE_DEPRECATED /**/
?H:?%<:#$d_attribute_format HASATTRIBUTE_FORMAT /**/
?H:?%<:#$d_printf_format_null PRINTF_FORMAT_NULL_OK /**/
?H:?%<:#$d_attribute_noreturn HASATTRIBUTE_NORETURN /**/
?H:?%<:#$d_attribute_malloc HASATTRIBUTE_MALLOC /**/
?H:?%<:#$d_attribute_nonnull HASATTRIBUTE_NONNULL /**/
?H:?%<:#$d_attribute_pure HASATTRIBUTE_PURE /**/
?H:?%<:#$d_attribute_unused HASATTRIBUTE_UNUSED /**/
?H:?%<:#$d_attribute_warn_unused_result HASATTRIBUTE_WARN_UNUSED_RESULT /**/
?H:?%<:#$d_attribute_always_inline
 HASATTRIBUTE_ALWAYS_INLINE /**/
?H:.
?F:!attrib !attrib.out !attrib.c
?LINT:set d_attribute_deprecated
?LINT:set d_attribute_format
?LINT:set d_printf_format_null
?LINT:set d_attribute_malloc
?LINT:set d_attribute_nonnull
?LINT:set d_attribute_noreturn
?LINT:set d_attribute_pure
?LINT:set d_attribute_unused
?LINT:set d_attribute_warn_unused_result
?LINT:set d_attribute_always_inline
: Look for GCC-style attribute format
case "$d_attribute_format" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((format)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void my_special_printf(char* pat,...) __attribute__((__format__(__printf__,1,2)));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
```

```
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((format))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((format))."
  val="$define"
 fi
else
 echo "Your C compiler
 doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_format" ;;
esac
set d_attribute_format
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute format with null format allowed
case "$d_printf_format_null" in
") case "$d_attribute_format" in
   $define)
 echo " "
 echo "Checking whether your compiler allows __printf__ format to be null ..." >&4
$cat >attrib.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#ifndef INTPTR_MAX
#define intptr_t int
#endif
int null_printf (char* pat,...) __attribute__((__format__(__printf__,1,2)));
int null_printf (char* pat,...) { return (int)(intptr_t)pat; }
int main () { exit(null_printf(NULL)); }
EOCP
 if $cc $ccflags -o attrib attrib.c >attrib.out 2>&1 ; then
     : run the executable in case it produces a run-time warning
     if $run ./attrib >>attrib.out 2>&1; then
  if $compiler_warning attrib.out
 >/dev/null 2>&1; then
      echo "Your C compiler doesn't allow __printf__ format to be null."
```

```
      val="$undef"
  else
      echo "Your C compiler allows __printf__ format to be null."
      val="$define"
  fi
     else
     echo "Your C compiler executable failed with __printf__ format null."
     val="$undef"
 fi
   else
 echo "Your C compiler fails with __printf__ format null."
 val="$undef"
   fi
   ;;
   *)  val="$undef" ;;
   esac
;;
*)  val="$d_printf_format_null" ;;
esac
set d_printf_format_null
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute malloc
case "$d_attribute_malloc" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((malloc)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
char *go_get_some_memory( int how_many_bytes ) __attribute__((malloc));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((malloc))."
  val="$undef"
 else
  echo
 "Your C compiler supports __attribute__((malloc))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_malloc" ;;
esac
```

```
set d_attribute_malloc
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute nonnull
case "$d_attribute_nonnull" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((nonnull(1))) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void do_something (char *some_pointer,...) __attribute__((nonnull(1)));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((nonnull))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((nonnull))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_nonnull" ;;
esac
set d_attribute_nonnull
eval
 $setvar
$rm -f attrib*

: Look for GCC-style attribute noreturn
case "$d_attribute_noreturn" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((noreturn)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void fall_over_dead( void ) __attribute__((noreturn));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((noreturn))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((noreturn))."
```

```
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_noreturn" ;;
esac
set d_attribute_noreturn
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute pure
case "$d_attribute_pure" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((pure)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int square( int
 n ) __attribute__((pure));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((pure))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((pure))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_pure" ;;
esac
set d_attribute_pure
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute unused
case "$d_attribute_unused" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((unused)) ..." >&4
$cat >attrib.c <<'EOCP'
```

```
#include <stdio.h>
int do_something( int dummy __attribute__((unused)), int n );
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((unused))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((unused))."
  val="$define"
 fi
else
 echo
 "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_unused" ;;
esac
set d_attribute_unused
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute deprecated
case "$d_attribute_deprecated" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((deprecated)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int I_am_deprecated(void) __attribute__((deprecated));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((deprecated))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((deprecated))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_deprecated" ;;
esac
set d_attribute_deprecated
```

```
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute
 warn_unused_result
case "$d_attribute_warn_unused_result" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((warn_unused_result)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int I_will_not_be_ignored(void) __attribute__((warn_unused_result));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((warn_unused_result))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((warn_unused_result))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_warn_unused_result" ;;
esac
set d_attribute_warn_unused_result
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute always_inline
case "$d_attribute_always_inline" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((always_inline)) ..." >&4
$cat >attrib.c <<'EOCP'
#include
 <stdio.h>
static __inline__ __attribute__((always_inline)) int I_will_always_be_inlined(void);
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((always_inline))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((always_inline))."
```

```
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_always_inline" ;;
esac
set d_attribute_always_inline
eval $setvar
$rm -f attrib*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_attribut.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_crypt_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_crypt_r crypt_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_crypt extern_C
?MAKE: -pick add $@ %<
?S:d_crypt_r:
?S: This variable conditionally defines the HAS_CRYPT_R symbol,
?S: which indicates to the C program that the crypt_r()
?S: routine is available.
?S:.
?S:crypt_r_proto:
?S: This variable encodes the prototype of crypt_r.
?S: It is zero if d_crypt_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_crypt_r
?S: is defined.
?S:.
?C:HAS_CRYPT_R:
?C: This symbol, if defined, indicates that the crypt_r routine
?C: is available to crypt re-entrantly.
?C:.
?C:CRYPT_R_PROTO:
?C: This
 symbol encodes the prototype of crypt_r.
?C: It is zero if d_crypt_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_crypt_r
```

```
?C: is defined.
?C:.
?H:#$d_crypt_r HAS_CRYPT_R /**/
?H:#define CRYPT_R_PROTO $crypt_r_proto /**/
?H:.
?T:try hdrs d_crypt_r_proto
: see if crypt_r exists
set crypt_r d_crypt_r
eval $inlibc
case "$d_crypt_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_crypt crypt.h"
 case "$d_crypt_r_proto:$usethreads" in
 ":define") d_crypt_r_proto=define
  set d_crypt_r_proto crypt_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_crypt_r_proto" in
 define)
 case "$crypt_r_proto" in
 "|0) try='char* crypt_r(const char*, const char*, struct crypt_data*);'
 ./protochk "$extern_C $try" $hdrs && crypt_r_proto=B_CCS ;;
 esac
 case "$crypt_r_proto" in
 "|0) try='char* crypt_r(const char*, const char*, CRYPTD*);'
 ./protochk "$extern_C $try" $hdrs && crypt_r_proto=B_CCD ;;
 esac
 case "$crypt_r_proto" in
 "|0) d_crypt_r=undef
  crypt_r_proto=0
  echo
 "Disabling crypt_r, cannot determine prototype." >&4 ;;
 * ) case "$crypt_r_proto" in
  REENTRANT_PROTO*) ;;
  *) crypt_r_proto="REENTRANT_PROTO_$crypt_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "crypt_r has no prototype, not using it." >&4 ;;
  esac
  d_crypt_r=undef
  crypt_r_proto=0
  ;;
 esac
 ;;
```

```
*) crypt_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_crypt_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: prefix.U,v $
?RCS: Revision 3.0.1.2  1995/01/30  14:44:05  ram
?RCS: patch49: new prefixexp variable holding a fully expanded prefix
?RCS: patch49: save off previous prefix value in oldprefix if changed (WED)
?RCS: patch49: added the INSTALLPREFIX define for C programs to use (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:31:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:prefix prefixexp +oldprefix: Getfile Loc Oldconfig
 cat package
?MAKE: -pick add $@ %<
?S:prefix:
?S: This variable holds the name of the directory below which the
?S: user will install the package.  Usually, this is /usr/local, and
?S: executables go in /usr/local/bin, library stuff in /usr/local/lib,
?S: man pages in /usr/local/man, etc.  It is only used to set defaults
?S: for things in bin.U, mansrc.U, privlib.U, or scriptdir.U.
?S:.
?S:prefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install the package.  Derived from prefix.
?S:.
?S:oldprefix:
?S: This variable is set non-null if the prefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
?C:INSTALLPREFIX:
```

```
?C: This symbol contains the name of the install prefix for this package.
?C:.
?H:#define INSTALLPREFIX "$prefix"  /**/
?H:.
: determine root of directory hierarchy where package will be installed.
case "$prefix" in
")
 dflt=`./loc . /usr/local /usr/local /local /opt
 /usr`
 ;;
*)
 dflt="$prefix"
 ;;
esac
$cat <<EOM

By default, $package will be installed in $dflt/bin, manual
pages under $dflt/man, etc..., i.e. with $dflt as prefix for
all installation directories. Typically set to /usr/local, but you
may choose /usr if you wish to install $package among your system
binaries. If you wish to have binaries under /bin but manual pages
under /usr/local/man, that's ok: you will be prompted separately
for each of the installation directories, the prefix being only used
to set the defaults.

EOM
fn=d~
rp='Installation prefix to use?'
. ./getfile
oldprefix=''
case "$prefix" in
") ;;
*)
 case "$ans" in
 "$prefix") ;;
 *) oldprefix="$prefix";;
 esac
 ;;
esac
prefix="$ans"
prefixexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_charsprf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_charsprf.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_charsprf: cat rm +cc Setvar
?MAKE: -pick add $@ %<
?S:d_charsprf:
?S: This variable conditionally defines CHARSPRINTF if this system
?S: declares "char *sprintf()" in stdio.h.  The trend seems to be to
?S: declare it as "int sprintf()".
?S:.
?C:CHARSPRINTF:
?C: This symbol is defined if this system declares "char *sprintf()" in
?C: stdio.h.
  The trend seems to be to declare it as "int sprintf()".  It
?C: is up to the package author to declare sprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_charsprf CHARSPRINTF  /**/
?H:.
?F:!ucbsprf.c !ucbsprf
?LINT:set d_charsprf
: see if sprintf is declared as int or pointer to char
echo " "
$cat >ucbsprf.c <<'EOF'
int main()
{
 int sprintf();
 char buf[10];
 exit((unsigned long)sprintf(buf,"%s","foo") > 10L);
}
EOF
if $cc -o ucbsprf ucbsprf.c >/dev/null 2>&1 && ./ucbsprf; then
 echo "Your sprintf() returns (int)." >&4
 val="$undef"
else
 echo "Your sprintf() returns (char*)." >&4
 val="$define"
fi
set d_charsprf
```

```
eval $setvar
$rm -f ucbsprf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_charsprf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nextafter: Inlibc
?MAKE: -pick add $@ %<
?S:d_nextafter:
?S: This variable conditionally defines HAS_NEXTAFTER if nextafter()
?S: is available to return the next machine representable double from
?S: x in direction y.
?S:.
?C:HAS_NEXTAFTER:
?C: This symbol, if defined, indicates that the nextafter routine is
?C: available to return the next machine representable double from
?C: x in direction y.
?C:.
?H:#$d_nextafter HAS_NEXTAFTER  /**/
?H:.
?LINT:set d_nextafter
: see if nextafter exists
set nextafter d_nextafter
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nextafter.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgsnd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgsnd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgsnd: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_msgsnd:
?S: This variable conditionally defines the HAS_MSGSND symbol, which
?S: indicates to the C program that the msgsnd() routine is available.
?S:.
?C:HAS_MSGSND:
?C: This symbol, if defined, indicates that the msgsnd() routine is
?C: available to send a message into the message queue.
?C:.
?H:#$d_msgsnd
 HAS_MSGSND  /**/
?H:.
?LINT:set d_msgsnd
: see if msgsnd exists
set msgsnd d_msgsnd
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgsnd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017-2018, H.Merijn Brand
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_accept4: Inlibc
?MAKE: -pick add $@ %<
?S:d_accept4:
?S: This variable conditionally defines HAS_ACCEPT4 if accept4() is
?S: available to accept socket connections.
?S:.
?C:HAS_ACCEPT4:
?C: This symbol, if defined, indicates that the accept4 routine is
?C: available to accept socket connections.
?C:.
?H:#$d_accept4 HAS_ACCEPT4 /**/
?H:.
?LINT:set d_accept4
: see if accept4 exists
set accept4 d_accept4
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_accept4.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:usevendorprefix vendorprefix vendorprefixexp +oldvendorprefix: \
 Getfile Loc Oldconfig cat prefix Myread
?MAKE: -pick add $@ %<
?S:usevendorprefix:
?S: This variable tells whether the vendorprefix
?S: and consequently other vendor* paths are in use.
?S:.
?S:vendorprefix:
?S: This variable holds the full absolute path of the directory below
?S: which
 the vendor will install add-on packages.
?S: See INSTALL for usage and examples.
?S:.
?S:vendorprefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the vendor will install add-on packages.  Derived from vendorprefix.
?S:.
?S:oldvendorprefix:
?S: This variable is set non-null if the vendorprefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
: Set the vendorprefix variables
$cat <<EOM

The installation process will also create a directory for
vendor-supplied add-ons.  Vendors who supply perl with their system
may find it convenient to place all vendor-supplied files in this
directory rather than in the main distribution directory.  This will
ease upgrades between binary-compatible maintenance versions of perl.

Of course you may also use these directories in whatever way you see
fit.  For example, you might use them to access modules shared over a
```

```
company-wide network.

The default answer should be
 fine for most people.
This causes further questions about vendor add-ons to be skipped
and no vendor-specific directories will be configured for perl.

EOM
rp='Do you want to configure vendor-specific add-on directories?'
case "$usevendorprefix" in
define|true|[yY]*) dflt=y ;;
*) : User may have set vendorprefix directly on Configure command line.
 case "$vendorprefix" in
 "|' ') dflt=n ;;
 *) dflt=y ;;
 esac
 ;;
esac
. ./myread
case "$ans" in
[yY]*) fn=d~+
 rp='Installation prefix to use for vendor-supplied add-ons?'
 case "$vendorprefix" in
 ") dflt="$prefix" ;;
 *)  dflt=$vendorprefix ;;
 esac
 . ./getfile
 : XXX Prefixit unit does not yet support siteprefix and vendorprefix
 oldvendorprefix="
 case "$vendorprefix" in
 ") ;;
 *) case "$ans" in
  "$prefix") ;;
  *) oldvendorprefix="$prefix";;
  esac
  ;;
 esac
 usevendorprefix="$define"
 vendorprefix="$ans"
 vendorprefixexp="$ansexp"
 ;;
*) usevendorprefix="$undef"
 vendorprefix="
 vendorprefixexp="
 ;;
esac

Found in path(s):
```

*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorprefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sbrk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sbrk.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:31  ram
?RCS: patch16: created
?RCS:
?MAKE:d_sbrk: Inlibc
?MAKE: -pick add $@ %<
?S:d_sbrk:
?S: This variable conditionally defines HAS_SBRK if sbrk() is
?S: available to add more core to the process.
?S:.
?C:HAS_SBRK:
?C: This symbol, if defined, indicates that the sbrk system call is
?C: available to add/relase core. Always true on Unix.
?C:.
?H:#$d_sbrk HAS_SBRK /**/
?H:.
?LINT:set d_sbrk
: see
 if sbrk exists
set sbrk d_sbrk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sbrk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vaproto.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: vaproto.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:17:16  ram
?RCS: patch16: definition of _V now appears only when needed
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:vaproto: prototype i_stdarg Setvar
?MAKE: -pick add $@ %<
?S:vaproto:
?S: This variable conditionally defines CAN_VAPROTO on systems supporting
?S: prototype
 declaration of functions with a variable number of
?S: arguments. See also prototype.
?S:.
?C:CAN_VAPROTO ~ %<:
?C: This variable is defined on systems supporting prototype declaration
?C: of functions with a variable number of arguments.
?C:.
?C:_V:
?C: This macro is used to declare function parameters in prototypes for
?C: functions with a variable number of parameters. Use double parentheses.
?C: For example:
?C:
?C:  int printf _V((char *fmt, ...));
?C:
?C: Remember to use the plain simple _() macro when declaring a function
?C: with no variable number of arguments, since it might be possible to
?C: have a non-effect _V() macro and still get prototypes via _().
?C:.
?H:?%<:#$vaproto CAN_VAPROTO /**/
?H:?_V:#ifdef CAN_VAPROTO
?H:?_V:#define _V(args) args
?H:?_V:#else
?H:?_V:#define _V(args) ()
?H:?_V:#endif
?H:.
?LINT:set vaproto
: see if prototypes support variable argument declarations
echo " "
case "$prototype$i_stdarg" in
$define$define)
 echo "It appears we'll be able
```

```
 to prototype varargs functions." >&4
 val="$define"
 ;;
*)
 echo "Too bad... We won't be using prototyped varargs functions..." >&4
 val="$undef"
 ;;
esac
set vaproto
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/vaproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Findhdr.U,v 3.0.1.2 1994/10/29 15:53:08 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Thomas Neumann <tom@smart.bo.open.de>
?RCS:
?RCS: $Log: Findhdr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:53:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:56  ram
?RCS: patch23: cppminus must be after other cppflags, not before
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a findhdr script which
 is used to locate the header
?X: files in $usrinc or other stranger places using cpp capabilities. The
?X: script is given an include file base name, like 'stdio.h' or 'sys/file.h'
?X: and it returns the full path of the include file and a zero status or an
?X: empty string with an error status if the file could not be located.
?X:
?MAKE:Findhdr: grep test tr rm incpth awk cat startsh \
 cppstdin cppminus +cppflags osname
?MAKE: -pick add $@ %<
```

```
?LINT:extern cppfilter
?LINT:define fieldn
?S:fieldn:
?S: This variable is used internally by Configure. It contains the position
?S: of the included file name in cpp output. That is to say, when cpp
?S: pre-processes a #include <file> line, it replaces it by a # line which
?S: contains the original position in the input file and the full name of
?S: included file, between "quotes".
?S:.
?V:fieldn
?F:./findhdr !fieldn
?T:cline pos wanted name awkprg usrincdir status testaccess
: determine filename position in cpp output
echo " "
echo "Computing
 filename position in cpp output for #include directives..." >&4
case "$osname" in
amigaos) fieldn=3 ;;  # Workaround for a bug in abc (pdksh).
esac
case "$fieldn" in
")
case "$osname" in
vos) testaccess=-e ;;
*)   testaccess=-r ;;
esac
echo '#include <stdio.h>' > foo.c
$cat >fieldn <<EOF
$startsh
$cppstdin $cppflags $cppminus <foo.c 2>/dev/null | \
$grep '^[  ]*#.*stdio\.h' | \
while read cline; do
 pos=1
 set \$cline
 while $test \$# -gt 0; do
  if $test $testaccess \`echo \$1 | $tr -d ""\`; then
   echo "\$pos"
   exit 0
  fi
  shift
  pos=\`expr \$pos + 1\`
 done
done
EOF
chmod +x fieldn
fieldn=`./fieldn`
$rm -f foo.c fieldn
;;
esac
```

```
case $fieldn in
") pos='???';;
1) pos=first;;
2) pos=second;;
3) pos=third;;
*) pos="${fieldn}th";;
esac
echo "Your cpp writes the filename in the $pos field of the line."

?X: To locate a header file, we cannot simply check for $usrinc/file.h, since
?X: some machine have the headers in weird places and our only hope is that
?X: the C pre-processor
 will know how to find those headers. Thank you NexT!
: locate header file
$cat >findhdr <<EOF
$startsh
wanted=\$1
name=''
for usrincdir in $incpth
do
 if test -f \$usrincdir/\$wanted; then
  echo "\$usrincdir/\$wanted"
  exit 0
 fi
done
awkprg='{ print \$$fieldn }'
echo "#include <\$wanted>" > foo\$\$.c
$cppstdin $cppminus $cppflags < foo\$\$.c 2>/dev/null | \
$cppfilter $grep "^[  ]*#.*\$wanted" | \
while read cline; do
 name=\`echo \$cline | $awk "\$awkprg" | $tr -d '"'\`
 case "\$name" in
 *[/\\\]\$wanted) echo "\$name"; exit 1;;
 *[\\\/]\$wanted) echo "\$name"; exit 1;;
 *) exit 2;;
 esac;
done;
#
# status = 0: grep returned 0 lines, case statement not executed
# status = 1: headerfile found
# status = 2: while loop executed, no headerfile found
#
status=\$?
$rm -f foo\$\$.c;
if test \$status -eq 1; then
 exit 0;
fi
exit 1
```

```
EOF
chmod +x findhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Findhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ualarm: Inlibc
?MAKE: -pick add $@ %<
?S:d_ualarm:
?S: This variable conditionally defines the HAS_UALARM symbol, which
?S: indicates to the C program that the ualarm() routine is available.
?S:.
?C:HAS_UALARM:
?C: This symbol, if defined, indicates that the ualarm routine is
?C: available to do alarms with microsecond granularity.
?C:.
?H:#$d_ualarm HAS_UALARM  /**/
?H:.
?LINT:set d_ualarm
: see if ualarm exists
set ualarm d_ualarm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ualarm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_vfork.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_vfork.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  15:05:44  ram
?RCS: patch23: avoid inclusion of <vfork.h> if no vfork() used (ADO)
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_vfork: Inhdr d_vfork
?MAKE: -pick add $@ %<
?S:i_vfork:
?S: This variable conditionally defines the I_VFORK symbol, and indicates
?S: whether a C program should include vfork.h.
?S:.
?C:I_VFORK:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include vfork.h.
?C:.
?H:#$i_vfork I_VFORK /**/
?H:.
: see if this is a vfork system
case "$d_vfork" in
"$define")
 set vfork.h i_vfork
 eval $inhdr
 ;;
*)
 i_vfork="$undef"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_vfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Inlibc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Inlibc.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  15:55:08  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:03  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?X:
?X: This unit checks for the definition of a given function.
?X:
?X: To use it, say:
?X: set function d_func
?X: eval $inlibc
?X:
?MAKE:Inlibc: Csym Whoa Oldconfig
?MAKE: -pick add $@ %<
?LINT:define inlibc
?V:inlibc
?S:inlibc:
?S: This
 shell variable is used internally by Configure to check
?S: wether a given function is defined or not. A typical use is:
?S:  set function d_func
?S:  eval $inlibc
?S: That will print a message, saying wether function was found or
?S: not and set d_func accordingly.
?S:.
?T:was tx sym tres td tu var
: define an is-in-libc? function
inlibc='echo " "; td=$define; tu=$undef;
sym=$1; var=$2; eval "was=\$$2";
tx=yes;
case "$reuseval$was" in
true) ;;
true*) tx=no;;
esac;
case "$tx" in
yes)
 set $sym tres -f;
 eval $csym;
 case "$tres" in
 true)
  echo "$sym() found." >&4;
  case "$was" in $undef) . ./whoa; esac; eval "$var=\$td";;
 *)
  echo "$sym() NOT found." >&4;
  case "$was" in $define) . ./whoa; esac; eval "$var=\$tu";;
 esac;;
*)
 case "$was" in
 $define) echo "$sym() found." >&4;;
 *) echo "$sym() NOT found." >&4;;
 esac;;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Inlibc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
?RCS: Copyright (c) 1996, Sven Verdoolaege
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_gnulibc gnulibc_version: Myread Oldconfig Setvar rm_try \
 cat Compile run
?MAKE: -pick add $@ %<
?S:d_gnulibc:
?S: Defined if we're dealing with the GNU C Library.
?S:.
?S:gnulibc_version:
?S: This variable contains the version number of the GNU C library.
?S: It is usually something like '2.2.5'.  It is a plain '' if this
?S: is not the GNU C library, or if the version is unknown.
?S:.
?C:HAS_GNULIBC ~ %<:
?C: This
 symbol, if defined, indicates to the C program that
?C: the GNU C library is being used.  A better check is to use
?C: the __GLIBC__ and __GLIBC_MINOR__ symbols supplied with glibc.
?C:.
?H:?%<:#$d_gnulibc HAS_GNULIBC   /**/
?H:?%<:#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)
?H:?%<:#define _GNU_SOURCE
?H:?%<:#endif
?H:.
?F:!glibc.ver !try.c !try
?LINT: set d_gnulibc
?LINT: usefile try.c
?LINT: known _GNU_SOURCE
?X: gnulibc can be executed by calling __libc_main().
?X: Ulrich Drepper doesn't think any other libc does that,
?X: but we check if it says 'GNU C Library' to be sure.
?X:
?X: Alas, as of 3/1998 glibc 2.0.7 reportedly isn't going to
```

```
?X: have __libc_main() anymore. :-(.  Fortunately, all released
?X: versions of glibc 2.x.x _do_ have CPP variables.  For 2.0.6,
?X: they are:
?X: #define __GLIBC__  2
?X: #define__GLIBC_MINOR__ 0.
?X: (The '6' isn't available :-(.
?X: glibc2.1 will also have
?X:  extern const char * __gnu_get_libc_release(void);
?X:  extern const char *
 __gnu_get_libc_version(void);
?X: functions.   --thanks to Andreas Jaeger.   --AD  6/1998.
?X: Although the exact format isn't documented, __gnu_get_libc_version()
?X: returns a simple string '2.1.3' in glibc 2.1.3.
?X:
: determine whether we are using a GNU C library
echo " "
echo "Checking for GNU C Library..." >&4
cat >try.c <<'EOCP'
/* Find out version of GNU C library.  __GLIBC__ and __GLIBC_MINOR__
  alone are insufficient to distinguish different versions, such as
  2.0.6 and 2.0.7.  The function gnu_get_libc_version() appeared in
  libc version 2.1.0.      A. Dougherty,  June 3, 2002.
*/
#include <stdio.h>
int main(void)
{
#ifdef __GLIBC__
#   ifdef __GLIBC_MINOR__
#       if __GLIBC__ >= 2 && __GLIBC_MINOR__ >= 1
#           include <gnu/libc-version.h>
     printf("%s\n",  gnu_get_libc_version());
#       else
     printf("%d.%d\n",  __GLIBC__, __GLIBC_MINOR__);
#       endif
#   else
 printf("%d\n",  __GLIBC__);
#   endif
   return 0;
#else
   return 1;
#endif
}
EOCP
set
 try
if eval $compile_ok && $run ./try > glibc.ver; then
 val="$define"
 gnulibc_version=`$cat glibc.ver`
```

```
 echo "You are using the GNU C Library version $gnulibc_version"
else
 val="$undef"
 gnulibc_version=''
 echo "You are not using the GNU C Library"
fi
$rm_try glibc.ver
set d_gnulibc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gnulibc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getopt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getopt.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getopt: Inlibc
?MAKE: -pick add $@ %<
?S:d_getopt:
?S: This variable conditionally defines the HAS_GETOPT symbol, which
?S: indicates that the getopt() routine exists.  The getopt() routine
?S: parses command line options in a standard fashion.
?S:.
?C:HAS_GETOPT (GETOPT):
?C: This symbol, if defined, indicates that the getopt() routine
 exists.
?C:.
?H:#$d_getopt HAS_GETOPT  /**/
?H:.
?LINT:set d_getopt
: see if getopt exists
set getopt d_getopt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getopt.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stddef.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stddef.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stddef: Inhdr
?MAKE: -pick add $@ %<
?S:i_stddef:
?S: This variable conditionally defines the I_STDDEF symbol, which
?S: indicates to the C program that <stddef.h> exists and should
?S: be included.
?S:.
?C:I_STDDEF:
?C: This symbol, if defined, indicates that <stddef.h> exists and should
?C: be included.
?C:.
?H:#$i_stddef I_STDDEF /**/
?H:.
?LINT:set
 i_stddef
: see if stddef is available
set stddef.h i_stddef
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_stddef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: d_statblks.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_statblks: contains Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_statblks:
?S: This variable conditionally defines USE_STAT_BLOCKS if this system
?S: has a stat structure declaring st_blksize and st_blocks.
?S:.
?C:USE_STAT_BLOCKS (STATBLOCKS):
?C: This symbol is defined if this system has a stat structure declaring
?C: st_blksize and st_blocks.
?C:.
?H:#$d_statblks USE_STAT_BLOCKS
  /**/
?H:.
?T:xxx
?LINT:set d_statblks
: see if stat knows about block sizes
echo " "
xxx=`./findhdr sys/stat.h`
if $contains 'st_blocks;' "$xxx" >/dev/null 2>&1 ; then
 if $contains 'st_blksize;' "$xxx" >/dev/null 2>&1 ; then
  echo "Your stat() knows about block sizes." >&4
  val="$define"
 else
  echo "Your stat() doesn't know about block sizes." >&4
  val="$undef"
 fi
else
 echo "Your stat() doesn't know about block sizes." >&4
 val="$undef"
fi
set d_statblks
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_statblks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usequadmath: Setvar cat uselongdouble
?MAKE: -pick add $@ %<
?S:usequadmath:
```

```
?S: This variable conditionally defines the USE_QUADMATH symbol,
?S: and indicates that the quadmath library __float128 long doubles
?S: should be used when available.
?S:.
?C:USE_QUADMATH:
?C: This symbol, if defined, indicates that the quadmath library should
?C: be used when available.
?C:.
?H:?%<:#ifndef USE_QUADMATH
?H:?%<:#$usequadmath USE_QUADMATH  /**/
?H:?%<:#endif
?H:.
: Check if quadmath is requested
case "$usequadmath" in
"$define"|true|[yY]*) usequadmath="$define" ;;
*)                    usequadmath="$undef"  ;;
esac

: Fail if both uselongdouble and usequadmath are requested
case "$usequadmath:$uselongdouble" in
define:define)
 $cat <<EOM >&4

*** You requested the use of
 the quadmath library and use
*** of long doubles.
***
*** Please select one or the other.
EOM
 exit 1
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usequadmath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprior.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getprior.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:06:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getprior: Inlibc
?MAKE: -pick add $@ %<
?S:d_getprior:
?S: This variable conditionally defines HAS_GETPRIORITY if getpriority()
?S: is available to get a process's priority.
?S:.
?C:HAS_GETPRIORITY (GETPRIORITY):
?C: This symbol, if defined, indicates that the getpriority routine is
?C: available to get a process's priority.
?C:.
?H:#$d_getprior
 HAS_GETPRIORITY  /**/
?H:.
: see if getpriority exists
?LINT:set d_getprior
set getpriority d_getprior
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getprior.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ieeefp.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_ieeefp: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_ieeefp:
?S: This variable conditionally defines the I_IEEEFP symbol, and indicates
?S: whether a C program should include <ieeefp.h>.
?S:.
?C:I_IEEEFP:
?C: This symbol, if defined, indicates that <ieeefp.h> exists and
?C: should be included.
?C:.
?H:#$i_ieeefp I_IEEEFP  /**/
?H:.
?LINT:set i_ieeefp
: see if this is a ieeefp.h system
case "$i_ieeefp" in
" ) set ieeefp.h i_ieeefp
```

```
    eval $inhdr
    ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_ieeefp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ftello: Inlibc longsize
?MAKE: -pick add $@ %<
?S:d_ftello:
?S: This variable conditionally defines the HAS_FTELLO symbol, which
?S: indicates to the C program that the ftello() routine is available.
?S:.
?C:HAS_FTELLO:
?C: This symbol, if defined, indicates that the ftello routine is
?C: available to ftell beyond 32 bits (useful for ILP32 hosts).
?C:.
?H:#$d_ftello HAS_FTELLO  /**/
?H:.
?LINT:set d_ftello
: see if ftello exists
set ftello d_ftello
eval $inlibc
case "$longsize" in
8) echo "(Your long is 64 bits, so you could use ftell.)" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ftello.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: uidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:33:25  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:09:36  ram
?RCS: patch30: comment for uidtype referred to the obsoleted symbol
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:28:27  ram
?RCS: patch27: made conform to its gidtype.U companion
?RCS: patch27: question now explicitly mentions getuid()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:56  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:uidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:uidtype:
?S: This variable defines Uid_t to be something like uid_t, int,
?S: ushort, or whatever type is used to declare user ids in the kernel.
?S:.
?C:Uid_t (UIDTYPE):
?C: This symbol holds the type used to declare user ids in the kernel.
?C: It can be int, ushort, uid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Uid_t $uidtype  /* UID type */
?H:.
?T:xxx
: see what type uids are declared as in the kernel
set uid_t uidtype xxx stdio.h sys/types.h
eval $typedef
case "$uidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep '_ruid;' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$uidtype";;
esac
echo " "
rp="What is the type for user ids returned by getuid()?"
. ./myread
uidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/uidtype.U
No license file was found, but licenses were detected in source scan.

Perl5 Metaconfig Units

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All rights reserved.

These units are the ones used to build Configure and config_h.SH
in the Perl5 distribution.

metaconfig will first look in its standard locations (specified when you
installed dist). It will then recurse through the 'U' subdirectory
and find any additional "private" units. Private units override
standard ones supplied with metaconfig.

Files in this directory:

README
This file.

Glossary.patch
The standard dist units contain some strings that make pod2man
complain. This patch silences those warnings. As new units are
added and Configure is regenerated, this patch may need more and more
'fuzz' to be applied. It should be freshly regenerated every once
in a while. See also mkgloss.pl

ln-all.pl
Re-generate the all/ folder

mkglossary
A script
to regenerate Porting/Glossary. You have to manually
edit the top of the script to point the location of your metaconfig
units. It is called automatically by 'mksample'. See also mkgloss.pl

mkgloss.pl
A perl script that calls U/mkglossary from the perl source tree, sorts
the list of symbols, and applies the patch mentioned in Glossary.patch.
When called on its own, redirect the output to a temporary file, and
compare that file to Porting/Glossary before applying.

mksample
A script to regenerate Porting/config.sh and Porting/config.H.

It also calls mkglossary, if necessary.

Subdirectories:

The units and other related files have been broken up into the following directories.

a_dvisory/
These are units that have to go first in the generated config_h.SH.
A word of explanation: Configure and config_h.SH are generated from 'Units' (the *.U files). Files indicate dependencies (using make(1)), and Configure is built to follow those dependencies.
However, config_h.SH is simply built by putting all the units in alphabetical order and extracting the relevant lines. (This could be fixed, I suppose, but it wasn't trivial the one time I looked.)
The a_dvisory/ directory, then, is a place to put units that need to be early in config_h.SH. (Most units are self-contained and ought to be able to go anywhere. However, some things, like byteorder, need to have the #defines from multiarch available.)

acl/
This is an old patch to begin to detect and use ACL (access control list) file protection schemes.

all/
A folder that conveniently holds symbolic links to all the modules that are used to build the current Configure and config_h.SH.

compline/
These are similar to the standard units, but I have modified them to have a more uniform compile command line, usually using the new Compile.U unit. (The ccflags.U unit is perl-specific since it mentions -DDEBUGGING and -DPOSIX_SOURCE, but that's the only place it is perl-specific.)

dist_patches/
These are patches to dist that must be applied before it is built and installed. I have submitted these for inclusion in the regular dist distribution. They have already been applied to the ../dist-3.0at70b directory.

ebcdic/
These are units that had to be specially modified to work under either EBCDIC or ASCII.

installdirs/

These are units to handle perl's installation directories and
related issues.

modified/
These are modified versions of the standard units. Also included in
this directory are new units that are clearly derived from existing
units. I have submitted these for inclusion in the regular dist
distribution.

nullified/
These are null units that replace units in the standard
distribution. Typically they are there because some part of the
perl source accidentally uses a symbol that metaconfig thinks means we
want the corresponding
unit.

perl/
These are specific to perl. Some are heavily derived from
original dist units, and are marked as such. Others are original.

perl_patches/
These are patches to the perl source. This directory
should ordinarily be empty, but there may have been drift between
the standard version of perl and the one associated with these
units.

protos/
These are units modified to use the new Hasproto.U or Protochk.U
units to check for prototypes.

threads/
These are specific to threading perl.

typedefs/
These are standard units modified to use the modified Typedef.U
unit to check for typedefs. (The modified Typdef.U includes a
function to avoid unnecessary prompts if the typdef being searched
for exists.)

Where appropriate, I submitted these units for inclusion into the
regular dist distribution. However, since dist is no longer actively
maintained, and the alternative is for *me* to actively maintain it,
the units just
sit here.

Copyright Information:

Unless otherwise indicated, the files contained in this
distribution are:

Copyright (c) 1996-1998, Andy Dougherty

The following licensing terms apply to all files contained in
this distribution:

You may distribute the files contained in this distribution
under the terms of either

a) the "Artistic License" which comes with Perl, or

b) the "Artistic License" which comes with dist, or

c) the GNU General Public License as published by the Free
Software Foundation; either version 1, or (at your option) any
later version (see the file "Copying" that comes with the
Perl distribution).

Which one to use is your choice.

The units in the "modified" directory have been derived from units
associated with the metaconfig program of Raphael Manfredi's "dist"
distribution. These units list Raphael Manfredi as the Copyright holder.
dist is distributed under a modified version of the Perl Artistic License.
Clause 7 of this modified
license as contained in dist-3.0-pl60 provides:

7. You may reuse parts of this Package in your own programs, provided
that you explicitly state where you got them from, in the source code
(and, left to your courtesy, in the documentation), duplicating
all the associated copyright notices and disclaimers. Besides
your changes, if any, must be clearly marked as such. Parts reused
that way will no longer fall under this license if, and only if,
the name of your program(s) have no immediate connection with the
name of the Package itself or its associated programs. You may then
apply whatever restrictions you wish on the reused parts or choose
to place them in the Public Domain--this will apply only within the
context of your package.

In accordance with this clause, the versions of these units
contained here are made available under the same terms as the
rest of the units.

If you have any questions about the use of these units or about
the differences

between these units and the standard versions, please
feel free to ask.

Andy Dougherty doughera@lafayette.edu
Dept. of Physics
Lafayette College
Easton, PA 18042-1782

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/README
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_access.U,v 3.0 1993/08/18 12:05:42 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_access.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_access: test +cc cat +cppflags h_fcntl h_sysfile i_stdlib rm Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_access:
?S: This variable conditionally defines HAS_ACCESS if the access() system
?S: call is available to check for access permissions using real IDs.
?S:.
?C:HAS_ACCESS:
?C: This manifest constant lets the C program know that the access()
?C: system
 call is available to check for accessibility using real UID/GID.
?C: (always present on UNIX.)
?C:.
?H:#$d_access HAS_ACCESS  /**/
?H:.
?W:%<:R_OK W_OK X_OK F_OK
?LINT:set d_access
?LINT:change h_fcntl h_sysfile
: access call always available on UNIX
set access d_access
eval $inlibc

: locate the flags for 'access()'
```

```
case "$d_access" in
"$define")
 echo " "
 $cat >access.c <<EOCP
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#ifdef I_UNISTD
#include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 exit(R_OK);
}
EOCP
 : check sys/file.h first, no particular reason here
 if $test `./findhdr sys/file.h` && \
  $cc -o access $cppflags -DI_SYS_FILE access.c >/dev/null 2>&1 ; then
  h_sysfile=true;
  echo "<sys/file.h> defines the *_OK access constants." >&4
 elif $test `./findhdr fcntl.h` && \
  $cc -o access $cppflags -DI_FCNTL access.c >/dev/null 2>&1 ; then
  h_fcntl=true;
  echo
 "<fcntl.h> defines the *_OK access constants." >&4
@if I_UNISTD
 elif $test `./findhdr unistd.h` && \
  $cc -o access $cppflags -DI_UNISTD access.c >/dev/null 2>&1 ; then
  echo "<unistd.h> defines the *_OK access constants." >&4
@end
 else
  echo "I can't find the four *_OK access constants--I'll use mine." >&4
 fi
 ;;
esac
$rm -f access*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_access.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_attribut.U,v $
?RCS: Revision 3.0.1.3  1995/01/30  14:33:45  ram
?RCS: patch49: test C program now includes <stdio.h> (WED)
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:25:47  ram
?RCS: patch45: fixed typo in the d_attribut variable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:55  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_attribut: Myread Oldconfig cat cc ccflags rm Setvar contains
?MAKE: -pick add $@ %<
?S:d_attribut
 (d_attrib):
?S: This variable conditionally defines HASATTRIBUTE, which
?S: indicates the C compiler can check for function attributes,
?S: such as printf formats.
?S:.
?C:HASATTRIBUTE ~ %< (GNUC_ATTRIBUTE_CHECK):
?C: This symbol indicates the C compiler can check for function attributes,
?C: such as printf formats. This is normally only supported by GNU cc.
?C:.
?H:?%<:#$d_attribut HASATTRIBUTE  /**/
?H:?%<:#ifndef HASATTRIBUTE
?H:?%<:#define __attribute__(_arg_)
?H:?%<:#endif
?H:.
?W:%<:__attribute__
?LINT:set d_attribut
?LINT:known __attribute__
: Look for GNU-cc style attribute checking
echo " "
echo "Checking whether your compiler can handle __attribute__ ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void croak (char* pat,...) __attribute__((format(printf,1,2),noreturn));
```

```
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $contains 'warning' attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't fully support __attribute__."
  val="$undef"
 else
  echo
 "Your C compiler supports __attribute__."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
set d_attribut
eval $setvar
$rm -f attrib*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_attribut.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017, 2019, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_wctype: Inhdr
?MAKE: -pick add $@ %<
?S:i_wctype:
?S: This variable conditionally defines the I_WCTYPE symbol,
?S: that indicates whether a C program may include <wctype.h>.
?S:.
?C:I_WCTYPE:
?C: This symbol, if defined, indicates that <wctype.h> exists.
?C:.
?H:#$i_wctype I_WCTYPE  /**/
?H:.
?LINT:set i_wctype
: see if this system has wctype.h
set wctype.h i_wctype
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_wctype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitelib.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitelib.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:21:35  ram
?RCS: patch61: created
?RCS:
?MAKE:sitelib sitelibexp installsitelib sitelib_stem: cat Getfile Oldconfig \
 Setprefixvar Prefixit package version sed installstyle siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitelib=''
?S:sitelib:
?S: This variable contains the
 eventual value of the SITELIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S: The standard distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: architecture-independent modules in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitelibexp=''
?S:sitelibexp:
?S: This variable is the ~name expanded version of sitelib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installsitelib=''
?S:installsitelib:
?S: This variable is really the same as sitelibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
```

```
?S: should be used in makefiles.
?S:.
?S:sitelib_stem:
?S: This variable is $sitelibexp with any trailing version-specific component
?S: removed.
  The elements in inc_version_list (inc_version_list.U) can
?S: be tacked onto this variable to generate a list of directories to search.
?S:.
?C:SITELIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: After perl has been installed, users may install their own local
?C: architecture-independent modules in this directory with
?C:  MakeMaker Makefile.PL
?C: or equivalent.  See INSTALL for details.
?C:.
?C:SITELIB_EXP:
?C: This symbol contains the ~name expanded version of SITELIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?C:SITELIB_STEM:
?C: This define is SITELIB_EXP with any trailing version-specific component
?C: removed.  The elements in
 inc_version_list (inc_version_list.U) can
?C: be tacked onto this variable to generate a list of directories to search.
?C:.
?H:#define SITELIB "$sitelib"  /**/
?H:#define SITELIB_EXP "$sitelibexp"  /**/
?H:#define SITELIB_STEM "$sitelib_stem"  /**/
?H:.
?T:prog
?LINT:change prefixvar
?LINT:set installsitelib
?LINT:set sitelib
?LINT:set sitelibexp
: determine where site specific libraries go.
: Usual default is /usr/local/lib/perl5/site_perl/$version
: The default "style" setting is made in installstyle.U
: XXX No longer works with Prefixit stuff.
?X: remove any trailing -3.0 or other version identification
prog=`echo $package | $sed 's/-*[0-9.]*$//'`
case "$sitelib" in
") case "$installstyle" in
 *lib/perl5*) dflt=$siteprefix/lib/$package/site_$prog/$version ;;
 *)  dflt=$siteprefix/lib/site_$prog/$version ;;
```

```
 esac
 ;;
*) dflt="$sitelib"
 ;;
esac
$cat <<EOM

The installation process will create a directory for
site-specific extensions and modules.  Most users find it convenient
to place
 all site-specific files in this directory rather than in the
main distribution directory.

EOM
fn=d~+
rp='Pathname for the site-specific library files?'
. ./getfile
prefixvar=sitelib
. ./setprefixvar
sitelib_stem=`echo "$sitelibexp" | sed "s,/$version$,,"`
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitelib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getspnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getspnam:
?S: This variable conditionally defines HAS_GETSPNAM if getspnam() is
?S: available to retrieve SysV shadow password entries by name.
?S:.
?C:HAS_GETSPNAM:
?C: This symbol, if defined, indicates that the getspnam system call is
?C: available to retrieve SysV shadow password entries by name.
?C:.
?H:#$d_getspnam HAS_GETSPNAM  /**/
?H:.
?LINT:set d_getspnam
```

```
: see if getspnam exists
set getspnam d_getspnam
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getspnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2019 Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_towupper: Inlibc
?MAKE: -pick add $@ %<
?S:d_towupper:
?S: This variable conditionally defines the HAS_TOWUPPER symbol, which
?S: indicates to the C program that the towupper() routine is available.
?S:.
?C:HAS_TOWUPPER:
?C: This symbol, if defined, indicates that the towupper () routine is
?C: available to do case conversion.
?C:.
?H:#$d_towupper HAS_TOWUPPER  /**/
?H:.
?LINT:set d_towupper
: see if towupper exists
set towupper d_towupper
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_towupper.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: ccflags.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:27:07  ram
```

```
?RCS: patch61: removed support for NO_PROTOTYPE detection on SCO
?RCS: patch61: new locincpth variable
?RCS: patch61: added info on the "additional ld flags" question
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:48:54  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.7  1995/05/12  12:08:33  ram
?RCS: patch54: now checks for cc/ccflags/ldflags coherency
?RCS:
?RCS: Revision 3.0.1.6
  1994/10/29  16:07:02  ram
?RCS: patch36: gcc versioning no longer relies on the C compiler's name
?RCS: patch36: simplified check for gcc version checking (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:06:35  ram
?RCS: patch32: propagate -posix flag from ccflags to ldflags
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:28:45  ram
?RCS: patch23: -fpcc-struct-return only needed in gcc 1.x (ADO)
?RCS: patch23: cppflags now computed on an option-by-option basis
?RCS: patch23: magically added cc flags now only done the first time
?RCS:
?RCS: Revision 3.0.1.3  1993/09/13  15:58:29  ram
?RCS: patch10: explicitly mention -DDEBUG just in case they need it (WAD)
?RCS: patch10: removed all the "tans" variable usage (WAD)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/27  14:39:38  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:24  ram
?RCS: patch6: added defaults for cppflags, ccflags and ldflags
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:31  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ccflags ldflags lkflags cppflags optimize locincpth: test cat \
 Myread Guess Options Oldconfig gccversion mips_type +usrinc \
 package contains rm rm_try +cc cppstdin cppminus cpprun cpplast libpth \
 loclibpth hint
?MAKE: -pick add $@ %<
?S:ccflags:
?S: This variable contains any additional C compiler flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:cppflags:
?S: This variable holds the flags that will be passed to the C pre-
```

```
?S: processor. It is up to the Makefile to use it.
?S:.
?S:optimize:
?S: This variable contains any optimizer/debugger flag that should be used.
?S: It is up to the Makefile to use it.
?S:.
?S:ldflags:
?S: This variable contains any additional C loader flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:lkflags:
?S: This variable contains any additional C partial linker flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:locincpth:
?S: This
 variable contains a list of additional directories to be
?S: searched by the compiler.  The appropriate -I directives will
?S: be added to ccflags.  This is intended to simplify setting
?S: local directories from the Configure command line.
?S: It's not much, but it parallels the loclibpth stuff in libpth.U.
?S:.
?T:inctest thisincl xxx flag inclwanted ftry previous thislibdir
?F:!cpp.c
?D:cppflags=''
?D:ccflags=''
?D:ldflags=''
?D:optimize=''
?INIT:: Possible local include directories to search.
?INIT:: Set locincpth to "" in a hint file to defeat local include searches.
?INIT:locincpth="/usr/local/include /opt/local/include /usr/gnu/include"
?INIT:locincpth="$locincpth /opt/gnu/include /usr/GNU/include /opt/GNU/include"
?INIT::
?INIT:: no include file wanted by default
?INIT:inclwanted=''
?INIT:
: determine optimize, if desired, or use for debug flag also
case "$optimize" in
' '|$undef) dflt='none';;
'')
 case "$gccversion" in
 '') dflt='-O';;
 *) dflt='-O2 -g';;
 esac
 ;;
*)
 dflt="$optimize";;
esac
```

```
case "$gccversion" in
") $cat <<EOH

Some C compilers have problems with their optimizers.  By default, $package
compiles with the -O flag to use the optimizer.  Alternately, you might want
to use the symbolic debugger, which uses the -g flag (on traditional Unix
systems).  Either flag can be specified here.  To use neither flag, specify
the word "none".

EOH
 ;;
*) $cat <<EOH

With the GNU C compiler, it is possible to supply both -O2 and -g flags, to
be able to reasonably optimize, whilst retaining the ability to use a
symbolic debugger.  Either flag can be specified here.  To use neither flag,
specify the word "none".

EOH
 ;;
esac
rp="What optimizer/debugger flag should be used?"
. ./myread
optimize="$ans"
case "$optimize" in
'none') optimize=" ";;
esac

dflt="
: We will not override a previous value, but we might want to
: augment a hint file
case "$hint" in
default|recommended)
 case "$gccversion" in
 1*) dflt='-fpcc-struct-return' ;;
 esac
?X:
 check for POSIXized ISC
 case "$gccversion" in
 2*) if test -d /etc/conf/kconfig.d &&
   $contains _POSIX_VERSION $usrinc/sys/unistd.h >/dev/null 2>&1
  then
   dflt="$dflt -posix"
  fi
  ;;
 esac
?X: turn warnings on if they're using gcc
 case "$gccversion" in
```

```
 1*|2*) dflt="$dflt -Wall";;
?X: starting with version 3, add "-W -Wall -Wformat=2 -Wshadow" by default
 *) dflt="$dflt -W -Wall -Wformat=2 -Wshadow";;
 esac
 ;;
esac

?X: In USG mode, a MIPS system may need some BSD includes
case "$mips_type" in
*BSD*|") inclwanted="$locincpth $usrinc";;
*) inclwanted="$locincpth $inclwanted $usrinc/bsd";;
esac
for thisincl in $inclwanted; do
 if $test -d $thisincl; then
  if $test x$thisincl != x$usrinc; then
   case "$dflt" in
   *$thisincl*);;
   *) dflt="$dflt -I$thisincl";;
   esac
  fi
 fi
done

?X: Include test function (header, symbol)
inctest='if $contains $2 $usrinc/$1 >/dev/null 2>&1; then
 xxx=true;
elif $contains $2 $usrinc/sys/$1 >/dev/null 2>&1; then
 xxx=true;
else
 xxx=false;
fi;
if
 $xxx; then
 case "$dflt" in
 *$2*);;
 *) dflt="$dflt -D$2";;
 esac;
fi'

?X:
?X: OSF/1 uses __LANGUAGE_C__ instead of LANGUAGE_C
?X:
if ./osf1; then
 set signal.h __LANGUAGE_C__; eval $inctest
else
 set signal.h LANGUAGE_C; eval $inctest
fi
```

```
case "$hint" in
default|recommended) dflt="$ccflags $dflt" ;;
*) dflt="$ccflags";;
esac

case "$dflt" in
"|' ') dflt=none;;
esac
$cat <<EOH

Your C compiler may want other flags.  For this question you should include
-I/whatever and -DWHATEVER flags and any other flags used by the C compiler,
but you should NOT include libraries or ld flags like -lwhatever.

To use no flags, specify the word "none".

EOH
?X: strip leading space
set X $dflt
shift
dflt=${1+"$@"}
rp="Any additional cc flags?"
. ./myread
case "$ans" in
none) ccflags="";;
*) ccflags="$ans";;
esac

: the following weeds options from ccflags that are of no interest to cpp
cppflags="$ccflags"
case "$gccversion" in
1*) cppflags="$cppflags -D__GNUC__"
esac
case "$mips_type" in
");;
*BSD*)
 cppflags="$cppflags -DSYSTYPE_BSD43";;
esac
case "$cppflags" in
");;
*)
 echo " "
 echo "Let me guess what the preprocessor flags are..." >&4
 set X $cppflags
 shift
 cppflags="
 $cat >cpp.c <<'EOM'
#define BLURFL foo
```

```
BLURFL xx LFRULB
EOM
?X:
?X: For each cc flag, try it out with both cppstdin and cpprun, since the
?X: first is almost surely a cc wrapper. We have to try both in case
?X: of cc flags like '-Olimit 2900' that are actually two words...
?X:
 previous=''
 for flag in $*
 do
  case "$flag" in
  -*) ftry="$flag";;
  *) ftry="$previous $flag";;
  esac
  if $cppstdin -DLFRULB=bar $ftry $cppminus <cpp.c \
   >cpp1.out 2>/dev/null && \
   $cpprun -DLFRULB=bar $ftry $cpplast <cpp.c \
   >cpp2.out 2>/dev/null && \
   $contains 'foo.*xx.*bar' cpp1.out >/dev/null 2>&1 && \
   $contains 'foo.*xx.*bar' cpp2.out >/dev/null 2>&1
  then
   cppflags="$cppflags $ftry"
   previous=''
  else
   previous="$flag"
  fi
 done
 set X $cppflags
 shift
 cppflags=${1+"$@"}
 case "$cppflags"
 in
 *-*)  echo "They appear to be: $cppflags";;
 esac
 $rm -f cpp.c cpp?.out
 ;;
esac

: flags used in final linking phase
case "$ldflags" in
'') if ./venix; then
  dflt='-i -z'
 else
  dflt=''
 fi
 case "$ccflags" in
 *-posix*) dflt="$dflt -posix" ;;
```

```
 esac
 ;;
*) dflt="$ldflags";;
esac

: Try to guess additional flags to pick up local libraries.
for thislibdir in $libpth; do
 case " $loclibpth " in
 *" $thislibdir "*)
  case "$dflt " in
  *"-L$thislibdir "*) ;;
  *)  dflt="$dflt -L$thislibdir" ;;
  esac
  ;;
 esac
done

case "$dflt" in
") dflt='none' ;;
*) set X $dflt; shift; dflt="$@";;
esac

$cat <<EOH

Your C linker may need flags.  For this question you should
include -L/whatever and any other flags used by the C linker, but you
should NOT include libraries like -lwhatever.

Make sure you include the appropriate -L/path flags if your C linker
does not normally search all of the directories you specified above,
namely
 $libpth
To use no flags, specify the word "none".

EOH

rp="Any
 additional ld flags (NOT including libraries)?"
. ./myread
case "$ans" in
none) ldflags=";;
*) ldflags="$ans";;
esac
rmlist="$rmlist pdp11"

@if lkflags
: partial linking may need other flags
case "$lkflags" in
```

```
") case "$ldflags" in
 ") dflt='none';;
 *) dflt="$ldflags";;
 esac;;
*) dflt="$lkflags";;
esac
echo " "
rp="Partial linking flags to be used (NOT including -r)?"
. ./myread
case "$ans" in
none) lkflags=";;
*) lkflags="$ans";;
esac

@end
?X:
?X: If the user changes compilers after selecting a hint file, it's
?X: possible that the suggested ccflags/ldflags will be wrong.  Try to
?X: compile and run a simple test program.  Let the user see all the
?X: error messages. -- ADO and RAM
?X:
: coherency check
echo " "
echo "Checking your choice of C compiler and flags for coherency..." >&4
?X: Strip extra blanks in case some of the following variables are empty
set X $cc $optimize $ccflags $ldflags -o try try.c
shift
$cat >try.msg <<EOM
I've tried to compile and run a simple program
 with:

 $*
 ./try

and I got the following output:

EOM
$cat > try.c <<'EOF'
#include <stdio.h>
int main() { exit(0); }
EOF
dflt=y
?X: Use "sh -c" to avoid error messages tagged with leading "Configure:".
?X: We need to try the resulting executable, because cc might yield a 0 status
?X: even when ld failed, in which case the executable will not run properly,
?X: if its x bit is set at all...
if sh -c "$cc $optimize $ccflags $ldflags -o try try.c" >>try.msg 2>&1; then
 if sh -c './try' >>try.msg 2>&1; then
```

```
  dflt=n
 else
  echo "The program compiled OK, but exited with status $?." >>try.msg
  rp="You have a problem.  Shall I abort Configure"
  dflt=y
 fi
else
 echo "I can't compile the test program." >>try.msg
 rp="You have a BIG problem.  Shall I abort Configure"
 dflt=y
fi
case "$dflt" in
y)
 $cat try.msg >&4
?X: using -K will prevent default aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
  echo "(The supplied flags might be incorrect with this C compiler.)"
  ;;
 *)
 dflt=n;;
 esac
 echo " "
 . ./myread
 case "$ans" in
 n*|N*) ;;
 *) echo "Ok.  Stopping Configure." >&4
  exit 1
  ;;
 esac
 ;;
n) echo "OK, that should do.";;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ccflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrgid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrgid_r getgrgid_r_proto: Inlibc Protochk Hasproto i_systypes \
```

```
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrgid_r:
?S: This variable conditionally defines the HAS_GETGRGID_R symbol,
?S: which indicates to the C program that the getgrgid_r()
?S: routine is available.
?S:.
?S:getgrgid_r_proto:
?S: This variable encodes the prototype of getgrgid_r.
?S: It is zero if d_getgrgid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrgid_r
?S: is defined.
?S:.
?C:HAS_GETGRGID_R:
?C: This symbol, if defined, indicates that the getgrgid_r routine
?C: is available to
 getgrgid re-entrantly.
?C:.
?C:GETGRGID_R_PROTO:
?C: This symbol encodes the prototype of getgrgid_r.
?C: It is zero if d_getgrgid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrgid_r
?C: is defined.
?C:.
?H:#$d_getgrgid_r HAS_GETGRGID_R /**/
?H:#define GETGRGID_R_PROTO $getgrgid_r_proto /**/
?H:.
?T:try hdrs d_getgrgid_r_proto
: see if getgrgid_r exists
set getgrgid_r d_getgrgid_r
eval $inlibc
case "$d_getgrgid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_getgrgid_r_proto:$usethreads" in
 ":define") d_getgrgid_r_proto=define
  set d_getgrgid_r_proto getgrgid_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getgrgid_r_proto" in
 define)
 case "$getgrgid_r_proto" in
 "|0) try='int getgrgid_r(gid_t, struct group*, char*, size_t, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBWR ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) try='int getgrgid_r(gid_t, struct group*, char*, int, struct
```

```
 group**);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBIR ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) try='int getgrgid_r(gid_t, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBI ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) try='struct group* getgrgid_r(gid_t, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=S_TSBI ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) d_getgrgid_r=undef
  getgrgid_r_proto=0
  echo "Disabling getgrgid_r, cannot determine prototype." >&4 ;;
 * ) case "$getgrgid_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getgrgid_r_proto="REENTRANT_PROTO_$getgrgid_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getgrgid_r has no prototype, not using it." >&4 ;;
  esac
  d_getgrgid_r=undef
  getgrgid_r_proto=0
  ;;
 esac
 ;;
*) getgrgid_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrgid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tzname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_tzname.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:14:43  ram
?RCS: patch32: forgot to set proper value in the val variable
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:57:55  ram
?RCS: patch30: created
?RCS:
?MAKE:d_tzname: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_tzname:
?S: This variable conditionally defines HAS_TZNAME if tzname[] is
?S: available to access timezone names.
?S:.
?C:HAS_TZNAME:
?C: This symbol, if defined, indicates that the tzname[]
 array is
?C: available to access timezone names.
?C:.
?H:#$d_tzname HAS_TZNAME  /**/
?H:.
?LINT:set d_tzname
: see if tzname[] exists
echo " "
if set tzname val -a d_tzname; eval $csym; $val; then
 val="$define"
 echo 'tzname[] found.' >&4
else
 val="$undef"
 echo 'tzname[] NOT found.' >&4
fi
set d_tzname
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tzname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libc.U,v $
```

```
?RCS: Revision 3.0.1.10  1997/02/28  15:56:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: added support for HPUX-10 nm output
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  14:11:56  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:20:47  ram
?RCS: patch54: made sure only most recent version of shared lib is picked
?RCS: patch54: final "nm -p" check now uses xscan and xrun like everybody
?RCS: patch54: can now grok
 linux nm output with lead __IO (ADO)
?RCS: patch54: added support for linux ELF output, using 'W' for alias (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1994/10/29  16:23:40  ram
?RCS: patch36: now looks for shared libraries before anything else (ADO)
?RCS: patch36: added new nm output format (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1994/08/29  16:28:10  ram
?RCS: patch32: added I-type symbols for nm output parsing on Linux
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  07:03:24  ram
?RCS: patch30: checks are now presented by succession of if/elif
?RCS: patch30: uniformized checks for shared objects with new so symbol
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  15:06:33  ram
?RCS: patch23: added shared library knowledge (ADO and WED)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:12:17  ram
?RCS: patch16: can now export nm_extract as an internal-use only variable
?RCS:
?RCS: Revision 3.0.1.2  1993/09/13  16:09:03  ram
?RCS: patch10: added special handling for Apollo systems (WAD)
?RCS:
?RCS: Revision 3.0.1.1
  1993/08/27  14:40:03  ram
?RCS: patch7: added entry for /usr/shlib/libc.so (OSF/1 machines)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libc libnames +nm_extract: echo n c rm test grep Getfile Myread \
 Oldconfig Loc sed libs incpath libpth ar runnm nm nm_opt nm_so_opt \
 contains xlibpth so osname trnl tr sort uniq _o _a
?MAKE: -pick add $@ %<
?S:libc:
?S: This variable contains the location of the C library.
?S:.
```

```
?S:libnames:
?S: The constructed list of library names.  Normally empty, but hint files
?S: may set this for later perusal by Configure.
?S:.
?S:nm_extract:
?S: This variable holds the name of the extraction command used to process
?S: the output of nm and yield the list of defined symbols. It is used
?S: internally by Configure.
?S:.
?T:thislib try libnames xxx xscan xrun thisname com tans file
?F:!libnames !libc.tmp !tmp.imp
?LINT:change nm_opt runnm
?INIT:libnames=''
: Figure out where the libc is located
case
 "$runnm" in
true)
?X: indentation is wrong on purpose--RAM
: get list of predefined functions in a handy place
echo " "
case "$libc" in
'') libc=unknown
 case "$libs" in
 *-lc_s*) libc=`./loc libc_s$_a $libc $libpth`
 esac
 ;;
esac
case "$libs" in
'') ;;
*)  for thislib in $libs; do
 case "$thislib" in
 -lc|-lc_s)
  : Handle C library specially below.
  ;;
 -l*)
  thislib=`echo $thislib | $sed -e 's/^-l//'`
  if try=`./loc lib$thislib.$so.'*' X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib.$so X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib X $libpth`; $test -f "$try"; then
   :
```

```
  elif try=`./loc Slib$thislib$_a X $xlibpth`; $test -f "$try"; then
   :
  else
   try=''
  fi
  libnames="$libnames $try"
  ;;
 *) libnames="$libnames $thislib"
 ;;
 esac
 done
 ;;
esac
?X:
?X: Some systems (e.g. DG/UX) use "environmental" links, which make the test
?X: -f fail. Ditto for symbolic links. So in order to reliably check the
?X: existence of a file, we use test -r. It will still fail with DG/UX links
?X: though, but at least it will detect symbolic links. At some strategic
?X: points, we make use of (test -h), using a sub-shell in case builtin test
?X: does not implement the -h check for symbolic links. This makes it
?X: possible to preset libc in a hint file for instance and have it show up
?X: as-is in the question.
?X:
xxx=normal
case "$libc" in
unknown)
?X:
?X: The sed below transforms .so.9 .so.12 into something like .so.0009 .so.0012,
?X: then sorts on it to allow keeping .so.12 instead of .so.9 as the latest
?X: up-to-date library. The initial filename (before sed munging, saved in hold
?X: space via 'h') is appended via 'G' before sorting, then the leading munged
?X: part is removed after sorting. Nice efficient work
 from Tye McQueen.
?X: The initial blurfl is here to prevent the trailing pipe from producing an
?X: empty string, causing Configure to output all its set variables!
?X:
 set /lib/libc.$so
 for xxx in $libpth; do
  $test -r $1 || set $xxx/libc.$so
  : The messy sed command sorts on library version numbers.
  $test -r $1 || \
   set `echo blurfl; echo $xxx/libc.$so.[0-9]* | \
   tr ' ' $trnl | egrep -v '\.[A-Za-z]*$' | $sed -e '
    h
    s/[0-9][0-9]*/0000&/g
    s/0*\([0-9][0-9][0-9][0-9][0-9]\)/\1/g
    G
    s/\n/ /' | \
```

```
    $sort | $sed -e 's/^.* //'`
  eval set \$$#
 done
 $test -r $1 || set /usr/ccs/lib/libc.$so
 $test -r $1 || set /lib/libsys_s$_a
 ;;
*)
?X: ensure the test below for the (shared) C library will fail
 set blurfl
 ;;
esac
if $test -r "$1"; then
 echo "Your (shared) C library seems to be in $1."
 libc="$1"
elif $test -r /lib/libc && $test -r /lib/clib; then
?X:
?X: Apollo has its C library in /lib/clib AND /lib/libc
?X: not to mention its math library in /lib/syslib...
?X:
 echo
 "Your C library seems to be in both /lib/clib and /lib/libc."
 xxx=apollo
 libc='/lib/clib /lib/libc'
 if $test -r /lib/syslib; then
  echo "(Your math library is in /lib/syslib.)"
?X: Put syslib in libc -- not quite right, but won't hurt
  libc="$libc /lib/syslib"
 fi
elif $test -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 echo "Your C library seems to be in $libc, as you said before."
?X: For mips, and...
elif $test -r $incpath/usr/lib/libc$_a; then
 libc=$incpath/usr/lib/libc$_a;
 echo "Your C library seems to be in $libc.  That's fine."
elif $test -r /lib/libc$_a; then
 libc=/lib/libc$_a;
 echo "Your C library seems to be in $libc.  You're normal."
else
 if tans=`./loc libc$_a blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc libc blurfl/dyick $libpth`; $test -r "$tans"; then
  libnames="$libnames "`./loc clib blurfl/dyick $libpth`
 elif tans=`./loc clib blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Slibc$_a blurfl/dyick
 $xlibpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Mlibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
```

```
  :
 else
  tans=`./loc Llibc$_a blurfl/dyick $xlibpth`
 fi
 if $test -r "$tans"; then
  echo "Your C library seems to be in $tans, of all places."
  libc=$tans
 else
  libc='blurfl'
 fi
fi
if $test $xxx = apollo -o -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 dflt="$libc"
 cat <<EOM

If the guess above is wrong (which it might be if you're using a strange
compiler, or your machine supports multiple models), you can override it here.

EOM
else
 dflt=''
 echo $libpth | $tr ' ' $trnl | $sort | $uniq > libpath
 cat >&4 <<EOM
I can't seem to find your C library.  I've looked in the following places:

EOM
 $sed 's/^/ /' libpath
 cat <<EOM

None of these seems to contain your C library. I need to get its name...

EOM
fi
fn=f
rp='Where is your C library?'
. ./getfile
libc="$ans"

echo " "
echo $libc $libnames | $tr ' ' $trnl | $sort | $uniq > libnames
set X `cat libnames`
shift
xxx=files
case
 $# in 1) xxx=file; esac
echo "Extracting names from the following $xxx for later perusal:" >&4
echo " "
$sed 's/^/ /' libnames >&4
```

```
echo " "
$echo $n "This may take a while...$c" >&4

?X:
?X: Linux may need the special Dynamic option to nm for shared libraries.
?X: In general, this is stored in the nm_so_opt variable.
?X: Unfortunately, that option may be fatal on non-shared libraries.
?X:
for file in $*; do
 case $file in
 *$so*) $nm $nm_so_opt $nm_opt $file 2>/dev/null;;
 *) $nm $nm_opt $file 2>/dev/null;;
 esac
done >libc.tmp

$echo $n ".$c"
?X:
?X: To accelerate processing, we look at the correct 'sed' command
?X: by using a small subset of libc.tmp, i.e. fprintf function.
?X: When we know which sed command to use, do the name extraction
?X:
$grep fprintf libc.tmp > libc.ptf
?X:
?X: In order to enhance readability and save some space, we define
?X: some variables that will be "eval"ed.
?X:
xscan='eval "<libc.ptf $com >libc.list"; $echo $n ".$c" >&4'
xrun='eval
 "<libc.tmp $com >libc.list"; echo "done." >&4'
?X: BSD-like output, I and W types added for Linux
?X: Some versions of Linux include a leading __IO in the symbol name.
?X: HPUX10 reportedly has trailing spaces, though I'm surprised it has
?X: BSD-like output.  (AD).
xxx='[ADTSIW]'
if com="$sed -n -e 's/__IO//' -e 's/^.* $xxx  *_[_.]*//p' -e 's/^.* $xxx  *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: SYSV-like output
elif com="$sed -n -e 's/^__*//' -e 's/^\([a-zA-Z_0-9$]*\).*xtern.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/|UNDEF/d' -e '/FUNC..GL/s/^.*|__*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.* D __*//p' -e 's/^.* D //p'";\
```

```
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^_//' -e 's/^\([a-zA-Z_0-9]*\).*xtern.*text.*/\1/p'";\
 eval
 $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$grep '|' | $sed -n -e '/|COMMON/d' -e '/|DATA/d' \
    -e '/ file/d' -e 's/^\([^  ]*\).*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p' -e 's/^.*|FUNC |WEAK .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: mips nm output (sysV)
elif com="$sed -n -e 's/^__//' -e '/|Undef/d' -e '/|Proc/s/ .*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|Proc .*|Text *| *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/Def. Text/s/.* \([^ ]*\)\$/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null
 2>&1; then
  eval $xrun
?X: OS/2 nm output
elif com="$sed -n -e 's/^[-0-9a-f ]*_\(.*\)=.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/.*\.text n\ \ \ \.//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: AIX nm output
elif com="sed -n -e 's/^__.*//' -e 's/[       ]*D[    ]*[0-9]*.*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
```

```
  eval $xrun
else
 $nm -p $* 2>/dev/null >libc.tmp
 $grep fprintf libc.tmp > libc.ptf
 if com="$sed -n -e 's/^.* [ADTSIW]  *_[_.]*//p' -e 's/^.* [ADTSIW] //p'";\
  eval $xscan; $contains '^fprintf$' libc.list >/dev/null 2>&1
 then
  nm_opt='-p'
  eval $xrun
 else
  echo " "
  echo "$nm didn't seem to work right. Trying $ar instead..." >&4
  com="
  if $ar t $libc > libc.tmp && \
   $contains '^fprintf$' libc.tmp >/dev/null 2>&1
  then
   for thisname in $libnames $libc; do
    $ar t $thisname >>libc.tmp
   done
   $sed
 -e "s/\\$_o\$//" < libc.tmp > libc.list
   echo "Ok." >&4
  elif test "X$osname" = "Xos2" && $ar tv $libc > libc.tmp; then
?X: Repeat libc to extract forwarders to DLL entries too
   for thisname in $libnames $libc; do
    $ar tv $thisname >>libc.tmp
?X: Revision 50 of EMX has bug in ar: it will not extract forwarders
?X: to DLL entries.  Use emximp which will extract exactly them.
    emximp -o tmp.imp $thisname \
        2>/dev/null && \
        $sed -e 's/^\([_a-zA-Z0-9]*\) .*$/\1/p' \
        < tmp.imp >>libc.tmp
    $rm -f tmp.imp
   done
   $sed -e "s/\\$_o\$//" -e 's/^ \+//' < libc.tmp > libc.list
   echo "Ok." >&4
  else
   echo "$ar didn't seem to work right." >&4
   echo "Maybe this is a Cray...trying bld instead..." >&4
   if
    bld t $libc | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" > libc.list &&
    $test -s libc.list
   then
    for thisname in $libnames; do
     bld t $libnames | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" >>libc.list
     $ar t $thisname >>libc.tmp
```

```
    done
    echo
 "Ok." >&4
   else
    echo "That didn't work either." >&4
    echo "No problem, I'll be compiling test programs then..." >&4
    runnm=false
   fi
  fi
 fi
fi
nm_extract="$com"
if $test -f /lib/syscalls.exp; then
 echo " "
 echo "Also extracting names from /lib/syscalls.exp for good ole AIX..." >&4
 $sed -n 's/^\([^  ]*\)[  ]*syscall[0-9]*[  ]*$/\1/p' \
  /lib/syscalls.exp >>libc.list
fi
?X: remember, indentation is wrong on purpose--RAM
;;
esac
$rm -f libnames libpath
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stdlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdlib: Inhdr
?MAKE: -pick add $@ %<
?S:i_stdlib:
?S: This variable conditionally defines the I_STDLIB symbol, which
?S: indicates to the C program that <stdlib.h> exists and should
?S: be included.
?S:.
```

```
?C:I_STDLIB:
?C: This symbol, if defined, indicates that <stdlib.h> exists and should
?C: be included.
?C:.
?H:#$i_stdlib I_STDLIB  /**/
?H:.
?LINT:set
 i_stdlib
: see if stdlib is available
set stdlib.h i_stdlib
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_stdlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_unordered: Inlibc
?MAKE: -pick add $@ %<
?S:d_unordered:
?S: This variable conditionally defines the HAS_UNORDERED symbol, which
?S: indicates to the C program that the unordered() routine is available.
?S:.
?C:HAS_UNORDERED:
?C: This symbol, if defined, indicates that the unordered routine is
?C: available to check whether two doubles are unordered
?C: (effectively: whether either of them is NaN)
?C:.
?H:#$d_unordered HAS_UNORDERED  /**/
?H:.
?LINT:set d_unordered
: see if unordered exists
set unordered d_unordered
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_unordered.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Loc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:04:16  ram
?RCS: patch61: allow users to specify paths on the command line
?RCS: patch61: will now substitute cp for ln if not supported
?RCS:
?RCS: Revision 3.0.1.9  1995/09/25  09:11:24  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS: patch59: abort Configure run when mandatory command is missing
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:40  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.7
  1995/01/11  15:13:37  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS: patch45: added path lookup for the 'comm' program
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:56:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: be careful and guard against wildcard searching (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:54:55  ram
?RCS: patch30: now locates find
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:18:15  ram
?RCS: patch27: added byacc to the trylist (ADO)
?RCS: patch27: lint lines reformatted (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:01:44  ram
?RCS: patch16: added metalint hint on changed PATH variable
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:16:52  ram
?RCS: patch15: now set _test variable when test is built-in
?RCS: patch15: fixed rare cases where echo is not needed
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:47:13  ram
?RCS: patch10: test program not always in /bin/test (WAD)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:05:05  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?X:
?X: This unit produces a shell script "loc" which can be used to find out
?X: where in a list of directories something is.  It then uses loc to
?X: determine the location of commonly used programs.  It leaves loc sitting
?X: around for other Configure units to use, but arranges for its demise
?X: at the end of Configure.
?X:
?X: To add a new program to find, add it both to the ?MAKE: line and to either
?X: the loclist or trylist variable.
?X:
?X: I put startsh at the end of the dependency list, in order to avoid the
?X: loading of the spitshell unit before the instructions.
?X:
?MAKE:Loc awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff
 \
 uname uniq uuname vi zcat zip:  eunicefix n c startsh Instruct Warn
?MAKE: -pick weed $@ %<
?LINT:describe awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip
?V::pth loclist trylist
?F:./loc
?T:thisthing thing xxx dir file say DJGPP
?T:_test _grep _cp _gmake _egrep _ln _make dflt
?LINT: change PATH
: find out where common programs are
echo " "
echo "Locating common programs..." >&4
cat <<EOSC >loc
$startsh
case \$# in
0) exit 1;;
esac
thing=\$1
shift
dflt=\$1
shift
for dir in \$*; do
 case "\$thing" in
 .)
```

```
 if test -d \$dir/\$thing; then
  echo \$dir
  exit 0
 fi
 ;;
 *)
?X: Be careful in case thing includes wildcards that might expand to multiple
?X: files.  Choose the last one.
  This happens when searching for shared
?X: libraries with version numbers.  How to choose which one we want is
?X: probably an insoluble problem, in general.
?X: Some folks leave things like libc.so.orig around w/o read
?X: permission.  A -r test would handle that, but since ./loc is
?X: also used to find executables (which are installed w/o read
?X: permission on SCO ODT 3.0, we can't include the -r test.
 for thisthing in \$dir/\$thing; do
  : just loop through to pick last item
 done
 if test -f \$thisthing; then
  echo \$thisthing
  exit 0
 elif test -f \$thisthing$_exe; then
  echo \$thisthing
  exit 0
 elif test -f \$dir/\$thing.exe; then
  if test -n "$DJGPP"; then
   echo \$dir/\$thing.exe
  else
   : on Eunice apparently
   echo \$dir/\$thing
  fi
  exit 0
 fi
 ;;
 esac
done
echo \$dflt
exit 1
EOSC
chmod +x loc
$eunicefix loc
loclist="
?awk:awk
?cat:cat
?chgrp:chgrp
?chmod:chmod
?chown:chown
?comm:comm
```

```
?cp:cp
?echo:echo
?expr:expr
?find:find
?grep:grep
?ls:ls
?mkdir:mkdir
?mv:mv
?rm:rm
?sed:sed
?sleep:sleep
?sort:sort
?tail:tail
?touch:touch
?tr:tr
?uniq:uniq
"
trylist="
?Mcc:Mcc
?ar:ar
?bash:bash
?bison:bison
?byacc:byacc
?compress:compress
?cpio:cpio
?cpp:cpp
?csh:csh
?date:date
?egrep:egrep
?emacs:emacs
?flex:flex
?gmake:gmake
?gzip:gzip
?inews:inews
?ksh:ksh
?less:less
?line:line
?lint:lint
?ln:ln
?lp:lp
?lpr:lpr
?mail:mail
?mailx:mailx
?make:make
?more:more
?nm:nm
?nroff:nroff
?perl:perl
```

```
?pg:pg
?pmake:pmake
?pr:pr
?rmail:rmail
?sendmail:sendmail
?shar:shar
?smail:smail
?submit:submit
?tar:tar
?tbl:tbl
?tee:tee
?test:test
?troff:troff
?uname:uname
?uuname:uuname
?vi:vi
?zcat:zcat
?zip:zip
"
?LINT:set
 awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo emacs expr find flex \
 gmake gzip grep inews ksh less line lint lp lpr ls mail mailx \
 mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee touch tr troff \
 uname uniq uuname vi zcat zip
pth=`echo $PATH | sed
 -e "s/$p_/ /g"`
pth="$pth /lib /usr/lib"
for file in $loclist; do
?X:
?X: Allow them to -Dmake=pmake on the command line for instance...
?X: If the file is not fully qualified, as in -Dmake=pmake, then we
?X: look the for the specified command (pmake here). If they say
?X: -Dmake=/sbin/make for instance, then we make sure the file
?X: exists, or we die...
?X:
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   ./warn "no $xxx -- ignoring your setting for $file."
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
```

```
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo "I don't know where '$file' is, and my life depends on it." >&4
  echo "Go find a public domain implementation or fix your PATH setting!" >&4
  exit 1
  ;;
 esac
done
echo " "
echo "Don't worry
 if any of the following aren't found..."
say=offhand
for file in $trylist; do
?X: Allow them to -Dmake=pmake on the command line for instance (see above)
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   ./warn "no $xxx -- ignoring your setting for $file."
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
```

```
 *)
  echo "I don't see $file out there, $say."
  say=either
  ;;
 esac
done
case "$egrep" in
egrep)
 echo "Substituting grep for egrep."
 egrep=$grep
 _egrep=$_grep
 ;;
esac
@if ln
case "$ln" in
ln)
 echo "Substituting cp for ln."
 ln=$cp
 _ln=$_cp
 ;;
esac
@end
@if make || gmake
case "$make" in
make)
 case "$gmake" in
 gmake)
 echo "I can't find make or gmake, and my life depends on it." >&4
 echo "Go find a
 public domain implementation or fix your PATH setting!" >&4
 exit 1
 ;;
 esac
 ;;
esac
case "$gmake" in
gmake) ;;
*) # We can't have osname yet.
 if test -f "/system/gnu_library/bin/ar.pm"; then # Stratus VOS
  # Assume that gmake, if found, is definitely GNU make
  # and prefer it over the system make.
  echo "Substituting gmake for make."
  make=$gmake
  _make=$_gmake
 fi
 ;;
esac
@end
```

```
case "$test" in
test)
 echo "Hopefully test is built into your sh."
 ;;
*)
 if `sh -c "PATH= test true" >/dev/null 2>&1`; then
  echo "Using the test built into your sh."
?X:
?X: We need to set both test and _test, since Oldconfig.U will use the _test
?X: value to systematically restore computed paths, which may be wrong if
?X: we choose to load an old config.sh generated on another platform.
?X:
  test=test
  _test=test
 fi
 ;;
esac
?LINT:change n c
case "$echo" in
echo)
 echo "Hopefully echo is built into your sh."
 ;;
?X: For those rare cases where we don't need $echo...
") ;;
*)
 echo " "
echo "Checking
 compatibility between $echo and builtin echo (if any)..." >&4
 $echo $n "hi there$c" >foo1
 echo $n "hi there$c" >foo2
 if cmp foo1 foo2 >/dev/null 2>&1; then
  echo "They are compatible.  In fact, they may be identical."
 else
  case "$n" in
  '-n') n=" c='\c';;
  *) n='-n' c=";;
  esac
  cat <<FOO
They are not compatible!  You are probably running ksh on a non-USG system.
I'll have to use $echo instead of the builtin, since Bourne shell doesn't
have echo built in and we may have to run some Bourne shell scripts.  That
means I'll have to use '$n$c' to suppress newlines now.  Life is ridiculous.

FOO
  $echo $n "The star should be here-->$c"
  $echo "*"
 fi
 $rm -f foo1 foo2
```

```
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Loc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sockopt.U,v $
?RCS: Revision 3.0.1.1  1995/07/25  14:16:14  ram
?RCS: patch56: obsoleted KEEPALIVE in favor of CAN_KEEPALIVE for consistency
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepalive: cat rm contains +cc +ccflags socketlib sockethdr \
 d_oldsock libs Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_keepalive:
?S: This symbol conditionally defines CAN_KEEPALIVE which indicates to the C
?S: program that setsockopt
 SO_KEEPALIVE will work properly.
?S:.
?C:CAN_KEEPALIVE (KEEPALIVE):
?C: This symbol if defined indicates to the C program that the SO_KEEPALIVE
?C: option of setsockopt() will work as advertised in the manual.
?C:.
?H:#$d_keepalive CAN_KEEPALIVE  /**/
?H:.
?F:!socket
?LINT:set d_keepalive
: see if setsockopt with SO_KEEPALIVE works as advertised
echo " "
case "$d_oldsock" in
"$undef")
 if $contains SO_KEEPALIVE `./findhdr sys/socket.h` \
  /dev/null >/dev/null 2>&1
 then
  echo "OK, let's see if SO_KEEPALIVE works as advertised..." >&4
```

```
  $cat > socket.c <<EOP
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netdb.h>

int main()
{
 int s = socket(AF_INET, SOCK_STREAM, 0);
 if (s == -1)
  exit(1);
 if (-1 == setsockopt(s, SOL_SOCKET, SO_KEEPALIVE, 0, 0))
  exit(2);
 exit(0);
}
EOP
  if $cc $ccflags $sockethdr -o socket socket.c $libs \
   $socketlib >/dev/null 2>&1; then
   ./socket >/dev/null 2>&1
   case $? in
   0) echo "Yes, it does!"
    val="$define";;
   1)
 $cat <<EOM
(Something went wrong -- Assuming SO_KEEPALIVE is broken)
EOM
    val="$undef";;
   2) echo "No, it doesn't.  Don't trust your manuals!!"
    val="$undef";;
   esac
  else
   cat <<EOM
(I can't compile the test program -- Assuming SO_KEEPALIVE is broken)
EOM
   val="$undef"
  fi
 else
  echo "Strange!! You have BSD 4.2 sockets but no SO_KEEPALIVE option."
  val="$undef"
 fi;;
*) cat <<EOM
As you have an old socket interface, you can't have heard of SO_KEEPALIVE.
EOM
 val="$undef";;
esac
set d_keepalive
eval $setvar
$rm -f socket socket.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sockopt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldsym.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:06:58  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit follows the creation of the config.sh file. It adds some
?X: special symbols: defines from patchlevel.h file if any and CONFIG,
?X: which is set to true. Then, we try to keep all the new symbols that
?X: may come from a hint file or a previous config.sh file.
?X:
?MAKE:Oldsym:
 Config_sh Options test hint src sed sort uniq
?MAKE: -pick add $@ %<
?T:CONFIG sym tmp
?F:!UU
: add special variables
$test -f $src/patchlevel.h && \
awk '/^#define/ {printf "%s=%s\n",$2,$3}' $src/patchlevel.h >>config.sh
echo "CONFIG=true" >>config.sh

: propagate old symbols
if $test -f UU/config.sh; then
?X: Make sure each symbol is unique in oldconfig.sh
 <UU/config.sh $sort | $uniq >UU/oldconfig.sh
?X:
?X: All the symbols that appear twice come only from config.sh (hence the
?X: two config.sh in the command line). These symbols will be removed by
?X: the uniq -u command. The oldsyms file thus contains all the symbols
?X: that did not appear in the produced config.sh (Larry Wall).
?X:
```

```
?X: Do not touch the -u flag of uniq.  This means you too, Jarkko.
?X:
 $sed -n 's/^\([a-zA-Z_0-9]*\)=.*/\1/p' \
  config.sh config.sh UU/oldconfig.sh |\
  $sort | $uniq -u >UU/oldsyms
 set X `cat UU/oldsyms`
 shift
 case $# in
 0) ;;
 *)
  cat <<EOM
Hmm...You had some extra variables I don't know about...I'll
 try to keep 'em...
EOM
  echo ": Variables propagated from previous config.sh file." >>config.sh
  for sym in `cat UU/oldsyms`; do
   echo "    Propagating $hint variable '"$'"$sym..."
   eval 'tmp="$'"${sym}"'"'
   echo "$tmp" | \
    sed -e "s/'/'\''\''/g" -e "s/^/$sym='/" -e "s/$/'/" >>config.sh
  done
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Oldsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_inetaton.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Spider Boardman
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_inetaton.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:36:35  ram
?RCS: patch61: created
?RCS:
?MAKE:d_inetaton: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetaton:
?S: This variable conditionally defines the HAS_INET_ATON symbol, which
```

```
?S: indicates to the C program that the inet_aton() function is available
?S: to parse IP address "dotted-quad" strings.
?S:.
?C:HAS_INET_ATON:
?C: This symbol, if defined, indicates
 to the C program that the
?C: inet_aton() function is available to parse IP address "dotted-quad"
?C: strings.
?C:.
?H:#$d_inetaton HAS_INET_ATON  /**/
?H:.
?LINT:set d_inetaton
: check whether inet_aton exists
set inet_aton d_inetaton
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_inetaton.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: pager.U,v $
?RCS: Revision 3.0.1.2  1995/01/30  14:41:26  ram
?RCS: patch49: ensure dflt gets initialized in case no pagers are found (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:27:45  ram
?RCS: patch36: replaced Myread by Getfile in the dependency line
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:pager: pg more less Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:pager:
?S: This variable contains the name of the preferred pager
 on the system.
?S: Usual values are (the full pathnames of) more, less, pg, or cat.
?S:.
: locate the preferred pager for this system
```

```
fn=f/
case "$pager" in
")
 dflt="
 case "$pg" in
 /*) dflt=$pg;;
 [a-zA-Z]:/*) dflt=$pg;;
 esac
 case "$more" in
 /*) dflt=$more;;
 [a-zA-Z]:/*) dflt=$more;;
 esac
 case "$less" in
 /*) dflt=$less;;
 [a-zA-Z]:/*) dflt=$less;;
 esac
 case "$dflt" in
 ") dflt=/usr/ucb/more;;
 esac
 ;;
*) dflt="$pager"
 ;;
esac
?X: Instruct ./getfile to trust the default pager value,
?X: even if it does not begin with a slash.  For example, on os2,
?X: pager might be cmd /c more.  Also, it might include some options,
?X: such as '/usr/bin/less -R'.  ./getfile would report that
?X: "/usr/bin/less -R" doesn't exist.
?X: See comments in Getfile.U.
fn="f/($dflt)"
echo " "
rp='What pager is used on your system?'
. ./getfile
pager="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pager.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysmount.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysmount: Inhdr Hasfield
?MAKE: -pick add $@ %<
```

```
?S:i_sysmount:
?S: This variable conditionally defines the I_SYSMOUNT symbol,
?S: and indicates whether a C program should include <sys/mount.h>.
?S:.
?C:I_SYS_MOUNT:
?C: This symbol, if defined, indicates that <sys/mount.h> exists and
?C: should be included.
?C:.
?H:#$i_sysmount I_SYS_MOUNT  /**/
?H:.
?LINT:set i_sysmount
: see if this is a sys/mount.h system
set sys/mount.h i_sysmount
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysmount.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readlink.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_readlink.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:52  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_readlink: Inlibc
?MAKE: -pick add $@ %<
?S:d_readlink:
?S: This variable conditionally defines the HAS_READLINK symbol, which
?S: indicates to the C program that the readlink() routine is available
?S: to read the value of a symbolic link.
?S:.
?C:HAS_READLINK :
?C: This
 symbol, if defined, indicates that the readlink routine is
?C: available to read the value of a symbolic link.
?C:.
?H:#$d_readlink HAS_READLINK  /**/
```

```
?H:.
?LINT:set d_readlink
: see if readlink exists
set readlink d_readlink
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_readlink.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fd_set.U,v 3.0.1.3 1997/02/28 15:33:16 ram Exp $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_fd_set.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:16  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  06:57:23  ram
?RCS: patch30: extended scope for fd_set checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:27  ram
?RCS: patch16: comments for HAS_FD_* symbols were not consistent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fd_set d_fd_macros
 d_fds_bits: Compile cat rm_try Oldconfig \
 d_socket i_systime i_sysselct i_stdlib run
?MAKE: -pick add $@ %<
?S:d_fd_set:
?S: This variable contains the eventual value of the HAS_FD_SET symbol,
?S: which indicates if your C compiler knows about the fd_set typedef.
?S:.
?S:d_fd_macros:
?S: This variable contains the eventual value of the HAS_FD_MACROS symbol,
?S: which indicates if your C compiler knows about the macros which
?S: manipulate an fd_set.
?S:.
?S:d_fds_bits:
?S: This variable contains the eventual value of the HAS_FDS_BITS symbol,
```

```
?S: which indicates if your fd_set typedef contains the fds_bits member.
?S: If you have an fd_set typedef, but the dweebs who installed it did
?S: a half-fast job and neglected to provide the macros to manipulate
?S: an fd_set, HAS_FDS_BITS will let us know how to fix the gaffe.
?S:.
?C:HAS_FD_SET:
?C: This symbol, when defined, indicates presence of the fd_set typedef
?C: in <sys/types.h>
?C:.
?C:HAS_FD_MACROS:
?C: This symbol, when defined,
  indicates presence of the macros used to
?C: manipulate an fd_set.
?C:.
?C:HAS_FDS_BITS:
?C: This symbol, when defined, indicates presence of the fds_bits member in
?C: fd_set.  This knowledge is useful if fd_set is available but the macros
?C: aren't.
?C:.
?H:#$d_fd_set HAS_FD_SET /**/
?H:#$d_fd_macros HAS_FD_MACROS /**/
?H:#$d_fds_bits HAS_FDS_BITS /**/
?H:.
?F:!try
: check for fd_set items
$cat <<EOM

Checking to see how well your C compiler handles fd_set and friends ...
EOM
?X: The FD_SET macros can be in strange places.  On some SysV-based
?X: systems, they are in <sys/bsdtypes.h>, which is included (perhaps)
?X: by <sys/socket.h>.  We won't force people to include
?X: <sys/bsdtypes.h> because it might introduce other
?X: incompatibilities.
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h>
 */
#endif
#ifdef I_SYS_TIME
```

```
#include <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main() {
 fd_set fds;

#ifdef TRYBITS
 if(fds.fds_bits);
#endif

#if defined(FD_SET) && defined(FD_CLR) && defined(FD_ISSET) && defined(FD_ZERO)
 exit(0);
#else
 exit(1);
#endif
}
EOCP
set try -DTRYBITS
if eval $compile; then
 d_fds_bits="$define"
 d_fd_set="$define"
 echo "Well, your system knows about the normal fd_set typedef..." >&4
 if $run ./try; then
  echo "and you have the normal fd_set macros (just as I'd expect)." >&4
  d_fd_macros="$define"
 else
  $cat >&4 <<'EOM'
but not the normal fd_set macros!  Gaaack!  I'll have to cover for you.
EOM
  d_fd_macros="$undef"
 fi
else
 $cat <<'EOM'
Hmm, your compiler has some difficulty with fd_set.  Checking further...
EOM
 set try
 if eval $compile; then
  d_fds_bits="$undef"
  d_fd_set="$define"
  echo "Well, your system has some sort of fd_set available..." >&4
  if $run ./try; then
   echo "and you have the normal
 fd_set macros." >&4
   d_fd_macros="$define"
  else
   $cat <<'EOM'
```

```
but not the normal fd_set macros!  Gross!  More work for me...
EOM
   d_fd_macros="$undef"
  fi
 else
 echo "Well, you got zip.  That's OK, I can roll my own fd_set stuff." >&4
  d_fd_set="$undef"
  d_fds_bits="$undef"
  d_fd_macros="$undef"
 fi
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_fd_set.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mbrtowc: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbrtowc:
?S: This variable conditionally defines the HAS_MBRTOWC symbol if the
?S: mbrtowc() routine is available to be used to convert a multi-byte
?S: character into a wide character.
?S:.
?C:HAS_MBRTOWC:
?C: This symbol, if defined, indicates that the mbrtowc routine is
?C: available to convert a multi-byte character into a wide character.
?C:.
?H:#$d_mbrtowc HAS_MBRTOWC /**/
?H:.
?LINT: set d_mbrtowc
: see if mbrtowc exists
set mbrtowc d_mbrtowc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_mbrtowc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2006-2007, H.Merijn Brand
```

```
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_c99_variadic_macros: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:d_c99_variadic_macros:
?S: This variable conditionally defines the HAS_C99_VARIADIC_MACROS
?S: symbol, which indicates to the C program that C99 variadic macros
?S: are available.
?S:.
?C:HAS_C99_VARIADIC_MACROS:
?C: If defined, the compiler supports C99 variadic macros.
?C:.
?H:#$d_c99_variadic_macros HAS_C99_VARIADIC_MACROS /**/
?H:.
?F:!try
: see if the Compiler supports C99 variadic macros
echo "Checking for C99 variadic macros." >&4
$cat >try.c <<EOCP
#include
 <stdio.h>
#include <stdarg.h>

#define foo(buffer, format, ...) sprintf(buffer, format, __VA_ARGS__)

int main() {
 char buf[20];
 foo(buf, "%d %g %.*s", 123, 456.0, (int)3, "789fail");
 puts(buf);
 return 0;
}
EOCP
set try
if eval $compile && $run ./try 2>&1 >/dev/null; then
   case "`$run ./try`" in
 "123 456 789")
 echo "You have C99 variadic macros." >&4
 d_c99_variadic_macros="$define"
 ;;
 *)
 echo "You don't have functional C99 variadic macros." >&4
 d_c99_variadic_macros="$undef"
 ;;
   esac
```

```
else
   echo "I couldn't compile and run the test program, so I assume that you don't have functional C99 variadic
macros." >&4
   d_c99_variadic_macros="$undef"
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_c99_variadic.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgrcv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgrcv.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgrcv: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgrcv:
?S: This variable conditionally defines the HAS_MSGRCV symbol, which
?S: indicates to the C program that the msgrcv() routine is available.
?S:.
?C:HAS_MSGRCV:
?C: This symbol, if defined, indicates that the msgrcv() routine is
?C: available to extract a message from the message queue.
?C:.
?H:#$d_msgrcv
 HAS_MSGRCV  /**/
?H:.
?LINT:set d_msgrcv
: see if msgrcv exists
set msgrcv d_msgrcv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgrcv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fsetpos.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
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?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fsetpos.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:38  ram
?RCS: patch30: created
?RCS:
?MAKE:d_fsetpos: Inlibc
?MAKE: -pick add $@ %<
?S:d_fsetpos:
?S: This variable conditionally defines HAS_FSETPOS if fsetpos() is
?S: available to set the file position indicator.
?S:.
?C:HAS_FSETPOS:
?C: This symbol, if defined, indicates that the fsetpos routine is
?C: available to set the file position indicator, similar to fseek().
?C:.
?H:#$d_fsetpos
 HAS_FSETPOS /**/
?H:.
?LINT:set d_fsetpos
: see if fsetpos exists
set fsetpos d_fsetpos
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fsetpos.U
No license file was found, but licenses were detected in source scan.

```
case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
```

```
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting makedir (with variable substitutions)"
$spitshell >makedir <<!GROK!THIS!
$startsh
# $Id: makedir.sh,v 3.0.1.1 1994/01/24 14:00:08 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original
 Author: Larry Wall <lwall@netlabs.com>
#
# $Log: makedir.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:08  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:38  ram
# Baseline for dist 3.0 netwide release.
#

export PATH || (echo "OOPS, this isn't sh.  Desperation time.  I will feed myself to sh."; sh \$0; kill \$\$)

case \$# in
 0)
   $echo "makedir pathname filenameflag"
   exit 1
   ;;
esac

: guarantee one slash before 1st component
case \$1 in
 /*) ;;
 *)  set ./\$1 \$2 ;;
esac

: strip last component if it is to be a filename
case X\$2 in
 X1) set \`$echo \$1 | $sed 's:\(.*\)/[^/]*\$:\1:'\` ;;
 *)  set \$1 ;;
esac
```

```
: return reasonable status if nothing to be created
if $test -d "\$1" ; then
   exit 0
fi

list=''
while true ; do
   case \$1 in
   */*)
 list="\$1 \$list"
 set \`echo \$1 | $sed 's:\(.*\)/:\1 :'\`
 ;;
   *)
 break
 ;;
   esac
done

set \$list

for dir do
   $mkdir \$dir >/dev/null 2>&1
done
!GROK!THIS!
$eunicefix
 makedir
chmod +x makedir
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/makedir.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_whoami.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_whoami.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:02:21  ram
?RCS: patch6: added default for i_whoami
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:50  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:i_whoami: Inhdr
?MAKE: -pick add $@ %<
?S:i_whoami (d_whoami):
?S: This variable conditionally defines the I_WHOAMI symbol, which
?S: indicates to the C program that it should include <whoami.h>.
?S:.
?C:I_WHOAMI (WHOAMI):
?C: This symbol,
 if defined, indicates that the program may include
?C: <whoami.h>.
?C:.
?H:#$i_whoami I_WHOAMI /**/
?H:.
?D:i_whoami=''
?LINT:set i_whoami
: see if there is a whoami.h file
set whoami.h i_whoami
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_whoami.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_trunc: Inlibc
?MAKE: -pick add $@ %<
?S:d_trunc:
?S: This variable conditionally defines the HAS_TRUNC symbol, which
?S: indicates to the C program that the trunc() routine is available
?S: to round doubles towards zero.
?S:.
?C:HAS_TRUNC:
?C: This symbol, if defined, indicates that the trunc routine is
?C: available to round doubles towards zero.
?C:.
?H:#$d_trunc HAS_TRUNC  /**/
?H:.
?LINT:set d_trunc
: see if trunc exists
set trunc d_trunc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_trunc.U

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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigaction.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:29  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sigaction: Csym Setvar cat cc ccflags ldflags libs rm _o
?MAKE: -pick add $@ %<
?S:d_sigaction:
?S: This variable conditionally defines the HAS_SIGACTION symbol, which
?S: indicates that the Vr4 sigaction() routine is available.
?S:.
?C:HAS_SIGACTION:
?C: This symbol, if defined, indicates that Vr4's sigaction() routine
?C: is available.
?C:.
?H:#$d_sigaction HAS_SIGACTION /**/
?H:.
?T:val
?LINT:set
 d_sigaction
: see if we have sigaction
echo " "
if set sigaction val -f d_sigaction; eval $csym; $val; then
 echo 'sigaction() found.' >&4
 val="$define"
else
 echo 'sigaction NOT found.' >&4
 val="$undef"
fi
?X:
?X: Solaris 2.5_x86 with SunWorks Pro C 3.0.1 doesn't have a complete
?X: sigaction structure if compiled with cc -Xc.  This compile test
?X: will fail then.  <doughera@lafcol.lafayette.edu>
?X:
$cat > set.c <<'EOP'
#include <stdio.h>
```

```
#include <sys/types.h>
#include <signal.h>
int main()
{
   struct sigaction act, oact;
}
EOP
if $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1; then
 :
else
 echo "But you don't seem to have a useable struct sigaction." >&4
 val="$undef"
fi
set d_sigaction; eval $setvar
$rm -f set set$_o set.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigaction.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strtol.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtol.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strtol: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtol:
?S: This variable conditionally defines the HAS_STRTOL symbol, which
?S: indicates to the C program that the strtol() routine is available
?S: to provide better numeric string conversion than atoi() and friends.
?S:.
?C:HAS_STRTOL (STRTOL):
?C: This symbol, if defined, indicates that
 the strtol routine is available
?C: to provide better numeric string conversion than atoi() and friends.
?C:.
?H:#$d_strtol HAS_STRTOL /**/
?H:.
```

```
?LINT:set d_strtol
: see if strtol exists
set strtol d_strtol
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtol.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_voidsig.U,v 3.0.1.3 1995/05/12 12:12:46 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_voidsig.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:12:46  ram
?RCS: patch54: made cppflags dependency optional
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:20:35  ram
?RCS: patch32: now sets signal_t only once d_voidsig is known (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:54  ram
?RCS: patch30: now properly sets signal_t when re-using previous value
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_voidsig
 signal_t: rm contains cppstdin cppminus +cppflags test Myread \
 Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_voidsig:
?S: This variable conditionally defines VOIDSIG if this system
?S: declares "void (*signal(...))()" in signal.h.  The old way was to
?S: declare it as "int (*signal(...))()".
?S:.
?S:signal_t:
?S: This variable holds the type of the signal handler (void or int).
?S:.
?C:VOIDSIG:
?C: This symbol is defined if this system declares "void (*signal(...))()" in
?C: signal.h.  The old way was to declare it as "int (*signal(...))()".  It
?C: is up to the package author to declare things correctly based on the
```

```
?C: symbol.
?C:.
?C:Signal_t (SIGNAL_T):
?C: This symbol's value is either "void" or "int", corresponding to the
?C: appropriate return type of a signal handler.  Thus, you can declare
?C: a signal handler using "Signal_t (*handler)()", and define the
?C: handler using "Signal_t handler(sig)".
?C:.
?H:#$d_voidsig VOIDSIG /**/
?H:#define
 Signal_t $signal_t /* Signal handler's return type */
?H:.
?T:xxx
?LINT:set d_voidsig
: see if signal is declared as pointer to function returning int or void
echo " "
xxx=`./findhdr signal.h`
$test "$xxx" && $cppstdin $cppminus $cppflags < $xxx >$$.tmp 2>/dev/null
if $contains 'int.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
elif $contains 'void.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have void (*signal())()." >&4
 val="$define"
elif $contains 'extern[  ]*[(\*]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
?X: This next test is kind of sloppy, but it catches Linux
?X: which has a
?X:  typedef void (*__sighandler_t)  (int)  ;
?X: A better fix would be to compile a C program with the proper
?X: prototype, but since nearly everyone uses void, we'll just go with
?X: this.
elif $contains 'void.*\*.*sig' $$.tmp >/dev/null 2>&1 ; then
 echo "You
 have void (*signal())()." >&4
 val="$define"
else
 case "$d_voidsig" in
 ")
 echo "I can't determine whether signal handler returns void or int..." >&4
  dflt=void
  rp="What type does your signal handler return?"
  . ./myread
  case "$ans" in
  v*) val="$define";;
  *) val="$undef";;
  esac;;
```

```
 "$define")
  echo "As you already told me, signal handler returns void." >&4
  val="$define"
  ;;
 *) echo "As you already told me, signal handler returns int." >&4
  val="$undef"
  ;;
 esac
fi
set d_voidsig
eval $setvar
case "$d_voidsig" in
"$define") signal_t="void";;
*) signal_t="int";;
esac
$rm -f $$.tmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_voidsig.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: selecttype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:20:09  ram
?RCS: patch61: always include <sys/select.h> when available for test
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:14:06  ram
?RCS: patch56: removed harmful spaces in assignment
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:31  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:selecttype: cat +cc +ccflags rm Oldconfig Myread \
 d_fd_set d_select d_socket i_systime
 i_sysselct
?MAKE: -pick add $@ %<
?S:selecttype:
```

```
?S: This variable holds the type used for the 2nd, 3rd, and 4th
?S: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?S: is defined, and 'int *' otherwise.  This is only useful if you
?S: have select(), naturally.
?S:.
?C:Select_fd_set_t:
?C: This symbol holds the type used for the 2nd, 3rd, and 4th
?C: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?C: is defined, and 'int *' otherwise.  This is only useful if you
?C: have select(), of course.
?C:.
?H:#define Select_fd_set_t  $selecttype /**/
?H:.
?T:xxx yyy
: check for type of arguments to select.  This will only really
: work if the system supports prototypes and provides one for
: select.
case "$d_select" in
$define)
 : Make initial guess
 case "$selecttype" in
 "|' ')
  case "$d_fd_set" in
  $define) xxx='fd_set *' ;;
  *) xxx='int *' ;;
  esac
  ;;
 *)  xxx="$selecttype"
  ;;
 esac
 : backup guess
 case "$xxx" in
 'fd_set *') yyy='int *'
 ;;
 'int *') yyy='fd_set *' ;;
 esac

 $cat <<EOM

Checking to see what type of arguments are expected by select().
EOM
 $cat >try.c <<EOCP
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
```

```
#endif
#ifdef I_SYS_TIME
#include <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main()
{
 int width;
 Select_fd_set_t readfds;
 Select_fd_set_t writefds;
 Select_fd_set_t exceptfds;
 struct timeval timeout;
 select(width, readfds, writefds, exceptfds, &timeout);
 exit(0);
}
EOCP
 if $cc $ccflags -c -DSelect_fd_set_t="$xxx" try.c >/dev/null 2>&1 ; then
  selecttype="$xxx"
  echo "Your system uses $xxx for the arguments to select." >&4
 elif $cc $ccflags -c -DSelect_fd_set_t="$yyy" try.c >/dev/null 2>&1 ; then
  selecttype="$yyy"
  echo "Your system uses $yyy for the arguments to select." >&4
 else
  rp='What is the type for the 2nd, 3rd, and 4th arguments
 to select?'
  dflt="$xxx"
  . ./myread
  selecttype="$ans"
 fi
 $rm -f try.[co]
 ;;
*) selecttype='int *'
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/selecttype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysndir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysndir.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysndir: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysndir:
?S: This variable conditionally defines the I_SYS_NDIR symbol, and indicates
?S: whether a C program should include <sys/ndir.h>.
?S:.
?C:I_SYS_NDIR (I_SYSNDIR):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/ndir.h>.
?C:.
?H:#$i_sysndir
 I_SYS_NDIR /**/
?H:.
?LINT:set i_sysndir
: see if this is an sysndir system
set sys/ndir.h i_sysndir
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysndir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_usleepproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_usleepproto:
?S: This variable conditionally defines the HAS_USLEEP_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the usleep() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_USLEEP_PROTO:
```

```
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the usleep() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern int
 usleep(useconds_t);
?C:.
?H:#$d_usleepproto HAS_USLEEP_PROTO /**/
?H:.
?LINT:set d_usleepproto
: see if prototype for usleep is available
echo " "
set d_usleepproto usleep $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_usleepproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethbynm.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethbynm: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbynm (d_gethhstby):
?S: This variable conditionally defines the HAS_GETHOSTBYNAME symbol, which
?S: indicates to the C program that the gethostbyname() routine is available
?S: to lookup host names in some data base or other.
?S:.
?C:HAS_GETHOSTBYNAME (GETHOSTBYNAME):
?C: This symbol, if defined, indicates that the gethostbyname()
 routine is
?C: available to lookup host names in some data base or other.
?C:.
?H:#$d_gethbynm HAS_GETHOSTBYNAME  /**/
?H:.
?LINT:set d_gethbynm
: see if gethostbyname exists
```

```
set gethostbyname d_gethbynm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethbynm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgrp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:28  ram
?RCS: patch61: new USE_BSD_GETPGRP to detect the getpgrp() flavour
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp d_bsdgetpgrp: Guess Inlibc Setvar cat rm \
 +cc +ccflags +ldflags +libs i_unistd
?MAKE: -pick add $@ %<
?S:d_getpgrp:
?S: This variable conditionally defines HAS_GETPGRP if getpgrp() is
?S: available to get the current process group.
?S:.
?S:d_bsdgetpgrp:
?S: This
 variable conditionally defines USE_BSD_GETPGRP if
?S: getpgrp needs one arguments whereas USG one needs none.
?S:.
?C:HAS_GETPGRP (GETPGRP):
?C: This symbol, if defined, indicates that the getpgrp routine is
?C: available to get the current process group.
?C:.
?C:USE_BSD_GETPGRP:
?C: This symbol, if defined, indicates that getpgrp needs one
?C: arguments whereas USG one needs none.
?C:.
?H:#$d_getpgrp HAS_GETPGRP  /**/
?H:#$d_bsdgetpgrp USE_BSD_GETPGRP /**/
?H:.
?F:!set !set.c
```

```
?T:xxx
?LINT:set d_getpgrp d_bsdgetpgrp
: see if getpgrp exists
set getpgrp d_getpgrp
eval $inlibc

@if USE_BSD_GETPGRP || d_bsdgetpgrp
case "$d_getpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of getpgrp is in use..."
 $cat >set.c <<EOP
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (getpgrp(1) ==
 0)
  exit(0);
#else
 if (getpgrp() > 0)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -DTRY_BSD_PGRP $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1
  && ./set
 then
  echo "You have to use getpgrp(pid) instead of getpgrp()." >&4
  val="$define"
 elif $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo "You have to use getpgrp() instead of getpgrp(pid)." >&4
  val="$undef"
 else
  echo "I can't seem to compile and run the test program."
  if ./usg; then
   xxx="a USG one, i.e. you use getpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
```

```
  case "$i_unistd" in
  $undef)
   xxx="a BSD one, i.e. you use getpgrp(pid)."
   val="$define"
   ;;
  $define)
   xxx="probably a USG one, i.e. you use getpgrp()."
   val="$undef"
   ;;
  esac
 fi
 echo "Assuming your getpgrp is $xxx" >&4
fi
;;
*) val="$undef";;
esac
set d_bsdgetpgrp
eval $setvar
$rm -f set set.c
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdbool.U,v $
?RCS:
?RCS: Copyright (c) 2011 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_stdbool: cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:i_stdbool:
?S: This variable conditionally defines the I_STDBOOL symbol, which
?S: indicates to the C program that <stdbool.h> exists and should
?S: be included.
?S:.
?C:I_STDBOOL:
?C: This symbol, if defined, indicates that <stdbool.h> exists and
?C: can be included.
?C:.
?H:#$i_stdbool I_STDBOOL  /**/
?H:.
?LINT:set i_stdbool
: see if stdbool is available
: we want a real compile instead of Inhdr because some Solaris systems
```

```
: have stdbool.h, but it can only be used if the compiler indicates it
: is sufficiently c99-compliant.
echo " "
$cat >try.c <<EOCP
#include <stdio.h>
#include <stdbool.h>
int func(bool x)
{
   return
 x ? 1 : 0;
}
int main(int argc, char **argv)
{
   return func(0);
}
EOCP
set try
if eval $compile; then
 echo "<stdbool.h> found." >&4
 val="$define"
else
 echo "<stdbool.h> NOT found." >&4
 val="$undef"
fi
$rm_try
set i_stdbool
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_stdbool.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cpp_stuff.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:24  ram
?RCS: patch36: now uses cppstdin instead of plain cpp for consistency (ADO)
?RCS: patch36: remove temporary files when done
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:36  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cpp_stuff: cat contains cppstdin cppflags cppminus rm
?MAKE: -pick add $@ %<
?S:cpp_stuff:
?S: This variable contains an identification of the concatenation
 mechanism
?S: used by the C preprocessor.
?S:.
?C:CAT2:
?C: This macro concatenates 2 tokens together.
?C:.
?C:CAT3:
?C: This macro concatenates 3 tokens together.
?C:.
?C:CAT4:
?C: This macro concatenates 4 tokens together.
?C:.
?C:CAT5:
?C: This macro concatenates 5 tokens together.
?C:.
?C:STRINGIFY:
?C: This macro surrounds its token with double quotes.
?C:.
?C:SCAT2:
?C: This macro concatenates 2 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT3:
?C: This macro concatenates 3 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT4:
?C: This macro concatenates 4 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT5:
?C: This macro concatenates 5 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?X: Dist pl70 included the following, but AIX's xlc compiler
?X: (which
 is ANSI-ish and has cpp_stuff == 42)) rejects
?X: The SQuoTe/EQuoTe stuff because the string literals are on
?X: separate lines.  Sigh.
?X:  Andy Dougherty   24 Feb 1998
?X: ?H:?%<:#if $cpp_stuff == 1
?X: ?H:?CAT2:#define CAT2(a,b)a/**/b
```

```
?X: ?H:?CAT3:#define CAT3(a,b,c)a/**/b/**/c
?X: ?H:?CAT4:#define CAT4(a,b,c,d)a/**/b/**/c/**/d
?X: ?H:?CAT5:#define CAT5(a,b,c,d,e)a/**/b/**/c/**/d/**/e
?X: ?H:?STRINGIFY:#define STRINGIFY(a)"a"
?X: ?H:?%<:#define SQuoTe(a)"a
?X: ?H:?%<:#define EQuoTe(a)a"
?X: ?H:?SCAT2:#define SCAT2(a,b)EQuoTe(SQuoTe(a)b)
?X: ?H:?SCAT3:#define SCAT3(a,b,c)EQuoTe(SQuoTe(a)b/**/c)
?X: ?H:?SCAT4:#define SCAT4(a,b,c,d)EQuoTe(SQuoTe(a)b/**/c/**/d)
?X: ?H:?SCAT5:#define SCAT5(a,b,c,d,e)EQuoTe(SQuoTe(a)b/**/c/**/d/**/e)
?X: ?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 1
?H:?CAT2:#define CAT2(a,b) a/**/b
?H:?CAT3:#define CAT3(a,b,c) a/**/b/**/c
?H:?CAT4:#define CAT4(a,b,c,d) a/**/b/**/c/**/d
?H:?CAT5:#define CAT5(a,b,c,d,e) a/**/b/**/c/**/d/**/e
?H:?STRINGIFY:#define STRINGIFY(a) "a"
?X: If
 you can get stringification with catify, tell me how!
?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 42
?H:?%<:#define PeRl_CaTiFy(a, b) a ## b
?H:?%<:#define PeRl_StGiFy(a) #a
?X: The additional level of indirection enables these macros to be
?X: used as arguments to other macros.  See K&R 2nd ed., page 231.
?H:?CAT2:#define CAT2(a,b) PeRl_CaTiFy(a,b)
?H:?CAT3:#define CAT3(a,b,c) CAT2(PeRl_CaTiFy(a,b),c)
?H:?CAT4:#define CAT4(a,b,c,d) CAT2(CAT3(a,b,c),d)
?H:?CAT5:#define CAT5(a,b,c,d,e) CAT2(CAT4(a,b,c,d),e)
?H:?%<:#define StGiFy(a) PeRl_StGiFy(a)
?H:?STRINGIFY:#define STRINGIFY(a) PeRl_StGiFy(a)
?H:?SCAT2:#define SCAT2(a,b) PeRl_StGiFy(a) PeRl_StGiFy(b)
?H:?SCAT3:#define SCAT3(a,b,c) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c)
?H:?SCAT4:#define SCAT4(a,b,c,d) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c) PeRl_StGiFy(d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c) PeRl_StGiFy(d)
PeRl_StGiFy(e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff != 1 && $cpp_stuff
 != 42
?H:?%<:#include "Bletch: How does this C preprocessor concatenate tokens?"
?H:?%<:#endif
?H:.
?W:%<:CAT2 CAT3 CAT4 CAT5 STRINGIFY SCAT2 SCAT3 SCAT4 SCAT5
?F:!cpp_stuff.c
?LINT:known StGiFy
?LINT:known PeRl_CaTiFy
?LINT:known PeRl_StGiFy
: how do we concatenate cpp tokens here?
```

```
echo " "
echo "Checking to see how your cpp does stuff like concatenate tokens..." >&4
$cat >cpp_stuff.c <<'EOCP'
#define RCAT(a,b)a/**/b
#define ACAT(a,b)a ## b
RCAT(Rei,ser)
ACAT(Cir,cus)
EOCP
$cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out 2>&1
if $contains 'Circus' cpp_stuff.out >/dev/null 2>&1; then
 echo "Oh!  Smells like ANSI's been here." >&4
 echo "We can catify or stringify, separately or together!"
 cpp_stuff=42
elif $contains 'Reiser' cpp_stuff.out >/dev/null 2>&1; then
 echo "Ah, yes!  The good old days!" >&4
 echo "However, in the good old days we don't know how to stringify and"
 echo "catify at the same time."
 cpp_stuff=1
else
 $cat >&4 <<EOM
Hmm, I don't seem to be able to concatenate
 tokens with your cpp.
You're going to have to edit the values of CAT[2-5] in config.h...
EOM
?X: It would be nice to have configure remind us at the end that some manual
?X: intervention is needed -- FIXME
 cpp_stuff="/* Help! How do we handle cpp_stuff? */*/"
fi
$rm -f cpp_stuff.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/cpp_stuff.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mkdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mkdir.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_mkdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkdir:
?S: This variable conditionally defines the HAS_MKDIR symbol, which
?S: indicates to the C program that the mkdir() routine is available
?S: to create directories..
?S:.
?C:HAS_MKDIR (MKDIR):
?C: This symbol, if defined, indicates that the mkdir routine is available
?C: to create directories.
  Otherwise you should fork off a new process to
?C: exec /bin/mkdir.
?C:.
?H:#$d_mkdir HAS_MKDIR  /**/
?H:.
?LINT:set d_mkdir
: see if mkdir exists
set mkdir d_mkdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mkdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memcmp.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:35  ram
?RCS: patch10: removed text recommending bcmp over memcmp (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memcmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_memcmp:
?S: This variable conditionally defines the HAS_MEMCMP symbol, which
?S: indicates to the C program that the memcmp() routine is available
?S: to compare blocks of
```

```
 memory.
?S:.
?C:HAS_MEMCMP (MEMCMP):
?C: This symbol, if defined, indicates that the memcmp routine is available
?C: to compare blocks of memory.
?C:.
?H:#$d_memcmp HAS_MEMCMP /**/
?H:.
?LINT:set d_memcmp
: see if memcmp exists
set memcmp d_memcmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_faststdio: Setvar \
 d_stdstdio d_stdio_ptr_lval d_stdio_cnt_lval d_stdio_ptr_lval_sets_cnt
?MAKE: -pick add $@ %<
?S:d_faststdio:
?S: This variable conditionally defines the HAS_FAST_STDIO symbol,
?S: which indicates to the C program that the "fast stdio" is available
?S: to manipulate the stdio buffers directly.
?S:.
?C:HAS_FAST_STDIO:
?C: This symbol, if defined, indicates that the "fast stdio"
?C: is available to manipulate the stdio buffers directly.
?C:.
?H:#$d_faststdio HAS_FAST_STDIO  /**/
?H:.
?LINT:set d_faststdio
: see if fast_stdio exists
val="$undef"
case "$d_stdstdio:$d_stdio_ptr_lval" in
"$define:$define")
 case "$d_stdio_cnt_lval$d_stdio_ptr_lval_sets_cnt" in
 *$define*)
  echo "You
 seem to have 'fast stdio' to directly manipulate the stdio buffers." >&4
  val="$define"
```

```
  ;;
 esac
 ;;
esac
set d_faststdio
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_faststdio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:run to from targetarch targetdir targetmkdir targethost targetport \
 usecrosscompile hostperl hostgenerate hostosname targetenv: \
    src test rm echo sed mkdir cp chmod make touch
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecrosscompile:
?S: This variable conditionally defines the USE_CROSS_COMPILE symbol,
?S: and indicates that Perl has been cross-compiled.
?S:.
?S:run:
?S: This variable contains the command used by Configure
?S: to copy and execute a cross-compiled executable in the
?S: target host.  Useful and available only during Perl build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:from:
?S: This variable contains the command used by Configure
?S: to copy files from the target host.  Useful
 and available
?S: only during Perl build.
?S: The string ':' if not cross-compiling.
?S:.
?S:to:
?S: This variable contains the command used by Configure
?S: to copy to from the target host.  Useful and available
?S: only during Perl build.
?S: The string ':' if not cross-compiling.
?S:.
?S:targetarch:
?S: If cross-compiling, this variable contains the target architecture.
```

```
?S: If not, this will be empty.
?S:.
?S:targetdir:
?S: This variable contains a path that will be created on the target
?S: host using targetmkdir, and then used to copy the cross-compiled
?S: executables to. Defaults to '/tmp' if not set.
?S:.
?S:targetmkdir:
?S: This variable contains the command used by Configure to create a
?S: new directory on the target host.
?S:.
?S:targethost:
?S: This variable contains the name of a separate host machine that
?S: can be used to run compiled test programs and perl tests on.
?S: Set to empty string if not in use.
?S:.
?S:targetport:
?S: This variable contains the number
 of a network port to be used to
?S: connect to the host in targethost, if unset defaults to 22 for ssh.
?S:.
?S:hostperl:
?S: This variable contains the path to a miniperl binary that can be
?S: run on the host OS when cross-compiling.  Useful and available only
?S: during Perl build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:hostgenerate:
?S: This variable contains the path to a generate_uudmap binary that
?S: can be run on the host OS when cross-compiling.  Useful and
?S: available only during Perl build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:hostosname:
?S: This variable contains the original value of '$^O' for hostperl
?S: when cross-compiling.  This is useful to pick the proper tools
?S: when running build code in the host.
?S: Empty string '' if not cross-compiling.
?S:.
?S:targetenv:
?S: If cross-compiling, this variable can be used to modify the
?S: environment on the target system.
?S: However, how and where it's used, and even if it's used at all, is
?S: entirely
 dependent on both the transport mechanism (targetrun) and
?S: what the target system is.  Unless the relevant documentation says
?S: otherwise, it is genereally not useful.
?S:.
```

```
?C:USE_CROSS_COMPILE:
?C: This symbol, if defined, indicates that Perl is being cross-compiled.
?C:.
?C:PERL_TARGETARCH:
?C: This symbol, if defined, indicates the target architecture
?C: Perl has been cross-compiled to.  Undefined if not a cross-compile.
?C:.
?H:?%<:#ifndef USE_CROSS_COMPILE
?H:?%<:#$usecrosscompile USE_CROSS_COMPILE /**/
?H:?%<:#define PERL_TARGETARCH "$targetarch" /**/
?H:?%<:#endif
?H:.
?D:targetenv=''
?D:targethost=''
?D:targetmkdir=''
?T:croak pwd exe f q cwd file xxx env
?LINT:extern usecrosscompile
?LINT:extern cc
?LINT:extern usrinc
?LINT:change ar
?LINT:change nm
?LINT:change ranlib
?LINT:change src
?LINT:extern targetenv
?LINT:extern targetport
?LINT:extern targetdir
?LINT:extern targetuser
?LINT:change targetuser
?LINT:extern targetrun
?LINT:extern targetfrom
?LINT:extern
 targetto
?LINT:change targetrun
?LINT:change targetfrom
?LINT:change targetto
?LINT:extern incpth
?LINT:extern libpth
?LINT:extern locincpth
?LINT:extern loclibpth
?LINT:change locincpth
?LINT:change loclibpth
?LINT:extern hostperl
?LINT:extern hostgenerate
?LINT:extern before_host
?LINT:change before_host
?LINT:extern hostosname
?LINT:extern multiarch
: Check for Cross-Compilation
```

```
?X: targethost and targetenv mainly set to allow ?S: documentation
?X:otherwise it could have been declared extern
if $test "X$targethost" = "X"; then
   targethost=""
fi
if $test "X$targetenv" = "X"; then
   targetenv=""
fi
case "$usecrosscompile" in
$define|true|[yY]*)
 $echo "Cross-compiling..."
 croak=''
 case "$cc" in
 *-gcc*|*-g++*) # A cross-compiling gcc, probably.
     # arm-linux-androideabi-gcc  -> arm-linux-androideabi
     # x86_64-w64-mingw32-gcc.exe -> x86_64-w64-mingw32
     targetarch=`$echo $cc|$sed 's/-g[c\+][c\+].*$//'`
     ar=`$echo $cc|$sed 's/-g[c\+][c\+]/-ar/'`
     # leave out ld,
 choosing it is more complex
     nm=`$echo $cc|$sed 's/-g[c\+][c\+]/-nm/'`
     ranlib=`$echo $cc|$sed 's/-g[c\+][c\+]/-ranlib/'`
     # We are in a weird spot. Just before us, some values
     # were 'saved', to be restored after the hints are
     # run.  This means that the changes we made to ar,
     # nm and ranlib will get reverted.
     # To avoid that, we hijack the saving mechanism and
     # have it save our new values.
     for file in ar nm ranlib; do
  eval xxx=\$$file
  eval $file=$xxx$_exe
  eval _$file=$xxx
     done
 ;;
 esac
 case "$targetarch" in
 '') echo "Targetarch not defined." >&4; croak=y ;;
 *)  echo "Using targetarch $targetarch." >&4 ;;
 esac
 case "$targethost" in
 '') echo "Targethost not defined." >&4; croak=n ;;
 *)  echo "Using targethost $targethost." >&4
 esac
 locincpth=' '
 loclibpth=' '
 case "$croak" in
 y) echo "Cannot continue, aborting." >&4; exit 1 ;;
 esac
```

```
  : compile a host miniperl and generate_uudmap, unless we got passed them
  if
 $test "X$hostperl" = X; then
    echo "Building host miniperl and generate_uudmap binaries" >&4
    before_host=`pwd`
    cd ..
    cd $src
    src=`pwd`
    rm -rf $src/host
    mkdir $src/host
    cd $src/host
    $src/Configure -des -Dusedevel -Dmksymlinks
    $make miniperl
    case "$hostgenerate" in
    ") $make generate_uudmap
        hostgenerate=$src/host/generate_uudmap
        ;;
     "$undef") hostgenerate="
        ;;
    esac
    hostperl=$src/host/miniperl
    cd $before_host
  fi
  hostosname=`$hostperl -le 'print $^O'`
  ;;
*)
  usecrosscompile="$undef"
  ;;
esac

: Define -Dtargethost=somecomputer to run compiled tests on another machine
case "$targethost" in
  ") echo "Checking for cross-compile" >&4
  case "$usecrosscompile$multiarch" in
     *$define*) echo "Skipping the try tests in the rest of Configure as no targethost was defined when cross-
compiling" >&4
       if [ -f Makefile ]; then
         echo
 " "
         echo "Now you must ensure config.sh, config.h and the generated headers exist and run a $make."
       else
         echo "Configure done."
       fi
     exit 0
     ;;
   *) echo "No targethost for running compiler tests against defined, running locally" >&4
      run="
      to=:
```

```
      from=:
      ;;
  esac
  ;;
  *) echo "Using targethost $targethost." >&4
case "$src" in
/*) run=$src/Cross/run
    targetmkdir=$src/Cross/mkdir
    to=$src/Cross/to
    from=$src/Cross/from
    ;;
*)  pwd=`$test -f ../Configure & cd ..; pwd`
    run=$pwd/Cross/run
    targetmkdir=$pwd/Cross/mkdir
    to=$pwd/Cross/to
    from=$pwd/Cross/from
    ;;
esac
case "$targetrun" in
") targetrun=ssh ;;
esac
case "$targetto" in
") targetto=scp ;;
esac
case "$targetfrom" in
") targetfrom=scp ;;
esac
run=$run-$targetrun
to=$to-$targetto
from=$from-$targetfrom
case "$targetdir" in
")  targetdir=/tmp
     echo "Guessing targetdir $targetdir."
>&4
     ;;
esac
case "$targetuser" in
")  targetuser=root
     echo "Guessing targetuser $targetuser." >&4
     ;;
esac
case "$targetport" in
")  targetport=22
     echo "Guessing targetport $targetport." >&4
     ;;
esac
case "$targetfrom" in
scp) q=-q ;;
```

```
 *) q=" ;;
 esac
 case "$targetrun" in
 ssh|rsh)
     cat >$run <<EOF
#!/bin/sh
env="
case "\$1" in
-cwd)
 shift
 cwd=\$1
 shift
 ;;
esac
case "\$1" in
-env)
 shift
 env=\$1
 shift
 ;;
esac
case "\$cwd" in
") cwd=$targetdir ;;
esac
exe=\$1
shift
$to \$exe
$targetrun -p $targetport -l $targetuser $targethost "cd \$cwd && \$env \$exe \$@"
EOF
     ;;
 adb)
     $touch $run
     ;;
 *)  echo "Unknown targetrun '$targetrun'" >&4
     exit 1
     ;;
 esac
 case "$targetmkdir" in
 */Cross/mkdir)
     cat >$targetmkdir <<EOF
#!/bin/sh
$targetrun -p $targetport -l $targetuser $targethost "mkdir -p \$@"
EOF
     $chmod a+rx $targetmkdir
     ;;
 *)  echo "Unknown targetmkdir '$targetmkdir'" >&4
     exit 1
     ;;
```

```
 esac
 case
 "$targetto" in
 scp|rcp)
     cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $targetmkdir \`dirname \$f\`
   $targetto -P $targetport -r $q \$f $targetuser@$targethost:\$f           2>/dev/null  || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $targetto -P $targetport -r $q \$f $targetuser@$targethost:$targetdir/\$f 2>/dev/null || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 cp) cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $mkdir -p $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 *)  echo "Unknown targetto '$targetto'" >&4
     exit 1
     ;;
 esac
 case "$targetfrom" in
 scp|rcp)
   cat >$from <<EOF
#!/bin/sh
```

```
for f in \$@
do
 $rm -f \$f
 $targetfrom -P $targetport $q $targetuser@$targethost:$targetdir/\$f . || exit 1
done
exit 0
EOF
    ;;
 cp) cat >$from <<EOF
#!/bin/sh
for
 f in \$@
do
 $rm -f \$f
 cp $targetdir/\$f . || exit 1
done
exit 0
EOF
    ;;
 *)  echo "Unknown targetfrom '$targetfrom'" >&4
    exit 1
    ;;
 esac
 if $test ! -f $run; then
    echo "Target 'run' script '$run' not found." >&4
 else
    $chmod a+rx $run
 fi
 if $test ! -f $to; then
    echo "Target 'to' script '$to' not found." >&4
 else
    $chmod a+rx $to
 fi
 if $test ! -f $from; then
    echo "Target 'from' script '$from' not found." >&4
 else
    $chmod a+rx $from
 fi
 if $test ! -f $run -o ! -f $to -o ! -f $from; then
    exit 1
 fi
 cat >&4 <<EOF
Using '$run' for remote execution,
and '$from' and '$to'
for remote file transfer.
EOF
 ;;
*) run="
```

```
 to=:
 from=:
 usecrosscompile="$undef"
 targetarch="
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Cross.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_semget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_semget.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semget: Inlibc
?MAKE: -pick add $@ %<
?S:d_semget:
?S: This variable conditionally defines the HAS_SEMGET symbol, which
?S: indicates to the C program that the semget() routine is available.
?S:.
?C:HAS_SEMGET:
?C: This symbol, if defined, indicates that the semget() routine is
?C: available to get a set of semaphores.
?C:.
?H:#$d_semget
 HAS_SEMGET /**/
?H:.
?LINT:set d_semget
: see if semget exists
set semget d_semget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uselargefiles \
 ccflags_uselargefiles \
 ldflags_uselargefiles \
 libswanted_uselargefiles: \
 Myread Oldconfig Setvar test lseeksize fpossize \
 fpostype Compile echo n c cat lseektype rm_try run \
 use64bitint use64bitall i_stdlib
?MAKE: -pick add $@ %<
?Y:TOP
?S:uselargefiles:
?S: This variable conditionally defines the USE_LARGE_FILES symbol,
?S: and indicates that large file interfaces should be used when
?S: available.
?S:.
?S:ccflags_uselargefiles:
?S: This variable contains the compiler flags needed by large file builds
?S: and added to ccflags by hints files.
?S:.
?S:ldflags_uselargefiles:
?S: This variable contains the loader flags needed by large file builds
?S: and added to ldflags by
 hints files.
?S:.
?S:libswanted_uselargefiles:
?S: This variable contains the libraries needed by large file builds
?S: and added to ldflags by hints files.  It is a space separated list
?S: of the library names without the "lib" prefix or any suffix, just
?S: like libswanted..
?S:.
?C:USE_LARGE_FILES:
?C: This symbol, if defined, indicates that large file support
?C: should be used when available.
?C:.
?H:?%<:#ifndef USE_LARGE_FILES
?H:?%<:#$uselargefiles USE_LARGE_FILES  /**/
?H:?%<:#endif
?H:.
?INIT:ccflags_uselargefiles="
?INIT:ldflags_uselargefiles="
?INIT:libswanted_uselargefiles="
?T:yyy zzz
?F:!uselargefiles.cbu !try
```

```
?LINT:change lseeksize
?LINT:change fpossize
?LINT:extern uselfs
?LINT:use use64bitint
?LINT:use use64bitall
: Check for large file support
# Backward compatibility (uselfs is deprecated).
case "$uselfs" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duselfs is deprecated, using -Duselargefiles instead.
EOM
 uselargefiles="$define"
 ;;
esac

case "$lseeksize:$fpossize"
 in
8:8) cat <<EOM

You can have files larger than 2 gigabytes.
EOM
  val="$define" ;;
*)    case "$uselargefiles" in
  "$undef"|false|[nN]*) dflt='n' ;;
  *) dflt='y' ;;
  esac
  cat <<EOM

Perl can be built to understand large files (files larger than 2 gigabytes)
on some systems.  To do so, Configure can be run with -Duselargefiles.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
  rp='Try to understand large files, if available?'
  . ./myread
  case "$ans" in
  y|Y) val="$define" ;;
  *) val="$undef"  ;;
  esac
  ;;
esac
set uselargefiles
eval $setvar
: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a large files perl is to be built,
: we may need to set or change some other defaults.
```

```
if $test -f uselargefiles.cbu; then
 echo "Your platform has some specific hints regarding large file builds, using them..."
 . ./uselargefiles.cbu
fi
case "$uselargefiles" in
"$define")
 if $test -f uselargefiles.cbu;
 then
  echo " "
  echo "Rechecking to see how big your file offsets are..." >&4
  $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof($lseektype));
   return(0);
}
EOCP
  set try
  if eval $compile_ok; then
   lseeksize=`$run ./try`
   $echo "Your file offsets are now $lseeksize bytes long."
  else
   dflt="$lseeksize"
   echo " "
   echo "(I can't seem to compile the test program.  Guessing...)"
   rp="What is the size of your file offsets (in bytes)?"
   . ./myread
   lseeksize="$ans"
  fi
  case "$fpostype" in
  *_t) zzz="$fpostype" ;;
  *)   zzz="fpos_t" ;;
  esac
  $echo $n "Rechecking the size of $zzz...$c" >&4
  $cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($fpostype));
   return(0);
}
EOCP
```

```
  set try
  if eval $compile_ok; then
   yyy=`$run ./try`
   dflt="$lseeksize"
   case "$yyy" in
   ") echo
 " "
    echo "(I can't execute the test program--guessing $fpossize.)" >&4
    ;;
   *) fpossize=$yyy
    echo " $fpossize bytes." >&4
    ;;
   esac
  else
   dflt="$fpossize"
   echo " "
   echo "(I can't compile the test program.  Guessing...)" >&4
   rp="What is the size of your file positions (in bytes)?"
   . ./myread
   fpossize="$ans"
  fi
  $rm_try
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/uselfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: html1dir.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: html1dir.U,v $
?RCS:
?MAKE:html1dir html1direxp installhtml1dir: cat Loc Myread \
 spackage test Getfile Setprefixvar Prefixit Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?D:html1dir="
?S:html1dir:
```

```
?S: This variable contains the name of the directory in which html
?S: source pages are to be put.  This directory is for pages
?S: that describe whole programs, not libraries or modules.  It
?S: is intended to correspond roughly to section 1 of the Unix
?S: manuals.
?S:.
?D:html1direxp=''
?S:html1direxp:
?S: This
 variable is the same as the html1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installhtml1dir=''
?S:installhtml1dir:
?S: This variable is really the same as html1direxp, unless you are
?S: using a different installprefix.  For extra portability, you
?S: should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set html1direxp
?LINT:set installhtml1dir
: determine where html pages for programs go
set html1dir html1dir none
eval $prefixit
$cat <<EOM

If you wish to install html files for programs in $spackage, indicate
the appropriate directory here.  To skip installing html files,
answer "none".
EOM
case "$html1dir" in
''|none|$undef|' ') dflt=none ;;
*) dflt=$html1dir ;;
esac
fn=dn+~
rp="Directory for the main $spackage html pages?"
. ./getfile
prefixvar=html1dir
. ./setprefixvar
: Use ' ' for none so value is preserved next time through Configure
$test X"$html1dir" = "X" && html1dir=' '

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/html1dir.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: contains.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:contains: Nothing
?MAKE: -pick add $@ %<
?S:contains:
?S: This variable holds the command to do a grep with a proper return
?S: status.  On most sane systems it is simply "grep".  On insane systems
?S: it is a grep followed by a cat followed by a test.  This variable
?S: is primarily for the use of other Configure units.
?S:.
: Some
 greps do not return status, grrr.
echo "grimblepritz" >grimble
if grep blurfldyick grimble >/dev/null 2>&1 ; then
 contains=contains
elif grep grimblepritz grimble >/dev/null 2>&1 ; then
 contains=grep
else
 contains=contains
fi
rm -f grimble
: the following should work in any shell
case "$contains" in
contains*)
 echo " " >&4
 echo "AGH!  Grep doesn't return a status.  Attempting remedial action." >&4
 cat >contains <<'EOSS'
grep "$1" "$2" >.greptmp && cat .greptmp && test -s .greptmp
EOSS
contains=./contains
chmod +x $contains
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/contains.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2014, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_dladdr.U,v $
?RCS:
?MAKE:d_dladdr: Inlibc
?MAKE: -pick add $@ %<
?S:d_dladdr:
?S: This variable conditionally defines the HAS_DLADDR symbol, which
?S: indicates to the C program that the dladdr() routine is available
?S: to get a stack trace.
?S:.
?C:HAS_DLADDR:
?C: This symbol, if defined, indicates that the dladdr() routine is
?C: available to query dynamic linker information for an address.
?C: The <dlfcn.h> header must be included to use this routine.
?C:.
?H:#$d_dladdr HAS_DLADDR /**/
?H:.
?LINT:set d_dladdr
:
 see if dladdr exists
set dladdr d_dladdr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dladdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_syslog.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_syslog.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:56  ram
```

```
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syslog: test Csym Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_syslog:
?S: This variable conditionally defines the HAS_SYSLOG symbol, which
?S: indicates to the C program that syslog() exists on this system.
?S:.
?C:HAS_SYSLOG
 (LIBSYSLOG):
?C: This symbol, if defined, indicates that the program can rely on the
?C: system providing syslog().  Otherwise, the syslog code provided by
?C: the package should be used.
?C:.
?H:#$d_syslog HAS_SYSLOG /**/
?H:.
?LINT:set d_syslog
: see if syslog is available
echo " "
if $test `./findhdr syslog.h` && \
 (set syslog val -f d_syslog; eval $csym; $val); then
 echo "syslog() found." >&4
 val="$define"
else
 echo "syslog() not found in your C library." >&4
 val="$undef"
fi
set d_syslog
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_syslog.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wait4.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wait4.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:08:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wait4: Inlibc
?MAKE: -pick add $@ %<
?S:d_wait4:
?S: This variable conditionally defines the HAS_WAIT4 symbol, which
?S: indicates the wait4() routine is available.
?S:.
?C:HAS_WAIT4 (WAIT4):
?C: This symbol, if defined, indicates that wait4() exists.
?C:.
?H:#$d_wait4 HAS_WAIT4 /**/
?H:.
?LINT:set d_wait4
: see if there is a wait4
set
 wait4 d_wait4
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wait4.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ssizetype.U,v 3.0.1.3 1997/02/28 16:24:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: ssizetype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:24:21  ram
?RCS: patch61: integrated perl5 concerns for mis-configured sfio
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:30:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:33:06  ram
?RCS: patch32: created
 by ADO
?RCS:
```

```
?MAKE:ssizetype: Myread Typedef sizetype cat rm_try Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:ssizetype:
?S: This variable defines ssizetype to be something like ssize_t,
?S: long or int.  It is used by functions that return a count
?S: of bytes or an error condition.  It must be a signed type.
?S: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?S:.
?C:SSize_t:
?C: This symbol holds the type used by functions that return
?C: a count of bytes or an error condition.  It must be a signed type.
?C: It is usually ssize_t, but may be long or int, etc.
?C: It may be necessary to include <sys/types.h> or <unistd.h>
?C: to get any typedef'ed information.
?C: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?C:.
?H:#define SSize_t $ssizetype /* signed count of bytes */
?H:.
?F:!try
: see what type is used for signed size_t
set ssize_t ssizetype int stdio.h sys/types.h
eval $typedef
dflt="$ssizetype"
?X: Now check out whether sizeof(SSize_t)
 == sizeof(Size_t)
$cat > try.c <<EOM
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#define Size_t $sizetype
#define SSize_t $dflt
int main()
{
 if (sizeof(Size_t) == sizeof(SSize_t))
  printf("$dflt\n");
 else if (sizeof(Size_t) == sizeof(int))
  printf("int\n");
 else
  printf("long\n");
 exit(0);
}
EOM
echo " "
set try
if eval $compile_ok && $run ./try > /dev/null; then
```

```
 ssizetype=`$run ./try`
 echo "I'll be using $ssizetype for functions returning a byte count." >&4
else
 $cat >&4 <<EOM
Help! I can't compile and run the ssize_t test program: please enlighten me!
(This is probably a misconfiguration in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)

I need a type that is the same size as $sizetype, but is guaranteed to
be signed.  Common values are ssize_t, int and long.

EOM
 rp="What signed type is the same size as $sizetype?"
 . ./myread
 ssizetype="$ans"
fi
$rm_try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ssizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmctl:
?S: This variable conditionally defines the HAS_SHMCTL symbol, which
?S: indicates to the C program that the shmctl() routine is available.
?S:.
?C:HAS_SHMCTL:
?C: This symbol, if defined, indicates that the shmctl() routine is
?C: available to perform shared memory control operations.
?C:.
?H:#$d_shmctl
```

```
 HAS_SHMCTL  /**/
?H:.
?LINT:set d_shmctl
: see if shmctl exists
set shmctl d_shmctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dlerror.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlerror.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:49  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:11:23  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_dlerror: Inlibc runnm
?MAKE: -pick add $@ %<
?S:d_dlerror:
?S: This variable conditionally defines the HAS_DLERROR symbol, which
?S: indicates
 to the C program that the dlerror() routine is available.
?S:.
?C:HAS_DLERROR :
?C: This symbol, if defined, indicates that the dlerror routine is
?C: available to return a string describing the last error that
?C: occurred from a call to dlopen(), dlclose() or dlsym().
?C:.
?H:#$d_dlerror HAS_DLERROR /**/
?H:.
?T: xxx_runnm
?LINT:set d_dlerror
?X: We don't permanently change runnm, but we do temporarily.
?LINT: change runnm
```

```
: see if dlerror exists
?X: On NetBSD and FreeBSD, dlerror might be available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
runnm=false
set dlerror d_dlerror
eval $inlibc
runnm="$xxx_runnm"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dlerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_fp_class.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_fp_class: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_fp_class:
?S: This variable conditionally defines the I_FP_CLASS symbol, and indicates
?S: whether a C program should include <fp_class.h>.
?S:.
?C:I_FP_CLASS:
?C: This symbol, if defined, indicates that <fp_class.h> exists and
?C: should be included.
?C:.
?H:#$i_fp_class I_FP_CLASS  /**/
?H:.
?LINT:set i_fp_class
: see if this is a fp_class.h system
set fp_class.h i_fp_class
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fp_class.U
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```
?RCS: $Id: d_htonl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_htonl.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:09:25  ram
?RCS: patch32: now properly handles htonl() and friends when macros (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:45:00  ram
?RCS: patch23: now also check for htonl() macro (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_htonl: Inlibc Setvar i_niin i_sysin i_arpainet cat rm contains \
 cppstdin cppflags cppminus
?MAKE: -pick
 add $@ %<
?S:d_htonl:
?S: This variable conditionally defines HAS_HTONL if htonl() and its
?S: friends are available to do network order byte swapping.
?S:.
?C:HAS_HTONL (HTONL):
?C: This symbol, if defined, indicates that the htonl() routine (and
?C: friends htons() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_HTONS (HTONS):
?C: This symbol, if defined, indicates that the htons() routine (and
?C: friends htonl() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHL (NTOHL):
?C: This symbol, if defined, indicates that the ntohl() routine (and
?C: friends htonl() htons() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHS (NTOHS):
?C: This symbol, if defined, indicates that the ntohs() routine (and
?C: friends htonl() htons() ntohl()) are available to do network
?C: order byte swapping.
?C:.
?H:#$d_htonl HAS_HTONL  /**/
?H:#$d_htonl HAS_HTONS  /**/
?H:#$d_htonl HAS_NTOHL  /**/
?H:#$d_htonl
 HAS_NTOHS  /**/
?H:.
```

```
?F:!htonl.c
?LINT:set d_htonl
: see if htonl --and friends-- exists
val="
set htonl val
eval $inlibc

: Maybe they are macros.
case "$val" in
$undef)
 $cat >htonl.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#$i_niin I_NETINET_IN
#$i_sysin I_SYS_IN
#$i_arpainet I_ARPA_INET
#ifdef I_NETINET_IN
#include <netinet/in.h>
#endif
#ifdef I_SYS_IN
#include <sys/in.h>
#endif
#ifdef I_ARPA_INET
#include <arpa/inet.h>
#endif
#ifdef htonl
printf("Defined as a macro.");
#endif
EOM
 $cppstdin $cppflags $cppminus < htonl.c >htonl.E 2>/dev/null
 if $contains 'Defined as a macro' htonl.E >/dev/null 2>&1; then
  val="$define"
  echo "But it seems to be defined as a macro." >&4
 fi
 $rm -f htonl.?
 ;;
esac
set d_htonl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_htonl.U
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```
?RCS: $Id: d_getlogin_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getlogin_r getlogin_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_unistd extern_C
?MAKE: -pick add $@ %<
?S:d_getlogin_r:
?S: This variable conditionally defines the HAS_GETLOGIN_R symbol,
?S: which indicates to the C program that the getlogin_r()
?S: routine is available.
?S:.
?S:getlogin_r_proto:
?S: This variable encodes the prototype of getlogin_r.
?S: It is zero if d_getlogin_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getlogin_r
?S: is defined.
?S:.
?C:HAS_GETLOGIN_R:
?C: This symbol, if defined, indicates that the getlogin_r routine
?C: is available
 to getlogin re-entrantly.
?C:.
?C:GETLOGIN_R_PROTO:
?C: This symbol encodes the prototype of getlogin_r.
?C: It is zero if d_getlogin_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getlogin_r
?C: is defined.
?C:.
?H:#$d_getlogin_r HAS_GETLOGIN_R /**/
?H:#define GETLOGIN_R_PROTO $getlogin_r_proto /**/
?H:.
?T:try hdrs d_getlogin_r_proto
: see if getlogin_r exists
set getlogin_r d_getlogin_r
eval $inlibc
case "$d_getlogin_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_unistd unistd.h"
 case "$d_getlogin_r_proto:$usethreads" in
 ":define") d_getlogin_r_proto=define
  set d_getlogin_r_proto getlogin_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getlogin_r_proto" in
 define)
 case "$getlogin_r_proto" in
```

```
"|0) try='int getlogin_r(char*, size_t);'
./protochk "$extern_C $try" $hdrs && getlogin_r_proto=I_BW ;;
esac
case "$getlogin_r_proto" in
"|0) try='int getlogin_r(char*, int);'
./protochk "$extern_C $try" $hdrs && getlogin_r_proto=I_BI
;;
esac
case "$getlogin_r_proto" in
"|0) try='char* getlogin_r(char*, size_t);'
./protochk "$extern_C $try" $hdrs && getlogin_r_proto=B_BW ;;
esac
case "$getlogin_r_proto" in
"|0) try='char* getlogin_r(char*, int);'
./protochk "$extern_C $try" $hdrs && getlogin_r_proto=B_BI ;;
esac
case "$getlogin_r_proto" in
"|0) d_getlogin_r=undef
 getlogin_r_proto=0
 echo "Disabling getlogin_r, cannot determine prototype." >&4 ;;
* ) case "$getlogin_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getlogin_r_proto="REENTRANT_PROTO_$getlogin_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getlogin_r has no prototype, not using it." >&4 ;;
 esac
 d_getlogin_r=undef
 getlogin_r_proto=0
 ;;
esac
;;
*) getlogin_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getlogin_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Lukas Mai
?RCS:
?RCS: You may distribute this file under the terms of either
?RCS:     a) the "Artistic License" which comes with Perl, or
?RCS:     b) the "Artistic License" which comes with dist, or
```

```
?RCS:     c) the GNU General Public License as published by the Free
?RCS:     Software Foundation; either version 1, or (at your option) any
?RCS:     later version (see the file "Copying" that comes with the
?RCS:     Perl distribution).
?RCS: Which one to use is your choice.
?RCS: See the U/README file.
?MAKE:d_builtin_add_overflow d_builtin_sub_overflow d_builtin_mul_overflow : Compile Setvar cat run rm_try
?MAKE: -pick add $@ %<
?S:d_builtin_add_overflow:
?S: This variable conditionally defines HAS_BUILTIN_ADD_OVERFLOW, which
?S: indicates that the compiler supports __builtin_add_overflow(x,y,&z)
?S: for safely adding x and y into z while checking for overflow.
?S:.
?S:d_builtin_sub_overflow:
?S: This
 variable conditionally defines HAS_BUILTIN_SUB_OVERFLOW, which
?S: indicates that the compiler supports __builtin_sub_overflow(x,y,&z)
?S: for safely subtracting y from x into z while checking for overflow.
?S:.
?S:d_builtin_mul_overflow:
?S: This variable conditionally defines HAS_BUILTIN_MUL_OVERFLOW, which
?S: indicates that the compiler supports __builtin_mul_overflow(x,y,&z)
?S: for safely multiplying x and y into z while checking for overflow.
?S:.
?C:HAS_BUILTIN_ADD_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_add_overflow for adding integers with overflow checks.
?C:.
?C:HAS_BUILTIN_SUB_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_sub_overflow for subtracting integers with overflow checks.
?C:.
?C:HAS_BUILTIN_MUL_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_mul_overflow for multiplying integers with overflow checks.
?C:.
?H:#$d_builtin_add_overflow
 HAS_BUILTIN_ADD_OVERFLOW /**/
?H:#$d_builtin_sub_overflow HAS_BUILTIN_SUB_OVERFLOW /**/
?H:#$d_builtin_mul_overflow HAS_BUILTIN_MUL_OVERFLOW /**/
?H:.
?F:!try
?LINT:set d_builtin_add_overflow d_builtin_sub_overflow d_builtin_mul_overflow
: Look for GCC-style __builtin_add_overflow
case "$d_builtin_add_overflow" in
")
  echo " "
  echo "Checking whether your compiler can handle __builtin_add_overflow ..." >&4
```

```
  $cat >try.c <<'EOCP'
int main(void) {
  const unsigned int uint_max = ~0u;
  int target_int = 0;
  if (__builtin_add_overflow(1, 2, &target_int) || target_int != 3) {
      return 1;
  }
  if (!__builtin_add_overflow((int)(uint_max >> 1), 1, &target_int)) {
      return 1;
  }
  if (!__builtin_add_overflow(uint_max, -1, &target_int)) {
      return 1;
  }
  return 0;
}
EOCP
  set try
  if eval $compile && $run ./try; then
      echo "Your C compiler supports __builtin_add_overflow."
      val="$define"
  else
      echo
 "Your C compiler doesn't seem to understand __builtin_add_overflow."
      val="$undef"
  fi
  ;;
*) val="$d_builtin_add_overflow" ;;
esac

set d_builtin_add_overflow
eval $setvar
$rm_try

: Look for GCC-style __builtin_sub_overflow
case "$d_builtin_sub_overflow" in
")
  echo " "
  echo "Checking whether your compiler can handle __builtin_sub_overflow ..." >&4
  $cat >try.c <<'EOCP'
int main(void) {
  const unsigned int uint_max = ~0u;
  int target_int = 0;
  if (__builtin_sub_overflow(1, -2, &target_int) || target_int != 3) {
      return 1;
  }
  if (!__builtin_sub_overflow(-(int)(uint_max >> 1), 2, &target_int)) {
      return 1;
  }
```

```
  if (!__builtin_sub_overflow(uint_max, 1, &target_int)) {
      return 1;
  }
  return 0;
}
EOCP
  set try
  if eval $compile && $run ./try; then
      echo "Your C compiler supports __builtin_sub_overflow."
      val="$define"
  else
      echo "Your C compiler doesn't seem to understand __builtin_sub_overflow."
       val="$undef"
  fi
  ;;
*) val="$d_builtin_sub_overflow" ;;
esac

set d_builtin_sub_overflow
eval $setvar
$rm_try

: Look for GCC-style __builtin_mul_overflow
case "$d_builtin_mul_overflow" in
")
  echo " "
  echo "Checking whether your compiler can handle __builtin_mul_overflow ..." >&4
  $cat >try.c <<'EOCP'
int main(void) {
  const unsigned int uint_max = ~0u;
  int target_int = 0;
  if (__builtin_mul_overflow(2, 3, &target_int) || target_int != 6) {
      return 1;
  }
  if (!__builtin_mul_overflow((int)(uint_max >> 1), 2, &target_int)) {
      return 1;
  }
  if (!__builtin_mul_overflow(uint_max, 1, &target_int)) {
      return 1;
  }
  return 0;
}
EOCP
  set try
  if eval $compile && $run ./try; then
      echo "Your C compiler supports __builtin_mul_overflow."
      val="$define"
  else
```

```
      echo "Your C compiler doesn't seem to understand __builtin_mul_overflow."
      val="$undef"
   fi
   ;;
*) val="$d_builtin_mul_overflow"
 ;;
esac

set d_builtin_mul_overflow
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_builtin_overflow.U
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```
?RCS: $Id: nametype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nametype.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:26:09  ram
?RCS: patch36: call ./usg and ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:36:48  ram
?RCS: patch32: fixed typo: /etc/password -> /etc/passwd (WED)
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:10:09  ram
?RCS: patch10: made questions more explicit for 'Configure -s' prompting (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:20  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?MAKE:nametype d_passnames d_berknames d_usgnames: Myread Guess Oldconfig cat
?MAKE: -pick add $@ %<
?S:nametype:
?S: This variable indicates how full names are stored on this system.
?S: Values are bsd, usg, and other.
?S:.
?S:d_passnames:
?S: This variable conditionally defines the PASSNAMES symbol,
```

```
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file.
?S:.
?S:d_berknames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file in Berkeley format.
?S:.
?S:d_usgnames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file in USG format.
?S:.
?C:PASSNAMES:
?C: This symbol, if defined, indicates that full names are stored in
?C: the /etc/passwd file.
?C:.
?C:BERKNAMES:
?C: This symbol, if defined, indicates that full
 names are stored in
?C: the /etc/passwd file in Berkeley format (name first thing, everything
?C: up to first comma, with & replaced by capitalized login id, yuck).
?C:.
?C:USGNAMES:
?C: This symbol, if defined, indicates that full names are stored in
?C: the /etc/passwd file in USG format (everything after - and before ( is
?C: the name).
?C:.
?H:#$d_passnames PASSNAMES /*  (undef to take name from ~/.fullname) */
?H:#$d_berknames BERKNAMES /* (that is, ":name,stuff:") */
?H:#$d_usgnames USGNAMES  /* (that is, ":stuff-name(stuff):") */
?H:.
: find out how to find out full name
case "$d_berknames" in
"$define")
 dflt=y;;
"$undef")
 dflt=n;;
*)
 if ./bsd; then
  dflt=y
 elif ./xenix; then
  dflt=y
 else
  dflt=n
 fi
 ;;
esac
```

```
$cat <<'EOM'

Does your /etc/passwd file keep full names in Berkeley/V7 format (name first
thing after ':' in GCOS field)?  In that case, a typical entry in the password
file looks like this:

   guest:**paswword**:10:100:Mister Guest User:/usr/users:/bin/sh

                          ^^^^^^^^^^^^^^^^^^
EOM
rp="Berkeley/V7 format for full name in /etc/passwd?"
. ./myread
case "$ans" in
y*) d_passnames="$define"
 d_berknames="$define"
 d_usgnames="$undef"
 nametype=bsd
 ;;
*)
 case "$d_usgnames" in
 "$define") dflt=y;;
 "$undef") dflt=n;;
 *)
  if ./usg; then
   dflt=y
  else
   dflt=n
  fi
  ;;
 esac
$cat <<'EOM'

Does your passwd file keep full names in USG format (name sandwiched between a
'-' and a '(')?  In that case, a typical entry in the password file looks like
this:

   guest:**paswword**:10:100:000-Mister Guest User(000):/usr/users:/bin/sh
                             ^^^^^^^^^^^^^^^^^^
EOM
 rp="USG format for full name in /etc/passwd?"
 . ./myread
 case "$ans" in
 n*) echo "Full name will be taken from ~/.fullname"
  d_passnames="$undef"
  d_berknames="$undef"
  d_usgnames="$undef"
  nametype=other
  ;;
```

```
 *)
  d_passnames="$define"
  d_berknames="$undef"
  d_usgnames="$define"
  nametype=usg
  ;;
 esac;;
esac
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nametype.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_msghdr_s: Hasstruct i_systypes d_socket i_sysuio Setvar
?MAKE: -pick add $@ %<
?S:d_msghdr_s:
?S: This variable conditionally defines the HAS_STRUCT_MSGHDR symbol,
?S: which indicates that the struct msghdr is supported.
?S:.
?C:HAS_STRUCT_MSGHDR:
?C: This symbol, if defined, indicates that the struct msghdr
?C: is supported.
?C:.
?H:#$d_msghdr_s HAS_STRUCT_MSGHDR /**/
?H:.
?LINT:set d_msghdr_s
: Check for msghdr_s
echo " "
echo "Checking to see if your system supports struct msghdr..." >&4
set d_msghdr_s msghdr $i_systypes sys/types.h $d_socket sys/socket.h $i_sysuio sys/uio.h
eval $hasstruct
case "$d_msghdr_s" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't."
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_msghdr_s.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gmtime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gmtime_r gmtime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_gmtime_r:
?S: This variable conditionally defines the HAS_GMTIME_R symbol,
?S: which indicates to the C program that the gmtime_r()
?S: routine is available.
?S:.
?S:gmtime_r_proto:
?S: This variable encodes the prototype of gmtime_r.
?S: It is zero if d_gmtime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gmtime_r
?S: is defined.
?S:.
?C:HAS_GMTIME_R:
?C: This symbol, if defined, indicates that the gmtime_r routine
?C: is available to gmtime re-entrantly.
?C:.
?C:GMTIME_R_PROTO:
?C: This
 symbol encodes the prototype of gmtime_r.
?C: It is zero if d_gmtime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gmtime_r
?C: is defined.
?C:.
?H:#$d_gmtime_r HAS_GMTIME_R /**/
?H:#define GMTIME_R_PROTO $gmtime_r_proto /**/
?H:.
?T:try hdrs d_gmtime_r_proto
: see if gmtime_r exists
set gmtime_r d_gmtime_r
eval $inlibc
case "$d_gmtime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_gmtime_r_proto:$usethreads" in
 ":define") d_gmtime_r_proto=define
  set d_gmtime_r_proto gmtime_r $hdrs
```

```
 eval $hasproto ;;
*) ;;
esac
case "$d_gmtime_r_proto" in
define)
case "$gmtime_r_proto" in
"|0) try='struct tm* gmtime_r(const time_t*, struct tm*);'
./protochk "$extern_C $try" $hdrs && gmtime_r_proto=S_TS ;;
esac
case "$gmtime_r_proto" in
"|0) try='int gmtime_r(const time_t*, struct tm*);'
./protochk "$extern_C $try" $hdrs && gmtime_r_proto=I_TS ;;
esac
case
"$gmtime_r_proto" in
"|0) d_gmtime_r=undef
 gmtime_r_proto=0
 echo "Disabling gmtime_r, cannot determine prototype." >&4 ;;
* ) case "$gmtime_r_proto" in
 REENTRANT_PROTO*) ;;
 *) gmtime_r_proto="REENTRANT_PROTO_$gmtime_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "gmtime_r has no prototype, not using it." >&4 ;;
 esac
 d_gmtime_r=undef
 gmtime_r_proto=0
 ;;
esac
;;
*) gmtime_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gmtime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016 Dagfinn Ilmari Mannsker & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X:
?X: This unit produces a variable that is intended to be eval'ed in
```

```
?X: order to define/undefine a symbol. A consistency check is made
?X: regarding any previous value and a warning is issued if there
?X: is any discrepancy.
?X:
?X: To use it, say:
?X: set d_siginfo_si_errno siginfo_t int si_errno $d_sigaction signal.h
?X: eval $hasfield_t;
?X:
?MAKE:Hasfield_t: test Compile rm_try Setvar
?MAKE: -pick add $@ %<
?LINT:define hasfield_t
?S:hasfield_t:
?S: Internal macro for Configure
?S:.
?V:hasfield_t:
?T:varname struct type field
: Define hasfield_t macro for Configure internal use
hasfield_t='varname=$1; struct=$2; type=$3; field=$4; shift; shift; shift; shift;
while $test $# -ge 2; do
   case
 "$1" in
 $define) echo "#include <$2>";;
   esac ;
   shift 2;
done > try.c;
echo "int main () { $struct foo; $type bar = foo.$field; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Hasfield_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shm.U,v 3.0 1993/08/18 12:07:17 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_shm.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shm: test d_shmctl d_shmget d_shmat d_shmdt Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_shm:
?S: This variable conditionally defines the HAS_SHM symbol, which
?S: indicates that the entire shm*(2) library is present.
?S:.
?C:HAS_SHM:
?C: This symbol, if defined, indicates that the entire shm*(2) library is
?C: supported.
?C:.
?H:#$d_shm HAS_SHM  /**/
?H:.
?T:h_shm
?LINT:set
 d_shm
: see how much of the 'shm*(2)' library is present.
h_shm=true
echo " "
case "$d_shmctl$d_shmget$d_shmat$d_shmdt" in
*"$undef"*) h_shm=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID shared memory"*"not configured"*)
 echo "Your $osname does not have the shm*(2) configured." >&4
       h_shm=false
 val="$undef"
 set shmctl d_shmctl
 eval $setvar
 set shmget d_shmget
 eval $setvar
 set shmat d_shmat
 eval $setvar
 set shmdt d_shmdt
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_shm && $test `./findhdr sys/shm.h`; then
```

```
 echo "You have the full shm*(2) library." >&4
 val="$define"
else
 echo "You don't have the full shm*(2) library." >&4
 val="$undef"
fi
set d_shm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_shm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_vprintf.U,v 3.0 1993/08/18 12:07:59 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_vprintf.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vprintf d_charvspr: Compile Guess cat Csym Setvar run rm_try \
 i_stdlib i_unistd i_stdarg i_varargs
?MAKE: -pick add $@ %<
?S:d_vprintf:
?S: This variable conditionally defines the HAS_VPRINTF symbol, which
?S: indicates to the C program that the vprintf() routine is available
?S: to printf with a pointer to an argument list.
?S:.
?S:d_charvspr:
?S: This
 variable conditionally defines CHARVSPRINTF if this system
?S: has vsprintf returning type (char*).  The trend seems to be to
?S: declare it as "int vsprintf()".
?S:.
?C:HAS_VPRINTF (VPRINTF):
?C: This symbol, if defined, indicates that the vprintf routine is available
?C: to printf with a pointer to an argument list.  If unavailable, you
?C: may need to write your own, probably in terms of _doprnt().
?C:.
?C:USE_CHAR_VSPRINTF (CHARVSPRINTF):
?C: This symbol is defined if this system has vsprintf() returning type
```

```
?C: (char*).  The trend seems to be to declare it as "int vsprintf()".  It
?C: is up to the package author to declare vsprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_vprintf HAS_VPRINTF /**/
?H:#$d_charvspr USE_CHAR_VSPRINTF /**/
?H:.
?T:val2
?F:!try
?LINT:set d_vprintf d_charvspr
: see if vprintf exists
echo " "
if set vprintf val -f d_vprintf; eval $csym; $val; then
 echo 'vprintf() found.' >&4
 val="$define"
 $cat >try.c <<EOF
#$i_stdarg I_STDARG  /*
 Only one of these can be defined by i_varhrd */
#$i_varargs I_VARARGS

#$i_stdlib I_STDLIB
#$i_unistd I_UNISTD

#ifdef I_STDARG
#  include <stdarg.h>
#else /* I_VARARGS */
#  include <varargs.h>
#endif

#ifdef I_UNISTD
#  include <unistd.h>
#endif

#ifdef I_STDLIB
#  include <stdlib.h>
#endif

#include <stdio.h> /* vsprintf prototype */

#ifdef I_STDARG
void xxx(int n, ...)
{
   va_list args;
   char buf[10];
   va_start(args, n);
   exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
int main() { xxx(1, "foo"); }
```

```
#else /* I_VARARGS */

xxx(va_alist)
va_dcl
{
   va_list args;
   char buf[10];
   va_start(args);
   exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
int main() { xxx("foo"); }

#endif

EOF
 set try
 if eval $compile_ok; then
  if $run ./try; then
   echo "Your vsprintf() returns (int)." >&4
   val2="$undef"
  else
   echo "Your vsprintf() returns (char*)." >&4
   val2="$define"
  fi
 else
  echo 'I am unable to compile the vsprintf() test program.' >&4
  #
 We shouldn't get here.  If we do, assume the standard signature,
  # not the old BSD one.
  echo 'Guessing that vsprintf() returns (int).' >&4
  val2="$undef"
 fi
else
 echo 'vprintf() NOT found.' >&4
 val="$undef"
 val2="$undef"
fi
$rm_try
set d_vprintf
eval $setvar
val=$val2
set d_charvspr
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_vprintf.U
```

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: basicshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: basicshell.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:basicshell: Getfile Oldconfig bash csh ksh sh
?MAKE: -pick add $@ %<
?S:basicshell:
?S: This variable contains the eventual value of the BASICSHELL symbol,
?S: which contains the full name of the basic script shell on this
?S: system.  Usual values are /bin/sh, /bin/ksh, /bin/csh.
?S:.
?C:BASICSHELL:
?C: This symbol contains the
 full name of the basic script shell on this
?C: system.  Usual values are /bin/sh, /bin/ksh, /bin/csh.
?C:.
?H:#define BASICSHELL "$basicshell"  /**/
?H:.
: find the most basic shell for scripts
echo " "
case "$basicshell" in
")
 case "$sh $bash $csh $ksh" in
 */sh*) dflt="$sh" ;;
 */ksh*) dflt="$ksh" ;;
 */csh*) dflt="$csh" ;;
 */bash*) dflt="$bash" ;;
 *) dflt='/bin/sh' ;;
 esac
 ;;
*)
 dflt="$basicshell";;
esac
fn=f
rp="Give the full path name of the most basic shell used on your system"
. ./getfile
```

```
basicshell=$ans
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/basicshell.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endgrent_r endgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_endgrent_r:
?S: This variable conditionally defines the HAS_ENDGRENT_R symbol,
?S: which indicates to the C program that the endgrent_r()
?S: routine is available.
?S:.
?S:endgrent_r_proto:
?S: This variable encodes the prototype of endgrent_r.
?S: It is zero if d_endgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endgrent_r
?S: is defined.
?S:.
?C:HAS_ENDGRENT_R:
?C: This symbol, if defined, indicates that the endgrent_r routine
?C: is available to
 endgrent re-entrantly.
?C:.
?C:ENDGRENT_R_PROTO:
?C: This symbol encodes the prototype of endgrent_r.
?C: It is zero if d_endgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endgrent_r
?C: is defined.
?C:.
?H:#$d_endgrent_r HAS_ENDGRENT_R /**/
?H:#define ENDGRENT_R_PROTO $endgrent_r_proto /**/
?H:.
?T:try hdrs d_endgrent_r_proto
: see if endgrent_r exists
set endgrent_r d_endgrent_r
eval $inlibc
case "$d_endgrent_r" in
"$define")
```

```
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_endgrent_r_proto:$usethreads" in
 ":define") d_endgrent_r_proto=define
  set d_endgrent_r_proto endgrent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endgrent_r_proto" in
 define)
 case "$endgrent_r_proto" in
 "|0) try='int endgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endgrent_r_proto=I_H ;;
 esac
 case "$endgrent_r_proto" in
 "|0) try='void endgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endgrent_r_proto=V_H ;;
 esac
 case "$endgrent_r_proto"
 in
 "|0) d_endgrent_r=undef
  endgrent_r_proto=0
  echo "Disabling endgrent_r, cannot determine prototype." >&4 ;;
 * ) case "$endgrent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endgrent_r_proto="REENTRANT_PROTO_$endgrent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endgrent_r has no prototype, not using it." >&4 ;;
  esac
  d_endgrent_r=undef
  endgrent_r_proto=0
  ;;
 esac
 ;;
*) endgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endgrent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getservprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getservprotos:
?S: This variable conditionally defines the HAS_GETSERV_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getserv*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETSERV_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getservent(), getservbyname(), and
?C: getservbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getservprotos HAS_GETSERV_PROTOS /**/
?H:.
?LINT:set d_getservprotos
: see if prototypes for various getservxxx netdb.h functions are available
echo " "
set d_getservprotos getservent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getservprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fp_class: Inlibc
?MAKE: -pick add $@ %<
?S:d_fp_class:
?S: This variable conditionally defines the HAS_FP_CLASS symbol, which
?S: indicates to the C program that the fp_class() routine is available.
?S:.
?C:HAS_FP_CLASS:
```

```
?C: This symbol, if defined, indicates that the fp_class routine is
?C: available to classify doubles.  Available for example in Digital UNIX.
?C: The returned values are defined in <math.h> and are:
?C:
?C: FP_SNAN           Signaling NaN (Not-a-Number)
?C: FP_QNAN           Quiet NaN (Not-a-Number)
?C: FP_POS_INF        +infinity
?C: FP_NEG_INF        -infinity
?C: FP_POS_NORM       Positive normalized
?C: FP_NEG_NORM       Negative normalized
?C: FP_POS_DENORM     Positive denormalized
?C: FP_NEG_DENORM
    Negative denormalized
?C: FP_POS_ZERO       +0.0 (positive zero)
?C: FP_NEG_ZERO       -0.0 (negative zero)
?C:.
?H:#$d_fp_class HAS_FP_CLASS  /**/
?H:.
?LINT:set d_fp_class
: see if fp_class exists
set fp_class d_fp_class
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fp_class.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_isascii.U,v 3.0.1.2 1994/10/29 16:13:39 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_isascii.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:13:39  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:32  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_isascii: Compile cat rm Setvar i_stdlib
?MAKE: -pick add $@ %<
```

```
?S:d_isascii:
?S: This variable conditionally defines the HAS_ISASCII constant,
?S: which indicates
 to the C program that isascii() is available.
?S:.
?C:HAS_ISASCII:
?C: This manifest constant lets the C program know that isascii
?C: is available.
?C:.
?H:#$d_isascii HAS_ISASCII  /**/
?H:.
?LINT:set d_isascii
?X: Can't use Inlibc because isascii() might be a macro.
: Look for isascii
echo " "
$cat >isascii.c <<EOCP
#include <stdio.h>
#include <ctype.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 int c = 'A';
 if (isascii(c))
  exit(0);
 else
  exit(1);
}
EOCP
set isascii
if eval $compile; then
 echo "isascii() found." >&4
 val="$define"
else
 echo "isascii() NOT found." >&4
 val="$undef"
fi
set d_isascii
eval $setvar
$rm -f isascii*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_isascii.U
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```
?RCS: $Id: d_getprotoprotos.U,v $
?RCS:
```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getprotoprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getprotoprotos:
?S: This variable conditionally defines the HAS_GETPROTO_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getproto*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETPROTO_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getprotoent(), getprotobyname(), and
?C: getprotobyaddr().
  Otherwise, it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getprotoprotos HAS_GETPROTO_PROTOS /**/
?H:.
?LINT:set d_getprotoprotos
: see if prototypes for various getprotoxxx netdb.h functions are available
echo " "
set d_getprotoprotos getprotoent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getprotoprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Thomas Neumann <tom@smart.bo.open.de>
?RCS:
?RCS: $Log: Findhdr.U,v $
```

```
?RCS: Revision 3.0.1.2  1994/10/29  15:53:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:56  ram
?RCS: patch23: cppminus must be after other cppflags, not before
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a findhdr script which is used to locate the header
?X: files
 in $usrinc or other stranger places using cpp capabilities. The
?X: script is given an include file base name, like 'stdio.h' or 'sys/file.h'
?X: and it returns the full path of the include file and a zero status or an
?X: empty string with an error status if the file could not be located.
?X:
?MAKE:Findhdr: grep test tr rm +usrinc awk cat startsh \
 cppstdin cppminus +cppflags eunicefix osname
?MAKE: -pick add $@ %<
?LINT:define fieldn
?S:fieldn:
?S: This variable is used internally by Configure. It contains the position
?S: of the included file name in cpp output. That is to say, when cpp
?S: pre-processes a #include <file> line, it replaces it by a # line which
?S: contains the original position in the input file and the full name of
?S: included file, between "quotes".
?S:.
?V:fieldn
?F:./findhdr !fieldn
?T:cline pos wanted name awkprg cppfilter testaccess status usrincdir
: determine filename position in cpp output
echo " "
echo "Computing filename position in cpp output for #include
 directives..." >&4
echo '#include <stdio.h>' > foo.c
case "$osname" in
vos)
 testaccess=-e
?X: VOS: path component separator is >
 cppfilter="tr '\\\\>' '/' |"
 ;;
*)
 testaccess=-r
 cppfilter="
 ;;
esac
$cat >fieldn <<EOF
```

```
$startsh
$cppstdin $cppflags $cppminus <foo.c 2>/dev/null | \
$grep '^[  ]*#.*stdio\.h' | \
while read cline; do
 pos=1
 set \$cline
 while $test \$# -gt 0; do
  if $test $testaccess \`echo \$1 | $tr -d ""\`; then
   echo "\$pos"
   exit 0
  fi
  shift
  pos=\`expr \$pos + 1\`
 done
done
EOF
chmod +x fieldn
fieldn=`./fieldn`
$rm -f foo.c fieldn
case $fieldn in
") pos='???';;
1) pos=first;;
2) pos=second;;
3) pos=third;;
*) pos="${fieldn}th";;
esac
echo "Your cpp writes the filename in the $pos field of the line."

?X: To locate a header file, we cannot simply check for $usrinc/file.h, since
?X: some machine have the headers in weird places and our only hope is that
?X: the C pre-processor will know how to find those headers. Thank you NexT!
: locate header file
$cat
 >findhdr <<EOF
$startsh
wanted=\$1
name=''
for usrincdir in $usrinc; do
 if test -f \$usrincdir/\$wanted; then
  echo "\$usrincdir/\$wanted"
  exit 0
 fi
done
awkprg='{ print \$$fieldn }'
echo "#include <\$wanted>" > foo\$\$.c
$cppstdin $cppminus $cppflags < foo\$\$.c 2>/dev/null | \
$cppfilter $grep "^[  ]*#.*\$wanted" | \
while read cline; do
```

```
 name=\`echo \$cline | $awk "\$awkprg" | $tr -d ""\`
 case "\$name" in
 *[/\\\\]\$wanted) echo "\$name"; exit 1;;
 *[\\\\/]\$wanted) echo "\$name"; exit 1;;
 *) exit 2;;
 esac
done
?X: status = 0: grep returned 0 lines, case statement not executed
?X: status = 1: headerfile found
?X: status = 2: while loop executed, no headerfile found
status=\$?
$rm -f foo\$\$.c
if test \$status -eq 1; then
 exit 0
fi
exit 1
EOF
chmod +x findhdr
$eunicefix findhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Findhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: charorder.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:chorder_int chorder_short chorder_long: Myread cat +cc +ccflags rm
?MAKE: -pick add $@ %<
?S:chorder_short (d_cos d_bos):
?S: Holds the value describing the byte ordering of characters in a short.
?S: On a Big-Endian machine, that would be "c0c1".
?S:.
?S:chorder_int
```

```
 (charoder):
?S: Holds the value describing the byte ordering of characters in an int.
?S: For instance, on a Big-Endian machine, this would be: "c0c1c2c3".
?S:.
?S:chorder_long (d_col d_bol):
?S: Holds the value describing the byte ordering of characters in a long.
?S: On a 64 bits Big-Endian machine, that would yield: "c0c1c2c3c4c5c6c7".
?S:.
?C:CHAR_ORDER_SHORT:
?C: Holds the byte ordering of characters in a short. It's a string
?C: value like "c0c1" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_INT:
?C: Holds the byte ordering of characters in an int. It's a string
?C: value like "c0c1c2c3" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_LONG:
?C: Holds the byte ordering of characters in a long. It's a string
?C: value like "c0c1c2c3c4c5c6c7" on a 64 bits Big-Endian machine.
?C:.
?H:#define CHAR_ORDER_SHORT "$chorder_short" /* byte order in a short */
?H:#define CHAR_ORDER_INT "$chorder_int" /* byte order in an int */
?H:#define CHAR_ORDER_LONG "$chorder_long" /* byte order in a long */
?H:.
?F:!byteorder
:
 check for character ordering
echo " "
echo "Checking out byte order..." >&4
$cat >byteorder.c <<'EOCP'
#include <stdio.h>

main(argc, argv)
 int argc;
 char *argv[]; {
 int i;
 int max;
 union {
  short u_s;
  int u_i;
  long u_l;
  char u_c[sizeof(long)];
 } u;
 switch (argv[1][0]) {
 case 'l':
  u.u_l = 0L;
  /* HMS: ASSERT: sizeof(long) < 10. */
  for(i = 0; i < sizeof(long); ++i) {
```

```
  u.u_l *= 0x100L;
  u.u_l += (0xc0 + i);
 }
 max = sizeof(long);
 break;
case 's':
 u.u_s = 0;
 /* HMS: ASSERT: sizeof(short) < 10. */
 for(i = 0; i < sizeof(short); ++i) {
  u.u_s *= 0x100L;
  u.u_s += (0xc0 + i);
 }
 max = sizeof(short);
 break;
case 'i':
 u.u_i = 0;
 /* RAM: ASSERT: sizeof(int) < 10. */
 for(i = 0; i < sizeof(int); ++i) {
  u.u_l *= 0x100L;
  u.u_l += (0xc0 + i);
 }
 max = sizeof(int);
 break;
default:
 max = 0;
 break;
}
for(i = 0; i < max; i++) {
 printf("%x", u.u_c[i] & 0x00FF);
}
printf("\n");
exit(0);
}
EOCP
if $cc $ccflags -o
 byteorder byteorder.c >/dev/null 2>&1 ; then
 : null statement
@if chorder_short
   chorder_short=`./byteorder s`
@end
@if chorder_int
   chorder_int=`./byteorder i`
@end
@if chorder_long
   chorder_long=`./byteorder l`
@end
else
 $cat <<EOM
```

```
(I can't seem to get my test program to work.  Guessing 32 bits big-endian.)
EOM
   chorder_short="c0c1"
   chorder_int="c0c1c2c3"
   chorder_long="c0c1c2c3"
fi
@if chorder_short
dflt=$chorder_short
rp='What is the order of characters in a short?'
. ./myread
chorder_short="$ans"
@end
@if chorder_int
dflt=$chorder_int
rp='What is the order of characters in an int?'
. ./myread
chorder_int="$ans"
@end
@if chorder_long
dflt=$chorder_long
rp='What is the order of characters in a long?'
. ./myread
chorder_long="$ans"
@end
$rm -f byteorder* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/charorder.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_newlocale d_freelocale d_uselocale d_duplocale d_querylocale \
 i_xlocale xlocale_needed: Inlibc Inhdr Compile cat rm_try run \
 d_localeconv_l
?MAKE: -pick add $@ %<
?S:d_newlocale:
?S: This variable conditionally defines the HAS_NEWLOCALE symbol, which
?S: indicates to the C program that the newlocale() routine is available
?S: to return a new locale object or modify an existing locale object.
?S:.
?S:d_freelocale:
?S: This variable conditionally defines the HAS_FREELOCALE symbol, which
?S: indicates to the C program that the freelocale() routine is available
?S: to deallocates the resources associated with a locale object.
?S:.
?S:d_uselocale:
```

?S: This variable conditionally defines the HAS_USELOCALE symbol, which
?S: indicates to the C program that the uselocale()
 routine is available
?S: to set the current locale for the calling thread.
?S:.
?S:d_duplocale:
?S: This variable conditionally defines the HAS_DUPLOCALE symbol, which
?S: indicates to the C program that the duplocale() routine is available
?S: to duplicate a locale object.
?S:.
?S:d_querylocale:
?S: This variable conditionally defines the HAS_QUERYLOCALE symbol, which
?S: indicates to the C program that the querylocale() routine is available
?S: to return the name of the locale for a category mask.
?S:.
?S:i_xlocale:
?S: This symbol, if defined, indicates to the C program that the
?S: header xlocale.h is available. See also xlocale_needed.
?S:.
?S:xlocale_needed:
?S: This symbol, if defined, indicates that the C program should
?S: include <xlocale.h> to get newlocale() and its friends.
?S:.
?C:HAS_NEWLOCALE:
?C: This symbol, if defined, indicates that the newlocale routine is
?C: available to return a new locale object or modify an existing
?C: locale object.
?C:.
?C:HAS_FREELOCALE:
?C: This
 symbol, if defined, indicates that the freelocale routine is
?C: available to deallocates the resources associated with a locale object.
?C:.
?C:HAS_USELOCALE:
?C: This symbol, if defined, indicates that the uselocale routine is
?C: available to set the current locale for the calling thread.
?C:.
?C:HAS_DUPLOCALE:
?C: This symbol, if defined, indicates that the duplocale routine is
?C: available to duplicate a locale object.
?C:.
?C:HAS_QUERYLOCALE:
?C: This symbol, if defined, indicates that the querylocale routine is
?C: available to return the name of the locale for a category mask.
?C:.
?C:I_XLOCALE:
?C: This symbol, if defined, indicates to the C program that the
?C: header xlocale.h is available. See also NEED_XLOCALE_H

```
?C:.
?C:NEED_XLOCALE_H:
?C: This symbol, if defined, indicates that the C program should
?C: include <xlocale.h> to get newlocale() and its friends.
?C:.
?H:#$d_newlocale HAS_NEWLOCALE /**/
?H:#$d_freelocale HAS_FREELOCALE /**/
?H:#$d_uselocale HAS_USELOCALE /**/
?H:#$d_duplocale HAS_DUPLOCALE /**/
?H:#$d_querylocale HAS_QUERYLOCALE /**/
?H:#$xlocale_needed NEED_XLOCALE_H /**/
?H:#$i_xlocale I_XLOCALE
        /**/
?H:.
?LINT:set i_xlocale
?LINT:set d_newlocale
?LINT:set d_freelocale
?LINT:set d_uselocale
?LINT:set d_duplocale
?LINT:set d_querylocale
?F:!try
: see if this is an xlocale.h system
set xlocale.h i_xlocale
eval $inhdr

: see if newlocale exists
set newlocale d_newlocale
eval $inlibc

: see if freelocale exists
set freelocale d_freelocale
eval $inlibc

: see if uselocale exists
set uselocale d_uselocale
eval $inlibc

: see if duplocale exists
set duplocale d_duplocale
eval $inlibc

: see if querylocale exists
set querylocale d_querylocale
eval $inlibc

: if we have xlocale.h, check whether it is needed
case "$i_xlocale$d_newlocale$xlocale_needed" in
"$define$define")
```

```
 echo "Checking if xlocale.h is needed..." >&4
 $cat >try.c <<EOF
#include <locale.h>
#include <stdio.h>
#ifdef TRY_XLOCALE
#include <xlocale.h>
#endif
#$d_localeconv_l
 HAVE_LOCALECONV_L

#ifdef HAVE_LOCALECONV_L
struct lconv *(*lcptr)(locale_t) = localeconv_l;
#endif

int main(void) {
 locale_t lc = newlocale(LC_ALL_MASK, "C", (locale_t)0);

#ifdef HAVE_LOCALECONV_L
 /* FreeBSD hides only localeconv_l() in xlocale.h */
 struct lconv *lcbuf = localeconv_l(lc);
 printf("decimal: %s\n", lcbuf->decimal_point);
#endif

 freelocale(lc);
 return 0;
}
EOF
 set try
 if eval $compile && $run ./try > /dev/null 2>&1 ; then
  echo "xlocale.h isn't needed" >&4
  xlocale_needed=$undef
 else
  set try -DTRY_XLOCALE
  if eval $compile && $run ./try > /dev/null 2>&1 ; then
   xlocale_needed=$define
   echo "xlocale.h is needed" >&4
  else
   echo "I can't build my test either way" >&4
   xlocale_needed=$undef
  fi
 fi
 $rm_try
 ;;
*) xlocale_needed=$undef ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_newlocale.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usemorebits: Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usemorebits:
?S: This variable conditionally defines the USE_MORE_BITS symbol,
?S: and indicates that explicit 64-bit interfaces and long doubles
?S: should be used when available.
?S:.
?C:USE_MORE_BITS:
?C: This symbol, if defined, indicates that 64-bit interfaces and
?C: long doubles should be used when available.
?C:.
?H:?%<:#ifndef USE_MORE_BITS
?H:?%<:#$usemorebits USE_MORE_BITS  /**/
?H:?%<:#endif
?H:.
?LINT:extern use64bitint
?LINT:change use64bitint
?LINT:extern uselongdouble
?LINT:change uselongdouble
: Check if morebits is requested
case "$usemorebits" in
"$define"|true|[yY]*)
 use64bitint="$define"
 uselongdouble="$define"
 usemorebits="$define"
 ;;
*) usemorebits="$undef"
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usemorebits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_eaccess: Inlibc
?MAKE: -pick add $@ %<
?S:d_eaccess:
?S: This variable conditionally defines the HAS_EACCESS symbol, which
?S: indicates to the C program that the eaccess() routine is available.
?S:.
?C:HAS_EACCESS :
?C: This symbol, if defined, indicates that the eaccess routine is
?C: available to do extended access checks.
?C:.
?H:#$d_eaccess HAS_EACCESS  /**/
?H:.
?LINT:set d_eaccess
: see if eaccess exists
set eaccess d_eaccess
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/d_eaccess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpent:
?S: This variable conditionally defines HAS_GETPROTOENT if getprotoent() is
?S: available to look up protocols in some data base or another.
?S:.
?C:HAS_GETPROTOENT:
?C: This symbol, if defined, indicates that the getprotoent() routine is
?C: available to look up protocols in some data base
```

```
 or another.
?C:.
?H:#$d_getpent HAS_GETPROTOENT  /**/
?H:.
?LINT:set d_getpent
: see if getprotoent exists
set getprotoent d_getpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_perlio.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_perlio.U,v $
?RCS:
?MAKE:useperlio: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:useperlio:
?S: This variable conditionally defines the USE_PERLIO symbol,
?S: and indicates that the PerlIO abstraction should be
?S: used throughout.
?S:.
?C:USE_PERLIO:
?C: This symbol, if defined, indicates that the PerlIO abstraction should
?C: be used throughout.  If not defined, stdio should be
?C: used in a fully backward compatible manner.
?C:.
?H:?%<:#ifndef USE_PERLIO
?H:?%<:#$useperlio USE_PERLIO  /**/
?H:?%<:#endif
?H:.
: Check if we want perlio
useperlio="$define"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/useperlio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_random_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_random_r random_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_random_r:
?S: This variable conditionally defines the HAS_RANDOM_R symbol,
?S: which indicates to the C program that the random_r()
?S: routine is available.
?S:.
?S:random_r_proto:
?S: This variable encodes the prototype of random_r.
?S: It is zero if d_random_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_random_r
?S: is defined.
?S:.
?C:HAS_RANDOM_R:
?C: This symbol, if defined, indicates that the random_r routine
?C: is available to random re-entrantly.
?C:.
?C:RANDOM_R_PROTO:
?C: This
 symbol encodes the prototype of random_r.
?C: It is zero if d_random_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_random_r
?C: is defined.
?C:.
?H:#$d_random_r HAS_RANDOM_R /**/
?H:#define RANDOM_R_PROTO $random_r_proto /**/
?H:.
?T:try hdrs d_random_r_proto
: see if random_r exists
set random_r d_random_r
eval $inlibc
case "$d_random_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_random_r_proto:$usethreads" in
 ":define") d_random_r_proto=define
  set d_random_r_proto random_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_random_r_proto" in
```

```
 define)
 case "$random_r_proto" in
 "|0) try='int random_r(int*, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_iS ;;
 esac
 case "$random_r_proto" in
 "|0) try='int random_r(long*, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_lS ;;
 esac
 case "$random_r_proto" in
 "|0)
 try='int random_r(struct random_data*, int32_t*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_St ;;
 esac
 case "$random_r_proto" in
 "|0) d_random_r=undef
  random_r_proto=0
  echo "Disabling random_r, cannot determine prototype." >&4 ;;
 * ) case "$random_r_proto" in
  REENTRANT_PROTO*) ;;
  *) random_r_proto="REENTRANT_PROTO_$random_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "random_r has no prototype, not using it." >&4 ;;
  esac
  d_random_r=undef
  random_r_proto=0
  ;;
 esac
 ;;
*) random_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_random_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_waitpid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_waitpid.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_waitpid: Inlibc
?MAKE: -pick add $@ %<
?S:d_waitpid:
?S: This variable conditionally defines HAS_WAITPID if waitpid() is
?S: available to wait for child process.
?S:.
?C:HAS_WAITPID (WAITPID):
?C: This symbol, if defined, indicates that the waitpid routine is
?C: available to wait for child process.
?C:.
?H:#$d_waitpid HAS_WAITPID /**/
?H:.
?LINT:set
 d_waitpid
: see if waitpid exists
set waitpid d_waitpid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_waitpid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: man1dir.U,v 3.2 1999/07/08 20:57:21 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996, 1999 Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: man1dir.U,v $
?RCS: Revision 3.2  1999/07/08 20:57:21  doughera
?RCS: Used installprefix.
?RCS:
?RCS: Revision 3.1  1999/07/08 20:52:19  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:10:29  ram
```

```
?RCS: patch61: created
?RCS:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and
 man3dir.  This unit is basically dist's mansrc.U with
?X: man1 used instead of man everywhere.
?X:
?MAKE:man1dir man1direxp man1ext installman1dir: cat nroff Loc Oldconfig \
 spackage test Getfile Setprefixvar Prefixit Prefixup sysman Myread \
 prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:man1dir=''
?S:man1dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?D:man1direxp=''
?S:man1direxp:
?S: This variable is the same as the man1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installman1dir=''
?S:installman1dir:
?S: This variable is really the same as man1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location.
 For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man1ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See man1dir.
?S:.
?T:lookpath
?LINT:change prefixvar
?LINT:set man1direxp
: determine where manual pages go
set man1dir man1dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages available in source form.
EOM
```

```
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$man1dir" in
 ") man1dir="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$man1dir" in
' ') dflt=none
 ;;
")
 lookpath="$prefixexp/share/man/man1"
 lookpath="$lookpath $prefixexp/man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath $prefixexp/man/p_man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1"
 lookpath="$lookpath $prefixexp/man/man.1"
?X: Experience has shown people
 expect man1dir to be under prefix,
?X: so we now always put it there.  Users who want other behavior
?X: can answer interactively or use a command line option.
?X: Does user have System V-style man paths.
 case "$sysman" in
 */?_man*) dflt=`./loc . $prefixexp/l_man/man1 $lookpath` ;;
 *) dflt=`./loc . $prefixexp/man/man1 $lookpath` ;;
 esac
 set dflt
 eval $prefixup
 ;;
*)  dflt="$man1dir"
 ;;
esac
echo " "
fn=dn+~
rp="Where do the main $spackage manual pages (source) go?"
. ./getfile
if $test "X$man1direxp" != "X$ansexp"; then
 installman1dir="
fi
prefixvar=man1dir
. ./setprefixvar

case "$man1dir" in
") man1dir=' '
 installman1dir=";;
esac

: What suffix to use on installed man pages
```

```
case "$man1dir" in
' ')
 man1ext='0'
 ;;
*)
 rp="What suffix should be used for the main $spackage man pages?"
 case "$man1ext" in
 ") case "$man1dir" in
  *1)  dflt=1 ;;
  *1p) dflt=1p ;;
  *1pm) dflt=1pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L1)
 dflt=L1;;
  *) dflt=1;;
  esac
  ;;
 *) dflt="$man1ext";;
 esac
 . ./myread
 man1ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/man1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_lstat.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_lstat: Inlibc
?MAKE: -pick add $@ %<
?S:d_lstat:
?S: This variable conditionally defines HAS_LSTAT if lstat() is
?S: available to do file stats on symbolic links.
?S:.
?C:HAS_LSTAT (LSTAT):
?C: This symbol, if defined, indicates that the lstat routine is
?C: available to do file stats on symbolic links.
?C:.
?H:#$d_lstat HAS_LSTAT  /**/
?H:.
?LINT:set
 d_lstat
: see if lstat exists
set lstat d_lstat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_lstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethname.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:00  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethname d_uname d_phostname aphostname: phostname cat \
 myhostname package d_portable Loc echo n c +i_whoami +usrinc \
 Myread Guess Oldconfig Csym
?MAKE: -pick add $@ %<
?S:d_gethname:
?S: This variable conditionally defines the HAS_GETHOSTNAME symbol,
 which
?S: indicates to the C program that the gethostname() routine may be
?S: used to derive the host name.
```

```
?S:.
?S:d_uname:
?S: This variable conditionally defines the HAS_UNAME symbol, which
?S: indicates to the C program that the uname() routine may be
?S: used to derive the host name.
?S:.
?S:d_phostname:
?S: This variable conditionally defines the PHOSTNAME symbol, which
?S: contains the shell command which, when fed to popen(), may be
?S: used to derive the host name.
?S:.
?S:aphostname:
?S: Thie variable contains the command which can be used to compute the
?S: host name. The command is fully qualified by its absolute path, to make
?S: it safe when used by a process with super-user privileges.
?S:.
?C:HAS_GETHOSTNAME (GETHOSTNAME):
?C: This symbol, if defined, indicates that the C program may use the
?C: gethostname() routine to derive the host name.  See also HAS_UNAME
?C: and PHOSTNAME.
?C:.
?C:HAS_UNAME (UNAME):
?C: This symbol, if defined, indicates that the C program may
 use the
?C: uname() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and PHOSTNAME.
?C:.
?C:PHOSTNAME:
?C: This symbol, if defined, indicates that the C program may use the
?C: contents of PHOSTNAME as a command to feed to the popen() routine
?C: to derive the host name.  See also HAS_GETHOSTNAME and HAS_UNAME.
?C: Note that the command uses a fully qualified path, so that it is safe
?C: even if used by a process with super-user privileges.
?C:.
?H:#$d_gethname HAS_GETHOSTNAME /**/
?H:#$d_uname HAS_UNAME  /**/
?H:#$d_phostname PHOSTNAME "$aphostname" /* How to get the host name */
?H:.
?T:file val call
?LINT:change i_whoami
: see how we will look up host name
echo " "
if false; then
 : dummy stub to allow use of elif
@if HAS_GETHOSTNAME
elif set gethostname val -f d_gethname; eval $csym; $val; then
 echo 'gethostname() found.' >&4
 d_gethname="$define"
```

```
 call=gethostname
@end
@if HAS_UNAME
elif set uname val -f d_uname; eval $csym; $val; then
 if ./xenix; then
  $cat <<'EOM'
uname()
 was found, but you're running xenix, and older versions of xenix
have a broken uname(). If you don't really know whether your xenix is old
enough to have a broken system call, use the default answer.

EOM
  dflt=y
  case "$d_uname" in
  "$define") dflt=n;;
  esac
  rp='Is your uname() broken?'
  . ./myread
  case "$ans" in
  n*) d_uname="$define"; call=uname;;
  esac
 else
  echo 'uname() found.' >&4
  d_uname="$define"
  call=uname
 fi
@end
fi
case "$d_gethname" in
") d_gethname="$undef";;
esac
case "$d_uname" in
") d_uname="$undef";;
esac
@if PHOSTNAME || MYHOSTNAME
case "$d_uname$d_gethname" in
*define*)
 dflt=n
 cat <<EOM

Every now and then someone has a $call() that lies about the hostname
but can't be fixed for political or economic reasons.  If you wish, I can
@if MYHOSTNAME && PHOSTNAME
pretend $call() isn't there and maybe compile in the hostname or
compute it from the '$phostname' command at run-time.
@elsif MYHOSTNAME
pretend $call() isn't there and maybe compile
```

```
 in the hostname.
@elsif PHOSTNAME
pretend $call() isn't there and maybe compute hostname at run-time
thanks to the '$phostname' command.
@elsif WHOAMI
get the hostname from whomai.h (provided you have one).
@else
simply ignore your host name and use someting like "noname" instead.
@end

EOM
 rp="Shall I ignore $call() from now on?"
 . ./myread
 case "$ans" in
 y*) d_uname="$undef" d_gethname="$undef"; $echo $n "Okay...$c";;
 esac;;
esac
@end
@if PHOSTNAME || aphostname
?X: Compute the full path name for the command
case "$phostname" in
") aphostname=";;
*) case "$aphostname" in
 /*) ;;
 *) set X $phostname
  shift
  file=$1
  shift
  file=`./loc $file $file $pth`
  aphostname=`echo $file $*`
  ;;
 esac
 ;;
esac
@end
@if PHOSTNAME && MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ") ;;
 *)
  $cat <<EOT

There is no gethostname() or uname() on this system.  You have two
possibilities at this point:

1)  You can have your host name ($myhostname) compiled
```

```
 into $package, which
   lets $package start up faster, but makes your binaries non-portable, or
2)  you can have $package use a

 popen("$aphostname","r")

   which will start slower but be more portable.

@ if WHOAMI
Option 1 will give you the option of using whoami.h if you have one.
@ end
If you want option 2 but with a different command, you can edit config.sh at
the end of this shell script.

EOT
  case "$d_phostname" in
  "$define") dflt=n;;
  "$undef")  dflt=y;;
  ")
   case "$d_portable" in
   "$define") dflt=n ;;
   *) dflt=y ;;
   esac;;
  esac
  rp="Do you want your host name compiled in?"
  . ./myread
  case "$ans" in
  n*) d_phostname="$define" ;;
  *) aphostname=''; d_phostname="$undef";;
  esac;;
 esac
 case "$aphostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   dflt=y
   $cat <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier
 ($myhostname) hardwired in.
EOM
   rp="Use whoami.h to get hostname?"
   . ./myread
```

```
   case "$ans" in
   n*) i_whoami="$undef";;
   esac
   ;;
  "$undef")
   $cat <<EOM
No hostname function and no whoami.h -- hardwiring "$myhostname".
EOM
   ;;
  esac;;
@ else
  echo 'No hostname function -- hardwiring "'$myhostname'".' >&4;;
@ end
 esac;;
esac
@elsif PHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   $cat <<EOM

No hostname function--we'll use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

EOM
   ;;
  *) echo "There will be no way for $package to get your hostname." >&4;;
  esac;;
@ else
  echo "There will be no way for $package to get your hostname." >&4;;
@ end
 *)
 echo "I'll use 'popen("""$aphostname"", "r")"" to get your hostname." >&4
  ;;
 esac;;
esac
@elsif MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
@ if WHOAMI
 case "$i_whoami" in
```

```
 "$define")
  dflt=y
  $cat
 <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

  `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
  rp="Use whoami.h to get hostname?"
  . ./myread
  case "$ans" in
  n*) i_whoami="$undef";;
  esac
  ;;
 "$undef")
  echo 'No whoami.h--hardwiring '"$myhostname"'.' >&4;;
 esac;;
@ else
 echo 'Hardwiring '"$myhostname"'.' >&4;;
@ end
esac
@end
case "$d_phostname" in
") d_phostname="$undef";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Config_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_h.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  14:57:43  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:10:49  ram
```

```
?RCS: patch59: commented the purpose of the #un-def directive
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:25:39  ram
?RCS: patch49: typo fixes in leading config.h comment (WED)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/24  12:13:20  ram
?RCS: patch3: added TOP as a local shell temporary variable
?RCS:
?RCS:
 Revision 3.0.1.1  1993/08/19  06:42:20  ram
?RCS: patch1: leading config.sh searching was not aborting properly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file ends up producing the config_h.SH script, which is run to produce
?X: the config.h file.  The file ./.Config_h below contains all the ?H: lines
?X: extracted out of all the units.  Metaconfig itself adds the !GROK!THIS!.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?X: For those who wish to know why the file is config_h.SH instead of the more
?X: natural config.h.SH, well... it is to support systems like MS-DOG. Only one
?X: 'dot' is allowed within the file name, as it is part of the "extension" of
?X: the file. MS-DOG will not let you have two 'dots' because that would mean
?X: two "extensions".
?X:
?MAKE:Config_h: Id End Config_sh Obsol_h myuname cf_time cf_by package src
?MAKE: -pick c_h_weed $@ %<
?MAKE: -pick
 c_h_weed $@ ./Config_h
?MAKE: -pick c_h_weed $@ ./Obsol_h
?T:PERL_CONFIG_SH TOP
?LINT:unclosed !GROK!THIS!
?LINT:extern CONFIG_H CONFIG_SH
?LINT:change CONFIG_H CONFIG_SH
?X:?LINT:nocomment
: Set up for generating config_h.SH
case "$CONFIG_SH" in
") CONFIG_SH=config.sh;;
esac
case "$CONFIG_H" in
") CONFIG_H=config.h;;
esac
case $PERL_CONFIG_SH in
")
 if test -f $CONFIG_SH; then TOP=.;
 elif test -f ../$CONFIG_SH; then TOP=..;
```

```
 elif test -f ../../$CONFIG_SH; then TOP=../..;
 elif test -f ../../../$CONFIG_SH; then TOP=../../..;
 elif test -f ../../../../$CONFIG_SH; then TOP=../../../..;
 else
  echo "Can't find $CONFIG_SH."; exit 1
 fi
 . $TOP/$CONFIG_SH
 ;;
esac
?X: Make sure we are in the directory where the .SH file is located.
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting $CONFIG_H (with variable substitutions)"
?X:
?X: Since we unconditionally translate leading #undef into /*#define, we're
?X: stuck when we really want to have a #undef in $CONFIG_H.
 That's why there
?X: is provision here for #un-def, which is translated back into #undef after
?X: all original #undef have been processed.
?X:
?X: Previously, we changed all
?X:  #undef FOO /**/
?X: into
?X:  /*#define FOO /**/
?X: The xlc compiler (available on IBM's AIX) complains that this is
?X: an illegal attempt to write a nested comment, and warns against it.
?X: There's apparently no way to shut the compiler up, either.
?X: This sed command from Hallvard B Furuseth <h.b.furuseth@usit.uio.no>
?X: changes it to
?X:  /*#define FOO / **/
sed <<!GROK!THIS! >$CONFIG_H -e 's!^#undef\(.*/\)\*!/\*#define\1 \*!' -e 's!^#un-def!#undef!'
/* This file was produced by running the config_h.SH script, which
* gets its values from $CONFIG_SH, which is generally produced by
* running Configure.
*
* Feel free to modify any of this as the need arises.  Note, however,
* that running config_h.SH again will wipe out any changes you've made.
* For a more permanent change edit $CONFIG_SH and
 rerun config_h.SH.
*/

/* Package name      : $package
* Source directory  : $src
* Configuration time: $cf_time
* Configured by     : $cf_by
* Target system     : $myuname
*/
```

```
#ifndef _config_h_
#define _config_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Config_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?X:
?X: This unit allows the duplication of the source tree to the current
?X: directory via symbolic links.  This must be requested explicitly
?X: by them issuing a -Dmksymlinks on the command line.
?X:
?MAKE:Mksymlinks: Mkdirp lns issymlink src rsrc pkgsrc
?MAKE: -pick add $@ %<
?F:!UU
?T: dir filename tmppwd filelist
?LINT:extern mksymlinks
@if {test -f ../MANIFEST}
: Duplicate the tree with symbolic links if -Dmksymlinks was supplied
case "$mksymlinks"
 in
$define|true|[yY]*)
 echo " "
 case "$src" in
 "|'.') echo "Cannot create symlinks in the original directory." >&4
  exit 1
  ;;
 *) case "$lns:$issymlink" in
  *"ln"*" -s:"*"test -"?)
   echo "Creating the symbolic links..." >&4
   echo "(First creating the subdirectories...)" >&4
   cd ..
   awk '{print $1}' $src/MANIFEST | grep / | sed 's:/[^/]*$::' | \
    sort -u | while true
   do
```

```
   read dir
   test -z "$dir" && break
   ./UU/mkdirp $dir 2>/dev/null
   if test -d $dir; then
    : ok
   else
    echo "Failed to create '$dir'.  Aborting." >&4
    exit 1
   fi
  done
  echo "(Now creating the symlinks...)" >&4
  awk '{print $1}' $src/MANIFEST | while true; do
   read filename
   test -z "$filename" && break
   if test -f $filename; then
    if $issymlink $filename; then
     rm -f $filename
    fi
   fi
   if test -f $filename; then
    echo "$filename already exists, not symlinking."
   else
?X: Note that the following works because "$pkgsrc" is absolute
    ln
 -s $pkgsrc/$filename $filename
   fi
  done
?X: Check that everything was correctly copied
  echo "(Checking current directory...)" >&4
  cd UU
  awk '$1 !~ /PACK[A-Z]+/ {print $1}' "$rsrc/MANIFEST" | \
   (split -l 50 2>/dev/null || split -50)
  rm -f missing
  tmppwd=`pwd`
  for filelist in x??; do
   (cd ..; ls `cat "$tmppwd/$filelist"` \
    >/dev/null 2>>"$tmppwd/missing")
  done
  if test -s missing; then
   echo "Failed duplication of source tree.  Aborting." >&4
   exit 1
  fi
  ;;
 *) echo "(I cannot figure out how to do symbolic links, ignoring!)" >&4
  ;;
 esac
 ;;
esac
```

```
 ;;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Mksymlinks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Whoa.U,v 3.0.1.2 1997/02/28 15:21:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Whoa.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:21:21  ram
?RCS: patch61: whoa script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:01  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to warn the user in case a change into a variable
 is noticed.
?X:
?X: To use this unit, $was must hold the old value that has changed. Upon
?X: exit, the two variables $td and $tu are set to the correct value for
?X: respectively defining or undefining a variable. For instance, if $vas was
?X: $undef, but now $var is $define, after calling . whoa, you should use
?X: eval "$var=\$tu" to finally set $var to the correct value. See unit Inlibc.
?X:
?MAKE:Whoa: Myread startsh hint
?MAKE: -pick add $@ %<
?F:./whoa
?T:var was td tu hintfile
: set up the script used to warn in case of inconsistency
cat <<EOS >whoa
$startsh
EOS
```

```
cat <<'EOSC' >>whoa
dflt=y
case "$hint" in
   recommended)
 case "$hintfile" in
 ") echo "The $hint value for \$$var on this machine was \"$was\"!" >&4
  ;;
 *) echo "Hmm.  Based on the hints in hints/$hintfile.sh, " >&4
  echo "the $hint value for \$$var on this machine was \"$was\"!" >&4
  ;;
 esac
 ;;
   *) echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    The $hint value for \$$var on this machine was
 \"$was\"!" >&4
 ;;
esac
rp="    Keep the $hint value?"
. ./myread
case "$ans" in
y) td=$was; tu=$was;;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Whoa.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpgetround: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpgetround:
?S: This variable conditionally defines HAS_FPGETROUND if fpgetround()
?S: is available to get the floating point rounding mode.
?S:.
?C:HAS_FPGETROUND:
?C: This symbol, if defined, indicates that the fpgetround routine is
?C: available to get the floating point rounding mode.
?C:.
?H:#$d_fpgetround HAS_FPGETROUND  /**/
?H:.
?LINT:set d_fpgetround
: see if fpgetround exists
set fpgetround d_fpgetround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpgetround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gconvert.U,v 3.0.1.3 1997/02/28 15:33:38 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_gconvert.U,v $
?RCS: Revision 3.0.1.3 1997/02/28  15:33:38  ram
?RCS: patch61: integrated new unit from perl5
?RCS:
?RCS: Revision 3.0.1.2 1995/07/25  13:55:59  ram
?RCS: patch56: improved comments about the Gconvert macro (ADO)
?RCS: patch56: force compile-link test since it may exist but be unusable (ADO)
?RCS:
?RCS: Revision 3.0.1.1 1994/10/29  16:12:51  ram
?RCS: patch36:
 created by ADO
?RCS:
?MAKE:d_Gconvert: \
 Compile cat Inlibc rm _o rm_try i_stdlib d_qgcvt run \
 uselongdouble d_longdbl d_PRIgldbl sPRIgldbl
?MAKE: -pick add $@ %<
?S:d_Gconvert:
?S: This variable holds what Gconvert is defined as to convert
?S: floating point numbers into strings.  By default, Configure
?S: sets this macro to use the first of gconvert, gcvt, or sprintf
?S: that pass sprintf-%g-like behavior tests.  If perl is using
?S: long doubles, the macro uses the first of the following
?S: functions that pass Configure's tests: qgcvt, sprintf (if
?S: Configure knows how to make sprintf format long doubles--see
?S: sPRIgldbl), gconvert, gcvt, and sprintf (casting to double).
?S: The gconvert_preference and gconvert_ld_preference variables
?S: can be used to alter Configure's preferences, for doubles and
?S: long doubles, respectively.  If present, they contain a
?S: space-separated list of one or more of the above function
?S: names in the order they should be tried.
?S:
```

```
?S: d_Gconvert
 may be set to override Configure with a platform-
?S: specific function.  If this function expects a double, a
?S: different value may need to be set by the uselongdouble.cbu
?S: call-back unit so that long doubles can be formatted without
?S: loss of precision.
?S:.
?C:Gconvert:
?C: This preprocessor macro is defined to convert a floating point
?C: number to a string without a trailing decimal point.  This
?C: emulates the behavior of sprintf("%g"), but is sometimes much more
?C: efficient.  If gconvert() is not available, but gcvt() drops the
?C: trailing decimal point, then gcvt() is used.  If all else fails,
?C: a macro using sprintf("%g") is used. Arguments for the Gconvert
?C: macro are: value, number of digits, whether trailing zeros should
?C: be retained, and the output buffer.
?C: The usual values are:
?C:  d_Gconvert='gconvert((x),(n),(t),(b))'
?C:  d_Gconvert='gcvt((x),(n),(b))'
?C:  d_Gconvert='sprintf((b),"%.*g",(n),(x))'
?C: The last two assume trailing zeros should
 not be kept.
?C:.
?H:#define Gconvert(x,n,t,b) $d_Gconvert
?H:.
?T: xxx_list xxx_convert xxx_ld_list
?F:!try
?LINT:extern gconvert_preference
?LINT:extern gconvert_ld_preference
: Check how to convert floats to strings.

if test "X$d_Gconvert" = X; then

echo " "
echo "Checking for an efficient way to convert floats to strings."
echo " " > try.c
case "$uselongdouble" in
"$define") echo "#define USE_LONG_DOUBLE" >>try.c ;;
esac
case "$d_longdbl" in
"$define") echo "#define HAS_LONG_DOUBLE" >>try.c ;;
esac
case "$d_PRIgldbl" in
"$define") echo "#define HAS_PRIgldbl"    >>try.c ;;
esac
$cat >>try.c <<EOP
#ifdef TRY_gconvert
#define Gconvert(x,n,t,b) gconvert((x),(n),(t),(b))
```

```
const char *myname = "gconvert";
#endif
#ifdef TRY_gcvt
#define Gconvert(x,n,t,b) gcvt((x),(n),(b))
const char *myname = "gcvt";
#endif
#ifdef TRY_qgcvt
#define Gconvert(x,n,t,b) qgcvt((x),(n),(b))
const char *myname = "qgcvt";
#define DOUBLETYPE long double
#endif
#ifdef TRY_sprintf
#if defined(USE_LONG_DOUBLE) &&
 defined(HAS_LONG_DOUBLE)
#ifdef HAS_PRIgldbl
#define Gconvert(x,n,t,b) sprintf((b),"%.*"$sPRIgldbl,(n),(x))
#else
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(double)(x))
#endif
#else
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(x))
#endif
const char *myname = "sprintf";
#endif

#ifndef DOUBLETYPE
#if defined(USE_LONG_DOUBLE) && defined(HAS_LONG_DOUBLE)
#define DOUBLETYPE long double
#else
#define DOUBLETYPE double
#endif
#endif

#include <stdio.h>

#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>

void checkit(const char *expect, char *got)
{
   if (strcmp(expect, got)) {
  printf("%s oddity:  Expected %s, got %s\n",
   myname, expect, got);
  exit(1);
 }
```

```
}

void lencheck(int expect, int got)
{
   if (expect != got) {
  printf("%s length mismatch:  Expected %d, got %d\n",
   myname, expect, got);
  exit(1);
 }
}

int main()
{
 char buf[64];
 buf[63] = '\0';

 /* This must be 1st test on (which?) platform */
 /* Alan Burlison <AlanBurlsin@unn.unisys.com>
 */
 Gconvert((DOUBLETYPE)0.1, 8, 0, buf);
 checkit("0.1", buf);

 Gconvert((DOUBLETYPE)0.01, 8, 0, buf);
 checkit("0.01", buf);

 Gconvert((DOUBLETYPE)0.001, 8, 0, buf);
 checkit("0.001", buf);

 Gconvert((DOUBLETYPE)0.0001, 8, 0, buf);
 checkit("0.0001", buf);

 Gconvert((DOUBLETYPE)0.00009, 8, 0, buf);
 if (strlen(buf) > 5)
    checkit("9e-005", buf); /* for Microsoft ?? */
 else
    checkit("9e-05", buf);

 Gconvert((DOUBLETYPE)1.0, 8, 0, buf);
 checkit("1", buf);

 Gconvert((DOUBLETYPE)1.1, 8, 0, buf);
 checkit("1.1", buf);

 Gconvert((DOUBLETYPE)1.01, 8, 0, buf);
 checkit("1.01", buf);

 Gconvert((DOUBLETYPE)1.001, 8, 0, buf);
 checkit("1.001", buf);
```

```
Gconvert((DOUBLETYPE)1.0001, 8, 0, buf);
checkit("1.0001", buf);

Gconvert((DOUBLETYPE)1.00001, 8, 0, buf);
checkit("1.00001", buf);

Gconvert((DOUBLETYPE)1.000001, 8, 0, buf);
checkit("1.000001", buf);

Gconvert((DOUBLETYPE)0.0, 8, 0, buf);
checkit("0", buf);

Gconvert((DOUBLETYPE)-1.0, 8, 0, buf);
checkit("-1",
buf);

/* Some Linux gcvt's give 1.e+5 here. */
Gconvert((DOUBLETYPE)100000.0, 8, 0, buf);
checkit("100000", buf);

/* Some Linux gcvt's give -1.e+5 here. */
Gconvert((DOUBLETYPE)-100000.0, 8, 0, buf);
checkit("-100000", buf);

Gconvert((DOUBLETYPE)123.456, 8, 0, buf);
checkit("123.456", buf);

/* Testing of 1e+129 in bigintpm.t must not get extra '.' here. */
Gconvert((DOUBLETYPE)1e34, 8, 0, buf);
/* 34 should be enough to scare even long double
 * places into using the e notation. */
if (strlen(buf) > 5)
   checkit("1e+034", buf); /* for Microsoft */
else
   checkit("1e+34", buf);

/* Test for an Ubuntu/Debian bug in gcvt and qgcvt. See:        *
 * https://bugs.launchpad.net/ubuntu/+source/glibc/+bug/1899553 */

Gconvert((DOUBLETYPE)0.4, 53, 0, buf);
lencheck(55, (int)strlen(buf));

/* For Perl, if you add additional tests here, also add them to
 * t/base/num.t for benefit of platforms not using Configure or
 * overriding d_Gconvert */

exit(0);
```

```
}
EOP
?X:
 List of order in which to search for functions.
?X: Usual order of efficiency is gconvert gcvt sprintf
?X: If a hint file sets a d_Gconvert="gconvert" or "gcvt" or "sprintf",
?X: then that is taken as a hint for which function to try first.
?X: (e.g. that function may be in a problematic /usr/ucblib library, and
?X: the user may or may not choose to use -lucb stuff.)
?X: Any other hint file (or previous config.sh) setting is left intact.
: first add preferred functions to our list
xxx_list=""
for xxx_convert in $gconvert_preference; do
   case $xxx_convert in
   gcvt|gconvert|sprintf) xxx_list="$xxx_list $xxx_convert" ;;
   *) echo "Discarding unrecognized gconvert_preference $xxx_convert" >&4 ;;
   esac
done
: then add any others
for xxx_convert in gconvert gcvt sprintf; do
   case "$xxx_list" in
   *$xxx_convert*) ;;
   *) xxx_list="$xxx_list $xxx_convert" ;;
   esac
done

case "$d_longdbl$uselongdouble" in
"$define$define")
   : again, add preferred functions to our
 list first
   xxx_ld_list=""
   for xxx_convert in $gconvert_ld_preference; do
       case $xxx_convert in
       qgcvt|gcvt|gconvert|sprintf) xxx_ld_list="$xxx_ld_list $xxx_convert" ;;
       *) echo "Discarding unrecognized gconvert_ld_preference $xxx_convert" ;;
       esac
   done
   : then add qgcvt, sprintf--then, in xxx_list order, gconvert and gcvt
   for xxx_convert in qgcvt sprintf $xxx_list; do
       case "$xxx_ld_list" in
       $xxx_convert*|*" $xxx_convert"*) ;;
       *) xxx_ld_list="$xxx_ld_list $xxx_convert" ;;
       esac
   done
   : if sprintf cannot do long doubles, move it to the end
   if test "$d_PRIgldbl" != "$define"; then
       xxx_ld_list="`echo $xxx_ld_list|sed s/sprintf//` sprintf"
   fi
```

```
   : if no qgcvt, remove it
   if test "$d_qgcvt" != "$define"; then
       xxx_ld_list="`echo $xxx_ld_list|sed s/qgcvt//`"
   fi
   : use the ld_list
   xxx_list="$xxx_ld_list"
   ;;
esac

for xxx_convert in $xxx_list; do
 echo "Trying $xxx_convert..."
?X:
 Do NOT use $rm_try here, as we need to keep try.c
 $rm -f try try$_o core
 set try -DTRY_$xxx_convert
 if eval $compile; then
  echo "$xxx_convert() found." >&4
  if $run ./try; then
   echo "I'll use $xxx_convert to convert floats into a string." >&4
   break;
  else
   echo "...But $xxx_convert didn't work as I expected."
   xxx_convert=''
  fi
 else
  echo "$xxx_convert NOT found." >&4
  xxx_convert=''
 fi
done

if test X$xxx_convert = X; then
   echo "*** WHOA THERE!!! ***" >&4
   echo "None of ($xxx_list)  seemed to work properly.  I'll use sprintf." >&4
   xxx_convert=sprintf
fi

case "$xxx_convert" in
gconvert) d_Gconvert='gconvert((x),(n),(t),(b))' ;;
gcvt) d_Gconvert='gcvt((x),(n),(b))' ;;
qgcvt) d_Gconvert='qgcvt((x),(n),(b))' ;;
*) case "$uselongdouble$d_longdbl$d_PRIgldbl" in
  "$define$define$define")
     d_Gconvert="sprintf((b),\"%.*\"$sPRIgldbl,(n),(x))" ;;
  "$define$define$undef")
     d_Gconvert='sprintf((b),"%.*g",(n),(double)(x))' ;;
  *) d_Gconvert='sprintf((b),"%.*g",(n),(x))'
 ;;
  esac
```

```
  ;;
esac

fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_gconvert.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setpwent_r setpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_setpwent_r:
?S: This variable conditionally defines the HAS_SETPWENT_R symbol,
?S: which indicates to the C program that the setpwent_r()
?S: routine is available.
?S:.
?S:setpwent_r_proto:
?S: This variable encodes the prototype of setpwent_r.
?S: It is zero if d_setpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setpwent_r
?S: is defined.
?S:.
?C:HAS_SETPWENT_R:
?C: This symbol, if defined, indicates that the setpwent_r routine
?C: is available to
 setpwent re-entrantly.
?C:.
?C:SETPWENT_R_PROTO:
?C: This symbol encodes the prototype of setpwent_r.
?C: It is zero if d_setpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setpwent_r
?C: is defined.
?C:.
?H:#$d_setpwent_r HAS_SETPWENT_R /**/
?H:#define SETPWENT_R_PROTO $setpwent_r_proto /**/
?H:.
?T:try hdrs d_setpwent_r_proto
: see if setpwent_r exists
```

```
set setpwent_r d_setpwent_r
eval $inlibc
case "$d_setpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_setpwent_r_proto:$usethreads" in
 ":define") d_setpwent_r_proto=define
  set d_setpwent_r_proto setpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setpwent_r_proto" in
 define)
 case "$setpwent_r_proto" in
 "|0) try='int setpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setpwent_r_proto=I_H ;;
 esac
 case "$setpwent_r_proto" in
 "|0) try='void setpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setpwent_r_proto=V_H ;;
 esac
 case "$setpwent_r_proto"
 in
 "|0) d_setpwent_r=undef
  setpwent_r_proto=0
  echo "Disabling setpwent_r, cannot determine prototype." >&4 ;;
 * ) case "$setpwent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setpwent_r_proto="REENTRANT_PROTO_$setpwent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setpwent_r has no prototype, not using it." >&4 ;;
  esac
  d_setpwent_r=undef
  setpwent_r_proto=0
  ;;
 esac
 ;;
*) setpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setpwent_r.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: myhostname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:15:55  ram
?RCS: patch61: improved hostname lookup by using ypmatch when NIS is used
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:25:43  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS: patch36: now uses new Tr unit to convert to/from lowercase
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:20  ram
?RCS: patch30: now a little more clever for domain name guessing
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:18  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:myhostname phostname mydomain: contains sed test Myread Oldconfig \
 Guess Loc awk echo sort uniq +usrinc rm hostcat Tr osname
?MAKE: -pick add $@ %<
?S:myhostname (hostname):
?S: This variable contains the eventual value of the MYHOSTNAME symbol,
?S: which is the name of the host the program is going to run on.
?S: The domain is not kept with hostname, but must be gotten from mydomain.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:mydomain:
?S: This variable contains the eventual value of the MYDOMAIN symbol,
?S: which is the domain of the host the program is going to run on.
?S: The domain must be appended to myhostname to form a complete host name.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:phostname:
?S: This variable contains the eventual value of the PHOSTNAME symbol,
?S: which is a command that can be fed to popen() to get the host name.
?S: The program
 should probably not presume that the domain is or isn't
?S: there already.
```

```
?S:.
?C:MYHOSTNAME (HOSTNAME):
?C: This symbol contains name of the host the program is going to run on.
?C: The domain is not kept with hostname, but must be gotten from MYDOMAIN.
?C: The dot comes with MYDOMAIN, and need not be supplied by the program.
?C: If gethostname() or uname() exist, MYHOSTNAME may be ignored. If MYDOMAIN
?C: is not used, MYHOSTNAME will hold the name derived from PHOSTNAME.
?C:.
?C:MYDOMAIN:
?C: This symbol contains the domain of the host the program is going to
?C: run on.  The domain must be appended to HOSTNAME to form a complete
?C: host name.  The dot comes with MYDOMAIN, and need not be supplied by
?C: the program.  If the host name is derived from PHOSTNAME, the domain
?C: may or may not already be there, and the program should check.
?C:.
?H:#define MYHOSTNAME "$myhostname"  /**/
?H:#define MYDOMAIN "$mydomain"  /**/
?H:.
?T:cont i tans tmp_re file
: now get the host name
echo
 " "
echo "Figuring out host name..." >&4
case "$myhostname" in
") cont=true
 echo 'Maybe "hostname" will work...'
 if tans=`sh -c hostname 2>&1` ; then
  myhostname=$tans
  phostname=hostname
  cont=''
 fi
 ;;
*) cont='';;
esac
if $test "$cont"; then
 if ./xenix; then
  echo 'Oh, dear.  Maybe "/etc/systemid" is the key...'
  if tans=`cat /etc/systemid 2>&1` ; then
   myhostname=$tans
   phostname='cat /etc/systemid'
   echo "Whadyaknow.  Xenix always was a bit strange..."
   cont=''
  fi
 elif $test -r /etc/systemid; then
  echo "(What is a non-Xenix system doing with /etc/systemid?)"
 fi
fi
if $test "$cont"; then
```

```
 echo 'No, maybe "uuname -l" will work...'
 if tans=`sh -c 'uuname -l' 2>&1` ; then
  myhostname=$tans
  phostname='uuname -l'
 else
  echo 'Strange.  Maybe "uname -n" will work...'
  if tans=`sh -c 'uname -n' 2>&1` ; then
   myhostname=$tans
   phostname='uname -n'
  else
   echo 'Oh well, maybe I can mine it out of whoami.h...'
   if tans=`sh -c $contains' sysname $usrinc/whoami.h'
 2>&1` ; then
    myhostname=`echo "$tans" | $sed 's/^.*"\(.*\)"/\1/'`
    phostname="sed -n -e ""/sysname/s/^.*\"\\(.*\\)\"/\1/{"" -e p -e q -e '}' <$usrinc/whoami.h"
   else
    case "$myhostname" in
    ") echo "Does this machine have an identity crisis or something?"
     phostname=";;
    *)
     echo "Well, you said $myhostname before..."
     phostname='echo $myhostname';;
    esac
   fi
  fi
 fi
fi
case "$myhostname" in
") myhostname=noname ;;
esac
: you do not want to know about this
set $myhostname
myhostname=$1

: verify guess
if $test "$myhostname" ; then
 dflt=y
 rp='Your host name appears to be "'$myhostname'".' Right?"
 . ./myread
 case "$ans" in
 y*) ;;
 *) myhostname=";;
 esac
fi

: bad guess or no guess
while $test "X$myhostname" = X ; do
 dflt="
```

```
 rp="Please type the (one word) name of your host:"
 . ./myread
 myhostname="$ans"
done

: translate upper to lower if necessary
case "$myhostname" in
*[A-Z]*)
 echo "(Normalizing case in your host name)"
 myhostname=`echo
 $myhostname | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

?X: Do not ask for domain name if this is not used later on. In that
?X: case, the hostname may keep its domain name, but it doesn't matter.
@if MYDOMAIN || mydomain
case "$myhostname" in
*.*)
 dflt=`expr "X$myhostname" : "X[^.]*\(\..*\)"`
 myhostname=`expr "X$myhostname" : "X\([^.]*\)\."`
 echo "(Trimming domain name from host name--host name is now $myhostname)"
 ;;
*) case "$mydomain" in
 ")
?X:
?X: There is currently no way to say we do not want hostcat if mydomain is not
?X: used. One way to achieve that would be to put that code in a mydomain.U
?X: unit. However, we want to stick the sanity checks right after the domain
?X: name computation, or if none is done, right after the hostname computation.
?X:
  {
?X: If we use NIS, try ypmatch.
   test "X$hostcat" = "Xypcat hosts" &&
   ypmatch "$myhostname" hosts 2>/dev/null |\
    $sed -e 's/[  ]*#.*//; s/$/ /' > hosts && \
   $test -s hosts
  } || {
?X: Extract only
 the relevant hosts, reducing file size,
?X: remove comments, insert trailing space for later use.
        $hostcat | $sed -n -e "s/[  ]*#.*//; s/\$/ /
     /[  ]$myhostname[ . ]/p" > hosts
  }
  tmp_re="[ . ]"
  $test x`$awk "/[0-9].*[  ]$myhostname$tmp_re/ { sum++ }
        END { print sum }" hosts` = x1 || tmp_re="[  ]"
  dflt=.`$awk \
```

```
  "/[0-9].*[  ]$myhostname$tmp_re/ {for(i=2; i<=NF;i++) print \\\$i}" \
   hosts | $sort | $uniq | \
   $sed -n -e "s/$myhostname\.\([-a-zA-Z0-9_.]\)/\1/p"`
  case `$echo X$dflt` in
  X*\ *) echo "(Several hosts in /etc/hosts matched hostname)"
   dflt=.
   ;;
?X: There is no /etc/hosts on os390
  X.)
   if $test -f /etc/hosts; then
    echo "(You do not have fully-qualified names in /etc/hosts)"
   else
    echo "(I cannot locate a hosts database anywhere)"
   fi
   ;;
  esac
  case "$dflt" in
  .)
   tans=`./loc resolv.conf X /etc /usr/etc`
   if $test -f "$tans"; then
    echo "(Attempting domain name extraction from $tans)"
?X: Look for either a search
 or a domain directive.
    dflt=.`$sed -n -e 's/ / /g' \
      -e 's/^search  *\([^ ]*\).*/\1/p' $tans \
      | ./tr '[A-Z]' '[a-z]' 2>/dev/null`
    case "$dflt" in
    .) dflt=.`$sed -n -e 's/ / /g' \
         -e 's/^domain  *\([^ ]*\).*/\1/p' $tans \
         | ./tr '[A-Z]' '[a-z]' 2>/dev/null`
      ;;
    esac
   fi
   ;;
  esac
  case "$dflt" in
  .) echo "(No help from resolv.conf either -- attempting clever guess)"
   dflt=.`sh -c domainname 2>/dev/null`
   case "$dflt" in
   ") dflt='.';;
   .nis.*|.yp.*|.main.*) dflt=`echo $dflt | $sed -e 's/^\.[^.]*//'`;;
   esac
   ;;
  esac
  case "$dflt$osname" in
  .os390)
   file="//'SYS1.TCPPARMS(TCPDATA)'"
   echo "(Attempting domain name extraction from $file)"
```

```
   dflt=.`awk '/^DOMAINORIGIN/ {print $2}' "$file" 2>/dev/null`
   ;;
   esac
  case "$dflt" in
  .) echo "(Lost all hope -- silly guess then)"
   dflt='.nonet'
   ;;
  esac
  $rm -f hosts
  ;;
 *) dflt="$mydomain";;
 esac;;
esac
echo " "
rp="What is your domain name?"
.
 ./myread
tans="$ans"
case "$ans" in
") ;;
.*) ;;
*) tans=".$tans";;
esac
mydomain="$tans"

: translate upper to lower if necessary
case "$mydomain" in
*[A-Z]*)
 echo "(Normalizing case in your domain name)"
 mydomain=`echo $mydomain | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

@end
: a little sanity check here
case "$phostname" in
") ;;
*)
 case `$phostname | ./tr '[A-Z]' '[a-z]'` in
 $myhostname$mydomain|$myhostname) ;;
 *)
  case "$phostname" in
  sed*)
   echo "(That doesn't agree with your whoami.h file, by the way.)"
   ;;
  *)
   echo "(That doesn't agree with your $phostname command, by the way.)"
   ;;
```

```
  esac
 ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/myhostname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: randbits.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:19:29  ram
?RCS: patch61: added <unistd.h> and <stdlib.h> to the C program test
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit has been somewhat made obsolete with creation of the
?X: randfunc function (which finds out how to generate random
?X: numbers between 0 and 1.
?X:
?MAKE:randbits: cat rm Myread cc i_unistd i_stdlib
?MAKE: -pick add $@ %<
?S:randbits:
?S: This
 variable contains the eventual value of the RANDBITS symbol,
?S: which indicates to the C program how many bits of random number
?S: the rand() function produces.
?S:.
?C:RANDBITS:
?C: This symbol contains the number of bits of random number the rand()
?C: function produces.  Usual values are 15, 16, and 31.
?C:.
?H:#define RANDBITS $randbits  /**/
?H:.
: check for size of random number generator
echo " "
```

```
case "$randbits" in
")
 echo "Checking to see how many bits your rand function produces..." >&4
 $cat >try.c <<EOCP
#$i_unistd I_UNISTD
#$i_stdlib I_STDLIB
#include <stdio.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
EOCP
 $cat >>try.c <<'EOCP'
int main()
{
 register int i;
 register unsigned long tmp;
 register unsigned long max = 0L;

 for (i = 1000; i; i--) {
  tmp = (unsigned long)rand();
  if (tmp > max) max = tmp;
 }
 for (i = 0; max; i++)
  max /= 2;
 printf("%d\n",i);
}
EOCP
 if $cc -o try try.c >/dev/null 2>&1 ; then
  dflt=`try`
 else
  dflt='?'
  echo
 "(I can't seem to compile the test program...)"
 fi
 ;;
*)
 dflt="$randbits"
 ;;
esac
rp='How many bits does your rand() function produce?'
. ./myread
randbits="$ans"
$rm -f try.c try
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/randbits.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Filexp.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:52:53  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added HOME to the ?T: line since metalint now checks ${HOME}
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:00  ram
?RCS: patch23: made sure error status from csh is propagated (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which will expand filenames beginning
?X:
 with tildes.  The script is deleted at the end of Configure.
?X:
?MAKE:Filexp: startsh sed test expr eunicefix
?MAKE: -pick add $@ %<
?F:./filexp
?T:HOME LOGDIR dir me name failed
: set up shell script to do ~ expansion
cat >filexp <<EOSS
$startsh
: expand filename
?X:
?X: The case entries below escape the ~ as some shells have shown expansion
?X: of the ~ during here-doc processing.
?X:
case "\$1" in
\~/*|\~)
 echo \$1 | $sed "s|~|\${HOME-\$LOGDIR}|"
 ;;
\~*)
 if $test -f /bin/csh; then
  /bin/csh -f -c "glob \$1"
```

```
  failed=\$?
  echo ""
  exit \$failed
 else
  name=\`$expr x\$1 : '..\([^/]*\)'\`
  dir=\`$sed -n -e "/^\${name}:/{s/^[^:]*:[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\).*"'\$'"/\1/" -e p -e q -e '}' </etc/passwd\`
  if $test ! -d "\$dir"; then
   me=\`basename \$0\`
   echo "\$me: can't locate home directory for: \$name" >&2
   exit 1
  fi
  case "\$1" in
  */*)
   echo \$dir/\`$expr x\$1 : '..[^/]*/\(.*\)'\`
   ;;
  *)
   echo \$dir
   ;;
  esac
 fi
 ;;
*)
 echo \$1
 ;;
esac
EOSS
chmod
 +x filexp
$eunicefix filexp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Filexp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_sqrtl: Inlibc
?MAKE: -pick add $@ %<
?S:d_sqrtl:
?S: This variable conditionally defines the HAS_SQRTL symbol, which
?S: indicates to the C program that the sqrtl() routine is available.
?S:.
?C:HAS_SQRTL:
```

```
?C: This symbol, if defined, indicates that the sqrtl routine is
?C: available to do long double square roots.
?C:.
?H:#$d_sqrtl HAS_SQRTL  /**/
?H:.
?LINT:set d_sqrtl
: see if sqrtl exists
set sqrtl d_sqrtl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sqrtl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usecbacktrace.U,v $
?RCS:
?RCS: Copyright (c) 2014 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usecbacktrace.U,v $
?RCS:
?MAKE:usecbacktrace: Myread Oldconfig Setvar Getfile d_backtrace
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecbacktrace:
?S: This variable indicates whether we are compiling with backtrace
?S: support.
?S:.
?C:USE_C_BACKTRACE:
?C: This symbol, if defined, indicates that Perl should
?C: be built with support for backtrace.
?C:.
?H:#$usecbacktrace USE_C_BACKTRACE  /**/
?H:.
: Check if C backtrace is actually supported.
case "$usecbacktrace" in
 "") usecbacktrace=$undef ;;
 [yY]*|true|$define)
   case "$d_backtrace" in
     [yY]*|true|$define)
       ;;
     *)
       echo "This system does not support backtrace" >&4
       usecbacktrace=$undef
```

```
  ;;
    esac
  ;;
 esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usebacktrace.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: pkgsrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:pkgsrc: src rsrc
?MAKE: -pick add $@ %<
?S:pkgsrc:
?S: This variable holds the absolute path of the package source.
?S:.
?C:PACKAGE_SOURCE_DIR:
?C: Holds the directory name holding the package source.
?C:.
?H:#define PACKAGE_SOURCE_DIR "$pkgsrc"
?H:.
: define absolute package source directory
case "$src" in
/*) pkgsrc=$src;;
*) pkgsrc=`cd $rsrc; pwd`;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pkgsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ftrncate.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: d_ftrncate.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ftrncate: Inlibc
?MAKE: -pick add $@ %<
?S:d_ftrncate (d_ftruncate):
?S: This variable conditionally defines the HAS_FTRUNCATE symbol, which
?S: indicates to the C program that the ftruncate() subroutine exists.
?S:.
?C:HAS_FTRUNCATE:
?C: This symbol, if defined, indicates that the ftruncate() subroutine
?C: exists.
?C:.
?H:#$d_ftrncate
 HAS_FTRUNCATE /**/
?H:.
?LINT:set d_ftrncate
: see if ftruncate exists
set ftruncate d_ftrncate
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ftrncate.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_round: Inlibc
?MAKE: -pick add $@ %<
?S:d_round:
?S: This variable conditionally defines the HAS_ROUND symbol, which
?S: indicates to the C program that the round() routine is available.
?S:.
?C:HAS_ROUND:
?C: This symbol, if defined, indicates that the round routine is
?C: available to round to nearest integer, away from zero.
?C:.
?H:#$d_round HAS_ROUND  /**/
?H:.
?LINT:set d_round
: see if round exists
set round d_round
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_round.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Karl Williamson
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mbrlen: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbrlen:
?S: This variable conditionally defines the HAS_MBRLEN symbol if the
?S: mbrlen() routine is available to be used to get the length of
?S: multi-byte character strings.
?S:.
?C:HAS_MBRLEN:
?C: This symbol, if defined, indicates that the mbrlen routine is
?C: available to get the length of multi-byte character strings.
?C:.
?H:#$d_mbrlen HAS_MBRLEN /**/
?H:.
?LINT: set d_mbrlen
: see if mbrlen exists
set mbrlen d_mbrlen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_mbrlen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libperl.U,v $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:libperl useshrplib shrpenv ldlibpthname: \
 Myread Oldconfig archlibexp awk cat libc \
 _a osname osvers so patchlevel subversion usedl ld \
 ccdlflags installarchlib userelocatableinc
?MAKE: -pick wipe $@ %<
?S:libperl:
?S: The perl executable is obtained by linking perlmain.c with
?S: libperl, any static extensions (usually just DynaLoader),
```

```
?S: and any other libraries needed on this system.  libperl
?S: is usually libperl.a, but can also be libperl.so.xxx if
?S: the user wishes to build a perl executable with a shared
?S: library.
?S:.
?S:useshrplib:
?S: This variable is set to 'true' if the user wishes
?S: to build a shared libperl, and 'false' otherwise.
?S:.
?S:shrpenv:
?S: If
 the user builds a shared libperl.so, then we need to tell the
?S: 'perl' executable where it will be able to find the installed libperl.so.
?S: One way to do this on some systems is to set the environment variable
?S: LD_RUN_PATH to the directory that will be the final location of the
?S: shared libperl.so.  The makefile can use this with something like
?S:  $shrpenv $(CC) -o perl perlmain.o $libperl $libs
?S: Typical values are
?S:  shrpenv="env LD_RUN_PATH=$archlibexp/CORE"
?S: or
?S:  shrpenv=''
?S: See the main perl Makefile.SH for actual working usage.
?S:
?S: Alternatively, we might be able to use a command line option such
?S: as -R $archlibexp/CORE (Solaris) or -Wl,-rpath
?S: $archlibexp/CORE (Linux).
?S:.
?S:ldlibpthname:
?S: This variable holds the name of the shared library
?S: search path, often LD_LIBRARY_PATH.  To get an empty
?S: string, the hints file must set this to 'none'.
?S:.
?T:shrpdir majonly majmin also xxx tmp_shrpenv
?X: metalint gets confused and thinks we're
 actually setting LDOPTS
?X: and LD_RUN_PATH.
?LINT:extern LDOPTS
?LINT:change LDOPTS
?LINT:extern LD_RUN_PATH
?LINT:change LD_RUN_PATH
?LINT:change ccdlflags
?LINT:extern maintloc maintname
?Y:top
: Do we want a shared libperl?
also=''
case "$usedl" in
$undef)
 # No dynamic loading being used, so don't bother even to prompt.
```

```
 useshrplib='false'
 ;;
*) case "$useshrplib" in
 '') case "$osname" in
  svr4*|nonstopux|dgux|dynixptx|esix|powerux|haiku|cygwin*)
   dflt=y
   also='Building a shared libperl is required for dynamic loading to work on your system.'
   ;;
  *) dflt=n
   ;;
  esac
  ;;
 $define|true|[Yy]*)
  dflt=y
  ;;
 *) dflt=n
  ;;
 esac
 $cat << EOM

The perl executable is normally obtained by linking perlmain.c with
libperl${_a}, any static extensions (usually just DynaLoader), and
any other libraries needed on this system (such as -lm, etc.).  Since
your system supports dynamic loading, it is probably possible to build
a shared libperl.$so.  If you will have more than one
 executable linked
to libperl.$so, this will significantly reduce the size of each
executable, but it may have a noticeable effect on performance.  The
default is probably sensible for your system.
$also

EOM
 rp="Build a shared libperl.$so (y/n)"
 . ./myread
 case "$ans" in
 true|$define|[Yy]*)
  useshrplib='true'  ;;
 *) useshrplib='false' ;;
 esac
 ;;
esac

case "$useshrplib" in
true)
 case "$userelocatableinc" in
 true|define)
  echo "Cannot build with both -Duserelocatableinc and -Duseshrplib" >&4
  echo "See INSTALL for an explanation why that won't work." >&4
```

```
 exit 4
 ;;
esac
case "$libperl" in
")
 # Figure out a good name for libperl.so.  Since it gets stored in
 # a version-specific architecture-dependent library, the version
 # number isn't really that important, except for making cc/ld happy.
 #
 # A name such as libperl.so.10.1
 majmin="libperl.$so.$patchlevel.$subversion"
 # A name such as libperl.so.100
 majonly=`echo $patchlevel $subversion |
  $awk '{printf
"%d%02d", $1, $2}'`
 majonly=libperl.$so.$majonly
 # I'd prefer to keep the os-specific stuff here to a minimum, and
 # rely on figuring it out from the naming of libc.
 case "${osname}${osvers}" in
 *linux*|gnu*)  # ld won't link with a bare -lperl otherwise.
  dflt=libperl.$so
  ;;
 cygwin*) # ld links now against the dll directly
  majmin="cygperl5_${patchlevel}_${subversion}.${so}"
  majonly=`echo $patchlevel $subversion |
   $awk '{printf "%03d%03d", $1, $2}'`
  majonly=cygperl5.$majonly.$so
  dflt=$majmin
  ;;
 *) # Try to guess based on whether libc has major.minor.
  case "$libc" in
  *libc.$so.[0-9]*.[0-9]*) dflt=$majmin ;;
  *libc.$so.[0-9]*) dflt=$majonly ;;
  *) dflt=libperl.$so ;;
  esac
  ;;
 esac
 ;;
*) dflt=$libperl
 ;;
esac
cat << EOM

I need to select a good name for the shared libperl.  If your system uses
library names with major and minor numbers, then you might want something
like $majmin.  Alternatively, if your system uses a single
 version
number for shared libraries, then you might want to use $majonly.
```

```
Or, your system might be quite happy with a simple libperl.$so.

Since the shared libperl will get installed into a version-specific
architecture-dependent directory, the version number of the shared perl
library probably isn't important, so the default should be o.k.

EOM
 rp='What name do you want to give to the shared libperl?'
 . ./myread
 libperl=$ans
 echo "Ok, I'll use $libperl"
 ;;
*)
 libperl="libperl${_a}"
 ;;
esac

# Detect old use of shrpdir via undocumented Configure -Dshrpdir
case "$shrpdir" in
") ;;
*) $cat >&4 <<EOM
WARNING:  Use of the shrpdir variable for the installation location of
the shared $libperl is not supported.  It was never documented and
will not work in this version.  Let me (<$maintloc>)
know of any problems this may cause.

EOM
 case "$shrpdir" in
 "$archlibexp/CORE")
  $cat >&4 <<EOM
But your current setting of $shrpdir is
the default anyway, so it's harmless.
EOM
  ;;
 *)
  $cat
 >&4 <<EOM
Further, your current attempted setting of $shrpdir
conflicts with the value of $archlibexp/CORE
that installperl will use.
EOM
  ;;
 esac
 ;;
esac

# How will the perl executable find the installed shared $libperl?
# Add $xxx to ccdlflags.
```

```
# If we can't figure out a command-line option, use $shrpenv to
# set env LD_RUN_PATH.  The main perl makefile uses this.
shrpdir=$archlibexp/CORE
xxx="
tmp_shrpenv="
if "$useshrplib"; then
   case "$osname" in
 aix)
  # We'll set it in Makefile.SH...
  ;;
 solaris)
  xxx="-R $shrpdir"
  ;;
 freebsd|minix|mirbsd|netbsd|openbsd|interix|dragonfly|bitrig)
  xxx="-Wl,-R$shrpdir"
  ;;
 bsdos|linux|irix*|dec_osf|gnu*|haiku)
  xxx="-Wl,-rpath,$shrpdir"
  ;;
 hpux*)
  # hpux doesn't like the default, either.
  tmp_shrpenv="env LDOPTS=\"+s +b${shrpdir}\""
  ;;
 cygwin)
  # cygwin needs only ldlibpth
  ;;
 *)
  tmp_shrpenv="env LD_RUN_PATH=$shrpdir"
  ;;
 esac
 case "$xxx" in
 ") ;;
 *)
  # Only add $xxx if it isn't already in ccdlflags.
  case
 " $ccdlflags " in
  *" $xxx "*) ;;
  *) ccdlflags="$ccdlflags $xxx"
   cat <<EOM >&4

Adding $xxx to the flags
passed to $ld so that the perl executable will find the
installed shared $libperl.

EOM
   ;;
  esac
  ;;
```

```
 esac
fi
# Fix ccdlflags in AIX for building external extensions.
# (For building Perl itself bare -bE:perl.exp is needed,
#  Makefile.SH takes care of this.)
case "$osname" in
aix) ccdlflags="$ccdlflags -bE:$installarchlib/CORE/perl.exp" ;;
esac
# Respect a hint or command-line value.
case "$shrpenv" in
") shrpenv="$tmp_shrpenv" ;;
esac
case "$ldlibpthname" in
") ldlibpthname=LD_LIBRARY_PATH ;;
none) ldlibpthname=" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/libperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ffs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ffs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ffs: Inlibc
?MAKE: -pick add $@ %<
?S:d_ffs:
?S: This variable conditionally defines the HAS_FFS symbol, which
?S: indicates to the C program that the ffs() routine is available
?S: to find the first bit which is set in its integer argument.
?S:.
?C:HAS_FFS:
?C: This symbol, if defined, indicates that the ffs routine is available
?C: to
 find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
```

```
?H:#$d_ffs HAS_FFS  /**/
?H:.
?LINT:set d_ffs
: see if ffs exists
set ffs d_ffs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ffs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: charsize.U,v 3.0.1.1 1994/10/29 16:07:13 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: charsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:13  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:charsize charbits: cat rm_try Myread Compile run
?MAKE: -pick add $@ %<
?S:charsize:
?S: This variable contains the value of the CHARSIZE symbol, which
?S: indicates to the C program how many bytes there are in a character.
?S:.
?S:charbits:
?S: This
 variable contains the value of the CHARBITS symbol, which
?S: indicates to the C program how many bits there are in a character.
?S:.
?C:CHARSIZE:
?C: This symbol contains the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?C:CHARBITS:
?C: This symbol contains the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define CHARSIZE $charsize  /**/
```

```
?H:#define CHARBITS $charbits  /**/
?H:.
?F:!try
: length of character in bytes. Is always 1, otherwise it is not C
: This used to be a test using sizeof
charsize=1

: Check for the number of bits in a character
case "$charbits" in
") echo "Checking how long a character is (in bits)..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
int main ()
{
   int n;
   unsigned char c;
   for (c = 1, n = 0; c; c <<= 1, n++) ;
   printf ("%d\n", n);
   return (0);
   }
EOCP
 set try
 if eval $compile_ok; then
  dflt=`$run ./try`
 else
  dflt='8'
  echo "(I
 can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$charbits"
 ;;
esac
rp="What is the length of a character (in bits)?"
. ./myread
charbits="$ans"
$rm_try
case "$charbits" in
8) ;;
*) cat >&4 << EOM
Your system has an unsigned character size of $charbits bits, which
is rather unusual (normally it is 8 bits).  Perl likely will not work
correctly on your system, with subtle bugs in various places.
EOM
 rp='Do you really want to continue?'
 dflt='n'
 . ./myread
```

```
 case "$ans" in
  [yY]) echo >&4 "Okay, continuing." ;;
  *) exit 1    ;;
 esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/charsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Tye McQueen <tye@metronet.com> added safe setuid script checks.
?RCS:
?RCS: $Log: d_dosuid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:33:03  ram
?RCS: patch61: moved unit to TOP via a ?Y: layout directive
?RCS: patch61: tell them /dev/fd is not about floppy disks
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:08  ram
?RCS: patch36: added checks for secure setuid scripts (Tye McQueen)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_dosuid
 d_suidsafe: cat contains ls rm test Myread Setvar \
 Oldconfig Guess package hint
?MAKE: -pick add $@ %<
?S:d_suidsafe:
?S: This variable conditionally defines SETUID_SCRIPTS_ARE_SECURE_NOW
?S: if setuid scripts can be secure.  This test looks in /dev/fd/.
?S:.
?S:d_dosuid:
?S: This variable conditionally defines the symbol DOSUID, which
?S: tells the C program that it should insert setuid emulation code
?S: on hosts which have setuid #! scripts disabled.
?S:.
?C:SETUID_SCRIPTS_ARE_SECURE_NOW:
?C: This symbol, if defined, indicates that the bug that prevents
```

```
?C: setuid scripts from being secure is not present in this kernel.
?C:.
?C:DOSUID:
?C: This symbol, if defined, indicates that the C program should
?C: check the script that it is executing for setuid/setgid bits, and
?C: attempt to emulate setuid/setgid on systems that have disabled
?C: setuid #! scripts because the kernel can't do it securely.
?C: It is up to the package designer to make sure that this emulation
?C: is done securely.
  Among other things, it should do an fstat on
?C: the script it just opened to make sure it really is a setuid/setgid
?C: script, it should make sure the arguments passed correspond exactly
?C: to the argument on the #! line, and it should not trust any
?C: subprocesses to which it must pass the filename rather than the
?C: file descriptor of the script to be executed.
?C:.
?H:#$d_suidsafe SETUID_SCRIPTS_ARE_SECURE_NOW /**/
?H:#$d_dosuid DOSUID  /**/
?H:.
?Y:TOP
?F:!reflect
?LINT: set d_suidsafe
?LINT: set d_dosuid
: see if setuid scripts can be secure
$cat <<EOM

Some kernels have a bug that prevents setuid #! scripts from being
secure.  Some sites have disabled setuid #! scripts because of this.

First let's decide if your kernel supports secure setuid #! scripts.
(If setuid #! scripts would be secure but have been disabled anyway,
don't say that they are secure if asked.)

EOM

val="$undef"
if $test -d /dev/fd; then
 echo "#!$ls" >reflect
 chmod +x,u+s reflect
 ./reflect >flect
 2>&1
 if $contains "/dev/fd" flect >/dev/null; then
  echo "Congratulations, your kernel has secure setuid scripts!" >&4
  val="$define"
 else
  $cat <<EOM
If you are not sure if they are secure, I can check but I'll need a
username and password different from the one you are using right now.
```

```
If you don't have such a username or don't want me to test, simply
enter 'none'.

EOM
  rp='Other username to test security of setuid scripts with?'
  dflt='none'
  . ./myread
  case "$ans" in
  n|none)
   case "$d_suidsafe" in
   ") echo "I'll assume setuid scripts are *not* secure." >&4
    dflt=n;;
   "$undef")
    echo "Well, the $hint value is *not* secure." >&4
    dflt=n;;
   *) echo "Well, the $hint value *is* secure." >&4
    dflt=y;;
   esac
   ;;
  *)
   $rm -f reflect flect
   echo "#!$ls" >reflect
   chmod +x,u+s reflect
   echo >flect
   chmod a+w flect
   echo "'su" will (probably) prompt you for "'$ans's password."
   su $ans -c './reflect >flect'
   if $contains "/dev/fd" flect
 >/dev/null; then
    echo "Okay, it looks like setuid scripts are secure." >&4
    dflt=y
   else
    echo "I don't think setuid scripts are secure." >&4
    dflt=n
   fi
   ;;
  esac
  rp='Does your kernel have *secure* setuid scripts?'
  . ./myread
  case "$ans" in
  [yY]*) val="$define";;
  *) val="$undef";;
  esac
 fi
else
 echo "I don't think setuid scripts are secure (no /dev/fd directory)." >&4
 echo "(That's for file descriptors, not floppy disks.)"
 val="$undef"
```

```
fi
set d_suidsafe
eval $setvar

$rm -f reflect flect

: now see if they want to do setuid emulation
echo " "
val="$undef"
case "$d_suidsafe" in
"$define")
 val="$undef"
 echo "No need to emulate SUID scripts since they are secure here." >& 4
 ;;
*)
 $cat <<EOM
Some systems have disabled setuid scripts, especially systems where
setuid scripts cannot be secure.  On systems where setuid scripts have
been disabled, the setuid/setgid bits on scripts are currently
useless.  It is possible for $package to detect those bits
 and emulate
setuid/setgid in a secure fashion.  This emulation will only work if
setuid scripts have been disabled in your kernel.

EOM
 case "$d_dosuid" in
 "$define") dflt=y ;;
 *) dflt=n ;;
 esac
 rp="Do you want to do setuid/setgid emulation?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
 ;;
esac
set d_dosuid
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dosuid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_mntent.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_mntent: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_mntent:
?S: This variable conditionally defines the I_MNTENT symbol, and indicates
?S: whether a C program should include <mntent.h>.
?S:.
?C:I_MNTENT:
?C: This symbol, if defined, indicates that <mntent.h> exists and
?C: should be included.
?C:.
?H:#$i_mntent I_MNTENT  /**/
?H:.
?LINT:set i_mntent
: see if this is a mntent.h system
set mntent.h i_mntent
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_mntent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysresrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysresrc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/resource.h> needs to be included
?X:
?MAKE:i_sysresrc: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysresrc:
?S: This variable conditionally defines the I_SYS_RESOURCE symbol,
?S: and indicates whether a C program should include <sys/resource.h>.
?S:.
?C:I_SYS_RESOURCE (I_SYSRESOURCE):
```

```
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <sys/resource.h>.
?C:.
?H:#$i_sysresrc I_SYS_RESOURCE  /**/
?H:.
?LINT:set i_sysresrc
: see if sys/resource.h has to be included
set sys/resource.h i_sysresrc
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysresrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_sockatmark: Inlibc
?MAKE: -pick add $@ %<
?S:d_sockatmark:
?S: This variable conditionally defines the HAS_SOCKATMARK symbol, which
?S: indicates to the C program that the sockatmark() routine is available.
?S:.
?C:HAS_SOCKATMARK:
?C: This symbol, if defined, indicates that the sockatmark routine is
?C: available to test whether a socket is at the out-of-band mark.
?C:.
?H:#$d_sockatmark HAS_SOCKATMARK  /**/
?H:.
?LINT:set d_sockatmark
: see if sockatmark exists
set sockatmark d_sockatmark
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sockatmark.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cf_name.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: cf_name.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  14:29:36  ram
?RCS: patch23: fixed user name computation from /etc/passwd in bsd systems
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:05:11  ram
?RCS: patch16: created
?RCS:
?RCS:
?MAKE:+cf_name: cf_by passcat Filexp nametype cat test
?MAKE: -pick add $@ %<
?S:cf_name:
?S: Full name of the person who ran the Configure script and
 answered the
?S: questions. This can be used by units that require the user's full name.
?S: This variable is for internal use only.
?S:.
?T:xxx fn NAME
: figure out their full name
case "$NAME" in
") case "$nametype" in
 other)
  fn=`./filexp ~/.fullname`
  xxx=usg
  $test -f $fn && xxx=other
  ;;
 *)
  xxx="$nametype"
  ;;
 esac

 case "$xxx" in
 bsd)
  cf_name=`$passcat | grep "^$cf_by:" | \
   sed -e 's/^[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\):.*/\1/' \
   -e 's/,.*//'`
  ;;
   usg)
  cf_name=`$passcat | grep "^$cf_by:" | \
   sed -e 's/^[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\):.*/\1/' \
   -e 's/[^-]*-\(.*\)(.*)/\1/'`
  ;;
```

```
 *)
  cf_name=`$cat $fn`
  ;;
 esac
 ;;
*)
 cf_name="$NAME"
 ;;
esac
?X:
?X: In the original unit, Graham asked for the user name, in case the above
?X: code was unable to figure it out correctly. Since now cf_name has been
?X: made an internal variable only (i.e. it is not saved in config.sh), letting
?X: the user override the computed default each time would be a pain.
?X:
 Therefore, I have decided to trust the above code to get it right, and for
?X: those rare cases where it will fail, too bad :-) --RAM.
?X:
echo " "
echo "Pleased to meet you, $cf_name."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_name.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sunscanf.U,v 3.0 1993/08/18 12:09:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sunscanf.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sunscanf: cat rm Compile Myread test Setvar
?MAKE: -pick add $@ %<
?S:sunscanf:
?S: This variable is set if this system runs with the Sun version
?S: of scanf.
?S:.
?C:SUNSCANF:
?C: This variable is set if this system runs with the Sun version
?C: of scanf.
```

```
?C:.
?H:#$sunscanf SUNSCANF  /**/
?H:.
?LINT:set sunscanf
?F:!scanf
: check to see what
 kinda scanf your using.
echo " "
echo "Checking to see what flavor of scanf you have..." >&4
$cat >scanf.c <<'EOCP'
int main()
{
 float value;

 sscanf("4.5","%g",&value);
 printf("%d\n", value == 4.5);
}
EOCP
set scanf
if eval $compile_ok; then
 if $test `./scanf` = 0; then
  echo "Hmm.. seems you are not running the USG flavor.."
  val="$undef"
 else
  echo "Uh... you are running the USG flavor of scanf."
  val="$define"
 fi
else
 echo "(I can't seem to compile the test program... Guessing)"
 val="$undef"
fi
set sunscanf
eval $setvar
$rm -f scanf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sunscanf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgrp2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: d_setpgrp2.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpgrp2:
?S: This variable conditionally defines the HAS_SETPGRP2 symbol, which
?S: indicates to the C program that the setpgrp2() (as in DG/UX) routine
?S: is available to set the current process group.
?S:.
?C:HAS_SETPGRP2 (SETPGRP2):
?C: This symbol, if defined, indicates that the
 setpgrp2() (as in DG/UX)
?C: routine is available to set the current process group.
?C:.
?H:#$d_setpgrp2 HAS_SETPGRP2  /**/
?H:.
?LINT:set d_setpgrp2
: see if setpgrp2 exists
set setpgrp2 d_setpgrp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgrp2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, 2012 Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:intsize longsize shortsize: Assert Myread cat rm_try +cc +ccflags echo n c
?MAKE: -pick add $@ %<
?S:intsize:
?S: This variable contains the value of the INTSIZE symbol, which
?S: indicates to the C program how many bytes there are in an int.
?S:.
?S:longsize:
?S: This variable contains the value of the LONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long.
?S:.
```

```
?S:shortsize:
?S: This variable contains the value of the SHORTSIZE symbol which
?S: indicates to the
 C program how many bytes there are in a short.
?S:.
?C:INTSIZE:
?C: This symbol contains the value of sizeof(int) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:LONGSIZE:
?C: This symbol contains the value of sizeof(long) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:SHORTSIZE:
?C: This symbol contains the value of sizeof(short) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define INTSIZE $intsize
?H:#define LONGSIZE $longsize
?H:#define SHORTSIZE $shortsize
?H:.
?T:types t size var
?LINT: set shortsize intsize longsize
: check for lengths of integral types
echo " "
types=''
@if SHORTSIZE || shortsize
types="$types short"
@end
@if INTSIZE || intsize
types="$types int"
@end
@if LONGSIZE || longsize
types="$types long"
@end
for t in $types; do
 $echo $n "Checking to see how big your ${t}s are...$c" >&4
 for size in 2 4 8 16 error; do
  $cat >try.c <<EOCP
#include "static_assert.h"
$t foo;
int main()
{
 STATIC_ASSERT($size
 == sizeof(foo));
 return 0;
}
EOCP
```

```
  if $cc -c $ccflags try.c >/dev/null 2>&1; then break; fi
 done
 var=${t}size
 case "$size" in
 error)
  echo " cannot compute it." >&4
  case $t in
  short) dflt=2;;
  int) dflt=4;;
  long) dflt=4;;
  esac
  rp="What is the size of the \"$t\" type (in bytes)?"
  . ./myread
  eval $var="$ans"
  ;;
 *)
  echo " $size bytes." >&4
  eval $var=$size
  ;;
 esac
done
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/intsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isfinitel: Inlibc
?MAKE: -pick add $@ %<
?S:d_isfinitel:
?S: This variable conditionally defines the HAS_ISFINITEL symbol, which
?S: indicates to the C program that the isfinitel() routine is available.
?S:.
?C:HAS_ISFINITEL:
?C: This symbol, if defined, indicates that the isfinitel routine is
?C: available to check whether a long double is finite.
?C: (non-infinity non-NaN).
?C:.
?H:#$d_isfinitel HAS_ISFINITEL  /**/
?H:.
?LINT:set d_isfinitel
```

```
: see if isfinitel exists
set isfinitel d_isfinitel
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isfinitel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016-2016, H.Merijn Brand
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_gai_strerror: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_gai_strerror:
?S: This variable conditionally defines the HAS_GAI_STRERROR symbol
?S: if the gai_strerror() routine is available and can be used to
?S: translate error codes returned by getaddrinfo() into human
?S: readable strings.
?S:.
?C:HAS_GAI_STRERROR:
?C: This symbol, if defined, indicates that the gai_strerror routine
?C: is available to translate error codes returned by getaddrinfo()
?C: into human readable strings.
?C:.
?H:#$d_gai_strerror
 HAS_GAI_STRERROR /**/
?H:.
?F:!try
?LINT: set d_gai_strerror
: look for gai_strerror
echo " "
$cat >try.c <<'EOCP'
#include <sys/types.h>
#include <sys/socket.h>
#include <netdb.h>
int main ()
{
   return (gai_strerror (0) ? 0 : 1);
   }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
```

```
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working gai_strerror() found." >&4
     val="$define" ;;
 *)  echo "gai_strerror() found, but it doesn't work" >&4
     ;;
 esac
else
   echo "gai_strerror() NOT found." >&4
   fi
set d_gai_strerror
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_gai_strerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_PORTAR.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_PORTAR.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:42  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_PORTAR: cat +cc rm Setvar
?MAKE: -pick add $@ %<
?S:d_PORTAR:
?S: This variable conditionally handles definition of PORTAR,
?S: a creation of greater minds than I can imagine.
?S:.
?C:PORTAR:
?C: This manifest constant must
 be defined to 1 for some implementations
?C: of ar.h to get the portable ar most everybody uses.
?C:.
?L:ar_fmag:
```

```
?L:ARFMAG:
?L:SARMAG:
?H:#$d_PORTAR PORTAR 1 /**/
?H:.
?F:!portar
?LINT:set d_PORTAR
: see if we need to define PORTAR
echo " "
echo 'Checking to see if we need to define PORTAR for portable archives...' >&4
$cat >portar.c <<'EOCP'
#include <ar.h>
int main() {
 char *arfmag = ARFMAG;
 int sarmag = SARMAG;
 struct ar_hdr arh;

 strncpy(arh.ar_fmag, arfmag, 2);

#ifdef PORTAR
 printf("D\n");
#else
 printf("U\n");
#endif
 exit(0);}
EOCP
if $cc -o portar portar.c >/dev/null 2>&1 || \
 $cc -DPORTAR=1 -o portar portar.c >/dev/null 2>&1 ; then
 case "`./portar`" in
 D)
  val="$define"
  echo "We'll be defining PORTAR for you."
  ;;
 U)
  val="$undef"
  echo "We don't seem to need PORTAR defined here."
  ;;
 *)
  val="$define"
  echo "(My test program gave me an unexpected value!)"
  echo "I'll just define PORTAR to be sure."
  ;;
 esac
else
 echo "(Strange, I couldn't get my test
 program to compile.)"
 echo "We'll just define PORTAR in this case."
 val="$define"
fi
```

```
set d_PORTAR
eval $setvar
$rm -f portar*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_PORTAR.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetent_r getnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetent_r:
?S: This variable conditionally defines the HAS_GETNETENT_R symbol,
?S: which indicates to the C program that the getnetent_r()
?S: routine is available.
?S:.
?S:getnetent_r_proto:
?S: This variable encodes the prototype of getnetent_r.
?S: It is zero if d_getnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetent_r
?S: is defined.
?S:.
?C:HAS_GETNETENT_R:
?C: This symbol, if defined, indicates that the getnetent_r routine
?C: is
 available to getnetent re-entrantly.
?C:.
?C:GETNETENT_R_PROTO:
?C: This symbol encodes the prototype of getnetent_r.
?C: It is zero if d_getnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetent_r
?C: is defined.
?C:.
?H:#$d_getnetent_r HAS_GETNETENT_R /**/
?H:#define GETNETENT_R_PROTO $getnetent_r_proto /**/
?H:.
?T:try hdrs d_getnetent_r_proto
: see if getnetent_r exists
set getnetent_r d_getnetent_r
eval $inlibc
```

```
case "$d_getnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetent_r_proto:$usethreads" in
 ":define") d_getnetent_r_proto=define
  set d_getnetent_r_proto getnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getnetent_r_proto" in
 define)
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct netent*, char*, size_t, struct netent**, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBWRE ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct
 netent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBIE ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='struct netent* getnetent_r(struct netent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=S_SBIE ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='struct netent* getnetent_r(struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=S_SBI ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBI ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct netent*, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SD ;;
 esac
 case "$getnetent_r_proto" in
 "|0) d_getnetent_r=undef
  getnetent_r_proto=0
  echo "Disabling getnetent_r, cannot determine prototype." >&4 ;;
 * ) case "$getnetent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getnetent_r_proto="REENTRANT_PROTO_$getnetent_r_proto"
 ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
```

```
 *) case "$usethreads" in
  define) echo "getnetent_r has no prototype, not using it." >&4 ;;
  esac
  d_getnetent_r=undef
  getnetent_r_proto=0
  ;;
 esac
 ;;
*) getnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_asinh: Inlibc
?MAKE: -pick add $@ %<
?S:d_asinh:
?S: This variable conditionally defines the HAS_ASINH symbol, which
?S: indicates to the C program that the asinh() routine is available.
?S:.
?C:HAS_ASINH:
?C: This symbol, if defined, indicates that the asinh routine is
?C: available to do the inverse hyperbolic sine function.
?C:.
?H:#$d_asinh HAS_ASINH  /**/
?H:.
?LINT:set d_asinh
: see if asinh exists
set asinh d_asinh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_asinh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_link.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_link.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:01:13  ram
?RCS: patch6: created for completeness
?RCS:
?MAKE:d_link: Inlibc
?MAKE: -pick add $@ %<
?S:d_link:
?S: This variable conditionally defines HAS_LINK if link() is
?S: available to create hard links.
?S:.
?C:HAS_LINK:
?C: This symbol, if defined, indicates that the link routine is
?C: available to create hard links.
?C:.
?H:#$d_link HAS_LINK /**/
?H:.
?LINT:set d_link
: see if link exists
set
 link d_link
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_link.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:56:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: added support for HPUX-10 nm output
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  14:11:56  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:20:47  ram
?RCS: patch54: made sure only most recent version of shared lib is picked
```

```
?RCS: patch54: final "nm -p" check now uses xscan and xrun
 like everybody
?RCS: patch54: can now grok Linux nm output with lead __IO (ADO)
?RCS: patch54: added support for Linux ELF output, using 'W' for alias (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1994/10/29  16:23:40  ram
?RCS: patch36: now looks for shared libraries before anything else (ADO)
?RCS: patch36: added new nm output format (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1994/08/29  16:28:10  ram
?RCS: patch32: added I-type symbols for nm output parsing on Linux
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  07:03:24  ram
?RCS: patch30: checks are now presented by succession of if/elif
?RCS: patch30: uniformized checks for shared objects with new so symbol
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  15:06:33  ram
?RCS: patch23: added shared library knowledge (ADO and WED)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:12:17  ram
?RCS: patch16: can now export nm_extract as an internal-use only variable
?RCS:
?RCS: Revision 3.0.1.2  1993/09/13  16:09:03  ram
?RCS: patch10: added special handling for Apollo
 systems (WAD)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:40:03  ram
?RCS: patch7: added entry for /usr/shlib/libc.so (OSF/1 machines)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libc +nm_extract: echo n c rm test grep Getfile Myread Oldconfig Loc \
 sed libs incpath libpth ar runnm nm nm_opt nm_so_opt contains xlibpth \
 so _a _o osname trnl tr sort uniq sysroot
?MAKE: -pick add $@ %<
?S:libc:
?S: This variable contains the location of the C library.
?S:.
?S:nm_extract:
?S: This variable holds the name of the extraction command used to process
?S: the output of nm and yield the list of defined symbols. It is used
?S: internally by Configure.
?S:.
?T:thislib try libnames xxx xscan xrun thisname com tans file
?F:!libnames !libc.tmp !tmp.imp
?LINT:extern PASE
?LINT:extern libnames
```

```
?LINT:change nm_opt
?INIT:libnames=''
: Figure out where the libc is located
case "$runnm" in
true)
?X: indentation is wrong on purpose--RAM
:
 get list of predefined functions in a handy place
echo " "
case "$libc" in
'') libc=unknown
 case "$libs" in
 *-lc_s*) libc=`./loc libc_s$_a $libc $libpth`
 esac
 ;;
esac
case "$libs" in
'') ;;
*)  for thislib in $libs; do
 case "$thislib" in
 -lc|-lc_s)
  : Handle C library specially below.
  ;;
 -l*)
  thislib=`echo $thislib | $sed -e 's/^-l//'`
  if try=`./loc lib$thislib.$so.'*' X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib.$so X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc Slib$thislib$_a X $xlibpth`; $test -f "$try"; then
   :
  else
   try=''
  fi
  libnames="$libnames $try"
  ;;
 *) libnames="$libnames $thislib" ;;
 esac
 done
 ;;
```

```
esac
?X:
?X: Some systems (e.g. DG/UX) use
 "environmental" links, which make the test
?X: -f fail. Ditto for symbolic links. So in order to reliably check the
?X: existence of a file, we use test -r. It will still fail with DG/UX links
?X: though, but at least it will detect symbolic links. At some strategic
?X: points, we make use of (test -h), using a sub-shell in case builtin test
?X: does not implement the -h check for symbolic links. This makes it
?X: possible to preset libc in a hint file for instance and have it show up
?X: as-is in the question.
?X:
xxx=normal
case "$libc" in
unknown)
?X:
?X: The sed below transforms .so.9 .so.12 into something like .so.0009 .so.0012,
?X: then sorts on it to allow keeping .so.12 instead of .so.9 as the latest
?X: up-to-date library. The initial filename (before sed munging, saved in hold
?X: space via 'h') is appended via 'G' before sorting, then the leading munged
?X: part is removed after sorting. Nice efficient work from Tye McQueen.
?X: The initial blurfl is here to prevent the trailing
 pipe from producing an
?X: empty string, causing Configure to output all its set variables!
?X:
 set /lib/libc.$so
 for xxx in $libpth; do
  $test -r $1 || set $xxx/libc.$so
  : The messy sed command sorts on library version numbers.
  $test -r $1 || \
   set `echo blurfl; echo $xxx/libc.$so.[0-9]* | \
   tr ' ' $trnl | egrep -v '\.[A-Za-z]*$' | $sed -e '
    h
    s/[0-9][0-9]*/0000&/g
    s/0*\([0-9][0-9][0-9][0-9][0-9]\)/\1/g
    G
    s/\n/ /' | \
    $sort | $sed -e 's/^.* //'`
  eval set \$$#
 done
 $test -r $1 || set $sysroot/usr/ccs/lib/libc.$so
 $test -r $1 || set $sysroot/lib/libsys_s$_a
 ;;
*)
?X: ensure the test below for the (shared) C library will fail
 set blurfl
 ;;
esac
```

```
if $test -r "$1"; then
 echo "Your (shared) C library seems to be in $1."
 libc="$1"
elif $test -r /lib/libc && $test -r /lib/clib; then
?X:
?X: Apollo has its C library in /lib/clib AND /lib/libc
?X: not to mention its math library in /lib/syslib...
?X:
 echo "Your C library seems to be in both /lib/clib
 and /lib/libc."
 xxx=apollo
 libc='/lib/clib /lib/libc'
 if $test -r /lib/syslib; then
  echo "(Your math library is in /lib/syslib.)"
?X: Put syslib in libc -- not quite right, but won't hurt
  libc="$libc /lib/syslib"
 fi
elif $test -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 echo "Your C library seems to be in $libc, as you said before."
?X: For mips, and...
elif $test -r $incpath/usr/lib/libc$_a; then
 libc=$incpath/usr/lib/libc$_a;
 echo "Your C library seems to be in $libc.  That's fine."
elif $test -r /lib/libc$_a; then
 libc=/lib/libc$_a;
 echo "Your C library seems to be in $libc.  You're normal."
else
 if tans=`./loc libc$_a blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc libc blurfl/dyick $libpth`; $test -r "$tans"; then
  libnames="$libnames "`./loc clib blurfl/dyick $libpth`
 elif tans=`./loc clib blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Slibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 elif tans=`./loc
 Mlibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 else
  tans=`./loc Llibc$_a blurfl/dyick $xlibpth`
 fi
 if $test -r "$tans"; then
  echo "Your C library seems to be in $tans, of all places."
  libc=$tans
 else
  libc='blurfl'
 fi
fi
```

```
if $test $xxx = apollo -o -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 dflt="$libc"
 cat <<EOM

If the guess above is wrong (which it might be if you're using a strange
compiler, or your machine supports multiple models), you can override it here.

EOM
else
 dflt=''
 echo $libpth | $tr ' ' $trnl | $sort | $uniq > libpath
 cat >&4 <<EOM
I can't seem to find your C library.  I've looked in the following places:

EOM
 $sed 's/^/ /' libpath
 cat <<EOM

None of these seems to contain your C library. I need to get its name...

EOM
fi
fn=f
rp='Where is your C library?'
. ./getfile
libc="$ans"

echo " "
echo $libc $libnames | $tr ' ' $trnl | $sort | $uniq > libnames
set X `cat libnames`
shift
xxx=files
case $# in 1) xxx=file; esac
echo
 "Extracting names from the following $xxx for later perusal:" >&4
echo " "
$sed 's/^/ /' libnames >&4
echo " "
$echo $n "This may take a while...$c" >&4

?X:
?X: Linux may need the special Dynamic option to nm for shared libraries.
?X: In general, this is stored in the nm_so_opt variable.
?X: Unfortunately, that option may be fatal on non-shared libraries.
?X:
for file in $*; do
 case $file in
 *$so*) $nm $nm_so_opt $nm_opt $file 2>/dev/null;;
```

```
 *) $nm $nm_opt $file 2>/dev/null;;
 esac
done >libc.tmp

$echo $n ".$c"
?X:
?X: To accelerate processing, we look at the correct 'sed' command
?X: by using a small subset of libc.tmp, i.e. fprintf function.
?X: When we know which sed command to use, do the name extraction
?X:
$grep fprintf libc.tmp > libc.ptf
?X:
?X: In order to enhance readability and save some space, we define
?X: some variables that will be "eval"ed.
?X:
xscan='eval "<libc.ptf $com >libc.list"; $echo $n ".$c" >&4'
xrun='eval "<libc.tmp $com >libc.list"; echo "done." >&4'
?X:
 BSD-like output, I and W types added for Linux
?X: Some versions of Linux include a leading __IO in the symbol name.
?X: HP-UX 10 reportedly has trailing spaces, though I'm surprised it has
?X: BSD-like output.  (AD).
?X: GNU extension: i is "indirect function"
xxx='[ADTSIWi]'
if com="$sed -n -e 's/__IO//' -e 's/^.* $xxx  *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: SYSV-like output
elif com="$sed -n -e 's/^__*//' -e 's/^\([a-zA-Z_0-9$]*\).*xtern.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/|UNDEF/d' -e '/FUNC..GL/s/^.*|__*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.* D __*//p' -e 's/^.* D //p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^_//' -e 's/^\([a-zA-Z_0-9]*\).*xtern.*text.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$'
 libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p'";\
 eval $xscan;\
```

```
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$grep '|' | $sed -n -e '/|COMMON/d' -e '/|DATA/d' \
    -e '/ file/d' -e 's/^\([^  ]*\).*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p' -e 's/^.*|FUNC |WEAK .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: mips nm output (sysV)
elif com="$sed -n -e 's/^__//' -e '/|Undef/d' -e '/|Proc/s/ .*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|Proc .*|Text *| *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/Def. Text/s/.* \([^ ]*\)\$/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: OS/2
 nm output
elif com="$sed -n -e 's/^[-0-9a-f ]*_\(.*\)=.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/.*\.text n\ \ \ \.//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: AIX nm output
elif com="sed -n -e 's/^__.*//' -e 's/[       ]*D[    ]*[0-9]*.*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
else
 $nm -p $* 2>/dev/null >libc.tmp
 $grep fprintf libc.tmp > libc.ptf
 if com="$sed -n -e 's/^.* [ADTSIW]  *_[_.]*//p' -e 's/^.* [ADTSIW] //p'";\
  eval $xscan; $contains '^fprintf$' libc.list >/dev/null 2>&1
 then
  nm_opt='-p'
  eval $xrun
 else
```

```
  echo " "
  echo "$nm didn't seem to work right. Trying $ar instead..." >&4
  com="
  if $ar t $libc > libc.tmp && \
   $contains '^fprintf$' libc.tmp >/dev/null 2>&1
  then
   for thisname in $libnames $libc; do
    $ar t $thisname >>libc.tmp
   done
   $sed -e "s/\\$_o\$//" < libc.tmp > libc.list
   echo
 "Ok." >&4
  elif test "X$osname" = "Xos2" && $ar tv $libc > libc.tmp; then
?X: Repeat libc to extract forwarders to DLL entries too
   for thisname in $libnames $libc; do
    $ar tv $thisname >>libc.tmp
?X: Revision 50 of EMX has bug in ar: it will not extract forwarders
?X: to DLL entries.  Use emximp which will extract exactly them.
    emximp -o tmp.imp $thisname \
        2>/dev/null && \
        $sed -e 's/^\([_a-zA-Z0-9]*\) .*$/\1/p' \
        < tmp.imp >>libc.tmp
    $rm -f tmp.imp
   done
   $sed -e "s/\\$_o\$//" -e 's/^ \+//' < libc.tmp > libc.list
   echo "Ok." >&4
  else
   echo "$ar didn't seem to work right." >&4
   echo "Maybe this is a Cray...trying bld instead..." >&4
   if  bld t $libc | \
    $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" > libc.list &&
    $test -s libc.list
   then
    for thisname in $libnames; do
     bld t $libnames | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" >>libc.list
     $ar t $thisname >>libc.tmp
    done
    echo "Ok." >&4
   else
    echo
 "That didn't work either.  Giving up." >&4
    exit 1
   fi
  fi
 fi
fi
nm_extract="$com"
```

```
case "$PASE" in
define)
   echo " "
   echo "Since you are compiling for PASE, extracting more symbols from libc.a ...">&4
   dump -Tv /lib/libc.a | awk '$7 == "/unix" {print $5 " " $8}' | grep "^SV" | awk '{print $2}' >> libc.list
   ;;
*)  if $test -f /lib/syscalls.exp; then
 echo " "
 echo "Also extracting names from /lib/syscalls.exp for good ole AIX..." >&4
 $sed -n 's/^\([^  ]*\)[  ]*syscall[0-9]*[  ]*$/\1/p' \
  /lib/syscalls.exp >>libc.list
   fi
   ;;
esac
;;
esac
$rm -f libnames libpath
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strftime.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_strftime:
?S: This variable conditionally defines HAS_STRFTIME if strftime() is
?S: available to format locale-specific times.
?S:.
?C:HAS_STRFTIME:
?C: This symbol, if defined, indicates that the strftime routine is
?C: available to format locale-specific times.
?C:.
?H:#$d_strftime HAS_STRFTIME /**/
?H:.
```

```
?LINT:set d_strftime
: see
 if strftime exists
set strftime d_strftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_table.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_table.U,v $
?RCS: Revision 3.0.1.2  1993/11/10  17:34:14  ram
?RCS: patch14: wrongly mentionned an obsolete symbol
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:49:29  ram
?RCS: patch12: created
?RCS:
?MAKE:d_table: Inlibc
?MAKE: -pick add $@ %<
?S:d_table:
?S: This variable conditionally defines HAS_TABLE if table() is
?S: available to examine/update elements from a system table.
?S:.
?C:HAS_TABLE:
?C: This symbol, if defined, indicates that the OSF/1
 table() system
?C: call is available to examine/update items from a system table.
?C:.
?H:#$d_table HAS_TABLE /**/
?H:.
?LINT:set d_table
: see if table exists
set table d_table
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_table.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extras.U,v$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:extras: Myread Oldconfig Setvar rm
?MAKE: -pick add $@ %<
?Y:TOP
?S:extras:
?S: This variable holds a list of extra modules to install.
?S:.
: See if we want extra modules installed
echo " "
case "$extras" in
") dflt='n';;
*) dflt='y';;
esac
cat <<EOM
Perl can be built with extra modules or bundles of modules which
will be fetched from the CPAN and installed alongside Perl.

Notice that you will need access to the CPAN; either via the Internet,
or a local copy, for example a CD-ROM or a local CPAN mirror.  (You will
be asked later to configure the CPAN.pm module which will in turn do
the installation of the rest of the extra modules or bundles.)

Notice also that if the modules require
 any external software such as
libraries and headers (the libz library and the zlib.h header for the
Compress::Zlib module, for example) you MUST have any such software
already installed, this configuration process will NOT install such
things for you.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Install any extra modules (y or n)?'
. ./myread
case "$ans" in
y|Y)
 cat <<EOM

Please list any extra modules or bundles to be installed from CPAN,
with spaces between the names.  The names can be in any format the
'install' command of CPAN.pm will understand.  (Answer 'none',
```

```
without the quotes, to install no extra modules or bundles.)
EOM
 rp='Extras?'
 dflt="$extras"
 . ./myread
 extras="$ans"
esac
case "$extras" in
"|'none')
 val=''
 $rm -f ../extras.lst
 ;;
*) echo "(Saving the list of extras for later...)"
 echo "$extras" > ../extras.lst
 val='"$extras"'
 ;;
esac
set extras
eval $setvar
echo " "
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Extras.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwent_r getpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwent_r:
?S: This variable conditionally defines the HAS_GETPWENT_R symbol,
?S: which indicates to the C program that the getpwent_r()
?S: routine is available.
?S:.
?S:getpwent_r_proto:
?S: This variable encodes the prototype of getpwent_r.
?S: It is zero if d_getpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwent_r
?S: is defined.
?S:.
?C:HAS_GETPWENT_R:
```

```
?C: This symbol, if defined, indicates that the getpwent_r routine
?C: is available to
 getpwent re-entrantly.
?C:.
?C:GETPWENT_R_PROTO:
?C: This symbol encodes the prototype of getpwent_r.
?C: It is zero if d_getpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwent_r
?C: is defined.
?C:.
?H:#$d_getpwent_r HAS_GETPWENT_R /**/
?H:#define GETPWENT_R_PROTO $getpwent_r_proto /**/
?H:.
?T:try hdrs d_getpwent_r_proto
: see if getpwent_r exists
set getpwent_r d_getpwent_r
eval $inlibc
case "$d_getpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwent_r_proto:$usethreads" in
 ":define") d_getpwent_r_proto=define
  set d_getpwent_r_proto getpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getpwent_r_proto" in
 define)
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, size_t, struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBWR ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, int, struct passwd**);'
 ./protochk
 "$extern_C $try" $hdrs && getpwent_r_proto=I_SBIR ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='struct passwd* getpwent_r(struct passwd*, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=S_SBW ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='struct passwd* getpwent_r(struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=S_SBI ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBI ;;
```

```
 esac
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, int, FILE**);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBIH ;;
 esac
 case "$getpwent_r_proto" in
 "|0) d_getpwent_r=undef
  getpwent_r_proto=0
  echo "Disabling getpwent_r, cannot determine prototype." >&4 ;;
 * ) case "$getpwent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getpwent_r_proto="REENTRANT_PROTO_$getpwent_r_proto" ;;
  esac
  echo
 "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getpwent_r has no prototype, not using it." >&4 ;;
  esac
  d_getpwent_r=undef
  getpwent_r_proto=0
  ;;
 esac
 ;;
*) getpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llrintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_llrintl:
?S: This variable conditionally defines the HAS_LLRINTL symbol, which
?S: indicates to the C program that the llrintl() routine is available
?S: to return the long long value closest to a long double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LLRINTL:
?C: This symbol, if defined, indicates that the llrintl routine is
?C: available to return the long long value closest to a long double
?C: (according to the current rounding mode).
```

```
?C:.
?H:#$d_llrintl HAS_LLRINTL  /**/
?H:.
?LINT:set d_llrintl
: see if llrintl exists
set llrintl d_llrintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llrintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uidformat: uidsize uidsign ivsize uvsize longsize intsize shortsize \
 ivdformat uvuformat test echo
?MAKE: -pick add $@ %<
?S:uidformat:
?S: This variable contains the format string used for printing a Uid_t.
?S:.
?C:Uid_t_f:
?C: This symbol defines the format string used for printing a Uid_t.
?C:.
?H:#define Uid_t_f  $uidformat  /**/
?H:.
: Check format string for UID
echo " "
$echo "Checking the format string to be used for uids..." >&4

case "$uidsign" in
-1) if $test X"$uidsize" = X"$ivsize"; then
  uidformat="$ivdformat"
 else
  if $test X"$uidsize" = X"$longsize"; then
   uidformat="'ld'"
  else
   if $test X"$uidsize" = X"$intsize"; then
    uidformat="'d'"
   else
    if $test X"$uidsize"
 = X"$shortsize"; then
     uidformat="'hd'"
    fi
```

```
   fi
  fi
 fi
 ;;
*) if $test X"$uidsize" = X"$uvsize"; then
  uidformat="$uvuformat"
 else
  if $test X"$uidsize" = X"$longsize"; then
   uidformat="'lu'"
  else
   if $test X"$uidsize" = X"$intsize"; then
    uidformat="'u'"
   else
    if $test X"$uidsize" = X"$shortsize"; then
     uidformat="'hu'"
    fi
   fi
  fi
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_volatile.U,v 3.0.1.2 1995/07/25 14:08:49 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_volatile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:08:49  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/09  11:49:51  ram
?RCS: patch9: volatile definition was swapped over with undef
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_volatile: cat +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
```

```
?S:d_volatile:
?S: This variable conditionally
 defines the HASVOLATILE symbol, which
?S: indicates to the C program that this C compiler knows about the
?S: volatile declaration.
?S:.
?C:HASVOLATILE ~ %<:
?C: This symbol, if defined, indicates that this C compiler knows about
?C: the volatile declaration.
?C:.
?H:?%<:#$d_volatile HASVOLATILE /**/
?H:?%<:#ifndef HASVOLATILE
?H:?%<:#define volatile
?H:?%<:#endif
?H:.
?LINT:set d_volatile
?LINT:known volatile
: check for volatile keyword
echo " "
echo 'Checking to see if your C compiler knows about "volatile"...' >&4
$cat >try.c <<'EOCP'
int main()
{
?X:
?X: The following seven lines added by Bill Campbell <billc@sierra.com>
?X: detect that MIPS compilers do not handle volatile in all situations.
?X:
 typedef struct _goo_struct goo_struct;
 goo_struct * volatile goo = ((goo_struct *)0);
 struct _goo_struct {
  long long_int;
  int reg_int;
  char char_var;
 };
 typedef unsigned short foo_t;
 char *volatile foo;
 volatile int bar;
 volatile foo_t blech;
 foo = foo;
}
EOCP
if $cc
 -c $ccflags try.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup, it does."
else
 val="$undef"
 echo "Nope, it doesn't."
```

```
fi
set d_volatile
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_volatile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_atolf: Inlibc
?MAKE: -pick add $@ %<
?S:d_atolf:
?S: This variable conditionally defines the HAS_ATOLF symbol, which
?S: indicates to the C program that the atolf() routine is available.
?S:.
?C:HAS_ATOLF:
?C: This symbol, if defined, indicates that the atolf routine is
?C: available to convert strings into long doubles.
?C:.
?H:#$d_atolf HAS_ATOLF  /**/
?H:.
?LINT:set d_atolf
: see if atolf exists
set atolf d_atolf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/atolf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_memrchr: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_memrchr:
?S: This variable conditionally defines the HAS_MEMRCHR symbol, which
?S: indicates to the C program that the memrchr() routine is available
?S: to return a pointer to the last occurrence of a byte in a memory
?S: area (or NULL if not found).
?S:.
```

```
?C:HAS_MEMRCHR:
?C: This symbol, if defined, indicates that the memrchr routine is
?C: available to return a pointer to the last occurrence of a byte in
?C: a memory area (or NULL if not found).
?C:.
?H:#$d_memrchr HAS_MEMRCHR  /**/
?H:.
?T:d_memrchr_proto xx1 xx2 xx3 xx4
?LINT:set d_memrchr
: see if memrchr exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_memrchr_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC)
 && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_memrchr_proto memrchr literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_memrchr_proto" in
   define) # see if memrchr exists
 set memrchr d_memrchr
 eval $inlibc
 ;;
   *)  val=$undef
 set d_memrchr
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_memrchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usemultiplicity: useithreads Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usemultiplicity:
?S: This variable conditionally defines the MULTIPLICITY symbol,
?S: and indicates that Perl should be built to use multiplicity.
```

```
?S:.
?C:MULTIPLICITY:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use multiplicity.
?C:.
?H:?%<:#ifndef MULTIPLICITY
?H:?%<:#$usemultiplicity MULTIPLICITY  /**/
?H:?%<:#endif
?H:.
?LINT:set usemultiplicity
?INIT:: set usemultiplicity on the Configure command line to enable multiplicity.
: Check if multiplicity is required
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
cat <<EOM

Perl
 can be built so that multiple Perl interpreters can coexist
within the same Perl executable.
EOM

case "$useithreads" in
$define)
 cat <<EOM
This multiple interpreter support is required for interpreter-based threads.
EOM
 val="$define"
 ;;
*) case "$usemultiplicity" in
 $define|true|[yY]*) dflt='y';;
 *) dflt='n';;
 esac
 echo " "
 echo "If this doesn't make any sense to you, just accept the default '$dflt'."
 rp='Build Perl for multiplicity?'
 . ./myread
 case "$ans" in
 y|Y) val="$define" ;;
 *)     val="$undef" ;;
 esac
 ;;
esac
set usemultiplicity
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usemultiplicity.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_poll: Inhdr
?MAKE: -pick add $@ %<
?S:i_poll:
?S: This variable conditionally defines the I_POLL symbol, which
?S: indicates to the C program that it should include <poll.h>.
?S:.
?C:I_POLL:
?C: This symbol, if defined, indicates that the program may include
?C: <poll.h>.  If there is no <poll.h>, then you may check I_SYS_POLL
?C: instead to see whether there is a <sys/poll.h> to include.
?C:.
?H:#$i_poll I_POLL /**/
?H:.
?LINT:set i_poll
: see if there is a poll.h file
set poll.h i_poll
eval $inhdr
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_poll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_grp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:i_grp: Inhdr
?MAKE: -pick add $@ %<
?S:i_grp:
?S: This variable conditionally defines the I_GRP symbol, and indicates
?S: whether a C program should include <grp.h>.
?S:.
?C:I_GRP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <grp.h>.
?C:.
?H:#$i_grp I_GRP  /**/
?H:.
?LINT:set i_grp
: see if this is an grp system
set grp.h i_grp
eval $inhdr
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_grp.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_eofpipe.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:40  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_eofpipe: cat +cc +ccflags +libs rm Oldconfig Guess echo n c
?MAKE: -pick add $@ %<
?S:d_eofpipe:
?S: This variable conditionally defines the EOFPIPE symbol, which
?S: indicates to the C program that select will correctly detect the EOF
?S: condition when pipe
 is closed from the other end.
?S:.
```

```
?C:EOFPIPE:
?C: This symbol, if defined, indicates that EOF condition will be detected
?C: by the reader of the pipe when it is closed by the writing process.
?C: That is, a select() call on that file descriptor will not block when
?C: only an EOF remains (typical behaviour for BSD systems).
?C:.
?H:#$d_eofpipe EOFPIPE  /**/
?H:.
?F:!mpipe
: see if pipe correctly gives the EOF condition
echo " "
case "$d_eofpipe" in
")
 echo "Let's see if your pipes return EOF to select() upon closing..." >&4
 $cat >pipe.c <<'EOP'
int main()
{
 int pd[2];
 int mask;

 pipe(pd);
 if (0 == fork()) {
  close(pd[0]);
  close(pd[1]);
  exit(0);
 }

 close(pd[1]);
 mask = 1 << pd[0];
 alarm(2);
 select(32, &mask, (int *) 0, (int *) 0, (char *) 0);
 if (0 == read(pd[0], &mask, 1))
  exit(0);

 exit(1);
}
EOP
 if $cc $ccflags -o pipe pipe.c $libs >/dev/null 2>&1; then
?X: Use a script to avoid the possible 'alarm call' message
  echo "./pipe || exit 1" > mpipe
  chmod +x
 mpipe
  ./mpipe >/dev/null 2>&1
  case $? in
  0) d_eofpipe="$define";;
  *) d_eofpipe="$undef";;
  esac
 else
```

```
  echo "(The test program did not compile correctly -- Guessing.)"
  if ./bsd; then
   d_eofpipe="$define"
  else
   d_eofpipe="$undef"
  fi
 fi
 case "$d_eofpipe" in
 "$define") echo "Yes, they do.";;
 *) echo "No, they don't! (sigh)";;
 esac
 ;;
*)
 $echo $n "Your pipes $c"
 case "$d_eofpipe" in
 "$define") echo "allow select() to see EOF upon closing.";;
 *) echo "won't let select() see EOF on closing.";;
 esac
 ;;
esac
$rm -f *pipe* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_eofpipe.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Obsol_sh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Obsol_sh.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file is prepended to .MT/Obsol_sh if that file is not empty. That file
?X: contains the necessary mappings of new symbols to obsolete ones.
?X:
?MAKE:Obsol_sh:
?MAKE: -pick prepend $@ ./Obsol_sh
?LINT:nocomment
#
```

```
# The following symbols are obsolete. They are mapped to the new
# symbols only to ease the transition process. The
 sources should be
# updated so as to use the new symbols only, since supporting of those
# obsolete symbols may end without notice.
#
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Obsol_sh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_open3.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:12  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:58:26  ram
?RCS: patch56: added knowledge of the O_NONBLOCK symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_open3: test +cc cat +cppflags h_fcntl h_sysfile rm Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?X: It would be easy to separate the h_O_stuff from this.
?X: Is there a reason
 to do so? -- HMS
?S:d_open3:
?S: This variable conditionally defines the HAS_OPEN3 manifest constant,
?S: which indicates to the C program that the 3 argument version of
?S: the open(2) function is available.
?S:.
?C:HAS_OPEN3 (OPEN3):
?C: This manifest constant lets the C program know that the three
?C: argument form of open(2) is available.
?C:.
?H:#$d_open3 HAS_OPEN3  /**/
?H:.
?W:%<:O_RDONLY O_WRONLY O_RDWR O_NDELAY O_APPEND O_SYNC O_CREAT O_TRUNC
```

```
?W:%<:O_EXCL O_NONBLOCK
?F:!open3
?LINT:set d_open3
?LINT:change h_fcntl h_sysfile
: Locate the flags for 'open()'
echo " "
$cat >open3.c <<'EOCP'
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
int main() {
 if(O_RDONLY);
#ifdef O_TRUNC
 exit(0);
#else
 exit(1);
#endif
}
EOCP
: check sys/file.h first to get FREAD on Sun
if $test `./findhdr sys/file.h` && \
  $cc $cppflags "-DI_SYS_FILE" -o open3 open3.c >/dev/null 2>&1 ; then
 h_sysfile=true;
 echo "<sys/file.h> defines the
 O_* constants..." >&4
 if ./open3; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
elif $test `./findhdr fcntl.h` && \
  $cc "-DI_FCNTL" -o open3 open3.c >/dev/null 2>&1 ; then
 h_fcntl=true;
 echo "<fcntl.h> defines the O_* constants..." >&4
 if ./open3; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
else
```

```
 val="$undef"
 ./warn "I can't find the O_* constant definitions!  You got problems."
fi
set d_open3
eval $setvar
$rm -f open3*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_open3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fcntl_can_lock.U,v$
?RCS:
?RCS: Copyright (c) 2000, Andrew Dougherty
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_fcntl_can_lock.U,v $
?RCS:
?MAKE:d_fcntl_can_lock: d_fcntl Compile Setvar cat rm_try run signal_t i_stdlib
?MAKE: -pick add $@ %<
?S:d_fcntl_can_lock:
?S: This variable conditionally defines the FCNTL_CAN_LOCK symbol
?S: and indicates whether file locking with fcntl() works.
?S:.
?C:FCNTL_CAN_LOCK:
?C: This symbol, if defined, indicates that fcntl() can be used
?C: for file locking.  Normally on Unix systems this is defined.
?C: It may be undefined on VMS.
?C:.
?H:#$d_fcntl_can_lock FCNTL_CAN_LOCK  /**/
?H:.
?F:!try
?LINT: set d_fcntl_can_lock
?X: fcntl may not be fully functional.  As of November 2000, on VMS and
?X: DOS/DJGPP, fctnl-based locking doesn't work.
?X: Thanks
 to Craig A. Berry <craig.berry@psinetcs.com> for this test.
: See if fcntl-based locking works.
echo " "
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <unistd.h>
#include <fcntl.h>
```

```
#include <signal.h>
$signal_t blech(int x) { exit(3); }
int main() {
#if defined(F_SETLK) && defined(F_SETLKW)
    struct flock flock;
    int retval, fd;
    fd = open("try.c", O_RDONLY);
    flock.l_type = F_RDLCK;
    flock.l_whence = SEEK_SET;
    flock.l_start = flock.l_len = 0;
    signal(SIGALRM, blech);
    alarm(10);
    retval = fcntl(fd, F_SETLK, &flock);
    close(fd);
    (retval < 0 ? exit(2) : exit(0));
#else
    exit(2);
#endif
}
EOCP
echo "Checking if fcntl-based file locking works... "
case "$d_fcntl" in
"$define")
 set try
 if eval $compile_ok; then
  if $run ./try; then
   echo "Yes, it seems to work."
   val="$define"
  else
   echo "Nope, it didn't work."
   val="$undef"
   case "$?" in
   3) $cat >&4 <<EOM
***
*** I had to
 forcibly timeout from fcntl(..., F_SETLK, ...).
*** This is (almost) impossible.
*** If your NFS lock daemons are not feeling well, something like
*** this may happen, please investigate.  Cannot continue, aborting.
***
EOM
    exit 1
    ;;
   esac
  fi
 else
  echo "I'm unable to compile the test program, so I'll assume not."
  val="$undef"
```

```
 fi
 ;;
*) val="$undef";
 echo "Nope, since you don't even have fcntl()."
 ;;
esac
set d_fcntl_can_lock
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fcntl_can_lock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msem_lck.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msem_lck.U,v $
?MAKE:d_msem_lck: Inlibc
?MAKE: -pick add $@ %<
?S:d_msem_lck:
?S: This variable conditionally defines HAS_MSEM_LOCK if msem_lock() is
?S: available, thereby indicating kernel support for memory semaphores.
?S:.
?C:HAS_MSEM_LOCK:
?C: This symbol, if defined, indicates that memory semaphores are
?C: available to protect mmap()'ed regions.
?C:.
?H:#$d_msem_lck HAS_MSEM_LOCK  /**/
?H:.
?LINT:set d_msem_lck
: see if msem_lock exists
set
 msem_lock d_msem_lck
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msem_lck.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tcstpgrp.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_tcstpgrp.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:11  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_tcsetpgrp: Inlibc
?MAKE: -pick add $@ %<
?S:d_tcsetpgrp:
?S: This variable conditionally defines the HAS_TCSETPGRP symbol, which
?S: indicates to the C program that the tcsetpgrp() routine is available
?S: to set foreground process group ID.
?S:.
?C:HAS_TCSETPGRP
 :
?C: This symbol, if defined, indicates that the tcsetpgrp routine is
?C: available to set foreground process group ID.
?C:.
?H:#$d_tcsetpgrp HAS_TCSETPGRP  /**/
?H:.
?LINT:set d_tcsetpgrp
: see if tcsetpgrp exists
set tcsetpgrp d_tcsetpgrp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tcstpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: charsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:13  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:charsize: Assert Myread cat rm_try +cc +ccflags echo n c
?MAKE: -pick add $@ %<
?S:charsize:
?S: This variable contains the value of the CHARSIZE symbol, which
?S: indicates to the C program how many bytes there are in a character.
?S:.
?C:CHARSIZE:
?C: This symbol contains
 the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define CHARSIZE $charsize
?H:.
?T:size s
: check for length of character
echo " "
$echo $n "Checking to see how big your characters are...$c" >&4
for size in 1 2 4 8 error; do
 $cat >try.c <<EOCP
#include "static_assert.h"
char foo;
int main()
{
 STATIC_ASSERT($size == sizeof(foo));
 return 0;
}
EOCP
 if $cc -c $ccflags try.c >/dev/null 2>&1; then break; fi
done
case "$size" in
error)
 echo " cannot compute it." >&4
 dflt=1
 rp="What is the size of a character (in bytes)?"
 . ./myread
 charsize="$ans"
 ;;
*)
 case "$size" in
 1) s="";;
 *) s='s';;
```

```
 esac
 echo " $size byte$s." >&4
 charsize=$size
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/charsize.U
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```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strlcat: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_strlcat:
?S: This variable conditionally defines the HAS_STRLCAT symbol, which
?S: indicates to the C program that the strlcat () routine is available.
?S:.
?C:HAS_STRLCAT:
?C: This symbol, if defined, indicates that the strlcat () routine is
?C: available to do string concatenation.
?C:.
?H:#$d_strlcat HAS_STRLCAT  /**/
?H:.
?T:d_strlcat_proto xx1 xx2 xx3 xx4
?LINT:set d_strlcat
: see if strlcat exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_strlcat_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_strlcat_proto
 strlcat literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_strlcat_proto" in
   define) # see if strlcat exists
 set strlcat d_strlcat
 eval $inlibc
 ;;
```

```
   *)  val=$undef
 set d_strlcat
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strlcat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: floatsize.U,v 3.0.1.1 1994/10/29 16:17:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: floatsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:09  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:floatsize: cat rm Myread Compile run
?MAKE: -pick add $@ %<
?S:floatsize:
?S: This variable contains the value of the FLOATSIZE symbol, which
?S: indicates to the C program how many bytes there are in a float.
?S:.
?C:FLOATSIZE:
?C: This
 symbol contains the size of a float, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define FLOATSIZE $floatsize  /**/
?H:.
?F:!try
: check for length of float
echo " "
case "$floatsize" in
")
 echo "Checking to see how big your floating point numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
```

```
int main()
{
   printf("%d\n", (int)sizeof(float));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  floatsize=`$run ./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a floating point number (in bytes)?"
  . ./myread
  floatsize="$ans"
 fi
 ;;
esac
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/floatsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_recvmsg: Inlibc
?MAKE: -pick add $@ %<
?S:d_recvmsg:
?S: This variable conditionally defines the HAS_RECVMSG symbol, which
?S: indicates to the C program that the recvmsg() routine is available.
?S:.
?C:HAS_RECVMSG:
?C: This symbol, if defined, indicates that the recvmsg routine is
?C: available to send structured socket messages.
?C:.
?H:#$d_recvmsg HAS_RECVMSG  /**/
?H:.
?LINT:set d_recvmsg
: see if recvmsg exists
set recvmsg d_recvmsg
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_recvmsg.U
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```
?RCS: $Id: i_memory.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_memory.U,v $
?RCS: Revision 3.0.1.3  1994/06/20  07:01:55  ram
?RCS: patch30: cosmetic changes
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:23:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:02:25  ram
?RCS: patch23: avoid conflicts with <string.h>
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_memory: Inhdr strings cppstdin
 cppflags cppminus contains rm Setvar
?MAKE: -pick add $@ %<
?S:i_memory:
?S: This variable conditionally defines the I_MEMORY symbol, and indicates
?S: whether a C program should include <memory.h>.
?S:.
?C:I_MEMORY:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <memory.h>.
?C:.
?H:#$i_memory I_MEMORY  /**/
?H:.
?LINT:set i_memory
?X:
?X: Unfortunately, the definitions of memory functions sometimes
?X: conflict with those in <string.h>.  We'll assume that if
?X: <string.h> contains memcpy, then we don't need memory.h
?X:
: see if memory.h is available.
val="
```

```
set memory.h val
eval $inhdr

: See if it conflicts with string.h
case "$val" in
$define)
 case "$strings" in
 ") ;;
 *)
  $cppstdin $cppflags $cppminus < $strings > mem.h
  if $contains 'memcpy' mem.h >/dev/null 2>&1; then
   echo " "
   echo "We won't be including <memory.h>."
   val="$undef"
  fi
  $rm -f mem.h
  ;;
 esac
esac
set i_memory
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_memory.U
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```
?RCS: $Id: d_mblen.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mblen.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:40  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_mblen: Inlibc
?MAKE: -pick add $@ %<
?S:d_mblen:
?S: This variable conditionally defines the HAS_MBLEN symbol, which
?S: indicates to the C program that the mblen() routine is available
?S: to find the number of bytes in a multibyte character.
```

```
?S:.
?C:HAS_MBLEN:
?C: This
 symbol, if defined, indicates that the mblen routine is available
?C: to find the number of bytes in a multibyte character.
?C:.
?H:#$d_mblen HAS_MBLEN  /**/
?H:.
?LINT:set d_mblen
: see if mblen exists
set mblen d_mblen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mblen.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_snprintf_l d_vsnprintf_l : Inlibc d_snprintf d_vsnprintf
?MAKE: -pick add $@ %<
?S:d_snprintf_l:
?S: This variable conditionally defines the HAS_SNPRINTF_L symbol, which
?S: indicates to the C program that the snprintf_l () library function
?S: is available.
?S:.
?S:d_vsnprintf_l:
?S: This variable conditionally defines the HAS_VSNPRINTF_L symbol, which
?S: indicates to the C program that the vsnprintf_l () library function
?S: is available.
?S:.
?C:HAS_SNPRINTF_L:
?C: This symbol, if defined, indicates that the snprintf_l () library
?C: function
 is available for use.
?C:.
?C:HAS_VSNPRINTF_L:
?C: This symbol, if defined, indicates that the vsnprintf_l () library
?C: function is available for use.
?C:.
?H:#$d_snprintf_l HAS_SNPRINTF_L /**/
?H:#$d_vsnprintf_l HAS_VSNPRINTF_L /**/
```

```
?H:.
: see if snprintf_l exists
set snprintf_l d_snprintf_l
eval $inlibc

: see if vsnprintf_l exists
set vsnprintf_l d_vsnprintf_l
eval $inlibc

case "$d_snprintf-$d_vsnprintf-$d_snprintf_l-$d_vsnprintf_l" in
"$define-$define-$define-$define")
   ;;
*) echo "(These require the basic snprintf and vsnprintf to also be available, which they aren't"
 d_snprintf_l="$undef"
 d_vsnprintf_l="$undef"
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_snprintf_l.U
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```
?RCS: $Id: d_alarm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_alarm.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:06:58  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_alarm: Inlibc
?MAKE: -pick add $@ %<
?S:d_alarm:
?S: This variable conditionally defines the HAS_ALARM symbol, which
?S: indicates to the C program that the alarm() routine is available.
?S:.
?C:HAS_ALARM :
?C: This symbol, if defined, indicates that the alarm routine is
?C: available.
?C:.
```

```
?H:#$d_alarm
 HAS_ALARM  /**/
?H:.
?LINT:set d_alarm
: see if alarm exists
set alarm d_alarm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_alarm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mmap mmaptype: Inlibc i_sysmman cat cc ccflags
?MAKE: -pick add $@ %<
?S:d_mmap:
?S: This variable conditionally defines HAS_MMAP if mmap() is
?S: available to map a file into memory.
?S:.
?S:mmaptype:
?S: This symbol contains the type of pointer returned by mmap()
?S: (and simultaneously the type of the first argument).
?S: It can be 'void *' or 'caddr_t'.
?S:.
?C:HAS_MMAP:
?C: This symbol, if defined, indicates that the mmap system call is
?C: available to map a file into memory.
?C:.
?C:Mmap_t:
?C: This symbol
 holds the return type of the mmap() system call
?C: (and simultaneously the type of the first argument).
?C: Usually set to 'void *' or 'caddr_t'.
?C:.
?H:#$d_mmap HAS_MMAP  /**/
?H:#define Mmap_t $mmaptype /**/
?H:.
?LINT:set d_mmap
: see if mmap exists
```

```
set mmap d_mmap
eval $inlibc
: see what shmat returns
: default to something harmless
mmaptype='void *'
case "$i_sysmman$d_mmap" in
"$define$define")
 $cat >mmap.c <<'END'
#include <sys/mman.h>
void *mmap();
END
 if $cc $ccflags -c mmap.c >/dev/null 2>&1; then
  mmaptype='void *'
 else
  mmaptype='caddr_t'
 fi
 echo "and it returns ($mmaptype)." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_mmap.U
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```
?RCS: $Id: Typedef.U,v 3.0.1.3 1995/07/25 13:42:07 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Typedef.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  13:42:07  ram
?RCS: patch56: added backslash escapes within evals to prevent space problems
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:01:16  ram
?RCS: patch36: don't clobber visible 'val' variable, use 'varval' instead
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:05:14  ram
?RCS: patch32: created
?RCS:
?X:
?X: This unit checks for the definition of a given typedef.
?X:
?X: To use it, say:
```

```
?X: set typedef
 val_t default [includes]
?X: eval $typedef
?X:
?MAKE:Typedef: cppstdin cppminus cppflags rm sed contains Oldconfig Myread
?MAKE: -pick add $@ %<
?LINT:define typedef
?LINT:define typedef_ask
?V:typedef typedef_ask
?S:typedef:
?S: This shell variable is used internally by Configure to check
?S: whether a given typedef is defined or not. A typical use is:
?S:  set typedef val_t default [includes]
?S:  eval $typedef
?S: That will return val_t set to default if the typedef was not found,
?S: to typedef otherwise. If no includes are specified, look in sys/types.h.
?S:.
?S:typedef_ask:
?S: This shell variable is used internally by Configure to check
?S: whether a given typedef is defined or not.  If it is not defined,
?S: this will call the ./myread script to prompt for an answer.
?S: It is intended to be used to avoid unnecessary prompts.
?S: A typical use is
?S:  rp="What is the type for file position used by fsetpos()?"
?S:  set fpos_t fpostype long stdio.h sys/types.h
?S:  eval $typedef_ask
?S: This
 will set fpostype=fpos_t, if fpos_t is available.  Otherwise
?S: it will call myread with a default of 'long', and a prompt of $rp.
?S:.
?T:type var def inclist varval inc
?F:!temp.c
: define an is-a-typedef? function
typedef='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
?X: Maybe it's a #define instead of a typedef.
 echo "#ifdef $type" >> temp.c;
 echo "printf(\"We have $type\");" >> temp.c;
 echo "#endif" >> temp.c;
```

```
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 if $contains $type temp.E >/dev/null 2>&1; then
  eval "$var=\$type";
 else
  eval "$var=\$def";
 fi;
 $rm -f temp.?;;
*) eval "$var=\$varval";;
esac'

?X: Originally, I eval'd $typedef and then checked the results against
?X: $type.  Unfortunately, it then became complicated to check
?X: whether you are re-using
 an old config.sh value, and the logic got
?X: so convoluted it became easier to just copy the function above
?X: and alter it slightly.  A.D.  3/1998
: define an is-a-typedef? function that prompts if the type is not available.
typedef_ask='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
?X: Maybe it's a #define instead of a typedef.
 echo "#ifdef $type" >> temp.c;
 echo "printf(\"We have $type\");" >> temp.c;
 echo "#endif" >> temp.c;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 echo " " ;
 echo "$rp" | $sed -e "s/What is/Looking for/" -e "s/?/./";
 if $contains $type temp.E >/dev/null 2>&1; then
  echo "$type found." >&4;
  eval "$var=\$type";
 else
  echo "$type NOT found." >&4;
  dflt="$def";
  . ./myread ;
  eval "$var=\$ans";
 fi;
 $rm -f temp.?;;
*) eval "$var=\$varval";;
esac'
```

```
Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/Typedef.U
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?RCS:
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?RCS:
?MAKE:d_cplusplus: Compile Setvar run cat rm_try
?MAKE: -pick add $@ %<
?S:d_cplusplus (d_cplusplus.U):
?S: This variable conditionally defines the USE_CPLUSPLUS symbol, which
?S: indicates that a C++ compiler was used to compiled Perl and will be
?S: used to compile extensions.
?S:.
?C:USE_CPLUSPLUS:
?C: This symbol, if defined, indicates that a C++ compiler was
?C: used to compiled Perl and will be used to compile extensions.
?C:.
?H:#$d_cplusplus USE_CPLUSPLUS  /**/
?H:.
?F:!try
?LINT:set d_cplusplus
: Check if we are using C++
echo " "
echo "Checking for C++..." >&4
$cat >try.c <<'EOCP'
#include <stdio.h>
int main(void)
{
#ifdef __cplusplus
   return 0;
#else
   return 1;
#endif
}
EOCP
set try
if eval $compile_ok
 && $run ./try; then
 val="$define"
 echo "You are using a C++ compiler."
else
 val="$undef"
 echo "You are not using a C++ compiler."
fi
```

```
$rm_try cplusplus$$
set d_cplusplus
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_cplusplus.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_memmem: Hasproto Inlibc Setvar d_gnulibc
?MAKE: -pick add $@ %<
?S:d_memmem:
?S: This variable conditionally defines the HAS_MEMMEM symbol, which
?S: indicates to the C program that the memmem() routine is available
?S: to return a pointer to the start of the first occurrence of a
?S: substring in a memory area (or NULL if not found).
?S:.
?C:HAS_MEMMEM:
?C: This symbol, if defined, indicates that the memmem routine is
?C: available to return a pointer to the start of the first occurrence
?C: of a substring in a memory area (or NULL if not found).
?C: In glibc, memmem is a GNU extension.  The function is visible in
?C: libc, but the prototype is only visible if _GNU_SOURCE is #defined.
?C: Thus we only define this if both the prototype and symbol are found.
?C:.
?H:#$d_memmem
 HAS_MEMMEM  /**/
?H:.
?T:d_memmem_proto xx1 xx2 xx3 xx4
?LINT:set d_memmem
: see if memmem exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_memmem_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_memmem_proto memmem literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_memmem_proto" in
   define) # see if memmem exists
 set memmem d_memmem
 eval $inlibc
 ;;
   *)  val=$undef
```

```
 set d_memmem
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_memmem.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtold: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtold:
?S: This variable conditionally defines the HAS_STRTOLD symbol, which
?S: indicates to the C program that the strtold() routine is available.
?S:.
?C:HAS_STRTOLD:
?C: This symbol, if defined, indicates that the strtold routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtold HAS_STRTOLD  /**/
?H:.
?LINT:set d_strtold
: see if strtold exists
set strtold d_strtold
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtold.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_sigsetjmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_sigsetjmp: Setvar cat +cc +ccflags +ldflags libs rm
?MAKE: -pick add $@ %<
?S:d_sigsetjmp:
?S: This variable conditionally defines the HAS_SIGSETJMP symbol,
?S: which indicates that the sigsetjmp() routine
 is available to
?S: call setjmp() and optionally save the process's signal mask.
?S:.
?C:HAS_SIGSETJMP:
?C: This variable indicates to the C program that the sigsetjmp()
?C: routine is available to save the calling process's registers
?C: and stack environment for later use by siglongjmp(), and
?C: to optionally save the process's signal mask.  See
?C: Sigjmp_buf, Sigsetjmp, and Siglongjmp.
?C:.
?C:Sigjmp_buf:
?C: This is the buffer type to be used with Sigsetjmp and Siglongjmp.
?C:.
?C:Sigsetjmp:
?C: This macro is used in the same way as sigsetjmp(), but will invoke
?C: traditional setjmp() if sigsetjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?C:Siglongjmp:
?C: This macro is used in the same way as siglongjmp(), but will invoke
?C: traditional longjmp() if siglongjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?H:?%<:#$d_sigsetjmp HAS_SIGSETJMP /**/
?H:?%<:#ifdef HAS_SIGSETJMP
?H:?%<:#define Sigjmp_buf sigjmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) sigsetjmp((buf),(save_mask))
?H:?%<:#define
 Siglongjmp(buf,retval) siglongjmp((buf),(retval))
?H:?%<:#else
?H:?%<:#define Sigjmp_buf jmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) setjmp((buf))
?H:?%<:#define Siglongjmp(buf,retval) longjmp((buf),(retval))
?H:?%<:#endif
?H:.
?W:%<:Sigjmp_buf Sigsetjmp Siglongjmp
```

```
?F:!set
?LINT:set d_sigsetjmp
: see if sigsetjmp exists
?X: We can't check for these symbols with Inlibc because sigsetjmp
?X: is (sometimes? always?) a macro under GCC
echo " "
case "$d_sigsetjmp" in
")
 $cat >set.c <<'EOP'
#include <setjmp.h>
sigjmp_buf env;
int set = 1;
int main()
{
 if (sigsetjmp(env,1))
  exit(set);
 set = 0;
 siglongjmp(env, 1);
 exit(1);
}
EOP
 if $cc $ccflags $ldflags -o set set.c $libs > /dev/null 2>&1 ; then
  if ./set >/dev/null 2>&1; then
   echo "POSIX sigsetjmp found." >&4
   val="$define"
  else
   $cat >&4 <<EOM
Uh-Oh! You have POSIX sigsetjmp and siglongjmp, but they do not work properly!!
I'll ignore them.
EOM
   val="$undef"
  fi
 else
  echo "sigsetjmp not found."
 >&4
  val="$undef"
 fi
 ;;
*) val="$d_sigsetjmp"
 case "$d_sigsetjmp" in
 $define) echo "POSIX sigsetjmp found." >&4;;
 $undef) echo "sigsetjmp not found." >&4;;
 esac
 ;;
esac
set d_sigsetjmp
eval $setvar
$rm -f set.c set
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigsetjmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_truncl: Inlibc
?MAKE: -pick add $@ %<
?S:d_truncl:
?S: This variable conditionally defines the HAS_TRUNCL symbol, which
?S: indicates to the C program that the truncl() routine is available
?S: to round long doubles towards zero. If copysignl is also present,
?S: we can emulate modfl.
?S:.
?C:HAS_TRUNCL :
?C: This symbol, if defined, indicates that the truncl routine is
?C: available. If copysignl is also present we can emulate modfl.
?C:.
?H:#$d_truncl HAS_TRUNCL  /**/
?H:.
?LINT:set d_truncl
: see if truncl exists
set truncl d_truncl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_truncl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_perror.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_perror.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:38  ram
?RCS: patch32: always define HAS_PERROR even when not used in C code
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_perror: Inlibc
?MAKE: -pick add $@ %<
?S:d_perror:
?S: This variable conditionally remaps perror to a null action and
?S: defines the symbol HAS_PERROR, which indicates to the C program
?S: that the perror()
 routine is not available to print system
?S: error messages.
?S:.
?C:HAS_PERROR ~ %<:
?C: This symbol, if defined, indicates that the perror() routine is
?C: available to print system error messages. If not defined, you should
?C: use your own diagnostic routine...
?C:.
?C:perror ~ %<:
?C: This symbol is maped to null if the  perror() routine is not
?C: available to print system error messages.
?C:.
?H:?%<:#$d_perror HAS_PERROR /**/
?H:?%<:#ifndef HAS_PERROR
?H:?%<:#define perror(s) ;  /* mapped to a null statement */
?H:?%<:#endif
?H:.
?LINT:set d_perror
: see if perror exists
set perror d_perror
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_perror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libpth.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:08:49  ram
?RCS: patch61: new loclibpth variable
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:31:30  ram
?RCS: patch45: call ./mips instead of just mips (WED)
```

```
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:29:15  ram
?RCS: patch32: added /lib/pa1.1 for HP-UX specially tuned PA-RISC libs (ADO)
?RCS: patch32: fixed information message, making it clearer (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:03:54  ram
?RCS: patch30: added /usr/shlib to
 glibpth for shared-only libraries
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:26:57  ram
?RCS: patch27: fixed a typo (libpth -> glibpth)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:07:53  ram
?RCS: patch23: now asks for library directories to be searched (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit initializes the path for C library lookup.
?X:
?MAKE:libpth glibpth xlibpth plibpth loclibpth: \
 usrinc incpath test cat Myread Oldconfig
?MAKE: -pick add $@ %<
?S:libpth:
?S: This variable holds the general path (space-separated) used to find
?S: libraries. It is intended to be used by other units.
?S:.
?S:glibpth:
?S: This variable holds the general path (space-separated) used to
?S: find libraries.  It may contain directories that do not exist on
?S: this platform, libpth is the cleaned-up version.
?S:.
?S:xlibpth:
?S: This variable holds extra path (space-separated) used to find
?S: libraries on this platform,
 for example CPU-specific libraries
?S: (on multi-CPU platforms) may be listed here.
?S:.
?S:loclibpth:
?S: This variable holds the paths (space-separated) used to find local
?S: libraries.  It is prepended to libpth, and is intended to be easily
?S: set from the command line.
?S:.
?S:plibpth:
?S: Holds the private path used by Configure to find out the libraries.
?S: Its value is prepend to libpth. This variable takes care of special
?S: machines, like the mips.  Usually, it should be empty.
```

```
?S:.
?T: xxx dlist
?LINT:use usrinc
?INIT:: change the next line if compiling for Xenix/286 on Xenix/386
?INIT:xlibpth='/usr/lib/386 /lib/386'
?INIT:: Possible local library directories to search.
?INIT:loclibpth="/usr/local/lib /opt/local/lib /usr/gnu/lib"
?INIT:loclibpth="$loclibpth /opt/gnu/lib /usr/GNU/lib /opt/GNU/lib"
?INIT:
?INIT:: general looking path for locating libraries
?INIT:glibpth="/lib /usr/lib $xlibpth"
?INIT:glibpth="$glibpth /usr/ccs/lib /usr/ucblib /usr/local/lib"
?X: /shlib
 is for Digital Unix 4.0
?X: /usr/shlib is for OSF/1 systems.
?INIT:test -f /usr/shlib/libc.so && glibpth="/usr/shlib $glibpth"
?INIT:test -f /shlib/libc.so     && glibpth="/shlib $glibpth"
?INIT:
?INIT:: Private path used by Configure to find libraries.  Its value
?INIT:: is prepended to libpth. This variable takes care of special
?INIT:: machines, like the mips.  Usually, it should be empty.
?INIT:plibpth="
?INIT:
: Set private lib path
case "$plibpth" in
") if ./mips; then
?X: on mips, we DO NOT want /lib, and we want $incpath/usr/lib
  plibpth="$incpath/usr/lib /usr/local/lib /usr/ccs/lib"
 fi;;
esac
case "$libpth" in
' ') dlist=";;
") dlist="$loclibpth $plibpth $glibpth";;
*) dlist="$libpth";;
esac

: Now check and see which directories actually exist, avoiding duplicates
libpth="
for xxx in $dlist
do
   if $test -d $xxx; then
  case " $libpth " in
  *" $xxx "*) ;;
  *) libpth="$libpth $xxx";;
  esac
   fi
done
$cat <<'EOM'
```

```
Some systems have incompatible or broken versions
 of libraries.  Among
the directories listed in the question below, please remove any you
know not to be holding relevant libraries, and add any that are needed.
Say "none" for none.

EOM
case "$libpth" in
") dflt='none';;
*)
?X: strip leading space
 set X $libpth
 shift
 dflt=${1+"$@"}
 ;;
esac
rp="Directories to use for library searches?"
. ./myread
case "$ans" in
none) libpth=' ';;
*) libpth="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libpth.U
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```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_copysign: Inlibc
?MAKE: -pick add $@ %<
?S:d_copysign:
?S: This variable conditionally defines the HAS_COPYSIGN symbol, which
?S: indicates to the C program that the copysign() routine is available.
?S:.
?C:HAS_COPYSIGN:
?C: This symbol, if defined, indicates that the copysign routine is
?C: available to do the copysign function.
?C:.
?H:#$d_copysign HAS_COPYSIGN  /**/
?H:.
?LINT:set d_copysign
```

```
: see if copysign exists
set copysign d_copysign
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_copysign.U
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```
?RCS: $Id: d_gethent.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethent:
?S: This variable conditionally defines HAS_GETHOSTENT if gethostent() is
?S: available to look up host names in some data base or another.
?S:.
?C:HAS_GETHOSTENT:
?C: This symbol, if defined, indicates that the gethostent() routine is
?C: available to look up host names in some
 data base or another.
?C:.
?H:#$d_gethent HAS_GETHOSTENT  /**/
?H:.
?LINT:set d_gethent
: see if gethostent exists
set gethostent d_gethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_mkdtemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkdtemp:
?S: This variable conditionally defines the HAS_MKDTEMP symbol, which
?S: indicates to the C program that the mkdtemp() routine is available
?S: to exclusively create a uniquely named temporary directory.
?S:.
?C:HAS_MKDTEMP :
?C: This symbol, if defined, indicates that the mkdtemp routine is
?C: available to exclusively create a uniquely named temporary directory.
?C:.
?H:#$d_mkdtemp HAS_MKDTEMP  /**/
?H:.
?LINT:set d_mkdtemp
: see if mkdtemp exists
set mkdtemp d_mkdtemp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkdtemp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
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?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getcwd: Inlibc
?MAKE: -pick add $@ %<
?S:d_getcwd:
?S: This variable conditionally defines the HAS_GETCWD symbol, which
?S: indicates to the C program that the getcwd() routine is available
?S: to get the current working directory.
?S:.
?C:HAS_GETCWD :
?C: This symbol, if defined, indicates that the getcwd routine is
?C: available to get the current working directory.
?C:.
?H:#$d_getcwd HAS_GETCWD  /**/
?H:.
?LINT:set d_getcwd
: see if getcwd exists
set getcwd d_getcwd
```

```
eval $inlibc

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getcwd.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:need_va_copy: rm_try cat Compile run
?MAKE: -pick add $@ %<
?S:need_va_copy:
?S: This symbol, if defined, indicates that the system stores
?S: the variable argument list datatype, va_list, in a format
?S: that cannot be copied by simple assignment, so that some
?S: other means must be used when copying is required.
?S: As such systems vary in their provision (or non-provision)
?S: of copying mechanisms, handy.h defines a platform-
?S: independent macro, Perl_va_copy(src, dst), to do the job.
?S:.
?C:NEED_VA_COPY:
?C: This
 symbol, if defined, indicates that the system stores
?C: the variable argument list datatype, va_list, in a format
?C: that cannot be copied by simple assignment, so that some
?C: other means must be used when copying is required.
?C: As such systems vary in their provision (or non-provision)
?C: of copying mechanisms, handy.h defines a platform-
?C: independent macro, Perl_va_copy(src, dst), to do the job.
?C:.
?H:#$need_va_copy NEED_VA_COPY  /**/
?H:.
?T:okay
?F:!try
: see if we need va_copy
echo " "
$cat >try.c <<EOCP
#include <stdarg.h>
#include <stdio.h>
#include <stdlib.h>
#include <signal.h>
```

```
int
ivfprintf(FILE *f, const char *fmt, va_list *valp)
{
 return vfprintf(f, fmt, *valp);
}

int
myvfprintf(FILE *f, const  char *fmt, va_list val)
{
 return ivfprintf(f, fmt, &val);
}

int
myprintf(char *fmt, ...)
{
 va_list val;
 va_start(val, fmt);
 return myvfprintf(stdout, fmt, val);
}

int
main(int ac, char **av)
{
 signal(SIGSEGV, exit);
#ifdef SIGBUS
 signal(SIGBUS,
 exit);
#endif

 myprintf("%s%cs all right, then\n", "that", '\');
 exit(0);
}
EOCP
set try
if eval $compile && $run ./try 2>&1 >/dev/null; then
 case "`$run ./try`" in
 "that's all right, then")
  okay=yes
  ;;
 esac
fi
case "$okay" in
yes) echo "It seems that you don't need va_copy()." >&4
 need_va_copy="$undef"
 ;;
*) echo "It seems that va_copy() or similar will be needed." >&4
 need_va_copy="$define"
```

```
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/need_va_copy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endservent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endservent_r endservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endservent_r:
?S: This variable conditionally defines the HAS_ENDSERVENT_R symbol,
?S: which indicates to the C program that the endservent_r()
?S: routine is available.
?S:.
?S:endservent_r_proto:
?S: This variable encodes the prototype of endservent_r.
?S: It is zero if d_endservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endservent_r
?S: is defined.
?S:.
?C:HAS_ENDSERVENT_R:
?C: This symbol, if defined, indicates that the endservent_r routine
?C: is
 available to endservent re-entrantly.
?C:.
?C:ENDSERVENT_R_PROTO:
?C: This symbol encodes the prototype of endservent_r.
?C: It is zero if d_endservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endservent_r
?C: is defined.
?C:.
?H:#$d_endservent_r HAS_ENDSERVENT_R /**/
?H:#define ENDSERVENT_R_PROTO $endservent_r_proto /**/
?H:.
?T:try hdrs d_endservent_r_proto
: see if endservent_r exists
set endservent_r d_endservent_r
eval $inlibc
```

```
case "$d_endservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endservent_r_proto:$usethreads" in
 ":define") d_endservent_r_proto=define
  set d_endservent_r_proto endservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endservent_r_proto" in
 define)
 case "$endservent_r_proto" in
 "|0) try='int endservent_r(struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && endservent_r_proto=I_D ;;
 esac
 case "$endservent_r_proto" in
 "|0) try='void endservent_r(struct
 servent_data*);'
 ./protochk "$extern_C $try" $hdrs && endservent_r_proto=V_D ;;
 esac
 case "$endservent_r_proto" in
 "|0) d_endservent_r=undef
  endservent_r_proto=0
  echo "Disabling endservent_r, cannot determine prototype." >&4 ;;
 * ) case "$endservent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endservent_r_proto="REENTRANT_PROTO_$endservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endservent_r has no prototype, not using it." >&4 ;;
  esac
  d_endservent_r=undef
  endservent_r_proto=0
  ;;
 esac
 ;;
*) endservent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endservent_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_getnbyad.U,v $

```
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnbyname: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnbyname:
?S: This variable conditionally defines the HAS_GETNETBYNAME symbol, which
?S: indicates to the C program that the getnetbyname() routine is available
?S: to look up networks by their names.
?S:.
?C:HAS_GETNETBYNAME:
?C: This symbol, if defined, indicates that the getnetbyname() routine is
?C: available to look up networks by their names.
?C:.
?H:#$d_getnbyname HAS_GETNETBYNAME  /**/
?H:.
?LINT:set d_getnbyname
: see if getnetbyname exists
set getnetbyname d_getnbyname
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnbynm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:30:48  ram
?RCS: patch61: added cute quoting trick for wild stringify support
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:24  ram
?RCS: patch36: now uses cppstdin instead of plain cpp for consistency (ADO)
?RCS: patch36: remove temporary files when done
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:36  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:cpp_stuff cpp_quote: cat contains cppstdin cppflags cppminus rm Warn \
 package
?MAKE: -pick
 add $@ %<
?S:cpp_stuff:
?S: This variable contains an identification of the catenation mechanism
?S: used by the C preprocessor.
?S:.
?S:cpp_quote:
?S: This variable is set to either "" or '' depending on whether the
?S: pre-processor pre-dates ANSI or not.  It is used in the production of
?S: the SQuoTe() and EQuoTe() macros, and was introduced to overcome a bug
?S: in gcc 3.x whereby the pre-processor complained loudly about the
?S: unterminated strings.
?S:.
?C:CAT2:
?C: This macro catenates 2 tokens together.
?C:.
?C:CAT3:
?C: This macro catenates 3 tokens together.
?C:.
?C:CAT4:
?C: This macro catenates 4 tokens together.
?C:.
?C:CAT5:
?C: This macro catenates 5 tokens together.
?C:.
?C:STRINGIFY:
?C: This macro surrounds its token with double quotes.
?C:.
?C:SCAT2:
?C: This macro catenates 2 tokens together and stringifies the result.
?C:.
?C:SCAT3:
?C: This macro catenates 3 tokens together and stringifies the result.
?C:.
?C:SCAT4:
?C: This macro catenates 4 tokens
 together and stringifies the result.
?C:.
?C:SCAT5:
?C: This macro catenates 5 tokens together and stringifies the result.
?C:.
?H:?%<:#if $cpp_stuff == 1
?H:?CAT2:#define CAT2(a,b)a/**/b
?H:?CAT3:#define CAT3(a,b,c)a/**/b/**/c
?H:?CAT4:#define CAT4(a,b,c,d)a/**/b/**/c/**/d
```

```
?H:?CAT5:#define CAT5(a,b,c,d,e)a/**/b/**/c/**/d/**/e
?H:?STRINGIFY:#define STRINGIFY(a)"a"
?H:?%<:#define SQuoTe(a)${cpp_quote}a
?H:?%<:#define EQuoTe(a)a${cpp_quote}
?H:?SCAT2:#define SCAT2(a,b)EQuoTe(SQuoTe(a)b)
?H:?SCAT3:#define SCAT3(a,b,c)EQuoTe(SQuoTe(a)b/**/c)
?H:?SCAT4:#define SCAT4(a,b,c,d)EQuoTe(SQuoTe(a)b/**/c/**/d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e)EQuoTe(SQuoTe(a)b/**/c/**/d/**/e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 42
?X: The additional level of indirection enables these macros to be
?X: used as arguments to other macros.  See K&R 2nd ed., page 231.
?H:?%<:#define CaTiFy(a,b) a ## b
?H:?%<:#define CAT2(a,b) CaTiFy(a,b)
?H:?CAT3:#define CAT3(a,b,c) CAT2(CaTiFy(a,b),c)
?H:?CAT4:#define CAT4(a,b,c,d)
 CAT2(CaTiFy(a,b), CaTiFy(c,d))
?H:?CAT5:#define CAT5(a,b,c,d,e) CAT2(CAT2(CaTiFy(a,b), CaTiFy(c,d)), e)
?H:?%<:#define StGiFy(a)# a
?H:?STRINGIFY:#define STRINGIFY(a)StGiFy(a)
?H:?SCAT2:#define SCAT2(a,b)StGiFy(a) StGiFy(b)
?H:?SCAT3:#define SCAT3(a,b,c)StGiFy(a) StGiFy(b) StGiFy(c)
?H:?SCAT4:#define SCAT4(a,b,c,d)StGiFy(a) StGiFy(b) StGiFy(c) StGiFy(d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e)StGiFy(a) StGiFy(b) StGiFy(c) StGiFy(d) StGiFy(e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff != 1 && $cpp_stuff != 42
?H:?%<:#include "Bletch: How does this C preprocessor catenate tokens?"
?H:?%<:#endif
?H:.
?W:%<:CAT2 CAT3 CAT4 CAT5 STRINGIFY SCAT2 SCAT3 SCAT4 SCAT5
?F:!cpp_stuff.c
?LINT:known StGiFy EQuoTe SQuoTe CaTiFy
: how do we catenate cpp tokens here?
echo " "
echo "Checking to see how your cpp does stuff like catenate tokens..." >&4
cpp_quote="
$cat >cpp_stuff.c <<'EOCP'
#define RCAT(a,b)a/**/b
#define ACAT(a,b)a ## b
RCAT(Rei,ser)
ACAT(Cir,cus)
EOCP
$cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out
 2>&1
if $contains 'Circus' cpp_stuff.out >/dev/null 2>&1; then
 echo "Oh!  Smells like ANSI's been here."
 echo "We can catify or stringify, separately or together!"
 cpp_stuff=42
```

```
elif $contains 'Reiser' cpp_stuff.out >/dev/null 2>&1; then
 echo "Ah, yes!  The good old days!"
 cpp_stuff=1
 $cat >cpp_stuff.c <<'EOCP'
#define SQuoTe(a)"a
#define EQuoTe(a)a"
#define CAT2(a,b)EQuoTe(SQuoTe(a)b)
CAT2(Vic,tory)
EOCP
 $cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out 2>&1
 if $contains '"Victory"' cpp_stuff.out >/dev/null 2>&1; then
  echo "I'll resort to a cute trick to also be able to stringify."
  cpp_quote=""
 else
  $cat <<EOM
However, in the good old days we don't know how to stringify and
catify at the same time...
@if SCAT2 || SCAT3 || SCAT4 || SCAT5
You might have to edit the values of the SCAT[2-5] macros in config.h...
@else
Hopefully, $package does not need this feature.
@end
EOM
 fi
else
 ./warn <<EOM
I can't seem to be able to catenate tokens with your cpp.
@if
 CAT2 || CAT3 || CAT4 || CAT5 || SCAT2 || SCAT3 || SCAT4 || SCAT5
You're going to have to edit the values of the following
macros in config.h:

@if CAT2 || CAT3 || CAT4 || CAT5
 CAT[2-5]
@end
@if SCAT2 || SCAT3 || SCAT4 || SCAT5
 SCAT[2-5]
@end

in order to let me compile.
@end
EOM
 cpp_stuff="/* Help! How do we handle cpp_stuff? */*/"
fi
$rm -f cpp_stuff.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cpp_stuff.U

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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gccversion gccosandvers gccansipedantic: cat cpp rm +cc \
 Myread Guess Options Oldconfig Loc osname osvers run
?MAKE: -pick add $@ %<
?S:gccversion:
?S: If GNU cc (gcc) is used, this variable holds '1' or '2' to
?S: indicate whether the compiler is version 1 or 2.  This is used in
?S: setting some of the default cflags.  It is set to '' if not gcc.
?S:.
?S:gccosandvers:
?S: If GNU cc (gcc) is used, this variable holds the operating system
?S: and version used to compile gcc.  It is set to '' if not gcc,
?S: or if
 nothing useful can be parsed as the os version.
?S:.
?S:gccansipedantic:
?S: If GNU cc (gcc) is used, this variable will enable (if set) the
?S: -ansi and -pedantic ccflags for building core files (through
?S: cflags script). (See Porting/pumpkin.pod for full description).
?S:.
?D:gccversion=''
?D:gccansipedantic=''
?T:c99_for
?T:flag
?T:gccshortvers
?T:incdir
?T:warn
?F:!try
?LINT:change cpp
?LINT:extern ccflags
?LINT:extern ldflags
?LINT:extern locincpth
?LINT:extern ccname
?LINT:change ccname
?LINT:change locincpth
?LINT:change ccflags
?LINT:set gccansipedantic
```

```
?X: Check if they have gcc in any guise.
: Check if we are using GNU gcc and what its version is
echo " "
echo "Checking for GNU cc in disguise and/or its version number..." >&4
$cat >try.c <<EOM
#include <stdio.h>
int main() {
#if defined(__GNUC__) && !defined(__INTEL_COMPILER)
#ifdef __VERSION__
 printf("%s\n", __VERSION__);
#else
 printf("%s\n", "1");
#endif
#endif
 return(0);
}
EOM
if $cc -o try $ccflags $ldflags try.c; then
 gccversion=`$run
 ./try`
 case "$gccversion" in
 ") echo "You are not using GNU cc." ;;
 *)  echo "You are using GNU cc $gccversion."
     ccname=gcc
     ;;
 esac
else
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to be working!" >&4
?X: using -K will prevent aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
 echo "    You'd better start hunting for one and let me know about it." >&4
  exit 1
  ;;
 esac
fi
$rm -f try try.*
case "$gccversion" in
1.*) cpp=`./loc gcc-cpp $cpp $pth` ;;
esac
case "$gccversion" in
") gccosandvers=" ;;
*) gccshortvers=`echo "$gccversion"|sed 's/ .*//'`
  gccosandvers=`$cc -v 2>&1|grep '/specs$'|sed "s!.*/[^-/]*-[^-/]*-\([^-/]*\)/$gccshortvers/specs!\1!"`
  gccshortvers="
  case "$gccosandvers" in
```

```
  $osname) gccosandvers=" ;; # linux gccs seem to have no linux osvers, grr
  $osname$osvers) ;; # looking good
  $osname*) cat <<EOM >&4

*** WHOA THERE!!! ***

   Your gcc has not been
 compiled for the exact release of
   your operating system ($gccosandvers versus $osname$osvers).

   In general it is a good idea to keep gcc synchronized with
   the operating system because otherwise serious problems
   may ensue when trying to compile software, like Perl.

   I'm trying to be optimistic here, though, and will continue.
   If later during the configuration and build icky compilation
   problems appear (headerfile conflicts being the most common
   manifestation), I suggest reinstalling the gcc to match
   your operating system release.

EOM
     ;;
  *) gccosandvers=" ;; # failed to parse, better be silent
  esac
  ;;
esac
case "$ccname" in
") ccname="$cc" ;;
esac

# gcc 3.* complain about adding -Idirectories that they already know about,
# so we will take those off from locincpth.
case "$gccversion" in
3.*)
   echo "main(){}">try.c
   for incdir in $locincpth; do
      warn=`$cc $ccflags -I$incdir -c try.c 2>&1 | \
      grep '^c[cp]p*[01]: warning:
 changing search order '`
      if test "X$warn" != X; then
    locincpth=`echo " $locincpth " | sed "s! $incdir ! !"`
      fi
   done
   $rm -f try try.*
esac

# gcc 4.9 by default does some optimizations that break perl.
# see ticket 121505.
```

```
#
# The -fwrapv disables those optimizations (and probably others,) so
# for gcc 4.9 (and later, since the optimizations probably won't go
# away), add -fwrapv unless the user requests -fno-wrapv, which
# disables -fwrapv, or if the user requests -fsanitize=undefined,
# which turns the overflows -fwrapv ignores into runtime errors.
case "$gccversion" in
4.[3-9].*|4.[1-9][0-9]*|[5-9].*|[1-9][0-9]*)
  case "$ccflags" in
  *-fno-wrapv*|*-fsanitize=undefined*|*-fwrapv*) ;;
  *) ccflags="$ccflags -fwrapv" ;;
  esac
esac

# Really old versions of gcc default to C89 and will error for this code.
# See if the compiler (gcc or otherwise) needs a flag to compile C99 code
# Initialisations in for loops seem to be the particular problem
# (Does
 this syntax conflict with something else that was valid C89?)
# We also add a declaration after a statement to detect whether the compiler
# (or the user supplied -Accflags) consider such declarations to be errors.
# This causes 'Configure with -Accflags="-Werror=declaration-after-statement"'
# to fail hard and early.
#
# Annoyingly -std=c99 will cause gcc to tell glibc not to define prototypes for
# syscall, drand48 etc when including <unistd.h>, which messes up our build.
# I guess we *could* loop round trying -std=c99 first with checks both for the
# prototype found and the code compiling (because -std=gnu99 might do other
# things we don't want, particularly on non-GCC compilers) but
# 1) We would need to check for the prototype first (without any flags)
# 2) We would still end up with most Linux systems either being -std=gnu99
#    or "" (no flag), and so both common options would not rigorously check our
#    portability to other platforms.
# So it doesn't seem worth the complexity
 and chance of different failure.
$cat >try.c <<'EOCP'
int main(int argc, char **argv) {
  argc = argc + 1;
  /* This is deliberately a declaration after a statement. */
  unsigned long long count = 0;
  for (char **p = argv; *p; ++p) {
     ++count;
  }
  return count == 1 ? 0 : argc;
}
EOCP
c99_for=no
for flag in " '-std=gnu99' '-std=c99'; do
```

```
   if $cc -o try $flag $ccflags $ldflags try.c 2>/dev/null && ./try; then
       c99_for="$flag"
       break;
   fi
done
case "$c99_for" in
") echo "Your C compiler doesn't need any special flags to compile C99 code"
   ;;
no) echo >&4 "Your C compiler doesn't seem to be able to compile C99 code"
   rp='Do you really want to continue?'
   dflt='n'
   . ./myread
   case "$ans" in
 [yY]) echo >&4 "Okay, continuing." ;;
 *) exit 1    ;;
   esac
   ;;
*)  echo "Your C compiler needs $c99_for to compile C99 code"
   ccflags="$c99_for $ccflags"
   ;;
esac
$rm -f try try.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/gccvers.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sresgproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sresgproto:
?S: This variable conditionally defines the HAS_SETRESGID_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the setresgid() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SETRESGID_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the setresgid() function.  Otherwise, it is up
```

```
?C: to the program to supply one.  Good guesses are
?C:  extern
 int setresgid(uid_t ruid, uid_t euid, uid_t suid);
?C:.
?H:#$d_sresgproto HAS_SETRESGID_PROTO /**/
?H:.
?LINT:set d_sresgproto
: see if prototype for setresgid is available
echo " "
set d_sresgproto setresgid $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sresgproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_umask.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_umask.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:14:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_umask: Inlibc
?MAKE: -pick add $@ %<
?S:d_umask:
?S: This variable conditionally defines the HAS_UMASK symbol, which
?S: indicates to the C program that the umask() routine is available.
?S: to set and get the value of the file creation mask.
?S:.
?C:HAS_UMASK :
?C: This
 symbol, if defined, indicates that the umask routine is
?C: available to set and get the value of the file creation mask.
?C:.
?H:#$d_umask HAS_UMASK  /**/
?H:.
?LINT:set d_umask
: see if umask exists
```

```
set umask d_umask
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_umask.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_nanosleep: Inlibc
?MAKE: -pick add $@ %<
?S:d_nanosleep:
?S: This variable conditionally defines HAS_NANOSLEEP
?S: if nanosleep() is available to sleep with 1E-9 sec accuracy.
?S:.
?C:HAS_NANOSLEEP:
?C: This symbol, if defined, indicates that the nanosleep
?C: system call is available to sleep with 1E-9 sec accuracy.
?C:.
?H:#$d_nanosleep HAS_NANOSLEEP  /**/
?H:.
?LINT:set d_nanosleep
: see if nanosleep exists
set nanosleep d_nanosleep
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nanosleep.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitebin.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: sitebin.U,v $
?RCS:
?MAKE:sitebin sitebinexp installsitebin : Getfile Oldconfig \
 Setprefixvar siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitebin=''
?S:sitebin:
?S: This variable holds the name of the directory in which the user wants
?S: to put add-on publicly executable files for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S: The standard distribution will put nothing
 in this directory.
?S: After perl has been installed, users may install their own local
?S: executables in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitebinexp=''
?S:sitebinexp:
?S: This is the same as the sitebin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installsitebin=''
?S:installsitebin:
?S: This variable is usually the same as sitebinexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?LINT:change prefixvar
?LINT:set installsitebin
?LINT:set sitebin
?LINT:set sitebinexp
: determine where add-on public executables go
case "$sitebin" in
'') dflt=$siteprefix/bin ;;
*) dflt=$sitebin ;;
esac
fn=d~
rp='Pathname where the add-on public executables should be installed?'
. ./getfile
prefixvar=sitebin
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitebin.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: prototype.U,v 3.0.1.3 1994/05/06 15:11:49 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: prototype.U,v $
?RCS: Revision 3.0.1.3  1994/05/06  15:11:49  ram
?RCS: patch23: ensure cc flags used when looking for prototype support
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:36  ram
?RCS: patch16: prototype handling macros now appear only when needed
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:03:12  ram
?RCS: patch6: defines were referring to non-existent VOID symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:36  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:prototype: Nothing
?S:prototype:
?S: This variable holds the eventual value of CAN_PROTOTYPE, which
?S: indicates the C compiler can handle function prototypes.
?S:.
: stub, never used
prototype=nothing
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/prototype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syslog.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_syslog: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_syslog:
```

```
?S: This variable conditionally defines the I_SYSLOG symbol,
?S: and indicates whether a C program should include <syslog.h>.
?S:.
?C:I_SYSLOG:
?C: This symbol, if defined, indicates that <syslog.h> exists and
?C: should be included.
?C:.
?H:#$i_syslog I_SYSLOG  /**/
?H:.
?LINT:set i_syslog
: see if this is a syslog.h system
set syslog.h i_syslog
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_syslog.U
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```
?RCS: $Id: prefshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: prefshell.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:28:13  ram
?RCS: patch36: added SHELL temporary since metalint now sees ${SHELL}
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:47  ram
?RCS: patch10: non-portable var substitution was used (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:prefshell: cat package Getfile Oldconfig ksh csh bash
?MAKE: -pick add $@ %<
?S:prefshell:
?S: This
 variable contains the eventual value of the PREFSHELL symbol,
?S: which contains the full name of the preferred user shell on this
?S: system.  Usual values are /bin/csh, /bin/ksh, /bin/sh.
?S:.
?C:PREFSHELL:
?C: This symbol contains the full name of the preferred user shell on this
```

```
?C: system.  Usual values are /bin/csh, /bin/ksh, /bin/sh.
?C:.
?H:#define PREFSHELL "$prefshell"  /**/
?H:.
?T:SHELL
: find out which shell people like to use most
case "$prefshell" in
")
 case "$ksh $bash $csh" in
 */ksh*) dflt="$ksh" ;;
 */bash*) dflt="$bash" ;;
 */csh*) dflt="$csh" ;;
 *) dflt='/bin/sh' ;;
 esac
 ;;
*)  dflt="$prefshell";;
esac
?X: Some shells (Ultrix) do not understand ${SHELL:-/bin/sh}, sigh!
$cat <<EOM

Give the full path name of the shell most people like to use on your system.
This will be used by $package whenever the user wants to get a shell
escape (for instance) and is not necessarily the same as the shell you are
currently using (${SHELL-/bin/sh}).

EOM
fn=f/~
rp='Preferred
 shell to be used?'
. ./getfile
prefshell=$ans

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prefshell.U
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?RCS: $Id: d_stat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_stat.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:28  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stat: Inlibc
?MAKE: -pick add $@ %<
?S:d_stat:
?S: This variable conditionally defines HAS_STAT if stat() is
?S: available to get file status.
?S:.
?C:HAS_STAT (STAT):
?C: This symbol, if defined, indicates that the stat routine is
?C: available to get file status.
?C:.
?H:#$d_stat HAS_STAT /**/
?H:.
?LINT:set d_stat
: see if stat exists
set
 stat d_stat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_stat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: so.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: so.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:30:04  ram
?RCS: patch36: now tells user how he can suppress shared lib lookup (ADO)
?RCS: patch36: removed echo at the top, since it's now in the here-doc (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:07:02  ram
?RCS: patch30: created
?RCS:
?X:
?X: This unit computes the shared-object / shared-lib extension
?X:
?MAKE:so d_libname_unique: test libpth Loc Myread Oldconfig cat Setvar
?MAKE: -pick add $@ %<
?S:so:
```

```
?S: This
 variable holds the extension used to identify shared libraries
?S: (also known as shared objects) on the system. Usually set to 'so'.
?S:.
?S:d_libname_unique:
?S: This variable is defined if the target system insists on unique
?S: basenames for shared library files. This is currently true on Android,
?S: false everywhere else we know of.
?S: Defaults to 'undef'.
?S:.
?LINT:set d_libname_unique
?T: xxx
: compute shared library extension
case "$so" in
")
 if xxx=`./loc libc.sl X $libpth`; $test -f "$xxx"; then
  dflt='sl'
 else
  dflt='so'
 fi
 ;;
*) dflt="$so";;
esac
$cat <<EOM

On some systems, shared libraries may be available.  Answer 'none' if
you want to suppress searching of shared libraries for the remainder
of this configuration.

EOM
rp='What is the file extension used for shared libraries?'
. ./myread
so="$ans"

: Does target system insist that shared library basenames are unique
$cat << EOM

Some dynamic loaders assume that the *basename* of shared library
 filenames
are globally unique.  We'll default this to undef as we assume your system
is not this weird. Set to defined if you're on one of them.

EOM

dflt='n'
rp='Make shared library basenames unique?'
. ./myread
case "$ans" in
```

```
y|Y) val="$define" ;;
*)   val="$undef"  ;;
esac
set d_libname_unique
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/so.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_casti32.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:10:45  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:09:37  ram
?RCS: patch36: declare signal handler correctly (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:06  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Can the compiler cast large floats to 32-bit integers?
?X:
?MAKE:d_casti32: cat
 +cc +ccflags rm_try intsize Setvar test signal_t
?MAKE: -pick add $@ %<
?S:d_casti32:
?S: This variable conditionally defines CASTI32, which indicates
?S: whether the C compiler can cast large floats to 32-bit ints.
?S:.
?C:CASTI32:
?C: This symbol is defined if the C compiler can cast negative
?C: or large floating point numbers to 32-bit ints.
?C:.
?T:xxx yyy
?H:#$d_casti32 CASTI32  /**/
```

```
?H:.
?F:!try
?LINT:set d_casti32
: check for ability to cast large floats to 32-bit ints.
echo " "
echo 'Checking whether your C compiler can cast large floats to int32.' >&4
if $test "$intsize" -eq 4; then
 xxx=int
else
 xxx=long
fi
$cat >try.c <<EOCP
#include <sys/types.h>
#include <signal.h>
$signal_t blech() { exit(3); }
int main()
{
 $xxx i32;
 double f;
 int result = 0;
 signal(SIGFPE, blech);

 f = (double) 0x7fffffff;
 f = 10 * f;
 i32  = ($xxx) f;

 if (i32 != ($xxx) f)
  result |= 1;
 exit(result);
}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 ./try
 yyy=$?
else
 echo "(I can't
 seem to compile the test program--assuming it can't)"
 yyy=1
fi
case "$yyy" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_casti32
```

```
eval $setvar
$rm_try

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_casti32.U
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_snprintf d_vsnprintf : Inlibc Compile cat run rm_try
?MAKE: -pick add $@ %<
?S:d_snprintf:
?S: This variable conditionally defines the HAS_SNPRINTF symbol, which
?S: indicates to the C program that the snprintf () library function
?S: is available.
?S:.
?S:d_vsnprintf:
?S: This variable conditionally defines the HAS_VSNPRINTF symbol, which
?S: indicates to the C program that the vsnprintf () library function
?S: is available.
?S:.
?C:HAS_SNPRINTF:
?C: This symbol, if defined, indicates that the snprintf () library
?C: function
 is available for use.
?C:.
?C:HAS_VSNPRINTF:
?C: This symbol, if defined, indicates that the vsnprintf () library
?C: function is available for use.
?C:.
?H:#$d_snprintf HAS_SNPRINTF /**/
?H:#$d_vsnprintf HAS_VSNPRINTF /**/
?H:.
?F:!try
: see if snprintf exists
set snprintf d_snprintf
eval $inlibc

: see if vsnprintf exists
set vsnprintf d_vsnprintf
eval $inlibc
```

```
case "$d_snprintf-$d_vsnprintf" in
"$define-$define")
   $cat <<EOM
Checking whether your snprintf() and vsnprintf() work okay...
EOM
   $cat >try.c <<'EOCP'
/* v?snprintf testing logic courtesy of Russ Allbery.
* According to C99:
* - if the buffer is too short it still must be \0-terminated
* - if the buffer is too short the potentially required length
*   must be returned and not -1
* - if the buffer is NULL the potentially required length
*   must be returned and not -1 or core dump
*/
#include <stdio.h>
#include <stdarg.h>

char buf[2];

int test (char *format, ...)
{
   va_list args;
   int count;

   va_start
 (args, format);
   count = vsnprintf (buf, sizeof buf, format, args);
   va_end (args);
   return count;
}

int main ()
{
   return ((test ("%s", "abcd") == 4 && buf[0] == 'a' && buf[1] == '\0'
           && snprintf (NULL, 0, "%s", "abcd") == 4) ? 0 : 1);
}
EOCP
   set try
   if eval $compile; then
 `$run ./try`
 case "$?" in
 0) echo "Your snprintf() and vsnprintf() seem to be working okay." ;;
 *) cat <<EOM >&4
Your snprintf() and snprintf() don't seem to be working okay.
EOM
    d_snprintf="$undef"
    d_vsnprintf="$undef"
    ;;
```

```
 esac
   else
 echo "(I can't seem to compile the test program--assuming they don't)"
 d_snprintf="$undef"
 d_vsnprintf="$undef"
   fi
   $rm_try
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_snprintf.U
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```
?RCS: $Id: package.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: package.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:27:21  ram
?RCS: patch36: beware of non-ascii character sets when translating case
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:37:02  ram
?RCS: patch14: skip definition of spackage if not otherwise used
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:10  ram
?RCS: patch10: added spackage, suitable for starting sentences
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:28  ram
?RCS: Baseline for dist 3.0
 netwide release.
?RCS:
?MAKE:package spackage: Nothing
?MAKE: -pick wipe $@ %<
?S:package:
?S: This variable contains the name of the package being constructed.
?S: It is primarily intended for the use of later Configure units.
?S:.
?S:spackage:
?S: This variable contains the name of the package being constructed,
?S: with the first letter uppercased, i.e. suitable for starting
?S: sentences.
```

```
?S:.
?X: dist-4 has defined PACKAGE: here, which clashes with perly.h
?X:  as package is a reserved keyword in perl
?T:first last
: set package name
package='<PACKAGENAME>'
@if spackage
first=`echo $package | sed -e 's/^\(.\).*/\1/'`
last=`echo $package | sed -e 's/^.\(.*\)/\1/'`
?X:
?X: So early in the Configure script, we don't have ./tr set up and can't
?X: include Tr in our dependency or that would create a cycle. Therefore,
?X: we have to somehow duplicate the work done in Tr. That's life.
?X:
case "`echo AbyZ | tr '[:lower:]' '[:upper:]' 2>/dev/null`"-"`echo AbyZ | tr '[:upper:]' '[:lower:]'
 2>/dev/null`" in
ABYZ-abyz) spackage=`echo $first | tr '[:lower:]' '[:upper:]'`$last;;
*) spackage=`echo $first | tr '[a-z]' '[A-Z]'`$last;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/package.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtold_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtold_l:
?S: This variable conditionally defines the HAS_STRTOLD_L symbol, which
?S: indicates to the C program that the strtold_l() routine is available.
?S:.
?C:HAS_STRTOLD_L:
?C: This symbol, if defined, indicates that the strtold_l routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtold_l HAS_STRTOLD_L  /**/
?H:.
?LINT:set d_strtold_l
: see if strtold_l exists
set strtold_l d_strtold_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strtold_l.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sem.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sem: test d_semctl d_semget d_semop Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_sem:
?S: This variable conditionally defines the HAS_SEM symbol, which
?S: indicates that the entire sem*(2) library is present.
?S:.
?C:HAS_SEM:
?C: This symbol, if defined, indicates that the entire sem*(2) library is
?C: supported.
?C:.
?H:#$d_sem HAS_SEM  /**/
?H:.
?T:h_sem
?LINT:set d_sem
:
 see how much of the 'sem*(2)' library is present.
h_sem=true
echo " "
case "$d_semctl$d_semget$d_semop" in
*"$undef"*) h_sem=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID messages"*"not configured"*)
 echo "Your $osname does not have the sem*(2) configured." >&4
       h_sem=false
 val="$undef"
 set semctl d_semctl
```

```
 eval $setvar
 set semget d_semget
 eval $setvar
 set semop d_semop
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_sem && $test `./findhdr sys/sem.h`; then
 echo "You have the full sem*(2) library." >&4
 val="$define"
else
 echo "You don't have the full sem*(2) library." >&4
 val="$undef"
fi
set d_sem
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sem.U
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```
?RCS: $Id: d_pwritev.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pwritev.U,v $
?RCS:
?MAKE:d_pwritev: Inlibc
?MAKE: -pick add $@ %<
?S:d_pwritev:
?S: This variable conditionally defines the HAS_PWRITEV symbol, which
?S: indicates to the C program that the pwritev() routine is available.
?S:.
?C:HAS_PWRITEV :
?C: This symbol, if defined, indicates that the pwritev routine is
?C: available to perform vectored writes on a file descriptor at a
?C: given offset.
?C:.
?H:#$d_pwritev HAS_PWRITEV  /**/
```

```
?H:.
?LINT:set
 d_pwritev
: see if pwritev exists
set pwritev d_pwritev
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pwritev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_time.U,v 3.0.1.2 1995/07/25 14:07:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_time.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:43  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:16:38  ram
?RCS: patch36: now uses new Typedef unit to compute type information (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Maybe <sys/types.h> should be included?
?X:INC: i_systypes
?MAKE:d_time timetype: Csym Setvar Findhdr Myread Typedef
?MAKE: -pick
 add $@ %<
?S:d_time:
?S: This variable conditionally defines the HAS_TIME symbol, which indicates
?S: that the time() routine exists.  The time() routine is normally
?S: provided on UNIX systems.
?S:.
?S:timetype:
?S: This variable holds the type returned by time(). It can be long,
?S: or time_t on BSD sites (in which case <sys/types.h> should be
?S: included). Anyway, the type Time_t should be used.
?S:.
?C:HAS_TIME (TIMER):
?C: This symbol, if defined, indicates that the time() routine exists.
```

```
?C:.
?C:Time_t (TIMETYPE):
?C: This symbol holds the type returned by time(). It can be long,
?C: or time_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_time HAS_TIME  /**/
?H:#define Time_t $timetype  /* Time type */
?H:.
?LINT:set d_time
: see if time exists
echo " "
?X: MPE/iX needs this protection of hint values.
?X: See d_sterror.U for more explanation.
if test "X$d_time" = X -o X"$timetype" = X; then
   if set time val -f d_time; eval $csym; $val;
 then
  echo 'time() found.' >&4
  val="$define"
  rp="What is the type returned by time() on this system?"
  set time_t timetype long stdio.h sys/types.h
  eval $typedef_ask
   else
  echo 'time() not found, hope that will do.' >&4
  val="$undef"
  timetype='int';
   fi
   set d_time
   eval $setvar
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/d_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: byteorder.U,v 3.0.1.2 1997/02/28 15:24:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: byteorder.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:24:55  ram
?RCS: patch61: no longer ask the user if the test runs ok
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:58  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:byteorder: cat Myread Oldconfig Loc Compile rm_try run \
 multiarch uvtype uvsize i_stdlib
?MAKE: -pick add $@ %<
?S:byteorder:
?S: This
 variable holds the byte order in a UV. In the following,
?S: larger digits indicate more significance.  The variable byteorder
?S: is either 4321 on a big-endian machine, or 1234 on a little-endian,
?S: or 87654321 on a Cray ... or 3412 with weird order !
?S:.
?C:BYTEORDER:
?C: This symbol holds the hexadecimal constant defined in byteorder,
?C: in a UV, i.e. 0x1234 or 0x4321 or 0x12345678, etc...
?C: If the compiler supports cross-compiling or multiple-architecture
?C: binaries, use compiler-defined macros to
?C: determine the byte order.
?C:.
?H:?%<:#if defined(MULTIARCH)
?H:?%<:#  ifdef __LITTLE_ENDIAN__
?H:?%<:#    if LONGSIZE == 4
?H:?%<:#      define BYTEORDER 0x1234
?H:?%<:#    else
?H:?%<:#      if LONGSIZE == 8
?H:?%<:#        define BYTEORDER 0x12345678
?H:?%<:#      endif
?H:?%<:#    endif
?H:?%<:#  else
?H:?%<:#    ifdef __BIG_ENDIAN__
?H:?%<:#      if LONGSIZE == 4
?H:?%<:#        define BYTEORDER 0x4321
?H:?%<:#      else
?H:?%<:#        if LONGSIZE
 == 8
?H:?%<:#          define BYTEORDER 0x87654321
?H:?%<:#        endif
?H:?%<:#      endif
?H:?%<:#    endif
?H:?%<:#  endif
?H:?%<:#else
?H:?%<:#define BYTEORDER 0x$byteorder /* large digits for MSB */
?H:?%<:#endif
```

```
?H:.
?T:xxx_prompt
?F:!try
: check for ordering of bytes in a UV
echo " "
case "$multiarch" in
*$define*)
 $cat <<EOM
You seem to be doing a multiarchitecture build,
skipping the byteorder check.

EOM
 byteorder='ffff'
 ;;
*)
 case "$byteorder" in
 ")
  $cat <<'EOM'
In the following, larger digits indicate more significance.  A big-endian
machine like a Pyramid or a Motorola 680?0 chip will come out to 4321. A
little-endian machine like a Vax or an Intel 80?86 chip would be 1234. Other
machines may have weird orders like 3412.  A Cray will report 87654321,
an Alpha will report 12345678. If the test program works the default is
probably right.
I'm now running the test program...
EOM
  $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include
 <sys/types.h>
typedef $uvtype UV;
int main()
{
 int i;
 union {
  UV l;
  char c[$uvsize];
 } u;

 if ($uvsize > 4)
  u.l = (((UV)0x08070605) << 32) | (UV)0x04030201;
 else
  u.l = (UV)0x04030201;
 for (i = 0; i < $uvsize; i++)
```

```
  printf("%c", u.c[i]+'0');
 printf("\n");
 exit(0);
}
EOCP
  xxx_prompt=y
  set try
  if eval $compile && $run ./try > /dev/null; then
   dflt=`$run ./try`
   case "$dflt" in
   [1-4][1-4][1-4][1-4]|12345678|87654321)
    echo "(The test program ran ok.)"
    echo "byteorder=$dflt"
    xxx_prompt=n
   ;;
   ????|????????) echo "(The test program ran ok.)" ;;
   *) echo "(The test program didn't run right for some reason.)" ;;
   esac
  else
   dflt='4321'
   cat <<'EOM'
(I can't seem to compile the test program.  Guessing big-endian...)
EOM
  fi
  case "$xxx_prompt" in
  y)
   rp="What is the order of bytes in $uvtype?"
   . ./myread
   byteorder="$ans"
   ;;
  *) byteorder=$dflt
   ;;
  esac
  ;;
 esac
 $rm_try
 ;;
esac
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/byteorder.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:

```
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:multiarch: osname
?MAKE: -pick add $@ %<
?S:multiarch:
?S: This variable conditionally defines the MULTIARCH symbol
?S: which signifies the presence of multiplatform files.
?S: This is normally set by hints files.
?S:.
?C:MULTIARCH:
?C: This symbol, if defined, signifies that the build
?C: process will produce some binary files that are going to be
?C: used in a cross-platform environment.  This is the case for
?C: example with the NeXT "fat" binaries that contain executables
?C: for
 several CPUs.
?C:.
?H:#$multiarch MULTIARCH  /**/
?H:.
: Check if is a multiplatform env
case "$osname" in
darwin) multiarch="$define" ;;
esac
case "$multiarch" in
"|[nN]*) multiarch="$undef" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/multiarch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nearbyint: Inlibc
?MAKE: -pick add $@ %<
?S:d_nearbyint:
?S: This variable conditionally defines HAS_NEARBYINT if nearbyint()
?S: is available to return the integral value closest to (according to
?S: the current rounding mode) to x.
?S:.
?C:HAS_NEARBYINT:
?C: This symbol, if defined, indicates that the nearbyint routine is
```

```
?C: available to return the integral value closest to (according to
?C: the current rounding mode) to x.
?C:.
?H:#$d_nearbyint HAS_NEARBYINT  /**/
?H:.
?LINT:set d_nearbyint
: see if nearbyint exists
set nearbyint d_nearbyint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nearbyint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Getfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Getfile.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:01:06  ram
?RCS: patch61: getfile script now begins with "startsh"
?RCS:
?RCS: Revision 3.0.1.6  1995/02/15  14:11:00  ram
?RCS: patch51: was not working if ~'s allowed with d_portable on (WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:11:25  ram
?RCS: patch45: added support for escaping answers to skip various checks
?RCS: patch45: modified message issued after file expansion
?RCS:
?RCS: Revision
 3.0.1.4  1994/10/29  15:53:19  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:23:36  ram
?RCS: patch23: getfile could be confused by file name in "locate" requests
?RCS: patch23: new 'p' directive to assume file is in people's path (WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:01:31  ram
?RCS: patch16: added metalint hint on changed 'ans' variable
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:46:27  ram
?RCS: patch10: minor format problems and misspellings fixed
```

```
?RCS: patch10: now performs from package dir and not from UU subdir
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to get a file name and make some sanity checks. Optionally, a ~name
?X: expansion is performed.
?X:
?X: To use this unit, $rp and $dflt must hold the question and the
?X: default answer, which will be passed as-is
 to the myread script.
?X: The $fn variable must hold the file type (f or d, for file/directory).
?X: If $gfpth is set to a list of space-separated list of directories,
?X: those are prefixes for the filename.  Unless $gfpthkeep is set to 'y',
?X: gfpth is cleared on return from Getfile.
?X:
?X: If it is followed by a ~, then ~name substitution will occur. Upon return,
?X: $ans is set with the filename value. If a / is specified, then only a full
?X: path name is accepted (but ~ substitution occurs before, if needed). The
?X: expanded path name is returned in that case.
?X:
?X: If a + is specified, the existence checks are skipped. This usually means
?X: the file/directory is under the full control of the program.
?X:
?X: If the 'n' (none) type is used, then the user may answer none.
?X: The 'e' (expand) switch may be used to bypass d_portable, expanding ~name.
?X:
?X: If the 'l' (locate) type is used, then it must end with a ':' and then a
?X: file name. If the answer is a directory,
 the file name will be appended
?X: before testing for file existence. This is useful in locate-style
?X: questions like "where is the active file?". In that case, one should
?X: use:
?X:
?X:   dflt='~news/lib'
?X:   fn='l~:active'
?X:   rp='Where is the active file?'
?X:   . ./getfile
?X:   active="$ans"
?X:
?X: If the 'p' (path) letter is specified along with 'l', then an answer
?X: without a leading / will be expected to be found in everyone's path.
?X:
?X: It is also possible to include a comma-separated list of items within
?X: parentheses to specify which items should be accepted as-is with no
?X: further checks. This is useful when for instance a full path is expected
```

```
?X: but the user may escape out via "magical" answers.
?X:
?X: If the answer to the question is 'none', then the existence checks are
?X: skipped and the empty string is returned.
?X:
?MAKE:Getfile: d_portable contains startsh Myread Filexp tr trnl
?MAKE: -pick add $@ %<
?V:ansexp:fn gfpth gfpthkeep
?F:./getfile
?T:tilde
 type what orig_rp orig_dflt fullpath already redo skip none_ok \
 value exp_file nopath_ok loc_file fp pf dir direxp
?LINT:change ans
?LINT:change gfpth
: now set up to get a file name
cat <<EOS >getfile
$startsh
EOS
cat <<'EOSC' >>getfile
tilde=''
fullpath=''
already=''
skip=''
none_ok=''
exp_file=''
nopath_ok=''
orig_rp="$rp"
orig_dflt="$dflt"
case "$gfpth" in
'') gfpth='.' ;;
esac

?X: Begin by stripping out any (...) grouping.
case "$fn" in
*\(*)
 : getfile will accept an answer from the comma-separated list
 : enclosed in parentheses even if it does not meet other criteria.
 expr "$fn" : '.*(\(.*\)).*' | $tr ',' $trnl >getfile.ok
 fn=`echo $fn | sed 's/(.*)//'`
 ;;
esac

?X: Catch up 'locate' requests early, so that we may strip the file name
?X: before looking at the one-letter commands, in case the file name contains
?X: one of them. Reported by Wayne Davison <davison@borland.com>.
case "$fn" in
*:*)
 loc_file=`expr $fn : '.*:\(.*\)'`
```

```
 fn=`expr $fn : '\(.*\):.*'`
 ;;
esac

case
 "$fn" in
*~*) tilde=true;;
esac
case "$fn" in
*/*) fullpath=true;;
esac
case "$fn" in
*+*) skip=true;;
esac
case "$fn" in
*n*) none_ok=true;;
esac
case "$fn" in
*e*) exp_file=true;;
esac
case "$fn" in
*p*) nopath_ok=true;;
esac

case "$fn" in
*f*) type='File';;
*d*) type='Directory';;
*l*) type='Locate';;
esac

what="$type"
case "$what" in
Locate) what='File';;
esac

case "$exp_file" in
")
 case "$d_portable" in
 "$define") ;;
 *) exp_file=true;;
 esac
 ;;
esac

cd ..
while test "$type"; do
 redo="
 rp="$orig_rp"
```

```
dflt="$orig_dflt"
case "$tilde" in
true) rp="$rp (~name ok)";;
esac
. UU/myread
?X: check for allowed escape sequence which may be accepted verbatim.
if test -f UU/getfile.ok && \
 $contains "^$ans\$" UU/getfile.ok >/dev/null 2>&1
then
 value="$ans"
 ansexp="$ans"
 break
fi
case "$ans" in
none)
 value=''
 ansexp=''
 case "$none_ok" in
 true) type='';;
 esac
 ;;
*)
 case "$tilde" in
 '') value="$ans"
  ansexp="$ans";;
 *)
  value=`UU/filexp $ans`
  case
$? in
  0)
   if test "$ans" != "$value"; then
    echo "(That expands to $value on this system.)"
   fi
   ;;
  *) value="$ans";;
  esac
  ansexp="$value"
  case "$exp_file" in
  '') value="$ans";;
  esac
  ;;
 esac
 case "$fullpath" in
 true)
?X: Perform all the checks on ansexp and not value since when d_portable
?X: is defined, the original un-expanded answer which is stored in value
?X: would lead to "non-existent" error messages whilst ansexp has been
?X: properly expanded. -- Fixed by Jan.Djarv@sa.erisoft.se (Jan Djarv)
```

```
?X: Always expand ~user if '/' was requested
  case "$ansexp" in
  /*) value="$ansexp" ;;
?X: Allow for c:/some/path
  [a-zA-Z]:/*) value="$ansexp" ;;
  *)
   redo=true
   case "$already" in
   true)
   echo "I shall only accept a full path name, as in /bin/ls." >&4
   echo "Use a ! shell escape if you wish to check pathnames." >&4
    ;;
   *)
   echo "Please give a full path name, starting with slash." >&4
    case "$tilde"
 in
    true)
   echo "Note that using ~name is ok provided it expands well." >&4
     already=true
     ;;
    esac
   esac
   ;;
  esac
  ;;
 esac
 case "$redo" in
 ")
  case "$type" in
  File)
   for fp in $gfpth; do
    if test "X$fp" = X.; then
        pf="$ansexp"
    else
        pf="$fp/$ansexp"
    fi
    if test -f "$pf"; then
     type="
    elif test -r "$pf" || (test -h "$pf") >/dev/null 2>&1
    then
     echo "($value is not a plain file, but that's ok.)"
     type="
    fi
    if test X"$type" = X; then
        value="$pf"
        break
    fi
   done
```

```
  ;;
 Directory)
  for fp in $gfpth; do
   if test "X$fp" = X.; then
       dir="$ans"
       direxp="$ansexp"
   else
       dir="$fp/$ansexp"
       direxp="$fp/$ansexp"
   fi
   if test -d "$direxp"; then
    type="
    value="$dir"
    break
   fi
  done
  ;;
 Locate)
  if test -d "$ansexp"; then
   echo "(Looking for $loc_file in directory
$value.)"
   value="$value/$loc_file"
   ansexp="$ansexp/$loc_file"
  fi
  if test -f "$ansexp"; then
   type="
  fi
  case "$nopath_ok" in
  true) case "$value" in
   */*) ;;
   *) echo "Assuming $value will be in people's path."
    type="
    ;;
   esac
   ;;
  esac
  ;;
 esac

 case "$skip" in
 true) type=";
 esac

 case "$type" in
 ") ;;
 *)
  if test "$fastread" = yes; then
   dflt=y
```

```
    else
     dflt=n
    fi
    rp="$what $value doesn't exist.  Use that name anyway?"
    . UU/myread
    dflt=''
    case "$ans" in
    y*) type='';;
    *) echo " ";;
    esac
    ;;
   esac
   ;;
  esac
  ;;
 esac
done
cd UU
ans="$value"
rp="$orig_rp"
dflt="$orig_dflt"
rm -f getfile.ok
test "X$gfpthkeep" != Xy && gfpth=''
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Getfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_drand48_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_drand48_r drand48_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_drand48_r:
?S: This variable conditionally defines the HAS_DRAND48_R symbol,
?S: which indicates to the C program that the drand48_r()
?S: routine is available.
?S:.
?S:drand48_r_proto:
?S: This variable encodes the prototype of drand48_r.
?S: It is zero if d_drand48_r is undef, and one of the
```

```
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_drand48_r
?S: is defined.
?S:.
?C:HAS_DRAND48_R:
?C: This symbol, if defined, indicates that the drand48_r routine
?C: is available to drand48 re-entrantly.
?C:.
?C:DRAND48_R_PROTO:
?C: This
 symbol encodes the prototype of drand48_r.
?C: It is zero if d_drand48_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_drand48_r
?C: is defined.
?C:.
?H:#$d_drand48_r HAS_DRAND48_R /**/
?H:#define DRAND48_R_PROTO $drand48_r_proto /**/
?H:.
?T:try hdrs d_drand48_r_proto
: see if drand48_r exists
set drand48_r d_drand48_r
eval $inlibc
case "$d_drand48_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_drand48_r_proto:$usethreads" in
 ":define") d_drand48_r_proto=define
  set d_drand48_r_proto drand48_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_drand48_r_proto" in
 define)
 case "$drand48_r_proto" in
 "|0) try='int drand48_r(struct drand48_data*, double*);'
 ./protochk "$extern_C $try" $hdrs && drand48_r_proto=I_ST ;;
 esac
 case "$drand48_r_proto" in
 "|0) d_drand48_r=undef
  drand48_r_proto=0
  echo "Disabling drand48_r, cannot determine prototype." >&4 ;;
 * ) case
 "$drand48_r_proto" in
  REENTRANT_PROTO*) ;;
  *) drand48_r_proto="REENTRANT_PROTO_$drand48_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
```

```
 *) case "$usethreads" in
  define) echo "drand48_r has no prototype, not using it." >&4 ;;
  esac
  d_drand48_r=undef
  drand48_r_proto=0
  ;;
 esac
 ;;
*) drand48_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_drand48_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorman1dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorman1dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorman1dir vendorman1direxp installvendorman1dir: man1dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorman1dir:
?S: This variable contains the name of the directory for man1
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: man1 pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorman1direxp:
?S: This variable is the ~name expanded version of vendorman1dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
```

```
?D:installvendorman1dir="
?S:installvendorman1dir:
?S: This variable is really the same as vendorman1direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorman1dir
: Set the vendorman1dir variables
case "$vendorprefix" in
") vendorman1dir="
 vendorman1direxp="
 ;;
*) : determine where vendor-supplied manual pages go.
 case "$vendorman1dir" in
 ") dflt=`echo "$man1dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorman1dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=nd~+
 rp='Pathname for
 the vendor-supplied manual section 1 pages?'
 . ./getfile
 vendorman1dir="$ans"
 vendorman1direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorman1dir" = "X" && vendorman1dir=' '
prefixvar=vendorman1dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorman1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_localtime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_localtime_r d_localtime_r_needs_tzset localtime_r_proto: Inlibc \
```

```
 cat run Protochk Hasproto i_systypes usethreads i_time i_systime \
 rm_try Compile extern_C i_stdlib i_unistd i_malloc
?MAKE: -pick add $@ %<
?S:d_localtime_r:
?S: This variable conditionally defines the HAS_LOCALTIME_R symbol,
?S: which indicates to the C program that the localtime_r()
?S: routine is available.
?S:.
?S:d_localtime_r_needs_tzset:
?S: This variable conditionally defines the LOCALTIME_R_NEEDS_TZSET
?S: symbol, which makes us call tzset before localtime_r()
?S:.
?S:localtime_r_proto:
?S: This
 variable encodes the prototype of localtime_r.
?S: It is zero if d_localtime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_localtime_r
?S: is defined.
?S:.
?C:HAS_LOCALTIME_R:
?C: This symbol, if defined, indicates that the localtime_r routine
?C: is available to localtime re-entrantly.
?C:.
?C:LOCALTIME_R_NEEDS_TZSET:
?C: Many libc's localtime_r implementations do not call tzset,
?C: making them differ from localtime(), and making timezone
?C: changes using \$ENV{TZ} without explicitly calling tzset
?C: impossible. This symbol makes us call tzset before localtime_r
?C:.
?H:?%<:#$d_localtime_r_needs_tzset LOCALTIME_R_NEEDS_TZSET /**/
?H:?%<:#ifdef LOCALTIME_R_NEEDS_TZSET
?H:?%<:#define L_R_TZSET tzset(),
?H:?%<:#else
?H:?%<:#define L_R_TZSET
?H:?%<:#endif
?H:.
?W:%<:L_R_TZSET
?C:L_R_TZSET:
?C: If localtime_r() needs tzset, it is defined in this define
?C:.
?C:LOCALTIME_R_PROTO:
?C: This symbol encodes the prototype of localtime_r.
?C: It is
 zero if d_localtime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_localtime_r
?C: is defined.
?C:.
?H:#$d_localtime_r HAS_LOCALTIME_R /**/
```

```
?H:#define LOCALTIME_R_PROTO $localtime_r_proto /**/
?H:.
?T:try hdrs d_localtime_r_proto
?F:!try
: see if localtime_r exists
set localtime_r d_localtime_r
eval $inlibc
case "$d_localtime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_localtime_r_proto:$usethreads" in
 ":define") d_localtime_r_proto=define
  set d_localtime_r_proto localtime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_localtime_r_proto" in
 define)
 case "$localtime_r_proto" in
 "|0) try='struct tm* localtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && localtime_r_proto=S_TS ;;
 esac
 case "$localtime_r_proto" in
 "|0) try='int localtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && localtime_r_proto=I_TS ;;
 esac
 case "$localtime_r_proto"
 in
 "|0) d_localtime_r=undef
  localtime_r_proto=0
  echo "Disabling localtime_r, cannot determine prototype." >&4 ;;
 * ) case "$localtime_r_proto" in
  REENTRANT_PROTO*) ;;
  *) localtime_r_proto="REENTRANT_PROTO_$localtime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "localtime_r has no prototype, not using it." >&4 ;;
  esac
  d_localtime_r=undef
  localtime_r_proto=0
  ;;
 esac
 ;;
*) localtime_r_proto=0
 ;;
```

```
esac

: see if localtime_r calls tzset
case "$localtime_r_proto" in
REENTRANT_PROTO*)
 $cat >try.c <<EOCP
/*  Does our libc's localtime_r call tzset ?
*  return 0 if so, 1 otherwise.
*/
#$i_systypes I_SYS_TYPES
#$i_unistd I_UNISTD
#$i_time I_TIME
#$i_stdlib I_STDLIB
#$i_malloc I_MALLOC
#ifdef I_SYS_TYPES
#  include <sys/types.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#ifdef I_TIME
#  include <time.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>
#ifdef I_MALLOC
#  include <malloc.h>
#endif
int
 main()
{
   int result = 0;
   time_t t = time(0L);
   char w_tz[]="TZ" "=GMT+5",
  e_tz[]="TZ" "=GMT-5",
 *tz_e = (char*)malloc(16),
 *tz_w = (char*)malloc(16);
   struct tm tm_e, tm_w;
   memset(&tm_e,'\0',sizeof(struct tm));
   memset(&tm_w,'\0',sizeof(struct tm));
   strcpy(tz_e,e_tz);
   strcpy(tz_w,w_tz);

   putenv(tz_e);
   localtime_r(&t, &tm_e);
```

```
   putenv(tz_w);
   localtime_r(&t, &tm_w);

   if( memcmp(&tm_e, &tm_w, sizeof(struct tm)) == 0 )
 result = 1;

   free(tz_e);free(tz_w);
   return result;
}
EOCP
 set try
 if eval $compile; then
     if $run ./try; then
  d_localtime_r_needs_tzset=undef;
     else
  d_localtime_r_needs_tzset=define;
     fi;
 else
     d_localtime_r_needs_tzset=undef;
 fi;
    ;;
 *)
    d_localtime_r_needs_tzset=undef;
    ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_localtime_r.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nblock_io.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:17:14  ram
?RCS: patch61: simplify here document for shells that can't handle them well
?RCS: patch61: force use of "startsh" at the head of the generated script
?RCS: patch61: added new files to the ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:13:22  ram
```

```
?RCS: patch56: created
?RCS:
?X:
?X: Simplify here document for shells that can't handle them well.
?X: (Problem reported on FreeBSD; it's unclear if this helps.)  --AD
?X:
?MAKE:o_nonblock
 eagain rd_nodata d_eofnblk: cat rm_try +cc +ccflags +ldflags \
 d_open3 h_sysfile h_fcntl signal_t hint Oldconfig Setvar startsh Warn
?MAKE: -pick add $@ %<
?S:o_nonblock:
?S: This variable bears the symbol value to be used during open() or fcntl()
?S: to turn on non-blocking I/O for a file descriptor. If you wish to switch
?S: between blocking and non-blocking, you may try ioctl(FIOSNBIO) instead,
?S: but that is only supported by some devices.
?S:.
?S:eagain:
?S: This variable bears the symbolic errno code set by read() when no
?S: data is present on the file and non-blocking I/O was enabled (otherwise,
?S: read() blocks naturally).
?S:.
?S:rd_nodata:
?S: This variable holds the return code from read() when no data is
?S: present. It should be -1, but some systems return 0 when O_NDELAY is
?S: used, which is a shame because you cannot make the difference between
?S: no data and an EOF.. Sigh!
?S:.
?S:d_eofnblk:
?S: This variable conditionally defines EOF_NONBLOCK
 if EOF can be seen
?S: when reading from a non-blocking I/O source.
?S:.
?C:VAL_O_NONBLOCK:
?C: This symbol is to be used during open() or fcntl(F_SETFL) to turn on
?C: non-blocking I/O for the file descriptor. Note that there is no way
?C: back, i.e. you cannot turn it blocking again this way. If you wish to
?C: alternatively switch between blocking and non-blocking, use the
?C: ioctl(FIOSNBIO) call instead, but that is not supported by all devices.
?C:.
?C:VAL_EAGAIN:
?C: This symbol holds the errno error code set by read() when no data was
?C: present on the non-blocking file descriptor.
?C:.
?C:RD_NODATA:
?C: This symbol holds the return code from read() when no data is present
?C: on the non-blocking file descriptor. Be careful! If EOF_NONBLOCK is
?C: not defined, then you can't distinguish between no data and EOF by
?C: issuing a read(). You'll have to find another way to tell for sure!
```

```
?C:.
?C:EOF_NONBLOCK:
?C: This symbol, if defined, indicates to the C program that a read() on
?C: a
 non-blocking file descriptor will return 0 on EOF, and not the value
?C: held in RD_NODATA (-1 usually, in that case!).
?C:.
?H:#define VAL_O_NONBLOCK $o_nonblock
?H:#define VAL_EAGAIN $eagain
?H:#define RD_NODATA $rd_nodata
?H:#$d_eofnblk EOF_NONBLOCK
?H:.
?F:!try !try.out !try.ret !try.err !mtry
?T:status
?LINT:use d_open3
: check for non-blocking I/O stuff
case "$h_sysfile" in
true) echo "#include <sys/file.h>" > head.c;;
*)
 case "$h_fcntl" in
 true) echo "#include <fcntl.h>" > head.c;;
 *) echo "#include <sys/fcntl.h>" > head.c;;
 esac
 ;;
esac
echo " "
echo "Figuring out the flag used by open() for non-blocking I/O..." >&4
case "$o_nonblock" in
")
 $cat head.c > try.c
 $cat >>try.c <<'EOCP'
int main() {
#ifdef O_NONBLOCK
 printf("O_NONBLOCK\n");
 exit(0);
#endif
#ifdef O_NDELAY
 printf("O_NDELAY\n");
 exit(0);
#endif
?X: Stevens "Advanced Programming in the UNIX Environment" page 364 mentions
?X: the FNDELAY symbol, used in 4.33BSD (source: Paul Marquess).
#ifdef FNDELAY
 printf("FNDELAY\n");
 exit(0);
#endif
 exit(0);
}
```

```
EOCP
 if
 $cc $ccflags $ldflags -o try try.c >/dev/null 2>&1; then
  o_nonblock=`./try`
  case "$o_nonblock" in
  ") echo "I can't figure it out, assuming O_NONBLOCK will do.";;
  *) echo "Seems like we can use $o_nonblock.";;
  esac
 else
  echo "(I can't compile the test program; pray O_NONBLOCK is right!)"
 fi
 ;;
*) echo "Using $hint value $o_nonblock.";;
esac
$rm_try

echo " "
echo "Let's see what value errno gets from read() on a $o_nonblock file..." >&4
case "$eagain" in
")
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <errno.h>
#include <sys/types.h>
#include <signal.h>
#define MY_O_NONBLOCK $o_nonblock
extern int errno;
$signal_t blech(x) int x; { exit(3); }
EOCP
 $cat >> try.c <<'EOCP'
int main()
{
 int pd[2];
 int pu[2];
 char buf[1];
 char string[100];

 pipe(pd); /* Down: child -> parent */
 pipe(pu); /* Up: parent -> child */
 if (0 != fork()) {
  int ret;
  close(pd[1]); /* Parent reads from pd[0] */
  close(pu[0]); /*
 Parent writes (blocking) to pu[1] */
  if (-1 == fcntl(pd[0], F_SETFL, MY_O_NONBLOCK))
   exit(1);
  signal(SIGALRM, blech);
  alarm(5);
```

```
  if ((ret = read(pd[0], buf, 1)) > 0) /* Nothing to read! */
   exit(2);
  sprintf(string, "%d\n", ret);
  write(2, string, strlen(string));
  alarm(0);
#ifdef EAGAIN
  if (errno == EAGAIN) {
   printf("EAGAIN\n");
   goto ok;
  }
#endif
#ifdef EWOULDBLOCK
  if (errno == EWOULDBLOCK)
   printf("EWOULDBLOCK\n");
#endif
 ok:
  write(pu[1], buf, 1); /* Unblocks child, tell it to close our pipe */
  sleep(2);    /* Give it time to close our pipe */
  alarm(5);
  ret = read(pd[0], buf, 1); /* Should read EOF */
  alarm(0);
  sprintf(string, "%d\n", ret);
  write(3, string, strlen(string));
  exit(0);
 }

 close(pd[0]);   /* We write to pd[1] */
 close(pu[1]);   /* We read from pu[0] */
 read(pu[0], buf, 1); /* Wait for parent to signal us we may continue */
 close(pd[1]);   /* Pipe pd is now fully closed! */
 exit(0);    /* Bye bye, thank you for playing!
 */
}
EOCP
 if $cc $ccflags $ldflags -o try try.c >/dev/null 2>&1; then
?X: Use script to avoid the possible 'alarm call' message
  echo "$startsh" >mtry
  echo "./try >try.out 2>try.ret 3>try.err || exit 4" >>mtry
  chmod +x mtry
  ./mtry >/dev/null 2>&1
  case $? in
  0) eagain=`$cat try.out`;;
  1) echo "Could not perform non-blocking setting!";;
  2) echo "I did a successful read() for something that was not there!";;
  3) echo "Hmm... non-blocking I/O does not seem to be working!";;
  *) echo "Something terribly wrong happened during testing.";;
  esac
  rd_nodata=`$cat try.ret`
```

```
 echo "A read() system call with no data present returns $rd_nodata."
 case "$rd_nodata" in
 0|-1) ;;
 *)
  echo "(That's peculiar, fixing that to be -1.)"
  rd_nodata=-1
  ;;
 esac
 case "$eagain" in
 ")
  echo "Forcing errno EAGAIN on read() with no data available."
  eagain=EAGAIN
  ;;
 *)
  echo "Your read() sets errno to $eagain when no data is available."
  ;;
 esac
 status=`$cat
try.err`
 case "$status" in
 0) echo "And it correctly returns 0 to signal EOF.";;
 -1) echo "But it also returns -1 to signal EOF, so be careful!";;
 *) echo "However, your read() returns '$status' on EOF??";;
 esac
 val="$define"
 if test "$status" = "$rd_nodata"; then
  ./warn "your read() can't distinguish between EOF and no data!"
  val="$undef"
 fi
else
 echo "I can't compile the test program--assuming errno EAGAIN will do."
 eagain=EAGAIN
fi
set d_eofnblk
eval $setvar
;;
*)
 echo "Using $hint value $eagain."
 echo "Your read() returns $rd_nodata when no data is present."
 case "$d_eofnblk" in
 "$define") echo "And you can see EOF because read() returns 0.";;
 "$undef") echo "But you can't see EOF status from read() returned value.";;
 *)
?X: Should not happen, but if it does, assume the worst!
  echo "(Assuming you can't see EOF status from read anyway.)"
  d_eofnblk=$undef
  ;;
 esac
```

```
 ;;
esac
$rm_try head.c mtry
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nblock_io.U
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```
?RCS: $Id: d_munmap.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_munmap.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:22  ram
?RCS: patch15: created
?RCS:
?MAKE:d_munmap: Inlibc
?MAKE: -pick add $@ %<
?S:d_munmap:
?S: This variable conditionally defines HAS_MUNMAP if munmap() is
?S: available to unmap a region mapped by mmap().
?S:.
?C:HAS_MUNMAP:
?C: This symbol, if defined, indicates that the munmap system call is
?C: available to unmap a region, usually mapped by mmap().
?C:.
?H:#$d_munmap HAS_MUNMAP  /**/
?H:.
?LINT:set
 d_munmap
: see if munmap exists
set munmap d_munmap
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_munmap.U
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gidsign: Myread Typedef gidtype Compile run
?MAKE: -pick add $@ %<
?S:gidsign:
?S: This variable contains the signedness of a gidtype.
?S: 1 for unsigned, -1 for signed.
?S:.
?C:Gid_t_sign:
?C: This symbol holds the signedness of a Gid_t.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define Gid_t_sign $gidsign  /* GID sign */
?H:.
?T:yyy zzz
?F:!try
: Check if GID is signed
echo " "
case "$gidtype" in
*_t) zzz="$gidtype" ;;
*)   zzz="gid"  ;;
esac
echo "Checking the sign of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include
 <stdio.h>
int main() {
 $gidtype foo = -1;
 if (foo < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set try
if eval $compile; then
 yyy=`$run ./try`
 case "$yyy" in
 ") gidsign=1
  echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) gidsign=$yyy
  case "$gidsign" in
   1) echo "Your $zzz is unsigned." ;;
```

```
  -1) echo "Your $zzz is signed."   ;;
  esac
  ;;
 esac
else
 gidsign=1
 echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidsign.U
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```
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?RCS:
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?RCS:
?MAKE:d_fpclass: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpclass:
?S: This variable conditionally defines the HAS_FPCLASS symbol, which
?S: indicates to the C program that the fpclass() routine is available.
?S:.
?C:HAS_FPCLASS:
?C: This symbol, if defined, indicates that the fpclass routine is
?C: available to classify doubles.  Available for example in Solaris/SVR4.
?C: The returned values are defined in <ieeefp.h> and are:
?C:
?C: FP_SNAN  signaling NaN
?C: FP_QNAN  quiet NaN
?C: FP_NINF  negative infinity
?C: FP_PINF  positive infinity
?C: FP_NDENORM negative denormalized non-zero
?C: FP_PDENORM positive denormalized non-zero
?C: FP_NZERO negative zero
?C: FP_PZERO positive zero
?C: FP_NNORM negative normalized
 non-zero
?C: FP_PNORM positive normalized non-zero
?C:.
?H:#$d_fpclass HAS_FPCLASS  /**/
?H:.
?LINT:set d_fpclass
: see if fpclass exists
set fpclass d_fpclass
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclass.U
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* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/Jmake.tmpl
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mbstowcs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mbstowcs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mbstowcs: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbstowcs:
?S: This variable conditionally defines the HAS_MBSTOWCS symbol, which
?S: indicates to the C program that the mbstowcs() routine is available
?S: to convert a multibyte string into a wide character string.
?S:.
?C:HAS_MBSTOWCS (MBSTOWCS):
?C: This symbol, if defined, indicates
 that the mbstowcs routine is
?C: available to convert a multibyte string into a wide character string.
?C:.
?H:#$d_mbstowcs HAS_MBSTOWCS  /**/
?H:.
?LINT:set d_mbstowcs
: see if mbstowcs exists
set mbstowcs d_mbstowcs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mbstowcs.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pread.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pread.U,v $
?RCS:
?MAKE:d_pread: Inlibc
?MAKE: -pick add $@ %<
?S:d_pread:
?S: This variable conditionally defines the HAS_PREAD symbol, which
?S: indicates to the C program that the pread() routine is available.
?S:.
?C:HAS_PREAD :
?C: This symbol, if defined, indicates that the pread routine is
?C: available to perform reads on a file descriptor at a given offset.
?C:.
?H:#$d_pread HAS_PREAD  /**/
?H:.
?LINT:set d_pread
: see if pread exists
set
 pread d_pread
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_time.U,v 3.0 1993/08/18 12:08:45 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_time.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:45  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit finds which "time" include to use. If 'timezone' is used by the
?X: program, we also try to find which header should be included. Eventually,
?X: we look for <sys/select.h> if I_SYSSELECT is used, to get struct timeval.
?X:
?MAKE:i_time i_systime i_systimek timeincl d_tm_tm_zone d_tm_tm_gmtoff: \
 Compile cat \
 contains rm_try echo n
 c +i_sysselct Findhdr Hasfield i_stdlib
?MAKE: -pick add $@ %<
?S:i_time:
?S: This variable unconditionally defines I_TIME, which indicates
?S: to the C program that it should include <time.h>.
?S:.
?S:i_systime:
?S: This variable conditionally defines I_SYS_TIME, which indicates
?S: to the C program that it should include <sys/time.h>.
?S:.
?S:i_systimek:
?S: This variable conditionally defines I_SYS_TIME_KERNEL, which
?S: indicates to the C program that it should include <sys/time.h>
?S: with KERNEL defined.
?S:.
?S:timeincl:
?S: This variable holds the full path of the included time header(s).
?S:.
?S:d_tm_tm_zone:
?S: This variable conditionally defines HAS_TM_TM_ZONE, which indicates
?S: to the C program that the struct tm has the tm_zone field.
?S:.
?S:d_tm_tm_gmtoff:
?S: This variable conditionally defines HAS_TM_TM_GMTOFF, which indicates
?S: to the C program that the struct tm has the tm_gmtoff field.
?S:.
?C:I_TIME (USE_TIME_H):
?C: This symbol is always defined, and indicates
 to the C program that
?C: it should include <time.h>.
?C:.
?C:I_SYS_TIME (I_SYSTIME USE_SYS_TIME_H NO_TIME_WITH_SYS_TIME):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h>.
?C:.
?C:I_SYS_TIME_KERNEL (I_SYSTIMEKERNEL):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h> with KERNEL defined.
```

```
?C:.
?C:HAS_TM_TM_ZONE:
?C: This symbol, if defined, indicates to the C program that
?C: the struct tm has a tm_zone field.
?C:.
?C:HAS_TM_TM_GMTOFF:
?C: This symbol, if defined, indicates to the C program that
?C: the struct tm has a tm_gmtoff field.
?C:.
?H:#$i_time I_TIME  /**/
?H:#$i_systime I_SYS_TIME  /**/
?H:#$i_systimek I_SYS_TIME_KERNEL  /**/
?H:#$d_tm_tm_zone HAS_TM_TM_ZONE  /**/
?H:#$d_tm_tm_gmtoff HAS_TM_TM_GMTOFF  /**/
?H:.
?W::timezone
?T:xselect flags sysselect s_timeval s_timezone
?LINT:change i_sysselct
?LINT:set d_tm_tm_zone
?LINT:set d_tm_tm_gmtoff
: see if we should include sys/time.h
echo
 " "
i_time='define'
if test "X$timeincl" = X; then
 echo "Testing to see if we should include <sys/time.h>." >&4
 $echo $n "I'm now running the test program...$c"
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <time.h>
#ifdef I_SYSTIME
#ifdef SYSTIMEKERNEL
#define KERNEL
#endif
#include <sys/time.h>
#endif
#ifdef I_SYSSELECT
#include <sys/select.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
 struct tm foo;
#ifdef S_TIMEVAL
 struct timeval bar;
```

```
#endif
#ifdef S_TIMEZONE
 struct timezone tzp;
#endif
 if (foo.tm_sec == foo.tm_sec)
  exit(0);
#ifdef S_TIMEVAL
 if (bar.tv_sec == bar.tv_sec)
  exit(0);
#endif
 exit(1);
}
EOCP
 flags=''
@if I_SYSSELECT
 if $contains 'timeval.*{' `./findhdr sys/select.h` >/dev/null 2>&1; then
  xselect='-DI_SYSSELECT'
 else
  xselect=''
 fi
@end
@if timezone
 for s_timezone in '-DS_TIMEZONE' ''; do
@else
 s_timezone=''
@end
?X: Every package is given a try with 'struct timeval'
@if I_SYSSELECT
 for sysselect in $xselect
 ''; do
@else
 sysselect=''
@end
 for s_timeval in '-DS_TIMEVAL' ''; do
 for i_systimek in '' '-DSYSTIMEKERNEL'; do
 for i_systime in '-DI_SYSTIME' ''; do
  case "$flags" in
  '') $echo $n ".$c"
   set try $i_systime $i_systimek $sysselect $s_timeval $s_timezone
   if eval $compile; then
    set X $i_systime $i_systimek $sysselect $s_timeval
    shift
    flags="$*"
    echo ' '
    $echo $n "Succeeded with $flags$c"
   fi
   ;;
  esac
```

```
 done
 done
 done
@if I_SYSSELECT
 done
@end
@if timezone
 done
@end
 timeincl=''
 echo " "
 case "$flags" in
 *SYSTIMEKERNEL*) i_systimek="$define"
  timeincl=`./findhdr sys/time.h`
  echo "We'll include <sys/time.h> with KERNEL defined." >&4;;
 *) i_systimek="$undef";;
 esac
 case "$flags" in
 *I_SYSTIME*) i_systime="$define"
  timeincl=`./findhdr sys/time.h`" $timeincl"
  echo "We'll include <sys/time.h>." >&4;;
 *) i_systime="$undef";;
 esac
@if I_SYSSELECT
 case "$flags" in
 *I_SYSSELECT*) i_sysselct="$define"
  timeincl=`./findhdr sys/select.h`"
 $timeincl"
  echo "We'll also include <sys/select.h> to get struct timeval." >&4;;
 *) case "$i_sysselct" in
  '') i_sysselct="$undef";;
  esac
 esac
@end
 $rm_try
fi
: see if struct tm knows about tm_zone
case "$i_systime$i_time" in
*$define*)
	echo " "
	echo "Checking to see if your struct tm has tm_zone field..." >&4
	set d_tm_tm_zone tm tm_zone $i_systime sys/time.h $i_time time.h
	eval $hasfield
	;;
*)	val="$undef"
	set d_tm_tm_zone
	eval $setvar
	;;
```

```
esac
case "$d_tm_tm_zone" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
: see if struct tm knows about tm_gmtoff
case "$i_systime$i_time" in
*$define*)
        echo " "
        echo "Checking to see if your struct tm has tm_gmtoff field..." >&4
        set d_tm_tm_gmtoff tm tm_gmtoff $i_systime sys/time.h $i_time time.h
        eval $hasfield
        ;;
*)      val="$undef"
        set d_tm_tm_gmtoff
        eval $setvar

    ;;
esac
case "$d_tm_tm_gmtoff" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/i_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorman3dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999-2000, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorman3dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorman3dir vendorman3direxp installvendorman3dir: man3dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorman3dir:
?S: This variable contains the name of the directory for man3
```

```
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: man3 pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorman3direxp:
?S: This variable is the ~name expanded version of vendorman3dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorman3dir=''
?S:installvendorman3dir:
?S: This variable is really the same as vendorman3direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorman3dir
: Set the vendorman3dir variables
case "$vendorprefix" in
'') vendorman3dir=''
 vendorman3direxp=''
 ;;
*) : determine where vendor-supplied module manual pages go.
 case "$vendorman3dir" in
 '') dflt=`echo "$man3dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorman3dir ;;
 esac
 case "$dflt" in
 '|' ') dflt=none ;;
 esac
 fn=nd~+
 rp='Pathname
 for the vendor-supplied manual section 3 pages?'
 . ./getfile
 vendorman3dir="$ans"
 vendorman3direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorman3dir" = "X" && vendorman3dir=' '
prefixvar=vendorman3dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorman3dir.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_finitel: Inlibc
?MAKE: -pick add $@ %<
?S:d_finitel:
?S: This variable conditionally defines the HAS_FINITEL symbol, which
?S: indicates to the C program that the finitel() routine is available.
?S:.
?C:HAS_FINITEL:
?C: This symbol, if defined, indicates that the finitel routine is
?C: available to check whether a long double is finite
?C: (non-infinity non-NaN).
?C:.
?H:#$d_finitel HAS_FINITEL  /**/
?H:.
?LINT:set d_finitel
: see if finitel exists
set finitel d_finitel
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_finitel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Oldconfig.U,v 3.0.1.10 1997/02/28 15:06:39 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Oldconfig.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:06:39  ram
?RCS: patch61: added support for src.U
?RCS: patch61: new OSNAME define
?RCS: patch61: can now sense new OSes
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  13:40:51  ram
```

```
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:04:18  ram
?RCS: patch54: config.sh reload logic now knows about new -K switch
?RCS: patch54: cleaned up and extended osvers for DEC
 OSF/1 (ADO)
?RCS: patch54: added MachTen detection (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:13:41  ram
?RCS: patch51: adapted osvers computation for AIX (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1995/01/30  14:27:15  ram
?RCS: patch49: unit Options.U now exports file optdef.sh, not a variable
?RCS: patch49: update code for myuname changed (WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:15:36  ram
?RCS: patch45: added quotes around the INITPROG variable (ADO)
?RCS: patch45: allows variable overriding after config file loading
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:57:05  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: merged with the version used for perl5's Configure (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:24:17  ram
?RCS: patch23: added support for osf1 hints
?RCS: patch23: new support for solaris and i386 systems (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:05:02  ram
?RCS: patch16: added post-processing on myuname for Xenix targets
?RCS:
 patch16: message proposing config.sh defaults made consistent
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:32  ram
?RCS: patch10: force use of config.sh when -d option is used (WAD)
?RCS: patch10: complain about non-existent hint files (WAD)
?RCS: patch10: added Options dependency for fastread variable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit tries to remember what we did last time we ran Configure, mostly
?X: for the sake of setting defaults.
?X:
?MAKE:Oldconfig hint myuname osname osvers: Instruct Myread uname \
 Checkcc Mksymlinks run \
 sh awk sed test cat rm lns tr n c contains Loc Options Tr src trnl ln
?MAKE: -pick wipe $@ %<
```

```
?S:myuname:
?S: The output of 'uname -a' if available, otherwise the hostname.
?S: The whole thing is then lower-cased and slashes and single quotes are
?S: removed.
?S:.
?S:hint:
?S: Gives the type of hints used for previous answers. May be one of
?S: "default",
 "recommended" or "previous".
?S:.
?S:osname:
?S: This variable contains the operating system name (e.g. sunos,
?S: solaris, hpux, etc.).  It can be useful later on for setting
?S: defaults.  Any spaces are replaced with underscores.  It is set
?S: to a null string if we can't figure it out.
?S:.
?S:osvers:
?S: This variable contains the operating system version (e.g.
?S: 4.1.3, 5.2, etc.).  It is primarily used for helping select
?S: an appropriate hints file, but might be useful elsewhere for
?S: setting defaults.  It is set to '' if we can't figure it out.
?S: We try to be flexible about how much of the version number
?S: to keep, e.g. if 4.1.1, 4.1.2, and 4.1.3 are essentially the
?S: same for this package, hints files might just be os_4.0 or
?S: os_4.1, etc., not keeping separate files for each little release.
?S:.
?C:OSNAME:
?C: This symbol contains the name of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests
 from Configure are generally more reliable.
?C:.
?C:OSVERS:
?C: This symbol contains the version of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests from Configure are generally more reliable.
?C:.
?H:#define OSNAME "$osname"  /**/
?H:#define OSVERS "$osvers"  /**/
?H:.
?F:!config.sh
?T:tmp tmp_n tmp_c tmp_sh file
?T:xxxxfile xxxfile xxfile xfile hintfile newmyuname
?T:tans _ isesix INITPROG DJGPP
?D:osname=''
?LINT:change n c sh
?LINT:extern targetarch
?LINT:extern hostarch
```

```
?LINT:change hostarch
?LINT:extern is_os2
: Try to determine whether config.sh was made on this system
case "$config_sh" in
")
?X: indentation wrong on purpose--RAM
?X: Leave a white space between first two '(' for ksh. The sub-shell is needed
?X: on some machines to avoid the error message when uname is not found; e.g.
?X: old SUN-OS 3.2 would not execute hostname in (uname -a || hostname). Sigh!
?X: Now not using a subshell but instead $test.
myuname=`$uname
 -a 2>/dev/null`
$test -z "$myuname" && myuname=`hostname 2>/dev/null`
# Downcase everything to avoid ambiguity.
# Remove slashes and single quotes so we can use parts of this in
# directory and file names.
# Remove newlines so myuname is sane to use elsewhere.
# tr '[A-Z]' '[a-z]' would not work in EBCDIC
# because the A-Z/a-z are not consecutive.
myuname=`echo $myuname | $sed -e "s,['/],,g" | \
 ./tr '[A-Z]' '[a-z]' | $tr $trnl ' '`
?X: Save the value we just computed to reset myuname after we get done here.
newmyuname="$myuname"
dflt=n
case "$knowitall" in
")
 if test -f ../config.sh; then
  if $contains myuname= ../config.sh >/dev/null 2>&1; then
   eval "`grep myuname= ../config.sh`"
  fi
  if test "X$myuname" = "X$newmyuname"; then
   dflt=y
  fi
 fi
 ;;
*) dflt=y;;
esac

@if {test -d ../hints}
: Get old answers from old config file if Configure was run on the
: same system, otherwise use the hints.
hint=default
cd ..
?X: Since we are now at the root of the source
 tree, we must use $src
?X: to access the sources and not $rsrc. See src.U for details...
if test -f config.sh; then
 echo " "
```

```
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . UU/myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it."
  mv config.sh config.sh.old
  myuname="$newmyuname"
  ;;
 *)  echo "Fetching default answers from your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  tmp_sh="$sh"
  . ./config.sh
  cp config.sh UU
  n="$tmp_n"
  c="$tmp_c"
  : Older versions did not always set $sh.  Catch re-use of such
  : an old config.sh.
  case "$sh" in
  ") sh="$tmp_sh" ;;
  esac
  hint=previous
  ;;
 esac
fi
. ./UU/checkcc
if test ! -f config.sh; then
 $cat <<EOM

First time through, eh?  I have some defaults handy for some systems
that need some extra help getting the Configure answers right:

EOM
 (cd $src/hints; ls -C *.sh) | $sed 's/\.sh/   /g' >&4
 dflt="
 : Half the following guesses are probably wrong... If you have better
 : tests or hints,
 please send them to <MAINTLOC>
 : The metaconfig authors would also appreciate a copy...
 $test -f /irix && osname=irix
 $test -f /xenix && osname=sco_xenix
 $test -f /dynix && osname=dynix
 $test -f /dnix && osname=dnix
 $test -f /lynx.os && osname=lynxos
 $test -f /unicos && osname=unicos && osvers=`$uname -r`
 $test -f /unicosmk && osname=unicosmk && osvers=`$uname -r`
 $test -f /unicosmk.ar && osname=unicosmk && osvers=`$uname -r`
 $test -f /bin/mips && /bin/mips && osname=mips
 $test -d /usr/apollo/bin && osname=apollo
```

```
 $test -f /etc/saf/_sactab && osname=svr4
 $test -d /usr/include/minix && osname=minix && osvers=`$uname -r`
 $test -f /system/gnu_library/bin/ar.pm && osname=vos
 $test -f /sys/utilities/MultiView && osname=amigaos
 if $test -d /MachTen -o -d /MachTen_Folder; then
?X:  MachTen uname -a output looks like
?X:  xxx 4 0.0 Macintosh
?X:  MachTen /sbin/version output looks like
?X:  MachTen 4.0 Mon Aug 28 10:18:00 1995
?X:  MachTen 3.x had the 'version' command in /usr/etc/version.
  osname=machten
  if
 $test -x /sbin/version; then
   osvers=`/sbin/version | $awk '{print $2}' |
   $sed -e 's/[A-Za-z]$//'`
  elif $test -x /usr/etc/version; then
   osvers=`/usr/etc/version | $awk '{print $2}' |
   $sed -e 's/[A-Za-z]$//'`
  else
   osvers="$2.$3"
  fi
 fi

 $test -f /sys/posix.dll &&
  $test -f /usr/bin/what &&
  set X `/usr/bin/what /sys/posix.dll` &&
  $test "$3" = UWIN &&
  osname=uwin &&
  osvers="$5"

?X: If we have uname, we already computed a suitable uname -a output,
?X: and it lies in $myuname.
 if $test -f $uname; then
  set X $myuname
  shift

  case "$5" in
  fps*) osname=fps ;;
  mips*)
   case "$4" in
   umips) osname=umips ;;
   *) osname=mips ;;
   esac;;
  [23]100) osname=mips ;;
?X: Interactive Unix.
  i386*)
   tmp=`/bin/uname -X 2>/dev/null|awk '/3\.2v[45]/{ print $(NF) }'`
   if $test "$tmp" != "" -a "$3" = "3.2" -a -f '/etc/systemid'; then
```

```
    osname='sco'
    osvers=$tmp
   elif $test -f /etc/kconfig; then
    osname=isc
    if
 test "$lns" = "$ln -s"; then
     osvers=4
    elif $contains _SYSV3 /usr/include/stdio.h > /dev/null 2>&1 ; then
     osvers=3
    elif $contains _POSIX_SOURCE /usr/include/stdio.h > /dev/null 2>&1 ; then
     osvers=2
    fi
   fi
   tmp=''
   ;;
?X: MS-DOS djgpp uname -a output looks like:
?X: ms-dos xxx 6 22 pc
?X:  $1 is the "dos flavor" (need not be "ms-dos").
?X:  $2 is the node name
?X:  $3 and $4 are version/subversion
?X:  $5 is always "pc", but that might not be unique to DJGPP.
?X: (e.g. Solaris_x86 has $5 = i86pc, which doesn't actually conflict,
?X: but it's close enough that I can easily imagine other vendors also
?X: using variants of pc* in $5.)
?X:  The "DJGPP" environment variable is always set when djgpp is active.
  pc*)
   if test -n "$DJGPP"; then
    osname=dos
    osvers=djgpp
   fi
   ;;
  esac

  case "$1" in
  aix) osname=aix
?X: aix 4.1 uname -a output looks like
?X:  AIX  foo  1 4 000123456789
?X: where $4 is the major release number and $3 is the (minor)
 version.
?X: More detail on the version is available with the oslevel command.
?X: in 3.2.x, it output a string (see case statements below).  In 4.1,
?X: it puts out something like  4.1.1.0
   tmp=`( (oslevel) 2>/dev/null || echo "not found") 2>&1`
   case "$tmp" in
   # oslevel can fail with:
   # oslevel: Unable to acquire lock.
   *not\ found) osvers="$4"."$3" ;;
   '<3240'|'<>3240') osvers=3.2.0 ;;
```

```
  '=3240'|'>3240'|'<3250'|'<>3250') osvers=3.2.4 ;;
  '=3250'|'>3250') osvers=3.2.5 ;;
  *) osvers=$tmp;;
  esac
  ;;
 bitrig) osname=bitrig
  osvers="$3"
  ;;
 bsd386) osname=bsd386
  osvers=`$uname -r`
  ;;
 cygwin*) osname=cygwin
  osvers="$3"
  ;;
 *dc.osx) osname=dcosx
  osvers="$3"
  ;;
 dnix) osname=dnix
  osvers="$3"
  ;;
 domainos) osname=apollo
  osvers="$3"
  ;;
 dgux) osname=dgux
  osvers="$3"
  ;;
 dragonfly) osname=dragonfly
  osvers="$3"
  ;;
?X:  uname -a returns
?X:  DYNIX/ptx xxx 4.0 V4.1.2 i386
 dynixptx*) osname=dynixptx
  osvers=`echo
 "$4"|sed 's/^v//'`
  ;;
 freebsd) osname=freebsd
  osvers="$3" ;;
 genix) osname=genix ;;
?X: GNU/Hurd uname -a gives something like:
?X: GNU foo 0.3 GNU-Mach 1.4/Hurd-0.3 i386-AT386 GNU
?X: GNU gnu 0.3 GNUmach-1.2/Hurd-0.3 i386-AT386 GNU
?X: Note the hostname on the second one, which will fool Configure
?X: into using the SysV case!
 gnu) osname=gnu
  osvers="$3" ;;
?X: HP-UX uname -a gives something like
?X: HP-UX foobar B.10.20 A 9000/735 2016483812 two-user license
?X: Preserve the full 10.20 string instead of the previous plain '10'.
```

```
?X:  Thanks to Graham Barr.    --AD 6/30/1998
  hp*) osname=hpux
   osvers=`echo "$3" | $sed 's,.*\.\([0-9]*\.[0-9]*\),\1,'`
   ;;
  irix*) osname=irix
   case "$3" in
   4*) osvers=4 ;;
   5*) osvers=5 ;;
   *) osvers="$3" ;;
   esac
   ;;
  linux) osname=linux
   case "$3" in
   *) osvers="$3" ;;
   esac
   $test -f /system/lib/libandroid.so && osname=linux-android
   ;;
  MiNT) osname=mint
   ;;
  minix) osname=minix
   osvers=`$uname -r`
   ;;
  netbsd*)
 osname=netbsd
   osvers="$3"
   ;;
  news-os) osvers="$3"
   case "$3" in
   4*) osname=newsos4 ;;
   *) osname=newsos ;;
   esac
   ;;
  nonstop-ux) osname=nonstopux ;;
  openbsd) osname=openbsd
   osvers="$3"
   ;;
  os2) osname=os2
   osvers="$4"
   ;;
  POSIX-BC | posix-bc ) osname=posix-bc
   osvers="$3"
   ;;
  powerux | power_ux | powermax_os | powermaxos | \
  powerunix | power_unix) osname=powerux
   osvers="$3"
   ;;
  qnx) osname=qnx
   osvers="$4"
```

```
  ;;
 solaris) osname=solaris
  case "$3" in
  5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
  *) osvers="$3" ;;
  esac
  ;;
 sunos) osname=sunos
  case "$3" in
  5*) osname=solaris
   osvers=`echo $3 | $sed 's/^5/2/g'` ;;
  *) osvers="$3" ;;
  esac
  ;;
 titanos) osname=titanos
  case "$3" in
  1*) osvers=1 ;;
  2*) osvers=2 ;;
  3*) osvers=3 ;;
  4*) osvers=4 ;;
  *) osvers="$3" ;;
  esac
  ;;
 ultrix) osname=ultrix
  osvers="$3"
  ;;
 osf1|mls+) case "$5" in
   alpha)
?X: DEC OSF/1 myuname
 -a output looks like:  osf1 xxxx t3.2 123.4 alpha
?X: where the version number can be something like [xvt]n.n
    osname=dec_osf
?X: sizer knows the minor minor version: the letter
    osvers=`sizer -v | awk -FUNIX '{print $2}' | awk '{print $1}' |  tr '[A-Z]' '[a-z]' | sed 's/^[xvt]//'`
    case "$osvers" in
    [1-9].[0-9]*) ;;
    *) osvers=`echo "$3" | sed 's/^[xvt]//'` ;;
    esac
    ;;
  hp*) osname=hp_osf1 ;;
  mips) osname=mips_osf1 ;;
?X: hp and mips were unsupported Technology Releases -- ADO, 24/10/94
  esac
  ;;
 # UnixWare 7.1.2 is known as Open UNIX 8
 openunix|unixware) osname=svr5
  osvers="$4"
  ;;
```

```
 uts) osname=uts
  osvers="$3"
  ;;
 vos) osvers="$3"
  ;;
 $2) case "$osname" in
  *isc*) ;;
  *freebsd*) ;;
  svr*)
   : svr4.x or possibly later
   case "svr$3" in
   ${osname}*)
    osname=svr$3
    osvers=$4
    ;;
   esac
   case "$osname" in
   svr4.0)
    : Check for ESIX
    if test -f /stand/boot ; then
     eval `grep '^INITPROG=[a-z/0-9]*$'
/stand/boot`
     if test -n "$INITPROG" -a -f "$INITPROG"; then
  isesix=`strings -a $INITPROG|grep 'ESIX SYSTEM V/386 Release 4.0'`
      if test -n "$isesix"; then
       osname=esix4
      fi
     fi
    fi
    ;;
   esac
   ;;
  *) if test -f /etc/systemid; then
    osname=sco
    set `echo $3 | $sed 's/\./ /g'` $4
    if $test -f $src/hints/sco_$1_$2_$3.sh; then
     osvers=$1.$2.$3
    elif $test -f $src/hints/sco_$1_$2.sh; then
     osvers=$1.$2
    elif $test -f $src/hints/sco_$1.sh; then
     osvers=$1
    fi
   else
    case "$osname" in
    ") : Still unknown.  Probably a generic Sys V.
     osname="sysv"
     osvers="$3"
     ;;
```

```
    esac
   fi
   ;;
  esac
  ;;
 *) case "$osname" in
  ") : Still unknown.  Probably a generic BSD.
   osname="$1"
   osvers="$3"
   ;;
  esac
  ;;
 esac
else
?X: Try to identify sony's NEWS-OS (BSD unix)
 if test -f /vmunix -a -f $src/hints/news_os.sh; then
  (what /vmunix | UU/tr '[A-Z]'
'[a-z]') > UU/kernel.what 2>&1
  if $contains news-os UU/kernel.what >/dev/null 2>&1; then
   osname=news_os
  fi
  $rm -f UU/kernel.what
?X: Maybe it's OS/2 or DOS or something similar
 elif test -d c:/. -o -n "$is_os2" ; then
  set X $myuname
  osname=os2
  osvers="$5"
 fi
fi

    case "$targetarch" in
    ") ;;
    *)  hostarch=$osname
        case "$targetarch" in
            nto*|*-nto-*)
                # Will load qnx.sh, which should change osname to nto
                osname=qnx
                osvers="
                ;;
            *linux-android*)
                # Catch arm-linux-androideabi, mipsel-linux-android,
                # and i686-linux-android
                osname=linux-android
                osvers="
                ;;
            *linux*)
                # Something like arm-linux-gnueabihf is really just
                # plain linux.
```

```
                osname=linux

                osvers=''
                ;;
            *solaris*|*sunos*)
                osname=solaris
                # XXX perhaps we should just assume
                # osvers to be 2, or maybe take the value
                # from targetarch. Using $run before the
                # hints are run is somewhat icky.
                set X `$run $uname -a 2>/dev/null`
                shift
                case "$3" in
                    5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
                    *)  osvers="$3" ;;
                esac
                ;;
            *)
    osname=`echo $targetarch|sed 's,^[^-]*-,,'`
    osvers=''
            ;;
        esac
        ;;
     esac

: Now look for a hint file osname_osvers, unless one has been
: specified already.
case "$hintfile" in
''|' ')
 file=`echo "${osname}_${osvers}" | $sed -e 's%\.%_%g' -e 's%_$%%'`
 : Also try without trailing minor version
numbers.
 xfile=`echo $file | $sed -e 's%_[^_]*$%%'`
 xxfile=`echo $xfile | $sed -e 's%_[^_]*$%%'`
 xxxfile=`echo $xxfile | $sed -e 's%_[^_]*$%%'`
 xxxxfile=`echo $xxxfile | $sed -e 's%_[^_]*$%%'`
 case "$file" in
 '') dflt=none ;;
 *)  case "$osvers" in
  '') dflt=$file
   ;;
  *)  if $test -f $src/hints/$file.sh ; then
    dflt=$file
   elif $test -f $src/hints/$xfile.sh ; then
    dflt=$xfile
   elif $test -f $src/hints/$xxfile.sh ; then
    dflt=$xxfile
   elif $test -f $src/hints/$xxxfile.sh ; then
```

```
    dflt=$xxxfile
   elif $test -f $src/hints/$xxxxfile.sh ; then
    dflt=$xxxxfile
   elif $test -f "$src/hints/${osname}.sh" ; then
    dflt="${osname}"
   else
    dflt=none
   fi
   ;;
  esac
  ;;
 esac
 if $test -f Policy.sh ; then
  case "$dflt" in
  *Policy*) ;;
  none) dflt="Policy" ;;
  *) dflt="Policy $dflt" ;;
  esac
 fi
 ;;
*)
 dflt=`echo $hintfile | $sed 's/\.sh$//'`
 ;;
esac

if $test -f Policy.sh ; then
 $cat <<EOM

There's also
 a Policy hint file available, which should make the
site-specific (policy) questions easier to answer.
EOM

 fi

 $cat <<EOM

You may give one or more space-separated answers, or "none" if appropriate.
If you have a handcrafted Policy.sh file or a Policy.sh file generated by a
previous run of Configure, you may specify it as well as or instead of
OS-specific hints.  If hints are provided for your OS, you should use them:
although Perl can probably be built without hints on many platforms, using
hints often improve performance and may enable features that Configure can't
set up on its own. If there are no hints that match your OS, specify "none";
DO NOT give a wrong version or a wrong OS.

EOM
```

```
 rp="Which of these apply, if any?"
 . UU/myread
 tans=$ans
 for file in $tans; do
  if $test X$file = XPolicy -a -f Policy.sh; then
   . Policy.sh
   $cat Policy.sh >> UU/config.sh
  elif $test -f $src/hints/$file.sh; then
   . $src/hints/$file.sh
   $cat $src/hints/$file.sh >> UU/config.sh
  elif
 $test X"$tans" = X -o X"$tans" = Xnone ; then
   : nothing
  else
   : Give one chance to correct a possible typo.
   echo "$file.sh does not exist"
   dflt=$file
   rp="hint to use instead?"
   . UU/myread
   for file in $ans; do
    if $test -f "$src/hints/$file.sh"; then
     . $src/hints/$file.sh
     $cat $src/hints/$file.sh >> UU/config.sh
    elif $test X$ans = X -o X$ans = Xnone ; then
     : nothing
    else
     echo "$file.sh does not exist -- ignored."
    fi
   done
  fi
 done

 hint=recommended
 : Remember our hint file for later.
 if $test -f "$src/hints/$file.sh" ; then
  hintfile="$file"
 else
  hintfile=''
 fi
fi
cd UU
?X: From here on, we must use $rsrc instead of $src
@else
: Get old answers, if there is a config file out there
hint=default
hintfile=''
if test -f ../config.sh; then
 echo " "
```

```
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . ./myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it.";;
 *)  echo "Fetching default answers from
 your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  . ../config.sh
  cp ../config.sh .
  n="$tmp_n"
  c="$tmp_c"
  hint=previous
  ;;
 esac
fi
@end
?X: remember, indentation is wrong--RAM
;;
*)
 echo " "
 echo "Fetching default answers from $config_sh..." >&4
 tmp_n="$n"
 tmp_c="$c"
 cd ..
?X: preserve symbolic links, if any
 cp $config_sh config.sh 2>/dev/null
 chmod +w config.sh
 . ./config.sh
 cd UU
 cp ../config.sh .
 n="$tmp_n"
 c="$tmp_c"
 hint=previous
 ;;
esac
. ./optdef.sh

: Restore computed paths
for file in $loclist $trylist; do
 eval $file="\$_$file"
done

@if osname || osvers
cat << EOM

Configure uses the operating system name and version to set some defaults.
The default value is probably right if the name rings a bell. Otherwise,
```

```
since spelling matters for me, either accept the default or answer "none"
to leave it blank.

EOM
@end
@if osname
case "$osname" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *)  dflt=`echo $hintfile | $sed -e 's/\.sh$//'
 -e 's/_.*$//'` ;;
  esac
  ;;
 *) dflt="$osname" ;;
esac
rp="Operating system name?"
. ./myread
case "$ans" in
none)  osname=" ;;
*) osname=`echo "$ans" | $sed -e 's/[  ][ ]*/_/g' | ./tr '[A-Z]' '[a-z]'`;;
esac
@end
@if osvers
@if osname
echo " "
@end
case "$osvers" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *) dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/^[^_]*//'`
   dflt=`echo $dflt | $sed -e 's/^_//' -e 's/_./g'`
   case "$dflt" in
   "|' ') dflt=none ;;
   esac
   ;;
  esac
  ;;
 *) dflt="$osvers" ;;
esac
rp="Operating system version?"
. ./myread
case "$ans" in
none)  osvers=" ;;
*) osvers="$ans" ;;
esac
```

```
@end

. ./posthint.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Oldconfig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nis.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:17:38  ram
?RCS: patch61: ensure suitable defaults for hostcat and friends
?RCS:
?RCS: Revision 3.0.1.2  1995/03/21  08:48:34  ram
?RCS: patch52: continued fix for NeXT NIS/NetInfo handling
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:16:23  ram
?RCS: patch51: now correctly handles NeXT using NIS rather than NetInfo
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:passcat groupcat hostcat:
 Myread Oldconfig test contains
?MAKE: -pick add $@ %<
?S:passcat:
?S: This variable contains a command that produces the text of the
?S: /etc/passwd file.  This is normally "cat /etc/passwd", but can be
?S: "ypcat passwd" when NIS is used.
?S:.
?S:groupcat:
?S: This variable contains a command that produces the text of the
?S: /etc/group file.  This is normally "cat /etc/group", but can be
?S: "ypcat group" when NIS is used.
?S:.
?S:hostcat:
?S: This variable contains a command that produces the text of the
?S: /etc/hosts file.  This is normally "cat /etc/hosts", but can be
?S: "ypcat hosts" when NIS is used.
```

```
?S:.
: see if we have to deal with yellow pages, now NIS.
?X: NeXT gives us some fun here, as always, by having both NIS (former YP)
?X: and NetInfo. But since it has both, it's ok to put the test inside the if.
?X: Contributed by Thomas Neumann <tom@smart.bo.open.de>.
if $test -d /usr/etc/yp || $test -d /etc/yp || $test -d /usr/lib/yp; then
 if $test -f /usr/etc/nibindd; then
  echo
 " "
  echo "I'm fairly confident you're on a NeXT."
@if passcat || groupcat
  echo " "
  rp='Do you get the passwd file via NetInfo?'
  dflt=y
  case "$passcat" in
  nidump*) ;;
  ") ;;
  *) dflt=n;;
  esac
  . ./myread
  case "$ans" in
  y*) passcat='nidump passwd .'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='nidump group .'
@end
   ;;
  *) echo "You told me, so don't blame me."
   case "$passcat" in
   nidump*) passcat="
@if groupcat
     groupcat=";;
@end
   esac
@if groupcat
   echo "(Assuming /etc/group is handled the same way.)"
@end
   ;;
  esac
@end
@if hostcat
  echo " "
  rp='Do you get the hosts file via NetInfo?'
  dflt=y
  case "$hostcat" in
  nidump*) ;;
  ") ;;
  *) dflt=n;;
```

```
  esac
  . ./myread
  case "$ans" in
  y*) hostcat='nidump hosts .';;
  *) case "$hostcat" in
   nidump*) hostcat="';;
   esac
   ;;
  esac
@end
 fi
@if passcat || groupcat
 case "$passcat" in
 nidump*) ;;
 *)
  case "$passcat" in
  *ypcat*) dflt=y;;
  ")
 if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the passwd file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) passcat='ypcat passwd'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='ypcat group'
@end
   ;;
  *) passcat='cat /etc/passwd'
@if groupcat
   echo "(Assuming /etc/group is also local.)"
   groupcat='cat /etc/group'
@end
   ;;
  esac
  ;;
 esac
@end
@if hostcat
 case "$hostcat" in
 nidump*) ;;
```

```
 *)
  case "$hostcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the hosts file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) hostcat='ypcat hosts';;
  *) hostcat='cat /etc/hosts';;
  esac
  ;;
 esac
@end
fi
?X: Ensure suitable default -- Manoj Srivastava
case "$hostcat" in
") hostcat=':'
 $test -f /etc/hosts && hostcat='cat
 /etc/hosts';;
esac
case "$groupcat" in
") groupcat=':'
 $test -f /etc/group && groupcat='cat /etc/group';;
esac
case "$passcat" in
") passcat=':'
 $test -f /etc/passwd && passcat='cat /etc/passwd';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:use64bitint use64bitall archname64: Myread Oldconfig Setvar test \
```

```
 usemorebits longsize ccflags d_quad uquadtype Compile rm_try run
?MAKE: -pick add $@ %<
?Y:TOP
?S:use64bitint:
?S: This variable conditionally defines the USE_64_BIT_INT symbol,
?S: and indicates that 64-bit integer types should be used
?S: when available.  The minimal possible 64-bitness
?S: is employed, just enough to get 64-bit integers into Perl.
?S: This may mean using for example "long longs", while your memory
?S: may still be limited to 2 gigabytes.
?S:.
?S:use64bitall:
?S: This variable conditionally defines the USE_64_BIT_ALL symbol,
?S: and indicates that 64-bit integer types should be used
?S: when available.  The maximal
 possible
?S: 64-bitness is employed: LP64 or ILP64, meaning that you will
?S: be able to use more than 2 gigabytes of memory.  This mode is
?S: even more binary incompatible than USE_64_BIT_INT. You may not
?S: be able to run the resulting executable in a 32-bit CPU at all or
?S: you may need at least to reboot your OS to 64-bit mode.
?S:.
?S:archname64:
?S: This variable is used for the 64-bitness part of $archname.
?S:.
?C:USE_64_BIT_INT:
?C: This symbol, if defined, indicates that 64-bit integers should
?C: be used when available.  If not defined, the native integers
?C: will be employed (be they 32 or 64 bits).  The minimal possible
?C: 64-bitness is used, just enough to get 64-bit integers into Perl.
?C: This may mean using for example "long longs", while your memory
?C: may still be limited to 2 gigabytes.
?C:.
?C:USE_64_BIT_ALL:
?C: This symbol, if defined, indicates that 64-bit integers should
?C: be used when available.  If not defined, the native integers
?C: will be used (be
 they 32 or 64 bits).  The maximal possible
?C: 64-bitness is employed: LP64 or ILP64, meaning that you will
?C: be able to use more than 2 gigabytes of memory.  This mode is
?C: even more binary incompatible than USE_64_BIT_INT. You may not
?C: be able to run the resulting executable in a 32-bit CPU at all or
?C: you may need at least to reboot your OS to 64-bit mode.
?C:.
?H:?%<:#ifndef USE_64_BIT_INT
?H:?%<:#$use64bitint USE_64_BIT_INT  /**/
?H:?%<:#endif
?H:?%<:#ifndef USE_64_BIT_ALL
```

```
?H:?%<:#$use64bitall USE_64_BIT_ALL  /**/
?H:?%<:#endif
?H:.
?INIT:archname64="
?LINT:extern ccflags
?LINT:use usemorebits
?LINT:extern use64bits
?LINT:extern uselonglong
?LINT:extern uselonglongs
?LINT:extern use64bitints
?LINT:extern use64bitsint
?LINT:extern use64bitsall
?T:libcquad
?F:!try
?F:!use64bitint.cbu
?F:!use64bitall.cbu
: Do we want 64bit support
case "$uselonglong" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duselonglong is deprecated, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case
 "$use64bits" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duse64bits is deprecated, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitints" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitints, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitsint" in
"$define"|true|[yY]*)
 cat <<EOM >&4
```

```
*** There is no Configure -Duse64bitsint, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$uselonglongs" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duselonglongs, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitsall" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitsall, using -Duse64bitall instead.
EOM
 use64bitall="$define"
 ;;
esac

case "$ccflags" in
*-DUSE_LONG_LONG*|*-DUSE_64_BIT_INT*|*-DUSE_64_BIT_ALL*) use64bitint="$define";;
esac
case "$use64bitall" in
"$define"|true|[yY]*)
 use64bitint="$define" ;;
esac

case "$longsize" in
8) cat <<EOM

You have natively 64-bit long integers.
EOM
  val="$define"
  ;;
*) case "$use64bitint" in
  "$define"|true|[yY]*) dflt='y';;
  *) dflt='n';;
  esac
  case "$d_quad" in
  "$define") ;;
  *) dflt='n' ;;
  esac
```

```
  cat <<EOM

Perl can be built to take advantage of 64-bit integer types
on some systems.  To do so, Configure can be run with -Duse64bitint.
Choosing this option will most probably introduce binary incompatibilities.

If this doesn't make any sense to you, just accept the default '$dflt'.
(The default has been chosen based on your configuration.)
EOM
  rp='Try to use 64-bit integers, if available?'
  . ./myread
  case "$ans" in
  [yY]*) val="$define" ;;
  *)     val="$undef"  ;;
  esac
  ;;
esac
set use64bitint
eval $setvar

case "$use64bitall" in
"$define"|true|[yY]*) dflt='y' ;;
*) case "$longsize" in
  8) dflt='y' ;;
  *) dflt='n' ;;
  esac
  ;;
esac
cat <<EOM

You may also
 choose to try maximal 64-bitness.  It means using as much
64-bitness as possible on the platform.  This in turn means even more
binary incompatibilities.  On the other hand, your platform may not
have any more 64-bitness available than what you already have chosen.

If this doesn't make any sense to you, just accept the default '$dflt'.
(The default has been chosen based on your configuration.)
EOM
rp='Try to use maximal 64-bit support, if available?'
. ./myread
case "$ans" in
[yY]*) val="$define" ;;
*)     val="$undef"  ;;
esac
set use64bitall
eval $setvar
case "$use64bitall" in
```

```
"$define")
 case "$use64bitint" in
 "$undef")
  cat <<EOM

Since you have chosen a maximally 64-bit build, I'm also turning on
the use of 64-bit integers.
EOM
  use64bitint="$define" ;;
 esac
 ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a 64-bit perl is to be built,
: we may need to set or change some other defaults.
if $test -f use64bitint.cbu; then
 echo "Your
 platform has some specific hints regarding 64-bit integers, using them..."
 . ./use64bitint.cbu
fi
case "$use64bitint" in
"$define"|true|[yY]*)
 : This test was common to all the OpenBSD forks, and seems harmless for
 : other platforms:
 echo " "
 echo "Checking if your C library has broken 64-bit functions..." >&4
 cat >try.c <<EOCP
#include <stdio.h>
typedef $uquadtype myULL;
int main (void)
{
   struct {
 double d;
 myULL  u;
   } *p, test[] = {
 {4294967303.15, 4294967303ULL},
 {4294967294.2,  4294967294ULL},
 {4294967295.7,  4294967295ULL},
 {0.0, 0ULL}
   };
   for (p = test; p->u; p++) {
 myULL x = (myULL)p->d;
 if (x != p->u) {
     printf("buggy\n");
     return 0;
 }
   }
```

```
  printf("ok\n");
  return 0;
}
EOCP
 set try
 if eval $compile_ok; then
    libcquad=`$run ./try`
    echo "Your C library's 64-bit functions are $libcquad."
 else
    echo "(I can't seem to compile the test program.)"
    echo "Assuming that your C library's 64-bit functions are ok."
    libcquad="ok"
 fi
 $rm_try

 case
 "$libcquad" in
    buggy*)
  cat >&4 <<EOM

*** You have a C library with broken 64-bit functions.
*** 64-bit support does not work reliably in this configuration.
*** Please rerun Configure without -Duse64bitint and/or -Dusemorebits.
*** Cannot continue, aborting.

EOM
  exit 1
  ;;
 esac
 case "$longsize" in
 4) case "$archname64" in
    ") archname64=64int ;;
    esac
    ;;
 esac
 ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a maximally 64-bit perl is to be built,
: we may need to set or change some other defaults.
if $test -f use64bitall.cbu; then
 echo "Your platform has some specific hints regarding 64-bit builds, using them..."
 . ./use64bitall.cbu
fi
case "$use64bitall" in
"$define"|true|[yY]*)
 case "$longsize" in
```

```
 4) case "$archname64" in
    "|64int) archname64=64all ;;
    esac
    ;;
 esac
 ;;
esac

case "$d_quad:$use64bitint" in
$undef:$define)
 cat >&4 <<EOF

*** You have chosen to use 64-bit
 integers,
*** but none can be found.
*** Please rerun Configure without -Duse64bitint and/or -Dusemorebits.
*** Cannot continue, aborting.

EOF
 exit 1
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/use64bits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_select.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_select.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_select: Inlibc
?MAKE: -pick add $@ %<
?S:d_select:
?S: This variable conditionally defines HAS_SELECT if select() is
?S: available to select active file descriptors. A <sys/time.h>
?S: inclusion may be necessary for the timeout field.
?S:.
```

```
?C:HAS_SELECT:
?C: This symbol, if defined, indicates that the select routine is
?C: available
 to select active file descriptors. If the timeout field
?C: is used, <sys/time.h> may need to be included.
?C:.
?H:#$d_select HAS_SELECT /**/
?H:.
?LINT:set d_select
: see if select exists
set select d_select
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_select.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ctime_r ctime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_ctime_r:
?S: This variable conditionally defines the HAS_CTIME_R symbol,
?S: which indicates to the C program that the ctime_r()
?S: routine is available.
?S:.
?S:ctime_r_proto:
?S: This variable encodes the prototype of ctime_r.
?S: It is zero if d_ctime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctime_r
?S: is defined.
?S:.
?C:HAS_CTIME_R:
?C: This symbol, if defined, indicates that the ctime_r routine
?C: is available to ctime re-entrantly.
?C:.
?C:CTIME_R_PROTO:
?C: This
 symbol encodes the prototype of ctime_r.
?C: It is zero if d_ctime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctime_r
```

```
?C: is defined.
?C:.
?H:#$d_ctime_r HAS_CTIME_R /**/
?H:#define CTIME_R_PROTO $ctime_r_proto /**/
?H:.
?T:try hdrs d_ctime_r_proto
: see if ctime_r exists
set ctime_r d_ctime_r
eval $inlibc
case "$d_ctime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_ctime_r_proto:$usethreads" in
 ":define") d_ctime_r_proto=define
  set d_ctime_r_proto ctime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ctime_r_proto" in
 define)
 case "$ctime_r_proto" in
 "|0) try='char* ctime_r(const time_t*, char*);'
 ./protochk "$extern_C $try" $hdrs && ctime_r_proto=B_SB ;;
 esac
 case "$ctime_r_proto" in
 "|0) try='char* ctime_r(const time_t*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && ctime_r_proto=B_SBI ;;
 esac
 case "$ctime_r_proto" in
 "|0) try='int ctime_r(const
 time_t*, char*);'
 ./protochk "$extern_C $try" $hdrs && ctime_r_proto=I_SB ;;
 esac
 case "$ctime_r_proto" in
 "|0) try='int ctime_r(const time_t*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && ctime_r_proto=I_SBI ;;
 esac
 case "$ctime_r_proto" in
 "|0) d_ctime_r=undef
  ctime_r_proto=0
  echo "Disabling ctime_r, cannot determine prototype." >&4 ;;
 * ) case "$ctime_r_proto" in
  REENTRANT_PROTO*) ;;
  *) ctime_r_proto="REENTRANT_PROTO_$ctime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
```

```
 *) case "$usethreads" in
  define) echo "ctime_r has no prototype, not using it." >&4 ;;
  esac
  d_ctime_r=undef
  ctime_r_proto=0
  ;;
 esac
 ;;
*) ctime_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ctime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pathconf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pathconf.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:54  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_pathconf d_fpathconf: Inlibc
?MAKE: -pick add $@ %<
?S:d_pathconf:
?S: This variable conditionally defines the HAS_PATHCONF symbol, which
?S: indicates to the C program that the pathconf() routine is available
?S: to determine file-system related limits and options
 associated
?S: with a given filename.
?S:.
?S:d_fpathconf:
?S: This variable conditionally defines the HAS_FPATHCONF symbol, which
?S: indicates to the C program that the pathconf() routine is available
?S: to determine file-system related limits and options associated
?S: with a given open file descriptor.
?S:.
?C:HAS_PATHCONF:
```

```
?C: This symbol, if defined, indicates that pathconf() is available
?C: to determine file-system related limits and options associated
?C: with a given filename.
?C:.
?C:HAS_FPATHCONF:
?C: This symbol, if defined, indicates that pathconf() is available
?C: to determine file-system related limits and options associated
?C: with a given open file descriptor.
?C:.
?H:#$d_pathconf HAS_PATHCONF  /**/
?H:#$d_fpathconf HAS_FPATHCONF  /**/
?H:.
?LINT:set d_pathconf
?LINT:set d_fpathconf
: see if pathconf exists
set pathconf d_pathconf
eval $inlibc

@if d_fpathconf || HAS_FPATHCONF
: see if fpathconf exists
set fpathconf d_fpathconf
eval $inlibc

@end
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pathconf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_lseekproto: Hasproto i_systypes i_unistd
?MAKE: -pick add $@ %<
?S:d_lseekproto:
?S: This variable conditionally defines the HAS_LSEEK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the lseek() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
```

```
?C:HAS_LSEEK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the lseek() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern
 off_t lseek(int, off_t, int);
?C:.
?H:#$d_lseekproto HAS_LSEEK_PROTO /**/
?H:.
?LINT:set d_lseekproto
: see if prototype for lseek is available
echo " "
set d_lseekproto lseek $i_systypes sys/types.h $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_lseekproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysselct.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysselct.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:01:33  ram
?RCS: patch6: added default for i_sysselct
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/select.h> exists
?X:
?MAKE:i_sysselct: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysselct:
?S: This variable conditionally defines I_SYS_SELECT, which indicates
?S: to the C program that it should include <sys/select.h> in
 order to
?S: get the definition of struct timeval.
?S:.
?C:I_SYS_SELECT (I_SYSSELECT):
```

```
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/select.h> in order to get definition of struct timeval.
?C:.
?H:#$i_sysselct I_SYS_SELECT /**/
?H:.
?D:i_sysselct="
?LINT:set i_sysselct
: see if sys/select.h has to be included
set sys/select.h i_sysselct
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysselct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_endpwent.U,v $
?RCS:
?MAKE:d_endpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endpwent:
?S: This variable conditionally defines the HAS_ENDPWENT symbol, which
?S: indicates to the C program that the endpwent() routine is available
?S: for sequential access of the passwd database.
?S:.
?C:HAS_ENDPWENT:
?C: This symbol, if defined, indicates that the endpwent routine is
?C: available for finalizing sequential access of the passwd database.
?C:.
?H:#$d_endpwent HAS_ENDPWENT  /**/
?H:.
?LINT:set d_endpwent
: see if endpwent exists
set endpwent d_endpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Options.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:08:15  ram
?RCS: patch61: optdef.sh now starts with a "startsh"
?RCS: patch61: moved some code from Head.U
?RCS:
?RCS: Revision 3.0.1.6  1995/09/25  09:14:46  ram
?RCS: patch59: protected option parsing code against 'echo -*' option failure
?RCS:
?RCS: Revision 3.0.1.5  1995/05/12  12:04:52  ram
?RCS: patch54: added -K option for experts
?RCS:
?RCS: Revision 3.0.1.4  1995/01/30  14:27:52  ram
?RCS: patch49: this unit now exports file optdef.sh,
 not a variable
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:19:00  ram
?RCS: patch45: new -O option allowing -D and -U to override config.sh settings
?RCS: patch45: file optdef.sh is no longer removed after sourcing
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  15:58:06  ram
?RCS: patch36: ensure option definition file is removed before appending
?RCS: patch36: protect variable definitions with spaces in them
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:55:44  ram
?RCS: patch30: now uses new me symbol to tag error messages
?RCS: patch30: new -D and -U options to define/undef symbols (JHI)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Command line parsing. It is really important that the variables used here
?X: be not listed in the MAKE line, or they will be saved in config.sh and
?X: loading this file to fetch default answers would clobber the values set
?X: herein.
?X:
?MAKE:Options: startsh
?MAKE: -pick wipe $@ %<
?V:reuseval
```

```
 alldone error realsilent silent extractsh fastread \
 override knowitall: config_sh
?T:arg argn symbol config_arg0 config_args config_argc xxx yyy zzz uuu
?T:args_exp args_sep arg_exp
?F:!Configure
?F:./optdef.sh ./cmdline.opt ./posthint.sh ./cmdl.opt
: Save command line options in file UU/cmdline.opt for later use in
: generating config.sh.
?X: This temporary file will be read by Oldsym.U.  I used a temporary
?X: file to preserve all sorts of potential command line quotes and
?X: also because we don't know in advance how many variables we'll
?X: need, so I can't actually declare them on the MAKE line.
?X: The config_args variable won't be quite correct if Configure is
?X: fed something like    ./Configure -Dcc="gcc -B/usr/ccs/bin/"
?X: since the quotes are gone by the time we see them.  You'd have to
?X: reconstruct the command line from the config_arg? lines, but since
?X: I don't imagine anyone actually having to do that, I'm not going
?X: to worry too much.
cat > cmdline.opt
 <<EOSH
: Configure command line arguments.
config_arg0='$0'
config_args='$*'
config_argc=$#
EOSH
argn=1
args_exp=''
args_sep=''
for arg in "$@"; do
 cat >>cmdline.opt <<EOSH
config_arg$argn='$arg'
EOSH
?X: Extreme backslashitis: replace each ' by '''''
 cat <<EOC | sed -e "s/'/'''''''''''''''/g" > cmdl.opt
$arg
EOC
 arg_exp=`cat cmdl.opt`
 args_exp="$args_exp$args_sep'$arg_exp'"
 argn=`expr $argn + 1`
 args_sep=' '
done
?X: args_exp is good for restarting self: eval "set X $args_exp"; shift; $0 "$@"
?X: used by hints/os2.sh in Perl, for instance
rm -f cmdl.opt

: produce awk script to parse command line options
cat >options.awk <<'EOF'
BEGIN {
```

```
 optstr = "A:dD:eEf:hKOrsSU:V"; # getopt-style specification

 len = length(optstr);
 for (i = 1; i <= len; i++) {
  c = substr(optstr, i, 1);
?X: some older awk's do not have the C ?: construct
  if (i < len) a = substr(optstr, i + 1, 1); else a = "";
  if (a == ":") {
   arg[c] = 1;
   i++;
  }
  opt[c] = 1;
 }
}
{
 expect = 0;
 str = $0;
 if (substr(str,
 1, 1) != "-") {
  printf("'%s'\n", str);
  next;
 }
 len = length($0);
 for (i = 2; i <= len; i++) {
  c = substr(str, i, 1);
  if (!opt[c]) {
   printf("-%s\n", substr(str, i));
   next;
  }
  printf("-%s\n", c);
  if (arg[c]) {
   if (i < len)
    printf("'%s'\n", substr(str, i + 1));
   else
    expect = 1;
   next;
  }
 }
}
END {
 if (expect)
  print "?";
}
EOF

: process the command line options
?X: Use "$@" to keep arguments with spaces in them from being split apart.
?X: For the same reason, awk will output quoted arguments and the final eval
```

```
?X: removes them and sets a proper $* array. An 'X' is prependend to each
?X: argument before being fed to echo to guard against 'echo -x', where -x
?X: would be understood as an echo option! It is removed before feeding awk.
set X `for arg in "$@"; do echo "X$arg"; done |
 sed -e s/X// | awk -f options.awk`
eval "set $*"
shift
rm -f options.awk

: set up default values
fastread=''
reuseval=false
config_sh=''
alldone=''
error=''
silent=''
extractsh=''
override=''
knowitall=''
rm
 -f optdef.sh posthint.sh
cat >optdef.sh <<EOS
$startsh
EOS

?X:
?X: Given that we now have the possibility to execute Configure remotely
?X: thanks to the new src.U support, we have to face the possibility
?X: of having to ask where the source lie, which means we need the Myread.U
?X: stuff and possibly other things that might echo something on the
?X: screen...
?X:
?X: That's not pretty, and might be confusing in 99% of the time. So...
?X: We introduce a new realsilent variable which is set when -s is given,
?X: and we force silent=true if -S is supplied. The Extractall.U unit
?X: will then undo the >&4 redirection based on the value of the
?X: realsilent variable... -- RAM, 18/93/96
?X:

: option parsing
while test $# -gt 0; do
 case "$1" in
 -d) shift; fastread=yes;;
 -e) shift; alldone=cont;;
 -f)
  shift
  cd ..
  if test -r "$1"; then
```

```
  config_sh="$1"
 else
  echo "$me: cannot read config file $1." >&2
  error=true
 fi
 cd UU
 shift;;
-h)
shift; error=true;;
-r) shift; reuseval=true;;
-s) shift; silent=true; realsilent=true;;
-E) shift; alldone=exit;;
-K) shift; knowitall=true;;
-O) shift; override=true;;
-S) shift; silent=true; extractsh=true;;
-D)
 shift
 case "$1" in
 *=)
  echo "$me: use '-U symbol=', not '-D symbol='." >&2
  echo "$me: ignoring -D $1" >&2
  ;;
 *=*) echo "$1" | \
   sed -e "s/'/'\''\''/g" -e "s/=\(.*\)/='\1'/" >> optdef.sh;;
 *) echo "$1='define'" >> optdef.sh;;
 esac
 shift
 ;;
-U)
 shift
 case "$1" in
 *=) echo "$1" >> optdef.sh;;
 *=*)
  echo "$me: use '-D symbol=val', not '-U symbol=val'." >&2
  echo "$me: ignoring -U $1" >&2
  ;;
 *) echo "$1='undef'" >> optdef.sh;;
 esac
 shift
 ;;
-A)
    shift
    xxx=''
    yyy="$1"
    zzz=''
    uuu=undef
    case "$yyy" in
          *=*) zzz=`echo "$yyy"|sed 's!=.*!!'`
```

```
            case "$zzz" in
            *:*) zzz=" ;;
            *)   xxx=append
                zzz=" "`echo
"$yyy"|sed 's!^[^=]*=!!'`
                yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
            esac
            ;;
        esac
        case "$xxx" in
        ")  case "$yyy" in
            *:*) xxx=`echo "$yyy"|sed 's!:.*!!'`
                yyy=`echo "$yyy"|sed 's!^[^:]*:!!'`
                zzz=`echo "$yyy"|sed 's!^[^=]*=!!'`
                yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
            *)   xxx=`echo "$yyy"|sed 's!:.*!!'`
                yyy=`echo "$yyy"|sed 's!^[^:]*:!!'` ;;
            esac
            ;;
        esac
   case "$xxx" in
   append)
 echo "$yyy=\"\${$yyy}$zzz\"" >> posthint.sh ;;
   clear)
 echo "$yyy=""   >> posthint.sh ;;
   define)
       case "$zzz" in
 ") zzz=define ;;
 esac
 echo "$yyy='$zzz'"  >> posthint.sh ;;
   eval)
 echo "eval \"$yyy=$zzz\"" >> posthint.sh ;;
   prepend)
 echo "$yyy=\"$zzz\${$yyy}\"" >> posthint.sh ;;
   undef)
       case "$zzz" in
 ")
zzz="$uuu" ;;
 esac
 echo "$yyy=$zzz"  >> posthint.sh ;;
        *)  echo "$me: unknown -A command '$xxx', ignoring -A $1" >&2 ;;
   esac
   shift
   ;;
-V) echo "$me generated by metaconfig <VERSION> PL<PATCHLEVEL>." >&2
   exit 0;;
--) break;;
-*) echo "$me: unknown option $1" >&2; shift; error=true;;
```

```
 *) break;;
 esac
done

case "$error" in
true)
 cat >&2 <<EOM
Usage: $me [-dehrsEKOSV] [-f config.sh] [-D symbol] [-D symbol=value]
               [-U symbol] [-U symbol=] [-A command:symbol...]
 -d : use defaults for all answers.
 -e : go on without questioning past the production of config.sh.
 -f : specify an alternate default configuration file.
 -h : print this help message and exit (with an error status).
 -r : reuse C symbols value if possible (skips costly nm extraction).
 -s : silent mode, only echoes questions and essential information.
 -D : define symbol to have some value:
       -D symbol         symbol gets the value 'define'
       -D symbol=value
   symbol gets the value 'value'
 -E : stop at the end of questions, after having produced config.sh.
 -K : do not use unless you know what you are doing.
 -O : let -D and -U override definitions from loaded configuration file.
 -S : perform variable substitutions on all .SH files (can mix with -f)
 -U : undefine symbol:
       -U symbol    symbol gets the value 'undef'
       -U symbol=   symbol gets completely empty
 -A : manipulate symbol after the platform specific hints have been applied:
  -A symbol=value  append " "value to symbol
  -A append:symbol=value  append value to symbol
  -A define:symbol=value  define symbol to have value
       -A clear:symbol  define symbol to be "
  -A define:symbol  define symbol to be 'define'
  -A eval:symbol=value  define symbol to be eval of value
  -A prepend:symbol=value prepend value to symbol
  -A undef:symbol  define symbol to be 'undef'
  -A undef:symbol=  define symbol to be "
 -V : print version number and exit (with
 a zero status).
EOM
 exit 1
 ;;
esac

?X:
?X: Unless they specified either -S or both -d and -e/E, make sure we're
?X: running interactively, i.e. attached to a terminal. Moved from Head.U to
?X: be able to handle batch configurations...
?X:
```

```
?X: We have to hardwire the Configure name and cannot use $me, since if they
?X: said 'sh <Configure', then $me is 'sh'...
?X:
: Sanity checks
case "$fastread$alldone" in
yescont|yesexit) ;;
*)
 case "$extractsh" in
 true) ;;
 *)
  if test ! -t 0; then
   echo "Say 'sh Configure', not 'sh <Configure'"
   exit 1
  fi
  ;;
 esac
 ;;
esac

?X: In silent mode, the standard output is closed. Questions are asked by
?X: outputing on file descriptor #4, which is the original stdout descriptor.
?X: This filters out all the "junk", since all the needed information is written
?X: on #4. Note that ksh will not let us redirect output if the file descriptor
?X: has not be defined yet, unlike sh, hence the following line...--RAM.
exec 4>&1
case "$silent" in
true)
 exec 1>/dev/null;;
esac

: run the defines and the undefines, if any, but leave the file out there...
touch optdef.sh
. ./optdef.sh
: create the posthint manipulation script and leave the file out there...
?X: this file will be perused by Oldconfig.U
touch posthint.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Options.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_pwd.U,v 3.0.1.2 1995/07/25 14:10:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_pwd.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:10:57  ram
?RCS: patch56: use setvar so hint file values can override our guesses (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:03:27  ram
?RCS: patch23: had forgotten cppminus in cppstdin test (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks whether there is a pwd system or not
?X:
?MAKE:i_pwd d_pwquota d_pwage d_pwchange
 d_pwclass d_pwexpire \
 d_pwgecos d_pwpasswd d_pwcomment: \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_pwd:
?S: This variable conditionally defines I_PWD, which indicates
?S: to the C program that it should include <pwd.h>.
?S:.
?S:d_pwquota:
?S: This variable conditionally defines PWQUOTA, which indicates
?S: that struct passwd contains pw_quota.
?S:.
?S:d_pwage:
?S: This variable conditionally defines PWAGE, which indicates
?S: that struct passwd contains pw_age.
?S:.
?S:d_pwchange:
?S: This variable conditionally defines PWCHANGE, which indicates
?S: that struct passwd contains pw_change.
?S:.
?S:d_pwclass:
?S: This variable conditionally defines PWCLASS, which indicates
?S: that struct passwd contains pw_class.
?S:.
?S:d_pwexpire:
?S: This variable conditionally defines PWEXPIRE, which indicates
?S: that struct passwd contains pw_expire.
?S:.
?S:d_pwcomment:
?S: This variable conditionally defines PWCOMMENT, which indicates
?S: that
```

```
 struct passwd contains pw_comment.
?S:.
?S:d_pwgecos:
?S: This variable conditionally defines PWGECOS, which indicates
?S: that struct passwd contains pw_gecos.
?S:.
?S:d_pwpasswd:
?S: This variable conditionally defines PWPASSWD, which indicates
?S: that struct passwd contains pw_passwd.
?S:.
?C:I_PWD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <pwd.h>.
?C:.
?C:PWQUOTA:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_quota.
?C:.
?C:PWAGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_age.
?C:.
?C:PWCHANGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_change.
?C:.
?C:PWCLASS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_class.
?C:.
?C:PWEXPIRE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_expire.
?C:.
?C:PWCOMMENT:
?C: This
 symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_comment.
?C:.
?C:PWGECOS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_gecos.
?C:.
?C:PWPASSWD:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_passwd.
?C:.
?H:#$i_pwd I_PWD  /**/
```

```
?H:#$d_pwquota PWQUOTA /**/
?H:#$d_pwage PWAGE /**/
?H:#$d_pwchange PWCHANGE /**/
?H:#$d_pwclass PWCLASS /**/
?H:#$d_pwexpire PWEXPIRE /**/
?H:#$d_pwcomment PWCOMMENT /**/
?H:#$d_pwgecos PWGECOS /**/
?H:#$d_pwpasswd PWPASSWD /**/
?H:.
?LINT: set i_pwd d_pwquota d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment
?LINT: set d_pwgecos d_pwpasswd
?T:xxx
: see if this is a pwd.h system
set pwd.h i_pwd
eval $inhdr

case "$i_pwd" in
$define)
 xxx=`./findhdr pwd.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'pw_quota' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwquota
 eval $setvar

 if $contains 'pw_age'
 $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwage
 eval $setvar

 if $contains 'pw_change' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwchange
 eval $setvar

 if $contains 'pw_class' $$.h >/dev/null 2>&1; then
  val="$define"
```

```
else
 val="$undef"
fi
set d_pwclass
eval $setvar

if $contains 'pw_expire' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwexpire
eval $setvar

if $contains 'pw_comment' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwcomment
eval $setvar

if $contains 'pw_gecos' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwgecos
eval $setvar

if $contains 'pw_passwd' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwpasswd
eval $setvar

$rm -f $$.h
;;
*)
val="$undef";
set d_pwquota; eval $setvar
set d_pwage; eval $setvar
set d_pwchange; eval $setvar
set d_pwclass; eval $setvar
set
```

```
 d_pwexpire; eval $setvar
 set d_pwcomment; eval $setvar
 set d_pwgecos; eval $setvar
 set d_pwpasswd; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_pwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_times.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:50  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:14:00  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: What is the type returned by times() ?
?X:
?X: Force inclusion of <sys/types.h>
?X:INC: i_systypes
?MAKE:d_times clocktype: Csym Myread Typedef i_systimes
?MAKE: -pick
 add $@ %<
?S:d_times:
?S: This variable conditionally defines the HAS_TIMES symbol, which indicates
?S: that the times() routine exists.  The times() routine is normally
?S: provided on UNIX systems. You may have to include <sys/times.h>.
?S:.
?S:clocktype:
?S: This variable holds the type returned by times(). It can be long,
?S: or clock_t on BSD sites (in which case <sys/types.h> should be
?S: included).
```

```
?S:.
?C:HAS_TIMES (TIMES):
?C: This symbol, if defined, indicates that the times() routine exists.
?C: Note that this became obsolete on some systems (SUNOS), which now
?C: use getrusage(). It may be necessary to include <sys/times.h>.
?C:.
?C:Clock_t (CLOCKTYPE):
?C: This symbol holds the type returned by times(). It can be long,
?C: or clock_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_times HAS_TIMES  /**/
?H:#define Clock_t $clocktype /* Clock time */
?H:.
?T:val inc
: see if times exists
echo " "
if set times val -f d_times; eval $csym;
 $val; then
 echo 'times() found.' >&4
 d_times="$define"
 inc=''
 case "$i_systimes" in
 "$define") inc='sys/times.h';;
 esac
 set clock_t clocktype long stdio.h sys/types.h $inc
 eval $typedef
 dflt="$clocktype"
 echo " "
 rp="What type is returned by times() on this system?"
 . ./myread
 clocktype="$ans"
else
 echo 'times() NOT found, hope that will do.' >&4
 d_times="$undef"
?X: The following is needed for typedef (won't like an empty variable)
 clocktype='int'
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_times.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getfsstat : Inlibc
?MAKE: -pick add $@ %<
?S:d_getfsstat:
?S: This variable conditionally defines the HAS_GETFSSTAT symbol, which
?S: indicates to the C program that the getfsstat() routine is available.
?S:.
?C:HAS_GETFSSTAT:
?C: This symbol, if defined, indicates that the getfsstat routine is
?C: available to stat filesystems in bulk.
?C:.
?H:#$d_getfsstat HAS_GETFSSTAT  /**/
?H:.
?LINT:set d_getfsstat
: see if getfsstat exists
set getfsstat d_getfsstat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getfsstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_hidnet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_hidnet.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_hidnet hiddennet: cat sed myhostname mydomain Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_hidnet:
?S: This variable conditionally defines the symbol HIDDEN_NET, which
?S: tells the C program that it should pretend it is on a different
?S: host for purposes of advertising a mailing address.
?S:.
?S:hiddennet:
?S: This variable contains
 the value eventually given to the symbol
?S: HIDDEN_NET, if d_hidnet defines it.  If defined, it's the name
```

```
?S: of the host which serves as the mail server for a network that
?S: is invisible to the outside world.
?S:.
?C:HIDDEN_NET (HIDDENNET):
?C: This symbol, if defined, contains the host name that you want to
?C: advertise to the outside world.  This name can be different from
?C: your actual host name, as long as the machine you specify knows
?C: how to forward mail to you.
?C:.
?H:#$d_hidnet HIDDEN_NET "$hiddennet" /**/
?H:.
: now get the host name to advertise as our mailing address
case "$hiddennet" in
") dflt=n;;
*) dflt=y;;
esac
$cat <<EOM

Some sites are on "hidden" networks, in the sense that the network appears
to the outside world as a single machine.  The advertised name of any host
on this hidden network is the name of one machine on the local network which
knows how to forward mail to any other host on the hidden network.

Do you wish to advertise a different hostname
 to the world than the one your
own host ($myhostname$mydomain) has?

EOM
rp='Use "hidden" network?'
. ./myread
case "$ans" in
n*) d_hidnet="$undef" hiddennet=";;
*)
 d_hidnet="$define"
 echo " "
 case "$hiddennet" in
 ") dflt=`echo $mydomain | $sed -e 's/^\.//'`;;
 *) dflt="$hiddennet";;
 esac
 rp='What hostname do you wish to advertise?'
 . ./myread
 hiddennet="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_hidnet.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_futimes: Compile cat rm_try run
?MAKE: -pick add $@ %<
?S:d_futimes:
?S: This variable conditionally defines the HAS_FUTIMES symbol, which
?S: indicates to the C program that the futimes() routine is available.
?S:.
?C:HAS_FUTIMES:
?C: This symbol, if defined, indicates that the futimes routine is
?C: available to change file descriptor time stamps with struct timevals.
?C:.
?H:#$d_futimes HAS_FUTIMES  /**/
?H:.
?T:rc
?F:!try
: check for a working futimes
d_futimes="$undef"
echo " "
echo "Checking if you have a working futimes()" >&4
$cat >try.c <<EOCP
#include <stdio.h>
#include <stdlib.h>
#include <sys/time.h>
#include <errno.h>
#include <fcntl.h>
#include <stdlib.h>

int main ()
{
   int fd,
 rv;
   fd = open ("try.c", O_RDWR);
   if (-1 == fd) exit (1);
   rv = futimes (fd, NULL);
   exit (rv == -1 ? errno : 0);
}
EOCP
set try
if eval $compile; then
   `$run ./try`
```

```
  rc=$?
  case "$rc" in
 0)  echo "Yes, you have" >&4
    d_futimes="$define"
    ;;
 *)  echo "No, you have futimes, but it isn't working ($rc) (probably harmless)" >&4
    ;;
  esac
else
  echo "No, it does not (probably harmless)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_futimes.U
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```
?RCS: $Id: sh.U,v 3.0.1.1 1997/02/28 16:20:13 ram Exp $
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:20:13  ram
?RCS: patch61: created
?RCS:
?MAKE:sh targetsh: Head
?MAKE: -pick wipe $@ %<
?S:sh:
?S: This variable contains the full pathname of the shell used
?S: on this system to execute Bourne shell scripts.  Usually, this will be
?S: /bin/sh, though it's possible that some systems will have /bin/ksh,
?S: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?S: D:/bin/sh.exe.
?S: This
 unit comes before Options.U, so you can't set sh with a -D
?S: option, though you can override this (and startsh)
?S: with -O -Dsh=/bin/whatever -Dstartsh=whatever
?S:.
?S:targetsh:
?S: If cross-compiling, this variable contains the location of sh on the
?S: target system.
```

```
?S: If not, this will be the same as $sh.
?S:.
?C:SH_PATH:
?C: This symbol contains the full pathname to the shell used on this
?C: on this system to execute Bourne shell scripts.  Usually, this will be
?C: /bin/sh, though it's possible that some systems will have /bin/ksh,
?C: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?C: D:/bin/sh.exe.
?C:.
?H:#define SH_PATH "$targetsh"  /**/
?H:.
?T:xxx try pth p SYSTYPE
?LINT:extern maintloc maintname _exe
?X:
?X: Be quiet unless something unusual happens because this gets
?X: loaded up even before options are processed.
?X: Can't use ./loc because that depends on startsh, which, in turn
?X: depends on this unit.
?X:
: Find the basic shell for
 Bourne shell scripts
case "$sh" in
")
?X: SYSTYPE is for some older MIPS systems.
?X: I do not know if it is still needed.
 case "$SYSTYPE" in
 *bsd*|sys5*) xxx="/$SYSTYPE/bin/sh";;
 *) xxx='/bin/sh';;
 esac
 if test -f "$xxx"; then
  sh="$xxx"
 else
  : Build up a list and do a single loop so we can 'break' out.
  pth=`echo $PATH | sed -e "s/$p_/ /g"`
  for xxx in sh bash ksh pdksh ash; do
   for p in $pth; do
    try="$try ${p}/${xxx}"
   done
  done
  for xxx in $try; do
   if test -f "$xxx"; then
    sh="$xxx";
    break
   elif test "X$_exe" != X -a -f "$xxx$_exe"; then
    sh="$xxx";
    break
   elif test -f "$xxx.exe"; then
    sh="$xxx";
```

```
    break
   fi
  done
 fi
 ;;
esac

?X: fd 4 isn't open yet...
case "$sh" in
") cat >&2 <<EOM
$me:  Fatal Error:  I can't find a Bourne Shell anywhere.

Usually it's in /bin/sh.  How did you even get this far?
Please report this issue at <$maintloc>
and we'll try to straighten this all out.
EOM
 exit 1
 ;;
esac

: When cross-compiling we
 need to separate the sh-to-run-Configure-with from the sh-to-use-in-Perl
: default both to the same thing, cross-compilers can then set targetsh differently if they like
targetsh=$sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sh.U
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```
?RCS: $Id: d_readdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_readdir.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  14:46:37  ram
?RCS: patch23: added support for seekdir, telldir and rewinddir (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Force checking for <dirent.h> inclusion
?X:INC: i_dirent
```

```
?MAKE:d_readdir d_seekdir d_telldir d_rewinddir: Inlibc
?MAKE: -pick add $@ %<
?S:d_readdir:
?S: This variable conditionally defines HAS_READDIR if readdir()
 is
?S: available to read directory entries.
?S:.
?C:HAS_READDIR (READDIR):
?C: This symbol, if defined, indicates that the readdir routine is
?C: available to read directory entries. You may have to include
?C: <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_readdir HAS_READDIR  /**/
?H:.
?S:d_seekdir:
?S: This variable conditionally defines HAS_SEEKDIR if seekdir() is
?S: available.
?S:.
?C:HAS_SEEKDIR:
?C: This symbol, if defined, indicates that the seekdir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_seekdir HAS_SEEKDIR  /**/
?H:.
?S:d_telldir:
?S: This variable conditionally defines HAS_TELLDIR if telldir() is
?S: available.
?S:.
?C:HAS_TELLDIR:
?C: This symbol, if defined, indicates that the telldir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_telldir HAS_TELLDIR  /**/
?H:.
?S:d_rewinddir:
?S: This variable conditionally defines HAS_REWINDDIR if rewinddir() is
?S: available.
?S:.
?C:HAS_REWINDDIR:
?C: This
 symbol, if defined, indicates that the rewinddir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_rewinddir HAS_REWINDDIR  /**/
?H:.
?LINT:set d_readdir d_seekdir d_telldir d_rewinddir
: see if readdir and friends exist
set readdir d_readdir
```

```
eval $inlibc
@if d_seekdir || HAS_SEEKDIR
set seekdir d_seekdir
eval $inlibc
@end
@if d_telldir || HAS_TELLDIR
set telldir d_telldir
eval $inlibc
@end
@if d_rewinddir || HAS_REWINDDIR
set rewinddir d_rewinddir
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_readdir.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fsync: Inlibc
?MAKE: -pick add $@ %<
?S:d_fsync:
?S: This variable conditionally defines the HAS_FSYNC symbol, which
?S: indicates to the C program that the fsync() routine is available.
?S:.
?C:HAS_FSYNC:
?C: This symbol, if defined, indicates that the fsync routine is
?C: available to write a file's modified data and attributes to
?C: permanent storage.
?C:.
?H:#$d_fsync HAS_FSYNC  /**/
?H:.
?LINT:set d_fsync
: see if fsync exists
set fsync d_fsync
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fsync.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservbyname_r.U,v 0RCS:
```

```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservbyname_r getservbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservbyname_r:
?S: This variable conditionally defines the HAS_GETSERVBYNAME_R symbol,
?S: which indicates to the C program that the getservbyname_r()
?S: routine is available.
?S:.
?S:getservbyname_r_proto:
?S: This variable encodes the prototype of getservbyname_r.
?S: It is zero if d_getservbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyname_r
?S: is defined.
?S:.
?C:HAS_GETSERVBYNAME_R:
?C: This symbol, if defined, indicates
 that the getservbyname_r routine
?C: is available to getservbyname re-entrantly.
?C:.
?C:GETSERVBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getservbyname_r.
?C: It is zero if d_getservbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyname_r
?C: is defined.
?C:.
?H:#$d_getservbyname_r HAS_GETSERVBYNAME_R /**/
?H:#define GETSERVBYNAME_R_PROTO $getservbyname_r_proto /**/
?H:.
?T:try hdrs d_getservbyname_r_proto
: see if getservbyname_r exists
set getservbyname_r d_getservbyname_r
eval $inlibc
case "$d_getservbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservbyname_r_proto:$usethreads" in
 ":define") d_getservbyname_r_proto=define
  set d_getservbyname_r_proto getservbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
```

```
 case "$d_getservbyname_r_proto" in
 define)
 case "$getservbyname_r_proto" in
 "|0) try='int getservbyname_r(const char*, const char*, struct servent*, char*,
 size_t, struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=I_CCSBWR ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) try='struct servent* getservbyname_r(const char*, const char*, struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=S_CCSBI ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) try='int getservbyname_r(const char*, const char*, struct servent*, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=I_CCSD ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) d_getservbyname_r=undef
  getservbyname_r_proto=0
  echo "Disabling getservbyname_r, cannot determine prototype." >&4 ;;
 * ) case "$getservbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getservbyname_r_proto="REENTRANT_PROTO_$getservbyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getservbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_getservbyname_r=undef
  getservbyname_r_proto=0
  ;;
 esac
 ;;
*) getservbyname_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservbyname_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_endnetent_r.U,v 0RCS:
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```
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endnetent_r endnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endnetent_r:
?S: This variable conditionally defines the HAS_ENDNETENT_R symbol,
?S: which indicates to the C program that the endnetent_r()
?S: routine is available.
?S:.
?S:endnetent_r_proto:
?S: This variable encodes the prototype of endnetent_r.
?S: It is zero if d_endnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endnetent_r
?S: is defined.
?S:.
?C:HAS_ENDNETENT_R:
?C: This symbol, if defined, indicates that the endnetent_r routine
?C: is
 available to endnetent re-entrantly.
?C:.
?C:ENDNETENT_R_PROTO:
?C: This symbol encodes the prototype of endnetent_r.
?C: It is zero if d_endnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endnetent_r
?C: is defined.
?C:.
?H:#$d_endnetent_r HAS_ENDNETENT_R /**/
?H:#define ENDNETENT_R_PROTO $endnetent_r_proto /**/
?H:.
?T:try hdrs d_endnetent_r_proto
: see if endnetent_r exists
set endnetent_r d_endnetent_r
eval $inlibc
case "$d_endnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endnetent_r_proto:$usethreads" in
 ":define") d_endnetent_r_proto=define
  set d_endnetent_r_proto endnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endnetent_r_proto" in
 define)
 case "$endnetent_r_proto" in
 "|0) try='int endnetent_r(struct netent_data*);'
```

```
 ./protochk "$extern_C $try" $hdrs && endnetent_r_proto=I_D ;;
 esac
 case "$endnetent_r_proto" in
"|0) try='void endnetent_r(struct netent_data*);'
 ./protochk
 "$extern_C $try" $hdrs && endnetent_r_proto=V_D ;;
 esac
 case "$endnetent_r_proto" in
"|0) d_endnetent_r=undef
  endnetent_r_proto=0
  echo "Disabling endnetent_r, cannot determine prototype." >&4 ;;
 * ) case "$endnetent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endnetent_r_proto="REENTRANT_PROTO_$endnetent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endnetent_r has no prototype, not using it." >&4 ;;
  esac
  d_endnetent_r=undef
  endnetent_r_proto=0
  ;;
 esac
 ;;
*) endnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endnetent_r.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_drand48proto: Hasproto i_stdlib i_unistd
?MAKE: -pick add $@ %<
?S:d_drand48proto:
?S: This variable conditionally defines the HAS_DRAND48_PROTO symbol,
```

```
?S: which indicates to the C program that the system provides
?S: a prototype for the drand48() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_DRAND48_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the drand48() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess
 is
?C:  extern double drand48(void);
?C:.
?H:#$d_drand48proto HAS_DRAND48_PROTO /**/
?H:.
?LINT:set d_drand48proto
: see if prototype for drand48 is available
echo " "
set d_drand48proto drand48 $i_stdlib stdlib.h $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_drand48proto.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: floatsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:09  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:floatsize: cat rm Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:floatsize:
?S: This variable contains the value of the FLOATSIZE symbol, which
?S: indicates to the C program how many bytes there are in a float.
?S:.
?C:FLOATSIZE:
?C: This symbol contains the size of
```

```
 a float, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define FLOATSIZE $floatsize  /**/
?H:.
?F:!try
: check for length of float
echo " "
case "$floatsize" in
")
 echo "Checking to see how big your floating point numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(float));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$floatsize"
 ;;
esac
rp="What is the size of a floating point number (in bytes)?"
. ./myread
floatsize="$ans"
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/floatsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setgrent_r setgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
```

```
?MAKE: -pick add $@ %<
?S:d_setgrent_r:
?S: This variable conditionally defines the HAS_SETGRENT_R symbol,
?S: which indicates to the C program that the setgrent_r()
?S: routine is available.
?S:.
?S:setgrent_r_proto:
?S: This variable encodes the prototype of setgrent_r.
?S: It is zero if d_setgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setgrent_r
?S: is defined.
?S:.
?C:HAS_SETGRENT_R:
?C: This symbol, if defined, indicates that the setgrent_r routine
?C: is available to
 setgrent re-entrantly.
?C:.
?C:SETGRENT_R_PROTO:
?C: This symbol encodes the prototype of setgrent_r.
?C: It is zero if d_setgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setgrent_r
?C: is defined.
?C:.
?H:#$d_setgrent_r HAS_SETGRENT_R /**/
?H:#define SETGRENT_R_PROTO $setgrent_r_proto /**/
?H:.
?T:try hdrs d_setgrent_r_proto
: see if setgrent_r exists
set setgrent_r d_setgrent_r
eval $inlibc
case "$d_setgrent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_setgrent_r_proto:$usethreads" in
 ":define") d_setgrent_r_proto=define
  set d_setgrent_r_proto setgrent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setgrent_r_proto" in
 define)
 case "$setgrent_r_proto" in
 "|0) try='int setgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setgrent_r_proto=I_H ;;
 esac
 case "$setgrent_r_proto" in
 "|0) try='void setgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setgrent_r_proto=V_H ;;
```

```
 esac
 case "$setgrent_r_proto"
 in
 "|0) d_setgrent_r=undef
  setgrent_r_proto=0
  echo "Disabling setgrent_r, cannot determine prototype." >&4 ;;
 * ) case "$setgrent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setgrent_r_proto="REENTRANT_PROTO_$setgrent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setgrent_r has no prototype, not using it." >&4 ;;
  esac
  d_setgrent_r=undef
  setgrent_r_proto=0
  ;;
 esac
 ;;
*) setgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setgrent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dlopen.U,v 3.0.1.2 1995/07/25 13:52:56 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlopen.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:56  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:34  ram
?RCS: patch32: created by ADO
?RCS:
```

```
?MAKE:d_dlopen: Inlibc runnm d_cplusplus ccflags gccversion
?MAKE: -pick add $@ %<
?S:d_dlopen:
?S: This variable conditionally defines the HAS_DLOPEN
 symbol, which
?S: indicates to the C program that the dlopen() routine is available.
?S:.
?C:HAS_DLOPEN :
?C: This symbol, if defined, indicates that the dlopen routine is
?C: available.
?C:.
?H:#$d_dlopen HAS_DLOPEN  /**/
?H:.
?T: xxx_runnm
?T: xxx_ccflags
?LINT:set d_dlopen
?X: We don't permanently change runnm and ccflags, but we do temporarily.
?LINT: change runnm
?LINT: change ccflags
: see if dlopen exists
?X: On NetBSD and FreeBSD, dlopen is available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
xxx_ccflags="$ccflags"
runnm=false
: with g++ one needs -shared to get is-in-libc to work for dlopen
case "$gccversion" in
") ;;
*Clang*) ;;
*) case "$d_cplusplus" in
 "$define") ccflags="$ccflags -shared" ;;
 esac
 ;;
esac
set dlopen d_dlopen
eval $inlibc
runnm="$xxx_runnm"
ccflags="$xxx_ccflags"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dlopen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syspoll.U 15 2006-08-30 18:21:51Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_syspoll: Inhdr
?MAKE: -pick add $@ %<
?S:i_syspoll:
?S: This variable conditionally defines the I_SYS_POLL symbol, which
?S: indicates to the C program that it should include <sys/poll.h>.
?S:.
?C:I_SYS_POLL:
?C: This symbol, if defined, indicates that the program may include
?C: <sys/poll.h>.  When I_POLL is also defined, it's probably safest
?C: to only include <poll.h>.
?C:.
?H:#$i_syspoll I_SYS_POLL /**/
?H:.
?LINT:set i_syspoll
: see if there is
 a sys/poll.h file
set sys/poll.h i_syspoll
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syspoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ftime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ftime.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ftime d_gettimeod: Inlibc Setvar
?MAKE: -pick add $@ %<
?S:d_ftime:
?S: This variable conditionally defines the HAS_FTIME symbol, which indicates
?S: that the ftime() routine exists.  The ftime() routine is basically
```

```
?S: a sub-second accuracy clock.
?S:.
?S:d_gettimeod:
?S: This variable conditionally defines the HAS_GETTIMEOFDAY symbol,
 which
?S: indicates that the gettimeofday() system call exists (to obtain a
?S: sub-second accuracy clock). You should probably include <sys/resource.h>.
?S:.
?C:HAS_FTIME (FTIMER):
?C: This symbol, if defined, indicates that the ftime() routine exists.
?C: It is basically a sub-second accuracy clock, but is less accurate
?C: than gettimeofday(2) anyway. The type "Timeval" should be used to
?C: refer to "struct timeb".
?C:.
?C:HAS_GETTIMEOFDAY (GETTIMEOFDAY):
?C: This symbol, if defined, indicates that the gettimeofday() system
?C: call is available for a sub-second accuracy clock. Usually, the file
?C: <sys/resource.h> needs to be included (see I_SYS_RESOURCE).
?C: The type "Timeval" should be used to refer to "struct timeval".
?C:.
?H:#$d_ftime HAS_FTIME  /**/
?H:#$d_gettimeod HAS_GETTIMEOFDAY /**/
?H:?%<:@if HAS_FTIME
?H:?%<:#ifdef HAS_FTIME
?H:?%<:#define Timeval struct timeb  /* Structure used by ftime() */
?H:?%<:#endif
?H:?%<:@end
?H:?%<:@if HAS_GETTIMEOFDAY
?H:?%<:#ifdef HAS_GETTIMEOFDAY
?H:?%<:#define
 Timeval struct timeval /* Structure used by gettimeofday() */
?H:?%<:#endif
?H:?%<:@end
?H:.
?X:FIXME
?X:?I:?d_ftime:i_systimeb
?X:?I:?d_gettimeod:i_sysresrc
?LINT:set d_gettimeod d_ftime
?LINT:known Timeval
: see if gettimeofday or ftime exists
?X:
?X: Give priority to gettimeofday(2) because timing is more accurate
?X:
set gettimeofday d_gettimeod
eval $inlibc
case "$d_gettimeod" in
"$undef")
 set ftime d_ftime
```

```
 eval $inlibc
 ;;
*)
 val="$undef"; set d_ftime; eval $setvar
 ;;
esac
case "$d_gettimeod$d_ftime" in
"$undef$undef")
 echo " "
 echo 'No ftime() nor gettimeofday() -- timing may be less accurate.' >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:gidformat: gidsize gidsign ivsize uvsize longsize intsize shortsize \
 ivdformat uvuformat test echo
?MAKE: -pick add $@ %<
?S:gidformat:
?S: This variable contains the format string used for printing a Gid_t.
?S:.
?C:Gid_t_f:
?C: This symbol defines the format string used for printing a Gid_t.
?C:.
?H:#define Gid_t_f  $gidformat  /**/
?H:.
: Check format string for GID

echo " "
$echo "Checking the format string to be used for gids..." >&4

case "$gidsign" in
-1) if $test X"$gidsize" = X"$ivsize"; then
  gidformat="$ivdformat"
 else
  if $test X"$gidsize" = X"$longsize"; then
   gidformat="'ld'"
  else
   if $test X"$gidsize" = X"$intsize"; then
```

```
    gidformat="'d'"
   else
    if $test X"$gidsize"
 = X"$shortsize"; then
     gidformat="'hd'"
    fi
   fi
  fi
 fi
 ;;
*) if $test X"$gidsize" = X"$uvsize"; then
  gidformat="$uvuformat"
 else
  if $test X"$gidsize" = X"$longsize"; then
   gidformat="'lu'"
  else
   if $test X"$gidsize" = X"$intsize"; then
    gidformat="'u'"
   else
    if $test X"$gidsize" = X"$shortsize"; then
     gidformat="'hu'"
    fi
   fi
  fi
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_NeWS.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_NeWS.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_news d_news0 d_newshome d_textcan: test rm Myread Getfile
?MAKE: -pick add $@ %<
```

```
?S:d_news:
?S: Set if running NeWS 1.1
?S:.
?S:d_news0:
?S: Set if running NeWS 1.0
?S:.
?S:d_newshome:
?S: Path to the top directory of the NeWS structure.
?S:.
?S:d_textcan:
?S: Path to where the textcan.ps stuff is...
?S:.
?C:HAS_NEWS1_1 (NEWS1_1):
?C: This
 symbol defined if running NeWS 1.1.
?C:.
?C:HAS_NEWS1_0 (NEWS1_0):
?C: This symbol defined if running NeWS 1.0.
?C:.
?C:TEXTCAN:
?C: Tells path to where the textcan.ps stuff is...
?C:.
?H:#$d_news HAS_NEWS1_1     /**/
?H:#$d_news0 HAS_NEWS1_0     /**/
?H:#define TEXTCAN $d_textcan /**/
?H:.
?INIT:: default path for NeWS
?INIT:d_newshome="/usr/NeWS"
?INIT:
: Check to see what version of NeWS is being run?
cd ..
echo " "
echo "Now for the interesting stuff... Lets see what kind of NeWS"
echo "they grow round here...."
echo " "
dflt='y'
if $test -d $d_newshome; then
 d_newshome=`(cd $d_newshome ; /bin/pwd)`
 echo "Ah...found myself a NeWS in $d_newshome..."
 dflt='y'
 rp="Is this the NeWS you want your children to grow up with?"
 . UU/myread
fi
while $test $ans = "n"; do
dflt=$d_newshome
fn=d
rp="Path to NeWS you want:"
. UU/getfile
```

```
d_newshome=$ans

echo " "
if $test ! -d $d_newshome/lib; then
 echo "ARG!  No lib directory in $d_newshome!!!"
 : heavy medicine.  I wonder what the disease
 is...
 $rm -f kit*isdone
 $rm -rf UU
 : bye bye
 set -t; echo "Sorry... no NeWS is bad news..."
fi

if $test -r $d_newshome/lib/NeWS/colors.ps ; then
 echo 'Ahh... your running NeWS 1.1!  Boy... that makes stuff easy....'
 echo " "
 d_news="$define"
 d_news0="$undef"
 if $test -r $d_newshome/lib/NeWS/textcan.ps; then
  d_textcan=$d_newshome/lib/NeWS
  echo "The textcan.ps stuff seems to be in : $d_textcan"
 else
  d_textcan=$d_newshome/clientsrc/client/nterm
  if $test ! -r $d_textcan/textcan.ps; then
   d_news="$undef"
   d_news0="$define"
   echo 'Hmm... must have been fooled... gotta be NeWS 1.1 beta!'
  else
   echo "The textcan.ps stuff seems to be in : $d_textcan"
  fi
 fi
else
 echo 'snif... snif... I smell the dilapidated smell of NeWS 1.0..'
 echo 'Some things will not work under NeWS 1.0...'
 d_news="$undef"
 d_news0="$define"
fi
cd UU
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_NeWS.U
No license file was found, but licenses were detected in source scan.

```
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```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:fpossize: Myread Typedef fpostype Compile longsize run i_stdlib
?MAKE: -pick add $@ %<
?S:fpossize:
?S: This variable contains the size of a fpostype in bytes.
?S:.
?C:Fpos_t_size:
?C: This symbol holds the size of a Fpos_t in bytes.
?C:.
?H:#define Fpos_t_size $fpossize  /* FPOS size */
?H:.
?T:yyy zzz
?F:!try
: Check size for Fpos_t
echo " "
case "$fpostype" in
*_t) zzz="$fpostype" ;;
*)   zzz="fpos_t" ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef
 I_STDLIB
#include <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($fpostype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") fpossize=4
  echo "(I can't execute the test program--guessing $fpossize.)" >&4
  ;;
 *) fpossize=$yyy
  echo "Your $zzz is $fpossize bytes long."
  ;;
 esac
else
```

```
 dflt="$longsize"
 echo " " >&4
 echo "(I can't compile the test program.  Guessing...)" >&4
 rp="What is the size of your file positions (in bytes)?"
 . ./myread
 fpossize="$ans"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/fpossize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysdir.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:22:30  ram
?RCS: patch32: fixed typo in I_SYS_DIR symbol name
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysdir: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysdir:
?S: This variable conditionally defines the I_SYS_DIR symbol, and indicates
?S: whether a C program should include <sys/dir.h>.
?S:.
?C:I_SYS_DIR (I_SYSDIR):
?C: This symbol, if
 defined, indicates to the C program that it should
?C: include <sys/dir.h>.
?C:.
?H:#$i_sysdir I_SYS_DIR  /**/
?H:.
?LINT:set i_sysdir
: see if this is an sysdir system
set sys/dir.h i_sysdir
eval $inhdr
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sysconf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_sysconf.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:15:57  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_sysconf: Inlibc
?MAKE: -pick add $@ %<
?S:d_sysconf:
?S: This variable conditionally defines the HAS_SYSCONF symbol, which
?S: indicates to the C program that the sysconf() routine is available
?S: to determine system related limits and options.
?S:.
?C:HAS_SYSCONF:
?C: This
 symbol, if defined, indicates that sysconf() is available
?C: to determine system related limits and options.
?C:.
?H:#$d_sysconf HAS_SYSCONF /**/
?H:.
?LINT:set d_sysconf
: see if sysconf exists
set sysconf d_sysconf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sysconf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Guess.U,v 3.0.1.5 1995/07/25 13:37:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Guess.U,v $
?RCS: Revision 3.0.1.5  1995/07/25  13:37:14  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:53:55  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:14:35  ram
?RCS: patch15: variable d_bsd was not always set properly
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:14  ram
?RCS:
 patch8: fixed comment which wrongly attributed the usrinc symbol
?RCS: patch8: no more ugly messages when no /usr/include/ctype.h
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:37:37  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit hazards some guesses as to what the general nature of the system
?X: is.  The information it collects here is used primarily to establish default
?X: answers to other questions.
?X:
?MAKE:Guess d_eunice d_xenix d_bsd: cat test echo n c contains \
 rm Loc eunicefix tr sysroot
?MAKE: -pick add $@ %<
?S:d_eunice:
?S: This variable conditionally defines the symbols EUNICE and VAX, which
?S: alerts the C program that it must deal with idiosyncrasies of VMS.
?S:.
?S:d_xenix:
?S: This variable conditionally defines the symbol XENIX, which alerts
?S: the C program that it runs under Xenix.
?S:.
?S:d_bsd:
?S: This symbol conditionally defines the
 symbol BSD when running on a
?S: BSD system.
?S:.
?C:EUNICE:
```

```
?C: This symbol, if defined, indicates that the program is being compiled
?C: under the EUNICE package under VMS.  The program will need to handle
?C: things like files that don't go away the first time you unlink them,
?C: due to version numbering.  It will also need to compensate for lack
?C: of a respectable link() command.
?C:.
?X: Should we define VMS here?  Is Eunice actually used anymore?
?X:?C:VMS:
?X:?C: This symbol, if defined, indicates that the program is running under
?X:?C: VMS.  It is currently only set in conjunction with the EUNICE symbol.
?X:?C:.
?C:XENIX:
?C: This symbol, if defined, indicates that the program is running under
?C: Xenix (at least 3.0 ?).
?C:.
?X:  We don't use BSD in the perl source.  It's too vague, and already
?X:  defined in some header files anyway (e.g. NetBSD).  This just gives
?X:  us a spurious redefinition error upon compilation.
?X: --Andy Dougherty  Feb 11, 1998
?X: ?C:BSD:
?X:
 ?C: This symbol, if defined, indicates that the program is running under
?X: ?C: a BSD system.
?X: ?C:.
?H:#$d_eunice EUNICE  /**/
?X:?H:#$d_eunice VMS  /**/
?H:#$d_xenix XENIX  /**/
?X: ?H:#$d_bsd BSD  /**/
?H:.
?F:./bsd ./usg ./v7 ./osf1 ./eunice ./xenix ./venix ./os2
?T:xxx
: make some quick guesses about what we are up against
echo " "
$echo $n "Hmm...  $c"
echo exit 1 >bsd
echo exit 1 >usg
echo exit 1 >v7
echo exit 1 >osf1
echo exit 1 >eunice
echo exit 1 >xenix
echo exit 1 >venix
echo exit 1 >os2
d_bsd="$undef"
?X:
?X: Do not use 'usrinc', or we get a circular dependency. because
?X: usrinc is defined in usrinc.U, which relies on us...
?X:
$cat $sysroot/usr/include/signal.h $sysroot/usr/include/sys/signal.h >foo 2>/dev/null
```

```
if test -f /osf_boot || $contains 'OSF/1' $sysroot/usr/include/ctype.h >/dev/null 2>&1
then
 echo "Looks kind of like an OSF/1 system, but we'll see..."
 echo exit 0 >osf1
elif test `echo abc | $tr a-z A-Z` = Abc ; then
 xxx=`./loc addbib blurfl $pth`
 if $test
 -f $xxx; then
 echo "Looks kind of like a USG system with BSD features, but we'll see..."
  echo exit 0 >bsd
  echo exit 0 >usg
 else
  if $contains SIGTSTP foo >/dev/null 2>&1 ; then
   echo "Looks kind of like an extended USG system, but we'll see..."
  else
   echo "Looks kind of like a USG system, but we'll see..."
  fi
  echo exit 0 >usg
 fi
elif $contains SIGTSTP foo >/dev/null 2>&1 ; then
 echo "Looks kind of like a BSD system, but we'll see..."
 d_bsd="$define"
 echo exit 0 >bsd
else
 echo "Looks kind of like a Version 7 system, but we'll see..."
 echo exit 0 >v7
fi
case "$eunicefix" in
*unixtovms*)
 $cat <<'EOI'
There is, however, a strange, musty smell in the air that reminds me of
something...hmm...yes...I've got it...there's a VMS nearby, or I'm a Blit.
EOI
 echo exit 0 >eunice
 d_eunice="$define"
: it so happens the Eunice I know will not run shell scripts in Unix format
 ;;
*)
 echo " "
 echo "Congratulations.  You aren't running Eunice."
 d_eunice="$undef"
 ;;
esac
: Detect
 OS2.  The p_ variable is set above in the Head.U unit.
: Note that this also -- wrongly -- detects e.g. dos-djgpp, which also uses
: semicolon as a patch separator
case "$p_" in
```

```
:) ;;
*)
 $cat <<'EOI'
I have the feeling something is not exactly right, however...don't tell me...
lemme think...does HAL ring a bell?...no, of course, you're only running OS/2!
(Or you may be running DOS with DJGPP.)
EOI
 echo exit 0 >os2
 ;;
esac
if test -f /xenix; then
 echo "Actually, this looks more like a XENIX system..."
 echo exit 0 >xenix
 d_xenix="$define"
else
 echo " "
 echo "It's not Xenix..."
 d_xenix="$undef"
fi
chmod +x xenix
$eunicefix xenix
if test -f /venix; then
 echo "Actually, this looks more like a VENIX system..."
 echo exit 0 >venix
else
 echo " "
 if ./xenix; then
  : null
 else
  echo "Nor is it Venix..."
 fi
fi
chmod +x bsd usg v7 osf1 eunice xenix venix os2
$eunicefix bsd usg v7 osf1 eunice xenix venix os2
$rm -f foo
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Guess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ustat.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_ustat: Inhdr Hasfield
```

```
?MAKE: -pick add $@ %<
?S:i_ustat:
?S: This variable conditionally defines the I_USTAT symbol, and indicates
?S: whether a C program should include <ustat.h>.
?S:.
?C:I_USTAT:
?C: This symbol, if defined, indicates that <ustat.h> exists and
?C: should be included.
?C:.
?H:#$i_ustat I_USTAT  /**/
?H:.
?LINT:set i_ustat
: see if this is a ustat.h system
set ustat.h i_ustat
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_ustat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setgrps.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setgrps.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setgrps: Inlibc
?MAKE: -pick add $@ %<
?S:d_setgrps:
?S: This variable conditionally defines the HAS_SETGROUPS symbol, which
?S: indicates to the C program that the setgroups() routine is available
?S: to set the list of process groups.
?S:.
?C:HAS_SETGROUPS:
?C: This symbol, if defined, indicates that the setgroups() routine is
?C: available
 to set the list of process groups.  If unavailable, multiple
?C: groups are probably not supported.
?C:.
?H:#$d_setgrps HAS_SETGROUPS  /**/
```

```
?H:.
?LINT:set d_setgrps
: see if setgroups exists
set setgroups d_setgrps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setgrps.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setnetent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setnetent_r setnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setnetent_r:
?S: This variable conditionally defines the HAS_SETNETENT_R symbol,
?S: which indicates to the C program that the setnetent_r()
?S: routine is available.
?S:.
?S:setnetent_r_proto:
?S: This variable encodes the prototype of setnetent_r.
?S: It is zero if d_setnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setnetent_r
?S: is defined.
?S:.
?C:HAS_SETNETENT_R:
?C: This symbol, if defined, indicates that the setnetent_r routine
?C: is
 available to setnetent re-entrantly.
?C:.
?C:SETNETENT_R_PROTO:
?C: This symbol encodes the prototype of setnetent_r.
?C: It is zero if d_setnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setnetent_r
?C: is defined.
?C:.
?H:#$d_setnetent_r HAS_SETNETENT_R /**/
?H:#define SETNETENT_R_PROTO $setnetent_r_proto /**/
?H:.
?T:try hdrs d_setnetent_r_proto
: see if setnetent_r exists
```

```
set setnetent_r d_setnetent_r
eval $inlibc
case "$d_setnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setnetent_r_proto:$usethreads" in
 ":define") d_setnetent_r_proto=define
  set d_setnetent_r_proto setnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setnetent_r_proto" in
 define)
 case "$setnetent_r_proto" in
 "|0) try='int setnetent_r(int, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && setnetent_r_proto=I_ID ;;
 esac
 case "$setnetent_r_proto" in
 "|0) try='void setnetent_r(int, struct netent_data*);'
 ./protochk
 "$extern_C $try" $hdrs && setnetent_r_proto=V_ID ;;
 esac
 case "$setnetent_r_proto" in
 "|0) d_setnetent_r=undef
  setnetent_r_proto=0
  echo "Disabling setnetent_r, cannot determine prototype." >&4 ;;
 * ) case "$setnetent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setnetent_r_proto="REENTRANT_PROTO_$setnetent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setnetent_r has no prototype, not using it." >&4 ;;
  esac
  d_setnetent_r=undef
  setnetent_r_proto=0
  ;;
 esac
 ;;
*) setnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setnetent_r.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_sendmsg: Inlibc
?MAKE: -pick add $@ %<
?S:d_sendmsg:
?S: This variable conditionally defines the HAS_SENDMSG symbol, which
?S: indicates to the C program that the sendmsg() routine is available.
?S:.
?C:HAS_SENDMSG:
?C: This symbol, if defined, indicates that the sendmsg routine is
?C: available to send structured socket messages.
?C:.
?H:#$d_sendmsg HAS_SENDMSG  /**/
?H:.
?LINT:set d_sendmsg
: see if sendmsg exists
set sendmsg d_sendmsg
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sendmsg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sig_name.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sig_name.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:21:25  ram
?RCS: patch61: brand new algorithm for sig_name and (new!) sig_num
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  14:14:54  ram
?RCS: patch56: added <asm/signal.h> lookup for Linux
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:24:11  ram
```

```
?RCS: patch54: now looks for <linux/signal.h> too (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:06:57  ram
?RCS: patch30: final echo was missing to close
 awk-printed string
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:17:55  ram
?RCS: patch23: signal list now formatted to avoid scroll-ups (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sig_name sig_name_init sig_num sig_num_init sig_count sig_size: \
 awk Signal Oldconfig rm
?MAKE: -pick add $@ %<
?S:sig_name:
?S: This variable holds the signal names, space separated. The leading
?S: SIG in signal name is removed.  A ZERO is prepended to the list.
?S: This is currently not used, sig_name_init is used instead.
?S:.
?S:sig_name_init:
?S: This variable holds the signal names, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NAME definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.  The leading SIG in signal names
?S: is removed. See sig_num.
?S:.
?S:sig_num:
?S: This variable holds the signal numbers, space separated. A ZERO is
?S: prepended
 to the list (corresponding to the fake SIGZERO).
?S: Those numbers correspond to  the value of the signal listed
?S: in the same place within the sig_name list.
?S: This is currently not used, sig_num_init is used instead.
?S:.
?S:sig_num_init:
?S: This variable holds the signal numbers, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NUM definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.
?S:.
?S:sig_count (sig_name.U):
?S: This variable holds a number larger than the largest valid
?S: signal number.  This is usually the same as the NSIG macro.
?S:.
?S:sig_size:
?S: This variable contains the number of elements of the sig_name
?S: and sig_num arrays.
```

```
?S:.
?C:SIG_NAME:
?C: This symbol contains a list of signal names in order of
?C: signal number. This is intended
?C: to be used as a static array initialization, like this:
?C:  char *sig_name[] = { SIG_NAME };
?C: The signals in the list are separated
 with commas, and each signal
?C: is surrounded by double quotes. There is no leading SIG in the signal
?C: name, i.e. SIGQUIT is known as "QUIT".
?C: Gaps in the signal numbers (up to NSIG) are filled in with NUMnn,
?C: etc., where nn is the actual signal number (e.g. NUM37).
?C: The signal number for sig_name[i] is stored in sig_num[i].
?C: The last element is 0 to terminate the list with a NULL.  This
?C: corresponds to the 0 at the end of the sig_name_init list.
?C: Note that this variable is initialized from the sig_name_init,
?C: not from sig_name (which is unused).
?C:.
?C:SIG_NUM:
?C: This symbol contains a list of signal numbers, in the same order as the
?C: SIG_NAME list. It is suitable for static array initialization, as in:
?C:  int sig_num[] = { SIG_NUM };
?C: The signals in the list are separated with commas, and the indices
?C: within that list and the SIG_NAME list match, so it's easy to compute
?C: the signal name from a number or vice versa at the price of a small
?C: dynamic
 linear lookup.
?C: Duplicates are allowed, but are moved to the end of the list.
?C: The signal number corresponding to sig_name[i] is sig_number[i].
?C: if (i < NSIG) then sig_number[i] == i.
?C: The last element is 0, corresponding to the 0 at the end of
?C: the sig_name_init list.
?C: Note that this variable is initialized from the sig_num_init,
?C: not from sig_num (which is unused).
?C:.
?C:SIG_COUNT:
?C: This variable contains a number larger than the largest
?C: signal number.  This is usually the same as the NSIG macro.
?C:.
?C:SIG_SIZE:
?C: This variable contains the number of elements of the SIG_NAME
?C: and SIG_NUM arrays, excluding the final NULL entry.
?C:.
?H:#define SIG_NAME $sig_name_init  /**/
?H:#define SIG_NUM  $sig_num_init  /**/
?H:#define SIG_COUNT $sig_count   /**/
?H:#define SIG_SIZE $sig_size   /**/
?H:.
```

```
?T:i doinit
?F:!= !signal_cmd
?X: signal.cmd creates a file  signal.lst which has two columns:
?X: NAME  number, e.g.
?X:  HUP 1
?X: The list is
 sorted on signal number, with duplicates moved to
?X: the end..
: generate list of signal names
case "$sig_num_init" in
")
echo " "
case "$sig_name_init" in
") doinit=yes ;;
*)  case "$sig_num_init" in
   "|*,*) doinit=yes ;;
   esac ;;
esac
case "$doinit" in
yes)
 echo "Generating a list of signal names and numbers..." >&4
 . ./signal_cmd
 sig_count=`$awk '/^NSIG/ { printf "%d", $2 }' signal.lst`
 sig_name=`$awk 'BEGIN { printf "ZERO " }
   !/^NSIG/ { printf "%s ", $1 }' signal.lst`
 sig_num=`$awk  'BEGIN { printf "0 " }
   !/^NSIG/ { printf "%d ", $2 }' signal.lst`
 sig_name_init=`$awk 'BEGIN { printf "\"ZERO\", " }
        !/^NSIG/ { printf "\"%s\", ", $1 }
        END { printf "0\n" }' signal.lst`
 sig_num_init=`$awk  'BEGIN { printf "0, " }
        !/^NSIG/ { printf "%d, ", $2}
        END { printf "0\n"}' signal.lst`
 ;;
esac
echo "The following $sig_count signals are available:"
echo " "
echo $sig_name | $awk \
'BEGIN { linelen = 0 }
{
 for (i = 1; i <= NF; i++) {
  name
 = "SIG" $i " "
  linelen = linelen + length(name)
  if (linelen > 70) {
   printf "\n"
   linelen = length(name)
  }
```

```
  printf "%s", name
 }
 printf "\n"
}'
sig_size=`echo $sig_name | awk '{print NF}'`
$rm -f signal signal.c signal.awk signal.lst signal_cmd
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sig_name.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: contains.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:contains: Nothing
?MAKE: -pick add $@ %<
?S:contains:
?S: This variable holds the command to do a grep with a proper return
?S: status.  On most sane systems it is simply "grep".  On insane systems
?S: it is a grep followed by a cat followed by a test.  This variable
?S: is primarily for the use of other Configure units.
?S:.
: Some
 greps do not return status, grrr.
echo "grimblepritz" >grimble
if grep blurfldyick grimble >/dev/null 2>&1 ; then
 contains=contains
elif grep grimblepritz grimble >/dev/null 2>&1 ; then
 contains=grep
else
 contains=contains
fi
rm -f grimble
: the following should work in any shell
case "$contains" in
```

```
contains*)
 echo " "
 echo "AGH!  Grep doesn't return a status.  Attempting remedial action."
 cat >contains <<'EOSS'
grep "$1" "$2" >.greptmp && cat .greptmp && test -s .greptmp
EOSS
chmod +x contains
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/contains.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: make.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: make.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:09:40  ram
?RCS: patch61: created
?RCS:
?MAKE:make_set_make : Loc rm sed make
?MAKE: -pick add $@ %<
?S:make_set_make:
?S: Some versions of 'make' set the variable MAKE.  Others do not.
?S: This variable contains the string to be included in Makefile.SH
?S: so that MAKE is set if needed, and not if not needed.
?S: Possible values are:
?S:
?S: make_set_make='#'  #
 If your make program handles this for you,
?S:
?S: make_set_make="MAKE=$make" # if it doesn't.
?S:
?S: This uses a comment character so that we can distinguish a
?S: 'set' value (from a previous config.sh or Configure -D option)
?S: from an uncomputed value.
?S:.
?LINT: extern MAKE
?LINT: change MAKE
?X: This test is based on one from an autoconf-generated configure
```

```
?X: script. Autoconf stole a lot from Configure, but now it's our
?X: turn to do so... ;-) -- RAM, 21/02/97
: check whether make sets MAKE
echo " "
echo "Checking if your $make program sets \$(MAKE)..." >&4
case "$make_set_make" in
")
?X: Use sed so we don't have a line begining with @echo.  Metaconfig
?X: will think that's a command like @if or @end.
 $sed 's/^X //' > testmake.mak << 'EOF'
Xall:
X  @echo 'maketemp="$(MAKE)"'
EOF
?X: GNU make sometimes prints "make[1]: Entering...", which would confuse us
 case "`$make -f testmake.mak 2>/dev/null`" in
 *maketemp=*) make_set_make='#' ;;
 *) make_set_make="MAKE=$make" ;;
 esac
 $rm
 -f testmake.mak
 ;;
esac
case "$make_set_make" in
'#') echo "Yup, it does.";;
*) echo "Nope, it doesn't.";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/make.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Signal.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:01  ram
?RCS: patch61: created
?RCS:
?X:
?X: This unit produces three files:
?X:
```

```
?X: 1- A signal.c file, which, when compiled and run, produces an output like:
?X:
?X:   HUP 1
?X:   INT 2
?X:   QUIT 3
?X:   etc...
?X:
?X: 2- A signal.awk script to parse the output of signal.c, fill
?X: in gaps (up to NSIG) and move duplicates to the end.
?X:
?X: 3- A signal_cmd script to compile signal.c and run it
?X: through sort -n -k 2 | uniq | awk -f signal.awk.
?X:
 (we try also sort -n +1 since some old hosts don't grok sort -k)
?X: (This is called signal_cmd to avoid OS/2 confusion with
?X: signal.cmd vs. signal.
?X: The signal_cmd script also falls back on checking signals one at a
?X: time in case the signal.c program fails.  On at least one version of
?X: Linux 2.1.x, the header file #define'd SIGRTMAX to a symbol that
?X: is not defined by the compiler/linker. :-(.  Further, on that same
?X: version of Linux, the user had a defective C-shell that gave an
?X: incorrect list for kill -l, so the fall-back didn't work.
?X:
?X: This unit is then used by sig_name.U.
?X:
?MAKE:Signal: test tr rm awk cat grep startsh eunicefix sed sort uniq \
 Findhdr cppstdin +cppflags cppminus Compile trnl run
?MAKE: -pick add $@ %<
?X:all files declared as "public" since they're used from other units
?F:signal.c signal_cmd signal.lst signal signal.awk
?T: xx xxx xxxfiles
?LINT:use rm run
: Trace out the files included by signal.h, then look for SIGxxx
 names.
?X: Remove SIGARRAYSIZE used by HPUX.
?X: Remove SIGSTKSIZE used by Linux.
?X: Remove SIGSTKSZ used by Posix.
?X: Remove SIGTYP void lines used by OS2.
?X: Some cpps, like os390, dont give the file name anywhere
if [ "X$fieldn" = X ]; then
 : Just make some guesses.  We check them later.
 xxx='/usr/include/signal.h /usr/include/sys/signal.h'
else
 xxx=`echo '#include <signal.h>' |
 $cppstdin $cppminus $cppflags 2>/dev/null |
 $grep '^[  ]*#.*include' |
 $awk "{print \\$$fieldn}" | $sed 's!"!!g' |\
  $sed 's!\\\\\\\\!/!g' | $sort | $uniq`
```

```
fi
?X: Check this list of files to be sure we have parsed the cpp output ok.
?X: This will also avoid potentially non-existent files, such
?X: as ../foo/bar.h
xxxfiles=''
?X: Add /dev/null in case the $xxx list is empty.
for xx in $xxx /dev/null ; do
 $test -f "$xx" && xxxfiles="$xxxfiles $xx"
done
?X: If we have found no files, at least try signal.h
case "$xxxfiles" in
'') xxxfiles=`./findhdr signal.h` ;;
esac
xxx=`awk '
$1 ~ /^#define$/ &&
 $2 ~ /^SIG[A-Z0-9]*$/ && $2 !~ /SIGARRAYSIZE/ && $2 !~ /SIGSTKSIZE/ && $2 !~ /SIGSTKSZ/ && $3 !~
/void/ {
 print substr($2, 4, 20)
}
$1 == "#" && $2 ~ /^define$/ && $3 ~ /^SIG[A-Z0-9]*$/ && $3 !~ /SIGARRAYSIZE/ && $4 !~ /void/ {
 print substr($3, 4, 20)
}' $xxxfiles`
: Append some common names just in case the awk scan failed.
xxx="$xxx ABRT ALRM BUS CANCEL CHLD CLD CONT DIL EMT FPE"
xxx="$xxx FREEZE HUP ILL INT IO IOT KILL LOST LWP PHONE"
xxx="$xxx PIPE POLL PROF PWR QUIT RTMAX RTMIN SEGV STKFLT STOP"
xxx="$xxx SYS TERM THAW TRAP TSTP TTIN TTOU URG USR1 USR2"
xxx="$xxx USR3 USR4 VTALRM WAITING WINCH WIND WINDOW XCPU XFSZ"

: generate a few handy files for later
$cat > signal.c <<'EOCP'
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {

/* Strange style to avoid deeply-nested #if/#else/#endif */
#ifndef NSIG
#  ifdef _NSIG
#    define NSIG (_NSIG)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGMAX
#    define NSIG (SIGMAX+1)
#  endif
#endif
```

```
#ifndef NSIG
#  ifdef SIG_MAX
#
    define NSIG (SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAXSIG
#    define NSIG (MAXSIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAX_SIG
#    define NSIG (MAX_SIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGARRAYSIZE
#    define NSIG (SIGARRAYSIZE+1) /* Not sure of the +1 */
#  endif
#endif

#ifndef NSIG
#  ifdef _sys_nsig
#    define NSIG (_sys_nsig) /* Solaris 2.5 */
#  endif
#endif

/* Default to some arbitrary number that's big enough to get most
  of the common signals.
*/
#ifndef NSIG
#    define NSIG 50
#endif

printf("NSIG %d\n", NSIG);

#ifndef JUST_NSIG

EOCP

echo $xxx | $tr ' ' $trnl | $sort | $uniq | $awk '
{
 printf "#ifdef SIG"; printf $1; printf "\n"
```

```
 printf "printf(\""; printf $1; printf " %%d\\n\",SIG";
 printf $1; printf ");\n"
 printf "#endif\n"
}
END {
 printf "#endif /* JUST_NSIG */\n";
 printf "exit(0);\n}\n";
}
' >>signal.c
$cat >signal.awk <<'EOP'
BEGIN { ndups = 0 }
$1 ~ /^NSIG$/ { nsig = $2 }
($1 !~ /^NSIG$/) && (NF == 2) {
   if ($2 >
 maxsig) { maxsig = $2 }
   if (sig_name[$2]) {
 dup_name[ndups] = $1
 dup_num[ndups] = $2
 ndups++
   }
   else {
 sig_name[$2] = $1
 sig_num[$2] = $2
   }
}
END {
   if (nsig == 0) {
    nsig = maxsig + 1
   }
   printf("NSIG %d\n", nsig);
   for (n = 1; n < nsig; n++) {
 if (sig_name[n]) {
     printf("%s %d\n", sig_name[n], sig_num[n])
 }
 else {
     printf("NUM%d %d\n", n, n)
 }
   }
   for (n = 0; n < ndups; n++) {
 printf("%s %d\n", dup_name[n], dup_num[n])
   }
}
EOP
$cat >signal_cmd <<EOS
$startsh
if $test -s signal.lst; then
   echo "Using your existing signal.lst file"
 exit 0
```

```
fi
xxx="$xxx"
EOS
?X: Avoid variable interpolation problems, especially with
?X: xxx, which contains newlines.
$cat >>signal_cmd <<'EOS'

set signal
if eval $compile_ok; then
 $run ./signal$_exe | ($sort -n -k 2 2>/dev/null || $sort -n +1) |\
  $uniq | $awk -f signal.awk >signal.lst
else
 echo "(I can't seem be able to compile the whole test program)" >&4
 echo "(I'll try it in little
 pieces.)" >&4
 set signal -DJUST_NSIG
 if eval $compile_ok; then
  $run ./signal$_exe > signal.nsg
  $cat signal.nsg
 else
  echo "I can't seem to figure out how many signals you have." >&4
  echo "Guessing 50." >&4
  echo 'NSIG 50' > signal.nsg
 fi
 : Now look at all the signal names, one at a time.
 for xx in `echo $xxx | $tr ' ' $trnl | $sort | $uniq`; do
  $cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {
printf("$xx %d\n", SIG${xx});
return 0;
}
EOCP
  set signal
  if eval $compile; then
   echo "SIG${xx} found."
   $run ./signal$_exe  >> signal.ls1
  else
   echo "SIG${xx} NOT found."
  fi
 done
 if $test -s signal.ls1; then
  $cat signal.nsg signal.ls1 |
   $sort -n | $uniq | $awk -f signal.awk >signal.lst
 fi
```

```
fi
if $test -s signal.lst; then
 :
else
 echo "(AAK! I can't compile the test programs -- Guessing)" >&4
 echo 'kill -l' >signal
 set X `csh -f <signal`
 $rm -f signal
 shift
 case $# in
 0) set HUP INT QUIT ILL TRAP ABRT
 EMT FPE KILL BUS SEGV SYS PIPE ALRM TERM;;
 esac
 echo $@ | $tr ' ' $trnl | \
     $awk '{ printf "%s %d\n", $1, ++s; }
    END { printf "NSIG %d\n", ++s }' >signal.lst
fi
$rm -f signal.c signal$_exe signal$_o signal.nsg signal.ls1
EOS
chmod a+x signal_cmd
$eunicefix signal_cmd
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Signal.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, 2012 Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:ptrsize: cat rm_try Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:ptrsize:
?S: This variable contains the value of the PTRSIZE symbol, which
?S: indicates to the C program how many bytes there are in a pointer.
?S:.
?C:PTRSIZE:
?C: This symbol contains the size of a pointer, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define PTRSIZE $ptrsize  /**/
?H:.
```

```
?F:!try
: check for length of pointer
echo " "
case "$ptrsize" in
")
 echo "Checking to see how big your pointers are..."
 >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(char *));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$ptrsize"
 ;;
esac
rp="What is the size of a pointer (in bytes)?"
. ./myread
ptrsize="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ptrsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: packadmin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:packadmin: cf_email Oldconfig Myread cat spackage package
?MAKE: -pick add $@ %<
?Y:TOP
```

```
?S:packadmin:
?S: Electronic mail address of the package administrator.
?S:.
: check wehther they will act as local admin for the package
$cat <<EOM

If you or somebody else will be maintaining $package at your site, please
fill in the correct e-mail address here so that they may be contacted
if necessary.  You may enter "none"
 for no administrator.

EOM
case "$packadmin" in
") dflt="$cf_email";;
*) dflt="$packadmin";;
esac
rp="$spackage administrator e-mail address"
. ./myread
packadmin="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/packadmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Config_sh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_sh.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:57:53  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  14:53:31  ram
?RCS: patch45: moved path stripping from d_portable.U to end of Configure
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:50:37  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X:
 This unit ends up producing the config.sh script, which contains all the
?X: definitions figured out by Configure.  The add.Config_sh command knows
?X: which variables need to be remembered.  It also adds the EOT (ends the
?X: here document redirection with variable substitution).
?X:
?MAKE:Config_sh: cf_time cf_by test spitshell startsh myuname Myread \
 End Obsol_sh Loc +d_portable package src cat
?MAKE: -pick add.Config_sh $@ %<
?MAKE: -pick add $@ ./Obsol_sh
?MAKE: -pick close.Config_sh $@ %<
?F:!config.over !config.arch
?T:file temp
?LINT:unclosed EOT
: back to where it started
if test -d ../UU; then
 cd ..
fi

: configuration may be unconditionally patched via a 'config.arch' file
if $test -f config.arch; then
 echo "I see a config.arch file, loading it." >&4
 . ./config.arch
fi

: configuration may be patched via a 'config.over' file
if $test -f config.over; then
 echo " "
 dflt=y
 rp='I see a config.over file.  Do you wish to load it?'
 . UU/myread
 case "$ans" in
 n*) echo
 "OK, I'll ignore it.";;
 *) . ./config.over
  echo "Configuration override changes have been loaded."
  ;;
 esac
fi

@if d_portable
: in case they want portability, strip down executable paths
?X:
?X: Strip down paths in located executables. For each file, e.g. vi, there
?X: is a $vi variable whose value is for instance '/usr/bin/vi'. By resetting
?X: $vi to 'vi', we rely on the PATH variable to locate the executable...
?X:
case "$d_portable" in
```

```
"$define")
 echo " "
 echo "Stripping down executable paths..." >&4
?X:
?X: Previously, we used to do    eval $file="\$file"  but in order
?X: to handle things like  sh Configure -Dmake=gmake, we can't do
?X: that.  What we *really* want is to strip away the absolute path
?X: and rely on the end user's $PATH to correctly find the executable.
?X: This method assumes there is a "basename" command available.  If
?X: not, replace it with the following expr-based command:
?X:   expr  $temp : '.*/\(.*\)' \| $temp
?X: Since this preserves the actual
 command name, we can now drop the
?X: OS/2 specific code.
?X:  --Andy Dougherty  August 1999
?X:
?X: On OS/2, a special $ar command not even named 'ar' is required,
?X: so we don't strip that name.
?X: Also, on DOS-ish systems, there might not be a ln command, but we
?X: might have ln='cp'.
?X: However, we can't set d_portable=undef on such systems since
?X: Unix-ish tools don't have standard locations there.  Thus we
?X: MUST rely on the user's $PATH.
?X: --Andy Dougherty  4/1998
?X:
 for file in $loclist $trylist; do
  eval temp=\$$file
  eval $file=`basename $temp`
 done
 ;;
esac

@end
: create config.sh file
echo " "
echo "Creating config.sh..." >&4
$spitshell <<EOT >config.sh
$startsh
#
# This file was produced by running the Configure script. It holds all the
# definitions figured out by Configure. Should you modify one of these values,
# do not forget to propagate your changes by running "Configure -der". You may
# instead choose to run each of the .SH files by yourself, or "Configure
 -S".
#

# Package name      : $package
# Source directory  : $src
```

```
# Configuration time: $cf_time
# Configured by     : $cf_by
# Target system     : $myuname

EOT
?X: Command line options are saved by the Options.U unit in the
?X: temporary file UU/cmdline.opt
: Add in command line options if available
$test -f UU/cmdline.opt && $cat UU/cmdline.opt >> config.sh

$spitshell <<EOT >>config.sh

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Config_sh.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: Signal.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Signal.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:01  ram
?RCS: patch61: created
?RCS:
?X:
?X: This unit produces three files:
?X: 1- A signal.c file, which, when compiled and run, produces an output like:
?X:
?X:   HUP 1
?X:   INT 2
?X:   QUIT 3
?X:   etc...
?X:
?X: 2- A signal.awk script to parse the output of signal.c, fill
?X: in gaps (up to NSIG) and move duplicates to the end.
?X: 3- A signal_cmd script to compile signal.c and run it
?X: through
 sort -n -k 2 | uniq | awk -f signal.awk.
?X: (we try also sort -n +1 since some old hosts don't grok sort -k)
?X: (This is called signal_cmd to avoid OS/2 confusion with
?X: signal.cmd vs. signal.
?X: The signal_cmd script also falls back on checking signals one at a
```

```
?X: time in case the signal.c program fails.  On at least one version of
?X: Linux 2.1.x, the header file #define'd SIGRTMAX to a symbol that
?X: is not defined by the compiler/linker. :-(.  Further, on that same
?X: version of Linux, the user had a defective C-shell that gave an
?X: incorrect list for kill -l, so the fall-back didn't work.
?X:
?X: This unit is then used by sig_name.U.
?X:
?MAKE:Signal: test tr rm awk cat grep startsh eunicefix sed sort uniq \
 Findhdr cppstdin +cppflags cppminus Compile _o _exe trnl run i_stdlib \
 sysroot
?MAKE: -pick add $@ %<
?X:all files declared as "public" since they're used from other units
?F:signal.c signal_cmd signal.lst signal signal.awk
?T: xx xxx xxxfiles
?LINT:use rm run
 _o _exe
?LINT:extern sig_num_init
: Trace out the files included by signal.h, then look for SIGxxx names.
?X: Remove SIGARRAYSIZE used by HPUX.
?X: Remove SIGSTKSIZE used by Linux.
?X: Remove SIGSTKSZ used by POSIX.
?X: Remove SIGTYP void lines used by OS2.
?X: Some cpps, like os390, do not give the file name anywhere
case "$sig_num_init" in
")
if [ "X$fieldn" = X ]; then
 : Just make some guesses.  We check them later.
 xxx="$sysroot/usr/include/signal.h $sysroot/usr/include/sys/signal.h"
else
 xxx=`echo '#include <signal.h>' |
 $cppstdin $cppminus $cppflags 2>/dev/null |
 $grep '^[  ]*#.*include' |
 $awk "{print \\$$fieldn}" | $sed 's!"!!g' |\
  $sed 's!\\\\\\\\!/!g' | $sort | $uniq`
fi
?X: Check this list of files to be sure we have parsed the cpp output ok.
?X: This will also avoid potentially non-existent files, such
?X: as ../foo/bar.h
xxxfiles="
?X: Add /dev/null in case the $xxx list is empty.
for xx in $xxx /dev/null ; do
 $test -f "$xx" && xxxfiles="$xxxfiles $xx"
done
?X:
 If we have found no files, at least try signal.h
case "$xxxfiles" in
") xxxfiles=`./findhdr signal.h` ;;
```

```
esac
xxx=`awk '
$1 ~ /^#define$/ && $2 ~ /^SIG[A-Z0-9]*$/ && $2 !~ /SIGARRAYSIZE/ && $2 !~ /SIGSTKSIZE/ && $2 !~
/SIGSTKSZ/ && $3 !~ /void/ {
 print substr($2, 4, 20)
}
$1 == "#" && $2 ~ /^define$/ && $3 ~ /^SIG[A-Z0-9]*$/ && $3 !~ /SIGARRAYSIZE/ && $4 !~ /void/ {
 print substr($3, 4, 20)
}' $xxxfiles`
: Append some common names just in case the awk scan failed.
xxx="$xxx ABRT ALRM BUS CANCEL CHLD CLD CONT DIL EMT FPE"
xxx="$xxx FREEZE HUP ILL INT IO IOT KILL LOST LWP PHONE"
xxx="$xxx PIPE POLL PROF PWR QUIT RTMAX RTMIN SEGV STKFLT STOP"
xxx="$xxx SYS TERM THAW TRAP TSTP TTIN TTOU URG USR1 USR2"
xxx="$xxx USR3 USR4 VTALRM WAITING WINCH WIND WINDOW XCPU XFSZ"

: generate a few handy files for later
$cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
int main() {

/* Strange style to avoid
 deeply-nested #if/#else/#endif */
#ifndef NSIG
#  ifdef _NSIG
#    define NSIG (_NSIG)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGMAX
#    define NSIG (SIGMAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIG_MAX
#    define NSIG (SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
```

```
#  ifdef _SIG_MAX
#    define NSIG (_SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAXSIG
#    define NSIG (MAXSIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAX_SIG
#    define NSIG (MAX_SIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGARRAYSIZE
#    define NSIG SIGARRAYSIZE /* Assume ary[SIGARRAYSIZE] */
#  endif
#endif

#ifndef NSIG
#  ifdef _sys_nsig
#    define NSIG (_sys_nsig) /* Solaris 2.5 */
#  endif
#endif

/* Default to some arbitrary number that's big enough to get most
  of the common signals.
*/
#ifndef NSIG
#    define NSIG 50
#endif

printf("NSIG %d\n", NSIG);

#ifndef JUST_NSIG

EOCP

echo $xxx | $tr ' ' $trnl | $sort | $uniq | $awk '
{
 printf "#ifdef SIG"; printf $1; printf "\n"
 printf "printf(\"";
 printf $1; printf " %%d\\n\",SIG";
 printf $1; printf ");\n"
```

```
 printf "#endif\n"
}
END {
 printf "#endif /* JUST_NSIG */\n";
 printf "exit(0);\n}\n";
}
' >>signal.c
$cat >signal.awk <<'EOP'
BEGIN { ndups = 0 }
$1 ~ /^NSIG$/ { nsig = $2 }
($1 !~ /^NSIG$/) && (NF == 2) && ($2 ~ /^[0-9][0-9]*$/) {
   if ($2 > maxsig) { maxsig = $2 }
   if (sig_name[$2]) {
 dup_name[ndups] = $1
 dup_num[ndups] = $2
 ndups++
   }
   else {
 sig_name[$2] = $1
 sig_num[$2] = $2
   }
}
END {
   if (nsig == 0) {
    nsig = maxsig + 1
   }
   printf("NSIG %d\n", nsig);
   for (n = 1; n < nsig; n++) {
 if (sig_name[n]) {
     printf("%s %d\n", sig_name[n], sig_num[n])
 }
 else {
     printf("NUM%d %d\n", n, n)
 }
   }
   for (n = 0; n < ndups; n++) {
 printf("%s %d\n", dup_name[n], dup_num[n])
   }
}
EOP
$cat >signal_cmd <<EOS
$startsh
if $test -s signal.lst; then
   echo "Using your existing signal.lst file"
 exit 0
fi
xxx="$xxx"
EOS
```

```
?X: Avoid variable interpolation problems, especially with
?X:
 xxx, which contains newlines.
$cat >>signal_cmd <<'EOS'

set signal
if eval $compile_ok; then
 $run ./signal$_exe | ($sort -n -k 2 2>/dev/null || $sort -n +1) |\
  $uniq | $awk -f signal.awk >signal.lst
else
 echo "(I can't seem be able to compile the whole test program)" >&4
 echo "(I'll try it in little pieces.)" >&4
 set signal -DJUST_NSIG
 if eval $compile_ok; then
  $run ./signal$_exe > signal.nsg
  $cat signal.nsg
 else
  echo "I can't seem to figure out how many signals you have." >&4
  echo "Guessing 50." >&4
  echo 'NSIG 50' > signal.nsg
 fi
 : Now look at all the signal names, one at a time.
 for xx in `echo $xxx | $tr ' ' $trnl | $sort | $uniq`; do
  $cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {
printf("$xx %d\n", SIG${xx});
return 0;
}
EOCP
  set signal
  if eval $compile; then
   echo "SIG${xx} found."
   $run ./signal$_exe  >> signal.ls1
  else
   echo "SIG${xx} NOT found."
  fi
 done
 if $test -s signal.ls1; then
  $cat
 signal.nsg signal.ls1 |
   $sort -n | $uniq | $awk -f signal.awk >signal.lst
 fi

fi
if $test -s signal.lst; then
```

```
 :
else
 echo "(AAK! I can't compile the test programs -- Guessing)" >&4
 echo 'kill -l' >signal
 set X `csh -f <signal`
 $rm -f signal
 shift
 case $# in
 0) set HUP INT QUIT ILL TRAP ABRT EMT FPE KILL BUS SEGV SYS PIPE ALRM TERM;;
 esac
 echo $@ | $tr ' ' $trnl | \
     $awk '{ printf "%s %d\n", $1, ++s; }
    END { printf "NSIG %d\n", ++s }' >signal.lst
fi
$rm -f signal.c signal$_exe signal$_o signal.nsg signal.ls1
EOS
chmod a+x signal_cmd
$eunicefix signal_cmd
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Signal.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: dlsrc.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: dlext.U,v $
?RCS:
?X:  hpux support thanks to Jeff Okamoto <okamoto@hpcc101.corp.hp.com>
?X:
?X:  To create a shared library, you must compile ALL source files in the
?X:  library with +z (or possibly +Z if the library is whopping huge),
?X:  then link the library with -b.  Example:
?X:   cc -c +z module_a.c
?X:   cc -c +z module_b.c
?X:   ld -b module_a.o module_b.o -o module.sl
?X:
?MAKE:dlext: \
 Getfile Myread cat usedl so
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:dlext:
```

```
?S: This variable contains the extension that is to be used for the
?S: dynamically loaded modules that perl generates.
?S:.
: Check what extension to use for shared libs
case "$usedl" in
$define|y|true)
 $cat <<
 EOM

On a few systems, the dynamically loaded modules that perl generates and uses
will need a different extension than shared libs. The default will probably
be appropriate.

EOM
 case "$dlext" in
 ") dflt="$so" ;;
 *) dflt="$dlext" ;;
 esac
 rp='What is the extension of dynamically loaded modules'
 . ./myread
 dlext="$ans"
 ;;
*)
 dlext="none"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dlext.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:fflushNULL fflushall: Compile cat rm rm_try test osname run to from \
 Oldconfig Myread Setvar echo targethost \
 d_sysconf i_unistd d_stdio_stream_array stdio_stream_array i_stdlib
?MAKE: -pick add $@ %<
?S:fflushNULL:
?S: This symbol, if defined, tells that fflush(NULL) correctly
?S: flushes all pending stdio output without side effects. In
```

```
?S: particular, on some platforms calling fflush(NULL) *still*
?S: corrupts STDIN if it is a pipe.
?S:.
?S:fflushall:
?S: This symbol, if defined, tells that to flush
?S: all
 pending stdio output one must loop through all
?S: the stdio file handles stored in an array and fflush them.
?S: Note that if fflushNULL is defined, fflushall will not
?S: even be probed for and will be left undefined.
?S:.
?C:FFLUSH_NULL:
?C: This symbol, if defined, tells that fflush(NULL) correctly
?C: flushes all pending stdio output without side effects. In
?C: particular, on some platforms calling fflush(NULL) *still*
?C: corrupts STDIN if it is a pipe.
?C:.
?C:FFLUSH_ALL:
?C: This symbol, if defined, tells that to flush
?C: all pending stdio output one must loop through all
?C: the stdio file handles stored in an array and fflush them.
?C: Note that if fflushNULL is defined, fflushall will not
?C: even be probed for and will be left undefined.
?C:.
?H:#$fflushNULL FFLUSH_NULL  /**/
?H:#$fflushall FFLUSH_ALL  /**/
?H:.
?T:output code
?F:!try.out !try !tryp
: Check how to flush
echo " "
$cat >&4 <<EOM
Checking how to flush all pending stdio output...
EOM
# I only know how to find
 the first 32 possibly open files on SunOS.
# See also hints/sunos_4_1.sh and util.c  --AD
case "$osname" in
sunos) $echo '#define PERL_FFLUSH_ALL_FOPEN_MAX 32' > try.c ;;
esac
$cat >>try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
```

```
# include <unistd.h>
#endif
#$d_sysconf HAS_SYSCONF
#$d_stdio_stream_array HAS_STDIO_STREAM_ARRAY
#ifdef HAS_STDIO_STREAM_ARRAY
# define STDIO_STREAM_ARRAY $stdio_stream_array
#endif
int main() {
 FILE* p;
 unlink("try.out");
 p = fopen("try.out", "w");
#ifdef TRY_FPUTC
 fputc('x', p);
#else
# ifdef TRY_FPRINTF
 fprintf(p, "x");
# endif
#endif
#ifdef TRY_FFLUSH_NULL
 fflush(NULL);
#endif
#ifdef TRY_FFLUSH_ALL
 {
   long open_max = -1;
# ifdef PERL_FFLUSH_ALL_FOPEN_MAX
   open_max = PERL_FFLUSH_ALL_FOPEN_MAX;
# else
#  if defined(HAS_SYSCONF) && defined(_SC_OPEN_MAX)
   open_max = sysconf(_SC_OPEN_MAX);
#  else
#   ifdef FOPEN_MAX
   open_max = FOPEN_MAX;
#   else
#
    ifdef OPEN_MAX
   open_max = OPEN_MAX;
#    else
#     ifdef _NFILE
   open_max = _NFILE;
#     endif
#    endif
#   endif
#  endif
# endif
# ifdef HAS_STDIO_STREAM_ARRAY
   if (open_max > 0) {
     long i;
     for (i = 0; i < open_max; i++)
```

```
    if (STDIO_STREAM_ARRAY[i]._file >= 0 &&
  STDIO_STREAM_ARRAY[i]._file < open_max &&
  STDIO_STREAM_ARRAY[i]._flag)
  fflush(&STDIO_STREAM_ARRAY[i]);
   }
 }
# endif
#endif
 _exit(42);
}
EOCP
: first we have to find out how _not_ to flush
$to try.c
if $test "X$fflushNULL" = X -o "X$fflushall" = X; then
   output=''
   set try -DTRY_FPUTC
   if eval $compile; then
     $run ./try 2>/dev/null
     code="$?"
     $from try.out
     if $test ! -s try.out -a "X$code" = X42; then
  output=-DTRY_FPUTC
     fi
   fi
   case "$output" in
   '')
     set try -DTRY_FPRINTF
     if eval $compile; then
      $run ./try 2>/dev/null
      code="$?"
      $from try.out
      if $test ! -s try.out -a "X$code" = X42; then
   output=-DTRY_FPRINTF

    fi
     fi
 ;;
   esac
fi
: check for fflush NULL behavior
case "$fflushNULL" in
'') set try -DTRY_FFLUSH_NULL $output
 if eval $compile; then
  $run ./try 2>/dev/null
  code="$?"
  $from try.out
  if $test -s try.out -a "X$code" = X42; then
   fflushNULL="`$cat try.out`"
```

```
  else
   if $test "X$code" != X42; then
    $cat >&4 <<EOM
(If this test failed, don't worry, we'll try another method shortly.)
EOM
   fi
  fi
 fi
 $rm -f core try.core core.try.*
 case "$fflushNULL" in
 x) $cat >&4 <<EOM
Your fflush(NULL) works okay for output streams.
Let's see if it clobbers input pipes...
EOM
# As of mid-March 2000 all versions of Solaris appear to have a stdio
# bug that improperly flushes the input end of pipes.  So we avoid the
# autoflush on fork/system/exec support for now. :-(
$cat >tryp.c <<EOCP
#include <stdio.h>
int
main(int argc, char **argv)
{
   char buf[1024];
   int i;
   char *bp = buf;
   while (1) {
 while ((i = getc(stdin)) != -1
        && (*bp++ = i) != '\n'

     && bp < &buf[1024])
 /* DO NOTHING */ ;
 *bp = '\0';
 fprintf(stdout, "%s", buf);
 fflush(NULL);
 if (i == -1)
     return 0;
 bp = buf;
   }
}
EOCP
  fflushNULL="$define"
  set tryp
  if eval $compile; then
      $rm -f tryp.out
      # Copy the .c file to the remote host ($to is an ssh-alike if targethost is set)
      if $test "X$targethost" != X; then
   $to tryp.c
   $to tryp
```

```
   $run "cat tryp.c | ./tryp " 2>/dev/null > tryp.out
      else
   $cat tryp.c | $run ./tryp   2>/dev/null > tryp.out
      fi
      if cmp tryp.c tryp.out >/dev/null 2>&1; then
         $cat >&4 <<EOM
fflush(NULL) seems to behave okay with input streams.
EOM
   fflushNULL="$define"
      else
   $cat >&4 <<EOM
Ouch, fflush(NULL) clobbers input pipes!  We will not use it.
EOM
   fflushNULL="$undef"
      fi
  fi
  $rm -f core tryp.c tryp.core core.tryp.*
  ;;
 ") $cat >&4 <<EOM
Your fflush(NULL) isn't working (contrary to ANSI C).
EOM
  fflushNULL="$undef"
  ;;
 *) $cat >&4 <<EOM
Cannot figure out whether
 your fflush(NULL) works or not.
I'm assuming it doesn't (contrary to ANSI C).
EOM
  fflushNULL="$undef"
  ;;
 esac
 ;;
$define|true|[yY]*)
 fflushNULL="$define"
 ;;
*)
 fflushNULL="$undef"
 ;;
esac
: check explicit looping only if NULL did not work, and if the pipe
: bug does not show up on an explicit flush too
case "$fflushNULL" in
"$undef")
 $cat >tryp.c <<EOCP
#include <stdio.h>
int
main(int argc, char **argv)
{
```

```
  char buf[1024];
  int i;
  char *bp = buf;
  while (1) {
 while ((i = getc(stdin)) != -1
       && (*bp++ = i) != '\n'
       && bp < &buf[1024])
 /* DO NOTHING */ ;
 *bp = '\0';
 fprintf(stdout, "%s", buf);
 fflush(stdin);
 if (i == -1)
    return 0;
 bp = buf;
  }
}
EOCP
 set tryp
 if eval $compile; then
    $rm -f tryp.out
    if $test "X$targethost" != X; then
  $to tryp.c
  $to tryp
  $run "cat tryp.c | ./tryp " 2>/dev/null > tryp.out
    else
  $cat tryp.c | $run ./tryp   2>/dev/null > tryp.out
    fi
    if cmp tryp.c tryp.out >/dev/null 2>&1;
 then
       $cat >&4 <<EOM
Good, at least fflush(stdin) seems to behave okay when stdin is a pipe.
EOM
  : now check for fflushall behaviour
  case "$fflushall" in
  ") set try -DTRY_FFLUSH_ALL $output
   if eval $compile; then
    $cat >&4 <<EOM
(Now testing the other method--but note that this also may fail.)
EOM
    $run ./try 2>/dev/null
    code=$?
    $from try.out
    if $test -s try.out -a "X$code" = X42; then
     fflushall="`$cat try.out`"
    fi
   fi
   $rm_try
   case "$fflushall" in
```

```
   x) $cat >&4 <<EOM
Whew. Flushing explicitly all the stdio streams works.
EOM
    fflushall="$define"
    ;;
   ") $cat >&4 <<EOM
Sigh. Flushing explicitly all the stdio streams doesn't work.
EOM
    fflushall="$undef"
    ;;
   *) $cat >&4 <<EOM
Cannot figure out whether flushing stdio streams explicitly works or not.
I'm assuming it doesn't.
EOM
    fflushall="$undef"
    ;;
   esac
   ;;
  "$define"|true|[yY]*)
   fflushall="$define"
   ;;
  *)
   fflushall="$undef"
   ;;
  esac

 else
  $cat >&4 <<EOM
All is futile.  Even fflush(stdin) clobbers input pipes!
EOM
  fflushall="$undef"
     fi
 else
     fflushall="$undef"
 fi
 $rm -f core tryp.c tryp.core core.tryp.*
 ;;
*) fflushall="$undef"
 ;;
esac

case "$fflushNULL$fflushall" in
undefundef)
 $cat <<EOM
OK, I give up.  I cannot figure out how to flush pending stdio output.
We won't be flushing handles at all before fork/exec/popen.
EOM
 ;;
```

```
esac
$rm_try tryp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/fflushall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setruid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setruid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setruid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setruid:
?S: This variable conditionally defines the HAS_SETRUID symbol, which
?S: indicates to the C program that the setruid() routine is available
?S: to change the real uid of the current program.
?S:.
?C:HAS_SETRUID (SETRUID):
?C: This symbol, if defined, indicates that the setruid
 routine is available
?C: to change the real uid of the current program.
?C:.
?H:#$d_setruid HAS_SETRUID  /**/
?H:.
?LINT:set d_setruid
: see if setruid exists
set setruid d_setruid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setruid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: errnolist.U,v 3.0.1.2 1997/02/28 15:48:01 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: errnolist.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:01  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:10:54  ram
?RCS: patch16: created
?RCS:
?MAKE:errnolist errnolist_SH errnolist_a errnolist_c errnolist_o: cat \
 Compile +d_sysernlst _a _o
?MAKE: -pick add $@ %<
?S:errnolist:
?S: This variable holds the base name of a file containing the
?S: definition
 of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S: The following lines should be included in your Makefile.SH:
?S:
?S:  case "$errnolist" in
?S:  ") ;;
?S:  *)
?S:   $spitshell >>Makefile <<!GROK!THIS!
?S:  $errnolist_c: $errnolist_SH $errnolist_a
?S:   sh ./$errnolist_SH
?S:
?S:  !GROK!THIS!
?S:   ;;
?S:  esac
?S:
?S: You may define the 'errnolist' variable in your Myinit.U if you
?S: wish to override its default value "errnolist".
?S:.
?S:errnolist_SH:
?S: This is the name of a file which will generate errnolistc.
?S:.
?S:errnolist_a:
?S: This is the name of the awk script called by errnolist_SH.
?S:.
?S:errnolist_c:
?S: This is the name of a generated C file which provides the
?S: definition of the sys_errnolist array.
?S:.
```

```
?S:errnolist_o:
?S: This is the name of the object file which provides the
?S: definition of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is
 empty.
?S:.
?INIT:errnolist=errnolist
: check for sys_errnolist
@if d_sysernlst || HAS_SYS_ERRNOLIST
case "$d_sysernlst" in
"$define")
   errnolist=''
   errnolist_SH=''
   errnolist_a=''
   errnolist_c=''
   errnolist_o=''
 ;;
*)
 echo " "
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
 ;;
esac
@else
echo " "
$cat <<EOM
Checking to see if your C library provides us with sys_errnolist[]...
EOM
$cat >errnolist.c <<'EOCP'
extern char *sys_errnolist[];
int main() {
   char *p0 = sys_errnolist[0];
   char *p1 = sys_errnolist[1];

   return (p0 == p1); /* Make sure they're not optimized away */
}
EOCP
set errnolist
if eval $compile; then
   echo "It does."
   errnolist=''
   errnolist_SH=''
   errnolist_a=''
   errnolist_c=''
   errnolist_o=''
```

```
else
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
    errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/errnolist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotobynumber_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotobynumber_r getprotobynumber_r_proto: Inlibc Protochk \
 Hasproto i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotobynumber_r:
?S: This variable conditionally defines the HAS_GETPROTOBYNUMBER_R symbol,
?S: which indicates to the C program that the getprotobynumber_r()
?S: routine is available.
?S:.
?S:getprotobynumber_r_proto:
?S: This variable encodes the prototype of getprotobynumber_r.
?S: It is zero if d_getprotobynumber_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobynumber_r
?S: is defined.
?S:.
?C:HAS_GETPROTOBYNUMBER_R:
?C: This
 symbol, if defined, indicates that the getprotobynumber_r routine
?C: is available to getprotobynumber re-entrantly.
?C:.
?C:GETPROTOBYNUMBER_R_PROTO:
?C: This symbol encodes the prototype of getprotobynumber_r.
?C: It is zero if d_getprotobynumber_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobynumber_r
?C: is defined.
?C:.
?H:#$d_getprotobynumber_r HAS_GETPROTOBYNUMBER_R /**/
?H:#define GETPROTOBYNUMBER_R_PROTO $getprotobynumber_r_proto /**/
```

```
?H:.
?T:try hdrs d_getprotobynumber_r_proto
: see if getprotobynumber_r exists
set getprotobynumber_r d_getprotobynumber_r
eval $inlibc
case "$d_getprotobynumber_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotobynumber_r_proto:$usethreads" in
 ":define") d_getprotobynumber_r_proto=define
  set d_getprotobynumber_r_proto getprotobynumber_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getprotobynumber_r_proto" in
 define)
 case "$getprotobynumber_r_proto"
 in
 "|0) try='int getprotobynumber_r(int, struct protoent*, char*, size_t, struct protoent**);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=I_ISBWR ;;
 esac
 case "$getprotobynumber_r_proto" in
 "|0) try='struct protoent* getprotobynumber_r(int, struct protoent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=S_ISBI ;;
 esac
 case "$getprotobynumber_r_proto" in
 "|0) try='int getprotobynumber_r(int, struct protoent*, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=I_ISD ;;
 esac
 case "$getprotobynumber_r_proto" in
 "|0) d_getprotobynumber_r=undef
  getprotobynumber_r_proto=0
  echo "Disabling getprotobynumber_r, cannot determine prototype." >&4 ;;
 * ) case "$getprotobynumber_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getprotobynumber_r_proto="REENTRANT_PROTO_$getprotobynumber_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getprotobynumber_r
 has no prototype, not using it." >&4 ;;
  esac
  d_getprotobynumber_r=undef
  getprotobynumber_r_proto=0
  ;;
 esac
```

```
 ;;
*) getprotobynumber_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotobynumber_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_usendir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_usendir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:47:34  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_usendir i_ndir ndirlib: test Setvar Findhdr d_readdir _a
?MAKE: -pick add $@ %<
?S:d_usendir:
?S: This variable conditionally defines the EMULATE_NDIR symbol, which
?S: indicates
 to the C program that it should compile the ndir.c code
?S: provided with the package.
?S:.
?S:i_ndir (d_libndir):
?S: This variable conditionally defines the I_NDIR symbol, which
?S: indicates to the C program that it should include the system's
?S: version of ndir.h, rather than the one with this package.
?S:.
?S:ndirlib:
?S: The name of the library to include at linking stage to resolve ndir
?S: symbols. It is up to the makefile to use this value.
?S:.
?C:EMULATE_NDIR (USENDIR):
?C: This symbol, if defined, indicates that the program should compile
?C: the ndir.c code provided with the package.
?C:.
```

```
?C:I_NDIR (LIBNDIR):
?C: This symbol, if defined, indicates that the program should include the
?C: system's version of ndir.h, rather than the one with this package.
?C:.
?H:#$d_usendir EMULATE_NDIR  /**/
?H:#$i_ndir I_NDIR  /**/
?H:.
?T:val2
?LINT: set d_usendir i_ndir
: see if there are directory access routines out there
echo " "
if $test `./findhdr ndir.h` && \
 ( $test -r /usr/lib/libndir$_a
 || $test -r /usr/local/lib/libndir$_a ); then
 echo "Ndir library found." >&4
 if $test -r /usr/lib/libndir$_a; then
  ndirlib='-lndir'
 else
  ndirlib="/usr/local/lib/libndir$_a"
 fi
 val2="$define"
 val="$undef"
else
 ndirlib=''
 val2="$undef"
 case "$d_readdir" in
 "$define")
 echo "No ndir library found, but you have readdir() so we'll use that." >&4
  val="$undef";
  ;;
 *)
  echo "No ndir library found." >&4
  val="$define"
  ;;
 esac
fi
set d_usendir
eval $setvar
val="$val2"
set i_ndir
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_usendir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_string.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_string.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:50:12  ram
?RCS: patch12: special units Loc and Guess were missing from dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:07:26  ram
?RCS: patch10: removed "(Actually, this looks more like...)" messages (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: See if we should include <string.h> or <strings.h>
?X:
?MAKE:i_string strings:
 test Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?S:i_string:
?S: This variable conditionally defines the I_STRING symbol, which
?S: indicates that <string.h> should be included rather than <strings.h>.
?S:.
?S:strings:
?S: This variable holds the full path of the string header that will be
?S: used. Typically /usr/include/string.h or /usr/include/strings.h.
?S:.
?C:I_STRING:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <string.h> (USG systems) instead of <strings.h> (BSD systems).
?C:.
?H:#$i_string I_STRING  /**/
?H:.
?LINT:set i_string
: see which of string.h or strings.h is needed
echo " "
strings=`./findhdr string.h`
if $test "$strings" && $test -r "$strings"; then
 echo "Using <string.h> instead of <strings.h>." >&4
 val="$define"
else
 val="$undef"
 strings=`./findhdr strings.h`
```

```
 if $test "$strings" && $test -r "$strings"; then
  echo "Using <strings.h> instead of <string.h>." >&4
 else
  ./warn "No string header found -- You'll surely
 have problems."
 fi
fi
set i_string
eval $setvar
case "$i_string" in
"$undef") strings=`./findhdr strings.h`;;
*)   strings=`./findhdr string.h`;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_string.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_access.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_access: test +cc cat +cppflags h_fcntl h_sysfile rm Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_access:
?S: This variable conditionally defines HAS_ACCESS if the access() system
?S: call is available to check for access permissions using real IDs.
?S:.
?C:HAS_ACCESS:
?C: This manifest constant lets the C program know that the access()
?C: system call is available to check for accessibility
 using real UID/GID.
?C: (always present on UNIX.)
?C:.
?H:#$d_access HAS_ACCESS  /**/
?H:.
?W:%<:R_OK W_OK X_OK F_OK
?LINT:set d_access
```

```
?LINT:change h_fcntl h_sysfile
: access call always available on UNIX
set access d_access
eval $inlibc

: locate the flags for 'access()'
case "$d_access" in
"$define")
 echo " "
 $cat >access.c <<'EOCP'
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#ifdef I_UNISTD
#include <unistd.h>
#endif
int main() {
 exit(R_OK);
}
EOCP
 : check sys/file.h first, no particular reason here
 if $test `./findhdr sys/file.h` && \
  $cc -o access $cppflags -DI_SYS_FILE access.c >/dev/null 2>&1 ; then
  h_sysfile=true;
  echo "<sys/file.h> defines the *_OK access constants." >&4
 elif $test `./findhdr fcntl.h` && \
  $cc -o access $cppflags -DI_FCNTL access.c >/dev/null 2>&1 ; then
  h_fcntl=true;
  echo "<fcntl.h> defines the *_OK access constants." >&4
@if I_UNISTD
 elif $test `./findhdr unistd.h`
 && \
  $cc -o access $cppflags -DI_UNISTD access.c >/dev/null 2>&1 ; then
  echo "<unistd.h> defines the *_OK access constants." >&4
@end
 else
  echo "I can't find the four *_OK access constants--I'll use mine." >&4
 fi
 ;;
esac
$rm -f access*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_access.U

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```
?RCS: $Id: mallocsrc.U,v 3.0.1.2 1997/02/28 16:10:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: mallocsrc.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:10:26  ram
?RCS: patch61: added support for Free_t, the type of free()
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:10:46  ram
?RCS: patch23: added support for MYMALLOC, mainly  for perl5 (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mallocsrc mallocobj usemallocwrap usemymalloc
 malloctype d_mymalloc \
 freetype: Myread \
 Oldconfig package Guess Setvar rm cat +cc +ccflags Findhdr \
 i_malloc i_stdlib sed libs _o ptrsize useithreads
?MAKE: -pick add $@ %<
?X: Put near top so that other tests don't erroneously include
?X: -lmalloc.  --AD  22 June 1998
?Y:TOP
?S:usemymalloc:
?S: This variable contains y if the malloc that comes with this package
?S: is desired over the system's version of malloc.  People often include
?S: special versions of malloc for efficiency, but such versions are often
?S: less portable.  See also mallocsrc and mallocobj.
?S: If this is 'y', then -lmalloc is removed from $libs.
?S:.
?S:usemallocwrap:
?S: This variable contains y if we are wrapping malloc to prevent
?S: integer overflow during size calculations.
?S:.
?S:mallocsrc:
?S: This variable contains the name of the malloc.c that comes with
?S: the package, if that malloc.c is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.
```

```
?S:.
?S:d_mymalloc:
?S: This
 variable conditionally defines MYMALLOC in case other parts
?S: of the source want to take special action if MYMALLOC is used.
?S: This may include different sorts of profiling or error detection.
?S:.
?S:mallocobj:
?S: This variable contains the name of the malloc.o that this package
?S: generates, if that malloc.o is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.  See mallocsrc.
?S:.
?S:freetype:
?S: This variable contains the return type of free().  It is usually
?S: void, but occasionally int.
?S:.
?S:malloctype:
?S: This variable contains the kind of ptr returned by malloc and realloc.
?S:.
?C:Free_t:
?C: This variable contains the return type of free().  It is usually
?C: void, but occasionally int.
?C:.
?C:Malloc_t (MALLOCPTRTYPE):
?C: This symbol is the type of pointer returned by malloc and realloc.
?C:.
?H:#define Malloc_t $malloctype   /**/
?H:#define Free_t
 $freetype   /**/
?H:.
?C:PERL_MALLOC_WRAP:
?C: This symbol, if defined, indicates that we'd like malloc wrap checks.
?C:.
?H:#$usemallocwrap PERL_MALLOC_WRAP  /**/
?H:.
?C:MYMALLOC:
?C: This symbol, if defined, indicates that we're using our own malloc.
?C:.
?H:#$d_mymalloc MYMALLOC   /**/
?H:.
?LINT:extern usedevel
?LINT:change libs
?X: Cannot test for mallocsrc; it is the unit's name and there is a bug in
?X: the interpreter which defines all the names, even though they are not used.
@if mallocobj
: determine whether to use malloc wrapping
echo " "
```

```
case "$usemallocwrap" in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*) case "$usedevel" in
 [yY]*|true|$define) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
esac
rp="Do you wish to wrap malloc calls to protect against potential overflows?"
. ./myread
usemallocwrap="$ans"
case "$ans" in
y*|true)
 usemallocwrap="$define" ;;
*)
 usemallocwrap="$undef" ;;
esac

: determine which malloc to compile in
echo " "
case "$usemymalloc"
 in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*) case "$ptrsize" in
 4) dflt='y' ;;
 *) dflt='n' ;;
 esac
 if test "$useithreads" = "$define"; then dflt='n'; fi
 ;;
esac
rp="Do you wish to attempt to use the malloc that comes with $package?"
. ./myread
usemymalloc="$ans"
case "$ans" in
y*|true)
 usemymalloc='y'
 mallocsrc='malloc.c'
 mallocobj="malloc$_o"
 d_mymalloc="$define"
?X: Maybe libs.U should be dependent on mallocsrc.U, but then
?X: most packages that use dist probably don't supply their own
?X: malloc, so this is probably an o.k. compromise
 case "$libs" in
 *-lmalloc*)
  : Remove malloc from list of libraries to use
  echo "Removing unneeded -lmalloc from library list" >&4
```

```
  set `echo X $libs | $sed -e 's/-lmalloc / /' -e 's/-lmalloc$//'`
  shift
  libs="$*"
  echo "libs = $libs" >&4
  ;;
 esac
 ;;
*)
 usemymalloc='n'
 mallocsrc=''
 mallocobj=''
 d_mymalloc="$undef"
 ;;
esac

@end
@if MALLOCPTRTYPE || Malloc_t || Free_t
: compute the return types of
 malloc and free
echo " "
$cat >malloc.c <<END
#$i_malloc I_MALLOC
#$i_stdlib I_STDLIB
#include <stdio.h>
#include <sys/types.h>
#ifdef I_MALLOC
#include <malloc.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#ifdef TRY_MALLOC
void *malloc();
#endif
#ifdef TRY_FREE
void free();
#endif
END
@if MALLOCPTRTYPE || Malloc_t
case "$malloctype" in
'')
 if $cc $ccflags -c -DTRY_MALLOC malloc.c >/dev/null 2>&1; then
  malloctype='void *'
 else
  malloctype='char *'
 fi
 ;;
esac
```

```
echo "Your system wants malloc to return '$malloctype', it would seem." >&4
@end

@if Free_t
case "$freetype" in
")
 if $cc $ccflags -c -DTRY_FREE malloc.c >/dev/null 2>&1; then
  freetype='void'
 else
  freetype='int'
 fi
 ;;
esac
echo "Your system uses $freetype free(), it would seem." >&4
@end
$rm -f malloc.[co]
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/mallocsrc.U
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```
?RCS: $Id: d_mkfifo.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mkfifo.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:17  ram
?RCS: patch36: created by ADO
?RCS:
?RCS:
?MAKE:d_mkfifo: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkfifo:
?S: This variable conditionally defines the HAS_MKFIFO symbol, which
?S: indicates to the C program that the mkfifo() routine is available.
?S:.
?C:HAS_MKFIFO :
?C: This symbol, if defined, indicates that the mkfifo
```

```
 routine is
?C: available to create FIFOs. Otherwise, mknod should be able to
?C: do it for you. However, if mkfifo is there, mknod might require
?C: super-user privileges which mkfifo will not.
?C:.
?H:#$d_mkfifo HAS_MKFIFO  /**/
?H:.
?LINT:set d_mkfifo
: see if mkfifo exists
set mkfifo d_mkfifo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mkfifo.U
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```
?RCS: $Id: d_scandir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scandir.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:35  ram
?RCS: patch16: created
?RCS:
?MAKE:d_scandir: Inlibc
?MAKE: -pick add $@ %<
?S:d_scandir:
?S: This variable conditionally defines HAS_SCANDIR if scandir() is
?S: available to scan a directory.
?S:.
?C:HAS_SCANDIR:
?C: This symbol, if defined, indicates that the scandir routine is
?C: available to scan a directory.
?C:.
?H:#$d_scandir HAS_SCANDIR /**/
?H:.
?LINT:set d_scandir
: see if
 scandir exists
set scandir d_scandir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scandir.U
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```
?RCS: $Id$
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_u32align: Compile cat rm_try Oldconfig run i_stdlib \
 byteorder u32type Myread Setvar u8type signal_t
?MAKE: -pick add $@ %<
?S:d_u32align:
?S: This variable tells whether you must access character data
?S: through U32-aligned pointers.
?S:.
?C:U32_ALIGNMENT_REQUIRED:
?C: This symbol, if defined, indicates that you must access
?C: character data through U32-aligned pointers.
?C:.
?H:?%<:#ifndef U32_ALIGNMENT_REQUIRED
?H:?%<:#$d_u32align U32_ALIGNMENT_REQUIRED /**/
?H:?%<:#endif
?H:.
?F:!try
: Checking 32bit alignedness
$cat
 <<EOM

Checking to see whether you can access character data unalignedly...
EOM
case "$d_u32align" in
")   $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define U32 $u32type
#define BYTEORDER 0x$byteorder
#define U8 $u8type
#include <signal.h>
#ifdef SIGBUS
```

```
$signal_t bletch(int s) { exit(4); }
#endif
int main() {
#if BYTEORDER == 0x1234 || BYTEORDER == 0x4321
   volatile U8 buf[8];
   volatile U32 *up;
   int i;

   if (sizeof(U32) != 4) {
 printf("sizeof(U32) is not 4, but %d\n", sizeof(U32));
 exit(1);
   }

   fflush(stdout);

#ifdef SIGBUS
   signal(SIGBUS, bletch);
#endif

   buf[0] = 0;
   buf[1] = 0;
   buf[2] = 0;
   buf[3] = 1;
   buf[4] = 0;
   buf[5] = 0;
   buf[6] = 0;
   buf[7] = 1;

   for (i = 0; i < 4; i++) {
 up = (U32*)(buf + i);
 if (! ((*up == 1 << (8*i)) ||   /* big-endian */
        (*up == 1 << (8*(3-i)))  /* little-endian */
       )
    )
 {
     printf("read failed (%x)\n", *up);

    exit(2);
 }
   }

   /* write test */
   for (i = 0; i < 4; i++) {
 up = (U32*)(buf + i);
 *up = 0xBeef;
 if (*up != 0xBeef) {
     printf("write failed (%x)\n", *up);
     exit(3);
```

```
 }
   }

   exit(0);
#else
   printf("1\n");
   exit(1);
#endif
   return 0;
}
EOCP
set try
if eval $compile_ok; then
 echo "(Testing for character data alignment may crash the test.  That's okay.)" >&4
 $run ./try 2>&1 >/dev/null
 case "$?" in
 0) cat >&4 <<EOM
You can access character data pretty unalignedly.
EOM
  d_u32align="$undef"
  ;;
 *) cat >&4 <<EOM
It seems that you must access character data in an aligned manner.
EOM
  d_u32align="$define"
  ;;
 esac
else
 rp='Can you access character data at unaligned addresses?'
 dflt='n'
 . ./myread
 case "$ans" in
 [yY]*) d_u32align="$undef"  ;;
 *) d_u32align="$define" ;;
 esac
fi
$rm_try
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_u32align.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_getpwent.U,v $
?RCS:
?MAKE:d_getpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpwent:
?S: This variable conditionally defines the HAS_GETPWENT symbol, which
?S: indicates to the C program that the getpwent() routine is available
?S: for sequential access of the passwd database.
?S:.
?C:HAS_GETPWENT:
?C: This symbol, if defined, indicates that the getpwent routine is
?C: available for sequential access of the passwd database.
?C: If this is not available, the older getpw() function may be available.
?C:.
?H:#$d_getpwent HAS_GETPWENT  /**/
?H:.
?LINT:set d_getpwent
: see if getpwent exists
set getpwent d_getpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpwent.U
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```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_stdio_stream_array stdio_stream_array: run \
 Compile cat rm_try Oldconfig Myread Setvar
?MAKE: -pick add $@ %<
?S:d_stdio_stream_array:
?S: This variable tells whether there is an array holding
?S: the stdio streams.
?S:.
?S:stdio_stream_array:
?S: This variable tells the name of the array holding the stdio streams.
?S: Usual values include _iob, __iob, and __sF.
```

```
?S:.
?C:HAS_STDIO_STREAM_ARRAY:
?C: This symbol, if defined, tells that there is an array
?C: holding the stdio streams.
?C:.
?C:STDIO_STREAM_ARRAY:
?C: This
 symbol tells the name of the array holding the stdio streams.
?C: Usual values include _iob, __iob, and __sF.
?C:.
?H:#$d_stdio_stream_array HAS_STDIO_STREAM_ARRAY /**/
?H:?%<:#ifdef HAS_STDIO_STREAM_ARRAY
?H:?%<:#define STDIO_STREAM_ARRAY $stdio_stream_array
?H:?%<:#endif
?H:.
?T:s
?F:!try
: Check stream access
$cat >&4 <<EOM
Checking how to access stdio streams by file descriptor number...
EOM
case "$stdio_stream_array" in
") $cat >try.c <<EOCP
#include <stdio.h>
int main() {
 if (&STDIO_STREAM_ARRAY[fileno(stdin)] == stdin)
   printf("yes\n");
}
EOCP
 for s in _iob __iob __sF
 do
        set try -DSTDIO_STREAM_ARRAY=$s
  if eval $compile; then
   case "`$run ./try`" in
   yes) stdio_stream_array=$s; break ;;
   esac
  fi
 done
 $rm_try
esac
case "$stdio_stream_array" in
") $cat >&4 <<EOM
I can't figure out how to access stdio streams by file descriptor number.
EOM
 d_stdio_stream_array="$undef"
 ;;
*) $cat >&4 <<EOM
You can access stdio streams by file descriptor number
```

```
 by the $stdio_stream_array array.
EOM
 d_stdio_stream_array="$define"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/stdio_streams.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2006-2007, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS:
?MAKE:d_dir_dd_fd: Compile cat rm_try Setvar i_dirent i_stdlib
?MAKE: -pick add $@ %<
?S:d_dir_dd_fd (d_dir_dd_fd.U):
?S: This variable conditionally defines the HAS_DIR_DD_FD symbol, which
?S: indicates that the DIR directory stream type contains a member
?S: variable called dd_fd.
?S:.
?C:HAS_DIR_DD_FD:
?C: This symbol, if defined, indicates that the the DIR* dirstream
?C: structure contains a member variable named dd_fd.
?C:.
?H:#$d_dir_dd_fd HAS_DIR_DD_FD  /**/
?H:.
?LINT:set d_dir_dd_fd
: Look for DIR.dd_fd
case "$i_dirent"
 in
"$define")
   echo "Checking to see if DIR has a dd_fd member variable" >&4
   $cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <dirent.h>

int main() {
   DIR dir;
   dir.dd_fd = 1;
```

```
  return 0;
}
EOCP
  val=$undef
  set try
  if eval $compile; then
      echo "Yes, it does."
      val="$define"
  else
      echo "No, it does not."
      val="$undef"
  fi
  ;;
*)
  echo "You don't have a <dirent.h>, so not checking for dd_fd." >&4
  val="$undef"
  ;;
esac
set d_dir_dd_fd
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dir_dd_fd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getenv_thread.U,v 0RCS:
?RCS: Copyright (c) 2021 H.Merijn Brand, Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getenv_preserves_other_thread: echo cat i_stdlib i_pthread run rm_try \
 Compile Setvar
?MAKE: -pick add $@ %<
?S:d_getenv_preserves_other_thread:
?S: This variable conditionally defines the GETENV_PRESERVES_OTHER_THREAD
?S: symbol, which indicates to the C program that the getenv() system call
?S: does not zap the static buffer in a different thread.
?S:.
?C:GETENV_PRESERVES_OTHER_THREAD:
?C: This symbol, if defined, indicates that the getenv system call doesn't
?C: zap the static buffer of getenv() in a different thread.
?C:
?C: The typical getenv() implementation will return a pointer to the proper
?C: position in **environ.  But some may instead copy them to
 a static
?C: buffer in getenv().  If there is a per-thread instance of that buffer,
```

```
?C: or the return points to **environ, then a many-reader/1-writer mutex
?C: will work; otherwise an exclusive locking mutex is required to prevent
?C: races.
?C:.
?H:#$d_getenv_preserves_other_thread GETENV_PRESERVES_OTHER_THREAD /**/
?H:.
?T:rc
?F:!try
?LINT:set d_getenv_preserves_other_thread
: check for getenv behavior
case "$d_getenv_preserves_other_thread" in
")
$echo "Checking to see if getenv() preserves a different thread's results" >&4
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#include <stdio.h>
#include <string.h>
#$i_pthread I_PTHREAD
#ifdef I_PTHREAD
#  include <pthread.h>
#endif

void *
thread_start(void * arg)
{
   return (void *) getenv("HOME");
}

int main() {
   char * main_buffer;
   char save_main_buffer[1000];
   pthread_t subthread;
   pthread_attr_t attr;

   main_buffer = getenv("PATH");

   /* If too large for our generous allowance,
 return we couldn't figure it
    * out. */
   if (strlen(main_buffer) >= sizeof(save_main_buffer)) {
       exit(2);
   }

   strcpy(save_main_buffer, main_buffer);
```

```
   if (pthread_attr_init(&attr) != 0) {
       exit(2);
   }

   if (pthread_create(&subthread, &attr, thread_start, NULL) != 0) {
       exit(2);
   }

   if (pthread_join(subthread, NULL) != 0) {
       exit(2);
   }

   exit(! (strcmp(main_buffer, save_main_buffer) == 0));
}
EOCP
val=
set try
if eval $compile_ok; then
   $run ./try
   rc=$?
   case "$rc" in
 0) echo "getenv() didn't destroy another thread's buffer" >&4
    val=$define
    ;;
 1) echo "getenv() does destroy another thread's buffer" >&4
    val=$undef
    ;;
 *) echo "Couldn't determine if getenv() destroys another thread's return value (code=$rc); assuming it does" >&4
    val=$undef
    ;;
   esac
else
   echo "(I can't seem to compile the test program.)" >&4
   echo "Assuming that your C library's getenv destroys another thread's
 return value." >&4
   val=$undef
fi
set d_getenv_preserves_other_thread
eval $setvar
$rm_try
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getenv_thread.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: prefix.U,v 3.1 1999/07/08 18:27:51 doughera Exp doughera $

```
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: prefix.U,v $
?RCS: Revision 3.1  1999/07/08 18:27:51  doughera
?RCS: 5.005_5x version -- Andy Dougherty
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:44:05  ram
?RCS: patch49: new prefixexp variable holding a fully expanded prefix
?RCS: patch49: save off previous prefix value in oldprefix if changed (WED)
?RCS: patch49: added the INSTALLPREFIX define for C programs to use (WED)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/08/29  16:31:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:prefix prefixexp +oldprefix: Getfile Loc Oldconfig cat package
?MAKE: -pick add $@ %<
?S:prefix:
?S: This variable holds the name of the directory below which the
?S: user will install the package.  Usually, this is /usr/local, and
?S: executables go in /usr/local/bin, library stuff in /usr/local/lib,
?S: man pages in /usr/local/man, etc.  It is only used to set defaults
?S: for things in bin.U, mansrc.U, privlib.U, or scriptdir.U.
?S:.
?S:prefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install the package.  Derived from prefix.
?S:.
?S:oldprefix:
?S: This variable is set non-null if the prefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
?C:INSTALLPREFIX:
?C: This symbol contains the name of the install prefix for this package.
?C:.
?H:#define INSTALLPREFIX "$prefix"  /**/
?H:.
:
```

```
 determine root of directory hierarchy where package will be installed.
case "$prefix" in
") dflt=`./loc . /usr/local /usr/local /local /opt /usr`
 ;;
*) dflt="$prefix"
 ;;
esac
$cat <<EOM

By default, $package will be installed in $dflt/bin, manual pages
under $dflt/man, etc..., i.e. with $dflt as prefix for all
installation directories. Typically this is something like /usr/local.
If you wish to have binaries under /usr/bin but other parts of the
installation under /usr/local, that's ok: you will be prompted
separately for each of the installation directories, the prefix being
only used to set the defaults.

EOM
fn=d~
rp='Installation prefix to use?'
. ./getfile
oldprefix=''
case "$prefix" in
") ;;
*) case "$ans" in
 "$prefix") ;;
 *) oldprefix="$prefix";;
 esac
 ;;
esac

case "$ans" in
*?/) prefix=`echo "$ans" | sed 's/.$//'`
 ;;
*) prefix="$ans"
esac

case "$ansexp" in
*?/) prefixexp=`echo "$ansexp" | sed 's/.$//'`
 ;;
*) prefixexp="$ansexp"
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/prefix.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_malloc: Inhdr
?MAKE: -pick add $@ %<
?S:i_malloc:
?S: This variable conditionally defines the I_MALLOC symbol, and indicates
?S: whether a C program should include <malloc.h>.
?S:.
?C:I_MALLOC:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <malloc.h>.
?C:.
?H:#$i_malloc I_MALLOC  /**/
?H:.
?LINT:set i_malloc
: see if this is a malloc.h system
set
 malloc.h i_malloc
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_malloc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2016 H.Merijn Brand & Todd Rinaldo
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:default_inc_excludes_dot: Myread cat
?MAKE: -pick add $@ %<
?S:default_inc_excludes_dot:
?S: When defined, remove the legacy '.' from @INC
?S:.
?C:DEFAULT_INC_EXCLUDES_DOT:
```

```
?C: This symbol, if defined, removes the legacy default behavior of
?C: including '.' at the end of @INC.
?C:.
?H:#$default_inc_excludes_dot DEFAULT_INC_EXCLUDES_DOT /**/
?H:.
: Include . in @INC
$cat <<EOM

Historically Perl has provided a final fallback of the current working
directory '.' when searching for a library. This, however, can lead to
problems when a Perl program which loads optional modules is called from
a shared directory. This can lead to executing unexpected code.

EOM

# When changing to exclude by
 default:
case "$default_inc_excludes_dot" in
   $undef|false|[nN]*) dflt="n" ;;
   *)                  dflt="y" ;;
esac
# To turn exclude off by default:
#case "$default_inc_excludes_dot" in
#    $define|true|[yY]*) dflt="y" ;;
#    *)                  dflt="n" ;;
#esac

rp='Exclude '.' from @INC by default? '
. ./myread
case "$ans" in
   [nN]|undef) default_inc_excludes_dot="$undef"  ;;
   *)          default_inc_excludes_dot="$define" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/defaultincdot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: Csym.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:36:29  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS: patch56: added quotes for OS/2 support
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:00:33  ram
?RCS: patch54: fixed C test program to bypass gcc builtin type checks (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/31  09:34:13  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:05  ram
?RCS:
 patch6: added ldflags as a conditional dependency and to compile line
?RCS: patch6: a final double quote was missing in csym variable after eval
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Csym: Options contains libc libs runnm +cc +ccflags +ldflags rm
?MAKE: -pick add $@ %<
?LINT:define csym
?LINT:use libc
?S:csym:
?S: This shell variable is used internally by Configure to check
?S: wether a given C symbol is defined or not. A typical use is:
?S:  set symbol result [-fva] [previous]
?S:  eval $csym
?S: That will set result to 'true' if the function [-f], variable [-v]
?S: or array [-a] is defined, 'false' otherwise. If a previous value is
?S: given and the -r flag was provided on the command line, that value
?S: is reused without questioning.
?S:.
?V:csym
?T:tval tx tlook tf tdc tc
: is a C symbol defined?
csym='tlook=$1;
case "$3" in
-v) tf=libc.tmp; tc=""; tdc="";;
-a) tf=libc.tmp; tc="[0]"; tdc="[]";;
*) tlook="^$1\$";
 tf=libc.list; tc=""; tdc="()";;
esac;
tx=yes;
case "$reuseval-$4" in
true-) ;;
true-*) tx=no; eval "tval=\$$4"; case "$tval" in "") tx=yes;; esac;;
esac;
```

```
case "$tx" in
yes)
 case "$runnm" in
 true)
  if $contains $tlook $tf >/dev/null 2>&1;
  then tval=true;
  else tval=false;
  fi;;
 *)
?X:
?X: We use 'char' instead of 'int' to try to circumvent overzealous
?X: optimizing compilers using built-in prototypes for commonly used
?X: routines to complain when seeing a different external declaration. For
?X: instance, gcc 2.6.3 fails if we use 'int' and we attempt a test against
?X: memcpy() on machines where sizeof(int) == sizeof(char *) (the usual return
?X: type), the compiler assuming it's a built-in declaration given that the
?X: returned size matches. At least with 'char' we are safe! -- RAM, for ADO
?X:
?X: Let's thank GNU cc for making our lifes so easy! :-)
?X: (An alternative for the future would be to use our knowledge about gcc
?X: to force a -fno-builtin option in the
 compile test, in case the 'char'
?X: trick is obsoleted by future gcc releases). -- RAM
?X:
?X: Lastly, gcc 3.4 otimizes &missing == 0 away, so we use + 2 instead now.
?X: The GNU folks like to do weird things, don't they? -- RAM, 2004-06-05
?X:
  echo "extern char $1$tdc; int main() { return &$1$tc + 2; }" > t.c;
  if $cc $ccflags $ldflags -o t t.c $libs >/dev/null 2>&1;
  then tval=true;
  else tval=false;
  fi;
  $rm -f t t.c;;
 esac;;
*)
 case "$tval" in
 $define) tval=true;;
 *) tval=false;;
 esac;;
esac;
eval "$2=$tval"'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Csym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: privlib.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
```

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: privlib.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:17:09  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:44:23  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:31:52  ram
?RCS:
 patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:34  ram
?RCS: patch10: added support for /local/lib (WED)
?RCS: patch10: prompt phrasing made more explicit (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:privlib privlibexp installprivlib: package cat Getfile Oldconfig \
 Setprefixvar Prefixit version installstyle binexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:privlib=''
?S:privlib:
?S: This variable contains the eventual value of the PRIVLIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S:.
?D:privlibexp=''
?S:privlibexp:
?S: This variable is the ~name expanded version of privlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installprivlib=''
?S:installprivlib:
```

```
?S: This variable
 is really the same as privlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:PRIVLIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C:.
?C:PRIVLIB_EXP:
?C: This symbol contains the ~name expanded version of PRIVLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#define PRIVLIB "$privlib"  /**/
?H:#define PRIVLIB_EXP "$privlibexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installprivlib
?LINT:set privlib
?LINT:set privlibexp
: determine where private library files go
: Usual default is /usr/local/lib/perl5/$version.
: Also allow things like /opt/perl/lib/$version, since
: /opt/perl/lib/perl5... would be redundant.
: The default "style"
 setting is made in installstyle.U
case "$installstyle" in
*lib/perl5*) set dflt privlib lib/$package/$version ;;
*)  set dflt privlib lib/$version ;;
esac
eval $prefixit
$cat <<EOM

There are some auxiliary files for $package that need to be put into a
private library directory that is accessible by everyone.

EOM
?X: Force dependency on bin.U
fn=$binexp
fn=d~+
rp='Pathname where the private library files will reside?'
. ./getfile
prefixvar=privlib
. ./setprefixvar

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/privlib.U
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```
?RCS: $Id: defeditor.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: defeditor.U,v $
?RCS: Revision 3.0.1.1  1995/01/11  15:30:16  ram
?RCS: patch45: can now use the 'vi' variable since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:defeditor: Getfile Oldconfig Loc vi
?MAKE: -pick add $@ %<
?S:defeditor:
?S: This variable contains the eventual value of the DEFEDITOR symbol,
?S: which contains the name of the default editor.
?S:.
?C:DEFEDITOR:
?C: This
 symbol contains the full pathname of the default editor.
?C:.
?H:#define DEFEDITOR "$defeditor"  /**/
?H:.
: determine default editor
echo " "
case "$defeditor" in
")
 case "$vi" in
 */*) dflt="$vi";;
 *) dflt=/usr/ucb/vi;;
 esac
 ;;
*)  dflt="$defeditor"
 ;;
esac
fn=f/
rp="What is the default editor on your system?"
. ./getfile
defeditor="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/defeditor.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1997, Chip Salzenberg
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:20:13  ram
?RCS: patch61: created
?RCS:
?MAKE:sh: Head
?MAKE: -pick wipe $@ %<
?S:sh:
?S: This variable contains the full pathname of the shell used
?S: on this system to execute Bourne shell scripts.  Usually, this will be
?S: /bin/sh, though it's possible that some systems will have /bin/ksh,
?S: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?S: D:/bin/sh.exe.
?S: This unit comes before Options.U,
 so you can't set sh with a -D
?S: option, though you can override this (and startsh)
?S: with -O -Dsh=/bin/whatever -Dstartsh=whatever
?S:.
?C:SH_PATH:
?C: This symbol contains the full pathname to the shell used on this
?C: on this system to execute Bourne shell scripts.  Usually, this will be
?C: /bin/sh, though it's possible that some systems will have /bin/ksh,
?C: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?C: D:/bin/sh.exe.
?C:.
?H:#define SH_PATH "$sh"  /**/
?H:.
?T:xxx try pth p SYSTYPE
?LINT:extern maintloc maintname
?X:
?X: Be quiet unless something unusual happens because this gets
?X: loaded up even before options are processed.
?X: Can't use ./loc because that depends on startsh, which, in turn
```

```
?X: depends on this unit.
?X:
: Find the basic shell for Bourne shell scripts
case "$sh" in
")
?X: SYSTYPE is for some older MIPS systems.
?X: I do not know if it is still needed.
 case "$SYSTYPE" in
 *bsd*|sys5*) xxx="/$SYSTYPE/bin/sh";;
 *) xxx='/bin/sh';;
 esac
 if
 test -f "$xxx"; then
  sh="$xxx"
 else
  : Build up a list and do a single loop so we can 'break' out.
  pth=`echo $PATH | sed -e "s/$p_/ /g"`
  for xxx in sh bash ksh pdksh ash; do
   for p in $pth; do
    try="$try ${p}/${xxx}"
   done
  done
  for xxx in $try; do
   if test -f "$xxx"; then
    sh="$xxx"
    break
   elif test -f "$xxx$_exe"; then
    sh="$xxx"
    break
   elif test -f "$xxx.exe"; then
    sh="$xxx"
    break
   fi
  done
 fi
 ;;
esac

?X: fd 4 isn't open yet...
case "$sh" in
") cat >&2 <<EOM
$me:  Fatal Error:  I can't find a Bourne Shell anywhere.

Usually it's in /bin/sh.  How did you even get this far?
Please contact me (<$maintname>) at <$maintloc> and
we'll try to straighten this all out.
EOM
 exit 1
```

```
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sh.U
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```
?RCS: $Id: d_setservent_r.U,v 0RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setservent_r setservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setservent_r:
?S: This variable conditionally defines the HAS_SETSERVENT_R symbol,
?S: which indicates to the C program that the setservent_r()
?S: routine is available.
?S:.
?S:setservent_r_proto:
?S: This variable encodes the prototype of setservent_r.
?S: It is zero if d_setservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setservent_r
?S: is defined.
?S:.
?C:HAS_SETSERVENT_R:
?C: This symbol, if defined, indicates that the setservent_r routine
?C: is
 available to setservent re-entrantly.
?C:.
?C:SETSERVENT_R_PROTO:
?C: This symbol encodes the prototype of setservent_r.
?C: It is zero if d_setservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setservent_r
?C: is defined.
?C:.
?H:#$d_setservent_r HAS_SETSERVENT_R /**/
?H:#define SETSERVENT_R_PROTO $setservent_r_proto /**/
?H:.
?T:try hdrs d_setservent_r_proto
: see if setservent_r exists
set setservent_r d_setservent_r
eval $inlibc
case "$d_setservent_r" in
```

```
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setservent_r_proto:$usethreads" in
 ":define") d_setservent_r_proto=define
  set d_setservent_r_proto setservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setservent_r_proto" in
 define)
 case "$setservent_r_proto" in
 "|0) try='int setservent_r(int, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && setservent_r_proto=I_ID ;;
 esac
 case "$setservent_r_proto" in
 "|0) try='void
 setservent_r(int, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && setservent_r_proto=V_ID ;;
 esac
 case "$setservent_r_proto" in
 "|0) d_setservent_r=undef
  setservent_r_proto=0
  echo "Disabling setservent_r, cannot determine prototype." >&4 ;;
 * ) case "$setservent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setservent_r_proto="REENTRANT_PROTO_$setservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setservent_r has no prototype, not using it." >&4 ;;
  esac
  d_setservent_r=undef
  setservent_r_proto=0
  ;;
 esac
 ;;
*) setservent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setservent_r.U
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?RCS: Id
?RCS:

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_sh.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:57:53  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  14:53:31  ram
?RCS: patch45: moved path stripping from d_portable.U to end of Configure
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:50:37  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit ends up producing the config.sh
 script, which contains all the
?X: definitions figured out by Configure.  The add.Config_sh command knows
?X: which variables need to be remembered.  It also adds the EOT (ends the
?X: here document redirection with variable substitution).
?X:
?MAKE:Config_sh: cf_time cf_by test spitshell startsh myuname Myread \
 End Obsol_sh Loc +d_portable package src cat sed
?MAKE: -pick add.Config_sh $@ %<
?MAKE: -pick add $@ ./Obsol_sh
?MAKE: -pick close.Config_sh $@ %<
?F:!config.over !config.arch
?T:file sfile xsed
?LINT:unclosed EOT
: back to where it started
if test -d ../UU; then
 cd ..
fi

: configuration may be unconditionally patched via a 'config.arch' file
if $test -f config.arch; then
 echo "I see a config.arch file, loading it." >&4
 . ./config.arch
fi

: configuration may be patched via a 'config.over' file
```

```
if $test -f config.over; then
 echo " "
 dflt=y
 rp='I see a config.over file.  Do you wish to load it?'
 . UU/myread
 case "$ans" in
 n*) echo "OK, I'll ignore it.";;
 *) . ./config.over
  echo
 "Configuration override changes have been loaded."
  ;;
 esac
fi

@if d_portable
: in case they want portability, strip down executable paths
?X:
?X: Strip down paths in located executables. For each file, e.g. vi, there
?X: is a $vi variable whose value is for instance '/usr/bin/vi'. By resetting
?X: $vi to 'vi', we rely on the PATH variable to locate the executable...
?X: In order to allow vi='/usr/bin/nvi' which will strip down to vi='nvi',
?X: we can't just say 'eval $file="\$file"', we have to recourse to sed.
?X: We don't use basename since it is less portable than sed.
?X:
case "$d_portable" in
"$define")
 echo " "
 echo "Stripping down executable paths..." >&4
 xsed=$sed
 for file in $loclist $trylist; do
  eval sfile="\$$file"
  sfile=`echo $sfile | $xsed -e 's,.*/\(.*\),\1,'`
  eval $file="$sfile"
 done
 ;;
esac

@end
: create config.sh file
echo " "
echo "Creating config.sh..." >&4
$spitshell <<EOT >config.sh
$startsh
#
# This file was produced by running the
 Configure script. It holds all the
# definitions figured out by Configure. Should you modify one of these values,
# do not forget to propagate your changes by running "Configure -der". You may
```

```
# instead choose to run each of the .SH files by yourself, or "Configure -S".
#

# Package name      : $package
# Source directory  : $src
# Configuration time: $cf_time
# Configured by     : $cf_by
# Target system     : $myuname

EOT
?X: Command line options are saved by the Options.U unit in the
?X: temporary file UU/cmdline.opt
$test -f UU/cmdline.opt && $cat UU/cmdline.opt >> config.sh
$spitshell <<EOT >>config.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Config_sh.U
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```
?RCS: $Id: i_malloc.U,v 3.5 2008/03/29 14:06:51 merijn Exp $
?RCS:
?RCS: Copyright (c) 2008, H.Merijn Brand
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?RCS: of the source tree for dist 3.5.
?RCS:
?MAKE:i_mallocmalloc: Inhdr
?MAKE: -pick add $@ %<
?S:i_mallocmalloc:
?S: This variable conditionally defines the I_MALLOCMALLOC symbol,
?S: and indicates whether a C program should include <malloc/malloc.h>.
?S:.
?C:I_MALLOCMALLOC:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <malloc/malloc.h>.
?C:.
?H:#$i_mallocmalloc I_MALLOCMALLOC  /**/
?H:.
?LINT:set i_mallocmalloc
: see if malloc/malloc.h has to be included
set malloc/malloc.h i_mallocmalloc
eval
 $inhdr
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_mallocmalloc.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wifstat.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:47:43  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:09:10  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1995/03/21  08:47:46  ram
?RCS: patch52: created
?RCS:
?MAKE:d_wifstat: d_uwait +cc +ccflags +ldflags +libs Oldconfig cat rm
?MAKE: -pick add $@ %<
?S:d_wifstat:
?S: This symbol conditionally defines USE_WIFSTAT if the C program can
?S: safely
 use the WIFxxx macros with the kind of wait() parameter
?S: declared in the program (see UNION_WAIT), or if it can't. Should
?S: only matter on HP-UX, where the macros are incorrectly written and
?S: therefore cause programs using them with an 'union wait' variable
?S: to not compile properly.
?S:.
?C:USE_WIFSTAT:
?C: This symbol, if defined, indicates to the C program that the argument
?C: for the WIFxxx set of macros such as WIFSIGNALED or WIFEXITED can
?C: be of the same kind as the one used to hold the wait() status. Should
?C: only matter on HP-UX, where the macros are incorrectly written and
?C: therefore cause programs using them with an 'union wait' variable
?C: to not compile properly. See also UNION_WAIT.
?C:.
?H:#$d_wifstat USE_WIFSTAT  /**/
?H:.
?T:type
?F:!foo
: see if we can use WIFxxx macros
echo " "
```

```
case "$d_wifstat" in
"$define") echo "As before, you can safely use WIFEXITED and friends!" >&4;;
"$undef") echo "You still can't use WIFEXITED and friends!" >&4;;
*)
 echo
 "Let's see whether you can use the WIFEXITED(status) macro and its"
 case "$d_uwait" in
 "$define") type='union wait';;
 *) type='int';;
 esac
 echo "friends with status declared as '$type status'..."
 $cat >foo.c <<EOCP
#include <sys/types.h>
#include <sys/wait.h>

int main()
{
 $type status;
 int e = 0;

#ifdef WIFEXITED
 if (WIFEXITED(status))
  printf("\n");
 exit(0);
#else
 exit(2);
#endif
}
EOCP
 d_wifstat="$undef"
 if $cc $ccflags $ldflags -o foo foo.c $libs >/dev/null 2>&1; then
  if ./foo >/dev/null; then
   echo "Great! Looks like we can use the WIFxxx macros." >&4
   d_wifstat="$define"
  else
   echo "You don't seem to have WIFxxx macros, but that's ok." >&4
  fi
 else
  echo "Apparently you can't use WIFxxx macros properly." >&4
 fi
 $rm -f foo.* foo core
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wifstat.U
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```
?RCS: $Id: cc.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cc.U,v $
?RCS: Revision 3.0.1.4  1995/05/12  12:06:47  ram
?RCS: patch54: may now abort Configure when cc does not work
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:20:11  ram
?RCS: patch45: changed gcc checking message to a more explicit one (WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:04:29  ram
?RCS: patch36: detect gcc even when not called as 'gcc' (ADO)
?RCS: patch36: simplified gcc version checking (ADO)
?RCS: patch36: added ?F: line for metalint
 file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:26:06  ram
?RCS: patch23: added support for gcc version (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cc: Myread Oldconfig Checkcc test
?MAKE: -pick add $@ %<
?S:cc:
?S: This variable holds the name of a command to execute a C compiler which
?S: can resolve multiple global references that happen to have the same
?S: name.  Usual values are 'cc' and 'gcc'.
?S: Fervent ANSI compilers may be called 'c89'.  AIX has xlc.
?S:.
?F:!cc.cbu
?D:cc='cc'
: Determine the C compiler to be used
echo " "
case "$cc" in
") dflt=cc;;
*) dflt="$cc";;
esac
rp="Use which C compiler?"
. ./myread
cc="$ans"
```

```
: See whether they have no cc but they do have gcc
. ./trygcc
?X: Look for a hint-file generated 'call-back-unit'.  Now that the
?X: user has specified the compiler, we may need to set or change some
?X: other defaults.
if $test -f cc.cbu; then
   . ./cc.cbu
fi
. ./checkcc

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cc.U
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?RCS: $Id: i_arpainet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_arpainet.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_arpainet: Inhdr
?MAKE: -pick add $@ %<
?S:i_arpainet:
?S: This variable conditionally defines the I_ARPA_INET symbol,
?S: and indicates whether a C program should include <arpa/inet.h>.
?S:.
?C:I_ARPA_INET:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <arpa/inet.h> to get inet_addr and friends
 declarations.
?C:.
?H:#$i_arpainet I_ARPA_INET  /**/
?H:.
?LINT:set i_arpainet
: see if arpa/inet.h has to be included
set arpa/inet.h i_arpainet
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_arpainet.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sunscanf.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sunscanf: cat rm Myread +cc +ccflags test Setvar
?MAKE: -pick add $@ %<
?S:sunscanf:
?S: This variable is set if this system runs with the Sun version
?S: of scanf.
?S:.
?C:SUNSCANF:
?C: This variable is set if this system runs with the Sun version
?C: of scanf.
?C:.
?H:#$sunscanf  SUNSCANF  /**/
?H:.
?LINT:set sunscanf
: check to see what kinda scanf your using.
echo " "
echo "Checking
 to see what flavor of scanf you have..." >&4
$cat >scanf.c <<'EOCP'
int main()
{
 float value;

 sscanf("4.5","%g",&value);
 printf("%d\n", value == 4.5);
}
EOCP
if $cc $ccflags -o scanf scanf.c >/dev/null 2>&1 ; then
 if $test `scanf` = 0; then
  echo "Hmm.. seems your not running the USG flavor.."
  val="$undef"
```

```
 else
  echo "Uh... your running the USG flavor of scanf."
  val="$define"
 fi
else
 echo "(I can't seem to compile the test program... Guessing)"
 val="$undef"
fi
set sunscanf
eval $setvar
$rm -f scanf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sunscanf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostbyaddr_r.U,v 0RCS:
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostbyaddr_r gethostbyaddr_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostbyaddr_r:
?S: This variable conditionally defines the HAS_GETHOSTBYADDR_R symbol,
?S: which indicates to the C program that the gethostbyaddr_r()
?S: routine is available.
?S:.
?S:gethostbyaddr_r_proto:
?S: This variable encodes the prototype of gethostbyaddr_r.
?S: It is zero if d_gethostbyaddr_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyaddr_r
?S: is defined.
?S:.
?C:HAS_GETHOSTBYADDR_R:
?C: This symbol, if defined, indicates
 that the gethostbyaddr_r routine
?C: is available to gethostbyaddr re-entrantly.
?C:.
?C:GETHOSTBYADDR_R_PROTO:
?C: This symbol encodes the prototype of gethostbyaddr_r.
?C: It is zero if d_gethostbyaddr_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyaddr_r
?C: is defined.
```

```
?C:.
?H:#$d_gethostbyaddr_r HAS_GETHOSTBYADDR_R /**/
?H:#define GETHOSTBYADDR_R_PROTO $gethostbyaddr_r_proto /**/
?H:.
?T:try hdrs d_gethostbyaddr_r_proto
: see if gethostbyaddr_r exists
set gethostbyaddr_r d_gethostbyaddr_r
eval $inlibc
case "$d_gethostbyaddr_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_gethostbyaddr_r_proto:$usethreads" in
 ":define") d_gethostbyaddr_r_proto=define
  set d_gethostbyaddr_r_proto gethostbyaddr_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gethostbyaddr_r_proto" in
 define)
 case "$gethostbyaddr_r_proto" in
 "|0) try='int gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*,
 size_t, struct hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CWISBWRE ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) try='struct hostent* gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*, size_t, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CWISBWIE ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) try='struct hostent* gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CWISBIE ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) try='struct hostent* gethostbyaddr_r(const void*, size_t, int, struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_TWISBIE ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) try='struct hostent* gethostbyaddr_r(const char*, int, int, struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CIISBIE ;;
 esac
 case
 "$gethostbyaddr_r_proto" in
 "|0) try='struct hostent* gethostbyaddr_r(const char*, struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CSBIE ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) try='struct hostent* gethostbyaddr_r(const void*, struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_TSBIE ;;
```

```
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) try='int gethostbyaddr_r(const char*, size_t, int, struct hostent*, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CWISD ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) try='int gethostbyaddr_r(const char*, int, int, struct hostent*, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CIISD ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) try='int gethostbyaddr_r(const char*, int, int);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CII ;;
 esac
 case
 "$gethostbyaddr_r_proto" in
 "|0) try='int gethostbyaddr_r(const void*, socklen_t, int, struct hostent*, char*, size_t, struct hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_TsISBWRE ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) d_gethostbyaddr_r=undef
  gethostbyaddr_r_proto=0
  echo "Disabling gethostbyaddr_r, cannot determine prototype." >&4 ;;
 * ) case "$gethostbyaddr_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gethostbyaddr_r_proto="REENTRANT_PROTO_$gethostbyaddr_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gethostbyaddr_r has no prototype, not using it." >&4 ;;
  esac
  d_gethostbyaddr_r=undef
  gethostbyaddr_r_proto=0
  ;;
 esac
 ;;
*) gethostbyaddr_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostbyaddr_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_systimes.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systimes.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_systimes: Inhdr
?MAKE: -pick add $@ %<
?S:i_systimes:
?S: This variable conditionally defines the I_SYS_TIMES symbol, and indicates
?S: whether a C program should include <sys/times.h>.
?S:.
?C:I_SYS_TIMES (I_SYSTIMES):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/times.h>.
?C:.
?H:#$i_systimes I_SYS_TIMES  /**/
?H:.
?LINT:set
 i_systimes
: see if this is a sys/times.h system
set sys/times.h i_systimes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systimes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorlib.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorlib.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorlib vendorlib vendorlibexp installvendorlib vendorlib_stem: \
```

```
 Getfile Setprefixvar Oldconfig Prefixit package vendorprefix sed \
 installstyle version
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorlib:
?S: This variable contains the eventual value of the VENDORLIB symbol,
?S: which is the name of the private library for this package.
?S: The standard
 distribution will put nothing in this directory.
?S: Vendors who distribute perl may wish to place their own
?S: modules in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorlibexp:
?S: This variable is the ~name expanded version of vendorlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorlib="
?S:installvendorlib:
?S: This variable is really the same as vendorlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorlib:
?S: This variable conditionally defines PERL_VENDORLIB.
?S:.
?S:vendorlib_stem:
?S: This variable is $vendorlibexp with any trailing version-specific component
?S: removed.  The elements in inc_version_list (inc_version_list.U) can
?S: be tacked onto this variable to generate a list of directories to search.
?S:.
?C:PERL_VENDORLIB:
?C: If defined, this symbol contains
 the name of a private library.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place their own
?C: modules in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORLIB_EXP:
?C: This symbol contains the ~name expanded version of VENDORLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
```

```
?C:PERL_VENDORLIB_STEM:
?C: This define is PERL_VENDORLIB_EXP with any trailing version-specific component
?C: removed.  The elements in inc_version_list (inc_version_list.U) can
?C: be tacked onto this variable to generate a list of directories to search.
?C:.
?H:#$d_vendorlib PERL_VENDORLIB "$vendorlib"  /**/
?H:#$d_vendorlib PERL_VENDORLIB_EXP
 "$vendorlibexp"  /**/
?H:#$d_vendorlib PERL_VENDORLIB_STEM "$vendorlib_stem"  /**/
?H:.
?T:prog
?LINT:change prefixvar
?LINT:set installvendorlib
: Set the vendorlib variables
case "$vendorprefix" in
") d_vendorlib="$undef"
 vendorlib="
 vendorlibexp="
 ;;
*) d_vendorlib="$define"
 : determine where vendor-supplied modules go.
 : Usual default is /usr/local/lib/perl5/vendor_perl/$version
 case "$vendorlib" in
 ")
?X:  remove any trailing -3.0 or other version identification
  prog=`echo $package | $sed 's/-*[0-9.]*$//'`
  case "$installstyle" in
  *lib/perl5*) dflt=$vendorprefix/lib/$package/vendor_$prog/$version ;;
  *)      dflt=$vendorprefix/lib/vendor_$prog/$version ;;
  esac
  ;;
 *) dflt="$vendorlib"
  ;;
 esac
 fn=d~+
 rp='Pathname for the vendor-supplied library files?'
 . ./getfile
 vendorlib="$ans"
 vendorlibexp="$ansexp"
 ;;
esac
vendorlib_stem=`echo "$vendorlibexp" | sed "s,/$version$,,"`
prefixvar=vendorlib
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorlib.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_euc2jis.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_euc2jis.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_euc2jis: Inlibc
?MAKE: -pick add $@ %<
?S:d_euc2jis:
?S: This variable conditionally defines the HAS_EUC2JIS symbol, which
?S: indicates to the C program that the euc2jis() routine is available
?S: to convert EUC to JIS.
?S:.
?C:HAS_EUC2JIS:
?C: This symbol, if defined, indicates that the euc2jis routine is
?C: available to convert
 EUC to JIS.
?C:.
?H:#$d_euc2jis HAS_EUC2JIS  /**/
?H:.
?LINT:set d_euc2jis
: see if euc2jis exists
set euc2jis d_euc2jis
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_euc2jis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_statfs_s: \
 Hasstruct i_sysparam i_sysmount i_systypes \
```

```
 i_sysvfs i_sysstatfs Setvar
?MAKE: -pick add $@ %<
?S:d_statfs_s:
?S: This variable conditionally defines the HAS_STRUCT_STATFS symbol,
?S: which indicates that the struct statfs is supported.
?S:.
?C:HAS_STRUCT_STATFS:
?C: This symbol, if defined, indicates that the struct statfs
?C: to do statfs() is supported.
?C:.
?H:#$d_statfs_s HAS_STRUCT_STATFS /**/
?H:.
?LINT:set d_statfs_s
: Check for statfs_s
echo " "
echo "Checking to see if your system supports struct statfs..." >&4
set d_statfs_s statfs $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h $i_sysvfs sys/vfs.h
$i_sysstatfs sys/statfs.h
eval $hasstruct
case "$d_statfs_s"
 in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statfs_s.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_bfd.U,v $
?RCS:
?RCS: Copyright (c) 2014 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_bfd: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_bfd:
?S: This variable conditionally defines the I_BFD symbol, and
?S: indicates whether a C program can include <bfd.h>.
?S:.
?C:I_BFD:
?C: This symbol, if defined, indicates that <bfd.h> exists and
?C: can be included.
?C:.
?H:#$i_bfd I_BFD  /**/
?H:.
```

```
?LINT:set i_bfd
: see if this is a bfd.h system
set bfd.h i_bfd
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_bfd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libdbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libdbm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:56:57  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libdbm: test Loc libpth _a
?MAKE: -pick add $@ %<
?S:libdbm:
?S: This variable contains the argument to pass to the loader in order
?S: to get the dbm library routines.  If there is no dbm or ndbm
?S: library, it is null.
?S:.
?T:xxx
:
 see if we should include -ldbm
echo " "
if $test -r /usr/lib/libndbm$_a || $test -r /usr/local/lib/libndbm$_a ; then
 echo "-lndbm found." >&4
 libdbm='-lndbm'
elif $test -r /usr/lib/libdbm$_a || $test -r /usr/local/lib/libdbm$_a ; then
 echo "-ldbm found." >&4
 libdbm='-ldbm'
else
 xxx=`./loc libdbm$_a x $libpth`
 case "$xxx" in
 x)
  echo "No dbm library found." >&4
```

```
  libdbm="
  ;;
 *)
  echo "DBM library found in $xxx." >&4
  libdbm="$xxx"
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libdbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Head.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:02:09  ram
?RCS: patch61: make sure we unset CDPATH for shells that support this
?RCS: patch61: improved Korn shell detection and handling
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:02  ram
?RCS: patch56: added SVR4-ish /opt directories to path list (ADO)
?RCS: patch56: OS/2 platforms are using another path separator
?RCS:
?RCS: Revision 3.0.1.7  1995/03/21  08:46:15  ram
?RCS: patch52: definition of paths wrongly added spurious ':' chars
?RCS:
?RCS:
 Revision 3.0.1.6  1994/10/29  15:54:19  ram
?RCS: patch36: make sure ENV is unset before calling /bin/ksh
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:03:44  ram
?RCS: patch32: now sets PATH only using existing directories
?RCS:
?RCS: Revision 3.0.1.4  1994/06/20  06:54:28  ram
?RCS: patch30: now computes its invocation name into 'me'
?RCS: patch30: symbol me is made visible to all units read-only
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:15:07  ram
?RCS: patch15: added /sbin:/usr/sbin:/usr/libexec in PATH for BSD/386
```

```
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:32:35  ram
?RCS: patch14: ensure PATH is reset to '.' before testing for alias
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:07  ram
?RCS: patch7: not all 'test' programs support the -x option
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the very first unit in the Configure script.  It is mostly just
?X: things to keep people from getting
 into a tizzy right off the bat.
?X:
?MAKE:Head:
?MAKE: -pick wipe $@ %<
?V:PATH p_ _exe me newsh
?T:argv Id p paths OS2_SHELL DJGPP
?T:inksh needksh avoidksh newsh changesh reason
?F:!*
?LINT:extern ENV CDPATH SHELL MACHTYPE
?LINT:change ENV CDPATH
?LINT:nocomment
#! /bin/sh
#
# If these # comments don't work, trim them. Don't worry about any other
# shell scripts, Configure will trim # comments from them for you.
#
# (If you are trying to port this package to a machine without sh,
# I would suggest you have a look at the prototypical config_h.SH file
# and edit it to reflect your system. Some packages may include samples
# of config.h for certain machines, so you might look for one of those.)
#
?X:
?X: NOTE THAT A CONFIGURE SCRIPT IS IN THE PUBLIC DOMAIN (whether or not
?X: the software which uses it is in the public domain).
?X:
# Yes, you may rip this off to use in other distribution packages. This
# script belongs to the public domain and cannot be copyrighted.
#
?X:
?X: WE ASK YOU
 NOT TO REMOVE OR ALTER THE FOLLOWING PARAGRAPH, PLEASE:
?X:
# Note: this Configure script was generated automatically. Rather than
# working with this copy of Configure, you may wish to get metaconfig.
# The dist package (which contains metaconfig) is available via SVN:
```

```
#     svn co https://svn.code.sf.net/p/dist/code/trunk/dist
?X:
?X: NOTA BENE:
?X: If you develop you own version of metaconfig based on this work,
?X: you have to add some comments telling that the script was generated
?X: by your version, not mine: It credits your work.
?X:

# $Id: Head.U 6 2006-08-25 22:21:46Z rmanfredi $
#
# Generated on <DATE> [metaconfig <VERSION> PL<PATCHLEVEL>]

cat >c1$$ <<EOF
ARGGGHHHH!!!!!

SCO csh still thinks true is false.  Write to SCO today and tell them that next
year Configure ought to "rm /bin/csh" unless they fix their blasted shell. :-)

(Actually, Configure ought to just patch csh in place.  Hmm.  Hmmmmm.  All
we'd have to do is go in and swap the && and || tokens, wherever they are.)

[End
 of diatribe. We now return you to your regularly scheduled programming...]
EOF
cat >c2$$ <<EOF

OOPS!  You naughty creature!  You didn't run Configure with sh!
I will attempt to remedy the situation by running sh for you...
EOF

true || cat c1$$ c2$$
true || exec sh $0 $argv:q

(exit $?0) || cat c2$$
(exit $?0) || exec sh $0 $argv:q
rm -f c1$$ c2$$

: compute my invocation name
me=$0
case "$0" in
*/*)
 me=`echo $0 | sed -e 's!.*/\(.*\)!\1!' 2>/dev/null`
 test "$me" || me=$0
 ;;
esac

?X:
?X: To be able to run under OS/2, we must detect that early enough to use
```

```
?X: the proper path separator, stored in $p_. It is : on UNIX and ; on
?X: DOSish systems such as OS/2.
?X:
: Proper separator for the PATH environment variable
p_=:
: On OS/2 this directory should exist if this is not floppy only system ":-]"
if test -d c:/. ; then
 if test -n "$OS2_SHELL"; then
  p_=\;
  PATH=`cmd /c "echo %PATH%" | tr '\\\\' / `
?X: That's a bug in ksh5.22
  OS2_SHELL=`cmd /c "echo %OS2_SHELL%" | tr
 '\\\\' / | tr '[A-Z]' '[a-z]'`
 elif test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
  *cygwin) ;;
  *) p_=\; ;;
  esac
 fi
fi

?X:
?X: There are two schools of thoughts here. Some people correctly argue that
?X: the user has a better chance than we do of setting a reasonable PATH and
?X: others argue that Configure is the best place there is to set up a suitable
?X: PATH. Well, here we try to compromize by keeping the user's PATH and
?X: appending some directories which are known to work on some machine or the
?X: other. The rationale behind this being that a novice user might not have a
?X: proper environment variable set, and some directories like /etc (where
?X: chown is located on some BSD systems) may be missing--RAM.
?X:
?X: SVR4 adds an /opt directory for optional packages.  Some sites use
?X: various permutations on /opt as opposed to /usr or /usr/local.-- ADO
?X:
?X: We only add directories that are not already in the PATH of the
?X: user and the directories must
 exist also.
?X:
: Proper PATH setting
paths='/bin /usr/bin /usr/local/bin /usr/ucb /usr/local /usr/lbin'
paths="$paths /opt/bin /opt/local/bin /opt/local /opt/lbin"
paths="$paths /usr/5bin /etc /usr/gnu/bin /usr/new /usr/new/bin /usr/nbin"
paths="$paths /opt/gnu/bin /opt/new /opt/new/bin /opt/nbin"
paths="$paths /sys5.3/bin /sys5.3/usr/bin /bsd4.3/bin /bsd4.3/usr/ucb"
paths="$paths /bsd4.3/usr/bin /usr/bsd /bsd43/bin /usr/ccs/bin"
paths="$paths /etc /usr/lib /usr/ucblib /lib /usr/ccs/lib"
paths="$paths /sbin /usr/sbin /usr/libexec"
paths="$paths /system/gnu_library/bin"
```

```
for p in $paths
do
 case "$p_$PATH$p_" in
 *$p_$p$p_*) ;;
 *) test -d $p && PATH=$PATH$p_$p ;;
 esac
done

PATH=.$p_$PATH
export PATH

: shall we be using ksh?
inksh=''
needksh=''
avoidksh=''
newsh=/bin/ksh
changesh=''
?X: Use (alias -x) and not (alias) since zsh and bash recognize the alias
?X: builtin but not the -x option which is typically ksh...
?X: We need to set up PATH before calling the "alias" built-in since
 some
?X: systems like HP-UX have a binary called /bin/alias.
if (PATH=.; alias -x) >/dev/null 2>&1; then
  inksh=true
fi
?X: On HP-UX, large Configure scripts may exercise a bug in /bin/sh, use ksh
if test -f /hp-ux -a -f /bin/ksh; then
 needksh='to avoid sh bug in "here document" expansion'
fi
?X: On AIX4, /bin/sh is really ksh and it causes problems, use sh
if test -d /usr/lpp -a -f /usr/bin/bsh -a -f /usr/bin/uname; then
 if test X`/usr/bin/uname -v` = X4; then
  avoidksh="to avoid AIX 4's /bin/sh"
  newsh=/usr/bin/bsh
 fi
fi
?X: On Digital UNIX, /bin/sh may start up buggy /bin/ksh, use sh
if test -f /osf_boot -a -f /usr/sbin/setld; then
 if test X`/usr/bin/uname -s` = XOSF1; then
  avoidksh="to avoid Digital UNIX' ksh"
  newsh=/bin/sh
?X: if BIN_SH is set to 'xpg4', sh will start up ksh
  unset BIN_SH
 fi
fi
?X: If we are not in ksh and need it, then feed us back to it
case "$inksh/$needksh" in
```

```
/[a-z]*)
?X: Clear ENV to avoid any ~/.kshrc that could alias cd or whatever...
?X: Don't
 use "unset ENV", that is not portable enough
  ENV="
  changesh=true
  reason="$needksh"
 ;;
esac
?X: If we are in ksh and must avoid it, then feed us back to a new shell
case "$inksh/$avoidksh" in
true/[a-z]*)
 changesh=true
 reason="$avoidksh"
 ;;
esac
?X: Warn them if they use ksh on other systems, which are those where
?X: we don't need ksh nor want to avoid it explicitly, yet are using it.
case "$inksh/$needksh-$avoidksh-" in
true/--)
  cat <<EOM
(I see you are using the Korn shell.  Some ksh's blow up on $me,
mainly on older exotic systems.  If yours does, try the Bourne shell instead.)
EOM
 ;;
esac
case "$changesh" in
true)
 export newsh
 echo "(Feeding myself to $newsh $reason.)"
?X: Make sure they didn't say sh <Configure by checking whether $0 ends
?X: with Configure or not. If they did say sh <../../Configure, then too
?X: bad for them anyway, since we lost that path indication...
?X: Otherwise, execing $0 ensures we keep the full remote source dir
?X: indication for src.U.
 case
 "$0" in
 Configure|*/Configure) exec $newsh $0 "$@";;
 *) exec $newsh Configure "$@";;
 esac
 ;;
esac

?X: Unset CDPATH to avoid surprises when using cd under some shells
?X: Can't unset it because that's not portable to very old shells.
?X: Can't set it to '' because then bash 2.02 won't do "cd UU"  --AD  6/98.
?X: Don't want to set it to '.' because then ksh prints out the
?X: name of the directory every time you cd to it. --AD 6/98
```

```
?X: In order to inflict the least harm, change it only if it's set.
: if needed, set CDPATH to a harmless value that is not chatty
case "$CDPATH" in
") ;;
*) case "$SHELL" in
 *bash*) CDPATH='.' ;;
 *) CDPATH=" ;;
 esac
 ;;
esac

: Configure runs within the UU subdirectory
test -d UU || mkdir UU
?X: Use ./* to avoid any confirmation prompts from enhanced shells -- WED
cd UU && rm -f ./*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Head.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: prototype.U,v $
?RCS: Revision 3.0.1.3  1994/05/06  15:11:49  ram
?RCS: patch23: ensure cc flags used when looking for prototype support
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:36  ram
?RCS: patch16: prototype handling macros now appear only when needed
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:03:12  ram
?RCS: patch6: defines were referring to non-existent VOID symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:prototype:
 Myread Oldconfig cat +cc +ccflags rm Setvar
?MAKE: -pick add $@ %<
?S:prototype:
?S: This variable holds the eventual value of CAN_PROTOTYPE, which
```

```
?S: indicates the C compiler can handle funciton prototypes.
?S:.
?C:CAN_PROTOTYPE ~ %<:
?C: If defined, this macro indicates that the C compiler can handle
?C: function prototypes.
?C:.
?C:DOTS:
?C: This macro is used to specify the ... in function prototypes which
?C: have arbitrary additional arguments.
?C:.
?C:NXT_ARG:
?C: This macro is used to separate arguments in the declared argument list.
?C:.
?C:P_FUNC:
?C: This macro is used to declare "private" (static) functions.
?C: It takes three arguments: the function type and name, a parenthesized
?C: traditional (comma separated) argument list, and the declared argument
?C: list (in which arguments are separated with NXT_ARG, and additional
?C: arbitrary arguments are specified with DOTS).  For example:
?C:
?C:  P_FUNC(int foo, (bar, baz), int bar NXT_ARG char *baz[])
?C:.
?C:P_FUNC_VOID:
?C: This
 macro is used to declare "private" (static) functions that have
?C: no arguments.  The macro takes one argument: the function type and name.
?C: For example:
?C:
?C:  P_FUNC_VOID(int subr)
?C:.
?C:V_FUNC:
?C: This macro is used to declare "public" (non-static) functions.
?C: It takes three arguments: the function type and name, a parenthesized
?C: traditional (comma separated) argument list, and the declared argument
?C: list (in which arguments are separated with NXT_ARG, and additional
?C: arbitrary arguments are specified with DOTS).  For example:
?C:
?C:  V_FUNC(int main, (argc, argv), int argc NXT_ARG char *argv[])
?C:.
?C:V_FUNC_VOID:
?C: This macro is used to declare "public" (non-static) functions that have
?C: no arguments.  The macro takes one argument: the function type and name.
?C: For example:
?C:
?C:  V_FUNC_VOID(int fork)
?C:.
?C:_ (P):
?C: This macro is used to declare function parameters for folks who want
```

```
?C: to make declarations with prototypes using a
 different style than
?C: the above macros.  Use double parentheses.  For example:
?C:
?C:  int main _((int argc, char *argv[]));
?C:.
?H:?%<:#$prototype CAN_PROTOTYPE /**/
?H:?%<:#ifdef CAN_PROTOTYPE
?H:?NXT_ARG:#define NXT_ARG ,
?H:?DOTS:#define DOTS , ...
?H:?V_FUNC:#define V_FUNC(name, arglist, args)name(args)
?H:?P_FUNC:#define P_FUNC(name, arglist, args)static name(args)
?H:?V_FUNC_VOID:#define V_FUNC_VOID(name)name(void)
?H:?P_FUNC_VOID:#define P_FUNC_VOID(name)static name(void)
?H:?_:#define _(args) args
?H:?%<:#else
?H:?NXT_ARG:#define NXT_ARG ;
?H:?DOTS:#define DOTS
?H:?V_FUNC:#define V_FUNC(name, arglist, args)name arglist args;
?H:?P_FUNC:#define P_FUNC(name, arglist, args)static name arglist args;
?H:?V_FUNC_VOID:#define V_FUNC_VOID(name)name()
?H:?P_FUNC_VOID:#define P_FUNC_VOID(name)static name()
?H:?_:#define _(args) ()
?H:?%<:#endif
?H:.
?W:%<:NXT_ARG DOTS V_FUNC P_FUNC V_FUNC_VOID P_FUNC_VOID _
?LINT:set prototype
: Cruising for prototypes
echo " "
echo "Checking out
 function prototypes..." >&4
$cat >prototype.c <<'EOCP'
int main(int argc, char *argv[]) {
 exit(0);}
EOCP
if $cc $ccflags -c prototype.c >prototype.out 2>&1 ; then
 echo "Your C compiler appears to support function prototypes."
 val="$define"
else
 echo "Your C compiler doesn't seem to understand function prototypes."
 val="$undef"
fi
set prototype
eval $setvar
$rm -f prototype*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prototype.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservbyport_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservbyport_r getservbyport_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservbyport_r:
?S: This variable conditionally defines the HAS_GETSERVBYPORT_R symbol,
?S: which indicates to the C program that the getservbyport_r()
?S: routine is available.
?S:.
?S:getservbyport_r_proto:
?S: This variable encodes the prototype of getservbyport_r.
?S: It is zero if d_getservbyport_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyport_r
?S: is defined.
?S:.
?C:HAS_GETSERVBYPORT_R:
?C: This symbol, if defined, indicates
 that the getservbyport_r routine
?C: is available to getservbyport re-entrantly.
?C:.
?C:GETSERVBYPORT_R_PROTO:
?C: This symbol encodes the prototype of getservbyport_r.
?C: It is zero if d_getservbyport_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyport_r
?C: is defined.
?C:.
?H:#$d_getservbyport_r HAS_GETSERVBYPORT_R /**/
?H:#define GETSERVBYPORT_R_PROTO $getservbyport_r_proto /**/
?H:.
?T:try hdrs d_getservbyport_r_proto
: see if getservbyport_r exists
set getservbyport_r d_getservbyport_r
eval $inlibc
case "$d_getservbyport_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservbyport_r_proto:$usethreads" in
 ":define") d_getservbyport_r_proto=define
  set d_getservbyport_r_proto getservbyport_r $hdrs
```

```
 eval $hasproto ;;
*) ;;
esac
case "$d_getservbyport_r_proto" in
define)
case "$getservbyport_r_proto" in
"|0) try='int getservbyport_r(int, const char*, struct servent*, char*, size_t,
struct servent**);'
./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=I_ICSBWR ;;
esac
case "$getservbyport_r_proto" in
"|0) try='struct servent* getservbyport_r(int, const char*, struct servent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=S_ICSBI ;;
esac
case "$getservbyport_r_proto" in
"|0) try='int getservbyport_r(int, const char*, struct servent*, struct servent_data*);'
./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=I_ICSD ;;
esac
case "$getservbyport_r_proto" in
"|0) d_getservbyport_r=undef
 getservbyport_r_proto=0
 echo "Disabling getservbyport_r, cannot determine prototype." >&4 ;;
* ) case "$getservbyport_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getservbyport_r_proto="REENTRANT_PROTO_$getservbyport_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getservbyport_r has no prototype, not using it." >&4 ;;
 esac
 d_getservbyport_r=undef
 getservbyport_r_proto=0
 ;;
esac
;;
*) getservbyport_r_proto=0
;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservbyport_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_utime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_utime.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_utime: Inhdr
?MAKE: -pick add $@ %<
?S:i_utime:
?S: This variable conditionally defines the I_UTIME symbol, and indicates
?S: whether a C program should include <utime.h>.
?S:.
?C:I_UTIME:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <utime.h>.
?C:.
?H:#$i_utime I_UTIME  /**/
?H:.
?LINT:set i_utime
:
 see if this is an utime system
set utime.h i_utime
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_utime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fstatfs : Inlibc
?MAKE: -pick add $@ %<
?S:d_fstatfs:
?S: This variable conditionally defines the HAS_FSTATFS symbol, which
?S: indicates to the C program that the fstatfs() routine is available.
?S:.
?C:HAS_FSTATFS:
```

```
?C: This symbol, if defined, indicates that the fstatfs routine is
?C: available to stat filesystems by file descriptors.
?C:.
?H:#$d_fstatfs HAS_FSTATFS  /**/
?H:.
?LINT:set d_fstatfs
: see if fstatfs exists
set fstatfs d_fstatfs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fstatfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysmman.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:11:20  ram
?RCS: patch16: created
?RCS:
?X:
?X: Look wether <sys/mman.h> needs to be included.
?X:
?MAKE:i_sysmman: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysmman:
?S: This variable conditionally defines the I_SYS_MMAN symbol,
?S: and indicates whether a C program should include <sys/mman.h>.
?S:.
?C:I_SYS_MMAN:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/mman.h>.
?C:.
?H:#$i_sysmman I_SYS_MMAN  /**/
?H:.
?LINT:set
 i_sysmman
: see if sys/mman.h has to be included
set sys/mman.h i_sysmman
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysmman.U
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```
?RCS: $Id: d_fgetpos.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fgetpos.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:33  ram
?RCS: patch30: created
?RCS:
?MAKE:d_fgetpos: Inlibc
?MAKE: -pick add $@ %<
?S:d_fgetpos:
?S: This variable conditionally defines HAS_FGETPOS if fgetpos() is
?S: available to get the file position indicator.
?S:.
?C:HAS_FGETPOS:
?C: This symbol, if defined, indicates that the fgetpos routine is
?C: available to get the file position indicator, similar to ftell().
?C:.
?H:#$d_fgetpos
 HAS_FGETPOS /**/
?H:.
?LINT:set d_fgetpos
: see if fgetpos exists
set fgetpos d_fgetpos
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fgetpos.U
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```
?RCS: $Id: baserev.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: baserev.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:baserev: Null
?MAKE: -pick wipe $@ %<
?S:baserev:
?S: The base revision level of this package, from the .package file.
?S:.
: set the base revision
baserev=<BASEREV>
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/baserev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lib.U,v 3.0.1.3 1995/09/25 09:16:47 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: lib.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:16:47  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:38:08  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:27:40  ram
?RCS: patch32: now uses installation prefix to set the default
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?LINT:
 empty
?X:?MAKE:lib libexp: Getfile Loc Oldconfig Prefixit Prefixup prefixexp
?X:?MAKE: -pick add $@ %<
?X:?Y:TOP
?X:?S:lib:
```

```
?X:?S: This variable holds the name of the directory in which the user wants
?X:?S: to put public library files for the package in question.  It is most
?X:?S: often a local directory such as /usr/local/lib. Programs using this
?X:?S: variable must be prepared to deal with filename expansion.
?X:?S:.
?X:?S:libexp:
?X:?S: This variable is the same as the lib variable, but is filename expanded
?X:?S: at configuration time, for convenient use in your makefiles.
?X:?S:.
?X:: determine where public libraries go
?X:set lib lib
?X:eval $prefixit
?X:case "$lib" in
?X:")
?X: dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
?X: set dflt
?X: eval $prefixup
?X: ;;
?X:*)  dflt="$lib";;
?X:esac
?X:echo " "
?X:fn=d~
?X:rp='Where do you want to put the public libraries?'
?X:. ./getfile
?X:lib="$ans"
?X:libexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/nullified/lib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigblock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigblock.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sigblock: Inlibc
?MAKE: -pick add $@ %<
?S:d_sigblock:
```

```
?S: This variable conditionally defines HAS_SIGBLOCK if sigblock() is
?S: available to block signal reception.
?S:.
?C:HAS_SIGBLOCK:
?C: This symbol, if defined, indicates that the sigblock routine is
?C: available to block signal reception.
?C:.
?H:#$d_sigblock HAS_SIGBLOCK /**/
?H:.
?LINT:set
 d_sigblock
: see if sigblock exists
set sigblock d_sigblock
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigblock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memmove.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memmove.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memmove: Inlibc
?MAKE: -pick add $@ %<
?S:d_memmove:
?S: This variable conditionally defines the HAS_MEMMOVE symbol, which
?S: indicates to the C program that the memmove() routine is available
?S: to copy potentially overlapping blocks of memory.
?S:.
?C:HAS_MEMMOVE:
?C: This symbol, if defined, indicates that the memmove routine
 is available
?C: to copy potentially overlapping blocks of memory. This should be used
?C: only when HAS_SAFE_BCOPY is not defined. If neither is there, roll your
?C: own version.
?C:.
?H:#$d_memmove HAS_MEMMOVE /**/
```

```
?H:.
?LINT:set d_memmove
: see if memmove exists
set memmove d_memmove
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memmove.U
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```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: patchlevel.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:18:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:patchlevel: package baserev test rsrc
?MAKE: -pick add $@ %<
?T:Revision
?S:patchlevel:
?S: The patchlevel level of this package.
?S: The value of patchlevel comes from the patchlevel.h file.
?S:.
: get the patchlevel
echo " "
echo "Getting the current patchlevel..." >&4
if $test -r
 $rsrc/patchlevel.h;then
 patchlevel=`awk \
  '/^#[  ]*define[  ][  ]*PATCHLEVEL/ {print $3}' \
  < $rsrc/patchlevel.h`
else
 patchlevel=0
fi
echo "(You have $package $baserev PL$patchlevel.)"
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/patchlevel.U
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```
?RCS: $Id$
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:Devel usedevel: Myread rsrc package
?MAKE: -pick wipe $@ %<
?T:xversion
?X: waiver of rights
?S:usedevel:
?S: This variable indicates that Perl was configured with development
?S: features enabled.  This should not be done for production builds.
?S:.
?C:PERL_USE_DEVEL:
?C: This symbol, if defined, indicates that Perl was configured with
?C: -Dusedevel, to enable development features.  This should not be
?C: done for production builds.
?C:.
?H:#$usedevel PERL_USE_DEVEL  /**/
?H:.
?LINT:extern versiononly
?LINT:extern
 installusrbinperl
?LINT:change versiononly
?LINT:change installusrbinperl
: See if we are using a devel version and want that
xversion=`awk '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
case "$usedevel" in
$define|true|[yY]*)
   usedevel="$define" ;;
*) case "$xversion" in
  *[13579])
 cat >&4 <<EOH
*** WHOA THERE!!! ***

   This is an UNSTABLE DEVELOPMENT release.
   The version of this $package distribution is $xversion, that is, odd,
   (as opposed to even) and that signifies a development release.
   If you want a maintenance release, you want an even-numbered version.
```

```
   Do ***NOT*** install this into production use.
   Data corruption and crashes are possible.

   It is most seriously suggested that you do not continue any further
   unless you want to help in developing and debugging Perl.

   If you *still* want to build perl, you can answer 'y' now,
   or pass -Dusedevel to Configure.

EOH
 rp='Do you really want to continue?'
 dflt='n'
 . ./myread
 case
 "$ans" in
 [yY]) echo >&4 "Okay, continuing."
       usedevel="$define" ;;
 *) echo >&4 "Okay, bye."
    exit 1
    ;;
 esac
 ;;
   esac
   usedevel="$undef"
   ;;
esac
case "$usedevel" in
$define|true|[yY]*)
 case "$versiononly" in
 ") versiononly="$define" ;;
 esac
 case "$installusrbinperl" in
 ") installusrbinperl="$undef" ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Devel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_acosh: Inlibc
?MAKE: -pick add $@ %<
?S:d_acosh:
?S: This variable conditionally defines the HAS_ACOSH symbol, which
```

```
?S: indicates to the C program that the acosh() routine is available.
?S:.
?C:HAS_ACOSH:
?C: This symbol, if defined, indicates that the acosh routine is
?C: available to do the inverse hyperbolic cosine function.
?C:.
?H:#$d_acosh HAS_ACOSH  /**/
?H:.
?LINT:set d_acosh
: see if acosh exists
set acosh d_acosh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_acosh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endprotoent_r endprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endprotoent_r:
?S: This variable conditionally defines the HAS_ENDPROTOENT_R symbol,
?S: which indicates to the C program that the endprotoent_r()
?S: routine is available.
?S:.
?S:endprotoent_r_proto:
?S: This variable encodes the prototype of endprotoent_r.
?S: It is zero if d_endprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endprotoent_r
?S: is defined.
?S:.
?C:HAS_ENDPROTOENT_R:
?C: This symbol, if defined, indicates that the endprotoent_r
 routine
?C: is available to endprotoent re-entrantly.
?C:.
?C:ENDPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of endprotoent_r.
?C: It is zero if d_endprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endprotoent_r
```

```
?C: is defined.
?C:.
?H:#$d_endprotoent_r HAS_ENDPROTOENT_R /**/
?H:#define ENDPROTOENT_R_PROTO $endprotoent_r_proto /**/
?H:.
?T:try hdrs d_endprotoent_r_proto
: see if endprotoent_r exists
set endprotoent_r d_endprotoent_r
eval $inlibc
case "$d_endprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endprotoent_r_proto:$usethreads" in
 ":define") d_endprotoent_r_proto=define
  set d_endprotoent_r_proto endprotoent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endprotoent_r_proto" in
 define)
 case "$endprotoent_r_proto" in
 "|0) try='int endprotoent_r(struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && endprotoent_r_proto=I_D ;;
 esac
 case "$endprotoent_r_proto"
 in
 "|0) try='void endprotoent_r(struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && endprotoent_r_proto=V_D ;;
 esac
 case "$endprotoent_r_proto" in
 "|0) d_endprotoent_r=undef
  endprotoent_r_proto=0
  echo "Disabling endprotoent_r, cannot determine prototype." >&4 ;;
 * ) case "$endprotoent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endprotoent_r_proto="REENTRANT_PROTO_$endprotoent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endprotoent_r has no prototype, not using it." >&4 ;;
  esac
  d_endprotoent_r=undef
  endprotoent_r_proto=0
  ;;
 esac
 ;;
```

```
*) endprotoent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endprotoent_r.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_madvise: Inlibc
?MAKE: -pick add $@ %<
?S:d_madvise:
?S: This variable conditionally defines HAS_MADVISE if madvise() is
?S: available to map a file into memory.
?S:.
?C:HAS_MADVISE:
?C: This symbol, if defined, indicates that the madvise system call is
?C: available to map a file into memory.
?C:.
?H:#$d_madvise HAS_MADVISE  /**/
?H:.
?LINT:set d_madvise
: see if madvise exists
set madvise d_madvise
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_madvise.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
```

```
?RCS:
?MAKE:d__fwalk: Inlibc
?MAKE: -pick add $@ %<
?S:d__fwalk:
?S: This variable conditionally defines HAS__FWALK if _fwalk() is
?S: available to apply a function to all the file handles.
?S:.
?C:HAS__FWALK:
?C: This symbol, if defined, indicates that the _fwalk system call is
?C: available to apply a function to all the file handles.
?C:.
?H:#$d__fwalk HAS__FWALK  /**/
?H:.
?LINT:set d__fwalk
: see if _fwalk exists
set fwalk d__fwalk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d__fwalk.U
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```
?RCS: $Id: d_flock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_flock.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flock: Inlibc
?MAKE: -pick add $@ %<
?S:d_flock:
?S: This variable conditionally defines HAS_FLOCK if flock() is
?S: available to do file locking.
?S:.
?C:HAS_FLOCK (FLOCK):
?C: This symbol, if defined, indicates that the flock routine is
?C: available to do file locking.
?C:.
?H:#$d_flock HAS_FLOCK  /**/
?H:.
```

```
?LINT:set d_flock
: see
 if flock exists
set flock d_flock
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_flock.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_finite: Inlibc
?MAKE: -pick add $@ %<
?S:d_finite:
?S: This variable conditionally defines the HAS_FINITE symbol, which
?S: indicates to the C program that the finite() routine is available.
?S:.
?C:HAS_FINITE:
?C: This symbol, if defined, indicates that the finite routine is
?C: available to check whether a double is finite (non-infinity non-NaN).
?C:.
?H:#$d_finite HAS_FINITE  /**/
?H:.
?LINT:set d_finite
: see if finite exists
set finite d_finite
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_finite.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_safebcpy.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  15:40:58  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.3  1995/07/25  13:58:40  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:29:23  ram
?RCS: patch45: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:49:03
  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safebcpy: cat d_bcopy +cc +optimize +ccflags +ldflags +libs rm \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safebcpy:
?S: This variable conditionally defines the HAS_SAFE_BCOPY symbol if
?S: the bcopy() routine can do overlapping copies.
?S:.
?C:HAS_SAFE_BCOPY (SAFE_BCOPY):
?C: This symbol, if defined, indicates that the bcopy routine is available
?C: to copy potentially overlapping memory blocks. Otherwise you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
?H:#$d_safebcpy HAS_SAFE_BCOPY /**/
?H:.
?F:!safebcpy
?LINT: set d_safebcpy
: can bcopy handle overlapping blocks?
?X: assume the worst
val="$undef"
case "$d_bcopy" in
"$define")
 echo " "
 echo "Checking to see if your bcopy() can do overlapping
 copies..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
```

```
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

?X: Copy "abcde..." string to char abc[] so that gcc doesn't
?X: try to store the string in read-only memory.
bcopy("abcdefghijklmnopqrstuvwxyz0123456789", abc, 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  bcopy(abc, b, len);
  for (off = 1; off <= len; off++) {
   bcopy(b, b+off, len);
   bcopy(b+off, b, len);
   if (bcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
 if $cc $optimize $ccflags $ldflags \
      -o safebcpy foo.c $libs >/dev/null 2>&1; then
  if ./safebcpy
```

```
 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "It can't, sorry."
   case "$d_memmove" in
   "$define") echo "But that's Ok since you have memmove()." ;;
   esac
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
  case "$d_memmove" in
  "$define") echo "But that's Ok since you have memmove()." ;;
  esac
 fi
 ;;
esac
$rm -f foo.* safebcpy core
set d_safebcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_safebcpy.U
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```
?RCS: Copyright (c) 2000,2014 Jarkko Hietaniemi
?RCS:
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?RCS:
?MAKE:d_fpclassify d_fp_classify: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?X:the short story is that C99 says use fpclassify.  But the story is confused
?X:by systems "partially C99" (or fully "pre C99") which either user fpclassify
?X:but with different return values, or they use fp_classify (with the expected)
?X:return values, or they use some other spelling of *fp*class* (sometimes even
?X:without the *fp* part), with yet another set(s) of return values ...
?S:d_fpclassify:
?S: This variable conditionally defines the HAS_FPCLASSIFY symbol, which
?S: indicates to the C program that the fpclassify() routine is available.
?S:.
?S:d_fp_classify:
?S: This variable conditionally defines the HAS_FP_CLASSIFY
 symbol, which
?S: indicates to the C program that the fp_classify() routine is available.
?S:.
?C:HAS_FPCLASSIFY:
?C: This symbol, if defined, indicates that the fpclassify routine is
```

```
?C: available to classify doubles.  Available for example in HP-UX.
?C: The returned values are defined in <math.h> and are
?C:
?C:   FP_NORMAL     Normalized
?C:   FP_ZERO       Zero
?C:   FP_INFINITE   Infinity
?C:   FP_SUBNORMAL  Denormalized
?C:   FP_NAN        NaN
?C:
?C:.
?C:HAS_FP_CLASSIFY:
?C: This symbol, if defined, indicates that the fp_classify routine is
?C: available to classify doubles. The values are defined in <math.h>
?C:
?C:   FP_NORMAL     Normalized
?C:   FP_ZERO       Zero
?C:   FP_INFINITE   Infinity
?C:   FP_SUBNORMAL  Denormalized
?C:   FP_NAN        NaN
?C:
?C:.
?H:#$d_fpclassify HAS_FPCLASSIFY  /**/
?H:#$d_fp_classify HAS_FP_CLASSIFY  /**/
?H:.
?LINT:set d_fpclassify
?LINT:set d_fp_classify
: check for fpclassify
?X:classified (Comment by jhi)
?X:fpclassify i_math
?X:fp_classify i_math
?X:fpclass i_math
 i_ieeefp i_fp
?X:fp_class i_math i_fp_class
?X:  No i_fp_class yet. But the systems that have
?X:  this (Tru64 and IRIX) both had <fp_class.h>
?X:class i_math
echo "Checking to see if you have fpclassify..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return fpclassify(1.0) == FP_NORMAL ? 0 : 1; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have fpclassify."
else
 val="$undef"
 echo "You do not have fpclassify."
```

```
fi
$rm_try
set d_fpclassify
eval $setvar

: see if fp_classify exists
set fp_classify d_fp_classify
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclassify.U
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```
?RCS: $Id: d_setnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setnent:
?S: This variable conditionally defines HAS_SETNETENT if setnetent() is
?S: available.
?S:.
?C:HAS_SETNETENT:
?C: This symbol, if defined, indicates that the setnetent() routine is
?C: available.
?C:.
?H:#$d_setnent HAS_SETNETENT  /**/
?H:.
?LINT:set d_setnent
: see if setnetent exists
set
 setnetent d_setnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setnent.U

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```
?RCS: $Id: i_shadow.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_prot: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_prot:
?S: This variable conditionally defines the I_PROT symbol, and indicates
?S: whether a C program should include <prot.h>.
?S:.
?C:I_PROT:
?C: This symbol, if defined, indicates that <prot.h> exists and
?C: should be included.
?C:.
?H:#$i_prot I_PROT  /**/
?H:.
?LINT:set i_prot
: see if this is a prot.h system
set prot.h i_prot
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_prot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2014, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_backtrace.U,v $
?RCS:
?MAKE:d_backtrace: Inlibc
?MAKE: -pick add $@ %<
?S:d_backtrace:
?S: This variable conditionally defines the HAS_BACKTRACE symbol, which
?S: indicates to the C program that the backtrace() routine is available
?S: to get a stack trace.
```

```
?S:.
?C:HAS_BACKTRACE:
?C: This symbol, if defined, indicates that the backtrace() routine is
?C: available to get a stack trace.  The <execinfo.h> header must be
?C: included to use this routine.
?C:.
?H:#$d_backtrace HAS_BACKTRACE /**/
?H:.
?LINT:set d_backtrace
:
 see if backtrace exists
set backtrace d_backtrace
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_backtrace.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strerror_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strerror_l:
?S: This variable conditionally defines the HAS_STRERROR_L symbol, which
?S: indicates to the C program that the strerror_l() routine is available
?S: to return the error message for a given errno value in a particular
?S: locale (identified by a locale_t object).
?S:.
?C:HAS_STRERROR_L:
?C: This symbol, if defined, indicates that the strerror_l routine is
?C: available to return the error message for a given errno value in
?C: a particular locale (identified by a locale_t object).
?C:.
?H:#$d_strerror_l HAS_STRERROR_L  /**/
?H:.
?LINT:set d_strerror_l
: see if strerror_l exists
set strerror_l d_strerror_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strerror_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_sysaccess: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysaccess:
?S: This variable conditionally defines the I_SYS_ACCESS symbol,
?S: and indicates whether a C program should include <sys/access.h>.
?S:.
?C:I_SYS_ACCESS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/access.h>.
?C:.
?H:#$i_sysaccess   I_SYS_ACCESS              /**/
?H:.
?LINT:set i_sysaccess
: see if sys/access.h is available
set sys/access.h i_sysaccess
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/i_sysaccess.U
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```
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS:
?MAKE:i_fenv: Inhdr
?MAKE: -pick add $@ %<
?S:i_fenv:
?S: This variable conditionally defines the I_FENV symbol, which
?S: indicates to the C program that <fenv.h> exists and should
?S: be included.
?S:.
?C:I_FENV:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <fenv.h> to get the floating point environment definitions.
?C:.
?H:#$i_fenv I_FENV  /**/
?H:.
?LINT:set i_fenv
: see if this is a fenv.h system
set fenv.h i_fenv
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fenv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrent_r getgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrent_r:
?S: This variable conditionally defines the HAS_GETGRENT_R symbol,
?S: which indicates to the C program that the getgrent_r()
?S: routine is available.
?S:.
?S:getgrent_r_proto:
?S: This variable encodes the prototype of getgrent_r.
?S: It is zero if d_getgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrent_r
?S: is defined.
?S:.
?C:HAS_GETGRENT_R:
?C: This symbol, if defined, indicates that the getgrent_r routine
?C: is available to
 getgrent re-entrantly.
?C:.
?C:GETGRENT_R_PROTO:
?C: This symbol encodes the prototype of getgrent_r.
?C: It is zero if d_getgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrent_r
?C: is defined.
?C:.
?H:#$d_getgrent_r HAS_GETGRENT_R /**/
?H:#define GETGRENT_R_PROTO $getgrent_r_proto /**/
?H:.
?T:try hdrs d_getgrent_r_proto
: see if getgrent_r exists
set getgrent_r d_getgrent_r
eval $inlibc
case "$d_getgrent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
```

```
case "$d_getgrent_r_proto:$usethreads" in
":define") d_getgrent_r_proto=define
 set d_getgrent_r_proto getgrent_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_getgrent_r_proto" in
define)
case "$getgrent_r_proto" in
"|0) try='int getgrent_r(struct group*, char*, size_t, struct group**);'
./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBWR ;;
esac
case "$getgrent_r_proto" in
"|0) try='int getgrent_r(struct group*, char*, int, struct group**);'
./protochk
"$extern_C $try" $hdrs && getgrent_r_proto=I_SBIR ;;
esac
case "$getgrent_r_proto" in
"|0) try='struct group* getgrent_r(struct group*, char*, size_t);'
./protochk "$extern_C $try" $hdrs && getgrent_r_proto=S_SBW ;;
esac
case "$getgrent_r_proto" in
"|0) try='struct group* getgrent_r(struct group*, char*, int);'
./protochk "$extern_C $try" $hdrs && getgrent_r_proto=S_SBI ;;
esac
case "$getgrent_r_proto" in
"|0) try='int getgrent_r(struct group*, char*, int);'
./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBI ;;
esac
case "$getgrent_r_proto" in
"|0) try='int getgrent_r(struct group*, char*, int, FILE**);'
./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBIH ;;
esac
case "$getgrent_r_proto" in
"|0) d_getgrent_r=undef
 getgrent_r_proto=0
 echo "Disabling getgrent_r, cannot determine prototype." >&4 ;;
* ) case "$getgrent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getgrent_r_proto="REENTRANT_PROTO_$getgrent_r_proto" ;;
 esac
 echo "Prototype:
$try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getgrent_r has no prototype, not using it." >&4 ;;
 esac
```

```
  d_getgrent_r=undef
  getgrent_r_proto=0
  ;;
 esac
 ;;
*) getgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrent_r.U
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```
?RCS: $Id: shm_for.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: shm_for.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:28:37  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:shm_for shm_att shm_lim: Cppsym Myread ipc uname
?MAKE: -pick add $@ %<
?S:shm_for:
?S: This variable tells us the type of machine we're expecting the
?S: shared memory code to run on.  The value is available to C
 programs
?S: in the C_SHM_FOR manifest.
?S:.
?S:shm_att:
?S: This variable tells us where a shared memory segment should be
?S: attached.  Good values are HIGH, LOW, and ZERO.
?S:.
?S:shm_lim:
?S: This variable tells us if shared memory attached HIGH should
?S: have an upper limit.
?S:.
?X: ------------------------------------------------------
?X: It's a potential lose to define anything beginning with SHM...
```

```
?X: At least we can think that S_ stands for "String version of ..." -- HMS
?X: -------------------------------------------------------
?C:S_SHM_FOR ~ %<:
?C: This symbol identifies what we chose for the target system's
?C: default shared memory configuration parameters.
?C:.
?C:S_SHM_ATT ~ %<:
?C: This symbol holds the default "place" to attach shared memory.
?C: Values are "HIGH", "ZERO", and "LOW".
?C:.
?C:S_SHM_LIM ~ %<:
?C: This symbol holds the default upper bound address limit if shared
?C: memory is attached HIGH.  If zero, there is no upper limit.
?C:.
?H:?%<:#ifdef
 SERVE_SHM
?H:?%<:#define S_SHM_FOR "$shm_for"
?H:?%<:#define S_SHM_ATT "$shm_att"
?H:?%<:#define S_SHM_LIM "$shm_lim"
?H:?%<:#endif
?H:.
?W:%<:S_SHM_FOR S_SHM_ATT S_SHM_LIM
: see how to attach shared memory
echo " "
echo "Deciding how to attach shared memory..." >&4

case "$ipc" in
shm)
 shm_for='Default case'
 shm_att='HIGH'
 shm_lim='0x0'
 if ./Cppsym tower32 tower32_600; then
  echo "NCR Towers are usually normal..."
  : echo "Oh, an NCR Tower."
  : This works for the 600
  shm_for='NCR Tower 32'
  shm_att='LOW'
 else
  case "$uname" in
  */uname)
   case "`uname -m`" in
   ACS??68*)
    echo "Oh, an Altos 3068."
    shm_for='Altos 3068:'
    shm_lim='0x800000'
    ;;
    esac
    ;;
```

```
  *)
   echo "Looks normal to me..."
   ;;
  esac
 fi

 dflt="$shm_for"
 rp='Description of shared memory configuration?'
 . ./myread
 shm_for="$ans"

 dflt="$shm_att"
 rp='Where should shared memory be attached?'
 . ./myread
 shm_att="$ans"

 case "$shm_att" in
 HIGH)
  dflt="$shm_lim"
  rp='What is
 the upper address limit for shared memory?'
  . ./myread
  shm_lim="$ans"
  ;;
 *)
  shm_lim=''
  ;;
 esac
 ;;

*)
 echo "but you aren't using shared memory so I won't bother." >&4
 shm_for='NOT CONFIGURED'
 shm_att='NONE'
 shm_lim='-1'
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/shm_for.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:d_socks5_init: Inlibc
?MAKE: -pick add $@ %<
?S:d_socks5_init:
?S: This variable conditionally defines the HAS_SOCKS5_INIT symbol, which
?S: indicates to the C program that the socks5_init() routine is available.
?S:.
?C:HAS_SOCKS5_INIT:
?C: This symbol, if defined, indicates that the socks5_init routine is
?C: available to initialize SOCKS 5.
?C:.
?H:#$d_socks5_init HAS_SOCKS5_INIT  /**/
?H:.
?LINT:set d_socks5_init
: see if socks5_init exists
set socks5_init d_socks5_init
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_socks5_init.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can be doted in order to extract
?X: .SH files with variable substitutions.
?X:
?X: When running Configure from a remote directory ($src
```

```
 is not '.'),
?X: then the files will be created in that directory, so beware!
?X:
?MAKE:Extract: Mkdirp src
?MAKE: -pick add $@ %<
?F:./extract
?T:CONFIG SRC dir file
: script used to extract .SH files with variable substitutions
cat >extract <<EOS
CONFIG=true
SRC="$src"
EOS
cat >>extract <<'EOS'
echo "Doing variable substitutions on .SH files..."
if test -f "$SRC/MANIFEST"; then
 set x `awk '{print $1}' <$SRC/MANIFEST | grep '\.SH'`
else
 echo "(Looking for .SH files under the source directory.)"
 set x `(cd "$SRC"; find . -name "*.SH" -print)`
fi
shift
case $# in
0) set x `(cd "$SRC"; echo *.SH)`; shift;;
esac
if test ! -f "$SRC/$1"; then
 shift
fi
for file in $*; do
 case "$SRC" in
 ".")
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (cd $dir && . ./$file)
   ;;
  *)
   . ./$file
   ;;
  esac
  ;;
 *)
?X:
?X: When running Configure remotely ($src is not '.'), we cannot source
?X: the files directly, since that would wrongly cause
 the extraction
?X: where the source lie instead of withing the current directory. Therefore,
?X: we need to 'sh <file' then, which is okay since they will source the
```

```
?X: existing config.sh file. It's not possible to use:
?X:  ../src/Configure -S -O -Dsomething
?X: unfortunately since no new config.sh with the -Dsomething override
?X: will be created before running the .SH files. A minor buglet.
?X:
?X: Note that we must create the directory hierarchy ourselves if it does
?X: not exist already, and that is done through a shell emulation of the
?X: 'mkdir -p' command. We don't want to use the $installdir metaconfig
?X: symbol here since that would require too much to be configured for
?X: this simple extraction task that may happen quickly with 'Configure -S'.
?X:  -- RAM, 18/03/96
?X:
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   ./mkdirp $dir
   sh <"$SRC/$dir/$file"
   ;;
  *)
   sh <"$SRC/$file"
   ;;
  esac
  ;;
 esac
done
if
 test -f "$SRC/config_h.SH"; then
 if test ! -f config.h; then
?X: oops, they left it out of MANIFEST, probably, so do it anyway.
  sh <"$SRC/config_h.SH"
 fi
fi
EOS
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Extract.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:st_dev_size st_dev_sign: cat echo i_stdlib Setvar Compile run rm_try
```

```
?MAKE: -pick add $@ %<
?S:st_dev_sign:
?S: This variable contains the signedness of struct stat's st_dev.
?S: 1 for unsigned, -1 for signed.
?S:.
?S:st_dev_size:
?S: This variable contains the size of struct stat's st_dev in bytes.
?S:.
?C:ST_DEV_SIZE:
?C: This variable contains the size of struct stat's st_dev in bytes.
?C:.
?C:ST_DEV_SIGN:
?C: This symbol holds the signedness of struct stat's st_dev.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define ST_DEV_SIGN
 $st_dev_sign /* st_dev sign */
?H:#define ST_DEV_SIZE $st_dev_size /* st_dev size */
?H:.
?F:!try
: Check the size of st_dev
$echo " "
$echo "Checking the size of st_dev..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   struct stat st;
   printf("%d\n", (int)sizeof(st.st_dev));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 val=`$run ./try`
 case "$val" in
 ") st_dev_size=4
  $echo "(I can't execute the test program--guessing $st_dev_size.)" >&4
  ;;
 *) st_dev_size=$val
  $echo "Your st_dev is $st_dev_size bytes long."
  ;;
 esac
else
```

```
 st_dev_size=4
 $echo "(I can't compile the test program--guessing $st_dev_size.)" >&4
fi
$rm_try

: Check if st_dev is signed
$echo " "
$echo "Checking the sign of st_dev..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
int main() {
 struct stat foo;
       foo.st_dev = -1;
 if (foo.st_dev < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set
 try
if eval $compile; then
 val=`$run ./try`
 case "$val" in
 ") st_dev_sign=1
  $echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) st_dev_sign=$val
  case "$st_dev_sign" in
   1) $echo "Your st_dev is unsigned." ;;
  -1) $echo "Your st_dev is signed."   ;;
  esac
  ;;
 esac
else
 st_dev_sign=1
 $echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/st_dev_def.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_math.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi

```
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_math.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:59  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_math: Inhdr
?MAKE: -pick add $@ %<
?X: Are there really systems that *DON'T* have math.h?
?S:i_math:
?S: This variable conditionally defines the I_MATH symbol, and indicates
?S: whether a C program may include <math.h>.
?S:.
?C:I_MATH:
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <math.h>.
?C:.
?H:#$i_math I_MATH  /**/
?H:.
?LINT:set i_math
: see if this is a math.h system
set math.h i_math
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_math.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ffs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ffs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:03  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ffs d_ffsl: Inlibc
?MAKE: -pick add $@ %<
?S:d_ffs:
?S: This variable conditionally defines the HAS_FFS symbol, which
?S: indicates to the C program that the ffs() routine is available
?S: to find the first bit which is set in its integer argument.
?S:.
?S:d_ffsl:
?S: This variable conditionally defines the HAS_FFSL symbol, which
?S: indicates
 to the C program that the ffsl() routine is available
?S: to find the first bit which is set in its long integer argument.
?S:.
?C:HAS_FFS:
?C: This symbol, if defined, indicates that the ffs routine is available
?C: to find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
?C:HAS_FFSL:
?C: This symbol, if defined, indicates that the ffsl routine is available
?C: to find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
?H:#$d_ffs HAS_FFS  /**/
?H:#$d_ffsl HAS_FFSL  /**/
?H:.
?LINT:set d_ffs d_ffsl
: see if ffs exists
set ffs d_ffs
eval $inlibc
: see if ffsl exists
set ffsl d_ffsl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ffs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cf_email.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:05:06  ram
?RCS: patch16: created
?RCS:
?RCS:
?MAKE:cf_email: cat cf_by test myhostname mydomain Oldconfig Myread
?MAKE: -pick add $@ %<
?S:cf_email:
?S: Electronic mail address of the person who ran Configure. This can be
?S: used by units that require the user's e-mail, like MailList.U.
?S:.
?T:cont maildomain
?LINT:extern MAILDOMAIN
: determine the e-mail address of the user who is running us
$cat <<EOM

I need to get your e-mail address
 in Internet format if possible, i.e.
something like user@host.domain. Please answer accurately since I have
no easy means to double check it. The default value provided below
is most probably close to reality but may not be valid from outside
your organization...

EOM
cont=x
while test "$cont"; do
 case "$MAILDOMAIN" in
 ")
  if $test -s /etc/mailname; then
   maildomain=`$cat /etc/mailname`
  else
   maildomain="$myhostname$mydomain"
  fi
  ;;
 *)  maildomain="$MAILDOMAIN";;
 esac
 case "$cf_email" in
 ") dflt="$cf_by@$maildomain";;
 *)  dflt="$cf_email";;
 esac
 rp='What is your e-mail address?'
 . ./myread
 cf_email="$ans"
 case "$cf_email" in
 *@*.*) cont=" ;;
 *)
```

```
  rp='Address does not look like an Internet one.  Use it anyway?'
  case "$fastread" in
  yes) dflt=y ;;
  *) dflt=n ;;
  esac
  . ./myread
  case "$ans" in
  y*) cont=" ;;
  *) echo " " ;;
  esac
  ;;
 esac
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_email.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_chown.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:14  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_chown: Inlibc
?MAKE: -pick add $@ %<
?S:d_chown:
?S: This variable conditionally defines the HAS_CHOWN symbol, which
?S: indicates to the C program that the chown() routine is available.
?S:.
?C:HAS_CHOWN :
?C: This symbol, if defined, indicates that the chown routine is
?C: available.
?C:.
?H:#$d_chown
 HAS_CHOWN  /**/
?H:.
?LINT:set d_chown
```

```
: see if chown exists
set chown d_chown
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bcmp.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:47:52  ram
?RCS: patch12: added magic support for bcmp()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:00:44  ram
?RCS: patch10: now only defines HAS_BCMP, no macro remap on memcmp (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bcmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_bcmp:
?S: This variable conditionally defines the HAS_BCMP symbol
 if
?S: the bcmp() routine is available to compare strings.
?S:.
?C:HAS_BCMP:
?C: This symbol is defined if the bcmp() routine is available to
?C: compare blocks of memory.
?C:.
?H:#$d_bcmp HAS_BCMP /**/
?H:.
?M:bcmp: HAS_BCMP
?M:#ifndef HAS_BCMP
?M:#ifndef bcmp
?M:#define bcmp(s,d,l) memcmp((s),(d),(l))
?M:#endif
?M:#endif
?M:.
```

```
?LINT:set d_bcmp
: see if bcmp exists
set bcmp d_bcmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysvfs.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysvfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysvfs:
?S: This variable conditionally defines the I_SYSVFS symbol,
?S: and indicates whether a C program should include <sys/vfs.h>.
?S:.
?C:I_SYS_VFS:
?C: This symbol, if defined, indicates that <sys/vfs.h> exists and
?C: should be included.
?C:.
?H:#$i_sysvfs I_SYS_VFS  /**/
?H:.
?LINT:set i_sysvfs
: see if this is a sys/vfs.h system
set sys/vfs.h i_sysvfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysvfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: usrinc.U,v $
```

```
?RCS: Revision 3.0.1.3  1997/02/28  16:27:12  ram
?RCS: patch61: don't ask for the include path unless they are on a MIPS
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:24:36  ram
?RCS: patch54: ensure that ./mips always exists (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:18:31  ram
?RCS: patch23: ensure usrinc value is preserved across sessions (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usrinc incpath mips_type:
 test cat echo n c Getfile Guess \
 Oldconfig eunicefix contains rm
?MAKE: -pick add $@ %<
?S:usrinc:
?S: This variable holds the path of the include files, which is
?S: usually /usr/include. It is mainly used by other Configure units.
?S:.
?S:incpath:
?S: This variable must preceed the normal include path to get hte
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
?S:.
?S:mips_type:
?S: This variable holds the environment type for the mips system.
?S: Possible values are "BSD 4.3" and "System V".
?S:.
?D:usrinc='/usr/include'
?LINT:create mips
?T:xxx_prompt
?F:./mips
: What should the include directory be ?
echo " "
$echo $n "Hmm...  $c"
dflt='/usr/include'
incpath=''
?X: mips_type is used later, to add -DSYSTYPE_BSD43 to cppflags if needed.
mips_type=''
?X:
?X: Cannot put the following in Guess, or we get a circular dependency.
?X:
if $test -f /bin/mips && /bin/mips; then
 echo "Looks like a MIPS system..."
 $cat >usr.c
 <<'EOCP'
#ifdef SYSTYPE_BSD43
```

```
/bsd43
#endif
EOCP
 if cc -E usr.c > usr.out && $contains / usr.out >/dev/null 2>&1; then
  dflt='/bsd43/usr/include'
  incpath='/bsd43'
  mips_type='BSD 4.3'
 else
  mips_type='System V'
 fi
 $rm -f usr.c usr.out
 echo "and you're compiling with the $mips_type compiler and libraries."
 xxx_prompt=y
 echo "exit 0" >mips
else
 echo "Doesn't look like a MIPS system."
 xxx_prompt=n
 echo "exit 1" >mips
fi
chmod +x mips
$eunicefix mips
case "$usrinc" in
") ;;
*) dflt="$usrinc";;
esac
case "$xxx_prompt" in
y) fn=d/
 echo " "
 rp='Where are the include files you want to use?'
 . ./getfile
 usrinc="$ans"
 ;;
*) usrinc="$dflt"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usrinc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_htonl.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:09:25  ram
?RCS: patch32: now properly handles htonl() and friends when macros (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:45:00  ram
?RCS: patch23: now also check for htonl() macro (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_htonl: Inlibc Setvar i_niin i_sysin cat rm contains \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_htonl:
?S: This variable conditionally
 defines HAS_HTONL if htonl() and its
?S: friends are available to do network order byte swapping.
?S:.
?C:HAS_HTONL (HTONL):
?C: This symbol, if defined, indicates that the htonl() routine (and
?C: friends htons() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_HTONS (HTONS):
?C: This symbol, if defined, indicates that the htons() routine (and
?C: friends htonl() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHL (NTOHL):
?C: This symbol, if defined, indicates that the ntohl() routine (and
?C: friends htonl() htons() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHS (NTOHS):
?C: This symbol, if defined, indicates that the ntohs() routine (and
?C: friends htonl() htons() ntohl()) are available to do network
?C: order byte swapping.
?C:.
?H:#$d_htonl HAS_HTONL  /**/
?H:#$d_htonl HAS_HTONS  /**/
?H:#$d_htonl HAS_NTOHL  /**/
?H:#$d_htonl HAS_NTOHS  /**/
?H:.
?F:!htonl.c
?LINT:set d_htonl
:
```

```
 see if htonl --and friends-- exists
val=''
set htonl val
eval $inlibc

: Maybe they are macros.
case "$val" in
$undef)
 $cat >htonl.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#$i_niin I_NETINET_IN
#$i_sysin I_SYS_IN
#ifdef I_NETINET_IN
#include <netinet/in.h>
#endif
#ifdef I_SYS_IN
#include <sys/in.h>
#endif
#ifdef htonl
printf("Defined as a macro.");
#endif
EOM
 $cppstdin $cppflags $cppminus < htonl.c >htonl.E 2>/dev/null
 if $contains 'Defined as a macro' htonl.E >/dev/null 2>&1; then
  val="$define"
  echo "But it seems to be defined as a macro." >&4
 fi
 $rm -f htonl.?
 ;;
esac
set d_htonl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_htonl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fchmod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_fchmod.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fchmod: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchmod:
?S: This variable conditionally defines the HAS_FCHMOD symbol, which
?S: indicates to the C program that the fchmod() routine is available
?S: to change mode of opened files.
?S:.
?C:HAS_FCHMOD (FCHMOD):
?C: This symbol, if defined, indicates that the fchmod routine is available
?C: to
 change mode of opened files.  If unavailable, use chmod().
?C:.
?H:#$d_fchmod HAS_FCHMOD  /**/
?H:.
?LINT:set d_fchmod
: see if fchmod exists
set fchmod d_fchmod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fchmod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Setprefixvar.U,v 3.0 2006/04/01 17:25:29 hmbrand $
?RCS:
?RCS: Copyright (c) 2006-2006, H.Merijn Brand & Nicholas Clark
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:   You may distribute under the terms of either the GNU General Public
?RCS:   License or the Artistic License, as specified in the README file.
?RCS:
?X:
?X: This unit sets up the scripts installprefix and setprefixvar, so code
?X: in other parts can be more simple and maintainable
?X:
?MAKE:Setprefixvar: Myread Getfile startsh eunicefix test \
 prefix prefixexp installprefix installprefixexp
?MAKE: -pick add $@ %<
?LINT:extern prefixvar
?X: metalint still sees "`\$${prefixvar}exp`" as variable :(
?T:prefixvarexp
```

```
?F:./setprefixvar
?F:./installprefix
: Perform
 the prefixexp/installprefixexp correction if necessary
cat <<EOS >installprefix
$startsh
EOS
cat <<'EOSC' >>installprefix
: Change installation prefix, if necessary.
if $test X"$prefix" != X"$installprefix"; then
   eval "install${prefixvar}=\`echo \$${prefixvar}exp | sed \"s#^\$prefixexp#\$installprefixexp#\"\`"
else
   eval "install${prefixvar}=\"\$${prefixvar}exp\""
fi
EOSC
chmod +x installprefix
$eunicefix installprefix

: Set variables such as privlib and privlibexp from the output of ./getfile
: performing the prefixexp/installprefixexp correction if necessary.
cat <<EOS >setprefixvar
$startsh
EOS
cat <<'EOSC' >>setprefixvar
eval "${prefixvar}=\"\$ans\""
eval "${prefixvar}exp=\"\$ansexp\""
. ./installprefix
EOSC
chmod +x setprefixvar
$eunicefix setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/Setprefixvar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgrp.U,v 3.0.1.1 1997/02/28 15:34:28 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpgrp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:28  ram
?RCS: patch61: new USE_BSD_GETPGRP to detect the getpgrp() flavor
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp d_bsdgetpgrp: Guess Inlibc Setvar cat rm_try \
 +cc +ccflags +ldflags +libs i_unistd i_stdlib run
?MAKE: -pick add $@ %<
?S:d_getpgrp:
?S: This variable conditionally defines HAS_GETPGRP if getpgrp() is
?S: available
 to get the current process group.
?S:.
?S:d_bsdgetpgrp:
?S: This variable conditionally defines USE_BSD_GETPGRP if
?S: getpgrp needs one arguments whereas USG one needs none.
?S:.
?C:HAS_GETPGRP (GETPGRP):
?C: This symbol, if defined, indicates that the getpgrp routine is
?C: available to get the current process group.
?C:.
?C:USE_BSD_GETPGRP:
?C: This symbol, if defined, indicates that getpgrp needs one
?C: arguments whereas USG one needs none.
?C:.
?H:#$d_getpgrp HAS_GETPGRP  /**/
?H:#$d_bsdgetpgrp USE_BSD_GETPGRP /**/
?H:.
?T:xxx
?F:!try
?LINT:set d_getpgrp d_bsdgetpgrp
: see if getpgrp exists
set getpgrp d_getpgrp
eval $inlibc

@if USE_BSD_GETPGRP || d_bsdgetpgrp
case "$d_getpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of getpgrp is in use..."
 $cat >try.c <<EOP
#include <stdio.h>
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
```

```
#include <stdlib.h>
#endif
int main()
{
 if (getuid()
 == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (getpgrp(1) == 0)
  exit(0);
#else
 if (getpgrp() > 0)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -o try -DTRY_BSD_PGRP $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo "You have to use getpgrp(pid) instead of getpgrp()." >&4
  val="$define"
 elif $cc -o try $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo "You have to use getpgrp() instead of getpgrp(pid)." >&4
  val="$undef"
 else
  echo "I can't seem to compile and run the test program."
  if ./usg; then
   xxx="a USG one, i.e. you use getpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use getpgrp(pid)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use getpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your getpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set
```

```
 d_bsdgetpgrp
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_casti32.U,v 3.0.1.3 1995/05/12 12:10:45 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_casti32.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:10:45  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:09:37  ram
?RCS: patch36: declare signal handler correctly (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:06  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Can the compiler cast large floats to
 32-bit integers?
?X:
?MAKE:d_casti32: cat Compile rm_try intsize Setvar test signal_t run i_stdlib
?MAKE: -pick add $@ %<
?S:d_casti32:
?S: This variable conditionally defines CASTI32, which indicates
?S: whether the C compiler can cast large floats to 32-bit ints.
?S:.
?C:CASTI32:
?C: This symbol is defined if the C compiler can cast negative
?C: or large floating point numbers to 32-bit ints.
?C:.
?H:#$d_casti32 CASTI32  /**/
?H:.
?T:xxx yyy
```

```
?F:!try
?LINT:set d_casti32
: check for ability to cast large floats to 32-bit ints.
echo " "
echo 'Checking whether your C compiler can cast large floats to int32.' >&4
if $test "$intsize" -ge 4; then
 xxx=int
else
 xxx=long
fi
$cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
$signal_t blech(int s) { exit(3); }
int main()
{
 $xxx i32;
 double f, g;
 int result = 0;
 char str[16];
 signal(SIGFPE, blech);

 /* Don't let compiler optimize the test away.
  Store the number
   in a writable string for gcc to pass to sscanf under HP-UX.
 */
 sprintf(str, "2147483647");
 sscanf(str, "%lf", &f); /* f = (double) 0x7fffffff; */
 g = 10 * f;
 i32  = ($xxx) g;

 /* x86 processors will probably give 0x8000 0000, which is a
   sign change.  We don't want that.  We want to mimic SPARC
   behavior here, which is to preserve the sign and give
   back 0x7fff ffff.
 */
 if (i32 != ($xxx) f)
  result |= 1;
 exit(result);
}
EOCP
set try
if eval $compile_ok; then
```

```
 $run ./try 2>/dev/null
 yyy=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 yyy=1
fi
case "$yyy" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_casti32
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_casti32.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: groupstype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: groupstype.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:18:08  ram
?RCS: patch36: no longer uses Setvar to set 'groupstype' (ADO)
?RCS: patch36: typo fix in the word 'argument' (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:00:18  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:groupstype: gidtype d_getgrps Myread Oldconfig Findhdr cat d_setgrps
?MAKE: -pick add $@ %<
?INIT:groupstype="
?S:groupstype:
?S: This
```

```
 variable defines Groups_t to be something like gid_t, int,
?S: ushort, or whatever type is used for the second argument to
?S: getgroups() and setgroups().  Usually, this is the same as
?S: gidtype (gid_t), but sometimes it isn't.
?S:.
?C:Groups_t (GROUPSTYPE):
?C: This symbol holds the type used for the second argument to
?C: getgroups() and setgroups().  Usually, this is the same as
?C: gidtype (gid_t) , but sometimes it isn't.
?C: It can be int, ushort, gid_t, etc...
?C: It may be necessary to include <sys/types.h> to get any
?C: typedef'ed information.  This is only required if you have
?C: getgroups() or setgroups()..
?C:.
?H:?%<:#if defined(HAS_GETGROUPS) || defined(HAS_SETGROUPS)
?H:?%<:#define Groups_t $groupstype /* Type for 2nd arg to [sg]etgroups() */
?H:?%<:#endif
?H:.
?W:%<:getgroups HAS_GETGROUPS setgroups HAS_SETGROUPS
: Find type of 2nd arg to 'getgroups()' and 'setgroups()'
echo " "
case "$d_getgrps$d_setgrps" in
*define*)
 case
 "$groupstype" in
 ") dflt="$gidtype" ;;
 *)  dflt="$groupstype" ;;
 esac
 $cat <<EOM
What type of pointer is the second argument to getgroups() and setgroups()?
Usually this is the same as group ids, $gidtype, but not always.

EOM
 rp='What type pointer is the second argument to getgroups() and setgroups()?'
 . ./myread
 groupstype="$ans"
 ;;
*)  groupstype="$gidtype";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/groupstype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: sizetype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:32:10  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:sizetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:sizetype:
?S: This variable defines sizetype to be something like size_t,
?S: unsigned long, or whatever type is used to declare length
?S: parameters for string functions.
?S:.
?C:Size_t:
?C: This symbol holds the type used to declare length parameters
?C: for string
 functions.  It is usually size_t, but may be
?C: unsigned long, int, etc.  It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Size_t $sizetype  /* length paramater for string functions */
?H:.
: see what type is used for size_t
set size_t sizetype 'unsigned int' stdio.h sys/types.h
eval $typedef
dflt="$sizetype"
echo " "
rp="What type is used for the length parameter for string functions?"
. ./myread
sizetype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sizetype.U
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```
?RCS: $Id: d_setpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpent:
?S: This variable conditionally defines HAS_SETPROTOENT if setprotoent() is
?S: available.
?S:.
?C:HAS_SETPROTOENT:
?C: This symbol, if defined, indicates that the setprotoent() routine is
?C: available.
?C:.
?H:#$d_setpent HAS_SETPROTOENT  /**/
?H:.
?LINT:set d_setpent
: see if setprotoent
 exists
set setprotoent d_setpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpent.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mmap.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:12  ram
?RCS: patch15: created
?RCS:
?MAKE:d_mmap: Inlibc
?MAKE: -pick add $@ %<
?S:d_mmap:
?S: This variable conditionally defines HAS_MMAP if mmap() is
?S: available to map a file into memory.
```

```
?S:.
?C:HAS_MMAP:
?C: This symbol, if defined, indicates that the mmap system call is
?C: available to map a file into memory.
?C:.
?H:#$d_mmap HAS_MMAP  /**/
?H:.
?LINT:set d_mmap
: see if mmap exists
set mmap d_mmap
eval $inlibc
```

Found in path(s):
*
/perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mmap.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setsid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setsid.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:49  ram
?RCS: patch16: created
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setsid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setsid:
?S: This variable conditionally defines HAS_SETSID if setsid() is
?S: available to set the process group ID.
?S:.
?C:HAS_SETSID:
?C: This symbol, if defined, indicates that the setsid routine is
?C: available
 to set the process group ID.
?C:.
?H:#$d_setsid HAS_SETSID /**/
?H:.
?LINT:set d_setsid
```

```
: see if setsid exists
set setsid d_setsid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setsid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lrint: Inlibc
?MAKE: -pick add $@ %<
?S:d_lrint:
?S: This variable conditionally defines the HAS_LRINT symbol, which
?S: indicates to the C program that the lrint() routine is available
?S: to return the integral value closest to a double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LRINT:
?C: This symbol, if defined, indicates that the lrint routine is
?C: available to return the integral value closest to a double
?C: (according to the current rounding mode).
?C:.
?H:#$d_lrint HAS_LRINT  /**/
?H:.
?LINT:set d_lrint
: see if lrint exists
set lrint d_lrint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lrint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extractall.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extractall.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:00:43  ram
?RCS: patch61: created
```

```
?RCS:
?X:
?X: If extraction has been requested, load the configuration file, perform
?X: the extraction and exit.
?X:
?X: This unit was originally a part of Options.U. It had to be removed from
?X: it to prevent a dependency cycle: Extract -> src -> Options -> Extract
?X: The Begin.U unit now requires us before beginning to do anything
?X: interesting, to ensure
 proper semantics. -- RAM, 15/03/96
?X:
?MAKE:Extractall: Extract Options
?MAKE: -pick wipe $@ %<
: extract files and exit if asked to do so
case "$extractsh" in
true)
?X: Undo the forced silent=true when -S was supplied, by probing realsilent
?X: which was set iff -s was also given. See Options.U for details.
 case "$realsilent" in
 true) ;;
 *) exec 1>&4;;
 esac
 case "$config_sh" in
 ") config_sh='config.sh';;
 esac
 echo " "
 echo "Fetching answers from $config_sh..."
 cd ..
 . $config_sh
?X: extract has to be run from the top directory, not within UU.
 . UU/optdef.sh
 echo " "
?X: extract has to be run from the top directory, not within UU.
 . UU/extract
 rm -rf UU
 echo "Extraction done."
 exit 0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Extractall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ttyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ttyname_r ttyname_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_unistd extern_C
?MAKE: -pick add $@ %<
?S:d_ttyname_r:
?S: This variable conditionally defines the HAS_TTYNAME_R symbol,
?S: which indicates to the C program that the ttyname_r()
?S: routine is available.
?S:.
?S:ttyname_r_proto:
?S: This variable encodes the prototype of ttyname_r.
?S: It is zero if d_ttyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ttyname_r
?S: is defined.
?S:.
?C:HAS_TTYNAME_R:
?C: This symbol, if defined, indicates that the ttyname_r routine
?C: is available to ttyname re-entrantly.
?C:.
?C:TTYNAME_R_PROTO:
?C: This
 symbol encodes the prototype of ttyname_r.
?C: It is zero if d_ttyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ttyname_r
?C: is defined.
?C:.
?H:#$d_ttyname_r HAS_TTYNAME_R /**/
?H:#define TTYNAME_R_PROTO $ttyname_r_proto /**/
?H:.
?T:try hdrs d_ttyname_r_proto
: see if ttyname_r exists
set ttyname_r d_ttyname_r
eval $inlibc
case "$d_ttyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_unistd unistd.h"
 case "$d_ttyname_r_proto:$usethreads" in
 ":define") d_ttyname_r_proto=define
  set d_ttyname_r_proto ttyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ttyname_r_proto" in
 define)
 case "$ttyname_r_proto" in
```

```
"|0) try='int ttyname_r(int, char*, size_t);'
./protochk "$extern_C $try" $hdrs && ttyname_r_proto=I_IBW ;;
esac
case "$ttyname_r_proto" in
"|0) try='int ttyname_r(int, char*, int);'
./protochk "$extern_C $try" $hdrs && ttyname_r_proto=I_IBI ;;
esac
case "$ttyname_r_proto"
in
"|0) try='char* ttyname_r(int, char*, int);'
./protochk "$extern_C $try" $hdrs && ttyname_r_proto=B_IBI ;;
esac
case "$ttyname_r_proto" in
"|0) d_ttyname_r=undef
 ttyname_r_proto=0
 echo "Disabling ttyname_r, cannot determine prototype." >&4 ;;
* ) case "$ttyname_r_proto" in
 REENTRANT_PROTO*) ;;
 *) ttyname_r_proto="REENTRANT_PROTO_$ttyname_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "ttyname_r has no prototype, not using it." >&4 ;;
 esac
 d_ttyname_r=undef
 ttyname_r_proto=0
 ;;
esac
;;
*) ttyname_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ttyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usethreads.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usethreads.U,v $
?RCS:
```

```
?MAKE:usethreads useithreads d_oldpthreads usereentrant: \
 Myread Oldconfig Setvar test cat
?MAKE: -pick add $@ %<
?Y:TOP
?S:usethreads:
?S: This variable conditionally defines the USE_THREADS symbol,
?S: and indicates that Perl should be built to use threads.
?S:.
?S:useithreads:
?S: This variable conditionally defines the USE_ITHREADS symbol,
?S: and indicates that Perl should be built to use the interpreter-based
?S: threading implementation.
?S:.
?X: I'm putting old_pthreads in this unit because it might eventually
?X: be part of an automatic determination to see if we can use threads
?X: at all.
?S:d_oldpthreads:
?S: This variable conditionally
 defines the OLD_PTHREADS_API symbol,
?S: and indicates that Perl should be built to use the old
?S: draft POSIX threads API.  This is only potentially meaningful if
?S: usethreads is set.
?S:.
?S:usereentrant:
?S: This variable conditionally defines the USE_REENTRANT_API symbol,
?S: which indicates that the thread code may try to use the various
?S: _r versions of library functions.  This is only potentially
?S: meaningful if usethreads is set and is very experimental, it is
?S: not even prompted for.
?S:.
?C:USE_ITHREADS:
?C: This symbol, if defined, indicates that Perl should be built to
?C: use the interpreter-based threading implementation.
?C:.
?C:USE_THREADS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use threads.  At present, it is a synonym for
?C: and USE_ITHREADS, but eventually the source ought to be
?C: changed to use this to mean _any_ threading implementation.
?C:.
?C:OLD_PTHREADS_API:
?C: This symbol, if defined, indicates that Perl should
?C: be
 built to use the old draft POSIX threads API.
?C:.
?C:USE_REENTRANT_API:
?C: This symbol, if defined, indicates that Perl should
?C: try to use the various _r versions of library functions.
```

```
?C: This is extremely experimental.
?C:.
?H:#$useithreads USE_ITHREADS  /**/
?H:#$usethreads  USE_THREADS  /**/
?H:#$d_oldpthreads OLD_PTHREADS_API  /**/
?H:#$usereentrant USE_REENTRANT_API /**/
?H:.
?LINT:set usethreads d_oldpthreads
?INIT:: set usethreads on the Configure command line to enable threads.
?INIT:usereentrant='undef'
?F:!usethreads.cbu
: Do we want threads support and if so, what type
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
case "$usethreads" in
$define|true|[yY]*)     dflt='y';;
*)     # Catch case where user specified ithreads but
     # forgot -Dusethreads (A.D. 4/2002)
     case "$useithreads" in
     *$define*) dflt='y';;
     *)  dflt='n';;
     esac
     ;;
esac
cat <<EOM

Perl can be built to
 offer a form of threading support on some systems
To do so, Configure can be run with -Dusethreads.

Note that Perl built with threading support runs slightly slower
and uses slightly more memory than plain Perl.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Build a threading Perl?'
. ./myread
case "$ans" in
y|Y)    val="$define" ;;
*)      val="$undef" ;;
esac
set usethreads
eval $setvar

useithreads="$usethreads"

?X: Check out what kind of threads API we have
case "$d_oldpthreads" in
```

```
") : Configure tests would be welcome here.  For now, assume undef.
 val="$undef" ;;
*) val="$d_oldpthreads" ;;
esac
set d_oldpthreads
eval $setvar

?X: In general, -lpthread needs to come before -lc but after other
?X: libraries such as -lgdbm and such like. We assume here that -lc
?X: is present in libswanted. If that fails to be true, then this
?X: can be changed to add pthread to the very end of libswanted.

: Look for a hint-file generated 'call-back-unit'.  If the
:
 user has specified that a threading perl is to be built,
: we may need to set or change some other defaults.
if $test -f usethreads.cbu; then
   echo "Your platform has some specific hints regarding threaded builds, using them..."
   . ./usethreads.cbu
else
   case "$usethreads" in
 "$define"|true|[yY]*)
  $cat <<EOM
(Your platform does not have any specific hints for threaded builds.
Assuming POSIX threads, then.)
EOM
 ;;
   esac
fi

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/usethreads.U
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?RCS: $Id: i_regex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Sidney C. Smith <scsmith@cbda9.apgea.army.mil>
?RCS:
?RCS: $Log: i_regex.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:35:45  ram
```

```
?RCS: patch49: created
?RCS:
?RCS:
?MAKE:i_regex: Inhdr
?MAKE: -pick add $@ %<
?S:i_regex:
?S: This variable conditionally defines the I_REGEX symbol, which
?S: indicates to the C program that <regex.h> exists and should
?S: be included.
?S:.
?C:I_REGEX:
?C: This symbol, if defined, indicates that <regex.h> exists
 and should
?C: be included.
?C:.
?H:#$i_regex I_REGEX /**/
?H:.
?LINT:set i_regex
: see if regex is available
set regex.h i_regex
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_regex.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: gidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:21:44  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS: patch32: removed useless usage of Setvar (for now)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:21:07  ram
?RCS: patch27: added lint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:01:51  ram
?RCS: patch23: protected gidtype setting via setvar (ADO)
?RCS: patch23: made Gid_t comment more explicit (ADO)
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:08:11  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:gidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:gidtype:
?S: This variable defines Gid_t to be something like gid_t, int,
?S: ushort, or whatever type is used to declare the return type
?S: of getgid().  Typically, it is the type of group ids in the kernel.
?S:.
?C:Gid_t (GIDTYPE):
?C: This symbol holds the return type of getgid() and the type of
?C: argument to setrgid() and related functions.  Typically,
?C: it is the type of group ids in the kernel. It can be int, ushort,
?C: uid_t, etc... It may be necessary to include <sys/types.h> to get
?C: any typedef'ed information.
?C:.
?H:#define Gid_t $gidtype  /* Type for getgid(), etc... */
?H:.
?T:xxx
: see what type gids are declared as in the kernel
set gid_t gidtype xxx stdio.h sys/types.h
eval $typedef
case "$gidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep 'groups\[NGROUPS\];' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1"
 ;;
 esac
 ;;
*) dflt="$gidtype";;
esac
echo " "
rp="What is the type for group ids returned by getgid()?"
. ./myread
gidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/gidtype.U
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: archlib.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:23:38  ram
?RCS: patch61: skip existence checks for archlib
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:18  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/02/15  14:14:14  ram
?RCS: patch51: architecture name is now computed by a separate unit
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:32:22  ram
?RCS:
 patch49: archname is now systematically recomputed
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:36  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_archlib archlib archlibexp installarchlib: archname afs spackage \
 cat Getfile Loc Oldconfig prefixexp privlib test Prefixit Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:d_archlib:
?S: This variable conditionally defines ARCHLIB to hold the pathname
?S: of architecture-dependent library files for $package.  If
?S: $archlib is the same as $privlib, then this is set to undef.
?S:.
?S:archlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put architecture-dependent public library files for $package.
?S: It is most often a local directory such as /usr/local/lib.
?S: Programs using this variable must be prepared to deal
?S: with filename expansion.
?S:.
?S:archlibexp:
?S: This variable is the same as the archlib variable, but is
?S: filename
 expanded at configuration time, for convenient use.
?S:.
```

```
?S:installarchlib:
?S: This variable is really the same as archlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:ARCHLIB:
?C: This variable, if defined, holds the name of the directory in
?C: which the user wants to put architecture-dependent public
?C: library files for $package.  It is most often a local directory
?C: such as /usr/local/lib.  Programs using this variable must be
?C: prepared to deal with filename expansion.  If ARCHLIB is the
?C: same as PRIVLIB, it is not defined, since presumably the
?C: program already searches PRIVLIB.
?C:.
?C:ARCHLIB_EXP:
?C: This symbol contains the ~name expanded version of ARCHLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_archlib ARCHLIB "$archlib"  /**/
?H:#$d_archlib ARCHLIB_EXP "$archlibexp"  /**/
?H:.
: determine where public architecture
 dependent libraries go
set archlib archlib
eval $prefixit
case "$archlib" in
")
 case "$privlib" in
 ")
  dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
  set dflt
  eval $prefixup
  ;;
 *)  dflt="$privlib/$archname";;
 esac
 ;;
*) dflt="$archlib";;
esac
cat <<EOM

$spackage contains architecture-dependent library files.  If you are
sharing libraries in a heterogeneous environment, you might store
these files in a separate location.  Otherwise, you can just include
them with the rest of the public library files.

EOM
fn=d+~
rp='Where do you want to put the public architecture-dependent libraries?'
```

```
. ./getfile
archlib="$ans"
archlibexp="$ansexp"

if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installarchlib" in
 ") dflt=`echo $archlibexp | sed 's#^/afs/#/afs/.#'`;;
 *)
 dflt="$installarchlib";;
 esac
 fn=de~
 rp='Where will architecture-dependent library files be installed?'
 . ./getfile
 installarchlib="$ans"
else
 installarchlib="$archlibexp"
fi
if $test X"$archlib" = X"$privlib"; then
 d_archlib="$undef"
else
 d_archlib="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/archlib.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:uidsign: Myread Typedef uidtype Compile run
?MAKE: -pick add $@ %<
?S:uidsign:
?S: This variable contains the signedness of a uidtype.
?S: 1 for unsigned, -1 for signed.
```

```
?S:.
?C:Uid_t_sign:
?C: This symbol holds the signedness of a Uid_t.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define Uid_t_sign $uidsign  /* UID sign */
?H:.
?T:yyy zzz
?F:!try
: Check if UID is signed
echo " "
case "$uidtype" in
*_t) zzz="$uidtype" ;;
*)   zzz="uid"  ;;
esac
echo "Checking the sign of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include
 <stdio.h>
int main() {
 $uidtype foo = -1;
 if (foo < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set try
if eval $compile; then
 yyy=`$run ./try`
 case "$yyy" in
 ") uidsign=1
  echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) uidsign=$yyy
  case "$uidsign" in
   1) echo "Your $zzz is unsigned." ;;
  -1) echo "Your $zzz is signed."   ;;
  esac
  ;;
 esac
else
 uidsign=1
 echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
```

Found in path(s):

```
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidsign.U
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?RCS: $Id: d_brokstat.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_brokstat.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:30:53  ram
?RCS: patch61: created
?RCS:
?MAKE:d_brokstat: cat contains cppstdin cppminus +cppflags rm Setvar
?MAKE: -pick add $@ %<
?S:d_brokstat:
?S: This variable conditionally defines STAT_MACROS_BROKEN if some
?S: of the S_IS*() macros from <sys/stat.h> give false positive on
?S: regular files.
?S:.
?C:STAT_MACROS_BROKEN:
?C: This symbol, if defined, indicates that the S_IS*() stat macros
?C: such
 as S_ISBLK() give false positive and are thus unusable.
?C: Your best bet is then to supply your own set.
?C:.
?H:#$d_brokstat STAT_MACROS_BROKEN  /**/
?H:.
?F:!try.c !try
?LINT:set d_brokstat
?LINT:usefile try
?X: This test inspired by autoconf -- RAM, 28/02/97
: are stat macros sane?
echo " "
echo "Checking whether your stat() macros are broken..."
$cat >try.c <<'EOC'
#include <sys/types.h>
#include <sys/stat.h>

#if defined(S_ISBLK) && defined(S_IFDIR)
#if S_ISBLK(S_IFDIR)
Broken
#endif
#endif
```

```
#if defined(S_ISBLK) && defined(S_IFCHR)
#if S_ISBLK(S_IFCHR)
Broken
#endif
#endif

#if defined(S_ISLNK) && defined(S_IFREG)
#if S_ISLNK(S_IFREG)
Broken.
#endif
#endif

#if defined(S_ISSOCK) && defined(S_IFREG)
#if S_ISSOCK(S_IFREG)
Broken.
#endif
#endif
EOC
$cppstdin $cppflags $cppminus <try.c 2>/dev/null >try
if $contains Broken try >/dev/null 2>&1; then
 echo "Alas, they are.  I'll use my own macro set then." >&4
 val="$define"
else
 echo "Nope, working just fine." >&4
 val="$undef"
fi
$rm
 -f try try.c
set d_brokstat
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_brokstat.U
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```
?RCS: $Id: i_socks.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_socks: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_socks:
?S: This variable conditionally defines the I_SOCKS symbol, and indicates
?S: whether a C program should include <socks.h>.
```

```
?S:.
?C:I_SOCKS:
?C: This symbol, if defined, indicates that <socks.h> exists and
?C: should be included.
?C:.
?H:#$i_socks I_SOCKS  /**/
?H:.
?LINT:set i_socks
: see if this is a socks.h system
set socks.h i_socks
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_socks.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: bitpbyte.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:54  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bitpbyte: cat rm Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:bitpbyte:
?S: This variable contains the value of the BITS_PER_BYTE symbol, which
?S: indicates to the C program how many bits there are in a byte.
?S:.
?C:BITS_PER_BYTE:
?C: This symbol contains the number
 of bits in a byte, so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define BITS_PER_BYTE $bitpbyte  /**/
?H:.
?F:!try
: check for length of byte
```

```
echo " "
case "$bitpbyte" in
")
 echo "Checking to see how many bits there are in a byte..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
?X: Standard C requires a macro CHAR_BIT in <limits.h>
#ifdef __STDC__
#include <limits.h>
#ifndef CHAR_BIT
#define CHAR_BIT 8
#endif
#ifndef BITSPERBYTE
#define BITSPERBYTE CHAR_BIT
#endif
#else
?X: On non standard C, try with <values.h>
#include <values.h>
#ifndef BITSPERBYTE
#define BITSPERBYTE 8
#endif
#endif
int main()
{
 printf("%d\n", BITSPERBYTE);
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$bitpbyte"
 ;;
esac
rp="What is the length of a byte (in bits)?"
. ./myread
bitpbyte="$ans"
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/bitpbyte.U
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?RCS: $Id: d_uwait.U 1 2006-08-24 12:32:52Z rmanfredi $

```
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?RCS:
?RCS: $Log: d_uwait.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:10:49  ram
?RCS: patch16: added knowledge about wait3()
?RCS: patch16: revised 'union wait' look-up algorithm
?RCS: patch16: fixed make dependency line accordingly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_uwait d_uwait3: cat contains cppstdin cppminus +cppflags rm \
 Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_uwait:
?S: This symbol
 conditionally defines UNION_WAIT which indicates to the C
?S: program that argument for the wait() system call should be declared as
?S: 'union wait status' instead of 'int status'.
?S:.
?S:d_uwait3:
?S: This symbol conditionally defines UNION_WAIT3 which indicates to the C
?S: program that the first argument for the wait3() system call should be
?S: declared as 'union wait status' instead of 'int status'.
?S:.
?C:UNION_WAIT:
?C: This symbol if defined indicates to the C program that the argument
?C: for the wait() system call should be declared as 'union wait status'
?C: instead of 'int status'. You probably need to include <sys/wait.h>
?C: in the former case (see I_SYSWAIT).
?C:.
?C:UNION_WAIT3:
?C: This symbol if defined indicates to the C program that the first argument
?C: for the wait3() system call should be declared as 'union wait status'
?C: instead of 'int status'. You probably need to include <sys/wait.h>
?C: in the former case (see I_SYSWAIT). It seems safe to assume that
 the
?C: same rule applies to the second parameter of wait4().
?C:.
?H:#$d_uwait UNION_WAIT  /**/
?H:#$d_uwait3 UNION_WAIT3 /**/
```

```
?H:.
?T:val2 flags f also
?LINT:set d_uwait d_uwait3
: see if union wait is available
echo " "
?X:
?X: Unfortunately, we can't just grep <sys/wait.h> for "union wait" because
?X: some weird systems (did I hear HP-UX?) define union wait only when _BSD
?X: is defined. The same thing happens on OSF/1, who is pushing weirdness to
?X: its limits by requiring wait() to use (int *) but wait3() to use
?X: (union wait *), unless _BSD is defined and -lbsd is used, in which case
?X: wait() also expects (union wait *). Aaargh!!--RAM
?X:
set X $cppflags
shift
flags=''
also=''
for f in $*; do
 case "$f" in
 *NO_PROTO*) ;;
 *) flags="$flags $f";;
 esac
done
$cat `./findhdr sys/wait.h` /dev/null | \
 $cppstdin $flags $cppminus >wait.out 2>/dev/null
if $contains 'union.*wait.*{' wait.out >/dev/null 2>&1 ; then
 echo "Looks like your <sys/wait.h> knows about 'union wait'..."
 >&4
 val="$define"
@if UNION_WAIT
 also='also '
 if $contains 'extern.*wait[  ]*([  ]*int' wait.out >/dev/null 2>&1
 then
  echo "But wait() seems to expect an 'int' pointer (POSIX way)." >&4
  val="$undef"
  also=''
 elif $contains 'extern.*wait[  ]*([  ]*union' wait.out >/dev/null 2>&1
 then
  echo "And indeed wait() expects an 'union wait' pointer (BSD way)." >&4
 else
  echo "So we'll use that for wait()." >&4
 fi
@end
@if UNION_WAIT3 || d_uwait3
 val2="$define"
@end
@if UNION_WAIT3
 if $contains 'extern.*wait3[  ]*([  ]*int' wait.out >/dev/null 2>&1
```

```
 then
  echo "However wait3() seems to expect an 'int' pointer, weird." >&4
  val2="$undef"
 elif $contains 'extern.*wait3[  ]*([  ]*union' wait.out >/dev/null 2>&1
 then
  echo "And wait3() ${also}expects an 'union wait' pointer, fine." >&4
 else
  echo "As expected, wait3() ${also}uses an 'union wait' pointer." >&4
 fi
@end
else
 echo "No trace of 'union wait' in <sys/wait.h>..." >&4
 val="$undef"
@if UNION_WAIT && UNION_WAIT3
 echo
 "Both wait() and wait3() will use a plain 'int' pointer then." >&4
@elsif UNION_WAIT
 echo "Your wait() should be happy with a plain 'int' pointer." >&4
@elsif UNION_WAIT3
 echo "Your wait3() should be happy with a plain 'int' pointer." >&4
@end
fi
set d_uwait
eval $setvar
@if UNION_WAIT3 || d_uwait3
val="$val2"; set d_uwait3
eval $setvar
@end
$rm -f wait.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_uwait.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpwent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_getpwent: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_getpwent:
?S: This variable conditionally defines the HAS_GETPWENT symbol, which
?S: indicates to the C program that it should use the getpwent()
?S: routine instead of the getpw() routine.
?S:.
?C:HAS_GETPWENT (GETPWENT):
?C: This symbol, if defined, indicates that the getpwent() routine
?C: should be used instead of the getpw()
 routine.
?C:.
?H:#$d_getpwent HAS_GETPWENT /**/
?H:.
?LINT:set d_getpwent
: see if there is a getpwent
echo " "
if set getpwent val -f d_getpwent; eval $csym; $val; then
 echo "getpwent() found." >&4
 val="$define"
else
 echo "No getpwent() found -- will use getpw() instead." >&4
 val="$undef"
fi
set d_getpwent
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpwent.U
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```
?RCS: $Id: mkdep.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mkdep.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:13:07  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  16:25:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
```

```
?RCS: Revision 3.0.1.2  1994/01/24  14:15:12  ram
?RCS: patch16: cppflags is now an optional dependency
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:22:39  ram
?RCS: patch15: force zero exit status in all mkdep scripts
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit generates the script 'mkdep' in the top-level directory.
?X: It is up to the makefile to use it for automatic dependencies
?X: generation (usage: 'mkdep [cppflags] -- *.c').
?X:
?MAKE:mkdep: spitshell startsh cpp +cppflags grep contains rm sed sort uniq \
 Getfile Oldconfig eunicefix cat +cc cppminus test pkgsrc _o
?MAKE: -pick add $@ %<
?S:mkdep:
?S: This variable holds the name of a command to generate makefile
?S: dependencies on the standard output. It is the pathname of the
?S: generated mkdep script.
?S:.
?F:mkdep
?T:IFS arg flags takeflags srcfile toplev filebase inc dir files file dep c
: find out how to generate dependencies
echo " "
echo "Checking how to generate makefile dependencies on your machine..." >&4
?X: We are in the UU directory
toplev=`cd ..;pwd`
$cat >dep.c <<'EOCP'
#include "dep.h"
EOCP
?X: Empty dep.h causes RIOS to barf
$cat >dep.h <<'EOCP'

EOCP
takeflags='flags=""'
case
 "$@" in
*--*)
 for arg
 do
  shift
  case "$arg" in
  --) break;;
  *) flags="$flags $arg";;
  esac
```

```
 done;;
esac'
case "$mkdep" in
")
 ;;
*)
 if test -f "$mkdep" &&
  $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "$mkdep works."
?X: If they copied a config.sh from some other place, they'll have a working
?X: mkdep script probably, but not located at the top of the sources.  And
?X: the Makefiles generated by jmake expect an mkdep script in the top dir.
  case "$mkdep" in
  "$pkgsrc/mkdep");;
  *) echo "(copying it to $pkgsrc)"
   cp $mkdep $pkgsrc/mkdep 2>/dev/null
      if $pkgsrc/mkdep dep.c >dep.out 2>/dev/null &&
    $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1; then
    mkdep=$pkgsrc/mkdep
   else
    echo "Hmm... The copy failed or something... Guessing again..."
    mkdep=
   fi
   ;;
  esac
 else
  mkdep=
 fi
esac

case "$mkdep" in
")
?X: have to figure something out: Try cpp
?X: have
 to pass source names one by one to cpp...
 $spitshell > ../mkdep <<EOM
$startsh
$takeflags
for srcfile
do
 $cpp -M $cppflags \$flags \$srcfile 2>/dev/null
done
exit 0
EOM
 mkdep=$toplev/mkdep
 chmod +x $mkdep
```

```
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "Looks like we can use $cpp -M."
 else
  mkdep=
 fi
 ;;
esac

case "$mkdep" in
")
?X: have to figure something out: on NeXT, use cc -MM
?X: have to pass source names one by one to cc...
 $spitshell > ../mkdep <<EOM
$startsh
$takeflags
for srcfile
do
 $cc -MM $cppflags \$flags \$srcfile 2>/dev/null
done
exit 0
EOM
 mkdep=$toplev/mkdep
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o: dep.h" dep.out >/dev/null 2>&1
 then
  echo "Looks like we can use $cc -MM."
 else
  mkdep=
 fi
 ;;
esac

case "$mkdep" in
")
?X: still no luck -- try something fancier.
 $spitshell >../mkdep <<EOS
$startsh
$takeflags
for srcfile
do
 case
 "\$srcfile" in
 *.c) c='.c';;
```

```
 *.y) c='.y';;
 *.l) c='.l';;
 esac
 filebase=\`basename \$srcfile \$c\`
 <\$srcfile $cpp $cppminus $cppflags \$flags 2>/dev/null | \\
 $sed -e '/^# *[0-9]/!d' \\
  -e 's/^.*"\(.*\)".*\$/"\$filebase"$_o: \1/' \\
  -e 's|: \./|: |' \\
  -e 's|: *$|: "\$srcfile"|' | \\
 $grep -v '^#' | $sort | $uniq
done
exit 0
EOS
 mkdep=$toplev/mkdep
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "A shell script using $cpp does the trick."
 else
  echo "$cpp doesn't seem to be any use at all."
  $spitshell >../mkdep <<EOS
$startsh
$takeflags
files="\$@"
set X \$flags
shift
inc='.'
while test \$# -gt 0
do
 case "\$1" in
 -I)
  shift
  inc="\$inc:\$1"
  ;;
 -I*)
  dir=\`echo \$1 | sed -e 's/^-I//'\`
  inc="\$inc:\$dir"
  ;;
 esac
 shift
done
set X \$files
shift
trap "$rm -f /tmp/mkdep\$\$; exit 1" 1 2 3 15
for srcfile
do
```

```
 case "\$srcfile" in
 *.c) c='.c';;
 *.y) c='.y';;
 *.l)
 c='.l';;
 esac
 filebase=\`basename \$srcfile \$c\`
 echo \$filebase$_o: \$srcfile
 $grep '^#[  ]*include' \$srcfile /dev/null | \
 $sed -n -e 's/#[   ]*include[  ]*//' \\
  -e '/<\(.*\)>/ d' \\
  -e 's/:[^"]*"\([^"]*\)".*/: \1/' \\
  -e "s/\\.c:/$_o:/p" > /tmp/mkdep\$\$
?X: Deal with directories specified via -I requests to locate files
 IFS=': '
 while read file dep; do
  for dir in \$inc; do
   if $test -f "\$dir/\$dep"; then
    dep="\$dir/\$dep"
    break
   fi
  done
  echo "\$file: \$dep" | $sed -e 's,: \./,: ,'
 done </tmp/mkdep\$\$
 IFS=' '
 $rm -f /tmp/mkdep\$\$
done
exit 0
EOS
  mkdep=$toplev/mkdep
  chmod +x $mkdep
  $eunicefix $mkdep
  if $mkdep dep.c >dep.out 2>/dev/null &&
   $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
  then
   cat << EOM

I can use a script with grep instead, but it will make some incorrect
dependencies, since it doesn't understand about conditional compilation.
Moreover, some dependencies may be missing, because scanning won't be
a
 recursive process.
If you have a program which generates makefile dependencies, you may want
to use it.  If not, you can use the script and edit the Makefile by hand
if you need to.
EOM
  else
   mkdep=
```

```
   cat << EOM

I can't seem to generate makefile dependencies at all!  Perhaps you have a
program that does?  If you don't, you might look at the mkdep script to
see if you can create one which works.
EOM
  fi
 fi
esac
echo " "
dflt="$mkdep"
fn=f~/
rp="Name of program to make makefile dependencies?"
. ./getfile
mkdep="$ans"
$rm -f dep.c dep.h dep$_o dep.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mkdep.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: modetype.U,v 3.0.1.1 1994/10/29 16:25:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: modetype.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:25:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:modetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:modetype:
?S: This variable defines modetype to be something like mode_t,
?S: int, unsigned short, or whatever type is used to declare file
?S: modes for system calls.
?S:.
?C:Mode_t:
?C: This symbol holds the type used to declare
 file modes
?C: for systems calls.  It is usually mode_t, but may be
```

```
?C: int or unsigned short.  It may be necessary to include <sys/types.h>
?C: to get any typedef'ed information.
?C:.
?H:#define Mode_t $modetype  /* file mode parameter for system calls */
?H:.
?LINT:set modetype
: see what type is used for mode_t
rp="What is the type used for file modes for system calls (e.g. fchmod())?"
set mode_t modetype int stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/modetype.U
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```
?RCS: $Id: d_srand48_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_srand48_r srand48_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_srand48_r:
?S: This variable conditionally defines the HAS_SRAND48_R symbol,
?S: which indicates to the C program that the srand48_r()
?S: routine is available.
?S:.
?S:srand48_r_proto:
?S: This variable encodes the prototype of srand48_r.
?S: It is zero if d_srand48_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srand48_r
?S: is defined.
?S:.
?C:HAS_SRAND48_R:
?C: This symbol, if defined, indicates that the srand48_r routine
?C: is available to srand48 re-entrantly.
?C:.
?C:SRAND48_R_PROTO:
?C: This
 symbol encodes the prototype of srand48_r.
?C: It is zero if d_srand48_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srand48_r
?C: is defined.
?C:.
```

```
?H:#$d_srand48_r HAS_SRAND48_R /**/
?H:#define SRAND48_R_PROTO $srand48_r_proto /**/
?H:.
?T:try hdrs d_srand48_r_proto
: see if srand48_r exists
set srand48_r d_srand48_r
eval $inlibc
case "$d_srand48_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_srand48_r_proto:$usethreads" in
 ":define") d_srand48_r_proto=define
  set d_srand48_r_proto srand48_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_srand48_r_proto" in
 define)
 case "$srand48_r_proto" in
 "|0) try='int srand48_r(long, struct drand48_data*);'
 ./protochk "$extern_C $try" $hdrs && srand48_r_proto=I_LS ;;
 esac
 case "$srand48_r_proto" in
 "|0) d_srand48_r=undef
  srand48_r_proto=0
  echo "Disabling srand48_r, cannot determine prototype." >&4 ;;
 * ) case
 "$srand48_r_proto" in
  REENTRANT_PROTO*) ;;
  *) srand48_r_proto="REENTRANT_PROTO_$srand48_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "srand48_r has no prototype, not using it." >&4 ;;
  esac
  d_srand48_r=undef
  srand48_r_proto=0
  ;;
 esac
 ;;
*) srand48_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_srand48_r.U

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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_log2: Inlibc
?MAKE: -pick add $@ %<
?S:d_log2:
?S: This variable conditionally defines the HAS_LOG2 symbol, which
?S: indicates to the C program that the log2() routine is available
?S: to compute log base two.
?S:.
?C:HAS_LOG2:
?C: This symbol, if defined, indicates that the log2 routine is
?C: available to do the log2 function.
?C:.
?H:#$d_log2 HAS_LOG2  /**/
?H:.
?LINT:set d_log2
: see if log2 exists
set log2 d_log2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_log2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotoent_r getprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotoent_r:
?S: This variable conditionally defines the HAS_GETPROTOENT_R symbol,
?S: which indicates to the C program that the getprotoent_r()
?S: routine is available.
?S:.
?S:getprotoent_r_proto:
?S: This variable encodes the prototype of getprotoent_r.
?S: It is zero if d_getprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotoent_r
?S: is defined.
```

```
?S:.
?C:HAS_GETPROTOENT_R:
?C: This symbol, if defined, indicates that the getprotoent_r
 routine
?C: is available to getprotoent re-entrantly.
?C:.
?C:GETPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of getprotoent_r.
?C: It is zero if d_getprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotoent_r
?C: is defined.
?C:.
?H:#$d_getprotoent_r HAS_GETPROTOENT_R /**/
?H:#define GETPROTOENT_R_PROTO $getprotoent_r_proto /**/
?H:.
?T:try hdrs d_getprotoent_r_proto
: see if getprotoent_r exists
set getprotoent_r d_getprotoent_r
eval $inlibc
case "$d_getprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotoent_r_proto:$usethreads" in
 ":define") d_getprotoent_r_proto=define
  set d_getprotoent_r_proto getprotoent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getprotoent_r_proto" in
 define)
 case "$getprotoent_r_proto" in
 "|0) try='int getprotoent_r(struct protoent*, char*, size_t, struct protoent**);'
 ./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SBWR
 ;;
 esac
 case "$getprotoent_r_proto" in
 "|0) try='int getprotoent_r(struct protoent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SBI ;;
 esac
 case "$getprotoent_r_proto" in
 "|0) try='struct protoent* getprotoent_r(struct protoent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=S_SBI ;;
 esac
 case "$getprotoent_r_proto" in
 "|0) try='int getprotoent_r(struct protoent*, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SD ;;
 esac
 case "$getprotoent_r_proto" in
```

```
 "|0) d_getprotoent_r=undef
  getprotoent_r_proto=0
  echo "Disabling getprotoent_r, cannot determine prototype." >&4 ;;
 * ) case "$getprotoent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getprotoent_r_proto="REENTRANT_PROTO_$getprotoent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getprotoent_r has no prototype, not using it." >&4 ;;
  esac
  d_getprotoent_r=undef
  getprotoent_r_proto=0
  ;;
 esac
 ;;
*) getprotoent_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotoent_r.U
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```
?RCS: $Id: siteprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: siteprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:siteprefix siteprefixexp +oldsiteprefix: Getfile Loc Oldconfig cat package prefix
?MAKE: -pick add $@ %<
?S:siteprefix:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install add-on packages.
?S: See INSTALL for usage and examples.
?S:.
```

```
?S:siteprefixexp:
?S: This variable holds the full absolute path of the
 directory below
?S: which the user will install add-on packages.  Derived from siteprefix.
?S:.
?S:oldsiteprefix:
?S: This variable is set non-null if the siteprefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
: Set the siteprefix variables
$cat <<EOM

After $package is installed, you may wish to install various
add-on modules and utilities.  Typically, these add-ons will
be installed under $prefix with the rest
of this package.  However, you may wish to install such add-ons
elsewhere under a different prefix.

If you do not wish to put everything under a single prefix, that's
ok.  You will be prompted for the individual locations; this siteprefix
is only used to suggest the defaults.

The default should be fine for most people.

EOM
fn=d~+
rp='Installation prefix to use for add-on modules and utilities?'
: XXX Here might be another good place for an installstyle setting.
case "$siteprefix" in
") dflt=$prefix ;;
*)  dflt=$siteprefix
 ;;
esac
. ./getfile
: XXX Prefixit unit does not yet support siteprefix and vendorprefix
oldsiteprefix="
case "$siteprefix" in
") ;;
*) case "$ans" in
 "$prefix") ;;
 *) oldsiteprefix="$prefix";;
 esac
 ;;
esac
siteprefix="$ans"
siteprefixexp="$ansexp"
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteprefix.U
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```
?RCS: $Id: nis.U,v 3.0.1.3 1997/02/28 16:17:38 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: nis.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:17:38  ram
?RCS: patch61: ensure suitable defaults for hostcat and friends
?RCS:
?RCS: Revision 3.0.1.2  1995/03/21  08:48:34  ram
?RCS: patch52: continued fix for NeXT NIS/NetInfo handling
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:16:23  ram
?RCS: patch51: now correctly handles NeXT using NIS rather than NetInfo
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:passcat
 groupcat hostcat: Myread Oldconfig test contains
?MAKE: -pick add $@ %<
?S:passcat:
?S: This variable contains a command that produces the text of the
?S: /etc/passwd file.  This is normally "cat /etc/passwd", but can be
?S: "ypcat passwd" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
?S:groupcat:
?S: This variable contains a command that produces the text of the
?S: /etc/group file.  This is normally "cat /etc/group", but can be
?S: "ypcat group" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
?S:hostcat:
?S: This variable contains a command that produces the text of the
?S: /etc/hosts file.  This is normally "cat /etc/hosts", but can be
?S: "ypcat hosts" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
```

```
?S: command, in which case this variable is unset.
?S:.
:
 see if we have to deal with yellow pages, now NIS.
?X: NeXT gives us some fun here, as always, by having both NIS (former YP)
?X: and NetInfo. But since it has both, it's ok to put the test inside the if.
?X: Contributed by Thomas Neumann <tom@smart.bo.open.de>.
if $test -d /usr/etc/yp || $test -d /etc/yp || $test -d /usr/lib/yp; then
@if passcat || groupcat
 case "$passcat" in
 nidump*) ;;
 *)
  case "$passcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the passwd file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) passcat='ypcat passwd'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='ypcat group'
@end
   ;;
  *) passcat='cat /etc/passwd'
@if groupcat
   echo "(Assuming /etc/group is also local.)"
   groupcat='cat /etc/group'
@end
   ;;
  esac
  ;;
 esac
@end
@if hostcat
 case "$hostcat" in
 nidump*) ;;
 *)
  case
 "$hostcat" in
  *ypcat*) dflt=y;;
```

```
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
  else
    dflt=n
  fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the hosts file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) hostcat='ypcat hosts';;
  *) hostcat='cat /etc/hosts';;
  esac
  ;;
 esac
@end
fi
?X: Ensure suitable default -- Manoj Srivastava
case "$hostcat" in
") test -f /etc/hosts && hostcat='cat /etc/hosts';;
esac
case "$groupcat" in
") test -f /etc/group && groupcat='cat /etc/group';;
esac
case "$passcat" in
") test -f /etc/passwd && passcat='cat /etc/passwd';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/nis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017 Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nl_langinfo_l d_thread_safe_nl_langinfo_l: Compile cat rm_try Oldconfig \
 i_pthread i_stdlib i_langinfo i_locale  \
 usethreads run
?MAKE: -pick add $@ %<
?S:d_nl_langinfo_l:
?S: This variable contains the eventual value of the
?S: HAS_NL_LANGINFO_L symbol, which indicates if the
?S: nl_langinfo_l() function exists.
```

```
?S:.
?S:d_thread_safe_nl_langinfo_l:
?S: This variable contains the eventual value of the
?S: HAS_THREAD_SAFE_NL_LANGINFO_L symbol, which indicates if the
?S: nl_langinfo_l() function exists and is thread-safe.
?S:.
?C:HAS_NL_LANGINFO_L:
?C: This symbol, when defined, indicates presence of the nl_langinfo_l()
?C: function
?C:.
?C:HAS_THREAD_SAFE_NL_LANGINFO_L:
?C: This symbol, when defined,
 indicates presence of the nl_langinfo_l()
?C: function, and that it is thread-safe.
?C:.
?H:#$d_nl_langinfo_l HAS_NL_LANGINFO_L /**/
?H:#$d_thread_safe_nl_langinfo_l HAS_THREAD_SAFE_NL_LANGINFO_L /**/
?H:.
?F:!try
: check for nl_langinfo_l item
$cat <<EOM

Checking to see if you have nl_langinfo_l(), and that it is thread-safe
EOM
?X: Despite claiming that nl_langinfo_l() is thread-safe, the POSIX 2008
?X: standard allows for a non-safe implementation:
?X:
?X:    "nl_langinfo_l() uses an internal per-thread buffer, and nl_langinfo()
?X: uses (in all threads) the same buffer that nl_langinfo_l() uses in the
?X: initial thread. There can be interactions, but only when
?X: nl_langinfo_l() is called in the initial thread"
?X:
?X: This program calls nl_langinfo_l(), then creates a thread, calling plain
?X: nl_langinfo() from within it, then sees if the buffer in the original
?X: thread was changed.
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#include
 <string.h>
#$i_langinfo I_LANGINFO
#ifdef I_LANGINFO
#  include <langinfo.h>
#endif
#$i_pthread I_PTHREAD
#ifdef I_PTHREAD
```

```
#  include <pthread.h>
#endif
#$i_locale I_LOCALE
#ifdef I_LOCALE
#  include <locale.h>
#endif

void *
thread_start(void * arg)
{
   nl_langinfo(RADIXCHAR);
}

int main() {
   char * main_buffer;
   char save_main_buffer[1000];
   pthread_t subthread;
   pthread_attr_t attr;

   main_buffer = nl_langinfo_l(CODESET, newlocale(LC_ALL_MASK, "C", 0));

   /* If too large for our generous allowance, just assume we don't have
    * it. */
   if (strlen(main_buffer) >= sizeof(save_main_buffer)) {
       exit(1);
   }

   strcpy(save_main_buffer, main_buffer);

   if (pthread_attr_init(&attr) != 0) {
       exit(1);
   }

   if (pthread_create(&subthread, &attr, thread_start, NULL) != 0) {
       exit(1);
   }

   if (pthread_join(subthread, NULL) != 0) {
       exit(1);
   }

   exit(! (strcmp(main_buffer, save_main_buffer) == 0));
}
EOCP
case
 "$usethreads" in
   define)
       set try
```

```
        if eval $compile; then
            echo "Your system has nl_langinfo_l()..." >&4
            d_nl_langinfo_l="$define"
            echo "$d_nl_langinfo_l" >&4
            if $run ./try; then
                echo "and it is thread-safe (just as I'd hoped)." >&4
                d_thread_safe_nl_langinfo_l="$define"
                echo "$d_thread_safe_nl_langinfo_l" >&4
            else
                echo "but it isn't thread-safe." >&4
            fi
        else
            echo "your system does not have nl_langinfo_l()" >&4
        fi
        ;;
    *) echo "Since threads aren't selected, we won't bother looking for nl_langinfo_l()" >&4
esac
if test X"$d_nl_langinfo_l" = X; then
 d_nl_langinfo_l="$undef"
fi
if test X"$d_thread_safe_nl_langinfo_l" = X; then
 d_thread_safe_nl_langinfo_l="$undef"
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_nl_langinfo_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msg.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msg: test d_msgctl d_msgget d_msgsnd d_msgrcv Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_msg:
?S: This variable conditionally defines the HAS_MSG symbol, which
?S: indicates that the entire msg*(2) library is present.
```

```
?S:.
?C:HAS_MSG:
?C: This symbol, if defined, indicates that the entire msg*(2) library is
?C: supported (IPC mechanism based on message queues).
?C:.
?H:#$d_msg
 HAS_MSG  /**/
?H:.
?T:h_msg
?LINT:set d_msg
: see how much of the 'msg*(2)' library is present.
h_msg=true
echo " "
case "$d_msgctl$d_msgget$d_msgsnd$d_msgrcv" in
*"$undef"*) h_msg=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID messages"*"not configured"*)
 echo "Your $osname does not have the msg*(2) configured." >&4
       h_msg=false
 val="$undef"
 set msgctl d_msgctl
 eval $setvar
 set msgget d_msgget
 eval $setvar
 set msgsnd d_msgsnd
 eval $setvar
 set msgrcv d_msgrcv
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_msg && $test `./findhdr sys/msg.h`; then
 echo "You have the full msg*(2) library." >&4
 val="$define"
else
 echo "You don't have the full msg*(2) library." >&4
 val="$undef"
fi
set d_msg
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msg.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_locale.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_locale.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:23  ram
?RCS: patch61: created
?RCS:
?MAKE:i_locale: Inhdr
?MAKE: -pick add $@ %<
?S:i_locale:
?S: This variable conditionally defines the I_LOCALE symbol,
?S: and indicates whether a C program should include <locale.h>.
?S:.
?C:I_LOCALE:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <locale.h>.
?C:.
?H:#$i_locale I_LOCALE  /**/
?H:.
?LINT:set
 i_locale
: see if locale.h is available
set locale.h i_locale
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_locale.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigsetjmp.U,v 3.0.1.1 1997/02/28 15:44:33 ram Exp $
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_sigsetjmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_sigsetjmp: Compile Setvar cat rm_try run i_stdlib
?MAKE: -pick add $@ %<
?S:d_sigsetjmp:
?S: This variable conditionally defines the HAS_SIGSETJMP symbol,
?S: which
 indicates that the sigsetjmp() routine is available to
?S: call setjmp() and optionally save the process's signal mask.
?S:.
?C:HAS_SIGSETJMP:
?C: This variable indicates to the C program that the sigsetjmp()
?C: routine is available to save the calling process's registers
?C: and stack environment for later use by siglongjmp(), and
?C: to optionally save the process's signal mask.  See
?C: Sigjmp_buf, Sigsetjmp, and Siglongjmp.
?C:.
?C:Sigjmp_buf:
?C: This is the buffer type to be used with Sigsetjmp and Siglongjmp.
?C:.
?C:Sigsetjmp:
?C: This macro is used in the same way as sigsetjmp(), but will invoke
?C: traditional setjmp() if sigsetjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?C:Siglongjmp:
?C: This macro is used in the same way as siglongjmp(), but will invoke
?C: traditional longjmp() if siglongjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?H:?%<:#$d_sigsetjmp HAS_SIGSETJMP /**/
?H:?%<:#ifdef HAS_SIGSETJMP
?H:?%<:#define Sigjmp_buf sigjmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask)
 sigsetjmp((buf),(save_mask))
?H:?%<:#define Siglongjmp(buf,retval) siglongjmp((buf),(retval))
?H:?%<:#else
?H:?%<:#define Sigjmp_buf jmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) setjmp((buf))
?H:?%<:#define Siglongjmp(buf,retval) longjmp((buf),(retval))
?H:?%<:#endif
```

```
?H:.
?W:%<:Sigjmp_buf Sigsetjmp Siglongjmp
?F:!try
?LINT:set d_sigsetjmp
: see if sigsetjmp exists
?X: We can't check for these symbols with Inlibc because sigsetjmp
?X: is (sometimes? always?) a macro under GCC
echo " "
case "$d_sigsetjmp" in
")
 $cat >try.c <<EOP
#include <setjmp.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
sigjmp_buf env;
int set = 1;
int main()
{
 if (sigsetjmp(env,1))
  exit(set);
 set = 0;
 siglongjmp(env, 1);
 exit(1);
}
EOP
 set try
 if eval $compile; then
  if $run ./try >/dev/null 2>&1; then
   echo "POSIX sigsetjmp found." >&4
   val="$define"
  else
   $cat >&4 <<EOM
Uh-Oh! You have POSIX sigsetjmp and siglongjmp, but they do not work properly!!
I'll
 ignore them.
EOM
   val="$undef"
  fi
 else
  echo "sigsetjmp not found." >&4
  val="$undef"
 fi
 ;;
*) val="$d_sigsetjmp"
 case "$d_sigsetjmp" in
 $define) echo "POSIX sigsetjmp found." >&4;;
```

```
 $undef) echo "sigsetjmp not found." >&4;;
 esac
 ;;
esac
set d_sigsetjmp
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sigsetjmp.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: getopt.C,v 3.0.1.1 1994/01/24 13:58:40 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* Original Author: unknown, got this off net.sources
*
* $Log: getopt.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:40  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/getopt.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: lex.U,v $
```

```
?RCS: Revision 3.0.1.3  1994/10/29  16:22:50  ram
?RCS: patch36: spurious single quote could cause Configure to crash
?RCS: patch36: (reported by Xavier Le Vourch <xavierl@eiffel.com>.)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:27:09  ram
?RCS: patch32: added lexflags variable for lex flags setting
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:06:01  ram
?RCS: patch23: added
 trailing blank line for metalint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lex lexflags: Guess Myread Oldconfig flex test
?MAKE: -pick add $@ %<
?S:lex:
?S: This variable holds the name of the lexical analyser generator we
?S: want to use in the Makefile. It can be lex or flex.
?S:.
?S:lexflags:
?S: This variable holds any flags that should be passed to the lexical
?S: analyzer.  It is up to the Makefile to use it.
?S:.
: determine lexical analyser generator
case "$lex" in
")
 dflt=lex;;
*)
 dflt="$lex";;
esac
echo " "
if $test -f "$flex"; then
 rp='Which lexical analyser generator (lex or flex) shall I use?'
else
 rp='Which lexical analyser generator shall I use?'
fi
. ./myread
lex="$ans"

@if lexflags
: if using lex this will normally be useless, but flex frequently takes args
echo " "
case "$lexflags" in
") dflt='none';;
*) dflt="$lexflags";;
esac
rp="What flags should be given to $lex?"
```

```
. ./myread
case "$ans"
 in
none) lexflags="";;
*) lexflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lex.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readdir64_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_readdir64_r readdir64_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_dirent extern_C
?MAKE: -pick add $@ %<
?S:d_readdir64_r:
?S: This variable conditionally defines the HAS_READDIR64_R symbol,
?S: which indicates to the C program that the readdir64_r()
?S: routine is available.
?S:.
?S:readdir64_r_proto:
?S: This variable encodes the prototype of readdir64_r.
?S: It is zero if d_readdir64_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir64_r
?S: is defined.
?S:.
?C:HAS_READDIR64_R:
?C: This symbol, if defined, indicates that the readdir64_r routine
?C: is
 available to readdir64 re-entrantly.
?C:.
?C:READDIR64_R_PROTO:
?C: This symbol encodes the prototype of readdir64_r.
?C: It is zero if d_readdir64_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir64_r
?C: is defined.
?C:.
?H:#$d_readdir64_r HAS_READDIR64_R /**/
?H:#define READDIR64_R_PROTO $readdir64_r_proto /**/
```

```
?H:.
?T:try hdrs d_readdir64_r_proto
: see if readdir64_r exists
set readdir64_r d_readdir64_r
eval $inlibc
case "$d_readdir64_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_dirent dirent.h"
 case "$d_readdir64_r_proto:$usethreads" in
 ":define") d_readdir64_r_proto=define
  set d_readdir64_r_proto readdir64_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_readdir64_r_proto" in
 define)
 case "$readdir64_r_proto" in
 "|0) try='int readdir64_r(DIR*, struct dirent64*, struct dirent64**);'
 ./protochk "$extern_C $try" $hdrs && readdir64_r_proto=I_TSR ;;
 esac
 case "$readdir64_r_proto" in
 "|0) try='int readdir64_r(DIR*,
 struct dirent64*);'
 ./protochk "$extern_C $try" $hdrs && readdir64_r_proto=I_TS ;;
 esac
 case "$readdir64_r_proto" in
 "|0) d_readdir64_r=undef
  readdir64_r_proto=0
  echo "Disabling readdir64_r, cannot determine prototype." >&4 ;;
 * ) case "$readdir64_r_proto" in
  REENTRANT_PROTO*) ;;
  *) readdir64_r_proto="REENTRANT_PROTO_$readdir64_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "readdir64_r has no prototype, not using it." >&4 ;;
  esac
  d_readdir64_r=undef
  readdir64_r_proto=0
  ;;
 esac
 ;;
*) readdir64_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_readdir64_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_safebcpy.U,v 3.0.1.4 1997/02/28 15:40:58 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_safebcpy.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  15:40:58  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.3  1995/07/25  13:58:40  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:29:23  ram
?RCS: patch45: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/05/06  14:49:03  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safebcpy: cat d_bcopy Compile rm_try run \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safebcpy:
?S: This variable conditionally defines the HAS_SAFE_BCOPY symbol if
?S: the bcopy() routine can do overlapping copies.  Normally, you
?S: should probably use memmove().
?S:.
?C:HAS_SAFE_BCOPY (SAFE_BCOPY):
?C: This symbol, if defined, indicates that the bcopy routine is available
?C: to copy potentially overlapping memory blocks. Normally, you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
?H:#$d_safebcpy HAS_SAFE_BCOPY /**/
```

```
?H:.
?F:!try
?LINT: set d_safebcpy
: can bcopy handle overlapping blocks?
echo " "
?X: assume the worst.
val="$undef"
case "$d_memmove" in
"$define")
 echo "I'll use memmove() instead of bcopy() for overlapping copies." ;;
*) case "$d_bcopy" in
 "$define")
  echo "Checking to see if bcopy() can do overlapping copies..." >&4
  $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
bcopy("abcdefghijklmnopqrstuvwxyz0123456789", abc, 36);

for (align = 7; align >= 0; align--) {
```

```
 for (len = 36; len; len--) {
  b = buf+align;
  bcopy(abc, b, len);
  for (off = 1; off <= len; off++) {
   bcopy(b, b+off, len);
   bcopy(b+off,
 b, len);
   if (bcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
  set try
  if eval $compile_ok; then
   if $run ./try 2>/dev/null; then
    echo "Yes, it can."
    val="$define"
   else
    echo "It can't, sorry."
   fi
  else
   echo "(I can't compile the test program, so we'll assume not...)"
  fi
  ;;
 esac
 $rm_try
 ;;
esac
set d_safebcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_safebcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_castneg.U,v 3.0.1.2 1995/05/12 12:11:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: d_castneg.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:11:21  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS: patch54: added improved test case for Interactive Unix
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:10:50  ram
?RCS: patch36: don't forget to tell user about compilation failures (ADO)
?RCS: patch36: declare signal handler correctly using 'signal_t' (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:47  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?X:
?X: Can the compiler cast negative / odd floats to unsigned values.
?X:
?MAKE:d_castneg castflags: cat Compile rm_try Setvar signal_t run i_stdlib
?MAKE: -pick add $@ %<
?S:d_castneg:
?S: This variable conditionally defines CASTNEG, which indicates
?S: whether the C compiler can cast negative float to unsigned.
?S:.
?S:castflags:
?S: This variable contains a flag that precise difficulties the
?S: compiler has casting odd floating values to unsigned long:
?S:  0 = ok
?S:  1 = couldn't cast < 0
?S:  2 = couldn't cast >= 0x80000000
?S:  4 = couldn't cast in argument expression list
?S:.
?C:CASTNEGFLOAT:
?C: This symbol is defined if the C compiler can cast negative
?C: numbers to unsigned longs, ints and shorts.
?C:.
?C:CASTFLAGS:
?C: This symbol contains flags that say what difficulties the compiler
?C: has casting odd floating values to unsigned long:
?C:  0 = ok
?C:  1 = couldn't cast < 0
?C:  2 = couldn't cast >= 0x80000000
?C:  4 = couldn't
 cast in argument expression list
?C:.
?H:#$d_castneg CASTNEGFLOAT  /**/
?H:#define CASTFLAGS $castflags  /**/
?H:.
?F:!try
?LINT:set d_castneg
```

```
: check for ability to cast negative floats to unsigned
echo " "
echo 'Checking whether your C compiler can cast negative float to unsigned.' >&4
$cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
$signal_t blech(int s) { exit(7); }
$signal_t blech_in_list(int s) { exit(4); }
unsigned long dummy_long(unsigned long p) { return p; }
unsigned int dummy_int(unsigned int p) { return p; }
unsigned short dummy_short(unsigned short p) { return p; }
int main()
{
 double f;
 unsigned long along;
 unsigned int aint;
 unsigned short ashort;
 int result = 0;
 char str[16];

 /* Frustrate gcc-2.7.2's optimizer which failed this test with
    a direct f = -123. assignment.  gcc-2.8.0 reportedly
    optimized the whole file away
 */
 /* Store the number in a writable
 string for gcc to pass to
    sscanf under HP-UX.
 */
 sprintf(str, "-123");
 sscanf(str, "%lf", &f);  /* f = -123.; */

 signal(SIGFPE, blech);
 along = (unsigned long)f;
 aint = (unsigned int)f;
 ashort = (unsigned short)f;
 if (along != (unsigned long)-123)
  result |= 1;
 if (aint != (unsigned int)-123)
  result |= 1;
 if (ashort != (unsigned short)-123)
  result |= 1;
 sprintf(str, "1073741824.");
 sscanf(str, "%lf", &f); /* f = (double)0x40000000; */
```

```
 f = f + f;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x80000000)
  result |= 2;
 f -= 1.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x7fffffff)
  result |= 1;
 f += 2.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x80000001)
  result |= 2;
 if (result)
  exit(result);
?X:
?X: The following is a test for Interactive Unix Version 4.1, which
?X: has an 'improved' compiler which can correctly cast negative
?X: floats in expression lists, but apparently not in argument lists.
?X: Contributed by Winfried Koenig
 <win@incom.rhein-main.de>
?X:
 signal(SIGFPE, blech_in_list);
 sprintf(str, "123.");
 sscanf(str, "%lf", &f);  /* f = 123.; */
 along = dummy_long((unsigned long)f);
 aint = dummy_int((unsigned int)f);
 ashort = dummy_short((unsigned short)f);
 if (along != (unsigned long)123)
  result |= 4;
 if (aint != (unsigned int)123)
  result |= 4;
 if (ashort != (unsigned short)123)
  result |= 4;
 exit(result);

}
EOCP
set try
if eval $compile_ok; then
 $run ./try 2>/dev/null
 castflags=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 castflags=7
fi
```

```
case "$castflags" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_castneg
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_castneg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syswait.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_syswait.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/wait.h> is available or not
?X:
?MAKE:i_syswait: Inhdr
?MAKE: -pick add $@ %<
?S:i_syswait:
?S: This variable conditionally defines I_SYS_WAIT, which indicates
?S: to the C program that it should include <sys/wait.h>.
?S:.
?C:I_SYS_WAIT (I_SYSWAIT):
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <sys/wait.h>.
?C:.
?H:#$i_syswait I_SYS_WAIT /**/
?H:.
?LINT:set i_syswait
: see if this is a syswait system
```

```
set sys/wait.h i_syswait
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syswait.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extensions.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: Extensions.U,v $
?RCS:
?MAKE:known_extensions extensions dynamic_ext static_ext nonxs_ext \
 useposix useopcode uselanginfo : \
 Myread hint usedl d_sem d_socket i_db i_dbm i_rpcsvcdbm i_gdbm \
 d_ndbm package test cat rsrc \
 d_msg d_shm osname use64bitint \
 libs d_cplusplus sed ls rm contains trnl sort
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:known_extensions:
?S: This variable holds a list of all extensions (both XS and non-xs)
?S: included in the package source distribution.  This information is
?S: only really of use during the Perl build, as the list makes no
?S: distinction between extensions which were build and installed, and
?S: those which where not.  See "extensions"
 for the list of extensions
?S: actually built and available.
?S:.
?S:dynamic_ext:
?S: This variable holds a list of XS extension files we want to
?S: link dynamically into the package.  It is used by Makefile.
?S:.
?S:static_ext:
?S: This variable holds a list of XS extension files we want to
?S: link statically into the package.  It is used by Makefile.
?S:.
?S:nonxs_ext:
?S: This variable holds a list of all non-xs extensions built and
?S: installed by the package.  By default, all non-xs extensions
?S: distributed will be built, with the exception of platform-specific
?S: extensions (currently only one VMS specific extension).
?S:.
?S:extensions:
```

```
?S: This variable holds a list of all extension files (both XS and
?S: non-xs) installed with the package.  It is propagated to Config.pm
?S: and is typically used to test whether a particular extension
?S: is available.
?S:.
?S:useposix:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the POSIX extension should
 be used.  The sole
?S: use for this currently is to allow an easy mechanism
?S: for hints files to indicate that POSIX will not compile
?S: on a particular system.
?S:.
?S:useopcode:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the Opcode extension should be used.  The sole
?S: use for this currently is to allow an easy mechanism
?S: for users to skip the Opcode extension from the Configure
?S: command line.
?S:.
?S:uselanginfo:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the I18N::Langinfo extension should be used.  The sole
?S: use for this currently is to allow an easy mechanism for users to skip
?S: this extension from the Configure command line.
?S:.
?T:xxx avail_ext this_ext tdir xs_extensions nonxs_extensions find_extensions
?INIT:: set useposix=false in your hint file to disable the POSIX extension.
?INIT:useposix=true
?INIT:: set useopcode=false in your hint file to disable the Opcode extension.
?INIT:useopcode=true
?INIT::
 set uselanginfo=false in your hint file to disable the I18N::Langinfo extension.
?INIT:uselanginfo=true
?LINT:extern noextensions
?LINT:extern onlyextensions
?T:keepextensions i
: Check extensions
echo " "
echo "Looking for extensions..." >&4
: If we are using the old config.sh, nonxs_extensions and xs_extensions may
: contain old or inaccurate or duplicate values.
nonxs_extensions="
xs_extensions="
: We do not use find because it might not be available.
: We do not just use MANIFEST because the user may have dropped
: some additional extensions into the source tree and expect them
: to be built.
```

```
: Function to recursively find available extensions, ignoring DynaLoader
: NOTE: recursion limit of 10 to prevent runaway in case of symlink madness
: In 5.10.1 and later, extensions are stored in directories
: like File-Glob instead of the older File/Glob/.
find_extensions='
  for xxx in *; do
 case "$xxx" in
    DynaLoader|dynaload) ;;
    *)
    this_ext=`echo "$xxx" | $sed -e s/-/\\/g`;

   case "$this_ext" in
 Scalar/List/Utils) this_ext="List/Util" ;;
 PathTools)         this_ext="Cwd" ;;
    esac;
    echo " $xs_extensions $nonxs_extensions" > "$tdir/$$.tmp";
    if $contains " $this_ext " "$tdir/$$.tmp"; then
 echo >&4;
 echo "Duplicate directories detected for extension $xxx" >&4;
 echo "Configure cannot correctly recover from this - shall I abort?" >&4;
 case "$knowitall" in
 "") dflt=y;;
 *) dflt=n;;
 esac;
 . ../UU/myread;
 case "$ans" in
 n*|N*) ;;
 *) echo >&4;
     echo "Ok.  Stopping Configure." >&4;
     echo "Please remove the duplicate directory (e.g. using git clean) and then re-run Configure" >&4;
     exit 1;;
 esac;
 echo "Ok.  You will need to correct config.sh before running make." >&4;
    fi;
    $ls -1 "$xxx" > "$tdir/$$.tmp";
    if   $contains "\.xs$" "$tdir/$$.tmp" > /dev/null 2>&1; then
 xs_extensions="$xs_extensions $this_ext";
    elif $contains "\.c$"  "$tdir/$$.tmp" > /dev/null 2>&1; then
 xs_extensions="$xs_extensions
$this_ext";
    elif $test -d "$xxx"; then
 nonxs_extensions="$nonxs_extensions $this_ext";
    fi;
    $rm -f "$tdir/$$.tmp";
    ;;
esac;
  done'
```

```
tdir=`pwd`
cd "$rsrc/cpan"
set X
shift
eval $find_extensions
cd "$rsrc/dist"
set X
shift
eval $find_extensions
cd "$rsrc/ext"
set X
shift
eval $find_extensions
set X $xs_extensions
shift
xs_extensions=`echo "$*" | tr ' ' $trnl | $sort | tr $trnl ' '`
set X $nonxs_extensions
shift
nonxs_extensions=`echo "$*" | tr ' ' $trnl | $sort | tr $trnl ' '`
cd "$tdir"
known_extensions=`echo $nonxs_extensions $xs_extensions  | tr ' ' $trnl | $sort | tr $trnl ' '`

: Now see which are supported on this system.
?X: avail_ext lists available XS extensions.
avail_ext=''
for xxx in $xs_extensions ; do
 case "$xxx" in
?X: Handle possible DOS 8.3 filename and case alterations
 Amiga*)
  case "$osname" in
  amigaos) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 DB_File|db_file)
  case "$i_db" in
  $define) avail_ext="$avail_ext $xxx"
 ;;
  esac
  ;;
 GDBM_File|gdbm_fil)
  case "$i_gdbm" in
  $define) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 IPC/SysV|ipc/sysv)
  : XXX Do we need a useipcsysv variable here
  case "${d_msg}${d_sem}${d_shm}" in
  *"${define}"*) avail_ext="$avail_ext $xxx" ;;
```

```
 esac
 ;;
NDBM_File|ndbm_fil)
 case "$d_ndbm" in
 $define)
    case "$osname-$use64bitint" in
    hpux-define)
  case "$libs" in
  *-lndbm*) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
    *) avail_ext="$avail_ext $xxx" ;;
    esac
    ;;
 esac
 ;;
ODBM_File|odbm_fil)
 case "${i_dbm}${i_rpcsvcdbm}" in
 *"${define}"*)
    case "$d_cplusplus" in
    define) ;; # delete as a function name will not work
    *)  case "$osname-$use64bitint" in
  hpux-define)
     case "$libs" in
     *-ldbm*) avail_ext="$avail_ext $xxx" ;;
     esac
     ;;
  *) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
    esac
    ;;
 esac
 ;;
Opcode|opcode)
 case "$useopcode" in
 true|define|y) avail_ext="$avail_ext
$xxx" ;;
 esac
 ;;
POSIX|posix)
 case "$useposix" in
 true|define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
Socket|socket)
 case "$d_socket" in
 true|$define|y) avail_ext="$avail_ext $xxx" ;;
```

```
 esac
 ;;
I18N/Langinfo|langinfo)
 case "$uselanginfo" in
 true|define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
Sys/Syslog|sys/syslog)
 case $osname in
  amigaos) ;; # not really very useful on AmigaOS
  *)
  : XXX syslog requires socket
  case "$d_socket" in
  true|$define|y) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 esac
 ;;
threads|threads/shared)
 # threads and threads::shared are special cases.
 # To stop people from asking "Perl 5.8.0 was supposed
 # to have this new fancy threads implementation but my
 # perl doesn't have it" and from people trying to
 # (re)install the threads module using CPAN.pm and
 # CPAN.pm then offering to reinstall Perl 5.8.0,
 # the threads.pm and threads/shared.pm will always be
 # there, croaking informatively ("you
need to rebuild
 # all of Perl with threads, sorry") when threads haven't
 # been compiled in.
 # --jhi
 avail_ext="$avail_ext $xxx"
 ;;
VMS*)
 ;;
Win32*)
 case "$osname" in
 cygwin) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
XS/APItest|xs/apitest)
 # This is just for testing.  Skip it unless we have dynamic loading.

 case "$usedl" in
 $define) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
XS/Typemap|xs/typemap)
```

```
  # This is just for testing.  Skip it unless we have dynamic loading.
  case "$usedl" in
  $define) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 *) avail_ext="$avail_ext $xxx"
  ;;
 esac
done

set X $avail_ext
shift
avail_ext="$*"

case "$onlyextensions" in
") ;;
*)  keepextensions="
   echo "You have requested that only certain extensions be included..." >&4
   for i in $onlyextensions; do
       case " $avail_ext " in
       *" $i "*)
           echo "Keeping extension $i."
           keepextensions="$keepextensions $i"
           ;;
       *) echo "Ignoring
 extension $i." ;;
       esac
   done
   avail_ext="$keepextensions"
   ;;
esac

case "$noextensions" in
") ;;
*)  keepextensions="
   echo "You have requested that certain extensions be ignored..." >&4
   for i in $avail_ext; do
       case " $noextensions " in
       *" $i "*) echo "Ignoring extension $i." ;;
       *) echo "Keeping extension $i.";
          keepextensions="$keepextensions $i"
          ;;
       esac
   done
   avail_ext="$keepextensions"
   ;;
esac
```

```
: Now see which nonxs extensions are supported on this system.
: For now assume all are.
nonxs_ext=''
for xxx in $nonxs_extensions ; do
 case "$xxx" in
 VMS*)
  ;;
 *) nonxs_ext="$nonxs_ext $xxx"
  ;;
 esac
done

set X $nonxs_ext
shift
nonxs_ext="$*"

case $usedl in
$define)
 $cat <<EOM
A number of extensions are supplied with $package.  You may choose to
compile these extensions for dynamic loading (the default), compile
them into the $package executable (static loading), or not include
them at all.
  Answer "none" to include no extensions.
Note that DynaLoader is always built and need not be mentioned here.

EOM
 case "$dynamic_ext" in
 ")
  : Exclude those listed in static_ext
  dflt=''
  for xxx in $avail_ext; do
   case " $static_ext " in
   *" $xxx "*) ;;
   *) dflt="$dflt $xxx" ;;
   esac
  done
  set X $dflt
  shift
  dflt="$*"
  ;;
 *) dflt="$dynamic_ext"
  # Perhaps we are reusing an old out-of-date config.sh.
  case "$hint" in
  previous)
   if test X"$dynamic_ext" != X"$avail_ext"; then
    $cat <<EOM
NOTICE:  Your previous config.sh list may be incorrect.
```

```
The extensions now available to you are
 ${avail_ext}
but the default list from your previous config.sh is
 ${dynamic_ext}

EOM
   fi
   ;;
  esac
  ;;
 esac
 case "$dflt" in
 ") dflt=none;;
 esac
 rp="What extensions do you wish to load dynamically?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
 none) dynamic_ext=' ' ;;
 *) dynamic_ext="$ans" ;;
 esac

 case "$static_ext"
 in
 ")
  : Exclude those already listed in dynamic linking
  dflt="
  for xxx in $avail_ext; do
   case " $dynamic_ext " in
   *" $xxx "*) ;;
   *) dflt="$dflt $xxx" ;;
   esac
  done
  set X $dflt
  shift
  dflt="$*"
  ;;
 *)  dflt="$static_ext"
  ;;
 esac

 case "$dflt" in
 ") dflt=none;;
 esac
 rp="What extensions do you wish to load statically?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
```

```
 none) static_ext=' ' ;;
 *) static_ext="$ans" ;;
 esac
 ;;
*)
 $cat <<EOM
A number of extensions are supplied with $package.  Answer "none"
to include no extensions.
Note that DynaLoader is always built and need not be mentioned here.

EOM
 case "$static_ext" in
 ") dflt="$avail_ext" ;;
 *) dflt="$static_ext"
  # Perhaps we are reusing an old out-of-date config.sh.
  case "$hint" in
  previous)
   if test X"$static_ext" != X"$avail_ext"; then
    $cat <<EOM
NOTICE:  Your previous config.sh list may be incorrect.
The extensions now available
 to you are
 ${avail_ext}
but the default list from your previous config.sh is
 ${static_ext}

EOM
   fi
   ;;
  esac
  ;;
 esac
 : Exclude those that are not xs extensions
 case "$dflt" in
 ") dflt=none;;
 esac
 rp="What extensions do you wish to include?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
 none) static_ext=' ' ;;
 *) static_ext="$ans" ;;
 esac
 ;;
esac
#
# Encode is a special case.  If we are building Encode as a static
# extension, we need to explicitly list its subextensions as well.
```

```
# For other nested extensions, this is handled automatically by
# the appropriate Makefile.PL.
case " $static_ext " in
 *" Encode "*) # Add the subextensions of Encode
 cd "$rsrc/cpan"
 for xxx in `ls Encode/*/Makefile.PL|awk -F/ '{print $2}'`; do
  static_ext="$static_ext Encode/$xxx"
  known_extensions="$known_extensions Encode/$xxx"
 done
 cd "$tdir"
 ;;
esac

set X $dynamic_ext $static_ext $nonxs_ext
shift
extensions="$*"

# Sanity check:
  We require an extension suitable for use with
# AnyDBM_File, as well as Fcntl and IO.  (Failure to have these
# should show up as failures in the test suite, but it's helpful to
# catch them now.) The 'extensions' list is normally sorted
# alphabetically, so we need to accept either
#    DB_File ... Fcntl ... IO  ....
# or something like
#    Fcntl ... NDBM_File ... IO  ....
case " $extensions"  in
*"_File "*" Fcntl "*" IO "*) ;; # DB_File
*" Fcntl "*"_File "*" IO "*) ;; # GDBM_File
*" Fcntl "*" IO "*"_File "*) ;; # NDBM_File
*) echo "WARNING: Extensions DB_File or *DBM_File, Fcntl, and IO not configured." >&4
  echo "WARNING: The Perl you are building will be quite crippled." >& 4
  ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Extensions.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctermid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: d_ctermid.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ctermid: Inlibc
?MAKE: -pick add $@ %<
?S:d_ctermid:
?S: This variable conditionally defines CTERMID if ctermid() is
?S: available to generate filename for terminal.
?S:.
?C:HAS_CTERMID (CTERMID):
?C: This symbol, if defined, indicates that the ctermid routine is
?C: available to generate filename for terminal.
?C:.
?H:#$d_ctermid
 HAS_CTERMID  /**/
?H:.
?LINT:set d_ctermid
: see if ctermid exists
set ctermid d_ctermid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ctermid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_cmsghdr_s: Hasstruct i_systypes d_socket i_sysuio Setvar
?MAKE: -pick add $@ %<
?S:d_cmsghdr_s:
?S: This variable conditionally defines the HAS_STRUCT_CMSGHDR symbol,
?S: which indicates that the struct cmsghdr is supported.
?S:.
?C:HAS_STRUCT_CMSGHDR:
?C: This symbol, if defined, indicates that the struct cmsghdr
?C: is supported.
?C:.
?H:#$d_cmsghdr_s HAS_STRUCT_CMSGHDR /**/
?H:.
?LINT:set d_cmsghdr_s
: Check for cmsghdr support
```

```
echo " "
echo "Checking to see if your system supports struct cmsghdr..." >&4
set d_cmsghdr_s cmsghdr $i_systypes sys/types.h $d_socket sys/socket.h $i_sysuio sys/uio.h
eval $hasstruct
case "$d_cmsghdr_s" in
"$define")      echo "Yes, it does."   ;;
*)              echo
 "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_cmsghdr_s.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: modetype.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:25:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:modetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:modetype:
?S: This variable defines modetype to be something like mode_t,
?S: int, unsigned short, or whatever type is used to declare file
?S: modes for system calls.
?S:.
?C:Mode_t:
?C: This symbol holds the type used to declare file modes
?C: for systems calls.
  It is usually mode_t, but may be
?C: int or unsigned short.  It may be necessary to include <sys/types.h>
?C: to get any typedef'ed information.
?C:.
?H:#define Mode_t $modetype  /* file mode parameter for system calls */
?H:.
: see what type is used for mode_t
set mode_t modetype int stdio.h sys/types.h
```

```
eval $typedef
dflt="$modetype"
echo " "
rp="What type is used for file modes?"
. ./myread
modetype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/modetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sizesize: Myread Typedef sizetype Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:sizesize:
?S: This variable contains the size of a sizetype in bytes.
?S:.
?C:Size_t_size:
?C: This symbol holds the size of a Size_t in bytes.
?C:.
?H:#define Size_t_size $sizesize  /**/
?H:.
?T:yyy zzz
?F:!try
: Check size of size
echo " "
case "$sizetype" in
*_t) zzz="$sizetype" ;;
*)   zzz="filesize" ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
```

```
   printf("%d\n", (int)sizeof($sizetype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") sizesize=4
  echo "(I can't execute the test program--guessing $sizesize.)" >&4
  ;;
 *) sizesize=$yyy
  echo "Your $zzz size is $sizesize bytes."
  ;;
 esac
else
 sizesize=4
 echo "(I can't compile the test program--guessing $sizesize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/sizesize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_isascii.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:13:39  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:32  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_isascii: cc cat ccflags ldflags rm libs Setvar
?MAKE: -pick add $@ %<
?S:d_isascii:
?S: This variable conditionally defines the HAS_ISASCII constant,
?S: which indicates to the C program that isascii()
```

```
 is available.
?S:.
?C:HAS_ISASCII:
?C: This manifest constant lets the C program know that isascii
?C: is available.
?C:.
?H:#$d_isascii HAS_ISASCII  /**/
?H:.
?LINT:set d_isascii
?X: Can't use Inlibc because isascii() might be a macro.
: Look for isascii
echo " "
$cat >isascii.c <<'EOCP'
#include <stdio.h>
#include <ctype.h>
int main() {
 int c = 'A';
 if (isascii(c))
  exit(0);
 else
  exit(1);
}
EOCP
if $cc $ccflags $ldflags -o isascii isascii.c $libs >/dev/null 2>&1 ; then
 echo "isascii() found." >&4
 val="$define"
else
 echo "isascii() NOT found." >&4
 val="$undef"
fi
set d_isascii
eval $setvar
$rm -f isascii*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_isascii.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ctime64 d_localtime64 d_gmtime64 d_mktime64 d_difftime64 d_asctime64: Inlibc
?MAKE: -pick add $@ %<
?S:d_ctime64:
```

?S: This variable conditionally defines the HAS_CTIME64 symbol, which
?S: indicates to the C program that the ctime64 () routine is available.
?S:.
?S:d_localtime64:
?S: This variable conditionally defines the HAS_LOCALTIME64 symbol, which
?S: indicates to the C program that the localtime64 () routine is available.
?S:.
?S:d_gmtime64:
?S: This variable conditionally defines the HAS_GMTIME64 symbol, which
?S: indicates to the C program that the gmtime64 () routine is available.
?S:.
?S:d_mktime64:
?S: This variable conditionally defines the HAS_MKTIME64 symbol, which
?S: indicates to the
 C program that the mktime64 () routine is available.
?S:.
?S:d_difftime64:
?S: This variable conditionally defines the HAS_DIFFTIME64 symbol, which
?S: indicates to the C program that the difftime64 () routine is available.
?S:.
?S:d_asctime64:
?S: This variable conditionally defines the HAS_ASCTIME64 symbol, which
?S: indicates to the C program that the asctime64 () routine is available.
?S:.
?C:HAS_CTIME64:
?C: This symbol, if defined, indicates that the ctime64 () routine is
?C: available to do the 64bit variant of ctime ()
?C:.
?C:HAS_LOCALTIME64:
?C: This symbol, if defined, indicates that the localtime64 () routine is
?C: available to do the 64bit variant of localtime ()
?C:.
?C:HAS_GMTIME64:
?C: This symbol, if defined, indicates that the gmtime64 () routine is
?C: available to do the 64bit variant of gmtime ()
?C:.
?C:HAS_MKTIME64:
?C: This symbol, if defined, indicates that the mktime64 () routine is
?C: available to do the 64bit variant of mktime ()
?C:.
?C:HAS_DIFFTIME64:
?C: This
 symbol, if defined, indicates that the difftime64 () routine is
?C: available to do the 64bit variant of difftime ()
?C:.
?C:HAS_ASCTIME64:
?C: This symbol, if defined, indicates that the asctime64 () routine is
?C: available to do the 64bit variant of asctime ()

```
?C:.
?H:#$d_ctime64 HAS_CTIME64  /**/
?H:#$d_localtime64 HAS_LOCALTIME64  /**/
?H:#$d_gmtime64 HAS_GMTIME64  /**/
?H:#$d_mktime64 HAS_MKTIME64  /**/
?H:#$d_difftime64 HAS_DIFFTIME64  /**/
?H:#$d_asctime64 HAS_ASCTIME64  /**/
?H:.
?LINT:set d_ctime64 d_localtime64 d_gmtime64 d_mktime64 d_difftime64 d_asctime64
: see if 64bit time functions exists

set ctime64 d_ctime64
eval $inlibc

set localtime64 d_localtime64
eval $inlibc

set gmtime64 d_gmtime64
eval $inlibc

set mktime64 d_mktime64
eval $inlibc

set difftime64 d_difftime64
eval $inlibc

set asctime64 d_asctime64
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_timefuncs64.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getespwnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getespwnam:
?S: This variable conditionally defines HAS_GETESPWNAM if getespwnam() is
?S: available to retrieve enhanced (shadow) password entries by name.
```

```
?S:.
?C:HAS_GETESPWNAM:
?C: This symbol, if defined, indicates that the getespwnam system call is
?C: available to retrieve enhanced (shadow) password entries by name.
?C:.
?H:#$d_getespwnam HAS_GETESPWNAM  /**/
?H:.
?LINT:set d_getespwnam
: see if getespwnam exists
set getespwnam d_getespwnam
eval $inlibc
```

Found in
 path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getespwnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dlfcn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_dlfcn.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:53  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_dlfcn: Inhdr
?MAKE: -pick add $@ %<
?S:i_dlfcn:
?S: This variable conditionally defines the I_DLFCN symbol, which
?S: indicates to the C program that <dlfcn.h> exists and should
?S: be included.
?S:.
?C:I_DLFCN:
?C: This symbol, if defined, indicates that <dlfcn.h> exists
 and should
?C: be included.
?C:.
?H:#$i_dlfcn I_DLFCN  /**/
?H:.
?LINT:set i_dlfcn
```

```
: see if dlfcn is available
set dlfcn.h i_dlfcn
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dlfcn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strccmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strccmp.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  14:54:34  ram
?RCS: patch23: fixed a typo (WED)
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:04:39  ram
?RCS: patch10: created (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strccmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_strccmp:
?S: This variable conditionally defines the HAS_STRCASECMP symbol, which
?S: indicates to the C program
 that the strcasecmp() routine is available
?S: for case-insensitive string compares.
?S:.
?C:HAS_STRCASECMP:
?C: This symbol, if defined, indicates that the strcasecmp() routine is
?C: available for case-insensitive string compares.
?C:.
?H:#$d_strccmp HAS_STRCASECMP /**/
?H:.
?LINT:set d_strccmp
: see if strcasecmp exists
set strcasecmp d_strccmp
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strccmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cf_who.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:28:50  ram
?RCS: patch61: new computation method avoiding use of temporary file
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:42:34  ram
?RCS: patch23: login name now computed the hard way
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Oldconfig dependency is there to ensure computation occurs after old values
?X: from config.sh have been loaded, so that we can supersede them.
?X:
?MAKE:cf_time
 cf_by: date Oldconfig
?MAKE: -pick add $@ %<
?S:cf_time:
?S: Holds the output of the "date" command when the configuration file was
?S: produced. This is used to tag both config.sh and config_h.SH.
?S:.
?S:cf_by:
?S: Login name of the person who ran the Configure script and answered the
?S: questions. This is used to tag both config.sh and config_h.SH.
?S:.
?LINT:change LC_ALL LANGUAGE
: who configured the system
?X: Ensure English date -- Jarkko Hietaniemi
cf_time=`LC_ALL=C; LANGUAGE=C; export LC_ALL; export LANGUAGE; $date 2>&1`
?X:
?X: Leave a white space between first two '(' for ksh. The sub-shell is needed
?X: on some machines to avoid the error message when logname is not found; e.g.
?X: on SUN-OS 3.2, (logname || whoami) would not execute whoami if logname was
?X: not found. Sigh!
?X:
```

```
?X: Convex had a broken logname executable which returned a non-zero status,
?X: and that broke the previous:
?X:   cf_by=`( (logname) 2>/dev/null || whoami) 2>&1`
?X: Switch to emergency
 mode... -- RAM, 19/04/94
?X:
?X: Parentheses needed to avoid error message if the program does not exist.
?X: Uses case instead of $test so it can be put before $test is defined.
?X: Don't redirect to a file because on Ultrix (under script?) logname
?X: outputs a blank line first.  This method will apparently work.
case "$cf_by" in
"")
 cf_by=`(logname) 2>/dev/null`
 case "$cf_by" in
 "")
  cf_by=`(whoami) 2>/dev/null`
  case "$cf_by" in
  "") cf_by=unknown ;;
  esac ;;
 esac ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_who.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_difftime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_difftime.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:31  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_difftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_difftime:
?S: This variable conditionally defines the HAS_DIFFTIME symbol, which
?S: indicates to the C program that the difftime() routine is available.
?S:.
```

```
?C:HAS_DIFFTIME :
?C: This symbol, if defined, indicates that
 the difftime routine is
?C: available.
?C:.
?H:#$d_difftime HAS_DIFFTIME  /**/
?H:.
?LINT:set d_difftime
: see if difftime exists
set difftime d_difftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_difftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: End.U,v 3.0 1993/08/18 12:04:51 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: End.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit serves as the goal which forces make to choose all the units that
?X: ask questions.  The $W on the ?MAKE: line is the list of all symbols wanted.
?X: To force any unit to be included, copy this unit to your private U directory
?X: and add the name of the unit desired to the ?MAKE: dependency line.
?X:
?MAKE:End perllibs: $W cppstdin gzip zip
 libs usedl osname osvers
?MAKE: -pick add $@ %<
?S:perllibs:
?S: The list of libraries needed by Perl only (any libraries needed
?S: by extensions only will by dropped, if using dynamic loading).
?S:.
?INIT:perllibs="
?LINT:use $W
?LINT:use gzip zip
?LINT:change cppstdin
: Remove libraries needed only for extensions
```

```
: The appropriate ext/Foo/Makefile.PL will add them back in, if necessary.
: The exception is SunOS 4.x, which needs them.
case "${osname}X${osvers}" in
sunos*X4*)
   perllibs="$libs"
   ;;
*) case "$usedl" in
   $define|true|[yY]*)
     set X `echo " $libs " | sed -e 's@ -lndbm @ @' -e 's@ -lgdbm @ @' -e 's@ -lgdbm_compat @ @' -e 's@ -ldbm @
@' -e 's@ -ldb @ @'`
     shift
     perllibs="$*"
     ;;
   *) perllibs="$libs"
     ;;
   esac
   ;;
esac

?X: If the user has the cppstdin wrapper, perl.c will try to call
?X: CPPSTDIN, but that will point to a location in the build
?X: directory, not the installed version!.  Here, we'll just strip the
?X: name down to 'cppstdin',
 and rely on the fact that perl.c will
?X: then call SCRIPTDIR/cppstdin, but local things like 'make depend'
?X: will continue to work.
: Remove build directory name from cppstdin so it can be used from
: either the present location or the final installed location.
echo " "
: Get out of the UU directory to get correct path name.
cd ..
case "$cppstdin" in
`pwd`/cppstdin)
 echo "Stripping down cppstdin path name"
 cppstdin=cppstdin
 ;;
esac
cd UU

: end of configuration questions
echo " "
echo "End of configuration questions."
echo " "
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/End.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lgamma_r: Inlibc
?MAKE: -pick add $@ %<
?S:d_lgamma_r:
?S: This variable conditionally defines the HAS_LGAMMA_R symbol, which
?S: indicates to the C program that the lgamma_r() routine is available
?S: for the log gamma function, without using the global signgam variable.
?S:.
?C:HAS_LGAMMA_R:
?C: This symbol, if defined, indicates that the lgamma_r routine is
?C: available to do the log gamma function without using the global
?C: signgam variable.
?C:.
?H:#$d_lgamma_r HAS_LGAMMA_R  /**/
?H:.
?LINT:set d_lgamma_r
: see if lgamma_r exists
set lgamma_r d_lgamma_r
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lgamma_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Chk_MANI.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Chk_MANI.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:57:25  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/31  09:33:14  ram
?RCS: patch44: now lists Begin instead of Myinit in its dependencies
?RCS: patch44: leading comment now explains how this unit is included
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: This unit checks the package by making sure
 every file listed in MANIFEST
?X: is present. It is systematically "included" via the Finish unit (which
?X: is always present in every Configure script), although it may result in
?X: an empty inclusion when no MANIFEST is present.
?X:
?MAKE:Chk_MANI: Begin c n rsrc
?MAKE: -pick wipe $@ %<
?T:filelist ans tmppwd
?X: This check happens at metaconfig-time, so it's ok to hard-code the path.
@if {test -f ../MANIFEST}
: Now test for existence of everything in MANIFEST
echo " "
if test -f "$rsrc/MANIFEST"; then
 echo "First let's make sure your kit is complete.  Checking..." >&4
?X:
?X: Files spelled uppercased and beginning with PACK are produced by the
?X: shell archive builder and may be removed by the user. Usually, they are
?X: not listed in the MANIFEST file, but you never know...
?X:
?X: "split -l" is the new way of running a split, but we also try the older way
?X:
 awk '$1 !~ /PACK[A-Z]+/ {print $1}' "$rsrc/MANIFEST" | \
  (split -l 50 2>/dev/null || split -50)
 rm -f missing
 tmppwd=`pwd`
 for
 filelist in x??; do
  (cd "$rsrc"; ls `cat "$tmppwd/$filelist"` \
   >/dev/null 2>>"$tmppwd/missing")
 done
 if test -s missing; then
  cat missing >&4
  cat >&4 <<'EOM'

THIS PACKAGE SEEMS TO BE INCOMPLETE.

You have the option of continuing the configuration process, despite the
distinct possibility that your kit is damaged, by typing 'y'es.  If you
do, don't blame me if something goes wrong.  I advise you to type 'n'o
and contact the author (<MAINTLOC>).

EOM
?X: Can't use $echo at this early stage
  echo $n "Continue? [n] $c" >&4
  read ans
  case "$ans" in
  y*)
```

```
   echo "Continuing..." >&4
   rm -f missing
   ;;
  *)
?X:
?X: Use kill and not exit, so that the trap gets executed to clean up
?X:
   echo "ABORTING..." >&4
   kill $$
   ;;
  esac
 else
  echo "Looks good..."
 fi
else
 echo "There is no MANIFEST file.  I hope your kit is complete !"
fi
rm -f missing x??

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Chk_MANI.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shm.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shm: test d_shmctl d_shmget d_shmat d_shmdt Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_shm:
?S: This variable conditionally defines the HAS_SHM symbol, which
?S: indicates that the entire shm*(2) library is present.
?S:.
?C:HAS_SHM:
?C: This symbol, if defined, indicates that the entire shm*(2) library is
?C: supported.
```

```
?C:.
?H:#$d_shm HAS_SHM  /**/
?H:.
?T:h_shm
?LINT:set d_shm
:
 see how much of the 'shm*(2)' library is present.
h_shm=true
echo " "
case "$d_shmctl$d_shmget$d_shmat$d_shmdt" in
*"$undef"*) h_shm=false;;
esac
: we could also check for sys/ipc.h ...
if $h_shm && $test `./findhdr sys/shm.h`; then
 echo "You have the full shm*(2) library." >&4
 val="$define"
else
 echo "You don't have the full shm*(2) library." >&4
 val="$undef"
fi
set d_shm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: etc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: etc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:etc etcexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:etc:
?S: This variable holds the name of the directory in which the user wants
?S: to put "administrative" executable images for the package in question.
?S: It is most often a local directory such as /usr/local/etc. Programs
?S: relying on this variable must be prepared to deal with
```

```
 ~name
?S: substitutions.
?S:.
?S:etcexp:
?S: This is the same as the etc variable, but is filename expanded at
?S: configuration time, for convenient use in makefiles.
?S:.
: determine where administrative executables go
case "$etc" in
")
 dflt=`./loc . /local/etc /usr/local/etc /local/etc /usr/etc /etc`
 ;;
*)
 dflt="$etc"
 ;;
esac
fn=d~
rp='Where should the administrative executables go?'
. ./getfile
etc="$ans"
etcexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/etc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Obsol_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Obsol_h.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file is prepended to .MT/Obsol_h if that file is not empty. That file
?X: contains the necessary mappings of new symbols to obsolete ones.
?X:
?MAKE:Obsol_h:
?MAKE: -pick prepend $@ ./Obsol_h
?LINT:nocomment
/*
```

```
* The following symbols are obsolete. They are mapped to the new
* symbols only to ease the transition process. The sources
 should be
* updated so as to use the new symbols only, as the support for these
* obsolete symbols may end without notice.
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Obsol_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtouq: Inlibc cat Compile run
?MAKE: -pick add $@ %<
?S:d_strtouq:
?S: This variable conditionally defines the HAS_STRTOUQ symbol, which
?S: indicates to the C program that the strtouq() routine is available.
?S:.
?C:HAS_STRTOUQ:
?C: This symbol, if defined, indicates that the strtouq routine is
?C: available to convert strings to unsigned long longs (quads).
?C:.
?H:#$d_strtouq HAS_STRTOUQ  /**/
?H:.
?F:!try
: see if strtouq exists
set strtouq d_strtouq
eval $inlibc

case "$d_strtouq" in
"$define")
 $cat <<EOM
Checking whether your strtouq() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#include <stdio.h>
static int bad = 0;
void check(const char *s, unsigned
 long long eull, int een) {
 unsigned long long gull;
```

```
 errno = 0;
 gull = strtouq(s, 0, 10);
 if (!((gull == eull) && (errno == een)))
  bad++;
}
int main() {
 check(" 1",                                1LL, 0);
 check(" 0",                                0LL, 0);
 check("18446744073709551615",  18446744073709551615ULL, 0);
 check("18446744073709551616",  18446744073709551615ULL, ERANGE);
#if 0 /* strtouq() for /^-/ strings is undefined. */
 check("-1",                  18446744073709551615ULL, 0);
 check("-18446744073709551614",                  2LL, 0);
 check("-18446744073709551615",                  1LL, 0);
 check("-18446744073709551616", 18446744073709551615ULL, ERANGE);
 check("-18446744073709551617", 18446744073709551615ULL, ERANGE);
#endif
 if (!bad)
  printf("ok\n");
 return 0;
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
  ok) echo "Your strtouq() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtouq() doesn't seem to be working
 okay.
EOM
     d_strtouq="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtouq="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtouq.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nexttoward: Inlibc

```
?MAKE: -pick add $@ %<
?S:d_nexttoward:
?S: This variable conditionally defines HAS_NEXTTOWARD if nexttoward()
?S: is available to return the next machine representable long double from
?S: x in direction y.
?S:.
?C:HAS_NEXTTOWARD:
?C: This symbol, if defined, indicates that the nexttoward routine is
?C: available to return the next machine representable long double from
?C: x in direction y.
?C:.
?H:#$d_nexttoward HAS_NEXTTOWARD  /**/
?H:.
?LINT:set d_nexttoward
: see if nexttoward exists
set nexttoward d_nexttoward
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nexttoward.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: so.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:30:04  ram
?RCS: patch36: now tells user how he can suppress shared lib lookup (ADO)
?RCS: patch36: removed echo at the top, since it's now in the here-doc (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:07:02  ram
?RCS: patch30: created
?RCS:
?X:
?X: This unit computes the shared-object / shared-lib extension
?X:
?MAKE:so: test libpth Loc Myread Oldconfig cat
?MAKE: -pick add $@ %<
?S:so:
?S: This variable holds the extension used to identify
```

```
 shared libraries
?S: (also known as shared objects) on the system. Usually set to 'so'.
?S:.
?T: xxx
: compute shared library extension
case "$so" in
")
 if xxx=`./loc libc.sl X $libpth`; $test -f "$xxx"; then
  dflt='sl'
 else
  dflt='so'
 fi
 ;;
*) dflt="$so";;
esac
$cat <<EOM

On some systems, shared libraries may be available.  Answer 'none' if
you want to suppress searching of shared libraries for the remainder
of this configuration.

EOM
rp='What is the file extension used for shared libraries?'
. ./myread
so="$ans"

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/so.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtod_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtod_l:
?S: This variable conditionally defines the HAS_STRTOD_L symbol, which
?S: indicates to the C program that the strtod_l() routine is available.
?S:.
?C:HAS_STRTOD_L:
?C: This symbol, if defined, indicates that the strtod_l routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtod_l HAS_STRTOD_L  /**/
```

```
?H:.
?LINT:set d_strtod_l
: see if strtod_l exists
set strtod_l d_strtod_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strtod_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_statblks.U,v 3.0 1993/08/18 12:07:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_statblks.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_statblks: Hasfield i_sysstat
?MAKE: -pick add $@ %<
?S:d_statblks:
?S: This variable conditionally defines USE_STAT_BLOCKS
?S: if this system has a stat structure declaring
?S: st_blksize and st_blocks.
?S:.
?C:USE_STAT_BLOCKS (STATBLOCKS):
?C: This symbol is defined if this system has a stat structure declaring
?C: st_blksize and st_blocks.
?C:.
?H:?%<:#ifndef
 USE_STAT_BLOCKS
?H:?%<:#$d_statblks USE_STAT_BLOCKS /**/
?H:?%<:#endif
?H:.
?LINT:set d_statblks
: see if stat knows about block sizes
echo " "
echo "Checking to see if your struct stat has st_blocks field..." >&4
set d_statblks stat st_blocks $i_sysstat sys/stat.h
eval $hasfield
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_statblks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: man3dir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:10:34  ram
?RCS: patch61: created
?RCS:
?X:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man3 used instead of man everywhere.
?X: I then added various tests because perl5 has *lots* of man3
?X: pages with long file names. -- ADO
?X:
?MAKE:man3dir
 man3direxp man3ext installman3dir: afs cat nroff Loc Oldconfig \
 sed man1dir spackage package Getfile prefix Prefixit Prefixup \
 d_flexfnam privlib Myread
?MAKE: -pick add $@ %<
?Y:TOP
?S:man3dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:man3direxp:
?S: This variable is the same as the man3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installman3dir:
?S: This variable is really the same as man3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
```

```
?S:man3ext:
?S: This variable contains the extension that the manual
 page should
?S: have: one of 'n', 'l', or '3'.  The Makefile must supply the '.'.
?S: See man3dir.
?S:.
: determine where library module manual pages go
set man3dir man3dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages for many of the library modules.
EOM

case "$nroff" in
nroff)
 $cat <<'EOM'
However, you don't have nroff, so they're probably useless to you.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

case "$d_flexfnam" in
undef)
 $cat <<'EOM'
However, your system can't handle the long file names like File::Basename.3.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

echo "If you don't want the manual sources installed, answer 'none'."
?X: We dont use /usr/local/man/man3 because some man programs will
?X: only show the /usr/local/man/man3 contents, and not the system ones,
?X: thus man less will show the perl module less.pm, but not the system
?X: less command.  We might also conflict with TCL man pages.
?X: However, something like /opt/perl/man/man3
 is fine.
case "$man3dir" in
") case "$prefix" in
 *$package*) dflt=`echo $man1dir |
   $sed -e 's/man1/man3/g' -e 's/man\.1/man\.3/g'` ;;
 *) dflt="$privlib/man/man3" ;;
 esac
 ;;
```

```
' ') dflt=none;;
*) dflt="$man3dir" ;;
esac
echo " "

fn=dn+~
rp="Where do the $package library man pages (source) go?"
. ./getfile
if test "X$man3direxp" != "X$ansexp"; then
 installman3dir=''
fi

man3dir="$ans"
man3direxp="$ansexp"
case "$man3dir" in
'') man3dir=' '
 installman3dir='';;
esac
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installman3dir" in
 '') dflt=`echo $man3direxp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installman3dir";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installman3dir="$ans"
else
 installman3dir="$man3direxp"
fi

: What suffix
 to use on installed man pages

case "$man3dir" in
' ')
 man3ext='0'
 ;;
*)
 rp="What suffix should be used for the $package library man pages?"
 case "$man3ext" in
```

```
 ") case "$man3dir" in
  *3)  dflt=3 ;;
  *3p) dflt=3p ;;
  *3pm) dflt=3pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L3) dflt=L3;;
  *) dflt=3;;
  esac
  ;;
 *) dflt="$man3ext";;
 esac
 . ./myread
 man3ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/man3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Chk_whoami.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Chk_whoami.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit makes sure we don't try to include whoami.h if uname() exists.
?X:
?MAKE:Chk_whoami: d_uname i_whoami
?MAKE: -pick add $@ %<
?LINT:change i_whoami
: weed out incompatibilities
case "$d_uname" in
 "$define") i_whoami="$undef" ;;
```

```
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Chk_whoami.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_aintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_aintl:
?S: This variable conditionally defines the HAS_AINTL symbol, which
?S: indicates to the C program that the aintl() routine is available.
?S: If copysignl is also present we can emulate modfl.
?S:.
?C:HAS_AINTL:
?C: This symbol, if defined, indicates that the aintl routine is
?C: available.  If copysignl is also present we can emulate modfl.
?C:.
?H:#$d_aintl HAS_AINTL  /**/
?H:.
?LINT:set d_aintl
: see if aintl exists
set aintl d_aintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_aintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rdchk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rdchk.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:51  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_rdchk: Inlibc
?MAKE: -pick add $@ %<
?S:d_rdchk:
?S: This variable conditionally defines the HAS_RDCHK symbol, which
?S: indicates to the C program that the rdchk() routine is available
?S: to find out if there is input pending on an IO channel.
?S:.
?C:HAS_RDCHK (RDCHK):
?C: This symbol, if defined, indicates that the rdchk routine
 is available
?C: to find out if there is input pending on an IO channel.  Generally
?C: the routine is used only if FIONREAD and O_NDELAY aren't available.
?C:.
?H:#$d_rdchk HAS_RDCHK  /**/
?H:.
?LINT:set d_rdchk
: see if rdchk exists
set rdchk d_rdchk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rdchk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_killpg.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_killpg.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_killpg: Inlibc
?MAKE: -pick add $@ %<
?S:d_killpg:
?S: This variable conditionally defines the HAS_KILLPG symbol, which
?S: indicates to the C program that the killpg() routine is available
?S: to kill process groups.
?S:.
?C:HAS_KILLPG (KILLPG):
?C: This symbol, if defined, indicates that the killpg routine is available
```

```
?C: to kill
 process groups.  If unavailable, you probably should use kill
?C: with a negative process number.
?C:.
?H:#$d_killpg HAS_KILLPG /**/
?H:.
?LINT:set d_killpg
: see if killpg exists
set killpg d_killpg
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_killpg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: pidtype.U,v 3.0.1.1 1994/08/29 16:31:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: pidtype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:31:27  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:pidtype: Myread Typedef
?MAKE: -pick add $@ %<
?S:pidtype:
?S: This variable defines PIDTYPE to be something like pid_t, int,
?S: ushort, or whatever type is used to declare process ids in the kernel.
?S:.
?C:Pid_t (PIDTYPE):
?C: This
 symbol holds the type used to declare process ids in the kernel.
?C: It can be int, uint, pid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Pid_t $pidtype  /* PID type */
?H:.
?LINT: set pidtype
: see what type pids are declared as in the kernel
```

```
rp="What is the type of process ids on this system?"
set pid_t pidtype int stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/pidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_lc_monetary_2008: cat Compile rm_try d_locconv
?MAKE: -pick add $@ %<
?S:d_lc_monetary_2008:
?S: This variable conditionally defines HAS_LC_MONETARY_2008 if libc
?S: has the international currency locale rules from POSIX
?S: 1003.1-2008.
?S:.
?C:HAS_LC_MONETARY_2008:
?C: This symbol, if defined, indicates that the localeconv routine is
?C: available and has the additional members added in POSIX 1003.1-2008.
?C:.
?H:#$d_lc_monetary_2008 HAS_LC_MONETARY_2008  /**/
?H:.
: see if libc has the POSIX.1-2008 currency locale rules
case "$d_locconv:$d_lc_monetary_2008" in
$define:)
 $cat
 >try.c <<EOCP
#include <locale.h>
int main() {
 struct lconv *lc = localeconv();
 char int_p_cs_precedes = lc->int_p_cs_precedes;
 return 0;
}
EOCP
 set try
 if eval $compile; then
  d_lc_monetary_2008="$define"
 else
  d_lc_monetary_2008="$undef"
 fi;
 $rm_try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lc_monetary_2008.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoull: Inlibc d_longlong Compile cat run
?MAKE: -pick add $@ %<
?S:d_strtoull:
?S: This variable conditionally defines the HAS_STRTOULL symbol, which
?S: indicates to the C program that the strtoull() routine is available.
?S:.
?C:HAS_STRTOULL:
?C: This symbol, if defined, indicates that the strtoull routine is
?C: available to convert strings to unsigned long longs.
?C:.
?H:#$d_strtoull HAS_STRTOULL  /**/
?H:.
?F:!try
: see if strtoull exists
set strtoull d_strtoull
eval $inlibc

case "$d_longlong-$d_strtoull" in
"$define-$define")
 $cat <<EOM
Checking whether your strtoull() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#ifdef __hpux
#define strtoull __strtoull
#endif
#include
 <stdio.h>
static int bad = 0;
void check(const char *s, long long eull, int een) {
 long long gull;
 errno = 0;
 gull = strtoull(s, 0, 10);
 if (!((gull == eull) && (errno == een)))
```

```
  bad++;
}
int main() {
 check(" 1",                                1LL, 0);
 check(" 0",                                0LL, 0);
 check("18446744073709551615",  18446744073709551615ULL, 0);
 check("18446744073709551616",  18446744073709551615ULL, ERANGE);
#if 0 /* strtoull() for /^-/ strings is undefined. */
 check("-1",                  18446744073709551615ULL, 0);
 check("-18446744073709551614",                  2LL, 0);
 check("-18446744073709551615",                  1LL, 0);
 check("-18446744073709551616", 18446744073709551615ULL, ERANGE);
 check("-18446744073709551617", 18446744073709551615ULL, ERANGE);
#endif
 if (!bad)
  printf("ok\n");
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
  ok) echo "Your strtoull() seems to be working okay."
 ;;
  *) cat <<EOM >&4
Your strtoull() doesn't seem to be working okay.
EOM
     d_strtoull="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtoull="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoull.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sgndchr.U,v 3.0.1.2 1997/02/28 15:44:25 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sgndchr.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:44:25  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:00:24  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sgndchr: cat rm Compile Setvar run
?MAKE: -pick add $@ %<
?S:d_sgndchr:
?S: This variable conditionally defines the SIGNEDCHAR
 symbol, which
?S: indicates to the C program that signed characters are available.
?S:.
?C:SIGNEDCHAR:
?C: This symbol, if defined, indicates that characters are a signed type.
?C: If not defined, things declared as signed characters (and that make
?C: use of negative values) should probably be declared as shorts instead.
?C:.
?H:#$d_sgndchr SIGNEDCHAR /**/
?H:.
?F:!try
?LINT:set d_sgndchr
: check for signed chars
echo " "
echo "Checking to see if your C compiler can do signed chars..." >&4
$cat >try.c <<'EOCP'
int main()
{
 char c = 0;

 c--;
 exit(c >= 0);
}
EOCP
set try
if eval $compile && $run ./try; then
if $run ./try; then
 val="$define"
 echo "It certainly can."
else
 val="$undef"
 echo "It can't.  I'll have to make some things type short."
```

```
fi
set d_sgndchr
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sgndchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: orgname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: orgname.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:10:25  ram
?RCS: patch10: added support for /local/src to the search (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orgname: sed cat Myread Loc Oldconfig
?MAKE: -pick add $@ %<
?S:orgname:
?S: This variable contains the eventual value of the ORGNAME symbol,
?S: which contains either the organizaton name or the full pathname
?S: of
 a file containing the organization name.
?S:.
?C:ORGNAME:
?C: This symbol contains either the organizaton name or the full pathname
?C: of a file containing the organization name, which the program must
?C: be prepared to open and substitute the contents of.
?C:.
?H:#define ORGNAME "$orgname"  /**/
?H:.
?T:longshots xxx
: get organization name
longshots='/local/src /usr/src/new /usr/src/local /usr/local/src'
case "$orgname" in
") if xxx=`./loc news/src/defs.h x $longshots`; then
  dflt=`$sed -n 's/^.*MYORG[  ]*"\(.*\)".*$/\1/p' $xxx`
 else
```

```
  dflt=''
 fi
 ;;
*)  dflt="$orgname";;
esac
$cat << 'EOH'

Please type the name of your organization as you want it to appear on the
Organization line of outgoing articles.  (It's nice if this also specifies
your location.  Your city name is probably sufficient if well known.)
For example:

   University of Southern North Dakota, Hoople

You may also put the name of a file, as long as it begins with a slash.
For example:

   /etc/organization

EOH
orgname=""
while
 test "X$orgname" = "X"; do
 rp='Organization:'
 . ./myread
 orgname="$ans"
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/orgname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: uidtype.U,v 3.0.1.3 1994/08/29 16:33:25 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: uidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:33:25  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:09:36  ram
?RCS: patch30: comment for uidtype referred to the obsoleted symbol
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:28:27  ram
?RCS: patch27: made conformant to its gidtype.U companion
?RCS: patch27: question now explicitly mentions getuid()
?RCS:
?RCS: Revision 3.0  1993/08/18
  12:09:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:uidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:uidtype:
?S: This variable defines Uid_t to be something like uid_t, int,
?S: ushort, or whatever type is used to declare user ids in the kernel.
?S:.
?C:Uid_t (UIDTYPE):
?C: This symbol holds the type used to declare user ids in the kernel.
?C: It can be int, ushort, uid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Uid_t $uidtype  /* UID type */
?H:.
?T:xxx
: see what type uids are declared as in the kernel
echo " "
echo "Looking for the type for user ids returned by getuid()."
set uid_t uidtype xxx stdio.h sys/types.h
eval $typedef
case "$uidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep '_ruid;' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$uidtype";;
esac
case "$uidtype" in
uid_t) echo "uid_t found." ;;
*) rp="What
 is the type for user ids returned by getuid()?"
 . ./myread
 uidtype="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: pidtype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:31:27  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:pidtype: Myread Typedef
?MAKE: -pick add $@ %<
?S:pidtype:
?S: This variable defines PIDTYPE to be something like pid_t, int,
?S: ushort, or whatever type is used to declare process ids in the kernel.
?S:.
?C:Pid_t (PIDTYPE):
?C: This symbol holds the type
 used to declare process ids in the kernel.
?C: It can be int, uint, pid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Pid_t $pidtype  /* PID type */
?H:.
: see what type pids are declared as in the kernel
set pid_t pidtype int stdio.h sys/types.h
eval $typedef
dflt="$pidtype"
echo " "
rp="What type are process ids on this system declared as?"
. ./myread
pidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Myread.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myread.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  15:05:39  ram
?RCS: patch61: myread script now starts with a "startsh"
?RCS: patch61: miscellaneous fixes
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:14:22  ram
?RCS: patch45: added & escape allowing user to turn on -d from the prompt
?RCS:
?RCS: Revision 3.0.1.4  1994/10/31  09:48:04  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29
  15:56:20  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:59  ram
?RCS: patch8: added new visible 'nostick' symbol, mainly for Finish.U
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:39:20  ram
?RCS: patch7: now sticks to the question when no default and empty answer
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a read.  It allows for shell escapes, default assignment and
?X: parameter evaluation.
?X:
?X: To use this unit, $rp and $dflt must hold the question and the
?X: default answer. The question will be printed by the script itself.
?X: Neither $rp nor $dflt is altered by the script.
?X:
?X: The myread script will stick to the question if no default is proposed
?X: and the user answer is empty, which prevents mistakes. However, at the
?X: end of Configure, there is an exception
 to this rule (Finish.U) where we
?X: set nostick to a non-empty value to allow the Return key to play its role!
```

```
?X:
?MAKE:Myread: Options startsh n c trnl
?MAKE: -pick add $@ %<
?V:ans:dflt rp nostick
?F:./myread
?T:COLUMNS xxxm rp dflt answ aok myecho
?LINT:change fastread
?X: Some shells (Ultrix) do not understand ${COLUMNS:-80}, sigh!
: compute the number of columns on the terminal for proper question formatting
case "$COLUMNS" in
") COLUMNS='80';;
esac

: set up the echo used in my read
?X:
?X: This variable is intended to be eval'ed. It will echo the two
?X: variables $rp and $dflt (provided this latter has a non null value).
?X: It is mainly used by the myread script to echo the questions.
?X:
?X: The $n and $c below are substituted before Loc does its silly echo check
?X: so don't put a $ on the echo below so we get builtin, even if $echo is
?X: pointing to /bin/echo.
?X:
myecho="case \"\$xxxm\" in
") echo $n \"\$rp $c\" >&4;;
*) case \"\$rp\" in
 ") echo $n \"[\$xxxm] $c\";;
 *)
  if
 test \`echo \"\$rp [\$xxxm]  \" | wc -c\` -ge $COLUMNS; then
   echo \"\$rp\" >&4
   echo $n \"[\$xxxm] $c\" >&4
  else
   echo $n \"\$rp [\$xxxm] $c\" >&4
  fi
  ;;
 esac;;
esac"

: now set up to do reads with possible shell escape and default assignment
cat <<EOSC >myread
$startsh
?X:
?X: Save value of default -- do not alter original in case of eval
?X:
xxxm=\$dflt
$myecho
?X:
```

```
?X: If there is no default, then stop, regardless of the value in fastread.
?X: In silent mode, no new-line is to be echoed if the question is empty,
?X: since this is used to wait for the "return" key.
?X:
ans='!'
case "\$fastread" in
yes) case "\$dflt" in
 ") ;;
 *) ans=";
  case "\$silent-\$rp" in
  true-) ;;
  *) echo " " >&4;;
  esac;;
 esac;;
*) case "\$silent" in
 true) case "\$rp" in
  ") ans=";;
  esac;;
 esac;;
esac
while expr "X\$ans" : "X!" >/dev/null; do
 read answ
?X:
?X: Run 'eval' on the answer, in order to do variable substitution, in case
?X: the user types $HOME or $WHATEVER.
 Variables must be evaluated now.
?X: Typing '\$HOME' won't currently prevent from substitution -- use '\\$HOME'
?X: The $1 .. $9 and $*, as well as $@, are available to refer to the
?X: default value.
?X:
 set x \$xxxm
 shift
 aok=''; eval "ans=\\"\$answ\\"" && aok=y
 case  "\$answ" in
?X:
?X: Use "!" and not a plain ! because of a bug in BSD 4.4 shell
?X: (reported by Wayne Davison)
?X: We must handle the shell escapes before dealing with possible variable
?X: substitution, since the shell we're launching in that case will be able
?X: to do it as well as we can -- RAM, 15/03/96
?X
 "!")
  sh 1>&4
  echo " "
  $myecho
  ;;
 !*)
  set x \`expr "X\$ans" : "X!\(.*\)\$"\`
```

```
  shift
  sh 1>&4 -c "\$*"
  echo " "
  $myecho
  ;;
 "\$ans")
  case "\$ans" in
?X:
?X: Answers starting with & are hooks allowing to dynamically turn on/off
?X: some Configure options. That's for the future. -- RAM, 09/01/95
?X: Today, we only recognize '& -d' to mean 'go on as if Configure -d, which
?X: is a hardwired
 behaviour compatible with our general scheme.
?X:
  \\&*)
   set x \`expr "X\$ans" : "X&\(.*\)\$"\`
   shift
   case "\$1" in
   -d)
    fastread=yes
    echo "(OK, I'll run with -d after this question.)" >&4
    ;;
   -*)
    echo "*** Sorry, \$1 not supported yet." >&4
    ;;
   esac
   $myecho
   ans=!
   ;;
  esac;;
 *)
  case "\$aok" in
  y)
   echo "*** Substitution done -- please confirm."
   xxxm="\$ans"
   ans=\`echo $n "\$ans$c" | tr '$trnl' ' '\`
   xxxm="\$ans"
   ans=!
   ;;
  *)
   echo "*** Error -- try again."
   ans=!
   ;;
  esac
  $myecho
  ;;
 esac
?X: Stick in myread if no default answer and nothing was answered
```

```
 case "\$ans\$xxxm\$nostick" in
 ")
  ans=!
  $myecho
  ;;
 esac
done
case "\$ans" in
") ans="\$xxxm";;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Myread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_h.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  14:57:43  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:10:49  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:25:39  ram
?RCS: patch49: typo fixes in leading config.h comment (WED)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/24  12:13:20  ram
?RCS: patch3: added TOP as a local shell temporary variable
?RCS:
?RCS: Revision 3.0.1.1  1993/08/19  06:42:20
  ram
?RCS: patch1: leading config.sh searching was not aborting properly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file ends up producing the config_h.SH script, which is run to produce
```

```
?X: the config.h file.  The file ./.Config_h below contains all the ?H: lines
?X: extracted out of all the units.  Metaconfig itself adds the !GROK!THIS!.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?X: For those who wish to know why the file is config_h.SH instead of the more
?X: natural config.h.SH, well... it is to support systems like MS-DOG. Only one
?X: 'dot' is allowed within the file name, as it is part of the "extension" of
?X: the file. MS-DOG will not let you have two 'dots' because that would mean
?X: two "extensions".
?X:
?MAKE:Config_h: Id End Config_sh Obsol_h myuname cf_time cf_by package src
?MAKE: -pick c_h_weed $@ %<
?MAKE: -pick c_h_weed $@ ./Config_h
?MAKE: -pick
 c_h_weed $@ ./Obsol_h
?T:CONFIG TOP
?LINT:unclosed !GROK!THIS!
?LINT:extern CONFIG_H CONFIG_SH
?LINT:change CONFIG_H CONFIG_SH
?LINT:nocomment
case "$CONFIG_SH" in
") CONFIG_SH=config.sh;;
esac
case "$CONFIG_H" in
") CONFIG_H=config.h;;
esac
case $CONFIG in
")
 if test -f $CONFIG_SH; then TOP=.;
 elif test -f ../$CONFIG_SH; then TOP=..;
 elif test -f ../../$CONFIG_SH; then TOP=../..;
 elif test -f ../../../$CONFIG_SH; then TOP=../../..;
 elif test -f ../../../../$CONFIG_SH; then TOP=../../../..;
 else
  echo "Can't find $CONFIG_SH."; exit 1
 fi
 . $TOP/$CONFIG_SH
 ;;
esac
?X: Make sure we are in the directory where the .SH file is located.
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting $CONFIG_H (with variable substitutions)"
?X:
?X: Since we unconditionally translate leading #undef into /*#define, we're
?X: stuck when we really want to have a #undef in config.h. That's why there
?X: is provision here for #un-def, which is translated back into #undef after
```

```
?X:
 all original #undef have been processed.
?X:
?X: Previously, we changed all
?X:  #undef FOO /**/
?X: into
?X:  /*#define FOO /**/
?X: The xlc compiler (available on IBM's AIX) complains that this is
?X: an illegal attempt to write a nested comment, and warns against it.
?X: There's apparently no way to shut the compiler up, either.
?X: This sed command from Hallvard B Furuseth <h.b.furuseth@usit.uio.no>
?X: changes it to
?X:  /*#define FOO / **/
sed <<!GROK!THIS! >$CONFIG_H -e 's!^#undef\(.*/\)\*!/\*#define\1 \*!' -e 's!^#un-def!#undef!'
/*
* This file was produced by running the config_h.SH script, which
* gets its values from $CONFIG_SH, which is generally produced by
* running Configure.
*
* Feel free to modify any of this as the need arises.  Note, however,
* that running config_h.SH again will wipe out any changes you've made.
* For a more permanent change edit $CONFIG_SH and rerun config_h.SH.
*
* \$Id: Config_h.U 1 2006-08-24 12:32:52Z rmanfredi $
*/

/*
* Package name
      : $package
* Source directory  : $src
* Configuration time: $cf_time
* Configured by     : $cf_by
* Target system     : $myuname
*/

#ifndef _config_h_
#define _config_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Config_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syssock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_syssock.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_syssock: Inhdr
?MAKE: -pick add $@ %<
?S:i_syssock:
?S: This variable conditionally defines the I_SYS_SOCKET symbol, and indicates
?S: whether a C program should include <sys/socket.h> before performing socket
?S: operations.
?S:.
?C:I_SYS_SOCKET:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
 <sys/socket.h> before performing socket calls.
?C:.
?H:#$i_syssock I_SYS_SOCKET  /**/
?H:.
?LINT:set i_syssock
: see if this is a sys/socket.h system
set sys/socket.h i_syssock
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syssock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sitehtml3dir sitehtml3direxp installsitehtml3dir: Getfile \
 Setprefixvar prefix siteprefix html3dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitehtml3dir=''
?S:sitehtml3dir:
?S: This variable contains the name of the directory in which site-specific
```

```
?S: library html source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After
 perl has been installed, users may install their own local
?S: library html pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitehtml3direxp=''
?S:sitehtml3direxp:
?S: This variable is the same as the sitehtml3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsitehtml3dir=''
?S:installsitehtml3dir:
?S: This variable is really the same as sitehtml3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: html3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsitehtml3dir
?LINT:set sitehtml3dir
?LINT:set sitehtml3direxp
: determine where add-on library html pages go
: There is no standard location, so try to copy the previously-selected
: directory structure for the core html pages.
case
 "$sitehtml3dir" in
'')    dflt=`echo "$html3dir" | $sed "s#^$prefix#$siteprefix#"` ;;
*)     dflt=$sitehtml3dir ;;
esac
case "$dflt" in
'|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname where the site-specific library html pages should be installed?'
. ./getfile
prefixvar=sitehtml3dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitehtml3dir.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_flockproto: Hasproto i_sysfile
?MAKE: -pick add $@ %<
?S:d_flockproto:
?S: This variable conditionally defines the HAS_FLOCK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the flock() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_FLOCK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the flock() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern int flock(int,
 int);
?C:.
?H:#$d_flockproto HAS_FLOCK_PROTO /**/
?H:.
?LINT:set d_flockproto
: see if prototype for flock is available
echo " "
set d_flockproto flock $i_sysfile sys/file.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_flockproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strcoll.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
```

```
?RCS: $Log: d_strcoll.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:01  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strcoll: Inlibc
?MAKE: -pick add $@ %<
?S:d_strcoll:
?S: This variable conditionally defines HAS_STRCOLL if strcoll() is
?S: available to compare strings using collating information.
?S:.
?C:HAS_STRCOLL:
?C: This symbol, if defined, indicates that the strcoll routine
 is
?C: available to compare strings using collating information.
?C:.
?H:#$d_strcoll HAS_STRCOLL /**/
?H:.
?LINT:set d_strcoll
: see if strcoll exists
set strcoll d_strcoll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strcoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: End.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit serves as the goal which forces make to choose all the units that
?X: ask questions.  The $W on the ?MAKE: line is the list of all symbols wanted.
?X: To force any unit to be included, copy this unit to your private U directory
?X: and add the name of the unit desired to the ?MAKE: dependency line.
?X:
?MAKE:End: $W
?MAKE: -pick add $@ %<
```

```
?LINT:use $W
: end of configuration
 questions
echo " "
echo "End of configuration questions."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/End.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llround: Inlibc
?MAKE: -pick add $@ %<
?S:d_llround:
?S: This variable conditionally defines the HAS_LLROUND symbol, which
?S: indicates to the C program that the llround() routine is available
?S: to return the long long value nearest to x.
?S:.
?C:HAS_LLROUND:
?C: This symbol, if defined, indicates that the llround routine is
?C: available to return the nearest long long value.
?C:.
?H:#$d_llround HAS_LLROUND  /**/
?H:.
?LINT:set d_llround
: see if llround exists
set llround d_llround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msync.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msync.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:17  ram
?RCS: patch15: created
```

```
?RCS:
?MAKE:d_msync: Inlibc
?MAKE: -pick add $@ %<
?S:d_msync:
?S: This variable conditionally defines HAS_MSYNC if msync() is
?S: available to synchronize a mapped file.
?S:.
?C:HAS_MSYNC:
?C: This symbol, if defined, indicates that the msync system call is
?C: available to synchronize a mapped file.
?C:.
?H:#$d_msync HAS_MSYNC  /**/
?H:.
?LINT:set d_msync
: see if
 msync exists
set msync d_msync
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msync.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: dup2.C,v 3.0.1.1 1994/01/24 13:58:37 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* Original Author: Larry Wall <lwall@netlabs.com>
*
* $Log: dup2.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:37  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/dup2.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: n.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: n.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:n c: contains
?MAKE: -pick add $@ %<
?S:n:
?S: This variable contains the -n flag if that is what causes the echo
?S: command to suppress newline.  Otherwise it is null.  Correct usage is
?S:     $echo $n "prompt for a question: $c".
?S:.
?S:c:
?S: This variable contains the \c string if that is what causes the echo
?S: command to suppress newline.
  Otherwise it is null.  Correct usage is
?S:     $echo $n "prompt for a question: $c".
?S:.
: first determine how to suppress newline on echo command
echo " "
echo "Checking echo to see how to suppress newlines..."
(echo "hi there\c" ; echo " ") >.echotmp
if $contains c .echotmp >/dev/null 2>&1 ; then
 echo "...using -n."
 n='-n'
 c=''
else
 cat <<'EOM'
...using \c
EOM
 n=''
 c='\c'
fi
echo $n "The star should be here-->$c"
echo '*'
rm -f .echotmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/n.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS:
?MAKE:i_stdint: Inhdr
?MAKE: -pick add $@ %<
?S:i_stdint:
?S: This variable conditionally defines the I_STDINT symbol, which
?S: indicates to the C program that <stdint.h> exists and should
?S: be included.
?S:.
?C:I_STDINT:
?C: This symbol, if defined, indicates that <stdint.h> exists and
?C: should be included.
?C:.
?H:#$i_stdint I_STDINT  /**/
?H:.
?LINT:set i_stdint
: see if stdint is available
set stdint.h i_stdint
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_stdint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn_v7ND.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Warn_v7ND.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:01:46  ram
?RCS: patch36: call ./v7 explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit warns V7 sites that they may not have a non-blocking read.
?X: This unit needs to be mentioned in End.U to get included.
?X:
?MAKE:Warn_v7ND: package Guess
?MAKE: -pick add $@ %<
```

```
: Warnings
if ./v7; then
 cat
 <<EOM

NOTE: many V7 systems do not have a way to do a non-blocking read.  If you
don't have any of FIONREAD, O_NDELAY, or rdchk(), the $package package
may not work as well as it might.  It might not work at all.
EOM
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn_v7ND.U
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```
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?RCS:
?MAKE:perladmin: cf_email Oldconfig Myread cat
?MAKE: -pick add $@ %<
?Y:TOP
?S:perladmin:
?S: Electronic mail address of the perl5 administrator.
?S:.
: Ask e-mail of administrator
$cat <<EOM

If you or somebody else will be maintaining perl at your site, please
fill in the correct e-mail address here so that they may be contacted
if necessary. You may enter "none" for no administrator.

EOM
case "$perladmin" in
") dflt="$cf_email";;
*) dflt="$perladmin";;
esac
rp='Perl administrator e-mail address'
. ./myread
perladmin="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perladmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sockatmarkproto: Hasproto d_socket
?MAKE: -pick add $@ %<
?S:d_sockatmarkproto:
?S: This variable conditionally defines the HAS_SOCKATMARK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the sockatmark() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SOCKATMARK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the sockatmark() function.  Otherwise, it is up
?C: to the program to supply one.  A good
 guess is
?C:  extern int sockatmark(int);
?C:.
?H:#$d_sockatmarkproto HAS_SOCKATMARK_PROTO /**/
?H:.
?LINT:set d_sockatmarkproto
: see if prototype for sockatmark is available
echo " "
set d_sockatmarkproto sockatmark $d_socket sys/socket.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sockatmarkproto.U
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```
?RCS: $Id: d_rmdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rmdir.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:56  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_rmdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_rmdir:
?S: This variable conditionally defines HAS_RMDIR if rmdir() is
?S: available to remove directories.
?S:.
?C:HAS_RMDIR (RMDIR):
?C: This symbol, if defined, indicates that the rmdir routine is
?C: available to remove directories. Otherwise you should fork off a
?C: new process to exec
 /bin/rmdir.
?C:.
?H:#$d_rmdir HAS_RMDIR  /**/
?H:.
?LINT:set d_rmdir
: see if rmdir exists
set rmdir d_rmdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rmdir.U
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```
?RCS: $Id: man3dir.U,v 3.1 1999/07/08 20:52:19 doughera Exp doughera $
?RCS:
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?RCS:
?RCS: $Log: man3dir.U,v $
?RCS: Revision 3.1  1999/07/08 20:52:19  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:10:34  ram
?RCS: patch61: created
?RCS:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man3 used instead
 of man everywhere.
?X: I then added various tests because perl5 has *lots* of man3
```

```
?X: pages with long file names. -- ADO
?X:
?MAKE:man3dir man3direxp man3ext installman3dir: cat nroff Loc Oldconfig \
 sed man1dir spackage package Getfile Setprefixvar Prefixit Prefixup \
 d_flexfnam privlib Myread test
?MAKE: -pick add $@ %<
?Y:TOP
?D:man3dir=''
?S:man3dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?D:man3direxp=''
?S:man3direxp:
?S: This variable is the same as the man3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installman3dir=''
?S:installman3dir:
?S: This variable is really the same as man3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only
 points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man3ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '3'.  The Makefile must supply the '.'.
?S: See man3dir.
?S:.
?T:prog tdflt
?LINT:change prefixvar
?LINT:set man3direxp
: determine where library module manual pages go
set man3dir man3dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages for many of the library modules.
EOM

case "$nroff" in
nroff)
 $cat <<'EOM'
However, you don't have nroff, so they're probably useless to you.
EOM
```

```
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

case "$d_flexfnam" in
undef)
 $cat <<'EOM'
However, your system can't handle the long file names like File::Basename.3.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

echo "If you don't want the manual sources installed, answer 'none'."
?X: In 5.005_57 and earlier, I had the following notes:
?X:
 We do not use /usr/local/man/man3 because some man programs will
?X: only show the /usr/local/man/man3 contents, and not the system ones,
?X: thus man less will show the perl module less.pm, but not the system
?X: less command.  We might also conflict with Tcl man pages.
?X: However, something like /opt/perl/man/man3 is fine.
?X:
?X: However, opinion seems to be shifting such that 'man POSIX' ought
?X: to just work.  -- Andy Dougherty  July 8, 1999
?X:
?X: remove any trailing -3.0 or other version indication from $package
prog=`echo $package | $sed 's/-*[0-9.]*$//'`
case "$man3dir" in
") dflt=`echo "$man1dir" | $sed -e 's/man1/man3/g' -e 's/man\.1/man\.3/g'`
 if $test -d "$privlib/man/man3"; then
  cat <<EOM >&4

WARNING:  Previous versions of perl installed man3 pages into
$privlib/man/man3.  This version will suggest a
new default of $dflt.
EOM
  tdflt=$dflt
  dflt='n'
  rp='Do you wish to preserve the old behavior?(y/n)'
  . ./myread
  case "$ans" in
  y*) dflt="$privlib/man/man3"
 ;;
  *)  dflt=$tdflt ;;
  esac
   fi
```

```
 ;;
*) dflt="$man3dir" ;;
esac
case "$dflt" in
' ') dflt=none ;;
esac
echo " "
fn=dn+~
rp="Where do the $package library man pages (source) go?"
. ./getfile
prefixvar=man3dir
. ./setprefixvar

case "$man3dir" in
") man3dir=' '
 installman3dir=";;
esac

: What suffix to use on installed man pages
case "$man3dir" in
' ')
 man3ext='0'
 ;;
*)
 rp="What suffix should be used for the $package library man pages?"
 case "$man3ext" in
 ") case "$man3dir" in
  *3)  dflt=3 ;;
  *3p) dflt=3p ;;
  *3pm) dflt=3pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L3) dflt=L3;;
  *) dflt=3;;
  esac
  ;;
 *) dflt="$man3ext";;
 esac
 . ./myread
 man3ext="$ans"
 ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/man3dir.U
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```
?RCS: $Id: d_endhent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endhent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endhent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endhent:
?S: This variable conditionally defines HAS_ENDHOSTENT if endhostent() is
?S: available to close whatever was being used for host queries.
?S:.
?C:HAS_ENDHOSTENT:
?C: This symbol, if defined, indicates that the endhostent() routine is
?C: available to close whatever was being used for host
 queries.
?C:.
?H:#$d_endhent HAS_ENDHOSTENT  /**/
?H:.
?LINT:set d_endhent
: see if endhostent exists
set endhostent d_endhent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endhent.U
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```
?RCS: $Id: d_psignal.U 1 2006-08-24 12:32:52Z rmanfredi $
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```

```
?RCS:
?RCS: $Log: d_psignal.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_psignal: Inlibc
?MAKE: -pick add $@ %<
?S:d_psignal:
?S: This variable conditionally defines the HAS_PSIGNAL symbol, which
?S: indicates that the psignal() routine exists.  The psignal() routine
?S: prints a description of a signal on the standard error output.
?S:.
?C:HAS_PSIGNAL (PSIGNAL):
?C: This symbol, if defined, indicates
 that the psignal() routine exists.
?C:.
?H:#$d_psignal HAS_PSIGNAL  /**/
?H:.
?LINT:set d_psignal
: see if psignal exists
set psignal d_psignal
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_psignal.U
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```
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?RCS:
?MAKE:d_isnormal: cat Compile Setvar rm_try
?MAKE: -pick add $@ %<
?S:d_isnormal:
?S: This variable conditionally defines the HAS_ISNORMAL symbol, which
?S: indicates to the C program that the isnormal() routine is available.
?S:.
?C:HAS_ISNORMAL:
?C: This symbol, if defined, indicates that the isnormal routine is
?C: available to check whether a double is normal (non-zero normalized).
?C:.
?H:#$d_isnormal HAS_ISNORMAL  /**/
?H:.
?LINT:set d_isnormal
: check for isnormal
echo "Checking to see if you have isnormal..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isnormal(0.0); }
```

```
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isnormal."
else
 val="$undef"
 echo "You do not have isnormal."
fi
$rm_try
set d_isnormal
eval $setvar

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnormal.U
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?RCS: $Id: d_semop.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: $Log: d_semop.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semop: Inlibc
?MAKE: -pick add $@ %<
?S:d_semop:
?S: This variable conditionally defines the HAS_SEMOP symbol, which
?S: indicates to the C program that the semop() routine is available.
?S:.
?C:HAS_SEMOP:
?C: This symbol, if defined, indicates that the semop() routine is
?C: available to execute semaphore operations.
?C:.
?H:#$d_semop
 HAS_SEMOP  /**/
?H:.
?LINT:set d_semop
: see if semop exists
set semop d_semop
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semop.U
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```
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?RCS:
?MAKE:d_quad quadtype uquadtype quadkind: \
 longsize intsize d_longlong longlongsize d_int64_t \
 Inhdr Setvar
?MAKE: -pick add $@ %<
?S:d_quad:
?S: This variable, if defined, tells that there's a 64-bit integer type,
?S: quadtype.
?S:.
?S:quadtype:
?S: This variable defines Quad_t to be something like long, int,
?S: long long, int64_t, or whatever type is used for 64-bit integers.
?S:.
?S:quadkind:
?S: This variable, if defined, encodes the type of a quad:
?S: 1 = int, 2 = long, 3 = long long, 4 = int64_t.
?S:.
?S:uquadtype:
?S: This variable defines Uquad_t to be something like unsigned long,
?S: unsigned int, unsigned long long, uint64_t, or whatever type is
?S: used for 64-bit integers.
?S:.
?C:HAS_QUAD:
?C: This
 symbol, if defined, tells that there's a 64-bit integer type,
?C: Quad_t, and its unsigned counterpart, Uquad_t. QUADKIND will be one
?C: of QUAD_IS_INT, QUAD_IS_LONG, QUAD_IS_LONG_LONG, QUAD_IS_INT64_T,
?C: or QUAD_IS___INT64.
?C:.
?H:#$d_quad HAS_QUAD /**/
?H:?%<:#ifdef HAS_QUAD
?H:?%<:#   define Quad_t $quadtype /**/
?H:?%<:#   define Uquad_t $uquadtype /**/
?H:?%<:#   define QUADKIND $quadkind /**/
?H:?%<:#   define QUAD_IS_INT 1
?H:?%<:#   define QUAD_IS_LONG 2
```

```
?H:?%<:#   define QUAD_IS_LONG_LONG 3
?H:?%<:#   define QUAD_IS_INT64_T 4
?H:?%<:#   define QUAD_IS___INT64 5
?H:?%<:#endif
?H:.
?LINT:set quadtype
?LINT:set uquadtype
: Check if 64bit ints have a quad type
echo " "
echo "Checking which 64-bit integer type we could use..." >&4
?X: We prefer quad types in order of int, long, long long, int64_t.

case "$intsize" in
8) val=int
  set quadtype
  eval $setvar
  val='"unsigned int"'
  set uquadtype
  eval $setvar
  quadkind=1
  ;;
*) case "$longsize" in
  8)
 val=long
    set quadtype
    eval $setvar
    val='"unsigned long"'
    set uquadtype
    eval $setvar
    quadkind=2
    ;;
  *) case "$d_longlong:$longlongsize" in
    define:8)
      val='"long long"'
      set quadtype
      eval $setvar
      val='"unsigned long long"'
      set uquadtype
      eval $setvar
      quadkind=3
      ;;
    *) case "$d_int64_t" in
       define)
         val=int64_t
         set quadtype
         eval $setvar
         val=uint64_t
         set uquadtype
```

```
          eval $setvar
          quadkind=4
          ;;
        esac
        ;;
      esac
      ;;
  esac
  ;;
esac

case "$quadtype" in
") echo "Alas, no 64-bit integer types in sight." >&4
 d_quad="$undef"
 ;;
*) echo "We could use '$quadtype' for 64-bit integers." >&4
 d_quad="$define"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/quadtype.U
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```
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?RCS:
?MAKE:d_atoll: Inlibc
?MAKE: -pick add $@ %<
?S:d_atoll:
?S: This variable conditionally defines the HAS_ATOLL symbol, which
?S: indicates to the C program that the atoll() routine is available.
?S:.
?C:HAS_ATOLL:
?C: This symbol, if defined, indicates that the atoll routine is
?C: available to convert strings into long longs.
?C:.
?H:#$d_atoll HAS_ATOLL  /**/
?H:.
?LINT:set d_atoll
: see if atoll exists
set atoll d_atoll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/atoll.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ptrdiff_t: Inlibc Setvar Compile rm_try cat
?MAKE: -pick add $@ %<
?S:d_ptrdiff_t:
?S: This symbol will be defined if the C compiler supports ptrdiff_t.
?S:.
?C:HAS_PTRDIFF_T:
?C: This symbol will be defined if the C compiler supports ptrdiff_t.
?C:.
?H:#$d_ptrdiff_t HAS_PTRDIFF_T  /**/
?H:.
?LINT:set d_ptrdiff_t
: check for ptrdiff_t
echo " "
echo "Checking to see if you have ptrdiff_t..." >&4
$cat >try.c <<EOCP
#include <stddef.h>
int main() { ptrdiff_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have ptrdiff_t."
else
 val="$undef"
 echo "You do not have ptrdiff_t."
fi
$rm_try
set d_ptrdiff_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ptrdiff_t.U
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```
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?RCS:
```

```
?MAKE:d_isless: cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isless:
?S: This variable conditionally defines the HAS_ISLESS symbol, which
?S: indicates to the C program that the isless() routine is available.
?S:.
?C:HAS_ISLESS:
?C: This symbol, if defined, indicates that the isless routine is
?C: available to do the isless function.
?C:.
?H:#$d_isless HAS_ISLESS  /**/
?H:.
?LINT:set d_isless
: check for isless
echo "Checking to see if you have isless..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isless(2.0, 1.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isless."
else
 val="$undef"
 echo "You do not have isless."
fi
$rm_try
set d_isless
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isless.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_times.U,v 3.0.1.2 1995/07/25 14:07:50 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_times.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:50  ram
?RCS: patch56: typo fix, sytem -> system
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:14:00  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: What is the type returned by times() ?
?X:
?X: Force inclusion of <sys/types.h>
?X:INC: i_systypes
?MAKE:d_times clocktype:
 Csym Myread Typedef i_systimes
?MAKE: -pick add $@ %<
?S:d_times:
?S: This variable conditionally defines the HAS_TIMES symbol, which indicates
?S: that the times() routine exists.  The times() routine is normally
?S: provided on UNIX systems. You may have to include <sys/times.h>.
?S:.
?S:clocktype:
?S: This variable holds the type returned by times(). It can be long,
?S: or clock_t on BSD sites (in which case <sys/types.h> should be
?S: included).
?S:.
?C:HAS_TIMES (TIMES):
?C: This symbol, if defined, indicates that the times() routine exists.
?C: Note that this became obsolete on some systems (SUNOS), which now
?C: use getrusage(). It may be necessary to include <sys/times.h>.
?C:.
?C:Clock_t (CLOCKTYPE):
?C: This symbol holds the type returned by times(). It can be long,
?C: or clock_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_times HAS_TIMES  /**/
?H:#define Clock_t $clocktype /* Clock time */
?H:.
?T:val inc
: see if times exists
echo "
 "
if set times val -f d_times; eval $csym; $val; then
 echo 'times() found.' >&4
 d_times="$define"
 inc=''
 case "$i_systimes" in
 "$define") inc='sys/times.h';;
```

```
 esac
 rp="What is the type returned by times() on this system?"
 set clock_t clocktype long stdio.h sys/types.h $inc
 eval $typedef_ask
else
 echo 'times() NOT found, hope that will do.' >&4
 d_times="$undef"
?X: The following is needed for typedef (won't like an empty variable)
 clocktype='int'
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/d_times.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usrinc.U,v 1.1 2000/06/27 00:20:28 jhi Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: usrinc.U,v $
?RCS: Revision 1.1  2000/06/27 00:20:28  jhi
?RCS: Initial revision
?RCS:
?RCS: Revision 3.0.1.3  1997/02/28  16:27:12  ram
?RCS: patch61: don't ask for the include path unless they are on a MIPS
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:24:36  ram
?RCS: patch54: ensure that ./mips always exists (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:18:31  ram
?RCS: patch23: ensure usrinc value is preserved across sessions (WED)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:09:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usrinc incpath mips_type: test cat echo n c Getfile Guess \
 Oldconfig eunicefix contains rm sysroot cc
?MAKE: -pick add $@ %<
?S:usrinc:
?S: This variable holds the path of the include files, which is
?S: usually /usr/include. It is mainly used by other Configure units.
```

```
?S:.
?S:incpath:
?S: This variable must precede the normal include path to get the
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
?S:.
?S:mips_type:
?S: This variable holds the environment type for the mips system.
?S: Possible values are "BSD 4.3" and "System V".
?S:.
?D:usrinc='/usr/include'
?LINT:extern cppflags
?LINT:create mips
?T:xxx_prompt
?F:./mips
: What should the include directory be ?
: Use sysroot if set, so findhdr looks in the right place.
echo " "
$echo $n "Hmm...  $c"
dflt="$sysroot/usr/include"
incpath=''
?X: mips_type is used later, to add -DSYSTYPE_BSD43
 to cppflags if needed.
mips_type=''
?X:
?X: Cannot put the following in Guess, or we get a circular dependency.
?X:
if $test -f /bin/mips && /bin/mips; then
 echo "Looks like a MIPS system..."
 $cat >usr.c <<'EOCP'
#ifdef SYSTYPE_BSD43
/bsd43
#endif
EOCP
 if $cc $cppflags -E usr.c > usr.out && $contains / usr.out >/dev/null 2>&1; then
  dflt='/bsd43/usr/include'
  incpath='/bsd43'
  mips_type='BSD 4.3'
 else
  mips_type='System V'
 fi
 $rm -f usr.c usr.out
 echo "and you're compiling with the $mips_type compiler and libraries."
 xxx_prompt=y
 echo "exit 0" >mips
else
 echo "Doesn't look like a MIPS system."
 xxx_prompt=n
```

```
 echo "exit 1" >mips
fi
chmod +x mips
$eunicefix mips
case "$usrinc" in
") ;;
*) dflt="$usrinc";;
esac
case "$xxx_prompt" in
y) fn=d/
 echo " "
 rp='Where are the include files you want to use?'
 . ./getfile
 usrinc="$ans"
 ;;
*) usrinc="$dflt"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/usrinc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sfio.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sfio.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:27  ram
?RCS: patch61: created
?RCS:
?MAKE:i_sfio: Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_sfio:
?S: This variable conditionally defines the I_SFIO symbol,
?S: and indicates whether a C program should include <sfio.h>.
?S:.
?C:I_SFIO:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sfio.h>.
?C:.
```

```
?H:#$i_sfio I_SFIO  /**/
?H:.
?LINT:set
 i_sfio
: see if sfio.h is available
set sfio.h i_sfio
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sfio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isfinite: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isfinite:
?S: This variable conditionally defines the HAS_ISFINITE symbol, which
?S: indicates to the C program that the isfinite() routine is available.
?S:.
?C:HAS_ISFINITE:
?C: This symbol, if defined, indicates that the isfinite routine is
?C: available to check whether a double is finite (non-infinity non-NaN).
?C:.
?LINT:set d_isfinite
?H:#$d_isfinite HAS_ISFINITE  /**/
?H:.
: check for isfinite
echo "Checking to see if you have isfinite..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isfinite(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isfinite."
else
 val="$undef"
 echo
 "You do not have isfinite."
fi
$rm_try
```

```
set d_isfinite
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isfinite.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: warnflags.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: warnflags.U,v $
?RCS: Revision 3.0  1993/08/18  12:10:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:warnflags: cat cc contains Myread Guess Oldconfig Findhdr
?MAKE: -pick add $@ %<
?S:warnflags:
?S: This variable contains any additional C compiler flags to generate
?S: warnings from the compiler. It is up to the Makefile to use this.
?S:.
: offer additional
 warning flags for compilation
$cat <<EOH

You may wish to compile with extra compiler warnings enabled.
Note that doing so enhances your chance of receiving your free set of steak
knives, particularly if you find any bugs and report them.
If you don't want extra warnings, answer "none".

EOH
case "$warnflags" in
") case "$cc" in
 *gcc*)
  dflt="-Wall -Wno-comment"
  if $contains 'fprintf' `./findhdr stdio.h` >/dev/null 2>&1; then
   :
  else
   dflt="$dflt -Wno-implicit"
  fi
```

```
  ;;
 *) dflt="none";;
 esac
 ;;
' ') dflt="none";;
*) dflt="$warnflags";;
esac

rp="Any $cc flags to enable warnings?"
. ./myread
case "$ans" in
none) warnflags=' ';;
*) warnflags="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/warnflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strxfrm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_strxfrm.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:04  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strxfrm: Inlibc
?MAKE: -pick add $@ %<
?S:d_strxfrm:
?S: This variable conditionally defines HAS_STRXFRM if strxfrm() is
?S: available to transform strings.
?S:.
?C:HAS_STRXFRM:
?C: This symbol, if defined, indicates that the strxfrm() routine is
?C: available to transform
 strings.
?C:.
?H:#$d_strxfrm HAS_STRXFRM /**/
?H:.
```

```
?LINT:set d_strxfrm
: see if strxfrm exists
set strxfrm d_strxfrm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strxfrm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_system.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_system.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_system: Inlibc
?MAKE: -pick add $@ %<
?S:d_system:
?S: This variable conditionally defines HAS_SYSTEM if system() is
?S: available to issue a shell command.
?S:.
?C:HAS_SYSTEM (SYSTEM):
?C: This symbol, if defined, indicates that the system routine is
?C: available to issue a shell command.
?C:.
?H:#$d_system HAS_SYSTEM /**/
?H:.
?LINT:set
 d_system
: see if system exists
set system d_system
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_system.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: html3dir.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: html3dir.U,v $
?RCS:
?MAKE:html3dir html3direxp installhtml3dir: cat sed Loc Myread \
 spackage test Getfile Setprefixvar Prefixit Prefixup html1dir
?MAKE: -pick add $@ %<
?Y:TOP
?D:html3dir="
?S:html3dir:
?S: This variable contains the name of the directory in which html
?S: source pages are to be put.  This directory is for pages
?S: that describe libraries or modules.  It is intended to
?S: correspond roughly to section 3 of the Unix manuals.
?S:.
?D:html3direxp="
?S:html3direxp:
?S: This variable
 is the same as the html3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installhtml3dir="
?S:installhtml3dir:
?S: This variable is really the same as html3direxp, unless you are
?S: using a different installprefix.  For extra portability, you
?S: should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set html3direxp
?LINT:set installhtml3dir
: determine where html pages for libraries and modules go
set html3dir html3dir none
eval $prefixit
$cat <<EOM

If you wish to install html files for modules associated with $spackage,
indicate the appropriate directory here.  To skip installing html files,
answer "none".
EOM
: There is no obvious default.  If they have specified html1dir, then
: try to key off that, possibly changing .../html1 into .../html3.
case "$html3dir" in
") html3dir=`echo "$html1dir" | $sed 's/1$/3$/'` ;;
```

```
*) dflt=$html3dir ;;
esac
fn=dn+~
rp="Directory for the $spackage module
 html pages?"
. ./getfile
prefixvar=html3dir
. ./setprefixvar
: Use ' ' for none so value is preserved next time through Configure
$test X"$html3dir" = "X" && html3dir=' '
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/html3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ndbm.U,v 3.0.1.1 1995/05/12 12:16:53 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_ndbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:53  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_ndbm i_gdbmndbm i_gdbm_ndbm d_ndbm d_ndbm_h_uses_prototypes \
 d_gdbmndbm_h_uses_prototypes d_gdbm_ndbm_h_uses_prototypes: \
    Inhdr Inlibc Setvar test d_cplusplus extern_C echo Protochk
?MAKE: -pick add $@ %<
?S:i_ndbm:
?S: This
 variable conditionally defines the I_NDBM symbol, which
?S: indicates to the C program that <ndbm.h> exists and should
?S: be included.
?S:.
?C:I_NDBM:
?C: This symbol, if defined, indicates that <ndbm.h> exists and should
?C: be included.
?C:.
?S:i_gdbmndbm:
?S: This variable conditionally defines the I_GDBMNDBM symbol, which
```

```
?S: indicates to the C program that <gdbm/ndbm.h> exists and should
?S: be included.  This was the location of the ndbm.h compatibility file
?S: in RedHat 7.1.
?S:.
?C:I_GDBMNDBM:
?C: This symbol, if defined, indicates that <gdbm/ndbm.h> exists and should
?C: be included.  This was the location of the ndbm.h compatibility file
?C: in RedHat 7.1.
?C:.
?S:i_gdbm_ndbm:
?S: This variable conditionally defines the I_GDBM_NDBM symbol, which
?S: indicates to the C program that <gdbm-ndbm.h> exists and should
?S: be included.  This is the location of the ndbm.h compatibility file
?S: in Debian 4.0.
?S:.
?C:I_GDBM_NDBM:
?C: This symbol, if defined, indicates
 that <gdbm-ndbm.h> exists and should
?C: be included.  This is the location of the ndbm.h compatibility file
?C: in Debian 4.0.
?C:.
?S:d_ndbm:
?S: This variable conditionally defines the HAS_NDBM symbol, which
?S: indicates that both the ndbm.h include file and an appropriate ndbm
?S: library exist.  Consult the different i_*ndbm variables
?S: to find out the actual include location.  Sometimes, a system has the
?S: header file but not the library.  This variable will only be set if
?S: the system has both.
?S:.
?C:HAS_NDBM:
?C: This symbol, if defined, indicates that some form of ndbm.h or compatibility
?C: include exists, along with the appropriate library.
?C:.
?S:d_ndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling
 when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative ndbm.h include files.
?S:.
?C:NDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <ndbm.h> uses real ANSI C
?C: prototypes instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
```

```
?C:.
?S:d_gdbmndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the gdbm/ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative
 ndbm.h include files.
?S:.
?C:GDBMNDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <gdbm/ndbm.h> uses real ANSI C
?C: prototypes instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?S:d_gdbm_ndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the gdbm-ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative ndbm.h include files.
?S:.
?C:GDBM_NDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <gdbm-ndbm.h> uses real ANSI C
?C: prototypes
 instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?H:#$i_ndbm I_NDBM /**/
?H:#$i_gdbmndbm I_GDBMNDBM /**/
?H:#$i_gdbm_ndbm I_GDBM_NDBM /**/
?H:#$d_ndbm HAS_NDBM /**/
?H:#$d_ndbm_h_uses_prototypes NDBM_H_USES_PROTOTYPES /**/
?H:#$d_gdbmndbm_h_uses_prototypes GDBMNDBM_H_USES_PROTOTYPES /**/
?H:#$d_gdbm_ndbm_h_uses_prototypes GDBM_NDBM_H_USES_PROTOTYPES /**/
?H:.
?T:d_dbm_open name hdr ihdr ndbm_hdr_protochk
?LINT:set d_ndbm d_gdbmndbm_h_uses_prototypes d_gdbm_ndbm_h_uses_prototypes
d_ndbm_h_uses_prototypes
: see if ndbm.h is available
set ndbm.h i_ndbm
eval $inhdr
: Compatibility location for RedHat 7.1
```

```
set gdbm/ndbm.h i_gdbmndbm
eval $inhdr
: Compatibility location for Debian 4.0
set gdbm-ndbm.h i_gdbm_ndbm
eval $inhdr

val="$undef"
if $test "$i_ndbm" = "$define" -o "$i_gdbmndbm" = "$define" -o "$i_gdbm_ndbm" = "$define"; then
 : see if dbm_open exists
 set
 dbm_open d_dbm_open
 eval $inlibc
 case "$d_dbm_open" in
 $undef)
  i_ndbm="$undef"
  i_gdbmndbm="$undef"
  i_gdbm_ndbm="$undef"
  echo "We won't be including <ndbm.h>"
  val="$undef"
  ;;
 *) val="$define"
    ;;
 esac
fi
set d_ndbm
eval $setvar

ndbm_hdr_protochk='name=$1; hdr=$2;
eval "ihdr=\$""i_$name";
val="$undef";
if $test "$ihdr" = "$define"; then
 $echo "Checking if your <$hdr> uses prototypes..." >&4;
 case "$d_cplusplus" in
 $define) ./protochk "$extern_C void dbm_close(DBM *);" literal "extern \"C\" {" $ihdr $hdr literal "}" &&
val="$define" ;;
 *) ./protochk "$extern_C void dbm_close(int, int);" $ihdr $hdr || val="$define" ;;
 esac;
 case "$val" in
 $define) $echo "Your <$hdr> seems to have prototypes";;
 *) $echo "Your <$hdr> does not seem to have prototypes";;
 esac;
fi;
set "d_${name}_h_uses_prototypes";
eval $setvar'

set ndbm ndbm.h
eval $ndbm_hdr_protochk
set gdbmndbm gdbm/ndbm.h
```

```
eval $ndbm_hdr_protochk
set gdbm_ndbm gdbm-ndbm.h
eval $ndbm_hdr_protochk
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_ndbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_atanh: Inlibc
?MAKE: -pick add $@ %<
?S:d_atanh:
?S: This variable conditionally defines the HAS_ATANH symbol, which
?S: indicates to the C program that the atanh() routine is available.
?S:.
?C:HAS_ATANH:
?C: This symbol, if defined, indicates that the atanh routine is
?C: available to do the inverse hyperbolic tangent function.
?C:.
?H:#$d_atanh HAS_ATANH  /**/
?H:.
?LINT:set d_atanh
: see if atanh exists
set atanh d_atanh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_atanh.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_off64_t: \
 Inlibc Setvar Compile rm_try cat lseeksize
?MAKE: -pick add $@ %<
?S:d_off64_t:
?S: This symbol will be defined if the C compiler supports off64_t.
?S:.
?C:HAS_OFF64_T:
?C: This symbol will be defined if the C compiler supports off64_t.
```

```
?C:.
?H:#$d_off64_t HAS_OFF64_T  /**/
?H:.
?LINT:set d_off64_t
: check for off64_t
echo " "
echo "Checking to see if you have off64_t..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <unistd.h>
int main() { off64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have off64_t."
else
 val="$undef"
 echo "You do not have off64_t."
 case "$lseeksize" in
 8) echo "(Your off_t is 64 bits, so you could use that.)" ;;
 esac
fi
$rm_try
set
 d_off64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_off64_t.U
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```
?RCS: $Id: d_tminsys.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tminsys.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_tminsys: contains Setvar Findhdr
?MAKE: -pick add $@ %<
```

```
?S:d_tminsys:
?S: This variable conditionally defines TM_IN_SYS if this system
?S: declares "struct tm" in <sys/time.h> rather than <time.h>.
?S:.
?C:TM_IN_SYS (TMINSYS):
?C: This symbol is defined if this system declares "struct tm" in
?C: <sys/time.h> rather than <time.h>.
  We can't just say
?C: -I/usr/include/sys because some systems have both time files, and
?C: the -I trick gets the wrong one.
?C:.
?H:#$d_tminsys TM_IN_SYS  /**/
?H:.
?LINT:set d_tminsys
: see if struct tm is defined in sys/time.h
echo " "
if $contains 'struct tm' `./findhdr time.h` >/dev/null 2>&1 ; then
 echo "You have struct tm defined in <time.h> rather than <sys/time.h>." >&4
 val="$undef"
else
 echo "You have struct tm defined in <sys/time.h> rather than <time.h>." >&4
 val="$define"
fi
set d_tminsys
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tminsys.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_dup3: Inlibc
?MAKE: -pick add $@ %<
?S:d_dup3:
?S: This variable conditionally defines HAS_DUP3 if dup3() is
?S: available to duplicate file descriptors.
?S:.
?C:HAS_DUP3:
?C: This symbol, if defined, indicates that the dup3 routine is
?C: available to duplicate file descriptors.
?C:.
```

```
?H:#$d_dup3 HAS_DUP3 /**/
?H:.
?LINT:set d_dup3
: see if dup3 exists
set dup3 d_dup3
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dup3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_internet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_internet.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:04  ram
?RCS: patch10: most mailers support Internet addresses nowadays (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_internet: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_internet:
?S: This variable conditionally defines the INTERNET symbol, which
?S: indicates to the C program that there is a mailer available
 which
?S: supports internet-style addresses (user@site.domain).
?S:.
?C:INTERNET:
?C: This symbol, if defined, indicates that there is a mailer available
?C: which supports internet-style addresses (user@site.domain).
?C:.
?H:#$d_internet INTERNET /**/
?H:.
?LINT:set d_internet
: check for internet mailer
dflt=y
case "$d_internet" in
"$undef") dflt=n;;
esac
```

```
cat <<EOM

Most mailers can deliver mail to addresses of the INTERNET persuasion,
such as user@host.edu.  Some older mailers, however, require the complete
path to the destination to be specified in the address.

EOM
rp="Does your mailer understand INTERNET addresses?"
. ./myread
case "$ans" in
y*) val="$define";;
*)  val="$undef";;
esac
set d_internet
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_internet.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_gconvert.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:38  ram
?RCS: patch61: integrated new unit from perl5
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:55:59  ram
?RCS: patch56: improved comments about the Gconvert macro (ADO)
?RCS: patch56: force compile-link test since it may exist but be unusable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:51  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_Gconvert:
 cat cc ccflags ldflags libs rm_try _o
?MAKE: -pick add $@ %<
?S:d_Gconvert:
?S: This variable holds what Gconvert is defined as to convert
```

```
?S: floating point numbers into strings. It could be 'gconvert'
?S: or a more complex macro emulating gconvert with gcvt() or sprintf.
?S:.
?C:Gconvert:
?C: This preprocessor macro is defined to convert a floating point
?C: number to a string without a trailing decimal point.  This
?C: emulates the behavior of sprintf("%g"), but is sometimes much more
?C: efficient.  If gconvert() is not available, but gcvt() drops the
?C: trailing decimal point, then gcvt() is used.  If all else fails,
?C: a macro using sprintf("%g") is used. Arguments for the Gconvert
?C: macro are: value, number of digits, whether trailing zeros should
?C: be retained, and the output buffer.
?C: Possible values are:
?C:  d_Gconvert='gconvert((x),(n),(t),(b))'
?C:  d_Gconvert='gcvt((x),(n),(b))'
?C:  d_Gconvert='sprintf((b),"%.*g",(n),(x))'
?C: The last two assume trailing zeros should
 not be kept.
?C:.
?H:#define Gconvert(x,n,t,b) $d_Gconvert
?H:.
?T: xxx_list xxx_convert
?F:!try
?X:
: Check how to convert floats to strings.
echo " "
echo "Checking for an efficient way to convert floats to strings."
?X: We want to be sure to drop trailing decimal points (perl5
?X: needs this).
$cat >try.c <<'EOP'
#ifdef TRY_gconvert
#define Gconvert(x,n,t,b) gconvert((x),(n),(t),(b))
char *myname = "gconvert";
#endif
#ifdef TRY_gcvt
#define Gconvert(x,n,t,b) gcvt((x),(n),(b))
char *myname = "gcvt";
#endif
#ifdef TRY_sprintf
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(x))
char *myname = "sprintf";
#endif

#include <stdio.h>

int
checkit(expect, got)
char *expect;
```

```
char *got;
{
   if (strcmp(expect, got)) {
  printf("%s oddity:  Expected %s, got %s\n",
   myname, expect, got);
  exit(1);
 }
}

int
int main()
{
 char buf[64];
 buf[63] = '\0';

 /* This must be 1st test on (which?) platform */
 /* Alan Burlison <AlanBurlsin@unn.unisys.com> */
 Gconvert(0.1, 8, 0, buf);
 checkit("0.1",
 buf);

 Gconvert(1.0, 8, 0, buf);
 checkit("1", buf);

 Gconvert(0.0, 8, 0, buf);
 checkit("0", buf);

 Gconvert(-1.0, 8, 0, buf);
 checkit("-1", buf);

 /* Some Linux gcvt's give 1.e+5 here. */
 Gconvert(100000.0, 8, 0, buf);
 checkit("100000", buf);

 /* Some Linux gcvt's give -1.e+5 here. */
 Gconvert(-100000.0, 8, 0, buf);
 checkit("-100000", buf);

 exit(0);
}
EOP
?X: List of order in which to search for functions.
?X: Usual order of efficiency is gconvert gcvt sprintf
?X: Respect a previous or hinted value.
case "$d_Gconvert" in
gconvert*) xxx_list='gconvert gcvt sprintf' ;;
gcvt*) xxx_list='gcvt gconvert sprintf' ;;
sprintf*) xxx_list='sprintf gconvert gcvt' ;;
```

```
*) xxx_list='gconvert gcvt sprintf' ;;
esac

for xxx_convert in $xxx_list; do
 echo "Trying $xxx_convert"
 $rm_try
 if $cc $ccflags -DTRY_$xxx_convert $ldflags -o try \
  try.c $libs > /dev/null 2>&1 ; then
  echo "$xxx_convert" found. >&4
  if ./try; then
   echo "I'll use $xxx_convert to convert floats
 into a string." >&4
   break;
  else
   echo "...But $xxx_convert didn't work as I expected."
  fi
 else
  echo "$xxx_convert NOT found." >&4
 fi
done

case "$xxx_convert" in
gconvert) d_Gconvert='gconvert((x),(n),(t),(b))' ;;
gcvt) d_Gconvert='gcvt((x),(n),(b))' ;;
*) d_Gconvert='sprintf((b),"%.*g",(n),(x))' ;;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gconvert.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpagsz.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:10  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_getpagsz pagesize: Oldconfig Myread Inlibc cat contains +cc +ccflags \
 libs rm Findhdr
?MAKE: -pick add $@ %<
?S:d_getpagsz:
?S: This variable conditionally defines HAS_GETPAGESIZE if getpagesize()
?S: is available to get the system page size.
?S:.
?S:pagesize (pagsize):
?S: This
 variable holds the size in bytes of a system page.
?S:.
?C:HAS_GETPAGESIZE (GETPAGESIZE):
?C: This symbol, if defined, indicates that the getpagesize system call
?C: is available to get system page size, which is the granularity of
?C: many memory management calls.
?C:.
?X: Don't name it PAGESIZE, this is sometimes used by <sys/param.h>
?C:PAGESIZE_VALUE (PAGSIZE):
?C: This symbol holds the size in bytes of a system page (obtained via
?C: the getpagesize() system call at configuration time or asked to the
?C: user if the system call is not available).
?C:.
?H:#$d_getpagsz HAS_GETPAGESIZE  /**/
?H:#define PAGESIZE_VALUE $pagesize /* System page size, in bytes */
?H:.
?F:!page
?T:guess
?LINT:set d_getpagsz
: see if getpagesize exists
set getpagesize d_getpagsz
eval $inlibc

@if pagesize || PAGESIZE_VALUE
: determine the system page size
echo " "
guess=' (OK to guess)'
case "$pagesize" in
")
 $cat >page.c <<EOP
extern int getpagesize();
int main()
{
 printf("%d\n", getpagesize());
}
EOP
 echo
 "Computing the granularity of memory management calls..." >&4
 dflt='4096'
```

```
 case "$d_getpagsz" in
 "$define")
  if $cc $ccflags -o page page.c $libs >/dev/null 2>&1; then
   dflt=`./page`
   guess=''
  else
   echo "(I can't seem to compile the test program--guessing)"
  fi
  ;;
 *)
  if $cc $ccflags -o page page.c $libs -lPW >/dev/null 2>&1; then
   dflt=`./page`
   guess=''
   echo "(For your eyes only: I used the getpagesize() from -lPW.)"
  else
   if $contains PAGESIZE `./findhdr sys/param.h` >/dev/null 2>&1; then
    $cat >page.c <<EOP
#include <sys/param.h>
int main()
{
 printf("%d\n", PAGESIZE);
}
EOP
    if $cc $ccflags -o page page.c $libs >/dev/null 2>&1; then
     dflt=`./page`
     guess=''
     echo "(Using value of PAGESIZE found in <sys/param.h>.)"
    fi
   fi
  fi
  ;;
 esac
 ;;
*) dflt="$pagesize"; guess="";;
esac
rp="What is the system page size, in bytes$guess?"
. ./myread
pagesize=$ans
$rm -f page.c page

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpagsz.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:

```
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getitimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_getitimer:
?S: This variable conditionally defines the HAS_GETITIMER symbol, which
?S: indicates to the C program that the getitimer() routine is available.
?S:.
?C:HAS_GETITIMER:
?C: This symbol, if defined, indicates that the getitimer routine is
?C: available to return interval timers.
?C:.
?H:#$d_getitimer HAS_GETITIMER  /**/
?H:.
?LINT:set d_getitimer
: see if getitimer exists
set getitimer d_getitimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getitimer.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:siteman1dir siteman1direxp installsiteman1dir: Getfile \
 Setprefixvar prefix siteprefix man1dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:siteman1dir=''
?S:siteman1dir:
?S: This variable contains the name of the directory in which site-specific
?S: manual source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After perl
```

```
 has been installed, users may install their own local
?S: man1 pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:siteman1direxp="
?S:siteman1direxp:
?S: This variable is the same as the siteman1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsiteman1dir="
?S:installsiteman1dir:
?S: This variable is really the same as siteman1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsiteman1dir
?LINT:set siteman1dir
?LINT:set siteman1direxp
: determine where add-on manual pages go
case "$siteman1dir" in
") dflt=`echo $man1dir | $sed "s#^$prefix#$siteprefix#"` ;;
*) dflt=$siteman1dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname
 where the site-specific manual pages should be installed?'
. ./getfile
prefixvar=siteman1dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteman1dir.U
No license file was found, but licenses were detected in source scan.

```
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_castneg.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:11:21  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS: patch54: added improved test case for Interactive Unix
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:10:50  ram
?RCS: patch36: don't forget to tell user about compilation failures (ADO)
?RCS: patch36: declare signal handler correctly using 'signal_t' (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Can
 the compiler cast negative / odd floats to unsigned values.
?X:
?MAKE:d_castneg castflags: cat +cc +ccflags rm_try Setvar signal_t
?MAKE: -pick add $@ %<
?S:d_castneg:
?S: This variable conditionally defines CASTNEG, which indicates
?S: wether the C compiler can cast negative float to unsigned.
?S:.
?S:castflags:
?S: This variable contains a flag that precise difficulties the
?S: compiler has casting odd floating values to unsigned long:
?S:  0 = ok
?S:  1 = couldn't cast < 0
?S:  2 = couldn't cast >= 0x80000000
?S:  4 = couldn't cast in argument expression list
?S:.
?C:CASTNEGFLOAT:
?C: This symbol is defined if the C compiler can cast negative
?C: numbers to unsigned longs, ints and shorts.
?C:.
?C:CASTFLAGS:
?C: This symbol contains flags that say what difficulties the compiler
?C: has casting odd floating values to unsigned long:
?C:  0 = ok
?C:  1 = couldn't cast < 0
?C:  2 = couldn't cast >= 0x80000000
?C:  4 = couldn't cast in argument expression list
?C:.
?H:#$d_castneg CASTNEGFLOAT  /**/
?H:#define
 CASTFLAGS $castflags  /**/
?H:.
```

```
?F:!try
?LINT:set d_castneg
: check for ability to cast negative floats to unsigned
echo " "
echo 'Checking whether your C compiler can cast negative float to unsigned.' >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <signal.h>
$signal_t blech() { exit(7); }
$signal_t blech_in_list() { exit(4); }
unsigned long dummy_long(p) unsigned long p; { return p; }
unsigned int dummy_int(p) unsigned int p; { return p; }
unsigned short dummy_short(p) unsigned short p; { return p; }
int main()
{
 double f = -123.;
 unsigned long along;
 unsigned int aint;
 unsigned short ashort;
 int result = 0;

 signal(SIGFPE, blech);
 along = (unsigned long)f;
 aint = (unsigned int)f;
 ashort = (unsigned short)f;
 if (along != (unsigned long)-123)
  result |= 1;
 if (aint != (unsigned int)-123)
  result |= 1;
 if (ashort != (unsigned short)-123)
  result |= 1;
 f = (double)0x40000000;
 f = f + f;
 along = 0;
 along = (unsigned long)f;
 if
 (along != 0x80000000)
  result |= 2;
 f -= 1.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x7fffffff)
  result |= 1;
 f += 2.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x80000001)
  result |= 2;
```

```
 if (result)
  exit(result);
?X:
?X: The following is a test for Interactive Unix Version 4.1, which
?X: has an 'improved' compiler which can correctly cast negative
?X: floats in expression lists, but apparently not in argument lists.
?X: Contributed by Winfried Koenig <win@incom.rhein-main.de>
?X:
 signal(SIGFPE, blech_in_list);
 f = 123.;
 along = dummy_long((unsigned long)f);
 aint = dummy_int((unsigned int)f);
 ashort = dummy_short((unsigned short)f);
 if (along != (unsigned long)123)
  result |= 4;
 if (aint != (unsigned int)123)
  result |= 4;
 if (ashort != (unsigned short)123)
  result |= 4;
 exit(result);

}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 ./try
 castflags=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 castflags=7
fi
case
 "$castflags" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_castneg
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_castneg.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getmnt: Inlibc
?MAKE: -pick add $@ %<
?S:d_getmnt:
?S: This variable conditionally defines the HAS_GETMNT symbol, which
?S: indicates to the C program that the getmnt() routine is available
?S: to retrieve one or more mount info blocks by filename.
?S:.
?C:HAS_GETMNT:
?C: This symbol, if defined, indicates that the getmnt routine is
?C: available to get filesystem mount info by filename.
?C:.
?H:#$d_getmnt HAS_GETMNT  /**/
?H:.
?LINT:set d_getmnt
: see if getmnt exists
set getmnt d_getmnt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getmnt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libnlist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libnlist.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:08:02  ram
?RCS: patch61: added usrinc and mips on the dependency line
?RCS: patch61: make sure we call ./mips
?RCS: patch61: added a ?LINT: hint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libnlist: Loc libpth Guess usrinc _a
```

```
?MAKE: -pick add $@ %<
?S:libnlist (libmld):
?S: This variable contains the name of the library required to
 get the
?S: definition of the nlist() function.  On a MIPS RISC/OS box, it is -lmld.
?S: Under Sys Vr4, it is -lelf.  Otherwise, its value is empty.
?S:.
?T:xxx
?LINT:use usrinc
: see if we need a special library for 'nlist()'
echo " "
: How about doing this if nlist is not in libc...
if ./mips ; then
 libnlist='-lmld'
else
 xxx=`./loc libelf$_a x $libpth`
 case "$xxx" in
 x)  ;;
 *)
  libnlist="$xxx"
  ;;
 esac
fi
case "$libnlist" in
") echo "No special library for nlist() seems necessary." >&4
 ;;
*)  echo "nlist() can be found in $libnlist." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libnlist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uselongdouble: Myread Oldconfig Setvar cat test usemorebits
?MAKE: -pick add $@ %<
?Y:TOP
?S:uselongdouble:
?S: This variable conditionally defines the USE_LONG_DOUBLE symbol,
?S: and indicates that long doubles should be used when available.
?S:.
```

```
?C:USE_LONG_DOUBLE:
?C: This symbol, if defined, indicates that long doubles should
?C: be used when available.
?C:.
?H:?%<:#ifndef USE_LONG_DOUBLE
?H:?%<:#$uselongdouble USE_LONG_DOUBLE  /**/
?H:?%<:#endif
?H:.
?LINT:extern ccflags
?LINT:use usemorebits
?F:!uselongdouble.cbu
: Check for uselongdouble support
case "$ccflags" in
*-DUSE_LONG_DOUBLE*|*-DUSE_MORE_BITS*) uselongdouble="$define" ;;
esac

case "$uselongdouble" in
$define|true|[yY]*) dflt='y';;
*)
 dflt='n';;
esac
cat <<EOM

Perl can be built to take advantage of long doubles which
(if available) may give more accuracy and range for floating point numbers.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Try to use long doubles if available?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set uselongdouble
eval $setvar

case "$uselongdouble" in
true|[yY]*) uselongdouble="$define" ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that long doubles should be used,
: we may need to set or change some other defaults.
if $test -f uselongdouble.cbu; then
   echo "Your platform has some specific hints regarding long doubles, using them..."
   . ./uselongdouble.cbu
else
```

```
   case "$uselongdouble" in
 $define)
  $cat <<EOM
(Your platform does not have any specific hints for long doubles.)
EOM
 ;;
   esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/uselongdbl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_SHM_MAC.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_SHM_MAC.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_SHM_MAC d_SHM_PRM d_SHM_SEG d_SHM_IMMU: cat d_shm test rm +cc +ccflags
?MAKE: -pick add $@ %<
?S:d_SHM_MAC:
?S: Sometimes, the SHMLBA manifest needs sys/sysmacros.h, usually for
?S: the ctob() macro.
?S:.
?S:d_SHM_PRM:
?S: Sometimes, the SHMLBA manifest needs sys/param.h, usually for the
?S: NBPC constant.
?S:.
?S:d_SHM_SEG:
?S: Sometimes,
 the SHMLBA manifest needs sys/seg.h, usually for the
?S: SNUMSHFT constant.
?S:.
?S:d_SHM_IMMU:
?S: Sometimes, the SHMLBA manifest needs sys/immu.h, usually for the
?S: stob() macro.
?S:.
?C:SHMLBA_WANTS_SYSMACROS:
?C: This value tells us to include <sys/sysmacros.h> because SHMLBA
```

```
?C: needs something from there, probably the ctob() macro.
?C:.
?C:SHMLBA_WANTS_PARAM:
?C: This value tells us to include <sys/param.h> because SHMLBA needs
?C: something from there, probably the NBPC constant.
?C:.
?C:SHMLBA_WANTS_SEG:
?C: This value tells us to include <sys/seg.h> because SHMLBA needs
?C: something from there, probably the SNUMSHFT constant.
?C:.
?C:SHMLBA_WANTS_IMMU:
?C: This value tells us to include <sys/immu.h> because SHMLBA needs
?C: something from there, probably the stob() macro.  (tower_600 only?)
?C:.
?H:#$d_SHM_MAC SHMLBA_WANTS_SYSMACROS /* SHMLBA wants ctob()? */
?H:#$d_SHM_PRM SHMLBA_WANTS_PARAM /* SHMLBA wants NBPC? */
?H:#$d_SHM_SEG SHMLBA_WANTS_SEG /* SHMLBA wants
 SNUMSHFT? */
?H:#$d_SHM_IMMU SHMLBA_WANTS_IMMU /* SHMLBA wants stob()? */
?H:.
?T:flags D_sys_immu D_sys_seg D_sys_sysmacros D_sys_param
: check for SHMLBA braindamage
d_SHM_MAC="$undef"
d_SHM_PRM="$undef"
d_SHM_SEG="$undef"
d_SHM_IMMU="$undef"
if $test "$d_shm" = "$define" ; then
 echo " "
 $cat >&4 <<EOM
Checking to see if SHMLBA needs additional headers.
The headers I'll be checking are:

   sys/macros.h (for the ctob() macro)
   sys/param.h  (for NBPC)
   sys/seg.h    (for SNUMSHFT)
   sys/immu.h  (for the stob() macro)

EOM
 $cat >shm_mac.c <<'EOCP'
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/shm.h>
#ifdef I_SYS_IMMU
#include <sys/immu.h>
#endif
#ifdef I_SYS_SYSMACROS
#include <sys/sysmacros.h>
#endif
```

```
#ifdef I_SYS_PARAM
#include <sys/param.h>
#endif
#ifdef I_SYS_SEG
#include <sys/seg.h>
#endif

int main() {
 int foo = SHMLBA ;
 }
EOCP
 flags='xxx'
 for D_sys_immu in " '-DI_SYS_IMMU'; do
 for D_sys_seg in " '-DI_SYS_SEG'; do
 for D_sys_sysmacros in " '-DI_SYS_SYSMACROS';
 do
 for D_sys_param in " '-DI_SYS_PARAM'; do
  case "$flags" in
  'xxx')
   case "$D_sys_immu$D_sys_param$D_sys_sysmacros$D_sys_seg" in
   ")
    echo "Trying it normally..."
    ;;
   *)
   echo "Trying $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg"
   ;;
   esac
   if $cc $ccflags \
   $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg \
   -o shm_mac shm_mac.c >/dev/null 2>&1 ; then
    set X $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg
    shift
    flags="$*"
    echo "Succeeded with $flags"
   fi
   ;;
  esac
 done
 done
 done
 done
 case "$flags" in
 xxx)
  echo "I don't know how to keep SHMLBA happy.  Good luck!"
  ;;
 esac
 case "$flags" in
 *I_SYS_PARAM*) d_SHM_PRM="$define";;
```

```
 esac
 case "$flags" in
 *I_SYS_SYSMACROS*) d_SHM_MAC="$define";;
 esac
 case "$flags" in
 *I_SYS_SEG*) d_SHM_SEG="$define";;
 esac
 case "$flags" in
 *I_SYS_IMMU*) d_SHM_IMMU="$define";;
 esac
fi
$rm -f shm_mac*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_SHM_MAC.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnent:
?S: This variable conditionally defines HAS_GETNETENT if getnetent() is
?S: available to look up network names in some data base or another.
?S:.
?C:HAS_GETNETENT:
?C: This symbol, if defined, indicates that the getnetent() routine is
?C: available to look up network names in some data base
 or another.
?C:.
?H:#$d_getnent HAS_GETNETENT  /**/
?H:.
?LINT:set d_getnent
: see if getnetent exists
set getnetent d_getnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bzero.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bzero.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:48:15  ram
?RCS: patch12: added magic support for bzero()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:01:33  ram
?RCS: patch10: now only defines HAS_BZERO, no macro remap on memset (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bzero: Inlibc
?MAKE: -pick add $@ %<
?S:d_bzero:
?S: This variable conditionally defines the HAS_BZERO
 symbol if
?S: the bzero() routine is available to set memory to 0.
?S:.
?C:HAS_BZERO:
?C: This symbol is defined if the bzero() routine is available to
?C: set a memory block to 0.
?C:.
?H:#$d_bzero HAS_BZERO /**/
?H:.
?M:bzero: HAS_BZERO
?M:#ifndef HAS_BZERO
?M:#ifndef bzero
?M:#define bzero(s,l) memset((s),0,(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bzero
: see if bzero exists
set bzero d_bzero
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bzero.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_gethbyaddr: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbyaddr:
?S: This variable conditionally defines the HAS_GETHOSTBYADDR symbol, which
?S: indicates to the C program that the gethostbyaddr() routine is available
?S: to look up hosts by their IP addresses.
?S:.
?C:HAS_GETHOSTBYADDR:
?C: This symbol, if defined, indicates that the gethostbyaddr() routine is
?C: available to look up hosts by their IP addresses.
?C:.
?H:#$d_gethbyaddr HAS_GETHOSTBYADDR  /**/
?H:.
?LINT:set d_gethbyaddr
: see if gethostbyaddr exists
set gethostbyaddr d_gethbyaddr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethbyad.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_termio.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:54  ram
?RCS: patch36: call ./usg and ./Cppsym explicitly instead of relying on PATH
```

```
?RCS:
?RCS: Revision 3.0.1.3  1994/08/29  16:26:38  ram
?RCS: patch32: don't include all three I_* symbols in config.h
?RCS: patch32: (had forgotten to undo this part last time)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:25:03  ram
?RCS: patch27: undone ADO's fix in previous patch since it was useless
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:05:23
 ram
?RCS: patch23: now include all three defines in config.h (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_termio i_sgtty i_termios: test Inlibc Cppsym Guess Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?S:i_termio:
?S: This variable conditionally defines the I_TERMIO symbol, which
?S: indicates to the C program that it should include <termio.h> rather
?S: than <sgtty.h>.
?S:.
?S:i_termios:
?S: This variable conditionally defines the I_TERMIOS symbol, which
?S: indicates to the C program that the POSIX <termios.h> file is
?S: to be included.
?S:.
?S:i_sgtty:
?S: This variable conditionally defines the I_SGTTY symbol, which
?S: indicates to the C program that it should include <sgtty.h> rather
?S: than <termio.h>.
?S:.
?C:I_TERMIO:
?C: This symbol, if defined, indicates that the program should include
?C: <termio.h> rather than <sgtty.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of
 this symbol.
?C:.
?C:I_TERMIOS:
?C: This symbol, if defined, indicates that the program should include
?C: the POSIX termios.h rather than sgtty.h or termio.h.
?C: There are also differences in the ioctl() calls that depend on the
?C: value of this symbol.
?C:.
?C:I_SGTTY:
?C: This symbol, if defined, indicates that the program should include
?C: <sgtty.h> rather than <termio.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of this symbol.
```

```
?C:.
?H:#$i_termio I_TERMIO  /**/
?H:#$i_termios I_TERMIOS  /**/
?H:#$i_sgtty I_SGTTY  /**/
?H:.
?T:val2 val3
?LINT:set i_termio i_sgtty i_termios
: see if this is a termio system
val="$undef"
val2="$undef"
val3="$undef"
?X: Prefer POSIX-approved termios.h over all else
if $test `./findhdr termios.h`; then
 set tcsetattr i_termios
 eval $inlibc
 val3="$i_termios"
fi
echo " "
case "$val3" in
"$define") echo "You have POSIX termios.h... good!" >&4;;
*) if ./Cppsym pyr; then
  case "`/bin/universe`" in
  ucb) if $test `./findhdr
 sgtty.h`; then
    val2="$define"
    echo "<sgtty.h> found." >&4
   else
    echo "System is pyramid with BSD universe."
    ./warn "<sgtty.h> not found--you could have problems."
   fi;;
  *) if $test `./findhdr termio.h`; then
    val="$define"
    echo "<termio.h> found." >&4
   else
    echo "System is pyramid with USG universe."
    ./warn "<termio.h> not found--you could have problems."
   fi;;
  esac
?X: Start with USG to avoid problems if both usg/bsd was guessed
 elif ./usg; then
  if $test `./findhdr termio.h`; then
   echo "<termio.h> found." >&4
   val="$define"
  elif $test `./findhdr sgtty.h`; then
   echo "<sgtty.h> found." >&4
   val2="$define"
  else
   ./warn "Neither <termio.h> nor <sgtty.h> found--cross fingers!"
```

```
  fi
 else
  if $test `./findhdr sgtty.h`; then
   echo "<sgtty.h> found." >&4
   val2="$define"
  elif $test `./findhdr termio.h`; then
   echo "<termio.h> found." >&4
   val="$define"
  else
   ./warn "Neither <sgtty.h> nor <termio.h> found--cross
 fingers!"
  fi
 fi;;
esac
set i_termio; eval $setvar
val=$val2; set i_sgtty; eval $setvar
val=$val3; set i_termios; eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_termio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myinit.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:47:29  ram
?RCS: patch44: leading comment states this unit comes before option processing
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: If you want to initialize any default values, copy this unit to your
?X: personal U directory and add the assignments to the end.  This file
?X: is included after variables are initialized but before any old
?X: config.sh file is read in and before
 any Configure switch processing.
?X:
?MAKE:Myinit: Init
?MAKE: -pick add $@ %<
```

```
?LINT: nocomment
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Myinit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_pthread_attr_setscope: Inlibc
?MAKE: -pick add $@ %<
?S:d_pthread_attr_setscope:
?S: This variable conditionally defines HAS_PTHREAD_ATTR_SETSCOPE if
?S: pthread_attr_setscope() is available to set the contention scope
?S: attribute of a thread attribute object.
?S:.
?C:HAS_PTHREAD_ATTR_SETSCOPE:
?C: This symbol, if defined, indicates that the pthread_attr_setscope
?C: system call is available to set the contention scope attribute of
?C: a thread attribute object.
?C:.
?H:#$d_pthread_attr_setscope HAS_PTHREAD_ATTR_SETSCOPE  /**/
?H:.
?LINT:set
 d_pthread_attr_setscope
: see if pthread_attr_setscope exists
set pthread_attr_setscope d_pthread_attr_setscope
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_pthread_attr_ss.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chsize.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_chsize.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_chsize: Inlibc
?MAKE: -pick add $@ %<
?S:d_chsize:
?S: This variable conditionally defines the CHSIZE symbol, which
?S: indicates to the C program that the chsize() routine is available
?S: to truncate files.  You might need a -lx to get this routine.
?S:.
?C:HAS_CHSIZE (CHSIZE):
?C: This symbol, if defined, indicates that the chsize
 routine is available
?C: to truncate files.  You might need a -lx to get this routine.
?C:.
?H:#$d_chsize HAS_CHSIZE  /**/
?H:.
?LINT:set d_chsize
: see if chsize exists
set chsize d_chsize
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mboxchar.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mboxchar.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:13:12  ram
?RCS: patch56: ensure ctrl-A characters are visible in prompt (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:11:22  ram
?RCS: patch23: added support for MMDF mailboxes (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:15  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:mboxchar: cat package shsharp Myread Oldconfig
?MAKE: -pick add $@ %<
?S:mboxchar:
?S: This variable
 contains the eventual value of the MBOXCHAR symbol,
?S: which is how a C program can identify a file as a mailbox.
?S:.
?C:MBOXCHAR:
?C: This symbol contains a character which will match the beginning
?C: of a mailbox file.
?C:.
?H:#define MBOXCHAR '$mboxchar'  /**/
?H:.
?T:CTRLA
?INIT:CTRLA=`echo a | tr a '\001'`
: determine how to determine when a file is a mailbox
case "$mboxchar" in
") dflt=F;;
?X: The following ^A is two-chars to ensure it will print out -- WED
"$CTRLA") dflt='^A';;
*)  dflt="$mboxchar";;
esac
$cat <<EOM

In saving articles, $package wants to differentiate between saving to
mailbox format files and normal files.  It does this by examining the
first character of the file in question.  On most systems the first line
starts with "From ...", so the first character is an F.  Other systems
use magic cookies like control codes between articles, so one of those
would be first.  For example, MMDF messages are separated with lines of
four control-A's (you may specify one
 as ^A, i.e. caret A).

EOM
rp="What's the first character of a mailbox file?"
. ./myread
mboxchar="$ans"
case "$mboxchar" in
'F') ;;
"$CTRLA") ;;
'^A'|'^a') mboxchar="$CTRLA";;
*)  cat <<'EOM'

You will need to edit the shell script mbox.saver to properly append an
article to a mailbox.  The arguments to the script are documented in
EOM
 case "$shsharp" in
```

```
 false) echo "comments in mbox.saver.std.";;
 true) echo "comments in the shell script itself.";;
 esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mboxchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setvbuf.U,v 3.0.1.1 1994/08/29 16:11:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setvbuf.U,v $
?RCS:
?MAKE:d_setvbuf: Inlibc
?MAKE: -pick add $@ %<
?S:d_setvbuf:
?S: This variable conditionally defines the HAS_SETVBUF symbol, which
?S: indicates to the C program that the setvbuf() routine is available
?S: to change buffering on an open stdio stream.
?S:.
?C:HAS_SETVBUF :
?C: This symbol, if defined, indicates that the setvbuf routine is
?C: available to change buffering on an open stdio stream.
?C: to a line-buffered mode.
?C:.
?H:#$d_setvbuf HAS_SETVBUF  /**/
?H:.
?LINT:set d_setvbuf
: see if setvbuf exists
set setvbuf d_setvbuf
eval $inlibc
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setvbuf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: instubperl.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:installusrbinperl: installbin cat bin Myread Setvar test Devel
?MAKE: -pick add $@ %<
?LINT:set installusrbinperl
?Y:TOP
?S:installusrbinperl:
?S: This variable tells whether Perl should be installed also as
?S: /usr/bin/perl in addition to
?S: $installbin/perl
?S:.
?C:INSTALL_USR_BIN_PERL:
?C: This symbol, if defined, indicates that Perl is to be installed
?C: also as /usr/bin/perl.
?C:.
?H:#$installusrbinperl INSTALL_USR_BIN_PERL /**/
?H:.
: determine
 whether to install perl also as /usr/bin/perl

echo " "
if $test -d /usr/bin -a "X$installbin" != X/usr/bin; then
 $cat <<EOM
Many scripts expect perl to be installed as /usr/bin/perl.

If you want to, I can install the perl you are about to compile
as /usr/bin/perl (in addition to $bin/perl).
EOM
 if test -f /usr/bin/perl; then
    $cat <<EOM

However, please note that because you already have a /usr/bin/perl,
overwriting that with a new Perl would very probably cause problems.
Therefore I'm assuming you don't want to do that (unless you insist).

EOM
    case "$installusrbinperl" in
    "$define"|[yY]*) dflt='y';;
    *)   dflt='n';;
    esac
 else
    $cat <<EOM

Since you don't have a /usr/bin/perl I'm assuming creating one is okay.
```

```
EOM
    case "$installusrbinperl" in
    "$undef"|[nN]*) dflt='n';;
    *)   dflt='y';;
    esac
 fi
 rp="Do you want to install perl as /usr/bin/perl?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef" ;;
 esac
else
 val="$undef"
fi
set
 installusrbinperl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/instubperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sitearch.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:21:30  ram
?RCS: patch61: created
?RCS:
?MAKE:sitearch sitearchexp installsitearch: afs cat Getfile \
 Oldconfig Prefixit prefix test archname sitelib
?MAKE: -pick add $@ %<
?Y:TOP
?S:sitearch:
?S: This variable contains the eventual value of the SITEARCH symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this
```

```
 directory while performing installation (with ~ substitution).
?S:.
?S:sitearchexp:
?S: This variable is the ~name expanded version of sitearch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installsitearch:
?S: This variable is really the same as sitearchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:SITEARCH:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Individual sites may place their own extensions and modules in
?C: this directory.
?C:.
?C:SITEARCH_EXP:
?C: This symbol contains the ~name expanded version of SITEARCH, to be used
?C: in programs that are not prepared to deal
 with ~ expansion at run-time.
?C:.
?H:#define SITEARCH "$sitearch"  /**/
?H:#define SITEARCH_EXP "$sitearchexp"  /**/
?H:.
?T:xxx
: determine where site specific architecture-dependent libraries go.
xxx=`echo $sitelib/$archname | sed 's!^$prefix!!'`
: xxx is usually lib/site_perl/archname.
set sitearch sitearch none
eval $prefixit
case "$sitearch" in
") dflt="$sitelib/$archname" ;;
*) dflt="$sitearch" ;;
esac
$cat <<EOM

The installation process will also create a directory for
architecture-dependent site-specific extensions and modules.

EOM
fn=nd~+
rp='Pathname for the site-specific architecture-dependent library files?'
. ./getfile
if $test "X$sitearchexp" != "X$ansexp"; then
```

```
 installsitearch=''
fi
sitearch="$ans"
sitearchexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case
 "$installsitearch" in
 '') dflt=`echo $sitearchexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installsitearch";;
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installsitearch="$ans"
else
 installsitearch="$sitearchexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sitearch.U
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```
?RCS: $Id: Unix.U,v 3.0.1.1 1997/02/28 15:20:06 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Unix.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:06  ram
?RCS: patch61: created
?RCS:
?X:
?X: The purpose of this unit is to define things that are common across all
?X: known UNIX platforms. If Configure is ported/used on a non-UNIX
?X: environment, then some of the following variables can be redefined in hint
?X: files.
```

```
?X:
?MAKE:Unix _exe _a _o exe_ext lib_ext obj_ext path_sep \
 firstmakefile archobjs rm_try: Oldconfig rm
?MAKE: -pick add $@ %<
?S:_exe:
?S: This
 variable defines the extension used for executable files.
?S: DJGPP, Cygwin and OS/2 use '.exe'.  Stratus VOS uses '.pm'.
?S: On operating systems which do not require a specific extension
?S: for executable files, this variable is empty.
?S:.
?S:_a:
?S: This variable defines the extension used for ordinary library files.
?S: For unix, it is '.a'.  The '.' is included.  Other possible
?S: values include '.lib'.
?S:.
?S:_o:
?S: This variable defines the extension used for object files.
?S: For unix, it is '.o'.  The '.' is included.  Other possible
?S: values include '.obj'.
?S:.
?S:firstmakefile:
?S: This variable defines the first file searched by make.  On unix,
?S: it is makefile (then Makefile).  On case-insensitive systems,
?S: it might be something else.  This is only used to deal with
?S: convoluted make depend tricks.
?S:.
?S:archobjs:
?S: This variable defines any additional objects that must be linked
?S: in with the program on this architecture.  On unix, it is usually
?S: empty.
  It is typically used to include emulations of unix calls
?S: or other facilities.  For perl on OS/2, for example, this would
?S: include os2/os2.obj.
?S:.
?X: Metaconfig's Obsolete symbol stuff is too over-eager.  In the
?X: perl sources, it picks up things like "P" and "FLOCK" that are
?X: not used in the way Metaconfig thinks they are.  Thus I can't
?X: just declare these obsolete and then run metaconfig -o.
?X: Instead, I'll just handle them here.
?X: Sadly, history has conspired to give us a web of definitions;
?X: this could have been much simpler.
?S:lib_ext:
?S: This is an old synonym for _a.
?S:.
?S:exe_ext:
?S: This is an old synonym for _exe.
?S:.
```

```
?S:obj_ext:
?S: This is an old synonym for _o.
?S:.
?S:path_sep:
?S: This is an old synonym for p_ in Head.U, the character
?S: used to separate elements in the command shell search PATH.
?S:.
?S:rm_try:
?S: This is a cleanup variable for try test programs.
?S: Internal Configure use only.
?S:.
?LINT: change p_
?INIT::
 Trailing extension.  Override this in a hint file, if needed.
?INIT:: Extra object files, if any, needed on this platform.
?INIT:archobjs="
: Define several unixisms.
: Hints files or command line option can be used to override them.
: The convoluted testing is in case hints files set either the old
: or the new name.
case "$_exe" in
") case "$exe_ext" in
 ") ;;
 *) _exe="$exe_ext" ;;
 esac
 ;;
esac
case "$_a" in
") case "$lib_ext" in
   ") _a='.a';;
 *) _a="$lib_ext" ;;
 esac
 ;;
esac
case "$_o" in
") case "$obj_ext" in
 ") _o='.o';;
 *) _o="$obj_ext";;
 esac
 ;;
esac
case "$p_" in
") case "$path_sep" in
 ") p_=':';;
 *) p_="$path_sep";;
 esac
 ;;
esac
```

```
exe_ext=$_exe
lib_ext=$_a
obj_ext=$_o
path_sep=$p_

rm_try="$rm -f try try$_exe a.out .out try.[cho] try.$_o core core.try* try.core*"

@if firstmakefile
: Which makefile gets called first.  This is used by make depend.
case "$firstmakefile" in
") firstmakefile='makefile';;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Unix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgctl:
?S: This variable conditionally defines the HAS_MSGCTL symbol, which
?S: indicates to the C program that the msgctl() routine is available.
?S:.
?C:HAS_MSGCTL:
?C: This symbol, if defined, indicates that the msgctl() routine is
?C: available to perform message control operations.
?C:.
?H:#$d_msgctl
 HAS_MSGCTL  /**/
?H:.
?LINT:set d_msgctl
: see if msgctl exists
```

```
set msgctl d_msgctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stdlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdlib: Nothing
?MAKE: -pick add $@ %<
?S:i_stdlib:
?S: This variable unconditionally defines the I_STDLIB symbol.
?S:.
?C:I_STDLIB:
?C: This symbol is always defined, indicating that <stdlib.h> exists
?C: and should be included.
?C:.
?H:#define I_STDLIB  /**/
?H:.
: stub, used only to satisfy other units
i_stdlib='define'
```

Found in
 path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_stdlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: License or the Artistic License, as specified in the WRITEME file.
?RCS:
?MAKE:d_writev: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_writev:
?S: This variable conditionally defines the HAS_WRITEV symbol, which
?S: indicates to the C program that the writev() routine is available.
?S:.
?C:HAS_WRITEV:
?C: This symbol, if defined, indicates that the writev routine is
?C: available to do scatter writes.
?C:.
?H:#$d_writev HAS_WRITEV  /**/
?H:.
?LINT:set d_writev
: see if writev exists
set writev d_writev
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_writev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strerror_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_strerror_r strerror_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_strerror_r:
?S: This variable conditionally defines the HAS_STRERROR_R symbol,
?S: which indicates to the C program that the strerror_r()
?S: routine is available.
?S:.
?S:strerror_r_proto:
?S: This variable encodes the prototype of strerror_r.
?S: It is zero if d_strerror_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_strerror_r
?S: is defined.
?S:.
?C:HAS_STRERROR_R:
?C: This symbol, if defined, indicates that the strerror_r routine
?C: is available to strerror
 re-entrantly.
?C:.
?C:STRERROR_R_PROTO:
```

```
?C: This symbol encodes the prototype of strerror_r.
?C: It is zero if d_strerror_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_strerror_r
?C: is defined.
?C:.
?H:#$d_strerror_r HAS_STRERROR_R /**/
?H:#define STRERROR_R_PROTO $strerror_r_proto /**/
?H:.
?T:try hdrs d_strerror_r_proto
: see if strerror_r exists
set strerror_r d_strerror_r
eval $inlibc
case "$d_strerror_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h define string.h"
 case "$d_strerror_r_proto:$usethreads" in
 ":define") d_strerror_r_proto=define
  set d_strerror_r_proto strerror_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_strerror_r_proto" in
 define)
 case "$strerror_r_proto" in
 "|0) try='int strerror_r(int, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && strerror_r_proto=I_IBW ;;
 esac
 case "$strerror_r_proto" in
 "|0) try='int strerror_r(int, char*, int);'
 ./protochk "$extern_C $try" $hdrs && strerror_r_proto=I_IBI
 ;;
 esac
 case "$strerror_r_proto" in
 "|0) try='char* strerror_r(int, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && strerror_r_proto=B_IBW ;;
 esac
 case "$strerror_r_proto" in
 "|0) d_strerror_r=undef
  strerror_r_proto=0
  echo "Disabling strerror_r, cannot determine prototype." >&4 ;;
 * ) case "$strerror_r_proto" in
  REENTRANT_PROTO*) ;;
  *) strerror_r_proto="REENTRANT_PROTO_$strerror_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
```

```
  define) echo "strerror_r has no prototype, not using it." >&4 ;;
  esac
  d_strerror_r=undef
  strerror_r_proto=0
  ;;
 esac
 ;;
*) strerror_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strerror_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sysman.U,v 3.0.1.2 1994/06/20 07:08:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sysman.U,v $
?RCS: Revision 3.0.1.2  1994/06/20  07:08:43  ram
?RCS: patch30: now explicitly states that /usr/man/man1 is the default
?RCS: patch30: added /usr/local/man/man1 to the search list
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:13:50  ram
?RCS: patch10: added support for /local/man/man1 (WAD)
?RCS: patch10: added temporary syspath variable to cut down on line length
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:55  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:sysman: test Loc Oldconfig
?MAKE: -pick add $@ %<
?S:sysman:
?S: This variable holds the place where the manual is located on this
?S: system. It is not the place where the user wants to put his manual
?S: pages. Rather it is the place where Configure may look to find manual
?S: for unix commands (section 1 of the manual usually). See mansrc.
?S:.
?T:syspath
: determine where manual pages are on this system
```

```
echo " "
case "$sysman" in
")
 syspath='/usr/share/man/man1 /usr/man/man1'
 syspath="$syspath /usr/man/mann /usr/man/manl /usr/man/local/man1"
 syspath="$syspath /usr/man/u_man/man1"
 syspath="$syspath /usr/catman/u_man/man1 /usr/man/l_man/man1"
 syspath="$syspath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 syspath="$syspath /usr/man/man.L /local/man/man1 /usr/local/man/man1"
 sysman=`./loc . /usr/man/man1 $syspath`
 ;;
esac
if $test -d "$sysman"; then
 echo "System manual is in $sysman." >&4
else
 echo "Could not find manual pages in source form."
 >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sysman.U
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```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scannl.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:27  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:59:12  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Does the scanf routine read "\n" correctly ? This is was not
?X: the case on AIX...
?X:
?MAKE:d_scannl: cat +cc +ccflags rm Setvar
```

```
?MAKE: -pick add $@ %<
?S:d_scannl:
?S: This
 variable conditionally defines SCAN_NL, which indicates
?S: wether the C library routines scanf() and friends can deal with
?S: a '\n' in the input correctly. They do most of the time.
?S:.
?C:SCAN_NL:
?C: This symbol is defined if the C library routines scanf() and friends
?C: can deal with a '\n' in the input correctly, so that you can say
?C: scanf("%d\n"); instead of scanf("%d"); getc(c); to handle the '\n'.
?C:.
?H:#$d_scannl SCAN_NL  /* scanf("%d\n") works */
?H:.
?F:!try
?LINT:set d_scannl
: does scanf handle "\n" correctly ?
echo " "
val="$define"
?X: I really want to say "\n" instead of '\n', because I am referring
?X: to the string given as argument to scanf().
echo 'Let""""s see if scanf() handles "\\n" correctly...' >&4
$cat >try.c <<'EOCP'
int main()
{
 int i = 0, j = 0;
 scanf("%d\n%d", &i, &j);
 if (j != 3)
  exit(1);
 exit(0);
}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 if ./try <<'EOD'
2
3
EOD
 then
  echo "Yes, it does."
 else
  echo "No, it doesn't."
  val="$undef"
 fi
else
 echo
 "(I can't seem to compile the test program. Assuming it does.)"
fi
set d_scannl
```

```
eval $setvar
$rm -f try.* try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scannl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_NOFILE.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:38  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:nofile d_gettblsz tablesize: Myread Guess cat +cc +ccflags +libs \
 test rm Csym
?MAKE: -pick add $@ %<
?S:nofile:
?S: This variable contains the number of file descriptors available to the
?S: process.
?S:.
?S:d_gettblsz:
?S: This variable conditionally handles remapping
 of the getdtablesize()
?S: subroutine to ulimit(4,0), or the NOFILE manifest constant.
?S:.
?S:tablesize:
?S: This variable contains either the 'NOFILE' constant or 'ulimit(4, 0L)'
?S: and is used as the remapped value for the getdtablesize() macro.
?S:.
?C:getdtablesize:
?C: This catches use of the getdtablesize() subroutine, and remaps it
?C: to either ulimit(4,0) or NOFILE, if getdtablesize() isn't available.
?C:.
?C:VAL_NOFILE:
?C: This symbol contains the number of file descriptors available to the
?C: process, as determined at configuration time. Unless a static constant
?C: is needed, you should rely on getdtablesize() to obtain that number.
```

```
?C:.
?H:#$d_gettblsz getdtablesize() $tablesize /**/
?H:#define VAL_NOFILE $nofile /* Number of file descriptors */
?H:.
?F:!nofile
?T:d_ulimit4 val
: see if getdtablesize exists
echo " "
?X: Revert logical value (d_gettblsz is undef iff getdtablesize is present)
case "$d_gettblsz" in
$define) d_gettblsz="$undef";;
$undef) d_gettblsz="$define";;
esac
if
 set getdtablesize val -f d_gettblsz; eval $csym; $val; then
 echo 'getdtablesize() found.' >&4
 d_gettblsz="$undef"
 tablesize=''
@if VAL_NOFILE || nofile
 $cat >nofile.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", getdtablesize());
}
EOCP
 nofile=''
 if $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1; then
  nofile=`./nofile 2>/dev/null`
 fi
 if $test "$nofile"; then
  echo "(You have $nofile file descriptors available per process.)"
 else
  nofile='20'
  if ./bsd; then
   nofile='64'
  fi
 echo "(Hmm... Let's say you have $nofile file descriptors available.)"
 fi
@end
else
 echo 'getdtablesize() NOT found...' >&4
 if set ulimit val -f; eval $csym; $val; then
  echo 'Maybe ulimit(4,0) will work...'
  $cat >nofile.c <<'EOCP'
#include <stdio.h>
#ifdef GETPARAM_H
#include <sys/param.h>
```

```
#endif
int main()
{
 printf("%d %d\n",
#ifdef NOFILE
  NOFILE,
#else
  0,
#endif
  ulimit(4,0));
  exit(0);
}
EOCP
  if $cc $ccflags -DGETPARAM_H -o nofile nofile.c $libs
 >/dev/null 2>&1 \
   || $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1 ; then
   set `./nofile`
   d_gettblsz=$1
   d_ulimit4=$2
   if $test "$d_ulimit4" -lt 0; then
    echo "Your ulimit() call doesn't tell me what I want to know."
    echo "We'll just use NOFILE in this case."
    nofile=$d_gettblsz
    d_gettblsz="$define"
    tablesize='NOFILE'
   else
    if $test "$d_gettblsz" -gt 0; then
    echo "Your system defines NOFILE to be $d_gettblsz, and" >&4
    else
    echo "I had trouble getting NOFILE from your system, but" >&4
    fi
echo "ulimit returns $d_ulimit4 as the number of available file descriptors." >&4
    dflt='y';
    echo " "
 rp='Should I use ulimit to get the number of available file descriptors?'
    . ./myread
    case "$ans" in
    y*)
     nofile=$d_ulimit4
     d_gettblsz="$define"
     tablesize='ulimit(4, 0L)'
     echo "Using ulimit(4,0)."
     ;;
    *)
     nofile=$d_gettblsz
     d_gettblsz="$define"
     tablesize='NOFILE'
     echo "Using NOFILE."
```

```
    ;;
   esac
  fi
 else
  echo
"Strange, I couldn't get my test program to compile."
  echo "We'll just use NOFILE in this case."
  d_gettblsz="$define"
  tablesize='NOFILE'
  nofile=''
 fi
else
 echo 'Using NOFILE instead.'
 d_gettblsz="$define"
 tablesize='NOFILE'
 nofile=''
fi
fi
@if VAL_NOFILE || nofile
case "$nofile" in
'')
 $cat >nofile.c <<'EOCP'
#include <stdio.h>
#ifdef GETPARAM_H
#include <sys/param.h>
#endif
int main()
{
 printf("%d\n",
#ifdef NOFILE
  NOFILE,
#else
  0,
#endif
  );
  exit(0);
}
EOCP
 if $cc $ccflags -DGETPARAM_H -o nofile nofile.c $libs >/dev/null 2>&1 \
  || $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1 ; then
  nofile=`./nofile 2>/dev/null`
 fi
 if $test "$nofile"; then
  echo "(You have $nofile file descriptors available per process.)"
 else
  nofile='20'
  if ./bsd; then
   nofile='64'
```

```
  fi
 echo "(Hmm... Let's say you have $nofile file descriptors available.)"
 fi
 ;;
esac
@end
$rm -f nofile*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_NOFILE.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: newsspool.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: newsspool.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:newsspool newsspoolexp: Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:newsspool:
?S: This variable contains the eventual value of the NEWSSPOOL symbol,
?S: which is the directory name where news articles are spooled.  It
?S: may have a ~ on the front of it.
?S:.
?S:newsspoolexp:
?S: This is the same as the newsspool variable, but is
 filename expanded
?S: at configuration time, for programs not wanting to deal with it at
?S: run-time.
?S:.
?C:NEWSSPOOL:
?C: This symbol contains the directory name where news articles are
?C: spooled.  The program must be prepared to do ~ expansion on it.
?C:.
?C:NEWSSPOOL_EXP:
?C: This is the same as NEWSSPOOL, but is filename expanded at
?C: configuration time, for use in programs not willing to do so
?C: at run-time.
?C:.
```

```
?H:#define NEWSSPOOL "$newsspool" /**/
?H:#define NEWSSPOOL_EXP "$newsspoolexp" /**/
?H:.
: locate news spool directory
case "$newsspool" in
")
 dflt=/usr/spool/news
 ;;
*) dflt="$newsspool";;
esac
echo " "
fn=d~
rp='Where are news spooled?'
. ./getfile
newsspool="$ans"
newsspoolexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/newsspool.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_newsadm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_newsadm.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:36:53  ram
?RCS: patch61: added Guess dependency
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:14:33  ram
?RCS: patch36: call ./eunice explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_newsadm newsadmin: cat contains Guess Setvar Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_newsadm:
?S: This variable
 conditionally defines the NEWS_ADMIN symbol, which
?S: indicates to the C program that there is a user who is in charge
?S: of news administration.
```

```
?S:.
?S:newsadmin:
?S: This variable holds the login name of the news administrator, if any.
?S:.
?C:NEWS_ADMIN (NEWSADMIN):
?C: This symbol, if defined, contains the login name of the news
?C: administrator.
?C:.
?H:#$d_newsadm NEWS_ADMIN "$newsadmin"  /**/
?H:.
?LINT:set d_newsadm
: get news administrator name
case "$newsadmin" in
")
 if $contains "^news:" /etc/passwd >/dev/null 2>&1 ; then
  dflt=news
 elif $contains "^usenet:" /etc/passwd >/dev/null 2>&1 ; then
  dflt=usenet
 elif ./eunice; then
  dflt=system
 else
  dflt=root
 fi
 ;;
*)
 dflt="$newsadmin"
 ;;
esac
$cat <<'EOM'

Many systems keep their news in a private directory, or have a non-superuser
in charge of administering news.  (If you don't have such a user, take the
default answer.)  I need the login name (not directory) which is used for
news administration.

EOM
rp="News
 admin login?"
. ./myread
newsadmin="$ans"
case "$newsadmin" in
root) val="$undef" ;;
*) val="$define" ;;
esac
set d_newsadm
eval $setvar

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_newsadm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_itimer.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_itimer.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_itimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_itimer:
?S: This variable conditionally defines the HAS_ITIMER symbol, which
?S: indicates that the setitimer() routine exists.  The setitimer()
?S: routine supports sub-second accuracy for one real-time and two
?S: cpu clocks.
?S:.
?C:HAS_ITIMER (ITIMER):
?C: This symbol, if defined, indicates
 that the setitimer() routine exists.
?C:.
?H:#$d_itimer HAS_ITIMER /**/
?H:.
?LINT:set d_itimer
: see if setitimer exists
set setitimer d_itimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_itimer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_time.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:43  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:16:38  ram
?RCS: patch36: now uses new Typedef unit to compute type information (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Maybe <sys/types.h> should be included?
?X:INC: i_systypes
?MAKE:d_time timetype: Csym Setvar Findhdr Myread Typedef
?MAKE: -pick add $@ %<
?S:d_time:
?S: This
 variable conditionally defines the HAS_TIME symbol, which indicates
?S: that the time() routine exists.  The time() routine is normally
?S: provided on UNIX systems.
?S:.
?S:timetype:
?S: This variable holds the type returned by time(). It can be long,
?S: or time_t on BSD sites (in which case <sys/types.h> should be
?S: included). Anyway, the type Time_t should be used.
?S:.
?C:HAS_TIME (TIMER):
?C: This symbol, if defined, indicates that the time() routine exists.
?C:.
?C:Time_t (TIMETYPE):
?C: This symbol holds the type returned by time(). It can be long,
?C: or time_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_time HAS_TIME  /**/
?H:#define Time_t $timetype  /* Time type */
?H:.
?LINT:set d_time
: see if time exists
echo " "
if set time val -f d_time; eval $csym; $val; then
 echo 'time() found.' >&4
 val="$define"
 set time_t timetype long stdio.h sys/types.h
 eval $typedef
 dflt="$timetype"
 echo " "
```

```
 rp="What type is returned by time() on this
 system?"
 . ./myread
 timetype="$ans"
else
 echo 'time() not found, hope that will do.' >&4
 val="$undef"
 timetype='int';
fi
set d_time
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2011, H.Merijn Brand & Tony Cook
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:st_ino_size st_ino_sign: cat echo i_stdlib Setvar Compile run rm_try
?MAKE: -pick add $@ %<
?S:st_ino_sign:
?S: This variable contains the signedness of struct stat's st_ino.
?S: 1 for unsigned, -1 for signed.
?S:.
?S:st_ino_size:
?S: This variable contains the size of struct stat's st_ino in bytes.
?S:.
?C:ST_INO_SIZE:
?C: This variable contains the size of struct stat's st_ino in bytes.
?C:.
?C:ST_INO_SIGN:
?C: This symbol holds the signedness of struct stat's st_ino.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define ST_INO_SIGN
 $st_ino_sign /* st_ino sign */
?H:#define ST_INO_SIZE $st_ino_size /* st_ino size */
?H:.
?F:!try
: Check the size of st_ino
$echo " "
$echo "Checking the size of st_ino..." >&4
```

```
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   struct stat st;
   printf("%d\n", (int)sizeof(st.st_ino));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 val=`$run ./try`
 case "$val" in
 ") st_ino_size=4
  $echo "(I can't execute the test program--guessing $st_ino_size.)" >&4
  ;;
 *) st_ino_size=$val
  $echo "Your st_ino is $st_ino_size bytes long."
  ;;
 esac
else
 st_ino_size=4
 $echo "(I can't compile the test program--guessing $st_ino_size.)" >&4
fi
$rm_try

: Check if st_ino is signed
$echo " "
$echo "Checking the sign of st_ino..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
int main() {
 struct stat foo;
       foo.st_ino = -1;
 if (foo.st_ino < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set
 try
if eval $compile; then
```

```
 val=`$run ./try`
 case "$val" in
 ") st_ino_sign=1
  $echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) st_ino_sign=$val
  case "$st_ino_sign" in
   1) $echo "Your st_ino is unsigned." ;;
  -1) $echo "Your st_ino is signed."   ;;
  esac
  ;;
 esac
else
 st_ino_sign=1
 $echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/st_ino_def.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_ldbl_dig: Myread contains cat rm Setvar \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_ldbl_dig:
?S: This variable conditionally defines d_ldbl_dig if this system's
?S: header files provide LDBL_DIG, which is the number of significant
?S: digits in a long double precision number.
?S:.
?C:HAS_LDBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol LDBL_DIG, which is the number
?C: of significant digits in a long double precision number. Unlike
?C: for
 DBL_DIG, there's no good guess for LDBL_DIG if it is undefined.
?C:.
?H:#$d_ldbl_dig HAS_LDBL_DIG /* */
```

```
?H:.
?F:!ldbl_dig.c
?LINT:set d_ldbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >ldbl_dig.c <<EOM
#include <limits.h>
#include <float.h>
#ifdef LDBL_DIG
printf("Contains LDBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < ldbl_dig.c >ldbl_dig.E 2>/dev/null
if $contains 'LDBL_DIG' ldbl_dig.E >/dev/null 2>&1; then
 echo "LDBL_DIG found." >&4
 val="$define"
else
 echo "LDBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f ldbl_dig.?
set d_ldbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ldbl_dig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016 Dagfinn Ilmari Mannsker & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_siginfo_si_errno d_siginfo_si_pid d_siginfo_si_uid d_siginfo_si_addr d_siginfo_si_status
d_siginfo_si_band d_siginfo_si_value d_siginfo_si_fd: d_sigaction pidtype uidtype Hasfield_t
?MAKE: -pick add $@ %<
?S:d_siginfo_si_errno:
?S: This variable conditionally defines the HAS_SIGINFO_SI_ERRNO symbol,
?S: which indicates that the siginfo_t struct has the si_errno member.
?S:.
?S:d_siginfo_si_pid:
?S: This variable conditionally defines the HAS_SIGINFO_SI_PID symbol,
?S: which indicates that the siginfo_t struct has the si_pid member.
?S:.
?S:d_siginfo_si_uid:
?S: This variable conditionally defines the HAS_SIGINFO_SI_UID symbol,
?S: which indicates that the siginfo_t struct has the si_uid member.
?S:.
```

```
?S:d_siginfo_si_addr:
?S: This
 variable conditionally defines the HAS_SIGINFO_SI_ADDR symbol,
?S: which indicates that the siginfo_t struct has the si_addr member.
?S:.
?S:d_siginfo_si_status:
?S: This variable conditionally defines the HAS_SIGINFO_SI_STATUS symbol,
?S: which indicates that the siginfo_t struct has the si_status member.
?S:.
?S:d_siginfo_si_band:
?S: This variable conditionally defines the HAS_SIGINFO_SI_BAND symbol,
?S: which indicates that the siginfo_t struct has the si_band member.
?S:.
?S:d_siginfo_si_value:
?S: This variable conditionally defines the HAS_SIGINFO_SI_VALUE symbol,
?S: which indicates that the siginfo_t struct has the si_value member.
?S:.
?S:d_siginfo_si_fd:
?S: This variable conditionally defines the HAS_SIGINFO_SI_FD symbol,
?S: which indicates that the siginfo_t struct has the si_fd member.
?S:.
?C:HAS_SIGINFO_SI_ERRNO:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_errno member
?C:.
?C:HAS_SIGINFO_SI_PID:
?C: This
 symbol, if defined, indicates that siginfo_t has the
?C: si_pid member
?C:.
?C:HAS_SIGINFO_SI_UID:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_uid member
?C:.
?C:HAS_SIGINFO_SI_ADDR:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_addr member
?C:.
?C:HAS_SIGINFO_SI_STATUS:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_status member
?C:.
?C:HAS_SIGINFO_SI_BAND:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_band member
?C:.
?C:HAS_SIGINFO_SI_VALUE:
?C: This symbol, if defined, indicates that siginfo_t has the
```

```
?C: si_value member
?C:.
?C:HAS_SIGINFO_SI_FD:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_fd member
?C:.
?H:#$d_siginfo_si_errno HAS_SIGINFO_SI_ERRNO /**/
?H:#$d_siginfo_si_pid HAS_SIGINFO_SI_PID /**/
?H:#$d_siginfo_si_uid HAS_SIGINFO_SI_UID /**/
?H:#$d_siginfo_si_addr HAS_SIGINFO_SI_ADDR /**/
?H:#$d_siginfo_si_status HAS_SIGINFO_SI_STATUS /**/
?H:#$d_siginfo_si_band HAS_SIGINFO_SI_BAND /**/
?H:#$d_siginfo_si_value HAS_SIGINFO_SI_VALUE /**/
?H:#$d_siginfo_si_fd HAS_SIGINFO_SI_FD /**/
?H:.
:
 see what siginfo fields we have
case "$d_sigaction" in
"$define")
 echo "Checking if your siginfo_t has si_errno field...">&4
 set d_siginfo_si_errno siginfo_t int si_errno $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_pid field...">&4
 set d_siginfo_si_pid siginfo_t $pidtype si_pid $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_uid field...">&4
 set d_siginfo_si_uid siginfo_t $uidtype si_uid $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_addr field...">&4
 set d_siginfo_si_addr siginfo_t "void *" si_addr $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_status field...">&4
 set d_siginfo_si_status siginfo_t int si_status $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_band field...">&4
 set
 d_siginfo_si_band siginfo_t long si_band $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_value field...">&4
 set d_siginfo_si_value siginfo_t "union sigval" si_value $d_sigaction signal.h
 eval $hasfield_t;
```

```
 echo "Checking if your siginfo_t has si_fd field...">&4
 set d_siginfo_si_fd siginfo_t int si_fd $d_sigaction signal.h
 eval $hasfield_t;

 ;;
*)
 d_siginfo_si_errno="$undef"
 d_siginfo_si_pid="$undef"
 d_siginfo_si_uid="$undef"
 d_siginfo_si_addr="$undef"
 d_siginfo_si_status="$undef"
 d_siginfo_si_band="$undef"
 d_siginfo_si_value="$undef"
 d_siginfo_si_fd="$undef"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_siginfo_si.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_ndbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:53  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_ndbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_ndbm (d_ndbm):
?S: This variable conditionally defines the I_NDBM symbol, which
?S: indicates to the C program that <ndbm.h> exists and should
?S: be included.
?S:.
?C:I_NDBM (HAS_NDBM NDBM):
?C: This
```

```
 symbol, if defined, indicates that <ndbm.h> exists and should
?C: be included.
?C:.
?H:#$i_ndbm I_NDBM /**/
?H:.
?T:t_ndbm d_dbm_open
?LINT:set i_ndbm
: see if ndbm.h is available
?X: t_ndbm is a tentative check.  We might just have the .h, not the lib -- ADO
set ndbm.h t_ndbm
eval $inhdr
case "$t_ndbm" in
$define)
 : see if dbm_open exists
 set dbm_open d_dbm_open
 eval $inlibc
 case "$d_dbm_open" in
 $undef)
  t_ndbm="$undef"
  echo "We won't be including <ndbm.h>"
  ;;
 esac
 ;;
esac
val="$t_ndbm"
set i_ndbm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_ndbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: package.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:27:21  ram
?RCS: patch36: beware of non-ascii character sets when translating case
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:37:02  ram
?RCS: patch14: skip definition of spackage if not otherwise used
```

```
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:10  ram
?RCS: patch10: added spackage, suitable for starting sentences
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:package spackage:
 Nothing
?MAKE: -pick wipe $@ %<
?S:package:
?S: This variable contains the name of the package being constructed.
?S: It is primarily intended for the use of later Configure units.
?S:.
?S:spackage:
?S: This variable contains the name of the package being constructed,
?S: with the first letter uppercased, i.e. suitable for starting
?S: sentences.
?S:.
?C:PACKAGE:
?C: This variable contains the name of the package being built.
?C:.
?H:#define PACKAGE "$package"
?H:.
?T:first last
: set package name
package='<PACKAGENAME>'
@if spackage
first=`echo $package | sed -e 's/^\(.\).*/\1/'`
last=`echo $package | sed -e 's/^.\(.*\)/\1/'`
?X:
?X: So early in the Configure script, we don't have ./tr set up and can't
?X: include Tr in our dependency or that would create a cycle. Therefore,
?X: we have to somehow duplicate the work done in Tr. That's life.
?X:
case "`echo AbyZ | tr '[:lower:]' '[:upper:]' 2>/dev/null`" in
ABYZ) spackage=`echo $first | tr '[:lower:]' '[:upper:]'`$last;;
*) spackage=`echo
 $first | tr '[a-z]' '[A-Z]'`$last;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/package.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysstat.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:30  ram
?RCS: patch61: created
?RCS:
?MAKE:i_sysstat: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysstat:
?S: This variable conditionally defines the I_SYS_STAT symbol,
?S: and indicates whether a C program should include <sys/stat.h>.
?S:.
?C:I_SYS_STAT (I_SYSSTAT):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/stat.h>.
?C:.
?H:#$i_sysstat I_SYS_STAT  /**/
?H:.
?LINT:set
 i_sysstat
: see if sys/stat.h is available
set sys/stat.h i_sysstat
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getprpwnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getprpwnam:
```

```
?S: This variable conditionally defines HAS_GETPRPWNAM if getprpwnam() is
?S: available to retrieve protected (shadow) password entries by name.
?S:.
?C:HAS_GETPRPWNAM:
?C: This symbol, if defined, indicates that the getprpwnam system call is
?C: available to retrieve protected (shadow) password entries by name.
?C:.
?H:#$d_getprpwnam HAS_GETPRPWNAM  /**/
?H:.
?LINT:set d_getprpwnam
: see if getprpwnam exists
set getprpwnam d_getprpwnam
eval $inlibc
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getprpwnam.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_statfs_f_flags: \
 Hasfield i_sysparam i_sysmount i_systypes \
 i_sysvfs i_sysstatfs Setvar d_statfs_s
?MAKE: -pick add $@ %<
?S:d_statfs_f_flags:
?S: This variable conditionally defines the HAS_STRUCT_STATFS_F_FLAGS
?S: symbol, which indicates to struct statfs from has f_flags member.
?S: This kind of struct statfs is coming from sys/mount.h (BSD),
?S: not from sys/statfs.h (SYSV).
?S:.
?C:HAS_STRUCT_STATFS_F_FLAGS:
?C: This symbol, if defined, indicates that the struct statfs
?C: does have the f_flags member containing the mount flags of
?C: the filesystem containing the file.
?C: This kind of struct statfs is coming from <sys/mount.h> (BSD 4.3),
?C: not from <sys/statfs.h> (SYSV).  Older BSDs
 (like Ultrix) do not
?C: have statfs() and struct statfs, they have ustat() and getmnt()
?C: with struct ustat and struct fs_data.
?C:.
?H:#$d_statfs_f_flags HAS_STRUCT_STATFS_F_FLAGS  /**/
?H:.
```

```
?LINT:set d_statfs_f_flags
: see if struct statfs knows about f_flags
case "$d_statfs_s" in
define)
 echo " "
 echo "Checking to see if your struct statfs has f_flags field..." >&4
 set d_statfs_f_flags statfs f_flags $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h
$i_sysvfs sys/vfs.h $i_sysstatfs sys/statfs.h
 eval $hasfield
 ;;
*) val="$undef"
 set d_statfs_f_flags
 eval $setvar
 ;;
esac
case "$d_statfs_f_flags" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statfs_f_flags.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_mkstemps: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkstemps:
?S: This variable conditionally defines the HAS_MKSTEMPS symbol, which
?S: indicates to the C program that the mkstemps() routine is available
?S: to exclusively create and open a uniquely named (with a suffix)
?S: temporary file.
?S:.
?C:HAS_MKSTEMPS :
?C: This symbol, if defined, indicates that the mkstemps routine is
?C: available to exclusively create and open a uniquely named
?C: (with a suffix) temporary file.
?C:.
?H:#$d_mkstemps HAS_MKSTEMPS  /**/
?H:.
?LINT:set d_mkstemps
: see if mkstemps exists
```

```
set mkstemps d_mkstemps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkstemps.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Prefixup.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Prefixup.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:30:40  ram
?RCS: patch49: created
?RCS:
?X:
?X: Used as: "set dflt; eval $prefixup" to set $dflt to be $prefix/dir
?X: instead of $prefixexp/dir, in case portability was involved somehow
?X: and $prefix uses ~name expansion.
?X:
?MAKE:Prefixup: prefix prefixexp
?MAKE: -pick add $@ %<
?LINT:define prefixup
?S:prefixup:
?S: This shell variable is used internally by Configure to reset
?S: the leading
 installation prefix correctly when $prefix uses
?S: ~name expansion.
?S:  set dflt
?S:  eval $prefixup
?S: That will set $dflt to $prefix/dir if it was $prefixexp/dir and
?S: $prefix differs from $prefixexp.
?S:.
?V:prefixup
: set the prefixup variable, to restore leading tilda escape
prefixup='case "$prefixexp" in
"$prefix") ;;
*) eval "$1=\`echo \$$1 | sed \"s,^$prefixexp,$prefix,\"\`";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Prefixup.U

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```
?RCS: $Id: d_memcpy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memcpy.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:58  ram
?RCS: patch10: removed text recommending bcopy over memcpy (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memcpy: Inlibc
?MAKE: -pick add $@ %<
?S:d_memcpy:
?S: This variable conditionally defines the HAS_MEMCPY symbol, which
?S: indicates to the C program that the memcpy() routine is available
?S: to copy blocks of
 memory.
?S:.
?C:HAS_MEMCPY (MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy blocks of memory.
?C:.
?H:#$d_memcpy HAS_MEMCPY /**/
?H:.
?LINT:set d_memcpy
: see if memcpy exists
set memcpy d_memcpy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lockf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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```

```
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_lockf.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:36  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_lockf: Inlibc
?MAKE: -pick add $@ %<
?S:d_lockf:
?S: This variable conditionally defines HAS_LOCKF if lockf() is
?S: available to do file locking.
?S:.
?C:HAS_LOCKF (LOCKF):
?C: This symbol, if defined, indicates that the lockf routine is
?C: available to do file locking.
?C:.
?H:#$d_lockf
 HAS_LOCKF  /**/
?H:.
?LINT:set d_lockf
: see if lockf exists
set lockf d_lockf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_lockf.U
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```
?RCS: $Id: lns.U,v 3.0.1.1 1994/06/20 07:05:52 ram Exp $
?RCS:
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
```

```
?X:
?X: This unit checks whether symbolic links are really supported.
?X: We can't rely on d_symlink because that may be listed in the
?X: C library but unimplemented.
?X:
?MAKE:lns: ln rm touch
?MAKE: -pick add $@ %<
?S:lns:
?S: This variable holds the name of the command to make
?S: symbolic
 links (if they are supported).  It can be used
?S: in the Makefile. It is either 'ln -s' or 'ln'
?S:.
: determine whether symbolic links are supported
echo " "
$touch blurfl
if $ln -s blurfl sym > /dev/null 2>&1 ; then
 echo "Symbolic links are supported." >&4
 lns="$ln -s"
else
 echo "Symbolic links are NOT supported." >&4
 lns="$ln"
fi
$rm -f blurfl sym
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/lns.U
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```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: ssizetype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:24:21  ram
?RCS: patch61: integrated perl5 concerns for mis-configured sfio
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:30:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:33:06  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:ssizetype: Myread Typedef
 sizetype cat rm \
 +cc +optimize +ccflags +ldflags +libs _o
?MAKE: -pick add $@ %<
?S:ssizetype:
?S: This variable defines ssizetype to be something like ssize_t,
?S: long or int.  It is used by functions that return a count
?S: of bytes or an error condition.  It must be a signed type.
?S: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?S:.
?C:SSize_t:
?C: This symbol holds the type used by functions that return
?C: a count of bytes or an error condition.  It must be a signed type.
?C: It is usually ssize_t, but may be long or int, etc.
?C: It may be necessary to include <sys/types.h> or <unistd.h>
?C: to get any typedef'ed information.
?C: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?C:.
?H:#define SSize_t $ssizetype  /* signed count of bytes */
?H:.
?F:!ssize.out !ssize
: see what type is used for signed size_t
set ssize_t ssizetype int stdio.h sys/types.h
eval $typedef
dflt="$ssizetype"
?X: Now check out whether sizeof(SSize_t) == sizeof(Size_t)
$cat
 > ssize.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#define Size_t $sizetype
#define SSize_t $dflt
int main()
{
 if (sizeof(Size_t) == sizeof(SSize_t))
  printf("$dflt\n");
 else if (sizeof(Size_t) == sizeof(int))
  printf("int\n");
 else
  printf("long\n");
 fflush(stdout);
 exit(0);
}
EOM
```

```
echo " "
?X: If $libs contains -lsfio, and sfio is mis-configured, then it
?X: sometimes (apparently) runs and exits with a 0 status, but with no
?X: output!.  Thus we check with test -s whether we actually got any
?X: output.  I think it has to do with sfio's use of _exit vs. exit,
?X: but I don't know for sure.  --Andy Dougherty  1/27/97.
if $cc $optimize $ccflags $ldflags -o ssize ssize.c $libs > /dev/null 2>&1  &&
  ./ssize > ssize.out 2>/dev/null && test -s ssize.out ; then
 ssizetype=`$cat ssize.out`
 echo "I'll be using $ssizetype for functions returning a byte count." >&4
else
 $cat >&4 <<EOM
Help! I can't compile and run the ssize_t test program: please enlighten me!
(This
 is probably a misconfiguration in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)

I need a type that is the same size as $sizetype, but is guaranteed to
be signed.  Common values are ssize_t, int and long.

EOM
 rp="What signed type is the same size as $sizetype?"
 . ./myread
 ssizetype="$ans"
fi
$rm -f ssize ssize$_o ssize.*

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ssizetype.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_mkostemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkostemp:
?S: This variable conditionally defines HAS_MKOSTEMP if mkostemp() is
?S: available to exclusively create and open a uniquely named (with a
?S: suffix) temporary file.
?S:.
?C:HAS_MKOSTEMP:
?C: This symbol, if defined, indicates that the mkostemp routine is
```

```
?C: available to exclusively create and open a uniquely named (with a
?C: suffix) temporary file.
?C:.
?H:#$d_mkostemp HAS_MKOSTEMP /**/
?H:.
?LINT:set d_mkostemp
: see if mkostemp exists
set mkostemp d_mkostemp
eval $inlibc
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkostemp.U
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```
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?RCS:
?MAKE:d_logb: Inlibc
?MAKE: -pick add $@ %<
?S:d_logb:
?S: This variable conditionally defines the HAS_LOGB symbol, which
?S: indicates to the C program that the logb() routine is available
?S: to extract the exponent of x.
?S:.
?C:HAS_LOGB:
?C: This symbol, if defined, indicates that the logb routine is
?C: available to do the logb function.
?C:.
?H:#$d_logb HAS_LOGB  /**/
?H:.
?LINT:set d_logb
: see if logb exists
set logb d_logb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_logb.U
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```
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```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/fixcpp
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.mk
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/makegloss
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/bindex

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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcscmp: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_wcscmp:
?S: This variable conditionally defines the HAS_WCSCMP symbol if the
?S: wcscmp() routine is available and can be used to compare wide
?S: character strings.
?S:.
?C:HAS_WCSCMP:
?C: This symbol, if defined, indicates that the wcscmp routine is
?C: available to compare two wide character strings.
?C:.
?H:#$d_wcscmp HAS_WCSCMP /**/
?H:.
?F:!try
?LINT: set d_wcscmp
: look for wcscmp
echo " "
$cat >try.c <<'EOCP'
#include <stdio.h>
#include
 <wchar.h>
int main ()
{
   wchar_t *s = L" ";
   return (wcscmp (s, s) ? 1 : 0);
   }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working wcscmp() found." >&4
     val="$define" ;;
 *)  echo "wcscmp() found, but it doesn't work" >&4
     ;;
 esac
```

```
else
   echo "wcscmp() NOT found." >&4
   fi
set d_wcscmp
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_wcscmp.U
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```
?RCS: $Id: i_sysutsname.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysutsname: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysutsname:
?S: This variable conditionally defines the I_SYSUTSNAME symbol,
?S: and indicates whether a C program should include <sys/utsname.h>.
?S:.
?C:I_SYSUTSNAME:
?C: This symbol, if defined, indicates that <sys/utsname.h> exists and
?C: should be included.
?C:.
?H:#$i_sysutsname I_SYSUTSNAME  /**/
?H:.
?LINT:set i_sysutsname
: see if this is a sys/utsname.h system
set sys/utsname.h i_sysutsname
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysutsname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorhtml1dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
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```

```
?RCS:
?RCS: $Log: vendorhtml1dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorhtml1dir vendorhtml1direxp installvendorhtml1dir: html1dir Getfile \
 Setprefixvar Oldconfig Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorhtml1dir:
?S: This variable contains the name of the directory for html
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this
 directory.
?S: Vendors who distribute perl may wish to place their own
?S: html pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorhtml1direxp:
?S: This variable is the ~name expanded version of vendorhtml1dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorhtml1dir="
?S:installvendorhtml1dir:
?S: This variable is really the same as vendorhtml1direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorhtml1dir
: Set the vendorhtml1dir variables
case "$vendorprefix" in
") vendorhtml1dir="
 vendorhtml1direxp="
 ;;
*) : determine where vendor-supplied html pages go.
 : There is no standard location, so try to copy the previously-selected
 : directory structure for the core html pages.
 : XXX Better default suggestions would be welcome.
 case "$vendorhtml1dir"
 in
 ") dflt=`echo "$html1dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorhtml1dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
```

```
 fn=dn+~
 rp='Pathname for the vendor-supplied html pages?'
 . ./getfile
 vendorhtml1dir="$ans"
 vendorhtml1direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorhtml1dir" = "X" && vendorhtml1dir=' '
prefixvar=vendorhtml1dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorhtml1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: spitshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: spitshell.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:22:12  ram
?RCS: patch61: removed useless chatter as this is now done very early
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:37:01  ram
?RCS: patch45: use 'test -f' instead of 'test -r' for exec-only cat progs (WED)
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:33:00  ram
?RCS: patch32: don't create spitshell under the UU directory
?RCS:
 patch32: allow for cat in /bin or /usr/bin
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:58  ram
?RCS: patch10: made #!-failure message more friendly (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:spitshell shsharp sharpbang: eunicefix sh Head
?MAKE: -pick add $@ %<
?S:spitshell:
```

```
?S: This variable contains the command necessary to spit out a runnable
?S: shell on this system.  It is either cat or a grep -v for # comments.
?S:.
?S:shsharp:
?S: This variable tells further Configure units whether your sh can
?S: handle # comments.
?S:.
?S:sharpbang:
?S: This variable contains the string #! if this system supports that
?S: construct.
?S:.
?F:!sharp
?T:xcat p
?X: "paths" comes from Head
?LINT:extern paths _exe
: see if sh knows # comments
?X: This is loaded up early, so avoid being chatty.
?X: echo " "
?X: echo "Checking your $sh to see if it knows about # comments..." >&2
if `$sh -c '#' >/dev/null 2>&1`; then
?X: echo
 "Your $sh handles # comments correctly."
 shsharp=true
 spitshell=cat
?X: echo " "
?X: echo "Okay, let's see if #! works on this system..."
 xcat=/bin/cat
 test -f $xcat$_exe || xcat=/usr/bin/cat
 if test ! -f $xcat$_exe; then
  for p in `echo $PATH | sed -e "s/$p_/ /g"` $paths; do
   if test -f $p/cat$_exe; then
    xcat=$p/cat
    break
   fi
  done
  if test ! -f $xcat$_exe; then
   echo "Can't find cat anywhere!"
   exit 1
  fi
 fi
 echo "#!$xcat" >sharp
 $eunicefix sharp
 chmod +x sharp
 ./sharp > today 2>/dev/null
 if test -s today; then
?X:  echo "It does."
  sharpbang='#!'
 else
```

```
  echo "#! $xcat" > sharp
  $eunicefix sharp
  chmod +x sharp
  ./sharp > today 2>/dev/null
  if test -s today; then
?X:   echo "It does."
   sharpbang='#! '
  else
?X:   echo "Okay, let's see if #! works on this system..."
?X:   echo "It's just a comment."
   sharpbang=': use '
  fi
 fi
else
 echo " "
 echo "Your $sh doesn't grok # comments--I will strip them later on."
 shsharp=false
?X: The
 spitshell script will be perused, so leave it out the UU directory
 cd ..
 echo "exec grep -v '^[  ]*#'" >spitshell
 chmod +x spitshell
 $eunicefix spitshell
 spitshell=`pwd`/spitshell
 cd UU
 echo "I presume that if # doesn't work, #! won't work either!"
 sharpbang=': use '
fi
rm -f sharp today
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/spitshell.U
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```
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?RCS:
?RCS: $Log: sbrksmart.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:35:41  ram
?RCS: patch45: now sets sbrksmart to undef explicitly when lacking sbrk()
?RCS: patch45: forgot a cast when using return value from sbrk()
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:16:45  ram
?RCS: patch16: created
?RCS:
?MAKE:sbrksmart: cat d_sbrk +cc +ccflags +libs rm
?MAKE: -pick add $@ %<
?S:sbrksmart:
?S: This variable conditionally defines HAS_SMART_SBRK if the sbrk()
?S: routine honors a negative argument to lower the break
 value.
?S:.
?C:HAS_SMART_SBRK:
?C: This symbol is defined when the sbrk() system call may be used with
?C: a negative argument to lower the break value, therefore releasing
?C: core to the system. If not, you'd probably be better off using the
?C: mmap() system call.
?C:.
?H:#$sbrksmart HAS_SMART_SBRK /**/
?H:.
?T:dumb
?F:!sbrk
: see whether sbrk can release core to the kernel
echo " "
case "$d_sbrk" in
"$define")
 echo "Let's see if your sbrk() is smart enough to release core..." >&4
 $cat > sbrk.c <<EOC
#define INC 256  /* Small enough to be less than a page size */

int main()
{
 char *obrk = (char *) sbrk(0);
 char *nbrk;

 nbrk = (char *) sbrk(INC);
 if (nbrk == (char *) -1)
  exit(1); /* Not enough memory */
 if (nbrk != obrk)
  exit(2); /* Unreliable sbrk() */
 nbrk = (char *) sbrk(-INC);
 if (nbrk == (char *) -1)
  exit(3); /* May have understood negative arg as huge positive */
 if (obrk != (char *) sbrk(0))
  exit(4); /* Not smart, definitely */

 exit(0);  /* Ok */
}
EOC
```

```
 sbrksmart="$undef"
 dumb='--
 assuming dumb sbrk().'
 if $cc $ccflags -o sbrk sbrk.c $libs >/dev/null 2>&1; then
  ./sbrk >/dev/null 2>&1
  case $? in
  0) sbrksmart="$define"
   echo "Yes, it can be used with negative values." ;;
  1) echo "Sorry, not enough memory $dumb" ;;
  2) echo "No it's not, and besides it seems to be buggy..." ;;
  3) echo "No, it fails with negative values." ;;
  4) echo "Nope, your sbrk() is too dumb." ;;
  *) echo "Err... Unexpected result $dumb" ;;
  esac
 else
  echo "(Could not compile test program $dumb)"
 fi
 ;;
*)
 echo "Since you don't have sbrk(), let's forget about the smart test!"
 sbrksmart="$undef"
 ;;
esac
$rm -f sbrk sbrk.* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sbrksmart.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysstatfs.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysstatfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysstatfs:
?S: This variable conditionally defines the I_SYSSTATFS symbol,
?S: and indicates whether a C program should include <sys/statfs.h>.
?S:.
?C:I_SYS_STATFS:
?C: This symbol, if defined, indicates that <sys/statfs.h> exists.
?C:.
?H:#$i_sysstatfs I_SYS_STATFS  /**/
?H:.
?LINT:set i_sysstatfs
```

```
: see if this is a sys/statfs.h system
set sys/statfs.h i_sysstatfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysstatfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sethent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_sethent:
?S: This variable conditionally defines HAS_SETHOSTENT if sethostent() is
?S: available.
?S:.
?C:HAS_SETHOSTENT:
?C: This symbol, if defined, indicates that the sethostent() routine is
?C: available.
?C:.
?H:#$d_sethent HAS_SETHOSTENT  /**/
?H:.
?LINT:set d_sethent
: see if sethostent exists
set
 sethostent d_sethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_sethent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:full_ar: ar
?MAKE: -pick add $@ %<
?S:full_ar:
?S: This variable contains the full pathname to 'ar', whether or
?S: not the user has specified 'portability'.  This is only used
?S: in the Makefile.SH.
?S:.
: Store the full pathname to the ar program for use in the C program
: Respect a hint or command line value for full_ar.
case "$full_ar" in
") full_ar=$ar ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Loc_ar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_su_chown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_su_chown.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_su_chown: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_su_chown (d_rootchown):
?S: This variable conditionally defines the SU_CHOWN symbol, which
?S: indicates to the C program that only root can chown() the owner
?S: of a file.
?S:.
?C:SU_CHOWN (ROOT_CHOWN):
?C: This symbol, if defined, indicates that the system allows only root
?C: can
```

```
 change the owner of a file with chown().
?C:.
?H:#$d_su_chown SU_CHOWN /**/
?H:.
?LINT:set d_su_chown
: see if 'chown()' is restricted.
: but not too hard, as it is late and I am tired. -- HMS
echo " "
if set setreuid val -f d_su_chown; eval $csym; $val; then
 echo 'It looks like only root can chown() the owner of a file.' >&4
 val="$define"
else
 echo 'It looks like root or the owner can chown() a file away.' >&4
 val="$undef"
fi
set d_su_chown
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_su_chown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_execinfo.U 34 2010-11-27 11:55:39Z rmanfredi $
?RCS:
?RCS: Copyright (c) 2011, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_execinfo: Inhdr
?MAKE: -pick add $@ %<
?S:i_execinfo:
?S: This variable conditionally defines the I_EXECINFO symbol, and indicates
?S: whether a C program may include <execinfo.h>, for backtrace() support.
?S:.
?C:I_EXECINFO:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <execinfo.h> for backtrace() support.
?C:.
?H:#$i_execinfo I_EXECINFO  /**/
?H:.
?LINT:set i_execinfo
: see if this is an execinfo.h system
set execinfo.h i_execinfo
eval
```

```
 $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_execinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bsdjmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bsdjmp.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:31:10  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:09:09  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bsdjmp: Guess Setvar cat +cc libs rm
?MAKE: -pick add $@ %<
?S:d_bsdjmp:
?S: This variable conditionally defines USE_BSDJMP
 if BSD _setjmp and
?S: _longjmp routines are available to do non-local gotos without saving
?S: or restoring the signal mask flag.
?S:.
?C:USE_BSDJMP (BSDJMP):
?C: This symbol, if defined, indicates that the BSD _setjmp and _longjmp
?C: routines are available to do non-local gotos wihtout saving or restoring
?C: the signal mask flag.
?C:.
?H:#$d_bsdjmp USE_BSDJMP  /**/
?H:.
?F:!set
?LINT:set d_bsdjmp
: see if _setjmp and _longjmp exists
?X: We can't check for these symbols with Inlibc because of the leading "_"
echo " "
case "$d_bsdjmp" in
")
```

```
 $cat >set.c <<EOP
#include <setjmp.h>
jmp_buf env;
int set = 1;
int main()
{
 if (_setjmp(env))
  exit(set);
 set = 0;
 _longjmp(env, 1);
 exit(1);
}
EOP
 if $cc -o set set.c $libs >/dev/null 2>&1; then
  if ./set >/dev/null 2>&1; then
   echo "Good! You have BSD _setjmp and _longjmp routines." >&4
   val="$define"
  else
   $cat <<EOM
Uh-Oh! You have BSD _setjmp and _longjmp, but they do not work properly!!
EOM
   val="$undef"
  fi
 else
  if
 ./usg; then
   echo "You do not have _setjmp and _longjmp, but that's fine." >&4
  else
   cat <<EOM
It sounds strange for a BSD system to miss _setjmp and _longjmp, but that's ok.
EOM
  fi
  val="$undef"
 fi
 ;;
*) val="$d_bsdjmp"
 case "$d_bsdjmp" in
 $define) echo "Good! You have BSD _setjmp and _longjmp routines." >&4;;
 $undef) echo "You do not have _setjmp and _longjmp, but that's fine." >&4;;
 esac
 ;;
esac
set d_bsdjmp
eval $setvar
$rm -f set.c set
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bsdjmp.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memchr.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memchr: Inlibc
?MAKE: -pick add $@ %<
?S:d_memchr:
?S: This variable conditionally defines the HAS_MEMCHR symbol, which
?S: indicates to the C program that the memchr() routine is available
?S: to scan a block of memory for a character.
?S:.
?C:HAS_MEMCHR:
?C: This symbol, if defined, indicates that the memchr routine is available
?C: to scan a block of memory for a character.
  If undefined, roll your own.
?C:.
?H:#$d_memchr HAS_MEMCHR  /**/
?H:.
?LINT:set d_memchr
: see if memchr exists
set memchr d_memchr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlocale_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setlocale_r setlocale_r_proto: Inlibc Protochk Hasproto i_systypes \
```

```
 usethreads i_locale extern_C
?MAKE: -pick add $@ %<
?S:d_setlocale_r:
?S: This variable conditionally defines the HAS_SETLOCALE_R symbol,
?S: which indicates to the C program that the setlocale_r()
?S: routine is available.
?S:.
?S:setlocale_r_proto:
?S: This variable encodes the prototype of setlocale_r.
?S: It is zero if d_setlocale_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setlocale_r
?S: is defined.
?S:.
?C:HAS_SETLOCALE_R:
?C: This symbol, if defined, indicates that the setlocale_r routine
?C: is
 available to setlocale re-entrantly.
?C:.
?C:SETLOCALE_R_PROTO:
?C: This symbol encodes the prototype of setlocale_r.
?C: It is zero if d_setlocale_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setlocale_r
?C: is defined.
?C:.
?H:#$d_setlocale_r HAS_SETLOCALE_R /**/
?H:#define SETLOCALE_R_PROTO $setlocale_r_proto /**/
?H:.
?T:try hdrs d_setlocale_r_proto
: see if setlocale_r exists
set setlocale_r d_setlocale_r
eval $inlibc
case "$d_setlocale_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_locale locale.h"
 case "$d_setlocale_r_proto:$usethreads" in
 ":define") d_setlocale_r_proto=define
  set d_setlocale_r_proto setlocale_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setlocale_r_proto" in
 define)
 case "$setlocale_r_proto" in
 "|0) try='int setlocale_r(int, const char*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && setlocale_r_proto=I_ICBI ;;
 esac
 case "$setlocale_r_proto" in
 "|0) d_setlocale_r=undef
```

```
  setlocale_r_proto=0
  echo
 "Disabling setlocale_r, cannot determine prototype." >&4 ;;
 * ) case "$setlocale_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setlocale_r_proto="REENTRANT_PROTO_$setlocale_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setlocale_r has no prototype, not using it." >&4 ;;
  esac
  d_setlocale_r=undef
  setlocale_r_proto=0
  ;;
 esac
 ;;
*) setlocale_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setlocale_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isinfl: Inlibc
?MAKE: -pick add $@ %<
?S:d_isinfl:
?S: This variable conditionally defines the HAS_ISINFL symbol, which
?S: indicates to the C program that the isinfl() routine is available.
?S:.
?C:HAS_ISINFL:
?C: This symbol, if defined, indicates that the isinfl routine is
?C: available to check whether a long double is an infinity.
?C:.
?H:#$d_isinfl HAS_ISINFL  /**/
?H:.
?LINT:set d_isinfl
: see if isinfl exists
set isinfl d_isinfl
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isinfl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: privlib.U,v $
?RCS: Revision 3.0.1.4  1995/09/25  09:17:09  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:44:23  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:31:52  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:34  ram
?RCS: patch10: added support for /local/lib (WED)
?RCS: patch10: prompt phrasing made
 more explicit (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:privlib privlibexp installprivlib: afs package cat Getfile \
 Oldconfig Prefixit test
?MAKE: -pick add $@ %<
?Y:TOP
?S:privlib:
?S: This variable contains the eventual value of the PRIVLIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S:.
?S:privlibexp:
?S: This variable is the ~name expanded version of privlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
```

```
?S:installprivlib:
?S: This variable is really the same as privlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:PRIVLIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is
 private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C:.
?C:PRIVLIB_EXP:
?C: This symbol contains the ~name expanded version of PRIVLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#define PRIVLIB "$privlib"  /**/
?H:#define PRIVLIB_EXP "$privlibexp"  /**/
?H:.
: determine where private executables go
set dflt privlib lib/$package
eval $prefixit
$cat <<EOM

There are some auxiliary files for $package that need to be put into a
private library directory that is accessible by everyone.

EOM
fn=d~+
rp='Pathname where the private library files will reside?'
. ./getfile
if $test "X$privlibexp" != "X$ansexp"; then
 installprivlib=''
fi
privlib="$ans"
privlibexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed
 (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installprivlib" in
 '') dflt=`echo $privlibexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installprivlib";;
```

```
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installprivlib="$ans"
else
 installprivlib="$privlibexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/privlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dup2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_dup2.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_dup2: Inlibc
?MAKE: -pick add $@ %<
?S:d_dup2:
?S: This variable conditionally defines HAS_DUP2 if dup2() is
?S: available to duplicate file descriptors.
?S:.
?C:HAS_DUP2 (DUP2):
?C: This symbol, if defined, indicates that the dup2 routine is
?C: available to duplicate file descriptors.
?C:.
?H:#$d_dup2 HAS_DUP2 /**/
?H:.
?LINT:set d_dup2
:
 see if dup2 exists
set dup2 d_dup2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dup2.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: randfunc.U,v 3.0 1993/08/18 12:09:39 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: randfunc.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the new unit that should be used when random
?X: functions are to be used. It thus makes randbits.U obsolete.
?X:
?X: This unit gives a simple #define for Drand01, which produces
?X: doubles in the range [0,1) using the "best" random number
?X: generator available.  The source should just call Drand01
?X: and not worry about the underlying
 implementation.
?X:     Andy Dougherty  July 1998
?X:
?MAKE:randfunc drand01 seedfunc randbits randseedtype: \
 Compile Myread Csym ccflags
?MAKE: -pick add $@ %<
?S:randfunc:
?S: Indicates the name of the random number function to use.
?S: Values include drand48, random, and rand. In C programs,
?S: the 'Drand01' macro is defined to generate uniformly distributed
?S: random numbers over the range [0., 1.[ (see drand01 and nrand).
?S:.
?S:drand01:
?S: Indicates the macro to be used to generate normalized
?S: random numbers.  Uses randfunc, often divided by
?S: (double) (((unsigned long) 1 << randbits)) in order to
?S: normalize the result.
?S: In C programs, the macro 'Drand01' is mapped to drand01.
?S:.
?S:randseedtype:
?S: Indicates the type of the argument of the seedfunc.
?S:.
?S:seedfunc:
?S: Indicates the random number generating seed function.
```

```
?S: Values include srand48, srandom, and srand.
?S:.
?S:randbits:
?S: Indicates how many bits are produced by the function used to
?S: generate
 normalized random numbers.
?S:.
?C:RANDFUNC:
?C: This symbol defines the random function used to define Drand01().
?C:.
?C:Drand01:
?C: This macro is to be used to generate uniformly distributed
?C: random numbers over the range [0., 1.[.  You may have to supply
?C: an 'extern double drand48();' in your program since SunOS 4.1.3
?C: doesn't provide you with anything relevant in its headers.
?C: See HAS_DRAND48_PROTO.
?C:.
?C:Rand_seed_t:
?C: This symbol defines the type of the argument of the
?C: random seed function.
?C:.
?C:seedDrand01:
?C: This symbol defines the macro to be used in seeding the
?C: random number generator (see Drand01).
?C:.
?C:RANDBITS:
?C: This symbol indicates how many bits are produced by the
?C: function used to generate normalized random numbers.
?C: Values include 15, 16, 31, and 48.
?C:.
?H:#define RANDFUNC  $randfunc  /**/
?H:#define Drand01()  $drand01  /**/
?H:#define Rand_seed_t  $randseedtype  /**/
?H:#define seedDrand01(x) $seedfunc((Rand_seed_t)x) /**/
?H:#define
 RANDBITS  $randbits  /**/
?H:.
?LINT:change ccflags
?LINT:unclosed $randbits))"
: How can we generate normalized random numbers ?
echo " "
echo "Using our internal random number implementation..." >&4

case "$ccflags" in
*-Dmy_rand=*|*-Dmy_srand=*)
 echo "Removing obsolete -Dmy_rand, -Dmy_srand, and -Drandbits from ccflags." >&4
 ccflags="`echo $ccflags | sed -e 's/-Dmy_rand=random/ /'`"
 ccflags="`echo $ccflags | sed -e 's/-Dmy_srand=srandom/ /'`"
```

```
 ccflags="`echo $ccflags | sed -e 's/-Drandbits=[0-9][0-9]*/ /'`"
 ;;
esac

randfunc=Perl_drand48
drand01="Perl_drand48()"
seedfunc="Perl_drand48_init"
randbits=48
randseedtype=U32
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/randfunc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strcspn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strcspn.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strcspn: Inlibc
?MAKE: -pick add $@ %<
?S:d_strcspn:
?S: This variable conditionally defines the HAS_STRCSPN symbol, which
?S: indicates to the C program that the strcspn() routine is available
?S: to scan strings.
?S:.
?C:HAS_STRCSPN (STRCSPN):
?C: This symbol, if defined, indicates that the strcspn routine is
?C: available to scan
 strings.
?C:.
?H:#$d_strcspn HAS_STRCSPN  /**/
?H:.
?LINT:set d_strcspn
: see if strcspn exists
set strcspn d_strcspn
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strcspn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fdclose: Inlibc
?MAKE: -pick add $@ %<
?S:d_fdclose:
?S: This variable conditionally defines the HAS_FDCLOSE symbol, which
?S: indicates to the C program that the fdclose() routine is available.
?S:.
?C:HAS_FDCLOSE:
?C: This symbol, if defined, indicates that the fdclose routine is
?C: available to free a FILE structure without closing the underlying
?C: file descriptor.  This function appeared in FreeBSD 10.2.
?C:.
?H:#$d_fdclose HAS_FDCLOSE  /**/
?H:.
?LINT:set d_fdclose
: see if fdclose exists
set fdclose d_fdclose
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fdclose.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtoul.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:43  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_strtoul: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtoul:
?S: This variable conditionally defines the HAS_STRTOUL symbol, which
```

```
?S: indicates to the C program that the strtoul() routine is available
?S: to provide conversion of strings to unsigned long.
?S:.
?C:HAS_STRTOUL (STRTOUL):
?C: This symbol, if defined, indicates that the strtoul routine is
?C: available
 to provide conversion of strings to unsigned long.
?C:.
?H:#$d_strtoul HAS_STRTOUL /**/
?H:.
?LINT:set d_strtoul
: see if strtoul exists
set strtoul d_strtoul
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtoul.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readdir_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_readdir_r readdir_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_dirent extern_C
?MAKE: -pick add $@ %<
?S:d_readdir_r:
?S: This variable conditionally defines the HAS_READDIR_R symbol,
?S: which indicates to the C program that the readdir_r()
?S: routine is available.
?S:.
?S:readdir_r_proto:
?S: This variable encodes the prototype of readdir_r.
?S: It is zero if d_readdir_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir_r
?S: is defined.
?S:.
?C:HAS_READDIR_R:
?C: This symbol, if defined, indicates that the readdir_r routine
?C: is available to readdir re-entrantly.
?C:.
?C:READDIR_R_PROTO:
?C: This
```

```
 symbol encodes the prototype of readdir_r.
?C: It is zero if d_readdir_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir_r
?C: is defined.
?C:.
?H:#$d_readdir_r HAS_READDIR_R /**/
?H:#define READDIR_R_PROTO $readdir_r_proto /**/
?H:.
?T:try hdrs d_readdir_r_proto
: see if readdir_r exists
set readdir_r d_readdir_r
eval $inlibc
case "$d_readdir_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_dirent dirent.h"
 case "$d_readdir_r_proto:$usethreads" in
 ":define") d_readdir_r_proto=define
  set d_readdir_r_proto readdir_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_readdir_r_proto" in
 define)
 case "$readdir_r_proto" in
 "|0) try='int readdir_r(DIR*, struct dirent*, struct dirent**);'
 ./protochk "$extern_C $try" $hdrs && readdir_r_proto=I_TSR ;;
 esac
 case "$readdir_r_proto" in
 "|0) try='int readdir_r(DIR*, struct dirent*);'
 ./protochk "$extern_C $try" $hdrs && readdir_r_proto=I_TS
 ;;
 esac
 case "$readdir_r_proto" in
 "|0) d_readdir_r=undef
  readdir_r_proto=0
  echo "Disabling readdir_r, cannot determine prototype." >&4 ;;
 * ) case "$readdir_r_proto" in
  REENTRANT_PROTO*) ;;
  *) readdir_r_proto="REENTRANT_PROTO_$readdir_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "readdir_r has no prototype, not using it." >&4 ;;
  esac
  d_readdir_r=undef
  readdir_r_proto=0
```

```
  ;;
 esac
 ;;
*) readdir_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_readdir_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: install.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: install.U,v $
?RCS: Revision 3.0.1.2  1995/09/25  09:16:37  ram
?RCS: patch59: all possible install programs are now looked for
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:30:41  ram
?RCS: patch45: created
?RCS:
?MAKE:install installdir: Loc Oldconfig Getfile cat test startsh rm +cc \
 eunicefix package contains mkdir echo n c
?MAKE: -pick add $@ %<
?S:install:
?S: This variable contains the name of an install program that can accept
?S: BSD-style arguments.
 It must correctly support -c, -s, and -m at least.
?S: It is a fully qualified pathname when found. If you have a local
?S: install.SH file at the root directory of your package, it is assumed to
?S: be the default script emulating a BSD install and the variable will be
?S: set to ./install. Otherwise, it is set to plain 'install', relying on
?S: the user's PATH to perform miracles.
?S:.
?S:installdir:
?S: This variable contains the name of a program that can install nested
?S: directories. Often set to 'mkdir -p', it can also be 'install -d' if
?S: you have such a beast and lack the former. If you have an install.SH
?S: file at the root directory of your package, it will be used in last
?S: resort, setting the variable to './install -d'. Otherwise, it is set to
?S: plain 'mkdir', and cross your fingers!
```

```
?S:.
?T:dir file tryit prog creatdir either
?F:!tryinst
: locate a BSD compatible install program
echo " "
echo "Looking for a BSD-compatible install program..." >&4
@if installdir
creatdir="
@end
case
 "$install" in
")
 tryit="
 for dir in $pth; do
  for file in ginstall installbsd scoinst install; do
   if $test -f $dir/$file; then
    tryit="$tryit $dir/$file"
   fi
  done
 done
 $cat >try.c <<EOC
int main()
{
 printf("OK\n");
 exit(0);
}
EOC
 if $cc -o try try.c >/dev/null 2>&1; then
  cp try try.ns
  strip try >/dev/null 2>&1
 else
  echo "(I can't seem to compile a trivial C program -- bypassing.)"
  echo "try" >try
  cp try try.ns
 fi
 $cat >tryinst <<EOS
$startsh
$rm -rf foo d
@if installdir
\$1 -d foo/bar
@end
$mkdir d
\$1 -c -m 764 try.ns d
\$1 -c -s -m 642 try.ns d/try
EOS
 chmod +x tryinst
 $eunicefix tryinst
 dflt="
```

```
 either=''
 for prog in $tryit; do
  $echo $n "Checking $prog... $c"
  ./tryinst $prog >/dev/null 2>&1
@if installdir
  if $test -d foo/bar; then
   creatdir="$prog -d"
  fi
@end
  (ls -l d/try >try.ls; ls -l d/try.ns >tryno.ls) 2>/dev/null
  if (cmp -s d/try try && cmp -s d/try.ns try.ns && \
   $contains 'rwxrw-r--' tryno.ls &&
 \
   $contains 'rw-r---w-' try.ls) >/dev/null 2>&1
  then
   dflt="$prog"
   echo "ok, that will do."
   break
  fi
  echo "not good$either."
  either=' either'
  $rm -f try*.ls
 done
 $rm -rf foo d tryinst try try*.ls try.*
 case "$dflt" in
 '')
@if {test -f ../install.SH}
  echo "Hopefully, $package comes with its own install script!"
  dflt='./install'
@else
  dflt='install'
@end
  ;;
 esac
 ;;
*) dflt="$install";;
esac
$cat <<EOM

I will be requiring a BSD-compatible install program (one that allows
options like -s to strip executables or -m to specify a file mode) to
install $package.

If the question below contains a fully qualified default path, then it
is probably ok. If it is an unqualified name such as 'install', then it
means I was unable to find out a good install program I could use. If
@if {test -f ../install.SH}
you know of one, please tell me about it. If the default is './install',
```

```
then I shall be using the install script supplied with $package.
@else
you know of one,
 please tell me about it.
@end

EOM
@if {test -f ../install.SH}
fn='/fe~(install,./install)'
@else
fn='/fe~(install)'
@end
rp='Which install program shall I use?'
. ./getfile
install="$ans"

@if installdir
: how can we create nested directories?
echo " "
echo "Ok, let's see how we can create nested directories..." >&4
case "$installdir" in
")
?X: First time, maybe we already found out a working one in $creatdir above...
?X: Prefer "mkdir -p" because of bugs in GNU install when not running as root
 $mkdir -p foo/bar >/dev/null 2>&1
 if $test -d foo/bar; then
  echo "Great, we can build them using 'mkdir -p'."
  creatdir='mkdir -p'
 else
  case "$creatdir" in
  ")
   if eval "$install -d foo/bar"; $test -d foo/bar; then
    creatdir="install -d"
    echo "It looks like '$creatdir' will do it for us."
   fi
   ;;
  *)
   eval "$creatdir foo/bar" >/dev/null 2>&1
   if $test -d foo/bar; then
    echo "Ah! We can use '$creatdir' to do just that."
   else
    creatdir="
   fi
   ;;
  esac
 fi
 $rm
```

```
 -rf foo
 case "$creatdir" in
 ")
  echo "Heck! Another ancient system lacking the comfort of modern ones!"
@if {test -f ../install.SH}
  echo "You can thank $package for bringing you its own install script!"
  installdir='./install -d'
@else
  echo "We have no choice but to use plain old 'mkdir' -- wish me luck!"
  installdir=mkdir
@end
  ;;
 *) installdir="$creatdir";;
 esac
 ;;
*) echo "As you already told me, '$installdir' should work.";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/install.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_pthread_atfork: Inlibc cat Compile usethreads Setvar
?MAKE: -pick add $@ %<
?S:d_pthread_atfork:
?S: This variable conditionally defines the HAS_PTHREAD_ATFORK symbol,
?S: which indicates to the C program that the pthread_atfork()
?S: routine is available.
?S:.
?C:HAS_PTHREAD_ATFORK:
?C: This symbol, if defined, indicates that the pthread_atfork routine
?C: is available to setup fork handlers.
?C:.
?H:#$d_pthread_atfork HAS_PTHREAD_ATFORK  /**/
?H:.
?LINT:set d_pthread_atfork
: see whether the pthread_atfork exists
$cat >try.c <<EOP
#include <pthread.h>
```

```
#include <stdio.h>
int main() {
#ifdef  PTHREAD_ATFORK
	pthread_atfork(NULL,NULL,NULL);
#endif
}
EOP

: see if pthread_atfork exists
set
 try -DPTHREAD_ATFORK
if eval $compile; then
   val="$define"
else
   val="$undef"
fi
case "$usethreads" in
$define)
	case "$val" in
	$define) echo 'pthread_atfork found.' >&4	;;
	*)	echo 'pthread_atfork NOT found.' >&4	;;
	esac
esac
set d_pthread_atfork
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthread_atfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: h_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: h_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:h_fcntl: Nothing
?MAKE: -pick add $@ %<
?S:h_fcntl:
?S: This is variable gets set in various places to tell i_fcntl that
```

```
?S: <fcntl.h> should be included.
?S:.
: Initialize h_fcntl
h_fcntl=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/h_fcntl.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: rename.C,v 3.0.1.1 1994/01/24 13:58:42 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: rename.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:42  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/rename.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_getgrent.U,v $
?RCS:
?MAKE:d_getgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getgrent:
?S: This variable conditionally defines the HAS_GETGRENT symbol, which
?S: indicates to the C program that the getgrent() routine is available
?S: for sequential access of the group database.
?S:.
?C:HAS_GETGRENT:
?C: This symbol, if defined, indicates that the getgrent routine is
```

```
?C: available for sequential access of the group database.
?C:.
?H:#$d_getgrent HAS_GETGRENT  /**/
?H:.
?LINT:set d_getgrent
: see if getgrent exists
set getgrent d_getgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getgrent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wifstat.U,v 3.0.1.3 1997/02/28 15:47:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_wifstat.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:47:43  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:09:10  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1995/03/21  08:47:46  ram
?RCS: patch52: created
?RCS:
?MAKE:d_wifstat: Compile d_uwait Oldconfig cat rm
?MAKE: -pick add $@ %<
?S:d_wifstat:
?S: This symbol conditionally defines USE_WIFSTAT
 if the C program can
?S: safely use the WIFxxx macros with the kind of wait() parameter
?S: declared in the program (see UNION_WAIT), or if it can't. Should
?S: only matter on HP-UX, where the macros are incorrectly written and
?S: therefore cause programs using them with an 'union wait' variable
?S: to not compile properly.
?S:.
?C:USE_WIFSTAT:
?C: This symbol, if defined, indicates to the C program that the argument
?C: for the WIFxxx set of macros such as WIFSIGNALED or WIFEXITED can
?C: be of the same kind as the one used to hold the wait() status. Should
```

```
?C: only matter on HP-UX, where the macros are incorrectly written and
?C: therefore cause programs using them with an 'union wait' variable
?C: to not compile properly. See also UNION_WAIT.
?C:.
?H:#$d_wifstat USE_WIFSTAT  /**/
?H:.
?T:type
?F:!foo
: see if we can use WIFxxx macros
echo " "
case "$d_wifstat" in
"$define") echo "As before, you can safely use WIFEXITED and friends!" >&4;;
"$undef") echo "You still can't use WIFEXITED
 and friends!" >&4;;
*)
 echo "Let's see whether you can use the WIFEXITED(status) macro and its"
 case "$d_uwait" in
 "$define") type='union wait';;
 *) type='int';;
 esac
 echo "friends with status declared as '$type status'..."
 $cat >foo.c <<EOCP
#include <sys/types.h>
#include <sys/wait.h>

int main()
{
 $type status;
 int e = 0;

#ifdef WIFEXITED
 if (WIFEXITED(status))
  printf("\n");
 exit(0);
#else
 exit(2);
#endif
}
EOCP
 d_wifstat="$undef"
 set foo
 if eval $compile; then
  if ./foo >/dev/null; then
   echo "Great! Looks like we can use the WIFxxx macros." >&4
   d_wifstat="$define"
  else
   echo "You don't seem to have WIFxxx macros, but that's ok." >&4
  fi
```

```
 else
  echo "Apparently you can't use WIFxxx macros properly." >&4
 fi
 $rm -f foo.* foo core
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_wifstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethent:
?S: This variable conditionally defines HAS_GETHOSTENT if gethostent() is
?S: available to dup file descriptors.
?S:.
?C:HAS_GETHOSTENT (GETHOSTENT):
?C: This symbol, if defined, indicates that the gethostent routine is
?C: available to lookup host names in some data base or other.
?C:.
?H:#$d_gethent HAS_GETHOSTENT  /**/
?H:.
?LINT:set
 d_gethent
: see if gethostent exists
set gethostent d_gethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethent.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
```

```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:Assert: cat
?MAKE: -pick add $@ %<
?F:./static_assert.h
: static assertion checking include file
?X:
?X: C programs can include this file to perform STATIC_ASSERT() checks
?X: which are done at compile-time and cause the compilation to fail when
?X: the expression is false.
?X:
?X: It is sufficient to compile with: $cc -c $ccflags try.c
?X: There is no need to link the file to spot the assertion failure.
?X:
$cat >static_assert.h <<'EOC'
#define STATIC_ASSERT(expr) \
 do { switch (0) { case ((expr) ? 1 : 0): case 0: break; } }
 while(0)
EOC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Assert.U
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```
?RCS: $Id: d_sighold.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sighold.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sighold: Inlibc
?MAKE: -pick add $@ %<
?S:d_sighold:
?S: This variable conditionally defines HAS_SIGHOLD if sighold() is
```

```
?S: available to hold signals.
?S:.
?C:HAS_SIGHOLD:
?C: This symbol, if defined, indicates that the sighold routine is
?C: available to hold signals.
?C:.
?H:#$d_sighold HAS_SIGHOLD /**/
?H:.
?LINT:set d_sighold
:
 see if sighold exists
set sighold d_sighold
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sighold.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nl_langinfo: Inlibc i_langinfo
?MAKE: -pick add $@ %<
?S:d_nl_langinfo:
?S: This variable conditionally defines the HAS_NL_LANGINFO symbol, which
?S: indicates to the C program that the nl_langinfo() routine is available.
?S:.
?C:HAS_NL_LANGINFO:
?C: This symbol, if defined, indicates that the nl_langinfo routine is
?C: available to return local data.  You will also need <langinfo.h>
?C: and therefore I_LANGINFO.
?C:.
?H:#$d_nl_langinfo HAS_NL_LANGINFO  /**/
?H:.
?LINT:set d_nl_langinfo
?LINT:use i_langinfo
: see if nl_langinfo exists
set nl_langinfo d_nl_langinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nl_langinfo.U
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```
?RCS: $Id: d_seteuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_seteuid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_seteuid: Inlibc
?MAKE: -pick add $@ %<
?S:d_seteuid:
?S: This variable conditionally defines the HAS_SETEUID symbol, which
?S: indicates to the C program that the seteuid() routine is available
?S: to change the effective uid of the current program.
?S:.
?C:HAS_SETEUID (SETEUID):
?C: This symbol, if defined, indicates that the seteuid
 routine is available
?C: to change the effective uid of the current program.
?C:.
?H:#$d_seteuid HAS_SETEUID  /**/
?H:.
?LINT:set d_seteuid
: see if seteuid exists
set seteuid d_seteuid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_seteuid.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:uidsize: Myread Typedef uidtype Compile run i_stdlib
?MAKE: -pick add $@ %<
```

```
?S:uidsize:
?S: This variable contains the size of a uidtype in bytes.
?S:.
?C:Uid_t_size:
?C: This symbol holds the size of a Uid_t in bytes.
?C:.
?H:#define Uid_t_size $uidsize  /* UID size */
?H:.
?T:yyy zzz
?F:!try
: Check size of UID
echo " "
case "$uidtype" in
*_t) zzz="$uidtype" ;;
*)   zzz="uid"  ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($uidtype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") uidsize=4
  echo "(I can't execute the test program--guessing $uidsize.)" >&4
  ;;
 *) uidsize=$yyy
  echo "Your $zzz is $uidsize bytes long."
  ;;
 esac
else
 uidsize=4
 echo "(I can't compile the test program--guessing $uidsize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidsize.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sunmath.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sunmath: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sunmath:
?S: This variable conditionally defines the I_SUNMATH symbol, and indicates
?S: whether a C program should include <sunmath.h>.
?S:.
?C:I_SUNMATH:
?C: This symbol, if defined, indicates that <sunmath.h> exists and
?C: should be included.
?C:.
?H:#$i_sunmath I_SUNMATH  /**/
?H:.
?LINT:set i_sunmath
: see if this is a sunmath.h system
set sunmath.h i_sunmath
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sunmath.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fd_set.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:16  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  06:57:23  ram
?RCS: patch30: extended scope for fd_set checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:27  ram
```

```
?RCS: patch16: comments for HAS_FD_* symbols were not consistent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fd_set d_fd_macros d_fds_bits: cat +cc +ccflags rm Oldconfig
 \
 d_socket i_systime i_sysselct i_syssock
?MAKE: -pick add $@ %<
?S:d_fd_set:
?S: This variable contains the eventual value of the HAS_FD_SET symbol,
?S: which indicates if your C compiler knows about the fd_set typedef.
?S:.
?S:d_fd_macros:
?S: This variable contains the eventual value of the HAS_FD_MACROS symbol,
?S: which indicates if your C compiler knows about the macros which
?S: manipulate an fd_set.
?S:.
?S:d_fds_bits:
?S: This variable contains the eventual value of the HAS_FDS_BITS symbol,
?S: which indicates if your fd_set typedef contains the fds_bits member.
?S: If you have an fd_set typedef, but the dweebs who installed it did
?S: a half-fast job and neglected to provide the macros to manipulate
?S: an fd_set, HAS_FDS_BITS will let us know how to fix the gaffe.
?S:.
?C:HAS_FD_SET:
?C: This symbol, when defined, indicates presence of the fd_set typedef
?C: in <sys/types.h>
?C:.
?C:HAS_FD_MACROS:
?C: This symbol, when defined,  indicates presence of the macros used
 to
?C: manipulate an fd_set.
?C:.
?C:HAS_FDS_BITS:
?C: This symbol, when defined, indicates presence of the fds_bits member in
?C: fd_set.  This knowledge is useful if fd_set is available but the macros
?C: aren't.
?C:.
?H:#$d_fd_set HAS_FD_SET /**/
?H:#$d_fd_macros HAS_FD_MACROS /**/
?H:#$d_fds_bits HAS_FDS_BITS /**/
?H:.
?F:!fd_set
: check for fd_set items
$cat <<EOM

Checking to see how well your C compiler handles fd_set and friends ...
```

```
EOM
?X: The FD_SET macros can be in strange places.  On some SysV-based
?X: systems, they are in <sys/bsdtypes.h>, which is included (perhaps)
?X: by <sys/socket.h>.  We won't force people to include
?X: <sys/bsdtypes.h> because it might introduce other
?X: incompatibilities.
$cat >fd_set.c <<EOCP
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#$i_syssock I_SYS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#ifdef I_SYS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#endif
#ifdef I_SYS_TIME
#include
 <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main() {
 fd_set fds;

#ifdef TRYBITS
 if(fds.fds_bits);
#endif

#if defined(FD_SET) && defined(FD_CLR) && defined(FD_ISSET) && defined(FD_ZERO)
 exit(0);
#else
 exit(1);
#endif
}
EOCP
if $cc $ccflags -DTRYBITS -o fd_set fd_set.c >fd_set.out 2>&1 ; then
 d_fds_bits="$define"
 d_fd_set="$define"
 echo "Well, your system knows about the normal fd_set typedef..." >&4
 if ./fd_set; then
  echo "and you have the normal fd_set macros (just as I'd expect)." >&4
  d_fd_macros="$define"
 else
  $cat >&4 <<'EOM'
but not the normal fd_set macros!  Gaaack!  I'll have to cover for you.
```

```
EOM
  d_fd_macros="$undef"
 fi
else
 $cat <<'EOM'
Hmm, your compiler has some difficulty with fd_set.  Checking further...
EOM
 if $cc $ccflags -o fd_set fd_set.c >fd_set.out 2>&1 ; then
  d_fds_bits="$undef"
  d_fd_set="$define"
  echo "Well, your system has some sort of fd_set available..." >&4
  if ./fd_set; then
   echo "and you have the
 normal fd_set macros." >&4
   d_fd_macros="$define"
  else
   $cat <<'EOM'
but not the normal fd_set macros!  Gross!  More work for me...
EOM
   d_fd_macros="$undef"
  fi
 else
 echo "Well, you got zip.  That's OK, I can roll my own fd_set stuff." >&4
  d_fd_set="$undef"
  d_fds_bits="$undef"
  d_fd_macros="$undef"
 fi
fi
$rm -f fd_set*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fd_set.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_safemcpy.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:41:12  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
```

```
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  13:58:46  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.3  1995/03/21  08:47:26  ram
?RCS: patch52: swapped two first arguments of memcpy() calls
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:15:10
  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:53:12  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safemcpy: cat d_memcpy +cc +optimize +ccflags +libs +ldflags rm \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safemcpy:
?S: This variable conditionally defines the HAS_SAFE_MEMCPY symbol if
?S: the memcpy() routine can do overlapping copies.
?S:.
?C:HAS_SAFE_MEMCPY (SAFE_MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy potentially overlapping memory blocks. Otherwise you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
?H:#$d_safemcpy HAS_SAFE_MEMCPY /**/
?H:.
?F:!safemcpy
?LINT: set d_safemcpy
: can memcpy handle overlapping blocks?
?X:
 assume the worst
val="$undef"
case "$d_memcpy" in
"$define")
 echo " "
 echo "Checking to see if your memcpy() can do overlapping copies..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
```

```
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
memcpy(abc, "abcdefghijklmnopqrstuvwxyz0123456789", 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  memcpy(b, abc, len);
  for (off = 1; off <= len; off++) {
   memcpy(b+off, b, len);
   memcpy(b, b+off, len);
   if (memcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
 if
 $cc $optimize $ccflags $ldflags \
      -o safemcpy foo.c $libs >/dev/null 2>&1; then
  if ./safemcpy 2>/dev/null; then
```

```
  echo "Yes, it can."
  val="$define"
 else
  echo "It can't, sorry."
  case "$d_memmove" in
  "$define") echo "But that's Ok since you have memmove()." ;;
  esac
 fi
else
 echo "(I can't compile the test program, so we'll assume not...)"
 case "$d_memmove" in
 "$define") echo "But that's Ok since you have memmove()." ;;
 esac
fi
;;
esac
$rm -f foo.* safemcpy core
set d_safemcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_safemcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_dbm.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:20  ram
?RCS: patch61: added I_RPCSVC_DBM check
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:16:05  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_dbm i_rpcsvcdbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_dbm (d_odbm):
?S: This variable conditionally defines
```

```
 the I_DBM symbol, which
?S: indicates to the C program that <dbm.h> exists and should
?S: be included.
?S:.
?S:i_rpcsvcdbm:
?S: This variable conditionally defines the I_RPCSVC_DBM symbol, which
?S: indicates to the C program that <rpcsvc/dbm.h> exists and should
?S: be included.  Some System V systems might need this instead of <dbm.h>.
?S:.
?C:I_DBM (HAS_ODBM ODBM):
?C: This symbol, if defined, indicates that <dbm.h> exists and should
?C: be included.
?C:.
?C:I_RPCSVC_DBM:
?C: This symbol, if defined, indicates that <rpcsvc/dbm.h> exists and
?C: should be included.
?C:.
?H:#$i_dbm I_DBM /**/
?H:#$i_rpcsvcdbm I_RPCSVC_DBM /**/
?H:.
?T:d_dbmclose
?LINT:set i_dbm i_rpcsvcdbm
: see if dbm.h is available
?X: We might just have the header, not the library.
?X: We look for dbmclose() rather than dbminit() because
?X: some versions of SCO Unix have -ldbm, but are missing dbmclose(). -- ADO
?X: Some System V systems have <rpcsvc/dbm.h> instead of <dbm.h>.
: see if dbmclose exists
set dbmclose
 d_dbmclose
eval $inlibc

case "$d_dbmclose" in
$define)
 set dbm.h i_dbm
 eval $inhdr
 case "$i_dbm" in
 $define)
  val="$undef"
  set i_rpcsvcdbm
  eval $setvar
  ;;
 *) set rpcsvc/dbm.h i_rpcsvcdbm
  eval $inhdr
  ;;
 esac
 ;;
*) echo "We won't be including <dbm.h>"
```

```
 val="$undef"
 set i_dbm
 eval $setvar
 val="$undef"
 set i_rpcsvcdbm
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dbm.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_csh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:32:18  ram
?RCS: patch61: added full_csh to preserve the full path even when portable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_csh full_csh: csh Setvar
?MAKE: -pick add $@ %<
?S:d_csh:
?S: This variable conditionally defines the CSH symbol, which
?S: indicates to the C program that the C-shell exists.
?S:.
?S:full_csh:
?S: This variable contains the full pathname to 'csh', whether
 or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'csh.'
?S:.
?C:HAS_CSH:
?C: This symbol, if defined, indicates that the C-shell exists.
?C:.
?C:CSH:
```

```
?C: This symbol, if defined, contains the full pathname of csh.
?C:.
?X: Previously, I just did $d_csh CSH "$full_csh", but that caused
?X: problems on VMS where the config.sh extraction program changes
?X: $undef to a real cpp undef, and they then had  #undef CSH ""
?X: which the compiler didn't like.  It's easy to work around this,
?X: so I did.  --AD  3/1998.
?X: And we don't want to define CSH if !HAS_CSH, but we don't want
?X: those lines in config.h if they don't need CSH, so protect with ?CSH
?X: and not ?%<. --RAM, 15/02/2004
?H:?%<:#$d_csh HAS_CSH  /**/
?H:?CSH:#ifdef HAS_CSH
?H:?CSH:#define CSH "$full_csh" /**/
?H:?CSH:#endif
?H:.
?LINT:set d_csh
: get csh whereabouts
case
 "$csh" in
'csh') val="$undef" ;;
*) val="$define" ;;
esac
set d_csh
eval $setvar
: Respect a hint or command line value for full_csh.
case "$full_csh" in
") full_csh=$csh ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_csh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: installprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: installprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
```

```
?RCS:
?RCS:
?MAKE:installprefix installprefixexp: Getfile Loc \
 Oldconfig afs cat package prefix
?MAKE: -pick add $@ %<
?S:installprefix:
?S: This variable holds the name of the directory below which
?S: "make install" will install the package.  For most users, this
?S: is the same
 as prefix.  However, it is useful for
?S: installing the software into a different (usually temporary)
?S: location after which it can be bundled up and moved somehow
?S: to the final location specified by prefix.
?S:.
?S:installprefixexp:
?S: This variable holds the full absolute path of installprefix
?S: with all ~-expansion done.
?S:.
: determine installation prefix for where package is to be installed.
if $afs; then
$cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
files will reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installprefix" in
 ") dflt=`echo $prefix | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installprefix";;
 esac
else
$cat <<EOM

In some special cases, particularly when building $package for distribution,
it is convenient to distinguish the directory in which files should be
installed from the directory ($prefix) in which they will
eventually
 reside.  For most users, these two directories are the same.

EOM
 case "$installprefix" in
 ") dflt=$prefix ;;
 *) dflt=$installprefix;;
 esac
fi
fn=d~
rp='What installation prefix should I use for installing files?'
```

```
. ./getfile
installprefix="$ans"
installprefixexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/installprefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systimeb.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systimeb.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/timeb.h> should be included
?X: or not when using ftime() (for struct timeb definition).
?X:
?X: Force looking for <sys/time.h> for struct timeb.
?X:INC: i_systime
?MAKE:i_systimeb: test contains Loc Setvar Findhdr
?MAKE: -pick add $@ %<
?S:i_systimeb:
?S: This variable conditionally defines I_SYS_TIMEB,
 which indicates
?S: to the C program that it should include <sys/timeb.h>.
?S:.
?C:I_SYS_TIMEB (I_SYSTIMEB):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/timeb.h>, in order to define struct timeb (some systems
?C: define this in <sys/time.h>). This is useful when using ftime().
?C: You should include <sys/time.h> if I_SYS_TIMEB is not defined,
?C: nor is I_SYS_TIME.
?C:.
?H:#$i_systimeb I_SYS_TIMEB  /**/
?H:.
?T:xxx
?LINT:set i_systimeb
: see where struct timeb is defined
echo " "
```

```
xxx=`./findhdr sys/timeb.h`
if $test "$xxx"; then
 if $contains 'struct timeb' $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have struct timeb defined in <sys/timeb.h>." >&4
 else
  val="$undef"
  echo "Assuming struct timeb is defined in <sys/time.h>." >&4
 fi
else
 val="$undef"
echo "No <sys/timeb.h> -- Assuming struct timeb is defined in <sys/time.h>." >&4
fi
set i_systimeb
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systimeb.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_neterrno.U,v 3.0.1.3 1994/10/29 16:20:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_neterrno.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:20:29  ram
?RCS: patch36: forgot to initialize 'val' to an empty value (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:22:10  ram
?RCS: patch32: removed spurious echo
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:02:05  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:i_neterrno: Inhdr +cc +ccflags rm_try Setvar
?MAKE: -pick
 add $@ %<
?S:i_neterrno:
?S: This variable conditionally defines the I_NET_ERRNO symbol, which
?S: indicates to the C program that <net/errno.h> exists and should
```

```
?S: be included.
?S:.
?C:I_NET_ERRNO:
?C: This symbol, if defined, indicates that <net/errno.h> exists and
?C: should be included.
?C:.
?H:#$i_neterrno I_NET_ERRNO  /**/
?H:.
?LINT:set i_neterrno
: see if net/errno.h is available
val=''
set net/errno.h val
eval $inhdr

: Unfortunately, it causes problems on some systems.  Arrgh.
case "$val" in
$define)
 cat > try.c <<'EOM'
#include <stdio.h>
#include <errno.h>
#include <net/errno.h>
int func()
{
 return ENOTSOCK;
}
EOM
 if $cc $ccflags -c try.c >/dev/null 2>&1; then
  echo "We'll be including <net/errno.h>." >&4
 else
  echo "We won't be including <net/errno.h>." >&4
  val="$undef"
 fi
 $rm_try
 ;;
esac
set i_neterrno
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_neterrno.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2015 Jarkko Hietaniemi, H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:longdblmantbits doublemantbits nvmantbits: Inlibc cat Compile run \
 rm_try Setvar echo i_sunmath usequadmath \
 d_longdbl longdblkind nvsize doublesize longdblsize
?MAKE: -pick add $@ %<
?S:doublemantbits:
?S: This symbol, if defined, tells how many mantissa bits
?S: there are in double precision floating point format.
?S: Note that this is usually DBL_MANT_DIG minus one, since
?S: with the standard IEEE 754 formats DBL_MANT_DIG includes
?S: the implicit bit which doesn't really exist.
?S:.
?S:longdblmantbits:
?S: This symbol, if defined, tells how many mantissa bits
?S: there are in long double precision floating point format.
?S: Note that this can be LDBL_MANT_DIG minus one,
?S: since
 LDBL_MANT_DIG can include the IEEE 754 implicit bit.
?S: The common x86-style 80-bit long double does not have
?S: an implicit bit.
?S:.
?S:nvmantbits:
?S: This variable tells how many bits the mantissa of a Perl NV has,
?S: not including the possible implicit bit.
?S:.
?C:DOUBLEMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: there are in double precision floating point format.
?C: Note that this is usually DBL_MANT_DIG minus one, since
?C: with the standard IEEE 754 formats DBL_MANT_DIG includes
?C: the implicit bit, which doesn't really exist.
?C:.
?C:LONGDBLMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: there are in long double precision floating point format.
?C: Note that this can be LDBL_MANT_DIG minus one,
?C: since LDBL_MANT_DIG can include the IEEE 754 implicit bit.
?C: The common x86-style 80-bit long double does not have
?C: an implicit bit.
?C:.
?C:NVMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: (not
 including implicit bit) there are in a Perl NV.
?C: This depends on which floating point type was chosen.
?C:.
?H:#define DOUBLEMANTBITS  $doublemantbits
?H:#define LONGDBLMANTBITS $longdblmantbits
```

```
?H:#define NVMANTBITS      $nvmantbits
?H:.
?F:!try
: Check the length of the double mantissa
$echo "Checking how many mantissa bits your doubles have..." >&4
$cat >try.c <<EOP
#$i_sunmath I_SUNMATH
#include <float.h>
#ifdef I_SUNMATH
# include <sunmath.h>
#endif
#ifdef DBL_MANT_DIG
# define BITS (DBL_MANT_DIG - 1) /* the implicit bit does not count */
#endif
#include <stdio.h>
int main(int argc, char *argv[]) {
#ifdef BITS
 printf("%d\n", BITS);
#endif
 return 0;
}
EOP
set try
if eval $compile; then
   doublemantbits=`$run ./try`
else
   doublemantbits="$undef"
fi
$rm_try

: Check the length of the longdouble mantissa
$echo "Checking how many mantissa bits your long doubles have..." >&4
$cat >try.c <<EOP
#$i_sunmath I_SUNMATH
#include <float.h>
#ifdef I_SUNMATH
# include <sunmath.h>
#endif
#$d_longdbl
 HAS_LONG_DOUBLE
#if defined(HAS_LONG_DOUBLE) && defined(LDBL_MANT_DIG)
# if ($longdblkind == 3) || ($longdblkind == 4) /* 80-bit extended precision */
/* This format has no implicit bit.  Beware, however, that for
* this format the bare LDBL_MANT_DIG is misleading for inf/nan:
* the top three bits are used for inf (100) / qnan (11x) / snan (101),
* and the top bit must have been one since 387, zero is plain invalid.
* For normal fp values, the LDBL_MANT_DIG is fine, though. */
#  define BITS LDBL_MANT_DIG
```

```
# elif ($longdblkind == 5 || $longdblkind == 6 || $longdblkind == 7 || $longdblkind == 8) /* double double */
/* LDBL_MANT_DIG of 106 (twice 53) would be logical, but for some
* reason e.g. Irix thinks 107.  But in any case, we want only
* the number of real bits, the implicit bits are of no interest.  */
#  define BITS 2 * (DBL_MANT_DIG - 1)
# else
#  define BITS (LDBL_MANT_DIG - 1) /* the implicit bit does not count */
# endif
#endif
#include <stdio.h>
int
 main(int argc, char *argv[]) {
#ifdef BITS
 printf("%d\n", BITS);
#endif
 return 0;
}
EOP
set try
if eval $compile; then
   longdblmantbits=`$run ./try`
else
   longdblmantbits="$undef"
fi
$rm_try

: Check the length of the NV mantissa
$echo "Checking how many mantissa bits your NVs have..." >&4
if test "X$usequadmath" = "X$define"; then
 nvmantbits=112 # 128-1-15
else
 if test "X$nvsize" = "X$doublesize"; then
   nvmantbits="$doublemantbits"
 else
    if test "X$nvsize" = "X$longdblsize"; then
      nvmantbits="$longdblmantbits"
    else
      nvmantbits="$undef"
    fi
 fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/mantbits.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_niin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_niin.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <netinet/in.h> is available or not
?X:
?MAKE:i_niin i_sysin: Inhdr
?MAKE: -pick add $@ %<
?S:i_niin:
?S: This variable conditionally defines I_NETINET_IN, which indicates
?S: to the C program that it should include <netinet/in.h>. Otherwise,
?S: you may try <sys/in.h>.
?S:.
?S:i_sysin:
?S: This variable conditionally
 defines I_SYS_IN, which indicates
?S: to the C program that it should include <sys/in.h> instead of
?S: <netinet/in.h>.
?S:.
?C:I_NETINET_IN:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <netinet/in.h>. Otherwise, you may try <sys/in.h>.
?C:.
?C:I_SYS_IN (I_SYSIN):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/in.h> instead of <netinet/in.h>.
?C:.
?H:#$i_niin I_NETINET_IN /**/
?H:#$i_sysin I_SYS_IN  /**/
?H:.
?LINT:set i_niin i_sysin
: see if this is a netinet/in.h or sys/in.h system
set netinet/in.h i_niin sys/in.h i_sysin
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_niin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: abortsig.U,v 3.0.1.1 1994/10/29 16:02:19 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: abortsig.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:19  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:abortsig: Myread Oldconfig Guess cat Compile rm
?MAKE: -pick add $@ %<
?S:abortsig:
?S: This variable holds the name of the signal used by the abort() call.
?S:.
?C:ABORTSIG:
?C: This symbol holds the signal number (symbol)
 used by the abort() call. To
?C: actually define the signal symbol, <signal.h> should be included.
?C:.
?H:#define ABORTSIG $abortsig  /**/
?H:.
?T:signal
: which signal is sent by abort ?
echo " "
case "$abortsig" in
")
 echo "Checking to see which signal is sent to the process by abort()..." >&4
 echo "abort" > abort.sh
 chmod +x abort.sh
?X: SIGABRT should replace SIGIOT on USG machines in a near future (1991).
 for signal in SIGIOT SIGILL SIGABRT; do
  case "$abortsig" in
  ") $cat >abort.c <<EOP
#include <signal.h>
caught() { exit(0); }
int main()
{
#ifdef $signal
 signal($signal, caught);
#endif
```

```
 if (-1 == abort())
  exit(1);
 exit(1);
}
EOP
?X: We have to use the abort.sh script otherwise sh behaves strangely on AIX.
   set abort
   if eval $compile; then
    (./abort.sh) >/dev/null 2>&1
    case $? in
    0) abortsig="$signal";;
    esac
   fi
   ;;
  esac
 done
 ;;
esac
case "$abortsig" in
") echo "(I wasn't able to compute the signal name--guessing)"
 if ./usg; then
  dflt="SIGIOT"
 else
  dflt="SIGILL"
 fi;;
*)
  dflt="$abortsig"
 ;;
esac
rp="Which signal does abort() send to the process (signal name)?"
. ./myread
abortsig="$ans"
$rm -f core abort.sh abort abort.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/abortsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: i_sysfile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:11:36  ram
?RCS: patch56: removed <> characters from comment, per metalint suggestion
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:01:23  ram
?RCS: patch6: added default for i_sysfile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysfile: h_sysfile Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_sysfile:
?S: This variable conditionally defines
 the I_SYS_FILE symbol, and indicates
?S: whether a C program should include <sys/file.h> to get R_OK and friends.
?S:.
?C:I_SYS_FILE (I_SYSFILE):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/file.h> to get definition of R_OK and friends.
?C:.
?H:#$i_sysfile I_SYS_FILE  /**/
?H:.
?T:val
?D:i_sysfile=''
?LINT:change h_sysfile
?LINT:set i_sysfile
: see if this is a sys/file.h system
val=''
set sys/file.h val
eval $inhdr

: do we need to include sys/file.h ?
case "$val" in
"$define")
 echo " "
 if $h_sysfile; then
  val="$define"
  echo "We'll be including <sys/file.h>." >&4
 else
  val="$undef"
  echo "We won't be including <sys/file.h>." >&4
 fi
 ;;
*)
 h_sysfile=false
 ;;
esac
```

```
set i_sysfile
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nblock_io.U,v 3.0.1.2 1997/02/28 16:17:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: nblock_io.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:17:14  ram
?RCS: patch61: simplify here document for shells that can't handle them well
?RCS: patch61: force use of "startsh" at the head of the generated script
?RCS: patch61: added new files to the ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:13:22  ram
?RCS: patch56: created
?RCS:
?X:
?X: Simplify here document for shells that can't handle them well.
?X: (Problem reported on FreeBSD;
 it's unclear if this helps.)  --AD
?X:
?MAKE:o_nonblock eagain rd_nodata d_eofnblk: cat rm_try Compile run \
 d_open3 h_sysfile h_fcntl signal_t hint Oldconfig Setvar \
 startsh i_unistd i_fcntl i_stdlib d_fork d_pipe d_alarm
?MAKE: -pick add $@ %<
?S:o_nonblock:
?S: This variable bears the symbol value to be used during open() or fcntl()
?S: to turn on non-blocking I/O for a file descriptor. If you wish to switch
?S: between blocking and non-blocking, you may try ioctl(FIOSNBIO) instead,
?S: but that is only supported by some devices.
?S:.
?S:eagain:
?S: This variable bears the symbolic errno code set by read() when no
?S: data is present on the file and non-blocking I/O was enabled (otherwise,
?S: read() blocks naturally).
?S:.
?S:rd_nodata:
?S: This variable holds the return code from read() when no data is
```

```
?S: present. It should be -1, but some systems return 0 when O_NDELAY is
?S: used, which is a shame because you cannot make the difference between
?S: no data and an EOF.. Sigh!
?S:.
?S:d_eofnblk:
?S: This
 variable conditionally defines EOF_NONBLOCK if EOF can be seen
?S: when reading from a non-blocking I/O source.
?S:.
?C:VAL_O_NONBLOCK:
?C: This symbol is to be used during open() or fcntl(F_SETFL) to turn on
?C: non-blocking I/O for the file descriptor. Note that there is no way
?C: back, i.e. you cannot turn it blocking again this way. If you wish to
?C: alternatively switch between blocking and non-blocking, use the
?C: ioctl(FIOSNBIO) call instead, but that is not supported by all devices.
?C:.
?C:VAL_EAGAIN:
?C: This symbol holds the errno error code set by read() when no data was
?C: present on the non-blocking file descriptor.
?C:.
?C:RD_NODATA:
?C: This symbol holds the return code from read() when no data is present
?C: on the non-blocking file descriptor. Be careful! If EOF_NONBLOCK is
?C: not defined, then you can't distinguish between no data and EOF by
?C: issuing a read(). You'll have to find another way to tell for sure!
?C:.
?C:EOF_NONBLOCK:
?C: This
 symbol, if defined, indicates to the C program that a read() on
?C: a non-blocking file descriptor will return 0 on EOF, and not the value
?C: held in RD_NODATA (-1 usually, in that case!).
?C:.
?H:#define VAL_O_NONBLOCK $o_nonblock
?H:#define VAL_EAGAIN $eagain
?H:#define RD_NODATA $rd_nodata
?H:#$d_eofnblk EOF_NONBLOCK
?H:.
?T:status
?F:!try.out !try.ret !try.err !try !mtry
?LINT:use d_open3
: check for non-blocking I/O stuff
case "$h_sysfile" in
true) echo "#include <sys/file.h>" > head.c;;
*)
	case "$h_fcntl" in
	true) echo "#include <fcntl.h>" > head.c;;
	*) echo "#include <sys/fcntl.h>" > head.c;;
	esac
```

```
      ;;
esac
echo " "
echo "Figuring out the flag used by open() for non-blocking I/O..." >&4
case "$o_nonblock" in
")
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_fcntl I_FCNTL
#ifdef I_FCNTL
#include <fcntl.h>
#endif
int main() {
#ifdef O_NONBLOCK
 printf("O_NONBLOCK\n");
 exit(0);
#endif
#ifdef
 O_NDELAY
 printf("O_NDELAY\n");
 exit(0);
#endif
?X: Stevens "Advanced Programming in the UNIX Environment" page 364 mentions
?X: the FNDELAY symbol, used in 4.3BSD (source: Paul Marquess).
#ifdef FNDELAY
 printf("FNDELAY\n");
 exit(0);
#endif
 exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  o_nonblock=`$run ./try`
  case "$o_nonblock" in
  ") echo "I can't figure it out, assuming O_NONBLOCK will do.";;
  *) echo "Seems like we can use $o_nonblock.";;
  esac
 else
  echo "(I can't compile the test program; pray O_NONBLOCK is right!)"
 fi
 ;;
*) echo "Using $hint value $o_nonblock.";;
```

```
esac
$rm_try

echo " "
echo "Let's see what value errno gets from read() on a $o_nonblock file..." >&4
case "$eagain" in
")
 case "$d_fork:$d_pipe:$d_alarm" in
 define:define:define)
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <errno.h>
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_fcntl
 I_FCNTL
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#define MY_O_NONBLOCK $o_nonblock
#ifndef errno  /* XXX need better Configure test */
extern int errno;
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#include <unistd.h>
#endif
#include <string.h>
$signal_t blech(int x) { exit(3); }
EOCP
 $cat >> try.c <<'EOCP'
int main()
{
 int pd[2];
 int pu[2];
 char buf[1];
 char string[100];
 int ret;

 ret = pipe(pd); /* Down: child -> parent */
 if (ret != 0)
  exit(3);
 ret = pipe(pu); /* Up: parent -> child */
```

```
 if (ret != 0)
  exit(3);
 if (0 != fork()) {
  close(pd[1]); /* Parent reads from pd[0] */
  close(pu[0]); /* Parent writes (blocking) to pu[1] */
#ifdef F_SETFL
  if (-1 == fcntl(pd[0], F_SETFL, MY_O_NONBLOCK))
   exit(1);
#else
  exit(4);
#endif
  signal(SIGALRM, blech);
  alarm(5);
  if ((ret = read(pd[0], buf, 1)) > 0) /* Nothing to read! */
   exit(2);
  sprintf(string, "%d\n", ret);
  ret = write(2, string, strlen(string));
  if (ret != strlen(string))
   exit(3);
  alarm(0);
#ifdef
 EAGAIN
  if (errno == EAGAIN) {
   printf("EAGAIN\n");
   goto ok;
  }
#endif
#ifdef EWOULDBLOCK
  if (errno == EWOULDBLOCK)
   printf("EWOULDBLOCK\n");
#endif
 ok:
  ret = write(pu[1], buf, 1); /* Unblocks child, tell it to close our pipe */
  if (ret != 1)
   exit(3);
  sleep(2);    /* Give it time to close our pipe */
  alarm(5);
  ret = read(pd[0], buf, 1); /* Should read EOF */
  alarm(0);
  sprintf(string, "%d\n", ret);
  ret = write(4, string, strlen(string));
  if (ret != strlen(string))
   exit(3);
  exit(0);
 }

 close(pd[0]);   /* We write to pd[1] */
 close(pu[1]);   /* We read from pu[0] */
```

```
 ret = read(pu[0], buf, 1); /* Wait for parent to signal us we may continue */
 if (ret != 1)
  exit(3);
 close(pd[1]);   /* Pipe pd is now fully closed! */
 exit(0);    /* Bye bye, thank you for playing! */
}
EOCP
 set try
 if eval $compile_ok; then
?X: Use script to avoid the possible 'alarm call' message
  echo "$startsh" >mtry
  echo "$run ./try >try.out 2>try.ret 4>try.err
 || exit 4" >>mtry
  chmod +x mtry
  $run ./mtry >/dev/null 2>&1
  case $? in
  0) eagain=`$cat try.out`;;
  1) echo "Could not perform non-blocking setting!";;
  2) echo "I did a successful read() for something that was not there!";;
  3) echo "Hmm... non-blocking I/O does not seem to be working!";;
  4) echo "Could not find F_SETFL!";;
  *) echo "Something terribly wrong happened during testing.";;
  esac
  rd_nodata=`$cat try.ret`
  echo "A read() system call with no data present returns $rd_nodata."
  case "$rd_nodata" in
  0|-1) ;;
  *)
   echo "(That's peculiar, fixing that to be -1.)"
   rd_nodata=-1
   ;;
  esac
  case "$eagain" in
  ")
   echo "Forcing errno EAGAIN on read() with no data available."
   eagain=EAGAIN
   ;;
  *)
   echo "Your read() sets errno to $eagain when no data is available."
   ;;
  esac
  status=`$cat try.err`
  case "$status" in
  0) echo "And it correctly returns 0 to signal EOF.";;
  -1) echo "But it also returns -1 to signal EOF, so be careful!";;
  *)
 echo "However, your read() returns '$status' on EOF??";;
  esac
```

```
  val="$define"
  if test "$status" = "$rd_nodata"; then
   echo "WARNING: you can't distinguish between EOF and no data!"
   val="$undef"
  fi
 else
  echo "I can't compile the test program--assuming errno EAGAIN will do."
  eagain=EAGAIN
 fi
 ;;
 *) echo "Can't figure out how to test this--assuming errno EAGAIN will do."
  eagain=EAGAIN
  val="$define"
  ;;
 esac
 set d_eofnblk
 eval $setvar
 ;;
*)
 echo "Using $hint value $eagain."
 echo "Your read() returns $rd_nodata when no data is present."
 case "$d_eofnblk" in
 "$define") echo "And you can see EOF because read() returns 0.";;
 "$undef") echo "But you can't see EOF status from read() returned value.";;
 *)
?X: Should not happen, but if it does, assume the worst!
  echo "(Assuming you can't see EOF status from read anyway.)"
  d_eofnblk=$undef
  ;;
 esac
 ;;
esac
$rm_try head.c mtry
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/nblock_io.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: socksizetype.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:socksizetype: \
 Protochk Oldconfig Myread cat d_socket d_socklen_t sizetype \
 usesocks i_socks i_systypes extern_C
```

```
?MAKE: -pick add $@ %<
?S:socksizetype:
?S: This variable holds the type used for the size argument
?S: for various socket calls like accept.  Usual values include
?S: socklen_t, size_t, and int.
?S:.
?C:Sock_size_t:
?C: This symbol holds the type used for the size argument of
?C: various socket calls (just the base type, not the pointer-to).
?C:.
?H:#define Sock_size_t  $socksizetype /**/
?H:.
?T:xxx yyy try
@if Sock_size_t
: check for type of the size argument to socket calls
case "$d_socket" in
"$define")
 $cat <<EOM

Checking to see what type is the last argument
 of accept().
EOM
 yyy=''
 case "$d_socklen_t" in
 "$define") yyy="$yyy socklen_t"
 esac
 yyy="$yyy $sizetype int long unsigned"
 for xxx in $yyy; do
  case "$socksizetype" in
  ") try="$extern_C int accept(int, struct sockaddr *, $xxx *);"
   case "$usesocks" in
   "$define")
    if ./protochk "$try" $i_systypes sys/types.h $d_socket sys/socket.h literal '#define INCLUDE_PROTOTYPES'
$i_socks socks.h.; then
     echo "Your system accepts '$xxx *' for the last argument of accept()."
     socksizetype="$xxx"
    fi
    ;;
   *) if ./protochk "$try"  $i_systypes sys/types.h $d_socket sys/socket.h; then
     echo "Your system accepts '$xxx *' for the last argument of accept()."
     socksizetype="$xxx"
    fi
    ;;
   esac
   ;;
  esac
 done
: In case none of those worked, prompt the user.
```

```
 case "$socksizetype" in
 ") rp='What is the type for socket address structure sizes?'
  dflt='int'
  . ./myread
  socksizetype=$ans
  ;;
 esac
 ;;
*) : no sockets, so pick relatively harmless default
 socksizetype='int'
 ;;
esac
@end
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/socksizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_cuserid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_cuserid.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:25  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_cuserid: Inlibc
?MAKE: -pick add $@ %<
?S:d_cuserid:
?S: This variable conditionally defines the HAS_CUSERID symbol, which
?S: indicates to the C program that the cuserid() routine is available
?S: to get character login names.
?S:.
?C:HAS_CUSERID :
?C: This symbol,
 if defined, indicates that the cuserid routine is
?C: available to get character login names.
?C:.
?H:#$d_cuserid HAS_CUSERID  /**/
```

```
?H:.
?LINT:set d_cuserid
: see if cuserid exists
set cuserid d_cuserid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_cuserid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2021 Nicholas Clark & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_thread_local perl_thread_local: cat echo Setvar Compile run rm_try hint
?MAKE: -pick add $@ %<
?S:d_thread_local:
?S: This variable conditionally defines the PERL_THREAD_LOCAL symbol. In
?S: turn that gives a linkage specification for thread-local storage.
?S:.
?S:perl_thread_local:
?S: This variable gives the value for the PERL_THREAD_LOCAL symbol (when
?S: defined), which gives a linkage specification for thread-local storage.
?S:.
?C:PERL_THREAD_LOCAL:
?C: This symbol, if defined, gives a linkage specification for thread-local
?C: storage. For example, for a C11 compiler this will be _Thread_local.
?C: Beware, some compilers are sensitive to the C language standard they are
?C: told
 to parse. For example, suncc defaults to C11, so our probe will
?C: report that _Thread_local can be used. However, if the -std=c99 is later
?C: added to the compiler flags, then _Thread_local will become a syntax
?C: error. Hence it is important for these flags to be consistent between
?C: probing and use.
?C:.
?H:#$d_thread_local PERL_THREAD_LOCAL $perl_thread_local /**/
?H:.
?T:thread_local
?F:!try
?LINT:set d_thread_local
: see what flavor, if any, of thread local storage is supported
echo " "
echo "Checking to see if your system supports C11 thread local storage..."
$cat > try.c <<'EOCP'
#include <stdio.h>
```

```
#include <stdlib.h>
#include <pthread.h>

static int plus_one = 1;
static int minus_one = -1;

PROBE_MACRO int *minion;

int callback (const void *a, const void *b) {
  int val_a = *minion * *(const int *)a;
  int val_b = *minion * *(const int *)b;
  return val_a < val_b ? -1 : val_a > val_b;
}

#define SIZE 8

void *thread_function(void *arg) {
  /* thread local variables
 should start zeroed in each thread. */
  if (minion != NULL) {
     fprintf(stderr, "__thread variable started with %p, should be NULL\n",
            minion);
     exit(2);
  }
  minion = &minus_one;

  int array[SIZE];
  unsigned int i;
  for (i = 0; i < SIZE; ++i) {
     /* "Hash randomisation" - this array isn't in sorted order: */
     array[i ^ 5] = i * i;
  }

  qsort(array, SIZE, sizeof(int), callback);

  int bad = 0;
  for (i = 0; i < SIZE; ++i) {
     int want = (SIZE - 1 - i) * (SIZE - 1 - i);
     int have = array[i];
     if (want != have) {
        ++bad;
        fprintf(stderr, "array[%u] - want %i, have %i\n", i, want, have);
     }
  }
  if (bad)
     exit(3);

  return NULL;
```

```
}

int main(int argc, char **argv) {
  if (minion != NULL) {
      fprintf(stderr, "__thread variable started with %p, should be NULL\n",
              minion);
      exit(4);
  }

  minion = &plus_one;

  pthread_t
 tid;
  int result = pthread_create(&tid, NULL, thread_function, NULL);
  if (result) {
      fprintf(stderr, "pthread_create failed (%d)\n", result);
      exit(5);
  }

  result = pthread_join(tid, NULL);
  if (result) {
      fprintf(stderr, "pthread_join failed (%d)\n", result);
      exit(6);
  }

  if (minion == NULL) {
      fprintf(stderr, "__thread variable should not be NULL\n");
      exit(7);
  }
  if (!(minion == &plus_one && *minion == 1)) {
      fprintf(stderr, "__thread variable should be %d @ %p, not %d @ %p\n",
              1, &plus_one, *minion, minion);
      exit(8);
  }

  return 0;
}
EOCP

# Respect a hint (or previous) value for perl_thread_local, if there is one.
case "$perl_thread_local" in
") # Check the various possibilities, and break out on success.
 for thread_local in _Thread_local __thread; do
  set try -DPROBE_MACRO=$thread_local
  if eval $compile && $run ./try; then
   $echo "Your compiler supports $thread_local."
 >&4
   val=$define
```

```
   perl_thread_local="$thread_local";
   break;
  fi
  $echo "Your compiler does NOT support $thread_local." >&4
  val="$undef"
 done
 ;;
*thread*|*Thread*) # Some variant of thread local exists.
 echo "Keeping your $hint value of $perl_thread_local."
 val=$define
 ;;
*)  # Unrecognized previous value -- blindly trust the supplied
 # value and hope it makes sense.  Use old value for
 # d_thread_local, if there is one.
 echo "Keeping your $hint value of $perl_thread_local."
 case "$d_thread_local" in
  ") val=$define ;;
  *)  val=$d_thread_local ;;
 esac
 ;;
esac
set d_thread_local
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_thread_local.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016 Tony Cook
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:dtraceobject dtracexnolibs: usedtrace dtrace cc ccflags optimize \
  Compile cat rm_try
?MAKE: -pick add $@ %<
?S:dtraceobject:
?S: Whether we need to build an object file with the dtrace tool.
?S:.
?S:dtracexnolibs:
?S: Whether dtrace accepts -xnolibs.  If available we call dtrace -h
?S: and dtrace -G with -xnolibs to allow dtrace to run in a jail on
?S: FreeBSD.
?S:.
?F: !perldtrace.h
?T:xnolibs
: Probe whether dtrace builds an object, as newer Illumos requires an input
```

```
: object file that uses at least one of the probes defined in the .d file
case "$usedtrace" in
$define)
  case "$dtracexnolibs" in
  $define|true|[yY]*)
      dtracexnolibs=$define
 $dtrace -h -xnolibs -s ../perldtrace.d -o perldtrace.h
 ;;
  ' '|'')
       if $dtrace -h -xnolibs -s ../perldtrace.d -o perldtrace.h 2>&1 ; then
     dtracexnolibs=$define
     echo "Your dtrace accepts -xnolibs"
 elif $dtrace -h -s ../perldtrace.d -o perldtrace.h 2>&1 ; then
     dtracexnolibs=$undef
     echo "Your dtrace doesn't accept -xnolibs"
 else
          echo "Your dtrace doesn't work at all, try building without dtrace support" >&4
     exit 1
 fi
 ;;
  *)
      dtracexnolibs=$undef
 $dtrace -h -s ../perldtrace.d -o perldtrace.h
 ;;
  esac
  case $dtracexnolibs in
  $define) xnolibs=-xnolibs ;;
  *) xnolibs= ;;
  esac

  case "$dtraceobject" in
  $define|true|[yY]*)
      dtraceobject=$define
      ;;
  ' '|'')
      $cat >try.c <<EOM
#include "perldtrace.h"
int main(void) {
  PERL_LOADED_FILE("dummy");
  return 0;
}
EOM
      dtraceobject=$undef
      if $cc -c -o try.o $optimize $ccflags try.c \
               && $dtrace -G $xnolibs -s ../perldtrace.d try.o >/dev/null 2>&1; then

        dtraceobject=$define
          echo "Your dtrace builds an object file"
```

```
      fi
      ;;
   *) dtraceobject=$undef ;;
   esac
   $rm_try perldtrace.o perldtrace.h
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dtraceobject.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: alignbytes.U,v 3.0.1.2 1994/10/29 16:02:28 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: alignbytes.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:02:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:25:20  ram
?RCS: patch23: avoid ALIGNBYTES, since it conflicts on NetBSD
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:alignbytes: Myread Compile cat rm_try multiarch run test nvtype
?MAKE: -pick add $@ %<
?S:alignbytes:
?S: This
 variable holds the number of bytes required to align a
?S: double-- or a long double when applicable. Usual values are
?S: 2, 4 and 8.  The default is eight, for safety.
?S:.
?X: This used to be called ALIGNBYTES, but that conflicts with
?X: <machines/param.h> in NetBSD.
?C:MEM_ALIGNBYTES (ALIGNBYTES):
?C: This symbol contains the number of bytes required to align a
?C: double, or a long double when applicable. Usual values are 2,
?C: 4 and 8. The default is eight, for safety.  For cross-compiling
?C: or multiarch support, Configure will set a minimum of 8.
?C:.
?H:?%<:#define MEM_ALIGNBYTES $alignbytes
```

```
?H:.
?F:!try
: check for alignment requirements
echo " "
case "$alignbytes" in
   ") echo "Checking alignment constraints..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
struct foobar {
   char foo;
   $nvtype bar;
} try_algn;
int main()
{
   printf("%d\n", (int)((char *)&try_algn.bar - (char *)&try_algn.foo));
   return(0);
}
EOCP
 set try
 if eval $compile_ok; then
     dflt=`$run
 ./try`
 else
     dflt='8'
     echo "(I can't seem to compile the test program...)"
 fi
 case "$multiarch" in
     *$define*)
  : The usual safe value is 8, but Darwin with -Duselongdouble
  : needs 16.  Hence, we will take 8 as a minimum, but allow
  : Configure to pick a larger value if needed.
  if $test "$dflt" -lt 8; then
      dflt='8'
      echo "Setting alignment to 8 for multiarch support.">&4
  fi
  ;;
 esac
 ;;
   *) dflt="$alignbytes"
 ;;
esac
rp="Doubles must be aligned on a how-many-byte boundary?"
. ./myread
alignbytes="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/alignbytes.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Prefixit.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Prefixit.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:29:22  ram
?RCS: patch49: created
?RCS:
?X:
?X: Used as: "set dflt var dir; eval $prefixit" to set $dflt to be
?X: $prefix/dir by default, or the previous $var depending on certain
?X: conditions:
?X: - If the $oldprefix variable is empty, then $prefix holds the same
?X:   value as on previous runs. Therefore, reuse $var if set, otherwise
?X:   set $dflt to $prefix/dir.
?X: - If $oldprefix is not
 empty, then set $dflt to $prefix/dir if $var
?X:   is empty (first run). Otherwise, if $var is $oldprefix/dir, then
?X:   change it to $prefix/dir. If none of the above, reuse the old $var.
?X:
?X: When dir is omitted, the dflt variable is set to $var if prefix did not
?X: change, to an empty value otherwise. If dir=none, then a single space
?X: in var is kept as-is, even if the prefix changes.
?X:
?MAKE:Prefixit: prefix oldprefix
?MAKE: -pick add $@ %<
?LINT:define prefixit
?S:prefixit:
?S: This shell variable is used internally by Configure to reset
?S: the leading installation prefix correctly when it is changed.
?S:  set dflt var [dir]
?S:  eval $prefixit
?S: That will set $dflt to $var or $prefix/dir depending on the
?S: value of $var and $oldprefix.
?S:.
?V:prefixit
?T:tp
: set the prefixit variable, to compute a suitable default value
prefixit='case "$3" in
""|none)
```

```
 case "$oldprefix" in
 "") eval "$1=\"\$$2\"";;
 *)
  case "$3" in
  "") eval "$1=";;
  none)
   eval "tp=\"\$$2\"";
   case
 "$tp" in
   ""|" "|none) eval "$1=\"\$$2\"";;
   *) eval "$1=";;
   esac;;
  esac;;
 esac;;
*)
 eval "tp=\"$oldprefix-\$$2-\""; eval "tp=\"$tp\"";
 case "$tp" in
 --|/*--|\~*--) eval "$1=\"$prefix/$3\"";;
 /*-$oldprefix/*|\~*-$oldprefix/*)
  eval "$1=\`echo \$$2 | sed \"s,^$oldprefix,$prefix,\"\`";;
 *) eval "$1=\"\$$2\"";;
 esac;;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Prefixit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tcgtpgrp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_tcgtpgrp.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:08  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_tcgetpgrp: Inlibc
?MAKE: -pick add $@ %<
?S:d_tcgetpgrp:
?S: This variable conditionally defines the HAS_TCGETPGRP symbol, which
```

```
?S: indicates to the C program that the tcgetpgrp() routine is available.
?S: to get foreground process group ID.
?S:.
?C:HAS_TCGETPGRP
 :
?C: This symbol, if defined, indicates that the tcgetpgrp routine is
?C: available to get foreground process group ID.
?C:.
?H:#$d_tcgetpgrp HAS_TCGETPGRP  /**/
?H:.
?LINT:set d_tcgetpgrp
: see if tcgetpgrp exists
set tcgetpgrp d_tcgetpgrp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tcgtpgrp.U
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```
?RCS: $Id: Warn_v7EXT.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Warn_v7EXT.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:01:42  ram
?RCS: patch36: call ./v7 explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit issues warnings to V7 sites that they are living dangerously.
?X: This unit needs to get mentioned in End.U to get included.
?X:
?MAKE:Warn_v7EXT: package Guess
?MAKE: -pick add $@ %<
: Warnings
if ./v7;
 then
 cat <<EOM

NOTE: the V7 compiler may ignore some #undefs that $package uses.  If so,
```

```
you may get messages about redefining EXT.  Some V7 compilers also have
difficulties with #defines near buffer boundaries, so beware.  You may have
to play with the spacing in some .h files, believe it or not.
EOM
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn_v7EXT.U
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```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mallocsrc.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:10:26  ram
?RCS: patch61: added support for Free_t, the type of free()
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:10:46  ram
?RCS: patch23: added support for MYMALLOC, mainly  for perl5 (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mallocsrc mallocobj usemymalloc malloctype d_mymalloc \
 freetype: Myread \
 Oldconfig
 package Guess Setvar rm cat +cc +ccflags Findhdr \
 i_malloc i_stdlib sed libs _o ptrsize
?MAKE: -pick add $@ %<
?X: Put near top so that other tests don't erroneously include
?X: -lmalloc.  --AD  22 June 1998
?Y:TOP
?S:usemymalloc:
?S: This variable contains y if the malloc that comes with this package
?S: is desired over the system's version of malloc.  People often include
?S: special versions of malloc for effiency, but such versions are often
?S: less portable.  See also mallocsrc and mallocobj.
?S: If this is 'y', then -lmalloc is removed from $libs.
?S:.
?S:mallocsrc:
```

```
?S: This variable contains the name of the malloc.c that comes with
?S: the package, if that malloc.c is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.
?S:.
?S:d_mymalloc:
?S: This variable conditionally defines MYMALLOC in case other parts
?S: of the source want to take special action if MYMALLOC is used.
?S: This may include different sorts
 of profiling or error detection.
?S:.
?S:mallocobj:
?S: This variable contains the name of the malloc.o that this package
?S: generates, if that malloc.o is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.  See mallocsrc.
?S:.
?S:freetype:
?S: This variable contains the return type of free().  It is usually
?S: void, but occasionally int.
?S:.
?S:malloctype:
?S: This variable contains the kind of ptr returned by malloc and realloc.
?S:.
?C:Free_t:
?C: This variable contains the return type of free().  It is usually
?C: void, but occasionally int.
?C:.
?C:Malloc_t (MALLOCPTRTYPE):
?C: This symbol is the type of pointer returned by malloc and realloc.
?C:.
?H:#define Malloc_t $malloctype   /**/
?H:#define Free_t $freetype   /**/
?H:.
?C:MYMALLOC:
?C: This symbol, if defined, indicates that we're using our own malloc.
?C:.
?H:#$d_mymalloc MYMALLOC   /**/
?H:.
?LINT:change libs
?X: Cannot test for mallocsrc; it
 is the unit's name and there is a bug in
?X: the interpreter which defines all the names, even though they are not used.
@if mallocobj
: determine which malloc to compile in
echo " "
case "$usemymalloc" in
[yY]*|true|$define) dflt='y' ;;
```

```
[nN]*|false|$undef) dflt='n' ;;
*)
 case "$ptrsize" in
 4) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
esac
rp="Do you wish to attempt to use the malloc that comes with $package?"
. ./myread
usemymalloc="$ans"
case "$ans" in
y*|true)
 usemymalloc='y'
 mallocsrc='malloc.c'
 mallocobj="malloc$_o"
 d_mymalloc="$define"
?X: Maybe libs.U should be dependent on mallocsrc.U, but then
?X: most packages that use dist probably don't supply their own
?X: malloc, so this is probably an o.k. comprpomise
 case "$libs" in
 *-lmalloc*)
  : Remove malloc from list of libraries to use
  echo "Removing unneeded -lmalloc from library list" >&4
  set `echo X $libs | $sed -e 's/-lmalloc / /' -e 's/-lmalloc$//'`
  shift
  libs="$*"
  echo "libs = $libs" >&4
  ;;
 esac
 ;;
*)
 usemymalloc='n'
 mallocsrc=''
 mallocobj=''
 d_mymalloc="$undef"
 ;;
esac

@end
@if
 MALLOCPTRTYPE || Malloc_t || Free_t
: compute the return types of malloc and free
echo " "
$cat >malloc.c <<END
#$i_malloc I_MALLOC
#$i_stdlib I_STDLIB
#include <stdio.h>
```

```
#include <sys/types.h>
#ifdef I_MALLOC
#include <malloc.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#ifdef TRY_MALLOC
void *malloc();
#endif
#ifdef TRY_FREE
void free();
#endif
END
@if MALLOCPTRTYPE || Malloc_t
case "$malloctype" in
")
 if $cc $ccflags -c -DTRY_MALLOC malloc.c >/dev/null 2>&1; then
  malloctype='void *'
 else
  malloctype='char *'
 fi
 ;;
esac
echo "Your system wants malloc to return '$malloctype', it would seem." >&4
@end

@if Free_t
case "$freetype" in
")
 if $cc $ccflags -c -DTRY_FREE malloc.c >/dev/null 2>&1; then
  freetype='void'
 else
  freetype='int'
 fi
 ;;
esac
echo "Your system uses $freetype free(), it would seem." >&4
@end
$rm -f malloc.[co]
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mallocsrc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_strtoul.U,v 3.0.1.1 1997/02/28 15:46:43 ram Exp $
?RCS:

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_strtoul.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:43  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_strtoul: Inlibc cat longsize Compile run
?MAKE: -pick add $@ %<
?S:d_strtoul:
?S: This variable conditionally defines the HAS_STRTOUL symbol, which
?S: indicates to the C program that the strtoul() routine is available
?S: to provide conversion of strings to unsigned long.
?S:.
?C:HAS_STRTOUL (STRTOUL):
?C: This
 symbol, if defined, indicates that the strtoul routine is
?C: available to provide conversion of strings to unsigned long.
?C:.
?H:#$d_strtoul HAS_STRTOUL /**/
?H:.
?F:!try
: see if strtoul exists
set strtoul d_strtoul
eval $inlibc

case "$d_strtoul" in
"$define")
 $cat <<EOM
Checking whether your strtoul() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#include <stdio.h>
static int bad = 0;
void check(const char *s, unsigned long eul, int een) {
 unsigned long gul;
 errno = 0;
 gul = strtoul(s, 0, 10);
 if (!((gul == eul) && (errno == een)))
```

```
  bad++;
}
int main() {
 check(" 1", 1L, 0);
 check(" 0", 0L, 0);
EOCP
 case "$longsize" in
 8)
     $cat >>try.c <<'EOCP'
 check("18446744073709551615", 18446744073709551615UL, 0);
 check("18446744073709551616", 18446744073709551615UL, ERANGE);
#if 0 /* strtoul() for /^-/ strings is undefined. */
 check("-1", 18446744073709551615UL, 0);
 check("-18446744073709551614", 2, 0);
 check("-18446744073709551615", 1,
 0);
 check("-18446744073709551616", 18446744073709551615UL, ERANGE);
 check("-18446744073709551617", 18446744073709551615UL, ERANGE);
#endif
EOCP
  ;;
 4)
      $cat >>try.c <<'EOCP'
 check("4294967295", 4294967295UL, 0);
 check("4294967296", 4294967295UL, ERANGE);
#if 0 /* strtoul() for /^-/ strings is undefined. */
 check("-1", 4294967295UL, 0);
 check("-4294967294", 2, 0);
 check("-4294967295", 1, 0);
 check("-4294967296", 4294967295UL, ERANGE);
 check("-4294967297", 4294967295UL, ERANGE);
#endif
EOCP
  ;;
 *)
: Should we write these tests to be more portable by sprintf-ing
: ~0 and then manipulating that char string as input for strtol?
  ;;
 esac
 $cat >>try.c <<'EOCP'
 if (!bad)
  printf("ok\n");
 return 0;
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
```

```
  ok) echo "Your strtoul() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtoul() doesn't seem to be working okay.
EOM
     d_strtoul="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test
 program--assuming it doesn't)"
  d_strtoul="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_strtoul.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strerror.U,v $
?RCS: Revision 3.0.1.3  1994/05/13  15:20:27  ram
?RCS: patch27: now uses new macro support for cleaner Strerror def
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  14:58:26  ram
?RCS: patch23: renamed strerror into Strerror to protect name space (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:56  ram
?RCS: patch16: protected code looking for sys_errnolist[] with @if
?RCS: patch16: added default value for d_sysernlst
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:35  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?MAKE:d_strerror d_syserrlst d_sysernlst d_strerrm: contains Csym Findhdr
?MAKE: -pick add $@ %<
?S:d_strerror:
?S: This variable conditionally defines HAS_STRERROR if strerror() is
```

```
?S: available to translate error numbers to strings.
?S:.
?S:d_syserrlst:
?S: This variable conditionally defines HAS_SYS_ERRLIST if sys_errlist[] is
?S: available to translate error numbers to strings.
?S:.
?S:d_sysernlst:
?S: This variable conditionally defines HAS_SYS_ERRNOLIST if sys_errnolist[]
?S: is available to translate error numbers to the symbolic name.
?S:.
?S:d_strerrm:
?S: This variable holds what Strerrr is defined as to translate an error
?S: code condition into an error message string. It could be 'strerror'
?S: or a more complex macro emulating strrror with sys_errlist[], or the
?S: "unknown" string when both strerror and sys_errlist are missing.
?S:.
?C:HAS_STRERROR (STRERROR):
?C: This symbol, if defined, indicates that the strerror routine is
?C: available
 to translate error numbers to strings. See the writeup
?C: of Strerror() in this file before you try to define your own.
?C:.
?C:HAS_SYS_ERRLIST (SYSERRLIST):
?C: This symbol, if defined, indicates that the sys_errlist array is
?C: available to translate error numbers to strings. The extern int
?C: sys_nerr gives the size of that table.
?C:.
?C:HAS_SYS_ERRNOLIST (SYSERRNOLIST):
?C: This symbol, if defined, indicates that the sys_errnolist array is
?C: available to translate an errno code into its symbolic name (e.g.
?C: ENOENT). The extern int sys_nerrno gives the size of that table.
?C:.
?C:Strerror:
?C: This preprocessor symbol is defined as a macro if strerror() is
?C: not available to translate error numbers to strings but sys_errlist[]
?C: array is there.
?C:.
?H:#$d_strerror HAS_STRERROR  /**/
?H:#$d_syserrlst HAS_SYS_ERRLIST /**/
?H:#$d_sysernlst HAS_SYS_ERRNOLIST /**/
?H:#define Strerror(e) $d_strerrm
?H:.
?D:d_sysernlst=''
?T:xxx val
: see if strerror and/or sys_errlist[]
 exist
echo " "
if set strerror val -f d_strerror; eval $csym; $val; then
```

```
 echo 'strerror() found.' >&4
 d_strerror="$define"
 d_strerrm='strerror(e)'
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "(You also have sys_errlist[], so we could roll our own strerror.)"
  d_syserrlst="$define"
 else
 echo "(Since you don't have sys_errlist[], sterror() is welcome.)"
  d_syserrlst="$undef"
 fi
elif xxx=`./findhdr string.h`; test "$xxx" || xxx=`./findhdr strings.h`; \
 $contains '#[  ]*define.*strerror' "$xxx" >/dev/null 2>&1; then
 echo 'strerror() found in string header.' >&4
 d_strerror="$define"
 d_strerrm='strerror(e)'
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "(Most probably, strerror() uses sys_errlist[] for descriptions.)"
  d_syserrlst="$define"
 else
  echo "(You don't appear to have any sys_errlist[], how can this be?)"
  d_syserrlst="$undef"
 fi
elif set sys_errlist val -a d_syserrlst; eval $csym; $val; then
echo "strerror()
 not found, but you have sys_errlist[] so we'll use that." >&4
 d_strerror="$undef"
 d_syserrlst="$define"
 d_strerrm='((e)<0||(e)>=sys_nerr?"unknown":sys_errlist[e])'
else
 echo 'strerror() and sys_errlist[] NOT found.' >&4
 d_strerror="$undef"
 d_syserrlst="$undef"
 d_strerrm='"unknown"'
fi
@if d_sysernlst || HAS_SYS_ERRNOLIST
if set sys_errnolist val -a d_sysernlst; eval $csym; $val; then
 echo "(Symbolic error codes can be fetched via the sys_errnolist[] array.)"
 d_sysernlst="$define"
else
 echo "(However, I can't extract the symbolic error code out of errno.)"
 d_sysernlst="$undef"
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoq: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtoq:
?S: This variable conditionally defines the HAS_STRTOQ symbol, which
?S: indicates to the C program that the strtoq() routine is available.
?S:.
?C:HAS_STRTOQ:
?C: This symbol, if defined, indicates that the strtoq routine is
?C: available to convert strings to long longs (quads).
?C:.
?H:#$d_strtoq HAS_STRTOQ  /**/
?H:.
?LINT:set d_strtoq
: see if strtoq exists
set strtoq d_strtoq
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoq.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_termio.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_termio.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:54  ram
?RCS: patch36: call ./usg and ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1994/08/29  16:26:38  ram
?RCS: patch32: don't include all threee I_* symbols in config.h
?RCS: patch32: (had forgotten to undo this part last time)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:25:03  ram
?RCS: patch27: undone ADO's fix in previous patch since it was useless
```

```
?RCS:
?RCS:
 Revision 3.0.1.1  1994/05/06  15:05:23  ram
?RCS: patch23: now include all three defines in config.h (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_termio i_sgtty i_termios: test Inlibc Cppsym Guess Setvar Findhdr Warn run
?MAKE: -pick add $@ %<
?S:i_termio:
?S: This variable conditionally defines the I_TERMIO symbol, which
?S: indicates to the C program that it should include <termio.h> rather
?S: than <sgtty.h>.
?S:.
?S:i_termios:
?S: This variable conditionally defines the I_TERMIOS symbol, which
?S: indicates to the C program that the POSIX <termios.h> file is
?S: to be included.
?S:.
?S:i_sgtty:
?S: This variable conditionally defines the I_SGTTY symbol, which
?S: indicates to the C program that it should include <sgtty.h> rather
?S: than <termio.h>.
?S:.
?C:I_TERMIO:
?C: This symbol, if defined, indicates that the program should include
?C: <termio.h> rather than <sgtty.h>.  There are also differences in
?C: the
 ioctl() calls that depend on the value of this symbol.
?C:.
?C:I_TERMIOS:
?C: This symbol, if defined, indicates that the program should include
?C: the POSIX termios.h rather than sgtty.h or termio.h.
?C: There are also differences in the ioctl() calls that depend on the
?C: value of this symbol.
?C:.
?C:I_SGTTY:
?C: This symbol, if defined, indicates that the program should include
?C: <sgtty.h> rather than <termio.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of this symbol.
?C:.
?H:#$i_termio I_TERMIO  /**/
?H:#$i_termios I_TERMIOS  /**/
?H:#$i_sgtty I_SGTTY  /**/
?H:.
?T:val2 val3
?LINT:set i_termio i_sgtty i_termios
```

```
: see if this is a termio system
val="$undef"
val2="$undef"
val3="$undef"
?X: Prefer POSIX-approved termios.h over all else
if $test `./findhdr termios.h`; then
   set tcsetattr i_termios
   eval $inlibc
   val3="$i_termios"
fi
echo " "
case "$val3" in
   "$define") echo "You have POSIX termios.h... good!" >&4;;
   *)
  if ./Cppsym pyr; then
     case "`$run /bin/universe`" in
  ucb) if $test `./findhdr sgtty.h`; then
   val2="$define"
   echo "<sgtty.h> found." >&4
      else
   echo "System is pyramid with BSD universe."
   ./warn "<sgtty.h> not found--you could have problems."
      fi;;
  *)  if $test `./findhdr termio.h`; then
   val="$define"
   echo "<termio.h> found." >&4
      else
   echo "System is pyramid with USG universe."
   ./warn "<termio.h> not found--you could have problems."
      fi;;
     esac
?X: Start with USG to avoid problems if both usg/bsd was guessed
 elif ./usg; then
     if $test `./findhdr termio.h`; then
  echo "<termio.h> found." >&4
  val="$define"
     elif $test `./findhdr sgtty.h`; then
  echo "<sgtty.h> found." >&4
  val2="$define"
     else
  ./warn "Neither <termio.h> nor <sgtty.h> found--cross fingers!"
     fi
 else
     if $test `./findhdr sgtty.h`; then
  echo "<sgtty.h> found." >&4
  val2="$define"
     elif $test `./findhdr termio.h`; then
  echo "<termio.h>
```

```
 found." >&4
  val="$define"
     else
  ./warn "Neither <sgtty.h> nor <termio.h> found--cross fingers!"
     fi
 fi;;
esac
set i_termio; eval $setvar
val=$val2; set i_sgtty; eval $setvar
val=$val3; set i_termios; eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_termio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endsent:
?S: This variable conditionally defines HAS_ENDSERVENT if endservent() is
?S: available to close whatever was being used for service queries.
?S:.
?C:HAS_ENDSERVENT:
?C: This symbol, if defined, indicates that the endservent() routine is
?C: available to close whatever was being used for
 service queries.
?C:.
?H:#$d_endsent HAS_ENDSERVENT  /**/
?H:.
?LINT:set d_endsent
: see if endservent exists
set endservent d_endsent
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_db.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:10:22  ram
?RCS: patch56: conditionally use const in test programs (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:14:42  ram
?RCS: patch54: extended for more intimate DB probing (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:21:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_db db_hashtype db_prefixtype: Inhdr +cc +ccflags rm_try contains cat \
  d_const
?MAKE: -pick
 add $@ %<
?S:i_db:
?S: This variable conditionally defines the I_DB symbol, and indicates
?S: whether a C program may include Berkeley's DB include file <db.h>.
?S:.
?S:db_hashtype:
?S: This variable contains the type of the hash structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is u_int32_t.
?S:.
?S:db_prefixtype:
?S: This variable contains the type of the prefix structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is size_t.
?S:.
?C:I_DB:
?C: This symbol, if defined, indicates to the C program that it should
?C: include Berkeley's DB include file <db.h>.
?C:.
?C:DB_Prefix_t:
```

```
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is u_int32_t.
?C:.
?C:DB_Hash_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header
 file.  In older versions of DB, it was
?C: int, while in newer ones it is size_t.
?C:.
?H:#$i_db I_DB  /**/
?H:#define DB_Hash_t $db_hashtype  /**/
?H:#define DB_Prefix_t $db_prefixtype   /**/
?H:.
?LINT:set i_db
: see if this is a db.h system
set db.h i_db
eval $inhdr

@if DB_Hash_t
case "$i_db" in
define)
 : Check the return type needed for hash
 echo " "
 echo "Checking return type needed for hash for Berkeley DB ..." >&4
 $cat >try.c <<EOCP
#$d_const HASCONST
#ifndef HASCONST
#define const
#endif
#include <sys/types.h>
#include <db.h>
u_int32_t hash_cb (ptr, size)
const void *ptr;
size_t size;
{
}
HASHINFO info;
int main()
{
 info.hash = hash_cb;
}
EOCP
 if $cc $ccflags -c try.c >try.out 2>&1 ; then
  if $contains warning try.out >>/dev/null 2>&1 ; then
   db_hashtype='int'
  else
   db_hashtype='u_int32_t'
```

```
  fi
 else
  echo "I can't seem to compile the test program." >&4
  db_hashtype=int
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_hashtype for hash."
 ;;
*) db_hashtype=int
 ;;
esac

@end
@if
 DB_Prefix_t
case "$i_db" in
define)
 : Check the return type needed for prefix
 echo " "
 echo "Checking return type needed for prefix for Berkeley DB ..." >&4
 cat >try.c <<EOCP
#$d_const HASCONST
#ifndef HASCONST
#define const
#endif
#include <sys/types.h>
#include <db.h>
size_t prefix_cb (key1, key2)
const DBT *key1;
const DBT *key2;
{
}
BTREEINFO info;
int main()
{
 info.prefix = prefix_cb;
}
EOCP
 if $cc $ccflags -c try.c  >try.out 2>&1 ; then
  if $contains warning try.out >>/dev/null 2>&1 ; then
   db_prefixtype='int'
  else
   db_prefixtype='size_t'
  fi
 else
  echo "I can't seem to compile the test program." >&4
  db_prefixtype='int'
 fi
```

```
 $rm_try
 echo "Your version of Berkeley DB uses $db_prefixtype for prefix."
 ;;
*) db_prefixtype='int'
 ;;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_db.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pthrattrj.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_old_pthread_create_joinable old_pthread_create_joinable: \
 cat Compile rm_try Setvar usethreads i_pthread
?MAKE: -pick add $@ %<
?S:d_old_pthread_create_joinable:
?S: This variable conditionally defines pthread_create_joinable.
?S: undef if pthread.h defines PTHREAD_CREATE_JOINABLE.
?S:.
?S:old_pthread_create_joinable:
?S: This variable defines the constant to use for creating joinable
?S: (aka undetached) pthreads.  Unused if pthread.h defines
?S: PTHREAD_CREATE_JOINABLE.  If used, possible values are
?S: PTHREAD_CREATE_UNDETACHED and __UNDETACHED.
?S:.
?C:OLD_PTHREAD_CREATE_JOINABLE:
?C: This symbol, if defined, indicates how to create pthread
?C: in joinable (aka undetached)
 state.  NOTE: not defined
?C: if pthread.h already has defined PTHREAD_CREATE_JOINABLE
?C: (the new version of the constant).
?C: If defined, known values are PTHREAD_CREATE_UNDETACHED
?C: and __UNDETACHED.
?C:.
?H:#$d_old_pthread_create_joinable OLD_PTHREAD_CREATE_JOINABLE $old_pthread_create_joinable /**/
?H:.
: how to create joinable pthreads
if test "X$usethreads" = "X$define" -a "X$i_pthread" = "X$define"; then
 echo " "
 echo "Checking what constant to use for creating joinable pthreads..." >&4
```

```
 $cat >try.c <<'EOCP'
#include <pthread.h>
int main() {
   int detachstate = JOINABLE;
}
EOCP
 set try -DJOINABLE=PTHREAD_CREATE_JOINABLE
 if eval $compile; then
  echo "You seem to use PTHREAD_CREATE_JOINABLE." >&4
  val="$undef" # Yes, undef.
  set d_old_pthread_create_joinable
  eval $setvar
  val=""
  set old_pthread_create_joinable
  eval $setvar
 else
  set try -DJOINABLE=PTHREAD_CREATE_UNDETACHED
  if eval $compile; then
   echo "You seem to use PTHREAD_CREATE_UNDETACHED." >&4
   val="$define"
   set
 d_old_pthread_create_joinable
   eval $setvar
   val=PTHREAD_CREATE_UNDETACHED
   set old_pthread_create_joinable
   eval $setvar
  else
   set try -DJOINABLE=__UNDETACHED
   if eval $compile; then
    echo "You seem to use __UNDETACHED." >&4
    val="$define"
    set d_old_pthread_create_joinable
    eval $setvar
    val=__UNDETACHED
    set old_pthread_create_joinable
    eval $setvar
   else
    echo "Egads, nothing obvious found.  Guessing that you use 0." >&4
    val="$define"
    set d_old_pthread_create_joinable
    eval $setvar
    val=0
    set old_pthread_create_joinable
    eval $setvar
   fi
  fi
 fi
 $rm_try
```

```
else
   d_old_pthread_create_joinable="$undef"
   old_pthread_create_joinable=""
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthrattrj.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: archname.U,v 3.0.1.3 1997/02/28 15:24:32 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: archname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:24:32  ram
?RCS: patch61: changed the way the archname is mangled from uname
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:05:24  ram
?RCS: patch54: protect against spaces in "uname -m" output (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:14:21  ram
?RCS: patch51: created
?RCS:
?MAKE:archname myarchname useversionedarchname: sed Loc Myread Oldconfig \
 osname test rm usethreads usemultiplicity use64bitint
 use64bitall \
 archname64 uselongdouble longdblsize doublesize targetarch Setvar \
 api_versionstring usequadmath
?MAKE: -pick add $@ %<
?S:archname:
?S: This variable is a short name to characterize the current
?S: architecture.  It is used mainly to construct the default archlib.
?S:.
?S:myarchname:
?S: This variable holds the architecture name computed by Configure in
?S: a previous run. It is not intended to be perused by any user and
?S: should never be set in a hint file.
?S:.
?S:useversionedarchname:
?S: This variable indicates whether to include the $api_versionstring
?S: as a component of the $archname.
?S:.
```

```
?C:ARCHNAME:
?C: This symbol holds a string representing the architecture name.
?C: It may be used to construct an architecture-dependant pathname
?C: where library files may be held under a private library, for
?C: instance.
?C:.
?H:#define ARCHNAME "$archname"  /**/
?H:.
?T:xxx tarch
?F:!archname.cbu
?INIT:archname=''
: determine the architecture name
echo " "
?X:
 We always recompute archname in case osname changes. However, we need
?X: to be careful since, as ADO rightfully pointed out, some systems pick
?X: silly architecture names (0001307135000-aix on AIX or 9000/715-ux under
?X: HP-UX). Therefore, we allow hint files to superseed our guess and ask
?X: the user for confirmation.
if xxx=`./loc arch blurfl $pth`; $test -f "$xxx"; then
 tarch=`arch`"-$osname"
elif xxx=`./loc uname blurfl $pth`; $test -f "$xxx" ; then
 if uname -m > tmparch 2>&1 ; then
  tarch=`$sed -e 's/ *$//' -e 's/ /_/g' \
   -e 's/$/'"-$osname/" tmparch`
 else
  tarch="$osname"
 fi
 $rm -f tmparch
else
 tarch="$osname"
fi
case "$myarchname" in
"|"$tarch") ;;
*)
 echo "(Your architecture name used to be $myarchname.)"
 archname=''
 ;;
esac
case "$targetarch" in
'') ;;
?X: Very GCCian.
*)  archname=`echo $targetarch|sed 's,^[^-]*-,,'` ;;
esac
myarchname="$tarch"
case "$archname" in
'') dflt="$tarch";;
*) dflt="$archname";;
```

```
esac
rp='What is your architecture name'
. ./myread
archname="$ans"

:
 optionally add API version to the architecture for versioned archlibs
case "$useversionedarchname" in
$define|true|[yY]*) dflt='y';;
*)                  dflt='n';;
esac
rp='Add the Perl API version to your archname?'
. ./myread
case "$ans" in
y|Y) useversionedarchname="$define" ;;
*)      useversionedarchname="$undef" ;;
esac
case "$useversionedarchname" in
$define)
 case "$archname" in
 *-$api_versionstring)
  echo "...and architecture name already has -$api_versionstring" >&4
  ;;
 *)
  archname="$archname-$api_versionstring"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac

@if usethreads
case "$usethreads" in
$define)
 echo "Threads selected." >&4
 case "$archname" in
 *-thread*) echo "...and architecture name already has -thread." >&4
  ;;
 *)      archname="$archname-thread"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
@if usemultiplicity
case "$usemultiplicity" in
$define)
```

```
 echo "Multiplicity selected."
 >&4
 case "$archname" in
 *-multi*) echo "...and architecture name already has -multi." >&4
  ;;
 *)      archname="$archname-multi"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
@if use64bitint
case "$use64bitint$use64bitall" in
*"$define"*)
 case "$archname64" in
 ")
  echo "This architecture is naturally 64-bit, not changing architecture name." >&4
  ;;
 *)
  case "$use64bitint" in
  "$define") echo "64 bit integers selected." >&4 ;;
  esac
  case "$use64bitall" in
  "$define") echo "Maximal 64 bitness selected." >&4 ;;
  esac
  case "$archname" in
  *-$archname64*) echo "...and architecture name already has $archname64." >&4
   ;;
  *)      archname="$archname-$archname64"
   echo "...setting architecture name to $archname." >&4
   ;;
  esac
  ;;
 esac
esac
@end
@if uselongdouble
case "$uselongdouble" in
$define)
 echo "Long doubles selected." >&4
 case "$longdblsize" in
 $doublesize)
  echo "...but long doubles are equal to doubles, not
 changing architecture name." >&4
  ;;
 *)
  case "$archname" in
```

```
  *-ld*) echo "...and architecture name already has -ld." >&4
   ;;
  *)      archname="$archname-ld"
   echo "...setting architecture name to $archname." >&4
   ;;
  esac
  ;;
 esac
 ;;
esac
@end
@if usequadmath
case "$usequadmath" in
$define)
 echo "quadmath selected." >&4
 case "$archname" in
 *-quadmath*) echo "...and architecture name already has -quadmath." >&4
  ;;
 *)      archname="$archname-quadmath"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
if $test -f archname.cbu; then
 echo "Your platform has some specific hints for architecture name, using them..."
 . ./archname.cbu
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/archname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_float.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_float.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:57  ram
```

```
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_float: Inhdr
?MAKE: -pick add $@ %<
?S:i_float:
?S: This variable conditionally defines the I_FLOAT symbol, and indicates
?S: whether a C program may include <float.h> to get symbols like DBL_MAX
?S: or DBL_MIN, i.e. machine dependent floating point values.
?S:.
?C:I_FLOAT:
?C: This
 symbol, if defined, indicates to the C program that it should
?C: include <float.h> to get definition of symbols like DBL_MAX or
?C: DBL_MIN, i.e. machine dependent floating point values.
?C:.
?H:#$i_float I_FLOAT  /**/
?H:.
?LINT:set i_float
: see if this is a float.h system
set float.h i_float
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_float.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_setproctitle: Inlibc
?MAKE: -pick add $@ %<
?S:d_setproctitle:
?S: This variable conditionally defines the HAS_SETPROCTITLE symbol,
?S: which indicates to the C program that the setproctitle() routine
?S: is available.
?S:.
?C:HAS_SETPROCTITLE:
?C: This symbol, if defined, indicates that the setproctitle routine is
?C: available to set process title.
?C:.
?H:#$d_setproctitle HAS_SETPROCTITLE  /**/
?H:.
?LINT:set d_setproctitle
: see if setproctitle exists
```

```
set setproctitle d_setproctitle
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setproctitle.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sig_name.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:21:25  ram
?RCS: patch61: brand new algorithm for sig_name and (new!) sig_num
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  14:14:54  ram
?RCS: patch56: added <asm/signal.h> lookup for linux
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:24:11  ram
?RCS: patch54: now looks for <linux/signal.h> too (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:06:57  ram
?RCS: patch30: final echo was missing to close awk-printed string
?RCS:
?RCS: Revision 3.0.1.1
  1994/05/06  15:17:55  ram
?RCS: patch23: signal list now formatted to avoid scroll-ups (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sig_name sig_name_init sig_num sig_num_init sig_count sig_size: \
 awk Signal Oldconfig rm
?MAKE: -pick add $@ %<
?S:sig_name:
?S: This variable holds the signal names, space separated. The leading
?S: SIG in signal name is removed.  A ZERO is prepended to the
?S: list.  This is currently not used.
?S:.
?S:sig_name_init:
?S: This variable holds the signal names, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NAME definition
```

```
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.  The leading SIG in signal names
?S: is removed. See sig_num.
?S:.
?S:sig_num:
?S: This variable holds the signal numbers, space separated. A ZERO is
?S: prepended to the list (corresponding to the fake SIGZERO), and
?S: the list is terminated
 with a 0.  Those numbers correspond to
?S: the value of the signal listed in the same place within the
?S: sig_name list.
?S:.
?S:sig_num_init:
?S: This variable holds the signal numbers, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NUM definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.
?S:.
?S:sig_count (sig_name.U):
?S:  This variable holds a number larger than the largest valid
?S:  signal number.  This is usually the same as the NSIG macro.
?S:.
?S:sig_size:
?S:  This variable contains the number of elements of the sig_name
?S:  and sig_num arrays, excluding the final NULL entry.
?S:.
?C:SIG_NAME:
?C: This symbol contains a list of signal names in order of
?C: signal number. This is intended
?C: to be used as a static array initialization, like this:
?C:  char *sig_name[] = { SIG_NAME };
?C: The signals in the list are separated with commas, and each signal
?C: is surrounded by double
 quotes. There is no leading SIG in the signal
?C: name, i.e. SIGQUIT is known as "QUIT".
?C: Gaps in the signal numbers (up to NSIG) are filled in with NUMnn,
?C: etc., where nn is the actual signal number (e.g. NUM37).
?C: The signal number for sig_name[i] is stored in sig_num[i].
?C: The last element is 0 to terminate the list with a NULL.  This
?C: corresponds to the 0 at the end of the sig_num list.
?C:.
?C:SIG_NUM:
?C: This symbol contains a list of signal numbers, in the same order as the
?C: SIG_NAME list. It is suitable for static array initialization, as in:
?C:  int sig_num[] = { SIG_NUM };
?C: The signals in the list are separated with commas, and the indices
?C: within that list and the SIG_NAME list match, so it's easy to compute
?C: the signal name from a number or vice versa at the price of a small
```

```
?C: dynamic linear lookup.
?C: Duplicates are allowed, but are moved to the end of the list.
?C: The signal number corresponding to sig_name[i] is sig_number[i].
?C: if (i
 < NSIG) then sig_number[i] == i.
?C: The last element is 0, corresponding to the 0 at the end of
?C: the sig_name list.
?C:.
?C:SIG_COUNT:
?C: This variable contains a number larger than the largest
?C: signal number.  This is usually the same as the NSIG macro.
?C:.
?C:SIG_SIZE:
?C: This variable contains the number of elements of the sig_name
?C: and sig_num arrays, excluding the final NULL entry.
?C:.
?H:#define SIG_NAME $sig_name_init  /**/
?H:#define SIG_NUM  $sig_num_init  /**/
?H:#define SIG_COUNT $sig_count   /**/
?H:#define SIG_SIZE $sig_size   /**/
?H:.
?T:i doinit
?F:!= !signal_cmd
?X: signal.cmd creates a file  signal.lst which has two columns:
?X: NAME  number, e.g.
?X:  HUP 1
?X: The list is sorted on signal number, with duplicates moved to
?X: the end..
: generate list of signal names
echo " "
case "$sig_name_init" in
") doinit=yes ;;
*)  case "$sig_num_init" in
   "|*,*) doinit=yes ;;
   esac ;;
esac
case "$doinit" in
yes)
 echo "Generating a list of signal names and
 numbers..." >&4
 . ./signal_cmd
 sig_count=`$awk '/^NSIG/ { printf "%d", $2 }' signal.lst`
 sig_name=`$awk 'BEGIN { printf "ZERO " }
   !/^NSIG/ { printf "%s ", $1 }' signal.lst`
 sig_num=`$awk  'BEGIN { printf "0 " }
   !/^NSIG/ { printf "%d ", $2 }' signal.lst`
 sig_name_init=`$awk 'BEGIN { printf "\"ZERO\", " }
        !/^NSIG/ { printf "\"%s\", ", $1 }
```

```
        END { printf "0\n" }' signal.lst`
 sig_num_init=`$awk  'BEGIN { printf "0, " }
        !/^NSIG/ { printf "%d, ", $2}
        END { printf "0\n"}' signal.lst`
 ;;
esac
echo "The following $sig_count signals are available:"
echo " "
echo $sig_name | $awk \
'BEGIN { linelen = 0 }
{
 for (i = 1; i <= NF; i++) {
  name = "SIG" $i " "
  linelen = linelen + length(name)
  if (linelen > 70) {
   printf "\n"
   linelen = length(name)
  }
  printf "%s", name
 }
 printf "\n"
}'
sig_size=`echo $sig_name | awk '{print NF}'`
$rm -f signal signal.c signal.awk signal.lst signal_cmd
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sig_name.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnameinfo: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnameinfo:
?S: This variable conditionally defines the HAS_GETNAMEINFO symbol,
?S: which indicates to the C program that the getnameinfo() function
?S: is available.
?S:.
?C:HAS_GETNAMEINFO:
?C: This symbol, if defined, indicates that the getnameinfo() function
?C: is available for use.
?C:.
?H:#$d_getnameinfo HAS_GETNAMEINFO  /**/
```

```
?H:.
?LINT:set d_getnameinfo
: see if getnameinfo exists
set getnameinfo d_getnameinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getnameinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS:
?MAKE:d_dirfd: Compile cat rm Setvar i_dirent i_sysdir i_sysndir i_systypes i_stdlib
?MAKE: -pick add $@ %<
?S:d_dirfd:
?S: This variable conditionally defines the HAS_DIRFD constant,
?S: which indicates to the C program that dirfd() is available
?S: to return the file descriptor of a directory stream.
?S:.
?C:HAS_DIRFD:
?C: This manifest constant lets the C program know that dirfd
?C: is available.
?C:.
?H:#$d_dirfd HAS_DIRFD  /**/
?H:.
?LINT:set d_dirfd
?X: Can't use Inlibc because dirfd() might be a macro.
: Look
 for dirfd
echo " "
$cat >dirfd.c <<EOM
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/
```

```
#$i_systypes I_SYS_TYPES /**/
#if defined(I_SYS_TYPES)
#include <sys/types.h>
#endif
#if defined(I_DIRENT)
#include <dirent.h>
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#include <sys/dir.h>
#endif
#endif
#endif
int main() {
 DIR *dirp = opendir(".");
 if (dirfd(dirp) >= 0)
  exit(0);
 else
  exit(1);
}
EOM
val=$undef
set dirfd
if eval $compile; then
 val="$define"
fi
case "$val" in
$define) echo "dirfd() found." >&4 ;;
*)  echo "dirfd() NOT found." >&4 ;;
esac
set d_dirfd
eval $setvar
$rm -f dirfd*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dirfd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_grp.U,v 3.0 1993/08/18 12:08:20 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: GRPASSWD detection added by Andy Dougherty  July 14, 1998.
?RCS:
?RCS: $Log: i_grp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_grp d_grpasswd: \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_grp:
?S: This variable conditionally defines the I_GRP symbol, and indicates
?S: whether a C program should include <grp.h>.
?S:.
?S:d_grpasswd:
?S: This variable conditionally
 defines GRPASSWD, which indicates
?S: that struct group in <grp.h> contains gr_passwd.
?S:.
?C:I_GRP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <grp.h>.
?C:.
?C:GRPASSWD:
?C: This symbol, if defined, indicates to the C program that struct group
?C: in <grp.h> contains gr_passwd.
?C:.
?H:#$i_grp I_GRP  /**/
?H:#$d_grpasswd GRPASSWD /**/
?H:.
?LINT:set i_grp d_grpasswd
?T: xxx
: see if this is an grp system
set grp.h i_grp
eval $inhdr

case "$i_grp" in
$define)
 xxx=`./findhdr grp.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'gr_passwd' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_grpasswd
```

```
 eval $setvar

 $rm -f $$.h
 ;;
*)
 val="$undef";
 set d_grpasswd; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_grp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: voidflags.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:27:58  ram
?RCS: patch61: don't prompt them if the void support is high enough for us
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:37:44  ram
?RCS: patch45: cosmetic change to avoid spurious blank lines when using -s
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:voidflags defvoidused: cat sed rm rm_try contains +cc +ccflags package \
 Oldconfig Myread
?MAKE: -pick add $@ %<
?S:voidflags:
?S: This
 variable contains the eventual value of the VOIDFLAGS symbol,
?S: which indicates how much support of the void type is given by this
?S: compiler.  See VOIDFLAGS for more info.
?S:.
?S:defvoidused:
?S: This variable contains the default value of the VOIDUSED symbol (15).
?S:.
?X: Exceptionally, we have to explicitly alias the symbol name for
?X: config_h.SH, otherwise the comment would not appear.
```

```
?C:VOIDFLAGS ~ %<:
?C: This symbol indicates how much support of the void type is given by this
?C: compiler.  What various bits mean:
?C:
?C:     1 = supports declaration of void
?C:     2 = supports arrays of pointers to functions returning void
?C:     4 = supports comparisons between pointers to void functions and
?C:      addresses of void functions
?C:     8 = suports declaration of generic void pointers
?C:
?C: The package designer should define VOIDUSED to indicate the requirements
?C: of the package.  This can be done either by #defining VOIDUSED before
?C: including
 config.h, or by defining defvoidused in Myinit.U.  If the
?C: latter approach is taken, only those flags will be tested.  If the
?C: level of void support necessary is not present, defines void to int.
?C:.
?H:?%<:#ifndef VOIDUSED
?H:?%<:#define VOIDUSED $defvoidused
?H:?%<:#endif
?H:?%<:#define VOIDFLAGS $voidflags
?H:?%<:#if (VOIDFLAGS & VOIDUSED) != VOIDUSED
?H:?%<:#define void int  /* is void to be avoided? */
?H:?%<:#define M_VOID   /* Xenix strikes again */
?H:?%<:#endif
?H:.
?W:%<:void
?F:!.out !try.c !flags
?LINT:usefile .out flags try.c
?INIT:: full support for void wanted by default
?INIT:defvoidused=15
?INIT:
?LINT:known void M_VOID VOIDUSED
: check for void type
echo " "
echo "Checking to see how well your C compiler groks the void type..." >&4
$cat >flags <<EOM

 Support flag bits are:
   1: basic void declarations.
   2: arrays of pointers to functions returning void.
   4: operations between pointers to and addresses of void functions.
   8: generic void pointers.

EOM
case
 "$voidflags" in
")
```

```
 $cat >try.c <<'EOCP'
#if TRY & 1
void sub() {
#else
sub() {
#endif
 extern void moo(); /* function returning void */
 void (*goo)();  /* ptr to func returning void */
#if TRY & 8
 void *hue;  /* generic ptr */
#endif
#if TRY & 2
 void (*foo[10])();
#endif

#if TRY & 4
 if(goo == moo) {
  exit(0);
 }
#endif
 exit(0);
}
int main() { sub(); }
EOCP
?X: This unit used to use cc -S in those tests to try to speed up things, but
?X: unfortunately, AIX 3.2 does not support this option.
 if $cc $ccflags -c -DTRY=$defvoidused try.c >.out 2>&1 ; then
  voidflags=$defvoidused
  echo "Good.  It appears to support void to the level $package wants."
  if $contains warning .out >/dev/null 2>&1; then
   echo "However, you might get some warnings that look like this:"
   $sed -e 's/^/ /' .out
  fi
 else
echo "Hmm, your compiler has some difficulty with void. Checking further..." >&4
  $cat >&4 flags
  $rm -f flags
  if $cc $ccflags -c -DTRY=1 try.c >/dev/null 2>&1; then
   echo
 "It supports 1..."
   if $cc $ccflags -c -DTRY=3 try.c >/dev/null 2>&1; then
    echo "It also supports 2..."
    if $cc $ccflags -c -DTRY=7 try.c >/dev/null 2>&1; then
     voidflags=7
     echo "And it supports 4 but not 8 definitely."
    else
     echo "It doesn't support 4..."
     if $cc $ccflags -c -DTRY=11 try.c >/dev/null 2>&1; then
```

```
      voidflags=11
      echo "But it supports 8."
     else
      voidflags=3
      echo "Neither does it support 8."
     fi
    fi
   else
    echo "It does not support 2..."
    if $cc $ccflags -c -DTRY=13 try.c >/dev/null 2>&1; then
     voidflags=13
     echo "But it supports 4 and 8."
    else
     if $cc $ccflags -c -DTRY=5 try.c >/dev/null 2>&1; then
      voidflags=5
      echo "And it supports 4 but has not heard about 8."
     else
      echo "However it supports 8 but not 4."
     fi
    fi
   fi
  else
   echo "There is no support at all for void."
   voidflags=0
  fi
 fi
esac
?X: Only prompt user if support does not match the
 level we want
case "$voidflags" in
"$defvoidused")
 echo "Good.  I already know it supports void to the level $package wants."
 ;;
*)
 dflt="$voidflags";
 test -f flags && $cat flags
 rp="Your void support flags add up to what?"
 . ./myread
 voidflags="$ans"
 ;;
esac
$rm_try flags
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/voidflags.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: models.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:13:17  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:39  ram
?RCS: patch6: added default for large
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:models split small medium large huge: test cat Myread sysman Oldconfig \
 Loc Warn contains rm
?MAKE: -pick add $@ %<
?S:models:
?S: This variable contains the list of memory models supported by
 this
?S: system.  Possible component values are none, split, unsplit, small,
?S: medium, large, and huge.  The component values are space separated.
?S:.
?S:split:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program that will run in separate I and D space, for those
?S: machines that support separation of instruction and data space.  It is
?S: up to the Makefile to use this.
?S:.
?S:small:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a small memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:medium:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a medium memory model.  If the
?S: medium model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?S:large:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to
```

```
 produce a program running with a large memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:huge:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a huge memory model.  If the
?S: huge model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?T:unsplit tans modelcc
?F:!pdp11
?D:large=''
?LINT:extern cc
: see what memory models we can support
case "$models" in
'')
?X: We may not use Cppsym or we get a circular dependency through cc.
?X: But this should work regardless of which cc we eventually use.
 $cat >pdp11.c <<'EOP'
int main() {
#ifdef pdp11
 exit(0);
#else
 exit(1);
#endif
}
EOP
?X: Run cc in a subshell in case they don't have a 'cc' command.
?X: Presumably they do have gcc or something.
 case "$cc" in
 '') modelcc="$cc" ;;
 *) modelcc="cc" ;;
 esac
 ( $modelcc -o pdp11 pdp11.c ) >/dev/null 2>&1
 if $test -f pdp11 && ./pdp11 2>/dev/null;
 then
  dflt='unsplit split'
 else
  tans=`./loc . X /lib/small /lib/large /usr/lib/small /usr/lib/large /lib/medium /usr/lib/medium /lib/huge`
  case "$tans" in
  X) dflt='none';;
  *) if $test -d /lib/small || $test -d /usr/lib/small; then
    dflt='small'
   else
    dflt=''
   fi
   if $test -d /lib/medium || $test -d /usr/lib/medium; then
    dflt="$dflt medium"
```

```
   fi
   if $test -d /lib/large || $test -d /usr/lib/large; then
    dflt="$dflt large"
   fi
   if $test -d /lib/huge || $test -d /usr/lib/huge; then
    dflt="$dflt huge"
   fi
  esac
 fi;;
*) dflt="$models";;
esac
$cat <<EOM

Some systems have different model sizes.  On most systems they are called
small, medium, large, and huge.  On the PDP11 they are called unsplit and
split.  If your system doesn't support different memory models, say "none".
If you wish to force everything to one memory model, say "none" here and
put the appropriate flags later when it asks you for other cc and ld flags.
Venix systems may wish
 to put "none" and let the compiler figure things out.
(In the following question multiple model names should be space separated.)

The default for most systems is "none".

EOM
rp="Which memory models are supported?"
. ./myread
models="$ans"

case "$models" in
none)
 small="
 medium="
 large="
 huge="
 unsplit="
 split="
 ;;
*split)
 case "$split" in
 ") if $contains '\-i' $sysman/ld.1 >/dev/null 2>&1 || \
    $contains '\-i' $sysman/cc.1 >/dev/null 2>&1; then
   dflt='-i'
  else
   dflt='none'
  fi;;
 *) dflt="$split";;
 esac
```

```
rp="What flag indicates separate I and D space?"
. ./myread
tans="$ans"
case "$tans" in
none) tans=";;
esac
split="$tans"
unsplit=";;
*large*|*small*|*medium*|*huge*)
case "$models" in
*large*)
 case "$large" in
 ") dflt='-Ml';;
 *) dflt="$large";;
 esac
rp="What flag indicates large model?"
. ./myread
tans="$ans"
case "$tans" in
none) tans=";
esac
large="$tans";;
*) large=";;
esac
case "$models" in
*huge*) case "$huge" in
 ")
dflt='-Mh';;
 *) dflt="$huge";;
 esac
 rp="What flag indicates huge model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 huge="$tans";;
*) huge="$large";;
esac
case "$models" in
*medium*) case "$medium" in
 ") dflt='-Mm';;
 *) dflt="$medium";;
 esac
 rp="What flag indicates medium model?"
 . ./myread
 tans="$ans"
 case "$tans" in
```

```
 none) tans='';
 esac
 medium="$tans";;
*) medium="$large";;
esac
case "$models" in
*small*) case "$small" in
 '') dflt='none';;
 *) dflt="$small";;
 esac
 rp="What flag indicates small model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans='';
 esac
 small="$tans";;
*) small='';;
esac
;;
*)
 ./warn "Unrecognized memory models--you may have to edit Makefile.SH"
 ;;
esac
$rm -f pdp11.* pdp11
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/models.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_poll.U,v $
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_langinfo: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_langinfo:
?S: This variable conditionally defines the I_LANGINFO symbol,
?S: and indicates whether a C program should include <langinfo.h>.
?S:.
?C:I_LANGINFO:
?C: This symbol, if defined, indicates that <langinfo.h> exists and
?C: should be included.
?C:.
?H:#$i_langinfo I_LANGINFO  /**/
```

```
?H:.
?LINT:set i_langinfo
: see if this is a langinfo.h system
set langinfo.h i_langinfo
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_langinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chroot.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_chroot.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:17  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_chroot: Inlibc
?MAKE: -pick add $@ %<
?S:d_chroot:
?S: This variable conditionally defines the HAS_CHROOT symbol, which
?S: indicates to the C program that the chroot() routine is available.
?S:.
?C:HAS_CHROOT :
?C: This symbol, if defined, indicates that the chroot routine
 is
?C: available.
?C:.
?H:#$d_chroot HAS_CHROOT  /**/
?H:.
?LINT:set d_chroot
: see if chroot exists
set chroot d_chroot
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chroot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: registers.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: registers.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:19:41  ram
?RCS: patch61: removed empty ?LINT lines
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:28:33  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:registers reg1 reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11 \
 reg12 reg13 reg14 reg15 reg16: awk rm Cppsym
 Myread Oldconfig
?MAKE: -pick add $@ %<
?S:registers:
?S: This variable contains the number of register declarations paid
?S: attention to by the C compiler.
?S:.
?S:reg1:
?S: This variable, along with reg2, reg3, etc. contains the eventual
?S: value for the symbols register1, register2, register3, etc.  It has
?S: either the value "register" or is null.
?S:.
?C:register1:
?C: This symbol, along with register2, register3, etc. is either the word
?C: "register" or null, depending on whether the C compiler pays attention
?C: to this many register declarations.  The intent is that you don't have
?C: to order your register declarations in the order of importance, so you
?C: can freely declare register variables in sub-blocks of code and as
?C: function parameters.  Do not use register<n> more than once per routine.
?C:.
?LINT:describe reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11
?LINT:describe reg12 reg13 reg14 reg15 reg16
?LINT:known register2 register3 register4 register5 register6
 register7
?LINT:known register8 register9 register10 register11 register12 register13
?LINT:known register14 register15 register16
?H:#define register1 $reg1  /**/
```

```
?H:#define register2 $reg2  /**/
?H:#define register3 $reg3  /**/
?H:#define register4 $reg4  /**/
?H:#define register5 $reg5  /**/
?H:#define register6 $reg6  /**/
?H:#define register7 $reg7  /**/
?H:#define register8 $reg8  /**/
?H:#define register9 $reg9  /**/
?H:#define register10 $reg10 /**/
?H:#define register11 $reg11 /**/
?H:#define register12 $reg12 /**/
?H:#define register13 $reg13 /**/
?H:#define register14 $reg14 /**/
?H:#define register15 $reg15 /**/
?H:#define register16 $reg16 /**/
?H:.
?F:!.foo
: see how many register declarations we want to use
case "$registers" in
")
 if ./Cppsym vax; then
  dflt=6
 elif ./Cppsym sun mc68000 mips; then
  dflt=10
 elif ./Cppsym pyr; then
  dflt=14
 elif ./Cppsym ns32000 ns16000; then
  dflt=5
 elif ./Cppsym $smallmach; then
  dflt=3
 else
  : if you have any other numbers
 for me, please send them in
  dflt=6
 fi;;
*) dflt=$registers ;;
esac
?LINT:set reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11
?LINT:set reg12 reg13 reg14 reg15 reg16
cat <<EOM

Different C compilers on different machines pay attention to different numbers
of register declarations.  About how many register declarations in each routine
does your C compiler pay attention to?  (OK to guess)

EOM
rp="Maximum register declarations?"
. ./myread
```

```
registers=$ans
reg1="
$awk "BEGIN { for (i=1; i<=16; i++) printf \"reg%d="\n\", i}" \
 </dev/null >.foo
. ./.foo
$awk "BEGIN { for (i=1; i<=$registers; i++) printf \"reg%d=register\n\", i}" \
 </dev/null >.foo
. ./.foo
$rm -f .foo
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/registers.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_longdbl.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_longdbl.U,v $
?RCS:
?MAKE:d_longdbl longdblsize d_ldexpl longdblkind \
 d_long_double_style_ieee d_long_double_style_ieee_doubledouble \
 d_long_double_style_ieee_extended d_long_double_style_ieee_std \
 d_long_double_style_vax: Compile Setvar Myread \
 Inlibc run echo cat rm_try test doublesize i_stdlib
?MAKE: -pick add $@ %<
?S:d_longdbl:
?S: This variable conditionally defines HAS_LONG_DOUBLE if
?S: the long double type is supported.
?S:.
?S:d_ldexpl:
?S: This variable conditionally defines the HAS_LDEXPL symbol, which
?S: indicates to the C program that the ldexpl() routine is available.
?S:.
?S:longdblsize:
?S: This variable contains the value of the LONG_DOUBLESIZE symbol,
 which
?S: indicates to the C program how many bytes there are in a long double,
?S: if this system supports long doubles.  Note that this is
?S: sizeof(long double), which may include unused bytes.
?S:.
?S:longdblkind:
?S: This variable, if defined, encodes the type of a long double:
?S:  0 = double,
?S:  1 = IEEE 754 128-bit little endian,
```

```
?S:  2 = IEEE 754 128-bit big endian,
?S:  3 = x86 80-bit little endian,
?S:  4 = x86 80-bit big endian,
?S:  5 = double-double 128-bit little endian,
?S:  6 = double-double 128-bit big endian,
?S:  7 = 128-bit mixed-endian double-double (64-bit LEs in BE),
?S:  8 = 128-bit mixed-endian double-double (64-bit BEs in LE),
?S:  9 = 128-bit PDP-style mixed-endian long doubles,
?S: -1 = unknown format.
?S:.
?S:d_long_double_style_ieee:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE
?S: if the long double is any of the IEEE 754 style long doubles:
?S: LONG_DOUBLE_STYLE_IEEE_STD, LONG_DOUBLE_STYLE_IEEE_EXTENDED,
?S: LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE.
?S:.
?S:d_long_double_style_ieee_doubledouble:
?S: This
 variable conditionally defines LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE
?S: if the long double is the 128-bit IEEE 754 double-double.
?S:.
?S:d_long_double_style_ieee_extended:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE_EXTENDED
?S: if the long double is the 80-bit IEEE 754 extended precision.
?S: Note that despite the 'extended' this is less than the 'std',
?S: since this is an extension of the double precision.
?S:.
?S:d_long_double_style_ieee_std:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE_STD
?S: if the long double is the 128-bit IEEE 754.
?S:.
?S:d_long_double_style_vax:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_VAX
?S: if the long double is the 128-bit VAX format H.
?S:.
?C:HAS_LONG_DOUBLE:
?C: This symbol will be defined if the C compiler supports long
?C: doubles.
?C:.
?C:LONG_DOUBLESIZE:
?C: This symbol contains the size of a long double, so that the
?C: C
 preprocessor can make decisions based on it.  It is only
?C: defined if the system supports long doubles.  Note that this
?C: is sizeof(long double), which may include unused bytes.
?C:.
?C:HAS_LDEXPL:
?C: This symbol, if defined, indicates that the ldexpl routine is
```

```
?C: available to shift a long double floating-point number
?C: by an integral power of 2.
?C:.
?C:LONG_DOUBLEKIND:
?C: LONG_DOUBLEKIND will be one of
?C: LONG_DOUBLE_IS_DOUBLE
?C: LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_VAX_H_FLOAT
?C: LONG_DOUBLE_IS_UNKNOWN_FORMAT
?C: It is only defined
 if the system supports long doubles.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE:
?C: This symbol, if defined, indicates that the long double
?C: is any of the IEEE 754 style long doubles:
?C: LONG_DOUBLE_STYLE_IEEE_STD, LONG_DOUBLE_STYLE_IEEE_EXTENDED,
?C: LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit double-double.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_EXTENDED:
?C: This symbol, if defined, indicates that the long double is
?C: the 80-bit IEEE 754. Note that despite the 'extended' this
?C: is less than the 'std', since this is an extension of
?C: the double precision.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_STD:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit IEEE 754.
?C:.
?C:LONG_DOUBLE_STYLE_VAX:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit VAX format H.
?C:.
?H:#$d_ldexpl  HAS_LDEXPL  /**/
?H:#$d_longdbl HAS_LONG_DOUBLE  /**/
?H:?LONG_DOUBLESIZE:#ifdef
```

```
 HAS_LONG_DOUBLE
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLESIZE $longdblsize  /**/
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLEKIND $longdblkind  /**/
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLE    0
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN 1
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN 2
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN  3
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN  4
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE 5
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE 6
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE 7
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE 8
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_VAX_H_FLOAT   9
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_UNKNOWN_FORMAT   -1
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
 /* back-compat */
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE /* back-compat */
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee LONG_DOUBLE_STYLE_IEEE
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_doubledouble
LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_extended
LONG_DOUBLE_STYLE_IEEE_EXTENDED
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_std LONG_DOUBLE_STYLE_IEEE_STD
?H:?LONG_DOUBLESIZE:#$d_long_double_style_vax LONG_DOUBLE_STYLE_VAX
?H:?LONG_DOUBLESIZE:#endif
?H:.
?F:!try
?LINT:known LONG_DOUBLE_IS_DOUBLE LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_UNKNOWN_FORMAT
?LINT:known
 LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE
?LINT:known LONG_DOUBLE_IS_VAX_H_FLOAT
?LINT:set d_longdbl
?LINT:set d_ldexpl
: check for long doubles
echo " " >&4
echo "Checking to see if you have long double..." >&4
echo 'int main() { long double x = 7.0; }' > try.c
```

```
set try
if eval $compile; then
 val="$define"
 echo "You have long double." >&4
else
 val="$undef"
 echo "You do not have long double." >&4
fi
$rm_try
set d_longdbl
eval $setvar

: see if ldexpl exists
set ldexpl d_ldexpl
eval $inlibc

@if LONG_DOUBLESIZE || longdblsize
: check for length of long double
?X:  Check only if d_longdbl and if longdblsize is not already set.
case "${d_longdbl}${longdblsize}" in
$define)
 echo " " >&4
 echo "Checking to see how big your long doubles are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(long
 double));
}
EOCP
 set try
?X: Don't use compile_ok because some compilers warn you that they have
?X: 'long double' as just 'double'.
 set try
 if eval $compile; then
  longdblsize=`$run ./try`
  echo "Your long doubles are $longdblsize bytes long." >&4
 else
  dflt='8'
  echo " " >&4
  echo "(I can't seem to compile the test program.  Guessing...)" >&4
  rp="What is the size of a long double (in bytes)?"
  . ./myread
  longdblsize="$ans"
 fi
 if $test "X$doublesize" = "X$longdblsize"; then
  echo "That isn't any different from an ordinary double." >&4
```

```
  echo "I'll keep your setting anyway, but you may see some" >&4
  echo "harmless compilation warnings." >&4
 fi
 ;;
esac
$rm_try
@end

$echo "Checking the kind of long doubles you have..." >&4
case "$d_longdbl" in
define)
$cat <<EOP >try.c
#$i_stdlib I_STDLIB
#define LONGDBLSIZE $longdblsize
#define DOUBLESIZE $doublesize
#include <float.h>
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
static const long double
 d = -0.1L;
int main() {
 unsigned const char* b = (unsigned const char*)(&d);
#if DOUBLESIZE == LONGDBLSIZE
 printf("0\n"); /* if it floats like double */
 exit(0);
#endif
#if (LDBL_MANT_DIG == 113 || FLT128_MANT_DIG == 113) && LONGDBLSIZE == 16
 if (b[0] == 0x9A && b[1] == 0x99 && b[15] == 0xBF) {
   /* IEEE 754 128-bit little-endian */
   printf("1\n");
   exit(0);
 }
 if (b[0] == 0xBF && b[14] == 0x99 && b[15] == 0x9A) {
   /* IEEE 128-bit big-endian, e.g. solaris sparc */
   printf("2\n");
   exit(0);
 }
#endif
/* For alignment 32-bit platforms have the 80 bits in 12 bytes,
* while 64-bits platforms have it in 16 bytes.  The trailing bytes
* cannot be trusted. */
#if LDBL_MANT_DIG == 64 && (LONGDBLSIZE == 16 || LONGDBLSIZE == 12)
 if (b[0] == 0xCD && b[9] == 0xBF) {
   /* x86 80-bit little-endian, sizeof 12 (ILP32, Solaris x86)
    * or 16 (LP64, Linux and OS X), 4 or 6 bytes of padding.
    * Also known as "extended precision". */
```

```
  printf("3\n");
  exit(0);
 }
if (b[0] == 0xBF && b[9] == 0xCD) {
  /* Is there ever big-endian 80-bit, really?
   *
   * The Motorola 68881 had another "extended precision" format:
   * sign:1 exp:15 zero:16 integer:1 mantissa:63
   * for total of 96 bits of bytes.  The zero bits were unused.
   * See "M68000 FAMILY PROGRAMMER'S REFERENCE MANUAL" for more details.
   * If it ever becomes relevant, this format should be allocated a
   * new doublekind code since it is quite different from the Intel x87.
   */
  printf("4\n");
  exit(0);
 }
#endif
#if (LDBL_MANT_DIG == 106 || LDBL_MANT_DIG == 107) && LONGDBLSIZE == 16
 /* software "double double", the 106 is 53+53.
  * but irix thinks it is 107. */
 if (b[0] == 0x9A && b[7] == 0x3C && b[8] == 0x9A && b[15] == 0xBF) {
  /* double double 128-bit fully little-endian,
   * little-endian doubles in little-endian order,
   * 9a 99 99 99 99 99 59 3c 9a 99 99 99 99 99 b9 bf */
  printf("5\n");
  exit(0);
 }
 if (b[0] == 0xBF && b[7]
 == 0x9A && b[8] == 0x3C && b[15] == 0x9A) {
  /* double double 128-bit fully big-endian,
   * big-endian doubles in big-endian order,
   * e.g. PPC/Power and MIPS:
   * bf b9 99 99 99 99 99 9a 3c 59 99 99 99 99 99 9a */
  printf("6\n");
  exit(0);
 }
 if (b[0] == 0x9A && b[7] == 0xBF && b[8] == 0x9A && b[15] == 0x3C) {
  /* double double 128-bit mixed endian.
   * little-endian doubles in big-endian order,
   * e.g. ppc64el,
   * 9a 99 99 99 99 99 b9 bf 9a 99 99 99 99 99 59 3c */
  printf("7\n");
  exit(0);
 }
 if (b[0] == 0x3C && b[7] == 0x9A && b[8] == 0xBF && b[15] == 0x9A) {
  /* double double 128-bit mixed endian,
   * big-endian doubles in little-endian order,
   * 3c 59 99 99 99 99 99 9a bf b9 99 99 99 99 99 9a */
```

```
   printf("8\n");
   exit(0);
 }
#endif
/* We are largely making this up because it may well be
* that the VAX format H was never made available to C,
* only to Fortran. */
#if LONGDBLSIZE == 16 && defined(__vax__)
 if (b[0]
 == 0xFD && b[15] == 0x99) {
   /* VAX format H, PDP-11 mixed endian. */
   printf("9\n");
   exit(0);
 }
#endif
 printf("-1\n"); /* unknown */
 exit(0);
}
EOP
set try
if eval $compile; then
   longdblkind=`$run ./try`
else
   longdblkind=-1
fi
;;
*) longdblkind=0 ;;
esac
case "$longdblkind" in
0) echo "Your long doubles are doubles." >&4 ;;
1) echo "You have IEEE 754 128-bit little endian long doubles." >&4 ;;
2) echo "You have IEEE 754 128-bit big endian long doubles." >&4 ;;
3) echo "You have x86 80-bit little endian long doubles." >&4 ;;
4) echo "You have x86 80-bit big endian long doubles." >&4 ;;
5) echo "You have 128-bit fully little-endian double-double long doubles (64-bit LEs in LE)." >&4 ;;
6) echo "You have 128-bit fully big-endian double-double long doubles (64-bit BEs in BE)." >&4 ;;
7) echo "You have 128-bit mixed-endian double-double long doubles (64-bit LEs in BE)." >&4 ;;
8) echo "You have 128-bit mixed-endian double-double long doubles (64-bit BEs in LE)." >&4
 ;;
9) echo "You have 128-bit PDP-style mixed-endian long doubles (VAX format H)." >&4 ;;
*) echo "Cannot figure out your long double." >&4 ;;
esac
d_long_double_style_ieee=$undef
d_long_double_style_ieee_std=$undef
d_long_double_style_ieee_extended=$undef
d_long_double_style_ieee_doubledouble=$undef
d_long_double_style_vax=$undef
case "$longdblkind" in
```

```
1|2|3|4|5|6|7|8) d_long_double_style_ieee=$define ;;
esac
case "$longdblkind" in
1|2) d_long_double_style_ieee_std=$define ;;
esac
case "$longdblkind" in
3|4) d_long_double_style_ieee_extended=$define ;;
esac
case "$longdblkind" in
5|6|7|8) d_long_double_style_ieee_doubledouble=$define ;;
esac
case "$longdblkind" in
9) d_long_double_style_vax=$define ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_longdbl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitescript.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitescript.U,v $
?RCS:
?MAKE:sitescript sitescriptexp installsitescript : Getfile Oldconfig test \
 Setprefixvar sitebin siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitescript="
?S:sitescript:
?S: This variable holds the name of the directory in which the user wants
?S: to put add-on publicly executable files for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S: The standard
 distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: scripts in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
```

```
?S:.
?D:sitescriptexp="
?S:sitescriptexp:
?S: This is the same as the sitescript variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installsitescript="
?S:installsitescript:
?S: This variable is usually the same as sitescriptexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?LINT:change prefixvar
?LINT:set installsitescript
?LINT:set sitescript
?LINT:set sitescriptexp
: determine where add-on public executable scripts go
case "$sitescript" in
") dflt=$siteprefix/script
 $test -d $dflt || dflt=$sitebin ;;
*)  dflt="$sitescript" ;;
esac
fn=d~+
rp='Pathname where add-on public executable scripts
 should be installed?'
. ./getfile
prefixvar=sitescript
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitescript.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_speedopt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_speedopt.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:15:51  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:27  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_speedopt: Myread Cppsym Oldconfig cat models Setvar
?MAKE: -pick add $@ %<
?S:d_speedopt:
?S: This variable conditionally defines the SPEED_OVER_MEM symbol, which
?S: indicates to the C program that it can
 burn memory in order to save
?S: CPU time.
?S:.
?C:SPEED_OVER_MEM (SPEEDOVERMEM):
?C: This symbol, if defined, indicates that the program can use more
?C: memory in order to reduce CPU time.  The symbol doesn't say whether
?C: we are more interested in saving text space or data space.
?C:.
?H:#$d_speedopt SPEED_OVER_MEM /**/
?H:.
?LINT:set d_speedopt
: do we want speed at the expense of memory
$cat <<'EOM'

I can try to optimize this package for either speed or memory.  If you have
limited address space you may wish to optimize for memory.  Otherwise you
should probably optimize for speed.

EOM
case "$d_speedopt" in
") if ./Cppsym $smallmach; then
 case "$models" in
  *large*|*huge*) dflt=speed;;
  *) dflt=memory;;
  esac
 else
  dflt=speed
 fi
 ;;
*define*) dflt=speed;;
*) dflt=memory;;
esac
rp="What to optimize for?"
. ./myread
case "$ans" in
mem*) val="$undef";;
*) val="$define";;
esac
set d_speedopt
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_speedopt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_voidsig.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:12:46  ram
?RCS: patch54: made cppflags dependency optional
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:20:35  ram
?RCS: patch32: now sets signal_t only once d_voidsig is known (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:54  ram
?RCS: patch30: now properly sets signal_t when re-using previous value
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_voidsig signal_t: rm contains
 cppstdin cppminus +cppflags test Myread \
 Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_voidsig:
?S: This variable conditionally defines VOIDSIG if this system
?S: declares "void (*signal(...))()" in signal.h.  The old way was to
?S: declare it as "int (*signal(...))()".
?S:.
?S:signal_t:
?S: This variable holds the type of the signal handler (void or int).
?S:.
?C:VOIDSIG:
?C: This symbol is defined if this system declares "void (*signal(...))()" in
?C: signal.h.  The old way was to declare it as "int (*signal(...))()".  It
?C: is up to the package author to declare things correctly based on the
?C: symbol.
?C:.
?C:Signal_t (SIGNAL_T):
?C: This symbol's value is either "void" or "int", corresponding to the
?C: appropriate return type of a signal handler.  Thus, you can declare
```

```
?C: a signal handler using "Signal_t (*handler)()", and define the
?C: handler using "Signal_t handler(sig)".
?C:.
?H:#$d_voidsig VOIDSIG  /**/
?H:#define Signal_t $signal_t /* Signal handler's return
 type */
?H:.
?T:xxx
?LINT:set d_voidsig
: see if signal is declared as pointer to function returning int or void
echo " "
xxx=`./findhdr signal.h`
$test "$xxx" && $cppstdin $cppminus $cppflags < $xxx >$$.tmp 2>/dev/null
if $contains 'int.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
elif $contains 'void.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have void (*signal())() instead of int." >&4
 val="$define"
elif $contains 'extern[  ]*[(\*]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
else
 case "$d_voidsig" in
 ")
 echo "I can't determine whether signal handler returns void or int..." >&4
  dflt=void
  rp="What type does your signal handler return?"
  . ./myread
  case "$ans" in
  v*) val="$define";;
  *) val="$undef";;
  esac;;
 "$define")
  echo "As you already told me, signal handler returns void." >&4;;
 *)
  echo "As you already told
 me, signal handler returns int." >&4;;
 esac
fi
set d_voidsig
eval $setvar
case "$d_voidsig" in
"$define") signal_t="void";;
*) signal_t="int";;
esac
$rm -f $$.tmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_voidsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_safemcpy.U,v 3.0.1.5 1997/02/28 15:41:12 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_safemcpy.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:41:12  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  13:58:46  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.3  1995/03/21  08:47:26  ram
?RCS: patch52: swapped two first arguments of memcpy() calls
?RCS:
?RCS:
 Revision 3.0.1.2  1994/10/29  16:15:10  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:53:12  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safemcpy: Compile cat d_memcpy rm_try run \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safemcpy:
?S: This variable conditionally defines the HAS_SAFE_MEMCPY symbol if
?S: the memcpy() routine can do overlapping copies.
?S: For overlapping copies, memmove() should be used, if available.
?S:.
?C:HAS_SAFE_MEMCPY (SAFE_MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy potentially overlapping memory blocks.  If you need to
?C: copy overlapping memory blocks, you should check HAS_MEMMOVE and
```

```
?C: use memmove() instead, if available.
?C:.
?H:#$d_safemcpy HAS_SAFE_MEMCPY /**/
?H:.
?F:!try
?LINT:
 set d_safemcpy
: can memcpy handle overlapping blocks?
echo " "
?X: assume the worst
val="$undef"
case "$d_memmove" in
"$define") echo "I'll use memmove() instead of memcpy() for overlapping copies." ;;
*) case "$d_memcpy" in
 "$define")
  echo "Checking to see if memcpy() can do overlapping copies..." >&4
  $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
```

```
memcpy(abc, "abcdefghijklmnopqrstuvwxyz0123456789", 36);

for (align = 7; align >=
 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  memcpy(b, abc, len);
  for (off = 1; off <= len; off++) {
   memcpy(b+off, b, len);
   memcpy(b, b+off, len);
   if (memcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
  set try
  if eval $compile_ok; then
   if $run ./try 2>/dev/null; then
    echo "Yes, it can."
    val="$define"
   else
    echo "It can't, sorry."
   fi
  else
   echo "(I can't compile the test program, so we'll assume not...)"
  fi
  ;;
 esac
 $rm_try
 ;;
esac
set d_safemcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_safemcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: otherlibdirs.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999-2000, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: otherlibdirs.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS: Revision 1.1  1999/07/08 18:20:26  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:otherlibdirs d_perl_otherlibdirs: Myread cat sitelib sitearch \
 vendorarch vendorlib Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:otherlibdirs:
?S: This variable contains a colon-separated set of paths for the perl
?S: binary to search for additional library files
 or modules.
?S: These directories will be tacked to the end of @INC.
?S: Perl will automatically search below each path for version-
?S: and architecture-specific directories.  See inc_version_list
?S: for more details.
?S: A value of ' ' means 'none' and is used to preserve this value
?S: for the next run through Configure.
?S:.
?S:d_perl_otherlibdirs:
?S: This variable conditionally defines PERL_OTHERLIBDIRS, which
?S: contains a colon-separated set of paths for the perl binary to
?S: include in @INC.  See also otherlibdirs.
?S:.
?C:PERL_OTHERLIBDIRS:
?C: This variable contains a colon-separated set of paths for the perl
?C: binary to search for additional library files or modules.
?C: These directories will be tacked to the end of @INC.
?C: Perl will automatically search below each path for version-
?C: and architecture-specific directories.  See PERL_INC_VERSION_LIST
?C: for more details.
?C:.
?H:#$d_perl_otherlibdirs PERL_OTHERLIBDIRS "$otherlibdirs"  /**/
?H:.
?LINT: set d_perl_otherlibdirs
:
 Final catch-all directories to search
$cat <<EOM

Lastly, you can have perl look in other directories for extensions and
modules in addition to those already specified.
```

```
These directories will be searched after
 $sitearch
 $sitelib
EOM
test X"$vendorlib" != "X" && echo ' ' $vendorlib
test X"$vendorarch" != "X" && echo ' ' $vendorarch
echo ' '
case "$otherlibdirs" in
"|' ') dflt='none' ;;
*) dflt="$otherlibdirs" ;;
esac
$cat <<EOM
Enter a colon-separated set of extra paths to include in perl's @INC
search path, or enter 'none' for no extra paths.

EOM

rp='Colon-separated list of additional directories for perl to search?'
. ./myread
case "$ans" in
' '|''|none) otherlibdirs=' ' ;;
*) otherlibdirs="$ans" ;;
esac
case "$otherlibdirs" in
' ') val=$undef ;;
*) val=$define ;;
esac
set d_perl_otherlibdirs
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/otherlibdirs.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_getpwnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwnam_r getpwnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwnam_r:
?S: This variable conditionally defines the HAS_GETPWNAM_R symbol,
?S: which indicates to the C program that the getpwnam_r()
```

```
?S: routine is available.
?S:.
?S:getpwnam_r_proto:
?S: This variable encodes the prototype of getpwnam_r.
?S: It is zero if d_getpwnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwnam_r
?S: is defined.
?S:.
?C:HAS_GETPWNAM_R:
?C: This symbol, if defined, indicates that the getpwnam_r routine
?C: is available to
 getpwnam re-entrantly.
?C:.
?C:GETPWNAM_R_PROTO:
?C: This symbol encodes the prototype of getpwnam_r.
?C: It is zero if d_getpwnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwnam_r
?C: is defined.
?C:.
?H:#$d_getpwnam_r HAS_GETPWNAM_R /**/
?H:#define GETPWNAM_R_PROTO $getpwnam_r_proto /**/
?H:.
?T:try hdrs d_getpwnam_r_proto
: see if getpwnam_r exists
set getpwnam_r d_getpwnam_r
eval $inlibc
case "$d_getpwnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwnam_r_proto:$usethreads" in
 ":define") d_getpwnam_r_proto=define
  set d_getpwnam_r_proto getpwnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getpwnam_r_proto" in
 define)
 case "$getpwnam_r_proto" in
 "|0) try='int getpwnam_r(const char*, struct passwd*, char*, size_t, struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBWR ;;
 esac
 case "$getpwnam_r_proto" in
 "|0) try='int getpwnam_r(const char*, struct passwd*,
 char*, int, struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBIR ;;
 esac
 case "$getpwnam_r_proto" in
 "|0) try='struct passwd* getpwnam_r(const char*, struct passwd*, char*, int);'
```

```
 ./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=S_CSBI ;;
 esac
 case "$getpwnam_r_proto" in
"|0) try='int getpwnam_r(const char*, struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBI ;;
 esac
 case "$getpwnam_r_proto" in
"|0) d_getpwnam_r=undef
  getpwnam_r_proto=0
  echo "Disabling getpwnam_r, cannot determine prototype." >&4 ;;
* ) case "$getpwnam_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getpwnam_r_proto="REENTRANT_PROTO_$getpwnam_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getpwnam_r has no prototype, not using it." >&4 ;;
  esac
  d_getpwnam_r=undef
  getpwnam_r_proto=0
  ;;
 esac
 ;;
*) getpwnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwnam_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrps.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getgrps.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getgrps: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_getgrps:
?S: This variable conditionally defines the HAS_GETGROUPS symbol, which
?S: indicates to the C program that the getgroups() routine is available
?S: to get the list of process groups.
?S:.
?C:HAS_GETGROUPS (GETGROUPS):
?C: This symbol, if defined, indicates that the getgroups()
 routine is
?C: available to get the list of process groups.  If unavailable, multiple
?C: groups are probably not supported.
?C:.
?H:#$d_getgrps HAS_GETGROUPS  /**/
?H:.
?LINT:set d_getgrps
: see if getgroups exists
set getgroups d_getgrps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getgrps.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: man1dir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:10:29  ram
?RCS: patch61: created
?RCS:
?X:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man1 used instead of man everywhere.
?X:
?MAKE:man1dir man1direxp man1ext installman1dir: afs cat nroff Loc Oldconfig \
 spackage test Getfile Prefixit prefixexp
 Prefixup sysman Myread
?MAKE: -pick add $@ %<
```

```
?Y:TOP
?S:man1dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:man1direxp:
?S: This variable is the same as the man1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installman1dir:
?S: This variable is really the same as man1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man1ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See man1dir.
?S:.
?T:lookpath
: determine
 where manual pages go
set man1dir man1dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$man1dir" in
 ") man1dir="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$man1dir" in
' ') dflt=none
 ;;
")
 lookpath="$prefixexp/man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath $prefixexp/man/p_man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1"
 lookpath="$lookpath $prefixexp/man/man.1"
?X: Experience has shown people expect man1dir to be under prefix,
```

```
?X: so we now always put it there.  Users who want other behavior
?X: can answer interactively or use a command line option.
?X: Does user have System V-style man paths.
 case "$sysman" in
 */?_man*) dflt=`./loc . $prefixexp/l_man/man1 $lookpath` ;;
 *) dflt=`./loc . $prefixexp/man/man1 $lookpath` ;;
 esac
 set dflt
 eval $prefixup
 ;;
*)
  dflt="$man1dir"
 ;;
esac
echo " "
fn=dn+~
rp="Where do the main $spackage manual pages (source) go?"
. ./getfile
if $test "X$man1direxp" != "X$ansexp"; then
 installman1dir=''
fi
man1dir="$ans"
man1direxp="$ansexp"
case "$man1dir" in
'') man1dir=' '
 installman1dir='';;
esac
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installman1dir" in
 '') dflt=`echo $man1direxp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installman1dir";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installman1dir="$ans"
else
 installman1dir="$man1direxp"
fi

: What suffix to use on installed man pages
```

```
case "$man1dir" in
' ')
 man1ext='0'
 ;;
*)
 rp="What suffix should be used for the main $spackage man pages?"
 case "$man1ext" in
 ") case "$man1dir" in
  *1)  dflt=1 ;;
  *1p)
 dflt=1p ;;
  *1pm) dflt=1pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L1) dflt=L1;;
  *) dflt=1;;
  esac
  ;;
 *) dflt="$man1ext";;
 esac
 . ./myread
 man1ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/man1dir.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: orderlib.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:18:18  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
```

```
?RCS: patch61: now uses the ar located by Loc.U
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:33:04  ram
?RCS: patch45: allows hint files to specify their own value for 'ranlib'
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:26:48  ram
?RCS: patch36: now performs a real small compile for accurate checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1
  1994/08/29  16:31:17  ram
?RCS: patch32: use cc variable instead of hardwired 'cc' in 1st compile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orderlib ranlib: Loc ar cat test rm +cc +ccflags +ldflags +libs _a _o
?MAKE: -pick add $@ %<
?S:orderlib:
?S: This variable is "true" if the components of libraries must be ordered
?S: (with `lorder $* | tsort`) before placing them in an archive.  Set to
?S: "false" if ranlib or ar can generate random libraries.
?S:.
?S:ranlib:
?S: This variable is set to the pathname of the ranlib program, if it is
?S: needed to generate random libraries.  Set to ":" if ar can generate
?S: random libraries or if random libraries are not supported
?S:.
?F:!foobar
: see if ar generates random libraries by itself
echo " "
echo "Checking how to generate random libraries on your machine..." >&4
?X: Some systems (like MIPS) complain when running ar... Others like Ultrix
?X: need an explicit 'ar ts'
 to add the table of contents.
?X: Still others like Linux run ar ts successfully, but still need ranlib.
?X: This set of tests seems the minimum necessary to check out Linux.
?X: We need to explicitly put the entries in out-of-order so that Sun's ld
?X: will fail.  (Otherwise it complains, but gives an exit status of 0.)
echo 'int bar1() { return bar2(); }' > bar1.c
echo 'int bar2() { return 2; }' > bar2.c
$cat > foo.c <<'EOP'
int main() { printf("%d\n", bar1()); exit(0); }
EOP
$cc $ccflags -c bar1.c >/dev/null 2>&1
$cc $ccflags -c bar2.c >/dev/null 2>&1
$cc $ccflags -c foo.c >/dev/null 2>&1
$ar rc bar$_a bar2$_o bar1$_o >/dev/null 2>&1
if $cc $ccflags $ldflags -o foobar foo$_o bar$_a $libs > /dev/null 2>&1 &&
```

```
 ./foobar >/dev/null 2>&1; then
 echo "ar appears to generate random libraries itself."
 orderlib=false
 ranlib=":"
elif $ar ts bar$_a >/dev/null 2>&1 &&
 $cc $ccflags $ldflags -o foobar foo$_o bar$_a $libs > /dev/null 2>&1 &&
 ./foobar >/dev/null 2>&1; then
  echo "a table of contents
 needs to be added with 'ar ts'."
  orderlib=false
  ranlib="$ar ts"
else
?X: Allow hints to specify their own ranlib "script". For instance, on
?X: some NeXT machines, the timestamp put by ranlib is not correct, and this
?X: may raise tedious recompiles for nothing. Therefore, NeXT may add the
?X: ranlib='sleep 5; /bin/ranlib' line in their hints to "fix" that.
?X: (reported by Andreas Koenig <k@franz.ww.tu-berlin.de>)
 case "$ranlib" in
 :) ranlib=";;
 ")
  ranlib=`./loc ranlib X /usr/bin /bin /usr/local/bin`
  $test -f $ranlib || ranlib="
  ;;
 esac
 if $test -n "$ranlib"; then
  echo "your system has '$ranlib'; we'll use that."
  orderlib=false
 else
  echo "your system doesn't seem to support random libraries"
  echo "so we'll use lorder and tsort to order the libraries."
  orderlib=true
  ranlib=":"
 fi
fi
$rm -f foo* bar*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/orderlib.U
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_keepsig.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:57:56  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:26:25  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:13:59  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:48:47  ram
?RCS: patch12: comment for SIGNALS_KEPT was the other way round
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:06:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepsig: cat Compile rm Guess contains echo n c Setvar run
?MAKE: -pick add $@ %<
?S:d_keepsig:
?S: This variable contains the eventual value of the SIGNALS_KEPT symbol,
?S: which indicates to the C program if signal handlers need not reinstated
?S: after receipt of a signal.
?S:.
?C:SIGNALS_KEPT (PERSISTENT_SIGNAL):
?C: This symbol is defined if signal handlers needn't be reinstated after
?C: receipt of a signal.
?C:.
?H:#$d_keepsig SIGNALS_KEPT /**/
?H:.
?F:!try !try.out
?LINT:set d_keepsig
: see if signals are kept
val="$undef";
echo " "
echo "Checking to see if signal handlers stick around..." >&4
$cat >try.c <<'EOCP'
foo() {}

int main()
{
 signal(2, foo);
 kill(getpid(), 2);
 kill(getpid(), 2);
 printf("abc\n");
}
```

```
EOCP
set try
if eval $compile_ok; then
?X: On AIX a single ./try will not work (with ksh)
?X: Backquotes required on Linux and SGI (prevents "ambiguous output redirect")
?X:
 (reported by Xavier LeVourch <xavierl@eiffel.com>)
 `sh -c $run ./try >try.out 2>/dev/null`
 if $contains abc try.out >/dev/null 2>&1; then
  echo "Yes, they do."
  val="$define";
 else
  echo "No, they don't."
 fi
else
 $echo $n "(I can't seem to compile the test program. Assuming $c"
 if ./bsd; then
  echo "they do.)"
  val="$define"
 else
  echo "they don't.)"
 fi
fi
set d_keepsig
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_keepsig.U
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```
?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:compiler_warning: contains grep osname
?MAKE: -pick add $@ %<
?S:compiler_warning:
?S: This variable holds the command to check if the file specified as a
?S: parameter contains a compiler warning
?S:.
: See if a file contains compiler warnings
```

```
: See if a file contains compiler warnings
case "$osname" in
 'aix')
 cat >compiler_warning <<EOSS
# Sample for aix ('.5' indicates the column number in the line):
#    "op.h", line 203.5: 1506-159 (E) Bit field
 type specified for op_type
# Since the word 'warning' isn't present, use a fairly rigorous match of what
# warning messages look like
#    "    o    p    .  h   ", line    203    .   5    :   1506    -    159    (  E  )
$grep -E "^\\"[A-Za-z][A-Za-z0-9_]*\.[ch]\\", line [1-9][0-9]*[.][1-9][0-9]*: [1-9][0-9]*-[1-9][0-9]* \([EW][)] "
"\$1"
EOSS
      compiler_warning=./compiler_warning
      chmod +x $compiler_warning
   ;;
    # Maybe a colon after the 'warning' would be appropriate
 *) compiler_warning="$contains -i warning"
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/compiler_warning.U
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```
?RCS: $Id: Oldsym.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldsym.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:06:58  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit follows the creation of the config.sh file. It adds some
?X: special symbols: defines from patchlevel.h file if any and PERL_CONFIG_SH,
?X: which is set to true. Then, we try to keep all the new symbols that
?X: may come from a hint
```

```
 file or a previous config.sh file.
?X:
?MAKE:Oldsym: Config_sh cat test hint src sed sort uniq perl_patchlevel
?MAKE: -pick add $@ %<
?T:PERL_CONFIG_SH PERL_PATCHLEVEL sym tmp
?F:!UU
: add special variables
$test -f $src/patchlevel.h && \
awk '/^#define[  ]+PERL_/ {printf "%s=%s\n",$2,$3}' $src/patchlevel.h >>config.sh
echo "PERL_PATCHLEVEL='$perl_patchlevel'" >>config.sh
echo "PERL_CONFIG_SH=true" >>config.sh

: propagate old symbols
if $test -f UU/config.sh; then
?X: Make sure each symbol is unique in oldconfig.sh
 <UU/config.sh $sort | $uniq >UU/oldconfig.sh
?X:
?X: All the symbols that appear twice come only from config.sh (hence the
?X: two config.sh in the command line). These symbols will be removed by
?X: the uniq -u command. The oldsyms file thus contains all the symbols
?X: that did not appear in the produced config.sh (Larry Wall).
?X:
?X: Do not touch the -u flag of uniq.  This means you too, Jarkko.
?X:
 $sed -n 's/^\([a-zA-Z_0-9]*\)=.*/\1/p' \
  config.sh config.sh UU/oldconfig.sh
 |\
  $sort | $uniq -u >UU/oldsyms
 set X `$cat UU/oldsyms`
 shift
 case $# in
 0) ;;
 *)
  $cat <<EOM
Hmm...You had some extra variables I don't know about...I'll try to keep 'em...
EOM
  echo ": Variables propagated from previous config.sh file." >>config.sh
  for sym in `$cat UU/oldsyms`; do
   echo "    Propagating $hint variable "'$'"$sym..."
   eval 'tmp="$'"${sym}"'"'
   echo "$tmp" | \
    sed -e "s/'/'\''\''/g" -e "s/^/$sym='/" -e "s/$/'/" >>config.sh
  done
  ;;
 esac
fi

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Oldsym.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in order
?X: to make quick check on whether the current C compiler is working.
?X:
?MAKE:Checkcc ccname ccversion: Myread Warn startsh cat contains test
?MAKE: -pick add $@ %<
?S:ccname:
?S: This can set either by hints files or by Configure.  If using
?S: gcc, this is gcc, and if not, usually equal to cc, unimpressive, no?
?S: Some platforms, however, make good use of this by storing the
?S: flavor
 of the C compiler being used here.  For example if using
?S: the Sun WorkShop suite, ccname will be 'workshop'.
?S:.
?S:ccversion:
?S: This can set either by hints files or by Configure.  If using
?S: a (non-gcc) vendor cc, this variable may contain a version for
?S: the compiler.
?S:.
?F:./checkcc ./trygcc !checktmp
?V:despair
?T:trygcc
?LINT:extern cc rm ccflags ldflags
?LINT:change cc ccflags
?LINT:usefile checktmp
?INIT:ccname=''
?INIT:ccversion=''
: generate the trygcc script for later perusal
cat <<EOS >trygcc
$startsh
EOS
cat <<'EOSC' >>trygcc
case "$cc" in
```

```
") ;;
*)  $rm -f try try.*
   $cat >try.c <<EOM
int main(int argc, char *argv[]) {
 (void) argc;
 (void) argv;
 return 0;
}
EOM
   if $cc -o try $ccflags $ldflags try.c; then
      :
   else
       echo "Uh-oh, the C compiler '$cc' doesn't seem to be working." >&4
       despair=yes
       trygcc=yes
       case "$cc" in
       *gcc*) trygcc=no ;;
       esac
       case "`$cc -v -c try.c 2>&1`" in

      *gcc*) trygcc=no ;;
       esac
       if $test X"$trygcc" = Xyes; then
           if gcc -o try -c try.c; then
               echo " "
               echo "You seem to have a working gcc, though." >&4
               rp="Would you like to use it?"
               dflt=y
               if $test -f myread; then
                   . ./myread
               else
                   if $test -f UU/myread; then
                       . ./UU/myread
                   else
                       echo "Cannot find myread, sorry.  Aborting." >&2
                       exit 1
                   fi
               fi
               case "$ans" in
               [yY]*) cc=gcc; ccname=gcc; ccflags=''; despair=no;
?X: Look whether we have 'call-back units' generated by hints that would
?X: seemingly affect the compiling environment.
                       $cat *.cbu >checktmp 2>/dev/null
                       if $contains ccflags checktmp >/dev/null; then

       ./warn <<EOM
Any previous setting of the C compiler flags has been lost.
It may be necessary to pass -Dcc=gcc to Configure right away.
```

```
EOM
                    fi;;
            esac
          fi
       fi
   fi
   $rm -f try try.*
   ;;
esac
EOSC

: generate the checkcc script for later perusal
cat <<EOS >checkcc
$startsh
EOS
cat <<'EOSC' >>checkcc
case "$cc" in
") ;;
*)  $rm -f try try.*
   $cat >try.c <<EOM
int main(int argc, char *argv[]) {
 (void) argc;
 (void) argv;
 return 0;
}
EOM
   if $cc -o try $ccflags $ldflags try.c; then
      :
   else
       if $test X"$despair" = Xyes; then
          echo "Uh-oh, the C compiler '$cc' doesn't seem to be working." >&4
       fi
       $cat >&4 <<EOM
You need to find a working C compiler.
Either (purchase and) install the C compiler supplied by your OS vendor,
or for a free C compiler try http://gcc.gnu.org/
I cannot continue any further, aborting.
EOM
       exit 1
   fi

 $rm -f try try.*
   ;;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Checkcc.U

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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_int64_t: Inhdr cat rm_try Setvar Compile i_inttypes
?MAKE: -pick add $@ %<
?S:d_int64_t:
?S: This symbol will be defined if the C compiler supports int64_t.
?S:.
?C:HAS_INT64_T:
?C: This symbol will defined if the C compiler supports int64_t.
?C: Usually the <inttypes.h> needs to be included, but sometimes
?C: <sys/types.h> is enough.
?C:.
?H:#$d_int64_t     HAS_INT64_T              /**/
?H:.
?LINT:set d_int64_t
: check for int64_t
echo " "
echo "Checking to see if you have int64_t..." >&4
$cat >try.c <<EOCP
#include
 <sys/types.h>
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
int main() { int64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have int64_t."
else
 val="$undef"
 echo "You do not have int64_t."
fi
$rm_try
set d_int64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_int64_t.U
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```
?RCS: $Id: i_systable.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systable.U,v $
?RCS: Revision 3.0.1.1  1993/10/16  13:50:20  ram
?RCS: patch12: created
?RCS:
?RCS:
?MAKE:i_systable: Inhdr
?MAKE: -pick add $@ %<
?S:i_systable:
?S: This variable conditionally defines the I_SYS_TABLE symbol, and
?S: indicates whether a C program should include <sys/table.h>.
?S:.
?C:I_SYS_TABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/table.h> for the OSF/1 table() system call.
?C:.
?H:#$i_systable
 I_SYS_TABLE  /**/
?H:.
?LINT:set i_systable
: see if this is an OSF sys/table system
set sys/table.h i_systable
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systable.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_normsig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_normsig.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:03  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:14:48  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_normsig jobslib: test Setvar Guess _a
?MAKE: -pick add $@ %<
?S:d_normsig:
?S: This variable conditionally
 defines the NORMSIG symbol, which
?S: indicates to the C program that the normal signal handling routines
?S: should be used, as opposed to the ones in 4.1bsd (sigset, etc.).
?S:.
?S:jobslib:
?S: This variable holds the argument to be passed to the loader to include
?S: the strange signal handling routines from 4.1bsd.  On systems that
?S: have NORMSIG defined this variable is null.
?S:.
?C:NORMSIG:
?C: This symbol, if defined, indicates that normal signal handling routines
?C: should be used, as opposed to the ones in 4.1bsd (sigset, etc.).
?C:.
?H:#$d_normsig NORMSIG  /**/
?H:.
?LINT:set d_normsig
: see if we need -ljobs and if we have sigset, etc.
echo " "
if $test -r /usr/lib/libjobs$_a || $test -r /usr/local/lib/libjobs$_a ; then
 echo "Jobs library found." >&4
 val="$undef"
 jobslib='-ljobs'
else
 if ./bsd; then
  echo "No jobs library found. (I suppose this is at least 4.2...)" >&4
 else
  echo "No jobs library found. (That's okay, we all have our faults.)" >&4
 fi
 val="$define"
 jobslib="
```

```
fi
set
 d_normsig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_normsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perl5.U,v $
?RCS:
?RCS: Copyright (c) 2000 Andrew Dougherty
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: perl5.U,v $
?RCS:
?X:
?X: The purpose of this unit is to locate a previously installed
?X: version of perl5 suitable for running inc_version_list.U.
?X: We check for 5.005 and later because inc_version_list is
?X: irrelevant for earlier versions.
?X:
?MAKE:perl5: path_sep binexp test sed exe_ext
?MAKE: -pick add $@ %<
?Y:TOP
?S:perl5:
?S: This variable contains the full path (if any) to a previously
?S: installed perl5.005 or later suitable for running the script
?S: to determine inc_version_list.
?S:.
?T: tdir
: Find perl5.005 or later.
echo "Looking for a previously installed perl5.005 or later... "
case "$perl5" in
") for tdir in `echo "$binexp$path_sep$PATH" | $sed "s/$path_sep/
 /g"`; do
  : Check if this perl is recent and can load a simple module
  if $test -x $tdir/perl$exe_ext && $tdir/perl -Mless -e 'use 5.005;' >/dev/null 2>&1; then
   perl5=$tdir/perl
   break;
  elif $test -x $tdir/perl5$exe_ext && $tdir/perl5 -Mless -e 'use 5.005;' >/dev/null 2>&1; then
   perl5=$tdir/perl5
   break;
  fi
 done
 ;;
```

```
*) perl5="$perl5"
 ;;
esac
case "$perl5" in
") echo "None found.  That's ok.";;
*) echo "Using $perl5." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/perl5.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setregid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setregid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setregid d_setresgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setregid:
?S: This variable conditionally defines HAS_SETREGID if setregid() is
?S: available to change the real and effective gid of the current
?S: process.
?S:.
?S:d_setresgid:
?S: This variable conditionally defines HAS_SETRESGID if setresgid() is
?S: available to change
 the real, effective and saved gid of the current
?S: process.
?S:.
?C:HAS_SETREGID (SETREGID):
?C: This symbol, if defined, indicates that the setregid routine is
?C: available to change the real and effective gid of the current
?C: process.
?C:.
?C:HAS_SETRESGID (SETRESGID):
?C: This symbol, if defined, indicates that the setresgid routine is
?C: available to change the real, effective and saved gid of the current
?C: process.
```

```
?C:.
?H:#$d_setregid HAS_SETREGID  /**/
?H:#$d_setresgid HAS_SETRESGID  /**/
?H:.
?LINT: set d_setregid d_setresgid
: see if setregid exists
set setregid d_setregid
eval $inlibc
set setresgid d_setresgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setregid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_regcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_regcmp.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:34:45  ram
?RCS: patch49: now looks for POSIX regcomp() routine
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_regcmp d_re_comp d_regcomp: Csym cat
?MAKE: -pick add $@ %<
?S:d_regcomp:
?S: This variable conditionally defines the HAS_REGCOMP symbol, which
?S: indicates to the C program that the regcomp() routine is available
?S: for regular
 pattern matching (usually on POSIX.2 conforming systems).
?S:.
?S:d_regcmp:
?S: This variable conditionally defines the HAS_REGCMP symbol, which
?S: indicates to the C program that the regcmp() routine is available
?S: for regular pattern matching (usually on System V).
?S:.
?S:d_re_comp:
?S: This variable conditionally defines the HAS_RECOMP symbol, which
?S: indicates to the C program that the re_comp() routine is available
```

```
?S: for regular pattern matching (usually on BSD). If so, it is likely that
?S: re_exec() exists.
?S:.
?C:HAS_REGCOMP (REGCOMP):
?C: This symbol, if defined, indicates that the regcomp() routine is
?C: available to do some regular pattern matching (usually on POSIX.2
?C: conforming systems).
?C:.
?C:HAS_REGCMP (REGCMP):
?C: This symbol, if defined, indicates that the regcmp() routine is
?C: available to do some regular pattern matching (usually on System V).
?C:.
?C:HAS_RECOMP (RECOMP):
?C: This symbol, if defined, indicates that the re_comp() routine is
?C: available
 to do some regular pattern matching (usually on BSD). If so,
?C: it is likely that re_exec() be available.
?C:.
?H:#$d_regcomp HAS_REGCOMP  /* POSIX.2 */
?H:#$d_regcmp HAS_REGCMP  /* sysV */
?H:#$d_re_comp HAS_RECOMP  /* BSD */
?H:.
?T:val
: see if regcomp, regcmp, or re_comp exist, for regular pattern matching
echo " "
if set regcomp val -f d_regcomp; eval $csym; $val; then
 echo 'regcomp() found.' >&4
 d_regcomp="$define"
 d_regcmp="$undef"
 d_re_comp="$undef"
elif set regcmp val -f d_regcmp; eval $csym; $val; then
 echo 'regcmp() found.' >&4
 d_regcmp="$define"
 d_regcomp="$undef"
 d_re_comp="$undef"
elif set re_comp val -f d_re_comp; eval $csym; $val; then
 echo 're_comp() found, assuming re_exec() also exists.' >&4
 d_re_comp="$define"
 d_regcomp="$undef"
 d_regcmp="$undef"
else
 $cat >&4 <<EOM
No regcomp(), regcmp() nor re_comp() found !! No regular pattern matching.
EOM
 d_regcmp="$undef"
 d_re_comp="$undef"
 d_regcomp="$undef"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_regcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: intsize.U,v 3.0.1.2 1997/02/28 15:55:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: intsize.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:55:26  ram
?RCS: patch61: avoid prompting the user if the test runs ok
?RCS: patch61: moved code from longsize.U into there
?RCS: patch61: new tests for shortsize as well
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:21:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:intsize longsize
 shortsize: Compile Myread cat run i_stdlib rm_try
?MAKE: -pick add $@ %<
?S:intsize:
?S: This variable contains the value of the INTSIZE symbol, which
?S: indicates to the C program how many bytes there are in an int.
?S:.
?S:longsize:
?S: This variable contains the value of the LONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long.
?S:.
?S:shortsize:
?S: This variable contains the value of the SHORTSIZE symbol which
?S: indicates to the C program how many bytes there are in a short.
?S:.
?C:INTSIZE:
?C: This symbol contains the value of sizeof(int) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:LONGSIZE:
?C: This symbol contains the value of sizeof(long) so that the C
```

```
?C: preprocessor can make decisions based on it.
?C:.
?C:SHORTSIZE:
?C: This symbol contains the value of sizeof(short) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define INTSIZE $intsize  /**/
?H:#define LONGSIZE $longsize  /**/
?H:#define
 SHORTSIZE $shortsize  /**/
?H:.
?F:!try
: check for lengths of integral types
echo " "
case "$intsize" in
")
 echo "Checking to see how big your integers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
@if INTSIZE || intsize
 printf("intsize=%d;\n", (int)sizeof(int));
@end
@if LONGSIZE || longsize
 printf("longsize=%d;\n", (int)sizeof(long));
@end
@if SHORTSIZE || shortsize
 printf("shortsize=%d;\n", (int)sizeof(short));
@end
 exit(0);
}
EOCP
 set try
 if eval $compile_ok && $run ./try > /dev/null; then
  eval `$run ./try`
@if INTSIZE || intsize
  echo "Your integers are $intsize bytes long."
@end
@if LONGSIZE || longsize
  echo "Your long integers are $longsize bytes long."
@end
@if SHORTSIZE || shortsize
  echo "Your short integers are $shortsize bytes long."
```

```
@end
 else
  $cat >&4 <<EOM
!
Help! I can't compile and run the intsize test program: please enlighten me!
(This is probably a misconfiguration
 in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)
!
EOM
@if INTSIZE || intsize
  dflt=4
  rp="What is the size of an integer (in bytes)?"
  . ./myread
  intsize="$ans"
@end
@if LONGSIZE || longsize
  dflt=$intsize
  rp="What is the size of a long integer (in bytes)?"
  . ./myread
  longsize="$ans"
@end
@if SHORTSIZE || shortsize
  dflt=2
  rp="What is the size of a short integer (in bytes)?"
  . ./myread
  shortsize="$ans"
@end
 fi
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/intsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostent_r gethostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
```

```
?S:d_gethostent_r:
?S: This variable conditionally defines the HAS_GETHOSTENT_R symbol,
?S: which indicates to the C program that the gethostent_r()
?S: routine is available.
?S:.
?S:gethostent_r_proto:
?S: This variable encodes the prototype of gethostent_r.
?S: It is zero if d_gethostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostent_r
?S: is defined.
?S:.
?C:HAS_GETHOSTENT_R:
?C: This symbol, if defined, indicates that the gethostent_r routine
?C: is
 available to gethostent re-entrantly.
?C:.
?C:GETHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of gethostent_r.
?C: It is zero if d_gethostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostent_r
?C: is defined.
?C:.
?H:#$d_gethostent_r HAS_GETHOSTENT_R /**/
?H:#define GETHOSTENT_R_PROTO $gethostent_r_proto /**/
?H:.
?T:try hdrs d_gethostent_r_proto
: see if gethostent_r exists
set gethostent_r d_gethostent_r
eval $inlibc
case "$d_gethostent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_gethostent_r_proto:$usethreads" in
 ":define") d_gethostent_r_proto=define
  set d_gethostent_r_proto gethostent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gethostent_r_proto" in
 define)
 case "$gethostent_r_proto" in
 "|0) try='int gethostent_r(struct hostent*, char*, size_t, struct hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBWRE ;;
 esac
 case "$gethostent_r_proto"
 in
 "|0) try='int gethostent_r(struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBIE ;;
```

```
 esac
 case "$gethostent_r_proto" in
 "|0) try='struct hostent* gethostent_r(struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=S_SBIE ;;
 esac
 case "$gethostent_r_proto" in
 "|0) try='struct hostent* gethostent_r(struct hostent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=S_SBI ;;
 esac
 case "$gethostent_r_proto" in
 "|0) try='int gethostent_r(struct hostent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBI ;;
 esac
 case "$gethostent_r_proto" in
 "|0) try='int gethostent_r(struct hostent*, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SD ;;
 esac
 case "$gethostent_r_proto" in
 "|0) d_gethostent_r=undef
  gethostent_r_proto=0
  echo "Disabling gethostent_r, cannot determine prototype." >&4 ;;
 * ) case
 "$gethostent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gethostent_r_proto="REENTRANT_PROTO_$gethostent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gethostent_r has no prototype, not using it." >&4 ;;
  esac
  d_gethostent_r=undef
  gethostent_r_proto=0
  ;;
 esac
 ;;
*) gethostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostent_r.U
No license file was found, but licenses were detected in source scan.

```
;###########################################################################
;# Jmake rules for building libraries, programs, scripts, and data files
;# $Id: Jmake.rules 18 2006-12-27 10:35:09Z rmanfredi $
```

```
/*
*     MACHINE-INDEPENDENT RULES -- DO NOT MODIFY
*/

/* $Id: Jmake.rules 18 2006-12-27 10:35:09Z rmanfredi $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: Jmake.rules,v $
* Revision 3.0.1.7  2004/08/22 08:28:58  ram
* patch71: random cleanup
*
* Revision 3.0.1.6  1997/02/28  14:56:01  ram
* patch61: now handles USRINC for dependencies
* patch61: smarter about dependencies
 computation
*
* Revision 3.0.1.5  1995/09/25  09:07:19  ram
* patch59: smarter sed command to strip /usr/include dependencies
*
* Revision 3.0.1.4  1995/07/25  13:33:59  ram
* patch56: install of script man pages can now cope with missing files
* patch56: the clobber target now removes the .config directory as well
*
* Revision 3.0.1.3  1995/03/21  08:35:28  ram
* patch52: suppressed extra argument to NormalProgramTarget call
*
* Revision 3.0.1.2  1995/01/11  14:49:55  ram
* patch45: new macros ShellScriptTargetExt and SimpleShellScriptTargetExt
* patch45: directory installation is now made via INSTALLDIR (Configure)
*
* Revision 3.0.1.1  1994/10/29  15:46:30  ram
* patch36: added RemoteDependency rule
*
* Revision 3.0  1993/08/18  12:04:14  ram
* Baseline for dist 3.0 netwide release.
*
*/

/* Please, edit only with tabstops = 4 (":set ts=4" under vi) */
```

```
/*
* AddedByConfigure:
* Gives name of the files generated by Configure that can safely
* be removed
 when a "make clobber" is issued. Not that it is useless
* to name config.h or config.sh because these are already taken care
* of by jmake.
*/
#define AddedByConfigure(files) @!\
local_clobber::   @@\
 $(RM) files

/*
* AddSuffix:
* Adds a sufix to the .SUFFIXES: list.
*/
#define AddSuffix(ext) @!\
|suffix ext


/*
* AllTarget:
* Generate rules to build necessary things during make all.
*/
#define AllTarget(depends) @!\
all:: depends    @!\
      @!\
local_realclean::   @@\
 $(RM) depends

/*
* RemoveTargetProgram:
* This is used in some other macros in order to remove the target
* before starting its building (saves disk space).  There should be
* no '@!' at the end of the '#define' line, because this macro is
* used *inside* building rules.
*/
#define RemoveTargetProgram(program) \
 $(RM) program @@\
 if test -f program^^^$(_EXE); then \ @@\
  $(MV) program^^^$(_EXE) program^^~^^^$(_EXE); fi

/*
* NormalProgramTarget:
* Generate rules to compile and link the
 indicated program; since
* it does not use any default object files, it may be used for
* multiple programs in the same Jmakefile.
```

```
*/
#define NormalProgramTarget(program,sources,objects) @!\
++OBJECTS objects @!\
++SOURCES sources @!\
NormalObjectRule()    @!\
AllTarget(program)    @!\
        @!\
program: objects    @@\
 RemoveTargetProgram($@)  @@\
 $(CC) -o $@ objects $(JLDFLAGS) $(LIBS) @!\


/*
* SingleProgramTarget:
* Obsolete version of NormalProgramTarget that doesn't have
* deplibs.
*/
#define SingleProgramTarget(program,objects,libs)  \
NormalProgramTarget(program,objects,libs)

/*
* SimpleProgramTarget:
* Generate rules for compiling and linking programs that only have
* one C source file.  It should only be used in Jmakefiles that
* describe a single program.
*/
#define SimpleProgramTarget(program) @!\
NormalProgramTarget(program,program.c,program.o)



/*
* ComplexProgramTarget:
* Generate rules for compiling and linking the program specified by
* $(OBJS) and
 $(SRCS), installing the program and its man page, and
* generating dependencies.  It should only be used in Jmakefiles
* that describe a single program.
*/
#define ComplexProgramTarget(program) @!\
++OBJECTS $(OBJS) @!\
++SOURCES $(SRCS) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS) $(JLDFLAGS) $(LIBS) @!\
```

```
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC)) @!\
DependTarget()      @!\
LintTarget()


/*
* ComplexProgramTarget_1:
* Generate rules for compiling and linking the program specified by
* $(OBJS1) and $(SRCS1), installing the program and its man page,
* and generating dependencies for it and any programs described by
* $(SRCS2) and $(SRCS3).  It should be used to build the primary
* program in Jmakefiles that describe multiple programs.
*/
#define ComplexProgramTarget_1(program) @!\
++OBJECTS $(OBJS1) @!\
++SOURCES $(SRCS1) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program:
 $(OBJS1)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS1) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC)) @!\
        @!\
DependTarget()      @!\
LintTarget()


/*
* ComplexProgramTarget_2:
* Generate rules for compiling and linking the program specified by
* $(OBJS2) and $(SRCS2) and installing the program and man page.
* It should be used to build the second program in Jmakefiles
* describing more than one program.
*/
#define ComplexProgramTarget_2(program) @!\
++OBJECTS $(OBJS2) @!\
++SOURCES $(SRCS2) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS2)     @@\
 RemoveTargetProgram($@)   @@\
```

```
 $(CC) -o $@ $(OBJS2) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC))


/*
* ComplexProgramTarget_3:
* Generate rules for compiling and linking the
 program specified by
* $(OBJS3) and $(SRCS3) and installing the program and man page.  It
* should be used to build the third program in Jmakefiles describing
* more than one program.
*/
#define ComplexProgramTarget_3(program) @!\
++OBJECTS $(OBJS3) @!\
++SOURCES $(SRCS3) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS3)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS3) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC))


/*
* ComplexShellManualTarget:
* Builds manual pages that are to be extracted from .SH files into
* .$manext files.
*/
#define ComplexShellManualTarget(manpages) @!\
++MANPAGE manpages @!\
|once _ShellManualRule_  @!\
|rule:.SH.$manext:   @!\
|rule: /bin/sh $<   @!\
|rule:      @!\
-once      @!\
AddSuffix(.SH)    @!\
AddSuffix(.$manext)   @!\
AllTarget(manpages)   @!\
       @!\
local_install.man::   @@\
 _MakeInstallDirIgnore($(MANSRC)) \     @@\
 for
```

```
 file in manpages; do \  @@\
  (set -x; $(INSTALL) -c -m 444 $$file \ @@\
   $(INSTALL_PREFIX)$(MANSRC)) || exit 1; \ @@\
 done     @!\
      @!\
local_deinstall.man::  @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for file in manpages; do \  @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(MANSRC)/$$file); \ @@\
 done


/*
* Initialize:
* Puts the line symbol = value in the initialization section of
* Makefile.SH (the one that is subject to parameter substitutions).
*/
#define Initialize(symbol,value) @!\
+symbol = value


/*
* InstallLibrary:
* Generate rules to install the indicated library.
*/
#define InstallLibrary(libname,dest) @!\
local_install:: lib^^libname.a  @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 644 lib^^libname.a $(INSTALL_PREFIX)^^^dest  @@\
 $(RANLIB) dest/lib^^libname.a @@\
 chmod 444 dest/lib^^libnane.a @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.a


/*
* InstallSharedLibrary:
* Generate rules to install
 the shared library.
*/
#define InstallSharedLibrary(libname,rev,dest) @!\
local_install:: lib^^libname.so.rev  @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 lib^^libname.so.rev $(INSTALL_PREFIX)^^^dest @!\
         @!\
local_deinstall::      @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.so.rev
```

```
/*
* InstallSharedLibraryData:
* Generate rules to install the shared library data
*/
#define InstallSharedLibraryData(libname,rev,dest) @!\
local_install:: lib^^libname.sa.rev  @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 lib^^libname.sa.rev $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.sa.rev


/*
* InstallLibraryAlias:
* Generate rules to create a link from one library name to another
* for the purposes of aliasing.
*/
#define InstallLibraryAlias(libname,alias,dest) @!\
local_install:: lib^^libname.a @@\
 $(RM) lib^^alias.a  @@\
 -(cd dest; $(LN) lib^^libname.a lib^^alias.a)
 @!\
      @!\
local_deinstall::   @@\
 $(RM) dest/lib^^alias.a


/*
* InstallLintLibrary:
* Generate rules to install the indicated lint library.
*/
#define InstallLintLibrary(libname,dest) @!\
install.ln:: llib-l^^libname.ln   @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 llib-l^^libname.ln $(INSTALL_PREFIX)^^^dest @!\
      @!\
deinstall.ln::    @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/llib-l^^libname.ln


/*
* InstallManPageLong:
* Generate rules to install the indicated manual page, giving it an
* alternate name.  This is used for installing man pages whose base
* name without the .man suffix would normally be longer than 8
```

```
* characters (the limit for using source code control systems on
* files systems with short file names).
*/
#define InstallManPageLong(file,destdir,dest) @!\
local_install.man:: file.man   @@\
 _MakeInstallDirIgnore(destdir) \ @@\
 $(INSTALL) -c -m 444 file.man $(INSTALL_PREFIX)^^^destdir/dest.$(L) @!\
        @!\
local_deinstall.man::     @@\
 $(RM)
 $(INSTALL_PREFIX)^^^destdir/dest.$(L)  @!\


/*
* InstallManPage:
* Generate rules to install the indicated manual page.
*/
#define InstallManPage(file,dest) @!\
InstallManPageLong(file,dest,file)


/*
* InstallNonExec:
* Generate rules to install a data file using any special
*  install flags.
*/
#define InstallNonExec(file,dest) @!\
local_install:: file    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 444 file $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/file


/*
* InstallProgramWithFlags:
* Generate rules to install an executable program using given
* install flags.
*/
#define InstallProgramWithFlags(program,dest,flags) @!\
local_install:: program    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -s -m 555 flags program^^^$(_EXE) $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/program^^^$(_EXE)
```

```
/*
* InstallProgramNoStripWithFlags:
 * Generate rules to install an executable program using given
* install flags.
*/
#define InstallProgramNoStripWithFlags(program,dest,flags) @!\
local_install:: program    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 555 flags program^^^$(_EXE) $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/program^^^$(_EXE)


/*
* InstallProgram:
* Generate rules to install an executable program using any special
* install flags set in $(INSTALLFLAGS).
*/
#define InstallProgram(program,dest) @!\
InstallProgramWithFlags(program,dest,^^)


/*
* InstallProgramNoStrip:
* Generate rules to install an executable program using any special
* install flags set in $(INSTALLFLAGS), but without stripping the
* executable from debugging symbols.
*/
#define InstallProgramNoStrip(program,dest) @!\
InstallProgramNoStripWithFlags(program,dest,^^)


/*
* InstallScriptWithFlags:
* Generate rules to install an executable script using given
* install
 flags.
*/
#define InstallScriptWithFlags(script,dest,flags) @!\
local_install:: script    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 555 flags script $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/script
```

```
/*
* InstallScript:
* Generate rules to install an executable script using any special
* install flags set in $(INSTALLFLAGS).
*/
#define InstallScript(script,dest) @!\
InstallScriptWithFlags(script,dest,^^)


/*
* InstallScripts:
* Generate rules to install all the scripts listed in the generated
*  $(SCRIPTS) and $(LSCRIPTS) macros.
*/
#define InstallScripts() @!\
|once _InstallScripts_  @!\
local_install:: $(SCRIPTS) $(LSCRIPTS)    @@\
 _MakeInstallDirIgnore($(SCRIPTDIR)) \  @@\
 for file in $(SCRIPTS) $(LSCRIPTS); do \ @@\
  (set -x; \ @@\
  $(INSTALL) -c -m 555 $$file $(INSTALL_PREFIX)$(SCRIPTDIR)) || \ @@\
  exit 1; \ @@\
 done     @!\
      @!\
local_deinstall::   @@\
 @for file in $(SCRIPTS)
 $(LSCRIPTS); do \ @@\
  case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(SCRIPTDIR)/$$file); \ @@\
 done     @!\
-once

/*
* InstallManScripts:
* Generate rule to install/deinstall manual pages for scripts listed
* in the automatically generated $(SCRIPTS) macro.
*/
#define InstallManScripts() @!\
|once _InstallManScripts_ @!\
?NOMAN:|skip    @!\
local_install.man::   @@\
 _MakeInstallDirIgnore($(MANSRC)) \  @@\
 for file in $(SCRIPTS); do \   @@\
  if test -f $$file.man; then \  @@\
   (set -x; \      @@\
   $(INSTALL) -c -m 444 $$file.man \ @@\
    $(INSTALL_PREFIX)$(MANSRC)/$$file.$(L)) || \ @@\
```

```
    exit 1; \ @@\
  fi; \    @@\
 done     @!\
       @!\
local_deinstall.man::  @@\
 case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for file in $(SCRIPTS); do \ @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(MANSRC)/$$file.$(L)); \ @@\
 done     @!\
       @!\
-skip      @!\
-once



/*
* LinkFileList:
* Link a list of list of files from one place to another
 */
#define LinkFileList(step,list,dir,sub) @!\
step:: list       @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 echo " cd" dir; cd dir; for i in list; do (set -x; $(LN) sub/$$i .); done


/*
* InstallMultipleDestFlags:
* Generate rules to install multiple files at once during a particular
* step in the build using a specific set of install flags.
*/
#define InstallMultipleDestFlags(step,list,dest,flags) @!\
step:: list       @@\
 _MakeInstallDirIgnore(dest) \ @@\
 for i in list; do \    @@\
  (set -x; $(INSTALL) -c flags \ @@\
   $$i $(INSTALL_PREFIX)^^^dest) || exit 1;\ @@\
 done

/*
* DeinstallMultipleDest:
* Generate rules to deinstall multiple files at once during a particular
* step in the build.
*/
#define DeinstallMultipleDest(step,list,dest) @!\
step::        @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for i in list; do \    @@\
  (set -x; $(RM) $(INSTALL_PREFIX)^^^dest/$$i); \ @@\
```

```
 done

/*
* InstallMultiple:
* Generate rules to install multiple
 files at once during the install
* step of the build using any install flags set in $(INSTALLFLAGS)
* and deinstall them.
*/
#define InstallMultiple(list,dest) @!\
InstallMultipleDestFlags(local_install,list,dest,$(INSTALLFLAGS)) @!\
DeinstallMultipleDest(local_deinstall,list,dest)


/*
* InstallMultipleFlags:
* Generate rules to install multiple files at once during the
* install step of the build using the given install flags.
*/
#define InstallMultipleFlags(list,dest,flags) @!\
InstallMultipleDestFlags(local_install,list,dest,flags) @!\
DeinstallMultipleDest(local_deinstall,list,dest)


/*
* InstallMultipleMan:
* Generate rules to install a variety of manual pages
* during the install.man step of the build.
*/
#define InstallMultipleMan(list,dest) @!\
InstallMultipleDestFlags(local_install.man,list,dest,$(INSTALLFLAGS)) @!\
DeinstallMultipleDest(local_deinstall.man,list,dest)


/*
* DependDependency:
* Generate rules to build the makedepend program.
*/
#define DependDependency()
    @!\
depend:: TOPDIR/mkdep    @!\
        @!\
TOPDIR/mkdep:      @!\
?TOP: @echo "You have to run Configure first."; exit 1 @!\
%TOP: @echo "You have to run Configure in $(TOP) first."; exit 1


/*
```

```
* DependTarget:
* Generate rules to compute dependencies for all files listed
* in $(SOURCES) (automatically generated macro).
*/
#define DependTarget()    @!\
+USRINC = $usrinc @!\
|once _DependTarget_    @!\
DependDependency()     @!\
        @!\
depend::       @@\
 ($(SED) '/^# DO NOT DELETE/q' Makefile && \ @@\
 $(MKDEP) $(SOURCES) | \   @@\
 $(SED) -e 's:/usr/lib[^ ]*::g; s:$(USRINC)[^ ]*::g; ' \ @@\
  -e '/: / b print' -e '$$ b print' -e 'H; d; n; : print' \ @@\
  -e 'x; s/\\$$//; s/\\\n//g; s/ ^^ */ /g; s/ :/:/;' -e '/: *$$/d' \ @@\
 ) > Makefile.new    @@\
 cp Makefile Makefile.bak  @@\
 cp Makefile.new Makefile  @@\
 $(RM) Makefile.new    @!\
        @!\
-once


/*
* CleanTarget:
* Generate rules to remove any garbage files.
*/
#define CleanTarget()    @!\
?SUBDIRS:clean:
 sub_clean local_clean    @!\
%SUBDIRS:clean: local_clean       @!\
?SUBDIRS:realclean: sub_realclean local_realclean @!\
%SUBDIRS:realclean: local_realclean     @!\
?SUBDIRS:clobber: sub_clobber local_clobber   @!\
%SUBDIRS:clobber: local_clobber      @!\
        @!\
local_clean::       @@\
 if test -f core; then $(RM) core; fi @@\
 $(RM) *~ *.o     @!\
        @!\
local_realclean:: local_clean  @!\
?TOP: $(RM) -r UU     @!\
        @!\
local_clobber:: local_realclean  @!\
%TOP: $(RM) Makefile config.sh  @!\
?TOP: $(RM) config.sh config.h  @!\
?TOP: $(RM) -r .config    @!\
?TOP: $(RM) Makefile    @!\
```

```
/*
* InstallTarget:
* Generate rules to recursively install files
*/
#define InstallTarget()          @!\
?SUBDIRS:install:: local_install sub_install     @!\
%SUBDIRS:install:: local_install        @!\
?SUBDIRS:install.man:: maybe_install.man sub_install.man  @!\
%SUBDIRS:install.man:: maybe_install.man      @!\
?SUBDIRS:deinstall:: sub_deinstall local_deinstall    @!\
%SUBDIRS:deinstall::
 local_deinstall       @!\
?SUBDIRS:deinstall.man:: sub_deinstall.man maybe_deinstall.man @!\
%SUBDIRS:deinstall.man:: maybe_deinstall.man     @!\
             @!\
?MANSRC:install.man-yes: local_install.man      @!\
install.man-no:            @!\
?MANSRC:deinstall.man-yes: local_deinstall.man     @!\
deinstall.man-no:           @!\


/*
* TagsTarget:
* Generate rules to compute tags files for C source code.
*/
#define TagsTarget()    @!\
tags::       @@\
 $(CTAGS) -w *.[ch]    @@\
 $(CTAGS) -xw *.[ch] > tags  @!\
        @!\
local_clobber::      @@\
 $(RM) tags



/*
* BuildMakefileSH:
* Generate rules to build a Makefile.SH from an Jmakefile and any
* special jmake flags.  This is generally done automatically by the
* template or by any special Jmakefiles.
* This function will simply touch Makefile.SH if no $(TOP)/.package
* exists, assuming the Jmakefile is not in a production environment.
*/
#define BuildMakefileSH(jmakeflags) @!\
Makefile.SH:
```

```
 Jmakefile     @@\
 -@if test -f $(TOP)/.package; then \ @@\
  if test -f Makefile.SH; then \ @@\
   echo " $(RM) Makefile.SH~; $(MV) Makefile.SH Makefile.SH~"; \ @@\
   $(RM) Makefile.SH~; $(MV) Makefile.SH Makefile.SH~; \ @@\
  fi; \      @@\
  echo " $(JMAKE) -DTOPDIR=$(TOP) -DCURDIR=$(CURRENT)" jmakeflags; \ @@\
  $(JMAKE) -DTOPDIR=$(TOP) -DCURDIR=$(CURRENT) jmakeflags; \ @@\
 else touch $@; fi


/*
* BuildMakefile:
* Generate rules to build a Makefile from a Makefile.SH.
*/
#define BuildMakefile() @!\
Makefile: Makefile.SH    @@\
 /bin/sh Makefile.SH


/*
* MakefileTarget:
* Generate rules to build a normal Makefile.
*/
#define MakefileTarget()  @!\
BuildMakefileSH(^^)    @!\
BuildMakefile()


/*
* NormalObjectRule:
* Generate make rule to build usual object files.
*/
#define NormalObjectRule()   @!\
|once _ObjectRule_     @!\
|rule:.c.o:       @!\
|rule: $(CC) -c $(JCFLAGS) $<  @!\
|rule:        @!\
-once

/*
* NormalLibraryObjectRule:
* Generate make rules to build
 "normal" objects.
*/
#define NormalLibraryObjectRule() @!\
|once _ObjectRule_     @!\
|rule:.c.o:       @!\
```

```
|rule: $(RM) $@      @!\
|rule: $(CC) -c $(JCFLAGS) $<  @!\
|rule:       @!\
-once

/*
* ProfiledLibraryObjectRule:
* Generate make rules to build both profiled and "normal" objects.
*/
#define ProfiledLibraryObjectRule() @!\
all::       @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @!\
        @!\
|rule:.c.o:      @!\
|rule: $(RM) $@ profiled/$@   @!\
|rule: $(CC) -pg -c $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o profiled/$*.o  @!\
|rule: $(CC) -c $(JCFLAGS) $*.c  @!\
|rule:       @!\
local_clean::      @@\
 -@if [ -d profiled ]; then echo " $(RM) profiled/?*.o"; \ @@\
  $(RM) profiled/?*.o; fi


/*
* DebuggedLibraryObjectRule:
* Generate make rules to build both debuggable and "normal"
* objects.
*/
#define DebuggedLibraryObjectRule()     @!\
all::        @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
        @!\
|rule:.c.o:      @!\
|rule: $(RM) $@
 debugger/$@   @!\
|rule: $(CC) -g -c $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o debugger/$*.o  @!\
|rule: $(CC) -c $(JCFLAGS) $*.c  @!\
|rule:       @!\
local_clean::     @@\
 -@if [ -d debugger ]; then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi


/*
* DebuggedAndProfiledLibraryOjbectRule:
* Generate make rules to build debuggable, profiled, and "normal"
```

```
* objects.
*/
#define DebuggedAndProfiledLibraryObjectRule() @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
         @!\
|rule:.c.o:       @!\
|rule: $(RM) $@ profiled/$@ debugger/$@ @!\
|rule: $(CC) -pg -c $(JCFLAGS) $*.c  @!\
|rule: $(MV) $*.o profiled/$*.o   @!\
|rule: $(CC) -g -c $(JCFLAGS) $*.c  @!\
|rule: $(MV) $*.o debugger/$*.o   @!\
|rule: $(CC) -c $(JCFLAGS) $*.c   @!\
|rule:        @!\
local_clean::       @@\
 -@if [ -d profiled ]; then echo " $(RM) profiled/?*.o"; \ @@\
  $(RM) profiled/?*.o; fi   @@\
 -@if [ -d debugger ];
 then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi


/*
* SharedLibraryObjectRule:
* Generate make rules to build shared and "normal" object files.
*/
#define SharedLibraryObjectRule()     @!\
all::       @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @!\
        @!\
|rule:.c.o:       @!\
|rule: $(RM) $@ shared/$@   @!\
|rule: $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o shared/$*.o  @!\
|rule: $(CC) -c $(SHLIBDEF) $(JCFLAGS) $*.c    @!\
|rule:       @!\
local_clean::      @@\
 -@if [ -d shared ]; then echo " $(RM) shared/?*.o"; \  @@\
  $(RM) shared/?*.o; fi

/*
* SharedAndDebuggedLibraryObjectRule:
* Generate make rules to build shared, debuggable, and "normal"
* object files.
*/
#define SharedAndDebuggedLibraryObjectRule() @!\
all::         @@\
```

```
 @if [ ! -d shared ]; then mkdir shared; fi  @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
          @!\
|rule:.c.o:        @!\
|rule: $(RM) $@ shared/$@ debugger/$@  @!\
|rule:
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o shared/$*.o    @!\
|rule: $(CC) -g -c $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o debugger/$*.o    @!\
|rule: $(CC) -c $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule:         @!\
local_clean::        @@\
 -@if [ -d shared ]; then echo " $(RM) shared/?*.o"; \  @@\
  $(RM) shared/?*.o; fi    @@\
 -@if [ -d debugger ]; then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi

/*
* SpecialSharedAndDebuggedObjectRule:
* Generate rules to compile a file with special flags and to make
* shared and debuggable versions.
*/
#define SpecialSharedAndDebuggedObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
         @!\
objs: depends       @@\
 $(RM) $@ shared/$@ debugger/$@  @@\
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) options $*.c @@\
 $(MV) $*.o shared/$*.o    @@\
 $(CC)
 -g -c $(SHLIBDEF) $(JCFLAGS) options $*.c   @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(SHLIBDEF) $(JCFLAGS) options $*.c

/*
* SpecialSharedObjectRule:
* Generate rules to compile a file with special flags and to make
* shared and debuggable versions.
*/
#define SpecialSharedObjectRule(objs,depends,options)  @!\
all::        @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @!\
         @!\
objs: depends       @@\
 $(RM) $@ shared/$@      @@\
```

```
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) options $*.c @@\
 $(MV) $*.o shared/$*.o    @@\
 $(CC) -c $(SHLIBDEF) $(JCFLAGS) options $*.c


/*
* SpecialObjectRule:
* Generate rules to compile a file with special flags.
*/
#define SpecialObjectRule(objs,depends,options)  @!\
objs: depends       @@\
 $(RM) $@       @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* SpecialProfiledObjectRule:
* Generate rules to compile a file with special flags and to make a
* profiled version.
*/
#define SpecialProfiledObjectRule(objs,depends,options)   @!\
all::        @@\
 @if
 [ ! -d profiled ]; then mkdir profiled; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ profiled/$@    @@\
 $(CC) -pg -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o profiled/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* SpecialDebuggedObjectRule:
* Generate rules to compile a file with special flags and to make a
* debuggable version.
*/
#define SpecialDebuggedObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ debugger/$@    @@\
 $(CC) -g -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c
```

```
/*
* SpecialDebuggedAndProfiledObjectRule:
* Generate rules to compile a file with special flags and to make
* debuggable and profiled versions.
*/
#define SpecialDebuggedAndProfiledObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @@\
 @if [ ! -d
 debugger ]; then mkdir debugger; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ profiled/$@ debugger/$@ @@\
 $(CC) -pg -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o profiled/$*.o   @@\
 $(CC) -g -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* NormalLibraryTarget:
* Generate rules to create a library. The 'srclist' and 'objlist'
* parameters are added to SOURCES and OBJECTS macros. The 'srclist'
* is not otherwise used by this rule, but is necessary for make depend.
*/
#define NormalLibraryTarget(libname,srclist,objlist) @!\
++OBJECTS objlist @!\
++SOURCES srclist @!\
NormalLibraryObjectRule()  @!\
AllTarget(lib^^libname.a)  @!\
       @!\
lib^^libname.a: objlist   @@\
 $(RM) $@     @@\
 $(AR) $@ objlist   @@\
 $(RANLIB) $@


/*
* NormalSharedLibraryTarget:
* Generate rules to create a shared library; build it into a
* different name so that the we don't hose people by having the
* library gone for long periods.
*/
#define
 NormalSharedLibraryTarget(libname,rev,solist) @!\
AllTarget(lib^^libname.so.rev) @!\
        @!\
```

```
lib^^libname.so.rev:  solist  @@\
 $(RM) $@~      @@\
 (cd shared; $(LD) -o ../$@~ -assert pure-text solist)  @@\
 $(RM) $@       @@\
 $(MV) $@~ $@

/*
* NormalSharedLibraryDataTarget:
* Generate rules to create shlib data file; build it into a
* different name so that the we don't hose people by having the
* library gone for long periods.
*/
#define NormalSharedLibraryDataTarget(libname,rev,salist) @!\
AllTarget(lib^^libname.sa.rev) @!\
        @!\
lib^^libname.sa.rev:  salist  @@\
 $(RM) $@      @@\
 $(AR) $@ salist     @@\
 $(RANLIB) $@


/*
* NormalLibraryTarget2:
* Generate rules to create a library in two steps.  This is used to
* create libraries with large numbers of files.
*/
#define NormalLibraryTarget2(libname,srclist,objlist1,objlist2) @!\
++SOURCES srclist @!\
++OBJECTS objlist1 @!\
++OBJECTS objlist2 @!\
NormalLibraryObjectRule()   @!\
AllTarget(lib^^libname.a)   @!\
        @!\
lib^^libname.a:
 objlist1 objlist2 @@\
 $(RM) $@      @@\
 $(AR) $@ objlist1    @@\
 $(AR) $@ objlist2    @@\
 $(RANLIB) $@


/*
* ProfiledLibraryTarget:
* Generate rules to create a profiled library.
*/
#define ProfiledLibraryTarget(libname,srclist,objlist) @!\
++SOURCES srclist @!\
++OBJECTS objlist @!\
```

```
AllTarget(lib^^libname^^_p.a)  @!\
        @!\
lib^^libname^^_p.a: objlist   @@\
 $(RM) $@      @@\
 cd profiled; $(AR) ../$@ objlist @@\
 $(RANLIB) $@


/*
* DebuggedLibraryTarget:
* Generate rules to create a debuggable library.
*/
#define DebuggedLibraryTarget(libname,srclist,objlist) @!\
++SOURCES srclist @!\
++OBJECTS objlist @!\
AllTarget(lib^^libname^^_d.a)  @!\
        @!\
lib^^libname^^_d.a: objlist   @@\
 $(RM) $@       @@\
 cd debugger; $(AR) ../$@ objlist @@\
 $(RANLIB) $@


/*
* AliasedLibraryTarget:
* Generate rules to link one library to another.
*/
#define AliasedLibraryTarget(libname,alias) @!\
AllTarget(lib^^alias.a)   @!\
        @!\
lib^^alias.a:
 lib^^libname.a @@\
 $(RM) $@     @@\
 $(LN) lib^^libname.a $@


/*
* PrelinkedRelocatableTarget:
* Generate rules to produce a relocatable object file instead of a
* library.
*/
#define PrelinkedRelocatableTarget(objname,objlist,libs) @!\
AllTarget(objname.o)    @!\
        @!\
objname.o: objlist     @@\
 $(RM) $@      @@\
 $(LD) $(JLDFLAGS) -r objlist -o $@ libs
```

```
/*
* NormalObjectTarget:
* Generate rules to produce a single object file.o from a file.c.
*/
#define NormalObjectTarget(file) @!\
++SOURCES file^^.c     @!\
AllTarget(file^^.o)     @!\
NormalObjectRule()

/*
* NormalRelocatableTarget:
* Generate rules to produce a relocatable object file instead of a
* library.
*/
#define NormalRelocatableTarget(objname,objlist) @!\
AllTarget(objname.o)    @!\
        @!\
objname.o: objlist     @@\
 $(RM) $@      @@\
 $(LD) $(JLDFLAGS) -r objlist -o $@


/*
* ProfiledRelocatableTarget:
* Generate rules to produce a profiled relocatable object file
* instead
 of a library.
*/
#define ProfiledRelocatableTarget(objname,objlist) @!\
AllTarget(objname^^_p.o)  @!\
       @!\
objname^^_p.o: objlist   @@\
 $(RM) $@     @@\
 $(LD) -X -r objlist -o $@


/*
* DebuggedRelocatableTarget:
* Generate rules to produce a debuggable relocatable object file
* instead of a library.
*/
#define DebuggedRelocatableTarget(objname,objlist) @!\
AllTarget(objname^^_d.o)  @!\
       @!\
objname^^_d.o: objlist   @@\
 $(RM) $@     @@\
 $(LD) -X -r objlist -o $@
```

```
/*
* LintLibraryTarget:
* Generate rules to create a lint library.  Note that the lint
* library is always forced to be newer than the library itself.
*/
#define LintLibraryTarget(libname,srclist) @!\
lintlib:: llib-l^^libname.ln @!\
        @!\
llib-l^^libname.ln: srclist  @@\
 $(RM) $@     @@\
 $(LINT) $(LINTLIBFLAG)^^libname $(LINTFLAGS) srclist


/*
* NormalLintTarget:
* Generate rules to lint a set of sources.
*/
#define NormalLintTarget(srclist) @!\
lint:       @@\
 $(LINT) $(LINTFLAGS) srclist
 $(LINTLIBS)


/*
* LintTarget:
* Generate rules to lint $(SOURCES) (automatically generated)
*/
#define LintTarget()   @!\
|once _LintTarget_    @!\
NormalLintTarget($(SOURCES)) @!\
-once


/*
* LinkSourceFile:
* Snag source file from some other directory
*/
#define LinkSourceFile(src,dir)  @!\
src:  dir/src   @@\
 $(RM) $@   @@\
 $(LN) $? $@   @!\


/*
* MakeSubincludesForBuild:
* Make includes in sub directories.
*/
```

```
#define MakeSubincludesForBuild(step,dir,srclist) @!\
step::  dir srclist        @@\
 @-(list=`echo srclist | sed -e 's/[^ ]*\///g'`; \  @@\
  set -x; cd dir; $(RM) $$list)   @@\
 @for i in srclist; do \      @@\
  (set -x; cd dir; $(LN) ../$$i .) || exit 1; \  @@\
 done          @!\
           @!\
MakeDirectories(dir,dir)      @!\
           @!\
local_realclean::         @@\
 @-(if [ -d dir ]; then \     @@\
  list=`echo srclist | sed -e 's/[^ ]*\///g'`; \  @@\
  set -x; cd dir; $(RM) $$list; fi)


/*
* CommonSubdirsRule:
* Rule for making $(TARGET) in
 every subdirectory, with $(VERB) as
* verbose message and $(FLAGS) as additional flags.
*/
#define CommonSubdirsRule(dirs) @!\
subdirs:       @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \   @@\
 for i in dirs ;\     @@\
 do \        @@\
  (cd $$i ; echo $(VERB) "in $(DIR)$$i..."; \  @@\
   $(MAKE) $(MFLAGS) $(FLAGS) $(TARGET)) || exit 1; \ @@\
 done


/*
* NamedTargetSubdirsRule:
* Recursively make a series of steps in the specified directories.
*/
#define NamedTargetSubdirsRule(dirs,name,verb,flags) @!\
name::         @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \  @@\
 for i in dirs ;\     @@\
 do \        @@\
  (cd $$i ; echo verb "in $(DIR)$$i..."; \ @@\
   $(MAKE) $(MFLAGS) flags name) || exit 1; \ @@\
 done


/*
* NamedTargetSubdirs:
```

```
* Recursively make a series of steps.
*/
#define NamedTargetSubdirs(name,verb,flags)  @!\
name::          @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags


/*
* NamedSubTargetSubdirs:
* Recursively make a series of steps,
 like NamedTargetSubdirs.
* However, the supplied "name" has "sub_" prefixed to it.
*/
#define NamedSubTargetSubdirs(name,verb,flags) @!\
sub_^^^name::          @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags

/*
* NamedDepthTargetSubdirs:
* Recursively make a series of steps. We first enter the
* subdirectories, then perform the local entries.
* The supplied "name" has "sub_" prefixed to it.
*/
#define NamedDepthTargetSubdirs(name,verb,flags)  @!\
sub_^^^name::      @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags @@\
 @echo "Back to $(CURRENT) for "name^^...


/*
* MakeSubdirs:
* Generate rules to do makes in the given subdirectories.
*/
#define MakeSubdirs() \
NamedTargetSubdirs(all,"Making all",^^)


/*
* DependDirs:
* Generate rules to recursively compute dependencies as part of the
* make depend step.
*/
#define DependDirs(dirs) \
NamedTargetSubdirsRule(dirs,depend,"Depending",^^)


/*
* DependSubdirs:
```

```
* Generate rules to recursively compute dependencies
 as part of the
* make depend step.
*/
#define DependSubdirs() \
DependDirs($(SUBDIRS))


/*
* InstallSubdirs:
* Generate rules to recursively install and deinstall programs and
* files.
*/
#define InstallSubdirs() \
NamedSubTargetSubdirs(install,"Installing",^^) @!\
NamedDepthTargetSubdirs(deinstall,"Deinstalling",^^)


/*
* InstallManSubdirs:
* Generate rules to recursively install and deinstall manual pages.
*/
#define InstallManSubdirs() \
NamedSubTargetSubdirs(install.man,"Installing man pages",^^) @!\
NamedDepthTargetSubdirs(deinstall.man,"Deinstalling man pages",^^)


/*
* IncludesSubdirs:
* Generate rules to recursively put include files in build
*/
#define IncludesSubdirs() \
NamedTargetSubdirs(includes,including,^^)


/*
* CleanSubdirs:
* Generate rules to recursively clean out garbage files.
*/
#define CleanSubdirs() \
NamedDepthTargetSubdirs(clean,"Cleaning",^^) @!\
NamedDepthTargetSubdirs(realclean,"Real cleaning",^^) @!\
NamedDepthTargetSubdirs(clobber,"Clobbering",^^)


/*
 * TagSubdirs:
* Generate rules to recursively create tags files.
```

```
*/
#define TagSubdirs(dirs) \
NamedTargetSubdirsRule(dirs,tag,"Tagging",^^)

/*
* MakeLintSubdirs:
* Generate rules to recursively lint directories as part of the
* named step.
*/
#define MakeLintSubdirs(dirs,target) \
NamedTargetSubdirsRule(dirs,target,"Linting",^^)


/*
* LintDirs:
* Generate rules to recursively lint directories as part of the
* make lint step.
*/
#define LintDirs(dirs) \
MakeLintSubdirs(dirs,lint)


/*
* LintSubdirs:
* Generate rules to recursively lint directories as part of the
* make lint step.
*/
#define LintSubdirs() \
LintDirs($(SUBDIRS))


/*
* MakeDirs:
* Creates a set of directories, even if some directories in the path
* do not already exist. There should be no '@!' at the end of the
* '#define' line, because this macro is used *inside* building rules.
*/
#define MakeDirs(dirs) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \   @@\
 for dir in dirs;
 do \         @@\
  (set -x; test -d $$dir || $(INSTALLDIR) $$dir) || \ @@\
  exit 1; \  @@\
 done

/*
* _MakeInstallDirs:
* Creates a set of intall directories, even if some directories in the path
```

```
* do not already exist. There should be no '@!' at the end of the
* '#define' line, because this macro is used *inside* building rules.
*/
#define _MakeInstallDirs(dirs) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for dir in dirs; do \       @@\
  _MakeInstallDir($$dir) \     @@\
 done

/*
* _MakeInstallDir:
* Internal macro to create a missing install directory.
*/
#define _MakeInstallDir(dir) \
 (set -x; test -d $(INSTALL_PREFIX)^^^dir || \ @@\
  $(INSTALLDIR) $(INSTALL_PREFIX)^^^dir);

/*
* _MakeInstallDirIgnore:
* Same as _MakeInstallDir but handles "make -i" as well.
*/
#define _MakeInstallDirIgnore(dir) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac;  \ @@\
 _MakeInstallDir(dir)

/*
* _RmInstallDirs:
* Removes a set of intall directories.
* There should be no '@!'
 at the end of the '#define' line, because this
* macro is used *inside* building rules.
*/
#define _RmInstallDirs(dirs) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for dir in dirs; do \       @@\
  (set -x; test -d $$dir && $(RM) -r $(INSTALL_PREFIX)$$dir); \ @@\
 done

/*
* MakeDirectories:
* Generate rules to create a hierarchy of directories.
*/
#define MakeDirectories(step,dirs)  @!\
step::         @@\
 MakeDirs(dirs)


/*
```

```
* MakeInstallDirectories:
* Generate a rule to create a set of directories at installation
* time (removed by deinstall).
*/
#define MakeInstallDirectories(dirs) @!\
local_install::    @@\
 _MakeInstallDirs(dirs) @!\
      @!\
local_deinstall::   @@\
 _RmInstallDirs(dirs)


/*
* MakeLintLibSubdirs:
* Generate rules to recursively create lint libraries.
*/
#define MakeLintLibSubdirs(dirs) @!\
MakeLintSubdirs(dirs,lintlib)


/*
* MakeMakeSubdirs:
* Generate rules to recursively recreate target as part of the
* specified step in the build.
  This assumes Makefile.SH has
* already been built (which is the case for a delivery), but does
* not rely on the existence of a Makefile.
*/
#define MakeMakeSubdirs(target) @!\
target::        @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \ @@\
 for i in $(SUBDIRS);\    @@\
 do \        @@\
  echo "Making "target" in $(DIR)$$i..."; \ @@\
  (cd $$i || exit 1; \   @@\
  if test ! -f Makefile; then /bin/sh Makefile.SH; fi; \ @@\
  $(MAKE) $(MFLAGS) target) || exit 1;\ @@\
 done


/*
* MakeMakefilesSH:
* Generate rules to recursively recreate target as part of the
* specified step in the build.  If $(TOP) is set to an absolute
* path, don't prepend the ../ prefix.  This makes running things
* outside of the source tree to be much easier.
*/
#define MakeMakefilesSH()  @!\
```

```
Makefiles.SH:: Makefile.SH    @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \ @@\
 for i in $(SUBDIRS);\     @@\
 do \        @@\
  case "$(DIR)$$i/" in \        @@\
  ^^*^^/^^*^^/^^*^^/^^*^^/) newtop=../../../..;;
 \ @@\
  ^^*^^/^^*^^/^^*^^/) newtop=../../..;; \    @@\
  ^^*^^/^^*^^/) newtop=../..;; \      @@\
  *^^/) newtop=..;; \         @@\
  esac; \            @@\
  case "$(TOP)" in \    @@\
  /^^*) newtop="$(TOP)" ;; \  @@\
  esac; \       @@\
  echo "Making Makefiles.SH in $(DIR)$$i..."; \ @@\
  (cd $$i || exit 1; \   @@\
   if test -f Jmakefile; then \ @@\
    $(MAKE) $(MFLAGS) -f ../Makefile \ @@\
     Makefile TOP=$$newtop CURRENT=$(DIR)$$i && \  @@\
    $(MAKE) $(MFLAGS) Makefiles.SH; \ @@\
   fi; \      @@\
  ) || exit 1; \ @@\
 done


/*
* MakefileSubdirs:
* Generate rules to create Makefiles.
*/
#define MakefileSubdirs()  @!\
MakeMakeSubdirs(Makefiles)  @!\
MakeMakefilesSH()


/*
* CppScriptTarget:
* Generate rules to create a shell script by running the input
* through cpp.
*/
#define CppScriptTarget(dst,src,defs,deplist) @!\
dst::  src deplist      @@\
 $(RM) $@       @@\
 $(CPP) defs <src | \    @@\
  sed -e '/^#  *[0-9][0-9]*  *.*$$/d' >$@  @@\
 chmod a+x $@


/*
```

```
 * MakeScriptFromCpp:
* Generate rules to create a script from a file with a
* .cpp suffix.
*/
#define MakeScriptFromCpp(name,defs) @!\
CppScriptTarget(name,name.cpp,defs,^^)


/*
* ShellScriptTargetExt:
* Generate rules to create and install a set of scripts from
* ext files (.sh and .SH are the most common examples). Man pages
* derived from the name of the scripts are also installed unless
* NoManPages() is specified.
*/
#define ShellScriptTargetExt(scripts,ext) @!\
++SCRIPTS scripts @!\
SimpleShellScriptTargetExt(scripts,ext)  @!\
InstallScripts()       @!\
InstallManScripts()


/*
* ShellScriptTarget:
* Generate rules to create and install a set of scripts from
* .SH files. Man pages derived from the name of the scripts are
* also installed unless NoManPages() is specified.
*/
#define ShellScriptTarget(scripts) @!\
ShellScriptTargetExt(scripts,.SH)


/*
* SimpleShellScriptTargetExt:
* Generate rules to create a set of scripts from ext files where
* ext is usually
 something like .sh or .SH, or whatever file
* extension you like..
*/
#define SimpleShellScriptTargetExt(scripts,ext) @!\
AllTarget(scripts)   @!\
       @!\
|expand s!scripts!   @!\
!s: !s^^ext     @@\
 /bin/sh !s^^ext   @!\
       @!\
-expand
```

```
/*
* SimpleShellScriptTarget:
* Generate rules to create a set of scripts from .SH files.
*/
#define SimpleShellScriptTarget(scripts) @!\
SimpleShellScriptTargetExt(scripts,.SH)


/*
* ShellScriptLongTarget:
* Generate rules to create a set of scripts from .SH files where
* the name of the generated file is different from the basename of
* the .SH file (when, for instance, the total length with the .SH
* extension would not leave enough space for RCS ,v extension).
*/
#define ShellScriptLongTarget(basename,scriptname) @!\
++LSCRIPTS scriptname @!\
AllTarget(scriptname)  @!\
      @!\
scriptname: basename^^.SH @@\
 /bin/sh basename^^.SH @!\
      @!\
InstallScripts()   @!\
?NOMAN:|skip    @!\
InstallManPageLong(basename,$(MANSRC),scriptname) @!\
-skip


/*
 * ForceTarget:
* The force target will force reconstruction of all the other
* targets which include .FORCE in their own dependencies.
*/
#define ForceTarget() @!\
|once _force_   @!\
.FORCE:     @!\
     @!\
-once


/*
* RemoteTargetDependency:
* A local target may rely on a remote dependency (e.g. a library)
* made in a separate directory. This rule explicits the dependency
* and forces a make of that dependency in the remote directory.
*/
#define RemoteTargetDependency(target,directory,dependency) @!\
```

```
RemoteDependency(directory,dependency) @!\
target: directory/^^^dependency @!\


/*
* RemoteDependency:
* Specify rules for making a remote dependency.
*/
#define RemoteDependency(directory,dependency) @!\
ForceTarget()       @!\
|once =directory/^^^dependency=   @!\
directory/^^^dependency: .FORCE   @@\
 @echo "Checking "^^^dependency" in "^^^directory"..." @@\
 cd ^^^directory; $(MAKE) ^^^dependency @@\
 @echo "Continuing in $(CURRENT)..." @!\
     @!\
-once

/*
 * SetSubdirs:
* Actually forces the definition of SUBDIRS, and lets the user
* specify what the sub-directories are.  This will be added to the
* customization part.
*/
#define SetSubdirs(subdirs) @!\
>SUBDIRS @!\
+SUBDIRS = subdirs


/*
* NoManPages:
* Actually forces the definition of NOMAN, which tells the jmake
* program to not generate rules for installing manual pages.
*/
#define NoManPages() @!\
>NOMAN


/*
* Expand:
* This powerful macro expands the `rule' given a `pattern'. It
* relies on a built-in command in jmake. The expansion is
* documented in the short notes file that comes with jmake and
* gives some insights on the internal syntax.
*/
#define Expand(rule, pattern) @!\
|expand pattern @!\
rule @!\
```

```
-expand


/*
* Lex and yacc stuff.
*/

/*
* YaccRule:
* This is the rule which is used to build a .c file from a .y file.
*/
#define YaccRule() @!\
AddSuffix(.y)     @!\
|once _YaccRule_    @!\
|rule:.y.c:      @!\
|rule: $(YACC) $(JYFLAGS)
 $< @!\
|rule: $(MV) y.tab.c $@   @!\
|rule:       @!\
-once

/*
* SimpleYaccTarget:
* Declare a yacc base.y file to be used in the building of the
* specified target program. The source file must be given without
* its final .y extension. The name of the .c and .o will be
* derived from the source file basename provided.
*/
#define SimpleYaccTarget(program,base) @!\
++SOURCES base.y @!\
++OBJECTS base.o @!\
YaccRule()    @!\
program: base.c   @!\
     @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* ComplexYaccTarget:
* Declare a yacc base.y file to be used in the building of the
* specified target program. The source file must be given without
* its final .y extension. The name of the .c and .o will be
* derived from the source file basename provided.
* The difference with SimpleYaccTarget is the identifying process
* where all the 'yy' are replaced by the specified prefix.
*/
#define ComplexYaccTarget(program,base,prefix) @!\
```

```
++SOURCES base.y @!\
++OBJECTS base.o
 @!\
program: base.c   @!\
      @!\
base.c: base.y     @@\
 $(YACC) $(JYFLAGS) base.y @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.c > base.c @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h @@\
 $(RM) y.tab.c y.tab.h @!\
       @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* SimpleYaccInclude:
* Declare that program will need an include file produced by
* the output of yacc on base.y, which typically produces a file
* named y.tab.h, which will be renamed as base.h.
* The only problem is that the dependencies towards base.h have
* to be manually given in the Jmakefile.
*/
#define SimpleYaccInclude(base) @!\
base.h: base.c  @@\
 @if test -f y.tab.h; then \ @@\
  echo " $(MV) y.tab.h $@"; \ @@\
  $(MV) y.tab.h $@; \  @@\
 fi       @!\
        @!\
local_realclean::    @@\
 $(RM) base.h

/*
* ComplexYaccInclude:
* Declare that program will need an include file produced by
* the output of yacc on base.y, which typically produces a file
* named y.tab.h, which will
 be renamed as base.h.
* The difference with SimpleYaccInclude is the identifying process
* of the y.tab.h file where all 'yy' are renamed to prefix.
* The only problem is that the dependencies towards base.h have
* to be manually given in the Jmakefile.
*/
#define ComplexYaccInclude(base,prefix) @!\
base.h: base.c  @@\
 @if test -f y.tab.h; then \ @@\
  echo " $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h"; \ @@\
```

```
  $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h; \ @@\
  echo " $(RM) y.tab.h"; \ @@\
  $(RM) y.tab.h; \  @@\
 elif test -f base.h; then \ @@\
  echo " $(CP) base.h base.ht"; \ @@\
  $(CP) base.h base.ht; \ @@\
  echo " $(SED) -e 's/yy\(.\)/prefix\1/g' < base.ht > base.h"; \ @@\
  $(SED) -e 's/yy\(.\)/prefix\1/g' < base.ht > base.h; \ @@\
  echo " $(RM) base.ht"; \ @@\
  $(RM) base.ht; \  @@\
 fi       @!\
       @!\
local_realclean::    @@\
 $(RM) base.h


/*
* NormalYaccTarget:
* Declare a yacc base.y file which should produce a base.c and
* base.h file
 as derived from the output of yacc, to be used by
* the specified program.
*/
#define NormalYaccTarget(program,base) @!\
SimpleYaccTarget(program,base) @!\
SimpleYaccInclude(base)


/*
* IdentifiedYaccTarget:
* Declare a yacc base.y file which should produce a base.c and
* base.h file as derived from the output of yacc, to be used by
* the specified program. The specified prefix is used to remplace
* all the 'yy' in the generated file, for use when more than a
* single parser is needed in one executable.
*/
#define IdentifiedYaccTarget(program,base,prefix) @!\
ComplexYaccTarget(program,base,prefix) @!\
ComplexYaccInclude(base,prefix)


/*
* SimpleLexTarget:
* This declares a lex base.l file which is to be ran through
* lex to produce a base.c file.
*/
#define SimpleLexTarget(program,base) @!\
++SOURCES base.l @!\
```

```
++OBJECTS base.o @!\
|once _LexRule_     @!\
|rule:.l.c:      @!\
|rule: $(LEX) $(JLFLAGS) $<  @!\
|rule: $(MV) lex.yy.c $@  @!\
|rule:       @!\
-once       @!\
AddSuffix(.l)   @!\
program:
 base.c   @!\
     @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* IdentifiedLexTarget:
* This declares a lex base.l file which is to be ran through
* lex to produce a base.c file. The prefix is used to replace
* the 'yy', so that the lexical analyzer may be identified.
*/
#define IdentifiedLexTarget(program,base,prefix) @!\
++SOURCES base.l @!\
++OBJECTS base.o @!\
program: base.c   @!\
     @!\
base.c: base.l     @@\
 $(LEX) $(JLFLAGS) base.l @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < lex.yy.c > base.c @@\
 $(RM) lex.yy.c    @!\
     @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* NormalLexDependTarget:
* Declare that program will need an include file produced by
* the output of lex on base.l, which typically produces a file
* named lex.yy.c which will be renamed as base.c. Besides, the
* lexical analyzer needs the file parser.h produced by running
* parser.y through yacc and renaming y.tab.h as parser.h.
*/
#define NormalLexDependTarget(program,base,parser)
 @!\
base.o: parser.h @!\
    @!\
SimpleLexTarget(program,base)
```

```
/*
* IdentifiedLexDependTarget:
* Declare that program will need an include file produced by
* the output of lex on base.l, which typically produces a file
* named lex.yy.c which will be renamed as base.c. Besides, the
* lexical analyzer needs the file parser.h produced by running
* parser.y through yacc and renaming y.tab.h as parser.h.
* The lexical analyzer is identified with the supplied prefix,
* which replaces the regular 'yy' prefix in the symbol names.
*/
#define IdentifiedLexDependTarget(program,base,parser,prefix) @!\
base.o: parser.h @!\
    @!\
IdentifiedLexTarget(program,base,prefix)


/*
* NormalParserTarget:
* Specify that program is using the lex/yacc combination to
* produce a parser. The lexic and parser parameters are the
* base name of the .l and .y file, respectively.
*/
#define NormalParserTarget(program,lexic,parser) @!\
NormalLexDependTarget(program,lexic,parser)
 @!\
NormalYaccTarget(program,parser)


/*
* IdentifiedParserTarget:
* Specify that program is using the lex/yacc combination to
* produce a parser. The lexic and parser parameters are the
* base name of the .l and .y file, respectively. The parser
* produced is identified via its prefix, which replaces all
* the normally supplied 'yy' prefix, hence making it possible
* to have multiple parsers in a single executable.
*/
#define IdentifiedParserTarget(program,lexic,parser,prefix) @!\
IdentifiedLexDependTarget(program,lexic,parser,prefix) @!\
IdentifiedYaccTarget(program,parser,prefix)
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/Jmake.rules
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_inetntop: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetntop:
?S: This variable conditionally defines the HAS_INETNTOP symbol,
?S: which indicates to the C program that the inet_ntop() function
?S: is available.
?S:.
?C:HAS_INETNTOP:
?C: This symbol, if defined, indicates that the inet_ntop() function
?C: is available to parse IPv4 and IPv6 strings.
?C:.
?H:#$d_inetntop HAS_INETNTOP  /**/
?H:.
?LINT:set d_inetntop
: see if inet_ntop exists
set inet_ntop d_inetntop
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_inetntop.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_volatile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:08:49  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/09  11:49:51  ram
?RCS: patch9: volatile definition was swapped over with undef
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_volatile: cat +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_volatile:
?S: This variable conditionally defines the HASVOLATILE symbol, which
?S: indicates
 to the C program that this C compiler knows about the
?S: volatile declaration.
?S:.
?C:HASVOLATILE ~ %<:
?C: This symbol, if defined, indicates that this C compiler knows about
?C: the volatile declaration.
?C:.
?H:?%<:#$d_volatile HASVOLATILE /**/
?H:?%<:#ifndef HASVOLATILE
?H:?%<:#define volatile
?H:?%<:#endif
?H:.
?W:%<:volatile
?LINT:set d_volatile
?LINT:known volatile
: check for volatile keyword
echo " "
echo 'Checking to see if your C compiler knows about "volatile"...' >&4
$cat >try.c <<'EOCP'
int main()
{
?X:
?X: The following seven lines added by Bill Campbell <billc@sierra.com>
?X: detect that MIPS compilers do not handle volatile in all situations.
?X:
 typedef struct _goo_struct goo_struct;
 goo_struct * volatile goo = ((goo_struct *)0);
 struct _goo_struct {
  long long_int;
  int reg_int;
  char char_var;
 };
 typedef unsigned short foo_t;
 char *volatile foo;
 volatile int bar;
 volatile foo_t blech;
 foo = foo;
}
EOCP
if $cc -c $ccflags try.c >/dev/null
 2>&1 ; then
 val="$define"
 echo "Yup, it does."
```

```
else
 val="$undef"
 echo "Nope, it doesn't."
fi
set d_volatile
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_volatile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getmntent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getmntent:
?S: This variable conditionally defines the HAS_GETMNTENT symbol, which
?S: indicates to the C program that the getmntent() routine is available
?S: to iterate through mounted files to get their mount info.
?S:.
?C:HAS_GETMNTENT:
?C: This symbol, if defined, indicates that the getmntent routine is
?C: available to iterate through mounted file systems to get their info.
?C:.
?H:#$d_getmntent HAS_GETMNTENT  /**/
?H:.
?LINT:set d_getmntent
: see if getmntent exists
set getmntent d_getmntent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getmntent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysuio.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:i_sysuio: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysuio:
?S: This variable conditionally defines the I_SYSUIO symbol, and indicates
?S: whether a C program should include <sys/uio.h>.
?S:.
?C:I_SYSUIO:
?C: This symbol, if defined, indicates that <sys/uio.h> exists and
?C: should be included.
?C:.
?H:#$i_sysuio I_SYSUIO  /**/
?H:.
?LINT:set i_sysuio
: see if this is a sys/uio.h system
set sys/uio.h i_sysuio
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_sysuio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strtok.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtok.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The strtok routine now appears to be a standard one, but it was
?X: missing in early BSD systems.
?X:
?MAKE:d_strtok: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtok:
?S: This variable conditionally defines HAS_STRTOK if strtok() is
?S: available to scan strings for tokens.
?S:.
?C:HAS_STRTOK (STRTOK):
?C: This symbol, if defined, indicates
```

```
 that the strtok routine is
?C: available to scan strings for tokens.
?C:.
?H:#$d_strtok HAS_STRTOK /**/
?H:.
?LINT:set d_strtok
: see if strtok exists
set strtok d_strtok
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtok.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: manfmt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: manfmt.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:11:57  ram
?RCS: patch61: don't ask for AFS when they choose to not install pages
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:16:52  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:39:20  ram
?RCS: patch49: new installmanfmt and AFS-lookup for formatted man pages
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS:
 Revision 3.0.1.2  1994/08/29  16:30:31  ram
?RCS: patch32: now uses installation prefix for default setting
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:09:22  ram
?RCS: patch10: allows for L1 man page extension (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:manfmt manfmtexp installmanfmt: Getfile Loc Oldconfig cat manext \
 spackage Prefixit prefixexp Prefixup afs test
?MAKE: -pick add $@ %<
```

```
?Y:TOP
?S:manfmt:
?S: This variable contains the name of the directory in which formatted
?S: manual pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command. Note
?S: that you may have to do ~name substitution. Use manfmtexp otherwise.
?S:.
?S:manfmtexp:
?S: This is the same as the manfmt variable, but is filename expanded
?S: at configuration time, for programs not willing to deal with it at
?S: run-time.
?S:.
?S:installmanfmt:
?S: This variable is really
 the same as manfmtexp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: mansrcexp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change manext
?T:lookpath
: determine where manual pages go
set manfmt manfmt
eval $prefixit
$cat <<EOM

$spackage has pre-formatted manual pages.  If you don't want these installed,
answer 'none' to the next question.

EOM
case "$manfmt" in
")
 lookpath="$prefixexp/catman/man1 $prefixexp/man/cat1"
 lookpath="$lookpath $prefixexp/catman/u_man/man1"
 lookpath="$lookpath $prefixexp/catman/l_man/man1"
 lookpath="$lookpath $prefixexp/catman/cat1 /usr/catman/local/man1"
 lookpath="$lookpath /usr/catman/manl /usr/man/cat1"
 lookpath="$lookpath /usr/catman/mann /usr/catman/l_man/man1"
 lookpath="$lookpath /usr/catman/u_man/man1 /usr/catman/man1"
 dflt=`./loc . none $lookpath`
 set dflt
 eval $prefixup
 ;;
*)  dflt="$manfmt"
 ;;
esac
fn=dn~
rp='Where
```

```
 do pre-formatted manual pages go?'
. ./getfile
if test "X$manfmtexp" != "X$ansexp"; then
 installmanfmt=''
fi
manfmt="$ans"
manfmtexp="$ansexp"
if $afs && $test "$manfmt"; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installmanfmt" in
 '') dflt=`echo $manfmtexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installmanfmt";;
 esac
 fn=de~
 rp='Where will pre-formatted man pages be installed?'
 . ./getfile
 installmanfmt="$ans"
else
 installmanfmt="$manfmtexp"
fi

case "$manfmt" in
'') manext='0';;
*l) manext=l;;
*n) manext=n;;
*o) manext=l;;
*p) manext=n;;
*C) manext=C;;
*L) manext=L;;
*L1) manext=L1;;
*) manext=1;;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/manfmt.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: bitpbyte.U,v 3.0.1.1 1994/10/29 16:02:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: bitpbyte.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:54  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bitpbyte: cat rm Myread Compile run
?MAKE: -pick add $@ %<
?S:bitpbyte:
?S: This variable contains the value of the BITS_PER_BYTE symbol, which
?S: indicates to the C program how many bits there are in a byte.
?S:.
?C:BITS_PER_BYTE:
?C: This
 symbol contains the number of bits in a byte, so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define BITS_PER_BYTE $bitpbyte  /**/
?H:.
?F:!try
: check for length of byte
echo " "
case "$bitpbyte" in
")
 echo "Checking to see how many bits there are in a byte..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
?X: Standard C requires a macro CHAR_BIT in <limits.h>
#ifdef __STDC__
#include <limits.h>
#ifndef CHAR_BIT
#define CHAR_BIT 8
#endif
#ifndef BITSPERBYTE
#define BITSPERBYTE CHAR_BIT
#endif
#else
?X: On non standard C, try with <values.h>
#include <values.h>
#ifndef BITSPERBYTE
#define BITSPERBYTE 8
#endif
```

```
#endif
int main()
{
 printf("%d\n", BITSPERBYTE);
}
EOCP
 set try
 if eval $compile_ok; then
  dflt=`$run ./try`
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$bitpbyte"
 ;;
esac
rp="What is the length of a byte (in bits)?"
. ./myread
bitpbyte="$ans"
$rm -f try.c try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/bitpbyte.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_union_semun.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_union_semun.U,v $
?RCS:
?MAKE:d_union_semun d_semctl_semun d_semctl_semid_ds: Compile Setvar Myread run \
 cat rm_try d_sem
?MAKE: -pick add $@ %<
?S:d_union_semun:
?S: This variable conditionally defines HAS_UNION_SEMUN if the
?S: union semun is defined by including <sys/sem.h>.
?S:.
?S:d_semctl_semun:
?S: This variable conditionally defines USE_SEMCTL_SEMUN, which
?S: indicates that union semun is to be used for semctl IPC_STAT.
?S:.
```

```
?S:d_semctl_semid_ds:
?S: This variable conditionally defines USE_SEMCTL_SEMID_DS, which
?S: indicates that struct semid_ds * is to be used for semctl IPC_STAT.
?S:.
?C:HAS_UNION_SEMUN:
?C: This symbol, if defined, indicates that the union semun
 is
?C: defined by including <sys/sem.h>.  If not, the user code
?C: probably needs to define it as:
?C:  union semun {
?C:     int val;
?C:     struct semid_ds *buf;
?C:     unsigned short *array;
?C:  }
?C:.
?C:USE_SEMCTL_SEMUN:
?C: This symbol, if defined, indicates that union semun is
?C: used for semctl IPC_STAT.
?C:.
?C:USE_SEMCTL_SEMID_DS:
?C: This symbol, if defined, indicates that struct semid_ds * is
?C: used for semctl IPC_STAT.
?C:.
?H:#$d_union_semun HAS_UNION_SEMUN /**/
?H:#$d_semctl_semun USE_SEMCTL_SEMUN /**/
?H:#$d_semctl_semid_ds USE_SEMCTL_SEMID_DS /**/
?H:.
?T:xxx also
?F:!try !tryh.h
?LINT: set d_union_semun d_semctl_semun d_semctl_semid_ds
: see whether sys/sem.h defines union semun
echo " "
$cat > try.c <<'END'
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
int main () { union semun semun; semun.buf = 0; }
END
set try
if eval $compile; then
   echo "You have union semun in <sys/sem.h>." >&4
   val="$define"
else
   echo "You do not have union
 semun in <sys/sem.h>." >&4
   val="$undef"
fi
$rm_try
```

```
set d_union_semun
eval $setvar

: see how to do semctl IPC_STAT
case "$d_sem" in
$define)
   echo " "
?X: use tryh.h instead of try.h because $rm_try cleans up try.*
   $cat > tryh.h <<END
#ifndef S_IRUSR
#   ifdef S_IREAD
# define S_IRUSR S_IREAD
# define S_IWUSR S_IWRITE
# define S_IXUSR S_IEXEC
#   else
# define S_IRUSR 0400
# define S_IWUSR 0200
# define S_IXUSR 0100
#   endif
#   define S_IRGRP (S_IRUSR>>3)
#   define S_IWGRP (S_IWUSR>>3)
#   define S_IXGRP (S_IXUSR>>3)
#   define S_IROTH (S_IRUSR>>6)
#   define S_IWOTH (S_IWUSR>>6)
#   define S_IXOTH (S_IXUSR>>6)
#endif
#ifndef S_IRWXU
#   define S_IRWXU (S_IRUSR|S_IWUSR|S_IXUSR)
#   define S_IRWXG (S_IRGRP|S_IWGRP|S_IXGRP)
#   define S_IRWXO (S_IROTH|S_IWOTH|S_IXOTH)
#endif
END
   : see whether semctl IPC_STAT can use union semun
   case "$d_semctl_semun" in
   ")
     val="$undef"
     $cat > try.c <<END
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#include
 <sys/stat.h>
#include <stdio.h>
#include <errno.h>
#include "tryh.h"
#ifndef errno
extern int errno;
#endif
```

```
#$d_union_semun HAS_UNION_SEMUN
int main() {
   union semun
#ifndef HAS_UNION_SEMUN
   {
 int val;
 struct semid_ds *buf;
 unsigned short *array;
   }
#endif
   arg;
   int sem, st;

#if defined(IPC_PRIVATE) && defined(S_IRWXU) && defined(S_IRWXG) && defined(S_IRWXO) &&
defined(IPC_CREAT)
   sem = semget(IPC_PRIVATE, 1, S_IRWXU|S_IRWXG|S_IRWXO|IPC_CREAT);
   if (sem > -1) {
 struct semid_ds argbuf;
 arg.buf = &argbuf;
# ifdef IPC_STAT
 st = semctl(sem, 0, IPC_STAT, arg);
 if (st == 0)
     printf("semun\n");
 else
# endif /* IPC_STAT */
     printf("semctl IPC_STAT failed: errno = %d\n", errno);
# ifdef IPC_RMID
 if (semctl(sem, 0, IPC_RMID, arg) != 0)
# endif /* IPC_RMID */
     printf("semctl IPC_RMID failed: errno = %d\n", errno);
   } else
#endif /* IPC_PRIVATE && ... */
 printf("semget failed: errno = %d\n", errno);
 return 0;
}
END
     set try

     if eval $compile; then
   xxx=`$run ./try`
         case "$xxx" in
         semun) val="$define" ;;
         esac
     fi
     $rm_try
     set d_semctl_semun
     eval $setvar
     ;;
```

```
  esac
  case "$d_semctl_semun" in
  $define)
      echo "You can use union semun for semctl IPC_STAT." >&4
 also='also'
      ;;
  *)  echo "You cannot use union semun for semctl IPC_STAT." >&4
 also=''
      ;;
  esac

  : see whether semctl IPC_STAT can use struct semid_ds pointer
  case "$d_semctl_semid_ds" in
  '')
    val="$undef"
    $cat > try.c <<'END'
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#include <sys/stat.h>
#include "tryh.h"
#include <stdio.h>
#include <errno.h>
#ifndef errno
extern int errno;
#endif
int main() {
  union semun
#ifndef HAS_UNION_SEMUN
  {
 int val;
 struct semid_ds *buf;
 unsigned short *array;
  }
#endif
  arg;
  struct semid_ds argbuf;
  int sem, st;

#if defined(IPC_PRIVATE) && defined(S_IRWXU) &&
 defined(S_IRWXG) &&  defined(S_IRWXO) && defined(IPC_CREAT)
  sem = semget(IPC_PRIVATE, 1, S_IRWXU|S_IRWXG|S_IRWXO|IPC_CREAT);
  if (sem > -1) {
 arg.buf = &argbuf;
# ifdef IPC_STAT
 st = semctl(sem, 0, IPC_STAT, arg);
 if (st == 0)
    printf("semid_ds\n");
```

```
 else
# endif /* IPC_STAT */
     printf("semctl IPC_STAT failed: errno = %d\n", errno);
# ifdef IPC_RMID
 if (semctl(sem, 0, IPC_RMID, arg) != 0)
# endif /* IPC_RMID */
     printf("semctl IPC_RMID failed: errno = %d\n", errno);
   } else
#endif /* IPC_PRIVATE && ... */
 printf("semget failed: errno = %d\n", errno);

   return 0;
}
END
     set try
     if eval $compile; then
         xxx=`$run ./try`
         case "$xxx" in
         semid_ds) val="$define" ;;
         esac
     fi
     $rm_try
     set d_semctl_semid_ds
     eval $setvar
     ;;
   esac
   case "$d_semctl_semid_ds" in
   $define)
       echo "You can $also use struct semid_ds* for semctl IPC_STAT." >&4
       ;;
   *)  echo "You cannot use
 struct semid_ds* for semctl IPC_STAT." >&4
       ;;
   esac
   ;;
*)  val="$undef"

   # We do not have the full sem*(2) library, so assume we can not
   # use either.

   set d_semctl_semun
   eval $setvar

   set d_semctl_semid_ds
   eval $setvar
   ;;
esac
$rm_try tryh.h
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_union_semun.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_semctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_semctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_semctl:
?S: This variable conditionally defines the HAS_SEMCTL symbol, which
?S: indicates to the C program that the semctl() routine is available.
?S:.
?C:HAS_SEMCTL:
?C: This symbol, if defined, indicates that the semctl() routine is
?C: available to perform semaphore control operations.
?C:.
?H:#$d_semctl
 HAS_SEMCTL /**/
?H:.
?LINT:set d_semctl
: see if semctl exists
set semctl d_semctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_scorfl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scorfl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_scorfl: cat Myread Oldconfig nametype Setvar
?MAKE: -pick add $@ %<
?S:d_scorfl:
?S: This variable conditionally defines the SCOREFULL symbol, which
?S: indicates to the C program that any scoreboard kept by the program
?S: should be kept on the basis of the user's full name as opposed to
?S: the user's login name.
?S:.
?C:SCOREFULL:
?C: This
 symbol, if defined, indicates that any scoreboard kept by the
?C: program should be kept on the basis of the user's full name as opposed
?C: to the user's login name.  If the user can change his full name he
?C: can enter multiple scores if this is defined.
?C:.
?H:#$d_scorfl SCOREFULL /**/
?H:.
?LINT:set d_scorfl
: see how they want the scoreboard kept
case "$d_scorfl" in
"$define") dflt=y ;;
*) dflt=n ;;
esac
case "$nametype" in
other) val="$undef" ;;
*)
 $cat <<'EOM'

The scoreboard can be kept with one score per login name, or one score per full
name.  If users can change their full name, or if there is more than one person
on your system with the same full name, you should keep the score by login name
(the full name is still printed).

EOM
 rp='Do you want the scoreboard kept by full name?'
 . ./myread
 case "$ans" in
 y*) val="$define" ;;
 *) val="$undef" ;;
 esac
 ;;
```

```
esac
set d_scorfl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scorfl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_closedir.U,v 3.0.1.3 1997/02/28 15:31:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_closedir.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:31:26  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:11:18  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:21  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_closedir d_void_closedir: Inlibc i_dirent i_sysdir i_sysndir
 \
 i_systypes Compile Setvar rm_try run
?MAKE: -pick add $@ %<
?S:d_closedir:
?S: This variable conditionally defines HAS_CLOSEDIR if closedir() is
?S: available.
?S:.
?C:HAS_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine is
?C: available.
?C:.
?H:#$d_closedir HAS_CLOSEDIR  /**/
?H:.
?S:d_void_closedir:
?S: This variable conditionally defines VOID_CLOSEDIR if closedir()
?S: does not return a value.
?S:.
```

```
?C:VOID_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine
?C: does not return a value.
?C:.
?H:#$d_void_closedir VOID_CLOSEDIR  /**/
?H:.
?F:!try
?LINT:set d_closedir d_void_closedir
: see if closedir exists
set closedir d_closedir
eval $inlibc

@if VOID_CLOSEDIR || d_void_closedir
?X: The following contortions are designed so we can call closedir()
?X: and check whether it returns a value.  The contortions are designed
?X: to portably pick up the correct directory header, for those
?X: systems that support various mutually incompatible
 directory functions.
?X: This is from perl5's perl.h
case "$d_closedir" in
"$define")
 echo " "
 echo "Checking whether closedir() returns a status..." >&4
 cat > try.c <<EOM
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/
#$i_systypes I_SYS_TYPES /**/

#if defined(I_SYS_TYPES)
#include <sys/types.h>
#endif
#if defined(I_DIRENT)
#include <dirent.h>
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#include <sys/dir.h>
#endif
#endif
#endif
int main() { return closedir(opendir(".")); }
EOM
 set try
 if eval $compile_ok; then
  if $run ./try > /dev/null 2>&1 ; then
```

```
  echo "Yes, it does."
  val="$undef"
 else
  echo "No, it doesn't."
  val="$define"
 fi
else
 echo "(I can't seem to compile the test program--assuming it doesn't)"
 val="$define"
fi
;;
*)
 val="$undef";
 ;;
esac
set d_void_closedir
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_closedir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_j0 d_j0l: Inlibc
?MAKE: -pick add $@ %<
?S:d_j0:
?S: This variable conditionally defines the HAS_J0 symbol, which
?S: indicates to the C program that the j0() routine is available.
?S:.
?S:d_j0l:
?S: This variable conditionally defines the HAS_J0L symbol, which
?S: indicates to the C program that the j0l() routine is available.
?S:.
?C:HAS_J0:
?C: This symbol, if defined, indicates to the C program that the
?C: j0() function is available for Bessel functions of the first
?C: kind of the order zero, for doubles.
?C:.
?C:HAS_J0L:
?C: This symbol, if defined, indicates to the C program that the
?C: j0l() function is available for Bessel functions of the first
?C: kind of the order zero, for long doubles.
?C:.
?H:#$d_j0 HAS_J0  /**/
```

```
?H:#$d_j0l HAS_J0L  /**/
?H:.
?LINT:set
 d_j0
?LINT:set d_j0l
: see if j0 exists
set j0 d_j0
eval $inlibc

: see if j0l exists
set j0l d_j0l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_j0.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_syscall.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_syscall.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syscall: Inlibc
?MAKE: -pick add $@ %<
?S:d_syscall:
?S: This variable conditionally defines HAS_SYSCALL if syscall() is
?S: available call arbitrary system calls.
?S:.
?C:HAS_SYSCALL (SYSCALL):
?C: This symbol, if defined, indicates that the syscall routine is
?C: available to call arbitrary system calls. If undefined, that's tough.
?C:.
?H:#$d_syscall
 HAS_SYSCALL /**/
?H:.
?LINT:set d_syscall
: see if syscall exists
set syscall d_syscall
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_syscall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fchown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fchown.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fchown: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchown:
?S: This variable conditionally defines the HAS_FCHOWN symbol, which
?S: indicates to the C program that the fchown() routine is available
?S: to change ownership of opened files.
?S:.
?C:HAS_FCHOWN (FCHOWN):
?C: This symbol, if defined, indicates that the fchown routine is available
?C: to
 change ownership of opened files.  If unavailable, use chown().
?C:.
?H:#$d_fchown HAS_FCHOWN  /**/
?H:.
?LINT:set d_fchown
: see if fchown exists
set fchown d_fchown
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fchown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethname.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:00  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethname d_uname d_phostname aphostname: phostname cat \
 myhostname package d_portable Loc echo n c +i_whoami +usrinc \
 Myread Guess Oldconfig Csym
?MAKE: -pick add $@ %<
?S:d_gethname:
?S: This variable conditionally
 defines the HAS_GETHOSTNAME symbol, which
?S: indicates to the C program that the gethostname() routine may be
?S: used to derive the host name.
?S:.
?S:d_uname:
?S: This variable conditionally defines the HAS_UNAME symbol, which
?S: indicates to the C program that the uname() routine may be
?S: used to derive the host name.
?S:.
?S:d_phostname:
?S: This variable conditionally defines the HAS_PHOSTNAME symbol, which
?S: contains the shell command which, when fed to popen(), may be
?S: used to derive the host name.
?S:.
?S:aphostname:
?S: This variable contains the command which can be used to compute the
?S: host name. The command is fully qualified by its absolute path, to make
?S: it safe when used by a process with super-user privileges.
?S:.
?C:HAS_GETHOSTNAME (GETHOSTNAME):
?C: This symbol, if defined, indicates that the C program may use the
?C: gethostname() routine to derive the host name.  See also HAS_UNAME
?C: and PHOSTNAME.
?C:.
?C:HAS_UNAME (UNAME):
?C: This symbol,
 if defined, indicates that the C program may use the
?C: uname() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and PHOSTNAME.
?C:.
?C:PHOSTNAME:
```

```
?C: This symbol, if defined, indicates the command to feed to the
?C: popen() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and HAS_UNAME. Note that the command uses a fully qualified path,
?C: so that it is safe even if used by a process with super-user
?C: privileges.
?C:.
?C:HAS_PHOSTNAME:
?C: This symbol, if defined, indicates that the C program may use the
?C: contents of PHOSTNAME as a command to feed to the popen() routine
?C: to derive the host name.
?C:.
?H:?%<:#$d_gethname HAS_GETHOSTNAME /**/
?H:?%<:#$d_uname HAS_UNAME  /**/
?H:?%<:#$d_phostname HAS_PHOSTNAME /**/
?H:?%<:#ifdef HAS_PHOSTNAME
?H:?%<:#define PHOSTNAME "$aphostname" /* How to get the host name */
?H:?%<:#endif
?H:.
?T:file val call
?LINT:change i_whoami
: see how we will look up host name
echo " "
call=''
@if HAS_GETHOSTNAME
if
 set gethostname val -f d_gethname; eval $csym; $val; then
 echo 'gethostname() found.' >&4
 d_gethname="$define"
 call=gethostname
fi
@end
@if HAS_UNAME
if set uname val -f d_uname; eval $csym; $val; then
 if ./xenix; then
  $cat <<'EOM'
uname() was found, but you're running xenix, and older versions of xenix
have a broken uname(). If you don't really know whether your xenix is old
enough to have a broken system call, use the default answer.

EOM
  dflt=y
  case "$d_uname" in
  "$define") dflt=n;;
  esac
  rp='Is your uname() broken?'
  . ./myread
  case "$ans" in
  n*) d_uname="$define"; call=uname;;
```

```
  esac
 else
  echo 'uname() found.' >&4
  d_uname="$define"
  case "$call" in
  ") call=uname ;;
  esac
 fi
fi
@end
case "$d_gethname" in
") d_gethname="$undef";;
esac
case "$d_uname" in
") d_uname="$undef";;
esac
@if PHOSTNAME || MYHOSTNAME
case "$d_uname$d_gethname" in
*define*)
 dflt=n
 cat <<EOM

Every now and then someone has a $call() that lies about the hostname
but can't be fixed
 for political or economic reasons.  If you wish, I can
@if MYHOSTNAME && PHOSTNAME
pretend $call() isn't there and maybe compile in the hostname or
compute it from the '$phostname' command at run-time.
@elsif MYHOSTNAME
pretend $call() isn't there and maybe compile in the hostname.
@elsif PHOSTNAME
pretend $call() isn't there and maybe compute hostname at run-time
thanks to the '$phostname' command.
@elsif WHOAMI
get the hostname from whomai.h (provided you have one).
@else
simply ignore your host name and use someting like "noname" instead.
@end

EOM
 rp="Shall I ignore $call() from now on?"
 . ./myread
 case "$ans" in
 y*) d_uname="$undef" d_gethname="$undef"; $echo $n "Okay...$c";;
 esac;;
esac
@end
@if PHOSTNAME || aphostname
```

```
?X: Compute the full path name for the command
case "$phostname" in
") aphostname=";;
*) case "$aphostname" in
 /*) ;;
 *) set X $phostname
  shift
  file=$1
  shift
  file=`./loc $file $file $pth`
  aphostname=`echo $file $*`
  ;;
 esac
 ;;
esac
@end
@if
 PHOSTNAME && MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ") ;;
 *)
  $cat <<EOT

There is no gethostname() or uname() on this system.  You have two
possibilities at this point:

1)  You can have your host name ($myhostname) compiled into $package, which
   lets $package start up faster, but makes your binaries non-portable, or
2)  you can have $package use a

 popen("$aphostname","r")

   which will start slower but be more portable.

@ if WHOAMI
Option 1 will give you the option of using whoami.h if you have one.
@ end
If you want option 2 but with a different command, you can edit config.sh at
the end of this shell script.

EOT
  case "$d_phostname" in
  "$define") dflt=n;;
  "$undef")  dflt=y;;
  ")
```

```
  case "$d_portable" in
  "$define") dflt=n ;;
  *) dflt=y ;;
  esac;;
 esac
 rp="Do you want your host name compiled in?"
 . ./myread
 case "$ans" in
 n*) d_phostname="$define" ;;
 *) aphostname=''; d_phostname="$undef";;
 esac;;
esac
case
"$aphostname" in
")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   dflt=y
   $cat <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
   rp="Use whoami.h to get hostname?"
   . ./myread
   case "$ans" in
   n*) i_whoami="$undef";;
   esac
   ;;
  "$undef")
   $cat <<EOM
No hostname function and no whoami.h -- hardwiring "$myhostname".
EOM
   ;;
  esac;;
@ else
  echo 'No hostname function -- hardwiring "'$myhostname'".' >&4;;
@ end
 esac;;
esac
@elsif PHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
```

```
 case "$phostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   $cat <<EOM

No hostname function--we'll use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

EOM
   ;;
  *) echo "There will be no way for $package to get your hostname." >&4;;
  esac;;
@ else
  echo "There will be no way
 for $package to get your hostname." >&4;;
@ end
 *)
 echo "I'll use 'popen("""$aphostname"", "r")"" to get your hostname." >&4
  ;;
 esac;;
esac
@elsif MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
@ if WHOAMI
 case "$i_whoami" in
 "$define")
  dflt=y
  $cat <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
  rp="Use whoami.h to get hostname?"
  . ./myread
  case "$ans" in
  n*) i_whoami="$undef";;
  esac
  ;;
 "$undef")
  echo 'No whoami.h--hardwiring "'$myhostname'".' >&4;;
```

```
 esac;;
@ else
 echo 'Hardwiring "'$myhostname'".' >&4;;
@ end
esac
@end
case "$d_phostname" in
") d_phostname="$undef";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Protochk.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a ./protochk script that is used internally
?X: by Configure to check if this system will accept a particular
?X: prototype.
?X:
?X: To use it, say something like:
?X: hdrs="$define sys/types.h
?X:  $i_systime sys/time.h
?X:  $i_sysselct sys/select.h
?X:  $d_socket sys/socket.h"
?X: $xxx='fd_set *'
?X: try='extern int select _((int, $xxx, $xxx, $xxx, struct timeval *'));'
?X: if ./protochk "$try" $hdrs; then
?X:  echo "Your system accepts $xxx for the arguments to select."
?X: fi
?X:  (Of course select is harder, since the first arg can be int,
?X: size_t, or unsigned long, and the last arg may or may not have a
?X: 'const' before the 'struct timeval' :-(.  Also SunOS
 4.1.3 doesn't
?X: provide a select prototype so the compiler accepts anything :-).
?X:
?X: The C compiler on QNX warns about invalid pointer types, but
?X: still exits with a 0 exit status, so it's not much help here.
?X: (It does correctly detect incorrect non-pointer arguments).
?X: Still, since QNX is a POSIX-ish system, just make your first
?X: a POSIX-ish one, and QNX will probably accept it.
?X:
?X: For determining argument types, your compiler must support
```

```
?X: prototypes, and the header files must use them.  Determining
?X: return types, however, is easier.  Just give an ridiculous
?X: return type, something like
?X: ./protochk 'extern int atof _((void));' $i_stdlib stdlib.h
?X: that should surely fail if atof() is defined in <stdlib.h>
?X:
?X: There is also an 'escape' hatch built in.  If you have a pair
?X: of args   'literal 'stuff' then 'stuff' gets included literally
?X: into the test program.  This could be useful for doing something
?X: like
?X: hdrs="$define stdio.h
?X:  $define
 sys/types.h"
?X: ./protochk 'extern int fsetpos(FILE *, Fpos_t);' $args \
?X:   'literal' '#define Fpos_t long long'
?X: but you have to be really careful about the spaces in "literal".
?X:
?X:  Andy Dougherty   Feb. 1998
?MAKE:Protochk: cat rm_try startsh eunicefix +cc +optimize +ccflags \
 i_pthread usethreads
?MAKE: -pick add $@ %<
?F:./protochk
?X: Comfort metalint.  All these are actually used in the protochk script.
?T:foo status pthread_h_done
?LINT: change cc optimize ccflags define rm_try
?LINT: extern pthread_h_first
?LINT: change pthread_h_first
?LINT: change usethreads
?LINT: change i_pthread
: define a function to check prototypes
$cat > protochk <<EOSH
$startsh
cc="$cc"
optimize="$optimize"
ccflags="$ccflags"
define="$define"
rm_try="$rm_try"
usethreads=$usethreads
i_pthread=$i_pthread
pthread_h_first=$pthread_h_first
EOSH

$cat >> protochk <<'EOSH'

$rm_try
foo="$1"
shift
while test $# -ge 2; do
```

```
 case "$1" in
  $define) echo "#include <$2>" >> try.c ;;
  literal)
 echo "$2" >> try.c ;;
 esac
   # Extra magic for the benefit of systems that need pthread.h
   # to be included early to correctly detect threadsafe functions.
   # Such functions must guarantee themselves, though, that the usethreads
   # and i_pthread have been defined, before calling protochk.
   if test "$usethreads" = "$define" -a "$i_pthread" = "$define" -a "$pthread_h_first" = "$define" -a
"$pthread_h_done" = ""; then
 echo "#include <pthread.h>" >> try.c
 pthread_h_done=yes
   fi
   shift 2
done
cat >> try.c <<'EOCP'
#define _(args) args
EOCP
echo "$foo" >> try.c
?X: Just so we have something to compile.
echo 'int no_real_function_has_this_name _((void)) { return 0; }' >> try.c
$cc $optimize $ccflags -c try.c > /dev/null 2>&1
status=$?
$rm_try
exit $status
EOSH
chmod +x protochk
$eunicefix protochk
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Protochk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: installstyle.U,v 1.2 1999/07/13 14:56:06 doughera Exp $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: installstyle.U,v $
?RCS: Revision 1.2  1999/07/13 14:56:06  doughera
?RCS: Fix dependencies.  Add more comments.
?RCS:
```

```
?RCS: Revision 1.1  1999/07/12 17:30:41  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:installstyle: prefix Myread
?MAKE: -pick add $@ %<
?X: Myread dependence is for dflt.
?S:installstyle:
?S: This variable describes the "style" of the perl installation.
?S: This is intended to be useful for tools that need to
?S: manipulate entire perl
 distributions.  Perl itself doesn't use
?S: this to find its libraries -- the library directories are
?S: stored directly in Config.pm.  Currently, there are only two
?S: styles:  "lib" and "lib/perl5".  The default library locations
?S: (e.g. privlib, sitelib) are either $prefix/lib or
?S: $prefix/lib/perl5.  The former is useful if $prefix is a
?S: directory dedicated to perl (e.g. /opt/perl), while the latter
?S: is useful if $prefix is shared by many packages, e.g. if
?S: $prefix=/usr/local.
?S:
?S: Unfortunately, while this "style" variable is used to set
?S: defaults for all three directory hierarchies (core, vendor, and
?S: site), there is no guarantee that the same style is actually
?S: appropriate for all those directories.  For example, $prefix
?S: might be /opt/perl, but $siteprefix might be /usr/local.
?S: (Perhaps, in retrospect, the "lib" style should never have been
?S: supported, but it did seem like a nice idea at the time.)
?S:
?S: The situation is even less clear for
 tools such as MakeMaker
?S: that can be used to install additional modules into
?S: non-standard places.  For example, if a user intends to install
?S: a module into a private directory (perhaps by setting PREFIX on
?S: the Makefile.PL command line), then there is no reason to
?S: assume that the Configure-time $installstyle setting will be
?S: relevant for that PREFIX.
?S:
?S: This may later be extended to include other information, so
?S: be careful with pattern-matching on the results.
?S:
?S: For compatibility with perl5.005 and earlier, the default
?S: setting is based on whether or not $prefix contains the string
?S: "perl".
?S:.
: determine installation style
: For now, try to deduce it from prefix unless it is already set.
: Reproduce behavior of 5.005 and earlier, maybe drop that in 5.7.
```

```
case "$installstyle" in
") case "$prefix" in
  *perl*) dflt='lib';;
  *) dflt='lib/perl5' ;;
 esac
 ;;
*) dflt="$installstyle" ;;
esac
: Probably not worth prompting for this since we prompt
 for all
: the directories individually, and the prompt would be too long and
: confusing anyway.
installstyle=$dflt
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/installstyle.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: scandir.C,v 3.0.1.1 1994/01/24 13:58:45 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: scandir.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:45  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/scandir.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_nice.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_nice.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:48  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_nice: Inlibc
?MAKE: -pick add $@ %<
?S:d_nice:
?S: This variable conditionally defines the HAS_NICE symbol, which
?S: indicates to the C program that the nice() routine is available.
?S:.
?C:HAS_NICE :
?C: This symbol, if defined, indicates that the nice routine is
?C: available.
?C:.
?H:#$d_nice
 HAS_NICE  /**/
?H:.
?LINT:set d_nice
: see if nice exists
set nice d_nice
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_nice.U
No license file was found, but licenses were detected in source scan.

```
# $Id: errnolist.sh,v 3.0.1.1 1994/01/24 14:00:00 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Harlan Stenn <harlan@mumps.pfcs.com>
#
# $Log: errnolist.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:00  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:36  ram
# Baseline for dist 3.0 netwide release.
#
```

```
case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif
 test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
case "$errnolistc" in
") ;;
*)
 echo "Making $errnolistc ..."
 awk -f errnolist.a < /usr/include/sys/errno.h > $errnolistc
 echo "It would be a good idea to make sure that $errnolistc is correct."
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2019 Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_towlower: Inlibc
?MAKE: -pick add $@ %<
?S:d_towlower:
?S: This variable conditionally defines the HAS_TOWLOWER symbol, which
?S: indicates to the C program that the towlower() routine is available.
?S:.
?C:HAS_TOWLOWER:
?C: This symbol, if defined, indicates that the towlower () routine is
?C: available to do case conversion.
?C:.
?H:#$d_towlower HAS_TOWLOWER  /**/
```

```
?H:.
?LINT:set d_towlower
: see if towlower exists
set towlower d_towlower
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_towlower.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mansrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mansrc.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  16:12:03  ram
?RCS: patch61: don't ask for AFS when they choose to not install pages
?RCS:
?RCS: Revision 3.0.1.8  1995/09/25  09:16:58  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:15:31  ram
?RCS: patch51: was mistakenly duplicating /usr/local/man/man1 (ADO)
?RCS: patch51: added /opt/man/man1 to the lookpath (ADO)
?RCS:
?RCS: Revision
 3.0.1.6  1995/01/30  14:39:34  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:32:25  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:30:38  ram
?RCS: patch32: now uses installation prefix for default setting
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  15:11:10  ram
?RCS: patch23: added lint hint, assuring that nroff is used
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:14:39  ram
?RCS: patch16: now uses _nroff in case user asked for portability
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:09:31  ram
```

```
?RCS: patch10: allows for L1 man page extension (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mansrc mansrcexp manext installmansrc: afs cat nroff Loc Oldconfig \
 sysman spackage test Getfile Prefixit prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:mansrc:
?S: This variable
 contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:mansrcexp:
?S: This variable is the same as the mansrc variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installmansrc:
?S: This variable is really the same as mansrcexp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: mansrcexp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:manext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See mansrc.
?S:.
?T:lookpath
: determine where manual pages go
set mansrc mansrc none
eval $prefixit
$cat <<EOM

$spackage has manual
 pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$mansrc" in
 ") mansrc="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
```

```
case "$mansrc" in
")
 lookpath="$prefixexp/share/man/man1 $prefixexp/man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath /usr/local/man/man1 /opt/man/man1 /usr/man/manl"
 lookpath="$lookpath /usr/share/man/man1 /usr/local/share/man/man1"
 lookpath="$lookpath /usr/man/local/man1 /usr/man/l_man/man1"
 lookpath="$lookpath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 lookpath="$lookpath /usr/man/man.L"
 mansrc=`./loc . $prefixexp/man/man1 $lookpath`
 if $test -d "$mansrc"; then
  dflt="$mansrc"
 else
  dflt="$sysman"
 fi
 set dflt
 eval $prefixup
 ;;
' ') dflt=none;;
*)  dflt="$mansrc"
 ;;
esac
echo " "
fn=dn~
rp='Where do the manual pages (source) go?'
. ./getfile
if test
 "X$mansrcexp" != "X$ansexp"; then
 installmansrc="
fi
mansrc="$ans"
mansrcexp="$ansexp"
case "$mansrc" in
") mansrc=' '
 installmansrc=";;
esac
if $afs && $test "$mansrc"; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installmansrc" in
 ") dflt=`echo $mansrcexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installmansrc";;
 esac
```

```
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installmansrc="$ans"
else
 installmansrc="$mansrcexp"
fi

case "$mansrc" in
' ') manext='0';;
*l) manext=l;;
*n) manext=n;;
*o) manext=l;;
*p) manext=n;;
*C) manext=C;;
*L) manext=L;;
*L1) manext=L1;;
*) manext=1;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mansrc.U
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```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?MAKE:usesocks: Myread Oldconfig Setvar spackage package
?MAKE: -pick add $@ %<
?Y:TOP
?S:usesocks:
?S: This variable conditionally defines the USE_SOCKS symbol,
?S: and indicates that Perl should be built to use SOCKS.
?S:.
?C:USE_SOCKS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use socks.
?C:.
?H:?%<:#$usesocks USE_SOCKS  /**/
```

```
?H:.
?D:usesocks="
?LINT:set usesocks
: check for requested SOCKS support
case "$usesocks" in
$define|true|[yY]*) dflt='y';;
*)
 dflt='n';;
esac
cat <<EOM

$spackage can be built to use the SOCKS proxy protocol library.
If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp="Build $package for SOCKS?"
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usesocks
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usesocks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: archlib.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: archlib.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:18  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
```

```
?RCS: Revision 3.0.1.3  1995/02/15  14:14:14  ram
?RCS: patch51: architecture name is now
 computed by a separate unit
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:32:22  ram
?RCS: patch49: archname is now systematically recomputed
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:36  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_archlib archlib archlibexp installarchlib: \
 cat Getfile Setprefixvar Loc Oldconfig archname spackage  \
 privlib sed test Prefixit Prefixup binexp
?MAKE: -pick add $@ %<
?Y:TOP
?S:d_archlib:
?S: This variable conditionally defines ARCHLIB to hold the pathname
?S: of architecture-dependent library files for $package.  If
?S: $archlib is the same as $privlib, then this is set to undef.
?S:.
?D:archlib=''
?S:archlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put architecture-dependent public library files for $package.
?S: It is most often a local directory such as /usr/local/lib.
?S: Programs using this variable must be prepared to deal
?S: with
 filename expansion.
?S:.
?D:archlibexp=''
?S:archlibexp:
?S: This variable is the same as the archlib variable, but is
?S: filename expanded at configuration time, for convenient use.
?S:.
?D:installarchlib=''
?S:installarchlib:
?S: This variable is really the same as archlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:ARCHLIB:
?C: This variable, if defined, holds the name of the directory in
?C: which the user wants to put architecture-dependent public
?C: library files for $package.  It is most often a local directory
?C: such as /usr/local/lib.  Programs using this variable must be
?C: prepared to deal with filename expansion.  If ARCHLIB is the
?C: same as PRIVLIB, it is not defined, since presumably the
```

```
?C: program already searches PRIVLIB.
?C:.
?C:ARCHLIB_EXP:
?C: This symbol contains the ~name expanded version of ARCHLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion
 at run-time.
?C:.
?H:#$d_archlib ARCHLIB "$archlib"  /**/
?H:#$d_archlib ARCHLIB_EXP "$archlibexp"  /**/
?H:.
?T: tdflt
?LINT:change prefixvar
?LINT:set archlib
?LINT:set archlibexp
?LINT:set installarchlib
: determine where public architecture dependent libraries go
set archlib archlib
eval $prefixit
: privlib default is /usr/local/lib/$package/$version
: archlib default is /usr/local/lib/$package/$version/$archname
: privlib may have an optional trailing /share.
tdflt=`echo $privlib | $sed 's,/share$,,'`
tdflt=$tdflt/$archname
case "$archlib" in
") dflt=$tdflt
 ;;
*) dflt="$archlib"
   ;;
esac
$cat <<EOM

$spackage contains architecture-dependent library files.  If you are
sharing libraries in a heterogeneous environment, you might store
these files in a separate location.  Otherwise, you can just include
them with the rest of the public library files.

EOM
?X: Force dependency on bin.U
fn=$binexp
fn=d+~
rp='Where do you want to put the public architecture-dependent libraries?'
.
 ./getfile
prefixvar=archlib
. ./setprefixvar
if $test X"$archlib" = X"$privlib"; then
 d_archlib="$undef"
else
```

```
 d_archlib="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/archlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ebcdic.U,v 3.0.1.3 1994/05/06 15:11:49 doughera Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:ebcdic: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:ebcdic:
?S: This variable conditionally defines EBCDIC if this
?S: system uses EBCDIC encoding.
?S:.
?C:EBCDIC:
?C: This symbol, if defined, indicates that this system uses
?C: EBCDIC encoding.
?C:.
?H:#$ebcdic EBCDIC  /**/
?H:.
?F:!try
?LINT:set ebcdic
: Determine if this is an EBCDIC system
echo " "
echo "Determining whether or not we are on an EBCDIC system..." >&4
$cat >try.c <<'EOM'
int main()
{
 if ('M'==0xd4) return 0;
 return 1;
}
EOM

val=$undef
set try
if eval
 $compile_ok; then
 if $run ./try; then
  echo "You seem to speak EBCDIC." >&4
```

```
  val="$define"
 else
  echo "Nope, no EBCDIC, probably ASCII or some ISO Latin. Or UTF-8." >&4
 fi
else
 echo "I'm unable to compile the test program." >&4
 echo "I'll assume ASCII or some ISO Latin. Or UTF8." >&4
fi
$rm_try
set ebcdic
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/ebcdic/ebcdic.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigsetmk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigsetmk.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sigsetmk: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_sigsetmk:
?S: This variable conditionally defines the HAS_SIGSETMASK symbol, which
?S: indicates to the C program that the sigsetmask() routine is available
?S: to set current signal mask.
?S:.
?C:HAS_SIGSETMASK (SIGSETMASK):
?C: This symbol, if defined, indicates that the sigsetmask()
 routine is
?C: available to set current signal mask. Otherwise, you should probably
?C: emulate this by using signal(), but fear race conditions...
?C:.
?H:#$d_sigsetmk HAS_SIGSETMASK  /**/
?H:.
?LINT:set d_sigsetmk
: see if sigsetmask exists
echo " "
```

```
if set sigsetmask val -f d_sigsetmk; eval $csym; $val; then
 echo 'sigsetmask() found.' >&4
 val="$define"
else
 echo "sigsetmask() not found -- We'll use signal()." >&4
 val="$undef"
fi
set d_sigsetmk
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigsetmk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: doublesize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:doublesize: cat rm_try Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:doublesize:
?S: This variable contains the value of the DOUBLESIZE symbol, which
?S: indicates to the C program how many bytes there are in a double.
?S:.
?C:DOUBLESIZE:
?C: This symbol contains the
 size of a double, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define DOUBLESIZE $doublesize  /**/
?H:.
?F:!try
: check for length of double
echo " "
case "$doublesize" in
```

```
")
 echo "Checking to see how big your double precision numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(double));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$doublesize"
 ;;
esac
rp="What is the size of a double precision number (in bytes)?"
. ./myread
doublesize="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/doublesize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_telldirproto: Hasproto i_systypes i_dirent
?MAKE: -pick add $@ %<
?S:d_telldirproto:
?S: This variable conditionally defines the HAS_TELLDIR_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the telldir() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_TELLDIR_PROTO:
```

```
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the telldir() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess
 is
?C:  extern long telldir(DIR*);
?C:.
?H:#$d_telldirproto HAS_TELLDIR_PROTO /**/
?H:.
?LINT:set d_telldirproto
: see if prototype for telldir is available
echo " "
set d_telldirproto telldir $i_systypes sys/types.h $i_dirent dirent.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_telldirproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_frexpl: Inlibc
?MAKE: -pick add $@ %<
?S:d_frexpl:
?S: This variable conditionally defines the HAS_FREXPL symbol, which
?S: indicates to the C program that the frexpl() routine is available.
?S:.
?C:HAS_FREXPL:
?C: This symbol, if defined, indicates that the frexpl routine is
?C: available to break a long double floating-point number into
?C: a normalized fraction and an integral power of 2.
?C:.
?H:#$d_frexpl HAS_FREXPL  /**/
?H:.
?LINT:set d_frexpl
: see if frexpl exists
set frexpl d_frexpl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_frexpl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usesocks: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usesocks:
?S: This variable conditionally defines the USE_SOCKS symbol,
?S: and indicates that Perl should be built to use SOCKS.
?S:.
?C:USE_SOCKS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use socks.
?C:.
?H:?%<:#ifndef USE_SOCKS
?H:?%<:#$usesocks USE_SOCKS  /**/
?H:?%<:#endif
?H:.
?LINT:set usesocks
?INIT:: set usesocks on the Configure command line to enable socks.
: Check is we will use socks
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
case "$usesocks" in
$define|true|[yY]*) dflt='y';;
*) dflt='n';;
esac
cat <<EOM

Perl can be built to
 use the SOCKS proxy protocol library.  To do so,
Configure must be run with -Dusesocks.  If you use SOCKS you also need
to use the PerlIO abstraction layer, this will be implicitly selected.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Build Perl for SOCKS?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usesocks
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usesocks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sbrkproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sbrkproto:
?S: This variable conditionally defines the HAS_SBRK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the sbrk() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SBRK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the sbrk() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern void* sbrk(int);
?C:  extern
 void* sbrk(size_t);
?C:.
?H:#$d_sbrkproto HAS_SBRK_PROTO /**/
?H:.
?LINT:set d_sbrkproto
: see if prototype for sbrk is available
echo " "
set d_sbrkproto sbrk $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sbrkproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_netinettcp: Inhdr
?MAKE: -pick add $@ %<
?S:i_netinettcp:
?S: This variable conditionally defines the I_NETINET_TCP symbol,
?S: and indicates whether a C program should include <netinet/tcp.h>.
?S:.
?C:I_NETINET_TCP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <netinet/tcp.h>.
?C:.
?H:#$i_netinettcp   I_NETINET_TCP               /**/
?H:.
?LINT:set i_netinettcp
: see if netinet/tcp.h is available
set netinet/tcp.h i_netinettcp
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_netinettcp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pthread_y.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_pthread_yield sched_yield d_sched_yield: \
 Compile Setvar cat rm_try usethreads
?MAKE: -pick add $@ %<
?S:d_pthread_yield:
?S: This variable conditionally defines the HAS_PTHREAD_YIELD
?S: symbol if the pthread_yield routine is available to yield
?S: the execution of the current thread.
?S:.
?S:sched_yield:
?S: This variable defines the way to yield the execution
?S: of the current thread.
?S:.
?S:d_sched_yield:
?S: This variable conditionally defines the HAS_SCHED_YIELD
?S: symbol if the sched_yield routine is available to yield
?S: the execution of the current thread.
```

```
?S:.
?C:HAS_PTHREAD_YIELD:
?C: This symbol, if defined, indicates that the pthread_yield
?C: routine is available
 to yield the execution of the current
?C: thread.  sched_yield is preferable to pthread_yield.
?C:.
?C:SCHED_YIELD:
?C: This symbol defines the way to yield the execution of
?C: the current thread.  Known ways are sched_yield,
?C: pthread_yield, and pthread_yield with NULL.
?C:.
?C:HAS_SCHED_YIELD:
?C: This symbol, if defined, indicates that the sched_yield
?C: routine is available to yield the execution of the current
?C: thread.  sched_yield is preferable to pthread_yield.
?C:.
?H:#$d_pthread_yield HAS_PTHREAD_YIELD /**/
?H:#define SCHED_YIELD $sched_yield /**/
?H:#$d_sched_yield HAS_SCHED_YIELD /**/
?H:.
?LINT: set d_pthread_yield d_sched_yield
: see whether the various POSIXish _yields exist
$cat >try.c <<EOP
#include <pthread.h>
#include <stdio.h>
int main() {
#ifdef SCHED_YIELD
 sched_yield();
#else
#ifdef PTHREAD_YIELD
 pthread_yield();
#else
#ifdef PTHREAD_YIELD_NULL
 pthread_yield(NULL);
#endif
#endif
#endif
}
EOP
: see if sched_yield exists
set try -DSCHED_YIELD
if eval $compile;
 then
   val="$define"
   sched_yield='sched_yield()'
else
   val="$undef"
```

```
fi
case "$usethreads" in
$define)
 case "$val" in
 $define) echo 'sched_yield() found.' >&4 ;;
 *)  echo 'sched_yield() NOT found.' >&4 ;;
 esac
esac
set d_sched_yield
eval $setvar

: see if pthread_yield exists
set try -DPTHREAD_YIELD
if eval $compile; then
   val="$define"
   case "$sched_yield" in
   ") sched_yield='pthread_yield()' ;;
   esac
else
   set try -DPTHREAD_YIELD_NULL
   if eval $compile; then
 val="$define"
 case "$sched_yield" in
 ") sched_yield='pthread_yield(NULL)' ;;
 esac
   else
 val="$undef"
   fi
fi
case "$usethreads" in
$define)
 case "$val" in
 $define) echo 'pthread_yield() found.' >&4 ;;
 *)  echo 'pthread_yield() NOT found.' >&4 ;;
 esac
 ;;
esac
set d_pthread_yield
eval $setvar
case "$sched_yield" in
") sched_yield=undef ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthread_y.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usedefaultstrict: Setvar Myread
?MAKE: -pick add $@ %<
?LINT:set usedefaultstrict
?S:usedefaultstrict:
?S: This setting provides a mechanism for perl developers to enable
?S: strict by default. These defaults do not apply when perl is run
?S: via -e or -E.
?S:.
?C:USE_STRICT_BY_DEFAULT:
?C: This symbol, if defined, enables additional defaults.
?C: At this time it only enables implicit strict by default.
?C:.
?H:#$usedefaultstrict USE_STRICT_BY_DEFAULT /* use strict by default */
?H:.
: Ask about strict by default.
case "$usedefaultstrict" in
  $define|true|[Yy]*)
    dflt="y"
    ;;
  *)
    dflt="n"
    ;;
  esac

cat <<EOM

EXPERIMENTAL: Perl can now be built with strict on by default when not
invoked with -e or -E. This is a diagnostic tool
 for development.

Unless you are familiar with this feature, you should probably answer 'no'.

EOM

rp='Would you like to build perl with strict enabled by default?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)   val="$undef"  ;;
esac
set usedefaultstrict
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usedefaultstrict.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: MailList.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: MailList.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:01:49  ram
?RCS: patch16: created
?RCS:
?RCS:
?X:
?X: This unit offers the user the option of subscribing to the mailing
?X: list. To force inclusion of this unit, you must add it's name to the
?X: dependancies on the MAKE line in your private copy of End.U.
?X: The address of the mailing list server must be set via a "list_request=..."
?X:
 entry in the .package file. This is usually done by running packinit and
?X: answering the proper questions.
?X:
?MAKE:MailList: cat mailer package Myread cf_name cf_email
?MAKE: -pick wipe $@ %<
?T:list_request list_sub list_unsub list_name
?X:
?X: The cf_name dependency is used through list_sub when the mailing list
?X: manager happens to be listserv, whereas cf_email is used whith majordomo
?X: or when the mailing list request address is scanned by a human. Since
?X: they do not appear within the unit itself, we need a lint hint.
?X:
?LINT:use cf_name cf_email
: offer to join the mailing list
list_request='<$list_request>'
list_sub="<$list_sub>"
list_unsub="<$list_unsub>"
list_name="<$list_name>"
$cat <<EOM

There is a mailing list for discussion about $package and related issues.
This is the preferred place to ask questions about the program and discuss
modifications and additions with the author and other users.  If you are able
```

```
to send mail to the Internet, you
 are encouraged to subscribe.  You need only
ever subscribe once, and you can unsubscribe automatically at any time in the
future.  If you have already subscribed and you wish to unsubscribe now, you
may do so by answering "unsubscribe".  Answer "subscribe" to subscribe to the
list.

EOM
rp="Subscribe to or unsubscribe from the $list_name mailing list?"
dflt=neither
. ./myread
case "$ans" in
[sS]*) $cat <<EOM

You will be sent a message from the list server to let you know when your
subscription has been successful and telling you how to submit articles and
how to unsubscribe again when necessary. You may also unsubscribe by running
this script again and asking it to do so for you.

EOM
 echo "Sending mail to subscribe you to the $list_name list..." >&4
 $mailer $list_request <<EOM >/dev/null 2>&1
Precedence: junk
To: $list_request

$list_sub
EOM
 ;;
[uU]*) echo "Sending mail to unsubscribe you from the $list_name list..." >&4
 $mailer $list_request <<EOM >/dev/null 2>&1
Precedence: junk
To:
 $list_request

$list_unsub
EOM
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/MailList.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: stdchar.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:stdchar: contains Findhdr cppstdin cppminus rm
?MAKE: -pick add $@ %<
?S:stdchar:
?S: This variable conditionally defines STDCHAR to be the type of char
?S: used in stdio.h.  It has the values "unsigned char" or "char".
?S:.
?C:STDCHAR:
?C: This symbol is defined to be the type of char used in stdio.h.
?C: It has the values "unsigned char" or "char".
?C:.
?H:#define STDCHAR $stdchar /**/
?H:.
?F:!stdioh
:
 see what type of char stdio uses.
echo " "
?X: untangle the #include nest
echo '#include <stdio.h>' | $cppstdin $cppminus > stdioh
if $contains 'unsigned.*char.*_ptr;' stdioh >/dev/null 2>&1 ; then
 echo "Your stdio uses unsigned chars." >&4
 stdchar="unsigned char"
else
 echo "Your stdio uses signed chars." >&4
 stdchar="char"
fi
$rm -f stdioh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/stdchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: scriptdir.U,v 3.1 1999/07/09 18:20:13 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: scriptdir.U,v $
?RCS: Revision 3.1  1999/07/09 18:20:13  doughera
?RCS: Updated for installprefix
?RCS:
?RCS: Revision 3.0.1.3  1995/09/25  09:17:15  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:46:13  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:32:04  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:scriptdir scriptdirexp installscript: cat test Getfile Loc \
 Oldconfig +bin Prefixit Setprefixvar prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?D:scriptdir=''
?S:scriptdir:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly scripts for the package in question.  It is either
?S: the same directory as for binaries, or a special one that can be
?S: mounted across different architectures, like /usr/share. Programs
?S: must be prepared to deal with ~name expansion.
?S:.
?D:scriptdirexp=''
?S:scriptdirexp:
?S: This variable is the same as scriptdir, but is filename expanded
?S: at configuration time, for programs not wanting to bother with it.
?S:.
?S:installscript:
?S: This variable is usually the same as scriptdirexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable
 within your makefiles for portability.
?S:.
?C:SCRIPTDIR:
?C: This symbol holds the name of the directory in which the user wants
?C: to put publicly executable scripts for the package in question.  It
?C: is often a directory that is mounted across diverse architectures.
?C: Programs must be prepared to deal with ~name expansion.
?C:.
```

```
?C:SCRIPTDIR_EXP:
?C: This is the same as SCRIPTDIR, but is filename expanded at
?C: configuration time, for use in programs not prepared to do
?C: ~name substitutions at run-time.
?C:.
?H:#define SCRIPTDIR "$scriptdir" /**/
?H:#define SCRIPTDIR_EXP "$scriptdirexp" /**/
?H:.
?T:installscriptdir
?LINT:change prefixvar
?LINT:set scriptdir
?LINT:set scriptdirexp
: determine where public executable scripts go
set scriptdir scriptdir
eval $prefixit
case "$scriptdir" in
")
 dflt="$bin"
 : guess some guesses
 $test -d /usr/share/scripts && dflt=/usr/share/scripts
 $test -d /usr/share/bin     && dflt=/usr/share/bin
 $test -d /usr/local/script  && dflt=/usr/local/script
 $test
 -d /usr/local/scripts && dflt=/usr/local/scripts
 $test -d $prefixexp/script  && dflt=$prefixexp/script
 set dflt
 eval $prefixup
 ;;
*)  dflt="$scriptdir"
 ;;
esac
$cat <<EOM

Some installations have a separate directory just for executable scripts so
that they can mount it across multiple architectures but keep the scripts in
one spot.  You might, for example, have a subdirectory of /usr/share for this.
Or you might just lump your scripts in with all your other executables.

EOM
fn=d~
rp='Where do you keep publicly executable scripts?'
. ./getfile
if $test "X$ansexp" != "X$scriptdirexp"; then
 installscript=''
fi
installscriptdir=''
prefixvar=scriptdir
. ./setprefixvar
```

```
: A little fix up for an irregularly named variable.
installscript="$installscriptdir"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/scriptdir.U
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```
?RCS: $Id: d_asctime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_asctime_r asctime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_asctime_r:
?S: This variable conditionally defines the HAS_ASCTIME_R symbol,
?S: which indicates to the C program that the asctime_r()
?S: routine is available.
?S:.
?S:asctime_r_proto:
?S: This variable encodes the prototype of asctime_r.
?S: It is zero if d_asctime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_asctime_r
?S: is defined.
?S:.
?C:HAS_ASCTIME_R:
?C: This symbol, if defined, indicates that the asctime_r routine
?C: is available to asctime
 re-entrantly.
?C:.
?C:ASCTIME_R_PROTO:
?C: This symbol encodes the prototype of asctime_r.
?C: It is zero if d_asctime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_asctime_r
?C: is defined.
?C:.
?H:#$d_asctime_r HAS_ASCTIME_R /**/
?H:#define ASCTIME_R_PROTO $asctime_r_proto /**/
?H:.
?T:try hdrs d_asctime_r_proto
: see if asctime_r exists
set asctime_r d_asctime_r
eval $inlibc
case "$d_asctime_r" in
```

```
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_asctime_r_proto:$usethreads" in
 ":define") d_asctime_r_proto=define
  set d_asctime_r_proto asctime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_asctime_r_proto" in
 define)
 case "$asctime_r_proto" in
 "|0) try='char* asctime_r(const struct tm*, char*);'
 ./protochk "$extern_C $try" $hdrs && asctime_r_proto=B_SB ;;
 esac
 case "$asctime_r_proto" in
 "|0) try='char* asctime_r(const struct tm*, char*, int);'
 ./protochk "$extern_C $try" $hdrs
 && asctime_r_proto=B_SBI ;;
 esac
 case "$asctime_r_proto" in
 "|0) try='int asctime_r(const struct tm*, char*);'
 ./protochk "$extern_C $try" $hdrs && asctime_r_proto=I_SB ;;
 esac
 case "$asctime_r_proto" in
 "|0) try='int asctime_r(const struct tm*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && asctime_r_proto=I_SBI ;;
 esac
 case "$asctime_r_proto" in
 "|0) d_asctime_r=undef
  asctime_r_proto=0
  echo "Disabling asctime_r, cannot determine prototype." >&4 ;;
 * ) case "$asctime_r_proto" in
  REENTRANT_PROTO*) ;;
  *) asctime_r_proto="REENTRANT_PROTO_$asctime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "asctime_r has no prototype, not using it." >&4 ;;
  esac
  d_asctime_r=undef
  asctime_r_proto=0
  ;;
 esac
 ;;
*) asctime_r_proto=0
 ;;
```

```
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_asctime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethbynm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethbynm.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethbyname: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbyname (d_gethbynm d_gethhstby):
?S: This variable conditionally defines the HAS_GETHOSTBYNAME symbol, which
?S: indicates to the C program that the gethostbyname() routine is available
?S: to look up host names in some data base or other.
?S:.
?C:HAS_GETHOSTBYNAME (GETHOSTBYNAME):
?C: This
 symbol, if defined, indicates that the gethostbyname() routine is
?C: available to look up host names in some data base or other.
?C:.
?H:#$d_gethbyname HAS_GETHOSTBYNAME  /**/
?H:.
?LINT:set d_gethbyname
: see if gethostbyname exists
set gethostbyname d_gethbyname
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethbynm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_flexfnam.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flexfnam: cat rm test Setvar
?MAKE: -pick add $@ %<
?S:d_flexfnam:
?S: This variable conditionally defines the FLEXFILENAMES symbol, which
?S: indicates that the system supports filenames longer than 14 characters.
?S:.
?C:FLEXFILENAMES:
?C: This symbol, if defined, indicates that the system supports filenames
?C: longer than 14 characters.
?C:.
?H:#$d_flexfnam FLEXFILENAMES  /**/
?H:.
?T:first
 second
?LINT:set d_flexfnam
: see if we can have long filenames
echo " "
?X:
?X: We have to test in both /tmp and . because of NFS (remote server may allow
?X: long filenames while the local filesystem cannot support them). If at least
?X: one of those file systems cannot support long filenames, then we assume the
?X: whole system can't.
?X:
rmlist="$rmlist /tmp/cf$$"
$test -d /tmp/cf$$ || mkdir /tmp/cf$$
first=123456789abcdef
second=/tmp/cf$$/$first
$rm -f $first $second
if (echo hi >$first) 2>/dev/null; then
 if $test -f 123456789abcde; then
  echo 'You cannot have filenames longer than 14 characters.  Sigh.' >&4
  val="$undef"
 else
  if (echo hi >$second) 2>/dev/null; then
   if $test -f /tmp/cf$$/123456789abcde; then
    $cat <<'EOM'
That's peculiar... You can have filenames longer than 14 characters, but only
on some of the filesystems.  Maybe you are using NFS.  Anyway, to avoid problems
I shall consider your system cannot support long filenames at all.
```

```
EOM
    val="$undef"
   else
    echo
 'You can have filenames longer than 14 characters.' >&4
    val="$define"
   fi
  else
   $cat <<'EOM'
How confusing! Some of your filesystems are sane enough to allow filenames
longer than 14 characters but some others like /tmp can't even think about them.
So, for now on, I shall assume your kernel does not allow them at all.
EOM
   val="$undef"
  fi
 fi
else
 $cat <<'EOM'
You can't have filenames longer than 14 chars.  You can't even think about them!
EOM
 val="$undef"
fi
set d_flexfnam
eval $setvar
$rm -rf /tmp/cf$$ 123456789abcde*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_flexfnam.U
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```
?RCS: $Id: d_setsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setsent:
?S: This variable conditionally defines HAS_SETSERVENT if setservent() is
```

```
?S: available.
?S:.
?C:HAS_SETSERVENT:
?C: This symbol, if defined, indicates that the setservent() routine is
?C: available.
?C:.
?H:#$d_setsent HAS_SETSERVENT  /**/
?H:.
?LINT:set d_setsent
: see if setservent exists
set
 setservent d_setsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sethostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_sethostent_r sethostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_sethostent_r:
?S: This variable conditionally defines the HAS_SETHOSTENT_R symbol,
?S: which indicates to the C program that the sethostent_r()
?S: routine is available.
?S:.
?S:sethostent_r_proto:
?S: This variable encodes the prototype of sethostent_r.
?S: It is zero if d_sethostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_sethostent_r
?S: is defined.
?S:.
?C:HAS_SETHOSTENT_R:
?C: This symbol, if defined, indicates that the sethostent_r routine
?C: is
 available to sethostent re-entrantly.
?C:.
?C:SETHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of sethostent_r.
?C: It is zero if d_sethostent_r is undef, and one of the
```

```
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_sethostent_r
?C: is defined.
?C:.
?H:#$d_sethostent_r HAS_SETHOSTENT_R /**/
?H:#define SETHOSTENT_R_PROTO $sethostent_r_proto /**/
?H:.
?T:try hdrs d_sethostent_r_proto
: see if sethostent_r exists
set sethostent_r d_sethostent_r
eval $inlibc
case "$d_sethostent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_sethostent_r_proto:$usethreads" in
 ":define") d_sethostent_r_proto=define
  set d_sethostent_r_proto sethostent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_sethostent_r_proto" in
 define)
 case "$sethostent_r_proto" in
 "|0) try='int sethostent_r(int, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && sethostent_r_proto=I_ID ;;
 esac
 case "$sethostent_r_proto" in
 "|0) try='void
 sethostent_r(int, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && sethostent_r_proto=V_ID ;;
 esac
 case "$sethostent_r_proto" in
 "|0) d_sethostent_r=undef
  sethostent_r_proto=0
  echo "Disabling sethostent_r, cannot determine prototype." >&4 ;;
 * ) case "$sethostent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) sethostent_r_proto="REENTRANT_PROTO_$sethostent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "sethostent_r has no prototype, not using it." >&4 ;;
  esac
  d_sethostent_r=undef
  sethostent_r_proto=0
  ;;
 esac
```

```
 ;;
*) sethostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_sethostent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_dirent.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:01  ram
?RCS: patch36: failed scanning for 'd_namlen' with missing <dirent.h> (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:01:25  ram
?RCS: patch30: added direntrytype for hints, merely for NeXT (ADO)
?RCS: patch30: now checks for both struct dirent and direct (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:22:37  ram
?RCS: patch27: new variable direntrytype for proper type setting (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24
 14:11:15  ram
?RCS: patch16: added new Direntry_t pseudo-type for directory entries
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks whether there is a dirent system or not
?X:
?MAKE:i_dirent d_dirnamlen direntrytype: test contains Setvar \
 Myread Findhdr cppstdin cppflags cppminus rm_try
?MAKE: -pick add $@ %<
?S:i_dirent:
?S: This variable conditionally defines I_DIRENT, which indicates
?S: to the C program that it should include <dirent.h>.
?S:.
?S:d_dirnamlen:
```

```
?S: This variable conditionally defines DIRNAMLEN, which indicates
?S: to the C program that the length of directory entry names is
?S: provided by a d_namelen field.
?S:.
?S:direntrytype:
?S: This symbol is set to 'struct direct' or 'struct dirent' depending on
?S: whether dirent is available or not. You should use this pseudo type to
?S: portably declare your directory entries.
?S:.
?C:I_DIRENT:
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <dirent.h>. Using this symbol also triggers the definition
?C: of the Direntry_t define which ends up being 'struct dirent' or
?C: 'struct direct' depending on the availability of <dirent.h>.
?C:.
?C:DIRNAMLEN:
?C: This symbol, if defined, indicates to the C program that the length
?C: of directory entry names is provided by a d_namlen field.  Otherwise
?C: you need to do strlen() on the d_name field.
?C:.
?C:Direntry_t:
?C: This symbol is set to 'struct direct' or 'struct dirent' depending on
?C: whether dirent is available or not. You should use this pseudo type to
?C: portably declare your directory entries.
?C:.
?H:#$i_dirent I_DIRENT  /**/
?H:#$d_dirnamlen DIRNAMLEN /**/
?H:?%<:@if I_DIRENT && Direntry_t
?H:?%<:#define Direntry_t $direntrytype
?H:?%<:@end
?H:.
?T:xinc guess1 guess2
?LINT:set i_dirent d_dirnamlen
: see if this is a dirent system
echo " "
if xinc=`./findhdr dirent.h`; $test "$xinc"; then
 val="$define"
 echo "<dirent.h> found." >&4
else
 val="$undef"
 if
 xinc=`./findhdr sys/dir.h`; $test "$xinc"; then
  echo "<sys/dir.h> found." >&4
  echo " "
 else
  xinc=`./findhdr sys/ndir.h`
 fi
```

```
 echo "<dirent.h> NOT found." >&4
fi
set i_dirent
eval $setvar

?X: Use struct dirent or struct direct?   If we're using dirent.h,
?X: it's probably struct dirent, but apparently not always.
?X: Assume $xinc still contains the name of the header file we're using.
@if direntrytype || Direntry_t
: Look for type of directory structure.
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c

case "$direntrytype" in
"|' ')
 case "$i_dirent" in
 $define) guess1='struct dirent' ;;
 *) guess1='struct direct'  ;;
 esac
 ;;
*) guess1="$direntrytype"
 ;;
esac

case "$guess1" in
'struct dirent') guess2='struct direct' ;;
*) guess2='struct dirent' ;;
esac

if $contains "$guess1" try.c >/dev/null 2>&1; then
 direntrytype="$guess1"
 echo "Your directory entries are $direntrytype." >&4
elif $contains "$guess2" try.c >/dev/null 2>&1; then
 direntrytype="$guess2"
 echo
 "Your directory entries seem to be $direntrytype." >&4
else
 echo "I don't recognize your system's directory entries." >&4
 rp="What type is used for directory entries on this system?"
 dflt="$guess1"
 . ./myread
 direntrytype="$ans"
fi
$rm_try

@end

@if d_dirnamlen || DIRNAMLEN
```

```
: see if the directory entry stores field length
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c
if $contains 'd_namlen' try.c >/dev/null 2>&1; then
 echo "Good, your directory entry keeps length information in d_namlen." >&4
 val="$define"
else
 echo "Your directory entry does not know about the d_namlen field." >&4
 val="$undef"
fi
set d_dirnamlen
eval $setvar
$rm_try

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dirent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: fpostype.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:20:52  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:59  ram
?RCS: patch30: created
?RCS:
?MAKE:fpostype: Myread Typedef
?MAKE: -pick add $@ %<
?S:fpostype:
?S: This variable defines Fpos_t to be something like fpost_t, long,
?S: uint, or whatever type is used to declare file positions in libc.
?S:.
?C:Fpos_t:
?C: This symbol holds the type used to declare file positions
 in libc.
?C: It can be fpos_t, long, uint, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
```

```
?C:.
?H:#define Fpos_t $fpostype  /* File position type */
?H:.
: see what type file positions are declared as in the library
set fpos_t fpostype long stdio.h sys/types.h
eval $typedef
echo " "
dflt="$fpostype"
rp="What is the type for file position used by fsetpos()?"
. ./myread
fpostype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/fpostype.U
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```
?RCS: $Id: d_byacc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
?RCS: $Log: d_byacc.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:31:14  ram
?RCS: patch61: created
?RCS:
?MAKE:d_byacc: byacc Setvar
?MAKE: -pick add $@ %<
?S:d_byacc:
?S: This variable indicates whether byacc is available.
?S: If the user has specified 'portability', then Makefile.SH
?S: sees $byacc='byacc' whether or not the user actually has
?S: byacc.  This variable allows us to determine in a makefile
?S: if we really
 have byacc.
?S:.
?LINT:set d_byacc
: Check if we really have byacc
case "$byacc" in
"|'byacc') val="$undef" ;;
*) val="$define" ;;
esac
set d_byacc
```

```
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_byacc.U
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?RCS: $Id: d_stdstdio.U,v 3.0.1.3 1997/02/28 15:46:32 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Tye McQueen <tye@metronet.com>
?RCS:
?RCS: $Log: d_stdstdio.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:46:32  ram
?RCS: patch61: merged with perl5's unit
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:06:54  ram
?RCS: patch56: typo fix on ?C: line for FILE_bufsiz
?RCS: patch56: fixed unbalanced parenthesis (ADO)
?RCS: patch56: check whether FILE_cnt and FILE_ptr can be assigned to (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:12:11  ram
?RCS:
 patch54: complete rewrite by Tye McQueen to fit modern systems
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stdstdio d_stdiobase stdio_ptr stdio_cnt \
 d_stdio_ptr_lval_sets_cnt d_stdio_ptr_lval_nochange_cnt stdio_base \
 stdio_bufsiz d_stdio_cnt_lval d_stdio_ptr_lval stdio_filbuf: cat \
 Compile contains rm_try d_gnulibc gnulibc_version i_stdlib \
 Setvar Findhdr Oldconfig run to
?MAKE: -pick weed $@ %<
?S:d_stdstdio:
?S: This variable conditionally defines USE_STDIO_PTR if this system
?S: has a FILE structure declaring usable _ptr and _cnt fields (or
?S: equivalent) in stdio.h.
?S:.
?S:stdio_ptr:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _ptr field (or equivalent) of stdio.h's FILE structure.  This will
```

?S: be used to define the macro FILE_ptr(fp).
?S:.
?S:d_stdio_ptr_lval:
?S: This variable conditionally defines STDIO_PTR_LVALUE if the
?S: FILE_ptr macro can be used as an lvalue.
?S:.
?S:stdio_cnt:
?S: This
variable defines how, given a FILE pointer, fp, to access the
?S: _cnt field (or equivalent) of stdio.h's FILE structure. This will
?S: be used to define the macro FILE_cnt(fp).
?S:.
?S:d_stdio_cnt_lval:
?S: This variable conditionally defines STDIO_CNT_LVALUE if the
?S: FILE_cnt macro can be used as an lvalue.
?S:.
?S:d_stdio_ptr_lval_sets_cnt:
?S: This symbol is defined if using the FILE_ptr macro as an lvalue
?S: to increase the pointer by n has the side effect of decreasing the
?S: value of File_cnt(fp) by n.
?S:.
?S:d_stdio_ptr_lval_nochange_cnt:
?S: This symbol is defined if using the FILE_ptr macro as an lvalue
?S: to increase the pointer by n leaves File_cnt(fp) unchanged.
?S:.
?S:stdio_filbuf:
?S: This variable defines how, given a FILE pointer, fp, to tell
?S: stdio to refill its internal buffers (?). This will
?S: be used to define the macro FILE_filbuf(fp).
?S:.
?S:d_stdiobase:
?S: This variable conditionally defines USE_STDIO_BASE if this system
?S: has
a FILE structure declaring a usable _base field (or equivalent)
?S: in stdio.h.
?S:.
?S:stdio_base:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _base field (or equivalent) of stdio.h's FILE structure. This will
?S: be used to define the macro FILE_base(fp).
?S:.
?S:stdio_bufsiz:
?S: This variable defines how, given a FILE pointer, fp, to determine
?S: the number of bytes store in the I/O buffer pointer to by the
?S: _base field (or equivalent) of stdio.h's FILE structure. This will
?S: be used to define the macro FILE_bufsiz(fp).
?S:.
?C:USE_STDIO_PTR ~ d_stdstdio (USE_STD_STDIO STDSTDIO):

```
?C: This symbol is defined if the _ptr and _cnt fields (or similar)
?C: of the stdio FILE structure can be used to access the stdio buffer
?C: for a file handle.  If this is defined, then the FILE_ptr(fp)
?C: and FILE_cnt(fp) macros will also be defined and should be used
?C: to access these fields.
?C:.
?C:FILE_ptr:
?C: This macro is used to access the _ptr
 field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_PTR_LVALUE:
?C: This symbol is defined if the FILE_ptr macro can be used as an
?C: lvalue.
?C:.
?C:FILE_cnt:
?C: This macro is used to access the _cnt field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_CNT_LVALUE:
?C: This symbol is defined if the FILE_cnt macro can be used as an
?C: lvalue.
?C:.
?C:STDIO_PTR_LVAL_SETS_CNT:
?C: This symbol is defined if using the FILE_ptr macro as an lvalue
?C: to increase the pointer by n has the side effect of decreasing the
?C: value of File_cnt(fp) by n.
?C:.
?C:STDIO_PTR_LVAL_NOCHANGE_CNT:
?C: This symbol is defined if using the FILE_ptr macro as an lvalue
?C: to increase the pointer by n leaves File_cnt(fp) unchanged.
?C:.
?C:FILE_filbuf:
?C: This macro is used to access the internal stdio
 _filbuf function
?C: (or equivalent), if STDIO_CNT_LVALUE and STDIO_PTR_LVALUE
?C: are defined.  It is typically either _filbuf or __filbuf.
?C: This macro will only be defined if both STDIO_CNT_LVALUE and
?C: STDIO_PTR_LVALUE are defined.
?C:.
?H:?d_stdstdio:#$d_stdstdio USE_STDIO_PTR /**/
?H:?d_stdstdio:#ifdef USE_STDIO_PTR
?H:#define FILE_ptr(fp) $stdio_ptr
?H:#$d_stdio_ptr_lval STDIO_PTR_LVALUE  /**/
?H:#define FILE_cnt(fp) $stdio_cnt
?H:#$d_stdio_cnt_lval STDIO_CNT_LVALUE  /**/
```

```
?H:#$d_stdio_ptr_lval_sets_cnt STDIO_PTR_LVAL_SETS_CNT /**/
?H:#$d_stdio_ptr_lval_nochange_cnt STDIO_PTR_LVAL_NOCHANGE_CNT /**/
?H:?FILE_filbuf:#if defined(STDIO_PTR_LVALUE) && defined(STDIO_CNT_LVALUE)
?H:?FILE_filbuf:#define FILE_filbuf(fp) $stdio_filbuf  /**/
?H:?FILE_filbuf:#endif
?H:?d_stdstdio:#endif
?H:.
?W:d_stdstdio:FILE_ptr FILE_cnt FILE_filbuf
?C:USE_STDIO_BASE ~ d_stdiobase:
?C: This symbol is defined if the _base field (or similar) of the
?C: stdio FILE structure can be used to access the
 stdio buffer for
?C: a file handle.  If this is defined, then the FILE_base(fp) macro
?C: will also be defined and should be used to access this field.
?C: Also, the FILE_bufsiz(fp) macro will be defined and should be used
?C: to determine the number of bytes in the buffer.  USE_STDIO_BASE
?C: will never be defined unless USE_STDIO_PTR is.
?C:.
?C:FILE_base:
?C: This macro is used to access the _base field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_BASE is defined.
?C:.
?C:FILE_bufsiz:
?C: This macro is used to determine the number of bytes in the I/O
?C: buffer pointed to by _base field (or equivalent) of the FILE
?C: structure pointed to its argument. This macro will always be defined
?C: if USE_STDIO_BASE is defined.
?C:.
?H:?d_stdiobase:#$d_stdiobase USE_STDIO_BASE /**/
?H:?d_stdiobase:#ifdef USE_STDIO_BASE
?H:#define FILE_base(fp) $stdio_base
?H:#define FILE_bufsiz(fp) $stdio_bufsiz
?H:?d_stdiobase:#endif
?H:.
?W:d_stdiobase:FILE_base
 FILE_bufsiz
?T:ptr_lval cnt_lval filbuf xxx
?F:!try
?LINT:set d_stdstdio d_stdiobase
: see if _ptr and _cnt from stdio act std
echo " "

if $contains '_lbfsize' `./findhdr stdio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from BSD.)"
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_p)'
  ptr_lval=$define
```

```
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 '') stdio_cnt='((fp)->_r)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 '') stdio_base='((fp)->_ub._base ? (fp)->_ub._base : (fp)->_bf._base)';;
 esac
 case "$stdio_bufsiz" in
 '') stdio_bufsiz='((fp)->_ub._base ? (fp)->_ub._size : (fp)->_bf._size)';;
 esac
elif $contains '_IO_fpos_t' `./findhdr stdio.h` `./findhdr libio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from Linux.)"
 case "$stdio_ptr" in
 '') stdio_ptr='((fp)->_IO_read_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt"
 in
 '') stdio_cnt='((fp)->_IO_read_end - (fp)->_IO_read_ptr)'
  cnt_lval=$undef
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 '') stdio_base='((fp)->_IO_read_base)';;
 esac
 case "$stdio_bufsiz" in
 '') stdio_bufsiz='((fp)->_IO_read_end - (fp)->_IO_read_base)';;
 esac
else
 case "$stdio_ptr" in
 '') stdio_ptr='((fp)->_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 '') stdio_cnt='((fp)->_cnt)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
```

```
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_cnt + (fp)->_ptr - (fp)->_base)';;
 esac
fi

: test whether _ptr and _cnt really work
echo "Checking how std your stdio is..." >&4
$cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if
 (
  18 <= FILE_cnt(fp) &&
  strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
 )
  exit(0);
 exit(1);
}
EOP
val="$undef"
set try
if eval $compile && $to try.c; then
 if $run ./try; then
  echo "Your stdio acts pretty std."
  val="$define"
 else
  echo "Your stdio isn't very std."
 fi
else
 echo "Your stdio doesn't appear very std."
fi
$rm_try

# glibc 2.2.90 and above apparently change stdio streams so Perl's
# direct buffer manipulation no longer works.  The Configure tests
# should be changed to correctly detect this, but until then,
```

```
# the following check should at least let perl compile and run.
# (This quick fix should be updated before 5.8.1.)
# To be defensive, reject all unknown versions, and all versions  > 2.2.9.
# A. Dougherty, June 3, 2002.
case "$d_gnulibc" in
$define)
 case "$gnulibc_version" in
 2.[01]*)  ;;
 2.2) ;;
 2.2.[0-9]) ;;
 *)  echo "But I will not snoop inside glibc $gnulibc_version stdio buffers."
  val="$undef"
  ;;
 esac
 ;;
esac
set d_stdstdio
eval
 $setvar

@if STDIO_PTR_LVALUE || d_stdio_ptr_lval
: Can _ptr be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$ptr_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_ptr_lval
eval $setvar
@end

@if STDIO_CNT_LVALUE || d_stdio_cnt_lval
: Can _cnt be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$cnt_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_cnt_lval
eval $setvar
@end

@if FILE_filbuf
: How to access the stdio _filbuf or __filbuf function.
: If this fails, check how the getc macro in stdio.h works.
case "${d_stdio_ptr_lval}${d_stdio_cnt_lval}" in
${define}${define})
 : Try $hint value, if any, then _filbuf, __filbuf, _fill, then punt.
```

```
 : _fill is for os/2.
 xxx='notok'
 for filbuf in $stdio_filbuf '_filbuf(fp)' '__filbuf(fp) ' '_fill(fp)' ; do
  $cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define
 FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#define FILE_filbuf(fp) $filbuf
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 c = getc(fp);
 c = FILE_filbuf(fp);  /* Just looking for linker errors.*/
 exit(0);
}
EOP
  set try
  if eval $compile && $to try.c && $run ./try; then
   echo "Your stdio appears to use $filbuf"
   stdio_filbuf="$filbuf"
   xxx='ok'
   break
  else
   echo "Hmm.  $filbuf doesn't seem to work."
  fi
  $rm_try
 done
 case "$xxx" in
 notok) echo "I can't figure out how to access _filbuf"
   echo "I'll just have to work around it."
   d_stdio_ptr_lval="$undef"
   d_stdio_cnt_lval="$undef"
   ;;
 esac
 ;;
esac
@end

@if STDIO_PTR_LVALUE
: test whether setting _ptr sets _cnt as a side effect
d_stdio_ptr_lval_sets_cnt="$undef"
d_stdio_ptr_lval_nochange_cnt="$undef"
case "$d_stdio_ptr_lval$d_stdstdio" in
```

```
$define$define)
 echo "Checking to see what happens if we set the stdio ptr..." >&4
$cat >try.c <<EOP
#include <stdio.h>
/* Can
 we scream? */
/* Eat dust sed :-) */
/* In the buffer space, no one can hear you scream. */
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#include <sys/types.h>
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 char *ptr;
 size_t cnt;
 if (!fp) {
     puts("Fail even to read");
     exit(1);
 }
 c = getc(fp); /* Read away the first # */
 if (c == EOF) {
     puts("Fail even to read");
     exit(1);
 }
 if (!(
  18 <= FILE_cnt(fp) &&
  strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
 )) {
  puts("Fail even to read");
  exit (1);
 }
 ptr = (char*) FILE_ptr(fp);
 cnt = (size_t)FILE_cnt(fp);

 FILE_ptr(fp) += 42;

 if ((char*)FILE_ptr(fp) != (ptr + 42)) {
  printf("Fail ptr check %p != %p", FILE_ptr(fp), (ptr + 42));
  exit (1);
 }
 if (FILE_cnt(fp) <= 20) {
  printf ("Fail (<20 chars to test)");
  exit (1);
```

```
 }
 if (strncmp(FILE_ptr(fp), "Eat dust sed :-) */\n", 20) != 0) {
  puts("Fail compare");
  exit
 (1);
 }
 if (cnt == FILE_cnt(fp)) {
  puts("Pass_unchanged");
  exit (0);
 }
 if (FILE_cnt(fp) == (cnt - 42)) {
  puts("Pass_changed");
  exit (0);
 }
 printf("Fail count was %d now %d\n", cnt, FILE_cnt(fp));
 return 1;

}
EOP
 set try
 if eval $compile && $to try.c; then
  case `$run ./try` in
  Pass_changed)
   echo "Increasing ptr in your stdio decreases cnt by the same amount.  Good." >&4
   d_stdio_ptr_lval_sets_cnt="$define" ;;
  Pass_unchanged)
   echo "Increasing ptr in your stdio leaves cnt unchanged.  Good." >&4
   d_stdio_ptr_lval_nochange_cnt="$define" ;;
  Fail*)
   echo "Increasing ptr in your stdio didn't do exactly what I expected.  We'll not be doing that then." >&4 ;;
  *)
   echo "It appears attempting to set ptr in your stdio is a bad plan." >&4 ;;
 esac
 else
  echo "It seems we can't set ptr in your stdio.  Nevermind." >&4
 fi
 $rm_try
 ;;
esac
@end

@if d_stdiobase || USE_STDIO_BASE || FILE_base || FILE_bufsiz
: see if _base is also standard
val="$undef"
case
 "$d_stdstdio" in
$define)
 $cat >try.c <<EOP
```

```
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_base(fp) $stdio_base
#define FILE_bufsiz(fp) $stdio_bufsiz
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  19 <= FILE_bufsiz(fp) &&
  strncmp(FILE_base(fp), "#include <stdio.h>\n", 19) == 0
 )
  exit(0);
 exit(1);
}
EOP
 set try
 if eval $compile && $to try.c; then
  if $run ./try; then
   echo "And its _base field acts std."
   val="$define"
  else
   echo "But its _base field isn't std."
  fi
 else
  echo "However, it seems to be lacking the _base field."
 fi
 $rm_try
 ;;
esac
set d_stdiobase
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_stdstdio.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lgamma: Inlibc
?MAKE: -pick add $@ %<
?S:d_lgamma:
?S: This variable conditionally defines the HAS_LGAMMA symbol, which
```

```
?S: indicates to the C program that the lgamma() routine is available
?S: for the log gamma function.  See also d_tgamma and d_lgamma_r.
?S:.
?C:HAS_LGAMMA:
?C: This symbol, if defined, indicates that the lgamma routine is
?C: available to do the log gamma function.  See also HAS_TGAMMA and
?C: HAS_LGAMMA_R.
?C:.
?H:#$d_lgamma HAS_LGAMMA  /**/
?H:.
?LINT:set d_lgamma
: see if lgamma exists
set lgamma d_lgamma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lgamma.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setpgid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:49  ram
?RCS: patch61: reworded symbol comments
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:40  ram
?RCS: patch16: created
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpgid:
?S: This variable conditionally defines the HAS_SETPGID symbol if the
?S: setpgid(pid, gpid) function is
 available to set process group ID.
?S:.
?C:HAS_SETPGID:
?C: This symbol, if defined, indicates that the setpgid(pid, gpid)
```

```
?C: routine is available to set process group ID.
?C:.
?H:#$d_setpgid HAS_SETPGID /**/
?H:.
?LINT:set d_setpgid
: see if setpgid exists
set setpgid d_setpgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgrp2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgrp2.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpgrp2:
?S: This variable conditionally defines the HAS_GETPGRP2 symbol, which
?S: indicates to the C program that the getpgrp2() (as in DG/UX) routine
?S: is available to get the current process group.
?S:.
?C:HAS_GETPGRP2 (GETPGRP2):
?C: This symbol, if defined, indicates that the
 getpgrp2() (as in DG/UX)
?C: routine is available to get the current process group.
?C:.
?H:#$d_getpgrp2 HAS_GETPGRP2  /**/
?H:.
?LINT:set d_getpgrp2
: see if getpgrp2 exists
set getpgrp2 d_getpgrp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgrp2.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_socklen_t: Inhdr cat rm_try Setvar Compile d_socket sizetype
?MAKE: -pick add $@ %<
?S:d_socklen_t:
?S: This symbol will be defined if the C compiler supports socklen_t.
?S:.
?C:HAS_SOCKLEN_T:
?C: This symbol will defined if the C compiler supports socklen_t.
?C: Usually the <sys/socket.h> needs to be included.
?C:.
?H:#$d_socklen_t     HAS_SOCKLEN_T              /**/
?H:.
?LINT:set d_socklen_t
: check for socklen_t
echo " "
echo "Checking to see if you have socklen_t..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#$d_socket
 HAS_SOCKET
#ifdef HAS_SOCKET
#include <sys/socket.h>
#endif
int main() { socklen_t x = 16; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have socklen_t."
else
 val="$undef"
 echo "You do not have socklen_t."
 case "$sizetype" in
 size_t) echo "(You do have size_t, that might work. Some people are happy with just an int.)" ;;
 esac
fi
$rm_try
```

```
set d_socklen_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_socklen_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: locdist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: locdist.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  15:09:20  ram
?RCS: patch23: added support for multi-state regions (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:locdist orgdist citydist statedist multistatedist cntrydist contdist: \
 test newslibexp cat Myread Oldconfig
?MAKE: -pick add $@ %<
?S:locdist:
?S: This variable contains the eventual value of the LOCDIST symbol,
?S: which
 is the local organization's distribution name for news.
?S:.
?S:orgdist:
?S: This variable contains the eventual value of the ORGDIST symbol,
?S: which is the organization's distribution name for news.
?S:.
?S:citydist:
?S: This variable contains the eventual value of the CITYDIST symbol,
?S: which is the city's distribution name for news.
?S:.
?S:statedist:
?S: This variable contains the eventual value of the STATEDIST symbol,
?S: which is the state's or province's distribution name for news.
?S:.
?S:multistatedist:
?S: This variable contains the eventual value of the MULTISTATEDIST symbol,
?S: which is the news distribution code for multi-state region.
?S:.
```

```
?S:cntrydist:
?S: This variable contains the eventual value of the CNTRYDIST symbol,
?S: which is the country's distribution name for news.
?S:.
?S:contdist:
?S: This variable contains the eventual value of the CONTDIST symbol,
?S: which is the continent's distribution name for news.
?S:.
?C:LOCDIST:
?C: This symbol contains the
 distribution name for the news system that
?C: restricts article distribution to the local organization.
?C:.
?C:ORGDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the organization.
?C:.
?C:CITYDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the city.
?C:.
?C:STATEDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the state or province.
?C:.
?C:MULTISTATEDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to a multi-state region.
?C:.
?C:CNTRYDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the country.
?C:.
?C:CONTDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the continent.
?C:.
?H:#define LOCDIST
 "$locdist"  /**/
?H:#define ORGDIST "$orgdist"  /**/
?H:#define CITYDIST "$citydist"  /**/
?H:#define MULTISTATEDIST "$multistatedist" /**/
?H:#define STATEDIST "$statedist"  /**/
?H:#define CNTRYDIST "$cntrydist"  /**/
?H:#define CONTDIST "$contdist"  /**/
?H:.
: get the local distributions
$cat <<'EOH'
```

```
Distribution groups are the things you use on the Distribution line to limit
where an article will go to.  You are likely to be a member of several
distribution groups, such as organization, city, state, province, country,
continent, etc.  For example, Los Angeles has the distribution code "la",
New Jersey has the code "nj", and Europe has the code "eunet".

The categories you will be asked are:

local organization (Could be just one machine or a cluster or an office)
organization  att, dec, kgb, ...
city   la, ny, mosc, ...
state/province  ca, nj, bc, ...
multi-state region pnw, ne, ...
country   usa, can, rok, whatever
continent  na (North America), asia, etc.

EOH
if $test
 -f $newslibexp/distributions; then
 case "$silent" in
 true) ;;
 *) dflt='Hit return to continue'
  rp=''
  . ./myread
  ;;
 esac
 echo "Here is your distributions file:" >&4
 echo " " >&4
 $cat >&4 $newslibexp/distributions
 echo " " >&4
fi
echo "Use 'none' for any distributions you don't have."
echo " "
case "$locdist" in
'') dflt="none";;
*)  dflt="$locdist";;
esac
rp="What is the distribution code for your local organization?"
. ./myread
locdist="$ans"
case "$orgdist" in
'') dflt="none";;
*)  dflt="$orgdist";;
esac
rp="What is the distribution code for your organization?"
. ./myread
orgdist="$ans"
```

```
case "$citydist" in
") dflt="none";;
*)  dflt="$citydist";;
esac
rp="What is the distribution code for your city?"
. ./myread
citydist="$ans"
case "$statedist" in
") dflt="none";;
*)  dflt="$statedist";;
esac
rp="What is the distribution code for your state/province?"
. ./myread
statedist="$ans"
case "$multistatedist" in
") dflt="none";;
*) dflt="$multistatedist";;
esac
rp="What is the
 distribution code for your multi-state region?"
. ./myread
multistatedist="$ans"
case "$cntrydist" in
") dflt="none";;
*)  dflt="$cntrydist";;
esac
rp="What is the distribution code for your country?"
. ./myread
cntrydist="$ans"
case "$contdist" in
") dflt="none";;
*)  dflt="$contdist";;
esac
rp="What is the distribution code for your continent?"
. ./myread
contdist="$ans"
$cat <<'EOM'

If you have any other distribution groups you will need to edit Pnews
and newsetup to add them.
EOM
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/locdist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ilogbl: Inlibc
?MAKE: -pick add $@ %<
?S:d_ilogbl:
?S: This variable conditionally defines the HAS_ILOGBL symbol, which
?S: indicates to the C program that the ilogbl() routine is available
?S: for extracting the exponent of long double x as a signed integer.
?S: If scalbnl is also present we can emulate frexpl.
?S:.
?C:HAS_ILOGBL:
?C: This symbol, if defined, indicates that the ilogbl routine is
?C: available.  If scalbnl is also present we can emulate frexpl.
?C:.
?H:#$d_ilogbl HAS_ILOGBL  /**/
?H:.
?LINT:set d_ilogbl
: see if ilogbl exists
set ilogbl d_ilogbl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ilogbl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usedtrace.U,v $
?RCS:
?RCS: Copyright (c) 2008 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usedtrace.U,v $
?RCS:
?MAKE:usedtrace dtrace: Myread Oldconfig Setvar Getfile test
?MAKE: -pick add $@ %<
?Y:TOP
?S:usedtrace:
?S: This variable indicates whether we are compiling with dtrace
?S: support. See also dtrace.
?S:.
?S:dtrace:
?S: This variable holds the location of the dtrace executable.
?S:.
?C:USE_DTRACE:
```

```
?C: This symbol, if defined, indicates that Perl should
?C: be built with support for DTrace.
?C:.
?H:#$usedtrace USE_DTRACE  /**/
?H:.
?T:dflt_dtrace
?LINT:set usedtrace
?LINT:set dtrace
: DTrace support
dflt_dtrace='/usr/sbin/dtrace'
$test -x /usr/bin/dtrace && dflt_dtrace='/usr/bin/dtrace'

cat <<EOM

Perl can be built to support DTrace on platforms that support
 it.
DTrace is a diagnosis and performance analysis tool from Sun.

If this doesn't make any sense to you, just accept the default.
EOM

while $test 1 ; do
 case "$usedtrace" in
 $define|true|[yY]*)
  dflt='y'
  ;;
 $undef|false|[nN]*)
  dflt='n'
  dflt_dtrace=""
  ;;
 ?*)
  dflt='y'
  dflt_dtrace=$usedtrace
  ;;
 *)
  dflt='n'
  ;;
 esac

 rp='Support DTrace if available?'
 . ./myread
 case "$ans" in
 y|Y) val="$define" ;;
 *)      val="$undef" ;;
 esac
 set usedtrace
 eval $setvar
```

```
 test "X$usedtrace" != "X$define" && break

 echo " "
 rp='Where is the dtrace executable?'
 dflt=$dflt_dtrace
 . ./getfile
 val="$ans"
 set dtrace
 eval $setvar

 if $test -f $dtrace
 then
  if $dtrace -h -s ../perldtrace.d \
   -o perldtrace.tmp >/dev/null 2>&1 \
   && rm -f perldtrace.tmp
  then
   echo " "
   echo "Good: your $dtrace knows about the -h flag."
  else
   cat >&2 <<EOM

*** $me:  Fatal Error:  $dtrace doesn't support -h flag
***
*** Your installed dtrace doesn't support the -h switch to
 compile a D
*** program into a C header. Can't continue.

EOM
   exit 1
  fi
  break;
 fi

 case "$fastread" in
 yes)
  cat >&2 <<EOM

*** $me:  Fatal Error:  $dtrace not found.
*** Can't continue.

EOM
  exit 1
  ;;
 *)
  echo "*** $dtrace was not found."
  echo " "
  ;;
 esac
```

```
done

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usedtrace.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sitehtml1dir sitehtml1direxp installsitehtml1dir: Getfile \
 Setprefixvar prefix siteprefix html1dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitehtml1dir=''
?S:sitehtml1dir:
?S: This variable contains the name of the directory in which site-specific
?S: html source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After perl
 has been installed, users may install their own local
?S: html pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitehtml1direxp=''
?S:sitehtml1direxp:
?S: This variable is the same as the sitehtml1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsitehtml1dir=''
?S:installsitehtml1dir:
?S: This variable is really the same as sitehtml1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: html1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsitehtml1dir
?LINT:set sitehtml1dir
```

```
?LINT:set sitehtml1direxp
: determine where add-on html pages go
: There is no standard location, so try to copy the previously-selected
: directory structure for the core html pages.
case "$sitehtml1dir" in
")
   dflt=`echo "$html1dir" | $sed "s#^$prefix#$siteprefix#"` ;;
*)     dflt=$sitehtml1dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname where the site-specific html pages should be installed?'
. ./getfile
prefixvar=sitehtml1dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitehtml1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Tr.U,v 3.0.1.2 1994/10/29 18:00:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Tr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  18:00:54  ram
?RCS: patch43: forgot to quote $@ to protect against "evil" characters
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:58:35  ram
?RCS: patch36: created
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a character translation. It catches translations to uppercase or
?X: to lowercase, and then invokes the real tr to perform the job.
?X:
?X: This unit is necessary
 on HP machines (HP strikes again!) with non-ascii
?X: ROMAN8-charset, where normal letters are not arranged in a row, so a-z
?X: covers not the whole alphabet but lots of special chars. This was reported
```

```
?X: by Andreas Sahlbach <a.sahlbach@tu-bs.de>.
?X:
?X: Units performing a tr '[A-Z]' '[a-z]' or the other way round should include
?X: us in their dependency and use ./tr instead.
?X:
?MAKE:Tr: startsh tr eunicefix
?MAKE: -pick add $@ %<
?F:./tr
?T:up low
: see whether [:lower:] and [:upper:] are supported character classes
echo " "
case "`echo AbyZ | $tr '[:lower:]' '[:upper:]' 2>/dev/null`"-"`echo AbyZ | $tr '[:upper:]' '[:lower:]' 2>/dev/null`" in
ABYZ-abyz)
 echo "Good, your tr supports [:lower:] and [:upper:] to convert case." >&4
 up='[:upper:]'
 low='[:lower:]'
 ;;
*) # There is a discontinuity in EBCDIC between 'R' and 'S'
 # (0xd9 and 0xe2), therefore that is a nice testing point.
 if test "X$up" = X -o "X$low" = X; then
    case "`echo RS | $tr '[R-S]' '[r-s]' 2>/dev/null`"
 in
    rs) up='[A-Z]'
  low='[a-z]'
  ;;
    esac
 fi
 if test "X$up" = X -o "X$low" = X; then
    case "`echo RS | $tr R-S r-s 2>/dev/null`" in
    rs) up='A-Z'
  low='a-z'
  ;;
    esac
 fi
 if test "X$up" = X -o "X$low" = X; then
    case "`echo RS | od -x 2>/dev/null`" in
    *D9E2*|*d9e2*)
  echo "Hey, this might be EBCDIC." >&4
  if test "X$up" = X -o "X$low" = X; then
     case "`echo RS | $tr '[A-IJ-RS-Z]' '[a-ij-rs-z]' 2>/dev/null`" in
     rs) up='[A-IJ-RS-Z]'
   low='[a-ij-rs-z]'
   ;;
     esac
  fi
  if test "X$up" = X -o "X$low" = X; then
     case "`echo RS | $tr A-IJ-RS-Z a-ij-rs-z 2>/dev/null`" in
     rs) up='A-IJ-RS-Z'
```

```
   low='a-ij-rs-z'
   ;;
      esac
  fi
  ;;
     esac
 fi
esac
case "`echo RS | $tr \"$up\" \"$low\" 2>/dev/null`" in
rs)
   echo "Using $up and $low to convert case." >&4
   ;;
*)
   echo "I don't know how to translate letters from upper to lower case." >&4
   echo "Your tr is not acting any way I know of." >&4
   exit 1
   ;;
esac
:
 set up the translation script tr, must be called with ./tr of course
cat >tr <<EOSC
$startsh
case "\$1\$2" in
'[A-Z][a-z]') exec $tr '$up' '$low';;
'[a-z][A-Z]') exec $tr '$low' '$up';;
esac
exec $tr "\$@"
EOSC
chmod +x tr
$eunicefix tr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Tr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sjis2jis.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sjis2jis.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:25  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_sjis2jis: Inlibc
?MAKE: -pick add $@ %<
?S:d_sjis2jis:
?S: This variable conditionally defines the HAS_SJIS2JIS symbol, which
?S: indicates to the C program that the sjis2jis() routine is available
?S: to convert SJIS to JIS.
?S:.
?C:HAS_SJIS2JIS:
?C: This symbol, if defined, indicates that the sjis2jis routine is
?C: available
 to convert SJIS to JIS.
?C:.
?H:#$d_sjis2jis HAS_SJIS2JIS  /**/
?H:.
?LINT:set d_sjis2jis
: see if sjis2jis exists
set sjis2jis d_sjis2jis
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sjis2jis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Instruct.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:02:55  ram
?RCS: patch61: logname / whoami sequence rewritten to use case
?RCS:
?RCS: Revision 3.0.1.2  1995/02/15  14:11:34  ram
?RCS: patch51: author name now appears at the end of the paragraph (WED)
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:12:05  ram
?RCS: patch45: now documents the & escape to turn -d on at the read prompt
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X:
 This unit spew out the directions that we want everyone to read.  I try to
?X: keep the first "pagefull" much less than a page since they don't know it
?X: isn't going to go shooting off the top of the screen, and we don't want
?X: to panic them yet.
?X:
?MAKE:Instruct: Begin Myread Configdir contains
?MAKE: -pick wipe $@ %<
?T:user needman firsttime
: general instructions
needman=true
firsttime=true
user=`(logname) 2>/dev/null`
case "$user" in
") user=`whoami 2>&1`;;
esac
if $contains "^$user\$" ../.config/instruct >/dev/null 2>&1; then
 firsttime=false
 echo " "
 rp='Would you like to see the instructions?'
 dflt=n
 . ./myread
 case "$ans" in
 [yY]*) ;;
 *) needman=false;;
 esac
fi
if $needman; then
 cat <<EOH

This installation shell script will examine your system and ask you questions
to determine how the <PACKAGENAME> package should be installed. If you get
stuck on a question, you may use a ! shell escape to start a subshell or
execute a command.  Many of the questions will have
 default answers in square
brackets; typing carriage return will give you the default.

On some of the questions which ask for file or directory names you are allowed
to use the ~name construct to specify the login directory belonging to "name",
even if you don't have a shell which knows about that.  Questions where this is
allowed will be marked "(~name ok)".

EOH
 rp="
 dflt='Type carriage return to continue'
 . ./myread
 cat <<'EOH'
```

```
The prompter used in this script allows you to use shell variables and
backticks in your answers.  You may use $1, $2, etc...  to refer to the words
in the default answer, as if the default line was a set of arguments given to a
script shell.  This means you may also use $* to repeat the whole default line,
so you do not have to re-type everything to add something to the default.

Everytime there is a substitution, you will have to confirm.  If there is an
error (e.g. an unmatched backtick), the default answer will remain unchanged
and you will be prompted
 again.

If you are in a hurry, you may run 'Configure -d'.  This will bypass nearly all
the questions and use the computed defaults (or the previous answers if there
was already a config.sh file). Type 'Configure -h' for a list of options.
You may also start interactively and then answer '& -d' at any prompt to turn
on the non-interactive behaviour for the remainder of the execution.

EOH
 . ./myread
 cat <<EOH

Much effort has been expended to ensure that this shell script will run on any
Unix system.  If despite that it blows up on yours, your best bet is to edit
Configure and run it again.  If you can't run Configure for some reason,
you'll have to generate a config.sh file by hand.  Whatever problems you
have, let me (<MAINTLOC>) know how I blew it.

This installation script affects things in two ways:

1) it may do direct variable substitutions on some of the files included
  in this kit.
2) it builds a config.h file for inclusion in C programs.  You may edit
  any of these
 files as the need arises after running this script.

If you make a mistake on a question, there is no easy way to back up to it
currently.  The easiest thing to do is to edit config.sh and rerun all the SH
files.  Configure will offer to let you do this before it runs the SH files.

EOH
?X: In case they played with the prompter...
 dflt='Type carriage return to continue'
 . ./myread
 case "$firsttime" in
 true) echo $user >>../.config/instruct;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Instruct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_db.U,v 3.0.1.3 1995/07/25 14:10:22 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_db.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:10:22  ram
?RCS: patch56: conditionally use const in test programs (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:14:42  ram
?RCS: patch54: extended for more intimate DB probing (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:21:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_db db_hashtype db_prefixtype \
 db_version_major
 db_version_minor db_version_patch : \
 Inhdr +cc +ccflags rm_try compiler_warning cat \
 Compile libs sed run i_stdlib
?MAKE: -pick add $@ %<
?S:i_db:
?S: This variable conditionally defines the I_DB symbol, and indicates
?S: whether a C program may include Berkeley's DB include file <db.h>.
?S:.
?S:db_hashtype:
?S: This variable contains the type of the hash structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is u_int32_t.
?S:.
?S:db_prefixtype:
?S: This variable contains the type of the prefix structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is size_t.
?S:.
?S:db_version_major:
?S: This variable contains the major version number of
```

```
?S: Berkeley DB found in the <db.h> header file.
?S:.
?S:db_version_minor:
?S: This variable contains the minor version number of
?S: Berkeley DB found in the <db.h> header file.
?S: For DB version 1 this is always 0.
?S:.
?S:db_version_patch:
?S: This
 variable contains the patch version number of
?S: Berkeley DB found in the <db.h> header file.
?S: For DB version 1 this is always 0.
?S:.
?C:I_DB:
?C: This symbol, if defined, indicates to the C program that it should
?C: include Berkeley's DB include file <db.h>.
?C:.
?C:DB_Prefix_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is u_int32_t.
?C:.
?C:DB_Hash_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is size_t.
?C:.
?C:DB_VERSION_MAJOR_CFG:
?C: This symbol, if defined, defines the major version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
?C:.
?C:DB_VERSION_MINOR_CFG:
?C: This symbol, if defined, defines the minor version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
?C: For
 DB version 1 this is always 0.
?C:.
?C:DB_VERSION_PATCH_CFG:
?C: This symbol, if defined, defines the patch version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
?C: For DB version 1 this is always 0.
?C:.
?H:#$i_db I_DB  /**/
?H:#define DB_Hash_t $db_hashtype  /**/
?H:#define DB_Prefix_t $db_prefixtype  /**/
?H:#define DB_VERSION_MAJOR_CFG $db_version_major /**/
?H:#define DB_VERSION_MINOR_CFG $db_version_minor /**/
?H:#define DB_VERSION_PATCH_CFG $db_version_patch /**/
```

```
?H:.
?F:!try
?LINT:change libs
: see if this is a db.h system
set db.h i_db
eval $inhdr

case "$i_db" in
$define)
 : Check db version.
 echo " "
 echo "Checking Berkeley DB version ..." >&4
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <db.h>
int main(int argc, char *argv[])
{
#ifdef DB_VERSION_MAJOR /* DB version >= 2 */
   int Major, Minor, Patch ;
   unsigned long Version ;
   (void)db_version(&Major,
 &Minor, &Patch) ;
   if (argc == 2) {
       printf("%d %d %d %d %d %d\n",
             DB_VERSION_MAJOR, DB_VERSION_MINOR, DB_VERSION_PATCH,
             Major, Minor, Patch);
       exit(0);
   }
   printf("You have Berkeley DB Version 2 or greater.\n");

   printf("db.h is from Berkeley DB Version %d.%d.%d\n",
  DB_VERSION_MAJOR, DB_VERSION_MINOR, DB_VERSION_PATCH);
   printf("libdb is from Berkeley DB Version %d.%d.%d\n",
  Major, Minor, Patch) ;

   /* check that db.h & libdb are compatible */
   if (DB_VERSION_MAJOR != Major || DB_VERSION_MINOR != Minor || DB_VERSION_PATCH != Patch) {
 printf("db.h and libdb are incompatible.\n") ;
       exit(3);
   }

   printf("db.h and libdb are compatible.\n") ;
```

```
  Version = DB_VERSION_MAJOR * 1000000 + DB_VERSION_MINOR * 1000
 + DB_VERSION_PATCH ;

  /* needs to be >= 2.3.4 */
  if (Version < 2003004) {
  /* if (DB_VERSION_MAJOR == 2 && DB_VERSION_MINOR == 0 && DB_VERSION_PATCH < 5) { */
 printf("Perl
 needs Berkeley DB 2.3.4 or greater.\n") ;
      exit(2);
  }

  exit(0);
#else
#if defined(_DB_H_) && defined(BTREEMAGIC) && defined(HASHMAGIC)
  if (argc == 2) {
      printf("1 0 0\n");
      exit(0);
  }
  printf("You have Berkeley DB Version 1.\n");
  exit(0); /* DB version < 2: the coast is clear. */
#else
  exit(1); /* <db.h> not Berkeley DB? */
#endif
#endif
}
EOCP
 set try
 if eval $compile_ok && $run ./try; then
  echo 'Looks OK.' >&4
  set `$run ./try 1`
  db_version_major=$1
  db_version_minor=$2
  db_version_patch=$3
 else
  echo "I can't use Berkeley DB with your <db.h>.  I'll disable Berkeley DB." >&4
  i_db=$undef
  case " $libs " in
  *"-ldb "*)
   : Remove db from list of libraries to use
   echo "Removing unusable -ldb from library list" >&4
   set `echo X $libs | $sed -e 's/-ldb / /' -e 's/-ldb$//'`
   shift
   libs="$*"
   echo "libs = $libs" >&4
   ;;
  esac
 fi
 $rm_try
```

```
 ;;
esac

@if DB_Hash_t
case "$i_db" in
define)
 : Check the return
 type needed for hash
 echo " "
 echo "Checking return type needed for hash for Berkeley DB ..." >&4
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <db.h>

#ifndef DB_VERSION_MAJOR
u_int32_t hash_cb (const void* ptr, size_t size)
{
 return 0;
}
HASHINFO info;
int main()
{
 info.hash = hash_cb;
}
#endif
EOCP
 if $cc $ccflags -c try.c >try.out 2>&1 ; then
  if $compiler_warning try.out >>/dev/null 2>&1 ; then
   db_hashtype='int'
  else
   db_hashtype='u_int32_t'
  fi
 else
  : XXX Maybe we should just give up here.
  db_hashtype=u_int32_t
  $cat try.out >&4
  echo "Help:  I can't seem to compile the db test program." >&4
  echo "Something's wrong, but I'll assume you use $db_hashtype." >&4
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_hashtype for hash."
 ;;
*) db_hashtype=u_int32_t
 ;;
esac
@end
@if DB_Prefix_t
case "$i_db" in
```

```
define)
 : Check the return type needed for prefix
 echo " "
 echo "Checking return type needed for prefix for Berkeley DB ..." >&4
 cat >try.c <<EOCP
#include
 <sys/types.h>
#include <db.h>

#ifndef DB_VERSION_MAJOR
size_t prefix_cb (const DBT *key1, const DBT *key2)
{
 return 0;
}
BTREEINFO info;
int main()
{
 info.prefix = prefix_cb;
}
#endif
EOCP
 if $cc $ccflags -c try.c  >try.out 2>&1 ; then
  if $compiler_warning try.out >>/dev/null 2>&1 ; then
   db_prefixtype='int'
  else
   db_prefixtype='size_t'
  fi
 else
  db_prefixtype='size_t'
  : XXX Maybe we should just give up here.
  $cat try.out >&4
  echo "Help:  I can't seem to compile the db test program." >&4
  echo "Something's wrong, but I'll assume you use $db_prefixtype." >&4
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_prefixtype for prefix."
 ;;
*) db_prefixtype='size_t'
 ;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_db.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_neterrno.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:20:29  ram
?RCS: patch36: forgot to initialize 'val' to an empty value (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:22:10  ram
?RCS: patch32: removed spurious echo
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:02:05  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:i_neterrno: Inhdr +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:i_neterrno:
?S: This variable
 conditionally defines the I_NET_ERRNO symbol, which
?S: indicates to the C program that <net/errno.h> exists and should
?S: be included.
?S:.
?C:I_NET_ERRNO:
?C: This symbol, if defined, indicates that <net/errno.h> exists and
?C: should be included.
?C:.
?H:#$i_neterrno I_NET_ERRNO  /**/
?H:.
?LINT:set i_neterrno
: see if net/errno.h is available
val=''
set net/errno.h val
eval $inhdr

: Unfortunately, it causes problems on some systems.  Arrgh.
case "$val" in
$define)
 cat > try.c <<'EOM'
#include <stdio.h>
#include <errno.h>
#include <net/errno.h>
int func()
```

```
{
 return ENOTSOCK;
}
EOM
 if $cc $ccflags -c try.c >/dev/null 2>&1; then
  echo "We'll be including <net/errno.h>." >&4
 else
  echo "We won't be including <net/errno.h>." >&4
  val="$undef"
 fi
 $rm_try
 ;;
esac
set i_neterrno
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_neterrno.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigaction.U,v 3.0.1.1 1997/02/28 15:44:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sigaction.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:29  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sigaction: Csym Compile Setvar cat rm_try i_stdlib
?MAKE: -pick add $@ %<
?S:d_sigaction:
?S: This variable conditionally defines the HAS_SIGACTION symbol, which
?S: indicates that the Vr4 sigaction() routine is available.
?S:.
?C:HAS_SIGACTION:
?C: This symbol, if defined, indicates that Vr4's sigaction() routine
?C: is available.
?C:.
?H:#$d_sigaction
 HAS_SIGACTION /**/
?H:.
```

```
?T:val
?LINT:set d_sigaction
: see if we have sigaction
echo " "
if set sigaction val -f d_sigaction; eval $csym; $val; then
 echo 'sigaction() found.' >&4
?X:
?X: Solaris 2.5_x86 with SunWorks Pro C 3.0.1 doesn't have a complete
?X: sigaction structure if compiled with cc -Xc.  This compile test
?X: will fail then.  <doughera@lafcol.lafayette.edu>
?X:
 $cat > try.c <<EOP
#include <stdio.h>
#include <sys/types.h>
#include <signal.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
   struct sigaction act, oact;
   act.sa_flags = 0;
   oact.sa_handler = 0;
   /* so that act and oact are used */
   exit(act.sa_flags == 0 &&  oact.sa_handler == 0);
}
EOP
 set try
 if eval $compile_ok; then
  val="$define"
 else
  echo "But you don't seem to have a usable struct sigaction." >&4
  val="$undef"
 fi
else
 echo 'sigaction NOT found.' >&4
 val="$undef"
fi
set d_sigaction; eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sigaction.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:trnl: Nothing
?MAKE: -pick add $@ %<
?S:trnl:
?S: This variable contains the value to be passed to the tr(1)
?S: command to transliterate a newline.  Typical values are
?S: '\012' and '\n'.  This is needed for EBCDIC systems where
?S: newline is not necessarily '\012'.
?S:.
?T: DJGPP
: Find the appropriate value for a newline for tr
?X: We can't
 use $tr since that would cause a circular dependency via Myread
?X: dos djgpp uses '\015\012', but reportedly is happy with '\012' in the
?X: tr command.  I don't know why it passes the '\n' test but later
?X: refuses to work correctly with it.  --AD  6/14/98
if test -n "$DJGPP"; then
	trnl='\012'
fi
if test X"$trnl" = X; then
 case "`echo foo | tr '\n' x 2>/dev/null`" in
 foox) trnl='\n' ;;
 esac
fi
if test X"$trnl" = X; then
 case "`echo foo | tr '\012' x 2>/dev/null`" in
 foox) trnl='\012' ;;
 esac
fi
if test X"$trnl" = X; then
	case "`echo foo | tr '\r\n' xy 2>/dev/null`" in
	fooxy) trnl='\n\r' ;;
	esac
fi
if test X"$trnl" = X; then
 cat <<EOM >&2
```

```
$me: Fatal Error: cannot figure out how to translate newlines with 'tr'.

EOM
 exit 1
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/trnl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_fp.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_fp: Inhdr
?MAKE: -pick add $@ %<
?S:i_fp:
?S: This variable conditionally defines the I_FP symbol, and indicates
?S: whether a C program should include <fp.h>.
?S:.
?C:I_FP:
?C: This symbol, if defined, indicates that <fp.h> exists and
?C: should be included.
?C:.
?H:#$i_fp I_FP  /**/
?H:.
?LINT:set i_fp
: see if this is a fp.h system
set fp.h i_fp
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sbrktype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: sbrktype.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sbrktype: Myread Oldconfig Loc contains Findhdr
?MAKE: -pick add $@ %<
?S:sbrktype:
?S: This variable defines sbrktype to be something like caddr_t, char *,
?S: or whatever type is used to declare sbrk() in the kernel.
?S:.
?C:Caddr_t (SBRKTYPE):
?C: This symbol holds the type of a core address. It is inteded to be used
?C: to safely
 declare the return type of system calls like sbrk(). It might
?C: be necessary to include <sys/types.h> as well.
?C:.
?H:#define Caddr_t $sbrktype /* <core address> type */
?H:.
: see what type sbrk is declared as in the kernel
case "$sbrktype" in
")
 if $contains 'caddr_t;' `./findhdr sys/types.h` >/dev/null 2>&1 ; then
  dflt='caddr_t';
 else
  dflt='char *';
 fi
 ;;
*)  dflt="$sbrktype"
 ;;
esac
echo " "
rp="What is the return type of sbrk() on this system?"
. ./myread
sbrktype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sbrktype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_preadv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_preadv.U,v $
?RCS:
?MAKE:d_preadv: Inlibc
?MAKE: -pick add $@ %<
?S:d_preadv:
?S: This variable conditionally defines the HAS_PREADV symbol, which
?S: indicates to the C program that the preadv() routine is available.
?S:.
?C:HAS_PREADV :
?C: This symbol, if defined, indicates that the preadv routine is
?C: available to perform vectored reads on a file descriptor at a
?C: given offset.
?C:.
?H:#$d_preadv HAS_PREADV  /**/
?H:.
?LINT:set d_preadv
:
 see if preadv exists
set preadv d_preadv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_preadv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pipe.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pipe.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:44  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_pipe: Inlibc
?MAKE: -pick add $@ %<
?S:d_pipe:
?S: This variable conditionally defines the HAS_PIPE symbol, which
?S: indicates to the C program that the pipe() routine is available
```

```
?S: to create an inter-process channel.
?S:.
?C:HAS_PIPE :
?C: This symbol, if defined, indicates
 that the pipe routine is
?C: available to create an inter-process channel.
?C:.
?H:#$d_pipe HAS_PIPE  /**/
?H:.
?LINT:set d_pipe
: see if pipe exists
set pipe d_pipe
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pipe.U
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```
?RCS: $Id$
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpos64_t: \
 Inlibc Setvar Compile rm_try cat fpossize
?MAKE: -pick add $@ %<
?S:d_fpos64_t:
?S: This symbol will be defined if the C compiler supports fpos64_t.
?S:.
?C:HAS_FPOS64_T:
?C: This symbol will be defined if the C compiler supports fpos64_t.
?C:.
?H:#$d_fpos64_t HAS_FPOS64_T /**/
?H:.
?LINT:set d_fpos64_t
: check for fpos64_t
echo " "
echo "Checking to see if you have fpos64_t..." >&4
$cat >try.c <<EOCP
#include <stdio.h>
int main() { fpos64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have fpos64_t."
```

```
else
 val="$undef"
 echo "You do not have fpos64_t."
 case "$fpossize" in
 8) echo "(Your fpos_t is 64 bits, so you could use that.)" ;;
 esac
fi
$rm_try
set
 d_fpos64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpos64_t.U
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```
?RCS: $Id: vendorscript.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorscript.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorscript vendorscript vendorscriptexp installvendorscript: Getfile \
 vendorbin cat Setprefixvar Oldconfig Prefixit test vendorprefix
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorscript:
?S: This variable contains the eventual value of the VENDORSCRIPT symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this
 directory.
?S: Vendors who distribute perl may wish to place additional
?S: executable scripts in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorscriptexp:
?S: This variable is the ~name expanded version of vendorscript, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
```

```
?D:installvendorscript="
?S:installvendorscript:
?S: This variable is really the same as vendorscriptexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorscript:
?S: This variable conditionally defines PERL_VENDORSCRIPT.
?S:.
?C:PERL_VENDORSCRIPT:
?C: If defined, this symbol contains the name of a directory
?C: for holding vendor-supplied executable scripts.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place additional
?C: executable
 scripts in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORSCRIPT_EXP:
?C: This symbol contains the ~name expanded version of VENDORSCRIPT, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorscript PERL_VENDORSCRIPT "$vendorscript"  /**/
?H:#$d_vendorscript PERL_VENDORSCRIPT_EXP "$vendorscriptexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorscript
: Set the vendorscript variables
case "$vendorprefix" in
") d_vendorscript="$undef"
 vendorscript="
 vendorscriptexp="
 ;;
*) d_vendorscript="$define"
 : determine where vendor-supplied scripts go.
 case "$vendorscript" in
 ") dflt=$vendorprefix/script
  $test -d $dflt || dflt=$vendorbin ;;
 *)  dflt="$vendorscript" ;;
 esac
 $cat <<EOM

The installation process will create a directory for
vendor-supplied scripts.

EOM
```

```
 fn=d~+
 rp='Pathname for the vendor-supplied scripts directory?'
 . ./getfile
 vendorscript="$ans"
 vendorscriptexp="$ansexp"
 ;;
esac
prefixvar=vendorscript
.
 ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorscript.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:ebcdic: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:ebcdic:
?S: This variable conditionally defines EBCDIC if this
?S: system uses EBCDIC encoding.  Among other things, this
?S: means that the character ranges are not contiguous.
?S: See trnl.U
?S:.
?C:EBCDIC:
?C:     This symbol, if defined, indicates that this system uses
?C: EBCDIC
 encoding.
?C:.
?H:#$ebcdic EBCDIC   /**/
?H:.
?F:!try
?LINT:set ebcdic
: look whether system uses EBCDIC
```

```
echo " "
echo "Determining whether or not we are on an EBCDIC system..." >&4
$cat >try.c <<'EOM'
int main()
{
 if ('M'==0xd4) return 0;
 return 1;
}
EOM
val=$undef
set try
if eval $compile_ok; then
 if $run ./try; then
  echo "You seem to speak EBCDIC." >&4
  val="$define"
 else
  echo "Nope, no EBCDIC, probably ASCII or some ISO Latin. Or UTF-8." >&4
 fi
else
 echo "I'm unable to compile the test program." >&4
 echo "I'll assume ASCII or some ISO Latin. Or UTF8." >&4
fi
$rm_try
set ebcdic
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ebcdic.U
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```
?RCS: $Id: i_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_fcntl: h_fcntl h_sysfile +i_sysfile Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_fcntl:
?S: This variable controls the value of I_FCNTL (which tells
```

```
?S: the C program to include <fcntl.h>).
?S:.
?C:I_FCNTL (HDR_O_STUFF FCNTL):
?C: This manifest constant tells the C program to include <fcntl.h>.
?C:.
?H:#$i_fcntl I_FCNTL /**/
?H:.
?T:val
?X:
 Make line lists +i_sysfile to ensure tests for <sys/file.h> will be
?X: conducted prior tests for <fcntl.h>, hece making sure the h_sysfile
?X: variable is correctly set when we reach that unit.
?LINT:set i_fcntl
?LINT:use i_sysfile
?LINT:change h_fcntl
: see if fcntl.h is there
val="
set fcntl.h val
eval $inhdr

: see if we can include fcntl.h
case "$val" in
"$define")
 echo " "
 if $h_fcntl; then
  val="$define"
  echo "We'll be including <fcntl.h>." >&4
 else
  val="$undef"
  if $h_sysfile; then
 echo "We don't need to include <fcntl.h> if we include <sys/file.h>." >&4
  else
   echo "We won't be including <fcntl.h>." >&4
  fi
 fi
 ;;
*)
 h_fcntl=false
 val="$undef"
 ;;
esac
set i_fcntl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_fcntl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lseektype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:30:10  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lseektype: Myread Typedef
?MAKE: -pick add $@ %<
?S:lseektype:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?C:Off_t
 (LSEEKTYPE):
?C: This symbol holds the type used to declare offsets in the kernel.
?C: It can be int, long, off_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Off_t $lseektype  /* <offset> type */
?H:.
: see what type lseek is declared as in the kernel
set off_t lseektype long stdio.h sys/types.h
eval $typedef
echo " "
dflt="$lseektype"
rp="What type is lseek's offset on this system declared as?"
. ./myread
lseektype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lseektype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sanemcmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:41:19  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sanemcmp: cat d_memcmp +cc +optimize +ccflags +libs +ldflags rm \
 i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_sanemcmp:
?S: This variable conditionally defines the HAS_SANE_MEMCMP symbol if
?S: the memcpy() routine is available and can be used to compare relative
?S: magnitudes of chars with their high bits set.
?S:.
?C:HAS_SANE_MEMCMP:
?C: This symbol,
 if defined, indicates that the memcmp routine is available
?C: and can be used to compare relative magnitudes of chars with their high
?C: bits set.  If it is not defined, roll your own version.
?C:.
?H:#$d_sanemcmp HAS_SANE_MEMCMP /**/
?H:.
?F:!sanemcmp
?LINT: set d_sanemcmp
: can memcmp be trusted to compare relative magnitude?
?X: assume the worst
val="$undef"
case "$d_memcmp" in
"$define")
 echo " "
 echo \
   "Checking to see if your memcmp() can compare relative magnitude..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
```

```
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char a = -1;
char b = 0;
if ((a < b) && memcmp(&a, &b, 1) < 0)
 exit(1);
exit(0);
}
EOCP
 if $cc $optimize $ccflags
 $ldflags \
      -o sanemcmp foo.c $libs >/dev/null 2>&1; then
  if ./sanemcmp 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "No, it can't (it uses signed chars)."
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
 fi
 ;;
esac
$rm -f foo.* sanemcmp core
set d_sanemcmp
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sanemcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isnanl: Inlibc
?MAKE: -pick add $@ %<
?S:d_isnanl:
?S: This variable conditionally defines the HAS_ISNANL symbol, which
?S: indicates to the C program that the isnanl() routine is available.
?S:.
?C:HAS_ISNANL:
?C: This symbol, if defined, indicates that the isnanl routine is
?C: available to check whether a long double is a NaN.
?C:.
?H:#$d_isnanl HAS_ISNANL  /**/
?H:.
?LINT:set d_isnanl
: see if isnanl exists
set isnanl d_isnanl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnanl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_unsetenv: Inlibc
?MAKE: -pick add $@ %<
?S:d_unsetenv:
?S: This variable conditionally defines the HAS_UNSETENV symbol, which
?S: indicates to the C program that the unsetenv () routine is available.
?S:.
?C:HAS_UNSETENV:
?C: This symbol, if defined, indicates that the unsetenv () routine is
?C: available for use.
?C:.
?H:#$d_unsetenv HAS_UNSETENV  /**/
?H:.
?LINT:set d_unsetenv
: see if unsetenv exists
set unsetenv d_unsetenv
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_unsetenv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlopen.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:56  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dlopen: Inlibc runnm
?MAKE: -pick add $@ %<
?S:d_dlopen:
?S: This variable conditionally defines the HAS_DLOPEN symbol, which
?S: indicates to the C program that the dlopen() routine
 is available.
?S:.
?C:HAS_DLOPEN :
?C: This symbol, if defined, indicates that the dlopen routine is
?C: available.
?C:.
?H:#$d_dlopen HAS_DLOPEN  /**/
?H:.
?T: xxx_runnm
?LINT:set d_dlopen
?X: We don't permanently change runnm, but we do temporarily.
?LINT: change runnm
: see if dlopen exists
?X: On NetBSD and FreeBSD, dlopen is available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
runnm=false
set dlopen d_dlopen
eval $inlibc
runnm="$xxx_runnm"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dlopen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extract.U,v 3.0.1.2 1997/02/28 14:58:52 ram Exp $
?RCS:
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can be doted in order to extract
?X: .SH files with variable substitutions.
?X:
?X: When running
 Configure from a remote directory ($src is not '.'),
?X: then the files will be created in that directory, so beware!
?X:
?MAKE:Extract: src
?MAKE: -pick add $@ %<
?F:./extract
?T:PERL_CONFIG_SH dir file name create mkdir_p
: script used to extract .SH files with variable substitutions
cat >extract <<'EOS'
PERL_CONFIG_SH=true
echo "Doing variable substitutions on .SH files..."
if test -f MANIFEST; then
 set x `awk '{print $1}' < MANIFEST | grep '\.SH$'`
else
 echo "(Looking for .SH files under the source directory.)"
 set x `(cd "$src"; find . -name "*.SH" -print)`
fi
shift
```

```
case $# in
0) set x `(cd "$src"; echo *.SH)`; shift;;
esac
if test ! -f "$src/$1"; then
 shift
fi
?X: script to emulate mkdir -p
mkdir_p='
name=$1;
create="";
while test $name; do
 if test ! -d "$name"; then
  create="$name $create";
  name=`echo $name | sed -e "s|^[^/]*$||"`;
  name=`echo $name | sed -e "s|\(.*\)/.*|\1|"`;
 else
  name="";
 fi;
done;
for file in $create; do
 mkdir $file;
done
'
for file in $*;
 do
 case "$src" in
 ".")
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (cd "$dir" && . ./$file)
   ;;
  *)
   . ./$file
   ;;
  esac
  ;;
 *)
?X:
?X: When running Configure remotely ($src is not '.'), we cannot source
?X: the files directly, since that would wrongly cause the extraction
?X: where the source lie instead of withing the current directory. Therefore,
?X: we need to 'sh <file' then, which is okay since they will source the
?X: existing config.sh file. It's not possible to use:
?X:  ../src/Configure -S -O -Dsomething
?X: unfortunately since no new config.sh with the -Dsomething override
?X: will be created before running the .SH files. A minor buglet.
```

```
?X:
?X: Note that we must create the directory hierarchy ourselves if it does
?X: not exist already, and that is done through a shell emulation of the
?X: 'mkdir -p' command. We don't want to use the $installdir metaconfig
?X: symbol here since that would require too much to
 be configured for
?X: this simple extraction task that may happen quickly with 'Configure -S'.
?X:  -- RAM, 18/03/96
?X:
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (set x $dir; shift; eval $mkdir_p)
   sh <"$src/$dir/$file"
   ;;
  *)
   sh <"$src/$file"
   ;;
  esac
  ;;
 esac
done
if test -f "$src/config_h.SH"; then
 if test ! -f config.h; then
 : oops, they left it out of MANIFEST, probably, so do it anyway.
 . "$src/config_h.SH"
 fi
fi
EOS
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Extract.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_shadow.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_shadow: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_shadow:
?S: This variable conditionally defines the I_SHADOW symbol, and indicates
?S: whether a C program should include <shadow.h>.
?S:.
```

```
?C:I_SHADOW:
?C: This symbol, if defined, indicates that <shadow.h> exists and
?C: should be included.
?C:.
?H:#$i_shadow I_SHADOW  /**/
?H:.
?LINT:set i_shadow
: see if this is a shadow.h system
set shadow.h i_shadow
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_shadow.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_accessx: Inlibc
?MAKE: -pick add $@ %<
?S:d_accessx:
?S: This variable conditionally defines the HAS_ACCESSX symbol, which
?S: indicates to the C program that the accessx() routine is available.
?S:.
?C:HAS_ACCESSX :
?C: This symbol, if defined, indicates that the accessx routine is
?C: available to do extended access checks.
?C:.
?H:#$d_accessx HAS_ACCESSX  /**/
?H:.
?LINT:set d_accessx
: see if accessx exists
set accessx d_accessx
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/d_accessx.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_popen.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_popen.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_popen: Inlibc
?MAKE: -pick add $@ %<
?S:d_popen:
?S: This variable conditionally defines HAS_POPEN if popen() is
?S: available to open a pipe from a process.
?S:.
?C:HAS_POPEN (POPEN):
?C: This symbol, if defined, indicates that the popen routine is
?C: available to open a pipe from a process.
?C:.
?H:#$d_popen HAS_POPEN  /**/
?H:.
?LINT:set
 d_popen
: see if popen exists
set popen d_popen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_popen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ptrsize.U,v 3.0.1.1 1994/10/29 16:28:19 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: ptrsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:28:19  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:ptrsize: cat rm_try Myread Compile run use64bitall i_stdlib d_quad
?MAKE: -pick add $@ %<
?S:ptrsize:
?S: This variable contains the value of the PTRSIZE symbol, which
?S: indicates to the C program how many bytes there are in a pointer.
?S:.
?C:PTRSIZE:
?C: This
 symbol contains the size of a pointer, so that the C preprocessor
?C: can make decisions based on it.  It will be sizeof(void *) if
?C: the compiler supports (void *); otherwise it will be
?C: sizeof(char *).
?C:.
?H:#define PTRSIZE $ptrsize  /**/
?H:.
?F:!try
?LINT:extern use64bitint
: check for length of pointer
echo " "
case "$ptrsize" in
")
 echo "Checking to see how big your pointers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
   printf("%d\n", (int)sizeof(void *));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  ptrsize=`$run ./try`
  echo "Your pointers are $ptrsize bytes long."
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)" >&4
  rp="What is the size of a pointer (in bytes)?"
  . ./myread
  ptrsize="$ans"
 fi
 ;;
esac
$rm_try
```

```
case "$use64bitall" in
"$define"|true|[yY]*)
 case "$ptrsize" in
 4) cat <<EOM >&4

*** You
 have chosen a maximally 64-bit build,
*** but your pointers are only 4 bytes wide.
*** Please rerun Configure without -Duse64bitall.
EOM
  case "$d_quad" in
  define)
   cat <<EOM >&4
*** Since you have quads, you could possibly try with -Duse64bitint.
EOM
   ;;
  esac
  cat <<EOM >&4
*** Cannot continue, aborting.

EOM

  exit 1
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ptrsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2012-2012, H.Merijn Brand
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: H.Merijn Brand
?RCS:
?MAKE:d_isblank: cc cat ccflags ldflags rm libs Setvar
?MAKE: -pick add $@ %<
?S:d_isblank:
?S: This variable conditionally defines the HAS_ISBLANK constant,
?S: which indicates to the C program that isblank() is available.
?S:.
```

```
?C:HAS_ISBLANK:
?C: This manifest constant lets the C program know that isblank
?C: is available.
?C:.
?H:#$d_isblank HAS_ISBLANK  /**/
?H:.
?LINT:set d_isblank
?X: Can't use Inlibc because isblank() might be a macro.
: Look for isblank
echo " "
$cat >isblank.c <<'EOCP'
#include
 <stdio.h>
#include <ctype.h>
int main() {
 int c = ' ';
 if (isblank(c))
  return 0 ;
 else
  return 1 ;
}
EOCP
if $cc $ccflags $ldflags -o isblank isblank.c $libs >/dev/null 2>&1 ; then
 echo "isblank() found." >&4
 val="$define"
else
 echo "isblank() NOT found." >&4
 val="$undef"
fi
set d_isblank
eval $setvar
$rm -f isblank*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isblank.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wait3.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wait3.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:08:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wait3: Inlibc
?MAKE: -pick add $@ %<
?S:d_wait3:
?S: This variable conditionally defines the HAS_WAIT3 symbol, which
?S: indicates to the C program that the wait3() subroutine exists.
?S:.
?C:HAS_WAIT3:
?C: This symbol, if defined, indicates that the wait3() subroutine
?C: exists.
?C:.
?H:#$d_wait3 HAS_WAIT3 /**/
?H:.
?LINT:set d_wait3
:
 see if 'wait3()' exists
set wait3 d_wait3
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wait3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasfield string that is used internally
?X: by Configure to check if this system has a field for a
?X: particular struct (of if this system has a particular struct!)
?X:
?X: To use it, say something like:
?X:  set d_statblocks stat st_blocks i_sysstat sys/stat.h
?X:  eval $hasfield
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/foo.h
?X:  $i_sysbar sys/bar.h
?X:  $i_syszot sys/zot.h
?X:  $i_zappa zappa.h"
?X: set d_statblocks stat st_blocks $hdrs
?X: eval $hasfield
?X:
?MAKE:Hasfield: Setvar rm_try test Compile
```

```
?MAKE: -pick add $@ %<
?T:varname struct field
?V:hasfield
: Define hasfield macro for Configure internal use
hasfield='varname=$1;
 struct=$2; field=$3; shift; shift; shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 esac ;
   shift 2;
done > try.c;
echo "int main () { struct $struct foo; char* bar; bar = (char*)foo.$field; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasfield.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: MailAuthor.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: MailAuthor.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:04:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:05:09  ram
?RCS: patch32: avoid message sending if they said no previously
?RCS:
?RCS: Revision 3.0.1.3  1993/10/16  13:47:30  ram
?RCS: patch12: now makes sure user-specified address is in Internet format
```

```
?RCS:
?RCS: Revision
 3.0.1.2  1993/09/13  15:48:49  ram
?RCS: patch10: reverted to original intent by the Author himself
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:38  ram
?RCS: patch7: now prompts user for its e-mail address
?RCS: patch7: no longer silent when mail has been sent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?RCS:
?X:
?X: This unit asks the user to please send a message to the author.
?X: To force inclusion of this unit, you must add it's name to the
?X: dependancies on the MAKE line in your private copy of End.U.
?X: This allows a smart mailagent program to automatically let users know
?X: when their package is out of date, and to allow users to be notified of
?X: any future patches.
?X:
?MAKE:MailAuthor mailpatches notifypatches usermail: test cat mailer \
 package Myread patchlevel baserev rm rsrc Oldconfig Configdir
?MAKE: -pick wipe $@ %<
?S:mailpatches:
?S: Indicates whether the user would like future patches to be mailed
?S: directly
 to them.
?S:.
?S:notifypatches:
?S: Indicates whether the user would like notification of future patches
?S: mailed to them.
?S:.
?S:usermail:
?S: This variable is used internally by Configure to keep track of the
?S: user e-mail address, where notifications or patches should be sent.
?S: A '-' value means the return address will be extracted by parsing
?S: the mail headers.
?S:.
?T:opt mailpatches notifypatches atsh status
: notify author that his package is used
if $test -f ../.config/mailauthor &&
 cmp $rsrc/patchlevel.h ../.config/mailauthor >/dev/null 2>&1
then
 status="say that you're using $package";
 case "$mailpatches" in
 true) status='have patches mailed to you as they are issued';;
 esac
```

```
 case "$notifypatches" in
 true) status='be notified when new patches are issued';;
 esac
 $cat <<EOM

You have already sent the author of $package (<MAINTLOC>) mail to
$status. If you wish, you may modify
your previous request by sending a new mail with different options.

EOM
 rp='Should
 I send a status update to <MAINTLOC>?'
 dflt=n
else
 $cat <<EOM

If you are able to send mail to the Internet, the author of $package would
really appreciate you letting me send off a quick note, just to say that you've
tried it. The author is more likely to spend time maintaining $package if it's
known that many people are using it, and you can even ask to get sent new
patches automagically this way if you wish. To protect your privacy, all I'll
say in the mail is the version of $package that you're using.

EOM
 rp='Should I send mail to <MAINTLOC>?'
 dflt=y
?X: Ensure default is 'n' if question has been asked already, in case they
?X: run Configure -d next time and answered 'n' the first time. Therefore,
?X: an empty nomail will be created later on even if no mail is sent.
 $test -f ../.config/nomail && dflt=n
fi
. ./myread
case "$ans" in
[yY]*)
 echo " "
 echo "Great! Your cooperation is really appreciated."
 $cat <<EOM

Some braindead sites do not set a proper return
 address in the From: header of
their outgoing mail, making it impossible to reply to mail they generate.
If your site is broken in this way, write to your system administrator and get
it fixed!!! In the mean time, you can manually specify the Internet e-mail
address by which the author can get back to you, should there be a need to do
so. If manually specified, it should be something like "user@domain.top".
If your mail system generates addresses correctly, specify "none".

EOM
```

```
 case "$usermail" in
 '-'|'') dflt=none;;
 *) dflt="$usermail";;
 esac
 rp='Manually specify a return address to use:'
 . ./myread
 case "$ans" in
 none|*@*.*)
  case "$ans" in
  none) usermail='-';;
  *) usermail="$ans";;
  esac
  ;;
 *)
  echo "(Address does not look like an Internet one -- ignoring it.)"
?X:
?X: If we can't trust their mailer or their return address, it's highly
?X: suggested that they only register and don't ask to get anything from
?X: the author, since it's likely to bounce in null-land --
 RAM.
?X:
  usermail='-'
  mailpatches=false
  notifypatches=false
  ;;
 esac
 echo " "
 opt=''
 rp='Would you like to have new patches automatically mailed to you?'
 case "$mailpatches" in
 true) dflt=y;;
 *) dflt=n;;
 esac
 . ./myread
 case "$ans" in
 [yY]*) opt=' mailpatches'; mailpatches=true;;
 *)
  mailpatches=false
  echo " "
  rp='Ok, would you like to simply be notified of new patches?'
  case "$notifypatches" in
  false) dflt=n;;
  *) dflt=y;;
  esac
  . ./myread
  echo " "
  case "$ans" in
  [yY]*) opt=' notifypatches'; notifypatches=true;;
```

```
  *)
   echo "Fine, I'll simply say that you've tried it then."
   notifypatches=false
   ;;
  esac
  ;;
 esac
 echo "Sending mail to <MAINTLOC>..." >&4
?X: Bizarre hack here. We can't just put @SH in the hereis lines below, because
?X: metaconfig will interpret it as a command, and there's no quoting mechanism.
?X: Do it via a variable instead.
 atsh='@SH'
 $mailer <MAINTLOC> <<EOM >/dev/null 2>&1
Subject: Command
Precedence: junk
To: <MAINTLOC>

$atsh
 package $usermail $package $baserev $patchlevel$opt
EOM
 $rm -f ../.config/mailauthor ../.config/nomail
 cp $rsrc/patchlevel.h ../.config/mailauthor
 ;;
*)
 case "$dflt" in
 "y")
  echo "Oh well, maybe next time."
  cp /dev/null ../.config/nomail
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/MailAuthor.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_crypt.U,v $
?RCS:
?RCS: Copyright (c) 2002 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_crypt: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_crypt:
?S: This variable conditionally defines the I_CRYPT symbol, and indicates
```

```
?S: whether a C program should include <crypt.h>.
?S:.
?C:I_CRYPT:
?C: This symbol, if defined, indicates that <crypt.h> exists and
?C: should be included.
?C:.
?H:#$i_crypt I_CRYPT  /**/
?H:.
?LINT:set i_crypt
: see if this is a crypt.h system
set crypt.h i_crypt
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_crypt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_socket.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:46:00  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:04  ram
?RCS: patch16: can now safely declare private nm_extract in dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_socket d_oldsock d_sockpair socketlib sockethdr: contains libc \
 echo n c nm_opt nm_extract Inlibc Csym _a
?MAKE: -pick add $@ %<
?S:d_socket:
?S: This
 variable conditionally defines HAS_SOCKET, which indicates
?S: that the BSD socket interface is supported.
?S:.
?S:d_sockpair:
?S: This variable conditionally defines the HAS_SOCKETPAIR symbol, which
?S: indicates that the BSD socketpair() is supported.
```

```
?S:.
?S:d_oldsock:
?S: This variable conditionally defines the OLDSOCKET symbol, which
?S: indicates that the BSD socket interface is based on 4.1c and not 4.2.
?S:.
?S:socketlib:
?S: This variable has the names of any libraries needed for socket support.
?S:.
?S:sockethdr:
?S: This variable has any cpp -I flags needed for socket support.
?S:.
?C:HAS_SOCKET (SOCKET):
?C: This symbol, if defined, indicates that the BSD socket interface is
?C: supported.
?C:.
?C:HAS_SOCKETPAIR (SOCKETPAIR):
?C: This symbol, if defined, indicates that the BSD socketpair() call is
?C: supported.
?C:.
?C:USE_OLDSOCKET (OLDSOCKET):
?C: This symbol, if defined, indicates that the 4.1c BSD socket interface
?C: is supported instead of the 4.2/4.3 BSD
 socket interface. For instance,
?C: there is no setsockopt() call.
?C:.
?H:#$d_socket HAS_SOCKET  /**/
?H:#$d_sockpair HAS_SOCKETPAIR /**/
?H:#$d_oldsock USE_OLDSOCKET /**/
?H:.
?T:val
?LINT:use libc
?LINT:set d_sockpair
: see whether socket exists
socketlib=''
sockethdr=''
echo " "
$echo $n "Hmm... $c" >&4
if set socket val -f d_socket; eval $csym; $val; then
 echo "Looks like you have Berkeley networking support." >&4
 d_socket="$define"
?X: now check for advanced features
 if set setsockopt val -f; eval $csym; $val; then
  d_oldsock="$undef"
 else
  echo "...but it uses the old 4.1c interface, rather than 4.2" >&4
  d_oldsock="$define"
 fi
else
```

```
?X: HP-UX, for one, puts all the socket stuff in socklib.o. Note that if we
?X: come here on HP-UX, then we must have used nm to get symbols, or we really
?X: don't have sockets anyway...
 if $contains socklib libc.list >/dev/null 2>&1; then
  echo "Looks like you have Berkeley networking support." >&4
  d_socket="$define"
  : we will have
 to assume that it supports the 4.2 BSD interface
  d_oldsock="$undef"
 else
  echo "You don't have Berkeley networking in libc$_a..." >&4
?X: look for an optional networking library
  if test -f /usr/lib/libnet$_a; then
?X: space between two  '(' needed for ksh
   ( (nm $nm_opt /usr/lib/libnet$_a | eval $nm_extract) ||  \
   ar t /usr/lib/libnet$_a) 2>/dev/null >> libc.list
   if $contains socket libc.list >/dev/null 2>&1; then
   echo "...but the Wollongong group seems to have hacked it in." >&4
    socketlib="-lnet"
    sockethdr="-I/usr/netinclude"
    d_socket="$define"
?X: now check for advanced features
    if $contains setsockopt libc.list >/dev/null 2>&1; then
     d_oldsock="$undef"
    else
     echo "...using the old 4.1c interface, rather than 4.2" >&4
     d_oldsock="$define"
    fi
   else
    echo "or even in libnet$_a, which is peculiar." >&4
    d_socket="$undef"
    d_oldsock="$undef"
   fi
  else
   echo "or anywhere else I see." >&4
   d_socket="$undef"
   d_oldsock="$undef"
  fi
 fi
fi

@if
 HAS_SOCKETPAIR || d_sockpair
: see if socketpair exists
set socketpair d_sockpair
eval $inlibc

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_socket.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostbyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostbyname_r gethostbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostbyname_r:
?S: This variable conditionally defines the HAS_GETHOSTBYNAME_R symbol,
?S: which indicates to the C program that the gethostbyname_r()
?S: routine is available.
?S:.
?S:gethostbyname_r_proto:
?S: This variable encodes the prototype of gethostbyname_r.
?S: It is zero if d_gethostbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyname_r
?S: is defined.
?S:.
?C:HAS_GETHOSTBYNAME_R:
?C: This symbol, if defined, indicates
 that the gethostbyname_r routine
?C: is available to gethostbyname re-entrantly.
?C:.
?C:GETHOSTBYNAME_R_PROTO:
?C: This symbol encodes the prototype of gethostbyname_r.
?C: It is zero if d_gethostbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyname_r
?C: is defined.
?C:.
?H:#$d_gethostbyname_r HAS_GETHOSTBYNAME_R /**/
?H:#define GETHOSTBYNAME_R_PROTO $gethostbyname_r_proto /**/
?H:.
?T:try hdrs d_gethostbyname_r_proto
: see if gethostbyname_r exists
set gethostbyname_r d_gethostbyname_r
eval $inlibc
case "$d_gethostbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
```

```
 case "$d_gethostbyname_r_proto:$usethreads" in
 ":define") d_gethostbyname_r_proto=define
  set d_gethostbyname_r_proto gethostbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gethostbyname_r_proto" in
 define)
 case "$gethostbyname_r_proto" in
 "|0) try='int gethostbyname_r(const char*, struct hostent*, char*, size_t, struct
 hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=I_CSBWRE ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) try='struct hostent* gethostbyname_r(const char*, struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=S_CSBIE ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) try='int gethostbyname_r(const char*, struct hostent*, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=I_CSD ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) d_gethostbyname_r=undef
  gethostbyname_r_proto=0
  echo "Disabling gethostbyname_r, cannot determine prototype." >&4 ;;
 * ) case "$gethostbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gethostbyname_r_proto="REENTRANT_PROTO_$gethostbyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gethostbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_gethostbyname_r=undef
  gethostbyname_r_proto=0
  ;;
 esac
 ;;
*) gethostbyname_r_proto=0
 ;;
esac

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostbyname_r.U
```

No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lrintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_lrintl:
?S: This variable conditionally defines the HAS_LRINTL symbol, which
?S: indicates to the C program that the lrintl() routine is available
?S: to return the integral value closest to a long double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LRINTL:
?C: This symbol, if defined, indicates that the lrintl routine is
?C: available to return the integral value closest to a long double
?C: (according to the current rounding mode).
?C:.
?H:#$d_lrintl HAS_LRINTL  /**/
?H:.
?LINT:set d_lrintl
: see if lrintl exists
set lrintl d_lrintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lrintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sizetype.U,v 3.0.1.1 1994/08/29 16:32:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: sizetype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:32:10  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:sizetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:sizetype:
```

```
?S: This variable defines sizetype to be something like size_t,
?S: unsigned long, or whatever type is used to declare length
?S: parameters for string functions.
?S:.
?C:Size_t:
?C: This symbol holds the type used
 to declare length parameters
?C: for string functions.  It is usually size_t, but may be
?C: unsigned long, int, etc.  It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Size_t $sizetype  /* length parameter for string functions */
?H:.
?LINT: set sizetype
: see what type is used for size_t
rp="What is the type used for the length parameter for string functions?"
set size_t sizetype 'unsigned int' stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/sizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_passwd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_passwd.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:21  ram
?RCS: patch61: useless unit dropped.
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:51  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Useless unit dropped.
?X:
?LINT:empty
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_passwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: afs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: afs.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:23:06  ram
?RCS: patch61: can now explicitly tell Configure whether AFS is running
?RCS:
?RCS: Revision 3.0.1.1  1993/08/24  12:24:43  ram
?RCS: patch3: created
?RCS:
?MAKE:afs afsroot: test
?MAKE: -pick add $@ %<
?S:afs:
?S: This variable is set to 'true' if AFS (Andrew File System) is used
?S: on the system, 'false' otherwise.  It is possible to override this
?S: with a hint value or command line option,
 but you'd better know
?S: what you are doing.
?S:.
?S:afsroot:
?S: This variable is by default set to '/afs'. In the unlikely case
?S: this is not the correct root, it is possible to override this with
?S: a hint value or command line option.  This will be used in subsequent
?S: tests for AFSness in the configure and test process.
?S:.
: allow them to override the AFS root
case "$afsroot" in
") afsroot=/afs ;;
*) afsroot=$afsroot ;;
esac

: is AFS running?
echo " "
case "$afs" in
$define|true) afs=true ;;
$undef|false) afs=false ;;
*) if $test -d $afsroot; then
  afs=true
```

```
 else
  afs=false
 fi
 ;;
esac
if $afs; then
 echo "AFS may be running... I'll be extra cautious then..." >&4
else
 echo "AFS does not seem to be running..." >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/afs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dlsymun.U,v $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_dlsymun.U,v $
?RCS:
?RCS:
?MAKE:d_dlsymun: cat cc ccflags ldflags ld rm Setvar dlsrc i_dlfcn i_stdlib \
 cccdlflags ccdlflags lddlflags libs dlext _o run to
?MAKE: -pick add $@ %<
?X: This is specific to perl5.
?S:d_dlsymun:
?S: This variable conditionally defines DLSYM_NEEDS_UNDERSCORE, which
?S: indicates that we need to prepend an underscore to the symbol
?S: name before calling dlsym().
?S:.
?C:DLSYM_NEEDS_UNDERSCORE:
?C: This symbol, if defined, indicates that we need to prepend an
?C: underscore to the symbol name before calling dlsym().  This only
?C: makes sense if you *have* dlsym, which we will presume is the
?C: case if you're using dl_dlopen.xs.
?C:.
?H:#$d_dlsymun DLSYM_NEEDS_UNDERSCORE /**/
?H:.
?LINT:set
 d_dlsymun
?T: xxx
?F:!fred
: Check if dlsym need a leading underscore
echo " "
```

```
val="$undef"

case "$dlsrc" in
dl_dlopen.xs)
 echo "Checking whether your dlsym() needs a leading underscore ..." >&4
 $cat >dyna.c <<'EOM'
fred () { }
EOM

$cat >fred.c<<EOM

#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_dlfcn I_DLFCN
#ifdef I_DLFCN
#include <dlfcn.h>      /* the dynamic linker include file for SunOS/Solaris */
#else
#include <sys/types.h>
#include <nlist.h>
#include <link.h>
#endif

extern int fred() ;

int main()
{
   void * handle ;
   void * symbol ;
#ifndef RTLD_LAZY
   int mode = 1 ;
#else
   int mode = RTLD_LAZY ;
#endif
   handle = dlopen("./dyna.$dlext", mode) ;
   if (handle == NULL) {
 printf ("1\n") ;
 fflush (stdout) ;
 exit(0);
   }
   symbol = dlsym(handle, "fred") ;
   if (symbol == NULL) {
 /* try putting a leading underscore */
 symbol = dlsym(handle, "_fred") ;
 if (symbol ==
```

```
 NULL) {
     printf ("2\n") ;
     fflush (stdout) ;
     exit(0);
 }
 printf ("3\n") ;
   }
   else
 printf ("4\n") ;
   fflush (stdout) ;
   exit(0);
}
EOM
 : Call the object file tmp-dyna.o in case dlext=o.
 if $cc $ccflags $cccdlflags -c dyna.c > /dev/null 2>&1 &&
  mv dyna${_o} tmp-dyna${_o} > /dev/null 2>&1 &&
  $ld -o dyna.$dlext $ldflags $lddlflags tmp-dyna${_o} > /dev/null 2>&1 &&
  $cc -o fred $ccflags $ldflags $cccdlflags $ccdlflags fred.c $libs > /dev/null 2>&1 && $to dyna.$dlext; then
  xxx=`$run ./fred`
  case $xxx in
  1) echo "Test program failed using dlopen." >&4
   echo "Perhaps you should not use dynamic loading." >&4;;
  2) echo "Test program failed using dlsym." >&4
   echo "Perhaps you should not use dynamic loading." >&4;;
  3) echo "dlsym needs a leading underscore" >&4
   val="$define" ;;
  4) echo "dlsym doesn't need a leading underscore." >&4;;
  esac
 else
  echo "I can't compile and run the test program." >&4
              echo "I'm guessing that dlsym
 doesn't need a leading underscore." >&4
 fi
 ;;
esac

$rm -f fred fred.* dyna.$dlext dyna.* tmp-dyna.*

set d_dlsymun
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dlsymun.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Unix.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:06  ram
?RCS: patch61: created
?RCS:
?X:
?X: The purpose of this unit is to define things that are common across all
?X: known UNIX platforms. If Configure is ported/used on a non-UNIX
?X: environment, then some of the following variables can be redefined in hint
?X: files.
?X:
?MAKE:Unix _a _o firstmakefile archobjs: Oldconfig
?MAKE: -pick add $@ %<
?S:_a (lib_ext):
?S: This variable defines the extension
 used for ordinary libraries.
?S: For unix, it is '.a'.  The '.' is included.  Other possible
?S: values include '.lib'.
?S:.
?S:_o (obj_ext):
?S: This variable defines the extension used for object files.
?S: For unix, it is '.o'.  The '.' is included.  Other possible
?S: values include '.obj'.
?S:.
?S:firstmakefile:
?S: This variable defines the first file searched by make.  On unix,
?S: it is makefile (then Makefile).  On case-insensitive systems,
?S: it might be something else.  This is only used to deal with
?S: convoluted make depend tricks.
?S:.
?S:archobjs:
?S: This variable defines any additional objects that must be linked
?S: in with the program on this architecture.  On unix, it is usually
?S: empty.  It is typically used to include emulations of unix calls
?S: or other facilities.  For perl on OS/2, for example, this would
?S: include os2/os2.obj.
?S:.
?INIT:: Extra object files, if any, needed on this platform.
?INIT:archobjs="
: Define several unixisms.
: Hints files
```

```
 or command line option can be used to override them.
case "$_a" in
") _a='.a';;
esac
case "$_o" in
") _o='.o';;
esac

@if firstmakefile
: Which makefile gets called first.  This is used by make depend.
case "$firstmakefile" in
") firstmakefile='makefile';;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Unix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usefaststdio: Myread Oldconfig Setvar rsrc
?MAKE: -pick add $@ %<
?Y:TOP
?S:usefaststdio:
?S: This variable conditionally defines the USE_FAST_STDIO symbol,
?S: and indicates that Perl should be built to use 'fast stdio'.
?S: Defaults to define in Perls 5.8 and earlier, to undef later.
?S:.
?C:USE_FAST_STDIO:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use 'fast stdio'.
?C: Defaults to define in Perls 5.8 and earlier, to undef later.
?C:.
?H:?%<:#ifndef USE_FAST_STDIO
?H:?%<:#$usefaststdio USE_FAST_STDIO  /**/
?H:?%<:#endif
?H:.
?T:xversion
?LINT:set usefaststdio
: Check if faststdio is requested and available
case "$usefaststdio" in
```

```
$define|true|[yY]*|'')
 xversion=`awk
 '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
 case "$xversion" in
 [68]) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
*) dflt='n';;
esac
cat <<EOM

Perl can be built to use 'fast stdio', which means using the stdio
library but also directly manipulating the stdio buffers to enable
faster I/O.  Using stdio is better for backward compatibility (especially
for Perl extensions), but on the other hand since Perl 5.8 the 'perlio'
interface has been preferred instead of stdio.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Use the "fast stdio" if available?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usefaststdio
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usefaststdio.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_strtod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtod.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:36  ram
?RCS: patch61: created
?RCS:
```

```
?RCS:
?MAKE:d_strtod: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtod:
?S: This variable conditionally defines the HAS_STRTOD symbol, which
?S: indicates to the C program that the strtod() routine is available
?S: to provide better numeric string conversion than atof().
?S:.
?C:HAS_STRTOD (STRTOD):
?C: This symbol, if defined,
 indicates that the strtod routine is
?C: available to provide better numeric string conversion than atof().
?C:.
?H:#$d_strtod HAS_STRTOD /**/
?H:.
?LINT:set d_strtod
: see if strtod exists
set strtod d_strtod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_values.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_values.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:34  ram
?RCS: patch61: created
?RCS:
?MAKE:i_values: Inhdr
?MAKE: -pick add $@ %<
?S:i_values:
?S: This variable conditionally defines the I_VALUES symbol, and indicates
?S: whether a C program may include <values.h> to get symbols like MAXLONG
?S: and friends.
?S:.
?C:I_VALUES:
?C: This symbol, if defined, indicates to the C program that it should
```

```
?C: include
 <values.h> to get definition of symbols like MINFLOAT or
?C: MAXLONG, i.e. machine dependant limitations.  Probably, you
?C: should use <limits.h> instead, if it is available.
?C:.
?H:#$i_values I_VALUES  /**/
?H:.
?LINT:set i_values
: see if this is a values.h system
set values.h i_values
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_values.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_drem.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_drem.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:14  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_drem: Inlibc
?MAKE: -pick add $@ %<
?S:d_drem:
?S: This variable conditionally defines the HAS_DREM symbol, which
?S: indicates to the C program that the drem() routine is available.
?S:.
?C:HAS_DREM :
?C: This symbol, if defined, indicates that the drem routine is
?C: available.
  This routine is roughly the same as fmod, i.e. it
?C: computes the remainder r=x-n*y, where n=rint(x/y), whereas fmod
?C: uses n=trunc(x/y).
?C:.
?H:#$d_drem HAS_DREM  /**/
?H:.
?LINT:set d_drem
```

```
: see if drem exists
set drem d_drem
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_drem.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cppfilecom.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: cppfilecom.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppfilecom cppstdinflags d_cppignhdrs d_cppcanstdin: \
 contains package test Myread Oldconfig Loc Setvar cpp cc cat rm
?MAKE: -pick add $@ %<
?S:cppfilecom:
?S: This variable contains the first part of the string which will invoke
?S: the C preprocessor a file
 and produce to standard output, preserving
?S: comments. Typical value of "cc -E -C" or "/lib/cpp -C".
?S:.
?S:cppstdinflags:
?S: This variable contains any flags necessary to get cppfilecom to read
?S: from the standard input.
?S:.
?S:d_cppignhdrs:
?S: This symbol conditionally defines CPP_IGN_HDRS if CPP_FILE_COM ignores
?S: *.h files.
?S:.
?S:d_cppcanstdin:
?S: This symbol conditionally defines CPP_CAN_STDIN if CPP_FILE_COM can
?S: read standard input directly.
?S:.
?C:CPP_FILE_COM (CPPFILECOM):
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor a file and produce to standard output, preserving
```

```
?C: comments. Typical value of "cc -E -C" or "/lib/cpp -C".
?C:.
?C:CPP_STDIN_FLAGS (CPPSTDINFLAGS):
?C: This variable contains any flags necessary to get CPP_FILE_COM to
?C: read from the standard input.
?C:.
?C:CPP_IGN_HDRS (CPPIGNHDRS):
?C: This symbol is defined if CPP_FILE_COM ignores *.h files.
?C:.
?C:CPP_CAN_STDIN (CPPCANSTDIN):
?C: This
 symbol is defined if CPP_FILE_COM can read standard input
?C: directly.
?C:.
?H:#define CPP_FILE_COM "$cppfilecom"
?H:#define CPP_STDIN_FLAGS "$cppstdinflags"
?H:#$d_cppignhdrs CPP_IGN_HDRS  /* does CPP ignore .h files? */
?H:#$d_cppcanstdin CPP_CAN_STDIN  /* can CPP read stdin directly? */
?H:.
?T:cont
?F:!testcpp.c !testcpp.h !testcpp.out
?LINT:set d_cppcanstdin d_cppignhdrs
?LINT:usefile testcpp.c testcpp.out
: see how we invoke the C preprocessor
$cat <<EOM

$package needs to be able to preprocess its input files in a mode which
preserves comments, which is often not the default behaviour.  It should run
the C preprocessor you will use when compiling your own source code, which
should be ISO/ANSI C compliant if you want $package to handle the latest
standard C.  I will try to guess, but I might guess wrongly because it is not
necessarily the same preprocessor used to build $package.

EOM
$cat <<'EOT' >testcpp.c
#define ABC abc
#define XYZ xyz
ABC.XYZ
/* comment */
EOT
:
if $test "X$cppfilecom"
 != "X" && \
 $cppfilecom testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "You used to use $cppfilecom so we'll use that again."
```

```
elif echo 'Maybe "'$cc' -E -C" will work...' && \
 $cc -E -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "It works!"
 cppfilecom="$cc -E -C"
elif echo 'Nope...maybe ""$cc"' -P -C" will work...' && \
 $cc -P -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Yup, that does."
 cppfilecom="$cc -P -C"
elif echo 'No such luck, maybe ""$cpp"' -C" will work...' && \
 $cpp -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out
 >/dev/null 2>&1
then
 echo "Yup, it does."
 cppfilecom="$cpp -C"
else
 cppfilecom=''
 $cat <<'EOM'
I can't find a C preprocessor that will preserve comments. Please name one.
EOM
fi
:
dflt="$cppfilecom"
cont=true
while $test "$cont" ; do
 echo " "
 rp="How should $package run your preprocessor preserving comments?"
 . ./myread
 cppfilecom="$ans"
 $cppfilecom testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
  $contains comment testcpp.out >/dev/null 2>&1
 then
  echo "OK, that will do."
  cont=''
 else
  echo "Sorry, I can't get that to work."
 fi
done

@if CPP_IGN_HDRS || d_cppignhdrs
```

```
: Now see if it ignores header files.
cp testcpp.c testcpp.h
$cppfilecom testcpp.h >testcpp.out 2>&1
if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Terrific; it processes .h files passed on the command line too."
 val="$undef"
else
 echo "It ignores .h files on the command line; pity."
 val="$define"
fi
set
 d_cppignhdrs
eval $setvar

@end
@if CPP_STDIN_FLAGS || CPP_CAN_STDIN || cppstdinflags || d_cppcanstdin
: Now see how to send stdin to it.
echo " "
cp testcpp.c testcpp.h
$cppfilecom <testcpp.h >testcpp.out 2>&1
if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Great; and it will read stdin if passed no arguments."
 val="$define"
 cppstdinflags="
else
 $cppfilecom - <testcpp.h >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
  $contains comment testcpp.out >/dev/null 2>&1
 then
  echo "Great; and it can read stdin by passing it '-'."
  val="$define"
  cppstdinflags='-'
 else
  $cat <<FOO
Unfortunately, I can't find an easy way to get that preprocessor to read from
standard input. Do you know any flags I can pass it to get it to do so?
If that preprocessor can't read directly form standard input, answer 'none'.

FOO
 val='dunno'
 while $test "$val" = "dunno"; do
  rp='Flags to get preprocessor
 to read stdin?'
  dflt='none'
```

```
  . ./myread
  if $test $ans = 'none'; then
   echo "Oh well, if $package wants it done, it will do it for itself."
   val="$undef"
  else
   $cppfilecom $ans <testcpp.h >testcpp.out 2>&1
   if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
    $contains comment testcpp.out >/dev/null 2>&1
   then
    echo "Good; that works fine."
    val="$define"
    cppstdinflags="$ans"
   else
    echo "Sorry, I couldn't get that to work."
   fi
  fi
 done
 fi
fi
set d_cppcanstdin
eval $setvar

@end
: cleanup cpp test files anyway
$rm -f testcpp.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cppfilecom.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: rcs_branch.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: rcs_branch.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:rcs_branch: Myread contains Loc
?MAKE: -pick add $@ %<
?S:rcs_branch:
?S: This variable will hold "true" if rcs can take the -b<revision>
```

```
?S: option, which can make Life Easier on those folks who like to run
?S: rcsdiff manually.
?S:.
?T:xxx
: Tra la la la la
echo " "
echo "Checking to see if RCS understands the -b switch..." >&4
xxx=`./loc
 rcs " $pth`
case "$xxx" in
")
 rcs_branch=false
 echo "Oh.  You don't seem to have RCS here."
 ;;
*)
 rcs > rcsbranch.out 2>&1
 if $contains 'b\[rev\]' rcsbranch.out  >/dev/null 2>&1 ; then
  rcs_branch=true
  echo "Nice!  Your RCS is spiffy!"
 else
  rcs_branch=false
 echo "Well, at least you have RCS.  You know, a newer version is available."
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/rcs_branch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999-2016 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_PRIfldbl sPRIfldbl d_PRIgldbl d_PRIFUldbl sPRIGUldbl d_PRIEUldbl \
 sPRIgldbl d_PRIeldbl sPRIeldbl sPRIFUldbl d_PRIGUldbl sPRIEUldbl \
 d_SCNfldbl  d_double_style_vax d_double_style_ieee \
 d_double_style_ibm d_double_style_cray d_double_has_subnormals \
 d_double_has_inf d_double_has_nan d_double_has_negative_zero \
 sSCNfldbl doublekind: \
 d_longdbl longdblsize doublesize uselongdouble test echo cat rm_try \
 Setvar Compile run i_stdlib osname gccversion ccflags
?MAKE: -pick add $@ %<
?S:doublekind:
?S: This variable, if defined, encodes the type of a double:
```

```
?S:  1 = IEEE 754 32-bit little endian,
?S:  2 = IEEE 754 32-bit big endian,
?S:  3 = IEEE 754 64-bit little endian,
?S:  4 = IEEE
 754 64-bit big endian,
?S:  5 = IEEE 754 128-bit little endian,
?S:  6 = IEEE 754 128-bit big endian,
?S:  7 = IEEE 754 64-bit mixed endian le-be,
?S:  8 = IEEE 754 64-bit mixed endian be-le,
?S:  9 = VAX 32bit little endian F float format
?S: 10 = VAX 64bit little endian D float format
?S: 11 = VAX 64bit little endian G float format
?S: 12 = IBM 32bit format
?S: 13 = IBM 64bit format
?S: 14 = Cray 64bit format
?S: -1 = unknown format.
?S:.
?S:d_PRIfldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIgldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIeldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIFUldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates
 that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIfldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_PRIGUldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIgldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_PRIEUldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIeldbl so that even
?S: case-blind systems can see the difference.
?S:.
```

```
?S:d_SCNfldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to scan long doubles.
?S:.
?S:sPRIfldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'f') for
 output.
?S:.
?S:sPRIgldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'g') for output.
?S:.
?S:sPRIeldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'e') for output.
?S:.
?S:sPRIFUldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'F') for output.
?S: The 'U' in the name is to separate this from sPRIfldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRIGUldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'G') for output.
?S: The 'U' in the name is to separate this from sPRIgldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRIEUldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'E') for output.
?S: The 'U' in the name is to separate this from sPRIeldbl so that even
?S: case-blind
 systems can see the difference.
?S:.
?S:sSCNfldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'f') for input.
?S:.
?S:d_double_has_inf:
?S: This variable conditionally defines the symbol DOUBLE_HAS_INF
?S: which indicates that the double type has an infinity.
?S:.
?S:d_double_has_nan:
?S: This variable conditionally defines the symbol DOUBLE_HAS_NAN
?S: which indicates that the double type has a not-a-number.
?S:.
```

```
?S:d_double_has_negative_zero:
?S: This variable conditionally defines the symbol DOUBLE_HAS_NEGATIVE_ZERO
?S: which indicates that the double type has a negative zero.
?S:.
?S:d_double_has_subnormals:
?S: This variable conditionally defines the symbol DOUBLE_HAS_SUBNORMALS
?S: which indicates that the double type has subnormals (denormals).
?S:.
?S:d_double_style_cray:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_CRAY
?S: which indicates that the double is the 64-bit CRAY mainframe
 format.
?S:.
?S:d_double_style_ibm:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_IBM,
?S: which indicates that the double is the 64-bit IBM mainframe format.
?S:.
?S:d_double_style_ieee:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_IEEE,
?S: which indicates that the double is the 64-bit IEEE 754.
?S:.
?S:d_double_style_vax:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_VAX,
?S: which indicates that the double is the 64-bit VAX format D or G.
?S:.
?C:PERL_PRIfldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'f') for output.
?C:.
?C:PERL_PRIgldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'g') for output.
?C:.
?C:PERL_PRIeldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'e') for output.
?C:.
?C:PERL_PRIFldbl:
?C: This symbol, if defined, contains the string used by stdio
 to
?C: format long doubles (format 'f') for output.
?C:.
?C:PERL_PRIGldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'g') for output.
?C:.
?C:PERL_PRIEldbl:
?C: This symbol, if defined, contains the string used by stdio to
```

```
?C: format long doubles (format 'e') for output.
?C:.
?C:PERL_SCNfldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'f') for input.
?C:.
?C:DOUBLEKIND:
?C: DOUBLEKIND will be one of
?C: DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE
?C: DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE
?C: DOUBLE_IS_VAX_F_FLOAT
?C: DOUBLE_IS_VAX_D_FLOAT
?C: DOUBLE_IS_VAX_G_FLOAT
?C: DOUBLE_IS_IBM_SINGLE_32_BIT
?C: DOUBLE_IS_IBM_DOUBLE_64_BIT
?C: DOUBLE_IS_CRAY_SINGLE_64_BIT
?C: DOUBLE_IS_UNKNOWN_FORMAT
?C:.
?C:DOUBLE_HAS_INF:
?C: This
 symbol, if defined, indicates that the double has
?C: the infinity.
?C:.
?C:DOUBLE_HAS_NAN:
?C: This symbol, if defined, indicates that the double has
?C: the not-a-number.
?C:.
?C:DOUBLE_HAS_NEGATIVE_ZERO:
?C: This symbol, if defined, indicates that the double has
?C: the negative_zero.
?C:.
?C:DOUBLE_HAS_SUBNORMALS:
?C: This symbol, if defined, indicates that the double has
?C: the subnormals (denormals).
?C:.
?C:DOUBLE_STYLE_CRAY:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit CRAY mainframe format.
?C:.
?C:DOUBLE_STYLE_IBM:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit IBM mainframe format.
```

```
?C:.
?C:DOUBLE_STYLE_IEEE:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit IEEE 754.
?C:.
?C:DOUBLE_STYLE_VAX:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit VAX format D or G.
?C:.
?LINT:known
 DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE
?LINT:known DOUBLE_IS_VAX_F_FLOAT
?LINT:known DOUBLE_IS_VAX_D_FLOAT
?LINT:known DOUBLE_IS_VAX_G_FLOAT
?LINT:known DOUBLE_IS_IBM_SINGLE_32_BIT
?LINT:known DOUBLE_IS_IBM_DOUBLE_64_BIT
?LINT:known DOUBLE_IS_CRAY_SINGLE_64_BIT
?LINT:known DOUBLE_IS_UNKNOWN_FORMAT
?H:#define DOUBLEKIND $doublekind  /**/
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN 1
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN 2
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN 3
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN 4
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN 5
?H:?DOUBLEKIND:#define
 DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN 6
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE 7
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE 8
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_F_FLOAT 9
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_D_FLOAT 10
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_G_FLOAT 11
?H:?DOUBLEKIND:#define DOUBLE_IS_IBM_SINGLE_32_BIT 12
?H:?DOUBLEKIND:#define DOUBLE_IS_IBM_DOUBLE_64_BIT 13
?H:?DOUBLEKIND:#define DOUBLE_IS_CRAY_SINGLE_64_BIT 14
?H:?DOUBLEKIND:#define DOUBLE_IS_UNKNOWN_FORMAT  -1
?H:#$d_PRIfldbl PERL_PRIfldbl $sPRIfldbl /**/
?H:#$d_PRIgldbl PERL_PRIgldbl $sPRIgldbl /**/
?H:#$d_PRIeldbl PERL_PRIeldbl $sPRIeldbl /**/
?H:#$d_PRIFUldbl PERL_PRIFldbl $sPRIFUldbl /**/
?H:#$d_PRIGUldbl PERL_PRIGldbl $sPRIGUldbl /**/
?H:#$d_PRIEUldbl PERL_PRIEldbl $sPRIEUldbl /**/
```

```
?H:#$d_SCNfldbl PERL_SCNfldbl $sSCNfldbl /**/
?H:#$d_double_has_inf DOUBLE_HAS_INF
?H:#$d_double_has_nan DOUBLE_HAS_NAN
?H:#$d_double_has_negative_zero
 DOUBLE_HAS_NEGATIVE_ZERO
?H:#$d_double_has_subnormals DOUBLE_HAS_SUBNORMALS
?H:#$d_double_style_cray DOUBLE_STYLE_CRAY
?H:#$d_double_style_ibm DOUBLE_STYLE_IBM
?H:#$d_double_style_ieee DOUBLE_STYLE_IEEE
?H:#$d_double_style_vax DOUBLE_STYLE_VAX
?H:.
?T:yyy message saveccflags
?F:!try
?LINT:change ccflags
?LINT:change uselongdouble
: Check what kind of doubles your system has
$echo "Checking the kind of doubles you have..." >&4
$cat >try.c <<EOP
#$i_stdlib I_STDLIB
#define DOUBLESIZE $doublesize
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
static const double d = -0.1;
int main() {
 unsigned const char* b = (unsigned const char*)(&d);
#if DOUBLESIZE == 4
 if (b[0] == 0xCD && b[3] == 0xBD) {
   /* IEEE 754 32-bit little-endian */
   printf("1\n");
   exit(0);
 }
 if (b[0] == 0xBD && b[3] == 0xCD) {
   /* IEEE 754 32-bit big-endian */
   printf("2\n");
   exit(0);
 }
 if (b[0] == 0xCC && b[3] == 0xCC) {
   /* VAX format F, 32-bit
 PDP-style mixed endian. */
   printf("9\n");
   exit(0);
 }
 if (b[0] == 0xC0 && b[3] == 0x9A) {
   /* IBM single 32-bit */
   printf("12\n");
   exit(0);
```

```
 }
#endif
#if DOUBLESIZE == 8
 if (b[0] == 0x9A && b[7] == 0xBF) {
   /* IEEE 754 64-bit little-endian */
   printf("3\n");
   exit(0);
 }
 if (b[0] == 0xBF && b[7] == 0x9A) {
   /* IEEE 754 64-bit big-endian */
   printf("4\n");
   exit(0);
 }
 if (b[0] == 0x99 && b[3] == 0xBF && b[4] == 0x9A && b[7] == 0x99) {
  /* ARM mixed endian: two little-endian 32-bit floats, in big endian order:
   * 4 5 6 7 0 1 2 3 (MSB = 7, LSB = 0)
   * 99 99 b9 bf 9a 99 99 99 */
   printf("7\n");
   exit(0);
 }
 if (b[0] == 0x99 && b[3] == 0x9A && b[4] == 0xBF && b[7] == 0x99) {
  /* The opposite of case 7, mixed endian: two big-endian 32-bit floats,
   * in little endian order: 3 2 1 0 7 6 5 4 (MSB = 7, LSB = 0)
   * 99 99 99 9a bf b9 99 99 */
   printf("8\n");
   exit(0);
 }
 if (b[0] == 0xCC && b[7] == 0xCC) {
  /* VAX
 format D, 64-bit PDP-style mixed endian. */
   printf("10\n");
   exit(0);
 }
 if (b[0] == 0xD9 && b[7] == 0x99) {
  /* VAX format G, 64-bit PDP-style mixed endian. */
   printf("11\n");
   exit(0);
 }
 if (b[0] == 0xC0 && b[7] == 0x9A) {
   /* IBM double 64-bit */
   printf("13\n");
   exit(0);
 }
 if (b[0] == 0xBF && b[7] == 0xCD) {
   /* CRAY single 64-bit */
   printf("14\n");
   exit(0);
 }
```

```
#endif
#if DOUBLESIZE == 16
 if (b[0] == 0x9A && b[15] == 0xBF) {
   /* IEEE 754 128-bit little-endian */
   printf("5\n");
   exit(0);
 }
 if (b[0] == 0xBF && b[15] == 0x9A) {
   /* IEEE 754 128-bit big-endian */
   printf("6\n");
   exit(0);
 }
#endif
 /* Then there are old mainframe/miniframe formats like IBM and CRAY.
  * Whether those environments can still build Perl is debatable. */
 printf("-1\n"); /* unknown */
 exit(0);
}
EOP
set try
if eval $compile; then
   doublekind=`$run ./try`
else
   doublekind=-1
fi
case "$doublekind" in
1) echo "You have IEEE
 754 32-bit little endian doubles." >&4 ;;
2) echo "You have IEEE 754 32-bit big endian doubles." >&4 ;;
3) echo "You have IEEE 754 64-bit little endian doubles." >&4 ;;
4) echo "You have IEEE 754 64-bit big endian doubles." >&4 ;;
5) echo "You have IEEE 754 128-bit little endian doubles." >&4 ;;
6) echo "You have IEEE 754 128-bit big endian doubles." >&4 ;;
7) echo "You have IEEE 754 64-bit mixed endian doubles (32-bit LEs in BE)." >&4 ;;
8) echo "You have IEEE 754 64-bit mixed endian doubles (32-bit BEs in LE)." >&4 ;;
9) echo "You have VAX format F 32-bit PDP-style mixed endian doubles." >&4 ;;
10) echo "You have VAX format D 64-bit PDP-style mixed endian doubles." >&4 ;;
11) echo "You have VAX format G 64-bit PDP-style mixed endian doubles." >&4 ;;
12) echo "You have IBM short 32-bit doubles." >&4 ;;
13) echo "You have IBM long 64-bit doubles." >&4 ;;
14) echo "You have Cray single 64-bit doubles." >&4 ;;
*) echo "Cannot figure out your double.  You Cyber, or something?" >&4 ;;
esac
d_double_style_ieee=$undef
d_double_style_vax=$undef
d_double_style_ibm=$undef
d_double_style_cray=$undef
case
```

```
 "$doublekind" in
1|2|3|4|5|6|7|8) d_double_style_ieee=$define ;;
9|10|11) d_double_style_vax=$define ;;
12|13) d_double_style_ibm=$define ;;
14) d_double_style_cray=$define ;;
esac
case "$d_double_style_ieee" in
$define)
   d_double_has_inf=$define
   d_double_has_nan=$define
   d_double_has_negative_zero=$define
   d_double_has_subnormals=$define
   ;;
*)
   d_double_has_inf=$undef
   d_double_has_nan=$undef
   d_double_has_negative_zero=$undef
   d_double_has_subnormals=$undef
   ;;
esac
$rm_try

: Check print/scan long double stuff
echo " "

if $test X"$d_longdbl" = X"$define"; then

echo "Checking how to print long doubles..." >&4

if $test X"$sPRIfldbl" = X -a X"$doublesize" = X"$longdblsize"; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 double d = 123.456;
 printf("%.3f\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run
 ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"f"'; sPRIgldbl='"g"'; sPRIeldbl='"e"';
   sPRIFUldbl='"F"'; sPRIGUldbl='"G"'; sPRIEUldbl='"E"';
   echo "We will use %f."
   ;;
```

```
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3Lf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"Lf"'; sPRIgldbl='"Lg"'; sPRIeldbl='"Le"';
   sPRIFUldbl='"LF"'; sPRIGUldbl='"LG"'; sPRIEUldbl='"LE"';
   echo "We will use %Lf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3llf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"llf"'; sPRIgldbl='"llg"'; sPRIeldbl='"lle"';
   sPRIFUldbl='"llF"'; sPRIGUldbl='"llG"'; sPRIEUldbl='"llE"';
   echo "We
 will use %llf."
   ;;
  esac
 fi
fi
```

```
if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3lf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"lf"'; sPRIgldbl='"lg"'; sPRIeldbl='"le"';
   sPRIFUldbl='"lF"'; sPRIGUldbl='"lG"'; sPRIEUldbl='"lE"';
   echo "We will use %lf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 echo "Cannot figure out how to print long doubles." >&4
else
 sSCNfldbl=$sPRIfldbl # expect consistency
fi

$rm_try

fi # d_longdbl

case "$sPRIfldbl" in
") d_PRIfldbl="$undef"; d_PRIgldbl="$undef"; d_PRIeldbl="$undef";
 d_PRIFUldbl="$undef"; d_PRIGUldbl="$undef"; d_PRIEUldbl="$undef";
 d_SCNfldbl="$undef";
 ;;
*) d_PRIfldbl="$define"; d_PRIgldbl="$define"; d_PRIeldbl="$define";
 d_PRIFUldbl="$define"; d_PRIGUldbl="$define"; d_PRIEUldbl="$define";
 d_SCNfldbl="$define";
 ;;
esac

: Before committing on uselongdouble,
 see whether that looks sane.
if $test "$uselongdouble" = "$define"; then
   message=""
```

```
   echo " "
   echo "Checking if your long double math functions work right..." >&4
   $cat > try.c <<EOF
#include <math.h>
#include <stdio.h>
int main() {
 printf("%"$sPRIgldbl"\n", sqrtl(logl(expl(cosl(sinl(0.0L))))+powl(2.0L, 3.0L)));
}
EOF
   case "$osname:$gccversion" in
   aix:) saveccflags="$ccflags"
  ccflags="$ccflags -qlongdouble" ;; # to avoid core dump
   esac
   set try
   if eval $compile_ok; then
     yyy=`$run ./try`
   fi
   case "$yyy" in
   3) echo "Your long double math functions are working correctly." >&4 ;;
   *) echo "Your long double math functions are broken, not using long doubles." >&4
      uselongdouble=$undef
      ;;
   esac
   $rm_try
   case "$osname:$gccversion" in
   aix:) ccflags="$saveccflags" ;; # restore
   esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/longdblfio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpagsz.U,v 3.0.1.1 1994/10/29 16:13:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpagsz.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:10  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:14  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpagsz: Compile Oldconfig Myread Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_getpagsz:
?S: This variable conditionally defines HAS_GETPAGESIZE if getpagesize()
?S: is available to get the system page size.
?S:.
?C:HAS_GETPAGESIZE
 (GETPAGESIZE):
?C: This symbol, if defined, indicates that the getpagesize system call
?C: is available to get system page size, which is the granularity of
?C: many memory management calls.
?C:.
?H:#$d_getpagsz HAS_GETPAGESIZE  /**/
?H:.
?LINT:set d_getpagsz
: see if getpagesize exists
set getpagesize d_getpagsz
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_getpagsz.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setrgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setrgid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setrgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setrgid:
?S: This variable conditionally defines the HAS_SETRGID symbol, which
?S: indicates to the C program that the setrgid() routine is available
?S: to change the real gid of the current program.
?S:.
?C:HAS_SETRGID (SETRGID):
?C: This symbol, if defined, indicates that the setrgid
```

```
 routine is available
?C: to change the real gid of the current program.
?C:.
?H:#$d_setrgid HAS_SETRGID  /**/
?H:.
?LINT:set d_setrgid
: see if setrgid exists
set setrgid d_setrgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setrgid.U
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```
?RCS: $Id: d_endpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endpent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endpent:
?S: This variable conditionally defines HAS_ENDPROTOENT if endprotoent() is
?S: available to close whatever was being used for protocol queries.
?S:.
?C:HAS_ENDPROTOENT:
?C: This symbol, if defined, indicates that the endprotoent() routine is
?C: available to close whatever was being used
 for protocol queries.
?C:.
?H:#$d_endpent HAS_ENDPROTOENT  /**/
?H:.
?LINT:set d_endpent
: see if endprotoent exists
set endprotoent d_endpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endpent.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mkstemp.U,v 3.0.1.1 1994/08/29 16:11:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mkstemp.U,v $
?RCS:
?MAKE:d_mkstemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkstemp:
?S: This variable conditionally defines the HAS_MKSTEMP symbol, which
?S: indicates to the C program that the mkstemp() routine is available
?S: to exclusively create and open a uniquely named temporary file.
?S:.
?C:HAS_MKSTEMP :
?C: This symbol, if defined, indicates that the mkstemp routine is
?C: available to exclusively create and open a uniquely named
?C: temporary file.
?C:.
?H:#$d_mkstemp HAS_MKSTEMP  /**/
?H:.
?LINT:set d_mkstemp
: see if mkstemp exists
set mkstemp d_mkstemp
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_mkstemp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_havetlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_havetlib.U,v $
```

```
?RCS: Revision 3.0.1.2  1997/02/28  15:36:31  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:44:06  ram
?RCS: patch23: added AIX support to accept shared lib stub as termlib (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_havetlib termlib: cat contains Myread Loc
 Filexp Oldconfig libpth \
 test uname _a _o
?MAKE: -pick add $@ %<
?S:d_havetlib:
?S: This variable conditionally defines the HAS_TERMLIB symbol, which
?S: indicates to the C program that termlib-style routines are available.
?S:.
?S:termlib:
?S: This variable contains the argument to pass to the loader to get
?S: termlib-style routines.  It is up to the Makefile.SH to make sure
?S: the value gets to the right command.  Note that on many systems the
?S: termlib routines are emulated by the curses or terminfo library.
?S:.
?C:HAS_TERMLIB (HAVETERMLIB):
?C: This symbol, when defined, indicates that termlib-style routines
?C: are available.  There is nothing to include.
?C:.
?H:#$d_havetlib HAS_TERMLIB /**/
?H:.
?T:xxx
: where do we get termlib routines from
echo " "
xxx=`./loc libcurses$_a x $libpth`
case "$xxx" in
/*)
 ar t $xxx >grimble
 if $contains tputs$_o grimble >/dev/null 2>&1; then
  termlib='-lcurses'
  d_havetlib="$define"
  echo "Terminfo library found." >&4
 elif $test "x`$uname
 2>/dev/null`" = xAIX; then
  # Ok, do the AIX shr.o fun thing
  /usr/ccs/bin/nm -en $xxx 2>/dev/null >grimble
  if $contains '^tputs .*|extern|' grimble >/dev/null 2>&1; then
   termlib='-lcurses'
   d_havetlib="$define"
```

```
   echo "AIX Terminfo library found." >&4
  else
   xxx=x
  fi
 else
  xxx=x
 fi
 rm -f grimble
 ;;
esac
case "$xxx" in
x)
 xxx=`./loc libtermlib$_a x $libpth`
 case "$xxx" in
 /usr/lib*|/lib*)
  termlib='-ltermlib'
  d_havetlib="$define"
  echo "Termlib library found." >&4
  ;;
 /*)
  termlib="$xxx"
  d_havetlib="$define"
  echo "Termlib library found." >&4
  ;;
 *)
  xxx=`./loc libtermcap$_a x $libpth`
  case "$xxx" in
  /usr/lib*|/lib*)
   termlib='-ltermcap'
   d_havetlib="$define"
   echo "Termcap library found." >&4
   ;;
  /*)
   termlib="$xxx"
   d_havetlib="$define"
   echo "Termcap library found." >&4
   ;;
  *)
   case "$termlib" in
   ")
    dflt=y
rp="Your system appears to NOT have termlib-style routines. Is this true?"
    . ./myread
    case "$ans"
 in
    n*|f*) d_havetlib="$define"
     $cat <<'EOM'
Then where are the termlib-style routines kept? Specify either -llibname
```

```
or a full pathname (~name ok).

EOM
    dflt=''
    rp='Specify termlib path:'
    . ./myread
    termlib=`./filexp $ans`
    ;;
   *)
    d_havetlib="$undef"
    termlib=''
    echo "You will have to play around with term.c then." >&4
    ;;
   esac
  echo " ";;
  *)  echo "You said termlib was $termlib before." >&4;;
  esac;;
 esac;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_havetlib.U
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```
?RCS: $Id: d_ckeypad.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ckeypad.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ckeypad: cat cc termlib Setvar
?MAKE: -pick add $@ %<
?S:d_ckeypad:
?S: This variable controls the definition of HAS_CURSES_KEYPAD,
?S: which tells the application that the keypad() curses function
?S: is available.
?S:.
?C:HAS_CURSES_KEYPAD:
?C: This symbol indicates the availability of the keypad() function
```

```
?C: of the curses library.
?C:.
?H:#$d_ckeypad
 HAS_CURSES_KEYPAD /**/
?H:.
?LINT:set d_ckeypad
: check for the "keypad()" function in the curses library
echo " "
case "$termlib" in
")
 echo "You don't have a curses library, so I won't waste time looking" >&4
 echo "to see if has the keypad() function." >&4
*)
echo "Checking the curses library ($termlib) for the keypad() function..." >&4
 $cat >c_keypad.c <<'EOCP'
#include <curses.h>
int main() {
 keypad(stdscr, TRUE);
 exit(0);
}
EOCP
 if $cc c_keypad.c >c_keypad.out 2>&1 ; then
  val=$define
  echo "It appears to have the keypad() function."
 else
  val=$undef
  echo "Your curses library doesn't appear to have the keypad() function."
 fi
esac
set d_ckeypad
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ckeypad.U
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```
?RCS: $Id: i_malloc.U,v 3.1 2003/01/21 18:51:51 merijn Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.1  2003/01/21  18:51:51  merijn
```

```
?RCS: Moved to modified: Ihdr replaced with Compile
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_malloc: cat rm_try Compile Setvar i_mallocmalloc
?MAKE: -pick add $@ %<
?S:i_malloc:
?S: This variable conditionally defines the I_MALLOC symbol, and indicates
?S: whether a C program should include <malloc.h>.
?S:.
?C:I_MALLOC:
?C: This
 symbol, if defined, indicates to the C program that it should
?C: include <malloc.h>.
?C:.
?H:#$i_malloc I_MALLOC  /**/
?H:.
?LINT:set i_malloc
: see if this is a malloc.h system
: we want a real compile instead of Inhdr because some systems have a
: malloc.h that just gives a compile error saying to use stdlib.h instead
echo " "
$cat >try.c <<EOCP
#include <stdlib.h>
#include <malloc.h>
#$i_mallocmalloc I_MALLOCMALLOC
#ifdef I_MALLOCMALLOC
# include <malloc/malloc.h>
#endif

int main () { return 0; }
EOCP
set try
if eval $compile; then
   echo "<malloc.h> found." >&4
   val="$define"
else
   echo "<malloc.h> NOT found." >&4
   val="$undef"
fi
$rm_try
set i_malloc
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_malloc.U
```

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lib.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:16:47  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:38:08  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:27:40  ram
?RCS: patch32: now uses installation prefix to set the default
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lib libexp: Getfile
 Loc Oldconfig Prefixit Prefixup prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?S:lib:
?S: This variable holds the name of the directory in which the user wants
?S: to put public library files for the package in question.  It is most
?S: often a local directory such as /usr/local/lib. Programs using this
?S: variable must be prepared to deal with filename expansion.
?S:.
?S:libexp:
?S: This variable is the same as the lib variable, but is filename expanded
?S: at configuration time, for convenient use in your makefiles.
?S:.
: determine where public libraries go
set lib lib
eval $prefixit
case "$lib" in
")
 dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
 set dflt
 eval $prefixup
 ;;
```

```
*)  dflt="$lib";;
esac
echo " "
fn=d~
rp='Where do you want to put the public libraries?'
. ./getfile
lib="$ans"
libexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_cbrt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_cbrt.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_cbrt: Inlibc
?MAKE: -pick add $@ %<
?S:d_cbrt:
?S: This variable conditionally defines the HAS_CBRT symbol, which
?S: indicates to the C program that the cbrt() (cube root) function
?S: is available.
?S:.
?C:HAS_CBRT (CBRT):
?C: This symbol, if defined, indicates that the cbrt() (cube root)
?C: function is available.
?C:.
?H:#$d_cbrt HAS_CBRT /**/
?H:.
?LINT:set
 d_cbrt
: see if cbrt exists
set cbrt d_cbrt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_cbrt.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2015 Jarkko Hietaniemi, H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:longdblinfbytes longdblnanbytes doubleinfbytes doublenanbytes: Inlibc \
 cat Compile run rm_try Setvar echo d_longdbl \
 doublekind doublesize longdblkind longdblsize
?MAKE: -pick add $@ %<
?S:longdblinfbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the long double precision infinity.
?S:.
?S:longdblnanbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the long double precision not-a-number.
?S:.
?S:doubleinfbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the double precision infinity.
?S:.
?S:doublenanbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for
 the double precision not-a-number.
?S:.
?C:DOUBLEINFBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes for the double precision infinity.
?C:.
?C:DOUBLENANBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes (0xHH) for the double precision not-a-number.
?C:.
?C:LONGDBLINFBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes for the long double precision infinity.
?C:.
?C:LONGDBLNANBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes (0xHH) for the long double precision not-a-number.
?C:.
?H:#define DOUBLEINFBYTES  $doubleinfbytes  /**/
?H:#define DOUBLENANBYTES  $doublenanbytes  /**/
```

```
?H:#define LONGDBLINFBYTES $longdblinfbytes  /**/
?H:#define LONGDBLNANBYTES $longdblnanbytes  /**/
?H:.
?F:!try
: Check what kind of inf/nan your system has
$echo "Checking the kind of infinities and nans you have..." >&4
$echo "(The following tests may crash.  That's
 okay.)" >&4
$cat >try.c <<EOP
#define DOUBLESIZE $doublesize
#$d_longdbl HAS_LONG_DOUBLE
#ifdef HAS_LONG_DOUBLE
#define LONG_DOUBLESIZE $longdblsize
#define LONG_DOUBLEKIND $longdblkind
#endif
#include <math.h>
#include <string.h>
#include <stdio.h>
/* Note that whether the sign bit is on or off
* for NaN depends on the CPU/FPU, and possibly
* can be affected by the build toolchain.
*
* For example for older MIPS and HP-PA 2.0 the quiet NaN is:
* 0x7f, 0xf7, 0xff, 0xff, 0xff, 0xff, 0xff, 0xff
* 0x7f, 0xf4, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00
* (respectively) as opposed to the more usual
* 0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00
*
* Pre-IEEE-754 floating point format do not even have inf/nan support
* at all.  They might have a "max" value (DBL_MAX), which may be deadly
* to even mention, causing immediate SIGFPE or equivalent: this is
* the case with VAX floating point, for example.
*/
static void bytes(void *v, unsigned int n) {
 unsigned char *p = (unsigned
 char *)v;
 int i;
 for (i = 0; i < n; i++) {
   printf("0x%02x%s", p[i], i < n - 1 ? ", " : "\n");
 }
}
int main(int argc, char *argv[]) {
  /* We cannot use 1.0/0.0 and 0.0/0.0 (with L suffixes for long double)
   * because some compilers are 'smart' and not only warn but refuse to
   * compile such 'illegal' values. */
  double dinf = exp(1e9);
  double dnan = sqrt(-1.0);
#ifdef HAS_LONG_DOUBLE
```

```
  long double ldinf = (long double)exp(1e9);
  long double ldnan = (long double)sqrt(-1.0);
# if LONG_DOUBLEKIND == 3 || LONG_DOUBLEKIND == 4
/* the 80-bit long doubles might have garbage in their excess bytes */
   memset((char *)&ldinf + 10, '\0', LONG_DOUBLESIZE - 10);
   memset((char *)&ldnan + 10, '\0', LONG_DOUBLESIZE - 10);
# endif
#endif
 if (argc == 2) {
   switch (argv[1][0]) {
   case '1': bytes(&dinf, sizeof(dinf)); break;
   case '2': bytes(&dnan, sizeof(dnan)); break;
#ifdef HAS_LONG_DOUBLE
   case '3': bytes(&ldinf, sizeof(ldinf)); break;
   case '4': bytes(&ldnan,
 sizeof(ldnan)); break;
#endif
   }
 }
 return 0;
}
EOP
set try
if eval $compile; then
   doubleinfbytes=`$run ./try 1`
   doublenanbytes=`$run ./try 2`
   case "$d_longdbl" in
   $define)
     longdblinfbytes=`$run ./try 3`
     longdblnanbytes=`$run ./try 4`
     ;;
   esac
else
   # Defaults in case the above test program failed.
   case "$doublekind" in
   1) # IEEE 754 32-bit LE
      doubleinfbytes='0x00, 0x00, 0xf0, 0x7f'
      doublenanbytes='0x00, 0x00, 0xf8, 0x7f'
      ;;
   2) # IEEE 754 32-bit BE
      doubleinfbytes='0x7f, 0xf0, 0x00, 0x00'
      doublenanbytes='0x7f, 0xf8, 0x00, 0x00'
      ;;
   3) # IEEE 754 64-bit LE
      doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0, 0x7f'
      doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8, 0x7f'
      ;;
   4) # IEEE 754 64-bit BE
```

```
    doubleinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
    doublenanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'

 ;;
  5) # IEEE 754 128-bit LE
    doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0,
0x7f'
    doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8,
0x7f'
    ;;
  6) # IEEE 754 128-bit BE
    doubleinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    doublenanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  7) # IEEE 754 64-bit mixed: 32-bit LEs in BE
    doubleinfbytes='0x00, 0x00, 0xf0, 0x7f, 0x00, 0x00, 0x00, 0x00'
    doublenanbytes='0x00, 0x00, 0xf8, 0x7f, 0x00, 0x00, 0x00, 0x00'
    ;;
  8) # IEEE 754 64-bit mixed: 32-bit BEs in LE
    doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x7f, 0xf0, 0x00, 0x00'
    doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x7f, 0xf8, 0x00, 0x00'
    ;;
  9|10|11|12|13|14) # VAX/Cray/IBM floating
 point formats, no inf/nan.
    doubleinfbytes=$undef
    doublenanbytes=$undef
    ;;
  *) # No idea.
    doubleinfbytes=$undef
    doublenanbytes=$undef
    ;;
  esac
  case "$longdblkind" in
  1) # IEEE 754 128-bit LE
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xff,
0x7f'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff,
0x7f'
    ;;
  2) # IEEE 754 128-bit BE
    longdblinfbytes='0x7f, 0xff, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  3) # IEEE 754 80-bit LE, 12 or 16 bytes (x86)
```

```
    case "$longdblsize" in
    12) # x86 32-bit (96 bits, or 4 x 32, or 12 x 8)
        longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff, 0x7f,
 0x00, 0x00'
        longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xc0, 0xff, 0x7f, 0x00, 0x00'
        ;;
    16) # x86_64
        longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
        longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xc0, 0xff, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
        ;;
    *)  # No idea.
        longdblinfbytes=$undef
        longdblnanbytes=$undef
    ;;
    esac
    ;;
  4) # IEEE 754 80-bit BE, 12 or 16 bytes
    case "$longdblsize" in
    12) # 32-bit system
        longdblinfbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
        longdblnanbytes='0x7f, 0xff, 0xc0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
        ;;
    16) # 64-bit system
        longdblinfbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
         longdblnanbytes='0x7f, 0xff, 0xc0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
        ;;
    *)  # No idea.
        longdblinfbytes=$undef
        longdblnanbytes=$undef
    ;;
    esac
    ;;
  5) # 128-bit LE-LE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0,
0x7f'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8,
0x7f'
    ;;
  6) # 128-bit BE-BE "double double"
    longdblinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
```

```
  7) # 128-bit LE-BE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'

    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  8) # 128-bit BE-LE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  9|10|11|12|13|14) # VAX/Cray/IBM floating point formats, no inf/nan.
    longdblinfbytes=$undef
    longdblnanbytes=$undef
    ;;
  *) # No idea.
    longdblinfbytes=$undef
    longdblnanbytes=$undef
    ;;
  esac
fi
# In case the program crashed the values are empty, turn them undef.
case "$doubleinfbytes" in
") doubleinfbytes=$undef ;;
esac
case "$doublenanbytes" in
") doublenanbytes=$undef ;;
esac
case "$longdblinfbytes" in
") longdblinfbytes=$undef ;;
esac
case "$longdblnanbytes" in
") longdblnanbytes=$undef ;;
esac
$rm_try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/infnan.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getlogin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_getlogin.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:41  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_getlogin: Inlibc
?MAKE: -pick add $@ %<
?S:d_getlogin:
?S: This variable conditionally defines the HAS_GETLOGIN symbol, which
?S: indicates to the C program that the getlogin() routine is available
?S: to get the login name.
?S:.
?C:HAS_GETLOGIN :
?C: This symbol,
 if defined, indicates that the getlogin routine is
?C: available to get the login name.
?C:.
?H:#$d_getlogin HAS_GETLOGIN  /**/
?H:.
?LINT:set d_getlogin
: see if getlogin exists
set getlogin d_getlogin
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getlogin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cppstdin.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:08:34  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
```

```
?RCS: Revision 3.0.1.3  1994/01/24  14:05:38  ram
?RCS: patch16: comment for CPPLAST was missing
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:18:58  ram
?RCS: patch15: new variables cpprun and cpplast, guaranteed wrapper-free
?RCS: patch15: cppstdin now tries to use cc, even at the cost of a wrapper
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:53  ram
?RCS: patch6:
 remove wrapper when not actually used
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppstdin cppminus cpprun cpplast: contains test Myread Oldconfig Loc \
 cpp +cc rm hint osname gccversion startsh eunicefix
?MAKE: -pick add $@ %<
?S:cppstdin:
?S: This variable contains the command which will invoke the C
?S: preprocessor on standard input and put the output to stdout.
?S: It is primarily used by other Configure units that ask about
?S: preprocessor symbols.
?S:.
?S:cppminus:
?S: This variable contains the second part of the string which will invoke
?S: the C preprocessor on the standard input and produce to standard
?S: output.  This variable will have the value "-" if cppstdin needs
?S: a minus to specify standard input, otherwise the value is "".
?S:.
?S:cpprun:
?S: This variable contains the command which will invoke a C preprocessor
?S: on standard input and put the output to stdout. It is guaranteed not
?S: to be a wrapper
 and may be a null string if no preprocessor can be
?S: made directly available. This preprocessor might be different from the
?S: one used by the C compiler. Don't forget to append cpplast after the
?S: preprocessor options.
?S:.
?S:cpplast:
?S: This variable has the same functionality as cppminus, only it applies to
?S: cpprun and not cppstdin.
?S:.
?C:CPPSTDIN:
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  Typical value of "cc -E" or "/lib/cpp", but it can also
?C: call a wrapper. See CPPRUN.
?C:.
```

```
?C:CPPMINUS:
?C: This symbol contains the second part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  This symbol will have the value "-" if CPPSTDIN needs a minus
?C: to specify standard input, otherwise the value is "".
?C:.
?C:CPPRUN:
?C: This symbol contains the string which will invoke a C preprocessor on
?C: the
 standard input and produce to standard output. It needs to end
?C: with CPPLAST, after all other preprocessor flags have been specified.
?C: The main difference with CPPSTDIN is that this program will never be a
?C: pointer to a shell wrapper, i.e. it will be empty if no preprocessor is
?C: available directly to the user. Note that it may well be different from
?C: the preprocessor used to compile the C program.
?C:.
?C:CPPLAST:
?C: This symbol is intended to be used along with CPPRUN in the same manner
?C: symbol CPPMINUS is used with CPPSTDIN. It contains either "-" or "".
?C:.
?H:#define CPPSTDIN "$cppstdin"
?H:#define CPPMINUS "$cppminus"
?H:#define CPPRUN "$cpprun"
?H:#define CPPLAST "$cpplast"
?H:.
?F:cppstdin !testcpp.out !testcpp.c
?T:wrapper x_cpp x_minus ok
: see how we invoke the C preprocessor
echo " "
echo "Now, how can we feed standard input to your C preprocessor..." >&4
cat <<'EOT' >testcpp.c
#define ABC abc
#define XYZ xyz
ABC.XYZ
EOT
cd ..
if $test ! -f cppstdin;
 then
 echo "$startsh" >cppstdin
if $test "X$osname" = "Xaix" -a "X$gccversion" = X; then
?X: AIX cc -E doesn't show the absolute headerfile
?X: locations but we'll cheat by using the -M flag.
 echo 'cat >.$$.c; rm -f .$$.u; '"$cc" ${1+"$@"} -M -c .$$.c 2>/dev/null; \
 test -s .$$.u && \
 awk '"'"$2 ~ /\.h$/ { print "# 0 \""$2"\"" }'"'" .$$.u; \
 rm -f .$$.o .$$.u; '"$cc" -E ${1+"$@"} .$$.c; rm .$$.c' >> cppstdin
else
 echo 'cat >.$$.c; '"$cc" -E ${1+"$@"} .$$.c; rm .$$.c' >>cppstdin
```

```
fi; else
 echo "Keeping your $hint cppstdin wrapper."
fi
chmod 755 cppstdin
$eunicefix cppstdin
wrapper=`pwd`/cppstdin
ok='false'
cd UU

?X:
?X: We'll run the cpp tests again if we don't have any valid C preprocessor
?X: yet or don't know how to proceed without a wrapper (in which case cpprun
?X: is empty and that's really annoying...)
?X:
if $test "X$cppstdin" != "X" && \
 $cppstdin $cppminus <testcpp.c >testcpp.out 2>&1 && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
then
 echo "You used to use
 $cppstdin $cppminus so we'll use that again."
 case "$cpprun" in
 '') echo "But let's see if we can live without a wrapper..." ;;
 *)
  if $cpprun $cpplast <testcpp.c >testcpp.out 2>&1 && \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
   echo "(And we'll use $cpprun $cpplast to preprocess directly.)"
   ok='true'
  else
   echo "(However, $cpprun $cpplast does not work, let's see...)"
  fi
  ;;
 esac
else
 case "$cppstdin" in
 '') ;;
 *)
  echo "Good old $cppstdin $cppminus does not seem to be of any help..."
  ;;
 esac
fi

if $ok; then
 : nothing
elif echo 'Maybe """$cc"' -E" will work...'; \
 $cc -E <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
```

```
 x_cpp="$cc -E"
 x_minus=";
elif echo 'Nope...maybe """$cc"' -E -" will work...'; \
 $cc -E - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc -E"
 x_minus='-';
elif echo 'Nope...maybe """$cc"'
 -P" will work...'; \
 $cc -P <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yipee, that works!"
 x_cpp="$cc -P"
 x_minus=";
elif echo 'Nope...maybe """$cc"' -P -" will work...'; \
 $cc -P - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "At long last!"
 x_cpp="$cc -P"
 x_minus='-';
elif echo 'No such luck, maybe "'$cpp"' will work...'; \
 $cpp <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "It works!"
 x_cpp="$cpp"
 x_minus=";
elif echo 'Nixed again...maybe "'$cpp' -" will work...'; \
 $cpp - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Hooray, it works!  I was beginning to wonder."
 x_cpp="$cpp"
 x_minus='-';
elif echo 'Uh-uh.  Time to get fancy.  Trying a wrapper...'; \
 $wrapper <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 x_cpp="$wrapper"
 x_minus="
 echo
 "Eureka!"
else
 dflt="
 rp="No dice.  I can't find a C preprocessor.  Name one:"
 . ./myread
 x_cpp="$ans"
 x_minus="
 $x_cpp <testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
```

```
  echo "OK, that will do." >&4
 else
echo "Sorry, I can't get that to work.  Go find one and rerun Configure." >&4
  exit 1
 fi
fi

case "$ok" in
false)
 cppstdin="$x_cpp"
 cppminus="$x_minus"
 cpprun="$x_cpp"
 cpplast="$x_minus"
?X:
?X: If /lib/cpp is used, try using a wrapper to increase our chances to have
?X: the C compiler and our $cppstdin agree on the same symbols... However,
?X: since cpprun is guaranteed not to be a wrapper, we must clear it if the
?X: only preprocessor we found was a wrapper, with all our luck...
?X:
 set X $x_cpp
 shift
 case "$1" in
 "$cpp")
  echo "Perhaps can we force $cc -E using a wrapper..."
  if $wrapper <testcpp.c >testcpp.out 2>&1; \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
   echo "Yup, we can."
   cppstdin="$wrapper"
   cppminus=";
  else
   echo
 "Nope, we'll have to live without it..."
  fi
  ;;
 esac
 case "$cpprun" in
 "$wrapper")
  cpprun="
  cpplast="
  ;;
 esac
 ;;
esac

case "$cppstdin" in
"$wrapper"|'cppstdin') ;;
*) $rm -f $wrapper;;
```

```
esac
$rm -f testcpp.c testcpp.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cppstdin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fdim: Inlibc
?MAKE: -pick add $@ %<
?S:d_fdim:
?S: This variable conditionally defines the HAS_FDIM symbol, which
?S: indicates to the C program that the fdim() routine is available.
?S:.
?C:HAS_FDIM:
?C: This symbol, if defined, indicates that the fdim routine is
?C: available to do the positive difference function.
?C:.
?H:#$d_fdim HAS_FDIM  /**/
?H:.
?LINT:set d_fdim
: see if fdim exists
set fdim d_fdim
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fdim.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: h_sysfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: h_sysfile.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:h_sysfile: Nothing
?MAKE: -pick add $@ %<
?S:h_sysfile:
```

```
?S: This is variable gets set in various places to tell i_sys_file that
?S: <sys/file.h> should be included.
?S:.
: Initialize h_sysfile
h_sysfile=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/h_sysfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dld.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_dld.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:20:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:i_dld: Inhdr
?MAKE: -pick add $@ %<
?S:i_dld:
?S: This variable conditionally defines the I_DLD symbol, which
?S: indicates to the C program that <dld.h> (GNU dynamic loading)
?S: exists and should be included.
?S:.
?C:I_DLD:
?C: This symbol, if defined, indicates that <dld.h>
 exists and should
?C: be included before using GNU dynamic loading features.
?C:.
?H:#$i_dld I_DLD /**/
?H:.
?LINT:set i_dld
: see if dld is available
set dld.h i_dld
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dld.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Begin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Begin.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:56:35  ram
?RCS: patch61: added Extractall dependency
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:25:08  ram
?RCS: patch49: avoid an empty rmlist: systems might choke on it (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/31  09:32:20  ram
?RCS: patch44: created
?RCS:
?X:
?X: This file comes after option processing had been done and after all
?X: the default values have been set up. It marks the beginning
 of questions.
?X: It is important that Options be listed *after* Myinit to ensure that the
?X: default initializations performed by Init and Myinit will not clobber
?X: any setting done on the command line via -D or -U.
?X:
?MAKE:Begin: Myinit Options package Extractall
?MAKE: -pick add $@ %<
: Eunice requires " " instead of "", can you believe it
echo " "
: Here we go...
echo "Beginning of configuration questions for $package."

?X: Make sure the rm below is given a non-empty list for some systems.
?X: This is run only when within the UU directory, hence we can safely
?X: attempt to rm a non-existent 'X' file...
trap 'echo " "; test -d ../UU && rm -rf X $rmlist; exit 1' 1 2 3 15
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Begin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sgndchr.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:44:25  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:00:24  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sgndchr: cat rm +cc +ccflags Setvar
?MAKE: -pick add $@ %<
?S:d_sgndchr:
?S: This variable conditionally defines the SIGNEDCHAR symbol, which
?S: indicates to the C program
 that signed characters are available.
?S:.
?C:SIGNEDCHAR:
?C: This symbol, if defined, indicates that characters are a signed type.
?C: If not defined, things declared as signed characters (and that make
?C: use of negative values) should probably be declared as shorts instead.
?C:.
?H:#$d_sgndchr SIGNEDCHAR /**/
?H:.
?F:!try
?LINT:set d_sgndchr
: check for signed chars
echo " "
echo "Checking to see if your C compiler can do signed chars..." >&4
$cat >try.c <<'EOCP'
int main()
{
 char c = 0;

 c--;
 exit(c >= 0);
}
EOCP
$cc $ccflags -o try try.c
if ./try; then
```

```
 val="$define"
 echo "It certainly can."
else
 val="$undef"
 echo "It can't.  I'll have to make some things type short."
fi
set d_sgndchr
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sgndchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endnent:
?S: This variable conditionally defines HAS_ENDNETENT if endnetent() is
?S: available to close whatever was being used for network queries.
?S:.
?C:HAS_ENDNETENT:
?C: This symbol, if defined, indicates that the endnetent() routine is
?C: available to close whatever was being used for network
 queries.
?C:.
?H:#$d_endnent HAS_ENDNETENT  /**/
?H:.
?LINT:set d_endnent
: see if endnetent exists
set endnetent d_endnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endnent.U

No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llrint: Inlibc
?MAKE: -pick add $@ %<
?S:d_llrint:
?S: This variable conditionally defines the HAS_LLRINT symbol, which
?S: indicates to the C program that the llrint() routine is available
?S: to return the long long value closest to a double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LLRINT:
?C: This symbol, if defined, indicates that the llrint routine is
?C: available to return the long long value closest to a double
?C: (according to the current rounding mode).
?C:.
?H:#$d_llrint HAS_LLRINT  /**/
?H:.
?LINT:set d_llrint
: see if llrint exists
set llrint d_llrint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llrint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dosuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Tye McQueen <tye@metronet.com> added safe setuid script checks.
?RCS:
?RCS: $Log: d_dosuid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:33:03  ram
?RCS: patch61: moved unit to TOP via a ?Y: layout directive
?RCS: patch61: tell them /dev/fd is not about floppy disks
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:08  ram
?RCS: patch36: added checks for secure setuid scripts (Tye McQueen)
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:55  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?MAKE:d_dosuid d_suidsafe: cat contains ls rm test Myread Setvar \
 Oldconfig Guess package hint patchlevel
?MAKE: -pick add $@ %<
?S:d_suidsafe:
?S: This variable conditionally defines SETUID_SCRIPTS_ARE_SECURE_NOW
?S: if setuid scripts can be secure.  This test looks in /dev/fd/.
?S:.
?S:d_dosuid:
?S: This variable conditionally defines the symbol DOSUID, which
?S: tells the C program that it should insert setuid emulation code
?S: on hosts which have setuid #! scripts disabled.
?S:.
?C:SETUID_SCRIPTS_ARE_SECURE_NOW:
?C: This symbol, if defined, indicates that the bug that prevents
?C: setuid scripts from being secure is not present in this kernel.
?C:.
?C:DOSUID:
?C: This symbol, if defined, indicates that the C program should
?C: check the script that it is executing for setuid/setgid bits, and
?C: attempt to emulate setuid/setgid on systems that have disabled
?C: setuid #! scripts because the kernel can't do it securely.
?C: It is up to the package
 designer to make sure that this emulation
?C: is done securely.  Among other things, it should do an fstat on
?C: the script it just opened to make sure it really is a setuid/setgid
?C: script, it should make sure the arguments passed correspond exactly
?C: to the argument on the #! line, and it should not trust any
?C: subprocesses to which it must pass the filename rather than the
?C: file descriptor of the script to be executed.
?C:.
?H:#$d_suidsafe SETUID_SCRIPTS_ARE_SECURE_NOW /**/
?H:#$d_dosuid DOSUID  /**/
?H:.
?Y:TOP
?F:!reflect
?LINT: set d_suidsafe
: see if setuid scripts can be secure
$cat <<EOM

Some kernels have a bug that prevents setuid #! scripts from being
secure.  Some sites have disabled setuid #! scripts because of this.

First let's decide if your kernel supports secure setuid #! scripts.
```

```
(If setuid #! scripts would be secure but have been disabled anyway,
don't say that they are secure if asked.)

EOM

val="$undef"
if $test -d /dev/fd; then
 echo "#!$ls" >reflect
 chmod
 +x,u+s reflect
 ./reflect >flect 2>&1
 if $contains "/dev/fd" flect >/dev/null; then
  echo "Congratulations, your kernel has secure setuid scripts!" >&4
  val="$define"
 else
  $cat <<EOM
If you are not sure if they are secure, I can check but I'll need a
username and password different from the one you are using right now.
If you don't have such a username or don't want me to test, simply
enter 'none'.

EOM
  rp='Other username to test security of setuid scripts with?'
  dflt='none'
  . ./myread
  case "$ans" in
  n|none)
   case "$d_suidsafe" in
   ") echo "I'll assume setuid scripts are *not* secure." >&4
    dflt=n;;
   "$undef")
    echo "Well, the $hint value is *not* secure." >&4
    dflt=n;;
   *) echo "Well, the $hint value *is* secure." >&4
    dflt=y;;
   esac
   ;;
  *)
   $rm -f reflect flect
   echo "#!$ls" >reflect
   chmod +x,u+s reflect
   echo >flect
   chmod a+w flect
   echo '"su" will (probably) prompt you for '"$ans's password."
   su $ans -c './reflect
 >flect'
   if $contains "/dev/fd" flect >/dev/null; then
    echo "Okay, it looks like setuid scripts are secure." >&4
```

```
    dflt=y
   else
    echo "I don't think setuid scripts are secure." >&4
    dflt=n
   fi
   ;;
  esac
  rp='Does your kernel have *secure* setuid scripts?'
  . ./myread
  case "$ans" in
  [yY]*) val="$define";;
  *) val="$undef";;
  esac
 fi
else
 echo "I don't think setuid scripts are secure (no /dev/fd directory)." >&4
 echo "(That's for file descriptors, not floppy disks.)"
 val="$undef"
fi
set d_suidsafe
eval $setvar

$rm -f reflect flect

: now see if they want to do setuid emulation
if $test $patchlevel -lt 11; then
echo " "
val="$undef"
case "$d_suidsafe" in
"$define")
 val="$undef"
 echo "No need to emulate SUID scripts since they are secure here." >&4
 ;;
*)
 $cat <<EOM
Some systems have disabled setuid scripts, especially systems where
setuid scripts cannot be secure.  On systems where setuid scripts have
been disabled, the setuid/setgid bits on scripts are
 currently
useless.  It is possible for $package to detect those bits and emulate
setuid/setgid in a secure fashion.  This emulation will only work if
setuid scripts have been disabled in your kernel.

EOM
 case "$d_dosuid" in
 "$define") dflt=y ;;
 *) dflt=n ;;
 esac
```

```
 rp="Do you want to do setuid/setgid emulation?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
 ;;
esac
set d_dosuid
eval $setvar
else
   case "$d_dosuid" in
 "$define")
 cat >&4 <<EOH

SUID emulation has been removed for 5.12
Please re-run Configure without -Dd_dosuid

EOH
 exit 1;
 ;;
   esac
   d_dosuid=undef
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dosuid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sanemcmp.U,v 3.0.1.1 1997/02/28 15:41:19 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sanemcmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:41:19  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sanemcmp: Compile cat d_memcmp rm_try run \
 i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_sanemcmp:
```

```
?S: This variable conditionally defines the HAS_SANE_MEMCMP symbol if
?S: the memcpy() routine is available and can be used to compare relative
?S: magnitudes of chars with their high bits set.
?S:.
?C:HAS_SANE_MEMCMP:
?C: This
 symbol, if defined, indicates that the memcmp routine is available
?C: and can be used to compare relative magnitudes of chars with their high
?C: bits set.  If it is not defined, roll your own version.
?C:.
?H:#$d_sanemcmp HAS_SANE_MEMCMP /**/
?H:.
?F:!try
?LINT: set d_sanemcmp
: can memcmp be trusted to compare relative magnitude?
?X: assume the worst
val="$undef"
case "$d_memcmp" in
"$define")
 echo " "
 echo "Checking if your memcmp() can compare relative magnitude..." >&4
 $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char a = -1;
char b = 0;
if ((a < b) && memcmp(&a, &b, 1) < 0)
```

```
 exit(1);
exit(0);
}
EOCP
 set try
 if eval
 $compile_ok; then
  if $run ./try 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "No, it can't (it uses signed chars)."
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
 fi
 ;;
esac
$rm_try
set d_sanemcmp
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sanemcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_erfc: Inlibc
?MAKE: -pick add $@ %<
?S:d_erfc:
?S: This variable conditionally defines the HAS_ERFC symbol, which
?S: indicates to the C program that the erfc() routine is available.
?S:.
?C:HAS_ERFC:
?C: This symbol, if defined, indicates that the erfc routine is
?C: available to do the complementary error function.
?C:.
?H:#$d_erfc HAS_ERFC  /**/
?H:.
?LINT:set d_erfc
: see if erfc exists
set erfc d_erfc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_erfc.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tzmin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tzmin.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:16:58  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_tzmin: contains cppstdin cppminus timeincl rm Setvar Guess
?MAKE: -pick add $@ %<
?S:d_tzmin:
?S: This symbol conditionally defines TZ_MINUTESWEST if the system uses
?S: tz_minuteswest in time header instead of timezone.
?S:.
?C:TZ_MINUTESWEST:
?C: This
 symbol is defined if this system uses tz_minuteswest
?C: in time header instead of timezone.
?C: If not defined, you may have to use struct timeb and ftime() rather
?C: than the new gettimeofday() system call.
?C:.
?H:#$d_tzmin TZ_MINUTESWEST  /**/
?H:.
?LINT:set d_tzmin
: see if tz_minuteswest is defined in time header
echo " "
val="$undef"
$cppstdin $cppminus < $timeincl > try 2>&1
if $contains 'tz_minuteswest' try >/dev/null 2>&1; then
echo "You have tz_minuteswest defined in $timeincl rather than timezone." >&4
 val="$define"
elif $contains 'timezone' try >/dev/null 2>&1; then
echo "You have timezone defined in $timeincl rather than tz_minuteswest." >&4
else
 echo "Your $timeincl file looks strange." >&4
fi
if ./bsd; then
```

```
 case "$d_tzmin" in
 "$undef") echo "(Maybe your system is an USG one after all?)";;
 esac
fi
set d_tzmin
eval $setvar
$rm -f try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tzmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_setpwent.U,v $
?RCS:
?MAKE:d_setpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpwent:
?S: This variable conditionally defines the HAS_SETPWENT symbol, which
?S: indicates to the C program that the setpwent() routine is available
?S: for initializing sequential access to the passwd database.
?S:.
?C:HAS_SETPWENT:
?C: This symbol, if defined, indicates that the setpwent routine is
?C: available for initializing sequential access of the passwd database.
?C:.
?H:#$d_setpwent HAS_SETPWENT  /**/
?H:.
?LINT:set d_setpwent
: see if setpwent exists
set setpwent d_setpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mprotect: Inlibc
?MAKE: -pick add $@ %<
?S:d_mprotect:
?S: This variable conditionally defines HAS_MPROTECT if mprotect() is
?S: available to modify the access protection of a memory mapped file.
?S:.
?C:HAS_MPROTECT:
?C: This symbol, if defined, indicates that the mprotect system call is
?C: available to modify the access protection of a memory mapped file.
?C:.
?H:#$d_mprotect HAS_MPROTECT  /**/
?H:.
?LINT:set d_mprotect
: see if mprotect exists
set mprotect d_mprotect
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mprotect.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lround: Inlibc
?MAKE: -pick add $@ %<
?S:d_lround:
?S: This variable conditionally defines the HAS_LROUND symbol, which
?S: indicates to the C program that the lround() routine is available
?S: to return the integral value nearest to x.
?S:.
?C:HAS_LROUND:
?C: This symbol, if defined, indicates that the lround routine is
?C: available to return the nearest integral value.
?C:.
?H:#$d_lround HAS_LROUND  /**/
?H:.
?LINT:set d_lround
: see if lround exists
set lround d_lround
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Loc.U 14 2006-08-28 16:51:14Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Loc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:04:16  ram
?RCS: patch61: allow users to specify paths on the command line
?RCS: patch61: will now substitute cp for ln if not supported
?RCS:
?RCS: Revision 3.0.1.9  1995/09/25  09:11:24  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS: patch59: abort Configure run when mandatory command is missing
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:40  ram
?RCS: patch56: now knows about
 OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.7  1995/01/11  15:13:37  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS: patch45: added path lookup for the 'comm' program
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:56:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: be careful and guard against wildcard searching (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:54:55  ram
?RCS: patch30: now locates find
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:18:15  ram
?RCS: patch27: added byacc to the trylist (ADO)
?RCS: patch27: lint lines reformatted (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:01:44  ram
?RCS: patch16: added metalint hint on changed PATH variable
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:16:52  ram
?RCS: patch15: now set _test variable when test is built-in
?RCS: patch15: fixed rare cases where echo is not needed
?RCS:
```

```
?RCS: Revision 3.0.1.1  1993/09/13  15:47:13  ram
?RCS: patch10: test program not always
 in /bin/test (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script "loc" which can be used to find out
?X: where in a list of directories something is.  It then uses loc to
?X: determine the location of commonly used programs.  It leaves loc sitting
?X: around for other Configure units to use, but arranges for its demise
?X: at the end of Configure.
?X:
?X: To add a new program to find, add it both to the ?MAKE: line and to either
?X: the loclist or trylist variable.
?X:
?X: I put startsh at the end of the dependency list, in order to avoid the
?X: loading of the spitshell unit before the instructions.
?X:
?MAKE:Loc awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort
 submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip: eunicefix n c startsh Instruct sysroot
?MAKE: -pick weed $@ %<
?LINT:describe awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip
?V::pth loclist trylist
?F:./loc test_h
?T:thisthing thing xxx dir file say _test DJGPP
?LINT:change PATH _egrep _ln _make _less
?LINT:extern _exe
: find out where common programs are
echo " "
echo "Locating common programs..." >&4
cat <<EOSC >loc
$startsh
case \$# in
0) exit 1;;
esac
thing=\$1
```

```
shift
dflt=\$1
shift
for dir in \$*; do
 case "\$thing" in
 .)
 if test -d \$dir/\$thing; then
  echo \$dir
  exit 0
 fi
 ;;
 *)
?X: Be careful in case thing includes wildcards that might expand
 to multiple
?X: files.  Choose the last one.  This happens when searching for shared
?X: libraries with version numbers.  How to choose which one we want is
?X: probably an insoluble problem, in general.
?X: Some folks leave things like libc.so.orig around w/o read
?X: permission.  A -r test would handle that, but since ./loc is
?X: also used to find executables (which are installed w/o read
?X: permission on SCO ODT 3.0, we can't include the -r test.
?X: If you need to use an _exe that is different from .exe
?X: you need to set it in Head.U.
 for thisthing in \$dir/\$thing; do
  : just loop through to pick last item
 done
 if test -f \$thisthing; then
  echo \$thisthing
  exit 0
 elif test "X$_exe" != X -a -f \$thisthing$_exe; then
  echo \$thisthing
  exit 0
 elif test -f \$dir/\$thing.exe; then
  if test -n "$DJGPP"; then
   echo \$dir/\$thing.exe
  elif test "$eunicefix" != ":"; then
   : on Eunice apparently
   echo \$dir/\$thing
  fi
  exit 0
 fi
 ;;
 esac
done
echo \$dflt
exit
 1
EOSC
```

```
chmod +x loc
$eunicefix loc
loclist="
?awk:awk
?cat:cat
?chgrp:chgrp
?chmod:chmod
?chown:chown
?comm:comm
?cp:cp
?echo:echo
?expr:expr
?find:find
?grep:grep
?ls:ls
?mkdir:mkdir
?mv:mv
?rm:rm
?sed:sed
?sleep:sleep
?sort:sort
?tail:tail
?touch:touch
?tr:tr
?uniq:uniq
"
trylist="
?Mcc:Mcc
?ar:ar
?bash:bash
?bison:bison
?byacc:byacc
?compress:compress
?cpio:cpio
?cpp:cpp
?csh:csh
?date:date
?egrep:egrep
?emacs:emacs
?flex:flex
?gmake:gmake
?gzip:gzip
?inews:inews
?ksh:ksh
?less:less
?line:line
?lint:lint
?ln:ln
```

```
?lp:lp
?lpr:lpr
?mail:mail
?mailx:mailx
?make:make
?more:more
?nm:nm
?nroff:nroff
?perl:perl
?pg:pg
?pmake:pmake
?pr:pr
?rmail:rmail
?sendmail:sendmail
?shar:shar
?smail:smail
?submit:submit
?tar:tar
?tbl:tbl
?tee:tee
?test:test
?troff:troff
?uname:uname
?uuname:uuname
?vi:vi
?zcat:zcat
?zip:zip
"
?LINT:set awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo emacs expr find flex \
 gmake gzip grep inews ksh line lint lp lpr ls mail mailx
 \
 mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee touch tr troff \
 uname uniq uuname vi zcat zip
pth=`echo $PATH | sed -e "s/$p_/ /g"`
pth="$pth $sysroot/lib $sysroot/usr/lib"
for file in $loclist; do
?X:
?X: Allow them to -Dmake=pmake on the command line for instance...
?X: If the file is not fully qualified, as in -Dmake=pmake, then we
?X: look the for the specified command (pmake here). If they say
?X: -Dmake=/sbin/make for instance, then we make sure the file
?X: exists, or we die...
?X:
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
```

```
  if test -f "$xxx"; then
   : ok
  else
   echo "WARNING: no $xxx -- ignoring your setting for $file." >&4
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo
 "I don't know where '$file' is, and my life depends on it." >&4
  echo "Go find a public domain implementation or fix your PATH setting!" >&4
  exit 1
  ;;
 esac
done
echo " "
echo "Don't worry if any of the following aren't found..."
say=offhand
for file in $trylist; do
?X: Allow them to -Dmake=pmake on the command line for instance (see above)
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   echo "WARNING: no $xxx -- ignoring your setting for $file." >&4
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
```

```
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo "I don't see $file out there, $say."
  say=either
  ;;
 esac
done
case "$egrep" in
egrep)
 echo "Substituting grep for egrep."
 egrep=$grep
 _egrep=$grep
 ;;
esac
@if less
case "$less"
 in
") ;;
*) if $less -R </dev/null >/dev/null 2>&1; then
        echo "Substituting less -R for less."
        less="$less -R"
        _less=$less
 fi
 ;;
esac
@end
@if ln
case "$ln" in
ln)
 echo "Substituting cp for ln."
 ln=$cp
 _ln=$cp
 ;;
esac
@end
@if make || gmake
case "$make" in
make)
 case "$gmake" in
 gmake)
 echo "I can't find make or gmake, and my life depends on it." >&4
```

```
 echo "Go find a public domain implementation or fix your PATH setting!" >&4
 exit 1
 ;;
 esac
 ;;
esac
case "$gmake" in
gmake) ;;
*) # We can't have osname yet.
 if test -f "/system/gnu_library/bin/ar.pm"; then # Stratus VOS
  # Assume that gmake, if found, is definitely GNU make
  # and prefer it over the system make.
  echo "Substituting gmake for make."
  make=$gmake
  _make=$gmake
 fi
 ;;
esac
@end
case "$test" in
test)
 echo "Hopefully test is built into your sh."
 ;;
*)
 if `sh -c "PATH= test true" >/dev/null 2>&1`; then
  echo "Using the test built into your sh."
?X:
?X: We need to set both test
 and _test, since Oldconfig.U will use the _test
?X: value to systematically restore computed paths, which may be wrong if
?X: we choose to load an old config.sh generated on another platform.
?X:
  test=test
  _test=test
 fi
 ;;
esac
?LINT:change n c
case "$echo" in
echo)
 echo "Hopefully echo is built into your sh."
 ;;
?X: For those rare cases where we don't need $echo...
") ;;
*)
 echo " "
echo "Checking compatibility between $echo and builtin echo (if any)..." >&4
 $echo $n "hi there$c" >foo1
```

```
 echo $n "hi there$c" >foo2
 if cmp foo1 foo2 >/dev/null 2>&1; then
  echo "They are compatible.  In fact, they may be identical."
 else
  case "$n" in
  '-n') n=" c='\c';;
  *) n='-n' c=";;
  esac
  cat <<FOO
They are not compatible!  You are probably running ksh on a non-USG system.
I'll have to use $echo instead of the builtin, since Bourne shell doesn't
have echo built in and we may have to run some Bourne shell scripts.  That
means I'll have to use '$n$c' to suppress newlines now.
  Life is ridiculous.

FOO
  $echo $n "The star should be here-->$c"
  $echo "*"
 fi
 $rm -f foo1 foo2
 ;;
esac

?X: The next part is irrelevant to the real process
# This question was auctioned at YAPC::Europe-2007 in Vienna
# I never promised you could answer it. I only auctioned the question.
cat <<FOO
The following message is sponsored by

 Dresden.pm<--The stars should be here.

Dear Perl user, system administrator or package
maintainer, the Perl community sends greetings to
you. Do you (emblematical) greet back [Y/n]? n

FOO

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Loc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_modfl d_modflproto: Inlibc Compile Hasproto cat \
 test ccflags uselongdouble \
 d_sqrtl d_aintl d_copysignl d_ilogbl d_scalbnl d_frexpl d_ldexpl \
 d_truncl
?MAKE: -pick add $@ %<
?S:d_modfl:
?S: This variable conditionally defines the HAS_MODFL symbol, which
?S: indicates to the C program that the modfl() routine is available.
?S:.
?S:d_modflproto:
?S: This symbol, if defined, indicates that the system provides
?S: a prototype for the modfl() function.  Otherwise, it is up
?S: to the program to supply one.  C99 says it should be
?S:  long double modfl(long double, long double *);
?S:.
?C:HAS_MODFL:
?C: This symbol, if defined, indicates that the modfl routine is
?C: available to split a long double
 x into a fractional part f and
?C: an integer part i such that |f| < 1.0 and (f + i) = x.
?C:.
?C:HAS_MODFL_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the modfl() function.  Otherwise, it is up
?C: to the program to supply one.
?C:.
?H:#$d_modfl HAS_MODFL  /**/
?H:#$d_modflproto HAS_MODFL_PROTO  /**/
?H:.
?T:message
?LINT:set d_modfl
?LINT:set d_modflproto
?LINT:change ccflags
: see if modfl exists
set modfl d_modfl
eval $inlibc

: see if prototype for modfl is available
echo " "
set d_modflproto modfl define math.h
eval $hasproto

if $test "$uselongdouble" = "$define"; then
   message=""
   if $test "$d_sqrtl" != "$define"; then
 message="$message sqrtl"
   fi
   if $test "$d_modfl" != "$define"; then
```

```
 if $test "$d_truncl:$d_copysignl" = "$define:$define"; then
    echo "You have both truncl and copysignl, so I can emulate modfl."
 else
    if $test "$d_aintl:$d_copysignl" = "$define:$define"; then
  echo "You have both aintl
 and copysignl, so I can emulate modfl."
    else
  message="$message modfl"
    fi
 fi
   fi
   if $test "$d_frexpl" != "$define"; then
 if $test "$d_ilogbl:$d_scalbnl" = "$define:$define"; then
    echo "You have both ilogbl and scalbnl, so I can emulate frexpl."
 else
    message="$message frexpl"
 fi
   fi
   if $test "$d_ldexpl" != "$define"; then
 message="$message ldexpl"
   fi

   if $test "$message" != ""; then
 $cat <<EOM >&4

*** You requested the use of long doubles but you do not seem to have
*** the following mathematical functions needed for long double support:
***    $message
*** Please rerun Configure without -Duselongdouble and/or -Dusemorebits.
*** Cannot continue, aborting.

EOM

 exit 1
   fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_modfl.U
No license file was found, but licenses were detected in source scan.

?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, 2012 Raphael Manfredi
?RCS:
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```
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:byteorder: cat Myread Oldconfig Loc +cc +ccflags rm_try
?MAKE: -pick add $@ %<
?S:byteorder:
?S: This variable holds the byte order. In the following, larger digits
?S: indicate more significance.  The variable byteorder is either 4321
?S: on a big-endian machine, or 1234 on a little-endian, or 87654321
?S: on a Cray ... or 3412 with weird order !
?S:.
?C:BYTEORDER:
?C: This symbol hold the hexadecimal constant defined in byteorder,
?C: i.e. 0x1234 or 0x4321, etc...
?C:.
?H:#define BYTEORDER 0x$byteorder /*
 large digits for MSB */
?H:.
?T:xxx_prompt
?F:!try
: check for ordering of bytes in a long
case "$byteorder" in
")
 $cat <<'EOM'

In the following, larger digits indicate more significance.  A big-endian
machine like a Pyramid or a Motorola 680?0 chip will come out to 4321. A
little-endian machine like a Vax or an Intel 80?86 chip would be 1234. Other
machines may have weird orders like 3412.  A Cray will report 87654321. If
the test program works the default is probably right.
I'm now running the test program...
EOM
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 int i;
 union {
  unsigned long l;
  char c[sizeof(long)];
 } u;

 if (sizeof(long) > 4)
  u.l = (0x08070605L << 32) | 0x04030201L;
 else
  u.l = 0x04030201L;
 for (i = 0; i < sizeof(long); i++)
  printf("%c", u.c[i]+'0');
 printf("\n");
```

```
 exit(0);
}
EOCP
 xxx_prompt=y
 if $cc $ccflags -o try try.c >/dev/null 2>&1 && ./try > /dev/null; then
  dflt=`./try`
  case "$dflt" in
  [1-4][1-4][1-4][1-4]|12345678|87654321)
   echo
 "(The test program ran ok.)"
   echo "byteorder=$dflt"
   xxx_prompt=n
   ;;
  ????|????????) echo "(The test program ran ok.)" ;;
  *) echo "(The test program didn't run right for some reason.)" ;;
  esac
 else
  dflt='4321'
  cat <<'EOM'
(I can't seem to compile the test program.  Guessing big-endian...)
EOM
 fi
 case "$xxx_prompt" in
 y)
  rp="What is the order of bytes in a long?"
  . ./myread
  byteorder="$ans"
  ;;
 *) byteorder=$dflt
  ;;
 esac
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/byteorder.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.

```
?RCS:
?RCS: $Log: abortsig.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:19  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:abortsig: Myread Oldconfig Guess cat +cc ccflags rm
?MAKE: -pick add $@ %<
?S:abortsig:
?S: This variable holds the name of the signal used by the abort() call.
?S:.
?C:ABORTSIG:
?C: This symbol holds the signal number (symbol) used by the abort() call. To
?C: actually
 define the signal symbol, <signal.h> should be included.
?C:.
?H:#define ABORTSIG $abortsig  /**/
?H:.
?T:signal
: which signal is sent by abort ?
echo " "
case "$abortsig" in
")
 echo "Checking to see which signal is sent to the process by abort()..." >&4
 echo "abort" > abort.sh
 chmod +x abort.sh
?X: SIGABRT should replace SIGIOT on USG machines in a near future (1991).
 for signal in SIGIOT SIGILL SIGABRT; do
  case "$abortsig" in
  ") $cat >abort.c <<EOP
/* FIXME: Missing #include <stdlib.h>*/
#include <signal.h>
caught() { exit(0); } /* FIXME: Use _exit() or _Exit() in signal handler  */
int main()
{
#ifdef $signal
 signal($signal, caught);
#endif
 if (-1 == abort())
  exit(1);
 exit(1);
}
EOP
?X: We have to use the abort.sh script otherwise sh behaves strangely on AIX.
   if $cc $ccflags -o abort abort.c >/dev/null 2>&1; then
    (./abort.sh) >/dev/null 2>&1
```

```
    case $? in
    0) abortsig="$signal";;
    esac
   fi
   ;;
  esac
 done
 ;;
esac
case "$abortsig" in
") echo
 "(I wasn't able to compute the signal name--guessing)"
 if ./usg; then
  dflt="SIGIOT"
 else
  dflt="SIGILL"
 fi;;
*)  dflt="$abortsig"
 ;;
esac
rp="Which signal does abort() send to the process (signal name)?"
. ./myread
abortsig="$ans"
$rm -f core abort.sh abort abort.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/abortsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fegetround: Inlibc
?MAKE: -pick add $@ %<
?S:d_fegetround:
?S: This variable conditionally defines HAS_FEGETROUND if fegetround() is
?S: available to get the floating point rounding mode.
?S:.
?C:HAS_FEGETROUND:
?C: This symbol, if defined, indicates that the fegetround routine is
?C: available to return the macro corresponding to the current rounding
?C: mode.
?C:.
?H:#$d_fegetround HAS_FEGETROUND /**/
?H:.
?LINT:set d_fegetround
: see if fegetround exists
set fegetround d_fegetround
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fegetround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_linuxstd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_linuxstd.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:05  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_linuxstd: d_stdstdio cppstdin cppflags cppminus \
 contains rm Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_linuxstd:
?S: This variable conditionally defines USE_LINUX_STDIO if this system
?S: has a FILE structure declaring _IO_read_base, _IO_read_ptr,
?S: and _IO_read_end
 in stdio.h.
?S:.
?C:USE_LINUX_STDIO:
?C: This symbol is defined if this system has a FILE structure declaring
?C: _IO_read_base, _IO_read_ptr, and _IO_read_end in stdio.h.
?C:.
?H:#$d_linuxstd USE_LINUX_STDIO  /**/
?H:.
?T:xxx
?LINT:set d_linuxstd
: see if stdio is like that in linux
case "$d_stdstdio" in
"$undef")
 echo " "
 xxx=`./findhdr stdio.h`
 $cppstdin $cppflags $cppminus < "$xxx" > stdio.E
 if $contains 'char.*_IO_read_base' stdio.E >/dev/null 2>&1 && \
  $contains '_IO_read_ptr' stdio.E >/dev/null 2>&1 && \
  $contains '_IO_read_end' stdio.E >/dev/null 2>&1 ; then
```

```
  echo "Your stdio looks like linux." >&4
  val="$define"
 else
  echo "You don't have linux stdio, either." >&4
  val="$undef"
 fi
 $rm -f stdio.E
 ;;
*) val="$undef" ;;
esac

set d_linuxstd
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_linuxstd.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_signbit: nvtype Compile Setvar cat run rm_try echo n c i_sunmath
?MAKE: -pick add $@ %<
?S:d_signbit:
?S: This variable conditionally defines the HAS_SIGNBIT symbol, which
?S: indicates to the C program that the signbit() routine is available
?S: and safe to use with perl's intern NV type.
?S:.
?C:HAS_SIGNBIT:
?C: This symbol, if defined, indicates that the signbit routine is
?C: available to check if the given number has the sign bit set.
?C: This should include correct testing of -0.0.  This will only be set
?C: if the signbit() routine is safe to use with the NV type used internally
?C: in perl.  Users should call Perl_signbit(), which will be #defined to
?C: the system's signbit() function or macro if this symbol is defined.
?C:.
?H:#$d_signbit
 HAS_SIGNBIT  /**/
?H:.
?F:!try
?LINT:set d_signbit
: see if signbit exists
$echo $n "Checking to see if you have signbit() available to work on $nvtype... $c" >&4
$cat >try.c <<EOCP
#$i_sunmath I_SUNMATH
#include <math.h>
```

```
#ifdef I_SUNMATH  /* Solaris special math library */
#  include <sunmath.h>
#endif
#define NV $nvtype
int main(int argc, char **argv)
{
   NV x = 0.0;
   NV y = -1.0;
   if ((signbit(x) == 0) && (signbit(y) != 0))
 return 0;
   else
 return 1;
}
EOCP
val="$undef"
set try
if eval $compile; then
   if $run ./try; then
       $echo "Yes." >&4
 val="$define"
   else
       $echo "Signbit seems to be available, but doesn't work as I expected."
       $echo "I won't use it." >&4
 val="$undef"
   fi
else
   $echo "Nope." >&4
   dflt="$undef"
fi
set d_signbit
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_signbit.U
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```
?RCS: $Id: Configdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Configdir.U,v $
```

```
?RCS: Revision 3.0.1.1  1997/02/28  14:58:36  ram
?RCS: patch61: have README explicitly mention the package name
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Configdir: package
?MAKE: -pick add $@ %<
: create .config dir to save info across Configure sessions
test -d ../.config || mkdir ../.config
cat >../.config/README <<EOF
This directory created by Configure to save
 information that should
persist across sessions for $package.

You may safely delete it if you wish.
EOF
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Configdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wctomb.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_wctomb.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:20:43  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_wctomb: Inlibc
?MAKE: -pick add $@ %<
?S:d_wctomb:
?S: This variable conditionally defines the HAS_WCTOMB symbol, which
?S: indicates to the C program that the wctomb() routine is available
?S: to convert a wide character to a multibyte.
?S:.
?C:HAS_WCTOMB (WCTOMB):
?C: This
```

```
 symbol, if defined, indicates that the wctomb routine is available
?C: to convert a wide character to a multibyte.
?C:.
?H:#$d_wctomb HAS_WCTOMB  /**/
?H:.
?LINT:set d_wctomb
: see if wctomb exists
set wctomb d_wctomb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wctomb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: scriptdir.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:17:15  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:46:13  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:32:04  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:scriptdir scriptdirexp installscript:
 afs cat test Getfile Loc \
 Oldconfig +bin Prefixit prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:scriptdir:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly scripts for the package in question.  It is either
?S: the same directory as for binaries, or a special one that can be
?S: mounted across different architectures, like /usr/share. Programs
?S: must be prepared to deal with ~name expansion.
```

```
?S:.
?S:scriptdirexp:
?S: This variable is the same as scriptdir, but is filename expanded
?S: at configuration time, for programs not wanting to bother with it.
?S:.
?S:installscript:
?S: This variable is usually the same as scriptdirexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?C:SCRIPTDIR:
?C: This symbol holds the name of the directory in which the user wants
?C: to put publicly executable scripts for the
 package in question.  It
?C: is often a directory that is mounted across diverse architectures.
?C: Programs must be prepared to deal with ~name expansion.
?C:.
?C:SCRIPTDIR_EXP:
?C: This is the same as SCRIPTDIR, but is filename expanded at
?C: configuration time, for use in programs not prepared to do
?C: ~name substitutions at run-time.
?C:.
?H:#define SCRIPTDIR "$scriptdir" /**/
?H:#define SCRIPTDIR_EXP "$scriptdirexp" /**/
?H:.
: determine where public executable scripts go
set scriptdir scriptdir
eval $prefixit
case "$scriptdir" in
")
 dflt="$bin"
 : guess some guesses
 $test -d /usr/share/scripts && dflt=/usr/share/scripts
 $test -d /usr/share/bin && dflt=/usr/share/bin
 $test -d /usr/local/script && dflt=/usr/local/script
 $test -d $prefixexp/script && dflt=$prefixexp/script
 set dflt
 eval $prefixup
 ;;
*)  dflt="$scriptdir"
 ;;
esac
$cat <<EOM

Some installations have a separate directory just for executable scripts so
that they can mount it across multiple architectures but
 keep the scripts in
one spot.  You might, for example, have a subdirectory of /usr/share for this.
```

```
Or you might just lump your scripts in with all your other executables.

EOM
fn=d~
rp='Where do you keep publicly executable scripts?'
. ./getfile
if $test "X$ansexp" != "X$scriptdirexp"; then
 installscript=''
fi
scriptdir="$ans"
scriptdirexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
scripts reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installscript" in
 '') dflt=`echo $scriptdirexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installscript";;
 esac
 fn=de~
 rp='Where will public scripts be installed?'
 . ./getfile
 installscript="$ans"
else
 installscript="$scriptdirexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/scriptdir.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_pipe2: Inlibc
?MAKE: -pick add $@ %<
?S:d_pipe2:
?S: This variable conditionally defines the HAS_PIPE2 symbol, which
?S: indicates to the C program that the pipe2() routine is available
```

```
?S: to create an inter-process channel.
?S:.
?C:HAS_PIPE2:
?C: This symbol, if defined, indicates that the pipe2 routine is
?C: available to create an inter-process channel.
?C:.
?H:#$d_pipe2 HAS_PIPE2  /**/
?H:.
?LINT:set d_pipe2
: see if pipe2 exists
set pipe2 d_pipe2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_pipe2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_longlong.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_longlong.U,v $
?RCS:
?MAKE:d_longlong longlongsize: Compile Setvar Myread run \
 cat rm_try test longsize
?MAKE: -pick add $@ %<
?S:d_longlong:
?S: This variable conditionally defines HAS_LONG_LONG if
?S: the long long type is supported.
?S:.
?S:longlongsize:
?S: This variable contains the value of the LONGLONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long long,
?S: if this system supports long long.
?S:.
?C:HAS_LONG_LONG:
?C: This symbol will be defined if the C compiler supports long long.
?C:.
?C:LONGLONGSIZE:
?C: This symbol contains the size of a long long, so that the
?C: C preprocessor can make decisions based on it.  It is only
?C: defined
 if the system supports long long.
?C:.
?H:#$d_longlong HAS_LONG_LONG  /**/
```

```
?H:?LONGLONGSIZE:#ifdef HAS_LONG_LONG
?H:?LONGLONGSIZE:#define LONGLONGSIZE $longlongsize  /**/
?H:?LONGLONGSIZE:#endif
?H:.
?F:!try
?LINT:set d_longlong
: check for long long
echo " "
echo "Checking to see if you have long long..." >&4
echo 'int main() { long long x = 7; return 0; }' > try.c
set try
if eval $compile; then
 val="$define"
 echo "You have long long."
else
 val="$undef"
 echo "You do not have long long."
fi
$rm_try
set d_longlong
eval $setvar

@if LONGLONGSIZE || longlongsize
: check for length of long long
?X:  Check only if d_longlong and if longlongsize is not already set.
case "${d_longlong}${longlongsize}" in
$define)
 echo " "
 echo "Checking to see how big your long longs are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof(long long));
   return(0);
}
EOCP
 set try
 if eval $compile_ok; then
  longlongsize=`$run ./try`
  echo "Your long
 longs are $longlongsize bytes long."
 else
  dflt='8'
  echo " "
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a long long (in bytes)?"
  . ./myread
```

```
  longlongsize="$ans"
 fi
 if $test "X$longsize" = "X$longlongsize"; then
  echo "(That isn't any different from an ordinary long.)"
 fi
 ;;
esac
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_longlong.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmdt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmdt.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmdt: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmdt:
?S: This variable conditionally defines the HAS_SHMDT symbol, which
?S: indicates to the C program that the shmdt() routine is available.
?S:.
?C:HAS_SHMDT:
?C: This symbol, if defined, indicates that the shmdt() routine is
?C: available to detach a shared memory segment from the process
 space.
?C:.
?H:#$d_shmdt HAS_SHMDT  /**/
?H:.
?LINT:set d_shmdt
: see if shmdt exists
set shmdt d_shmdt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmdt.U

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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libs.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:09:11  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.5  1995/07/25  14:12:05  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  16:24:22  ram
?RCS: patch36: removed old broken thislib/thatlib processing (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:05:44  ram
?RCS: patch30: code cleanup with if/elif by ADO and RAM
?RCS: patch30: undone patch23 for libswanted default
 setting
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:08:45  ram
?RCS: patch23: now includes ordered default libswanted variable (ADO)
?RCS: patch23: major cleanup for library lookups (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:31  ram
?RCS: patch6: added default for libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libs libsfound libsfiles libsdirs libspath libscheck: \
 test cat Myread Oldconfig Loc libpth package xlibpth so _a \
 +usesocks sed +cc +ccflags +ldflags rm
?MAKE: -pick add $@ %<
?S:libs:
?S: This variable holds the additional libraries we want to use.
?S: It is up to the Makefile to deal with it.  The list can be empty.
?S:.
?S:libsfound:
?S: This variable holds the full pathnames of the libraries
?S: we found and accepted.
```

```
?S:.
?S:libsfiles:
?S: This variable holds the filenames aka basenames of the libraries
?S: we found and accepted.
?S:.
?S:libsdirs:
?S: This variable holds the directory
 names aka dirnames of the libraries
?S: we found and accepted, duplicates are removed.
?S:.
?S:libspath:
?S: This variable holds the directory names probed for libraries.
?S:.
?S:libscheck:
?S: This variable is intended to be set by hint files, if needed.
?S: It should contain shell code that will be eval'ed with $xxx holding
?S: some library file.  It may change $xxx if needed.
?S: For instance, on an Irix platform, you may make sure the right
?S: library file is used depending on the cc command line, so that the
?S: correct library is used depending on the selected ABI (for 32 and
?S: 64-bit compilations).
?S:
?S: Here is an example of code that could be found in a hint file on Irix
?S: when the selected compiler was for 32-bit -- that code is put in the
?S: cc.cbu call-back unit to be invoked AFTER the C compiler and its
?S: flags have been chosen:
?S:
?S:  libscheck='case "$xxx" in
?S:  *.a) /bin/ar p $xxx `/bin/ar t $xxx | sed q` >$$.o;
?S:   case "`/usr/bin/file $$.o`" in
?S:   *N32*)
 rm -f $$.o ;;
?S:   *) rm -f $$.o; xxx=/no/n32$xxx ;;
?S:   esac ;;
?S:  *) case "`/usr/bin/file $xxx`" in
?S:   *N32*) ;;
?S:   *) xxx=/no/n32$xxx ;;
?S:   esac ;;
?S:  esac'
?S:.
?D:libs="
?LINT:extern libswanted
?LINT:change libswanted
?INIT:: default library list
?INIT:libswanted="
?X: This order is chosen so that libraries  -lndir, -ldir, -lucb, -lbsd,
?X: -lBSD, -lPW, and -lx only get used if there are unresolved
?X: routines at link time.  Usually, these are backwards compatability
```

```
?X: libraries, and may not be as reliable as the standard c library.
?X:
?X: The -lsocket -linet -lnsl order has been reported to be necessary
?X: for at least one SVR4 implementation.
?X: -lc must proceed -lucb or -lbsd for most Solaris applications.
?X: -lc_s proceeds -lc so we pick up the shared library version, if
?X: it is available.
?X:
?X: The ordering of c, posix, and cposix is a guess and almost
?X: certainly wrong on about half of all systems.
?X:
?X: Set proper libswanted in your private
 Myinit.U if needed.
?X:
?X:: default ordered library list
?X:libswanted='net socket inet bind nsl nm sdbm gdbm ndbm dbm malloc dl'
?X:libswanted="$libswanted dld sun m c_s c posix cposix ndir dir ucb"
?X:libswanted="$libswanted bsd BSD PW x"
?X:
?INIT:: should be set by hint files if needed
?INIT:libscheck="
?T:xxx yyy thislib thisdir libstyle linkmsg
?F:lt.c lt
: Looking for optional libraries
echo " "
echo "Checking for optional libraries..." >&4
case "$libs" in
' '|'') dflt='';;
*) dflt="$libs";;
esac
case "$libswanted" in
'') libswanted='c_s';;
esac
?X: libsocks has nasty naming scheme.
?X: This does not work if somebody wants SOCKS 4.
case "$usesocks" in
"$define") libswanted="$libswanted socks5 socks5_sh" ;;
esac
?X: Used later for link checks
echo "extern char printf(); int main() { printf(); return 0; }" > lt.c
libsfound="
libsfiles="
libsdirs="
libspath="
for thisdir in $libpth $xlibpth; do
 test -d $thisdir && libspath="$libspath $thisdir"
done
for thislib in $libswanted;
```

```
do
for thisdir in $libspath; do
    xxx=''
    if $test ! -f "$xxx" ; then
  xxx=`ls $thisdir/lib$thislib.$so.[0-9]* 2>/dev/null | $sed -n '1p'`
  $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib$thislib.$so
  $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib${thislib}_s$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
  $test -f "$xxx" && thislib=${thislib}_s
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/Slib$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test
 -f "$xxx" && libstyle=static
    fi
    if $test -f "$xxx"; then
?X:
?X: It is not sufficient to find a .so on the disk.  We must make sure
?X: that we can indeed supply the -lfoo line on the cc line to link against
?X: that library.  On Linux for instance, a versionned .so will not be
?X: implicitly linked against, whereas it will work fine on Solaris 2.6.
?X:  --RAM, 10/10/2003
?X:
  if $cc -o lt $ccflags $ldflags lt.c -l$thislib >/dev/null 2>&1;
  then
   linkmsg=""
  else
   linkmsg=" but I can't link against it"
```

```
  fi
  case "$libstyle" in
  shared) echo "Found -l$thislib (shared)$linkmsg." ;;
  static) echo "Found -l$thislib$linkmsg." ;;
  *)      echo "Found -l$thislib ($libstyle)$linkmsg." ;;
  esac
  case " $dflt " in
  *"-l$thislib "*) ;;
  *)
   case "$linkmsg" in
   ")
    dflt="$dflt -l$thislib"
    libsfound="$libsfound $xxx"
    yyy=`basename $xxx`
    libsfiles="$libsfiles $yyy"
    yyy=`echo $xxx|$sed -e "s%/$yyy\\$%%"`
    case " $libsdirs
 " in
    *" $yyy "*) ;;
    *) libsdirs="$libsdirs $yyy" ;;
    esac
      ;;
   esac
   ;;
  esac
  break
    fi
 done
 if $test ! -f "$xxx"; then
    echo "No -l$thislib."
 fi
done
set X $dflt
shift
dflt="$*"
case "$libs" in
") dflt="$dflt";;
*) dflt="$libs";;
esac
case "$dflt" in
' '|") dflt='none';;
esac
$rm -f lt.c lt

$cat <<EOM

In order to compile $package on your machine, a number of libraries
are usually needed.  Include any other special libraries here as well.
```

```
Say "none" for none.  The default list is almost always right.
EOM

echo " "
rp="Which libraries to use?"
. ./myread
case "$ans" in
none) libs=' ';;
*) libs="$ans";;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libs.U
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?RCS: $Id: d_scannl.U,v 3.0.1.2 1997/02/28 15:41:27 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_scannl.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:27  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:59:12  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Does the scanf routine read "\n" correctly ? This is was not
?X: the case on AIX...
?X:
?MAKE:d_scannl: cat rm Setvar Compile run
?MAKE: -pick
 add $@ %<
?S:d_scannl:
?S: This variable conditionally defines SCAN_NL, which indicates
?S: whether the C library routines scanf() and friends can deal with
?S: a '\n' in the input correctly. They do most of the time.
?S:.
?C:SCAN_NL:
```

```
?C: This symbol is defined if the C library routines scanf() and friends
?C: can deal with a '\n' in the input correctly, so that you can say
?C: scanf("%d\n"); instead of scanf("%d"); getc(c); to handle the '\n'.
?C:.
?H:#$d_scannl SCAN_NL  /* scanf("%d\n") works */
?H:.
?F:!try
?LINT:set d_scannl
: does scanf handle "\n" correctly ?
echo " "
val="$define"
?X: I really want to say "\n" instead of '\n', because I am referring
?X: to the string given as argument to scanf().
echo 'Let""""s see if scanf() handles "\\n" correctly...' >&4
$cat >try.c <<'EOCP'
int main()
{
 int i = 0, j = 0;
 scanf("%d\n%d", &i, &j);
 if (j != 3)
  exit(1);
 exit(0);
}
EOCP
set try
if eval $compile_ok; then
 if $run ./try <<'EOD'
2
3
EOD
 then
  echo "Yes, it does."
 else
  echo
 "No, it doesn't."
  val="$undef"
 fi
else
 echo "(I can't seem to compile the test program. Assuming it does.)"
fi
set d_scannl
eval $setvar
$rm -f try.* try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_scannl.U
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```
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?RCS:
?MAKE:d_statvfs d_fstatvfs: Inlibc
?MAKE: -pick add $@ %<
?S:d_statvfs:
?S: This variable conditionally defines the HAS_STATVFS symbol, which
?S: indicates to the C program that the statvfs() routine is available.
?S:.
?S:d_fstatvfs:
?S: This variable conditionally defines the HAS_FSTATVFS symbol, which
?S: indicates to the C program that the fstatvfs() routine is available.
?S:.
?C:HAS_STATVFS:
?C: This symbol, if defined, indicates that the statvfs routine is
?C: available to stat filesystems by filenames.
?C:.
?C:HAS_FSTATVFS:
?C: This symbol, if defined, indicates that the fstatvfs routine is
?C: available to stat filesystems by file descriptors.
?C:.
?H:#$d_statvfs HAS_STATVFS  /**/
?H:#$d_fstatvfs
 HAS_FSTATVFS  /**/
?H:.
?LINT:set d_statvfs
?LINT:set d_fstatvfs
: see if statvfs exists
set statvfs d_statvfs
eval $inlibc

: see if fstatvfs exists
set fstatvfs d_fstatvfs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statvfs.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setpgrp.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:44:16  ram
?RCS: patch61: obsoleted USE_BSDGRP in favor of USE_BSD_SETPGRP
?RCS: patch61: another unit now also defines a USE_BSD_GETPGRP
?RCS: patch61: fallback for test program failure improved
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:59:30  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:15:37  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
 patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp d_bsdsetpgrp: cat rm +cc +libs +ccflags \
 +ldflags Inlibc Guess Setvar i_unistd
?MAKE: -pick add $@ %<
?S:d_setpgrp:
?S: This variable conditionally defines HAS_SETPGRP if setpgrp() is
?S: available to set the current process group.
?S:.
?S:d_bsdsetpgrp (d_bsdpgrp):
?S: This variable conditionally defines USE_BSD_SETPGRP if
?S: setpgrp needs two arguments whereas USG one needs none.
?S: See also d_setpgid for a POSIX interface.
?S:.
?C:HAS_SETPGRP (SETPGRP):
?C: This symbol, if defined, indicates that the setpgrp routine is
?C: available to set the current process group.
?C:.
?C:USE_BSD_SETPGRP (USE_BSDPGRP BSDPGRP):
?C: This symbol, if defined, indicates that setpgrp needs two
?C: arguments whereas USG one needs none.  See also HAS_SETPGID
?C: for a POSIX interface.
?C:.
?H:#$d_setpgrp HAS_SETPGRP  /**/
?H:#$d_bsdsetpgrp
 USE_BSD_SETPGRP /**/
?H:.
?F:!set.c !set
```

```
?T:xxx
?LINT:set d_setpgrp d_bsdsetpgrp
: see if setpgrp exists
set setpgrp d_setpgrp
eval $inlibc

@if USE_BSD_SETPGRP || d_bsdsetpgrp
case "$d_setpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of setpgrp is in use..."
 $cat >set.c <<EOP
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (-1 == setpgrp(1, 1))
  exit(0);
#else
 if (setpgrp() != -1)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -DTRY_BSD_PGRP $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo 'You have to use setpgrp(pid,pgrp) instead of setpgrp().' >&4
  val="$define"
 elif $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo 'You have to use setpgrp() instead of setpgrp(pid,pgrp).' >&4
  val="$undef"
 else
  echo "(I can't
 seem to compile and run the test program.)"
  if ./usg; then
   xxx="a USG one, i.e. you use setpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
```

```
    xxx="a BSD one, i.e. you use setpgrp(pid,pgrp)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use setpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your setpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set d_bsdsetpgrp
eval $setvar
$rm -f set set.c
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgrp.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Tom Tromey <tromey@cygnus.com>
?RCS:
?RCS: $Log: src.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:23:54  ram
?RCS: patch61: created
?RCS:
?MAKE:src +rsrc: Options package contains
?MAKE: -pick add $@ %<
?Y:TOP
?S:src (srcdir):
?S: This variable holds the (possibly relative) path of the package source.
?S: It is up to the Makefile to use this variable and set VPATH accordingly
?S: to find the sources remotely.  Use $pkgsrc to have an absolute path.
?S:.
```

```
?S:rsrc
 (relsrcdir):
?S: This variable holds a potentially relative path to the package
?S: source.  The contents are correct for the configuration environment,
?S: i.e. there might be an extra .. prepended to get out of the UU dir.
?S: Configure units should use this, not the src variable.
?S:.
: Find the path to the source tree
case "$src" in
") case "$0" in
   */*) src=`echo $0 | sed -e 's%/[^/][^/]*$%%'`
        case "$src" in
  /*) ;;
  .) ;;
        *) src=`cd ../$src && pwd` ;;
  esac
        ;;
   *)   src='.';;
   esac;;
esac
case "$src" in
") src=/
 rsrc=/
 ;;
/*) rsrc="$src";;
*) rsrc="../$src";;
esac
?X:
?X: Now check whether we have found the right source tree (i.e. the one for the
?X: package we're about to configure). The original unit from Tom Tromey forced
?X: the user to pick a unique file from his distribution, and we were merely
?X: checking the existence of that file. I prefer to rely on Configure (which
?X: we know *is* present since this unit is
 part of it!) and look for the
?X: definition of the package variable, making sure it's the same as ours.
?X: If it matches, we know we found the right source tree. -- RAM, 15/03/96
?X:
if test -f $rsrc/Configure && \
 $contains "^package='$package'\$" $rsrc/Configure >/dev/null 2>&1
then
  : found it, so we are ok.
else
?X: Otherwise try "." and up to 4 parent directories...
?X: Note that we prepend a ".." to get out of the configuration environment.
 rsrc="
 for src in . .. ../.. ../../.. ../../../..; do
  if test -f ../$src/Configure && \
   $contains "^package=$package$" ../$src/Configure >/dev/null 2>&1
```

```
  then
   rsrc=../$src
   break
  fi
 done
fi
case "$rsrc" in
")
 cat <<EOM >&4

Sorry, I can't seem to locate the source dir for $package.  Please start
Configure with an explicit path -- i.e. /some/path/Configure.

EOM
 exit 1
 ;;
?X: Don't echo anything if the sources are in . -- they should know already ;-)
?X: In that case, rsrc is ../. since we lookup from within UU
../.) rsrc='..';;
*)
 echo
 " "
 echo "Sources for $package found in \"$src\"." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/src.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lchown.U,v 3.0.1.1 1994/08/29 16:07:14 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_lchown.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:14  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_lchown: Compile Setvar cat echo i_unistd rm_try
?MAKE: -pick add $@ %<
```

```
?S:d_lchown:
?S: This variable conditionally defines the HAS_LCHOWN symbol, which
?S: indicates to the C program that the lchown() routine is available
?S: to operate on a symbolic link (instead of following
 the link).
?S:.
?C:HAS_LCHOWN :
?C: This symbol, if defined, indicates that the lchown routine is
?C: available to operate on a symbolic link (instead of following the
?C: link).
?C:.
?H:#$d_lchown HAS_LCHOWN  /**/
?H:.
?F:!try
?LINT:set d_lchown
: see if lchown exists
echo " "
?X: Some functions (such as lchown()) are present in libc, but are
?X: unimplemented.  That is, they always fail and set errno=ENOSYS.
?X:
?X: Thomas Bushnell provided the following sample code and the explanation
?X: that follows.
?X:
?X: The choice of <assert.h> is essentially arbitrary.  The GNU libc
?X: macros are found in <gnu/stubs.h>.  You can include that file instead
?X: of <assert.h> (which itself includes <gnu/stubs.h>) if you test for
?X: its existence first.  <assert.h> is assumed to exist on every system,
?X: which is why it's used here.  Any GNU libc header file will include
?X: the stubs macros.  If either __stub_NAME or __stub___NAME is defined,
?X: then the function doesn't actually exist.
  Tests using <assert.h> work
?X: on every system around.
?X:
?X: The declaration of FOO is there to override builtin prototypes for
?X: ANSI C functions.
?X:
?X:  I really ought to enhance the inlibc test to check for this, but
?X:  I don't have time now.  --A.D.  5/1998
?X:
?X: Unfortunately, this trick fails under clang++-7.  Apparently to
?X: cover both the stub issue and clang's requirements, we need to do
?X: a compile and run test. -- A.D. 8/2019
?X:
$cat > try.c <<EOCP
#include <pwd.h>
#include <stdio.h>
#include <stdlib.h>
#$i_unistd I_UNISTD
```

```
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main(int argc, char *argv[])
{
  if (lchown("./try.c", -1, getgid()) == -1) {
      exit(EXIT_FAILURE);
  }
  exit(EXIT_SUCCESS);
}
EOCP
set try
if eval $compile && ./try; then
   $echo "lchown() found." >&4
   val="$define"
else
   $echo "lchown() NOT found." >&4
   val="$undef"
fi
set d_lchown
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_lchown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isnan: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isnan:
?S: This variable conditionally defines the HAS_ISNAN symbol, which
?S: indicates to the C program that the isnan() routine is available.
?S:.
?C:HAS_ISNAN:
?C: This symbol, if defined, indicates that the isnan routine is
?C: available to check whether a double is a NaN.
?C:.
?H:#$d_isnan HAS_ISNAN  /**/
?H:.
?LINT:set d_isnan
: check for isnan
```

```
echo "Checking to see if you have isnan..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isnan(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isnan."
else
 val="$undef"
 echo "You do not have isnan."
fi
$rm_try
set d_isnan
eval $setvar

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnan.U
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?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Whoa.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:21:21  ram
?RCS: patch61: whoa script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:01  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to warn the user in case a change into a variable is noticed.
?X:
?X: To use this
```

```
 unit, $was must hold the old value that has changed. Upon
?X: exit, the two variables $td and $tu are set to the correct value for
?X: respectively defining or undefining a variable. For instance, if $vas was
?X: $undef, but now $var is $define, after calling . whoa, you should use
?X: eval "$var=\$tu" to finally set $var to the correct value. See unit Inlibc.
?X:
?MAKE:Whoa: Myread startsh hint
?MAKE: -pick add $@ %<
?F:./whoa
?T:var was
?LINT:change td tu
: set up the script used to warn in case of inconsistency
cat <<EOS >whoa
$startsh
EOS
cat <<'EOSC' >>whoa
dflt=y
echo " "
echo "*** WHOA THERE!!! ***" >&4
echo "    The $hint value for \$$var on this machine was \"$was\"!" >&4
rp="    Keep the $hint value?"
. ./myread
case "$ans" in
y) td=$was; tu=$was;;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Whoa.U
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```
?RCS: $Id: d_setgrent.U,v $
?RCS:
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?RCS:
?RCS: $Log: d_setgrent.U,v $
?RCS:
?MAKE:d_setgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setgrent:
?S: This variable conditionally defines the HAS_SETGRENT symbol, which
?S: indicates to the C program that the setgrent() routine is available
?S: for initializing sequential access to the group database.
?S:.
?C:HAS_SETGRENT:
```

```
?C: This symbol, if defined, indicates that the setgrent routine is
?C: available for initializing sequential access of the group database.
?C:.
?H:#$d_setgrent HAS_SETGRENT  /**/
?H:.
?LINT:set d_setgrent
: see if setgrent exists
set setgrent d_setgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setgrent.U
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```
?RCS: $Id: d_endgrent.U,v $
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?RCS:
?RCS: $Log: d_endgrent.U,v $
?RCS:
?MAKE:d_endgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endgrent:
?S: This variable conditionally defines the HAS_ENDGRENT symbol, which
?S: indicates to the C program that the endgrent() routine is available
?S: for sequential access of the group database.
?S:.
?C:HAS_ENDGRENT:
?C: This symbol, if defined, indicates that the getgrent routine is
?C: available for finalizing sequential access of the group database.
?C:.
?H:#$d_endgrent HAS_ENDGRENT  /**/
?H:.
?LINT:set d_endgrent
: see if endgrent exists
set endgrent d_endgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endgrent.U
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```
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?RCS:
```

```
?MAKE:d_fma: Inlibc
?MAKE: -pick add $@ %<
?S:d_fma:
?S: This variable conditionally defines the HAS_FMA symbol, which
?S: indicates to the C program that the fma() routine is available.
?S:.
?C:HAS_FMA:
?C: This symbol, if defined, indicates that the fma routine is
?C: available to do the multiply-add function.
?C:.
?H:#$d_fma HAS_FMA  /**/
?H:.
?LINT:set d_fma
: see if fma exists
set fma d_fma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fma.U
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```
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?RCS:
?MAKE:d_llroundl: Inlibc
?MAKE: -pick add $@ %<
?S:d_llroundl:
?S: This variable conditionally defines the HAS_LLROUNDL symbol, which
?S: indicates to the C program that the llroundl() routine is available
?S: to return the long long value nearest to x away from zero.
?S:.
?C:HAS_LLROUNDL:
?C: This symbol, if defined, indicates that the llroundl routine is
?C: available to return the nearest long long value away from zero of
?C: the long double argument value.
?C:.
?H:#$d_llroundl HAS_LLROUNDL  /**/
?H:.
?LINT:set d_llroundl
: see if llroundl exists
set llroundl d_llroundl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llroundl.U
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```
?RCS: $Id: d_symlink.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_symlink.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_symlink: Inlibc
?MAKE: -pick add $@ %<
?S:d_symlink:
?S: This variable conditionally defines the HAS_SYMLINK symbol, which
?S: indicates to the C program that the symlink() routine is available
?S: to create symbolic links.
?S:.
?C:HAS_SYMLINK (SYMLINK):
?C: This symbol, if defined, indicates that the symlink routine is available
?C: to
 create symbolic links.
?C:.
?H:#$d_symlink HAS_SYMLINK /**/
?H:.
?LINT:set d_symlink
: see if symlink exists
set symlink d_symlink
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_symlink.U

1.1207 tar 1.34+dfsg-1ubuntu0.1.22.04.2

1.1207.1 Available under license :

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and valid for as
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with subsection 6b.

d) Convey the object code by offering access from a designated
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the same way through the same place at no
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1.1208 perl-base 5.36.0-7+deb12u1

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```
?RCS: patch61: can now sense new OSes
?RCS:
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?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:04:18  ram
?RCS: patch54: config.sh reload logic now knows about new -K switch
?RCS: patch54: cleaned up and extended osvers for DEC OSF/1 (ADO)
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 (ADO)
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?RCS: patch49: update code for myuname changed (WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:15:36  ram
?RCS: patch45: added quotes around the INITPROG variable (ADO)
?RCS: patch45: allows variable overriding after config file loading
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:57:05  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: merged with the version used for perl5's Configure (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:24:17  ram
?RCS: patch23: added support for osf1 hints
?RCS: patch23: new support for solaris and i386 systems (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:05:02  ram
?RCS: patch16: added post-processing on myuname for Xenix targets
?RCS: patch16: message proposing config.sh
 defaults made consistent
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:32  ram
?RCS: patch10: force use of config.sh when -d option is used (WAD)
?RCS: patch10: complain about non-existent hint files (WAD)
?RCS: patch10: added Options dependency for fastread variable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit tries to remember what we did last time we ran Configure, mostly
?X: for the sake of setting defaults.
?X:
?MAKE:Oldconfig hint myuname osname osvers: Instruct Myread Checkcc \
```

```
 Mksymlinks Loc Options Tr src trnl ln uname sh awk sed test cat grep \
 rm lns tr n c contains targetarch
?MAKE: -pick wipe $@ %<
?S:myuname:
?S: The output of 'uname -a' if available, otherwise the hostname. On Xenix,
?S: pseudo variables assignments in the output are stripped, thank you. The
?S: whole thing is then lower-cased.
?S:.
?S:hint:
?S: Gives the type of hints used for previous answers. May be one of
?S: "default",
 "recommended" or "previous".
?S:.
?S:osname:
?S: This variable contains the operating system name (e.g. sunos,
?S: solaris, hpux, etc.).  It can be useful later on for setting
?S: defaults.  Any spaces are replaced with underscores.  It is set
?S: to a null string if we can't figure it out.
?S:.
?S:osvers:
?S: This variable contains the operating system version (e.g.
?S: 4.1.3, 5.2, etc.).  It is primarily used for helping select
?S: an appropriate hints file, but might be useful elsewhere for
?S: setting defaults.  It is set to '' if we can't figure it out.
?S: We try to be flexible about how much of the version number
?S: to keep, e.g. if 4.1.1, 4.1.2, and 4.1.3 are essentially the
?S: same for this package, hints files might just be os_4.0 or
?S: os_4.1, etc., not keeping separate files for each little release.
?S:.
?C:OSNAME:
?C: This symbol contains the name of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature
 tests from Configure are generally more reliable.
?C:.
?C:OSVERS:
?C: This symbol contains the version of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests from Configure are generally more reliable.
?C:.
?H:#define OSNAME "$osname"  /**/
?H:#define OSVERS "$osvers"  /**/
?H:.
?F:!config.sh
?T:tmp tmp_n tmp_c tmp_sh file
?T:xxxxfile xxxfile xxfile xfile hintfile newmyuname
?T:tans _ isesix INITPROG DJGPP has_uname
?D:osname=''
```

```
?LINT:change n c sh
?LINT:extern hostarch
?LINT:change hostarch
: Determine the name of the machine
myuname=`$uname -a 2>/dev/null`
$test -z "$myuname" && myuname=`hostname 2>/dev/null`
?X: Special mention for Xenix, whose 'uname -a' gives us output like this:
?X:  sysname=XENIX
?X:  nodename=whatever
?X:  release=2.3.2 .. etc...
?X: Therefore, we strip all this variable assignment junk and remove all the
?X: new lines to keep the myuname variable sane... --RAM
myuname=`echo $myuname | $sed -e
 's/^[^=]*=//' -e 's/\//g' | \
 ./tr '[A-Z]' '[a-z]' | $tr $trnl ' '`
?X: Save the value we just computed to reset myuname after we get done here.
newmyuname="$myuname"
$test -f "$uname$_exe" && has_uname=y

: Guessing of the OS name -- half the following guesses are probably wrong...
: If you have better tests or hints, please send them to the metaconfig
: authors and to <MAINTLOC>
$test -f /irix && osname=irix
$test -f /xenix && osname=sco_xenix
$test -f /dynix && osname=dynix
$test -f /dnix && osname=dnix
$test -f /lynx.os && osname=lynxos
$test -f /unicos && osname=unicos && osvers=`$uname -r`
$test -f /unicosmk && osname=unicosmk && osvers=`$uname -r`
$test -f /unicosmk.ar && osname=unicosmk && osvers=`$uname -r`
$test -f /bin/mips && /bin/mips && osname=mips
$test -d /NextApps && set X `hostinfo | $grep 'NeXT Mach.*:' | \
 $sed -e 's/://' -e 's/\./_/'` && osname=next && osvers=$4
$test -d /usr/apollo/bin && osname=apollo
$test -f /etc/saf/_sactab && osname=svr4
$test -d /usr/include/minix
 && osname=minix
$test -f /system/gnu_library/bin/ar.pm && osname=vos
if $test -d /MachTen -o -d /MachTen_Folder; then
?X:  MachTen uname -a output looks like
?X:  xxx 4 0.0 Macintosh
?X:  MachTen /sbin/version output looks like
?X:  MachTen 4.0 Mon Aug 28 10:18:00 1995
?X:  MachTen 3.x had the 'version' command in /usr/etc/version.
 osname=machten
 if $test -x /sbin/version; then
  osvers=`/sbin/version | $awk '{print $2}' |
  $sed -e 's/[A-Za-z]$//'`
```

```
 elif $test -x /usr/etc/version; then
  osvers=`/usr/etc/version | $awk '{print $2}' |
  $sed -e 's/[A-Za-z]$//'`
 else
  osvers="$2.$3"
 fi
fi
$test -f /sys/posix.dll &&
 $test -f /usr/bin/what &&
 set X `/usr/bin/what /sys/posix.dll` &&
 $test "$3" = UWIN &&
 osname=uwin &&
 osvers="$5"
?X: If we have uname, we already computed a suitable uname -a output, correctly
?X: formatted for Xenix, and it lies in $myuname.
if $test "X$has_uname" != X; then
 set X $myuname
 shift
 case "$5" in
 fps*) osname=fps ;;
 mips*)
  case "$4"
 in
  umips) osname=umips ;;
  *) osname=mips ;;
  esac;;
 [23]100) osname=mips ;;
 next*) osname=next ;;
?X: Interactive Unix.
 i386*)
  tmp=`/bin/uname -X 2>/dev/null|awk '/3\.2v[45]/{ print $(NF) }'`
  if $test "$tmp" != "" -a "$3" = "3.2" -a -f '/etc/systemid'; then
   osname='sco'
   osvers=$tmp
  elif $test -f /etc/kconfig; then
   osname=isc
   if $test "$lns" = "$ln -s"; then
    osvers=4
   elif $contains _SYSV3 /usr/include/stdio.h > /dev/null 2>&1 ; then
    osvers=3
   elif $contains _POSIX_SOURCE /usr/include/stdio.h > /dev/null 2>&1 ; then
    osvers=2
   fi
  fi
  tmp=''
  ;;
?X: MS-DOS djgpp uname -a output looks like:
?X: ms-dos xxx 6 22 pc
```

```
?X:  $1 is the "dos flavor" (need not be "ms-dos").
?X:  $2 is the node name
?X:  $3 and $4 are version/subversion
?X:  $5 is always "pc", but that might not be unique to DJGPP.
?X: (e.g. Solaris_x86 has $5 = i86pc, which doesn't actually conflict,
?X: but it's close enought that I can easily imagine other vendors also
?X: using variants
 of pc* in $5.)
?X:  The "DJGPP" environment variable is always set when djgpp is active.
 pc*)
  if $test -n "$DJGPP"; then
   osname=dos
   osvers=djgpp
  fi
  ;;
 esac
 case "$1" in
 aix) osname=aix
?X: aix 4.1 uname -a output looks like
?X:  AIX  foo  1 4 000123456789
?X: where $4 is the major release number and $3 is the (minor) version.
?X: More detail on the version is available with the oslevel command.
?X: in 3.2.x, it output a string (see case statements below).  In 4.1,
?X: it puts out something like  4.1.1.0
  tmp=`( (oslevel) 2>/dev/null || echo "not found") 2>&1`
  case "$tmp" in
  'not found') osvers="$4"."$3" ;;
  '<3240'|'<>3240') osvers=3.2.0 ;;
  '=3240'|'>3240'|'<3250'|'<>3250') osvers=3.2.4 ;;
  '=3250'|'>3250') osvers=3.2.5 ;;
  *) osvers=$tmp;;
  esac
  ;;
 bsd386) osname=bsd386
  osvers=`$uname -r`
  ;;
 cygwin*) osname=cygwin
  osvers="$3"
  ;;
 *dc.osx) osname=dcosx
  osvers="$3"
  ;;
 dnix) osname=dnix
  osvers="$3"
  ;;
 domainos) osname=apollo
  osvers="$3"
  ;;
```

```
 dgux)
 osname=dgux
  osvers="$3"
  ;;
?X:  uname -a returns
?X:  DYNIX/ptx xxx 4.0 V4.1.2 i386
 dynixptx*) osname=dynixptx
  osvers=`echo "$4"|sed 's/^v//'`
  ;;
 freebsd) osname=freebsd
  osvers="$3" ;;
 genix) osname=genix ;;
?X: HP-UX uname -a gives something like
?X: HP-UX foobar B.10.20 A 9000/735 2016483812 two-user license
?X: Preserve the full 10.20 string instead of the previous plain '10'.
?X:  Thanks to Graham Barr.    --AD 6/30/1998
 hp*) osname=hpux
  osvers=`echo "$3" | $sed 's,.*\.\([0-9]*\.[0-9]*\),\1,'`
  ;;
 irix*) osname=irix
  case "$3" in
  4*) osvers=4 ;;
  5*) osvers=5 ;;
  *) osvers="$3" ;;
  esac
  ;;
 linux) osname=linux
  case "$3" in
  *) osvers="$3" ;;
  esac
  ;;
 MiNT) osname=mint
  ;;
 netbsd*) osname=netbsd
  osvers="$3"
  ;;
 news-os) osvers="$3"
  case "$3" in
  4*) osname=newsos4 ;;
  *) osname=newsos ;;
  esac
  ;;
 next*) osname=next ;;
 nonstop-ux) osname=nonstopux ;;
 openbsd) osname=openbsd
    osvers="$3"
    ;;
 POSIX-BC | posix-bc
```

```
) osname=posix-bc
 osvers="$3"
 ;;
powerux | power_ux | powermax_os | powermaxos | \
powerunix | power_unix) osname=powerux
 osvers="$3"
 ;;
qnx) osname=qnx
 osvers="$4"
 ;;
solaris) osname=solaris
 case "$3" in
 5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
 *) osvers="$3" ;;
 esac
 ;;
sunos) osname=sunos
 case "$3" in
 5*) osname=solaris
  osvers=`echo $3 | $sed 's/^5/2/g'` ;;
 *) osvers="$3" ;;
 esac
 ;;
titanos) osname=titanos
 case "$3" in
 1*) osvers=1 ;;
 2*) osvers=2 ;;
 3*) osvers=3 ;;
 4*) osvers=4 ;;
 *) osvers="$3" ;;
 esac
 ;;
ultrix) osname=ultrix
 osvers="$3"
 ;;
osf1|mls+) case "$5" in
 alpha)
?X: DEC OSF/1 myuname -a output looks like:  osf1 xxxx t3.2 123.4 alpha
?X: where the version number can be something like [xvt]n.n
  osname=dec_osf
?X: sizer knows the minor minor version: the letter
  osvers=`sizer -v | awk '{print $3}' | \
   ./tr '[A-Z]' '[a-z]' | sed 's/^[xvt]//'`
  case "$osvers" in
  [1-9].[0-9]*) ;;
  *) osvers=`echo
"$3" | sed 's/^[xvt]//'` ;;
  esac
```

```
  ;;
 hp*) osname=hp_osf1 ;;
 mips) osname=mips_osf1 ;;
?X: hp and mips were unsupported Technology Releases -- ADO, 24/10/94
 esac
 ;;
unixware) osname=svr5
 osvers="$4"
 ;;
uts) osname=uts
 osvers="$3"
 ;;
vos) osvers="$3"
 ;;
$2) case "$osname" in
 *isc*) ;;
 *freebsd*) ;;
 svr*)
  : svr4.x or possibly later
  case "svr$3" in
  ${osname}*)
   osname=svr$3
   osvers=$4
   ;;
  esac
  case "$osname" in
  svr4.0)
   : Check for ESIX
   if $test -f /stand/boot ; then
    eval `$grep '^INITPROG=[a-z/0-9]*$' /stand/boot`
    if $test -n "$INITPROG" -a -f "$INITPROG"; then
     isesix=`strings -a $INITPROG | \
      $grep 'ESIX SYSTEM V/386 Release 4.0'`
     if $test -n "$isesix"; then
      osname=esix4
     fi
    fi
   fi
   ;;
  esac
  ;;
 *) if $test -f /etc/systemid; then
   osname=sco
   set `echo $3 | $sed 's/\./ /g'` $4
   if $test -f $src/hints/sco_$1_$2_$3.sh; then
    osvers=$1.$2.$3
   elif $test
```

```
 -f $src/hints/sco_$1_$2.sh; then
     osvers=$1.$2
    elif $test -f $src/hints/sco_$1.sh; then
     osvers=$1
    fi
   else
    case "$osname" in
    ") : Still unknown.  Probably a generic Sys V.
     osname="sysv"
     osvers="$3"
     ;;
    esac
   fi
   ;;
  esac
  ;;
 *) case "$osname" in
  ") : Still unknown.  Probably a generic BSD.
   osname="$1"
   osvers="$3"
   ;;
  esac
  ;;
 esac
else
?X: Try to identify sony's NEWS-OS (BSD unix)
 if $test -f /vmunix -a -f $src/hints/news_os.sh; then
  (what /vmunix | UU/tr '[A-Z]' '[a-z]') > UU/kernel.what 2>&1
  if $contains news-os UU/kernel.what >/dev/null 2>&1; then
   osname=news_os
  fi
  $rm -f UU/kernel.what
?X: Maybe it's OS/2 or DOS or something similar
 elif $test -d c:/.; then
  set X $myuname
  osname=os2
  osvers="$5"
 fi
fi

: Try to determine whether config.sh was made on this system
case "$config_sh" in
")
?X: indentation wrong on purpose--RAM
dflt=n
case "$knowitall" in
")
 if test -f ../config.sh; then
```

```
  if $contains
 myuname= ../config.sh >/dev/null 2>&1; then
   eval "`$grep myuname= ../config.sh`"
  fi
  if test "X$myuname" = "X$newmyuname"; then
   dflt=y
  fi
 fi
 ;;
*) dflt=y;;
esac

: Get old answers from config file if it was generated on the same system
hint=default
if $test -f ../config.sh; then
 echo " "
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . ./myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it."
  mv ../config.sh ../config.sh.old
  myuname="$newmyuname"
  ;;
 *)  echo "Fetching default answers from your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  tmp_sh="$sh"
  . ../config.sh
  cp ../config.sh .
  n="$tmp_n"
  c="$tmp_c"
  hint=previous
  ;;
 esac
fi
?X: remember, case indentation is wrong--RAM
;;
*)
 echo " "
 echo "Fetching default answers from $config_sh..." >&4
 tmp_n="$n"
 tmp_c="$c"
 tmp_sh="$sh"
 cd ..
?X: preserve symbolic links, if any
 cp $config_sh config.sh 2>/dev/null
 chmod +w config.sh
 . ./config.sh
```

```
 cd UU
 cp ../config.sh
 .
 n="$tmp_n"
 c="$tmp_c"
 hint=previous
 ;;
esac
?X: Older versions did not always set $sh.
case "$sh" in
") sh="$tmp_sh" ;;
esac
$test "$override" && . ./optdef.sh

: Restore computed paths
for file in $loclist $trylist; do
 eval $file="\$_$file"
done

. ./checkcc
?X: Cross-compiling support
case "$targetarch" in
") ;;
*)  hostarch=$osname
 osname=`echo $targetarch|sed 's,^[^-]*-,,'`
 osvers="
 ;;
esac

@if {test -d ../hints}
: Offer them some hints based on their OS
cd ..
?X: Since we are now at the root of the source tree, we must use $src
?X: to access the sources and not $rsrc. See src.U for details...
if $test ! -f config.sh; then
 $cat <<EOM

First time through, eh?  I have some defaults handy for some systems
that need some extra help getting the Configure answers right:

EOM
 (cd $src/hints; ls -C *.sh) | $sed 's/\.sh/   /g' >&4
 dflt="

 : Now look for a hint file osname_osvers, unless one has been
 : specified already.
 case "$hintfile" in
 "|' ')
```

```
 file=`echo "${osname}_${osvers}"
| $sed -e 's%\.%_%g' -e 's%_$%%'`
 : Also try without trailing minor version numbers.
 xfile=`echo $file | $sed -e 's%_[^_]*$%%'`
 xxfile=`echo $xfile | $sed -e 's%_[^_]*$%%'`
 xxxfile=`echo $xxfile | $sed -e 's%_[^_]*$%%'`
 xxxxfile=`echo $xxxfile | $sed -e 's%_[^_]*$%%'`
 case "$file" in
 ") dflt=none ;;
 *)  case "$osvers" in
  ") dflt=$file
   ;;
  *)  if $test -f $src/hints/$file.sh ; then
    dflt=$file
   elif $test -f $src/hints/$xfile.sh ; then
    dflt=$xfile
   elif $test -f $src/hints/$xxfile.sh ; then
    dflt=$xxfile
   elif $test -f $src/hints/$xxxfile.sh ; then
    dflt=$xxxfile
   elif $test -f $src/hints/$xxxxfile.sh ; then
    dflt=$xxxxfile
   elif $test -f "$src/hints/${osname}.sh" ; then
    dflt="${osname}"
   else
    dflt=none
   fi
   ;;
  esac
  ;;
 esac
 if $test -f Policy.sh ; then
  case "$dflt" in
  *Policy*) ;;
  none) dflt="Policy" ;;
  *) dflt="Policy $dflt" ;;
  esac
 fi
 ;;
*)
 dflt=`echo
$hintfile | $sed 's/\.sh$//'`
 ;;
esac

if $test -f Policy.sh ; then
 $cat <<EOM
```

```
There's also a Policy hint file available, which should make the
site-specific (policy) questions easier to answer.
EOM

 fi

 $cat <<EOM

You may give one or more space-separated answers, or "none" if appropriate.
A well-behaved OS will have no hints, so answering "none" or just "Policy"
is a good thing.  DO NOT give a wrong version or a wrong OS.

EOM

 rp="Which of these apply, if any?"
 . UU/myread
 tans=$ans
 for file in $tans; do
  if $test X$file = XPolicy -a -f Policy.sh; then
   . Policy.sh
   $cat Policy.sh >> UU/config.sh
  elif $test -f $src/hints/$file.sh; then
   . $src/hints/$file.sh
   $cat $src/hints/$file.sh >> UU/config.sh
  elif $test X"$tans" = X -o X"$tans" = Xnone ; then
   : nothing
  else
   : Give one chance to correct a possible typo.
   echo "$file.sh does not exist"
   dflt=$file
   rp="hint to use instead?"
   . UU/myread
   for file in $ans; do
    if $test -f "$src/hints/$file.sh";
 then
     . $src/hints/$file.sh
     $cat $src/hints/$file.sh >> UU/config.sh
    elif $test X$ans = X -o X$ans = Xnone ; then
     : nothing
    else
     echo "$file.sh does not exist -- ignored."
    fi
   done
  fi
 done

 hint=recommended
 : Remember our hint file for later.
```

```
 if $test -f "$src/hints/$file.sh" ; then
  hintfile="$file"
 else
  hintfile=''
 fi
fi
cd UU
?X: From here on, we must use $rsrc instead of $src

@end
: Process their -A options
. ./posthint.sh

@if osname || osvers
: Ask them to confirm the OS name
cat << EOM

Configure uses the operating system name and version to set some defaults.
The default value is probably right if the name rings a bell. Otherwise,
since spelling matters for me, either accept the default or answer "none"
to leave it blank.

EOM
@end
@if osname
case "$osname" in
 ''|' ')
  case "$hintfile" in
  ''|' '|none) dflt=none ;;
  *)  dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/_.*$//'` ;;
  esac
  ;;
 *) dflt="$osname" ;;
esac
rp="Operating
 system name?"
. ./myread
case "$ans" in
none)  osname='' ;;
*) osname=`echo "$ans" | $sed -e 's/[  ][ ]*/_/g' | ./tr '[A-Z]' '[a-z]'`;;
esac
@end
@if osvers
@if osname
echo " "
@end
case "$osvers" in
 ''|' ')
```

```
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *) dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/^[^_]*//'`
   dflt=`echo $dflt | $sed -e 's/^_//' -e 's/_/./g'`
   case "$dflt" in
   "|' ') dflt=none ;;
   esac
   ;;
  esac
  ;;
 *) dflt="$osvers" ;;
esac
rp="Operating system version?"
. ./myread
case "$ans" in
none)  osvers=" ;;
*) osvers="$ans" ;;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Oldconfig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_syscallproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_syscallproto:
?S: This variable conditionally defines the HAS_SYSCALL_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the syscall() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SYSCALL_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the syscall() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
```

```
 int syscall(int,  ...);
?C:  extern int syscall(long, ...);
?C:.
?H:#$d_syscallproto HAS_SYSCALL_PROTO /**/
?H:.
?LINT:set d_syscallproto
: see if prototype for syscall is available
echo " "
set d_syscallproto syscall $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_syscallproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cppstdin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cppstdin.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:08:34  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:05:38  ram
?RCS: patch16: comment for CPPLAST was missing
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:18:58  ram
?RCS: patch15: new variables cpprun and cpplast, guaranteed wrapper-free
?RCS: patch15: cppstdin now tries to use cc, even at the cost of a wrapper
?RCS:
?RCS: Revision 3.0.1.1
  1993/08/25  14:00:53  ram
?RCS: patch6: remove wrapper when not actually used
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppstdin cppminus cpprun cpplast: contains test \
 Myread Oldconfig Loc cpp +cc rm hint osname gccversion
?MAKE: -pick add $@ %<
?S:cppstdin:
?S: This variable contains the command which will invoke the C
```

```
?S: preprocessor on standard input and put the output to stdout.
?S: It is primarily used by other Configure units that ask about
?S: preprocessor symbols.
?S:.
?S:cppminus:
?S: This variable contains the second part of the string which will invoke
?S: the C preprocessor on the standard input and produce to standard
?S: output.  This variable will have the value "-" if cppstdin needs
?S: a minus to specify standard input, otherwise the value is "".
?S:.
?S:cpprun:
?S: This variable contains the command which will invoke a C preprocessor
?S: on standard input and put the output to stdout. It is guaranteed
 not
?S: to be a wrapper and may be a null string if no preprocessor can be
?S: made directly available. This preprocessor might be different from the
?S: one used by the C compiler. Don't forget to append cpplast after the
?S: preprocessor options.
?S:.
?S:cpplast:
?S: This variable has the same functionality as cppminus, only it applies
?S: to cpprun and not cppstdin.
?S:.
?C:CPPSTDIN:
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  Typical value of "cc -E" or "/lib/cpp", but it can also
?C: call a wrapper. See CPPRUN.
?C:.
?C:CPPMINUS:
?C: This symbol contains the second part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  This symbol will have the value "-" if CPPSTDIN needs a minus
?C: to specify standard input, otherwise the value is "".
?C:.
?C:CPPRUN:
?C: This symbol contains the string which will invoke
 a C preprocessor on
?C: the standard input and produce to standard output. It needs to end
?C: with CPPLAST, after all other preprocessor flags have been specified.
?C: The main difference with CPPSTDIN is that this program will never be a
?C: pointer to a shell wrapper, i.e. it will be empty if no preprocessor is
?C: available directly to the user. Note that it may well be different from
?C: the preprocessor used to compile the C program.
?C:.
?C:CPPLAST:
?C: This symbol is intended to be used along with CPPRUN in the same manner
?C: symbol CPPMINUS is used with CPPSTDIN. It contains either "-" or "".
```

```
?C:.
?H:#define CPPSTDIN "$cppstdin"
?H:#define CPPMINUS "$cppminus"
?H:#define CPPRUN "$cpprun"
?H:#define CPPLAST "$cpplast"
?H:.
?F:cppstdin !testcpp.out !testcpp.c
?T:wrapper x_cpp x_minus ok
?LINT:extern cppflags
: see how we invoke the C preprocessor
echo " "
echo "Now, how can we feed standard input to your C preprocessor..." >&4
cat <<'EOT' >testcpp.c
#define ABC abc
#define
 XYZ xyz
ABC.XYZ
EOT
cd ..
if test ! -f cppstdin; then
 if test "X$osname" = "Xaix" -a "X$gccversion" = X; then
  # AIX cc -E doesn't show the absolute headerfile
  # locations but we'll cheat by using the -M flag.
  echo 'cat >.$$.c; rm -f .$$.u; "'"$cc"' ${1+"$@"} -M -c .$$.c 2>/dev/null; test -s .$$.u && awk '"'"'$2 ~ /\.h$/ { print
"# 0 \"'"$2"'\"" }'"'" .$$.u; rm -f .$$.o .$$.u; "'"$cc"' -E ${1+"$@"} .$$.c; rm .$$.c' > cppstdin
 else
  echo 'cat >.$$.c; "'"$cc $cppflags"' -E ${1+"$@"} .$$.c; rm .$$.c' >cppstdin
 fi
else
 echo "Keeping your $hint cppstdin wrapper."
fi
chmod 755 cppstdin
wrapper=`pwd`/cppstdin
ok='false'
cd UU

?X:
?X: We'll run the cpp tests again if we don't have any valid C preprocessor
?X: yet or don't know how to proceed without a wrapper (in which case cpprun
?X: is empty and that's really annoying...)
?X:
if $test "X$cppstdin" != "X" && \
 $cppstdin $cppminus <testcpp.c >testcpp.out 2>&1 && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
then
 echo "You used
 to use $cppstdin $cppminus so we'll use that again."
 case "$cpprun" in
```

```
 ") echo "But let's see if we can live without a wrapper..." ;;
 *)
  if $cpprun $cpplast <testcpp.c >testcpp.out 2>&1 && \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
   echo "(And we'll use $cpprun $cpplast to preprocess directly.)"
   ok='true'
  else
   echo "(However, $cpprun $cpplast does not work, let's see...)"
  fi
  ;;
 esac
else
 case "$cppstdin" in
 ") ;;
 *)
  echo "Good old $cppstdin $cppminus does not seem to be of any help..."
  ;;
 esac
fi

if $ok; then
 : nothing
elif echo 'Maybe """$cc"' -E" will work...'; \
 $cc -E <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc $cppflags -E"
 x_minus=";
elif echo 'Nope...maybe """$cc"' -E -" will work...'; \
 $cc -E - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc $cppflags -E"
 x_minus='-';
elif
 echo 'Nope...maybe """$cc"' -P" will work...'; \
 $cc -P <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yipee, that works!"
 x_cpp="$cc $cppflags -P"
 x_minus=";
elif echo 'Nope...maybe """$cc"' -P -" will work...'; \
 $cc -P - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "At long last!"
 x_cpp="$cc $cppflags -P"
 x_minus='-';
```

```
elif echo 'No such luck, maybe "'$cpp'" will work...'; \
 $cpp <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "It works!"
 x_cpp="$cpp $cppflags"
 x_minus=";
elif echo 'Nixed again...maybe "'$cpp' -" will work...'; \
 $cpp - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Hooray, it works!  I was beginning to wonder."
 x_cpp="$cpp $cppflags"
 x_minus='-';
elif echo 'Uh-uh.  Time to get fancy.  Trying a wrapper...'; \
 $wrapper <testcpp.c >testcpp.out 2>&1; \
 $contains
 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 x_cpp="$wrapper"
 x_minus="
 echo "Eureka!"
else
 dflt="
 rp="No dice.  I can't find a C preprocessor.  Name one:"
 . ./myread
 x_cpp="$ans"
 x_minus="
 $x_cpp <testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
  echo "OK, that will do." >&4
 else
echo "Sorry, I can't get that to work.  Go find one and rerun Configure." >&4
  exit 1
 fi
fi

case "$ok" in
false)
 cppstdin="$x_cpp"
 cppminus="$x_minus"
 cpprun="$x_cpp"
 cpplast="$x_minus"
?X:
?X: If /lib/cpp is used, try using a wrapper to increase our chances to have
?X: the C compiler and our $cppstdin agree on the same symbols... However,
?X: since cpprun is guaranteed not to be a wrapper, we must clear it if the
?X: only preprocessor we found was a wrapper, with all our luck...
?X:
 set X $x_cpp
 shift
```

```
 case "$1" in
 "$cpp")
  echo "Perhaps can we force $cc -E using a wrapper..."
  if $wrapper <testcpp.c >testcpp.out 2>&1; \
   $contains 'abc.*xyz'
 testcpp.out >/dev/null 2>&1
  then
   echo "Yup, we can."
   cppstdin="$wrapper"
   cppminus=";
  else
   echo "Nope, we'll have to live without it..."
  fi
  ;;
 esac
 case "$cpprun" in
 "$wrapper")
  cpprun="
  cpplast="
  ;;
 esac
 ;;
esac

case "$cppstdin" in
"$wrapper"|'cppstdin') ;;
*) $rm -f $wrapper;;
esac
$rm -f testcpp.c testcpp.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/cppstdin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strdup.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strdup.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:21:41  ram
?RCS: patch15: created
?RCS:
```

```
?MAKE:d_strdup: Inlibc
?MAKE: -pick add $@ %<
?S:d_strdup:
?S: This variable conditionally defines HAS_STRDUP if strdup() is
?S: available to duplicate strings in memory.
?S:.
?C:HAS_STRDUP:
?C: This symbol, if defined, indicates that the strdup routine is
?C: available to duplicate strings in memory. Otherwise, roll up
?C: your own...
?C:.
?H:#$d_strdup HAS_STRDUP  /**/
?H:.
?LINT:set
 d_strdup
: see if strdup exists
set strdup d_strdup
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strdup.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_expm1: Inlibc
?MAKE: -pick add $@ %<
?S:d_expm1:
?S: This variable conditionally defines the HAS_EXPM1 symbol, which
?S: indicates to the C program that the expm1() routine is available.
?S:.
?C:HAS_EXPM1:
?C: This symbol, if defined, indicates that the expm1 routine is
?C: available to do the exp(x) - 1 when x is near 1 function.
?C:.
?H:#$d_expm1 HAS_EXPM1  /**/
?H:.
?LINT:set d_expm1
: see if expm1 exists
set expm1 d_expm1
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_expm1.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: kernel.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: kernel.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:kernel: Getfile test
?MAKE: -pick add $@ %<
?S:kernel:
?S: This variable becomes the (fully rooted) path name of the kernel.
?S:.
: find the name of the kernel.
echo " "
case "$kernel" in
")
 if $test -r /unix; then
  dflt=/unix
 elif $test -r /vmunix; then
  dflt=/vmunix
 elif $test -r /xenix; then
  dflt=/xenix
 elif $test -r /mach; then
  dflt=/mach
 elif
 $test -r /dgux; then
  dflt=/dgux
 elif $test -r /hp-ux; then
  dflt=/hp-ux
 elif $test -r /syst; then
  dflt=/syst
 elif $test -r /arix; then
  dflt=/arix
 elif $test -r /irix; then
  dflt=/arix
 else
  dflt='unknown'
  set X /*x
  shift
  case $# in
  1)
   if $test -r "$1"; then
```

```
    dflt="$1"
   fi
   ;;
  esac
 fi
 ;;
*)
 dflt="$kernel"
 ;;
esac
fn=f
rp='What is the name of your kernel?'
. ./getfile
kernel="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/kernel.U
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```
?RCS: $Id: Csym.U,v 3.0.1.4 1995/07/25 13:36:29 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Csym.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:36:29  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS: patch56: added quotes for OS/2 support
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:00:33  ram
?RCS: patch54: fixed C test program to bypass gcc builtin type checks (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/31  09:34:13  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision
 3.0.1.1  1993/08/25  14:00:05  ram
?RCS: patch6: added ldflags as a conditional dependency and to compile line
?RCS: patch6: a final double quote was missing in csym variable after eval
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:Csym mistrustnm extern_C: Options contains libc libs runnm test \
 +cc +optimize +ccflags +ldflags run rm_try _exe d_cplusplus
?MAKE: -pick add $@ %<
?LINT:define csym
?LINT:use libc
?LINT:extern mistrustnm
?LINT:set mistrustnm
?S:csym:
?S: This shell variable is used internally by Configure to check
?S: whether a given C symbol is defined or not. A typical use is:
?S:  set symbol result [-fva] [previous]
?S:  eval $csym
?S: That will set result to 'true' if the function [-f], variable [-v]
?S: or array [-a] is defined, 'false' otherwise. If a previous value is
?S: given and the -r flag was provided on the command line, that value
?S: is reused without questioning.
?S:.
?S:extern_C:
?S: ANSI C
 requires 'extern' where C++ requires 'extern "C"'. This
?S: variable can be used in Configure to do the right thing.
?S:.
?S:mistrustnm:
?S: This variable can be used to establish a fallthrough for the cases
?S: where nm fails to find a symbol.  If usenm is false or usenm is true
?S: and mistrustnm is false, this variable has no effect.  If usenm is true
?S: and mistrustnm is "compile", a test program will be compiled to try to
?S: find any symbol that can't be located via nm lookup.  If mistrustnm is
?S: "run", the test program will be run as well as being compiled.
?S:.
?V:csym
?T:tval tx tlook tf tdc
?F:!try
: is a C symbol defined?
csym='tlook=$1;
case "$3" in
-v) tf=libc.tmp; tdc="";;
-a) tf=libc.tmp; tdc="[]";;
*) tlook="^$1\$"; tf=libc.list; tdc="()";;
esac;
case "$d_cplusplus" in
   $define) extern_C="extern \"C\"" ;;
   *)  extern_C="extern" ;;
esac;
tx=yes;
case "$reuseval-$4" in
true-) ;;
true-*) tx=no; eval "tval=\$$4"; case "$tval" in "") tx=yes;; esac;;
```

```
esac;
case "$tx"
 in
yes)
?X:
?X: Put symbol inside a printf to fool optimizing compilers...
?X:
?X: We use 'short' instead of 'int' to try to circumvent overzealous
?X: optimizing compilers using built-in prototypes for commonly used
?X: routines to complain when seeing a different external declaration. For
?X: instance, gcc 2.6.3 fails if we use 'int' and we attempt a test against
?X: memcpy() on machines where sizeof(int) == sizeof(char *) (the usual return
?X: type), the compiler assuming it's a built-in declaration given that the
?X: returned size matches. At least with 'short' we are safe! -- RAM, for ADO
?X:
?X: Let's thank GNU cc for making our lives so easy! :-)
?X: (An alternative for the future would be to use our knowledge about gcc
?X: to force a -fno-builtin option in the compile test, in case the 'short'
?X: trick is obsoleted by future gcc releases). -- RAM
?X:
 tval=false;
 if $test "$runnm" = true; then
  if $contains $tlook $tf >/dev/null 2>&1; then
   tval=true;
  elif $test "$mistrustnm"
 = compile -o "$mistrustnm" = run; then
   echo "$extern_C void *$1$tdc; void *(*(p()))$tdc { return &$1; } int main(int argc, char **argv) { if(p() && p() !=
(void *)argv[0]) return(0); else return(1); }"> try.c;
   $cc -o try $optimize $ccflags $ldflags try.c >/dev/null 2>&1 $libs && tval=true;
   $test "$mistrustnm" = run -a -x try && { $run ./try$_exe >/dev/null 2>&1 || tval=false; };
   $rm_try;
  fi;
 else
  echo "$extern_C void *$1$tdc; void *(*(p()))$tdc { return &$1; } int main(int argc, char **argv) { if(p() && p() !=
(void *)argv[0]) return(0); else return(1); }"> try.c;
  $cc -o try $optimize $ccflags $ldflags try.c $libs >/dev/null 2>&1 && tval=true;
  $rm_try;
 fi;
 ;;
*)
 case "$tval" in
 $define) tval=true;;
 *) tval=false;;
 esac;
 ;;
esac;
eval "$2=$tval"'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/Csym.U
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```
?RCS: $Id: d_gnulibc.U,v 3.0.1.1 1997/02/28 15:34:33 ram Exp $
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
?RCS: Copyright (c) 1996, Sven Verdoolaege
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_gnulibc.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_gnulibc gnulibc_version: Myread Oldconfig Setvar rm_try \
 cat Compile run
?MAKE: -pick add $@ %<
?S:d_gnulibc:
?S: Defined if we're dealing with the GNU C Library.
?S:.
?S:gnulibc_version:
?S: This variable contains the version number of the GNU C library.
?S: It is
 usually something like '2.2.5'.  It is a plain '' if this
?S: is not the GNU C library, or if the version is unknown.
?S:.
?C:HAS_GNULIBC:
?C: This symbol, if defined, indicates to the C program that
?C: the GNU C library is being used.  A better check is to use
?C: the __GLIBC__ and __GLIBC_MINOR__ symbols supplied with glibc.
?C:.
?H:#$d_gnulibc HAS_GNULIBC /**/
?H:?%<:#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)
?H:?%<:#   define _GNU_SOURCE
?H:?%<:#endif
?H:.
?F:!glibc.ver !try
?LINT: set d_gnulibc
?X: gnulibc can be executed by calling __libc_main().
?X: Ulrich Drepper doesn't think any other libc does that,
?X: but we check if it says 'GNU C Library' to be sure.
?X:
```

```
?X: Alas, as of 3/1998 glibc 2.0.7 reportedly isn't going to
?X: have __libc_main() anymore. :-(.  Fortunately, all released
?X: versions of glibc 2.x.x _do_ have CPP variables.  For 2.0.6,
?X: they are:
?X: #define __GLIBC__  2
?X: #define__GLIBC_MINOR__ 0.
?X: (The '6' isn't available :-(.
?X: glibc2.1 will also
 have
?X:  extern const char * __gnu_get_libc_release(void);
?X:  extern const char * __gnu_get_libc_version(void);
?X: functions.   --thanks to Andreas Jaeger.   --AD  6/1998.
?X: Although the exact format isn't documented, __gnu_get_libc_version()
?X: returns a simple string '2.1.3' in glibc 2.1.3.
?X:
: Check if we are using the GNU C library
echo " "
echo "Checking for GNU C Library..." >&4
cat >try.c <<'EOCP'
/* Find out version of GNU C library.  __GLIBC__ and __GLIBC_MINOR__
  alone are insufficient to distinguish different versions, such as
  2.0.6 and 2.0.7.  The function gnu_get_libc_version() appeared in
  libc version 2.1.0.      A. Dougherty,  June 3, 2002.
*/
#include <stdio.h>
int main(void)
{
#ifdef __GLIBC__
#   ifdef __GLIBC_MINOR__
#       if __GLIBC__ >= 2 && __GLIBC_MINOR__ >= 1 && !defined(__cplusplus)
#           include <gnu/libc-version.h>
     printf("%s\n",  gnu_get_libc_version());
#       else
     printf("%d.%d\n",  __GLIBC__, __GLIBC_MINOR__);
#
   endif
#   else
 printf("%d\n",  __GLIBC__);
#   endif
   return 0;
#else
   return 1;
#endif
}
EOCP
set try
if eval $compile_ok && $run ./try > glibc.ver; then
 val="$define"
```

```
 gnulibc_version=`$cat glibc.ver`
 echo "You are using the GNU C Library version $gnulibc_version"
else
 val="$undef"
 gnulibc_version=''
 echo "You are not using the GNU C Library"
fi
$rm_try glibc.ver
set d_gnulibc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_gnulibc.U
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```
?RCS: $Id: netdbtype.U,v $
?RCS:
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: netdbtype.U,v $
?RCS:
?MAKE:netdb_host_type netdb_hlen_type netdb_name_type netdb_net_type: \
 Protochk Oldconfig Myread cat \
 d_gethbyaddr d_gethbyname d_getnbyaddr \
 i_niin i_netdb i_unistd d_socket sizetype extern_C
?MAKE: -pick add $@ %<
?S:netdb_host_type:
?S: This variable holds the type used for the 1st argument to
?S: gethostbyaddr().  Usually, this is char * or void *,  possibly
?S: with or without a const prefix.
?S: This is only useful if you have gethostbyaddr(), naturally.
?S:.
?S:netdb_hlen_type:
?S: This variable holds the type used for the 2nd argument to
?S: gethostbyaddr().  Usually,
 this is int or size_t or unsigned.
?S: This is only useful if you have gethostbyaddr(), naturally.
?S:.
?S:netdb_name_type:
?S: This variable holds the type used for the argument to
?S: gethostbyname().  Usually, this is char * or const char *.
?S: This is only useful if you have gethostbyname(), naturally.
?S:.
```

```
?S:netdb_net_type:
?S: This variable holds the type used for the 1st argument to
?S: getnetbyaddr().  Usually, this is int or long.
?S: This is only useful if you have getnetbyaddr(), naturally.
?S:.
?C:Netdb_host_t:
?C: This symbol holds the type used for the 1st argument
?C: to gethostbyaddr().
?C:.
?C:Netdb_hlen_t:
?C: This symbol holds the type used for the 2nd argument
?C: to gethostbyaddr().
?C:.
?C:Netdb_name_t:
?C: This symbol holds the type used for the argument to
?C: gethostbyname().
?C:.
?C:Netdb_net_t:
?C: This symbol holds the type used for the 1st argument to
?C: getnetbyaddr().
?C:.
?H:#define Netdb_host_t  $netdb_host_type /**/
?H:#define Netdb_hlen_t  $netdb_hlen_type
 /**/
?H:#define Netdb_name_t  $netdb_name_type /**/
?H:#define Netdb_net_t  $netdb_net_type /**/
?H:.
?T:xxx yyy try hdrs
@if netdb_host_type || Netdb_host_t || netdb_hlen_type || Netdb_hlen_t
: check for type of arguments to gethostbyaddr.
if test "X$netdb_host_type" = X -o "X$netdb_hlen_type" = X; then
 case "$d_gethbyaddr" in
 $define)
  $cat <<EOM

Checking to see what type of arguments are accepted by gethostbyaddr().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin netinet/in.h
   $i_netdb netdb.h
   $i_unistd unistd.h"
  : The first arg can 'char *' or 'void *'
  : The second arg is some of integral type
  for xxx in in_addr_t 'const void *' 'const char *' 'void *' 'char *'; do
   for yyy in size_t long int; do
    case "$netdb_host_type" in
    ") try="$extern_C struct hostent *gethostbyaddr($xxx, $yyy, int);"
```

```
    if ./protochk "$try" $hdrs; then
     echo "Your system accepts $xxx for the first arg."
     echo "...and $yyy for the second arg."
     netdb_host_type="$xxx"
     netdb_hlen_type="$yyy"
    fi
    ;;
   esac
  done
 done
 :
In case none of those worked, prompt the user.
 case "$netdb_host_type" in
 ") rp='What is the type for the 1st argument to gethostbyaddr?'
  dflt='char *'
  . ./myread
  netdb_host_type=$ans
  rp='What is the type for the 2nd argument to gethostbyaddr?'
  dflt="$sizetype"
  . ./myread
  netdb_hlen_type=$ans
  ;;
 esac
 ;;
*) : no gethostbyaddr, so pick harmless defaults
 netdb_host_type='char *'
 netdb_hlen_type="$sizetype"
 ;;
esac
# Remove the "const" if needed. -- but then we'll have a
# prototype clash!
# netdb_host_type=`echo "$netdb_host_type" | sed 's/^const //'`
fi
@end

@if netdb_name_type || Netdb_name_t
: check for type of argument to gethostbyname.
if test "X$netdb_name_type" = X ; then
 case "$d_gethbyname" in
 $define)
  $cat <<EOM

Checking to see what type of argument is accepted by gethostbyname().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin
```

```
 netinet/in.h
   $i_netdb netdb.h
   $i_unistd unistd.h"
  for xxx in "const char *" "char *"; do
   case "$netdb_name_type" in
   ") try="$extern_C struct hostent *gethostbyname($xxx);"
    if ./protochk "$try" $hdrs; then
     echo "Your system accepts $xxx."
     netdb_name_type="$xxx"
    fi
    ;;
   esac
  done
  : In case none of those worked, prompt the user.
  case "$netdb_name_type" in
  ") rp='What is the type for the 1st argument to gethostbyname?'
   dflt='char *'
   . ./myread
   netdb_name_type=$ans
   ;;
  esac
  ;;
 *) : no gethostbyname, so pick harmless default
  netdb_name_type='char *'
  ;;
 esac
fi
@end

@if netdb_net_type || Netdb_net_t
: check for type of 1st argument to getnetbyaddr.
if test "X$netdb_net_type" = X ; then
 case "$d_getnbyaddr" in
 $define)
  $cat <<EOM

Checking to see what type of 1st argument is accepted by getnetbyaddr().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin netinet/in.h
   $i_netdb netdb.h
   $i_unistd
 unistd.h"
  for xxx in in_addr_t "unsigned long" long "unsigned int" int; do
   case "$netdb_net_type" in
   ") try="$extern_C struct netent *getnetbyaddr($xxx, int);"
    if ./protochk "$try" $hdrs; then
```

```
    echo "Your system accepts $xxx."
    netdb_net_type="$xxx"
   fi
   ;;
  esac
 done
 : In case none of those worked, prompt the user.
 case "$netdb_net_type" in
 ") rp='What is the type for the 1st argument to getnetbyaddr?'
  dflt='long'
  . ./myread
  netdb_net_type=$ans
  ;;
 esac
 ;;
*) : no getnetbyaddr, so pick harmless default
 netdb_net_type='long'
 ;;
esac
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/netdbtype.U
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```
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS:
?X:
?X: This unit is just a quick shorthand for the compile command
?X: to be used in all the other metaconfig units.
?X:
?MAKE:Compile: +cc +optimize +ccflags +ldflags +libs
?MAKE: -pick add $@ %<
```

```
?LINT:define compile compile_ok
?V:compile compile_ok mc_file
?S:compile:
?S: This shell variable is used internally
 by Configure to provide
?S: a convenient shorthand for the typical compile command, namely
?S: $cc $optimize $ccflags $ldflags -o $1 $1.c $libs > /dev/null 2>&1
?S: Note that the output filename does _not_ include the _exe
?S: extension.  Instead we assume that the linker will be
?S: "helpful" and automatically appending the correct suffix.
?S: OS/2 users will apparently need to supply the -Zexe flag to
?S: get this behavior.
?S:
?S: To use this variable, say something like:
?S:  echo 'int main() { exit(0); }' > try.c
?S:  set try
?S:  if eval $compile; then
?S:   echo "success"   # and do whatever . . .
?S:  else
?S:   echo "failure"   # and do whatever . . .
?S:  fi
?S: To add extra flags cc flags (e.g. -DWHATEVER) just put them
?S: in $*, e.g.
?S:  set try -DTRY_THIS_FLAG
?S:.
?S:compile_ok:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command that you
?S: expect to work ok.  It is the same as $compile,
 except we
?S: deliberately let the user see any error messages.
?S:.
: define a shorthand compile call
compile='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
: define a shorthand compile call for compilations that should be ok.
compile_ok='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs;'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Compile.U
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?RCS: Id

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmat.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:04:23  ram
?RCS: patch56: use findhdr to find <sys/shm.h>, to get the right one (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:18:56  ram
?RCS: patch27: added new symbol HAS_SHMAT_PROTOTYPE (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:54:18  ram
?RCS: patch23: new Shmat_t symbol to declare return type of shmat()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmat shmattype
 d_shmatprototype: Inlibc cat +cc +ccflags \
 rm cppstdin cppflags cppminus Findhdr Setvar contains
?MAKE: -pick add $@ %<
?S:d_shmat:
?S: This variable conditionally defines the HAS_SHMAT symbol, which
?S: indicates to the C program that the shmat() routine is available.
?S:.
?S:shmattype:
?S: This symbol contains the type of pointer returned by shmat().
?S: It can be 'void *' or 'char *'.
?S:.
?S:d_shmatprototype:
?S: This variable conditionally defines the HAS_SHMAT_PROTOTYPE
?S: symbol, which indicates that sys/shm.h has a prototype for
?S: shmat.
?S:.
?C:HAS_SHMAT:
?C: This symbol, if defined, indicates that the shmat() routine is
?C: available to attach a shared memory segment to the process space.
?C:.
?C:Shmat_t:
?C: This symbol holds the return type of the shmat() system call.
?C: Usually set to 'void *' or 'char *'.
?C:.
?C:HAS_SHMAT_PROTOTYPE:
```

```
?C: This symbol, if defined, indicates that the sys/shm.h includes
?C: a prototype for shmat().  Otherwise, it is up to the program
 to
?C: guess one.  Shmat_t shmat _((int, Shmat_t, int)) is a good guess,
?C: but not always right so it should be emitted by the program only
?C: when HAS_SHMAT_PROTOTYPE is not defined to avoid conflicting defs.
?C:.
?H:#$d_shmat HAS_SHMAT  /**/
?H:#define Shmat_t $shmattype /**/
?H:#$d_shmatprototype HAS_SHMAT_PROTOTYPE /**/
?H:.
?LINT:set d_shmat d_shmatprototype
?T:xxx
: see if shmat exists
set shmat d_shmat
eval $inlibc
: see what shmat returns
case "$d_shmat" in
"$define")
 $cat >shmat.c <<'END'
#include <sys/shm.h>
void *shmat();
END
 if $cc $ccflags -c shmat.c >/dev/null 2>&1; then
  shmattype='void *'
 else
  shmattype='char *'
 fi
 echo "and it returns ($shmattype)." >&4
 : see if a prototype for shmat is available
 xxx=`./findhdr sys/shm.h`
 $cppstdin $cppflags $cppminus < $xxx > shmat.c 2>/dev/null
 if $contains 'shmat.*(' shmat.c >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 $rm -f shmat.[co]
 ;;
*)
 val="$undef"
 ;;
esac
set d_shmatprototype
eval $setvar
```

Found

in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_varhdr.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:54:42  ram
?RCS: patch61: varargs script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:21:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:26:05  ram
?RCS: patch27: this unit now supersedes old i_stdarg.U and i_varargs.U
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:49  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?MAKE:i_stdarg i_varargs i_varhdr: cat +cc +ccflags rm test Setvar \
 Findhdr Warn startsh _o
?MAKE: -pick add $@ %<
?S:i_stdarg:
?S: This variable conditionally defines the I_STDARG symbol, which
?S: indicates to the C program that <stdarg.h> exists and should
?S: be included.
?S:.
?S:i_varargs:
?S: This variable conditionally defines I_VARARGS, which indicates
?S: to the C program that it should include <varargs.h>.
?S:.
?S:i_varhdr:
?S: Contains the name of the header to be included to get va_dcl definition.
?S: Typically one of varargs.h or stdarg.h.
?S:.
?C:I_STDARG:
?C: This symbol, if defined, indicates that <stdarg.h> exists and should
?C: be included.
```

```
?C:.
?C:I_VARARGS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <varargs.h>.
?C:.
?H:#$i_stdarg I_STDARG  /**/
?H:#$i_varargs I_VARARGS /**/
?H:.
?W:%<:va_dcl
?F:!varargs
?T:valstd
?LINT:set i_stdarg i_varargs
?X:
?X: Don't use setvar because the varags test
 below might override these.
?X: Actually, the messages here are just informative. We don't wish to set
?X: i_varargs or i_stdarg to their final value before knowing which of the
?X: two we'll include.
?X:
: see if stdarg is available
echo " "
if $test `./findhdr stdarg.h`; then
 echo "<stdarg.h> found." >&4
 valstd="$define"
else
 echo "<stdarg.h> NOT found." >&4
 valstd="$undef"
fi

: see if varags is available
echo " "
if $test `./findhdr varargs.h`; then
 echo "<varargs.h> found." >&4
else
 echo "<varargs.h> NOT found, but that's ok (I hope)." >&4
fi

?X:
?X: if you have stdarg.h, you need to support prototypes to actually use it;
?X: but if stdarg.h exists and the compiler doesn't support prototypes (for some
?X: bizarre reason), we'll fall back to varargs.h anyway so it's not so bad.
?X:
: set up the varargs testing programs
$cat > varargs.c <<EOP
#ifdef I_STDARG
#include <stdarg.h>
#endif
#ifdef I_VARARGS
```

```
#include <varargs.h>
#endif

#ifdef I_STDARG
int f(char *p, ...)
#else
int
 f(va_alist)
va_dcl
#endif
{
 va_list ap;
#ifndef I_STDARG
 char *p;
#endif
#ifdef I_STDARG
 va_start(ap,p);
#else
 va_start(ap);
 p = va_arg(ap, char *);
#endif
 va_end(ap);
}
EOP
$cat > varargs <<EOP
$startsh
if $cc -c $ccflags -D\$1 varargs.c >/dev/null 2>&1; then
 echo "true"
else
 echo "false"
fi
$rm -f varargs$_o
EOP
chmod +x varargs

: now check which varargs header should be included
echo " "
i_varhdr=''
case "$valstd" in
"$define")
 if `./varargs I_STDARG`; then
  val='stdarg.h'
 elif `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
*)
 if `./varargs I_VARARGS`; then
```

```
  val='varargs.h'
 fi
 ;;
esac
case "$val" in
")
 ./warn "I could not find the definition for va_dcl... You have problems..."
 val="$undef"; set i_stdarg; eval $setvar
 val="$undef"; set i_varargs; eval $setvar
 ;;
*)
 set i_varhdr
 eval $setvar
 case "$i_varhdr" in
 stdarg.h)
  val="$define"; set i_stdarg; eval $setvar
  val="$undef"; set i_varargs; eval $setvar
  ;;
 varargs.h)
  val="$undef"; set i_stdarg;
 eval $setvar
  val="$define"; set i_varargs; eval $setvar
  ;;
 esac
 echo "We'll include <$i_varhdr> to get va_dcl definition." >&4;;
esac
$rm -f varargs*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_varhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_raster.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_raster.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_raster rasterlib: cat test Setvar Myread Oldconfig
?MAKE: -pick add $@ %<
```

```
?S:d_raster:
?S: Conditionally defines RASTER_TEK if this is a raster tech machine.
?S:.
?S:rasterlib (d_rasterlib):
?S: Set to the needed compile flag if this is a raster tech machine.
?S: It is up to the Makefile to use this variable.
?S:.
?C:RASTER_TEK:
?C: Defined
 if this is a rastertech machine.
?C:.
?H:#$d_raster RASTER_TEK /**/
?H:.
?LINT:set d_raster
: See if this is a raster tech machine.
val="$undef"
rasterlib=''
if $test -r /dev/mirage; then
 $cat <<'EOM'

You seem to have a mirage device... this is normally associated with a raster
technologies graphics workstation. If this is right, you may want to use raster
tech in this program.

EOM
 dflt=y
 case "$d_raster" in
 "$undef") dflt=n;;
 esac
 rp='Use raster tech?'
 . ./myread
 case "$ans" in
 y*) val="$define";;
 esac
fi
set d_raster
eval $setvar

case "$d_raster" in
"$define") rasterlib='-lphigs';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_raster.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pause.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pause.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:54  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_pause: Inlibc
?MAKE: -pick add $@ %<
?S:d_pause:
?S: This variable conditionally defines the HAS_PAUSE symbol, which
?S: indicates to the C program that the pause() routine is available
?S: to suspend a process until a signal is received.
?S:.
?C:HAS_PAUSE :
?C: This symbol,
 if defined, indicates that the pause routine is
?C: available to suspend a process until a signal is received.
?C:.
?H:#$d_pause HAS_PAUSE  /**/
?H:.
?LINT:set d_pause
: see if pause exists
set pause d_pause
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pause.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_pwd.U,v $
```

```
?RCS: Revision 3.0.1.2  1995/07/25  14:10:57  ram
?RCS: patch56: use setvar so hint file values can override our guesses (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:03:27  ram
?RCS: patch23: had forgotten cppminus in cppstdin test (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks whether there is a pwd system or not
?X:
?MAKE:i_pwd d_pwquota d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment:
 \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_pwd:
?S: This variable conditionally defines I_PWD, which indicates
?S: to the C program that it should include <pwd.h>.
?S:.
?S:d_pwquota:
?S: This varaible conditionally defines PWQUOTA, which indicates
?S: that struct passwd contains pw_quota.
?S:.
?S:d_pwage:
?S: This varaible conditionally defines PWAGE, which indicates
?S: that struct passwd contains pw_age.
?S:.
?S:d_pwchange:
?S: This varaible conditionally defines PWCHANGE, which indicates
?S: that struct passwd contains pw_change.
?S:.
?S:d_pwclass:
?S: This varaible conditionally defines PWCLASS, which indicates
?S: that struct passwd contains pw_class.
?S:.
?S:d_pwexpire:
?S: This varaible conditionally defines PWEXPIRE, which indicates
?S: that struct passwd contains pw_expire.
?S:.
?S:d_pwcomment:
?S: This varaible conditionally defines PWCOMMENT, which indicates
?S: that struct passwd contains pw_comment.
?S:.
?C:I_PWD:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include <pwd.h>.
```

```
?C:.
?C:PWQUOTA:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_quota.
?C:.
?C:PWAGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_age.
?C:.
?C:PWCHANGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_change.
?C:.
?C:PWCLASS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_class.
?C:.
?C:PWEXPIRE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_expire.
?C:.
?C:PWCOMMENT:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_comment.
?C:.
?H:#$i_pwd I_PWD  /**/
?H:#$d_pwquota PWQUOTA /**/
?H:#$d_pwage PWAGE /**/
?H:#$d_pwchange PWCHANGE /**/
?H:#$d_pwclass PWCLASS /**/
?H:#$d_pwexpire PWEXPIRE /**/
?H:#$d_pwcomment PWCOMMENT /**/
?H:.
?LINT: set i_pwd d_pwquota
 d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment
?T:xxx
: see if this is a pwd.h system
set pwd.h i_pwd
eval $inhdr

case "$i_pwd" in
$define)
 xxx=`./findhdr pwd.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'pw_quota' $$.h >/dev/null 2>&1; then
  val="$define"
 else
```

```
 val="$undef"
fi
set d_pwquota
eval $setvar

if $contains 'pw_age' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwage
eval $setvar

if $contains 'pw_change' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwchange
eval $setvar

if $contains 'pw_class' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwclass
eval $setvar

if $contains 'pw_expire' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwexpire
eval $setvar

if $contains 'pw_comment' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwcomment
eval $setvar

$rm -f $$.h
;;
*)
```

```
 val="$undef";
 set
 d_pwquota; eval $setvar
 set d_pwage; eval $setvar
 set d_pwchange; eval $setvar
 set d_pwclass; eval $setvar
 set d_pwexpire; eval $setvar
 set d_pwcomment; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_pwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:versiononly: cat Myread Setvar Devel
?MAKE: -pick add $@ %<
?LINT:set versiononly
?Y:TOP
?S:versiononly:
?S: If set, this symbol indicates that only the version-specific
?S: components of a perl installation should be installed.
?S: This may be useful for making a test installation of a new
?S: version without disturbing the existing installation.
?S: Setting versiononly is equivalent to setting installperl's -v option.
?S: In particular, the non-versioned scripts and programs such as
?S: a2p, c2ph, h2xs, pod2*, and perldoc
 are not installed
?S: (see INSTALL for a more complete list).  Nor are the man
?S: pages installed.
?S: Usually, this is undef.
?S:.
?LINT:extern inc_version_list
?LINT:change inc_version_list
?LINT:extern inc_version_list_init
?LINT:change inc_version_list_init
?LINT:extern version
: determine whether to use a version number suffix for installed binaries
```

```
echo " "
$cat <<EOM
Do you want to use a version number suffix for installed binaries? This
will install 'perl$version' instead of 'perl', and likewise for other
binaries like 'perldoc' and 'cpan'. This allows many versions of perl
to be installed side-by-side. Unless you are a developer, you probably
do *not* want to do this.
EOM
case "$versiononly" in
"$define"|[Yy]*|true) dflt='y' ;;
*) dflt='n';
esac
rp="Do you want to use a version number suffix for installed binaries?"
. ./myread
case "$ans" in
[yY]*) val="$define";;
*) val="$undef" ;;
esac
set versiononly
eval $setvar

case "$versiononly" in
"$define") inc_version_list="
          inc_version_list_init=0
         ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/versiononly.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nan: Inlibc
?MAKE: -pick add $@ %<
?S:d_nan:
?S: This variable conditionally defines HAS_NAN if nan() is
?S: available to generate NaN.
?S:.
?C:HAS_NAN:
?C: This symbol, if defined, indicates that the nan routine is
?C: available to generate NaN.
?C:.
?H:#$d_nan HAS_NAN  /**/
?H:.
?LINT:set d_nan
: see if nan exists
```

```
set nan d_nan
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nan.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perlxv.U,v 1.1 2000/08/31 17:53:56 jhi Exp jhi $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:ivtype uvtype nvtype ivsize uvsize nvsize \
    i8type u8type i16type u16type i32type u32type i64type u64type \
    i8size u8size i16size u16size i32size u32size i64size u64size \
    d_nv_preserves_uv nv_preserves_uv_bits nv_overflows_integers_at \
    d_nv_zero_is_allbits_zero: \
 echo rm_try use64bitint d_quad quadtype uquadtype usequadmath \
 d_longdbl uselongdouble longdblsize doublesize i_quadmath \
 shortsize intsize longsize i_stdlib libs gccversion \
 cat Compile i_inttypes test signal_t run
?MAKE: -pick add $@ %<
?S:ivtype:
?S: This variable contains the C type used for Perl's IV.
?S:.
?S:uvtype:
?S: This variable contains the C type
 used for Perl's UV.
?S:.
?S:nvtype:
?S: This variable contains the C type used for Perl's NV.
?S:.
?S:i8type:
?S: This variable contains the C type used for Perl's I8.
?S:.
?S:u8type:
?S: This variable contains the C type used for Perl's U8.
?S:.
?S:i16type:
?S: This variable contains the C type used for Perl's I16.
?S:.
?S:u16type:
?S: This variable contains the C type used for Perl's U16.
?S:.
?S:i32type:
?S: This variable contains the C type used for Perl's I32.
```

```
?S:.
?S:u32type:
?S: This variable contains the C type used for Perl's U32.
?S:.
?S:i64type:
?S: This variable contains the C type used for Perl's I64.
?S:.
?S:u64type:
?S: This variable contains the C type used for Perl's U64.
?S:.
?S:ivsize:
?S: This variable is the size of an IV in bytes.
?S:.
?S:uvsize:
?S: This variable is the size of a UV in bytes.
?S:.
?S:i8size:
?S: This variable is the size of an I8 in bytes.
?S:.
?S:u8size:
?S: This variable is the size of an U8 in bytes.
?S:.
?S:i16size:
?S: This variable is the
 size of an I16 in bytes.
?S:.
?S:u16size:
?S: This variable is the size of an U16 in bytes.
?S:.
?S:i32size:
?S: This variable is the size of an I32 in bytes.
?S:.
?S:u32size:
?S: This variable is the size of an U32 in bytes.
?S:.
?S:i64size:
?S: This variable is the size of an I64 in bytes.
?S:.
?S:u64size:
?S: This variable is the size of an U64 in bytes.
?S:.
?S:nvsize:
?S: This variable is the size of a Perl NV in bytes.
?S: Note that some floating point formats have unused bytes.
?S:.
?S:d_nv_preserves_uv:
?S: This variable indicates whether a variable of type nvtype
?S: can preserve all the bits a variable of type uvtype.
```

```
?S:.
?S:nv_preserves_uv_bits:
?S: This variable indicates how many of bits type uvtype
?S: a variable nvtype can preserve.
?S:.
?S:nv_overflows_integers_at:
?S: This variable gives the largest integer value that NVs can hold
?S: as a constant floating point expression.
?S: If it could not be determined, it holds the value 0.
?S:.
?S:d_nv_zero_is_allbits_zero:
?S: This
 variable indicates whether a variable of type nvtype
?S: stores 0.0 in memory as all bits zero.
?S:.
?C:IVTYPE:
?C: This symbol defines the C type used for Perl's IV.
?C:.
?C:UVTYPE:
?C: This symbol defines the C type used for Perl's UV.
?C:.
?C:I8TYPE:
?C: This symbol defines the C type used for Perl's I8.
?C:.
?C:U8TYPE:
?C: This symbol defines the C type used for Perl's U8.
?C:.
?C:I16TYPE:
?C: This symbol defines the C type used for Perl's I16.
?C:.
?C:U16TYPE:
?C: This symbol defines the C type used for Perl's U16.
?C:.
?C:I32TYPE:
?C: This symbol defines the C type used for Perl's I32.
?C:.
?C:U32TYPE:
?C: This symbol defines the C type used for Perl's U32.
?C:.
?C:I64TYPE:
?C: This symbol defines the C type used for Perl's I64.
?C:.
?C:U64TYPE:
?C: This symbol defines the C type used for Perl's U64.
?C:.
?C:NVTYPE:
?C: This symbol defines the C type used for Perl's NV.
?C:.
```

```
?C:IVSIZE:
?C: This symbol contains the sizeof(IV).
?C:.
?C:UVSIZE:
?C: This symbol contains the
 sizeof(UV).
?C:.
?C:I8SIZE:
?C: This symbol contains the sizeof(I8).
?C:.
?C:U8SIZE:
?C: This symbol contains the sizeof(U8).
?C:.
?C:I16SIZE:
?C: This symbol contains the sizeof(I16).
?C:.
?C:U16SIZE:
?C: This symbol contains the sizeof(U16).
?C:.
?C:I32SIZE:
?C: This symbol contains the sizeof(I32).
?C:.
?C:U32SIZE:
?C: This symbol contains the sizeof(U32).
?C:.
?C:I64SIZE:
?C: This symbol contains the sizeof(I64).
?C:.
?C:U64SIZE:
?C: This symbol contains the sizeof(U64).
?C:.
?C:NVSIZE:
?C: This symbol contains the sizeof(NV).
?C: Note that some floating point formats have unused bytes.
?C: The most notable example is the x86* 80-bit extended precision
?C: which comes in byte sizes of 12 and 16 (for 32 and 64 bit
?C: platforms, respectively), but which only uses 10 bytes.
?C: Perl compiled with -Duselongdouble on x86* is like this.
?C:.
?C:NV_PRESERVES_UV:
?C: This symbol, if defined, indicates that a variable of type NVTYPE
?C: can preserve all the bits of a variable of type UVTYPE.
?C:.
?C:NV_PRESERVES_UV_BITS:
?C: This
 symbol contains the number of bits a variable of type NVTYPE
?C: can preserve of a variable of type UVTYPE.
?C:.
```

```
?C:NV_OVERFLOWS_INTEGERS_AT:
?C: This symbol gives the largest integer value that NVs can hold. This
?C: value + 1.0 cannot be stored accurately. It is expressed as constant
?C: floating point expression to reduce the chance of decimal/binary
?C: conversion issues. If it can not be determined, the value 0 is given.
?C:.
?C:NV_ZERO_IS_ALLBITS_ZERO:
?C: This symbol, if defined, indicates that a variable of type NVTYPE
?C: stores 0.0 in memory as all bits zero.
?C:.
?H:#define IVTYPE  $ivtype  /**/
?H:#define UVTYPE  $uvtype  /**/
?H:#define I8TYPE  $i8type  /**/
?H:#define U8TYPE  $u8type  /**/
?H:#define I16TYPE  $i16type /**/
?H:#define U16TYPE  $u16type /**/
?H:#define I32TYPE  $i32type /**/
?H:#define U32TYPE  $u32type /**/
?H:?%<:#ifdef HAS_QUAD
?H:?%<:#define I64TYPE  $i64type /**/
?H:?%<:#define U64TYPE  $u64type /**/
?H:?%<:#endif
?H:#define NVTYPE  $nvtype  /**/
?H:#define IVSIZE  $ivsize  /**/
?H:#define UVSIZE  $uvsize  /**/
?H:#define I8SIZE  $i8size  /**/
?H:#define U8SIZE  $u8size  /**/
?H:#define I16SIZE  $i16size /**/
?H:#define U16SIZE  $u16size /**/
?H:#define I32SIZE  $i32size /**/
?H:#define U32SIZE  $u32size /**/
?H:?%<:#ifdef
 HAS_QUAD
?H:?%<:#define I64SIZE  $i64size /**/
?H:?%<:#define U64SIZE  $u64size /**/
?H:?%<:#endif
?H:#define NVSIZE  $nvsize  /**/
?H:#$d_nv_preserves_uv NV_PRESERVES_UV
?H:#define NV_PRESERVES_UV_BITS $nv_preserves_uv_bits
?H:#define NV_OVERFLOWS_INTEGERS_AT ($nv_overflows_integers_at)
?H:#$d_nv_zero_is_allbits_zero NV_ZERO_IS_ALLBITS_ZERO
?H:?%<:#if UVSIZE == 8
?H:?%<:#   ifdef BYTEORDER
?H:?%<:#       if BYTEORDER == 0x1234
?H:?%<:#           undef BYTEORDER
?H:?%<:#           define BYTEORDER 0x12345678
?H:?%<:#       else
?H:?%<:#           if BYTEORDER == 0x4321
```

```
?H:?%<:#            undef BYTEORDER
?H:?%<:#            define BYTEORDER 0x87654321
?H:?%<:#
    endif
?H:?%<:#      endif
?H:?%<:#   endif
?H:?%<:#endif
?H:.
?T:xxx
?T:d
?F:!try
: Check basic sizes
echo " "
$echo "Choosing the C types to be used for Perl's internal types..." >&4

case "$use64bitint:$d_quad:$quadtype" in
define:define:?*)
 ivtype="$quadtype"
 uvtype="$uquadtype"
 ivsize=8
 uvsize=8
 ;;
*) ivtype="long"
 uvtype="unsigned long"
 ivsize=$longsize
 uvsize=$longsize
 ;;
esac

case "$uselongdouble:$d_longdbl" in
define:define)
 nvtype="long double"
 nvsize=$longdblsize
 ;;
*) nvtype=double
 nvsize=$doublesize
 ;;
esac

case "$usequadmath:$i_quadmath" in
define:define)
 nvtype="__float128"
 nvsize=16
 case "$libs" in
 *quadmath*) ;;
 *) $cat <<EOM >&4

*** You requested the use of the quadmath library, but you
```

```
*** do not seem to have the quadmath library installed.
*** Cannot continue, aborting.
EOM
   exit 1
   ;;
 esac
 ;;
define:*) $cat <<EOM >&4

*** You requested the use of the quadmath library, but you
*** do not seem to have the required header, <quadmath.h>.
EOM
  case "$gccversion" in
 [23].*|4.[0-5]*)
  $cat <<EOM >&4
*** Your gcc looks a bit old:
*** $gccversion
EOM
   ;;
 ")
  $cat <<EOM >&4
*** You are not running a gcc.
EOM
   ;;
 esac
 $cat <<EOM >&4
*** For the quadmath library you need at least gcc 4.6.
*** Cannot continue, aborting.
EOM
 exit 1
 ;;
esac

$echo "(IV will be "$ivtype", $ivsize bytes)"
$echo "(UV will be "$uvtype", $uvsize bytes)"
$echo "(NV will be "$nvtype", $nvsize bytes)"

$cat >try.c <<EOCP
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#include <stdio.h>
int main() {
#ifdef INT8
  int8_t i =  INT8_MAX;
 uint8_t u = UINT8_MAX;
 printf("int8_t\n");
```

```
#endif
#ifdef INT16
  int16_t i =  INT16_MAX;
 uint16_t u = UINT16_MAX;
 printf("int16_t\n");
#endif
#ifdef INT32
  int32_t i =  INT32_MAX;
 uint32_t u = UINT32_MAX;
 printf("int32_t\n");
#endif
}
EOCP

i8type="signed char"
u8type="unsigned char"
i8size=1
u8size=1

case "$i16type" in
") case "$shortsize" in
 2) i16type=short
  u16type="unsigned
 short"
  i16size=$shortsize
  u16size=$shortsize
  ;;
 esac
 ;;
esac
case "$i16type" in
") set try -DINT16
 if eval $compile; then
  case "`$run ./try`" in
  int16_t)
   i16type=int16_t
   u16type=uint16_t
   i16size=2
   u16size=2
   ;;
  esac
 fi
 ;;
esac
case "$i16type" in
") if $test $shortsize -ge 2; then
  i16type=short
  u16type="unsigned short"
```

```
  i16size=$shortsize
  u16size=$shortsize
 fi
 ;;
esac

case "$i32type" in
") case "$longsize" in
 4) i32type=long
  u32type="unsigned long"
  i32size=$longsize
  u32size=$longsize
  ;;
 *) case "$intsize" in
  4) i32type=int
   u32type="unsigned int"
   i32size=$intsize
   u32size=$intsize
   ;;
  esac
  ;;
 esac
 ;;
esac
case "$i32type" in
") set try -DINT32
 if eval $compile; then
  case "`$run ./try`" in
  int32_t)
   i32type=int32_t
   u32type=uint32_t
   i32size=4
   u32size=4
   ;;
  esac
 fi
 ;;
esac
case "$i32type" in
") if $test $intsize -ge 4; then
  i32type=int
  u32type="unsigned int"
  i32size=$intsize
  u32size=$intsize
 fi
 ;;
esac
```

```
case
 "$i64type" in
") case "$d_quad:$quadtype" in
 define:?*)
  i64type="$quadtype"
  u64type="$uquadtype"
  i64size=8
  u64size=8
  ;;
 esac
 ;;
esac

$echo "Checking how many bits of your UVs your NVs can preserve..." >&4
$cat <<EOP >try.c
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
#ifdef SIGFPE
/* volatile so that the compiler has to store it out to memory */
volatile int bletched = 0;
$signal_t blech(int s) { bletched = 1; }
#endif
int main() {
   $uvtype u = 0;
   $nvtype d;
   int     n = 8 * $uvsize;
   int     i;
#ifdef SIGFPE
   signal(SIGFPE, blech);
#endif

   for (i = 0; i < n; i++) {
     u = u << 1 | ($uvtype)1;
     d = ($nvtype)u;
     if (($uvtype)d != u)
       break;
     if (d <= 0)
 break;
     d = ($nvtype)(u - 1);
     if (($uvtype)d != (u - 1))
       break;
#ifdef SIGFPE
     if (bletched)
```

```
 break;
#endif
   }
   printf("%d\n",
 ((i == n) ? -n : i));
   exit(0);
}
EOP
set try

d_nv_preserves_uv="$undef"
if eval $compile; then
 nv_preserves_uv_bits="`$run ./try`"
fi
case "$nv_preserves_uv_bits" in
\-[1-9]*)
 nv_preserves_uv_bits=`expr 0 - $nv_preserves_uv_bits`
 $echo "Your NVs can preserve all $nv_preserves_uv_bits bits of your UVs."  >&4
 d_nv_preserves_uv="$define"
 ;;
[1-9]*) $echo "Your NVs can preserve only $nv_preserves_uv_bits bits of your UVs."  >&4
 d_nv_preserves_uv="$undef" ;;
*) $echo "Can't figure out how many bits your NVs preserve." >&4
 nv_preserves_uv_bits="0" ;;
esac
$rm_try

$echo "Checking to find the largest integer value your NVs can hold..." >&4
$cat <<EOP >try.c
#include <stdio.h>

typedef $nvtype NV;

int
main() {
 NV value = 2;
 int count = 1;

 while(count < 256) {
   /* volatile so that the compiler has to store it out to memory */
   volatile NV up = value + 1.0;
   volatile NV negated = -value;
   volatile NV down = negated - 1.0;
   volatile NV got_up = up -
 value;
   int up_good = got_up == 1.0;
   int got_down = down - negated;
   int down_good = got_down == -1.0;
```

```
  if (down_good != up_good) {
    fprintf(stderr,
      "Inconsistency - up %d %f; down %d %f; for 2**%d (%.20f)\n",
      up_good, (double) got_up, down_good, (double) got_down,
      count, (double) value);
    return 1;
  }
  if (!up_good) {
    while (1) {
 if (count > 8) {
  count -= 8;
  fputs("256.0", stdout);
 } else {
  count--;
  fputs("2.0", stdout);
 }
 if (!count) {
  puts("");
  return 0;
 }
 fputs("*", stdout);
    }
  }
  value *= 2;
  ++count;
 }
 fprintf(stderr, "Cannot overflow integer range, even at 2**%d (%.20f)\n",
  count, (double) value);
 return 1;
}
EOP
set try

nv_overflows_integers_at='0'
if eval $compile; then
  xxx="`$run ./try`"
  case "$?" in
 0)
    case "$xxx" in
  2*)  cat >&4 <<EOM
The largest integer your NVs can preserve is equal to $xxx
EOM
      nv_overflows_integers_at="$xxx"
      ;;
  *)  cat
 >&4 <<EOM
Cannot determine the largest integer value your NVs can hold, unexpected output
```

```
'$xxx'
EOM
      ;;
     esac
     ;;
 *)  cat >&4 <<EOM
Cannot determine the largest integer value your NVs can hold
EOM
     ;;
   esac
fi
$rm_try

$echo "Checking whether NV 0.0 is all bits zero in memory..." >&4
$cat <<EOP >try.c
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>
#include <sys/types.h>
#include <signal.h>
#ifdef SIGFPE
/* volatile so that the compiler has to store it out to memory */
volatile int bletched = 0;
$signal_t blech(int s) { bletched = 1; }
#endif

int checkit($nvtype d, const char *where) {
   void *v = &d;
   unsigned char *p = (unsigned char *)v;
   unsigned char *end = p + sizeof(d);
   int fail = 0;

   while (p < end)
 fail += *p++;

   if (!fail)
 return 0;

   p = (unsigned char *)v;
   printf("No - %s: 0x", where);
   while (p < end)
 printf ("%02X", *p++);
   printf("\n");
   return 1;
}
```

```
int main(int
 argc, char **argv) {
   $nvtype d = 0.0;
   int fail = 0;
   fail += checkit(d, "0.0");

   /* The compiler shouldn't be assuming that bletched is 0  */
   d = bletched;

   fail += checkit(d, "bleched");

#ifdef SIGFPE
   signal(SIGFPE, blech);
#endif

   /* Paranoia - the compiler should have no way of knowing that ANSI says
      that argv[argc] will always be NULL.  Actually, if it did assume this it
      would be buggy, as this is C and main() can be called from elsewhere in
      the program.  */
   d = argv[argc] ? 1 : 0;

   if (d) {
 printf("Odd argv[argc]=%p, d=%g\n", argv[argc], d);
   }

   fail += checkit(d, "ternary");

   memset(&d, sizeof(d), argv[argc] ? 1 : 0);

   if (d != 0.0) {
 printf("No - memset doesn't give 0.0\n");
 /* This might just blow up:  */
 printf("(gives %g)\n", d);
 return 1;
   }

#ifdef SIGFPE
   if (bletched) {
 printf("No - something bleched\n");
 return 1;
   }
#endif
   if (fail) {
     printf("No - %d fail(s)\n",
 fail);
     return 1;
   }
```

```
   printf("Yes\n");
   return 0;
}
EOP
set try

d_nv_zero_is_allbits_zero="$undef"
if eval $compile; then
   xxx="`$run ./try`"
   case "$?" in
 0)
     case "$xxx" in
  Yes)  cat >&4 <<EOM
0.0 is represented as all bits zero in memory
EOM
      d_nv_zero_is_allbits_zero="$define"
      ;;
  *)  cat >&4 <<EOM
0.0 is not represented as all bits zero in memory
EOM
      d_nv_zero_is_allbits_zero="$undef"
      ;;
     esac
     ;;
 *)  cat >&4 <<EOM
0.0 is not represented as all bits zero in memory
EOM
     d_nv_zero_is_allbits_zero="$undef"
     ;;
   esac
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlxv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: fpostype.U,v 3.0.1.2 1994/08/29 16:20:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: fpostype.U,v $
```

```
?RCS: Revision 3.0.1.2  1994/08/29  16:20:52  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:59  ram
?RCS: patch30: created
?RCS:
?MAKE:fpostype: Myread Typedef
?MAKE: -pick add $@ %<
?S:fpostype:
?S: This variable defines Fpos_t to be something like fpos_t, long,
?S: uint, or whatever type is used to declare file positions in libc.
?S:.
?C:Fpos_t:
?C: This symbol holds
 the type used to declare file positions in libc.
?C: It can be fpos_t, long, uint, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Fpos_t $fpostype  /* File position type */
?H:.
?LINT:set fpostype
: see what type file positions are declared as in the library
rp="What is the type for file position used by fsetpos()?"
set fpos_t fpostype long stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/fpostype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: randfunc.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the new unit that should be used when random
?X: functions are to be used. It thus makes randbits.U obsolete.
?X:
```

```
?MAKE:randfunc mrand seedfunc nrandbits: cat +cc rm test Myread Csym
?MAKE: -pick add $@ %<
?S:randfunc:
?S: Indicates the name of the random number function to use.
?S: Values include drand48, random, and rand. In C programs,
?S: the 'nrand' macro is defined
 to generate uniformly distributed
?S: random numbers over the range [0., 1.] (see mrand and nrand).
?S:.
?S:mrand:
?S: Indicates the macro to be used to generate normalized
?S: random numbers.  Uses randfunc, often divided by
?S: (double) ((1 << nrandbits) -1) in order to normalize the result.
?S: In C programs, the macro 'nrand' is maped on mrand.
?S:.
?S:seedfunc:
?S: Indicates the random number generating seed function.
?S: Values include srand48, srandom, and srand.
?S:.
?S:nrandbits:
?S: Indicates how many bits are produced by the function used to
?S: generate normalized random numbers.
?S:.
?C:nrand:
?C: This macro is to be used to generate uniformly distributed
?C: random numbers over the range [0., 1.].
?C:.
?C:seednrand:
?C: This symbol defines the macro to be used in seeding the
?C: random number generator (see nrand).
?C:.
?H:#define nrand()  $mrand  /**/
?H:#define seednrand(x) $seedfunc(x) /**/
?H:.
?T:cont val
?LINT:nothere $nrandbits)
: How can we generate normalized
 random numbers ?
echo " "
case "$randfunc" in
")
 if set drand48 val -f; eval $csym; $val; then
  dflt="drand48"
  echo "Good, found drand48()." >&4
 elif set random val -f; eval $csym; $val; then
  dflt="random"
  echo "OK, found random()." >&4
 else
```

```
  dflt="rand"
  echo "Yick, looks like I have to use rand()." >&4
 fi
 echo " "
 ;;
*)
 dflt="$randfunc"
 ;;
esac
cont=true
while $test "$cont"; do
 rp="Use which function to generate random numbers?"
 . ./myread
?X: Invalidates nrandbits if the answer is not the default so
?X: that the value stored in config.sh will not be used when
?X: we change our random function.
 if $test "$ans" = "$dflt"; then
  : null
 else
  nrandbits=''
 fi
 randfunc="$ans"
 if set $ans val -f; eval $csym; $val; then
  cont=''
 else
  dflt=n
  rp="Function $ans does not exists. Use that name anyway?"
  . ./myread
  dflt=rand
  case "$ans" in
   [yY]*) cont='';;
  esac
 fi
 case "$cont" in
 '')
  case "$randfunc" in
  drand48)
   mrand="drand48()"
   seedfunc="srand48"
   ;;
  rand*)
   case
 "$nrandbits" in
   '')
echo "Checking to see how many bits your $randfunc() function produces..." >&4
   $cat >try.c <<EOCP
#include <stdio.h>
int main()
```

```
{
 register int i;
 register unsigned long tmp;
 register unsigned long max = 0L;
 extern long random();

 for (i = 1000; i; i--) {
  tmp = (unsigned long)$randfunc();
  if (tmp > max) max = tmp;
 }
 for (i = 0; max; i++)
  max /= 2;
 printf("%d\n",i);
}
EOCP
   if $cc -o try try.c >/dev/null 2>&1 ; then
   dflt=`try`
   else
   dflt='?'
   echo "(I can't seem to compile the test program...)"
   fi
   ;;
   *)
    dflt="$nrandbits"
    ;;
   esac
   rp="How many bits does your $randfunc() function produce?"
   . ./myread
   nrandbits="$ans"
   $rm -f try.c try
   mrand="($randfunc() / (double) ((1 << $nrandbits) -1))"
   seedfunc="srand"
   ;;
?X: The following is provided just in case...
  *)
   dflt="31"
   rp="How many bits does your $randfunc() function produce?"
   . ./myread
   nrandbits="$ans"
   seedfunc="s$randfunc"
   mrand="($randfunc()
 / (double) ((1 << $nrandbits) -1))"
   if set $seedfunc val -f; eval $csym; $val; then
    echo "(Using $seedfunc() to seed random generator)"
   else
    echo "(Warning: no $seedfunc() to seed random generator)"
    seedfunc=rand
   fi
```

```
   ;;
  esac
  ;;
 esac
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/randfunc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: filexp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: filexp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:filexp: privlib
?MAKE: -pick add $@ %<
?S:filexp:
?S: This symbol contains the full pathname of the filexp script, in case we
?S: are saving the script for posterity.
?S:.
: must not allow self reference
case "$privlib" in
 /*)
 filexp=$privlib/filexp
 ;;
 *)
 filexp=`pwd`/filexp
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/filexp_path.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Hasproto.U $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasproto string that is used internally
?X: by Configure to check if this system has a prototype for a
?X: particular function
?X:
?X: To use it, say something like:
?X:  set d_getnetent_proto getnetent $i_netdb netdb.h
?X:  eval $hasproto
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/types.h
?X:  $i_systime sys/time.h
?X:  $i_sysselct sys/select.h
?X:  $i_netdb netdb.h"
?X: set d_getnetent_proto getnetent $hdrs
?X: eval $hasproto
?X:
?X: There is also an 'escape' hatch built in.  If you have a pair
?X: of args   'literal 'stuff' then 'stuff' gets included literally
?X: into the test program.  See Protochk.U for more details.
?X:
?MAKE:Hasproto:
 Setvar cppstdin cppflags cppminus contains rm_try test
?MAKE: -pick add $@ %<
?T:func varname
?F:!try.c
?V:hasproto
: Define hasproto macro for Configure internal use
hasproto='varname=$1; func=$2; shift; shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 literal) echo "$2" ;;
 esac ;
   shift 2;
done > try.c;
$cppstdin $cppflags $cppminus < try.c > tryout.c 2>/dev/null;
if $contains "$func.*(" tryout.c >/dev/null 2>&1; then
 echo "$func() prototype found.";
 val="$define";
else
 echo "$func() prototype NOT found.";
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try tryout.c'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_tgamma: Inlibc
?MAKE: -pick add $@ %<
?S:d_tgamma:
?S: This variable conditionally defines the HAS_TGAMMA symbol, which
?S: indicates to the C program that the tgamma() routine is available
?S: for the gamma function.  See also d_lgamma.
?S:.
?C:HAS_TGAMMA:
?C: This symbol, if defined, indicates that the tgamma routine is
?C: available to do the gamma function. See also HAS_LGAMMA.
?C:.
?H:#$d_tgamma HAS_TGAMMA  /**/
?H:.
?LINT:set d_tgamma
: see if tgamma exists
set tgamma d_tgamma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_tgamma.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Options.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Options.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:08:15  ram
?RCS: patch61: optdef.sh now starts with a "startsh"
?RCS: patch61: moved some code from Head.U
?RCS:
?RCS: Revision 3.0.1.6  1995/09/25  09:14:46  ram
?RCS: patch59: protected option parsing code against 'echo -*' option failure
?RCS:
```

```
?RCS: Revision 3.0.1.5  1995/05/12  12:04:52  ram
?RCS: patch54: added -K option for experts
?RCS:
?RCS: Revision 3.0.1.4  1995/01/30  14:27:52  ram
?RCS:
 patch49: this unit now exports file optdef.sh, not a variable
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:19:00  ram
?RCS: patch45: new -O option allowing -D and -U to override config.sh settings
?RCS: patch45: file optdef.sh is no longer removed after sourcing
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  15:58:06  ram
?RCS: patch36: ensure option definition file is removed before appending
?RCS: patch36: protect variable definitions with spaces in them
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:55:44  ram
?RCS: patch30: now uses new me symbol to tag error messages
?RCS: patch30: new -D and -U options to define/undef symbols (JHI)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Command line parsing. It is really important that the variables used here
?X: be not listed in the MAKE line, or they will be saved in config.sh and
?X: loading this file to fetch default answers would clobber the values set
?X: herein.
?X:
?MAKE:Options:
 startsh
?MAKE: -pick wipe $@ %<
?V:reuseval alldone error realsilent silent extractsh fastread \
 knowitall: config_sh
?T:arg argn symbol config_arg0 config_args config_argc xxx yyy zzz uuu
?T:args_exp args_sep arg_exp ccflags
?F:!Configure
?F:./optdef.sh ./cmdline.opt ./posthint.sh ./cmdl.opt
: Save command line options in file UU/cmdline.opt for later use in
: generating config.sh.
?X: This temporary file will be read by Oldsym.U.  I used a temporary
?X: file to preserve all sorts of potential command line quotes and
?X: also because we don't know in advance how many variables we'll
?X: need, so I can't actually declare them on the MAKE line.
?X: The config_args variable won't be quite correct if Configure is
?X: fed something like    ./Configure -Dcc="gcc -B/usr/ccs/bin/"
?X: since the quotes are gone by the time we see them.  You'd have to
?X: reconstruct the command line from the config_arg? lines, but since
?X: I don't imagine anyone actually having to do that, I'm not going
```

```
?X:
 to worry too much.
cat > cmdline.opt <<EOSH
: Configure command line arguments.
config_arg0='$0'
config_args='$*'
config_argc=$#
EOSH
argn=1
args_exp=''
args_sep=''
for arg in "$@"; do
 cat >>cmdline.opt <<EOSH
config_arg$argn='$arg'
EOSH
?X: Extreme backslashitis: replace each ' by '''''
 cat <<EOC | sed -e "s/'/'''''''''''''''/g" > cmdl.opt
$arg
EOC
 arg_exp=`cat cmdl.opt`
 args_exp="$args_exp$args_sep'$arg_exp'"
 argn=`expr $argn + 1`
 args_sep=' '
done
?X: args_exp is good for restarting self: eval "set X $args_exp"; shift; $0 "$@"
?X: used by hints/os2.sh in Perl, for instance
rm -f cmdl.opt

: produce awk script to parse command line options
cat >options.awk <<'EOF'
BEGIN {
 optstr = "A:dD:eEf:hKOrsSU:V"; # getopt-style specification

 len = length(optstr);
 for (i = 1; i <= len; i++) {
  c = substr(optstr, i, 1);
?X: some older awk's do not have the C ?: construct
  if (i < len) a = substr(optstr, i + 1, 1); else a = "";
  if (a == ":") {
   arg[c] = 1;
   i++;
  }
  opt[c]
 = 1;
 }
}
{
 expect = 0;
```

```
 str = $0;
 if (substr(str, 1, 1) != "-") {
  printf("'%s'\n", str);
  next;
 }
 len = length($0);
 for (i = 2; i <= len; i++) {
  c = substr(str, i, 1);
  if (!opt[c]) {
   printf("-%s\n", substr(str, i));
   next;
  }
  printf("-%s\n", c);
  if (arg[c]) {
   if (i < len)
    printf("'%s'\n", substr(str, i + 1));
   else
    expect = 1;
   next;
  }
 }
}
END {
 if (expect)
  print "?";
}
EOF

: process the command line options
?X: Use "$@" to keep arguments with spaces in them from being split apart.
?X: For the same reason, awk will output quoted arguments and the final eval
?X: removes them and sets a proper $* array. An 'X' is prepended to each
?X: argument before being fed to echo to guard against 'echo -x', where -x
?X: would be understood as an echo option! It is removed before feeding awk.
set X `for arg in "$@"; do echo "X$arg"; done |
 sed -e s/X// | awk -f options.awk`
eval "set $*"
shift
rm -f options.awk

: set up default values
fastread=''
reuseval=false
config_sh=''
alldone=''
error=''
silent=''
extractsh=''
```

```
knowitall="
rm
 -f optdef.sh posthint.sh
cat >optdef.sh <<EOS
$startsh
EOS

?X:
?X: Given that we now have the possibility to execute Configure remotely
?X: thanks to the new src.U support, we have to face the possibility
?X: of having to ask where the source lie, which means we need the Myread.U
?X: stuff and possibly other things that might echo something on the
?X: screen...
?X:
?X: That's not pretty, and might be confusing in 99% of the time. So...
?X: We introduce a new realsilent variable which is set when -s is given,
?X: and we force silent=true if -S is supplied. The Extractall.U unit
?X: will then undo the >&4 redirection based on the value of the
?X: realsilent variable... -- RAM, 18/93/96
?X:

: option parsing
while test $# -gt 0; do
 case "$1" in
 -d) shift; fastread=yes;;
 -e) shift; alldone=cont;;
 -f)
  shift
  cd ..
  if test -r "$1"; then
   config_sh="$1"
  else
   echo "$me: cannot read config file $1."
 >&2
   error=true
  fi
  cd UU
  shift;;
 --help|\
 -h) shift; error=true;;
 -r) shift; reuseval=true;;
 -s) shift; silent=true; realsilent=true;;
 -E) shift; alldone=exit;;
 -K) shift; knowitall=true;;
 -O) shift;;
 -S) shift; silent=true; extractsh=true;;
 -D)
  shift
```

```
 case "$1" in
 *=)
  echo "$me: use '-U symbol=', not '-D symbol='." >&2
  echo "$me: ignoring -D $1" >&2
  ;;
 *=*) echo "$1" | \
   sed -e "s/'/'\''\''/g" -e "s/=\(.*\)/='\1'/" >> optdef.sh;;
 *) echo "$1='define'" >> optdef.sh;;
 esac
 shift
 ;;
-U)
 shift
 case "$1" in
 *=) echo "$1" >> optdef.sh;;
 *=*)
  echo "$me: use '-D symbol=val', not '-U symbol=val'." >&2
  echo "$me: ignoring -U $1" >&2
  ;;
 *) echo "$1='undef'" >> optdef.sh;;
 esac
 shift
 ;;
-A)
    shift
    xxx=''
    yyy="$1"
    zzz=''
    uuu=undef
    case "$yyy" in
          *=*) zzz=`echo "$yyy"|sed 's!=.*!!'`
               case "$zzz" in
               *:*) zzz='' ;;
               *)   xxx=append

               zzz=' '`echo "$yyy"|sed 's!^[^=]*=!!'`
                    yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
               esac
               ;;
          esac
          case "$xxx" in
          '')  case "$yyy" in
               *:*) xxx=`echo "$yyy"|sed 's!:.*!!'`
                    yyy=`echo "$yyy"|sed 's!^[^:]*:!!'`
                    zzz=`echo "$yyy"|sed 's!^[^=]*=!!'`
                    yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
               *)   xxx=`echo "$yyy"|sed 's!:.*!!'`
                    yyy=`echo "$yyy"|sed 's!^[^:]*:!!'` ;;
```

```
            esac
            ;;
        esac
    case "$xxx" in
    append)
  echo "$yyy=\"\${$yyy}$zzz\"" >> posthint.sh ;;
    clear)
  echo "$yyy=""   >> posthint.sh ;;
    define)
        case "$zzz" in
  ") zzz=define ;;
  esac
  echo "$yyy='$zzz'"  >> posthint.sh ;;
    eval)
  echo "eval \"$yyy=$zzz\"" >> posthint.sh ;;
    prepend)
  echo "$yyy=\"$zzz\${$yyy}\"" >> posthint.sh ;;
    undef)

      case "$zzz" in
  ") zzz="$uuu" ;;
  esac
  echo "$yyy=$zzz"  >> posthint.sh ;;
        *)  echo "$me: unknown -A command '$xxx', ignoring -A $1" >&2 ;;
    esac
    shift
    ;;
 -V) echo "$me generated by metaconfig <VERSION> PL<PATCHLEVEL>." >&2
    exit 0;;
 --) break;;
 -*) echo "$me: unknown option $1" >&2; shift; error=true;;
 *) break;;
 esac
done

case "$error" in
true)
 cat >&2 <<EOM
Usage: $me [-dehrsEKOSV] [-f config.sh] [-D symbol] [-D symbol=value]
            [-U symbol] [-U symbol=] [-A command:symbol...]
 -d : use defaults for all answers.
 -e : go on without questioning past the production of config.sh.
 -f : specify an alternate default configuration file.
 -h : print this help message and exit (with an error status).
 -r : reuse C symbols value if possible (skips costly nm extraction).
 -s : silent mode, only echoes questions and essential information.
 -D : define symbol to have some value:
      -D symbol             symbol gets the
```

```
 value 'define'
        -D symbol='some value'   symbol is set to 'some value'
      common used examples (see INSTALL for more info):
        -Duse64bitint            use 64bit integers
        -Duse64bitall            use 64bit integers and pointers
        -Dusethreads             use thread support
        -Dinc_version_list=none  do not include older perl trees in @INC
        -DEBUGGING=none          DEBUGGING options
        -Dcc=gcc                 choose your compiler
        -Dprefix=/opt/perl5      choose your destination
 -E : stop at the end of questions, after having produced config.sh.
 -K : do not use unless you know what you are doing.
 -O : ignored for backward compatibility
 -S : perform variable substitutions on all .SH files (can mix with -f)
 -U : undefine symbol:
        -U symbol    symbol gets the value 'undef'
        -U symbol=   symbol gets completely empty
      e.g.:  -Uversiononly
 -A : manipulate symbol after the platform specific hints
 have been applied:
        -A append:symbol=value   append value to symbol
        -A symbol=value          like append:, but with a separating space
        -A define:symbol=value   define symbol to have value
        -A clear:symbol          define symbol to be ''
        -A define:symbol         define symbol to be 'define'
        -A eval:symbol=value     define symbol to be eval of value
        -A prepend:symbol=value  prepend value to symbol
        -A undef:symbol          define symbol to be 'undef'
        -A undef:symbol=         define symbol to be ''
      e.g.:  -A prepend:libswanted='cl pthread '
             -A ccflags=-DSOME_MACRO
 -V : print version number and exit (with a zero status).
EOM
 exit 1
 ;;
esac

?X:
?X: Unless they specified either -S or both -d and -e/E, make sure we're
?X: running interactively, i.e. attached to a terminal. Moved from Head.U to
?X: be able to handle batch configurations...
?X:
?X: We have to hardwire the Configure name and
 cannot use $me, since if they
?X: said 'sh <Configure', then $me is 'sh'...
?X:
: Sanity checks
case "$fastread$alldone" in
```

```
yescont|yesexit) ;;
*)
 case "$extractsh" in
 true) ;;
 *)
  if test ! -t 0; then
   echo "Say 'sh Configure', not 'sh <Configure'"
   exit 1
  fi
  ;;
 esac
 ;;
esac

?X: In silent mode, the standard output is closed. Questions are asked by
?X: outputing on file descriptor #4, which is the original stdout descriptor.
?X: This filters out all the "junk", since all the needed information is written
?X: on #4. Note that ksh will not let us redirect output if the file descriptor
?X: has not be defined yet, unlike sh, hence the following line...--RAM.
exec 4>&1
case "$silent" in
true) exec 1>/dev/null;;
esac

: run the defines and the undefines, if any, but leave the file out there...
touch optdef.sh
?X: -q is POSIX
?X: It does not work in SysV (solaris) or old BSD greps.
grep '\\' optdef.sh >/dev/null 2>&1
if test $? = 0; then
   echo "Configure does not support \\
 in -D arguments"
   exit 1
fi
. ./optdef.sh
: create the posthint manipulation script and leave the file out there...
?X: this file will be perused by Oldconfig.U
touch posthint.sh

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Options.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_memccpy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memccpy.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memccpy: Inlibc
?MAKE: -pick add $@ %<
?S:d_memccpy:
?S: This variable conditionally defines the HAS_MEMCCPY symbol, which
?S: indicates to the C program that the memccpy() routine is available
?S: to copy a character into a block of memory.
?S:.
?C:HAS_MEMCCPY (MEMCCPY):
?C: This symbol, if defined, indicates that the memccpy routine
 is available
?C: to copy a character into a block of memory.  Otherwise you should
?C: roll your own.
?C:.
?H:#$d_memccpy HAS_MEMCCPY  /**/
?H:.
?LINT:set d_memccpy
: see if memccpy exists
set memccpy d_memccpy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memccpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_inetpton: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetpton:
?S: This variable conditionally defines the HAS_INETPTON symbol,
?S: which indicates to the C program that the inet_pton() function
?S: is available.
?S:.
?C:HAS_INETPTON:
```

```
?C: This symbol, if defined, indicates that the inet_pton() function
?C: is available to parse IPv4 and IPv6 strings.
?C:.
?H:#$d_inetpton HAS_INETPTON  /**/
?H:.
?LINT:set d_inetpton
: see if inet_pton exists
set inet_pton d_inetpton
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_inetpton.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlocale.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setlocale.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:51  ram
?RCS: patch30: created
?RCS:
?MAKE:d_setlocale: Inlibc
?MAKE: -pick add $@ %<
?S:d_setlocale:
?S: This variable conditionally defines HAS_SETLOCALE if setlocale() is
?S: available to handle locale-specific ctype implementations.
?S:.
?C:HAS_SETLOCALE:
?C: This symbol, if defined, indicates that the setlocale
 routine is
?C: available to handle locale-specific ctype implementations.
?C:.
?H:#$d_setlocale HAS_SETLOCALE /**/
?H:.
?LINT:set d_setlocale
: see if setlocale exists
set setlocale d_setlocale
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setlocale.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorhtml3dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorhtml3dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorhtml3dir vendorhtml3direxp installvendorhtml3dir: html3dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorhtml3dir:
?S: This variable contains the name of the directory for html
?S: library pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing
 in this directory.
?S: Vendors who distribute perl may wish to place their own
?S: html pages for modules and extensions in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorhtml3direxp:
?S: This variable is the ~name expanded version of vendorhtml3dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorhtml3dir="
?S:installvendorhtml3dir:
?S: This variable is really the same as vendorhtml3direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorhtml3dir
: Set the vendorhtml3dir variables
case "$vendorprefix" in
") vendorhtml3dir="
 vendorhtml3direxp="
```

```
 ;;
*) : determine where vendor-supplied module html pages go.
 : There is no standard location, so try to copy the previously-selected
 : directory structure for the core html pages.
 : XXX Better default
 suggestions would be welcome.
 case "$vendorhtml3dir" in
 ") dflt=`echo "$html3dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorhtml3dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=dn+~
 rp='Pathname for the vendor-supplied html pages?'
 . ./getfile
 vendorhtml3dir="$ans"
 vendorhtml3direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorhtml3dir" = "X" && vendorhtml3dir=' '
prefixvar=vendorhtml3dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorhtml3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_dbminitproto: Hasproto i_dbm
?MAKE: -pick add $@ %<
?S:d_dbminitproto:
?S: This variable conditionally defines the HAS_DBMINIT_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the dbminit() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_DBMINIT_PROTO:
```

```
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the dbminit() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern
 int dbminit(char *);
?C:.
?H:#$d_dbminitproto HAS_DBMINIT_PROTO /**/
?H:.
?LINT:set d_dbminitproto
: see if prototype for dbminit is available
echo " "
set d_dbminitproto dbminit $i_dbm dbm.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dbminitproto.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Tr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  18:00:54  ram
?RCS: patch43: forgot to quote $@ to protect against "evil" characters
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:58:35  ram
?RCS: patch36: created
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a character translation. It catches translations to uppercase or
?X: to lowercase, and then invokes the real tr to perform the job.
?X:
?X: This unit is necessary on HP machines (HP strikes again!)
 with non-ascii
?X: ROMAN8-charset, where normal letters are not arranged in a row, so a-z
?X: covers not the whole alphabet but lots of special chars. This was reported
?X: by Andreas Sahlbach <a.sahlbach@tu-bs.de>.
?X:
?X: Units performing a tr '[A-Z]' '[a-z]' or the other way round should include
?X: us in their dependency and use ./tr instead.
```

```
?X:
?MAKE:Tr: startsh tr eunicefix
?MAKE: -pick add $@ %<
?F:./tr
?T:up low LC_ALL
: see whether [:lower:] and [:upper:] are supported character classes
echo " "
case "`echo AbyZ | LC_ALL=C $tr '[:lower:]' '[:upper:]' 2>/dev/null`" in
ABYZ)
 echo "Good, your tr supports [:lower:] and [:upper:] to convert case." >&4
 up='[:upper:]'
 low='[:lower:]'
 ;;
*) # There is a discontinuity in EBCDIC between 'I' and 'J'
       # (0xc9 and 0xd1), therefore that is a nice testing point.
       if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | LC_ALL=C $tr '[I-J]' '[i-j]' 2>/dev/null`" in
     ij) up='[A-Z]'
         low='[a-z]'
  ;;

 esac
       fi
 if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | LC_ALL=C $tr I-J i-j 2>/dev/null`" in
     ij) up='A-Z'
  low='a-z'
  ;;
     esac
       fi
 if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | od -x 2>/dev/null`" in
     *C9D1*|*c9d1*)
  echo "Hey, this might be EBCDIC." >&4
  if test "X$up" = X -o "X$low" = X; then
      case "`echo IJ | \
    LC_ALL=C $tr '[A-IJ-RS-Z]' '[a-ij-rs-z]' 2>/dev/null`" in
      ij) up='[A-IJ-RS-Z]'
          low='[a-ij-rs-z]'
   ;;
      esac
  fi
  if test "X$up" = X -o "X$low" = X; then
      case "`echo IJ | LC_ALL=C $tr A-IJ-RS-Z a-ij-rs-z 2>/dev/null`" in
      ij) up='A-IJ-RS-Z'
          low='a-ij-rs-z'
   ;;
      esac
```

```
  fi
  ;;
     esac
 fi
esac
case "`echo IJ | LC_ALL=C $tr \"$up\" \"$low\" 2>/dev/null`" in
ij)
   echo "Using $up and $low to convert case." >&4
   ;;
*)
   echo "I don't know how to translate letters from upper to lower case." >&4
   echo "Your tr is not acting any way I know of." >&4
    exit 1
   ;;
esac
: set up the translation script tr, must be called with ./tr of course
cat >tr <<EOSC
$startsh
case "\$1\$2" in
'[A-Z][a-z]') LC_ALL=C exec $tr '$up' '$low';;
'[a-z][A-Z]') LC_ALL=C exec $tr '$low' '$up';;
esac
LC_ALL=C exec $tr "\$@"
EOSC
chmod +x tr
$eunicefix tr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Tr.U
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```
?RCS: $Id: rootid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: rootid.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:45:36  ram
?RCS: patch49: now only prints a single empty line when outputting something
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:rootid: sed
?MAKE: -pick add $@ %<
?S:rootid:
?S: This variable contains the eventual value of the ROOTID symbol,
?S: which is the uid of root.
?S:.
?C:ROOTID:
?C: This symbol contains the uid of root, normally
 0.
?C:.
?H:#define ROOTID $rootid  /**/
?H:.
: determine root id
rootid=`$sed -e "/^root:/{s/^[^:]*:[^:]*:\([^:]*\).*'''$'''/\1/" -e "q" -e "}" -e "d" </etc/passwd`
case "$rootid" in
") rootid=0 ;;
*) echo " "; echo "Root uid = $rootid" >&4 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/rootid.U
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```
?RCS: $Id: d_sigvec.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigvec.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:45:37  ram
?RCS: patch61: there is now a separate routine for sigaction()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: d_sigvec.U, from d_ftime.U 1.0
?X:
?MAKE:d_sigvec d_sigvectr d_sigintrp: Csym Inlibc Setvar
?MAKE: -pick add $@ %<
?S:d_sigvec:
?S: This variable conditionally defines the HAS_SIGVEC symbol, which indicates
?S: that BSD
```

```
 reliable signals are supported.
?S:.
?S:d_sigvectr:
?S: This variable conditionally defines the HAS_SIGVECTOR symbol, which
?S: indicates that the sigvec() routine is called sigvector() instead, for
?S: reasons known only to Hewlett-Packard.
?S:.
?S:d_sigintrp:
?S: This variable conditionally defines the HAS_SIGINTRP symbol, which
?S: indicates that the siginterrupt() routine is available.
?S:.
?C:HAS_SIGVEC (SIGVEC):
?C: This symbol, if defined, indicates that BSD reliable signals are
?C: supported.
?C:.
?C:HAS_SIGVECTOR (SIGVECTOR):
?C: This symbol, if defined, indicates that the sigvec() routine is called
?C: sigvector() instead, and that sigspace() is provided instead of
?C: sigstack().  This is probably only true for HP-UX.
?C:.
?C:HAS_SIGINTRP (SIGINTRP):
?C: This symbol, if defined, indicates that the siginterrupt() routine
?C: is available.
?C:.
?H:#$d_sigvec HAS_SIGVEC /**/
?H:#$d_sigvectr HAS_SIGVECTOR /**/
?H:#$d_sigintrp HAS_SIGINTRP /**/
?H:.
?T:val
?LINT:set d_sigvec d_sigintrp
@if
 d_sigvectr || d_sigvec || HAS_SIGVEC || HAS_SIGVECTOR
: see if sigvector exists -- since sigvec will match the substring
echo " "
if set sigvector val -f d_sigvectr; eval $csym; $val; then
 echo 'sigvector() found--you must be running HP-UX.' >&4
 val="$define"; set d_sigvectr; eval $setvar
 val="$define"; set d_sigvec; eval $setvar
else
: try the original name
 d_sigvectr="$undef"
 if set sigvec val -f d_sigvec; eval $csym; $val; then
  echo 'sigvec() found.' >&4
  val="$define"; set d_sigvec; eval $setvar
 else
  echo 'sigvec() not found--race conditions with signals may occur.' >&4
  val="$undef"; set d_sigvec; eval $setvar
 fi
```

```
fi

@end
@if d_sigintrp || HAS_SIGINTRP
: see if we have siginterrupt
set siginterrupt d_sigintrp
eval $inlibc

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigvec.U
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```
?RCS: $Id: d_getwd.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: $Log: d_getwd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getwd: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_getwd:
?S: This variable conditionally defines HAS_GETWD if getwd() is
?S: available to get working directory. If not, you should
?S: probably use getcwd().
?S:.
?C:HAS_GETWD (GETWD):
?C: This symbol, if defined, indicates that the getwd routine is
?C: available to get working directory.
 If not, you should
?C: probably use getcwd().
?C:.
?H:#$d_getwd HAS_GETWD  /**/
?H:.
?LINT:set d_getwd
: see if getwd exists
echo " "
if set getwd val -f d_getwd; eval $csym; $val; then
 echo 'getwd() found.' >&4
```

```
 val="$define"
else
 echo 'getwd() not found. Assuming getcwd() exists.' >&4
 val="$undef"
fi
set d_getwd
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getwd.U
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```
?RCS: $Id: d_getservent_r.U,v 0RCS:
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservent_r getservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservent_r:
?S: This variable conditionally defines the HAS_GETSERVENT_R symbol,
?S: which indicates to the C program that the getservent_r()
?S: routine is available.
?S:.
?S:getservent_r_proto:
?S: This variable encodes the prototype of getservent_r.
?S: It is zero if d_getservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservent_r
?S: is defined.
?S:.
?C:HAS_GETSERVENT_R:
?C: This symbol, if defined, indicates that the getservent_r routine
?C: is
 available to getservent re-entrantly.
?C:.
?C:GETSERVENT_R_PROTO:
?C: This symbol encodes the prototype of getservent_r.
?C: It is zero if d_getservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservent_r
?C: is defined.
?C:.
?H:#$d_getservent_r HAS_GETSERVENT_R /**/
?H:#define GETSERVENT_R_PROTO $getservent_r_proto /**/
?H:.
```

```
?T:try hdrs d_getservent_r_proto
: see if getservent_r exists
set getservent_r d_getservent_r
eval $inlibc
case "$d_getservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservent_r_proto:$usethreads" in
 ":define") d_getservent_r_proto=define
  set d_getservent_r_proto getservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getservent_r_proto" in
 define)
 case "$getservent_r_proto" in
 "|0) try='int getservent_r(struct servent*, char*, size_t, struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SBWR ;;
 esac
 case "$getservent_r_proto"
 in
 "|0) try='int getservent_r(struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SBI ;;
 esac
 case "$getservent_r_proto" in
 "|0) try='struct servent* getservent_r(struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=S_SBI ;;
 esac
 case "$getservent_r_proto" in
 "|0) try='int getservent_r(struct servent*, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SD ;;
 esac
 case "$getservent_r_proto" in
 "|0) d_getservent_r=undef
  getservent_r_proto=0
  echo "Disabling getservent_r, cannot determine prototype." >&4 ;;
 * ) case "$getservent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getservent_r_proto="REENTRANT_PROTO_$getservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getservent_r has no prototype, not using it." >&4 ;;
  esac
  d_getservent_r=undef
  getservent_r_proto=0
```

```
  ;;
 esac
 ;;
*) getservent_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservent_r.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extractall.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:00:43  ram
?RCS: patch61: created
?RCS:
?X:
?X: If extraction has been requested, load the configuration file, perform
?X: the extraction and exit.
?X:
?X: This unit was originally a part of Options.U. It had to be removed from
?X: it to prevent a dependency cycle: Extract -> src -> Options -> Extract
?X: The Begin.U unit now requires us before beginning to do anything
?X: interesting, to ensure proper semantics. -- RAM, 15/03/96
?X:
?MAKE:Extractall:
 Extract Options
?MAKE: -pick wipe $@ %<
: extract files and exit if asked to do so
case "$extractsh" in
true)
?X: Undo the forced silent=true when -S was supplied, by probing realsilent
?X: which was set iff -s was also given. See Options.U for details.
 case "$realsilent" in
 true) ;;
 *) exec 1>&4;;
 esac
 case "$config_sh" in
```

```
 ") config_sh='config.sh';;
 esac
 echo " "
 echo "Fetching answers from $config_sh..."
 cd ..
 . $config_sh
 test "$override" && . ./optdef.sh
 echo " "
?X: extract has to be run from the top directory, not within UU.
 . UU/extract
 rm -rf UU
 echo "Extraction done."
 exit 0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Extractall.U
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```
?RCS: $Id: d_endhostent_r.U,v 0RCS:
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endhostent_r endhostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endhostent_r:
?S: This variable conditionally defines the HAS_ENDHOSTENT_R symbol,
?S: which indicates to the C program that the endhostent_r()
?S: routine is available.
?S:.
?S:endhostent_r_proto:
?S: This variable encodes the prototype of endhostent_r.
?S: It is zero if d_endhostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endhostent_r
?S: is defined.
?S:.
?C:HAS_ENDHOSTENT_R:
?C: This symbol, if defined, indicates that the endhostent_r routine
?C: is
 available to endhostent re-entrantly.
?C:.
?C:ENDHOSTENT_R_PROTO:
```

```
?C: This symbol encodes the prototype of endhostent_r.
?C: It is zero if d_endhostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endhostent_r
?C: is defined.
?C:.
?H:#$d_endhostent_r HAS_ENDHOSTENT_R /**/
?H:#define ENDHOSTENT_R_PROTO $endhostent_r_proto /**/
?H:.
?T:try hdrs d_endhostent_r_proto
: see if endhostent_r exists
set endhostent_r d_endhostent_r
eval $inlibc
case "$d_endhostent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endhostent_r_proto:$usethreads" in
 ":define") d_endhostent_r_proto=define
  set d_endhostent_r_proto endhostent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endhostent_r_proto" in
 define)
 case "$endhostent_r_proto" in
 "|0) try='int endhostent_r(struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && endhostent_r_proto=I_D ;;
 esac
 case "$endhostent_r_proto" in
 "|0) try='void endhostent_r(struct
 hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && endhostent_r_proto=V_D ;;
 esac
 case "$endhostent_r_proto" in
 "|0) d_endhostent_r=undef
  endhostent_r_proto=0
  echo "Disabling endhostent_r, cannot determine prototype." >&4 ;;
 * ) case "$endhostent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endhostent_r_proto="REENTRANT_PROTO_$endhostent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endhostent_r has no prototype, not using it." >&4 ;;
  esac
  d_endhostent_r=undef
  endhostent_r_proto=0
```

```
  ;;
 esac
 ;;
*) endhostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endhostent_r.U
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```
?RCS: $Id: d_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fcntl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fcntl:
?S: This variable conditionally defines the HAS_FCNTL symbol, and indicates
?S: whether the fcntl() function exists
?S:.
?C:HAS_FCNTL:
?C: This symbol, if defined, indicates to the C program that
?C: the fcntl() function exists.
?C:.
?H:#$d_fcntl HAS_FCNTL  /**/
?H:.
?LINT:set d_fcntl
:
 see if this is an fcntl system
set fcntl d_fcntl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fcntl.U
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```
?RCS: $Id$
```

```
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_vprintf.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vprintf d_charvspr: Guess cat +cc +ccflags Csym Setvar
?MAKE: -pick add $@ %<
?S:d_vprintf:
?S: This variable conditionally defines the HAS_VPRINTF symbol, which
?S: indicates to the C program that the vprintf() routine is available
?S: to printf with a pointer to an argument list.
?S:.
?S:d_charvspr:
?S: This variable conditionally defines CHARVSPRINTF if this system
?S: has
 vsprintf returning type (char*).  The trend seems to be to
?S: declare it as "int vsprintf()".
?S:.
?C:HAS_VPRINTF (VPRINTF):
?C: This symbol, if defined, indicates that the vprintf routine is available
?C: to printf with a pointer to an argument list.  If unavailable, you
?C: may need to write your own, probably in terms of _doprnt().
?C:.
?C:USE_CHAR_VSPRINTF (CHARVSPRINTF):
?C: This symbol is defined if this system has vsprintf() returning type
?C: (char*).  The trend seems to be to declare it as "int vsprintf()".  It
?C: is up to the package author to declare vsprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_vprintf HAS_VPRINTF /**/
?H:#$d_charvspr USE_CHAR_VSPRINTF  /**/
?H:.
?F:!vprintf !vprintf.c
?T:val2
?LINT:set d_vprintf d_charvspr
: see if vprintf exists
echo " "
if set vprintf val -f d_vprintf; eval $csym; $val; then
 echo 'vprintf() found.' >&4
 val="$define"
```

```
 $cat >vprintf.c <<'EOF'
#include <varargs.h>

int main() { xxx("foo"); }

xxx(va_alist)
va_dcl
{
 va_list args;
 char
 buf[10];

 va_start(args);
 exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
EOF
 if $cc $ccflags -o vprintf vprintf.c >/dev/null 2>&1 && ./vprintf; then
  echo "Your vsprintf() returns (int)." >&4
  val2="$undef"
 else
  echo "Your vsprintf() returns (char*)." >&4
  val2="$define"
 fi
else
 echo 'vprintf() NOT found.' >&4
  val="$undef"
  val2="$undef"
fi
set d_vprintf
eval $setvar
val=$val2
set d_charvspr
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_vprintf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strchr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_strchr.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:49:20  ram
?RCS: patch12: added support for HAS_INDEX
?RCS: patch12: added magic for index() and rindex()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:05:26  ram
?RCS: patch10: now only defines HAS_STRCHR, no macro remap of index (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strchr d_index: contains strings Setvar Myread Oldconfig
 Csym
?MAKE: -pick add $@ %<
?S:d_strchr:
?S: This variable conditionally defines HAS_STRCHR if strchr() and
?S: strrchr() are available for string searching.
?S:.
?S:d_index:
?S: This variable conditionally defines HAS_INDEX if index() and
?S: rindex() are available for string searching.
?S:.
?C:HAS_STRCHR:
?C: This symbol is defined to indicate that the strchr()/strrchr()
?C: functions are available for string searching. If not, try the
?C: index()/rindex() pair.
?C:.
?C:HAS_INDEX:
?C: This symbol is defined to indicate that the index()/rindex()
?C: functions are available for string searching.
?C:.
?H:#$d_strchr HAS_STRCHR /**/
?H:#$d_index HAS_INDEX /**/
?H:.
?M:index: HAS_INDEX
?M:#ifndef HAS_INDEX
?M:#ifndef index
?M:#define index strchr
?M:#endif
?M:#endif
?M:.
?M:rindex: HAS_INDEX
?M:#ifndef HAS_INDEX
?M:#ifndef rindex
?M:#define rindex strrchr
?M:#endif
?M:#endif
?M:.
```

```
?T:vali
?LINT:set d_strchr d_index
: index or strchr
echo " "
if set index val -f; eval $csym; $val; then
 if
 set strchr val -f d_strchr; eval $csym; $val; then
  if $contains strchr "$strings" >/dev/null 2>&1 ; then
?X: has index, strchr, and strchr in string header
   val="$define"
   vali="$undef"
   echo "strchr() found." >&4
  else
?X: has index, strchr, and no strchr in string header
   val="$undef"
   vali="$define"
   echo "index() found." >&4
  fi
 else
?X: has only index, no strchr, string header is a moot point
  val="$undef"
  vali="$define"
  echo "index() found." >&4
 fi
else
 if set strchr val -f d_strchr; eval $csym; $val; then
  val="$define"
  vali="$undef"
  echo "strchr() found." >&4
 else
  echo "No index() or strchr() found!" >&4
  val="$undef"
  vali="$undef"
 fi
fi
set d_strchr; eval $setvar
val="$vali"
set d_index; eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usenm.U,v 3.0.1.1 1997/02/28 16:26:40 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: usenm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:26:40  ram
?RCS: patch61: don't use nm with the GNU C library
?RCS: patch61: added support for Linux shared libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usenm runnm nm_opt nm_so_opt: cat test Myread Oldconfig myuname grep \
 nm d_gnulibc osname egrep rsrc
?MAKE: -pick add $@ %<
?S:usenm:
?S: This variable contains 'true' or 'false' depending
 whether the
?S: nm extraction is wanted or not.
?S:.
?S:runnm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction should be performed or not, according to the value
?S: of usenm and the flags on the Configure command line.
?S:.
?S:nm_opt:
?S: This variable holds the options that may be necessary for nm.
?S:.
?S:nm_so_opt:
?S: This variable holds the options that may be necessary for nm
?S: to work on a shared library but that can not be used on an
?S: archive library.  Currently, this is only used by Linux, where
?S: nm --dynamic is *required* to get symbols from an ELF library which
?S: has been stripped, but nm --dynamic is *fatal* on an archive library.
?S: Maybe Linux should just always set usenm=false.
?S:.
: see if nm is to be used to determine whether a symbol is defined or not
?X: If there is enough inquiries, it might be worth to wait for the nm
?X: extraction. Otherwise, the C compilations might be a better deal.
?X:
?X: Don't bother if we're
 using GNU libc -- skimo
?LINT:extern PASE
case "$usenm" in
")
 dflt="
 case "$d_gnulibc" in
```

```
 "$define")
  echo " "
  echo "nm probably won't work on the GNU C Library." >&4
  dflt=n
  ;;
 esac
 case "$dflt" in
 ")
  if $test "$osname" = aix -a "X$PASE" != "Xdefine" -a ! -f /lib/syscalls.exp; then
   echo " "
   echo "Whoops!  This is an AIX system without /lib/syscalls.exp!" >&4
   echo "'nm' won't be sufficient on this system." >&4
   dflt=n
  fi
  ;;
 esac
 case "$dflt" in
 ") dflt=`$egrep 'inlibc|csym' $rsrc/Configure | wc -l 2>/dev/null`
  if $test $dflt -gt 20; then
   dflt=y
  else
   dflt=n
  fi
  ;;
 esac
 ;;
*)
 case "$usenm" in
 true|$define) dflt=y;;
 *) dflt=n;;
 esac
 ;;
esac
$cat <<EOM

I can use $nm to extract the symbols from your C libraries. This
is a time consuming task which may generate huge output on the disk (up
to 3 megabytes) but that should make the symbols extraction faster. The
alternative is to skip the 'nm' extraction part and to compile a small
test
 program instead to determine whether each symbol is present. If
you have a fast C compiler and/or if your 'nm' output cannot be parsed,
this may be the best solution.

You probably shouldn't let me use 'nm' if you are using the GNU C Library.

EOM
rp="Shall I use $nm to extract C symbols from the libraries?"
```

```
. ./myread
case "$ans" in
[Nn]*) usenm=false;;
*) usenm=true;;
esac

?X: Name extraction is to be run if 'nm' usage is wanted and if no -r flag
?X: was provided to configure (in which case we simply re-use the previous
?X: values).
runnm=$usenm
case "$reuseval" in
true) runnm=false;;
esac

: nm options which may be necessary
case "$nm_opt" in
") if $test -f /mach_boot; then
  nm_opt=" # Mach
 elif $test -d /usr/ccs/lib; then
  nm_opt='-p' # Solaris (and SunOS?)
 elif $test -f /dgux; then
  nm_opt='-p' # DG-UX
 elif $test -f /lib64/rld; then
  nm_opt='-p' # 64-bit Irix
 else
  nm_opt="
 fi;;
esac

: nm options which may be necessary for shared libraries but illegal
: for archive
 libraries.  Thank you, Linux.
case "$nm_so_opt" in
") case "$myuname" in
 *linux*|gnu*)
  if $nm --help | $grep 'dynamic' > /dev/null 2>&1; then
   nm_so_opt='--dynamic'
  fi
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/usenm.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: yacc.U,v 3.0.1.1 1994/05/13 15:28:48 ram Exp $

```
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: yacc.U,v $
?RCS: Revision 3.0.1.1  1994/05/13  15:28:48  ram
?RCS: patch27: added byacc as another alternative (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:yacc yaccflags: Guess Myread Oldconfig byacc bison cat test _exe
?MAKE: -pick add $@ %<
?S:yacc:
?S: This variable holds the name of the compiler compiler we
?S: want to use in the Makefile. It can be yacc, byacc, or bison -y.
?S:.
?S:yaccflags:
?S: This
 variable contains any additional yacc flags desired by the
?S: user.  It is up to the Makefile to use this.
?S:.
?T:comp
: determine compiler compiler
case "$yacc" in
")
 dflt=yacc;;
*)
 dflt="$yacc";;
esac
echo " "
comp='yacc'
if $test -f "$byacc$_exe"; then
 dflt="$byacc"
 comp="byacc or $comp"
fi
if $test -f "$bison$_exe"; then
 comp="$comp or bison -y"
fi
rp="Which compiler compiler ($comp) shall I use?"
. ./myread
yacc="$ans"
case "$yacc" in
```

```
*bis*)
 case "$yacc" in
 *-y*) ;;
 *)
  yacc="$yacc -y"
  echo "(Adding -y option to bison to get yacc-compatible behavior.)"
  ;;
 esac
 ;;
esac

@if yaccflags
: see if we need extra yacc flags
dflt="$yaccflags"
case "$dflt" in
") dflt=none;;
esac
$cat <<EOH

Your yacc program may need extra flags to normally process the parser sources.
Do NOT specify any -d or -v flags here, since those are explicitly known
by the various Makefiles. However, if your machine has strange/undocumented
options (like -Sr# on SCO to specify the
 maximum number of grammar rules), then
please add them here.  To use no flags, specify the word "none".

EOH
rp="Any additional yacc flags?"
. ./myread
case "$ans" in
none) yaccflags=";;
*) yaccflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/yacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getsrvby.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getsbyname d_getsbyport: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_getsbyname:
?S: This variable conditionally defines the HAS_GETSERVBYNAME
?S: symbol, which indicates to the C program that the
?S: getservbyname() routine is available to look up services
?S: by their name.
?S:.
?S:d_getsbyport:
?S: This variable conditionally defines the HAS_GETSERVBYPORT
?S: symbol, which indicates to the C program that the
?S: getservbyport() routine is available to look up services
?S: by their port.
?S:.
?C:HAS_GETSERVBYNAME:
?C: This symbol, if defined, indicates that the getservbyname()
?C: routine is available to look up services by their name.
?C:.
?C:HAS_GETSERVBYPORT:
?C: This symbol, if defined,
 indicates that the getservbyport()
?C: routine is available to look up services by their port.
?C:.
?H:#$d_getsbyname HAS_GETSERVBYNAME  /**/
?H:#$d_getsbyport HAS_GETSERVBYPORT  /**/
?H:.
?LINT:set d_getsbyname d_getsbyport
: Optional checks for getsbyname and getsbyport

@if d_getsbyname || HAS_GETSERVBYNAME
: see if getservbyname exists
set getservbyname d_getsbyname
eval $inlibc
@end

@if d_getsbyport || HAS_GETSERVBYPORT
: see if getservbyport exists
set getservbyport d_getsbyport
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getsrvby.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_scalbnl: Inlibc
?MAKE: -pick add $@ %<
?S:d_scalbnl:
?S: This variable conditionally defines the HAS_SCALBNL symbol, which
?S: indicates to the C program that the scalbnl() routine is available.
?S: If ilogbl is also present we can emulate frexpl.
?S:.
?C:HAS_SCALBNL:
?C: This symbol, if defined, indicates that the scalbnl routine is
?C: available.  If ilogbl is also present we can emulate frexpl.
?C:.
?H:#$d_scalbnl HAS_SCALBNL  /**/
?H:.
?LINT:set d_scalbnl
: see if scalbnl exists
set scalbnl d_scalbnl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_scalbnl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vaproto.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: vaproto.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:17:16  ram
?RCS: patch16: definition of _V now appears only when needed
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:vaproto: prototype i_stdarg Setvar
?MAKE: -pick add $@ %<
?S:vaproto:
?S: This variable conditionally defines CAN_VAPROTO on systems supporting
```

```
?S: prototype
 declaration of functions with a variable number of
?S: arguments. See also prototype.
?S:.
?C:CAN_VAPROTO ~ %<:
?C: This variable is defined on systems supporting prototype declaration
?C: of functions with a variable number of arguments.
?C:.
?C:_V:
?C: This macro is used to declare function parameters in prototypes for
?C: functions with a variable number of parameters. Use double parentheses.
?C: For example:
?C:
?C:  int printf _V((char *fmt, ...));
?C:
?C: Remember to use the plain simple _() macro when declaring a function
?C: with no variable number of arguments, since it might be possible to
?C: have a non-effect _V() macro and still get prototypes via _().
?C:.
?H:?%<:#$vaproto CAN_VAPROTO /**/
?H:?_V:#ifdef CAN_VAPROTO
?H:?_V:#define _V(args) args
?H:?_V:#else
?H:?_V:#define _V(args) ()
?H:?_V:#endif
?H:.
?W:%<:_V
?LINT:set vaproto
: see if prototypes support variable argument declarations
echo " "
case "$prototype$i_stdarg" in
$define$define)
 echo "It appears we'll
 be able to prototype varargs functions." >&4
 val="$define"
 ;;
*)
 echo "Too bad... We won't be using prototyped varargs functions..." >&4
 val="$undef"
 ;;
esac
set vaproto
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/vaproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_csh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:32:18  ram
?RCS: patch61: added full_csh to preserve the full path even when portable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_csh full_csh: csh Setvar
?MAKE: -pick add $@ %<
?S:d_csh:
?S: This variable conditionally defines the CSH symbol, which
?S: indicates to the C program that the C-shell exists.
?S:.
?S:full_csh:
?S: This variable contains the full pathname to 'csh', whether
 or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'csh.'
?S:.
?X: Yes, I know about the C symbol PORTABLE, but I think csh
?X: is unlikely to move, and I'm too lazy to add all the
?X: #ifdef PORTABLE sections to the perl source.
?X:
?C:HAS_CSH:
?C: This symbol, if defined, indicates that the C-shell exists.
?C:.
?C:CSH:
?C: This symbol, if defined, contains the full pathname of csh.
?C:.
?X: Previously, I just did $d_csh CSH "$full_csh", but that caused
?X: problems on VMS where the config.sh extraction program changes
?X: $undef to a real cpp undef, and they then had  #undef CSH ""
?X: which the compiler didn't like.  It's easy to work around this,
?X: so I did.  --AD  3/1998.
?X: And we don't want to define CSH if !HAS_CSH, but we don't want
?X: those lines in config.h if they don't need CSH, so protect with ?CSH
```

```
?X: and not
 ?%<. --RAM, 15/02/2004
?H:?%<:#$d_csh HAS_CSH  /**/
?H:?CSH:#ifdef HAS_CSH
?H:?CSH:#define CSH "$full_csh" /**/
?H:?CSH:#endif
?H:.
?LINT:set d_csh
: get csh whereabouts
case "$csh" in
'csh') val="$undef" ;;
*) val="$define" ;;
esac
set d_csh
eval $setvar
: Respect a hint or command line value for full_csh.
case "$full_csh" in
'') full_csh=$csh ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_csh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mailfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mailfile.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:24:57  ram
?RCS: patch36: the Loc unit was missing from the dependency line
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:22:08  ram
?RCS: patch15: now also looks under /var/mail for BSD/386
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mailfile: Myread Oldconfig Filexp Loc
?MAKE: -pick add $@ %<
?S:mailfile:
?S: This variable contains
```

```
 the eventual value of the MAILFILE symbol,
?S: which contains an interpretable name of the mail spool file for the
?S: current user.
?S:.
?C:MAILFILE:
?C: This symbol contains the interpretable name of the mail spool file
?C: for the current user.  The program must be prepared to substitute
?C: the HOME directory for %~, and the login id for %L.
?C:.
?H:#define MAILFILE "$mailfile"  /**/
?H:.
: determine where mail is spooled
case "$mailfile" in
")
 dflt=`./loc . XXX /usr/spool/mail /usr/mail /var/mail`
 case "$dflt" in
 XXX) dflt='%~/mailbox';;
 *) dflt="$dflt/%L";;
 esac
 ;;
*)  dflt="$mailfile"
 ;;
esac
cat <<'EOM'

In the following question, you may use %~ to represent the user's home
directory, and %L to represent a users name.

EOM
rp='In which file is yet-to-be-read mail spooled? (~name ok)'
. ./myread
mailfile=`./filexp "$ans"`

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mailfile.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: myhostname.U,v 3.0.1.3 1997/02/28 16:15:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: myhostname.U,v $
```

```
?RCS: Revision 3.0.1.3  1997/02/28  16:15:55  ram
?RCS: patch61: improved hostname lookup by using ypmatch when NIS is used
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:25:43  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS: patch36: now uses new Tr unit to convert to/from lowercase
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:20  ram
?RCS: patch30: now a little more clever for domain name guessing
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:myhostname phostname mydomain: contains sed test Myread Oldconfig \
 Guess Loc awk echo sort uniq +usrinc rm hostcat Tr
?MAKE: -pick add $@ %<
?S:myhostname (hostname):
?S: This variable contains the eventual value of the MYHOSTNAME symbol,
?S: which is the name of the host the program is going to run on.
?S: The domain is not kept with hostname, but must be gotten from mydomain.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:mydomain:
?S: This variable contains the eventual value of the MYDOMAIN symbol,
?S: which is the domain of the host the program is going to run on.
?S: The domain must be appended to myhostname to form a complete host name.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:phostname:
?S: This variable contains the eventual value of the PHOSTNAME symbol,
?S: which is a command that can be fed to popen()
 to get the host name.
?S: The program should probably not presume that the domain is or isn't
?S: there already.
?S:.
?C:MYHOSTNAME (HOSTNAME):
?C: This symbol contains name of the host the program is going to run on.
?C: The domain is not kept with hostname, but must be gotten from MYDOMAIN.
?C: The dot comes with MYDOMAIN, and need not be supplied by the program.
?C: If gethostname() or uname() exist, MYHOSTNAME may be ignored. If MYDOMAIN
?C: is not used, MYHOSTNAME will hold the name derived from PHOSTNAME.
?C:.
?C:MYDOMAIN:
?C: This symbol contains the domain of the host the program is going to
?C: run on.  The domain must be appended to HOSTNAME to form a complete
?C: host name.  The dot comes with MYDOMAIN, and need not be supplied by
?C: the program.  If the host name is derived from PHOSTNAME, the domain
```

```
?C: may or may not already be there, and the program should check.
?C:.
?H:#define MYHOSTNAME "$myhostname"  /**/
?H:#define MYDOMAIN "$mydomain"  /**/
?H:.
?LINT:extern osname
?T:cont
 i tans tmp_re
: now get the host name
echo " "
echo "Figuring out host name..." >&4
case "$myhostname" in
") cont=true
 echo 'Maybe "hostname" will work...'
 if tans=`sh -c hostname 2>&1` ; then
  myhostname=$tans
  phostname=hostname
  cont=''
 fi
 ;;
*) cont='';;
esac
if $test "$cont"; then
 if ./xenix; then
  echo 'Oh, dear.  Maybe "/etc/systemid" is the key...'
  if tans=`cat /etc/systemid 2>&1` ; then
   myhostname=$tans
   phostname='cat /etc/systemid'
   echo "Whadyaknow.  Xenix always was a bit strange..."
   cont=''
  fi
 elif $test -r /etc/systemid; then
  echo "(What is a non-Xenix system doing with /etc/systemid?)"
 fi
fi
if $test "$cont"; then
 echo 'No, maybe "uuname -l" will work...'
 if tans=`sh -c 'uuname -l' 2>&1` ; then
  myhostname=$tans
  phostname='uuname -l'
 else
  echo 'Strange.  Maybe "uname -n" will work...'
  if tans=`sh -c 'uname -n' 2>&1` ; then
   myhostname=$tans
   phostname='uname -n'
  else
   echo 'Oh well, maybe I can mine it out of whoami.h...'
   if
```

```
 tans=`sh -c $contains' sysname $usrinc/whoami.h' 2>&1` ; then
    myhostname=`echo "$tans" | $sed 's/^.*"\(.*\)"/\1/'`
    phostname="sed -n -e ""/sysname/s/^.*\"\\(.*\\)\"/\1/{"" -e p -e q -e '}' <$usrinc/whoami.h"
   else
    case "$myhostname" in
    ") echo "Does this machine have an identity crisis or something?"
     phostname=";;
    *)
     echo "Well, you said $myhostname before..."
     phostname='echo $myhostname';;
    esac
   fi
  fi
 fi
fi
case "$myhostname" in
") myhostname=noname ;;
esac
: you do not want to know about this
set $myhostname
myhostname=$1

: verify guess
if $test "$myhostname" ; then
 dflt=y
 rp='Your host name appears to be "'$myhostname'".' Right?"
 . ./myread
 case "$ans" in
 y*) ;;
 *) myhostname=";;
 esac
fi

: bad guess or no guess
while $test "X$myhostname" = X ; do
 dflt="
 rp="Please type the (one word) name of your host:"
 . ./myread
 myhostname="$ans"
done

: translate upper to lower if necessary
case "$myhostname" in
*[A-Z]*)
 echo
 "(Normalizing case in your host name)"
 myhostname=`echo $myhostname | ./tr '[A-Z]' '[a-z]'`
 ;;
```

```
esac

?X: Do not ask for domain name if this is not used later on. In that
?X: case, the hostname may keep its domain name, but it doesn't matter.
@if MYDOMAIN || mydomain
case "$myhostname" in
*.*)
 dflt=`expr "X$myhostname" : "X[^.]*\(\..*\)"`
 myhostname=`expr "X$myhostname" : "X\([^.]*\)\."`
 echo "(Trimming domain name from host name--host name is now $myhostname)"
 ;;
*) case "$mydomain" in
 ")
?X:
?X: There is currently no way to say we do not want hostcat if mydomain is not
?X: used. One way to achieve that would be to put that code in a mydomain.U
?X: unit. However, we want to stick the sanity checks right after the domain
?X: name computation, or if none is done, right after the hostname computation.
?X:
  {
?X: If we use NIS, try ypmatch.
   test "X$hostcat" = "Xypcat hosts" &&
   ypmatch "$myhostname" hosts 2>/dev/null |\
    $sed -e 's/[  ]*#.*//; s/$/ /' > hosts
 && \
   $test -s hosts
  } || {
?X: Extract only the relevant hosts, reducing file size,
?X: remove comments, insert trailing space for later use.
?X: Test to be sure we *have* a hostcat command.  os390 doesn't.
   test "X$hostcat" != "X" &&
   $hostcat | $sed -n -e "s/[  ]*#.*//; s/\$/ /
     /[  ]$myhostname[ . ]/p" > hosts
  }
  tmp_re="[ . ]"
  if $test -f hosts; then
   $test x`$awk "/[0-9].*[  ]$myhostname$tmp_re/ { sum++ }
        END { print sum }" hosts` = x1 || tmp_re="[  ]"
   dflt=.`$awk "/[0-9].*[  ]$myhostname$tmp_re/ {for(i=2; i<=NF;i++) print \\\$i}" \
    hosts | $sort | $uniq | \
    $sed -n -e "s/$myhostname\.\([-a-zA-Z0-9_.]\)/\1/p"`
   case `$echo X$dflt` in
   X*\ *) echo "(Several hosts in the database matched hostname)"
    dflt=.
    ;;
   X.) echo "(You do not have fully-qualified names in the hosts database)"
    ;;
   esac
```

```
  else
   echo "(I cannot locate a hosts database anywhere)"
   dflt=.
  fi
  case "$dflt" in
  .)
   tans=`./loc resolv.conf X /etc /usr/etc`
   if
 $test -f "$tans"; then
    echo "(Attempting domain name extraction from $tans)"
?X: Look for either a search or a domain directive.
    dflt=.`$sed -n -e 's/ / /g' \
      -e 's/^search  *\([^ ]*\).*/\1/p' $tans \
      -e 1q 2>/dev/null`
    case "$dflt" in
    .) dflt=.`$sed -n -e 's/ / /g' \
         -e 's/^domain  *\([^ ]*\).*/\1/p' $tans \
         -e 1q 2>/dev/null`
     ;;
    esac
   fi
   ;;
  esac
  case "$dflt" in
  .) echo "(No help from resolv.conf either -- attempting clever guess)"
   dflt=.`sh -c domainname 2>/dev/null`
   case "$dflt" in
   ") dflt='.';;
   .nis.*|.yp.*|.main.*) dflt=`echo $dflt | $sed -e 's/^\.[^.]*//'`;;
   esac
   ;;
  esac
  case "$dflt$osname" in
  .os390) echo "(Attempting domain name extraction from //'SYS1.TCPPARMS(TCPDATA)')"
   dflt=.`awk '/^DOMAINORIGIN/ {print $2}' "//'SYS1.TCPPARMS(TCPDATA)'" 2>/dev/null`
   ;;
  esac
  case "$dflt" in
  .) echo "(Lost all hope -- silly guess then)"
   dflt='.nonet'
   ;;
  esac
  $rm -f hosts
  ;;
 *)
 dflt="$mydomain";;
 esac;;
esac
```

```
echo " "
rp="What is your domain name?"
. ./myread
tans="$ans"
case "$ans" in
") ;;
.*) ;;
*) tans=".$tans";;
esac
mydomain="$tans"

: translate upper to lower if necessary
case "$mydomain" in
*[A-Z]*)
 echo "(Normalizing case in your domain name)"
 mydomain=`echo $mydomain | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

@end
: a little sanity check here
case "$phostname" in
") ;;
*)
 case `$phostname | ./tr '[A-Z]' '[a-z]'` in
 $myhostname$mydomain|$myhostname) ;;
 *)
  case "$phostname" in
  sed*)
   echo "(That doesn't agree with your whoami.h file, by the way.)"
   ;;
  *)
   echo "(That doesn't agree with your $phostname command, by the way.)"
   ;;
  esac
 ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/myhostname.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_inetd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_inetd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_inetd: cat test package Myread Setvar
?MAKE: -pick add $@ %<
?S:d_inetd:
?S: This symbol conditionally defines USE_INETD which indicates to the C
?S: program that the initial socket connection will be done via inetd.
?S:.
?C:USE_INETD (INETD):
?C: This symbol if defined indicates to the C program that inetd will be
?C: in charge of the
 initial socket connection. The file descriptors 0 and
?C: 1 have been dup()ed from the original connected socket descriptor and
?C: are ready for send() and recv().
?C:.
?H:#$d_inetd USE_INETD  /**/
?H:.
?LINT:set d_inetd
: ask whether initial socket connection is to be done via inetd
echo " "
dflt=n
case "$d_inetd" in
") if $test -f /etc/inetd.conf; then
  $cat <<EOM
Your system provides a so called "Internet super-server", the inetd daemon.
Network services like ftp or rlogin are usually handled via ftpd and rlogind
daemons. Without inetd, these daemons must always be running for the service
to be on. On the contrary, inetd listens to specific ports defined in file
/etc/inetd.conf and will run the appropriate daemon upon request. This scheme
avoids eating up the process table and memory with useless daemons.

I can set up things so that internet connections for $package will be done
using inetd, in which case you will have to edit /etc/inetd.conf to add some
specific informations.

EOM
  dflt=y
 else
  $cat
```

```
 <<EOM
I do not see any trace of a configuration file for inetd, hence I assume your
system does not support the so called "Internet super-server". This means
$package will need to have a daemon process running on this machine to allow
network connections.

EOM
 fi;;
*) case "$d_inetd" in
 "$define") dflt=y;;
 esac;;
esac
rp='Do you wish to use inetd for network connections?'
. ./myread
val="$undef"
case "$ans" in
y*|Y*) val="$define";;
esac
set d_inetd
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_inetd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mktime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mktime.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:44  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_mktime: Inlibc
?MAKE: -pick add $@ %<
?S:d_mktime:
?S: This variable conditionally defines the HAS_MKTIME symbol, which
?S: indicates to the C program that the mktime() routine is available.
?S:.
?C:HAS_MKTIME :
```

```
?C: This symbol, if defined, indicates that the mktime routine
 is
?C: available.
?C:.
?H:#$d_mktime HAS_MKTIME  /**/
?H:.
?LINT:set d_mktime
: see if mktime exists
set mktime d_mktime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mktime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memset.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memset.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:03:11  ram
?RCS: patch10: removed text recommending bzero over memset (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memset: Inlibc
?MAKE: -pick add $@ %<
?S:d_memset:
?S: This variable conditionally defines the HAS_MEMSET symbol, which
?S: indicates to the C program that the memset() routine is available
?S: to set blocks of memory.
?S:.
?C:HAS_MEMSET
 (MEMSET):
?C: This symbol, if defined, indicates that the memset routine is available
?C: to set blocks of memory.
?C:.
?H:#$d_memset HAS_MEMSET /**/
?H:.
?LINT:set d_memset
: see if memset exists
```

```
set memset d_memset
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memset.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017 Dagfinn Ilmari Mannsåker
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strnlen: Inlibc
?MAKE: -pick add $@ %<
?S:d_strnlen:
?S: This variable conditionally defines the HAS_STRNLEN symbol, which
?S: indicates to the C program that the strnlen () routine is available.
?S:.
?C:HAS_STRNLEN:
?C: This symbol, if defined, indicates that the strnlen () routine is
?C: available to check the length of a string up to a maximum.
?C:.
?H:#$d_strnlen HAS_STRNLEN  /**/
?H:.
?LINT:set d_strnlen
: see if strnlen exists
set strnlen d_strnlen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strnlen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_closedir.U,v $
```

```
?RCS: Revision 3.0.1.3  1997/02/28  15:31:26  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:11:18  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:21  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_closedir d_void_closedir: Inlibc i_dirent i_sysdir i_sysndir \
 cc ccflags ldflags libs Setvar rm
?MAKE: -pick
 add $@ %<
?S:d_closedir:
?S: This variable conditionally defines HAS_CLOSEDIR if closedir() is
?S: available.
?S:.
?C:HAS_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine is
?C: available.
?C:.
?H:#$d_closedir HAS_CLOSEDIR  /**/
?H:.
?S:d_void_closedir:
?S: This variable conditionally defines VOID_CLOSEDIR if closedir()
?S: does not return a value.
?S:.
?C:VOID_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine
?C: does not return a value.
?C:.
?H:#$d_void_closedir VOID_CLOSEDIR  /**/
?H:.
?F:!closedir
?LINT:set d_closedir d_void_closedir
: see if closedir exists
set closedir d_closedir
eval $inlibc

@if VOID_CLOSEDIR || d_void_closedir
?X: The following contortions are designed so we can call closedir()
?X: and check whether it returns a value.  The contortions are designed
?X: to portably pick up the correct directory header, for those
?X: systems that support various mutually incompatible directory functions.
?X: This
 is from perl5's perl.h
case "$d_closedir" in
"$define")
```

```
 echo " "
 echo "Checking whether closedir() returns a status..." >&4
 cat > closedir.c <<EOM
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/

#if defined(I_DIRENT)
#include <dirent.h>
#if defined(NeXT) && defined(I_SYS_DIR) /* NeXT needs dirent + sys/dir.h */
#include <sys/dir.h>
#endif
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#ifdef hp9000s500
#include <ndir.h> /* may be wrong in the future */
#else
#include <sys/dir.h>
#endif
#endif
#endif
#endif
int main() { return closedir(opendir(".")); }
EOM
 if $cc $ccflags $ldflags -o closedir closedir.c $libs > /dev/null 2>&1; then
  if ./closedir > /dev/null 2>&1 ; then
   echo "Yes, it does."
   val="$undef"
  else
   echo "No, it doesn't."
   val="$define"
  fi
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  val="$define"
 fi
 ;;
*)
 val="$undef";
 ;;
esac
set d_void_closedir
eval $setvar
$rm
```

```
 -f closedir*
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_closedir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysparam.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysparam.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:22:43  ram
?RCS: patch32: created
?RCS:
?MAKE:i_sysparam: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysparam:
?S: This variable conditionally defines the I_SYS_PARAM symbol, and indicates
?S: whether a C program should include <sys/param.h>.
?S:.
?C:I_SYS_PARAM:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/param.h>.
?C:.
?H:#$i_sysparam I_SYS_PARAM  /**/
?H:.
?LINT:set
 i_sysparam
: see if this is a sys/param system
set sys/param.h i_sysparam
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysparam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorarch.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorarch.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorarch vendorarch vendorarchexp installvendorarch: sed Getfile \
 Setprefixvar Oldconfig Prefixit archname vendorlib vendorprefix test
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorarch:
?S: This variable contains the value of the PERL_VENDORARCH symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: architecture-dependent modules and extensions in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorarchexp:
?S: This variable is the ~name expanded version of vendorarch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorarch=''
?S:installvendorarch:
?S: This variable is really the same as vendorarchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorarch:
?S: This variable conditionally defined PERL_VENDORARCH.
?S:.
?C:PERL_VENDORARCH:
?C: If defined, this symbol contains the name of a private library.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this
 directory.
?C: Vendors who distribute perl may wish to place their own
?C: architecture-dependent modules and extensions in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
```

```
?C:PERL_VENDORARCH_EXP:
?C: This symbol contains the ~name expanded version of PERL_VENDORARCH, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorarch PERL_VENDORARCH "$vendorarch"  /**/
?H:#$d_vendorarch PERL_VENDORARCH_EXP "$vendorarchexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorarch
: Set the vendorarch variables
case "$vendorprefix" in
") d_vendorarch="$undef"
 vendorarch="
 vendorarchexp="
 ;;
*) d_vendorarch="$define"
 : determine where vendor-supplied architecture-dependent libraries go.
 : vendorlib  default is /usr/local/lib/perl5/vendor_perl/$version
 : vendorarch default is /usr/local/lib/perl5/vendor_perl/$version/$archname
 : vendorlib may have an optional trailing
 /share.
 case "$vendorarch" in
 ") dflt=`echo $vendorlib | $sed 's,/share$,,'`
  dflt="$dflt/$archname"
  ;;
 *) dflt="$vendorarch" ;;
 esac
 fn=d~+
 rp='Pathname for vendor-supplied architecture-dependent files?'
 . ./getfile
 vendorarch="$ans"
 vendorarchexp="$ansexp"
 ;;
esac
prefixvar=vendorarch
. ./installprefix
if $test X"$vendorarch" = X"$vendorlib"; then
 d_vendorarch="$undef"
else
 d_vendorarch="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorarch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Typedef.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  13:42:07  ram
?RCS: patch56: added backslash escapes within evals to prevent space problems
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:01:16  ram
?RCS: patch36: don't clobber visible 'val' variable, use 'varval' instead
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:05:14  ram
?RCS: patch32: created
?RCS:
?X:
?X: This unit checks for the definition of a given typedef.
?X:
?X: To use it, say:
?X: set typedef val_t default [includes]
?X: eval $typedef
?X:
?MAKE:Typedef:
 cppstdin cppminus cppflags rm contains Oldconfig
?MAKE: -pick add $@ %<
?F:!temp.c
?LINT:define typedef
?V:typedef
?S:typedef:
?S: This shell variable is used internally by Configure to check
?S: wether a given typedef is defined or not. A typical use is:
?S:  set typedef val_t default [includes]
?S:  eval $typedef
?S: That will return val_t set to default if the typedef was not found,
?S: to typedef otherwise. If no includes are specified, look in sys/types.h.
?S:.
?T:type var def inclist varval inc
: define an is-a-typedef? function
typedef='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
```

```
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 if $contains $type temp.E >/dev/null 2>&1; then
  eval "$var=\$type";
 else
  eval "$var=\$def";
 fi;
 $rm -f temp.?;;
*) eval
 "$var=\$varval";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Typedef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nlist_pfx.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nlist_pfx.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:26:18  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:nlist_pfx nlist_fnd: cat test Myread Oldconfig libnlist \
 +cc +ccflags
?MAKE: -pick add $@ %<
?S:nlist_pfx:
?S: This variable holds any characters which precede the symbol name
?S: when doing an nlist search.
?S:.
?S:nlist_fnd:
?S: This
 variable holds the member of the nlist structure which is
?S: nonzero if an nlist search succeeds.  Presently, it is always "n_value".
?S:.
```

```
?C:NLIST_PREFIX:
?C: This manifest constant holds the string of characters which should
?C: precede the symbol name when doing an nlist search.
?C:.
?C:NLIST_FOUND:
?C: This manifest constant holds the member of the nlist structure which
?C: is nonzero if an nlist search succeeds.
?C:.
?H:#define NLIST_PREFIX $nlist_pfx /**/
?H:#define NLIST_FOUND $nlist_fnd /**/
?H:.
?F:!nlisttest
?T:nlist_loc
: Nose around for nlist stuff
echo " "
echo "Checking out nlist stuff..." >&4
$cat >nlisttest.c <<'EOCP'
#include <stdio.h>
#include <nlist.h>

main(argc, argv)
int argc;
char **argv;
{
 int (*loc)();
 extern int hereIam();
 static struct nlist nl[] = {
  { "IamNotFound", 0 },
  { "hereIam", 0 },
  { "_hereIam", 0 },
  { ".hereIam", 0 },
  { "", 0 }
 };

 loc = hereIam;

 if(argc == 1) {
  printf("%ld\n", loc);}
 else {
  int i;
  int rc;

  if(nlist("./nlisttest",
 nl) == -1) exit(-1);
  i = argv[1][0] - '0';
  printf("%d %d %d\n", nl[i].n_name, nl[i].n_type, nl[i].n_value);
  }
 exit(0);}
```

```
int hereIam() {

 return;}
EOCP
nlist_fnd=n_value
if $cc $ccflags -o nlisttest nlisttest.c $libnlist >/dev/null 2>&1 ; then
 set `./nlisttest`
 nlist_loc=$1

 set `./nlisttest 0`
 if $test "$3" = "0" ; then
  echo "$nlist_fnd is 0 if nlist() fails, as I expected."
 else
  $cat <<EOM
Hello, Jim.  We have just discovered that $nlist_fnd was nonzero on an
nlist() lookup failure!  Your mission, should you choose to accept it, is to
edit either config.sh (to provide a Good value for nlist_fnd) or The Code
(to find an alternative to NLIST_FOUND), and reporting the full details of
your success to the MetaConfig Police.  Of course, should you fail...
EOM
  nlist_fnd="/* Bletch! */ */"
 fi

 set `./nlisttest 1`
 if $test "$nlist_loc" = "$3" ; then
  echo "Symbols are stored with no initial characters."
  nlist_pfx=
 else
  set `./nlisttest 2`
  if
 $test "$nlist_loc" = "$3" ; then
   echo "Symbols are stored with an initial underscore."
   nlist_pfx=_
  else
   set `./nlisttest 3`
   if $test "$nlist_loc" = "$3" ; then
    echo "Symbols are stored with an initial dot."
    nlist_pfx=.
   else
    $cat <<EOM
I can't figure out the symbol prefix!
You get to edit config.sh and fix 'nlist_pfx' (Configure will let you do this
at the end of its configuration questions), or config.h and fix the value of
the NLIST_PREFIX symbol.
EOM
    nlist_pfx="/* Bletch! */ */"
   fi
```

```
  fi
 fi
else
 $cat <<EOM
I can't get the nlist test program working!
You get to edit config.sh and fix 'nlist_pfx' (Configure will let you do this
at the end of its configuration questions) and 'nlist_fnd', or config.h and
fix the value of the NLIST_PREFIX and NLIST_FOUND symbols.
EOM
 nlist_pfx="/* Bletch! */ */"
 nlist_fnd="/* Bletch! */ */"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nlist_pfx.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_exp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_exp2:
?S: This variable conditionally defines the HAS_EXP2 symbol, which
?S: indicates to the C program that the exp2() routine is available.
?S:.
?C:HAS_EXP2:
?C: This symbol, if defined, indicates that the exp2 routine is
?C: available to do the 2**x function.
?C:.
?H:#$d_exp2 HAS_EXP2  /**/
?H:.
?LINT:set d_exp2
: see if exp2 exists
set exp2 d_exp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_exp2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_quadmath: Inhdr
?MAKE: -pick add $@ %<
?S:i_quadmath:
?S: This variable conditionally defines I_QUADMATH, which indicates
```

```
?S: to the C program that it should include <quadmath.h>.
?S:.
?C:I_QUADMATH:
?C: This symbol, if defined, indicates that <quadmath.h> exists and
?C: should be included.
?C:.
?H:#$i_quadmath I_QUADMATH  /**/
?H:.
?LINT:set i_quadmath
: see if this is a quadmath.h system
set quadmath.h i_quadmath
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_quadmath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getppid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_getppid.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:45  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_getppid: Inlibc
?MAKE: -pick add $@ %<
?S:d_getppid:
?S: This variable conditionally defines the HAS_GETPPID symbol, which
?S: indicates to the C program that the getppid() routine is available
?S: to get the parent process ID.
?S:.
?C:HAS_GETPPID :
?C: This symbol,
 if defined, indicates that the getppid routine is
?C: available to get the parent process ID.
?C:.
?H:#$d_getppid HAS_GETPPID  /**/
?H:.
?LINT:set d_getppid
```

```
: see if getppid exists
set getppid d_getppid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getppid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libflex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libflex.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:57:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:07:02  ram
?RCS: patch23: now uses full library path instead of -l notation
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:13:25  ram
?RCS: patch16: un-obsoleted this unit to allow smooth lex/flex compilations
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:59  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:libflex: Loc lex libpth _a
?MAKE: -pick add $@ %<
?S:libflex:
?S: This variable contains the argument to pass to the loader in order
?S: to get the flex/lex library routines.  If there is no flex or flex
?S: library, it is null.
?S:.
?T:xxx
: see if we should include -lfl
echo " "
case "$lex" in
*flex)
 xxx=`./loc libfl$_a x $libpth`
 case "$xxx" in
 x)
  echo "No flex library found." >&4
```

```
  libflex=''
  ;;
 *)
  echo "flex library found in $xxx." >&4
  libflex="$xxx"
  ;;
 esac
 ;;
*lex)
 xxx=`./loc libl$_a x $libpth`
 case "$xxx" in
 x)
  echo "No lex library found." >&4
  libflex=''
  ;;
 *)
  echo "lex library found in $xxx." >&4
  libflex="$xxx"
  ;;
 esac
 ;;
*)
echo "You don't seem to have lex or flex, so I won't look for libraries." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libflex.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:sysroot: Head
?MAKE: -pick add $@ %<
?S:sysroot:
?S: This variable is empty unless supplied by the Configure user.
?S: It can contain a path to an alternative root directory, under which
?S: headers and libraries for the compilation target can be found. This
?S: is generally used when cross-compiling using a gcc-like compiler.
?S:.
?LINT:extern cc
?LINT:extern cppflags
?LINT:change cppflags
?LINT:extern ccflags
?LINT:change ccflags
```

```
?LINT:extern ldflags
?LINT:change ldflags
?LINT:extern cccdlflags
?X: _sysroot is later used in ccflags, but we do not want it in config.sh
?T:var xxx path _sysroot
: Set 'sysroot' to change the logical root directory to your headers and libraries see man gcc
: This is primarily meant for cross-compile environments, and
 may fail to be useful in other cases
if test "X$sysroot" = X; then
   sysroot=""
else
   case "$cc" in
 *gcc*|*g++*)
     echo "Using $sysroot to find your headers and libraries, adding to ccflags"
     # _sysroot is used in places where we need --sysroot=foo
     # but using the rest of the flags could cause issues.
     _sysroot="--sysroot=$sysroot";
     case "$ccflags" in
  *sysroot*) ;;
  'undef'|*)
  ccflags="$ccflags $_sysroot"
     esac
     case "$ldflags" in
  *sysroot*) ;;
  'undef'|*)
  ldflags="$ldflags $_sysroot"
     esac
     case "$cppflags" in
  *sysroot*) ;;
  'undef'|*)
  cppflags="$cppflags $_sysroot"
     esac
     # lddlflags updated below in lddlflags section;
     # same with cccdlflags
     ;;
   esac

   # Adjust some defaults to also use $sysroot
   for var in xlibpth loclibpth locincpth glibpth; do
 eval xxx=\$$var
 eval $var=''
 for path in $xxx; do
     eval $var=\"\$$var $sysroot$path\"
 done
   done

fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Sysroot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_unistd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_unistd.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_unistd: Inhdr
?MAKE: -pick add $@ %<
?S:i_unistd:
?S: This variable conditionally defines the I_UNISTD symbol, and indicates
?S: whether a C program should include <unistd.h>.
?S:.
?C:I_UNISTD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <unistd.h>.
?C:.
?H:#$i_unistd I_UNISTD  /**/
?H:.
?LINT:set
 i_unistd
: see if this is a unistd.h system
set unistd.h i_unistd
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_unistd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctermid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
```

```
?MAKE:d_ctermid_r ctermid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_ctermid_r:
?S: This variable conditionally defines the HAS_CTERMID_R symbol,
?S: which indicates to the C program that the ctermid_r()
?S: routine is available.
?S:.
?S:ctermid_r_proto:
?S: This variable encodes the prototype of ctermid_r.
?S: It is zero if d_ctermid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctermid_r
?S: is defined.
?S:.
?C:HAS_CTERMID_R:
?C: This symbol, if defined, indicates that the ctermid_r routine
?C: is available to ctermid re-entrantly.
?C:.
?C:CTERMID_R_PROTO:
?C: This
 symbol encodes the prototype of ctermid_r.
?C: It is zero if d_ctermid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctermid_r
?C: is defined.
?C:.
?H:#$d_ctermid_r HAS_CTERMID_R /**/
?H:#define CTERMID_R_PROTO $ctermid_r_proto /**/
?H:.
?T:try hdrs d_ctermid_r_proto
: see if ctermid_r exists
set ctermid_r d_ctermid_r
eval $inlibc
case "$d_ctermid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h "
 case "$d_ctermid_r_proto:$usethreads" in
 ":define") d_ctermid_r_proto=define
  set d_ctermid_r_proto ctermid_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ctermid_r_proto" in
 define)
 case "$ctermid_r_proto" in
 "|0) try='char* ctermid_r(char*);'
 ./protochk "$extern_C $try" $hdrs && ctermid_r_proto=B_B ;;
 esac
 case "$ctermid_r_proto" in
```

```
 "|0) d_ctermid_r=undef
  ctermid_r_proto=0
  echo "Disabling ctermid_r, cannot determine prototype." >&4 ;;
 * ) case "$ctermid_r_proto" in
  REENTRANT_PROTO*) ;;
  *)
 ctermid_r_proto="REENTRANT_PROTO_$ctermid_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "ctermid_r has no prototype, not using it." >&4 ;;
  esac
  d_ctermid_r=undef
  ctermid_r_proto=0
  ;;
 esac
 ;;
*) ctermid_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ctermid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strerror.U,v 3.0.1.3 1994/05/13 15:20:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_strerror.U,v $
?RCS: Revision 3.0.1.3  1994/05/13  15:20:27  ram
?RCS: patch27: now uses new macro support for cleaner Strerror def
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  14:58:26  ram
?RCS: patch23: renamed strerror into Strerror to protect name space (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:56  ram
?RCS: patch16: protected code looking for sys_errnolist[] with @if
?RCS: patch16: added default value for d_sysernlst
?RCS:
```

```
?RCS: Revision
 3.0  1993/08/18  12:07:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syserrlst d_sysernlst: Csym Findhdr
?MAKE: -pick add $@ %<
?S:d_syserrlst:
?S: This variable conditionally defines HAS_SYS_ERRLIST if sys_errlist[] is
?S: available to translate error numbers to strings.
?S:.
?S:d_sysernlst:
?S: This variable conditionally defines HAS_SYS_ERRNOLIST if sys_errnolist[]
?S: is available to translate error numbers to the symbolic name.
?S:.
?C:HAS_SYS_ERRLIST (SYSERRLIST):
?C: This symbol, if defined, indicates that the sys_errlist array is
?C: available to translate error numbers to strings. The extern int
?C: sys_nerr gives the size of that table.
?C:.
?C:HAS_SYS_ERRNOLIST (SYSERRNOLIST):
?C: This symbol, if defined, indicates that the sys_errnolist array is
?C: available to translate an errno code into its symbolic name (e.g.
?C: ENOENT). The extern int sys_nerrno gives the size of that table.
?C:.
?H:#$d_syserrlst HAS_SYS_ERRLIST /**/
?H:#$d_sysernlst HAS_SYS_ERRNOLIST /**/
?H:.
?D:d_sysernlst=''
?T:val
:
 see if sys_errlist[] exists
echo " "
if test "X$d_syserrlst" = X; then
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "You have sys_errlist[], so we could roll our own strerror."
  d_syserrlst="$define"
 else
  echo "You don't have sys_errlist[], so strerror() is welcome."
  d_syserrlst="$undef"
 fi
fi
@if d_sysernlst || HAS_SYS_ERRNOLIST
if set sys_errnolist val -a d_sysernlst; eval $csym; $val; then
 echo "(Symbolic error codes can be fetched via the sys_errnolist[] array.)"
 d_sysernlst="$define"
else
 echo "(However, I can't extract the symbolic error code out of errno.)"
 d_sysernlst="$undef"
```

```
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_strerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?X:
?X: This unit produces a shell script which can be run in order to emit
?X: an important warning to the user, which will be remembered and shown
?X: at the end of the Configure run as well.
?X:
?X: A typical use would be:
?X:
?X:  ./warn <<EOM
?X:  Problem with your C compiler: can't turn debugging on.
?X:  EOM
?X:
?X: or:
?X:
?X:  ./warn "Problem with your C compiler: can't turn debugging on."
?X:
?X: Which will both display to the user:
?X:
?X:  ***
 WARNING:
?X:  *** Problem with your C compiler: can't turn debugging on.
?X:  ***
?X:
?MAKE:Warn: startsh eunicefix
?MAKE: -pick add $@ %<
?F:./warn
: script used to emit important warnings
cat >warn <<EOS
$startsh
?X: Read the whole warning message from stdin into a temporary file
?X: when no argument was supplied.
```

```
if test \$# -gt 0; then
 echo "\$@" >msg
else
 cat >msg
fi
?X: Emit the warning, prefixing all lines with '*** '
echo "*** WARNING:" >&4
sed -e 's/^/*** /' <msg >&4
echo "*** " >&4
?X: Save the warning in the logs, which will be shown again at the end
cat msg >>config.msg
echo " " >>config.msg
rm -f msg
EOS
chmod +x warn
$eunicefix warn
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysstatvfs.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysstatvfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysstatvfs:
?S: This variable conditionally defines the I_SYSSTATVFS symbol,
?S: and indicates whether a C program should include <sys/statvfs.h>.
?S:.
?C:I_SYS_STATVFS:
?C: This symbol, if defined, indicates that <sys/statvfs.h> exists and
?C: should be included.
?C:.
?H:#$i_sysstatvfs I_SYS_STATVFS  /**/
?H:.
?LINT:set i_sysstatvfs
: see if this is a sys/statvfs.h system
set sys/statvfs.h i_sysstatvfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysstatvfs.U

No license file was found, but licenses were detected in source scan.

```
/*
* $Id: setsid.C,v 3.0.1.1 1994/01/24 13:58:47 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: setsid.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:47  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/setsid.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fseeko: Inlibc longsize
?MAKE: -pick add $@ %<
?S:d_fseeko:
?S: This variable conditionally defines the HAS_FSEEKO symbol, which
?S: indicates to the C program that the fseeko() routine is available.
?S:.
?C:HAS_FSEEKO:
?C: This symbol, if defined, indicates that the fseeko routine is
?C: available to fseek beyond 32 bits (useful for ILP32 hosts).
?C:.
?H:#$d_fseeko HAS_FSEEKO  /**/
?H:.
?LINT:set d_fseeko
: see if fseeko exists
set fseeko d_fseeko
eval $inlibc
case "$longsize" in
8) echo "(Your long is 64 bits, so you could use fseek.)" ;;
```

```
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fseeko.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_setitimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_setitimer:
?S: This variable conditionally defines the HAS_SETITIMER symbol, which
?S: indicates to the C program that the setitimer() routine is available.
?S:.
?C:HAS_SETITIMER:
?C: This symbol, if defined, indicates that the setitimer routine is
?C: available to set interval timers.
?C:.
?H:#$d_setitimer HAS_SETITIMER  /**/
?H:.
?LINT:set d_setitimer
: see if setitimer exists
set setitimer d_setitimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setitimer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_machcthr: Inhdr usethreads
?MAKE: -pick add $@ %<
?S:i_machcthr:
?S: This variable conditionally defines the I_MACH_CTHREADS symbol,
```

```
?S: and indicates whether a C program should include <mach/cthreads.h>.
?S:.
?C:I_MACH_CTHREADS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <mach/cthreads.h>.
?C:.
?H:#$i_machcthr   I_MACH_CTHREADS /**/
?H:.
: see if mach cthreads are available
if test "X$usethreads" = "X$define"; then
 set mach/cthreads.h i_machcthr
 eval $inhdr
else
 i_machcthr="$undef"
fi
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/i_machcthr.U
No license file was found, but licenses were detected in source scan.

Perl5 Metaconfig Units

Copyright (c) 1996-1998, Andy Dougherty
Copyright (c) 1999-2011, H.Merijn Brand
All rights reserved.

These units are the ones I used to build Configure and config_h.SH
in the Perl5 distribution.

The Configure script and config_h.SH file in the Perl distribution are
generated by a program called metaconfig. To run metaconfig, you will
need the full dist 3.0 distribution, maintained by Raphael Manfredi.
As of this writing, the current version is dist3.0, patchlevel 70.
Dist version dist-3.0@70.tar.gz is available on CPAN (the Comprehensive
Perl Archive Network) as
<http://www.perl.com/perl/CPAN/authors/id/RAM/dist-3.0@70.tar.gz>.

Instructions:

1. Unpack the full perl5 sources. Execute the following command

```
 chmod +w Configure config_h.SH Porting/Glossary Porting/config*
```

2. Unpack the archive containing this file in the perl5 source
   directory. This will create a directory
 'U' under the perl5
   sources. That directory will contain the metaconfig units for perl5.

This will also create two files in the perl5 source tree:
MANIFEST.new and .package.

3. Apply any patches to perl in the perl_patches/ directory.
(This may well be empty.)

4. Obtain and install dist-3.0pl70.

4. Apply any patches to dist under the dist_patches subdirectory.

5. From your main perl5 source directory, run packinit to
regenerate the .package file. IMPORTANT: Change the name and
address of the maintainer to your own name and address. I don't
want bug reports intended for you coming to me.

6. From your main perl5 source directory, run

metalint (or mlint)

and repair every failure it reports.

7. From your main perl5 source directory, run

metaconfig -m (or mconfig -m)

8. Edit U/mkglossary and/or U/mkgloss.pl to point to your dist-3.0pl70
location. (See comments at the top.)

9. Run the Porting/mksample script to update the contents
of the Porting/
subdirectory, or run all parts by hand. (see README)

NB: this script used to be U/mksample replaced by Porting/mksample;
see Porting/pumpkin.pod instead for current documentation on its
use.

10. Let me know about any changes, corrections, or enhancements.

Things to watch out for:

1. Future support of better random number generators should probably
start with the randfunc.U unit included here. It's currently
broken, but well commented and probably a good place to start.

Descriptions:

The units and other related files have been broken up into the following
directories:

acl/
This is an old patch to begin to detect and use ACL (access control list) file protection schemes.

compline/
These are similar to the standard units, but I have modified them to have a more uniform compile command line, usually using the new Compile.U unit. I have submitted these for inclusion into the regular dist distribution. (The ccflags.U unit is actually perl-specific since it mentions -DDEBUGGING and -DPOSIX_SOURCE, but that's the only place it is perl-specific.)

dist_patches/
These are patches to dist that must be applied before it is built and installed. I have submitted these for inclusion in the regular dist distribution.

modified/
These are modified versions of the standard units. Also included in this directory are new units that are clearly derived from existing units. I have submitted these for inclusion in the regular dist distribution.

perl/
These are specific to perl. Some are heavily derived from original dist units, and are marked as such. Others are original.

perl_patches/
These are patches to the perl source. This directory should ordinarily be empty, but there may have been drift between the standard version of perl and the one associated with these units.

protos/
These are units modified to use the new Hasproto.U or Protochk.U units to check for prototypes. I have submitted these for inclusion into the regular dist distribution.

target/
This is the very, very beginning of cross-compiler support. It doesn't work yet, and many standard units will need modification.

typedefs/
These are standard units modified to use the modified Typedef.U unit to check for typedefs. (The modified Typdef.U includes a

function to avoid unnecessary prompts if the typdef being searched
for exists.) I have submitted these for inclusion into the
regular dist distribution.

threads/
These are specific to threading perl.

Copyright Information:

Unless otherwise indicated, the files contained in this
distribution are:

Copyright (c) 1996-1998, Andy Dougherty

The following licensing terms apply to all files contained in
this distribution:

You may distribute the files contained in this distribution
under the terms of either

a) the "Artistic License" which comes with Perl,
or

b) the "Artistic License" which comes with dist, or

c) the GNU General Public License as published by the Free
Software Foundation; either version 1, or (at your option) any
later version (see the file "Copying" that comes with the
Perl distribution).

Which one to use is your choice.

The units in the "modified" directory have been derived from units
associated with the metaconfig program of Raphael Manfredi's "dist"
distribution. These units list Raphael Manfredi as the Copyright holder.
dist is distributed under a modified version of the Perl Artistic License.
Clause 7 of this modified license as contained in dist-3.0-pl60 provides:

7. You may reuse parts of this Package in your own programs, provided
that you explicitly state where you got them from, in the source code
(and, left to your courtesy, in the documentation), duplicating
all the associated copyright notices and disclaimers. Besides
your changes, if any, must be clearly marked
as such. Parts reused
that way will no longer fall under this license if, and only if,
the name of your program(s) have no immediate connection with the
name of the Package itself or its associated programs. You may then
apply whatever restrictions you wish on the reused parts or choose

to place them in the Public Domain--this will apply only within the
context of your package.

In accordance with this clause, the versions of these units
contained here are made available under the same terms as the
rest of the units.

If you have any questions about the use of these units or about
the differences between these units and the standard versions, please
feel free to ask.

Andy Dougherty doughera@lafayette.edu
Dept. of Physics
Lafayette College
Easton, PA 18042-1782

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/README.dist
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Finish.U,v $
?RCS: Revision 3.0.1.6 1995/02/15 14:09:30 ram
?RCS: patch51: now clearer about how to edit config.sh at the prompt (WED)
?RCS:
?RCS: Revision 3.0.1.5 1994/10/29 15:53:14 ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.4 1994/05/06 14:19:37 ram
?RCS: patch23: added blank lines around 'End of Configure'
?RCS:
?RCS: Revision 3.0.1.3 1993/10/16 13:46:09 ram
?RCS: patch12: replaced Config_h by Magic_h in the dependency line
?RCS:
?RCS:
 Revision 3.0.1.2 1993/09/13 15:45:26 ram
?RCS: patch10: fixed shell evaluation w/o shell escape while in silent mode
?RCS:
?RCS: Revision 3.0.1.1 1993/08/30 08:55:59 ram

```
?RCS: patch8: prevents myread from blocking on empty answers, exceptionally
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit is the very last one in the Configure script.  It runs all the
?X: SH files, which among other things produce config.h and (usually) Makefile.
?X: It offers to do a make depend if the Makefile contains that target.
?X:
?MAKE:Finish: Chk_MANI Extract Myread Oldsym Magic_h cat rm contains \
 test package make
?MAKE: -pick add $@ %<
?F:!config.sh
?T:pwd
: Finish up by extracting the .SH files
case "$alldone" in
exit)
?X: They supplied the -E switch
 echo "Stopping at your request, leaving temporary files around."
 exit 0
 ;;
cont)
 ;;
")
 dflt="
 nostick=true
 $cat <<EOM

If you'd like to make any changes to the config.sh
 file before I begin
to configure things, do it as a shell escape now (e.g. !vi config.sh).

EOM
 rp="Press return or use a shell escape to edit config.sh:"
 . UU/myread
 nostick="
 case "$ans" in
 ") ;;
 *) : in case they cannot read
  sh 1>&4 -c "$ans";;
 esac
 ;;
esac

: if this fails, just run all the .SH files by hand
. ./config.sh
```

```
?X:
?X: Turn silent mode off from now on (we want a verbose file extraction).
?X: This means we have to explicitly test for '$silent' from now on to
?X: strip off any verbose messages.
?X:
echo " "
exec 1>&4
pwd=`pwd`
. ./UU/extract
cd "$pwd"

if $contains '^depend:' [Mm]akefile >/dev/null 2>&1; then
 dflt=y
 case "$silent" in
 true) ;;
 *)
  $cat <<EOM

Now you need to generate make dependencies by running "$make depend".
You might prefer to run it in background: "$make depend > makedepend.out &"
It can take a while, so you might not want to run it right now.

EOM
  ;;
 esac
 rp="Run $make depend now?"
 . UU/myread
 case "$ans" in
 y*)
  $make depend
 && echo "Now you must run '$make'."
  ;;
 *)
  echo "You must run '$make depend' then '$make'."
  ;;
 esac
elif test -f [Mm]akefile; then
 echo " "
 echo "Now you must run a $make."
else
 echo "Configure done."
fi

if $test -f Policy.sh; then
   $cat <<EOM

If you compile $package on a different machine or from a different object
directory, copy the Policy.sh file from this object directory to the
```

```
new one before you run Configure -- this will help you with most of
the policy defaults.

EOM
fi
if $test -f UU/config.msg; then
   echo "Hmm.  I also noted the following information while running:"
   echo " "
   $cat UU/config.msg >&4
fi
?X:
?X: kit*isdone files are left over by shell archives built using the makedist
?X: script which comes from dist, while ark*isdone files are left over by
?X: the cshar archive maker.
?X:
$rm -f kit*isdone ark*isdone
$rm -rf UU

: End of Configure

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Finish.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: usenm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:26:40  ram
?RCS: patch61: don't use nm with the GNU C library
?RCS: patch61: added support for Linux shared libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usenm runnm nm_opt nm_so_opt: cat test Myread Oldconfig grep \
 d_gnulibc nm egrep rsrc osname Guess
?MAKE: -pick add $@ %<
?S:usenm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction is wanted
```

```
 or not.
?S:.
?S:runnm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction should be performed or not, according to the value
?S: of usenm and the flags on the Configure command line.
?S:.
?S:nm_opt:
?S: This variable holds the options that may be necessary for nm.
?S:.
?S:nm_so_opt:
?S: This variable holds the options that may be necessary for nm
?S: to work on a shared library but that can not be used on an
?S: archive library.  Currently, this is only used by Linux, where
?S: nm --dynamic is *required* to get symbols from an ELF library which
?S: has been stripped, but nm --dynamic is *fatal* on an archive library.
?S: Maybe Linux should just always set usenm=false.
?S:.
: see if nm is to be used to determine whether a symbol is defined or not
?X: If there is enough inquiries, it might be worth to wait for the nm
?X: extraction. Otherwise, the C compilations might be a better deal.
?X:
?X: Don't bother if we're using GNU libc -- skimo
case "$usenm"
 in
")
 dflt="
 case "$d_gnulibc" in
 "$define")
  echo " "
  echo "$nm probably won't work on the GNU C Library." >&4
  dflt=n
  ;;
 esac
 case "$dflt" in
 ")
  if $test "$osname" = aix -a ! -f /lib/syscalls.exp; then
   echo " "
   echo "Whoops!  This is an AIX system without /lib/syscalls.exp!" >&4
   echo "'nm' won't be sufficient on this system." >&4
   dflt=n
  fi
  ;;
 esac
 case "$dflt" in
 ")
  if ./gnu; then
   echo " "
```

```
   echo "Hmm...  A GNU system without a GNU C Library?  Weird..." >&4
   dflt=n
  else
   dflt=`$egrep 'inlibc|csym' $rsrc/Configure | wc -l 2>/dev/null`
   if $test $dflt -gt 20; then
    dflt=y
   else
    dflt=n
   fi
  fi
  ;;
 esac
 ;;
*)
 case "$usenm" in
 true|$define) dflt=y;;
 *) dflt=n;;
 esac
 ;;
esac
$cat <<EOM

I can use $nm to extract the symbols from your C libraries. This
is a time consuming task which may generate huge output on the disk (up
to 3 megabytes) but that should make the symbols extraction faster. The
alternative is to skip the
 'nm' extraction part and to compile a small
test program instead to determine whether each symbol is present. If
you have a fast C compiler and/or if your 'nm' output cannot be parsed,
this may be the best solution.

EOM
rp='Shall I use nm to extract C symbols from the libraries?'
. ./myread
case "$ans" in
[Nn]*) usenm=false;;
*) usenm=true;;
esac

?X: Name extraction is to be run if 'nm' usage is wanted and if no -r flag
?X: was provided to configure (in which case we simply re-use the previous
?X: values).
runnm=$usenm
case "$reuseval" in
true) runnm=false;;
esac

: nm options which may be necessary
```

```
case "$nm_opt" in
") if $test -f /mach_boot; then
  nm_opt="  # Mach
 elif $test -d /usr/ccs/lib; then
  nm_opt='-p'  # Solaris (and SunOS?)
 elif $test -f /dgux; then
  nm_opt='-p'  # DG-UX
 elif $test -f /lib64/rld; then
  nm_opt='-p'  # 64-bit Irix
 else
  nm_opt="
 fi;;
esac

?X: nm options which may be necessary for shared libraries but illegal
?X: for archive libraries.  Thank you,
 Linux.
case "$nm_so_opt" in
") case "$osname" in
 *linux*)
  if $nm --help | $grep 'dynamic' > /dev/null 2>&1; then
   nm_so_opt='--dynamic'
  fi
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usenm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_attribut.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 2020, Raphael Manfredi, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_non_int_bitfields: \
    Myread Oldconfig cat cc ccflags Setvar compiler_warning rm_try
?MAKE: -pick add $@ %<
?S:d_non_int_bitfields:
?S: This variable conditionally defines HAS_NON_INT_BITFIELDS
?S: which indicates that the C compiler accepts struct bitfields of sizes
```

```
?S: that aren't 'int' or 'unsigned int'
?S:.
?C:HAS_NON_INT_BITFIELDS:
?C: This symbol, if defined, indicates that the C compiler accepts, without
?C: error or warning, struct bitfields
 that are declared with sizes other
?C: than plain 'int'; for example 'unsigned char' is accepted.
?C:.
?H:?%<:#$d_non_int_bitfields HAS_NON_INT_BITFIELDS /**/
?H:.
?LINT:set d_non_int_bitfields
?F:!try.out !try.c
: Look for non 'int'-sized bitfields
case "$d_non_int_bitfields" in
")
echo " " >&4
echo "Checking whether your compiler can handle struct bitfields that aren't 'int' or 'unsigned int' ..." >&4
$cat >try.c <<'EOCP'
#include <stdio.h>
struct foo {
   unsigned char byte:1;
   unsigned short halfword:1;
} bar;
EOCP
if $cc $ccflags -c try.c >try.out 2>&1 ; then
 if $compiler_warning try.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support struct bitfields that aren't 'int' or 'unsigned int'." >&4
  val="$undef"
 else
  echo "Your C compiler supports struct bitfields besides 'int' and 'unsigned int'." >&4
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand struct bitfields that aren't 'int' or 'unsigned int' at all." >&4
 val="$undef"
fi
;;
*)
 val="$d_non_int_bitfields" ;;
esac
set d_non_int_bitfields
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_bitfield.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bcopy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bcopy.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:48:04  ram
?RCS: patch12: added magic support for bcopy()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:01:11  ram
?RCS: patch10: now only defines HAS_BCOPY, no macro remap on memcpy (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bcopy: Inlibc
?MAKE: -pick add $@ %<
?S:d_bcopy:
?S: This variable conditionally defines the HAS_BCOPY
 symbol if
?S: the bcopy() routine is available to copy strings.
?S:.
?C:HAS_BCOPY:
?C: This symbol is defined if the bcopy() routine is available to
?C: copy blocks of memory.
?C:.
?H:#$d_bcopy HAS_BCOPY /**/
?H:.
?M:bcopy: HAS_BCOPY
?M:#ifndef HAS_BCOPY
?M:#ifndef bcopy
?M:#define bcopy(s,d,l) memcpy((d),(s),(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bcopy
: see if bcopy exists
set bcopy d_bcopy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bcopy.U

No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Karl Williamson
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcrtomb: Inlibc
?MAKE: -pick add $@ %<
?S:d_wcrtomb:
?S: This variable conditionally defines the HAS_WCRTOMB symbol if the
?S: wcrtomb() routine is available to be used to convert a wide character
?S: into a multi-byte character.
?S:.
?C:HAS_WCRTOMB:
?C: This symbol, if defined, indicates that the wcrtomb routine is
?C: available to convert a wide character into a multi-byte character.
?C:.
?H:#$d_wcrtomb HAS_WCRTOMB /**/
?H:.
?LINT: set d_wcrtomb
: see if wcrtomb exists
set wcrtomb d_wcrtomb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_wcrtomb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sigprocmask: Inlibc
?MAKE: -pick add $@ %<
?S:d_sigprocmask:
?S: This variable conditionally defines HAS_SIGPROCMASK
?S: if sigprocmask() is available to examine or change the signal mask
?S: of the calling process.
```

```
?S:.
?C:HAS_SIGPROCMASK:
?C: This symbol, if defined, indicates that the sigprocmask
?C: system call is available to examine or change the signal mask
?C: of the calling process.
?C:.
?H:#$d_sigprocmask HAS_SIGPROCMASK  /**/
?H:.
?LINT:set d_sigprocmask
: see if sigprocmask exists
set sigprocmask d_sigprocmask
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sigprocmask.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Compile.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS:
?X:
?X: This unit is just a quick shorthand for the compile command
?X: to be used in all the other metaconfig units.
?X:
?MAKE:Compile: +cc +optimize +ccflags +ldflags +libs test
?MAKE: -pick wipe $@ %<
?LINT:extern usedevel maintloc
?LINT:define compile compile_ok
?V:compile compile_ok mc_file
?S:compile:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command, namely
?S: $cc $optimize $ccflags $ldflags -o $1 $1.c $libs > /dev/null 2>&1
?S: Note that the output filename does _not_ include the _exe
?S: extension.  Instead we assume that the linker will be
?S: "helpful" and automatically appending the correct suffix.
?S: OS/2
 users will apparently need to supply the -Zexe flag to
?S: get this behavior.
?S:
?S: To use this variable, say something like:
?S:  echo 'int main() { exit(0); }' > try.c
```

```
?S:  set try
?S:  if eval $compile; then
?S:   echo "success"   # and do whatever . . .
?S:  else
?S:   echo "failure"   # and do whatever . . .
?S:  fi
?S: To add extra flags cc flags (e.g. -DWHATEVER) just put them
?S: in $*, e.g.
?S:  set try -DTRY_THIS_FLAG
?S:.
?S:compile_ok:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command that you
?S: expect to work ok.  It is the same as $compile, except we
?S: deliberately let the user see any error messages.
?S:.
: define a shorthand compile call
compile='
mc_file=$1;
shift;
case "$usedevel" in $define|true|[yY]*) if $test ! -f "${mc_file}.c"; then
echo "Internal Configure script bug - compiler test file ${mc_file}.c is missing. Please report this to <$maintloc>"
>&4;
exit 1;
fi;
esac;
$cc
 -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
: define a shorthand compile call for compilations that should be ok.
compile_ok='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/Compile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?MAKE:run to from targetarch usecrosscompile: src awk cat grep test rm \
 echo sed mkdir cp touch chmod
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecrosscompile:
?S: This variable conditionally defines the USE_CROSS_COMPILE symbol,
?S: and indicates that our package has been cross-compiled.
?S:.
?S:run:
?S: This variable contains the command used by Configure
?S: to copy and execute a cross-compiled executable in the
?S: target host.  Useful and available only during
 the build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:from:
?S: This variable contains the command used by Configure
?S: to copy files from the target host.  Useful and available
?S: only during the build.
?S: The string ':' if not cross-compiling.
?S:.
?S:to:
?S: This variable contains the command used by Configure
?S: to copy to from the target host.  Useful and available
?S: only during the build.
?S: The string ':' if not cross-compiling.
?S:.
?S:targetarch:
?S: If cross-compiling, this variable contains the target architecture.
?S: If not, this will be empty.
?S:.
?C:USE_CROSS_COMPILE:
?C: This symbol, if defined, indicates that the package is being
?C: cross-compiled.
?C:.
?C:CROSS_TARGET_ARCH:
?C: This symbol, if defined, indicates the target architecture
?C: the package has been cross-compiled to.
?C: Undefined if not a cross-compile.
?C:.
?H:?usecrosscompile:#ifndef USE_CROSS_COMPILE
?H:?usecrosscompile:#$usecrosscompile USE_CROSS_COMPILE /**/
?H:?usecrosscompile:#define
 CROSS_TARGET_ARCH "$targetarch" /**/
?H:?usecrosscompile:#endif
?H:.
```

```
?T:croak pwd exe f q i j cwd
?LINT:extern usecrosscompile
?LINT:extern cc
?LINT:extern usrinc
?LINT:change usrinc
?LINT:change ar
?LINT:change nm
?LINT:change ranlib
?LINT:extern targethost
?LINT:extern targetdir
?LINT:change targetdir
?LINT:extern targetuser
?LINT:change targetuser
?LINT:extern targetrun
?LINT:extern targetfrom
?LINT:extern targetto
?LINT:extern targetmkdir
?LINT:change targetrun
?LINT:change targetfrom
?LINT:change targetto
?LINT:change targetmkdir
?LINT:extern incpth
?LINT:extern libpth
?LINT:change incpth
?LINT:change libpth
?LINT:extern locincpth
?LINT:extern loclibpth
?LINT:change locincpth
?LINT:change loclibpth
?LINT:extern TMPDIR
: setup for possible cross-compilation
run=''
to=:
from=:
usecrosscompile='undef'
targetarch=''
case "$usecrosscompile" in
$define|true|[yY]*)
@if { test -d ../Cross }
?X:
?X: Cross-compilation is enabled when there is a 'Cross' directory found
?X: at the root
 of the package.  This directory must contain the following
?X: entries for defining the cross-compilation process:
?X:
?X: FIXME FIXME
?X: WE MUST DISTINGUISH BETWEEN LOCAL cross-compiling AND REMOTE ONE
?X: ACTUALLY, REMOTE COMPILATION SHOULD BE CONFIGURED INTERACTIVELY
```

```
?X: IT WILL COPY ALL THE FILES FROM THE MANIFEST DOWN TO THE REMOTE DIR...
?X: (and copy things like 'mkdep', etc...)
?X:
 $echo "Cross-compiling..."
 croak=''
 case "$cc" in
 *-*-gcc)
?X: A cross-compiling gcc, probably.
    targetarch=`$echo $cc|$sed 's/-gcc$//'`
    ar=$targetarch-ar
?X: leave out ld, choosing it is more complex
    nm=$targetarch-nm
    ranlib=$targetarch-ranlib
    $echo 'extern int foo;' > try.c
    set X `$cc -v -E try.c 2>&1 | \
  $awk '/^#include </,/^End of search /'|$grep '/include'`
    shift
  if $test $# -gt 0; then
        incpth="$incpth $*"
  incpth="`$echo $incpth|$sed 's/^ //'`"
  echo "Guessing incpth '$incpth'." >&4
  for i in $*; do
   j="`$echo $i|$sed 's,/include$,/lib,'`"
   if
 $test -d $j; then
    libpth="$libpth $j"
   fi
  done
  libpth="`$echo $libpth|$sed 's/^ //'`"
  echo "Guessing libpth '$libpth'." >&4
    fi
    $rm -f try.c
    ;;
 esac
 case "$targetarch" in
 '') echo "Targetarch not defined." >&4; croak=y ;;
 *)  echo "Using targetarch $targetarch." >&4 ;;
 esac
 case "$incpth" in
 '') echo "Incpth not defined." >&4; croak=y ;;
 *)  echo "Using incpth '$incpth'." >&4 ;;
 esac
 case "$libpth" in
 '') echo "Libpth not defined." >&4; croak=y ;;
 *)  echo "Using libpth '$libpth'." >&4 ;;
 esac
 case "$usrinc" in
 '')
```

```
 for i in $incpth; do
  if $test -f $i/errno.h -a -f $i/stdio.h -a -f $i/time.h; then
   usrinc=$i
   echo "Guessing usrinc $usrinc." >&4
   break
  fi
    done
    case "$usrinc" in
    ") echo "Usrinc not defined." >&4; croak=y ;;
    esac
 ;;
*)  echo "Using usrinc $usrinc." >&4 ;;
esac
case "$targethost" in
") echo "Targethost not defined." >&4; croak=y ;;
*)  echo "Using targethost $targethost."
>&4
esac
locincpth=' '
loclibpth=' '
case "$croak" in
y) echo "Cannot continue, aborting." >&4; exit 1 ;;
esac
case "$src" in
/*) run=$src/Cross/run
    targetmkdir=$src/Cross/mkdir
    to=$src/Cross/to
    from=$src/Cross/from
    ;;
*)  pwd=`$test -f ../Configure & cd ..; pwd`
    run=$pwd/Cross/run
    targetmkdir=$pwd/Cross/mkdir
    to=$pwd/Cross/to
    from=$pwd/Cross/from
    ;;
esac
case "$targetrun" in
") targetrun=ssh ;;
esac
case "$targetto" in
") targetto=scp ;;
esac
case "$targetfrom" in
") targetfrom=scp ;;
esac
run=$run-$targetrun
to=$to-$targetto
from=$from-$targetfrom
```

```
 case "$targetdir" in
 ")
  targetdir="${TMPDIR:-/tmp}"
  echo "Guessing targetdir $targetdir." >&4
  ;;
 esac
 case "$targetuser" in
 ")
  targetuser=root
  echo "Guessing targetuser $targetuser." >&4
  ;;
 esac
 case "$targetfrom" in
 scp) q=-q ;;
 *) q=" ;;
 esac
 case "$targetrun" in
 ssh|rsh)
  $cat >$run <<EOF
#!/bin/sh
case "\$1" in
-cwd)
 shift
 cwd=\$1
  shift
 ;;
esac
case "\$cwd" in
") cwd=$targetdir ;;
esac
exe=\$1
shift
if $test ! -f \$exe.xok; then
 $to \$exe
 $touch \$exe.xok
fi
$targetrun -l $targetuser $targethost "cd \$cwd && ./\$exe \$@"
EOF
  ;;
 *)  echo "Unknown targetrun '$targetrun'" >&4
     exit 1
     ;;
 esac
 case "$targetmkdir" in
 */Cross/mkdir)
  $cat >$targetmkdir <<EOF
#!/bin/sh
$targetrun -l $targetuser $targethost "mkdir -p \$@"
```

```
EOF
    $chmod a+rx $targetmkdir
    ;;
 *)  echo "Unknown targetmkdir '$targetmkdir'" >&4
    exit 1
    ;;
 esac
 case "$targetto" in
 scp|rcp)
    $cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $targetmkdir \`dirname \$f\`
   $targetto $q \$f $targetuser@$targethost:\$f            || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $targetto $q \$f $targetuser@$targethost:$targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
    ;;
 cp) $cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $mkdir -p $targetdir/\`dirname
 \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
    ;;
 *)  echo "Unknown targetto '$targetto'" >&4
    exit 1
```

```
    ;;
 esac
 case "$targetfrom" in
 scp|rcp)
   $cat >$from <<EOF
#!/bin/sh
for f in \$@
do
 $rm -f \$f
 $targetfrom $q $targetuser@$targethost:$targetdir/\$f . || exit 1
done
exit 0
EOF
    ;;
 cp) $cat >$from <<EOF
#!/bin/sh
for f in \$@
do
 $rm -f \$f
 cp $targetdir/\$f . || exit 1
done
exit 0
EOF
    ;;
 *)  echo "Unknown targetfrom '$targetfrom'" >&4
    exit 1
    ;;
 esac
 if $test ! -f $run; then
    echo "Target 'run' script '$run' not found." >&4
 else
    $chmod a+rx $run
 fi
 if $test ! -f $to; then
    echo "Target 'to' script '$to' not found." >&4
 else
    $chmod a+rx $to
 fi
 if $test ! -f $from; then
    echo "Target 'from' script '$from' not found." >&4
 else
    $chmod a+rx $from
 fi
 if $test ! -f $run -o ! -f $to -o !
 -f $from; then
    exit 1
 fi
 $cat >&4 <<EOF
```

```
Using '$run' for remote execution,
and '$from' and '$to'
for remote file transfer.
EOF
@else
 echo "Cross-compilation is not supported for this package." >&4
 exit 1
@end
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Cross.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmget.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmget: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmget:
?S: This variable conditionally defines the HAS_SHMGET symbol, which
?S: indicates to the C program that the shmget() routine is available.
?S:.
?C:HAS_SHMGET:
?C: This symbol, if defined, indicates that the shmget() routine is
?C: available to request a shared memory segment from
 the kernel.
?C:.
?H:#$d_shmget HAS_SHMGET  /**/
?H:.
?LINT:set d_shmget
: see if shmget exists
set shmget d_shmget
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fork.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_fork.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:38  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_fork: Inlibc
?MAKE: -pick add $@ %<
?S:d_fork:
?S: This variable conditionally defines the HAS_FORK symbol, which
?S: indicates to the C program that the fork() routine is available.
?S:.
?C:HAS_FORK :
?C: This symbol, if defined, indicates that the fork routine is
?C: available.
?C:.
?H:#$d_fork
 HAS_FORK  /**/
?H:.
?LINT:set d_fork
: see if fork exists
set fork d_fork
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_remquo: Inlibc
?MAKE: -pick add $@ %<
?S:d_remquo:
?S: This variable conditionally defines the HAS_REMQUO symbol, which
```

```
?S: indicates to the C program that the remquo() routine is available.
?S:.
?C:HAS_REMQUO:
?C: This symbol, if defined, indicates that the remquo routine is
?C: available to return the remainder and part of quotient.
?C:.
?H:#$d_remquo HAS_REMQUO  /**/
?H:.
?LINT:set d_remquo
: see if remquo exists
set remquo d_remquo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_remquo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Nothing.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Nothing.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this file is to supply an empty target for the private
?X: Makefile built by metaconfig to order the units.
?X:
?MAKE:Nothing: Head
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Nothing.U
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```
?RCS: $Id$
?RCS:
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: startperl.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:25:06  ram
?RCS: patch61: warn them if the #! line is too long for their OS
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startperl: cat rm sharpbang perlpath d_portable Myread
?MAKE: -pick add $@ %<
?S:startperl:
?S: This variable contains the string to put on the front of a perl
?S: script to make sure (hopefully) that it runs with perl and not some
?S: shell. Of course, that
 leading line must be followed by the classical
?S: perl idiom:
?S:  eval 'exec perl -S $0 ${1+"$@"}'
?S:   if $running_under_some_shell;
?S: to guarantee perl startup should the shell execute the script. Note
?S: that this magic incantation is not understood by csh.
?S:.
?C:STARTPERL:
?C: This symbol is the string that should be put on the front of a
?C: perl script to make sure (hopefully) that it runs with perl and
?C: not under some shell. That line should be followed by the classical
?C: invocation magic:
?C:  eval 'exec perl -S $0 ${1+"$@"}'
?C:   if $running_under_some_shell;
?C: to guarantee perl startup should the shell execute the script at first.
?C:.
?H:#define STARTPERL "$startperl"
?H:.
?T:pdflt
?F:!xtry
: figure out how to guarantee perl startup
case "$sharpbang" in
*!)
?X:
?X: Make sure the #!$perlpath magic incantation indeed works on this
?X: system... It might not if the length of the #! hook is greater
?X: than some hardwired kernel limit. -- RAM, 15/03/96
?X:
 $cat
 >xtry <<EOP
#!$perlpath
system("exit 0");
```

```
EOP
 chmod a+x xtry
 if ./xtry >/dev/null 2>&1; then
  $cat <<EOH

I can use the #! construct to start perl on your system. This will make
startup of perl scripts faster, but may cause problems if you want to share
those scripts and perl is not in a standard place (/usr/bin/perl) on all your
platforms. The alternative is to force a shell by starting the script with a
single ':' character.

EOH
  pdflt=y
 else
  $cat <<EOH

I could use the #! construct to start perl on your system, but using
   #!$perlpath
would be too long for your kernel to grok. Indeed, most systems do
limit the size of the leading #! string to 32 characters.

EOH
  pdflt=n
 fi
 $rm -f xtry
 case "$startperl" in
 *!*) dflt=y;;
 ") case "$d_portable" in
  "$define") dflt=n;;
  *) dflt=$pdflt;;
  esac;;
 *) dflt=n;;
 esac
 rp='Shall I use #! to start up perl?'
 . ./myread
 case "$ans" in
 y*|Y*) startperl="#!$perlpath";;
 *) startperl=": # use perl";;
 esac;;
*) startperl=":
 # use perl";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/startperl.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isinf: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isinf:
?S: This variable conditionally defines the HAS_ISINF symbol, which
?S: indicates to the C program that the isinf() routine is available.
?S:.
?C:HAS_ISINF:
?C: This symbol, if defined, indicates that the isinf routine is
?C: available to check whether a double is an infinity.
?C:.
?H:#$d_isinf HAS_ISINF  /**/
?H:.
?LINT:set d_isinf
: check for isinf
echo "Checking to see if you have isinf..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isinf(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isinf."
else
 val="$undef"
 echo "You do not have isinf."
fi
$rm_try
set d_isinf
eval $setvar

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isinf.U
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?RCS: $Id: i_gdbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_gdbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:39  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_gdbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_gdbm (d_gdbm):
?S: This variable conditionally defines the I_GDBM symbol, which
?S: indicates to the C program that <gdbm.h> exists and should
?S: be included.
?S:.
?C:I_GDBM
 (HAS_GDBM):
?C: This symbol, if defined, indicates that <gdbm.h> exists and should
?C: be included.
?C:.
?H:#$i_gdbm I_GDBM /**/
?H:.
?T:t_gdbm d_gdbm_open
?LINT:set i_gdbm
: see if gdbm.h is available
?X: t_gdbm is a tentative check. We might just have the .h, not the lib -- ADO
set gdbm.h t_gdbm
eval $inhdr
case "$t_gdbm" in
$define)
 : see if gdbm_open exists
 set gdbm_open d_gdbm_open
 eval $inlibc
 case "$d_gdbm_open" in
 $undef)
  t_gdbm="$undef"
  echo "We won't be including <gdbm.h>"
  ;;
 esac
 ;;
esac
val="$t_gdbm"
set i_gdbm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_gdbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: selecttype.U,v 3.0.1.3 1997/02/28 16:20:09 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: selecttype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:20:09  ram
?RCS: patch61: always include <sys/select.h> when available for test
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:14:06  ram
?RCS: patch56: removed harmful spaces in assignment
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:31  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:selecttype: Protochk Oldconfig Myread cat
 \
 d_fd_set d_select d_socket i_systime i_sysselct extern_C
?MAKE: -pick add $@ %<
?S:selecttype:
?S: This variable holds the type used for the 2nd, 3rd, and 4th
?S: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?S: is defined, and 'int *' otherwise.  This is only useful if you
?S: have select(), naturally.
?S:.
?C:Select_fd_set_t:
?C: This symbol holds the type used for the 2nd, 3rd, and 4th
?C: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?C: is defined, and 'int *' otherwise.  This is only useful if you
?C: have select(), of course.
?C:.
?H:#define Select_fd_set_t $selecttype /**/
?H:.
?T:xxx nfd tmo try hdrs val
: check for type of arguments to select.
case "$selecttype" in
") case "$d_select" in
```

```
 $define)
  echo " "
  $cat <<EOM
Checking to see what type of arguments are accepted by select().
EOM
  hdrs="$define sys/types.h
   $i_systime sys/time.h
   $i_sysselct sys/select.h
   $d_socket sys/socket.h"
  : The first arg can be int, unsigned,
 or size_t
  : The last arg may or may not be 'const'
  val=''
  : void pointer has been seen but using that
  : breaks the selectminbits test
  for xxx in 'fd_set *' 'int *'; do
   for nfd in 'int' 'size_t' 'unsigned long' 'unsigned' ; do
    for tmo in 'struct timeval *' 'const struct timeval *'; do
     case "$val" in
     '') try="$extern_C select _(($nfd, $xxx, $xxx, $xxx, $tmo));"
      if ./protochk "$try" $hdrs; then
       echo "Your system accepts $xxx."
       val="$xxx"
      fi
      ;;
     esac
    done
   done
  done
?X: In the unlikely event that none of those worked, prompt the user.
  case "$val" in
  '') rp='What is the type for the 2nd, 3rd, and 4th arguments to select?'
   case "$d_fd_set" in
    $define) dflt="fd_set *" ;;
    *)  dflt="int *" ;;
   esac
   . ./myread
   val=$ans
   ;;
  esac
  selecttype="$val"
  ;;
 *) : no select, so pick a harmless default
  selecttype='int *'
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/selecttype.U
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```
?RCS: $Id: Loc_sed.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS: of the source tree for dist 4.0.
?RCS:
?X: This is used in perl.c.
?MAKE:full_sed: sed
?MAKE: -pick add $@ %<
?S:full_sed:
?S: This variable contains the full pathname to 'sed', whether or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'sed.'
?S:.
?X: Yes, I know about the C symbol PORTABLE, but I think sed
?X: is
 unlikely to move, and I'm too lazy to add all the
?X: #ifdef PORTABLE sections to the perl source.
?X:
?C:LOC_SED:
?C: This symbol holds the complete pathname to the sed program.
?C:.
?H:#define LOC_SED  "$full_sed" /**/
?H:.
: Store the full pathname to the sed program for use in the C program
full_sed=$sed
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Loc_sed.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dirent.U,v 3.0.1.4 1994/10/29 16:20:01 ram Exp $
?RCS:
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?RCS:
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```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_dirent.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:01  ram
?RCS: patch36: failed scanning for 'd_namlen' with missing <dirent.h> (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:01:25  ram
?RCS: patch30: added direntrytype for hints, merely for NeXT (ADO)
?RCS: patch30: now checks for both struct dirent and direct (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:22:37  ram
?RCS: patch27: new variable direntrytype for proper type setting (ADO)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/01/24  14:11:15  ram
?RCS: patch16: added new Direntry_t pseudo-type for directory entries
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks whether there is a dirent system or not
?X:
?MAKE:i_dirent d_dirnamlen direntrytype: test contains Setvar \
 Myread Findhdr cppstdin cppflags cppminus rm_try
?MAKE: -pick add $@ %<
?S:i_dirent:
?S: This variable conditionally defines I_DIRENT, which indicates
?S: to the C program that it should include <dirent.h>.
?S:.
?S:d_dirnamlen:
?S: This variable conditionally defines DIRNAMLEN, which indicates
?S: to the C program that the length of directory entry names is
?S: provided by a d_namelen field.
?S:.
?S:direntrytype:
?S: This symbol is set to 'struct direct' or 'struct dirent' depending on
?S: whether dirent is available or not. You should use this pseudo type to
?S: portably declare your directory entries.
?S:.
?C:I_DIRENT:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include <dirent.h>. Using this symbol also triggers the definition
?C: of the Direntry_t define which ends up being 'struct dirent' or
```

```
?C: 'struct direct' depending on the availability of <dirent.h>.
?C:.
?C:DIRNAMLEN:
?C: This symbol, if defined, indicates to the C program that the length
?C: of directory entry names is provided by a d_namlen field.  Otherwise
?C: you need to do strlen() on the d_name field.
?C:.
?C:Direntry_t:
?C: This symbol is set to 'struct direct' or 'struct dirent' depending on
?C: whether dirent is available or not. You should use this pseudo type to
?C: portably declare your directory entries.
?C:.
?H:#$i_dirent I_DIRENT  /**/
?H:#$d_dirnamlen DIRNAMLEN /**/
?H:?%<:@if I_DIRENT && Direntry_t
?H:?%<:#define Direntry_t $direntrytype
?H:?%<:@end
?H:.
?T:xinc guess1 guess2
?LINT:set i_dirent d_dirnamlen
: see if this is a dirent system
echo " "
if xinc=`./findhdr dirent.h`; $test "$xinc"; then
 val="$define"
 echo
 "<dirent.h> found." >&4
else
 val="$undef"
 if xinc=`./findhdr sys/dir.h`; $test "$xinc"; then
  echo "<sys/dir.h> found." >&4
  echo " "
 else
  xinc=`./findhdr sys/ndir.h`
 fi
 echo "<dirent.h> NOT found." >&4
fi
set i_dirent
eval $setvar

?X: Use struct dirent or struct direct?   If we're using dirent.h,
?X: it's probably struct dirent, but apparently not always.
?X: Assume $xinc still contains the name of the header file we're using.
@if direntrytype || Direntry_t
: Look for type of directory structure.
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c

case "$direntrytype" in
```

```
"|' ')
 case "$i_dirent" in
 $define) guess1='struct dirent' ;;
 *) guess1='struct direct'  ;;
 esac
 ;;
*) guess1="$direntrytype"
 ;;
esac

case "$guess1" in
'struct dirent') guess2='struct direct' ;;
*) guess2='struct dirent' ;;
esac

if $contains "$guess1" try.c >/dev/null 2>&1; then
 direntrytype="$guess1"
 echo "Your directory entries are $direntrytype." >&4
elif $contains "$guess2"
 try.c >/dev/null 2>&1; then
 direntrytype="$guess2"
 echo "Your directory entries seem to be $direntrytype." >&4
else
 echo "I don't recognize your system's directory entries." >&4
 rp="What type is used for directory entries on this system?"
 dflt="$guess1"
 . ./myread
 direntrytype="$ans"
fi
$rm_try

@end
@if d_dirnamlen || DIRNAMLEN
: see if the directory entry stores field length
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c
if $contains 'd_namlen' try.c >/dev/null 2>&1; then
 echo "Good, your directory entry keeps length information in d_namlen." >&4
 val="$define"
else
 echo "Your directory entry does not know about the d_namlen field." >&4
 val="$undef"
fi
set d_dirnamlen
eval $setvar
$rm_try

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_dirent.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2005, H.Merijn Brand
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_malloc_size d_malloc_good_size d_malloc_usable_size: Inlibc
?MAKE: -pick add $@ %<
?S:d_malloc_size:
?S: This symbol, if defined, indicates that the malloc_size
?S: routine is available for use.
?S:.
?S:d_malloc_good_size:
?S: This symbol, if defined, indicates that the malloc_good_size
?S: routine is available for use.
?S:.
?S:d_malloc_usable_size:
?S: This symbol, if defined, indicates that the malloc_usable_size
?S: routine is available for use.
?S:.
?C:HAS_MALLOC_SIZE:
?C: This symbol, if defined, indicates that
 the malloc_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_size HAS_MALLOC_SIZE  /**/
?H:.
?C:HAS_MALLOC_GOOD_SIZE:
?C: This symbol, if defined, indicates that the malloc_good_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_good_size HAS_MALLOC_GOOD_SIZE /**/
?H:.
?C:HAS_MALLOC_USABLE_SIZE:
?C: This symbol, if defined, indicates that the malloc_usable_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_usable_size HAS_MALLOC_USABLE_SIZE  /**/
?H:.
```

```
?LINT:set d_malloc_size
?LINT:set d_malloc_good_size
?LINT:set d_malloc_usable_size
: see if malloc_size exists
set malloc_size d_malloc_size
eval $inlibc

: see if malloc_size_good exists
set malloc_good_size d_malloc_good_size
eval $inlibc

: see if malloc_usable_size exists
set malloc_usable_size d_malloc_usable_size
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_malloc_size.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pwrite.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pwrite.U,v $
?RCS:
?MAKE:d_pwrite: Inlibc
?MAKE: -pick add $@ %<
?S:d_pwrite:
?S: This variable conditionally defines the HAS_PWRITE symbol, which
?S: indicates to the C program that the pwrite() routine is available.
?S:.
?C:HAS_PWRITE :
?C: This symbol, if defined, indicates that the pwrite routine is
?C: available to perform writes on a file descriptor at a given offset.
?C:.
?H:#$d_pwrite HAS_PWRITE  /**/
?H:.
?LINT:set d_pwrite
: see if pwrite
 exists
set pwrite d_pwrite
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pwrite.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Cppsym.U,v $
?RCS: Revision 3.0.1.5  1995/05/12  11:59:11  ram
?RCS: patch54: split awk command onto two lines for older awks (ADO)
?RCS:
?RCS: Revision 3.0.1.4  1995/01/11  14:55:57  ram
?RCS: patch45: new cc vs. cpp symbol checking suggested by JHI
?RCS: patch45: added more cpp symbols (JHI)
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  15:51:32  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: new symbols ardent and titan (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20
  06:53:32  ram
?RCS: patch30: extended cpp symbol lookup list (JHI)
?RCS: patch30: renamed attrlist symbol into al for brevity
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:14:14  ram
?RCS: patch15: added new cpp symbols __bsdi__ and BSD_NET2
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script called Cppsym, which can be used to
?X: determine whether any in a list of symbols is defined by the C compilation
?X: chain (C preprocessor symbols plus C compiler native ones).
?X: It can determine the status of any symbol, though the symbols in $al
?X: are more easily determined.  If you want to add to $al you can do
?X: it in Myinit.U.
?X:
?MAKE:Cppsym ccsymbols cppsymbols cppccsymbols: run \
 eunicefix Guess awk cat tr sed sort rm startsh osname \
```

```
 +cc gccversion test comm uniq echo Options trnl \
 optimize ccflags ldflags libs
?MAKE: -pick add $@ %<
?S:ccsymbols:
?S: The variable contains the symbols
 defined by the C compiler alone.
?S: The symbols defined by cpp or by cc when it calls cpp are not in
?S: this list, see cppsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppsymbols:
?S: The variable contains the symbols defined by the C preprocessor
?S: alone.  The symbols defined by cc or by cc when it calls cpp are
?S: not in this list, see ccsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppccsymbols:
?S: The variable contains the symbols defined by the C compiler
?S: when it calls cpp.  The symbols defined by the cc alone or cpp
?S: alone are not in this list, see ccsymbols and cppsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?T:also symbols i postprocess_cc_v flags
?F:./Cppsym
?F:!Cppsym.true !Cppsym.know !ccsym.com !ccsym.cpp !ccsym.own
: determine known pre-processor and compiler symbols
echo " "
$echo "Guessing which symbols your C compiler and preprocessor
 define..." >&4
?X:
?X: The symbol list is in alpha order for ease of maintenance...
?X:
?X: Lots of new symbols (mostly rummaged from gcc), courtesy of
?X: Jarkko Hietaniemi <jhi@snakemail.hut.fi> -- RAM, 06/06/94
?X:
?X: If your symbol is mixed case, just add it as-is.
?X: All symbols will be transformed to both all-lower and all-upper.
?X: Also drop any leading/trailing underscores, the scan will try all those.
?X:
$cat <<'EOSH' > Cppsym.know
a29k ABI64 aegis AES_SOURCE AIX AIX32 AIX370
AIX41 AIX42 AIX43 AIX_SOURCE aixpc ALL_SOURCE
alliant alpha am29000 AM29000 AMD64 amiga AMIGAOS AMIX
ansi ANSI_C_SOURCE apollo ardent ARM32 atarist att386 att3b
BeOS BIG_ENDIAN BIT_MSF bsd BSD bsd43 bsd4_2 bsd4_3 BSD4_3 bsd4_4
BSD_4_3 BSD_4_4 BSD_NET2 BSD_TIME BSD_TYPES BSDCOMPAT bsdi
bull c cadmus clipper CMU COFF COMPILER_VERSION
concurrent convex cpu cray CRAY CRAYMPP ctix CX_UX
```

CYGWIN DGUX DGUX_SOURCE DJGPP dmert DOLPHIN DPX2 DSO
Dynix DynixPTX ELF encore EPI EXTENSIONS FAVOR_BSD
FILE_OFFSET_BITS
FreeBSD GCC_NEW_VARARGS gcos gcx gimpel
GLIBC GLIBC_MINOR
GNU_SOURCE GNUC GNUC_MINOR GNU_LIBRARY GO32 gould GOULD_PN
H3050R H3050RX hbullx20 hcx host_mips
hp200 hp300 hp700 HP700 hp800 hp9000
hp9000s200 hp9000s300 hp9000s400 hp9000s500
hp9000s700 hp9000s800 hp9k8 hp_osf hppa hpux HPUX_SOURCE
i186 i286 i386 i486 i586 i686 i8086 i80960 i860 I960
IA64 iAPX286 ibm ibm032 ibmesa IBMR2 ibmrt ILP32 ILP64
INLINE_INTRINSICS INTRINSICS INT64 interdata is68k ksr1
LANGUAGE_C LARGE_FILE_API LARGEFILE64_SOURCE
LARGEFILE_SOURCE LFS64_LARGEFILE LFS_LARGEFILE
Linux LITTLE_ENDIAN LONG64 LONG_DOUBLE LONG_LONG
LONGDOUBLE LONGLONG LP64 luna luna88k Lynx
M68000 m68k m88100 m88k M88KBCS_TARGET M_COFF
M_I186 M_I286 M_I386 M_I8086 M_I86 M_I86SM M_SYS3
M_SYS5 M_SYSIII M_SYSV M_UNIX M_XENIX MACH machine MachTen
MATH_HAS_NO_SIDE_EFFECTS
mc300 mc500 mc68000 mc68010 mc68020 mc68030 mc68040
mc68060 mc68k mc68k32 mc700 mc88000 mc88100 merlin
mert MiNT mips MIPS_FPSET MIPS_ISA MIPS_SIM MIPS_SZINT
MIPS_SZLONG
MIPS_SZPTR MIPSEB MIPSEL MODERN_C motorola
mpeix MSDOS MTXINU MULTIMAX mvs MVS n16 ncl_el ncl_mr
NetBSD news1500 news1700 news1800 news1900 news3700
news700 news800 news900 NeXT NLS nonstopux ns16000 ns32000
ns32016 ns32332 ns32k nsc32000
OCS88 OEMVS OpenBSD os OS2 OS390 osf OSF1 OSF_SOURCE
pa_risc PA_RISC1_1 PA_RISC2_0 PARAGON parisc
pc532 pdp11 PGC PIC plexus PORTAR posix
POSIX1B_SOURCE POSIX2_SOURCE POSIX4_SOURCE
POSIX_C_SOURCE POSIX_SOURCE POWER
PROTOTYPES PWB pyr QNX R3000 REENTRANT RES Rhapsody RISC6000
riscix riscos RT S390 SA110 scs SCO sequent sgi SGI_SOURCE SH3 sinix
SIZE_INT SIZE_LONG SIZE_PTR SOCKET_SOURCE SOCKETS_SOURCE
sony sony_news sonyrisc sparc sparclite spectrum
stardent stdc STDC_EXT stratos sun sun3 sun386
Sun386i svr3 svr4 SVR4_2 SVR4_SOURCE svr5
SX system SYSTYPE_BSD SYSTYPE_BSD43 SYSTYPE_BSD44
SYSTYPE_SVR4 SYSTYPE_SVR5 SYSTYPE_SYSV SYSV SYSV3 SYSV4 SYSV5
sysV68 sysV88 Tek4132 Tek4300 titan
TM3200 TM5400 TM5600
tower tower32 tower32_200 tower32_600 tower32_700
tower32_800

```
 tower32_850 tss
u370 u3b u3b2 u3b20 u3b200 u3b20d u3b5
ultrix UMAXV UnicomPBB UnicomPBD UNICOS UNICOSMK
unix UNIX95 UNIX99 unixpc unos
USE_BSD USE_FILE_OFFSET64 USE_GNU USE_ISOC9X USE_LARGEFILE USE_LARGEFILE64
USE_MISC USE_POSIX USE_POSIX199309 USE_POSIX199506 USE_POSIX2
USE_REENTRANT USE_SVID USE_UNIX98 USE_XOPEN USE_XOPEN_EXTENDED
USGr4 USGr4_2
Utek UTek UTS UWIN uxpm uxps vax venix VMESA vms xenix Xenix286
XOPEN_SOURCE XOPEN_SOURCE_EXTENDED XPG2 XPG2_EXTENDED
XPG3 XPG3_EXTENDED XPG4 XPG4_EXTENDED
z8000
EOSH
?X: Maybe put other stuff here too.
cat <<EOSH >>Cppsym.know
$osname
EOSH
./tr '[a-z]' '[A-Z]' < Cppsym.know > Cppsym.a
./tr '[A-Z]' '[a-z]' < Cppsym.know > Cppsym.b
$cat Cppsym.know > Cppsym.c
$cat Cppsym.a Cppsym.b Cppsym.c | $tr ' ' $trnl | $sort | $uniq > Cppsym.know
$rm -f Cppsym.a Cppsym.b Cppsym.c
cat <<EOSH > Cppsym
$startsh
if $test \$# -gt 0; then
   echo \$* | $tr " " "$trnl" | ./Cppsym.try > Cppsym.got
   if $test -s Cppsym.got; then
       $rm -f Cppsym.got
        exit 0
   fi
   $rm -f Cppsym.got
   exit 1
else
   $tr " " "$trnl" | ./Cppsym.try
   exit 0
fi
EOSH
chmod +x Cppsym
$eunicefix Cppsym
?X: The below awk script will die a horrible death if
?X: some of the tested symbols are not long ints.
?X: Also, we do not make difference between just defined and defined zero.
cat <<EOSH > Cppsym.try
$startsh
cat <<'EOCP' > try.c
#include <stdio.h>
int main() {
EOCP
```

```
?X: The length($1) command guards against possible empty entries.
?X: The awk snippet is know to give heartburn to UNICOS/mk awk.
$awk \\
EOSH
cat <<'EOSH' >> Cppsym.try
'length($1) > 0 {
   printf "#ifdef %s\n#if %s+0\nprintf(\"%s=%%ld\\n\", (long)%s);\n#else\nprintf(\"%s\\n\");\n#endif\n#endif\n", $1,
$1, $1, $1, $1
   printf "#ifdef _%s\n#if _%s+0\nprintf(\"_%s=%%ld\\n\",
(long)_%s);\n#else\nprintf(\"_%s\\n\");\n#endif\n#endif\n", $1, $1, $1, $1, $1
   printf "#ifdef __%s\n#if __%s+0\nprintf(\"__%s=%%ld\\n\",
(long)__%s);\n#else\nprintf(\"__%s\\n\");\n#endif\n#endif\n",
 $1, $1, $1, $1, $1
   printf "#ifdef __%s__\n#if __%s__+0\nprintf(\"__%s__=%%ld\\n\",
(long)__%s__);\n#else\nprintf(\"__%s__\\n\");\n#endif\n#endif\n", $1, $1, $1, $1, $1
}'  >> try.c
echo 'return 0;}' >> try.c
EOSH
cat <<EOSH >> Cppsym.try
flags="$ccflags"
case "$osname-$gccversion" in
irix-) flags="\$flags -woff 1178" ;;
os2-*) flags="\$flags -Zlinker /PM:VIO" ;;
esac
$cc -o try $optimize \$flags $ldflags try.c $libs && $run ./try
EOSH
chmod +x Cppsym.try
$eunicefix Cppsym.try
./Cppsym < Cppsym.know > Cppsym.true
: now check the C compiler for additional symbols
?X: suggested by Jarkko Hietaniemi <jhi@snakemail.hut.fi>, thanks!
postprocess_cc_v="
case "$osname" in
aix) postprocess_cc_v="|$tr , ' '" ;;
esac
$cat >ccsym <<EOS
$startsh
$cat >tmp.c <<EOF
extern int foo;
EOF
for i in \`$cc -v -c tmp.c 2>&1 $postprocess_cc_v\`
do
 case "\$i" in
 -D*) echo "\$i" | $sed 's/^-D//';;
 -A*) $test "$gccversion" && echo "\$i" | $sed 's/^-A//' | $sed 's/\(.*\)(\(.*\))/\1=\2/';;
 esac
done
$rm
```

```
 -f try.c
EOS
postprocess_cc_v="
chmod +x ccsym
$eunicefix ccsym
./ccsym > ccsym1.raw
?X: AIX complains if $uniq is passed an empty file.  ($sort apparently
?X: doesn't care.)  --AD  14 July 1998
if $test -s ccsym1.raw; then
      $sort ccsym1.raw | $uniq >ccsym.raw
else
      mv ccsym1.raw ccsym.raw
fi

?X: canonicalize symbols for easier sort/uniq/comm usage: append =1 if no = sign
?X: the awk script must be on two lines for older awk programs, sigh! -- ADO
$awk '/\=/ { print $0; next }
 { print $0"=1" }' ccsym.raw >ccsym.list
$awk '/\=/ { print $0; next }
 { print $0"=1" }' Cppsym.true >ccsym.true
$comm -13 ccsym.true ccsym.list >ccsym.own
$comm -12 ccsym.true ccsym.list >ccsym.com
$comm -23 ccsym.true ccsym.list >ccsym.cpp
also="
if $test -z ccsym.raw; then
 echo "Your C compiler doesn't seem to define any symbols!" >&4
 echo " "
 echo "However, your C preprocessor defines the following symbols:"
 $cat Cppsym.true
    ccsymbols="
 cppsymbols=`$cat Cppsym.true`
       cppsymbols=`echo
 $cppsymbols`
 cppccsymbols="$cppsymbols"
else
 if $test -s ccsym.com; then
  echo "Your C compiler and pre-processor define these symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.com
  also='also '
  symbols='ones'
  cppccsymbols=`$cat ccsym.com`
  cppccsymbols=`echo $cppccsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.cpp; then
  $test "$also" && echo " "
  echo "Your C pre-processor ${also}defines the following symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.cpp
```

```
  also='further '
  cppsymbols=`$cat ccsym.cpp`
  cppsymbols=`echo $cppsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.own; then
  $test "$also" && echo " "
  echo "Your C compiler ${also}defines the following cpp symbols:"
  $sed -e 's/\(..*\)=1/\1/' ccsym.own
  $sed -e 's/\(..*\)=.*/\1/' ccsym.own | $uniq >>Cppsym.true
        ccsymbols=`$cat ccsym.own`
        ccsymbols=`echo $ccsymbols`
  $test "$silent" || sleep 1
 fi
fi
$rm -f Cppsym.know Cppsym.true
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Cppsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?MAKE:gccversion gccosandvers: cat cpp rm +cc \
 Myread Guess Options Oldconfig Loc osname osvers grep run ccname
?MAKE: -pick add $@ %<
?S:gccversion:
?S: If GNU cc (gcc) is used, this variable holds '1' or '3' (for instance)
?S: to indicate whether the compiler is version 1 or 3.  This is used in
?S: setting some of the default cflags.  It is set to '' if not gcc.
?S:.
?S:gccosandvers:
?S: If GNU cc (gcc) is used, this variable the operating system and
?S: version
 used to compile the gcc.  It is set to '' if not gcc,
?S: or if nothing useful can be parsed as the os version.
?S:.
?T:gccshortvers incdir d
```

```
?F:!try.c !try
?LINT:extern locincpth ccflags ldflags
?LINT:change locincpth ccname cpp
: Check whether they have gcc in any guise.
echo " "
echo "Checking for GNU cc in disguise and/or its version number..." >&4
$cat >try.c <<EOM
#include <stdio.h>
int main() {
#ifdef __GNUC__
#ifdef __VERSION__
 printf("%s\n", __VERSION__);
#else
 printf("%s\n", "1");
#endif
#endif
 exit(0);
}
EOM
if $cc -o try $ccflags $ldflags try.c >/dev/null 2>&1; then
 gccversion=`$run ./try`
 case "$gccversion" in
 ") echo "You are not using GNU cc." ;;
 *)  echo "You are using GNU cc $gccversion."
     ccname=gcc
     ;;
 esac
else
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to be working!" >&4
?X: using -K will prevent aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
 echo "    You'd better
 start hunting for one and let me know about it." >&4
  exit 1
  ;;
 esac
fi
$rm -f try try.*
case "$gccversion" in
1*) cpp=`./loc gcc-cpp $cpp $pth` ;;
esac
case "$gccversion" in
") gccosandvers=" ;;
*) gccshortvers=`echo "$gccversion"|sed 's/ .*//'`
  gccosandvers=`$cc -v 2>&1 | \
```

```
 $grep '/specs$'|sed "s!.*/[^-/]*-[^-/]*-\([^-/]*\)/$gccshortvers/specs!\1!"`
  gccshortvers="
  case "$gccosandvers" in
  $osname) gccosandvers=" ;; # linux gccs seem to have no linux osvers, grr
  $osname$osvers) ;; # looking good
  $osname*) cat <<EOM >&4

*** WHOA THERE!!! ***

   Your gcc has not been compiled for the exact release of
   your operating system ($gccosandvers versus $osname$osvers).

   In general it is a good idea to keep gcc synchronized with
   the operating system because otherwise serious problems
   may ensue when trying to compile software, like Perl.

   I'm trying to be optimistic here, though, and will continue.
   If later during the configuration and build icky
 compilation
   problems appear (headerfile conflicts being the most common
   manifestation), I suggest reinstalling the gcc to match
   your operating system release.

EOM
     ;;
  *) gccosandvers=" ;; # failed to parse, better be silent
  esac
  ;;
esac
case "$ccname" in
") ccname="$cc" ;;
esac

: gcc 3.1 complains about adding -Idirectories that it already knows about,
: so we will take those off from locincpth.
case "$gccversion" in
3*)
   echo "main(){}">try.c
   for incdir in `$cc -v -c try.c 2>&1 | \
      sed '1,/^#include <\.\.\.>/d;/^End of search list/,$d;s/^ //'` ; do
      locincpth=`echo $locincpth | sed s!$incdir!!`
   done
   $rm -f try try.*
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/gccvers.U
```

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Cppsym.U,v 3.0.1.5 1995/05/12 11:59:11 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Cppsym.U,v $
?RCS: Revision 3.0.1.5  1995/05/12  11:59:11  ram
?RCS: patch54: split awk command onto two lines for older awk's (ADO)
?RCS:
?RCS: Revision 3.0.1.4  1995/01/11  14:55:57  ram
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?RCS: patch45: added more cpp symbols (JHI)
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  15:51:32  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: new symbols ardent and titan (ADO)
?RCS:
?RCS:
 Revision 3.0.1.2  1994/06/20  06:53:32  ram
?RCS: patch30: extended cpp symbol lookup list (JHI)
?RCS: patch30: renamed attrlist symbol into al for brevity
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:14:14  ram
?RCS: patch15: added new cpp symbols __bsdi__ and BSD_NET2
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: This unit produces a shell script called Cppsym, which can be used to
?X: determine whether any in a list of symbols is defined by the C compilation
?X: chain (C preprocessor symbols plus C compiler native ones).
?X: It can determine the status of any symbol, though the symbols in $al
?X: are more easily determined.  If you want to add to $al you can do
?X: it in Myinit.U.
?MAKE:Cppsym ccsymbols cppsymbols cppccsymbols: run \
 eunicefix Guess awk cat tr sed sort rm rm_try startsh osname \
 +cc +gccversion test comm uniq echo Options trnl \
 optimize ccflags ldflags libs cpp_stuff cpp
?MAKE: -pick add $@ %<
?T:also
```

```
 symbols i postprocess_cc_v tHdrH
?X:
?X: The symbol list is in alpha order for ease of maintenance...
?X:
?X: Lots of new symbols (mostly rummaged from gcc), courtesy of
?X: Jarkko Hietaniemi <jhi@snakemail.hut.fi> -- RAM, 06/06/94
?X:
?S:ccsymbols:
?S: The variable contains the symbols defined by the C compiler alone.
?S: The symbols defined by cpp or by cc when it calls cpp are not in
?S: this list, see cppsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppsymbols:
?S: The variable contains the symbols defined by the C preprocessor
?S: alone.  The symbols defined by cc or by cc when it calls cpp are
?S: not in this list, see ccsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppccsymbols:
?S: The variable contains the symbols defined by the C compiler
?S: when it calls cpp.  The symbols defined by the cc alone or cpp
?S: alone are not in this list, see ccsymbols and cppsymbols.
?S: The
 list is a space-separated list of symbol=value tokens.
?S:.
?F:./Cppsym
?F:./Cppsym.know
?F:!Cppsym.true
?F:!ccsym.com
?F:!ccsym.cpp
?F:!ccsym.own
?X: fake LINT hints
?LINT:change ccflags
?LINT:extern s
?LINT:extern s__
: Preprocessor symbols
echo " "
$echo "Guessing which symbols your C compiler and preprocessor define..." >&4
?X: If your symbol is mixed case, just add it as-is.
?X: All symbols will be transformed to both all-lower and all-upper.
?X: Also drop any leading/trailing underscores, the scan will try all those.
$cat <<'EOSH' > Cppsym.know
a29k aarch64 ABI64 aegis AES_SOURCE AIX AIX32 AIX370 AIX41 AIX42
AIX43 aixpc AIX_SOURCE alliant ALL_SOURCE alpha AM29000 am29000
AMD64 amd64 amiga AMIGAOS AMIX ansi ANSI_C_SOURCE apollo arch_ppc
arch_pwr ardent ARM ARM32 atarist att386 att3b
BeOS BIG_ENDIAN BIT_MSF BSD bsd bsd43 bsd4_2 BSD4_3 bsd4_3 bsd4_4
```

BSDCOMPAT bsdi BSD_4_3 BSD_4_4 BSD_NET2 BSD_TIME BSD_TYPES bull
byteorder byte_order
c cadmus clang clipper CMU COFF COMPILER_VERSION
concurrent
convex cpu CRAY cray CRAYMPP ctix CX_UX CYGWIN
DECC DGUX DGUX_SOURCE DJGPP dmert DOLPHIN DPX2 DSO Dynix DynixPTX
ELF encore EPI EXTENSIONS
FAVOR_BSD FILE_OFFSET_BITS FORTIFY_SOURCE FreeBSD
GCC_NEW_VARARGS gcos gcx gimpel GLIBC GLIBC_MINOR GNUC GNUC_MINOR
GNU_LIBRARY GNU_SOURCE GO32 gould GOULD_PN
H3050R H3050RX hbullx20 hcx host_mips hp200 hp300 HP700 hp700
hp800 hp9000 hp9000s200 hp9000s300 hp9000s400
hp9000s700 hp9000s800 hp9k8 hppa hpux HPUX_SOURCE hp_osf
i186 i286 i386 i486 i586 i686 i8086 i80960 i860 I960 IA32 IA64
iAPX286 ibm ibm032 ibmesa IBMR2 ibmrt ILP32 ILP64
INLINE_INTRINSICS INT64 INTEL interdata INTRINSICS is68k itanium
ksr1
LANGUAGE_C LARGEFILE64_SOURCE LARGEFILE_SOURCE LARGE_FILE_API
LFS64_LARGEFILE LFS_LARGEFILE LIBCATAMOUNT Linux LITTLE_ENDIAN
LONG64 LONGDOUBLE LONGLONG LONG_DOUBLE LONG_LONG LP64 luna
luna88k Lynx
M68000 m68k m88100 m88k M88KBCS_TARGET MACH machine MachTen
MATH_HAS_NO_SIDE_EFFECTS mc300 mc500 mc68000 mc68010 mc68020
mc68030 mc68040 mc68060
mc68k mc68k32 mc700 mc88000 mc88100
merlin mert MiNT mips MIPSEB MIPSEL MIPS_FPSET MIPS_ISA MIPS_SIM
MIPS_SZINT MIPS_SZLONG MIPS_SZPTR MODERN_C motorola MSDOS
MTXINU MULTIMAX MVS mvs M_AMD64 M_ARM M_ARMT M_COFF M_I186 M_I286
M_I386 M_I8086 M_I86 M_I86SM M_IA64 M_IX86 M_PPC M_SYS3 M_SYS5
M_SYSIII M_SYSV M_UNIX M_X86 M_XENIX
n16 ncl_el ncl_mr NetBSD news1500 news1700 news1800 news1900
news3700 news700 news800 news900 NeXT NLS nonstopux ns16000
ns32000 ns32016 ns32332 ns32k nsc32000
OCS88 OEMVS OpenBSD os OS2 OS390 osf OSF1 OSF_SOURCE
PARAGON parisc pa_risc PA_RISC1_1 PA_RISC2_0 pc532 pdp11 PGC PIC
plexus PORTAR posix POSIX1B_SOURCE POSIX2_SOURCE POSIX4_SOURCE
POSIX_C_SOURCE POSIX_SOURCE POWER powerpc ppc PROTOTYPES PWB pyr
QK_USER QNX
R3000 REENTRANT RES Rhapsody RISC6000 riscix riscos RT
S390 S390x SA110 SCO scs sequent sgi SGI_SOURCE SH SH3 sinix
SIZE_INT SIZE_LONG SIZE_PTR SOCKETS_SOURCE SOCKET_SOURCE sony
sonyrisc sony_news sparc sparclite sparcv8 sparcv9 spectrum
stardent stdc
STDC_EXT stratos sun sun3 sun386 Sun386i svr3 svr4
SVR4_2 SVR4_SOURCE svr5 SX system SYSTYPE_BSD SYSTYPE_BSD43
SYSTYPE_BSD44 SYSTYPE_SVR4 SYSTYPE_SVR5 SYSTYPE_SYSV SYSV SYSV3
SYSV4 SYSV5 sysV68 sysV88
Tek4132 Tek4300 thumb thw_370 thw_intel thw_rs6000 titan TM3200

```
TM5400 TM5600 tower tower32 tower32_200 tower32_600 tower32_700
tower32_800 tower32_850 tss
u370 u3b u3b2 u3b20 u3b200 u3b20d u3b5 ultrix UMAXV UnicomPBB
UnicomPBD UNICOS UNICOSMK unix UNIX95 UNIX99 unixpc unos USE_BSD
USE_FILE_OFFSET64 USE_GNU USE_ISOC9X USE_LARGEFILE
USE_LARGEFILE64 USE_MISC USE_POSIX USE_POSIX199309
USE_POSIX199506 USE_POSIX2 USE_REENTRANT USE_SVID USE_UNIX98
USE_XOPEN USE_XOPEN_EXTENDED USGr4 USGr4_2 UTek Utek UTS UWIN
uxpm uxps
vax venix VMESA vms
x86_64 xenix Xenix286 XOPEN_SOURCE XOPEN_SOURCE_EXTENDED XPG2
XPG2_EXTENDED XPG3 XPG3_EXTENDED XPG4 XPG4_EXTENDED
z8000 zarch
EOSH
# Maybe put other stuff here too.
?X:Some OS's will have a dash in their $osname
?X:e.g. Android is known as linux-android
?X:The
 preprocessor will interpret the dash as a minus
./tr '-' '_' <<EOSH >>Cppsym.know
$osname
EOSH
./tr '[a-z]' '[A-Z]' < Cppsym.know > Cppsym.a
./tr '[A-Z]' '[a-z]' < Cppsym.know > Cppsym.b
$cat Cppsym.know > Cppsym.c
$cat Cppsym.a Cppsym.b Cppsym.c | $tr ' ' $trnl | $sort | $uniq > Cppsym.know
$rm -f Cppsym.a Cppsym.b Cppsym.c
cat <<EOSH > Cppsym
$startsh
if $test \$# -gt 0; then
   echo \$* | $tr " " "$trnl" | ./Cppsym.try > Cppsym.got
   if $test -s Cppsym.got; then
 $rm -f Cppsym.got
 exit 0
   fi
   $rm -f Cppsym.got
   exit 1
else
   $tr " " "$trnl" | ./Cppsym.try
   exit 0
fi
EOSH
chmod +x Cppsym
$eunicefix Cppsym
?X: The below awk script will die a horrible death if
?X: some of the tested symbols are not long ints.
?X: Also, we do not make difference between just defined and defined zero.
cat <<EOSH > Cppsym.try
```

```
$startsh
cat <<'EOCP' > try.c
#include <stdio.h>
#if cpp_stuff == 1
#define STRINGIFY(a)    "a"
#endif
#if cpp_stuff == 42
#define StGiFy(a)  #a
#define STRINGIFY(a)
    StGiFy(a)
#endif
#if $cpp_stuff != 1 && $cpp_stuff != 42
#   include "Bletch: How does this C preprocessor stringify macros?"
#endif
int main() {
EOCP
?X: The length($1) command guards against possible empty entries.
?X: The awk snippet is know to give heartburn to UNICOS/mk awk.
$awk \\
EOSH
cat <<'EOSH' >> Cppsym.try
'length($1) > 0 {
   printf "#ifdef %s\nprintf(\"%s=%%s\\n\", STRINGIFY(%s));\n#endif\n", $1, $1, $1
   printf "#ifdef _%s\nprintf(\"_%s=%%s\\n\", STRINGIFY(_%s));\n#endif\n", $1, $1, $1
   printf "#ifdef __%s\nprintf(\"__%s=%%s\\n\", STRINGIFY(__%s));\n#endif\n", $1, $1, $1
   printf "#ifdef __%s__\nprintf(\"__%s__=%%s\\n\", STRINGIFY(__%s__));\n#endif\n", $1, $1, $1
}' >> try.c
echo 'return 0;}' >> try.c
EOSH
cat <<EOSH >> Cppsym.try
ccflags="$ccflags"
case "$osname-$gccversion" in
irix-) ccflags="\$ccflags -woff 1178" ;;
os2-*) ccflags="\$ccflags -Zlinker /PM:VIO" ;;
esac
$cc -o try -Dcpp_stuff=$cpp_stuff $optimize \$ccflags $ldflags try.c $libs 2>/dev/null
 && $run ./try | $sed 's/ /\\\ /g'
EOSH
chmod +x Cppsym.try
$eunicefix Cppsym.try
./Cppsym < Cppsym.know | $sort | $uniq > Cppsym.true
: Add in any Linux cpp "predefined macros":
case "$osname::$gccversion" in
 *linux*::*.*|*gnukfreebsd*::*.*|gnu::*.*)
   tHdrH=_tmpHdr
   rm -f $tHdrH'.h' $tHdrH
   touch $tHdrH'.h'
   # Filter out macro arguments, such as Linux's __INT8_C(c)
```

```
   if $cpp -dM $tHdrH'.h' > $tHdrH'_cppsym.h' && [ -s $tHdrH'_cppsym.h' ]; then
      sed -e 's/#define[\ \  ]*//;s/[\ \      ].*$//' -e 's/(.*//' <$tHdrH'_cppsym.h' >$tHdrH'_cppsym.real'
      if [ -s $tHdrH'_cppsym.real' ]; then
   cat $tHdrH'_cppsym.real' Cppsym.know | sort | uniq | ./Cppsym | sort | uniq > Cppsym.true
      fi
   fi
   rm -f $tHdrH'.h' $tHdrH'_cppsym.h' $tHdrH'_cppsym.real'
 ;;
esac
: now check the C compiler for additional symbols
?X: suggested by Jarkko Hietaniemi <jhi@snakemail.hut.fi>, thanks!
postprocess_cc_v="
case "$osname" in
aix) postprocess_cc_v="|$tr , ' '" ;;
esac
$cat >ccsym
 <<EOS
$startsh
$cat >tmp.c <<EOF
extern int foo;
EOF
for i in \`$cc -v -c tmp.c 2>&1 $postprocess_cc_v\`
do
 case "\$i" in
 -D*) echo "\$i" | $sed 's/^-D//';;
 -A*) $test "$gccversion" && echo "\$i" | $sed 's/^-A//' | $sed 's/\(.*\)(\(.*\))/\1=\2/';;
 esac
done
$rm_try
EOS
postprocess_cc_v="
chmod +x ccsym
$eunicefix ccsym
./ccsym > ccsym1.raw
?X: AIX complains if $uniq is passed an empty file.  ($sort apparently
?X: doesn't care.)  --AD  14 July 1998
if $test -s ccsym1.raw; then
   $sort ccsym1.raw | $uniq >ccsym.raw
else
   mv ccsym1.raw ccsym.raw
fi

?X: canonicalize symbols for easier sort/uniq/comm usage: append =1 if no = sign
?X: the awk script must be on two lines for older awk programs, sigh! -- ADO
$awk '/\=/ { print $0; next }
 { print $0"=1" }' ccsym.raw >ccsym.list
$comm -13 Cppsym.true ccsym.list >ccsym.own
$comm -12 Cppsym.true ccsym.list >ccsym.com
```

```
$comm -23 Cppsym.true ccsym.list >ccsym.cpp
also=''
if $test -z ccsym.raw; then
 echo "Your C compiler doesn't seem
 to define any symbols!" >&4
 echo " "
 echo "However, your C preprocessor defines the following symbols:"
 $cat Cppsym.true
 ccsymbols=''
 cppsymbols=`$cat Cppsym.true`
 cppsymbols=`echo $cppsymbols`
 cppccsymbols="$cppsymbols"
else
 if $test -s ccsym.com; then
  echo "Your C compiler and pre-processor define these symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.com
  also='also '
  symbols='ones'
  cppccsymbols=`$cat ccsym.com`
  cppccsymbols=`echo $cppccsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.cpp; then
  $test "$also" && echo " "
  echo "Your C pre-processor ${also}defines the following symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.cpp
  also='further '
  cppsymbols=`$cat ccsym.cpp`
  cppsymbols=`echo $cppsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.own; then
  $test "$also" && echo " "
  echo "Your C compiler ${also}defines the following cpp symbols:"
  $sed -e 's/\(..*\)=1/\1/' ccsym.own
  $sed -e 's/\(..*\)=.*/\1/' ccsym.own | $uniq >>Cppsym.true
  ccsymbols=`$cat
 ccsym.own`
  ccsymbols=`echo $ccsymbols`
  $test "$silent" || sleep 1
 fi
fi

: add -D_FORTIFY_SOURCE if feasible and not already there
case "$gccversion" in
[456789].*|[1-9][0-9]*) case "$optimize$ccflags" in
 *-O*) case "$ccflags$cppsymbols" in
  *_FORTIFY_SOURCE=*) # Don't add it again.
```

```
  echo "You seem to have -D_FORTIFY_SOURCE already, not adding it." >&4
  ;;
 *) echo "Adding -D_FORTIFY_SOURCE=2 to ccflags..." >&4
  ccflags="$ccflags -D_FORTIFY_SOURCE=2"
  ;;
 esac
 ;;
*) echo "You have gcc 4.* or later but not optimizing, not adding -D_FORTIFY_SOURCE." >&4
 ;;
esac
;;
*) echo "You seem not to have gcc 4.* or later, not adding -D_FORTIFY_SOURCE." >&4
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Cppsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_nolnbuf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_nolnbuf.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  14:46:07  ram
?RCS: patch23: avoid looping in the "see that again?" prompt (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_nolnbuf: test +cc cat rm Setvar Myread
?MAKE: -pick add $@ %<
?S:d_nolnbuf:
?S: This variable conditionally defines the NOLINEBUF symbol, which
?S: indicates to the C program that stdout is not buffered, so that
?S: the
 program can call setbuf() or setlinebuf() for efficiency.
?S:.
?C:NOLINEBUF:
?C: This symbol, if defined, indicates that stdout is not buffered, so that
?C: the program can call setbuf() or setlinebuf() for efficiency.
?C:.
```

```
?H:#$d_nolnbuf NOLINEBUF /**/
?H:.
?T:xxx
?F:!blurfl
?LINT:set d_nolnbuf
: check for buffering of stdout
echo " "
case "$d_nolnbuf" in
")
 $cat <<'EOT' >blurfl.c
#include <stdio.h>
int main()
{
 int i;

 for (i = 0; i < 5; i++) {
  putchar(i+'a');
  sleep(1);
 }
 putchar('\n');
}
EOT
 $cc -o blurfl blurfl.c >/dev/null 2>&1;
 $rm -f blurfl.c
 $cat >&4 <<'EOM'
Checking for buffering of stdout to terminal.

Observe the following characters as they are printed out, to see whether they
print out all at once, or with a 1 second pause between each of them.  If they
print out one by one, you don't have buffering.  If they print together (after
about a 5 second pause), you do have buffering.

EOM
 dflt='Type return to start printing the test characters'
 rp="
 .
 ./myread
 xxx=y
 while $test "$xxx" = 'y'; do
  ./blurfl 1>&4
  dflt=n
  rp='Would you like to see that again?'
  . ./myread
  case "$ans" in
  [yY]*) xxx="y";;
  *) xxx="n";;
  esac
 done
```

```
 dflt=y
 rp="Do you have buffering (printed all at once)?"
 . ./myread
 case "$ans" in
 n*) val="$define";;
 *)  val="$undef";;
 esac
 ;;
*)
 case "$d_nolnbuf" in
 "$define") dflt=n;;
 *) dflt=y;;
 esac
 rp="Do you have buffering on stdout to terminals?"
 . ./myread
 case "$ans" in
 n*) val="$define";;
 *)  val="$undef";;
 esac
 ;;
esac
set d_nolnbuf
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_nolnbuf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitearch.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitearch.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:21:30  ram
?RCS: patch61: created
?RCS:
?MAKE:sitearch sitearchexp installsitearch d_sitearch: cat sed Getfile \
 Oldconfig Setprefixvar Prefixit test archname sitelib
```

```
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitearch="
?S:sitearch:
?S: This variable contains the eventual
 value of the SITEARCH symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S: The standard distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: architecture-dependent modules in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitearchexp="
?S:sitearchexp:
?S: This variable is the ~name expanded version of sitearch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installsitearch="
?S:installsitearch:
?S: This variable is really the same as sitearchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?D:d_sitearch="
?S:d_sitearch:
?S: This variable conditionally defines SITEARCH to hold the
 pathname
?S: of architecture-dependent library files for $package.  If
?S: $sitearch is the same as $archlib, then this is set to undef.
?S:.
?C:SITEARCH:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: After perl has been installed, users may install their own local
?C: architecture-dependent modules in this directory with
?C:  MakeMaker Makefile.PL
?C: or equivalent.  See INSTALL for details.
?C:.
?C:SITEARCH_EXP:
?C: This symbol contains the ~name expanded version of SITEARCH, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
```

```
?H:#$d_sitearch SITEARCH "$sitearch"  /**/
?H:#$d_sitearch SITEARCH_EXP "$sitearchexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installsitearch
?LINT:set
 sitearch
?LINT:set sitearchexp
: determine where site specific architecture-dependent libraries go.
: sitelib  default is /usr/local/lib/perl5/site_perl/$version
: sitearch default is /usr/local/lib/perl5/site_perl/$version/$archname
: sitelib may have an optional trailing /share.
case "$sitearch" in
") dflt=`echo $sitelib | $sed 's,/share$,,'`
 dflt="$dflt/$archname"
 ;;
*) dflt="$sitearch"
 ;;
esac
set sitearch sitearch none
eval $prefixit
$cat <<EOM

The installation process will also create a directory for
architecture-dependent site-specific extensions and modules.

EOM
fn=d~+
rp='Pathname for the site-specific architecture-dependent library files?'
. ./getfile
prefixvar=sitearch
. ./setprefixvar
if $test X"$sitearch" = X"$sitelib"; then
 d_sitearch="$undef"
else
 d_sitearch="$define"
fi

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitearch.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: maildir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: maildir.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:21:56  ram
?RCS: patch15: now also looks under /var/mail for BSD/386
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:maildir maildirexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:maildir:
?S: This variable contains the name of the directory in which mail is
?S: spooled. Programs using this variable must be prepared to deal with
?S: ~name
 substitutions.
?S:.
?S:maildirexp:
?S: This is the same as the maildir variable, but is filename expanded
?S: at configuration time, for programs not willing to deal with it at
?S: run-time.
?S:.
: determine where mail is spooled
case "$maildir" in
") dflt=`./loc . /usr/spool/mail /usr/spool/mail /usr/mail /var/mail`;;
*) dflt="$maildir";;
esac
echo " "
fn=d~
rp='Where is yet-to-be-read mail spooled?'
. ./getfile
maildir="$ans"
maildirexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/maildir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libnm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libnm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:08:26  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libnm: test Loc libpth _a
?MAKE: -pick add $@ %<
?S:libnm:
?S: This variable contains the argument to pass to the loader in order
?S: to get the new math library routines.  If there is no new math
?S: library, it is null.
?S:.
?T:ans
?O:
 use libswanted='-lnm' instead (see libs.U).
: see if we should include -lnm
echo " "
if $test -r /usr/lib/libnm$_a || $test -r /usr/local/lib/libnm$_a ; then
 echo "New math library found." >&4
 libnm='-lnm'
else
 ans=`./loc libnm$_a x $libpth`
 case "$ans" in
 x)
  echo "No nm library found--the normal math library will have to do." >&4
  libnm=''
  ;;
 *)
  echo "New math library found in $ans." >&4
  libnm="$ans"
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libnm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_xdrs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_xdrs.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_xdrs: cat Csym Setvar
?MAKE: -pick add $@ %<
?S:d_xdrs:
?S: This symbol conditionally defines HAS_XDRS which indicates to the C
?S: program that XDR serialization routines are available.
?S:.
?C:HAS_XDRS (XDRS):
?C: This symbol if defined indicates to the C program that the XDR
?C: serialization routines are available to transfer data
 accross
?C: various architectures.
?C:.
?H:#$d_xdrs HAS_XDRS /**/
?H:.
?LINT:set d_xdrs
: see if XDR is available
echo " "
if set xdr_int val -f d_xdrs; eval $csym; $val; then
 echo "Ahh! You have XDR routines for network communications." >&4
 val="$define"
else
 $cat >&4 <<EOM
Sigh! You do not have XDR routines -- Network communications may be hazardous.
EOM
 val="$undef"
fi
set d_xdrs
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_xdrs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: voidflags.U,v 3.0.1.2 1997/02/28 16:27:58 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: voidflags.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:27:58  ram
?RCS: patch61: don't prompt them if the void support is high enough for us
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:37:44  ram
?RCS: patch45: cosmetic change to avoid spurious blank lines when using -s
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:voidflags defvoidused: cat rm_try compiler_warning +cc +ccflags package \
 Oldconfig
 Myread i_stdlib
?MAKE: -pick add $@ %<
?S:voidflags:
?S: This variable contains the eventual value of the VOIDFLAGS symbol,
?S: which indicates how much support of the void type is given by this
?S: compiler.  See VOIDFLAGS for more info.
?S:.
?S:defvoidused:
?S: This variable contains the default value of the VOIDUSED symbol (15).
?S:.
?X: Exceptionally, we have to explicitly alias the symbol name for
?X: config_h.SH, otherwise the comment would not appear.
?C:VOIDFLAGS ~ %<:
?C: This symbol indicates how much support of the void type is given by this
?C: compiler.  What various bits mean:
?C:
?C:     1 = supports declaration of void
?C:     2 = supports arrays of pointers to functions returning void
?C:     4 = supports comparisons between pointers to void functions and
?C:      addresses of void functions
?C:     8 = supports declaration of generic void pointers
?C:
?C: The package designer should define VOIDUSED to indicate the requirements
?C: of the package.  This can be
 done either by #defining VOIDUSED before
?C: including config.h, or by defining defvoidused in Myinit.U.  If the
?C: latter approach is taken, only those flags will be tested.  If the
?C: level of void support necessary is not present, defines void to int.
?C:.
?H:?%<:#ifndef VOIDUSED
?H:?%<:#define VOIDUSED $defvoidused
?H:?%<:#endif
?H:?%<:#define VOIDFLAGS $voidflags
```

```
?H:?%<:#if (VOIDFLAGS & VOIDUSED) != VOIDUSED
?H:?%<:#define void int  /* is void to be avoided? */
?H:?%<:#define M_VOID   /* Xenix strikes again */
?H:?%<:#endif
?H:.
?INIT:: full support for void wanted by default
?INIT:defvoidused=15
?INIT:
?LINT:known void M_VOID VOIDUSED
: check for void type
echo " "
echo "Checking to see how well your C compiler groks the void type..." >&4
case "$voidflags" in
")
 $cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#if TRY & 1
void sub() {
#else
sub() {
#endif
 extern void moo(); /* function returning void */
 void (*goo)();  /* ptr to func returning
 void */
#if TRY & 8
 void *hue;  /* generic ptr */
#endif
#if TRY & 2
 void (*foo[10])();
#endif

#if TRY & 4
 if(goo == moo) {
  exit(0);
 }
#endif
 exit(0);
}
int main() { sub(); }
EOCP
?X: This unit used to use cc -S in those tests to try to speed up things, but
?X: unfortunately, AIX 3.2 does not support this option.
 if $cc $ccflags -c -DTRY=$defvoidused try.c >.out 2>&1 ; then
  voidflags=$defvoidused
 echo "Good.  It appears to support void to the level $package wants.">&4
```

```
  if $compiler_warning .out >/dev/null 2>&1; then
   echo "However, you might get some warnings that look like this:"
   $cat .out
  fi
 else
echo "Hmm, your compiler has some difficulty with void. Checking further..." >&4
  if $cc $ccflags -c -DTRY=1 try.c >/dev/null 2>&1; then
   echo "It supports 1..."
   if $cc $ccflags -c -DTRY=3 try.c >/dev/null 2>&1; then
    echo "It also supports 2..."
    if $cc $ccflags -c -DTRY=7 try.c >/dev/null 2>&1; then
     voidflags=7
     echo "And it supports 4 but not 8
 definitely."
    else
     echo "It doesn't support 4..."
     if $cc $ccflags -c -DTRY=11 try.c >/dev/null 2>&1; then
      voidflags=11
      echo "But it supports 8."
     else
      voidflags=3
      echo "Neither does it support 8."
     fi
    fi
   else
    echo "It does not support 2..."
    if $cc $ccflags -c -DTRY=13 try.c >/dev/null 2>&1; then
     voidflags=13
     echo "But it supports 4 and 8."
    else
     if $cc $ccflags -c -DTRY=5 try.c >/dev/null 2>&1; then
      voidflags=5
      echo "And it supports 4 but has not heard about 8."
     else
      echo "However it supports 8 but not 4."
     fi
    fi
   fi
  else
   echo "There is no support at all for void."
   voidflags=0
  fi
 fi
esac
?X: Only prompt user if support does not match the level we want
case "$voidflags" in
"$defvoidused") ;;
*) $cat >&4 <<'EOM'
```

```
 Support flag bits are:
   1: basic void declarations.
   2: arrays of pointers to functions returning void.
   4: operations between pointers to and addresses
 of void functions.
   8: generic void pointers.
EOM
 dflt="$voidflags";
 rp="Your void support flags add up to what?"
 . ./myread
 voidflags="$ans"
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/voidflags.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fmin: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmin:
?S: This variable conditionally defines the HAS_FMIN symbol, which
?S: indicates to the C program that the fmin() routine is available.
?S:.
?C:HAS_FMIN:
?C: This symbol, if defined, indicates that the fmin routine is
?C: available to do the minimum function.
?C:.
?H:#$d_fmin HAS_FMIN  /**/
?H:.
?LINT:set d_fmin
: see if fmin exists
set fmin d_fmin
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fmin.U
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```
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```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_clearenv: Inlibc
?MAKE: -pick add $@ %<
?S:d_clearenv:
?S: This variable conditionally defines the HAS_CLEARENV symbol, which
?S: indicates to the C program that the clearenv () routine is available.
?S:.
?C:HAS_CLEARENV:
?C: This symbol, if defined, indicates that the clearenv () routine is
?C: available for use.
?C:.
?H:#$d_clearenv HAS_CLEARENV  /**/
?H:.
?LINT:set d_clearenv
: see if clearenv exists
set clearenv d_clearenv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_clearenv.U
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?RCS:
?MAKE:d_getaddrinfo: Inlibc
?MAKE: -pick add $@ %<
?S:d_getaddrinfo:
?S: This variable conditionally defines the HAS_GETADDRINFO symbol,
?S: which indicates to the C program that the getaddrinfo() function
?S: is available.
?S:.
?C:HAS_GETADDRINFO:
?C: This symbol, if defined, indicates that the getaddrinfo() function
?C: is available for use.
?C:.
?H:#$d_getaddrinfo HAS_GETADDRINFO  /**/
?H:.
?LINT:set d_getaddrinfo
: see if getaddrinfo exists
set getaddrinfo d_getaddrinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getaddrinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: models.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: models.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:13:17  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:39  ram
?RCS: patch6: added default for large
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:models split small medium large huge: test cat Myread sysman Oldconfig \
 Loc contains rm
?MAKE: -pick add $@ %<
?S:models:
?S: This variable contains
 the list of memory models supported by this
?S: system.  Possible component values are none, split, unsplit, small,
?S: medium, large, and huge.  The component values are space separated.
?S:.
?S:split:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program that will run in separate I and D space, for those
?S: machines that support separation of instruction and data space.  It is
?S: up to the Makefile to use this.
?S:.
?S:small:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a small memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:medium:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a medium memory model.  If the
?S: medium model is not supported, contains the flag to produce large
```

```
?S: model programs.  It is up to the Makefile to use this.
?S:.
?S:large:
?S: This variable contains a flag
 which will tell the C compiler and loader
?S: to produce a program running with a large memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:huge:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a huge memory model.  If the
?S: huge model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?T:unsplit tans modelcc
?F:!pdp11
?D:large=''
?LINT:extern cc
: see what memory models we can support
case "$models" in
'')
?X: We may not use Cppsym or we get a circular dependency through cc.
?X: But this should work regardless of which cc we eventually use.
 $cat >pdp11.c <<'EOP'
int main() {
#ifdef pdp11
 exit(0);
#else
 exit(1);
#endif
}
EOP
?X: Run cc in a subshell in case they don't have a 'cc' command.
?X: Presumably they do have gcc or something.
 case "$cc" in
 '') modelcc="$cc" ;;
 *) modelcc="cc" ;;
 esac
 ( $modelcc -o pdp11 pdp11.c ) >/dev/null 2>&1
 if
 $test -f pdp11 && ./pdp11 2>/dev/null; then
  dflt='unsplit split'
 else
  tans=`./loc . X /lib/small /lib/large /usr/lib/small /usr/lib/large /lib/medium /usr/lib/medium /lib/huge`
  case "$tans" in
  X) dflt='none';;
  *) if $test -d /lib/small || $test -d /usr/lib/small; then
    dflt='small'
```

```
   else
    dflt=''
   fi
   if $test -d /lib/medium || $test -d /usr/lib/medium; then
    dflt="$dflt medium"
   fi
   if $test -d /lib/large || $test -d /usr/lib/large; then
    dflt="$dflt large"
   fi
   if $test -d /lib/huge || $test -d /usr/lib/huge; then
    dflt="$dflt huge"
   fi
  esac
 fi;;
*) dflt="$models";;
esac
$cat <<EOM

Some systems have different model sizes.  On most systems they are called
small, medium, large, and huge.  On the PDP11 they are called unsplit and
split.  If your system doesn't support different memory models, say "none".
If you wish to force everything to one memory model, say "none" here and
put the appropriate flags later when it asks you for other
 cc and ld flags.
Venix systems may wish to put "none" and let the compiler figure things out.
(In the following question multiple model names should be space separated.)

The default for most systems is "none".

EOM
rp="Which memory models are supported?"
. ./myread
models="$ans"

case "$models" in
none)
 small=''
 medium=''
 large=''
 huge=''
 unsplit=''
 split=''
 ;;
*split)
 case "$split" in
 '') if $contains '\-i' $sysman/ld.1 >/dev/null 2>&1 || \
    $contains '\-i' $sysman/cc.1 >/dev/null 2>&1; then
   dflt='-i'
```

```
 else
  dflt='none'
 fi;;
*) dflt="$split";;
esac
rp="What flag indicates separate I and D space?"
. ./myread
tans="$ans"
case "$tans" in
none) tans=";;
esac
split="$tans"
unsplit=";;
*large*|*small*|*medium*|*huge*)
 case "$models" in
 *large*)
  case "$large" in
  ") dflt='-Ml';;
  *) dflt="$large";;
  esac
 rp="What flag indicates large model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 large="$tans";;
 *) large=";;
 esac
 case "$models"
 in
 *huge*) case "$huge" in
  ") dflt='-Mh';;
  *) dflt="$huge";;
  esac
  rp="What flag indicates huge model?"
  . ./myread
  tans="$ans"
  case "$tans" in
  none) tans=";
  esac
  huge="$tans";;
 *) huge="$large";;
 esac
 case "$models" in
 *medium*) case "$medium" in
  ") dflt='-Mm';;
  *) dflt="$medium";;
```

```
  esac
  rp="What flag indicates medium model?"
  . ./myread
  tans="$ans"
  case "$tans" in
  none) tans=";
  esac
  medium="$tans";;
 *) medium="$large";;
 esac
 case "$models" in
 *small*) case "$small" in
  ") dflt='none';;
  *) dflt="$small";;
  esac
  rp="What flag indicates small model?"
  . ./myread
  tans="$ans"
  case "$tans" in
  none) tans=";
  esac
  small="$tans";;
 *) small=";;
 esac
 ;;
*)
 echo "Unrecognized memory models--you may have to edit Makefile.SH" >&4
 ;;
esac
$rm -f pdp11.* pdp11
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/models.U
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```
?RCS: $Id: cpp_trad.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?MAKE:cpp_trad: cpp cat contains rm
?MAKE: -pick add $@ %<
```

```
?S:cpp_trad:
?S: This variable contains the program to run to get traditional C
?S: preprocessor semantics and not ISO C semantics: we want something
?S: that knows as little about C as possible to use as a more general
?S: purpose preprocessor.
?S:.
?F:!foo.c !foo.cpp
: how do we get traditional cpp semantics?
echo " "
echo "Checking to see how to get traditional cpp semantics..."
 >&4
$cat >foo.c <<'EOF'
#define A(x) x
#define B(y) y
A(a)B(b)
EOF
if $cpp foo.c >foo.cpp; $contains ab foo.cpp >/dev/null 2>&1; then
 echo "Plain '$cpp' works just fine."
 cpp_trad="$cpp"
elif $cpp -traditional foo.c >foo.cpp; \
 $contains ab foo.cpp >/dev/null 2>&1; then
 echo "We'll use '$cpp -traditional' to get proper semantics."
 cpp_trad="$cpp -traditional"
else
 echo "I don't know how to get traditional semantics with '$cpp'." >&4
 cpp_trad="$cpp"
fi
$rm -f foo.c foo.cpp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cpp_trad.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_lroundl: Inlibc
?MAKE: -pick add $@ %<
?S:d_lroundl:
?S: This variable conditionally defines the HAS_LROUNDL symbol, which
?S: indicates to the C program that the lroundl() routine is available
?S: to return the integral value nearest to x away from zero.
?S:.
?C:HAS_LROUNDL:
?C: This symbol, if defined, indicates that the lroundl routine is
?C: available to return the nearest integral value away from zero of
?C: the long double argument value.
?C:.
```

```
?H:#$d_lroundl HAS_LROUNDL  /**/
?H:.
?LINT:set d_lroundl
: see if lroundl exists
set lroundl d_lroundl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lroundl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: fpu.U,v 3.0 1993/08/18 12:08:10 ram Exp $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: fpu.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?LINT: empty
?X:?MAKE:fpu: test cat cc Myread
?X:?MAKE: -pick add $@ %<
?X:?S:fpu (fpunit):
?X:?S: Set to be the compile flag for the local floating point unit.
?X:?S:.
?X:?C:FPU (FPUNIT):
?X:?C: String containing the flags for the local floating point unit.
?X:?C:.
?X:?H:#define FPU "$fpu" /**/
?X:?H:.
?X:: see what floating point compile flags should be used.
?X:fpu=''
?X:if
 $test -r /dev/fpa; then
?X: $cat>fpa.c << GOOP
?X: main(){return(1);}
?X:GOOP
?X: $cc -ffpa -o fpa fpa.c
?X: fpa > fpa.out 2>&1
?X: if $test ! -s fpa.out; then
?X:  dflt='y'
?X:  $cat <<'EOM'
```

```
?X:
?X:You seem to have a sun fpa...  I can compile the code to use the fpa but it will
?X:mean that the code can ONLY run on a machine with a fpa...
?X:
?X:EOM
?X:  rp="Should I compile for fpa?"
?X:  . ./myread
?X:  if $test $ans = "n"; then
?X:   fpu=''
?X:  else
?X:   fpu='-ffpa'
?X:  fi
?X: else
?X:  $cat <<'EOM'
?X:
?X:You have the fpa device but I can't seem to use it.  Maybe you should talk to
?X:your sysadmin about this.  For now, I am not going to compile it in.
?X:
?X:EOM
?X: fi
?X:fi
?X:if $test "$fpu" = ''; then
?X: if $test -r /usr/etc/mc68881version; then
?X:  dflt='y'
?X:  $cat <<'EOM'
?X:
?X:There also seems to be the pieces for a 68881.  If I compile this in, it will
?X:work on almost all Sun 3's except for a few Sun-3/50s without a 68881...
?X:
?X:EOM
?X:  rp="Should
 I compile for a 68881?"
?X:  . ./myread
?X:  if $test $ans = "y"; then
?X:   fpu='-f68881'
?X:  fi
?X: fi
?X:fi
?X:
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/nullified/fpu.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_remainder: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_remainder:
?S: This variable conditionally defines the HAS_REMAINDER symbol, which
?S: indicates to the C program that the remainder() routine is available.
?S:.
?C:HAS_REMAINDER:
?C: This symbol, if defined, indicates that the remainder routine is
?C: available to return the floating-point remainder.
?C:.
?H:#$d_remainder HAS_REMAINDER  /**/
?H:.
?LINT:set d_remainder
: see if remainder exists
set remainder d_remainder
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_remainder.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?X:
?X: This unit checks whether symbolic links are really supported.
?X: We can't rely on d_symlink because that may be listed in the
?X: C library but unimplemented.
?X:
?MAKE:lns: ln rm touch test
?MAKE: -pick add $@ %<
?S:lns:
?S: This variable holds the name of the command to make
?S: symbolic links (if they are supported).
  It can be used
?S: in the Makefile. It is either 'ln -s' or 'ln'
```

```
?S:.
: determine whether symbolic links are supported
echo " "
$rm -f blurfl sym
$touch blurfl
if $ln -s blurfl sym > /dev/null 2>&1 && $test -f sym; then
 echo "Symbolic links are supported." >&4
 lns="$ln -s"
else
 echo "Symbolic links are NOT supported." >&4
 lns="$ln"
fi
$rm -f blurfl sym
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lns.U
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```
?RCS: $Id: charorder.U,v 3.0.1.1 1994/10/29 16:07:08 ram Exp $
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: charorder.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:chorder_int chorder_short chorder_long: Myread cat Compile rm
?MAKE: -pick add $@ %<
?S:chorder_short (d_cos d_bos):
?S: Holds the value describing the byte ordering of characters in a short.
?S: On a Big-Endian machine, that
 would be "c0c1".
?S:.
?S:chorder_int (charoder):
?S: Holds the value describing the byte ordering of characters in an int.
?S: For instance, on a Big-Endian machine, this would be: "c0c1c2c3".
?S:.
?S:chorder_long (d_col d_bol):
?S: Holds the value describing the byte ordering of characters in a long.
```

```
?S: On a 64 bits Big-Endian machine, that would yield: "c0c1c2c3c4c5c6c7".
?S:.
?C:CHAR_ORDER_SHORT:
?C: Holds the byte ordering of characters in a short. It's a string
?C: value like "c0c1" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_INT:
?C: Holds the byte ordering of characters in an int. It's a string
?C: value like "c0c1c2c3" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_LONG:
?C: Holds the byte ordering of characters in a long. It's a string
?C: value like "c0c1c2c3c4c5c6c7" on a 64 bits Big-Endian machine.
?C:.
?H:#define CHAR_ORDER_SHORT "$chorder_short" /* byte order in a short */
?H:#define CHAR_ORDER_INT "$chorder_int" /* byte order in an int */
?H:#define CHAR_ORDER_LONG "$chorder_long"
 /* byte order in a long */
?H:.
?F:!byteorder
: check for character ordering
echo " "
echo "Checking out byte order..." >&4
$cat >byteorder.c <<'EOCP'
#include <stdio.h>

int main(argc, argv)
 int argc;
 char *argv[]; {
 int i;
 int max;
 union {
  short u_s;
  int u_i;
  long u_l;
  char u_c[sizeof(long)];
 } u;
 switch (argv[1][0]) {
 case 'l':
  u.u_l = 0L;
  /* HMS: ASSERT: sizeof(long) < 10. */
  for(i = 0; i < sizeof(long); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(long);
  break;
 case 's':
```

```
  u.u_s = 0;
  /* HMS: ASSERT: sizeof(short) < 10. */
  for(i = 0; i < sizeof(short); ++i) {
   u.u_s *= 0x100L;
   u.u_s += (0xc0 + i);
  }
  max = sizeof(short);
  break;
 case 'i':
  u.u_i = 0;
  /* RAM: ASSERT: sizeof(int) < 10. */
  for(i = 0; i < sizeof(int); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(int);
  break;
 default:
  max = 0;
  break;
 }
 for(i = 0; i < max; i++) {
  printf("%x", u.u_c[i] & 0x00FF);
 }
 printf("\n");
 exit(0);
}
EOCP
set
 byteorder
if eval $compile_ok ; then
 : null statement
@if chorder_short
   chorder_short=`./byteorder s`
@end
@if chorder_int
   chorder_int=`./byteorder i`
@end
@if chorder_long
   chorder_long=`./byteorder l`
@end
else
 $cat <<EOM
(I can't seem to get my test program to work.  Guessing 32 bits big-endian.)
EOM
   chorder_short="c0c1"
   chorder_int="c0c1c2c3"
   chorder_long="c0c1c2c3"
```

```
fi
@if chorder_short
dflt=$chorder_short
rp='What is the order of characters in a short?'
. ./myread
chorder_short="$ans"
@end
@if chorder_int
dflt=$chorder_int
rp='What is the order of characters in an int?'
. ./myread
chorder_int="$ans"
@end
@if chorder_long
dflt=$chorder_long
rp='What is the order of characters in a long?'
. ./myread
chorder_long="$ans"
@end
$rm -f byteorder* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/charorder.U
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```
?RCS: $Id$
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_PRId64 d_PRIi64 d_PRIu64 d_PRIo64 d_PRIx64 d_PRIXU64 \
 sPRId64 sPRIi64 sPRIu64 sPRIo64 sPRIx64 sPRIXU64: \
 quadtype i_inttypes test cat rm_try Setvar Compile run
?MAKE: -pick add $@ %<
?S:d_PRId64:
?S: This variable conditionally defines the PERL_PRId64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit decimal numbers.
?S:.
?S:d_PRIi64:
?S: This variable conditionally defines the PERL_PRIi64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit decimal numbers.
?S:.
?S:d_PRIu64:
?S: This variable conditionally defines the PERL_PRIu64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit unsigned decimal
?S: numbers.
```

?S:.
?S:d_PRIo64:
?S: This variable
 conditionally defines the PERL_PRIo64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit octal numbers.
?S:.
?S:d_PRIx64:
?S: This variable conditionally defines the PERL_PRIx64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit hexadecimal numbers.
?S:.
?S:d_PRIXU64:
?S: This variable conditionally defines the PERL_PRIXU64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit hExADECimAl numbers.
?S: The 'U' in the name is to separate this from d_PRIx64 so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRId64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit decimal numbers (format 'd') for output.
?S:.
?S:sPRIi64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit decimal numbers (format 'i') for output.
?S:.
?S:sPRIu64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit unsigned decimal numbers (format 'u')
 for output.
?S:.
?S:sPRIo64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit octal numbers (format 'o') for output.
?S:.
?S:sPRIx64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit hexadecimal numbers (format 'x') for output.
?S:.
?S:sPRIXU64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit hExADECimAl numbers (format 'X') for output.
?S: The 'U' in the name is to separate this from sPRIx64 so that even
?S: case-blind systems can see the difference.
?S:.
?C:PERL_PRId64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit decimal numbers (format 'd') for output.
?C:.
?C:PERL_PRIi64:

```
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit decimal numbers (format 'i') for output.
?C:.
?C:PERL_PRIu64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit unsigned decimal numbers (format 'u')
 for output.
?C:.
?C:PERL_PRIo64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit octal numbers (format 'o') for output.
?C:.
?C:PERL_PRIx64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit hexadecimal numbers (format 'x') for output.
?C:.
?C:PERL_PRIXU64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit hExADECimAl numbers (format 'X') for output.
?C:.
?H:#$d_PRId64 PERL_PRId64 $sPRId64 /**/
?H:#$d_PRIi64 PERL_PRIi64 $sPRIi64 /**/
?H:#$d_PRIu64 PERL_PRIu64 $sPRIu64 /**/
?H:#$d_PRIo64 PERL_PRIo64 $sPRIo64 /**/
?H:#$d_PRIx64 PERL_PRIx64 $sPRIx64 /**/
?H:#$d_PRIx64 PERL_PRIXU64 $sPRIXU64 /**/
?H:.
?T:yyy
?F:!try
: Check 64bit sizes
echo " "

if $test X"$quadtype" != X; then

echo "Checking how to print 64-bit integers..." >&4

if $test X"$sPRId64" = X -a X"$quadtype" = Xint; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 int q = 12345678901;

 printf("%ld\n", q);
}
EOCP
 set try
 if eval $compile; then
```

```
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64="'d'"; sPRIi64="'i'"; sPRIu64="'u'";
   sPRIo64="'o'"; sPRIx64="'x'"; sPRIXU64="'X'";
   echo "We will use %d."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" = Xlong; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long q = 12345678901;
 printf("%ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64="'ld'"; sPRIi64="'li'"; sPRIu64="'lu'";
   sPRIo64="'lo'"; sPRIx64="'lx'"; sPRIXU64="'lX'";
   echo "We will use %ld."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$i_inttypes" = X"$define" -a X"$quadtype" = Xint64_t; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <inttypes.h>
#include <stdio.h>
int main() {
 int64_t q = 12345678901;
 printf("%" PRId64 "\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
```

```
   sPRId64=PRId64;
 sPRIi64=PRIi64; sPRIu64=PRIu64;
   sPRIo64=PRIo64; sPRIx64=PRIx64; sPRIXU64=PRIXU64;
   echo "We will use the C9X style."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" != X; then
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main() {
 $quadtype q = 12345678901;
 printf("%Ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"Ld"'; sPRIi64='"Li"'; sPRIu64='"Lu"';
   sPRIo64='"Lo"'; sPRIx64='"Lx"'; sPRIXU64='"LX"';
   echo "We will use %Ld."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" = X"long long"; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long long q = 12345678901LL; /* AIX cc requires the LL suffix. */
 printf("%lld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"lld"'; sPRIi64='"lli"'; sPRIu64='"llu"';
   sPRIo64='"llo"'; sPRIx64='"llx"';
```

```
 sPRIXU64='"llX"';
   echo "We will use the %lld style."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" != X; then
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main() {
 $quadtype q = 12345678901;
 printf("%qd\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"qd"'; sPRIi64='"qi"'; sPRIu64='"qu"';
   sPRIo64='"qo"'; sPRIx64='"qx"'; sPRIXU64='"qX"';
   echo "We will use %qd."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X; then
 echo "Cannot figure out how to print 64-bit integers." >&4
fi
$rm_try

fi

case "$sPRId64" in
") d_PRId64="$undef"; d_PRIi64="$undef"; d_PRIu64="$undef";
 d_PRIo64="$undef"; d_PRIx64="$undef"; d_PRIXU64="$undef";
 ;;
*) d_PRId64="$define"; d_PRIi64="$define"; d_PRIu64="$define";
 d_PRIo64="$define"; d_PRIx64="$define"; d_PRIXU64="$define";
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/quadfio.U

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```
?RCS: $Id: d_getprotobyname_r.U,v 0RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotobyname_r getprotobyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotobyname_r:
?S: This variable conditionally defines the HAS_GETPROTOBYNAME_R symbol,
?S: which indicates to the C program that the getprotobyname_r()
?S: routine is available.
?S:.
?S:getprotobyname_r_proto:
?S: This variable encodes the prototype of getprotobyname_r.
?S: It is zero if d_getprotobyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobyname_r
?S: is defined.
?S:.
?C:HAS_GETPROTOBYNAME_R:
?C: This symbol, if
 defined, indicates that the getprotobyname_r routine
?C: is available to getprotobyname re-entrantly.
?C:.
?C:GETPROTOBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getprotobyname_r.
?C: It is zero if d_getprotobyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobyname_r
?C: is defined.
?C:.
?H:#$d_getprotobyname_r HAS_GETPROTOBYNAME_R /**/
?H:#define GETPROTOBYNAME_R_PROTO $getprotobyname_r_proto /**/
?H:.
?T:try hdrs d_getprotobyname_r_proto
: see if getprotobyname_r exists
set getprotobyname_r d_getprotobyname_r
eval $inlibc
case "$d_getprotobyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotobyname_r_proto:$usethreads" in
 ":define") d_getprotobyname_r_proto=define
  set d_getprotobyname_r_proto getprotobyname_r $hdrs
```

```
 eval $hasproto ;;
*) ;;
esac
case "$d_getprotobyname_r_proto" in
define)
case "$getprotobyname_r_proto" in
"|0) try='int getprotobyname_r(const char*, struct
protoent*, char*, size_t, struct protoent**);'
./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=I_CSBWR ;;
esac
case "$getprotobyname_r_proto" in
"|0) try='struct protoent* getprotobyname_r(const char*, struct protoent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=S_CSBI ;;
esac
case "$getprotobyname_r_proto" in
"|0) try='int getprotobyname_r(const char*, struct protoent*, struct protoent_data*);'
./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=I_CSD ;;
esac
case "$getprotobyname_r_proto" in
"|0) d_getprotobyname_r=undef
 getprotobyname_r_proto=0
 echo "Disabling getprotobyname_r, cannot determine prototype." >&4 ;;
* ) case "$getprotobyname_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getprotobyname_r_proto="REENTRANT_PROTO_$getprotobyname_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getprotobyname_r has no prototype, not using it." >&4 ;;
 esac
 d_getprotobyname_r=undef
 getprotobyname_r_proto=0
 ;;
esac
;;
*) getprotobyname_r_proto=0
;;
esac

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotobyname_r.U
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?RCS: $Id$
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:issymlink: lns test rm
?MAKE: -pick add $@ %<
?S:issymlink:
?S: This variable holds the test command to test for a symbolic link
?S: (if they are supported).  Typical values include 'test -h' and
?S: 'test -L'.
?S:.
?T:pth p
?LINT:change PATH test
?LINT:extern newsh
: determine whether symbolic links are supported
echo
 " "
case "$lns" in
*"ln"*" -s")
 echo "Checking how to test for symbolic links..." >&4
 $lns blurfl sym
 if $test "X$issymlink" = X; then
?X:
?X: In some AIX 4 versions the (ksh) builtin test (-h) is broken.
?X:
  case "$newsh" in
  ") sh     -c "PATH= test -h sym" >/dev/null 2>&1 ;;
  *)  $newsh -c "PATH= test -h sym" >/dev/null 2>&1 ;;
  esac
  if test $? = 0; then
   issymlink="test -h"
  else
   echo "Your builtin 'test -h' may be broken." >&4
   case "$test" in
   /*) ;;
   *) pth=`echo $PATH | sed -e "s/$p_/ /g"`
    for p in $pth
    do
```

```
    if test -f "$p/$test"; then
     test="$p/$test"
     break
    fi
   done
   ;;
  esac
  case "$test" in
  /*)
   echo "Trying external '$test -h'." >&4
   issymlink="$test -h"
   if $test ! -h sym >/dev/null 2>&1; then
    echo "External '$test -h' is broken, too." >&4
    issymlink="
   fi
   ;;
  *) issymlink=" ;;
  esac
 fi
fi
if $test "X$issymlink" = X; then
 if $test -L sym 2>/dev/null; then
  issymlink="$test
-L"
  echo "The builtin '$test -L' worked." >&4
 fi
fi
if $test "X$issymlink" != X; then
 echo "You can test for symbolic links with '$issymlink'." >&4
else
 echo "I do not know how you can test for symbolic links." >&4
fi
$rm -f blurfl sym
;;
*) echo "No symbolic links, so not testing for their testing..." >&4
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/issymlink.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: gidtype.U,v 3.0.1.3 1994/08/29 16:21:44 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: gidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:21:44  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS: patch32: removed useless usage of Setvar (for now)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:21:07  ram
?RCS: patch27: added lint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:01:51  ram
?RCS: patch23: protected gidtype setting via setvar (ADO)
?RCS: patch23: made Gid_t comment more explicit (ADO)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:08:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:gidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:gidtype:
?S: This variable defines Gid_t to be something like gid_t, int,
?S: ushort, or whatever type is used to declare the return type
?S: of getgid().  Typically, it is the type of group ids in the kernel.
?S:.
?C:Gid_t (GIDTYPE):
?C: This symbol holds the return type of getgid() and the type of
?C: argument to setrgid() and related functions.  Typically,
?C: it is the type of group ids in the kernel. It can be int, ushort,
?C: gid_t, etc... It may be necessary to include <sys/types.h> to get
?C: any typedef'ed information.
?C:.
?H:#define Gid_t $gidtype  /* Type for getgid(), etc... */
?H:.
?T:xxx
: see what type gids are declared as in the kernel
echo " "
echo "Looking for the type for group ids returned by getgid()."
set gid_t gidtype xxx stdio.h sys/types.h
eval $typedef
case "$gidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep
 'groups\[NGROUPS\];' "$xxx" 2>/dev/null` unsigned short
 case $1 in
```

```
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$gidtype";;
esac
case "$gidtype" in
gid_t) echo "gid_t found." ;;
*) rp="What is the type for group ids returned by getgid()?"
 . ./myread
 gidtype="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidtype.U
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```
?RCS: $Id: d_rusage.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rusage.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: We may need to include <sys/resource.h> and <sys/time.h> FIXME
?X:INC: i_sysresrc i_systime
?MAKE:d_rusage: Inlibc
?MAKE: -pick add $@ %<
?S:d_rusage (d_getrusg):
?S: This variable conditionally defines the HAS_GETRUSAGE symbol, which
?S: indicates that the getrusage() routine exists.  The getrusage() routine
?S: supports sub-second accuracy
 for process cpu accounting. You may need
?S: to include <sys/resource.h> and <sys/time.h>.
?S:.
?C:HAS_GETRUSAGE (RUSAGE GETRUSAGE):
?C: This symbol, if defined, indicates that the getrusage() routine is
?C: available to get process statistics with a sub-second accuracy.
?C: Inclusion of <sys/resource.h> and <sys/time.h> may be necessary.
?C:.
```

```
?H:#$d_rusage HAS_GETRUSAGE  /**/
?H:.
?LINT:set d_rusage
: see if getrusage exists
set getrusage d_rusage
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rusage.U
No license file was found, but licenses were detected in source scan.

```
# $Id: errnolist.a,v 3.0 1993/08/18 12:04:35 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
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#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Harlan Stenn <harlan@mumps.pfcs.com>
#
# $Log: errnolist.a,v $
# Revision 3.0  1993/08/18 12:04:35  ram
# Baseline for dist 3.0 netwide release.
#
#
# This is a simple-minded awk script to generate an initialization for
# sys_errnolist on systems that don't have it.
# This file now depends only on sys/errno.h error numbers under maxerr being
# in order.  It will complain and die if not.  NOTE: It will still produce
# a compilable output file, even with errors, so you
 must check the output.


BEGIN  {
   format = "\t\"%s\",\n"
   printf("/*\n** This is a generated file.  Do NOT edit it unless you really have to...\n*/\n\n")
   printf("char *sys_errnolist[] = {\n")
   maxerr = 89
  }

$1=="#define" {
   if(count > maxerr || substr($2,1,1) != "E")
    next   # we're not interested
   if($3 < count) { # this is bad
    printf("Fatal error: %s out of order at %s\n",\
```

```
    FILENAME, $2)>"/dev/tty"
    exit 1
   }
   # fill in the blanks
   while($3 > count) {
    dummy=sprintf("EDUMMY%d",count)
    printf(format,dummy)
    count++
   }
   printf(format,$2)
   count++
  }

END  {
   printf("\t0\n};\n")
  }
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.a
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```
?RCS: $Id: d_getnbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnbyaddr: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnbyaddr:
?S: This variable conditionally defines the HAS_GETNETBYADDR symbol, which
?S: indicates to the C program that the getnetbyaddr() routine is available
?S: to look up networks by their IP addresses.
?S:.
?C:HAS_GETNETBYADDR:
?C: This symbol, if defined, indicates that the getnetbyaddr() routine is
?C: available to look up networks by their IP addresses.
?C:.
?H:#$d_getnbyaddr HAS_GETNETBYADDR  /**/
?H:.
?LINT:set d_getnbyaddr
: see if getnetbyaddr exists
set getnetbyaddr d_getnbyaddr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnbyad.U

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```
?RCS: $Id: d_dbl_dig.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dbl_dig.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:28  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dbl_dig: Myread contains cat rm Setvar \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_dbl_dig:
?S: This variable conditionally defines d_dbl_dig if this system's
?S: header files provide DBL_DIG, which is the number of significant
?S: digits in a double precision
 number.
?S:.
?C:HAS_DBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol DBL_DIG, which is the number
?C: of significant digits in a double precision number.  If this
?C: symbol is not defined, a guess of 15 is usually pretty good.
?C:.
?H:#$d_dbl_dig HAS_DBL_DIG /**/
?H:.
?F:!dbl_dig.c
?LINT:set d_dbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >dbl_dig.c <<EOM
#include <limits.h>
#include <float.h>
#ifdef DBL_DIG
printf("Contains DBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < dbl_dig.c >dbl_dig.E 2>/dev/null
if $contains 'DBL_DIG' dbl_dig.E >/dev/null 2>&1; then
```

```
 echo "DBL_DIG found." >&4
 val="$define"
else
 echo "DBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f dbl_dig.?
set d_dbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dbl_dig.U
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```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoll: Inlibc d_longlong Compile cat run
?MAKE: -pick add $@ %<
?S:d_strtoll:
?S: This variable conditionally defines the HAS_STRTOLL symbol, which
?S: indicates to the C program that the strtoll() routine is available.
?S:.
?C:HAS_STRTOLL:
?C: This symbol, if defined, indicates that the strtoll routine is
?C: available to convert strings to long longs.
?C:.
?H:#$d_strtoll HAS_STRTOLL  /**/
?H:.
?T:yyy
?F:!try
: see if strtoll exists
set strtoll d_strtoll
eval $inlibc

case "$d_longlong-$d_strtoll" in
"$define-$define")
 $cat <<EOM
Checking whether your strtoll() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <errno.h>
#ifdef __hpux
#define strtoll __strtoll
```

```
#endif
#ifdef __EMX__
#define strtoll
 _strtoll
#endif
#include <stdio.h>
#include <stdlib.h>
static int bad = 0;
void check(const char *s, long long ell, int een) {
 long long gll;
 errno = 0;
 gll = strtoll(s, 0, 10);
 if (!((gll == ell) && (errno == een)))
  bad++;
}
int main() {
 check(" 1",                                1LL, 0);
 check(" 0",                                0LL, 0);
 check("-1",                               -1LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check(" 9223372036854775807",  9223372036854775807LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check(" 9223372036854775808",  9223372036854775807LL, ERANGE);
 check("-9223372036854775809", -9223372036854775808LL, ERANGE);
 if (!bad)
  printf("ok\n");
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  ok) echo "Your strtoll() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtoll() doesn't seem
 to be working okay.
EOM
     d_strtoll="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtoll="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetbyname_r.U,v 0RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetbyname_r getnetbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetbyname_r:
?S: This variable conditionally defines the HAS_GETNETBYNAME_R symbol,
?S: which indicates to the C program that the getnetbyname_r()
?S: routine is available.
?S:.
?S:getnetbyname_r_proto:
?S: This variable encodes the prototype of getnetbyname_r.
?S: It is zero if d_getnetbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyname_r
?S: is defined.
?S:.
?C:HAS_GETNETBYNAME_R:
?C: This symbol, if defined, indicates that
 the getnetbyname_r routine
?C: is available to getnetbyname re-entrantly.
?C:.
?C:GETNETBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getnetbyname_r.
?C: It is zero if d_getnetbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyname_r
?C: is defined.
?C:.
?H:#$d_getnetbyname_r HAS_GETNETBYNAME_R /**/
?H:#define GETNETBYNAME_R_PROTO $getnetbyname_r_proto /**/
?H:.
?T:try hdrs d_getnetbyname_r_proto
: see if getnetbyname_r exists
set getnetbyname_r d_getnetbyname_r
eval $inlibc
case "$d_getnetbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetbyname_r_proto:$usethreads" in
```

```
":define") d_getnetbyname_r_proto=define
 set d_getnetbyname_r_proto getnetbyname_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_getnetbyname_r_proto" in
define)
case "$getnetbyname_r_proto" in
"|0) try='int getnetbyname_r(const char*, struct netent*, char*, size_t, struct netent**, int*);'
./protochk "$extern_C
$try" $hdrs && getnetbyname_r_proto=I_CSBWRE ;;
esac
case "$getnetbyname_r_proto" in
"|0) try='int getnetbyname_r(const char*, struct netent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=I_CSBI ;;
esac
case "$getnetbyname_r_proto" in
"|0) try='struct netent* getnetbyname_r(const char*, struct netent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=S_CSBI ;;
esac
case "$getnetbyname_r_proto" in
"|0) try='int getnetbyname_r(const char*, struct netent*, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=I_CSD ;;
esac
case "$getnetbyname_r_proto" in
"|0) d_getnetbyname_r=undef
 getnetbyname_r_proto=0
 echo "Disabling getnetbyname_r, cannot determine prototype." >&4 ;;
* ) case "$getnetbyname_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getnetbyname_r_proto="REENTRANT_PROTO_$getnetbyname_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo
"getnetbyname_r has no prototype, not using it." >&4 ;;
 esac
 d_getnetbyname_r=undef
 getnetbyname_r_proto=0
 ;;
esac
;;
*) getnetbyname_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetbyname_r.U
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```
?RCS: $Id: sbrksmart.U,v 3.0.1.2 1995/01/11 15:35:41 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sbrksmart.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:35:41  ram
?RCS: patch45: now sets sbrksmart to undef explicitly when lacking sbrk()
?RCS: patch45: forgot a cast when using return value from sbrk()
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:16:45  ram
?RCS: patch16: created
?RCS:
?MAKE:sbrksmart: cat d_sbrk Compile rm
?MAKE: -pick add $@ %<
?S:sbrksmart:
?S: This variable conditionally defines HAS_SMART_SBRK if the sbrk()
?S: routine honors a negative
 argument to lower the break value.
?S:.
?C:HAS_SMART_SBRK:
?C: This symbol is defined when the sbrk() system call may be used with
?C: a negative argument to lower the break value, therefore releasing
?C: core to the system. If not, you'd probably be better off using the
?C: mmap() system call.
?C:.
?H:#$sbrksmart HAS_SMART_SBRK /**/
?H:.
?T:dumb
?F:!sbrk
: see if sbrk can release core to the kernel
echo " "
case "$d_sbrk" in
"$define")
 echo "Let's see if your sbrk() is smart enough to release core..." >&4
 $cat > sbrk.c <<'EOC'
#define INC 256  /* Small enough to be less than a page size */

int main()
```

```
{
 char *obrk = (char *) sbrk(0);
 char *nbrk;

 nbrk = (char *) sbrk(INC);
 if (nbrk == (char *) -1)
  exit(1); /* Not enough memory */
 if (nbrk != obrk)
  exit(2); /* Unreliable sbrk() */
 nbrk = (char *) sbrk(-INC);
 if (nbrk == (char *) -1)
  exit(3); /* May have understood negative arg as huge positive */
 if (obrk != (char *) sbrk(0))
  exit(4); /* Not smart, definitely */

 exit(0);  /*
 Ok */
}
EOC
 sbrksmart="$undef"
 dumb='-- assuming dumb sbrk().'
 set sbrk
 if eval $compile_ok; then
  ./sbrk >/dev/null 2>&1
  case $? in
  0) sbrksmart="$define"
   echo "Yes, it can be used with negative values." ;;
  1) echo "Sorry, not enough memory $dumb" ;;
  2) echo "No it's not, and besides it seems to be buggy..." ;;
  3) echo "No, it fails with negative values." ;;
  4) echo "Nope, your sbrk() is too dumb." ;;
  *) echo "Err... Unexpected result $dumb" ;;
  esac
 else
  echo "(Could not compile test program $dumb)"
 fi
 ;;
*)
 echo "Since you don't have sbrk(), let's forget about the smart test!"
 sbrksmart="$undef"
 ;;
esac
$rm -f sbrk sbrk.* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sbrksmart.U
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```
?RCS: $Id: Magic_h.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Magic_h.U,v $
?RCS: Revision 3.0.1.2  1993/11/10  17:32:58  ram
?RCS: patch14: forgot to mention Id in the dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:46:59  ram
?RCS: patch12: created for ?M: lines support (magic symbols)
?RCS:
?X:
?X: This file ends up producing the confmagic.h include, which is used to
?X: automagically remap some C symbols via cpp redefinitions.
?X:
?X: The file ./Magic_h below contains all the ?M: lines extracted out
 of all
?X: the units.  Metaconfig itself adds the final #endif statement.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?MAKE:Magic_h: Id Config_h
?MAKE: -pick cm_h_weed $@ %<
?MAKE: -pick cm_h_weed $@ ./Magic_h
?LINT:nocomment
/*
* This file was produced by running metaconfig and is intended to be included
* after config.h and after all the other needed includes have been dealt with.
*
* This file may be empty, and should not be edited. Rerun metaconfig instead.
* If you wish to get rid of this magic, remove this file and rerun metaconfig
* without the -M option.
*
*  $Id: Magic_h.U 1 2006-08-24 12:32:52Z rmanfredi $
*/

#ifndef _confmagic_h_
#define _confmagic_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Magic_h.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysun.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <inttypes.h> is available or not
?X:
?MAKE:i_inttypes: Inhdr
?MAKE: -pick add $@ %<
?S:i_inttypes:
?S: This variable conditionally defines I_INTTYPES, which indicates
?S: to the C program that it should include <inttypes.h> to get
?S: format conversions of integer types.
?S:.
?C:I_INTTYPES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
 <inttypes.h> to get format conversions of integer types.
?C:.
?H:#$i_inttypes I_INTTYPES  /**/
?H:.
?LINT:set i_inttypes
: see if this is a inttypes.h system
set inttypes.h i_inttypes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_inttypes.U
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?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?MAKE:d_wcsxfrm: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_wcsxfrm:
?S: This variable conditionally defines the HAS_WCSXFRM symbol if the
?S: wcsxfrm() routine is available and can be used to compare wide
?S: character strings.
?S:.
?C:HAS_WCSXFRM:
?C: This symbol, if defined, indicates that the wcsxfrm routine is
?C: available to tranform a wide character string for wcscmp().
?C:.
?H:#$d_wcsxfrm HAS_WCSXFRM /**/
?H:.
?F:!try
?LINT: set d_wcsxfrm
: look for wcsxfrm
echo " "
$cat >try.c <<'EOCP'
#include
 <errno.h>
#include <wchar.h>
int main ()
{
   wchar_t dst[4], *src = L" ";
   errno = 0;
   return (wcsxfrm (dst, src, 1) ? errno ? errno : 0 : 1);
   }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working wcsxfrm() found." >&4
     val="$define" ;;
 *)  echo "wcsxfrm() found, but it doesn't work" >&4
     ;;
 esac
else
   echo "wcsxfrm() NOT found." >&4
   fi
set d_wcsxfrm
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_wcsxfrm.U

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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fmax: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmax:
?S: This variable conditionally defines the HAS_FMAX symbol, which
?S: indicates to the C program that the fmax() routine is available.
?S:.
?C:HAS_FMAX:
?C: This symbol, if defined, indicates that the fmax routine is
?C: available to do the maximum function.
?C:.
?H:#$d_fmax HAS_FMAX  /**/
?H:.
?LINT:set d_fmax
: see if fmax exists
set fmax d_fmax
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fmax.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_portable.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:28:52  ram
?RCS: patch45: executable path stripping moved to the end in Config_sh.U
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:21:17  ram
?RCS: patch15: did not strip variables properly when needed
?RCS: patch15: now also strips down variables from trylist
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: The Loc unit is wanted to get the definition of all the locating variables.
?X:
?MAKE:d_portable:
 cat Loc Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_portable:
?S: This variable conditionally defines the PORTABLE symbol, which
?S: indicates to the C program that it should not assume that it is
?S: running on the machine it was compiled on.
?S:.
?C:PORTABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: not assume that it is running on the machine it was compiled on.
?C: The program should be prepared to look up the host name, translate
?C: generic filenames, use PATH, etc.
?C:.
?H:#$d_portable PORTABLE /**/
?H:.
?D:d_portable="
: decide how portable to be
case "$d_portable" in
"$define") dflt=y;;
*) dflt=n;;
esac
$cat <<'EOH'

I can set things up so that your shell scripts and binaries are more portable,
at what may be a noticable cost in performance.  In particular, if you
ask to be portable, the following happens:

    1) Shell scripts will rely on the PATH variable rather than using
 the paths derived above.
    2) ~username
 interpretations will be done at run time rather than
 by Configure.
@if PHOSTNAME
    3) The system name will be determined at run time, if at all possible.
@end

EOH
rp="Do you expect to run these scripts and binaries on multiple machines?"
. ./myread
case "$ans" in
 y*) d_portable="$define"
?X:
?X: Paths will be stripped down (/usr/bin/vi -> vi) in Config_sh.U if needed.
?X:
 ;;
```

```
 *)  d_portable="$undef" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_portable.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: bin.U,v $
?RCS: Revision 3.0.1.4  1995/09/25  09:15:32  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:32:40  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:05:28  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:51  ram
?RCS: patch10: made prompting more explicit (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18
  12:05:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bin binexp installbin: Prefixit Getfile Oldconfig afs cat test
?MAKE: -pick add $@ %<
?Y:TOP
?S:bin:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly executable images for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S:.
?S:binexp:
?S: This is the same as the bin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?S:installbin:
```

```
?S: This variable is the same as binexp unless AFS is running in which case
?S: the user is explicitly prompted for it. This variable should always
?S: be used in your makefiles for maximum portability.
?S:.
?C:BIN:
?C: This symbol holds the path of the bin directory where the package will
?C: be installed. Program must be prepared to deal with ~name substitution.
?C:.
?C:BIN_EXP:
?C: This
 symbol is the filename expanded version of the BIN symbol, for
?C: programs that do not want to deal with that at run-time.
?C:.
?H:#define BIN "$bin" /**/
?H:#define BIN_EXP "$binexp" /**/
?H:.
?D:bin='/usr/local/bin'
: determine where public executables go
echo " "
set dflt bin bin
eval $prefixit
fn=d~
rp='Pathname where the public executables will reside?'
. ./getfile
if $test "X$ansexp" != "X$binexp"; then
 installbin=''
fi
bin="$ans"
binexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
executables reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installbin" in
 '') dflt=`echo $binexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installbin";;
 esac
 fn=de~
 rp='Where will public executables be installed?'
 . ./getfile
 installbin="$ans"
else
 installbin="$binexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/bin.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_erf: Inlibc
?MAKE: -pick add $@ %<
?S:d_erf:
?S: This variable conditionally defines the HAS_ERF symbol, which
?S: indicates to the C program that the erf() routine is available.
?S:.
?C:HAS_ERF:
?C: This symbol, if defined, indicates that the erf routine is
?C: available to do the error function.
?C:.
?H:#$d_erf HAS_ERF  /**/
?H:.
?LINT:set d_erf
: see if erf exists
set erf d_erf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_erf.U
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```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_timegm: Inlibc
?MAKE: -pick add $@ %<
?S:d_timegm:
?S: This variable conditionally defines the HAS_TIMEGM symbol, which
?S: indicates to the C program that the timegm () routine is available.
?S:.
?C:HAS_TIMEGM:
?C: This symbol, if defined, indicates that the timegm routine is
?C: available to do the opposite of gmtime ()
?C:.
?H:#$d_timegm HAS_TIMEGM  /**/
?H:.
```

```
?LINT:set d_timegm
: see if timegm exists
set timegm d_timegm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_timegm.U
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```
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?RCS:
?MAKE:d_libm_lib_version: Compile cat run rm_try
?MAKE: -pick add $@ %<
?S:d_libm_lib_version:
?S: This variable conditionally defines the LIBM_LIB_VERSION symbol,
?S: which indicates to the C program that math.h defines _LIB_VERSION
?S: being available in libm
?S:.
?C:LIBM_LIB_VERSION:
?C: This symbol, if defined, indicates that libm exports _LIB_VERSION
?C: and that math.h defines the enum to manipulate it.
?C:.
?H:#$d_libm_lib_version LIBM_LIB_VERSION  /**/
?H:.
?T:foo
?F:!try
: check to see if math.h defines _LIB_VERSION
d_libm_lib_version="$undef"
echo " "
echo "Checking to see if your libm supports _LIB_VERSION..." >&4
$cat >try.c <<EOCP
#include <unistd.h>
#include <math.h>
int main (int argc, char *argv[])
{
    printf ("%d\n", _LIB_VERSION);
   return (0);
   } /* main */
EOCP
set try
if eval $compile; then
   foo=`$run ./try`
   echo "Yes, it does ($foo)" >&4
   d_libm_lib_version="$define"
else
```

```
  echo "No, it does not (probably harmless)" >&4
  fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_libm_lib_version.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setegid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setegid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setegid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setegid:
?S: This variable conditionally defines the HAS_SETEGID symbol, which
?S: indicates to the C program that the setegid() routine is available
?S: to change the effective gid of the current program.
?S:.
?C:HAS_SETEGID (SETEGID):
?C: This symbol, if defined, indicates that the setegid
 routine is available
?C: to change the effective gid of the current program.
?C:.
?H:#$d_setegid HAS_SETEGID  /**/
?H:.
?LINT:set d_setegid
: see if setegid exists
set setegid d_setegid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setegid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_srandom_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_srandom_r srandom_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_srandom_r:
?S: This variable conditionally defines the HAS_SRANDOM_R symbol,
?S: which indicates to the C program that the srandom_r()
?S: routine is available.
?S:.
?S:srandom_r_proto:
?S: This variable encodes the prototype of srandom_r.
?S: It is zero if d_srandom_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srandom_r
?S: is defined.
?S:.
?C:HAS_SRANDOM_R:
?C: This symbol, if defined, indicates that the srandom_r routine
?C: is available to srandom re-entrantly.
?C:.
?C:SRANDOM_R_PROTO:
?C: This
 symbol encodes the prototype of srandom_r.
?C: It is zero if d_srandom_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srandom_r
?C: is defined.
?C:.
?H:#$d_srandom_r HAS_SRANDOM_R /**/
?H:#define SRANDOM_R_PROTO $srandom_r_proto /**/
?H:.
?T:try hdrs d_srandom_r_proto
: see if srandom_r exists
set srandom_r d_srandom_r
eval $inlibc
case "$d_srandom_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_srandom_r_proto:$usethreads" in
 ":define") d_srandom_r_proto=define
  set d_srandom_r_proto srandom_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_srandom_r_proto" in
 define)
```

```
 case "$srandom_r_proto" in
 "|0) try='int srandom_r(unsigned int, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && srandom_r_proto=I_TS ;;
 esac
 case "$srandom_r_proto" in
 "|0) d_srandom_r=undef
  srandom_r_proto=0
  echo "Disabling srandom_r, cannot determine prototype." >&4 ;;
 *
 ) case "$srandom_r_proto" in
  REENTRANT_PROTO*) ;;
  *) srandom_r_proto="REENTRANT_PROTO_$srandom_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "srandom_r has no prototype, not using it." >&4 ;;
  esac
  d_srandom_r=undef
  srandom_r_proto=0
  ;;
 esac
 ;;
*) srandom_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_srandom_r.U
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```
?RCS: $Id: i_libutil.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_libutil: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_libutil:
?S: This variable conditionally defines the I_LIBUTIL symbol, and indicates
?S: whether a C program should include <libutil.h>.
?S:.
?C:I_LIBUTIL:
?C: This symbol, if defined, indicates that <libutil.h> exists and
?C: should be included.
```

```
?C:.
?H:#$i_libutil I_LIBUTIL  /**/
?H:.
?LINT:set i_libutil
: see if this is a libutil.h system
set libutil.h i_libutil
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_libutil.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ccflags.U,v 3.0.1.9 1997/02/28 15:27:07 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: ccflags.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:27:07  ram
?RCS: patch61: removed support for NO_PROTOTYPE detection on SCO
?RCS: patch61: new locincpth variable
?RCS: patch61: added info on the "additional ld flags" question
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:48:54  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.7  1995/05/12  12:08:33  ram
?RCS: patch54: now checks for cc/ccflags/ldflags
 coherency
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  16:07:02  ram
?RCS: patch36: gcc versioning no longer relies on the C compiler's name
?RCS: patch36: simplified check for gcc version checking (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:06:35  ram
?RCS: patch32: propagate -posix flag from ccflags to ldflags
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:28:45  ram
?RCS: patch23: -fpcc-struct-return only needed in gcc 1.x (ADO)
?RCS: patch23: cppflags now computed on an option-by-option basis
?RCS: patch23: magically added cc flags now only done the first time
?RCS:
?RCS: Revision 3.0.1.3  1993/09/13  15:58:29  ram
```

```
?RCS: patch10: explicitly mention -DDEBUG just in case they need it (WAD)
?RCS: patch10: removed all the "tans" variable usage (WAD)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/27  14:39:38  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:24  ram
?RCS: patch6: added defaults for cppflags, ccflags and ldflags
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:05:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ccflags ldflags lkflags cppflags optimize locincpth: test cat \
 Myread Guess Options Oldconfig +gccversion mips_type +usrinc \
 package contains rm +cc cppstdin cppminus cpprun cpplast libpth \
 libs loclibpth hint usesocks sh run rm_try sysroot
?MAKE: -pick add $@ %<
?S:ccflags:
?S: This variable contains any additional C compiler flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:cppflags:
?S: This variable holds the flags that will be passed to the C pre-
?S: processor. It is up to the Makefile to use it.
?S:.
?S:optimize:
?S: This variable contains any optimizer/debugger flag that should be used.
?S: It is up to the Makefile to use it.
?S:.
?S:ldflags:
?S: This variable contains any additional C loader flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:lkflags:
?S: This variable contains any additional C partial linker flags desired
 by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:locincpth:
?S: This variable contains a list of additional directories to be
?S: searched by the compiler.  The appropriate '-I' directives will
?S: be added to ccflags.  This is intended to simplify setting
?S: local directories from the Configure command line.
?S: It's not much, but it parallels the loclibpth stuff in libpth.U.
?S:.
?T:inctest thisincl xxx inclwanted ftry previous thislibdir
?T:EBUGGING DEBUGGING
```

```
?T:check flag callback checkccflag
?F:!cpp.c !gcctest !try
?D:cppflags=''
?D:ccflags=''
?D:ldflags=''
?D:optimize=''
?LINT:extern _sysroot
?INIT:: Possible local include directories to search.
?INIT:: Set locincpth to "" in a hint file to defeat local include searches.
?INIT:locincpth="/usr/local/include /opt/local/include /usr/gnu/include"
?INIT:locincpth="$locincpth /opt/gnu/include /usr/GNU/include /opt/GNU/include"
?INIT::
?INIT:: no include file wanted by default
?INIT:inclwanted=''
?INIT:
?INIT:: Enable
 -DEBUGGING and -DDEBUGGING from the command line
?INIT:EBUGGING=''
?INIT:DEBUGGING=''
?INIT:
: determine optimization, if desired, or use for debug flag also
?X: Allow for Configure -Uoptimize -- it's not strictly sensible, but
?X: it has happened and we know what they mean.   AD  2/16/98
case "$optimize" in
' '|$undef) dflt='none';;
'') dflt='-O';;
*) dflt="$optimize";;
esac
$cat <<EOH

By default, $package compiles with the -O flag to use the optimizer.
Alternately, you might want to use the symbolic debugger, which uses
the -g flag (on traditional Unix systems).  Either flag can be
specified here.  To use neither flag, specify the word "none".

EOH
rp="What optimizer/debugger flag should be used?"
. ./myread
optimize="$ans"
case "$optimize" in
'none') optimize=" ";;
esac

: Check what DEBUGGING is required from the command line
: -DEBUGGING      or -DDEBUGGING or
: -DEBUGGING=both   = -g + -DDEBUGGING
: -DEBUGGING=-g   or -Doptimize=-g = -g
: -DEBUGGING=none or -UDEBUGGING =
```

```
: -DEBUGGING=old
  or -DEBUGGING=default = ? $optimize
case "$EBUGGING" in
") ;;
*) DEBUGGING=$EBUGGING ;;
esac

case "$DEBUGGING" in
-g|both|$define)
   case "$optimize" in
 *-g*) ;;
 *)    optimize="$optimize -g" ;;
   esac ;;
none|$undef)
   case "$optimize" in
 *-g*) set `echo "X $optimize " | sed 's/ -g / /'`
  shift
  optimize="$*"
  ;;
   esac ;;
esac

dflt="
case "$DEBUGGING" in
both|$define) dflt='-DDEBUGGING'
esac

: argument order is deliberate, as the flag will start with - which set could
: think is an option
checkccflag='check=$1; flag=$2; callback=$3;
echo " ";
echo "Checking if your compiler accepts $flag" >&4;
[ "X$sysroot" != "X" ] && echo "For sysroot = $sysroot";
echo "int main(void) { return 0; }" > gcctest.c;
if $cc $_sysroot -O2 $flag -o gcctest gcctest.c 2>gcctest.out && $run ./gcctest; then
   echo "Yes, it does." >&4;
   if $test -s gcctest.out ; then
       echo "But your platform does not like it:";
       cat gcctest.out;
   else
 case "$ccflags" in
 *$check*)

    echo "Leaving current flags $ccflags alone." >&4
     ;;
 *) dflt="$dflt $flag";
     eval $callback
     ;;
```

```
 esac
   fi
else
   echo "Nope, it does not, but that is ok." >&4;
fi
'

: We will not override a previous value, but we might want to
: augment a hint file
case "$hint" in
default|recommended)
 case "$gccversion" in
 1.*) dflt="$dflt -fpcc-struct-return" ;;
 esac
 case "$optimize:$DEBUGGING" in
 *-g*:old) dflt="$dflt -DDEBUGGING";;
 esac
?X: check for POSIXized ISC
 case "$gccversion" in
 2.*) if $test -d /etc/conf/kconfig.d &&
   $contains _POSIX_VERSION $usrinc/sys/unistd.h >/dev/null 2>&1
  then
   # Interactive Systems (ISC) POSIX mode.
   dflt="$dflt -posix"
  fi
  ;;
 esac
?X: If the user has gcc-2.95 or greater, try adding -fno-strict-alias.
?X: Since the gcc "version" can be non-numeric, e.g.
?X: "2.95.1 19990809 (prerelease)" , we'll do the test on any version
?X: greater than 2.8.
?X: --Andy Dougherty  27 Aug 1999
 case "$gccversion" in
 1.*) ;;
 2.[0-8]*)
 ;;
 ?*) set strict-aliasing -fno-strict-aliasing
  eval $checkccflag
  ;;
 esac
?X: HMB 200405
?X: -pipe has shown a compile time speedup of about 40% on Linux and HP-UX
?X: and also worked on cygwin-1.5.9
?X: If a system fails, disable it in the hints. 99% of gcc uses binutils
 # For gcc, adding -pipe speeds up compilations for some, but apparently
 # some assemblers can't read from stdin.  (It also slows down compilations
 # in other cases, but those are apparently rarer these days.)  AD 5/2004.
 case "$gccversion" in
```

```
 ?*) set pipe -pipe
  eval $checkccflag
  ;;
 esac

?X: NWC 200712
 # on x86_64 (at least) we require an extra library (libssp) in the
 # link command line. This library is not named, so I infer that it is
 # an implementation detail that may change. Hence the safest approach
 # is to add the flag to the flags passed to the compiler at link time,
 # as that way the compiler can do the right implementation dependant
 # thing. (NWC)
 case "$ccflags" in
 *-fno-stack-protector*)

    echo "Do not add -fstack-protector nor -fstack-protector-strong" 2>&1
     ;;
 *) case "$gccversion" in
    ?*) set stack-protector-strong -fstack-protector-strong
  eval $checkccflag
  case "$dflt" in
  *-fstack-protector-strong*) ;; # It got added.
  *) # Try the plain/older -fstack-protector.
     set stack-protector -fstack-protector
     eval $checkccflag
     ;;
  esac
  ;;
     esac
     ;;
 esac
esac

?X: In USG mode, a MIPS system may need some BSD includes
case "$mips_type" in
*BSD*|") inclwanted="$locincpth $usrinc";;
*) inclwanted="$locincpth $inclwanted $usrinc/bsd";;
esac
for thisincl in $inclwanted; do
 if $test -d $thisincl; then
  if $test x$thisincl != x$usrinc; then
   case "$dflt" in
   *" -I$thisincl "*);;
   *) dflt="$dflt -I$thisincl ";;
   esac
  fi
 fi
done
```

```
?X: Include test function (header, symbol)
inctest='if $contains $2 $usrinc/$1 >/dev/null 2>&1; then
 xxx=true;
elif $contains $2 $usrinc/sys/$1 >/dev/null 2>&1; then
 xxx=true;
else
 xxx=false;
fi;
if
 $xxx; then
 case "$dflt" in
 *$2*);;
 *) dflt="$dflt -D$2";;
 esac;
fi'

set signal.h LANGUAGE_C; eval $inctest

case "$usesocks" in
$define)
 ccflags="$ccflags -DSOCKS"
 ;;
esac

case "$hint" in
default|recommended) dflt="$ccflags $dflt" ;;
*) dflt="$ccflags";;
esac

case "$dflt" in
"|' ') dflt=none;;
esac

$cat <<EOH

Your C compiler may want other flags.  For this question you should include
-I/whatever and -DWHATEVER flags and any other flags used by the C compiler,
but you should NOT include libraries or ld flags like -lwhatever.  If you
want $package to honor its debug switch, you should include -DDEBUGGING here.
Your C compiler might also need additional flags, such as -D_POSIX_SOURCE.

To use no flags, specify the word "none".

EOH
?X: strip leading space
set X $dflt
shift
```

```
dflt=${1+"$@"}
rp="Any additional cc flags?"
. ./myread
case "$ans" in
none) ccflags="";;
*) ccflags="$ans";;
esac

: the following weeds options from ccflags that are of no interest to cpp
case
 "$cppflags" in
") cppflags="$ccflags" ;;
*)  set X $ccflags; shift
   case " $cppflags " in
   *" $1 "*) ;;  # Try to avoid doubling the cppflags.
   *) cppflags="$cppflags $ccflags" ;;
   esac
   ;;
esac
case "$gccversion" in
1.*) cppflags="$cppflags -D__GNUC__"
esac
case "$mips_type" in
");;
*BSD*) cppflags="$cppflags -DSYSTYPE_BSD43";;
esac
case "$cppflags" in
");;
*)
 echo " "
 echo "Let me guess what the preprocessor flags are..." >&4
 set X $cppflags
 shift
 cppflags="
 $cat >cpp.c <<'EOM'
#define BLURFL foo

BLURFL xx LFRULB
EOM
?X:
?X: For each cc flag, try it out with both cppstdin and cpprun, since the
?X: first is almost surely a cc wrapper. We have to try both in case
?X: of cc flags like '-Olimit 2900' that are actually two words...
?X:
 previous="
 for flag in $*
 do
  case "$flag" in
```

```
  -*) ftry="$flag";;
  *) ftry="$previous $flag";;
  esac
  if $cppstdin -DLFRULB=bar $cppflags $ftry $cppminus <cpp.c \
   >cpp1.out 2>/dev/null && \
   $cpprun -DLFRULB=bar $cppflags
 $ftry $cpplast <cpp.c \
   >cpp2.out 2>/dev/null && \
   $contains 'foo.*xx.*bar' cpp1.out >/dev/null 2>&1 && \
   $contains 'foo.*xx.*bar' cpp2.out >/dev/null 2>&1
  then
   cppflags="$cppflags $ftry"
   previous=''
  else
   previous="$flag"
  fi
 done
 set X $cppflags
 shift
 cppflags=${1+"$@"}
 case "$cppflags" in
 *-*)  echo "They appear to be: $cppflags";;
 esac
 $rm -f cpp.c cpp?.out
 ;;
esac

: flags used in final linking phase
case "$ldflags" in
'') if ./venix; then
  dflt='-i -z'
 else
  dflt=''
 fi
 case "$ccflags" in
 *-posix*) dflt="$dflt -posix" ;;
 esac
 ;;
*) dflt="$ldflags";;
esac
# See note above about -fstack-protector
case "$ccflags" in
*-fstack-protector-strong*)
 case "$dflt" in
 *-fstack-protector-strong*) ;; # Don't add it again
 *) dflt="$dflt -fstack-protector-strong" ;;
 esac
 ;;
```

```
*-fstack-protector*)
 case "$dflt" in
 *-fstack-protector*) ;; # Don't add it again
 *) dflt="$dflt -fstack-protector" ;;
 esac
 ;;
esac

: Try to guess additional flags to pick
 up local libraries.
for thislibdir in $libpth; do
 case " $loclibpth " in
 *" $thislibdir "*)
  case "$dflt " in
  *"-L$thislibdir "*) ;;
  *)  dflt="$dflt -L$thislibdir" ;;
  esac
  ;;
 esac
done

case "$dflt" in
") dflt='none' ;;
esac

$cat <<EOH

Your C linker may need flags.  For this question you should
include -L/whatever and any other flags used by the C linker, but you
should NOT include libraries like -lwhatever.

Make sure you include the appropriate -L/path flags if your C linker
does not normally search all of the directories you specified above,
namely
 $libpth
To use no flags, specify the word "none".

EOH

rp="Any additional ld flags (NOT including libraries)?"
. ./myread
case "$ans" in
none) ldflags=";;
*) ldflags="$ans";;
esac
rmlist="$rmlist pdp11"

@if lkflags
```

```
: partial linking may need other flags
case "$lkflags" in
") case "$ldflags" in
 ") dflt='none';;
 *) dflt="$ldflags";;
 esac;;
*) dflt="$lkflags";;
esac
echo " "
rp="Partial linking flags to be used (NOT
 including -r)?"
. ./myread
case "$ans" in
none) lkflags=";;
*) lkflags="$ans";;
esac

@end
?X:
?X: If the user changes compilers after selecting a hint file, it's
?X: possible that the suggested ccflags/ldflags will be wrong.  Try to
?X: compile and run a simple test program.  Let the user see all the
?X: error messages. -- ADO and RAM
?X: Sometimes, particularly on Linux systems, there is a bad library
?X: (e.g. a dangling symlink or incompatible library or a "run-time"
?X: version but not a "development" version of a library).  This test
?X: will catch those sorts of problems too, though how to fix them
?X: may not be obvious.
?X:
: coherency check
echo " "
echo "Checking your choice of C compiler and flags for coherency..." >&4
$cat > try.c <<'EOF'
#include <stdio.h>
int main() { printf("Ok\n"); return(0); }
EOF
?X: Strip extra blanks in case some of the following variables are empty
set X $cc -o try $optimize $ccflags $ldflags try.c $libs
shift
$cat >try.msg <<'EOM'
I've tried to
 compile and run the following simple program:

EOM
$cat try.c >> try.msg

$cat >> try.msg <<EOM
```

I used the command:

```
 $*
 $run ./try
```

and I got the following output:

```
EOM
dflt=y
?X: Use "sh -c" to avoid error messages tagged with leading "Configure:".
?X: We need to try the resulting executable, because cc might yield a 0 status
?X: even when ld failed, in which case the executable will not run properly,
?X: if its x bit is set at all...
if $sh -c "$cc -o try $optimize $ccflags $ldflags try.c $libs" >>try.msg 2>&1; then
 if $sh -c "$run ./try " >>try.msg 2>&1; then
  xxx=`$run ./try`
  case "$xxx" in
  "Ok") dflt=n ;;
  *)    echo 'The program compiled OK, but produced no output.' >> try.msg ;;
  esac
 else
  echo "The program compiled OK, but exited with status $?." >>try.msg
  rp="You have a problem.  Shall I abort Configure"
  dflt=y
 fi
else
 echo "I can't compile the test program." >>try.msg
 rp="You have a BIG problem.  Shall I abort Configure"
 dflt=y
fi
case "$dflt" in
y)
 $cat
 try.msg >&4
?X: using -K will prevent default aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
  echo "(The supplied flags or libraries might be incorrect.)"
  ;;
 *) dflt=n;;
 esac
 echo " "
 . ./myread
 case "$ans" in
 n*|N*) ;;
 *) echo "Ok.  Stopping Configure." >&4
  exit 1
  ;;
```

```
 esac
 ;;
n) echo "OK, that should do.";;
esac
$rm_try gcctest gcctest.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ccflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Inhdr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Inhdr.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:01:31  ram
?RCS: patch54: deleted tabs that caused some /bin/sh to core dump (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:55:01  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks wether a set of header files exists or not.
?X: If the first header is not
 found, the function tries to locate
?X: the next header, and so on, until one is found or there is no
?X: more header in the list.
?X:
?X: To use it, say:
?X: set header i_header [ header2 i_header2 ... ]
?X: eval $inhdr
?X:
?MAKE:Inhdr: test Findhdr Whoa
?MAKE: -pick add $@ %<
?LINT:define inhdr
?V:inhdr
?S:inhdr:
?S: This shell variable is used internally by Configure to check
?S: wether a set of headers exist or not. A typical use is:
```

```
?S:  set header i_header [ header2 i_header2 ... ]
?S:  eval $inhdr
?S: That will print a message, saying wether header was found or not
?S: and set i_header* accordingly. If the first header is not found,
?S: we try the next one, until the list is empty or one is found.
?S:.
?T:xxx xxf var td xxnf tu yyy instead was cont
: define an alternate in-header-list? function
inhdr='echo " "; td=$define; tu=$undef; yyy=$@;
cont=true; xxf="echo \"<\$1> found.\" >&4";
case $# in 2) xxnf="echo \"<\$1> NOT found.\" >&4";;
*) xxnf="echo \"<\$1> NOT found, ...\" >&4";;
esac;
case
 $# in 4) instead=instead;; *) instead="at last";; esac;
while $test "$cont"; do
 xxx=`./findhdr $1`
 var=$2; eval "was=\$$2";
 if $test "$xxx" && $test -r "$xxx";
 then eval $xxf;
?X: Next line shifted left 1 tabstop to avoid sh core dump on MachTen 2.1.1.
 eval "case \"\$$var\" in $undef) . ./whoa; esac"; eval "$var=\$td";
  cont="";
 else eval $xxnf;
?X: Likewise, the next line has been shifted left 1 tabstop -- ADO, 08/03/95
 eval "case \"\$$var\" in $define) . ./whoa; esac"; eval "$var=\$tu"; fi;
 set $yyy; shift; shift; yyy=$@;
 case $# in 0) cont="";;
 2) xxf="echo \"but I found <\$1> $instead.\" >&4";
  xxnf="echo \"and I did not find <\$1> either.\" >&4";;
 *) xxf="echo \"but I found <\$1\> instead.\" >&4";
  xxnf="echo \"there is no <\$1>, ...\" >&4";;
 esac;
done;
?X: Remaining values are set to 'undef'
while $test "$yyy";
do set $yyy; var=$2; eval "was=\$$2";
 eval "case \"\$$var\" in $define) . ./whoa; esac"; eval "$var=\$tu";
 set $yyy; shift; shift; yyy=$@;
done'

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Inhdr.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: orderlib.U,v 3.0.1.4 1997/02/28 16:18:18 ram Exp $
?RCS:
```

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: orderlib.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:18:18  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS: patch61: now uses the ar located by Loc.U
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:33:04  ram
?RCS: patch45: allows hint files to specify their own value for 'ranlib'
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:26:48  ram
?RCS: patch36: now performs a real small compile for accurate
 checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:31:17  ram
?RCS: patch32: use cc variable instead of hardwired 'cc' in 1st compile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orderlib ranlib: Loc ar cat test rm +cc +ccflags +ldflags +libs i_stdlib _a _o run
?MAKE: -pick add $@ %<
?S:orderlib:
?S: This variable is "true" if the components of libraries must be ordered
?S: (with `lorder $* | tsort`) before placing them in an archive.  Set to
?S: "false" if ranlib or ar can generate random libraries.
?S:.
?S:ranlib:
?S: This variable is set to the pathname of the ranlib program, if it is
?S: needed to generate random libraries.  Set to ":" if ar can generate
?S: random libraries or if random libraries are not supported
?S:.
?F:!foobar
: see if ar generates random libraries by itself
echo " "
echo "Checking how to generate random libraries on your machine..." >&4
?X: Some systems (like MIPS) complain when running
 ar... Others like Ultrix
?X: need an explicit 'ar ts' to add the table of contents.
?X: Still others like Linux run ar ts successfully, but still need ranlib.
?X: This set of tests seems the minimum necessary to check out Linux.
```

```
?X: We need to explicitly put the entries in out-of-order so that Sun's ld
?X: will fail.  (Otherwise it complains, but gives an exit status of 0.)
echo 'int bar1() { return bar2(); }' > bar1.c
echo 'int bar2() { return 2; }' > bar2.c
$cat > foo.c <<EOP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() { printf("%d\n", bar1()); exit(0); }
EOP
$cc $ccflags -c bar1.c >/dev/null 2>&1
$cc $ccflags -c bar2.c >/dev/null 2>&1
$cc $ccflags -c foo.c >/dev/null 2>&1
$ar rc bar$_a bar2$_o bar1$_o >/dev/null 2>&1
if $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
 echo "$ar appears to generate random libraries itself."
 orderlib=false
 if [ "X$ranlib" = "X" ]; then
     ranlib=":"
 fi
elif
 $ar s bar$_a >/dev/null 2>&1 &&
 $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
  echo "a table of contents needs to be added with '$ar s'."
  orderlib=false
  ranlib="$ar s"
elif $ar ts bar$_a >/dev/null 2>&1 &&
 $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
  echo "a table of contents needs to be added with '$ar ts'."
  orderlib=false
  ranlib="$ar ts"
else
?X: Allow hints to specify their own ranlib "script". For instance, on
?X: some NeXT machines, the timestamp put by ranlib is not correct, and this
?X: may raise tedious recompiles for nothing. Therefore, NeXT may add the
?X: ranlib='sleep 5; /bin/ranlib' line in their hints to "fix" that.
?X: (reported by Andreas Koenig <k@franz.ww.tu-berlin.de>)
 case "$ranlib" in
 :) ranlib=";;
 ")
  ranlib=`./loc ranlib X /usr/bin /bin /usr/local/bin`
  $test -f $ranlib || ranlib="
  ;;
 esac
```

```
 if $test -n "$ranlib";
 then
  echo "your system has '$ranlib'; we'll use that."
  orderlib=false
 else
  echo "your system doesn't seem to support random libraries"
  echo "so we'll use lorder and tsort to order the libraries."
  orderlib=true
  ranlib=":"
 fi
fi
$rm -f foo* bar*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/orderlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlnbuf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setlnbuf.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:57  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_setlinebuf: Inlibc
?MAKE: -pick add $@ %<
?S:d_setlinebuf:
?S: This variable conditionally defines the HAS_SETLINEBUF symbol, which
?S: indicates to the C program that the setlinebuf() routine is available
?S: to change stderr or stdout from block-buffered or unbuffered
 to a
?S: line-buffered mode.
?S:.
?C:HAS_SETLINEBUF :
?C: This symbol, if defined, indicates that the setlinebuf routine is
?C: available to change stderr or stdout from block-buffered or unbuffered
?C: to a line-buffered mode.
?C:.
?H:#$d_setlinebuf HAS_SETLINEBUF  /**/
```

```
?H:.
?LINT:set d_setlinebuf
: see if setlinebuf exists
set setlinebuf d_setlinebuf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setlnbuf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mailer.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mailer.U,v $
?RCS: Revision 3.0.1.3  1995/01/11  15:32:11  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:10:04  ram
?RCS: patch23: ensure full path value is used for rmail also
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:14:18  ram
?RCS: patch16: now use _sendmail vars and friends for portability issues
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:10  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:mailer: test cat rmail mail smail sendmail Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:mailer:
?S: This variable contains the full pathname of a reasonable mailer.
?S: By reasonable, we mean some program which can understand internet
?S: addresses or at least forward them to some internet router. This
?S: mailer should be invoked as "mailer [options] recipients <mail".
?S:.
: determine the name of a reasonable mailer
case "$mailer" in
")
 if $test -f "$sendmail"; then
  dflt="$sendmail"
 elif $test -f "$smail"; then
```

```
  dflt="$smail"
 elif $test -f "$rmail"; then
  dflt="$rmail"
 elif $test -f /bin/mail; then
  dflt=/bin/mail
 else
  dflt=$mail
 fi
 ;;
*)  dflt="$mailer";;
esac
$cat <<EOM

I need the full pathname of the program used to deliver mail on your system.
A typical answer would be /usr/lib/sendmail or /bin/rmail, but you may choose
any other program, as long as it can be fed from standard input and will
honour any user-supplied headers.

EOM
fn=f
rp='Mail
 transport agent to be used?'
. ./getfile
mailer="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mailer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysmode.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysmode: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysmode:
?S: This variable conditionally defines the I_SYSMODE symbol,
?S: and indicates whether a C program should include <sys/mode.h>.
?S:.
?C:I_SYSMODE:
?C: This symbol, if defined, indicates that <sys/mode.h> exists and
?C: should be included.
?C:.
?H:#$i_sysmode I_SYSMODE  /**/
?H:.
```

```
?LINT:set i_sysmode
: see if this is a sys/mode.h system
set sys/mode.h i_sysmode
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysmode.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_wchar: Inhdr
?MAKE: -pick add $@ %<
?S:i_wchar:
?S: This variable conditionally defines the I_WCHAR symbol,
?S: that indicates whether a C program may include <wchar.h>.
?S:.
?C:I_WCHAR:
?C: This symbol, if defined, indicates to the C program that <wchar.h>
?C: is available for inclusion
?C:.
?H:#$i_wchar   I_WCHAR /**/
?H:.
?LINT:set i_wchar
: see if wchar.h is present
set wchar.h i_wchar
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_wchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_copysignl: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_copysignl:
?S: This variable conditionally defines the HAS_COPYSIGNL symbol, which
?S: indicates to the C program that the copysignl() routine is available.
?S: If aintl is also present we can emulate modfl.
?S:.
?C:HAS_COPYSIGNL:
?C: This symbol, if defined, indicates that the copysignl routine is
?C: available.  If aintl is also present we can emulate modfl.
?C:.
?H:#$d_copysignl HAS_COPYSIGNL  /**/
?H:.
?LINT:set d_copysignl
: see if copysignl exists
set copysignl d_copysignl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_copysignl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_truncate.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_truncate.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_truncate: Inlibc
?MAKE: -pick add $@ %<
?S:d_truncate:
?S: This variable conditionally defines HAS_TRUNCATE if truncate() is
?S: available to truncate files.
?S:.
?C:HAS_TRUNCATE (TRUNCATE):
?C: This symbol, if defined, indicates that the truncate routine is
?C: available to truncate files.
?C:.
?H:#$d_truncate HAS_TRUNCATE /**/
?H:.
?LINT:set
```

```
 d_truncate
: see if truncate exists
set truncate d_truncate
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_truncate.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Null.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Null.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit ends up producing shell code to set all variables to ".  This
?X: probably isn't necessary, but I'm paranoid.  About certain things.
?X:
?MAKE:Null: Head
?MAKE: -pick add.Null $@ %<
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Null.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Init.U,v 3.0.1.1 1994/10/31 09:45:59 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Init.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:45:59  ram
?RCS: patch44: removed Options from MAKE to prevent Init overrides
?RCS: patch44: option processing now done after Myinit thanks to new Begin.U
```

```
?RCS: patch44: moved "Beginning of configuration questions" to Begin.U
?RCS: patch44: moved signal trapping instruction to Begin.U as well
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file
 initializes certain default variables used by Configure.  They
?X: may be overridden or added to by definitions in Myinit.U.
?X:
?MAKE:Init eunicefix: Null
?MAKE: -pick add $@ %<
?MAKE: -pick weed $@ ./Init
?S:eunicefix:
?S: When running under Eunice this variable contains a command which will
?S: convert a shell script to the proper form of text file for it to be
?S: executable by the shell.  On other systems it is a no-op.
?S:.
?V:define undef smallmach:rmlist
?X:
?X: Throughout the units, one may make use of $define and $undef to reference
?X: a defined symbol or an undefined one. There is no need to add them in
?X: the dependency line since this unit makes them visible via ?V:, and
?X: everyone inherits from those symbols since by convention Init.U is the
?X: root dependency.
?X:
?LINT:extern DJGPP
?LINT:extern _exe
?LINT:change _exe
?LINT:extern is_os2
: Detect odd OSs
define='define'
undef='undef'
smallmach='pdp11 i8086 z8000 i80286 iAPX286'
rmlist=''

: We must find out about
 Eunice early
eunicefix=':'
if test -f /etc/unixtovms; then
 eunicefix=/etc/unixtovms
fi
if test -f /etc/unixtovms.exe; then
 eunicefix=/etc/unixtovms.exe
fi

: Set executable suffix now -- needed before hints available
```

```
if test -f "/libs/version.library"; then
: Amiga OS
   _exe=""
elif test -f "/system/gnu_library/bin/ar.pm"; then
: Stratus VOS
   _exe=".pm"
elif test -n "$DJGPP"; then
: DOS DJGPP
   _exe=".exe"
elif test -f /kern/cookiejar; then
: MiNT
   _exe=""
elif test -d c:/. -o -n "$is_os2" ; then
: OS/2 or cygwin
   _exe=".exe"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Init.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gidsize: Myread Typedef gidtype Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:gidsize:
?S: This variable contains the size of a gidtype in bytes.
?S:.
?C:Gid_t_size:
?C: This symbol holds the size of a Gid_t in bytes.
?C:.
?H:#define Gid_t_size $gidsize  /* GID size */
?H:.
?T:yyy zzz
?F:!try
: Check the size of GID
echo " "
case "$gidtype" in
*_t) zzz="$gidtype" ;;
*)   zzz="gid"  ;;
esac
```

```
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($gidtype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") gidsize=4
  echo "(I can't execute the test program--guessing $gidsize.)" >&4
  ;;
 *) gidsize=$yyy
  echo "Your $zzz is $gidsize bytes long."
  ;;
 esac
else
 gidsize=4
 echo "(I can't compile the test program--guessing $gidsize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libs.U,v 3.0.1.6 1997/02/28 16:09:11 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: libs.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:09:11  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
```

```
?RCS: Revision 3.0.1.5  1995/07/25  14:12:05  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  16:24:22  ram
?RCS: patch36: removed old broken thislib/thatlib processing (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:05:44  ram
?RCS: patch30: code cleanup with if/elif by ADO and RAM
?RCS: patch30:
 undone patch23 for libswanted default setting
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:08:45  ram
?RCS: patch23: now includes ordered default libswanted variable (ADO)
?RCS: patch23: major cleanup for library lookups (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:31  ram
?RCS: patch6: added default for libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libs ignore_versioned_solibs libsfound libsfiles libsdirs libspath: \
 test cat Myread Oldconfig Loc libpth package xlibpth so _a \
 usesocks sed uselongdouble usequadmath
?MAKE: -pick add $@ %<
?S:libs:
?S: This variable holds the additional libraries we want to use.
?S: It is up to the Makefile to deal with it.  The list can be empty.
?S:.
?S:libsfound:
?S: This variable holds the full pathnames of the libraries
?S: we found and accepted.
?S:.
?S:libsfiles:
?S: This variable holds the filenames aka basenames of the libraries
?S: we found and accepted.
?S:.
?S:libsdirs:
?S: This
 variable holds the directory names aka dirnames of the libraries
?S: we found and accepted, duplicates are removed.
?S:.
?S:libspath:
?S: This variable holds the directory names probed for libraries.
?S:.
?S:ignore_versioned_solibs:
?S: This variable should be non-empty if non-versioned shared
?S: libraries (libfoo.so.x.y) are to be ignored (because they
```

```
?S: cannot be linked against).
?S:.
?T:xxx yyy thislib thisdir libswanted libstyle
?D:libs="
?X:
?X: This order is chosen so that libraries  -lndir, -ldir, -lucb, -lbsd,
?X: -lBSD, -lPW, and -lx only get used if there are unresolved
?X: routines at link time.  Usually, these are backwards compatibility
?X: libraries, and may not be as reliable as the standard c library.
?X:
?X: The -lsocket -linet -lnsl order has been reported to be necessary
?X: for at least one SVR4 implementation.
?X: -lc must proceed -lucb or -lbsd for most Solaris applications.
?X: -lc_s proceeds -lc so we pick up the shared library version,
 if
?X: it is available.
?X:
?X: The ordering of c, posix, and cposix is a guess and almost
?X: certainly wrong on about half of all systems.
?X:
?X: Set proper libswanted in your private Myinit.U if needed.
?X:
?X:: default ordered library list
?X:libswanted='net socket inet bind nsl nm sdbm gdbm ndbm dbm malloc dl'
?X:libswanted="$libswanted dld sun m c_s c posix cposix ndir dir ucb"
?X:libswanted="$libswanted bsd BSD PW x"
?X:
?INIT:: default library list
?INIT:libswanted="
?INIT:: some systems want to use only the non-versioned libso:s
?INIT:ignore_versioned_solibs="
?LINT:extern usecbacktrace
?LINT:extern libscheck
?LINT:extern p
?LINT:use uselongdouble
: Looking for optional libraries
echo " "
echo "Checking for optional libraries..." >&4
case "$libs" in
' '|'') dflt='';;
*) dflt="$libs";;
esac
case "$libswanted" in
'') libswanted='c_s';;
esac
?X: libsocks has nasty naming scheme.
?X: This does not work if somebody wants SOCKS 4.
case "$usesocks" in
```

```
"$define") libswanted="$libswanted
 socks5 socks5_sh" ;;
esac
case "$usecbacktrace" in
"$define") libswanted="$libswanted bfd" ;;
esac
case "$usequadmath" in
"$define") libswanted="$libswanted quadmath" ;;
esac
libsfound="
libsfiles="
libsdirs="
libspath="
for thisdir in $libpth $xlibpth; do
 test -d $thisdir && libspath="$libspath $thisdir"
done
for thislib in $libswanted; do
 for thisdir in $libspath; do
    xxx="
    if $test ! -f "$xxx" -a "X$ignore_versioned_solibs" = "X"; then
  xxx=`ls $thisdir/lib$thislib.$so.[0-9] 2>/dev/null|sed -n '$p'`
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
  xxx=`ls $thisdir/lib$thislib.[0-9].$so 2>/dev/null|sed -n '$p'`
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib$thislib.$so
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib$thislib$_a
        $test -f "$xxx"
 && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib${thislib}_s$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
  $test -f "$xxx" && thislib=${thislib}_s
```

```
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/Slib$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if $test -f "$xxx"; then
  case "$libstyle" in
  shared) echo "Found -l$thislib (shared)." ;;
  static) echo "Found -l$thislib." ;;
  *)      echo "Found -l$thislib ($libstyle)." ;;
  esac
  case " $dflt " in
  *"-l$thislib "*);;
  *) dflt="$dflt -l$thislib"
                libsfound="$libsfound $xxx"
                yyy=`basename $xxx`
                libsfiles="$libsfiles $yyy"
                yyy=`echo $xxx|$sed -e
 "s%/$yyy\\$%%"`
                case " $libsdirs " in
                *" $yyy "*) ;;
                *) libsdirs="$libsdirs $yyy" ;;
                esac
    ;;
  esac
  break
    fi
 done
 if $test ! -f "$xxx"; then
    echo "No -l$thislib."
 fi
done
set X $dflt
shift
dflt="$*"
case "$libs" in
") dflt="$dflt";;
*) dflt="$libs";;
esac
case "$dflt" in
' '|") dflt='none';;
esac

$cat <<EOM

In order to compile $package on your machine, a number of libraries
are usually needed.  Include any other special libraries here as well.
```

```
Say "none" for none.  The default list is almost always right.
EOM

echo " "
rp="What libraries to use?"
. ./myread
case "$ans" in
none) libs=' ';;
*) libs="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sresuproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sresuproto:
?S: This variable conditionally defines the HAS_SETRESUID_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the setresuid() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SETRESUID_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the setresuid() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
 int setresuid(uid_t ruid, uid_t euid, uid_t suid);
?C:.
?H:#$d_sresuproto HAS_SETRESUID_PROTO /**/
?H:.
?LINT:set d_sresuproto
: see if prototype for setresuid is available
echo " "
set d_sresuproto setresuid $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sresuproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tmpnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_tmpnam_r tmpnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_tmpnam_r:
?S: This variable conditionally defines the HAS_TMPNAM_R symbol,
?S: which indicates to the C program that the tmpnam_r()
?S: routine is available.
?S:.
?S:tmpnam_r_proto:
?S: This variable encodes the prototype of tmpnam_r.
?S: It is zero if d_tmpnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_tmpnam_r
?S: is defined.
?S:.
?C:HAS_TMPNAM_R:
?C: This symbol, if defined, indicates that the tmpnam_r routine
?C: is available to tmpnam re-entrantly.
?C:.
?C:TMPNAM_R_PROTO:
?C: This
 symbol encodes the prototype of tmpnam_r.
?C: It is zero if d_tmpnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_tmpnam_r
?C: is defined.
?C:.
?H:#$d_tmpnam_r HAS_TMPNAM_R /**/
?H:#define TMPNAM_R_PROTO $tmpnam_r_proto /**/
?H:.
?T:try hdrs d_tmpnam_r_proto
: see if tmpnam_r exists
set tmpnam_r d_tmpnam_r
eval $inlibc
case "$d_tmpnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h "
 case "$d_tmpnam_r_proto:$usethreads" in
```

```
 ":define") d_tmpnam_r_proto=define
  set d_tmpnam_r_proto tmpnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_tmpnam_r_proto" in
 define)
 case "$tmpnam_r_proto" in
 "|0) try='char* tmpnam_r(char*);'
 ./protochk "$extern_C $try" $hdrs && tmpnam_r_proto=B_B ;;
 esac
 case "$tmpnam_r_proto" in
 "|0) d_tmpnam_r=undef
  tmpnam_r_proto=0
  echo "Disabling tmpnam_r, cannot determine prototype." >&4 ;;
 * ) case "$tmpnam_r_proto" in
  REENTRANT_PROTO*) ;;
  *) tmpnam_r_proto="REENTRANT_PROTO_$tmpnam_r_proto"
 ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "tmpnam_r has no prototype, not using it." >&4 ;;
  esac
  d_tmpnam_r=undef
  tmpnam_r_proto=0
  ;;
 esac
 ;;
*) tmpnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_tmpnam_r.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: of the source tree for dist 3.0.

```
?RCS:
?MAKE:i_pthread: Inhdr
?MAKE: -pick add $@ %<
?S:i_pthread:
?S: This variable conditionally defines the I_PTHREAD symbol,
?S: and indicates whether a C program should include <pthread.h>.
?S:.
?C:I_PTHREAD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <pthread.h>.
?C:.
?H:#$i_pthread   I_PTHREAD /**/
?H:.
?LINT:set i_pthread
: see if POSIX threads are available
set pthread.h i_pthread
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/i_pthread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libyacc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libyacc.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:09:19  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.3  1994/05/13  15:27:12  ram
?RCS: patch27: added byacc case (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:09:01  ram
?RCS: patch23: now uses full library path instead of -l notation
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:13:49  ram
?RCS: patch16: un-obsoleted this unit for smooth yacc compilations
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:04  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:libyacc: Loc yacc libpth _a
?MAKE: -pick add $@ %<
?S:libyacc:
?S: This variable contains the argument to pass to the loader in order
?S: to get the yacc library routines.  If there is no yacc or yacc
?S: library, it is null.
?S:.
?T:xxx
: see if we should include -ly
echo " "
case "$yacc" in
*byacc*)
 echo "You are using byacc, so I won't look for a yacc library." >&4
 libyacc=''
 ;;
*yacc)
 xxx=`./loc liby$_a x $libpth`
 case "$xxx" in
 x)
  echo "No yacc library found." >&4
  libyacc=''
  ;;
 *)
  echo "yacc library found in $xxx." >&4
  libyacc="$xxx"
  ;;
 esac
 ;;
*bison*)
 echo "You are using bison, so I won't look for a yacc library." >&4
 libyacc=''
 ;;
*)
echo "You don't seem to have yacc, so I won't look for the yacc library." >&4
 libyacc=''
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libyacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2004 H.Merijn Brand
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```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strlcpy: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_strlcpy:
?S: This variable conditionally defines the HAS_STRLCPY symbol, which
?S: indicates to the C program that the strlcpy () routine is available.
?S:.
?C:HAS_STRLCPY:
?C: This symbol, if defined, indicates that the strlcpy () routine is
?C: available to do string copying.
?C:.
?H:#$d_strlcpy HAS_STRLCPY  /**/
?H:.
?T:d_strlcpy_proto xx1 xx2 xx3 xx4
?LINT:set d_strlcpy
: see if strlcpy exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_strlcpy_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_strlcpy_proto strlcpy
 literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_strlcpy_proto" in
   define) # see if strlcpy exists
 set strlcpy d_strlcpy
 eval $inlibc
 ;;
   *)  val=$undef
 set d_strlcpy
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strlcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: AAAAA.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: AAAAA.U,v $
?RCS: Revision 3.0.1.4  1994/06/20  06:50:26  ram
?RCS: patch30: changes from Jarkko Hietaniemi are tagged with JHI
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:01:39  ram
?RCS: patch23: initials for Wayne Davison are now WED
?RCS: patch23: added initials for new unit contributor Andy Dougherty
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:01:09  ram
?RCS: patch16: make metalint shut up on special unit definition for All target
?RCS:
?RCS: Revision
 3.0.1.1  1993/09/13  15:43:57  ram
?RCS: patch10: documents initials used for Wayne Davison's contributions
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this file is to supply the head of the Makefile created
?X: by metaconfig.  For this reason it must be first in alphabetical order.
?X: The leading '+' in front of the unit name is a hint for metalint, since
?X: the use of that special unit name as a "made" unit is legitimate here.
?X:
?MAKE:+All: Finish
?X:
?X: Throughout the units, the following initials are used to identify comments:
?X:
?X:  HMS: Harlan Stenn
?X:  RAM: Raphael Manfredi
?X:  WED: Wayne Davison (was WAD by mistake--RAM)
?X:  ADO: Andy Dougherty
?X:  JHI: Jarkko Hietaniemi
?X:
?X: Agreed, this is a weird place to document it, but I couldn't find a better
?X: place to do so. I've bet on the curiosity of users, who would probably
?X: want to know what's in this strangely-named file--RAM.

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/AAAAA.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_sitecustomize.U,v $
```

```
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?RCS:
?RCS: $Log: d_sitecustomize.U,v $
?RCS:
?MAKE:usesitecustomize: Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:usesitecustomize:
?S: This variable is set to true when the user requires a mechanism that
?S: allows the sysadmin to add entries to @INC at runtime.  This variable
?S: being set, makes perl run '$sitelib/sitecustomize.pl' at startup.
?S:.
?C:USE_SITECUSTOMIZE:
?C: This symbol, if defined, indicates that sitecustomize should
?C: be used.
?C:.
?H:?%<:@if USE_SITECUSTOMIZE
?H:?%<:#ifndef USE_SITECUSTOMIZE
?H:?%<:#$usesitecustomize USE_SITECUSTOMIZE  /**/
?H:?%<:#endif
?H:?%<:@end
?H:.
: Check if site customization support was requested
case "$usesitecustomize" in
   $define|true|[Yy]*)
 usesitecustomize="$define"
 ;;
    *)
 usesitecustomize="$undef"
 ;;
   esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sitecustomize.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_builtin_choose_expr d_builtin_expect : Compile Setvar cat run rm_try
```

```
?MAKE: -pick add $@ %<
?S:d_builtin_choose_expr:
?S: This conditionally defines HAS_BUILTIN_CHOOSE_EXPR, which
?S: indicates that the compiler supports __builtin_choose_expr(x,y,z).
?S: This built-in function is analogous to the "x?y:z" operator in C,
?S: except that the expression returned has its type unaltered by
?S: promotion rules. Also, the built-in function does not evaluate
?S: the expression that was not chosen.
?S:.
?S:d_builtin_expect:
?S: This conditionally
 defines HAS_BUILTIN_EXPECT, which indicates
?S: that the compiler supports __builtin_expect(exp,c).  You may use
?S: __builtin_expect to provide the compiler with branch prediction
?S: information.
?S:.
?C:HAS_BUILTIN_CHOOSE_EXPR:
?C: Can we handle GCC builtin for compile-time ternary-like expressions
?C:.
?C:HAS_BUILTIN_EXPECT:
?C: Can we handle GCC builtin for telling that certain values are more
?C: likely
?C:.
?H:#$d_builtin_expect HAS_BUILTIN_EXPECT /**/
?H:#$d_builtin_choose_expr HAS_BUILTIN_CHOOSE_EXPR /**/
?H:.
?F:!try
?LINT:set d_builtin_expect d_builtin_choose_expr
: Look for GCC-style __builtin_choose_expr
case "$d_builtin_choose_expr" in
")
   echo " "
   echo "Checking whether your compiler can handle __builtin_choose_expr ..." >&4
   $cat >try.c <<'EOCP'
#include <assert.h>
#include <stdlib.h>
#include <stdio.h>

#define SYRINX(x) __builtin_choose_expr( x, (1056*2), (103*50) )

int main(void) {
   assert( SYRINX(1) == 2112 );
   assert( SYRINX(1) != 5150 );
    assert( SYRINX(0) == 5150 );
   assert( SYRINX(0) != 2112 );
   puts( "All good!" );
   exit(0);
}
```

```
EOCP
   set try
   if eval $compile && $run ./try; then
 echo "Your C compiler supports __builtin_choose_expr."
 val="$define"
   else
 echo "Your C compiler doesn't seem to understand __builtin_choose_expr."
 val="$undef"
   fi
;;
*) val="$d_builtin_choose_expr" ;;
esac

set d_builtin_choose_expr
eval $setvar
$rm_try

: Look for GCC-style __builtin_expect
case "$d_builtin_expect" in
")
   echo " "
   echo "Checking whether your compiler can handle __builtin_expect ..." >&4
   $cat >try.c <<'EOCP'
int main(void) {
   int n = 50;
   if ( __builtin_expect(n, 0) ) n = 1;
   /* Remember shell exit code truth is 0, C truth is non-zero */
   return !(n == 1);
}
EOCP
   set try
   if eval $compile && $run ./try; then
 echo "Your C compiler supports __builtin_expect."
 val="$define"
   else
 echo "Your C compiler doesn't seem to understand __builtin_expect."
 val="$undef"
    fi
   ;;
*) val="$d_builtin_expect" ;;
esac

set d_builtin_expect
eval $setvar
$rm_try

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_builtin.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_time.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit finds which "time" include to use. If 'timezone' is used by the
?X: program, we also try to find which header should be included. Eventually,
?X: we look for <sys/select.h> if I_SYSSELECT is used, to get struct timeval.
?X:
?MAKE:i_time i_systime i_systimek timeincl: cat cc ccflags contains rm_try \
 echo n c +i_sysselct Findhdr
?MAKE: -pick add $@ %<
?S:i_time:
?S: This
 variable conditionally defines I_TIME, which indicates
?S: to the C program that it should include <time.h>.
?S:.
?S:i_systime:
?S: This variable conditionally defines I_SYS_TIME, which indicates
?S: to the C program that it should include <sys/time.h>.
?S:.
?S:i_systimek:
?S: This variable conditionally defines I_SYS_TIME_KERNEL, which
?S: indicates to the C program that it should include <sys/time.h>
?S: with KERNEL defined.
?S:.
?S:timeincl:
?S: This variable holds the full path of the included time header(s).
?S:.
?C:I_TIME (USE_TIME_H):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <time.h>.
?C:.
?C:I_SYS_TIME (I_SYSTIME USE_SYS_TIME_H NO_TIME_WITH_SYS_TIME):
?C: This symbol, if defined, indicates to the C program that it should
```

```
?C: include <sys/time.h>.
?C:.
?C:I_SYS_TIME_KERNEL (I_SYSTIMEKERNEL):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h> with KERNEL defined.
?C:.
?H:#$i_time I_TIME  /**/
?H:#$i_systime
 I_SYS_TIME  /**/
?H:#$i_systimek I_SYS_TIME_KERNEL  /**/
?H:.
?W::timezone
?T:xselect flags sysselect s_timeval s_timezone
?LINT:change i_sysselct
: see if we should include time.h, sys/time.h, or both
echo " "
echo "Testing to see if we should include <time.h>, <sys/time.h> or both." >&4
$echo $n "I'm now running the test program...$c"
$cat >try.c <<'EOCP'
#include <sys/types.h>
#ifdef I_TIME
#include <time.h>
#endif
#ifdef I_SYSTIME
#ifdef SYSTIMEKERNEL
#define KERNEL
#endif
#include <sys/time.h>
#endif
#ifdef I_SYSSELECT
#include <sys/select.h>
#endif
int main()
{
 struct tm foo;
#ifdef S_TIMEVAL
 struct timeval bar;
#endif
#ifdef S_TIMEZONE
 struct timezone tzp;
#endif
 if (foo.tm_sec == foo.tm_sec)
  exit(0);
#ifdef S_TIMEVAL
 if (bar.tv_sec == bar.tv_sec)
  exit(0);
#endif
 exit(1);
```

```
}
EOCP
flags=''
@if I_SYSSELECT
if $contains 'timeval.*{' `./findhdr sys/select.h` >/dev/null 2>&1; then
 xselect='-DI_SYSSELECT'
else
 xselect=''
fi
@end
@if timezone
for s_timezone
 in '-DS_TIMEZONE' ''; do
@else
s_timezone=''
@end
?X: Every package is given a try with 'struct timeval'
@if I_SYSSELECT
for sysselect in $xselect ''; do
@else
sysselect=''
@end
for s_timeval in '-DS_TIMEVAL' ''; do
for i_systimek in '' '-DSYSTIMEKERNEL'; do
for i_time in '' '-DI_TIME'; do
for i_systime in '-DI_SYSTIME' ''; do
 case "$flags" in
 '') $echo $n ".$c"
  if $cc $ccflags \
  $i_time $i_systime $i_systimek $sysselect $s_timeval $s_timezone \
  -o try try.c >/dev/null 2>&1 ; then
   set X $i_time $i_systime $i_systimek $sysselect $s_timeval
   shift
   flags="$*"
   echo " "
   $echo $n "Succeeded with $flags$c"
  fi
  ;;
 esac
done
done
done
done
@if I_SYSSELECT
done
@end
@if timezone
done
```

```
@end
timeincl=''
echo " "
case "$flags" in
*SYSTIMEKERNEL*) i_systimek="$define"
 timeincl=`./findhdr sys/time.h`
 echo "We'll include <sys/time.h> with KERNEL defined." >&4;;
*) i_systimek="$undef";;
esac
case "$flags" in
*I_TIME*) i_time="$define"
 timeincl=`./findhdr time.h`" $timeincl"
 echo
 "We'll include <time.h>." >&4;;
*) i_time="$undef";;
esac
case "$flags" in
*I_SYSTIME*) i_systime="$define"
 timeincl=`./findhdr sys/time.h`" $timeincl"
 echo "We'll include <sys/time.h>." >&4;;
*) i_systime="$undef";;
esac
@if I_SYSSELECT
case "$flags" in
*I_SYSSELECT*) i_sysselct="$define"
 timeincl=`./findhdr sys/select.h`" $timeincl"
 echo "We'll also include <sys/select.h> to get struct timeval." >&4;;
*) case "$i_sysselct" in
 '') i_sysselct="$undef";;
 esac
esac
@end
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_localeconv_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_localeconv_l:
```

```
?S: This variable conditionally defines the HAS_LOCALECONV_L symbol, which
?S: indicates to the C program that the localeconv_l() routine is available.
?S:.
?C:HAS_LOCALECONV_L:
?C: This symbol, if defined, indicates that the localeconv_l routine is
?C: available to query certain information about a locale.
?C:.
?H:#$d_localeconv_l HAS_LOCALECONV_L  /**/
?H:.
?LINT:set d_localeconv_l
: see if localeconv_l exists
set localeconv_l d_localeconv_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_localeconv_l.U
No license file was found, but licenses were detected in source scan.

* Feel free to modify any of this as the need arises. Note, however,

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/metaconfig.html
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Guess.U,v $
?RCS: Revision 3.0.1.5  1995/07/25  13:37:14  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:53:55  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:14:35  ram
?RCS: patch15: variable d_bsd was not always set properly
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:14  ram
?RCS: patch8: fixed comment which wrongly
```

```
 attributed the usrinc symbol
?RCS: patch8: no more ugly messages when no /usr/include/ctype.h
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:37:37  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit hazards some guesses as to what the general nature of the system
?X: is.  The information it collects here is used primarily to establish default
?X: answers to other questions.
?X:
?MAKE:Guess d_eunice d_xenix d_bsd d_linux d_dos d_os2: cat test echo n c \
 contains rm tr Loc eunicefix
?MAKE: -pick add $@ %<
?S:d_eunice:
?S: This variable conditionally defines the symbols EUNICE_SYSTEM, which
?S: alerts the C program that it must deal with ideosyncracies of VMS.
?S:.
?S:d_xenix:
?S: This variable conditionally defines the symbol XENIX_SYSTEM, which alerts
?S: the C program that it runs under Xenix.
?S:.
?S:d_dos:
?S: This symbol conditionally defines the symbol DOS_SYSTEM
 when running on
?S: DOS with DJGPP or Cygwin.
?S:.
?S:d_os2:
?S: This symbol conditionally defines the symbol OS2_SYSTEM when running on
?S: an OS/2 system.
?S:.
?S:d_bsd:
?S: This symbol conditionally defines the symbol BSD_SYSTEM when running on a
?S: BSD system.
?S:.
?S:d_linux:
?S: This symbol conditionally defines the symbol LINUX_SYSTEM when running
?S: on a Linux system.
?S:.
?C:EUNICE_SYSTEM (EUNICE):
?C: This symbol, if defined, indicates that the program is being compiled
?C: under the EUNICE package under VMS.  The program will need to handle
?C: things like files that don't go away the first time you unlink them,
?C: due to version numbering.  It will also need to compensate for lack
?C: of a respectable link() command.
```

```
?C:.
?C:VMS_SYSTEM (VMS):
?C: This symbol, if defined, indicates that the program is running under
?C: VMS.  It is currently only set in conjunction with the EUNICE symbol.
?C:.
?C:XENIX_SYSTEM (XENIX):
?C: This symbol, if defined, indicates that the program
 is running under
?C: Xenix (at least 3.0 ?).
?C:.
?C:DOS_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: DOS with DJGPP.
?C:.
?C:OS2_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: an OS/2 system.
?C:.
?C:BSD_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: a BSD system.
?C:.
?C:LINUX_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: a Linux system.
?C:.
?H:#$d_eunice EUNICE_SYSTEM  /**/
?H:#$d_eunice VMS_SYSTEM  /**/
?H:#$d_xenix XENIX_SYSTEM  /**/
?H:#$d_dos DOS_SYSTEM  /**/
?H:#$d_os2 OS2_SYSTEM  /**/
?H:#$d_bsd BSD_SYSTEM  /**/
?H:#$d_linux LINUX_SYSTEM  /**/
?H:.
?F:./bsd ./usg ./v7 ./osf1 ./eunice ./xenix ./venix ./dos ./os2 ./gnu ./linux
?T:xxx DJGPP MACHTYPE
: make some quick guesses about what we are up against
echo " "
$echo $n "Hmm...  $c"
echo exit 1 >bsd
echo exit 1 >usg
echo exit 1 >v7
echo exit 1 >osf1
echo exit 1 >eunice
echo
 exit 1 >xenix
echo exit 1 >venix
echo exit 1 >os2
```

```
echo exit 1 >gnu
echo exit 1 >linux
echo exit 1 >dos
d_bsd="$undef"
d_linux="$undef"
d_dos="$undef"
d_os2="$undef"
?X:
?X: Do not use 'usrinc', or we get a circular dependency. because
?X: usrinc is defined in usrinc.U, which relies on us...
?X:
$cat /usr/include/signal.h /usr/include/sys/signal.h >foo 2>/dev/null
if test -f /osf_boot || $contains 'OSF/1' /usr/include/ctype.h >/dev/null 2>&1
then
 echo "Looks kind of like an OSF/1 system, but we'll see..."
 echo exit 0 >osf1
elif test `echo abc | $tr a-z A-Z` = Abc ; then
 xxx=`./loc addbib blurfl $pth`
 if $test -f $xxx; then
 echo "Looks kind of like a USG system with BSD features, but we'll see..."
  echo exit 0 >bsd
  echo exit 0 >usg
 else
  if $contains SIGTSTP foo >/dev/null 2>&1 ; then
   echo "Looks kind of like an extended USG system, but we'll see..."
  else
   echo "Looks kind of like a USG system, but we'll see..."
  fi
  echo exit 0 >usg
 fi
elif $contains SIGTSTP foo >/dev/null
 2>&1 ; then
 echo "Looks kind of like a BSD system, but we'll see..."
 d_bsd="$define"
 echo exit 0 >bsd
elif
 $rm --version 2>/dev/null >foo;
 $contains "Free Software Foundation" foo >/dev/null
then
 xxx=`uname`
 echo exit 0 >gnu
 echo "Looks kind of like a GNU/$xxx system, but we'll see..."
 if $test X$xxx = XLinux; then
  d_linux="$define"
  echo exit 0 >linux
 fi
else
 echo "Looks kind of like a Version 7 system, but we'll see..."
```

```
 echo exit 0 >v7
fi
case "$eunicefix" in
*unixtovms*)
 $cat <<'EOI'
There is, however, a strange, musty smell in the air that reminds me of
something...hmm...yes...I've got it...there's a VMS nearby, or I'm a Blit.
EOI
 echo exit 0 >eunice
 d_eunice="$define"
: it so happens the Eunice I know will not run shell scripts in Unix format
 ;;
*)
 echo " "
 echo "Congratulations.  You aren't running Eunice."
 d_eunice="$undef"
 ;;
esac
case "$p_" in
:) ;;
*)
 $cat <<'EOI'
I have the feeling something is not exactly right, however...don't tell me...
EOI
 if
 test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
  cygwin) echo "hah!... you're running under Cygwin!";;
  *) echo "got it... you're running DOS with DJGPP!";;
  esac
  echo exit 0 >dos
  d_dos="$define"
 else
  $cat <<'EOI'
lemme think...does HAL ring a bell?...no, of course, you're only running OS/2!
EOI
  echo exit 0 >os2
  d_os2="$define"
 fi
 ;;
esac
if test -f /xenix; then
 echo "Actually, this looks more like a XENIX system..."
 echo exit 0 >xenix
 d_xenix="$define"
else
 echo " "
 echo "It's not Xenix..."
```

```
 d_xenix="$undef"
fi
chmod +x xenix
$eunicefix xenix
if test -f /venix; then
 echo "Actually, this looks more like a VENIX system..."
 echo exit 0 >venix
else
 echo " "
 if ./xenix; then
  : null
 else
  echo "Nor is it Venix..."
 fi
fi
chmod +x bsd usg v7 osf1 eunice xenix venix dos os2 gnu linux
$eunicefix bsd usg v7 osf1 eunice xenix venix dos os2 gnu linux
$rm -f foo
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Guess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dbl_dig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dbl_dig.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:28  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dbl_dig: Myread contains cat rm Setvar i_limits i_float \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_dbl_dig:
?S: This variable conditionally defines d_dbl_dig if this system's
?S: header files provide DBL_DIG, which is the number of significant
?S: digits
 in a double precision number.
?S:.
```

```
?C:HAS_DBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol DBL_DIG, which is the number
?C: of significant digits in a double precision number.  If this
?C: symbol is not defined, a guess of 15 is usually pretty good.
?C:.
?H:#$d_dbl_dig HAS_DBL_DIG  /**/
?H:.
?F:!dbl_dig.c
?LINT:set d_dbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >dbl_dig.c <<EOM
#$i_limits I_LIMITS
#$i_float I_FLOAT
#ifdef I_LIMITS
#include <limits.h>
#endif
#ifdef I_FLOAT
#include <float.h>
#endif
#ifdef DBL_DIG
printf("Contains DBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < dbl_dig.c >dbl_dig.E 2>/dev/null
if $contains 'DBL_DIG' dbl_dig.E >/dev/null 2>&1; then
 echo "DBL_DIG found." >&4
 val="$define"
else
 echo "DBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f dbl_dig.?
set d_dbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dbl_dig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: perlpath.U,v $
?RCS: Revision 3.0.1.2  1995/09/25  09:17:04  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:33:53  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this unit is to locate perl good enough to construct a #!
?X:
?MAKE:perlpath: Getfile Oldconfig Loc perl
?MAKE: -pick
 add $@ %<
?Y:TOP
?S:perlpath:
?S: This variable contains the eventual value of the PERLPATH symbol,
?S: which contains the absolute location of the perl interpreter.
?S:.
?C:PERLPATH:
?C: This symbol contains the absolute location of the perl interpreter.
?C:.
?H:#define PERLPATH "$perlpath"  /**/
?H:.
: determine perl absolute location
case "$perlpath" in
")
 if test -f /usr/bin/perl; then
  dflt=/usr/bin/perl
 else
  case "$perl" in
  */*) dflt="$perl";;
  *) dflt=/usr/bin/perl;;
  esac
 fi
 ;;
*)  dflt="$perlpath"
 ;;
esac
echo " "
fn=f~/
rp="Where is perl located on your system?"
. ./getfile
```

```
perlpath="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/perlpath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_eofpipe.U,v 3.0.1.1 1994/10/29 16:12:40 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_eofpipe.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:40  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_eofpipe: Compile cat rm Oldconfig Guess echo n c
?MAKE: -pick add $@ %<
?S:d_eofpipe:
?S: This variable conditionally defines the EOFPIPE symbol, which
?S: indicates to the C program that select will correctly detect
 the EOF
?S: condition when pipe is closed from the other end.
?S:.
?C:EOFPIPE:
?C: This symbol, if defined, indicates that EOF condition will be detected
?C: by the reader of the pipe when it is closed by the writing process.
?C: That is, a select() call on that file descriptor will not block when
?C: only an EOF remains (typical behavior for BSD systems).
?C:.
?H:#$d_eofpipe EOFPIPE  /**/
?H:.
?F:!mpipe
: see if pipe correctly gives the EOF condition
echo " "
case "$d_eofpipe" in
")
 echo "Let's see if your pipes return EOF to select() upon closing..." >&4
 $cat >pipe.c <<'EOP'
int main()
{
```

```
 int pd[2];
 int mask;

 pipe(pd);
 if (0 == fork()) {
  close(pd[0]);
  close(pd[1]);
  exit(0);
 }

 close(pd[1]);
 mask = 1 << pd[0];
 alarm(2);
 select(32, &mask, (int *) 0, (int *) 0, (char *) 0);
 if (0 == read(pd[0], &mask, 1))
  exit(0);

 exit(1);
}
EOP
 set pipe
 if eval $compile_ok; then
?X: Use a script to avoid the possible 'alarm call' message
  echo "./pipe || exit 1" > mpipe
  chmod
 +x mpipe
  ./mpipe >/dev/null 2>&1
  case $? in
  0) d_eofpipe="$define";;
  *) d_eofpipe="$undef";;
  esac
 else
  echo "(The test program did not compile correctly -- Guessing.)"
  if ./bsd; then
   d_eofpipe="$define"
  else
   d_eofpipe="$undef"
  fi
 fi
 case "$d_eofpipe" in
 "$define") echo "Yes, they do.";;
 *) echo "No, they don't! (sigh)";;
 esac
 ;;
*)
 $echo $n "Your pipes $c"
 case "$d_eofpipe" in
 "$define") echo "allow select() to see EOF upon closing.";;
```

```
 *) echo "won't let select() see EOF on closing.";;
 esac
 ;;
esac
$rm -f *pipe* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_eofpipe.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_strftime:
?S: This variable conditionally defines the HAS_STRFTIME symbol, which
?S: indicates to the C program that the strftime() routine is available.
?S:.
?C:HAS_STRFTIME:
?C: This symbol, if defined, indicates that the strftime routine is
?C: available to do time formatting.
?C:.
?H:#$d_strftime HAS_STRFTIME  /**/
?H:.
?LINT:set d_strftime
: see if strftime exists
set strftime d_strftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libpth.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: libpth.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:08:49  ram
?RCS: patch61: new loclibpth variable
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:31:30  ram
?RCS: patch45: call ./mips instead of just mips (WED)
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:29:15  ram
?RCS: patch32: added /lib/pa1.1 for HP-UX specially tuned PA-RISC libs (ADO)
?RCS: patch32: fixed information message, making it clearer (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:03:54
  ram
?RCS: patch30: added /usr/shlib to glibpth for shared-only libraries
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:26:57  ram
?RCS: patch27: fixed a typo (libpth -> glibpth)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:07:53  ram
?RCS: patch23: now asks for library directories to be searched (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit initializes the path for C library lookup.
?X:
?MAKE:libpth glibpth xlibpth plibpth loclibpth incpth: \
 usrinc incpath test cat Myread Oldconfig sysroot osname \
 ccname echo cppstdin awk grep sed rm usecrosscompile
?MAKE: -pick add $@ %<
?S:libpth:
?S: This variable holds the general path (space-separated) used to find
?S: libraries. It is intended to be used by other units.
?S:.
?S:glibpth:
?S: This variable holds the general path (space-separated) used to
?S: find libraries.  It may contain directories that do not exist on
?S: this platform, libpth is the cleaned-up
 version.
?S:.
?S:xlibpth:
?S: This variable holds extra path (space-separated) used to find
?S: libraries on this platform, for example CPU-specific libraries
?S: (on multi-CPU platforms) may be listed here.
?S:.
?S:loclibpth:
?S: This variable holds the paths (space-separated) used to find local
```

```
?S: libraries.  It is prepended to libpth, and is intended to be easily
?S: set from the command line.
?S:.
?S:plibpth:
?S: Holds the private path used by Configure to find out the libraries.
?S: Its value is prepend to libpth. This variable takes care of special
?S: machines, like the mips.  Usually, it should be empty.
?S:.
?S:incpth:
?S: This variable must precede the normal include path to get the
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
?S:.
?T: xxx dlist i j croak realpath inclibpth
?LINT:extern incpth
?LINT:change usrinc
?INIT:: change the next line if compiling for Xenix/286 on Xenix/386
?INIT:xlibpth='/usr/lib/386
 /lib/386'
?INIT:: Possible local library directories to search.
?INIT:loclibpth="/usr/local/lib /opt/local/lib /usr/gnu/lib"
?INIT:loclibpth="$loclibpth /opt/gnu/lib /usr/GNU/lib /opt/GNU/lib"
?INIT:
?INIT:: general looking path for locating libraries
?INIT:glibpth="/lib /usr/lib $xlibpth"
?INIT:glibpth="$glibpth /usr/ccs/lib /usr/ucblib /usr/local/lib"
?X: /shlib is for Digital Unix 4.0
?X: /usr/shlib is for OSF/1 systems.
?INIT:test -f /usr/shlib/libc.so && glibpth="/usr/shlib $glibpth"
?INIT:test -f /shlib/libc.so     && glibpth="/shlib $glibpth"
?INIT:test -d /usr/lib64         && glibpth="$glibpth /lib64 /usr/lib64 /usr/local/lib64"
?INIT:
?INIT:: Private path used by Configure to find libraries.  Its value
?INIT:: is prepended to libpth. This variable takes care of special
?INIT:: machines, like the mips.  Usually, it should be empty.
?INIT:plibpth=''
?INIT:
?X:cppfilter is later used in Findhdr.U, but we not want to expose it to config.h
?T:cppfilter
: Adjust cppfilter for path
 component separator
case "$osname" in
vos) cppfilter="tr '\\\\>' '/' |" ;; # path component separator is >
os2) cppfilter="sed -e 's|\\\\\\\\|/|g' |" ;; # path component separator is \
*)   cppfilter='' ;;
esac

: Use gcc to determine libpth and incpth
```

```
# If using gcc or clang, we can get better values for libpth, incpth
# and usrinc directly from the compiler.
# Note that ccname for clang is also gcc.
case "$ccname" in
  gcc)
 realpath=`which realpath 2>/dev/null | sed 's/no realpath in.*//'`
 $echo 'extern int foo;' > try.c
 set X `$cppstdin -v try.c 2>&1 | $awk '/^#include </,/^End of search /'|$cppfilter $grep '/include'`
 shift
 inclibpth=""
 if $test $# -gt 0; then
     for i in $*; do
  case $realpath in
      */realpath) i=`$realpath $i` ;;
  esac
  incpth="$incpth $i"
  j="`$echo $i | $sed 's,/include[^/]*,/lib,'`"
  if $test -d $j; then
      inclibpth="$inclibpth $j"
  fi
     done
     incpth="`$echo $incpth | $sed 's/^ //'`"
     for xxx in $inclibpth $loclibpth $plibpth
 $glibpth; do
  if $test -d $xxx; then
      case $realpath in
   */realpath) xxx=`$realpath $xxx` ;;
      esac
      case " $libpth " in
      *" $xxx "*) ;;
      *) libpth="$libpth $xxx";;
      esac
  fi
     done
     libpth="`$echo $libpth | $sed 's/^ //'`"
 fi
 $rm -f try.c
 case "$usrinc" in
 ") for i in $incpth; do
  if $test -f $i/errno.h -a -f $i/stdio.h -a -f $i/time.h; then
      usrinc="$i"
      break
  fi
     done
     ;;
 esac

 case "$usecrosscompile" in
```

```
 $define|true|[yY]*)
    case "$incpth" in
  ") echo "Incpth not defined." >&4; croak=y ;;
  *)  echo "Using incpth '$incpth'." >&4 ;;
    esac
    case "$libpth" in
  ") echo "Libpth not defined." >&4; croak=y ;;
  *)  echo "Using libpth '$libpth'." >&4 ;;
    esac
    case "$usrinc" in
  ") echo "Usrinc not defined." >&4; croak=y ;;
  *)  echo "Using usrinc $usrinc." >&4 ;;
    esac
    case "$croak" in
  y)
  if test "X$sysroot" = X; then
     echo "Cannot continue, aborting." >&4; exit 1
  else

   echo "Cross-compiling using sysroot $sysroot, failing to guess inc/lib paths is not fatal" >&4
  fi
  ;;
    esac
    ;;
 esac
   ;;
esac

: Default value for incpth is just usrinc
case "$incpth" in
") incpth="$usrinc";;
esac

: Set private lib path
case "$plibpth" in
") if ./mips; then
?X: on mips, we DO NOT want /lib, and we want $incpath/usr/lib
 plibpth="$incpath/usr/lib $sysroot/usr/local/lib $sysroot/usr/ccs/lib"
   fi;;
esac
case "$libpth" in
' ') dlist=";;
") dlist="$loclibpth $plibpth $glibpth";;
*) dlist="$libpth";;
esac

: Now check and see which directories actually exist, avoiding duplicates
for xxx in $dlist
```

```
do
   if $test -d $xxx; then
  case " $libpth " in
  *" $xxx "*) ;;
  *) libpth="$libpth $xxx";;
  esac
   fi
done
$cat <<'EOM'

Some systems have incompatible or broken versions of libraries.  Among
the directories listed in the question below, please remove any you
know not to be holding relevant libraries, and add any that are needed.
Say "none" for none.

EOM

if
 test "X$sysroot" != X; then
   $cat <<EOM
You have set sysroot to $sysroot, please supply the directories excluding sysroot

EOM
fi

case "$libpth" in
") dflt='none';;
*)
?X: strip leading space
 set X $libpth
 shift
 dflt=${1+"$@"}
 ;;
esac
rp="Directories to use for library searches?"
. ./myread
case "$ans" in
none) libpth=' ';;
*) libpth="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libpth.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:ivdformat uvuformat uvoformat uvxformat uvXUformat \
 nvEUformat nvFUformat nvGUformat \
 nveformat nvfformat nvgformat: \
 ivsize longsize intsize shortsize \
 sPRId64 sPRIu64 sPRIo64 sPRIx64 sPRIXU64 \
 uselongdouble d_longdbl usequadmath d_PRIgldbl \
 sPRIEUldbl sPRIFUldbl sPRIGUldbl sPRIeldbl sPRIfldbl sPRIgldbl \
 test echo
?MAKE: -pick add $@ %<
?S:ivdformat:
?S: This variable contains the format string used for printing
?S: a Perl IV as a signed decimal integer.
?S:.
?S:uvuformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned decimal integer.
?S:.
?S:uvoformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned
 octal integer.
?S:.
?S:uvxformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned hexadecimal integer in lowercase abcdef.
?S:.
?S:uvXUformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned hexadecimal integer in uppercase ABCDEF.
?S:.
?S:nveformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %e-ish floating point format.
?S:.
?S:nvfformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %f-ish floating point format.
?S:.
?S:nvgformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %g-ish floating point format.
?S:.
?S:nvEUformat:
?S: This variable contains the format string used for printing
```

```
?S: a Perl NV using %E-ish floating point format.
?S:.
?S:nvFUformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %F-ish floating point format.
?S:.
?S:nvGUformat:
?S: This
 variable contains the format string used for printing
?S: a Perl NV using %G-ish floating point format.
?S:.
?C:IVdf:
?C: This symbol defines the format string used for printing a Perl IV
?C: as a signed decimal integer.
?C:.
?C:UVuf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned decimal integer.
?C:.
?C:UVof:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned octal integer.
?C:.
?C:UVxf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned hexadecimal integer in lowercase abcdef.
?C:.
?C:UVXf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned hexadecimal integer in uppercase ABCDEF.
?C:.
?C:NVef:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %e-ish floating point format.
?C:.
?C:NVff:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %f-ish floating point
 format.
?C:.
?C:NVgf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %g-ish floating point format.
?C:.
?C:NVEf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %E-ish floating point format.
?C:.
```

```
?C:NVFf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %F-ish floating point format.
?C:.
?C:NVGf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %G-ish floating point format.
?C:.
?H:#define IVdf  $ivdformat  /**/
?H:#define UVuf  $uvuformat  /**/
?H:#define UVof  $uvoformat  /**/
?H:#define UVxf  $uvxformat  /**/
?H:#define UVXf  $uvXUformat  /**/
?H:#define NVef  $nveformat  /**/
?H:#define NVff  $nvfformat  /**/
?H:#define NVgf  $nvgformat  /**/
?H:#define NVEf  $nvEUformat  /**/
?H:#define NVFf  $nvFUformat  /**/
?H:#define NVGf  $nvGUformat  /**/
?H:.
: Check format strings for internal types
echo " "
$echo "Checking the format strings to be used for Perl's
 internal types..." >&4

if $test X"$ivsize" = X8; then
 ivdformat="$sPRId64"
 uvuformat="$sPRIu64"
 uvoformat="$sPRIo64"
 uvxformat="$sPRIx64"
 uvXUformat="$sPRIXU64"
else
 if $test X"$ivsize" = X"$longsize"; then
  ivdformat="'ld'"
  uvuformat="'lu'"
  uvoformat="'lo'"
  uvxformat="'lx'"
  uvXUformat="'lX'"
 else
  if $test X"$ivsize" = X"$intsize"; then
   ivdformat="'d'"
   uvuformat="'u'"
   uvoformat="'o'"
   uvxformat="'x'"
   uvXUformat="'X'"
  else
   : far out
   if $test X"$ivsize" = X"$shortsize"; then
```

```
    ivdformat='"hd"'
    uvuformat='"hu"'
    uvoformat='"ho"'
    uvxformat='"hx"'
    uvXUformat='"hX"'
   fi
  fi
 fi
fi

if $test X"$usequadmath" = X"$define"; then
   nveformat='"Qe"'
   nvfformat='"Qf"'
   nvgformat='"Qg"'
   nvEUformat='"QE"'
   nvFUformat='"QF"'
   nvGUformat='"QG"'
else
   if $test X"$uselongdouble" = X"$define" -a X"$d_longdbl" = X"$define" -a X"$d_PRIgldbl" = X"$define"; then
 nveformat="$sPRIeldbl"
 nvfformat="$sPRIfldbl"
 nvgformat="$sPRIgldbl"
 nvEUformat="$sPRIEUldbl"
 nvFUformat="$sPRIFUldbl"
 nvGUformat="$sPRIGUldbl"
    else
 nveformat='"e"'
 nvfformat='"f"'
 nvgformat='"g"'
 nvEUformat='"E"'
 nvFUformat='"F"'
 nvGUformat='"G"'
   fi
fi

case "$ivdformat" in
") echo "$0: Fatal: failed to find format strings, cannot continue." >&4
   exit 1
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlxvf.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: ipc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: ipc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ipc serve_shm serve_msg serve_inet_udp serve_inet_tcp serve_unix_udp \
 serve_unix_tcp: test Myread Oldconfig d_socket d_msg d_shm d_sem
?MAKE: -pick add $@ %<
?LINT:use d_msg d_sem
?S:ipc:
?S: This variable holds the type of IPC service we'll be using.  Values
?S: include "ip", "shm", "msg", "cms" and "os9".  We don't worry about
?S: cms or os9
 here, because Configure doesn't run in those places--HMS.
?S:.
?S:serve_shm:
?S: This variable controls the definition of SERVE_SHM, which tells the
?S: C program to use USG shared memory for IPC.
?S:.
?S:serve_msg:
?S: This variable controls the definition of SERVE_MSG, which tells the
?S: C program to use USG message queues for IPC.
?S:.
?S:serve_inet_udp:
?S: This variable controls the definition of SERVE_INET_UDP, which tells
?S: the C program to enable InterNet-domain UDP support for IPC.
?S:.
?S:serve_inet_tcp:
?S: This variable controls the definition of SERVE_INET_TCP, which tells
?S: the C program to enable InterNet-domain TCP support for IPC.
?S:.
?S:serve_unix_udp:
?S: This variable controls the definition of SERVE_UNIX_UDP, which tells
?S: the C program to enable Unix-domain UDP support for IPC.
?S:.
?S:serve_unix_tcp:
?S: This variable controls the definition of SERVE_UNIX_TCP, which tells
?S: the C program to enable Unix-domain TCP support for IPC.
?S:.
?C:SERVE_SHM:
?C: If
```

```
 defined, tells the C program to use USG shared memory for IPC.
?C:.
?C:SERVE_MSG:
?C: If defined, tells the C program to use USG message queues for IPC.
?C:.
?C:SERVE_INET_UDP:
?C: If defined, tells the C program to enable InterNet-domain UDP
?C: support for IPC.
?C:.
?C:SERVE_INET_TCP:
?C: If defined, tells the C program to enable InterNet-domain TCP
?C: support for IPC.
?C:.
?C:SERVE_UNIX_UDP:
?C: If defined, tells the C program to enable Unix-domain UDP
?C: support for IPC.
?C:.
?C:SERVE_UNIX_TCP:
?C: If defined, tells the C program to enable Unix-domain TCP
?C: support for IPC.
?C:.
?H:#$serve_shm SERVE_SHM /**/
?H:#$serve_msg SERVE_MSG /**/
?H:#$serve_inet_udp SERVE_INET_UDP /**/
?H:#$serve_inet_tcp SERVE_INET_TCP /**/
?H:#$serve_unix_udp SERVE_UNIX_UDP /**/
?H:#$serve_unix_tcp SERVE_UNIX_TCP /**/
?H:.
?X: FIXME -- RAM
?INIT:serve_shm="
?INIT:serve_msg="$undef"
?INIT:serve_inet_udp="
?INIT:serve_inet_tcp="
?INIT:serve_unix_udp="
?INIT:serve_unix_tcp="
: get IPC mechanism
echo
 " "
ipc="
while $test -z "$ipc"
do
 if $test "$ipc" != "shm" -a "$d_socket" = "$define"; then
  ipc="
  if $test "$serve_inet_udp" = "$undef"; then
   dflt=n
  else
   dflt=y
  fi
```

```
rp='Provide InterNet-domain UDP service?'
. ./myread
dflt=''
case "$ans" in
n*) serve_inet_udp="$undef";;
*)
 serve_inet_udp="$define"
 ipc='ip'
 ;;
esac

if $test "$serve_inet_tcp" = "$define"; then
 dflt=y
else
 dflt=n
fi
rp='Provide InterNet-domain TCP service?'
. ./myread
dflt=''
case "$ans" in
n*) serve_inet_tcp="$undef";;
*)
 serve_inet_tcp="$define"
 ipc='ip'
 ;;
esac

if $test "$serve_unix_udp" = "$define"; then
 dflt=y
else
 dflt=n
fi
rp='Provide Unix-domain UDP service?'
. ./myread
dflt=''
case "$ans" in
n*) serve_unix_udp="$undef";;
*)
 serve_unix_udp="$define"
 ipc='ip'
 ;;
esac

if $test "$serve_unix_tcp" = "$define"; then
 dflt=y
else
 dflt=n
fi
```

```
 rp='Provide Unix-domain TCP service?'
 . ./myread
 dflt=''
 case
"$ans" in
 n*) serve_unix_tcp="$undef";;
 *)
  serve_unix_tcp="$define"
  ipc='ip'
  ;;
 esac
else
 serve_inet_udp="$undef"
 serve_inet_tcp="$undef"
 serve_unix_udp="$undef"
 serve_unix_tcp="$undef"
fi
if $test "$ipc" != "ip" -a "$d_shm" = "$define"; then
 echo "Providing USG shared memory IPC support." >&4
 serve_shm="$define"
 ipc='shm'
else
 serve_shm="$undef"
fi
if $test -z "$ipc"; then
 echo "You must select an IPC mechanism." >&4
fi
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ipc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_static_inline.U,v $
?RCS:
?RCS: Copyright (c) 2010 Andrew Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafayette.edu>
?RCS:
?MAKE:d_static_inline perl_static_inline: Compile Setvar gccversion \
 cat echo run hint rm rm_try
?MAKE: -pick add $@ %<
```

```
?S:d_static_inline:
?S: This variable conditionally defines the HAS_STATIC_INLINE symbol,
?S: which indicates that the C compiler supports C99-style static
?S: inline.  That is, the function can't be called from another
?S: translation unit.
?S:.
?S:perl_static_inline:
?S: This variable defines the PERL_STATIC_INLINE
 symbol to
?S: the best-guess incantation to use for static inline functions.
?S: Possibilities include
?S:  static inline       (c99)
?S:  static __inline__   (gcc -ansi)
?S:  static __inline     (MSVC)
?S:  static _inline      (older MSVC)
?S:  static              (c89 compilers)
?S:.
?C:HAS_STATIC_INLINE :
?C: This symbol, if defined, indicates that the C compiler supports
?C: C99-style static inline.  That is, the function can't be called
?C: from another translation unit.
?C:.
?C:PERL_STATIC_INLINE:
?C: This symbol gives the best-guess incantation to use for static
?C: inline functions.  If HAS_STATIC_INLINE is defined, this will
?C: give C99-style inline.  If HAS_STATIC_INLINE is not defined,
?C: this will give a plain 'static'.  It will always be defined
?C: to something that gives static linkage.
?C: Possibilities include
?C:  static inline       (c99)
?C:  static __inline__   (gcc -ansi)
?C:  static __inline     (MSVC)
?C:  static _inline      (older MSVC)
?C:  static
        (c89 compilers)
?C:.
?H:#$d_static_inline HAS_STATIC_INLINE    /**/
?H:#define PERL_STATIC_INLINE $perl_static_inline /**/
?H:.
?LINT:set d_static_inline
?T:inline xxx
?F:!try
: see what flavor, if any, of static inline is supported
echo " "
echo "Checking to see if your system supports static inline..."
?X: Build two programs.  The first uses static inline in file a.c and
?X: should work.  The second also includes b.c which tries to link against
?X: the static function in a.c.  This should fail.
```

```
?X:.
$cat > try.c <<'EOCP'
#include <stdlib.h>
extern int f_via_a(int x);
extern int f_via_b(int x);
int main(int argc, char **argv)
{
   int y;

   y = f_via_a(0);
#ifdef USE_B
   y = f_via_b(0);
#endif
   if (y == 42) {
       return EXIT_SUCCESS;
   }
   else {
       return EXIT_FAILURE;
   }
}
EOCP
$cat > a.c <<'EOCP'
static INLINE int f(int x) {
   int y;
   y = x + 42;
   return y;
}

int f_via_a(int x)
{
   return f(x);
}
EOCP
$cat > b.c <<'EOCP'
extern int f(int x);

int
 f_via_b(int x)
{
   return f(x);
}
EOCP

# Respect a hint (or previous) value for perl_static_inline, if there is one.
case "$perl_static_inline" in
") # Check the various possibilities, and break out on success.
 # For gcc, prefer __inline__, which will still permit
 # cflags.SH to add in -ansi.
```

```
 case "$gccversion" in
  ") xxx="inline __inline__ __inline _inline";;
  *)  xxx="__inline__ inline __inline _inline";;
 esac
 for inline in $xxx; do
  set try -DINLINE=$inline a.c
  if eval $compile && $run ./try; then
   # Now make sure there is no external linkage of static
   # functions
   set try -DINLINE=$inline -DUSE_B a.c b.c
   if eval $compile && $run ./try; then
    $echo "Your compiler supports static $inline, " >&4
    $echo "but it also creates an external definition," >&4
    $echo "so I won't use it." >&4
    val=$undef
   else
    $echo "Your compiler supports static $inline." >&4
    val=$define
    perl_static_inline="static $inline";
    break;
   fi
  else
   $echo
 "Your compiler does NOT support static $inline." >&4
   val="$undef"
  fi
 done
 ;;
*inline*) # Some variant of inline exists.
 echo "Keeping your $hint value of $perl_static_inline."
 val=$define
 ;;
static)  # No inline capabilities
 echo "Keeping your $hint value of $perl_static_inline."
 val=$undef
 ;;
*)  # Unrecognized previous value -- blindly trust the supplied
 # value and hope it makes sense.  Use old value for
 # d_static_inline, if there is one.
 echo "Keeping your $hint value of $perl_static_inline."
 case "$d_static_inline" in
  ") val=$define ;;
  *)  val=$d_static_inline ;;
 esac
 ;;
esac
# Fallback to plain 'static' if nothing worked.
case "$perl_static_inline" in
```

```
")
 perl_static_inline="static"
 val=$undef
 ;;
esac
set d_static_inline
eval $setvar
$rm -f a.[co] b.[co]
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_static_inline.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysioctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysioctl.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  15:04:57  ram
?RCS: patch23: added knowledge for <sys/filio.h> (WED)
?RCS: patch23: optimized amount of findhdr calls
?RCS:
?RCS: Revision 3.0.1.1  1993/11/10  17:36:09  ram
?RCS: patch14: now use a compiler check for TIOCNOTTY because of HP-UX 9.x
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysioctl i_bsdioctl i_sysfilio i_syssockio
 d_voidtty: test contains \
 cat i_termio i_termios i_sgtty Setvar Findhdr +cc rm Inhdr
?MAKE: -pick add $@ %<
?S:i_sysioctl:
?S: This variable conditionally defines the I_SYS_IOCTL symbol, which
?S: indicates to the C program that <sys/ioctl.h> exists and should
?S: be included.
?S:.
?S:i_sysfilio:
?S: This variable conditionally defines the I_SYS_FILIO symbol, which
?S: indicates to the C program that <sys/filio.h> exists and should
?S: be included in preference to <sys/ioctl.h>.
```

```
?S:.
?S:i_bsdioctl:
?S: This variable conditionally defines the I_SYS_BSDIOCTL symbol, which
?S: indicates to the C program that <sys/bsdioctl.h> exists and should
?S: be included.
?S:.
?S:i_syssockio:
?S: This variable conditionally defines I_SYS_SOCKIO to indicate to the
?S: C program that socket ioctl codes may be found in <sys/sockio.h>
?S: instead of <sys/ioctl.h>.
?S:.
?S:d_voidtty:
?S: This variable conditionally defines USE_IOCNOTTY to indicate that the
?S: ioctl() call with TIOCNOTTY should be used
 to void tty association.
?S: Otherwise (on USG probably), it is enough to close the standard file
?S: descriptors and do a setpgrp().
?S:.
?C:I_SYS_IOCTL (I_SYSIOCTL):
?C: This symbol, if defined, indicates that <sys/ioctl.h> exists and should
?C: be included. Otherwise, include <sgtty.h> or <termio.h>.
?C:.
?C:I_SYS_FILIO:
?C: This symbol, if defined, indicates that <sys/filio.h> exists and
?C: should be included instead of <sys/ioctl.h>.
?C:.
?C:I_SYS_BSDIOCTL (I_BSDIOCTL):
?C: This symbol, if defined, indicates that <sys/bsdioctl.h> exists and should
?C: be included. Otherwise, try <sys/ioctl.h>. This is primarly intended for
?C: definitions of sockets options, like SIOCATMARK.
?C:.
?C:I_SYS_SOCKIO (I_SYSSOCKIO):
?C: This symbol, if defined, indicates the <sys/sockio.h> should be included
?C: to get socket ioctl options, like SIOCATMARK.
?C:.
?C:USE_TIOCNOTTY (VOIDTTY):
?C: This symbol, if defined indicate to the C program that the ioctl()
?C: call with TIOCNOTTY should be used
 to void tty association.
?C: Otherwise (on USG probably), it is enough to close the standard file
?C: descriptors and do a setpgrp().
?C:.
?H:#$i_sysioctl I_SYS_IOCTL  /**/
?H:#$i_sysfilio I_SYS_FILIO  /**/
?H:#$i_bsdioctl I_SYS_BSDIOCTL  /**/
?H:#$i_syssockio I_SYS_SOCKIO /**/
?H:#$d_voidtty USE_TIOCNOTTY /**/
?H:.
```

```
?T:xxx
: see if ioctl defs are in sgtty, termio, sys/filio or sys/ioctl
?LINT:set i_sysfilio
set sys/filio.h i_sysfilio
eval $inhdr
echo " "
if $test `./findhdr sys/ioctl.h`; then
 val="$define"
 echo '<sys/ioctl.h> found.' >&4
else
 val="$undef"
 if $test $i_sysfilio = "$define"; then
     echo '<sys/ioctl.h> NOT found.' >&4
 else
  $test $i_sgtty = "$define" && xxx="sgtty.h"
  $test $i_termio = "$define" && xxx="termio.h"
  $test $i_termios = "$define" && xxx="termios.h"
echo "No <sys/ioctl.h> found, assuming ioctl args are defined in <$xxx>." >&4
 fi
fi
?LINT:set i_sysioctl
set i_sysioctl
eval $setvar

@if I_BSDIOCTL || i_bsdioctl
?X:
?X: The only machine I know where this
 inclusion was necessary is a
?X: BULL DPX 5000 (a French machine).
?X:
: see if socket ioctl defs are in sys/bsdioctl or sys/ioctl
echo " "
xxx=`./findhdr sys/bsdioctl.h`
if $test "$xxx"; then
 if $contains SIOCATMARK $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have socket ioctls defined in <sys/bsdioctl.h>." >&4
 else
  val="$undef"
  echo "No socket ioctls found in <sys/bsdioctl.h>." >&4
 fi
else
 val="$undef"
 echo "<sys/bsdioctl.h> not found, but that's ok." >&4
fi
?LINT:set i_bsdioctl
set i_bsdioctl
eval $setvar
```

```
@end
@if I_SYSSOCKIO || i_syssockio
: see if socket ioctl defs are in sys/sockio.h
echo " "
xxx=`./findhdr sys/sockio.h`
if $test "$xxx"; then
 if $contains SIOCATMARK $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have socket ioctls defined in <sys/sockio.h>." >&4
 else
  val="$undef"
  echo "No socket ioctls found in <sys/sockio.h>." >&4
 fi
else
 val="$undef"
@if I_BSDIOCTL
 case "$i_bsdioctl" in
 "$define") $cat <<EOM
<sys/sockio.h> not found, using
 ioctls from <sys/bsdioctl.h>.
EOM
 ;;
 *) $cat <<EOM
<sys/sockio.h> not found, assuming socket ioctls are in <sys/ioctl.h>.
EOM
 ;;
 esac
@else
 $cat <<EOM
<sys/sockio.h> not found, assuming socket ioctls are in <sys/ioctl.h>.
EOM
@end
fi
?LINT:set i_syssockio
set i_syssockio
eval $setvar

@end
@if VOIDTTY || d_voidtty
: check how to void tty association
echo " "
case "$i_sysioctl" in
"$define") xxx='sys/ioctl.h';;
?X: otherwise $xxx was set during the determination of i_sysioctl, above.
esac
?X:
?X: Can't use $contains here since HP-UX 9.x has TIOCNOTTY between a pair
```

```
?X: of #ifdef/#endif and is never actually defined. Oh well...
?X:
$cat > tcio.c <<EOM
#include <sys/types.h> /* Just in case */
#include <$xxx>

int main()
{
#ifdef TIOCNOTTY
 exit(0);
#else
 exit(1);
#endif
}
EOM
if ($cc -o tcio tcio.c && ./tcio) >/dev/null 2>&1; then
 val="$define"
 echo "TIOCNOTTY found in <$xxx>." >&4
 echo "Using ioctl() call on /dev/tty to void tty association." >&4
else
 val="$undef"
 echo "Closing
 standard file descriptors should void tty association." >&4
fi
?LINT:set d_voidtty
set d_voidtty
eval $setvar
$rm -f tcio tcio.? core

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysioctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_scalbn: Inlibc
?MAKE: -pick add $@ %<
?S:d_scalbn:
?S: This variable conditionally defines the HAS_SCALBN symbol, which
?S: indicates to the C program that the scalbn() routine is available.
?S:.
?C:HAS_SCALBN:
?C: This symbol, if defined, indicates that the scalbn routine is
?C: available to multiply floating-point number by integral power
?C: of radix.
```

```
?C:.
?H:#$d_scalbn HAS_SCALBN  /**/
?H:.
?LINT:set d_scalbn
: see if scalbn exists
set scalbn d_scalbn
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_scalbn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memalign.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memalign.U,v $
?RCS:
?MAKE:d_memalign: Inlibc
?MAKE: -pick add $@ %<
?S:d_memalign:
?S: This variable conditionally defines the HAS_MEMALIGN symbol, which
?S: indicates to the C program that the memalign() routine is available.
?S:.
?C:HAS_MEMALIGN :
?C: This symbol, if defined, indicates that the memalign routine is
?C: available to allocate aligned memory.
?C:.
?H:#$d_memalign HAS_MEMALIGN  /**/
?H:.
?LINT:set d_memalign
: see if memalign exists
set
 memalign d_memalign
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memalign.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Head.U 6 2006-08-25 22:21:46Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Head.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:02:09  ram
?RCS: patch61: make sure we unset CDPATH for shells that support this
?RCS: patch61: improved Korn shell detection and handling
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:02  ram
?RCS: patch56: added SVR4-ish /opt directories to path list (ADO)
?RCS: patch56: OS/2 platforms are using another path separator
?RCS:
?RCS: Revision 3.0.1.7  1995/03/21  08:46:15  ram
?RCS: patch52: definition of
 paths wrongly added spurious ':' chars
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:54:19  ram
?RCS: patch36: make sure ENV is unset before calling /bin/ksh
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:03:44  ram
?RCS: patch32: now sets PATH only using existing directories
?RCS:
?RCS: Revision 3.0.1.4  1994/06/20  06:54:28  ram
?RCS: patch30: now computes its invocation name into 'me'
?RCS: patch30: symbol me is made visible to all units read-only
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:15:07  ram
?RCS: patch15: added /sbin:/usr/sbin:/usr/libexec in PATH for BSD/386
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:32:35  ram
?RCS: patch14: ensure PATH is reset to '.' before testing for alias
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:07  ram
?RCS: patch7: not all 'test' programs support the -x option
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the very first unit in the Configure script.  It is mostly just
?X:
 things to keep people from getting into a tizzy right off the bat.
?X:
```

```
?MAKE:Head:
?MAKE: -pick wipe $@ %<
?V:PATH p_ _exe me newsh
?T:argv p paths OS2_SHELL DJGPP
?T:inksh needksh avoidksh newsh changesh reason
?F:!*
?LINT:extern ENV CDPATH SHELL MACHTYPE _exe is_os2
?LINT:change ENV CDPATH is_os2
?LINT:nocomment
#! /bin/sh
#
# If these # comments don't work, trim them. Don't worry about any other
# shell scripts, Configure will trim # comments from them for you.
#
# (If you are trying to port this package to a machine without sh,
# I would suggest you have a look at the prototypical config_h.SH file
# and edit it to reflect your system. Some packages may include samples
# of config.h for certain machines, so you might look for one of those.)
#
?X:
?X: NOTE THAT A CONFIGURE SCRIPT IS IN THE PUBLIC DOMAIN (whether or not
?X: the software which uses it is in the public domain).
?X:
# Yes, you may rip this off to use in other distribution packages. This
# script belongs to the public
 domain and cannot be copyrighted.
#
?X:
?X: WE ASK YOU NOT TO REMOVE OR ALTER THE FOLLOWING PARAGRAPH, PLEASE:
?X:
# Note: this Configure script was generated automatically by the tool
# called "metaconfig". Rather than working with this copy of Configure,
# you should use metaconfig. Perl uses a modified version of this
# tool, and this, together with the metaconfig units, are available
# in the git repository:
#    $ git clone https://github.com/Perl/metaconfig metaconfig
# The original dist package (including metaconfig) is available on github:
#    $ git clone https://github.com/rmanfredi/dist.git dist-git
#
?X: OK, I'll not alter, but I'll add to it then ...
# Though this script was generated by metaconfig from metaunits, it is
# OK to send patches against Configure itself (but not to commit them
# to blead). It's up to
# the Configure maintainers to backport the patch to the metaunits if it
# is accepted. Exceptions to this rule, and more information, is in
# Porting/pumpkin.pod.
?X:
?X:
```

```
 NOTA BENE:
?X: If you develop you own version of metaconfig based on this work,
?X: you have to add some comments telling that the script was generated
?X: by your version, not mine: It credits your work.
?X:

# Generated using [metaconfig <VERSION> PL<PATCHLEVEL>]
# with additional metaconfig patches from https://github.com/Perl/metaconfig

cat >c1$$ <<EOF
ARGGGHHHH!!!!!

SCO csh still thinks true is false.  Write to SCO today and tell them that next
year Configure ought to "rm /bin/csh" unless they fix their blasted shell. :-)

(Actually, Configure ought to just patch csh in place.  Hmm.  Hmmmmm.  All
we'd have to do is go in and swap the && and || tokens, wherever they are.)

[End of diatribe. We now return you to your regularly scheduled programming...]
EOF
cat >c2$$ <<EOF

OOPS!  You naughty creature!  You didn't run Configure with sh!
I will attempt to remedy the situation by running sh for you...
EOF

true || cat c1$$ c2$$
true || exec sh $0 $argv:q

(exit $?0) || cat
 c2$$
(exit $?0) || exec sh $0 $argv:q
rm -f c1$$ c2$$

if test -f /dev/cputype -a -f /dev/drivers -a -f /dev/osversion; then
 cat <<EOF
***
*** I'm sorry but this system looks like Plan 9 and Plan 9 doesn't do
*** Configure that well.  (Plan 9 is close to UNIX but not close enough.)
*** Please read the README.plan9 for further instructions.
*** Cannot continue, aborting.
***
EOF
 exit 1
fi

if test -f /sys/utilities/MultiView ; then
 # AmigaOS, test -c for /dev/null is not useful
```

```
 :
elif test ! -c /dev/null ; then
 cat <<EOF
***
*** I'm sorry, but /dev/null appears to be a file rather than a device.
*** Please consult your operating sytem's notes for making a device
*** in /dev.
*** Cannot continue, aborting.
***
EOF
 exit 1
fi

: compute my invocation name
me=$0
case "$0" in
*/*)
 me=`echo $0 | sed -e 's!.*/\(.*\)!\1!' 2>/dev/null`
 test "$me" || me=$0
 ;;
esac

?X:
?X: To be able to run under OS/2, we must detect that early enough to use
?X: the proper path separator, stored in $p_.
 It is : on UNIX and ; on
?X: DOS-ish systems such as OS/2.
?X:
: Proper separator for the PATH environment variable
p_=:
: On OS/2 this directory should exist if this is not floppy only system ":-]"
if test -d c:/. || ( uname -a | grep -i 'os\(/\|\)2' 2>&1 ) 2>&1 >/dev/null ; then
 if test -n "$OS2_SHELL"; then
  p_=\;
  PATH=`cmd /c "echo %PATH%" | tr '\\\\' / `
?X: That's a bug in ksh5.22
  OS2_SHELL=`cmd /c "echo %OS2_SHELL%" | tr '\\\\' / | tr '[A-Z]' '[a-z]'`
  is_os2=yes
 elif test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
  *cygwin|*msys) ;;
  *) p_=\; ;;
  esac
 fi
fi

?X:
?X: There are two schools of thoughts here. Some people correctly argue that
```

```
?X: the user has a better chance than we do of setting a reasonable PATH and
?X: others argue that Configure is the best place there is to set up a suitable
?X: PATH. Well, here we try to compromise by keeping the user's PATH and
?X: appending some directories which are known to work on some machine or the
?X: other.
 The rationale behind this being that a novice user might not have a
?X: proper environment variable set, and some directories like /etc (where
?X: chown is located on some BSD systems) may be missing--RAM.
?X:
?X: SVR4 adds an /opt directory for optional packages.  Some sites use
?X: various permutations on /opt as opposed to /usr or /usr/local.-- ADO
?X:
?X: We only add directories that are not already in the PATH of the
?X: user and the directories must exist also.
?X:
?X: 20040627, Merijn, HP-UX's ANSI compiler is in /opt/ansic/bin if present
?X:  and should be before /usr/ccs/bin, where the braindead bundled compiler
?X:  can be found. The /usr/ccs/bin compiler cannot be used to build perl.
?X:
: Proper PATH setting
paths='/bin /usr/bin /usr/local/bin /usr/ucb /usr/local /usr/lbin'
paths="$paths /opt/bin /opt/local/bin /opt/local /opt/lbin"
paths="$paths /usr/5bin /etc /usr/gnu/bin /usr/new /usr/new/bin /usr/nbin"
paths="$paths /opt/gnu/bin /opt/new /opt/new/bin /opt/nbin"
paths="$paths
 /sys5.3/bin /sys5.3/usr/bin /bsd4.3/bin /bsd4.3/usr/ucb"
paths="$paths /bsd4.3/usr/bin /usr/bsd /bsd43/bin /opt/ansic/bin /usr/ccs/bin"
paths="$paths /etc /usr/lib /usr/ucblib /lib /usr/ccs/lib"
paths="$paths /sbin /usr/sbin /usr/libexec"
paths="$paths /system/gnu_library/bin"

for p in $paths
do
 case "$p_$PATH$p_" in
 *$p_$p$p_*) ;;
 *) test -d $p && PATH=$PATH$p_$p ;;
 esac
done

PATH=.$p_$PATH
export PATH

: shall we be using ksh?
inksh=''
needksh=''
avoidksh=''
newsh=/bin/ksh
changesh=''
```

```
?X: Use (alias -x) and not (alias) since zsh and bash recognize the alias
?X: builtin but not the -x option which is typically ksh...
?X: We need to set up PATH before calling the "alias" built-in since some
?X: systems like HP-UX have a binary called /bin/alias.
if (PATH=.; alias -x) >/dev/null 2>&1; then
  inksh=true
fi
?X: On HP-UX, large Configure scripts may exercise a bug in /bin/sh, use ksh
if test -f /hp-ux -a -f /bin/ksh; then
 needksh='to avoid sh bug in "here document" expansion'
fi
?X:
 On AIX4, /bin/sh is really ksh and it causes problems, use sh
if test -d /usr/lpp -a -f /usr/bin/bsh -a -f /usr/bin/uname; then
 if test X`/usr/bin/uname -v` = X4; then
  avoidksh="to avoid AIX 4's /bin/sh"
  newsh=/usr/bin/bsh
 fi
fi
?X: On Digital UNIX, /bin/sh may start up buggy /bin/ksh, use sh
if test -f /osf_boot -a -f /usr/sbin/setld; then
 if test X`/usr/bin/uname -s` = XOSF1; then
  avoidksh="to avoid Digital UNIX' ksh"
  newsh=/bin/sh
?X: if BIN_SH is set to 'xpg4', sh will start up ksh
  unset BIN_SH
 fi
fi
?X: If we are not in ksh and need it, then feed us back to it
case "$inksh/$needksh" in
/[a-z]*)
?X: Clear ENV to avoid any ~/.kshrc that could alias cd or whatever...
?X: Don't use "unset ENV", that is not portable enough
  ENV=''
  changesh=true
  reason="$needksh"
 ;;
esac
?X: If we are in ksh and must avoid it, then feed us back to a new shell
case "$inksh/$avoidksh" in
true/[a-z]*)
 changesh=true
 reason="$avoidksh"
 ;;
esac
?X: Warn them if they use ksh on
 other systems, which are those where
?X: we don't need ksh nor want to avoid it explicitly, yet are using it.
```

```
case "$inksh/$needksh-$avoidksh-" in
true/--)
  cat <<EOM
(I see you are using the Korn shell.  Some ksh's blow up on $me,
mainly on older exotic systems.  If yours does, try the Bourne shell instead.)
EOM
 ;;
esac
case "$changesh" in
true)
 export newsh
 echo "(Feeding myself to $newsh $reason.)"
?X: Make sure they didn't say sh <Configure by checking whether $0 ends
?X: with Configure or not. If they did say sh <../../Configure, then too
?X: bad for them anyway, since we lost that path indication...
?X: Otherwise, execing $0 ensures we keep the full remote source dir
?X: indication for src.U.
 case "$0" in
 Configure|*/Configure) exec $newsh $0 "$@";;
 *) exec $newsh Configure "$@";;
 esac
 ;;
esac
?X: 2004.06.09 rac
?X: having $newsh persist as ksh here is bad news if ksh doesn't really
?X: exist. this causes us to toss away a perfectly good working test in
?X: bash in favor
 of more exotic external options. see bug 42665.
test -x "${newsh}" || unset newsh

?X: Unset CDPATH to avoid surprises when using cd under some shells
?X: Can't unset it because that's not portable to very old shells.
?X: Can't set it to '' because then bash 2.02 won't do "cd UU"  --AD  6/98.
?X: Don't want to set it to '.' because then ksh prints out the
?X: name of the directory every time you cd to it. --AD 6/98
?X: In order to inflict the least harm, change it only if it's set.
: if needed, set CDPATH to a harmless value that is not chatty
: avoid bash 2.02 problems with empty CDPATH.
case "$CDPATH" in
'') ;;
*) case "$SHELL" in
 *bash*) CDPATH='.' ;;
 *) CDPATH='' ;;
 esac
 ;;
esac

: Configure runs within the UU subdirectory
```

```
test -d UU || mkdir UU
?X: Use ./* to avoid any confirmation prompts from enhanced shells -- WED
cd UU && rm -f ./*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Head.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: inc_version_list.U,v $
?RCS:
?RCS: Copyright (c) 2000 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: inc_version_list.U,v $
?RCS:
?MAKE:inc_version_list inc_version_list_init d_inc_version_list: cat sed \
 Getfile perl5 version api_versionstring rm Myread archname \
 prefix sitelib_stem exe_ext
?MAKE: -pick add $@ %<
?Y:TOP
?S:inc_version_list:
?S: This variable specifies the list of subdirectories in over
?S: which perl.c:incpush() and lib/lib.pm will automatically
?S: search when adding directories to @INC.  The elements in
?S: the list are separated by spaces.  This is only useful
?S: if
 you have a perl library directory tree structured like the
?S: default one.  See INSTALL for how this works.  The versioned
?S: site_perl directory was introduced in 5.005, so that is the
?S: lowest possible value.
?S:
?S: This list includes architecture-dependent directories back to
?S: version $api_versionstring (e.g. 5.5.640) and
?S: architecture-independent directories all the way back to
?S: 5.005.
?S:.
?S:inc_version_list_init:
?S: This variable holds the same list as inc_version_list, but
?S: each item is enclosed in double quotes and separated by commas,
?S: suitable for use in the PERL_INC_VERSION_LIST initialization.
?S:.
?S:d_inc_version_list:
?S: This variable conditionally defines PERL_INC_VERSION_LIST.
```

```
?S: It is set to undef when PERL_INC_VERSION_LIST is empty.
?S:.
?C:PERL_INC_VERSION_LIST:
?C: This variable specifies the list of subdirectories in over
?C: which perl.c:incpush() and lib/lib.pm will automatically
?C: search when adding directories to @INC, in a format suitable
?C: for
 a C initialization string.  See the inc_version_list entry
?C: in Porting/Glossary for more details.
?C:.
?H:#$d_inc_version_list PERL_INC_VERSION_LIST $inc_version_list_init  /**/
?H:.
?T:stem
: Determine list of previous versions to include in @INC
$cat > getverlist <<EOPL
#!$perl5
use strict;
use warnings;
use File::Basename;
my \$api_versionstring = "$api_versionstring";
my \$version = "$version";
my \$stem = "$sitelib_stem";
my \$archname = "$archname";
EOPL
 $cat >> getverlist <<'EOPL'
# The list found is stored twice for each entry: the original name, and
# the binary broken down version into pack "s>s>s>", so sorting is easy
# and unambiguous.  This will work for all versions that have a maximum
# of three digit per group separate by '.'s or '_'s. Names are extended
# with ".0.0" to ensure at least three elements for the pack.
#                                -- H.Merijn Brand (m)'06 23-10-2006

my @inc_version_list;
my @candidates;
# XXX Redo to do opendir/readdir?
if
 (-d $stem) {
   chdir($stem);
   ;@candidates = map {
 [ $_, pack "s>s>s>", split m/[._]/, "$_.0.0" ] } glob("5.*");
   ;@candidates = sort { $a->[1] cmp $b->[1]} @candidates;
}
else {
   ;@candidates = ();
}

my ($pversion, $aversion, $vsn5005) = map {
   pack "s>s>s>", split m/[._]/, "$_.0.0" } $version, $api_versionstring, "5.005";
```

```
foreach my $d (@candidates) {
   if ($d->[1] lt $pversion) {
 if ($d->[1] ge $aversion) {
     unshift(@inc_version_list, grep { -d } $d->[0]."/$archname", $d->[0]);
 }
 elsif ($d->[1] ge $vsn5005) {
     unshift(@inc_version_list, grep { -d } $d->[0]);
 }
   }
   else {
 # Skip newer version.  I.e. don't look in
 # 5.7.0 if we're installing 5.6.1.
   }
}

if (@inc_version_list) {
   print join(' ', @inc_version_list);
}
else {
   # Blank space to preserve value for next Configure run.
   print " ";
}
EOPL
chmod +x getverlist
case "$inc_version_list" in
") if test -x "$perl5$exe_ext"; then
  dflt=`$perl5 getverlist`
 else
  dflt='none'
 fi
 ;;
$undef)
 dflt='none' ;;
?X:     Configure -Dinc_version_list='5.6.0/$archname 5.6.0' ...
*)  eval dflt=\"$inc_version_list\" ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
case "$dflt" in
5.005) dflt=none ;;
esac
$cat <<EOM

In order to ease the process of upgrading, this version of perl
can be configured to use modules built and installed with earlier
versions of perl that were installed under $prefix.  Specify here
the list of earlier versions that this version of perl should check.
```

```
If Configure detected no earlier versions of perl installed under
$prefix, then the list will be empty.  Answer 'none' to tell perl
to not search earlier versions.

The default should almost always be sensible, so if you're not sure,
just accept the default.
EOM

rp='List of earlier versions to include in @INC?'
. ./myread
case "$ans" in
[Nn]one|''|' '|$undef) inc_version_list=' ' ;;
*) inc_version_list="$ans" ;;
esac
case "$inc_version_list" in
''|' ')
 inc_version_list_init='0'
 d_inc_version_list="$undef"
 ;;
*) inc_version_list_init=`echo
 $inc_version_list |
  $sed -e 's/^/"/' -e 's/ /","/g' -e 's/$/",0/'`
 d_inc_version_list="$define"
 ;;
esac
$rm -f getverlist
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/inc_version_list.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_poll.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_poll: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_poll:
?S: This variable conditionally defines the I_POLL symbol, and indicates
?S: whether a C program should include <poll.h>.
?S:.
?C:I_POLL:
?C: This symbol, if defined, indicates that <poll.h> exists and
?C: should be included. (see also HAS_POLL)
?C:.
```

```
?H:#$i_poll I_POLL  /**/
?H:.
?LINT:set i_poll
: see if this is a poll.h system
set poll.h i_poll
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_poll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2008 H.Merijn Brand
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:sGMTIME_max sGMTIME_min sLOCALTIME_max sLOCALTIME_min: cat rm_try \
 Setvar Compile run
?MAKE: -pick add $@ %<
?S:sGMTIME_max:
?S: This variable defines the maximum value of the time_t offset that
?S: the system function gmtime () accepts
?S:.
?S:sGMTIME_min:
?S: This variable defines the minimum value of the time_t offset that
?S: the system function gmtime () accepts
?S:.
?S:sLOCALTIME_max:
?S: This variable defines the maximum value of the time_t offset that
?S: the system function localtime () accepts
?S:.
?S:sLOCALTIME_min:
?S: This variable defines the minimum value of the time_t offset that
?S: the system function localtime () accepts
?S:.
?C:GMTIME_MAX:
?C: This symbol contains the maximum value
 for the time_t offset that
?C: the system function gmtime () accepts, and defaults to 0
?C:.
?C:GMTIME_MIN:
?C: This symbol contains the minimum value for the time_t offset that
?C: the system function gmtime () accepts, and defaults to 0
?C:.
?C:LOCALTIME_MAX:
?C: This symbol contains the maximum value for the time_t offset that
```

```
?C: the system function localtime () accepts, and defaults to 0
?C:.
?C:LOCALTIME_MIN:
?C: This symbol contains the minimum value for the time_t offset that
?C: the system function localtime () accepts, and defaults to 0
?C:.
?H:#define GMTIME_MAX  $sGMTIME_max /**/
?H:#define GMTIME_MIN  $sGMTIME_min /**/
?H:#define LOCALTIME_MAX $sLOCALTIME_max /**/
?H:#define LOCALTIME_MIN $sLOCALTIME_min /**/
?H:.
?D:sGMTIME_max=0
?D:sGMTIME_min=0
?D:sLOCALTIME_max=0
?D:sLOCALTIME_min=0
?F:!try
: Check the max offset that gmtime and localtime accept
echo "Checking max offsets that gmtime () accepts"

case "$sGMTIME_min/$sGMTIME_max" in
   0/0|/)
 $cat >try.c <<EOCP
#include
 <sys/types.h>
#include <stdio.h>
#include <time.h>

int i;
struct tm *tmp;
time_t pt;

void gm_check (time_t t, int min_year, int max_year)
{
   tmp = gmtime (&t);
   if ( tmp == NULL ||
 /* Check tm_year overflow */
  tmp->tm_year < min_year || tmp->tm_year > max_year)
 tmp = NULL;
   else
 pt = t;
   } /* gm_check */

int check_max ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MAXLONG
   gm_check (MAXLONG, 69, 0x7fffffff);
```

```
#endif
   if (tmp == NULL || tmp->tm_year < 0) {
 for (i = 63; i >= 0; i--) {
     time_t x = pt | ((time_t)1 << i);
     if (x < 0 || x < pt) continue;
     gm_check (x, 69, 0x7fffffff);
     }
 }
   printf ("sGMTIME_max=%ld\n", pt);
   return (0);
   } /* check_max */

int check_min ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MINLONG
   gm_check (MINLONG, -1900, 70);
#endif
   if (tmp == NULL) {
 for (i = 36; i >= 0; i--) {
     time_t x = pt - ((time_t)1 << i);
     if (x > 0) continue;
     gm_check (x, -1900, 70);
     }
 }
   printf ("sGMTIME_min=%ld\n",
 pt);
   return (0);
   } /* check_min */

int main (int argc, char *argv[])
{
   /* fprintf (stderr, "Sizeof time_t = %ld\n", sizeof (time_t)); */
   check_max ();
   check_min ();
   return (0);
   } /* main */
EOCP
 set try
 if eval $compile; then
     eval `$run ./try 2>/dev/null`
 else
     echo "Cannot determine sGMTIME_max and sGMTIME_min." >&4
     fi
 $rm_try
 ;;
   esac
```

```
echo "Checking max offsets that localtime () accepts"

case "$sLOCALTIME_min/$sLOCALTIME_max" in
   0/0|/)
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#include <time.h>

int i;
struct tm *tmp;
time_t pt;

void local_check (time_t t, int min_year, int max_year)
{
   if (sizeof (time_t) > 4 && t > 0x7fffffffffff000LL)
 tmp = NULL;
   else
 tmp = localtime (&t);
   if ( tmp == NULL ||
 /* Check tm_year overflow */
  tmp->tm_year < min_year || tmp->tm_year > max_year)
 tmp = NULL;
   else
 pt = t;
   } /* local_check */

int check_max ()
{
   tmp = NULL;
   pt  = 0;
#ifdef
 MAXLONG
   local_check (MAXLONG, 69, 0x7fffffff);
#endif
   if (tmp == NULL || tmp->tm_year < 0) {
 for (i = 63; i >= 0; i--) {
     time_t x = pt | ((time_t)1 << i);
     if (x < 0 || x < pt) continue;
     local_check (x, 69, 0x7fffffff);
     }
 }
   printf ("sLOCALTIME_max=%ld\n", pt);
   return (0);
  } /* check_max */

int check_min ()
```

```
{
   tmp = NULL;
   pt  = 0;
#ifdef MINLONG
   local_check (MINLONG, -1900, 70);
#endif
   if (tmp == NULL) {
 for (i = 36; i >= 0; i--) {
     time_t x = pt - ((time_t)1 << i);
     if (x > 0) continue;
     local_check (x, -1900, 70);
     }
 }
   printf ("sLOCALTIME_min=%ld\n", pt);
   return (0);
   } /* check_min */

int main (int argc, char *argv[])
{
   check_max ();
   check_min ();
   return (0);
   } /* main */
EOCP
 set try
 if eval $compile; then
     eval `$run ./try 2>/dev/null`
 else
     echo "Cannot determine sLOCALTIME_max and sLOCALTIME_min." >&4
     fi
 $rm_try
 ;;
   esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/time_size.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?MAKE:d_gethostprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_gethostprotos:
?S: This variable conditionally defines the HAS_GETHOST_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various gethost*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETHOST_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for gethostent(), gethostbyname(), and
?C: gethostbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_gethostprotos HAS_GETHOST_PROTOS /**/
?H:.
?LINT:set d_gethostprotos
?X: This test actually only checks for gethostent() and assumes the
?X: others follow suit.  This test fails for ChorusOS, which has
?X: gethostbyname and gethostbyaddr, but not gethostent.
: see if prototypes for various gethostxxx netdb.h functions are available
echo " "
set d_gethostprotos gethostent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_gethostprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fmod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_fmod.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:46  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_fmod: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_fmod:
?S: This variable conditionally defines the HAS_FMOD symbol, which
?S: indicates to the C program that the fmod() routine is available.
?S: See also d_drem for the drem() routine which does roughly the same.
?S:.
?C:HAS_FMOD
 :
?C: This symbol, if defined, indicates that the fmod routine is
?C: available to compute the remainder r=x-n*y where n=trunc(x/y).
?C:.
?H:#$d_fmod HAS_FMOD  /**/
?H:.
?LINT:set d_fmod
: see if fmod exists
set fmod d_fmod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fmod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethid.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethid: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethid:
?S: This variable conditionally defines HAS_GETHOSTID if gethostid() is
?S: available to get the host id.
?S:.
?C:HAS_GETHOSTID (GETHOSTID):
?C: This symbol, if defined, indicates that the gethostid system call is
?C: available to get the host id.
?C:.
?H:#$d_gethid HAS_GETHOSTID  /**/
?H:.
?LINT:set
```

```
 d_gethid
: see if gethid exists
set gethostid d_gethid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_siglist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_siglist.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_siglist: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_siglist:
?S: This variable conditionally defines HAS_SYS_SIGLIST if sys_siglist[] is
?S: available to translate signal numbers to strings.
?S:.
?C:HAS_SYS_SIGLIST (SYS_SIGLIST):
?C: This symbol, if defined, indicates that the sys_siglist array is
?C: available to translate signal numbers
 to strings.
?C:.
?H:#$d_siglist HAS_SYS_SIGLIST  /**/
?H:.
?LINT:set d_siglist
: see if sys_siglist[] exist
echo " "
if set sys_siglist val -a d_siglist; eval $csym; $val; then
 echo "You have sys_siglist[] for signal description." >&4
 val="$define"
else
 echo "You don't have sys_siglist[]." >&4
 val="$undef"
fi
set d_siglist
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_siglist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?X:
?X: Useless unit dropped.  Use randfunc instead.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/randbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_vfork.U,v 3.0.1.6 1994/08/29 16:18:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_vfork.U,v $
?RCS: Revision 3.0.1.6  1994/08/29  16:18:21  ram
?RCS: patch32: set default to 'y' the first time
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:59:14  ram
?RCS: patch30: usevfork was not always properly set
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:20:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:59:09  ram
?RCS: patch23: now explicitly ask whether vfork() should be used
 (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1993/10/16  13:49:39  ram
```

```
?RCS: patch12: added magic for vfork()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:06:57  ram
?RCS: patch10: removed automatic remapping of vfork on fork (WAD)
?RCS: patch10: added compatibility code for older config.sh (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vfork usevfork d_pseudofork: Inlibc Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_vfork:
?S: This variable conditionally defines the HAS_VFORK symbol, which
?S: indicates the vfork() routine is available.
?S:.
?S:usevfork:
?S: This variable is set to true when the user accepts to use vfork.
?S: It is set to false when no vfork is available or when the user
?S: explicitly requests not to use vfork.
?S:.
?S:d_pseudofork:
?S: This variable conditionally defines the HAS_PSEUDOFORK symbol,
?S: which indicates that an emulation of the fork routine is available.
?S:.
?C:HAS_VFORK (VFORK):
?C: This
 symbol, if defined, indicates that vfork() exists.
?C:.
?H:#$d_vfork HAS_VFORK /**/
?H:.
?C:HAS_PSEUDOFORK:
?C: This symbol, if defined, indicates that an emulation of the
?C: fork routine is available.
?C:.
?H:#$d_pseudofork HAS_PSEUDOFORK /**/
?H:.
?M:vfork: HAS_VFORK
?M:#ifndef HAS_VFORK
?M:#define vfork fork
?M:#endif
?M:.
?T:d_hvfork
: backward compatibility for d_hvfork
if test X$d_hvfork != X; then
 d_vfork="$d_hvfork"
 d_hvfork="
fi
?X:==========================
```

```
: see if there is a vfork
val=''
set vfork val
eval $inlibc

d_pseudofork=$undef

: Ok, but do we want to use it. vfork is reportedly unreliable in
: perl on Solaris 2.x, and probably elsewhere.
case "$val" in
$define)
 echo " "
 case "$usevfork" in
 false) dflt='n';;
 *) dflt='y';;
 esac
 cat <<'EOM'

Perl can only use a vfork() that doesn't suffer from strict
restrictions on calling functions or modifying global data in
the child.  For example, glibc-2.1 contains such a vfork()
that is unsuitable.  If your system
 provides a proper fork()
call, chances are that you do NOT want perl to use vfork().

EOM
 rp="Do you still want to use vfork()?"
 . ./myread
 case "$ans" in
 y|Y) ;;
 *)
  echo "Ok, we won't use vfork()."
  val="$undef"
  ;;
 esac
 ;;
esac
?X:
?X: Only set it when final value is known to avoid spurious Whoa's
?X: Then set usevfork accordingly to the current value, for next run
?X:
set d_vfork
eval $setvar
case "$d_vfork" in
$define) usevfork='true';;
*) usevfork='false';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_vfork.U
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```
?RCS: $Id: Instruct.U,v 3.0.1.3 1997/02/28 15:02:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Instruct.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:02:55  ram
?RCS: patch61: logname / whoami sequence rewritten to use case
?RCS:
?RCS: Revision 3.0.1.2  1995/02/15  14:11:34  ram
?RCS: patch51: author name now appears at the end of the paragraph (WED)
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:12:05  ram
?RCS: patch45: now documents the & escape to turn -d on at the read prompt
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:04  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?X:
?X: This unit spew out the directions that we want everyone to read.  I try to
?X: keep the first "pagefull" much less than a page since they don't know it
?X: isn't going to go shooting off the top of the screen, and we don't want
?X: to panic them yet.
?X:
?MAKE:Instruct: Myread Configdir Devel contains
?MAKE: -pick wipe $@ %<
?T:user needman firsttime
: general instructions
needman=true
firsttime=true
user=`(logname) 2>/dev/null`
case "$user" in
") user=`whoami 2>&1`;;
esac
if $contains "^$user\$" ../.config/instruct >/dev/null 2>&1; then
 firsttime=false
 echo " "
 rp='Would you like to see the instructions?'
```

```
 dflt=n
 . ./myread
 case "$ans" in
 [yY]*) ;;
 *) needman=false;;
 esac
fi
if $needman; then
 cat <<EOH

This installation shell script will examine your system and ask you questions
to determine how the <PACKAGENAME> package should be installed. If you get
stuck on a question, you may use a ! shell escape to start a subshell or
execute a
 command.  Many of the questions will have default answers in square
brackets; typing carriage return will give you the default.

On some of the questions which ask for file or directory names you are allowed
to use the ~name construct to specify the login directory belonging to "name",
even if you don't have a shell which knows about that.  Questions where this is
allowed will be marked "(~name ok)".

EOH
 rp="
 dflt='Type carriage return to continue'
 . ./myread
 cat <<'EOH'

The prompter used in this script allows you to use shell variables and
backticks in your answers.  You may use $1, $2, etc...  to refer to the words
in the default answer, as if the default line was a set of arguments given to a
script shell.  This means you may also use $* to repeat the whole default line,
so you do not have to re-type everything to add something to the default.

Every time there is a substitution, you will have to confirm.  If there is an
error (e.g. an unmatched backtick), the default answer
 will remain unchanged
and you will be prompted again.

If you are in a hurry, you may run 'Configure -d'.  This will bypass nearly all
the questions and use the computed defaults (or the previous answers if there
was already a config.sh file). Type 'Configure -h' for a list of options.
You may also start interactively and then answer '& -d' at any prompt to turn
on the non-interactive behaviour for the remainder of the execution.

EOH
 . ./myread
 cat <<EOH
```

```
Much effort has been expended to ensure that this shell script will run on any
Unix system.  If despite that it blows up on yours, your best bet is to edit
Configure and run it again.  If you can't run Configure for some reason,
you'll have to generate a config.sh file by hand.  Whatever problems you
have, let me (<MAINTLOC>) know how I blew it.

This installation script affects things in two ways:

1) it may do direct variable substitutions on some of the files included
  in this kit.
2) it builds a config.h file for inclusion in
 C programs.  You may edit
  any of these files as the need arises after running this script.

If you make a mistake on a question, there is no easy way to back up to it
currently.  The easiest thing to do is to edit config.sh and rerun all the SH
files.  Configure will offer to let you do this before it runs the SH files.

EOH
?X: In case they played with the prompter...
 dflt='Type carriage return to continue'
 . ./myread
 case "$firsttime" in
 true) echo $user >>../.config/instruct;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Instruct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_limits.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_limits.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_limits: Inhdr
?MAKE: -pick add $@ %<
```

```
?S:i_limits:
?S: This variable conditionally defines the I_LIMITS symbol, and indicates
?S: whether a C program may include <limits.h> to get symbols like WORD_BIT
?S: and friends.
?S:.
?C:I_LIMITS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <limits.h> to
 get definition of symbols like WORD_BIT or
?C: LONG_MAX, i.e. machine dependant limitations.
?C:.
?H:#$i_limits I_LIMITS  /**/
?H:.
?LINT:set i_limits
: see if this is a limits.h system
set limits.h i_limits
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_limits.U
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```
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?RCS:
?MAKE:d_log1p: Inlibc
?MAKE: -pick add $@ %<
?S:d_log1p:
?S: This variable conditionally defines the HAS_LOG1P symbol, which
?S: indicates to the C program that the logp1() routine is available
?S: to compute log(1 + x) for values of x close to zero.
?S:.
?C:HAS_LOG1P:
?C: This symbol, if defined, indicates that the log1p routine is
?C: available to do the logarithm of 1 plus argument function.
?C:.
?H:#$d_log1p HAS_LOG1P  /**/
?H:.
?LINT:set d_log1p
: see if log1p exists
set log1p d_log1p
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_log1p.U
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```
?RCS: $Id$
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: fpu.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:fpu: test cat cc Myread
?MAKE: -pick add $@ %<
?S:fpu (fpunit):
?S: Set to be the compile flag for the local floating point unit.
?S:.
?C:FPU (FPUNIT):
?C: String containing the flags for the local floating point unit.
?C:.
?H:#define FPU "$fpu" /**/
?H:.
: see what floating point compile flags should be used.
fpu=''
if $test -r /dev/fpa; then
 $cat>fpa.c << GOOP
 main(){return(1);}
GOOP
 $cc
 -ffpa -o fpa fpa.c
 fpa > fpa.out 2>&1
 if $test ! -s fpa.out; then
  dflt='y'
  $cat <<'EOM'

You seem to have a sun fpa...  I can compile the code to use the fpa but it will
mean that the code can ONLY run on a machine with a fpa...

EOM
  rp="Should I compile for fpa?"
  . ./myread
  if $test $ans = "n"; then
   fpu=''
  else
   fpu='-ffpa'
  fi
 else
```

```
  $cat <<'EOM'

You have the fpa device but I can't seem to use it.  Maybe you should talk to
your sysadmin about this.  For now, I am not going to compile it in.

EOM
 fi
fi
if $test "$fpu" = ''; then
 if $test -r /usr/etc/mc68881version; then
  dflt='y'
  $cat <<'EOM'

There also seems to be the pieces for a 68881.  If I compile this in, it will
work on almost all Sun 3's except for a few Sun-3/50s without a 68881...

EOM
  rp="Should I compile for a 68881?"
  . ./myread
  if $test $ans = "y"; then
   fpu='-f68881'
  fi
 fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/fpu.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_setlocale d_setlocale_accepts_any_locale_name d_has_C_UTF8: \
 cat Compile run rm_try i_locale i_wctype d_towupper Setvar Myread
?MAKE: -pick add $@ %<
?S:d_has_C_UTF8:
?S: This variable is set to either "true" or "false" depending on
?S: whether the compilation system supports the C.UTF-8 locale.
?S:.
?S:d_setlocale:
?S: This variable conditionally defines HAS_SETLOCALE if setlocale() is
?S: available to handle locale-specific ctype implementations.
```

```
?S:.
?S:d_setlocale_accepts_any_locale_name:
?S: This
 variable conditionally defines SETLOCALE_ACCEPTS_ANY_LOCALE_NAME
?S: if setlocale() accepts any locale name.
?S:.
?C:HAS_SETLOCALE:
?C: This symbol, if defined, indicates that the setlocale routine is
?C: available to handle locale-specific ctype implementations.
?C:.
?C:SETLOCALE_ACCEPTS_ANY_LOCALE_NAME:
?C: This symbol, if defined, indicates that the setlocale routine is
?C: available and it accepts any input locale name as valid.
?C:.
?H:#$d_setlocale HAS_SETLOCALE /**/
?H:#$d_setlocale_accepts_any_locale_name SETLOCALE_ACCEPTS_ANY_LOCALE_NAME /**/
?H:.
?F:!try
?T:LC_CTYPE c_utf8_locale
: check for setlocale function and behavior
case "$d_setlocale" in
")
$cat >&4 <<EOM

Checking to see if you have setlocale() and its behavior
EOM
$cat >try.c <<EOCP
#include <stdlib.h>
#include <string.h>
#$i_locale I_LOCALE
#ifdef I_LOCALE
#  include <locale.h>
#endif
#$i_wctype I_WCTYPE
#ifdef I_WCTYPE
#  include <wctype.h>
#endif

int main() {
   const char * invalid_name
 = "\a";   /* This is really invalid! */
   int accepts_any_locale_name = 0;
   int has_C_UTF8 = 0;
   unsigned char bad_setlocale = 255;

   /* If LC_CTYPE isn't defined the compilation will fail, and locales will be
    * disabled.  It's hard to imagine an instance where meaningful locale
    * handling could be done without LC_CTYPE */
```

```
   const char *  name = setlocale(LC_CTYPE, "C");

   if (name == NULL || strcmp(name, "C") != 0) {
      exit(bad_setlocale);
   }

   name = setlocale(LC_CTYPE, invalid_name);
   if (name != NULL) {

      /* Let it pass if it accepts the name but gives back one of the C
       * locales */
      if (strcmp(name, "C") != 0 && strcmp(name, "C.UTF-8") != 0) {
         accepts_any_locale_name = 1;
      }
   }

   name = setlocale(LC_CTYPE, "C.UTF-8");
   if (name != NULL) {
      unsigned char y_with_diaeresis = ('A' == 193) ? 0xDF : 0xFF;

#$d_towupper HAS_TOWUPPER
#ifdef HAS_TOWUPPER

      /* We assume that if
 the machine doesn't have the C99 towupper, it
       * doesn't have C.UTF-8, even if we successfully changed locales to
       * include it.  This seems safer even on platforms that didn't accept
       * the really invalid name */

      if (towupper(y_with_diaeresis) == 0x178) {
         has_C_UTF8 = 1;
      }

#endif

   }

#if 0

   /* Currently unused code to determine if LC_ALL with disparate values uses
    * category = value pairs or positional, and to determine the separator
    * between the categories.  We could add code so that if the separator were
    * > '9', we subtract 10; similarly for 'Z' and 'z', and then just about
    * every possible ASCII separator would fit in the 5 bits available in the
    * exit code.  This would not be true in EBCDIC.  And then if LC_ALL is
    * positional, we probably would want to know the order of the categories.
    * Using a file between the C program and the shell script would really be
    * require to do that
```

```
 */
#ifdef LC_ALL

  unsigned char min_separator = ' ' - 1;
  unsigned char separator = min_separator;
  int uses_name_value_pair_names = 0;

  name = setlocale(LC_ALL, "C");
  if (name == NULL || strcmp(name, "C") != 0) {
      exit(bad_setlocale);
  }

  if (has_C_UTF8) {
      char * pos;

      name = setlocale(LC_CTYPE, "C.UTF-8");
      if (name == NULL) {
          exit(bad_setlocale);
      }
      name = setlocale(LC_ALL, NULL);
      if (name == NULL) {
          exit(bad_setlocale);
      }

      pos = strstr(name, "LC_CTYPE" "=C.UTF-8");
      if (pos != NULL) {
          uses_name_value_pair_names = 1;
          if (pos == name) {
              separator = name[sizeof("LC_CTYPE=C.UTF-8") - 1];
          }
          else {
              separator = *(pos - 1);
          }
      }
      else {
          pos = strstr(name, "C.UTF-8");
          if (pos == NULL) {
              /* bad */
          }

  else if (pos == name) {
              separator = name[sizeof("C.UTF-8") - 1];
          }
          else {
              separator = *(pos - 1);
          }
      }
  }
```

```
#endif
#endif

  exit( 0 /* (separator - min_separator) << 3
      | uses_name_value_pair_names      << 2
        */
      | has_C_UTF8                      << 1
      | accepts_any_locale_name);

}
EOCP
val=
set d_setlocale
eval $setvar
case $d_setlocale in
  $undef) d_setlocale_accepts_any_locale_name="$undef"
          d_has_C_UTF8="false"
          ;;
  *) set try
     if eval $compile; then
        echo "Your system has setlocale()..." >&4
        $run ./try
        case $? in
           0) echo "and it seems sane; you don't have a C.UTF-8 locale" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$undef"
              d_has_C_UTF8="false"
              ;;
           1) echo "and it seems sane, but accepts
 any locale name as valid" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$define"
              d_has_C_UTF8="false"
              ;;
           2) echo "and it seems sane; you have a C.UTF-8 locale" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$undef"
              d_has_C_UTF8="true"
              ;;
           3) echo "and it seems sane, but accepts any locale name as valid" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$define"
              d_has_C_UTF8="true"
              ;;
           *) echo "but it doesn't seem to work, so we won't use it." >&4
              d_setlocale="$undef"
              d_setlocale_accepts_any_locale_name="$undef"
```

```
            d_has_C_UTF8="false"
            ;;
        esac
    else
        echo "your system does not have setlocale()"
 >&4
        d_setlocale="$undef"
        d_setlocale_accepts_any_locale_name="$undef"
        d_has_C_UTF8="false"
    fi
esac
$rm_try
;;
*) val="$d_setlocale"
  set d_setlocale
  eval $setvar
  case "$d_setlocale" in
     $undef) echo "There may be other ways to set the locale on your system, so we need to ask:" >&4
     ;;
  esac
  rp="Does your system have the C.UTF-8 locale?"
  dflt=n
  . ./myread
  case "$ans" in
     [Yy]*) d_has_C_UTF8="true"
            c_utf8_locale=" or C.UTF-8"
            ;;
     *)     d_has_C_UTF8="false"
            c_utf8_locale=""
            ;;
  esac
  case "$d_setlocale" in
     $define)
         rp="When you set your locale to something besides C$c_utf8_locale, does it do so, or just pretend to?" >&4
         dflt=n
         . ./myread
         case "$ans" in
            true|[Yy]*)
   d_setlocale_accepts_any_locale_name="$undef"
   ;;
 *) d_setlocale_accepts_any_locale_name="$define"

  ;;
         esac
         ;;
     *) d_setlocale_accepts_any_locale_name="$undef"
   ;;
  esac
```

```
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setlocale.U
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```
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?RCS:
?MAKE:d_fpclassl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpclassl:
?S: This variable conditionally defines the HAS_FPCLASSL symbol, which
?S: indicates to the C program that the fpclassl() routine is available.
?S:.
?C:HAS_FPCLASSL:
?C: This symbol, if defined, indicates that the fpclassl routine is
?C: available to classify long doubles.  Available for example in IRIX.
?C: The returned values are defined in <ieeefp.h> and are:
?C:
?C: FP_SNAN  signaling NaN
?C: FP_QNAN  quiet NaN
?C: FP_NINF  negative infinity
?C: FP_PINF  positive infinity
?C: FP_NDENORM negative denormalized non-zero
?C: FP_PDENORM positive denormalized non-zero
?C: FP_NZERO negative zero
?C: FP_PZERO positive zero
?C: FP_NNORM negative
 normalized non-zero
?C: FP_PNORM positive normalized non-zero
?C:.
?H:#$d_fpclassl HAS_FPCLASSL  /**/
?H:.
?LINT:set d_fpclassl
: see if fpclassl exists
set fpclassl d_fpclassl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclassl.U
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```
?RCS: $Id: i_systypes.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
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?RCS:
?RCS: $Log: i_systypes.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/types.h> needs to be included.
?X:
?MAKE:i_systypes: Inhdr
?MAKE: -pick add $@ %<
?S:i_systypes:
?S: This variable conditionally defines the I_SYS_TYPES symbol,
?S: and indicates whether a C program should include <sys/types.h>.
?S:.
?C:I_SYS_TYPES (I_SYSTYPES):
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <sys/types.h>.
?C:.
?H:#$i_systypes I_SYS_TYPES  /**/
?H:.
?LINT:set i_systypes
: see if sys/types.h has to be included
set sys/types.h i_systypes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systypes.U
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```
?RCS: $Id: d_open3.U,v 3.0.1.2 1997/02/28 15:37:12 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: d_open3.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:12  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:58:26  ram
?RCS: patch56: added knowledge of the O_NONBLOCK symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_open3: Compile test cat h_fcntl h_sysfile rm_try Setvar Findhdr run i_stdlib
?MAKE: -pick add $@ %<
?X: It would be easy to separate the
 h_O_stuff from this.
?X: Is there a reason to do so? -- HMS
?S:d_open3:
?S: This variable conditionally defines the HAS_OPEN3 manifest constant,
?S: which indicates to the C program that the 3 argument version of
?S: the open(2) function is available.
?S:.
?C:HAS_OPEN3 (OPEN3):
?C: This manifest constant lets the C program know that the three
?C: argument form of open(2) is available.
?C:.
?H:#$d_open3 HAS_OPEN3  /**/
?H:.
?W:%<:O_RDONLY O_WRONLY O_RDWR O_NDELAY O_APPEND O_SYNC O_CREAT O_TRUNC
?W:%<:O_EXCL O_NONBLOCK
?F:!try
?LINT:set d_open3
?LINT:change h_fcntl h_sysfile
: Locate the flags for 'open()'
echo " "
$cat >try.c <<EOCP
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 if(O_RDONLY);
#ifdef O_TRUNC
```

```
 exit(0);
#else
 exit(1);
#endif
}
EOCP
: check sys/file.h first to get FREAD on Sun
if $test `./findhdr sys/file.h` && \
  set try -DI_SYS_FILE
 && eval $compile; then
 h_sysfile=true;
 echo "<sys/file.h> defines the O_* constants..." >&4
 if $run ./try; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
elif $test `./findhdr fcntl.h` && \
  set try -DI_FCNTL && eval $compile; then
 h_fcntl=true;
 echo "<fcntl.h> defines the O_* constants..." >&4
 if $run ./try; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
else
 val="$undef"
 echo "I can't find the O_* constant definitions!  You got problems." >&4
fi
set d_open3
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_open3.U
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```
?RCS: $Id: d_socket.U,v 3.0.1.2 1997/02/28 15:46:00 ram Exp $
?RCS:
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```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_socket.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:46:00  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:04  ram
?RCS: patch16: can now safely declare private nm_extract in dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_socket d_oldsock d_sockpair socketlib sockethdr \
 d_msg_ctrunc d_msg_dontroute d_msg_oob d_msg_peek
 d_msg_proxy \
 d_scm_rights d_sockaddr_sa_len d_sockaddr_in6 d_sin6_scope_id \
 d_ip_mreq d_ip_mreq_source d_ipv6_mreq d_ipv6_mreq_source \
 d_sockaddr_storage: \
 contains echo n c ar nm nm_opt nm_extract Inlibc Csym _a \
 Compile cat rm_try Setvar Hasfield sysroot
?MAKE: -pick add $@ %<
?S:d_socket:
?S: This variable conditionally defines HAS_SOCKET, which indicates
?S: that the BSD socket interface is supported.
?S:.
?S:d_sockpair:
?S: This variable conditionally defines the HAS_SOCKETPAIR symbol, which
?S: indicates that the BSD socketpair() is supported.
?S:.
?S:d_oldsock:
?S: This variable conditionally defines the OLDSOCKET symbol, which
?S: indicates that the BSD socket interface is based on 4.1c and not 4.2.
?S:.
?S:d_msg_ctrunc:
?S: This variable conditionally defines the HAS_MSG_CTRUNC symbol,
?S: which indicates that the MSG_CTRUNC is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_dontroute:
?S: This variable
 conditionally defines the HAS_MSG_DONTROUTE symbol,
?S: which indicates that the MSG_DONTROUTE is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_oob:
?S: This variable conditionally defines the HAS_MSG_OOB symbol,
```

```
?S: which indicates that the MSG_OOB is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_peek:
?S: This variable conditionally defines the HAS_MSG_PEEK symbol,
?S: which indicates that the MSG_PEEK is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_proxy:
?S: This variable conditionally defines the HAS_MSG_PROXY symbol,
?S: which indicates that the MSG_PROXY is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_scm_rights:
?S: This variable conditionally defines the HAS_SCM_RIGHTS symbol,
?S: which indicates that the SCM_RIGHTS is available.
  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_sockaddr_sa_len:
?S: This variable conditionally defines the HAS_SOCKADDR_SA_LEN symbol,
?S: which indicates that a struct sockaddr structure has the sa_len
?S: member.
?S:.
?S:d_sockaddr_in6:
?S: This variable conditionally defines the HAS_SOCKADDR_IN6 symbol, which
?S: indicates the availability of a struct sockaddr_in6.
?S:.
?S:d_sockaddr_storage:
?S: This variable conditionally defines the HAS_SOCKADDR_STORAGE symbol,
?S: which indicates the availability of a struct sockaddr_storage.
?S:.
?S:d_sin6_scope_id:
?S: This variable conditionally defines the HAS_SIN6_SCOPE_ID symbol, which
?S: indicates that a struct sockaddr_in6 structure has the sin6_scope_id
?S: member.
?S:.
?S:d_ip_mreq:
?S: This variable conditionally defines the HAS_IP_MREQ symbol, which
?S: indicates the availability of a struct ip_mreq.
?S:.
?S:d_ip_mreq_source:
?S: This variable conditionally defines the HAS_IP_MREQ_SOURCE
 symbol,
?S: which indicates the availability of a struct ip_mreq_source.
?S:.
?S:d_ipv6_mreq:
?S: This variable conditionally defines the HAS_IPV6_MREQ symbol, which
```

?S: indicates the availability of a struct ipv6_mreq.
?S:.
?S:d_ipv6_mreq_source:
?S: This variable conditionally defines the HAS_IPV6_MREQ_SOURCE symbol,
?S: which indicates the availability of a struct ipv6_mreq_source.
?S:.
?S:socketlib:
?S: This variable has the names of any libraries needed for socket support.
?S:.
?S:sockethdr:
?S: This variable has any cpp '-I' flags needed for socket support.
?S:.
?C:HAS_SOCKET (SOCKET):
?C: This symbol, if defined, indicates that the BSD socket interface is
?C: supported.
?C:.
?C:HAS_SOCKETPAIR (SOCKETPAIR):
?C: This symbol, if defined, indicates that the BSD socketpair() call is
?C: supported.
?C:.
?C:USE_OLDSOCKET (OLDSOCKET):
?C: This symbol, if defined, indicates that the 4.1c BSD socket interface
?C: is supported instead of the 4.2/4.3 BSD socket interface. For instance,
?C: there
 is no setsockopt() call.
?C:.
?C:HAS_MSG_CTRUNC:
?C: This symbol, if defined, indicates that the MSG_CTRUNC is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_DONTROUTE:
?C: This symbol, if defined, indicates that the MSG_DONTROUTE is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_OOB:
?C: This symbol, if defined, indicates that the MSG_OOB is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_PEEK:
?C: This symbol, if defined, indicates that the MSG_PEEK is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_PROXY:
?C: This symbol, if defined, indicates that the MSG_PROXY is supported.

```
?C: Checking just with #ifdef might not be enough because this
 symbol
?C: has been known to be an enum.
?C:.
?C:HAS_SCM_RIGHTS:
?C: This symbol, if defined, indicates that the SCM_RIGHTS is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_SOCKADDR_SA_LEN:
?C: This symbol, if defined, indicates that the struct sockaddr
?C: structure has a member called sa_len, indicating the length of
?C: the structure.
?C:.
?C:HAS_SOCKADDR_IN6:
?C: This symbol, if defined, indicates the availability of
?C: struct sockaddr_in6;
?C:.
?C:HAS_SOCKADDR_STORAGE:
?C: This symbol, if defined, indicates the availability of
?C: struct sockaddr_storage;
?C:.
?C:HAS_SIN6_SCOPE_ID:
?C: This symbol, if defined, indicates that the struct sockaddr_in6
?C: structure has a member called sin6_scope_id.
?C:.
?C:HAS_IP_MREQ:
?C: This symbol, if defined, indicates the availability of
?C: struct ip_mreq;
?C:.
?C:HAS_IP_MREQ_SOURCE:
?C: This symbol, if defined, indicates the availability of
?C: struct ip_mreq_source;
?C:.
?C:HAS_IPV6_MREQ:
?C: This
 symbol, if defined, indicates the availability of
?C: struct ipv6_mreq;
?C:.
?C:HAS_IPV6_MREQ_SOURCE:
?C: This symbol, if defined, indicates the availability of
?C: struct ipv6_mreq_source;
?C:.
?H:#$d_socket HAS_SOCKET  /**/
?H:#$d_sockpair HAS_SOCKETPAIR /**/
?H:#$d_sockaddr_sa_len HAS_SOCKADDR_SA_LEN /**/
?H:#$d_oldsock USE_OLDSOCKET /**/
?H:#$d_msg_ctrunc HAS_MSG_CTRUNC /**/
```

```
?H:#$d_msg_dontroute HAS_MSG_DONTROUTE /**/
?H:#$d_msg_oob HAS_MSG_OOB /**/
?H:#$d_msg_peek HAS_MSG_PEEK /**/
?H:#$d_msg_proxy HAS_MSG_PROXY /**/
?H:#$d_scm_rights HAS_SCM_RIGHTS /**/
?H:#$d_sockaddr_in6 HAS_SOCKADDR_IN6 /**/
?H:#$d_sockaddr_storage HAS_SOCKADDR_STORAGE /**/
?H:#$d_sin6_scope_id HAS_SIN6_SCOPE_ID /**/
?H:#$d_ip_mreq HAS_IP_MREQ /**/
?H:#$d_ip_mreq_source HAS_IP_MREQ_SOURCE /**/
?H:#$d_ipv6_mreq HAS_IPV6_MREQ /**/
?H:#$d_ipv6_mreq_source HAS_IPV6_MREQ_SOURCE /**/
?H:.
?T:val net ENUM enum
?LINT:set d_sockpair d_sockaddr_sa_len
?LINT:set d_msg_ctrunc d_msg_dontroute
 d_msg_oob d_msg_peek d_msg_proxy
?LINT:set d_scm_rights d_sockaddr_in6 d_sin6_scope_id d_ip_mreq
?LINT:set d_ip_mreq_source d_ipv6_mreq d_ipv6_mreq_source d_sockaddr_storage
: see whether socket exists
socketlib="
sockethdr="
echo " "
$echo $n "Hmm... $c" >&4
if set socket val -f d_socket; eval $csym; $val; then
   echo "Looks like you have Berkeley networking support." >&4
   d_socket="$define"
?X: now check for advanced features
   if set setsockopt val -f; eval $csym; $val; then
 d_oldsock="$undef"
   else
 echo "...but it uses the old BSD 4.1c interface, rather than 4.2." >&4
 d_oldsock="$define"
   fi
else
?X: HP-UX, for one, puts all the socket stuff in socklib.o. Note that if we
?X: come here on HP-UX, then we must have used nm to get symbols, or we really
?X: don't have sockets anyway...
   if $contains socklib libc.list >/dev/null 2>&1; then
 echo "Looks like you have Berkeley networking support." >&4
 d_socket="$define"
 : we will have to assume that it supports
 the 4.2 BSD interface
 d_oldsock="$undef"
   else
 echo "You don't have Berkeley networking in libc$_a..." >&4
?X: look for optional networking libraries
 if test "X$d_socket" = "X$define"; then
```

```
    echo "...but you seem to believe that you have sockets." >&4
 else
    for net in net socket
    do
  if test -f $sysroot/usr/lib/lib$net$_a; then
?X: space between two  '(' needed for ksh
     ( ($nm $nm_opt $sysroot/usr/lib/lib$net$_a | eval $nm_extract) ||  \
     $ar t $sysroot/usr/lib/lib$net$_a) 2>/dev/null >> libc.list
     if $contains socket libc.list >/dev/null 2>&1; then
   d_socket="$define"
   socketlib="-l$net"
   case "$net" in
   net)
       echo "...but the Wollongong group seems to have hacked it in." >&4
       sockethdr="-I$sysroot/usr/netinclude"
       ;;
   esac
   echo "Found Berkeley sockets interface in lib$net." >&4
?X: now check for advanced features
   if $contains setsockopt libc.list >/dev/null 2>&1; then
       d_oldsock="$undef"
   else
       echo
 "...using the old BSD 4.1c interface, rather than 4.2." >&4
       d_oldsock="$define"
   fi
   break
      fi
  fi
    done
    if test "X$d_socket" != "X$define"; then
       echo "or anywhere else I see." >&4
       d_socket="$undef"
       d_oldsock="$undef"
    fi
 fi
   fi
fi

@if HAS_SOCKETPAIR || d_sockpair
: see if socketpair exists
set socketpair d_sockpair
eval $inlibc

@end

echo "Checking the availability sa_len in the sock struct ..." >&4
$cat >try.c <<EOF
```

```
#include <sys/types.h>
#include <sys/socket.h>
int main() {
struct sockaddr sa;
return (sa.sa_len);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sockaddr_sa_len; eval $setvar
$rm_try

echo "Checking the availability struct sockaddr_in6 ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_in6 sin6;
return (sin6.sin6_family);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sockaddr_in6;
 eval $setvar
$rm_try

echo "Checking the availability struct sockaddr_storage ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_storage sastor;
return (sastor.ss_family);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sockaddr_storage; eval $setvar
$rm_try
```

```
echo "Checking the availability sin6_scope_id in struct sockaddr_in6 ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_in6 sin6;
return (sin6.sin6_scope_id);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sin6_scope_id; eval $setvar
$rm_try

echo "Checking the availability struct ip_mreq ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ip_mreq mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile; then

 val="$define"
fi
set d_ip_mreq; eval $setvar
$rm_try

echo "Checking the availability struct ip_mreq_source ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ip_mreq_source mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile; then
```

```
    val="$define"
fi
set d_ip_mreq_source; eval $setvar
$rm_try

echo "Checking the availability struct ipv6_mreq ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ipv6_mreq mreq;
return (mreq.ipv6mr_interface);
}
EOF
val="$undef"
set try; if eval $compile; then
  val="$define"
fi
set d_ipv6_mreq; eval $setvar
$rm_try

echo "Checking the availability struct ipv6_mreq_source ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ipv6_mreq_source mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile;
 then
    val="$define"
fi
set d_ipv6_mreq_source; eval $setvar
$rm_try

?X: these constants are known to be troublesomely defined as enums
?X: so that ifdef will not work for detecting their presence.
echo "Checking the availability of certain socket constants..." >&4
for ENUM in MSG_CTRUNC MSG_DONTROUTE MSG_OOB MSG_PEEK MSG_PROXY SCM_RIGHTS; do
  enum=`$echo $ENUM|./tr '[A-Z]' '[a-z]'`
  $cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
```

```
int main() {
   int i = $ENUM;
}
EOF
   val="$undef"
   set try; if eval $compile; then
 val="$define"
   fi
   set d_${enum}; eval $setvar
   $rm_try
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_socket.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_group.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_group.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:34:52  ram
?RCS: patch61: useless unit dropped.
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:48  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Useless unit dropped.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_group.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setprotoent_r setprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setprotoent_r:
?S: This variable conditionally defines the HAS_SETPROTOENT_R symbol,
?S: which indicates to the C program that the setprotoent_r()
?S: routine is available.
?S:.
?S:setprotoent_r_proto:
?S: This variable encodes the prototype of setprotoent_r.
?S: It is zero if d_setprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setprotoent_r
?S: is defined.
?S:.
?C:HAS_SETPROTOENT_R:
?C: This symbol, if defined, indicates that the setprotoent_r
 routine
?C: is available to setprotoent re-entrantly.
?C:.
?C:SETPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of setprotoent_r.
?C: It is zero if d_setprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setprotoent_r
?C: is defined.
?C:.
?H:#$d_setprotoent_r HAS_SETPROTOENT_R /**/
?H:#define SETPROTOENT_R_PROTO $setprotoent_r_proto /**/
?H:.
?T:try hdrs d_setprotoent_r_proto
: see if setprotoent_r exists
set setprotoent_r d_setprotoent_r
eval $inlibc
case "$d_setprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setprotoent_r_proto:$usethreads" in
 ":define") d_setprotoent_r_proto=define
  set d_setprotoent_r_proto setprotoent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setprotoent_r_proto" in
 define)
 case "$setprotoent_r_proto" in
```

```
"|0) try='int setprotoent_r(int, struct protoent_data*);'
./protochk "$extern_C $try" $hdrs && setprotoent_r_proto=I_ID ;;
esac
case "$setprotoent_r_proto"
in
"|0) try='void setprotoent_r(int, struct protoent_data*);'
./protochk "$extern_C $try" $hdrs && setprotoent_r_proto=V_ID ;;
esac
case "$setprotoent_r_proto" in
"|0) d_setprotoent_r=undef
 setprotoent_r_proto=0
 echo "Disabling setprotoent_r, cannot determine prototype." >&4 ;;
* ) case "$setprotoent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) setprotoent_r_proto="REENTRANT_PROTO_$setprotoent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "setprotoent_r has no prototype, not using it." >&4 ;;
 esac
 d_setprotoent_r=undef
 setprotoent_r_proto=0
 ;;
esac
;;
*) setprotoent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setprotoent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:siteman3dir siteman3direxp installsiteman3dir: Getfile \
 Setprefixvar prefix siteprefix man3dir sed
?MAKE: -pick add $@ %<
```

```
?Y:TOP
?D:siteman3dir=''
?S:siteman3dir:
?S: This variable contains the name of the directory in which site-specific
?S: library man source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After
 perl has been installed, users may install their own local
?S: man3 pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:siteman3direxp=''
?S:siteman3direxp:
?S: This variable is the same as the siteman3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsiteman3dir=''
?S:installsiteman3dir:
?S: This variable is really the same as siteman3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsiteman3dir
?LINT:set siteman3dir
?LINT:set siteman3direxp
: determine where add-on library man pages go
case "$siteman3dir" in
'') dflt=`echo $man3dir | $sed "s#^$prefix#$siteprefix#"` ;;
*) dflt=$siteman3dir ;;
esac
case "$dflt" in
'|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname
 where the site-specific library manual pages should be installed?'
. ./getfile
prefixvar=siteman3dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteman3dir.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: newslib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: newslib.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:newslib newslibexp: test inews Oldconfig Getfile
?MAKE: -pick add $@ %<
?S:newslib:
?S: This variable contains the eventual value of the NEWSLIB symbol,
?S: which holds the name of the directory serving as the news library.
?S: It may have a ~ on the front.  See newslibexp for expanded version.
?S:.
?S:newslibexp:
?S: This variable contains
 the ~ expanded name of the news library
?S: directory.  See newslib.
?S:.
?C:NEWSLIB:
?C: This symbol contains the name of the directory serving as the news
?C: library.  The program must be prepared to do ~ expansion on it.
?C:.
?C:NEWSLIB_EXP:
?C: This symbol is the ~ expanded version of NEWSLIB, for programs that
?C: do not wish to deal with it at run-time.
?C:.
?H:#define NEWSLIB "$newslib"  /**/
?H:#define NEWSLIB_EXP "$newslibexp" /**/
?H:.
?LINT:change inews
: figure out news library
case "$newslib" in
")
 dflt=/usr/lib/news
 ;;
*)  dflt=$newslib ;;
esac
echo " "
```

```
fn=d~
rp='Where is your news library?'
. ./getfile
newslib="$ans"
newslibexp="$ansexp"
if $test -f $newslibexp/inews; then
 echo "Aha!  Inews is really in $newslibexp!  Maybe this is 2.10.2..." >&4
 case "$inews" in
 inews)
  : null
  ;;
 *) echo "(Make sure $inews isn't an old version.)";;
 esac
 inews=$newslibexp/inews
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/newslib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: errnolist.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:01  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:10:54  ram
?RCS: patch16: created
?RCS:
?MAKE:errnolist errnolist_SH errnolist_a errnolist_c errnolist_o: cat +cc \
 +ccflags +libs +d_sysernlst _a _o
?MAKE: -pick add $@ %<
?S:errnolist:
?S: This variable holds the base name of a file containing the
?S: definition of the sys_errnolist
 array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S: The following lines should be included in your Makefile.SH:
?S:
```

```
?S:  case "$errnolist" in
?S:  ") ;;
?S:  *)
?S:   $spitshell >>Makefile <<!GROK!THIS!
?S:  $errnolist_c: $errnolist_SH $errnolist_a
?S:   sh ./$errnolist_SH
?S:
?S:  !GROK!THIS!
?S:   ;;
?S:  esac
?S:
?S: You may define the 'errnolist' variable in your Myinit.U if you
?S: wish to override its default value "errnolist".
?S:.
?S:errnolist_SH:
?S: This is the name of a file which will generate errnolistc.
?S:.
?S:errnolist_a:
?S: This is the name of the awk script called by errnolist_SH.
?S:.
?S:errnolist_c:
?S: This is the name of a generated C file which provides the
?S: definition of the sys_errnolist array.
?S:.
?S:errnolist_o:
?S: This is the name of the object file which provides the
?S: definition of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S:.
?INIT:errnolist=errnolist
:
 check for sys_errnolist
@if d_sysernlst || HAS_SYS_ERRNOLIST
case "$d_sysernlst" in
"$define")
   errnolist="
   errnolist_SH="
   errnolist_a="
   errnolist_c="
   errnolist_o="
 ;;
*)
 echo " "
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
```

```
 ;;
esac
@else
echo " "
$cat <<EOM
Checking to see if your C library provides us with sys_errnolist[]...
EOM
$cat >errnolist.c <<'EOCP'
extern char *sys_errnolist[];
int main() {
   char *p0 = sys_errnolist[0];
   char *p1 = sys_errnolist[1];

   return (p0 == p1); /* Make sure they're not optimized away */
}
EOCP
if $cc $ccflags -o errnolist errnolist.c $libs >/dev/null 2>&1 ; then
   echo "It does."
   errnolist="
   errnolist_SH="
   errnolist_a="
   errnolist_c="
   errnolist_o="
else
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"

   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/errnolist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_readv: Inlibc
?MAKE: -pick add $@ %<
?S:d_readv:
?S: This variable conditionally defines the HAS_READV symbol, which
```

```
?S: indicates to the C program that the readv() routine is available.
?S:.
?C:HAS_READV:
?C: This symbol, if defined, indicates that the readv routine is
?C: available to do gather reads.  You will also need <sys/uio.h>
?C: and there I_SYSUIO.
?C:.
?H:#$d_readv HAS_READV  /**/
?H:.
?LINT:set d_readv
: see if readv exists
set readv d_readv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_readv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_usleep.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_usleep.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_usleep: Inlibc
?MAKE: -pick add $@ %<
?S:d_usleep:
?S: This variable conditionally defines HAS_USLEEP if usleep() is
?S: available to do high granularity sleeps.
?S:.
?C:HAS_USLEEP (USLEEP):
?C: This symbol, if defined, indicates that the usleep routine is
?C: available to let the process sleep on a sub-second accuracy.
?C:.
?H:#$d_usleep
 HAS_USLEEP  /**/
?H:.
?LINT:set d_usleep
: see if usleep exists
set usleep d_usleep
```

```
eval $inlibc

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_usleep.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_endpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endpwent_r endpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_endpwent_r:
?S: This variable conditionally defines the HAS_ENDPWENT_R symbol,
?S: which indicates to the C program that the endpwent_r()
?S: routine is available.
?S:.
?S:endpwent_r_proto:
?S: This variable encodes the prototype of endpwent_r.
?S: It is zero if d_endpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endpwent_r
?S: is defined.
?S:.
?C:HAS_ENDPWENT_R:
?C: This symbol, if defined, indicates that the endpwent_r routine
?C: is available to
 endpwent re-entrantly.
?C:.
?C:ENDPWENT_R_PROTO:
?C: This symbol encodes the prototype of endpwent_r.
?C: It is zero if d_endpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endpwent_r
?C: is defined.
?C:.
?H:#$d_endpwent_r HAS_ENDPWENT_R /**/
?H:#define ENDPWENT_R_PROTO $endpwent_r_proto /**/
?H:.
?T:try hdrs d_endpwent_r_proto
: see if endpwent_r exists
set endpwent_r d_endpwent_r
eval $inlibc
case "$d_endpwent_r" in
"$define")
```

```
hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
case "$d_endpwent_r_proto:$usethreads" in
":define") d_endpwent_r_proto=define
 set d_endpwent_r_proto endpwent_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_endpwent_r_proto" in
define)
case "$endpwent_r_proto" in
"|0) try='int endpwent_r(FILE**);'
./protochk "$extern_C $try" $hdrs && endpwent_r_proto=I_H ;;
esac
case "$endpwent_r_proto" in
"|0) try='void endpwent_r(FILE**);'
./protochk "$extern_C $try" $hdrs && endpwent_r_proto=V_H ;;
esac
case "$endpwent_r_proto"
in
"|0) d_endpwent_r=undef
 endpwent_r_proto=0
 echo "Disabling endpwent_r, cannot determine prototype." >&4 ;;
* ) case "$endpwent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) endpwent_r_proto="REENTRANT_PROTO_$endpwent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "endpwent_r has no prototype, not using it." >&4 ;;
 esac
 d_endpwent_r=undef
 endpwent_r_proto=0
 ;;
esac
;;
*) endpwent_r_proto=0
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endpwent_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: lintlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lintlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lintlib lintlibexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:lintlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put public lint-library files for the package in question.  It is
?S: most often a local directory such as /usr/local/lib/lint. Programs using
?S: this variable must be prepared to
 deal with ~name expansion.
?S:.
?S:lintlibexp:
?S: This variable is the same as the lintlib variable, but is filename
?S: expanded at configuration time, for convenient use in your makefiles.
?S:.
: determine where public lint libraries go
case "$lintlib" in
") dflt=`./loc . "." /usr/local/lib/lint /usr/lib/lint /usr/lib`;;
*) dflt="$lintlib" ;;
esac
echo " "
fn=d~
rp='Where do you want to put the public lint libraries?'
. ./getfile
lintlib="$ans"
lintlibexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lintlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_rint: Inlibc
?MAKE: -pick add $@ %<
?S:d_rint:
?S: This variable conditionally defines the HAS_RINT symbol, which
?S: indicates to the C program that the rint() routine is available.
```

```
?S:.
?C:HAS_RINT:
?C: This symbol, if defined, indicates that the rint routine is
?C: available to return the nearest integral value to x as double
?C: using the current rounding mode.
?C:.
?H:#$d_rint HAS_RINT  /**/
?H:.
?LINT:set d_rint
: see if rint exists
set rint d_rint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_rint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_ustat: Inlibc
?MAKE: -pick add $@ %<
?S:d_ustat:
?S: This variable conditionally defines HAS_USTAT if ustat() is
?S: available to query file system statistics by dev_t.
?S:.
?C:HAS_USTAT:
?C: This symbol, if defined, indicates that the ustat system call is
?C: available to query file system statistics by dev_t.
?C:.
?H:#$d_ustat HAS_USTAT  /**/
?H:.
?LINT:set d_ustat
: see if ustat exists
set ustat d_ustat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ustat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotby.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getpbyname d_getpbynumber: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpbyname:
?S: This variable conditionally defines the HAS_GETPROTOBYNAME
?S: symbol, which indicates to the C program that the
?S: getprotobyname() routine is available to look up protocols
?S: by their name.
?S:.
?S:d_getpbynumber:
?S: This variable conditionally defines the HAS_GETPROTOBYNUMBER
?S: symbol, which indicates to the C program that the
?S: getprotobynumber() routine is available to look up protocols
?S: by their number.
?S:.
?C:HAS_GETPROTOBYNAME:
?C: This symbol, if defined, indicates that the getprotobyname()
?C: routine is available to look up protocols by their name.
?C:.
?C:HAS_GETPROTOBYNUMBER:
?C: This
 symbol, if defined, indicates that the getprotobynumber()
?C: routine is available to look up protocols by their number.
?C:.
?H:#$d_getpbyname HAS_GETPROTOBYNAME  /**/
?H:#$d_getpbynumber HAS_GETPROTOBYNUMBER  /**/
?H:.
?LINT:set d_getpbyname d_getpbynumber
: Optional checks for getprotobyname and getprotobynumber

@if d_getpbyname || HAS_GETPROTOBYNAME
: see if getprotobyname exists
set getprotobyname d_getpbyname
eval $inlibc
@end

@if d_getpbynumber || HAS_GETPROTOBYNUMBER
: see if getprotobynumber exists
set getprotobynumber d_getpbynumber
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getprotby.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Mkdirp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can launched to create a
?X: directory path like "mkdir -p" would do.
?X:
?MAKE:Mkdirp:
 eunicefix startsh
?MAKE: -pick add $@ %<
?F:./mkdirp
?T:name create file
: script used to emulate mkdir -p
cat >mkdirp <<EOS
$startsh
EOS
cat >>mkdirp <<'EOS'
name=$1;
create="";
while test $name; do
 if test ! -d "$name"; then
  create="$name $create"
  name=`echo $name | sed -e "s|^[^/]*$||"`
  name=`echo $name | sed -e "s|\(.*\)/.*|\1|"`
 else
  name=""
 fi
```

```
done
for file in $create; do
 mkdir $file
done
EOS
chmod +x mkdirp
$eunicefix mkdirp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Mkdirp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Rcs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Rcs.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is a unit that helps people who write SH scripts and keep them under
?X: RCS, but don't think to protect the $Log and other $Id keywords from
?X: variable substitution (or people like me who do not like to).
?X:
?MAKE:Author Date Header Id Locker Log RCSfile Revision Source State: Oldconfig
?MAKE: -pick weed $@ %<
?LINT:describe Author
 Date Header Id Locker Log RCSfile Revision Source State
: preserve RCS keywords in files with variable substitution, grrr
?Author:Author='$Author'
?Date:Date='$Date'
?Header:Header='$Header'
?Id:Id='$Id'
?$Locker'
?Log:Log='$Log'
?RCSfile:RCSfile='$RCSfile'
?Revision:Revision='$Revision'
?Source:Source='$Source'
?State:State='$State'
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Rcs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgid.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:33:44  ram
?RCS: patch61: created
?RCS:
?MAKE:d_getpgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpgid:
?S: This variable conditionally defines the HAS_GETPGID symbol, which
?S: indicates to the C program that the getpgid(pid) function
?S: is available to get the process group id.
?S:.
?C:HAS_GETPGID:
?C: This symbol, if defined, indicates to the C program
 that
?C: the getpgid(pid) function is available to get the
?C: process group id.
?C:.
?H:#$d_getpgid HAS_GETPGID  /**/
?H:.
?LINT:set d_getpgid
: see if getpgid exists
set getpgid d_getpgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strstr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strstr.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strstr: Inlibc
?MAKE: -pick add $@ %<
?S:d_strstr:
?S: This variable conditionally defines HAS_STRSTR if strstr() is
?S: available to find substrings.
?S:.
?C:HAS_STRSTR (STRSTR):
?C: This symbol, if defined, indicates that the strstr routine is
?C: available to find substrings.
?C:.
?H:#$d_strstr HAS_STRSTR /**/
?H:.
?LINT:set d_strstr
:
 see if strstr exists
set strstr d_strstr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strstr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017 H.Merijn Brand (original change by Tony Cook)
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_openat d_unlinkat d_renameat d_linkat d_fchmodat: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchmodat:
?S: This variable conditionally defines the HAS_FCHMODAT symbol, which
?S: indicates the POSIX fchmodat() function is available.
?S:.
?S:d_linkat:
?S: This variable conditionally defines the HAS_LINKAT symbol, which
?S: indicates the POSIX linkat() function is available.
?S:.
?S:d_openat:
?S: This variable conditionally defines the HAS_OPENAT symbol, which
?S: indicates the POSIX openat() function is available.
```

```
?S:.
?S:d_renameat:
?S: This variable conditionally defines the HAS_RENAMEAT symbol, which
?S: indicates the POSIX renameat() function is available.
?S:.
?S:d_unlinkat:
?S: This variable
 conditionally defines the HAS_UNLINKAT symbol, which
?S: indicates the POSIX unlinkat() function isavailable.
?S:.
?C:HAS_FCHMODAT:
?C: This symbol is defined if the fchmodat() routine is available.
?C:.
?C:HAS_LINKAT:
?C: This symbol is defined if the linkat() routine is available.
?C:.
?C:HAS_OPENAT:
?C: This symbol is defined if the openat() routine is available.
?C:.
?C:HAS_RENAMEAT:
?C: This symbol is defined if the renameat() routine is available.
?C:.
?C:HAS_UNLINKAT:
?C: This symbol is defined if the unlinkat() routine is available.
?C:.
?H:#$d_fchmodat HAS_FCHMODAT /**/
?H:#$d_linkat HAS_LINKAT /**/
?H:#$d_openat HAS_OPENAT /**/
?H:#$d_renameat HAS_RENAMEAT /**/
?H:#$d_unlinkat HAS_UNLINKAT /**/
?H:.
?LINT:set d_openat d_unlinkat d_renameat d_linkat d_fchmodat
: check for openat, unlinkat, renameat, linkat, fchmodat
set openat d_openat
eval $inlibc

set unlinkat d_unlinkat
eval $inlibc

set renameat d_renameat
eval $inlibc

set linkat d_linkat
eval $inlibc

set fchmodat d_fchmodat
eval
```

```
 $inlibc

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fsat.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: perlpath.U,v 3.0.1.2 1995/09/25 09:17:04 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: perlpath.U,v $
?RCS:
?RCS: Special perl5 unit -- we haven't installed perl yet.
?RCS:
?RCS: Revision 3.0.1.2  1995/09/25  09:17:04  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:33:53  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:32  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this unit is to locate perl good enough to construct a #!
?X:
?MAKE:perlpath: cat Getfile Loc Myread Oldconfig initialinstalllocation \
 startperl version versiononly
?MAKE: -pick add $@ %<
?Y:TOP
?S:perlpath:
?S: This variable contains the eventual value of the PERLPATH symbol,
?S: which contains the name of the perl interpreter to be used in
?S: shell scripts and in the "eval 'exec'" idiom.  This variable is
?S: not necessarily the pathname of the file containing the perl
?S: interpreter; you must append the executable extension (_exe) if
?S: it is not already present.  Note that Perl code that runs during
?S: the Perl build process cannot reference this variable, as Perl
?S: may not have been installed, or even if installed, may be a
?S: different version of Perl.
```

```
?S:.
?C:PERLPATH:
?C: This symbol contains the name of the perl interpreter to be
?C: used in shell scripts and in the "eval 'exec'" idiom.
?C:.
?H:#define PERLPATH "$perlpath"  /**/
?H:.
:
 figure best path for perl in scripts
case "$perlpath" in
")
 case "$versionony" in
 "$define") perlpath="$initialinstalllocation/perl$version";;
 *)  perlpath="$initialinstalllocation/perl";;
 esac
 case "$startperl" in
 *!*) ;;
 *)
  $cat <<EOH

I will use the "eval 'exec'" idiom to start Perl on your system.
I can use the full path of your Perl binary for this purpose, but
doing so may cause problems if you want to share those scripts and
Perl is not always in a standard place ($initialinstalllocation/perl).

EOH
  dflt="$initialinstalllocation/perl"
  rp="What path shall I use in \"eval 'exec'\"?"
  . ./myread
  perlpath="$ans"
  ;;
 esac
 ;;
esac
case "$startperl" in
*!*) ;;
*) echo "I'll use $perlpath in \"eval 'exec'\"" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlpath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_inttypes: Inhdr cat rm_try Setvar Compile
?MAKE: -pick add $@ %<
?S:i_inttypes:
?S: This variable conditionally defines the I_INTTYPES symbol,
?S: and indicates whether a C program should include <inttypes.h>.
?S:.
?C:I_INTTYPES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <inttypes.h>.
?C:.
?H:#$i_inttypes   I_INTTYPES                /**/
?H:.
?LINT:set i_inttypes
: see if inttypes.h is available
: we want a real compile instead of Inhdr because some systems
: have an inttypes.h
 which includes non-existent headers
echo " "
$cat >try.c <<EOCP
#include <inttypes.h>
int main() {
 static int32_t foo32 = 0x12345678;
}
EOCP
set try
if eval $compile; then
 echo "<inttypes.h> found." >&4
 val="$define"
else
 echo "<inttypes.h> NOT found." >&4
 val="$undef"
fi
$rm_try
set i_inttypes
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_inttypes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rename.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rename.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_rename: Inlibc
?MAKE: -pick add $@ %<
?S:d_rename:
?S: This variable conditionally defines the HAS_RENAME symbol, which
?S: indicates to the C program that the rename() routine is available
?S: to rename files.
?S:.
?C:HAS_RENAME (RENAME):
?C: This symbol, if defined, indicates that the rename routine is available
?C: to rename files.
  Otherwise you should do the unlink(), link(), unlink()
?C: trick.
?C:.
?H:#$d_rename HAS_RENAME /**/
?H:.
?LINT:set d_rename
: see if rename exists
set rename d_rename
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rename.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_hypot: Inlibc
?MAKE: -pick add $@ %<
?S:d_hypot:
?S: This variable conditionally defines HAS_HYPOT if hypot is available
?S: for numerically stable hypotenuse function.
?S:.
?C:HAS_HYPOT:
?C: This symbol, if defined, indicates that the hypot routine is
?C: available to do the hypotenuse function.
?C:.
```

```
?H:#$d_hypot HAS_HYPOT  /**/
?H:.
?LINT:set d_hypot
: see if hypot exists
set hypot d_hypot
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_hypot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_portable.U,v 3.0.1.2 1995/01/11 15:28:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_portable.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:28:52  ram
?RCS: patch45: executable path stripping moved to the end in Config_sh.U
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:21:17  ram
?RCS: patch15: did not strip variables properly when needed
?RCS: patch15: now also strips down variables from trylist
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
   This is the same as the dist version, except I don't bother
?X:   prompting people since it makes no difference for perl5,
?X:   and only confuses people.
?X:
?X: The Loc unit is wanted to get the definition of all the locating variables.
?X:
?MAKE:d_portable: Loc Oldconfig
?MAKE: -pick add $@ %<
?S:d_portable:
?S: This variable conditionally defines the PORTABLE symbol, which
?S: indicates to the C program that it should not assume that it is
?S: running on the machine it was compiled on.
?S:.
?C:PORTABLE:
```

```
?C: This symbol, if defined, indicates to the C program that it should
?C: not assume that it is running on the machine it was compiled on.
?C: The program should be prepared to look up the host name, translate
?C: generic filenames, use PATH, etc.
?C:.
?H:#$d_portable PORTABLE /**/
?H:.
?D:d_portable="
: decide how portable to be.  Allow command line overrides.
case "$d_portable" in
"$undef") ;;
*) d_portable="$define" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_portable.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ilogb: Inlibc
?MAKE: -pick add $@ %<
?S:d_ilogb:
?S: This variable conditionally defines the HAS_ILOGB symbol, which
?S: indicates to the C program that the ilogb() routine is available
?S: for extracting the exponent of double x as a signed integer.
?S:.
?C:HAS_ILOGB:
?C: This symbol, if defined, indicates that the ilogb routine is
?C: available to get integer exponent of a floating-point value.
?C:.
?H:#$d_ilogb HAS_ILOGB  /**/
?H:.
?LINT:set d_ilogb
: see if ilogb exists
set ilogb d_ilogb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ilogb.U
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```
?RCS: $Id$
?RCS:
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```

```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:selectminbits: Compile cat rm_try Oldconfig d_select \
 i_time i_systime i_systimek i_sysselct selecttype d_socket \
 byteorder Myread Setvar run i_stdlib ptrsize
?MAKE: -pick add $@ %<
?S:selectminbits:
?S: This variable holds the minimum number of bits operated by select.
?S: That is, if you do select(n, ...), how many bits at least will be
?S: cleared in the masks if some activity is detected.  Usually this
?S: is either n or 32*ceil(n/32), especially many little-endians do
?S: the latter.  This is only useful if
 you have select(), naturally.
?S:.
?C:SELECT_MIN_BITS:
?C: This symbol holds the minimum number of bits operated by select.
?C: That is, if you do select(n, ...), how many bits at least will be
?C: cleared in the masks if some activity is detected.  Usually this
?C: is either n or 32*ceil(n/32), especially many little-endians do
?C: the latter.  This is only useful if you have select(), naturally.
?C:.
?H:#define SELECT_MIN_BITS $selectminbits /**/
?H:.
?T:bits
?T:safebits
?F:!try
: check for the select 'width'
case "$selectminbits" in
") safebits=`expr $ptrsize \* 8`
   case "$d_select" in
 $define)
  $cat <<EOM

Checking to see on how many bits at a time your select() operates...
EOM
  $cat >try.c <<EOCP
#include <sys/types.h>
#$i_time I_TIME
#$i_systime I_SYS_TIME
#$i_systimek I_SYS_TIME_KERNEL
#ifdef I_TIME
#   include <time.h>
#endif
#ifdef I_SYS_TIME
#   ifdef I_SYS_TIME_KERNEL
```

```
# define KERNEL
#   endif
#   include <sys/time.h>
#   ifdef I_SYS_TIME_KERNEL
# undef KERNEL
#   endif
#endif
#$i_sysselct
 I_SYS_SELECT
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
#$d_socket HAS_SOCKET
#ifdef HAS_SOCKET
#   include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
$selecttype b;
#define S sizeof(*(b))
#define MINBITS 64
#define NBYTES (S * 8 > MINBITS ? S : MINBITS/8)
#define NBITS  (NBYTES * 8)
int main() {
   char *s = (char *)malloc(NBYTES);
   struct timeval t;
   int i;
   FILE* fp;
   int fd;

   if (!s)
 exit(1);
   fclose(stdin);
   fp = fopen("try.c", "r");
   if (fp == 0)
     exit(2);
   fd = fileno(fp);
   if (fd < 0)
     exit(3);
   b = ($selecttype)s;
   for (i = 0; i < NBITS; i++)
 FD_SET(i, b);
   t.tv_sec  = 0;
   t.tv_usec = 0;
   select(fd + 1, b, 0, 0, &t);
```

```
   for (i = NBITS - 1; i > fd && FD_ISSET(i, b); i--);
   free(s);
   printf("%d\n", i + 1);
   return 0;
}
EOCP
  set try
  if eval $compile_ok; then
   selectminbits=`$run
 ./try 2>/dev/null`
   case "$selectminbits" in
   ") cat >&4 <<EOM
Cannot figure out on how many bits at a time your select() operates.
I'll play safe and guess it is $safebits bits.
EOM
    selectminbits=$safebits
    bits="$safebits bits"
    ;;
   1) bits="1 bit" ;;
   *) bits="$selectminbits bits" ;;
   esac
   echo "Your select() operates on $bits at a time." >&4
  else
   rp='What is the minimum number of bits your select() operates on?'
   case "$byteorder" in
   12345678) dflt=64 ;;
   1234)  dflt=32 ;;
   *)  dflt=1 ;;
   esac
   . ./myread
   val=$ans
   selectminbits="$val"
  fi
  $rm_try
  ;;
 *) : no select, so pick a harmless default
  selectminbits=$safebits
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/selectminbits.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_getnetprotos.U,v $
?RCS:

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getnetprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getnetprotos:
?S: This variable conditionally defines the HAS_GETNET_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getnet*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETNET_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getnetent(), getnetbyname(), and
?C: getnetbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getnetprotos HAS_GETNET_PROTOS /**/
?H:.
?LINT:set d_getnetprotos
: see if prototypes for various getnetxxx netdb.h functions are available
echo " "
set d_getnetprotos getnetent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getnetprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgrp.U,v 3.0.1.3 1997/02/28 15:44:16 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setpgrp.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:44:16  ram
?RCS: patch61: obsoleted USE_BSDGRP in favor of USE_BSD_SETPGRP
```

```
?RCS: patch61: another unit now also defines a USE_BSD_GETPGRP
?RCS: patch61: fallback for test program failure improved
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:59:30  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:15:37  ram
?RCS: patch36: added
 'ldflags' to the test compile line (ADO)
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp d_bsdsetpgrp: cat rm_try +cc +libs +ccflags \
 +ldflags Inlibc Guess Setvar i_unistd i_stdlib run
?MAKE: -pick add $@ %<
?S:d_setpgrp:
?S: This variable conditionally defines HAS_SETPGRP if setpgrp() is
?S: available to set the current process group.
?S:.
?S:d_bsdsetpgrp (d_bsdpgrp):
?S: This variable conditionally defines USE_BSD_SETPGRP if
?S: setpgrp needs two arguments whereas USG one needs none.
?S: See also d_setpgid for a POSIX interface.
?S:.
?C:HAS_SETPGRP (SETPGRP):
?C: This symbol, if defined, indicates that the setpgrp routine is
?C: available to set the current process group.
?C:.
?C:USE_BSD_SETPGRP (USE_BSDPGRP BSDPGRP):
?C: This symbol, if defined, indicates that setpgrp needs two
?C: arguments whereas USG one needs none.  See also HAS_SETPGID
?C: for
 a POSIX interface.
?C:.
?H:#$d_setpgrp HAS_SETPGRP  /**/
?H:#$d_bsdsetpgrp USE_BSD_SETPGRP /**/
?H:.
?T:xxx
?F:!try
?LINT:set d_setpgrp d_bsdsetpgrp
: see if setpgrp exists
set setpgrp d_setpgrp
eval $inlibc

@if USE_BSD_SETPGRP || d_bsdsetpgrp
case "$d_setpgrp" in
```

```
"$define")
 echo " "
 echo "Checking to see which flavor of setpgrp is in use..."
 $cat >try.c <<EOP
#include <stdio.h>
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (-1 == setpgrp(1, 1))
  exit(0);
#else
 if (setpgrp() != -1)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -o try -DTRY_BSD_PGRP $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo 'You have to use setpgrp(pid,pgrp) instead of setpgrp().' >&4
  val="$define"
 elif $cc -o try $ccflags $ldflags try.c $libs
 >/dev/null 2>&1 && $run ./try; then
  echo 'You have to use setpgrp() instead of setpgrp(pid,pgrp).' >&4
  val="$undef"
 else
  echo "(I can't seem to compile and run the test program.)"
  if ./usg; then
   xxx="a USG one, i.e. you use setpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use setpgrp(pid,pgrp)."
    val="$define"
    ;;
```

```
  $define)
   xxx="probably a USG one, i.e. you use setpgrp()."
   val="$undef"
   ;;
  esac
 fi
 echo "Assuming your setpgrp is $xxx" >&4
fi
;;
*) val="$undef";;
esac
set d_bsdsetpgrp
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwuid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwuid_r getpwuid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwuid_r:
?S: This variable conditionally defines the HAS_GETPWUID_R symbol,
?S: which indicates to the C program that the getpwuid_r()
?S: routine is available.
?S:.
?S:getpwuid_r_proto:
?S: This variable encodes the prototype of getpwuid_r.
?S: It is zero if d_getpwuid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwuid_r
?S: is defined.
?S:.
?C:HAS_GETPWUID_R:
?C: This symbol, if defined, indicates that the getpwuid_r routine
?C: is available to
 getpwuid re-entrantly.
?C:.
?C:GETPWUID_R_PROTO:
```

```
?C: This symbol encodes the prototype of getpwuid_r.
?C: It is zero if d_getpwuid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwuid_r
?C: is defined.
?C:.
?H:#$d_getpwuid_r HAS_GETPWUID_R /**/
?H:#define GETPWUID_R_PROTO $getpwuid_r_proto /**/
?H:.
?T:try hdrs d_getpwuid_r_proto
: see if getpwuid_r exists
set getpwuid_r d_getpwuid_r
eval $inlibc
case "$d_getpwuid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwuid_r_proto:$usethreads" in
 ":define") d_getpwuid_r_proto=define
  set d_getpwuid_r_proto getpwuid_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getpwuid_r_proto" in
 define)
 case "$getpwuid_r_proto" in
 "|0) try='int getpwuid_r(uid_t, struct passwd*, char*, size_t, struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBWR ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) try='int getpwuid_r(uid_t, struct passwd*, char*, int,
 struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBIR ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) try='int getpwuid_r(uid_t, struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBI ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) try='struct passwd* getpwuid_r(uid_t, struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=S_TSBI ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) d_getpwuid_r=undef
  getpwuid_r_proto=0
  echo "Disabling getpwuid_r, cannot determine prototype." >&4 ;;
 * ) case "$getpwuid_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getpwuid_r_proto="REENTRANT_PROTO_$getpwuid_r_proto" ;;
  esac
```

```
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getpwuid_r has no prototype, not using it." >&4 ;;
  esac
  d_getpwuid_r=undef
  getpwuid_r_proto=0
  ;;
 esac
 ;;
*) getpwuid_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwuid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sysman.U,v $
?RCS: Revision 3.0.1.2  1994/06/20  07:08:43  ram
?RCS: patch30: now explicitly states that /usr/man/man1 is the default
?RCS: patch30: added /usr/local/man/man1 to the search list
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:13:50  ram
?RCS: patch10: added support for /local/man/man1 (WAD)
?RCS: patch10: added temporary syspath variable to cut down on line length
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sysman: test
 Loc Oldconfig
?MAKE: -pick add $@ %<
?S:sysman:
?S: This variable holds the place where the manual is located on this
?S: system. It is not the place where the user wants to put his manual
?S: pages. Rather it is the place where Configure may look to find manual
```

```
?S: for unix commands (section 1 of the manual usually). See mansrc.
?S:.
?T:syspath
: determine where manual pages are on this system
echo " "
case "$sysman" in
")
 syspath='/usr/share/man/man1 /usr/man/man1'
 syspath="$syspath /usr/man/mann /usr/man/manl /usr/man/local/man1"
 syspath="$syspath /usr/man/u_man/man1 /usr/share/man/man1"
 syspath="$syspath /usr/catman/u_man/man1 /usr/man/l_man/man1"
 syspath="$syspath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 syspath="$syspath /usr/man/man.L /local/man/man1 /usr/local/man/man1"
 sysman=`./loc . /usr/man/man1 $syspath`
 ;;
esac
if $test -d "$sysman"; then
 echo "System manual is in $sysman." >&4
else
 echo "Could not find manual pages in source form." >&4
fi

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sysman.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: startsh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: startsh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:25:31  ram
?RCS: patch61: avoid needless chatter since this is now done very early
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startsh: sh sharpbang eunicefix
?MAKE: -pick add $@ %<
?S:startsh:
?S: This variable contains the string to put on the front of a shell
```

```
?S: script to make sure (hopefully) that it runs with sh and not some
?S: other
 shell.
?S:.
?F:!sharp
: figure out how to guarantee sh startup
?X: Avoid needless chatter since this is now done very early.
?X: echo " "
?X: echo "Checking out how to guarantee sh startup..." >&2
case "$startsh" in
") startsh=${sharpbang}${sh} ;;
*)
?X: echo "Let's see if '$startsh' works..." ;;
esac
cat >sharp <<EOSS
$startsh
set abc
test "$?abc" != 1
EOSS

chmod +x sharp
$eunicefix sharp
if ./sharp; then
 : echo "Yup, it does."
else
 echo "Hmm... '$startsh' does not guarantee sh startup..."
 echo "You may have to fix up the shell scripts to make sure $sh runs them."
fi
rm -f sharp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/startsh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_vfork.U,v $
?RCS: Revision 3.0.1.6  1994/08/29  16:18:21  ram
?RCS: patch32: set default to 'y' the first time
?RCS:
```

```
?RCS: Revision 3.0.1.5  1994/06/20  06:59:14  ram
?RCS: patch30: usevfork was not always properly set
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:20:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:59:09  ram
?RCS: patch23: now explicitly ask whether vfork() should be used (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1993/10/16
  13:49:39  ram
?RCS: patch12: added magic for vfork()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:06:57  ram
?RCS: patch10: removed automatic remapping of vfork on fork (WAD)
?RCS: patch10: added compatibility code for older config.sh (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vfork usevfork: Inlibc Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_vfork:
?S: This variable conditionally defines the HAS_VFORK symbol, which
?S: indicates the vfork() routine is available.
?S:.
?S:usevfork:
?S: This variable is set to true when the user accepts to use vfork.
?S: It is set to false when no vfork is available or when the user
?S: explicitly requests not to use vfork.
?S:.
?C:HAS_VFORK (VFORK):
?C: This symbol, if defined, indicates that vfork() exists.
?C:.
?H:#$d_vfork HAS_VFORK /**/
?H:.
?M:vfork: HAS_VFORK
?M:#ifndef HAS_VFORK
?M:#define vfork fork
?M:#endif
?M:.
?LINT:set d_vfork
: see if there is a vfork
val=''
set
 vfork val
eval $inlibc
```

```
: Ok, but do we want to use it. vfork is reportedly unreliable in
: perl on Solaris 2.x, and probably elsewhere.
case "$val" in
$define)
 echo " "
 case "$usevfork" in
 false) dflt='n';;
 *) dflt='y';;
 esac
 rp="Some systems have problems with vfork().  Do you want to use it?"
 . ./myread
 case "$ans" in
 y|Y) ;;
 *)
  echo "Ok, we won't use vfork()."
  val="$undef"
  ;;
 esac
 ;;
esac
?X:
?X: Only set it when final value is known to avoid spurious Whoas
?X: Then set usevfork accordingly to the current value, for next run
?X:
set d_vfork
eval $setvar
case "$d_vfork" in
$define) usevfork='true';;
*) usevfork='false';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_vfork.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: alignbytes.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:02:28  ram
?RCS: patch36: added ?F: line for metalint file checking
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:25:20  ram
?RCS: patch23: avoid ALIGNBYTES, since it conflicts on NetBSD
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:alignbytes: Assert Myread Trylink cat i_inttypes i_limits i_math
?MAKE: -pick add $@ %<
?S:alignbytes:
?S: This variable holds the number of bytes required
 to align an
?S: arbitrary standard type. Usual values are 2, 4 and 8.
?S:.
?X: This used to be called ALIGNBYTES, but that conflicts with
?X: <machines/param.h> in NetBSD.
?C:MEM_ALIGNBYTES (ALIGNBYTES):
?C: This symbol contains the number of bytes required to align a
?C: double. Usual values are 2, 4 and 8.
?C:.
?H:#define MEM_ALIGNBYTES $alignbytes /**/
?H:.
?T:alignment result
: check for alignment requirements
echo " "
case "$alignbytes" in
")
 echo "Checking alignment constraints..." >&4

 for alignment in 8 4 2 1 16 32 error
 do
  $cat >try.c <<EOCP
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#$i_limits I_LIMITS
#ifdef I_LIMITS
#include <limits.h>
#endif
#$i_math I_MATH
#ifdef I_MATH
#include <math.h>
#endif

union u {
 void *void_ptr;
 void (*func_ptr)(void);
```

```
 char c;
 short s;
 int i;
 long l;
 float f;
 double d;
#ifdef LLONG_MAX
 long long ll;
#else
#warning "LLONG_MAX undefined"
#endif
#if defined(HUGE_VALL)
 long double ld;
#else
#warning
 "HUGE_VALL undefined"
#endif
#ifdef UINT32_MAX
 uint32_t u32;
#else
#warning "UINT32_MAX undefined"
#endif
#ifdef UINT16_MAX
 uint16_t u16;
#else
#warning "UINT32_MAX undefined"
#endif
#ifdef UINT64_MAX
 uint64_t u64;
#else
#warning "UINT64_MAX undefined"
#endif
#ifdef UINTMAX_MAX
 uintmax_t m;
#else
#warning "UINTMAX_MAX undefined"
#endif
#ifdef UINTPTR_MAX
 uintptr_t up;
#else
#warning "UINTPTR_MAX undefined"
#endif
};

struct s {
 char a;
 union u b;
};
```

```
#include "static_assert.h"

int
main(void)
{
 STATIC_ASSERT($alignment == ((sizeof (struct s) - (sizeof (union u)))));
 return 0;
}
EOCP

  result=''
  set result
  eval $trylink
  case "$result" in
  "$define") break;;
  esac
 done

 case "$alignment" in
 error) dflt='8'
  echo "(I can't seem to compile the test program...)" >&4
  ;;
 *) dflt=$alignment
  ;;
 esac
;;
*) dflt="$alignbytes"
 ;;
esac
rp="What is the maximum alignment in bytes required for a standard type?"
. ./myread
alignbytes="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/alignbytes.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fp_classl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fp_classl:
```

```
?S: This variable conditionally defines the HAS_FP_CLASSL symbol, which
?S: indicates to the C program that the fp_classl() routine is available.
?S:.
?C:HAS_FP_CLASSL:
?C: This symbol, if defined, indicates that the fp_classl routine is
?C: available to classify long doubles.  Available for example in
?C: Digital UNIX.  See for possible values HAS_FP_CLASS.
?C:.
?H:#$d_fp_classl HAS_FP_CLASSL  /**/
?H:.
?LINT:set d_fp_classl
: see if fp_classl exists
set fp_classl d_fp_classl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fp_classl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Tye McQueen <tye@metronet.com>
?RCS:
?RCS: $Log: d_stdstdio.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:46:32  ram
?RCS: patch61: merged with perl5's unit
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:06:54  ram
?RCS: patch56: typo fix on ?C: line for FILE_bufsiz
?RCS: patch56: fixed unbalanced parenthesis (ADO)
?RCS: patch56: check whether FILE_cnt and FILE_ptr can be assigned to (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:12:11  ram
?RCS: patch54: complete rewrite by Tye McQueen
 to fit modern systems
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stdstdio d_stdiobase stdio_ptr stdio_cnt stdio_base \
```

```
 stdio_bufsiz d_stdio_cnt_lval d_stdio_ptr_lval stdio_filbuf: cat \
 +cc +ccflags contains +ldflags +libs rm_try \
 Setvar Findhdr Oldconfig
?MAKE: -pick add $@ %<
?S:d_stdstdio:
?S: This variable conditionally defines USE_STDIO_PTR if this system
?S: has a FILE structure declaring usable _ptr and _cnt fields (or
?S: equivalent) in stdio.h.
?S:.
?S:stdio_ptr:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _ptr field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_ptr(fp).
?S:.
?S:d_stdio_ptr_lval:
?S: This variable conditionally defines STDIO_PTR_LVALUE if the
?S: FILE_ptr macro can be used as an lvalue.
?S:.
?S:stdio_cnt:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _cnt field (or equivalent) of
 stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_cnt(fp).
?S:.
?S:d_stdio_cnt_lval:
?S: This variable conditionally defines STDIO_CNT_LVALUE if the
?S: FILE_cnt macro can be used as an lvalue.
?S:.
?S:stdio_filbuf:
?S: This variable defines how, given a FILE pointer, fp, to tell
?S: stdio to refill it's internal buffers (?).  This will
?S: be used to define the macro FILE_filbuf(fp).
?S:.
?S:d_stdiobase:
?S: This variable conditionally defines USE_STDIO_BASE if this system
?S: has a FILE structure declaring a usable _base field (or equivalent)
?S: in stdio.h.
?S:.
?S:stdio_base:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _base field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_base(fp).
?S:.
?S:stdio_bufsiz:
?S: This variable defines how, given a FILE pointer, fp, to determine
?S: the number of bytes store in the I/O buffer pointer to by the
?S: _base field (or equivalent) of stdio.h's
```

```
 FILE structure.  This will
?S: be used to define the macro FILE_bufsiz(fp).
?S:.
?C:USE_STDIO_PTR ~ d_stdstdio (USE_STD_STDIO STDSTDIO):
?C: This symbol is defined if the _ptr and _cnt fields (or similar)
?C: of the stdio FILE structure can be used to access the stdio buffer
?C: for a file handle.  If this is defined, then the FILE_ptr(fp)
?C: and FILE_cnt(fp) macros will also be defined and should be used
?C: to access these fields.
?C:.
?C:FILE_ptr:
?C: This macro is used to access the _ptr field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_PTR_LVALUE:
?C: This symbol is defined if the FILE_ptr macro can be used as an
?C: lvalue.
?C:.
?C:FILE_cnt:
?C: This macro is used to access the _cnt field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_CNT_LVALUE:
?C: This symbol is defined
 if the FILE_cnt macro can be used as an
?C: lvalue.
?C:.
?C:FILE_filbuf:
?C: This macro is used to access the internal stdio _filbuf function
?C: (or equivalent), if STDIO_CNT_LVALUE and STDIO_PTR_LVALUE
?C: are defined.  It is typically either _filbuf or __filbuf.
?C: This macro will only be defined if both STDIO_CNT_LVALUE and
?C: STDIO_PTR_LVALUE are defined.
?C:.
?H:?d_stdstdio:#$d_stdstdio USE_STDIO_PTR  /**/
?H:?d_stdstdio:#ifdef USE_STDIO_PTR
?H:#define FILE_ptr(fp) $stdio_ptr
?H:#$d_stdio_ptr_lval STDIO_PTR_LVALUE   /**/
?H:#define FILE_cnt(fp) $stdio_cnt
?H:#$d_stdio_cnt_lval STDIO_CNT_LVALUE   /**/
?H:?d_stdstdio:#if defined(STDIO_PTR_LVALUE) && defined(STDIO_CNT_LVALUE)
?H:#define FILE_filbuf(fp) $stdio_filbuf   /**/
?H:?d_stdstdio:#endif
?H:?d_stdstdio:#endif
?H:.
?W:d_stdstdio:FILE_ptr FILE_cnt FILE_filbuf
```

```
?C:USE_STDIO_BASE ~ d_stdiobase:
?C: This symbol is defined if the _base field (or similar) of the
?C: stdio FILE structure can be used to access the stdio buffer
 for
?C: a file handle.  If this is defined, then the FILE_base(fp) macro
?C: will also be defined and should be used to access this field.
?C: Also, the FILE_bufsiz(fp) macro will be defined and should be used
?C: to determine the number of bytes in the buffer.  USE_STDIO_BASE
?C: will never be defined unless USE_STDIO_PTR is.
?C:.
?C:FILE_base:
?C: This macro is used to access the _base field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_BASE is defined.
?C:.
?C:FILE_bufsiz:
?C: This macro is used to determine the number of bytes in the I/O
?C: buffer pointed to by _base field (or equivalent) of the FILE
?C: structure pointed to its argument. This macro will always be defined
?C: if USE_STDIO_BASE is defined.
?C:.
?H:?d_stdiobase:#$d_stdiobase USE_STDIO_BASE  /**/
?H:?d_stdiobase:#ifdef USE_STDIO_BASE
?H:#define FILE_base(fp) $stdio_base
?H:#define FILE_bufsiz(fp) $stdio_bufsiz
?H:?d_stdiobase:#endif
?H:.
?W:d_stdiobase:FILE_base
 FILE_bufsiz
?LINT:set d_stdstdio d_stdiobase
?T:ptr_lval cnt_lval filbuf xxx
?F:!try
: see if _ptr and _cnt from stdio act std
echo " "
if $contains '_IO_fpos_t' `./findhdr stdio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from Linux.)"
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_IO_read_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 ") stdio_cnt='((fp)->_IO_read_end - (fp)->_IO_read_ptr)'
  cnt_lval=$undef
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
```

```
 case "$stdio_base" in
 ") stdio_base='((fp)->_IO_read_base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_IO_read_end - (fp)->_IO_read_base)';;
 esac
else
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 ") stdio_cnt='((fp)->_cnt)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_base)';;
 esac
 case
 "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_cnt + (fp)->_ptr - (fp)->_base)';;
 esac
fi
: test whether _ptr and _cnt really work
echo "Checking how std your stdio is..." >&4
$cat >try.c <<EOP
#include <stdio.h>
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  18 <= FILE_cnt(fp) &&
  strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
 )
  exit(0);
 exit(1);
}
EOP
val="$undef"
if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1; then
 if ./try; then
  echo "Your stdio acts pretty std."
```

```
  val="$define"
 else
  echo "Your stdio isn't very std."
 fi
else
 echo "Your stdio doesn't appear very std."
fi
$rm_try
set d_stdstdio
eval $setvar

@if STDIO_PTR_LVALUE || d_stdio_ptr_lval
: Can _ptr be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$ptr_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_ptr_lval
eval
 $setvar

@end
@if STDIO_CNT_LVALUE || d_stdio_cnt_lval
: Can _cnt be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$cnt_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_cnt_lval
eval $setvar

@end
@if FILE_filbuf
: How to access the stdio _filbuf or __filbuf function.
: If this fails, check how the getc macro in stdio.h works.
case "${d_stdio_ptr_lval}${d_stdio_cnt_lval}" in
${define}${define})
 : Try hint value, if any, then _filbuf, __filbuf, _fill, then punt.
 : _fill is for OS/2.
 xxx='notok'
 for filbuf in $stdio_filbuf '_filbuf(fp)' '__filbuf(fp) ' '_fill(fp)' ; do
  $cat >try.c <<EOP
#include <stdio.h>
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#define FILE_filbuf(fp) $filbuf
```

```
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 c = getc(fp);
 c = FILE_filbuf(fp);  /* Just looking for linker errors.*/
 exit(0);
}
EOP
  if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 &&
 ./try; then
   echo "Your stdio appears to use $filbuf"
   stdio_filbuf="$filbuf"
   xxx='ok'
   break
  else
   echo "Hmm.  $filbuf doesn't seem to work."
  fi
  $rm_try
 done
 case "$xxx" in
 notok) echo "I can't figure out how to access _filbuf"
   echo "I'll just have to work around it."
   d_stdio_ptr_lval="$undef"
   d_stdio_cnt_lval="$undef"
   ;;
 esac
 ;;
esac
@end
@if d_stdiobase || USE_STDIO_BASE || FILE_base || FILE_bufsiz
: see if _base is also standard
val="$undef"
case "$d_stdstdio" in
$define)
 $cat >try.c <<EOP
#include <stdio.h>
#define FILE_base(fp) $stdio_base
#define FILE_bufsiz(fp) $stdio_bufsiz
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  19 <= FILE_bufsiz(fp) &&
  strncmp(FILE_base(fp), "#include <stdio.h>\n", 19) == 0
 )
  exit(0);
 exit(1);
}
```

```
EOP
 if $cc $ccflags $ldflags -o try try.c $libs > /dev/null 2>&1; then
  if ./try; then
   echo "And its _base field acts std."
   val="$define"
  else
   echo "But its _base field isn't std."
  fi
 else
  echo
 "However, it seems to be lacking the _base field."
 fi
 $rm_try
 ;;
esac
set d_stdiobase
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_stdstdio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sitelib.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:21:35  ram
?RCS: patch61: created
?RCS:
?MAKE:sitelib sitelibexp installsitelib: afs cat Getfile \
 Oldconfig Prefixit test privlib package sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:sitelib:
?S: This variable contains the eventual value of the SITELIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this
```

```
 directory while performing installation (with ~ substitution).
?S:.
?S:sitelibexp:
?S: This variable is the ~name expanded version of sitelib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installsitelib:
?S: This variable is really the same as sitelibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:SITELIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Individual sites may place their own extensions and modules in
?C: this directory.
?C:.
?C:SITELIB_EXP:
?C: This symbol contains the ~name expanded version of SITELIB, to be used
?C: in programs that are not prepared to deal with ~ expansion
 at run-time.
?C:.
?H:#define SITELIB "$sitelib"  /**/
?H:#define SITELIB_EXP "$sitelibexp"  /**/
?H:.
?T:prog
: determine where site specific libraries go.
set sitelib sitelib
eval $prefixit
case "$sitelib" in
")
?X: remove any trailing -3.0 or other version indentification
 prog=`echo $package | $sed 's/-*[0-9.]*$//'`
 dflt="$privlib/site_$prog" ;;
*) dflt="$sitelib" ;;
esac
$cat <<EOM

The installation process will also create a directory for
site-specific extensions and modules.  Some users find it convenient
to place all local files in this directory rather than in the main
distribution directory.

EOM
fn=d~+
```

```
rp='Pathname for the site-specific library files?'
. ./getfile
if $test "X$sitelibexp" != "X$ansexp"; then
 installsitelib=''
fi
sitelib="$ans"
sitelibexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to
 the former directory by occult means).

EOM
 case "$installsitelib" in
 '') dflt=`echo $sitelibexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installsitelib";;
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installsitelib="$ans"
else
 installsitelib="$sitelibexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sitelib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_locconv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_locconv.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:11  ram
?RCS: patch36: created by ADO
?RCS:
```

```
?MAKE:d_locconv: Inlibc
?MAKE: -pick add $@ %<
?S:d_locconv:
?S: This variable conditionally defines HAS_LOCALECONV if localeconv() is
?S: available for numeric and monetary formatting conventions.
?S:.
?C:HAS_LOCALECONV:
?C: This symbol, if defined, indicates that the localeconv
 routine is
?C: available for numeric and monetary formatting conventions.
?C:.
?H:#$d_locconv HAS_LOCALECONV /**/
?H:.
?LINT:set d_locconv
: see if localeconv exists
set localeconv d_locconv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_locconv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: dlsrc.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: dlsrc.U,v $
?RCS:
?X:  hpux support thanks to Jeff Okamoto <okamoto@hpcc101.corp.hp.com>
?X:
?X:  To create a shared library, you must compile ALL source files in the
?X:  library with +z (or possibly +Z if the library is whopping huge),
?X:  then link the library with -b.  Example:
?X:   cc -c +z module_a.c
?X:   cc -c +z module_b.c
?X:   ld -b module_a.o module_b.o -o module.sl
?X:
?MAKE:usedl ld dlsrc cccdlflags lddlflags ccdlflags bin_ELF ld_can_script: \
 rm_try Getfile Myread test osname sed d_dlopen Findhdr Setvar \
 src run cc ccflags ldflags optimize ls gccversion cat rsrc i_stdlib \
 i_unistd osvers sysroot
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:usedl:
?S: This variable
```

```
 indicates if the system supports dynamic
?S: loading of some sort.  See also dlsrc and dlobj.
?S:.
?S:ld:
?S: This variable indicates the program to be used to link
?S: libraries for dynamic loading.  On some systems, it is 'ld'.
?S: On ELF systems, it should be $cc.  Mostly, we'll try to respect
?S: the hint file setting.
?S:.
?S:dlsrc:
?S: This variable contains the name of the dynamic loading file that
?S: will be used with the package.
?S:.
?S:cccdlflags:
?S: This variable contains any special flags that might need to be
?S: passed with 'cc -c' to compile modules to be used to create a shared
?S: library that will be used for dynamic loading.  For hpux, this
?S: should be +z.  It is up to the makefile to use it.
?S:.
?S:lddlflags:
?S: This variable contains any special flags that might need to be
?S: passed to $ld to create a shared library suitable for dynamic
?S: loading.  It is up to the makefile to use it.  For hpux, it
?S: should be '-b'.  For sunos 4.1, it is empty.
?S:.
?S:ccdlflags:
?S: This
 variable contains any special flags that might need to be
?S: passed to cc to link with a shared library for dynamic loading.
?S: It is up to the makefile to use it.  For sunos 4.1, it should
?S: be empty.
?S:.
?S:bin_ELF:
?S: This variable saves the result from configure if generated binaries
?S: are in ELF format. Only set to defined when the test has actually
?S: been performed, and the result was positive.
?S:.
?S:ld_can_script:
?S: This variable shows if the loader accepts scripts in the form of
?S: -Wl,--version-script=ld.script. This is currently only supported
?S: for GNU ld on ELF in dynamic loading builds.
?S:.
?C:USE_DYNAMIC_LOADING ~ %<:
?C: This symbol, if defined, indicates that dynamic loading of
?C: some sort is available.
?C:.
?H:?%<:#$usedl USE_DYNAMIC_LOADING  /**/
?H:.
```

```
?W:%<:dlopen
?T:dldir thisflag tdir
?F:!a.out
: determine which dynamic loading, if any, to compile in
echo " "
dldir="ext/DynaLoader"
case "$usedl" in
   $define|y|true)
 dflt='y'
 usedl="$define"
 ;;
    $undef|n|false)
 dflt='n'
 usedl="$undef"
 ;;
   *)
 dflt='n'
 case "$d_dlopen" in
     $define) dflt='y' ;;
 esac
 : Does a dl_xxx.xs file exist for this operating system
 $test -f $rsrc/$dldir/dl_${osname}.xs && dflt='y'
 ;;
esac
rp="Do you wish to use dynamic loading?"
. ./myread
usedl="$ans"
bin_ELF="$undef"
case "$ans" in
   y*) usedl="$define"
 case "$dlsrc" in
     ") if $test -f $rsrc/$dldir/dl_${osname}.xs ; then
      dflt="$dldir/dl_${osname}.xs"
  elif $test "$d_dlopen" = "$define" ; then
      dflt="$dldir/dl_dlopen.xs"
  else
      dflt="
  fi
  ;;
     *)  dflt="$dldir/$dlsrc"
  ;;
 esac
 echo "The following dynamic loading files are available:"
 : Can not go over to $dldir because getfile has path hard-coded in.
 tdir=`pwd`; cd "$rsrc"; $ls -C $dldir/dl*.xs; cd "$tdir"
 rp="Source file to use for dynamic loading"
 fn="fne"
 gfpth="$src"
```

```
. ./getfile
usedl="$define"
: emulate basename
dlsrc=`echo $ans | $sed -e 's%.*/\([^/]*\)$%\1%'`

$cat
<< EOM

Some systems may require passing special flags to $cc -c to
compile modules that will be used to create a shared library.
To use no flags, say "none".

EOM
 case "$cccdlflags" in
    ") case "$gccversion" in
  ") case "$osname" in
  hpux) dflt='+z' ;;
  irix*) dflt='-KPIC' ;;
  svr4*|esix*|solaris|nonstopux) dflt='-KPIC' ;;
  sunos) dflt='-pic' ;;
  *) dflt='none' ;;
     esac
     ;;
 *)  case "$osname" in
  darwin) dflt='none' ;;
  *linux*|svr4*|esix*|solaris|nonstopux) dflt='-fPIC' ;;
  *) dflt='-fpic' ;;
     esac ;;
 esac ;;
    ' ') dflt='none' ;;
    *)   dflt="$cccdlflags" ;;
esac

case "$dflt" in
    none) dflt=" ;;
esac

# If -Dsysroot was specified, now's the time to add it
# to cccdlflags
if test "X$sysroot" != X; then
    case "$gccversion" in
  ") ;;
 *)  case "$dflt" in
  *sysroot*) ;;
  'undef'|*)
      dflt="$dflt --sysroot=$sysroot" ;;
     esac
     ;;
```

```
    esac
fi

case "$dflt" in
    ") dflt='none';;
esac

rp="Any
special flags to pass to $cc -c to compile shared library modules?"
. ./myread
case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
    none) cccdlflags=' ' ;;
    *)    cccdlflags="$ans" ;;
esac

cat << EOM

Some systems use ld to create libraries that can be dynamically loaded,
while other systems (such as those using ELF) use $cc.

EOM

: Determine if this is ELF
 $cat >try.c <<EOM
/* Test for whether ELF binaries are produced */
#include <fcntl.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#include <unistd.h>
#endif
int main() {
  char b[4];
  int i = open("a.out",O_RDONLY);
  if(i == -1)
 exit(1); /* fail */
  if(read(i,b,4)==4 && b[0]==127 && b[1]=='E' && b[2]=='L' && b[3]=='F')
 exit(0); /* succeed (yes, it is ELF) */
  exit(1); /* fail */
}
EOM
 if $cc $ccflags $ldflags -o a.out try.c >/dev/null 2>&1 && $run ./a.out; then
    bin_ELF="$define"
 fi
```

```
$rm_try

case "$ld" in

   ") if $test $bin_ELF = "$define"; then
     cat <<EOM
You appear to have ELF support.  I'll use $cc to build dynamic libraries.
EOM
     dflt="$cc"
  else
     echo "I'll use ld to build dynamic libraries."
     dflt='ld'
  fi
  ;;
   *)  dflt="$ld"
  ;;
esac

rp="What command should be used to create dynamic libraries?"
. ./myread
ld="$ans"

cat << EOM

Some systems may require passing special flags to $ld to create a
library that can be dynamically loaded.  If your ld flags include
-L/other/path options to locate libraries outside your loader's normal
search path, you may need to specify those -L options here as well.  To
use no flags, say "none".

EOM
 case "$lddlflags" in
    ") case "$osname" in
     haiku) dflt='-shared' ;;
     hpux) dflt='-b';
    case "$gccversion" in
        ") dflt="$dflt +vnocompatwarnings" ;;
    esac
    ;;
     *linux*|irix*|gnu*)  dflt="-shared $optimize" ;;
     solaris) # See [perl #66604].
      # On Solaris 11, gcc -m64
 on amd64
      # appears not to understand -G.  gcc versions at
      # least as old as 3.4.3 support -shared, so just
      # use that with Solaris 11 and later, but keep
      # the old behavior for older Solaris versions.
      case "$gccversion" in
```

```
   ") dflt='-G' ;;
   *)  case "$osvers" in
    2.?|2.10) dflt='-G' ;;
    *) dflt='-shared' ;;
       esac
       ;;
      esac
      ;;
     sunos) dflt='-assert nodefinitions' ;;
     svr4*|esix*|nonstopux) dflt="-G $ldflags" ;;
     *)     dflt='none' ;;
 esac
 ;;
    *) dflt="$lddlflags" ;;
esac

: Only do this for gcc, since, for example, qcc has no concept
: of --sysroot.
if $test "X$sysroot" != X; then
    case "$gccversion" in
 ") ;;
 *)  dflt="$dflt --sysroot=$sysroot" ;;
    esac
fi

: Try to guess additional flags to pick up local libraries.
: Be careful not to append to a plain 'none'
case "$dflt" in
    none) dflt=" ;;
esac
for thisflag in $ldflags; do
    case "$thisflag" in
 -L*|-R*|-Wl,-R*)

   case " $dflt " in
  *" $thisflag "*) ;;
  *) dflt="$dflt $thisflag" ;;
     esac
     ;;
    esac
done

case "$dflt" in
    "|' ') dflt='none' ;;
esac

case "$ldflags" in
    *-fstack-protector-strong*)
```

```
 case "$dflt" in
     *-fstack-protector-strong*) ;; # Don't add it again
     *) dflt="$dflt -fstack-protector-strong" ;;
 esac
 ;;
    *-fstack-protector*)
 case "$dflt" in
     *-fstack-protector*) ;; # Don't add it again
     *) dflt="$dflt -fstack-protector" ;;
 esac
 ;;
esac

rp="Any special flags to pass to $ld to create a dynamically loaded library?"
. ./myread
case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
    none) lddlflags=' ' ;;
    *) lddlflags="$ans" ;;
esac

cat <<EOM

Some systems may require passing special flags to $cc to indicate that
the resulting executable will use dynamic linking.  To use no flags,
say "none".

EOM
case "$ccdlflags" in
    ") case "$osname" in
     *linux*|hpux|gnu*)
dflt='-Wl,-E' ;;
     sunos)             dflt='none'   ;;
     *)                 dflt='none'   ;;
 esac ;;
    ' ') dflt='none' ;;
    *)   dflt="$ccdlflags" ;;
esac
rp="Any special flags to pass to $cc to use dynamic linking?"
. ./myread
case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
    none) ccdlflags=' ' ;;
    *)    ccdlflags="$ans" ;;
esac
;;
?X: End of usedl=y section
```

```
   *)  usedl="$undef"
 ld='ld'
 dlsrc='dl_none.xs'
 lddlflags=''
 ccdlflags=''
 ;;
esac

ld_can_script="$undef"
case "$bin_ELF$usedl" in
   $define$define)
 # Abuse try.h and a.out names for neat cleanup
 $cat >try.c <<EOM
void foo() {}
void bar() {}
EOM
 $cat >try.h <<EOM
LIBTEST_42 {
global:
 foo;
local: *;
};
EOM
 if $cc $cccdlflags $ccdlflags $ccflags \
        $ldflags $lddlflags -o a.out try.c \
        -Wl,--version-script=try.h >/dev/null 2>&1 \
    &&  $test -s a.out ; then
     echo "ld supports scripting" >&4
     ld_can_script="$define"
 else

    echo "ld does not support scripting" >&4
 fi
 $rm_try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dlsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_crypt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_crypt.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:31:47  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_crypt cryptlib: Loc test xlibpth libpth Csym Setvar _a Inlibc
?MAKE: -pick add $@ %<
?S:d_crypt:
?S: This variable conditionally defines the CRYPT symbol, which
?S: indicates to the C program that the crypt() routine is available
?S: to
 encrypt passwords and the like.
?S:.
?S:cryptlib:
?S: This variable holds -lcrypt or the path to a libcrypt.a archive if
?S: the crypt() function is not defined in the standard C library. It is
?S: up to the Makefile to use this.
?S:.
?C:HAS_CRYPT (CRYPT):
?C: This symbol, if defined, indicates that the crypt routine is available
?C: to encrypt passwords and the like.
?C:.
?H:#$d_crypt HAS_CRYPT  /**/
?H:.
?LINT:set d_crypt
?T:val
: see if crypt exists
echo " "
set crypt d_crypt
eval $inlibc
case "$d_crypt" in
$define) cryptlib=" ;;
*) if set crypt val -f d_crypt; eval $csym; $val; then
  echo 'crypt() found.' >&4
  val="$define"
  cryptlib="
 else
  cryptlib=`./loc Slibcrypt$_a "" $xlibpth`
  if $test -z "$cryptlib"; then
   cryptlib=`./loc Mlibcrypt$_a "" $xlibpth`
  else
   cryptlib=-lcrypt
  fi
```

```
  if $test -z "$cryptlib"; then
   cryptlib=`./loc Llibcrypt$_a "" $xlibpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   cryptlib=`./loc libcrypt$_a ""
 $libpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   echo 'crypt() NOT found.' >&4
   val="$undef"
  else
   val="$define"
  fi
 fi
 set d_crypt
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_crypt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strctcpy.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strctcpy: cat rm_try cc Setvar
?MAKE: -pick add $@ %<
?S:d_strctcpy:
?S: This variable conditionally defines the USE_STRUCT_COPY symbol, which
?S: indicates to the C program that this C compiler knows how to copy
?S: structures.
?S:.
```

```
?C:USE_STRUCT_COPY (STRUCTCOPY):
?C: This symbol, if defined, indicates that this C compiler knows how
?C: to copy structures.  If undefined, you'll
 need to use a block copy
?C: routine of some sort instead.
?C:.
?H:#$d_strctcpy USE_STRUCT_COPY /**/
?H:.
?LINT:set d_strctcpy
: check for structure copying
echo " "
echo "Checking to see if your C compiler can copy structs..." >&4
$cat >try.c <<'EOCP'
int main()
{
 struct blurfl {
  int dyick;
 } foo, bar;

 foo = bar;
}
EOCP
if $cc -c try.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup, it can."
else
 val="$undef"
 echo "Nope, it can't."
fi
set d_strctcpy
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strctcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: yacc.U,v $
```

```
?RCS: Revision 3.0.1.1  1994/05/13  15:28:48  ram
?RCS: patch27: added byacc as another alternative (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:yacc yaccflags: Guess Myread Loc Oldconfig byacc bison cat test
?MAKE: -pick add $@ %<
?S:yacc:
?S: This variable holds the name of the compiler compiler we
?S: want to use in the Makefile. It can be yacc, byacc, or bison -y.
?S:.
?S:yaccflags:
?S: This variable contains any
 additional yacc flags desired by the
?S: user.  It is up to the Makefile to use this.
?S:.
?T:comp
: determine compiler compiler
echo " "
comp='yacc'
if $test -f "$byacc$_exe"; then
 comp="byacc or $comp"
fi
if $test -f "$bison$_exe"; then
 comp="$comp or bison -y"
fi
case "$yacc" in
")
 yacc=`./loc yacc yacc $pth`
 if $test -f "$yacc$_exe"; then
  dflt='yacc'
 elif $test -f "$byacc$_exe"; then
  dflt='byacc'
 elif $test -f "$bison$_exe"; then
  dflt='bison'
 else
  dflt=''
 fi
 ;;
*) dflt="$yacc";;
esac
rp="Which compiler compiler ($comp) shall I use?"
. ./myread
yacc="$ans"
case "$yacc" in
*bis*)
 case "$yacc" in
```

```
 *-y*) ;;
 *)
  yacc="$yacc -y"
  echo "(Adding -y option to bison to get yacc-compatible behaviour.)"
  ;;
 esac
 ;;
esac

@if yaccflags
: see if we need extra yacc flags
dflt="$yaccflags"
case "$dflt" in
") dflt=none;;
esac
$cat <<EOH

Your yacc program may need extra flags to normally process the parser sources.
Do NOT specify any -d or -v flags here, since those are
 explicitly known
by the various Makefiles. However, if your machine has strange/undocumented
options (like -Sr# on SCO to specify the maximum number of grammar rules), then
please add them here.  To use no flags, specify the word "none".

EOH
rp="Any additional yacc flags?"
. ./myread
case "$ans" in
none) yaccflags=";;
*) yaccflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/yacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: inc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: inc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:inc incexp: Loc Oldconfig Getfile usrinc
?MAKE: -pick add $@ %<
?S:inc:
?S: This variable holds the name of the directory in which the user wants
?S: to put public header files for the package in question.  It is most
?S: often a local directory such as /usr/local/include.
?S:.
?S:incexp:
?S: This is the same as the inc variable, but is filename
 expaned
?S: at configuration time for convenient use in your makefiles.
?S:.
: determine where public header files go
case "$inc" in
")
 dflt=`./loc . "." /usr/local/include /usr/include/local $usrinc`
 ;;
*)  dflt="$inc"
 ;;
esac
fn=d~
rp='Where do you want to put the public header files?'
. ./getfile
inc="$ans"
incexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/inc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_class: Inlibc
?MAKE: -pick add $@ %<
?S:d_class:
?S: This variable conditionally defines the HAS_CLASS symbol, which
?S: indicates to the C program that the class() routine is available.
?S:.
?C:HAS_CLASS:
```

```
?C: This symbol, if defined, indicates that the class routine is
?C: available to classify doubles.  Available for example in AIX.
?C: The returned values are defined in <float.h> and are:
?C:
?C: FP_PLUS_NORM Positive normalized, nonzero
?C: FP_MINUS_NORM Negative normalized, nonzero
?C: FP_PLUS_DENORM Positive denormalized, nonzero
?C: FP_MINUS_DENORM Negative denormalized, nonzero
?C: FP_PLUS_ZERO +0.0
?C: FP_MINUS_ZERO -0.0
?C: FP_PLUS_INF +INF
?C: FP_MINUS_INF -INF
?C: FP_NANS  Signaling
 Not a Number (NaNS)
?C: FP_NANQ  Quiet Not a Number (NaNQ)
?C:.
?H:#$d_class HAS_CLASS  /**/
?H:.
?LINT:set d_class
: see if class exists
set class d_class
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_class.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorbin.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorbin.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorbin vendorbin vendorbinexp installvendorbin: Getfile \
 Setprefixvar Oldconfig Prefixit vendorprefix
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorbin:
?S: This variable contains the eventual value of the VENDORBIN symbol.
?S: It may have a ~ on the front.
```

```
?S: The standard distribution will put nothing in this directory.
?S: Vendors who distribute perl
 may wish to place additional
?S: binaries in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorbinexp:
?S: This variable is the ~name expanded version of vendorbin, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorbin="
?S:installvendorbin:
?S: This variable is really the same as vendorbinexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorbin:
?S: This variable conditionally defines PERL_VENDORBIN.
?S:.
?C:PERL_VENDORBIN:
?C: If defined, this symbol contains the name of a directory
?C: for holding vendor-supplied executables.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place additional
?C: binaries in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.
  See INSTALL for details.
?C:.
?C:PERL_VENDORBIN_EXP:
?C: This symbol contains the ~name expanded version of VENDORBIN, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorbin PERL_VENDORBIN "$vendorbin"  /**/
?H:#$d_vendorbin PERL_VENDORBIN_EXP "$vendorbinexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorbin
: Set the vendorbin variables
case "$vendorprefix" in
") d_vendorbin="$undef"
 vendorbin="
 vendorbinexp="
 ;;
*) d_vendorbin="$define"
 : determine where vendor-supplied executables go.
```

```
 case "$vendorbin" in
 ") dflt=$vendorprefix/bin ;;
 *) dflt="$vendorbin" ;;
 esac
 fn=d~+
 rp='Pathname for the vendor-supplied executables directory?'
 . ./getfile
 vendorbin="$ans"
 vendorbinexp="$ansexp"
 ;;
esac
prefixvar=vendorbin
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorbin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasstruct string that is used internally
?X: by Configure to check if this system has a field for a
?X: particular struct (of if this system has a particular struct!)
?X:
?X: To use it, say something like:
?X:  set d_statblocks stat i_sysstat sys/stat.h
?X:  eval $hasstruct
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/foo.h
?X:  $i_sysbar sys/bar.h
?X:  $i_syszot sys/zot.h
?X:  $i_zappa zappa.h"
?X: set d_statblocks stat $hdrs
?X: eval $hasstruct
?X:
?MAKE:Hasstruct: Setvar rm_try test Compile
?MAKE: -pick add $@ %<
?T:varname struct
?V:hasstruct
: Define hasstruct macro for Configure internal use
hasstruct='varname=$1; struct=$2; shift;
 shift;
while $test $# -ge 2; do
```

```
 case "$1" in
 $define) echo "#include <$2>";;
 esac ;
   shift 2;
done > try.c;
echo "int main () { struct $struct foo; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasstruct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Init.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:45:59  ram
?RCS: patch44: removed Options from MAKE to prevent Init overrides
?RCS: patch44: option processing now done after Myinit thanks to new Begin.U
?RCS: patch44: moved "Beginning of configuration questions" to Begin.U
?RCS: patch44: moved signal trapping instruction to Begin.U as well
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file initializes certain default variables
 used by Configure.  They
?X: may be overridden or added to by definitions in Myinit.U.
?X:
?MAKE:Init eunicefix _exe: Null
?MAKE: -pick add $@ %<
?MAKE: -pick weed $@ ./Init
```

```
?S:eunicefix:
?S: When running under Eunice this variable contains a command which will
?S: convert a shell script to the proper form of text file for it to be
?S: executable by the shell.  On other systems it is a no-op.
?S:.
?S:_exe (exe_ext):
?S: This variable defines the extension used for executable files.
?S: For unix it is empty.  Other possible values include '.exe'.
?S: DJGPP, Cygwin and OS/2 use '.exe'.  Stratus VOS uses '.pm'.
?S: On operating systems which do not require a specific extension
?S: for executable files, this variable is empty.
?S:.
?V:define undef smallmach:rmlist
?X:
?X: Throughout the units, one may make use of $define and $undef to reference
?X: a defined symbol or an undefined one. There is no need to add them in
?X: the dependency line since this unit makes them visible via ?V:, and
?X:
 everyone inherits from those symbols since by convention Init.U is the
?X: root dependency.
?X:
?T: DJGPP
: Initialize wide constants
define='define'
undef='undef'
smallmach='pdp11 i8086 z8000 i80286 iAPX286'
rmlist=''

: We must find out about Eunice early
eunicefix=':'
if test -f /etc/unixtovms; then
 eunicefix=/etc/unixtovms
fi
if test -f /etc/unixtovms.exe; then
 eunicefix=/etc/unixtovms.exe
fi

: Set executable suffix now -- needed before hints available
if test -f "/libs/version.library"; then
 : Amiga OS
  _exe=""
elif test -f "/system/gnu_library/bin/ar.pm"; then
 : Stratus VOS
 _exe=".pm"
elif test -n "$DJGPP"; then
 : DOS DJGPP
  _exe=".exe"
elif test -d c:/. ; then
```

```
 : OS/2 or cygwin
 _exe=".exe"
else
 : All other UNIX systems
 _exe=""
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Init.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_netdb.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_netdb: Inhdr
?MAKE: -pick add $@ %<
?S:i_netdb:
?S: This variable conditionally defines the I_NETDB symbol, and indicates
?S: whether a C program should include <netdb.h>.
?S:.
?C:I_NETDB:
?C: This symbol, if defined, indicates that <netdb.h> exists and
?C: should be included.
?C:.
?H:#$i_netdb I_NETDB  /**/
?H:.
?LINT:set i_netdb
: see if this is a netdb.h system
set netdb.h i_netdb
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_netdb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_flexfnam.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: d_flexfnam.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flexfnam: cat rm test Setvar
?MAKE: -pick add $@ %<
?S:d_flexfnam:
?S: This variable conditionally defines the FLEXFILENAMES symbol, which
?S: indicates that the system supports filenames longer than 14 characters.
?S:.
?C:FLEXFILENAMES:
?C: This symbol, if defined, indicates that the system supports filenames
?C: longer than 14
 characters.
?C:.
?H:#$d_flexfnam FLEXFILENAMES  /**/
?H:.
?T:first
?LINT:set d_flexfnam
: see if we can have long filenames
echo " "
?X:
?X: We have to test in both /tmp and . because of NFS (remote server may allow
?X: long filenames while the local filesystem cannot support them). If at least
?X: one of those file systems cannot support long filenames, then we assume the
?X: whole system can't.
?X:
first=123456789abcdef
$rm -f $first
if (echo hi >$first) 2>/dev/null; then
 if $test -f 123456789abcde; then
  echo 'You cannot have filenames longer than 14 characters.  Sigh.' >&4
  val="$undef"
 else
  echo 'You can have filenames longer than 14 characters.'>&4
  val="$define"
 fi
else
 $cat <<'EOM'
You can't have filenames longer than 14 chars.
You can't even think about them!
EOM
 val="$undef"
fi
set d_flexfnam
eval $setvar
$rm -rf 123456789abcde*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_flexfnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getsent:
?S: This variable conditionally defines HAS_GETSERVENT if getservent() is
?S: available to look up network services in some data base or another.
?S:.
?C:HAS_GETSERVENT:
?C: This symbol, if defined, indicates that the getservent() routine is
?C: available to look up network services in some
 data base or another.
?C:.
?H:#$d_getsent HAS_GETSERVENT  /**/
?H:.
?LINT:set d_getsent
: see if getservent exists
set getservent d_getsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mbtowc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mbtowc.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mbtowc: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbtowc:
?S: This variable conditionally defines the HAS_MBTOWC symbol, which
?S: indicates to the C program that the mbtowc() routine is available
?S: to convert multibyte to a wide character.
?S:.
?C:HAS_MBTOWC (MBTOWC):
?C: This symbol, if defined, indicates that the mbtowc routine is available
?C: to
 convert a multibyte to a wide character.
?C:.
?H:#$d_mbtowc HAS_MBTOWC  /**/
?H:.
?LINT:set d_mbtowc
: see if mbtowc exists
set mbtowc d_mbtowc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mbtowc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ulimit.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ulimit.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ulimit: Inlibc
?MAKE: -pick add $@ %<
?S:d_ulimit:
?S: This variable conditionally defines HAS_ULIMIT if ulimit() is
```

```
?S: available to get the user limits.
?S:.
?C:HAS_ULIMIT (ULIMIT):
?C: This symbol, if defined, indicates that the ulimit system call is
?C: available to get the user limits.
?C:.
?H:#$d_ulimit HAS_ULIMIT  /**/
?H:.
?LINT:set
 d_ulimit
: see if ulimit exists
set ulimit d_ulimit
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ulimit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetbyaddr_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetbyaddr_r getnetbyaddr_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetbyaddr_r:
?S: This variable conditionally defines the HAS_GETNETBYADDR_R symbol,
?S: which indicates to the C program that the getnetbyaddr_r()
?S: routine is available.
?S:.
?S:getnetbyaddr_r_proto:
?S: This variable encodes the prototype of getnetbyaddr_r.
?S: It is zero if d_getnetbyaddr_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyaddr_r
?S: is defined.
?S:.
?C:HAS_GETNETBYADDR_R:
?C: This symbol, if defined, indicates that
 the getnetbyaddr_r routine
?C: is available to getnetbyaddr re-entrantly.
?C:.
?C:GETNETBYADDR_R_PROTO:
?C: This symbol encodes the prototype of getnetbyaddr_r.
?C: It is zero if d_getnetbyaddr_r is undef, and one of the
```

```
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyaddr_r
?C: is defined.
?C:.
?H:#$d_getnetbyaddr_r HAS_GETNETBYADDR_R /**/
?H:#define GETNETBYADDR_R_PROTO $getnetbyaddr_r_proto /**/
?H:.
?T:try hdrs d_getnetbyaddr_r_proto
: see if getnetbyaddr_r exists
set getnetbyaddr_r d_getnetbyaddr_r
eval $inlibc
case "$d_getnetbyaddr_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetbyaddr_r_proto:$usethreads" in
 ":define") d_getnetbyaddr_r_proto=define
  set d_getnetbyaddr_r_proto getnetbyaddr_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getnetbyaddr_r_proto" in
 define)
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(unsigned long, int, struct netent*, char*, size_t, struct netent**, int*);'
 ./protochk
 "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_UISBWRE ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(long, int, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_LISBI ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='struct netent* getnetbyaddr_r(in_addr_t, int, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=S_TISBI ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='struct netent* getnetbyaddr_r(long, int, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=S_LISBI ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(in_addr_t, int, struct netent*, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_TISD ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(long, int, struct netent*, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_LISD
 ;;
 esac
 case "$getnetbyaddr_r_proto" in
```

```
"|0) try='int getnetbyaddr_r(int, int, struct netent*, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_IISD ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(uint32_t, int, struct netent*, char*, size_t, struct netent**, int*);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_uISBWRE ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) d_getnetbyaddr_r=undef
 getnetbyaddr_r_proto=0
 echo "Disabling getnetbyaddr_r, cannot determine prototype." >&4 ;;
* ) case "$getnetbyaddr_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getnetbyaddr_r_proto="REENTRANT_PROTO_$getnetbyaddr_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getnetbyaddr_r has no prototype, not using it." >&4 ;;
 esac
 d_getnetbyaddr_r=undef
 getnetbyaddr_r_proto=0
 ;;
esac
;;
*) getnetbyaddr_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetbyaddr_r.U
No license file was found, but licenses were detected in source scan.

```
case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
```

```
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting makedepend (with variable substitutions)"
$spitshell >makedepend <<!GROK!THIS!
$startsh
# $Id: makedepend.sh,v 3.0.1.1 1994/01/24 14:00:05 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
#
 Original Author: Larry Wall <lwall@netlabs.com>
#
# $Log: makedepend.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:05  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:37  ram
# Baseline for dist 3.0 netwide release.
#

export PATH || (echo "OOPS, this isn't sh.  Desperation time.  I will feed myself to sh."; sh \$0; kill \$\$)

cat='$cat'
cppflags='$cppflags'
cp='$cp'
cpp='$cppstdin'
echo='$echo'
egrep='$egrep'
expr='$expr'
mv='$mv'
rm='$rm'
sed='$sed'
sort='$sort'
test='$test'
tr='$tr'
uniq='$uniq'
!GROK!THIS!

$spitshell >>makedepend <<'!NO!SUBS!'

$cat /dev/null >.deptmp
$rm -f *.c.c c/*.c.c
```

```
if test -f Makefile; then
   mf=Makefile
else
   mf=makefile
fi
if test -f $mf; then
   defrule=`<$mf sed -n  \
 -e '/^\.c\.o:.*;/{'  \
 -e    's/\$\*\.c//'  \
 -e    's/^[^;]*;[  ]*//p' \
 -e    q    \
 -e '}'    \
 -e '/^\.c\.o: *$/{'  \
 -e    N    \
 -e    's/\$\*\.c//'  \
 -e    's/^.*\n[  ]*//p'  \
 -e    q    \
 -e '}'`
fi
case
 "$defrule" in
") defrule='$(CC) -c $(CFLAGS)' ;;
esac

make clist || ($echo "Searching for .c files..."; \
 $echo *.c | $tr ' ' '\012' | $egrep -v '\*' >.clist)
gotnone=true
for file in `$cat .clist`; do
# for file in `cat /dev/null`; do
   case "$file" in
   *.c) filebase=`basename $file .c` ;;
   *.y) filebase=`basename $file .c` ;;
   ")  continue ;;
   esac
   gotnone=false
   $echo "Finding dependencies for $filebase.o."
   $sed -n <$file >$file.c \
 -e "/^${filebase}_init(/q" \
 -e '/^#/{' \
 -e 's|/\*.*$||' \
 -e 's|\\$||' \
 -e p \
 -e '}'
   $cpp -I/usr/local/include -I. $cppflags $file.c | \
   $sed \
 -e '/^# *[0-9]/!d' \
 -e 's/^.*"\(.*\)".*$/'$filebase'.o: \1/' \
 -e 's|: \./|: |' \
```

```
 -e 's|\.c\.c|.c|' | \
   $uniq | $sort | $uniq >> .deptmp
done

$sed <Makefile >Makefile.new -e '1,/^# AUTOMATICALLY/!d'

make shlist || ($echo "Searching for .SH files..."; \
 $echo *.SH | $tr ' ' '\012' | $egrep -v '\*' >.shlist)
if $gotnone || $test -s .deptmp; then

  for file in `cat .shlist`; do
 $echo `$expr X$file : 'X\(.*\).SH`: $file config.sh \; \
     /bin/sh $file >> .deptmp
   done
   $echo "Updating Makefile..."
   $echo "# If this runs make out of memory, delete /usr/include lines." \
 >> Makefile.new
   $sed 's|^\(.*\.o:\) *\(.*/.*\.c\) *$|\1 \2; '"$defrule \2|" .deptmp \
      >>Makefile.new
else
   make hlist || ($echo "Searching for .h files..."; \
 $echo *.h | $tr ' ' '\012' | $egrep -v '\*' >.hlist)
   $echo "You don't seem to have a proper C preprocessor.  Using grep instead."
   $egrep '^#include ' `cat .clist` `cat .hlist`  >.deptmp
   $echo "Updating Makefile..."
   <.clist $sed -n       \
 -e '/\//{'       \
 -e   's|^\(.*\)/\(.*\)\.c|\2.o: \1/\2.c; '"$defrule \1/\2.c|p" \
 -e   d        \
 -e '}'        \
 -e 's|^\(.*\)\.c|\1.o: \1.c|p' >> Makefile.new
   <.hlist $sed -n 's|\(.*/\)\(.*\)|s= \2= \1\2=|p' >.hsed
   <.deptmp $sed -n 's|c:#include "\(.*\)".*$|o: \1|p' | \
      $sed 's|^[^;]*/||' | \
      $sed -f
 .hsed >> Makefile.new
   <.deptmp $sed -n 's|c:#include <\(.*\)>.*$|o: /usr/include/\1|p' \
      >> Makefile.new
   <.deptmp $sed -n 's|h:#include "\(.*\)".*$|h: \1|p' | \
      $sed -f .hsed >> Makefile.new
   <.deptmp $sed -n 's|h:#include <\(.*\)>.*$|h: /usr/include/\1|p' \
      >> Makefile.new
   for file in `$cat .shlist`; do
 $echo `$expr X$file : 'X\(.*\).SH`: $file config.sh \; \
     /bin/sh $file >> Makefile.new
   done
fi
$rm -f Makefile.old
```

```
$cp Makefile Makefile.old
$cp Makefile.new Makefile
$rm Makefile.new
$echo "# WARNING: Put nothing here or make depend will gobble it up!" >> Makefile
$rm -f .deptmp `sed 's/\.c/.c.c/' .clist` .shlist .clist .hlist .hsed

!NO!SUBS!
$eunicefix makedepend
chmod +x makedepend
case `pwd` in
*SH)
  $rm -f ../makedepend
  ln makedepend ../makedepend
  ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/makedepend.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Myinit.U,v 3.0 1993/08/18 12:05:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: Myinit.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: If you want to initialize any default values, copy this unit to your
?X: personal U directory and add the assignments to the end.  This file
?X: is included after variables are initialized but before any old
?X: config.sh file is read in and before any Configure switch processing.
?X:
?MAKE:Myinit
 libswanted: Init
?MAKE: -pick add $@ %<
?S:libswanted:
?S: This variable holds a list of all the libraries we want to
?S: search.  The order is chosen to pick up the c library
?S: ahead of ucb or bsd libraries for SVR4.
```

```
?S:.
?LINT:extern usevfork glibpth
?LINT:change usevfork glibpth
: List of libraries we want.
?X: Put crypt here, even though I should really fix d_crypt.U to look
?X: for it correctly, including possible shared library versions.
: If anyone needs extra -lxxx, put those in a hint file.
libswanted="cl pthread socket bind inet nsl ndbm gdbm dbm db malloc dl ld"
libswanted="$libswanted sun m crypt sec util c cposix posix ucb bsd BSD"
: We probably want to search /usr/shlib before most other libraries.
: This is only used by the lib/ExtUtils/MakeMaker.pm routine extliblist.
glibpth=`echo " $glibpth " | sed -e 's! /usr/shlib ! !'`
glibpth="/usr/shlib $glibpth"
: Do not use vfork unless overridden by a hint file.
usevfork=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Myinit.U
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```
?RCS: $Id: d_poll.U 15 2006-08-30 18:21:51Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_poll.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:38:17  ram
?RCS: patch61: mention that <poll.h> can be included if HAS_POLL defined
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:26:31  ram
?RCS: patch45: created
?RCS:
?MAKE:d_poll: Inlibc
?MAKE: -pick add $@ %<
?S:d_poll:
?S: This variable conditionally defines the HAS_POLL symbol, which
?S: indicates to the C program that the poll() routine is available
?S: to poll active file descriptors.
?S:.
?C:HAS_POLL
 :
?C: This symbol, if defined, indicates that the poll routine is
?C: available to poll active file descriptors.  Please check I_POLL and
```

```
?C: I_SYS_POLL to know which header should be included as well.
?C:.
?H:#$d_poll HAS_POLL  /**/
?H:.
?LINT:set d_poll
: see if poll exists
set poll d_poll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_poll.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:ilp d_ilp32 d_ilp64 d_lp64 d_can64: Assert Myread Setvar \
 cat rm +cc +ccflags echo n c intsize longsize ptrsize
?MAKE: -pick add $@ %<
?S:ilp:
?S: This variable contains the largest amount of bits that the CPU supports,
?S: from the compiler's point of view.  Typically 32 or 64.
?S:.
?S:d_ilp32:
?S: This variable conditionally defines the CPU_IS_ILP32.
?S:.
?S:d_ilp64:
?S: This variable conditionally defines the CPU_IS_ILP64.
?S:.
?S:d_lp64:
?S: This variable conditionally defines the CPU_IS_LP64.
?S:.
?S:d_can64:
?S: This variable
 conditionally defines CAN_HANDLE_64BITS.
?S:.
?C:CPU_ILP_MAXBITS:
?C: This symbol contains the largest amount of bits that the CPU natively
?C: supports from the compiler's point of view.  Typically 32 or 64.
?C:.
?C:CPU_IS_ILP32:
?C: When defined, this indicates that the integer, long and pointer variables
```

```
?C: hold 32-bit values.
?C:.
?C:CPU_IS_ILP64:
?C: When defined, this indicates that the integer, long and pointer variables
?C: hold 64-bit values.
?C:.
?C:CPU_IS_LP64:
?C: When defined, this indicates that the long and pointer variables hold
?C: 64-bit values but integers are smaller (probably only 32-bit wide).
?C:.
?C:CAN_HANDLE_64BITS:
?C: When defined, this indicates that the compiler can handle 64-bit values
?C: despite the CPU having only 32-bit registers.  These are available using
?C: the "long long" C type.  It is only defined for ILP32 machines, since
?C: 64-bit support is naturally available on ILP64 and LP64 machines.
?C:.
?H:#define CPU_ILP_MAXBITS $ilp
?H:#$d_ilp32
 CPU_IS_ILP32 /**/
?H:#$d_ilp64 CPU_IS_ILP64 /**/
?H:#$d_lp64 CPU_IS_LP64  /**/
?H:#$d_can64 CAN_HANDLE_64BITS /**/
?H:.
?LINT: set d_ilp32 d_ilp64 d_lp64 d_can64
: check for architecture type
echo " "
$echo $n "Computing CPU architecture type...$c" >&4
ilp=`expr $longsize \* 8`
case "$ptrsize" in
8)
 val=$undef; set d_ilp32; eval $setvar
 case "$intsize" in
 8)
  echo " ILP64." >&4
  val=$define; set d_ilp64; eval $setvar
  val=$undef; set d_lp64; eval $setvar
  ;;
 *)
  echo " LP64." >&4
  val=$define; set d_lp64; eval $setvar
  val=$undef; set d_ilp64; eval $setvar
  ;;
 esac
 ;;
*)
 echo " ILP${ilp}." >&4
 case "$ilp" in
 32) val=$define;;
```

```
 *) val=$undef;;
 esac
 set d_ilp32; eval $setvar
 val=$undef; set d_ilp64; eval $setvar
 val=$undef; set d_lp64; eval $setvar
 ;;
esac

@if CAN_HANDLE_64BITS || d_can64
: see whether compiler supports 64-bit emulation
val=$undef
case "$ilp" in
64) val=$define;;
*)
 $cat >try.c <<EOCP
#include "static_assert.h"
long long foo;
int main()
{
 STATIC_ASSERT(8
 == sizeof(foo));
 return 0;
}
EOCP
 if $cc -c $ccflags try.c >/dev/null 2>&1; then
  echo " "
  echo "Your compiler also supports 64-bit emulation." >&4
  val=$define
 fi
 $rm -f try.*
 ;;
esac
set d_can64
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ilp.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_syssecrt: Inhdr
?MAKE: -pick add $@ %<
?S:i_syssecrt:
?S: This variable conditionally defines the I_SYS_SECURITY symbol,
?S: and indicates whether a C program should include <sys/security.h>.
?S:.
?C:I_SYS_SECURITY:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/security.h>.
?C:.
?H:#$i_syssecrt   I_SYS_SECURITY /**/
?H:.
?LINT:set i_syssecrt
: see if sys/security.h is available
set sys/security.h i_syssecrt
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/i_syssecrt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysun.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysun.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/un.h> is available or not
?X:
?MAKE:i_sysun: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysun:
?S: This variable conditionally defines I_SYS_UN, which indicates
?S: to the C program that it should include <sys/un.h> to get UNIX
?S: domain socket definitions.
?S:.
```

```
?C:I_SYS_UN:
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <sys/un.h> to get UNIX domain socket definitions.
?C:.
?H:#$i_sysun I_SYS_UN  /**/
?H:.
?LINT:set i_sysun
: see if this is a sys/un.h system
set sys/un.h i_sysun
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysun.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strxfrm_l.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_strxfrm_l.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:04  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strxfrm_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strxfrm_l:
?S: This variable conditionally defines HAS_STRXFRM_L if strxfrm_l() is
?S: available to transform strings.
?S:.
?C:HAS_STRXFRM_L:
?C: This symbol, if defined, indicates that the strxfrm_l() routine is
?C: available
 to transform strings.
?C:.
?H:#$d_strxfrm_l HAS_STRXFRM_L /**/
?H:.
?LINT:set d_strxfrm_l
: see if strxfrm_l exists
set strxfrm_l d_strxfrm_l
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strxfrm_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fchdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchdir:
?S: This variable conditionally defines the HAS_FCHDIR symbol, which
?S: indicates to the C program that the fchdir() routine is available.
?S:.
?C:HAS_FCHDIR:
?C: This symbol, if defined, indicates that the fchdir routine is
?C: available to change directory using a file descriptor.
?C:.
?H:#$d_fchdir HAS_FCHDIR  /**/
?H:.
?LINT:set d_fchdir
: see if fchdir exists
set fchdir d_fchdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fchdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wcstombs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wcstombs.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_wcstombs: Inlibc
?MAKE: -pick add $@ %<
?S:d_wcstombs:
?S: This variable conditionally defines the HAS_WCSTOMBS symbol, which
?S: indicates to the C program that the wcstombs() routine is available
?S: to convert wide character strings to multibyte strings.
?S:.
?C:HAS_WCSTOMBS:
?C: This symbol, if defined, indicates that the wcstombs
 routine is
?C: available to convert wide character strings to multibyte strings.
?C:.
?H:#$d_wcstombs HAS_WCSTOMBS /**/
?H:.
?LINT:set d_wcstombs
: see if wcstombs exists
set wcstombs d_wcstombs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wcstombs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setprior.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setprior.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setprior: Inlibc
?MAKE: -pick add $@ %<
?S:d_setprior:
?S: This variable conditionally defines HAS_SETPRIORITY if setpriority()
?S: is available to set a process's priority.
?S:.
?C:HAS_SETPRIORITY (SETPRIORITY):
?C: This symbol, if defined, indicates that the setpriority routine is
?C: available to set a process's priority.
?C:.
?H:#$d_setprior
```

```
 HAS_SETPRIORITY  /**/
?H:.
?LINT:set d_setprior
: see if setpriority exists
set setpriority d_setprior
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setprior.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Setvar.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Setvar.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  15:58:28  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a variable that is intended to be eval'ed in
?X: order to define/undefine a symbol. A consistency check is made
?X: regarding any previous value and a warning is issued if there
?X: is any discrepancy.
?X:
?X:
 To use it, say:
?X: val=<value>
?X: set d_variable
?X: eval $setvar
?X:
?MAKE:Setvar: Whoa
?MAKE: -pick add $@ %<
?LINT:define setvar
?S:setvar:
?S: This shell variable is used internally by Configure to set a value
?S: to a given symbol that is defined or not. A typical use is:
?S: val=<value computed>
?S:  set d_variable
```

```
?S:  eval $setvar
?S: That will print a message in case the $val value is not the same
?S: as the previous value of $d_variable.
?S:.
?V:setvar:val
?T:var was td tu
: function used to set '$1' to '$val'
setvar='var=$1; eval "was=\$$1"; td=$define; tu=$undef;
case "$val$was" in
$define$undef) . ./whoa; eval "$var=\$td";;
$undef$define) . ./whoa; eval "$var=\$tu";;
*) eval "$var=$val";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Setvar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrnam_r getgrnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrnam_r:
?S: This variable conditionally defines the HAS_GETGRNAM_R symbol,
?S: which indicates to the C program that the getgrnam_r()
?S: routine is available.
?S:.
?S:getgrnam_r_proto:
?S: This variable encodes the prototype of getgrnam_r.
?S: It is zero if d_getgrnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrnam_r
?S: is defined.
?S:.
?C:HAS_GETGRNAM_R:
?C: This symbol, if defined, indicates that the getgrnam_r routine
?C: is available to
 getgrnam re-entrantly.
?C:.
?C:GETGRNAM_R_PROTO:
?C: This symbol encodes the prototype of getgrnam_r.
?C: It is zero if d_getgrnam_r is undef, and one of the
```

```
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrnam_r
?C: is defined.
?C:.
?H:#$d_getgrnam_r HAS_GETGRNAM_R /**/
?H:#define GETGRNAM_R_PROTO $getgrnam_r_proto /**/
?H:.
?T:try hdrs d_getgrnam_r_proto
: see if getgrnam_r exists
set getgrnam_r d_getgrnam_r
eval $inlibc
case "$d_getgrnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_getgrnam_r_proto:$usethreads" in
 ":define") d_getgrnam_r_proto=define
  set d_getgrnam_r_proto getgrnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getgrnam_r_proto" in
 define)
 case "$getgrnam_r_proto" in
 "|0) try='int getgrnam_r(const char*, struct group*, char*, size_t, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBWR ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='int getgrnam_r(const char*, struct group*, char*,
 int, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBIR ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='struct group* getgrnam_r(const char*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=S_CBI ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='int getgrnam_r(const char*, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBI ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='struct group* getgrnam_r(const char*, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=S_CSBI ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) d_getgrnam_r=undef
  getgrnam_r_proto=0
  echo "Disabling getgrnam_r, cannot determine prototype." >&4 ;;
 * ) case "$getgrnam_r_proto" in
  REENTRANT_PROTO*) ;;
```

```
  *) getgrnam_r_proto="REENTRANT_PROTO_$getgrnam_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getgrnam_r has no prototype, not using it."
 >&4 ;;
  esac
  d_getgrnam_r=undef
  getgrnam_r_proto=0
  ;;
 esac
 ;;
*) getgrnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrnam_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgget.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgget: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgget:
?S: This variable conditionally defines the HAS_MSGGET symbol, which
?S: indicates to the C program that the msgget() routine is available.
?S:.
?C:HAS_MSGGET:
?C: This symbol, if defined, indicates that the msgget() routine is
?C: available to get a new message queue.
?C:.
?H:#$d_msgget
```

```
 HAS_MSGGET  /**/
?H:.
?LINT:set d_msgget
: see if msgget exists
set msgget d_msgget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: doublesize.U,v 3.0.1.1 1994/10/29 16:17:06 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: doublesize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:doublesize: cat rm_try Myread Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:doublesize:
?S: This variable contains the value of the DOUBLESIZE symbol, which
?S: indicates to the C program how many bytes there are in a double.
?S:.
?C:DOUBLESIZE:
?C: This
 symbol contains the size of a double, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define DOUBLESIZE $doublesize  /**/
?H:.
?F:!try
: check for length of double
echo " "
case "$doublesize" in
")
 echo "Checking to see how big your double precision numbers are..." >&4
 $cat >try.c <<EOCP
```

```
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
   printf("%d\n", (int)sizeof(double));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  doublesize=`$run ./try`
  echo "Your double is $doublesize bytes long."
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a double precision number (in bytes)?"
  . ./myread
  doublesize="$ans"
 fi
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/doublesize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: patchlevel.U,v 3.0.1.1 1997/02/28 16:18:41 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: patchlevel.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:18:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:patchlevel revision version subversion \
 perl_patchlevel version_patchlevel_string \
 api_revision api_version api_subversion api_versionstring: \
 package test rsrc echo awk osname
?MAKE: -pick
 add $@ %<
?S:revision:
?S: The value of revision comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "5".
?S: In patchlevel.h, this is referred to as "PERL_REVISION".
?S:.
?S:patchlevel:
?S: The patchlevel level of this package.
?S: The value of patchlevel comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "6".
?S: In patchlevel.h, this is referred to as "PERL_VERSION".
?S:.
?S:subversion:
?S: The subversion level of this package.
?S: The value of subversion comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "1".
?S: In patchlevel.h, this is referred to as "PERL_SUBVERSION".
?S: This is unique to perl.
?S:.
?S:version:
?S: The full version number of this package, such as 5.6.1 (or 5_6_1).
?S: This combines revision, patchlevel, and subversion to get the
?S: full version number, including any possible subversions.
?S: This is suitable for use as a directory name, and hence is
?S: filesystem
 dependent.
?S:.
?S:api_revision:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_revision is the '5'.
?S: Prior to 5.5.640, the format was a floating point number,
?S: like 5.00563.
?S:
?S: perl.c:incpush() and lib/lib.pm will automatically search in
?S: $sitelib/.. for older directories back to the limit specified
?S: by these api_ variables.  This is only useful if you have a
?S: perl library directory tree structured like the default one.
?S: See INSTALL for how this works.  The versioned site_perl
?S: directory was introduced in 5.005, so that is the lowest
?S: possible value.  The version list appropriate for the current
?S: system is determined in inc_version_list.U.
```

```
?S:
?S: XXX To do:  Since compatibility can depend on compile time
?S: options (such as bincompat, longlong, etc.) it should
?S: (perhaps) be set by
 Configure, but currently it isn't.
?S: Currently, we read a hard-wired value from patchlevel.h.
?S: Perhaps what we ought to do is take the hard-wired value from
?S: patchlevel.h but then modify it if the current Configure
?S: options warrant.  patchlevel.h then would use an #ifdef guard.
?S:.
?S:api_version:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_version is the '6'.  See api_revision for
?S: full details.  As a special case, 5.5.0 is rendered in the
?S: old-style as 5.005.  (In the 5.005_0x maintenance series,
?S: this was the only versioned directory in $sitelib.)
?S:.
?S:api_subversion:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_subversion is the
 '1'.  See api_revision for
?S: full details.
?S:.
?S:api_versionstring:
?S: This variable combines api_revision, api_version, and
?S: api_subversion in a format such as 5.6.1 (or 5_6_1) suitable
?S: for use as a directory name.  This is filesystem dependent.
?S:.
?S:perl_patchlevel:
?S: This is the Perl patch level, a numeric change identifier,
?S: as defined by whichever source code maintenance system
?S: is used to maintain the patches; currently Perforce.
?S: It does not correlate with the Perl version numbers or
?S: the maintenance versus development dichotomy except
?S: by also being increasing.
?S:.
?S:version_patchlevel_string:
?S: This is a string combining version, subversion and
?S: perl_patchlevel (if perl_patchlevel is non-zero).
?S: It is typically something like
?S: 'version 7 subversion 1'  or
?S: 'version 7 subversion 1 patchlevel 11224'
?S: It is computed here to avoid duplication of code in myconfig.SH
?S: and lib/Config.pm.
```

```
?S:.
?LINT:extern LC_ALL
?LINT:extern LANGUAGE
:
 get the patchlevel
echo " "
echo "Getting the current patchlevel..." >&4
if $test -r $rsrc/patchlevel.h;then
 revision=`awk '/define[  ]+PERL_REVISION/ {print $3}' $rsrc/patchlevel.h`
 patchlevel=`awk '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
 subversion=`awk '/define[  ]+PERL_SUBVERSION/ {print $3}' $rsrc/patchlevel.h`
 api_revision=`awk '/define[  ]+PERL_API_REVISION/ {print $3}' $rsrc/patchlevel.h`
 api_version=`awk '/define[  ]+PERL_API_VERSION/ {print $3}' $rsrc/patchlevel.h`
 api_subversion=`awk '/define[  ]+PERL_API_SUBVERSION/ {print $3}' $rsrc/patchlevel.h`
 perl_patchlevel=`egrep ',"(MAINT|SMOKE)[0-9][0-9]*"' $rsrc/patchlevel.h|tail -1|sed 's/[^0-9]//g'`
else
 revision=0
 patchlevel=0
 subversion=0
 api_revision=0
 api_version=0
 api_subversion=0
 perl_patchlevel=0
 $echo "(You do not have patchlevel.h.  Eek.)"
fi
: Define a handy string here to avoid duplication in myconfig.SH and configpm.
version_patchlevel_string="version $patchlevel subversion $subversion"
case
 "$perl_patchlevel" in
0|'') ;;
*)  perl_patchlevel=`echo $perl_patchlevel | sed 's/.* //'`
   version_patchlevel_string="$version_patchlevel_string patch $perl_patchlevel"
   ;;
esac

$echo "(You have $package $version_patchlevel_string.)"

case "$osname" in
dos|vms)
 : XXX Should be a Configure test for double-dots in filenames.
 version=`echo $revision $patchlevel $subversion | \
   $awk '{ printf "%d_%d_%d", $1, $2, $3 }'`
 api_versionstring=`echo $api_revision $api_version $api_subversion | \
   $awk '{ printf "%d_%d_%d", $1, $2, $3 }'`
 ;;
*)
 version=`echo $revision $patchlevel $subversion | \
   $awk '{ printf "%d.%d.%d", $1, $2, $3 }'`
```

```
 api_versionstring=`echo $api_revision $api_version $api_subversion | \
   $awk '{ printf "%d.%d.%d", $1, $2, $3 }'`
 ;;
esac
: Special case the 5.005_xx maintenance series, which used 5.005
: without any subversion label as a subdirectory in $sitelib
if test "${api_revision}${api_version}${api_subversion}" = "550"; then
 api_versionstring='5.005'
fi
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/patchlevel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systwgcf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systwgcf.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_systwgcf: Inhdr
?MAKE: -pick add $@ %<
?S:i_systwgcf:
?S: This variable conditionally defines the I_SYS_TWG_CF symbol, and
?S: indicates whether a C program should include sys/twg_config.h.
?S:.
?C:I_SYS_TWG_CF:
?C: This symbol, if defined, indicates to the C program that it should
?C: include sys/twg_config.h.
?C:.
?H:#$i_systwgcf
 I_SYS_TWG_CF /**/
?H:.
?LINT:set i_systwgcf
: see if this is a sys/twg_config.h system
set sys/twg_config.h i_systwgcf
eval $inhdr
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systwgcf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sockopt.U,v 3.0.1.1 1995/07/25 14:16:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sockopt.U,v $
?RCS: Revision 3.0.1.1  1995/07/25  14:16:14  ram
?RCS: patch56: obsoleted KEEPALIVE in favor of CAN_KEEPALIVE for consistency
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepalive: cat rm contains +cc +ccflags +ldflags socketlib sockethdr \
 d_oldsock libs Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_keepalive:
?S: This symbol conditionally defines CAN_KEEPALIVE which
 indicates to the C
?S: program that setsockopt SO_KEEPALIVE will work properly.
?S:.
?C:CAN_KEEPALIVE (KEEPALIVE):
?C: This symbol if defined indicates to the C program that the SO_KEEPALIVE
?C: option of setsockopt() will work as advertised in the manual.
?C:.
?H:#$d_keepalive CAN_KEEPALIVE  /**/
?H:.
?F:!socket
?LINT:set d_keepalive
: see if setsockopt with SO_KEEPALIVE works as advertised
echo " "
case "$d_oldsock" in
"$undef")
 if $contains SO_KEEPALIVE `./findhdr sys/socket.h` \
  /dev/null >/dev/null 2>&1
 then
  echo "OK, let's see if SO_KEEPALIVE works as advertised..." >&4
  $cat > socket.c <<EOP
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
```

```
#include <netdb.h>

int main()
{
 int s = socket(AF_INET, SOCK_STREAM, 0);
 if (s == -1)
  exit(1);
 if (-1 == setsockopt(s, SOL_SOCKET, SO_KEEPALIVE, 0, 0))
  exit(2);
 exit(0);
}
EOP
  if $cc $ccflags $sockethdr $ldflags -o socket socket.c $libs \
   $socketlib >/dev/null 2>&1; then
   ./socket >/dev/null 2>&1
   case
 $? in
   0) echo "Yes, it does!"
    val="$define";;
   1) $cat <<EOM
(Something went wrong -- Assuming SO_KEEPALIVE is broken)
EOM
    val="$undef";;
   2) echo "No, it doesn't.  Don't trust your manuals!!"
    val="$undef";;
   esac
  else
   cat <<EOM
(I can't compile the test program -- Assuming SO_KEEPALIVE is broken)
EOM
   val="$undef"
  fi
 else
  echo "Strange!! You have BSD 4.2 sockets but no SO_KEEPALIVE option."
  val="$undef"
 fi;;
*) cat <<EOM
As you have an old socket interface, you can't have heard of SO_KEEPALIVE.
EOM
 val="$undef";;
esac
set d_keepalive
eval $setvar
$rm -f socket socket.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sockopt.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: startperl.U,v 3.0 1993/08/18 12:09:50 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: startperl.U,v $
?RCS: Perl5 version -- I always have d_portable=define.
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startperl: cat Myread sharpbang initialinstalllocation test \
 versiononly version
?MAKE: -pick add $@ %<
?Y:TOP
?X: This is different from dist's standard startperl.U unit because
?X: we can't directly test #!/usr/local/bin/perl (or
 whatever) because
?X: we haven't built and installed perl yet.
?S:startperl:
?S: This variable contains the string to put on the front of a perl
?S: script to make sure (hopefully) that it runs with perl and not some
?S: shell. Of course, that leading line must be followed by the classical
?S: perl idiom:
?S:  eval 'exec perl -S $0 ${1+"$@"}'
?S:   if $running_under_some_shell;
?S: to guarantee perl startup should the shell execute the script. Note
?S: that this magic incantation is not understood by csh.
?S:.
?C:STARTPERL:
?C: This variable contains the string to put in front of a perl
?C: script to make sure (one hopes) that it runs with perl and not
?C: some shell.
?C:.
?H:#define STARTPERL "$startperl"  /**/
?H:.
: figure out how to guarantee perl startup
: XXX Note that this currently takes advantage of the bug that binexp ignores
:     the Configure -Dinstallprefix setting, which in turn means that under
:     relocatable @INC, initialinstalllocation is what binexp started as.
```

```
case
 "$startperl" in
")
 case "$sharpbang" in
 *!)
  $cat <<EOH

I can use the #! construct to start perl on your system. This will
make startup of perl scripts faster, but may cause problems if you
want to share those scripts and perl is not in a standard place
($initialinstalllocation/perl) on all your platforms. The alternative
is to force a shell by starting the script with a single ':' character.

EOH
  case "$versiononly" in
  "$define")      dflt="$initialinstalllocation/perl$version";;
  *)              dflt="$initialinstalllocation/perl";;
  esac
  rp='What shall I put after the #! to start up perl ("none" to not use #!)?'
  . ./myread
  case "$ans" in
  none) startperl=": # use perl";;
  *) startperl="#!$ans"
   if $test 30 -lt `echo "$ans" | wc -c`; then
    $cat >&4 <<EOM

WARNING:  Some systems limit the #! command to 32 characters.
If you experience difficulty running Perl scripts with #!, try
installing Perl in a directory with a shorter pathname.

EOM
   fi ;;
  esac
  ;;
 *)
 startperl=": # use perl"
  ;;
 esac
 ;;
esac
echo "I'll use $startperl to start perl scripts."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/startperl.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: lseektype.U,v 3.0.1.1 1994/08/29 16:30:10 ram Exp $
?RCS:

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: lseektype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:30:10  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lseektype lseeksize: Myread Typedef cat Compile rm_try longsize run
?MAKE: -pick add $@ %<
?S:lseektype:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare
 lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?S:lseeksize:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?C:Off_t (LSEEKTYPE):
?C: This symbol holds the type used to declare offsets in the kernel.
?C: It can be int, long, off_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?C:LSEEKSIZE:
?C: This symbol holds the number of bytes used by the Off_t.
?C:.
?C:Off_t_size:
?C: This symbol holds the number of bytes used by the Off_t.
?C:.
?H:#define Off_t $lseektype  /* <offset> type */
?H:#define LSEEKSIZE $lseeksize  /* <offset> size */
?H:#define Off_t_size $lseeksize /* <offset> size */
?H:.
?F:!try
?LINT:set lseektype
: see what type lseek is declared as in the kernel
rp="What is the type used for lseek's offset on this system?"
set off_t lseektype
```

```
 long stdio.h sys/types.h
eval $typedef_ask

echo " "
echo "Checking to see how big your file offsets are..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof($lseektype));
   return(0);
}
EOCP
set try
if eval $compile_ok; then
 lseeksize=`$run ./try`
 echo "Your file offsets are $lseeksize bytes long."
else
 dflt=$longsize
 echo " "
 echo "(I can't seem to compile the test program.  Guessing...)"
 rp="What is the size of your file offsets (in bytes)?"
 . ./myread
 lseeksize="$ans"
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/lseektype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setreuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setreuid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setreuid d_setresuid: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_setreuid:
?S: This variable conditionally defines HAS_SETREUID if setreuid() is
?S: available to change the real and effective uid of the current
?S: process.
?S:.
?S:d_setresuid:
?S: This variable conditionally defines HAS_SETREUID if setresuid() is
?S: available to change
 the real, effective and saved uid of the current
?S: process.
?S:.
?C:HAS_SETREUID (SETREUID):
?C: This symbol, if defined, indicates that the setreuid routine is
?C: available to change the real and effective uid of the current
?C: process.
?C:.
?C:HAS_SETRESUID (SETRESUID):
?C: This symbol, if defined, indicates that the setresuid routine is
?C: available to change the real, effective and saved uid of the current
?C: process.
?C:.
?H:#$d_setreuid HAS_SETREUID  /**/
?H:#$d_setresuid HAS_SETRESUID  /**/
?H:.
?LINT:set d_setreuid d_setresuid
: see if setreuid exists
set setreuid d_setreuid
eval $inlibc
set setresuid d_setresuid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setreuid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getspnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getspnam_r getspnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_shadow extern_C
?MAKE: -pick add $@ %<
?S:d_getspnam_r:
?S: This variable conditionally defines the HAS_GETSPNAM_R symbol,
```

```
?S: which indicates to the C program that the getspnam_r()
?S: routine is available.
?S:.
?S:getspnam_r_proto:
?S: This variable encodes the prototype of getspnam_r.
?S: It is zero if d_getspnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getspnam_r
?S: is defined.
?S:.
?C:HAS_GETSPNAM_R:
?C: This symbol, if defined, indicates that the getspnam_r routine
?C: is available
 to getspnam re-entrantly.
?C:.
?C:GETSPNAM_R_PROTO:
?C: This symbol encodes the prototype of getspnam_r.
?C: It is zero if d_getspnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getspnam_r
?C: is defined.
?C:.
?H:#$d_getspnam_r HAS_GETSPNAM_R /**/
?H:#define GETSPNAM_R_PROTO $getspnam_r_proto /**/
?H:.
?T:try hdrs d_getspnam_r_proto
: see if getspnam_r exists
set getspnam_r d_getspnam_r
eval $inlibc
case "$d_getspnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_shadow shadow.h"
 case "$d_getspnam_r_proto:$usethreads" in
 ":define") d_getspnam_r_proto=define
  set d_getspnam_r_proto getspnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getspnam_r_proto" in
 define)
 case "$getspnam_r_proto" in
 "|0) try='int getspnam_r(const char*, struct spwd*, char*, size_t, struct spwd**);'
 ./protochk "$extern_C $try" $hdrs && getspnam_r_proto=I_CSBWR ;;
 esac
 case "$getspnam_r_proto" in
 "|0) try='struct spwd* getspnam_r(const char*, struct
 spwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getspnam_r_proto=S_CSBI ;;
 esac
 case "$getspnam_r_proto" in
```

```
"|0) d_getspnam_r=undef
 getspnam_r_proto=0
 echo "Disabling getspnam_r, cannot determine prototype." >&4 ;;
* ) case "$getspnam_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getspnam_r_proto="REENTRANT_PROTO_$getspnam_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getspnam_r has no prototype, not using it." >&4 ;;
 esac
 d_getspnam_r=undef
 getspnam_r_proto=0
 ;;
esac
;;
*) getspnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getspnam_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2010 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_prctl d_prctl_set_name: Inlibc cat Compile run rm_try
?MAKE: -pick add $@ %<
?S:d_prctl:
?S: This variable conditionally defines the HAS_PRCTL symbol, which
?S: indicates to the C program that the prctl() routine is available.
?S: Note that there are at least two prctl variants: Linux and Irix.
?S: While they are somewhat similar, they are incompatible.
?S:.
?S:d_prctl_set_name:
?S: This variable conditionally defines the HAS_PRCTL_SET_NAME symbol,
?S: which indicates to the C program that the prctl() routine supports
?S: the PR_SET_NAME option.
?S:.
?C:HAS_PRCTL:
?C: This symbol, if defined, indicates that the prctl routine is
```

```
?C: available to set process title.
?C: Note that there are at least two
 prctl variants: Linux and Irix.
?C: While they are somewhat similar, they are incompatible.
?C:.
?C:HAS_PRCTL_SET_NAME:
?C: This symbol, if defined, indicates that the prctl routine is
?C: available to set process title and supports PR_SET_NAME.
?C:.
?H:#$d_prctl HAS_PRCTL  /**/
?H:#$d_prctl_set_name HAS_PRCTL_SET_NAME  /**/
?H:.
?F:!try
?LINT:set d_prctl
: see if prctl exists
set prctl d_prctl
eval $inlibc

: see if prctl supports PR_SET_NAME
d_prctl_set_name=$undef
case $d_prctl in
   $define)
 $cat >try.c <<EOM
#ifdef __ANDROID__
#include <unistd.h>
#endif
#include <sys/prctl.h>

int main (int argc, char *argv[])
{
   return (prctl (PR_SET_NAME, "Test"));
   } /* main */
EOM
 set try
 if eval $compile_ok && $run ./try; then
     echo "Your prctl (PR_SET_NAME, ...) works"
     d_prctl_set_name=$define
     fi
 $rm_try
 ;;
   esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_prctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_keepsig.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:57:56  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:26:25  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:13:59  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:48:47  ram
?RCS: patch12: comment for SIGNALS_KEPT was the other way round
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:06:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepsig: cat Compile rm Guess contains echo n c Setvar run
?MAKE: -pick add $@ %<
?S:d_keepsig:
?S: This variable contains the eventual value of the SIGNALS_KEPT symbol,
?S: which indicates to the C program if signal handlers need not reinstated
?S: after receipt of a signal.
?S:.
?C:SIGNALS_KEPT (PERSISTENT_SIGNAL):
?C: This symbol is defined if signal handlers needn't be reinstated after
?C: receipt of a signal.
?C:.
?H:#$d_keepsig SIGNALS_KEPT /**/
?H:.
?F:!try !try.out
?LINT:set d_keepsig
: see if signals are kept
val="$undef";
echo " "
echo "Checking to see if signal handlers stick around..." >&4
$cat >try.c <<'EOCP'
foo() {}

int main()
```

```
{
 signal(2, foo);
 kill(getpid(), 2);
 kill(getpid(), 2);
 printf("abc\n");
}
EOCP
set try
if eval $compile; then
?X: On AIX a single ./try will not work (with ksh)
?X: Backquotes required on Linux and SGI (prevents "ambiguous output redirect")
?X:
 (reported by Xavier LeVourch <xavierl@eiffel.com>)
 echo `sh -c $run ./try >try.out 2>/dev/null` >/dev/null
 if $contains abc try.out >/dev/null 2>&1; then
  echo "Yes, they do."
  val="$define";
 else
  echo "No, they don't."
 fi
else
 $echo $n "(I can't seem to compile the test program. Assuming $c"
 if ./bsd; then
  echo "they do.)"
  val="$define"
 else
  echo "they don't.)"
 fi
fi
set d_keepsig
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_keepsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: bin.U,v 3.1 1999/07/09 18:20:13 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: bin.U,v $
```

```
?RCS: Revision 3.1  1999/07/09 18:20:13  doughera
?RCS: Updated for installprefix
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:32  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:32:40  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:05:28  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS:
 Revision 3.0.1.1  1993/09/13  15:56:51  ram
?RCS: patch10: made prompting more explicit (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bin binexp installbin userelocatableinc initialinstalllocation: \
 Myread Prefixit Getfile Setvar Setprefixvar Oldconfig \
 test prefix prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:bin=''
?S:bin:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly executable images for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S:.
?D:binexp=''
?S:binexp:
?S: This is the same as the bin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installbin=''
?S:installbin:
?S: This variable is the same as binexp unless AFS is running in which case
?S: the user is explicitly prompted for it. This variable
 should always
?S: be used in your makefiles for maximum portability.
?S:.
?D:userelocatableinc=''
?S:userelocatableinc:
?S: This variable is set to true to indicate that perl should relocate
?S: @INC entries at runtime based on the path to the perl binary.
?S: Any @INC paths starting "../" are relocated relative to the directory
```

```
?S: containing the perl binary, and a logical cleanup of the path is then
?S: made around the join point (removing "dir/../" pairs)
?S:.
?S:initialinstalllocation:
?S: When userelocatableinc is true, this variable holds the location
?S: that make install should copy the perl binary to, with all the
?S: run-time relocatable paths calculated from this at install time.
?S: When used, it is initialized to the original value of binexp, and
?S: then binexp is set to '.../', as the other binaries are found
?S: relative to the perl binary.
?S:.
?C:BIN:
?C: This symbol holds the path of the bin directory where the package will
?C: be installed. Program must be
 prepared to deal with ~name substitution.
?C:.
?C:BIN_EXP:
?C: This symbol is the filename expanded version of the BIN symbol, for
?C: programs that do not want to deal with that at run-time.
?C:.
?C:PERL_RELOCATABLE_INC:
?C: This symbol, if defined, indicates that we'd like to relocate entries
?C: in @INC at run time based on the location of the perl binary.
?C:.
?H:#define BIN "$bin" /**/
?H:#define BIN_EXP "$binexp" /**/
?H:#define PERL_RELOCATABLE_INC "$userelocatableinc"  /**/
?H:.
?D:bin='/usr/local/bin'
?LINT:change prefix
?LINT:change prefixexp
?LINT:change prefixvar
?LINT:change installprefixexp
?LINT:set userelocatableinc
: determine where public executables go
echo " "
set dflt bin bin
eval $prefixit
fn=d~
rp='Pathname where the public executables will reside?'
. ./getfile
if $test "X$ansexp" != "X$binexp"; then
 installbin="
fi
prefixvar=bin
: XXX Bug? -- ignores Configure -Dinstallprefix setting.
: XXX If this is fixed, also fix the "start perl" hunk below, which relies on
:
```

```
    this via initialinstalllocation
. ./setprefixvar

case "$userelocatableinc" in
$define|true|[yY]*) dflt='y' ;;
*)   dflt='n' ;;
esac
cat <<EOM

Would you like to build Perl so that the installation is relocatable, so that
library paths in @INC are determined relative to the path of the perl binary?
This is not advised for system Perl installs, or if you need to run setid
scripts or scripts under taint mode.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Use relocatable @INC?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*) val="$undef"  ;;
esac
set userelocatableinc
eval $setvar

initialinstalllocation="$binexp"
: Default prefix is now "up one level from where the binaries are"
case "$userelocatableinc" in
$define|true|[yY]*)
   bin="../"
   binexp="../"
   prefix="../.."
   prefixexp="../.."
   installprefixexp="../.."
   ;;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/bin.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_varhdr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_varhdr.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:54:42  ram
?RCS: patch61: varargs script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:21:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:26:05  ram
?RCS: patch27: this unit now supersedes old i_stdarg.U and i_varargs.U
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0
  1993/08/18  12:08:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdarg i_varargs i_varhdr: cat +cc +ccflags rm test Setvar \
 Findhdr startsh _o
?MAKE: -pick add $@ %<
?S:i_stdarg:
?S: This variable conditionally defines the I_STDARG symbol, which
?S: indicates to the C program that <stdarg.h> exists and should
?S: be included.
?S:.
?S:i_varargs:
?S: This variable conditionally defines I_VARARGS, which indicates
?S: to the C program that it should include <varargs.h>.
?S:.
?S:i_varhdr:
?S: Contains the name of the header to be included to get va_dcl definition.
?S: Typically one of varargs.h or stdarg.h.
?S:.
?C:I_STDARG:
?C: This symbol, if defined, indicates that <stdarg.h> exists and should
?C: be included.
?C:.
?C:I_VARARGS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <varargs.h>.
?C:.
?H:#$i_stdarg I_STDARG  /**/
?H:#$i_varargs I_VARARGS /**/
?H:.
?W:%<:va_dcl
?F:!varargs
?T:valstd
```

```
?LINT:set i_stdarg i_varargs
?X:
?X:
 Don't use setvar because the varargs test below might override these.
?X: Actually, the messages here are just informative. We don't wish to set
?X: i_varargs or i_stdarg to their final value before knowing which of the
?X: two we'll include.
?X:
: see if stdarg is available
echo " "
if $test `./findhdr stdarg.h`; then
 echo "<stdarg.h> found." >&4
 valstd="$define"
else
 echo "<stdarg.h> NOT found." >&4
 valstd="$undef"
fi

: see if varargs is available
echo " "
if $test `./findhdr varargs.h`; then
 echo "<varargs.h> found." >&4
else
 echo "<varargs.h> NOT found, but that's ok (I hope)." >&4
fi

?X:
?X: if you have stdarg.h, you need to support prototypes to actually use it;
?X: but if stdarg.h exists and the compiler doesn't support prototypes (for some
?X: bizarre reason), we'll fall back to varargs.h anyway so it's not so bad.
?X:
: set up the varargs testing programs
$cat > varargs.c <<EOP
#ifdef I_STDARG
#include <stdarg.h>
#endif
#ifdef I_VARARGS
#include <varargs.h>
#endif

#ifdef
 I_STDARG
int f(char *p, ...)
#else
int f(va_alist)
va_dcl
#endif
{
```

```
 va_list ap;
#ifndef I_STDARG
 char *p;
#endif
#ifdef I_STDARG
 va_start(ap,p);
#else
 va_start(ap);
 p = va_arg(ap, char *);
#endif
 va_end(ap);
 return 0;
}
EOP
$cat > varargs <<EOP
$startsh
if $cc -c $ccflags -D\$1 varargs.c >/dev/null 2>&1; then
 echo "true"
else
 echo "false"
fi
$rm -f varargs$_o
EOP
chmod +x varargs

: now check which varargs header should be included
echo " "
i_varhdr="
val="
case "$valstd" in
"$define")
 if `./varargs I_STDARG`; then
  val='stdarg.h'
 elif `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
*)
 if `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
esac
case "$val" in
")
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to support stdarg or varargs!" >&4
```

```
 case "$knowitall" in
 ")
 echo "    I'm giving up; maybe you can try again with a different compiler?" >&4
  exit 1
  ;;
 esac
echo "I could not find the definition for va_dcl...
 You have problems..." >&4
 val="$undef"; set i_stdarg; eval $setvar
 val="$undef"; set i_varargs; eval $setvar
 ;;
*)
 set i_varhdr
 eval $setvar
 case "$i_varhdr" in
 stdarg.h)
  val="$define"; set i_stdarg; eval $setvar
  val="$undef"; set i_varargs; eval $setvar
  ;;
 varargs.h)
  val="$undef"; set i_stdarg; eval $setvar
  val="$define"; set i_varargs; eval $setvar
  ;;
 esac
 echo "We'll include <$i_varhdr> to get va_dcl definition." >&4;;
esac
$rm -f varargs*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_varhdr.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: archname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:24:32  ram
?RCS: patch61: changed the way the archname is mangled from uname
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:05:24  ram
?RCS: patch54: protect against spaces in "uname -m" output (ADO)
```

```
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:14:21  ram
?RCS: patch51: created
?RCS:
?MAKE:archname myarchname: sed Loc Myread Oldconfig osname test rm
?MAKE: -pick add $@ %<
?S:archname:
?S: This variable is a short name to characterize the current
?S: architecture.
  It is used mainly to construct the default archlib.
?S:.
?S:myarchname:
?S: This variable holds the architecture name computed by Configure in
?S: a previous run. It is not intended to be perused by any user and
?S: should never be set in a hint file.
?S:.
?C:ARCHNAME:
?C: This symbol holds a string representing the architecture name.
?C: It may be used to construct an architecture-dependant pathname
?C: where library files may be held under a private library, for
?C: instance.
?C:.
?H:#define ARCHNAME "$archname"  /**/
?H:.
?T:xxx tarch
: determine the architecture name
echo " "
?X: We always recompute archname in case osname changes. However, we need
?X: to be careful since, as ADO rightfully pointed out, some systems pick
?X: silly architecture names (0001307135000-aix on AIX or 9000/715-ux under
?X: HP-UX). Therefore, we allow hint files to superseed our guess and ask
?X: the user for confirmation.
if xxx=`./loc arch blurfl $pth`; $test -f "$xxx"; then
 tarch=`arch`"-$osname"
elif
 xxx=`./loc uname blurfl $pth`; $test -f "$xxx" ; then
 if uname -m > tmparch 2>&1 ; then
  tarch=`$sed -e 's/ *$//' -e 's/ /_/g' \
   -e 's/$/"'-$osname/" tmparch`
 else
  tarch="$osname"
 fi
 $rm -f tmparch
else
 tarch="$osname"
fi
case "$myarchname" in
"|"$tarch") ;;
```

```
*)
 echo "(Your architecture name used to be $myarchname.)"
 archname=''
 ;;
esac
case "$archname" in
'') dflt="$tarch";;
*) dflt="$archname";;
esac
rp='What is your architecture name'
. ./myread
archname="$ans"
myarchname="$tarch"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/archname.U
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```
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?RCS:
?MAKE:d_qgcvt: Inlibc
?MAKE: -pick add $@ %<
?S:d_qgcvt:
?S: This variable conditionally defines the HAS_QGCVT symbol, which
?S: indicates to the C program that the qgcvt() routine is available.
?S:.
?C:HAS_QGCVT:
?C: This symbol, if defined, indicates that the qgcvt routine is
?C: available to convert long doubles ("quad doubles") to strings.
?C: This is a low-level routine hopefully faster than sprintf.
?C:.
?H:#$d_qgcvt HAS_QGCVT  /**/
?H:.
?LINT:set d_qgcvt
: see if qgcvt exists
set qgcvt d_qgcvt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_qgcvt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmat.U,v 3.0.1.3 1995/07/25 14:04:23 ram Exp $
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_shmat.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:04:23  ram
?RCS: patch56: use findhdr to find <sys/shm.h>, to get the right one (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:18:56  ram
?RCS: patch27: added new symbol HAS_SHMAT_PROTOTYPE (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:54:18  ram
?RCS: patch23: new Shmat_t symbol to declare return type of shmat()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:d_shmat shmattype d_shmatprototype: Inlibc cat +cc +ccflags \
 rm cppstdin cppflags cppminus Findhdr Setvar contains
?MAKE: -pick add $@ %<
?S:d_shmat:
?S: This variable conditionally defines the HAS_SHMAT symbol, which
?S: indicates to the C program that the shmat() routine is available.
?S:.
?S:shmattype:
?S: This symbol contains the type of pointer returned by shmat().
?S: It can be 'void *' or 'char *'.
?S:.
?S:d_shmatprototype:
?S: This variable conditionally defines the HAS_SHMAT_PROTOTYPE
?S: symbol, which indicates that sys/shm.h has a prototype for
?S: shmat.
?S:.
?C:HAS_SHMAT:
?C: This symbol, if defined, indicates that the shmat() routine is
?C: available to attach a shared memory segment to the process space.
?C:.
?C:Shmat_t:
?C: This symbol holds the return type of the shmat() system call.
?C: Usually set to 'void *' or 'char *'.
?C:.
?C:HAS_SHMAT_PROTOTYPE:
```

```
?C: This symbol, if defined, indicates that the sys/shm.h includes
?C: a prototype for shmat().
  Otherwise, it is up to the program to
?C: guess one.  Shmat_t shmat(int, Shmat_t, int) is a good guess,
?C: but not always right so it should be emitted by the program only
?C: when HAS_SHMAT_PROTOTYPE is not defined to avoid conflicting defs.
?C:.
?H:#$d_shmat HAS_SHMAT  /**/
?H:#define Shmat_t $shmattype /**/
?H:#$d_shmatprototype HAS_SHMAT_PROTOTYPE /**/
?H:.
?LINT:set d_shmat d_shmatprototype
?T:xxx
: see if shmat exists
set shmat d_shmat
eval $inlibc
: see what shmat returns
case "$d_shmat" in
"$define")
 $cat >shmat.c <<'END'
#include <sys/shm.h>
void *shmat();
END
 if $cc $ccflags -c shmat.c >/dev/null 2>&1; then
  shmattype='void *'
 else
  shmattype='char *'
 fi
 echo "and it returns ($shmattype)." >&4
 : see if a prototype for shmat is available
 xxx=`./findhdr sys/shm.h`
 $cppstdin $cppflags $cppminus < $xxx > shmat.c 2>/dev/null
 if $contains 'shmat.*(' shmat.c >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 $rm -f shmat.[co]
 ;;
*)
 val="$undef"
 ;;
esac
set
 d_shmatprototype
eval $setvar
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_shmat.U
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```
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?RCS:
?MAKE:d_hasmntopt: Inlibc
?MAKE: -pick add $@ %<
?S:d_hasmntopt:
?S: This variable conditionally defines the HAS_HASMNTOPT symbol, which
?S: indicates to the C program that the hasmntopt() routine is available
?S: to query the mount options of file systems.
?S:.
?C:HAS_HASMNTOPT:
?C: This symbol, if defined, indicates that the hasmntopt routine is
?C: available to query the mount options of file systems.
?C:.
?H:#$d_hasmntopt HAS_HASMNTOPT  /**/
?H:.
?LINT:set d_hasmntopt
: see if hasmntopt exists
set hasmntopt d_hasmntopt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_hasmntopt.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_const.U,v $
?RCS: Revision 3.0.1.1  1993/11/10  17:33:41  ram
?RCS: patch14: stronger const check with added typedef for MIPS cc
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:51  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_const: cat rm cc ccflags Setvar
?MAKE: -pick add $@ %<
?S:d_const:
?S: This variable conditionally defines the HASCONST symbol, which
?S: indicates to the C program that this C compiler knows about the
?S: const type.
?S:.
?C:HASCONST ~ %<:
?C: This symbol,
 if defined, indicates that this C compiler knows about
?C: the const type. There is no need to actually test for that symbol
?C: within your programs. The mere use of the "const" keyword will
?C: trigger the necessary tests.
?C:.
?H:?%<:#$d_const HASCONST /**/
?H:?%<:#ifndef HASCONST
?H:?%<:#define const
?H:?%<:#endif
?H:.
?W:%<:const
?F:const.c const.o
?LINT:set d_const
?LINT:known const
: check for const keyword
echo " "
echo 'Checking to see if your C compiler knows about "const"...' >&4
$cat >const.c <<'EOCP'
?X: mmcg@bruce.cs.monash.edu.au reports that:
?X: The MIPS cc compiler (V2.10) on a dec 5000 running Ultrix 4.2A
?X: pretends to understand `const' but doesn't - it'll also fail to
?X: handle typedefs properly if they're declared const. To guard
?X: against this, boost up the test by using an explicit typedef...
typedef struct spug { int drokk; } spug;
int main()
{
 const char *foo;
 const spug y;
}
EOCP
if $cc -c $ccflags const.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup,
 it does."
else
 val="$undef"
 echo "Nope, it doesn't."
fi
```

```
set d_const
eval $setvar
$rm -f const.c const.o
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_const.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
?MAKE:d_fs_data_s: Hasstruct i_sysparam i_sysmount i_systypes Setvar
?MAKE: -pick add $@ %<
?S:d_fs_data_s:
?S: This variable conditionally defines the HAS_STRUCT_FS_DATA symbol,
?S: which indicates that the struct fs_data is supported.
?S:.
?C:HAS_STRUCT_FS_DATA:
?C: This symbol, if defined, indicates that the struct fs_data
?C: to do statfs() is supported.
?C:.
?H:#$d_fs_data_s HAS_STRUCT_FS_DATA /**/
?H:.
?LINT:set d_fs_data_s
: Check for fs_data_s
echo " "
echo "Checking to see if your system supports struct fs_data..." >&4
set d_fs_data_s fs_data $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h
eval $hasstruct
case "$d_fs_data_s" in
"$define")      echo "Yes, it does."   ;;
*)
            echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fs_data_s.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: longsize.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: longsize.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:09:35  ram
?RCS: patch61: code moved to intsize.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:24:31  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: 'longsize' is now defined within intsize.U
?X:
?LINT: empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/longsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pidcheck.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pidcheck.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:37:55  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_pidcheck: cat rm +cc _o
?MAKE: -pick add $@ %<
?S:d_pidcheck:
?S: This variable conditionally defines the variable PIDCHECK
?S: which indicates that kill(pid, 0) will check for an
```

```
 active pid.
?S:.
?C:PIDCHECK:
?C: This symbol, if defined, means that the kill(pid, 0) will
?C: check for an active pid (i.e. the kernel will run all the
?C: necessary pid checks, but no signal is actually sent).
?C:.
?H:#$d_pidcheck PIDCHECK  /**/
?H:.
?F:!try
: check for "kill(pid, 0)"
echo " "
case "$d_pidcheck" in
"$define")
echo "I already know your system supports kill(pid, 0) for pid checks." >&4
 ;;
"$undef")
echo "We both know your system does not support signal #0 for pid checks." >&4
 ;;
*)
 echo "Checking to see if kill(pid, 0) works..." >&4
 $cat >try.c <<'EOCP'
int main()
 {
 int pid, status0, status9;

 if ((pid = fork()) == 0)
  {
  sleep(30);
  exit(1);
  }
 status0 = kill(pid, 0);
 status9 = kill(pid, 9);
 exit(status0 == status9);
 }
EOCP
 if $cc -o try try.c >/dev/null 2>&1 ; then
  if ./try >/dev/null 2>&1 ; then
   echo "Yes, it does marvels."
   d_pidcheck="$undef"
  else
   d_pidcheck="$define"
   echo "No, it doesn't."
  fi
 else
  echo "(I was unable to compile
 the test program.)"
  echo "Your system does not appear to support kill(pid, 0)."
```

```
  d_pidcheck="$undef"
 fi
 $rm -f try.c try$_o try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pidcheck.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_attribut.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_attribut.U,v $
?RCS: Revision 3.0.1.3  1995/01/30  14:33:45  ram
?RCS: patch49: test C program now includes <stdio.h> (WED)
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:25:47  ram
?RCS: patch45: fixed typo in the d_attribut variable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:55  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_attribute_deprecated d_attribute_format
 d_attribute_malloc \
 d_attribute_nonnull d_attribute_noreturn d_attribute_pure \
 d_attribute_unused d_attribute_warn_unused_result \
 d_printf_format_null d_attribute_always_inline: \
    Myread Oldconfig cat cc ccflags rm Setvar compiler_warning \
         i_stdlib run i_inttypes
?MAKE: -pick add $@ %<
?S:d_attribute_format:
?S: This variable conditionally defines HASATTRIBUTE_FORMAT, which
?S: indicates the C compiler can check for printf-like formats.
?S:.
?S:d_attribute_deprecated:
?S: This variable conditionally defines HASATTRIBUTE_DEPRECATED, which
?S: indicates that GCC can handle the attribute for marking deprecated
?S: APIs
```

```
?S:.
?S:d_printf_format_null:
?S: This variable conditionally defines PRINTF_FORMAT_NULL_OK, which
?S: indicates the C compiler allows printf-like formats to be null.
?S:.
?S:d_attribute_malloc:
?S: This variable conditionally defines HASATTRIBUTE_MALLOC, which
?S: indicates the C compiler can understand functions as having
?S: malloc-like semantics.
?S:.
?S:d_attribute_nonnull:
?S: This
 variable conditionally defines HASATTRIBUTE_NONNULL, which
?S: indicates that the C compiler can know that certain arguments
?S: must not be NULL, and will check accordingly at compile time.
?S:.
?S:d_attribute_noreturn:
?S: This variable conditionally defines HASATTRIBUTE_NORETURN, which
?S: indicates that the C compiler can know that certain functions
?S: are guaranteed never to return.
?S:.
?S:d_attribute_pure:
?S: This variable conditionally defines HASATTRIBUTE_PURE, which
?S: indicates that the C compiler can know that certain functions
?S: are "pure" functions, meaning that they have no side effects, and
?S: only rely on function input and/or global data for their results.
?S:.
?S:d_attribute_unused:
?S: This variable conditionally defines HASATTRIBUTE_UNUSED, which
?S: indicates that the C compiler can know that certain variables
?S: and arguments may not always be used, and to not throw warnings
?S: if they don't get used.
?S:.
?S:d_attribute_warn_unused_result:
?S: This
 variable conditionally defines
?S: HASATTRIBUTE_WARN_UNUSED_RESULT, which indicates that the C
?S: compiler can know that certain functions have a return values
?S: that must not be ignored, such as malloc() or open().
?S:.
?S:d_attribute_always_inline:
?S: This variable conditionally defines HASATTRIBUTE_ALWAYS_INLINE,
?S: which indicates that the C compiler can know that certain
?S: functions should always be inlined.
?S:.
?C:HASATTRIBUTE_FORMAT ~ %< (GNUC_ATTRIBUTE_CHECK):
?C: Can we handle GCC attribute for checking printf-style formats
?C:.
```

```
?C:PRINTF_FORMAT_NULL_OK:
?C: Allows __printf__ format to be null when checking printf-style
?C:.
?C:HASATTRIBUTE_MALLOC:
?C: Can we handle GCC attribute for malloc-style functions.
?C:.
?C:HASATTRIBUTE_NONNULL:
?C: Can we handle GCC attribute for nonnull function parms.
?C:.
?C:HASATTRIBUTE_NORETURN:
?C: Can we handle GCC attribute for functions that do not return
?C:.
?C:HASATTRIBUTE_PURE:
?C: Can we handle
 GCC attribute for pure functions
?C:.
?C:HASATTRIBUTE_UNUSED:
?C: Can we handle GCC attribute for unused variables and arguments
?C:.
?C:HASATTRIBUTE_DEPRECATED:
?C: Can we handle GCC attribute for marking deprecated APIs
?C:.
?C:HASATTRIBUTE_WARN_UNUSED_RESULT ~ %< (HASATTRIBUTE):
?C: Can we handle GCC attribute for warning on unused results
?C:.
?C:HASATTRIBUTE_ALWAYS_INLINE:
?C: Can we handle GCC attribute for functions that should always be
?C: inlined.
?C:.
?H:?%<:#$d_attribute_deprecated HASATTRIBUTE_DEPRECATED /**/
?H:?%<:#$d_attribute_format HASATTRIBUTE_FORMAT /**/
?H:?%<:#$d_printf_format_null PRINTF_FORMAT_NULL_OK /**/
?H:?%<:#$d_attribute_noreturn HASATTRIBUTE_NORETURN /**/
?H:?%<:#$d_attribute_malloc HASATTRIBUTE_MALLOC /**/
?H:?%<:#$d_attribute_nonnull HASATTRIBUTE_NONNULL /**/
?H:?%<:#$d_attribute_pure HASATTRIBUTE_PURE /**/
?H:?%<:#$d_attribute_unused HASATTRIBUTE_UNUSED /**/
?H:?%<:#$d_attribute_warn_unused_result HASATTRIBUTE_WARN_UNUSED_RESULT /**/
?H:?%<:#$d_attribute_always_inline
 HASATTRIBUTE_ALWAYS_INLINE /**/
?H:.
?F:!attrib !attrib.out !attrib.c
?LINT:set d_attribute_deprecated
?LINT:set d_attribute_format
?LINT:set d_printf_format_null
?LINT:set d_attribute_malloc
?LINT:set d_attribute_nonnull
?LINT:set d_attribute_noreturn
```

```
?LINT:set d_attribute_pure
?LINT:set d_attribute_unused
?LINT:set d_attribute_warn_unused_result
?LINT:set d_attribute_always_inline
: Look for GCC-style attribute format
case "$d_attribute_format" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((format)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void my_special_printf(char* pat,...) __attribute__((__format__(__printf__,1,2)));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((format))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((format))."
  val="$define"
 fi
else
 echo "Your C compiler
 doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_format" ;;
esac
set d_attribute_format
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute format with null format allowed
case "$d_printf_format_null" in
") case "$d_attribute_format" in
   $define)
 echo " "
 echo "Checking whether your compiler allows __printf__ format to be null ..." >&4
$cat >attrib.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
```

```
#endif
#ifndef INTPTR_MAX
#define intptr_t int
#endif
int null_printf (char* pat,...) __attribute__((__format__(__printf__,1,2)));
int null_printf (char* pat,...) { return (int)(intptr_t)pat; }
int main () { exit(null_printf(NULL)); }
EOCP
 if $cc $ccflags -o attrib attrib.c >attrib.out 2>&1 ; then
     : run the executable in case it produces a run-time warning
     if $run ./attrib >>attrib.out 2>&1; then
  if $compiler_warning attrib.out
 >/dev/null 2>&1; then
      echo "Your C compiler doesn't allow __printf__ format to be null."
      val="$undef"
  else
      echo "Your C compiler allows __printf__ format to be null."
      val="$define"
  fi
     else
     echo "Your C compiler executable failed with __printf__ format null."
     val="$undef"
 fi
   else
 echo "Your C compiler fails with __printf__ format null."
 val="$undef"
   fi
   ;;
   *)  val="$undef" ;;
   esac
;;
*)  val="$d_printf_format_null" ;;
esac
set d_printf_format_null
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute malloc
case "$d_attribute_malloc" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((malloc)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
char *go_get_some_memory( int how_many_bytes ) __attribute__((malloc));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
```

```
  echo "Your C compiler doesn't support __attribute__((malloc))."
  val="$undef"
 else
  echo
 "Your C compiler supports __attribute__((malloc))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_malloc" ;;
esac
set d_attribute_malloc
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute nonnull
case "$d_attribute_nonnull" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((nonnull(1))) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void do_something (char *some_pointer,...) __attribute__((nonnull(1)));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((nonnull))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((nonnull))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_nonnull" ;;
esac
set d_attribute_nonnull
eval
 $setvar
$rm -f attrib*

: Look for GCC-style attribute noreturn
```

```
case "$d_attribute_noreturn" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((noreturn)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void fall_over_dead( void ) __attribute__((noreturn));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((noreturn))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((noreturn))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_noreturn" ;;
esac
set d_attribute_noreturn
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute pure
case "$d_attribute_pure" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((pure)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int square( int
 n ) __attribute__((pure));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((pure))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((pure))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
```

```
fi
;;
*) val="$d_attribute_pure" ;;
esac
set d_attribute_pure
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute unused
case "$d_attribute_unused" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((unused)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int do_something( int dummy __attribute__((unused)), int n );
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((unused))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((unused))."
  val="$define"
 fi
else
 echo
 "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_unused" ;;
esac
set d_attribute_unused
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute deprecated
case "$d_attribute_deprecated" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((deprecated)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int I_am_deprecated(void) __attribute__((deprecated));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
```

```
  echo "Your C compiler doesn't support __attribute__((deprecated))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((deprecated))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_deprecated" ;;
esac
set d_attribute_deprecated
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute
 warn_unused_result
case "$d_attribute_warn_unused_result" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((warn_unused_result)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int I_will_not_be_ignored(void) __attribute__((warn_unused_result));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((warn_unused_result))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((warn_unused_result))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_warn_unused_result" ;;
esac
set d_attribute_warn_unused_result
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute always_inline
case "$d_attribute_always_inline" in
```

```
")
echo " "
echo "Checking whether your compiler can handle __attribute__((always_inline)) ..." >&4
$cat >attrib.c <<'EOCP'
#include
 <stdio.h>
static __inline__ __attribute__((always_inline)) int I_will_always_be_inlined(void);
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((always_inline))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((always_inline))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_always_inline" ;;
esac
set d_attribute_always_inline
eval $setvar
$rm -f attrib*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_attribut.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_crypt_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_crypt_r crypt_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_crypt extern_C
?MAKE: -pick add $@ %<
?S:d_crypt_r:
?S: This variable conditionally defines the HAS_CRYPT_R symbol,
?S: which indicates to the C program that the crypt_r()
?S: routine is available.
?S:.
?S:crypt_r_proto:
```

```
?S: This variable encodes the prototype of crypt_r.
?S: It is zero if d_crypt_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_crypt_r
?S: is defined.
?S:.
?C:HAS_CRYPT_R:
?C: This symbol, if defined, indicates that the crypt_r routine
?C: is available to crypt re-entrantly.
?C:.
?C:CRYPT_R_PROTO:
?C: This
 symbol encodes the prototype of crypt_r.
?C: It is zero if d_crypt_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_crypt_r
?C: is defined.
?C:.
?H:#$d_crypt_r HAS_CRYPT_R /**/
?H:#define CRYPT_R_PROTO $crypt_r_proto /**/
?H:.
?T:try hdrs d_crypt_r_proto
: see if crypt_r exists
set crypt_r d_crypt_r
eval $inlibc
case "$d_crypt_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_crypt crypt.h"
 case "$d_crypt_r_proto:$usethreads" in
 ":define") d_crypt_r_proto=define
  set d_crypt_r_proto crypt_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_crypt_r_proto" in
 define)
 case "$crypt_r_proto" in
 "|0) try='char* crypt_r(const char*, const char*, struct crypt_data*);'
 ./protochk "$extern_C $try" $hdrs && crypt_r_proto=B_CCS ;;
 esac
 case "$crypt_r_proto" in
 "|0) try='char* crypt_r(const char*, const char*, CRYPTD*);'
 ./protochk "$extern_C $try" $hdrs && crypt_r_proto=B_CCD ;;
 esac
 case "$crypt_r_proto" in
 "|0) d_crypt_r=undef
  crypt_r_proto=0
  echo
 "Disabling crypt_r, cannot determine prototype." >&4 ;;
 * ) case "$crypt_r_proto" in
```

```
  REENTRANT_PROTO*) ;;
  *) crypt_r_proto="REENTRANT_PROTO_$crypt_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "crypt_r has no prototype, not using it." >&4 ;;
  esac
  d_crypt_r=undef
  crypt_r_proto=0
  ;;
 esac
 ;;
*) crypt_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_crypt_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: prefix.U,v $
?RCS: Revision 3.0.1.2  1995/01/30  14:44:05  ram
?RCS: patch49: new prefixexp variable holding a fully expanded prefix
?RCS: patch49: save off previous prefix value in oldprefix if changed (WED)
?RCS: patch49: added the INSTALLPREFIX define for C programs to use (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:31:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:prefix prefixexp +oldprefix: Getfile Loc Oldconfig
 cat package
?MAKE: -pick add $@ %<
?S:prefix:
?S: This variable holds the name of the directory below which the
```

```
?S: user will install the package.  Usually, this is /usr/local, and
?S: executables go in /usr/local/bin, library stuff in /usr/local/lib,
?S: man pages in /usr/local/man, etc.  It is only used to set defaults
?S: for things in bin.U, mansrc.U, privlib.U, or scriptdir.U.
?S:.
?S:prefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install the package.  Derived from prefix.
?S:.
?S:oldprefix:
?S: This variable is set non-null if the prefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
?C:INSTALLPREFIX:
?C: This symbol contains the name of the install prefix for this package.
?C:.
?H:#define INSTALLPREFIX "$prefix"  /**/
?H:.
: determine root of directory hierarchy where package will be installed.
case "$prefix" in
")
 dflt=`./loc . /usr/local /usr/local /local /opt
 /usr`
 ;;
*)
 dflt="$prefix"
 ;;
esac
$cat <<EOM

By default, $package will be installed in $dflt/bin, manual
pages under $dflt/man, etc..., i.e. with $dflt as prefix for
all installation directories. Typically set to /usr/local, but you
may choose /usr if you wish to install $package among your system
binaries. If you wish to have binaries under /bin but manual pages
under /usr/local/man, that's ok: you will be prompted separately
for each of the installation directories, the prefix being only used
to set the defaults.

EOM
fn=d~
rp='Installation prefix to use?'
. ./getfile
oldprefix=''
case "$prefix" in
") ;;
*)
 case "$ans" in
```

```
 "$prefix") ;;
 *) oldprefix="$prefix";;
 esac
 ;;
esac
prefix="$ans"
prefixexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_charsprf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_charsprf.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_charsprf: cat rm +cc Setvar
?MAKE: -pick add $@ %<
?S:d_charsprf:
?S: This variable conditionally defines CHARSPRINTF if this system
?S: declares "char *sprintf()" in stdio.h.  The trend seems to be to
?S: declare it as "int sprintf()".
?S:.
?C:CHARSPRINTF:
?C: This symbol is defined if this system declares "char *sprintf()" in
?C: stdio.h.
  The trend seems to be to declare it as "int sprintf()".  It
?C: is up to the package author to declare sprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_charsprf CHARSPRINTF  /**/
?H:.
?F:!ucbsprf.c !ucbsprf
?LINT:set d_charsprf
: see if sprintf is declared as int or pointer to char
echo " "
$cat >ucbsprf.c <<'EOF'
int main()
```

```
{
 int sprintf();
 char buf[10];
 exit((unsigned long)sprintf(buf,"%s","foo") > 10L);
}
EOF
if $cc -o ucbsprf ucbsprf.c >/dev/null 2>&1 && ./ucbsprf; then
 echo "Your sprintf() returns (int)." >&4
 val="$undef"
else
 echo "Your sprintf() returns (char*)." >&4
 val="$define"
fi
set d_charsprf
eval $setvar
$rm -f ucbsprf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_charsprf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nextafter: Inlibc
?MAKE: -pick add $@ %<
?S:d_nextafter:
?S: This variable conditionally defines HAS_NEXTAFTER if nextafter()
?S: is available to return the next machine representable double from
?S: x in direction y.
?S:.
?C:HAS_NEXTAFTER:
?C: This symbol, if defined, indicates that the nextafter routine is
?C: available to return the next machine representable double from
?C: x in direction y.
?C:.
?H:#$d_nextafter HAS_NEXTAFTER  /**/
?H:.
?LINT:set d_nextafter
: see if nextafter exists
set nextafter d_nextafter
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nextafter.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgsnd.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgsnd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgsnd: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgsnd:
?S: This variable conditionally defines the HAS_MSGSND symbol, which
?S: indicates to the C program that the msgsnd() routine is available.
?S:.
?C:HAS_MSGSND:
?C: This symbol, if defined, indicates that the msgsnd() routine is
?C: available to send a message into the message queue.
?C:.
?H:#$d_msgsnd
 HAS_MSGSND  /**/
?H:.
?LINT:set d_msgsnd
: see if msgsnd exists
set msgsnd d_msgsnd
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgsnd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017-2018, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_accept4: Inlibc
?MAKE: -pick add $@ %<
?S:d_accept4:
?S: This variable conditionally defines HAS_ACCEPT4 if accept4() is
?S: available to accept socket connections.
```

```
?S:.
?C:HAS_ACCEPT4:
?C: This symbol, if defined, indicates that the accept4 routine is
?C: available to accept socket connections.
?C:.
?H:#$d_accept4 HAS_ACCEPT4 /**/
?H:.
?LINT:set d_accept4
: see if accept4 exists
set accept4 d_accept4
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_accept4.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:usevendorprefix vendorprefix vendorprefixexp +oldvendorprefix: \
 Getfile Loc Oldconfig cat prefix Myread
?MAKE: -pick add $@ %<
?S:usevendorprefix:
?S: This variable tells whether the vendorprefix
?S: and consequently other vendor* paths are in use.
?S:.
?S:vendorprefix:
?S: This variable holds the full absolute path of the directory below
?S: which
 the vendor will install add-on packages.
?S: See INSTALL for usage and examples.
?S:.
?S:vendorprefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the vendor will install add-on packages.  Derived from vendorprefix.
?S:.
?S:oldvendorprefix:
```

```
?S: This variable is set non-null if the vendorprefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
: Set the vendorprefix variables
$cat <<EOM

The installation process will also create a directory for
vendor-supplied add-ons.  Vendors who supply perl with their system
may find it convenient to place all vendor-supplied files in this
directory rather than in the main distribution directory.  This will
ease upgrades between binary-compatible maintenance versions of perl.

Of course you may also use these directories in whatever way you see
fit.  For example, you might use them to access modules shared over a
company-wide network.

The default answer should be
 fine for most people.
This causes further questions about vendor add-ons to be skipped
and no vendor-specific directories will be configured for perl.

EOM
rp='Do you want to configure vendor-specific add-on directories?'
case "$usevendorprefix" in
define|true|[yY]*) dflt=y ;;
*) : User may have set vendorprefix directly on Configure command line.
 case "$vendorprefix" in
 "|' ') dflt=n ;;
 *) dflt=y ;;
 esac
 ;;
esac
. ./myread
case "$ans" in
[yY]*) fn=d~+
 rp='Installation prefix to use for vendor-supplied add-ons?'
 case "$vendorprefix" in
 ") dflt="$prefix" ;;
 *)  dflt=$vendorprefix ;;
 esac
 . ./getfile
 : XXX Prefixit unit does not yet support siteprefix and vendorprefix
 oldvendorprefix="
 case "$vendorprefix" in
 ") ;;
 *) case "$ans" in
  "$prefix") ;;
  *) oldvendorprefix="$prefix";;
```

```
  esac
  ;;
 esac
 usevendorprefix="$define"
 vendorprefix="$ans"
 vendorprefixexp="$ansexp"
 ;;
*) usevendorprefix="$undef"
 vendorprefix=''
 vendorprefixexp=''
 ;;
esac
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorprefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sbrk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sbrk.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:31  ram
?RCS: patch16: created
?RCS:
?MAKE:d_sbrk: Inlibc
?MAKE: -pick add $@ %<
?S:d_sbrk:
?S: This variable conditionally defines HAS_SBRK if sbrk() is
?S: available to add more core to the process.
?S:.
?C:HAS_SBRK:
?C: This symbol, if defined, indicates that the sbrk system call is
?C: available to add/relase core. Always true on Unix.
?C:.
?H:#$d_sbrk HAS_SBRK /**/
?H:.
?LINT:set d_sbrk
: see
 if sbrk exists
set sbrk d_sbrk
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sbrk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vaproto.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: vaproto.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:17:16  ram
?RCS: patch16: definition of _V now appears only when needed
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:vaproto: prototype i_stdarg Setvar
?MAKE: -pick add $@ %<
?S:vaproto:
?S: This variable conditionally defines CAN_VAPROTO on systems supporting
?S: prototype
 declaration of functions with a variable number of
?S: arguments. See also prototype.
?S:.
?C:CAN_VAPROTO ~ %<:
?C: This variable is defined on systems supporting prototype declaration
?C: of functions with a variable number of arguments.
?C:.
?C:_V:
?C: This macro is used to declare function parameters in prototypes for
?C: functions with a variable number of parameters. Use double parentheses.
?C: For example:
?C:
?C:  int printf _V((char *fmt, ...));
?C:
?C: Remember to use the plain simple _() macro when declaring a function
?C: with no variable number of arguments, since it might be possible to
?C: have a non-effect _V() macro and still get prototypes via _().
?C:.
```

```
?H:?%<:#$vaproto CAN_VAPROTO /**/
?H:?_V:#ifdef CAN_VAPROTO
?H:?_V:#define _V(args) args
?H:?_V:#else
?H:?_V:#define _V(args) ()
?H:?_V:#endif
?H:.
?LINT:set vaproto
: see if prototypes support variable argument declarations
echo " "
case "$prototype$i_stdarg" in
$define$define)
 echo "It appears we'll be able
 to prototype varargs functions." >&4
 val="$define"
 ;;
*)
 echo "Too bad... We won't be using prototyped varargs functions..." >&4
 val="$undef"
 ;;
esac
set vaproto
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/vaproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Findhdr.U,v 3.0.1.2 1994/10/29 15:53:08 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Thomas Neumann <tom@smart.bo.open.de>
?RCS:
?RCS: $Log: Findhdr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:53:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:56  ram
?RCS: patch23: cppminus must be after other cppflags, not before
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:54  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a findhdr script which
 is used to locate the header
?X: files in $usrinc or other stranger places using cpp capabilities. The
?X: script is given an include file base name, like 'stdio.h' or 'sys/file.h'
?X: and it returns the full path of the include file and a zero status or an
?X: empty string with an error status if the file could not be located.
?X:
?MAKE:Findhdr: grep test tr rm incpth awk cat startsh \
 cppstdin cppminus +cppflags osname
?MAKE: -pick add $@ %<
?LINT:extern cppfilter
?LINT:define fieldn
?S:fieldn:
?S: This variable is used internally by Configure. It contains the position
?S: of the included file name in cpp output. That is to say, when cpp
?S: pre-processes a #include <file> line, it replaces it by a # line which
?S: contains the original position in the input file and the full name of
?S: included file, between "quotes".
?S:.
?V:fieldn
?F:./findhdr !fieldn
?T:cline pos wanted name awkprg usrincdir status testaccess
: determine filename position in cpp output
echo " "
echo "Computing
 filename position in cpp output for #include directives..." >&4
case "$osname" in
amigaos) fieldn=3 ;;  # Workaround for a bug in abc (pdksh).
esac
case "$fieldn" in
")
case "$osname" in
vos) testaccess=-e ;;
*)   testaccess=-r ;;
esac
echo '#include <stdio.h>' > foo.c
$cat >fieldn <<EOF
$startsh
$cppstdin $cppflags $cppminus <foo.c 2>/dev/null | \
$grep '^[  ]*#.*stdio\.h' | \
while read cline; do
 pos=1
 set \$cline
 while $test \$# -gt 0; do
  if $test $testaccess \`echo \$1 | $tr -d '"'\`; then
```

```
   echo "\$pos"
   exit 0
  fi
  shift
  pos=\`expr \$pos + 1\`
 done
done
EOF
chmod +x fieldn
fieldn=`./fieldn`
$rm -f foo.c fieldn
;;
esac
case $fieldn in
") pos='???';;
1) pos=first;;
2) pos=second;;
3) pos=third;;
*) pos="${fieldn}th";;
esac
echo "Your cpp writes the filename in the $pos field of the line."

?X: To locate a header file, we cannot simply check for $usrinc/file.h, since
?X: some machine have the headers in weird places and our only hope is that
?X: the C pre-processor
 will know how to find those headers. Thank you NexT!
: locate header file
$cat >findhdr <<EOF
$startsh
wanted=\$1
name=''
for usrincdir in $incpth
do
 if test -f \$usrincdir/\$wanted; then
  echo "\$usrincdir/\$wanted"
  exit 0
 fi
done
awkprg='{ print \$$fieldn }'
echo "#include <\$wanted>" > foo\$\$.c
$cppstdin $cppminus $cppflags < foo\$\$.c 2>/dev/null | \
$cppfilter $grep "^[  ]*#.*\$wanted" | \
while read cline; do
 name=\`echo \$cline | $awk "\$awkprg" | $tr -d '"'\`
 case "\$name" in
 *[/\\\\]\$wanted) echo "\$name"; exit 1;;
 *[\\\\/]\$wanted) echo "\$name"; exit 1;;
 *) exit 2;;
```

```
 esac;
done;
#
# status = 0: grep returned 0 lines, case statement not executed
# status = 1: headerfile found
# status = 2: while loop executed, no headerfile found
#
status=\$?
$rm -f foo\$\$.c;
if test \$status -eq 1; then
 exit 0;
fi
exit 1
EOF
chmod +x findhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Findhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ualarm: Inlibc
?MAKE: -pick add $@ %<
?S:d_ualarm:
?S: This variable conditionally defines the HAS_UALARM symbol, which
?S: indicates to the C program that the ualarm() routine is available.
?S:.
?C:HAS_UALARM:
?C: This symbol, if defined, indicates that the ualarm routine is
?C: available to do alarms with microsecond granularity.
?C:.
?H:#$d_ualarm HAS_UALARM  /**/
?H:.
?LINT:set d_ualarm
: see if ualarm exists
set ualarm d_ualarm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ualarm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_vfork.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_vfork.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  15:05:44  ram
?RCS: patch23: avoid inclusion of <vfork.h> if no vfork() used (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_vfork: Inhdr d_vfork
?MAKE: -pick add $@ %<
?S:i_vfork:
?S: This variable conditionally defines the I_VFORK symbol, and indicates
?S: whether a C program should include vfork.h.
?S:.
?C:I_VFORK:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include vfork.h.
?C:.
?H:#$i_vfork I_VFORK /**/
?H:.
: see if this is a vfork system
case "$d_vfork" in
"$define")
 set vfork.h i_vfork
 eval $inhdr
 ;;
*)
 i_vfork="$undef"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_vfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Inlibc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Inlibc.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  15:55:08  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks for the definition of a given function.
?X:
?X: To use it, say:
?X: set function d_func
?X: eval $inlibc
?X:
?MAKE:Inlibc: Csym Whoa Oldconfig
?MAKE: -pick add $@ %<
?LINT:define inlibc
?V:inlibc
?S:inlibc:
?S: This
 shell variable is used internally by Configure to check
?S: wether a given function is defined or not. A typical use is:
?S:  set function d_func
?S:  eval $inlibc
?S: That will print a message, saying wether function was found or
?S: not and set d_func accordingly.
?S:.
?T:was tx sym tres td tu var
: define an is-in-libc? function
inlibc='echo " "; td=$define; tu=$undef;
sym=$1; var=$2; eval "was=\$$2";
tx=yes;
case "$reuseval$was" in
true) ;;
true*) tx=no;;
esac;
case "$tx" in
yes)
 set $sym tres -f;
 eval $csym;
 case "$tres" in
```

```
 true)
  echo "$sym() found." >&4;
  case "$was" in $undef) . ./whoa; esac; eval "$var=\$td";;
 *)
  echo "$sym() NOT found." >&4;
  case "$was" in $define) . ./whoa; esac; eval "$var=\$tu";;
 esac;;
*)
 case "$was" in
 $define) echo "$sym() found." >&4;;
 *) echo "$sym() NOT found." >&4;;
 esac;;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Inlibc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
?RCS: Copyright (c) 1996, Sven Verdoolaege
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_gnulibc gnulibc_version: Myread Oldconfig Setvar rm_try \
 cat Compile run
?MAKE: -pick add $@ %<
?S:d_gnulibc:
?S: Defined if we're dealing with the GNU C Library.
?S:.
?S:gnulibc_version:
?S: This variable contains the version number of the GNU C library.
?S: It is usually something like '2.2.5'.  It is a plain '' if this
?S: is not the GNU C library, or if the version is unknown.
?S:.
?C:HAS_GNULIBC ~ %<:
?C: This
 symbol, if defined, indicates to the C program that
?C: the GNU C library is being used.  A better check is to use
?C: the __GLIBC__ and __GLIBC_MINOR__ symbols supplied with glibc.
?C:.
?H:?%<:#$d_gnulibc HAS_GNULIBC   /**/
```

```
?H:?%<:#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)
?H:?%<:#define _GNU_SOURCE
?H:?%<:#endif
?H:.
?F:!glibc.ver !try.c !try
?LINT: set d_gnulibc
?LINT: usefile try.c
?LINT: known _GNU_SOURCE
?X: gnulibc can be executed by calling __libc_main().
?X: Ulrich Drepper doesn't think any other libc does that,
?X: but we check if it says 'GNU C Library' to be sure.
?X:
?X: Alas, as of 3/1998 glibc 2.0.7 reportedly isn't going to
?X: have __libc_main() anymore. :-(.  Fortunately, all released
?X: versions of glibc 2.x.x _do_ have CPP variables.  For 2.0.6,
?X: they are:
?X: #define __GLIBC__  2
?X: #define__GLIBC_MINOR__ 0.
?X: (The '6' isn't available :-(.
?X: glibc2.1 will also have
?X:  extern const char * __gnu_get_libc_release(void);
?X:  extern const char *
 __gnu_get_libc_version(void);
?X: functions.   --thanks to Andreas Jaeger.   --AD  6/1998.
?X: Although the exact format isn't documented, __gnu_get_libc_version()
?X: returns a simple string '2.1.3' in glibc 2.1.3.
?X:
: determine whether we are using a GNU C library
echo " "
echo "Checking for GNU C Library..." >&4
cat >try.c <<'EOCP'
/* Find out version of GNU C library.  __GLIBC__ and __GLIBC_MINOR__
  alone are insufficient to distinguish different versions, such as
  2.0.6 and 2.0.7.  The function gnu_get_libc_version() appeared in
  libc version 2.1.0.      A. Dougherty,  June 3, 2002.
*/
#include <stdio.h>
int main(void)
{
#ifdef __GLIBC__
#   ifdef __GLIBC_MINOR__
#       if __GLIBC__ >= 2 && __GLIBC_MINOR__ >= 1
#           include <gnu/libc-version.h>
    printf("%s\n",  gnu_get_libc_version());
#       else
    printf("%d.%d\n",  __GLIBC__, __GLIBC_MINOR__);
#       endif
#   else
```

```
 printf("%d\n",  __GLIBC__);
#   endif
   return 0;
#else
   return 1;
#endif
}
EOCP
set
 try
if eval $compile_ok && $run ./try > glibc.ver; then
 val="$define"
 gnulibc_version=`$cat glibc.ver`
 echo "You are using the GNU C Library version $gnulibc_version"
else
 val="$undef"
 gnulibc_version=''
 echo "You are not using the GNU C Library"
fi
$rm_try glibc.ver
set d_gnulibc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gnulibc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getopt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getopt.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getopt: Inlibc
?MAKE: -pick add $@ %<
?S:d_getopt:
?S: This variable conditionally defines the HAS_GETOPT symbol, which
?S: indicates that the getopt() routine exists.  The getopt() routine
?S: parses command line options in a standard fashion.
?S:.
```

```
?C:HAS_GETOPT (GETOPT):
?C: This symbol, if defined, indicates that the getopt() routine
 exists.
?C:.
?H:#$d_getopt HAS_GETOPT  /**/
?H:.
?LINT:set d_getopt
: see if getopt exists
set getopt d_getopt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getopt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stddef.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stddef.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stddef: Inhdr
?MAKE: -pick add $@ %<
?S:i_stddef:
?S: This variable conditionally defines the I_STDDEF symbol, which
?S: indicates to the C program that <stddef.h> exists and should
?S: be included.
?S:.
?C:I_STDDEF:
?C: This symbol, if defined, indicates that <stddef.h> exists and should
?C: be included.
?C:.
?H:#$i_stddef I_STDDEF /**/
?H:.
?LINT:set
 i_stddef
: see if stddef is available
set stddef.h i_stddef
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_stddef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_statblks.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_statblks: contains Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_statblks:
?S: This variable conditionally defines USE_STAT_BLOCKS if this system
?S: has a stat structure declaring st_blksize and st_blocks.
?S:.
?C:USE_STAT_BLOCKS (STATBLOCKS):
?C: This symbol is defined if this system has a stat structure declaring
?C: st_blksize and st_blocks.
?C:.
?H:#$d_statblks USE_STAT_BLOCKS
  /**/
?H:.
?T:xxx
?LINT:set d_statblks
: see if stat knows about block sizes
echo " "
xxx=`./findhdr sys/stat.h`
if $contains 'st_blocks;' "$xxx" >/dev/null 2>&1 ; then
 if $contains 'st_blksize;' "$xxx" >/dev/null 2>&1 ; then
  echo "Your stat() knows about block sizes." >&4
  val="$define"
 else
  echo "Your stat() doesn't know about block sizes." >&4
  val="$undef"
 fi
else
 echo "Your stat() doesn't know about block sizes." >&4
 val="$undef"
fi
```

```
set d_statblks
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_statblks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usequadmath: Setvar cat uselongdouble
?MAKE: -pick add $@ %<
?S:usequadmath:
?S: This variable conditionally defines the USE_QUADMATH symbol,
?S: and indicates that the quadmath library __float128 long doubles
?S: should be used when available.
?S:.
?C:USE_QUADMATH:
?C: This symbol, if defined, indicates that the quadmath library should
?C: be used when available.
?C:.
?H:?%<:#ifndef USE_QUADMATH
?H:?%<:#$usequadmath USE_QUADMATH  /**/
?H:?%<:#endif
?H:.
: Check if quadmath is requested
case "$usequadmath" in
"$define"|true|[yY]*) usequadmath="$define" ;;
*)                    usequadmath="$undef"  ;;
esac

: Fail if both uselongdouble and usequadmath are requested
case "$usequadmath:$uselongdouble" in
define:define)
 $cat <<EOM >&4

*** You requested the use of
 the quadmath library and use
*** of long doubles.
***
*** Please select one or the other.
EOM
 exit 1
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usequadmath.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprior.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getprior.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getprior: Inlibc
?MAKE: -pick add $@ %<
?S:d_getprior:
?S: This variable conditionally defines HAS_GETPRIORITY if getpriority()
?S: is available to get a process's priority.
?S:.
?C:HAS_GETPRIORITY (GETPRIORITY):
?C: This symbol, if defined, indicates that the getpriority routine is
?C: available to get a process's priority.
?C:.
?H:#$d_getprior
 HAS_GETPRIORITY  /**/
?H:.
: see if getpriority exists
?LINT:set d_getprior
set getpriority d_getprior
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getprior.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ieeefp.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_ieeefp: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_ieeefp:
```

```
?S: This variable conditionally defines the I_IEEEFP symbol, and indicates
?S: whether a C program should include <ieeefp.h>.
?S:.
?C:I_IEEEFP:
?C: This symbol, if defined, indicates that <ieeefp.h> exists and
?C: should be included.
?C:.
?H:#$i_ieeefp I_IEEEFP  /**/
?H:.
?LINT:set i_ieeefp
: see if this is a ieeefp.h system
case "$i_ieeefp" in
" ) set ieeefp.h i_ieeefp
    eval $inhdr
    ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_ieeefp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ftello: Inlibc longsize
?MAKE: -pick add $@ %<
?S:d_ftello:
?S: This variable conditionally defines the HAS_FTELLO symbol, which
?S: indicates to the C program that the ftello() routine is available.
?S:.
?C:HAS_FTELLO:
?C: This symbol, if defined, indicates that the ftello routine is
?C: available to ftell beyond 32 bits (useful for ILP32 hosts).
?C:.
?H:#$d_ftello HAS_FTELLO  /**/
?H:.
?LINT:set d_ftello
: see if ftello exists
set ftello d_ftello
eval $inlibc
case "$longsize" in
8) echo "(Your long is 64 bits, so you could use ftell.)" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ftello.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: uidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:33:25  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:09:36  ram
?RCS: patch30: comment for uidtype referred to the obsoleted symbol
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:28:27  ram
?RCS: patch27: made conform to its gidtype.U companion
?RCS: patch27: question now explicitly mentions getuid()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:56  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:uidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:uidtype:
?S: This variable defines Uid_t to be something like uid_t, int,
?S: ushort, or whatever type is used to declare user ids in the kernel.
?S:.
?C:Uid_t (UIDTYPE):
?C: This symbol holds the type used to declare user ids in the kernel.
?C: It can be int, ushort, uid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Uid_t $uidtype  /* UID type */
?H:.
?T:xxx
: see what type uids are declared as in the kernel
set uid_t uidtype xxx stdio.h sys/types.h
eval $typedef
case "$uidtype" in
xxx)
```

```
 xxx=`./findhdr sys/user.h`
 set `grep '_ruid;' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$uidtype";;
esac
echo " "
rp="What is the type for user ids returned by getuid()?"
. ./myread
uidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/uidtype.U
No license file was found, but licenses were detected in source scan.

Perl5 Metaconfig Units

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Copyright (c) 1999-2011, H.Merijn Brand
All rights reserved.

These units are the ones used to build Configure and config_h.SH
in the Perl5 distribution.

metaconfig will first look in its standard locations (specified when you
installed dist). It will then recurse through the 'U' subdirectory
and find any additional "private" units. Private units override
standard ones supplied with metaconfig.

Files in this directory:

README
This file.

Glossary.patch
The standard dist units contain some strings that make pod2man
complain. This patch silences those warnings. As new units are
added and Configure is regenerated, this patch may need more and more
'fuzz' to be applied. It should be freshly regenerated every once
in a while. See also mkgloss.pl

ln-all.pl
Re-generate the all/ folder

mkglossary

A script
to regenerate Porting/Glossary. You have to manually
edit the top of the script to point the location of your metaconfig
units. It is called automatically by 'mksample'. See also mkgloss.pl

mkgloss.pl
A perl script that calls U/mkglossary from the perl source tree, sorts
the list of symbols, and applies the patch mentioned in Glossary.patch.
When called on its own, redirect the output to a temporary file, and
compare that file to Porting/Glossary before applying.

mksample
A script to regenerate Porting/config.sh and Porting/config.H.
It also calls mkglossary, if necessary.

Subdirectories:

The units and other related files have been broken up into the following
directories.

a_dvisory/
These are units that have to go first in the generated config_h.SH.
A word of explanation: Configure and config_h.SH are generated from 'Units'
(the *.U files). Files indicate dependencies (using make(1)), and
Configure is built to follow those dependencies.
However, config_h.SH
is simply built by putting all the units in alphabetical order and
extracting the relevant lines. (This could be fixed, I suppose, but
it wasn't trivial the one time I looked.)
The a_dvisory/ directory, then, is a place to put units that need
to be early in config_h.SH. (Most units are self-contained
and ought to be able to go anywhere. However, some things, like
byteorder, need to have the #defines from multiarch available.)

acl/
This is an old patch to begin to detect and use ACL (access
control list) file protection schemes.

all/
A folder that conveniently holds symbolic links to all the modules
that are used to build the current Configure and config_h.SH.

compline/
These are similar to the standard units, but I have modified them
to have a more uniform compile command line, usually using the
new Compile.U unit. (The ccflags.U unit is perl-specific since it
mentions -DDEBUGGING and

-DPOSIX_SOURCE, but that's the only place
it is perl-specific.)

dist_patches/
These are patches to dist that must be applied before it is built
and installed. I have submitted these for inclusion in the
regular dist distribution. They have already been applied
to the ../dist-3.0at70b directory.

ebcdic/
These are units that had to be specially modified to work under
either EBCDIC or ASCII.

installdirs/
These are units to handle perl's installation directories and
related issues.

modified/
These are modified versions of the standard units. Also included in
this directory are new units that are clearly derived from existing
units. I have submitted these for inclusion in the regular dist
distribution.

nullified/
These are null units that replace units in the standard
distribution. Typically they are there because some part of the
perl source accidentally uses a symbol that metaconfig thinks means we
want the corresponding
unit.

perl/
These are specific to perl. Some are heavily derived from
original dist units, and are marked as such. Others are original.

perl_patches/
These are patches to the perl source. This directory
should ordinarily be empty, but there may have been drift between
the standard version of perl and the one associated with these
units.

protos/
These are units modified to use the new Hasproto.U or Protochk.U
units to check for prototypes.

threads/
These are specific to threading perl.

typedefs/

These are standard units modified to use the modified Typedef.U unit to check for typedefs. (The modified Typdef.U includes a function to avoid unnecessary prompts if the typdef being searched for exists.)

Where appropriate, I submitted these units for inclusion into the regular dist distribution. However, since dist is no longer actively maintained, and the alternative is for *me* to actively maintain it, the units just
sit here.

Copyright Information:

Unless otherwise indicated, the files contained in this distribution are:

Copyright (c) 1996-1998, Andy Dougherty

The following licensing terms apply to all files contained in this distribution:

You may distribute the files contained in this distribution under the terms of either

a) the "Artistic License" which comes with Perl, or

b) the "Artistic License" which comes with dist, or

c) the GNU General Public License as published by the Free Software Foundation; either version 1, or (at your option) any later version (see the file "Copying" that comes with the Perl distribution).

Which one to use is your choice.

The units in the "modified" directory have been derived from units associated with the metaconfig program of Raphael Manfredi's "dist" distribution. These units list Raphael Manfredi as the Copyright holder. dist is distributed under a modified version of the Perl Artistic License. Clause 7 of this modified
license as contained in dist-3.0-pl60 provides:

7. You may reuse parts of this Package in your own programs, provided that you explicitly state where you got them from, in the source code (and, left to your courtesy, in the documentation), duplicating all the associated copyright notices and disclaimers. Besides your changes, if any, must be clearly marked as such. Parts reused

that way will no longer fall under this license if, and only if,
the name of your program(s) have no immediate connection with the
name of the Package itself or its associated programs. You may then
apply whatever restrictions you wish on the reused parts or choose
to place them in the Public Domain--this will apply only within the
context of your package.

In accordance with this clause, the versions of these units
contained here are made available under the same terms as the
rest of the units.

If you have any questions about the use of these units or about
the differences
between these units and the standard versions, please
feel free to ask.

Andy Dougherty doughera@lafayette.edu
Dept. of Physics
Lafayette College
Easton, PA 18042-1782

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/README
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_access.U,v 3.0 1993/08/18 12:05:42 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_access.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_access: test +cc cat +cppflags h_fcntl h_sysfile i_stdlib rm Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_access:
?S: This variable conditionally defines HAS_ACCESS if the access() system
?S: call is available to check for access permissions using real IDs.
?S:.
?C:HAS_ACCESS:
?C: This manifest constant lets the C program know that the access()
?C: system
```

```
 call is available to check for accessibility using real UID/GID.
?C: (always present on UNIX.)
?C:.
?H:#$d_access HAS_ACCESS  /**/
?H:.
?W:%<:R_OK W_OK X_OK F_OK
?LINT:set d_access
?LINT:change h_fcntl h_sysfile
: access call always available on UNIX
set access d_access
eval $inlibc

: locate the flags for 'access()'
case "$d_access" in
"$define")
 echo " "
 $cat >access.c <<EOCP
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#ifdef I_UNISTD
#include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 exit(R_OK);
}
EOCP
 : check sys/file.h first, no particular reason here
 if $test `./findhdr sys/file.h` && \
  $cc -o access $cppflags -DI_SYS_FILE access.c >/dev/null 2>&1 ; then
  h_sysfile=true;
  echo "<sys/file.h> defines the *_OK access constants." >&4
 elif $test `./findhdr fcntl.h` && \
  $cc -o access $cppflags -DI_FCNTL access.c >/dev/null 2>&1 ; then
  h_fcntl=true;
  echo
 "<fcntl.h> defines the *_OK access constants." >&4
@if I_UNISTD
 elif $test `./findhdr unistd.h` && \
  $cc -o access $cppflags -DI_UNISTD access.c >/dev/null 2>&1 ; then
```

```
  echo "<unistd.h> defines the *_OK access constants." >&4
@end
 else
  echo "I can't find the four *_OK access constants--I'll use mine." >&4
 fi
 ;;
esac
$rm -f access*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_access.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_attribut.U,v $
?RCS: Revision 3.0.1.3  1995/01/30  14:33:45  ram
?RCS: patch49: test C program now includes <stdio.h> (WED)
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:25:47  ram
?RCS: patch45: fixed typo in the d_attribut variable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:55  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_attribut: Myread Oldconfig cat cc ccflags rm Setvar contains
?MAKE: -pick add $@ %<
?S:d_attribut
 (d_attrib):
?S: This variable conditionally defines HASATTRIBUTE, which
?S: indicates the C compiler can check for function attributes,
?S: such as printf formats.
?S:.
?C:HASATTRIBUTE ~ %< (GNUC_ATTRIBUTE_CHECK):
?C: This symbol indicates the C compiler can check for function attributes,
?C: such as printf formats. This is normally only supported by GNU cc.
?C:.
?H:?%<:#$d_attribut HASATTRIBUTE  /**/
```

```
?H:?%<:#ifndef HASATTRIBUTE
?H:?%<:#define __attribute__(_arg_)
?H:?%<:#endif
?H:.
?W:%<:__attribute__
?LINT:set d_attribut
?LINT:known __attribute__
: Look for GNU-cc style attribute checking
echo " "
echo "Checking whether your compiler can handle __attribute__ ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void croak (char* pat,...) __attribute__((format(printf,1,2),noreturn));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $contains 'warning' attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't fully support __attribute__."
  val="$undef"
 else
  echo
 "Your C compiler supports __attribute__."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
set d_attribut
eval $setvar
$rm -f attrib*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_attribut.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017, 2019, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_wctype: Inhdr
?MAKE: -pick add $@ %<
?S:i_wctype:
```

```
?S: This variable conditionally defines the I_WCTYPE symbol,
?S: that indicates whether a C program may include <wctype.h>.
?S:.
?C:I_WCTYPE:
?C: This symbol, if defined, indicates that <wctype.h> exists.
?C:.
?H:#$i_wctype I_WCTYPE  /**/
?H:.
?LINT:set i_wctype
: see if this system has wctype.h
set wctype.h i_wctype
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_wctype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitelib.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitelib.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:21:35  ram
?RCS: patch61: created
?RCS:
?MAKE:sitelib sitelibexp installsitelib sitelib_stem: cat Getfile Oldconfig \
 Setprefixvar Prefixit package version sed installstyle siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitelib=''
?S:sitelib:
?S: This variable contains the
 eventual value of the SITELIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S: The standard distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
```

```
?S: architecture-independent modules in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitelibexp="
?S:sitelibexp:
?S: This variable is the ~name expanded version of sitelib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installsitelib="
?S:installsitelib:
?S: This variable is really the same as sitelibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:sitelib_stem:
?S: This variable is $sitelibexp with any trailing version-specific component
?S: removed.
  The elements in inc_version_list (inc_version_list.U) can
?S: be tacked onto this variable to generate a list of directories to search.
?S:.
?C:SITELIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: After perl has been installed, users may install their own local
?C: architecture-independent modules in this directory with
?C:  MakeMaker Makefile.PL
?C: or equivalent.  See INSTALL for details.
?C:.
?C:SITELIB_EXP:
?C: This symbol contains the ~name expanded version of SITELIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?C:SITELIB_STEM:
?C: This define is SITELIB_EXP with any trailing version-specific component
?C: removed.  The elements in
 inc_version_list (inc_version_list.U) can
?C: be tacked onto this variable to generate a list of directories to search.
?C:.
?H:#define SITELIB "$sitelib"  /**/
?H:#define SITELIB_EXP "$sitelibexp"  /**/
?H:#define SITELIB_STEM "$sitelib_stem"  /**/
?H:.
?T:prog
?LINT:change prefixvar
```

```
?LINT:set installsitelib
?LINT:set sitelib
?LINT:set sitelibexp
: determine where site specific libraries go.
: Usual default is /usr/local/lib/perl5/site_perl/$version
: The default "style" setting is made in installstyle.U
: XXX No longer works with Prefixit stuff.
?X: remove any trailing -3.0 or other version identification
prog=`echo $package | $sed 's/-*[0-9.]*$//'`
case "$sitelib" in
") case "$installstyle" in
 *lib/perl5*) dflt=$siteprefix/lib/$package/site_$prog/$version ;;
 *)  dflt=$siteprefix/lib/site_$prog/$version ;;
 esac
 ;;
*) dflt="$sitelib"
 ;;
esac
$cat <<EOM

The installation process will create a directory for
site-specific extensions and modules.  Most users find it convenient
to place
 all site-specific files in this directory rather than in the
main distribution directory.

EOM
fn=d~+
rp='Pathname for the site-specific library files?'
. ./getfile
prefixvar=sitelib
. ./setprefixvar
sitelib_stem=`echo "$sitelibexp" | sed "s,/$version$,,"`
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitelib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?MAKE:d_getspnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getspnam:
?S: This variable conditionally defines HAS_GETSPNAM if getspnam() is
?S: available to retrieve SysV shadow password entries by name.
?S:.
?C:HAS_GETSPNAM:
?C: This symbol, if defined, indicates that the getspnam system call is
?C: available to retrieve SysV shadow password entries by name.
?C:.
?H:#$d_getspnam HAS_GETSPNAM  /**/
?H:.
?LINT:set d_getspnam
: see if getspnam exists
set getspnam d_getspnam
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getspnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2019 Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_towupper: Inlibc
?MAKE: -pick add $@ %<
?S:d_towupper:
?S: This variable conditionally defines the HAS_TOWUPPER symbol, which
?S: indicates to the C program that the towupper() routine is available.
?S:.
?C:HAS_TOWUPPER:
?C: This symbol, if defined, indicates that the towupper () routine is
?C: available to do case conversion.
?C:.
?H:#$d_towupper HAS_TOWUPPER  /**/
?H:.
?LINT:set d_towupper
: see if towupper exists
set towupper d_towupper
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_towupper.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: ccflags.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:27:07  ram
?RCS: patch61: removed support for NO_PROTOTYPE detection on SCO
?RCS: patch61: new locincpth variable
?RCS: patch61: added info on the "additional ld flags" question
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:48:54  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.7  1995/05/12  12:08:33  ram
?RCS: patch54: now checks for cc/ccflags/ldflags coherency
?RCS:
?RCS: Revision 3.0.1.6
  1994/10/29  16:07:02  ram
?RCS: patch36: gcc versioning no longer relies on the C compiler's name
?RCS: patch36: simplified check for gcc version checking (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:06:35  ram
?RCS: patch32: propagate -posix flag from ccflags to ldflags
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:28:45  ram
?RCS: patch23: -fpcc-struct-return only needed in gcc 1.x (ADO)
?RCS: patch23: cppflags now computed on an option-by-option basis
?RCS: patch23: magically added cc flags now only done the first time
?RCS:
?RCS: Revision 3.0.1.3  1993/09/13  15:58:29  ram
?RCS: patch10: explicitly mention -DDEBUG just in case they need it (WAD)
?RCS: patch10: removed all the "tans" variable usage (WAD)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/27  14:39:38  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:24  ram
?RCS: patch6: added defaults for cppflags, ccflags and ldflags
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:31  ram
```

```
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ccflags ldflags lkflags cppflags optimize locincpth: test cat \
 Myread Guess Options Oldconfig gccversion mips_type +usrinc \
 package contains rm rm_try +cc cppstdin cppminus cpprun cpplast libpth \
 loclibpth hint
?MAKE: -pick add $@ %<
?S:ccflags:
?S: This variable contains any additional C compiler flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:cppflags:
?S: This variable holds the flags that will be passed to the C pre-
?S: processor. It is up to the Makefile to use it.
?S:.
?S:optimize:
?S: This variable contains any optimizer/debugger flag that should be used.
?S: It is up to the Makefile to use it.
?S:.
?S:ldflags:
?S: This variable contains any additional C loader flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:lkflags:
?S: This variable contains any additional C partial linker flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:locincpth:
?S: This
 variable contains a list of additional directories to be
?S: searched by the compiler.  The appropriate -I directives will
?S: be added to ccflags.  This is intended to simplify setting
?S: local directories from the Configure command line.
?S: It's not much, but it parallels the loclibpth stuff in libpth.U.
?S:.
?T:inctest thisincl xxx flag inclwanted ftry previous thislibdir
?F:!cpp.c
?D:cppflags=''
?D:ccflags=''
?D:ldflags=''
?D:optimize=''
?INIT:: Possible local include directories to search.
?INIT:: Set locincpth to "" in a hint file to defeat local include searches.
?INIT:locincpth="/usr/local/include /opt/local/include /usr/gnu/include"
?INIT:locincpth="$locincpth /opt/gnu/include /usr/GNU/include /opt/GNU/include"
?INIT::
?INIT:: no include file wanted by default
```

```
?INIT:inclwanted="
?INIT:
: determine optimize, if desired, or use for debug flag also
case "$optimize" in
' '|$undef) dflt='none';;
")
 case "$gccversion" in
 ") dflt='-O';;
 *) dflt='-O2 -g';;
 esac
 ;;
*)
 dflt="$optimize";;
esac
case "$gccversion" in
") $cat <<EOH

Some C compilers have problems with their optimizers.  By default, $package
compiles with the -O flag to use the optimizer.  Alternately, you might want
to use the symbolic debugger, which uses the -g flag (on traditional Unix
systems).  Either flag can be specified here.  To use neither flag, specify
the word "none".

EOH
 ;;
*) $cat <<EOH

With the GNU C compiler, it is possible to supply both -O2 and -g flags, to
be able to reasonably optimize, whilst retaining the ability to use a
symbolic debugger.  Either flag can be specified here.  To use neither flag,
specify the word "none".

EOH
 ;;
esac
rp="What optimizer/debugger flag should be used?"
. ./myread
optimize="$ans"
case "$optimize" in
'none') optimize=" ";;
esac

dflt="
: We will not override a previous value, but we might want to
: augment a hint file
case "$hint" in
default|recommended)
 case "$gccversion" in
```

```
 1*) dflt='-fpcc-struct-return' ;;
 esac
?X:
 check for POSIXized ISC
 case "$gccversion" in
 2*) if test -d /etc/conf/kconfig.d &&
   $contains _POSIX_VERSION $usrinc/sys/unistd.h >/dev/null 2>&1
  then
   dflt="$dflt -posix"
  fi
  ;;
 esac
?X: turn warnings on if they're using gcc
 case "$gccversion" in
 1*|2*) dflt="$dflt -Wall";;
?X: starting with version 3, add "-W -Wall -Wformat=2 -Wshadow" by default
 *) dflt="$dflt -W -Wall -Wformat=2 -Wshadow";;
 esac
 ;;
esac

?X: In USG mode, a MIPS system may need some BSD includes
case "$mips_type" in
*BSD*|") inclwanted="$locincpth $usrinc";;
*) inclwanted="$locincpth $inclwanted $usrinc/bsd";;
esac
for thisincl in $inclwanted; do
 if $test -d $thisincl; then
  if $test x$thisincl != x$usrinc; then
   case "$dflt" in
   *$thisincl*);;
   *) dflt="$dflt -I$thisincl";;
   esac
  fi
 fi
done

?X: Include test function (header, symbol)
inctest='if $contains $2 $usrinc/$1 >/dev/null 2>&1; then
 xxx=true;
elif $contains $2 $usrinc/sys/$1 >/dev/null 2>&1; then
 xxx=true;
else
 xxx=false;
fi;
if
 $xxx; then
 case "$dflt" in
```

```
 *$2*);;
 *) dflt="$dflt -D$2";;
 esac;
fi'

?X:
?X: OSF/1 uses __LANGUAGE_C__ instead of LANGUAGE_C
?X:
if ./osf1; then
 set signal.h __LANGUAGE_C__; eval $inctest
else
 set signal.h LANGUAGE_C; eval $inctest
fi

case "$hint" in
default|recommended) dflt="$ccflags $dflt" ;;
*) dflt="$ccflags";;
esac

case "$dflt" in
"|' ') dflt=none;;
esac
$cat <<EOH

Your C compiler may want other flags.  For this question you should include
-I/whatever and -DWHATEVER flags and any other flags used by the C compiler,
but you should NOT include libraries or ld flags like -lwhatever.

To use no flags, specify the word "none".

EOH
?X: strip leading space
set X $dflt
shift
dflt=${1+"$@"}
rp="Any additional cc flags?"
. ./myread
case "$ans" in
none) ccflags="";;
*) ccflags="$ans";;
esac

: the following weeds options from ccflags that are of no interest to cpp
cppflags="$ccflags"
case "$gccversion" in
1*) cppflags="$cppflags -D__GNUC__"
esac
case "$mips_type" in
```

```
");;
*BSD*)
 cppflags="$cppflags -DSYSTYPE_BSD43";;
esac
case "$cppflags" in
");;
*)
 echo " "
 echo "Let me guess what the preprocessor flags are..." >&4
 set X $cppflags
 shift
 cppflags="
 $cat >cpp.c <<'EOM'
#define BLURFL foo

BLURFL xx LFRULB
EOM
?X:
?X: For each cc flag, try it out with both cppstdin and cpprun, since the
?X: first is almost surely a cc wrapper. We have to try both in case
?X: of cc flags like '-Olimit 2900' that are actually two words...
?X:
 previous="
 for flag in $*
 do
  case "$flag" in
  -*) ftry="$flag";;
  *) ftry="$previous $flag";;
  esac
  if $cppstdin -DLFRULB=bar $ftry $cppminus <cpp.c \
   >cpp1.out 2>/dev/null && \
   $cpprun -DLFRULB=bar $ftry $cpplast <cpp.c \
   >cpp2.out 2>/dev/null && \
   $contains 'foo.*xx.*bar' cpp1.out >/dev/null 2>&1 && \
   $contains 'foo.*xx.*bar' cpp2.out >/dev/null 2>&1
  then
   cppflags="$cppflags $ftry"
   previous="
  else
   previous="$flag"
  fi
 done
 set X $cppflags
 shift
 cppflags=${1+"$@"}
 case "$cppflags"
 in
 *-*)  echo "They appear to be: $cppflags";;
```

```
 esac
 $rm -f cpp.c cpp?.out
 ;;
esac

: flags used in final linking phase
case "$ldflags" in
") if ./venix; then
  dflt='-i -z'
 else
  dflt="
 fi
 case "$ccflags" in
 *-posix*) dflt="$dflt -posix" ;;
 esac
 ;;
*) dflt="$ldflags";;
esac

: Try to guess additional flags to pick up local libraries.
for thislibdir in $libpth; do
 case " $loclibpth " in
 *" $thislibdir "*)
  case "$dflt " in
  *"-L$thislibdir "*) ;;
  *)  dflt="$dflt -L$thislibdir" ;;
  esac
  ;;
 esac
done

case "$dflt" in
") dflt='none' ;;
*) set X $dflt; shift; dflt="$@";;
esac

$cat <<EOH

Your C linker may need flags.  For this question you should
include -L/whatever and any other flags used by the C linker, but you
should NOT include libraries like -lwhatever.

Make sure you include the appropriate -L/path flags if your C linker
does not normally search all of the directories you specified above,
namely
 $libpth
To use no flags, specify the word "none".
```

```
EOH

rp="Any
 additional ld flags (NOT including libraries)?"
. ./myread
case "$ans" in
none) ldflags="";;
*) ldflags="$ans";;
esac
rmlist="$rmlist pdp11"

@if lkflags
: partial linking may need other flags
case "$lkflags" in
") case "$ldflags" in
 ") dflt='none';;
 *) dflt="$ldflags";;
 esac;;
*) dflt="$lkflags";;
esac
echo " "
rp="Partial linking flags to be used (NOT including -r)?"
. ./myread
case "$ans" in
none) lkflags="";;
*) lkflags="$ans";;
esac

@end
?X:
?X: If the user changes compilers after selecting a hint file, it's
?X: possible that the suggested ccflags/ldflags will be wrong.  Try to
?X: compile and run a simple test program.  Let the user see all the
?X: error messages. -- ADO and RAM
?X:
: coherency check
echo " "
echo "Checking your choice of C compiler and flags for coherency..." >&4
?X: Strip extra blanks in case some of the following variables are empty
set X $cc $optimize $ccflags $ldflags -o try try.c
shift
$cat >try.msg <<EOM
I've tried to compile and run a simple program
 with:

 $*
 ./try
```

and I got the following output:

```
EOM
$cat > try.c <<'EOF'
#include <stdio.h>
int main() { exit(0); }
EOF
dflt=y
?X: Use "sh -c" to avoid error messages tagged with leading "Configure:".
?X: We need to try the resulting executable, because cc might yield a 0 status
?X: even when ld failed, in which case the executable will not run properly,
?X: if its x bit is set at all...
if sh -c "$cc $optimize $ccflags $ldflags -o try try.c" >>try.msg 2>&1; then
 if sh -c './try' >>try.msg 2>&1; then
  dflt=n
 else
  echo "The program compiled OK, but exited with status $?." >>try.msg
  rp="You have a problem.  Shall I abort Configure"
  dflt=y
 fi
else
 echo "I can't compile the test program." >>try.msg
 rp="You have a BIG problem.  Shall I abort Configure"
 dflt=y
fi
case "$dflt" in
y)
 $cat try.msg >&4
?X: using -K will prevent default aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
  echo "(The supplied flags might be incorrect with this C compiler.)"
  ;;
 *)
 dflt=n;;
 esac
 echo " "
 . ./myread
 case "$ans" in
 n*|N*) ;;
 *) echo "Ok.  Stopping Configure." >&4
  exit 1
  ;;
 esac
 ;;
n) echo "OK, that should do.";;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ccflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrgid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrgid_r getgrgid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrgid_r:
?S: This variable conditionally defines the HAS_GETGRGID_R symbol,
?S: which indicates to the C program that the getgrgid_r()
?S: routine is available.
?S:.
?S:getgrgid_r_proto:
?S: This variable encodes the prototype of getgrgid_r.
?S: It is zero if d_getgrgid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrgid_r
?S: is defined.
?S:.
?C:HAS_GETGRGID_R:
?C: This symbol, if defined, indicates that the getgrgid_r routine
?C: is available to
 getgrgid re-entrantly.
?C:.
?C:GETGRGID_R_PROTO:
?C: This symbol encodes the prototype of getgrgid_r.
?C: It is zero if d_getgrgid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrgid_r
?C: is defined.
?C:.
?H:#$d_getgrgid_r HAS_GETGRGID_R /**/
?H:#define GETGRGID_R_PROTO $getgrgid_r_proto /**/
?H:.
?T:try hdrs d_getgrgid_r_proto
: see if getgrgid_r exists
set getgrgid_r d_getgrgid_r
eval $inlibc
case "$d_getgrgid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
```

```
case "$d_getgrgid_r_proto:$usethreads" in
":define") d_getgrgid_r_proto=define
 set d_getgrgid_r_proto getgrgid_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_getgrgid_r_proto" in
define)
case "$getgrgid_r_proto" in
"|0) try='int getgrgid_r(gid_t, struct group*, char*, size_t, struct group**);'
./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBWR ;;
esac
case "$getgrgid_r_proto" in
"|0) try='int getgrgid_r(gid_t, struct group*, char*, int, struct
group**);'
./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBIR ;;
esac
case "$getgrgid_r_proto" in
"|0) try='int getgrgid_r(gid_t, struct group*, char*, int);'
./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBI ;;
esac
case "$getgrgid_r_proto" in
"|0) try='struct group* getgrgid_r(gid_t, struct group*, char*, int);'
./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=S_TSBI ;;
esac
case "$getgrgid_r_proto" in
"|0) d_getgrgid_r=undef
 getgrgid_r_proto=0
 echo "Disabling getgrgid_r, cannot determine prototype." >&4 ;;
* ) case "$getgrgid_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getgrgid_r_proto="REENTRANT_PROTO_$getgrgid_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getgrgid_r has no prototype, not using it." >&4 ;;
 esac
 d_getgrgid_r=undef
 getgrgid_r_proto=0
 ;;
esac
;;
*) getgrgid_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrgid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tzname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tzname.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:14:43  ram
?RCS: patch32: forgot to set proper value in the val variable
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:57:55  ram
?RCS: patch30: created
?RCS:
?MAKE:d_tzname: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_tzname:
?S: This variable conditionally defines HAS_TZNAME if tzname[] is
?S: available to access timezone names.
?S:.
?C:HAS_TZNAME:
?C: This symbol, if defined, indicates that the tzname[]
 array is
?C: available to access timezone names.
?C:.
?H:#$d_tzname HAS_TZNAME  /**/
?H:.
?LINT:set d_tzname
: see if tzname[] exists
echo " "
if set tzname val -a d_tzname; eval $csym; $val; then
 val="$define"
 echo 'tzname[] found.' >&4
else
 val="$undef"
 echo 'tzname[] NOT found.' >&4
fi
set d_tzname
eval $setvar
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tzname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:56:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: added support for HPUX-10 nm output
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  14:11:56  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:20:47  ram
?RCS: patch54: made sure only most recent version of shared lib is picked
?RCS: patch54: final "nm -p" check now uses xscan and xrun like everybody
?RCS: patch54: can now grok
 linux nm output with lead __IO (ADO)
?RCS: patch54: added support for linux ELF output, using 'W' for alias (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1994/10/29  16:23:40  ram
?RCS: patch36: now looks for shared libraries before anything else (ADO)
?RCS: patch36: added new nm output format (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1994/08/29  16:28:10  ram
?RCS: patch32: added I-type symbols for nm output parsing on Linux
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  07:03:24  ram
?RCS: patch30: checks are now presented by succession of if/elif
?RCS: patch30: uniformized checks for shared objects with new so symbol
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  15:06:33  ram
?RCS: patch23: added shared library knowledge (ADO and WED)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:12:17  ram
?RCS: patch16: can now export nm_extract as an internal-use only variable
?RCS:
?RCS: Revision 3.0.1.2  1993/09/13  16:09:03  ram
?RCS: patch10: added special handling for Apollo systems (WAD)
?RCS:
```

```
?RCS: Revision 3.0.1.1
  1993/08/27  14:40:03  ram
?RCS: patch7: added entry for /usr/shlib/libc.so (OSF/1 machines)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libc libnames +nm_extract: echo n c rm test grep Getfile Myread \
 Oldconfig Loc sed libs incpath libpth ar runnm nm nm_opt nm_so_opt \
 contains xlibpth so osname trnl tr sort uniq _o _a
?MAKE: -pick add $@ %<
?S:libc:
?S: This variable contains the location of the C library.
?S:.
?S:libnames:
?S: The constructed list of library names.  Normally empty, but hint files
?S: may set this for later perusal by Configure.
?S:.
?S:nm_extract:
?S: This variable holds the name of the extraction command used to process
?S: the output of nm and yield the list of defined symbols. It is used
?S: internally by Configure.
?S:.
?T:thislib try libnames xxx xscan xrun thisname com tans file
?F:!libnames !libc.tmp !tmp.imp
?LINT:change nm_opt runnm
?INIT:libnames=''
: Figure out where the libc is located
case
 "$runnm" in
true)
?X: indentation is wrong on purpose--RAM
: get list of predefined functions in a handy place
echo " "
case "$libc" in
'') libc=unknown
 case "$libs" in
 *-lc_s*) libc=`./loc libc_s$_a $libc $libpth`
 esac
 ;;
esac
case "$libs" in
'') ;;
*)  for thislib in $libs; do
 case "$thislib" in
 -lc|-lc_s)
  : Handle C library specially below.
  ;;
```

```
 -l*)
  thislib=`echo $thislib | $sed -e 's/^-l//'`
  if try=`./loc lib$thislib.$so.'*' X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib.$so X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc Slib$thislib$_a X $xlibpth`; $test -f "$try"; then
   :
  else
   try=''
  fi
  libnames="$libnames $try"
  ;;
 *) libnames="$libnames $thislib"
 ;;
 esac
 done
 ;;
esac
?X:
?X: Some systems (e.g. DG/UX) use "environmental" links, which make the test
?X: -f fail. Ditto for symbolic links. So in order to reliably check the
?X: existence of a file, we use test -r. It will still fail with DG/UX links
?X: though, but at least it will detect symbolic links. At some strategic
?X: points, we make use of (test -h), using a sub-shell in case builtin test
?X: does not implement the -h check for symbolic links. This makes it
?X: possible to preset libc in a hint file for instance and have it show up
?X: as-is in the question.
?X:
xxx=normal
case "$libc" in
unknown)
?X:
?X: The sed below transforms .so.9 .so.12 into something like .so.0009 .so.0012,
?X: then sorts on it to allow keeping .so.12 instead of .so.9 as the latest
?X: up-to-date library. The initial filename (before sed munging, saved in hold
?X: space via 'h') is appended via 'G' before sorting, then the leading munged
?X: part is removed after sorting. Nice efficient work
 from Tye McQueen.
?X: The initial blurfl is here to prevent the trailing pipe from producing an
```

```
?X: empty string, causing Configure to output all its set variables!
?X:
 set /lib/libc.$so
 for xxx in $libpth; do
  $test -r $1 || set $xxx/libc.$so
  : The messy sed command sorts on library version numbers.
  $test -r $1 || \
   set `echo blurfl; echo $xxx/libc.$so.[0-9]* | \
   tr ' ' $trnl | egrep -v '\.[A-Za-z]*$' | $sed -e '
    h
    s/[0-9][0-9]*/0000&/g
    s/0*\([0-9][0-9][0-9][0-9][0-9]\)/\1/g
    G
    s/\n/ /' | \
    $sort | $sed -e 's/^.* //'`
  eval set \$$#
 done
 $test -r $1 || set /usr/ccs/lib/libc.$so
 $test -r $1 || set /lib/libsys_s$_a
 ;;
*)
?X: ensure the test below for the (shared) C library will fail
 set blurfl
 ;;
esac
if $test -r "$1"; then
 echo "Your (shared) C library seems to be in $1."
 libc="$1"
elif $test -r /lib/libc && $test -r /lib/clib; then
?X:
?X: Apollo has its C library in /lib/clib AND /lib/libc
?X: not to mention its math library in /lib/syslib...
?X:
 echo
 "Your C library seems to be in both /lib/clib and /lib/libc."
 xxx=apollo
 libc='/lib/clib /lib/libc'
 if $test -r /lib/syslib; then
  echo "(Your math library is in /lib/syslib.)"
?X: Put syslib in libc -- not quite right, but won't hurt
  libc="$libc /lib/syslib"
 fi
elif $test -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 echo "Your C library seems to be in $libc, as you said before."
?X: For mips, and...
elif $test -r $incpath/usr/lib/libc$_a; then
 libc=$incpath/usr/lib/libc$_a;
 echo "Your C library seems to be in $libc.  That's fine."
```

```
elif $test -r /lib/libc$_a; then
 libc=/lib/libc$_a;
 echo "Your C library seems to be in $libc.  You're normal."
else
 if tans=`./loc libc$_a blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc libc blurfl/dyick $libpth`; $test -r "$tans"; then
  libnames="$libnames "`./loc clib blurfl/dyick $libpth`
 elif tans=`./loc clib blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Slibc$_a blurfl/dyick
 $xlibpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Mlibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 else
  tans=`./loc Llibc$_a blurfl/dyick $xlibpth`
 fi
 if $test -r "$tans"; then
  echo "Your C library seems to be in $tans, of all places."
  libc=$tans
 else
  libc='blurfl'
 fi
fi
if $test $xxx = apollo -o -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 dflt="$libc"
 cat <<EOM

If the guess above is wrong (which it might be if you're using a strange
compiler, or your machine supports multiple models), you can override it here.

EOM
else
 dflt=''
 echo $libpth | $tr ' ' $trnl | $sort | $uniq > libpath
 cat >&4 <<EOM
I can't seem to find your C library.  I've looked in the following places:

EOM
 $sed 's/^/ /' libpath
 cat <<EOM

None of these seems to contain your C library. I need to get its name...

EOM
fi
fn=f
```

```
rp='Where is your C library?'
. ./getfile
libc="$ans"

echo " "
echo $libc $libnames | $tr ' ' $trnl | $sort | $uniq > libnames
set X `cat libnames`
shift
xxx=files
case
 $# in 1) xxx=file; esac
echo "Extracting names from the following $xxx for later perusal:" >&4
echo " "
$sed 's/^/ /' libnames >&4
echo " "
$echo $n "This may take a while...$c" >&4

?X:
?X: Linux may need the special Dynamic option to nm for shared libraries.
?X: In general, this is stored in the nm_so_opt variable.
?X: Unfortunately, that option may be fatal on non-shared libraries.
?X:
for file in $*; do
 case $file in
 *$so*) $nm $nm_so_opt $nm_opt $file 2>/dev/null;;
 *) $nm $nm_opt $file 2>/dev/null;;
 esac
done >libc.tmp

$echo $n ".$c"
?X:
?X: To accelerate processing, we look at the correct 'sed' command
?X: by using a small subset of libc.tmp, i.e. fprintf function.
?X: When we know which sed command to use, do the name extraction
?X:
$grep fprintf libc.tmp > libc.ptf
?X:
?X: In order to enhance readability and save some space, we define
?X: some variables that will be "eval"ed.
?X:
xscan='eval "<libc.ptf $com >libc.list"; $echo $n ".$c" >&4'
xrun='eval
 "<libc.tmp $com >libc.list"; echo "done." >&4'
?X: BSD-like output, I and W types added for Linux
?X: Some versions of Linux include a leading __IO in the symbol name.
?X: HPUX10 reportedly has trailing spaces, though I'm surprised it has
?X: BSD-like output.  (AD).
xxx='[ADTSIW]'
```

```
if com="$sed -n -e 's/__IO//' -e 's/^.* $xxx  *_[_.]*//p' -e 's/^.* $xxx  *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: SYSV-like output
elif com="$sed -n -e 's/^__*//' -e 's/^\([a-zA-Z_0-9$]*\).*xtern.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/|UNDEF/d' -e '/FUNC..GL/s/^.*|__*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.* D __*//p' -e 's/^.* D //p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^_//' -e 's/^\([a-zA-Z_0-9]*\).*xtern.*text.*/\1/p'";\
 eval
 $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$grep '|' | $sed -n -e '/|COMMON/d' -e '/|DATA/d' \
   -e '/ file/d' -e 's/^\([^  ]*\).*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p' -e 's/^.*|FUNC |WEAK .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: mips nm output (sysV)
elif com="$sed -n -e 's/^__//' -e '/|Undef/d' -e '/|Proc/s/ .*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|Proc .*|Text *| *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/Def. Text/s/.* \([^ ]*\)\$/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null
```

```
 2>&1; then
  eval $xrun
?X: OS/2 nm output
elif com="$sed -n -e 's/^[-0-9a-f ]*_\(.*\)=.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/.*\.text n\ \ \ \.//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: AIX nm output
elif com="sed -n -e 's/^__.*//' -e 's/[       ]*D[    ]*[0-9]*.*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
else
 $nm -p $* 2>/dev/null >libc.tmp
 $grep fprintf libc.tmp > libc.ptf
 if com="$sed -n -e 's/^.* [ADTSIW]  *_[_.]*//p' -e 's/^.* [ADTSIW] //p'";\
  eval $xscan; $contains '^fprintf$' libc.list >/dev/null 2>&1
 then
  nm_opt='-p'
  eval $xrun
 else
  echo " "
  echo "$nm didn't seem to work right. Trying $ar instead..." >&4
  com="
  if $ar t $libc > libc.tmp && \
   $contains '^fprintf$' libc.tmp >/dev/null 2>&1
  then
   for thisname in $libnames $libc; do
    $ar t $thisname >>libc.tmp
   done
   $sed
 -e "s/\\$_o\$//" < libc.tmp > libc.list
   echo "Ok." >&4
  elif test "X$osname" = "Xos2" && $ar tv $libc > libc.tmp; then
?X: Repeat libc to extract forwarders to DLL entries too
   for thisname in $libnames $libc; do
    $ar tv $thisname >>libc.tmp
?X: Revision 50 of EMX has bug in ar: it will not extract forwarders
?X: to DLL entries.  Use emximp which will extract exactly them.
    emximp -o tmp.imp $thisname \
        2>/dev/null && \
        $sed -e 's/^\([_a-zA-Z0-9]*\) .*$/\1/p' \
        < tmp.imp >>libc.tmp
    $rm -f tmp.imp
```

```
  done
  $sed -e "s/\\$_o\$//" -e 's/^ \+//' < libc.tmp > libc.list
  echo "Ok." >&4
 else
  echo "$ar didn't seem to work right." >&4
  echo "Maybe this is a Cray...trying bld instead..." >&4
  if
   bld t $libc | \
    $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" > libc.list &&
   $test -s libc.list
  then
   for thisname in $libnames; do
    bld t $libnames | \
    $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" >>libc.list
    $ar t $thisname >>libc.tmp
   done
   echo
 "Ok." >&4
  else
   echo "That didn't work either." >&4
   echo "No problem, I'll be compiling test programs then..." >&4
   runnm=false
  fi
 fi
fi
nm_extract="$com"
if $test -f /lib/syscalls.exp; then
 echo " "
 echo "Also extracting names from /lib/syscalls.exp for good ole AIX..." >&4
 $sed -n 's/^\([^  ]*\)[  ]*syscall[0-9]*[  ]*$/\1/p' \
  /lib/syscalls.exp >>libc.list
fi
?X: remember, indentation is wrong on purpose--RAM
;;
esac
$rm -f libnames libpath
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stdlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdlib: Inhdr
?MAKE: -pick add $@ %<
?S:i_stdlib:
?S: This variable conditionally defines the I_STDLIB symbol, which
?S: indicates to the C program that <stdlib.h> exists and should
?S: be included.
?S:.
?C:I_STDLIB:
?C: This symbol, if defined, indicates that <stdlib.h> exists and should
?C: be included.
?C:.
?H:#$i_stdlib I_STDLIB  /**/
?H:.
?LINT:set
 i_stdlib
: see if stdlib is available
set stdlib.h i_stdlib
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_stdlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_unordered: Inlibc
?MAKE: -pick add $@ %<
?S:d_unordered:
?S: This variable conditionally defines the HAS_UNORDERED symbol, which
?S: indicates to the C program that the unordered() routine is available.
?S:.
?C:HAS_UNORDERED:
?C: This symbol, if defined, indicates that the unordered routine is
?C: available to check whether two doubles are unordered
?C: (effectively: whether either of them is NaN)
```

```
?C:.
?H:#$d_unordered HAS_UNORDERED  /**/
?H:.
?LINT:set d_unordered
: see if unordered exists
set unordered d_unordered
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_unordered.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Loc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:04:16  ram
?RCS: patch61: allow users to specify paths on the command line
?RCS: patch61: will now substitute cp for ln if not supported
?RCS:
?RCS: Revision 3.0.1.9  1995/09/25  09:11:24  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS: patch59: abort Configure run when mandatory command is missing
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:40  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.7
  1995/01/11  15:13:37  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS: patch45: added path lookup for the 'comm' program
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:56:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: be careful and guard against wildcard searching (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:54:55  ram
?RCS: patch30: now locates find
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:18:15  ram
?RCS: patch27: added byacc to the trylist (ADO)
```

```
?RCS: patch27: lint lines reformatted (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:01:44  ram
?RCS: patch16: added metalint hint on changed PATH variable
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:16:52  ram
?RCS: patch15: now set _test variable when test is built-in
?RCS: patch15: fixed rare cases where echo is not needed
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:47:13  ram
?RCS: patch10: test program not always in /bin/test (WAD)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:05:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script "loc" which can be used to find out
?X: where in a list of directories something is.  It then uses loc to
?X: determine the location of commonly used programs.  It leaves loc sitting
?X: around for other Configure units to use, but arranges for its demise
?X: at the end of Configure.
?X:
?X: To add a new program to find, add it both to the ?MAKE: line and to either
?X: the loclist or trylist variable.
?X:
?X: I put startsh at the end of the dependency list, in order to avoid the
?X: loading of the spitshell unit before the instructions.
?X:
?MAKE:Loc awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff
 \
 uname uniq uuname vi zcat zip:  eunicefix n c startsh Instruct Warn
?MAKE: -pick weed $@ %<
?LINT:describe awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip
?V::pth loclist trylist
?F:./loc
?T:thisthing thing xxx dir file say DJGPP
?T:_test _grep _cp _gmake _egrep _ln _make dflt
?LINT: change PATH
```

```
: find out where common programs are
echo " "
echo "Locating common programs..." >&4
cat <<EOSC >loc
$startsh
case \$# in
0) exit 1;;
esac
thing=\$1
shift
dflt=\$1
shift
for dir in \$*; do
 case "\$thing" in
 .)
 if test -d \$dir/\$thing; then
  echo \$dir
  exit 0
 fi
 ;;
 *)
?X: Be careful in case thing includes wildcards that might expand to multiple
?X: files.  Choose the last one.
  This happens when searching for shared
?X: libraries with version numbers.  How to choose which one we want is
?X: probably an insoluble problem, in general.
?X: Some folks leave things like libc.so.orig around w/o read
?X: permission.  A -r test would handle that, but since ./loc is
?X: also used to find executables (which are installed w/o read
?X: permission on SCO ODT 3.0, we can't include the -r test.
 for thisthing in \$dir/\$thing; do
  : just loop through to pick last item
 done
 if test -f \$thisthing; then
  echo \$thisthing
  exit 0
 elif test -f \$thisthing$_exe; then
  echo \$thisthing
  exit 0
 elif test -f \$dir/\$thing.exe; then
  if test -n "$DJGPP"; then
   echo \$dir/\$thing.exe
  else
   : on Eunice apparently
   echo \$dir/\$thing
  fi
  exit 0
 fi
```

```
 ;;
 esac
done
echo \$dflt
exit 1
EOSC
chmod +x loc
$eunicefix loc
loclist="
?awk:awk
?cat:cat
?chgrp:chgrp
?chmod:chmod
?chown:chown
?comm:comm
?cp:cp
?echo:echo
?expr:expr
?find:find
?grep:grep
?ls:ls
?mkdir:mkdir
?mv:mv
?rm:rm
?sed:sed
?sleep:sleep
?sort:sort
?tail:tail
?touch:touch
?tr:tr
?uniq:uniq
"
trylist="
?Mcc:Mcc
?ar:ar
?bash:bash
?bison:bison
?byacc:byacc
?compress:compress
?cpio:cpio
?cpp:cpp
?csh:csh
?date:date
?egrep:egrep
?emacs:emacs
?flex:flex
?gmake:gmake
?gzip:gzip
```

```
?inews:inews
?ksh:ksh
?less:less
?line:line
?lint:lint
?ln:ln
?lp:lp
?lpr:lpr
?mail:mail
?mailx:mailx
?make:make
?more:more
?nm:nm
?nroff:nroff
?perl:perl
?pg:pg
?pmake:pmake
?pr:pr
?rmail:rmail
?sendmail:sendmail
?shar:shar
?smail:smail
?submit:submit
?tar:tar
?tbl:tbl
?tee:tee
?test:test
?troff:troff
?uname:uname
?uuname:uuname
?vi:vi
?zcat:zcat
?zip:zip
"
?LINT:set
 awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo emacs expr find flex \
 gmake gzip grep inews ksh less line lint lp lpr ls mail mailx \
 mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee touch tr troff \
 uname uniq uuname vi zcat zip
pth=`echo $PATH | sed
 -e "s/$p_/ /g"`
pth="$pth /lib /usr/lib"
for file in $loclist; do
?X:
?X: Allow them to -Dmake=pmake on the command line for instance...
?X: If the file is not fully qualified, as in -Dmake=pmake, then we
```

```
?X: look the for the specified command (pmake here). If they say
?X: -Dmake=/sbin/make for instance, then we make sure the file
?X: exists, or we die...
?X:
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   ./warn "no $xxx -- ignoring your setting for $file."
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo "I don't know where '$file' is, and my life depends on it." >&4
  echo "Go find a public domain implementation or fix your PATH setting!" >&4
  exit 1
  ;;
 esac
done
echo " "
echo "Don't worry
 if any of the following aren't found..."
say=offhand
for file in $trylist; do
?X: Allow them to -Dmake=pmake on the command line for instance (see above)
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   ./warn "no $xxx -- ignoring your setting for $file."
   xxx=`./loc $file $file $pth`
```

```
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo "I don't see $file out there, $say."
  say=either
  ;;
 esac
done
case "$egrep" in
egrep)
 echo "Substituting grep for egrep."
 egrep=$grep
 _egrep=$_grep
 ;;
esac
@if ln
case "$ln" in
ln)
 echo "Substituting cp for ln."
 ln=$cp
 _ln=$_cp
 ;;
esac
@end
@if make || gmake
case "$make" in
make)
 case "$gmake" in
 gmake)
 echo "I can't find make or gmake, and my life depends on it." >&4
 echo "Go find a
 public domain implementation or fix your PATH setting!" >&4
 exit 1
 ;;
 esac
```

```
 ;;
esac
case "$gmake" in
gmake) ;;
*) # We can't have osname yet.
 if test -f "/system/gnu_library/bin/ar.pm"; then # Stratus VOS
  # Assume that gmake, if found, is definitely GNU make
  # and prefer it over the system make.
  echo "Substituting gmake for make."
  make=$gmake
  _make=$_gmake
 fi
 ;;
esac
@end
case "$test" in
test)
 echo "Hopefully test is built into your sh."
 ;;
*)
 if `sh -c "PATH= test true" >/dev/null 2>&1`; then
  echo "Using the test built into your sh."
?X:
?X: We need to set both test and _test, since Oldconfig.U will use the _test
?X: value to systematically restore computed paths, which may be wrong if
?X: we choose to load an old config.sh generated on another platform.
?X:
  test=test
  _test=test
 fi
 ;;
esac
?LINT:change n c
case "$echo" in
echo)
 echo "Hopefully echo is built into your sh."
 ;;
?X: For those rare cases where we don't need $echo...
") ;;
*)
 echo " "
echo "Checking
 compatibility between $echo and builtin echo (if any)..." >&4
 $echo $n "hi there$c" >foo1
 echo $n "hi there$c" >foo2
 if cmp foo1 foo2 >/dev/null 2>&1; then
  echo "They are compatible.  In fact, they may be identical."
 else
```

```
  case "$n" in
  '-n') n=" c='\c';;
  *) n='-n' c=";;
  esac
  cat <<FOO
They are not compatible!  You are probably running ksh on a non-USG system.
I'll have to use $echo instead of the builtin, since Bourne shell doesn't
have echo built in and we may have to run some Bourne shell scripts.  That
means I'll have to use '$n$c' to suppress newlines now.  Life is ridiculous.

FOO
  $echo $n "The star should be here-->$c"
  $echo "*"
 fi
 $rm -f foo1 foo2
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Loc.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sockopt.U,v $
?RCS: Revision 3.0.1.1  1995/07/25  14:16:14  ram
?RCS: patch56: obsoleted KEEPALIVE in favor of CAN_KEEPALIVE for consistency
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepalive: cat rm contains +cc +ccflags socketlib sockethdr \
 d_oldsock libs Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_keepalive:
?S: This symbol conditionally defines CAN_KEEPALIVE which indicates to the C
?S: program that setsockopt
 SO_KEEPALIVE will work properly.
?S:.
?C:CAN_KEEPALIVE (KEEPALIVE):
```

```
?C: This symbol if defined indicates to the C program that the SO_KEEPALIVE
?C: option of setsockopt() will work as advertised in the manual.
?C:.
?H:#$d_keepalive CAN_KEEPALIVE  /**/
?H:.
?F:!socket
?LINT:set d_keepalive
: see if setsockopt with SO_KEEPALIVE works as advertised
echo " "
case "$d_oldsock" in
"$undef")
 if $contains SO_KEEPALIVE `./findhdr sys/socket.h` \
  /dev/null >/dev/null 2>&1
 then
  echo "OK, let's see if SO_KEEPALIVE works as advertised..." >&4
  $cat > socket.c <<EOP
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netdb.h>

int main()
{
 int s = socket(AF_INET, SOCK_STREAM, 0);
 if (s == -1)
  exit(1);
 if (-1 == setsockopt(s, SOL_SOCKET, SO_KEEPALIVE, 0, 0))
  exit(2);
 exit(0);
}
EOP
  if $cc $ccflags $sockethdr -o socket socket.c $libs \
   $socketlib >/dev/null 2>&1; then
   ./socket >/dev/null 2>&1
   case $? in
   0) echo "Yes, it does!"
    val="$define";;
   1)
 $cat <<EOM
(Something went wrong -- Assuming SO_KEEPALIVE is broken)
EOM
    val="$undef";;
   2) echo "No, it doesn't.  Don't trust your manuals!!"
    val="$undef";;
   esac
  else
   cat <<EOM
(I can't compile the test program -- Assuming SO_KEEPALIVE is broken)
```

```
EOM
   val="$undef"
  fi
 else
  echo "Strange!! You have BSD 4.2 sockets but no SO_KEEPALIVE option."
  val="$undef"
 fi;;
*) cat <<EOM
As you have an old socket interface, you can't have heard of SO_KEEPALIVE.
EOM
 val="$undef";;
esac
set d_keepalive
eval $setvar
$rm -f socket socket.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sockopt.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldsym.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:06:58  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit follows the creation of the config.sh file. It adds some
?X: special symbols: defines from patchlevel.h file if any and CONFIG,
?X: which is set to true. Then, we try to keep all the new symbols that
?X: may come from a hint file or a previous config.sh file.
?X:
?MAKE:Oldsym:
 Config_sh Options test hint src sed sort uniq
?MAKE: -pick add $@ %<
?T:CONFIG sym tmp
?F:!UU
```

```
: add special variables
$test -f $src/patchlevel.h && \
awk '/^#define/ {printf "%s=%s\n",$2,$3}' $src/patchlevel.h >>config.sh
echo "CONFIG=true" >>config.sh

: propagate old symbols
if $test -f UU/config.sh; then
?X: Make sure each symbol is unique in oldconfig.sh
 <UU/config.sh $sort | $uniq >UU/oldconfig.sh
?X:
?X: All the symbols that appear twice come only from config.sh (hence the
?X: two config.sh in the command line). These symbols will be removed by
?X: the uniq -u command. The oldsyms file thus contains all the symbols
?X: that did not appear in the produced config.sh (Larry Wall).
?X:
?X: Do not touch the -u flag of uniq.  This means you too, Jarkko.
?X:
 $sed -n 's/^\([a-zA-Z_0-9]*\)=.*/\1/p' \
  config.sh config.sh UU/oldconfig.sh |\
  $sort | $uniq -u >UU/oldsyms
 set X `cat UU/oldsyms`
 shift
 case $# in
 0) ;;
 *)
  cat <<EOM
Hmm...You had some extra variables I don't know about...I'll
 try to keep 'em...
EOM
  echo ": Variables propagated from previous config.sh file." >>config.sh
  for sym in `cat UU/oldsyms`; do
   echo "    Propagating $hint variable "'$'"$sym..."
   eval 'tmp="$'"${sym}"'"'
   echo "$tmp" | \
    sed -e "s/'/'\''\''/g" -e "s/^/$sym='/" -e "s/$/'/" >>config.sh
  done
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Oldsym.U
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```
?RCS: $Id: d_inetaton.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Spider Boardman
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_inetaton.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:36:35  ram
?RCS: patch61: created
?RCS:
?MAKE:d_inetaton: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetaton:
?S: This variable conditionally defines the HAS_INET_ATON symbol, which
?S: indicates to the C program that the inet_aton() function is available
?S: to parse IP address "dotted-quad" strings.
?S:.
?C:HAS_INET_ATON:
?C: This symbol, if defined, indicates
 to the C program that the
?C: inet_aton() function is available to parse IP address "dotted-quad"
?C: strings.
?C:.
?H:#$d_inetaton HAS_INET_ATON  /**/
?H:.
?LINT:set d_inetaton
: check whether inet_aton exists
set inet_aton d_inetaton
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_inetaton.U
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: pager.U,v $
?RCS: Revision 3.0.1.2  1995/01/30  14:41:26  ram
?RCS: patch49: ensure dflt gets initialized in case no pagers are found (WED)
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:27:45  ram
?RCS: patch36: replaced Myread by Getfile in the dependency line
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:pager: pg more less Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:pager:
?S: This variable contains the name of the preferred pager
 on the system.
?S: Usual values are (the full pathnames of) more, less, pg, or cat.
?S:.
: locate the preferred pager for this system
fn=f/
case "$pager" in
")
 dflt="
 case "$pg" in
 /*) dflt=$pg;;
 [a-zA-Z]:/*) dflt=$pg;;
 esac
 case "$more" in
 /*) dflt=$more;;
 [a-zA-Z]:/*) dflt=$more;;
 esac
 case "$less" in
 /*) dflt=$less;;
 [a-zA-Z]:/*) dflt=$less;;
 esac
 case "$dflt" in
 ") dflt=/usr/ucb/more;;
 esac
 ;;
*) dflt="$pager"
 ;;
esac
?X: Instruct ./getfile to trust the default pager value,
?X: even if it does not begin with a slash.  For example, on os2,
?X: pager might be cmd /c more.  Also, it might include some options,
?X: such as '/usr/bin/less -R'.  ./getfile would report that
?X: "/usr/bin/less -R" doesn't exist.
?X: See comments in Getfile.U.
fn="f/($dflt)"
echo " "
rp='What pager is used on your system?'
. ./getfile
```

```
pager="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pager.U
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```
?RCS: $Id: i_sysmount.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysmount: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysmount:
?S: This variable conditionally defines the I_SYSMOUNT symbol,
?S: and indicates whether a C program should include <sys/mount.h>.
?S:.
?C:I_SYS_MOUNT:
?C: This symbol, if defined, indicates that <sys/mount.h> exists and
?C: should be included.
?C:.
?H:#$i_sysmount I_SYS_MOUNT  /**/
?H:.
?LINT:set i_sysmount
: see if this is a sys/mount.h system
set sys/mount.h i_sysmount
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysmount.U
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```
?RCS: $Id: d_readlink.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_readlink.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:52  ram
```

```
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_readlink: Inlibc
?MAKE: -pick add $@ %<
?S:d_readlink:
?S: This variable conditionally defines the HAS_READLINK symbol, which
?S: indicates to the C program that the readlink() routine is available
?S: to read the value of a symbolic link.
?S:.
?C:HAS_READLINK :
?C: This
 symbol, if defined, indicates that the readlink routine is
?C: available to read the value of a symbolic link.
?C:.
?H:#$d_readlink HAS_READLINK  /**/
?H:.
?LINT:set d_readlink
: see if readlink exists
set readlink d_readlink
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_readlink.U
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```
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```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/bindex
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/makegloss
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/fixcpp
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.mk
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```
?RCS: $Id: d_fd_set.U,v 3.0.1.3 1997/02/28 15:33:16 ram Exp $
?RCS:
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?RCS:
?RCS: $Log: d_fd_set.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:16  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
```

```
?RCS: Revision 3.0.1.2  1994/06/20  06:57:23  ram
?RCS: patch30: extended scope for fd_set checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:27  ram
?RCS: patch16: comments for HAS_FD_* symbols were not consistent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fd_set d_fd_macros
 d_fds_bits: Compile cat rm_try Oldconfig \
 d_socket i_systime i_sysselct i_stdlib run
?MAKE: -pick add $@ %<
?S:d_fd_set:
?S: This variable contains the eventual value of the HAS_FD_SET symbol,
?S: which indicates if your C compiler knows about the fd_set typedef.
?S:.
?S:d_fd_macros:
?S: This variable contains the eventual value of the HAS_FD_MACROS symbol,
?S: which indicates if your C compiler knows about the macros which
?S: manipulate an fd_set.
?S:.
?S:d_fds_bits:
?S: This variable contains the eventual value of the HAS_FDS_BITS symbol,
?S: which indicates if your fd_set typedef contains the fds_bits member.
?S: If you have an fd_set typedef, but the dweebs who installed it did
?S: a half-fast job and neglected to provide the macros to manipulate
?S: an fd_set, HAS_FDS_BITS will let us know how to fix the gaffe.
?S:.
?C:HAS_FD_SET:
?C: This symbol, when defined, indicates presence of the fd_set typedef
?C: in <sys/types.h>
?C:.
?C:HAS_FD_MACROS:
?C: This symbol, when defined,
  indicates presence of the macros used to
?C: manipulate an fd_set.
?C:.
?C:HAS_FDS_BITS:
?C: This symbol, when defined, indicates presence of the fds_bits member in
?C: fd_set.  This knowledge is useful if fd_set is available but the macros
?C: aren't.
?C:.
?H:#$d_fd_set HAS_FD_SET /**/
?H:#$d_fd_macros HAS_FD_MACROS /**/
?H:#$d_fds_bits HAS_FDS_BITS /**/
?H:.
?F:!try
```

```
: check for fd_set items
$cat <<EOM

Checking to see how well your C compiler handles fd_set and friends ...
EOM
?X: The FD_SET macros can be in strange places.  On some SysV-based
?X: systems, they are in <sys/bsdtypes.h>, which is included (perhaps)
?X: by <sys/socket.h>.  We won't force people to include
?X: <sys/bsdtypes.h> because it might introduce other
?X: incompatibilities.
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h>
 */
#endif
#ifdef I_SYS_TIME
#include <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main() {
 fd_set fds;

#ifdef TRYBITS
 if(fds.fds_bits);
#endif

#if defined(FD_SET) && defined(FD_CLR) && defined(FD_ISSET) && defined(FD_ZERO)
 exit(0);
#else
 exit(1);
#endif
}
EOCP
set try -DTRYBITS
if eval $compile; then
 d_fds_bits="$define"
 d_fd_set="$define"
 echo "Well, your system knows about the normal fd_set typedef..." >&4
```

```
 if $run ./try; then
  echo "and you have the normal fd_set macros (just as I'd expect)." >&4
  d_fd_macros="$define"
 else
  $cat >&4 <<'EOM'
but not the normal fd_set macros!  Gaaack!  I'll have to cover for you.
EOM
  d_fd_macros="$undef"
 fi
else
 $cat <<'EOM'
Hmm, your compiler has some difficulty with fd_set.  Checking further...
EOM
 set try
 if eval $compile; then
  d_fds_bits="$undef"
  d_fd_set="$define"
  echo "Well, your system has some sort of fd_set available..." >&4
  if $run ./try; then
   echo "and you have the normal
 fd_set macros." >&4
   d_fd_macros="$define"
  else
   $cat <<'EOM'
but not the normal fd_set macros!  Gross!  More work for me...
EOM
   d_fd_macros="$undef"
  fi
 else
 echo "Well, you got zip.  That's OK, I can roll my own fd_set stuff." >&4
  d_fd_set="$undef"
  d_fds_bits="$undef"
  d_fd_macros="$undef"
 fi
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_fd_set.U
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```
?RCS:
?MAKE:d_mbrtowc: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbrtowc:
?S: This variable conditionally defines the HAS_MBRTOWC symbol if the
?S: mbrtowc() routine is available to be used to convert a multi-byte
?S: character into a wide character.
?S:.
?C:HAS_MBRTOWC:
?C: This symbol, if defined, indicates that the mbrtowc routine is
?C: available to convert a multi-byte character into a wide character.
?C:.
?H:#$d_mbrtowc HAS_MBRTOWC /**/
?H:.
?LINT: set d_mbrtowc
: see if mbrtowc exists
set mbrtowc d_mbrtowc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_mbrtowc.U
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```
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?RCS:
?MAKE:d_c99_variadic_macros: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:d_c99_variadic_macros:
?S: This variable conditionally defines the HAS_C99_VARIADIC_MACROS
?S: symbol, which indicates to the C program that C99 variadic macros
?S: are available.
?S:.
?C:HAS_C99_VARIADIC_MACROS:
?C: If defined, the compiler supports C99 variadic macros.
?C:.
?H:#$d_c99_variadic_macros HAS_C99_VARIADIC_MACROS /**/
?H:.
?F:!try
: see if the Compiler supports C99 variadic macros
echo "Checking for C99 variadic macros." >&4
$cat >try.c <<EOCP
#include
```

```
 <stdio.h>
#include <stdarg.h>

#define foo(buffer, format, ...) sprintf(buffer, format, __VA_ARGS__)

int main() {
 char buf[20];
 foo(buf, "%d %g %.*s", 123, 456.0, (int)3, "789fail");
 puts(buf);
 return 0;
}
EOCP
set try
if eval $compile && $run ./try 2>&1 >/dev/null; then
   case "`$run ./try`" in
 "123 456 789")
 echo "You have C99 variadic macros." >&4
 d_c99_variadic_macros="$define"
 ;;
 *)
 echo "You don't have functional C99 variadic macros." >&4
 d_c99_variadic_macros="$undef"
 ;;
   esac
else
   echo "I couldn't compile and run the test program, so I assume that you don't have functional C99 variadic
macros." >&4
   d_c99_variadic_macros="$undef"
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_c99_variadic.U
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```
?RCS: $Id: d_msgrcv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
?RCS: $Log: d_msgrcv.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:40  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_msgrcv: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgrcv:
?S: This variable conditionally defines the HAS_MSGRCV symbol, which
?S: indicates to the C program that the msgrcv() routine is available.
?S:.
?C:HAS_MSGRCV:
?C: This symbol, if defined, indicates that the msgrcv() routine is
?C: available to extract a message from the message queue.
?C:.
?H:#$d_msgrcv
 HAS_MSGRCV  /**/
?H:.
?LINT:set d_msgrcv
: see if msgrcv exists
set msgrcv d_msgrcv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgrcv.U
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```
?RCS: $Id: d_fsetpos.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
?RCS: $Log: d_fsetpos.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:38  ram
?RCS: patch30: created
?RCS:
?MAKE:d_fsetpos: Inlibc
?MAKE: -pick add $@ %<
?S:d_fsetpos:
?S: This variable conditionally defines HAS_FSETPOS if fsetpos() is
?S: available to set the file position indicator.
?S:.
?C:HAS_FSETPOS:
?C: This symbol, if defined, indicates that the fsetpos routine is
?C: available to set the file position indicator, similar to fseek().
?C:.
?H:#$d_fsetpos
```

```
 HAS_FSETPOS /**/
?H:.
?LINT:set d_fsetpos
: see if fsetpos exists
set fsetpos d_fsetpos
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fsetpos.U
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```
case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting makedir (with variable substitutions)"
$spitshell >makedir <<!GROK!THIS!
$startsh
# $Id: makedir.sh,v 3.0.1.1 1994/01/24 14:00:08 ram Exp ram $
#
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#
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#  of the source tree for dist 4.0.
#
# Original
 Author: Larry Wall <lwall@netlabs.com>
#
# $Log: makedir.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:08  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:38  ram
```

```
# Baseline for dist 3.0 netwide release.
#

export PATH || (echo "OOPS, this isn't sh.  Desperation time.  I will feed myself to sh."; sh \$0; kill \$\$)

case \$# in
 0)
   $echo "makedir pathname filenameflag"
   exit 1
   ;;
esac

: guarantee one slash before 1st component
case \$1 in
 /*) ;;
 *)  set ./\$1 \$2 ;;
esac

: strip last component if it is to be a filename
case X\$2 in
 X1) set \`$echo \$1 | $sed 's:\(.*\)/[^/]*\$:\1:'\` ;;
 *)  set \$1 ;;
esac

: return reasonable status if nothing to be created
if $test -d "\$1" ; then
   exit 0
fi

list=''
while true ; do
   case \$1 in
   */*)
 list="\$1 \$list"
 set \`echo \$1 | $sed 's:\(.*\)/:\1 :'\`
 ;;
   *)
 break
 ;;
   esac
done

set \$list

for dir do
   $mkdir \$dir >/dev/null 2>&1
done
!GROK!THIS!
```

```
$eunicefix
 makedir
chmod +x makedir
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/makedir.SH
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```
?RCS: $Id: i_whoami.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_whoami.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:02:21  ram
?RCS: patch6: added default for i_whoami
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_whoami: Inhdr
?MAKE: -pick add $@ %<
?S:i_whoami (d_whoami):
?S: This variable conditionally defines the I_WHOAMI symbol, which
?S: indicates to the C program that it should include <whoami.h>.
?S:.
?C:I_WHOAMI (WHOAMI):
?C: This symbol,
 if defined, indicates that the program may include
?C: <whoami.h>.
?C:.
?H:#$i_whoami I_WHOAMI /**/
?H:.
?D:i_whoami=''
?LINT:set i_whoami
: see if there is a whoami.h file
set whoami.h i_whoami
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_whoami.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_trunc: Inlibc
?MAKE: -pick add $@ %<
?S:d_trunc:
?S: This variable conditionally defines the HAS_TRUNC symbol, which
?S: indicates to the C program that the trunc() routine is available
?S: to round doubles towards zero.
?S:.
?C:HAS_TRUNC:
?C: This symbol, if defined, indicates that the trunc routine is
?C: available to round doubles towards zero.
?C:.
?H:#$d_trunc HAS_TRUNC  /**/
?H:.
?LINT:set d_trunc
: see if trunc exists
set trunc d_trunc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_trunc.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigaction.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:29  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sigaction: Csym Setvar cat cc ccflags ldflags libs rm _o
?MAKE: -pick add $@ %<
?S:d_sigaction:
?S: This variable conditionally defines the HAS_SIGACTION symbol, which
?S: indicates that the Vr4 sigaction() routine is available.
?S:.
?C:HAS_SIGACTION:
?C: This symbol, if defined, indicates that Vr4's sigaction() routine
```

```
?C: is available.
?C:.
?H:#$d_sigaction HAS_SIGACTION /**/
?H:.
?T:val
?LINT:set
 d_sigaction
: see if we have sigaction
echo " "
if set sigaction val -f d_sigaction; eval $csym; $val; then
 echo 'sigaction() found.' >&4
 val="$define"
else
 echo 'sigaction NOT found.' >&4
 val="$undef"
fi
?X:
?X: Solaris 2.5_x86 with SunWorks Pro C 3.0.1 doesn't have a complete
?X: sigaction structure if compiled with cc -Xc.  This compile test
?X: will fail then.  <doughera@lafcol.lafayette.edu>
?X:
$cat > set.c <<'EOP'
#include <stdio.h>
#include <sys/types.h>
#include <signal.h>
int main()
{
   struct sigaction act, oact;
}
EOP
if $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1; then
 :
else
 echo "But you don't seem to have a useable struct sigaction." >&4
 val="$undef"
fi
set d_sigaction; eval $setvar
$rm -f set set$_o set.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigaction.U
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```
?RCS: $Id: d_strtol.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS:
?RCS: $Log: d_strtol.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strtol: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtol:
?S: This variable conditionally defines the HAS_STRTOL symbol, which
?S: indicates to the C program that the strtol() routine is available
?S: to provide better numeric string conversion than atoi() and friends.
?S:.
?C:HAS_STRTOL (STRTOL):
?C: This symbol, if defined, indicates that
 the strtol routine is available
?C: to provide better numeric string conversion than atoi() and friends.
?C:.
?H:#$d_strtol HAS_STRTOL /**/
?H:.
?LINT:set d_strtol
: see if strtol exists
set strtol d_strtol
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtol.U
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```
?RCS: $Id: d_voidsig.U,v 3.0.1.3 1995/05/12 12:12:46 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_voidsig.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:12:46  ram
?RCS: patch54: made cppflags dependency optional
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:20:35  ram
?RCS: patch32: now sets signal_t only once d_voidsig is known (WED)
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:54  ram
?RCS: patch30: now properly sets signal_t when re-using previous value
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_voidsig
 signal_t: rm contains cppstdin cppminus +cppflags test Myread \
 Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_voidsig:
?S: This variable conditionally defines VOIDSIG if this system
?S: declares "void (*signal(...))()" in signal.h.  The old way was to
?S: declare it as "int (*signal(...))()".
?S:.
?S:signal_t:
?S: This variable holds the type of the signal handler (void or int).
?S:.
?C:VOIDSIG:
?C: This symbol is defined if this system declares "void (*signal(...))()" in
?C: signal.h.  The old way was to declare it as "int (*signal(...))()".  It
?C: is up to the package author to declare things correctly based on the
?C: symbol.
?C:.
?C:Signal_t (SIGNAL_T):
?C: This symbol's value is either "void" or "int", corresponding to the
?C: appropriate return type of a signal handler.  Thus, you can declare
?C: a signal handler using "Signal_t (*handler)()", and define the
?C: handler using "Signal_t handler(sig)".
?C:.
?H:#$d_voidsig VOIDSIG /**/
?H:#define
 Signal_t $signal_t /* Signal handler's return type */
?H:.
?T:xxx
?LINT:set d_voidsig
: see if signal is declared as pointer to function returning int or void
echo " "
xxx=`./findhdr signal.h`
$test "$xxx" && $cppstdin $cppminus $cppflags < $xxx >$$.tmp 2>/dev/null
if $contains 'int.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
elif $contains 'void.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have void (*signal())()." >&4
 val="$define"
elif $contains 'extern[  ]*[(\*]*signal' $$.tmp >/dev/null 2>&1 ; then
```

```
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
?X: This next test is kind of sloppy, but it catches Linux
?X: which has a
?X:  typedef void (*__sighandler_t)  (int)  ;
?X: A better fix would be to compile a C program with the proper
?X: prototype, but since nearly everyone uses void, we'll just go with
?X: this.
elif $contains 'void.*\*.*sig' $$.tmp >/dev/null 2>&1 ; then
 echo "You
 have void (*signal())()." >&4
 val="$define"
else
 case "$d_voidsig" in
 ")
 echo "I can't determine whether signal handler returns void or int..." >&4
  dflt=void
  rp="What type does your signal handler return?"
  . ./myread
  case "$ans" in
  v*) val="$define";;
  *) val="$undef";;
  esac;;
 "$define")
  echo "As you already told me, signal handler returns void." >&4
  val="$define"
  ;;
 *) echo "As you already told me, signal handler returns int." >&4
  val="$undef"
  ;;
 esac
fi
set d_voidsig
eval $setvar
case "$d_voidsig" in
"$define") signal_t="void";;
*) signal_t="int";;
esac
$rm -f $$.tmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_voidsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: selecttype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:20:09  ram
?RCS: patch61: always include <sys/select.h> when available for test
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:14:06  ram
?RCS: patch56: removed harmful spaces in assignment
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:31  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:selecttype: cat +cc +ccflags rm Oldconfig Myread \
 d_fd_set d_select d_socket i_systime
 i_sysselct
?MAKE: -pick add $@ %<
?S:selecttype:
?S: This variable holds the type used for the 2nd, 3rd, and 4th
?S: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?S: is defined, and 'int *' otherwise.  This is only useful if you
?S: have select(), naturally.
?S:.
?C:Select_fd_set_t:
?C: This symbol holds the type used for the 2nd, 3rd, and 4th
?C: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?C: is defined, and 'int *' otherwise.  This is only useful if you
?C: have select(), of course.
?C:.
?H:#define Select_fd_set_t  $selecttype /**/
?H:.
?T:xxx yyy
: check for type of arguments to select.  This will only really
: work if the system supports prototypes and provides one for
: select.
case "$d_select" in
$define)
 : Make initial guess
 case "$selecttype" in
 "|' ')
  case "$d_fd_set" in
  $define) xxx='fd_set *' ;;
  *) xxx='int *' ;;
```

```
 esac
 ;;
*)  xxx="$selecttype"
 ;;
esac
: backup guess
case "$xxx" in
'fd_set *') yyy='int *'
;;
'int *') yyy='fd_set *' ;;
esac

$cat <<EOM

Checking to see what type of arguments are expected by select().
EOM
 $cat >try.c <<EOCP
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#ifdef I_SYS_TIME
#include <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main()
{
 int width;
 Select_fd_set_t readfds;
 Select_fd_set_t writefds;
 Select_fd_set_t exceptfds;
 struct timeval timeout;
 select(width, readfds, writefds, exceptfds, &timeout);
 exit(0);
}
EOCP
 if $cc $ccflags -c -DSelect_fd_set_t="$xxx" try.c >/dev/null 2>&1 ; then
  selecttype="$xxx"
  echo "Your system uses $xxx for the arguments to select." >&4
 elif $cc $ccflags -c -DSelect_fd_set_t="$yyy" try.c >/dev/null 2>&1 ; then
  selecttype="$yyy"
  echo "Your system uses $yyy for the arguments to select." >&4
 else
```

```
  rp='What is the type for the 2nd, 3rd, and 4th arguments
 to select?'
  dflt="$xxx"
  . ./myread
  selecttype="$ans"
 fi
 $rm -f try.[co]
 ;;
*) selecttype='int *'
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/selecttype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysndir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysndir.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysndir: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysndir:
?S: This variable conditionally defines the I_SYS_NDIR symbol, and indicates
?S: whether a C program should include <sys/ndir.h>.
?S:.
?C:I_SYS_NDIR (I_SYSNDIR):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/ndir.h>.
?C:.
?H:#$i_sysndir
 I_SYS_NDIR /**/
?H:.
?LINT:set i_sysndir
: see if this is an sysndir system
set sys/ndir.h i_sysndir
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysndir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_usleepproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_usleepproto:
?S: This variable conditionally defines the HAS_USLEEP_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the usleep() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_USLEEP_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the usleep() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern int
 usleep(useconds_t);
?C:.
?H:#$d_usleepproto HAS_USLEEP_PROTO /**/
?H:.
?LINT:set d_usleepproto
: see if prototype for usleep is available
echo " "
set d_usleepproto usleep $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_usleepproto.U
No license file was found, but licenses were detected in source scan.

```
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethbynm.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethbynm: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbynm (d_gethhstby):
?S: This variable conditionally defines the HAS_GETHOSTBYNAME symbol, which
?S: indicates to the C program that the gethostbyname() routine is available
?S: to lookup host names in some data base or other.
?S:.
?C:HAS_GETHOSTBYNAME (GETHOSTBYNAME):
?C: This symbol, if defined, indicates that the gethostbyname()
 routine is
?C: available to lookup host names in some data base or other.
?C:.
?H:#$d_gethbynm HAS_GETHOSTBYNAME  /**/
?H:.
?LINT:set d_gethbynm
: see if gethostbyname exists
set gethostbyname d_gethbynm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethbynm.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgrp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:28  ram
?RCS: patch61: new USE_BSD_GETPGRP to detect the getpgrp() flavour
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp d_bsdgetpgrp: Guess Inlibc Setvar cat rm \
```

```
 +cc +ccflags +ldflags +libs i_unistd
?MAKE: -pick add $@ %<
?S:d_getpgrp:
?S: This variable conditionally defines HAS_GETPGRP if getpgrp() is
?S: available to get the current process group.
?S:.
?S:d_bsdgetpgrp:
?S: This
 variable conditionally defines USE_BSD_GETPGRP if
?S: getpgrp needs one arguments whereas USG one needs none.
?S:.
?C:HAS_GETPGRP (GETPGRP):
?C: This symbol, if defined, indicates that the getpgrp routine is
?C: available to get the current process group.
?C:.
?C:USE_BSD_GETPGRP:
?C: This symbol, if defined, indicates that getpgrp needs one
?C: arguments whereas USG one needs none.
?C:.
?H:#$d_getpgrp HAS_GETPGRP  /**/
?H:#$d_bsdgetpgrp USE_BSD_GETPGRP /**/
?H:.
?F:!set !set.c
?T:xxx
?LINT:set d_getpgrp d_bsdgetpgrp
: see if getpgrp exists
set getpgrp d_getpgrp
eval $inlibc

@if USE_BSD_GETPGRP || d_bsdgetpgrp
case "$d_getpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of getpgrp is in use..."
 $cat >set.c <<EOP
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (getpgrp(1) ==
```

```
 0)
  exit(0);
#else
 if (getpgrp() > 0)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -DTRY_BSD_PGRP $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1
  && ./set
 then
  echo "You have to use getpgrp(pid) instead of getpgrp()." >&4
  val="$define"
 elif $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo "You have to use getpgrp() instead of getpgrp(pid)." >&4
  val="$undef"
 else
  echo "I can't seem to compile and run the test program."
  if ./usg; then
   xxx="a USG one, i.e. you use getpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use getpgrp(pid)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use getpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your getpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set d_bsdgetpgrp
eval $setvar
$rm -f set set.c
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdbool.U,v $
?RCS:
?RCS: Copyright (c) 2011 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_stdbool: cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:i_stdbool:
?S: This variable conditionally defines the I_STDBOOL symbol, which
?S: indicates to the C program that <stdbool.h> exists and should
?S: be included.
?S:.
?C:I_STDBOOL:
?C: This symbol, if defined, indicates that <stdbool.h> exists and
?C: can be included.
?C:.
?H:#$i_stdbool I_STDBOOL  /**/
?H:.
?LINT:set i_stdbool
: see if stdbool is available
: we want a real compile instead of Inhdr because some Solaris systems
: have stdbool.h, but it can only be used if the compiler indicates it
: is sufficiently c99-compliant.
echo " "
$cat >try.c <<EOCP
#include <stdio.h>
#include <stdbool.h>
int func(bool x)
{
   return
 x ? 1 : 0;
}
int main(int argc, char **argv)
{
   return func(0);
}
EOCP
set try
if eval $compile; then
 echo "<stdbool.h> found." >&4
 val="$define"
else
 echo "<stdbool.h> NOT found." >&4
 val="$undef"
fi
$rm_try
```

```
set i_stdbool
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_stdbool.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cpp_stuff.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:24  ram
?RCS: patch36: now uses cppstdin instead of plain cpp for consistency (ADO)
?RCS: patch36: remove temporary files when done
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cpp_stuff: cat contains cppstdin cppflags cppminus rm
?MAKE: -pick add $@ %<
?S:cpp_stuff:
?S: This variable contains an identification of the concatenation
 mechanism
?S: used by the C preprocessor.
?S:.
?C:CAT2:
?C: This macro concatenates 2 tokens together.
?C:.
?C:CAT3:
?C: This macro concatenates 3 tokens together.
?C:.
?C:CAT4:
?C: This macro concatenates 4 tokens together.
?C:.
?C:CAT5:
?C: This macro concatenates 5 tokens together.
?C:.
?C:STRINGIFY:
?C: This macro surrounds its token with double quotes.
?C:.
?C:SCAT2:
```

```
?C: This macro concatenates 2 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT3:
?C: This macro concatenates 3 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT4:
?C: This macro concatenates 4 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT5:
?C: This macro concatenates 5 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?X: Dist pl70 included the following, but AIX's xlc compiler
?X: (which
 is ANSI-ish and has cpp_stuff == 42)) rejects
?X: The SQuoTe/EQuoTe stuff because the string literals are on
?X: separate lines.  Sigh.
?X:  Andy Dougherty   24 Feb 1998
?X: ?H:?%<:#if $cpp_stuff == 1
?X: ?H:?CAT2:#define CAT2(a,b)a/**/b
?X: ?H:?CAT3:#define CAT3(a,b,c)a/**/b/**/c
?X: ?H:?CAT4:#define CAT4(a,b,c,d)a/**/b/**/c/**/d
?X: ?H:?CAT5:#define CAT5(a,b,c,d,e)a/**/b/**/c/**/d/**/e
?X: ?H:?STRINGIFY:#define STRINGIFY(a)"a"
?X: ?H:?%<:#define SQuoTe(a)"a
?X: ?H:?%<:#define EQuoTe(a)a"
?X: ?H:?SCAT2:#define SCAT2(a,b)EQuoTe(SQuoTe(a)b)
?X: ?H:?SCAT3:#define SCAT3(a,b,c)EQuoTe(SQuoTe(a)b/**/c)
?X: ?H:?SCAT4:#define SCAT4(a,b,c,d)EQuoTe(SQuoTe(a)b/**/c/**/d)
?X: ?H:?SCAT5:#define SCAT5(a,b,c,d,e)EQuoTe(SQuoTe(a)b/**/c/**/d/**/e)
?X: ?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 1
?H:?CAT2:#define CAT2(a,b) a/**/b
?H:?CAT3:#define CAT3(a,b,c) a/**/b/**/c
?H:?CAT4:#define CAT4(a,b,c,d) a/**/b/**/c/**/d
?H:?CAT5:#define CAT5(a,b,c,d,e) a/**/b/**/c/**/d/**/e
?H:?STRINGIFY:#define STRINGIFY(a) "a"
?X: If
 you can get stringification with catify, tell me how!
?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 42
?H:?%<:#define PeRl_CaTiFy(a, b) a ## b
?H:?%<:#define PeRl_StGiFy(a) #a
?X: The additional level of indirection enables these macros to be
?X: used as arguments to other macros.  See K&R 2nd ed., page 231.
```

```
?H:?CAT2:#define CAT2(a,b) PeRl_CaTiFy(a,b)
?H:?CAT3:#define CAT3(a,b,c) CAT2(PeRl_CaTiFy(a,b),c)
?H:?CAT4:#define CAT4(a,b,c,d) CAT2(CAT3(a,b,c),d)
?H:?CAT5:#define CAT5(a,b,c,d,e) CAT2(CAT4(a,b,c,d),e)
?H:?%<:#define StGiFy(a) PeRl_StGiFy(a)
?H:?STRINGIFY:#define STRINGIFY(a) PeRl_StGiFy(a)
?H:?SCAT2:#define SCAT2(a,b) PeRl_StGiFy(a) PeRl_StGiFy(b)
?H:?SCAT3:#define SCAT3(a,b,c) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c)
?H:?SCAT4:#define SCAT4(a,b,c,d) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c) PeRl_StGiFy(d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c) PeRl_StGiFy(d)
PeRl_StGiFy(e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff != 1 && $cpp_stuff
 != 42
?H:?%<:#include "Bletch: How does this C preprocessor concatenate tokens?"
?H:?%<:#endif
?H:.
?W:%<:CAT2 CAT3 CAT4 CAT5 STRINGIFY SCAT2 SCAT3 SCAT4 SCAT5
?F:!cpp_stuff.c
?LINT:known StGiFy
?LINT:known PeRl_CaTiFy
?LINT:known PeRl_StGiFy
: how do we concatenate cpp tokens here?
echo " "
echo "Checking to see how your cpp does stuff like concatenate tokens..." >&4
$cat >cpp_stuff.c <<'EOCP'
#define RCAT(a,b)a/**/b
#define ACAT(a,b)a ## b
RCAT(Rei,ser)
ACAT(Cir,cus)
EOCP
$cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out 2>&1
if $contains 'Circus' cpp_stuff.out >/dev/null 2>&1; then
 echo "Oh!  Smells like ANSI's been here." >&4
 echo "We can catify or stringify, separately or together!"
 cpp_stuff=42
elif $contains 'Reiser' cpp_stuff.out >/dev/null 2>&1; then
 echo "Ah, yes!  The good old days!" >&4
 echo "However, in the good old days we don't know how to stringify and"
 echo "catify at the same time."
 cpp_stuff=1
else
 $cat >&4 <<EOM
Hmm, I don't seem to be able to concatenate
 tokens with your cpp.
You're going to have to edit the values of CAT[2-5] in config.h...
EOM
?X: It would be nice to have configure remind us at the end that some manual
```

```
?X: intervention is needed -- FIXME
 cpp_stuff="/* Help! How do we handle cpp_stuff? */*/"
fi
$rm -f cpp_stuff.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/cpp_stuff.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mkdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mkdir.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mkdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkdir:
?S: This variable conditionally defines the HAS_MKDIR symbol, which
?S: indicates to the C program that the mkdir() routine is available
?S: to create directories..
?S:.
?C:HAS_MKDIR (MKDIR):
?C: This symbol, if defined, indicates that the mkdir routine is available
?C: to create directories.
  Otherwise you should fork off a new process to
?C: exec /bin/mkdir.
?C:.
?H:#$d_mkdir HAS_MKDIR  /**/
?H:.
?LINT:set d_mkdir
: see if mkdir exists
set mkdir d_mkdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mkdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memcmp.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:35  ram
?RCS: patch10: removed text recommending bcmp over memcmp (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memcmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_memcmp:
?S: This variable conditionally defines the HAS_MEMCMP symbol, which
?S: indicates to the C program that the memcmp() routine is available
?S: to compare blocks of
 memory.
?S:.
?C:HAS_MEMCMP (MEMCMP):
?C: This symbol, if defined, indicates that the memcmp routine is available
?C: to compare blocks of memory.
?C:.
?H:#$d_memcmp HAS_MEMCMP /**/
?H:.
?LINT:set d_memcmp
: see if memcmp exists
set memcmp d_memcmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_faststdio: Setvar \
 d_stdstdio d_stdio_ptr_lval d_stdio_cnt_lval d_stdio_ptr_lval_sets_cnt
```

```
?MAKE: -pick add $@ %<
?S:d_faststdio:
?S: This variable conditionally defines the HAS_FAST_STDIO symbol,
?S: which indicates to the C program that the "fast stdio" is available
?S: to manipulate the stdio buffers directly.
?S:.
?C:HAS_FAST_STDIO:
?C: This symbol, if defined, indicates that the "fast stdio"
?C: is available to manipulate the stdio buffers directly.
?C:.
?H:#$d_faststdio HAS_FAST_STDIO  /**/
?H:.
?LINT:set d_faststdio
: see if fast_stdio exists
val="$undef"
case "$d_stdstdio:$d_stdio_ptr_lval" in
"$define:$define")
 case "$d_stdio_cnt_lval$d_stdio_ptr_lval_sets_cnt" in
 *$define*)
  echo "You
 seem to have 'fast stdio' to directly manipulate the stdio buffers." >&4
  val="$define"
  ;;
 esac
 ;;
esac
set d_faststdio
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_faststdio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:run to from targetarch targetdir targetmkdir targethost targetport \
 usecrosscompile hostperl hostgenerate hostosname targetenv: \
    src test rm echo sed mkdir cp chmod make touch
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecrosscompile:
?S: This variable conditionally defines the USE_CROSS_COMPILE symbol,
?S: and indicates that Perl has been cross-compiled.
```

```
?S:.
?S:run:
?S: This variable contains the command used by Configure
?S: to copy and execute a cross-compiled executable in the
?S: target host.  Useful and available only during Perl build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:from:
?S: This variable contains the command used by Configure
?S: to copy files from the target host.  Useful
 and available
?S: only during Perl build.
?S: The string ':' if not cross-compiling.
?S:.
?S:to:
?S: This variable contains the command used by Configure
?S: to copy to from the target host.  Useful and available
?S: only during Perl build.
?S: The string ':' if not cross-compiling.
?S:.
?S:targetarch:
?S: If cross-compiling, this variable contains the target architecture.
?S: If not, this will be empty.
?S:.
?S:targetdir:
?S: This variable contains a path that will be created on the target
?S: host using targetmkdir, and then used to copy the cross-compiled
?S: executables to. Defaults to '/tmp' if not set.
?S:.
?S:targetmkdir:
?S: This variable contains the command used by Configure to create a
?S: new directory on the target host.
?S:.
?S:targethost:
?S: This variable contains the name of a separate host machine that
?S: can be used to run compiled test programs and perl tests on.
?S: Set to empty string if not in use.
?S:.
?S:targetport:
?S: This variable contains the number
 of a network port to be used to
?S: connect to the host in targethost, if unset defaults to 22 for ssh.
?S:.
?S:hostperl:
?S: This variable contains the path to a miniperl binary that can be
?S: run on the host OS when cross-compiling.  Useful and available only
?S: during Perl build.
?S: Empty string '' if not cross-compiling.
```

```
?S:.
?S:hostgenerate:
?S: This variable contains the path to a generate_uudmap binary that
?S: can be run on the host OS when cross-compiling.  Useful and
?S: available only during Perl build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:hostosname:
?S: This variable contains the original value of '$^O' for hostperl
?S: when cross-compiling.  This is useful to pick the proper tools
?S: when running build code in the host.
?S: Empty string '' if not cross-compiling.
?S:.
?S:targetenv:
?S: If cross-compiling, this variable can be used to modify the
?S: environment on the target system.
?S: However, how and where it's used, and even if it's used at all, is
?S: entirely
 dependent on both the transport mechanism (targetrun) and
?S: what the target system is.  Unless the relevant documentation says
?S: otherwise, it is genereally not useful.
?S:.
?C:USE_CROSS_COMPILE:
?C: This symbol, if defined, indicates that Perl is being cross-compiled.
?C:.
?C:PERL_TARGETARCH:
?C: This symbol, if defined, indicates the target architecture
?C: Perl has been cross-compiled to.  Undefined if not a cross-compile.
?C:.
?H:?%<:#ifndef USE_CROSS_COMPILE
?H:?%<:#$usecrosscompile USE_CROSS_COMPILE /**/
?H:?%<:#define PERL_TARGETARCH "$targetarch" /**/
?H:?%<:#endif
?H:.
?D:targetenv=''
?D:targethost=''
?D:targetmkdir=''
?T:croak pwd exe f q cwd file xxx env
?LINT:extern usecrosscompile
?LINT:extern cc
?LINT:extern usrinc
?LINT:change ar
?LINT:change nm
?LINT:change ranlib
?LINT:change src
?LINT:extern targetenv
?LINT:extern targetport
?LINT:extern targetdir
```

```
?LINT:extern targetuser
?LINT:change targetuser
?LINT:extern targetrun
?LINT:extern targetfrom
?LINT:extern
 targetto
?LINT:change targetrun
?LINT:change targetfrom
?LINT:change targetto
?LINT:extern incpth
?LINT:extern libpth
?LINT:extern locincpth
?LINT:extern loclibpth
?LINT:change locincpth
?LINT:change loclibpth
?LINT:extern hostperl
?LINT:extern hostgenerate
?LINT:extern before_host
?LINT:change before_host
?LINT:extern hostosname
?LINT:extern multiarch
: Check for Cross-Compilation
?X: targethost and targetenv mainly set to allow ?S: documentation
?X:otherwise it could have been declared extern
if $test "X$targethost" = "X"; then
   targethost=""
fi
if $test "X$targetenv" = "X"; then
   targetenv=""
fi
case "$usecrosscompile" in
$define|true|[yY]*)
 $echo "Cross-compiling..."
 croak="
 case "$cc" in
 *-gcc*|*-g++*) # A cross-compiling gcc, probably.
     # arm-linux-androideabi-gcc  -> arm-linux-androideabi
     # x86_64-w64-mingw32-gcc.exe -> x86_64-w64-mingw32
     targetarch=`$echo $cc|$sed 's/-g[c\+][c\+].*$//'`
     ar=`$echo $cc|$sed 's/-g[c\+][c\+]/-ar/'`
     # leave out ld,
 choosing it is more complex
     nm=`$echo $cc|$sed 's/-g[c\+][c\+]/-nm/'`
     ranlib=`$echo $cc|$sed 's/-g[c\+][c\+]/-ranlib/'`
     # We are in a weird spot. Just before us, some values
     # were 'saved', to be restored after the hints are
     # run.  This means that the changes we made to ar,
     # nm and ranlib will get reverted.
```

```
    # To avoid that, we hijack the saving mechanism and
    # have it save our new values.
    for file in ar nm ranlib; do
 eval xxx=\$$file
 eval $file=$xxx$_exe
 eval _$file=$xxx
    done
;;
esac
case "$targetarch" in
") echo "Targetarch not defined." >&4; croak=y ;;
*)  echo "Using targetarch $targetarch." >&4 ;;
esac
case "$targethost" in
") echo "Targethost not defined." >&4; croak=n ;;
*)  echo "Using targethost $targethost." >&4
esac
locincpth=' '
loclibpth=' '
case "$croak" in
y) echo "Cannot continue, aborting." >&4; exit 1 ;;
esac
  : compile a host miniperl and generate_uudmap, unless we got passed them
  if
$test "X$hostperl" = X; then
    echo "Building host miniperl and generate_uudmap binaries" >&4
    before_host=`pwd`
    cd ..
    cd $src
    src=`pwd`
    rm -rf $src/host
    mkdir $src/host
    cd $src/host
    $src/Configure -des -Dusedevel -Dmksymlinks
    $make miniperl
    case "$hostgenerate" in
    ") $make generate_uudmap
        hostgenerate=$src/host/generate_uudmap
        ;;
     "$undef") hostgenerate="
        ;;
    esac
    hostperl=$src/host/miniperl
    cd $before_host
  fi
  hostosname=`$hostperl -le 'print $^O'`
  ;;
*)
```

```
  usecrosscompile="$undef"
  ;;
esac

: Define -Dtargethost=somecomputer to run compiled tests on another machine
case "$targethost" in
  ") echo "Checking for cross-compile" >&4
  case "$usecrosscompile$multiarch" in
     *$define*) echo "Skipping the try tests in the rest of Configure as no targethost was defined when cross-
compiling" >&4
       if [ -f Makefile ]; then
         echo
" "
         echo "Now you must ensure config.sh, config.h and the generated headers exist and run a $make."
       else
         echo "Configure done."
       fi
     exit 0
     ;;
   *) echo "No targethost for running compiler tests against defined, running locally" >&4
      run="
      to=:
      from=:
      ;;
  esac
  ;;
  *) echo "Using targethost $targethost." >&4
 case "$src" in
 /*) run=$src/Cross/run
    targetmkdir=$src/Cross/mkdir
    to=$src/Cross/to
    from=$src/Cross/from
    ;;
 *)  pwd=`$test -f ../Configure & cd ..; pwd`
    run=$pwd/Cross/run
    targetmkdir=$pwd/Cross/mkdir
    to=$pwd/Cross/to
    from=$pwd/Cross/from
    ;;
 esac
 case "$targetrun" in
 ") targetrun=ssh ;;
 esac
 case "$targetto" in
 ") targetto=scp ;;
 esac
 case "$targetfrom" in
 ") targetfrom=scp ;;
```

```
 esac
 run=$run-$targetrun
 to=$to-$targetto
 from=$from-$targetfrom
 case "$targetdir" in
 ")  targetdir=/tmp
     echo "Guessing targetdir $targetdir."
 >&4
     ;;
 esac
 case "$targetuser" in
 ")  targetuser=root
     echo "Guessing targetuser $targetuser." >&4
     ;;
 esac
 case "$targetport" in
 ")  targetport=22
     echo "Guessing targetport $targetport." >&4
     ;;
 esac
 case "$targetfrom" in
 scp) q=-q ;;
 *) q=" ;;
 esac
 case "$targetrun" in
 ssh|rsh)
    cat >$run <<EOF
#!/bin/sh
env="
case "\$1" in
-cwd)
 shift
 cwd=\$1
 shift
 ;;
esac
case "\$1" in
-env)
 shift
 env=\$1
 shift
 ;;
esac
case "\$cwd" in
") cwd=$targetdir ;;
esac
exe=\$1
shift
```

```
$to \$exe
$targetrun -p $targetport -l $targetuser $targethost "cd \$cwd && \$env \$exe \$@"
EOF
    ;;
 adb)
    $touch $run
    ;;
 *)  echo "Unknown targetrun '$targetrun'" >&4
    exit 1
    ;;
 esac
 case "$targetmkdir" in
 */Cross/mkdir)
    cat >$targetmkdir <<EOF
#!/bin/sh
$targetrun -p $targetport -l $targetuser $targethost "mkdir -p \$@"
EOF
    $chmod a+rx $targetmkdir
    ;;
 *)  echo "Unknown targetmkdir '$targetmkdir'" >&4
    exit 1
    ;;
 esac
 case
 "$targetto" in
 scp|rcp)
    cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $targetmkdir \`dirname \$f\`
   $targetto -P $targetport -r $q \$f $targetuser@$targethost:\$f          2>/dev/null  || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $targetto -P $targetport -r $q \$f $targetuser@$targethost:$targetdir/\$f 2>/dev/null || exit 1
   ;;
 esac
done
exit 0
EOF
    ;;
 cp) cat >$to <<EOF
#!/bin/sh
for f in \$@
do
```

```
 case "\$f" in
 /*)
   $mkdir -p $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 *)  echo "Unknown targetto '$targetto'" >&4
     exit 1
     ;;
 esac
 case "$targetfrom" in
 scp|rcp)
   cat >$from <<EOF
#!/bin/sh
for f in \$@
do
 $rm -f \$f
 $targetfrom -P $targetport $q $targetuser@$targethost:$targetdir/\$f . || exit 1
done
exit 0
EOF
     ;;
 cp) cat >$from <<EOF
#!/bin/sh
for
 f in \$@
do
 $rm -f \$f
 cp $targetdir/\$f . || exit 1
done
exit 0
EOF
     ;;
 *)  echo "Unknown targetfrom '$targetfrom'" >&4
     exit 1
     ;;
 esac
 if $test ! -f $run; then
     echo "Target 'run' script '$run' not found." >&4
 else
```

```
    $chmod a+rx $run
 fi
 if $test ! -f $to; then
    echo "Target 'to' script '$to' not found." >&4
 else
    $chmod a+rx $to
 fi
 if $test ! -f $from; then
    echo "Target 'from' script '$from' not found." >&4
 else
    $chmod a+rx $from
 fi
 if $test ! -f $run -o ! -f $to -o ! -f $from; then
    exit 1
 fi
 cat >&4 <<EOF
Using '$run' for remote execution,
and '$from' and '$to'
for remote file transfer.
EOF
 ;;
*) run="
 to=:
 from=:
 usecrosscompile="$undef"
 targetarch="
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Cross.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_semget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_semget.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semget: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_semget:
?S: This variable conditionally defines the HAS_SEMGET symbol, which
?S: indicates to the C program that the semget() routine is available.
?S:.
?C:HAS_SEMGET:
?C: This symbol, if defined, indicates that the semget() routine is
?C: available to get a set of semaphores.
?C:.
?H:#$d_semget
 HAS_SEMGET /**/
?H:.
?LINT:set d_semget
: see if semget exists
set semget d_semget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uselargefiles \
 ccflags_uselargefiles \
 ldflags_uselargefiles \
 libswanted_uselargefiles: \
 Myread Oldconfig Setvar test lseeksize fpossize \
 fpostype Compile echo n c cat lseektype rm_try run \
 use64bitint use64bitall i_stdlib
?MAKE: -pick add $@ %<
?Y:TOP
?S:uselargefiles:
?S: This variable conditionally defines the USE_LARGE_FILES symbol,
?S: and indicates that large file interfaces should be used when
?S: available.
?S:.
?S:ccflags_uselargefiles:
?S: This variable contains the compiler flags needed by large file builds
?S: and added to ccflags by hints files.
?S:.
?S:ldflags_uselargefiles:
?S: This variable contains the loader flags needed by large file builds
```

```
?S: and added to ldflags by
 hints files.
?S:.
?S:libswanted_uselargefiles:
?S: This variable contains the libraries needed by large file builds
?S: and added to ldflags by hints files.  It is a space separated list
?S: of the library names without the "lib" prefix or any suffix, just
?S: like libswanted..
?S:.
?C:USE_LARGE_FILES:
?C: This symbol, if defined, indicates that large file support
?C: should be used when available.
?C:.
?H:?%<:#ifndef USE_LARGE_FILES
?H:?%<:#$uselargefiles USE_LARGE_FILES  /**/
?H:?%<:#endif
?H:.
?INIT:ccflags_uselargefiles="
?INIT:ldflags_uselargefiles="
?INIT:libswanted_uselargefiles="
?T:yyy zzz
?F:!uselargefiles.cbu !try
?LINT:change lseeksize
?LINT:change fpossize
?LINT:extern uselfs
?LINT:use use64bitint
?LINT:use use64bitall
: Check for large file support
# Backward compatibility (uselfs is deprecated).
case "$uselfs" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duselfs is deprecated, using -Duselargefiles instead.
EOM
 uselargefiles="$define"
 ;;
esac

case "$lseeksize:$fpossize"
 in
8:8) cat <<EOM

You can have files larger than 2 gigabytes.
EOM
  val="$define" ;;
*)    case "$uselargefiles" in
  "$undef"|false|[nN]*) dflt='n' ;;
```

```
  *) dflt='y' ;;
  esac
  cat <<EOM

Perl can be built to understand large files (files larger than 2 gigabytes)
on some systems.  To do so, Configure can be run with -Duselargefiles.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
  rp='Try to understand large files, if available?'
  . ./myread
  case "$ans" in
  y|Y) val="$define" ;;
  *) val="$undef"  ;;
  esac
  ;;
esac
set uselargefiles
eval $setvar
: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a large files perl is to be built,
: we may need to set or change some other defaults.
if $test -f uselargefiles.cbu; then
 echo "Your platform has some specific hints regarding large file builds, using them..."
 . ./uselargefiles.cbu
fi
case "$uselargefiles" in
"$define")
 if $test -f uselargefiles.cbu;
 then
  echo " "
  echo "Rechecking to see how big your file offsets are..." >&4
  $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof($lseektype));
   return(0);
}
EOCP
  set try
  if eval $compile_ok; then
   lseeksize=`$run ./try`
   $echo "Your file offsets are now $lseeksize bytes long."
  else
   dflt="$lseeksize"
   echo " "
```

```
   echo "(I can't seem to compile the test program.  Guessing...)"
   rp="What is the size of your file offsets (in bytes)?"
   . ./myread
   lseeksize="$ans"
  fi
  case "$fpostype" in
  *_t) zzz="$fpostype" ;;
  *)   zzz="fpos_t" ;;
  esac
  $echo $n "Rechecking the size of $zzz...$c" >&4
  $cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($fpostype));
   return(0);
}
EOCP
  set try
  if eval $compile_ok; then
   yyy=`$run ./try`
   dflt="$lseeksize"
   case "$yyy" in
   ") echo
 " "
    echo "(I can't execute the test program--guessing $fpossize.)" >&4
    ;;
   *) fpossize=$yyy
    echo " $fpossize bytes." >&4
    ;;
   esac
  else
   dflt="$fpossize"
   echo " "
   echo "(I can't compile the test program.  Guessing...)" >&4
   rp="What is the size of your file positions (in bytes)?"
   . ./myread
   fpossize="$ans"
  fi
  $rm_try
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/uselfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: html1dir.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: html1dir.U,v $
?RCS:
?MAKE:html1dir html1direxp installhtml1dir: cat Loc Myread \
 spackage test Getfile Setprefixvar Prefixit Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?D:html1dir=''
?S:html1dir:
?S: This variable contains the name of the directory in which html
?S: source pages are to be put.  This directory is for pages
?S: that describe whole programs, not libraries or modules.  It
?S: is intended to correspond roughly to section 1 of the Unix
?S: manuals.
?S:.
?D:html1direxp=''
?S:html1direxp:
?S: This
 variable is the same as the html1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installhtml1dir=''
?S:installhtml1dir:
?S: This variable is really the same as html1direxp, unless you are
?S: using a different installprefix.  For extra portability, you
?S: should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set html1direxp
?LINT:set installhtml1dir
: determine where html pages for programs go
set html1dir html1dir none
eval $prefixit
$cat <<EOM
```

```
If you wish to install html files for programs in $spackage, indicate
the appropriate directory here.  To skip installing html files,
answer "none".
EOM
case "$html1dir" in
"|none|$undef|' ') dflt=none ;;
*) dflt=$html1dir ;;
esac
fn=dn+~
rp="Directory for the main $spackage html pages?"
. ./getfile
prefixvar=html1dir
. ./setprefixvar
: Use ' ' for none so value is preserved next time through Configure
$test X"$html1dir" = "X" && html1dir=' '

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/html1dir.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: contains.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:contains: Nothing
?MAKE: -pick add $@ %<
?S:contains:
?S: This variable holds the command to do a grep with a proper return
?S: status.  On most sane systems it is simply "grep".  On insane systems
?S: it is a grep followed by a cat followed by a test.  This variable
?S: is primarily for the use of other Configure units.
?S:.
: Some
 greps do not return status, grrr.
echo "grimblepritz" >grimble
if grep blurfldyick grimble >/dev/null 2>&1 ; then
 contains=contains
```

```
elif grep grimblepritz grimble >/dev/null 2>&1 ; then
 contains=grep
else
 contains=contains
fi
rm -f grimble
: the following should work in any shell
case "$contains" in
contains*)
 echo " " >&4
 echo "AGH!  Grep doesn't return a status.  Attempting remedial action." >&4
 cat >contains <<'EOSS'
grep "$1" "$2" >.greptmp && cat .greptmp && test -s .greptmp
EOSS
contains=./contains
chmod +x $contains
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/contains.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2014, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_dladdr.U,v $
?RCS:
?MAKE:d_dladdr: Inlibc
?MAKE: -pick add $@ %<
?S:d_dladdr:
?S: This variable conditionally defines the HAS_DLADDR symbol, which
?S: indicates to the C program that the dladdr() routine is available
?S: to get a stack trace.
?S:.
?C:HAS_DLADDR:
?C: This symbol, if defined, indicates that the dladdr() routine is
?C: available to query dynamic linker information for an address.
?C: The <dlfcn.h> header must be included to use this routine.
?C:.
?H:#$d_dladdr HAS_DLADDR /**/
?H:.
```

```
?LINT:set d_dladdr
:
 see if dladdr exists
set dladdr d_dladdr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dladdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_syslog.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_syslog.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:56  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syslog: test Csym Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_syslog:
?S: This variable conditionally defines the HAS_SYSLOG symbol, which
?S: indicates to the C program that syslog() exists on this system.
?S:.
?C:HAS_SYSLOG
 (LIBSYSLOG):
?C: This symbol, if defined, indicates that the program can rely on the
?C: system providing syslog().  Otherwise, the syslog code provided by
?C: the package should be used.
?C:.
?H:#$d_syslog HAS_SYSLOG /**/
?H:.
?LINT:set d_syslog
: see if syslog is available
echo " "
if $test `./findhdr syslog.h` && \
 (set syslog val -f d_syslog; eval $csym; $val); then
 echo "syslog() found." >&4
 val="$define"
```

```
else
 echo "syslog() not found in your C library." >&4
 val="$undef"
fi
set d_syslog
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_syslog.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wait4.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wait4.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wait4: Inlibc
?MAKE: -pick add $@ %<
?S:d_wait4:
?S: This variable conditionally defines the HAS_WAIT4 symbol, which
?S: indicates the wait4() routine is available.
?S:.
?C:HAS_WAIT4 (WAIT4):
?C: This symbol, if defined, indicates that wait4() exists.
?C:.
?H:#$d_wait4 HAS_WAIT4 /**/
?H:.
?LINT:set d_wait4
: see if there is a wait4
set
 wait4 d_wait4
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wait4.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ssizetype.U,v 3.0.1.3 1997/02/28 16:24:21 ram Exp $
?RCS:
```

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: ssizetype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:24:21  ram
?RCS: patch61: integrated perl5 concerns for mis-configured sfio
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:30:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:33:06  ram
?RCS: patch32: created
 by ADO
?RCS:
?MAKE:ssizetype: Myread Typedef sizetype cat rm_try Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:ssizetype:
?S: This variable defines ssizetype to be something like ssize_t,
?S: long or int.  It is used by functions that return a count
?S: of bytes or an error condition.  It must be a signed type.
?S: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?S:.
?C:SSize_t:
?C: This symbol holds the type used by functions that return
?C: a count of bytes or an error condition.  It must be a signed type.
?C: It is usually ssize_t, but may be long or int, etc.
?C: It may be necessary to include <sys/types.h> or <unistd.h>
?C: to get any typedef'ed information.
?C: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?C:.
?H:#define SSize_t $ssizetype /* signed count of bytes */
?H:.
?F:!try
: see what type is used for signed size_t
set ssize_t ssizetype int stdio.h sys/types.h
eval $typedef
dflt="$ssizetype"
?X: Now check out whether sizeof(SSize_t)
 == sizeof(Size_t)
$cat > try.c <<EOM
```

```
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#define Size_t $sizetype
#define SSize_t $dflt
int main()
{
 if (sizeof(Size_t) == sizeof(SSize_t))
  printf("$dflt\n");
 else if (sizeof(Size_t) == sizeof(int))
  printf("int\n");
 else
  printf("long\n");
 exit(0);
}
EOM
echo " "
set try
if eval $compile_ok && $run ./try > /dev/null; then
 ssizetype=`$run ./try`
 echo "I'll be using $ssizetype for functions returning a byte count." >&4
else
 $cat >&4 <<EOM
Help! I can't compile and run the ssize_t test program: please enlighten me!
(This is probably a misconfiguration in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)

I need a type that is the same size as $sizetype, but is guaranteed to
be signed.  Common values are ssize_t, int and long.

EOM
 rp="What signed type is the same size as $sizetype?"
 . ./myread
 ssizetype="$ans"
fi
$rm_try
```

Found in path(s):
*
/perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ssizetype.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_shmctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmctl:
?S: This variable conditionally defines the HAS_SHMCTL symbol, which
?S: indicates to the C program that the shmctl() routine is available.
?S:.
?C:HAS_SHMCTL:
?C: This symbol, if defined, indicates that the shmctl() routine is
?C: available to perform shared memory control operations.
?C:.
?H:#$d_shmctl
 HAS_SHMCTL  /**/
?H:.
?LINT:set d_shmctl
: see if shmctl exists
set shmctl d_shmctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dlerror.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlerror.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:49  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:11:23  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_dlerror: Inlibc runnm
?MAKE: -pick add $@ %<
?S:d_dlerror:
?S: This variable conditionally defines the HAS_DLERROR symbol, which
?S: indicates
 to the C program that the dlerror() routine is available.
?S:.
?C:HAS_DLERROR :
?C: This symbol, if defined, indicates that the dlerror routine is
?C: available to return a string describing the last error that
?C: occurred from a call to dlopen(), dlclose() or dlsym().
?C:.
?H:#$d_dlerror HAS_DLERROR /**/
?H:.
?T: xxx_runnm
?LINT:set d_dlerror
?X: We don't permanently change runnm, but we do temporarily.
?LINT: change runnm
: see if dlerror exists
?X: On NetBSD and FreeBSD, dlerror might be available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
runnm=false
set dlerror d_dlerror
eval $inlibc
runnm="$xxx_runnm"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dlerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_fp_class.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_fp_class: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_fp_class:
?S: This variable conditionally defines the I_FP_CLASS symbol, and indicates
?S: whether a C program should include <fp_class.h>.
```

```
?S:.
?C:I_FP_CLASS:
?C: This symbol, if defined, indicates that <fp_class.h> exists and
?C: should be included.
?C:.
?H:#$i_fp_class I_FP_CLASS  /**/
?H:.
?LINT:set i_fp_class
: see if this is a fp_class.h system
set fp_class.h i_fp_class
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fp_class.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_htonl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_htonl.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:09:25  ram
?RCS: patch32: now properly handles htonl() and friends when macros (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:45:00  ram
?RCS: patch23: now also check for htonl() macro (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_htonl: Inlibc Setvar i_niin i_sysin i_arpainet cat rm contains \
 cppstdin cppflags cppminus
?MAKE: -pick
 add $@ %<
?S:d_htonl:
?S: This variable conditionally defines HAS_HTONL if htonl() and its
?S: friends are available to do network order byte swapping.
?S:.
?C:HAS_HTONL (HTONL):
?C: This symbol, if defined, indicates that the htonl() routine (and
?C: friends htons() ntohl() ntohs()) are available to do network
?C: order byte swapping.
```

```
?C:.
?C:HAS_HTONS (HTONS):
?C: This symbol, if defined, indicates that the htons() routine (and
?C: friends htonl() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHL (NTOHL):
?C: This symbol, if defined, indicates that the ntohl() routine (and
?C: friends htonl() htons() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHS (NTOHS):
?C: This symbol, if defined, indicates that the ntohs() routine (and
?C: friends htonl() htons() ntohl()) are available to do network
?C: order byte swapping.
?C:.
?H:#$d_htonl HAS_HTONL  /**/
?H:#$d_htonl HAS_HTONS  /**/
?H:#$d_htonl HAS_NTOHL  /**/
?H:#$d_htonl
 HAS_NTOHS  /**/
?H:.
?F:!htonl.c
?LINT:set d_htonl
: see if htonl --and friends-- exists
val=''
set htonl val
eval $inlibc

: Maybe they are macros.
case "$val" in
$undef)
 $cat >htonl.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#$i_niin I_NETINET_IN
#$i_sysin I_SYS_IN
#$i_arpainet I_ARPA_INET
#ifdef I_NETINET_IN
#include <netinet/in.h>
#endif
#ifdef I_SYS_IN
#include <sys/in.h>
#endif
#ifdef I_ARPA_INET
#include <arpa/inet.h>
#endif
#ifdef htonl
```

```
printf("Defined as a macro.");
#endif
EOM
 $cppstdin $cppflags $cppminus < htonl.c >htonl.E 2>/dev/null
 if $contains 'Defined as a macro' htonl.E >/dev/null 2>&1; then
  val="$define"
  echo "But it seems to be defined as a macro." >&4
 fi
 $rm -f htonl.?
 ;;
esac
set d_htonl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_htonl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getlogin_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getlogin_r getlogin_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_unistd extern_C
?MAKE: -pick add $@ %<
?S:d_getlogin_r:
?S: This variable conditionally defines the HAS_GETLOGIN_R symbol,
?S: which indicates to the C program that the getlogin_r()
?S: routine is available.
?S:.
?S:getlogin_r_proto:
?S: This variable encodes the prototype of getlogin_r.
?S: It is zero if d_getlogin_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getlogin_r
?S: is defined.
?S:.
?C:HAS_GETLOGIN_R:
?C: This symbol, if defined, indicates that the getlogin_r routine
?C: is available
 to getlogin re-entrantly.
?C:.
?C:GETLOGIN_R_PROTO:
?C: This symbol encodes the prototype of getlogin_r.
?C: It is zero if d_getlogin_r is undef, and one of the
```

```
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getlogin_r
?C: is defined.
?C:.
?H:#$d_getlogin_r HAS_GETLOGIN_R /**/
?H:#define GETLOGIN_R_PROTO $getlogin_r_proto /**/
?H:.
?T:try hdrs d_getlogin_r_proto
: see if getlogin_r exists
set getlogin_r d_getlogin_r
eval $inlibc
case "$d_getlogin_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_unistd unistd.h"
 case "$d_getlogin_r_proto:$usethreads" in
 ":define") d_getlogin_r_proto=define
  set d_getlogin_r_proto getlogin_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getlogin_r_proto" in
 define)
 case "$getlogin_r_proto" in
 "|0) try='int getlogin_r(char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=I_BW ;;
 esac
 case "$getlogin_r_proto" in
 "|0) try='int getlogin_r(char*, int);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=I_BI
 ;;
 esac
 case "$getlogin_r_proto" in
 "|0) try='char* getlogin_r(char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=B_BW ;;
 esac
 case "$getlogin_r_proto" in
 "|0) try='char* getlogin_r(char*, int);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=B_BI ;;
 esac
 case "$getlogin_r_proto" in
 "|0) d_getlogin_r=undef
  getlogin_r_proto=0
  echo "Disabling getlogin_r, cannot determine prototype." >&4 ;;
 * ) case "$getlogin_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getlogin_r_proto="REENTRANT_PROTO_$getlogin_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
```

```
 ;;
 *) case "$usethreads" in
  define) echo "getlogin_r has no prototype, not using it." >&4 ;;
  esac
  d_getlogin_r=undef
  getlogin_r_proto=0
  ;;
 esac
 ;;
*) getlogin_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getlogin_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Lukas Mai
?RCS:
?RCS: You may distribute this file under the terms of either
?RCS:     a) the "Artistic License" which comes with Perl, or
?RCS:     b) the "Artistic License" which comes with dist, or
?RCS:     c) the GNU General Public License as published by the Free
?RCS:     Software Foundation; either version 1, or (at your option) any
?RCS:     later version (see the file "Copying" that comes with the
?RCS:     Perl distribution).
?RCS: Which one to use is your choice.
?RCS: See the U/README file.
?MAKE:d_builtin_add_overflow d_builtin_sub_overflow d_builtin_mul_overflow : Compile Setvar cat run rm_try
?MAKE: -pick add $@ %<
?S:d_builtin_add_overflow:
?S: This variable conditionally defines HAS_BUILTIN_ADD_OVERFLOW, which
?S: indicates that the compiler supports __builtin_add_overflow(x,y,&z)
?S: for safely adding x and y into z while checking for overflow.
?S:.
?S:d_builtin_sub_overflow:
?S: This
 variable conditionally defines HAS_BUILTIN_SUB_OVERFLOW, which
?S: indicates that the compiler supports __builtin_sub_overflow(x,y,&z)
?S: for safely subtracting y from x into z while checking for overflow.
?S:.
?S:d_builtin_mul_overflow:
?S: This variable conditionally defines HAS_BUILTIN_MUL_OVERFLOW, which
?S: indicates that the compiler supports __builtin_mul_overflow(x,y,&z)
?S: for safely multiplying x and y into z while checking for overflow.
?S:.
?C:HAS_BUILTIN_ADD_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
```

```
?C: __builtin_add_overflow for adding integers with overflow checks.
?C:.
?C:HAS_BUILTIN_SUB_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_sub_overflow for subtracting integers with overflow checks.
?C:.
?C:HAS_BUILTIN_MUL_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_mul_overflow for multiplying integers with overflow checks.
?C:.
?H:#$d_builtin_add_overflow
 HAS_BUILTIN_ADD_OVERFLOW /**/
?H:#$d_builtin_sub_overflow HAS_BUILTIN_SUB_OVERFLOW /**/
?H:#$d_builtin_mul_overflow HAS_BUILTIN_MUL_OVERFLOW /**/
?H:.
?F:!try
?LINT:set d_builtin_add_overflow d_builtin_sub_overflow d_builtin_mul_overflow
: Look for GCC-style __builtin_add_overflow
case "$d_builtin_add_overflow" in
")
   echo " "
   echo "Checking whether your compiler can handle __builtin_add_overflow ..." >&4
   $cat >try.c <<'EOCP'
int main(void) {
   const unsigned int uint_max = ~0u;
   int target_int = 0;
   if (__builtin_add_overflow(1, 2, &target_int) || target_int != 3) {
       return 1;
   }
   if (!__builtin_add_overflow((int)(uint_max >> 1), 1, &target_int)) {
       return 1;
   }
   if (!__builtin_add_overflow(uint_max, -1, &target_int)) {
       return 1;
   }
   return 0;
}
EOCP
   set try
   if eval $compile && $run ./try; then
       echo "Your C compiler supports __builtin_add_overflow."
       val="$define"
   else
       echo
 "Your C compiler doesn't seem to understand __builtin_add_overflow."
       val="$undef"
   fi
   ;;
```

```
*) val="$d_builtin_add_overflow" ;;
esac

set d_builtin_add_overflow
eval $setvar
$rm_try

: Look for GCC-style __builtin_sub_overflow
case "$d_builtin_sub_overflow" in
")
  echo " "
  echo "Checking whether your compiler can handle __builtin_sub_overflow ..." >&4
  $cat >try.c <<'EOCP'
int main(void) {
  const unsigned int uint_max = ~0u;
  int target_int = 0;
  if (__builtin_sub_overflow(1, -2, &target_int) || target_int != 3) {
      return 1;
  }
  if (!__builtin_sub_overflow(-(int)(uint_max >> 1), 2, &target_int)) {
      return 1;
  }
  if (!__builtin_sub_overflow(uint_max, 1, &target_int)) {
      return 1;
  }
  return 0;
}
EOCP
  set try
  if eval $compile && $run ./try; then
      echo "Your C compiler supports __builtin_sub_overflow."
      val="$define"
  else
      echo "Your C compiler doesn't seem to understand __builtin_sub_overflow."
       val="$undef"
  fi
  ;;
*) val="$d_builtin_sub_overflow" ;;
esac

set d_builtin_sub_overflow
eval $setvar
$rm_try

: Look for GCC-style __builtin_mul_overflow
case "$d_builtin_mul_overflow" in
")
  echo " "
```

```
  echo "Checking whether your compiler can handle __builtin_mul_overflow ..." >&4
  $cat >try.c <<'EOCP'
int main(void) {
  const unsigned int uint_max = ~0u;
  int target_int = 0;
  if (__builtin_mul_overflow(2, 3, &target_int) || target_int != 6) {
     return 1;
  }
  if (!__builtin_mul_overflow((int)(uint_max >> 1), 2, &target_int)) {
     return 1;
  }
  if (!__builtin_mul_overflow(uint_max, 1, &target_int)) {
     return 1;
  }
  return 0;
}
EOCP
  set try
  if eval $compile && $run ./try; then
     echo "Your C compiler supports __builtin_mul_overflow."
     val="$define"
  else
     echo "Your C compiler doesn't seem to understand __builtin_mul_overflow."
     val="$undef"
  fi
  ;;
*) val="$d_builtin_mul_overflow"
 ;;
esac

set d_builtin_mul_overflow
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_builtin_overflow.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nametype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: nametype.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:26:09  ram
?RCS: patch36: call ./usg and ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:36:48  ram
?RCS: patch32: fixed typo: /etc/password -> /etc/passwd (WED)
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:10:09  ram
?RCS: patch10: made questions more explicit for 'Configure -s' prompting (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:20  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?MAKE:nametype d_passnames d_berknames d_usgnames: Myread Guess Oldconfig cat
?MAKE: -pick add $@ %<
?S:nametype:
?S: This variable indicates how full names are stored on this system.
?S: Values are bsd, usg, and other.
?S:.
?S:d_passnames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file.
?S:.
?S:d_berknames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file in Berkeley format.
?S:.
?S:d_usgnames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file in USG format.
?S:.
?C:PASSNAMES:
?C: This symbol, if defined, indicates that full names are stored in
?C: the /etc/passwd file.
?C:.
?C:BERKNAMES:
?C: This symbol, if defined, indicates that full
 names are stored in
?C: the /etc/passwd file in Berkeley format (name first thing, everything
?C: up to first comma, with & replaced by capitalized login id, yuck).
?C:.
?C:USGNAMES:
?C: This symbol, if defined, indicates that full names are stored in
?C: the /etc/passwd file in USG format (everything after - and before ( is
```

```
?C: the name).
?C:.
?H:#$d_passnames PASSNAMES /*  (undef to take name from ~/.fullname) */
?H:#$d_berknames BERKNAMES /* (that is, ":name,stuff:") */
?H:#$d_usgnames USGNAMES  /* (that is, ":stuff-name(stuff):") */
?H:.
: find out how to find out full name
case "$d_berknames" in
"$define")
 dflt=y;;
"$undef")
 dflt=n;;
*)
 if ./bsd; then
  dflt=y
 elif ./xenix; then
  dflt=y
 else
  dflt=n
 fi
 ;;
esac
$cat <<'EOM'

Does your /etc/passwd file keep full names in Berkeley/V7 format (name first
thing after ':' in GCOS field)?  In that case, a typical entry in the password
file looks like this:

   guest:**paswword**:10:100:Mister Guest User:/usr/users:/bin/sh

                         ^^^^^^^^^^^^^^^^^^
EOM
rp="Berkeley/V7 format for full name in /etc/passwd?"
. ./myread
case "$ans" in
y*) d_passnames="$define"
 d_berknames="$define"
 d_usgnames="$undef"
 nametype=bsd
 ;;
*)
 case "$d_usgnames" in
 "$define") dflt=y;;
 "$undef") dflt=n;;
 *)
  if ./usg; then
   dflt=y
  else
```

```
  dflt=n
 fi
 ;;
esac
$cat <<'EOM'

Does your passwd file keep full names in USG format (name sandwiched between a
'-' and a '(')?  In that case, a typical entry in the password file looks like
this:

  guest:**paswword**:10:100:000-Mister Guest User(000):/usr/users:/bin/sh
                            ^^^^^^^^^^^^^^^^^^
EOM
 rp="USG format for full name in /etc/passwd?"
 . ./myread
 case "$ans" in
 n*) echo "Full name will be taken from ~/.fullname"
  d_passnames="$undef"
  d_berknames="$undef"
  d_usgnames="$undef"
  nametype=other
  ;;
 *)
  d_passnames="$define"
  d_berknames="$undef"
  d_usgnames="$define"
  nametype=usg
  ;;
 esac;;
esac

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nametype.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_msghdr_s: Hasstruct i_systypes d_socket i_sysuio Setvar
?MAKE: -pick add $@ %<
?S:d_msghdr_s:
?S: This variable conditionally defines the HAS_STRUCT_MSGHDR symbol,
?S: which indicates that the struct msghdr is supported.
```

```
?S:.
?C:HAS_STRUCT_MSGHDR:
?C: This symbol, if defined, indicates that the struct msghdr
?C: is supported.
?C:.
?H:#$d_msghdr_s HAS_STRUCT_MSGHDR /**/
?H:.
?LINT:set d_msghdr_s
: Check for msghdr_s
echo " "
echo "Checking to see if your system supports struct msghdr..." >&4
set d_msghdr_s msghdr $i_systypes sys/types.h $d_socket sys/socket.h $i_sysuio sys/uio.h
eval $hasstruct
case "$d_msghdr_s" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't."
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_msghdr_s.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gmtime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gmtime_r gmtime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_gmtime_r:
?S: This variable conditionally defines the HAS_GMTIME_R symbol,
?S: which indicates to the C program that the gmtime_r()
?S: routine is available.
?S:.
?S:gmtime_r_proto:
?S: This variable encodes the prototype of gmtime_r.
?S: It is zero if d_gmtime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gmtime_r
?S: is defined.
?S:.
?C:HAS_GMTIME_R:
?C: This symbol, if defined, indicates that the gmtime_r routine
?C: is available to gmtime re-entrantly.
```

```
?C:.
?C:GMTIME_R_PROTO:
?C: This
 symbol encodes the prototype of gmtime_r.
?C: It is zero if d_gmtime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gmtime_r
?C: is defined.
?C:.
?H:#$d_gmtime_r HAS_GMTIME_R /**/
?H:#define GMTIME_R_PROTO $gmtime_r_proto /**/
?H:.
?T:try hdrs d_gmtime_r_proto
: see if gmtime_r exists
set gmtime_r d_gmtime_r
eval $inlibc
case "$d_gmtime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_gmtime_r_proto:$usethreads" in
 ":define") d_gmtime_r_proto=define
  set d_gmtime_r_proto gmtime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gmtime_r_proto" in
 define)
 case "$gmtime_r_proto" in
 "|0) try='struct tm* gmtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && gmtime_r_proto=S_TS ;;
 esac
 case "$gmtime_r_proto" in
 "|0) try='int gmtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && gmtime_r_proto=I_TS ;;
 esac
 case
 "$gmtime_r_proto" in
 "|0) d_gmtime_r=undef
  gmtime_r_proto=0
  echo "Disabling gmtime_r, cannot determine prototype." >&4 ;;
 * ) case "$gmtime_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gmtime_r_proto="REENTRANT_PROTO_$gmtime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gmtime_r has no prototype, not using it." >&4 ;;
```

```
  esac
  d_gmtime_r=undef
  gmtime_r_proto=0
  ;;
 esac
 ;;
*) gmtime_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gmtime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016 Dagfinn Ilmari Mannsker & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X:
?X: This unit produces a variable that is intended to be eval'ed in
?X: order to define/undefine a symbol. A consistency check is made
?X: regarding any previous value and a warning is issued if there
?X: is any discrepancy.
?X:
?X: To use it, say:
?X: set d_siginfo_si_errno siginfo_t int si_errno $d_sigaction signal.h
?X: eval $hasfield_t;
?X:
?MAKE:Hasfield_t: test Compile rm_try Setvar
?MAKE: -pick add $@ %<
?LINT:define hasfield_t
?S:hasfield_t:
?S: Internal macro for Configure
?S:.
?V:hasfield_t:
?T:varname struct type field
: Define hasfield_t macro for Configure internal use
hasfield_t='varname=$1; struct=$2; type=$3; field=$4; shift; shift; shift; shift;
while $test $# -ge 2; do
   case
 "$1" in
 $define) echo "#include <$2>";;
   esac ;
   shift 2;
done > try.c;
echo "int main () { $struct foo; $type bar = foo.$field; }" >> try.c;
set try;
```

```
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Hasfield_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shm.U,v 3.0 1993/08/18 12:07:17 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_shm.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shm: test d_shmctl d_shmget d_shmat d_shmdt Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_shm:
?S: This variable conditionally defines the HAS_SHM symbol, which
?S: indicates that the entire shm*(2) library is present.
?S:.
?C:HAS_SHM:
?C: This symbol, if defined, indicates that the entire shm*(2) library is
?C: supported.
?C:.
?H:#$d_shm HAS_SHM  /**/
?H:.
?T:h_shm
?LINT:set
 d_shm
: see how much of the 'shm*(2)' library is present.
h_shm=true
echo " "
case "$d_shmctl$d_shmget$d_shmat$d_shmdt" in
*"$undef"*) h_shm=false;;
esac
```

```
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID shared memory"*"not configured"*)
 echo "Your $osname does not have the shm*(2) configured." >&4
       h_shm=false
 val="$undef"
 set shmctl d_shmctl
 eval $setvar
 set shmget d_shmget
 eval $setvar
 set shmat d_shmat
 eval $setvar
 set shmdt d_shmdt
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_shm && $test `./findhdr sys/shm.h`; then
 echo "You have the full shm*(2) library." >&4
 val="$define"
else
 echo "You don't have the full shm*(2) library." >&4
 val="$undef"
fi
set d_shm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_shm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_vprintf.U,v 3.0 1993/08/18 12:07:59 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_vprintf.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_vprintf d_charvspr: Compile Guess cat Csym Setvar run rm_try \
 i_stdlib i_unistd i_stdarg i_varargs
?MAKE: -pick add $@ %<
?S:d_vprintf:
?S: This variable conditionally defines the HAS_VPRINTF symbol, which
?S: indicates to the C program that the vprintf() routine is available
?S: to printf with a pointer to an argument list.
?S:.
?S:d_charvspr:
?S: This
 variable conditionally defines CHARVSPRINTF if this system
?S: has vsprintf returning type (char*).  The trend seems to be to
?S: declare it as "int vsprintf()".
?S:.
?C:HAS_VPRINTF (VPRINTF):
?C: This symbol, if defined, indicates that the vprintf routine is available
?C: to printf with a pointer to an argument list.  If unavailable, you
?C: may need to write your own, probably in terms of _doprnt().
?C:.
?C:USE_CHAR_VSPRINTF (CHARVSPRINTF):
?C: This symbol is defined if this system has vsprintf() returning type
?C: (char*).  The trend seems to be to declare it as "int vsprintf()".  It
?C: is up to the package author to declare vsprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_vprintf HAS_VPRINTF /**/
?H:#$d_charvspr USE_CHAR_VSPRINTF /**/
?H:.
?T:val2
?F:!try
?LINT:set d_vprintf d_charvspr
: see if vprintf exists
echo " "
if set vprintf val -f d_vprintf; eval $csym; $val; then
 echo 'vprintf() found.' >&4
 val="$define"
 $cat >try.c <<EOF
#$i_stdarg I_STDARG  /*
 Only one of these can be defined by i_varhrd */
#$i_varargs I_VARARGS

#$i_stdlib I_STDLIB
#$i_unistd I_UNISTD

#ifdef I_STDARG
#  include <stdarg.h>
#else /* I_VARARGS */
#  include <varargs.h>
```

```
#endif

#ifdef I_UNISTD
#  include <unistd.h>
#endif

#ifdef I_STDLIB
#  include <stdlib.h>
#endif

#include <stdio.h> /* vsprintf prototype */

#ifdef I_STDARG
void xxx(int n, ...)
{
   va_list args;
   char buf[10];
   va_start(args, n);
   exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
int main() { xxx(1, "foo"); }

#else /* I_VARARGS */

xxx(va_alist)
va_dcl
{
   va_list args;
   char buf[10];
   va_start(args);
   exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
int main() { xxx("foo"); }

#endif

EOF
 set try
 if eval $compile_ok; then
  if $run ./try; then
   echo "Your vsprintf() returns (int)." >&4
   val2="$undef"
  else
   echo "Your vsprintf() returns (char*)." >&4
   val2="$define"
  fi
 else
  echo 'I am unable to compile the vsprintf() test program.' >&4
```

```
  #
 We shouldn't get here.  If we do, assume the standard signature,
  # not the old BSD one.
  echo 'Guessing that vsprintf() returns (int).' >&4
  val2="$undef"
 fi
else
 echo 'vprintf() NOT found.' >&4
 val="$undef"
 val2="$undef"
fi
$rm_try
set d_vprintf
eval $setvar
val=$val2
set d_charvspr
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_vprintf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: basicshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: basicshell.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:basicshell: Getfile Oldconfig bash csh ksh sh
?MAKE: -pick add $@ %<
?S:basicshell:
?S: This variable contains the eventual value of the BASICSHELL symbol,
?S: which contains the full name of the basic script shell on this
?S: system.  Usual values are /bin/sh, /bin/ksh, /bin/csh.
?S:.
?C:BASICSHELL:
?C: This symbol contains the
 full name of the basic script shell on this
?C: system.  Usual values are /bin/sh, /bin/ksh, /bin/csh.
?C:.
```

```
?H:#define BASICSHELL "$basicshell"  /**/
?H:.
: find the most basic shell for scripts
echo " "
case "$basicshell" in
")
 case "$sh $bash $csh $ksh" in
 */sh*) dflt="$sh" ;;
 */ksh*) dflt="$ksh" ;;
 */csh*) dflt="$csh" ;;
 */bash*) dflt="$bash" ;;
 *) dflt='/bin/sh' ;;
 esac
 ;;
*)
 dflt="$basicshell";;
esac
fn=f
rp="Give the full path name of the most basic shell used on your system"
. ./getfile
basicshell=$ans
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/basicshell.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endgrent_r endgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_endgrent_r:
?S: This variable conditionally defines the HAS_ENDGRENT_R symbol,
?S: which indicates to the C program that the endgrent_r()
?S: routine is available.
?S:.
?S:endgrent_r_proto:
?S: This variable encodes the prototype of endgrent_r.
?S: It is zero if d_endgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endgrent_r
?S: is defined.
?S:.
```

```
?C:HAS_ENDGRENT_R:
?C: This symbol, if defined, indicates that the endgrent_r routine
?C: is available to
 endgrent re-entrantly.
?C:.
?C:ENDGRENT_R_PROTO:
?C: This symbol encodes the prototype of endgrent_r.
?C: It is zero if d_endgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endgrent_r
?C: is defined.
?C:.
?H:#$d_endgrent_r HAS_ENDGRENT_R /**/
?H:#define ENDGRENT_R_PROTO $endgrent_r_proto /**/
?H:.
?T:try hdrs d_endgrent_r_proto
: see if endgrent_r exists
set endgrent_r d_endgrent_r
eval $inlibc
case "$d_endgrent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_endgrent_r_proto:$usethreads" in
 ":define") d_endgrent_r_proto=define
  set d_endgrent_r_proto endgrent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endgrent_r_proto" in
 define)
 case "$endgrent_r_proto" in
 "|0) try='int endgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endgrent_r_proto=I_H ;;
 esac
 case "$endgrent_r_proto" in
 "|0) try='void endgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endgrent_r_proto=V_H ;;
 esac
 case "$endgrent_r_proto"
 in
 "|0) d_endgrent_r=undef
  endgrent_r_proto=0
  echo "Disabling endgrent_r, cannot determine prototype." >&4 ;;
 * ) case "$endgrent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endgrent_r_proto="REENTRANT_PROTO_$endgrent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
```

```
 ;;
 *) case "$usethreads" in
  define) echo "endgrent_r has no prototype, not using it." >&4 ;;
  esac
  d_endgrent_r=undef
  endgrent_r_proto=0
  ;;
 esac
 ;;
*) endgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endgrent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getservprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getservprotos:
?S: This variable conditionally defines the HAS_GETSERV_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getserv*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETSERV_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getservent(), getservbyname(), and
?C: getservbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getservprotos HAS_GETSERV_PROTOS /**/
?H:.
?LINT:set d_getservprotos
: see if prototypes for various getservxxx netdb.h functions are available
echo " "
set d_getservprotos getservent $i_netdb netdb.h
```

```
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getservprotos.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fp_class: Inlibc
?MAKE: -pick add $@ %<
?S:d_fp_class:
?S: This variable conditionally defines the HAS_FP_CLASS symbol, which
?S: indicates to the C program that the fp_class() routine is available.
?S:.
?C:HAS_FP_CLASS:
?C: This symbol, if defined, indicates that the fp_class routine is
?C: available to classify doubles.  Available for example in Digital UNIX.
?C: The returned values are defined in <math.h> and are:
?C:
?C: FP_SNAN           Signaling NaN (Not-a-Number)
?C: FP_QNAN           Quiet NaN (Not-a-Number)
?C: FP_POS_INF        +infinity
?C: FP_NEG_INF        -infinity
?C: FP_POS_NORM       Positive normalized
?C: FP_NEG_NORM       Negative normalized
?C: FP_POS_DENORM     Positive denormalized
?C: FP_NEG_DENORM
    Negative denormalized
?C: FP_POS_ZERO       +0.0 (positive zero)
?C: FP_NEG_ZERO       -0.0 (negative zero)
?C:.
?H:#$d_fp_class HAS_FP_CLASS  /**/
?H:.
?LINT:set d_fp_class
: see if fp_class exists
set fp_class d_fp_class
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fp_class.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_isascii.U,v 3.0.1.2 1994/10/29 16:13:39 ram Exp $
```

```
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_isascii.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:13:39  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:32  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_isascii: Compile cat rm Setvar i_stdlib
?MAKE: -pick add $@ %<
?S:d_isascii:
?S: This variable conditionally defines the HAS_ISASCII constant,
?S: which indicates
 to the C program that isascii() is available.
?S:.
?C:HAS_ISASCII:
?C: This manifest constant lets the C program know that isascii
?C: is available.
?C:.
?H:#$d_isascii HAS_ISASCII  /**/
?H:.
?LINT:set d_isascii
?X: Can't use Inlibc because isascii() might be a macro.
: Look for isascii
echo " "
$cat >isascii.c <<EOCP
#include <stdio.h>
#include <ctype.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 int c = 'A';
 if (isascii(c))
  exit(0);
 else
  exit(1);
```

```
}
EOCP
set isascii
if eval $compile; then
 echo "isascii() found." >&4
 val="$define"
else
 echo "isascii() NOT found." >&4
 val="$undef"
fi
set d_isascii
eval $setvar
$rm -f isascii*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_isascii.U
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```
?RCS: $Id: d_getprotoprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getprotoprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getprotoprotos:
?S: This variable conditionally defines the HAS_GETPROTO_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getproto*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETPROTO_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getprotoent(), getprotobyname(), and
?C: getprotobyaddr().
  Otherwise, it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getprotoprotos HAS_GETPROTO_PROTOS /**/
?H:.
?LINT:set d_getprotoprotos
: see if prototypes for various getprotoxxx netdb.h functions are available
echo " "
```

```
set d_getprotoprotos getprotoent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getprotoprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Thomas Neumann <tom@smart.bo.open.de>
?RCS:
?RCS: $Log: Findhdr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:53:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:56  ram
?RCS: patch23: cppminus must be after other cppflags, not before
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a findhdr script which is used to locate the header
?X: files
 in $usrinc or other stranger places using cpp capabilities. The
?X: script is given an include file base name, like 'stdio.h' or 'sys/file.h'
?X: and it returns the full path of the include file and a zero status or an
?X: empty string with an error status if the file could not be located.
?X:
?MAKE:Findhdr: grep test tr rm +usrinc awk cat startsh \
 cppstdin cppminus +cppflags eunicefix osname
?MAKE: -pick add $@ %<
?LINT:define fieldn
?S:fieldn:
?S: This variable is used internally by Configure. It contains the position
?S: of the included file name in cpp output. That is to say, when cpp
?S: pre-processes a #include <file> line, it replaces it by a # line which
?S: contains the original position in the input file and the full name of
?S: included file, between "quotes".
?S:.
```

```
?V:fieldn
?F:./findhdr !fieldn
?T:cline pos wanted name awkprg cppfilter testaccess status usrincdir
: determine filename position in cpp output
echo " "
echo "Computing filename position in cpp output for #include
 directives..." >&4
echo '#include <stdio.h>' > foo.c
case "$osname" in
vos)
 testaccess=-e
?X: VOS: path component separator is >
 cppfilter="tr '\\\\>' '/' |"
 ;;
*)
 testaccess=-r
 cppfilter="
 ;;
esac
$cat >fieldn <<EOF
$startsh
$cppstdin $cppflags $cppminus <foo.c 2>/dev/null | \
$grep '^[  ]*#.*stdio\.h' | \
while read cline; do
 pos=1
 set \$cline
 while $test \$# -gt 0; do
  if $test $testaccess \`echo \$1 | $tr -d ""\`; then
   echo "\$pos"
   exit 0
  fi
  shift
  pos=\`expr \$pos + 1\`
 done
done
EOF
chmod +x fieldn
fieldn=`./fieldn`
$rm -f foo.c fieldn
case $fieldn in
") pos='???';;
1) pos=first;;
2) pos=second;;
3) pos=third;;
*) pos="${fieldn}th";;
esac
echo "Your cpp writes the filename in the $pos field of the line."
```

```
?X: To locate a header file, we cannot simply check for $usrinc/file.h, since
?X: some machine have the headers in weird places and our only hope is that
?X: the C pre-processor will know how to find those headers. Thank you NexT!
: locate header file
$cat
 >findhdr <<EOF
$startsh
wanted=\$1
name=''
for usrincdir in $usrinc; do
 if test -f \$usrincdir/\$wanted; then
  echo "\$usrincdir/\$wanted"
  exit 0
 fi
done
awkprg='{ print \$$fieldn }'
echo "#include <\$wanted>" > foo\$\$.c
$cppstdin $cppminus $cppflags < foo\$\$.c 2>/dev/null | \
$cppfilter $grep "^[  ]*#.*\$wanted" | \
while read cline; do
 name=\`echo \$cline | $awk "\$awkprg" | $tr -d '"'\`
 case "\$name" in
 *[/\\\\]\$wanted) echo "\$name"; exit 1;;
 *[\\\\/]\$wanted) echo "\$name"; exit 1;;
 *) exit 2;;
 esac
done
?X: status = 0: grep returned 0 lines, case statement not executed
?X: status = 1: headerfile found
?X: status = 2: while loop executed, no headerfile found
status=\$?
$rm -f foo\$\$.c
if test \$status -eq 1; then
 exit 0
fi
exit 1
EOF
chmod +x findhdr
$eunicefix findhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Findhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: charorder.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:chorder_int chorder_short chorder_long: Myread cat +cc +ccflags rm
?MAKE: -pick add $@ %<
?S:chorder_short (d_cos d_bos):
?S: Holds the value describing the byte ordering of characters in a short.
?S: On a Big-Endian machine, that would be "c0c1".
?S:.
?S:chorder_int
 (charoder):
?S: Holds the value describing the byte ordering of characters in an int.
?S: For instance, on a Big-Endian machine, this would be: "c0c1c2c3".
?S:.
?S:chorder_long (d_col d_bol):
?S: Holds the value describing the byte ordering of characters in a long.
?S: On a 64 bits Big-Endian machine, that would yield: "c0c1c2c3c4c5c6c7".
?S:.
?C:CHAR_ORDER_SHORT:
?C: Holds the byte ordering of characters in a short. It's a string
?C: value like "c0c1" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_INT:
?C: Holds the byte ordering of characters in an int. It's a string
?C: value like "c0c1c2c3" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_LONG:
?C: Holds the byte ordering of characters in a long. It's a string
?C: value like "c0c1c2c3c4c5c6c7" on a 64 bits Big-Endian machine.
?C:.
?H:#define CHAR_ORDER_SHORT "$chorder_short" /* byte order in a short */
?H:#define CHAR_ORDER_INT "$chorder_int" /* byte order in an int */
?H:#define CHAR_ORDER_LONG "$chorder_long" /* byte order in a long */
?H:.
?F:!byteorder
:
 check for character ordering
echo " "
```

```
echo "Checking out byte order..." >&4
$cat >byteorder.c <<'EOCP'
#include <stdio.h>

main(argc, argv)
 int argc;
 char *argv[]; {
 int i;
 int max;
 union {
  short u_s;
  int u_i;
  long u_l;
  char u_c[sizeof(long)];
 } u;
 switch (argv[1][0]) {
 case 'l':
  u.u_l = 0L;
  /* HMS: ASSERT: sizeof(long) < 10. */
  for(i = 0; i < sizeof(long); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(long);
  break;
 case 's':
  u.u_s = 0;
  /* HMS: ASSERT: sizeof(short) < 10. */
  for(i = 0; i < sizeof(short); ++i) {
   u.u_s *= 0x100L;
   u.u_s += (0xc0 + i);
  }
  max = sizeof(short);
  break;
 case 'i':
  u.u_i = 0;
  /* RAM: ASSERT: sizeof(int) < 10. */
  for(i = 0; i < sizeof(int); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(int);
  break;
 default:
  max = 0;
  break;
 }
 for(i = 0; i < max; i++) {
```

```
  printf("%x", u.u_c[i] & 0x00FF);
 }
 printf("\n");
 exit(0);
}
EOCP
if $cc $ccflags -o
 byteorder byteorder.c >/dev/null 2>&1 ; then
 : null statement
@if chorder_short
   chorder_short=`./byteorder s`
@end
@if chorder_int
   chorder_int=`./byteorder i`
@end
@if chorder_long
   chorder_long=`./byteorder l`
@end
else
 $cat <<EOM
(I can't seem to get my test program to work.  Guessing 32 bits big-endian.)
EOM
   chorder_short="c0c1"
   chorder_int="c0c1c2c3"
   chorder_long="c0c1c2c3"
fi
@if chorder_short
dflt=$chorder_short
rp='What is the order of characters in a short?'
. ./myread
chorder_short="$ans"
@end
@if chorder_int
dflt=$chorder_int
rp='What is the order of characters in an int?'
. ./myread
chorder_int="$ans"
@end
@if chorder_long
dflt=$chorder_long
rp='What is the order of characters in a long?'
. ./myread
chorder_long="$ans"
@end
$rm -f byteorder* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/charorder.U

No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_newlocale d_freelocale d_uselocale d_duplocale d_querylocale \
 i_xlocale xlocale_needed: Inlibc Inhdr Compile cat rm_try run \
 d_localeconv_l
?MAKE: -pick add $@ %<
?S:d_newlocale:
?S: This variable conditionally defines the HAS_NEWLOCALE symbol, which
?S: indicates to the C program that the newlocale() routine is available
?S: to return a new locale object or modify an existing locale object.
?S:.
?S:d_freelocale:
?S: This variable conditionally defines the HAS_FREELOCALE symbol, which
?S: indicates to the C program that the freelocale() routine is available
?S: to deallocates the resources associated with a locale object.
?S:.
?S:d_uselocale:
?S: This variable conditionally defines the HAS_USELOCALE symbol, which
?S: indicates to the C program that the uselocale()
 routine is available
?S: to set the current locale for the calling thread.
?S:.
?S:d_duplocale:
?S: This variable conditionally defines the HAS_DUPLOCALE symbol, which
?S: indicates to the C program that the duplocale() routine is available
?S: to duplicate a locale object.
?S:.
?S:d_querylocale:
?S: This variable conditionally defines the HAS_QUERYLOCALE symbol, which
?S: indicates to the C program that the querylocale() routine is available
?S: to return the name of the locale for a category mask.
?S:.
?S:i_xlocale:
?S: This symbol, if defined, indicates to the C program that the
?S: header xlocale.h is available.  See also xlocale_needed.
?S:.
?S:xlocale_needed:
?S: This symbol, if defined, indicates that the C program should
?S: include <xlocale.h> to get newlocale() and its friends.
?S:.
?C:HAS_NEWLOCALE:
?C: This symbol, if defined, indicates that the newlocale routine is
?C: available to return a new locale object or modify an existing
?C: locale object.
?C:.
```

```
?C:HAS_FREELOCALE:
?C: This
 symbol, if defined, indicates that the freelocale routine is
?C: available to deallocates the resources associated with a locale object.
?C:.
?C:HAS_USELOCALE:
?C: This symbol, if defined, indicates that the uselocale routine is
?C: available to set the current locale for the calling thread.
?C:.
?C:HAS_DUPLOCALE:
?C: This symbol, if defined, indicates that the duplocale routine is
?C: available to duplicate a locale object.
?C:.
?C:HAS_QUERYLOCALE:
?C: This symbol, if defined, indicates that the querylocale routine is
?C: available to return the name of the locale for a category mask.
?C:.
?C:I_XLOCALE:
?C: This symbol, if defined, indicates to the C program that the
?C: header xlocale.h is available.  See also NEED_XLOCALE_H
?C:.
?C:NEED_XLOCALE_H:
?C: This symbol, if defined, indicates that the C program should
?C: include <xlocale.h> to get newlocale() and its friends.
?C:.
?H:#$d_newlocale HAS_NEWLOCALE /**/
?H:#$d_freelocale HAS_FREELOCALE /**/
?H:#$d_uselocale HAS_USELOCALE /**/
?H:#$d_duplocale HAS_DUPLOCALE /**/
?H:#$d_querylocale HAS_QUERYLOCALE /**/
?H:#$xlocale_needed NEED_XLOCALE_H /**/
?H:#$i_xlocale I_XLOCALE
            /**/
?H:.
?LINT:set i_xlocale
?LINT:set d_newlocale
?LINT:set d_freelocale
?LINT:set d_uselocale
?LINT:set d_duplocale
?LINT:set d_querylocale
?F:!try
: see if this is an xlocale.h system
set xlocale.h i_xlocale
eval $inhdr

: see if newlocale exists
set newlocale d_newlocale
eval $inlibc
```

```
: see if freelocale exists
set freelocale d_freelocale
eval $inlibc

: see if uselocale exists
set uselocale d_uselocale
eval $inlibc

: see if duplocale exists
set duplocale d_duplocale
eval $inlibc

: see if querylocale exists
set querylocale d_querylocale
eval $inlibc

: if we have xlocale.h, check whether it is needed
case "$i_xlocale$d_newlocale$xlocale_needed" in
"$define$define")
 echo "Checking if xlocale.h is needed..." >&4
 $cat >try.c <<EOF
#include <locale.h>
#include <stdio.h>
#ifdef TRY_XLOCALE
#include <xlocale.h>
#endif
#$d_localeconv_l
 HAVE_LOCALECONV_L

#ifdef HAVE_LOCALECONV_L
struct lconv *(*lcptr)(locale_t) = localeconv_l;
#endif

int main(void) {
 locale_t lc = newlocale(LC_ALL_MASK, "C", (locale_t)0);

#ifdef HAVE_LOCALECONV_L
 /* FreeBSD hides only localeconv_l() in xlocale.h */
 struct lconv *lcbuf = localeconv_l(lc);
 printf("decimal: %s\n", lcbuf->decimal_point);
#endif

 freelocale(lc);
 return 0;
}
EOF
 set try
```

```
 if eval $compile && $run ./try > /dev/null 2>&1 ; then
  echo "xlocale.h isn't needed" >&4
  xlocale_needed=$undef
 else
  set try -DTRY_XLOCALE
  if eval $compile && $run ./try > /dev/null 2>&1 ; then
   xlocale_needed=$define
   echo "xlocale.h is needed" >&4
  else
   echo "I can't build my test either way" >&4
   xlocale_needed=$undef
  fi
 fi
 $rm_try
 ;;
*) xlocale_needed=$undef ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_newlocale.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usemorebits: Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usemorebits:
?S: This variable conditionally defines the USE_MORE_BITS symbol,
?S: and indicates that explicit 64-bit interfaces and long doubles
?S: should be used when available.
?S:.
?C:USE_MORE_BITS:
?C: This symbol, if defined, indicates that 64-bit interfaces and
?C: long doubles should be used when available.
?C:.
?H:?%<:#ifndef USE_MORE_BITS
?H:?%<:#$usemorebits USE_MORE_BITS  /**/
?H:?%<:#endif
?H:.
?LINT:extern use64bitint
?LINT:change use64bitint
?LINT:extern uselongdouble
```

```
?LINT:change uselongdouble
: Check if morebits is requested
case "$usemorebits" in
"$define"|true|[yY]*)
 use64bitint="$define"
 uselongdouble="$define"
 usemorebits="$define"
 ;;
*) usemorebits="$undef"
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usemorebits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_eaccess: Inlibc
?MAKE: -pick add $@ %<
?S:d_eaccess:
?S: This variable conditionally defines the HAS_EACCESS symbol, which
?S: indicates to the C program that the eaccess() routine is available.
?S:.
?C:HAS_EACCESS :
?C: This symbol, if defined, indicates that the eaccess routine is
?C: available to do extended access checks.
?C:.
?H:#$d_eaccess HAS_EACCESS  /**/
?H:.
?LINT:set d_eaccess
: see if eaccess exists
set eaccess d_eaccess
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/d_eaccess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpent:
?S: This variable conditionally defines HAS_GETPROTOENT if getprotoent() is
?S: available to look up protocols in some data base or another.
?S:.
?C:HAS_GETPROTOENT:
?C: This symbol, if defined, indicates that the getprotoent() routine is
?C: available to look up protocols in some data base
 or another.
?C:.
?H:#$d_getpent HAS_GETPROTOENT  /**/
?H:.
?LINT:set d_getpent
: see if getprotoent exists
set getprotoent d_getpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_perlio.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_perlio.U,v $
?RCS:
?MAKE:useperlio: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:useperlio:
?S: This variable conditionally defines the USE_PERLIO symbol,
?S: and indicates that the PerlIO abstraction should be
```

```
?S: used throughout.
?S:.
?C:USE_PERLIO:
?C: This symbol, if defined, indicates that the PerlIO abstraction should
?C: be used throughout.  If not defined, stdio should be
?C: used in a fully backward compatible manner.
?C:.
?H:?%<:#ifndef USE_PERLIO
?H:?%<:#$useperlio USE_PERLIO  /**/
?H:?%<:#endif
?H:.
: Check if we want perlio
useperlio="$define"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/useperlio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_random_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_random_r random_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_random_r:
?S: This variable conditionally defines the HAS_RANDOM_R symbol,
?S: which indicates to the C program that the random_r()
?S: routine is available.
?S:.
?S:random_r_proto:
?S: This variable encodes the prototype of random_r.
?S: It is zero if d_random_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_random_r
?S: is defined.
?S:.
?C:HAS_RANDOM_R:
?C: This symbol, if defined, indicates that the random_r routine
?C: is available to random re-entrantly.
?C:.
?C:RANDOM_R_PROTO:
?C: This
 symbol encodes the prototype of random_r.
?C: It is zero if d_random_r is undef, and one of the
```

```
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_random_r
?C: is defined.
?C:.
?H:#$d_random_r HAS_RANDOM_R /**/
?H:#define RANDOM_R_PROTO $random_r_proto /**/
?H:.
?T:try hdrs d_random_r_proto
: see if random_r exists
set random_r d_random_r
eval $inlibc
case "$d_random_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_random_r_proto:$usethreads" in
 ":define") d_random_r_proto=define
  set d_random_r_proto random_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_random_r_proto" in
 define)
 case "$random_r_proto" in
 "|0) try='int random_r(int*, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_iS ;;
 esac
 case "$random_r_proto" in
 "|0) try='int random_r(long*, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_lS ;;
 esac
 case "$random_r_proto" in
 "|0)
 try='int random_r(struct random_data*, int32_t*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_St ;;
 esac
 case "$random_r_proto" in
 "|0) d_random_r=undef
  random_r_proto=0
  echo "Disabling random_r, cannot determine prototype." >&4 ;;
 * ) case "$random_r_proto" in
  REENTRANT_PROTO*) ;;
  *) random_r_proto="REENTRANT_PROTO_$random_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "random_r has no prototype, not using it." >&4 ;;
  esac
```

```
  d_random_r=undef
  random_r_proto=0
  ;;
 esac
 ;;
*) random_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_random_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_waitpid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_waitpid.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_waitpid: Inlibc
?MAKE: -pick add $@ %<
?S:d_waitpid:
?S: This variable conditionally defines HAS_WAITPID if waitpid() is
?S: available to wait for child process.
?S:.
?C:HAS_WAITPID (WAITPID):
?C: This symbol, if defined, indicates that the waitpid routine is
?C: available to wait for child process.
?C:.
?H:#$d_waitpid HAS_WAITPID /**/
?H:.
?LINT:set
 d_waitpid
: see if waitpid exists
set waitpid d_waitpid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_waitpid.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: man1dir.U,v 3.2 1999/07/08 20:57:21 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996, 1999 Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: man1dir.U,v $
?RCS: Revision 3.2  1999/07/08 20:57:21  doughera
?RCS: Used installprefix.
?RCS:
?RCS: Revision 3.1  1999/07/08 20:52:19  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:10:29  ram
?RCS: patch61: created
?RCS:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and
 man3dir.  This unit is basically dist's mansrc.U with
?X: man1 used instead of man everywhere.
?X:
?MAKE:man1dir man1direxp man1ext installman1dir: cat nroff Loc Oldconfig \
 spackage test Getfile Setprefixvar Prefixit Prefixup sysman Myread \
 prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:man1dir=''
?S:man1dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?D:man1direxp=''
?S:man1direxp:
?S: This variable is the same as the man1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installman1dir=''
?S:installman1dir:
```

```
?S: This variable is really the same as man1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location.
 For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man1ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See man1dir.
?S:.
?T:lookpath
?LINT:change prefixvar
?LINT:set man1direxp
: determine where manual pages go
set man1dir man1dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$man1dir" in
 ") man1dir="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$man1dir" in
' ') dflt=none
 ;;
")
 lookpath="$prefixexp/share/man/man1"
 lookpath="$lookpath $prefixexp/man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath $prefixexp/man/p_man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1"
 lookpath="$lookpath $prefixexp/man/man.1"
?X: Experience has shown people
 expect man1dir to be under prefix,
?X: so we now always put it there.  Users who want other behavior
?X: can answer interactively or use a command line option.
?X: Does user have System V-style man paths.
 case "$sysman" in
 */?_man*) dflt=`./loc . $prefixexp/l_man/man1 $lookpath` ;;
 *) dflt=`./loc . $prefixexp/man/man1 $lookpath` ;;
 esac
 set dflt
```

```
 eval $prefixup
 ;;
*)  dflt="$man1dir"
 ;;
esac
echo " "
fn=dn+~
rp="Where do the main $spackage manual pages (source) go?"
. ./getfile
if $test "X$man1direxp" != "X$ansexp"; then
 installman1dir=''
fi
prefixvar=man1dir
. ./setprefixvar

case "$man1dir" in
'') man1dir=' '
 installman1dir='';;
esac

: What suffix to use on installed man pages

case "$man1dir" in
' ')
 man1ext='0'
 ;;
*)
 rp="What suffix should be used for the main $spackage man pages?"
 case "$man1ext" in
 '') case "$man1dir" in
  *1)  dflt=1 ;;
  *1p) dflt=1p ;;
  *1pm) dflt=1pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L1)
 dflt=L1;;
  *) dflt=1;;
  esac
  ;;
 *) dflt="$man1ext";;
 esac
 . ./myread
 man1ext="$ans"
```

```
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/man1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_lstat.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_lstat: Inlibc
?MAKE: -pick add $@ %<
?S:d_lstat:
?S: This variable conditionally defines HAS_LSTAT if lstat() is
?S: available to do file stats on symbolic links.
?S:.
?C:HAS_LSTAT (LSTAT):
?C: This symbol, if defined, indicates that the lstat routine is
?C: available to do file stats on symbolic links.
?C:.
?H:#$d_lstat HAS_LSTAT  /**/
?H:.
?LINT:set
 d_lstat
: see if lstat exists
set lstat d_lstat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_lstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethname.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:00  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethname d_uname d_phostname aphostname: phostname cat \
 myhostname package d_portable Loc echo n c +i_whoami +usrinc \
 Myread Guess Oldconfig Csym
?MAKE: -pick add $@ %<
?S:d_gethname:
?S: This variable conditionally defines the HAS_GETHOSTNAME symbol,
 which
?S: indicates to the C program that the gethostname() routine may be
?S: used to derive the host name.
?S:.
?S:d_uname:
?S: This variable conditionally defines the HAS_UNAME symbol, which
?S: indicates to the C program that the uname() routine may be
?S: used to derive the host name.
?S:.
?S:d_phostname:
?S: This variable conditionally defines the PHOSTNAME symbol, which
?S: contains the shell command which, when fed to popen(), may be
?S: used to derive the host name.
?S:.
?S:aphostname:
?S: Thie variable contains the command which can be used to compute the
?S: host name. The command is fully qualified by its absolute path, to make
?S: it safe when used by a process with super-user privileges.
?S:.
?C:HAS_GETHOSTNAME (GETHOSTNAME):
?C: This symbol, if defined, indicates that the C program may use the
?C: gethostname() routine to derive the host name.  See also HAS_UNAME
?C: and PHOSTNAME.
?C:.
?C:HAS_UNAME (UNAME):
?C: This symbol, if defined, indicates that the C program may
 use the
?C: uname() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and PHOSTNAME.
?C:.
```

```
?C:PHOSTNAME:
?C: This symbol, if defined, indicates that the C program may use the
?C: contents of PHOSTNAME as a command to feed to the popen() routine
?C: to derive the host name.  See also HAS_GETHOSTNAME and HAS_UNAME.
?C: Note that the command uses a fully qualified path, so that it is safe
?C: even if used by a process with super-user privileges.
?C:.
?H:#$d_gethname HAS_GETHOSTNAME /**/
?H:#$d_uname HAS_UNAME  /**/
?H:#$d_phostname PHOSTNAME "$aphostname" /* How to get the host name */
?H:.
?T:file val call
?LINT:change i_whoami
: see how we will look up host name
echo " "
if false; then
 : dummy stub to allow use of elif
@if HAS_GETHOSTNAME
elif set gethostname val -f d_gethname; eval $csym; $val; then
 echo 'gethostname() found.' >&4
 d_gethname="$define"
 call=gethostname
@end
@if HAS_UNAME
elif set uname val -f d_uname; eval $csym; $val; then
 if ./xenix; then
  $cat <<'EOM'
uname()
 was found, but you're running xenix, and older versions of xenix
have a broken uname(). If you don't really know whether your xenix is old
enough to have a broken system call, use the default answer.

EOM
  dflt=y
  case "$d_uname" in
  "$define") dflt=n;;
  esac
  rp='Is your uname() broken?'
  . ./myread
  case "$ans" in
  n*) d_uname="$define"; call=uname;;
  esac
 else
  echo 'uname() found.' >&4
  d_uname="$define"
  call=uname
 fi
@end
```

```
fi
case "$d_gethname" in
") d_gethname="$undef";;
esac
case "$d_uname" in
") d_uname="$undef";;
esac
@if PHOSTNAME || MYHOSTNAME
case "$d_uname$d_gethname" in
*define*)
 dflt=n
 cat <<EOM

Every now and then someone has a $call() that lies about the hostname
but can't be fixed for political or economic reasons.  If you wish, I can
@if MYHOSTNAME && PHOSTNAME
pretend $call() isn't there and maybe compile in the hostname or
compute it from the '$phostname' command at run-time.
@elsif MYHOSTNAME
pretend $call() isn't there and maybe compile
 in the hostname.
@elsif PHOSTNAME
pretend $call() isn't there and maybe compute hostname at run-time
thanks to the '$phostname' command.
@elsif WHOAMI
get the hostname from whomai.h (provided you have one).
@else
simply ignore your host name and use someting like "noname" instead.
@end

EOM
 rp="Shall I ignore $call() from now on?"
 . ./myread
 case "$ans" in
 y*) d_uname="$undef" d_gethname="$undef"; $echo $n "Okay...$c";;
 esac;;
esac
@end
@if PHOSTNAME || aphostname
?X: Compute the full path name for the command
case "$phostname" in
") aphostname=";;
*) case "$aphostname" in
 /*) ;;
 *) set X $phostname
  shift
  file=$1
  shift
```

```
  file=`./loc $file $file $pth`
  aphostname=`echo $file $*`
  ;;
 esac
 ;;
esac
@end
@if PHOSTNAME && MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ") ;;
 *)
  $cat <<EOT

There is no gethostname() or uname() on this system.  You have two
possibilities at this point:

1)  You can have your host name ($myhostname) compiled
 into $package, which
   lets $package start up faster, but makes your binaries non-portable, or
2)  you can have $package use a

 popen("$aphostname","r")

   which will start slower but be more portable.

@ if WHOAMI
Option 1 will give you the option of using whoami.h if you have one.
@ end
If you want option 2 but with a different command, you can edit config.sh at
the end of this shell script.

EOT
  case "$d_phostname" in
  "$define") dflt=n;;
  "$undef")  dflt=y;;
  ")
   case "$d_portable" in
   "$define") dflt=n ;;
   *) dflt=y ;;
   esac;;
  esac
  rp="Do you want your host name compiled in?"
  . ./myread
  case "$ans" in
  n*) d_phostname="$define" ;;
```

```
  *) aphostname=''; d_phostname="$undef";;
  esac;;
 esac
 case "$aphostname" in
 '')
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   dflt=y
   $cat <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier
 ($myhostname) hardwired in.
EOM
   rp="Use whoami.h to get hostname?"
   . ./myread
   case "$ans" in
   n*) i_whoami="$undef";;
   esac
   ;;
  "$undef")
   $cat <<EOM
No hostname function and no whoami.h -- hardwiring "$myhostname".
EOM
   ;;
  esac;;
@ else
  echo 'No hostname function -- hardwiring "'$myhostname'".' >&4;;
@ end
 esac;;
esac
@elsif PHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 '')
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   $cat <<EOM

No hostname function--we'll use the whoami.h file, which has this line:
```

```
 `grep sysname $usrinc/whoami.h`

EOM
   ;;
  *) echo "There will be no way for $package to get your hostname." >&4;;
  esac;;
@ else
  echo "There will be no way for $package to get your hostname." >&4;;
@ end
 *)
 echo "I'll use 'popen(""""$aphostname"", "r")"" to get your hostname." >&4
  ;;
 esac;;
esac
@elsif MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
@ if WHOAMI
 case "$i_whoami" in
 "$define")
  dflt=y
  $cat
 <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
  rp="Use whoami.h to get hostname?"
  . ./myread
  case "$ans" in
  n*) i_whoami="$undef";;
  esac
  ;;
 "$undef")
  echo 'No whoami.h--hardwiring "'$myhostname'".' >&4;;
 esac;;
@ else
 echo 'Hardwiring "'$myhostname'".' >&4;;
@ end
esac
@end
case "$d_phostname" in
") d_phostname="$undef";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Config_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_h.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  14:57:43  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:10:49  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:25:39  ram
?RCS: patch49: typo fixes in leading config.h comment (WED)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/24  12:13:20  ram
?RCS: patch3: added TOP as a local shell temporary variable
?RCS:
?RCS:
 Revision 3.0.1.1  1993/08/19  06:42:20  ram
?RCS: patch1: leading config.sh searching was not aborting properly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file ends up producing the config_h.SH script, which is run to produce
?X: the config.h file.  The file ./.Config_h below contains all the ?H: lines
?X: extracted out of all the units.  Metaconfig itself adds the !GROK!THIS!.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?X: For those who wish to know why the file is config_h.SH instead of the more
?X: natural config.h.SH, well... it is to support systems like MS-DOG. Only one
?X: 'dot' is allowed within the file name, as it is part of the "extension" of
?X: the file. MS-DOG will not let you have two 'dots' because that would mean
?X: two "extensions".
?X:
?MAKE:Config_h: Id End Config_sh Obsol_h myuname cf_time cf_by package src
```

```
?MAKE: -pick c_h_weed $@ %<
?MAKE: -pick
 c_h_weed $@ ./Config_h
?MAKE: -pick c_h_weed $@ ./Obsol_h
?T:PERL_CONFIG_SH TOP
?LINT:unclosed !GROK!THIS!
?LINT:extern CONFIG_H CONFIG_SH
?LINT:change CONFIG_H CONFIG_SH
?X:?LINT:nocomment
: Set up for generating config_h.SH
case "$CONFIG_SH" in
") CONFIG_SH=config.sh;;
esac
case "$CONFIG_H" in
") CONFIG_H=config.h;;
esac
case $PERL_CONFIG_SH in
")
 if test -f $CONFIG_SH; then TOP=.;
 elif test -f ../$CONFIG_SH; then TOP=..;
 elif test -f ../../$CONFIG_SH; then TOP=../..;
 elif test -f ../../../$CONFIG_SH; then TOP=../../..;
 elif test -f ../../../../$CONFIG_SH; then TOP=../../../..;
 else
  echo "Can't find $CONFIG_SH."; exit 1
 fi
 . $TOP/$CONFIG_SH
 ;;
esac
?X: Make sure we are in the directory where the .SH file is located.
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting $CONFIG_H (with variable substitutions)"
?X:
?X: Since we unconditionally translate leading #undef into /*#define, we're
?X: stuck when we really want to have a #undef in $CONFIG_H.
 That's why there
?X: is provision here for #un-def, which is translated back into #undef after
?X: all original #undef have been processed.
?X:
?X: Previously, we changed all
?X:  #undef FOO /**/
?X: into
?X:  /*#define FOO /**/
?X: The xlc compiler (available on IBM's AIX) complains that this is
?X: an illegal attempt to write a nested comment, and warns against it.
?X: There's apparently no way to shut the compiler up, either.
```

```
?X: This sed command from Hallvard B Furuseth <h.b.furuseth@usit.uio.no>
?X: changes it to
?X:  /*#define FOO / **/
sed <<!GROK!THIS! >$CONFIG_H -e 's!^#undef\(.*/\)\*!/\*#define\1 \*!' -e 's!^#un-def!#undef!'
/* This file was produced by running the config_h.SH script, which
* gets its values from $CONFIG_SH, which is generally produced by
* running Configure.
*
* Feel free to modify any of this as the need arises.  Note, however,
* that running config_h.SH again will wipe out any changes you've made.
* For a more permanent change edit $CONFIG_SH and
 rerun config_h.SH.
*/

/* Package name      : $package
* Source directory  : $src
* Configuration time: $cf_time
* Configured by     : $cf_by
* Target system     : $myuname
*/

#ifndef _config_h_
#define _config_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Config_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?X:
?X: This unit allows the duplication of the source tree to the current
?X: directory via symbolic links.  This must be requested explicitly
?X: by them issuing a -Dmksymlinks on the command line.
?X:
?MAKE:Mksymlinks: Mkdirp lns issymlink src rsrc pkgsrc
?MAKE: -pick add $@ %<
?F:!UU
```

```
?T: dir filename tmppwd filelist
?LINT:extern mksymlinks
@if {test -f ../MANIFEST}
: Duplicate the tree with symbolic links if -Dmksymlinks was supplied
case "$mksymlinks"
 in
$define|true|[yY]*)
 echo " "
 case "$src" in
 "|'.') echo "Cannot create symlinks in the original directory." >&4
  exit 1
  ;;
 *) case "$lns:$issymlink" in
  *"ln"*" -s:"*"test -"?)
   echo "Creating the symbolic links..." >&4
   echo "(First creating the subdirectories...)" >&4
   cd ..
   awk '{print $1}' $src/MANIFEST | grep / | sed 's:/[^/]*$::' | \
    sort -u | while true
   do
    read dir
    test -z "$dir" && break
    ./UU/mkdirp $dir 2>/dev/null
    if test -d $dir; then
     : ok
    else
     echo "Failed to create '$dir'.  Aborting." >&4
     exit 1
    fi
   done
   echo "(Now creating the symlinks...)" >&4
   awk '{print $1}' $src/MANIFEST | while true; do
    read filename
    test -z "$filename" && break
    if test -f $filename; then
     if $issymlink $filename; then
      rm -f $filename
     fi
    fi
    if test -f $filename; then
     echo "$filename already exists, not symlinking."
    else
?X: Note that the following works because "$pkgsrc" is absolute
     ln
 -s $pkgsrc/$filename $filename
    fi
   done
?X: Check that everything was correctly copied
```

```
   echo "(Checking current directory...)" >&4
   cd UU
   awk '$1 !~ /PACK[A-Z]+/ {print $1}' "$rsrc/MANIFEST" | \
    (split -l 50 2>/dev/null || split -50)
   rm -f missing
   tmppwd=`pwd`
   for filelist in x??; do
    (cd ..; ls `cat "$tmppwd/$filelist"` \
     >/dev/null 2>>"$tmppwd/missing")
   done
   if test -s missing; then
    echo "Failed duplication of source tree.  Aborting." >&4
    exit 1
   fi
   ;;
  *) echo "(I cannot figure out how to do symbolic links, ignoring!)" >&4
   ;;
  esac
  ;;
 esac
 ;;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Mksymlinks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Whoa.U,v 3.0.1.2 1997/02/28 15:21:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Whoa.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:21:21  ram
?RCS: patch61: whoa script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:01  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:19  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to warn the user in case a change into a variable
 is noticed.
?X:
?X: To use this unit, $was must hold the old value that has changed. Upon
?X: exit, the two variables $td and $tu are set to the correct value for
?X: respectively defining or undefining a variable. For instance, if $vas was
?X: $undef, but now $var is $define, after calling . whoa, you should use
?X: eval "$var=\$tu" to finally set $var to the correct value. See unit Inlibc.
?X:
?MAKE:Whoa: Myread startsh hint
?MAKE: -pick add $@ %<
?F:./whoa
?T:var was td tu hintfile
: set up the script used to warn in case of inconsistency
cat <<EOS >whoa
$startsh
EOS
cat <<'EOSC' >>whoa
dflt=y
case "$hint" in
   recommended)
 case "$hintfile" in
 ") echo "The $hint value for \$$var on this machine was \"$was\"!" >&4
  ;;
 *) echo "Hmm.  Based on the hints in hints/$hintfile.sh, " >&4
  echo "the $hint value for \$$var on this machine was \"$was\"!" >&4
  ;;
 esac
 ;;
   *) echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    The $hint value for \$$var on this machine was
 \"$was\"!" >&4
 ;;
esac
rp="    Keep the $hint value?"
. ./myread
case "$ans" in
y) td=$was; tu=$was;;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Whoa.U

No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpgetround: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpgetround:
?S: This variable conditionally defines HAS_FPGETROUND if fpgetround()
?S: is available to get the floating point rounding mode.
?S:.
?C:HAS_FPGETROUND:
?C: This symbol, if defined, indicates that the fpgetround routine is
?C: available to get the floating point rounding mode.
?C:.
?H:#$d_fpgetround HAS_FPGETROUND  /**/
?H:.
?LINT:set d_fpgetround
: see if fpgetround exists
set fpgetround d_fpgetround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpgetround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gconvert.U,v 3.0.1.3 1997/02/28 15:33:38 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_gconvert.U,v $
?RCS: Revision 3.0.1.3 1997/02/28  15:33:38  ram
?RCS: patch61: integrated new unit from perl5
?RCS:
?RCS: Revision 3.0.1.2 1995/07/25  13:55:59  ram
?RCS: patch56: improved comments about the Gconvert macro (ADO)
?RCS: patch56: force compile-link test since it may exist but be unusable (ADO)
?RCS:
?RCS: Revision 3.0.1.1 1994/10/29  16:12:51  ram
?RCS: patch36:
```

```
 created by ADO
?RCS:
?MAKE:d_Gconvert: \
 Compile cat Inlibc rm _o rm_try i_stdlib d_qgcvt run \
 uselongdouble d_longdbl d_PRIgldbl sPRIgldbl
?MAKE: -pick add $@ %<
?S:d_Gconvert:
?S: This variable holds what Gconvert is defined as to convert
?S: floating point numbers into strings.  By default, Configure
?S: sets this macro to use the first of gconvert, gcvt, or sprintf
?S: that pass sprintf-%g-like behavior tests.  If perl is using
?S: long doubles, the macro uses the first of the following
?S: functions that pass Configure's tests: qgcvt, sprintf (if
?S: Configure knows how to make sprintf format long doubles--see
?S: sPRIgldbl), gconvert, gcvt, and sprintf (casting to double).
?S: The gconvert_preference and gconvert_ld_preference variables
?S: can be used to alter Configure's preferences, for doubles and
?S: long doubles, respectively.  If present, they contain a
?S: space-separated list of one or more of the above function
?S: names in the order they should be tried.
?S:
?S: d_Gconvert
 may be set to override Configure with a platform-
?S: specific function.  If this function expects a double, a
?S: different value may need to be set by the uselongdouble.cbu
?S: call-back unit so that long doubles can be formatted without
?S: loss of precision.
?S:.
?C:Gconvert:
?C: This preprocessor macro is defined to convert a floating point
?C: number to a string without a trailing decimal point.  This
?C: emulates the behavior of sprintf("%g"), but is sometimes much more
?C: efficient.  If gconvert() is not available, but gcvt() drops the
?C: trailing decimal point, then gcvt() is used.  If all else fails,
?C: a macro using sprintf("%g") is used. Arguments for the Gconvert
?C: macro are: value, number of digits, whether trailing zeros should
?C: be retained, and the output buffer.
?C: The usual values are:
?C:  d_Gconvert='gconvert((x),(n),(t),(b))'
?C:  d_Gconvert='gcvt((x),(n),(b))'
?C:  d_Gconvert='sprintf((b),"%.*g",(n),(x))'
?C: The last two assume trailing zeros should
 not be kept.
?C:.
?H:#define Gconvert(x,n,t,b) $d_Gconvert
?H:.
?T: xxx_list xxx_convert xxx_ld_list
?F:!try
```

```
?LINT:extern gconvert_preference
?LINT:extern gconvert_ld_preference
: Check how to convert floats to strings.

if test "X$d_Gconvert" = X; then

echo " "
echo "Checking for an efficient way to convert floats to strings."
echo " " > try.c
case "$uselongdouble" in
"$define") echo "#define USE_LONG_DOUBLE" >>try.c ;;
esac
case "$d_longdbl" in
"$define") echo "#define HAS_LONG_DOUBLE" >>try.c ;;
esac
case "$d_PRIgldbl" in
"$define") echo "#define HAS_PRIgldbl"    >>try.c ;;
esac
$cat >>try.c <<EOP
#ifdef TRY_gconvert
#define Gconvert(x,n,t,b) gconvert((x),(n),(t),(b))
const char *myname = "gconvert";
#endif
#ifdef TRY_gcvt
#define Gconvert(x,n,t,b) gcvt((x),(n),(b))
const char *myname = "gcvt";
#endif
#ifdef TRY_qgcvt
#define Gconvert(x,n,t,b) qgcvt((x),(n),(b))
const char *myname = "qgcvt";
#define DOUBLETYPE long double
#endif
#ifdef TRY_sprintf
#if defined(USE_LONG_DOUBLE) &&
 defined(HAS_LONG_DOUBLE)
#ifdef HAS_PRIgldbl
#define Gconvert(x,n,t,b) sprintf((b),"%.*"$sPRIgldbl,(n),(x))
#else
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(double)(x))
#endif
#else
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(x))
#endif
const char *myname = "sprintf";
#endif

#ifndef DOUBLETYPE
#if defined(USE_LONG_DOUBLE) && defined(HAS_LONG_DOUBLE)
```

```
#define DOUBLETYPE long double
#else
#define DOUBLETYPE double
#endif
#endif

#include <stdio.h>

#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>

void checkit(const char *expect, char *got)
{
   if (strcmp(expect, got)) {
  printf("%s oddity:  Expected %s, got %s\n",
   myname, expect, got);
  exit(1);
 }
}

void lencheck(int expect, int got)
{
   if (expect != got) {
  printf("%s length mismatch:  Expected %d, got %d\n",
   myname, expect, got);
  exit(1);
 }
}

int main()
{
 char buf[64];
 buf[63] = '\0';

 /* This must be 1st test on (which?) platform */
 /* Alan Burlison <AlanBurlsin@unn.unisys.com>
 */
 Gconvert((DOUBLETYPE)0.1, 8, 0, buf);
 checkit("0.1", buf);

 Gconvert((DOUBLETYPE)0.01, 8, 0, buf);
 checkit("0.01", buf);

 Gconvert((DOUBLETYPE)0.001, 8, 0, buf);
 checkit("0.001", buf);
```

```
Gconvert((DOUBLETYPE)0.0001, 8, 0, buf);
checkit("0.0001", buf);

Gconvert((DOUBLETYPE)0.00009, 8, 0, buf);
if (strlen(buf) > 5)
   checkit("9e-005", buf); /* for Microsoft ?? */
else
   checkit("9e-05", buf);

Gconvert((DOUBLETYPE)1.0, 8, 0, buf);
checkit("1", buf);

Gconvert((DOUBLETYPE)1.1, 8, 0, buf);
checkit("1.1", buf);

Gconvert((DOUBLETYPE)1.01, 8, 0, buf);
checkit("1.01", buf);

Gconvert((DOUBLETYPE)1.001, 8, 0, buf);
checkit("1.001", buf);

Gconvert((DOUBLETYPE)1.0001, 8, 0, buf);
checkit("1.0001", buf);

Gconvert((DOUBLETYPE)1.00001, 8, 0, buf);
checkit("1.00001", buf);

Gconvert((DOUBLETYPE)1.000001, 8, 0, buf);
checkit("1.000001", buf);

Gconvert((DOUBLETYPE)0.0, 8, 0, buf);
checkit("0", buf);

Gconvert((DOUBLETYPE)-1.0, 8, 0, buf);
checkit("-1",
buf);

/* Some Linux gcvt's give 1.e+5 here. */
Gconvert((DOUBLETYPE)100000.0, 8, 0, buf);
checkit("100000", buf);

/* Some Linux gcvt's give -1.e+5 here. */
Gconvert((DOUBLETYPE)-100000.0, 8, 0, buf);
checkit("-100000", buf);

Gconvert((DOUBLETYPE)123.456, 8, 0, buf);
checkit("123.456", buf);
```

```
 /* Testing of 1e+129 in bigintpm.t must not get extra '.' here. */
 Gconvert((DOUBLETYPE)1e34, 8, 0, buf);
 /* 34 should be enough to scare even long double
  * places into using the e notation. */
 if (strlen(buf) > 5)
     checkit("1e+034", buf); /* for Microsoft */
 else
     checkit("1e+34", buf);

 /* Test for an Ubuntu/Debian bug in gcvt and qgcvt. See:        *
  * https://bugs.launchpad.net/ubuntu/+source/glibc/+bug/1899553 */

 Gconvert((DOUBLETYPE)0.4, 53, 0, buf);
 lencheck(55, (int)strlen(buf));

 /* For Perl, if you add additional tests here, also add them to
  * t/base/num.t for benefit of platforms not using Configure or
  * overriding d_Gconvert */

 exit(0);
}
EOP
?X:
 List of order in which to search for functions.
?X: Usual order of efficiency is gconvert gcvt sprintf
?X: If a hint file sets a d_Gconvert="gconvert" or "gcvt" or "sprintf",
?X: then that is taken as a hint for which function to try first.
?X: (e.g. that function may be in a problematic /usr/ucblib library, and
?X: the user may or may not choose to use -lucb stuff.)
?X: Any other hint file (or previous config.sh) setting is left intact.
: first add preferred functions to our list
xxx_list=""
for xxx_convert in $gconvert_preference; do
   case $xxx_convert in
   gcvt|gconvert|sprintf) xxx_list="$xxx_list $xxx_convert" ;;
   *) echo "Discarding unrecognized gconvert_preference $xxx_convert" >&4 ;;
   esac
done
: then add any others
for xxx_convert in gconvert gcvt sprintf; do
   case "$xxx_list" in
   *$xxx_convert*) ;;
   *) xxx_list="$xxx_list $xxx_convert" ;;
   esac
done

case "$d_longdbl$uselongdouble" in
```

```
"$define$define")
  : again, add preferred functions to our
 list first
  xxx_ld_list=""
  for xxx_convert in $gconvert_ld_preference; do
      case $xxx_convert in
      qgcvt|gcvt|gconvert|sprintf) xxx_ld_list="$xxx_ld_list $xxx_convert" ;;
      *) echo "Discarding unrecognized gconvert_ld_preference $xxx_convert" ;;
      esac
  done
  : then add qgcvt, sprintf--then, in xxx_list order, gconvert and gcvt
  for xxx_convert in qgcvt sprintf $xxx_list; do
      case "$xxx_ld_list" in
      $xxx_convert*|*" $xxx_convert"*) ;;
      *) xxx_ld_list="$xxx_ld_list $xxx_convert" ;;
      esac
  done
  : if sprintf cannot do long doubles, move it to the end
  if test "$d_PRIgldbl" != "$define"; then
      xxx_ld_list="`echo $xxx_ld_list|sed s/sprintf//` sprintf"
  fi
  : if no qgcvt, remove it
  if test "$d_qgcvt" != "$define"; then
      xxx_ld_list="`echo $xxx_ld_list|sed s/qgcvt//`"
  fi
  : use the ld_list
  xxx_list="$xxx_ld_list"
  ;;
esac

for xxx_convert in $xxx_list; do
 echo "Trying $xxx_convert..."
?X:
 Do NOT use $rm_try here, as we need to keep try.c
 $rm -f try try$_o core
 set try -DTRY_$xxx_convert
 if eval $compile; then
  echo "$xxx_convert() found." >&4
  if $run ./try; then
   echo "I'll use $xxx_convert to convert floats into a string." >&4
   break;
  else
   echo "...But $xxx_convert didn't work as I expected."
   xxx_convert="
  fi
 else
  echo "$xxx_convert NOT found." >&4
  xxx_convert="
```

```
 fi
done

if test X$xxx_convert = X; then
   echo "*** WHOA THERE!!! ***" >&4
   echo "None of ($xxx_list)  seemed to work properly.  I'll use sprintf." >&4
   xxx_convert=sprintf
fi

case "$xxx_convert" in
gconvert) d_Gconvert='gconvert((x),(n),(t),(b))' ;;
gcvt) d_Gconvert='gcvt((x),(n),(b))' ;;
qgcvt) d_Gconvert='qgcvt((x),(n),(b))' ;;
*) case "$uselongdouble$d_longdbl$d_PRIgldbl" in
  "$define$define$define")
     d_Gconvert="sprintf((b),\"%.*\"$sPRIgldbl,(n),(x))" ;;
  "$define$define$undef")
     d_Gconvert='sprintf((b),"%.*g",(n),(double)(x))' ;;
  *) d_Gconvert='sprintf((b),"%.*g",(n),(x))'
 ;;
  esac
  ;;
esac

fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_gconvert.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setpwent_r setpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_setpwent_r:
?S: This variable conditionally defines the HAS_SETPWENT_R symbol,
?S: which indicates to the C program that the setpwent_r()
?S: routine is available.
?S:.
?S:setpwent_r_proto:
```

```
?S: This variable encodes the prototype of setpwent_r.
?S: It is zero if d_setpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setpwent_r
?S: is defined.
?S:.
?C:HAS_SETPWENT_R:
?C: This symbol, if defined, indicates that the setpwent_r routine
?C: is available to
 setpwent re-entrantly.
?C:.
?C:SETPWENT_R_PROTO:
?C: This symbol encodes the prototype of setpwent_r.
?C: It is zero if d_setpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setpwent_r
?C: is defined.
?C:.
?H:#$d_setpwent_r HAS_SETPWENT_R /**/
?H:#define SETPWENT_R_PROTO $setpwent_r_proto /**/
?H:.
?T:try hdrs d_setpwent_r_proto
: see if setpwent_r exists
set setpwent_r d_setpwent_r
eval $inlibc
case "$d_setpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_setpwent_r_proto:$usethreads" in
 ":define") d_setpwent_r_proto=define
  set d_setpwent_r_proto setpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setpwent_r_proto" in
 define)
 case "$setpwent_r_proto" in
 "|0) try='int setpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setpwent_r_proto=I_H ;;
 esac
 case "$setpwent_r_proto" in
 "|0) try='void setpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setpwent_r_proto=V_H ;;
 esac
 case "$setpwent_r_proto"
 in
 "|0) d_setpwent_r=undef
  setpwent_r_proto=0
  echo "Disabling setpwent_r, cannot determine prototype." >&4 ;;
 * ) case "$setpwent_r_proto" in
```

```
  REENTRANT_PROTO*) ;;
  *) setpwent_r_proto="REENTRANT_PROTO_$setpwent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setpwent_r has no prototype, not using it." >&4 ;;
  esac
  d_setpwent_r=undef
  setpwent_r_proto=0
  ;;
 esac
 ;;
*) setpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setpwent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: myhostname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:15:55  ram
?RCS: patch61: improved hostname lookup by using ypmatch when NIS is used
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:25:43  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS: patch36: now uses new Tr unit to convert to/from lowercase
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:20  ram
?RCS: patch30: now a little more clever for domain name guessing
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:18  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:myhostname phostname mydomain: contains sed test Myread Oldconfig \
```

```
 Guess Loc awk echo sort uniq +usrinc rm hostcat Tr osname
?MAKE: -pick add $@ %<
?S:myhostname (hostname):
?S: This variable contains the eventual value of the MYHOSTNAME symbol,
?S: which is the name of the host the program is going to run on.
?S: The domain is not kept with hostname, but must be gotten from mydomain.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:mydomain:
?S: This variable contains the eventual value of the MYDOMAIN symbol,
?S: which is the domain of the host the program is going to run on.
?S: The domain must be appended to myhostname to form a complete host name.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:phostname:
?S: This variable contains the eventual value of the PHOSTNAME symbol,
?S: which is a command that can be fed to popen() to get the host name.
?S: The program
 should probably not presume that the domain is or isn't
?S: there already.
?S:.
?C:MYHOSTNAME (HOSTNAME):
?C: This symbol contains name of the host the program is going to run on.
?C: The domain is not kept with hostname, but must be gotten from MYDOMAIN.
?C: The dot comes with MYDOMAIN, and need not be supplied by the program.
?C: If gethostname() or uname() exist, MYHOSTNAME may be ignored. If MYDOMAIN
?C: is not used, MYHOSTNAME will hold the name derived from PHOSTNAME.
?C:.
?C:MYDOMAIN:
?C: This symbol contains the domain of the host the program is going to
?C: run on.  The domain must be appended to HOSTNAME to form a complete
?C: host name.  The dot comes with MYDOMAIN, and need not be supplied by
?C: the program.  If the host name is derived from PHOSTNAME, the domain
?C: may or may not already be there, and the program should check.
?C:.
?H:#define MYHOSTNAME "$myhostname"  /**/
?H:#define MYDOMAIN "$mydomain"  /**/
?H:.
?T:cont i tans tmp_re file
: now get the host name
echo
 " "
echo "Figuring out host name..." >&4
case "$myhostname" in
") cont=true
 echo 'Maybe "hostname" will work...'
 if tans=`sh -c hostname 2>&1` ; then
  myhostname=$tans
```

```
  phostname=hostname
  cont=''
 fi
 ;;
*) cont='';;
esac
if $test "$cont"; then
 if ./xenix; then
  echo 'Oh, dear.  Maybe "/etc/systemid" is the key...'
  if tans=`cat /etc/systemid 2>&1` ; then
   myhostname=$tans
   phostname='cat /etc/systemid'
   echo "Whadyaknow.  Xenix always was a bit strange..."
   cont=''
  fi
 elif $test -r /etc/systemid; then
  echo "(What is a non-Xenix system doing with /etc/systemid?)"
 fi
fi
if $test "$cont"; then
 echo 'No, maybe "uuname -l" will work...'
 if tans=`sh -c 'uuname -l' 2>&1` ; then
  myhostname=$tans
  phostname='uuname -l'
 else
  echo 'Strange.  Maybe "uname -n" will work...'
  if tans=`sh -c 'uname -n' 2>&1` ; then
   myhostname=$tans
   phostname='uname -n'
  else
   echo 'Oh well, maybe I can mine it out of whoami.h...'
   if tans=`sh -c $contains' sysname $usrinc/whoami.h'
 2>&1` ; then
    myhostname=`echo "$tans" | $sed 's/^.*"\(.*\)"/\1/'`
    phostname="sed -n -e ""/sysname/s/^.*\"\\(.*\\)\"/\1/{"" -e p -e q -e '}' <$usrinc/whoami.h"
   else
    case "$myhostname" in
    '') echo "Does this machine have an identity crisis or something?"
     phostname='';;
    *)
     echo "Well, you said $myhostname before..."
     phostname='echo $myhostname';;
    esac
   fi
  fi
 fi
fi
case "$myhostname" in
```

```
") myhostname=noname ;;
esac
: you do not want to know about this
set $myhostname
myhostname=$1

: verify guess
if $test "$myhostname" ; then
 dflt=y
 rp='Your host name appears to be "'$myhostname'".' Right?"
 . ./myread
 case "$ans" in
 y*) ;;
 *) myhostname=";;
 esac
fi

: bad guess or no guess
while $test "X$myhostname" = X ; do
 dflt="
 rp="Please type the (one word) name of your host:"
 . ./myread
 myhostname="$ans"
done

: translate upper to lower if necessary
case "$myhostname" in
*[A-Z]*)
 echo "(Normalizing case in your host name)"
 myhostname=`echo
 $myhostname | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

?X: Do not ask for domain name if this is not used later on. In that
?X: case, the hostname may keep its domain name, but it doesn't matter.
@if MYDOMAIN || mydomain
case "$myhostname" in
*.*)
 dflt=`expr "X$myhostname" : "X[^.]*\(\..*\)"`
 myhostname=`expr "X$myhostname" : "X\([^.]*\)\."`
 echo "(Trimming domain name from host name--host name is now $myhostname)"
 ;;
*) case "$mydomain" in
 ")
?X:
?X: There is currently no way to say we do not want hostcat if mydomain is not
?X: used. One way to achieve that would be to put that code in a mydomain.U
```

```
?X: unit. However, we want to stick the sanity checks right after the domain
?X: name computation, or if none is done, right after the hostname computation.
?X:
  {
?X: If we use NIS, try ypmatch.
   test "X$hostcat" = "Xypcat hosts" &&
   ypmatch "$myhostname" hosts 2>/dev/null |\
    $sed -e 's/[  ]*#.*//; s/$/ /' > hosts && \
   $test -s hosts
  } || {
?X: Extract only
 the relevant hosts, reducing file size,
?X: remove comments, insert trailing space for later use.
        $hostcat | $sed -n -e "s/[  ]*#.*//; s/\$/ /
     /[  ]$myhostname[ . ]/p" > hosts
  }
  tmp_re="[ . ]"
  $test x`$awk "/[0-9].*[  ]$myhostname$tmp_re/ { sum++ }
        END { print sum }" hosts` = x1 || tmp_re="[  ]"
  dflt=.`$awk \
  "/[0-9].*[  ]$myhostname$tmp_re/ {for(i=2; i<=NF;i++) print \\\$i}" \
   hosts | $sort | $uniq | \
   $sed -n -e "s/$myhostname\.\([-a-zA-Z0-9_.]\)/\1/p"`
  case `$echo X$dflt` in
  X*\ *) echo "(Several hosts in /etc/hosts matched hostname)"
   dflt=.
   ;;
?X: There is no /etc/hosts on os390
  X.)
   if $test -f /etc/hosts; then
    echo "(You do not have fully-qualified names in /etc/hosts)"
   else
    echo "(I cannot locate a hosts database anywhere)"
   fi
   ;;
  esac
  case "$dflt" in
  .)
   tans=`./loc resolv.conf X /etc /usr/etc`
   if $test -f "$tans"; then
    echo "(Attempting domain name extraction from $tans)"
?X: Look for either a search
 or a domain directive.
    dflt=.`$sed -n -e 's/ / /g' \
      -e 's/^search  *\([^ ]*\).*/\1/p' $tans \
      | ./tr '[A-Z]' '[a-z]' 2>/dev/null`
    case "$dflt" in
    .) dflt=.`$sed -n -e 's/ / /g' \
```

```
        -e 's/^domain  *\([^ ]*\).*/\1/p' $tans \
        | ./tr '[A-Z]' '[a-z]' 2>/dev/null`
      ;;
    esac
   fi
   ;;
  esac
  case "$dflt" in
  .) echo "(No help from resolv.conf either -- attempting clever guess)"
   dflt=.`sh -c domainname 2>/dev/null`
   case "$dflt" in
   ") dflt='.';;
   .nis.*|.yp.*|.main.*) dflt=`echo $dflt | $sed -e 's/^\.[^.]*//'`;;
   esac
   ;;
  esac
  case "$dflt$osname" in
  .os390)
   file="//'SYS1.TCPPARMS(TCPDATA)'"
   echo "(Attempting domain name extraction from $file)"
   dflt=.`awk '/^DOMAINORIGIN/ {print $2}' "$file" 2>/dev/null`
   ;;
   esac
  case "$dflt" in
  .) echo "(Lost all hope -- silly guess then)"
   dflt='.nonet'
   ;;
  esac
  $rm -f hosts
  ;;
 *) dflt="$mydomain";;
 esac;;
esac
echo " "
rp="What is your domain name?"
.
 ./myread
tans="$ans"
case "$ans" in
") ;;
.*) ;;
*) tans=".$tans";;
esac
mydomain="$tans"

: translate upper to lower if necessary
case "$mydomain" in
*[A-Z]*)
```

```
 echo "(Normalizing case in your domain name)"
 mydomain=`echo $mydomain | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

@end
: a little sanity check here
case "$phostname" in
") ;;
*)
 case `$phostname | ./tr '[A-Z]' '[a-z]'` in
 $myhostname$mydomain|$myhostname) ;;
 *)
  case "$phostname" in
  sed*)
   echo "(That doesn't agree with your whoami.h file, by the way.)"
   ;;
  *)
   echo "(That doesn't agree with your $phostname command, by the way.)"
   ;;
  esac
 ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/myhostname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: randbits.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:19:29  ram
?RCS: patch61: added <unistd.h> and <stdlib.h> to the C program test
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: This unit has been somewhat made obsolete with creation of the
?X: randfunc function (which finds out how to generate random
?X: numbers between 0 and 1.
?X:
?MAKE:randbits: cat rm Myread cc i_unistd i_stdlib
?MAKE: -pick add $@ %<
?S:randbits:
?S: This
 variable contains the eventual value of the RANDBITS symbol,
?S: which indicates to the C program how many bits of random number
?S: the rand() function produces.
?S:.
?C:RANDBITS:
?C: This symbol contains the number of bits of random number the rand()
?C: function produces.  Usual values are 15, 16, and 31.
?C:.
?H:#define RANDBITS $randbits  /**/
?H:.
: check for size of random number generator
echo " "
case "$randbits" in
")
 echo "Checking to see how many bits your rand function produces..." >&4
 $cat >try.c <<EOCP
#$i_unistd I_UNISTD
#$i_stdlib I_STDLIB
#include <stdio.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
EOCP
 $cat >>try.c <<'EOCP'
int main()
{
 register int i;
 register unsigned long tmp;
 register unsigned long max = 0L;

 for (i = 1000; i; i--) {
  tmp = (unsigned long)rand();
  if (tmp > max) max = tmp;
 }
 for (i = 0; max; i++)
  max /= 2;
 printf("%d\n",i);
```

```
}
EOCP
 if $cc -o try try.c >/dev/null 2>&1 ; then
  dflt=`try`
 else
  dflt='?'
  echo
 "(I can't seem to compile the test program...)"
 fi
 ;;
*)
 dflt="$randbits"
 ;;
esac
rp='How many bits does your rand() function produce?'
. ./myread
randbits="$ans"
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/randbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Filexp.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:52:53  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added HOME to the ?T: line since metalint now checks ${HOME}
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:00  ram
?RCS: patch23: made sure error status from csh is propagated (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which will expand filenames beginning
?X:
```

```
 with tildes.  The script is deleted at the end of Configure.
?X:
?MAKE:Filexp: startsh sed test expr eunicefix
?MAKE: -pick add $@ %<
?F:./filexp
?T:HOME LOGDIR dir me name failed
: set up shell script to do ~ expansion
cat >filexp <<EOSS
$startsh
: expand filename
?X:
?X: The case entries below escape the ~ as some shells have shown expansion
?X: of the ~ during here-doc processing.
?X:
case "\$1" in
\~/*|\~)
 echo \$1 | $sed "s|~|\${HOME-\$LOGDIR}|"
 ;;
\~*)
 if $test -f /bin/csh; then
  /bin/csh -f -c "glob \$1"
  failed=\$?
  echo ""
  exit \$failed
 else
  name=\`$expr x\$1 : '..\([^/]*\)'\`
  dir=\`$sed -n -e "/^\${name}:/{s/^[^:]*:[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\).*""\$"'/\1/" -e p -e q -e '}' </etc/passwd\`
  if $test ! -d "\$dir"; then
   me=\`basename \$0\`
   echo "\$me: can't locate home directory for: \$name" >&2
   exit 1
  fi
  case "\$1" in
  */*)
   echo \$dir/\`$expr x\$1 : '..[^/]*/\(.*\)'\`
   ;;
  *)
   echo \$dir
   ;;
  esac
 fi
 ;;
*)
 echo \$1
 ;;
esac
EOSS
chmod
```

```
 +x filexp
$eunicefix filexp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Filexp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_sqrtl: Inlibc
?MAKE: -pick add $@ %<
?S:d_sqrtl:
?S: This variable conditionally defines the HAS_SQRTL symbol, which
?S: indicates to the C program that the sqrtl() routine is available.
?S:.
?C:HAS_SQRTL:
?C: This symbol, if defined, indicates that the sqrtl routine is
?C: available to do long double square roots.
?C:.
?H:#$d_sqrtl HAS_SQRTL  /**/
?H:.
?LINT:set d_sqrtl
: see if sqrtl exists
set sqrtl d_sqrtl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sqrtl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usecbacktrace.U,v $
?RCS:
?RCS: Copyright (c) 2014 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usecbacktrace.U,v $
?RCS:
?MAKE:usecbacktrace: Myread Oldconfig Setvar Getfile d_backtrace
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecbacktrace:
```

```
?S: This variable indicates whether we are compiling with backtrace
?S: support.
?S:.
?C:USE_C_BACKTRACE:
?C: This symbol, if defined, indicates that Perl should
?C: be built with support for backtrace.
?C:.
?H:#$usecbacktrace USE_C_BACKTRACE  /**/
?H:.
: Check if C backtrace is actually supported.
case "$usecbacktrace" in
 "") usecbacktrace=$undef ;;
 [yY]*|true|$define)
   case "$d_backtrace" in
     [yY]*|true|$define)
       ;;
     *)
       echo "This system does not support backtrace" >&4
       usecbacktrace=$undef

  ;;
     esac
   ;;
 esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usebacktrace.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: pkgsrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:pkgsrc: src rsrc
?MAKE: -pick add $@ %<
?S:pkgsrc:
?S: This variable holds the absolute path of the package source.
?S:.
?C:PACKAGE_SOURCE_DIR:
?C: Holds the directory name holding the package source.
?C:.
?H:#define PACKAGE_SOURCE_DIR "$pkgsrc"
```

```
?H:.
: define absolute package source directory
case "$src" in
/*) pkgsrc=$src;;
*) pkgsrc=`cd $rsrc; pwd`;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pkgsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ftrncate.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ftrncate.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ftrncate: Inlibc
?MAKE: -pick add $@ %<
?S:d_ftrncate (d_ftruncate):
?S: This variable conditionally defines the HAS_FTRUNCATE symbol, which
?S: indicates to the C program that the ftruncate() subroutine exists.
?S:.
?C:HAS_FTRUNCATE:
?C: This symbol, if defined, indicates that the ftruncate() subroutine
?C: exists.
?C:.
?H:#$d_ftrncate
 HAS_FTRUNCATE /**/
?H:.
?LINT:set d_ftrncate
: see if ftruncate exists
set ftruncate d_ftrncate
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ftrncate.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_round: Inlibc
?MAKE: -pick add $@ %<
?S:d_round:
?S: This variable conditionally defines the HAS_ROUND symbol, which
?S: indicates to the C program that the round() routine is available.
?S:.
?C:HAS_ROUND:
?C: This symbol, if defined, indicates that the round routine is
?C: available to round to nearest integer, away from zero.
?C:.
?H:#$d_round HAS_ROUND  /**/
?H:.
?LINT:set d_round
: see if round exists
set round d_round
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_round.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mbrlen: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbrlen:
?S: This variable conditionally defines the HAS_MBRLEN symbol if the
?S: mbrlen() routine is available to be used to get the length of
?S: multi-byte character strings.
?S:.
?C:HAS_MBRLEN:
?C: This symbol, if defined, indicates that the mbrlen routine is
?C: available to get the length of multi-byte character strings.
?C:.
?H:#$d_mbrlen HAS_MBRLEN /**/
?H:.
?LINT: set d_mbrlen
: see if mbrlen exists
set mbrlen d_mbrlen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_mbrlen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libperl.U,v $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:libperl useshrplib shrpenv ldlibpthname: \
 Myread Oldconfig archlibexp awk cat libc \
 _a osname osvers so patchlevel subversion usedl ld \
 ccdlflags installarchlib userelocatableinc
?MAKE: -pick wipe $@ %<
?S:libperl:
?S: The perl executable is obtained by linking perlmain.c with
?S: libperl, any static extensions (usually just DynaLoader),
?S: and any other libraries needed on this system.  libperl
?S: is usually libperl.a, but can also be libperl.so.xxx if
?S: the user wishes to build a perl executable with a shared
?S: library.
?S:.
?S:useshrplib:
?S: This variable is set to 'true' if the user wishes
?S: to build a shared libperl, and 'false' otherwise.
?S:.
?S:shrpenv:
?S: If
 the user builds a shared libperl.so, then we need to tell the
?S: 'perl' executable where it will be able to find the installed libperl.so.
?S: One way to do this on some systems is to set the environment variable
?S: LD_RUN_PATH to the directory that will be the final location of the
?S: shared libperl.so.  The makefile can use this with something like
?S:  $shrpenv $(CC) -o perl perlmain.o $libperl $libs
?S: Typical values are
?S:  shrpenv="env LD_RUN_PATH=$archlibexp/CORE"
?S: or
?S:  shrpenv="
?S: See the main perl Makefile.SH for actual working usage.
?S:
?S: Alternatively, we might be able to use a command line option such
?S: as -R $archlibexp/CORE (Solaris) or -Wl,-rpath
?S: $archlibexp/CORE (Linux).
?S:.
?S:ldlibpthname:
```

```
?S: This variable holds the name of the shared library
?S: search path, often LD_LIBRARY_PATH.  To get an empty
?S: string, the hints file must set this to 'none'.
?S:.
?T:shrpdir majonly majmin also xxx tmp_shrpenv
?X: metalint gets confused and thinks we're
 actually setting LDOPTS
?X: and LD_RUN_PATH.
?LINT:extern LDOPTS
?LINT:change LDOPTS
?LINT:extern LD_RUN_PATH
?LINT:change LD_RUN_PATH
?LINT:change ccdlflags
?LINT:extern maintloc maintname
?Y:top
: Do we want a shared libperl?
also=''
case "$usedl" in
$undef)
 # No dynamic loading being used, so don't bother even to prompt.
 useshrplib='false'
 ;;
*) case "$useshrplib" in
 '') case "$osname" in
  svr4*|nonstopux|dgux|dynixptx|esix|powerux|haiku|cygwin*)
   dflt=y
   also='Building a shared libperl is required for dynamic loading to work on your system.'
   ;;
  *) dflt=n
   ;;
  esac
  ;;
 $define|true|[Yy]*)
  dflt=y
  ;;
 *) dflt=n
  ;;
 esac
 $cat << EOM

The perl executable is normally obtained by linking perlmain.c with
libperl${_a}, any static extensions (usually just DynaLoader), and
any other libraries needed on this system (such as -lm, etc.).  Since
your system supports dynamic loading, it is probably possible to build
a shared libperl.$so.  If you will have more than one
 executable linked
to libperl.$so, this will significantly reduce the size of each
executable, but it may have a noticeable effect on performance.  The
```

```
default is probably sensible for your system.
$also

EOM
 rp="Build a shared libperl.$so (y/n)"
 . ./myread
 case "$ans" in
 true|$define|[Yy]*)
  useshrplib='true'  ;;
 *) useshrplib='false' ;;
 esac
 ;;
esac

case "$useshrplib" in
true)
 case "$userelocatableinc" in
 true|define)
  echo "Cannot build with both -Duserelocatableinc and -Duseshrplib" >&4
  echo "See INSTALL for an explanation why that won't work." >&4
  exit 4
  ;;
 esac
 case "$libperl" in
 ")
  # Figure out a good name for libperl.so.  Since it gets stored in
  # a version-specific architecture-dependent library, the version
  # number isn't really that important, except for making cc/ld happy.
  #
  # A name such as libperl.so.10.1
  majmin="libperl.$so.$patchlevel.$subversion"
  # A name such as libperl.so.100
  majonly=`echo $patchlevel $subversion |
   $awk '{printf
 "%d%02d", $1, $2}'`
  majonly=libperl.$so.$majonly
  # I'd prefer to keep the os-specific stuff here to a minimum, and
  # rely on figuring it out from the naming of libc.
  case "${osname}${osvers}" in
  *linux*|gnu*)  # ld won't link with a bare -lperl otherwise.
   dflt=libperl.$so
   ;;
  cygwin*) # ld links now against the dll directly
   majmin="cygperl5_${patchlevel}_${subversion}.${so}"
   majonly=`echo $patchlevel $subversion |
    $awk '{printf "%03d%03d", $1, $2}'`
   majonly=cygperl5.$majonly.$so
   dflt=$majmin
```

```
  ;;
  *) # Try to guess based on whether libc has major.minor.
   case "$libc" in
   *libc.$so.[0-9]*.[0-9]*) dflt=$majmin ;;
   *libc.$so.[0-9]*) dflt=$majonly ;;
   *) dflt=libperl.$so ;;
   esac
   ;;
  esac
  ;;
 *) dflt=$libperl
  ;;
 esac
 cat << EOM

I need to select a good name for the shared libperl.  If your system uses
library names with major and minor numbers, then you might want something
like $majmin.  Alternatively, if your system uses a single
 version
number for shared libraries, then you might want to use $majonly.
Or, your system might be quite happy with a simple libperl.$so.

Since the shared libperl will get installed into a version-specific
architecture-dependent directory, the version number of the shared perl
library probably isn't important, so the default should be o.k.

EOM
 rp='What name do you want to give to the shared libperl?'
 . ./myread
 libperl=$ans
 echo "Ok, I'll use $libperl"
 ;;
*)
 libperl="libperl${_a}"
 ;;
esac

# Detect old use of shrpdir via undocumented Configure -Dshrpdir
case "$shrpdir" in
") ;;
*) $cat >&4 <<EOM
WARNING:  Use of the shrpdir variable for the installation location of
the shared $libperl is not supported.  It was never documented and
will not work in this version.  Let me (<$maintloc>)
know of any problems this may cause.

EOM
 case "$shrpdir" in
```

```
 "$archlibexp/CORE")
  $cat >&4 <<EOM
But your current setting of $shrpdir is
the default anyway, so it's harmless.
EOM
  ;;
 *)
  $cat
 >&4 <<EOM
Further, your current attempted setting of $shrpdir
conflicts with the value of $archlibexp/CORE
that installperl will use.
EOM
  ;;
 esac
 ;;
esac

# How will the perl executable find the installed shared $libperl?
# Add $xxx to ccdlflags.
# If we can't figure out a command-line option, use $shrpenv to
# set env LD_RUN_PATH.  The main perl makefile uses this.
shrpdir=$archlibexp/CORE
xxx=''
tmp_shrpenv=''
if "$useshrplib"; then
   case "$osname" in
 aix)
  # We'll set it in Makefile.SH...
  ;;
 solaris)
  xxx="-R $shrpdir"
  ;;
 freebsd|minix|mirbsd|netbsd|openbsd|interix|dragonfly|bitrig)
  xxx="-Wl,-R$shrpdir"
  ;;
 bsdos|linux|irix*|dec_osf|gnu*|haiku)
  xxx="-Wl,-rpath,$shrpdir"
  ;;
 hpux*)
  # hpux doesn't like the default, either.
  tmp_shrpenv="env LDOPTS=\"+s +b${shrpdir}\""
  ;;
 cygwin)
  # cygwin needs only ldlibpth
  ;;
 *)
  tmp_shrpenv="env LD_RUN_PATH=$shrpdir"
```

```
  ;;
 esac
 case "$xxx" in
 ") ;;
 *)
  # Only add $xxx if it isn't already in ccdlflags.
  case
 " $ccdlflags " in
  *" $xxx "*) ;;
  *) ccdlflags="$ccdlflags $xxx"
   cat <<EOM >&4

Adding $xxx to the flags
passed to $ld so that the perl executable will find the
installed shared $libperl.

EOM
   ;;
  esac
  ;;
 esac
fi
# Fix ccdlflags in AIX for building external extensions.
# (For building Perl itself bare -bE:perl.exp is needed,
#  Makefile.SH takes care of this.)
case "$osname" in
aix) ccdlflags="$ccdlflags -bE:$installarchlib/CORE/perl.exp" ;;
esac
# Respect a hint or command-line value.
case "$shrpenv" in
") shrpenv="$tmp_shrpenv" ;;
esac
case "$ldlibpthname" in
") ldlibpthname=LD_LIBRARY_PATH ;;
none) ldlibpthname=" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/libperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ffs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ffs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ffs: Inlibc
?MAKE: -pick add $@ %<
?S:d_ffs:
?S: This variable conditionally defines the HAS_FFS symbol, which
?S: indicates to the C program that the ffs() routine is available
?S: to find the first bit which is set in its integer argument.
?S:.
?C:HAS_FFS:
?C: This symbol, if defined, indicates that the ffs routine is available
?C: to
 find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
?H:#$d_ffs HAS_FFS  /**/
?H:.
?LINT:set d_ffs
: see if ffs exists
set ffs d_ffs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ffs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: charsize.U,v 3.0.1.1 1994/10/29 16:07:13 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: charsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:13  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:charsize charbits: cat rm_try Myread Compile run
?MAKE: -pick add $@ %<
?S:charsize:
?S: This variable contains the value of the CHARSIZE symbol, which
?S: indicates to the C program how many bytes there are in a character.
?S:.
?S:charbits:
?S: This
 variable contains the value of the CHARBITS symbol, which
?S: indicates to the C program how many bits there are in a character.
?S:.
?C:CHARSIZE:
?C: This symbol contains the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?C:CHARBITS:
?C: This symbol contains the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define CHARSIZE $charsize  /**/
?H:#define CHARBITS $charbits  /**/
?H:.
?F:!try
: length of character in bytes. Is always 1, otherwise it is not C
: This used to be a test using sizeof
charsize=1

: Check for the number of bits in a character
case "$charbits" in
") echo "Checking how long a character is (in bits)..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
int main ()
{
   int n;
   unsigned char c;
   for (c = 1, n = 0; c; c <<= 1, n++) ;
   printf ("%d\n", n);
   return (0);
   }
EOCP
 set try
 if eval $compile_ok; then
  dflt=`$run ./try`
 else
  dflt='8'
  echo "(I
```

```
 can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$charbits"
 ;;
esac
rp="What is the length of a character (in bits)?"
. ./myread
charbits="$ans"
$rm_try
case "$charbits" in
8) ;;
*) cat >&4 << EOM
Your system has an unsigned character size of $charbits bits, which
is rather unusual (normally it is 8 bits).  Perl likely will not work
correctly on your system, with subtle bugs in various places.
EOM
 rp='Do you really want to continue?'
 dflt='n'
 . ./myread
 case "$ans" in
  [yY]) echo >&4 "Okay, continuing." ;;
  *) exit 1    ;;
 esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/charsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Tye McQueen <tye@metronet.com> added safe setuid script checks.
?RCS:
?RCS: $Log: d_dosuid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:33:03  ram
?RCS: patch61: moved unit to TOP via a ?Y: layout directive
?RCS: patch61: tell them /dev/fd is not about floppy disks
?RCS:
```

```
?RCS: Revision 3.0.1.1  1994/10/29  16:12:08  ram
?RCS: patch36: added checks for secure setuid scripts (Tye McQueen)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_dosuid
 d_suidsafe: cat contains ls rm test Myread Setvar \
 Oldconfig Guess package hint
?MAKE: -pick add $@ %<
?S:d_suidsafe:
?S: This variable conditionally defines SETUID_SCRIPTS_ARE_SECURE_NOW
?S: if setuid scripts can be secure.  This test looks in /dev/fd/.
?S:.
?S:d_dosuid:
?S: This variable conditionally defines the symbol DOSUID, which
?S: tells the C program that it should insert setuid emulation code
?S: on hosts which have setuid #! scripts disabled.
?S:.
?C:SETUID_SCRIPTS_ARE_SECURE_NOW:
?C: This symbol, if defined, indicates that the bug that prevents
?C: setuid scripts from being secure is not present in this kernel.
?C:.
?C:DOSUID:
?C: This symbol, if defined, indicates that the C program should
?C: check the script that it is executing for setuid/setgid bits, and
?C: attempt to emulate setuid/setgid on systems that have disabled
?C: setuid #! scripts because the kernel can't do it securely.
?C: It is up to the package designer to make sure that this emulation
?C: is done securely.
  Among other things, it should do an fstat on
?C: the script it just opened to make sure it really is a setuid/setgid
?C: script, it should make sure the arguments passed correspond exactly
?C: to the argument on the #! line, and it should not trust any
?C: subprocesses to which it must pass the filename rather than the
?C: file descriptor of the script to be executed.
?C:.
?H:#$d_suidsafe SETUID_SCRIPTS_ARE_SECURE_NOW /**/
?H:#$d_dosuid DOSUID  /**/
?H:.
?Y:TOP
?F:!reflect
?LINT: set d_suidsafe
?LINT: set d_dosuid
: see if setuid scripts can be secure
$cat <<EOM

Some kernels have a bug that prevents setuid #! scripts from being
```

```
secure.  Some sites have disabled setuid #! scripts because of this.

First let's decide if your kernel supports secure setuid #! scripts.
(If setuid #! scripts would be secure but have been disabled anyway,
don't say that they are secure if asked.)

EOM

val="$undef"
if $test -d /dev/fd; then
 echo "#!$ls" >reflect
 chmod +x,u+s reflect
 ./reflect >flect
 2>&1
 if $contains "/dev/fd" flect >/dev/null; then
  echo "Congratulations, your kernel has secure setuid scripts!" >&4
  val="$define"
 else
  $cat <<EOM
If you are not sure if they are secure, I can check but I'll need a
username and password different from the one you are using right now.
If you don't have such a username or don't want me to test, simply
enter 'none'.

EOM
  rp='Other username to test security of setuid scripts with?'
  dflt='none'
  . ./myread
  case "$ans" in
  n|none)
   case "$d_suidsafe" in
   ") echo "I'll assume setuid scripts are *not* secure." >&4
    dflt=n;;
   "$undef")
    echo "Well, the $hint value is *not* secure." >&4
    dflt=n;;
   *) echo "Well, the $hint value *is* secure." >&4
    dflt=y;;
   esac
   ;;
  *)
   $rm -f reflect flect
   echo "#!$ls" >reflect
   chmod +x,u+s reflect
   echo >flect
   chmod a+w flect
   echo '"su" will (probably) prompt you for '"$ans's password."
   su $ans -c './reflect >flect'
```

```
  if $contains "/dev/fd" flect
>/dev/null; then
   echo "Okay, it looks like setuid scripts are secure." >&4
   dflt=y
  else
   echo "I don't think setuid scripts are secure." >&4
   dflt=n
  fi
  ;;
 esac
 rp='Does your kernel have *secure* setuid scripts?'
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
fi
else
 echo "I don't think setuid scripts are secure (no /dev/fd directory)." >&4
 echo "(That's for file descriptors, not floppy disks.)"
 val="$undef"
fi
set d_suidsafe
eval $setvar

$rm -f reflect flect

: now see if they want to do setuid emulation
echo " "
val="$undef"
case "$d_suidsafe" in
"$define")
 val="$undef"
 echo "No need to emulate SUID scripts since they are secure here." >& 4
 ;;
*)
 $cat <<EOM
Some systems have disabled setuid scripts, especially systems where
setuid scripts cannot be secure.  On systems where setuid scripts have
been disabled, the setuid/setgid bits on scripts are currently
useless.  It is possible for $package to detect those bits
 and emulate
setuid/setgid in a secure fashion.  This emulation will only work if
setuid scripts have been disabled in your kernel.

EOM
 case "$d_dosuid" in
 "$define") dflt=y ;;
```

```
 *) dflt=n ;;
 esac
 rp="Do you want to do setuid/setgid emulation?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
 ;;
esac
set d_dosuid
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dosuid.U
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```
?RCS: $Id: i_mntent.U,v $
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?RCS:
?MAKE:i_mntent: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_mntent:
?S: This variable conditionally defines the I_MNTENT symbol, and indicates
?S: whether a C program should include <mntent.h>.
?S:.
?C:I_MNTENT:
?C: This symbol, if defined, indicates that <mntent.h> exists and
?C: should be included.
?C:.
?H:#$i_mntent I_MNTENT  /**/
?H:.
?LINT:set i_mntent
: see if this is a mntent.h system
set mntent.h i_mntent
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_mntent.U
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```
?RCS: $Id: i_sysresrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

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?RCS:
?RCS: $Log: i_sysresrc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/resource.h> needs to be included
?X:
?MAKE:i_sysresrc: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysresrc:
?S: This variable conditionally defines the I_SYS_RESOURCE symbol,
?S: and indicates whether a C program should include <sys/resource.h>.
?S:.
?C:I_SYS_RESOURCE (I_SYSRESOURCE):
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <sys/resource.h>.
?C:.
?H:#$i_sysresrc I_SYS_RESOURCE  /**/
?H:.
?LINT:set i_sysresrc
: see if sys/resource.h has to be included
set sys/resource.h i_sysresrc
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysresrc.U
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```
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?RCS:
?MAKE:d_sockatmark: Inlibc
?MAKE: -pick add $@ %<
?S:d_sockatmark:
?S: This variable conditionally defines the HAS_SOCKATMARK symbol, which
?S: indicates to the C program that the sockatmark() routine is available.
```

```
?S:.
?C:HAS_SOCKATMARK:
?C: This symbol, if defined, indicates that the sockatmark routine is
?C: available to test whether a socket is at the out-of-band mark.
?C:.
?H:#$d_sockatmark HAS_SOCKATMARK  /**/
?H:.
?LINT:set d_sockatmark
: see if sockatmark exists
set sockatmark d_sockatmark
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sockatmark.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cf_name.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: cf_name.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  14:29:36  ram
?RCS: patch23: fixed user name computation from /etc/passwd in bsd systems
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:05:11  ram
?RCS: patch16: created
?RCS:
?RCS:
?MAKE:+cf_name: cf_by passcat Filexp nametype cat test
?MAKE: -pick add $@ %<
?S:cf_name:
?S: Full name of the person who ran the Configure script and
 answered the
?S: questions. This can be used by units that require the user's full name.
?S: This variable is for internal use only.
?S:.
?T:xxx fn NAME
: figure out their full name
case "$NAME" in
") case "$nametype" in
```

```
 other)
  fn=`./filexp ~/.fullname`
  xxx=usg
  $test -f $fn && xxx=other
  ;;
 *)
  xxx="$nametype"
  ;;
 esac

 case "$xxx" in
 bsd)
  cf_name=`$passcat | grep "^$cf_by:" | \
   sed -e 's/^[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\):.*/\1/' \
   -e 's/,.*//'`
  ;;
   usg)
  cf_name=`$passcat | grep "^$cf_by:" | \
   sed -e 's/^[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\):.*/\1/' \
   -e 's/[^-]*-\(.*\)(.*)/\1/'`
  ;;
 *)
  cf_name=`$cat $fn`
  ;;
 esac
 ;;
*)
 cf_name="$NAME"
 ;;
esac
?X:
?X: In the original unit, Graham asked for the user name, in case the above
?X: code was unable to figure it out correctly. Since now cf_name has been
?X: made an internal variable only (i.e. it is not saved in config.sh), letting
?X: the user override the computed default each time would be a pain.
?X:
 Therefore, I have decided to trust the above code to get it right, and for
?X: those rare cases where it will fail, too bad :-) --RAM.
?X:
echo " "
echo "Pleased to meet you, $cf_name."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_name.U
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?RCS: $Id: sunscanf.U,v 3.0 1993/08/18 12:09:54 ram Exp $
?RCS:

```
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?RCS:
?RCS: $Log: sunscanf.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sunscanf: cat rm Compile Myread test Setvar
?MAKE: -pick add $@ %<
?S:sunscanf:
?S: This variable is set if this system runs with the Sun version
?S: of scanf.
?S:.
?C:SUNSCANF:
?C: This variable is set if this system runs with the Sun version
?C: of scanf.
?C:.
?H:#$sunscanf SUNSCANF  /**/
?H:.
?LINT:set sunscanf
?F:!scanf
: check to see what
 kinda scanf your using.
echo " "
echo "Checking to see what flavor of scanf you have..." >&4
$cat >scanf.c <<'EOCP'
int main()
{
 float value;

 sscanf("4.5","%g",&value);
 printf("%d\n", value == 4.5);
}
EOCP
set scanf
if eval $compile_ok; then
 if $test `./scanf` = 0; then
  echo "Hmm.. seems you are not running the USG flavor.."
  val="$undef"
 else
  echo "Uh... you are running the USG flavor of scanf."
  val="$define"
 fi
```

```
else
 echo "(I can't seem to compile the test program... Guessing)"
 val="$undef"
fi
set sunscanf
eval $setvar
$rm -f scanf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sunscanf.U
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```
?RCS: $Id: d_setpgrp2.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: $Log: d_setpgrp2.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpgrp2:
?S: This variable conditionally defines the HAS_SETPGRP2 symbol, which
?S: indicates to the C program that the setpgrp2() (as in DG/UX) routine
?S: is available to set the current process group.
?S:.
?C:HAS_SETPGRP2 (SETPGRP2):
?C: This symbol, if defined, indicates that the
 setpgrp2() (as in DG/UX)
?C: routine is available to set the current process group.
?C:.
?H:#$d_setpgrp2 HAS_SETPGRP2  /**/
?H:.
?LINT:set d_setpgrp2
: see if setpgrp2 exists
set setpgrp2 d_setpgrp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgrp2.U

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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:intsize longsize shortsize: Assert Myread cat rm_try +cc +ccflags echo n c
?MAKE: -pick add $@ %<
?S:intsize:
?S: This variable contains the value of the INTSIZE symbol, which
?S: indicates to the C program how many bytes there are in an int.
?S:.
?S:longsize:
?S: This variable contains the value of the LONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long.
?S:.
?S:shortsize:
?S: This variable contains the value of the SHORTSIZE symbol which
?S: indicates to the
 C program how many bytes there are in a short.
?S:.
?C:INTSIZE:
?C: This symbol contains the value of sizeof(int) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:LONGSIZE:
?C: This symbol contains the value of sizeof(long) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:SHORTSIZE:
?C: This symbol contains the value of sizeof(short) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define INTSIZE $intsize
?H:#define LONGSIZE $longsize
?H:#define SHORTSIZE $shortsize
?H:.
?T:types t size var
?LINT: set shortsize intsize longsize
: check for lengths of integral types
echo " "
types="
```

```
@if SHORTSIZE || shortsize
types="$types short"
@end
@if INTSIZE || intsize
types="$types int"
@end
@if LONGSIZE || longsize
types="$types long"
@end
for t in $types; do
 $echo $n "Checking to see how big your ${t}s are...$c" >&4
 for size in 2 4 8 16 error; do
  $cat >try.c <<EOCP
#include "static_assert.h"
$t foo;
int main()
{
 STATIC_ASSERT($size
 == sizeof(foo));
 return 0;
}
EOCP
  if $cc -c $ccflags try.c >/dev/null 2>&1; then break; fi
 done
 var=${t}size
 case "$size" in
 error)
  echo " cannot compute it." >&4
  case $t in
  short) dflt=2;;
  int) dflt=4;;
  long) dflt=4;;
  esac
  rp="What is the size of the \"$t\" type (in bytes)?"
  . ./myread
  eval $var="$ans"
  ;;
 *)
  echo " $size bytes." >&4
  eval $var=$size
  ;;
 esac
done
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/intsize.U

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?RCS:
?MAKE:d_isfinitel: Inlibc
?MAKE: -pick add $@ %<
?S:d_isfinitel:
?S: This variable conditionally defines the HAS_ISFINITEL symbol, which
?S: indicates to the C program that the isfinitel() routine is available.
?S:.
?C:HAS_ISFINITEL:
?C: This symbol, if defined, indicates that the isfinitel routine is
?C: available to check whether a long double is finite.
?C: (non-infinity non-NaN).
?C:.
?H:#$d_isfinitel HAS_ISFINITEL  /**/
?H:.
?LINT:set d_isfinitel
: see if isfinitel exists
set isfinitel d_isfinitel
eval $inlibc
```

Found in path(s):
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_gai_strerror: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_gai_strerror:
?S: This variable conditionally defines the HAS_GAI_STRERROR symbol
?S: if the gai_strerror() routine is available and can be used to
?S: translate error codes returned by getaddrinfo() into human
?S: readable strings.
?S:.
?C:HAS_GAI_STRERROR:
```

```
?C: This symbol, if defined, indicates that the gai_strerror routine
?C: is available to translate error codes returned by getaddrinfo()
?C: into human readable strings.
?C:.
?H:#$d_gai_strerror
 HAS_GAI_STRERROR /**/
?H:.
?F:!try
?LINT: set d_gai_strerror
: look for gai_strerror
echo " "
$cat >try.c <<'EOCP'
#include <sys/types.h>
#include <sys/socket.h>
#include <netdb.h>
int main ()
{
   return (gai_strerror (0) ? 0 : 1);
   }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working gai_strerror() found." >&4
     val="$define" ;;
 *)  echo "gai_strerror() found, but it doesn't work" >&4
     ;;
 esac
else
   echo "gai_strerror() NOT found." >&4
   fi
set d_gai_strerror
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_gai_strerror.U
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```
?RCS: $Id: d_PORTAR.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_PORTAR.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:42  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_PORTAR: cat +cc rm Setvar
?MAKE: -pick add $@ %<
?S:d_PORTAR:
?S: This variable conditionally handles definition of PORTAR,
?S: a creation of greater minds than I can imagine.
?S:.
?C:PORTAR:
?C: This manifest constant must
 be defined to 1 for some implementations
?C: of ar.h to get the portable ar most everybody uses.
?C:.
?L:ar_fmag:
?L:ARFMAG:
?L:SARMAG:
?H:#$d_PORTAR PORTAR 1 /**/
?H:.
?F:!portar
?LINT:set d_PORTAR
: see if we need to define PORTAR
echo " "
echo 'Checking to see if we need to define PORTAR for portable archives...' >&4
$cat >portar.c <<'EOCP'
#include <ar.h>
int main() {
 char *arfmag = ARFMAG;
 int sarmag = SARMAG;
 struct ar_hdr arh;

 strncpy(arh.ar_fmag, arfmag, 2);

#ifdef PORTAR
 printf("D\n");
#else
 printf("U\n");
#endif
 exit(0);}
EOCP
```

```
if $cc -o portar portar.c >/dev/null 2>&1 || \
 $cc -DPORTAR=1 -o portar portar.c >/dev/null 2>&1 ; then
 case "`./portar`" in
 D)
  val="$define"
  echo "We'll be defining PORTAR for you."
  ;;
 U)
  val="$undef"
  echo "We don't seem to need PORTAR defined here."
  ;;
 *)
  val="$define"
  echo "(My test program gave me an unexpected value!)"
  echo "I'll just define PORTAR to be sure."
  ;;
 esac
else
 echo "(Strange, I couldn't get my test
 program to compile.)"
 echo "We'll just define PORTAR in this case."
 val="$define"
fi
set d_PORTAR
eval $setvar
$rm -f portar*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_PORTAR.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetent_r getnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetent_r:
?S: This variable conditionally defines the HAS_GETNETENT_R symbol,
?S: which indicates to the C program that the getnetent_r()
?S: routine is available.
?S:.
?S:getnetent_r_proto:
```

```
?S: This variable encodes the prototype of getnetent_r.
?S: It is zero if d_getnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetent_r
?S: is defined.
?S:.
?C:HAS_GETNETENT_R:
?C: This symbol, if defined, indicates that the getnetent_r routine
?C: is
 available to getnetent re-entrantly.
?C:.
?C:GETNETENT_R_PROTO:
?C: This symbol encodes the prototype of getnetent_r.
?C: It is zero if d_getnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetent_r
?C: is defined.
?C:.
?H:#$d_getnetent_r HAS_GETNETENT_R /**/
?H:#define GETNETENT_R_PROTO $getnetent_r_proto /**/
?H:.
?T:try hdrs d_getnetent_r_proto
: see if getnetent_r exists
set getnetent_r d_getnetent_r
eval $inlibc
case "$d_getnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetent_r_proto:$usethreads" in
 ":define") d_getnetent_r_proto=define
  set d_getnetent_r_proto getnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getnetent_r_proto" in
 define)
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct netent*, char*, size_t, struct netent**, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBWRE ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct
 netent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBIE ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='struct netent* getnetent_r(struct netent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=S_SBIE ;;
 esac
 case "$getnetent_r_proto" in
```

```
"|0) try='struct netent* getnetent_r(struct netent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getnetent_r_proto=S_SBI ;;
esac
case "$getnetent_r_proto" in
"|0) try='int getnetent_r(struct netent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBI ;;
esac
case "$getnetent_r_proto" in
"|0) try='int getnetent_r(struct netent*, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SD ;;
esac
case "$getnetent_r_proto" in
"|0) d_getnetent_r=undef
 getnetent_r_proto=0
 echo "Disabling getnetent_r, cannot determine prototype." >&4 ;;
* ) case "$getnetent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getnetent_r_proto="REENTRANT_PROTO_$getnetent_r_proto"
;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getnetent_r has no prototype, not using it." >&4 ;;
 esac
 d_getnetent_r=undef
 getnetent_r_proto=0
 ;;
esac
;;
*) getnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_asinh: Inlibc
?MAKE: -pick add $@ %<
?S:d_asinh:
?S: This variable conditionally defines the HAS_ASINH symbol, which
?S: indicates to the C program that the asinh() routine is available.
?S:.
```

```
?C:HAS_ASINH:
?C: This symbol, if defined, indicates that the asinh routine is
?C: available to do the inverse hyperbolic sine function.
?C:.
?H:#$d_asinh HAS_ASINH  /**/
?H:.
?LINT:set d_asinh
: see if asinh exists
set asinh d_asinh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_asinh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_link.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_link.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:01:13  ram
?RCS: patch6: created for completeness
?RCS:
?MAKE:d_link: Inlibc
?MAKE: -pick add $@ %<
?S:d_link:
?S: This variable conditionally defines HAS_LINK if link() is
?S: available to create hard links.
?S:.
?C:HAS_LINK:
?C: This symbol, if defined, indicates that the link routine is
?C: available to create hard links.
?C:.
?H:#$d_link HAS_LINK /**/
?H:.
?LINT:set d_link
: see if link exists
set
 link d_link
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_link.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:56:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: added support for HPUX-10 nm output
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  14:11:56  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:20:47  ram
?RCS: patch54: made sure only most recent version of shared lib is picked
?RCS: patch54: final "nm -p" check now uses xscan and xrun
 like everybody
?RCS: patch54: can now grok Linux nm output with lead __IO (ADO)
?RCS: patch54: added support for Linux ELF output, using 'W' for alias (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1994/10/29  16:23:40  ram
?RCS: patch36: now looks for shared libraries before anything else (ADO)
?RCS: patch36: added new nm output format (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1994/08/29  16:28:10  ram
?RCS: patch32: added I-type symbols for nm output parsing on Linux
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  07:03:24  ram
?RCS: patch30: checks are now presented by succession of if/elif
?RCS: patch30: uniformized checks for shared objects with new so symbol
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  15:06:33  ram
?RCS: patch23: added shared library knowledge (ADO and WED)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:12:17  ram
?RCS: patch16: can now export nm_extract as an internal-use only variable
?RCS:
?RCS: Revision 3.0.1.2  1993/09/13  16:09:03  ram
?RCS: patch10: added special handling for Apollo
```

```
 systems (WAD)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:40:03  ram
?RCS: patch7: added entry for /usr/shlib/libc.so (OSF/1 machines)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libc +nm_extract: echo n c rm test grep Getfile Myread Oldconfig Loc \
 sed libs incpath libpth ar runnm nm nm_opt nm_so_opt contains xlibpth \
 so _a _o osname trnl tr sort uniq sysroot
?MAKE: -pick add $@ %<
?S:libc:
?S: This variable contains the location of the C library.
?S:.
?S:nm_extract:
?S: This variable holds the name of the extraction command used to process
?S: the output of nm and yield the list of defined symbols. It is used
?S: internally by Configure.
?S:.
?T:thislib try libnames xxx xscan xrun thisname com tans file
?F:!libnames !libc.tmp !tmp.imp
?LINT:extern PASE
?LINT:extern libnames
?LINT:change nm_opt
?INIT:libnames=''
: Figure out where the libc is located
case "$runnm" in
true)
?X: indentation is wrong on purpose--RAM
:
 get list of predefined functions in a handy place
echo " "
case "$libc" in
'') libc=unknown
 case "$libs" in
 *-lc_s*) libc=`./loc libc_s$_a $libc $libpth`
 esac
 ;;
esac
case "$libs" in
'') ;;
*)  for thislib in $libs; do
 case "$thislib" in
 -lc|-lc_s)
  : Handle C library specially below.
  ;;
 -l*)
```

```
  thislib=`echo $thislib | $sed -e 's/^-l//'`
  if try=`./loc lib$thislib.$so.'*' X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib.$so X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc Slib$thislib$_a X $xlibpth`; $test -f "$try"; then
   :
  else
   try=''
  fi
  libnames="$libnames $try"
  ;;
 *) libnames="$libnames $thislib" ;;
 esac
 done
 ;;
esac
?X:
?X: Some systems (e.g. DG/UX) use
 "environmental" links, which make the test
?X: -f fail. Ditto for symbolic links. So in order to reliably check the
?X: existence of a file, we use test -r. It will still fail with DG/UX links
?X: though, but at least it will detect symbolic links. At some strategic
?X: points, we make use of (test -h), using a sub-shell in case builtin test
?X: does not implement the -h check for symbolic links. This makes it
?X: possible to preset libc in a hint file for instance and have it show up
?X: as-is in the question.
?X:
xxx=normal
case "$libc" in
unknown)
?X:
?X: The sed below transforms .so.9 .so.12 into something like .so.0009 .so.0012,
?X: then sorts on it to allow keeping .so.12 instead of .so.9 as the latest
?X: up-to-date library. The initial filename (before sed munging, saved in hold
?X: space via 'h') is appended via 'G' before sorting, then the leading munged
?X: part is removed after sorting. Nice efficient work from Tye McQueen.
?X: The initial blurfl is here to prevent the trailing
 pipe from producing an
?X: empty string, causing Configure to output all its set variables!
```

```
?X:
 set /lib/libc.$so
 for xxx in $libpth; do
  $test -r $1 || set $xxx/libc.$so
  : The messy sed command sorts on library version numbers.
  $test -r $1 || \
   set `echo blurfl; echo $xxx/libc.$so.[0-9]* | \
   tr ' ' $trnl | egrep -v '\.[A-Za-z]*$' | $sed -e '
    h
    s/[0-9][0-9]*/0000&/g
    s/0*\([0-9][0-9][0-9][0-9][0-9]\)/\1/g
    G
    s/\n/ /' | \
    $sort | $sed -e 's/^.* //'`
  eval set \$$#
 done
 $test -r $1 || set $sysroot/usr/ccs/lib/libc.$so
 $test -r $1 || set $sysroot/lib/libsys_s$_a
 ;;
*)
?X: ensure the test below for the (shared) C library will fail
 set blurfl
 ;;
esac
if $test -r "$1"; then
 echo "Your (shared) C library seems to be in $1."
 libc="$1"
elif $test -r /lib/libc && $test -r /lib/clib; then
?X:
?X: Apollo has its C library in /lib/clib AND /lib/libc
?X: not to mention its math library in /lib/syslib...
?X:
 echo "Your C library seems to be in both /lib/clib
 and /lib/libc."
 xxx=apollo
 libc='/lib/clib /lib/libc'
 if $test -r /lib/syslib; then
  echo "(Your math library is in /lib/syslib.)"
?X: Put syslib in libc -- not quite right, but won't hurt
  libc="$libc /lib/syslib"
 fi
elif $test -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 echo "Your C library seems to be in $libc, as you said before."
?X: For mips, and...
elif $test -r $incpath/usr/lib/libc$_a; then
 libc=$incpath/usr/lib/libc$_a;
 echo "Your C library seems to be in $libc.  That's fine."
elif $test -r /lib/libc$_a; then
```

```
 libc=/lib/libc$_a;
 echo "Your C library seems to be in $libc.  You're normal."
else
 if tans=`./loc libc$_a blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc libc blurfl/dyick $libpth`; $test -r "$tans"; then
  libnames="$libnames "`./loc clib blurfl/dyick $libpth`
 elif tans=`./loc clib blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Slibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 elif tans=`./loc
 Mlibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 else
  tans=`./loc Llibc$_a blurfl/dyick $xlibpth`
 fi
 if $test -r "$tans"; then
  echo "Your C library seems to be in $tans, of all places."
  libc=$tans
 else
  libc='blurfl'
 fi
fi
if $test $xxx = apollo -o -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 dflt="$libc"
 cat <<EOM

If the guess above is wrong (which it might be if you're using a strange
compiler, or your machine supports multiple models), you can override it here.

EOM
else
 dflt=''
 echo $libpth | $tr ' ' $trnl | $sort | $uniq > libpath
 cat >&4 <<EOM
I can't seem to find your C library.  I've looked in the following places:

EOM
 $sed 's/^/ /' libpath
 cat <<EOM

None of these seems to contain your C library. I need to get its name...

EOM
fi
fn=f
rp='Where is your C library?'
```

```
. ./getfile
libc="$ans"

echo " "
echo $libc $libnames | $tr ' ' $trnl | $sort | $uniq > libnames
set X `cat libnames`
shift
xxx=files
case $# in 1) xxx=file; esac
echo
 "Extracting names from the following $xxx for later perusal:" >&4
echo " "
$sed 's/^/ /' libnames >&4
echo " "
$echo $n "This may take a while...$c" >&4

?X:
?X: Linux may need the special Dynamic option to nm for shared libraries.
?X: In general, this is stored in the nm_so_opt variable.
?X: Unfortunately, that option may be fatal on non-shared libraries.
?X:
for file in $*; do
 case $file in
 *$so*) $nm $nm_so_opt $nm_opt $file 2>/dev/null;;
 *) $nm $nm_opt $file 2>/dev/null;;
 esac
done >libc.tmp

$echo $n ".$c"
?X:
?X: To accelerate processing, we look at the correct 'sed' command
?X: by using a small subset of libc.tmp, i.e. fprintf function.
?X: When we know which sed command to use, do the name extraction
?X:
$grep fprintf libc.tmp > libc.ptf
?X:
?X: In order to enhance readability and save some space, we define
?X: some variables that will be "eval"ed.
?X:
xscan='eval "<libc.ptf $com >libc.list"; $echo $n ".$c" >&4'
xrun='eval "<libc.tmp $com >libc.list"; echo "done." >&4'
?X:
 BSD-like output, I and W types added for Linux
?X: Some versions of Linux include a leading __IO in the symbol name.
?X: HP-UX 10 reportedly has trailing spaces, though I'm surprised it has
?X: BSD-like output.  (AD).
?X: GNU extension: i is "indirect function"
xxx='[ADTSIWi]'
```

```
if com="$sed -n -e 's/__IO//' -e 's/^.* $xxx  *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: SYSV-like output
elif com="$sed -n -e 's/^__*//' -e 's/^\([a-zA-Z_0-9$]*\).*xtern.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/|UNDEF/d' -e '/FUNC..GL/s/^.*|__*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.* D __*//p' -e 's/^.* D //p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^_//' -e 's/^\([a-zA-Z_0-9]*\).*xtern.*text.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$'
 libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$grep '|' | $sed -n -e '/|COMMON/d' -e '/|DATA/d' \
    -e '/ file/d' -e 's/^\([^  ]*\).*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p' -e 's/^.*|FUNC |WEAK .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: mips nm output (sysV)
elif com="$sed -n -e 's/^__//' -e '/|Undef/d' -e '/|Proc/s/ .*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|Proc .*|Text *| *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/Def. Text/s/.* \([^ ]*\)\$/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
```

```
?X: OS/2
 nm output
elif com="$sed -n -e 's/^[-0-9a-f ]*_\(.*\)=.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/.*\.text n\ \ \ \.//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: AIX nm output
elif com="sed -n -e 's/^__.*//' -e 's/[       ]*D[    ]*[0-9]*.*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
else
 $nm -p $* 2>/dev/null >libc.tmp
 $grep fprintf libc.tmp > libc.ptf
 if com="$sed -n -e 's/^.* [ADTSIW]  *_[_.]*//p' -e 's/^.* [ADTSIW] //p'";\
  eval $xscan; $contains '^fprintf$' libc.list >/dev/null 2>&1
 then
  nm_opt='-p'
  eval $xrun
 else
  echo " "
  echo "$nm didn't seem to work right. Trying $ar instead..." >&4
  com="
  if $ar t $libc > libc.tmp && \
   $contains '^fprintf$' libc.tmp >/dev/null 2>&1
  then
   for thisname in $libnames $libc; do
    $ar t $thisname >>libc.tmp
   done
   $sed -e "s/\\$_o\$//" < libc.tmp > libc.list
   echo
 "Ok." >&4
  elif test "X$osname" = "Xos2" && $ar tv $libc > libc.tmp; then
?X: Repeat libc to extract forwarders to DLL entries too
   for thisname in $libnames $libc; do
    $ar tv $thisname >>libc.tmp
?X: Revision 50 of EMX has bug in ar: it will not extract forwarders
?X: to DLL entries.  Use emximp which will extract exactly them.
    emximp -o tmp.imp $thisname \
        2>/dev/null && \
        $sed -e 's/^\([_a-zA-Z0-9]*\) .*$/\1/p' \
        < tmp.imp >>libc.tmp
    $rm -f tmp.imp
   done
```

```
   $sed -e "s/\\$_o\$//" -e 's/^ \+//' < libc.tmp > libc.list
   echo "Ok." >&4
  else
   echo "$ar didn't seem to work right." >&4
   echo "Maybe this is a Cray...trying bld instead..." >&4
   if  bld t $libc | \
    $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" > libc.list &&
    $test -s libc.list
   then
    for thisname in $libnames; do
     bld t $libnames | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" >>libc.list
     $ar t $thisname >>libc.tmp
    done
    echo "Ok." >&4
   else
    echo
 "That didn't work either.  Giving up." >&4
    exit 1
   fi
  fi
 fi
fi
nm_extract="$com"
case "$PASE" in
define)
   echo " "
   echo "Since you are compiling for PASE, extracting more symbols from libc.a ...">&4
   dump -Tv /lib/libc.a | awk '$7 == "/unix" {print $5 " " $8}' | grep "^SV" | awk '{print $2}' >> libc.list
   ;;
*)  if $test -f /lib/syscalls.exp; then
 echo " "
 echo "Also extracting names from /lib/syscalls.exp for good ole AIX..." >&4
 $sed -n 's/^\([^  ]*\)[  ]*syscall[0-9]*[  ]*$/\1/p' \
  /lib/syscalls.exp >>libc.list
   fi
   ;;
esac
;;
esac
$rm -f libnames libpath
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libc.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:

```
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?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strftime.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_strftime:
?S: This variable conditionally defines HAS_STRFTIME if strftime() is
?S: available to format locale-specific times.
?S:.
?C:HAS_STRFTIME:
?C: This symbol, if defined, indicates that the strftime routine is
?C: available to format locale-specific times.
?C:.
?H:#$d_strftime HAS_STRFTIME /**/
?H:.
?LINT:set d_strftime
: see
 if strftime exists
set strftime d_strftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strftime.U
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```
?RCS: $Id: d_table.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_table.U,v $
?RCS: Revision 3.0.1.2  1993/11/10  17:34:14  ram
?RCS: patch14: wrongly mentionned an obsolete symbol
?RCS:
```

```
?RCS: Revision 3.0.1.1  1993/10/16  13:49:29  ram
?RCS: patch12: created
?RCS:
?MAKE:d_table: Inlibc
?MAKE: -pick add $@ %<
?S:d_table:
?S: This variable conditionally defines HAS_TABLE if table() is
?S: available to examine/update elements from a system table.
?S:.
?C:HAS_TABLE:
?C: This symbol, if defined, indicates that the OSF/1
 table() system
?C: call is available to examine/update items from a system table.
?C:.
?H:#$d_table HAS_TABLE /**/
?H:.
?LINT:set d_table
: see if table exists
set table d_table
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_table.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extras.U,v$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:extras: Myread Oldconfig Setvar rm
?MAKE: -pick add $@ %<
?Y:TOP
?S:extras:
?S: This variable holds a list of extra modules to install.
?S:.
: See if we want extra modules installed
echo " "
case "$extras" in
") dflt='n';;
*) dflt='y';;
esac
cat <<EOM
Perl can be built with extra modules or bundles of modules which
will be fetched from the CPAN and installed alongside Perl.
```

```
Notice that you will need access to the CPAN; either via the Internet,
or a local copy, for example a CD-ROM or a local CPAN mirror.  (You will
be asked later to configure the CPAN.pm module which will in turn do
the installation of the rest of the extra modules or bundles.)

Notice also that if the modules require
 any external software such as
libraries and headers (the libz library and the zlib.h header for the
Compress::Zlib module, for example) you MUST have any such software
already installed, this configuration process will NOT install such
things for you.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Install any extra modules (y or n)?'
. ./myread
case "$ans" in
y|Y)
 cat <<EOM

Please list any extra modules or bundles to be installed from CPAN,
with spaces between the names.  The names can be in any format the
'install' command of CPAN.pm will understand.  (Answer 'none',
without the quotes, to install no extra modules or bundles.)
EOM
 rp='Extras?'
 dflt="$extras"
 . ./myread
 extras="$ans"
esac
case "$extras" in
"|'none')
 val=''
 $rm -f ../extras.lst
 ;;
*) echo "(Saving the list of extras for later...)"
 echo "$extras" > ../extras.lst
 val="'$extras'"
 ;;
esac
set extras
eval $setvar
echo " "
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Extras.U
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```
?RCS: $Id: d_getpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwent_r getpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwent_r:
?S: This variable conditionally defines the HAS_GETPWENT_R symbol,
?S: which indicates to the C program that the getpwent_r()
?S: routine is available.
?S:.
?S:getpwent_r_proto:
?S: This variable encodes the prototype of getpwent_r.
?S: It is zero if d_getpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwent_r
?S: is defined.
?S:.
?C:HAS_GETPWENT_R:
?C: This symbol, if defined, indicates that the getpwent_r routine
?C: is available to
 getpwent re-entrantly.
?C:.
?C:GETPWENT_R_PROTO:
?C: This symbol encodes the prototype of getpwent_r.
?C: It is zero if d_getpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwent_r
?C: is defined.
?C:.
?H:#$d_getpwent_r HAS_GETPWENT_R /**/
?H:#define GETPWENT_R_PROTO $getpwent_r_proto /**/
?H:.
?T:try hdrs d_getpwent_r_proto
: see if getpwent_r exists
set getpwent_r d_getpwent_r
eval $inlibc
case "$d_getpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwent_r_proto:$usethreads" in
 ":define") d_getpwent_r_proto=define
  set d_getpwent_r_proto getpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
```

```
esac
case "$d_getpwent_r_proto" in
define)
case "$getpwent_r_proto" in
"|0) try='int getpwent_r(struct passwd*, char*, size_t, struct passwd**);'
./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBWR ;;
esac
case "$getpwent_r_proto" in
"|0) try='int getpwent_r(struct passwd*, char*, int, struct passwd**);'
./protochk
"$extern_C $try" $hdrs && getpwent_r_proto=I_SBIR ;;
esac
case "$getpwent_r_proto" in
"|0) try='struct passwd* getpwent_r(struct passwd*, char*, size_t);'
./protochk "$extern_C $try" $hdrs && getpwent_r_proto=S_SBW ;;
esac
case "$getpwent_r_proto" in
"|0) try='struct passwd* getpwent_r(struct passwd*, char*, int);'
./protochk "$extern_C $try" $hdrs && getpwent_r_proto=S_SBI ;;
esac
case "$getpwent_r_proto" in
"|0) try='int getpwent_r(struct passwd*, char*, int);'
./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBI ;;
esac
case "$getpwent_r_proto" in
"|0) try='int getpwent_r(struct passwd*, char*, int, FILE**);'
./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBIH ;;
esac
case "$getpwent_r_proto" in
"|0) d_getpwent_r=undef
 getpwent_r_proto=0
 echo "Disabling getpwent_r, cannot determine prototype." >&4 ;;
* ) case "$getpwent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getpwent_r_proto="REENTRANT_PROTO_$getpwent_r_proto" ;;
 esac
 echo
"Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getpwent_r has no prototype, not using it." >&4 ;;
 esac
 d_getpwent_r=undef
 getpwent_r_proto=0
 ;;
esac
;;
```

```
*) getpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llrintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_llrintl:
?S: This variable conditionally defines the HAS_LLRINTL symbol, which
?S: indicates to the C program that the llrintl() routine is available
?S: to return the long long value closest to a long double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LLRINTL:
?C: This symbol, if defined, indicates that the llrintl routine is
?C: available to return the long long value closest to a long double
?C: (according to the current rounding mode).
?C:.
?H:#$d_llrintl HAS_LLRINTL  /**/
?H:.
?LINT:set d_llrintl
: see if llrintl exists
set llrintl d_llrintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llrintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uidformat: uidsize uidsign ivsize uvsize longsize intsize shortsize \
 ivdformat uvuformat test echo
?MAKE: -pick add $@ %<
?S:uidformat:
?S: This variable contains the format string used for printing a Uid_t.
?S:.
```

```
?C:Uid_t_f:
?C: This symbol defines the format string used for printing a Uid_t.
?C:.
?H:#define Uid_t_f  $uidformat  /**/
?H:.
: Check format string for UID
echo " "
$echo "Checking the format string to be used for uids..." >&4

case "$uidsign" in
-1) if $test X"$uidsize" = X"$ivsize"; then
  uidformat="$ivdformat"
 else
  if $test X"$uidsize" = X"$longsize"; then
   uidformat="'ld'"
  else
   if $test X"$uidsize" = X"$intsize"; then
    uidformat="'d'"
   else
    if $test X"$uidsize"
 = X"$shortsize"; then
     uidformat="'hd'"
    fi
   fi
  fi
 fi
 ;;
*) if $test X"$uidsize" = X"$uvsize"; then
  uidformat="$uvuformat"
 else
  if $test X"$uidsize" = X"$longsize"; then
   uidformat="'lu'"
  else
   if $test X"$uidsize" = X"$intsize"; then
    uidformat="'u'"
   else
    if $test X"$uidsize" = X"$shortsize"; then
     uidformat="'hu'"
    fi
   fi
  fi
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidf.U

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```
?RCS: $Id: d_volatile.U,v 3.0.1.2 1995/07/25 14:08:49 ram Exp $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_volatile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:08:49  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/09  11:49:51  ram
?RCS: patch9: volatile definition was swapped over with undef
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_volatile: cat +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_volatile:
?S: This variable conditionally
 defines the HASVOLATILE symbol, which
?S: indicates to the C program that this C compiler knows about the
?S: volatile declaration.
?S:.
?C:HASVOLATILE ~ %<:
?C: This symbol, if defined, indicates that this C compiler knows about
?C: the volatile declaration.
?C:.
?H:?%<:#$d_volatile HASVOLATILE /**/
?H:?%<:#ifndef HASVOLATILE
?H:?%<:#define volatile
?H:?%<:#endif
?H:.
?LINT:set d_volatile
?LINT:known volatile
: check for volatile keyword
echo " "
echo 'Checking to see if your C compiler knows about "volatile"...' >&4
$cat >try.c <<'EOCP'
int main()
{
?X:
```

```
?X: The following seven lines added by Bill Campbell <billc@sierra.com>
?X: detect that MIPS compilers do not handle volatile in all situations.
?X:
 typedef struct _goo_struct goo_struct;
 goo_struct * volatile goo = ((goo_struct *)0);
 struct _goo_struct {
  long long_int;
  int reg_int;
  char char_var;
 };
 typedef unsigned short foo_t;
 char *volatile foo;
 volatile int bar;
 volatile foo_t blech;
 foo = foo;
}
EOCP
if $cc
 -c $ccflags try.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup, it does."
else
 val="$undef"
 echo "Nope, it doesn't."
fi
set d_volatile
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_volatile.U
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```
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?RCS:
?MAKE:d_atolf: Inlibc
?MAKE: -pick add $@ %<
?S:d_atolf:
?S: This variable conditionally defines the HAS_ATOLF symbol, which
?S: indicates to the C program that the atolf() routine is available.
?S:.
?C:HAS_ATOLF:
?C: This symbol, if defined, indicates that the atolf routine is
```

```
?C: available to convert strings into long doubles.
?C:.
?H:#$d_atolf HAS_ATOLF  /**/
?H:.
?LINT:set d_atolf
: see if atolf exists
set atolf d_atolf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/atolf.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_memrchr: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_memrchr:
?S: This variable conditionally defines the HAS_MEMRCHR symbol, which
?S: indicates to the C program that the memrchr() routine is available
?S: to return a pointer to the last occurrence of a byte in a memory
?S: area (or NULL if not found).
?S:.
?C:HAS_MEMRCHR:
?C: This symbol, if defined, indicates that the memrchr routine is
?C: available to return a pointer to the last occurrence of a byte in
?C: a memory area (or NULL if not found).
?C:.
?H:#$d_memrchr HAS_MEMRCHR  /**/
?H:.
?T:d_memrchr_proto xx1 xx2 xx3 xx4
?LINT:set d_memrchr
: see if memrchr exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_memrchr_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC)
 && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_memrchr_proto memrchr literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_memrchr_proto" in
   define) # see if memrchr exists
 set memrchr d_memrchr
 eval $inlibc
```

```
 ;;
   *)  val=$undef
 set d_memrchr
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_memrchr.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usemultiplicity: useithreads Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usemultiplicity:
?S: This variable conditionally defines the MULTIPLICITY symbol,
?S: and indicates that Perl should be built to use multiplicity.
?S:.
?C:MULTIPLICITY:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use multiplicity.
?C:.
?H:?%<:#ifndef MULTIPLICITY
?H:?%<:#$usemultiplicity MULTIPLICITY  /**/
?H:?%<:#endif
?H:.
?LINT:set usemultiplicity
?INIT:: set usemultiplicity on the Configure command line to enable multiplicity.
: Check if multiplicity is required
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
cat <<EOM

Perl
 can be built so that multiple Perl interpreters can coexist
within the same Perl executable.
EOM

case "$useithreads" in
$define)
 cat <<EOM
```

```
This multiple interpreter support is required for interpreter-based threads.
EOM
 val="$define"
 ;;
*) case "$usemultiplicity" in
 $define|true|[yY]*) dflt='y';;
 *) dflt='n';;
 esac
 echo " "
 echo "If this doesn't make any sense to you, just accept the default '$dflt'."
 rp='Build Perl for multiplicity?'
 . ./myread
 case "$ans" in
 y|Y) val="$define" ;;
 *)      val="$undef" ;;
 esac
 ;;
esac
set usemultiplicity
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usemultiplicity.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_poll: Inhdr
?MAKE: -pick add $@ %<
?S:i_poll:
?S: This variable conditionally defines the I_POLL symbol, which
?S: indicates to the C program that it should include <poll.h>.
?S:.
?C:I_POLL:
?C: This symbol, if defined, indicates that the program may include
?C: <poll.h>.  If there is no <poll.h>, then you may check I_SYS_POLL
?C: instead to see whether there is a <sys/poll.h> to include.
?C:.
?H:#$i_poll I_POLL /**/
?H:.
```

```
?LINT:set i_poll
: see if there is a poll.h file
set poll.h i_poll
eval $inhdr

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_poll.U
No license file was found, but licenses were detected in source scan.

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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_grp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_grp: Inhdr
?MAKE: -pick add $@ %<
?S:i_grp:
?S: This variable conditionally defines the I_GRP symbol, and indicates
?S: whether a C program should include <grp.h>.
?S:.
?C:I_GRP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <grp.h>.
?C:.
?H:#$i_grp I_GRP  /**/
?H:.
?LINT:set i_grp
: see if this is an grp system
set grp.h i_grp
eval $inhdr

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_grp.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS:
?RCS: $Log: d_eofpipe.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:40  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_eofpipe: cat +cc +ccflags +libs rm Oldconfig Guess echo n c
?MAKE: -pick add $@ %<
?S:d_eofpipe:
?S: This variable conditionally defines the EOFPIPE symbol, which
?S: indicates to the C program that select will correctly detect the EOF
?S: condition when pipe
 is closed from the other end.
?S:.
?C:EOFPIPE:
?C: This symbol, if defined, indicates that EOF condition will be detected
?C: by the reader of the pipe when it is closed by the writing process.
?C: That is, a select() call on that file descriptor will not block when
?C: only an EOF remains (typical behaviour for BSD systems).
?C:.
?H:#$d_eofpipe EOFPIPE  /**/
?H:.
?F:!mpipe
: see if pipe correctly gives the EOF condition
echo " "
case "$d_eofpipe" in
")
 echo "Let's see if your pipes return EOF to select() upon closing..." >&4
 $cat >pipe.c <<'EOP'
int main()
{
 int pd[2];
 int mask;

 pipe(pd);
 if (0 == fork()) {
  close(pd[0]);
  close(pd[1]);
  exit(0);
```

```
 }

 close(pd[1]);
 mask = 1 << pd[0];
 alarm(2);
 select(32, &mask, (int *) 0, (int *) 0, (char *) 0);
 if (0 == read(pd[0], &mask, 1))
  exit(0);

 exit(1);
}
EOP
 if $cc $ccflags -o pipe pipe.c $libs >/dev/null 2>&1; then
?X: Use a script to avoid the possible 'alarm call' message
  echo "./pipe || exit 1" > mpipe
  chmod +x
 mpipe
  ./mpipe >/dev/null 2>&1
  case $? in
  0) d_eofpipe="$define";;
  *) d_eofpipe="$undef";;
  esac
 else
  echo "(The test program did not compile correctly -- Guessing.)"
  if ./bsd; then
   d_eofpipe="$define"
  else
   d_eofpipe="$undef"
  fi
 fi
 case "$d_eofpipe" in
 "$define") echo "Yes, they do.";;
 *) echo "No, they don't! (sigh)";;
 esac
 ;;
*)
 $echo $n "Your pipes $c"
 case "$d_eofpipe" in
 "$define") echo "allow select() to see EOF upon closing.";;
 *) echo "won't let select() see EOF on closing.";;
 esac
 ;;
esac
$rm -f *pipe* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_eofpipe.U

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```
?RCS: $Id: Obsol_sh.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: $Log: Obsol_sh.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file is prepended to .MT/Obsol_sh if that file is not empty. That file
?X: contains the necessary mappings of new symbols to obsolete ones.
?X:
?MAKE:Obsol_sh:
?MAKE: -pick prepend $@ ./Obsol_sh
?LINT:nocomment
#
# The following symbols are obsolete. They are mapped to the new
# symbols only to ease the transition process. The
 sources should be
# updated so as to use the new symbols only, since supporting of those
# obsolete symbols may end without notice.
#
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Obsol_sh.U
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```
?RCS: $Id$
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?RCS:
?RCS: $Log: d_open3.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:12  ram
?RCS: patch61: added ?F: metalint hint
```

```
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:58:26  ram
?RCS: patch56: added knowledge of the O_NONBLOCK symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_open3: test +cc cat +cppflags h_fcntl h_sysfile rm Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?X: It would be easy to separate the h_O_stuff from this.
?X: Is there a reason
 to do so? -- HMS
?S:d_open3:
?S: This variable conditionally defines the HAS_OPEN3 manifest constant,
?S: which indicates to the C program that the 3 argument version of
?S: the open(2) function is available.
?S:.
?C:HAS_OPEN3 (OPEN3):
?C: This manifest constant lets the C program know that the three
?C: argument form of open(2) is available.
?C:.
?H:#$d_open3 HAS_OPEN3  /**/
?H:.
?W:%<:O_RDONLY O_WRONLY O_RDWR O_NDELAY O_APPEND O_SYNC O_CREAT O_TRUNC
?W:%<:O_EXCL O_NONBLOCK
?F:!open3
?LINT:set d_open3
?LINT:change h_fcntl h_sysfile
: Locate the flags for 'open()'
echo " "
$cat >open3.c <<'EOCP'
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
int main() {
 if(O_RDONLY);
#ifdef O_TRUNC
 exit(0);
#else
 exit(1);
#endif
}
EOCP
: check sys/file.h first to get FREAD on Sun
```

```
if $test `./findhdr sys/file.h` && \
  $cc $cppflags "-DI_SYS_FILE" -o open3 open3.c >/dev/null 2>&1 ; then
 h_sysfile=true;
 echo "<sys/file.h> defines the
 O_* constants..." >&4
 if ./open3; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
elif $test `./findhdr fcntl.h` && \
  $cc "-DI_FCNTL" -o open3 open3.c >/dev/null 2>&1 ; then
 h_fcntl=true;
 echo "<fcntl.h> defines the O_* constants..." >&4
 if ./open3; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
else
 val="$undef"
 ./warn "I can't find the O_* constant definitions!  You got problems."
fi
set d_open3
eval $setvar
$rm -f open3*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_open3.U
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```
?RCS: $Id: d_fcntl_can_lock.U,v$
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?RCS:
?RCS: $Log: d_fcntl_can_lock.U,v $
?RCS:
?MAKE:d_fcntl_can_lock: d_fcntl Compile Setvar cat rm_try run signal_t i_stdlib
?MAKE: -pick add $@ %<
?S:d_fcntl_can_lock:
?S: This variable conditionally defines the FCNTL_CAN_LOCK symbol
```

```
?S: and indicates whether file locking with fcntl() works.
?S:.
?C:FCNTL_CAN_LOCK:
?C: This symbol, if defined, indicates that fcntl() can be used
?C: for file locking.  Normally on Unix systems this is defined.
?C: It may be undefined on VMS.
?C:.
?H:#$d_fcntl_can_lock FCNTL_CAN_LOCK  /**/
?H:.
?F:!try
?LINT: set d_fcntl_can_lock
?X: fcntl may not be fully functional.  As of November 2000, on VMS and
?X: DOS/DJGPP, fctnl-based locking doesn't work.
?X: Thanks
 to Craig A. Berry <craig.berry@psinetcs.com> for this test.
: See if fcntl-based locking works.
echo " "
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <unistd.h>
#include <fcntl.h>
#include <signal.h>
$signal_t blech(int x) { exit(3); }
int main() {
#if defined(F_SETLK) && defined(F_SETLKW)
   struct flock flock;
   int retval, fd;
   fd = open("try.c", O_RDONLY);
   flock.l_type = F_RDLCK;
   flock.l_whence = SEEK_SET;
   flock.l_start = flock.l_len = 0;
   signal(SIGALRM, blech);
   alarm(10);
   retval = fcntl(fd, F_SETLK, &flock);
   close(fd);
   (retval < 0 ? exit(2) : exit(0));
#else
   exit(2);
#endif
}
EOCP
echo "Checking if fcntl-based file locking works... "
case "$d_fcntl" in
"$define")
 set try
```

```
 if eval $compile_ok; then
  if $run ./try; then
   echo "Yes, it seems to work."
   val="$define"
  else
   echo "Nope, it didn't work."
   val="$undef"
   case "$?" in
   3) $cat >&4 <<EOM
***
*** I had to
 forcibly timeout from fcntl(..., F_SETLK, ...).
*** This is (almost) impossible.
*** If your NFS lock daemons are not feeling well, something like
*** this may happen, please investigate.  Cannot continue, aborting.
***
EOM
    exit 1
    ;;
   esac
  fi
 else
  echo "I'm unable to compile the test program, so I'll assume not."
  val="$undef"
 fi
 ;;
*) val="$undef";
 echo "Nope, since you don't even have fcntl()."
 ;;
esac
set d_fcntl_can_lock
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fcntl_can_lock.U
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```
?RCS: $Id: d_msem_lck.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
```

```
?RCS: $Log: d_msem_lck.U,v $
?MAKE:d_msem_lck: Inlibc
?MAKE: -pick add $@ %<
?S:d_msem_lck:
?S: This variable conditionally defines HAS_MSEM_LOCK if msem_lock() is
?S: available, thereby indicating kernel support for memory semaphores.
?S:.
?C:HAS_MSEM_LOCK:
?C: This symbol, if defined, indicates that memory semaphores are
?C: available to protect mmap()'ed regions.
?C:.
?H:#$d_msem_lck HAS_MSEM_LOCK  /**/
?H:.
?LINT:set d_msem_lck
: see if msem_lock exists
set
 msem_lock d_msem_lck
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msem_lck.U
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```
?RCS: $Id: d_tcstpgrp.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_tcstpgrp.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:11  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_tcsetpgrp: Inlibc
?MAKE: -pick add $@ %<
?S:d_tcsetpgrp:
?S: This variable conditionally defines the HAS_TCSETPGRP symbol, which
?S: indicates to the C program that the tcsetpgrp() routine is available
?S: to set foreground process group ID.
?S:.
?C:HAS_TCSETPGRP
```

```
 :
?C: This symbol, if defined, indicates that the tcsetpgrp routine is
?C: available to set foreground process group ID.
?C:.
?H:#$d_tcsetpgrp HAS_TCSETPGRP  /**/
?H:.
?LINT:set d_tcsetpgrp
: see if tcsetpgrp exists
set tcsetpgrp d_tcsetpgrp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tcstpgrp.U
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```
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?RCS:
?RCS: $Log: charsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:13  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:charsize: Assert Myread cat rm_try +cc +ccflags echo n c
?MAKE: -pick add $@ %<
?S:charsize:
?S: This variable contains the value of the CHARSIZE symbol, which
?S: indicates to the C program how many bytes there are in a character.
?S:.
?C:CHARSIZE:
?C: This symbol contains
 the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define CHARSIZE $charsize
?H:.
?T:size s
: check for length of character
echo " "
```

```
$echo $n "Checking to see how big your characters are...$c" >&4
for size in 1 2 4 8 error; do
 $cat >try.c <<EOCP
#include "static_assert.h"
char foo;
int main()
{
 STATIC_ASSERT($size == sizeof(foo));
 return 0;
}
EOCP
 if $cc -c $ccflags try.c >/dev/null 2>&1; then break; fi
done
case "$size" in
error)
 echo " cannot compute it." >&4
 dflt=1
 rp="What is the size of a character (in bytes)?"
 . ./myread
 charsize="$ans"
 ;;
*)
 case "$size" in
 1) s="";;
 *) s='s';;
 esac
 echo " $size byte$s." >&4
 charsize=$size
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/charsize.U
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```
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?RCS:
?MAKE:d_strlcat: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_strlcat:
?S: This variable conditionally defines the HAS_STRLCAT symbol, which
?S: indicates to the C program that the strlcat () routine is available.
```

```
?S:.
?C:HAS_STRLCAT:
?C: This symbol, if defined, indicates that the strlcat () routine is
?C: available to do string concatenation.
?C:.
?H:#$d_strlcat HAS_STRLCAT  /**/
?H:.
?T:d_strlcat_proto xx1 xx2 xx3 xx4
?LINT:set d_strlcat
: see if strlcat exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_strlcat_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_strlcat_proto
 strlcat literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_strlcat_proto" in
   define) # see if strlcat exists
 set strlcat d_strlcat
 eval $inlibc
 ;;
   *)  val=$undef
 set d_strlcat
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strlcat.U
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```
?RCS: $Id: floatsize.U,v 3.0.1.1 1994/10/29 16:17:09 ram Exp $
?RCS:
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?RCS:
?RCS: $Log: floatsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:09  ram
?RCS: patch36: added ?F: line for metalint file checking
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:floatsize: cat rm Myread Compile run
?MAKE: -pick add $@ %<
?S:floatsize:
?S: This variable contains the value of the FLOATSIZE symbol, which
?S: indicates to the C program how many bytes there are in a float.
?S:.
?C:FLOATSIZE:
?C: This
 symbol contains the size of a float, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define FLOATSIZE $floatsize  /**/
?H:.
?F:!try
: check for length of float
echo " "
case "$floatsize" in
")
 echo "Checking to see how big your floating point numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof(float));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  floatsize=`$run ./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a floating point number (in bytes)?"
  . ./myread
  floatsize="$ans"
 fi
 ;;
esac
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/floatsize.U

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```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_recvmsg: Inlibc
?MAKE: -pick add $@ %<
?S:d_recvmsg:
?S: This variable conditionally defines the HAS_RECVMSG symbol, which
?S: indicates to the C program that the recvmsg() routine is available.
?S:.
?C:HAS_RECVMSG:
?C: This symbol, if defined, indicates that the recvmsg routine is
?C: available to send structured socket messages.
?C:.
?H:#$d_recvmsg HAS_RECVMSG  /**/
?H:.
?LINT:set d_recvmsg
: see if recvmsg exists
set recvmsg d_recvmsg
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_recvmsg.U
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```
?RCS: $Id: i_memory.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
?RCS: $Log: i_memory.U,v $
?RCS: Revision 3.0.1.3  1994/06/20  07:01:55  ram
?RCS: patch30: cosmetic changes
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:23:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:02:25  ram
```

```
?RCS: patch23: avoid conflicts with <string.h>
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_memory: Inhdr strings cppstdin
 cppflags cppminus contains rm Setvar
?MAKE: -pick add $@ %<
?S:i_memory:
?S: This variable conditionally defines the I_MEMORY symbol, and indicates
?S: whether a C program should include <memory.h>.
?S:.
?C:I_MEMORY:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <memory.h>.
?C:.
?H:#$i_memory I_MEMORY  /**/
?H:.
?LINT:set i_memory
?X:
?X: Unfortunately, the definitions of memory functions sometimes
?X: conflict with those in <string.h>.  We'll assume that if
?X: <string.h> contains memcpy, then we don't need memory.h
?X:
: see if memory.h is available.
val=''
set memory.h val
eval $inhdr

: See if it conflicts with string.h
case "$val" in
$define)
 case "$strings" in
 '') ;;
 *)
  $cppstdin $cppflags $cppminus < $strings > mem.h
  if $contains 'memcpy' mem.h >/dev/null 2>&1; then
   echo " "
   echo "We won't be including <memory.h>."
   val="$undef"
  fi
  $rm -f mem.h
  ;;
 esac
esac
set i_memory
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_memory.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mblen.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mblen.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:40  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_mblen: Inlibc
?MAKE: -pick add $@ %<
?S:d_mblen:
?S: This variable conditionally defines the HAS_MBLEN symbol, which
?S: indicates to the C program that the mblen() routine is available
?S: to find the number of bytes in a multibyte character.
?S:.
?C:HAS_MBLEN:
?C: This
 symbol, if defined, indicates that the mblen routine is available
?C: to find the number of bytes in a multibyte character.
?C:.
?H:#$d_mblen HAS_MBLEN  /**/
?H:.
?LINT:set d_mblen
: see if mblen exists
set mblen d_mblen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mblen.U
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```
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_snprintf_l d_vsnprintf_l : Inlibc d_snprintf d_vsnprintf
?MAKE: -pick add $@ %<
?S:d_snprintf_l:
?S: This variable conditionally defines the HAS_SNPRINTF_L symbol, which
?S: indicates to the C program that the snprintf_l () library function
?S: is available.
?S:.
?S:d_vsnprintf_l:
?S: This variable conditionally defines the HAS_VSNPRINTF_L symbol, which
?S: indicates to the C program that the vsnprintf_l () library function
?S: is available.
?S:.
?C:HAS_SNPRINTF_L:
?C: This symbol, if defined, indicates that the snprintf_l () library
?C: function
 is available for use.
?C:.
?C:HAS_VSNPRINTF_L:
?C: This symbol, if defined, indicates that the vsnprintf_l () library
?C: function is available for use.
?C:.
?H:#$d_snprintf_l HAS_SNPRINTF_L /**/
?H:#$d_vsnprintf_l HAS_VSNPRINTF_L /**/
?H:.
: see if snprintf_l exists
set snprintf_l d_snprintf_l
eval $inlibc

: see if vsnprintf_l exists
set vsnprintf_l d_vsnprintf_l
eval $inlibc

case "$d_snprintf-$d_vsnprintf-$d_snprintf_l-$d_vsnprintf_l" in
"$define-$define-$define-$define")
   ;;
*) echo "(These require the basic snprintf and vsnprintf to also be available, which they aren't"
 d_snprintf_l="$undef"
 d_vsnprintf_l="$undef"
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_snprintf_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_alarm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_alarm.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:06:58  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_alarm: Inlibc
?MAKE: -pick add $@ %<
?S:d_alarm:
?S: This variable conditionally defines the HAS_ALARM symbol, which
?S: indicates to the C program that the alarm() routine is available.
?S:.
?C:HAS_ALARM :
?C: This symbol, if defined, indicates that the alarm routine is
?C: available.
?C:.
?H:#$d_alarm
 HAS_ALARM  /**/
?H:.
?LINT:set d_alarm
: see if alarm exists
set alarm d_alarm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_alarm.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?MAKE:d_mmap mmaptype: Inlibc i_sysmman cat cc ccflags
?MAKE: -pick add $@ %<
?S:d_mmap:
?S: This variable conditionally defines HAS_MMAP if mmap() is
?S: available to map a file into memory.
?S:.
?S:mmaptype:
?S: This symbol contains the type of pointer returned by mmap()
?S: (and simultaneously the type of the first argument).
?S: It can be 'void *' or 'caddr_t'.
?S:.
?C:HAS_MMAP:
?C: This symbol, if defined, indicates that the mmap system call is
?C: available to map a file into memory.
?C:.
?C:Mmap_t:
?C: This symbol
 holds the return type of the mmap() system call
?C: (and simultaneously the type of the first argument).
?C: Usually set to 'void *' or 'caddr_t'.
?C:.
?H:#$d_mmap HAS_MMAP  /**/
?H:#define Mmap_t $mmaptype /**/
?H:.
?LINT:set d_mmap
: see if mmap exists
set mmap d_mmap
eval $inlibc
: see what shmat returns
: default to something harmless
mmaptype='void *'
case "$i_sysmman$d_mmap" in
"$define$define")
 $cat >mmap.c <<'END'
#include <sys/mman.h>
void *mmap();
END
 if $cc $ccflags -c mmap.c >/dev/null 2>&1; then
  mmaptype='void *'
 else
  mmaptype='caddr_t'
 fi
 echo "and it returns ($mmaptype)." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_mmap.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Typedef.U,v 3.0.1.3 1995/07/25 13:42:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Typedef.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  13:42:07  ram
?RCS: patch56: added backslash escapes within evals to prevent space problems
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:01:16  ram
?RCS: patch36: don't clobber visible 'val' variable, use 'varval' instead
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:05:14  ram
?RCS: patch32: created
?RCS:
?X:
?X: This unit checks for the definition of a given typedef.
?X:
?X: To use it, say:
?X: set typedef
 val_t default [includes]
?X: eval $typedef
?X:
?MAKE:Typedef: cppstdin cppminus cppflags rm sed contains Oldconfig Myread
?MAKE: -pick add $@ %<
?LINT:define typedef
?LINT:define typedef_ask
?V:typedef typedef_ask
?S:typedef:
?S: This shell variable is used internally by Configure to check
?S: whether a given typedef is defined or not. A typical use is:
?S:  set typedef val_t default [includes]
?S:  eval $typedef
?S: That will return val_t set to default if the typedef was not found,
?S: to typedef otherwise. If no includes are specified, look in sys/types.h.
?S:.
?S:typedef_ask:
?S: This shell variable is used internally by Configure to check
?S: whether a given typedef is defined or not.  If it is not defined,
?S: this will call the ./myread script to prompt for an answer.
?S: It is intended to be used to avoid unnecessary prompts.
```

```
?S: A typical use is
?S:  rp="What is the type for file position used by fsetpos()?"
?S:  set fpos_t fpostype long stdio.h sys/types.h
?S:  eval $typedef_ask
?S: This
 will set fpostype=fpos_t, if fpos_t is available.  Otherwise
?S: it will call myread with a default of 'long', and a prompt of $rp.
?S:.
?T:type var def inclist varval inc
?F:!temp.c
: define an is-a-typedef? function
typedef='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
?X: Maybe it's a #define instead of a typedef.
 echo "#ifdef $type" >> temp.c;
 echo "printf(\"We have $type\");" >> temp.c;
 echo "#endif" >> temp.c;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 if $contains $type temp.E >/dev/null 2>&1; then
  eval "$var=\$type";
 else
  eval "$var=\$def";
 fi;
 $rm -f temp.?;;
*) eval "$var=\$varval";;
esac'

?X: Originally, I eval'd $typedef and then checked the results against
?X: $type.  Unfortunately, it then became complicated to check
?X: whether you are re-using
 an old config.sh value, and the logic got
?X: so convoluted it became easier to just copy the function above
?X: and alter it slightly.  A.D.  3/1998
: define an is-a-typedef? function that prompts if the type is not available.
typedef_ask='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
```

```
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
?X: Maybe it's a #define instead of a typedef.
 echo "#ifdef $type" >> temp.c;
 echo "printf(\"We have $type\");" >> temp.c;
 echo "#endif" >> temp.c;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 echo " " ;
 echo "$rp" | $sed -e "s/What is/Looking for/" -e "s/?/./";
 if $contains $type temp.E >/dev/null 2>&1; then
  echo "$type found." >&4;
  eval "$var=\$type";
 else
  echo "$type NOT found." >&4;
  dflt="$def";
  . ./myread ;
  eval "$var=\$ans";
 fi;
 $rm -f temp.?;;
*) eval "$var=\$varval";;
esac'
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/Typedef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2005-2007 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_cplusplus: Compile Setvar run cat rm_try
?MAKE: -pick add $@ %<
?S:d_cplusplus (d_cplusplus.U):
?S: This variable conditionally defines the USE_CPLUSPLUS symbol, which
?S: indicates that a C++ compiler was used to compiled Perl and will be
?S: used to compile extensions.
?S:.
?C:USE_CPLUSPLUS:
?C: This symbol, if defined, indicates that a C++ compiler was
?C: used to compiled Perl and will be used to compile extensions.
?C:.
?H:#$d_cplusplus USE_CPLUSPLUS  /**/
```

```
?H:.
?F:!try
?LINT:set d_cplusplus
: Check if we are using C++
echo " "
echo "Checking for C++..." >&4
$cat >try.c <<'EOCP'
#include <stdio.h>
int main(void)
{
#ifdef __cplusplus
   return 0;
#else
   return 1;
#endif
}
EOCP
set try
if eval $compile_ok
 && $run ./try; then
 val="$define"
 echo "You are using a C++ compiler."
else
 val="$undef"
 echo "You are not using a C++ compiler."
fi
$rm_try cplusplus$$
set d_cplusplus
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_cplusplus.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_memmem: Hasproto Inlibc Setvar d_gnulibc
?MAKE: -pick add $@ %<
?S:d_memmem:
?S: This variable conditionally defines the HAS_MEMMEM symbol, which
?S: indicates to the C program that the memmem() routine is available
?S: to return a pointer to the start of the first occurrence of a
?S: substring in a memory area (or NULL if not found).
?S:.
?C:HAS_MEMMEM:
?C: This symbol, if defined, indicates that the memmem routine is
?C: available to return a pointer to the start of the first occurrence
```

```
?C: of a substring in a memory area (or NULL if not found).
?C: In glibc, memmem is a GNU extension.  The function is visible in
?C: libc, but the prototype is only visible if _GNU_SOURCE is #defined.
?C: Thus we only define this if both the prototype and symbol are found.
?C:.
?H:#$d_memmem
 HAS_MEMMEM  /**/
?H:.
?T:d_memmem_proto xx1 xx2 xx3 xx4
?LINT:set d_memmem
: see if memmem exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_memmem_proto=''
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_memmem_proto memmem literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_memmem_proto" in
   define) # see if memmem exists
 set memmem d_memmem
 eval $inlibc
 ;;
   *)  val=$undef
 set d_memmem
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_memmem.U
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```
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?RCS:
?MAKE:d_strtold: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtold:
?S: This variable conditionally defines the HAS_STRTOLD symbol, which
?S: indicates to the C program that the strtold() routine is available.
?S:.
```

```
?C:HAS_STRTOLD:
?C: This symbol, if defined, indicates that the strtold routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtold HAS_STRTOLD  /**/
?H:.
?LINT:set d_strtold
: see if strtold exists
set strtold d_strtold
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtold.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_sigsetjmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_sigsetjmp: Setvar cat +cc +ccflags +ldflags libs rm
?MAKE: -pick add $@ %<
?S:d_sigsetjmp:
?S: This variable conditionally defines the HAS_SIGSETJMP symbol,
?S: which indicates that the sigsetjmp() routine
 is available to
?S: call setjmp() and optionally save the process's signal mask.
?S:.
?C:HAS_SIGSETJMP:
?C: This variable indicates to the C program that the sigsetjmp()
?C: routine is available to save the calling process's registers
?C: and stack environment for later use by siglongjmp(), and
?C: to optionally save the process's signal mask.  See
?C: Sigjmp_buf, Sigsetjmp, and Siglongjmp.
?C:.
```

```
?C:Sigjmp_buf:
?C: This is the buffer type to be used with Sigsetjmp and Siglongjmp.
?C:.
?C:Sigsetjmp:
?C: This macro is used in the same way as sigsetjmp(), but will invoke
?C: traditional setjmp() if sigsetjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?C:Siglongjmp:
?C: This macro is used in the same way as siglongjmp(), but will invoke
?C: traditional longjmp() if siglongjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?H:?%<:#$d_sigsetjmp HAS_SIGSETJMP /**/
?H:?%<:#ifdef HAS_SIGSETJMP
?H:?%<:#define Sigjmp_buf sigjmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) sigsetjmp((buf),(save_mask))
?H:?%<:#define
 Siglongjmp(buf,retval) siglongjmp((buf),(retval))
?H:?%<:#else
?H:?%<:#define Sigjmp_buf jmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) setjmp((buf))
?H:?%<:#define Siglongjmp(buf,retval) longjmp((buf),(retval))
?H:?%<:#endif
?H:.
?W:%<:Sigjmp_buf Sigsetjmp Siglongjmp
?F:!set
?LINT:set d_sigsetjmp
: see if sigsetjmp exists
?X: We can't check for these symbols with Inlibc because sigsetjmp
?X: is (sometimes? always?) a macro under GCC
echo " "
case "$d_sigsetjmp" in
")
 $cat >set.c <<'EOP'
#include <setjmp.h>
sigjmp_buf env;
int set = 1;
int main()
{
 if (sigsetjmp(env,1))
  exit(set);
 set = 0;
 siglongjmp(env, 1);
 exit(1);
}
EOP
 if $cc $ccflags $ldflags -o set set.c $libs > /dev/null 2>&1 ; then
```

```
  if ./set >/dev/null 2>&1; then
   echo "POSIX sigsetjmp found." >&4
   val="$define"
  else
   $cat >&4 <<EOM
Uh-Oh! You have POSIX sigsetjmp and siglongjmp, but they do not work properly!!
I'll ignore them.
EOM
   val="$undef"
  fi
 else
  echo "sigsetjmp not found."
 >&4
  val="$undef"
 fi
 ;;
*) val="$d_sigsetjmp"
 case "$d_sigsetjmp" in
 $define) echo "POSIX sigsetjmp found." >&4;;
 $undef) echo "sigsetjmp not found." >&4;;
 esac
 ;;
esac
set d_sigsetjmp
eval $setvar
$rm -f set.c set
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigsetjmp.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_truncl: Inlibc
?MAKE: -pick add $@ %<
?S:d_truncl:
?S: This variable conditionally defines the HAS_TRUNCL symbol, which
?S: indicates to the C program that the truncl() routine is available
?S: to round long doubles towards zero. If copysignl is also present,
?S: we can emulate modfl.
?S:.
?C:HAS_TRUNCL :
?C: This symbol, if defined, indicates that the truncl routine is
?C: available. If copysignl is also present we can emulate modfl.
?C:.
?H:#$d_truncl HAS_TRUNCL  /**/
?H:.
```

```
?LINT:set d_truncl
: see if truncl exists
set truncl d_truncl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_truncl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_perror.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_perror.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:38  ram
?RCS: patch32: always define HAS_PERROR even when not used in C code
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_perror: Inlibc
?MAKE: -pick add $@ %<
?S:d_perror:
?S: This variable conditionally remaps perror to a null action and
?S: defines the symbol HAS_PERROR, which indicates to the C program
?S: that the perror()
 routine is not available to print system
?S: error messages.
?S:.
?C:HAS_PERROR ~ %<:
?C: This symbol, if defined, indicates that the perror() routine is
?C: available to print system error messages. If not defined, you should
?C: use your own diagnostic routine...
?C:.
?C:perror ~ %<:
?C: This symbol is maped to null if the  perror() routine is not
?C: available to print system error messages.
?C:.
?H:?%<:#$d_perror HAS_PERROR /**/
?H:?%<:#ifndef HAS_PERROR
?H:?%<:#define perror(s) ;  /* mapped to a null statement */
?H:?%<:#endif
```

```
?H:.
?LINT:set d_perror
: see if perror exists
set perror d_perror
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_perror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libpth.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:08:49  ram
?RCS: patch61: new loclibpth variable
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:31:30  ram
?RCS: patch45: call ./mips instead of just mips (WED)
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:29:15  ram
?RCS: patch32: added /lib/pa1.1 for HP-UX specially tuned PA-RISC libs (ADO)
?RCS: patch32: fixed information message, making it clearer (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:03:54  ram
?RCS: patch30: added /usr/shlib to
 glibpth for shared-only libraries
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:26:57  ram
?RCS: patch27: fixed a typo (libpth -> glibpth)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:07:53  ram
?RCS: patch23: now asks for library directories to be searched (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit initializes the path for C library lookup.
?X:
?MAKE:libpth glibpth xlibpth plibpth loclibpth: \
```

```
 usrinc incpath test cat Myread Oldconfig
?MAKE: -pick add $@ %<
?S:libpth:
?S: This variable holds the general path (space-separated) used to find
?S: libraries. It is intended to be used by other units.
?S:.
?S:glibpth:
?S: This variable holds the general path (space-separated) used to
?S: find libraries.  It may contain directories that do not exist on
?S: this platform, libpth is the cleaned-up version.
?S:.
?S:xlibpth:
?S: This variable holds extra path (space-separated) used to find
?S: libraries on this platform,
 for example CPU-specific libraries
?S: (on multi-CPU platforms) may be listed here.
?S:.
?S:loclibpth:
?S: This variable holds the paths (space-separated) used to find local
?S: libraries.  It is prepended to libpth, and is intended to be easily
?S: set from the command line.
?S:.
?S:plibpth:
?S: Holds the private path used by Configure to find out the libraries.
?S: Its value is prepend to libpth. This variable takes care of special
?S: machines, like the mips.  Usually, it should be empty.
?S:.
?T: xxx dlist
?LINT:use usrinc
?INIT:: change the next line if compiling for Xenix/286 on Xenix/386
?INIT:xlibpth='/usr/lib/386 /lib/386'
?INIT:: Possible local library directories to search.
?INIT:loclibpth="/usr/local/lib /opt/local/lib /usr/gnu/lib"
?INIT:loclibpth="$loclibpth /opt/gnu/lib /usr/GNU/lib /opt/GNU/lib"
?INIT:
?INIT:: general looking path for locating libraries
?INIT:glibpth="/lib /usr/lib $xlibpth"
?INIT:glibpth="$glibpth /usr/ccs/lib /usr/ucblib /usr/local/lib"
?X: /shlib
 is for Digital Unix 4.0
?X: /usr/shlib is for OSF/1 systems.
?INIT:test -f /usr/shlib/libc.so && glibpth="/usr/shlib $glibpth"
?INIT:test -f /shlib/libc.so     && glibpth="/shlib $glibpth"
?INIT:
?INIT:: Private path used by Configure to find libraries.  Its value
?INIT:: is prepended to libpth. This variable takes care of special
?INIT:: machines, like the mips.  Usually, it should be empty.
?INIT:plibpth="
```

```
?INIT:
: Set private lib path
case "$plibpth" in
") if ./mips; then
?X: on mips, we DO NOT want /lib, and we want $incpath/usr/lib
  plibpth="$incpath/usr/lib /usr/local/lib /usr/ccs/lib"
 fi;;
esac
case "$libpth" in
' ') dlist=";;
") dlist="$loclibpth $plibpth $glibpth";;
*) dlist="$libpth";;
esac

: Now check and see which directories actually exist, avoiding duplicates
libpth="
for xxx in $dlist
do
   if $test -d $xxx; then
  case " $libpth " in
  *" $xxx "*) ;;
  *) libpth="$libpth $xxx";;
  esac
   fi
done
$cat <<'EOM'

Some systems have incompatible or broken versions
 of libraries.  Among
the directories listed in the question below, please remove any you
know not to be holding relevant libraries, and add any that are needed.
Say "none" for none.

EOM
case "$libpth" in
") dflt='none';;
*)
?X: strip leading space
 set X $libpth
 shift
 dflt=${1+"$@"}
 ;;
esac
rp="Directories to use for library searches?"
. ./myread
case "$ans" in
none) libpth=' ';;
*) libpth="$ans";;
```

```
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libpth.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2014 Jarkko Hietaniemi & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_copysign: Inlibc
?MAKE: -pick add $@ %<
?S:d_copysign:
?S: This variable conditionally defines the HAS_COPYSIGN symbol, which
?S: indicates to the C program that the copysign() routine is available.
?S:.
?C:HAS_COPYSIGN:
?C: This symbol, if defined, indicates that the copysign routine is
?C: available to do the copysign function.
?C:.
?H:#$d_copysign HAS_COPYSIGN  /**/
?H:.
?LINT:set d_copysign
: see if copysign exists
set copysign d_copysign
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_copysign.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethent.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_gethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethent:
?S: This variable conditionally defines HAS_GETHOSTENT if gethostent() is
?S: available to look up host names in some data base or another.
?S:.
?C:HAS_GETHOSTENT:
?C: This symbol, if defined, indicates that the gethostent() routine is
?C: available to look up host names in some
 data base or another.
?C:.
?H:#$d_gethent HAS_GETHOSTENT  /**/
?H:.
?LINT:set d_gethent
: see if gethostent exists
set gethostent d_gethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_mkdtemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkdtemp:
?S: This variable conditionally defines the HAS_MKDTEMP symbol, which
?S: indicates to the C program that the mkdtemp() routine is available
?S: to exclusively create a uniquely named temporary directory.
?S:.
?C:HAS_MKDTEMP :
?C: This symbol, if defined, indicates that the mkdtemp routine is
?C: available to exclusively create a uniquely named temporary directory.
?C:.
?H:#$d_mkdtemp HAS_MKDTEMP  /**/
?H:.
?LINT:set d_mkdtemp
: see if mkdtemp exists
set mkdtemp d_mkdtemp
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkdtemp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getcwd: Inlibc
?MAKE: -pick add $@ %<
?S:d_getcwd:
?S: This variable conditionally defines the HAS_GETCWD symbol, which
?S: indicates to the C program that the getcwd() routine is available
?S: to get the current working directory.
?S:.
?C:HAS_GETCWD :
?C: This symbol, if defined, indicates that the getcwd routine is
?C: available to get the current working directory.
?C:.
?H:#$d_getcwd HAS_GETCWD  /**/
?H:.
?LINT:set d_getcwd
: see if getcwd exists
set getcwd d_getcwd
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getcwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:need_va_copy: rm_try cat Compile run
?MAKE: -pick add $@ %<
?S:need_va_copy:
?S: This symbol, if defined, indicates that the system stores
?S: the variable argument list datatype, va_list, in a format
?S: that cannot be copied by simple assignment, so that some
```

```
?S: other means must be used when copying is required.
?S: As such systems vary in their provision (or non-provision)
?S: of copying mechanisms, handy.h defines a platform-
?S: independent macro, Perl_va_copy(src, dst), to do the job.
?S:.
?C:NEED_VA_COPY:
?C: This
 symbol, if defined, indicates that the system stores
?C: the variable argument list datatype, va_list, in a format
?C: that cannot be copied by simple assignment, so that some
?C: other means must be used when copying is required.
?C: As such systems vary in their provision (or non-provision)
?C: of copying mechanisms, handy.h defines a platform-
?C: independent macro, Perl_va_copy(src, dst), to do the job.
?C:.
?H:#$need_va_copy NEED_VA_COPY  /**/
?H:.
?T:okay
?F:!try
: see if we need va_copy
echo " "
$cat >try.c <<EOCP
#include <stdarg.h>
#include <stdio.h>
#include <stdlib.h>
#include <signal.h>

int
ivfprintf(FILE *f, const char *fmt, va_list *valp)
{
 return vfprintf(f, fmt, *valp);
}

int
myvfprintf(FILE *f, const  char *fmt, va_list val)
{
 return ivfprintf(f, fmt, &val);
}

int
myprintf(char *fmt, ...)
{
 va_list val;
 va_start(val, fmt);
 return myvfprintf(stdout, fmt, val);
}

int
```

```
main(int ac, char **av)
{
 signal(SIGSEGV, exit);
#ifdef SIGBUS
 signal(SIGBUS,
 exit);
#endif

 myprintf("%s%cs all right, then\n", "that", '\');
 exit(0);
}
EOCP
set try
if eval $compile && $run ./try 2>&1 >/dev/null; then
 case "`$run ./try`" in
 "that's all right, then")
  okay=yes
  ;;
 esac
fi
case "$okay" in
yes) echo "It seems that you don't need va_copy()." >&4
 need_va_copy="$undef"
 ;;
*) echo "It seems that va_copy() or similar will be needed." >&4
 need_va_copy="$define"
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/need_va_copy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endservent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endservent_r endservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endservent_r:
?S: This variable conditionally defines the HAS_ENDSERVENT_R symbol,
?S: which indicates to the C program that the endservent_r()
```

```
?S: routine is available.
?S:.
?S:endservent_r_proto:
?S: This variable encodes the prototype of endservent_r.
?S: It is zero if d_endservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endservent_r
?S: is defined.
?S:.
?C:HAS_ENDSERVENT_R:
?C: This symbol, if defined, indicates that the endservent_r routine
?C: is
 available to endservent re-entrantly.
?C:.
?C:ENDSERVENT_R_PROTO:
?C: This symbol encodes the prototype of endservent_r.
?C: It is zero if d_endservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endservent_r
?C: is defined.
?C:.
?H:#$d_endservent_r HAS_ENDSERVENT_R /**/
?H:#define ENDSERVENT_R_PROTO $endservent_r_proto /**/
?H:.
?T:try hdrs d_endservent_r_proto
: see if endservent_r exists
set endservent_r d_endservent_r
eval $inlibc
case "$d_endservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endservent_r_proto:$usethreads" in
 ":define") d_endservent_r_proto=define
  set d_endservent_r_proto endservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endservent_r_proto" in
 define)
 case "$endservent_r_proto" in
 "|0) try='int endservent_r(struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && endservent_r_proto=I_D ;;
 esac
 case "$endservent_r_proto" in
 "|0) try='void endservent_r(struct
 servent_data*);'
 ./protochk "$extern_C $try" $hdrs && endservent_r_proto=V_D ;;
 esac
 case "$endservent_r_proto" in
 "|0) d_endservent_r=undef
```

```
  endservent_r_proto=0
  echo "Disabling endservent_r, cannot determine prototype." >&4 ;;
 * ) case "$endservent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endservent_r_proto="REENTRANT_PROTO_$endservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endservent_r has no prototype, not using it." >&4 ;;
  esac
  d_endservent_r=undef
  endservent_r_proto=0
  ;;
 esac
 ;;
*) endservent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endservent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnbyname: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnbyname:
?S: This variable conditionally defines the HAS_GETNETBYNAME symbol, which
?S: indicates to the C program that the getnetbyname() routine is available
?S: to look up networks by their names.
?S:.
?C:HAS_GETNETBYNAME:
?C: This symbol, if defined, indicates that the getnetbyname() routine is
?C: available to look up networks by their names.
?C:.
?H:#$d_getnbyname HAS_GETNETBYNAME  /**/
?H:.
?LINT:set d_getnbyname
: see if getnetbyname exists
set getnetbyname d_getnbyname
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnbynm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:30:48  ram
?RCS: patch61: added cute quoting trick for wild stringify support
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:24  ram
?RCS: patch36: now uses cppstdin instead of plain cpp for consistency (ADO)
?RCS: patch36: remove temporary files when done
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cpp_stuff cpp_quote: cat contains cppstdin cppflags cppminus rm Warn \
 package
?MAKE: -pick
 add $@ %<
?S:cpp_stuff:
?S: This variable contains an identification of the catenation mechanism
?S: used by the C preprocessor.
?S:.
?S:cpp_quote:
?S: This variable is set to either "" or '' depending on whether the
?S: pre-processor pre-dates ANSI or not.  It is used in the production of
?S: the SQuoTe() and EQuoTe() macros, and was introduced to overcome a bug
?S: in gcc 3.x whereby the pre-processor complained loudly about the
?S: unterminated strings.
?S:.
?C:CAT2:
?C: This macro catenates 2 tokens together.
?C:.
?C:CAT3:
?C: This macro catenates 3 tokens together.
?C:.
```

```
?C:CAT4:
?C: This macro catenates 4 tokens together.
?C:.
?C:CAT5:
?C: This macro catenates 5 tokens together.
?C:.
?C:STRINGIFY:
?C: This macro surrounds its token with double quotes.
?C:.
?C:SCAT2:
?C: This macro catenates 2 tokens together and stringifies the result.
?C:.
?C:SCAT3:
?C: This macro catenates 3 tokens together and stringifies the result.
?C:.
?C:SCAT4:
?C: This macro catenates 4 tokens
 together and stringifies the result.
?C:.
?C:SCAT5:
?C: This macro catenates 5 tokens together and stringifies the result.
?C:.
?H:?%<:#if $cpp_stuff == 1
?H:?CAT2:#define CAT2(a,b)a/**/b
?H:?CAT3:#define CAT3(a,b,c)a/**/b/**/c
?H:?CAT4:#define CAT4(a,b,c,d)a/**/b/**/c/**/d
?H:?CAT5:#define CAT5(a,b,c,d,e)a/**/b/**/c/**/d/**/e
?H:?STRINGIFY:#define STRINGIFY(a)"a"
?H:?%<:#define SQuoTe(a)${cpp_quote}a
?H:?%<:#define EQuoTe(a)a${cpp_quote}
?H:?SCAT2:#define SCAT2(a,b)EQuoTe(SQuoTe(a)b)
?H:?SCAT3:#define SCAT3(a,b,c)EQuoTe(SQuoTe(a)b/**/c)
?H:?SCAT4:#define SCAT4(a,b,c,d)EQuoTe(SQuoTe(a)b/**/c/**/d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e)EQuoTe(SQuoTe(a)b/**/c/**/d/**/e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 42
?X: The additional level of indirection enables these macros to be
?X: used as arguments to other macros.  See K&R 2nd ed., page 231.
?H:?%<:#define CaTiFy(a,b) a ## b
?H:?%<:#define CAT2(a,b) CaTiFy(a,b)
?H:?CAT3:#define CAT3(a,b,c) CAT2(CaTiFy(a,b),c)
?H:?CAT4:#define CAT4(a,b,c,d)
 CAT2(CaTiFy(a,b), CaTiFy(c,d))
?H:?CAT5:#define CAT5(a,b,c,d,e) CAT2(CAT2(CaTiFy(a,b), CaTiFy(c,d)), e)
?H:?%<:#define StGiFy(a)# a
?H:?STRINGIFY:#define STRINGIFY(a)StGiFy(a)
?H:?SCAT2:#define SCAT2(a,b)StGiFy(a) StGiFy(b)
?H:?SCAT3:#define SCAT3(a,b,c)StGiFy(a) StGiFy(b) StGiFy(c)
```

```
?H:?SCAT4:#define SCAT4(a,b,c,d)StGiFy(a) StGiFy(b) StGiFy(c) StGiFy(d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e)StGiFy(a) StGiFy(b) StGiFy(c) StGiFy(d) StGiFy(e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff != 1 && $cpp_stuff != 42
?H:?%<:#include "Bletch: How does this C preprocessor catenate tokens?"
?H:?%<:#endif
?H:.
?W:%<:CAT2 CAT3 CAT4 CAT5 STRINGIFY SCAT2 SCAT3 SCAT4 SCAT5
?F:!cpp_stuff.c
?LINT:known StGiFy EQuoTe SQuoTe CaTiFy
: how do we catenate cpp tokens here?
echo " "
echo "Checking to see how your cpp does stuff like catenate tokens..." >&4
cpp_quote=''
$cat >cpp_stuff.c <<'EOCP'
#define RCAT(a,b)a/**/b
#define ACAT(a,b)a ## b
RCAT(Rei,ser)
ACAT(Cir,cus)
EOCP
$cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out
 2>&1
if $contains 'Circus' cpp_stuff.out >/dev/null 2>&1; then
 echo "Oh!  Smells like ANSI's been here."
 echo "We can catify or stringify, separately or together!"
 cpp_stuff=42
elif $contains 'Reiser' cpp_stuff.out >/dev/null 2>&1; then
 echo "Ah, yes!  The good old days!"
 cpp_stuff=1
 $cat >cpp_stuff.c <<'EOCP'
#define SQuoTe(a)"a
#define EQuoTe(a)a"
#define CAT2(a,b)EQuoTe(SQuoTe(a)b)
CAT2(Vic,tory)
EOCP
 $cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out 2>&1
 if $contains '"Victory"' cpp_stuff.out >/dev/null 2>&1; then
  echo "I'll resort to a cute trick to also be able to stringify."
  cpp_quote=''
 else
  $cat <<EOM
However, in the good old days we don't know how to stringify and
catify at the same time...
@if SCAT2 || SCAT3 || SCAT4 || SCAT5
You might have to edit the values of the SCAT[2-5] macros in config.h...
@else
Hopefully, $package does not need this feature.
@end
```

```
EOM
 fi
else
 ./warn <<EOM
I can't seem to be able to catenate tokens with your cpp.
@if
 CAT2 || CAT3 || CAT4 || CAT5 || SCAT2 || SCAT3 || SCAT4 || SCAT5
You're going to have to edit the values of the following
macros in config.h:

@if CAT2 || CAT3 || CAT4 || CAT5
 CAT[2-5]
@end
@if SCAT2 || SCAT3 || SCAT4 || SCAT5
 SCAT[2-5]
@end

in order to let me compile.
@end
EOM
 cpp_stuff="/* Help! How do we handle cpp_stuff? */*/"
fi
$rm -f cpp_stuff.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cpp_stuff.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gccversion gccosandvers gccansipedantic: cat cpp rm +cc \
 Myread Guess Options Oldconfig Loc osname osvers run
?MAKE: -pick add $@ %<
?S:gccversion:
?S: If GNU cc (gcc) is used, this variable holds '1' or '2' to
?S: indicate whether the compiler is version 1 or 2.  This is used in
?S: setting some of the default cflags.  It is set to '' if not gcc.
?S:.
?S:gccosandvers:
?S: If GNU cc (gcc) is used, this variable holds the operating system
```

```
?S: and version used to compile gcc.  It is set to '' if not gcc,
?S: or if
 nothing useful can be parsed as the os version.
?S:.
?S:gccansipedantic:
?S: If GNU cc (gcc) is used, this variable will enable (if set) the
?S: -ansi and -pedantic ccflags for building core files (through
?S: cflags script). (See Porting/pumpkin.pod for full description).
?S:.
?D:gccversion=''
?D:gccansipedantic=''
?T:c99_for
?T:flag
?T:gccshortvers
?T:incdir
?T:warn
?F:!try
?LINT:change cpp
?LINT:extern ccflags
?LINT:extern ldflags
?LINT:extern locincpth
?LINT:extern ccname
?LINT:change ccname
?LINT:change locincpth
?LINT:change ccflags
?LINT:set gccansipedantic
?X: Check if they have gcc in any guise.
: Check if we are using GNU gcc and what its version is
echo " "
echo "Checking for GNU cc in disguise and/or its version number..." >&4
$cat >try.c <<EOM
#include <stdio.h>
int main() {
#if defined(__GNUC__) && !defined(__INTEL_COMPILER)
#ifdef __VERSION__
 printf("%s\n", __VERSION__);
#else
 printf("%s\n", "1");
#endif
#endif
 return(0);
}
EOM
if $cc -o try $ccflags $ldflags try.c; then
 gccversion=`$run
 ./try`
 case "$gccversion" in
 '') echo "You are not using GNU cc." ;;
```

```
 *)  echo "You are using GNU cc $gccversion."
     ccname=gcc
     ;;
 esac
else
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to be working!" >&4
?X: using -K will prevent aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
 echo "    You'd better start hunting for one and let me know about it." >&4
  exit 1
  ;;
 esac
fi
$rm -f try try.*
case "$gccversion" in
1.*) cpp=`./loc gcc-cpp $cpp $pth` ;;
esac
case "$gccversion" in
") gccosandvers=" ;;
*) gccshortvers=`echo "$gccversion"|sed 's/ .*//'`
  gccosandvers=`$cc -v 2>&1|grep '/specs$'|sed "s!.*/[^-/]*-[^-/]*-\([^-/]*\)/$gccshortvers/specs!\1!"`
  gccshortvers="
  case "$gccosandvers" in
  $osname) gccosandvers=" ;; # linux gccs seem to have no linux osvers, grr
  $osname$osvers) ;; # looking good
  $osname*) cat <<EOM >&4

*** WHOA THERE!!! ***

   Your gcc has not been
 compiled for the exact release of
   your operating system ($gccosandvers versus $osname$osvers).

   In general it is a good idea to keep gcc synchronized with
   the operating system because otherwise serious problems
   may ensue when trying to compile software, like Perl.

   I'm trying to be optimistic here, though, and will continue.
   If later during the configuration and build icky compilation
   problems appear (headerfile conflicts being the most common
   manifestation), I suggest reinstalling the gcc to match
   your operating system release.

EOM
     ;;
```

```
  *) gccosandvers=" ;; # failed to parse, better be silent
  esac
  ;;
esac
case "$ccname" in
") ccname="$cc" ;;
esac

# gcc 3.* complain about adding -Idirectories that they already know about,
# so we will take those off from locincpth.
case "$gccversion" in
3.*)
   echo "main(){}">try.c
   for incdir in $locincpth; do
      warn=`$cc $ccflags -I$incdir -c try.c 2>&1 | \
      grep '^c[cp]p*[01]: warning:
 changing search order '`
      if test "X$warn" != X; then
    locincpth=`echo " $locincpth " | sed "s! $incdir ! !"`
      fi
   done
   $rm -f try try.*
esac

# gcc 4.9 by default does some optimizations that break perl.
# see ticket 121505.
#
# The -fwrapv disables those optimizations (and probably others,) so
# for gcc 4.9 (and later, since the optimizations probably won't go
# away), add -fwrapv unless the user requests -fno-wrapv, which
# disables -fwrapv, or if the user requests -fsanitize=undefined,
# which turns the overflows -fwrapv ignores into runtime errors.
case "$gccversion" in
4.[3-9].*|4.[1-9][0-9]*|[5-9].*|[1-9][0-9]*)
   case "$ccflags" in
   *-fno-wrapv*|*-fsanitize=undefined*|*-fwrapv*) ;;
   *) ccflags="$ccflags -fwrapv" ;;
   esac
esac

# Really old versions of gcc default to C89 and will error for this code.
# See if the compiler (gcc or otherwise) needs a flag to compile C99 code
# Initialisations in for loops seem to be the particular problem
# (Does
 this syntax conflict with something else that was valid C89?)
# We also add a declaration after a statement to detect whether the compiler
# (or the user supplied -Accflags) consider such declarations to be errors.
# This causes 'Configure with -Accflags="-Werror=declaration-after-statement'"
```

```
# to fail hard and early.
#
# Annoyingly -std=c99 will cause gcc to tell glibc not to define prototypes for
# syscall, drand48 etc when including <unistd.h>, which messes up our build.
# I guess we *could* loop round trying -std=c99 first with checks both for the
# prototype found and the code compiling (because -std=gnu99 might do other
# things we don't want, particularly on non-GCC compilers) but
# 1) We would need to check for the prototype first (without any flags)
# 2) We would still end up with most Linux systems either being -std=gnu99
#    or "" (no flag), and so both common options would not rigorously check our
#    portability to other platforms.
# So it doesn't seem worth the complexity
 and chance of different failure.
$cat >try.c <<'EOCP'
int main(int argc, char **argv) {
   argc = argc + 1;
   /* This is deliberately a declaration after a statement. */
   unsigned long long count = 0;
   for (char **p = argv; *p; ++p) {
       ++count;
   }
   return count == 1 ? 0 : argc;
}
EOCP
c99_for=no
for flag in " '-std=gnu99' '-std=c99'; do
   if $cc -o try $flag $ccflags $ldflags try.c 2>/dev/null && ./try; then
       c99_for="$flag"
       break;
   fi
done
case "$c99_for" in
") echo "Your C compiler doesn't need any special flags to compile C99 code"
   ;;
no) echo >&4 "Your C compiler doesn't seem to be able to compile C99 code"
   rp='Do you really want to continue?'
   dflt='n'
   . ./myread
   case "$ans" in
 [yY]) echo >&4 "Okay, continuing." ;;
 *) exit 1    ;;
   esac
   ;;
*)  echo "Your C compiler needs $c99_for to compile C99 code"
   ccflags="$c99_for $ccflags"
   ;;
esac
$rm -f try try.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/gccvers.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sresgproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sresgproto:
?S: This variable conditionally defines the HAS_SETRESGID_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the setresgid() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SETRESGID_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the setresgid() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
 int setresgid(uid_t ruid, uid_t euid, uid_t suid);
?C:.
?H:#$d_sresgproto HAS_SETRESGID_PROTO /**/
?H:.
?LINT:set d_sresgproto
: see if prototype for setresgid is available
echo " "
set d_sresgproto setresgid $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sresgproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_umask.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_umask.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:14:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_umask: Inlibc
?MAKE: -pick add $@ %<
?S:d_umask:
?S: This variable conditionally defines the HAS_UMASK symbol, which
?S: indicates to the C program that the umask() routine is available.
?S: to set and get the value of the file creation mask.
?S:.
?C:HAS_UMASK :
?C: This
 symbol, if defined, indicates that the umask routine is
?C: available to set and get the value of the file creation mask.
?C:.
?H:#$d_umask HAS_UMASK  /**/
?H:.
?LINT:set d_umask
: see if umask exists
set umask d_umask
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_umask.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_nanosleep: Inlibc
?MAKE: -pick add $@ %<
?S:d_nanosleep:
?S: This variable conditionally defines HAS_NANOSLEEP
?S: if nanosleep() is available to sleep with 1E-9 sec accuracy.
```

```
?S:.
?C:HAS_NANOSLEEP:
?C: This symbol, if defined, indicates that the nanosleep
?C: system call is available to sleep with 1E-9 sec accuracy.
?C:.
?H:#$d_nanosleep HAS_NANOSLEEP  /**/
?H:.
?LINT:set d_nanosleep
: see if nanosleep exists
set nanosleep d_nanosleep
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nanosleep.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitebin.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitebin.U,v $
?RCS:
?MAKE:sitebin sitebinexp installsitebin : Getfile Oldconfig \
 Setprefixvar siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitebin=''
?S:sitebin:
?S: This variable holds the name of the directory in which the user wants
?S: to put add-on publicly executable files for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S: The standard distribution will put nothing
 in this directory.
?S: After perl has been installed, users may install their own local
?S: executables in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitebinexp=''
?S:sitebinexp:
?S: This is the same as the sitebin variable, but is filename expanded at
```

```
?S: configuration time, for use in your makefiles.
?S:.
?D:installsitebin="
?S:installsitebin:
?S: This variable is usually the same as sitebinexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?LINT:change prefixvar
?LINT:set installsitebin
?LINT:set sitebin
?LINT:set sitebinexp
: determine where add-on public executables go
case "$sitebin" in
") dflt=$siteprefix/bin ;;
*) dflt=$sitebin ;;
esac
fn=d~
rp='Pathname where the add-on public executables should be installed?'
. ./getfile
prefixvar=sitebin
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitebin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: prototype.U,v 3.0.1.3 1994/05/06 15:11:49 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: prototype.U,v $
?RCS: Revision 3.0.1.3  1994/05/06  15:11:49  ram
?RCS: patch23: ensure cc flags used when looking for prototype support
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:36  ram
?RCS: patch16: prototype handling macros now appear only when needed
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:03:12  ram
?RCS: patch6: defines were referring to non-existent VOID symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:36  ram
```

```
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:prototype: Nothing
?S:prototype:
?S: This variable holds the eventual value of CAN_PROTOTYPE, which
?S: indicates the C compiler can handle function prototypes.
?S:.
: stub, never used
prototype=nothing
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/prototype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syslog.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_syslog: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_syslog:
?S: This variable conditionally defines the I_SYSLOG symbol,
?S: and indicates whether a C program should include <syslog.h>.
?S:.
?C:I_SYSLOG:
?C: This symbol, if defined, indicates that <syslog.h> exists and
?C: should be included.
?C:.
?H:#$i_syslog I_SYSLOG  /**/
?H:.
?LINT:set i_syslog
: see if this is a syslog.h system
set syslog.h i_syslog
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_syslog.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: prefshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: prefshell.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:28:13  ram
?RCS: patch36: added SHELL temporary since metalint now sees ${SHELL}
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:47  ram
?RCS: patch10: non-portable var substitution was used (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:prefshell: cat package Getfile Oldconfig ksh csh bash
?MAKE: -pick add $@ %<
?S:prefshell:
?S: This
 variable contains the eventual value of the PREFSHELL symbol,
?S: which contains the full name of the preferred user shell on this
?S: system.  Usual values are /bin/csh, /bin/ksh, /bin/sh.
?S:.
?C:PREFSHELL:
?C: This symbol contains the full name of the preferred user shell on this
?C: system.  Usual values are /bin/csh, /bin/ksh, /bin/sh.
?C:.
?H:#define PREFSHELL "$prefshell"  /**/
?H:.
?T:SHELL
: find out which shell people like to use most
case "$prefshell" in
")
 case "$ksh $bash $csh" in
 */ksh*) dflt="$ksh" ;;
 */bash*) dflt="$bash" ;;
 */csh*) dflt="$csh" ;;
 *) dflt='/bin/sh' ;;
 esac
 ;;
*)  dflt="$prefshell";;
esac
?X: Some shells (Ultrix) do not understand ${SHELL:-/bin/sh}, sigh!
$cat <<EOM

Give the full path name of the shell most people like to use on your system.
This will be used by $package whenever the user wants to get a shell
escape (for instance) and is not necessarily the same as the shell you are
```

```
currently using (${SHELL-/bin/sh}).

EOM
fn=f/~
rp='Preferred
 shell to be used?'
. ./getfile
prefshell=$ans
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prefshell.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_stat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_stat.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stat: Inlibc
?MAKE: -pick add $@ %<
?S:d_stat:
?S: This variable conditionally defines HAS_STAT if stat() is
?S: available to get file status.
?S:.
?C:HAS_STAT (STAT):
?C: This symbol, if defined, indicates that the stat routine is
?C: available to get file status.
?C:.
?H:#$d_stat HAS_STAT /**/
?H:.
?LINT:set d_stat
: see if stat exists
set
 stat d_stat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_stat.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: so.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: so.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:30:04  ram
?RCS: patch36: now tells user how he can suppress shared lib lookup (ADO)
?RCS: patch36: removed echo at the top, since it's now in the here-doc (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:07:02  ram
?RCS: patch30: created
?RCS:
?X:
?X: This unit computes the shared-object / shared-lib extension
?X:
?MAKE:so d_libname_unique: test libpth Loc Myread Oldconfig cat Setvar
?MAKE: -pick add $@ %<
?S:so:
?S: This
 variable holds the extension used to identify shared libraries
?S: (also known as shared objects) on the system. Usually set to 'so'.
?S:.
?S:d_libname_unique:
?S: This variable is defined if the target system insists on unique
?S: basenames for shared library files. This is currently true on Android,
?S: false everywhere else we know of.
?S: Defaults to 'undef'.
?S:.
?LINT:set d_libname_unique
?T: xxx
: compute shared library extension
case "$so" in
")
 if xxx=`./loc libc.sl X $libpth`; $test -f "$xxx"; then
  dflt='sl'
 else
  dflt='so'
 fi
 ;;
*) dflt="$so";;
```

```
esac
$cat <<EOM

On some systems, shared libraries may be available.  Answer 'none' if
you want to suppress searching of shared libraries for the remainder
of this configuration.

EOM
rp='What is the file extension used for shared libraries?'
. ./myread
so="$ans"

: Does target system insist that shared library basenames are unique
$cat << EOM

Some dynamic loaders assume that the *basename* of shared library
 filenames
are globally unique.  We'll default this to undef as we assume your system
is not this weird. Set to defined if you're on one of them.

EOM

dflt='n'
rp='Make shared library basenames unique?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)   val="$undef"  ;;
esac
set d_libname_unique
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/so.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
```

```
?RCS: $Log: d_casti32.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:10:45  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:09:37  ram
?RCS: patch36: declare signal handler correctly (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:06  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Can the compiler cast large floats to 32-bit integers?
?X:
?MAKE:d_casti32: cat
 +cc +ccflags rm_try intsize Setvar test signal_t
?MAKE: -pick add $@ %<
?S:d_casti32:
?S: This variable conditionally defines CASTI32, which indicates
?S: whether the C compiler can cast large floats to 32-bit ints.
?S:.
?C:CASTI32:
?C: This symbol is defined if the C compiler can cast negative
?C: or large floating point numbers to 32-bit ints.
?C:.
?T:xxx yyy
?H:#$d_casti32 CASTI32  /**/
?H:.
?F:!try
?LINT:set d_casti32
: check for ability to cast large floats to 32-bit ints.
echo " "
echo 'Checking whether your C compiler can cast large floats to int32.' >&4
if $test "$intsize" -eq 4; then
 xxx=int
else
 xxx=long
fi
$cat >try.c <<EOCP
#include <sys/types.h>
#include <signal.h>
$signal_t blech() { exit(3); }
int main()
{
 $xxx i32;
 double f;
 int result = 0;
 signal(SIGFPE, blech);
```

```
 f = (double) 0x7fffffff;
 f = 10 * f;
 i32  = ($xxx) f;

 if (i32 != ($xxx) f)
  result |= 1;
 exit(result);
}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 ./try
 yyy=$?
else
 echo "(I can't
 seem to compile the test program--assuming it can't)"
 yyy=1
fi
case "$yyy" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_casti32
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_casti32.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2006-2007, H.Merijn Brand
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_snprintf d_vsnprintf : Inlibc Compile cat run rm_try
?MAKE: -pick add $@ %<
?S:d_snprintf:
?S: This variable conditionally defines the HAS_SNPRINTF symbol, which
?S: indicates to the C program that the snprintf () library function
?S: is available.
?S:.
```

```
?S:d_vsnprintf:
?S: This variable conditionally defines the HAS_VSNPRINTF symbol, which
?S: indicates to the C program that the vsnprintf () library function
?S: is available.
?S:.
?C:HAS_SNPRINTF:
?C: This symbol, if defined, indicates that the snprintf () library
?C: function
 is available for use.
?C:.
?C:HAS_VSNPRINTF:
?C: This symbol, if defined, indicates that the vsnprintf () library
?C: function is available for use.
?C:.
?H:#$d_snprintf HAS_SNPRINTF /**/
?H:#$d_vsnprintf HAS_VSNPRINTF /**/
?H:.
?F:!try
: see if snprintf exists
set snprintf d_snprintf
eval $inlibc

: see if vsnprintf exists
set vsnprintf d_vsnprintf
eval $inlibc

case "$d_snprintf-$d_vsnprintf" in
"$define-$define")
   $cat <<EOM
Checking whether your snprintf() and vsnprintf() work okay...
EOM
   $cat >try.c <<'EOCP'
/* v?snprintf testing logic courtesy of Russ Allbery.
* According to C99:
* - if the buffer is too short it still must be \0-terminated
* - if the buffer is too short the potentially required length
*   must be returned and not -1
* - if the buffer is NULL the potentially required length
*   must be returned and not -1 or core dump
*/
#include <stdio.h>
#include <stdarg.h>

char buf[2];

int test (char *format, ...)
{
   va_list args;
```

```
  int count;

  va_start
 (args, format);
  count = vsnprintf (buf, sizeof buf, format, args);
  va_end (args);
  return count;
}

int main ()
{
  return ((test ("%s", "abcd") == 4 && buf[0] == 'a' && buf[1] == '\0'
          && snprintf (NULL, 0, "%s", "abcd") == 4) ? 0 : 1);
}
EOCP
  set try
  if eval $compile; then
 `$run ./try`
 case "$?" in
 0) echo "Your snprintf() and vsnprintf() seem to be working okay." ;;
 *) cat <<EOM >&4
Your snprintf() and snprintf() don't seem to be working okay.
EOM
   d_snprintf="$undef"
   d_vsnprintf="$undef"
   ;;
 esac
  else
 echo "(I can't seem to compile the test program--assuming they don't)"
 d_snprintf="$undef"
 d_vsnprintf="$undef"
  fi
  $rm_try
  ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_snprintf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: package.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: package.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:27:21  ram
?RCS: patch36: beware of non-ascii character sets when translating case
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:37:02  ram
?RCS: patch14: skip definition of spackage if not otherwise used
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:10  ram
?RCS: patch10: added spackage, suitable for starting sentences
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:28  ram
?RCS: Baseline for dist 3.0
 netwide release.
?RCS:
?MAKE:package spackage: Nothing
?MAKE: -pick wipe $@ %<
?S:package:
?S: This variable contains the name of the package being constructed.
?S: It is primarily intended for the use of later Configure units.
?S:.
?S:spackage:
?S: This variable contains the name of the package being constructed,
?S: with the first letter uppercased, i.e. suitable for starting
?S: sentences.
?S:.
?X: dist-4 has defined PACKAGE: here, which clashes with perly.h
?X:  as package is a reserved keyword in perl
?T:first last
: set package name
package='<PACKAGENAME>'
@if spackage
first=`echo $package | sed -e 's/^\(.\).*/\1/'`
last=`echo $package | sed -e 's/^.\(.*\)/\1/'`
?X:
?X: So early in the Configure script, we don't have ./tr set up and can't
?X: include Tr in our dependency or that would create a cycle. Therefore,
?X: we have to somehow duplicate the work done in Tr. That's life.
?X:
case "`echo AbyZ | tr '[:lower:]' '[:upper:]' 2>/dev/null`"-"`echo AbyZ | tr '[:upper:]' '[:lower:]'
 2>/dev/null`" in
ABYZ-abyz) spackage=`echo $first | tr '[:lower:]' '[:upper:]'`$last;;
*) spackage=`echo $first | tr '[a-z]' '[A-Z]'`$last;;
esac
@end
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/package.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtold_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtold_l:
?S: This variable conditionally defines the HAS_STRTOLD_L symbol, which
?S: indicates to the C program that the strtold_l() routine is available.
?S:.
?C:HAS_STRTOLD_L:
?C: This symbol, if defined, indicates that the strtold_l routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtold_l HAS_STRTOLD_L  /**/
?H:.
?LINT:set d_strtold_l
: see if strtold_l exists
set strtold_l d_strtold_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strtold_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sem.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sem: test d_semctl d_semget d_semop Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_sem:
```

```
?S: This variable conditionally defines the HAS_SEM symbol, which
?S: indicates that the entire sem*(2) library is present.
?S:.
?C:HAS_SEM:
?C: This symbol, if defined, indicates that the entire sem*(2) library is
?C: supported.
?C:.
?H:#$d_sem HAS_SEM  /**/
?H:.
?T:h_sem
?LINT:set d_sem
:
 see how much of the 'sem*(2)' library is present.
h_sem=true
echo " "
case "$d_semctl$d_semget$d_semop" in
*"$undef"*) h_sem=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID messages"*"not configured"*)
 echo "Your $osname does not have the sem*(2) configured." >&4
       h_sem=false
 val="$undef"
 set semctl d_semctl
 eval $setvar
 set semget d_semget
 eval $setvar
 set semop d_semop
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_sem && $test `./findhdr sys/sem.h`; then
 echo "You have the full sem*(2) library." >&4
 val="$define"
else
 echo "You don't have the full sem*(2) library." >&4
 val="$undef"
fi
set d_sem
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sem.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pwritev.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pwritev.U,v $
?RCS:
?MAKE:d_pwritev: Inlibc
?MAKE: -pick add $@ %<
?S:d_pwritev:
?S: This variable conditionally defines the HAS_PWRITEV symbol, which
?S: indicates to the C program that the pwritev() routine is available.
?S:.
?C:HAS_PWRITEV :
?C: This symbol, if defined, indicates that the pwritev routine is
?C: available to perform vectored writes on a file descriptor at a
?C: given offset.
?C:.
?H:#$d_pwritev HAS_PWRITEV  /**/
?H:.
?LINT:set
 d_pwritev
: see if pwritev exists
set pwritev d_pwritev
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pwritev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_time.U,v 3.0.1.2 1995/07/25 14:07:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_time.U,v $
```

```
?RCS: Revision 3.0.1.2  1995/07/25  14:07:43  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:16:38  ram
?RCS: patch36: now uses new Typedef unit to compute type information (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Maybe <sys/types.h> should be included?
?X:INC: i_systypes
?MAKE:d_time timetype: Csym Setvar Findhdr Myread Typedef
?MAKE: -pick
 add $@ %<
?S:d_time:
?S: This variable conditionally defines the HAS_TIME symbol, which indicates
?S: that the time() routine exists.  The time() routine is normally
?S: provided on UNIX systems.
?S:.
?S:timetype:
?S: This variable holds the type returned by time(). It can be long,
?S: or time_t on BSD sites (in which case <sys/types.h> should be
?S: included). Anyway, the type Time_t should be used.
?S:.
?C:HAS_TIME (TIMER):
?C: This symbol, if defined, indicates that the time() routine exists.
?C:.
?C:Time_t (TIMETYPE):
?C: This symbol holds the type returned by time(). It can be long,
?C: or time_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_time HAS_TIME  /**/
?H:#define Time_t $timetype  /* Time type */
?H:.
?LINT:set d_time
: see if time exists
echo " "
?X: MPE/iX needs this protection of hint values.
?X: See d_sterror.U for more explanation.
if test "X$d_time" = X -o X"$timetype" = X; then
   if set time val -f d_time; eval $csym; $val;
 then
  echo 'time() found.' >&4
  val="$define"
  rp="What is the type returned by time() on this system?"
  set time_t timetype long stdio.h sys/types.h
  eval $typedef_ask
```

```
  else
  echo 'time() not found, hope that will do.' >&4
  val="$undef"
  timetype='int';
  fi
  set d_time
  eval $setvar
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/d_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: byteorder.U,v 3.0.1.2 1997/02/28 15:24:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: byteorder.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:24:55  ram
?RCS: patch61: no longer ask the user if the test runs ok
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:58  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:byteorder: cat Myread Oldconfig Loc Compile rm_try run \
 multiarch uvtype uvsize i_stdlib
?MAKE: -pick add $@ %<
?S:byteorder:
?S: This
 variable holds the byte order in a UV. In the following,
?S: larger digits indicate more significance.  The variable byteorder
?S: is either 4321 on a big-endian machine, or 1234 on a little-endian,
?S: or 87654321 on a Cray ... or 3412 with weird order !
?S:.
?C:BYTEORDER:
?C: This symbol holds the hexadecimal constant defined in byteorder,
?C: in a UV, i.e. 0x1234 or 0x4321 or 0x12345678, etc...
?C: If the compiler supports cross-compiling or multiple-architecture
?C: binaries, use compiler-defined macros to
```

```
?C: determine the byte order.
?C:.
?H:?%<:#if defined(MULTIARCH)
?H:?%<:#  ifdef __LITTLE_ENDIAN__
?H:?%<:#    if LONGSIZE == 4
?H:?%<:#      define BYTEORDER 0x1234
?H:?%<:#    else
?H:?%<:#      if LONGSIZE == 8
?H:?%<:#        define BYTEORDER 0x12345678
?H:?%<:#      endif
?H:?%<:#    endif
?H:?%<:#  else
?H:?%<:#    ifdef __BIG_ENDIAN__
?H:?%<:#      if LONGSIZE == 4
?H:?%<:#        define BYTEORDER 0x4321
?H:?%<:#      else
?H:?%<:#        if LONGSIZE
 == 8
?H:?%<:#          define BYTEORDER 0x87654321
?H:?%<:#        endif
?H:?%<:#      endif
?H:?%<:#    endif
?H:?%<:#  endif
?H:?%<:#else
?H:?%<:#define BYTEORDER 0x$byteorder /* large digits for MSB */
?H:?%<:#endif
?H:.
?T:xxx_prompt
?F:!try
: check for ordering of bytes in a UV
echo " "
case "$multiarch" in
*$define*)
 $cat <<EOM
You seem to be doing a multiarchitecture build,
skipping the byteorder check.

EOM
 byteorder='ffff'
 ;;
*)
 case "$byteorder" in
 ")
  $cat <<'EOM'
In the following, larger digits indicate more significance.  A big-endian
machine like a Pyramid or a Motorola 680?0 chip will come out to 4321. A
little-endian machine like a Vax or an Intel 80?86 chip would be 1234. Other
machines may have weird orders like 3412.  A Cray will report 87654321,
```

```
an Alpha will report 12345678. If the test program works the default is
probably right.
I'm now running the test program...
EOM
  $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include
 <sys/types.h>
typedef $uvtype UV;
int main()
{
 int i;
 union {
  UV l;
  char c[$uvsize];
 } u;

 if ($uvsize > 4)
  u.l = (((UV)0x08070605) << 32) | (UV)0x04030201;
 else
  u.l = (UV)0x04030201;
 for (i = 0; i < $uvsize; i++)
  printf("%c", u.c[i]+'0');
 printf("\n");
 exit(0);
}
EOCP
  xxx_prompt=y
  set try
  if eval $compile && $run ./try > /dev/null; then
   dflt=`$run ./try`
   case "$dflt" in
   [1-4][1-4][1-4][1-4]|12345678|87654321)
    echo "(The test program ran ok.)"
    echo "byteorder=$dflt"
    xxx_prompt=n
   ;;
   ????|????????) echo "(The test program ran ok.)" ;;
   *) echo "(The test program didn't run right for some reason.)" ;;
   esac
  else
   dflt='4321'
   cat <<'EOM'
(I can't seem to compile the test program.  Guessing big-endian...)
```

```
EOM
  fi
  case "$xxx_prompt" in
  y)
   rp="What is the order of bytes in $uvtype?"
   . ./myread
   byteorder="$ans"
   ;;
  *) byteorder=$dflt
   ;;
  esac
  ;;
 esac
 $rm_try
 ;;
esac
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/byteorder.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:multiarch: osname
?MAKE: -pick add $@ %<
?S:multiarch:
?S: This variable conditionally defines the MULTIARCH symbol
?S: which signifies the presence of multiplatform files.
?S: This is normally set by hints files.
?S:.
?C:MULTIARCH:
?C: This symbol, if defined, signifies that the build
?C: process will produce some binary files that are going to be
?C: used in a cross-platform environment.  This is the case for
?C: example with the NeXT "fat" binaries that contain executables
?C: for
 several CPUs.
?C:.
```

```
?H:#$multiarch MULTIARCH  /**/
?H:.
: Check if is a multiplatform env
case "$osname" in
darwin) multiarch="$define" ;;
esac
case "$multiarch" in
"|[nN]*) multiarch="$undef" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/multiarch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nearbyint: Inlibc
?MAKE: -pick add $@ %<
?S:d_nearbyint:
?S: This variable conditionally defines HAS_NEARBYINT if nearbyint()
?S: is available to return the integral value closest to (according to
?S: the current rounding mode) to x.
?S:.
?C:HAS_NEARBYINT:
?C: This symbol, if defined, indicates that the nearbyint routine is
?C: available to return the integral value closest to (according to
?C: the current rounding mode) to x.
?C:.
?H:#$d_nearbyint HAS_NEARBYINT  /**/
?H:.
?LINT:set d_nearbyint
: see if nearbyint exists
set nearbyint d_nearbyint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nearbyint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Getfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Getfile.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:01:06  ram
?RCS: patch61: getfile script now begins with "startsh"
?RCS:
?RCS: Revision 3.0.1.6  1995/02/15  14:11:00  ram
?RCS: patch51: was not working if ~'s allowed with d_portable on (WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:11:25  ram
?RCS: patch45: added support for escaping answers to skip various checks
?RCS: patch45: modified message issued after file expansion
?RCS:
?RCS: Revision
 3.0.1.4  1994/10/29  15:53:19  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:23:36  ram
?RCS: patch23: getfile could be confused by file name in "locate" requests
?RCS: patch23: new 'p' directive to assume file is in people's path (WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:01:31  ram
?RCS: patch16: added metalint hint on changed 'ans' variable
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:46:27  ram
?RCS: patch10: minor format problems and misspellings fixed
?RCS: patch10: now performs from package dir and not from UU subdir
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to get a file name and make some sanity checks. Optionally, a ~name
?X: expansion is performed.
?X:
?X: To use this unit, $rp and $dflt must hold the question and the
?X: default answer, which will be passed as-is
 to the myread script.
?X: The $fn variable must hold the file type (f or d, for file/directory).
?X: If $gfpth is set to a list of space-separated list of directories,
?X: those are prefixes for the filename.  Unless $gfpthkeep is set to 'y',
?X: gfpth is cleared on return from Getfile.
?X:
?X: If it is followed by a ~, then ~name substitution will occur. Upon return,
?X: $ans is set with the filename value. If a / is specified, then only a full
?X: path name is accepted (but ~ substitution occurs before, if needed). The
?X: expanded path name is returned in that case.
```

```
?X:
?X: If a + is specified, the existence checks are skipped. This usually means
?X: the file/directory is under the full control of the program.
?X:
?X: If the 'n' (none) type is used, then the user may answer none.
?X: The 'e' (expand) switch may be used to bypass d_portable, expanding ~name.
?X:
?X: If the 'l' (locate) type is used, then it must end with a ':' and then a
?X: file name. If the answer is a directory,
 the file name will be appended
?X: before testing for file existence. This is useful in locate-style
?X: questions like "where is the active file?". In that case, one should
?X: use:
?X:
?X:   dflt='~news/lib'
?X:   fn='l~:active'
?X:   rp='Where is the active file?'
?X:   . ./getfile
?X:   active="$ans"
?X:
?X: If the 'p' (path) letter is specified along with 'l', then an answer
?X: without a leading / will be expected to be found in everyone's path.
?X:
?X: It is also possible to include a comma-separated list of items within
?X: parentheses to specify which items should be accepted as-is with no
?X: further checks. This is useful when for instance a full path is expected
?X: but the user may escape out via "magical" answers.
?X:
?X: If the answer to the question is 'none', then the existence checks are
?X: skipped and the empty string is returned.
?X:
?MAKE:Getfile: d_portable contains startsh Myread Filexp tr trnl
?MAKE: -pick add $@ %<
?V:ansexp:fn gfpth gfpthkeep
?F:./getfile
?T:tilde
 type what orig_rp orig_dflt fullpath already redo skip none_ok \
 value exp_file nopath_ok loc_file fp pf dir direxp
?LINT:change ans
?LINT:change gfpth
: now set up to get a file name
cat <<EOS >getfile
$startsh
EOS
cat <<'EOSC' >>getfile
tilde=''
fullpath=''
already=''
```

```
skip=''
none_ok=''
exp_file=''
nopath_ok=''
orig_rp="$rp"
orig_dflt="$dflt"
case "$gfpth" in
'') gfpth='.' ;;
esac

?X: Begin by stripping out any (...) grouping.
case "$fn" in
*\(*)
 : getfile will accept an answer from the comma-separated list
 : enclosed in parentheses even if it does not meet other criteria.
 expr "$fn" : '.*(\(.*\)).*' | $tr ',' $trnl >getfile.ok
 fn=`echo $fn | sed 's/(.*)//'`
 ;;
esac

?X: Catch up 'locate' requests early, so that we may strip the file name
?X: before looking at the one-letter commands, in case the file name contains
?X: one of them. Reported by Wayne Davison <davison@borland.com>.
case "$fn" in
*:*)
 loc_file=`expr $fn : '.*:\(.*\)'`
 fn=`expr $fn : '\(.*\):.*'`
 ;;
esac

case
 "$fn" in
*~*) tilde=true;;
esac
case "$fn" in
*/*) fullpath=true;;
esac
case "$fn" in
*+*) skip=true;;
esac
case "$fn" in
*n*) none_ok=true;;
esac
case "$fn" in
*e*) exp_file=true;;
esac
case "$fn" in
*p*) nopath_ok=true;;
```

```
esac

case "$fn" in
*f*) type='File';;
*d*) type='Directory';;
*l*) type='Locate';;
esac

what="$type"
case "$what" in
Locate) what='File';;
esac

case "$exp_file" in
")
 case "$d_portable" in
 "$define") ;;
 *) exp_file=true;;
 esac
 ;;
esac

cd ..
while test "$type"; do
 redo=''
 rp="$orig_rp"
 dflt="$orig_dflt"
 case "$tilde" in
 true) rp="$rp (~name ok)";;
 esac
 . UU/myread
?X: check for allowed escape sequence which may be accepted verbatim.
 if test -f UU/getfile.ok && \
  $contains "^$ans\$" UU/getfile.ok >/dev/null 2>&1
 then
  value="$ans"
  ansexp="$ans"
  break
 fi
 case "$ans" in
 none)
  value=''
  ansexp=''
  case "$none_ok" in
  true) type='';;
  esac
  ;;
 *)
```

```
 case "$tilde" in
 ") value="$ans"
  ansexp="$ans";;
 *)
  value=`UU/filexp $ans`
  case
$? in
  0)
   if test "$ans" != "$value"; then
    echo "(That expands to $value on this system.)"
   fi
   ;;
  *) value="$ans";;
  esac
  ansexp="$value"
  case "$exp_file" in
  ") value="$ans";;
  esac
  ;;
 esac
 case "$fullpath" in
 true)
?X: Perform all the checks on ansexp and not value since when d_portable
?X: is defined, the original un-expanded answer which is stored in value
?X: would lead to "non-existent" error messages whilst ansexp has been
?X: properly expanded. -- Fixed by Jan.Djarv@sa.erisoft.se (Jan Djarv)
?X: Always expand ~user if '/' was requested
  case "$ansexp" in
  /*) value="$ansexp" ;;
?X: Allow for c:/some/path
  [a-zA-Z]:/*) value="$ansexp" ;;
  *)
   redo=true
   case "$already" in
   true)
   echo "I shall only accept a full path name, as in /bin/ls." >&4
   echo "Use a ! shell escape if you wish to check pathnames." >&4
    ;;
   *)
   echo "Please give a full path name, starting with slash." >&4
    case "$tilde"
in
    true)
   echo "Note that using ~name is ok provided it expands well." >&4
     already=true
     ;;
    esac
   esac
```

```
  ;;
 esac
 ;;
esac
case "$redo" in
")
 case "$type" in
 File)
  for fp in $gfpth; do
   if test "X$fp" = X.; then
       pf="$ansexp"
   else
       pf="$fp/$ansexp"
   fi
   if test -f "$pf"; then
    type="
   elif test -r "$pf" || (test -h "$pf") >/dev/null 2>&1
   then
    echo "($value is not a plain file, but that's ok.)"
    type="
   fi
   if test X"$type" = X; then
       value="$pf"
       break
   fi
  done
  ;;
 Directory)
  for fp in $gfpth; do
   if test "X$fp" = X.; then
       dir="$ans"
       direxp="$ansexp"
   else
       dir="$fp/$ansexp"
       direxp="$fp/$ansexp"
   fi
   if test -d "$direxp"; then
    type="
    value="$dir"
    break
   fi
  done
  ;;
 Locate)
  if test -d "$ansexp"; then
   echo "(Looking for $loc_file in directory
$value.)"
   value="$value/$loc_file"
```

```
    ansexp="$ansexp/$loc_file"
   fi
   if test -f "$ansexp"; then
    type="
   fi
   case "$nopath_ok" in
   true) case "$value" in
    */*) ;;
    *) echo "Assuming $value will be in people's path."
     type="
     ;;
    esac
    ;;
   esac
   ;;
  esac

  case "$skip" in
  true) type=";
  esac

  case "$type" in
  ") ;;
  *)
   if test "$fastread" = yes; then
    dflt=y
   else
    dflt=n
   fi
   rp="$what $value doesn't exist.  Use that name anyway?"
   . UU/myread
   dflt="
   case "$ans" in
   y*) type=";;
   *) echo " ";;
   esac
   ;;
  esac
  ;;
 esac
 ;;
esac
done
cd UU
ans="$value"
rp="$orig_rp"
dflt="$orig_dflt"
rm -f getfile.ok
```

```
test "X$gfpthkeep" != Xy && gfpth=""
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Getfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_drand48_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_drand48_r drand48_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_drand48_r:
?S: This variable conditionally defines the HAS_DRAND48_R symbol,
?S: which indicates to the C program that the drand48_r()
?S: routine is available.
?S:.
?S:drand48_r_proto:
?S: This variable encodes the prototype of drand48_r.
?S: It is zero if d_drand48_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_drand48_r
?S: is defined.
?S:.
?C:HAS_DRAND48_R:
?C: This symbol, if defined, indicates that the drand48_r routine
?C: is available to drand48 re-entrantly.
?C:.
?C:DRAND48_R_PROTO:
?C: This
 symbol encodes the prototype of drand48_r.
?C: It is zero if d_drand48_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_drand48_r
?C: is defined.
?C:.
?H:#$d_drand48_r HAS_DRAND48_R /**/
?H:#define DRAND48_R_PROTO $drand48_r_proto /**/
?H:.
?T:try hdrs d_drand48_r_proto
: see if drand48_r exists
set drand48_r d_drand48_r
eval $inlibc
case "$d_drand48_r" in
```

```
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_drand48_r_proto:$usethreads" in
 ":define") d_drand48_r_proto=define
  set d_drand48_r_proto drand48_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_drand48_r_proto" in
 define)
 case "$drand48_r_proto" in
 "|0) try='int drand48_r(struct drand48_data*, double*);'
 ./protochk "$extern_C $try" $hdrs && drand48_r_proto=I_ST ;;
 esac
 case "$drand48_r_proto" in
 "|0) d_drand48_r=undef
  drand48_r_proto=0
  echo "Disabling drand48_r, cannot determine prototype." >&4 ;;
 * ) case
 "$drand48_r_proto" in
  REENTRANT_PROTO*) ;;
  *) drand48_r_proto="REENTRANT_PROTO_$drand48_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "drand48_r has no prototype, not using it." >&4 ;;
  esac
  d_drand48_r=undef
  drand48_r_proto=0
  ;;
 esac
 ;;
*) drand48_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_drand48_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: vendorman1dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorman1dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorman1dir vendorman1direxp installvendorman1dir: man1dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorman1dir:
?S: This variable contains the name of the directory for man1
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: man1 pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorman1direxp:
?S: This variable is the ~name expanded version of vendorman1dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorman1dir=''
?S:installvendorman1dir:
?S: This variable is really the same as vendorman1direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorman1dir
: Set the vendorman1dir variables
case "$vendorprefix" in
'') vendorman1dir=''
 vendorman1direxp=''
 ;;
*) : determine where vendor-supplied manual pages go.
 case "$vendorman1dir" in
 '') dflt=`echo "$man1dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorman1dir ;;
 esac
 case "$dflt" in
 '|' ') dflt=none ;;
 esac
 fn=nd~+
```

```
 rp='Pathname for
 the vendor-supplied manual section 1 pages?'
 . ./getfile
 vendorman1dir="$ans"
 vendorman1direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorman1dir" = "X" && vendorman1dir=' '
prefixvar=vendorman1dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorman1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_localtime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS: Copyright (c) 2006,2007 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_localtime_r d_localtime_r_needs_tzset localtime_r_proto: Inlibc \
 cat run Protochk Hasproto i_systypes usethreads i_time i_systime \
 rm_try Compile extern_C i_stdlib i_unistd i_malloc
?MAKE: -pick add $@ %<
?S:d_localtime_r:
?S: This variable conditionally defines the HAS_LOCALTIME_R symbol,
?S: which indicates to the C program that the localtime_r()
?S: routine is available.
?S:.
?S:d_localtime_r_needs_tzset:
?S: This variable conditionally defines the LOCALTIME_R_NEEDS_TZSET
?S: symbol, which makes us call tzset before localtime_r()
?S:.
?S:localtime_r_proto:
?S: This
 variable encodes the prototype of localtime_r.
?S: It is zero if d_localtime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_localtime_r
?S: is defined.
?S:.
?C:HAS_LOCALTIME_R:
?C: This symbol, if defined, indicates that the localtime_r routine
?C: is available to localtime re-entrantly.
```

```
?C:.
?C:LOCALTIME_R_NEEDS_TZSET:
?C: Many libc's localtime_r implementations do not call tzset,
?C: making them differ from localtime(), and making timezone
?C: changes using \$ENV{TZ} without explicitly calling tzset
?C: impossible. This symbol makes us call tzset before localtime_r
?C:.
?H:?%<:#$d_localtime_r_needs_tzset LOCALTIME_R_NEEDS_TZSET /**/
?H:?%<:#ifdef LOCALTIME_R_NEEDS_TZSET
?H:?%<:#define L_R_TZSET tzset(),
?H:?%<:#else
?H:?%<:#define L_R_TZSET
?H:?%<:#endif
?H:.
?W:%<:L_R_TZSET
?C:L_R_TZSET:
?C: If localtime_r() needs tzset, it is defined in this define
?C:.
?C:LOCALTIME_R_PROTO:
?C: This symbol encodes the prototype of localtime_r.
?C: It is
 zero if d_localtime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_localtime_r
?C: is defined.
?C:.
?H:#$d_localtime_r HAS_LOCALTIME_R /**/
?H:#define LOCALTIME_R_PROTO $localtime_r_proto /**/
?H:.
?T:try hdrs d_localtime_r_proto
?F:!try
: see if localtime_r exists
set localtime_r d_localtime_r
eval $inlibc
case "$d_localtime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_localtime_r_proto:$usethreads" in
 ":define") d_localtime_r_proto=define
  set d_localtime_r_proto localtime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_localtime_r_proto" in
 define)
 case "$localtime_r_proto" in
 "|0) try='struct tm* localtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && localtime_r_proto=S_TS ;;
 esac
```

```
 case "$localtime_r_proto" in
 "|0) try='int localtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && localtime_r_proto=I_TS ;;
 esac
 case "$localtime_r_proto"
 in
 "|0) d_localtime_r=undef
  localtime_r_proto=0
  echo "Disabling localtime_r, cannot determine prototype." >&4 ;;
 * ) case "$localtime_r_proto" in
  REENTRANT_PROTO*) ;;
  *) localtime_r_proto="REENTRANT_PROTO_$localtime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "localtime_r has no prototype, not using it." >&4 ;;
  esac
  d_localtime_r=undef
  localtime_r_proto=0
  ;;
 esac
 ;;
*) localtime_r_proto=0
 ;;
esac

: see if localtime_r calls tzset
case "$localtime_r_proto" in
REENTRANT_PROTO*)
 $cat >try.c <<EOCP
/*  Does our libc's localtime_r call tzset ?
*  return 0 if so, 1 otherwise.
*/
#$i_systypes I_SYS_TYPES
#$i_unistd I_UNISTD
#$i_time I_TIME
#$i_stdlib I_STDLIB
#$i_malloc I_MALLOC
#ifdef I_SYS_TYPES
#  include <sys/types.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#ifdef I_TIME
#  include <time.h>
```

```
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>
#ifdef I_MALLOC
#  include <malloc.h>
#endif
int
 main()
{
   int result = 0;
   time_t t = time(0L);
   char w_tz[]="TZ" "=GMT+5",
  e_tz[]="TZ" "=GMT-5",
 *tz_e = (char*)malloc(16),
 *tz_w = (char*)malloc(16);
   struct tm tm_e, tm_w;
   memset(&tm_e,'\0',sizeof(struct tm));
   memset(&tm_w,'\0',sizeof(struct tm));
   strcpy(tz_e,e_tz);
   strcpy(tz_w,w_tz);

   putenv(tz_e);
   localtime_r(&t, &tm_e);

   putenv(tz_w);
   localtime_r(&t, &tm_w);

   if( memcmp(&tm_e, &tm_w, sizeof(struct tm)) == 0 )
 result = 1;

   free(tz_e);free(tz_w);
   return result;
}
EOCP
 set try
 if eval $compile; then
     if $run ./try; then
  d_localtime_r_needs_tzset=undef;
     else
  d_localtime_r_needs_tzset=define;
     fi;
 else
     d_localtime_r_needs_tzset=undef;
 fi;
    ;;
 *)
```

```
    d_localtime_r_needs_tzset=undef;
    ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_localtime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nblock_io.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:17:14  ram
?RCS: patch61: simplify here document for shells that can't handle them well
?RCS: patch61: force use of "startsh" at the head of the generated script
?RCS: patch61: added new files to the ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:13:22  ram
?RCS: patch56: created
?RCS:
?X:
?X: Simplify here document for shells that can't handle them well.
?X: (Problem reported on FreeBSD; it's unclear if this helps.)  --AD
?X:
?MAKE:o_nonblock
 eagain rd_nodata d_eofnblk: cat rm_try +cc +ccflags +ldflags \
 d_open3 h_sysfile h_fcntl signal_t hint Oldconfig Setvar startsh Warn
?MAKE: -pick add $@ %<
?S:o_nonblock:
?S: This variable bears the symbol value to be used during open() or fcntl()
?S: to turn on non-blocking I/O for a file descriptor. If you wish to switch
?S: between blocking and non-blocking, you may try ioctl(FIOSNBIO) instead,
?S: but that is only supported by some devices.
?S:.
?S:eagain:
?S: This variable bears the symbolic errno code set by read() when no
?S: data is present on the file and non-blocking I/O was enabled (otherwise,
?S: read() blocks naturally).
?S:.
?S:rd_nodata:
```

```
?S: This variable holds the return code from read() when no data is
?S: present. It should be -1, but some systems return 0 when O_NDELAY is
?S: used, which is a shame because you cannot make the difference between
?S: no data and an EOF.. Sigh!
?S:.
?S:d_eofnblk:
?S: This variable conditionally defines EOF_NONBLOCK
 if EOF can be seen
?S: when reading from a non-blocking I/O source.
?S:.
?C:VAL_O_NONBLOCK:
?C: This symbol is to be used during open() or fcntl(F_SETFL) to turn on
?C: non-blocking I/O for the file descriptor. Note that there is no way
?C: back, i.e. you cannot turn it blocking again this way. If you wish to
?C: alternatively switch between blocking and non-blocking, use the
?C: ioctl(FIOSNBIO) call instead, but that is not supported by all devices.
?C:.
?C:VAL_EAGAIN:
?C: This symbol holds the errno error code set by read() when no data was
?C: present on the non-blocking file descriptor.
?C:.
?C:RD_NODATA:
?C: This symbol holds the return code from read() when no data is present
?C: on the non-blocking file descriptor. Be careful! If EOF_NONBLOCK is
?C: not defined, then you can't distinguish between no data and EOF by
?C: issuing a read(). You'll have to find another way to tell for sure!
?C:.
?C:EOF_NONBLOCK:
?C: This symbol, if defined, indicates to the C program that a read() on
?C: a
 non-blocking file descriptor will return 0 on EOF, and not the value
?C: held in RD_NODATA (-1 usually, in that case!).
?C:.
?H:#define VAL_O_NONBLOCK $o_nonblock
?H:#define VAL_EAGAIN $eagain
?H:#define RD_NODATA $rd_nodata
?H:#$d_eofnblk EOF_NONBLOCK
?H:.
?F:!try !try.out !try.ret !try.err !mtry
?T:status
?LINT:use d_open3
: check for non-blocking I/O stuff
case "$h_sysfile" in
true) echo "#include <sys/file.h>" > head.c;;
*)
 case "$h_fcntl" in
 true) echo "#include <fcntl.h>" > head.c;;
 *) echo "#include <sys/fcntl.h>" > head.c;;
```

```
 esac
 ;;
esac
echo " "
echo "Figuring out the flag used by open() for non-blocking I/O..." >&4
case "$o_nonblock" in
")
 $cat head.c > try.c
 $cat >>try.c <<'EOCP'
int main() {
#ifdef O_NONBLOCK
 printf("O_NONBLOCK\n");
 exit(0);
#endif
#ifdef O_NDELAY
 printf("O_NDELAY\n");
 exit(0);
#endif
?X: Stevens "Advanced Programming in the UNIX Environment" page 364 mentions
?X: the FNDELAY symbol, used in 4.33BSD (source: Paul Marquess).
#ifdef FNDELAY
 printf("FNDELAY\n");
 exit(0);
#endif
 exit(0);
}
EOCP
 if
 $cc $ccflags $ldflags -o try try.c >/dev/null 2>&1; then
  o_nonblock=`./try`
  case "$o_nonblock" in
  ") echo "I can't figure it out, assuming O_NONBLOCK will do.";;
  *) echo "Seems like we can use $o_nonblock.";;
  esac
 else
  echo "(I can't compile the test program; pray O_NONBLOCK is right!)"
 fi
 ;;
*) echo "Using $hint value $o_nonblock.";;
esac
$rm_try

echo " "
echo "Let's see what value errno gets from read() on a $o_nonblock file..." >&4
case "$eagain" in
")
 $cat head.c > try.c
 $cat >>try.c <<EOCP
```

```
#include <errno.h>
#include <sys/types.h>
#include <signal.h>
#define MY_O_NONBLOCK $o_nonblock
extern int errno;
$signal_t blech(x) int x; { exit(3); }
EOCP
 $cat >> try.c <<'EOCP'
int main()
{
 int pd[2];
 int pu[2];
 char buf[1];
 char string[100];

 pipe(pd); /* Down: child -> parent */
 pipe(pu); /* Up: parent -> child */
 if (0 != fork()) {
  int ret;
  close(pd[1]); /* Parent reads from pd[0] */
  close(pu[0]); /*
 Parent writes (blocking) to pu[1] */
  if (-1 == fcntl(pd[0], F_SETFL, MY_O_NONBLOCK))
   exit(1);
  signal(SIGALRM, blech);
  alarm(5);
  if ((ret = read(pd[0], buf, 1)) > 0) /* Nothing to read! */
   exit(2);
  sprintf(string, "%d\n", ret);
  write(2, string, strlen(string));
  alarm(0);
#ifdef EAGAIN
  if (errno == EAGAIN) {
   printf("EAGAIN\n");
   goto ok;
  }
#endif
#ifdef EWOULDBLOCK
  if (errno == EWOULDBLOCK)
   printf("EWOULDBLOCK\n");
#endif
 ok:
  write(pu[1], buf, 1); /* Unblocks child, tell it to close our pipe */
  sleep(2);    /* Give it time to close our pipe */
  alarm(5);
  ret = read(pd[0], buf, 1); /* Should read EOF */
  alarm(0);
  sprintf(string, "%d\n", ret);
```

```
 write(3, string, strlen(string));
 exit(0);
 }

 close(pd[0]);   /* We write to pd[1] */
 close(pu[1]);   /* We read from pu[0] */
 read(pu[0], buf, 1); /* Wait for parent to signal us we may continue */
 close(pd[1]);   /* Pipe pd is now fully closed! */
 exit(0);    /* Bye bye, thank you for playing!
 */
}
EOCP
 if $cc $ccflags $ldflags -o try try.c >/dev/null 2>&1; then
?X: Use script to avoid the possible 'alarm call' message
  echo "$startsh" >mtry
  echo "./try >try.out 2>try.ret 3>try.err || exit 4" >>mtry
  chmod +x mtry
  ./mtry >/dev/null 2>&1
  case $? in
  0) eagain=`$cat try.out`;;
  1) echo "Could not perform non-blocking setting!";;
  2) echo "I did a successful read() for something that was not there!";;
  3) echo "Hmm... non-blocking I/O does not seem to be working!";;
  *) echo "Something terribly wrong happened during testing.";;
  esac
  rd_nodata=`$cat try.ret`
  echo "A read() system call with no data present returns $rd_nodata."
  case "$rd_nodata" in
  0|-1) ;;
  *)
   echo "(That's peculiar, fixing that to be -1.)"
   rd_nodata=-1
   ;;
  esac
  case "$eagain" in
  ")
   echo "Forcing errno EAGAIN on read() with no data available."
   eagain=EAGAIN
   ;;
  *)
   echo "Your read() sets errno to $eagain when no data is available."
   ;;
  esac
  status=`$cat
 try.err`
  case "$status" in
  0) echo "And it correctly returns 0 to signal EOF.";;
  -1) echo "But it also returns -1 to signal EOF, so be careful!";;
```

```
  *) echo "However, your read() returns '$status' on EOF??";;
  esac
  val="$define"
  if test "$status" = "$rd_nodata"; then
   ./warn "your read() can't distinguish between EOF and no data!"
   val="$undef"
  fi
 else
  echo "I can't compile the test program--assuming errno EAGAIN will do."
  eagain=EAGAIN
 fi
 set d_eofnblk
 eval $setvar
 ;;
*)
 echo "Using $hint value $eagain."
 echo "Your read() returns $rd_nodata when no data is present."
 case "$d_eofnblk" in
 "$define") echo "And you can see EOF because read() returns 0.";;
 "$undef") echo "But you can't see EOF status from read() returned value.";;
 *)
?X: Should not happen, but if it does, assume the worst!
  echo "(Assuming you can't see EOF status from read anyway.)"
  d_eofnblk=$undef
  ;;
 esac
 ;;
esac
$rm_try head.c mtry
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nblock_io.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_munmap.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_munmap.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:22  ram
?RCS: patch15: created
?RCS:
```

```
?MAKE:d_munmap: Inlibc
?MAKE: -pick add $@ %<
?S:d_munmap:
?S: This variable conditionally defines HAS_MUNMAP if munmap() is
?S: available to unmap a region mapped by mmap().
?S:.
?C:HAS_MUNMAP:
?C: This symbol, if defined, indicates that the munmap system call is
?C: available to unmap a region, usually mapped by mmap().
?C:.
?H:#$d_munmap HAS_MUNMAP  /**/
?H:.
?LINT:set
 d_munmap
: see if munmap exists
set munmap d_munmap
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_munmap.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gidsign: Myread Typedef gidtype Compile run
?MAKE: -pick add $@ %<
?S:gidsign:
?S: This variable contains the signedness of a gidtype.
?S: 1 for unsigned, -1 for signed.
?S:.
?C:Gid_t_sign:
?C: This symbol holds the signedness of a Gid_t.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define Gid_t_sign $gidsign  /* GID sign */
?H:.
?T:yyy zzz
?F:!try
: Check if GID is signed
echo " "
case "$gidtype" in
```

```
*_t) zzz="$gidtype" ;;
*)   zzz="gid"  ;;
esac
echo "Checking the sign of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include
 <stdio.h>
int main() {
 $gidtype foo = -1;
 if (foo < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set try
if eval $compile; then
 yyy=`$run ./try`
 case "$yyy" in
 ") gidsign=1
  echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) gidsign=$yyy
  case "$gidsign" in
   1) echo "Your $zzz is unsigned." ;;
  -1) echo "Your $zzz is signed."   ;;
  esac
  ;;
 esac
else
 gidsign=1
 echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidsign.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpclass: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_fpclass:
?S: This variable conditionally defines the HAS_FPCLASS symbol, which
?S: indicates to the C program that the fpclass() routine is available.
?S:.
?C:HAS_FPCLASS:
?C: This symbol, if defined, indicates that the fpclass routine is
?C: available to classify doubles.  Available for example in Solaris/SVR4.
?C: The returned values are defined in <ieeefp.h> and are:
?C:
?C: FP_SNAN  signaling NaN
?C: FP_QNAN  quiet NaN
?C: FP_NINF  negative infinity
?C: FP_PINF  positive infinity
?C: FP_NDENORM negative denormalized non-zero
?C: FP_PDENORM positive denormalized non-zero
?C: FP_NZERO negative zero
?C: FP_PZERO positive zero
?C: FP_NNORM negative normalized
 non-zero
?C: FP_PNORM positive normalized non-zero
?C:.
?H:#$d_fpclass HAS_FPCLASS  /**/
?H:.
?LINT:set d_fpclass
: see if fpclass exists
set fpclass d_fpclass
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclass.U
No license file was found, but licenses were detected in source scan.

```
*  You may redistribute only under the terms of the Artistic Licence,
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/Jmake.tmpl
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mbstowcs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_mbstowcs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mbstowcs: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbstowcs:
?S: This variable conditionally defines the HAS_MBSTOWCS symbol, which
?S: indicates to the C program that the mbstowcs() routine is available
?S: to convert a multibyte string into a wide character string.
?S:.
?C:HAS_MBSTOWCS (MBSTOWCS):
?C: This symbol, if defined, indicates
 that the mbstowcs routine is
?C: available to convert a multibyte string into a wide character string.
?C:.
?H:#$d_mbstowcs HAS_MBSTOWCS  /**/
?H:.
?LINT:set d_mbstowcs
: see if mbstowcs exists
set mbstowcs d_mbstowcs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mbstowcs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pread.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pread.U,v $
?RCS:
?MAKE:d_pread: Inlibc
?MAKE: -pick add $@ %<
?S:d_pread:
?S: This variable conditionally defines the HAS_PREAD symbol, which
?S: indicates to the C program that the pread() routine is available.
?S:.
?C:HAS_PREAD :
?C: This symbol, if defined, indicates that the pread routine is
?C: available to perform reads on a file descriptor at a given offset.
```

```
?C:.
?H:#$d_pread HAS_PREAD  /**/
?H:.
?LINT:set d_pread
: see if pread exists
set
 pread d_pread
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_time.U,v 3.0 1993/08/18 12:08:45 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_time.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit finds which "time" include to use. If 'timezone' is used by the
?X: program, we also try to find which header should be included. Eventually,
?X: we look for <sys/select.h> if I_SYSSELECT is used, to get struct timeval.
?X:
?MAKE:i_time i_systime i_systimek timeincl d_tm_tm_zone d_tm_tm_gmtoff: \
 Compile cat \
 contains rm_try echo n
 c +i_sysselct Findhdr Hasfield i_stdlib
?MAKE: -pick add $@ %<
?S:i_time:
?S: This variable unconditionally defines I_TIME, which indicates
?S: to the C program that it should include <time.h>.
?S:.
?S:i_systime:
?S: This variable conditionally defines I_SYS_TIME, which indicates
?S: to the C program that it should include <sys/time.h>.
?S:.
?S:i_systimek:
?S: This variable conditionally defines I_SYS_TIME_KERNEL, which
?S: indicates to the C program that it should include <sys/time.h>
```

```
?S: with KERNEL defined.
?S:.
?S:timeincl:
?S: This variable holds the full path of the included time header(s).
?S:.
?S:d_tm_tm_zone:
?S: This variable conditionally defines HAS_TM_TM_ZONE, which indicates
?S: to the C program that the struct tm has the tm_zone field.
?S:.
?S:d_tm_tm_gmtoff:
?S: This variable conditionally defines HAS_TM_TM_GMTOFF, which indicates
?S: to the C program that the struct tm has the tm_gmtoff field.
?S:.
?C:I_TIME (USE_TIME_H):
?C: This symbol is always defined, and indicates
 to the C program that
?C: it should include <time.h>.
?C:.
?C:I_SYS_TIME (I_SYSTIME USE_SYS_TIME_H NO_TIME_WITH_SYS_TIME):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h>.
?C:.
?C:I_SYS_TIME_KERNEL (I_SYSTIMEKERNEL):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h> with KERNEL defined.
?C:.
?C:HAS_TM_TM_ZONE:
?C: This symbol, if defined, indicates to the C program that
?C: the struct tm has a tm_zone field.
?C:.
?C:HAS_TM_TM_GMTOFF:
?C: This symbol, if defined, indicates to the C program that
?C: the struct tm has a tm_gmtoff field.
?C:.
?H:#$i_time I_TIME  /**/
?H:#$i_systime I_SYS_TIME  /**/
?H:#$i_systimek I_SYS_TIME_KERNEL  /**/
?H:#$d_tm_tm_zone HAS_TM_TM_ZONE  /**/
?H:#$d_tm_tm_gmtoff HAS_TM_TM_GMTOFF  /**/
?H:.
?W::timezone
?T:xselect flags sysselect s_timeval s_timezone
?LINT:change i_sysselct
?LINT:set d_tm_tm_zone
?LINT:set d_tm_tm_gmtoff
: see if we should include sys/time.h
echo
```

```
 " "
i_time='define'
if test "X$timeincl" = X; then
 echo "Testing to see if we should include <sys/time.h>." >&4
 $echo $n "I'm now running the test program...$c"
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <time.h>
#ifdef I_SYSTIME
#ifdef SYSTIMEKERNEL
#define KERNEL
#endif
#include <sys/time.h>
#endif
#ifdef I_SYSSELECT
#include <sys/select.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
 struct tm foo;
#ifdef S_TIMEVAL
 struct timeval bar;
#endif
#ifdef S_TIMEZONE
 struct timezone tzp;
#endif
 if (foo.tm_sec == foo.tm_sec)
  exit(0);
#ifdef S_TIMEVAL
 if (bar.tv_sec == bar.tv_sec)
  exit(0);
#endif
 exit(1);
}
EOCP
 flags=''
@if I_SYSSELECT
 if $contains 'timeval.*{' `./findhdr sys/select.h` >/dev/null 2>&1; then
  xselect='-DI_SYSSELECT'
 else
  xselect=''
 fi
@end
@if timezone
```

```
 for s_timezone in '-DS_TIMEZONE' ''; do
@else
 s_timezone=''
@end
?X: Every package is given a try with 'struct timeval'
@if I_SYSSELECT
 for sysselect in $xselect
 ''; do
@else
 sysselect=''
@end
 for s_timeval in '-DS_TIMEVAL' ''; do
 for i_systimek in '' '-DSYSTIMEKERNEL'; do
 for i_systime in '-DI_SYSTIME' ''; do
  case "$flags" in
  '') $echo $n ".$c"
   set try $i_systime $i_systimek $sysselect $s_timeval $s_timezone
   if eval $compile; then
    set X $i_systime $i_systimek $sysselect $s_timeval
    shift
    flags="$*"
    echo " "
    $echo $n "Succeeded with $flags$c"
   fi
   ;;
  esac
 done
 done
 done
@if I_SYSSELECT
 done
@end
@if timezone
 done
@end
 timeincl=''
 echo " "
 case "$flags" in
 *SYSTIMEKERNEL*) i_systimek="$define"
  timeincl=`./findhdr sys/time.h`
  echo "We'll include <sys/time.h> with KERNEL defined." >&4;;
 *) i_systimek="$undef";;
 esac
 case "$flags" in
 *I_SYSTIME*) i_systime="$define"
  timeincl=`./findhdr sys/time.h`" $timeincl"
  echo "We'll include <sys/time.h>." >&4;;
 *) i_systime="$undef";;
```

```
 esac
@if I_SYSSELECT
 case "$flags" in
 *I_SYSSELECT*) i_sysselct="$define"
  timeincl=`./findhdr sys/select.h`"
 $timeincl"
  echo "We'll also include <sys/select.h> to get struct timeval." >&4;;
 *) case "$i_sysselct" in
  ") i_sysselct="$undef";;
  esac
 esac
@end
 $rm_try
fi
: see if struct tm knows about tm_zone
case "$i_systime$i_time" in
*$define*)
	echo " "
	echo "Checking to see if your struct tm has tm_zone field..." >&4
	set d_tm_tm_zone tm tm_zone $i_systime sys/time.h $i_time time.h
	eval $hasfield
	;;
*)	val="$undef"
	set d_tm_tm_zone
	eval $setvar
	;;
esac
case "$d_tm_tm_zone" in
"$define")	echo "Yes, it does."	;;
*)		echo "No, it doesn't." ;;
esac
: see if struct tm knows about tm_gmtoff
case "$i_systime$i_time" in
*$define*)
	echo " "
	echo "Checking to see if your struct tm has tm_gmtoff field..." >&4
	set d_tm_tm_gmtoff tm tm_gmtoff $i_systime sys/time.h $i_time time.h
	eval $hasfield
	;;
*)	val="$undef"
	set d_tm_tm_gmtoff
	eval $setvar

	;;
esac
case "$d_tm_tm_gmtoff" in
"$define")	echo "Yes, it does."	;;
*)		echo "No, it doesn't." ;;
```

```
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/i_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorman3dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999-2000, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorman3dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorman3dir vendorman3direxp installvendorman3dir: man3dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorman3dir:
?S: This variable contains the name of the directory for man3
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: man3 pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorman3direxp:
?S: This variable is the ~name expanded version of vendorman3dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorman3dir="
?S:installvendorman3dir:
?S: This variable is really the same as vendorman3direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorman3dir
: Set the vendorman3dir variables
case "$vendorprefix" in
```

```
") vendorman3dir="
 vendorman3direxp="
 ;;
*) : determine where vendor-supplied module manual pages go.
 case "$vendorman3dir" in
 ") dflt=`echo "$man3dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorman3dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=nd~+
 rp='Pathname
 for the vendor-supplied manual section 3 pages?'
 . ./getfile
 vendorman3dir="$ans"
 vendorman3direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorman3dir" = "X" && vendorman3dir=' '
prefixvar=vendorman3dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorman3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_finitel: Inlibc
?MAKE: -pick add $@ %<
?S:d_finitel:
?S: This variable conditionally defines the HAS_FINITEL symbol, which
?S: indicates to the C program that the finitel() routine is available.
?S:.
?C:HAS_FINITEL:
?C: This symbol, if defined, indicates that the finitel routine is
?C: available to check whether a long double is finite
?C: (non-infinity non-NaN).
?C:.
?H:#$d_finitel HAS_FINITEL  /**/
?H:.
```

```
?LINT:set d_finitel
: see if finitel exists
set finitel d_finitel
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_finitel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Oldconfig.U,v 3.0.1.10 1997/02/28 15:06:39 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Oldconfig.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:06:39  ram
?RCS: patch61: added support for src.U
?RCS: patch61: new OSNAME define
?RCS: patch61: can now sense new OSes
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  13:40:51  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:04:18  ram
?RCS: patch54: config.sh reload logic now knows about new -K switch
?RCS: patch54: cleaned up and extended osvers for DEC
 OSF/1 (ADO)
?RCS: patch54: added MachTen detection (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:13:41  ram
?RCS: patch51: adapted osvers computation for AIX (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1995/01/30  14:27:15  ram
?RCS: patch49: unit Options.U now exports file optdef.sh, not a variable
?RCS: patch49: update code for myuname changed (WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:15:36  ram
?RCS: patch45: added quotes around the INITPROG variable (ADO)
?RCS: patch45: allows variable overriding after config file loading
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:57:05  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: merged with the version used for perl5's Configure (ADO)
```

```
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:24:17  ram
?RCS: patch23: added support for osf1 hints
?RCS: patch23: new support for solaris and i386 systems (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:05:02  ram
?RCS: patch16: added post-processing on myuname for Xenix targets
?RCS:
 patch16: message proposing config.sh defaults made consistent
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:32  ram
?RCS: patch10: force use of config.sh when -d option is used (WAD)
?RCS: patch10: complain about non-existent hint files (WAD)
?RCS: patch10: added Options dependency for fastread variable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit tries to remember what we did last time we ran Configure, mostly
?X: for the sake of setting defaults.
?X:
?MAKE:Oldconfig hint myuname osname osvers: Instruct Myread uname \
 Checkcc Mksymlinks run \
 sh awk sed test cat rm lns tr n c contains Loc Options Tr src trnl ln
?MAKE: -pick wipe $@ %<
?S:myuname:
?S: The output of 'uname -a' if available, otherwise the hostname.
?S: The whole thing is then lower-cased and slashes and single quotes are
?S: removed.
?S:.
?S:hint:
?S: Gives the type of hints used for previous answers. May be one of
?S: "default",
 "recommended" or "previous".
?S:.
?S:osname:
?S: This variable contains the operating system name (e.g. sunos,
?S: solaris, hpux, etc.).  It can be useful later on for setting
?S: defaults.  Any spaces are replaced with underscores.  It is set
?S: to a null string if we can't figure it out.
?S:.
?S:osvers:
?S: This variable contains the operating system version (e.g.
?S: 4.1.3, 5.2, etc.).  It is primarily used for helping select
?S: an appropriate hints file, but might be useful elsewhere for
?S: setting defaults.  It is set to '' if we can't figure it out.
?S: We try to be flexible about how much of the version number
```

```
?S: to keep, e.g. if 4.1.1, 4.1.2, and 4.1.3 are essentially the
?S: same for this package, hints files might just be os_4.0 or
?S: os_4.1, etc., not keeping separate files for each little release.
?S:.
?C:OSNAME:
?C: This symbol contains the name of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests
 from Configure are generally more reliable.
?C:.
?C:OSVERS:
?C: This symbol contains the version of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests from Configure are generally more reliable.
?C:.
?H:#define OSNAME "$osname"  /**/
?H:#define OSVERS "$osvers"  /**/
?H:.
?F:!config.sh
?T:tmp tmp_n tmp_c tmp_sh file
?T:xxxxfile xxxfile xxfile xfile hintfile newmyuname
?T:tans _ isesix INITPROG DJGPP
?D:osname="
?LINT:change n c sh
?LINT:extern targetarch
?LINT:extern hostarch
?LINT:change hostarch
?LINT:extern is_os2
: Try to determine whether config.sh was made on this system
case "$config_sh" in
")
?X: indentation wrong on purpose--RAM
?X: Leave a white space between first two '(' for ksh. The sub-shell is needed
?X: on some machines to avoid the error message when uname is not found; e.g.
?X: old SUN-OS 3.2 would not execute hostname in (uname -a || hostname). Sigh!
?X: Now not using a subshell but instead $test.
myuname=`$uname
 -a 2>/dev/null`
$test -z "$myuname" && myuname=`hostname 2>/dev/null`
# Downcase everything to avoid ambiguity.
# Remove slashes and single quotes so we can use parts of this in
# directory and file names.
# Remove newlines so myuname is sane to use elsewhere.
# tr '[A-Z]' '[a-z]' would not work in EBCDIC
# because the A-Z/a-z are not consecutive.
myuname=`echo $myuname | $sed -e "s,['/],,g" | \
 ./tr '[A-Z]' '[a-z]' | $tr $trnl ' '`
?X: Save the value we just computed to reset myuname after we get done here.
```

```
newmyuname="$myuname"
dflt=n
case "$knowitall" in
")
 if test -f ../config.sh; then
  if $contains myuname= ../config.sh >/dev/null 2>&1; then
   eval "`grep myuname= ../config.sh`"
  fi
  if test "X$myuname" = "X$newmyuname"; then
   dflt=y
  fi
 fi
 ;;
*) dflt=y;;
esac

@if {test -d ../hints}
: Get old answers from old config file if Configure was run on the
: same system, otherwise use the hints.
hint=default
cd ..
?X: Since we are now at the root of the source
 tree, we must use $src
?X: to access the sources and not $rsrc. See src.U for details...
if test -f config.sh; then
 echo " "
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . UU/myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it."
  mv config.sh config.sh.old
  myuname="$newmyuname"
  ;;
 *)  echo "Fetching default answers from your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  tmp_sh="$sh"
  . ./config.sh
  cp config.sh UU
  n="$tmp_n"
  c="$tmp_c"
  : Older versions did not always set $sh.  Catch re-use of such
  : an old config.sh.
  case "$sh" in
  ") sh="$tmp_sh" ;;
  esac
  hint=previous
  ;;
```

```
 esac
fi
. ./UU/checkcc
if test ! -f config.sh; then
 $cat <<EOM

First time through, eh?  I have some defaults handy for some systems
that need some extra help getting the Configure answers right:

EOM
 (cd $src/hints; ls -C *.sh) | $sed 's/\.sh/   /g' >&4
 dflt=''
 : Half the following guesses are probably wrong... If you have better
 : tests or hints,
 please send them to <MAINTLOC>
 : The metaconfig authors would also appreciate a copy...
 $test -f /irix && osname=irix
 $test -f /xenix && osname=sco_xenix
 $test -f /dynix && osname=dynix
 $test -f /dnix && osname=dnix
 $test -f /lynx.os && osname=lynxos
 $test -f /unicos && osname=unicos && osvers=`$uname -r`
 $test -f /unicosmk && osname=unicosmk && osvers=`$uname -r`
 $test -f /unicosmk.ar && osname=unicosmk && osvers=`$uname -r`
 $test -f /bin/mips && /bin/mips && osname=mips
 $test -d /usr/apollo/bin && osname=apollo
 $test -f /etc/saf/_sactab && osname=svr4
 $test -d /usr/include/minix && osname=minix && osvers=`$uname -r`
 $test -f /system/gnu_library/bin/ar.pm && osname=vos
 $test -f /sys/utilities/MultiView && osname=amigaos
 if $test -d /MachTen -o -d /MachTen_Folder; then
?X:  MachTen uname -a output looks like
?X:  xxx 4 0.0 Macintosh
?X:  MachTen /sbin/version output looks like
?X:  MachTen 4.0 Mon Aug 28 10:18:00 1995
?X:  MachTen 3.x had the 'version' command in /usr/etc/version.
  osname=machten
  if
 $test -x /sbin/version; then
   osvers=`/sbin/version | $awk '{print $2}' |
   $sed -e 's/[A-Za-z]$//'`
  elif $test -x /usr/etc/version; then
   osvers=`/usr/etc/version | $awk '{print $2}' |
   $sed -e 's/[A-Za-z]$//'`
  else
   osvers="$2.$3"
  fi
 fi
```

```
 $test -f /sys/posix.dll &&
  $test -f /usr/bin/what &&
  set X `/usr/bin/what /sys/posix.dll` &&
  $test "$3" = UWIN &&
  osname=uwin &&
  osvers="$5"

?X: If we have uname, we already computed a suitable uname -a output,
?X: and it lies in $myuname.
 if $test -f $uname; then
  set X $myuname
  shift

  case "$5" in
  fps*) osname=fps ;;
  mips*)
   case "$4" in
   umips) osname=umips ;;
   *) osname=mips ;;
   esac;;
  [23]100) osname=mips ;;
?X: Interactive Unix.
  i386*)
   tmp=`/bin/uname -X 2>/dev/null|awk '/3\.2v[45]/{ print $(NF) }'`
   if $test "$tmp" != "" -a "$3" = "3.2" -a -f '/etc/systemid'; then
    osname='sco'
    osvers=$tmp
   elif $test -f /etc/kconfig; then
    osname=isc
    if
 test "$lns" = "$ln -s"; then
     osvers=4
    elif $contains _SYSV3 /usr/include/stdio.h > /dev/null 2>&1 ; then
     osvers=3
    elif $contains _POSIX_SOURCE /usr/include/stdio.h > /dev/null 2>&1 ; then
     osvers=2
    fi
   fi
   tmp=''
   ;;
?X: MS-DOS djgpp uname -a output looks like:
?X: ms-dos xxx 6 22 pc
?X:  $1 is the "dos flavor" (need not be "ms-dos").
?X:  $2 is the node name
?X:  $3 and $4 are version/subversion
?X:  $5 is always "pc", but that might not be unique to DJGPP.
?X: (e.g. Solaris_x86 has $5 = i86pc, which doesn't actually conflict,
```

```
?X: but it's close enough that I can easily imagine other vendors also
?X: using variants of pc* in $5.)
?X:  The "DJGPP" environment variable is always set when djgpp is active.
  pc*)
   if test -n "$DJGPP"; then
    osname=dos
    osvers=djgpp
   fi
   ;;
  esac

  case "$1" in
  aix) osname=aix
?X: aix 4.1 uname -a output looks like
?X:  AIX  foo  1 4 000123456789
?X: where $4 is the major release number and $3 is the (minor)
 version.
?X: More detail on the version is available with the oslevel command.
?X: in 3.2.x, it output a string (see case statements below).  In 4.1,
?X: it puts out something like  4.1.1.0
   tmp=`( (oslevel) 2>/dev/null || echo "not found") 2>&1`
   case "$tmp" in
   # oslevel can fail with:
   # oslevel: Unable to acquire lock.
   *not\ found) osvers="$4"."$3" ;;
   '<3240'|'<>3240') osvers=3.2.0 ;;
   '=3240'|'>3240'|'<3250'|'<>3250') osvers=3.2.4 ;;
   '=3250'|'>3250') osvers=3.2.5 ;;
   *) osvers=$tmp;;
   esac
   ;;
  bitrig) osname=bitrig
   osvers="$3"
   ;;
  bsd386) osname=bsd386
   osvers=`$uname -r`
   ;;
  cygwin*) osname=cygwin
   osvers="$3"
   ;;
  *dc.osx) osname=dcosx
   osvers="$3"
   ;;
  dnix) osname=dnix
   osvers="$3"
   ;;
  domainos) osname=apollo
   osvers="$3"
```

```
  ;;
  dgux) osname=dgux
   osvers="$3"
   ;;
  dragonfly) osname=dragonfly
   osvers="$3"
   ;;
?X:  uname -a returns
?X:  DYNIX/ptx xxx 4.0 V4.1.2 i386
  dynixptx*) osname=dynixptx
   osvers=`echo
 "$4"|sed 's/^v//'`
   ;;
  freebsd) osname=freebsd
   osvers="$3" ;;
  genix) osname=genix ;;
?X: GNU/Hurd uname -a gives something like:
?X: GNU foo 0.3 GNU-Mach 1.4/Hurd-0.3 i386-AT386 GNU
?X: GNU gnu 0.3 GNUmach-1.2/Hurd-0.3 i386-AT386 GNU
?X: Note the hostname on the second one, which will fool Configure
?X: into using the SysV case!
  gnu) osname=gnu
   osvers="$3" ;;
?X: HP-UX uname -a gives something like
?X: HP-UX foobar B.10.20 A 9000/735 2016483812 two-user license
?X: Preserve the full 10.20 string instead of the previous plain '10'.
?X:  Thanks to Graham Barr.    --AD 6/30/1998
  hp*) osname=hpux
   osvers=`echo "$3" | $sed 's,.*\.\([0-9]*\.[0-9]*\),\1,'`
   ;;
  irix*) osname=irix
   case "$3" in
   4*) osvers=4 ;;
   5*) osvers=5 ;;
   *) osvers="$3" ;;
   esac
   ;;
  linux) osname=linux
   case "$3" in
   *) osvers="$3" ;;
   esac
   $test -f /system/lib/libandroid.so && osname=linux-android
   ;;
  MiNT) osname=mint
   ;;
  minix) osname=minix
   osvers=`$uname -r`
   ;;
```

```
 netbsd*)
osname=netbsd
  osvers="$3"
  ;;
 news-os) osvers="$3"
  case "$3" in
  4*) osname=newsos4 ;;
  *) osname=newsos ;;
  esac
  ;;
 nonstop-ux) osname=nonstopux ;;
 openbsd) osname=openbsd
  osvers="$3"
  ;;
 os2) osname=os2
  osvers="$4"
  ;;
 POSIX-BC | posix-bc ) osname=posix-bc
  osvers="$3"
  ;;
 powerux | power_ux | powermax_os | powermaxos | \
 powerunix | power_unix) osname=powerux
  osvers="$3"
  ;;
 qnx) osname=qnx
  osvers="$4"
  ;;
 solaris) osname=solaris
  case "$3" in
  5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
  *) osvers="$3" ;;
  esac
  ;;
 sunos) osname=sunos
  case "$3" in
  5*) osname=solaris
   osvers=`echo $3 | $sed 's/^5/2/g'` ;;
  *) osvers="$3" ;;
  esac
  ;;
 titanos) osname=titanos
  case "$3" in
  1*) osvers=1 ;;
  2*) osvers=2 ;;
  3*) osvers=3 ;;
  4*) osvers=4 ;;
  *) osvers="$3" ;;
  esac
```

```
  ;;
  ultrix) osname=ultrix
   osvers="$3"
   ;;
  osf1|mls+) case "$5" in
    alpha)
?X: DEC OSF/1 myuname
 -a output looks like:  osf1 xxxx t3.2 123.4 alpha
?X: where the version number can be something like [xvt]n.n
     osname=dec_osf
?X: sizer knows the minor minor version: the letter
     osvers=`sizer -v | awk -FUNIX '{print $2}' | awk '{print $1}' |  tr '[A-Z]' '[a-z]' | sed 's/^[xvt]//'`
     case "$osvers" in
     [1-9].[0-9]*) ;;
     *) osvers=`echo "$3" | sed 's/^[xvt]//'` ;;
     esac
     ;;
   hp*) osname=hp_osf1 ;;
   mips) osname=mips_osf1 ;;
?X: hp and mips were unsupported Technology Releases -- ADO, 24/10/94
   esac
   ;;
  # UnixWare 7.1.2 is known as Open UNIX 8
  openunix|unixware) osname=svr5
   osvers="$4"
   ;;
  uts) osname=uts
   osvers="$3"
   ;;
  vos) osvers="$3"
   ;;
  $2) case "$osname" in
   *isc*) ;;
   *freebsd*) ;;
   svr*)
    : svr4.x or possibly later
    case "svr$3" in
    ${osname}*)
     osname=svr$3
     osvers=$4
     ;;
    esac
    case "$osname" in
    svr4.0)
     : Check for ESIX
     if test -f /stand/boot ; then
      eval `grep '^INITPROG=[a-z/0-9]*$'
```

```
/stand/boot`
    if test -n "$INITPROG" -a -f "$INITPROG"; then
  isesix=`strings -a $INITPROG|grep 'ESIX SYSTEM V/386 Release 4.0'`
     if test -n "$isesix"; then
      osname=esix4
     fi
    fi
   fi
   ;;
  esac
  ;;
  *) if test -f /etc/systemid; then
   osname=sco
   set `echo $3 | $sed 's/\./ /g'` $4
   if $test -f $src/hints/sco_$1_$2_$3.sh; then
    osvers=$1.$2.$3
   elif $test -f $src/hints/sco_$1_$2.sh; then
    osvers=$1.$2
   elif $test -f $src/hints/sco_$1.sh; then
    osvers=$1
   fi
  else
   case "$osname" in
   ") : Still unknown.  Probably a generic Sys V.
    osname="sysv"
    osvers="$3"
    ;;
   esac
  fi
  ;;
 esac
 ;;
 *) case "$osname" in
 ") : Still unknown.  Probably a generic BSD.
  osname="$1"
  osvers="$3"
  ;;
 esac
 ;;
esac
else
?X: Try to identify sony's NEWS-OS (BSD unix)
 if test -f /vmunix -a -f $src/hints/news_os.sh; then
  (what /vmunix | UU/tr '[A-Z]'
'[a-z]') > UU/kernel.what 2>&1
  if $contains news-os UU/kernel.what >/dev/null 2>&1; then
   osname=news_os
  fi
```

```
  $rm -f UU/kernel.what
?X: Maybe it's OS/2 or DOS or something similar
 elif test -d c:/. -o -n "$is_os2" ; then
  set X $myuname
  osname=os2
  osvers="$5"
 fi
fi

     case "$targetarch" in
     ") ;;
     *)  hostarch=$osname
        case "$targetarch" in
           nto*|*-nto-*)
              # Will load qnx.sh, which should change osname to nto
              osname=qnx
              osvers="
              ;;
           *linux-android*)
              # Catch arm-linux-androideabi, mipsel-linux-android,
              # and i686-linux-android
              osname=linux-android
              osvers="
              ;;
           *linux*)
              # Something like arm-linux-gnueabihf is really just
              # plain linux.
              osname=linux

              osvers="
              ;;
           *solaris*|*sunos*)
              osname=solaris
              # XXX perhaps we should just assume
              # osvers to be 2, or maybe take the value
              # from targetarch. Using $run before the
              # hints are run is somewhat icky.
              set X `$run $uname -a 2>/dev/null`
              shift
              case "$3" in
                 5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
                 *)  osvers="$3" ;;
              esac
              ;;
           *)
     osname=`echo $targetarch|sed 's,^[^-]*-,,'`
     osvers="
           ;;
```

```
        esac
        ;;
      esac

: Now look for a hint file osname_osvers, unless one has been
: specified already.
case "$hintfile" in
"|' ')
 file=`echo "${osname}_${osvers}" | $sed -e 's%\.%_%g' -e 's%_$%%'`
 : Also try without trailing minor version
numbers.
 xfile=`echo $file | $sed -e 's%_[^_]*$%%'`
 xxfile=`echo $xfile | $sed -e 's%_[^_]*$%%'`
 xxxfile=`echo $xxfile | $sed -e 's%_[^_]*$%%'`
 xxxxfile=`echo $xxxfile | $sed -e 's%_[^_]*$%%'`
 case "$file" in
 ") dflt=none ;;
 *)  case "$osvers" in
  ") dflt=$file
   ;;
  *)  if $test -f $src/hints/$file.sh ; then
    dflt=$file
   elif $test -f $src/hints/$xfile.sh ; then
    dflt=$xfile
   elif $test -f $src/hints/$xxfile.sh ; then
    dflt=$xxfile
   elif $test -f $src/hints/$xxxfile.sh ; then
    dflt=$xxxfile
   elif $test -f $src/hints/$xxxxfile.sh ; then
    dflt=$xxxxfile
   elif $test -f "$src/hints/${osname}.sh" ; then
    dflt="${osname}"
   else
    dflt=none
   fi
   ;;
  esac
  ;;
 esac
 if $test -f Policy.sh ; then
  case "$dflt" in
  *Policy*) ;;
  none) dflt="Policy" ;;
  *) dflt="Policy $dflt" ;;
  esac
 fi
 ;;
*)
```

```
  dflt=`echo $hintfile | $sed 's/\.sh$//'`
  ;;
 esac

 if $test -f Policy.sh ; then
  $cat <<EOM

There's also
 a Policy hint file available, which should make the
site-specific (policy) questions easier to answer.
EOM

 fi

 $cat <<EOM

You may give one or more space-separated answers, or "none" if appropriate.
If you have a handcrafted Policy.sh file or a Policy.sh file generated by a
previous run of Configure, you may specify it as well as or instead of
OS-specific hints.  If hints are provided for your OS, you should use them:
although Perl can probably be built without hints on many platforms, using
hints often improve performance and may enable features that Configure can't
set up on its own. If there are no hints that match your OS, specify "none";
DO NOT give a wrong version or a wrong OS.

EOM

 rp="Which of these apply, if any?"
 . UU/myread
 tans=$ans
 for file in $tans; do
  if $test X$file = XPolicy -a -f Policy.sh; then
   . Policy.sh
   $cat Policy.sh >> UU/config.sh
  elif $test -f $src/hints/$file.sh; then
   . $src/hints/$file.sh
   $cat $src/hints/$file.sh >> UU/config.sh
  elif
 $test X"$tans" = X -o X"$tans" = Xnone ; then
   : nothing
  else
   : Give one chance to correct a possible typo.
   echo "$file.sh does not exist"
   dflt=$file
   rp="hint to use instead?"
   . UU/myread
   for file in $ans; do
    if $test -f "$src/hints/$file.sh"; then
```

```
    . $src/hints/$file.sh
    $cat $src/hints/$file.sh >> UU/config.sh
   elif $test X$ans = X -o X$ans = Xnone ; then
    : nothing
   else
    echo "$file.sh does not exist -- ignored."
   fi
  done
 fi
done

hint=recommended
: Remember our hint file for later.
if $test -f "$src/hints/$file.sh" ; then
 hintfile="$file"
else
 hintfile=''
fi
fi
cd UU
?X: From here on, we must use $rsrc instead of $src
@else
: Get old answers, if there is a config file out there
hint=default
hintfile=''
if test -f ../config.sh; then
 echo " "
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . ./myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it.";;
 *)  echo "Fetching default answers from
 your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  . ../config.sh
  cp ../config.sh .
  n="$tmp_n"
  c="$tmp_c"
  hint=previous
  ;;
 esac
fi
@end
?X: remember, indentation is wrong--RAM
;;
*)
 echo " "
```

```
 echo "Fetching default answers from $config_sh..." >&4
 tmp_n="$n"
 tmp_c="$c"
 cd ..
?X: preserve symbolic links, if any
 cp $config_sh config.sh 2>/dev/null
 chmod +w config.sh
 . ./config.sh
 cd UU
 cp ../config.sh .
 n="$tmp_n"
 c="$tmp_c"
 hint=previous
 ;;
esac
. ./optdef.sh

: Restore computed paths
for file in $loclist $trylist; do
 eval $file="\$_$file"
done

@if osname || osvers
cat << EOM

Configure uses the operating system name and version to set some defaults.
The default value is probably right if the name rings a bell. Otherwise,
since spelling matters for me, either accept the default or answer "none"
to leave it blank.

EOM
@end
@if osname
case "$osname" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *)  dflt=`echo $hintfile | $sed -e 's/\.sh$//'
 -e 's/_.*$//'` ;;
  esac
  ;;
 *) dflt="$osname" ;;
esac
rp="Operating system name?"
. ./myread
case "$ans" in
none)  osname=" ;;
*) osname=`echo "$ans" | $sed -e 's/[  ][ ]*/_/g' | ./tr '[A-Z]' '[a-z]'`;;
```

```
esac
@end
@if osvers
@if osname
echo " "
@end
case "$osvers" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *) dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/^[^_]*//'`
   dflt=`echo $dflt | $sed -e 's/^_//' -e 's/_././g'`
   case "$dflt" in
   "|' ') dflt=none ;;
   esac
   ;;
  esac
  ;;
 *) dflt="$osvers" ;;
esac
rp="Operating system version?"
. ./myread
case "$ans" in
none)  osvers=" ;;
*) osvers="$ans" ;;
esac

@end

. ./posthint.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Oldconfig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nis.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:17:38  ram
?RCS: patch61: ensure suitable defaults for hostcat and friends
```

```
?RCS:
?RCS: Revision 3.0.1.2  1995/03/21  08:48:34  ram
?RCS: patch52: continued fix for NeXT NIS/NetInfo handling
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:16:23  ram
?RCS: patch51: now correctly handles NeXT using NIS rather than NetInfo
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:passcat groupcat hostcat:
 Myread Oldconfig test contains
?MAKE: -pick add $@ %<
?S:passcat:
?S: This variable contains a command that produces the text of the
?S: /etc/passwd file.  This is normally "cat /etc/passwd", but can be
?S: "ypcat passwd" when NIS is used.
?S:.
?S:groupcat:
?S: This variable contains a command that produces the text of the
?S: /etc/group file.  This is normally "cat /etc/group", but can be
?S: "ypcat group" when NIS is used.
?S:.
?S:hostcat:
?S: This variable contains a command that produces the text of the
?S: /etc/hosts file.  This is normally "cat /etc/hosts", but can be
?S: "ypcat hosts" when NIS is used.
?S:.
: see if we have to deal with yellow pages, now NIS.
?X: NeXT gives us some fun here, as always, by having both NIS (former YP)
?X: and NetInfo. But since it has both, it's ok to put the test inside the if.
?X: Contributed by Thomas Neumann <tom@smart.bo.open.de>.
if $test -d /usr/etc/yp || $test -d /etc/yp || $test -d /usr/lib/yp; then
 if $test -f /usr/etc/nibindd; then
  echo
 " "
  echo "I'm fairly confident you're on a NeXT."
@if passcat || groupcat
  echo " "
  rp='Do you get the passwd file via NetInfo?'
  dflt=y
  case "$passcat" in
  nidump*) ;;
  ") ;;
  *) dflt=n;;
  esac
  . ./myread
  case "$ans" in
```

```
  y*) passcat='nidump passwd .'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='nidump group .'
@end
   ;;
  *) echo "You told me, so don't blame me."
   case "$passcat" in
   nidump*) passcat="
@if groupcat
     groupcat=";;
@end
   esac
@if groupcat
   echo "(Assuming /etc/group is handled the same way.)"
@end
   ;;
  esac
@end
@if hostcat
  echo " "
  rp='Do you get the hosts file via NetInfo?'
  dflt=y
  case "$hostcat" in
  nidump*) ;;
  ") ;;
  *) dflt=n;;
  esac
  . ./myread
  case "$ans" in
  y*) hostcat='nidump hosts .';;
  *) case "$hostcat" in
   nidump*) hostcat=";;
   esac
   ;;
  esac
@end
 fi
@if passcat || groupcat
 case "$passcat" in
 nidump*) ;;
 *)
  case "$passcat" in
  *ypcat*) dflt=y;;
  ")
 if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
```

```
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the passwd file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) passcat='ypcat passwd'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='ypcat group'
@end
   ;;
  *) passcat='cat /etc/passwd'
@if groupcat
   echo "(Assuming /etc/group is also local.)"
   groupcat='cat /etc/group'
@end
   ;;
  esac
  ;;
 esac
@end
@if hostcat
 case "$hostcat" in
 nidump*) ;;
 *)
  case "$hostcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the hosts file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) hostcat='ypcat hosts';;
  *) hostcat='cat /etc/hosts';;
  esac
  ;;
 esac
@end
fi
```

```
?X: Ensure suitable default -- Manoj Srivastava
case "$hostcat" in
") hostcat=':'
 $test -f /etc/hosts && hostcat='cat
 /etc/hosts';;
esac
case "$groupcat" in
") groupcat=':'
 $test -f /etc/group && groupcat='cat /etc/group';;
esac
case "$passcat" in
") passcat=':'
 $test -f /etc/passwd && passcat='cat /etc/passwd';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:use64bitint use64bitall archname64: Myread Oldconfig Setvar test \
 usemorebits longsize ccflags d_quad uquadtype Compile rm_try run
?MAKE: -pick add $@ %<
?Y:TOP
?S:use64bitint:
?S: This variable conditionally defines the USE_64_BIT_INT symbol,
?S: and indicates that 64-bit integer types should be used
?S: when available.  The minimal possible 64-bitness
?S: is employed, just enough to get 64-bit integers into Perl.
?S: This may mean using for example "long longs", while your memory
?S: may still be limited to 2 gigabytes.
?S:.
?S:use64bitall:
?S: This variable conditionally defines the USE_64_BIT_ALL symbol,
?S: and indicates that 64-bit integer types should be used
?S: when available.  The maximal
 possible
?S: 64-bitness is employed: LP64 or ILP64, meaning that you will
?S: be able to use more than 2 gigabytes of memory.  This mode is
?S: even more binary incompatible than USE_64_BIT_INT. You may not
?S: be able to run the resulting executable in a 32-bit CPU at all or
?S: you may need at least to reboot your OS to 64-bit mode.
```

```
?S:.
?S:archname64:
?S: This variable is used for the 64-bitness part of $archname.
?S:.
?C:USE_64_BIT_INT:
?C: This symbol, if defined, indicates that 64-bit integers should
?C: be used when available.  If not defined, the native integers
?C: will be employed (be they 32 or 64 bits).  The minimal possible
?C: 64-bitness is used, just enough to get 64-bit integers into Perl.
?C: This may mean using for example "long longs", while your memory
?C: may still be limited to 2 gigabytes.
?C:.
?C:USE_64_BIT_ALL:
?C: This symbol, if defined, indicates that 64-bit integers should
?C: be used when available.  If not defined, the native integers
?C: will be used (be
 they 32 or 64 bits).  The maximal possible
?C: 64-bitness is employed: LP64 or ILP64, meaning that you will
?C: be able to use more than 2 gigabytes of memory.  This mode is
?C: even more binary incompatible than USE_64_BIT_INT. You may not
?C: be able to run the resulting executable in a 32-bit CPU at all or
?C: you may need at least to reboot your OS to 64-bit mode.
?C:.
?H:?%<:#ifndef USE_64_BIT_INT
?H:?%<:#$use64bitint USE_64_BIT_INT  /**/
?H:?%<:#endif
?H:?%<:#ifndef USE_64_BIT_ALL
?H:?%<:#$use64bitall USE_64_BIT_ALL  /**/
?H:?%<:#endif
?H:.
?INIT:archname64="
?LINT:extern ccflags
?LINT:use usemorebits
?LINT:extern use64bits
?LINT:extern uselonglong
?LINT:extern uselonglongs
?LINT:extern use64bitints
?LINT:extern use64bitsint
?LINT:extern use64bitsall
?T:libcquad
?F:!try
?F:!use64bitint.cbu
?F:!use64bitall.cbu
: Do we want 64bit support
case "$uselonglong" in
"$define"|true|[yY]*)
 cat <<EOM >&4
```

```
*** Configure -Duselonglong is deprecated, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case
 "$use64bits" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duse64bits is deprecated, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitints" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitints, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitsint" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitsint, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$uselonglongs" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duselonglongs, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitsall" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitsall, using -Duse64bitall instead.
EOM
```

```
 use64bitall="$define"
 ;;
esac

case "$ccflags" in
*-DUSE_LONG_LONG*|*-DUSE_64_BIT_INT*|*-DUSE_64_BIT_ALL*) use64bitint="$define";;
esac
case "$use64bitall" in
"$define"|true|[yY]*)
 use64bitint="$define" ;;
esac

case "$longsize" in
8) cat <<EOM

You have natively 64-bit long integers.
EOM
  val="$define"
  ;;
*) case "$use64bitint" in
  "$define"|true|[yY]*) dflt='y';;
  *) dflt='n';;
  esac
  case "$d_quad" in
  "$define") ;;
  *) dflt='n' ;;
  esac
  cat <<EOM

Perl can be built to take advantage of 64-bit integer types
on some systems.  To do so, Configure can be run with -Duse64bitint.
Choosing this option will most probably introduce binary incompatibilities.

If this doesn't make any sense to you, just accept the default '$dflt'.
(The default has been chosen based on your configuration.)
EOM
  rp='Try to use 64-bit integers, if available?'
  . ./myread
  case "$ans" in
  [yY]*) val="$define" ;;
  *)     val="$undef"  ;;
  esac
  ;;
esac
set use64bitint
eval $setvar

case "$use64bitall" in
```

```
"$define"|true|[yY]*) dflt='y' ;;
*) case "$longsize" in
  8) dflt='y' ;;
  *) dflt='n' ;;
  esac
  ;;
esac
cat <<EOM

You may also
 choose to try maximal 64-bitness.  It means using as much
64-bitness as possible on the platform.  This in turn means even more
binary incompatibilities.  On the other hand, your platform may not
have any more 64-bitness available than what you already have chosen.

If this doesn't make any sense to you, just accept the default '$dflt'.
(The default has been chosen based on your configuration.)
EOM
rp='Try to use maximal 64-bit support, if available?'
. ./myread
case "$ans" in
[yY]*) val="$define" ;;
*)     val="$undef"  ;;
esac
set use64bitall
eval $setvar
case "$use64bitall" in
"$define")
 case "$use64bitint" in
 "$undef")
  cat <<EOM

Since you have chosen a maximally 64-bit build, I'm also turning on
the use of 64-bit integers.
EOM
  use64bitint="$define" ;;
 esac
 ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a 64-bit perl is to be built,
: we may need to set or change some other defaults.
if $test -f use64bitint.cbu; then
 echo "Your
 platform has some specific hints regarding 64-bit integers, using them..."
 . ./use64bitint.cbu
fi
```

```
case "$use64bitint" in
"$define"|true|[yY]*)
 : This test was common to all the OpenBSD forks, and seems harmless for
 : other platforms:
 echo " "
 echo "Checking if your C library has broken 64-bit functions..." >&4
 cat >try.c <<EOCP
#include <stdio.h>
typedef $uquadtype myULL;
int main (void)
{
   struct {
 double d;
 myULL  u;
   } *p, test[] = {
 {4294967303.15, 4294967303ULL},
 {4294967294.2,  4294967294ULL},
 {4294967295.7,  4294967295ULL},
 {0.0, 0ULL}
   };
   for (p = test; p->u; p++) {
 myULL x = (myULL)p->d;
 if (x != p->u) {
     printf("buggy\n");
     return 0;
 }
   }
   printf("ok\n");
   return 0;
}
EOCP
 set try
 if eval $compile_ok; then
     libcquad=`$run ./try`
     echo "Your C library's 64-bit functions are $libcquad."
 else
     echo "(I can't seem to compile the test program.)"
     echo "Assuming that your C library's 64-bit functions are ok."
     libcquad="ok"
 fi
 $rm_try

 case
 "$libcquad" in
     buggy*)
  cat >&4 <<EOM

*** You have a C library with broken 64-bit functions.
```

```
*** 64-bit support does not work reliably in this configuration.
*** Please rerun Configure without -Duse64bitint and/or -Dusemorebits.
*** Cannot continue, aborting.

EOM
  exit 1
  ;;
 esac
 case "$longsize" in
 4) case "$archname64" in
    ") archname64=64int ;;
    esac
    ;;
 esac
 ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a maximally 64-bit perl is to be built,
: we may need to set or change some other defaults.
if $test -f use64bitall.cbu; then
 echo "Your platform has some specific hints regarding 64-bit builds, using them..."
 . ./use64bitall.cbu
fi
case "$use64bitall" in
"$define"|true|[yY]*)
 case "$longsize" in
 4) case "$archname64" in
    "|64int) archname64=64all ;;
    esac
    ;;
 esac
 ;;
esac

case "$d_quad:$use64bitint" in
$undef:$define)
 cat >&4 <<EOF

*** You have chosen to use 64-bit
 integers,
*** but none can be found.
*** Please rerun Configure without -Duse64bitint and/or -Dusemorebits.
*** Cannot continue, aborting.

EOF
 exit 1
 ;;
```

```
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/use64bits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_select.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_select.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_select: Inlibc
?MAKE: -pick add $@ %<
?S:d_select:
?S: This variable conditionally defines HAS_SELECT if select() is
?S: available to select active file descriptors. A <sys/time.h>
?S: inclusion may be necessary for the timeout field.
?S:.
?C:HAS_SELECT:
?C: This symbol, if defined, indicates that the select routine is
?C: available
 to select active file descriptors. If the timeout field
?C: is used, <sys/time.h> may need to be included.
?C:.
?H:#$d_select HAS_SELECT /**/
?H:.
?LINT:set d_select
: see if select exists
set select d_select
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_select.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ctime_r ctime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_ctime_r:
?S: This variable conditionally defines the HAS_CTIME_R symbol,
?S: which indicates to the C program that the ctime_r()
?S: routine is available.
?S:.
?S:ctime_r_proto:
?S: This variable encodes the prototype of ctime_r.
?S: It is zero if d_ctime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctime_r
?S: is defined.
?S:.
?C:HAS_CTIME_R:
?C: This symbol, if defined, indicates that the ctime_r routine
?C: is available to ctime re-entrantly.
?C:.
?C:CTIME_R_PROTO:
?C: This
 symbol encodes the prototype of ctime_r.
?C: It is zero if d_ctime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctime_r
?C: is defined.
?C:.
?H:#$d_ctime_r HAS_CTIME_R /**/
?H:#define CTIME_R_PROTO $ctime_r_proto /**/
?H:.
?T:try hdrs d_ctime_r_proto
: see if ctime_r exists
set ctime_r d_ctime_r
eval $inlibc
case "$d_ctime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_ctime_r_proto:$usethreads" in
 ":define") d_ctime_r_proto=define
  set d_ctime_r_proto ctime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ctime_r_proto" in
 define)
 case "$ctime_r_proto" in
```

```
"|0) try='char* ctime_r(const time_t*, char*);'
./protochk "$extern_C $try" $hdrs && ctime_r_proto=B_SB ;;
esac
case "$ctime_r_proto" in
"|0) try='char* ctime_r(const time_t*, char*, int);'
./protochk "$extern_C $try" $hdrs && ctime_r_proto=B_SBI ;;
esac
case "$ctime_r_proto" in
"|0) try='int ctime_r(const
time_t*, char*);'
./protochk "$extern_C $try" $hdrs && ctime_r_proto=I_SB ;;
esac
case "$ctime_r_proto" in
"|0) try='int ctime_r(const time_t*, char*, int);'
./protochk "$extern_C $try" $hdrs && ctime_r_proto=I_SBI ;;
esac
case "$ctime_r_proto" in
"|0) d_ctime_r=undef
 ctime_r_proto=0
 echo "Disabling ctime_r, cannot determine prototype." >&4 ;;
* ) case "$ctime_r_proto" in
 REENTRANT_PROTO*) ;;
 *) ctime_r_proto="REENTRANT_PROTO_$ctime_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "ctime_r has no prototype, not using it." >&4 ;;
 esac
 d_ctime_r=undef
 ctime_r_proto=0
 ;;
esac
;;
*) ctime_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ctime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pathconf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pathconf.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:54  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_pathconf d_fpathconf: Inlibc
?MAKE: -pick add $@ %<
?S:d_pathconf:
?S: This variable conditionally defines the HAS_PATHCONF symbol, which
?S: indicates to the C program that the pathconf() routine is available
?S: to determine file-system related limits and options
 associated
?S: with a given filename.
?S:.
?S:d_fpathconf:
?S: This variable conditionally defines the HAS_FPATHCONF symbol, which
?S: indicates to the C program that the pathconf() routine is available
?S: to determine file-system related limits and options associated
?S: with a given open file descriptor.
?S:.
?C:HAS_PATHCONF:
?C: This symbol, if defined, indicates that pathconf() is available
?C: to determine file-system related limits and options associated
?C: with a given filename.
?C:.
?C:HAS_FPATHCONF:
?C: This symbol, if defined, indicates that pathconf() is available
?C: to determine file-system related limits and options associated
?C: with a given open file descriptor.
?C:.
?H:#$d_pathconf HAS_PATHCONF  /**/
?H:#$d_fpathconf HAS_FPATHCONF  /**/
?H:.
?LINT:set d_pathconf
?LINT:set d_fpathconf
: see if pathconf exists
set pathconf d_pathconf
eval $inlibc

@if d_fpathconf || HAS_FPATHCONF
: see if fpathconf exists
set fpathconf d_fpathconf
```

```
eval $inlibc

@end
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pathconf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_lseekproto: Hasproto i_systypes i_unistd
?MAKE: -pick add $@ %<
?S:d_lseekproto:
?S: This variable conditionally defines the HAS_LSEEK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the lseek() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_LSEEK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the lseek() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern
 off_t lseek(int, off_t, int);
?C:.
?H:#$d_lseekproto HAS_LSEEK_PROTO /**/
?H:.
?LINT:set d_lseekproto
: see if prototype for lseek is available
echo " "
set d_lseekproto lseek $i_systypes sys/types.h $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_lseekproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysselct.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysselct.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:01:33  ram
?RCS: patch6: added default for i_sysselct
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/select.h> exists
?X:
?MAKE:i_sysselct: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysselct:
?S: This variable conditionally defines I_SYS_SELECT, which indicates
?S: to the C program that it should include <sys/select.h> in
 order to
?S: get the definition of struct timeval.
?S:.
?C:I_SYS_SELECT (I_SYSSELECT):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/select.h> in order to get definition of struct timeval.
?C:.
?H:#$i_sysselct I_SYS_SELECT /**/
?H:.
?D:i_sysselct="
?LINT:set i_sysselct
: see if sys/select.h has to be included
set sys/select.h i_sysselct
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysselct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?RCS: $Log: d_endpwent.U,v $
?RCS:
?MAKE:d_endpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endpwent:
?S: This variable conditionally defines the HAS_ENDPWENT symbol, which
?S: indicates to the C program that the endpwent() routine is available
?S: for sequential access of the passwd database.
?S:.
?C:HAS_ENDPWENT:
?C: This symbol, if defined, indicates that the endpwent routine is
?C: available for finalizing sequential access of the passwd database.
?C:.
?H:#$d_endpwent HAS_ENDPWENT  /**/
?H:.
?LINT:set d_endpwent
: see if endpwent exists
set endpwent d_endpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Options.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:08:15  ram
?RCS: patch61: optdef.sh now starts with a "startsh"
?RCS: patch61: moved some code from Head.U
?RCS:
?RCS: Revision 3.0.1.6  1995/09/25  09:14:46  ram
?RCS: patch59: protected option parsing code against 'echo -*' option failure
?RCS:
?RCS: Revision 3.0.1.5  1995/05/12  12:04:52  ram
?RCS: patch54: added -K option for experts
?RCS:
?RCS: Revision 3.0.1.4  1995/01/30  14:27:52  ram
?RCS: patch49: this unit now exports file optdef.sh,
```

```
 not a variable
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:19:00  ram
?RCS: patch45: new -O option allowing -D and -U to override config.sh settings
?RCS: patch45: file optdef.sh is no longer removed after sourcing
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  15:58:06  ram
?RCS: patch36: ensure option definition file is removed before appending
?RCS: patch36: protect variable definitions with spaces in them
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:55:44  ram
?RCS: patch30: now uses new me symbol to tag error messages
?RCS: patch30: new -D and -U options to define/undef symbols (JHI)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Command line parsing. It is really important that the variables used here
?X: be not listed in the MAKE line, or they will be saved in config.sh and
?X: loading this file to fetch default answers would clobber the values set
?X: herein.
?X:
?MAKE:Options: startsh
?MAKE: -pick wipe $@ %<
?V:reuseval
 alldone error realsilent silent extractsh fastread \
 override knowitall: config_sh
?T:arg argn symbol config_arg0 config_args config_argc xxx yyy zzz uuu
?T:args_exp args_sep arg_exp
?F:!Configure
?F:./optdef.sh ./cmdline.opt ./posthint.sh ./cmdl.opt
: Save command line options in file UU/cmdline.opt for later use in
: generating config.sh.
?X: This temporary file will be read by Oldsym.U.  I used a temporary
?X: file to preserve all sorts of potential command line quotes and
?X: also because we don't know in advance how many variables we'll
?X: need, so I can't actually declare them on the MAKE line.
?X: The config_args variable won't be quite correct if Configure is
?X: fed something like    ./Configure -Dcc="gcc -B/usr/ccs/bin/"
?X: since the quotes are gone by the time we see them.  You'd have to
?X: reconstruct the command line from the config_arg? lines, but since
?X: I don't imagine anyone actually having to do that, I'm not going
?X: to worry too much.
cat > cmdline.opt
 <<EOSH
: Configure command line arguments.
config_arg0='$0'
```

```
config_args='$*'
config_argc=$#
EOSH
argn=1
args_exp=''
args_sep=''
for arg in "$@"; do
 cat >>cmdline.opt <<EOSH
config_arg$argn='$arg'
EOSH
?X: Extreme backslashitis: replace each ' by '''''
 cat <<EOC | sed -e "s/'/'''''''''''''''/g" > cmdl.opt
$arg
EOC
 arg_exp=`cat cmdl.opt`
 args_exp="$args_exp$args_sep'$arg_exp'"
 argn=`expr $argn + 1`
 args_sep=' '
done
?X: args_exp is good for restarting self: eval "set X $args_exp"; shift; $0 "$@"
?X: used by hints/os2.sh in Perl, for instance
rm -f cmdl.opt

: produce awk script to parse command line options
cat >options.awk <<'EOF'
BEGIN {
 optstr = "A:dD:eEf:hKOrsSU:V"; # getopt-style specification

 len = length(optstr);
 for (i = 1; i <= len; i++) {
  c = substr(optstr, i, 1);
?X: some older awk's do not have the C ?: construct
  if (i < len) a = substr(optstr, i + 1, 1); else a = "";
  if (a == ":") {
   arg[c] = 1;
   i++;
  }
  opt[c] = 1;
 }
}
{
 expect = 0;
 str = $0;
 if (substr(str,
 1, 1) != "-") {
  printf("'%s'\n", str);
  next;
 }
```

```
 len = length($0);
 for (i = 2; i <= len; i++) {
  c = substr(str, i, 1);
  if (!opt[c]) {
   printf("-%s\n", substr(str, i));
   next;
  }
  printf("-%s\n", c);
  if (arg[c]) {
   if (i < len)
    printf("'%s'\n", substr(str, i + 1));
   else
    expect = 1;
   next;
  }
 }
}
END {
 if (expect)
  print "?";
}
EOF

: process the command line options
?X: Use "$@" to keep arguments with spaces in them from being split apart.
?X: For the same reason, awk will output quoted arguments and the final eval
?X: removes them and sets a proper $* array. An 'X' is prependend to each
?X: argument before being fed to echo to guard against 'echo -x', where -x
?X: would be understood as an echo option! It is removed before feeding awk.
set X `for arg in "$@"; do echo "X$arg"; done |
 sed -e s/X// | awk -f options.awk`
eval "set $*"
shift
rm -f options.awk

: set up default values
fastread=''
reuseval=false
config_sh=''
alldone=''
error=''
silent=''
extractsh=''
override=''
knowitall=''
rm
 -f optdef.sh posthint.sh
cat >optdef.sh <<EOS
```

```
$startsh
EOS

?X:
?X: Given that we now have the possibility to execute Configure remotely
?X: thanks to the new src.U support, we have to face the possibility
?X: of having to ask where the source lie, which means we need the Myread.U
?X: stuff and possibly other things that might echo something on the
?X: screen...
?X:
?X: That's not pretty, and might be confusing in 99% of the time. So...
?X: We introduce a new realsilent variable which is set when -s is given,
?X: and we force silent=true if -S is supplied. The Extractall.U unit
?X: will then undo the >&4 redirection based on the value of the
?X: realsilent variable... -- RAM, 18/93/96
?X:

: option parsing
while test $# -gt 0; do
 case "$1" in
 -d) shift; fastread=yes;;
 -e) shift; alldone=cont;;
 -f)
  shift
  cd ..
  if test -r "$1"; then
   config_sh="$1"
  else
   echo "$me: cannot read config file $1." >&2
   error=true
  fi
  cd UU
  shift;;
 -h)
 shift; error=true;;
 -r) shift; reuseval=true;;
 -s) shift; silent=true; realsilent=true;;
 -E) shift; alldone=exit;;
 -K) shift; knowitall=true;;
 -O) shift; override=true;;
 -S) shift; silent=true; extractsh=true;;
 -D)
  shift
  case "$1" in
  *=)
   echo "$me: use '-U symbol=', not '-D symbol='." >&2
   echo "$me: ignoring -D $1" >&2
   ;;
```

```
 *=*) echo "$1" | \
   sed -e "s/'/'\'"\'"/g" -e "s/=\(.*\)/='\1'/" >> optdef.sh;;
 *) echo "$1='define'" >> optdef.sh;;
 esac
 shift
 ;;
-U)
 shift
 case "$1" in
 *=) echo "$1" >> optdef.sh;;
 *=*)
  echo "$me: use '-D symbol=val', not '-U symbol=val'." >&2
  echo "$me: ignoring -U $1" >&2
  ;;
 *) echo "$1='undef'" >> optdef.sh;;
 esac
 shift
 ;;
-A)
    shift
    xxx=''
    yyy="$1"
    zzz=''
    uuu=undef
    case "$yyy" in
          *=*) zzz=`echo "$yyy"|sed 's!=.*!!'`
               case "$zzz" in
               *:*) zzz='' ;;
               *)   xxx=append
                    zzz=' "`echo
"$yyy"|sed 's!^[^=]*=!!'`
                    yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
               esac
               ;;
          esac
          case "$xxx" in
          '')  case "$yyy" in
               *:*) xxx=`echo "$yyy"|sed 's!:.*!!'`
                    yyy=`echo "$yyy"|sed 's!^[^:]*:!!'`
                    zzz=`echo "$yyy"|sed 's!^[^=]*=!!'`
                    yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
               *)   xxx=`echo "$yyy"|sed 's!:.*!!'`
                    yyy=`echo "$yyy"|sed 's!^[^:]*:!!'` ;;
               esac
               ;;
          esac
    case "$xxx" in
    append)
```

```
 echo "$yyy=\"\${$yyy}$zzz\"" >> posthint.sh ;;
    clear)
 echo "$yyy=""   >> posthint.sh ;;
    define)
        case "$zzz" in
 ") zzz=define ;;
 esac
 echo "$yyy='$zzz'"  >> posthint.sh ;;
    eval)
 echo "eval \"$yyy=$zzz\"" >> posthint.sh ;;
    prepend)
 echo "$yyy=\"$zzz\${$yyy}\"" >> posthint.sh ;;
    undef)
        case "$zzz" in
 ")
zzz="$uuu" ;;
 esac
 echo "$yyy=$zzz"  >> posthint.sh ;;
          *)  echo "$me: unknown -A command '$xxx', ignoring -A $1" >&2 ;;
    esac
    shift
    ;;
 -V) echo "$me generated by metaconfig <VERSION> PL<PATCHLEVEL>." >&2
    exit 0;;
 --) break;;
 -*) echo "$me: unknown option $1" >&2; shift; error=true;;
 *) break;;
 esac
done

case "$error" in
true)
 cat >&2 <<EOM
Usage: $me [-dehrsEKOSV] [-f config.sh] [-D symbol] [-D symbol=value]
               [-U symbol] [-U symbol=] [-A command:symbol...]
 -d : use defaults for all answers.
 -e : go on without questioning past the production of config.sh.
 -f : specify an alternate default configuration file.
 -h : print this help message and exit (with an error status).
 -r : reuse C symbols value if possible (skips costly nm extraction).
 -s : silent mode, only echoes questions and essential information.
 -D : define symbol to have some value:
       -D symbol         symbol gets the value 'define'
       -D symbol=value
  symbol gets the value 'value'
 -E : stop at the end of questions, after having produced config.sh.
 -K : do not use unless you know what you are doing.
 -O : let -D and -U override definitions from loaded configuration file.
```

```
 -S : perform variable substitutions on all .SH files (can mix with -f)
 -U : undefine symbol:
       -U symbol    symbol gets the value 'undef'
       -U symbol=   symbol gets completely empty
 -A : manipulate symbol after the platform specific hints have been applied:
  -A symbol=value  append " "value to symbol
  -A append:symbol=value  append value to symbol
  -A define:symbol=value  define symbol to have value
       -A clear:symbol  define symbol to be "
  -A define:symbol  define symbol to be 'define'
  -A eval:symbol=value  define symbol to be eval of value
  -A prepend:symbol=value prepend value to symbol
  -A undef:symbol  define symbol to be 'undef'
  -A undef:symbol=  define symbol to be "
 -V : print version number and exit (with
 a zero status).
EOM
 exit 1
 ;;
esac

?X:
?X: Unless they specified either -S or both -d and -e/E, make sure we're
?X: running interactively, i.e. attached to a terminal. Moved from Head.U to
?X: be able to handle batch configurations...
?X:
?X: We have to hardwire the Configure name and cannot use $me, since if they
?X: said 'sh <Configure', then $me is 'sh'...
?X:
: Sanity checks
case "$fastread$alldone" in
yescont|yesexit) ;;
*)
 case "$extractsh" in
 true) ;;
 *)
  if test ! -t 0; then
   echo "Say 'sh Configure', not 'sh <Configure'"
   exit 1
  fi
  ;;
 esac
 ;;
esac

?X: In silent mode, the standard output is closed. Questions are asked by
?X: outputing on file descriptor #4, which is the original stdout descriptor.
?X: This filters out all the "junk", since all the needed information is written
```

```
?X: on #4. Note that ksh will not let us redirect output if the file descriptor
?X: has not be defined yet, unlike sh, hence the following line...--RAM.
exec 4>&1
case "$silent" in
true)
 exec 1>/dev/null;;
esac

: run the defines and the undefines, if any, but leave the file out there...
touch optdef.sh
. ./optdef.sh
: create the posthint manipulation script and leave the file out there...
?X: this file will be perused by Oldconfig.U
touch posthint.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Options.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_pwd.U,v 3.0.1.2 1995/07/25 14:10:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_pwd.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:10:57  ram
?RCS: patch56: use setvar so hint file values can override our guesses (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:03:27  ram
?RCS: patch23: had forgotten cppminus in cppstdin test (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks whether there is a pwd system or not
?X:
?MAKE:i_pwd d_pwquota d_pwage d_pwchange
 d_pwclass d_pwexpire \
 d_pwgecos d_pwpasswd d_pwcomment: \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_pwd:
```

```
?S: This variable conditionally defines I_PWD, which indicates
?S: to the C program that it should include <pwd.h>.
?S:.
?S:d_pwquota:
?S: This variable conditionally defines PWQUOTA, which indicates
?S: that struct passwd contains pw_quota.
?S:.
?S:d_pwage:
?S: This variable conditionally defines PWAGE, which indicates
?S: that struct passwd contains pw_age.
?S:.
?S:d_pwchange:
?S: This variable conditionally defines PWCHANGE, which indicates
?S: that struct passwd contains pw_change.
?S:.
?S:d_pwclass:
?S: This variable conditionally defines PWCLASS, which indicates
?S: that struct passwd contains pw_class.
?S:.
?S:d_pwexpire:
?S: This variable conditionally defines PWEXPIRE, which indicates
?S: that struct passwd contains pw_expire.
?S:.
?S:d_pwcomment:
?S: This variable conditionally defines PWCOMMENT, which indicates
?S: that
 struct passwd contains pw_comment.
?S:.
?S:d_pwgecos:
?S: This variable conditionally defines PWGECOS, which indicates
?S: that struct passwd contains pw_gecos.
?S:.
?S:d_pwpasswd:
?S: This variable conditionally defines PWPASSWD, which indicates
?S: that struct passwd contains pw_passwd.
?S:.
?C:I_PWD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <pwd.h>.
?C:.
?C:PWQUOTA:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_quota.
?C:.
?C:PWAGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_age.
?C:.
```

```
?C:PWCHANGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_change.
?C:.
?C:PWCLASS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_class.
?C:.
?C:PWEXPIRE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_expire.
?C:.
?C:PWCOMMENT:
?C: This
 symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_comment.
?C:.
?C:PWGECOS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_gecos.
?C:.
?C:PWPASSWD:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_passwd.
?C:.
?H:#$i_pwd I_PWD  /**/
?H:#$d_pwquota PWQUOTA /**/
?H:#$d_pwage PWAGE /**/
?H:#$d_pwchange PWCHANGE /**/
?H:#$d_pwclass PWCLASS /**/
?H:#$d_pwexpire PWEXPIRE /**/
?H:#$d_pwcomment PWCOMMENT /**/
?H:#$d_pwgecos PWGECOS /**/
?H:#$d_pwpasswd PWPASSWD /**/
?H:.
?LINT: set i_pwd d_pwquota d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment
?LINT: set d_pwgecos d_pwpasswd
?T:xxx
: see if this is a pwd.h system
set pwd.h i_pwd
eval $inhdr

case "$i_pwd" in
$define)
 xxx=`./findhdr pwd.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'pw_quota' $$.h >/dev/null 2>&1; then
```

```
 val="$define"
else
 val="$undef"
fi
set d_pwquota
eval $setvar

if $contains 'pw_age'
$$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwage
eval $setvar

if $contains 'pw_change' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwchange
eval $setvar

if $contains 'pw_class' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwclass
eval $setvar

if $contains 'pw_expire' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwexpire
eval $setvar

if $contains 'pw_comment' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwcomment
eval $setvar
```

```
 if $contains 'pw_gecos' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwgecos
 eval $setvar

 if $contains 'pw_passwd' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwpasswd
 eval $setvar

 $rm -f $$.h
 ;;
*)
 val="$undef";
 set d_pwquota; eval $setvar
 set d_pwage; eval $setvar
 set d_pwchange; eval $setvar
 set d_pwclass; eval $setvar
 set
 d_pwexpire; eval $setvar
 set d_pwcomment; eval $setvar
 set d_pwgecos; eval $setvar
 set d_pwpasswd; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_pwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_times.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:50  ram
```

```
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:14:00  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: What is the type returned by times() ?
?X:
?X: Force inclusion of <sys/types.h>
?X:INC: i_systypes
?MAKE:d_times clocktype: Csym Myread Typedef i_systimes
?MAKE: -pick
 add $@ %<
?S:d_times:
?S: This variable conditionally defines the HAS_TIMES symbol, which indicates
?S: that the times() routine exists.  The times() routine is normally
?S: provided on UNIX systems. You may have to include <sys/times.h>.
?S:.
?S:clocktype:
?S: This variable holds the type returned by times(). It can be long,
?S: or clock_t on BSD sites (in which case <sys/types.h> should be
?S: included).
?S:.
?C:HAS_TIMES (TIMES):
?C: This symbol, if defined, indicates that the times() routine exists.
?C: Note that this became obsolete on some systems (SUNOS), which now
?C: use getrusage(). It may be necessary to include <sys/times.h>.
?C:.
?C:Clock_t (CLOCKTYPE):
?C: This symbol holds the type returned by times(). It can be long,
?C: or clock_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_times HAS_TIMES  /**/
?H:#define Clock_t $clocktype /* Clock time */
?H:.
?T:val inc
: see if times exists
echo " "
if set times val -f d_times; eval $csym;
 $val; then
 echo 'times() found.' >&4
 d_times="$define"
 inc="
 case "$i_systimes" in
```

```
 "$define") inc='sys/times.h';;
 esac
 set clock_t clocktype long stdio.h sys/types.h $inc
 eval $typedef
 dflt="$clocktype"
 echo " "
 rp="What type is returned by times() on this system?"
 . ./myread
 clocktype="$ans"
else
 echo 'times() NOT found, hope that will do.' >&4
 d_times="$undef"
?X: The following is needed for typedef (won't like an empty variable)
 clocktype='int'
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_times.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getfsstat : Inlibc
?MAKE: -pick add $@ %<
?S:d_getfsstat:
?S: This variable conditionally defines the HAS_GETFSSTAT symbol, which
?S: indicates to the C program that the getfsstat() routine is available.
?S:.
?C:HAS_GETFSSTAT:
?C: This symbol, if defined, indicates that the getfsstat routine is
?C: available to stat filesystems in bulk.
?C:.
?H:#$d_getfsstat HAS_GETFSSTAT  /**/
?H:.
?LINT:set d_getfsstat
: see if getfsstat exists
set getfsstat d_getfsstat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getfsstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_hidnet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_hidnet.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_hidnet hiddennet: cat sed myhostname mydomain Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_hidnet:
?S: This variable conditionally defines the symbol HIDDEN_NET, which
?S: tells the C program that it should pretend it is on a different
?S: host for purposes of advertising a mailing address.
?S:.
?S:hiddennet:
?S: This variable contains
 the value eventually given to the symbol
?S: HIDDEN_NET, if d_hidnet defines it.  If defined, it's the name
?S: of the host which serves as the mail server for a network that
?S: is invisible to the outside world.
?S:.
?C:HIDDEN_NET (HIDDENNET):
?C: This symbol, if defined, contains the host name that you want to
?C: advertise to the outside world.  This name can be different from
?C: your actual host name, as long as the machine you specify knows
?C: how to forward mail to you.
?C:.
?H:#$d_hidnet HIDDEN_NET "$hiddennet" /**/
?H:.
: now get the host name to advertise as our mailing address
case "$hiddennet" in
") dflt=n;;
*) dflt=y;;
esac
$cat <<EOM

Some sites are on "hidden" networks, in the sense that the network appears
to the outside world as a single machine.  The advertised name of any host
on this hidden network is the name of one machine on the local network which
knows how to forward mail to any other host on the hidden network.
```

```
Do you wish to advertise a different hostname
 to the world than the one your
own host ($myhostname$mydomain) has?

EOM
rp='Use "hidden" network?'
. ./myread
case "$ans" in
n*) d_hidnet="$undef" hiddennet="";;
*)
 d_hidnet="$define"
 echo " "
 case "$hiddennet" in
 "") dflt=`echo $mydomain | $sed -e 's/^\.//'`;;
 *) dflt="$hiddennet";;
 esac
 rp='What hostname do you wish to advertise?'
 . ./myread
 hiddennet="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_hidnet.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_futimes: Compile cat rm_try run
?MAKE: -pick add $@ %<
?S:d_futimes:
?S: This variable conditionally defines the HAS_FUTIMES symbol, which
?S: indicates to the C program that the futimes() routine is available.
?S:.
?C:HAS_FUTIMES:
?C: This symbol, if defined, indicates that the futimes routine is
?C: available to change file descriptor time stamps with struct timevals.
?C:.
?H:#$d_futimes HAS_FUTIMES  /**/
?H:.
?T:rc
?F:!try
: check for a working futimes
```

```
d_futimes="$undef"
echo " "
echo "Checking if you have a working futimes()" >&4
$cat >try.c <<EOCP
#include <stdio.h>
#include <stdlib.h>
#include <sys/time.h>
#include <errno.h>
#include <fcntl.h>
#include <stdlib.h>

int main ()
{
   int fd,
 rv;
   fd = open ("try.c", O_RDWR);
   if (-1 == fd) exit (1);
   rv = futimes (fd, NULL);
   exit (rv == -1 ? errno : 0);
}
EOCP
set try
if eval $compile; then
   `$run ./try`
   rc=$?
   case "$rc" in
 0)  echo "Yes, you have" >&4
     d_futimes="$define"
     ;;
 *)  echo "No, you have futimes, but it isn't working ($rc) (probably harmless)" >&4
     ;;
   esac
else
   echo "No, it does not (probably harmless)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_futimes.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: sh.U,v 3.0.1.1 1997/02/28 16:20:13 ram Exp $
?RCS:
?RCS: Copyright (c) 1997, Chip Salzenberg
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:20:13  ram
?RCS: patch61: created
?RCS:
?MAKE:sh targetsh: Head
?MAKE: -pick wipe $@ %<
?S:sh:
?S: This variable contains the full pathname of the shell used
?S: on this system to execute Bourne shell scripts.  Usually, this will be
?S: /bin/sh, though it's possible that some systems will have /bin/ksh,
?S: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?S: D:/bin/sh.exe.
?S: This
 unit comes before Options.U, so you can't set sh with a -D
?S: option, though you can override this (and startsh)
?S: with -O -Dsh=/bin/whatever -Dstartsh=whatever
?S:.
?S:targetsh:
?S: If cross-compiling, this variable contains the location of sh on the
?S: target system.
?S: If not, this will be the same as $sh.
?S:.
?C:SH_PATH:
?C: This symbol contains the full pathname to the shell used on this
?C: on this system to execute Bourne shell scripts.  Usually, this will be
?C: /bin/sh, though it's possible that some systems will have /bin/ksh,
?C: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?C: D:/bin/sh.exe.
?C:.
?H:#define SH_PATH "$targetsh"  /**/
?H:.
?T:xxx try pth p SYSTYPE
?LINT:extern maintloc maintname _exe
?X:
?X: Be quiet unless something unusual happens because this gets
?X: loaded up even before options are processed.
?X: Can't use ./loc because that depends on startsh, which, in turn
?X: depends on this unit.
?X:
: Find the basic shell for
 Bourne shell scripts
case "$sh" in
")
?X: SYSTYPE is for some older MIPS systems.
```

```
?X: I do not know if it is still needed.
 case "$SYSTYPE" in
 *bsd*|sys5*) xxx="/$SYSTYPE/bin/sh";;
 *) xxx='/bin/sh';;
 esac
 if test -f "$xxx"; then
  sh="$xxx"
 else
  : Build up a list and do a single loop so we can 'break' out.
  pth=`echo $PATH | sed -e "s/$p_/ /g"`
  for xxx in sh bash ksh pdksh ash; do
   for p in $pth; do
    try="$try ${p}/${xxx}"
   done
  done
  for xxx in $try; do
   if test -f "$xxx"; then
    sh="$xxx";
    break
   elif test "X$_exe" != X -a -f "$xxx$_exe"; then
    sh="$xxx";
    break
   elif test -f "$xxx.exe"; then
    sh="$xxx";
    break
   fi
  done
 fi
 ;;
esac

?X: fd 4 isn't open yet...
case "$sh" in
") cat >&2 <<EOM
$me:  Fatal Error:  I can't find a Bourne Shell anywhere.

Usually it's in /bin/sh.  How did you even get this far?
Please report this issue at <$maintloc>
and we'll try to straighten this all out.
EOM
 exit 1
 ;;
esac

: When cross-compiling we
 need to separate the sh-to-run-Configure-with from the sh-to-use-in-Perl
: default both to the same thing, cross-compilers can then set targetsh differently if they like
targetsh=$sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_readdir.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  14:46:37  ram
?RCS: patch23: added support for seekdir, telldir and rewinddir (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Force checking for <dirent.h> inclusion
?X:INC: i_dirent
?MAKE:d_readdir d_seekdir d_telldir d_rewinddir: Inlibc
?MAKE: -pick add $@ %<
?S:d_readdir:
?S: This variable conditionally defines HAS_READDIR if readdir()
 is
?S: available to read directory entries.
?S:.
?C:HAS_READDIR (READDIR):
?C: This symbol, if defined, indicates that the readdir routine is
?C: available to read directory entries. You may have to include
?C: <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_readdir HAS_READDIR  /**/
?H:.
?S:d_seekdir:
?S: This variable conditionally defines HAS_SEEKDIR if seekdir() is
?S: available.
?S:.
?C:HAS_SEEKDIR:
?C: This symbol, if defined, indicates that the seekdir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_seekdir HAS_SEEKDIR  /**/
?H:.
```

```
?S:d_telldir:
?S: This variable conditionally defines HAS_TELLDIR if telldir() is
?S: available.
?S:.
?C:HAS_TELLDIR:
?C: This symbol, if defined, indicates that the telldir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_telldir HAS_TELLDIR  /**/
?H:.
?S:d_rewinddir:
?S: This variable conditionally defines HAS_REWINDDIR if rewinddir() is
?S: available.
?S:.
?C:HAS_REWINDDIR:
?C: This
 symbol, if defined, indicates that the rewinddir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_rewinddir HAS_REWINDDIR  /**/
?H:.
?LINT:set d_readdir d_seekdir d_telldir d_rewinddir
: see if readdir and friends exist
set readdir d_readdir
eval $inlibc
@if d_seekdir || HAS_SEEKDIR
set seekdir d_seekdir
eval $inlibc
@end
@if d_telldir || HAS_TELLDIR
set telldir d_telldir
eval $inlibc
@end
@if d_rewinddir || HAS_REWINDDIR
set rewinddir d_rewinddir
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_readdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:d_fsync: Inlibc
?MAKE: -pick add $@ %<
?S:d_fsync:
?S: This variable conditionally defines the HAS_FSYNC symbol, which
?S: indicates to the C program that the fsync() routine is available.
?S:.
?C:HAS_FSYNC:
?C: This symbol, if defined, indicates that the fsync routine is
?C: available to write a file's modified data and attributes to
?C: permanent storage.
?C:.
?H:#$d_fsync HAS_FSYNC  /**/
?H:.
?LINT:set d_fsync
: see if fsync exists
set fsync d_fsync
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fsync.U
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```
?RCS: $Id: d_getservbyname_r.U,v 0RCS:
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservbyname_r getservbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservbyname_r:
?S: This variable conditionally defines the HAS_GETSERVBYNAME_R symbol,
?S: which indicates to the C program that the getservbyname_r()
?S: routine is available.
?S:.
?S:getservbyname_r_proto:
?S: This variable encodes the prototype of getservbyname_r.
?S: It is zero if d_getservbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyname_r
?S: is defined.
?S:.
?C:HAS_GETSERVBYNAME_R:
?C: This symbol, if defined, indicates
```

```
 that the getservbyname_r routine
?C: is available to getservbyname re-entrantly.
?C:.
?C:GETSERVBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getservbyname_r.
?C: It is zero if d_getservbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyname_r
?C: is defined.
?C:.
?H:#$d_getservbyname_r HAS_GETSERVBYNAME_R /**/
?H:#define GETSERVBYNAME_R_PROTO $getservbyname_r_proto /**/
?H:.
?T:try hdrs d_getservbyname_r_proto
: see if getservbyname_r exists
set getservbyname_r d_getservbyname_r
eval $inlibc
case "$d_getservbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservbyname_r_proto:$usethreads" in
 ":define") d_getservbyname_r_proto=define
  set d_getservbyname_r_proto getservbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getservbyname_r_proto" in
 define)
 case "$getservbyname_r_proto" in
 "|0) try='int getservbyname_r(const char*, const char*, struct servent*, char*,
 size_t, struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=I_CCSBWR ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) try='struct servent* getservbyname_r(const char*, const char*, struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=S_CCSBI ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) try='int getservbyname_r(const char*, const char*, struct servent*, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=I_CCSD ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) d_getservbyname_r=undef
  getservbyname_r_proto=0
  echo "Disabling getservbyname_r, cannot determine prototype." >&4 ;;
 * ) case "$getservbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getservbyname_r_proto="REENTRANT_PROTO_$getservbyname_r_proto" ;;
  esac
```

```
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getservbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_getservbyname_r=undef
  getservbyname_r_proto=0
  ;;
 esac
 ;;
*) getservbyname_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservbyname_r.U
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```
?RCS: $Id: d_endnetent_r.U,v 0RCS:
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endnetent_r endnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endnetent_r:
?S: This variable conditionally defines the HAS_ENDNETENT_R symbol,
?S: which indicates to the C program that the endnetent_r()
?S: routine is available.
?S:.
?S:endnetent_r_proto:
?S: This variable encodes the prototype of endnetent_r.
?S: It is zero if d_endnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endnetent_r
?S: is defined.
?S:.
?C:HAS_ENDNETENT_R:
?C: This symbol, if defined, indicates that the endnetent_r routine
?C: is
 available to endnetent re-entrantly.
?C:.
?C:ENDNETENT_R_PROTO:
```

```
?C: This symbol encodes the prototype of endnetent_r.
?C: It is zero if d_endnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endnetent_r
?C: is defined.
?C:.
?H:#$d_endnetent_r HAS_ENDNETENT_R /**/
?H:#define ENDNETENT_R_PROTO $endnetent_r_proto /**/
?H:.
?T:try hdrs d_endnetent_r_proto
: see if endnetent_r exists
set endnetent_r d_endnetent_r
eval $inlibc
case "$d_endnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endnetent_r_proto:$usethreads" in
 ":define") d_endnetent_r_proto=define
  set d_endnetent_r_proto endnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endnetent_r_proto" in
 define)
 case "$endnetent_r_proto" in
 "|0) try='int endnetent_r(struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && endnetent_r_proto=I_D ;;
 esac
 case "$endnetent_r_proto" in
 "|0) try='void endnetent_r(struct netent_data*);'
 ./protochk
 "$extern_C $try" $hdrs && endnetent_r_proto=V_D ;;
 esac
 case "$endnetent_r_proto" in
 "|0) d_endnetent_r=undef
  endnetent_r_proto=0
  echo "Disabling endnetent_r, cannot determine prototype." >&4 ;;
 * ) case "$endnetent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endnetent_r_proto="REENTRANT_PROTO_$endnetent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endnetent_r has no prototype, not using it." >&4 ;;
  esac
  d_endnetent_r=undef
  endnetent_r_proto=0
```

```
  ;;
 esac
 ;;
*) endnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endnetent_r.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_drand48proto: Hasproto i_stdlib i_unistd
?MAKE: -pick add $@ %<
?S:d_drand48proto:
?S: This variable conditionally defines the HAS_DRAND48_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the drand48() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_DRAND48_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the drand48() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess
 is
?C:  extern double drand48(void);
?C:.
?H:#$d_drand48proto HAS_DRAND48_PROTO /**/
?H:.
?LINT:set d_drand48proto
: see if prototype for drand48 is available
echo " "
set d_drand48proto drand48 $i_stdlib stdlib.h $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_drand48proto.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: floatsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:09  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:floatsize: cat rm Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:floatsize:
?S: This variable contains the value of the FLOATSIZE symbol, which
?S: indicates to the C program how many bytes there are in a float.
?S:.
?C:FLOATSIZE:
?C: This symbol contains the size of
 a float, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define FLOATSIZE $floatsize  /**/
?H:.
?F:!try
: check for length of float
echo " "
case "$floatsize" in
")
 echo "Checking to see how big your floating point numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(float));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
```

```
 fi
 ;;
*)
 dflt="$floatsize"
 ;;
esac
rp="What is the size of a floating point number (in bytes)?"
. ./myread
floatsize="$ans"
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/floatsize.U
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```
?RCS: $Id: d_setgrent_r.U,v 0RCS:
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setgrent_r setgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_setgrent_r:
?S: This variable conditionally defines the HAS_SETGRENT_R symbol,
?S: which indicates to the C program that the setgrent_r()
?S: routine is available.
?S:.
?S:setgrent_r_proto:
?S: This variable encodes the prototype of setgrent_r.
?S: It is zero if d_setgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setgrent_r
?S: is defined.
?S:.
?C:HAS_SETGRENT_R:
?C: This symbol, if defined, indicates that the setgrent_r routine
?C: is available to
 setgrent re-entrantly.
?C:.
?C:SETGRENT_R_PROTO:
?C: This symbol encodes the prototype of setgrent_r.
?C: It is zero if d_setgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setgrent_r
?C: is defined.
?C:.
```

```
?H:#$d_setgrent_r HAS_SETGRENT_R /**/
?H:#define SETGRENT_R_PROTO $setgrent_r_proto /**/
?H:.
?T:try hdrs d_setgrent_r_proto
: see if setgrent_r exists
set setgrent_r d_setgrent_r
eval $inlibc
case "$d_setgrent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_setgrent_r_proto:$usethreads" in
 ":define") d_setgrent_r_proto=define
  set d_setgrent_r_proto setgrent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setgrent_r_proto" in
 define)
 case "$setgrent_r_proto" in
 "|0) try='int setgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setgrent_r_proto=I_H ;;
 esac
 case "$setgrent_r_proto" in
 "|0) try='void setgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setgrent_r_proto=V_H ;;
 esac
 case "$setgrent_r_proto"
 in
 "|0) d_setgrent_r=undef
  setgrent_r_proto=0
  echo "Disabling setgrent_r, cannot determine prototype." >&4 ;;
 * ) case "$setgrent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setgrent_r_proto="REENTRANT_PROTO_$setgrent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setgrent_r has no prototype, not using it." >&4 ;;
  esac
  d_setgrent_r=undef
  setgrent_r_proto=0
  ;;
 esac
 ;;
*) setgrent_r_proto=0
 ;;
```

```
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setgrent_r.U
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?RCS: $Id: d_dlopen.U,v 3.0.1.2 1995/07/25 13:52:56 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlopen.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:56  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dlopen: Inlibc runnm d_cplusplus ccflags gccversion
?MAKE: -pick add $@ %<
?S:d_dlopen:
?S: This variable conditionally defines the HAS_DLOPEN
 symbol, which
?S: indicates to the C program that the dlopen() routine is available.
?S:.
?C:HAS_DLOPEN :
?C: This symbol, if defined, indicates that the dlopen routine is
?C: available.
?C:.
?H:#$d_dlopen HAS_DLOPEN  /**/
?H:.
?T: xxx_runnm
?T: xxx_ccflags
?LINT:set d_dlopen
?X: We don't permanently change runnm and ccflags, but we do temporarily.
?LINT: change runnm
?LINT: change ccflags
: see if dlopen exists
?X: On NetBSD and FreeBSD, dlopen is available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
```

```
xxx_runnm="$runnm"
xxx_ccflags="$ccflags"
runnm=false
: with g++ one needs -shared to get is-in-libc to work for dlopen
case "$gccversion" in
") ;;
*Clang*) ;;
*) case "$d_cplusplus" in
 "$define") ccflags="$ccflags -shared" ;;
 esac
 ;;
esac
set dlopen d_dlopen
eval $inlibc
runnm="$xxx_runnm"
ccflags="$xxx_ccflags"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dlopen.U
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```
?RCS: $Id: i_syspoll.U 15 2006-08-30 18:21:51Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_syspoll: Inhdr
?MAKE: -pick add $@ %<
?S:i_syspoll:
?S: This variable conditionally defines the I_SYS_POLL symbol, which
?S: indicates to the C program that it should include <sys/poll.h>.
?S:.
?C:I_SYS_POLL:
?C: This symbol, if defined, indicates that the program may include
?C: <sys/poll.h>.  When I_POLL is also defined, it's probably safest
?C: to only include <poll.h>.
?C:.
?H:#$i_syspoll I_SYS_POLL /**/
?H:.
?LINT:set i_syspoll
: see if there is
 a sys/poll.h file
set sys/poll.h i_syspoll
```

```
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syspoll.U
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```
?RCS: $Id: d_ftime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ftime.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ftime d_gettimeod: Inlibc Setvar
?MAKE: -pick add $@ %<
?S:d_ftime:
?S: This variable conditionally defines the HAS_FTIME symbol, which indicates
?S: that the ftime() routine exists.  The ftime() routine is basically
?S: a sub-second accuracy clock.
?S:.
?S:d_gettimeod:
?S: This variable conditionally defines the HAS_GETTIMEOFDAY symbol,
 which
?S: indicates that the gettimeofday() system call exists (to obtain a
?S: sub-second accuracy clock). You should probably include <sys/resource.h>.
?S:.
?C:HAS_FTIME (FTIMER):
?C: This symbol, if defined, indicates that the ftime() routine exists.
?C: It is basically a sub-second accuracy clock, but is less accurate
?C: than gettimeofday(2) anyway. The type "Timeval" should be used to
?C: refer to "struct timeb".
?C:.
?C:HAS_GETTIMEOFDAY (GETTIMEOFDAY):
?C: This symbol, if defined, indicates that the gettimeofday() system
?C: call is available for a sub-second accuracy clock. Usually, the file
?C: <sys/resource.h> needs to be included (see I_SYS_RESOURCE).
?C: The type "Timeval" should be used to refer to "struct timeval".
?C:.
?H:#$d_ftime HAS_FTIME  /**/
?H:#$d_gettimeod HAS_GETTIMEOFDAY /**/
?H:?%<:@if HAS_FTIME
```

```
?H:?%<:#ifdef HAS_FTIME
?H:?%<:#define Timeval struct timeb  /* Structure used by ftime() */
?H:?%<:#endif
?H:?%<:@end
?H:?%<:@if HAS_GETTIMEOFDAY
?H:?%<:#ifdef HAS_GETTIMEOFDAY
?H:?%<:#define
 Timeval struct timeval /* Structure used by gettimeofday() */
?H:?%<:#endif
?H:?%<:@end
?H:.
?X:FIXME
?X:?I:?d_ftime:i_systimeb
?X:?I:?d_gettimeod:i_sysresrc
?LINT:set d_gettimeod d_ftime
?LINT:known Timeval
: see if gettimeofday or ftime exists
?X:
?X: Give priority to gettimeofday(2) because timing is more accurate
?X:
set gettimeofday d_gettimeod
eval $inlibc
case "$d_gettimeod" in
"$undef")
 set ftime d_ftime
 eval $inlibc
 ;;
*)
 val="$undef"; set d_ftime; eval $setvar
 ;;
esac
case "$d_gettimeod$d_ftime" in
"$undef$undef")
 echo " "
 echo 'No ftime() nor gettimeofday() -- timing may be less accurate.' >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ftime.U
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```

```
?RCS:
?MAKE:gidformat: gidsize gidsign ivsize uvsize longsize intsize shortsize \
 ivdformat uvuformat test echo
?MAKE: -pick add $@ %<
?S:gidformat:
?S: This variable contains the format string used for printing a Gid_t.
?S:.
?C:Gid_t_f:
?C: This symbol defines the format string used for printing a Gid_t.
?C:.
?H:#define Gid_t_f  $gidformat  /**/
?H:.
: Check format string for GID

echo " "
$echo "Checking the format string to be used for gids..." >&4

case "$gidsign" in
-1) if $test X"$gidsize" = X"$ivsize"; then
  gidformat="$ivdformat"
 else
  if $test X"$gidsize" = X"$longsize"; then
   gidformat="'ld'"
  else
   if $test X"$gidsize" = X"$intsize"; then
    gidformat="'d'"
   else
    if $test X"$gidsize"
 = X"$shortsize"; then
     gidformat="'hd'"
    fi
   fi
  fi
 fi
 ;;
*) if $test X"$gidsize" = X"$uvsize"; then
  gidformat="$uvuformat"
 else
  if $test X"$gidsize" = X"$longsize"; then
   gidformat="'lu'"
  else
   if $test X"$gidsize" = X"$intsize"; then
    gidformat="'u'"
   else
    if $test X"$gidsize" = X"$shortsize"; then
     gidformat="'hu'"
    fi
   fi
```

```
  fi
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_NeWS.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_NeWS.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_news d_news0 d_newshome d_textcan: test rm Myread Getfile
?MAKE: -pick add $@ %<
?S:d_news:
?S: Set if running NeWS 1.1
?S:.
?S:d_news0:
?S: Set if running NeWS 1.0
?S:.
?S:d_newshome:
?S: Path to the top directory of the NeWS structure.
?S:.
?S:d_textcan:
?S: Path to where the textcan.ps stuff is...
?S:.
?C:HAS_NEWS1_1 (NEWS1_1):
?C: This
 symbol defined if running NeWS 1.1.
?C:.
?C:HAS_NEWS1_0 (NEWS1_0):
?C: This symbol defined if running NeWS 1.0.
?C:.
?C:TEXTCAN:
?C: Tells path to where the textcan.ps stuff is...
?C:.
?H:#$d_news HAS_NEWS1_1     /**/
```

```
?H:#$d_news0 HAS_NEWS1_0     /**/
?H:#define TEXTCAN $d_textcan /**/
?H:.
?INIT:: default path for NeWS
?INIT:d_newshome="/usr/NeWS"
?INIT:
: Check to see what version of NeWS is being run?
cd ..
echo " "
echo "Now for the interesting stuff... Lets see what kind of NeWS"
echo "they grow round here...."
echo " "
dflt='y'
if $test -d $d_newshome; then
 d_newshome=`(cd $d_newshome ; /bin/pwd)`
 echo "Ah...found myself a NeWS in $d_newshome..."
 dflt='y'
 rp="Is this the NeWS you want your children to grow up with?"
 . UU/myread
fi
while $test $ans = "n"; do
dflt=$d_newshome
fn=d
rp="Path to NeWS you want:"
. UU/getfile
d_newshome=$ans

echo " "
if $test ! -d $d_newshome/lib; then
 echo "ARG!  No lib directory in $d_newshome!!!"
 : heavy medicine.  I wonder what the disease
 is...
 $rm -f kit*isdone
 $rm -rf UU
 : bye bye
 set -t; echo "Sorry... no NeWS is bad news..."
fi

if $test -r $d_newshome/lib/NeWS/colors.ps ; then
 echo 'Ahh... your running NeWS 1.1!  Boy... that makes stuff easy....'
 echo " "
 d_news="$define"
 d_news0="$undef"
 if $test -r $d_newshome/lib/NeWS/textcan.ps; then
  d_textcan=$d_newshome/lib/NeWS
  echo "The textcan.ps stuff seems to be in : $d_textcan"
 else
  d_textcan=$d_newshome/clientsrc/client/nterm
```

```
  if $test ! -r $d_textcan/textcan.ps; then
   d_news="$undef"
   d_news0="$define"
   echo 'Hmm... must have been fooled... gotta be NeWS 1.1 beta!'
  else
   echo "The textcan.ps stuff seems to be in : $d_textcan"
  fi
 fi
else
 echo 'snif... snif... I smell the dilapidated smell of NeWS 1.0..'
 echo 'Some things will not work under NeWS 1.0...'
 d_news="$undef"
 d_news0="$define"
fi
cd UU
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_NeWS.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:fpossize: Myread Typedef fpostype Compile longsize run i_stdlib
?MAKE: -pick add $@ %<
?S:fpossize:
?S: This variable contains the size of a fpostype in bytes.
?S:.
?C:Fpos_t_size:
?C: This symbol holds the size of a Fpos_t in bytes.
?C:.
?H:#define Fpos_t_size $fpossize  /* FPOS size */
?H:.
?T:yyy zzz
?F:!try
: Check size for Fpos_t
echo " "
case "$fpostype" in
*_t) zzz="$fpostype" ;;
*)   zzz="fpos_t" ;;
esac
echo "Checking the size of $zzz..." >&4
```

```
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef
 I_STDLIB
#include <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($fpostype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") fpossize=4
  echo "(I can't execute the test program--guessing $fpossize.)" >&4
  ;;
 *) fpossize=$yyy
  echo "Your $zzz is $fpossize bytes long."
  ;;
 esac
else
 dflt="$longsize"
 echo " " >&4
 echo "(I can't compile the test program.  Guessing...)" >&4
 rp="What is the size of your file positions (in bytes)?"
 . ./myread
 fpossize="$ans"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/fpossize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysdir.U,v $
```

```
?RCS: Revision 3.0.1.1  1994/08/29  16:22:30  ram
?RCS: patch32: fixed typo in I_SYS_DIR symbol name
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysdir: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysdir:
?S: This variable conditionally defines the I_SYS_DIR symbol, and indicates
?S: whether a C program should include <sys/dir.h>.
?S:.
?C:I_SYS_DIR (I_SYSDIR):
?C: This symbol, if
 defined, indicates to the C program that it should
?C: include <sys/dir.h>.
?C:.
?H:#$i_sysdir I_SYS_DIR  /**/
?H:.
?LINT:set i_sysdir
: see if this is an sysdir system
set sys/dir.h i_sysdir
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sysconf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_sysconf.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:15:57  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_sysconf: Inlibc
?MAKE: -pick add $@ %<
?S:d_sysconf:
?S: This variable conditionally defines the HAS_SYSCONF symbol, which
```

```
?S: indicates to the C program that the sysconf() routine is available
?S: to determine system related limits and options.
?S:.
?C:HAS_SYSCONF:
?C: This
 symbol, if defined, indicates that sysconf() is available
?C: to determine system related limits and options.
?C:.
?H:#$d_sysconf HAS_SYSCONF /**/
?H:.
?LINT:set d_sysconf
: see if sysconf exists
set sysconf d_sysconf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sysconf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Guess.U,v 3.0.1.5 1995/07/25 13:37:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Guess.U,v $
?RCS: Revision 3.0.1.5  1995/07/25  13:37:14  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:53:55  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:14:35  ram
?RCS: patch15: variable d_bsd was not always set properly
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:14  ram
?RCS:
 patch8: fixed comment which wrongly attributed the usrinc symbol
?RCS: patch8: no more ugly messages when no /usr/include/ctype.h
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:37:37  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:04:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit hazards some guesses as to what the general nature of the system
?X: is.  The information it collects here is used primarily to establish default
?X: answers to other questions.
?X:
?MAKE:Guess d_eunice d_xenix d_bsd: cat test echo n c contains \
 rm Loc eunicefix tr sysroot
?MAKE: -pick add $@ %<
?S:d_eunice:
?S: This variable conditionally defines the symbols EUNICE and VAX, which
?S: alerts the C program that it must deal with idiosyncrasies of VMS.
?S:.
?S:d_xenix:
?S: This variable conditionally defines the symbol XENIX, which alerts
?S: the C program that it runs under Xenix.
?S:.
?S:d_bsd:
?S: This symbol conditionally defines the
 symbol BSD when running on a
?S: BSD system.
?S:.
?C:EUNICE:
?C: This symbol, if defined, indicates that the program is being compiled
?C: under the EUNICE package under VMS.  The program will need to handle
?C: things like files that don't go away the first time you unlink them,
?C: due to version numbering.  It will also need to compensate for lack
?C: of a respectable link() command.
?C:.
?X: Should we define VMS here?  Is Eunice actually used anymore?
?X:?C:VMS:
?X:?C: This symbol, if defined, indicates that the program is running under
?X:?C: VMS.  It is currently only set in conjunction with the EUNICE symbol.
?X:?C:.
?C:XENIX:
?C: This symbol, if defined, indicates that the program is running under
?C: Xenix (at least 3.0 ?).
?C:.
?X:  We don't use BSD in the perl source.  It's too vague, and already
?X:  defined in some header files anyway (e.g. NetBSD).  This just gives
?X:  us a spurious redefinition error upon compilation.
?X: --Andy Dougherty  Feb 11, 1998
?X: ?C:BSD:
?X:
 ?C: This symbol, if defined, indicates that the program is running under
?X: ?C: a BSD system.
```

```
?X: ?C:.
?H:#$d_eunice EUNICE  /**/
?X:?H:#$d_eunice VMS  /**/
?H:#$d_xenix XENIX  /**/
?X: ?H:#$d_bsd BSD  /**/
?H:.
?F:./bsd ./usg ./v7 ./osf1 ./eunice ./xenix ./venix ./os2
?T:xxx
: make some quick guesses about what we are up against
echo " "
$echo $n "Hmm...  $c"
echo exit 1 >bsd
echo exit 1 >usg
echo exit 1 >v7
echo exit 1 >osf1
echo exit 1 >eunice
echo exit 1 >xenix
echo exit 1 >venix
echo exit 1 >os2
d_bsd="$undef"
?X:
?X: Do not use 'usrinc', or we get a circular dependency. because
?X: usrinc is defined in usrinc.U, which relies on us...
?X:
$cat $sysroot/usr/include/signal.h $sysroot/usr/include/sys/signal.h >foo 2>/dev/null
if test -f /osf_boot || $contains 'OSF/1' $sysroot/usr/include/ctype.h >/dev/null 2>&1
then
 echo "Looks kind of like an OSF/1 system, but we'll see..."
 echo exit 0 >osf1
elif test `echo abc | $tr a-z A-Z` = Abc ; then
 xxx=`./loc addbib blurfl $pth`
 if $test
 -f $xxx; then
 echo "Looks kind of like a USG system with BSD features, but we'll see..."
  echo exit 0 >bsd
  echo exit 0 >usg
 else
  if $contains SIGTSTP foo >/dev/null 2>&1 ; then
   echo "Looks kind of like an extended USG system, but we'll see..."
  else
   echo "Looks kind of like a USG system, but we'll see..."
  fi
  echo exit 0 >usg
 fi
elif $contains SIGTSTP foo >/dev/null 2>&1 ; then
 echo "Looks kind of like a BSD system, but we'll see..."
 d_bsd="$define"
 echo exit 0 >bsd
```

```
else
 echo "Looks kind of like a Version 7 system, but we'll see..."
 echo exit 0 >v7
fi
case "$eunicefix" in
*unixtovms*)
 $cat <<'EOI'
There is, however, a strange, musty smell in the air that reminds me of
something...hmm...yes...I've got it...there's a VMS nearby, or I'm a Blit.
EOI
 echo exit 0 >eunice
 d_eunice="$define"
: it so happens the Eunice I know will not run shell scripts in Unix format
 ;;
*)
 echo " "
 echo "Congratulations.  You aren't running Eunice."
 d_eunice="$undef"
 ;;
esac
: Detect
 OS2.  The p_ variable is set above in the Head.U unit.
: Note that this also -- wrongly -- detects e.g. dos-djgpp, which also uses
: semicolon as a patch separator
case "$p_" in
:) ;;
*)
 $cat <<'EOI'
I have the feeling something is not exactly right, however...don't tell me...
lemme think...does HAL ring a bell?...no, of course, you're only running OS/2!
(Or you may be running DOS with DJGPP.)
EOI
 echo exit 0 >os2
 ;;
esac
if test -f /xenix; then
 echo "Actually, this looks more like a XENIX system..."
 echo exit 0 >xenix
 d_xenix="$define"
else
 echo " "
 echo "It's not Xenix..."
 d_xenix="$undef"
fi
chmod +x xenix
$eunicefix xenix
if test -f /venix; then
 echo "Actually, this looks more like a VENIX system..."
```

```
 echo exit 0 >venix
else
 echo " "
 if ./xenix; then
  : null
 else
  echo "Nor is it Venix..."
 fi
fi
chmod +x bsd usg v7 osf1 eunice xenix venix os2
$eunicefix bsd usg v7 osf1 eunice xenix venix os2
$rm -f foo
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Guess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ustat.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_ustat: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_ustat:
?S: This variable conditionally defines the I_USTAT symbol, and indicates
?S: whether a C program should include <ustat.h>.
?S:.
?C:I_USTAT:
?C: This symbol, if defined, indicates that <ustat.h> exists and
?C: should be included.
?C:.
?H:#$i_ustat I_USTAT  /**/
?H:.
?LINT:set i_ustat
: see if this is a ustat.h system
set ustat.h i_ustat
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_ustat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setgrps.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setgrps.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setgrps: Inlibc
?MAKE: -pick add $@ %<
?S:d_setgrps:
?S: This variable conditionally defines the HAS_SETGROUPS symbol, which
?S: indicates to the C program that the setgroups() routine is available
?S: to set the list of process groups.
?S:.
?C:HAS_SETGROUPS:
?C: This symbol, if defined, indicates that the setgroups() routine is
?C: available
 to set the list of process groups.  If unavailable, multiple
?C: groups are probably not supported.
?C:.
?H:#$d_setgrps HAS_SETGROUPS  /**/
?H:.
?LINT:set d_setgrps
: see if setgroups exists
set setgroups d_setgrps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setgrps.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setnetent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setnetent_r setnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setnetent_r:
?S: This variable conditionally defines the HAS_SETNETENT_R symbol,
```

```
?S: which indicates to the C program that the setnetent_r()
?S: routine is available.
?S:.
?S:setnetent_r_proto:
?S: This variable encodes the prototype of setnetent_r.
?S: It is zero if d_setnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setnetent_r
?S: is defined.
?S:.
?C:HAS_SETNETENT_R:
?C: This symbol, if defined, indicates that the setnetent_r routine
?C: is
 available to setnetent re-entrantly.
?C:.
?C:SETNETENT_R_PROTO:
?C: This symbol encodes the prototype of setnetent_r.
?C: It is zero if d_setnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setnetent_r
?C: is defined.
?C:.
?H:#$d_setnetent_r HAS_SETNETENT_R /**/
?H:#define SETNETENT_R_PROTO $setnetent_r_proto /**/
?H:.
?T:try hdrs d_setnetent_r_proto
: see if setnetent_r exists
set setnetent_r d_setnetent_r
eval $inlibc
case "$d_setnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setnetent_r_proto:$usethreads" in
 ":define") d_setnetent_r_proto=define
  set d_setnetent_r_proto setnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setnetent_r_proto" in
 define)
 case "$setnetent_r_proto" in
 "|0) try='int setnetent_r(int, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && setnetent_r_proto=I_ID ;;
 esac
 case "$setnetent_r_proto" in
 "|0) try='void setnetent_r(int, struct netent_data*);'
 ./protochk
 "$extern_C $try" $hdrs && setnetent_r_proto=V_ID ;;
 esac
 case "$setnetent_r_proto" in
```

```
 "|0) d_setnetent_r=undef
  setnetent_r_proto=0
  echo "Disabling setnetent_r, cannot determine prototype." >&4 ;;
 * ) case "$setnetent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setnetent_r_proto="REENTRANT_PROTO_$setnetent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setnetent_r has no prototype, not using it." >&4 ;;
  esac
  d_setnetent_r=undef
  setnetent_r_proto=0
  ;;
 esac
 ;;
*) setnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setnetent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_sendmsg: Inlibc
?MAKE: -pick add $@ %<
?S:d_sendmsg:
?S: This variable conditionally defines the HAS_SENDMSG symbol, which
?S: indicates to the C program that the sendmsg() routine is available.
?S:.
?C:HAS_SENDMSG:
?C: This symbol, if defined, indicates that the sendmsg routine is
?C: available to send structured socket messages.
?C:.
?H:#$d_sendmsg HAS_SENDMSG  /**/
?H:.
?LINT:set d_sendmsg
: see if sendmsg exists
set sendmsg d_sendmsg
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sendmsg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sig_name.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sig_name.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:21:25  ram
?RCS: patch61: brand new algorithm for sig_name and (new!) sig_num
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  14:14:54  ram
?RCS: patch56: added <asm/signal.h> lookup for Linux
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:24:11  ram
?RCS: patch54: now looks for <linux/signal.h> too (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:06:57  ram
?RCS: patch30: final echo was missing to close
 awk-printed string
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:17:55  ram
?RCS: patch23: signal list now formatted to avoid scroll-ups (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sig_name sig_name_init sig_num sig_num_init sig_count sig_size: \
 awk Signal Oldconfig rm
?MAKE: -pick add $@ %<
?S:sig_name:
?S: This variable holds the signal names, space separated. The leading
?S: SIG in signal name is removed.  A ZERO is prepended to the list.
?S: This is currently not used, sig_name_init is used instead.
?S:.
?S:sig_name_init:
?S: This variable holds the signal names, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NAME definition
?S: below.  A "ZERO" is prepended to the list, and the list is
```

```
?S: terminated with a plain 0.  The leading SIG in signal names
?S: is removed. See sig_num.
?S:.
?S:sig_num:
?S: This variable holds the signal numbers, space separated. A ZERO is
?S: prepended
 to the list (corresponding to the fake SIGZERO).
?S: Those numbers correspond to  the value of the signal listed
?S: in the same place within the sig_name list.
?S: This is currently not used, sig_num_init is used instead.
?S:.
?S:sig_num_init:
?S: This variable holds the signal numbers, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NUM definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.
?S:.
?S:sig_count (sig_name.U):
?S: This variable holds a number larger than the largest valid
?S: signal number.  This is usually the same as the NSIG macro.
?S:.
?S:sig_size:
?S: This variable contains the number of elements of the sig_name
?S: and sig_num arrays.
?S:.
?C:SIG_NAME:
?C: This symbol contains a list of signal names in order of
?C: signal number. This is intended
?C: to be used as a static array initialization, like this:
?C:  char *sig_name[] = { SIG_NAME };
?C: The signals in the list are separated
 with commas, and each signal
?C: is surrounded by double quotes. There is no leading SIG in the signal
?C: name, i.e. SIGQUIT is known as "QUIT".
?C: Gaps in the signal numbers (up to NSIG) are filled in with NUMnn,
?C: etc., where nn is the actual signal number (e.g. NUM37).
?C: The signal number for sig_name[i] is stored in sig_num[i].
?C: The last element is 0 to terminate the list with a NULL.  This
?C: corresponds to the 0 at the end of the sig_name_init list.
?C: Note that this variable is initialized from the sig_name_init,
?C: not from sig_name (which is unused).
?C:.
?C:SIG_NUM:
?C: This symbol contains a list of signal numbers, in the same order as the
?C: SIG_NAME list. It is suitable for static array initialization, as in:
?C:  int sig_num[] = { SIG_NUM };
?C: The signals in the list are separated with commas, and the indices
?C: within that list and the SIG_NAME list match, so it's easy to compute
```

```
?C: the signal name from a number or vice versa at the price of a small
?C: dynamic
 linear lookup.
?C: Duplicates are allowed, but are moved to the end of the list.
?C: The signal number corresponding to sig_name[i] is sig_number[i].
?C: if (i < NSIG) then sig_number[i] == i.
?C: The last element is 0, corresponding to the 0 at the end of
?C: the sig_name_init list.
?C: Note that this variable is initialized from the sig_num_init,
?C: not from sig_num (which is unused).
?C:.
?C:SIG_COUNT:
?C: This variable contains a number larger than the largest
?C: signal number.  This is usually the same as the NSIG macro.
?C:.
?C:SIG_SIZE:
?C: This variable contains the number of elements of the SIG_NAME
?C: and SIG_NUM arrays, excluding the final NULL entry.
?C:.
?H:#define SIG_NAME $sig_name_init  /**/
?H:#define SIG_NUM  $sig_num_init  /**/
?H:#define SIG_COUNT $sig_count   /**/
?H:#define SIG_SIZE $sig_size   /**/
?H:.
?T:i doinit
?F:!= !signal_cmd
?X: signal.cmd creates a file  signal.lst which has two columns:
?X: NAME  number, e.g.
?X:  HUP 1
?X: The list is
 sorted on signal number, with duplicates moved to
?X: the end..
: generate list of signal names
case "$sig_num_init" in
")
echo " "
case "$sig_name_init" in
") doinit=yes ;;
*)  case "$sig_num_init" in
   "|*,*) doinit=yes ;;
   esac ;;
esac
case "$doinit" in
yes)
 echo "Generating a list of signal names and numbers..." >&4
 . ./signal_cmd
 sig_count=`$awk '/^NSIG/ { printf "%d", $2 }' signal.lst`
 sig_name=`$awk 'BEGIN { printf "ZERO " }
```

```
  !/^NSIG/ { printf "%s ", $1 }' signal.lst`
 sig_num=`$awk  'BEGIN { printf "0 " }
  !/^NSIG/ { printf "%d ", $2 }' signal.lst`
 sig_name_init=`$awk 'BEGIN { printf "\"ZERO\", " }
       !/^NSIG/ { printf "\"%s\", ", $1 }
       END { printf "0\n" }' signal.lst`
 sig_num_init=`$awk  'BEGIN { printf "0, " }
       !/^NSIG/ { printf "%d, ", $2}
       END { printf "0\n"}' signal.lst`
 ;;
esac
echo "The following $sig_count signals are available:"
echo " "
echo $sig_name | $awk \
'BEGIN { linelen = 0 }
{
 for (i = 1; i <= NF; i++) {
  name
 = "SIG" $i " "
  linelen = linelen + length(name)
  if (linelen > 70) {
   printf "\n"
   linelen = length(name)
  }
  printf "%s", name
 }
 printf "\n"
}'
sig_size=`echo $sig_name | awk '{print NF}'`
$rm -f signal signal.c signal.awk signal.lst signal_cmd
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sig_name.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: contains.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:05:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:contains: Nothing
?MAKE: -pick add $@ %<
?S:contains:
?S: This variable holds the command to do a grep with a proper return
?S: status.  On most sane systems it is simply "grep".  On insane systems
?S: it is a grep followed by a cat followed by a test.  This variable
?S: is primarily for the use of other Configure units.
?S:.
: Some
 greps do not return status, grrr.
echo "grimblepritz" >grimble
if grep blurfldyick grimble >/dev/null 2>&1 ; then
 contains=contains
elif grep grimblepritz grimble >/dev/null 2>&1 ; then
 contains=grep
else
 contains=contains
fi
rm -f grimble
: the following should work in any shell
case "$contains" in
contains*)
 echo " "
 echo "AGH!  Grep doesn't return a status.  Attempting remedial action."
 cat >contains <<'EOSS'
grep "$1" "$2" >.greptmp && cat .greptmp && test -s .greptmp
EOSS
chmod +x contains
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/contains.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: make.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: make.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:09:40  ram
?RCS: patch61: created
?RCS:
?MAKE:make_set_make : Loc rm sed make
?MAKE: -pick add $@ %<
?S:make_set_make:
?S: Some versions of 'make' set the variable MAKE.  Others do not.
?S: This variable contains the string to be included in Makefile.SH
?S: so that MAKE is set if needed, and not if not needed.
?S: Possible values are:
?S:
?S: make_set_make='#'  #
 If your make program handles this for you,
?S:
?S: make_set_make="MAKE=$make" # if it doesn't.
?S:
?S: This uses a comment character so that we can distinguish a
?S: 'set' value (from a previous config.sh or Configure -D option)
?S: from an uncomputed value.
?S:.
?LINT: extern MAKE
?LINT: change MAKE
?X: This test is based on one from an autoconf-generated configure
?X: script. Autoconf stole a lot from Configure, but now it's our
?X: turn to do so... ;-) -- RAM, 21/02/97
: check whether make sets MAKE
echo " "
echo "Checking if your $make program sets \$(MAKE)..." >&4
case "$make_set_make" in
")
?X: Use sed so we don't have a line begining with @echo.  Metaconfig
?X: will think that's a command like @if or @end.
 $sed 's/^X //' > testmake.mak << 'EOF'
Xall:
X  @echo 'maketemp="$(MAKE)"'
EOF
?X: GNU make sometimes prints "make[1]: Entering...", which would confuse us
 case "`$make -f testmake.mak 2>/dev/null`" in
 *maketemp=*) make_set_make='#' ;;
 *) make_set_make="MAKE=$make" ;;
 esac
 $rm
 -f testmake.mak
 ;;
esac
case "$make_set_make" in
'#') echo "Yup, it does.";;
```

```
*) echo "Nope, it doesn't.";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/make.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Signal.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:01  ram
?RCS: patch61: created
?RCS:
?X:
?X: This unit produces three files:
?X:
?X: 1- A signal.c file, which, when compiled and run, produces an output like:
?X:
?X:   HUP 1
?X:   INT 2
?X:   QUIT 3
?X:   etc...
?X:
?X: 2- A signal.awk script to parse the output of signal.c, fill
?X: in gaps (up to NSIG) and move duplicates to the end.
?X:
?X: 3- A signal_cmd script to compile signal.c and run it
?X: through sort -n -k 2 | uniq | awk -f signal.awk.
?X:
 (we try also sort -n +1 since some old hosts don't grok sort -k)
?X: (This is called signal_cmd to avoid OS/2 confusion with
?X: signal.cmd vs. signal.
?X: The signal_cmd script also falls back on checking signals one at a
?X: time in case the signal.c program fails.  On at least one version of
?X: Linux 2.1.x, the header file #define'd SIGRTMAX to a symbol that
?X: is not defined by the compiler/linker. :-(.  Further, on that same
?X: version of Linux, the user had a defective C-shell that gave an
?X: incorrect list for kill -l, so the fall-back didn't work.
?X:
?X: This unit is then used by sig_name.U.
```

```
?X:
?MAKE:Signal: test tr rm awk cat grep startsh eunicefix sed sort uniq \
 Findhdr cppstdin +cppflags cppminus Compile trnl run
?MAKE: -pick add $@ %<
?X:all files declared as "public" since they're used from other units
?F:signal.c signal_cmd signal.lst signal signal.awk
?T: xx xxx xxxfiles
?LINT:use rm run
: Trace out the files included by signal.h, then look for SIGxxx
 names.
?X: Remove SIGARRAYSIZE used by HPUX.
?X: Remove SIGSTKSIZE used by Linux.
?X: Remove SIGSTKSZ used by Posix.
?X: Remove SIGTYP void lines used by OS2.
?X: Some cpps, like os390, dont give the file name anywhere
if [ "X$fieldn" = X ]; then
 : Just make some guesses.  We check them later.
 xxx='/usr/include/signal.h /usr/include/sys/signal.h'
else
 xxx=`echo '#include <signal.h>' |
 $cppstdin $cppminus $cppflags 2>/dev/null |
 $grep '^[  ]*#.*include' |
 $awk "{print \\$$fieldn}" | $sed 's!"!!g' |\
  $sed 's!\\\\\\\\!/!g' | $sort | $uniq`
fi
?X: Check this list of files to be sure we have parsed the cpp output ok.
?X: This will also avoid potentially non-existent files, such
?X: as ../foo/bar.h
xxxfiles="
?X: Add /dev/null in case the $xxx list is empty.
for xx in $xxx /dev/null ; do
 $test -f "$xx" && xxxfiles="$xxxfiles $xx"
done
?X: If we have found no files, at least try signal.h
case "$xxxfiles" in
") xxxfiles=`./findhdr signal.h` ;;
esac
xxx=`awk '
$1 ~ /^#define$/ &&
 $2 ~ /^SIG[A-Z0-9]*$/ && $2 !~ /SIGARRAYSIZE/ && $2 !~ /SIGSTKSIZE/ && $2 !~ /SIGSTKSZ/ && $3 !~
/void/ {
 print substr($2, 4, 20)
}
$1 == "#" && $2 ~ /^define$/ && $3 ~ /^SIG[A-Z0-9]*$/ && $3 !~ /SIGARRAYSIZE/ && $4 !~ /void/ {
 print substr($3, 4, 20)
}' $xxxfiles`
: Append some common names just in case the awk scan failed.
xxx="$xxx ABRT ALRM BUS CANCEL CHLD CLD CONT DIL EMT FPE"
```

```
xxx="$xxx FREEZE HUP ILL INT IO IOT KILL LOST LWP PHONE"
xxx="$xxx PIPE POLL PROF PWR QUIT RTMAX RTMIN SEGV STKFLT STOP"
xxx="$xxx SYS TERM THAW TRAP TSTP TTIN TTOU URG USR1 USR2"
xxx="$xxx USR3 USR4 VTALRM WAITING WINCH WIND WINDOW XCPU XFSZ"

: generate a few handy files for later
$cat > signal.c <<'EOCP'
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {

/* Strange style to avoid deeply-nested #if/#else/#endif */
#ifndef NSIG
#  ifdef _NSIG
#    define NSIG (_NSIG)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGMAX
#    define NSIG (SIGMAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIG_MAX
#
   define NSIG (SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAXSIG
#    define NSIG (MAXSIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAX_SIG
#    define NSIG (MAX_SIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGARRAYSIZE
#    define NSIG (SIGARRAYSIZE+1) /* Not sure of the +1 */
#  endif
```

```
#endif

#ifndef NSIG
#  ifdef _sys_nsig
#    define NSIG (_sys_nsig) /* Solaris 2.5 */
#  endif
#endif

/* Default to some arbitrary number that's big enough to get most
  of the common signals.
*/
#ifndef NSIG
#    define NSIG 50
#endif

printf("NSIG %d\n", NSIG);

#ifndef JUST_NSIG

EOCP

echo $xxx | $tr ' ' $trnl | $sort | $uniq | $awk '
{
 printf "#ifdef SIG"; printf $1; printf "\n"
 printf "printf(\""; printf $1; printf " %%d\\n\",SIG";
 printf $1; printf ");\n"
 printf "#endif\n"
}
END {
 printf "#endif /* JUST_NSIG */\n";
 printf "exit(0);\n}\n";
}
' >>signal.c
$cat >signal.awk <<'EOP'
BEGIN { ndups = 0 }
$1 ~ /^NSIG$/ { nsig = $2 }
($1 !~ /^NSIG$/) && (NF == 2) {
   if ($2 >
 maxsig) { maxsig = $2 }
   if (sig_name[$2]) {
 dup_name[ndups] = $1
 dup_num[ndups] = $2
 ndups++
   }
   else {
 sig_name[$2] = $1
 sig_num[$2] = $2
   }
```

```
}
END {
   if (nsig == 0) {
    nsig = maxsig + 1
   }
   printf("NSIG %d\n", nsig);
   for (n = 1; n < nsig; n++) {
 if (sig_name[n]) {
     printf("%s %d\n", sig_name[n], sig_num[n])
 }
 else {
     printf("NUM%d %d\n", n, n)
 }
   }
   for (n = 0; n < ndups; n++) {
 printf("%s %d\n", dup_name[n], dup_num[n])
   }
}
EOP
$cat >signal_cmd <<EOS
$startsh
if $test -s signal.lst; then
   echo "Using your existing signal.lst file"
 exit 0
fi
xxx="$xxx"
EOS
?X: Avoid variable interpolation problems, especially with
?X: xxx, which contains newlines.
$cat >>signal_cmd <<'EOS'

set signal
if eval $compile_ok; then
 $run ./signal$_exe | ($sort -n -k 2 2>/dev/null || $sort -n +1) |\
  $uniq | $awk -f signal.awk >signal.lst
else
 echo "(I can't seem be able to compile the whole test program)" >&4
 echo "(I'll try it in little
 pieces.)" >&4
 set signal -DJUST_NSIG
 if eval $compile_ok; then
  $run ./signal$_exe > signal.nsg
  $cat signal.nsg
 else
  echo "I can't seem to figure out how many signals you have." >&4
  echo "Guessing 50." >&4
  echo 'NSIG 50' > signal.nsg
 fi
```

```
 : Now look at all the signal names, one at a time.
 for xx in `echo $xxx | $tr ' ' $trnl | $sort | $uniq`; do
  $cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {
printf("$xx %d\n", SIG${xx});
return 0;
}
EOCP
  set signal
  if eval $compile; then
   echo "SIG${xx} found."
   $run ./signal$_exe  >> signal.ls1
  else
   echo "SIG${xx} NOT found."
  fi
 done
 if $test -s signal.ls1; then
  $cat signal.nsg signal.ls1 |
   $sort -n | $uniq | $awk -f signal.awk >signal.lst
 fi

fi
if $test -s signal.lst; then
 :
else
 echo "(AAK! I can't compile the test programs -- Guessing)" >&4
 echo 'kill -l' >signal
 set X `csh -f <signal`
 $rm -f signal
 shift
 case $# in
 0) set HUP INT QUIT ILL TRAP ABRT
 EMT FPE KILL BUS SEGV SYS PIPE ALRM TERM;;
 esac
 echo $@ | $tr ' ' $trnl | \
     $awk '{ printf "%s %d\n", $1, ++s; }
    END { printf "NSIG %d\n", ++s }' >signal.lst
fi
$rm -f signal.c signal$_exe signal$_o signal.nsg signal.ls1
EOS
chmod a+x signal_cmd
$eunicefix signal_cmd
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Signal.U

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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, 2012 Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:ptrsize: cat rm_try Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:ptrsize:
?S: This variable contains the value of the PTRSIZE symbol, which
?S: indicates to the C program how many bytes there are in a pointer.
?S:.
?C:PTRSIZE:
?C: This symbol contains the size of a pointer, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define PTRSIZE $ptrsize  /**/
?H:.
?F:!try
: check for length of pointer
echo " "
case "$ptrsize" in
")
 echo "Checking to see how big your pointers are..."
 >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(char *));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$ptrsize"
 ;;
```

```
esac
rp="What is the size of a pointer (in bytes)?"
. ./myread
ptrsize="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ptrsize.U
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```
?RCS: $Id: packadmin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:packadmin: cf_email Oldconfig Myread cat spackage package
?MAKE: -pick add $@ %<
?Y:TOP
?S:packadmin:
?S: Electronic mail address of the package administrator.
?S:.
: check wehther they will act as local admin for the package
$cat <<EOM

If you or somebody else will be maintaining $package at your site, please
fill in the correct e-mail address here so that they may be contacted
if necessary.  You may enter "none"
 for no administrator.

EOM
case "$packadmin" in
") dflt="$cf_email";;
*) dflt="$packadmin";;
esac
rp="$spackage administrator e-mail address"
. ./myread
packadmin="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/packadmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Config_sh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_sh.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:57:53  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  14:53:31  ram
?RCS: patch45: moved path stripping from d_portable.U to end of Configure
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:50:37  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X:
 This unit ends up producing the config.sh script, which contains all the
?X: definitions figured out by Configure.  The add.Config_sh command knows
?X: which variables need to be remembered.  It also adds the EOT (ends the
?X: here document redirection with variable substitution).
?X:
?MAKE:Config_sh: cf_time cf_by test spitshell startsh myuname Myread \
 End Obsol_sh Loc +d_portable package src cat
?MAKE: -pick add.Config_sh $@ %<
?MAKE: -pick add $@ ./Obsol_sh
?MAKE: -pick close.Config_sh $@ %<
?F:!config.over !config.arch
?T:file temp
?LINT:unclosed EOT
: back to where it started
if test -d ../UU; then
 cd ..
fi

: configuration may be unconditionally patched via a 'config.arch' file
if $test -f config.arch; then
 echo "I see a config.arch file, loading it." >&4
 . ./config.arch
fi
```

```
: configuration may be patched via a 'config.over' file
if $test -f config.over; then
 echo " "
 dflt=y
 rp='I see a config.over file.  Do you wish to load it?'
 . UU/myread
 case "$ans" in
 n*) echo
 "OK, I'll ignore it.";;
 *) . ./config.over
  echo "Configuration override changes have been loaded."
  ;;
 esac
fi

@if d_portable
: in case they want portability, strip down executable paths
?X:
?X: Strip down paths in located executables. For each file, e.g. vi, there
?X: is a $vi variable whose value is for instance '/usr/bin/vi'. By resetting
?X: $vi to 'vi', we rely on the PATH variable to locate the executable...
?X:
case "$d_portable" in
"$define")
 echo " "
 echo "Stripping down executable paths..." >&4
?X:
?X: Previously, we used to do    eval $file="\$file"  but in order
?X: to handle things like  sh Configure -Dmake=gmake, we can't do
?X: that.  What we *really* want is to strip away the absolute path
?X: and rely on the end user's $PATH to correctly find the executable.
?X: This method assumes there is a "basename" command available.  If
?X: not, replace it with the following expr-based command:
?X:   expr  $temp : '.*/\(.*\)' \| $temp
?X: Since this preserves the actual
 command name, we can now drop the
?X: OS/2 specific code.
?X:  --Andy Dougherty  August 1999
?X:
?X: On OS/2, a special $ar command not even named 'ar' is required,
?X: so we don't strip that name.
?X: Also, on DOS-ish systems, there might not be a ln command, but we
?X: might have ln='cp'.
?X: However, we can't set d_portable=undef on such systems since
?X: Unix-ish tools don't have standard locations there.  Thus we
?X: MUST rely on the user's $PATH.
?X: --Andy Dougherty  4/1998
```

```
?X:
 for file in $loclist $trylist; do
  eval temp=\$$file
  eval $file=`basename $temp`
 done
 ;;
esac

@end
: create config.sh file
echo " "
echo "Creating config.sh..." >&4
$spitshell <<EOT >config.sh
$startsh
#
# This file was produced by running the Configure script. It holds all the
# definitions figured out by Configure. Should you modify one of these values,
# do not forget to propagate your changes by running "Configure -der". You may
# instead choose to run each of the .SH files by yourself, or "Configure
 -S".
#

# Package name      : $package
# Source directory  : $src
# Configuration time: $cf_time
# Configured by     : $cf_by
# Target system     : $myuname

EOT
?X: Command line options are saved by the Options.U unit in the
?X: temporary file UU/cmdline.opt
: Add in command line options if available
$test -f UU/cmdline.opt && $cat UU/cmdline.opt >> config.sh

$spitshell <<EOT >>config.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Config_sh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Signal.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Signal.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:01  ram
?RCS: patch61: created
?RCS:
?X:
?X: This unit produces three files:
?X: 1- A signal.c file, which, when compiled and run, produces an output like:
?X:
?X:   HUP 1
?X:   INT 2
?X:   QUIT 3
?X:   etc...
?X:
?X: 2- A signal.awk script to parse the output of signal.c, fill
?X: in gaps (up to NSIG) and move duplicates to the end.
?X: 3- A signal_cmd script to compile signal.c and run it
?X: through
 sort -n -k 2 | uniq | awk -f signal.awk.
?X: (we try also sort -n +1 since some old hosts don't grok sort -k)
?X: (This is called signal_cmd to avoid OS/2 confusion with
?X: signal.cmd vs. signal.
?X: The signal_cmd script also falls back on checking signals one at a
?X: time in case the signal.c program fails.  On at least one version of
?X: Linux 2.1.x, the header file #define'd SIGRTMAX to a symbol that
?X: is not defined by the compiler/linker. :-(.  Further, on that same
?X: version of Linux, the user had a defective C-shell that gave an
?X: incorrect list for kill -l, so the fall-back didn't work.
?X:
?X: This unit is then used by sig_name.U.
?X:
?MAKE:Signal: test tr rm awk cat grep startsh eunicefix sed sort uniq \
 Findhdr cppstdin +cppflags cppminus Compile _o _exe trnl run i_stdlib \
 sysroot
?MAKE: -pick add $@ %<
?X:all files declared as "public" since they're used from other units
?F:signal.c signal_cmd signal.lst signal signal.awk
?T: xx xxx xxxfiles
?LINT:use rm run
 _o _exe
?LINT:extern sig_num_init
: Trace out the files included by signal.h, then look for SIGxxx names.
?X: Remove SIGARRAYSIZE used by HPUX.
?X: Remove SIGSTKSIZE used by Linux.
?X: Remove SIGSTKSZ used by POSIX.
?X: Remove SIGTYP void lines used by OS2.
?X: Some cpps, like os390, do not give the file name anywhere
```

```
case "$sig_num_init" in
")
if [ "X$fieldn" = X ]; then
 : Just make some guesses.  We check them later.
 xxx="$sysroot/usr/include/signal.h $sysroot/usr/include/sys/signal.h"
else
 xxx=`echo '#include <signal.h>' |
 $cppstdin $cppminus $cppflags 2>/dev/null |
 $grep '^[  ]*#.*include' |
 $awk "{print \\$$fieldn}" | $sed 's!"!!g' |\
  $sed 's!\\\\\\\\!/!g' | $sort | $uniq`
fi
?X: Check this list of files to be sure we have parsed the cpp output ok.
?X: This will also avoid potentially non-existent files, such
?X: as ../foo/bar.h
xxxfiles="
?X: Add /dev/null in case the $xxx list is empty.
for xx in $xxx /dev/null ; do
 $test -f "$xx" && xxxfiles="$xxxfiles $xx"
done
?X:
 If we have found no files, at least try signal.h
case "$xxxfiles" in
") xxxfiles=`./findhdr signal.h` ;;
esac
xxx=`awk '
$1 ~ /^#define$/ && $2 ~ /^SIG[A-Z0-9]*$/ && $2 !~ /SIGARRAYSIZE/ && $2 !~ /SIGSTKSIZE/ && $2 !~
/SIGSTKSZ/ && $3 !~ /void/ {
 print substr($2, 4, 20)
}
$1 == "#" && $2 ~ /^define$/ && $3 ~ /^SIG[A-Z0-9]*$/ && $3 !~ /SIGARRAYSIZE/ && $4 !~ /void/ {
 print substr($3, 4, 20)
}' $xxxfiles`
: Append some common names just in case the awk scan failed.
xxx="$xxx ABRT ALRM BUS CANCEL CHLD CLD CONT DIL EMT FPE"
xxx="$xxx FREEZE HUP ILL INT IO IOT KILL LOST LWP PHONE"
xxx="$xxx PIPE POLL PROF PWR QUIT RTMAX RTMIN SEGV STKFLT STOP"
xxx="$xxx SYS TERM THAW TRAP TSTP TTIN TTOU URG USR1 USR2"
xxx="$xxx USR3 USR4 VTALRM WAITING WINCH WIND WINDOW XCPU XFSZ"

: generate a few handy files for later
$cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
```

```
#include <stdio.h>
int main() {

/* Strange style to avoid
 deeply-nested #if/#else/#endif */
#ifndef NSIG
#  ifdef _NSIG
#    define NSIG (_NSIG)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGMAX
#    define NSIG (SIGMAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIG_MAX
#    define NSIG (SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef _SIG_MAX
#    define NSIG (_SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAXSIG
#    define NSIG (MAXSIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAX_SIG
#    define NSIG (MAX_SIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGARRAYSIZE
#    define NSIG SIGARRAYSIZE /* Assume ary[SIGARRAYSIZE] */
#  endif
#endif

#ifndef NSIG
```

```
#  ifdef _sys_nsig
#    define NSIG (_sys_nsig) /* Solaris 2.5 */
#  endif
#endif

/* Default to some arbitrary number that's big enough to get most
  of the common signals.
*/
#ifndef NSIG
#    define NSIG 50
#endif

printf("NSIG %d\n", NSIG);

#ifndef JUST_NSIG

EOCP

echo $xxx | $tr ' ' $trnl | $sort | $uniq | $awk '
{
 printf "#ifdef SIG"; printf $1; printf "\n"
 printf "printf(\"";
 printf $1; printf " %%d\\n\",SIG";
 printf $1; printf ");\n"
 printf "#endif\n"
}
END {
 printf "#endif /* JUST_NSIG */\n";
 printf "exit(0);\n}\n";
}
' >>signal.c
$cat >signal.awk <<'EOP'
BEGIN { ndups = 0 }
$1 ~ /^NSIG$/ { nsig = $2 }
($1 !~ /^NSIG$/) && (NF == 2) && ($2 ~ /^[0-9][0-9]*$/) {
   if ($2 > maxsig) { maxsig = $2 }
   if (sig_name[$2]) {
 dup_name[ndups] = $1
 dup_num[ndups] = $2
 ndups++
   }
   else {
 sig_name[$2] = $1
 sig_num[$2] = $2
   }
}
END {
   if (nsig == 0) {
```

```
    nsig = maxsig + 1
   }
   printf("NSIG %d\n", nsig);
   for (n = 1; n < nsig; n++) {
 if (sig_name[n]) {
     printf("%s %d\n", sig_name[n], sig_num[n])
 }
 else {
     printf("NUM%d %d\n", n, n)
 }
   }
   for (n = 0; n < ndups; n++) {
 printf("%s %d\n", dup_name[n], dup_num[n])
   }
}
EOP
$cat >signal_cmd <<EOS
$startsh
if $test -s signal.lst; then
   echo "Using your existing signal.lst file"
 exit 0
fi
xxx="$xxx"
EOS
?X: Avoid variable interpolation problems, especially with
?X:
 xxx, which contains newlines.
$cat >>signal_cmd <<'EOS'

set signal
if eval $compile_ok; then
 $run ./signal$_exe | ($sort -n -k 2 2>/dev/null || $sort -n +1) |\
  $uniq | $awk -f signal.awk >signal.lst
else
 echo "(I can't seem be able to compile the whole test program)" >&4
 echo "(I'll try it in little pieces.)" >&4
 set signal -DJUST_NSIG
 if eval $compile_ok; then
  $run ./signal$_exe > signal.nsg
  $cat signal.nsg
 else
  echo "I can't seem to figure out how many signals you have." >&4
  echo "Guessing 50." >&4
  echo 'NSIG 50' > signal.nsg
 fi
 : Now look at all the signal names, one at a time.
 for xx in `echo $xxx | $tr ' ' $trnl | $sort | $uniq`; do
  $cat > signal.c <<EOCP
```

```
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {
printf("$xx %d\n", SIG${xx});
return 0;
}
EOCP
  set signal
  if eval $compile; then
   echo "SIG${xx} found."
   $run ./signal$_exe  >> signal.ls1
  else
   echo "SIG${xx} NOT found."
  fi
 done
 if $test -s signal.ls1; then
  $cat
 signal.nsg signal.ls1 |
   $sort -n | $uniq | $awk -f signal.awk >signal.lst
 fi

fi
if $test -s signal.lst; then
 :
else
 echo "(AAK! I can't compile the test programs -- Guessing)" >&4
 echo 'kill -l' >signal
 set X `csh -f <signal`
 $rm -f signal
 shift
 case $# in
 0) set HUP INT QUIT ILL TRAP ABRT EMT FPE KILL BUS SEGV SYS PIPE ALRM TERM;;
 esac
 echo $@ | $tr ' ' $trnl | \
     $awk '{ printf "%s %d\n", $1, ++s; }
    END { printf "NSIG %d\n", ++s }' >signal.lst
fi
$rm -f signal.c signal$_exe signal$_o signal.nsg signal.ls1
EOS
chmod a+x signal_cmd
$eunicefix signal_cmd
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Signal.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: dlsrc.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: dlext.U,v $
?RCS:
?X:  hpux support thanks to Jeff Okamoto <okamoto@hpcc101.corp.hp.com>
?X:
?X:  To create a shared library, you must compile ALL source files in the
?X:  library with +z (or possibly +Z if the library is whopping huge),
?X:  then link the library with -b.  Example:
?X:   cc -c +z module_a.c
?X:   cc -c +z module_b.c
?X:   ld -b module_a.o module_b.o -o module.sl
?X:
?MAKE:dlext: \
 Getfile Myread cat usedl so
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:dlext:
?S: This variable contains the extension that is to be used for the
?S: dynamically loaded modules that perl generates.
?S:.
: Check what extension to use for shared libs
case "$usedl" in
$define|y|true)
 $cat <<
 EOM

On a few systems, the dynamically loaded modules that perl generates and uses
will need a different extension than shared libs. The default will probably
be appropriate.

EOM
 case "$dlext" in
 ") dflt="$so" ;;
 *) dflt="$dlext" ;;
 esac
 rp='What is the extension of dynamically loaded modules'
 . ./myread
 dlext="$ans"
 ;;
*)
```

```
 dlext="none"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dlext.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:fflushNULL fflushall: Compile cat rm rm_try test osname run to from \
 Oldconfig Myread Setvar echo targethost \
 d_sysconf i_unistd d_stdio_stream_array stdio_stream_array i_stdlib
?MAKE: -pick add $@ %<
?S:fflushNULL:
?S: This symbol, if defined, tells that fflush(NULL) correctly
?S: flushes all pending stdio output without side effects. In
?S: particular, on some platforms calling fflush(NULL) *still*
?S: corrupts STDIN if it is a pipe.
?S:.
?S:fflushall:
?S: This symbol, if defined, tells that to flush
?S: all
 pending stdio output one must loop through all
?S: the stdio file handles stored in an array and fflush them.
?S: Note that if fflushNULL is defined, fflushall will not
?S: even be probed for and will be left undefined.
?S:.
?C:FFLUSH_NULL:
?C: This symbol, if defined, tells that fflush(NULL) correctly
?C: flushes all pending stdio output without side effects. In
?C: particular, on some platforms calling fflush(NULL) *still*
?C: corrupts STDIN if it is a pipe.
?C:.
?C:FFLUSH_ALL:
?C: This symbol, if defined, tells that to flush
?C: all pending stdio output one must loop through all
?C: the stdio file handles stored in an array and fflush them.
?C: Note that if fflushNULL is defined, fflushall will not
?C: even be probed for and will be left undefined.
```

```
?C:.
?H:#$fflushNULL FFLUSH_NULL  /**/
?H:#$fflushall FFLUSH_ALL  /**/
?H:.
?T:output code
?F:!try.out !try !tryp
: Check how to flush
echo " "
$cat >&4 <<EOM
Checking how to flush all pending stdio output...
EOM
# I only know how to find
 the first 32 possibly open files on SunOS.
# See also hints/sunos_4_1.sh and util.c  --AD
case "$osname" in
sunos) $echo '#define PERL_FFLUSH_ALL_FOPEN_MAX 32' > try.c ;;
esac
$cat >>try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
# include <unistd.h>
#endif
#$d_sysconf HAS_SYSCONF
#$d_stdio_stream_array HAS_STDIO_STREAM_ARRAY
#ifdef HAS_STDIO_STREAM_ARRAY
# define STDIO_STREAM_ARRAY $stdio_stream_array
#endif
int main() {
 FILE* p;
 unlink("try.out");
 p = fopen("try.out", "w");
#ifdef TRY_FPUTC
 fputc('x', p);
#else
# ifdef TRY_FPRINTF
 fprintf(p, "x");
# endif
#endif
#ifdef TRY_FFLUSH_NULL
 fflush(NULL);
#endif
#ifdef TRY_FFLUSH_ALL
 {
```

```
   long open_max = -1;
# ifdef PERL_FFLUSH_ALL_FOPEN_MAX
   open_max = PERL_FFLUSH_ALL_FOPEN_MAX;
# else
#  if defined(HAS_SYSCONF) && defined(_SC_OPEN_MAX)
   open_max = sysconf(_SC_OPEN_MAX);
#  else
#   ifdef FOPEN_MAX
   open_max = FOPEN_MAX;
#   else
#
    ifdef OPEN_MAX
   open_max = OPEN_MAX;
#    else
#     ifdef _NFILE
   open_max = _NFILE;
#     endif
#    endif
#   endif
#  endif
# endif
# ifdef HAS_STDIO_STREAM_ARRAY
   if (open_max > 0) {
     long i;
     for (i = 0; i < open_max; i++)
     if (STDIO_STREAM_ARRAY[i]._file >= 0 &&
  STDIO_STREAM_ARRAY[i]._file < open_max &&
  STDIO_STREAM_ARRAY[i]._flag)
  fflush(&STDIO_STREAM_ARRAY[i]);
   }
 }
# endif
#endif
 _exit(42);
}
EOCP
: first we have to find out how _not_ to flush
$to try.c
if $test "X$fflushNULL" = X -o "X$fflushall" = X; then
   output=''
   set try -DTRY_FPUTC
   if eval $compile; then
     $run ./try 2>/dev/null
     code="$?"
     $from try.out
     if $test ! -s try.out -a "X$code" = X42; then
  output=-DTRY_FPUTC
     fi
```

```
   fi
   case "$output" in
   ")
     set try -DTRY_FPRINTF
     if eval $compile; then
      $run ./try 2>/dev/null
      code="$?"
      $from try.out
      if $test ! -s try.out -a "X$code" = X42; then
   output=-DTRY_FPRINTF

    fi
     fi
 ;;
   esac
fi
: check for fflush NULL behavior
case "$fflushNULL" in
") set try -DTRY_FFLUSH_NULL $output
 if eval $compile; then
  $run ./try 2>/dev/null
  code="$?"
  $from try.out
  if $test -s try.out -a "X$code" = X42; then
   fflushNULL="`$cat try.out`"
  else
   if $test "X$code" != X42; then
    $cat >&4 <<EOM
(If this test failed, don't worry, we'll try another method shortly.)
EOM
   fi
  fi
 fi
 $rm -f core try.core core.try.*
 case "$fflushNULL" in
 x) $cat >&4 <<EOM
Your fflush(NULL) works okay for output streams.
Let's see if it clobbers input pipes...
EOM
# As of mid-March 2000 all versions of Solaris appear to have a stdio
# bug that improperly flushes the input end of pipes.  So we avoid the
# autoflush on fork/system/exec support for now. :-(
$cat >tryp.c <<EOCP
#include <stdio.h>
int
main(int argc, char **argv)
{
   char buf[1024];
```

```
  int i;
  char *bp = buf;
  while (1) {
 while ((i = getc(stdin)) != -1
       && (*bp++ = i) != '\n'

    && bp < &buf[1024])
 /* DO NOTHING */ ;
 *bp = '\0';
 fprintf(stdout, "%s", buf);
 fflush(NULL);
 if (i == -1)
    return 0;
 bp = buf;
  }
}
EOCP
  fflushNULL="$define"
  set tryp
  if eval $compile; then
     $rm -f tryp.out
     # Copy the .c file to the remote host ($to is an ssh-alike if targethost is set)
     if $test "X$targethost" != X; then
  $to tryp.c
  $to tryp
  $run "cat tryp.c | ./tryp " 2>/dev/null > tryp.out
     else
  $cat tryp.c | $run ./tryp   2>/dev/null > tryp.out
     fi
     if cmp tryp.c tryp.out >/dev/null 2>&1; then
        $cat >&4 <<EOM
fflush(NULL) seems to behave okay with input streams.
EOM
  fflushNULL="$define"
     else
  $cat >&4 <<EOM
Ouch, fflush(NULL) clobbers input pipes!  We will not use it.
EOM
  fflushNULL="$undef"
     fi
  fi
  $rm -f core tryp.c tryp.core core.tryp.*
  ;;
 ") $cat >&4 <<EOM
Your fflush(NULL) isn't working (contrary to ANSI C).
EOM
  fflushNULL="$undef"
  ;;
```

```
 *) $cat >&4 <<EOM
Cannot figure out whether
 your fflush(NULL) works or not.
I'm assuming it doesn't (contrary to ANSI C).
EOM
  fflushNULL="$undef"
  ;;
 esac
 ;;
$define|true|[yY]*)
 fflushNULL="$define"
 ;;
*)
 fflushNULL="$undef"
 ;;
esac
: check explicit looping only if NULL did not work, and if the pipe
: bug does not show up on an explicit flush too
case "$fflushNULL" in
"$undef")
 $cat >tryp.c <<EOCP
#include <stdio.h>
int
main(int argc, char **argv)
{
   char buf[1024];
   int i;
   char *bp = buf;
   while (1) {
 while ((i = getc(stdin)) != -1
        && (*bp++ = i) != '\n'
        && bp < &buf[1024])
 /* DO NOTHING */ ;
 *bp = '\0';
 fprintf(stdout, "%s", buf);
 fflush(stdin);
 if (i == -1)
     return 0;
 bp = buf;
   }
}
EOCP
 set tryp
 if eval $compile; then
     $rm -f tryp.out
     if $test "X$targethost" != X; then
  $to tryp.c
  $to tryp
```

```
  $run "cat tryp.c | ./tryp " 2>/dev/null > tryp.out
    else
  $cat tryp.c | $run ./tryp   2>/dev/null > tryp.out
    fi
    if cmp tryp.c tryp.out >/dev/null 2>&1;
 then
       $cat >&4 <<EOM
Good, at least fflush(stdin) seems to behave okay when stdin is a pipe.
EOM
  : now check for fflushall behaviour
  case "$fflushall" in
  ") set try -DTRY_FFLUSH_ALL $output
   if eval $compile; then
    $cat >&4 <<EOM
(Now testing the other method--but note that this also may fail.)
EOM
    $run ./try 2>/dev/null
    code=$?
    $from try.out
    if $test -s try.out -a "X$code" = X42; then
     fflushall="`$cat try.out`"
    fi
   fi
   $rm_try
   case "$fflushall" in
   x) $cat >&4 <<EOM
Whew. Flushing explicitly all the stdio streams works.
EOM
    fflushall="$define"
    ;;
   ") $cat >&4 <<EOM
Sigh. Flushing explicitly all the stdio streams doesn't work.
EOM
    fflushall="$undef"
    ;;
   *) $cat >&4 <<EOM
Cannot figure out whether flushing stdio streams explicitly works or not.
I'm assuming it doesn't.
EOM
    fflushall="$undef"
    ;;
   esac
   ;;
  "$define"|true|[yY]*)
   fflushall="$define"
   ;;
  *)
   fflushall="$undef"
```

```
  ;;
  esac

 else
  $cat >&4 <<EOM
All is futile.  Even fflush(stdin) clobbers input pipes!
EOM
  fflushall="$undef"
     fi
 else
     fflushall="$undef"
 fi
 $rm -f core tryp.c tryp.core core.tryp.*
 ;;
*) fflushall="$undef"
 ;;
esac

case "$fflushNULL$fflushall" in
undefundef)
 $cat <<EOM
OK, I give up.  I cannot figure out how to flush pending stdio output.
We won't be flushing handles at all before fork/exec/popen.
EOM
 ;;
esac
$rm_try tryp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/fflushall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setruid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setruid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setruid: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_setruid:
?S: This variable conditionally defines the HAS_SETRUID symbol, which
?S: indicates to the C program that the setruid() routine is available
?S: to change the real uid of the current program.
?S:.
?C:HAS_SETRUID (SETRUID):
?C: This symbol, if defined, indicates that the setruid
 routine is available
?C: to change the real uid of the current program.
?C:.
?H:#$d_setruid HAS_SETRUID  /**/
?H:.
?LINT:set d_setruid
: see if setruid exists
set setruid d_setruid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setruid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: errnolist.U,v 3.0.1.2 1997/02/28 15:48:01 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: errnolist.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:01  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:10:54  ram
?RCS: patch16: created
?RCS:
?MAKE:errnolist errnolist_SH errnolist_a errnolist_c errnolist_o: cat \
 Compile +d_sysernlst _a _o
?MAKE: -pick add $@ %<
?S:errnolist:
?S: This variable holds the base name of a file containing the
?S: definition
 of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S: The following lines should be included in your Makefile.SH:
```

```
?S:
?S:  case "$errnolist" in
?S:  ") ;;
?S:  *)
?S:   $spitshell >>Makefile <<!GROK!THIS!
?S:  $errnolist_c: $errnolist_SH $errnolist_a
?S:   sh ./$errnolist_SH
?S:
?S:  !GROK!THIS!
?S:   ;;
?S:  esac
?S:
?S: You may define the 'errnolist' variable in your Myinit.U if you
?S: wish to override its default value "errnolist".
?S:.
?S:errnolist_SH:
?S: This is the name of a file which will generate errnolistc.
?S:.
?S:errnolist_a:
?S: This is the name of the awk script called by errnolist_SH.
?S:.
?S:errnolist_c:
?S: This is the name of a generated C file which provides the
?S: definition of the sys_errnolist array.
?S:.
?S:errnolist_o:
?S: This is the name of the object file which provides the
?S: definition of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is
 empty.
?S:.
?INIT:errnolist=errnolist
: check for sys_errnolist
@if d_sysernlst || HAS_SYS_ERRNOLIST
case "$d_sysernlst" in
"$define")
   errnolist="
   errnolist_SH="
   errnolist_a="
   errnolist_c="
   errnolist_o="
 ;;
*)
 echo " "
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
```

```
   errnolist_o=$errnolist$_o
 ;;
esac
@else
echo " "
$cat <<EOM
Checking to see if your C library provides us with sys_errnolist[]...
EOM
$cat >errnolist.c <<'EOCP'
extern char *sys_errnolist[];
int main() {
   char *p0 = sys_errnolist[0];
   char *p1 = sys_errnolist[1];

   return (p0 == p1); /* Make sure they're not optimized away */
}
EOCP
set errnolist
if eval $compile; then
   echo "It does."
   errnolist="
   errnolist_SH="
   errnolist_a="
   errnolist_c="
   errnolist_o="
else
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
    errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/errnolist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotobynumber_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotobynumber_r getprotobynumber_r_proto: Inlibc Protochk \
 Hasproto i_systypes usethreads i_netdb extern_C
```

```
?MAKE: -pick add $@ %<
?S:d_getprotobynumber_r:
?S: This variable conditionally defines the HAS_GETPROTOBYNUMBER_R symbol,
?S: which indicates to the C program that the getprotobynumber_r()
?S: routine is available.
?S:.
?S:getprotobynumber_r_proto:
?S: This variable encodes the prototype of getprotobynumber_r.
?S: It is zero if d_getprotobynumber_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobynumber_r
?S: is defined.
?S:.
?C:HAS_GETPROTOBYNUMBER_R:
?C: This
 symbol, if defined, indicates that the getprotobynumber_r routine
?C: is available to getprotobynumber re-entrantly.
?C:.
?C:GETPROTOBYNUMBER_R_PROTO:
?C: This symbol encodes the prototype of getprotobynumber_r.
?C: It is zero if d_getprotobynumber_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobynumber_r
?C: is defined.
?C:.
?H:#$d_getprotobynumber_r HAS_GETPROTOBYNUMBER_R /**/
?H:#define GETPROTOBYNUMBER_R_PROTO $getprotobynumber_r_proto /**/
?H:.
?T:try hdrs d_getprotobynumber_r_proto
: see if getprotobynumber_r exists
set getprotobynumber_r d_getprotobynumber_r
eval $inlibc
case "$d_getprotobynumber_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotobynumber_r_proto:$usethreads" in
 ":define") d_getprotobynumber_r_proto=define
  set d_getprotobynumber_r_proto getprotobynumber_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getprotobynumber_r_proto" in
 define)
 case "$getprotobynumber_r_proto"
 in
 "|0) try='int getprotobynumber_r(int, struct protoent*, char*, size_t, struct protoent**);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=I_ISBWR ;;
 esac
 case "$getprotobynumber_r_proto" in
 "|0) try='struct protoent* getprotobynumber_r(int, struct protoent*, char*, int);'
```

```
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=S_ISBI ;;
 esac
 case "$getprotobynumber_r_proto" in
 "|0) try='int getprotobynumber_r(int, struct protoent*, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=I_ISD ;;
 esac
 case "$getprotobynumber_r_proto" in
 "|0) d_getprotobynumber_r=undef
  getprotobynumber_r_proto=0
  echo "Disabling getprotobynumber_r, cannot determine prototype." >&4 ;;
 * ) case "$getprotobynumber_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getprotobynumber_r_proto="REENTRANT_PROTO_$getprotobynumber_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getprotobynumber_r
 has no prototype, not using it." >&4 ;;
  esac
  d_getprotobynumber_r=undef
  getprotobynumber_r_proto=0
  ;;
 esac
 ;;
*) getprotobynumber_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotobynumber_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_usendir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_usendir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:47:34  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_usendir i_ndir ndirlib: test Setvar Findhdr d_readdir _a
?MAKE: -pick add $@ %<
?S:d_usendir:
?S: This variable conditionally defines the EMULATE_NDIR symbol, which
?S: indicates
 to the C program that it should compile the ndir.c code
?S: provided with the package.
?S:.
?S:i_ndir (d_libndir):
?S: This variable conditionally defines the I_NDIR symbol, which
?S: indicates to the C program that it should include the system's
?S: version of ndir.h, rather than the one with this package.
?S:.
?S:ndirlib:
?S: The name of the library to include at linking stage to resolve ndir
?S: symbols. It is up to the makefile to use this value.
?S:.
?C:EMULATE_NDIR (USENDIR):
?C: This symbol, if defined, indicates that the program should compile
?C: the ndir.c code provided with the package.
?C:.
?C:I_NDIR (LIBNDIR):
?C: This symbol, if defined, indicates that the program should include the
?C: system's version of ndir.h, rather than the one with this package.
?C:.
?H:#$d_usendir EMULATE_NDIR  /**/
?H:#$i_ndir I_NDIR  /**/
?H:.
?T:val2
?LINT: set d_usendir i_ndir
: see if there are directory access routines out there
echo " "
if $test `./findhdr ndir.h` && \
 ( $test -r /usr/lib/libndir$_a
 || $test -r /usr/local/lib/libndir$_a ); then
 echo "Ndir library found." >&4
 if $test -r /usr/lib/libndir$_a; then
  ndirlib='-lndir'
 else
  ndirlib="/usr/local/lib/libndir$_a"
 fi
 val2="$define"
 val="$undef"
else
```

```
 ndirlib="
 val2="$undef"
 case "$d_readdir" in
 "$define")
 echo "No ndir library found, but you have readdir() so we'll use that." >&4
  val="$undef";
  ;;
 *)
  echo "No ndir library found." >&4
  val="$define"
  ;;
 esac
fi
set d_usendir
eval $setvar
val="$val2"
set i_ndir
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_usendir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_string.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_string.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:50:12  ram
?RCS: patch12: special units Loc and Guess were missing from dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:07:26  ram
?RCS: patch10: removed "(Actually, this looks more like...)" messages (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: See if we should include <string.h> or <strings.h>
?X:
?MAKE:i_string strings:
```

```
 test Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?S:i_string:
?S: This variable conditionally defines the I_STRING symbol, which
?S: indicates that <string.h> should be included rather than <strings.h>.
?S:.
?S:strings:
?S: This variable holds the full path of the string header that will be
?S: used. Typically /usr/include/string.h or /usr/include/strings.h.
?S:.
?C:I_STRING:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <string.h> (USG systems) instead of <strings.h> (BSD systems).
?C:.
?H:#$i_string I_STRING  /**/
?H:.
?LINT:set i_string
: see which of string.h or strings.h is needed
echo " "
strings=`./findhdr string.h`
if $test "$strings" && $test -r "$strings"; then
 echo "Using <string.h> instead of <strings.h>." >&4
 val="$define"
else
 val="$undef"
 strings=`./findhdr strings.h`
 if $test "$strings" && $test -r "$strings"; then
  echo "Using <strings.h> instead of <string.h>." >&4
 else
  ./warn "No string header found -- You'll surely
 have problems."
 fi
fi
set i_string
eval $setvar
case "$i_string" in
"$undef") strings=`./findhdr strings.h`;;
*)   strings=`./findhdr string.h`;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_string.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_access.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_access: test +cc cat +cppflags h_fcntl h_sysfile rm Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_access:
?S: This variable conditionally defines HAS_ACCESS if the access() system
?S: call is available to check for access permissions using real IDs.
?S:.
?C:HAS_ACCESS:
?C: This manifest constant lets the C program know that the access()
?C: system call is available to check for accessibility
 using real UID/GID.
?C: (always present on UNIX.)
?C:.
?H:#$d_access HAS_ACCESS  /**/
?H:.
?W:%<:R_OK W_OK X_OK F_OK
?LINT:set d_access
?LINT:change h_fcntl h_sysfile
: access call always available on UNIX
set access d_access
eval $inlibc

: locate the flags for 'access()'
case "$d_access" in
"$define")
 echo " "
 $cat >access.c <<'EOCP'
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#ifdef I_UNISTD
#include <unistd.h>
#endif
int main() {
 exit(R_OK);
```

```
}
EOCP
 : check sys/file.h first, no particular reason here
 if $test `./findhdr sys/file.h` && \
  $cc -o access $cppflags -DI_SYS_FILE access.c >/dev/null 2>&1 ; then
  h_sysfile=true;
  echo "<sys/file.h> defines the *_OK access constants." >&4
 elif $test `./findhdr fcntl.h` && \
  $cc -o access $cppflags -DI_FCNTL access.c >/dev/null 2>&1 ; then
  h_fcntl=true;
  echo "<fcntl.h> defines the *_OK access constants." >&4
@if I_UNISTD
 elif $test `./findhdr unistd.h`
 && \
  $cc -o access $cppflags -DI_UNISTD access.c >/dev/null 2>&1 ; then
  echo "<unistd.h> defines the *_OK access constants." >&4
@end
 else
  echo "I can't find the four *_OK access constants--I'll use mine." >&4
 fi
 ;;
esac
$rm -f access*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_access.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mallocsrc.U,v 3.0.1.2 1997/02/28 16:10:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: mallocsrc.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:10:26  ram
?RCS: patch61: added support for Free_t, the type of free()
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:10:46  ram
?RCS: patch23: added support for MYMALLOC, mainly  for perl5 (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:12  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:mallocsrc mallocobj usemallocwrap usemymalloc
 malloctype d_mymalloc \
 freetype: Myread \
 Oldconfig package Guess Setvar rm cat +cc +ccflags Findhdr \
 i_malloc i_stdlib sed libs _o ptrsize useithreads
?MAKE: -pick add $@ %<
?X: Put near top so that other tests don't erroneously include
?X: -lmalloc.  --AD  22 June 1998
?Y:TOP
?S:usemymalloc:
?S: This variable contains y if the malloc that comes with this package
?S: is desired over the system's version of malloc.  People often include
?S: special versions of malloc for efficiency, but such versions are often
?S: less portable.  See also mallocsrc and mallocobj.
?S: If this is 'y', then -lmalloc is removed from $libs.
?S:.
?S:usemallocwrap:
?S: This variable contains y if we are wrapping malloc to prevent
?S: integer overflow during size calculations.
?S:.
?S:mallocsrc:
?S: This variable contains the name of the malloc.c that comes with
?S: the package, if that malloc.c is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.
?S:.
?S:d_mymalloc:
?S: This
 variable conditionally defines MYMALLOC in case other parts
?S: of the source want to take special action if MYMALLOC is used.
?S: This may include different sorts of profiling or error detection.
?S:.
?S:mallocobj:
?S: This variable contains the name of the malloc.o that this package
?S: generates, if that malloc.o is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.  See mallocsrc.
?S:.
?S:freetype:
?S: This variable contains the return type of free().  It is usually
?S: void, but occasionally int.
?S:.
?S:malloctype:
?S: This variable contains the kind of ptr returned by malloc and realloc.
?S:.
?C:Free_t:
?C: This variable contains the return type of free().  It is usually
```

```
?C: void, but occasionally int.
?C:.
?C:Malloc_t (MALLOCPTRTYPE):
?C: This symbol is the type of pointer returned by malloc and realloc.
?C:.
?H:#define Malloc_t $malloctype   /**/
?H:#define Free_t
 $freetype   /**/
?H:.
?C:PERL_MALLOC_WRAP:
?C: This symbol, if defined, indicates that we'd like malloc wrap checks.
?C:.
?H:#$usemallocwrap PERL_MALLOC_WRAP  /**/
?H:.
?C:MYMALLOC:
?C: This symbol, if defined, indicates that we're using our own malloc.
?C:.
?H:#$d_mymalloc MYMALLOC   /**/
?H:.
?LINT:extern usedevel
?LINT:change libs
?X: Cannot test for mallocsrc; it is the unit's name and there is a bug in
?X: the interpreter which defines all the names, even though they are not used.
@if mallocobj
: determine whether to use malloc wrapping
echo " "
case "$usemallocwrap" in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*) case "$usedevel" in
 [yY]*|true|$define) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
esac
rp="Do you wish to wrap malloc calls to protect against potential overflows?"
. ./myread
usemallocwrap="$ans"
case "$ans" in
y*|true)
 usemallocwrap="$define" ;;
*)
 usemallocwrap="$undef" ;;
esac

: determine which malloc to compile in
echo " "
case "$usemymalloc"
```

```
 in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*) case "$ptrsize" in
 4) dflt='y' ;;
 *) dflt='n' ;;
 esac
 if test "$useithreads" = "$define"; then dflt='n'; fi
 ;;
esac
rp="Do you wish to attempt to use the malloc that comes with $package?"
. ./myread
usemymalloc="$ans"
case "$ans" in
y*|true)
 usemymalloc='y'
 mallocsrc='malloc.c'
 mallocobj="malloc$_o"
 d_mymalloc="$define"
?X: Maybe libs.U should be dependent on mallocsrc.U, but then
?X: most packages that use dist probably don't supply their own
?X: malloc, so this is probably an o.k. compromise
 case "$libs" in
 *-lmalloc*)
  : Remove malloc from list of libraries to use
  echo "Removing unneeded -lmalloc from library list" >&4
  set `echo X $libs | $sed -e 's/-lmalloc / /' -e 's/-lmalloc$//'`
  shift
  libs="$*"
  echo "libs = $libs" >&4
  ;;
 esac
 ;;
*)
 usemymalloc='n'
 mallocsrc=''
 mallocobj=''
 d_mymalloc="$undef"
 ;;
esac

@end
@if MALLOCPTRTYPE || Malloc_t || Free_t
: compute the return types of
 malloc and free
echo " "
$cat >malloc.c <<END
#$i_malloc I_MALLOC
```

```
#$i_stdlib I_STDLIB
#include <stdio.h>
#include <sys/types.h>
#ifdef I_MALLOC
#include <malloc.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#ifdef TRY_MALLOC
void *malloc();
#endif
#ifdef TRY_FREE
void free();
#endif
END
@if MALLOCPTRTYPE || Malloc_t
case "$malloctype" in
")
 if $cc $ccflags -c -DTRY_MALLOC malloc.c >/dev/null 2>&1; then
  malloctype='void *'
 else
  malloctype='char *'
 fi
 ;;
esac
echo "Your system wants malloc to return '$malloctype', it would seem." >&4
@end

@if Free_t
case "$freetype" in
")
 if $cc $ccflags -c -DTRY_FREE malloc.c >/dev/null 2>&1; then
  freetype='void'
 else
  freetype='int'
 fi
 ;;
esac
echo "Your system uses $freetype free(), it would seem." >&4
@end
$rm -f malloc.[co]
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/mallocsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mkfifo.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mkfifo.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:17  ram
?RCS: patch36: created by ADO
?RCS:
?RCS:
?MAKE:d_mkfifo: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkfifo:
?S: This variable conditionally defines the HAS_MKFIFO symbol, which
?S: indicates to the C program that the mkfifo() routine is available.
?S:.
?C:HAS_MKFIFO :
?C: This symbol, if defined, indicates that the mkfifo
 routine is
?C: available to create FIFOs. Otherwise, mknod should be able to
?C: do it for you. However, if mkfifo is there, mknod might require
?C: super-user privileges which mkfifo will not.
?C:.
?H:#$d_mkfifo HAS_MKFIFO  /**/
?H:.
?LINT:set d_mkfifo
: see if mkfifo exists
set mkfifo d_mkfifo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mkfifo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_scandir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scandir.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:35  ram
?RCS: patch16: created
?RCS:
?MAKE:d_scandir: Inlibc
?MAKE: -pick add $@ %<
?S:d_scandir:
?S: This variable conditionally defines HAS_SCANDIR if scandir() is
?S: available to scan a directory.
?S:.
?C:HAS_SCANDIR:
?C: This symbol, if defined, indicates that the scandir routine is
?C: available to scan a directory.
?C:.
?H:#$d_scandir HAS_SCANDIR /**/
?H:.
?LINT:set d_scandir
: see if
 scandir exists
set scandir d_scandir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scandir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_u32align: Compile cat rm_try Oldconfig run i_stdlib \
 byteorder u32type Myread Setvar u8type signal_t
?MAKE: -pick add $@ %<
?S:d_u32align:
?S: This variable tells whether you must access character data
?S: through U32-aligned pointers.
?S:.
?C:U32_ALIGNMENT_REQUIRED:
?C: This symbol, if defined, indicates that you must access
```

```
?C: character data through U32-aligned pointers.
?C:.
?H:?%<:#ifndef U32_ALIGNMENT_REQUIRED
?H:?%<:#$d_u32align U32_ALIGNMENT_REQUIRED /**/
?H:?%<:#endif
?H:.
?F:!try
: Checking 32bit alignedness
$cat
 <<EOM

Checking to see whether you can access character data unalignedly...
EOM
case "$d_u32align" in
")   $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define U32 $u32type
#define BYTEORDER 0x$byteorder
#define U8 $u8type
#include <signal.h>
#ifdef SIGBUS
$signal_t bletch(int s) { exit(4); }
#endif
int main() {
#if BYTEORDER == 0x1234 || BYTEORDER == 0x4321
   volatile U8 buf[8];
   volatile U32 *up;
   int i;

   if (sizeof(U32) != 4) {
 printf("sizeof(U32) is not 4, but %d\n", sizeof(U32));
 exit(1);
   }

   fflush(stdout);

#ifdef SIGBUS
   signal(SIGBUS, bletch);
#endif

   buf[0] = 0;
   buf[1] = 0;
   buf[2] = 0;
   buf[3] = 1;
```

```
  buf[4] = 0;
  buf[5] = 0;
  buf[6] = 0;
  buf[7] = 1;

  for (i = 0; i < 4; i++) {
 up = (U32*)(buf + i);
 if (! ((*up == 1 << (8*i)) ||   /* big-endian */
       (*up == 1 << (8*(3-i)))  /* little-endian */
      )
   )
 {
    printf("read failed (%x)\n", *up);

   exit(2);
 }
  }

  /* write test */
  for (i = 0; i < 4; i++) {
 up = (U32*)(buf + i);
 *up = 0xBeef;
 if (*up != 0xBeef) {
    printf("write failed (%x)\n", *up);
    exit(3);
 }
  }

  exit(0);
#else
  printf("1\n");
  exit(1);
#endif
  return 0;
}
EOCP
set try
if eval $compile_ok; then
 echo "(Testing for character data alignment may crash the test.  That's okay.)" >&4
 $run ./try 2>&1 >/dev/null
 case "$?" in
 0) cat >&4 <<EOM
You can access character data pretty unalignedly.
EOM
  d_u32align="$undef"
  ;;
 *) cat >&4 <<EOM
It seems that you must access character data in an aligned manner.
```

```
EOM
  d_u32align="$define"
  ;;
 esac
else
 rp='Can you access character data at unaligned addresses?'
 dflt='n'
 . ./myread
 case "$ans" in
 [yY]*) d_u32align="$undef"  ;;
 *) d_u32align="$define" ;;
 esac
fi
$rm_try
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_u32align.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_getpwent.U,v $
?RCS:
?MAKE:d_getpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpwent:
?S: This variable conditionally defines the HAS_GETPWENT symbol, which
?S: indicates to the C program that the getpwent() routine is available
?S: for sequential access of the passwd database.
?S:.
?C:HAS_GETPWENT:
?C: This symbol, if defined, indicates that the getpwent routine is
?C: available for sequential access of the passwd database.
?C: If this is not available, the older getpw() function may be available.
?C:.
?H:#$d_getpwent HAS_GETPWENT  /**/
?H:.
?LINT:set d_getpwent
: see if getpwent exists
set getpwent d_getpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_stdio_stream_array stdio_stream_array: run \
 Compile cat rm_try Oldconfig Myread Setvar
?MAKE: -pick add $@ %<
?S:d_stdio_stream_array:
?S: This variable tells whether there is an array holding
?S: the stdio streams.
?S:.
?S:stdio_stream_array:
?S: This variable tells the name of the array holding the stdio streams.
?S: Usual values include _iob, __iob, and __sF.
?S:.
?C:HAS_STDIO_STREAM_ARRAY:
?C: This symbol, if defined, tells that there is an array
?C: holding the stdio streams.
?C:.
?C:STDIO_STREAM_ARRAY:
?C: This
 symbol tells the name of the array holding the stdio streams.
?C: Usual values include _iob, __iob, and __sF.
?C:.
?H:#$d_stdio_stream_array HAS_STDIO_STREAM_ARRAY /**/
?H:?%<:#ifdef HAS_STDIO_STREAM_ARRAY
?H:?%<:#define STDIO_STREAM_ARRAY $stdio_stream_array
?H:?%<:#endif
?H:.
?T:s
?F:!try
: Check stream access
$cat >&4 <<EOM
Checking how to access stdio streams by file descriptor number...
EOM
case "$stdio_stream_array" in
") $cat >try.c <<EOCP
```

```
#include <stdio.h>
int main() {
 if (&STDIO_STREAM_ARRAY[fileno(stdin)] == stdin)
   printf("yes\n");
}
EOCP
 for s in _iob __iob __sF
 do
        set try -DSTDIO_STREAM_ARRAY=$s
  if eval $compile; then
   case "`$run ./try`" in
   yes) stdio_stream_array=$s; break ;;
   esac
  fi
 done
 $rm_try
esac
case "$stdio_stream_array" in
") $cat >&4 <<EOM
I can't figure out how to access stdio streams by file descriptor number.
EOM
 d_stdio_stream_array="$undef"
 ;;
*) $cat >&4 <<EOM
You can access stdio streams by file descriptor number
 by the $stdio_stream_array array.
EOM
 d_stdio_stream_array="$define"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/stdio_streams.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2006-2007, H.Merijn Brand
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS:
?MAKE:d_dir_dd_fd: Compile cat rm_try Setvar i_dirent i_stdlib
?MAKE: -pick add $@ %<
?S:d_dir_dd_fd (d_dir_dd_fd.U):
?S: This variable conditionally defines the HAS_DIR_DD_FD symbol, which
```

```
?S: indicates that the DIR directory stream type contains a member
?S: variable called dd_fd.
?S:.
?C:HAS_DIR_DD_FD:
?C: This symbol, if defined, indicates that the the DIR* dirstream
?C: structure contains a member variable named dd_fd.
?C:.
?H:#$d_dir_dd_fd HAS_DIR_DD_FD  /**/
?H:.
?LINT:set d_dir_dd_fd
: Look for DIR.dd_fd
case "$i_dirent"
 in
"$define")
   echo "Checking to see if DIR has a dd_fd member variable" >&4
   $cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <dirent.h>

int main() {
   DIR dir;
   dir.dd_fd = 1;
   return 0;
}
EOCP
   val=$undef
   set try
   if eval $compile; then
       echo "Yes, it does."
       val="$define"
   else
       echo "No, it does not."
       val="$undef"
   fi
   ;;
*)
   echo "You don't have a <dirent.h>, so not checking for dd_fd." >&4
   val="$undef"
   ;;
esac
set d_dir_dd_fd
eval $setvar
$rm_try

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dir_dd_fd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getenv_thread.U,v 0RCS:
?RCS: Copyright (c) 2021 H.Merijn Brand, Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getenv_preserves_other_thread: echo cat i_stdlib i_pthread run rm_try \
 Compile Setvar
?MAKE: -pick add $@ %<
?S:d_getenv_preserves_other_thread:
?S: This variable conditionally defines the GETENV_PRESERVES_OTHER_THREAD
?S: symbol, which indicates to the C program that the getenv() system call
?S: does not zap the static buffer in a different thread.
?S:.
?C:GETENV_PRESERVES_OTHER_THREAD:
?C: This symbol, if defined, indicates that the getenv system call doesn't
?C: zap the static buffer of getenv() in a different thread.
?C:
?C: The typical getenv() implementation will return a pointer to the proper
?C: position in **environ.  But some may instead copy them to
 a static
?C: buffer in getenv().  If there is a per-thread instance of that buffer,
?C: or the return points to **environ, then a many-reader/1-writer mutex
?C: will work; otherwise an exclusive locking mutex is required to prevent
?C: races.
?C:.
?H:#$d_getenv_preserves_other_thread GETENV_PRESERVES_OTHER_THREAD /**/
?H:.
?T:rc
?F:!try
?LINT:set d_getenv_preserves_other_thread
: check for getenv behavior
case "$d_getenv_preserves_other_thread" in
")
$echo "Checking to see if getenv() preserves a different thread's results" >&4
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#include <stdio.h>
#include <string.h>
#$i_pthread I_PTHREAD
#ifdef I_PTHREAD
#  include <pthread.h>
```

```
#endif

void *
thread_start(void * arg)
{
   return (void *) getenv("HOME");
}

int main() {
   char * main_buffer;
   char save_main_buffer[1000];
   pthread_t subthread;
   pthread_attr_t attr;

   main_buffer = getenv("PATH");

   /* If too large for our generous allowance,
 return we couldn't figure it
    * out. */
   if (strlen(main_buffer) >= sizeof(save_main_buffer)) {
       exit(2);
   }

   strcpy(save_main_buffer, main_buffer);

   if (pthread_attr_init(&attr) != 0) {
       exit(2);
   }

   if (pthread_create(&subthread, &attr, thread_start, NULL) != 0) {
       exit(2);
   }

   if (pthread_join(subthread, NULL) != 0) {
       exit(2);
   }

   exit(! (strcmp(main_buffer, save_main_buffer) == 0));
}
EOCP
val=
set try
if eval $compile_ok; then
   $run ./try
   rc=$?
   case "$rc" in
 0) echo "getenv() didn't destroy another thread's buffer" >&4
    val=$define
```

```
    ;;
 1) echo "getenv() does destroy another thread's buffer" >&4
    val=$undef
    ;;
 *) echo "Couldn't determine if getenv() destroys another thread's return value (code=$rc); assuming it does" >&4
    val=$undef
    ;;
   esac
else
   echo "(I can't seem to compile the test program.)" >&4
   echo "Assuming that your C library's getenv destroys another thread's
 return value." >&4
   val=$undef
fi
set d_getenv_preserves_other_thread
eval $setvar
$rm_try
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getenv_thread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: prefix.U,v 3.1 1999/07/08 18:27:51 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: prefix.U,v $
?RCS: Revision 3.1  1999/07/08 18:27:51  doughera
?RCS: 5.005_5x version -- Andy Dougherty
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:44:05  ram
?RCS: patch49: new prefixexp variable holding a fully expanded prefix
?RCS: patch49: save off previous prefix value in oldprefix if changed (WED)
?RCS: patch49: added the INSTALLPREFIX define for C programs to use (WED)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/08/29  16:31:34  ram
?RCS: patch32: created by ADO
```

```
?RCS:
?MAKE:prefix prefixexp +oldprefix: Getfile Loc Oldconfig cat package
?MAKE: -pick add $@ %<
?S:prefix:
?S: This variable holds the name of the directory below which the
?S: user will install the package.  Usually, this is /usr/local, and
?S: executables go in /usr/local/bin, library stuff in /usr/local/lib,
?S: man pages in /usr/local/man, etc.  It is only used to set defaults
?S: for things in bin.U, mansrc.U, privlib.U, or scriptdir.U.
?S:.
?S:prefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install the package.  Derived from prefix.
?S:.
?S:oldprefix:
?S: This variable is set non-null if the prefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
?C:INSTALLPREFIX:
?C: This symbol contains the name of the install prefix for this package.
?C:.
?H:#define INSTALLPREFIX "$prefix"  /**/
?H:.
:
 determine root of directory hierarchy where package will be installed.
case "$prefix" in
") dflt=`./loc . /usr/local /usr/local /local /opt /usr`
 ;;
*) dflt="$prefix"
 ;;
esac
$cat <<EOM

By default, $package will be installed in $dflt/bin, manual pages
under $dflt/man, etc..., i.e. with $dflt as prefix for all
installation directories. Typically this is something like /usr/local.
If you wish to have binaries under /usr/bin but other parts of the
installation under /usr/local, that's ok: you will be prompted
separately for each of the installation directories, the prefix being
only used to set the defaults.

EOM
fn=d~
rp='Installation prefix to use?'
. ./getfile
oldprefix="
case "$prefix" in
") ;;
```

```
*) case "$ans" in
 "$prefix") ;;
 *) oldprefix="$prefix";;
 esac
 ;;
esac

case "$ans" in
*?/) prefix=`echo "$ans" | sed 's/.$//'`
 ;;
*) prefix="$ans"
esac

case "$ansexp" in
*?/) prefixexp=`echo "$ansexp" | sed 's/.$//'`
 ;;
*) prefixexp="$ansexp"
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/prefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_malloc: Inhdr
?MAKE: -pick add $@ %<
?S:i_malloc:
?S: This variable conditionally defines the I_MALLOC symbol, and indicates
?S: whether a C program should include <malloc.h>.
?S:.
?C:I_MALLOC:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <malloc.h>.
?C:.
?H:#$i_malloc I_MALLOC  /**/
```

```
?H:.
?LINT:set i_malloc
: see if this is a malloc.h system
set
 malloc.h i_malloc
eval $inhdr

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_malloc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2016 H.Merijn Brand & Todd Rinaldo
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:default_inc_excludes_dot: Myread cat
?MAKE: -pick add $@ %<
?S:default_inc_excludes_dot:
?S: When defined, remove the legacy '.' from @INC
?S:.
?C:DEFAULT_INC_EXCLUDES_DOT:
?C: This symbol, if defined, removes the legacy default behavior of
?C: including '.' at the end of @INC.
?C:.
?H:#$default_inc_excludes_dot DEFAULT_INC_EXCLUDES_DOT /**/
?H:.
: Include . in @INC
$cat <<EOM

Historically Perl has provided a final fallback of the current working
directory '.' when searching for a library. This, however, can lead to
problems when a Perl program which loads optional modules is called from
a shared directory. This can lead to executing unexpected code.

EOM

# When changing to exclude by
 default:
case "$default_inc_excludes_dot" in
   $undef|false|[nN]*) dflt="n" ;;
   *)                  dflt="y" ;;
esac
# To turn exclude off by default:
#case "$default_inc_excludes_dot" in
#    $define|true|[yY]*) dflt="y" ;;
```

```
#    *)                 dflt="n" ;;
#esac

rp='Exclude '.' from @INC by default? '
. ./myread
case "$ans" in
   [nN]|undef) default_inc_excludes_dot="$undef"  ;;
   *)         default_inc_excludes_dot="$define" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/defaultincdot.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Csym.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:36:29  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS: patch56: added quotes for OS/2 support
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:00:33  ram
?RCS: patch54: fixed C test program to bypass gcc builtin type checks (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/31  09:34:13  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:05  ram
?RCS:
 patch6: added ldflags as a conditional dependency and to compile line
?RCS: patch6: a final double quote was missing in csym variable after eval
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Csym: Options contains libc libs runnm +cc +ccflags +ldflags rm
?MAKE: -pick add $@ %<
?LINT:define csym
?LINT:use libc
?S:csym:
```

```
?S: This shell variable is used internally by Configure to check
?S: wether a given C symbol is defined or not. A typical use is:
?S:  set symbol result [-fva] [previous]
?S:  eval $csym
?S: That will set result to 'true' if the function [-f], variable [-v]
?S: or array [-a] is defined, 'false' otherwise. If a previous value is
?S: given and the -r flag was provided on the command line, that value
?S: is reused without questioning.
?S:.
?V:csym
?T:tval tx tlook tf tdc tc
: is a C symbol defined?
csym='tlook=$1;
case "$3" in
-v) tf=libc.tmp; tc=""; tdc="";;
-a) tf=libc.tmp; tc="[0]"; tdc="[]";;
*) tlook="^$1\$";
 tf=libc.list; tc=""; tdc="()";;
esac;
tx=yes;
case "$reuseval-$4" in
true-) ;;
true-*) tx=no; eval "tval=\$$4"; case "$tval" in "") tx=yes;; esac;;
esac;
case "$tx" in
yes)
 case "$runnm" in
 true)
  if $contains $tlook $tf >/dev/null 2>&1;
  then tval=true;
  else tval=false;
  fi;;
 *)
?X:
?X: We use 'char' instead of 'int' to try to circumvent overzealous
?X: optimizing compilers using built-in prototypes for commonly used
?X: routines to complain when seeing a different external declaration. For
?X: instance, gcc 2.6.3 fails if we use 'int' and we attempt a test against
?X: memcpy() on machines where sizeof(int) == sizeof(char *) (the usual return
?X: type), the compiler assuming it's a built-in declaration given that the
?X: returned size matches. At least with 'char' we are safe! -- RAM, for ADO
?X:
?X: Let's thank GNU cc for making our lifes so easy! :-)
?X: (An alternative for the future would be to use our knowledge about gcc
?X: to force a -fno-builtin option in the
 compile test, in case the 'char'
?X: trick is obsoleted by future gcc releases). -- RAM
?X:
```

```
?X: Lastly, gcc 3.4 otimizes &missing == 0 away, so we use + 2 instead now.
?X: The GNU folks like to do weird things, don't they? -- RAM, 2004-06-05
?X:
  echo "extern char $1$tdc; int main() { return &$1$tc + 2; }" > t.c;
  if $cc $ccflags $ldflags -o t t.c $libs >/dev/null 2>&1;
  then tval=true;
  else tval=false;
  fi;
  $rm -f t t.c;;
 esac;;
*)
 case "$tval" in
 $define) tval=true;;
 *) tval=false;;
 esac;;
esac;
eval "$2=$tval"'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Csym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: privlib.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: privlib.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:17:09  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:44:23  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:31:52  ram
?RCS:
 patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:34  ram
```

```
?RCS: patch10: added support for /local/lib (WED)
?RCS: patch10: prompt phrasing made more explicit (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:privlib privlibexp installprivlib: package cat Getfile Oldconfig \
 Setprefixvar Prefixit version installstyle binexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:privlib=''
?S:privlib:
?S: This variable contains the eventual value of the PRIVLIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S:.
?D:privlibexp=''
?S:privlibexp:
?S: This variable is the ~name expanded version of privlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installprivlib=''
?S:installprivlib:
?S: This variable
 is really the same as privlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:PRIVLIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C:.
?C:PRIVLIB_EXP:
?C: This symbol contains the ~name expanded version of PRIVLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#define PRIVLIB "$privlib"  /**/
?H:#define PRIVLIB_EXP "$privlibexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installprivlib
?LINT:set privlib
?LINT:set privlibexp
: determine where private library files go
: Usual default is /usr/local/lib/perl5/$version.
```

```
: Also allow things like /opt/perl/lib/$version, since
: /opt/perl/lib/perl5... would be redundant.
: The default "style"
 setting is made in installstyle.U
case "$installstyle" in
*lib/perl5*) set dflt privlib lib/$package/$version ;;
*)  set dflt privlib lib/$version ;;
esac
eval $prefixit
$cat <<EOM

There are some auxiliary files for $package that need to be put into a
private library directory that is accessible by everyone.

EOM
?X: Force dependency on bin.U
fn=$binexp
fn=d~+
rp='Pathname where the private library files will reside?'
. ./getfile
prefixvar=privlib
. ./setprefixvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/privlib.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: defeditor.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: defeditor.U,v $
?RCS: Revision 3.0.1.1  1995/01/11  15:30:16  ram
?RCS: patch45: can now use the 'vi' variable since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:defeditor: Getfile Oldconfig Loc vi
?MAKE: -pick add $@ %<
?S:defeditor:
?S: This variable contains the eventual value of the DEFEDITOR symbol,
```

```
?S: which contains the name of the default editor.
?S:.
?C:DEFEDITOR:
?C: This
 symbol contains the full pathname of the default editor.
?C:.
?H:#define DEFEDITOR "$defeditor"  /**/
?H:.
: determine default editor
echo " "
case "$defeditor" in
")
 case "$vi" in
 */*) dflt="$vi";;
 *) dflt=/usr/ucb/vi;;
 esac
 ;;
*)  dflt="$defeditor"
 ;;
esac
fn=f/
rp="What is the default editor on your system?"
. ./getfile
defeditor="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/defeditor.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1997, Chip Salzenberg
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:20:13  ram
?RCS: patch61: created
?RCS:
?MAKE:sh: Head
?MAKE: -pick wipe $@ %<
?S:sh:
?S: This variable contains the full pathname of the shell used
```

```
?S: on this system to execute Bourne shell scripts.  Usually, this will be
?S: /bin/sh, though it's possible that some systems will have /bin/ksh,
?S: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?S: D:/bin/sh.exe.
?S: This unit comes before Options.U,
 so you can't set sh with a -D
?S: option, though you can override this (and startsh)
?S: with -O -Dsh=/bin/whatever -Dstartsh=whatever
?S:.
?C:SH_PATH:
?C: This symbol contains the full pathname to the shell used on this
?C: on this system to execute Bourne shell scripts.  Usually, this will be
?C: /bin/sh, though it's possible that some systems will have /bin/ksh,
?C: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?C: D:/bin/sh.exe.
?C:.
?H:#define SH_PATH "$sh"  /**/
?H:.
?T:xxx try pth p SYSTYPE
?LINT:extern maintloc maintname
?X:
?X: Be quiet unless something unusual happens because this gets
?X: loaded up even before options are processed.
?X: Can't use ./loc because that depends on startsh, which, in turn
?X: depends on this unit.
?X:
: Find the basic shell for Bourne shell scripts
case "$sh" in
")
?X: SYSTYPE is for some older MIPS systems.
?X: I do not know if it is still needed.
 case "$SYSTYPE" in
 *bsd*|sys5*) xxx="/$SYSTYPE/bin/sh";;
 *) xxx='/bin/sh';;
 esac
 if
 test -f "$xxx"; then
  sh="$xxx"
 else
  : Build up a list and do a single loop so we can 'break' out.
  pth=`echo $PATH | sed -e "s/$p_/ /g"`
  for xxx in sh bash ksh pdksh ash; do
   for p in $pth; do
    try="$try ${p}/${xxx}"
   done
  done
  for xxx in $try; do
   if test -f "$xxx"; then
```

```
    sh="$xxx"
    break
   elif test -f "$xxx$_exe"; then
    sh="$xxx"
    break
   elif test -f "$xxx.exe"; then
    sh="$xxx"
    break
   fi
  done
 fi
 ;;
esac

?X: fd 4 isn't open yet...
case "$sh" in
") cat >&2 <<EOM
$me:  Fatal Error:  I can't find a Bourne Shell anywhere.

Usually it's in /bin/sh.  How did you even get this far?
Please contact me (<$maintname>) at <$maintloc> and
we'll try to straighten this all out.
EOM
 exit 1
 ;;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sh.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_setservent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setservent_r setservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setservent_r:
?S: This variable conditionally defines the HAS_SETSERVENT_R symbol,
?S: which indicates to the C program that the setservent_r()
?S: routine is available.
?S:.
?S:setservent_r_proto:
```

```
?S: This variable encodes the prototype of setservent_r.
?S: It is zero if d_setservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setservent_r
?S: is defined.
?S:.
?C:HAS_SETSERVENT_R:
?C: This symbol, if defined, indicates that the setservent_r routine
?C: is
 available to setservent re-entrantly.
?C:.
?C:SETSERVENT_R_PROTO:
?C: This symbol encodes the prototype of setservent_r.
?C: It is zero if d_setservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setservent_r
?C: is defined.
?C:.
?H:#$d_setservent_r HAS_SETSERVENT_R /**/
?H:#define SETSERVENT_R_PROTO $setservent_r_proto /**/
?H:.
?T:try hdrs d_setservent_r_proto
: see if setservent_r exists
set setservent_r d_setservent_r
eval $inlibc
case "$d_setservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setservent_r_proto:$usethreads" in
 ":define") d_setservent_r_proto=define
  set d_setservent_r_proto setservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setservent_r_proto" in
 define)
 case "$setservent_r_proto" in
 "|0) try='int setservent_r(int, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && setservent_r_proto=I_ID ;;
 esac
 case "$setservent_r_proto" in
 "|0) try='void
 setservent_r(int, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && setservent_r_proto=V_ID ;;
 esac
 case "$setservent_r_proto" in
 "|0) d_setservent_r=undef
  setservent_r_proto=0
  echo "Disabling setservent_r, cannot determine prototype." >&4 ;;
 * ) case "$setservent_r_proto" in
```

```
  REENTRANT_PROTO*) ;;
  *) setservent_r_proto="REENTRANT_PROTO_$setservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setservent_r has no prototype, not using it." >&4 ;;
  esac
  d_setservent_r=undef
  setservent_r_proto=0
  ;;
 esac
 ;;
*) setservent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setservent_r.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_sh.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:57:53  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  14:53:31  ram
?RCS: patch45: moved path stripping from d_portable.U to end of Configure
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:50:37  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit ends up producing the config.sh
```

```
 script, which contains all the
?X: definitions figured out by Configure.  The add.Config_sh command knows
?X: which variables need to be remembered.  It also adds the EOT (ends the
?X: here document redirection with variable substitution).
?X:
?MAKE:Config_sh: cf_time cf_by test spitshell startsh myuname Myread \
 End Obsol_sh Loc +d_portable package src cat sed
?MAKE: -pick add.Config_sh $@ %<
?MAKE: -pick add $@ ./Obsol_sh
?MAKE: -pick close.Config_sh $@ %<
?F:!config.over !config.arch
?T:file sfile xsed
?LINT:unclosed EOT
: back to where it started
if test -d ../UU; then
 cd ..
fi

: configuration may be unconditionally patched via a 'config.arch' file
if $test -f config.arch; then
 echo "I see a config.arch file, loading it." >&4
 . ./config.arch
fi

: configuration may be patched via a 'config.over' file
if $test -f config.over; then
 echo " "
 dflt=y
 rp='I see a config.over file.  Do you wish to load it?'
 . UU/myread
 case "$ans" in
 n*) echo "OK, I'll ignore it.";;
 *) . ./config.over
  echo
 "Configuration override changes have been loaded."
  ;;
 esac
fi

@if d_portable
: in case they want portability, strip down executable paths
?X:
?X: Strip down paths in located executables. For each file, e.g. vi, there
?X: is a $vi variable whose value is for instance '/usr/bin/vi'. By resetting
?X: $vi to 'vi', we rely on the PATH variable to locate the executable...
?X: In order to allow vi='/usr/bin/nvi' which will strip down to vi='nvi',
?X: we can't just say 'eval $file="\$file"', we have to recourse to sed.
?X: We don't use basename since it is less portable than sed.
```

```
?X:
case "$d_portable" in
"$define")
 echo " "
 echo "Stripping down executable paths..." >&4
 xsed=$sed
 for file in $loclist $trylist; do
  eval sfile="\$$file"
  sfile=`echo $sfile | $xsed -e 's,.*/\(.*\),\1,'`
  eval $file="$sfile"
 done
 ;;
esac

@end
: create config.sh file
echo " "
echo "Creating config.sh..." >&4
$spitshell <<EOT >config.sh
$startsh
#
# This file was produced by running the
 Configure script. It holds all the
# definitions figured out by Configure. Should you modify one of these values,
# do not forget to propagate your changes by running "Configure -der". You may
# instead choose to run each of the .SH files by yourself, or "Configure -S".
#

# Package name      : $package
# Source directory  : $src
# Configuration time: $cf_time
# Configured by     : $cf_by
# Target system     : $myuname

EOT
?X: Command line options are saved by the Options.U unit in the
?X: temporary file UU/cmdline.opt
$test -f UU/cmdline.opt && $cat UU/cmdline.opt >> config.sh
$spitshell <<EOT >>config.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Config_sh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_malloc.U,v 3.5 2008/03/29 14:06:51 merijn Exp $
?RCS:
?RCS: Copyright (c) 2008, H.Merijn Brand
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.5.
?RCS:
?MAKE:i_mallocmalloc: Inhdr
?MAKE: -pick add $@ %<
?S:i_mallocmalloc:
?S: This variable conditionally defines the I_MALLOCMALLOC symbol,
?S: and indicates whether a C program should include <malloc/malloc.h>.
?S:.
?C:I_MALLOCMALLOC:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <malloc/malloc.h>.
?C:.
?H:#$i_mallocmalloc I_MALLOCMALLOC  /**/
?H:.
?LINT:set i_mallocmalloc
: see if malloc/malloc.h has to be included
set malloc/malloc.h i_mallocmalloc
eval
 $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_mallocmalloc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wifstat.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:47:43  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:09:10  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1995/03/21  08:47:46  ram
?RCS: patch52: created
?RCS:
```

```
?MAKE:d_wifstat: d_uwait +cc +ccflags +ldflags +libs Oldconfig cat rm
?MAKE: -pick add $@ %<
?S:d_wifstat:
?S: This symbol conditionally defines USE_WIFSTAT if the C program can
?S: safely
 use the WIFxxx macros with the kind of wait() parameter
?S: declared in the program (see UNION_WAIT), or if it can't. Should
?S: only matter on HP-UX, where the macros are incorrectly written and
?S: therefore cause programs using them with an 'union wait' variable
?S: to not compile properly.
?S:.
?C:USE_WIFSTAT:
?C: This symbol, if defined, indicates to the C program that the argument
?C: for the WIFxxx set of macros such as WIFSIGNALED or WIFEXITED can
?C: be of the same kind as the one used to hold the wait() status. Should
?C: only matter on HP-UX, where the macros are incorrectly written and
?C: therefore cause programs using them with an 'union wait' variable
?C: to not compile properly. See also UNION_WAIT.
?C:.
?H:#$d_wifstat USE_WIFSTAT  /**/
?H:.
?T:type
?F:!foo
: see if we can use WIFxxx macros
echo " "
case "$d_wifstat" in
"$define") echo "As before, you can safely use WIFEXITED and friends!" >&4;;
"$undef") echo "You still can't use WIFEXITED and friends!" >&4;;
*)
 echo
 "Let's see whether you can use the WIFEXITED(status) macro and its"
 case "$d_uwait" in
 "$define") type='union wait';;
 *) type='int';;
 esac
 echo "friends with status declared as '$type status'..."
 $cat >foo.c <<EOCP
#include <sys/types.h>
#include <sys/wait.h>

int main()
{
 $type status;
 int e = 0;

#ifdef WIFEXITED
 if (WIFEXITED(status))
  printf("\n");
```

```
 exit(0);
#else
 exit(2);
#endif
}
EOCP
 d_wifstat="$undef"
 if $cc $ccflags $ldflags -o foo foo.c $libs >/dev/null 2>&1; then
  if ./foo >/dev/null; then
   echo "Great! Looks like we can use the WIFxxx macros." >&4
   d_wifstat="$define"
  else
   echo "You don't seem to have WIFxxx macros, but that's ok." >&4
  fi
 else
  echo "Apparently you can't use WIFxxx macros properly." >&4
 fi
 $rm -f foo.* foo core
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wifstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cc.U,v $
?RCS: Revision 3.0.1.4  1995/05/12  12:06:47  ram
?RCS: patch54: may now abort Configure when cc does not work
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:20:11  ram
?RCS: patch45: changed gcc checking message to a more explicit one (WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:04:29  ram
?RCS: patch36: detect gcc even when not called as 'gcc' (ADO)
?RCS: patch36: simplified gcc version checking (ADO)
?RCS: patch36: added ?F: line for metalint
 file checking
?RCS:
```

```
?RCS: Revision 3.0.1.1  1994/05/06  14:26:06  ram
?RCS: patch23: added support for gcc version (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cc: Myread Oldconfig Checkcc test
?MAKE: -pick add $@ %<
?S:cc:
?S: This variable holds the name of a command to execute a C compiler which
?S: can resolve multiple global references that happen to have the same
?S: name.  Usual values are 'cc' and 'gcc'.
?S: Fervent ANSI compilers may be called 'c89'.  AIX has xlc.
?S:.
?F:!cc.cbu
?D:cc='cc'
: Determine the C compiler to be used
echo " "
case "$cc" in
") dflt=cc;;
*) dflt="$cc";;
esac
rp="Use which C compiler?"
. ./myread
cc="$ans"

: See whether they have no cc but they do have gcc
. ./trygcc
?X: Look for a hint-file generated 'call-back-unit'.  Now that the
?X: user has specified the compiler, we may need to set or change some
?X: other defaults.
if $test -f cc.cbu; then
   . ./cc.cbu
fi
. ./checkcc

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_arpainet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_arpainet.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_arpainet: Inhdr
?MAKE: -pick add $@ %<
?S:i_arpainet:
?S: This variable conditionally defines the I_ARPA_INET symbol,
?S: and indicates whether a C program should include <arpa/inet.h>.
?S:.
?C:I_ARPA_INET:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <arpa/inet.h> to get inet_addr and friends
 declarations.
?C:.
?H:#$i_arpainet I_ARPA_INET  /**/
?H:.
?LINT:set i_arpainet
: see if arpa/inet.h has to be included
set arpa/inet.h i_arpainet
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_arpainet.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sunscanf.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sunscanf: cat rm Myread +cc +ccflags test Setvar
?MAKE: -pick add $@ %<
?S:sunscanf:
?S: This variable is set if this system runs with the Sun version
?S: of scanf.
```

```
?S:.
?C:SUNSCANF:
?C: This variable is set if this system runs with the Sun version
?C: of scanf.
?C:.
?H:#$sunscanf  SUNSCANF  /**/
?H:.
?LINT:set sunscanf
: check to see what kinda scanf your using.
echo " "
echo "Checking
 to see what flavor of scanf you have..." >&4
$cat >scanf.c <<'EOCP'
int main()
{
 float value;

 sscanf("4.5","%g",&value);
 printf("%d\n", value == 4.5);
}
EOCP
if $cc $ccflags -o scanf scanf.c >/dev/null 2>&1 ; then
 if $test `scanf` = 0; then
  echo "Hmm.. seems your not running the USG flavor.."
  val="$undef"
 else
  echo "Uh... your running the USG flavor of scanf."
  val="$define"
 fi
else
 echo "(I can't seem to compile the test program... Guessing)"
 val="$undef"
fi
set sunscanf
eval $setvar
$rm -f scanf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sunscanf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostbyaddr_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
```

```
?RCS:
?MAKE:d_gethostbyaddr_r gethostbyaddr_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostbyaddr_r:
?S: This variable conditionally defines the HAS_GETHOSTBYADDR_R symbol,
?S: which indicates to the C program that the gethostbyaddr_r()
?S: routine is available.
?S:.
?S:gethostbyaddr_r_proto:
?S: This variable encodes the prototype of gethostbyaddr_r.
?S: It is zero if d_gethostbyaddr_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyaddr_r
?S: is defined.
?S:.
?C:HAS_GETHOSTBYADDR_R:
?C: This symbol, if defined, indicates
 that the gethostbyaddr_r routine
?C: is available to gethostbyaddr re-entrantly.
?C:.
?C:GETHOSTBYADDR_R_PROTO:
?C: This symbol encodes the prototype of gethostbyaddr_r.
?C: It is zero if d_gethostbyaddr_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyaddr_r
?C: is defined.
?C:.
?H:#$d_gethostbyaddr_r HAS_GETHOSTBYADDR_R /**/
?H:#define GETHOSTBYADDR_R_PROTO $gethostbyaddr_r_proto /**/
?H:.
?T:try hdrs d_gethostbyaddr_r_proto
: see if gethostbyaddr_r exists
set gethostbyaddr_r d_gethostbyaddr_r
eval $inlibc
case "$d_gethostbyaddr_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_gethostbyaddr_r_proto:$usethreads" in
 ":define") d_gethostbyaddr_r_proto=define
  set d_gethostbyaddr_r_proto gethostbyaddr_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gethostbyaddr_r_proto" in
 define)
 case "$gethostbyaddr_r_proto" in
 "|0) try='int gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*,
 size_t, struct hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CWISBWRE ;;
```

```
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*, size_t, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CWISBWIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CWISBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const void*, size_t, int, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_TWISBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const char*, int, int, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CIISBIE ;;
esac
case
"$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const char*, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CSBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const void*, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_TSBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const char*, size_t, int, struct hostent*, struct hostent_data*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CWISD ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const char*, int, int, struct hostent*, struct hostent_data*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CIISD ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const char*, int, int);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CII ;;
esac
case
"$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const void*, socklen_t, int, struct hostent*, char*, size_t, struct hostent**, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_TsISBWRE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) d_gethostbyaddr_r=undef
 gethostbyaddr_r_proto=0
 echo "Disabling gethostbyaddr_r, cannot determine prototype." >&4 ;;
* ) case "$gethostbyaddr_r_proto" in
```

```
  REENTRANT_PROTO*) ;;
  *) gethostbyaddr_r_proto="REENTRANT_PROTO_$gethostbyaddr_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gethostbyaddr_r has no prototype, not using it." >&4 ;;
  esac
  d_gethostbyaddr_r=undef
  gethostbyaddr_r_proto=0
  ;;
 esac
 ;;
*) gethostbyaddr_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostbyaddr_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systimes.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systimes.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_systimes: Inhdr
?MAKE: -pick add $@ %<
?S:i_systimes:
?S: This variable conditionally defines the I_SYS_TIMES symbol, and indicates
?S: whether a C program should include <sys/times.h>.
?S:.
?C:I_SYS_TIMES (I_SYSTIMES):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/times.h>.
?C:.
?H:#$i_systimes I_SYS_TIMES  /**/
?H:.
```

```
?LINT:set
 i_systimes
: see if this is a sys/times.h system
set sys/times.h i_systimes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systimes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorlib.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorlib.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorlib vendorlib vendorlibexp installvendorlib vendorlib_stem: \
 Getfile Setprefixvar Oldconfig Prefixit package vendorprefix sed \
 installstyle version
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorlib:
?S: This variable contains the eventual value of the VENDORLIB symbol,
?S: which is the name of the private library for this package.
?S: The standard
 distribution will put nothing in this directory.
?S: Vendors who distribute perl may wish to place their own
?S: modules in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorlibexp:
?S: This variable is the ~name expanded version of vendorlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorlib="
?S:installvendorlib:
?S: This variable is really the same as vendorlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
```

```
?S:.
?S:d_vendorlib:
?S: This variable conditionally defines PERL_VENDORLIB.
?S:.
?S:vendorlib_stem:
?S: This variable is $vendorlibexp with any trailing version-specific component
?S: removed.  The elements in inc_version_list (inc_version_list.U) can
?S: be tacked onto this variable to generate a list of directories to search.
?S:.
?C:PERL_VENDORLIB:
?C: If defined, this symbol contains
 the name of a private library.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place their own
?C: modules in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORLIB_EXP:
?C: This symbol contains the ~name expanded version of VENDORLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?C:PERL_VENDORLIB_STEM:
?C: This define is PERL_VENDORLIB_EXP with any trailing version-specific component
?C: removed.  The elements in inc_version_list (inc_version_list.U) can
?C: be tacked onto this variable to generate a list of directories to search.
?C:.
?H:#$d_vendorlib PERL_VENDORLIB "$vendorlib"  /**/
?H:#$d_vendorlib PERL_VENDORLIB_EXP
 "$vendorlibexp"  /**/
?H:#$d_vendorlib PERL_VENDORLIB_STEM "$vendorlib_stem"  /**/
?H:.
?T:prog
?LINT:change prefixvar
?LINT:set installvendorlib
: Set the vendorlib variables
case "$vendorprefix" in
") d_vendorlib="$undef"
 vendorlib="
 vendorlibexp="
 ;;
*) d_vendorlib="$define"
 : determine where vendor-supplied modules go.
 : Usual default is /usr/local/lib/perl5/vendor_perl/$version
 case "$vendorlib" in
```

```
 ")
?X:  remove any trailing -3.0 or other version identification
  prog=`echo $package | $sed 's/-*[0-9.]*$//'`
  case "$installstyle" in
  *lib/perl5*) dflt=$vendorprefix/lib/$package/vendor_$prog/$version ;;
  *)      dflt=$vendorprefix/lib/vendor_$prog/$version ;;
  esac
  ;;
 *) dflt="$vendorlib"
  ;;
 esac
 fn=d~+
 rp='Pathname for the vendor-supplied library files?'
 . ./getfile
 vendorlib="$ans"
 vendorlibexp="$ansexp"
 ;;
esac
vendorlib_stem=`echo "$vendorlibexp" | sed "s,/$version$,,"`
prefixvar=vendorlib
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_euc2jis.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_euc2jis.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_euc2jis: Inlibc
?MAKE: -pick add $@ %<
?S:d_euc2jis:
?S: This variable conditionally defines the HAS_EUC2JIS symbol, which
?S: indicates to the C program that the euc2jis() routine is available
?S: to convert EUC to JIS.
?S:.
?C:HAS_EUC2JIS:
```

```
?C: This symbol, if defined, indicates that the euc2jis routine is
?C: available to convert
 EUC to JIS.
?C:.
?H:#$d_euc2jis HAS_EUC2JIS  /**/
?H:.
?LINT:set d_euc2jis
: see if euc2jis exists
set euc2jis d_euc2jis
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_euc2jis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_statfs_s: \
 Hasstruct i_sysparam i_sysmount i_systypes \
 i_sysvfs i_sysstatfs Setvar
?MAKE: -pick add $@ %<
?S:d_statfs_s:
?S: This variable conditionally defines the HAS_STRUCT_STATFS symbol,
?S: which indicates that the struct statfs is supported.
?S:.
?C:HAS_STRUCT_STATFS:
?C: This symbol, if defined, indicates that the struct statfs
?C: to do statfs() is supported.
?C:.
?H:#$d_statfs_s HAS_STRUCT_STATFS /**/
?H:.
?LINT:set d_statfs_s
: Check for statfs_s
echo " "
echo "Checking to see if your system supports struct statfs..." >&4
set d_statfs_s statfs $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h $i_sysvfs sys/vfs.h
$i_sysstatfs sys/statfs.h
eval $hasstruct
case "$d_statfs_s"
 in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statfs_s.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_bfd.U,v $
?RCS:
?RCS: Copyright (c) 2014 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_bfd: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_bfd:
?S: This variable conditionally defines the I_BFD symbol, and
?S: indicates whether a C program can include <bfd.h>.
?S:.
?C:I_BFD:
?C: This symbol, if defined, indicates that <bfd.h> exists and
?C: can be included.
?C:.
?H:#$i_bfd I_BFD  /**/
?H:.
?LINT:set i_bfd
: see if this is a bfd.h system
set bfd.h i_bfd
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_bfd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libdbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libdbm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:56:57  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:58  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libdbm: test Loc libpth _a
?MAKE: -pick add $@ %<
?S:libdbm:
?S: This variable contains the argument to pass to the loader in order
?S: to get the dbm library routines.  If there is no dbm or ndbm
?S: library, it is null.
?S:.
?T:xxx
:
 see if we should include -ldbm
echo " "
if $test -r /usr/lib/libndbm$_a || $test -r /usr/local/lib/libndbm$_a ; then
 echo "-lndbm found." >&4
 libdbm='-lndbm'
elif $test -r /usr/lib/libdbm$_a || $test -r /usr/local/lib/libdbm$_a ; then
 echo "-ldbm found." >&4
 libdbm='-ldbm'
else
 xxx=`./loc libdbm$_a x $libpth`
 case "$xxx" in
 x)
  echo "No dbm library found." >&4
  libdbm=''
  ;;
 *)
  echo "DBM library found in $xxx." >&4
  libdbm="$xxx"
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libdbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Head.U,v $
```

```
?RCS: Revision 3.0.1.9  1997/02/28  15:02:09  ram
?RCS: patch61: make sure we unset CDPATH for shells that support this
?RCS: patch61: improved Korn shell detection and handling
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:02  ram
?RCS: patch56: added SVR4-ish /opt directories to path list (ADO)
?RCS: patch56: OS/2 platforms are using another path separator
?RCS:
?RCS: Revision 3.0.1.7  1995/03/21  08:46:15  ram
?RCS: patch52: definition of paths wrongly added spurious ':' chars
?RCS:
?RCS:
 Revision 3.0.1.6  1994/10/29  15:54:19  ram
?RCS: patch36: make sure ENV is unset before calling /bin/ksh
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:03:44  ram
?RCS: patch32: now sets PATH only using existing directories
?RCS:
?RCS: Revision 3.0.1.4  1994/06/20  06:54:28  ram
?RCS: patch30: now computes its invocation name into 'me'
?RCS: patch30: symbol me is made visible to all units read-only
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:15:07  ram
?RCS: patch15: added /sbin:/usr/sbin:/usr/libexec in PATH for BSD/386
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:32:35  ram
?RCS: patch14: ensure PATH is reset to '.' before testing for alias
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:07  ram
?RCS: patch7: not all 'test' programs support the -x option
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the very first unit in the Configure script.  It is mostly just
?X: things to keep people from getting
 into a tizzy right off the bat.
?X:
?MAKE:Head:
?MAKE: -pick wipe $@ %<
?V:PATH p_ _exe me newsh
?T:argv Id p paths OS2_SHELL DJGPP
?T:inksh needksh avoidksh newsh changesh reason
?F:!*
?LINT:extern ENV CDPATH SHELL MACHTYPE
?LINT:change ENV CDPATH
?LINT:nocomment
```

```
#! /bin/sh
#
# If these # comments don't work, trim them. Don't worry about any other
# shell scripts, Configure will trim # comments from them for you.
#
# (If you are trying to port this package to a machine without sh,
# I would suggest you have a look at the prototypical config_h.SH file
# and edit it to reflect your system. Some packages may include samples
# of config.h for certain machines, so you might look for one of those.)
#
?X:
?X: NOTE THAT A CONFIGURE SCRIPT IS IN THE PUBLIC DOMAIN (whether or not
?X: the software which uses it is in the public domain).
?X:
# Yes, you may rip this off to use in other distribution packages. This
# script belongs to the public domain and cannot be copyrighted.
#
?X:
?X: WE ASK YOU
 NOT TO REMOVE OR ALTER THE FOLLOWING PARAGRAPH, PLEASE:
?X:
# Note: this Configure script was generated automatically. Rather than
# working with this copy of Configure, you may wish to get metaconfig.
# The dist package (which contains metaconfig) is available via SVN:
#     svn co https://svn.code.sf.net/p/dist/code/trunk/dist
?X:
?X: NOTA BENE:
?X: If you develop you own version of metaconfig based on this work,
?X: you have to add some comments telling that the script was generated
?X: by your version, not mine: It credits your work.
?X:

# $Id: Head.U 6 2006-08-25 22:21:46Z rmanfredi $
#
# Generated on <DATE> [metaconfig <VERSION> PL<PATCHLEVEL>]

cat >c1$$ <<EOF
ARGGGHHHH!!!!!

SCO csh still thinks true is false.  Write to SCO today and tell them that next
year Configure ought to "rm /bin/csh" unless they fix their blasted shell. :-)

(Actually, Configure ought to just patch csh in place.  Hmm.  Hmmmmm.  All
we'd have to do is go in and swap the && and || tokens, wherever they are.)

[End
 of diatribe. We now return you to your regularly scheduled programming...]
EOF
```

```
cat >c2$$ <<EOF

OOPS!  You naughty creature!  You didn't run Configure with sh!
I will attempt to remedy the situation by running sh for you...
EOF

true || cat c1$$ c2$$
true || exec sh $0 $argv:q

(exit $?0) || cat c2$$
(exit $?0) || exec sh $0 $argv:q
rm -f c1$$ c2$$

: compute my invocation name
me=$0
case "$0" in
*/*)
 me=`echo $0 | sed -e 's!.*/\(.*\)!\1!' 2>/dev/null`
 test "$me" || me=$0
 ;;
esac

?X:
?X: To be able to run under OS/2, we must detect that early enough to use
?X: the proper path separator, stored in $p_. It is : on UNIX and ; on
?X: DOSish systems such as OS/2.
?X:
: Proper separator for the PATH environment variable
p_=:
: On OS/2 this directory should exist if this is not floppy only system ":-]"
if test -d c:/. ; then
 if test -n "$OS2_SHELL"; then
  p_=\;
  PATH=`cmd /c "echo %PATH%" | tr '\\\\' / `
?X: That's a bug in ksh5.22
  OS2_SHELL=`cmd /c "echo %OS2_SHELL%" | tr
 '\\\\' / | tr '[A-Z]' '[a-z]'`
 elif test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
  *cygwin) ;;
  *) p_=\; ;;
  esac
 fi
fi

?X:
?X: There are two schools of thoughts here. Some people correctly argue that
?X: the user has a better chance than we do of setting a reasonable PATH and
```

```
?X: others argue that Configure is the best place there is to set up a suitable
?X: PATH. Well, here we try to compromize by keeping the user's PATH and
?X: appending some directories which are known to work on some machine or the
?X: other. The rationale behind this being that a novice user might not have a
?X: proper environment variable set, and some directories like /etc (where
?X: chown is located on some BSD systems) may be missing--RAM.
?X:
?X: SVR4 adds an /opt directory for optional packages.  Some sites use
?X: various permutations on /opt as opposed to /usr or /usr/local.-- ADO
?X:
?X: We only add directories that are not already in the PATH of the
?X: user and the directories must
 exist also.
?X:
: Proper PATH setting
paths='/bin /usr/bin /usr/local/bin /usr/ucb /usr/local /usr/lbin'
paths="$paths /opt/bin /opt/local/bin /opt/local /opt/lbin"
paths="$paths /usr/5bin /etc /usr/gnu/bin /usr/new /usr/new/bin /usr/nbin"
paths="$paths /opt/gnu/bin /opt/new /opt/new/bin /opt/nbin"
paths="$paths /sys5.3/bin /sys5.3/usr/bin /bsd4.3/bin /bsd4.3/usr/ucb"
paths="$paths /bsd4.3/usr/bin /usr/bsd /bsd43/bin /usr/ccs/bin"
paths="$paths /etc /usr/lib /usr/ucblib /lib /usr/ccs/lib"
paths="$paths /sbin /usr/sbin /usr/libexec"
paths="$paths /system/gnu_library/bin"

for p in $paths
do
 case "$p_$PATH$p_" in
 *$p_$p$p_*) ;;
 *) test -d $p && PATH=$PATH$p_$p ;;
 esac
done

PATH=.$p_$PATH
export PATH

: shall we be using ksh?
inksh=''
needksh=''
avoidksh=''
newsh=/bin/ksh
changesh=''
?X: Use (alias -x) and not (alias) since zsh and bash recognize the alias
?X: builtin but not the -x option which is typically ksh...
?X: We need to set up PATH before calling the "alias" built-in since
 some
?X: systems like HP-UX have a binary called /bin/alias.
if (PATH=.; alias -x) >/dev/null 2>&1; then
```

```
  inksh=true
fi
?X: On HP-UX, large Configure scripts may exercise a bug in /bin/sh, use ksh
if test -f /hp-ux -a -f /bin/ksh; then
 needksh='to avoid sh bug in "here document" expansion'
fi
?X: On AIX4, /bin/sh is really ksh and it causes problems, use sh
if test -d /usr/lpp -a -f /usr/bin/bsh -a -f /usr/bin/uname; then
 if test X`/usr/bin/uname -v` = X4; then
  avoidksh="to avoid AIX 4's /bin/sh"
  newsh=/usr/bin/bsh
 fi
fi
?X: On Digital UNIX, /bin/sh may start up buggy /bin/ksh, use sh
if test -f /osf_boot -a -f /usr/sbin/setld; then
 if test X`/usr/bin/uname -s` = XOSF1; then
  avoidksh="to avoid Digital UNIX' ksh"
  newsh=/bin/sh
?X: if BIN_SH is set to 'xpg4', sh will start up ksh
  unset BIN_SH
 fi
fi
?X: If we are not in ksh and need it, then feed us back to it
case "$inksh/$needksh" in
/[a-z]*)
?X: Clear ENV to avoid any ~/.kshrc that could alias cd or whatever...
?X: Don't
 use "unset ENV", that is not portable enough
  ENV=''
  changesh=true
  reason="$needksh"
 ;;
esac
?X: If we are in ksh and must avoid it, then feed us back to a new shell
case "$inksh/$avoidksh" in
true/[a-z]*)
 changesh=true
 reason="$avoidksh"
 ;;
esac
?X: Warn them if they use ksh on other systems, which are those where
?X: we don't need ksh nor want to avoid it explicitly, yet are using it.
case "$inksh/$needksh-$avoidksh-" in
true/--)
  cat <<EOM
(I see you are using the Korn shell.  Some ksh's blow up on $me,
mainly on older exotic systems.  If yours does, try the Bourne shell instead.)
EOM
```

```
 ;;
esac
case "$changesh" in
true)
 export newsh
 echo "(Feeding myself to $newsh $reason.)"
?X: Make sure they didn't say sh <Configure by checking whether $0 ends
?X: with Configure or not. If they did say sh <../../Configure, then too
?X: bad for them anyway, since we lost that path indication...
?X: Otherwise, execing $0 ensures we keep the full remote source dir
?X: indication for src.U.
 case
 "$0" in
 Configure|*/Configure) exec $newsh $0 "$@";;
 *) exec $newsh Configure "$@";;
 esac
 ;;
esac

?X: Unset CDPATH to avoid surprises when using cd under some shells
?X: Can't unset it because that's not portable to very old shells.
?X: Can't set it to '' because then bash 2.02 won't do "cd UU"  --AD  6/98.
?X: Don't want to set it to '.' because then ksh prints out the
?X: name of the directory every time you cd to it. --AD 6/98
?X: In order to inflict the least harm, change it only if it's set.
: if needed, set CDPATH to a harmless value that is not chatty
case "$CDPATH" in
'') ;;
*) case "$SHELL" in
 *bash*) CDPATH='.' ;;
 *) CDPATH='' ;;
 esac
 ;;
esac

: Configure runs within the UU subdirectory
test -d UU || mkdir UU
?X: Use ./* to avoid any confirmation prompts from enhanced shells -- WED
cd UU && rm -f ./*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Head.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: prototype.U,v $
?RCS: Revision 3.0.1.3  1994/05/06  15:11:49  ram
?RCS: patch23: ensure cc flags used when looking for prototype support
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:36  ram
?RCS: patch16: prototype handling macros now appear only when needed
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:03:12  ram
?RCS: patch6: defines were referring to non-existent VOID symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:prototype:
 Myread Oldconfig cat +cc +ccflags rm Setvar
?MAKE: -pick add $@ %<
?S:prototype:
?S: This variable holds the eventual value of CAN_PROTOTYPE, which
?S: indicates the C compiler can handle funciton prototypes.
?S:.
?C:CAN_PROTOTYPE ~ %<:
?C: If defined, this macro indicates that the C compiler can handle
?C: function prototypes.
?C:.
?C:DOTS:
?C: This macro is used to specify the ... in function prototypes which
?C: have arbitrary additional arguments.
?C:.
?C:NXT_ARG:
?C: This macro is used to separate arguments in the declared argument list.
?C:.
?C:P_FUNC:
?C: This macro is used to declare "private" (static) functions.
?C: It takes three arguments: the function type and name, a parenthesized
?C: traditional (comma separated) argument list, and the declared argument
?C: list (in which arguments are separated with NXT_ARG, and additional
?C: arbitrary arguments are specified with DOTS).  For example:
?C:
?C:  P_FUNC(int foo, (bar, baz), int bar NXT_ARG char *baz[])
?C:.
?C:P_FUNC_VOID:
?C: This
```

```
 macro is used to declare "private" (static) functions that have
?C: no arguments.  The macro takes one argument: the function type and name.
?C: For example:
?C:
?C:  P_FUNC_VOID(int subr)
?C:.
?C:V_FUNC:
?C: This macro is used to declare "public" (non-static) functions.
?C: It takes three arguments: the function type and name, a parenthesized
?C: traditional (comma separated) argument list, and the declared argument
?C: list (in which arguments are separated with NXT_ARG, and additional
?C: arbitrary arguments are specified with DOTS).  For example:
?C:
?C:  V_FUNC(int main, (argc, argv), int argc NXT_ARG char *argv[])
?C:.
?C:V_FUNC_VOID:
?C: This macro is used to declare "public" (non-static) functions that have
?C: no arguments.  The macro takes one argument: the function type and name.
?C: For example:
?C:
?C:  V_FUNC_VOID(int fork)
?C:.
?C:_ (P):
?C: This macro is used to declare function parameters for folks who want
?C: to make declarations with prototypes using a
 different style than
?C: the above macros.  Use double parentheses.  For example:
?C:
?C:  int main _((int argc, char *argv[]));
?C:.
?H:?%<:#$prototype CAN_PROTOTYPE /**/
?H:?%<:#ifdef CAN_PROTOTYPE
?H:?NXT_ARG:#define NXT_ARG ,
?H:?DOTS:#define DOTS , ...
?H:?V_FUNC:#define V_FUNC(name, arglist, args)name(args)
?H:?P_FUNC:#define P_FUNC(name, arglist, args)static name(args)
?H:?V_FUNC_VOID:#define V_FUNC_VOID(name)name(void)
?H:?P_FUNC_VOID:#define P_FUNC_VOID(name)static name(void)
?H:?_:#define _(args) args
?H:?%<:#else
?H:?NXT_ARG:#define NXT_ARG ;
?H:?DOTS:#define DOTS
?H:?V_FUNC:#define V_FUNC(name, arglist, args)name arglist args;
?H:?P_FUNC:#define P_FUNC(name, arglist, args)static name arglist args;
?H:?V_FUNC_VOID:#define V_FUNC_VOID(name)name()
?H:?P_FUNC_VOID:#define P_FUNC_VOID(name)static name()
?H:?_:#define _(args) ()
?H:?%<:#endif
```

```
?H:.
?W:%<:NXT_ARG DOTS V_FUNC P_FUNC V_FUNC_VOID P_FUNC_VOID _
?LINT:set prototype
: Cruising for prototypes
echo " "
echo "Checking out
 function prototypes..." >&4
$cat >prototype.c <<'EOCP'
int main(int argc, char *argv[]) {
 exit(0);}
EOCP
if $cc $ccflags -c prototype.c >prototype.out 2>&1 ; then
 echo "Your C compiler appears to support function prototypes."
 val="$define"
else
 echo "Your C compiler doesn't seem to understand function prototypes."
 val="$undef"
fi
set prototype
eval $setvar
$rm -f prototype*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prototype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservbyport_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservbyport_r getservbyport_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservbyport_r:
?S: This variable conditionally defines the HAS_GETSERVBYPORT_R symbol,
?S: which indicates to the C program that the getservbyport_r()
?S: routine is available.
?S:.
?S:getservbyport_r_proto:
?S: This variable encodes the prototype of getservbyport_r.
?S: It is zero if d_getservbyport_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyport_r
?S: is defined.
?S:.
```

```
?C:HAS_GETSERVBYPORT_R:
?C: This symbol, if defined, indicates
 that the getservbyport_r routine
?C: is available to getservbyport re-entrantly.
?C:.
?C:GETSERVBYPORT_R_PROTO:
?C: This symbol encodes the prototype of getservbyport_r.
?C: It is zero if d_getservbyport_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyport_r
?C: is defined.
?C:.
?H:#$d_getservbyport_r HAS_GETSERVBYPORT_R /**/
?H:#define GETSERVBYPORT_R_PROTO $getservbyport_r_proto /**/
?H:.
?T:try hdrs d_getservbyport_r_proto
: see if getservbyport_r exists
set getservbyport_r d_getservbyport_r
eval $inlibc
case "$d_getservbyport_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservbyport_r_proto:$usethreads" in
 ":define") d_getservbyport_r_proto=define
  set d_getservbyport_r_proto getservbyport_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getservbyport_r_proto" in
 define)
 case "$getservbyport_r_proto" in
 "|0) try='int getservbyport_r(int, const char*, struct servent*, char*, size_t,
 struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=I_ICSBWR ;;
 esac
 case "$getservbyport_r_proto" in
 "|0) try='struct servent* getservbyport_r(int, const char*, struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=S_ICSBI ;;
 esac
 case "$getservbyport_r_proto" in
 "|0) try='int getservbyport_r(int, const char*, struct servent*, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=I_ICSD ;;
 esac
 case "$getservbyport_r_proto" in
 "|0) d_getservbyport_r=undef
  getservbyport_r_proto=0
  echo "Disabling getservbyport_r, cannot determine prototype." >&4 ;;
 * ) case "$getservbyport_r_proto" in
  REENTRANT_PROTO*) ;;
```

```
  *) getservbyport_r_proto="REENTRANT_PROTO_$getservbyport_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getservbyport_r has no prototype, not using it." >&4 ;;
  esac
  d_getservbyport_r=undef
  getservbyport_r_proto=0
  ;;
 esac
 ;;
*) getservbyport_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservbyport_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_utime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_utime.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_utime: Inhdr
?MAKE: -pick add $@ %<
?S:i_utime:
?S: This variable conditionally defines the I_UTIME symbol, and indicates
?S: whether a C program should include <utime.h>.
?S:.
?C:I_UTIME:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <utime.h>.
?C:.
?H:#$i_utime I_UTIME  /**/
?H:.
```

```
?LINT:set i_utime
:
 see if this is an utime system
set utime.h i_utime
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_utime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fstatfs : Inlibc
?MAKE: -pick add $@ %<
?S:d_fstatfs:
?S: This variable conditionally defines the HAS_FSTATFS symbol, which
?S: indicates to the C program that the fstatfs() routine is available.
?S:.
?C:HAS_FSTATFS:
?C: This symbol, if defined, indicates that the fstatfs routine is
?C: available to stat filesystems by file descriptors.
?C:.
?H:#$d_fstatfs HAS_FSTATFS  /**/
?H:.
?LINT:set d_fstatfs
: see if fstatfs exists
set fstatfs d_fstatfs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fstatfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: i_sysmman.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:11:20  ram
?RCS: patch16: created
?RCS:
?X:
?X: Look wether <sys/mman.h> needs to be included.
?X:
?MAKE:i_sysmman: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysmman:
?S: This variable conditionally defines the I_SYS_MMAN symbol,
?S: and indicates whether a C program should include <sys/mman.h>.
?S:.
?C:I_SYS_MMAN:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/mman.h>.
?C:.
?H:#$i_sysmman I_SYS_MMAN  /**/
?H:.
?LINT:set
 i_sysmman
: see if sys/mman.h has to be included
set sys/mman.h i_sysmman
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysmman.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fgetpos.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fgetpos.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:33  ram
?RCS: patch30: created
?RCS:
?MAKE:d_fgetpos: Inlibc
?MAKE: -pick add $@ %<
?S:d_fgetpos:
?S: This variable conditionally defines HAS_FGETPOS if fgetpos() is
?S: available to get the file position indicator.
```

```
?S:.
?C:HAS_FGETPOS:
?C: This symbol, if defined, indicates that the fgetpos routine is
?C: available to get the file position indicator, similar to ftell().
?C:.
?H:#$d_fgetpos
 HAS_FGETPOS /**/
?H:.
?LINT:set d_fgetpos
: see if fgetpos exists
set fgetpos d_fgetpos
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fgetpos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: baserev.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: baserev.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:baserev: Null
?MAKE: -pick wipe $@ %<
?S:baserev:
?S: The base revision level of this package, from the .package file.
?S:.
: set the base revision
baserev=<BASEREV>
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/baserev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lib.U,v 3.0.1.3 1995/09/25 09:16:47 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: lib.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:16:47  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:38:08  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:27:40  ram
?RCS: patch32: now uses installation prefix to set the default
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?LINT:
 empty
?X:?MAKE:lib libexp: Getfile Loc Oldconfig Prefixit Prefixup prefixexp
?X:?MAKE: -pick add $@ %<
?X:?Y:TOP
?X:?S:lib:
?X:?S: This variable holds the name of the directory in which the user wants
?X:?S: to put public library files for the package in question.  It is most
?X:?S: often a local directory such as /usr/local/lib. Programs using this
?X:?S: variable must be prepared to deal with filename expansion.
?X:?S:.
?X:?S:libexp:
?X:?S: This variable is the same as the lib variable, but is filename expanded
?X:?S: at configuration time, for convenient use in your makefiles.
?X:?S:.
?X:: determine where public libraries go
?X:set lib lib
?X:eval $prefixit
?X:case "$lib" in
?X:")
?X: dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
?X: set dflt
?X: eval $prefixup
?X: ;;
?X:*)  dflt="$lib";;
?X:esac
?X:echo " "
?X:fn=d~
?X:rp='Where do you want to put the public libraries?'
?X:. ./getfile
```

```
?X:lib="$ans"
?X:libexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/nullified/lib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigblock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigblock.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sigblock: Inlibc
?MAKE: -pick add $@ %<
?S:d_sigblock:
?S: This variable conditionally defines HAS_SIGBLOCK if sigblock() is
?S: available to block signal reception.
?S:.
?C:HAS_SIGBLOCK:
?C: This symbol, if defined, indicates that the sigblock routine is
?C: available to block signal reception.
?C:.
?H:#$d_sigblock HAS_SIGBLOCK /**/
?H:.
?LINT:set
 d_sigblock
: see if sigblock exists
set sigblock d_sigblock
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigblock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memmove.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memmove.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memmove: Inlibc
?MAKE: -pick add $@ %<
?S:d_memmove:
?S: This variable conditionally defines the HAS_MEMMOVE symbol, which
?S: indicates to the C program that the memmove() routine is available
?S: to copy potentially overlapping blocks of memory.
?S:.
?C:HAS_MEMMOVE:
?C: This symbol, if defined, indicates that the memmove routine
 is available
?C: to copy potentially overlapping blocks of memory. This should be used
?C: only when HAS_SAFE_BCOPY is not defined. If neither is there, roll your
?C: own version.
?C:.
?H:#$d_memmove HAS_MEMMOVE /**/
?H:.
?LINT:set d_memmove
: see if memmove exists
set memmove d_memmove
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memmove.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: patchlevel.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:18:41  ram
?RCS: patch61: added support for src.U
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:09:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:patchlevel: package baserev test rsrc
?MAKE: -pick add $@ %<
?T:Revision
?S:patchlevel:
?S: The patchlevel level of this package.
?S: The value of patchlevel comes from the patchlevel.h file.
?S:.
: get the patchlevel
echo " "
echo "Getting the current patchlevel..." >&4
if $test -r
 $rsrc/patchlevel.h;then
 patchlevel=`awk \
  '/^#[  ]*define[  ][  ]*PATCHLEVEL/ {print $3}' \
  < $rsrc/patchlevel.h`
else
 patchlevel=0
fi
echo "(You have $package $baserev PL$patchlevel.)"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/patchlevel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:Devel usedevel: Myread rsrc package
?MAKE: -pick wipe $@ %<
?T:xversion
?X: waiver of rights
?S:usedevel:
?S: This variable indicates that Perl was configured with development
?S: features enabled.  This should not be done for production builds.
?S:.
?C:PERL_USE_DEVEL:
?C: This symbol, if defined, indicates that Perl was configured with
?C: -Dusedevel, to enable development features.  This should not be
```

```
?C: done for production builds.
?C:.
?H:#$usedevel PERL_USE_DEVEL  /**/
?H:.
?LINT:extern versiononly
?LINT:extern
 installusrbinperl
?LINT:change versiononly
?LINT:change installusrbinperl
: See if we are using a devel version and want that
xversion=`awk '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
case "$usedevel" in
$define|true|[yY]*)
   usedevel="$define" ;;
*) case "$xversion" in
  *[13579])
 cat >&4 <<EOH
*** WHOA THERE!!! ***

   This is an UNSTABLE DEVELOPMENT release.
   The version of this $package distribution is $xversion, that is, odd,
   (as opposed to even) and that signifies a development release.
   If you want a maintenance release, you want an even-numbered version.

   Do ***NOT*** install this into production use.
   Data corruption and crashes are possible.

   It is most seriously suggested that you do not continue any further
   unless you want to help in developing and debugging Perl.

   If you *still* want to build perl, you can answer 'y' now,
   or pass -Dusedevel to Configure.

EOH
 rp='Do you really want to continue?'
 dflt='n'
 . ./myread
 case
 "$ans" in
 [yY]) echo >&4 "Okay, continuing."
       usedevel="$define" ;;
 *) echo >&4 "Okay, bye."
    exit 1
    ;;
 esac
 ;;
   esac
   usedevel="$undef"
```

```
   ;;
esac
case "$usedevel" in
$define|true|[yY]*)
 case "$versiononly" in
 ") versiononly="$define" ;;
 esac
 case "$installusrbinperl" in
 ") installusrbinperl="$undef" ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Devel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_acosh: Inlibc
?MAKE: -pick add $@ %<
?S:d_acosh:
?S: This variable conditionally defines the HAS_ACOSH symbol, which
?S: indicates to the C program that the acosh() routine is available.
?S:.
?C:HAS_ACOSH:
?C: This symbol, if defined, indicates that the acosh routine is
?C: available to do the inverse hyperbolic cosine function.
?C:.
?H:#$d_acosh HAS_ACOSH  /**/
?H:.
?LINT:set d_acosh
: see if acosh exists
set acosh d_acosh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_acosh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
```

```
?RCS:
?MAKE:d_endprotoent_r endprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endprotoent_r:
?S: This variable conditionally defines the HAS_ENDPROTOENT_R symbol,
?S: which indicates to the C program that the endprotoent_r()
?S: routine is available.
?S:.
?S:endprotoent_r_proto:
?S: This variable encodes the prototype of endprotoent_r.
?S: It is zero if d_endprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endprotoent_r
?S: is defined.
?S:.
?C:HAS_ENDPROTOENT_R:
?C: This symbol, if defined, indicates that the endprotoent_r
 routine
?C: is available to endprotoent re-entrantly.
?C:.
?C:ENDPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of endprotoent_r.
?C: It is zero if d_endprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endprotoent_r
?C: is defined.
?C:.
?H:#$d_endprotoent_r HAS_ENDPROTOENT_R /**/
?H:#define ENDPROTOENT_R_PROTO $endprotoent_r_proto /**/
?H:.
?T:try hdrs d_endprotoent_r_proto
: see if endprotoent_r exists
set endprotoent_r d_endprotoent_r
eval $inlibc
case "$d_endprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endprotoent_r_proto:$usethreads" in
 ":define") d_endprotoent_r_proto=define
  set d_endprotoent_r_proto endprotoent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endprotoent_r_proto" in
 define)
 case "$endprotoent_r_proto" in
 "|0) try='int endprotoent_r(struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && endprotoent_r_proto=I_D ;;
 esac
```

```
 case "$endprotoent_r_proto"
 in
 "|0) try='void endprotoent_r(struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && endprotoent_r_proto=V_D ;;
 esac
 case "$endprotoent_r_proto" in
 "|0) d_endprotoent_r=undef
  endprotoent_r_proto=0
  echo "Disabling endprotoent_r, cannot determine prototype." >&4 ;;
 * ) case "$endprotoent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endprotoent_r_proto="REENTRANT_PROTO_$endprotoent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endprotoent_r has no prototype, not using it." >&4 ;;
  esac
  d_endprotoent_r=undef
  endprotoent_r_proto=0
  ;;
 esac
 ;;
*) endprotoent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endprotoent_r.U
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```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_madvise: Inlibc
?MAKE: -pick add $@ %<
?S:d_madvise:
?S: This variable conditionally defines HAS_MADVISE if madvise() is
?S: available to map a file into memory.
?S:.
```

```
?C:HAS_MADVISE:
?C: This symbol, if defined, indicates that the madvise system call is
?C: available to map a file into memory.
?C:.
?H:#$d_madvise HAS_MADVISE  /**/
?H:.
?LINT:set d_madvise
: see if madvise exists
set madvise d_madvise
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_madvise.U
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```
?RCS: $Id$
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d__fwalk: Inlibc
?MAKE: -pick add $@ %<
?S:d__fwalk:
?S: This variable conditionally defines HAS__FWALK if _fwalk() is
?S: available to apply a function to all the file handles.
?S:.
?C:HAS__FWALK:
?C: This symbol, if defined, indicates that the _fwalk system call is
?C: available to apply a function to all the file handles.
?C:.
?H:#$d__fwalk HAS__FWALK  /**/
?H:.
?LINT:set d__fwalk
: see if _fwalk exists
set fwalk d__fwalk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d__fwalk.U
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```
?RCS: $Id: d_flock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_flock.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flock: Inlibc
?MAKE: -pick add $@ %<
?S:d_flock:
?S: This variable conditionally defines HAS_FLOCK if flock() is
?S: available to do file locking.
?S:.
?C:HAS_FLOCK (FLOCK):
?C: This symbol, if defined, indicates that the flock routine is
?C: available to do file locking.
?C:.
?H:#$d_flock HAS_FLOCK  /**/
?H:.
?LINT:set d_flock
: see
 if flock exists
set flock d_flock
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_flock.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_finite: Inlibc
?MAKE: -pick add $@ %<
?S:d_finite:
?S: This variable conditionally defines the HAS_FINITE symbol, which
?S: indicates to the C program that the finite() routine is available.
?S:.
?C:HAS_FINITE:
```

```
?C: This symbol, if defined, indicates that the finite routine is
?C: available to check whether a double is finite (non-infinity non-NaN).
?C:.
?H:#$d_finite HAS_FINITE  /**/
?H:.
?LINT:set d_finite
: see if finite exists
set finite d_finite
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_finite.U
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```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_safebcpy.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  15:40:58  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.3  1995/07/25  13:58:40  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:29:23  ram
?RCS: patch45: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:49:03
  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safebcpy: cat d_bcopy +cc +optimize +ccflags +ldflags +libs rm \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safebcpy:
?S: This variable conditionally defines the HAS_SAFE_BCOPY symbol if
```

```
?S: the bcopy() routine can do overlapping copies.
?S:.
?C:HAS_SAFE_BCOPY (SAFE_BCOPY):
?C: This symbol, if defined, indicates that the bcopy routine is available
?C: to copy potentially overlapping memory blocks. Otherwise you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
?H:#$d_safebcpy HAS_SAFE_BCOPY /**/
?H:.
?F:!safebcpy
?LINT: set d_safebcpy
: can bcopy handle overlapping blocks?
?X: assume the worst
val="$undef"
case "$d_bcopy" in
"$define")
 echo " "
 echo "Checking to see if your bcopy() can do overlapping
 copies..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
```

```
int align;

?X: Copy "abcde..." string to char abc[] so that gcc doesn't
?X: try to store the string in read-only memory.
bcopy("abcdefghijklmnopqrstuvwxyz0123456789", abc, 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  bcopy(abc, b, len);
  for (off = 1; off <= len; off++) {
   bcopy(b, b+off, len);
   bcopy(b+off, b, len);
   if (bcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
 if $cc $optimize $ccflags $ldflags \
      -o safebcpy foo.c $libs >/dev/null 2>&1; then
  if ./safebcpy
 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "It can't, sorry."
   case "$d_memmove" in
   "$define") echo "But that's Ok since you have memmove()." ;;
   esac
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
  case "$d_memmove" in
  "$define") echo "But that's Ok since you have memmove()." ;;
  esac
 fi
 ;;
esac
$rm -f foo.* safebcpy core
set d_safebcpy
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_safebcpy.U
```

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```
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?RCS:
?MAKE:d_fpclassify d_fp_classify: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?X:the short story is that C99 says use fpclassify.  But the story is confused
?X:by systems "partially C99" (or fully "pre C99") which either user fpclassify
?X:but with different return values, or they use fp_classify (with the expected)
?X:return values, or they use some other spelling of *fp*class* (sometimes even
?X:without the *fp* part), with yet another set(s) of return values ...
?S:d_fpclassify:
?S: This variable conditionally defines the HAS_FPCLASSIFY symbol, which
?S: indicates to the C program that the fpclassify() routine is available.
?S:.
?S:d_fp_classify:
?S: This variable conditionally defines the HAS_FP_CLASSIFY
 symbol, which
?S: indicates to the C program that the fp_classify() routine is available.
?S:.
?C:HAS_FPCLASSIFY:
?C: This symbol, if defined, indicates that the fpclassify routine is
?C: available to classify doubles.  Available for example in HP-UX.
?C: The returned values are defined in <math.h> and are
?C:
?C:   FP_NORMAL     Normalized
?C:   FP_ZERO       Zero
?C:   FP_INFINITE   Infinity
?C:   FP_SUBNORMAL  Denormalized
?C:   FP_NAN        NaN
?C:
?C:.
?C:HAS_FP_CLASSIFY:
?C: This symbol, if defined, indicates that the fp_classify routine is
?C: available to classify doubles. The values are defined in <math.h>
?C:
?C:   FP_NORMAL     Normalized
?C:   FP_ZERO       Zero
?C:   FP_INFINITE   Infinity
?C:   FP_SUBNORMAL  Denormalized
?C:   FP_NAN        NaN
?C:
?C:.
?H:#$d_fpclassify HAS_FPCLASSIFY  /**/
?H:#$d_fp_classify HAS_FP_CLASSIFY  /**/
```

```
?H:.
?LINT:set d_fpclassify
?LINT:set d_fp_classify
: check for fpclassify
?X:classified (Comment by jhi)
?X:fpclassify i_math
?X:fp_classify i_math
?X:fpclass i_math
 i_ieeefp i_fp
?X:fp_class i_math i_fp_class
?X:  No i_fp_class yet. But the systems that have
?X:  this (Tru64 and IRIX) both had <fp_class.h>
?X:class i_math
echo "Checking to see if you have fpclassify..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return fpclassify(1.0) == FP_NORMAL ? 0 : 1; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have fpclassify."
else
 val="$undef"
 echo "You do not have fpclassify."
fi
$rm_try
set d_fpclassify
eval $setvar

: see if fp_classify exists
set fp_classify d_fp_classify
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclassify.U
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```
?RCS: $Id: i_shadow.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_prot: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_prot:
```

```
?S: This variable conditionally defines the I_PROT symbol, and indicates
?S: whether a C program should include <prot.h>.
?S:.
?C:I_PROT:
?C: This symbol, if defined, indicates that <prot.h> exists and
?C: should be included.
?C:.
?H:#$i_prot I_PROT  /**/
?H:.
?LINT:set i_prot
: see if this is a prot.h system
set prot.h i_prot
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_prot.U
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```
?RCS: $Id: d_setnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setnent:
?S: This variable conditionally defines HAS_SETNETENT if setnetent() is
?S: available.
?S:.
?C:HAS_SETNETENT:
?C: This symbol, if defined, indicates that the setnetent() routine is
?C: available.
?C:.
?H:#$d_setnent HAS_SETNETENT  /**/
?H:.
?LINT:set d_setnent
: see if setnetent exists
set
```

```
 setnetent d_setnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setnent.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_backtrace.U,v $
?RCS:
?MAKE:d_backtrace: Inlibc
?MAKE: -pick add $@ %<
?S:d_backtrace:
?S: This variable conditionally defines the HAS_BACKTRACE symbol, which
?S: indicates to the C program that the backtrace() routine is available
?S: to get a stack trace.
?S:.
?C:HAS_BACKTRACE:
?C: This symbol, if defined, indicates that the backtrace() routine is
?C: available to get a stack trace.  The <execinfo.h> header must be
?C: included to use this routine.
?C:.
?H:#$d_backtrace HAS_BACKTRACE /**/
?H:.
?LINT:set d_backtrace
:
 see if backtrace exists
set backtrace d_backtrace
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_backtrace.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_strerror_l: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_strerror_l:
?S: This variable conditionally defines the HAS_STRERROR_L symbol, which
?S: indicates to the C program that the strerror_l() routine is available
?S: to return the error message for a given errno value in a particular
?S: locale (identified by a locale_t object).
?S:.
?C:HAS_STRERROR_L:
?C: This symbol, if defined, indicates that the strerror_l routine is
?C: available to return the error message for a given errno value in
?C: a particular locale (identified by a locale_t object).
?C:.
?H:#$d_strerror_l HAS_STRERROR_L  /**/
?H:.
?LINT:set d_strerror_l
: see if strerror_l exists
set strerror_l d_strerror_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strerror_l.U
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```
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_sysaccess: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysaccess:
?S: This variable conditionally defines the I_SYS_ACCESS symbol,
?S: and indicates whether a C program should include <sys/access.h>.
?S:.
?C:I_SYS_ACCESS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/access.h>.
?C:.
?H:#$i_sysaccess   I_SYS_ACCESS              /**/
?H:.
?LINT:set i_sysaccess
: see if sys/access.h is available
set sys/access.h i_sysaccess
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/i_sysaccess.U
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```
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS:
?MAKE:i_fenv: Inhdr
?MAKE: -pick add $@ %<
?S:i_fenv:
?S: This variable conditionally defines the I_FENV symbol, which
?S: indicates to the C program that <fenv.h> exists and should
?S: be included.
?S:.
?C:I_FENV:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <fenv.h> to get the floating point environment definitions.
?C:.
?H:#$i_fenv I_FENV  /**/
?H:.
?LINT:set i_fenv
: see if this is a fenv.h system
set fenv.h i_fenv
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fenv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrent_r getgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrent_r:
?S: This variable conditionally defines the HAS_GETGRENT_R symbol,
?S: which indicates to the C program that the getgrent_r()
?S: routine is available.
?S:.
?S:getgrent_r_proto:
?S: This variable encodes the prototype of getgrent_r.
```

```
?S: It is zero if d_getgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrent_r
?S: is defined.
?S:.
?C:HAS_GETGRENT_R:
?C: This symbol, if defined, indicates that the getgrent_r routine
?C: is available to
 getgrent re-entrantly.
?C:.
?C:GETGRENT_R_PROTO:
?C: This symbol encodes the prototype of getgrent_r.
?C: It is zero if d_getgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrent_r
?C: is defined.
?C:.
?H:#$d_getgrent_r HAS_GETGRENT_R /**/
?H:#define GETGRENT_R_PROTO $getgrent_r_proto /**/
?H:.
?T:try hdrs d_getgrent_r_proto
: see if getgrent_r exists
set getgrent_r d_getgrent_r
eval $inlibc
case "$d_getgrent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_getgrent_r_proto:$usethreads" in
 ":define") d_getgrent_r_proto=define
  set d_getgrent_r_proto getgrent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getgrent_r_proto" in
 define)
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, size_t, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBWR ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, int, struct group**);'
 ./protochk
 "$extern_C $try" $hdrs && getgrent_r_proto=I_SBIR ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='struct group* getgrent_r(struct group*, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=S_SBW ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='struct group* getgrent_r(struct group*, char*, int);'
```

```
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=S_SBI ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBI ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, int, FILE**);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBIH ;;
 esac
 case "$getgrent_r_proto" in
 "|0) d_getgrent_r=undef
  getgrent_r_proto=0
  echo "Disabling getgrent_r, cannot determine prototype." >&4 ;;
 * ) case "$getgrent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getgrent_r_proto="REENTRANT_PROTO_$getgrent_r_proto" ;;
  esac
  echo "Prototype:
 $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getgrent_r has no prototype, not using it." >&4 ;;
  esac
  d_getgrent_r=undef
  getgrent_r_proto=0
  ;;
 esac
 ;;
*) getgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: shm_for.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: shm_for.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:28:37  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:shm_for shm_att shm_lim: Cppsym Myread ipc uname
?MAKE: -pick add $@ %<
?S:shm_for:
?S: This variable tells us the type of machine we're expecting the
?S: shared memory code to run on.  The value is available to C
 programs
?S: in the C_SHM_FOR manifest.
?S:.
?S:shm_att:
?S: This variable tells us where a shared memory segment should be
?S: attached.  Good values are HIGH, LOW, and ZERO.
?S:.
?S:shm_lim:
?S: This variable tells us if shared memory attached HIGH should
?S: have an upper limit.
?S:.
?X: ----------------------------------------------------------
?X: It's a potential lose to define anything beginning with SHM...
?X: At least we can think that S_ stands for "String version of ..." -- HMS
?X: ----------------------------------------------------------
?C:S_SHM_FOR ~ %<:
?C: This symbol identifies what we chose for the target system's
?C: default shared memory configuration parameters.
?C:.
?C:S_SHM_ATT ~ %<:
?C: This symbol holds the default "place" to attach shared memory.
?C: Values are "HIGH", "ZERO", and "LOW".
?C:.
?C:S_SHM_LIM ~ %<:
?C: This symbol holds the default upper bound address limit if shared
?C: memory is attached HIGH.  If zero, there is no upper limit.
?C:.
?H:?%<:#ifdef
 SERVE_SHM
?H:?%<:#define S_SHM_FOR "$shm_for"
?H:?%<:#define S_SHM_ATT "$shm_att"
?H:?%<:#define S_SHM_LIM "$shm_lim"
?H:?%<:#endif
?H:.
?W:%<:S_SHM_FOR S_SHM_ATT S_SHM_LIM
: see how to attach shared memory
```

```
echo " "
echo "Deciding how to attach shared memory..." >&4

case "$ipc" in
shm)
 shm_for='Default case'
 shm_att='HIGH'
 shm_lim='0x0'
 if ./Cppsym tower32 tower32_600; then
  echo "NCR Towers are usually normal..."
  : echo "Oh, an NCR Tower."
  : This works for the 600
  shm_for='NCR Tower 32'
  shm_att='LOW'
 else
  case "$uname" in
  */uname)
   case "`uname -m`" in
   ACS??68*)
    echo "Oh, an Altos 3068."
    shm_for='Altos 3068:'
    shm_lim='0x800000'
    ;;
    esac
    ;;
  *)
   echo "Looks normal to me..."
   ;;
  esac
 fi

 dflt="$shm_for"
 rp='Description of shared memory configuration?'
 . ./myread
 shm_for="$ans"

 dflt="$shm_att"
 rp='Where should shared memory be attached?'
 . ./myread
 shm_att="$ans"

 case "$shm_att" in
 HIGH)
  dflt="$shm_lim"
  rp='What is
 the upper address limit for shared memory?'
  . ./myread
  shm_lim="$ans"
```

```
  ;;
 *)
  shm_lim=''
  ;;
 esac
 ;;

*)
 echo "but you aren't using shared memory so I won't bother." >&4
 shm_for='NOT CONFIGURED'
 shm_att='NONE'
 shm_lim='-1'
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/shm_for.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_socks5_init: Inlibc
?MAKE: -pick add $@ %<
?S:d_socks5_init:
?S: This variable conditionally defines the HAS_SOCKS5_INIT symbol, which
?S: indicates to the C program that the socks5_init() routine is available.
?S:.
?C:HAS_SOCKS5_INIT:
?C: This symbol, if defined, indicates that the socks5_init routine is
?C: available to initialize SOCKS 5.
?C:.
?H:#$d_socks5_init HAS_SOCKS5_INIT  /**/
?H:.
?LINT:set d_socks5_init
: see if socks5_init exists
set socks5_init d_socks5_init
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_socks5_init.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can be doted in order to extract
?X: .SH files with variable substitutions.
?X:
?X: When running Configure from a remote directory ($src
 is not '.'),
?X: then the files will be created in that directory, so beware!
?X:
?MAKE:Extract: Mkdirp src
?MAKE: -pick add $@ %<
?F:./extract
?T:CONFIG SRC dir file
: script used to extract .SH files with variable substitutions
cat >extract <<EOS
CONFIG=true
SRC="$src"
EOS
cat >>extract <<'EOS'
echo "Doing variable substitutions on .SH files..."
if test -f "$SRC/MANIFEST"; then
 set x `awk '{print $1}' <$SRC/MANIFEST | grep '\.SH'`
else
 echo "(Looking for .SH files under the source directory.)"
 set x `(cd "$SRC"; find . -name "*.SH" -print)`
fi
shift
case $# in
0) set x `(cd "$SRC"; echo *.SH)`; shift;;
esac
```

```
if test ! -f "$SRC/$1"; then
 shift
fi
for file in $*; do
 case "$SRC" in
 ".")
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (cd $dir && . ./$file)
   ;;
  *)
   . ./$file
   ;;
  esac
  ;;
 *)
?X:
?X: When running Configure remotely ($src is not '.'), we cannot source
?X: the files directly, since that would wrongly cause
 the extraction
?X: where the source lie instead of withing the current directory. Therefore,
?X: we need to 'sh <file' then, which is okay since they will source the
?X: existing config.sh file. It's not possible to use:
?X:  ../src/Configure -S -O -Dsomething
?X: unfortunately since no new config.sh with the -Dsomething override
?X: will be created before running the .SH files. A minor buglet.
?X:
?X: Note that we must create the directory hierarchy ourselves if it does
?X: not exist already, and that is done through a shell emulation of the
?X: 'mkdir -p' command. We don't want to use the $installdir metaconfig
?X: symbol here since that would require too much to be configured for
?X: this simple extraction task that may happen quickly with 'Configure -S'.
?X:  -- RAM, 18/03/96
?X:
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   ./mkdirp $dir
   sh <"$SRC/$dir/$file"
   ;;
  *)
   sh <"$SRC/$file"
   ;;
  esac
  ;;
```

```
 esac
done
if
 test -f "$SRC/config_h.SH"; then
 if test ! -f config.h; then
?X: oops, they left it out of MANIFEST, probably, so do it anyway.
  sh <"$SRC/config_h.SH"
 fi
fi
EOS
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Extract.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:st_dev_size st_dev_sign: cat echo i_stdlib Setvar Compile run rm_try
?MAKE: -pick add $@ %<
?S:st_dev_sign:
?S: This variable contains the signedness of struct stat's st_dev.
?S: 1 for unsigned, -1 for signed.
?S:.
?S:st_dev_size:
?S: This variable contains the size of struct stat's st_dev in bytes.
?S:.
?C:ST_DEV_SIZE:
?C: This variable contains the size of struct stat's st_dev in bytes.
?C:.
?C:ST_DEV_SIGN:
?C: This symbol holds the signedness of struct stat's st_dev.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define ST_DEV_SIGN
 $st_dev_sign /* st_dev sign */
?H:#define ST_DEV_SIZE $st_dev_size /* st_dev size */
?H:.
?F:!try
: Check the size of st_dev
$echo " "
$echo "Checking the size of st_dev..." >&4
$cat > try.c <<EOCP
```

```
#include <sys/stat.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   struct stat st;
   printf("%d\n", (int)sizeof(st.st_dev));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 val=`$run ./try`
 case "$val" in
 ") st_dev_size=4
  $echo "(I can't execute the test program--guessing $st_dev_size.)" >&4
  ;;
 *) st_dev_size=$val
  $echo "Your st_dev is $st_dev_size bytes long."
  ;;
 esac
else
 st_dev_size=4
 $echo "(I can't compile the test program--guessing $st_dev_size.)" >&4
fi
$rm_try

: Check if st_dev is signed
$echo " "
$echo "Checking the sign of st_dev..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
int main() {
 struct stat foo;
       foo.st_dev = -1;
 if (foo.st_dev < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set
 try
if eval $compile; then
 val=`$run ./try`
```

```
 case "$val" in
 ") st_dev_sign=1
  $echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) st_dev_sign=$val
  case "$st_dev_sign" in
   1) $echo "Your st_dev is unsigned." ;;
  -1) $echo "Your st_dev is signed."   ;;
  esac
  ;;
 esac
else
 st_dev_sign=1
 $echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/st_dev_def.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_math.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_math.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:59  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_math: Inhdr
?MAKE: -pick add $@ %<
?X: Are there really systems that *DON'T* have math.h?
?S:i_math:
?S: This variable conditionally defines the I_MATH symbol, and indicates
?S: whether a C program may include <math.h>.
?S:.
?C:I_MATH:
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <math.h>.
```

```
?C:.
?H:#$i_math I_MATH  /**/
?H:.
?LINT:set i_math
: see if this is a math.h system
set math.h i_math
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_math.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ffs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ffs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ffs d_ffsl: Inlibc
?MAKE: -pick add $@ %<
?S:d_ffs:
?S: This variable conditionally defines the HAS_FFS symbol, which
?S: indicates to the C program that the ffs() routine is available
?S: to find the first bit which is set in its integer argument.
?S:.
?S:d_ffsl:
?S: This variable conditionally defines the HAS_FFSL symbol, which
?S: indicates
 to the C program that the ffsl() routine is available
?S: to find the first bit which is set in its long integer argument.
?S:.
?C:HAS_FFS:
?C: This symbol, if defined, indicates that the ffs routine is available
?C: to find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
?C:HAS_FFSL:
?C: This symbol, if defined, indicates that the ffsl routine is available
?C: to find the first bit set in its argument.  If it's not available,
?C: roll your own.
```

```
?C:.
?H:#$d_ffs HAS_FFS  /**/
?H:#$d_ffsl HAS_FFSL  /**/
?H:.
?LINT:set d_ffs d_ffsl
: see if ffs exists
set ffs d_ffs
eval $inlibc
: see if ffsl exists
set ffsl d_ffsl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ffs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cf_email.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:05:06  ram
?RCS: patch16: created
?RCS:
?RCS:
?MAKE:cf_email: cat cf_by test myhostname mydomain Oldconfig Myread
?MAKE: -pick add $@ %<
?S:cf_email:
?S: Electronic mail address of the person who ran Configure. This can be
?S: used by units that require the user's e-mail, like MailList.U.
?S:.
?T:cont maildomain
?LINT:extern MAILDOMAIN
: determine the e-mail address of the user who is running us
$cat <<EOM

I need to get your e-mail address
 in Internet format if possible, i.e.
something like user@host.domain. Please answer accurately since I have
no easy means to double check it. The default value provided below
is most probably close to reality but may not be valid from outside
your organization...
```

```
EOM
cont=x
while test "$cont"; do
 case "$MAILDOMAIN" in
 ")
  if $test -s /etc/mailname; then
   maildomain=`$cat /etc/mailname`
  else
   maildomain="$myhostname$mydomain"
  fi
  ;;
 *)  maildomain="$MAILDOMAIN";;
 esac
 case "$cf_email" in
 ") dflt="$cf_by@$maildomain";;
 *)  dflt="$cf_email";;
 esac
 rp='What is your e-mail address?'
 . ./myread
 cf_email="$ans"
 case "$cf_email" in
 *@*.*) cont=" ;;
 *)
  rp='Address does not look like an Internet one.  Use it anyway?'
  case "$fastread" in
  yes) dflt=y ;;
  *) dflt=n ;;
  esac
  . ./myread
  case "$ans" in
  y*) cont=" ;;
  *) echo " " ;;
  esac
  ;;
 esac
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_email.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_chown.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:14  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_chown: Inlibc
?MAKE: -pick add $@ %<
?S:d_chown:
?S: This variable conditionally defines the HAS_CHOWN symbol, which
?S: indicates to the C program that the chown() routine is available.
?S:.
?C:HAS_CHOWN :
?C: This symbol, if defined, indicates that the chown routine is
?C: available.
?C:.
?H:#$d_chown
 HAS_CHOWN  /**/
?H:.
?LINT:set d_chown
: see if chown exists
set chown d_chown
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bcmp.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:47:52  ram
?RCS: patch12: added magic support for bcmp()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:00:44  ram
?RCS: patch10: now only defines HAS_BCMP, no macro remap on memcmp (WAD)
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bcmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_bcmp:
?S: This variable conditionally defines the HAS_BCMP symbol
 if
?S: the bcmp() routine is available to compare strings.
?S:.
?C:HAS_BCMP:
?C: This symbol is defined if the bcmp() routine is available to
?C: compare blocks of memory.
?C:.
?H:#$d_bcmp HAS_BCMP /**/
?H:.
?M:bcmp: HAS_BCMP
?M:#ifndef HAS_BCMP
?M:#ifndef bcmp
?M:#define bcmp(s,d,l) memcmp((s),(d),(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bcmp
: see if bcmp exists
set bcmp d_bcmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysvfs.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysvfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysvfs:
?S: This variable conditionally defines the I_SYSVFS symbol,
?S: and indicates whether a C program should include <sys/vfs.h>.
?S:.
?C:I_SYS_VFS:
?C: This symbol, if defined, indicates that <sys/vfs.h> exists and
```

```
?C: should be included.
?C:.
?H:#$i_sysvfs I_SYS_VFS  /**/
?H:.
?LINT:set i_sysvfs
: see if this is a sys/vfs.h system
set sys/vfs.h i_sysvfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysvfs.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: usrinc.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:27:12  ram
?RCS: patch61: don't ask for the include path unless they are on a MIPS
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:24:36  ram
?RCS: patch54: ensure that ./mips always exists (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:18:31  ram
?RCS: patch23: ensure usrinc value is preserved across sessions (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usrinc incpath mips_type:
 test cat echo n c Getfile Guess \
 Oldconfig eunicefix contains rm
?MAKE: -pick add $@ %<
?S:usrinc:
?S: This variable holds the path of the include files, which is
?S: usually /usr/include. It is mainly used by other Configure units.
?S:.
?S:incpath:
?S: This variable must preceed the normal include path to get hte
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
```

```
?S:.
?S:mips_type:
?S: This variable holds the environment type for the mips system.
?S: Possible values are "BSD 4.3" and "System V".
?S:.
?D:usrinc='/usr/include'
?LINT:create mips
?T:xxx_prompt
?F:./mips
: What should the include directory be ?
echo " "
$echo $n "Hmm...  $c"
dflt='/usr/include'
incpath=''
?X: mips_type is used later, to add -DSYSTYPE_BSD43 to cppflags if needed.
mips_type=''
?X:
?X: Cannot put the following in Guess, or we get a circular dependency.
?X:
if $test -f /bin/mips && /bin/mips; then
 echo "Looks like a MIPS system..."
 $cat >usr.c
 <<'EOCP'
#ifdef SYSTYPE_BSD43
/bsd43
#endif
EOCP
 if cc -E usr.c > usr.out && $contains / usr.out >/dev/null 2>&1; then
  dflt='/bsd43/usr/include'
  incpath='/bsd43'
  mips_type='BSD 4.3'
 else
  mips_type='System V'
 fi
 $rm -f usr.c usr.out
 echo "and you're compiling with the $mips_type compiler and libraries."
 xxx_prompt=y
 echo "exit 0" >mips
else
 echo "Doesn't look like a MIPS system."
 xxx_prompt=n
 echo "exit 1" >mips
fi
chmod +x mips
$eunicefix mips
case "$usrinc" in
'') ;;
*) dflt="$usrinc";;
```

```
esac
case "$xxx_prompt" in
y) fn=d/
 echo " "
 rp='Where are the include files you want to use?'
 . ./getfile
 usrinc="$ans"
 ;;
*) usrinc="$dflt"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usrinc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_htonl.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:09:25  ram
?RCS: patch32: now properly handles htonl() and friends when macros (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:45:00  ram
?RCS: patch23: now also check for htonl() macro (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_htonl: Inlibc Setvar i_niin i_sysin cat rm contains \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_htonl:
?S: This variable conditionally
 defines HAS_HTONL if htonl() and its
?S: friends are available to do network order byte swapping.
?S:.
?C:HAS_HTONL (HTONL):
?C: This symbol, if defined, indicates that the htonl() routine (and
?C: friends htons() ntohl() ntohs()) are available to do network
?C: order byte swapping.
```

```
?C:.
?C:HAS_HTONS (HTONS):
?C: This symbol, if defined, indicates that the htons() routine (and
?C: friends htonl() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHL (NTOHL):
?C: This symbol, if defined, indicates that the ntohl() routine (and
?C: friends htonl() htons() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHS (NTOHS):
?C: This symbol, if defined, indicates that the ntohs() routine (and
?C: friends htonl() htons() ntohl()) are available to do network
?C: order byte swapping.
?C:.
?H:#$d_htonl HAS_HTONL  /**/
?H:#$d_htonl HAS_HTONS  /**/
?H:#$d_htonl HAS_NTOHL  /**/
?H:#$d_htonl HAS_NTOHS  /**/
?H:.
?F:!htonl.c
?LINT:set d_htonl
:
 see if htonl --and friends-- exists
val=''
set htonl val
eval $inlibc

: Maybe they are macros.
case "$val" in
$undef)
 $cat >htonl.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#$i_niin I_NETINET_IN
#$i_sysin I_SYS_IN
#ifdef I_NETINET_IN
#include <netinet/in.h>
#endif
#ifdef I_SYS_IN
#include <sys/in.h>
#endif
#ifdef htonl
printf("Defined as a macro.");
#endif
EOM
 $cppstdin $cppflags $cppminus < htonl.c >htonl.E 2>/dev/null
```

```
 if $contains 'Defined as a macro' htonl.E >/dev/null 2>&1; then
  val="$define"
  echo "But it seems to be defined as a macro." >&4
 fi
 $rm -f htonl.?
 ;;
esac
set d_htonl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_htonl.U
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```
?RCS: $Id: d_fchmod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fchmod.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fchmod: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchmod:
?S: This variable conditionally defines the HAS_FCHMOD symbol, which
?S: indicates to the C program that the fchmod() routine is available
?S: to change mode of opened files.
?S:.
?C:HAS_FCHMOD (FCHMOD):
?C: This symbol, if defined, indicates that the fchmod routine is available
?C: to
 change mode of opened files.  If unavailable, use chmod().
?C:.
?H:#$d_fchmod HAS_FCHMOD  /**/
?H:.
?LINT:set d_fchmod
: see if fchmod exists
set fchmod d_fchmod
eval $inlibc
```

Found in path(s):

```
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fchmod.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: Setprefixvar.U,v 3.0 2006/04/01 17:25:29 hmbrand $
?RCS:
?RCS: Copyright (c) 2006-2006, H.Merijn Brand & Nicholas Clark
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:   You may distribute under the terms of either the GNU General Public
?RCS:   License or the Artistic License, as specified in the README file.
?RCS:
?X:
?X: This unit sets up the scripts installprefix and setprefixvar, so code
?X: in other parts can be more simple and maintainable
?X:
?MAKE:Setprefixvar: Myread Getfile startsh eunicefix test \
 prefix prefixexp installprefix installprefixexp
?MAKE: -pick add $@ %<
?LINT:extern prefixvar
?X: metalint still sees "`\$${prefixvar}exp`" as variable :(
?T:prefixvarexp
?F:./setprefixvar
?F:./installprefix
: Perform
 the prefixexp/installprefixexp correction if necessary
cat <<EOS >installprefix
$startsh
EOS
cat <<'EOSC' >>installprefix
: Change installation prefix, if necessary.
if $test X"$prefix" != X"$installprefix"; then
   eval "install${prefixvar}=\`echo \$${prefixvar}exp | sed \"s#^\$prefixexp#\$installprefixexp#\"\`"
else
   eval "install${prefixvar}=\"\$${prefixvar}exp\""
fi
EOSC
chmod +x installprefix
$eunicefix installprefix

: Set variables such as privlib and privlibexp from the output of ./getfile
: performing the prefixexp/installprefixexp correction if necessary.
cat <<EOS >setprefixvar
$startsh
EOS
cat <<'EOSC' >>setprefixvar
```

```
eval "${prefixvar}=\"\$ans\""
eval "${prefixvar}exp=\"\$ansexp\""
. ./installprefix
EOSC
chmod +x setprefixvar
$eunicefix setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/Setprefixvar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgrp.U,v 3.0.1.1 1997/02/28 15:34:28 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpgrp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:28  ram
?RCS: patch61: new USE_BSD_GETPGRP to detect the getpgrp() flavor
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp d_bsdgetpgrp: Guess Inlibc Setvar cat rm_try \
 +cc +ccflags +ldflags +libs i_unistd i_stdlib run
?MAKE: -pick add $@ %<
?S:d_getpgrp:
?S: This variable conditionally defines HAS_GETPGRP if getpgrp() is
?S: available
 to get the current process group.
?S:.
?S:d_bsdgetpgrp:
?S: This variable conditionally defines USE_BSD_GETPGRP if
?S: getpgrp needs one arguments whereas USG one needs none.
?S:.
?C:HAS_GETPGRP (GETPGRP):
?C: This symbol, if defined, indicates that the getpgrp routine is
?C: available to get the current process group.
?C:.
?C:USE_BSD_GETPGRP:
?C: This symbol, if defined, indicates that getpgrp needs one
?C: arguments whereas USG one needs none.
?C:.
```

```
?H:#$d_getpgrp HAS_GETPGRP  /**/
?H:#$d_bsdgetpgrp USE_BSD_GETPGRP /**/
?H:.
?T:xxx
?F:!try
?LINT:set d_getpgrp d_bsdgetpgrp
: see if getpgrp exists
set getpgrp d_getpgrp
eval $inlibc

@if USE_BSD_GETPGRP || d_bsdgetpgrp
case "$d_getpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of getpgrp is in use..."
 $cat >try.c <<EOP
#include <stdio.h>
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
 if (getuid()
 == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (getpgrp(1) == 0)
  exit(0);
#else
 if (getpgrp() > 0)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -o try -DTRY_BSD_PGRP $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo "You have to use getpgrp(pid) instead of getpgrp()." >&4
  val="$define"
 elif $cc -o try $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo "You have to use getpgrp() instead of getpgrp(pid)." >&4
```

```
  val="$undef"
 else
  echo "I can't seem to compile and run the test program."
  if ./usg; then
   xxx="a USG one, i.e. you use getpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use getpgrp(pid)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use getpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your getpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set
 d_bsdgetpgrp
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_casti32.U,v 3.0.1.3 1995/05/12 12:10:45 ram Exp $
?RCS:
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_casti32.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:10:45  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
```

```
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:09:37  ram
?RCS: patch36: declare signal handler correctly (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:06  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Can the compiler cast large floats to
 32-bit integers?
?X:
?MAKE:d_casti32: cat Compile rm_try intsize Setvar test signal_t run i_stdlib
?MAKE: -pick add $@ %<
?S:d_casti32:
?S: This variable conditionally defines CASTI32, which indicates
?S: whether the C compiler can cast large floats to 32-bit ints.
?S:.
?C:CASTI32:
?C: This symbol is defined if the C compiler can cast negative
?C: or large floating point numbers to 32-bit ints.
?C:.
?H:#$d_casti32 CASTI32  /**/
?H:.
?T:xxx yyy
?F:!try
?LINT:set d_casti32
: check for ability to cast large floats to 32-bit ints.
echo " "
echo 'Checking whether your C compiler can cast large floats to int32.' >&4
if $test "$intsize" -ge 4; then
 xxx=int
else
 xxx=long
fi
$cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
$signal_t blech(int s) { exit(3); }
int main()
{
 $xxx i32;
 double f, g;
 int result = 0;
```

```
 char str[16];
 signal(SIGFPE, blech);

 /* Don't let compiler optimize the test away.
  Store the number
    in a writable string for gcc to pass to sscanf under HP-UX.
 */
 sprintf(str, "2147483647");
 sscanf(str, "%lf", &f); /* f = (double) 0x7fffffff; */
 g = 10 * f;
 i32  = ($xxx) g;

 /* x86 processors will probably give 0x8000 0000, which is a
    sign change.  We don't want that.  We want to mimic SPARC
    behavior here, which is to preserve the sign and give
    back 0x7fff ffff.
 */
 if (i32 != ($xxx) f)
  result |= 1;
 exit(result);
}
EOCP
set try
if eval $compile_ok; then
 $run ./try 2>/dev/null
 yyy=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 yyy=1
fi
case "$yyy" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_casti32
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_casti32.U
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?RCS: $Id: groupstype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:

```
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: groupstype.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:18:08  ram
?RCS: patch36: no longer uses Setvar to set 'groupstype' (ADO)
?RCS: patch36: typo fix in the word 'argument' (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:00:18  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:groupstype: gidtype d_getgrps Myread Oldconfig Findhdr cat d_setgrps
?MAKE: -pick add $@ %<
?INIT:groupstype=''
?S:groupstype:
?S: This
 variable defines Groups_t to be something like gid_t, int,
?S: ushort, or whatever type is used for the second argument to
?S: getgroups() and setgroups().  Usually, this is the same as
?S: gidtype (gid_t), but sometimes it isn't.
?S:.
?C:Groups_t (GROUPSTYPE):
?C: This symbol holds the type used for the second argument to
?C: getgroups() and setgroups().  Usually, this is the same as
?C: gidtype (gid_t) , but sometimes it isn't.
?C: It can be int, ushort, gid_t, etc...
?C: It may be necessary to include <sys/types.h> to get any
?C: typedef'ed information.  This is only required if you have
?C: getgroups() or setgroups()..
?C:.
?H:?%<:#if defined(HAS_GETGROUPS) || defined(HAS_SETGROUPS)
?H:?%<:#define Groups_t $groupstype /* Type for 2nd arg to [sg]etgroups() */
?H:?%<:#endif
?H:.
?W:%<:getgroups HAS_GETGROUPS setgroups HAS_SETGROUPS
: Find type of 2nd arg to 'getgroups()' and 'setgroups()'
echo " "
case "$d_getgrps$d_setgrps" in
*define*)
 case
```

```
 "$groupstype" in
 ") dflt="$gidtype" ;;
 *)  dflt="$groupstype" ;;
 esac
 $cat <<EOM
What type of pointer is the second argument to getgroups() and setgroups()?
Usually this is the same as group ids, $gidtype, but not always.

EOM
 rp='What type pointer is the second argument to getgroups() and setgroups()?'
 . ./myread
 groupstype="$ans"
 ;;
*)  groupstype="$gidtype";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/groupstype.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: sizetype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:32:10  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:sizetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:sizetype:
?S: This variable defines sizetype to be something like size_t,
?S: unsigned long, or whatever type is used to declare length
?S: parameters for string functions.
?S:.
?C:Size_t:
?C: This symbol holds the type used to declare length parameters
?C: for string
 functions.  It is usually size_t, but may be
?C: unsigned long, int, etc.  It may be necessary to include
```

```
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Size_t $sizetype  /* length paramater for string functions */
?H:.
: see what type is used for size_t
set size_t sizetype 'unsigned int' stdio.h sys/types.h
eval $typedef
dflt="$sizetype"
echo " "
rp="What type is used for the length parameter for string functions?"
. ./myread
sizetype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpent:
?S: This variable conditionally defines HAS_SETPROTOENT if setprotoent() is
?S: available.
?S:.
?C:HAS_SETPROTOENT:
?C: This symbol, if defined, indicates that the setprotoent() routine is
?C: available.
?C:.
?H:#$d_setpent HAS_SETPROTOENT  /**/
?H:.
?LINT:set d_setpent
: see if setprotoent
 exists
set setprotoent d_setpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mmap.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:12  ram
?RCS: patch15: created
?RCS:
?MAKE:d_mmap: Inlibc
?MAKE: -pick add $@ %<
?S:d_mmap:
?S: This variable conditionally defines HAS_MMAP if mmap() is
?S: available to map a file into memory.
?S:.
?C:HAS_MMAP:
?C: This symbol, if defined, indicates that the mmap system call is
?C: available to map a file into memory.
?C:.
?H:#$d_mmap HAS_MMAP  /**/
?H:.
?LINT:set d_mmap
: see if mmap exists
set mmap d_mmap
eval $inlibc
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mmap.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setsid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setsid.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:49  ram
?RCS: patch16: created
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setsid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setsid:
?S: This variable conditionally defines HAS_SETSID if setsid() is
?S: available to set the process group ID.
?S:.
?C:HAS_SETSID:
?C: This symbol, if defined, indicates that the setsid routine is
?C: available
 to set the process group ID.
?C:.
?H:#$d_setsid HAS_SETSID /**/
?H:.
?LINT:set d_setsid
: see if setsid exists
set setsid d_setsid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setsid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lrint: Inlibc
?MAKE: -pick add $@ %<
?S:d_lrint:
?S: This variable conditionally defines the HAS_LRINT symbol, which
?S: indicates to the C program that the lrint() routine is available
?S: to return the integral value closest to a double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LRINT:
?C: This symbol, if defined, indicates that the lrint routine is
?C: available to return the integral value closest to a double
?C: (according to the current rounding mode).
?C:.
```

```
?H:#$d_lrint HAS_LRINT  /**/
?H:.
?LINT:set d_lrint
: see if lrint exists
set lrint d_lrint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lrint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extractall.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extractall.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:00:43  ram
?RCS: patch61: created
?RCS:
?X:
?X: If extraction has been requested, load the configuration file, perform
?X: the extraction and exit.
?X:
?X: This unit was originally a part of Options.U. It had to be removed from
?X: it to prevent a dependency cycle: Extract -> src -> Options -> Extract
?X: The Begin.U unit now requires us before beginning to do anything
?X: interesting, to ensure
 proper semantics. -- RAM, 15/03/96
?X:
?MAKE:Extractall: Extract Options
?MAKE: -pick wipe $@ %<
: extract files and exit if asked to do so
case "$extractsh" in
true)
?X: Undo the forced silent=true when -S was supplied, by probing realsilent
?X: which was set iff -s was also given. See Options.U for details.
 case "$realsilent" in
 true) ;;
 *) exec 1>&4;;
 esac
 case "$config_sh" in
 ") config_sh='config.sh';;
```

```
 esac
 echo " "
 echo "Fetching answers from $config_sh..."
 cd ..
 . $config_sh
?X: extract has to be run from the top directory, not within UU.
 . UU/optdef.sh
 echo " "
?X: extract has to be run from the top directory, not within UU.
 . UU/extract
 rm -rf UU
 echo "Extraction done."
 exit 0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Extractall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ttyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ttyname_r ttyname_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_unistd extern_C
?MAKE: -pick add $@ %<
?S:d_ttyname_r:
?S: This variable conditionally defines the HAS_TTYNAME_R symbol,
?S: which indicates to the C program that the ttyname_r()
?S: routine is available.
?S:.
?S:ttyname_r_proto:
?S: This variable encodes the prototype of ttyname_r.
?S: It is zero if d_ttyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ttyname_r
?S: is defined.
?S:.
?C:HAS_TTYNAME_R:
?C: This symbol, if defined, indicates that the ttyname_r routine
?C: is available to ttyname re-entrantly.
?C:.
?C:TTYNAME_R_PROTO:
?C: This
```

```
 symbol encodes the prototype of ttyname_r.
?C: It is zero if d_ttyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ttyname_r
?C: is defined.
?C:.
?H:#$d_ttyname_r HAS_TTYNAME_R /**/
?H:#define TTYNAME_R_PROTO $ttyname_r_proto /**/
?H:.
?T:try hdrs d_ttyname_r_proto
: see if ttyname_r exists
set ttyname_r d_ttyname_r
eval $inlibc
case "$d_ttyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_unistd unistd.h"
 case "$d_ttyname_r_proto:$usethreads" in
 ":define") d_ttyname_r_proto=define
  set d_ttyname_r_proto ttyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ttyname_r_proto" in
 define)
 case "$ttyname_r_proto" in
 "|0) try='int ttyname_r(int, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && ttyname_r_proto=I_IBW ;;
 esac
 case "$ttyname_r_proto" in
 "|0) try='int ttyname_r(int, char*, int);'
 ./protochk "$extern_C $try" $hdrs && ttyname_r_proto=I_IBI ;;
 esac
 case "$ttyname_r_proto"
 in
 "|0) try='char* ttyname_r(int, char*, int);'
 ./protochk "$extern_C $try" $hdrs && ttyname_r_proto=B_IBI ;;
 esac
 case "$ttyname_r_proto" in
 "|0) d_ttyname_r=undef
  ttyname_r_proto=0
  echo "Disabling ttyname_r, cannot determine prototype." >&4 ;;
 * ) case "$ttyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) ttyname_r_proto="REENTRANT_PROTO_$ttyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
```

```
  define) echo "ttyname_r has no prototype, not using it." >&4 ;;
  esac
  d_ttyname_r=undef
  ttyname_r_proto=0
  ;;
 esac
 ;;
*) ttyname_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ttyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usethreads.U,v $
?RCS:
?RCS: Copyright (c) 1998-2000 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usethreads.U,v $
?RCS:
?MAKE:usethreads useithreads d_oldpthreads usereentrant: \
 Myread Oldconfig Setvar test cat
?MAKE: -pick add $@ %<
?Y:TOP
?S:usethreads:
?S: This variable conditionally defines the USE_THREADS symbol,
?S: and indicates that Perl should be built to use threads.
?S:.
?S:useithreads:
?S: This variable conditionally defines the USE_ITHREADS symbol,
?S: and indicates that Perl should be built to use the interpreter-based
?S: threading implementation.
?S:.
?X: I'm putting old_pthreads in this unit because it might eventually
?X: be part of an automatic determination to see if we can use threads
?X: at all.
?S:d_oldpthreads:
?S: This variable conditionally
 defines the OLD_PTHREADS_API symbol,
?S: and indicates that Perl should be built to use the old
?S: draft POSIX threads API.  This is only potentially meaningful if
?S: usethreads is set.
?S:.
?S:usereentrant:
```

```
?S: This variable conditionally defines the USE_REENTRANT_API symbol,
?S: which indicates that the thread code may try to use the various
?S: _r versions of library functions.  This is only potentially
?S: meaningful if usethreads is set and is very experimental, it is
?S: not even prompted for.
?S:.
?C:USE_ITHREADS:
?C: This symbol, if defined, indicates that Perl should be built to
?C: use the interpreter-based threading implementation.
?C:.
?C:USE_THREADS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use threads.  At present, it is a synonym for
?C: and USE_ITHREADS, but eventually the source ought to be
?C: changed to use this to mean _any_ threading implementation.
?C:.
?C:OLD_PTHREADS_API:
?C: This symbol, if defined, indicates that Perl should
?C: be
 built to use the old draft POSIX threads API.
?C:.
?C:USE_REENTRANT_API:
?C: This symbol, if defined, indicates that Perl should
?C: try to use the various _r versions of library functions.
?C: This is extremely experimental.
?C:.
?H:#$useithreads USE_ITHREADS  /**/
?H:#$usethreads  USE_THREADS  /**/
?H:#$d_oldpthreads OLD_PTHREADS_API  /**/
?H:#$usereentrant USE_REENTRANT_API /**/
?H:.
?LINT:set usethreads d_oldpthreads
?INIT:: set usethreads on the Configure command line to enable threads.
?INIT:usereentrant='undef'
?F:!usethreads.cbu
: Do we want threads support and if so, what type
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
case "$usethreads" in
$define|true|[yY]*)     dflt='y';;
*)     # Catch case where user specified ithreads but
     # forgot -Dusethreads (A.D. 4/2002)
     case "$useithreads" in
     *$define*) dflt='y';;
     *)  dflt='n';;
     esac
     ;;
esac
```

```
cat <<EOM

Perl can be built to
 offer a form of threading support on some systems
To do so, Configure can be run with -Dusethreads.

Note that Perl built with threading support runs slightly slower
and uses slightly more memory than plain Perl.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Build a threading Perl?'
. ./myread
case "$ans" in
y|Y)    val="$define" ;;
*)      val="$undef" ;;
esac
set usethreads
eval $setvar

useithreads="$usethreads"

?X: Check out what kind of threads API we have
case "$d_oldpthreads" in
") : Configure tests would be welcome here.  For now, assume undef.
 val="$undef" ;;
*) val="$d_oldpthreads" ;;
esac
set d_oldpthreads
eval $setvar

?X: In general, -lpthread needs to come before -lc but after other
?X: libraries such as -lgdbm and such like. We assume here that -lc
?X: is present in libswanted. If that fails to be true, then this
?X: can be changed to add pthread to the very end of libswanted.

: Look for a hint-file generated 'call-back-unit'.  If the
:
 user has specified that a threading perl is to be built,
: we may need to set or change some other defaults.
if $test -f usethreads.cbu; then
   echo "Your platform has some specific hints regarding threaded builds, using them..."
   . ./usethreads.cbu
else
   case "$usethreads" in
 "$define"|true|[yY]*)
  $cat <<EOM
(Your platform does not have any specific hints for threaded builds.
```

```
Assuming POSIX threads, then.)
EOM
 ;;
   esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/usethreads.U
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```
?RCS: $Id: i_regex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Sidney C. Smith <scsmith@cbda9.apgea.army.mil>
?RCS:
?RCS: $Log: i_regex.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:35:45  ram
?RCS: patch49: created
?RCS:
?RCS:
?MAKE:i_regex: Inhdr
?MAKE: -pick add $@ %<
?S:i_regex:
?S: This variable conditionally defines the I_REGEX symbol, which
?S: indicates to the C program that <regex.h> exists and should
?S: be included.
?S:.
?C:I_REGEX:
?C: This symbol, if defined, indicates that <regex.h> exists
 and should
?C: be included.
?C:.
?H:#$i_regex I_REGEX /**/
?H:.
?LINT:set i_regex
: see if regex is available
set regex.h i_regex
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_regex.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: gidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:21:44  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS: patch32: removed useless usage of Setvar (for now)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:21:07  ram
?RCS: patch27: added lint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:01:51  ram
?RCS: patch23: protected gidtype setting via setvar (ADO)
?RCS: patch23: made Gid_t comment more explicit (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:11  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:gidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:gidtype:
?S: This variable defines Gid_t to be something like gid_t, int,
?S: ushort, or whatever type is used to declare the return type
?S: of getgid().  Typically, it is the type of group ids in the kernel.
?S:.
?C:Gid_t (GIDTYPE):
?C: This symbol holds the return type of getgid() and the type of
?C: argument to setrgid() and related functions.  Typically,
?C: it is the type of group ids in the kernel. It can be int, ushort,
?C: uid_t, etc... It may be necessary to include <sys/types.h> to get
?C: any typedef'ed information.
?C:.
?H:#define Gid_t $gidtype  /* Type for getgid(), etc... */
?H:.
?T:xxx
: see what type gids are declared as in the kernel
set gid_t gidtype xxx stdio.h sys/types.h
eval $typedef
```

```
case "$gidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep 'groups\[NGROUPS\];' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1"
 ;;
 esac
 ;;
*) dflt="$gidtype";;
esac
echo " "
rp="What is the type for group ids returned by getgid()?"
. ./myread
gidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/gidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: archlib.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:23:38  ram
?RCS: patch61: skip existence checks for archlib
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:18  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/02/15  14:14:14  ram
?RCS: patch51: architecture name is now computed by a separate unit
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:32:22  ram
?RCS:
 patch49: archname is now systematically recomputed
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
```

```
?RCS: Revision 3.0.1.1  1994/10/29  16:02:36  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_archlib archlib archlibexp installarchlib: archname afs spackage \
 cat Getfile Loc Oldconfig prefixexp privlib test Prefixit Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:d_archlib:
?S: This variable conditionally defines ARCHLIB to hold the pathname
?S: of architecture-dependent library files for $package.  If
?S: $archlib is the same as $privlib, then this is set to undef.
?S:.
?S:archlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put architecture-dependent public library files for $package.
?S: It is most often a local directory such as /usr/local/lib.
?S: Programs using this variable must be prepared to deal
?S: with filename expansion.
?S:.
?S:archlibexp:
?S: This variable is the same as the archlib variable, but is
?S: filename
 expanded at configuration time, for convenient use.
?S:.
?S:installarchlib:
?S: This variable is really the same as archlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:ARCHLIB:
?C: This variable, if defined, holds the name of the directory in
?C: which the user wants to put architecture-dependent public
?C: library files for $package.  It is most often a local directory
?C: such as /usr/local/lib.  Programs using this variable must be
?C: prepared to deal with filename expansion.  If ARCHLIB is the
?C: same as PRIVLIB, it is not defined, since presumably the
?C: program already searches PRIVLIB.
?C:.
?C:ARCHLIB_EXP:
?C: This symbol contains the ~name expanded version of ARCHLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_archlib ARCHLIB "$archlib"  /**/
?H:#$d_archlib ARCHLIB_EXP "$archlibexp"  /**/
?H:.
: determine where public architecture
 dependent libraries go
set archlib archlib
```

```
eval $prefixit
case "$archlib" in
")
 case "$privlib" in
 ")
  dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
  set dflt
  eval $prefixup
  ;;
 *)  dflt="$privlib/$archname";;
 esac
 ;;
*) dflt="$archlib";;
esac
cat <<EOM

$spackage contains architecture-dependent library files.  If you are
sharing libraries in a heterogeneous environment, you might store
these files in a separate location.  Otherwise, you can just include
them with the rest of the public library files.

EOM
fn=d+~
rp='Where do you want to put the public architecture-dependent libraries?'
. ./getfile
archlib="$ans"
archlibexp="$ansexp"

if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installarchlib" in
 ") dflt=`echo $archlibexp | sed 's#^/afs/#/afs/.#'`;;
 *)
 dflt="$installarchlib";;
 esac
 fn=de~
 rp='Where will architecture-dependent library files be installed?'
 . ./getfile
 installarchlib="$ans"
else
 installarchlib="$archlibexp"
fi
```

```
if $test X"$archlib" = X"$privlib"; then
 d_archlib="$undef"
else
 d_archlib="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/archlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:uidsign: Myread Typedef uidtype Compile run
?MAKE: -pick add $@ %<
?S:uidsign:
?S: This variable contains the signedness of a uidtype.
?S: 1 for unsigned, -1 for signed.
?S:.
?C:Uid_t_sign:
?C: This symbol holds the signedness of a Uid_t.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define Uid_t_sign $uidsign  /* UID sign */
?H:.
?T:yyy zzz
?F:!try
: Check if UID is signed
echo " "
case "$uidtype" in
*_t) zzz="$uidtype" ;;
*)   zzz="uid"  ;;
esac
echo "Checking the sign of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include
 <stdio.h>
int main() {
 $uidtype foo = -1;
 if (foo < 0)
  printf("-1\n");
```

```
 else
  printf("1\n");
}
EOCP
set try
if eval $compile; then
 yyy=`$run ./try`
 case "$yyy" in
 ") uidsign=1
  echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) uidsign=$yyy
  case "$uidsign" in
   1) echo "Your $zzz is unsigned." ;;
  -1) echo "Your $zzz is signed."   ;;
  esac
  ;;
 esac
else
 uidsign=1
 echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidsign.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_brokstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_brokstat.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:30:53  ram
?RCS: patch61: created
?RCS:
?MAKE:d_brokstat: cat contains cppstdin cppminus +cppflags rm Setvar
?MAKE: -pick add $@ %<
?S:d_brokstat:
?S: This variable conditionally defines STAT_MACROS_BROKEN if some
?S: of the S_IS*() macros from <sys/stat.h> give false positive on
?S: regular files.
?S:.
```

```
?C:STAT_MACROS_BROKEN:
?C: This symbol, if defined, indicates that the S_IS*() stat macros
?C: such
 as S_ISBLK() give false positive and are thus unusable.
?C: Your best bet is then to supply your own set.
?C:.
?H:#$d_brokstat STAT_MACROS_BROKEN  /**/
?H:.
?F:!try.c !try
?LINT:set d_brokstat
?LINT:usefile try
?X: This test inspired by autoconf -- RAM, 28/02/97
: are stat macros sane?
echo " "
echo "Checking whether your stat() macros are broken..."
$cat >try.c <<'EOC'
#include <sys/types.h>
#include <sys/stat.h>

#if defined(S_ISBLK) && defined(S_IFDIR)
#if S_ISBLK(S_IFDIR)
Broken
#endif
#endif

#if defined(S_ISBLK) && defined(S_IFCHR)
#if S_ISBLK(S_IFCHR)
Broken
#endif
#endif

#if defined(S_ISLNK) && defined(S_IFREG)
#if S_ISLNK(S_IFREG)
Broken.
#endif
#endif

#if defined(S_ISSOCK) && defined(S_IFREG)
#if S_ISSOCK(S_IFREG)
Broken.
#endif
#endif
EOC
$cppstdin $cppflags $cppminus <try.c 2>/dev/null >try
if $contains Broken try >/dev/null 2>&1; then
 echo "Alas, they are.  I'll use my own macro set then." >&4
 val="$define"
else
```

```
 echo "Nope, working just fine." >&4
 val="$undef"
fi
$rm
 -f try try.c
set d_brokstat
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_brokstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_socks.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_socks: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_socks:
?S: This variable conditionally defines the I_SOCKS symbol, and indicates
?S: whether a C program should include <socks.h>.
?S:.
?C:I_SOCKS:
?C: This symbol, if defined, indicates that <socks.h> exists and
?C: should be included.
?C:.
?H:#$i_socks I_SOCKS  /**/
?H:.
?LINT:set i_socks
: see if this is a socks.h system
set socks.h i_socks
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_socks.U
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```
?RCS: $Id$
?RCS:
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: bitpbyte.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:54  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bitpbyte: cat rm Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:bitpbyte:
?S: This variable contains the value of the BITS_PER_BYTE symbol, which
?S: indicates to the C program how many bits there are in a byte.
?S:.
?C:BITS_PER_BYTE:
?C: This symbol contains the number
 of bits in a byte, so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define BITS_PER_BYTE $bitpbyte  /**/
?H:.
?F:!try
: check for length of byte
echo " "
case "$bitpbyte" in
")
 echo "Checking to see how many bits there are in a byte..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
?X: Standard C requires a macro CHAR_BIT in <limits.h>
#ifdef __STDC__
#include <limits.h>
#ifndef CHAR_BIT
#define CHAR_BIT 8
#endif
#ifndef BITSPERBYTE
#define BITSPERBYTE CHAR_BIT
#endif
#else
?X: On non standard C, try with <values.h>
#include <values.h>
#ifndef BITSPERBYTE
#define BITSPERBYTE 8
#endif
#endif
int main()
{
```

```
 printf("%d\n", BITSPERBYTE);
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$bitpbyte"
 ;;
esac
rp="What is the length of a byte (in bits)?"
. ./myread
bitpbyte="$ans"
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/bitpbyte.U
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```
?RCS: $Id: d_uwait.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_uwait.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:10:49  ram
?RCS: patch16: added knowledge about wait3()
?RCS: patch16: revised 'union wait' look-up algorithm
?RCS: patch16: fixed make dependency line accordingly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_uwait d_uwait3: cat contains cppstdin cppminus +cppflags rm \
 Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_uwait:
?S: This symbol
```

```
 conditionally defines UNION_WAIT which indicates to the C
?S: program that argument for the wait() system call should be declared as
?S: 'union wait status' instead of 'int status'.
?S:.
?S:d_uwait3:
?S: This symbol conditionally defines UNION_WAIT3 which indicates to the C
?S: program that the first argument for the wait3() system call should be
?S: declared as 'union wait status' instead of 'int status'.
?S:.
?C:UNION_WAIT:
?C: This symbol if defined indicates to the C program that the argument
?C: for the wait() system call should be declared as 'union wait status'
?C: instead of 'int status'. You probably need to include <sys/wait.h>
?C: in the former case (see I_SYSWAIT).
?C:.
?C:UNION_WAIT3:
?C: This symbol if defined indicates to the C program that the first argument
?C: for the wait3() system call should be declared as 'union wait status'
?C: instead of 'int status'. You probably need to include <sys/wait.h>
?C: in the former case (see I_SYSWAIT). It seems safe to assume that
 the
?C: same rule applies to the second parameter of wait4().
?C:.
?H:#$d_uwait UNION_WAIT  /**/
?H:#$d_uwait3 UNION_WAIT3 /**/
?H:.
?T:val2 flags f also
?LINT:set d_uwait d_uwait3
: see if union wait is available
echo " "
?X:
?X: Unfortunately, we can't just grep <sys/wait.h> for "union wait" because
?X: some weird systems (did I hear HP-UX?) define union wait only when _BSD
?X: is defined. The same thing happens on OSF/1, who is pushing weirdness to
?X: its limits by requiring wait() to use (int *) but wait3() to use
?X: (union wait *), unless _BSD is defined and -lbsd is used, in which case
?X: wait() also expects (union wait *). Aaargh!!--RAM
?X:
set X $cppflags
shift
flags="
also="
for f in $*; do
 case "$f" in
 *NO_PROTO*) ;;
 *) flags="$flags $f";;
 esac
done
```

```
$cat `./findhdr sys/wait.h` /dev/null | \
 $cppstdin $flags $cppminus >wait.out 2>/dev/null
if $contains 'union.*wait.*{' wait.out >/dev/null 2>&1 ; then
 echo "Looks like your <sys/wait.h> knows about 'union wait'..."
 >&4
 val="$define"
@if UNION_WAIT
 also='also '
 if $contains 'extern.*wait[  ]*([  ]*int' wait.out >/dev/null 2>&1
 then
  echo "But wait() seems to expect an 'int' pointer (POSIX way)." >&4
  val="$undef"
  also=''
 elif $contains 'extern.*wait[  ]*([  ]*union' wait.out >/dev/null 2>&1
 then
  echo "And indeed wait() expects an 'union wait' pointer (BSD way)." >&4
 else
  echo "So we'll use that for wait()." >&4
 fi
@end
@if UNION_WAIT3 || d_uwait3
 val2="$define"
@end
@if UNION_WAIT3
 if $contains 'extern.*wait3[  ]*([  ]*int' wait.out >/dev/null 2>&1
 then
  echo "However wait3() seems to expect an 'int' pointer, weird." >&4
  val2="$undef"
 elif $contains 'extern.*wait3[  ]*([  ]*union' wait.out >/dev/null 2>&1
 then
  echo "And wait3() ${also}expects an 'union wait' pointer, fine." >&4
 else
  echo "As expected, wait3() ${also}uses an 'union wait' pointer." >&4
 fi
@end
else
 echo "No trace of 'union wait' in <sys/wait.h>..." >&4
 val="$undef"
@if UNION_WAIT && UNION_WAIT3
 echo
 "Both wait() and wait3() will use a plain 'int' pointer then." >&4
@elsif UNION_WAIT
 echo "Your wait() should be happy with a plain 'int' pointer." >&4
@elsif UNION_WAIT3
 echo "Your wait3() should be happy with a plain 'int' pointer." >&4
@end
fi
set d_uwait
```

```
eval $setvar
@if UNION_WAIT3 || d_uwait3
val="$val2"; set d_uwait3
eval $setvar
@end
$rm -f wait.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_uwait.U
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```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpwent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpwent: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_getpwent:
?S: This variable conditionally defines the HAS_GETPWENT symbol, which
?S: indicates to the C program that it should use the getpwent()
?S: routine instead of the getpw() routine.
?S:.
?C:HAS_GETPWENT (GETPWENT):
?C: This symbol, if defined, indicates that the getpwent() routine
?C: should be used instead of the getpw()
 routine.
?C:.
?H:#$d_getpwent HAS_GETPWENT /**/
?H:.
?LINT:set d_getpwent
: see if there is a getpwent
echo " "
if set getpwent val -f d_getpwent; eval $csym; $val; then
 echo "getpwent() found." >&4
 val="$define"
else
 echo "No getpwent() found -- will use getpw() instead." >&4
 val="$undef"
```

```
fi
set d_getpwent
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mkdep.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mkdep.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:13:07  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  16:25:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:12  ram
?RCS: patch16: cppflags is now an optional dependency
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:22:39  ram
?RCS: patch15: force zero exit status in all mkdep scripts
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit generates the script 'mkdep' in the top-level directory.
?X: It is up to the makefile to use it for automatic dependencies
?X: generation (usage: 'mkdep [cppflags] -- *.c').
?X:
?MAKE:mkdep: spitshell startsh cpp +cppflags grep contains rm sed sort uniq \
 Getfile Oldconfig eunicefix cat +cc cppminus test pkgsrc _o
?MAKE: -pick add $@ %<
?S:mkdep:
?S: This variable holds the name of a command to generate makefile
?S: dependencies on the standard output. It is the pathname of the
?S: generated mkdep script.
?S:.
```

```
?F:mkdep
?T:IFS arg flags takeflags srcfile toplev filebase inc dir files file dep c
: find out how to generate dependencies
echo " "
echo "Checking how to generate makefile dependencies on your machine..." >&4
?X: We are in the UU directory
toplev=`cd ..;pwd`
$cat >dep.c <<'EOCP'
#include "dep.h"
EOCP
?X: Empty dep.h causes RIOS to barf
$cat >dep.h <<'EOCP'

EOCP
takeflags='flags=""
case
 "$@" in
*--*)
 for arg
 do
  shift
  case "$arg" in
  --) break;;
  *) flags="$flags $arg";;
  esac
 done;;
esac'
case "$mkdep" in
")
 ;;
*)
 if test -f "$mkdep" &&
  $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "$mkdep works."
?X: If they copied a config.sh from some other place, they'll have a working
?X: mkdep script probably, but not located at the top of the sources.  And
?X: the Makefiles generated by jmake expect an mkdep script in the top dir.
  case "$mkdep" in
  "$pkgsrc/mkdep");;
  *) echo "(copying it to $pkgsrc)"
   cp $mkdep $pkgsrc/mkdep 2>/dev/null
      if $pkgsrc/mkdep dep.c >dep.out 2>/dev/null &&
    $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1; then
    mkdep=$pkgsrc/mkdep
   else
    echo "Hmm... The copy failed or something... Guessing again..."
```

```
    mkdep=
   fi
   ;;
  esac
 else
  mkdep=
 fi
esac

case "$mkdep" in
")
?X: have to figure something out: Try cpp
?X: have
 to pass source names one by one to cpp...
 $spitshell > ../mkdep <<EOM
$startsh
$takeflags
for srcfile
do
 $cpp -M $cppflags \$flags \$srcfile 2>/dev/null
done
exit 0
EOM
 mkdep=$toplev/mkdep
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "Looks like we can use $cpp -M."
 else
  mkdep=
 fi
 ;;
esac

case "$mkdep" in
")
?X: have to figure something out: on NeXT, use cc -MM
?X: have to pass source names one by one to cc...
 $spitshell > ../mkdep <<EOM
$startsh
$takeflags
for srcfile
do
 $cc -MM $cppflags \$flags \$srcfile 2>/dev/null
done
exit 0
```

```
EOM
 mkdep=$toplev/mkdep
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o: dep.h" dep.out >/dev/null 2>&1
 then
  echo "Looks like we can use $cc -MM."
 else
  mkdep=
 fi
 ;;
esac

case "$mkdep" in
")
?X: still no luck -- try something fancier.
 $spitshell >../mkdep <<EOS
$startsh
$takeflags
for srcfile
do
 case
 "\$srcfile" in
 *.c) c='.c';;
 *.y) c='.y';;
 *.l) c='.l';;
 esac
 filebase=\`basename \$srcfile \$c\`
 <\$srcfile $cpp $cppminus $cppflags \$flags 2>/dev/null | \\
 $sed -e '/^# *[0-9]/!d' \\
  -e 's/^.*"\(.*\)".*\$/"\$filebase'$_o: \1/' \\
  -e 's|: \./|: |' \\
  -e 's|: *$|: "\$srcfile"|' | \\
 $grep -v '^#' | $sort | $uniq
done
exit 0
EOS
 mkdep=$toplev/mkdep
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "A shell script using $cpp does the trick."
 else
  echo "$cpp doesn't seem to be any use at all."
  $spitshell >../mkdep <<EOS
```

```
$startsh
$takeflags
files="\$@"
set X \$flags
shift
inc='.'
while test \$# -gt 0
do
 case "\$1" in
 -I)
  shift
  inc="\$inc:\$1"
  ;;
 -I*)
  dir=\`echo \$1 | sed -e 's/^-I//'\`
  inc="\$inc:\$dir"
  ;;
 esac
 shift
done
set X \$files
shift
trap "$rm -f /tmp/mkdep\$\$; exit 1" 1 2 3 15
for srcfile
do
 case "\$srcfile" in
 *.c) c='.c';;
 *.y) c='.y';;
 *.l)
 c='.l';;
 esac
 filebase=\`basename \$srcfile \$c\`
 echo \$filebase$_o: \$srcfile
 $grep '^#[  ]*include' \$srcfile /dev/null | \
 $sed -n -e 's/#[   ]*include[  ]*//' \\
  -e '/<\(.*\)>/ d' \\
  -e 's/:[^"]*"\([^"]*\)".*/: \1/' \\
  -e "s/\\.c:/$_o:/p" > /tmp/mkdep\$\$
?X: Deal with directories specified via -I requests to locate files
 IFS=': '
 while read file dep; do
  for dir in \$inc; do
   if $test -f "\$dir/\$dep"; then
    dep="\$dir/\$dep"
    break
   fi
  done
  echo "\$file: \$dep" | $sed -e 's,: \./,: ,'
```

```
 done </tmp/mkdep\$\$
 IFS=' '
 $rm -f /tmp/mkdep\$\$
done
exit 0
EOS
  mkdep=$toplev/mkdep
  chmod +x $mkdep
  $eunicefix $mkdep
  if $mkdep dep.c >dep.out 2>/dev/null &&
   $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
  then
   cat << EOM

I can use a script with grep instead, but it will make some incorrect
dependencies, since it doesn't understand about conditional compilation.
Moreover, some dependencies may be missing, because scanning won't be
a
 recursive process.
If you have a program which generates makefile dependencies, you may want
to use it.  If not, you can use the script and edit the Makefile by hand
if you need to.
EOM
  else
   mkdep=
   cat << EOM

I can't seem to generate makefile dependencies at all!  Perhaps you have a
program that does?  If you don't, you might look at the mkdep script to
see if you can create one which works.
EOM
  fi
 fi
esac
echo " "
dflt="$mkdep"
fn=f~/
rp="Name of program to make makefile dependencies?"
. ./getfile
mkdep="$ans"
$rm -f dep.c dep.h dep$_o dep.out

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mkdep.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: modetype.U,v 3.0.1.1 1994/10/29 16:25:07 ram Exp $
?RCS:
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: modetype.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:25:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:modetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:modetype:
?S: This variable defines modetype to be something like mode_t,
?S: int, unsigned short, or whatever type is used to declare file
?S: modes for system calls.
?S:.
?C:Mode_t:
?C: This symbol holds the type used to declare
 file modes
?C: for systems calls.  It is usually mode_t, but may be
?C: int or unsigned short.  It may be necessary to include <sys/types.h>
?C: to get any typedef'ed information.
?C:.
?H:#define Mode_t $modetype  /* file mode parameter for system calls */
?H:.
?LINT:set modetype
: see what type is used for mode_t
rp="What is the type used for file modes for system calls (e.g. fchmod())?"
set mode_t modetype int stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/modetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_srand48_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
```

```
?MAKE:d_srand48_r srand48_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_srand48_r:
?S: This variable conditionally defines the HAS_SRAND48_R symbol,
?S: which indicates to the C program that the srand48_r()
?S: routine is available.
?S:.
?S:srand48_r_proto:
?S: This variable encodes the prototype of srand48_r.
?S: It is zero if d_srand48_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srand48_r
?S: is defined.
?S:.
?C:HAS_SRAND48_R:
?C: This symbol, if defined, indicates that the srand48_r routine
?C: is available to srand48 re-entrantly.
?C:.
?C:SRAND48_R_PROTO:
?C: This
 symbol encodes the prototype of srand48_r.
?C: It is zero if d_srand48_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srand48_r
?C: is defined.
?C:.
?H:#$d_srand48_r HAS_SRAND48_R /**/
?H:#define SRAND48_R_PROTO $srand48_r_proto /**/
?H:.
?T:try hdrs d_srand48_r_proto
: see if srand48_r exists
set srand48_r d_srand48_r
eval $inlibc
case "$d_srand48_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_srand48_r_proto:$usethreads" in
 ":define") d_srand48_r_proto=define
  set d_srand48_r_proto srand48_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_srand48_r_proto" in
 define)
 case "$srand48_r_proto" in
 "|0) try='int srand48_r(long, struct drand48_data*);'
 ./protochk "$extern_C $try" $hdrs && srand48_r_proto=I_LS ;;
 esac
 case "$srand48_r_proto" in
```

```
 "|0) d_srand48_r=undef
  srand48_r_proto=0
  echo "Disabling srand48_r, cannot determine prototype." >&4 ;;
 * ) case
 "$srand48_r_proto" in
  REENTRANT_PROTO*) ;;
  *) srand48_r_proto="REENTRANT_PROTO_$srand48_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "srand48_r has no prototype, not using it." >&4 ;;
  esac
  d_srand48_r=undef
  srand48_r_proto=0
  ;;
 esac
 ;;
*) srand48_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_srand48_r.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_log2: Inlibc
?MAKE: -pick add $@ %<
?S:d_log2:
?S: This variable conditionally defines the HAS_LOG2 symbol, which
?S: indicates to the C program that the log2() routine is available
?S: to compute log base two.
?S:.
?C:HAS_LOG2:
?C: This symbol, if defined, indicates that the log2 routine is
?C: available to do the log2 function.
?C:.
?H:#$d_log2 HAS_LOG2  /**/
?H:.
?LINT:set d_log2
: see if log2 exists
set log2 d_log2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_log2.U
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```
?RCS: $Id: d_getprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotoent_r getprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotoent_r:
?S: This variable conditionally defines the HAS_GETPROTOENT_R symbol,
?S: which indicates to the C program that the getprotoent_r()
?S: routine is available.
?S:.
?S:getprotoent_r_proto:
?S: This variable encodes the prototype of getprotoent_r.
?S: It is zero if d_getprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotoent_r
?S: is defined.
?S:.
?C:HAS_GETPROTOENT_R:
?C: This symbol, if defined, indicates that the getprotoent_r
 routine
?C: is available to getprotoent re-entrantly.
?C:.
?C:GETPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of getprotoent_r.
?C: It is zero if d_getprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotoent_r
?C: is defined.
?C:.
?H:#$d_getprotoent_r HAS_GETPROTOENT_R /**/
?H:#define GETPROTOENT_R_PROTO $getprotoent_r_proto /**/
?H:.
?T:try hdrs d_getprotoent_r_proto
: see if getprotoent_r exists
set getprotoent_r d_getprotoent_r
eval $inlibc
case "$d_getprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotoent_r_proto:$usethreads" in
```

```
":define") d_getprotoent_r_proto=define
 set d_getprotoent_r_proto getprotoent_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_getprotoent_r_proto" in
define)
case "$getprotoent_r_proto" in
"|0) try='int getprotoent_r(struct protoent*, char*, size_t, struct protoent**);'
./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SBWR
;;
esac
case "$getprotoent_r_proto" in
"|0) try='int getprotoent_r(struct protoent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SBI ;;
esac
case "$getprotoent_r_proto" in
"|0) try='struct protoent* getprotoent_r(struct protoent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=S_SBI ;;
esac
case "$getprotoent_r_proto" in
"|0) try='int getprotoent_r(struct protoent*, struct protoent_data*);'
./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SD ;;
esac
case "$getprotoent_r_proto" in
"|0) d_getprotoent_r=undef
 getprotoent_r_proto=0
 echo "Disabling getprotoent_r, cannot determine prototype." >&4 ;;
* ) case "$getprotoent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getprotoent_r_proto="REENTRANT_PROTO_$getprotoent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getprotoent_r has no prototype, not using it." >&4 ;;
 esac
 d_getprotoent_r=undef
 getprotoent_r_proto=0
 ;;
esac
;;
*) getprotoent_r_proto=0
 ;;
esac
```

Found

```
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotoent_r.U
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?RCS: $Id: siteprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: siteprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:siteprefix siteprefixexp +oldsiteprefix: Getfile Loc Oldconfig cat package prefix
?MAKE: -pick add $@ %<
?S:siteprefix:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install add-on packages.
?S: See INSTALL for usage and examples.
?S:.
?S:siteprefixexp:
?S: This variable holds the full absolute path of the
 directory below
?S: which the user will install add-on packages.  Derived from siteprefix.
?S:.
?S:oldsiteprefix:
?S: This variable is set non-null if the siteprefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
: Set the siteprefix variables
$cat <<EOM

After $package is installed, you may wish to install various
add-on modules and utilities.  Typically, these add-ons will
be installed under $prefix with the rest
of this package.  However, you may wish to install such add-ons
elsewhere under a different prefix.

If you do not wish to put everything under a single prefix, that's
ok.  You will be prompted for the individual locations; this siteprefix
is only used to suggest the defaults.

The default should be fine for most people.
```

```
EOM
fn=d~+
rp='Installation prefix to use for add-on modules and utilities?'
: XXX Here might be another good place for an installstyle setting.
case "$siteprefix" in
") dflt=$prefix ;;
*)  dflt=$siteprefix
 ;;
esac
. ./getfile
: XXX Prefixit unit does not yet support siteprefix and vendorprefix
oldsiteprefix="
case "$siteprefix" in
") ;;
*) case "$ans" in
 "$prefix") ;;
 *) oldsiteprefix="$prefix";;
 esac
 ;;
esac
siteprefix="$ans"
siteprefixexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteprefix.U
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```
?RCS: $Id: nis.U,v 3.0.1.3 1997/02/28 16:17:38 ram Exp $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: nis.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:17:38  ram
?RCS: patch61: ensure suitable defaults for hostcat and friends
?RCS:
?RCS: Revision 3.0.1.2  1995/03/21  08:48:34  ram
?RCS: patch52: continued fix for NeXT NIS/NetInfo handling
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:16:23  ram
?RCS: patch51: now correctly handles NeXT using NIS rather than NetInfo
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:passcat
 groupcat hostcat: Myread Oldconfig test contains
?MAKE: -pick add $@ %<
?S:passcat:
?S: This variable contains a command that produces the text of the
?S: /etc/passwd file.  This is normally "cat /etc/passwd", but can be
?S: "ypcat passwd" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
?S:groupcat:
?S: This variable contains a command that produces the text of the
?S: /etc/group file.  This is normally "cat /etc/group", but can be
?S: "ypcat group" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
?S:hostcat:
?S: This variable contains a command that produces the text of the
?S: /etc/hosts file.  This is normally "cat /etc/hosts", but can be
?S: "ypcat hosts" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
:
 see if we have to deal with yellow pages, now NIS.
?X: NeXT gives us some fun here, as always, by having both NIS (former YP)
?X: and NetInfo. But since it has both, it's ok to put the test inside the if.
?X: Contributed by Thomas Neumann <tom@smart.bo.open.de>.
if $test -d /usr/etc/yp || $test -d /etc/yp || $test -d /usr/lib/yp; then
@if passcat || groupcat
 case "$passcat" in
 nidump*) ;;
 *)
  case "$passcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the passwd file via yellow pages?'
```

```
  . ./myread
  case "$ans" in
  y*) passcat='ypcat passwd'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='ypcat group'
@end
   ;;
  *) passcat='cat /etc/passwd'
@if groupcat
   echo "(Assuming /etc/group is also local.)"
   groupcat='cat /etc/group'
@end
   ;;
  esac
  ;;
 esac
@end
@if hostcat
 case "$hostcat" in
 nidump*) ;;
 *)
  case
 "$hostcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the hosts file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) hostcat='ypcat hosts';;
  *) hostcat='cat /etc/hosts';;
  esac
  ;;
 esac
@end
fi
?X: Ensure suitable default -- Manoj Srivastava
case "$hostcat" in
") test -f /etc/hosts && hostcat='cat /etc/hosts';;
esac
case "$groupcat" in
```

```
") test -f /etc/group && groupcat='cat /etc/group';;
esac
case "$passcat" in
") test -f /etc/passwd && passcat='cat /etc/passwd';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/nis.U
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```
?RCS: $Id$
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nl_langinfo_l d_thread_safe_nl_langinfo_l: Compile cat rm_try Oldconfig \
 i_pthread i_stdlib i_langinfo i_locale  \
 usethreads run
?MAKE: -pick add $@ %<
?S:d_nl_langinfo_l:
?S: This variable contains the eventual value of the
?S: HAS_NL_LANGINFO_L symbol, which indicates if the
?S: nl_langinfo_l() function exists.
?S:.
?S:d_thread_safe_nl_langinfo_l:
?S: This variable contains the eventual value of the
?S: HAS_THREAD_SAFE_NL_LANGINFO_L symbol, which indicates if the
?S: nl_langinfo_l() function exists and is thread-safe.
?S:.
?C:HAS_NL_LANGINFO_L:
?C: This symbol, when defined, indicates presence of the nl_langinfo_l()
?C: function
?C:.
?C:HAS_THREAD_SAFE_NL_LANGINFO_L:
?C: This symbol, when defined,
 indicates presence of the nl_langinfo_l()
?C: function, and that it is thread-safe.
?C:.
?H:#$d_nl_langinfo_l HAS_NL_LANGINFO_L /**/
?H:#$d_thread_safe_nl_langinfo_l HAS_THREAD_SAFE_NL_LANGINFO_L /**/
?H:.
?F:!try
: check for nl_langinfo_l item
$cat <<EOM

Checking to see if you have nl_langinfo_l(), and that it is thread-safe
```

```
EOM
?X: Despite claiming that nl_langinfo_l() is thread-safe, the POSIX 2008
?X: standard allows for a non-safe implementation:
?X:
?X:    "nl_langinfo_l() uses an internal per-thread buffer, and nl_langinfo()
?X: uses (in all threads) the same buffer that nl_langinfo_l() uses in the
?X: initial thread. There can be interactions, but only when
?X: nl_langinfo_l() is called in the initial thread"
?X:
?X: This program calls nl_langinfo_l(), then creates a thread, calling plain
?X: nl_langinfo() from within it, then sees if the buffer in the original
?X: thread was changed.
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#include
 <string.h>
#$i_langinfo I_LANGINFO
#ifdef I_LANGINFO
#  include <langinfo.h>
#endif
#$i_pthread I_PTHREAD
#ifdef I_PTHREAD
#  include <pthread.h>
#endif
#$i_locale I_LOCALE
#ifdef I_LOCALE
#  include <locale.h>
#endif

void *
thread_start(void * arg)
{
   nl_langinfo(RADIXCHAR);
}

int main() {
   char * main_buffer;
   char save_main_buffer[1000];
   pthread_t subthread;
   pthread_attr_t attr;

   main_buffer = nl_langinfo_l(CODESET, newlocale(LC_ALL_MASK, "C", 0));

   /* If too large for our generous allowance, just assume we don't have
    * it. */
```

```
  if (strlen(main_buffer) >= sizeof(save_main_buffer)) {
      exit(1);
  }

  strcpy(save_main_buffer, main_buffer);

  if (pthread_attr_init(&attr) != 0) {
      exit(1);
  }

  if (pthread_create(&subthread, &attr, thread_start, NULL) != 0) {
      exit(1);
  }

  if (pthread_join(subthread, NULL) != 0) {
      exit(1);
  }

  exit(! (strcmp(main_buffer, save_main_buffer) == 0));
}
EOCP
case
 "$usethreads" in
  define)
      set try
      if eval $compile; then
          echo "Your system has nl_langinfo_l()..." >&4
          d_nl_langinfo_l="$define"
          echo "$d_nl_langinfo_l" >&4
          if $run ./try; then
              echo "and it is thread-safe (just as I'd hoped)." >&4
              d_thread_safe_nl_langinfo_l="$define"
              echo "$d_thread_safe_nl_langinfo_l" >&4
          else
              echo "but it isn't thread-safe." >&4
          fi
      else
          echo "your system does not have nl_langinfo_l()" >&4
      fi
      ;;
  *) echo "Since threads aren't selected, we won't bother looking for nl_langinfo_l()" >&4
esac
if test X"$d_nl_langinfo_l" = X; then
 d_nl_langinfo_l="$undef"
fi
if test X"$d_thread_safe_nl_langinfo_l" = X; then
 d_thread_safe_nl_langinfo_l="$undef"
fi
```

```
$rm_try

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_nl_langinfo_l.U
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msg.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msg: test d_msgctl d_msgget d_msgsnd d_msgrcv Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_msg:
?S: This variable conditionally defines the HAS_MSG symbol, which
?S: indicates that the entire msg*(2) library is present.
?S:.
?C:HAS_MSG:
?C: This symbol, if defined, indicates that the entire msg*(2) library is
?C: supported (IPC mechanism based on message queues).
?C:.
?H:#$d_msg
 HAS_MSG  /**/
?H:.
?T:h_msg
?LINT:set d_msg
: see how much of the 'msg*(2)' library is present.
h_msg=true
echo " "
case "$d_msgctl$d_msgget$d_msgsnd$d_msgrcv" in
*"$undef"*) h_msg=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID messages"*"not configured"*)
 echo "Your $osname does not have the msg*(2) configured." >&4
       h_msg=false
 val="$undef"
```

```
 set msgctl d_msgctl
 eval $setvar
 set msgget d_msgget
 eval $setvar
 set msgsnd d_msgsnd
 eval $setvar
 set msgrcv d_msgrcv
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_msg && $test `./findhdr sys/msg.h`; then
 echo "You have the full msg*(2) library." >&4
 val="$define"
else
 echo "You don't have the full msg*(2) library." >&4
 val="$undef"
fi
set d_msg
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msg.U
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```
?RCS: $Id: i_locale.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_locale.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:23  ram
?RCS: patch61: created
?RCS:
?MAKE:i_locale: Inhdr
?MAKE: -pick add $@ %<
?S:i_locale:
?S: This variable conditionally defines the I_LOCALE symbol,
?S: and indicates whether a C program should include <locale.h>.
?S:.
```

```
?C:I_LOCALE:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <locale.h>.
?C:.
?H:#$i_locale I_LOCALE  /**/
?H:.
?LINT:set
 i_locale
: see if locale.h is available
set locale.h i_locale
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_locale.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigsetjmp.U,v 3.0.1.1 1997/02/28 15:44:33 ram Exp $
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
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?RCS:
?RCS: $Log: d_sigsetjmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_sigsetjmp: Compile Setvar cat rm_try run i_stdlib
?MAKE: -pick add $@ %<
?S:d_sigsetjmp:
?S: This variable conditionally defines the HAS_SIGSETJMP symbol,
?S: which
 indicates that the sigsetjmp() routine is available to
?S: call setjmp() and optionally save the process's signal mask.
?S:.
?C:HAS_SIGSETJMP:
?C: This variable indicates to the C program that the sigsetjmp()
?C: routine is available to save the calling process's registers
?C: and stack environment for later use by siglongjmp(), and
?C: to optionally save the process's signal mask.  See
?C: Sigjmp_buf, Sigsetjmp, and Siglongjmp.
```

```
?C:.
?C:Sigjmp_buf:
?C: This is the buffer type to be used with Sigsetjmp and Siglongjmp.
?C:.
?C:Sigsetjmp:
?C: This macro is used in the same way as sigsetjmp(), but will invoke
?C: traditional setjmp() if sigsetjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?C:Siglongjmp:
?C: This macro is used in the same way as siglongjmp(), but will invoke
?C: traditional longjmp() if siglongjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?H:?%<:#$d_sigsetjmp HAS_SIGSETJMP /**/
?H:?%<:#ifdef HAS_SIGSETJMP
?H:?%<:#define Sigjmp_buf sigjmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask)
 sigsetjmp((buf),(save_mask))
?H:?%<:#define Siglongjmp(buf,retval) siglongjmp((buf),(retval))
?H:?%<:#else
?H:?%<:#define Sigjmp_buf jmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) setjmp((buf))
?H:?%<:#define Siglongjmp(buf,retval) longjmp((buf),(retval))
?H:?%<:#endif
?H:.
?W:%<:Sigjmp_buf Sigsetjmp Siglongjmp
?F:!try
?LINT:set d_sigsetjmp
: see if sigsetjmp exists
?X: We can't check for these symbols with Inlibc because sigsetjmp
?X: is (sometimes? always?) a macro under GCC
echo " "
case "$d_sigsetjmp" in
")
 $cat >try.c <<EOP
#include <setjmp.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
sigjmp_buf env;
int set = 1;
int main()
{
 if (sigsetjmp(env,1))
  exit(set);
 set = 0;
```

```
 siglongjmp(env, 1);
 exit(1);
}
EOP
 set try
 if eval $compile; then
  if $run ./try >/dev/null 2>&1; then
   echo "POSIX sigsetjmp found." >&4
   val="$define"
  else
   $cat >&4 <<EOM
Uh-Oh! You have POSIX sigsetjmp and siglongjmp, but they do not work properly!!
I'll
 ignore them.
EOM
   val="$undef"
  fi
 else
  echo "sigsetjmp not found." >&4
  val="$undef"
 fi
 ;;
*) val="$d_sigsetjmp"
 case "$d_sigsetjmp" in
 $define) echo "POSIX sigsetjmp found." >&4;;
 $undef) echo "sigsetjmp not found." >&4;;
 esac
 ;;
esac
set d_sigsetjmp
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sigsetjmp.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: getopt.C,v 3.0.1.1 1994/01/24 13:58:40 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
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*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
```

```
* Original Author: unknown, got this off net.sources
*
* $Log: getopt.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:40  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/getopt.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: lex.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:22:50  ram
?RCS: patch36: spurious single quote could cause Configure to crash
?RCS: patch36: (reported by Xavier Le Vourch <xavierl@eiffel.com>.)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:27:09  ram
?RCS: patch32: added lexflags variable for lex flags setting
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:06:01  ram
?RCS: patch23: added
 trailing blank line for metalint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lex lexflags: Guess Myread Oldconfig flex test
?MAKE: -pick add $@ %<
?S:lex:
?S: This variable holds the name of the lexical analyser generator we
?S: want to use in the Makefile. It can be lex or flex.
?S:.
?S:lexflags:
?S: This variable holds any flags that should be passed to the lexical
?S: analyzer.  It is up to the Makefile to use it.
```

```
?S:.
: determine lexical analyser generator
case "$lex" in
")
 dflt=lex;;
*)
 dflt="$lex";;
esac
echo " "
if $test -f "$flex"; then
 rp='Which lexical analyser generator (lex or flex) shall I use?'
else
 rp='Which lexical analyser generator shall I use?'
fi
. ./myread
lex="$ans"

@if lexflags
: if using lex this will normally be useless, but flex frequently takes args
echo " "
case "$lexflags" in
") dflt='none';;
*) dflt="$lexflags";;
esac
rp="What flags should be given to $lex?"
. ./myread
case "$ans"
 in
none) lexflags=";;
*) lexflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lex.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readdir64_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_readdir64_r readdir64_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_dirent extern_C
```

```
?MAKE: -pick add $@ %<
?S:d_readdir64_r:
?S: This variable conditionally defines the HAS_READDIR64_R symbol,
?S: which indicates to the C program that the readdir64_r()
?S: routine is available.
?S:.
?S:readdir64_r_proto:
?S: This variable encodes the prototype of readdir64_r.
?S: It is zero if d_readdir64_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir64_r
?S: is defined.
?S:.
?C:HAS_READDIR64_R:
?C: This symbol, if defined, indicates that the readdir64_r routine
?C: is
 available to readdir64 re-entrantly.
?C:.
?C:READDIR64_R_PROTO:
?C: This symbol encodes the prototype of readdir64_r.
?C: It is zero if d_readdir64_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir64_r
?C: is defined.
?C:.
?H:#$d_readdir64_r HAS_READDIR64_R /**/
?H:#define READDIR64_R_PROTO $readdir64_r_proto /**/
?H:.
?T:try hdrs d_readdir64_r_proto
: see if readdir64_r exists
set readdir64_r d_readdir64_r
eval $inlibc
case "$d_readdir64_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_dirent dirent.h"
 case "$d_readdir64_r_proto:$usethreads" in
 ":define") d_readdir64_r_proto=define
  set d_readdir64_r_proto readdir64_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_readdir64_r_proto" in
 define)
 case "$readdir64_r_proto" in
 "|0) try='int readdir64_r(DIR*, struct dirent64*, struct dirent64**);'
 ./protochk "$extern_C $try" $hdrs && readdir64_r_proto=I_TSR ;;
 esac
 case "$readdir64_r_proto" in
 "|0) try='int readdir64_r(DIR*,
```

```
 struct dirent64*);'
 ./protochk "$extern_C $try" $hdrs && readdir64_r_proto=I_TS ;;
 esac
 case "$readdir64_r_proto" in
 "|0) d_readdir64_r=undef
  readdir64_r_proto=0
  echo "Disabling readdir64_r, cannot determine prototype." >&4 ;;
 * ) case "$readdir64_r_proto" in
  REENTRANT_PROTO*) ;;
  *) readdir64_r_proto="REENTRANT_PROTO_$readdir64_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "readdir64_r has no prototype, not using it." >&4 ;;
  esac
  d_readdir64_r=undef
  readdir64_r_proto=0
  ;;
 esac
 ;;
*) readdir64_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_readdir64_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_safebcpy.U,v 3.0.1.4 1997/02/28 15:40:58 ram Exp $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_safebcpy.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  15:40:58  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.3  1995/07/25  13:58:40  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
```

```
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:29:23  ram
?RCS: patch45: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/05/06  14:49:03  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safebcpy: cat d_bcopy Compile rm_try run \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safebcpy:
?S: This variable conditionally defines the HAS_SAFE_BCOPY symbol if
?S: the bcopy() routine can do overlapping copies.  Normally, you
?S: should probably use memmove().
?S:.
?C:HAS_SAFE_BCOPY (SAFE_BCOPY):
?C: This symbol, if defined, indicates that the bcopy routine is available
?C: to copy potentially overlapping memory blocks. Normally, you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
?H:#$d_safebcpy HAS_SAFE_BCOPY /**/
?H:.
?F:!try
?LINT: set d_safebcpy
: can bcopy handle overlapping blocks?
echo " "
?X: assume the worst.
val="$undef"
case "$d_memmove" in
"$define")
 echo "I'll use memmove() instead of bcopy() for overlapping copies." ;;
*) case "$d_bcopy" in
 "$define")
  echo "Checking to see if bcopy() can do overlapping copies..." >&4
  $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
```

```
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
bcopy("abcdefghijklmnopqrstuvwxyz0123456789", abc, 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  bcopy(abc, b, len);
  for (off = 1; off <= len; off++) {
   bcopy(b, b+off, len);
   bcopy(b+off,
 b, len);
   if (bcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
  set try
  if eval $compile_ok; then
   if $run ./try 2>/dev/null; then
    echo "Yes, it can."
    val="$define"
   else
    echo "It can't, sorry."
```

```
   fi
  else
   echo "(I can't compile the test program, so we'll assume not...)"
  fi
  ;;
 esac
 $rm_try
 ;;
esac
set d_safebcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_safebcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_castneg.U,v 3.0.1.2 1995/05/12 12:11:21 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_castneg.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:11:21  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS: patch54: added improved test case for Interactive Unix
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:10:50  ram
?RCS: patch36: don't forget to tell user about compilation failures (ADO)
?RCS: patch36: declare signal handler correctly using 'signal_t' (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:47  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?X:
?X: Can the compiler cast negative / odd floats to unsigned values.
?X:
?MAKE:d_castneg castflags: cat Compile rm_try Setvar signal_t run i_stdlib
?MAKE: -pick add $@ %<
?S:d_castneg:
?S: This variable conditionally defines CASTNEG, which indicates
?S: whether the C compiler can cast negative float to unsigned.
?S:.
```

```
?S:castflags:
?S: This variable contains a flag that precise difficulties the
?S: compiler has casting odd floating values to unsigned long:
?S:  0 = ok
?S:  1 = couldn't cast < 0
?S:  2 = couldn't cast >= 0x80000000
?S:  4 = couldn't cast in argument expression list
?S:.
?C:CASTNEGFLOAT:
?C: This symbol is defined if the C compiler can cast negative
?C: numbers to unsigned longs, ints and shorts.
?C:.
?C:CASTFLAGS:
?C: This symbol contains flags that say what difficulties the compiler
?C: has casting odd floating values to unsigned long:
?C:  0 = ok
?C:  1 = couldn't cast < 0
?C:  2 = couldn't cast >= 0x80000000
?C:  4 = couldn't
 cast in argument expression list
?C:.
?H:#$d_castneg CASTNEGFLOAT  /**/
?H:#define CASTFLAGS $castflags  /**/
?H:.
?F:!try
?LINT:set d_castneg
: check for ability to cast negative floats to unsigned
echo " "
echo 'Checking whether your C compiler can cast negative float to unsigned.' >&4
$cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
$signal_t blech(int s) { exit(7); }
$signal_t blech_in_list(int s) { exit(4); }
unsigned long dummy_long(unsigned long p) { return p; }
unsigned int dummy_int(unsigned int p) { return p; }
unsigned short dummy_short(unsigned short p) { return p; }
int main()
{
 double f;
 unsigned long along;
 unsigned int aint;
 unsigned short ashort;
```

```
int result = 0;
char str[16];

/* Frustrate gcc-2.7.2's optimizer which failed this test with
   a direct f = -123. assignment.  gcc-2.8.0 reportedly
   optimized the whole file away
*/
/* Store the number in a writable
string for gcc to pass to
   sscanf under HP-UX.
*/
sprintf(str, "-123");
sscanf(str, "%lf", &f);  /* f = -123.; */

signal(SIGFPE, blech);
along = (unsigned long)f;
aint = (unsigned int)f;
ashort = (unsigned short)f;
if (along != (unsigned long)-123)
 result |= 1;
if (aint != (unsigned int)-123)
 result |= 1;
if (ashort != (unsigned short)-123)
 result |= 1;
sprintf(str, "1073741824.");
sscanf(str, "%lf", &f); /* f = (double)0x40000000; */
f = f + f;
along = 0;
along = (unsigned long)f;
if (along != 0x80000000)
 result |= 2;
f -= 1.;
along = 0;
along = (unsigned long)f;
if (along != 0x7fffffff)
 result |= 1;
f += 2.;
along = 0;
along = (unsigned long)f;
if (along != 0x80000001)
 result |= 2;
if (result)
 exit(result);
?X:
?X: The following is a test for Interactive Unix Version 4.1, which
?X: has an 'improved' compiler which can correctly cast negative
?X: floats in expression lists, but apparently not in argument lists.
?X: Contributed by Winfried Koenig
```

```
 <win@incom.rhein-main.de>
?X:
 signal(SIGFPE, blech_in_list);
 sprintf(str, "123.");
 sscanf(str, "%lf", &f);  /* f = 123.; */
 along = dummy_long((unsigned long)f);
 aint = dummy_int((unsigned int)f);
 ashort = dummy_short((unsigned short)f);
 if (along != (unsigned long)123)
  result |= 4;
 if (aint != (unsigned int)123)
  result |= 4;
 if (ashort != (unsigned short)123)
  result |= 4;
 exit(result);

}
EOCP
set try
if eval $compile_ok; then
 $run ./try 2>/dev/null
 castflags=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 castflags=7
fi
case "$castflags" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_castneg
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_castneg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syswait.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_syswait.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/wait.h> is available or not
?X:
?MAKE:i_syswait: Inhdr
?MAKE: -pick add $@ %<
?S:i_syswait:
?S: This variable conditionally defines I_SYS_WAIT, which indicates
?S: to the C program that it should include <sys/wait.h>.
?S:.
?C:I_SYS_WAIT (I_SYSWAIT):
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <sys/wait.h>.
?C:.
?H:#$i_syswait I_SYS_WAIT /**/
?H:.
?LINT:set i_syswait
: see if this is a syswait system
set sys/wait.h i_syswait
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syswait.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extensions.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: Extensions.U,v $
?RCS:
?MAKE:known_extensions extensions dynamic_ext static_ext nonxs_ext \
 useposix useopcode uselanginfo : \
 Myread hint usedl d_sem d_socket i_db i_dbm i_rpcsvcdbm i_gdbm \
 d_ndbm package test cat rsrc \
 d_msg d_shm osname use64bitint \
 libs d_cplusplus sed ls rm contains trnl sort
```

```
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:known_extensions:
?S: This variable holds a list of all extensions (both XS and non-xs)
?S: included in the package source distribution.  This information is
?S: only really of use during the Perl build, as the list makes no
?S: distinction between extensions which were build and installed, and
?S: those which where not.  See "extensions"
 for the list of extensions
?S: actually built and available.
?S:.
?S:dynamic_ext:
?S: This variable holds a list of XS extension files we want to
?S: link dynamically into the package.  It is used by Makefile.
?S:.
?S:static_ext:
?S: This variable holds a list of XS extension files we want to
?S: link statically into the package.  It is used by Makefile.
?S:.
?S:nonxs_ext:
?S: This variable holds a list of all non-xs extensions built and
?S: installed by the package.  By default, all non-xs extensions
?S: distributed will be built, with the exception of platform-specific
?S: extensions (currently only one VMS specific extension).
?S:.
?S:extensions:
?S: This variable holds a list of all extension files (both XS and
?S: non-xs) installed with the package.  It is propagated to Config.pm
?S: and is typically used to test whether a particular extension
?S: is available.
?S:.
?S:useposix:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the POSIX extension should
 be used.  The sole
?S: use for this currently is to allow an easy mechanism
?S: for hints files to indicate that POSIX will not compile
?S: on a particular system.
?S:.
?S:useopcode:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the Opcode extension should be used.  The sole
?S: use for this currently is to allow an easy mechanism
?S: for users to skip the Opcode extension from the Configure
?S: command line.
?S:.
?S:uselanginfo:
?S: This variable holds either 'true' or 'false' to indicate
```

```
?S: whether the I18N::Langinfo extension should be used.  The sole
?S: use for this currently is to allow an easy mechanism for users to skip
?S: this extension from the Configure command line.
?S:.
?T:xxx avail_ext this_ext tdir xs_extensions nonxs_extensions find_extensions
?INIT:: set useposix=false in your hint file to disable the POSIX extension.
?INIT:useposix=true
?INIT:: set useopcode=false in your hint file to disable the Opcode extension.
?INIT:useopcode=true
?INIT::
 set uselanginfo=false in your hint file to disable the I18N::Langinfo extension.
?INIT:uselanginfo=true
?LINT:extern noextensions
?LINT:extern onlyextensions
?T:keepextensions i
: Check extensions
echo " "
echo "Looking for extensions..." >&4
: If we are using the old config.sh, nonxs_extensions and xs_extensions may
: contain old or inaccurate or duplicate values.
nonxs_extensions="
xs_extensions="
: We do not use find because it might not be available.
: We do not just use MANIFEST because the user may have dropped
: some additional extensions into the source tree and expect them
: to be built.

: Function to recursively find available extensions, ignoring DynaLoader
: NOTE: recursion limit of 10 to prevent runaway in case of symlink madness
: In 5.10.1 and later, extensions are stored in directories
: like File-Glob instead of the older File/Glob/.
find_extensions='
   for xxx in *; do
 case "$xxx" in
     DynaLoader|dynaload) ;;
     *)
     this_ext=`echo "$xxx" | $sed -e s/-/\\\/g`;

    case "$this_ext" in
  Scalar/List/Utils) this_ext="List/Util" ;;
  PathTools)         this_ext="Cwd" ;;
     esac;
     echo " $xs_extensions $nonxs_extensions" > "$tdir/$$.tmp";
     if $contains " $this_ext " "$tdir/$$.tmp"; then
  echo >&4;
  echo "Duplicate directories detected for extension $xxx" >&4;
  echo "Configure cannot correctly recover from this - shall I abort?" >&4;
  case "$knowitall" in
```

```
  "") dflt=y;;
  *) dflt=n;;
  esac;
  . ../UU/myread;
  case "$ans" in
  n*|N*) ;;
  *) echo >&4;
      echo "Ok.  Stopping Configure." >&4;
      echo "Please remove the duplicate directory (e.g. using git clean) and then re-run Configure" >&4;
      exit 1;;
  esac;
  echo "Ok.  You will need to correct config.sh before running make." >&4;
     fi;
     $ls -1 "$xxx" > "$tdir/$$.tmp";
     if   $contains "\.xs$" "$tdir/$$.tmp" > /dev/null 2>&1; then
  xs_extensions="$xs_extensions $this_ext";
     elif $contains "\.c$"  "$tdir/$$.tmp" > /dev/null 2>&1; then
  xs_extensions="$xs_extensions
 $this_ext";
     elif $test -d "$xxx"; then
  nonxs_extensions="$nonxs_extensions $this_ext";
     fi;
     $rm -f "$tdir/$$.tmp";
     ;;
 esac;
   done'
tdir=`pwd`
cd "$rsrc/cpan"
set X
shift
eval $find_extensions
cd "$rsrc/dist"
set X
shift
eval $find_extensions
cd "$rsrc/ext"
set X
shift
eval $find_extensions
set X $xs_extensions
shift
xs_extensions=`echo "$*" | tr ' ' $trnl | $sort | tr $trnl ' '`
set X $nonxs_extensions
shift
nonxs_extensions=`echo "$*" | tr ' ' $trnl | $sort | tr $trnl ' '`
cd "$tdir"
known_extensions=`echo $nonxs_extensions $xs_extensions  | tr ' ' $trnl | $sort | tr $trnl ' '`
```

```
: Now see which are supported on this system.
?X: avail_ext lists available XS extensions.
avail_ext="
for xxx in $xs_extensions ; do
 case "$xxx" in
?X: Handle possible DOS 8.3 filename and case alterations
 Amiga*)
  case "$osname" in
  amigaos) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 DB_File|db_file)
  case "$i_db" in
  $define) avail_ext="$avail_ext $xxx"
 ;;
  esac
  ;;
 GDBM_File|gdbm_fil)
  case "$i_gdbm" in
  $define) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 IPC/SysV|ipc/sysv)
  : XXX Do we need a useipcsysv variable here
  case "${d_msg}${d_sem}${d_shm}" in
  *"${define}"*) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 NDBM_File|ndbm_fil)
  case "$d_ndbm" in
  $define)
      case "$osname-$use64bitint" in
      hpux-define)
   case "$libs" in
   *-lndbm*) avail_ext="$avail_ext $xxx" ;;
   esac
   ;;
      *) avail_ext="$avail_ext $xxx" ;;
      esac
      ;;
  esac
  ;;
 ODBM_File|odbm_fil)
  case "${i_dbm}${i_rpcsvcdbm}" in
  *"${define}"*)
      case "$d_cplusplus" in
      define) ;; # delete as a function name will not work
      *)  case "$osname-$use64bitint" in
```

```
  hpux-define)
      case "$libs" in
      *-ldbm*) avail_ext="$avail_ext $xxx" ;;
      esac
      ;;
  *) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
     esac
     ;;
 esac
 ;;
Opcode|opcode)
 case "$useopcode" in
 true|define|y) avail_ext="$avail_ext
$xxx" ;;
 esac
 ;;
POSIX|posix)
 case "$useposix" in
 true|define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
Socket|socket)
 case "$d_socket" in
 true|$define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
I18N/Langinfo|langinfo)
 case "$uselanginfo" in
 true|define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
Sys/Syslog|sys/syslog)
 case $osname in
  amigaos) ;; # not really very useful on AmigaOS
  *)
  : XXX syslog requires socket
  case "$d_socket" in
  true|$define|y) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 esac
 ;;
threads|threads/shared)
 # threads and threads::shared are special cases.
 # To stop people from asking "Perl 5.8.0 was supposed
 # to have this new fancy threads implementation but my
```

```
 # perl doesn't have it" and from people trying to
 # (re)install the threads module using CPAN.pm and
 # CPAN.pm then offering to reinstall Perl 5.8.0,
 # the threads.pm and threads/shared.pm will always be
 # there, croaking informatively ("you
need to rebuild
 # all of Perl with threads, sorry") when threads haven't
 # been compiled in.
 # --jhi
 avail_ext="$avail_ext $xxx"
 ;;
VMS*)
 ;;
Win32*)
 case "$osname" in
 cygwin) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
XS/APItest|xs/apitest)
 # This is just for testing.  Skip it unless we have dynamic loading.

 case "$usedl" in
 $define) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
XS/Typemap|xs/typemap)
 # This is just for testing.  Skip it unless we have dynamic loading.
 case "$usedl" in
 $define) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
*) avail_ext="$avail_ext $xxx"
 ;;
esac
done

set X $avail_ext
shift
avail_ext="$*"

case "$onlyextensions" in
") ;;
*)  keepextensions="
  echo "You have requested that only certain extensions be included..." >&4
  for i in $onlyextensions; do
     case " $avail_ext " in
     *" $i "*)
        echo "Keeping extension $i."
```

```
          keepextensions="$keepextensions $i"
          ;;
       *) echo "Ignoring
 extension $i." ;;
       esac
   done
   avail_ext="$keepextensions"
   ;;
esac

case "$noextensions" in
") ;;
*)  keepextensions="
   echo "You have requested that certain extensions be ignored..." >&4
   for i in $avail_ext; do
       case " $noextensions " in
       *" $i "*) echo "Ignoring extension $i." ;;
       *) echo "Keeping extension $i.";
          keepextensions="$keepextensions $i"
          ;;
       esac
   done
   avail_ext="$keepextensions"
   ;;
esac

: Now see which nonxs extensions are supported on this system.
: For now assume all are.
nonxs_ext="
for xxx in $nonxs_extensions ; do
 case "$xxx" in
 VMS*)
  ;;
 *) nonxs_ext="$nonxs_ext $xxx"
  ;;
 esac
done

set X $nonxs_ext
shift
nonxs_ext="$*"

case $usedl in
$define)
 $cat <<EOM
A number of extensions are supplied with $package.  You may choose to
compile these extensions for dynamic loading (the default), compile
them into the $package executable (static loading), or not include
```

```
them at all.
  Answer "none" to include no extensions.
Note that DynaLoader is always built and need not be mentioned here.

EOM
 case "$dynamic_ext" in
 ")
  : Exclude those listed in static_ext
  dflt="
  for xxx in $avail_ext; do
   case " $static_ext " in
   *" $xxx "*) ;;
   *) dflt="$dflt $xxx" ;;
   esac
  done
  set X $dflt
  shift
  dflt="$*"
  ;;
 *) dflt="$dynamic_ext"
  # Perhaps we are reusing an old out-of-date config.sh.
  case "$hint" in
  previous)
   if test X"$dynamic_ext" != X"$avail_ext"; then
    $cat <<EOM
NOTICE:  Your previous config.sh list may be incorrect.
The extensions now available to you are
 ${avail_ext}
but the default list from your previous config.sh is
 ${dynamic_ext}

EOM
   fi
   ;;
  esac
  ;;
 esac
 case "$dflt" in
 ") dflt=none;;
 esac
 rp="What extensions do you wish to load dynamically?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
 none) dynamic_ext=' ' ;;
 *) dynamic_ext="$ans" ;;
 esac
```

```
 case "$static_ext"
 in
 ")
  : Exclude those already listed in dynamic linking
  dflt="
  for xxx in $avail_ext; do
   case " $dynamic_ext " in
   *" $xxx "*) ;;
   *) dflt="$dflt $xxx" ;;
   esac
  done
  set X $dflt
  shift
  dflt="$*"
  ;;
 *)  dflt="$static_ext"
  ;;
 esac

 case "$dflt" in
 ") dflt=none;;
 esac
 rp="What extensions do you wish to load statically?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
 none) static_ext=' ' ;;
 *) static_ext="$ans" ;;
 esac
 ;;
*)
 $cat <<EOM
A number of extensions are supplied with $package.  Answer "none"
to include no extensions.
Note that DynaLoader is always built and need not be mentioned here.

EOM
 case "$static_ext" in
 ") dflt="$avail_ext" ;;
 *) dflt="$static_ext"
  # Perhaps we are reusing an old out-of-date config.sh.
  case "$hint" in
  previous)
   if test X"$static_ext" != X"$avail_ext"; then
    $cat <<EOM
NOTICE:  Your previous config.sh list may be incorrect.
The extensions now available
```

```
 to you are
 ${avail_ext}
but the default list from your previous config.sh is
 ${static_ext}

EOM
   fi
   ;;
  esac
  ;;
 esac
 : Exclude those that are not xs extensions
 case "$dflt" in
 ") dflt=none;;
 esac
 rp="What extensions do you wish to include?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
 none) static_ext=' ' ;;
 *) static_ext="$ans" ;;
 esac
 ;;
esac
#
# Encode is a special case.  If we are building Encode as a static
# extension, we need to explicitly list its subextensions as well.
# For other nested extensions, this is handled automatically by
# the appropriate Makefile.PL.
case " $static_ext " in
 *" Encode "*) # Add the subextensions of Encode
 cd "$rsrc/cpan"
 for xxx in `ls Encode/*/Makefile.PL|awk -F/ '{print $2}'`; do
  static_ext="$static_ext Encode/$xxx"
  known_extensions="$known_extensions Encode/$xxx"
 done
 cd "$tdir"
 ;;
esac

set X $dynamic_ext $static_ext $nonxs_ext
shift
extensions="$*"

# Sanity check:
  We require an extension suitable for use with
# AnyDBM_File, as well as Fcntl and IO.  (Failure to have these
# should show up as failures in the test suite, but it's helpful to
```

```
# catch them now.) The 'extensions' list is normally sorted
# alphabetically, so we need to accept either
#    DB_File ... Fcntl ... IO  ....
# or something like
#    Fcntl ... NDBM_File ... IO  ....
case " $extensions"  in
*"_File "*" Fcntl "*" IO "*) ;; # DB_File
*" Fcntl "*"_File "*" IO "*) ;; # GDBM_File
*" Fcntl "*" IO "*"_File "*) ;; # NDBM_File
*) echo "WARNING: Extensions DB_File or *DBM_File, Fcntl, and IO not configured." >&4
  echo "WARNING: The Perl you are building will be quite crippled." >& 4
  ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Extensions.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctermid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ctermid.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ctermid: Inlibc
?MAKE: -pick add $@ %<
?S:d_ctermid:
?S: This variable conditionally defines CTERMID if ctermid() is
?S: available to generate filename for terminal.
?S:.
?C:HAS_CTERMID (CTERMID):
?C: This symbol, if defined, indicates that the ctermid routine is
?C: available to generate filename for terminal.
?C:.
?H:#$d_ctermid
 HAS_CTERMID  /**/
?H:.
?LINT:set d_ctermid
: see if ctermid exists
set ctermid d_ctermid
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ctermid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_cmsghdr_s: Hasstruct i_systypes d_socket i_sysuio Setvar
?MAKE: -pick add $@ %<
?S:d_cmsghdr_s:
?S: This variable conditionally defines the HAS_STRUCT_CMSGHDR symbol,
?S: which indicates that the struct cmsghdr is supported.
?S:.
?C:HAS_STRUCT_CMSGHDR:
?C: This symbol, if defined, indicates that the struct cmsghdr
?C: is supported.
?C:.
?H:#$d_cmsghdr_s HAS_STRUCT_CMSGHDR /**/
?H:.
?LINT:set d_cmsghdr_s
: Check for cmsghdr support
echo " "
echo "Checking to see if your system supports struct cmsghdr..." >&4
set d_cmsghdr_s cmsghdr $i_systypes sys/types.h $d_socket sys/socket.h $i_sysuio sys/uio.h
eval $hasstruct
case "$d_cmsghdr_s" in
"$define")      echo "Yes, it does."   ;;
*)              echo
 "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_cmsghdr_s.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: modetype.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:25:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:modetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:modetype:
?S: This variable defines modetype to be something like mode_t,
?S: int, unsigned short, or whatever type is used to declare file
?S: modes for system calls.
?S:.
?C:Mode_t:
?C: This symbol holds the type used to declare file modes
?C: for systems calls.
  It is usually mode_t, but may be
?C: int or unsigned short.  It may be necessary to include <sys/types.h>
?C: to get any typedef'ed information.
?C:.
?H:#define Mode_t $modetype  /* file mode parameter for system calls */
?H:.
: see what type is used for mode_t
set mode_t modetype int stdio.h sys/types.h
eval $typedef
dflt="$modetype"
echo " "
rp="What type is used for file modes?"
. ./myread
modetype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/modetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sizesize: Myread Typedef sizetype Compile run i_stdlib
```

```
?MAKE: -pick add $@ %<
?S:sizesize:
?S: This variable contains the size of a sizetype in bytes.
?S:.
?C:Size_t_size:
?C: This symbol holds the size of a Size_t in bytes.
?C:.
?H:#define Size_t_size $sizesize  /**/
?H:.
?T:yyy zzz
?F:!try
: Check size of size
echo " "
case "$sizetype" in
*_t) zzz="$sizetype" ;;
*)   zzz="filesize" ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($sizetype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") sizesize=4
  echo "(I can't execute the test program--guessing $sizesize.)" >&4
  ;;
 *) sizesize=$yyy
  echo "Your $zzz size is $sizesize bytes."
  ;;
 esac
else
 sizesize=4
 echo "(I can't compile the test program--guessing $sizesize.)" >&4
fi
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/sizesize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_isascii.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:13:39  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:32  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_isascii: cc cat ccflags ldflags rm libs Setvar
?MAKE: -pick add $@ %<
?S:d_isascii:
?S: This variable conditionally defines the HAS_ISASCII constant,
?S: which indicates to the C program that isascii()
 is available.
?S:.
?C:HAS_ISASCII:
?C: This manifest constant lets the C program know that isascii
?C: is available.
?C:.
?H:#$d_isascii HAS_ISASCII  /**/
?H:.
?LINT:set d_isascii
?X: Can't use Inlibc because isascii() might be a macro.
: Look for isascii
echo " "
$cat >isascii.c <<'EOCP'
#include <stdio.h>
#include <ctype.h>
int main() {
 int c = 'A';
 if (isascii(c))
  exit(0);
 else
  exit(1);
```

```
}
EOCP
if $cc $ccflags $ldflags -o isascii isascii.c $libs >/dev/null 2>&1 ; then
 echo "isascii() found." >&4
 val="$define"
else
 echo "isascii() NOT found." >&4
 val="$undef"
fi
set d_isascii
eval $setvar
$rm -f isascii*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_isascii.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2008 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ctime64 d_localtime64 d_gmtime64 d_mktime64 d_difftime64 d_asctime64: Inlibc
?MAKE: -pick add $@ %<
?S:d_ctime64:
?S: This variable conditionally defines the HAS_CTIME64 symbol, which
?S: indicates to the C program that the ctime64 () routine is available.
?S:.
?S:d_localtime64:
?S: This variable conditionally defines the HAS_LOCALTIME64 symbol, which
?S: indicates to the C program that the localtime64 () routine is available.
?S:.
?S:d_gmtime64:
?S: This variable conditionally defines the HAS_GMTIME64 symbol, which
?S: indicates to the C program that the gmtime64 () routine is available.
?S:.
?S:d_mktime64:
?S: This variable conditionally defines the HAS_MKTIME64 symbol, which
?S: indicates to the
 C program that the mktime64 () routine is available.
?S:.
?S:d_difftime64:
?S: This variable conditionally defines the HAS_DIFFTIME64 symbol, which
?S: indicates to the C program that the difftime64 () routine is available.
?S:.
?S:d_asctime64:
```

```
?S: This variable conditionally defines the HAS_ASCTIME64 symbol, which
?S: indicates to the C program that the asctime64 () routine is available.
?S:.
?C:HAS_CTIME64:
?C: This symbol, if defined, indicates that the ctime64 () routine is
?C: available to do the 64bit variant of ctime ()
?C:.
?C:HAS_LOCALTIME64:
?C: This symbol, if defined, indicates that the localtime64 () routine is
?C: available to do the 64bit variant of localtime ()
?C:.
?C:HAS_GMTIME64:
?C: This symbol, if defined, indicates that the gmtime64 () routine is
?C: available to do the 64bit variant of gmtime ()
?C:.
?C:HAS_MKTIME64:
?C: This symbol, if defined, indicates that the mktime64 () routine is
?C: available to do the 64bit variant of mktime ()
?C:.
?C:HAS_DIFFTIME64:
?C: This
 symbol, if defined, indicates that the difftime64 () routine is
?C: available to do the 64bit variant of difftime ()
?C:.
?C:HAS_ASCTIME64:
?C: This symbol, if defined, indicates that the asctime64 () routine is
?C: available to do the 64bit variant of asctime ()
?C:.
?H:#$d_ctime64 HAS_CTIME64  /**/
?H:#$d_localtime64 HAS_LOCALTIME64  /**/
?H:#$d_gmtime64 HAS_GMTIME64  /**/
?H:#$d_mktime64 HAS_MKTIME64  /**/
?H:#$d_difftime64 HAS_DIFFTIME64  /**/
?H:#$d_asctime64 HAS_ASCTIME64  /**/
?H:.
?LINT:set d_ctime64 d_localtime64 d_gmtime64 d_mktime64 d_difftime64 d_asctime64
: see if 64bit time functions exists

set ctime64 d_ctime64
eval $inlibc

set localtime64 d_localtime64
eval $inlibc

set gmtime64 d_gmtime64
eval $inlibc

set mktime64 d_mktime64
```

```
eval $inlibc

set difftime64 d_difftime64
eval $inlibc

set asctime64 d_asctime64
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_timefuncs64.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getespwnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getespwnam:
?S: This variable conditionally defines HAS_GETESPWNAM if getespwnam() is
?S: available to retrieve enhanced (shadow) password entries by name.
?S:.
?C:HAS_GETESPWNAM:
?C: This symbol, if defined, indicates that the getespwnam system call is
?C: available to retrieve enhanced (shadow) password entries by name.
?C:.
?H:#$d_getespwnam HAS_GETESPWNAM  /**/
?H:.
?LINT:set d_getespwnam
: see if getespwnam exists
set getespwnam d_getespwnam
eval $inlibc
```

Found in
 path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getespwnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dlfcn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_dlfcn.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:53  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_dlfcn: Inhdr
?MAKE: -pick add $@ %<
?S:i_dlfcn:
?S: This variable conditionally defines the I_DLFCN symbol, which
?S: indicates to the C program that <dlfcn.h> exists and should
?S: be included.
?S:.
?C:I_DLFCN:
?C: This symbol, if defined, indicates that <dlfcn.h> exists
 and should
?C: be included.
?C:.
?H:#$i_dlfcn I_DLFCN  /**/
?H:.
?LINT:set i_dlfcn
: see if dlfcn is available
set dlfcn.h i_dlfcn
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dlfcn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strccmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strccmp.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  14:54:34  ram
?RCS: patch23: fixed a typo (WED)
```

```
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:04:39  ram
?RCS: patch10: created (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strccmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_strccmp:
?S: This variable conditionally defines the HAS_STRCASECMP symbol, which
?S: indicates to the C program
 that the strcasecmp() routine is available
?S: for case-insensitive string compares.
?S:.
?C:HAS_STRCASECMP:
?C: This symbol, if defined, indicates that the strcasecmp() routine is
?C: available for case-insensitive string compares.
?C:.
?H:#$d_strccmp HAS_STRCASECMP /**/
?H:.
?LINT:set d_strccmp
: see if strcasecmp exists
set strcasecmp d_strccmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strccmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cf_who.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:28:50  ram
?RCS: patch61: new computation method avoiding use of temporary file
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:42:34  ram
?RCS: patch23: login name now computed the hard way
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:32  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Oldconfig dependency is there to ensure computation occurs after old values
?X: from config.sh have been loaded, so that we can supersede them.
?X:
?MAKE:cf_time
 cf_by: date Oldconfig
?MAKE: -pick add $@ %<
?S:cf_time:
?S: Holds the output of the "date" command when the configuration file was
?S: produced. This is used to tag both config.sh and config_h.SH.
?S:.
?S:cf_by:
?S: Login name of the person who ran the Configure script and answered the
?S: questions. This is used to tag both config.sh and config_h.SH.
?S:.
?LINT:change LC_ALL LANGUAGE
: who configured the system
?X: Ensure English date -- Jarkko Hietaniemi
cf_time=`LC_ALL=C; LANGUAGE=C; export LC_ALL; export LANGUAGE; $date 2>&1`
?X:
?X: Leave a white space between first two '(' for ksh. The sub-shell is needed
?X: on some machines to avoid the error message when logname is not found; e.g.
?X: on SUN-OS 3.2, (logname || whoami) would not execute whoami if logname was
?X: not found. Sigh!
?X:
?X: Convex had a broken logname executable which returned a non-zero status,
?X: and that broke the previous:
?X:   cf_by=`( (logname) 2>/dev/null || whoami) 2>&1`
?X: Switch to emergency
 mode... -- RAM, 19/04/94
?X:
?X: Parentheses needed to avoid error message if the program does not exist.
?X: Uses case instead of $test so it can be put before $test is defined.
?X: Don't redirect to a file because on Ultrix (under script?) logname
?X: outputs a blank line first.  This method will apparently work.
case "$cf_by" in
"")
 cf_by=`(logname) 2>/dev/null`
 case "$cf_by" in
 "")
  cf_by=`(whoami) 2>/dev/null`
  case "$cf_by" in
  "") cf_by=unknown ;;
  esac ;;
 esac ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_who.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_difftime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_difftime.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:31  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_difftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_difftime:
?S: This variable conditionally defines the HAS_DIFFTIME symbol, which
?S: indicates to the C program that the difftime() routine is available.
?S:.
?C:HAS_DIFFTIME :
?C: This symbol, if defined, indicates that
 the difftime routine is
?C: available.
?C:.
?H:#$d_difftime HAS_DIFFTIME  /**/
?H:.
?LINT:set d_difftime
: see if difftime exists
set difftime d_difftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_difftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: End.U,v 3.0 1993/08/18 12:04:51 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: End.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit serves as the goal which forces make to choose all the units that
?X: ask questions.  The $W on the ?MAKE: line is the list of all symbols wanted.
?X: To force any unit to be included, copy this unit to your private U directory
?X: and add the name of the unit desired to the ?MAKE: dependency line.
?X:
?MAKE:End perllibs: $W cppstdin gzip zip
 libs usedl osname osvers
?MAKE: -pick add $@ %<
?S:perllibs:
?S: The list of libraries needed by Perl only (any libraries needed
?S: by extensions only will by dropped, if using dynamic loading).
?S:.
?INIT:perllibs=''
?LINT:use $W
?LINT:use gzip zip
?LINT:change cppstdin
: Remove libraries needed only for extensions
: The appropriate ext/Foo/Makefile.PL will add them back in, if necessary.
: The exception is SunOS 4.x, which needs them.
case "${osname}X${osvers}" in
sunos*X4*)
   perllibs="$libs"
   ;;
*) case "$usedl" in
   $define|true|[yY]*)
     set X `echo " $libs " | sed -e 's@ -lndbm @ @' -e 's@ -lgdbm @ @' -e 's@ -lgdbm_compat @ @' -e 's@ -ldbm @
@' -e 's@ -ldb @ @'`
     shift
     perllibs="$*"
     ;;
   *) perllibs="$libs"
     ;;
   esac
   ;;
esac

?X: If the user has the cppstdin wrapper, perl.c will try to call
?X: CPPSTDIN, but that will point to a location in the build
```

```
?X: directory, not the installed version!.  Here, we'll just strip the
?X: name down to 'cppstdin',
 and rely on the fact that perl.c will
?X: then call SCRIPTDIR/cppstdin, but local things like 'make depend'
?X: will continue to work.
: Remove build directory name from cppstdin so it can be used from
: either the present location or the final installed location.
echo " "
: Get out of the UU directory to get correct path name.
cd ..
case "$cppstdin" in
`pwd`/cppstdin)
 echo "Stripping down cppstdin path name"
 cppstdin=cppstdin
 ;;
esac
cd UU

: end of configuration questions
echo " "
echo "End of configuration questions."
echo " "
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/End.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lgamma_r: Inlibc
?MAKE: -pick add $@ %<
?S:d_lgamma_r:
?S: This variable conditionally defines the HAS_LGAMMA_R symbol, which
?S: indicates to the C program that the lgamma_r() routine is available
?S: for the log gamma function, without using the global signgam variable.
?S:.
?C:HAS_LGAMMA_R:
?C: This symbol, if defined, indicates that the lgamma_r routine is
?C: available to do the log gamma function without using the global
?C: signgam variable.
?C:.
?H:#$d_lgamma_r HAS_LGAMMA_R  /**/
?H:.
?LINT:set d_lgamma_r
: see if lgamma_r exists
set lgamma_r d_lgamma_r
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lgamma_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Chk_MANI.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Chk_MANI.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:57:25  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/31  09:33:14  ram
?RCS: patch44: now lists Begin instead of Myinit in its dependencies
?RCS: patch44: leading comment now explains how this unit is included
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks the package by making sure
 every file listed in MANIFEST
?X: is present. It is systematically "included" via the Finish unit (which
?X: is always present in every Configure script), although it may result in
?X: an empty inclusion when no MANIFEST is present.
?X:
?MAKE:Chk_MANI: Begin c n rsrc
?MAKE: -pick wipe $@ %<
?T:filelist ans tmppwd
?X: This check happens at metaconfig-time, so it's ok to hard-code the path.
@if {test -f ../MANIFEST}
: Now test for existence of everything in MANIFEST
echo " "
if test -f "$rsrc/MANIFEST"; then
 echo "First let's make sure your kit is complete.  Checking..." >&4
?X:
?X: Files spelled uppercased and beginning with PACK are produced by the
?X: shell archive builder and may be removed by the user. Usually, they are
?X: not listed in the MANIFEST file, but you never know...
?X:
?X: "split -l" is the new way of running a split, but we also try the older way
```

```
?X:
 awk '$1 !~ /PACK[A-Z]+/ {print $1}' "$rsrc/MANIFEST" | \
  (split -l 50 2>/dev/null || split -50)
 rm -f missing
 tmppwd=`pwd`
 for
 filelist in x??; do
  (cd "$rsrc"; ls `cat "$tmppwd/$filelist"` \
   >/dev/null 2>>"$tmppwd/missing")
 done
 if test -s missing; then
  cat missing >&4
  cat >&4 <<'EOM'

THIS PACKAGE SEEMS TO BE INCOMPLETE.

You have the option of continuing the configuration process, despite the
distinct possibility that your kit is damaged, by typing 'y'es.  If you
do, don't blame me if something goes wrong.  I advise you to type 'n'o
and contact the author (<MAINTLOC>).

EOM
?X: Can't use $echo at this early stage
  echo $n "Continue? [n] $c" >&4
  read ans
  case "$ans" in
  y*)
   echo "Continuing..." >&4
   rm -f missing
   ;;
  *)
?X:
?X: Use kill and not exit, so that the trap gets executed to clean up
?X:
   echo "ABORTING..." >&4
   kill $$
   ;;
  esac
 else
  echo "Looks good..."
 fi
else
 echo "There is no MANIFEST file.  I hope your kit is complete !"
fi
rm -f missing x??

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Chk_MANI.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shm.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shm: test d_shmctl d_shmget d_shmat d_shmdt Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_shm:
?S: This variable conditionally defines the HAS_SHM symbol, which
?S: indicates that the entire shm*(2) library is present.
?S:.
?C:HAS_SHM:
?C: This symbol, if defined, indicates that the entire shm*(2) library is
?C: supported.
?C:.
?H:#$d_shm HAS_SHM  /**/
?H:.
?T:h_shm
?LINT:set d_shm
:
 see how much of the 'shm*(2)' library is present.
h_shm=true
echo " "
case "$d_shmctl$d_shmget$d_shmat$d_shmdt" in
*"$undef"*) h_shm=false;;
esac
: we could also check for sys/ipc.h ...
if $h_shm && $test `./findhdr sys/shm.h`; then
 echo "You have the full shm*(2) library." >&4
 val="$define"
else
 echo "You don't have the full shm*(2) library." >&4
 val="$undef"
fi
set d_shm
```

```
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: etc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: etc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:etc etcexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:etc:
?S: This variable holds the name of the directory in which the user wants
?S: to put "administrative" executable images for the package in question.
?S: It is most often a local directory such as /usr/local/etc. Programs
?S: relying on this variable must be prepared to deal with
 ~name
?S: substitutions.
?S:.
?S:etcexp:
?S: This is the same as the etc variable, but is filename expanded at
?S: configuration time, for convenient use in makefiles.
?S:.
: determine where administrative executables go
case "$etc" in
")
 dflt=`./loc . /local/etc /usr/local/etc /local/etc /usr/etc /etc`
 ;;
*)
 dflt="$etc"
 ;;
esac
fn=d~
rp='Where should the administrative executables go?'
. ./getfile
etc="$ans"
etcexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/etc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Obsol_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Obsol_h.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file is prepended to .MT/Obsol_h if that file is not empty. That file
?X: contains the necessary mappings of new symbols to obsolete ones.
?X:
?MAKE:Obsol_h:
?MAKE: -pick prepend $@ ./Obsol_h
?LINT:nocomment
/*
* The following symbols are obsolete. They are mapped to the new
* symbols only to ease the transition process. The sources
 should be
* updated so as to use the new symbols only, as the support for these
* obsolete symbols may end without notice.
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Obsol_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtouq: Inlibc cat Compile run
?MAKE: -pick add $@ %<
?S:d_strtouq:
```

```
?S: This variable conditionally defines the HAS_STRTOUQ symbol, which
?S: indicates to the C program that the strtouq() routine is available.
?S:.
?C:HAS_STRTOUQ:
?C: This symbol, if defined, indicates that the strtouq routine is
?C: available to convert strings to unsigned long longs (quads).
?C:.
?H:#$d_strtouq HAS_STRTOUQ  /**/
?H:.
?F:!try
: see if strtouq exists
set strtouq d_strtouq
eval $inlibc

case "$d_strtouq" in
"$define")
 $cat <<EOM
Checking whether your strtouq() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#include <stdio.h>
static int bad = 0;
void check(const char *s, unsigned
 long long eull, int een) {
 unsigned long long gull;
 errno = 0;
 gull = strtouq(s, 0, 10);
 if (!((gull == eull) && (errno == een)))
  bad++;
}
int main() {
 check(" 1",                                1LL, 0);
 check(" 0",                                0LL, 0);
 check("18446744073709551615",  18446744073709551615ULL, 0);
 check("18446744073709551616",  18446744073709551615ULL, ERANGE);
#if 0 /* strtouq() for /^-/ strings is undefined. */
 check("-1",                 18446744073709551615ULL, 0);
 check("-18446744073709551614",                  2LL, 0);
 check("-18446744073709551615",                  1LL, 0);
 check("-18446744073709551616", 18446744073709551615ULL, ERANGE);
 check("-18446744073709551617", 18446744073709551615ULL, ERANGE);
#endif
 if (!bad)
  printf("ok\n");
 return 0;
}
```

```
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
  ok) echo "Your strtouq() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtouq() doesn't seem to be working
 okay.
EOM
     d_strtouq="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtouq="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtouq.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nexttoward: Inlibc
?MAKE: -pick add $@ %<
?S:d_nexttoward:
?S: This variable conditionally defines HAS_NEXTTOWARD if nexttoward()
?S: is available to return the next machine representable long double from
?S: x in direction y.
?S:.
?C:HAS_NEXTTOWARD:
?C: This symbol, if defined, indicates that the nexttoward routine is
?C: available to return the next machine representable long double from
?C: x in direction y.
?C:.
?H:#$d_nexttoward HAS_NEXTTOWARD  /**/
?H:.
?LINT:set d_nexttoward
: see if nexttoward exists
set nexttoward d_nexttoward
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nexttoward.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: so.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:30:04  ram
?RCS: patch36: now tells user how he can suppress shared lib lookup (ADO)
?RCS: patch36: removed echo at the top, since it's now in the here-doc (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:07:02  ram
?RCS: patch30: created
?RCS:
?X:
?X: This unit computes the shared-object / shared-lib extension
?X:
?MAKE:so: test libpth Loc Myread Oldconfig cat
?MAKE: -pick add $@ %<
?S:so:
?S: This variable holds the extension used to identify
 shared libraries
?S: (also known as shared objects) on the system. Usually set to 'so'.
?S:.
?T: xxx
: compute shared library extension
case "$so" in
")
 if xxx=`./loc libc.sl X $libpth`; $test -f "$xxx"; then
  dflt='sl'
 else
  dflt='so'
 fi
 ;;
*) dflt="$so";;
esac
$cat <<EOM

On some systems, shared libraries may be available.  Answer 'none' if
you want to suppress searching of shared libraries for the remainder
of this configuration.
```

```
EOM
rp='What is the file extension used for shared libraries?'
. ./myread
so="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/so.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtod_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtod_l:
?S: This variable conditionally defines the HAS_STRTOD_L symbol, which
?S: indicates to the C program that the strtod_l() routine is available.
?S:.
?C:HAS_STRTOD_L:
?C: This symbol, if defined, indicates that the strtod_l routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtod_l HAS_STRTOD_L  /**/
?H:.
?LINT:set d_strtod_l
: see if strtod_l exists
set strtod_l d_strtod_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strtod_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_statblks.U,v 3.0 1993/08/18 12:07:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_statblks.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:07:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_statblks: Hasfield i_sysstat
?MAKE: -pick add $@ %<
?S:d_statblks:
?S: This variable conditionally defines USE_STAT_BLOCKS
?S: if this system has a stat structure declaring
?S: st_blksize and st_blocks.
?S:.
?C:USE_STAT_BLOCKS (STATBLOCKS):
?C: This symbol is defined if this system has a stat structure declaring
?C: st_blksize and st_blocks.
?C:.
?H:?%<:#ifndef
 USE_STAT_BLOCKS
?H:?%<:#$d_statblks USE_STAT_BLOCKS /**/
?H:?%<:#endif
?H:.
?LINT:set d_statblks
: see if stat knows about block sizes
echo " "
echo "Checking to see if your struct stat has st_blocks field..." >&4
set d_statblks stat st_blocks $i_sysstat sys/stat.h
eval $hasfield
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_statblks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: man3dir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:10:34  ram
?RCS: patch61: created
?RCS:
?X:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
```

```
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man3 used instead of man everywhere.
?X: I then added various tests because perl5 has *lots* of man3
?X: pages with long file names. -- ADO
?X:
?MAKE:man3dir
 man3direxp man3ext installman3dir: afs cat nroff Loc Oldconfig \
 sed man1dir spackage package Getfile prefix Prefixit Prefixup \
 d_flexfnam privlib Myread
?MAKE: -pick add $@ %<
?Y:TOP
?S:man3dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:man3direxp:
?S: This variable is the same as the man3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installman3dir:
?S: This variable is really the same as man3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man3ext:
?S: This variable contains the extension that the manual
 page should
?S: have: one of 'n', 'l', or '3'.  The Makefile must supply the '.'.
?S: See man3dir.
?S:.
: determine where library module manual pages go
set man3dir man3dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages for many of the library modules.
EOM

case "$nroff" in
nroff)
 $cat <<'EOM'
However, you don't have nroff, so they're probably useless to you.
EOM
 case "$man3dir" in
 ") man3dir="none";;
```

```
 esac;;
esac

case "$d_flexfnam" in
undef)
 $cat <<'EOM'
However, your system can't handle the long file names like File::Basename.3.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

echo "If you don't want the manual sources installed, answer 'none'."
?X: We dont use /usr/local/man/man3 because some man programs will
?X: only show the /usr/local/man/man3 contents, and not the system ones,
?X: thus man less will show the perl module less.pm, but not the system
?X: less command.  We might also conflict with TCL man pages.
?X: However, something like /opt/perl/man/man3
 is fine.
case "$man3dir" in
") case "$prefix" in
 *$package*) dflt=`echo $man1dir |
   $sed -e 's/man1/man3/g' -e 's/man\.1/man\.3/g'` ;;
 *) dflt="$privlib/man/man3" ;;
 esac
 ;;
' ') dflt=none;;
*) dflt="$man3dir" ;;
esac
echo " "

fn=dn+~
rp="Where do the $package library man pages (source) go?"
. ./getfile
if test "X$man3direxp" != "X$ansexp"; then
 installman3dir="
fi

man3dir="$ans"
man3direxp="$ansexp"
case "$man3dir" in
") man3dir=' '
 installman3dir=";;
esac
if $afs; then
 $cat <<EOM
```

```
Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installman3dir" in
 ") dflt=`echo $man3direxp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installman3dir";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installman3dir="$ans"
else
 installman3dir="$man3direxp"
fi

: What suffix
 to use on installed man pages

case "$man3dir" in
' ')
 man3ext='0'
 ;;
*)
 rp="What suffix should be used for the $package library man pages?"
 case "$man3ext" in
 ") case "$man3dir" in
  *3)  dflt=3 ;;
  *3p) dflt=3p ;;
  *3pm) dflt=3pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L3) dflt=L3;;
  *) dflt=3;;
  esac
  ;;
 *) dflt="$man3ext";;
 esac
 . ./myread
 man3ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/man3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Chk_whoami.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Chk_whoami.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit makes sure we don't try to include whoami.h if uname() exists.
?X:
?MAKE:Chk_whoami: d_uname i_whoami
?MAKE: -pick add $@ %<
?LINT:change i_whoami
: weed out incompatibilities
case "$d_uname" in
 "$define") i_whoami="$undef" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Chk_whoami.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_aintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_aintl:
?S: This variable conditionally defines the HAS_AINTL symbol, which
?S: indicates to the C program that the aintl() routine is available.
?S: If copysignl is also present we can emulate modfl.
?S:.
?C:HAS_AINTL:
```

```
?C: This symbol, if defined, indicates that the aintl routine is
?C: available.  If copysignl is also present we can emulate modfl.
?C:.
?H:#$d_aintl HAS_AINTL  /**/
?H:.
?LINT:set d_aintl
: see if aintl exists
set aintl d_aintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_aintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rdchk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rdchk.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_rdchk: Inlibc
?MAKE: -pick add $@ %<
?S:d_rdchk:
?S: This variable conditionally defines the HAS_RDCHK symbol, which
?S: indicates to the C program that the rdchk() routine is available
?S: to find out if there is input pending on an IO channel.
?S:.
?C:HAS_RDCHK (RDCHK):
?C: This symbol, if defined, indicates that the rdchk routine
 is available
?C: to find out if there is input pending on an IO channel.  Generally
?C: the routine is used only if FIONREAD and O_NDELAY aren't available.
?C:.
?H:#$d_rdchk HAS_RDCHK  /**/
?H:.
?LINT:set d_rdchk
: see if rdchk exists
set rdchk d_rdchk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rdchk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_killpg.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_killpg.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_killpg: Inlibc
?MAKE: -pick add $@ %<
?S:d_killpg:
?S: This variable conditionally defines the HAS_KILLPG symbol, which
?S: indicates to the C program that the killpg() routine is available
?S: to kill process groups.
?S:.
?C:HAS_KILLPG (KILLPG):
?C: This symbol, if defined, indicates that the killpg routine is available
?C: to kill
 process groups.  If unavailable, you probably should use kill
?C: with a negative process number.
?C:.
?H:#$d_killpg HAS_KILLPG /**/
?H:.
?LINT:set d_killpg
: see if killpg exists
set killpg d_killpg
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_killpg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: pidtype.U,v 3.0.1.1 1994/08/29 16:31:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: pidtype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:31:27  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:pidtype: Myread Typedef
?MAKE: -pick add $@ %<
?S:pidtype:
?S: This variable defines PIDTYPE to be something like pid_t, int,
?S: ushort, or whatever type is used to declare process ids in the kernel.
?S:.
?C:Pid_t (PIDTYPE):
?C: This
 symbol holds the type used to declare process ids in the kernel.
?C: It can be int, uint, pid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Pid_t $pidtype  /* PID type */
?H:.
?LINT: set pidtype
: see what type pids are declared as in the kernel
rp="What is the type of process ids on this system?"
set pid_t pidtype int stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/pidtype.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_lc_monetary_2008: cat Compile rm_try d_locconv
?MAKE: -pick add $@ %<
?S:d_lc_monetary_2008:
?S: This variable conditionally defines HAS_LC_MONETARY_2008 if libc
?S: has the international currency locale rules from POSIX
?S: 1003.1-2008.
?S:.
```

```
?C:HAS_LC_MONETARY_2008:
?C: This symbol, if defined, indicates that the localeconv routine is
?C: available and has the additional members added in POSIX 1003.1-2008.
?C:.
?H:#$d_lc_monetary_2008 HAS_LC_MONETARY_2008  /**/
?H:.
: see if libc has the POSIX.1-2008 currency locale rules
case "$d_locconv:$d_lc_monetary_2008" in
$define:)
 $cat
 >try.c <<EOCP
#include <locale.h>
int main() {
 struct lconv *lc = localeconv();
 char int_p_cs_precedes = lc->int_p_cs_precedes;
 return 0;
}
EOCP
 set try
 if eval $compile; then
  d_lc_monetary_2008="$define"
 else
  d_lc_monetary_2008="$undef"
 fi;
 $rm_try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lc_monetary_2008.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoull: Inlibc d_longlong Compile cat run
?MAKE: -pick add $@ %<
?S:d_strtoull:
?S: This variable conditionally defines the HAS_STRTOULL symbol, which
?S: indicates to the C program that the strtoull() routine is available.
?S:.
?C:HAS_STRTOULL:
?C: This symbol, if defined, indicates that the strtoull routine is
?C: available to convert strings to unsigned long longs.
```

```
?C:.
?H:#$d_strtoull HAS_STRTOULL  /**/
?H:.
?F:!try
: see if strtoull exists
set strtoull d_strtoull
eval $inlibc

case "$d_longlong-$d_strtoull" in
"$define-$define")
 $cat <<EOM
Checking whether your strtoull() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#ifdef __hpux
#define strtoull __strtoull
#endif
#include
 <stdio.h>
static int bad = 0;
void check(const char *s, long long eull, int een) {
 long long gull;
 errno = 0;
 gull = strtoull(s, 0, 10);
 if (!((gull == eull) && (errno == een)))
  bad++;
}
int main() {
 check(" 1",                                  1LL, 0);
 check(" 0",                                  0LL, 0);
 check("18446744073709551615",  18446744073709551615ULL, 0);
 check("18446744073709551616",  18446744073709551615ULL, ERANGE);
#if 0 /* strtoull() for /^-/ strings is undefined. */
 check("-1",                  18446744073709551615ULL, 0);
 check("-18446744073709551614",                  2LL, 0);
 check("-18446744073709551615",                  1LL, 0);
 check("-18446744073709551616", 18446744073709551615ULL, ERANGE);
 check("-18446744073709551617", 18446744073709551615ULL, ERANGE);
#endif
 if (!bad)
  printf("ok\n");
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
```

```
  ok) echo "Your strtoull() seems to be working okay."
 ;;
  *) cat <<EOM >&4
Your strtoull() doesn't seem to be working okay.
EOM
     d_strtoull="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtoull="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoull.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sgndchr.U,v 3.0.1.2 1997/02/28 15:44:25 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sgndchr.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:44:25  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:00:24  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sgndchr: cat rm Compile Setvar run
?MAKE: -pick add $@ %<
?S:d_sgndchr:
?S: This variable conditionally defines the SIGNEDCHAR
 symbol, which
?S: indicates to the C program that signed characters are available.
?S:.
?C:SIGNEDCHAR:
?C: This symbol, if defined, indicates that characters are a signed type.
```

```
?C: If not defined, things declared as signed characters (and that make
?C: use of negative values) should probably be declared as shorts instead.
?C:.
?H:#$d_sgndchr SIGNEDCHAR /**/
?H:.
?F:!try
?LINT:set d_sgndchr
: check for signed chars
echo " "
echo "Checking to see if your C compiler can do signed chars..." >&4
$cat >try.c <<'EOCP'
int main()
{
 char c = 0;

 c--;
 exit(c >= 0);
}
EOCP
set try
if eval $compile && $run ./try; then
if $run ./try; then
 val="$define"
 echo "It certainly can."
else
 val="$undef"
 echo "It can't.  I'll have to make some things type short."
fi
set d_sgndchr
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sgndchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: orgname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: orgname.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:10:25  ram
```

```
?RCS: patch10: added support for /local/src to the search (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orgname: sed cat Myread Loc Oldconfig
?MAKE: -pick add $@ %<
?S:orgname:
?S: This variable contains the eventual value of the ORGNAME symbol,
?S: which contains either the organizaton name or the full pathname
?S: of
 a file containing the organization name.
?S:.
?C:ORGNAME:
?C: This symbol contains either the organizaton name or the full pathname
?C: of a file containing the organization name, which the program must
?C: be prepared to open and substitute the contents of.
?C:.
?H:#define ORGNAME "$orgname"  /**/
?H:.
?T:longshots xxx
: get organization name
longshots='/local/src /usr/src/new /usr/src/local /usr/local/src'
case "$orgname" in
") if xxx=`./loc news/src/defs.h x $longshots`; then
  dflt=`$sed -n 's/^.*MYORG[  ]*"\(.*\)".*$/\1/p' $xxx`
 else
  dflt=''
 fi
 ;;
*)  dflt="$orgname";;
esac
$cat << 'EOH'

Please type the name of your organization as you want it to appear on the
Organization line of outgoing articles.  (It's nice if this also specifies
your location.  Your city name is probably sufficient if well known.)
For example:

   University of Southern North Dakota, Hoople

You may also put the name of a file, as long as it begins with a slash.
For example:

   /etc/organization

EOH
orgname=""
```

```
while
 test "X$orgname" = "X"; do
 rp='Organization:'
 . ./myread
 orgname="$ans"
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/orgname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: uidtype.U,v 3.0.1.3 1994/08/29 16:33:25 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: uidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:33:25  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:09:36  ram
?RCS: patch30: comment for uidtype referred to the obsoleted symbol
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:28:27  ram
?RCS: patch27: made conformant to its gidtype.U companion
?RCS: patch27: question now explicitly mentions getuid()
?RCS:
?RCS: Revision 3.0  1993/08/18
  12:09:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:uidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:uidtype:
?S: This variable defines Uid_t to be something like uid_t, int,
?S: ushort, or whatever type is used to declare user ids in the kernel.
?S:.
?C:Uid_t (UIDTYPE):
?C: This symbol holds the type used to declare user ids in the kernel.
?C: It can be int, ushort, uid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Uid_t $uidtype  /* UID type */
```

```
?H:.
?T:xxx
: see what type uids are declared as in the kernel
echo " "
echo "Looking for the type for user ids returned by getuid()."
set uid_t uidtype xxx stdio.h sys/types.h
eval $typedef
case "$uidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep '_ruid;' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$uidtype";;
esac
case "$uidtype" in
uid_t) echo "uid_t found." ;;
*) rp="What
 is the type for user ids returned by getuid()?"
 . ./myread
 uidtype="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: pidtype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:31:27  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:pidtype: Myread Typedef
?MAKE: -pick add $@ %<
?S:pidtype:
?S: This variable defines PIDTYPE to be something like pid_t, int,
?S: ushort, or whatever type is used to declare process ids in the kernel.
?S:.
?C:Pid_t (PIDTYPE):
?C: This symbol holds the type
 used to declare process ids in the kernel.
?C: It can be int, uint, pid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Pid_t $pidtype  /* PID type */
?H:.
: see what type pids are declared as in the kernel
set pid_t pidtype int stdio.h sys/types.h
eval $typedef
dflt="$pidtype"
echo " "
rp="What type are process ids on this system declared as?"
. ./myread
pidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Myread.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myread.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  15:05:39  ram
?RCS: patch61: myread script now starts with a "startsh"
?RCS: patch61: miscellaneous fixes
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:14:22  ram
?RCS: patch45: added & escape allowing user to turn on -d from the prompt
?RCS:
?RCS: Revision 3.0.1.4  1994/10/31  09:48:04  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
```

```
?RCS: Revision 3.0.1.3  1994/10/29
  15:56:20  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:59  ram
?RCS: patch8: added new visible 'nostick' symbol, mainly for Finish.U
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:39:20  ram
?RCS: patch7: now sticks to the question when no default and empty answer
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a read.  It allows for shell escapes, default assignment and
?X: parameter evaluation.
?X:
?X: To use this unit, $rp and $dflt must hold the question and the
?X: default answer. The question will be printed by the script itself.
?X: Neither $rp nor $dflt is altered by the script.
?X:
?X: The myread script will stick to the question if no default is proposed
?X: and the user answer is empty, which prevents mistakes. However, at the
?X: end of Configure, there is an exception
 to this rule (Finish.U) where we
?X: set nostick to a non-empty value to allow the Return key to play its role!
?X:
?MAKE:Myread: Options startsh n c trnl
?MAKE: -pick add $@ %<
?V:ans:dflt rp nostick
?F:./myread
?T:COLUMNS xxxm rp dflt answ aok myecho
?LINT:change fastread
?X: Some shells (Ultrix) do not understand ${COLUMNS:-80}, sigh!
: compute the number of columns on the terminal for proper question formatting
case "$COLUMNS" in
") COLUMNS='80';;
esac

: set up the echo used in my read
?X:
?X: This variable is intended to be eval'ed. It will echo the two
?X: variables $rp and $dflt (provided this latter has a non null value).
?X: It is mainly used by the myread script to echo the questions.
?X:
?X: The $n and $c below are substituted before Loc does its silly echo check
?X: so don't put a $ on the echo below so we get builtin, even if $echo is
```

```
?X: pointing to /bin/echo.
?X:
myecho="case \"\$xxxm\" in
") echo $n \"\$rp $c\" >&4;;
*) case \"\$rp\" in
 ") echo $n \"[\$xxxm] $c\";;
 *)
  if
 test \`echo \"\$rp [\$xxxm]  \" | wc -c\` -ge $COLUMNS; then
   echo \"\$rp\" >&4
   echo $n \"[\$xxxm] $c\" >&4
  else
   echo $n \"\$rp [\$xxxm] $c\" >&4
  fi
  ;;
 esac;;
esac"

: now set up to do reads with possible shell escape and default assignment
cat <<EOSC >myread
$startsh
?X:
?X: Save value of default -- do not alter original in case of eval
?X:
xxxm=\$dflt
$myecho
?X:
?X: If there is no default, then stop, regardless of the value in fastread.
?X: In silent mode, no new-line is to be echoed if the question is empty,
?X: since this is used to wait for the "return" key.
?X:
ans='!'
case "\$fastread" in
yes) case "\$dflt" in
 ") ;;
 *) ans=";
  case "\$silent-\$rp" in
  true-) ;;
  *) echo " " >&4;;
  esac;;
 esac;;
*) case "\$silent" in
 true) case "\$rp" in
  ") ans=";;
  esac;;
 esac;;
esac
while expr "X\$ans" : "X!" >/dev/null; do
```

```
 read answ
?X:
?X: Run 'eval' on the answer, in order to do variable substitution, in case
?X: the user types $HOME or $WHATEVER.
 Variables must be evaluated now.
?X: Typing '\$HOME' won't currently prevent from substitution -- use '\\$HOME'
?X: The $1 .. $9 and $*, as well as $@, are available to refer to the
?X: default value.
?X:
 set x \$xxxm
 shift
 aok=''; eval "ans=\\"\$answ\\"" && aok=y
 case  "\$answ" in
?X:
?X: Use "!" and not a plain ! because of a bug in BSD 4.4 shell
?X: (reported by Wayne Davison)
?X: We must handle the shell escapes before dealing with possible variable
?X: substitution, since the shell we're launching in that case will be able
?X: to do it as well as we can -- RAM, 15/03/96
?X
 "!")
  sh 1>&4
  echo " "
  $myecho
  ;;
 !*)
  set x \`expr "X\$ans" : "X!\(.*\)\$"\`
  shift
  sh 1>&4 -c "\$*"
  echo " "
  $myecho
  ;;
 "\$ans")
  case "\$ans" in
?X:
?X: Answers starting with & are hooks allowing to dynamically turn on/off
?X: some Configure options. That's for the future. -- RAM, 09/01/95
?X: Today, we only recognize '& -d' to mean 'go on as if Configure -d, which
?X: is a hardwired
 behaviour compatible with our general scheme.
?X:
  \\&*)
   set x \`expr "X\$ans" : "X&\(.*\)\$"\`
   shift
   case "\$1" in
   -d)
    fastread=yes
    echo "(OK, I'll run with -d after this question.)" >&4
```

```
    ;;
   -*)
    echo "*** Sorry, \$1 not supported yet." >&4
    ;;
   esac
   $myecho
   ans=!
   ;;
  esac;;
 *)
  case "\$aok" in
  y)
   echo "*** Substitution done -- please confirm."
   xxxm="\$ans"
   ans=\`echo $n "\$ans$c" | tr '$trnl' ' '\`
   xxxm="\$ans"
   ans=!
   ;;
  *)
   echo "*** Error -- try again."
   ans=!
   ;;
  esac
  $myecho
  ;;
 esac
?X: Stick in myread if no default answer and nothing was answered
 case "\$ans\$xxxm\$nostick" in
 ")
  ans=!
  $myecho
  ;;
 esac
done
case "\$ans" in
") ans="\$xxxm";;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Myread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_h.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  14:57:43  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:10:49  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:25:39  ram
?RCS: patch49: typo fixes in leading config.h comment (WED)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/24  12:13:20  ram
?RCS: patch3: added TOP as a local shell temporary variable
?RCS:
?RCS: Revision 3.0.1.1  1993/08/19  06:42:20
  ram
?RCS: patch1: leading config.sh searching was not aborting properly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file ends up producing the config_h.SH script, which is run to produce
?X: the config.h file.  The file ./.Config_h below contains all the ?H: lines
?X: extracted out of all the units.  Metaconfig itself adds the !GROK!THIS!.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?X: For those who wish to know why the file is config_h.SH instead of the more
?X: natural config.h.SH, well... it is to support systems like MS-DOG. Only one
?X: 'dot' is allowed within the file name, as it is part of the "extension" of
?X: the file. MS-DOG will not let you have two 'dots' because that would mean
?X: two "extensions".
?X:
?MAKE:Config_h: Id End Config_sh Obsol_h myuname cf_time cf_by package src
?MAKE: -pick c_h_weed $@ %<
?MAKE: -pick c_h_weed $@ ./Config_h
?MAKE: -pick
 c_h_weed $@ ./Obsol_h
?T:CONFIG TOP
?LINT:unclosed !GROK!THIS!
?LINT:extern CONFIG_H CONFIG_SH
?LINT:change CONFIG_H CONFIG_SH
?LINT:nocomment
case "$CONFIG_SH" in
```

```
") CONFIG_SH=config.sh;;
esac
case "$CONFIG_H" in
") CONFIG_H=config.h;;
esac
case $CONFIG in
")
 if test -f $CONFIG_SH; then TOP=.;
 elif test -f ../$CONFIG_SH; then TOP=..;
 elif test -f ../../$CONFIG_SH; then TOP=../..;
 elif test -f ../../../$CONFIG_SH; then TOP=../../..;
 elif test -f ../../../../$CONFIG_SH; then TOP=../../../..;
 else
  echo "Can't find $CONFIG_SH."; exit 1
 fi
 . $TOP/$CONFIG_SH
 ;;
esac
?X: Make sure we are in the directory where the .SH file is located.
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting $CONFIG_H (with variable substitutions)"
?X:
?X: Since we unconditionally translate leading #undef into /*#define, we're
?X: stuck when we really want to have a #undef in config.h. That's why there
?X: is provision here for #un-def, which is translated back into #undef after
?X:
 all original #undef have been processed.
?X:
?X: Previously, we changed all
?X:  #undef FOO /**/
?X: into
?X:  /*#define FOO /**/
?X: The xlc compiler (available on IBM's AIX) complains that this is
?X: an illegal attempt to write a nested comment, and warns against it.
?X: There's apparently no way to shut the compiler up, either.
?X: This sed command from Hallvard B Furuseth <h.b.furuseth@usit.uio.no>
?X: changes it to
?X:  /*#define FOO / **/
sed <<!GROK!THIS! >$CONFIG_H -e 's!^#undef\(.*/\)\*!/\*#define\1 \*!' -e 's!^#un-def!#undef!'
/*
* This file was produced by running the config_h.SH script, which
* gets its values from $CONFIG_SH, which is generally produced by
* running Configure.
*
* Feel free to modify any of this as the need arises.  Note, however,
* that running config_h.SH again will wipe out any changes you've made.
```

```
* For a more permanent change edit $CONFIG_SH and rerun config_h.SH.
*
* \$Id: Config_h.U 1 2006-08-24 12:32:52Z rmanfredi $
*/

/*
* Package name
     : $package
* Source directory  : $src
* Configuration time: $cf_time
* Configured by     : $cf_by
* Target system     : $myuname
*/

#ifndef _config_h_
#define _config_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Config_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syssock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_syssock.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_syssock: Inhdr
?MAKE: -pick add $@ %<
?S:i_syssock:
?S: This variable conditionally defines the I_SYS_SOCKET symbol, and indicates
?S: whether a C program should include <sys/socket.h> before performing socket
?S: operations.
?S:.
?C:I_SYS_SOCKET:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
 <sys/socket.h> before performing socket calls.
?C:.
?H:#$i_syssock I_SYS_SOCKET  /**/
```

```
?H:.
?LINT:set i_syssock
: see if this is a sys/socket.h system
set sys/socket.h i_syssock
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syssock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sitehtml3dir sitehtml3direxp installsitehtml3dir: Getfile \
 Setprefixvar prefix siteprefix html3dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitehtml3dir=''
?S:sitehtml3dir:
?S: This variable contains the name of the directory in which site-specific
?S: library html source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After
 perl has been installed, users may install their own local
?S: library html pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitehtml3direxp=''
?S:sitehtml3direxp:
?S: This variable is the same as the sitehtml3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsitehtml3dir=''
?S:installsitehtml3dir:
?S: This variable is really the same as sitehtml3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: html3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
```

```
?S:.
?LINT:change prefixvar
?LINT:set installsitehtml3dir
?LINT:set sitehtml3dir
?LINT:set sitehtml3direxp
: determine where add-on library html pages go
: There is no standard location, so try to copy the previously-selected
: directory structure for the core html pages.
case
 "$sitehtml3dir" in
")    dflt=`echo "$html3dir" | $sed "s#^$prefix#$siteprefix#"` ;;
*)     dflt=$sitehtml3dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname where the site-specific library html pages should be installed?'
. ./getfile
prefixvar=sitehtml3dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitehtml3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_flockproto: Hasproto i_sysfile
?MAKE: -pick add $@ %<
?S:d_flockproto:
?S: This variable conditionally defines the HAS_FLOCK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the flock() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_FLOCK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the flock() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
```

```
?C:  extern int flock(int,
 int);
?C:.
?H:#$d_flockproto HAS_FLOCK_PROTO /**/
?H:.
?LINT:set d_flockproto
: see if prototype for flock is available
echo " "
set d_flockproto flock $i_sysfile sys/file.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_flockproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strcoll.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_strcoll.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:01  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strcoll: Inlibc
?MAKE: -pick add $@ %<
?S:d_strcoll:
?S: This variable conditionally defines HAS_STRCOLL if strcoll() is
?S: available to compare strings using collating information.
?S:.
?C:HAS_STRCOLL:
?C: This symbol, if defined, indicates that the strcoll routine
 is
?C: available to compare strings using collating information.
?C:.
?H:#$d_strcoll HAS_STRCOLL /**/
?H:.
?LINT:set d_strcoll
: see if strcoll exists
set strcoll d_strcoll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strcoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: End.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit serves as the goal which forces make to choose all the units that
?X: ask questions.  The $W on the ?MAKE: line is the list of all symbols wanted.
?X: To force any unit to be included, copy this unit to your private U directory
?X: and add the name of the unit desired to the ?MAKE: dependency line.
?X:
?MAKE:End: $W
?MAKE: -pick add $@ %<
?LINT:use $W
: end of configuration
 questions
echo " "
echo "End of configuration questions."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/End.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llround: Inlibc
?MAKE: -pick add $@ %<
?S:d_llround:
?S: This variable conditionally defines the HAS_LLROUND symbol, which
?S: indicates to the C program that the llround() routine is available
?S: to return the long long value nearest to x.
?S:.
?C:HAS_LLROUND:
```

```
?C: This symbol, if defined, indicates that the llround routine is
?C: available to return the nearest long long value.
?C:.
?H:#$d_llround HAS_LLROUND  /**/
?H:.
?LINT:set d_llround
: see if llround exists
set llround d_llround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msync.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msync.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:17  ram
?RCS: patch15: created
?RCS:
?MAKE:d_msync: Inlibc
?MAKE: -pick add $@ %<
?S:d_msync:
?S: This variable conditionally defines HAS_MSYNC if msync() is
?S: available to synchronize a mapped file.
?S:.
?C:HAS_MSYNC:
?C: This symbol, if defined, indicates that the msync system call is
?C: available to synchronize a mapped file.
?C:.
?H:#$d_msync HAS_MSYNC  /**/
?H:.
?LINT:set d_msync
: see if
 msync exists
set msync d_msync
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msync.U

No license file was found, but licenses were detected in source scan.

```
/*
* $Id: dup2.C,v 3.0.1.1 1994/01/24 13:58:37 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* Original Author: Larry Wall <lwall@netlabs.com>
*
* $Log: dup2.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:37  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/dup2.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: n.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: n.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:n c: contains
?MAKE: -pick add $@ %<
?S:n:
?S: This variable contains the -n flag if that is what causes the echo
?S: command to suppress newline.  Otherwise it is null.  Correct usage is
?S:     $echo $n "prompt for a question: $c".
?S:.
?S:c:
?S: This variable contains the \c string if that is what causes the echo
```

```
?S: command to suppress newline.
  Otherwise it is null.  Correct usage is
?S:     $echo $n "prompt for a question: $c".
?S:.
: first determine how to suppress newline on echo command
echo " "
echo "Checking echo to see how to suppress newlines..."
(echo "hi there\c" ; echo " ") >.echotmp
if $contains c .echotmp >/dev/null 2>&1 ; then
 echo "...using -n."
 n='-n'
 c=''
else
 cat <<'EOM'
...using \c
EOM
 n=''
 c='\c'
fi
echo $n "The star should be here-->$c"
echo '*'
rm -f .echotmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/n.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS:
?MAKE:i_stdint: Inhdr
?MAKE: -pick add $@ %<
?S:i_stdint:
?S: This variable conditionally defines the I_STDINT symbol, which
?S: indicates to the C program that <stdint.h> exists and should
?S: be included.
?S:.
?C:I_STDINT:
?C: This symbol, if defined, indicates that <stdint.h> exists and
?C: should be included.
?C:.
?H:#$i_stdint I_STDINT  /**/
?H:.
?LINT:set i_stdint
: see if stdint is available
set stdint.h i_stdint
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_stdint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn_v7ND.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Warn_v7ND.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:01:46  ram
?RCS: patch36: call ./v7 explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit warns V7 sites that they may not have a non-blocking read.
?X: This unit needs to be mentioned in End.U to get included.
?X:
?MAKE:Warn_v7ND: package Guess
?MAKE: -pick add $@ %<
: Warnings
if ./v7; then
 cat
 <<EOM

NOTE: many V7 systems do not have a way to do a non-blocking read.  If you
don't have any of FIONREAD, O_NDELAY, or rdchk(), the $package package
may not work as well as it might.  It might not work at all.
EOM
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn_v7ND.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:perladmin: cf_email Oldconfig Myread cat
```

```
?MAKE: -pick add $@ %<
?Y:TOP
?S:perladmin:
?S: Electronic mail address of the perl5 administrator.
?S:.
: Ask e-mail of administrator
$cat <<EOM

If you or somebody else will be maintaining perl at your site, please
fill in the correct e-mail address here so that they may be contacted
if necessary. You may enter "none" for no administrator.

EOM
case "$perladmin" in
") dflt="$cf_email";;
*) dflt="$perladmin";;
esac
rp='Perl administrator e-mail address'
. ./myread
perladmin="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perladmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sockatmarkproto: Hasproto d_socket
?MAKE: -pick add $@ %<
?S:d_sockatmarkproto:
?S: This variable conditionally defines the HAS_SOCKATMARK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the sockatmark() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SOCKATMARK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the sockatmark() function.  Otherwise, it is up
?C: to the program to supply one.  A good
```

```
 guess is
?C:  extern int sockatmark(int);
?C:.
?H:#$d_sockatmarkproto HAS_SOCKATMARK_PROTO /**/
?H:.
?LINT:set d_sockatmarkproto
: see if prototype for sockatmark is available
echo " "
set d_sockatmarkproto sockatmark $d_socket sys/socket.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sockatmarkproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rmdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rmdir.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_rmdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_rmdir:
?S: This variable conditionally defines HAS_RMDIR if rmdir() is
?S: available to remove directories.
?S:.
?C:HAS_RMDIR (RMDIR):
?C: This symbol, if defined, indicates that the rmdir routine is
?C: available to remove directories. Otherwise you should fork off a
?C: new process to exec
 /bin/rmdir.
?C:.
?H:#$d_rmdir HAS_RMDIR  /**/
?H:.
?LINT:set d_rmdir
: see if rmdir exists
set rmdir d_rmdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rmdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: man3dir.U,v 3.1 1999/07/08 20:52:19 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1999, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: man3dir.U,v $
?RCS: Revision 3.1  1999/07/08 20:52:19  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:10:34  ram
?RCS: patch61: created
?RCS:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man3 used instead
 of man everywhere.
?X: I then added various tests because perl5 has *lots* of man3
?X: pages with long file names. -- ADO
?X:
?MAKE:man3dir man3direxp man3ext installman3dir: cat nroff Loc Oldconfig \
 sed man1dir spackage package Getfile Setprefixvar Prefixit Prefixup \
 d_flexfnam privlib Myread test
?MAKE: -pick add $@ %<
?Y:TOP
?D:man3dir=''
?S:man3dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?D:man3direxp=''
?S:man3direxp:
?S: This variable is the same as the man3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installman3dir=''
```

```
?S:installman3dir:
?S: This variable is really the same as man3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only
 points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man3ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '3'.  The Makefile must supply the '.'.
?S: See man3dir.
?S:.
?T:prog tdflt
?LINT:change prefixvar
?LINT:set man3direxp
: determine where library module manual pages go
set man3dir man3dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages for many of the library modules.
EOM

case "$nroff" in
nroff)
 $cat <<'EOM'
However, you don't have nroff, so they're probably useless to you.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

case "$d_flexfnam" in
undef)
 $cat <<'EOM'
However, your system can't handle the long file names like File::Basename.3.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

echo "If you don't want the manual sources installed, answer 'none'."
?X: In 5.005_57 and earlier, I had the following notes:
?X:
 We do not use /usr/local/man/man3 because some man programs will
?X: only show the /usr/local/man/man3 contents, and not the system ones,
```

```
?X: thus man less will show the perl module less.pm, but not the system
?X: less command.  We might also conflict with Tcl man pages.
?X: However, something like /opt/perl/man/man3 is fine.
?X:
?X: However, opinion seems to be shifting such that 'man POSIX' ought
?X: to just work.  -- Andy Dougherty  July 8, 1999
?X:
?X: remove any trailing -3.0 or other version indication from $package
prog=`echo $package | $sed 's/-*[0-9.]*$//'`
case "$man3dir" in
") dflt=`echo "$man1dir" | $sed -e 's/man1/man3/g' -e 's/man\.1/man\.3/g'`
 if $test -d "$privlib/man/man3"; then
  cat <<EOM >&4

WARNING:  Previous versions of perl installed man3 pages into
$privlib/man/man3.  This version will suggest a
new default of $dflt.
EOM
  tdflt=$dflt
  dflt='n'
  rp='Do you wish to preserve the old behavior?(y/n)'
  . ./myread
  case "$ans" in
  y*) dflt="$privlib/man/man3"
 ;;
  *)  dflt=$tdflt ;;
  esac
   fi
 ;;
*) dflt="$man3dir" ;;
esac
case "$dflt" in
' ') dflt=none ;;
esac
echo " "
fn=dn+~
rp="Where do the $package library man pages (source) go?"
. ./getfile
prefixvar=man3dir
. ./setprefixvar

case "$man3dir" in
") man3dir=' '
 installman3dir=";;
esac

: What suffix to use on installed man pages
case "$man3dir" in
```

```
' ')
 man3ext='0'
 ;;
*)
 rp="What suffix should be used for the $package library man pages?"
 case "$man3ext" in
 ") case "$man3dir" in
  *3)  dflt=3 ;;
  *3p) dflt=3p ;;
  *3pm) dflt=3pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L3) dflt=L3;;
  *) dflt=3;;
  esac
  ;;
 *) dflt="$man3ext";;
 esac
 . ./myread
 man3ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/man3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endhent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endhent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endhent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endhent:
```

```
?S: This variable conditionally defines HAS_ENDHOSTENT if endhostent() is
?S: available to close whatever was being used for host queries.
?S:.
?C:HAS_ENDHOSTENT:
?C: This symbol, if defined, indicates that the endhostent() routine is
?C: available to close whatever was being used for host
 queries.
?C:.
?H:#$d_endhent HAS_ENDHOSTENT  /**/
?H:.
?LINT:set d_endhent
: see if endhostent exists
set endhostent d_endhent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endhent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_psignal.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_psignal.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_psignal: Inlibc
?MAKE: -pick add $@ %<
?S:d_psignal:
?S: This variable conditionally defines the HAS_PSIGNAL symbol, which
?S: indicates that the psignal() routine exists.  The psignal() routine
?S: prints a description of a signal on the standard error output.
?S:.
?C:HAS_PSIGNAL (PSIGNAL):
?C: This symbol, if defined, indicates
 that the psignal() routine exists.
?C:.
?H:#$d_psignal HAS_PSIGNAL  /**/
?H:.
?LINT:set d_psignal
: see if psignal exists
```

```
set psignal d_psignal
eval $inlibc

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_psignal.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isnormal: cat Compile Setvar rm_try
?MAKE: -pick add $@ %<
?S:d_isnormal:
?S: This variable conditionally defines the HAS_ISNORMAL symbol, which
?S: indicates to the C program that the isnormal() routine is available.
?S:.
?C:HAS_ISNORMAL:
?C: This symbol, if defined, indicates that the isnormal routine is
?C: available to check whether a double is normal (non-zero normalized).
?C:.
?H:#$d_isnormal HAS_ISNORMAL  /**/
?H:.
?LINT:set d_isnormal
: check for isnormal
echo "Checking to see if you have isnormal..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isnormal(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isnormal."
else
 val="$undef"
 echo "You do not have isnormal."
fi
$rm_try
set d_isnormal
eval $setvar

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnormal.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_semop.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_semop.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semop: Inlibc
?MAKE: -pick add $@ %<
?S:d_semop:
?S: This variable conditionally defines the HAS_SEMOP symbol, which
?S: indicates to the C program that the semop() routine is available.
?S:.
?C:HAS_SEMOP:
?C: This symbol, if defined, indicates that the semop() routine is
?C: available to execute semaphore operations.
?C:.
?H:#$d_semop
 HAS_SEMOP  /**/
?H:.
?LINT:set d_semop
: see if semop exists
set semop d_semop
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semop.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_quad quadtype uquadtype quadkind: \
 longsize intsize d_longlong longlongsize d_int64_t \
 Inhdr Setvar
?MAKE: -pick add $@ %<
?S:d_quad:
?S: This variable, if defined, tells that there's a 64-bit integer type,
?S: quadtype.
```

```
?S:.
?S:quadtype:
?S: This variable defines Quad_t to be something like long, int,
?S: long long, int64_t, or whatever type is used for 64-bit integers.
?S:.
?S:quadkind:
?S: This variable, if defined, encodes the type of a quad:
?S: 1 = int, 2 = long, 3 = long long, 4 = int64_t.
?S:.
?S:uquadtype:
?S: This variable defines Uquad_t to be something like unsigned long,
?S: unsigned int, unsigned long long, uint64_t, or whatever type is
?S: used for 64-bit integers.
?S:.
?C:HAS_QUAD:
?C: This
 symbol, if defined, tells that there's a 64-bit integer type,
?C: Quad_t, and its unsigned counterpart, Uquad_t. QUADKIND will be one
?C: of QUAD_IS_INT, QUAD_IS_LONG, QUAD_IS_LONG_LONG, QUAD_IS_INT64_T,
?C: or QUAD_IS___INT64.
?C:.
?H:#$d_quad HAS_QUAD /**/
?H:?%<:#ifdef HAS_QUAD
?H:?%<:#   define Quad_t $quadtype /**/
?H:?%<:#   define Uquad_t $uquadtype /**/
?H:?%<:#   define QUADKIND $quadkind /**/
?H:?%<:#   define QUAD_IS_INT 1
?H:?%<:#   define QUAD_IS_LONG 2
?H:?%<:#   define QUAD_IS_LONG_LONG 3
?H:?%<:#   define QUAD_IS_INT64_T 4
?H:?%<:#   define QUAD_IS___INT64 5
?H:?%<:#endif
?H:.
?LINT:set quadtype
?LINT:set uquadtype
: Check if 64bit ints have a quad type
echo " "
echo "Checking which 64-bit integer type we could use..." >&4
?X: We prefer quad types in order of int, long, long long, int64_t.

case "$intsize" in
8) val=int
  set quadtype
  eval $setvar
  val='"unsigned int"'
  set uquadtype
  eval $setvar
  quadkind=1
```

```
  ;;
*) case "$longsize" in
  8)
 val=long
     set quadtype
     eval $setvar
     val='"unsigned long"'
     set uquadtype
     eval $setvar
     quadkind=2
     ;;
  *) case "$d_longlong:$longlongsize" in
     define:8)
       val='"long long"'
       set quadtype
       eval $setvar
       val='"unsigned long long"'
       set uquadtype
       eval $setvar
       quadkind=3
       ;;
     *) case "$d_int64_t" in
        define)
          val=int64_t
          set quadtype
          eval $setvar
          val=uint64_t
          set uquadtype
          eval $setvar
          quadkind=4
          ;;
        esac
        ;;
     esac
     ;;
  esac
  ;;
esac

case "$quadtype" in
") echo "Alas, no 64-bit integer types in sight." >&4
 d_quad="$undef"
 ;;
*) echo "We could use '$quadtype' for 64-bit integers." >&4
 d_quad="$define"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/quadtype.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_atoll: Inlibc
?MAKE: -pick add $@ %<
?S:d_atoll:
?S: This variable conditionally defines the HAS_ATOLL symbol, which
?S: indicates to the C program that the atoll() routine is available.
?S:.
?C:HAS_ATOLL:
?C: This symbol, if defined, indicates that the atoll routine is
?C: available to convert strings into long longs.
?C:.
?H:#$d_atoll HAS_ATOLL  /**/
?H:.
?LINT:set d_atoll
: see if atoll exists
set atoll d_atoll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/atoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ptrdiff_t: Inlibc Setvar Compile rm_try cat
?MAKE: -pick add $@ %<
?S:d_ptrdiff_t:
?S: This symbol will be defined if the C compiler supports ptrdiff_t.
?S:.
?C:HAS_PTRDIFF_T:
?C: This symbol will be defined if the C compiler supports ptrdiff_t.
?C:.
?H:#$d_ptrdiff_t HAS_PTRDIFF_T  /**/
```

```
?H:.
?LINT:set d_ptrdiff_t
: check for ptrdiff_t
echo " "
echo "Checking to see if you have ptrdiff_t..." >&4
$cat >try.c <<EOCP
#include <stddef.h>
int main() { ptrdiff_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have ptrdiff_t."
else
 val="$undef"
 echo "You do not have ptrdiff_t."
fi
$rm_try
set d_ptrdiff_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ptrdiff_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_isless: cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isless:
?S: This variable conditionally defines the HAS_ISLESS symbol, which
?S: indicates to the C program that the isless() routine is available.
?S:.
?C:HAS_ISLESS:
?C: This symbol, if defined, indicates that the isless routine is
?C: available to do the isless function.
?C:.
?H:#$d_isless HAS_ISLESS  /**/
?H:.
?LINT:set d_isless
: check for isless
echo "Checking to see if you have isless..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isless(2.0, 1.0); }
EOCP
set try
```

```
if eval $compile; then
 val="$define"
 echo "You have isless."
else
 val="$undef"
 echo "You do not have isless."
fi
$rm_try
set d_isless
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isless.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_times.U,v 3.0.1.2 1995/07/25 14:07:50 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_times.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:50  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:14:00  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: What is the type returned by times() ?
?X:
?X: Force inclusion of <sys/types.h>
?X:INC: i_systypes
?MAKE:d_times clocktype:
 Csym Myread Typedef i_systimes
?MAKE: -pick add $@ %<
?S:d_times:
?S: This variable conditionally defines the HAS_TIMES symbol, which indicates
?S: that the times() routine exists.  The times() routine is normally
?S: provided on UNIX systems. You may have to include <sys/times.h>.
?S:.
```

```
?S:clocktype:
?S: This variable holds the type returned by times(). It can be long,
?S: or clock_t on BSD sites (in which case <sys/types.h> should be
?S: included).
?S:.
?C:HAS_TIMES (TIMES):
?C: This symbol, if defined, indicates that the times() routine exists.
?C: Note that this became obsolete on some systems (SUNOS), which now
?C: use getrusage(). It may be necessary to include <sys/times.h>.
?C:.
?C:Clock_t (CLOCKTYPE):
?C: This symbol holds the type returned by times(). It can be long,
?C: or clock_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_times HAS_TIMES  /**/
?H:#define Clock_t $clocktype /* Clock time */
?H:.
?T:val inc
: see if times exists
echo "
 "
if set times val -f d_times; eval $csym; $val; then
 echo 'times() found.' >&4
 d_times="$define"
 inc=''
 case "$i_systimes" in
 "$define") inc='sys/times.h';;
 esac
 rp="What is the type returned by times() on this system?"
 set clock_t clocktype long stdio.h sys/types.h $inc
 eval $typedef_ask
else
 echo 'times() NOT found, hope that will do.' >&4
 d_times="$undef"
?X: The following is needed for typedef (won't like an empty variable)
 clocktype='int'
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/d_times.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usrinc.U,v 1.1 2000/06/27 00:20:28 jhi Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: usrinc.U,v $
?RCS: Revision 1.1  2000/06/27 00:20:28  jhi
?RCS: Initial revision
?RCS:
?RCS: Revision 3.0.1.3  1997/02/28  16:27:12  ram
?RCS: patch61: don't ask for the include path unless they are on a MIPS
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:24:36  ram
?RCS: patch54: ensure that ./mips always exists (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:18:31  ram
?RCS: patch23: ensure usrinc value is preserved across sessions (WED)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:09:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usrinc incpath mips_type: test cat echo n c Getfile Guess \
 Oldconfig eunicefix contains rm sysroot cc
?MAKE: -pick add $@ %<
?S:usrinc:
?S: This variable holds the path of the include files, which is
?S: usually /usr/include. It is mainly used by other Configure units.
?S:.
?S:incpath:
?S: This variable must precede the normal include path to get the
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
?S:.
?S:mips_type:
?S: This variable holds the environment type for the mips system.
?S: Possible values are "BSD 4.3" and "System V".
?S:.
?D:usrinc='/usr/include'
?LINT:extern cppflags
?LINT:create mips
?T:xxx_prompt
?F:./mips
: What should the include directory be ?
: Use sysroot if set, so findhdr looks in the right place.
echo " "
$echo $n "Hmm...  $c"
dflt="$sysroot/usr/include"
```

```
incpath=''
?X: mips_type is used later, to add -DSYSTYPE_BSD43
 to cppflags if needed.
mips_type=''
?X:
?X: Cannot put the following in Guess, or we get a circular dependency.
?X:
if $test -f /bin/mips && /bin/mips; then
 echo "Looks like a MIPS system..."
 $cat >usr.c <<'EOCP'
#ifdef SYSTYPE_BSD43
/bsd43
#endif
EOCP
 if $cc $cppflags -E usr.c > usr.out && $contains / usr.out >/dev/null 2>&1; then
  dflt='/bsd43/usr/include'
  incpath='/bsd43'
  mips_type='BSD 4.3'
 else
  mips_type='System V'
 fi
 $rm -f usr.c usr.out
 echo "and you're compiling with the $mips_type compiler and libraries."
 xxx_prompt=y
 echo "exit 0" >mips
else
 echo "Doesn't look like a MIPS system."
 xxx_prompt=n
 echo "exit 1" >mips
fi
chmod +x mips
$eunicefix mips
case "$usrinc" in
'') ;;
*) dflt="$usrinc";;
esac
case "$xxx_prompt" in
y) fn=d/
 echo " "
 rp='Where are the include files you want to use?'
 . ./getfile
 usrinc="$ans"
 ;;
*) usrinc="$dflt"
 ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/usrinc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sfio.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sfio.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:27  ram
?RCS: patch61: created
?RCS:
?MAKE:i_sfio: Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_sfio:
?S: This variable conditionally defines the I_SFIO symbol,
?S: and indicates whether a C program should include <sfio.h>.
?S:.
?C:I_SFIO:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sfio.h>.
?C:.
?H:#$i_sfio I_SFIO  /**/
?H:.
?LINT:set
 i_sfio
: see if sfio.h is available
set sfio.h i_sfio
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sfio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isfinite: Inlibc cat Compile rm_try Setvar
```

```
?MAKE: -pick add $@ %<
?S:d_isfinite:
?S: This variable conditionally defines the HAS_ISFINITE symbol, which
?S: indicates to the C program that the isfinite() routine is available.
?S:.
?C:HAS_ISFINITE:
?C: This symbol, if defined, indicates that the isfinite routine is
?C: available to check whether a double is finite (non-infinity non-NaN).
?C:.
?LINT:set d_isfinite
?H:#$d_isfinite HAS_ISFINITE  /**/
?H:.
: check for isfinite
echo "Checking to see if you have isfinite..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isfinite(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isfinite."
else
 val="$undef"
 echo
 "You do not have isfinite."
fi
$rm_try
set d_isfinite
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isfinite.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: warnflags.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: warnflags.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:10:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:warnflags: cat cc contains Myread Guess Oldconfig Findhdr
?MAKE: -pick add $@ %<
?S:warnflags:
?S: This variable contains any additional C compiler flags to generate
?S: warnings from the compiler. It is up to the Makefile to use this.
?S:.
: offer additional
 warning flags for compilation
$cat <<EOH

You may wish to compile with extra compiler warnings enabled.
Note that doing so enhances your chance of receiving your free set of steak
knives, particularly if you find any bugs and report them.
If you don't want extra warnings, answer "none".

EOH
case "$warnflags" in
") case "$cc" in
 *gcc*)
  dflt="-Wall -Wno-comment"
  if $contains 'fprintf' `./findhdr stdio.h` >/dev/null 2>&1; then
   :
  else
   dflt="$dflt -Wno-implicit"
  fi
  ;;
 *) dflt="none";;
 esac
 ;;
' ') dflt="none";;
*) dflt="$warnflags";;
esac

rp="Any $cc flags to enable warnings?"
. ./myread
case "$ans" in
none) warnflags=' ';;
*) warnflags="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/warnflags.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_strxfrm.U 1 2006-08-24 12:32:52Z rmanfredi $

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_strxfrm.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:04  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strxfrm: Inlibc
?MAKE: -pick add $@ %<
?S:d_strxfrm:
?S: This variable conditionally defines HAS_STRXFRM if strxfrm() is
?S: available to transform strings.
?S:.
?C:HAS_STRXFRM:
?C: This symbol, if defined, indicates that the strxfrm() routine is
?C: available to transform
 strings.
?C:.
?H:#$d_strxfrm HAS_STRXFRM /**/
?H:.
?LINT:set d_strxfrm
: see if strxfrm exists
set strxfrm d_strxfrm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strxfrm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_system.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_system.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:07:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_system: Inlibc
?MAKE: -pick add $@ %<
?S:d_system:
?S: This variable conditionally defines HAS_SYSTEM if system() is
?S: available to issue a shell command.
?S:.
?C:HAS_SYSTEM (SYSTEM):
?C: This symbol, if defined, indicates that the system routine is
?C: available to issue a shell command.
?C:.
?H:#$d_system HAS_SYSTEM /**/
?H:.
?LINT:set
 d_system
: see if system exists
set system d_system
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_system.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: html3dir.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: html3dir.U,v $
?RCS:
?MAKE:html3dir html3direxp installhtml3dir: cat sed Loc Myread \
 spackage test Getfile Setprefixvar Prefixit Prefixup html1dir
?MAKE: -pick add $@ %<
?Y:TOP
?D:html3dir=''
?S:html3dir:
?S: This variable contains the name of the directory in which html
?S: source pages are to be put.  This directory is for pages
?S: that describe libraries or modules.  It is intended to
?S: correspond roughly to section 3 of the Unix manuals.
?S:.
```

```
?D:html3direxp="
?S:html3direxp:
?S: This variable
 is the same as the html3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installhtml3dir="
?S:installhtml3dir:
?S: This variable is really the same as html3direxp, unless you are
?S: using a different installprefix.  For extra portability, you
?S: should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set html3direxp
?LINT:set installhtml3dir
: determine where html pages for libraries and modules go
set html3dir html3dir none
eval $prefixit
$cat <<EOM

If you wish to install html files for modules associated with $spackage,
indicate the appropriate directory here.  To skip installing html files,
answer "none".
EOM
: There is no obvious default.  If they have specified html1dir, then
: try to key off that, possibly changing .../html1 into .../html3.
case "$html3dir" in
") html3dir=`echo "$html1dir" | $sed 's/1$/3$/'` ;;
*) dflt=$html3dir ;;
esac
fn=dn+~
rp="Directory for the $spackage module
 html pages?"
. ./getfile
prefixvar=html3dir
. ./setprefixvar
: Use ' ' for none so value is preserved next time through Configure
$test X"$html3dir" = "X" && html3dir=' '
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/html3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ndbm.U,v 3.0.1.1 1995/05/12 12:16:53 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_ndbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:53  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_ndbm i_gdbmndbm i_gdbm_ndbm d_ndbm d_ndbm_h_uses_prototypes \
 d_gdbmndbm_h_uses_prototypes d_gdbm_ndbm_h_uses_prototypes: \
    Inhdr Inlibc Setvar test d_cplusplus extern_C echo Protochk
?MAKE: -pick add $@ %<
?S:i_ndbm:
?S: This
 variable conditionally defines the I_NDBM symbol, which
?S: indicates to the C program that <ndbm.h> exists and should
?S: be included.
?S:.
?C:I_NDBM:
?C: This symbol, if defined, indicates that <ndbm.h> exists and should
?C: be included.
?C:.
?S:i_gdbmndbm:
?S: This variable conditionally defines the I_GDBMNDBM symbol, which
?S: indicates to the C program that <gdbm/ndbm.h> exists and should
?S: be included.  This was the location of the ndbm.h compatibility file
?S: in RedHat 7.1.
?S:.
?C:I_GDBMNDBM:
?C: This symbol, if defined, indicates that <gdbm/ndbm.h> exists and should
?C: be included.  This was the location of the ndbm.h compatibility file
?C: in RedHat 7.1.
?C:.
?S:i_gdbm_ndbm:
?S: This variable conditionally defines the I_GDBM_NDBM symbol, which
?S: indicates to the C program that <gdbm-ndbm.h> exists and should
?S: be included.  This is the location of the ndbm.h compatibility file
?S: in Debian 4.0.
?S:.
?C:I_GDBM_NDBM:
?C: This symbol, if defined, indicates
 that <gdbm-ndbm.h> exists and should
?C: be included.  This is the location of the ndbm.h compatibility file
?C: in Debian 4.0.
```

?C:.
?S:d_ndbm:
?S: This variable conditionally defines the HAS_NDBM symbol, which
?S: indicates that both the ndbm.h include file and an appropriate ndbm
?S: library exist. Consult the different i_*ndbm variables
?S: to find out the actual include location. Sometimes, a system has the
?S: header file but not the library. This variable will only be set if
?S: the system has both.
?S:.
?C:HAS_NDBM:
?C: This symbol, if defined, indicates that some form of ndbm.h or compatibility
?C: include exists, along with the appropriate library.
?C:.
?S:d_ndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling
 when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative ndbm.h include files.
?S:.
?C:NDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <ndbm.h> uses real ANSI C
?C: prototypes instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?S:d_gdbmndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the gdbm/ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative
 ndbm.h include files.
?S:.
?C:GDBMNDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <gdbm/ndbm.h> uses real ANSI C
?C: prototypes instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?S:d_gdbm_ndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the gdbm-ndbm.h include file uses real ANSI C

```
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative ndbm.h include files.
?S:.
?C:GDBM_NDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <gdbm-ndbm.h> uses real ANSI C
?C: prototypes
 instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?H:#$i_ndbm I_NDBM /**/
?H:#$i_gdbmndbm I_GDBMNDBM /**/
?H:#$i_gdbm_ndbm I_GDBM_NDBM /**/
?H:#$d_ndbm HAS_NDBM /**/
?H:#$d_ndbm_h_uses_prototypes NDBM_H_USES_PROTOTYPES /**/
?H:#$d_gdbmndbm_h_uses_prototypes GDBMNDBM_H_USES_PROTOTYPES /**/
?H:#$d_gdbm_ndbm_h_uses_prototypes GDBM_NDBM_H_USES_PROTOTYPES /**/
?H:.
?T:d_dbm_open name hdr ihdr ndbm_hdr_protochk
?LINT:set d_ndbm d_gdbmndbm_h_uses_prototypes d_gdbm_ndbm_h_uses_prototypes
d_ndbm_h_uses_prototypes
: see if ndbm.h is available
set ndbm.h i_ndbm
eval $inhdr
: Compatibility location for RedHat 7.1
set gdbm/ndbm.h i_gdbmndbm
eval $inhdr
: Compatibility location for Debian 4.0
set gdbm-ndbm.h i_gdbm_ndbm
eval $inhdr

val="$undef"
if $test "$i_ndbm" = "$define" -o "$i_gdbmndbm" = "$define" -o "$i_gdbm_ndbm" = "$define"; then
 : see if dbm_open exists
 set
 dbm_open d_dbm_open
 eval $inlibc
 case "$d_dbm_open" in
 $undef)
  i_ndbm="$undef"
  i_gdbmndbm="$undef"
  i_gdbm_ndbm="$undef"
  echo "We won't be including <ndbm.h>"
  val="$undef"
  ;;
```

```
 *) val="$define"
    ;;
 esac
fi
set d_ndbm
eval $setvar

ndbm_hdr_protochk='name=$1; hdr=$2;
eval "ihdr=\$""i_$name";
val="$undef";
if $test "$ihdr" = "$define"; then
 $echo "Checking if your <$hdr> uses prototypes..." >&4;
 case "$d_cplusplus" in
 $define) ./protochk "$extern_C void dbm_close(DBM *);" literal "extern \"C\" {" $ihdr $hdr literal "}" &&
val="$define" ;;
 *) ./protochk "$extern_C void dbm_close(int, int);" $ihdr $hdr || val="$define" ;;
 esac;
 case "$val" in
 $define) $echo "Your <$hdr> seems to have prototypes";;
 *) $echo "Your <$hdr> does not seem to have prototypes";;
 esac;
fi;
set "d_${name}_h_uses_prototypes";
eval $setvar'

set ndbm ndbm.h
eval $ndbm_hdr_protochk
set gdbmndbm gdbm/ndbm.h
eval $ndbm_hdr_protochk
set gdbm_ndbm gdbm-ndbm.h
eval $ndbm_hdr_protochk

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_ndbm.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_atanh: Inlibc
?MAKE: -pick add $@ %<
?S:d_atanh:
?S: This variable conditionally defines the HAS_ATANH symbol, which
?S: indicates to the C program that the atanh() routine is available.
?S:.
?C:HAS_ATANH:
?C: This symbol, if defined, indicates that the atanh routine is
```

```
?C: available to do the inverse hyperbolic tangent function.
?C:.
?H:#$d_atanh HAS_ATANH  /**/
?H:.
?LINT:set d_atanh
: see if atanh exists
set atanh d_atanh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_atanh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_off64_t: \
 Inlibc Setvar Compile rm_try cat lseeksize
?MAKE: -pick add $@ %<
?S:d_off64_t:
?S: This symbol will be defined if the C compiler supports off64_t.
?S:.
?C:HAS_OFF64_T:
?C: This symbol will be defined if the C compiler supports off64_t.
?C:.
?H:#$d_off64_t HAS_OFF64_T  /**/
?H:.
?LINT:set d_off64_t
: check for off64_t
echo " "
echo "Checking to see if you have off64_t..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <unistd.h>
int main() { off64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have off64_t."
else
 val="$undef"
 echo "You do not have off64_t."
 case "$lseeksize" in
```

```
 8) echo "(Your off_t is 64 bits, so you could use that.)" ;;
 esac
fi
$rm_try
set
 d_off64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_off64_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tminsys.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tminsys.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_tminsys: contains Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_tminsys:
?S: This variable conditionally defines TM_IN_SYS if this system
?S: declares "struct tm" in <sys/time.h> rather than <time.h>.
?S:.
?C:TM_IN_SYS (TMINSYS):
?C: This symbol is defined if this system declares "struct tm" in
?C: <sys/time.h> rather than <time.h>.
  We can't just say
?C: -I/usr/include/sys because some systems have both time files, and
?C: the -I trick gets the wrong one.
?C:.
?H:#$d_tminsys TM_IN_SYS  /**/
?H:.
?LINT:set d_tminsys
: see if struct tm is defined in sys/time.h
echo " "
if $contains 'struct tm' `./findhdr time.h` >/dev/null 2>&1 ; then
 echo "You have struct tm defined in <time.h> rather than <sys/time.h>." >&4
 val="$undef"
else
```

```
 echo "You have struct tm defined in <sys/time.h> rather than <time.h>." >&4
 val="$define"
fi
set d_tminsys
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tminsys.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017-2018, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_dup3: Inlibc
?MAKE: -pick add $@ %<
?S:d_dup3:
?S: This variable conditionally defines HAS_DUP3 if dup3() is
?S: available to duplicate file descriptors.
?S:.
?C:HAS_DUP3:
?C: This symbol, if defined, indicates that the dup3 routine is
?C: available to duplicate file descriptors.
?C:.
?H:#$d_dup3 HAS_DUP3 /**/
?H:.
?LINT:set d_dup3
: see if dup3 exists
set dup3 d_dup3
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dup3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_internet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: d_internet.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:04  ram
?RCS: patch10: most mailers support Internet addresses nowadays (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_internet: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_internet:
?S: This variable conditionally defines the INTERNET symbol, which
?S: indicates to the C program that there is a mailer available
 which
?S: supports internet-style addresses (user@site.domain).
?S:.
?C:INTERNET:
?C: This symbol, if defined, indicates that there is a mailer available
?C: which supports internet-style addresses (user@site.domain).
?C:.
?H:#$d_internet INTERNET /**/
?H:.
?LINT:set d_internet
: check for internet mailer
dflt=y
case "$d_internet" in
"$undef") dflt=n;;
esac
cat <<EOM

Most mailers can deliver mail to addresses of the INTERNET persuasion,
such as user@host.edu.  Some older mailers, however, require the complete
path to the destination to be specified in the address.

EOM
rp="Does your mailer understand INTERNET addresses?"
. ./myread
case "$ans" in
y*) val="$define";;
*)  val="$undef";;
esac
set d_internet
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_internet.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_gconvert.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:38  ram
?RCS: patch61: integrated new unit from perl5
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:55:59  ram
?RCS: patch56: improved comments about the Gconvert macro (ADO)
?RCS: patch56: force compile-link test since it may exist but be unusable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:51  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_Gconvert:
 cat cc ccflags ldflags libs rm_try _o
?MAKE: -pick add $@ %<
?S:d_Gconvert:
?S: This variable holds what Gconvert is defined as to convert
?S: floating point numbers into strings. It could be 'gconvert'
?S: or a more complex macro emulating gconvert with gcvt() or sprintf.
?S:.
?C:Gconvert:
?C: This preprocessor macro is defined to convert a floating point
?C: number to a string without a trailing decimal point.  This
?C: emulates the behavior of sprintf("%g"), but is sometimes much more
?C: efficient.  If gconvert() is not available, but gcvt() drops the
?C: trailing decimal point, then gcvt() is used.  If all else fails,
?C: a macro using sprintf("%g") is used. Arguments for the Gconvert
?C: macro are: value, number of digits, whether trailing zeros should
?C: be retained, and the output buffer.
?C: Possible values are:
?C:  d_Gconvert='gconvert((x),(n),(t),(b))'
?C:  d_Gconvert='gcvt((x),(n),(b))'
?C:  d_Gconvert='sprintf((b),"%.*g",(n),(x))'
?C: The last two assume trailing zeros should
 not be kept.
?C:.
?H:#define Gconvert(x,n,t,b) $d_Gconvert
```

```
?H:.
?T: xxx_list xxx_convert
?F:!try
?X:
: Check how to convert floats to strings.
echo " "
echo "Checking for an efficient way to convert floats to strings."
?X: We want to be sure to drop trailing decimal points (perl5
?X: needs this).
$cat >try.c <<'EOP'
#ifdef TRY_gconvert
#define Gconvert(x,n,t,b) gconvert((x),(n),(t),(b))
char *myname = "gconvert";
#endif
#ifdef TRY_gcvt
#define Gconvert(x,n,t,b) gcvt((x),(n),(b))
char *myname = "gcvt";
#endif
#ifdef TRY_sprintf
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(x))
char *myname = "sprintf";
#endif

#include <stdio.h>

int
checkit(expect, got)
char *expect;
char *got;
{
   if (strcmp(expect, got)) {
  printf("%s oddity:  Expected %s, got %s\n",
   myname, expect, got);
  exit(1);
 }
}

int
int main()
{
 char buf[64];
 buf[63] = '\0';

 /* This must be 1st test on (which?) platform */
 /* Alan Burlison <AlanBurlsin@unn.unisys.com> */
 Gconvert(0.1, 8, 0, buf);
 checkit("0.1",
```

```
 buf);

 Gconvert(1.0, 8, 0, buf);
 checkit("1", buf);

 Gconvert(0.0, 8, 0, buf);
 checkit("0", buf);

 Gconvert(-1.0, 8, 0, buf);
 checkit("-1", buf);

 /* Some Linux gcvt's give 1.e+5 here. */
 Gconvert(100000.0, 8, 0, buf);
 checkit("100000", buf);

 /* Some Linux gcvt's give -1.e+5 here. */
 Gconvert(-100000.0, 8, 0, buf);
 checkit("-100000", buf);

 exit(0);
}
EOP
?X: List of order in which to search for functions.
?X: Usual order of efficiency is gconvert gcvt sprintf
?X: Respect a previous or hinted value.
case "$d_Gconvert" in
gconvert*) xxx_list='gconvert gcvt sprintf' ;;
gcvt*) xxx_list='gcvt gconvert sprintf' ;;
sprintf*) xxx_list='sprintf gconvert gcvt' ;;
*) xxx_list='gconvert gcvt sprintf' ;;
esac

for xxx_convert in $xxx_list; do
 echo "Trying $xxx_convert"
 $rm_try
 if $cc $ccflags -DTRY_$xxx_convert $ldflags -o try \
  try.c $libs > /dev/null 2>&1 ; then
  echo "$xxx_convert" found. >&4
  if ./try; then
   echo "I'll use $xxx_convert to convert floats
 into a string." >&4
   break;
  else
   echo "...But $xxx_convert didn't work as I expected."
  fi
 else
  echo "$xxx_convert NOT found." >&4
 fi
```

```
done

case "$xxx_convert" in
gconvert) d_Gconvert='gconvert((x),(n),(t),(b))' ;;
gcvt) d_Gconvert='gcvt((x),(n),(b))' ;;
*) d_Gconvert='sprintf((b),"%.*g",(n),(x))' ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gconvert.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpagsz.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:10  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpagsz pagesize: Oldconfig Myread Inlibc cat contains +cc +ccflags \
 libs rm Findhdr
?MAKE: -pick add $@ %<
?S:d_getpagsz:
?S: This variable conditionally defines HAS_GETPAGESIZE if getpagesize()
?S: is available to get the system page size.
?S:.
?S:pagesize (pagsize):
?S: This
 variable holds the size in bytes of a system page.
?S:.
?C:HAS_GETPAGESIZE (GETPAGESIZE):
?C: This symbol, if defined, indicates that the getpagesize system call
?C: is available to get system page size, which is the granularity of
?C: many memory management calls.
?C:.
?X: Don't name it PAGESIZE, this is sometimes used by <sys/param.h>
?C:PAGESIZE_VALUE (PAGSIZE):
?C: This symbol holds the size in bytes of a system page (obtained via
```

```
?C: the getpagesize() system call at configuration time or asked to the
?C: user if the system call is not available).
?C:.
?H:#$d_getpagsz HAS_GETPAGESIZE  /**/
?H:#define PAGESIZE_VALUE $pagesize /* System page size, in bytes */
?H:.
?F:!page
?T:guess
?LINT:set d_getpagsz
: see if getpagesize exists
set getpagesize d_getpagsz
eval $inlibc

@if pagesize || PAGESIZE_VALUE
: determine the system page size
echo " "
guess=' (OK to guess)'
case "$pagesize" in
")
 $cat >page.c <<EOP
extern int getpagesize();
int main()
{
 printf("%d\n", getpagesize());
}
EOP
 echo
 "Computing the granularity of memory management calls..." >&4
 dflt='4096'
 case "$d_getpagsz" in
 "$define")
  if $cc $ccflags -o page page.c $libs >/dev/null 2>&1; then
   dflt=`./page`
   guess=''
  else
   echo "(I can't seem to compile the test program--guessing)"
  fi
  ;;
 *)
  if $cc $ccflags -o page page.c $libs -lPW >/dev/null 2>&1; then
   dflt=`./page`
   guess=''
   echo "(For your eyes only: I used the getpagesize() from -lPW.)"
  else
   if $contains PAGESIZE `./findhdr sys/param.h` >/dev/null 2>&1; then
    $cat >page.c <<EOP
#include <sys/param.h>
int main()
```

```
{
 printf("%d\n", PAGESIZE);
}
EOP
    if $cc $ccflags -o page page.c $libs >/dev/null 2>&1; then
     dflt=`./page`
     guess=''
     echo "(Using value of PAGESIZE found in <sys/param.h>.)"
    fi
   fi
  fi
  ;;
 esac
 ;;
*) dflt="$pagesize"; guess=';;
esac
rp="What is the system page size, in bytes$guess?"
. ./myread
pagesize=$ans
$rm -f page.c page

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpagsz.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getitimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_getitimer:
?S: This variable conditionally defines the HAS_GETITIMER symbol, which
?S: indicates to the C program that the getitimer() routine is available.
?S:.
?C:HAS_GETITIMER:
?C: This symbol, if defined, indicates that the getitimer routine is
?C: available to return interval timers.
?C:.
?H:#$d_getitimer HAS_GETITIMER  /**/
?H:.
?LINT:set d_getitimer
: see if getitimer exists
```

```
set getitimer d_getitimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getitimer.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:siteman1dir siteman1direxp installsiteman1dir: Getfile \
 Setprefixvar prefix siteprefix man1dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:siteman1dir=''
?S:siteman1dir:
?S: This variable contains the name of the directory in which site-specific
?S: manual source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After perl
 has been installed, users may install their own local
?S: man1 pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:siteman1direxp=''
?S:siteman1direxp:
?S: This variable is the same as the siteman1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsiteman1dir=''
?S:installsiteman1dir:
?S: This variable is really the same as siteman1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsiteman1dir
```

```
?LINT:set siteman1dir
?LINT:set siteman1direxp
: determine where add-on manual pages go
case "$siteman1dir" in
") dflt=`echo $man1dir | $sed "s#^$prefix#$siteprefix#"` ;;
*) dflt=$siteman1dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname
 where the site-specific manual pages should be installed?'
. ./getfile
prefixvar=siteman1dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteman1dir.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_castneg.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:11:21  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS: patch54: added improved test case for Interactive Unix
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:10:50  ram
?RCS: patch36: don't forget to tell user about compilation failures (ADO)
?RCS: patch36: declare signal handler correctly using 'signal_t' (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Can
 the compiler cast negative / odd floats to unsigned values.
?X:
?MAKE:d_castneg castflags: cat +cc +ccflags rm_try Setvar signal_t
```

```
?MAKE: -pick add $@ %<
?S:d_castneg:
?S: This variable conditionally defines CASTNEG, which indicates
?S: wether the C compiler can cast negative float to unsigned.
?S:.
?S:castflags:
?S: This variable contains a flag that precise difficulties the
?S: compiler has casting odd floating values to unsigned long:
?S:  0 = ok
?S:  1 = couldn't cast < 0
?S:  2 = couldn't cast >= 0x80000000
?S:  4 = couldn't cast in argument expression list
?S:.
?C:CASTNEGFLOAT:
?C: This symbol is defined if the C compiler can cast negative
?C: numbers to unsigned longs, ints and shorts.
?C:.
?C:CASTFLAGS:
?C: This symbol contains flags that say what difficulties the compiler
?C: has casting odd floating values to unsigned long:
?C:  0 = ok
?C:  1 = couldn't cast < 0
?C:  2 = couldn't cast >= 0x80000000
?C:  4 = couldn't cast in argument expression list
?C:.
?H:#$d_castneg CASTNEGFLOAT  /**/
?H:#define
 CASTFLAGS $castflags  /**/
?H:.
?F:!try
?LINT:set d_castneg
: check for ability to cast negative floats to unsigned
echo " "
echo 'Checking whether your C compiler can cast negative float to unsigned.' >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <signal.h>
$signal_t blech() { exit(7); }
$signal_t blech_in_list() { exit(4); }
unsigned long dummy_long(p) unsigned long p; { return p; }
unsigned int dummy_int(p) unsigned int p; { return p; }
unsigned short dummy_short(p) unsigned short p; { return p; }
int main()
{
 double f = -123.;
 unsigned long along;
 unsigned int aint;
 unsigned short ashort;
```

```
 int result = 0;

 signal(SIGFPE, blech);
 along = (unsigned long)f;
 aint = (unsigned int)f;
 ashort = (unsigned short)f;
 if (along != (unsigned long)-123)
  result |= 1;
 if (aint != (unsigned int)-123)
  result |= 1;
 if (ashort != (unsigned short)-123)
  result |= 1;
 f = (double)0x40000000;
 f = f + f;
 along = 0;
 along = (unsigned long)f;
 if
 (along != 0x80000000)
  result |= 2;
 f -= 1.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x7fffffff)
  result |= 1;
 f += 2.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x80000001)
  result |= 2;
 if (result)
  exit(result);
?X:
?X: The following is a test for Interactive Unix Version 4.1, which
?X: has an 'improved' compiler which can correctly cast negative
?X: floats in expression lists, but apparently not in argument lists.
?X: Contributed by Winfried Koenig <win@incom.rhein-main.de>
?X:
 signal(SIGFPE, blech_in_list);
 f = 123.;
 along = dummy_long((unsigned long)f);
 aint = dummy_int((unsigned int)f);
 ashort = dummy_short((unsigned short)f);
 if (along != (unsigned long)123)
  result |= 4;
 if (aint != (unsigned int)123)
  result |= 4;
 if (ashort != (unsigned short)123)
  result |= 4;
```

```
 exit(result);

}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 ./try
 castflags=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 castflags=7
fi
case
 "$castflags" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_castneg
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_castneg.U
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```
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?RCS:
?MAKE:d_getmnt: Inlibc
?MAKE: -pick add $@ %<
?S:d_getmnt:
?S: This variable conditionally defines the HAS_GETMNT symbol, which
?S: indicates to the C program that the getmnt() routine is available
?S: to retrieve one or more mount info blocks by filename.
?S:.
?C:HAS_GETMNT:
?C: This symbol, if defined, indicates that the getmnt routine is
?C: available to get filesystem mount info by filename.
?C:.
?H:#$d_getmnt HAS_GETMNT  /**/
?H:.
```

```
?LINT:set d_getmnt
: see if getmnt exists
set getmnt d_getmnt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getmnt.U
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```
?RCS: $Id: libnlist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libnlist.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:08:02  ram
?RCS: patch61: added usrinc and mips on the dependency line
?RCS: patch61: make sure we call ./mips
?RCS: patch61: added a ?LINT: hint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libnlist: Loc libpth Guess usrinc _a
?MAKE: -pick add $@ %<
?S:libnlist (libmld):
?S: This variable contains the name of the library required to
 get the
?S: definition of the nlist() function.  On a MIPS RISC/OS box, it is -lmld.
?S: Under Sys Vr4, it is -lelf.  Otherwise, its value is empty.
?S:.
?T:xxx
?LINT:use usrinc
: see if we need a special library for 'nlist()'
echo " "
: How about doing this if nlist is not in libc...
if ./mips ; then
 libnlist='-lmld'
else
 xxx=`./loc libelf$_a x $libpth`
 case "$xxx" in
 x)  ;;
 *)
```

```
  libnlist="$xxx"
  ;;
 esac
fi
case "$libnlist" in
") echo "No special library for nlist() seems necessary." >&4
 ;;
*)  echo "nlist() can be found in $libnlist." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libnlist.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uselongdouble: Myread Oldconfig Setvar cat test usemorebits
?MAKE: -pick add $@ %<
?Y:TOP
?S:uselongdouble:
?S: This variable conditionally defines the USE_LONG_DOUBLE symbol,
?S: and indicates that long doubles should be used when available.
?S:.
?C:USE_LONG_DOUBLE:
?C: This symbol, if defined, indicates that long doubles should
?C: be used when available.
?C:.
?H:?%<:#ifndef USE_LONG_DOUBLE
?H:?%<:#$uselongdouble USE_LONG_DOUBLE  /**/
?H:?%<:#endif
?H:.
?LINT:extern ccflags
?LINT:use usemorebits
?F:!uselongdouble.cbu
: Check for uselongdouble support
case "$ccflags" in
*-DUSE_LONG_DOUBLE*|*-DUSE_MORE_BITS*) uselongdouble="$define" ;;
esac

case "$uselongdouble" in
$define|true|[yY]*) dflt='y';;
*)
```

```
 dflt='n';;
esac
cat <<EOM

Perl can be built to take advantage of long doubles which
(if available) may give more accuracy and range for floating point numbers.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Try to use long doubles if available?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set uselongdouble
eval $setvar

case "$uselongdouble" in
true|[yY]*) uselongdouble="$define" ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that long doubles should be used,
: we may need to set or change some other defaults.
if $test -f uselongdouble.cbu; then
   echo "Your platform has some specific hints regarding long doubles, using them..."
   . ./uselongdouble.cbu
else
   case "$uselongdouble" in
 $define)
  $cat <<EOM
(Your platform does not have any specific hints for long doubles.)
EOM
 ;;
   esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/uselongdbl.U
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```
?RCS: $Id: d_SHM_MAC.U 1 2006-08-24 12:32:52Z rmanfredi $
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_SHM_MAC.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_SHM_MAC d_SHM_PRM d_SHM_SEG d_SHM_IMMU: cat d_shm test rm +cc +ccflags
?MAKE: -pick add $@ %<
?S:d_SHM_MAC:
?S: Sometimes, the SHMLBA manifest needs sys/sysmacros.h, usually for
?S: the ctob() macro.
?S:.
?S:d_SHM_PRM:
?S: Sometimes, the SHMLBA manifest needs sys/param.h, usually for the
?S: NBPC constant.
?S:.
?S:d_SHM_SEG:
?S: Sometimes,
 the SHMLBA manifest needs sys/seg.h, usually for the
?S: SNUMSHFT constant.
?S:.
?S:d_SHM_IMMU:
?S: Sometimes, the SHMLBA manifest needs sys/immu.h, usually for the
?S: stob() macro.
?S:.
?C:SHMLBA_WANTS_SYSMACROS:
?C: This value tells us to include <sys/sysmacros.h> because SHMLBA
?C: needs something from there, probably the ctob() macro.
?C:.
?C:SHMLBA_WANTS_PARAM:
?C: This value tells us to include <sys/param.h> because SHMLBA needs
?C: something from there, probably the NBPC constant.
?C:.
?C:SHMLBA_WANTS_SEG:
?C: This value tells us to include <sys/seg.h> because SHMLBA needs
?C: something from there, probably the SNUMSHFT constant.
?C:.
?C:SHMLBA_WANTS_IMMU:
?C: This value tells us to include <sys/immu.h> because SHMLBA needs
?C: something from there, probably the stob() macro.  (tower_600 only?)
?C:.
?H:#$d_SHM_MAC SHMLBA_WANTS_SYSMACROS /* SHMLBA wants ctob()? */
?H:#$d_SHM_PRM SHMLBA_WANTS_PARAM /* SHMLBA wants NBPC? */
?H:#$d_SHM_SEG SHMLBA_WANTS_SEG /* SHMLBA wants
 SNUMSHFT? */
?H:#$d_SHM_IMMU SHMLBA_WANTS_IMMU /* SHMLBA wants stob()? */
```

```
?H:.
?T:flags D_sys_immu D_sys_seg D_sys_sysmacros D_sys_param
: check for SHMLBA braindamage
d_SHM_MAC="$undef"
d_SHM_PRM="$undef"
d_SHM_SEG="$undef"
d_SHM_IMMU="$undef"
if $test "$d_shm" = "$define" ; then
 echo " "
 $cat >&4 <<EOM
Checking to see if SHMLBA needs additional headers.
The headers I'll be checking are:

   sys/macros.h (for the ctob() macro)
   sys/param.h  (for NBPC)
   sys/seg.h    (for SNUMSHFT)
   sys/immu.h  (for the stob() macro)

EOM
 $cat >shm_mac.c <<'EOCP'
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/shm.h>
#ifdef I_SYS_IMMU
#include <sys/immu.h>
#endif
#ifdef I_SYS_SYSMACROS
#include <sys/sysmacros.h>
#endif
#ifdef I_SYS_PARAM
#include <sys/param.h>
#endif
#ifdef I_SYS_SEG
#include <sys/seg.h>
#endif

int main() {
 int foo = SHMLBA ;
 }
EOCP
 flags='xxx'
 for D_sys_immu in " '-DI_SYS_IMMU'; do
 for D_sys_seg in " '-DI_SYS_SEG'; do
 for D_sys_sysmacros in " '-DI_SYS_SYSMACROS';
 do
 for D_sys_param in " '-DI_SYS_PARAM'; do
  case "$flags" in
  'xxx')
```

```
  case "$D_sys_immu$D_sys_param$D_sys_sysmacros$D_sys_seg" in
  ")
   echo "Trying it normally..."
   ;;
  *)
  echo "Trying $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg"
  ;;
  esac
  if $cc $ccflags \
  $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg \
  -o shm_mac shm_mac.c >/dev/null 2>&1 ; then
   set X $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg
   shift
   flags="$*"
   echo "Succeeded with $flags"
  fi
  ;;
 esac
done
done
done
done
case "$flags" in
xxx)
 echo "I don't know how to keep SHMLBA happy.  Good luck!"
 ;;
esac
case "$flags" in
*I_SYS_PARAM*) d_SHM_PRM="$define";;
esac
case "$flags" in
*I_SYS_SYSMACROS*) d_SHM_MAC="$define";;
esac
case "$flags" in
*I_SYS_SEG*) d_SHM_SEG="$define";;
esac
case "$flags" in
*I_SYS_IMMU*) d_SHM_IMMU="$define";;
esac
fi
$rm -f shm_mac*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_SHM_MAC.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_getnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnent:
?S: This variable conditionally defines HAS_GETNETENT if getnetent() is
?S: available to look up network names in some data base or another.
?S:.
?C:HAS_GETNETENT:
?C: This symbol, if defined, indicates that the getnetent() routine is
?C: available to look up network names in some data base
 or another.
?C:.
?H:#$d_getnent HAS_GETNETENT  /**/
?H:.
?LINT:set d_getnent
: see if getnetent exists
set getnetent d_getnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bzero.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bzero.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:48:15  ram
?RCS: patch12: added magic support for bzero()
?RCS:
```

```
?RCS: Revision 3.0.1.1  1993/09/13  16:01:33  ram
?RCS: patch10: now only defines HAS_BZERO, no macro remap on memset (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bzero: Inlibc
?MAKE: -pick add $@ %<
?S:d_bzero:
?S: This variable conditionally defines the HAS_BZERO
 symbol if
?S: the bzero() routine is available to set memory to 0.
?S:.
?C:HAS_BZERO:
?C: This symbol is defined if the bzero() routine is available to
?C: set a memory block to 0.
?C:.
?H:#$d_bzero HAS_BZERO /**/
?H:.
?M:bzero: HAS_BZERO
?M:#ifndef HAS_BZERO
?M:#ifndef bzero
?M:#define bzero(s,l) memset((s),0,(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bzero
: see if bzero exists
set bzero d_bzero
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bzero.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_gethbyaddr: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbyaddr:
?S: This variable conditionally defines the HAS_GETHOSTBYADDR symbol, which
?S: indicates to the C program that the gethostbyaddr() routine is available
?S: to look up hosts by their IP addresses.
```

```
?S:.
?C:HAS_GETHOSTBYADDR:
?C: This symbol, if defined, indicates that the gethostbyaddr() routine is
?C: available to look up hosts by their IP addresses.
?C:.
?H:#$d_gethbyaddr HAS_GETHOSTBYADDR  /**/
?H:.
?LINT:set d_gethbyaddr
: see if gethostbyaddr exists
set gethostbyaddr d_gethbyaddr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethbyad.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_termio.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:54  ram
?RCS: patch36: call ./usg and ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1994/08/29  16:26:38  ram
?RCS: patch32: don't include all three I_* symbols in config.h
?RCS: patch32: (had forgotten to undo this part last time)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:25:03  ram
?RCS: patch27: undone ADO's fix in previous patch since it was useless
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:05:23
 ram
?RCS: patch23: now include all three defines in config.h (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_termio i_sgtty i_termios: test Inlibc Cppsym Guess Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?S:i_termio:
?S: This variable conditionally defines the I_TERMIO symbol, which
```

```
?S: indicates to the C program that it should include <termio.h> rather
?S: than <sgtty.h>.
?S:.
?S:i_termios:
?S: This variable conditionally defines the I_TERMIOS symbol, which
?S: indicates to the C program that the POSIX <termios.h> file is
?S: to be included.
?S:.
?S:i_sgtty:
?S: This variable conditionally defines the I_SGTTY symbol, which
?S: indicates to the C program that it should include <sgtty.h> rather
?S: than <termio.h>.
?S:.
?C:I_TERMIO:
?C: This symbol, if defined, indicates that the program should include
?C: <termio.h> rather than <sgtty.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of
 this symbol.
?C:.
?C:I_TERMIOS:
?C: This symbol, if defined, indicates that the program should include
?C: the POSIX termios.h rather than sgtty.h or termio.h.
?C: There are also differences in the ioctl() calls that depend on the
?C: value of this symbol.
?C:.
?C:I_SGTTY:
?C: This symbol, if defined, indicates that the program should include
?C: <sgtty.h> rather than <termio.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of this symbol.
?C:.
?H:#$i_termio I_TERMIO  /**/
?H:#$i_termios I_TERMIOS  /**/
?H:#$i_sgtty I_SGTTY  /**/
?H:.
?T:val2 val3
?LINT:set i_termio i_sgtty i_termios
: see if this is a termio system
val="$undef"
val2="$undef"
val3="$undef"
?X: Prefer POSIX-approved termios.h over all else
if $test `./findhdr termios.h`; then
 set tcsetattr i_termios
 eval $inlibc
 val3="$i_termios"
fi
echo " "
case "$val3" in
```

```
"$define") echo "You have POSIX termios.h... good!" >&4;;
*) if ./Cppsym pyr; then
  case "`/bin/universe`" in
  ucb) if $test `./findhdr
 sgtty.h`; then
    val2="$define"
    echo "<sgtty.h> found." >&4
   else
    echo "System is pyramid with BSD universe."
    ./warn "<sgtty.h> not found--you could have problems."
   fi;;
  *) if $test `./findhdr termio.h`; then
    val="$define"
    echo "<termio.h> found." >&4
   else
    echo "System is pyramid with USG universe."
    ./warn "<termio.h> not found--you could have problems."
   fi;;
  esac
?X: Start with USG to avoid problems if both usg/bsd was guessed
 elif ./usg; then
  if $test `./findhdr termio.h`; then
   echo "<termio.h> found." >&4
   val="$define"
  elif $test `./findhdr sgtty.h`; then
   echo "<sgtty.h> found." >&4
   val2="$define"
  else
   ./warn "Neither <termio.h> nor <sgtty.h> found--cross fingers!"
  fi
 else
  if $test `./findhdr sgtty.h`; then
   echo "<sgtty.h> found." >&4
   val2="$define"
  elif $test `./findhdr termio.h`; then
   echo "<termio.h> found." >&4
   val="$define"
  else
   ./warn "Neither <sgtty.h> nor <termio.h> found--cross
 fingers!"
  fi
 fi;;
esac
set i_termio; eval $setvar
val=$val2; set i_sgtty; eval $setvar
val=$val3; set i_termios; eval $setvar

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_termio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myinit.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:47:29  ram
?RCS: patch44: leading comment states this unit comes before option processing
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: If you want to initialize any default values, copy this unit to your
?X: personal U directory and add the assignments to the end.  This file
?X: is included after variables are initialized but before any old
?X: config.sh file is read in and before
 any Configure switch processing.
?X:
?MAKE:Myinit: Init
?MAKE: -pick add $@ %<
?LINT: nocomment
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Myinit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_pthread_attr_setscope: Inlibc
?MAKE: -pick add $@ %<
?S:d_pthread_attr_setscope:
```

```
?S: This variable conditionally defines HAS_PTHREAD_ATTR_SETSCOPE if
?S: pthread_attr_setscope() is available to set the contention scope
?S: attribute of a thread attribute object.
?S:.
?C:HAS_PTHREAD_ATTR_SETSCOPE:
?C: This symbol, if defined, indicates that the pthread_attr_setscope
?C: system call is available to set the contention scope attribute of
?C: a thread attribute object.
?C:.
?H:#$d_pthread_attr_setscope HAS_PTHREAD_ATTR_SETSCOPE  /**/
?H:.
?LINT:set
 d_pthread_attr_setscope
: see if pthread_attr_setscope exists
set pthread_attr_setscope d_pthread_attr_setscope
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_pthread_attr_ss.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chsize.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_chsize.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_chsize: Inlibc
?MAKE: -pick add $@ %<
?S:d_chsize:
?S: This variable conditionally defines the CHSIZE symbol, which
?S: indicates to the C program that the chsize() routine is available
?S: to truncate files.  You might need a -lx to get this routine.
?S:.
?C:HAS_CHSIZE (CHSIZE):
?C: This symbol, if defined, indicates that the chsize
 routine is available
?C: to truncate files.  You might need a -lx to get this routine.
?C:.
?H:#$d_chsize HAS_CHSIZE  /**/
```

```
?H:.
?LINT:set d_chsize
: see if chsize exists
set chsize d_chsize
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mboxchar.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mboxchar.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:13:12  ram
?RCS: patch56: ensure ctrl-A characters are visible in prompt (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:11:22  ram
?RCS: patch23: added support for MMDF mailboxes (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mboxchar: cat package shsharp Myread Oldconfig
?MAKE: -pick add $@ %<
?S:mboxchar:
?S: This variable
 contains the eventual value of the MBOXCHAR symbol,
?S: which is how a C program can identify a file as a mailbox.
?S:.
?C:MBOXCHAR:
?C: This symbol contains a character which will match the beginning
?C: of a mailbox file.
?C:.
?H:#define MBOXCHAR '$mboxchar'  /**/
?H:.
?T:CTRLA
?INIT:CTRLA=`echo a | tr a '\001'`
: determine how to determine when a file is a mailbox
case "$mboxchar" in
") dflt=F;;
```

```
?X: The following ^A is two-chars to ensure it will print out -- WED
"$CTRLA") dflt='^A';;
*)  dflt="$mboxchar";;
esac
$cat <<EOM

In saving articles, $package wants to differentiate between saving to
mailbox format files and normal files.  It does this by examining the
first character of the file in question.  On most systems the first line
starts with "From ...", so the first character is an F.  Other systems
use magic cookies like control codes between articles, so one of those
would be first.  For example, MMDF messages are separated with lines of
four control-A's (you may specify one
 as ^A, i.e. caret A).

EOM
rp="What's the first character of a mailbox file?"
. ./myread
mboxchar="$ans"
case "$mboxchar" in
'F') ;;
"$CTRLA") ;;
'^A'|'^a') mboxchar="$CTRLA";;
*)  cat <<'EOM'

You will need to edit the shell script mbox.saver to properly append an
article to a mailbox.  The arguments to the script are documented in
EOM
 case "$shsharp" in
 false) echo "comments in mbox.saver.std.";;
 true) echo "comments in the shell script itself.";;
 esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mboxchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setvbuf.U,v 3.0.1.1 1994/08/29 16:11:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setvbuf.U,v $
```

```
?RCS:
?MAKE:d_setvbuf: Inlibc
?MAKE: -pick add $@ %<
?S:d_setvbuf:
?S: This variable conditionally defines the HAS_SETVBUF symbol, which
?S: indicates to the C program that the setvbuf() routine is available
?S: to change buffering on an open stdio stream.
?S:.
?C:HAS_SETVBUF :
?C: This symbol, if defined, indicates that the setvbuf routine is
?C: available to change buffering on an open stdio stream.
?C: to a line-buffered mode.
?C:.
?H:#$d_setvbuf HAS_SETVBUF  /**/
?H:.
?LINT:set d_setvbuf
: see if setvbuf exists
set setvbuf d_setvbuf
eval $inlibc

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setvbuf.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: instubperl.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:installusrbinperl: installbin cat bin Myread Setvar test Devel
?MAKE: -pick add $@ %<
?LINT:set installusrbinperl
?Y:TOP
?S:installusrbinperl:
?S: This variable tells whether Perl should be installed also as
?S: /usr/bin/perl in addition to
?S: $installbin/perl
?S:.
?C:INSTALL_USR_BIN_PERL:
?C: This symbol, if defined, indicates that Perl is to be installed
?C: also as /usr/bin/perl.
?C:.
```

```
?H:#$installusrbinperl INSTALL_USR_BIN_PERL /**/
?H:.
: determine
 whether to install perl also as /usr/bin/perl

echo " "
if $test -d /usr/bin -a "X$installbin" != X/usr/bin; then
 $cat <<EOM
Many scripts expect perl to be installed as /usr/bin/perl.

If you want to, I can install the perl you are about to compile
as /usr/bin/perl (in addition to $bin/perl).
EOM
 if test -f /usr/bin/perl; then
    $cat <<EOM

However, please note that because you already have a /usr/bin/perl,
overwriting that with a new Perl would very probably cause problems.
Therefore I'm assuming you don't want to do that (unless you insist).

EOM
    case "$installusrbinperl" in
    "$define"|[yY]*) dflt='y';;
    *)   dflt='n';;
    esac
 else
    $cat <<EOM

Since you don't have a /usr/bin/perl I'm assuming creating one is okay.

EOM
    case "$installusrbinperl" in
    "$undef"|[nN]*) dflt='n';;
    *)   dflt='y';;
    esac
 fi
 rp="Do you want to install perl as /usr/bin/perl?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef" ;;
 esac
else
 val="$undef"
fi
set
 installusrbinperl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/instubperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sitearch.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:21:30  ram
?RCS: patch61: created
?RCS:
?MAKE:sitearch sitearchexp installsitearch: afs cat Getfile \
 Oldconfig Prefixit prefix test archname sitelib
?MAKE: -pick add $@ %<
?Y:TOP
?S:sitearch:
?S: This variable contains the eventual value of the SITEARCH symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this
 directory while performing installation (with ~ substitution).
?S:.
?S:sitearchexp:
?S: This variable is the ~name expanded version of sitearch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installsitearch:
?S: This variable is really the same as sitearchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:SITEARCH:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Individual sites may place their own extensions and modules in
?C: this directory.
```

```
?C:.
?C:SITEARCH_EXP:
?C: This symbol contains the ~name expanded version of SITEARCH, to be used
?C: in programs that are not prepared to deal
 with ~ expansion at run-time.
?C:.
?H:#define SITEARCH "$sitearch"  /**/
?H:#define SITEARCH_EXP "$sitearchexp"  /**/
?H:.
?T:xxx
: determine where site specific architecture-dependent libraries go.
xxx=`echo $sitelib/$archname | sed 's!^$prefix!!'`
: xxx is usually lib/site_perl/archname.
set sitearch sitearch none
eval $prefixit
case "$sitearch" in
") dflt="$sitelib/$archname" ;;
*) dflt="$sitearch" ;;
esac
$cat <<EOM

The installation process will also create a directory for
architecture-dependent site-specific extensions and modules.

EOM
fn=nd~+
rp='Pathname for the site-specific architecture-dependent library files?'
. ./getfile
if $test "X$sitearchexp" != "X$ansexp"; then
 installsitearch=''
fi
sitearch="$ans"
sitearchexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case
 "$installsitearch" in
 ") dflt=`echo $sitearchexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installsitearch";;
 esac
 fn=de~
 rp='Where will private files be installed?'
```

```
 . ./getfile
 installsitearch="$ans"
else
 installsitearch="$sitearchexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sitearch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Unix.U,v 3.0.1.1 1997/02/28 15:20:06 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Unix.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:06  ram
?RCS: patch61: created
?RCS:
?X:
?X: The purpose of this unit is to define things that are common across all
?X: known UNIX platforms. If Configure is ported/used on a non-UNIX
?X: environment, then some of the following variables can be redefined in hint
?X: files.
?X:
?MAKE:Unix _exe _a _o exe_ext lib_ext obj_ext path_sep \
 firstmakefile archobjs rm_try: Oldconfig rm
?MAKE: -pick add $@ %<
?S:_exe:
?S: This
 variable defines the extension used for executable files.
?S: DJGPP, Cygwin and OS/2 use '.exe'.  Stratus VOS uses '.pm'.
?S: On operating systems which do not require a specific extension
?S: for executable files, this variable is empty.
?S:.
?S:_a:
?S: This variable defines the extension used for ordinary library files.
?S: For unix, it is '.a'.  The '.' is included.  Other possible
?S: values include '.lib'.
?S:.
?S:_o:
?S: This variable defines the extension used for object files.
?S: For unix, it is '.o'.  The '.' is included.  Other possible
```

```
?S: values include '.obj'.
?S:.
?S:firstmakefile:
?S: This variable defines the first file searched by make.  On unix,
?S: it is makefile (then Makefile).  On case-insensitive systems,
?S: it might be something else.  This is only used to deal with
?S: convoluted make depend tricks.
?S:.
?S:archobjs:
?S: This variable defines any additional objects that must be linked
?S: in with the program on this architecture.  On unix, it is usually
?S: empty.
  It is typically used to include emulations of unix calls
?S: or other facilities.  For perl on OS/2, for example, this would
?S: include os2/os2.obj.
?S:.
?X: Metaconfig's Obsolete symbol stuff is too over-eager.  In the
?X: perl sources, it picks up things like "P" and "FLOCK" that are
?X: not used in the way Metaconfig thinks they are.  Thus I can't
?X: just declare these obsolete and then run metaconfig -o.
?X: Instead, I'll just handle them here.
?X: Sadly, history has conspired to give us a web of definitions;
?X: this could have been much simpler.
?S:lib_ext:
?S: This is an old synonym for _a.
?S:.
?S:exe_ext:
?S: This is an old synonym for _exe.
?S:.
?S:obj_ext:
?S: This is an old synonym for _o.
?S:.
?S:path_sep:
?S: This is an old synonym for p_ in Head.U, the character
?S: used to separate elements in the command shell search PATH.
?S:.
?S:rm_try:
?S: This is a cleanup variable for try test programs.
?S: Internal Configure use only.
?S:.
?LINT: change p_
?INIT::
 Trailing extension.  Override this in a hint file, if needed.
?INIT:: Extra object files, if any, needed on this platform.
?INIT:archobjs="
: Define several unixisms.
: Hints files or command line option can be used to override them.
: The convoluted testing is in case hints files set either the old
```

```
: or the new name.
case "$_exe" in
") case "$exe_ext" in
 ") ;;
 *) _exe="$exe_ext" ;;
 esac
 ;;
esac
case "$_a" in
") case "$lib_ext" in
   ") _a='.a';;
 *) _a="$lib_ext" ;;
 esac
 ;;
esac
case "$_o" in
") case "$obj_ext" in
 ") _o='.o';;
 *) _o="$obj_ext";;
 esac
 ;;
esac
case "$p_" in
") case "$path_sep" in
 ") p_=':';;
 *) p_="$path_sep";;
 esac
 ;;
esac
exe_ext=$_exe
lib_ext=$_a
obj_ext=$_o
path_sep=$p_

rm_try="$rm -f try try$_exe a.out .out try.[cho] try.$_o core core.try* try.core*"

@if firstmakefile
: Which makefile gets called first.  This is used by make depend.
case "$firstmakefile" in
") firstmakefile='makefile';;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Unix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgctl:
?S: This variable conditionally defines the HAS_MSGCTL symbol, which
?S: indicates to the C program that the msgctl() routine is available.
?S:.
?C:HAS_MSGCTL:
?C: This symbol, if defined, indicates that the msgctl() routine is
?C: available to perform message control operations.
?C:.
?H:#$d_msgctl
 HAS_MSGCTL  /**/
?H:.
?LINT:set d_msgctl
: see if msgctl exists
set msgctl d_msgctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stdlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdlib: Nothing
?MAKE: -pick add $@ %<
?S:i_stdlib:
?S: This variable unconditionally defines the I_STDLIB symbol.
?S:.
?C:I_STDLIB:
?C: This symbol is always defined, indicating that <stdlib.h> exists
?C: and should be included.
?C:.
?H:#define I_STDLIB  /**/
?H:.
: stub, used only to satisfy other units
i_stdlib='define'
```

Found in
 path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_stdlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the WRITEME file.
?RCS:
?MAKE:d_writev: Inlibc
?MAKE: -pick add $@ %<
?S:d_writev:
?S: This variable conditionally defines the HAS_WRITEV symbol, which
?S: indicates to the C program that the writev() routine is available.
?S:.
?C:HAS_WRITEV:
?C: This symbol, if defined, indicates that the writev routine is
?C: available to do scatter writes.
?C:.
?H:#$d_writev HAS_WRITEV  /**/
?H:.
?LINT:set d_writev
: see if writev exists
set writev d_writev
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_writev.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strerror_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_strerror_r strerror_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_strerror_r:
?S: This variable conditionally defines the HAS_STRERROR_R symbol,
?S: which indicates to the C program that the strerror_r()
?S: routine is available.
?S:.
?S:strerror_r_proto:
?S: This variable encodes the prototype of strerror_r.
?S: It is zero if d_strerror_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_strerror_r
?S: is defined.
?S:.
?C:HAS_STRERROR_R:
?C: This symbol, if defined, indicates that the strerror_r routine
?C: is available to strerror
 re-entrantly.
?C:.
?C:STRERROR_R_PROTO:
?C: This symbol encodes the prototype of strerror_r.
?C: It is zero if d_strerror_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_strerror_r
?C: is defined.
?C:.
?H:#$d_strerror_r HAS_STRERROR_R /**/
?H:#define STRERROR_R_PROTO $strerror_r_proto /**/
?H:.
?T:try hdrs d_strerror_r_proto
: see if strerror_r exists
set strerror_r d_strerror_r
eval $inlibc
case "$d_strerror_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h define string.h"
 case "$d_strerror_r_proto:$usethreads" in
 ":define") d_strerror_r_proto=define
  set d_strerror_r_proto strerror_r $hdrs
```

```
 eval $hasproto ;;
*) ;;
esac
case "$d_strerror_r_proto" in
define)
case "$strerror_r_proto" in
"|0) try='int strerror_r(int, char*, size_t);'
./protochk "$extern_C $try" $hdrs && strerror_r_proto=I_IBW ;;
esac
case "$strerror_r_proto" in
"|0) try='int strerror_r(int, char*, int);'
./protochk "$extern_C $try" $hdrs && strerror_r_proto=I_IBI
;;
esac
case "$strerror_r_proto" in
"|0) try='char* strerror_r(int, char*, size_t);'
./protochk "$extern_C $try" $hdrs && strerror_r_proto=B_IBW ;;
esac
case "$strerror_r_proto" in
"|0) d_strerror_r=undef
 strerror_r_proto=0
 echo "Disabling strerror_r, cannot determine prototype." >&4 ;;
* ) case "$strerror_r_proto" in
 REENTRANT_PROTO*) ;;
 *) strerror_r_proto="REENTRANT_PROTO_$strerror_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "strerror_r has no prototype, not using it." >&4 ;;
 esac
 d_strerror_r=undef
 strerror_r_proto=0
 ;;
esac
;;
*) strerror_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strerror_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: sysman.U,v 3.0.1.2 1994/06/20 07:08:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sysman.U,v $
?RCS: Revision 3.0.1.2  1994/06/20  07:08:43  ram
?RCS: patch30: now explicitly states that /usr/man/man1 is the default
?RCS: patch30: added /usr/local/man/man1 to the search list
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:13:50  ram
?RCS: patch10: added support for /local/man/man1 (WAD)
?RCS: patch10: added temporary syspath variable to cut down on line length
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:55  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:sysman: test Loc Oldconfig
?MAKE: -pick add $@ %<
?S:sysman:
?S: This variable holds the place where the manual is located on this
?S: system. It is not the place where the user wants to put his manual
?S: pages. Rather it is the place where Configure may look to find manual
?S: for unix commands (section 1 of the manual usually). See mansrc.
?S:.
?T:syspath
: determine where manual pages are on this system
echo " "
case "$sysman" in
")
 syspath='/usr/share/man/man1 /usr/man/man1'
 syspath="$syspath /usr/man/mann /usr/man/manl /usr/man/local/man1"
 syspath="$syspath /usr/man/u_man/man1"
 syspath="$syspath /usr/catman/u_man/man1 /usr/man/l_man/man1"
 syspath="$syspath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 syspath="$syspath /usr/man/man.L /local/man/man1 /usr/local/man/man1"
 sysman=`./loc . /usr/man/man1 $syspath`
 ;;
esac
if $test -d "$sysman"; then
 echo "System manual is in $sysman." >&4
else
 echo "Could not find manual pages in source form."
 >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sysman.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scannl.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:27  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:59:12  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Does the scanf routine read "\n" correctly ? This is was not
?X: the case on AIX...
?X:
?MAKE:d_scannl: cat +cc +ccflags rm Setvar
?MAKE: -pick add $@ %<
?S:d_scannl:
?S: This
 variable conditionally defines SCAN_NL, which indicates
?S: wether the C library routines scanf() and friends can deal with
?S: a '\n' in the input correctly. They do most of the time.
?S:.
?C:SCAN_NL:
?C: This symbol is defined if the C library routines scanf() and friends
?C: can deal with a '\n' in the input correctly, so that you can say
?C: scanf("%d\n"); instead of scanf("%d"); getc(c); to handle the '\n'.
?C:.
?H:#$d_scannl SCAN_NL  /* scanf("%d\n") works */
?H:.
?F:!try
?LINT:set d_scannl
: does scanf handle "\n" correctly ?
echo " "
```

```
val="$define"
?X: I really want to say "\n" instead of '\n', because I am referring
?X: to the string given as argument to scanf().
echo 'Let"""'s see if scanf() handles "\\n" correctly...' >&4
$cat >try.c <<'EOCP'
int main()
{
 int i = 0, j = 0;
 scanf("%d\n%d", &i, &j);
 if (j != 3)
  exit(1);
 exit(0);
}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 if ./try <<'EOD'
2
3
EOD
 then
  echo "Yes, it does."
 else
  echo "No, it doesn't."
  val="$undef"
 fi
else
 echo
 "(I can't seem to compile the test program. Assuming it does.)"
fi
set d_scannl
eval $setvar
$rm -f try.* try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scannl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_NOFILE.U,v $
```

```
?RCS: Revision 3.0.1.1  1994/10/29  16:08:38  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:nofile d_gettblsz tablesize: Myread Guess cat +cc +ccflags +libs \
 test rm Csym
?MAKE: -pick add $@ %<
?S:nofile:
?S: This variable contains the number of file descriptors available to the
?S: process.
?S:.
?S:d_gettblsz:
?S: This variable conditionally handles remapping
 of the getdtablesize()
?S: subroutine to ulimit(4,0), or the NOFILE manifest constant.
?S:.
?S:tablesize:
?S: This variable contains either the 'NOFILE' constant or 'ulimit(4, 0L)'
?S: and is used as the remapped value for the getdtablesize() macro.
?S:.
?C:getdtablesize:
?C: This catches use of the getdtablesize() subroutine, and remaps it
?C: to either ulimit(4,0) or NOFILE, if getdtablesize() isn't available.
?C:.
?C:VAL_NOFILE:
?C: This symbol contains the number of file descriptors available to the
?C: process, as determined at configuration time. Unless a static constant
?C: is needed, you should rely on getdtablesize() to obtain that number.
?C:.
?H:#$d_gettblsz getdtablesize() $tablesize /**/
?H:#define VAL_NOFILE $nofile /* Number of file descriptors */
?H:.
?F:!nofile
?T:d_ulimit4 val
: see if getdtablesize exists
echo " "
?X: Revert logical value (d_gettblsz is undef iff getdtablesize is present)
case "$d_gettblsz" in
$define) d_gettblsz="$undef";;
$undef) d_gettblsz="$define";;
esac
if
 set getdtablesize val -f d_gettblsz; eval $csym; $val; then
 echo 'getdtablesize() found.' >&4
 d_gettblsz="$undef"
 tablesize="
```

```
@if VAL_NOFILE || nofile
 $cat >nofile.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", getdtablesize());
}
EOCP
 nofile=''
 if $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1; then
  nofile=`./nofile 2>/dev/null`
 fi
 if $test "$nofile"; then
  echo "(You have $nofile file descriptors available per process.)"
 else
  nofile='20'
  if ./bsd; then
   nofile='64'
  fi
 echo "(Hmm... Let's say you have $nofile file descriptors available.)"
 fi
@end
else
 echo 'getdtablesize() NOT found...' >&4
 if set ulimit val -f; eval $csym; $val; then
  echo 'Maybe ulimit(4,0) will work...'
  $cat >nofile.c <<'EOCP'
#include <stdio.h>
#ifdef GETPARAM_H
#include <sys/param.h>
#endif
int main()
{
 printf("%d %d\n",
#ifdef NOFILE
  NOFILE,
#else
  0,
#endif
  ulimit(4,0));
  exit(0);
}
EOCP
  if $cc $ccflags -DGETPARAM_H -o nofile nofile.c $libs
 >/dev/null 2>&1 \
   || $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1 ; then
   set `./nofile`
   d_gettblsz=$1
```

```
  d_ulimit4=$2
  if $test "$d_ulimit4" -lt 0; then
   echo "Your ulimit() call doesn't tell me what I want to know."
   echo "We'll just use NOFILE in this case."
   nofile=$d_gettblsz
   d_gettblsz="$define"
   tablesize='NOFILE'
  else
   if $test "$d_gettblsz" -gt 0; then
   echo "Your system defines NOFILE to be $d_gettblsz, and" >&4
   else
   echo "I had trouble getting NOFILE from your system, but" >&4
   fi
echo "ulimit returns $d_ulimit4 as the number of available file descriptors." >&4
   dflt='y';
   echo " "
 rp='Should I use ulimit to get the number of available file descriptors?'
   . ./myread
   case "$ans" in
   y*)
    nofile=$d_ulimit4
    d_gettblsz="$define"
    tablesize='ulimit(4, 0L)'
    echo "Using ulimit(4,0)."
    ;;
   *)
    nofile=$d_gettblsz
    d_gettblsz="$define"
    tablesize='NOFILE'
    echo "Using NOFILE."
    ;;
   esac
  fi
 else
  echo
 "Strange, I couldn't get my test program to compile."
  echo "We'll just use NOFILE in this case."
  d_gettblsz="$define"
  tablesize='NOFILE'
  nofile=''
 fi
else
 echo 'Using NOFILE instead.'
 d_gettblsz="$define"
 tablesize='NOFILE'
 nofile=''
fi
```

```
@if VAL_NOFILE || nofile
case "$nofile" in
")
 $cat >nofile.c <<'EOCP'
#include <stdio.h>
#ifdef GETPARAM_H
#include <sys/param.h>
#endif
int main()
{
 printf("%d\n",
#ifdef NOFILE
  NOFILE,
#else
  0,
#endif
  );
  exit(0);
}
EOCP
 if $cc $ccflags -DGETPARAM_H -o nofile nofile.c $libs >/dev/null 2>&1 \
  || $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1 ; then
  nofile=`./nofile 2>/dev/null`
 fi
 if $test "$nofile"; then
  echo "(You have $nofile file descriptors available per process.)"
 else
  nofile='20'
  if ./bsd; then
   nofile='64'
  fi
 echo "(Hmm... Let's say you have $nofile file descriptors available.)"
 fi
 ;;
esac
@end
$rm -f nofile*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_NOFILE.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: newsspool.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: newsspool.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:newsspool newsspoolexp: Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:newsspool:
?S: This variable contains the eventual value of the NEWSSPOOL symbol,
?S: which is the directory name where news articles are spooled.  It
?S: may have a ~ on the front of it.
?S:.
?S:newsspoolexp:
?S: This is the same as the newsspool variable, but is
 filename expanded
?S: at configuration time, for programs not wanting to deal with it at
?S: run-time.
?S:.
?C:NEWSSPOOL:
?C: This symbol contains the directory name where news articles are
?C: spooled.  The program must be prepared to do ~ expansion on it.
?C:.
?C:NEWSSPOOL_EXP:
?C: This is the same as NEWSSPOOL, but is filename expanded at
?C: configuration time, for use in programs not willing to do so
?C: at run-time.
?C:.
?H:#define NEWSSPOOL "$newsspool" /**/
?H:#define NEWSSPOOL_EXP "$newsspoolexp" /**/
?H:.
: locate news spool directory
case "$newsspool" in
")
 dflt=/usr/spool/news
 ;;
*) dflt="$newsspool";;
esac
echo " "
fn=d~
rp='Where are news spooled?'
. ./getfile
newsspool="$ans"
newsspoolexp="$ansexp"
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/newsspool.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_newsadm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_newsadm.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:36:53  ram
?RCS: patch61: added Guess dependency
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:14:33  ram
?RCS: patch36: call ./eunice explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_newsadm newsadmin: cat contains Guess Setvar Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_newsadm:
?S: This variable
 conditionally defines the NEWS_ADMIN symbol, which
?S: indicates to the C program that there is a user who is in charge
?S: of news administration.
?S:.
?S:newsadmin:
?S: This variable holds the login name of the news administrator, if any.
?S:.
?C:NEWS_ADMIN (NEWSADMIN):
?C: This symbol, if defined, contains the login name of the news
?C: administrator.
?C:.
?H:#$d_newsadm NEWS_ADMIN "$newsadmin"  /**/
?H:.
?LINT:set d_newsadm
: get news administrator name
case "$newsadmin" in
")
 if $contains "^news:" /etc/passwd >/dev/null 2>&1 ; then
  dflt=news
 elif $contains "^usenet:" /etc/passwd >/dev/null 2>&1 ; then
  dflt=usenet
```

```
 elif ./eunice; then
  dflt=system
 else
  dflt=root
 fi
 ;;
*)
 dflt="$newsadmin"
 ;;
esac
$cat <<'EOM'

Many systems keep their news in a private directory, or have a non-superuser
in charge of administering news.  (If you don't have such a user, take the
default answer.)  I need the login name (not directory) which is used for
news administration.

EOM
rp="News
 admin login?"
. ./myread
newsadmin="$ans"
case "$newsadmin" in
root) val="$undef" ;;
*) val="$define" ;;
esac
set d_newsadm
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_newsadm.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_itimer.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_itimer.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_itimer: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_itimer:
?S: This variable conditionally defines the HAS_ITIMER symbol, which
?S: indicates that the setitimer() routine exists.  The setitimer()
?S: routine supports sub-second accuracy for one real-time and two
?S: cpu clocks.
?S:.
?C:HAS_ITIMER (ITIMER):
?C: This symbol, if defined, indicates
 that the setitimer() routine exists.
?C:.
?H:#$d_itimer HAS_ITIMER /**/
?H:.
?LINT:set d_itimer
: see if setitimer exists
set setitimer d_itimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_itimer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_time.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:43  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:16:38  ram
?RCS: patch36: now uses new Typedef unit to compute type information (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Maybe <sys/types.h> should be included?
?X:INC: i_systypes
?MAKE:d_time timetype: Csym Setvar Findhdr Myread Typedef
?MAKE: -pick add $@ %<
?S:d_time:
?S: This
```

```
 variable conditionally defines the HAS_TIME symbol, which indicates
?S: that the time() routine exists.  The time() routine is normally
?S: provided on UNIX systems.
?S:.
?S:timetype:
?S: This variable holds the type returned by time(). It can be long,
?S: or time_t on BSD sites (in which case <sys/types.h> should be
?S: included). Anyway, the type Time_t should be used.
?S:.
?C:HAS_TIME (TIMER):
?C: This symbol, if defined, indicates that the time() routine exists.
?C:.
?C:Time_t (TIMETYPE):
?C: This symbol holds the type returned by time(). It can be long,
?C: or time_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_time HAS_TIME  /**/
?H:#define Time_t $timetype  /* Time type */
?H:.
?LINT:set d_time
: see if time exists
echo " "
if set time val -f d_time; eval $csym; $val; then
 echo 'time() found.' >&4
 val="$define"
 set time_t timetype long stdio.h sys/types.h
 eval $typedef
 dflt="$timetype"
 echo " "
 rp="What type is returned by time() on this
 system?"
 . ./myread
 timetype="$ans"
else
 echo 'time() not found, hope that will do.' >&4
 val="$undef"
 timetype='int';
fi
set d_time
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_time.U
No license file was found, but licenses were detected in source scan.

?RCS: Copyright (c) 2011, H.Merijn Brand & Tony Cook
?RCS:

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:st_ino_size st_ino_sign: cat echo i_stdlib Setvar Compile run rm_try
?MAKE: -pick add $@ %<
?S:st_ino_sign:
?S: This variable contains the signedness of struct stat's st_ino.
?S: 1 for unsigned, -1 for signed.
?S:.
?S:st_ino_size:
?S: This variable contains the size of struct stat's st_ino in bytes.
?S:.
?C:ST_INO_SIZE:
?C: This variable contains the size of struct stat's st_ino in bytes.
?C:.
?C:ST_INO_SIGN:
?C: This symbol holds the signedness of struct stat's st_ino.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define ST_INO_SIGN
 $st_ino_sign /* st_ino sign */
?H:#define ST_INO_SIZE $st_ino_size /* st_ino size */
?H:.
?F:!try
: Check the size of st_ino
$echo " "
$echo "Checking the size of st_ino..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   struct stat st;
   printf("%d\n", (int)sizeof(st.st_ino));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 val=`$run ./try`
 case "$val" in
 ") st_ino_size=4
```

```
  $echo "(I can't execute the test program--guessing $st_ino_size.)" >&4
  ;;
 *) st_ino_size=$val
  $echo "Your st_ino is $st_ino_size bytes long."
  ;;
 esac
else
 st_ino_size=4
 $echo "(I can't compile the test program--guessing $st_ino_size.)" >&4
fi
$rm_try

: Check if st_ino is signed
$echo " "
$echo "Checking the sign of st_ino..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
int main() {
 struct stat foo;
       foo.st_ino = -1;
 if (foo.st_ino < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set
 try
if eval $compile; then
 val=`$run ./try`
 case "$val" in
 ") st_ino_sign=1
  $echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) st_ino_sign=$val
  case "$st_ino_sign" in
   1) $echo "Your st_ino is unsigned." ;;
  -1) $echo "Your st_ino is signed."   ;;
  esac
  ;;
 esac
else
 st_ino_sign=1
 $echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/st_ino_def.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_ldbl_dig: Myread contains cat rm Setvar \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_ldbl_dig:
?S: This variable conditionally defines d_ldbl_dig if this system's
?S: header files provide LDBL_DIG, which is the number of significant
?S: digits in a long double precision number.
?S:.
?C:HAS_LDBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol LDBL_DIG, which is the number
?C: of significant digits in a long double precision number. Unlike
?C: for
 DBL_DIG, there's no good guess for LDBL_DIG if it is undefined.
?C:.
?H:#$d_ldbl_dig HAS_LDBL_DIG /* */
?H:.
?F:!ldbl_dig.c
?LINT:set d_ldbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >ldbl_dig.c <<EOM
#include <limits.h>
#include <float.h>
#ifdef LDBL_DIG
printf("Contains LDBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < ldbl_dig.c >ldbl_dig.E 2>/dev/null
if $contains 'LDBL_DIG' ldbl_dig.E >/dev/null 2>&1; then
 echo "LDBL_DIG found." >&4
 val="$define"
else
 echo "LDBL_DIG NOT found." >&4
```

```
 val="$undef"
fi
$rm -f ldbl_dig.?
set d_ldbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ldbl_dig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016 Dagfinn Ilmari Mannsker & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_siginfo_si_errno d_siginfo_si_pid d_siginfo_si_uid d_siginfo_si_addr d_siginfo_si_status
d_siginfo_si_band d_siginfo_si_value d_siginfo_si_fd: d_sigaction pidtype uidtype Hasfield_t
?MAKE: -pick add $@ %<
?S:d_siginfo_si_errno:
?S: This variable conditionally defines the HAS_SIGINFO_SI_ERRNO symbol,
?S: which indicates that the siginfo_t struct has the si_errno member.
?S:.
?S:d_siginfo_si_pid:
?S: This variable conditionally defines the HAS_SIGINFO_SI_PID symbol,
?S: which indicates that the siginfo_t struct has the si_pid member.
?S:.
?S:d_siginfo_si_uid:
?S: This variable conditionally defines the HAS_SIGINFO_SI_UID symbol,
?S: which indicates that the siginfo_t struct has the si_uid member.
?S:.
?S:d_siginfo_si_addr:
?S: This
 variable conditionally defines the HAS_SIGINFO_SI_ADDR symbol,
?S: which indicates that the siginfo_t struct has the si_addr member.
?S:.
?S:d_siginfo_si_status:
?S: This variable conditionally defines the HAS_SIGINFO_SI_STATUS symbol,
?S: which indicates that the siginfo_t struct has the si_status member.
?S:.
?S:d_siginfo_si_band:
?S: This variable conditionally defines the HAS_SIGINFO_SI_BAND symbol,
?S: which indicates that the siginfo_t struct has the si_band member.
?S:.
?S:d_siginfo_si_value:
?S: This variable conditionally defines the HAS_SIGINFO_SI_VALUE symbol,
?S: which indicates that the siginfo_t struct has the si_value member.
?S:.
?S:d_siginfo_si_fd:
```

```
?S: This variable conditionally defines the HAS_SIGINFO_SI_FD symbol,
?S: which indicates that the siginfo_t struct has the si_fd member.
?S:.
?C:HAS_SIGINFO_SI_ERRNO:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_errno member
?C:.
?C:HAS_SIGINFO_SI_PID:
?C: This
 symbol, if defined, indicates that siginfo_t has the
?C: si_pid member
?C:.
?C:HAS_SIGINFO_SI_UID:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_uid member
?C:.
?C:HAS_SIGINFO_SI_ADDR:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_addr member
?C:.
?C:HAS_SIGINFO_SI_STATUS:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_status member
?C:.
?C:HAS_SIGINFO_SI_BAND:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_band member
?C:.
?C:HAS_SIGINFO_SI_VALUE:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_value member
?C:.
?C:HAS_SIGINFO_SI_FD:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_fd member
?C:.
?H:#$d_siginfo_si_errno HAS_SIGINFO_SI_ERRNO /**/
?H:#$d_siginfo_si_pid HAS_SIGINFO_SI_PID /**/
?H:#$d_siginfo_si_uid HAS_SIGINFO_SI_UID /**/
?H:#$d_siginfo_si_addr HAS_SIGINFO_SI_ADDR /**/
?H:#$d_siginfo_si_status HAS_SIGINFO_SI_STATUS /**/
?H:#$d_siginfo_si_band HAS_SIGINFO_SI_BAND /**/
?H:#$d_siginfo_si_value HAS_SIGINFO_SI_VALUE /**/
?H:#$d_siginfo_si_fd HAS_SIGINFO_SI_FD /**/
?H:.
:
 see what siginfo fields we have
case "$d_sigaction" in
```

```
"$define")
 echo "Checking if your siginfo_t has si_errno field...">&4
 set d_siginfo_si_errno siginfo_t int si_errno $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_pid field...">&4
 set d_siginfo_si_pid siginfo_t $pidtype si_pid $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_uid field...">&4
 set d_siginfo_si_uid siginfo_t $uidtype si_uid $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_addr field...">&4
 set d_siginfo_si_addr siginfo_t "void *" si_addr $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_status field...">&4
 set d_siginfo_si_status siginfo_t int si_status $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_band field...">&4
 set
 d_siginfo_si_band siginfo_t long si_band $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_value field...">&4
 set d_siginfo_si_value siginfo_t "union sigval" si_value $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_fd field...">&4
 set d_siginfo_si_fd siginfo_t int si_fd $d_sigaction signal.h
 eval $hasfield_t;

 ;;
*)
 d_siginfo_si_errno="$undef"
 d_siginfo_si_pid="$undef"
 d_siginfo_si_uid="$undef"
 d_siginfo_si_addr="$undef"
 d_siginfo_si_status="$undef"
 d_siginfo_si_band="$undef"
 d_siginfo_si_value="$undef"
 d_siginfo_si_fd="$undef"
 ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_siginfo_si.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_ndbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:53  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_ndbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_ndbm (d_ndbm):
?S: This variable conditionally defines the I_NDBM symbol, which
?S: indicates to the C program that <ndbm.h> exists and should
?S: be included.
?S:.
?C:I_NDBM (HAS_NDBM NDBM):
?C: This
 symbol, if defined, indicates that <ndbm.h> exists and should
?C: be included.
?C:.
?H:#$i_ndbm I_NDBM /**/
?H:.
?T:t_ndbm d_dbm_open
?LINT:set i_ndbm
: see if ndbm.h is available
?X: t_ndbm is a tentative check.  We might just have the .h, not the lib -- ADO
set ndbm.h t_ndbm
eval $inhdr
case "$t_ndbm" in
$define)
 : see if dbm_open exists
 set dbm_open d_dbm_open
 eval $inlibc
 case "$d_dbm_open" in
 $undef)
  t_ndbm="$undef"
```

```
  echo "We won't be including <ndbm.h>"
  ;;
 esac
 ;;
esac
val="$t_ndbm"
set i_ndbm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_ndbm.U
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```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: package.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:27:21  ram
?RCS: patch36: beware of non-ascii character sets when translating case
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:37:02  ram
?RCS: patch14: skip definition of spackage if not otherwise used
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:10  ram
?RCS: patch10: added spackage, suitable for starting sentences
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:package spackage:
 Nothing
?MAKE: -pick wipe $@ %<
?S:package:
?S: This variable contains the name of the package being constructed.
?S: It is primarily intended for the use of later Configure units.
?S:.
?S:spackage:
?S: This variable contains the name of the package being constructed,
?S: with the first letter uppercased, i.e. suitable for starting
?S: sentences.
?S:.
```

```
?C:PACKAGE:
?C: This variable contains the name of the package being built.
?C:.
?H:#define PACKAGE "$package"
?H:.
?T:first last
: set package name
package='<PACKAGENAME>'
@if spackage
first=`echo $package | sed -e 's/^\(.\).*/\1/'`
last=`echo $package | sed -e 's/^.\(.*\)/\1/'`
?X:
?X: So early in the Configure script, we don't have ./tr set up and can't
?X: include Tr in our dependency or that would create a cycle. Therefore,
?X: we have to somehow duplicate the work done in Tr. That's life.
?X:
case "`echo AbyZ | tr '[:lower:]' '[:upper:]' 2>/dev/null`" in
ABYZ) spackage=`echo $first | tr '[:lower:]' '[:upper:]'`$last;;
*) spackage=`echo
 $first | tr '[a-z]' '[A-Z]'`$last;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/package.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysstat.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:30  ram
?RCS: patch61: created
?RCS:
?MAKE:i_sysstat: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysstat:
?S: This variable conditionally defines the I_SYS_STAT symbol,
?S: and indicates whether a C program should include <sys/stat.h>.
?S:.
```

```
?C:I_SYS_STAT (I_SYSSTAT):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/stat.h>.
?C:.
?H:#$i_sysstat I_SYS_STAT  /**/
?H:.
?LINT:set
 i_sysstat
: see if sys/stat.h is available
set sys/stat.h i_sysstat
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getprpwnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getprpwnam:
?S: This variable conditionally defines HAS_GETPRPWNAM if getprpwnam() is
?S: available to retrieve protected (shadow) password entries by name.
?S:.
?C:HAS_GETPRPWNAM:
?C: This symbol, if defined, indicates that the getprpwnam system call is
?C: available to retrieve protected (shadow) password entries by name.
?C:.
?H:#$d_getprpwnam HAS_GETPRPWNAM  /**/
?H:.
?LINT:set d_getprpwnam
: see if getprpwnam exists
set getprpwnam d_getprpwnam
eval $inlibc
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getprpwnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
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?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_statfs_f_flags: \
 Hasfield i_sysparam i_sysmount i_systypes \
 i_sysvfs i_sysstatfs Setvar d_statfs_s
?MAKE: -pick add $@ %<
?S:d_statfs_f_flags:
?S: This variable conditionally defines the HAS_STRUCT_STATFS_F_FLAGS
?S: symbol, which indicates to struct statfs from has f_flags member.
?S: This kind of struct statfs is coming from sys/mount.h (BSD),
?S: not from sys/statfs.h (SYSV).
?S:.
?C:HAS_STRUCT_STATFS_F_FLAGS:
?C: This symbol, if defined, indicates that the struct statfs
?C: does have the f_flags member containing the mount flags of
?C: the filesystem containing the file.
?C: This kind of struct statfs is coming from <sys/mount.h> (BSD 4.3),
?C: not from <sys/statfs.h> (SYSV).  Older BSDs
 (like Ultrix) do not
?C: have statfs() and struct statfs, they have ustat() and getmnt()
?C: with struct ustat and struct fs_data.
?C:.
?H:#$d_statfs_f_flags HAS_STRUCT_STATFS_F_FLAGS  /**/
?H:.
?LINT:set d_statfs_f_flags
: see if struct statfs knows about f_flags
case "$d_statfs_s" in
define)
 echo " "
 echo "Checking to see if your struct statfs has f_flags field..." >&4
 set d_statfs_f_flags statfs f_flags $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h
$i_sysvfs sys/vfs.h $i_sysstatfs sys/statfs.h
 eval $hasfield
 ;;
*) val="$undef"
 set d_statfs_f_flags
 eval $setvar
 ;;
esac
case "$d_statfs_f_flags" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statfs_f_flags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_mkstemps: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkstemps:
?S: This variable conditionally defines the HAS_MKSTEMPS symbol, which
?S: indicates to the C program that the mkstemps() routine is available
?S: to exclusively create and open a uniquely named (with a suffix)
?S: temporary file.
?S:.
?C:HAS_MKSTEMPS :
?C: This symbol, if defined, indicates that the mkstemps routine is
?C: available to exclusively create and open a uniquely named
?C: (with a suffix) temporary file.
?C:.
?H:#$d_mkstemps HAS_MKSTEMPS  /**/
?H:.
?LINT:set d_mkstemps
: see if mkstemps exists
set mkstemps d_mkstemps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkstemps.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Prefixup.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Prefixup.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:30:40  ram
```

```
?RCS: patch49: created
?RCS:
?X:
?X: Used as: "set dflt; eval $prefixup" to set $dflt to be $prefix/dir
?X: instead of $prefixexp/dir, in case portability was involved somehow
?X: and $prefix uses ~name expansion.
?X:
?MAKE:Prefixup: prefix prefixexp
?MAKE: -pick add $@ %<
?LINT:define prefixup
?S:prefixup:
?S: This shell variable is used internally by Configure to reset
?S: the leading
 installation prefix correctly when $prefix uses
?S: ~name expansion.
?S:  set dflt
?S:  eval $prefixup
?S: That will set $dflt to $prefix/dir if it was $prefixexp/dir and
?S: $prefix differs from $prefixexp.
?S:.
?V:prefixup
: set the prefixup variable, to restore leading tilda escape
prefixup='case "$prefixexp" in
"$prefix") ;;
*) eval "$1=\`echo \$$1 | sed \"s,^$prefixexp,$prefix,\"\`";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Prefixup.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memcpy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memcpy.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:58  ram
?RCS: patch10: removed text recommending bcopy over memcpy (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_memcpy: Inlibc
?MAKE: -pick add $@ %<
?S:d_memcpy:
?S: This variable conditionally defines the HAS_MEMCPY symbol, which
?S: indicates to the C program that the memcpy() routine is available
?S: to copy blocks of
 memory.
?S:.
?C:HAS_MEMCPY (MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy blocks of memory.
?C:.
?H:#$d_memcpy HAS_MEMCPY /**/
?H:.
?LINT:set d_memcpy
: see if memcpy exists
set memcpy d_memcpy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lockf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_lockf.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:36  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_lockf: Inlibc
?MAKE: -pick add $@ %<
?S:d_lockf:
?S: This variable conditionally defines HAS_LOCKF if lockf() is
?S: available to do file locking.
?S:.
?C:HAS_LOCKF (LOCKF):
?C: This symbol, if defined, indicates that the lockf routine is
?C: available to do file locking.
```

```
?C:.
?H:#$d_lockf
 HAS_LOCKF  /**/
?H:.
?LINT:set d_lockf
: see if lockf exists
set lockf d_lockf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_lockf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lns.U,v 3.0.1.1 1994/06/20 07:05:52 ram Exp $
?RCS:
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?X:
?X: This unit checks whether symbolic links are really supported.
?X: We can't rely on d_symlink because that may be listed in the
?X: C library but unimplemented.
?X:
?MAKE:lns: ln rm touch
?MAKE: -pick add $@ %<
?S:lns:
?S: This variable holds the name of the command to make
?S: symbolic
 links (if they are supported).  It can be used
?S: in the Makefile. It is either 'ln -s' or 'ln'
?S:.
: determine whether symbolic links are supported
echo " "
$touch blurfl
if $ln -s blurfl sym > /dev/null 2>&1 ; then
 echo "Symbolic links are supported." >&4
 lns="$ln -s"
```

```
else
 echo "Symbolic links are NOT supported." >&4
 lns="$ln"
fi
$rm -f blurfl sym
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/lns.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: ssizetype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:24:21  ram
?RCS: patch61: integrated perl5 concerns for mis-configured sfio
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:30:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:33:06  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:ssizetype: Myread Typedef
 sizetype cat rm \
 +cc +optimize +ccflags +ldflags +libs _o
?MAKE: -pick add $@ %<
?S:ssizetype:
?S: This variable defines ssizetype to be something like ssize_t,
?S: long or int.  It is used by functions that return a count
?S: of bytes or an error condition.  It must be a signed type.
?S: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?S:.
?C:SSize_t:
?C: This symbol holds the type used by functions that return
?C: a count of bytes or an error condition.  It must be a signed type.
?C: It is usually ssize_t, but may be long or int, etc.
?C: It may be necessary to include <sys/types.h> or <unistd.h>
```

```
?C: to get any typedef'ed information.
?C: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?C:.
?H:#define SSize_t $ssizetype  /* signed count of bytes */
?H:.
?F:!ssize.out !ssize
: see what type is used for signed size_t
set ssize_t ssizetype int stdio.h sys/types.h
eval $typedef
dflt="$ssizetype"
?X: Now check out whether sizeof(SSize_t) == sizeof(Size_t)
$cat
 > ssize.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#define Size_t $sizetype
#define SSize_t $dflt
int main()
{
 if (sizeof(Size_t) == sizeof(SSize_t))
  printf("$dflt\n");
 else if (sizeof(Size_t) == sizeof(int))
  printf("int\n");
 else
  printf("long\n");
 fflush(stdout);
 exit(0);
}
EOM
echo " "
?X: If $libs contains -lsfio, and sfio is mis-configured, then it
?X: sometimes (apparently) runs and exits with a 0 status, but with no
?X: output!.  Thus we check with test -s whether we actually got any
?X: output.  I think it has to do with sfio's use of _exit vs. exit,
?X: but I don't know for sure.  --Andy Dougherty  1/27/97.
if $cc $optimize $ccflags $ldflags -o ssize ssize.c $libs > /dev/null 2>&1  &&
  ./ssize > ssize.out 2>/dev/null && test -s ssize.out ; then
 ssizetype=`$cat ssize.out`
 echo "I'll be using $ssizetype for functions returning a byte count." >&4
else
 $cat >&4 <<EOM
Help! I can't compile and run the ssize_t test program: please enlighten me!
(This
 is probably a misconfiguration in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)

I need a type that is the same size as $sizetype, but is guaranteed to
be signed.  Common values are ssize_t, int and long.
```

```
EOM
 rp="What signed type is the same size as $sizetype?"
 . ./myread
 ssizetype="$ans"
fi
$rm -f ssize ssize$_o ssize.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ssizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017-2018, H.Merijn Brand
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_mkostemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkostemp:
?S: This variable conditionally defines HAS_MKOSTEMP if mkostemp() is
?S: available to exclusively create and open a uniquely named (with a
?S: suffix) temporary file.
?S:.
?C:HAS_MKOSTEMP:
?C: This symbol, if defined, indicates that the mkostemp routine is
?C: available to exclusively create and open a uniquely named (with a
?C: suffix) temporary file.
?C:.
?H:#$d_mkostemp HAS_MKOSTEMP /**/
?H:.
?LINT:set d_mkostemp
: see if mkostemp exists
set mkostemp d_mkostemp
eval $inlibc
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkostemp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_logb: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_logb:
?S: This variable conditionally defines the HAS_LOGB symbol, which
?S: indicates to the C program that the logb() routine is available
?S: to extract the exponent of x.
?S:.
?C:HAS_LOGB:
?C: This symbol, if defined, indicates that the logb routine is
?C: available to do the logb function.
?C:.
?H:#$d_logb HAS_LOGB  /**/
?H:.
?LINT:set d_logb
: see if logb exists
set logb d_logb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_logb.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcscmp: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_wcscmp:
?S: This variable conditionally defines the HAS_WCSCMP symbol if the
?S: wcscmp() routine is available and can be used to compare wide
?S: character strings.
?S:.
?C:HAS_WCSCMP:
?C: This symbol, if defined, indicates that the wcscmp routine is
?C: available to compare two wide character strings.
?C:.
?H:#$d_wcscmp HAS_WCSCMP /**/
?H:.
?F:!try
?LINT: set d_wcscmp
: look for wcscmp
echo " "
$cat >try.c <<'EOCP'
#include <stdio.h>
```

```
#include
 <wchar.h>
int main ()
{
   wchar_t *s = L" ";
   return (wcscmp (s, s) ? 1 : 0);
   }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working wcscmp() found." >&4
     val="$define" ;;
 *)  echo "wcscmp() found, but it doesn't work" >&4
     ;;
 esac
else
   echo "wcscmp() NOT found." >&4
   fi
set d_wcscmp
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_wcscmp.U
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```
?RCS: $Id: i_sysutsname.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysutsname: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysutsname:
?S: This variable conditionally defines the I_SYSUTSNAME symbol,
?S: and indicates whether a C program should include <sys/utsname.h>.
?S:.
?C:I_SYSUTSNAME:
?C: This symbol, if defined, indicates that <sys/utsname.h> exists and
?C: should be included.
?C:.
?H:#$i_sysutsname I_SYSUTSNAME  /**/
```

```
?H:.
?LINT:set i_sysutsname
: see if this is a sys/utsname.h system
set sys/utsname.h i_sysutsname
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysutsname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorhtml1dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorhtml1dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorhtml1dir vendorhtml1direxp installvendorhtml1dir: html1dir Getfile \
 Setprefixvar Oldconfig Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorhtml1dir:
?S: This variable contains the name of the directory for html
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this
 directory.
?S: Vendors who distribute perl may wish to place their own
?S: html pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorhtml1direxp:
?S: This variable is the ~name expanded version of vendorhtml1dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorhtml1dir="
?S:installvendorhtml1dir:
?S: This variable is really the same as vendorhtml1direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
```

```
?LINT:change prefixvar
?LINT:set installvendorhtml1dir
: Set the vendorhtml1dir variables
case "$vendorprefix" in
") vendorhtml1dir="
 vendorhtml1direxp="
 ;;
*) : determine where vendor-supplied html pages go.
 : There is no standard location, so try to copy the previously-selected
 : directory structure for the core html pages.
 : XXX Better default suggestions would be welcome.
 case "$vendorhtml1dir"
 in
 ") dflt=`echo "$html1dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorhtml1dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=dn+~
 rp='Pathname for the vendor-supplied html pages?'
 . ./getfile
 vendorhtml1dir="$ans"
 vendorhtml1direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorhtml1dir" = "X" && vendorhtml1dir=' '
prefixvar=vendorhtml1dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorhtml1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: spitshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: spitshell.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:22:12  ram
?RCS: patch61: removed useless chatter as this is now done very early
```

```
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:37:01  ram
?RCS: patch45: use 'test -f' instead of 'test -r' for exec-only cat progs (WED)
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:33:00  ram
?RCS: patch32: don't create spitshell under the UU directory
?RCS:
 patch32: allow for cat in /bin or /usr/bin
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:58  ram
?RCS: patch10: made #!-failure message more friendly (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:spitshell shsharp sharpbang: eunicefix sh Head
?MAKE: -pick add $@ %<
?S:spitshell:
?S: This variable contains the command necessary to spit out a runnable
?S: shell on this system.  It is either cat or a grep -v for # comments.
?S:.
?S:shsharp:
?S: This variable tells further Configure units whether your sh can
?S: handle # comments.
?S:.
?S:sharpbang:
?S: This variable contains the string #! if this system supports that
?S: construct.
?S:.
?F:!sharp
?T:xcat p
?X: "paths" comes from Head
?LINT:extern paths _exe
: see if sh knows # comments
?X: This is loaded up early, so avoid being chatty.
?X: echo " "
?X: echo "Checking your $sh to see if it knows about # comments..." >&2
if `$sh -c '#' >/dev/null 2>&1`; then
?X: echo
 "Your $sh handles # comments correctly."
 shsharp=true
 spitshell=cat
?X: echo " "
?X: echo "Okay, let's see if #! works on this system..."
 xcat=/bin/cat
 test -f $xcat$_exe || xcat=/usr/bin/cat
 if test ! -f $xcat$_exe; then
```

```
  for p in `echo $PATH | sed -e "s/$p_/ /g"` $paths; do
   if test -f $p/cat$_exe; then
    xcat=$p/cat
    break
   fi
  done
  if test ! -f $xcat$_exe; then
   echo "Can't find cat anywhere!"
   exit 1
  fi
 fi
 echo "#!$xcat" >sharp
 $eunicefix sharp
 chmod +x sharp
 ./sharp > today 2>/dev/null
 if test -s today; then
?X:  echo "It does."
  sharpbang='#!'
 else
  echo "#! $xcat" > sharp
  $eunicefix sharp
  chmod +x sharp
  ./sharp > today 2>/dev/null
  if test -s today; then
?X:   echo "It does."
   sharpbang='#! '
  else
?X:   echo "Okay, let's see if #! works on this system..."
?X:   echo "It's just a comment."
   sharpbang=': use '
  fi
 fi
else
 echo " "
 echo "Your $sh doesn't grok # comments--I will strip them later on."
 shsharp=false
?X: The
 spitshell script will be perused, so leave it out the UU directory
 cd ..
 echo "exec grep -v '^[  ]*#'" >spitshell
 chmod +x spitshell
 $eunicefix spitshell
 spitshell=`pwd`/spitshell
 cd UU
 echo "I presume that if # doesn't work, #! won't work either!"
 sharpbang=': use '
fi
rm -f sharp today
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/spitshell.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sbrksmart.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:35:41  ram
?RCS: patch45: now sets sbrksmart to undef explicitly when lacking sbrk()
?RCS: patch45: forgot a cast when using return value from sbrk()
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:16:45  ram
?RCS: patch16: created
?RCS:
?MAKE:sbrksmart: cat d_sbrk +cc +ccflags +libs rm
?MAKE: -pick add $@ %<
?S:sbrksmart:
?S: This variable conditionally defines HAS_SMART_SBRK if the sbrk()
?S: routine honors a negative argument to lower the break
 value.
?S:.
?C:HAS_SMART_SBRK:
?C: This symbol is defined when the sbrk() system call may be used with
?C: a negative argument to lower the break value, therefore releasing
?C: core to the system. If not, you'd probably be better off using the
?C: mmap() system call.
?C:.
?H:#$sbrksmart HAS_SMART_SBRK /**/
?H:.
?T:dumb
?F:!sbrk
: see whether sbrk can release core to the kernel
echo " "
case "$d_sbrk" in
"$define")
 echo "Let's see if your sbrk() is smart enough to release core..." >&4
 $cat > sbrk.c <<EOC
#define INC 256  /* Small enough to be less than a page size */
```

```
int main()
{
 char *obrk = (char *) sbrk(0);
 char *nbrk;

 nbrk = (char *) sbrk(INC);
 if (nbrk == (char *) -1)
  exit(1); /* Not enough memory */
 if (nbrk != obrk)
  exit(2); /* Unreliable sbrk() */
 nbrk = (char *) sbrk(-INC);
 if (nbrk == (char *) -1)
  exit(3); /* May have understood negative arg as huge positive */
 if (obrk != (char *) sbrk(0))
  exit(4); /* Not smart, definitely */

 exit(0);  /* Ok */
}
EOC
 sbrksmart="$undef"
 dumb='--
 assuming dumb sbrk().'
 if $cc $ccflags -o sbrk sbrk.c $libs >/dev/null 2>&1; then
  ./sbrk >/dev/null 2>&1
  case $? in
  0) sbrksmart="$define"
   echo "Yes, it can be used with negative values." ;;
  1) echo "Sorry, not enough memory $dumb" ;;
  2) echo "No it's not, and besides it seems to be buggy..." ;;
  3) echo "No, it fails with negative values." ;;
  4) echo "Nope, your sbrk() is too dumb." ;;
  *) echo "Err... Unexpected result $dumb" ;;
  esac
 else
  echo "(Could not compile test program $dumb)"
 fi
 ;;
*)
 echo "Since you don't have sbrk(), let's forget about the smart test!"
 sbrksmart="$undef"
 ;;
esac
$rm -f sbrk sbrk.* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sbrksmart.U
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```
?RCS: $Id: i_sysstatfs.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysstatfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysstatfs:
?S: This variable conditionally defines the I_SYSSTATFS symbol,
?S: and indicates whether a C program should include <sys/statfs.h>.
?S:.
?C:I_SYS_STATFS:
?C: This symbol, if defined, indicates that <sys/statfs.h> exists.
?C:.
?H:#$i_sysstatfs I_SYS_STATFS  /**/
?H:.
?LINT:set i_sysstatfs
: see if this is a sys/statfs.h system
set sys/statfs.h i_sysstatfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysstatfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sethent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_sethent:
?S: This variable conditionally defines HAS_SETHOSTENT if sethostent() is
?S: available.
?S:.
?C:HAS_SETHOSTENT:
```

```
?C: This symbol, if defined, indicates that the sethostent() routine is
?C: available.
?C:.
?H:#$d_sethent HAS_SETHOSTENT  /**/
?H:.
?LINT:set d_sethent
: see if sethostent exists
set
 sethostent d_sethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_sethent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:full_ar: ar
?MAKE: -pick add $@ %<
?S:full_ar:
?S: This variable contains the full pathname to 'ar', whether or
?S: not the user has specified 'portability'.  This is only used
?S: in the Makefile.SH.
?S:.
: Store the full pathname to the ar program for use in the C program
: Respect a hint or command line value for full_ar.
case "$full_ar" in
") full_ar=$ar ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Loc_ar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_su_chown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS:
?RCS: $Log: d_su_chown.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_su_chown: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_su_chown (d_rootchown):
?S: This variable conditionally defines the SU_CHOWN symbol, which
?S: indicates to the C program that only root can chown() the owner
?S: of a file.
?S:.
?C:SU_CHOWN (ROOT_CHOWN):
?C: This symbol, if defined, indicates that the system allows only root
?C: can
 change the owner of a file with chown().
?C:.
?H:#$d_su_chown SU_CHOWN /**/
?H:.
?LINT:set d_su_chown
: see if 'chown()' is restricted.
: but not too hard, as it is late and I am tired. -- HMS
echo " "
if set setreuid val -f d_su_chown; eval $csym; $val; then
 echo 'It looks like only root can chown() the owner of a file.' >&4
 val="$define"
else
 echo 'It looks like root or the owner can chown() a file away.' >&4
 val="$undef"
fi
set d_su_chown
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_su_chown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_execinfo.U 34 2010-11-27 11:55:39Z rmanfredi $
?RCS:
?RCS: Copyright (c) 2011, Raphael Manfredi
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_execinfo: Inhdr
?MAKE: -pick add $@ %<
?S:i_execinfo:
?S: This variable conditionally defines the I_EXECINFO symbol, and indicates
?S: whether a C program may include <execinfo.h>, for backtrace() support.
?S:.
?C:I_EXECINFO:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <execinfo.h> for backtrace() support.
?C:.
?H:#$i_execinfo I_EXECINFO  /**/
?H:.
?LINT:set i_execinfo
: see if this is an execinfo.h system
set execinfo.h i_execinfo
eval
 $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_execinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bsdjmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bsdjmp.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:31:10  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:09:09  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bsdjmp: Guess Setvar cat +cc libs rm
?MAKE: -pick add $@ %<
?S:d_bsdjmp:
?S: This variable conditionally defines USE_BSDJMP
```

```
 if BSD _setjmp and
?S: _longjmp routines are available to do non-local gotos without saving
?S: or restoring the signal mask flag.
?S:.
?C:USE_BSDJMP (BSDJMP):
?C: This symbol, if defined, indicates that the BSD _setjmp and _longjmp
?C: routines are available to do non-local gotos wihtout saving or restoring
?C: the signal mask flag.
?C:.
?H:#$d_bsdjmp USE_BSDJMP  /**/
?H:.
?F:!set
?LINT:set d_bsdjmp
: see if _setjmp and _longjmp exists
?X: We can't check for these symbols with Inlibc because of the leading "_"
echo " "
case "$d_bsdjmp" in
")
 $cat >set.c <<EOP
#include <setjmp.h>
jmp_buf env;
int set = 1;
int main()
{
 if (_setjmp(env))
  exit(set);
 set = 0;
 _longjmp(env, 1);
 exit(1);
}
EOP
 if $cc -o set set.c $libs >/dev/null 2>&1; then
  if ./set >/dev/null 2>&1; then
   echo "Good! You have BSD _setjmp and _longjmp routines." >&4
   val="$define"
  else
   $cat <<EOM
Uh-Oh! You have BSD _setjmp and _longjmp, but they do not work properly!!
EOM
   val="$undef"
  fi
 else
  if
 ./usg; then
   echo "You do not have _setjmp and _longjmp, but that's fine." >&4
  else
   cat <<EOM
It sounds strange for a BSD system to miss _setjmp and _longjmp, but that's ok.
```

```
EOM
  fi
  val="$undef"
 fi
 ;;
*) val="$d_bsdjmp"
 case "$d_bsdjmp" in
 $define) echo "Good! You have BSD _setjmp and _longjmp routines." >&4;;
 $undef) echo "You do not have _setjmp and _longjmp, but that's fine." >&4;;
 esac
 ;;
esac
set d_bsdjmp
eval $setvar
$rm -f set.c set
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bsdjmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memchr.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memchr: Inlibc
?MAKE: -pick add $@ %<
?S:d_memchr:
?S: This variable conditionally defines the HAS_MEMCHR symbol, which
?S: indicates to the C program that the memchr() routine is available
?S: to scan a block of memory for a character.
?S:.
?C:HAS_MEMCHR:
?C: This symbol, if defined, indicates that the memchr routine is available
?C: to scan a block of memory for a character.
  If undefined, roll your own.
?C:.
?H:#$d_memchr HAS_MEMCHR  /**/
?H:.
```

```
?LINT:set d_memchr
: see if memchr exists
set memchr d_memchr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlocale_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setlocale_r setlocale_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_locale extern_C
?MAKE: -pick add $@ %<
?S:d_setlocale_r:
?S: This variable conditionally defines the HAS_SETLOCALE_R symbol,
?S: which indicates to the C program that the setlocale_r()
?S: routine is available.
?S:.
?S:setlocale_r_proto:
?S: This variable encodes the prototype of setlocale_r.
?S: It is zero if d_setlocale_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setlocale_r
?S: is defined.
?S:.
?C:HAS_SETLOCALE_R:
?C: This symbol, if defined, indicates that the setlocale_r routine
?C: is
 available to setlocale re-entrantly.
?C:.
?C:SETLOCALE_R_PROTO:
?C: This symbol encodes the prototype of setlocale_r.
?C: It is zero if d_setlocale_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setlocale_r
?C: is defined.
?C:.
?H:#$d_setlocale_r HAS_SETLOCALE_R /**/
?H:#define SETLOCALE_R_PROTO $setlocale_r_proto /**/
?H:.
?T:try hdrs d_setlocale_r_proto
: see if setlocale_r exists
set setlocale_r d_setlocale_r
```

```
eval $inlibc
case "$d_setlocale_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_locale locale.h"
 case "$d_setlocale_r_proto:$usethreads" in
 ":define") d_setlocale_r_proto=define
  set d_setlocale_r_proto setlocale_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setlocale_r_proto" in
 define)
 case "$setlocale_r_proto" in
 "|0) try='int setlocale_r(int, const char*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && setlocale_r_proto=I_ICBI ;;
 esac
 case "$setlocale_r_proto" in
 "|0) d_setlocale_r=undef
  setlocale_r_proto=0
  echo
 "Disabling setlocale_r, cannot determine prototype." >&4 ;;
 * ) case "$setlocale_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setlocale_r_proto="REENTRANT_PROTO_$setlocale_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setlocale_r has no prototype, not using it." >&4 ;;
  esac
  d_setlocale_r=undef
  setlocale_r_proto=0
  ;;
 esac
 ;;
*) setlocale_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setlocale_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isinfl: Inlibc
?MAKE: -pick add $@ %<
?S:d_isinfl:
?S: This variable conditionally defines the HAS_ISINFL symbol, which
?S: indicates to the C program that the isinfl() routine is available.
?S:.
?C:HAS_ISINFL:
?C: This symbol, if defined, indicates that the isinfl routine is
?C: available to check whether a long double is an infinity.
?C:.
?H:#$d_isinfl HAS_ISINFL  /**/
?H:.
?LINT:set d_isinfl
: see if isinfl exists
set isinfl d_isinfl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isinfl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: privlib.U,v $
?RCS: Revision 3.0.1.4  1995/09/25  09:17:09  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:44:23  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:31:52  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:34  ram
?RCS: patch10: added support for /local/lib (WED)
?RCS: patch10: prompt phrasing made
```

```
 more explicit (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:privlib privlibexp installprivlib: afs package cat Getfile \
 Oldconfig Prefixit test
?MAKE: -pick add $@ %<
?Y:TOP
?S:privlib:
?S: This variable contains the eventual value of the PRIVLIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S:.
?S:privlibexp:
?S: This variable is the ~name expanded version of privlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installprivlib:
?S: This variable is really the same as privlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:PRIVLIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is
 private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C:.
?C:PRIVLIB_EXP:
?C: This symbol contains the ~name expanded version of PRIVLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#define PRIVLIB "$privlib"  /**/
?H:#define PRIVLIB_EXP "$privlibexp"  /**/
?H:.
: determine where private executables go
set dflt privlib lib/$package
eval $prefixit
$cat <<EOM

There are some auxiliary files for $package that need to be put into a
private library directory that is accessible by everyone.

EOM
fn=d~+
```

```
rp='Pathname where the private library files will reside?'
. ./getfile
if $test "X$privlibexp" != "X$ansexp"; then
 installprivlib="
fi
privlib="$ans"
privlibexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed
 (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installprivlib" in
 ") dflt=`echo $privlibexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installprivlib";;
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installprivlib="$ans"
else
 installprivlib="$privlibexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/privlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dup2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_dup2.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_dup2: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_dup2:
?S: This variable conditionally defines HAS_DUP2 if dup2() is
?S: available to duplicate file descriptors.
?S:.
?C:HAS_DUP2 (DUP2):
?C: This symbol, if defined, indicates that the dup2 routine is
?C: available to duplicate file descriptors.
?C:.
?H:#$d_dup2 HAS_DUP2 /**/
?H:.
?LINT:set d_dup2
:
 see if dup2 exists
set dup2 d_dup2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dup2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: randfunc.U,v 3.0 1993/08/18 12:09:39 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: randfunc.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the new unit that should be used when random
?X: functions are to be used. It thus makes randbits.U obsolete.
?X:
?X: This unit gives a simple #define for Drand01, which produces
?X: doubles in the range [0,1) using the "best" random number
?X: generator available.  The source should just call Drand01
?X: and not worry about the underlying
 implementation.
?X:     Andy Dougherty  July 1998
?X:
?MAKE:randfunc drand01 seedfunc randbits randseedtype: \
 Compile Myread Csym ccflags
?MAKE: -pick add $@ %<
```

```
?S:randfunc:
?S: Indicates the name of the random number function to use.
?S: Values include drand48, random, and rand. In C programs,
?S: the 'Drand01' macro is defined to generate uniformly distributed
?S: random numbers over the range [0., 1.[ (see drand01 and nrand).
?S:.
?S:drand01:
?S: Indicates the macro to be used to generate normalized
?S: random numbers.  Uses randfunc, often divided by
?S: (double) (((unsigned long) 1 << randbits)) in order to
?S: normalize the result.
?S: In C programs, the macro 'Drand01' is mapped to drand01.
?S:.
?S:randseedtype:
?S: Indicates the type of the argument of the seedfunc.
?S:.
?S:seedfunc:
?S: Indicates the random number generating seed function.
?S: Values include srand48, srandom, and srand.
?S:.
?S:randbits:
?S: Indicates how many bits are produced by the function used to
?S: generate
 normalized random numbers.
?S:.
?C:RANDFUNC:
?C: This symbol defines the random function used to define Drand01().
?C:.
?C:Drand01:
?C: This macro is to be used to generate uniformly distributed
?C: random numbers over the range [0., 1.[.  You may have to supply
?C: an 'extern double drand48();' in your program since SunOS 4.1.3
?C: doesn't provide you with anything relevant in its headers.
?C: See HAS_DRAND48_PROTO.
?C:.
?C:Rand_seed_t:
?C: This symbol defines the type of the argument of the
?C: random seed function.
?C:.
?C:seedDrand01:
?C: This symbol defines the macro to be used in seeding the
?C: random number generator (see Drand01).
?C:.
?C:RANDBITS:
?C: This symbol indicates how many bits are produced by the
?C: function used to generate normalized random numbers.
?C: Values include 15, 16, 31, and 48.
?C:.
```

```
?H:#define RANDFUNC  $randfunc  /**/
?H:#define Drand01()  $drand01  /**/
?H:#define Rand_seed_t  $randseedtype  /**/
?H:#define seedDrand01(x) $seedfunc((Rand_seed_t)x) /**/
?H:#define
 RANDBITS  $randbits  /**/
?H:.
?LINT:change ccflags
?LINT:unclosed $randbits))"
: How can we generate normalized random numbers ?
echo " "
echo "Using our internal random number implementation..." >&4

case "$ccflags" in
*-Dmy_rand=*|*-Dmy_srand=*)
 echo "Removing obsolete -Dmy_rand, -Dmy_srand, and -Drandbits from ccflags." >&4
 ccflags="`echo $ccflags | sed -e 's/-Dmy_rand=random/ /'`"
 ccflags="`echo $ccflags | sed -e 's/-Dmy_srand=srandom/ /'`"
 ccflags="`echo $ccflags | sed -e 's/-Drandbits=[0-9][0-9]*/ /'`"
 ;;
esac

randfunc=Perl_drand48
drand01="Perl_drand48()"
seedfunc="Perl_drand48_init"
randbits=48
randseedtype=U32
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/randfunc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strcspn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strcspn.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strcspn: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_strcspn:
?S: This variable conditionally defines the HAS_STRCSPN symbol, which
?S: indicates to the C program that the strcspn() routine is available
?S: to scan strings.
?S:.
?C:HAS_STRCSPN (STRCSPN):
?C: This symbol, if defined, indicates that the strcspn routine is
?C: available to scan
 strings.
?C:.
?H:#$d_strcspn HAS_STRCSPN  /**/
?H:.
?LINT:set d_strcspn
: see if strcspn exists
set strcspn d_strcspn
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strcspn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fdclose: Inlibc
?MAKE: -pick add $@ %<
?S:d_fdclose:
?S: This variable conditionally defines the HAS_FDCLOSE symbol, which
?S: indicates to the C program that the fdclose() routine is available.
?S:.
?C:HAS_FDCLOSE:
?C: This symbol, if defined, indicates that the fdclose routine is
?C: available to free a FILE structure without closing the underlying
?C: file descriptor.  This function appeared in FreeBSD 10.2.
?C:.
?H:#$d_fdclose HAS_FDCLOSE  /**/
?H:.
?LINT:set d_fdclose
: see if fdclose exists
set fdclose d_fdclose
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fdclose.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtoul.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:43  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_strtoul: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtoul:
?S: This variable conditionally defines the HAS_STRTOUL symbol, which
?S: indicates to the C program that the strtoul() routine is available
?S: to provide conversion of strings to unsigned long.
?S:.
?C:HAS_STRTOUL (STRTOUL):
?C: This symbol, if defined, indicates that the strtoul routine is
?C: available
 to provide conversion of strings to unsigned long.
?C:.
?H:#$d_strtoul HAS_STRTOUL /**/
?H:.
?LINT:set d_strtoul
: see if strtoul exists
set strtoul d_strtoul
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtoul.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readdir_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_readdir_r readdir_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_dirent extern_C
?MAKE: -pick add $@ %<
```

```
?S:d_readdir_r:
?S: This variable conditionally defines the HAS_READDIR_R symbol,
?S: which indicates to the C program that the readdir_r()
?S: routine is available.
?S:.
?S:readdir_r_proto:
?S: This variable encodes the prototype of readdir_r.
?S: It is zero if d_readdir_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir_r
?S: is defined.
?S:.
?C:HAS_READDIR_R:
?C: This symbol, if defined, indicates that the readdir_r routine
?C: is available to readdir re-entrantly.
?C:.
?C:READDIR_R_PROTO:
?C: This
 symbol encodes the prototype of readdir_r.
?C: It is zero if d_readdir_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir_r
?C: is defined.
?C:.
?H:#$d_readdir_r HAS_READDIR_R /**/
?H:#define READDIR_R_PROTO $readdir_r_proto /**/
?H:.
?T:try hdrs d_readdir_r_proto
: see if readdir_r exists
set readdir_r d_readdir_r
eval $inlibc
case "$d_readdir_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_dirent dirent.h"
 case "$d_readdir_r_proto:$usethreads" in
 ":define") d_readdir_r_proto=define
  set d_readdir_r_proto readdir_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_readdir_r_proto" in
 define)
 case "$readdir_r_proto" in
 "|0) try='int readdir_r(DIR*, struct dirent*, struct dirent**);'
 ./protochk "$extern_C $try" $hdrs && readdir_r_proto=I_TSR ;;
 esac
 case "$readdir_r_proto" in
 "|0) try='int readdir_r(DIR*, struct dirent*);'
 ./protochk "$extern_C $try" $hdrs && readdir_r_proto=I_TS
```

```
 ;;
 esac
 case "$readdir_r_proto" in
"|0) d_readdir_r=undef
  readdir_r_proto=0
  echo "Disabling readdir_r, cannot determine prototype." >&4 ;;
* ) case "$readdir_r_proto" in
  REENTRANT_PROTO*) ;;
  *) readdir_r_proto="REENTRANT_PROTO_$readdir_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "readdir_r has no prototype, not using it." >&4 ;;
  esac
  d_readdir_r=undef
  readdir_r_proto=0
  ;;
 esac
 ;;
*) readdir_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_readdir_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: install.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: install.U,v $
?RCS: Revision 3.0.1.2  1995/09/25  09:16:37  ram
?RCS: patch59: all possible install programs are now looked for
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:30:41  ram
?RCS: patch45: created
?RCS:
?MAKE:install installdir: Loc Oldconfig Getfile cat test startsh rm +cc \
 eunicefix package contains mkdir echo n c
```

```
?MAKE: -pick add $@ %<
?S:install:
?S: This variable contains the name of an install program that can accept
?S: BSD-style arguments.
 It must correctly support -c, -s, and -m at least.
?S: It is a fully qualified pathname when found. If you have a local
?S: install.SH file at the root directory of your package, it is assumed to
?S: be the default script emulating a BSD install and the variable will be
?S: set to ./install. Otherwise, it is set to plain 'install', relying on
?S: the user's PATH to perform miracles.
?S:.
?S:installdir:
?S: This variable contains the name of a program that can install nested
?S: directories. Often set to 'mkdir -p', it can also be 'install -d' if
?S: you have such a beast and lack the former. If you have an install.SH
?S: file at the root directory of your package, it will be used in last
?S: resort, setting the variable to './install -d'. Otherwise, it is set to
?S: plain 'mkdir', and cross your fingers!
?S:.
?T:dir file tryit prog creatdir either
?F:!tryinst
: locate a BSD compatible install program
echo " "
echo "Looking for a BSD-compatible install program..." >&4
@if installdir
creatdir="
@end
case
 "$install" in
")
 tryit="
 for dir in $pth; do
  for file in ginstall installbsd scoinst install; do
   if $test -f $dir/$file; then
    tryit="$tryit $dir/$file"
   fi
  done
 done
 $cat >try.c <<EOC
int main()
{
 printf("OK\n");
 exit(0);
}
EOC
 if $cc -o try try.c >/dev/null 2>&1; then
  cp try try.ns
  strip try >/dev/null 2>&1
```

```
 else
  echo "(I can't seem to compile a trivial C program -- bypassing.)"
  echo "try" >try
  cp try try.ns
 fi
 $cat >tryinst <<EOS
$startsh
$rm -rf foo d
@if installdir
\$1 -d foo/bar
@end
$mkdir d
\$1 -c -m 764 try.ns d
\$1 -c -s -m 642 try.ns d/try
EOS
 chmod +x tryinst
 $eunicefix tryinst
 dflt=''
 either=''
 for prog in $tryit; do
  $echo $n "Checking $prog... $c"
  ./tryinst $prog >/dev/null 2>&1
@if installdir
  if $test -d foo/bar; then
   creatdir="$prog -d"
  fi
@end
  (ls -l d/try >try.ls; ls -l d/try.ns >tryno.ls) 2>/dev/null
  if (cmp -s d/try try && cmp -s d/try.ns try.ns && \
   $contains 'rwxrw-r--' tryno.ls &&
 \
   $contains 'rw-r---w-' try.ls) >/dev/null 2>&1
  then
   dflt="$prog"
   echo "ok, that will do."
   break
  fi
  echo "not good$either."
  either=' either'
  $rm -f try*.ls
 done
 $rm -rf foo d tryinst try try*.ls try.*
 case "$dflt" in
 '')
@if {test -f ../install.SH}
  echo "Hopefully, $package comes with its own install script!"
  dflt='./install'
@else
```

```
  dflt='install'
@end
  ;;
 esac
 ;;
*) dflt="$install";;
esac
$cat <<EOM

I will be requiring a BSD-compatible install program (one that allows
options like -s to strip executables or -m to specify a file mode) to
install $package.

If the question below contains a fully qualified default path, then it
is probably ok. If it is an unqualified name such as 'install', then it
means I was unable to find out a good install program I could use. If
@if {test -f ../install.SH}
you know of one, please tell me about it. If the default is './install',
then I shall be using the install script supplied with $package.
@else
you know of one,
 please tell me about it.
@end

EOM
@if {test -f ../install.SH}
fn='/fe~(install,./install)'
@else
fn='/fe~(install)'
@end
rp='Which install program shall I use?'
. ./getfile
install="$ans"

@if installdir
: how can we create nested directories?
echo " "
echo "Ok, let's see how we can create nested directories..." >&4
case "$installdir" in
")
?X: First time, maybe we already found out a working one in $creatdir above...
?X: Prefer "mkdir -p" because of bugs in GNU install when not running as root
 $mkdir -p foo/bar >/dev/null 2>&1
 if $test -d foo/bar; then
  echo "Great, we can build them using 'mkdir -p'."
  creatdir='mkdir -p'
 else
  case "$creatdir" in
```

```
  ")
   if eval "$install -d foo/bar"; $test -d foo/bar; then
    creatdir="install -d"
    echo "It looks like '$creatdir' will do it for us."
   fi
   ;;
  *)
   eval "$creatdir foo/bar" >/dev/null 2>&1
   if $test -d foo/bar; then
    echo "Ah! We can use '$creatdir' to do just that."
   else
    creatdir="
   fi
   ;;
  esac
 fi
 $rm
 -rf foo
 case "$creatdir" in
 ")
  echo "Heck! Another ancient system lacking the comfort of modern ones!"
@if {test -f ../install.SH}
  echo "You can thank $package for bringing you its own install script!"
  installdir='./install -d'
@else
  echo "We have no choice but to use plain old 'mkdir' -- wish me luck!"
  installdir=mkdir
@end
  ;;
 *) installdir="$creatdir";;
 esac
 ;;
*) echo "As you already told me, '$installdir' should work.";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/install.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_pthread_atfork: Inlibc cat Compile usethreads Setvar
?MAKE: -pick add $@ %<
?S:d_pthread_atfork:
?S: This variable conditionally defines the HAS_PTHREAD_ATFORK symbol,
?S: which indicates to the C program that the pthread_atfork()
?S: routine is available.
?S:.
?C:HAS_PTHREAD_ATFORK:
?C: This symbol, if defined, indicates that the pthread_atfork routine
?C: is available to setup fork handlers.
?C:.
?H:#$d_pthread_atfork HAS_PTHREAD_ATFORK  /**/
?H:.
?LINT:set d_pthread_atfork
: see whether the pthread_atfork exists
$cat >try.c <<EOP
#include <pthread.h>
#include <stdio.h>
int main() {
#ifdef  PTHREAD_ATFORK
	pthread_atfork(NULL,NULL,NULL);
#endif
}
EOP

: see if pthread_atfork exists
set
 try -DPTHREAD_ATFORK
if eval $compile; then
   val="$define"
else
   val="$undef"
fi
case "$usethreads" in
$define)
	case "$val" in
	$define) echo 'pthread_atfork found.' >&4	;;
	*)	echo 'pthread_atfork NOT found.' >&4	;;
	esac
esac
set d_pthread_atfork
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthread_atfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: h_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: h_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:h_fcntl: Nothing
?MAKE: -pick add $@ %<
?S:h_fcntl:
?S: This is variable gets set in various places to tell i_fcntl that
?S: <fcntl.h> should be included.
?S:.
: Initialize h_fcntl
h_fcntl=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/h_fcntl.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: rename.C,v 3.0.1.1 1994/01/24 13:58:42 ram Exp ram $
*
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*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: rename.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:42  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/rename.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrent.U,v $
```

```
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_getgrent.U,v $
?RCS:
?MAKE:d_getgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getgrent:
?S: This variable conditionally defines the HAS_GETGRENT symbol, which
?S: indicates to the C program that the getgrent() routine is available
?S: for sequential access of the group database.
?S:.
?C:HAS_GETGRENT:
?C: This symbol, if defined, indicates that the getgrent routine is
?C: available for sequential access of the group database.
?C:.
?H:#$d_getgrent HAS_GETGRENT  /**/
?H:.
?LINT:set d_getgrent
: see if getgrent exists
set getgrent d_getgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getgrent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wifstat.U,v 3.0.1.3 1997/02/28 15:47:43 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_wifstat.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:47:43  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:09:10  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1995/03/21  08:47:46  ram
```

```
?RCS: patch52: created
?RCS:
?MAKE:d_wifstat: Compile d_uwait Oldconfig cat rm
?MAKE: -pick add $@ %<
?S:d_wifstat:
?S: This symbol conditionally defines USE_WIFSTAT
 if the C program can
?S: safely use the WIFxxx macros with the kind of wait() parameter
?S: declared in the program (see UNION_WAIT), or if it can't. Should
?S: only matter on HP-UX, where the macros are incorrectly written and
?S: therefore cause programs using them with an 'union wait' variable
?S: to not compile properly.
?S:.
?C:USE_WIFSTAT:
?C: This symbol, if defined, indicates to the C program that the argument
?C: for the WIFxxx set of macros such as WIFSIGNALED or WIFEXITED can
?C: be of the same kind as the one used to hold the wait() status. Should
?C: only matter on HP-UX, where the macros are incorrectly written and
?C: therefore cause programs using them with an 'union wait' variable
?C: to not compile properly. See also UNION_WAIT.
?C:.
?H:#$d_wifstat USE_WIFSTAT  /**/
?H:.
?T:type
?F:!foo
: see if we can use WIFxxx macros
echo " "
case "$d_wifstat" in
"$define") echo "As before, you can safely use WIFEXITED and friends!" >&4;;
"$undef") echo "You still can't use WIFEXITED
 and friends!" >&4;;
*)
 echo "Let's see whether you can use the WIFEXITED(status) macro and its"
 case "$d_uwait" in
 "$define") type='union wait';;
 *) type='int';;
 esac
 echo "friends with status declared as '$type status'..."
 $cat >foo.c <<EOCP
#include <sys/types.h>
#include <sys/wait.h>

int main()
{
 $type status;
 int e = 0;

#ifdef WIFEXITED
```

```
 if (WIFEXITED(status))
  printf("\n");
 exit(0);
#else
 exit(2);
#endif
}
EOCP
 d_wifstat="$undef"
 set foo
 if eval $compile; then
  if ./foo >/dev/null; then
   echo "Great! Looks like we can use the WIFxxx macros." >&4
   d_wifstat="$define"
  else
   echo "You don't seem to have WIFxxx macros, but that's ok." >&4
  fi
 else
  echo "Apparently you can't use WIFxxx macros properly." >&4
 fi
 $rm -f foo.* foo core
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_wifstat.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethent:
?S: This variable conditionally defines HAS_GETHOSTENT if gethostent() is
?S: available to dup file descriptors.
?S:.
```

```
?C:HAS_GETHOSTENT (GETHOSTENT):
?C: This symbol, if defined, indicates that the gethostent routine is
?C: available to lookup host names in some data base or other.
?C:.
?H:#$d_gethent HAS_GETHOSTENT  /**/
?H:.
?LINT:set
 d_gethent
: see if gethostent exists
set gethostent d_gethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethent.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:Assert: cat
?MAKE: -pick add $@ %<
?F:./static_assert.h
: static assertion checking include file
?X:
?X: C programs can include this file to perform STATIC_ASSERT() checks
?X: which are done at compile-time and cause the compilation to fail when
?X: the expression is false.
?X:
?X: It is sufficient to compile with: $cc -c $ccflags try.c
?X: There is no need to link the file to spot the assertion failure.
?X:
$cat >static_assert.h <<'EOC'
#define STATIC_ASSERT(expr) \
 do { switch (0) { case ((expr) ? 1 : 0): case 0: break; } }
 while(0)
EOC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Assert.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sighold.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sighold.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sighold: Inlibc
?MAKE: -pick add $@ %<
?S:d_sighold:
?S: This variable conditionally defines HAS_SIGHOLD if sighold() is
?S: available to hold signals.
?S:.
?C:HAS_SIGHOLD:
?C: This symbol, if defined, indicates that the sighold routine is
?C: available to hold signals.
?C:.
?H:#$d_sighold HAS_SIGHOLD /**/
?H:.
?LINT:set d_sighold
:
 see if sighold exists
set sighold d_sighold
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sighold.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nl_langinfo: Inlibc i_langinfo
?MAKE: -pick add $@ %<
?S:d_nl_langinfo:
?S: This variable conditionally defines the HAS_NL_LANGINFO symbol, which
?S: indicates to the C program that the nl_langinfo() routine is available.
?S:.
```

```
?C:HAS_NL_LANGINFO:
?C: This symbol, if defined, indicates that the nl_langinfo routine is
?C: available to return local data.  You will also need <langinfo.h>
?C: and therefore I_LANGINFO.
?C:.
?H:#$d_nl_langinfo HAS_NL_LANGINFO  /**/
?H:.
?LINT:set d_nl_langinfo
?LINT:use i_langinfo
: see if nl_langinfo exists
set nl_langinfo d_nl_langinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nl_langinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_seteuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_seteuid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_seteuid: Inlibc
?MAKE: -pick add $@ %<
?S:d_seteuid:
?S: This variable conditionally defines the HAS_SETEUID symbol, which
?S: indicates to the C program that the seteuid() routine is available
?S: to change the effective uid of the current program.
?S:.
?C:HAS_SETEUID (SETEUID):
?C: This symbol, if defined, indicates that the seteuid
 routine is available
?C: to change the effective uid of the current program.
?C:.
?H:#$d_seteuid HAS_SETEUID  /**/
?H:.
?LINT:set d_seteuid
: see if seteuid exists
set seteuid d_seteuid
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_seteuid.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:uidsize: Myread Typedef uidtype Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:uidsize:
?S: This variable contains the size of a uidtype in bytes.
?S:.
?C:Uid_t_size:
?C: This symbol holds the size of a Uid_t in bytes.
?C:.
?H:#define Uid_t_size $uidsize  /* UID size */
?H:.
?T:yyy zzz
?F:!try
: Check size of UID
echo " "
case "$uidtype" in
*_t) zzz="$uidtype" ;;
*)   zzz="uid"  ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($uidtype));
   exit(0);
}
EOCP
set try
```

```
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") uidsize=4
  echo "(I can't execute the test program--guessing $uidsize.)" >&4
  ;;
 *) uidsize=$yyy
  echo "Your $zzz is $uidsize bytes long."
  ;;
 esac
else
 uidsize=4
 echo "(I can't compile the test program--guessing $uidsize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sunmath.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sunmath: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sunmath:
?S: This variable conditionally defines the I_SUNMATH symbol, and indicates
?S: whether a C program should include <sunmath.h>.
?S:.
?C:I_SUNMATH:
?C: This symbol, if defined, indicates that <sunmath.h> exists and
?C: should be included.
?C:.
?H:#$i_sunmath I_SUNMATH  /**/
?H:.
?LINT:set i_sunmath
: see if this is a sunmath.h system
set sunmath.h i_sunmath
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sunmath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fd_set.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:16  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  06:57:23  ram
?RCS: patch30: extended scope for fd_set checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:27  ram
?RCS: patch16: comments for HAS_FD_* symbols were not consistent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fd_set d_fd_macros d_fds_bits: cat +cc +ccflags rm Oldconfig
 \
 d_socket i_systime i_sysselct i_syssock
?MAKE: -pick add $@ %<
?S:d_fd_set:
?S: This variable contains the eventual value of the HAS_FD_SET symbol,
?S: which indicates if your C compiler knows about the fd_set typedef.
?S:.
?S:d_fd_macros:
?S: This variable contains the eventual value of the HAS_FD_MACROS symbol,
?S: which indicates if your C compiler knows about the macros which
?S: manipulate an fd_set.
?S:.
?S:d_fds_bits:
?S: This variable contains the eventual value of the HAS_FDS_BITS symbol,
?S: which indicates if your fd_set typedef contains the fds_bits member.
?S: If you have an fd_set typedef, but the dweebs who installed it did
?S: a half-fast job and neglected to provide the macros to manipulate
?S: an fd_set, HAS_FDS_BITS will let us know how to fix the gaffe.
?S:.
?C:HAS_FD_SET:
?C: This symbol, when defined, indicates presence of the fd_set typedef
?C: in <sys/types.h>
?C:.
?C:HAS_FD_MACROS:
?C: This symbol, when defined,  indicates presence of the macros used
```

```
 to
?C: manipulate an fd_set.
?C:.
?C:HAS_FDS_BITS:
?C: This symbol, when defined, indicates presence of the fds_bits member in
?C: fd_set.  This knowledge is useful if fd_set is available but the macros
?C: aren't.
?C:.
?H:#$d_fd_set HAS_FD_SET /**/
?H:#$d_fd_macros HAS_FD_MACROS /**/
?H:#$d_fds_bits HAS_FDS_BITS /**/
?H:.
?F:!fd_set
: check for fd_set items
$cat <<EOM

Checking to see how well your C compiler handles fd_set and friends ...
EOM
?X: The FD_SET macros can be in strange places.  On some SysV-based
?X: systems, they are in <sys/bsdtypes.h>, which is included (perhaps)
?X: by <sys/socket.h>.  We won't force people to include
?X: <sys/bsdtypes.h> because it might introduce other
?X: incompatibilities.
$cat >fd_set.c <<EOCP
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#$i_syssock I_SYS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#ifdef I_SYS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#endif
#ifdef I_SYS_TIME
#include
 <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main() {
 fd_set fds;

#ifdef TRYBITS
 if(fds.fds_bits);
#endif
```

```
#if defined(FD_SET) && defined(FD_CLR) && defined(FD_ISSET) && defined(FD_ZERO)
 exit(0);
#else
 exit(1);
#endif
}
EOCP
if $cc $ccflags -DTRYBITS -o fd_set fd_set.c >fd_set.out 2>&1 ; then
 d_fds_bits="$define"
 d_fd_set="$define"
 echo "Well, your system knows about the normal fd_set typedef..." >&4
 if ./fd_set; then
  echo "and you have the normal fd_set macros (just as I'd expect)." >&4
  d_fd_macros="$define"
 else
  $cat >&4 <<'EOM'
but not the normal fd_set macros!  Gaaack!  I'll have to cover for you.
EOM
  d_fd_macros="$undef"
 fi
else
 $cat <<'EOM'
Hmm, your compiler has some difficulty with fd_set.  Checking further...
EOM
 if $cc $ccflags -o fd_set fd_set.c >fd_set.out 2>&1 ; then
  d_fds_bits="$undef"
  d_fd_set="$define"
  echo "Well, your system has some sort of fd_set available..." >&4
  if ./fd_set; then
   echo "and you have the
 normal fd_set macros." >&4
   d_fd_macros="$define"
  else
   $cat <<'EOM'
but not the normal fd_set macros!  Gross!  More work for me...
EOM
   d_fd_macros="$undef"
  fi
 else
 echo "Well, you got zip.  That's OK, I can roll my own fd_set stuff." >&4
  d_fd_set="$undef"
  d_fds_bits="$undef"
  d_fd_macros="$undef"
 fi
fi
$rm -f fd_set*
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fd_set.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_safemcpy.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:41:12  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  13:58:46  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.3  1995/03/21  08:47:26  ram
?RCS: patch52: swapped two first arguments of memcpy() calls
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:15:10
  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:53:12  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safemcpy: cat d_memcpy +cc +optimize +ccflags +libs +ldflags rm \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safemcpy:
?S: This variable conditionally defines the HAS_SAFE_MEMCPY symbol if
?S: the memcpy() routine can do overlapping copies.
?S:.
?C:HAS_SAFE_MEMCPY (SAFE_MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy potentially overlapping memory blocks. Otherwise you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
```

```
?H:#$d_safemcpy HAS_SAFE_MEMCPY /**/
?H:.
?F:!safemcpy
?LINT: set d_safemcpy
: can memcpy handle overlapping blocks?
?X:
 assume the worst
val="$undef"
case "$d_memcpy" in
"$define")
 echo " "
 echo "Checking to see if your memcpy() can do overlapping copies..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
memcpy(abc, "abcdefghijklmnopqrstuvwxyz0123456789", 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
```

```
  b = buf+align;
  memcpy(b, abc, len);
  for (off = 1; off <= len; off++) {
   memcpy(b+off, b, len);
   memcpy(b, b+off, len);
   if (memcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
 if
 $cc $optimize $ccflags $ldflags \
      -o safemcpy foo.c $libs >/dev/null 2>&1; then
  if ./safemcpy 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "It can't, sorry."
   case "$d_memmove" in
   "$define") echo "But that's Ok since you have memmove()." ;;
   esac
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
  case "$d_memmove" in
  "$define") echo "But that's Ok since you have memmove()." ;;
  esac
 fi
 ;;
esac
$rm -f foo.* safemcpy core
set d_safemcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_safemcpy.U
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```
?RCS: $Id: i_dbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```
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?RCS:
?RCS: $Log: i_dbm.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:20  ram
?RCS: patch61: added I_RPCSVC_DBM check
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:16:05  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_dbm i_rpcsvcdbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_dbm (d_odbm):
?S: This variable conditionally defines
 the I_DBM symbol, which
?S: indicates to the C program that <dbm.h> exists and should
?S: be included.
?S:.
?S:i_rpcsvcdbm:
?S: This variable conditionally defines the I_RPCSVC_DBM symbol, which
?S: indicates to the C program that <rpcsvc/dbm.h> exists and should
?S: be included.  Some System V systems might need this instead of <dbm.h>.
?S:.
?C:I_DBM (HAS_ODBM ODBM):
?C: This symbol, if defined, indicates that <dbm.h> exists and should
?C: be included.
?C:.
?C:I_RPCSVC_DBM:
?C: This symbol, if defined, indicates that <rpcsvc/dbm.h> exists and
?C: should be included.
?C:.
?H:#$i_dbm I_DBM /**/
?H:#$i_rpcsvcdbm I_RPCSVC_DBM /**/
?H:.
?T:d_dbmclose
?LINT:set i_dbm i_rpcsvcdbm
: see if dbm.h is available
?X: We might just have the header, not the library.
?X: We look for dbmclose() rather than dbminit() because
?X: some versions of SCO Unix have -ldbm, but are missing dbmclose(). -- ADO
?X: Some System V systems have <rpcsvc/dbm.h> instead of <dbm.h>.
: see if dbmclose exists
set dbmclose
 d_dbmclose
eval $inlibc
```

```
case "$d_dbmclose" in
$define)
 set dbm.h i_dbm
 eval $inhdr
 case "$i_dbm" in
 $define)
  val="$undef"
  set i_rpcsvcdbm
  eval $setvar
  ;;
 *) set rpcsvc/dbm.h i_rpcsvcdbm
  eval $inhdr
  ;;
 esac
 ;;
*) echo "We won't be including <dbm.h>"
 val="$undef"
 set i_dbm
 eval $setvar
 val="$undef"
 set i_rpcsvcdbm
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dbm.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_csh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:32:18  ram
?RCS: patch61: added full_csh to preserve the full path even when portable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_csh full_csh: csh Setvar
```

```
?MAKE: -pick add $@ %<
?S:d_csh:
?S: This variable conditionally defines the CSH symbol, which
?S: indicates to the C program that the C-shell exists.
?S:.
?S:full_csh:
?S: This variable contains the full pathname to 'csh', whether
 or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'csh.'
?S:.
?C:HAS_CSH:
?C: This symbol, if defined, indicates that the C-shell exists.
?C:.
?C:CSH:
?C: This symbol, if defined, contains the full pathname of csh.
?C:.
?X: Previously, I just did $d_csh CSH "$full_csh", but that caused
?X: problems on VMS where the config.sh extraction program changes
?X: $undef to a real cpp undef, and they then had  #undef CSH ""
?X: which the compiler didn't like.  It's easy to work around this,
?X: so I did.  --AD  3/1998.
?X: And we don't want to define CSH if !HAS_CSH, but we don't want
?X: those lines in config.h if they don't need CSH, so protect with ?CSH
?X: and not ?%<. --RAM, 15/02/2004
?H:?%<:#$d_csh HAS_CSH  /**/
?H:?CSH:#ifdef HAS_CSH
?H:?CSH:#define CSH "$full_csh" /**/
?H:?CSH:#endif
?H:.
?LINT:set d_csh
: get csh whereabouts
case
 "$csh" in
'csh') val="$undef" ;;
*) val="$define" ;;
esac
set d_csh
eval $setvar
: Respect a hint or command line value for full_csh.
case "$full_csh" in
") full_csh=$csh ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_csh.U

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```
?RCS: $Id: installprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: installprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:installprefix installprefixexp: Getfile Loc \
 Oldconfig afs cat package prefix
?MAKE: -pick add $@ %<
?S:installprefix:
?S: This variable holds the name of the directory below which
?S: "make install" will install the package.  For most users, this
?S: is the same
 as prefix.  However, it is useful for
?S: installing the software into a different (usually temporary)
?S: location after which it can be bundled up and moved somehow
?S: to the final location specified by prefix.
?S:.
?S:installprefixexp:
?S: This variable holds the full absolute path of installprefix
?S: with all ~-expansion done.
?S:.
: determine installation prefix for where package is to be installed.
if $afs; then
$cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
files will reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installprefix" in
 ") dflt=`echo $prefix | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installprefix";;
 esac
```

```
else
$cat <<EOM

In some special cases, particularly when building $package for distribution,
it is convenient to distinguish the directory in which files should be
installed from the directory ($prefix) in which they will
eventually
 reside.  For most users, these two directories are the same.

EOM
 case "$installprefix" in
 ") dflt=$prefix ;;
 *) dflt=$installprefix;;
 esac
fi
fn=d~
rp='What installation prefix should I use for installing files?'
. ./getfile
installprefix="$ans"
installprefixexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/installprefix.U
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```
?RCS: $Id: i_systimeb.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systimeb.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/timeb.h> should be included
?X: or not when using ftime() (for struct timeb definition).
?X:
?X: Force looking for <sys/time.h> for struct timeb.
?X:INC: i_systime
?MAKE:i_systimeb: test contains Loc Setvar Findhdr
?MAKE: -pick add $@ %<
?S:i_systimeb:
```

```
?S: This variable conditionally defines I_SYS_TIMEB,
 which indicates
?S: to the C program that it should include <sys/timeb.h>.
?S:.
?C:I_SYS_TIMEB (I_SYSTIMEB):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/timeb.h>, in order to define struct timeb (some systems
?C: define this in <sys/time.h>). This is useful when using ftime().
?C: You should include <sys/time.h> if I_SYS_TIMEB is not defined,
?C: nor is I_SYS_TIME.
?C:.
?H:#$i_systimeb I_SYS_TIMEB  /**/
?H:.
?T:xxx
?LINT:set i_systimeb
: see where struct timeb is defined
echo " "
xxx=`./findhdr sys/timeb.h`
if $test "$xxx"; then
 if $contains 'struct timeb' $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have struct timeb defined in <sys/timeb.h>." >&4
 else
  val="$undef"
  echo "Assuming struct timeb is defined in <sys/time.h>." >&4
 fi
else
 val="$undef"
echo "No <sys/timeb.h> -- Assuming struct timeb is defined in <sys/time.h>." >&4
fi
set i_systimeb
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systimeb.U
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```
?RCS: $Id: i_neterrno.U,v 3.0.1.3 1994/10/29 16:20:29 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
```

```
?RCS:
?RCS: $Log: i_neterrno.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:20:29  ram
?RCS: patch36: forgot to initialize 'val' to an empty value (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:22:10  ram
?RCS: patch32: removed spurious echo
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:02:05  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:i_neterrno: Inhdr +cc +ccflags rm_try Setvar
?MAKE: -pick
 add $@ %<
?S:i_neterrno:
?S: This variable conditionally defines the I_NET_ERRNO symbol, which
?S: indicates to the C program that <net/errno.h> exists and should
?S: be included.
?S:.
?C:I_NET_ERRNO:
?C: This symbol, if defined, indicates that <net/errno.h> exists and
?C: should be included.
?C:.
?H:#$i_neterrno I_NET_ERRNO  /**/
?H:.
?LINT:set i_neterrno
: see if net/errno.h is available
val=''
set net/errno.h val
eval $inhdr

: Unfortunately, it causes problems on some systems.  Arrgh.
case "$val" in
$define)
 cat > try.c <<'EOM'
#include <stdio.h>
#include <errno.h>
#include <net/errno.h>
int func()
{
 return ENOTSOCK;
}
EOM
 if $cc $ccflags -c try.c >/dev/null 2>&1; then
  echo "We'll be including <net/errno.h>." >&4
 else
  echo "We won't be including <net/errno.h>." >&4
  val="$undef"
```

```
 fi
 $rm_try
 ;;
esac
set i_neterrno
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_neterrno.U
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```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:longdblmantbits doublemantbits nvmantbits: Inlibc cat Compile run \
 rm_try Setvar echo i_sunmath usequadmath \
 d_longdbl longdblkind nvsize doublesize longdblsize
?MAKE: -pick add $@ %<
?S:doublemantbits:
?S: This symbol, if defined, tells how many mantissa bits
?S: there are in double precision floating point format.
?S: Note that this is usually DBL_MANT_DIG minus one, since
?S: with the standard IEEE 754 formats DBL_MANT_DIG includes
?S: the implicit bit which doesn't really exist.
?S:.
?S:longdblmantbits:
?S: This symbol, if defined, tells how many mantissa bits
?S: there are in long double precision floating point format.
?S: Note that this can be LDBL_MANT_DIG minus one,
?S: since
 LDBL_MANT_DIG can include the IEEE 754 implicit bit.
?S: The common x86-style 80-bit long double does not have
?S: an implicit bit.
?S:.
?S:nvmantbits:
?S: This variable tells how many bits the mantissa of a Perl NV has,
?S: not including the possible implicit bit.
?S:.
?C:DOUBLEMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: there are in double precision floating point format.
?C: Note that this is usually DBL_MANT_DIG minus one, since
?C: with the standard IEEE 754 formats DBL_MANT_DIG includes
?C: the implicit bit, which doesn't really exist.
```

```
?C:.
?C:LONGDBLMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: there are in long double precision floating point format.
?C: Note that this can be LDBL_MANT_DIG minus one,
?C: since LDBL_MANT_DIG can include the IEEE 754 implicit bit.
?C: The common x86-style 80-bit long double does not have
?C: an implicit bit.
?C:.
?C:NVMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: (not
 including implicit bit) there are in a Perl NV.
?C: This depends on which floating point type was chosen.
?C:.
?H:#define DOUBLEMANTBITS  $doublemantbits
?H:#define LONGDBLMANTBITS $longdblmantbits
?H:#define NVMANTBITS      $nvmantbits
?H:.
?F:!try
: Check the length of the double mantissa
$echo "Checking how many mantissa bits your doubles have..." >&4
$cat >try.c <<EOP
#$i_sunmath I_SUNMATH
#include <float.h>
#ifdef I_SUNMATH
# include <sunmath.h>
#endif
#ifdef DBL_MANT_DIG
# define BITS (DBL_MANT_DIG - 1) /* the implicit bit does not count */
#endif
#include <stdio.h>
int main(int argc, char *argv[]) {
#ifdef BITS
 printf("%d\n", BITS);
#endif
 return 0;
}
EOP
set try
if eval $compile; then
   doublemantbits=`$run ./try`
else
   doublemantbits="$undef"
fi
$rm_try

: Check the length of the longdouble mantissa
```

```
$echo "Checking how many mantissa bits your long doubles have..." >&4
$cat >try.c <<EOP
#$i_sunmath I_SUNMATH
#include <float.h>
#ifdef I_SUNMATH
# include <sunmath.h>
#endif
#$d_longdbl
 HAS_LONG_DOUBLE
#if defined(HAS_LONG_DOUBLE) && defined(LDBL_MANT_DIG)
# if ($longdblkind == 3) || ($longdblkind == 4) /* 80-bit extended precision */
/* This format has no implicit bit.  Beware, however, that for
* this format the bare LDBL_MANT_DIG is misleading for inf/nan:
* the top three bits are used for inf (100) / qnan (11x) / snan (101),
* and the top bit must have been one since 387, zero is plain invalid.
* For normal fp values, the LDBL_MANT_DIG is fine, though. */
#  define BITS LDBL_MANT_DIG
# elif ($longdblkind == 5 || $longdblkind == 6 || $longdblkind == 7 || $longdblkind == 8) /* double double */
/* LDBL_MANT_DIG of 106 (twice 53) would be logical, but for some
* reason e.g. Irix thinks 107.  But in any case, we want only
* the number of real bits, the implicit bits are of no interest.  */
#  define BITS 2 * (DBL_MANT_DIG - 1)
# else
#  define BITS (LDBL_MANT_DIG - 1) /* the implicit bit does not count */
# endif
#endif
#include <stdio.h>
int
 main(int argc, char *argv[]) {
#ifdef BITS
 printf("%d\n", BITS);
#endif
 return 0;
}
EOP
set try
if eval $compile; then
   longdblmantbits=`$run ./try`
else
   longdblmantbits="$undef"
fi
$rm_try

: Check the length of the NV mantissa
$echo "Checking how many mantissa bits your NVs have..." >&4
if test "X$usequadmath" = "X$define"; then
 nvmantbits=112 # 128-1-15
else
```

```
 if test "X$nvsize" = "X$doublesize"; then
   nvmantbits="$doublemantbits"
 else
    if test "X$nvsize" = "X$longdblsize"; then
      nvmantbits="$longdblmantbits"
    else
      nvmantbits="$undef"
    fi
 fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/mantbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_niin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_niin.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <netinet/in.h> is available or not
?X:
?MAKE:i_niin i_sysin: Inhdr
?MAKE: -pick add $@ %<
?S:i_niin:
?S: This variable conditionally defines I_NETINET_IN, which indicates
?S: to the C program that it should include <netinet/in.h>. Otherwise,
?S: you may try <sys/in.h>.
?S:.
?S:i_sysin:
?S: This variable conditionally
 defines I_SYS_IN, which indicates
?S: to the C program that it should include <sys/in.h> instead of
?S: <netinet/in.h>.
?S:.
?C:I_NETINET_IN:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <netinet/in.h>. Otherwise, you may try <sys/in.h>.
```

```
?C:.
?C:I_SYS_IN (I_SYSIN):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/in.h> instead of <netinet/in.h>.
?C:.
?H:#$i_niin I_NETINET_IN /**/
?H:#$i_sysin I_SYS_IN  /**/
?H:.
?LINT:set i_niin i_sysin
: see if this is a netinet/in.h or sys/in.h system
set netinet/in.h i_niin sys/in.h i_sysin
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_niin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: abortsig.U,v 3.0.1.1 1994/10/29 16:02:19 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: abortsig.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:19  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:abortsig: Myread Oldconfig Guess cat Compile rm
?MAKE: -pick add $@ %<
?S:abortsig:
?S: This variable holds the name of the signal used by the abort() call.
?S:.
?C:ABORTSIG:
?C: This symbol holds the signal number (symbol)
 used by the abort() call. To
?C: actually define the signal symbol, <signal.h> should be included.
?C:.
?H:#define ABORTSIG $abortsig  /**/
?H:.
?T:signal
: which signal is sent by abort ?
```

```
echo " "
case "$abortsig" in
")
 echo "Checking to see which signal is sent to the process by abort()..." >&4
 echo "abort" > abort.sh
 chmod +x abort.sh
?X: SIGABRT should replace SIGIOT on USG machines in a near future (1991).
 for signal in SIGIOT SIGILL SIGABRT; do
  case "$abortsig" in
  ") $cat >abort.c <<EOP
#include <signal.h>
caught() { exit(0); }
int main()
{
#ifdef $signal
 signal($signal, caught);
#endif
 if (-1 == abort())
  exit(1);
 exit(1);
}
EOP
?X: We have to use the abort.sh script otherwise sh behaves strangely on AIX.
   set abort
   if eval $compile; then
    (./abort.sh) >/dev/null 2>&1
    case $? in
    0) abortsig="$signal";;
    esac
   fi
   ;;
  esac
 done
 ;;
esac
case "$abortsig" in
") echo "(I wasn't able to compute the signal name--guessing)"
 if ./usg; then
  dflt="SIGIOT"
 else
  dflt="SIGILL"
 fi;;
*)
  dflt="$abortsig"
 ;;
esac
rp="Which signal does abort() send to the process (signal name)?"
. ./myread
```

```
abortsig="$ans"
$rm -f core abort.sh abort abort.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/abortsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysfile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:11:36  ram
?RCS: patch56: removed <> characters from comment, per metalint suggestion
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:01:23  ram
?RCS: patch6: added default for i_sysfile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysfile: h_sysfile Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_sysfile:
?S: This variable conditionally defines
 the I_SYS_FILE symbol, and indicates
?S: whether a C program should include <sys/file.h> to get R_OK and friends.
?S:.
?C:I_SYS_FILE (I_SYSFILE):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/file.h> to get definition of R_OK and friends.
?C:.
?H:#$i_sysfile I_SYS_FILE  /**/
?H:.
?T:val
?D:i_sysfile="
?LINT:change h_sysfile
?LINT:set i_sysfile
: see if this is a sys/file.h system
val="
set sys/file.h val
eval $inhdr
```

```
: do we need to include sys/file.h ?
case "$val" in
"$define")
 echo " "
 if $h_sysfile; then
  val="$define"
  echo "We'll be including <sys/file.h>." >&4
 else
  val="$undef"
  echo "We won't be including <sys/file.h>." >&4
 fi
 ;;
*)
 h_sysfile=false
 ;;
esac
set i_sysfile
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nblock_io.U,v 3.0.1.2 1997/02/28 16:17:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: nblock_io.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:17:14  ram
?RCS: patch61: simplify here document for shells that can't handle them well
?RCS: patch61: force use of "startsh" at the head of the generated script
?RCS: patch61: added new files to the ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:13:22  ram
?RCS: patch56: created
?RCS:
?X:
?X: Simplify here document for shells that can't handle them well.
?X: (Problem reported on FreeBSD;
 it's unclear if this helps.)  --AD
?X:
```

```
?MAKE:o_nonblock eagain rd_nodata d_eofnblk: cat rm_try Compile run \
 d_open3 h_sysfile h_fcntl signal_t hint Oldconfig Setvar \
 startsh i_unistd i_fcntl i_stdlib d_fork d_pipe d_alarm
?MAKE: -pick add $@ %<
?S:o_nonblock:
?S: This variable bears the symbol value to be used during open() or fcntl()
?S: to turn on non-blocking I/O for a file descriptor. If you wish to switch
?S: between blocking and non-blocking, you may try ioctl(FIOSNBIO) instead,
?S: but that is only supported by some devices.
?S:.
?S:eagain:
?S: This variable bears the symbolic errno code set by read() when no
?S: data is present on the file and non-blocking I/O was enabled (otherwise,
?S: read() blocks naturally).
?S:.
?S:rd_nodata:
?S: This variable holds the return code from read() when no data is
?S: present. It should be -1, but some systems return 0 when O_NDELAY is
?S: used, which is a shame because you cannot make the difference between
?S: no data and an EOF.. Sigh!
?S:.
?S:d_eofnblk:
?S: This
 variable conditionally defines EOF_NONBLOCK if EOF can be seen
?S: when reading from a non-blocking I/O source.
?S:.
?C:VAL_O_NONBLOCK:
?C: This symbol is to be used during open() or fcntl(F_SETFL) to turn on
?C: non-blocking I/O for the file descriptor. Note that there is no way
?C: back, i.e. you cannot turn it blocking again this way. If you wish to
?C: alternatively switch between blocking and non-blocking, use the
?C: ioctl(FIOSNBIO) call instead, but that is not supported by all devices.
?C:.
?C:VAL_EAGAIN:
?C: This symbol holds the errno error code set by read() when no data was
?C: present on the non-blocking file descriptor.
?C:.
?C:RD_NODATA:
?C: This symbol holds the return code from read() when no data is present
?C: on the non-blocking file descriptor. Be careful! If EOF_NONBLOCK is
?C: not defined, then you can't distinguish between no data and EOF by
?C: issuing a read(). You'll have to find another way to tell for sure!
?C:.
?C:EOF_NONBLOCK:
?C: This
 symbol, if defined, indicates to the C program that a read() on
?C: a non-blocking file descriptor will return 0 on EOF, and not the value
?C: held in RD_NODATA (-1 usually, in that case!).
```

```
?C:.
?H:#define VAL_O_NONBLOCK $o_nonblock
?H:#define VAL_EAGAIN $eagain
?H:#define RD_NODATA $rd_nodata
?H:#$d_eofnblk EOF_NONBLOCK
?H:.
?T:status
?F:!try.out !try.ret !try.err !try !mtry
?LINT:use d_open3
: check for non-blocking I/O stuff
case "$h_sysfile" in
true) echo "#include <sys/file.h>" > head.c;;
*)
	case "$h_fcntl" in
	true) echo "#include <fcntl.h>" > head.c;;
	*) echo "#include <sys/fcntl.h>" > head.c;;
	esac
	;;
esac
echo " "
echo "Figuring out the flag used by open() for non-blocking I/O..." >&4
case "$o_nonblock" in
")
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_fcntl I_FCNTL
#ifdef I_FCNTL
#include <fcntl.h>
#endif
int main() {
#ifdef O_NONBLOCK
 printf("O_NONBLOCK\n");
 exit(0);
#endif
#ifdef
 O_NDELAY
 printf("O_NDELAY\n");
 exit(0);
#endif
?X: Stevens "Advanced Programming in the UNIX Environment" page 364 mentions
?X: the FNDELAY symbol, used in 4.3BSD (source: Paul Marquess).
#ifdef FNDELAY
 printf("FNDELAY\n");
```

```
 exit(0);
#endif
 exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  o_nonblock=`$run ./try`
  case "$o_nonblock" in
  ") echo "I can't figure it out, assuming O_NONBLOCK will do.";;
  *) echo "Seems like we can use $o_nonblock.";;
  esac
 else
  echo "(I can't compile the test program; pray O_NONBLOCK is right!)"
 fi
 ;;
*) echo "Using $hint value $o_nonblock.";;
esac
$rm_try

echo " "
echo "Let's see what value errno gets from read() on a $o_nonblock file..." >&4
case "$eagain" in
")
 case "$d_fork:$d_pipe:$d_alarm" in
 define:define:define)
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <errno.h>
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_fcntl
 I_FCNTL
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#define MY_O_NONBLOCK $o_nonblock
#ifndef errno  /* XXX need better Configure test */
extern int errno;
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#include <unistd.h>
```

```
#endif
#include <string.h>
$signal_t blech(int x) { exit(3); }
EOCP
 $cat >> try.c <<'EOCP'
int main()
{
 int pd[2];
 int pu[2];
 char buf[1];
 char string[100];
 int ret;

 ret = pipe(pd); /* Down: child -> parent */
 if (ret != 0)
  exit(3);
 ret = pipe(pu); /* Up: parent -> child */
 if (ret != 0)
  exit(3);
 if (0 != fork()) {
  close(pd[1]); /* Parent reads from pd[0] */
  close(pu[0]); /* Parent writes (blocking) to pu[1] */
#ifdef F_SETFL
  if (-1 == fcntl(pd[0], F_SETFL, MY_O_NONBLOCK))
   exit(1);
#else
  exit(4);
#endif
  signal(SIGALRM, blech);
  alarm(5);
  if ((ret = read(pd[0], buf, 1)) > 0) /* Nothing to read! */
   exit(2);
  sprintf(string, "%d\n", ret);
  ret = write(2, string, strlen(string));
  if (ret != strlen(string))
   exit(3);
  alarm(0);
#ifdef
 EAGAIN
  if (errno == EAGAIN) {
   printf("EAGAIN\n");
   goto ok;
  }
#endif
#ifdef EWOULDBLOCK
  if (errno == EWOULDBLOCK)
   printf("EWOULDBLOCK\n");
#endif
```

```
ok:
 ret = write(pu[1], buf, 1); /* Unblocks child, tell it to close our pipe */
 if (ret != 1)
  exit(3);
 sleep(2);    /* Give it time to close our pipe */
 alarm(5);
 ret = read(pd[0], buf, 1); /* Should read EOF */
 alarm(0);
 sprintf(string, "%d\n", ret);
 ret = write(4, string, strlen(string));
 if (ret != strlen(string))
  exit(3);
 exit(0);
}

 close(pd[0]);   /* We write to pd[1] */
 close(pu[1]);   /* We read from pu[0] */
 ret = read(pu[0], buf, 1); /* Wait for parent to signal us we may continue */
 if (ret != 1)
  exit(3);
 close(pd[1]);   /* Pipe pd is now fully closed! */
 exit(0);    /* Bye bye, thank you for playing! */
}
EOCP
 set try
 if eval $compile_ok; then
?X: Use script to avoid the possible 'alarm call' message
  echo "$startsh" >mtry
  echo "$run ./try >try.out 2>try.ret 4>try.err
 || exit 4" >>mtry
  chmod +x mtry
  $run ./mtry >/dev/null 2>&1
  case $? in
  0) eagain=`$cat try.out`;;
  1) echo "Could not perform non-blocking setting!";;
  2) echo "I did a successful read() for something that was not there!";;
  3) echo "Hmm... non-blocking I/O does not seem to be working!";;
  4) echo "Could not find F_SETFL!";;
  *) echo "Something terribly wrong happened during testing.";;
  esac
  rd_nodata=`$cat try.ret`
  echo "A read() system call with no data present returns $rd_nodata."
  case "$rd_nodata" in
  0|-1) ;;
  *)
   echo "(That's peculiar, fixing that to be -1.)"
   rd_nodata=-1
   ;;
```

```
 esac
 case "$eagain" in
 ")
  echo "Forcing errno EAGAIN on read() with no data available."
  eagain=EAGAIN
  ;;
 *)
  echo "Your read() sets errno to $eagain when no data is available."
  ;;
 esac
 status=`$cat try.err`
 case "$status" in
 0) echo "And it correctly returns 0 to signal EOF.";;
 -1) echo "But it also returns -1 to signal EOF, so be careful!";;
 *)
echo "However, your read() returns '$status' on EOF??";;
 esac
 val="$define"
 if test "$status" = "$rd_nodata"; then
  echo "WARNING: you can't distinguish between EOF and no data!"
  val="$undef"
 fi
else
 echo "I can't compile the test program--assuming errno EAGAIN will do."
 eagain=EAGAIN
fi
;;
*) echo "Can't figure out how to test this--assuming errno EAGAIN will do."
 eagain=EAGAIN
 val="$define"
 ;;
esac
set d_eofnblk
eval $setvar
;;
*)
echo "Using $hint value $eagain."
echo "Your read() returns $rd_nodata when no data is present."
case "$d_eofnblk" in
"$define") echo "And you can see EOF because read() returns 0.";;
"$undef") echo "But you can't see EOF status from read() returned value.";;
*)
?X: Should not happen, but if it does, assume the worst!
 echo "(Assuming you can't see EOF status from read anyway.)"
 d_eofnblk=$undef
 ;;
esac
;;
```

```
esac
$rm_try head.c mtry

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/nblock_io.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: socksizetype.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:socksizetype: \
 Protochk Oldconfig Myread cat d_socket d_socklen_t sizetype \
 usesocks i_socks i_systypes extern_C
?MAKE: -pick add $@ %<
?S:socksizetype:
?S: This variable holds the type used for the size argument
?S: for various socket calls like accept.  Usual values include
?S: socklen_t, size_t, and int.
?S:.
?C:Sock_size_t:
?C: This symbol holds the type used for the size argument of
?C: various socket calls (just the base type, not the pointer-to).
?C:.
?H:#define Sock_size_t  $socksizetype /**/
?H:.
?T:xxx yyy try
@if Sock_size_t
: check for type of the size argument to socket calls
case "$d_socket" in
"$define")
 $cat <<EOM

Checking to see what type is the last argument
 of accept().
EOM
 yyy=''
 case "$d_socklen_t" in
 "$define") yyy="$yyy socklen_t"
 esac
 yyy="$yyy $sizetype int long unsigned"
 for xxx in $yyy; do
  case "$socksizetype" in
  ") try="$extern_C int accept(int, struct sockaddr *, $xxx *);"
   case "$usesocks" in
```

```
   "$define")
    if ./protochk "$try" $i_systypes sys/types.h $d_socket sys/socket.h literal '#define INCLUDE_PROTOTYPES'
$i_socks socks.h.; then
     echo "Your system accepts '$xxx *' for the last argument of accept()."
     socksizetype="$xxx"
    fi
    ;;
   *) if ./protochk "$try"  $i_systypes sys/types.h $d_socket sys/socket.h; then
     echo "Your system accepts '$xxx *' for the last argument of accept()."
     socksizetype="$xxx"
    fi
    ;;
   esac
   ;;
  esac
 done
: In case none of those worked, prompt the user.
 case "$socksizetype" in
 ") rp='What is the type for socket address structure sizes?'
  dflt='int'
  . ./myread
  socksizetype=$ans
  ;;
 esac
 ;;
*) : no sockets, so pick relatively harmless default
 socksizetype='int'
 ;;
esac
@end

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/socksizetype.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_cuserid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
```

```
?RCS: $Log: d_cuserid.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:25  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_cuserid: Inlibc
?MAKE: -pick add $@ %<
?S:d_cuserid:
?S: This variable conditionally defines the HAS_CUSERID symbol, which
?S: indicates to the C program that the cuserid() routine is available
?S: to get character login names.
?S:.
?C:HAS_CUSERID :
?C: This symbol,
 if defined, indicates that the cuserid routine is
?C: available to get character login names.
?C:.
?H:#$d_cuserid HAS_CUSERID  /**/
?H:.
?LINT:set d_cuserid
: see if cuserid exists
set cuserid d_cuserid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_cuserid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2021 Nicholas Clark & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_thread_local perl_thread_local: cat echo Setvar Compile run rm_try hint
?MAKE: -pick add $@ %<
?S:d_thread_local:
?S: This variable conditionally defines the PERL_THREAD_LOCAL symbol. In
?S: turn that gives a linkage specification for thread-local storage.
?S:.
?S:perl_thread_local:
?S: This variable gives the value for the PERL_THREAD_LOCAL symbol (when
?S: defined), which gives a linkage specification for thread-local storage.
?S:.
?C:PERL_THREAD_LOCAL:
?C: This symbol, if defined, gives a linkage specification for thread-local
?C: storage. For example, for a C11 compiler this will be _Thread_local.
?C: Beware, some compilers are sensitive to the C language standard they are
```

```
?C: told
 to parse. For example, suncc defaults to C11, so our probe will
?C: report that _Thread_local can be used. However, if the -std=c99 is later
?C: added to the compiler flags, then _Thread_local will become a syntax
?C: error. Hence it is important for these flags to be consistent between
?C: probing and use.
?C:.
?H:#$d_thread_local PERL_THREAD_LOCAL $perl_thread_local /**/
?H:.
?T:thread_local
?F:!try
?LINT:set d_thread_local
: see what flavor, if any, of thread local storage is supported
echo " "
echo "Checking to see if your system supports C11 thread local storage..."
$cat > try.c <<'EOCP'
#include <stdio.h>
#include <stdlib.h>
#include <pthread.h>

static int plus_one = 1;
static int minus_one = -1;

PROBE_MACRO int *minion;

int callback (const void *a, const void *b) {
  int val_a = *minion * *(const int *)a;
  int val_b = *minion * *(const int *)b;
  return val_a < val_b ? -1 : val_a > val_b;
}

#define SIZE 8

void *thread_function(void *arg) {
  /* thread local variables
 should start zeroed in each thread. */
  if (minion != NULL) {
      fprintf(stderr, "__thread variable started with %p, should be NULL\n",
              minion);
      exit(2);
  }
  minion = &minus_one;

  int array[SIZE];
  unsigned int i;
  for (i = 0; i < SIZE; ++i) {
      /* "Hash randomisation" - this array isn't in sorted order: */
      array[i ^ 5] = i * i;
```

```
  }

  qsort(array, SIZE, sizeof(int), callback);

  int bad = 0;
  for (i = 0; i < SIZE; ++i) {
     int want = (SIZE - 1 - i) * (SIZE - 1 - i);
     int have = array[i];
     if (want != have) {
        ++bad;
        fprintf(stderr, "array[%u] - want %i, have %i\n", i, want, have);
     }
  }
  if (bad)
     exit(3);

  return NULL;
}

int main(int argc, char **argv) {
  if (minion != NULL) {
     fprintf(stderr, "__thread variable started with %p, should be NULL\n",
           minion);
     exit(4);
  }

  minion = &plus_one;

  pthread_t
 tid;
  int result = pthread_create(&tid, NULL, thread_function, NULL);
  if (result) {
     fprintf(stderr, "pthread_create failed (%d)\n", result);
     exit(5);
  }

  result = pthread_join(tid, NULL);
  if (result) {
     fprintf(stderr, "pthread_join failed (%d)\n", result);
     exit(6);
  }

  if (minion == NULL) {
     fprintf(stderr, "__thread variable should not be NULL\n");
     exit(7);
  }
  if (!(minion == &plus_one && *minion == 1)) {
     fprintf(stderr, "__thread variable should be %d @ %p, not %d @ %p\n",
```

```
            1, &plus_one, *minion, minion);
      exit(8);
   }

   return 0;
}
EOCP

# Respect a hint (or previous) value for perl_thread_local, if there is one.
case "$perl_thread_local" in
") # Check the various possibilities, and break out on success.
 for thread_local in _Thread_local __thread; do
  set try -DPROBE_MACRO=$thread_local
  if eval $compile && $run ./try; then
   $echo "Your compiler supports $thread_local."
 >&4
   val=$define
   perl_thread_local="$thread_local";
   break;
  fi
  $echo "Your compiler does NOT support $thread_local." >&4
  val="$undef"
 done
 ;;
*thread*|*Thread*) # Some variant of thread local exists.
 echo "Keeping your $hint value of $perl_thread_local."
 val=$define
 ;;
*)  # Unrecognized previous value -- blindly trust the supplied
 # value and hope it makes sense.  Use old value for
 # d_thread_local, if there is one.
 echo "Keeping your $hint value of $perl_thread_local."
 case "$d_thread_local" in
  ") val=$define ;;
  *)  val=$d_thread_local ;;
 esac
 ;;
esac
set d_thread_local
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_thread_local.U
No license file was found, but licenses were detected in source scan.

?RCS: Copyright (c) 2016 Tony Cook
?RCS:

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:dtraceobject dtracexnolibs: usedtrace dtrace cc ccflags optimize \
  Compile cat rm_try
?MAKE: -pick add $@ %<
?S:dtraceobject:
?S: Whether we need to build an object file with the dtrace tool.
?S:.
?S:dtracexnolibs:
?S: Whether dtrace accepts -xnolibs.  If available we call dtrace -h
?S: and dtrace -G with -xnolibs to allow dtrace to run in a jail on
?S: FreeBSD.
?S:.
?F: !perldtrace.h
?T:xnolibs
: Probe whether dtrace builds an object, as newer Illumos requires an input
: object file that uses at least one of the probes defined in the .d file
case "$usedtrace" in
$define)
   case "$dtracexnolibs" in
   $define|true|[yY]*)
       dtracexnolibs=$define
 $dtrace -h -xnolibs -s ../perldtrace.d -o perldtrace.h
 ;;
   ' '|'')
        if $dtrace -h -xnolibs -s ../perldtrace.d -o perldtrace.h 2>&1 ; then
      dtracexnolibs=$define
      echo "Your dtrace accepts -xnolibs"
 elif $dtrace -h -s ../perldtrace.d -o perldtrace.h 2>&1 ; then
      dtracexnolibs=$undef
      echo "Your dtrace doesn't accept -xnolibs"
 else
            echo "Your dtrace doesn't work at all, try building without dtrace support" >&4
      exit 1
 fi
 ;;
   *)
       dtracexnolibs=$undef
 $dtrace -h -s ../perldtrace.d -o perldtrace.h
 ;;
   esac
   case $dtracexnolibs in
   $define) xnolibs=-xnolibs ;;
   *) xnolibs= ;;
   esac

   case "$dtraceobject" in
```

```
  $define|true|[yY]*)
      dtraceobject=$define
      ;;
  ' '|'')
      $cat >try.c <<EOM
#include "perldtrace.h"
int main(void) {
  PERL_LOADED_FILE("dummy");
  return 0;
}
EOM
      dtraceobject=$undef
      if $cc -c -o try.o $optimize $ccflags try.c \
              && $dtrace -G $xnolibs -s ../perldtrace.d try.o >/dev/null 2>&1; then

        dtraceobject=$define
          echo "Your dtrace builds an object file"
      fi
      ;;
  *) dtraceobject=$undef ;;
  esac
  $rm_try perldtrace.o perldtrace.h
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dtraceobject.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: alignbytes.U,v 3.0.1.2 1994/10/29 16:02:28 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: alignbytes.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:02:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:25:20  ram
?RCS: patch23: avoid ALIGNBYTES, since it conflicts on NetBSD
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:alignbytes: Myread Compile cat rm_try multiarch run test nvtype
?MAKE: -pick add $@ %<
?S:alignbytes:
?S: This
 variable holds the number of bytes required to align a
?S: double-- or a long double when applicable. Usual values are
?S: 2, 4 and 8.  The default is eight, for safety.
?S:.
?X: This used to be called ALIGNBYTES, but that conflicts with
?X: <machines/param.h> in NetBSD.
?C:MEM_ALIGNBYTES (ALIGNBYTES):
?C: This symbol contains the number of bytes required to align a
?C: double, or a long double when applicable. Usual values are 2,
?C: 4 and 8. The default is eight, for safety.  For cross-compiling
?C: or multiarch support, Configure will set a minimum of 8.
?C:.
?H:?%<:#define MEM_ALIGNBYTES $alignbytes
?H:.
?F:!try
: check for alignment requirements
echo " "
case "$alignbytes" in
   ") echo "Checking alignment constraints..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
struct foobar {
   char foo;
   $nvtype bar;
} try_algn;
int main()
{
   printf("%d\n", (int)((char *)&try_algn.bar - (char *)&try_algn.foo));
   return(0);
}
EOCP
 set try
 if eval $compile_ok; then
     dflt=`$run
 ./try`
 else
     dflt='8'
     echo "(I can't seem to compile the test program...)"
 fi
 case "$multiarch" in
     *$define*)
  : The usual safe value is 8, but Darwin with -Duselongdouble
  : needs 16.  Hence, we will take 8 as a minimum, but allow
  : Configure to pick a larger value if needed.
```

```
  if $test "$dflt" -lt 8; then
      dflt='8'
      echo "Setting alignment to 8 for multiarch support."><&4
  fi
  ;;
 esac
 ;;
   *) dflt="$alignbytes"
 ;;
esac
rp="Doubles must be aligned on a how-many-byte boundary?"
. ./myread
alignbytes="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/alignbytes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Prefixit.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Prefixit.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:29:22  ram
?RCS: patch49: created
?RCS:
?X:
?X: Used as: "set dflt var dir; eval $prefixit" to set $dflt to be
?X: $prefix/dir by default, or the previous $var depending on certain
?X: conditions:
?X: - If the $oldprefix variable is empty, then $prefix holds the same
?X:   value as on previous runs. Therefore, reuse $var if set, otherwise
?X:   set $dflt to $prefix/dir.
?X: - If $oldprefix is not
 empty, then set $dflt to $prefix/dir if $var
?X:   is empty (first run). Otherwise, if $var is $oldprefix/dir, then
?X:   change it to $prefix/dir. If none of the above, reuse the old $var.
?X:
?X: When dir is omitted, the dflt variable is set to $var if prefix did not
?X: change, to an empty value otherwise. If dir=none, then a single space
?X: in var is kept as-is, even if the prefix changes.
```

```
?X:
?MAKE:Prefixit: prefix oldprefix
?MAKE: -pick add $@ %<
?LINT:define prefixit
?S:prefixit:
?S: This shell variable is used internally by Configure to reset
?S: the leading installation prefix correctly when it is changed.
?S:  set dflt var [dir]
?S:  eval $prefixit
?S: That will set $dflt to $var or $prefix/dir depending on the
?S: value of $var and $oldprefix.
?S:.
?V:prefixit
?T:tp
: set the prefixit variable, to compute a suitable default value
prefixit='case "$3" in
""|none)
 case "$oldprefix" in
 "") eval "$1=\"\$$2\"";;
 *)
  case "$3" in
  "") eval "$1=";;
  none)
   eval "tp=\"\$$2\"";
   case
 "$tp" in
   ""|" "|none) eval "$1=\"\$$2\"";;
   *) eval "$1=";;
   esac;;
  esac;;
 esac;;
*)
 eval "tp=\"$oldprefix-\$$2-\""; eval "tp=\"$tp\"";
 case "$tp" in
 --|/*--|\~*--) eval "$1=\"$prefix/$3\"";;
 /*-$oldprefix/*|\~*-$oldprefix/*)
  eval "$1=\`echo \$$2 | sed \"s,^$oldprefix,$prefix,\"\`";;
 *) eval "$1=\"\$$2\"";;
 esac;;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Prefixit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tcgtpgrp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_tcgtpgrp.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:08  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_tcgetpgrp: Inlibc
?MAKE: -pick add $@ %<
?S:d_tcgetpgrp:
?S: This variable conditionally defines the HAS_TCGETPGRP symbol, which
?S: indicates to the C program that the tcgetpgrp() routine is available.
?S: to get foreground process group ID.
?S:.
?C:HAS_TCGETPGRP
 :
?C: This symbol, if defined, indicates that the tcgetpgrp routine is
?C: available to get foreground process group ID.
?C:.
?H:#$d_tcgetpgrp HAS_TCGETPGRP  /**/
?H:.
?LINT:set d_tcgetpgrp
: see if tcgetpgrp exists
set tcgetpgrp d_tcgetpgrp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tcgtpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn_v7EXT.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Warn_v7EXT.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:01:42  ram
```

```
?RCS: patch36: call ./v7 explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit issues warnings to V7 sites that they are living dangerously.
?X: This unit needs to get mentioned in End.U to get included.
?X:
?MAKE:Warn_v7EXT: package Guess
?MAKE: -pick add $@ %<
: Warnings
if ./v7;
 then
 cat <<EOM

NOTE: the V7 compiler may ignore some #undefs that $package uses.  If so,
you may get messages about redefining EXT.  Some V7 compilers also have
difficulties with #defines near buffer boundaries, so beware.  You may have
to play with the spacing in some .h files, believe it or not.
EOM
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn_v7EXT.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mallocsrc.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:10:26  ram
?RCS: patch61: added support for Free_t, the type of free()
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:10:46  ram
?RCS: patch23: added support for MYMALLOC, mainly  for perl5 (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:mallocsrc mallocobj usemymalloc malloctype d_mymalloc \
 freetype: Myread \
 Oldconfig
 package Guess Setvar rm cat +cc +ccflags Findhdr \
 i_malloc i_stdlib sed libs _o ptrsize
?MAKE: -pick add $@ %<
?X: Put near top so that other tests don't erroneously include
?X: -lmalloc.  --AD  22 June 1998
?Y:TOP
?S:usemymalloc:
?S: This variable contains y if the malloc that comes with this package
?S: is desired over the system's version of malloc.  People often include
?S: special versions of malloc for effiency, but such versions are often
?S: less portable.  See also mallocsrc and mallocobj.
?S: If this is 'y', then -lmalloc is removed from $libs.
?S:.
?S:mallocsrc:
?S: This variable contains the name of the malloc.c that comes with
?S: the package, if that malloc.c is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.
?S:.
?S:d_mymalloc:
?S: This variable conditionally defines MYMALLOC in case other parts
?S: of the source want to take special action if MYMALLOC is used.
?S: This may include different sorts
 of profiling or error detection.
?S:.
?S:mallocobj:
?S: This variable contains the name of the malloc.o that this package
?S: generates, if that malloc.o is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.  See mallocsrc.
?S:.
?S:freetype:
?S: This variable contains the return type of free().  It is usually
?S: void, but occasionally int.
?S:.
?S:malloctype:
?S: This variable contains the kind of ptr returned by malloc and realloc.
?S:.
?C:Free_t:
?C: This variable contains the return type of free().  It is usually
?C: void, but occasionally int.
?C:.
?C:Malloc_t (MALLOCPTRTYPE):
?C: This symbol is the type of pointer returned by malloc and realloc.
?C:.
```

```
?H:#define Malloc_t $malloctype   /**/
?H:#define Free_t $freetype   /**/
?H:.
?C:MYMALLOC:
?C: This symbol, if defined, indicates that we're using our own malloc.
?C:.
?H:#$d_mymalloc MYMALLOC   /**/
?H:.
?LINT:change libs
?X: Cannot test for mallocsrc; it
 is the unit's name and there is a bug in
?X: the interpreter which defines all the names, even though they are not used.
@if mallocobj
: determine which malloc to compile in
echo " "
case "$usemymalloc" in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*)
 case "$ptrsize" in
 4) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
esac
rp="Do you wish to attempt to use the malloc that comes with $package?"
. ./myread
usemymalloc="$ans"
case "$ans" in
y*|true)
 usemymalloc='y'
 mallocsrc='malloc.c'
 mallocobj="malloc$_o"
 d_mymalloc="$define"
?X: Maybe libs.U should be dependent on mallocsrc.U, but then
?X: most packages that use dist probably don't supply their own
?X: malloc, so this is probably an o.k. comprpomise
 case "$libs" in
 *-lmalloc*)
  : Remove malloc from list of libraries to use
  echo "Removing unneeded -lmalloc from library list" >&4
  set `echo X $libs | $sed -e 's/-lmalloc / /' -e 's/-lmalloc$//'`
  shift
  libs="$*"
  echo "libs = $libs" >&4
  ;;
 esac
 ;;
```

```
*)
 usemymalloc='n'
 mallocsrc=''
 mallocobj=''
 d_mymalloc="$undef"
 ;;
esac

@end
@if
 MALLOCPTRTYPE || Malloc_t || Free_t
: compute the return types of malloc and free
echo " "
$cat >malloc.c <<END
#$i_malloc I_MALLOC
#$i_stdlib I_STDLIB
#include <stdio.h>
#include <sys/types.h>
#ifdef I_MALLOC
#include <malloc.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#ifdef TRY_MALLOC
void *malloc();
#endif
#ifdef TRY_FREE
void free();
#endif
END
@if MALLOCPTRTYPE || Malloc_t
case "$malloctype" in
")
 if $cc $ccflags -c -DTRY_MALLOC malloc.c >/dev/null 2>&1; then
  malloctype='void *'
 else
  malloctype='char *'
 fi
 ;;
esac
echo "Your system wants malloc to return '$malloctype', it would seem." >&4
@end

@if Free_t
case "$freetype" in
")
 if $cc $ccflags -c -DTRY_FREE malloc.c >/dev/null 2>&1; then
```

```
  freetype='void'
 else
  freetype='int'
 fi
 ;;
esac
echo "Your system uses $freetype free(), it would seem." >&4
@end
$rm -f malloc.[co]
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mallocsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strtoul.U,v 3.0.1.1 1997/02/28 15:46:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_strtoul.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:43  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_strtoul: Inlibc cat longsize Compile run
?MAKE: -pick add $@ %<
?S:d_strtoul:
?S: This variable conditionally defines the HAS_STRTOUL symbol, which
?S: indicates to the C program that the strtoul() routine is available
?S: to provide conversion of strings to unsigned long.
?S:.
?C:HAS_STRTOUL (STRTOUL):
?C: This
 symbol, if defined, indicates that the strtoul routine is
?C: available to provide conversion of strings to unsigned long.
?C:.
?H:#$d_strtoul HAS_STRTOUL /**/
?H:.
?F:!try
: see if strtoul exists
set strtoul d_strtoul
```

```
eval $inlibc

case "$d_strtoul" in
"$define")
 $cat <<EOM
Checking whether your strtoul() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#include <stdio.h>
static int bad = 0;
void check(const char *s, unsigned long eul, int een) {
 unsigned long gul;
 errno = 0;
 gul = strtoul(s, 0, 10);
 if (!((gul == eul) && (errno == een)))
  bad++;
}
int main() {
 check(" 1", 1L, 0);
 check(" 0", 0L, 0);
EOCP
 case "$longsize" in
 8)
    $cat >>try.c <<'EOCP'
 check("18446744073709551615", 18446744073709551615UL, 0);
 check("18446744073709551616", 18446744073709551615UL, ERANGE);
#if 0 /* strtoul() for /^-/ strings is undefined. */
 check("-1", 18446744073709551615UL, 0);
 check("-18446744073709551614", 2, 0);
 check("-18446744073709551615", 1,
 0);
 check("-18446744073709551616", 18446744073709551615UL, ERANGE);
 check("-18446744073709551617", 18446744073709551615UL, ERANGE);
#endif
EOCP
  ;;
 4)
     $cat >>try.c <<'EOCP'
 check("4294967295", 4294967295UL, 0);
 check("4294967296", 4294967295UL, ERANGE);
#if 0 /* strtoul() for /^-/ strings is undefined. */
 check("-1", 4294967295UL, 0);
 check("-4294967294", 2, 0);
 check("-4294967295", 1, 0);
 check("-4294967296", 4294967295UL, ERANGE);
 check("-4294967297", 4294967295UL, ERANGE);
```

```
#endif
EOCP
  ;;
 *)
: Should we write these tests to be more portable by sprintf-ing
: ~0 and then manipulating that char string as input for strtol?
  ;;
 esac
 $cat >>try.c <<'EOCP'
 if (!bad)
  printf("ok\n");
 return 0;
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
  ok) echo "Your strtoul() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtoul() doesn't seem to be working okay.
EOM
     d_strtoul="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test
 program--assuming it doesn't)"
  d_strtoul="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_strtoul.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strerror.U,v $
?RCS: Revision 3.0.1.3  1994/05/13  15:20:27  ram
```

```
?RCS: patch27: now uses new macro support for cleaner Strerror def
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  14:58:26  ram
?RCS: patch23: renamed strerror into Strerror to protect name space (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:56  ram
?RCS: patch16: protected code looking for sys_errnolist[] with @if
?RCS: patch16: added default value for d_sysernlst
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:35  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?MAKE:d_strerror d_syserrlst d_sysernlst d_strerrm: contains Csym Findhdr
?MAKE: -pick add $@ %<
?S:d_strerror:
?S: This variable conditionally defines HAS_STRERROR if strerror() is
?S: available to translate error numbers to strings.
?S:.
?S:d_syserrlst:
?S: This variable conditionally defines HAS_SYS_ERRLIST if sys_errlist[] is
?S: available to translate error numbers to strings.
?S:.
?S:d_sysernlst:
?S: This variable conditionally defines HAS_SYS_ERRNOLIST if sys_errnolist[]
?S: is available to translate error numbers to the symbolic name.
?S:.
?S:d_strerrm:
?S: This variable holds what Strerr is defined as to translate an error
?S: code condition into an error message string. It could be 'strerror'
?S: or a more complex macro emulating strrror with sys_errlist[], or the
?S: "unknown" string when both strerror and sys_errlist are missing.
?S:.
?C:HAS_STRERROR (STRERROR):
?C: This symbol, if defined, indicates that the strerror routine is
?C: available
 to translate error numbers to strings. See the writeup
?C: of Strerror() in this file before you try to define your own.
?C:.
?C:HAS_SYS_ERRLIST (SYSERRLIST):
?C: This symbol, if defined, indicates that the sys_errlist array is
?C: available to translate error numbers to strings. The extern int
?C: sys_nerr gives the size of that table.
?C:.
?C:HAS_SYS_ERRNOLIST (SYSERRNOLIST):
?C: This symbol, if defined, indicates that the sys_errnolist array is
?C: available to translate an errno code into its symbolic name (e.g.
?C: ENOENT). The extern int sys_nerrno gives the size of that table.
```

```
?C:.
?C:Strerror:
?C: This preprocessor symbol is defined as a macro if strerror() is
?C: not available to translate error numbers to strings but sys_errlist[]
?C: array is there.
?C:.
?H:#$d_strerror HAS_STRERROR  /**/
?H:#$d_syserrlst HAS_SYS_ERRLIST /**/
?H:#$d_sysernlst HAS_SYS_ERRNOLIST /**/
?H:#define Strerror(e) $d_strerrm
?H:.
?D:d_sysernlst=''
?T:xxx val
: see if strerror and/or sys_errlist[]
 exist
echo " "
if set strerror val -f d_strerror; eval $csym; $val; then
 echo 'strerror() found.' >&4
 d_strerror="$define"
 d_strerrm='strerror(e)'
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "(You also have sys_errlist[], so we could roll our own strerror.)"
  d_syserrlst="$define"
 else
 echo "(Since you don't have sys_errlist[], sterror() is welcome.)"
  d_syserrlst="$undef"
 fi
elif xxx=`./findhdr string.h`; test "$xxx" || xxx=`./findhdr strings.h`; \
 $contains '#[  ]*define.*strerror' "$xxx" >/dev/null 2>&1; then
 echo 'strerror() found in string header.' >&4
 d_strerror="$define"
 d_strerrm='strerror(e)'
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "(Most probably, strerror() uses sys_errlist[] for descriptions.)"
  d_syserrlst="$define"
 else
  echo "(You don't appear to have any sys_errlist[], how can this be?)"
  d_syserrlst="$undef"
 fi
elif set sys_errlist val -a d_syserrlst; eval $csym; $val; then
echo "strerror()
 not found, but you have sys_errlist[] so we'll use that." >&4
 d_strerror="$undef"
 d_syserrlst="$define"
 d_strerrm='((e)<0||(e)>=sys_nerr?"unknown":sys_errlist[e])'
else
 echo 'strerror() and sys_errlist[] NOT found.' >&4
 d_strerror="$undef"
```

```
 d_syserrlst="$undef"
 d_strerrm="'unknown'"
fi
@if d_sysernlst || HAS_SYS_ERRNOLIST
if set sys_errnolist val -a d_sysernlst; eval $csym; $val; then
 echo "(Symbolic error codes can be fetched via the sys_errnolist[] array.)"
 d_sysernlst="$define"
else
 echo "(However, I can't extract the symbolic error code out of errno.)"
 d_sysernlst="$undef"
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoq: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtoq:
?S: This variable conditionally defines the HAS_STRTOQ symbol, which
?S: indicates to the C program that the strtoq() routine is available.
?S:.
?C:HAS_STRTOQ:
?C: This symbol, if defined, indicates that the strtoq routine is
?C: available to convert strings to long longs (quads).
?C:.
?H:#$d_strtoq HAS_STRTOQ  /**/
?H:.
?LINT:set d_strtoq
: see if strtoq exists
set strtoq d_strtoq
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoq.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_termio.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_termio.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:54  ram
?RCS: patch36: call ./usg and ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1994/08/29  16:26:38  ram
?RCS: patch32: don't include all threee I_* symbols in config.h
?RCS: patch32: (had forgotten to undo this part last time)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:25:03  ram
?RCS: patch27: undone ADO's fix in previous patch since it was useless
?RCS:
?RCS:
 Revision 3.0.1.1  1994/05/06  15:05:23  ram
?RCS: patch23: now include all three defines in config.h (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_termio i_sgtty i_termios: test Inlibc Cppsym Guess Setvar Findhdr Warn run
?MAKE: -pick add $@ %<
?S:i_termio:
?S: This variable conditionally defines the I_TERMIO symbol, which
?S: indicates to the C program that it should include <termio.h> rather
?S: than <sgtty.h>.
?S:.
?S:i_termios:
?S: This variable conditionally defines the I_TERMIOS symbol, which
?S: indicates to the C program that the POSIX <termios.h> file is
?S: to be included.
?S:.
?S:i_sgtty:
?S: This variable conditionally defines the I_SGTTY symbol, which
?S: indicates to the C program that it should include <sgtty.h> rather
?S: than <termio.h>.
?S:.
?C:I_TERMIO:
?C: This symbol, if defined, indicates that the program should include
?C: <termio.h> rather than <sgtty.h>.  There are also differences in
?C: the
 ioctl() calls that depend on the value of this symbol.
?C:.
```

```
?C:I_TERMIOS:
?C: This symbol, if defined, indicates that the program should include
?C: the POSIX termios.h rather than sgtty.h or termio.h.
?C: There are also differences in the ioctl() calls that depend on the
?C: value of this symbol.
?C:.
?C:I_SGTTY:
?C: This symbol, if defined, indicates that the program should include
?C: <sgtty.h> rather than <termio.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of this symbol.
?C:.
?H:#$i_termio I_TERMIO  /**/
?H:#$i_termios I_TERMIOS  /**/
?H:#$i_sgtty I_SGTTY  /**/
?H:.
?T:val2 val3
?LINT:set i_termio i_sgtty i_termios
: see if this is a termio system
val="$undef"
val2="$undef"
val3="$undef"
?X: Prefer POSIX-approved termios.h over all else
if $test `./findhdr termios.h`; then
   set tcsetattr i_termios
   eval $inlibc
   val3="$i_termios"
fi
echo " "
case "$val3" in
   "$define") echo "You have POSIX termios.h... good!" >&4;;
   *)
  if ./Cppsym pyr; then
     case "`$run /bin/universe`" in
  ucb) if $test `./findhdr sgtty.h`; then
   val2="$define"
   echo "<sgtty.h> found." >&4
      else
   echo "System is pyramid with BSD universe."
   ./warn "<sgtty.h> not found--you could have problems."
      fi;;
  *)  if $test `./findhdr termio.h`; then
   val="$define"
   echo "<termio.h> found." >&4
      else
   echo "System is pyramid with USG universe."
   ./warn "<termio.h> not found--you could have problems."
      fi;;
    esac
```

```
?X: Start with USG to avoid problems if both usg/bsd was guessed
 elif ./usg; then
    if $test `./findhdr termio.h`; then
  echo "<termio.h> found." >&4
  val="$define"
    elif $test `./findhdr sgtty.h`; then
  echo "<sgtty.h> found." >&4
  val2="$define"
    else
  ./warn "Neither <termio.h> nor <sgtty.h> found--cross fingers!"
    fi
 else
    if $test `./findhdr sgtty.h`; then
  echo "<sgtty.h> found." >&4
  val2="$define"
    elif $test `./findhdr termio.h`; then
  echo "<termio.h>
 found." >&4
  val="$define"
    else
  ./warn "Neither <sgtty.h> nor <termio.h> found--cross fingers!"
    fi
 fi;;
esac
set i_termio; eval $setvar
val=$val2; set i_sgtty; eval $setvar
val=$val3; set i_termios; eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_termio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endsent: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_endsent:
?S: This variable conditionally defines HAS_ENDSERVENT if endservent() is
?S: available to close whatever was being used for service queries.
?S:.
?C:HAS_ENDSERVENT:
?C: This symbol, if defined, indicates that the endservent() routine is
?C: available to close whatever was being used for
 service queries.
?C:.
?H:#$d_endsent HAS_ENDSERVENT  /**/
?H:.
?LINT:set d_endsent
: see if endservent exists
set endservent d_endsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_db.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:10:22  ram
?RCS: patch56: conditionally use const in test programs (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:14:42  ram
?RCS: patch54: extended for more intimate DB probing (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:21:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_db db_hashtype db_prefixtype: Inhdr +cc +ccflags rm_try contains cat \
  d_const
?MAKE: -pick
 add $@ %<
?S:i_db:
?S: This variable conditionally defines the I_DB symbol, and indicates
```

```
?S: whether a C program may include Berkeley's DB include file <db.h>.
?S:.
?S:db_hashtype:
?S: This variable contains the type of the hash structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is u_int32_t.
?S:.
?S:db_prefixtype:
?S: This variable contains the type of the prefix structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is size_t.
?S:.
?C:I_DB:
?C: This symbol, if defined, indicates to the C program that it should
?C: include Berkeley's DB include file <db.h>.
?C:.
?C:DB_Prefix_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is u_int32_t.
?C:.
?C:DB_Hash_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header
 file.  In older versions of DB, it was
?C: int, while in newer ones it is size_t.
?C:.
?H:#$i_db I_DB  /**/
?H:#define DB_Hash_t $db_hashtype  /**/
?H:#define DB_Prefix_t $db_prefixtype   /**/
?H:.
?LINT:set i_db
: see if this is a db.h system
set db.h i_db
eval $inhdr

@if DB_Hash_t
case "$i_db" in
define)
 : Check the return type needed for hash
 echo " "
 echo "Checking return type needed for hash for Berkeley DB ..." >&4
 $cat >try.c <<EOCP
#$d_const HASCONST
#ifndef HASCONST
#define const
#endif
#include <sys/types.h>
```

```
#include <db.h>
u_int32_t hash_cb (ptr, size)
const void *ptr;
size_t size;
{
}
HASHINFO info;
int main()
{
 info.hash = hash_cb;
}
EOCP
 if $cc $ccflags -c try.c >try.out 2>&1 ; then
  if $contains warning try.out >>/dev/null 2>&1 ; then
   db_hashtype='int'
  else
   db_hashtype='u_int32_t'
  fi
 else
  echo "I can't seem to compile the test program." >&4
  db_hashtype=int
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_hashtype for hash."
 ;;
*) db_hashtype=int
 ;;
esac

@end
@if
 DB_Prefix_t
case "$i_db" in
define)
 : Check the return type needed for prefix
 echo " "
 echo "Checking return type needed for prefix for Berkeley DB ..." >&4
 cat >try.c <<EOCP
#$d_const HASCONST
#ifndef HASCONST
#define const
#endif
#include <sys/types.h>
#include <db.h>
size_t prefix_cb (key1, key2)
const DBT *key1;
const DBT *key2;
{
```

```
}
BTREEINFO info;
int main()
{
 info.prefix = prefix_cb;
}
EOCP
 if $cc $ccflags -c try.c  >try.out 2>&1 ; then
  if $contains warning try.out >>/dev/null 2>&1 ; then
   db_prefixtype='int'
  else
   db_prefixtype='size_t'
  fi
 else
  echo "I can't seem to compile the test program." >&4
  db_prefixtype='int'
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_prefixtype for prefix."
 ;;
*) db_prefixtype='int'
 ;;
esac

@end

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_db.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_pthrattrj.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_old_pthread_create_joinable old_pthread_create_joinable: \
 cat Compile rm_try Setvar usethreads i_pthread
?MAKE: -pick add $@ %<
?S:d_old_pthread_create_joinable:
?S: This variable conditionally defines pthread_create_joinable.
?S: undef if pthread.h defines PTHREAD_CREATE_JOINABLE.
?S:.
?S:old_pthread_create_joinable:
?S: This variable defines the constant to use for creating joinable
?S: (aka undetached) pthreads.  Unused if pthread.h defines
?S: PTHREAD_CREATE_JOINABLE.  If used, possible values are
```

```
?S: PTHREAD_CREATE_UNDETACHED and __UNDETACHED.
?S:.
?C:OLD_PTHREAD_CREATE_JOINABLE:
?C: This symbol, if defined, indicates how to create pthread
?C: in joinable (aka undetached)
 state.  NOTE: not defined
?C: if pthread.h already has defined PTHREAD_CREATE_JOINABLE
?C: (the new version of the constant).
?C: If defined, known values are PTHREAD_CREATE_UNDETACHED
?C: and __UNDETACHED.
?C:.
?H:#$d_old_pthread_create_joinable OLD_PTHREAD_CREATE_JOINABLE $old_pthread_create_joinable /**/
?H:.
: how to create joinable pthreads
if test "X$usethreads" = "X$define" -a "X$i_pthread" = "X$define"; then
 echo " "
 echo "Checking what constant to use for creating joinable pthreads..." >&4
 $cat >try.c <<'EOCP'
#include <pthread.h>
int main() {
   int detachstate = JOINABLE;
}
EOCP
 set try -DJOINABLE=PTHREAD_CREATE_JOINABLE
 if eval $compile; then
  echo "You seem to use PTHREAD_CREATE_JOINABLE." >&4
  val="$undef" # Yes, undef.
  set d_old_pthread_create_joinable
  eval $setvar
  val=""
  set old_pthread_create_joinable
  eval $setvar
 else
  set try -DJOINABLE=PTHREAD_CREATE_UNDETACHED
  if eval $compile; then
   echo "You seem to use PTHREAD_CREATE_UNDETACHED." >&4
   val="$define"
   set
 d_old_pthread_create_joinable
   eval $setvar
   val=PTHREAD_CREATE_UNDETACHED
   set old_pthread_create_joinable
   eval $setvar
  else
   set try -DJOINABLE=__UNDETACHED
   if eval $compile; then
    echo "You seem to use __UNDETACHED." >&4
    val="$define"
```

```
    set d_old_pthread_create_joinable
    eval $setvar
    val=__UNDETACHED
    set old_pthread_create_joinable
    eval $setvar
   else
    echo "Egads, nothing obvious found.  Guessing that you use 0." >&4
    val="$define"
    set d_old_pthread_create_joinable
    eval $setvar
    val=0
    set old_pthread_create_joinable
    eval $setvar
   fi
  fi
 fi
 $rm_try
else
   d_old_pthread_create_joinable="$undef"
   old_pthread_create_joinable=""
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthrattrj.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: archname.U,v 3.0.1.3 1997/02/28 15:24:32 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: archname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:24:32  ram
?RCS: patch61: changed the way the archname is mangled from uname
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:05:24  ram
?RCS: patch54: protect against spaces in "uname -m" output (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:14:21  ram
?RCS: patch51: created
?RCS:
?MAKE:archname myarchname useversionedarchname: sed Loc Myread Oldconfig \
 osname test rm usethreads usemultiplicity use64bitint
```

```
 use64bitall \
 archname64 uselongdouble longdblsize doublesize targetarch Setvar \
 api_versionstring usequadmath
?MAKE: -pick add $@ %<
?S:archname:
?S: This variable is a short name to characterize the current
?S: architecture.  It is used mainly to construct the default archlib.
?S:.
?S:myarchname:
?S: This variable holds the architecture name computed by Configure in
?S: a previous run. It is not intended to be perused by any user and
?S: should never be set in a hint file.
?S:.
?S:useversionedarchname:
?S: This variable indicates whether to include the $api_versionstring
?S: as a component of the $archname.
?S:.
?C:ARCHNAME:
?C: This symbol holds a string representing the architecture name.
?C: It may be used to construct an architecture-dependant pathname
?C: where library files may be held under a private library, for
?C: instance.
?C:.
?H:#define ARCHNAME "$archname"  /**/
?H:.
?T:xxx tarch
?F:!archname.cbu
?INIT:archname=''
: determine the architecture name
echo " "
?X:
 We always recompute archname in case osname changes. However, we need
?X: to be careful since, as ADO rightfully pointed out, some systems pick
?X: silly architecture names (0001307135000-aix on AIX or 9000/715-ux under
?X: HP-UX). Therefore, we allow hint files to superseed our guess and ask
?X: the user for confirmation.
if xxx=`./loc arch blurfl $pth`; $test -f "$xxx"; then
 tarch=`arch`"-$osname"
elif xxx=`./loc uname blurfl $pth`; $test -f "$xxx" ; then
 if uname -m > tmparch 2>&1 ; then
  tarch=`$sed -e 's/ *$//' -e 's/ /_/g' \
   -e 's/$/"'-$osname/" tmparch`
 else
  tarch="$osname"
 fi
 $rm -f tmparch
else
 tarch="$osname"
```

```
fi
case "$myarchname" in
"|"$tarch") ;;
*)
 echo "(Your architecture name used to be $myarchname.)"
 archname=''
 ;;
esac
case "$targetarch" in
'') ;;
?X: Very GCCian.
*)  archname=`echo $targetarch|sed 's,^[^-]*-,,'` ;;
esac
myarchname="$tarch"
case "$archname" in
'') dflt="$tarch";;
*) dflt="$archname";;
esac
rp='What is your architecture name'
. ./myread
archname="$ans"

:
 optionally add API version to the architecture for versioned archlibs
case "$useversionedarchname" in
$define|true|[yY]*) dflt='y';;
*)                  dflt='n';;
esac
rp='Add the Perl API version to your archname?'
. ./myread
case "$ans" in
y|Y) useversionedarchname="$define" ;;
*)      useversionedarchname="$undef" ;;
esac
case "$useversionedarchname" in
$define)
 case "$archname" in
 *-$api_versionstring)
  echo "...and architecture name already has -$api_versionstring" >&4
  ;;
 *)
  archname="$archname-$api_versionstring"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
```

```
@if usethreads
case "$usethreads" in
$define)
 echo "Threads selected." >&4
 case "$archname" in
 *-thread*) echo "...and architecture name already has -thread." >&4
  ;;
 *)      archname="$archname-thread"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
@if usemultiplicity
case "$usemultiplicity" in
$define)
 echo "Multiplicity selected."
 >&4
 case "$archname" in
 *-multi*) echo "...and architecture name already has -multi." >&4
  ;;
 *)      archname="$archname-multi"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
@if use64bitint
case "$use64bitint$use64bitall" in
*"$define"*)
 case "$archname64" in
 ")
  echo "This architecture is naturally 64-bit, not changing architecture name." >&4
  ;;
 *)
  case "$use64bitint" in
  "$define") echo "64 bit integers selected." >&4 ;;
  esac
  case "$use64bitall" in
  "$define") echo "Maximal 64 bitness selected." >&4 ;;
  esac
  case "$archname" in
  *-$archname64*) echo "...and architecture name already has $archname64." >&4
   ;;
  *)      archname="$archname-$archname64"
   echo "...setting architecture name to $archname." >&4
```

```
   ;;
  esac
  ;;
 esac
esac
@end
@if uselongdouble
case "$uselongdouble" in
$define)
 echo "Long doubles selected." >&4
 case "$longdblsize" in
 $doublesize)
  echo "...but long doubles are equal to doubles, not
 changing architecture name." >&4
  ;;
 *)
  case "$archname" in
  *-ld*) echo "...and architecture name already has -ld." >&4
   ;;
  *)      archname="$archname-ld"
   echo "...setting architecture name to $archname." >&4
   ;;
  esac
  ;;
 esac
 ;;
esac
@end
@if usequadmath
case "$usequadmath" in
$define)
 echo "quadmath selected." >&4
 case "$archname" in
 *-quadmath*) echo "...and architecture name already has -quadmath." >&4
  ;;
 *)      archname="$archname-quadmath"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
if $test -f archname.cbu; then
 echo "Your platform has some specific hints for architecture name, using them..."
 . ./archname.cbu
fi
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/archname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_float.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_float.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:57  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_float: Inhdr
?MAKE: -pick add $@ %<
?S:i_float:
?S: This variable conditionally defines the I_FLOAT symbol, and indicates
?S: whether a C program may include <float.h> to get symbols like DBL_MAX
?S: or DBL_MIN, i.e. machine dependent floating point values.
?S:.
?C:I_FLOAT:
?C: This
 symbol, if defined, indicates to the C program that it should
?C: include <float.h> to get definition of symbols like DBL_MAX or
?C: DBL_MIN, i.e. machine dependent floating point values.
?C:.
?H:#$i_float I_FLOAT  /**/
?H:.
?LINT:set i_float
: see if this is a float.h system
set float.h i_float
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_float.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_setproctitle: Inlibc
?MAKE: -pick add $@ %<
?S:d_setproctitle:
?S: This variable conditionally defines the HAS_SETPROCTITLE symbol,
?S: which indicates to the C program that the setproctitle() routine
?S: is available.
?S:.
?C:HAS_SETPROCTITLE:
?C: This symbol, if defined, indicates that the setproctitle routine is
?C: available to set process title.
?C:.
?H:#$d_setproctitle HAS_SETPROCTITLE  /**/
?H:.
?LINT:set d_setproctitle
: see if setproctitle exists
set setproctitle d_setproctitle
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setproctitle.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sig_name.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:21:25  ram
?RCS: patch61: brand new algorithm for sig_name and (new!) sig_num
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  14:14:54  ram
?RCS: patch56: added <asm/signal.h> lookup for linux
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:24:11  ram
?RCS: patch54: now looks for <linux/signal.h> too (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:06:57  ram
?RCS: patch30: final echo was missing to close awk-printed string
?RCS:
?RCS: Revision 3.0.1.1
```

```
  1994/05/06  15:17:55  ram
?RCS: patch23: signal list now formatted to avoid scroll-ups (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sig_name sig_name_init sig_num sig_num_init sig_count sig_size: \
 awk Signal Oldconfig rm
?MAKE: -pick add $@ %<
?S:sig_name:
?S: This variable holds the signal names, space separated. The leading
?S: SIG in signal name is removed.  A ZERO is prepended to the
?S: list.  This is currently not used.
?S:.
?S:sig_name_init:
?S: This variable holds the signal names, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NAME definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.  The leading SIG in signal names
?S: is removed. See sig_num.
?S:.
?S:sig_num:
?S: This variable holds the signal numbers, space separated. A ZERO is
?S: prepended to the list (corresponding to the fake SIGZERO), and
?S: the list is terminated
 with a 0.  Those numbers correspond to
?S: the value of the signal listed in the same place within the
?S: sig_name list.
?S:.
?S:sig_num_init:
?S: This variable holds the signal numbers, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NUM definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.
?S:.
?S:sig_count (sig_name.U):
?S:  This variable holds a number larger than the largest valid
?S:  signal number.  This is usually the same as the NSIG macro.
?S:.
?S:sig_size:
?S:  This variable contains the number of elements of the sig_name
?S:  and sig_num arrays, excluding the final NULL entry.
?S:.
?C:SIG_NAME:
?C: This symbol contains a list of signal names in order of
?C: signal number. This is intended
?C: to be used as a static array initialization, like this:
?C:  char *sig_name[] = { SIG_NAME };
```

```
?C: The signals in the list are separated with commas, and each signal
?C: is surrounded by double
 quotes. There is no leading SIG in the signal
?C: name, i.e. SIGQUIT is known as "QUIT".
?C: Gaps in the signal numbers (up to NSIG) are filled in with NUMnn,
?C: etc., where nn is the actual signal number (e.g. NUM37).
?C: The signal number for sig_name[i] is stored in sig_num[i].
?C: The last element is 0 to terminate the list with a NULL.  This
?C: corresponds to the 0 at the end of the sig_num list.
?C:.
?C:SIG_NUM:
?C: This symbol contains a list of signal numbers, in the same order as the
?C: SIG_NAME list. It is suitable for static array initialization, as in:
?C:  int sig_num[] = { SIG_NUM };
?C: The signals in the list are separated with commas, and the indices
?C: within that list and the SIG_NAME list match, so it's easy to compute
?C: the signal name from a number or vice versa at the price of a small
?C: dynamic linear lookup.
?C: Duplicates are allowed, but are moved to the end of the list.
?C: The signal number corresponding to sig_name[i] is sig_number[i].
?C: if (i
 < NSIG) then sig_number[i] == i.
?C: The last element is 0, corresponding to the 0 at the end of
?C: the sig_name list.
?C:.
?C:SIG_COUNT:
?C: This variable contains a number larger than the largest
?C: signal number.  This is usually the same as the NSIG macro.
?C:.
?C:SIG_SIZE:
?C: This variable contains the number of elements of the sig_name
?C: and sig_num arrays, excluding the final NULL entry.
?C:.
?H:#define SIG_NAME $sig_name_init  /**/
?H:#define SIG_NUM  $sig_num_init  /**/
?H:#define SIG_COUNT $sig_count   /**/
?H:#define SIG_SIZE $sig_size   /**/
?H:.
?T:i doinit
?F:!= !signal_cmd
?X: signal.cmd creates a file  signal.lst which has two columns:
?X: NAME  number, e.g.
?X:  HUP 1
?X: The list is sorted on signal number, with duplicates moved to
?X: the end..
: generate list of signal names
echo " "
case "$sig_name_init" in
```

```
") doinit=yes ;;
*)  case "$sig_num_init" in
   "|*,*) doinit=yes ;;
   esac ;;
esac
case "$doinit" in
yes)
 echo "Generating a list of signal names and
 numbers..." >&4
 . ./signal_cmd
 sig_count=`$awk '/^NSIG/ { printf "%d", $2 }' signal.lst`
 sig_name=`$awk 'BEGIN { printf "ZERO " }
   !/^NSIG/ { printf "%s ", $1 }' signal.lst`
 sig_num=`$awk  'BEGIN { printf "0 " }
   !/^NSIG/ { printf "%d ", $2 }' signal.lst`
 sig_name_init=`$awk 'BEGIN { printf "\"ZERO\", " }
        !/^NSIG/ { printf "\"%s\", ", $1 }
        END { printf "0\n" }' signal.lst`
 sig_num_init=`$awk  'BEGIN { printf "0, " }
        !/^NSIG/ { printf "%d, ", $2}
        END { printf "0\n"}' signal.lst`
 ;;
esac
echo "The following $sig_count signals are available:"
echo " "
echo $sig_name | $awk \
'BEGIN { linelen = 0 }
{
 for (i = 1; i <= NF; i++) {
  name = "SIG" $i " "
  linelen = linelen + length(name)
  if (linelen > 70) {
   printf "\n"
   linelen = length(name)
  }
  printf "%s", name
 }
 printf "\n"
}'
sig_size=`echo $sig_name | awk '{print NF}'`
$rm -f signal signal.c signal.awk signal.lst signal_cmd
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sig_name.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:

```
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnameinfo: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnameinfo:
?S: This variable conditionally defines the HAS_GETNAMEINFO symbol,
?S: which indicates to the C program that the getnameinfo() function
?S: is available.
?S:.
?C:HAS_GETNAMEINFO:
?C: This symbol, if defined, indicates that the getnameinfo() function
?C: is available for use.
?C:.
?H:#$d_getnameinfo HAS_GETNAMEINFO  /**/
?H:.
?LINT:set d_getnameinfo
: see if getnameinfo exists
set getnameinfo d_getnameinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getnameinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS:
?MAKE:d_dirfd: Compile cat rm Setvar i_dirent i_sysdir i_sysndir i_systypes i_stdlib
?MAKE: -pick add $@ %<
?S:d_dirfd:
?S: This variable conditionally defines the HAS_DIRFD constant,
?S: which indicates to the C program that dirfd() is available
?S: to return the file descriptor of a directory stream.
?S:.
?C:HAS_DIRFD:
?C: This manifest constant lets the C program know that dirfd
?C: is available.
```

```
?C:.
?H:#$d_dirfd HAS_DIRFD  /**/
?H:.
?LINT:set d_dirfd
?X: Can't use Inlibc because dirfd() might be a macro.
: Look
 for dirfd
echo " "
$cat >dirfd.c <<EOM
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/
#$i_systypes I_SYS_TYPES /**/
#if defined(I_SYS_TYPES)
#include <sys/types.h>
#endif
#if defined(I_DIRENT)
#include <dirent.h>
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#include <sys/dir.h>
#endif
#endif
#endif
int main() {
 DIR *dirp = opendir(".");
 if (dirfd(dirp) >= 0)
  exit(0);
 else
  exit(1);
}
EOM
val=$undef
set dirfd
if eval $compile; then
 val="$define"
fi
case "$val" in
$define) echo "dirfd() found." >&4 ;;
*)  echo "dirfd() NOT found." >&4 ;;
```

```
esac
set d_dirfd
eval $setvar
$rm -f dirfd*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dirfd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_grp.U,v 3.0 1993/08/18 12:08:20 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: GRPASSWD detection added by Andy Dougherty  July 14, 1998.
?RCS:
?RCS: $Log: i_grp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_grp d_grpasswd: \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_grp:
?S: This variable conditionally defines the I_GRP symbol, and indicates
?S: whether a C program should include <grp.h>.
?S:.
?S:d_grpasswd:
?S: This variable conditionally
 defines GRPASSWD, which indicates
?S: that struct group in <grp.h> contains gr_passwd.
?S:.
?C:I_GRP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <grp.h>.
?C:.
?C:GRPASSWD:
?C: This symbol, if defined, indicates to the C program that struct group
?C: in <grp.h> contains gr_passwd.
?C:.
?H:#$i_grp I_GRP  /**/
?H:#$d_grpasswd GRPASSWD /**/
?H:.
```

```
?LINT:set i_grp d_grpasswd
?T: xxx
: see if this is an grp system
set grp.h i_grp
eval $inhdr

case "$i_grp" in
$define)
 xxx=`./findhdr grp.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'gr_passwd' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_grpasswd
 eval $setvar

 $rm -f $$.h
 ;;
*)
 val="$undef";
 set d_grpasswd; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_grp.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: voidflags.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:27:58  ram
?RCS: patch61: don't prompt them if the void support is high enough for us
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:37:44  ram
?RCS: patch45: cosmetic change to avoid spurious blank lines when using -s
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:10:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:voidflags defvoidused: cat sed rm rm_try contains +cc +ccflags package \
 Oldconfig Myread
?MAKE: -pick add $@ %<
?S:voidflags:
?S: This
 variable contains the eventual value of the VOIDFLAGS symbol,
?S: which indicates how much support of the void type is given by this
?S: compiler.  See VOIDFLAGS for more info.
?S:.
?S:defvoidused:
?S: This variable contains the default value of the VOIDUSED symbol (15).
?S:.
?X: Exceptionally, we have to explicitly alias the symbol name for
?X: config_h.SH, otherwise the comment would not appear.
?C:VOIDFLAGS ~ %<:
?C: This symbol indicates how much support of the void type is given by this
?C: compiler.  What various bits mean:
?C:
?C:     1 = supports declaration of void
?C:     2 = supports arrays of pointers to functions returning void
?C:     4 = supports comparisons between pointers to void functions and
?C:      addresses of void functions
?C:     8 = suports declaration of generic void pointers
?C:
?C: The package designer should define VOIDUSED to indicate the requirements
?C: of the package.  This can be done either by #defining VOIDUSED before
?C: including
 config.h, or by defining defvoidused in Myinit.U.  If the
?C: latter approach is taken, only those flags will be tested.  If the
?C: level of void support necessary is not present, defines void to int.
?C:.
?H:?%<:#ifndef VOIDUSED
?H:?%<:#define VOIDUSED $defvoidused
?H:?%<:#endif
?H:?%<:#define VOIDFLAGS $voidflags
?H:?%<:#if (VOIDFLAGS & VOIDUSED) != VOIDUSED
?H:?%<:#define void int  /* is void to be avoided? */
?H:?%<:#define M_VOID   /* Xenix strikes again */
?H:?%<:#endif
?H:.
?W:%<:void
?F:!.out !try.c !flags
?LINT:usefile .out flags try.c
?INIT:: full support for void wanted by default
?INIT:defvoidused=15
```

```
?INIT:
?LINT:known void M_VOID VOIDUSED
: check for void type
echo " "
echo "Checking to see how well your C compiler groks the void type..." >&4
$cat >flags <<EOM

 Support flag bits are:
   1: basic void declarations.
   2: arrays of pointers to functions returning void.
   4: operations between pointers to and addresses of void functions.
   8: generic void pointers.

EOM
case
 "$voidflags" in
")
 $cat >try.c <<'EOCP'
#if TRY & 1
void sub() {
#else
sub() {
#endif
 extern void moo(); /* function returning void */
 void (*goo)();  /* ptr to func returning void */
#if TRY & 8
 void *hue;  /* generic ptr */
#endif
#if TRY & 2
 void (*foo[10])();
#endif

#if TRY & 4
 if(goo == moo) {
  exit(0);
 }
#endif
 exit(0);
}
int main() { sub(); }
EOCP
?X: This unit used to use cc -S in those tests to try to speed up things, but
?X: unfortunately, AIX 3.2 does not support this option.
 if $cc $ccflags -c -DTRY=$defvoidused try.c >.out 2>&1 ; then
  voidflags=$defvoidused
  echo "Good.  It appears to support void to the level $package wants."
  if $contains warning .out >/dev/null 2>&1; then
   echo "However, you might get some warnings that look like this:"
```

```
  $sed -e 's/^/ /' .out
  fi
 else
echo "Hmm, your compiler has some difficulty with void. Checking further..." >&4
  $cat >&4 flags
  $rm -f flags
  if $cc $ccflags -c -DTRY=1 try.c >/dev/null 2>&1; then
   echo
 "It supports 1..."
   if $cc $ccflags -c -DTRY=3 try.c >/dev/null 2>&1; then
    echo "It also supports 2..."
    if $cc $ccflags -c -DTRY=7 try.c >/dev/null 2>&1; then
     voidflags=7
     echo "And it supports 4 but not 8 definitely."
    else
     echo "It doesn't support 4..."
     if $cc $ccflags -c -DTRY=11 try.c >/dev/null 2>&1; then
      voidflags=11
      echo "But it supports 8."
     else
      voidflags=3
      echo "Neither does it support 8."
     fi
    fi
   else
    echo "It does not support 2..."
    if $cc $ccflags -c -DTRY=13 try.c >/dev/null 2>&1; then
     voidflags=13
     echo "But it supports 4 and 8."
    else
     if $cc $ccflags -c -DTRY=5 try.c >/dev/null 2>&1; then
      voidflags=5
      echo "And it supports 4 but has not heard about 8."
     else
      echo "However it supports 8 but not 4."
     fi
    fi
   fi
  else
   echo "There is no support at all for void."
   voidflags=0
  fi
 fi
esac
?X: Only prompt user if support does not match the
 level we want
case "$voidflags" in
"$defvoidused")
```

```
 echo "Good.  I already know it supports void to the level $package wants."
 ;;
*)
 dflt="$voidflags";
 test -f flags && $cat flags
 rp="Your void support flags add up to what?"
 . ./myread
 voidflags="$ans"
 ;;
esac
$rm_try flags
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/voidflags.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: models.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:13:17  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:39  ram
?RCS: patch6: added default for large
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:models split small medium large huge: test cat Myread sysman Oldconfig \
 Loc Warn contains rm
?MAKE: -pick add $@ %<
?S:models:
?S: This variable contains the list of memory models supported by
 this
?S: system.  Possible component values are none, split, unsplit, small,
?S: medium, large, and huge.  The component values are space separated.
?S:.
?S:split:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program that will run in separate I and D space, for those
```

```
?S: machines that support separation of instruction and data space.  It is
?S: up to the Makefile to use this.
?S:.
?S:small:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a small memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:medium:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a medium memory model.  If the
?S: medium model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?S:large:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to
 produce a program running with a large memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:huge:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a huge memory model.  If the
?S: huge model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?T:unsplit tans modelcc
?F:!pdp11
?D:large="
?LINT:extern cc
: see what memory models we can support
case "$models" in
")
?X: We may not use Cppsym or we get a circular dependency through cc.
?X: But this should work regardless of which cc we eventually use.
 $cat >pdp11.c <<'EOP'
int main() {
#ifdef pdp11
 exit(0);
#else
 exit(1);
#endif
}
EOP
?X: Run cc in a subshell in case they don't have a 'cc' command.
?X: Presumably they do have gcc or something.
 case "$cc" in
 ") modelcc="$cc" ;;
```

```
 *) modelcc="cc" ;;
 esac
 ( $modelcc -o pdp11 pdp11.c ) >/dev/null 2>&1
 if $test -f pdp11 && ./pdp11 2>/dev/null;
 then
  dflt='unsplit split'
 else
  tans=`./loc . X /lib/small /lib/large /usr/lib/small /usr/lib/large /lib/medium /usr/lib/medium /lib/huge`
  case "$tans" in
  X) dflt='none';;
  *) if $test -d /lib/small || $test -d /usr/lib/small; then
    dflt='small'
   else
    dflt=''
   fi
   if $test -d /lib/medium || $test -d /usr/lib/medium; then
    dflt="$dflt medium"
   fi
   if $test -d /lib/large || $test -d /usr/lib/large; then
    dflt="$dflt large"
   fi
   if $test -d /lib/huge || $test -d /usr/lib/huge; then
    dflt="$dflt huge"
   fi
  esac
 fi;;
*) dflt="$models";;
esac
$cat <<EOM

Some systems have different model sizes.  On most systems they are called
small, medium, large, and huge.  On the PDP11 they are called unsplit and
split.  If your system doesn't support different memory models, say "none".
If you wish to force everything to one memory model, say "none" here and
put the appropriate flags later when it asks you for other cc and ld flags.
Venix systems may wish
 to put "none" and let the compiler figure things out.
(In the following question multiple model names should be space separated.)

The default for most systems is "none".

EOM
rp="Which memory models are supported?"
. ./myread
models="$ans"

case "$models" in
none)
```

```
 small=''
 medium=''
 large=''
 huge=''
 unsplit=''
 split=''
 ;;
*split)
 case "$split" in
 '') if $contains '\-i' $sysman/ld.1 >/dev/null 2>&1 || \
    $contains '\-i' $sysman/cc.1 >/dev/null 2>&1; then
   dflt='-i'
  else
   dflt='none'
  fi;;
 *) dflt="$split";;
 esac
 rp="What flag indicates separate I and D space?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans='';;
 esac
 split="$tans"
 unsplit='';;
*large*|*small*|*medium*|*huge*)
 case "$models" in
 *large*)
  case "$large" in
  '') dflt='-Ml';;
  *) dflt="$large";;
  esac
 rp="What flag indicates large model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans='';
 esac
 large="$tans";;
 *) large='';;
 esac
 case "$models" in
 *huge*) case "$huge" in
  '')
 dflt='-Mh';;
  *) dflt="$huge";;
  esac
  rp="What flag indicates huge model?"
```

```
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 huge="$tans";;
*) huge="$large";;
esac
case "$models" in
*medium*) case "$medium" in
 ") dflt='-Mm';;
 *) dflt="$medium";;
 esac
 rp="What flag indicates medium model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 medium="$tans";;
*) medium="$large";;
esac
case "$models" in
*small*) case "$small" in
 ") dflt='none';;
 *) dflt="$small";;
 esac
 rp="What flag indicates small model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 small="$tans";;
*) small=";;
esac
;;
*)
 ./warn "Unrecognized memory models--you may have to edit Makefile.SH"
 ;;
esac
$rm -f pdp11.* pdp11
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/models.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_poll.U,v $

```
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?RCS:
?MAKE:i_langinfo: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_langinfo:
?S: This variable conditionally defines the I_LANGINFO symbol,
?S: and indicates whether a C program should include <langinfo.h>.
?S:.
?C:I_LANGINFO:
?C: This symbol, if defined, indicates that <langinfo.h> exists and
?C: should be included.
?C:.
?H:#$i_langinfo I_LANGINFO  /**/
?H:.
?LINT:set i_langinfo
: see if this is a langinfo.h system
set langinfo.h i_langinfo
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_langinfo.U
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```
?RCS: $Id: d_chroot.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_chroot.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:17  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_chroot: Inlibc
?MAKE: -pick add $@ %<
?S:d_chroot:
?S: This variable conditionally defines the HAS_CHROOT symbol, which
?S: indicates to the C program that the chroot() routine is available.
```

```
?S:.
?C:HAS_CHROOT :
?C: This symbol, if defined, indicates that the chroot routine
 is
?C: available.
?C:.
?H:#$d_chroot HAS_CHROOT  /**/
?H:.
?LINT:set d_chroot
: see if chroot exists
set chroot d_chroot
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chroot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: registers.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: registers.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:19:41  ram
?RCS: patch61: removed empty ?LINT lines
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:28:33  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:registers reg1 reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11 \
 reg12 reg13 reg14 reg15 reg16: awk rm Cppsym
 Myread Oldconfig
?MAKE: -pick add $@ %<
?S:registers:
?S: This variable contains the number of register declarations paid
?S: attention to by the C compiler.
?S:.
?S:reg1:
?S: This variable, along with reg2, reg3, etc. contains the eventual
?S: value for the symbols register1, register2, register3, etc.  It has
```

```
?S: either the value "register" or is null.
?S:.
?C:register1:
?C: This symbol, along with register2, register3, etc. is either the word
?C: "register" or null, depending on whether the C compiler pays attention
?C: to this many register declarations.  The intent is that you don't have
?C: to order your register declarations in the order of importance, so you
?C: can freely declare register variables in sub-blocks of code and as
?C: function parameters.  Do not use register<n> more than once per routine.
?C:.
?LINT:describe reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11
?LINT:describe reg12 reg13 reg14 reg15 reg16
?LINT:known register2 register3 register4 register5 register6
 register7
?LINT:known register8 register9 register10 register11 register12 register13
?LINT:known register14 register15 register16
?H:#define register1 $reg1  /**/
?H:#define register2 $reg2  /**/
?H:#define register3 $reg3  /**/
?H:#define register4 $reg4  /**/
?H:#define register5 $reg5  /**/
?H:#define register6 $reg6  /**/
?H:#define register7 $reg7  /**/
?H:#define register8 $reg8  /**/
?H:#define register9 $reg9  /**/
?H:#define register10 $reg10 /**/
?H:#define register11 $reg11 /**/
?H:#define register12 $reg12 /**/
?H:#define register13 $reg13 /**/
?H:#define register14 $reg14 /**/
?H:#define register15 $reg15 /**/
?H:#define register16 $reg16 /**/
?H:.
?F:!.foo
: see how many register declarations we want to use
case "$registers" in
")
 if ./Cppsym vax; then
  dflt=6
 elif ./Cppsym sun mc68000 mips; then
  dflt=10
 elif ./Cppsym pyr; then
  dflt=14
 elif ./Cppsym ns32000 ns16000; then
  dflt=5
 elif ./Cppsym $smallmach; then
  dflt=3
 else
```

```
  : if you have any other numbers
 for me, please send them in
  dflt=6
 fi;;
*) dflt=$registers ;;
esac
?LINT:set reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11
?LINT:set reg12 reg13 reg14 reg15 reg16
cat <<EOM

Different C compilers on different machines pay attention to different numbers
of register declarations.  About how many register declarations in each routine
does your C compiler pay attention to?  (OK to guess)

EOM
rp="Maximum register declarations?"
. ./myread
registers=$ans
reg1="
$awk "BEGIN { for (i=1; i<=16; i++) printf \"reg%d="\n\", i}" \
 </dev/null >.foo
. ./.foo
$awk "BEGIN { for (i=1; i<=$registers; i++) printf \"reg%d=register\n\", i}" \
 </dev/null >.foo
. ./.foo
$rm -f .foo

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/registers.U
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?RCS: $Id: d_longdbl.U,v $
?RCS:
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?RCS:
?RCS: $Log: d_longdbl.U,v $
?RCS:
?MAKE:d_longdbl longdblsize d_ldexpl longdblkind \
 d_long_double_style_ieee d_long_double_style_ieee_doubledouble \
 d_long_double_style_ieee_extended d_long_double_style_ieee_std \
 d_long_double_style_vax: Compile Setvar Myread \
 Inlibc run echo cat rm_try test doublesize i_stdlib
?MAKE: -pick add $@ %<
?S:d_longdbl:
?S: This variable conditionally defines HAS_LONG_DOUBLE if
```

```
?S: the long double type is supported.
?S:.
?S:d_ldexpl:
?S: This variable conditionally defines the HAS_LDEXPL symbol, which
?S: indicates to the C program that the ldexpl() routine is available.
?S:.
?S:longdblsize:
?S: This variable contains the value of the LONG_DOUBLESIZE symbol,
 which
?S: indicates to the C program how many bytes there are in a long double,
?S: if this system supports long doubles.  Note that this is
?S: sizeof(long double), which may include unused bytes.
?S:.
?S:longdblkind:
?S: This variable, if defined, encodes the type of a long double:
?S:  0 = double,
?S:  1 = IEEE 754 128-bit little endian,
?S:  2 = IEEE 754 128-bit big endian,
?S:  3 = x86 80-bit little endian,
?S:  4 = x86 80-bit big endian,
?S:  5 = double-double 128-bit little endian,
?S:  6 = double-double 128-bit big endian,
?S:  7 = 128-bit mixed-endian double-double (64-bit LEs in BE),
?S:  8 = 128-bit mixed-endian double-double (64-bit BEs in LE),
?S:  9 = 128-bit PDP-style mixed-endian long doubles,
?S: -1 = unknown format.
?S:.
?S:d_long_double_style_ieee:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE
?S: if the long double is any of the IEEE 754 style long doubles:
?S: LONG_DOUBLE_STYLE_IEEE_STD, LONG_DOUBLE_STYLE_IEEE_EXTENDED,
?S: LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE.
?S:.
?S:d_long_double_style_ieee_doubledouble:
?S: This
 variable conditionally defines LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE
?S: if the long double is the 128-bit IEEE 754 double-double.
?S:.
?S:d_long_double_style_ieee_extended:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE_EXTENDED
?S: if the long double is the 80-bit IEEE 754 extended precision.
?S: Note that despite the 'extended' this is less than the 'std',
?S: since this is an extension of the double precision.
?S:.
?S:d_long_double_style_ieee_std:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE_STD
?S: if the long double is the 128-bit IEEE 754.
?S:.
```

```
?S:d_long_double_style_vax:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_VAX
?S: if the long double is the 128-bit VAX format H.
?S:.
?C:HAS_LONG_DOUBLE:
?C: This symbol will be defined if the C compiler supports long
?C: doubles.
?C:.
?C:LONG_DOUBLESIZE:
?C: This symbol contains the size of a long double, so that the
?C: C
 preprocessor can make decisions based on it.  It is only
?C: defined if the system supports long doubles.  Note that this
?C: is sizeof(long double), which may include unused bytes.
?C:.
?C:HAS_LDEXPL:
?C: This symbol, if defined, indicates that the ldexpl routine is
?C: available to shift a long double floating-point number
?C: by an integral power of 2.
?C:.
?C:LONG_DOUBLEKIND:
?C: LONG_DOUBLEKIND will be one of
?C: LONG_DOUBLE_IS_DOUBLE
?C: LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_VAX_H_FLOAT
?C: LONG_DOUBLE_IS_UNKNOWN_FORMAT
?C: It is only defined
 if the system supports long doubles.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE:
?C: This symbol, if defined, indicates that the long double
?C: is any of the IEEE 754 style long doubles:
?C: LONG_DOUBLE_STYLE_IEEE_STD, LONG_DOUBLE_STYLE_IEEE_EXTENDED,
?C: LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit double-double.
?C:.
```

```
?C:LONG_DOUBLE_STYLE_IEEE_EXTENDED:
?C: This symbol, if defined, indicates that the long double is
?C: the 80-bit IEEE 754. Note that despite the 'extended' this
?C: is less than the 'std', since this is an extension of
?C: the double precision.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_STD:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit IEEE 754.
?C:.
?C:LONG_DOUBLE_STYLE_VAX:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit VAX format H.
?C:.
?H:#$d_ldexpl  HAS_LDEXPL  /**/
?H:#$d_longdbl HAS_LONG_DOUBLE  /**/
?H:?LONG_DOUBLESIZE:#ifdef
 HAS_LONG_DOUBLE
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLESIZE $longdblsize  /**/
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLEKIND $longdblkind  /**/
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLE    0
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN 1
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN 2
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN  3
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN  4
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE 5
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE 6
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE 7
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE 8
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_VAX_H_FLOAT   9
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_UNKNOWN_FORMAT   -1
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
 /* back-compat */
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE /* back-compat */
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee LONG_DOUBLE_STYLE_IEEE
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_doubledouble
LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_extended
LONG_DOUBLE_STYLE_IEEE_EXTENDED
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_std LONG_DOUBLE_STYLE_IEEE_STD
?H:?LONG_DOUBLESIZE:#$d_long_double_style_vax LONG_DOUBLE_STYLE_VAX
?H:?LONG_DOUBLESIZE:#endif
?H:.
?F:!try
?LINT:known LONG_DOUBLE_IS_DOUBLE LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
```

```
LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_UNKNOWN_FORMAT
?LINT:known
 LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE
?LINT:known LONG_DOUBLE_IS_VAX_H_FLOAT
?LINT:set d_longdbl
?LINT:set d_ldexpl
: check for long doubles
echo " " >&4
echo "Checking to see if you have long double..." >&4
echo 'int main() { long double x = 7.0; }' > try.c
set try
if eval $compile; then
 val="$define"
 echo "You have long double." >&4
else
 val="$undef"
 echo "You do not have long double." >&4
fi
$rm_try
set d_longdbl
eval $setvar

: see if ldexpl exists
set ldexpl d_ldexpl
eval $inlibc

@if LONG_DOUBLESIZE || longdblsize
: check for length of long double
?X:  Check only if d_longdbl and if longdblsize is not already set.
case "${d_longdbl}${longdblsize}" in
$define)
 echo " " >&4
 echo "Checking to see how big your long doubles are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(long
 double));
}
EOCP
```

```
 set try
?X: Don't use compile_ok because some compilers warn you that they have
?X: 'long double' as just 'double'.
 set try
 if eval $compile; then
  longdblsize=`$run ./try`
  echo "Your long doubles are $longdblsize bytes long." >&4
 else
  dflt='8'
  echo " " >&4
  echo "(I can't seem to compile the test program.  Guessing...)" >&4
  rp="What is the size of a long double (in bytes)?"
  . ./myread
  longdblsize="$ans"
 fi
 if $test "X$doublesize" = "X$longdblsize"; then
  echo "That isn't any different from an ordinary double." >&4
  echo "I'll keep your setting anyway, but you may see some" >&4
  echo "harmless compilation warnings." >&4
 fi
 ;;
esac
$rm_try
@end

$echo "Checking the kind of long doubles you have..." >&4
case "$d_longdbl" in
define)
$cat <<EOP >try.c
#$i_stdlib I_STDLIB
#define LONGDBLSIZE $longdblsize
#define DOUBLESIZE $doublesize
#include <float.h>
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
static const long double
 d = -0.1L;
int main() {
 unsigned const char* b = (unsigned const char*)(&d);
#if DOUBLESIZE == LONGDBLSIZE
 printf("0\n"); /* if it floats like double */
 exit(0);
#endif
#if (LDBL_MANT_DIG == 113 || FLT128_MANT_DIG == 113) && LONGDBLSIZE == 16
 if (b[0] == 0x9A && b[1] == 0x99 && b[15] == 0xBF) {
   /* IEEE 754 128-bit little-endian */
```

```
  printf("1\n");
  exit(0);
 }
 if (b[0] == 0xBF && b[14] == 0x99 && b[15] == 0x9A) {
  /* IEEE 128-bit big-endian, e.g. solaris sparc */
  printf("2\n");
  exit(0);
 }
#endif
/* For alignment 32-bit platforms have the 80 bits in 12 bytes,
* while 64-bits platforms have it in 16 bytes.  The trailing bytes
* cannot be trusted. */
#if LDBL_MANT_DIG == 64 && (LONGDBLSIZE == 16 || LONGDBLSIZE == 12)
 if (b[0] == 0xCD && b[9] == 0xBF) {
  /* x86 80-bit little-endian, sizeof 12 (ILP32, Solaris x86)
   * or 16 (LP64, Linux and OS X), 4 or 6 bytes of padding.
   * Also known as "extended precision". */
  printf("3\n");
  exit(0);
 }
 if (b[0] == 0xBF && b[9] == 0xCD) {
  /* Is there ever big-endian 80-bit, really?
   *
   * The Motorola 68881 had another "extended precision" format:
   * sign:1 exp:15 zero:16 integer:1 mantissa:63
   * for total of 96 bits of bytes.  The zero bits were unused.
   * See "M68000 FAMILY PROGRAMMER'S REFERENCE MANUAL" for more details.
   * If it ever becomes relevant, this format should be allocated a
   * new doublekind code since it is quite different from the Intel x87.
   */
  printf("4\n");
  exit(0);
 }
#endif
#if (LDBL_MANT_DIG == 106 || LDBL_MANT_DIG == 107) && LONGDBLSIZE == 16
 /* software "double double", the 106 is 53+53.
  * but irix thinks it is 107. */
 if (b[0] == 0x9A && b[7] == 0x3C && b[8] == 0x9A && b[15] == 0xBF) {
  /* double double 128-bit fully little-endian,
   * little-endian doubles in little-endian order,
   * 9a 99 99 99 99 99 59 3c 9a 99 99 99 99 99 b9 bf */
  printf("5\n");
  exit(0);
 }
 if (b[0] == 0xBF && b[7]
 == 0x9A && b[8] == 0x3C && b[15] == 0x9A) {
  /* double double 128-bit fully big-endian,
   * big-endian doubles in big-endian order,
```

```
    * e.g. PPC/Power and MIPS:
    * bf b9 99 99 99 99 99 9a 3c 59 99 99 99 99 99 9a */
   printf("6\n");
   exit(0);
  }
  if (b[0] == 0x9A && b[7] == 0xBF && b[8] == 0x9A && b[15] == 0x3C) {
   /* double double 128-bit mixed endian.
    * little-endian doubles in big-endian order,
    * e.g. ppc64el,
    * 9a 99 99 99 99 99 b9 bf 9a 99 99 99 99 99 59 3c */
   printf("7\n");
   exit(0);
  }
  if (b[0] == 0x3C && b[7] == 0x9A && b[8] == 0xBF && b[15] == 0x9A) {
   /* double double 128-bit mixed endian,
    * big-endian doubles in little-endian order,
    * 3c 59 99 99 99 99 99 9a bf b9 99 99 99 99 99 9a */
   printf("8\n");
   exit(0);
  }
#endif
/* We are largely making this up because it may well be
* that the VAX format H was never made available to C,
* only to Fortran. */
#if LONGDBLSIZE == 16 && defined(__vax__)
  if (b[0]
  == 0xFD && b[15] == 0x99) {
   /* VAX format H, PDP-11 mixed endian. */
   printf("9\n");
   exit(0);
  }
#endif
  printf("-1\n"); /* unknown */
  exit(0);
}
EOP
set try
if eval $compile; then
   longdblkind=`$run ./try`
else
   longdblkind=-1
fi
;;
*) longdblkind=0 ;;
esac
case "$longdblkind" in
0) echo "Your long doubles are doubles." >&4 ;;
1) echo "You have IEEE 754 128-bit little endian long doubles." >&4 ;;
```

```
2) echo "You have IEEE 754 128-bit big endian long doubles." >&4 ;;
3) echo "You have x86 80-bit little endian long doubles." >&4 ;;
4) echo "You have x86 80-bit big endian long doubles." >&4 ;;
5) echo "You have 128-bit fully little-endian double-double long doubles (64-bit LEs in LE)." >&4 ;;
6) echo "You have 128-bit fully big-endian double-double long doubles (64-bit BEs in BE)." >&4 ;;
7) echo "You have 128-bit mixed-endian double-double long doubles (64-bit LEs in BE)." >&4 ;;
8) echo "You have 128-bit mixed-endian double-double long doubles (64-bit BEs in LE)." >&4
 ;;
9) echo "You have 128-bit PDP-style mixed-endian long doubles (VAX format H)." >&4 ;;
*) echo "Cannot figure out your long double." >&4 ;;
esac
d_long_double_style_ieee=$undef
d_long_double_style_ieee_std=$undef
d_long_double_style_ieee_extended=$undef
d_long_double_style_ieee_doubledouble=$undef
d_long_double_style_vax=$undef
case "$longdblkind" in
1|2|3|4|5|6|7|8) d_long_double_style_ieee=$define ;;
esac
case "$longdblkind" in
1|2) d_long_double_style_ieee_std=$define ;;
esac
case "$longdblkind" in
3|4) d_long_double_style_ieee_extended=$define ;;
esac
case "$longdblkind" in
5|6|7|8) d_long_double_style_ieee_doubledouble=$define ;;
esac
case "$longdblkind" in
9) d_long_double_style_vax=$define ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_longdbl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_speedopt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_speedopt.U,v $
```

```
?RCS: Revision 3.0.1.1  1994/10/29  16:15:51  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_speedopt: Myread Cppsym Oldconfig cat models Setvar
?MAKE: -pick add $@ %<
?S:d_speedopt:
?S: This variable conditionally defines the SPEED_OVER_MEM symbol, which
?S: indicates to the C program that it can
 burn memory in order to save
?S: CPU time.
?S:.
?C:SPEED_OVER_MEM (SPEEDOVERMEM):
?C: This symbol, if defined, indicates that the program can use more
?C: memory in order to reduce CPU time.  The symbol doesn't say whether
?C: we are more interested in saving text space or data space.
?C:.
?H:#$d_speedopt SPEED_OVER_MEM /**/
?H:.
?LINT:set d_speedopt
: do we want speed at the expense of memory
$cat <<'EOM'

I can try to optimize this package for either speed or memory.  If you have
limited address space you may wish to optimize for memory.  Otherwise you
should probably optimize for speed.

EOM
case "$d_speedopt" in
") if ./Cppsym $smallmach; then
 case "$models" in
  *large*|*huge*) dflt=speed;;
  *) dflt=memory;;
  esac
 else
  dflt=speed
 fi
 ;;
*define*) dflt=speed;;
*) dflt=memory;;
esac
rp="What to optimize for?"
. ./myread
case "$ans" in
mem*) val="$undef";;
*) val="$define";;
```

```
esac
set d_speedopt
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_speedopt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitescript.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitescript.U,v $
?RCS:
?MAKE:sitescript sitescriptexp installsitescript : Getfile Oldconfig test \
 Setprefixvar sitebin siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitescript=''
?S:sitescript:
?S: This variable holds the name of the directory in which the user wants
?S: to put add-on publicly executable files for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S: The standard
 distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: scripts in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitescriptexp=''
?S:sitescriptexp:
?S: This is the same as the sitescript variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installsitescript=''
?S:installsitescript:
?S: This variable is usually the same as sitescriptexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
```

```
?LINT:change prefixvar
?LINT:set installsitescript
?LINT:set sitescript
?LINT:set sitescriptexp
: determine where add-on public executable scripts go
case "$sitescript" in
") dflt=$siteprefix/script
 $test -d $dflt || dflt=$sitebin ;;
*)  dflt="$sitescript" ;;
esac
fn=d~+
rp='Pathname where add-on public executable scripts
 should be installed?'
. ./getfile
prefixvar=sitescript
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitescript.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_voidsig.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:12:46  ram
?RCS: patch54: made cppflags dependency optional
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:20:35  ram
?RCS: patch32: now sets signal_t only once d_voidsig is known (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:54  ram
?RCS: patch30: now properly sets signal_t when re-using previous value
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_voidsig signal_t: rm contains
 cppstdin cppminus +cppflags test Myread \
 Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
```

```
?S:d_voidsig:
?S: This variable conditionally defines VOIDSIG if this system
?S: declares "void (*signal(...))()" in signal.h.  The old way was to
?S: declare it as "int (*signal(...))()".
?S:.
?S:signal_t:
?S: This variable holds the type of the signal handler (void or int).
?S:.
?C:VOIDSIG:
?C: This symbol is defined if this system declares "void (*signal(...))()" in
?C: signal.h.  The old way was to declare it as "int (*signal(...))()".  It
?C: is up to the package author to declare things correctly based on the
?C: symbol.
?C:.
?C:Signal_t (SIGNAL_T):
?C: This symbol's value is either "void" or "int", corresponding to the
?C: appropriate return type of a signal handler.  Thus, you can declare
?C: a signal handler using "Signal_t (*handler)()", and define the
?C: handler using "Signal_t handler(sig)".
?C:.
?H:#$d_voidsig VOIDSIG  /**/
?H:#define Signal_t $signal_t /* Signal handler's return
 type */
?H:.
?T:xxx
?LINT:set d_voidsig
: see if signal is declared as pointer to function returning int or void
echo " "
xxx=`./findhdr signal.h`
$test "$xxx" && $cppstdin $cppminus $cppflags < $xxx >$$.tmp 2>/dev/null
if $contains 'int.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
elif $contains 'void.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have void (*signal())() instead of int." >&4
 val="$define"
elif $contains 'extern[  ]*[(\*]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
else
 case "$d_voidsig" in
 ")
 echo "I can't determine whether signal handler returns void or int..." >&4
  dflt=void
  rp="What type does your signal handler return?"
  . ./myread
  case "$ans" in
  v*) val="$define";;
```

```
  *) val="$undef";;
  esac;;
 "$define")
  echo "As you already told me, signal handler returns void." >&4;;
 *)
  echo "As you already told
 me, signal handler returns int." >&4;;
 esac
fi
set d_voidsig
eval $setvar
case "$d_voidsig" in
"$define") signal_t="void";;
*) signal_t="int";;
esac
$rm -f $$.tmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_voidsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_safemcpy.U,v 3.0.1.5 1997/02/28 15:41:12 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_safemcpy.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:41:12  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  13:58:46  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.3  1995/03/21  08:47:26  ram
?RCS: patch52: swapped two first arguments of memcpy() calls
?RCS:
?RCS:
 Revision 3.0.1.2  1994/10/29  16:15:10  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:53:12  ram
```

```
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safemcpy: Compile cat d_memcpy rm_try run \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safemcpy:
?S: This variable conditionally defines the HAS_SAFE_MEMCPY symbol if
?S: the memcpy() routine can do overlapping copies.
?S: For overlapping copies, memmove() should be used, if available.
?S:.
?C:HAS_SAFE_MEMCPY (SAFE_MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy potentially overlapping memory blocks.  If you need to
?C: copy overlapping memory blocks, you should check HAS_MEMMOVE and
?C: use memmove() instead, if available.
?C:.
?H:#$d_safemcpy HAS_SAFE_MEMCPY /**/
?H:.
?F:!try
?LINT:
 set d_safemcpy
: can memcpy handle overlapping blocks?
echo " "
?X: assume the worst
val="$undef"
case "$d_memmove" in
"$define") echo "I'll use memmove() instead of memcpy() for overlapping copies." ;;
*) case "$d_memcpy" in
 "$define")
  echo "Checking to see if memcpy() can do overlapping copies..." >&4
  $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
```

```
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
memcpy(abc, "abcdefghijklmnopqrstuvwxyz0123456789", 36);

for (align = 7; align >=
 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  memcpy(b, abc, len);
  for (off = 1; off <= len; off++) {
   memcpy(b+off, b, len);
   memcpy(b, b+off, len);
   if (memcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
  set try
  if eval $compile_ok; then
   if $run ./try 2>/dev/null; then
    echo "Yes, it can."
    val="$define"
   else
    echo "It can't, sorry."
   fi
  else
   echo "(I can't compile the test program, so we'll assume not...)"
  fi
  ;;
 esac
```

```
 $rm_try
 ;;
esac
set d_safemcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_safemcpy.U
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```
?RCS: $Id: otherlibdirs.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: otherlibdirs.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS: Revision 1.1  1999/07/08 18:20:26  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:otherlibdirs d_perl_otherlibdirs: Myread cat sitelib sitearch \
 vendorarch vendorlib Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:otherlibdirs:
?S: This variable contains a colon-separated set of paths for the perl
?S: binary to search for additional library files
 or modules.
?S: These directories will be tacked to the end of @INC.
?S: Perl will automatically search below each path for version-
?S: and architecture-specific directories.  See inc_version_list
?S: for more details.
?S: A value of ' ' means 'none' and is used to preserve this value
?S: for the next run through Configure.
?S:.
?S:d_perl_otherlibdirs:
?S: This variable conditionally defines PERL_OTHERLIBDIRS, which
?S: contains a colon-separated set of paths for the perl binary to
?S: include in @INC.  See also otherlibdirs.
?S:.
```

```
?C:PERL_OTHERLIBDIRS:
?C: This variable contains a colon-separated set of paths for the perl
?C: binary to search for additional library files or modules.
?C: These directories will be tacked to the end of @INC.
?C: Perl will automatically search below each path for version-
?C: and architecture-specific directories.  See PERL_INC_VERSION_LIST
?C: for more details.
?C:.
?H:#$d_perl_otherlibdirs PERL_OTHERLIBDIRS "$otherlibdirs"  /**/
?H:.
?LINT: set d_perl_otherlibdirs
:
 Final catch-all directories to search
$cat <<EOM

Lastly, you can have perl look in other directories for extensions and
modules in addition to those already specified.
These directories will be searched after
 $sitearch
 $sitelib
EOM
test X"$vendorlib" != "X" && echo ' ' $vendorlib
test X"$vendorarch" != "X" && echo ' ' $vendorarch
echo ' '
case "$otherlibdirs" in
"|' ') dflt='none' ;;
*) dflt="$otherlibdirs" ;;
esac
$cat <<EOM
Enter a colon-separated set of extra paths to include in perl's @INC
search path, or enter 'none' for no extra paths.

EOM

rp='Colon-separated list of additional directories for perl to search?'
. ./myread
case "$ans" in
' '|''|none) otherlibdirs=' ' ;;
*) otherlibdirs="$ans" ;;
esac
case "$otherlibdirs" in
' ') val=$undef ;;
*) val=$define ;;
esac
set d_perl_otherlibdirs
eval $setvar

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/otherlibdirs.U
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```
?RCS: $Id: d_getpwnam_r.U,v 0RCS:
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwnam_r getpwnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwnam_r:
?S: This variable conditionally defines the HAS_GETPWNAM_R symbol,
?S: which indicates to the C program that the getpwnam_r()
?S: routine is available.
?S:.
?S:getpwnam_r_proto:
?S: This variable encodes the prototype of getpwnam_r.
?S: It is zero if d_getpwnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwnam_r
?S: is defined.
?S:.
?C:HAS_GETPWNAM_R:
?C: This symbol, if defined, indicates that the getpwnam_r routine
?C: is available to
 getpwnam re-entrantly.
?C:.
?C:GETPWNAM_R_PROTO:
?C: This symbol encodes the prototype of getpwnam_r.
?C: It is zero if d_getpwnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwnam_r
?C: is defined.
?C:.
?H:#$d_getpwnam_r HAS_GETPWNAM_R /**/
?H:#define GETPWNAM_R_PROTO $getpwnam_r_proto /**/
?H:.
?T:try hdrs d_getpwnam_r_proto
: see if getpwnam_r exists
set getpwnam_r d_getpwnam_r
eval $inlibc
case "$d_getpwnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwnam_r_proto:$usethreads" in
 ":define") d_getpwnam_r_proto=define
```

```
 set d_getpwnam_r_proto getpwnam_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_getpwnam_r_proto" in
define)
case "$getpwnam_r_proto" in
"|0) try='int getpwnam_r(const char*, struct passwd*, char*, size_t, struct passwd**);'
./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBWR ;;
esac
case "$getpwnam_r_proto" in
"|0) try='int getpwnam_r(const char*, struct passwd*,
char*, int, struct passwd**);'
./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBIR ;;
esac
case "$getpwnam_r_proto" in
"|0) try='struct passwd* getpwnam_r(const char*, struct passwd*, char*, int);'
./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=S_CSBI ;;
esac
case "$getpwnam_r_proto" in
"|0) try='int getpwnam_r(const char*, struct passwd*, char*, int);'
./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBI ;;
esac
case "$getpwnam_r_proto" in
"|0) d_getpwnam_r=undef
 getpwnam_r_proto=0
 echo "Disabling getpwnam_r, cannot determine prototype." >&4 ;;
* ) case "$getpwnam_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getpwnam_r_proto="REENTRANT_PROTO_$getpwnam_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getpwnam_r has no prototype, not using it." >&4 ;;
 esac
 d_getpwnam_r=undef
 getpwnam_r_proto=0
 ;;
esac
;;
*) getpwnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwnam_r.U

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```
?RCS: $Id: d_getgrps.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: $Log: d_getgrps.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getgrps: Inlibc
?MAKE: -pick add $@ %<
?S:d_getgrps:
?S: This variable conditionally defines the HAS_GETGROUPS symbol, which
?S: indicates to the C program that the getgroups() routine is available
?S: to get the list of process groups.
?S:.
?C:HAS_GETGROUPS (GETGROUPS):
?C: This symbol, if defined, indicates that the getgroups()
 routine is
?C: available to get the list of process groups.  If unavailable, multiple
?C: groups are probably not supported.
?C:.
?H:#$d_getgrps HAS_GETGROUPS  /**/
?H:.
?LINT:set d_getgrps
: see if getgroups exists
set getgroups d_getgrps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getgrps.U
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```

```
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?RCS:
?RCS: $Log: man1dir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:10:29  ram
?RCS: patch61: created
?RCS:
?X:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man1 used instead of man everywhere.
?X:
?MAKE:man1dir man1direxp man1ext installman1dir: afs cat nroff Loc Oldconfig \
 spackage test Getfile Prefixit prefixexp
 Prefixup sysman Myread
?MAKE: -pick add $@ %<
?Y:TOP
?S:man1dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:man1direxp:
?S: This variable is the same as the man1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installman1dir:
?S: This variable is really the same as man1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man1ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See man1dir.
?S:.
?T:lookpath
: determine
 where manual pages go
set man1dir man1dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages available in source form.
EOM
```

```
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$man1dir" in
 ") man1dir="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$man1dir" in
' ') dflt=none
 ;;
")
 lookpath="$prefixexp/man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath $prefixexp/man/p_man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1"
 lookpath="$lookpath $prefixexp/man/man.1"
?X: Experience has shown people expect man1dir to be under prefix,
?X: so we now always put it there.  Users who want other behavior
?X: can answer interactively or use a command line option.
?X: Does user have System V-style man paths.
 case "$sysman" in
 */?_man*) dflt=`./loc . $prefixexp/l_man/man1 $lookpath` ;;
 *) dflt=`./loc . $prefixexp/man/man1 $lookpath` ;;
 esac
 set dflt
 eval $prefixup
 ;;
*)
  dflt="$man1dir"
 ;;
esac
echo " "
fn=dn+~
rp="Where do the main $spackage manual pages (source) go?"
. ./getfile
if $test "X$man1direxp" != "X$ansexp"; then
 installman1dir="
fi
man1dir="$ans"
man1direxp="$ansexp"
case "$man1dir" in
") man1dir=' '
 installman1dir=";;
esac
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
```

```
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installman1dir" in
 ") dflt=`echo $man1direxp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installman1dir";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installman1dir="$ans"
else
 installman1dir="$man1direxp"
fi

: What suffix to use on installed man pages

case "$man1dir" in
' ')
 man1ext='0'
 ;;
*)
 rp="What suffix should be used for the main $spackage man pages?"
 case "$man1ext" in
 ") case "$man1dir" in
  *1)  dflt=1 ;;
  *1p)
 dflt=1p ;;
  *1pm) dflt=1pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L1) dflt=L1;;
  *) dflt=1;;
  esac
  ;;
 *) dflt="$man1ext";;
 esac
 . ./myread
 man1ext="$ans"
 ;;
esac

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/man1dir.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: orderlib.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:18:18  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS: patch61: now uses the ar located by Loc.U
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:33:04  ram
?RCS: patch45: allows hint files to specify their own value for 'ranlib'
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:26:48  ram
?RCS: patch36: now performs a real small compile for accurate checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1
  1994/08/29  16:31:17  ram
?RCS: patch32: use cc variable instead of hardwired 'cc' in 1st compile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orderlib ranlib: Loc ar cat test rm +cc +ccflags +ldflags +libs _a _o
?MAKE: -pick add $@ %<
?S:orderlib:
?S: This variable is "true" if the components of libraries must be ordered
?S: (with `lorder $* | tsort`) before placing them in an archive.  Set to
?S: "false" if ranlib or ar can generate random libraries.
?S:.
?S:ranlib:
?S: This variable is set to the pathname of the ranlib program, if it is
?S: needed to generate random libraries.  Set to ":" if ar can generate
?S: random libraries or if random libraries are not supported
?S:.
?F:!foobar
: see if ar generates random libraries by itself
echo " "
echo "Checking how to generate random libraries on your machine..." >&4
```

```
?X: Some systems (like MIPS) complain when running ar... Others like Ultrix
?X: need an explicit 'ar ts'
 to add the table of contents.
?X: Still others like Linux run ar ts successfully, but still need ranlib.
?X: This set of tests seems the minimum necessary to check out Linux.
?X: We need to explicitly put the entries in out-of-order so that Sun's ld
?X: will fail.  (Otherwise it complains, but gives an exit status of 0.)
echo 'int bar1() { return bar2(); }' > bar1.c
echo 'int bar2() { return 2; }' > bar2.c
$cat > foo.c <<'EOP'
int main() { printf("%d\n", bar1()); exit(0); }
EOP
$cc $ccflags -c bar1.c >/dev/null 2>&1
$cc $ccflags -c bar2.c >/dev/null 2>&1
$cc $ccflags -c foo.c >/dev/null 2>&1
$ar rc bar$_a bar2$_o bar1$_o >/dev/null 2>&1
if $cc $ccflags $ldflags -o foobar foo$_o bar$_a $libs > /dev/null 2>&1 &&
 ./foobar >/dev/null 2>&1; then
 echo "ar appears to generate random libraries itself."
 orderlib=false
 ranlib=":"
elif $ar ts bar$_a >/dev/null 2>&1 &&
 $cc $ccflags $ldflags -o foobar foo$_o bar$_a $libs > /dev/null 2>&1 &&
 ./foobar >/dev/null 2>&1; then
  echo "a table of contents
 needs to be added with 'ar ts'."
  orderlib=false
  ranlib="$ar ts"
else
?X: Allow hints to specify their own ranlib "script". For instance, on
?X: some NeXT machines, the timestamp put by ranlib is not correct, and this
?X: may raise tedious recompiles for nothing. Therefore, NeXT may add the
?X: ranlib='sleep 5; /bin/ranlib' line in their hints to "fix" that.
?X: (reported by Andreas Koenig <k@franz.ww.tu-berlin.de>)
 case "$ranlib" in
 :) ranlib=";;
 ")
  ranlib=`./loc ranlib X /usr/bin /bin /usr/local/bin`
  $test -f $ranlib || ranlib="
  ;;
 esac
 if $test -n "$ranlib"; then
  echo "your system has '$ranlib'; we'll use that."
  orderlib=false
 else
  echo "your system doesn't seem to support random libraries"
  echo "so we'll use lorder and tsort to order the libraries."
  orderlib=true
```

```
  ranlib=":"
 fi
fi
$rm -f foo* bar*
```

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* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/orderlib.U
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_keepsig.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:57:56  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:26:25  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:13:59  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:48:47  ram
?RCS: patch12: comment for SIGNALS_KEPT was the other way round
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:06:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepsig: cat Compile rm Guess contains echo n c Setvar run
?MAKE: -pick add $@ %<
?S:d_keepsig:
?S: This variable contains the eventual value of the SIGNALS_KEPT symbol,
?S: which indicates to the C program if signal handlers need not reinstated
?S: after receipt of a signal.
?S:.
?C:SIGNALS_KEPT (PERSISTENT_SIGNAL):
?C: This symbol is defined if signal handlers needn't be reinstated after
?C: receipt of a signal.
?C:.
?H:#$d_keepsig SIGNALS_KEPT /**/
```

```
?H:.
?F:!try !try.out
?LINT:set d_keepsig
: see if signals are kept
val="$undef";
echo " "
echo "Checking to see if signal handlers stick around..." >&4
$cat >try.c <<'EOCP'
foo() {}

int main()
{
 signal(2, foo);
 kill(getpid(), 2);
 kill(getpid(), 2);
 printf("abc\n");
}
EOCP
set try
if eval $compile_ok; then
?X: On AIX a single ./try will not work (with ksh)
?X: Backquotes required on Linux and SGI (prevents "ambiguous output redirect")
?X:
 (reported by Xavier LeVourch <xavierl@eiffel.com>)
 `sh -c $run ./try >try.out 2>/dev/null`
 if $contains abc try.out >/dev/null 2>&1; then
  echo "Yes, they do."
  val="$define";
 else
  echo "No, they don't."
 fi
else
 $echo $n "(I can't seem to compile the test program. Assuming $c"
 if ./bsd; then
  echo "they do.)"
  val="$define"
 else
  echo "they don't.)"
 fi
fi
set d_keepsig
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_keepsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 2020, Raphael Manfredi and Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:compiler_warning: contains grep osname
?MAKE: -pick add $@ %<
?S:compiler_warning:
?S: This variable holds the command to check if the file specified as a
?S: parameter contains a compiler warning
?S:.
: See if a file contains compiler warnings
: See if a file contains compiler warnings
case "$osname" in
 'aix')
 cat >compiler_warning <<EOSS
# Sample for aix ('.5' indicates the column number in the line):
#    "op.h", line 203.5: 1506-159 (E) Bit field
 type specified for op_type
# Since the word 'warning' isn't present, use a fairly rigorous match of what
# warning messages look like
#           "    o       p       .  h   ", line    203     .   5       :   1506     -    159      (  E  )
$grep -E "^\\"[A-Za-z][A-Za-z0-9_]*\.[ch]\\", line [1-9][0-9]*[.][1-9][0-9]*: [1-9][0-9]*-[1-9][0-9]* \([EW][)] "
"\$1"
EOSS
      compiler_warning=./compiler_warning
      chmod +x $compiler_warning
   ;;
    # Maybe a colon after the 'warning' would be appropriate
 *) compiler_warning="$contains -i warning"
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/compiler_warning.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Oldsym.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldsym.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:06:58  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit follows the creation of the config.sh file. It adds some
?X: special symbols: defines from patchlevel.h file if any and PERL_CONFIG_SH,
?X: which is set to true. Then, we try to keep all the new symbols that
?X: may come from a hint
 file or a previous config.sh file.
?X:
?MAKE:Oldsym: Config_sh cat test hint src sed sort uniq perl_patchlevel
?MAKE: -pick add $@ %<
?T:PERL_CONFIG_SH PERL_PATCHLEVEL sym tmp
?F:!UU
: add special variables
$test -f $src/patchlevel.h && \
awk '/^#define[  ]+PERL_/ {printf "%s=%s\n",$2,$3}' $src/patchlevel.h >>config.sh
echo "PERL_PATCHLEVEL='$perl_patchlevel'" >>config.sh
echo "PERL_CONFIG_SH=true" >>config.sh

: propagate old symbols
if $test -f UU/config.sh; then
?X: Make sure each symbol is unique in oldconfig.sh
 <UU/config.sh $sort | $uniq >UU/oldconfig.sh
?X:
?X: All the symbols that appear twice come only from config.sh (hence the
?X: two config.sh in the command line). These symbols will be removed by
?X: the uniq -u command. The oldsyms file thus contains all the symbols
?X: that did not appear in the produced config.sh (Larry Wall).
?X:
?X: Do not touch the -u flag of uniq.  This means you too, Jarkko.
?X:
 $sed -n 's/^\([a-zA-Z_0-9]*\)=.*/\1/p' \
  config.sh config.sh UU/oldconfig.sh
 |\
  $sort | $uniq -u >UU/oldsyms
 set X `$cat UU/oldsyms`
 shift
 case $# in
 0) ;;
```

```
 *)
  $cat <<EOM
Hmm...You had some extra variables I don't know about...I'll try to keep 'em...
EOM
  echo ": Variables propagated from previous config.sh file." >>config.sh
  for sym in `$cat UU/oldsyms`; do
   echo "    Propagating $hint variable '"$'"$sym..."
   eval 'tmp="$'"${sym}"'"'
   echo "$tmp" | \
    sed -e "s/'/'\''\''/g" -e "s/^/$sym='/" -e "s/$/'/" >>config.sh
  done
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Oldsym.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in order
?X: to make quick check on whether the current C compiler is working.
?X:
?MAKE:Checkcc ccname ccversion: Myread Warn startsh cat contains test
?MAKE: -pick add $@ %<
?S:ccname:
?S: This can set either by hints files or by Configure.  If using
?S: gcc, this is gcc, and if not, usually equal to cc, unimpressive, no?
?S: Some platforms, however, make good use of this by storing the
?S: flavor
 of the C compiler being used here.  For example if using
?S: the Sun WorkShop suite, ccname will be 'workshop'.
?S:.
?S:ccversion:
?S: This can set either by hints files or by Configure.  If using
?S: a (non-gcc) vendor cc, this variable may contain a version for
```

```
?S: the compiler.
?S:.
?F:./checkcc ./trygcc !checktmp
?V:despair
?T:trygcc
?LINT:extern cc rm ccflags ldflags
?LINT:change cc ccflags
?LINT:usefile checktmp
?INIT:ccname=''
?INIT:ccversion=''
: generate the trygcc script for later perusal
cat <<EOS >trygcc
$startsh
EOS
cat <<'EOSC' >>trygcc
case "$cc" in
'') ;;
*)  $rm -f try try.*
   $cat >try.c <<EOM
int main(int argc, char *argv[]) {
 (void) argc;
 (void) argv;
 return 0;
}
EOM
   if $cc -o try $ccflags $ldflags try.c; then
      :
   else
       echo "Uh-oh, the C compiler '$cc' doesn't seem to be working." >&4
       despair=yes
       trygcc=yes
       case "$cc" in
       *gcc*) trygcc=no ;;
       esac
       case "`$cc -v -c try.c 2>&1`" in

      *gcc*) trygcc=no ;;
       esac
       if $test X"$trygcc" = Xyes; then
           if gcc -o try -c try.c; then
               echo " "
               echo "You seem to have a working gcc, though." >&4
               rp="Would you like to use it?"
               dflt=y
               if $test -f myread; then
                   . ./myread
               else
                   if $test -f UU/myread; then
```

```
                . ./UU/myread
            else
                echo "Cannot find myread, sorry.  Aborting." >&2
                exit 1
            fi
        fi
        case "$ans" in
        [yY]*) cc=gcc; ccname=gcc; ccflags=''; despair=no;
?X: Look whether we have 'call-back units' generated by hints that would
?X: seemingly affect the compiling environment.
                $cat *.cbu >checktmp 2>/dev/null
                if $contains ccflags checktmp >/dev/null; then

    ./warn <<EOM
Any previous setting of the C compiler flags has been lost.
It may be necessary to pass -Dcc=gcc to Configure right away.
EOM
                fi;;
        esac
      fi
    fi
  fi
  $rm -f try try.*
  ;;
esac
EOSC

: generate the checkcc script for later perusal
cat <<EOS >checkcc
$startsh
EOS
cat <<'EOSC' >>checkcc
case "$cc" in
'') ;;
*)  $rm -f try try.*
  $cat >try.c <<EOM
int main(int argc, char *argv[]) {
 (void) argc;
 (void) argv;
 return 0;
}
EOM
  if $cc -o try $ccflags $ldflags try.c; then
    :
  else
    if $test X"$despair" = Xyes; then
      echo "Uh-oh, the C compiler '$cc' doesn't seem to be working." >&4
    fi
```

```
      $cat >&4 <<EOM
You need to find a working C compiler.
Either (purchase and) install the C compiler supplied by your OS vendor,
or for a free C compiler try http://gcc.gnu.org/
I cannot continue any further, aborting.
EOM
      exit 1
   fi

 $rm -f try try.*
   ;;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Checkcc.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_int64_t: Inhdr cat rm_try Setvar Compile i_inttypes
?MAKE: -pick add $@ %<
?S:d_int64_t:
?S: This symbol will be defined if the C compiler supports int64_t.
?S:.
?C:HAS_INT64_T:
?C: This symbol will defined if the C compiler supports int64_t.
?C: Usually the <inttypes.h> needs to be included, but sometimes
?C: <sys/types.h> is enough.
?C:.
?H:#$d_int64_t     HAS_INT64_T              /**/
?H:.
?LINT:set d_int64_t
: check for int64_t
echo " "
echo "Checking to see if you have int64_t..." >&4
$cat >try.c <<EOCP
#include
 <sys/types.h>
#$i_inttypes I_INTTYPES
```

```
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
int main() { int64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have int64_t."
else
 val="$undef"
 echo "You do not have int64_t."
fi
$rm_try
set d_int64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_int64_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systable.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systable.U,v $
?RCS: Revision 3.0.1.1  1993/10/16  13:50:20  ram
?RCS: patch12: created
?RCS:
?RCS:
?MAKE:i_systable: Inhdr
?MAKE: -pick add $@ %<
?S:i_systable:
?S: This variable conditionally defines the I_SYS_TABLE symbol, and
?S: indicates whether a C program should include <sys/table.h>.
?S:.
?C:I_SYS_TABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/table.h> for the OSF/1 table() system call.
?C:.
?H:#$i_systable
```

```
 I_SYS_TABLE  /**/
?H:.
?LINT:set i_systable
: see if this is an OSF sys/table system
set sys/table.h i_systable
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systable.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_normsig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_normsig.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:03  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:14:48  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_normsig jobslib: test Setvar Guess _a
?MAKE: -pick add $@ %<
?S:d_normsig:
?S: This variable conditionally
 defines the NORMSIG symbol, which
?S: indicates to the C program that the normal signal handling routines
?S: should be used, as opposed to the ones in 4.1bsd (sigset, etc.).
?S:.
?S:jobslib:
?S: This variable holds the argument to be passed to the loader to include
?S: the strange signal handling routines from 4.1bsd.  On systems that
?S: have NORMSIG defined this variable is null.
?S:.
?C:NORMSIG:
?C: This symbol, if defined, indicates that normal signal handling routines
?C: should be used, as opposed to the ones in 4.1bsd (sigset, etc.).
?C:.
```

```
?H:#$d_normsig NORMSIG  /**/
?H:.
?LINT:set d_normsig
: see if we need -ljobs and if we have sigset, etc.
echo " "
if $test -r /usr/lib/libjobs$_a || $test -r /usr/local/lib/libjobs$_a ; then
 echo "Jobs library found." >&4
 val="$undef"
 jobslib='-ljobs'
else
 if ./bsd; then
  echo "No jobs library found. (I suppose this is at least 4.2...)" >&4
 else
  echo "No jobs library found. (That's okay, we all have our faults.)" >&4
 fi
 val="$define"
 jobslib=''
fi
set
 d_normsig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_normsig.U
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```
?RCS: $Id: perl5.U,v $
?RCS:
?RCS: Copyright (c) 2000 Andrew Dougherty
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: perl5.U,v $
?RCS:
?X:
?X: The purpose of this unit is to locate a previously installed
?X: version of perl5 suitable for running inc_version_list.U.
?X: We check for 5.005 and later because inc_version_list is
?X: irrelevant for earlier versions.
?X:
?MAKE:perl5: path_sep binexp test sed exe_ext
?MAKE: -pick add $@ %<
?Y:TOP
?S:perl5:
?S: This variable contains the full path (if any) to a previously
?S: installed perl5.005 or later suitable for running the script
?S: to determine inc_version_list.
```

```
?S:.
?T: tdir
: Find perl5.005 or later.
echo "Looking for a previously installed perl5.005 or later... "
case "$perl5" in
") for tdir in `echo "$binexp$path_sep$PATH" | $sed "s/$path_sep/
 /g"`; do
  : Check if this perl is recent and can load a simple module
  if $test -x $tdir/perl$exe_ext && $tdir/perl -Mless -e 'use 5.005;' >/dev/null 2>&1; then
   perl5=$tdir/perl
   break;
  elif $test -x $tdir/perl5$exe_ext && $tdir/perl5 -Mless -e 'use 5.005;' >/dev/null 2>&1; then
   perl5=$tdir/perl5
   break;
  fi
 done
 ;;
*) perl5="$perl5"
 ;;
esac
case "$perl5" in
") echo "None found.  That's ok.";;
*) echo "Using $perl5." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/perl5.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setregid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setregid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setregid d_setresgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setregid:
?S: This variable conditionally defines HAS_SETREGID if setregid() is
?S: available to change the real and effective gid of the current
```

```
?S: process.
?S:.
?S:d_setresgid:
?S: This variable conditionally defines HAS_SETRESGID if setresgid() is
?S: available to change
 the real, effective and saved gid of the current
?S: process.
?S:.
?C:HAS_SETREGID (SETREGID):
?C: This symbol, if defined, indicates that the setregid routine is
?C: available to change the real and effective gid of the current
?C: process.
?C:.
?C:HAS_SETRESGID (SETRESGID):
?C: This symbol, if defined, indicates that the setresgid routine is
?C: available to change the real, effective and saved gid of the current
?C: process.
?C:.
?H:#$d_setregid HAS_SETREGID  /**/
?H:#$d_setresgid HAS_SETRESGID  /**/
?H:.
?LINT: set d_setregid d_setresgid
: see if setregid exists
set setregid d_setregid
eval $inlibc
set setresgid d_setresgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setregid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_regcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_regcmp.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:34:45  ram
?RCS: patch49: now looks for POSIX regcomp() routine
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:53  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_regcmp d_re_comp d_regcomp: Csym cat
?MAKE: -pick add $@ %<
?S:d_regcomp:
?S: This variable conditionally defines the HAS_REGCOMP symbol, which
?S: indicates to the C program that the regcomp() routine is available
?S: for regular
 pattern matching (usually on POSIX.2 conforming systems).
?S:.
?S:d_regcmp:
?S: This variable conditionally defines the HAS_REGCMP symbol, which
?S: indicates to the C program that the regcmp() routine is available
?S: for regular pattern matching (usually on System V).
?S:.
?S:d_re_comp:
?S: This variable conditionally defines the HAS_RECOMP symbol, which
?S: indicates to the C program that the re_comp() routine is available
?S: for regular pattern matching (usually on BSD). If so, it is likely that
?S: re_exec() exists.
?S:.
?C:HAS_REGCOMP (REGCOMP):
?C: This symbol, if defined, indicates that the regcomp() routine is
?C: available to do some regular pattern matching (usually on POSIX.2
?C: conforming systems).
?C:.
?C:HAS_REGCMP (REGCMP):
?C: This symbol, if defined, indicates that the regcmp() routine is
?C: available to do some regular pattern matching (usually on System V).
?C:.
?C:HAS_RECOMP (RECOMP):
?C: This symbol, if defined, indicates that the re_comp() routine is
?C: available
 to do some regular pattern matching (usually on BSD). If so,
?C: it is likely that re_exec() be available.
?C:.
?H:#$d_regcomp HAS_REGCOMP  /* POSIX.2 */
?H:#$d_regcmp HAS_REGCMP  /* sysV */
?H:#$d_re_comp HAS_RECOMP  /* BSD */
?H:.
?T:val
: see if regcomp, regcmp, or re_comp exist, for regular pattern matching
echo " "
if set regcomp val -f d_regcomp; eval $csym; $val; then
 echo 'regcomp() found.' >&4
 d_regcomp="$define"
 d_regcmp="$undef"
 d_re_comp="$undef"
elif set regcmp val -f d_regcmp; eval $csym; $val; then
```

```
 echo 'regcmp() found.' >&4
 d_regcmp="$define"
 d_regcomp="$undef"
 d_re_comp="$undef"
elif set re_comp val -f d_re_comp; eval $csym; $val; then
 echo 're_comp() found, assuming re_exec() also exists.' >&4
 d_re_comp="$define"
 d_regcomp="$undef"
 d_regcmp="$undef"
else
 $cat >&4 <<EOM
No regcomp(), regcmp() nor re_comp() found !! No regular pattern matching.
EOM
 d_regcmp="$undef"
 d_re_comp="$undef"
 d_regcomp="$undef"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_regcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: intsize.U,v 3.0.1.2 1997/02/28 15:55:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: intsize.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:55:26  ram
?RCS: patch61: avoid prompting the user if the test runs ok
?RCS: patch61: moved code from longsize.U into there
?RCS: patch61: new tests for shortsize as well
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:21:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:intsize longsize
 shortsize: Compile Myread cat run i_stdlib rm_try
?MAKE: -pick add $@ %<
?S:intsize:
```

```
?S: This variable contains the value of the INTSIZE symbol, which
?S: indicates to the C program how many bytes there are in an int.
?S:.
?S:longsize:
?S: This variable contains the value of the LONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long.
?S:.
?S:shortsize:
?S: This variable contains the value of the SHORTSIZE symbol which
?S: indicates to the C program how many bytes there are in a short.
?S:.
?C:INTSIZE:
?C: This symbol contains the value of sizeof(int) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:LONGSIZE:
?C: This symbol contains the value of sizeof(long) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:SHORTSIZE:
?C: This symbol contains the value of sizeof(short) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define INTSIZE $intsize  /**/
?H:#define LONGSIZE $longsize  /**/
?H:#define
 SHORTSIZE $shortsize  /**/
?H:.
?F:!try
: check for lengths of integral types
echo " "
case "$intsize" in
")
 echo "Checking to see how big your integers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
@if INTSIZE || intsize
 printf("intsize=%d;\n", (int)sizeof(int));
@end
@if LONGSIZE || longsize
 printf("longsize=%d;\n", (int)sizeof(long));
@end
```

```
@if SHORTSIZE || shortsize
 printf("shortsize=%d;\n", (int)sizeof(short));
@end
 exit(0);
}
EOCP
 set try
 if eval $compile_ok && $run ./try > /dev/null; then
  eval `$run ./try`
@if INTSIZE || intsize
  echo "Your integers are $intsize bytes long."
@end
@if LONGSIZE || longsize
  echo "Your long integers are $longsize bytes long."
@end
@if SHORTSIZE || shortsize
  echo "Your short integers are $shortsize bytes long."
@end
 else
  $cat >&4 <<EOM
!
Help! I can't compile and run the intsize test program: please enlighten me!
(This is probably a misconfiguration
 in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)
!
EOM
@if INTSIZE || intsize
  dflt=4
  rp="What is the size of an integer (in bytes)?"
  . ./myread
  intsize="$ans"
@end
@if LONGSIZE || longsize
  dflt=$intsize
  rp="What is the size of a long integer (in bytes)?"
  . ./myread
  longsize="$ans"
@end
@if SHORTSIZE || shortsize
  dflt=2
  rp="What is the size of a short integer (in bytes)?"
  . ./myread
  shortsize="$ans"
@end
 fi
 ;;
esac
```

```
$rm_try

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/intsize.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_gethostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostent_r gethostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostent_r:
?S: This variable conditionally defines the HAS_GETHOSTENT_R symbol,
?S: which indicates to the C program that the gethostent_r()
?S: routine is available.
?S:.
?S:gethostent_r_proto:
?S: This variable encodes the prototype of gethostent_r.
?S: It is zero if d_gethostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostent_r
?S: is defined.
?S:.
?C:HAS_GETHOSTENT_R:
?C: This symbol, if defined, indicates that the gethostent_r routine
?C: is
 available to gethostent re-entrantly.
?C:.
?C:GETHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of gethostent_r.
?C: It is zero if d_gethostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostent_r
?C: is defined.
?C:.
?H:#$d_gethostent_r HAS_GETHOSTENT_R /**/
?H:#define GETHOSTENT_R_PROTO $gethostent_r_proto /**/
?H:.
?T:try hdrs d_gethostent_r_proto
: see if gethostent_r exists
set gethostent_r d_gethostent_r
eval $inlibc
case "$d_gethostent_r" in
"$define")
```

```
hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
case "$d_gethostent_r_proto:$usethreads" in
":define") d_gethostent_r_proto=define
 set d_gethostent_r_proto gethostent_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_gethostent_r_proto" in
define)
case "$gethostent_r_proto" in
"|0) try='int gethostent_r(struct hostent*, char*, size_t, struct hostent**, int*);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBWRE ;;
esac
case "$gethostent_r_proto"
in
"|0) try='int gethostent_r(struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBIE ;;
esac
case "$gethostent_r_proto" in
"|0) try='struct hostent* gethostent_r(struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=S_SBIE ;;
esac
case "$gethostent_r_proto" in
"|0) try='struct hostent* gethostent_r(struct hostent*, char*, int);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=S_SBI ;;
esac
case "$gethostent_r_proto" in
"|0) try='int gethostent_r(struct hostent*, char*, int);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBI ;;
esac
case "$gethostent_r_proto" in
"|0) try='int gethostent_r(struct hostent*, struct hostent_data*);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SD ;;
esac
case "$gethostent_r_proto" in
"|0) d_gethostent_r=undef
 gethostent_r_proto=0
 echo "Disabling gethostent_r, cannot determine prototype." >&4 ;;
* ) case
"$gethostent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) gethostent_r_proto="REENTRANT_PROTO_$gethostent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "gethostent_r has no prototype, not using it." >&4 ;;
```

```
  esac
  d_gethostent_r=undef
  gethostent_r_proto=0
  ;;
 esac
 ;;
*) gethostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostent_r.U
No license file was found, but licenses were detected in source scan.

```
;###########################################################################
;# Jmake rules for building libraries, programs, scripts, and data files
;# $Id: Jmake.rules 18 2006-12-27 10:35:09Z rmanfredi $

/*
*     MACHINE-INDEPENDENT RULES -- DO NOT MODIFY
*/

/* $Id: Jmake.rules 18 2006-12-27 10:35:09Z rmanfredi $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: Jmake.rules,v $
* Revision 3.0.1.7  2004/08/22 08:28:58  ram
* patch71: random cleanup
*
* Revision 3.0.1.6  1997/02/28  14:56:01  ram
* patch61: now handles USRINC for dependencies
* patch61: smarter about dependencies
 computation
*
* Revision 3.0.1.5  1995/09/25  09:07:19  ram
* patch59: smarter sed command to strip /usr/include dependencies
*
* Revision 3.0.1.4  1995/07/25  13:33:59  ram
* patch56: install of script man pages can now cope with missing files
* patch56: the clobber target now removes the .config directory as well
*
```

```
* Revision 3.0.1.3  1995/03/21  08:35:28  ram
* patch52: suppressed extra argument to NormalProgramTarget call
*
* Revision 3.0.1.2  1995/01/11  14:49:55  ram
* patch45: new macros ShellScriptTargetExt and SimpleShellScriptTargetExt
* patch45: directory installation is now made via INSTALLDIR (Configure)
*
* Revision 3.0.1.1  1994/10/29  15:46:30  ram
* patch36: added RemoteDependency rule
*
* Revision 3.0  1993/08/18  12:04:14  ram
* Baseline for dist 3.0 netwide release.
*
*/

/* Please, edit only with tabstops = 4 (":set ts=4" under vi) */

/*
* AddedByConfigure:
* Gives name of the files generated by Configure that can safely
* be removed
 when a "make clobber" is issued. Not that it is useless
* to name config.h or config.sh because these are already taken care
* of by jmake.
*/
#define AddedByConfigure(files) @!\
local_clobber::   @@\
 $(RM) files

/*
* AddSuffix:
* Adds a sufix to the .SUFFIXES: list.
*/
#define AddSuffix(ext) @!\
|suffix ext


/*
* AllTarget:
* Generate rules to build necessary things during make all.
*/
#define AllTarget(depends) @!\
all:: depends    @!\
      @!\
local_realclean::   @@\
 $(RM) depends

/*
```

```
* RemoveTargetProgram:
* This is used in some other macros in order to remove the target
* before starting its building (saves disk space).  There should be
* no '@!' at the end of the '#define' line, because this macro is
* used *inside* building rules.
*/
#define RemoveTargetProgram(program) \
 $(RM) program @@\
 if test -f program^^^$(_EXE); then \ @@\
  $(MV) program^^^$(_EXE) program^^~^^^$(_EXE); fi

/*
* NormalProgramTarget:
* Generate rules to compile and link the
 indicated program; since
* it does not use any default object files, it may be used for
* multiple programs in the same Jmakefile.
*/
#define NormalProgramTarget(program,sources,objects) @!\
++OBJECTS objects @!\
++SOURCES sources @!\
NormalObjectRule()    @!\
AllTarget(program)    @!\
       @!\
program: objects    @@\
 RemoveTargetProgram($@)  @@\
 $(CC) -o $@ objects $(JLDFLAGS) $(LIBS) @!\


/*
* SingleProgramTarget:
* Obsolete version of NormalProgramTarget that doesn't have
* deplibs.
*/
#define SingleProgramTarget(program,objects,libs)  \
NormalProgramTarget(program,objects,libs)

/*
* SimpleProgramTarget:
* Generate rules for compiling and linking programs that only have
* one C source file.  It should only be used in Jmakefiles that
* describe a single program.
*/
#define SimpleProgramTarget(program) @!\
NormalProgramTarget(program,program.c,program.o)
```

```
/*
* ComplexProgramTarget:
* Generate rules for compiling and linking the program specified by
* $(OBJS) and
 $(SRCS), installing the program and its man page, and
* generating dependencies.  It should only be used in Jmakefiles
* that describe a single program.
*/
#define ComplexProgramTarget(program) @!\
++OBJECTS $(OBJS) @!\
++SOURCES $(SRCS) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC)) @!\
DependTarget()      @!\
LintTarget()


/*
* ComplexProgramTarget_1:
* Generate rules for compiling and linking the program specified by
* $(OBJS1) and $(SRCS1), installing the program and its man page,
* and generating dependencies for it and any programs described by
* $(SRCS2) and $(SRCS3).  It should be used to build the primary
* program in Jmakefiles that describe multiple programs.
*/
#define ComplexProgramTarget_1(program) @!\
++OBJECTS $(OBJS1) @!\
++SOURCES $(SRCS1) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program:
 $(OBJS1)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS1) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC)) @!\
        @!\
DependTarget()      @!\
LintTarget()
```

```
/*
* ComplexProgramTarget_2:
* Generate rules for compiling and linking the program specified by
* $(OBJS2) and $(SRCS2) and installing the program and man page.
* It should be used to build the second program in Jmakefiles
* describing more than one program.
*/
#define ComplexProgramTarget_2(program) @!\
++OBJECTS $(OBJS2) @!\
++SOURCES $(SRCS2) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS2)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS2) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC))


/*
* ComplexProgramTarget_3:
* Generate rules for compiling and linking the
 program specified by
* $(OBJS3) and $(SRCS3) and installing the program and man page.  It
* should be used to build the third program in Jmakefiles describing
* more than one program.
*/
#define ComplexProgramTarget_3(program) @!\
++OBJECTS $(OBJS3) @!\
++SOURCES $(SRCS3) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS3)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS3) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC))


/*
* ComplexShellManualTarget:
* Builds manual pages that are to be extracted from .SH files into
```

```
* .$manext files.
*/
#define ComplexShellManualTarget(manpages) @!\
++MANPAGE manpages @!\
|once _ShellManualRule_  @!\
|rule:.SH.$manext:   @!\
|rule: /bin/sh $<   @!\
|rule:      @!\
-once      @!\
AddSuffix(.SH)    @!\
AddSuffix(.$manext)   @!\
AllTarget(manpages)   @!\
      @!\
local_install.man::   @@\
 _MakeInstallDirIgnore($(MANSRC)) \     @@\
 for
 file in manpages; do \  @@\
  (set -x; $(INSTALL) -c -m 444 $$file \ @@\
   $(INSTALL_PREFIX)$(MANSRC)) || exit 1; \ @@\
 done     @!\
      @!\
local_deinstall.man::  @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for file in manpages; do \  @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(MANSRC)/$$file); \ @@\
 done


/*
* Initialize:
* Puts the line symbol = value in the initialization section of
* Makefile.SH (the one that is subject to parameter substitutions).
*/
#define Initialize(symbol,value) @!\
+symbol = value


/*
* InstallLibrary:
* Generate rules to install the indicated library.
*/
#define InstallLibrary(libname,dest) @!\
local_install:: lib^^libname.a  @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 644 lib^^libname.a $(INSTALL_PREFIX)^^^dest  @@\
 $(RANLIB) dest/lib^^libname.a @@\
 chmod 444 dest/lib^^libnane.a @!\
        @!\
```

```
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.a


/*
* InstallSharedLibrary:
* Generate rules to install
 the shared library.
*/
#define InstallSharedLibrary(libname,rev,dest) @!\
local_install:: lib^^libname.so.rev  @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 lib^^libname.so.rev $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::      @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.so.rev


/*
* InstallSharedLibraryData:
* Generate rules to install the shared library data
*/
#define InstallSharedLibraryData(libname,rev,dest) @!\
local_install:: lib^^libname.sa.rev  @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 lib^^libname.sa.rev $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.sa.rev


/*
* InstallLibraryAlias:
* Generate rules to create a link from one library name to another
* for the purposes of aliasing.
*/
#define InstallLibraryAlias(libname,alias,dest) @!\
local_install:: lib^^libname.a @@\
 $(RM) lib^^alias.a  @@\
 -(cd dest; $(LN) lib^^libname.a lib^^alias.a)
 @!\
       @!\
local_deinstall::   @@\
 $(RM) dest/lib^^alias.a


/*
* InstallLintLibrary:
```

```
* Generate rules to install the indicated lint library.
*/
#define InstallLintLibrary(libname,dest) @!\
install.ln:: llib-l^^libname.ln   @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 llib-l^^libname.ln $(INSTALL_PREFIX)^^^dest @!\
      @!\
deinstall.ln::    @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/llib-l^^libname.ln


/*
* InstallManPageLong:
* Generate rules to install the indicated manual page, giving it an
* alternate name.  This is used for installing man pages whose base
* name without the .man suffix would normally be longer than 8
* characters (the limit for using source code control systems on
* files systems with short file names).
*/
#define InstallManPageLong(file,destdir,dest) @!\
local_install.man:: file.man   @@\
 _MakeInstallDirIgnore(destdir) \ @@\
 $(INSTALL) -c -m 444 file.man $(INSTALL_PREFIX)^^^destdir/dest.$(L) @!\
         @!\
local_deinstall.man::     @@\
 $(RM)
 $(INSTALL_PREFIX)^^^destdir/dest.$(L)  @!\


/*
* InstallManPage:
* Generate rules to install the indicated manual page.
*/
#define InstallManPage(file,dest) @!\
InstallManPageLong(file,dest,file)


/*
* InstallNonExec:
* Generate rules to install a data file using any special
*  install flags.
*/
#define InstallNonExec(file,dest) @!\
local_install:: file    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 444 file $(INSTALL_PREFIX)^^^dest @!\
         @!\
local_deinstall::     @@\
```

```
 $(RM) $(INSTALL_PREFIX)^^^dest/file


/*
* InstallProgramWithFlags:
* Generate rules to install an executable program using given
* install flags.
*/
#define InstallProgramWithFlags(program,dest,flags) @!\
local_install:: program    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -s -m 555 flags program^^^$(_EXE) $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/program^^^$(_EXE)


/*
* InstallProgramNoStripWithFlags:
 * Generate rules to install an executable program using given
* install flags.
*/
#define InstallProgramNoStripWithFlags(program,dest,flags) @!\
local_install:: program    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 555 flags program^^^$(_EXE) $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/program^^^$(_EXE)


/*
* InstallProgram:
* Generate rules to install an executable program using any special
* install flags set in $(INSTALLFLAGS).
*/
#define InstallProgram(program,dest) @!\
InstallProgramWithFlags(program,dest,^^)


/*
* InstallProgramNoStrip:
* Generate rules to install an executable program using any special
* install flags set in $(INSTALLFLAGS), but without stripping the
* executable from debugging symbols.
*/
#define InstallProgramNoStrip(program,dest) @!\
InstallProgramNoStripWithFlags(program,dest,^^)
```

```
/*
* InstallScriptWithFlags:
* Generate rules to install an executable script using given
* install
 flags.
*/
#define InstallScriptWithFlags(script,dest,flags) @!\
local_install:: script    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 555 flags script $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/script


/*
* InstallScript:
* Generate rules to install an executable script using any special
* install flags set in $(INSTALLFLAGS).
*/
#define InstallScript(script,dest) @!\
InstallScriptWithFlags(script,dest,^^)


/*
* InstallScripts:
* Generate rules to install all the scripts listed in the generated
*  $(SCRIPTS) and $(LSCRIPTS) macros.
*/
#define InstallScripts() @!\
|once _InstallScripts_  @!\
local_install:: $(SCRIPTS) $(LSCRIPTS)    @@\
 _MakeInstallDirIgnore($(SCRIPTDIR)) \  @@\
 for file in $(SCRIPTS) $(LSCRIPTS); do \ @@\
  (set -x; \ @@\
  $(INSTALL) -c -m 555 $$file $(INSTALL_PREFIX)$(SCRIPTDIR)) || \ @@\
  exit 1; \ @@\
 done     @!\
       @!\
local_deinstall::   @@\
 @for file in $(SCRIPTS)
 $(LSCRIPTS); do \ @@\
  case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(SCRIPTDIR)/$$file); \ @@\
 done     @!\
-once
```

```
/*
* InstallManScripts:
* Generate rule to install/deinstall manual pages for scripts listed
* in the automatically generated $(SCRIPTS) macro.
*/
#define InstallManScripts() @!\
|once _InstallManScripts_ @!\
?NOMAN:|skip    @!\
local_install.man::   @@\
 _MakeInstallDirIgnore($(MANSRC)) \  @@\
 for file in $(SCRIPTS); do \   @@\
  if test -f $$file.man; then \  @@\
   (set -x; \      @@\
   $(INSTALL) -c -m 444 $$file.man \ @@\
    $(INSTALL_PREFIX)$(MANSRC)/$$file.$(L)) || \ @@\
    exit 1; \ @@\
  fi; \    @@\
 done     @!\
       @!\
local_deinstall.man::  @@\
 case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for file in $(SCRIPTS); do \ @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(MANSRC)/$$file.$(L)); \ @@\
 done     @!\
       @!\
-skip      @!\
-once



/*
* LinkFileList:
* Link a list of list of files from one place to another
 */
#define LinkFileList(step,list,dir,sub) @!\
step:: list       @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 echo " cd" dir; cd dir; for i in list; do (set -x; $(LN) sub/$$i .); done


/*
* InstallMultipleDestFlags:
* Generate rules to install multiple files at once during a particular
* step in the build using a specific set of install flags.
*/
#define InstallMultipleDestFlags(step,list,dest,flags) @!\
step:: list       @@\
```

```
 _MakeInstallDirIgnore(dest) \ @@\
 for i in list; do \    @@\
  (set -x; $(INSTALL) -c flags \ @@\
   $$i $(INSTALL_PREFIX)^^^dest) || exit 1;\ @@\
 done

/*
* DeinstallMultipleDest:
* Generate rules to deinstall multiple files at once during a particular
* step in the build.
*/
#define DeinstallMultipleDest(step,list,dest) @!\
step::        @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for i in list; do \    @@\
  (set -x; $(RM) $(INSTALL_PREFIX)^^^dest/$$i); \ @@\
 done

/*
* InstallMultiple:
* Generate rules to install multiple
 files at once during the install
* step of the build using any install flags set in $(INSTALLFLAGS)
* and deinstall them.
*/
#define InstallMultiple(list,dest) @!\
InstallMultipleDestFlags(local_install,list,dest,$(INSTALLFLAGS)) @!\
DeinstallMultipleDest(local_deinstall,list,dest)


/*
* InstallMultipleFlags:
* Generate rules to install multiple files at once during the
* install step of the build using the given install flags.
*/
#define InstallMultipleFlags(list,dest,flags) @!\
InstallMultipleDestFlags(local_install,list,dest,flags) @!\
DeinstallMultipleDest(local_deinstall,list,dest)


/*
* InstallMultipleMan:
* Generate rules to install a variety of manual pages
* during the install.man step of the build.
*/
#define InstallMultipleMan(list,dest) @!\
InstallMultipleDestFlags(local_install.man,list,dest,$(INSTALLFLAGS)) @!\
DeinstallMultipleDest(local_deinstall.man,list,dest)
```

```
/*
* DependDependency:
* Generate rules to build the makedepend program.
*/
#define DependDependency()
    @!\
depend:: TOPDIR/mkdep    @!\
        @!\
TOPDIR/mkdep:      @!\
?TOP: @echo "You have to run Configure first."; exit 1 @!\
%TOP: @echo "You have to run Configure in $(TOP) first."; exit 1


/*
* DependTarget:
* Generate rules to compute dependencies for all files listed
* in $(SOURCES) (automatically generated macro).
*/
#define DependTarget()    @!\
+USRINC = $usrinc @!\
|once _DependTarget_    @!\
DependDependency()     @!\
        @!\
depend::       @@\
 ($(SED) '/^# DO NOT DELETE/q' Makefile && \ @@\
 $(MKDEP) $(SOURCES) | \   @@\
 $(SED) -e 's:/usr/lib[^ ]*::g; s:$(USRINC)[^ ]*::g; ' \ @@\
  -e '/: / b print' -e '$$ b print' -e 'H; d; n; : print' \ @@\
  -e 'x; s/\\$$//; s/\\\n//g; s/ ^^ */ /g; s/ :/:/;' -e '/: *$$/d' \ @@\
 ) > Makefile.new    @@\
 cp Makefile Makefile.bak  @@\
 cp Makefile.new Makefile  @@\
 $(RM) Makefile.new    @!\
        @!\
-once


/*
* CleanTarget:
* Generate rules to remove any garbage files.
*/
#define CleanTarget()    @!\
?SUBDIRS:clean:
 sub_clean local_clean    @!\
%SUBDIRS:clean: local_clean       @!\
?SUBDIRS:realclean: sub_realclean local_realclean @!\
```

```
%SUBDIRS:realclean: local_realclean     @!\
?SUBDIRS:clobber: sub_clobber local_clobber   @!\
%SUBDIRS:clobber: local_clobber      @!\
        @!\
local_clean::       @@\
 if test -f core; then $(RM) core; fi @@\
 $(RM) *~ *.o     @!\
        @!\
local_realclean:: local_clean  @!\
?TOP: $(RM) -r UU     @!\
        @!\
local_clobber:: local_realclean  @!\
%TOP: $(RM) Makefile config.sh  @!\
?TOP: $(RM) config.sh config.h  @!\
?TOP: $(RM) -r .config    @!\
?TOP: $(RM) Makefile    @!\


/*
* InstallTarget:
* Generate rules to recursively install files
*/
#define InstallTarget()           @!\
?SUBDIRS:install:: local_install sub_install     @!\
%SUBDIRS:install:: local_install        @!\
?SUBDIRS:install.man:: maybe_install.man sub_install.man  @!\
%SUBDIRS:install.man:: maybe_install.man      @!\
?SUBDIRS:deinstall:: sub_deinstall local_deinstall    @!\
%SUBDIRS:deinstall::
 local_deinstall       @!\
?SUBDIRS:deinstall.man:: sub_deinstall.man maybe_deinstall.man @!\
%SUBDIRS:deinstall.man:: maybe_deinstall.man     @!\
                @!\
?MANSRC:install.man-yes: local_install.man      @!\
install.man-no:             @!\
?MANSRC:deinstall.man-yes: local_deinstall.man     @!\
deinstall.man-no:           @!\


/*
* TagsTarget:
* Generate rules to compute tags files for C source code.
*/
#define TagsTarget()    @!\
tags::       @@\
 $(CTAGS) -w *.[ch]    @@\
 $(CTAGS) -xw *.[ch] > tags  @!\
        @!\
```

```
local_clobber::      @@\
 $(RM) tags



/*
* BuildMakefileSH:
* Generate rules to build a Makefile.SH from an Jmakefile and any
* special jmake flags.  This is generally done automatically by the
* template or by any special Jmakefiles.
* This function will simply touch Makefile.SH if no $(TOP)/.package
* exists, assuming the Jmakefile is not in a production environment.
*/
#define BuildMakefileSH(jmakeflags) @!\
Makefile.SH:
 Jmakefile     @@\
 -@if test -f $(TOP)/.package; then \ @@\
  if test -f Makefile.SH; then \ @@\
   echo " $(RM) Makefile.SH~; $(MV) Makefile.SH Makefile.SH~"; \ @@\
   $(RM) Makefile.SH~; $(MV) Makefile.SH Makefile.SH~; \ @@\
  fi; \      @@\
  echo " $(JMAKE) -DTOPDIR=$(TOP) -DCURDIR=$(CURRENT)" jmakeflags; \ @@\
  $(JMAKE) -DTOPDIR=$(TOP) -DCURDIR=$(CURRENT) jmakeflags; \ @@\
 else touch $@; fi


/*
* BuildMakefile:
* Generate rules to build a Makefile from a Makefile.SH.
*/
#define BuildMakefile() @!\
Makefile: Makefile.SH    @@\
 /bin/sh Makefile.SH


/*
* MakefileTarget:
* Generate rules to build a normal Makefile.
*/
#define MakefileTarget()  @!\
BuildMakefileSH(^^)    @!\
BuildMakefile()


/*
* NormalObjectRule:
* Generate make rule to build usual object files.
*/
```

```
#define NormalObjectRule()   @!\
|once _ObjectRule_     @!\
|rule:.c.o:       @!\
|rule: $(CC) -c $(JCFLAGS) $<  @!\
|rule:        @!\
-once

/*
* NormalLibraryObjectRule:
* Generate make rules to build
 "normal" objects.
*/
#define NormalLibraryObjectRule() @!\
|once _ObjectRule_     @!\
|rule:.c.o:       @!\
|rule: $(RM) $@      @!\
|rule: $(CC) -c $(JCFLAGS) $<  @!\
|rule:        @!\
-once

/*
* ProfiledLibraryObjectRule:
* Generate make rules to build both profiled and "normal" objects.
*/
#define ProfiledLibraryObjectRule() @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @!\
        @!\
|rule:.c.o:       @!\
|rule: $(RM) $@ profiled/$@   @!\
|rule: $(CC) -pg -c $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o profiled/$*.o  @!\
|rule: $(CC) -c $(JCFLAGS) $*.c  @!\
|rule:        @!\
local_clean::       @@\
 -@if [ -d profiled ]; then echo " $(RM) profiled/?*.o"; \ @@\
  $(RM) profiled/?*.o; fi


/*
* DebuggedLibraryObjectRule:
* Generate make rules to build both debuggable and "normal"
* objects.
*/
#define DebuggedLibraryObjectRule()     @!\
all::        @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
        @!\
```

```
|rule:.c.o:       @!\
|rule: $(RM) $@
 debugger/$@   @!\
|rule: $(CC) -g -c $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o debugger/$*.o  @!\
|rule: $(CC) -c $(JCFLAGS) $*.c  @!\
|rule:        @!\
local_clean::      @@\
 -@if [ -d debugger ]; then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi


/*
* DebuggedAndProfiledLibraryOjbectRule:
* Generate make rules to build debuggable, profiled, and "normal"
* objects.
*/
#define DebuggedAndProfiledLibraryObjectRule() @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
         @!\
|rule:.c.o:        @!\
|rule: $(RM) $@ profiled/$@ debugger/$@ @!\
|rule: $(CC) -pg -c $(JCFLAGS) $*.c  @!\
|rule: $(MV) $*.o profiled/$*.o   @!\
|rule: $(CC) -g -c $(JCFLAGS) $*.c  @!\
|rule: $(MV) $*.o debugger/$*.o   @!\
|rule: $(CC) -c $(JCFLAGS) $*.c   @!\
|rule:         @!\
local_clean::       @@\
 -@if [ -d profiled ]; then echo " $(RM) profiled/?*.o"; \ @@\
  $(RM) profiled/?*.o; fi   @@\
 -@if [ -d debugger ];
 then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi


/*
* SharedLibraryObjectRule:
* Generate make rules to build shared and "normal" object files.
*/
#define SharedLibraryObjectRule()     @!\
all::        @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @!\
         @!\
|rule:.c.o:       @!\
|rule: $(RM) $@ shared/$@   @!\
```

```
|rule: $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o shared/$*.o  @!\
|rule: $(CC) -c $(SHLIBDEF) $(JCFLAGS) $*.c    @!\
|rule:       @!\
local_clean::      @@\
 -@if [ -d shared ]; then echo " $(RM) shared/?*.o"; \  @@\
  $(RM) shared/?*.o; fi

/*
* SharedAndDebuggedLibraryObjectRule:
* Generate make rules to build shared, debuggable, and "normal"
* object files.
*/
#define SharedAndDebuggedLibraryObjectRule() @!\
all::         @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
          @!\
|rule:.c.o:        @!\
|rule: $(RM) $@ shared/$@ debugger/$@  @!\
|rule:
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o shared/$*.o    @!\
|rule: $(CC) -g -c $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o debugger/$*.o    @!\
|rule: $(CC) -c $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule:         @!\
local_clean::        @@\
 -@if [ -d shared ]; then echo " $(RM) shared/?*.o"; \  @@\
  $(RM) shared/?*.o; fi    @@\
 -@if [ -d debugger ]; then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi

/*
* SpecialSharedAndDebuggedObjectRule:
* Generate rules to compile a file with special flags and to make
* shared and debuggable versions.
*/
#define SpecialSharedAndDebuggedObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
         @!\
objs: depends       @@\
 $(RM) $@ shared/$@ debugger/$@  @@\
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) options $*.c @@\
 $(MV) $*.o shared/$*.o    @@\
 $(CC)
```

```
 -g -c $(SHLIBDEF) $(JCFLAGS) options $*.c   @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(SHLIBDEF) $(JCFLAGS) options $*.c

/*
* SpecialSharedObjectRule:
* Generate rules to compile a file with special flags and to make
* shared and debuggable versions.
*/
#define SpecialSharedObjectRule(objs,depends,options)  @!\
all::        @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @!\
        @!\
objs: depends       @@\
 $(RM) $@ shared/$@      @@\
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) options $*.c @@\
 $(MV) $*.o shared/$*.o    @@\
 $(CC) -c $(SHLIBDEF) $(JCFLAGS) options $*.c


/*
* SpecialObjectRule:
* Generate rules to compile a file with special flags.
*/
#define SpecialObjectRule(objs,depends,options)  @!\
objs: depends       @@\
 $(RM) $@       @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* SpecialProfiledObjectRule:
* Generate rules to compile a file with special flags and to make a
* profiled version.
*/
#define SpecialProfiledObjectRule(objs,depends,options)   @!\
all::        @@\
 @if
 [ ! -d profiled ]; then mkdir profiled; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ profiled/$@    @@\
 $(CC) -pg -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o profiled/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
```

```
* SpecialDebuggedObjectRule:
* Generate rules to compile a file with special flags and to make a
* debuggable version.
*/
#define SpecialDebuggedObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ debugger/$@    @@\
 $(CC) -g -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* SpecialDebuggedAndProfiledObjectRule:
* Generate rules to compile a file with special flags and to make
* debuggable and profiled versions.
*/
#define SpecialDebuggedAndProfiledObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @@\
 @if [ ! -d
 debugger ]; then mkdir debugger; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ profiled/$@ debugger/$@ @@\
 $(CC) -pg -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o profiled/$*.o   @@\
 $(CC) -g -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* NormalLibraryTarget:
* Generate rules to create a library. The 'srclist' and 'objlist'
* parameters are added to SOURCES and OBJECTS macros. The 'srclist'
* is not otherwise used by this rule, but is necessary for make depend.
*/
#define NormalLibraryTarget(libname,srclist,objlist) @!\
++OBJECTS objlist @!\
++SOURCES srclist @!\
NormalLibraryObjectRule()  @!\
AllTarget(lib^^libname.a)  @!\
       @!\
lib^^libname.a: objlist   @@\
```

```
 $(RM) $@     @@\
 $(AR) $@ objlist   @@\
 $(RANLIB) $@


/*
* NormalSharedLibraryTarget:
* Generate rules to create a shared library; build it into a
* different name so that the we don't hose people by having the
* library gone for long periods.
*/
#define
 NormalSharedLibraryTarget(libname,rev,solist) @!\
AllTarget(lib^^libname.so.rev) @!\
        @!\
lib^^libname.so.rev:  solist  @@\
 $(RM) $@~      @@\
 (cd shared; $(LD) -o ../$@~ -assert pure-text solist)  @@\
 $(RM) $@       @@\
 $(MV) $@~ $@

/*
* NormalSharedLibraryDataTarget:
* Generate rules to create shlib data file; build it into a
* different name so that the we don't hose people by having the
* library gone for long periods.
*/
#define NormalSharedLibraryDataTarget(libname,rev,salist) @!\
AllTarget(lib^^libname.sa.rev) @!\
        @!\
lib^^libname.sa.rev:  salist  @@\
 $(RM) $@      @@\
 $(AR) $@ salist     @@\
 $(RANLIB) $@


/*
* NormalLibraryTarget2:
* Generate rules to create a library in two steps.  This is used to
* create libraries with large numbers of files.
*/
#define NormalLibraryTarget2(libname,srclist,objlist1,objlist2) @!\
++SOURCES srclist @!\
++OBJECTS objlist1 @!\
++OBJECTS objlist2 @!\
NormalLibraryObjectRule()   @!\
AllTarget(lib^^libname.a)   @!\
        @!\
```

```
lib^^libname.a:
 objlist1 objlist2 @@\
 $(RM) $@      @@\
 $(AR) $@ objlist1    @@\
 $(AR) $@ objlist2    @@\
 $(RANLIB) $@


/*
* ProfiledLibraryTarget:
* Generate rules to create a profiled library.
*/
#define ProfiledLibraryTarget(libname,srclist,objlist) @!\
++SOURCES srclist @!\
++OBJECTS objlist @!\
AllTarget(lib^^libname^^_p.a)  @!\
        @!\
lib^^libname^^_p.a: objlist   @@\
 $(RM) $@      @@\
 cd profiled; $(AR) ../$@ objlist @@\
 $(RANLIB) $@


/*
* DebuggedLibraryTarget:
* Generate rules to create a debuggable library.
*/
#define DebuggedLibraryTarget(libname,srclist,objlist) @!\
++SOURCES srclist @!\
++OBJECTS objlist @!\
AllTarget(lib^^libname^^_d.a)  @!\
        @!\
lib^^libname^^_d.a: objlist   @@\
 $(RM) $@       @@\
 cd debugger; $(AR) ../$@ objlist @@\
 $(RANLIB) $@


/*
* AliasedLibraryTarget:
* Generate rules to link one library to another.
*/
#define AliasedLibraryTarget(libname,alias) @!\
AllTarget(lib^^alias.a)   @!\
       @!\
lib^^alias.a:
 lib^^libname.a @@\
 $(RM) $@     @@\
```

```
 $(LN) lib^^libname.a $@


/*
* PrelinkedRelocatableTarget:
* Generate rules to produce a relocatable object file instead of a
* library.
*/
#define PrelinkedRelocatableTarget(objname,objlist,libs) @!\
AllTarget(objname.o)    @!\
        @!\
objname.o: objlist     @@\
 $(RM) $@      @@\
 $(LD) $(JLDFLAGS) -r objlist -o $@ libs


/*
* NormalObjectTarget:
* Generate rules to produce a single object file.o from a file.c.
*/
#define NormalObjectTarget(file) @!\
++SOURCES file^^.c     @!\
AllTarget(file^^.o)     @!\
NormalObjectRule()

/*
* NormalRelocatableTarget:
* Generate rules to produce a relocatable object file instead of a
* library.
*/
#define NormalRelocatableTarget(objname,objlist) @!\
AllTarget(objname.o)    @!\
        @!\
objname.o: objlist     @@\
 $(RM) $@      @@\
 $(LD) $(JLDFLAGS) -r objlist -o $@


/*
* ProfiledRelocatableTarget:
* Generate rules to produce a profiled relocatable object file
* instead
 of a library.
*/
#define ProfiledRelocatableTarget(objname,objlist) @!\
AllTarget(objname^^_p.o)  @!\
       @!\
objname^^_p.o: objlist   @@\
```

```
 $(RM) $@     @@\
 $(LD) -X -r objlist -o $@


/*
* DebuggedRelocatableTarget:
* Generate rules to produce a debuggable relocatable object file
* instead of a library.
*/
#define DebuggedRelocatableTarget(objname,objlist) @!\
AllTarget(objname^^_d.o)  @!\
        @!\
objname^^_d.o: objlist   @@\
 $(RM) $@     @@\
 $(LD) -X -r objlist -o $@

/*
* LintLibraryTarget:
* Generate rules to create a lint library.  Note that the lint
* library is always forced to be newer than the library itself.
*/
#define LintLibraryTarget(libname,srclist) @!\
lintlib:: llib-l^^libname.ln @!\
        @!\
llib-l^^libname.ln: srclist  @@\
 $(RM) $@     @@\
 $(LINT) $(LINTLIBFLAG)^^libname $(LINTFLAGS) srclist


/*
* NormalLintTarget:
* Generate rules to lint a set of sources.
*/
#define NormalLintTarget(srclist) @!\
lint:        @@\
 $(LINT) $(LINTFLAGS) srclist
 $(LINTLIBS)


/*
* LintTarget:
* Generate rules to lint $(SOURCES) (automatically generated)
*/
#define LintTarget()   @!\
|once _LintTarget_    @!\
NormalLintTarget($(SOURCES)) @!\
-once
```

```
/*
* LinkSourceFile:
* Snag source file from some other directory
*/
#define LinkSourceFile(src,dir)  @!\
src:  dir/src   @@\
 $(RM) $@   @@\
 $(LN) $? $@   @!\


/*
* MakeSubincludesForBuild:
* Make includes in sub directories.
*/
#define MakeSubincludesForBuild(step,dir,srclist) @!\
step::  dir srclist        @@\
 @-(list=`echo srclist | sed -e 's/[^ ]*\//g'`; \  @@\
  set -x; cd dir; $(RM) $$list)   @@\
 @for i in srclist; do \      @@\
  (set -x; cd dir; $(LN) ../$$i .) || exit 1; \  @@\
 done          @!\
            @!\
MakeDirectories(dir,dir)      @!\
            @!\
local_realclean::         @@\
 @-(if [ -d dir ]; then \     @@\
  list=`echo srclist | sed -e 's/[^ ]*\//g'`; \  @@\
  set -x; cd dir; $(RM) $$list; fi)


/*
* CommonSubdirsRule:
* Rule for making $(TARGET) in
 every subdirectory, with $(VERB) as
* verbose message and $(FLAGS) as additional flags.
*/
#define CommonSubdirsRule(dirs) @!\
subdirs:       @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \   @@\
 for i in dirs ;\     @@\
 do \        @@\
  (cd $$i ; echo $(VERB) "in $(DIR)$$i..."; \  @@\
   $(MAKE) $(MFLAGS) $(FLAGS) $(TARGET)) || exit 1; \ @@\
 done


/*
```

```
* NamedTargetSubdirsRule:
* Recursively make a series of steps in the specified directories.
*/
#define NamedTargetSubdirsRule(dirs,name,verb,flags) @!\
name::        @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \  @@\
 for i in dirs ;\     @@\
 do \        @@\
  (cd $$i ; echo verb "in $(DIR)$$i..."; \ @@\
   $(MAKE) $(MFLAGS) flags name) || exit 1; \ @@\
 done


/*
* NamedTargetSubdirs:
* Recursively make a series of steps.
*/
#define NamedTargetSubdirs(name,verb,flags)  @!\
name::          @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags


/*
* NamedSubTargetSubdirs:
* Recursively make a series of steps,
 like NamedTargetSubdirs.
* However, the supplied "name" has "sub_" prefixed to it.
*/
#define NamedSubTargetSubdirs(name,verb,flags) @!\
sub_^^^name::          @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags

/*
* NamedDepthTargetSubdirs:
* Recursively make a series of steps. We first enter the
* subdirectories, then perform the local entries.
* The supplied "name" has "sub_" prefixed to it.
*/
#define NamedDepthTargetSubdirs(name,verb,flags)  @!\
sub_^^^name::      @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags @@\
 @echo "Back to $(CURRENT) for "name^^...


/*
* MakeSubdirs:
* Generate rules to do makes in the given subdirectories.
*/
```

```
#define MakeSubdirs() \
NamedTargetSubdirs(all,"Making all",^^)


/*
* DependDirs:
* Generate rules to recursively compute dependencies as part of the
* make depend step.
*/
#define DependDirs(dirs) \
NamedTargetSubdirsRule(dirs,depend,"Depending",^^)


/*
* DependSubdirs:
* Generate rules to recursively compute dependencies
 as part of the
* make depend step.
*/
#define DependSubdirs() \
DependDirs($(SUBDIRS))


/*
* InstallSubdirs:
* Generate rules to recursively install and deinstall programs and
* files.
*/
#define InstallSubdirs() \
NamedSubTargetSubdirs(install,"Installing",^^) @!\
NamedDepthTargetSubdirs(deinstall,"Deinstalling",^^)


/*
* InstallManSubdirs:
* Generate rules to recursively install and deinstall manual pages.
*/
#define InstallManSubdirs() \
NamedSubTargetSubdirs(install.man,"Installing man pages",^^) @!\
NamedDepthTargetSubdirs(deinstall.man,"Deinstalling man pages",^^)


/*
* IncludesSubdirs:
* Generate rules to recursively put include files in build
*/
#define IncludesSubdirs() \
NamedTargetSubdirs(includes,including,^^)
```

```
/*
* CleanSubdirs:
* Generate rules to recursively clean out garbage files.
*/
#define CleanSubdirs() \
NamedDepthTargetSubdirs(clean,"Cleaning",^^) @!\
NamedDepthTargetSubdirs(realclean,"Real cleaning",^^) @!\
NamedDepthTargetSubdirs(clobber,"Clobbering",^^)


/*
 * TagSubdirs:
* Generate rules to recursively create tags files.
*/
#define TagSubdirs(dirs) \
NamedTargetSubdirsRule(dirs,tag,"Tagging",^^)

/*
* MakeLintSubdirs:
* Generate rules to recursively lint directories as part of the
* named step.
*/
#define MakeLintSubdirs(dirs,target) \
NamedTargetSubdirsRule(dirs,target,"Linting",^^)


/*
* LintDirs:
* Generate rules to recursively lint directories as part of the
* make lint step.
*/
#define LintDirs(dirs) \
MakeLintSubdirs(dirs,lint)


/*
* LintSubdirs:
* Generate rules to recursively lint directories as part of the
* make lint step.
*/
#define LintSubdirs() \
LintDirs($(SUBDIRS))


/*
* MakeDirs:
```

```
* Creates a set of directories, even if some directories in the path
* do not already exist. There should be no '@!' at the end of the
* '#define' line, because this macro is used *inside* building rules.
*/
#define MakeDirs(dirs) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \   @@\
 for dir in dirs;
 do \         @@\
  (set -x; test -d $$dir || $(INSTALLDIR) $$dir) || \ @@\
  exit 1; \  @@\
 done

/*
* _MakeInstallDirs:
* Creates a set of intall directories, even if some directories in the path
* do not already exist. There should be no '@!' at the end of the
* '#define' line, because this macro is used *inside* building rules.
*/
#define _MakeInstallDirs(dirs) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for dir in dirs; do \       @@\
  _MakeInstallDir($$dir) \     @@\
 done

/*
* _MakeInstallDir:
* Internal macro to create a missing install directory.
*/
#define _MakeInstallDir(dir) \
 (set -x; test -d $(INSTALL_PREFIX)^^^dir || \ @@\
  $(INSTALLDIR) $(INSTALL_PREFIX)^^^dir);

/*
* _MakeInstallDirIgnore:
* Same as _MakeInstallDir but handles "make -i" as well.
*/
#define _MakeInstallDirIgnore(dir) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac;  \ @@\
 _MakeInstallDir(dir)

/*
* _RmInstallDirs:
* Removes a set of intall directories.
* There should be no '@!'
 at the end of the '#define' line, because this
* macro is used *inside* building rules.
*/
#define _RmInstallDirs(dirs) \
```

```
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for dir in dirs; do \       @@\
  (set -x; test -d $$dir && $(RM) -r $(INSTALL_PREFIX)$$dir); \ @@\
 done

/*
* MakeDirectories:
* Generate rules to create a hierarchy of directories.
*/
#define MakeDirectories(step,dirs)  @!\
step::        @@\
 MakeDirs(dirs)


/*
* MakeInstallDirectories:
* Generate a rule to create a set of directories at installation
* time (removed by deinstall).
*/
#define MakeInstallDirectories(dirs) @!\
local_install::    @@\
 _MakeInstallDirs(dirs) @!\
      @!\
local_deinstall::   @@\
 _RmInstallDirs(dirs)


/*
* MakeLintLibSubdirs:
* Generate rules to recursively create lint libraries.
*/
#define MakeLintLibSubdirs(dirs) @!\
MakeLintSubdirs(dirs,lintlib)


/*
* MakeMakeSubdirs:
* Generate rules to recursively recreate target as part of the
* specified step in the build.
  This assumes Makefile.SH has
* already been built (which is the case for a delivery), but does
* not rely on the existence of a Makefile.
*/
#define MakeMakeSubdirs(target) @!\
target::        @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \ @@\
 for i in $(SUBDIRS);\    @@\
 do \        @@\
```

```
  echo "Making "target" in $(DIR)$$i..."; \ @@\
  (cd $$i || exit 1; \   @@\
  if test ! -f Makefile; then /bin/sh Makefile.SH; fi; \ @@\
  $(MAKE) $(MFLAGS) target) || exit 1;\ @@\
 done


/*
* MakeMakefilesSH:
* Generate rules to recursively recreate target as part of the
* specified step in the build.  If $(TOP) is set to an absolute
* path, don't prepend the ../ prefix.  This makes running things
* outside of the source tree to be much easier.
*/
#define MakeMakefilesSH()  @!\
Makefiles.SH:: Makefile.SH    @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \ @@\
 for i in $(SUBDIRS);\     @@\
 do \        @@\
  case "$(DIR)$$i/" in \        @@\
  ^^*^^/^^*^^/^^*^^/^^*^^/) newtop=../../../..;;
 \ @@\
  ^^*^^/^^*^^/^^*^^/) newtop=../../..;; \    @@\
  ^^*^^/^^*^^/) newtop=../..;; \      @@\
  *^^/) newtop=..;; \         @@\
  esac; \            @@\
  case "$(TOP)" in \    @@\
  /^^*) newtop="$(TOP)" ;; \  @@\
  esac; \       @@\
  echo "Making Makefiles.SH in $(DIR)$$i..."; \ @@\
  (cd $$i || exit 1; \   @@\
   if test -f Jmakefile; then \ @@\
    $(MAKE) $(MFLAGS) -f ../Makefile \ @@\
     Makefile TOP=$$newtop CURRENT=$(DIR)$$i && \  @@\
    $(MAKE) $(MFLAGS) Makefiles.SH; \ @@\
   fi; \      @@\
  ) || exit 1; \ @@\
 done


/*
* MakefileSubdirs:
* Generate rules to create Makefiles.
*/
#define MakefileSubdirs()  @!\
MakeMakeSubdirs(Makefiles)  @!\
MakeMakefilesSH()
```

```
/*
* CppScriptTarget:
* Generate rules to create a shell script by running the input
* through cpp.
*/
#define CppScriptTarget(dst,src,defs,deplist) @!\
dst::  src deplist      @@\
 $(RM) $@       @@\
 $(CPP) defs <src | \    @@\
  sed -e '/^#  *[0-9][0-9]*  *.*$$/d' >$@  @@\
 chmod a+x $@


/*
 * MakeScriptFromCpp:
* Generate rules to create a script from a file with a
* .cpp suffix.
*/
#define MakeScriptFromCpp(name,defs) @!\
CppScriptTarget(name,name.cpp,defs,^^)


/*
* ShellScriptTargetExt:
* Generate rules to create and install a set of scripts from
* ext files (.sh and .SH are the most common examples). Man pages
* derived from the name of the scripts are also installed unless
* NoManPages() is specified.
*/
#define ShellScriptTargetExt(scripts,ext) @!\
++SCRIPTS scripts @!\
SimpleShellScriptTargetExt(scripts,ext)  @!\
InstallScripts()       @!\
InstallManScripts()


/*
* ShellScriptTarget:
* Generate rules to create and install a set of scripts from
* .SH files. Man pages derived from the name of the scripts are
* also installed unless NoManPages() is specified.
*/
#define ShellScriptTarget(scripts) @!\
ShellScriptTargetExt(scripts,.SH)


/*
```

```
* SimpleShellScriptTargetExt:
* Generate rules to create a set of scripts from ext files where
* ext is usually
 something like .sh or .SH, or whatever file
* extension you like..
*/
#define SimpleShellScriptTargetExt(scripts,ext) @!\
AllTarget(scripts)   @!\
      @!\
|expand s!scripts!   @!\
!s: !s^^ext     @@\
 /bin/sh !s^^ext   @!\
      @!\
-expand


/*
* SimpleShellScriptTarget:
* Generate rules to create a set of scripts from .SH files.
*/
#define SimpleShellScriptTarget(scripts) @!\
SimpleShellScriptTargetExt(scripts,.SH)


/*
* ShellScriptLongTarget:
* Generate rules to create a set of scripts from .SH files where
* the name of the generated file is different from the basename of
* the .SH file (when, for instance, the total length with the .SH
* extension would not leave enough space for RCS ,v extension).
*/
#define ShellScriptLongTarget(basename,scriptname) @!\
++LSCRIPTS scriptname @!\
AllTarget(scriptname)  @!\
      @!\
scriptname: basename^^.SH @@\
 /bin/sh basename^^.SH @!\
      @!\
InstallScripts()   @!\
?NOMAN:|skip    @!\
InstallManPageLong(basename,$(MANSRC),scriptname) @!\
-skip


/*
 * ForceTarget:
* The force target will force reconstruction of all the other
* targets which include .FORCE in their own dependencies.
```

```
*/
#define ForceTarget() @!\
|once _force_   @!\
.FORCE:     @!\
      @!\
-once


/*
* RemoteTargetDependency:
* A local target may rely on a remote dependency (e.g. a library)
* made in a separate directory. This rule explicits the dependency
* and forces a make of that dependency in the remote directory.
*/
#define RemoteTargetDependency(target,directory,dependency) @!\
RemoteDependency(directory,dependency) @!\
target: directory/^^^dependency @!\


/*
* RemoteDependency:
* Specify rules for making a remote dependency.
*/
#define RemoteDependency(directory,dependency) @!\
ForceTarget()       @!\
|once =directory/^^^dependency=   @!\
directory/^^^dependency: .FORCE   @@\
 @echo "Checking "^^^dependency" in "^^^directory"..." @@\
 cd ^^^directory; $(MAKE) ^^^dependency @@\
 @echo "Continuing in $(CURRENT)..." @!\
     @!\
-once

/*
 * SetSubdirs:
* Actually forces the definition of SUBDIRS, and lets the user
* specify what the sub-directories are.  This will be added to the
* customization part.
*/
#define SetSubdirs(subdirs) @!\
>SUBDIRS @!\
+SUBDIRS = subdirs


/*
* NoManPages:
* Actually forces the definition of NOMAN, which tells the jmake
* program to not generate rules for installing manual pages.
```

```
*/
#define NoManPages() @!\
>NOMAN


/*
* Expand:
* This powerful macro expands the `rule' given a `pattern'. It
* relies on a built-in command in jmake. The expansion is
* documented in the short notes file that comes with jmake and
* gives some insights on the internal syntax.
*/
#define Expand(rule, pattern) @!\
|expand pattern @!\
rule @!\
-expand


/*
* Lex and yacc stuff.
*/

/*
* YaccRule:
* This is the rule which is used to build a .c file from a .y file.
*/
#define YaccRule() @!\
AddSuffix(.y)     @!\
|once _YaccRule_    @!\
|rule:.y.c:      @!\
|rule: $(YACC) $(JYFLAGS)
 $< @!\
|rule: $(MV) y.tab.c $@   @!\
|rule:       @!\
-once

/*
* SimpleYaccTarget:
* Declare a yacc base.y file to be used in the building of the
* specified target program. The source file must be given without
* its final .y extension. The name of the .c and .o will be
* derived from the source file basename provided.
*/
#define SimpleYaccTarget(program,base) @!\
++SOURCES base.y @!\
++OBJECTS base.o @!\
YaccRule()    @!\
program: base.c   @!\
```

```
     @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* ComplexYaccTarget:
* Declare a yacc base.y file to be used in the building of the
* specified target program. The source file must be given without
* its final .y extension. The name of the .c and .o will be
* derived from the source file basename provided.
* The difference with SimpleYaccTarget is the identifying process
* where all the 'yy' are replaced by the specified prefix.
*/
#define ComplexYaccTarget(program,base,prefix) @!\
++SOURCES base.y @!\
++OBJECTS base.o
 @!\
program: base.c   @!\
     @!\
base.c: base.y     @@\
 $(YACC) $(JYFLAGS) base.y @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.c > base.c @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h @@\
 $(RM) y.tab.c y.tab.h @!\
      @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* SimpleYaccInclude:
* Declare that program will need an include file produced by
* the output of yacc on base.y, which typically produces a file
* named y.tab.h, which will be renamed as base.h.
* The only problem is that the dependencies towards base.h have
* to be manually given in the Jmakefile.
*/
#define SimpleYaccInclude(base) @!\
base.h: base.c  @@\
 @if test -f y.tab.h; then \ @@\
  echo " $(MV) y.tab.h $@"; \ @@\
  $(MV) y.tab.h $@; \  @@\
 fi       @!\
       @!\
local_realclean::    @@\
 $(RM) base.h
```

```
/*
* ComplexYaccInclude:
* Declare that program will need an include file produced by
* the output of yacc on base.y, which typically produces a file
* named y.tab.h, which will
 be renamed as base.h.
* The difference with SimpleYaccInclude is the identifying process
* of the y.tab.h file where all 'yy' are renamed to prefix.
* The only problem is that the dependencies towards base.h have
* to be manually given in the Jmakefile.
*/
#define ComplexYaccInclude(base,prefix) @!\
base.h: base.c  @@\
 @if test -f y.tab.h; then \ @@\
  echo " $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h"; \ @@\
  $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h; \ @@\
  echo " $(RM) y.tab.h"; \ @@\
  $(RM) y.tab.h; \  @@\
 elif test -f base.h; then \ @@\
  echo " $(CP) base.h base.ht"; \ @@\
  $(CP) base.h base.ht; \ @@\
  echo " $(SED) -e 's/yy\(.\)/prefix\1/g' < base.ht > base.h"; \ @@\
  $(SED) -e 's/yy\(.\)/prefix\1/g' < base.ht > base.h; \ @@\
  echo " $(RM) base.ht"; \ @@\
  $(RM) base.ht; \  @@\
 fi       @!\
       @!\
local_realclean::    @@\
 $(RM) base.h


/*
* NormalYaccTarget:
* Declare a yacc base.y file which should produce a base.c and
* base.h file
 as derived from the output of yacc, to be used by
* the specified program.
*/
#define NormalYaccTarget(program,base) @!\
SimpleYaccTarget(program,base) @!\
SimpleYaccInclude(base)


/*
* IdentifiedYaccTarget:
* Declare a yacc base.y file which should produce a base.c and
* base.h file as derived from the output of yacc, to be used by
* the specified program. The specified prefix is used to remplace
```

```
* all the 'yy' in the generated file, for use when more than a
* single parser is needed in one executable.
*/
#define IdentifiedYaccTarget(program,base,prefix) @!\
ComplexYaccTarget(program,base,prefix) @!\
ComplexYaccInclude(base,prefix)


/*
* SimpleLexTarget:
* This declares a lex base.l file which is to be ran through
* lex to produce a base.c file.
*/
#define SimpleLexTarget(program,base) @!\
++SOURCES base.l @!\
++OBJECTS base.o @!\
|once _LexRule_     @!\
|rule:.l.c:      @!\
|rule: $(LEX) $(JLFLAGS) $<  @!\
|rule: $(MV) lex.yy.c $@  @!\
|rule:       @!\
-once       @!\
AddSuffix(.l)   @!\
program:
 base.c   @!\
      @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* IdentifiedLexTarget:
* This declares a lex base.l file which is to be ran through
* lex to produce a base.c file. The prefix is used to replace
* the 'yy', so that the lexical analyzer may be identified.
*/
#define IdentifiedLexTarget(program,base,prefix) @!\
++SOURCES base.l @!\
++OBJECTS base.o @!\
program: base.c   @!\
      @!\
base.c: base.l     @@\
 $(LEX) $(JLFLAGS) base.l @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < lex.yy.c > base.c @@\
 $(RM) lex.yy.c    @!\
      @!\
local_realclean::  @@\
 $(RM) base.c  @!\
```

```
/*
* NormalLexDependTarget:
* Declare that program will need an include file produced by
* the output of lex on base.l, which typically produces a file
* named lex.yy.c which will be renamed as base.c. Besides, the
* lexical analyzer needs the file parser.h produced by running
* parser.y through yacc and renaming y.tab.h as parser.h.
*/
#define NormalLexDependTarget(program,base,parser)
 @!\
base.o: parser.h @!\
    @!\
SimpleLexTarget(program,base)


/*
* IdentifiedLexDependTarget:
* Declare that program will need an include file produced by
* the output of lex on base.l, which typically produces a file
* named lex.yy.c which will be renamed as base.c. Besides, the
* lexical analyzer needs the file parser.h produced by running
* parser.y through yacc and renaming y.tab.h as parser.h.
* The lexical analyzer is identified with the supplied prefix,
* which replaces the regular 'yy' prefix in the symbol names.
*/
#define IdentifiedLexDependTarget(program,base,parser,prefix) @!\
base.o: parser.h @!\
    @!\
IdentifiedLexTarget(program,base,prefix)


/*
* NormalParserTarget:
* Specify that program is using the lex/yacc combination to
* produce a parser. The lexic and parser parameters are the
* base name of the .l and .y file, respectively.
*/
#define NormalParserTarget(program,lexic,parser) @!\
NormalLexDependTarget(program,lexic,parser)
 @!\
NormalYaccTarget(program,parser)


/*
* IdentifiedParserTarget:
* Specify that program is using the lex/yacc combination to
```

```
* produce a parser. The lexic and parser parameters are the
* base name of the .l and .y file, respectively. The parser
* produced is identified via its prefix, which replaces all
* the normally supplied 'yy' prefix, hence making it possible
* to have multiple parsers in a single executable.
*/
#define IdentifiedParserTarget(program,lexic,parser,prefix) @!\
IdentifiedLexDependTarget(program,lexic,parser,prefix) @!\
IdentifiedYaccTarget(program,parser,prefix)
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/Jmake.rules
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_inetntop: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetntop:
?S: This variable conditionally defines the HAS_INETNTOP symbol,
?S: which indicates to the C program that the inet_ntop() function
?S: is available.
?S:.
?C:HAS_INETNTOP:
?C: This symbol, if defined, indicates that the inet_ntop() function
?C: is available to parse IPv4 and IPv6 strings.
?C:.
?H:#$d_inetntop HAS_INETNTOP  /**/
?H:.
?LINT:set d_inetntop
: see if inet_ntop exists
set inet_ntop d_inetntop
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_inetntop.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_volatile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:08:49  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/09  11:49:51  ram
?RCS: patch9: volatile definition was swapped over with undef
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_volatile: cat +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_volatile:
?S: This variable conditionally defines the HASVOLATILE symbol, which
?S: indicates
 to the C program that this C compiler knows about the
?S: volatile declaration.
?S:.
?C:HASVOLATILE ~ %<:
?C: This symbol, if defined, indicates that this C compiler knows about
?C: the volatile declaration.
?C:.
?H:?%<:#$d_volatile HASVOLATILE /**/
?H:?%<:#ifndef HASVOLATILE
?H:?%<:#define volatile
?H:?%<:#endif
?H:.
?W:%<:volatile
?LINT:set d_volatile
?LINT:known volatile
: check for volatile keyword
echo " "
echo 'Checking to see if your C compiler knows about "volatile"...' >&4
$cat >try.c <<'EOCP'
int main()
{
?X:
?X: The following seven lines added by Bill Campbell <billc@sierra.com>
?X: detect that MIPS compilers do not handle volatile in all situations.
?X:
 typedef struct _goo_struct goo_struct;
 goo_struct * volatile goo = ((goo_struct *)0);
 struct _goo_struct {
```

```
  long long_int;
  int reg_int;
  char char_var;
 };
 typedef unsigned short foo_t;
 char *volatile foo;
 volatile int bar;
 volatile foo_t blech;
 foo = foo;
}
EOCP
if $cc -c $ccflags try.c >/dev/null
 2>&1 ; then
 val="$define"
 echo "Yup, it does."
else
 val="$undef"
 echo "Nope, it doesn't."
fi
set d_volatile
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_volatile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getmntent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getmntent:
?S: This variable conditionally defines the HAS_GETMNTENT symbol, which
?S: indicates to the C program that the getmntent() routine is available
?S: to iterate through mounted files to get their mount info.
?S:.
?C:HAS_GETMNTENT:
?C: This symbol, if defined, indicates that the getmntent routine is
?C: available to iterate through mounted file systems to get their info.
?C:.
?H:#$d_getmntent HAS_GETMNTENT  /**/
?H:.
?LINT:set d_getmntent
```

```
: see if getmntent exists
set getmntent d_getmntent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getmntent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysuio.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysuio: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysuio:
?S: This variable conditionally defines the I_SYSUIO symbol, and indicates
?S: whether a C program should include <sys/uio.h>.
?S:.
?C:I_SYSUIO:
?C: This symbol, if defined, indicates that <sys/uio.h> exists and
?C: should be included.
?C:.
?H:#$i_sysuio I_SYSUIO  /**/
?H:.
?LINT:set i_sysuio
: see if this is a sys/uio.h system
set sys/uio.h i_sysuio
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_sysuio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strtok.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtok.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:38  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The strtok routine now appears to be a standard one, but it was
?X: missing in early BSD systems.
?X:
?MAKE:d_strtok: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtok:
?S: This variable conditionally defines HAS_STRTOK if strtok() is
?S: available to scan strings for tokens.
?S:.
?C:HAS_STRTOK (STRTOK):
?C: This symbol, if defined, indicates
 that the strtok routine is
?C: available to scan strings for tokens.
?C:.
?H:#$d_strtok HAS_STRTOK /**/
?H:.
?LINT:set d_strtok
: see if strtok exists
set strtok d_strtok
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtok.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: manfmt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: manfmt.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:11:57  ram
?RCS: patch61: don't ask for AFS when they choose to not install pages
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:16:52  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:39:20  ram
?RCS: patch49: new installmanfmt and AFS-lookup for formatted man pages
?RCS: patch49: can now handle installation prefix changes (from WED)
```

```
?RCS:
?RCS:
 Revision 3.0.1.2  1994/08/29  16:30:31  ram
?RCS: patch32: now uses installation prefix for default setting
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:09:22  ram
?RCS: patch10: allows for L1 man page extension (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:manfmt manfmtexp installmanfmt: Getfile Loc Oldconfig cat manext \
 spackage Prefixit prefixexp Prefixup afs test
?MAKE: -pick add $@ %<
?Y:TOP
?S:manfmt:
?S: This variable contains the name of the directory in which formatted
?S: manual pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command. Note
?S: that you may have to do ~name substitution. Use manfmtexp otherwise.
?S:.
?S:manfmtexp:
?S: This is the same as the manfmt variable, but is filename expanded
?S: at configuration time, for programs not willing to deal with it at
?S: run-time.
?S:.
?S:installmanfmt:
?S: This variable is really
 the same as manfmtexp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: mansrcexp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change manext
?T:lookpath
: determine where manual pages go
set manfmt manfmt
eval $prefixit
$cat <<EOM

$spackage has pre-formatted manual pages.  If you don't want these installed,
answer 'none' to the next question.

EOM
case "$manfmt" in
")
 lookpath="$prefixexp/catman/man1 $prefixexp/man/cat1"
 lookpath="$lookpath $prefixexp/catman/u_man/man1"
```

```
 lookpath="$lookpath $prefixexp/catman/l_man/man1"
 lookpath="$lookpath $prefixexp/catman/cat1 /usr/catman/local/man1"
 lookpath="$lookpath /usr/catman/manl /usr/man/cat1"
 lookpath="$lookpath /usr/catman/mann /usr/catman/l_man/man1"
 lookpath="$lookpath /usr/catman/u_man/man1 /usr/catman/man1"
 dflt=`./loc . none $lookpath`
 set dflt
 eval $prefixup
 ;;
*)  dflt="$manfmt"
 ;;
esac
fn=dn~
rp='Where
 do pre-formatted manual pages go?'
. ./getfile
if test "X$manfmtexp" != "X$ansexp"; then
 installmanfmt=''
fi
manfmt="$ans"
manfmtexp="$ansexp"
if $afs && $test "$manfmt"; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installmanfmt" in
 '') dflt=`echo $manfmtexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installmanfmt";;
 esac
 fn=de~
 rp='Where will pre-formatted man pages be installed?'
 . ./getfile
 installmanfmt="$ans"
else
 installmanfmt="$manfmtexp"
fi

case "$manfmt" in
'') manext='0';;
*l) manext=l;;
*n) manext=n;;
*o) manext=l;;
*p) manext=n;;
*C) manext=C;;
```

```
*L) manext=L;;
*L1) manext=L1;;
*) manext=1;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/manfmt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: bitpbyte.U,v 3.0.1.1 1994/10/29 16:02:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: bitpbyte.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:54  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bitpbyte: cat rm Myread Compile run
?MAKE: -pick add $@ %<
?S:bitpbyte:
?S: This variable contains the value of the BITS_PER_BYTE symbol, which
?S: indicates to the C program how many bits there are in a byte.
?S:.
?C:BITS_PER_BYTE:
?C: This
 symbol contains the number of bits in a byte, so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define BITS_PER_BYTE $bitpbyte  /**/
?H:.
?F:!try
: check for length of byte
echo " "
case "$bitpbyte" in
")
 echo "Checking to see how many bits there are in a byte..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
?X: Standard C requires a macro CHAR_BIT in <limits.h>
```

```
#ifdef __STDC__
#include <limits.h>
#ifndef CHAR_BIT
#define CHAR_BIT 8
#endif
#ifndef BITSPERBYTE
#define BITSPERBYTE CHAR_BIT
#endif
#else
?X: On non standard C, try with <values.h>
#include <values.h>
#ifndef BITSPERBYTE
#define BITSPERBYTE 8
#endif
#endif
int main()
{
 printf("%d\n", BITSPERBYTE);
}
EOCP
 set try
 if eval $compile_ok; then
  dflt=`$run ./try`
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$bitpbyte"
 ;;
esac
rp="What is the length of a byte (in bits)?"
. ./myread
bitpbyte="$ans"
$rm -f try.c try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/bitpbyte.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_union_semun.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?RCS: $Log: d_union_semun.U,v $
?RCS:
?MAKE:d_union_semun d_semctl_semun d_semctl_semid_ds: Compile Setvar Myread run \
 cat rm_try d_sem
?MAKE: -pick add $@ %<
?S:d_union_semun:
?S: This variable conditionally defines HAS_UNION_SEMUN if the
?S: union semun is defined by including <sys/sem.h>.
?S:.
?S:d_semctl_semun:
?S: This variable conditionally defines USE_SEMCTL_SEMUN, which
?S: indicates that union semun is to be used for semctl IPC_STAT.
?S:.
?S:d_semctl_semid_ds:
?S: This variable conditionally defines USE_SEMCTL_SEMID_DS, which
?S: indicates that struct semid_ds * is to be used for semctl IPC_STAT.
?S:.
?C:HAS_UNION_SEMUN:
?C: This symbol, if defined, indicates that the union semun
 is
?C: defined by including <sys/sem.h>.  If not, the user code
?C: probably needs to define it as:
?C:  union semun {
?C:     int val;
?C:     struct semid_ds *buf;
?C:     unsigned short *array;
?C:  }
?C:.
?C:USE_SEMCTL_SEMUN:
?C: This symbol, if defined, indicates that union semun is
?C: used for semctl IPC_STAT.
?C:.
?C:USE_SEMCTL_SEMID_DS:
?C: This symbol, if defined, indicates that struct semid_ds * is
?C: used for semctl IPC_STAT.
?C:.
?H:#$d_union_semun HAS_UNION_SEMUN /**/
?H:#$d_semctl_semun USE_SEMCTL_SEMUN /**/
?H:#$d_semctl_semid_ds USE_SEMCTL_SEMID_DS /**/
?H:.
?T:xxx also
?F:!try !tryh.h
?LINT: set d_union_semun d_semctl_semun d_semctl_semid_ds
: see whether sys/sem.h defines union semun
echo " "
$cat > try.c <<'END'
#include <sys/types.h>
```

```
#include <sys/ipc.h>
#include <sys/sem.h>
int main () { union semun semun; semun.buf = 0; }
END
set try
if eval $compile; then
   echo "You have union semun in <sys/sem.h>." >&4
   val="$define"
else
   echo "You do not have union
 semun in <sys/sem.h>." >&4
   val="$undef"
fi
$rm_try
set d_union_semun
eval $setvar

: see how to do semctl IPC_STAT
case "$d_sem" in
$define)
   echo " "
?X: use tryh.h instead of try.h because $rm_try cleans up try.*
   $cat > tryh.h <<END
#ifndef S_IRUSR
#   ifdef S_IREAD
# define S_IRUSR S_IREAD
# define S_IWUSR S_IWRITE
# define S_IXUSR S_IEXEC
#   else
# define S_IRUSR 0400
# define S_IWUSR 0200
# define S_IXUSR 0100
#   endif
#   define S_IRGRP (S_IRUSR>>3)
#   define S_IWGRP (S_IWUSR>>3)
#   define S_IXGRP (S_IXUSR>>3)
#   define S_IROTH (S_IRUSR>>6)
#   define S_IWOTH (S_IWUSR>>6)
#   define S_IXOTH (S_IXUSR>>6)
#endif
#ifndef S_IRWXU
#   define S_IRWXU (S_IRUSR|S_IWUSR|S_IXUSR)
#   define S_IRWXG (S_IRGRP|S_IWGRP|S_IXGRP)
#   define S_IRWXO (S_IROTH|S_IWOTH|S_IXOTH)
#endif
END
   : see whether semctl IPC_STAT can use union semun
   case "$d_semctl_semun" in
```

```
   ")
     val="$undef"
     $cat > try.c <<END
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#include
 <sys/stat.h>
#include <stdio.h>
#include <errno.h>
#include "tryh.h"
#ifndef errno
extern int errno;
#endif
#$d_union_semun HAS_UNION_SEMUN
int main() {
   union semun
#ifndef HAS_UNION_SEMUN
   {
 int val;
 struct semid_ds *buf;
 unsigned short *array;
   }
#endif
   arg;
   int sem, st;

#if defined(IPC_PRIVATE) && defined(S_IRWXU) && defined(S_IRWXG) && defined(S_IRWXO) &&
defined(IPC_CREAT)
   sem = semget(IPC_PRIVATE, 1, S_IRWXU|S_IRWXG|S_IRWXO|IPC_CREAT);
   if (sem > -1) {
 struct semid_ds argbuf;
 arg.buf = &argbuf;
# ifdef IPC_STAT
 st = semctl(sem, 0, IPC_STAT, arg);
 if (st == 0)
     printf("semun\n");
 else
# endif /* IPC_STAT */
     printf("semctl IPC_STAT failed: errno = %d\n", errno);
# ifdef IPC_RMID
 if (semctl(sem, 0, IPC_RMID, arg) != 0)
# endif /* IPC_RMID */
     printf("semctl IPC_RMID failed: errno = %d\n", errno);
   } else
#endif /* IPC_PRIVATE && ... */
 printf("semget failed: errno = %d\n", errno);
 return 0;
```

```
}
END
    set try

    if eval $compile; then
  xxx=`$run ./try`
        case "$xxx" in
        semun) val="$define" ;;
        esac
    fi
    $rm_try
    set d_semctl_semun
    eval $setvar
    ;;
  esac
  case "$d_semctl_semun" in
  $define)
      echo "You can use union semun for semctl IPC_STAT." >&4
 also='also'
      ;;
  *)  echo "You cannot use union semun for semctl IPC_STAT." >&4
 also=''
      ;;
  esac

  : see whether semctl IPC_STAT can use struct semid_ds pointer
  case "$d_semctl_semid_ds" in
  '')
    val="$undef"
    $cat > try.c <<'END'
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#include <sys/stat.h>
#include "tryh.h"
#include <stdio.h>
#include <errno.h>
#ifndef errno
extern int errno;
#endif
int main() {
  union semun
#ifndef HAS_UNION_SEMUN
  {
 int val;
 struct semid_ds *buf;
 unsigned short *array;
  }
```

```
#endif
   arg;
   struct semid_ds argbuf;
   int sem, st;

#if defined(IPC_PRIVATE) && defined(S_IRWXU) &&
 defined(S_IRWXG) &&  defined(S_IRWXO) && defined(IPC_CREAT)
   sem = semget(IPC_PRIVATE, 1, S_IRWXU|S_IRWXG|S_IRWXO|IPC_CREAT);
   if (sem > -1) {
 arg.buf = &argbuf;
# ifdef IPC_STAT
 st = semctl(sem, 0, IPC_STAT, arg);
 if (st == 0)
     printf("semid_ds\n");
 else
# endif /* IPC_STAT */
     printf("semctl IPC_STAT failed: errno = %d\n", errno);
# ifdef IPC_RMID
 if (semctl(sem, 0, IPC_RMID, arg) != 0)
# endif /* IPC_RMID */
     printf("semctl IPC_RMID failed: errno = %d\n", errno);
   } else
#endif /* IPC_PRIVATE && ... */
 printf("semget failed: errno = %d\n", errno);

   return 0;
}
END
     set try
     if eval $compile; then
         xxx=`$run ./try`
         case "$xxx" in
         semid_ds) val="$define" ;;
         esac
     fi
     $rm_try
     set d_semctl_semid_ds
     eval $setvar
     ;;
   esac
   case "$d_semctl_semid_ds" in
   $define)
       echo "You can $also use struct semid_ds* for semctl IPC_STAT." >&4
       ;;
   *)  echo "You cannot use
 struct semid_ds* for semctl IPC_STAT." >&4
       ;;
   esac
```

```
  ;;
*)  val="$undef"

  # We do not have the full sem*(2) library, so assume we can not
  # use either.

  set d_semctl_semun
  eval $setvar

  set d_semctl_semid_ds
  eval $setvar
  ;;
esac
$rm_try tryh.h
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_union_semun.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_semctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_semctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_semctl:
?S: This variable conditionally defines the HAS_SEMCTL symbol, which
?S: indicates to the C program that the semctl() routine is available.
?S:.
?C:HAS_SEMCTL:
?C: This symbol, if defined, indicates that the semctl() routine is
?C: available to perform semaphore control operations.
?C:.
?H:#$d_semctl
 HAS_SEMCTL /**/
?H:.
?LINT:set d_semctl
: see if semctl exists
```

```
set semctl d_semctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_scorfl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scorfl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_scorfl: cat Myread Oldconfig nametype Setvar
?MAKE: -pick add $@ %<
?S:d_scorfl:
?S: This variable conditionally defines the SCOREFULL symbol, which
?S: indicates to the C program that any scoreboard kept by the program
?S: should be kept on the basis of the user's full name as opposed to
?S: the user's login name.
?S:.
?C:SCOREFULL:
?C: This
 symbol, if defined, indicates that any scoreboard kept by the
?C: program should be kept on the basis of the user's full name as opposed
?C: to the user's login name.  If the user can change his full name he
?C: can enter multiple scores if this is defined.
?C:.
?H:#$d_scorfl SCOREFULL /**/
?H:.
?LINT:set d_scorfl
: see how they want the scoreboard kept
case "$d_scorfl" in
"$define") dflt=y ;;
*) dflt=n ;;
esac
case "$nametype" in
other) val="$undef" ;;
*)
 $cat <<'EOM'
```

```
The scoreboard can be kept with one score per login name, or one score per full
name.  If users can change their full name, or if there is more than one person
on your system with the same full name, you should keep the score by login name
(the full name is still printed).

EOM
 rp='Do you want the scoreboard kept by full name?'
 . ./myread
 case "$ans" in
 y*) val="$define" ;;
 *) val="$undef" ;;
 esac
 ;;
esac
set d_scorfl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scorfl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_closedir.U,v 3.0.1.3 1997/02/28 15:31:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_closedir.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:31:26  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:11:18  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:21  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_closedir d_void_closedir: Inlibc i_dirent i_sysdir i_sysndir
 \
 i_systypes Compile Setvar rm_try run
?MAKE: -pick add $@ %<
```

```
?S:d_closedir:
?S: This variable conditionally defines HAS_CLOSEDIR if closedir() is
?S: available.
?S:.
?C:HAS_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine is
?C: available.
?C:.
?H:#$d_closedir HAS_CLOSEDIR  /**/
?H:.
?S:d_void_closedir:
?S: This variable conditionally defines VOID_CLOSEDIR if closedir()
?S: does not return a value.
?S:.
?C:VOID_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine
?C: does not return a value.
?C:.
?H:#$d_void_closedir VOID_CLOSEDIR  /**/
?H:.
?F:!try
?LINT:set d_closedir d_void_closedir
: see if closedir exists
set closedir d_closedir
eval $inlibc

@if VOID_CLOSEDIR || d_void_closedir
?X: The following contortions are designed so we can call closedir()
?X: and check whether it returns a value.  The contortions are designed
?X: to portably pick up the correct directory header, for those
?X: systems that support various mutually incompatible
 directory functions.
?X: This is from perl5's perl.h
case "$d_closedir" in
"$define")
 echo " "
 echo "Checking whether closedir() returns a status..." >&4
 cat > try.c <<EOM
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/
#$i_systypes I_SYS_TYPES /**/

#if defined(I_SYS_TYPES)
#include <sys/types.h>
#endif
#if defined(I_DIRENT)
#include <dirent.h>
```

```
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#include <sys/dir.h>
#endif
#endif
#endif
int main() { return closedir(opendir(".")); }
EOM
 set try
 if eval $compile_ok; then
  if $run ./try > /dev/null 2>&1 ; then
   echo "Yes, it does."
   val="$undef"
  else
   echo "No, it doesn't."
   val="$define"
  fi
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  val="$define"
 fi
 ;;
*)
 val="$undef";
 ;;
esac
set d_void_closedir
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_closedir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_j0 d_j0l: Inlibc
?MAKE: -pick add $@ %<
?S:d_j0:
?S: This variable conditionally defines the HAS_J0 symbol, which
?S: indicates to the C program that the j0() routine is available.
?S:.
?S:d_j0l:
```

```
?S: This variable conditionally defines the HAS_J0L symbol, which
?S: indicates to the C program that the j0l() routine is available.
?S:.
?C:HAS_J0:
?C: This symbol, if defined, indicates to the C program that the
?C: j0() function is available for Bessel functions of the first
?C: kind of the order zero, for doubles.
?C:.
?C:HAS_J0L:
?C: This symbol, if defined, indicates to the C program that the
?C: j0l() function is available for Bessel functions of the first
?C: kind of the order zero, for long doubles.
?C:.
?H:#$d_j0 HAS_J0  /**/
?H:#$d_j0l HAS_J0L  /**/
?H:.
?LINT:set
 d_j0
?LINT:set d_j0l
: see if j0 exists
set j0 d_j0
eval $inlibc

: see if j0l exists
set j0l d_j0l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_j0.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_syscall.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_syscall.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syscall: Inlibc
?MAKE: -pick add $@ %<
?S:d_syscall:
```

```
?S: This variable conditionally defines HAS_SYSCALL if syscall() is
?S: available call arbitrary system calls.
?S:.
?C:HAS_SYSCALL (SYSCALL):
?C: This symbol, if defined, indicates that the syscall routine is
?C: available to call arbitrary system calls. If undefined, that's tough.
?C:.
?H:#$d_syscall
 HAS_SYSCALL /**/
?H:.
?LINT:set d_syscall
: see if syscall exists
set syscall d_syscall
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_syscall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fchown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fchown.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fchown: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchown:
?S: This variable conditionally defines the HAS_FCHOWN symbol, which
?S: indicates to the C program that the fchown() routine is available
?S: to change ownership of opened files.
?S:.
?C:HAS_FCHOWN (FCHOWN):
?C: This symbol, if defined, indicates that the fchown routine is available
?C: to
 change ownership of opened files.  If unavailable, use chown().
?C:.
?H:#$d_fchown HAS_FCHOWN  /**/
?H:.
?LINT:set d_fchown
```

```
: see if fchown exists
set fchown d_fchown
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fchown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethname.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:00  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethname d_uname d_phostname aphostname: phostname cat \
 myhostname package d_portable Loc echo n c +i_whoami +usrinc \
 Myread Guess Oldconfig Csym
?MAKE: -pick add $@ %<
?S:d_gethname:
?S: This variable conditionally
 defines the HAS_GETHOSTNAME symbol, which
?S: indicates to the C program that the gethostname() routine may be
?S: used to derive the host name.
?S:.
?S:d_uname:
?S: This variable conditionally defines the HAS_UNAME symbol, which
?S: indicates to the C program that the uname() routine may be
?S: used to derive the host name.
?S:.
?S:d_phostname:
?S: This variable conditionally defines the HAS_PHOSTNAME symbol, which
?S: contains the shell command which, when fed to popen(), may be
?S: used to derive the host name.
?S:.
?S:aphostname:
?S: This variable contains the command which can be used to compute the
?S: host name. The command is fully qualified by its absolute path, to make
```

```
?S: it safe when used by a process with super-user privileges.
?S:.
?C:HAS_GETHOSTNAME (GETHOSTNAME):
?C: This symbol, if defined, indicates that the C program may use the
?C: gethostname() routine to derive the host name.  See also HAS_UNAME
?C: and PHOSTNAME.
?C:.
?C:HAS_UNAME (UNAME):
?C: This symbol,
 if defined, indicates that the C program may use the
?C: uname() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and PHOSTNAME.
?C:.
?C:PHOSTNAME:
?C: This symbol, if defined, indicates the command to feed to the
?C: popen() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and HAS_UNAME. Note that the command uses a fully qualified path,
?C: so that it is safe even if used by a process with super-user
?C: privileges.
?C:.
?C:HAS_PHOSTNAME:
?C: This symbol, if defined, indicates that the C program may use the
?C: contents of PHOSTNAME as a command to feed to the popen() routine
?C: to derive the host name.
?C:.
?H:?%<:#$d_gethname HAS_GETHOSTNAME /**/
?H:?%<:#$d_uname HAS_UNAME  /**/
?H:?%<:#$d_phostname HAS_PHOSTNAME /**/
?H:?%<:#ifdef HAS_PHOSTNAME
?H:?%<:#define PHOSTNAME "$aphostname" /* How to get the host name */
?H:?%<:#endif
?H:.
?T:file val call
?LINT:change i_whoami
: see how we will look up host name
echo " "
call=''
@if HAS_GETHOSTNAME
if
 set gethostname val -f d_gethname; eval $csym; $val; then
 echo 'gethostname() found.' >&4
 d_gethname="$define"
 call=gethostname
fi
@end
@if HAS_UNAME
if set uname val -f d_uname; eval $csym; $val; then
 if ./xenix; then
```

```
  $cat <<'EOM'
uname() was found, but you're running xenix, and older versions of xenix
have a broken uname(). If you don't really know whether your xenix is old
enough to have a broken system call, use the default answer.

EOM
  dflt=y
  case "$d_uname" in
  "$define") dflt=n;;
  esac
  rp='Is your uname() broken?'
  . ./myread
  case "$ans" in
  n*) d_uname="$define"; call=uname;;
  esac
 else
  echo 'uname() found.' >&4
  d_uname="$define"
  case "$call" in
  ") call=uname ;;
  esac
 fi
fi
@end
case "$d_gethname" in
") d_gethname="$undef";;
esac
case "$d_uname" in
") d_uname="$undef";;
esac
@if PHOSTNAME || MYHOSTNAME
case "$d_uname$d_gethname" in
*define*)
 dflt=n
 cat <<EOM

Every now and then someone has a $call() that lies about the hostname
but can't be fixed
 for political or economic reasons.  If you wish, I can
@if MYHOSTNAME && PHOSTNAME
pretend $call() isn't there and maybe compile in the hostname or
compute it from the '$phostname' command at run-time.
@elsif MYHOSTNAME
pretend $call() isn't there and maybe compile in the hostname.
@elsif PHOSTNAME
pretend $call() isn't there and maybe compute hostname at run-time
thanks to the '$phostname' command.
@elsif WHOAMI
```

```
get the hostname from whomai.h (provided you have one).
@else
simply ignore your host name and use someting like "noname" instead.
@end

EOM
 rp="Shall I ignore $call() from now on?"
 . ./myread
 case "$ans" in
 y*) d_uname="$undef" d_gethname="$undef"; $echo $n "Okay...$c";;
 esac;;
esac
@end
@if PHOSTNAME || aphostname
?X: Compute the full path name for the command
case "$phostname" in
") aphostname=";;
*) case "$aphostname" in
 /*) ;;
 *) set X $phostname
  shift
  file=$1
  shift
  file=`./loc $file $file $pth`
  aphostname=`echo $file $*`
  ;;
 esac
 ;;
esac
@end
@if
 PHOSTNAME && MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ") ;;
 *)
  $cat <<EOT

There is no gethostname() or uname() on this system.  You have two
possibilities at this point:

1)  You can have your host name ($myhostname) compiled into $package, which
   lets $package start up faster, but makes your binaries non-portable, or
2)  you can have $package use a

 popen("$aphostname","r")
```

```
   which will start slower but be more portable.

@ if WHOAMI
Option 1 will give you the option of using whoami.h if you have one.
@ end
If you want option 2 but with a different command, you can edit config.sh at
the end of this shell script.

EOT
  case "$d_phostname" in
  "$define") dflt=n;;
  "$undef")  dflt=y;;
  ")
   case "$d_portable" in
   "$define") dflt=n ;;
   *) dflt=y ;;
   esac;;
  esac
  rp="Do you want your host name compiled in?"
  . ./myread
  case "$ans" in
  n*) d_phostname="$define" ;;
  *) aphostname=''; d_phostname="$undef";;
  esac;;
 esac
 case
 "$aphostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   dflt=y
   $cat <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
   rp="Use whoami.h to get hostname?"
   . ./myread
   case "$ans" in
   n*) i_whoami="$undef";;
   esac
   ;;
  "$undef")
```

```
   $cat <<EOM
No hostname function and no whoami.h -- hardwiring "$myhostname".
EOM
   ;;
  esac;;
@ else
  echo 'No hostname function -- hardwiring '"$myhostname"'.' >&4;;
@ end
 esac;;
esac
@elsif PHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   $cat <<EOM

No hostname function--we'll use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

EOM
   ;;
  *) echo "There will be no way for $package to get your hostname." >&4;;
  esac;;
@ else
  echo "There will be no way
 for $package to get your hostname." >&4;;
@ end
 *)
 echo "I'll use 'popen('''$aphostname''', "r")'" to get your hostname." >&4
  ;;
 esac;;
esac
@elsif MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
@ if WHOAMI
 case "$i_whoami" in
 "$define")
  dflt=y
  $cat <<EOM
```

```
No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
  rp="Use whoami.h to get hostname?"
  . ./myread
  case "$ans" in
  n*) i_whoami="$undef";;
  esac
  ;;
 "$undef")
  echo 'No whoami.h--hardwiring '"$myhostname"'.' >&4;;
 esac;;
@ else
 echo 'Hardwiring '"$myhostname"'.' >&4;;
@ end
esac
@end
case "$d_phostname" in
") d_phostname="$undef";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Protochk.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a ./protochk script that is used internally
?X: by Configure to check if this system will accept a particular
?X: prototype.
?X:
?X: To use it, say something like:
?X: hdrs="$define sys/types.h
?X:  $i_systime sys/time.h
?X:  $i_sysselct sys/select.h
?X:  $d_socket sys/socket.h"
?X: $xxx='fd_set *'
?X: try='extern int select _((int, $xxx, $xxx, $xxx, struct timeval *'));'
?X: if ./protochk "$try" $hdrs; then
?X:  echo "Your system accepts $xxx for the arguments to select."
```

```
?X: fi
?X:  (Of course select is harder, since the first arg can be int,
?X: size_t, or unsigned long, and the last arg may or may not have a
?X: 'const' before the 'struct timeval' :-(.  Also SunOS
 4.1.3 doesn't
?X: provide a select prototype so the compiler accepts anything :-).
?X:
?X: The C compiler on QNX warns about invalid pointer types, but
?X: still exits with a 0 exit status, so it's not much help here.
?X: (It does correctly detect incorrect non-pointer arguments).
?X: Still, since QNX is a POSIX-ish system, just make your first
?X: a POSIX-ish one, and QNX will probably accept it.
?X:
?X: For determining argument types, your compiler must support
?X: prototypes, and the header files must use them.  Determining
?X: return types, however, is easier.  Just give an ridiculous
?X: return type, something like
?X: ./protochk 'extern int atof _((void));' $i_stdlib stdlib.h
?X: that should surely fail if atof() is defined in <stdlib.h>
?X:
?X: There is also an 'escape' hatch built in.  If you have a pair
?X: of args   'literal 'stuff' then 'stuff' gets included literally
?X: into the test program.  This could be useful for doing something
?X: like
?X: hdrs="$define stdio.h
?X:  $define
 sys/types.h"
?X: ./protochk 'extern int fsetpos(FILE *, Fpos_t);' $args \
?X:   'literal' '#define Fpos_t long long'
?X: but you have to be really careful about the spaces in "literal".
?X:
?X:  Andy Dougherty   Feb. 1998
?MAKE:Protochk: cat rm_try startsh eunicefix +cc +optimize +ccflags \
 i_pthread usethreads
?MAKE: -pick add $@ %<
?F:./protochk
?X: Comfort metalint.  All these are actually used in the protochk script.
?T:foo status pthread_h_done
?LINT: change cc optimize ccflags define rm_try
?LINT: extern pthread_h_first
?LINT: change pthread_h_first
?LINT: change usethreads
?LINT: change i_pthread
: define a function to check prototypes
$cat > protochk <<EOSH
$startsh
cc="$cc"
optimize="$optimize"
```

```
ccflags="$ccflags"
define="$define"
rm_try="$rm_try"
usethreads=$usethreads
i_pthread=$i_pthread
pthread_h_first=$pthread_h_first
EOSH

$cat >> protochk <<'EOSH'

$rm_try
foo="$1"
shift
while test $# -ge 2; do
 case "$1" in
  $define) echo "#include <$2>" >> try.c ;;
  literal)
 echo "$2" >> try.c ;;
 esac
   # Extra magic for the benefit of systems that need pthread.h
   # to be included early to correctly detect threadsafe functions.
   # Such functions must guarantee themselves, though, that the usethreads
   # and i_pthread have been defined, before calling protochk.
   if test "$usethreads" = "$define" -a "$i_pthread" = "$define" -a "$pthread_h_first" = "$define" -a
"$pthread_h_done" = ""; then
 echo "#include <pthread.h>" >> try.c
 pthread_h_done=yes
   fi
   shift 2
done
cat >> try.c <<'EOCP'
#define _(args) args
EOCP
echo "$foo" >> try.c
?X: Just so we have something to compile.
echo 'int no_real_function_has_this_name _((void)) { return 0; }' >> try.c
$cc $optimize $ccflags -c try.c > /dev/null 2>&1
status=$?
$rm_try
exit $status
EOSH
chmod +x protochk
$eunicefix protochk
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Protochk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: installstyle.U,v 1.2 1999/07/13 14:56:06 doughera Exp $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: installstyle.U,v $
?RCS: Revision 1.2  1999/07/13 14:56:06  doughera
?RCS: Fix dependencies.  Add more comments.
?RCS:
?RCS: Revision 1.1  1999/07/12 17:30:41  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:installstyle: prefix Myread
?MAKE: -pick add $@ %<
?X: Myread dependence is for dflt.
?S:installstyle:
?S: This variable describes the "style" of the perl installation.
?S: This is intended to be useful for tools that need to
?S: manipulate entire perl
 distributions.  Perl itself doesn't use
?S: this to find its libraries -- the library directories are
?S: stored directly in Config.pm.  Currently, there are only two
?S: styles:  "lib" and "lib/perl5".  The default library locations
?S: (e.g. privlib, sitelib) are either $prefix/lib or
?S: $prefix/lib/perl5.  The former is useful if $prefix is a
?S: directory dedicated to perl (e.g. /opt/perl), while the latter
?S: is useful if $prefix is shared by many packages, e.g. if
?S: $prefix=/usr/local.
?S:
?S: Unfortunately, while this "style" variable is used to set
?S: defaults for all three directory hierarchies (core, vendor, and
?S: site), there is no guarantee that the same style is actually
?S: appropriate for all those directories.  For example, $prefix
?S: might be /opt/perl, but $siteprefix might be /usr/local.
?S: (Perhaps, in retrospect, the "lib" style should never have been
?S: supported, but it did seem like a nice idea at the time.)
?S:
?S: The situation is even less clear for
 tools such as MakeMaker
?S: that can be used to install additional modules into
?S: non-standard places.  For example, if a user intends to install
?S: a module into a private directory (perhaps by setting PREFIX on
```

```
?S: the Makefile.PL command line), then there is no reason to
?S: assume that the Configure-time $installstyle setting will be
?S: relevant for that PREFIX.
?S:
?S: This may later be extended to include other information, so
?S: be careful with pattern-matching on the results.
?S:
?S: For compatibility with perl5.005 and earlier, the default
?S: setting is based on whether or not $prefix contains the string
?S: "perl".
?S:.
: determine installation style
: For now, try to deduce it from prefix unless it is already set.
: Reproduce behavior of 5.005 and earlier, maybe drop that in 5.7.
case "$installstyle" in
") case "$prefix" in
  *perl*) dflt='lib';;
  *) dflt='lib/perl5' ;;
 esac
 ;;
*) dflt="$installstyle" ;;
esac
: Probably not worth prompting for this since we prompt
 for all
: the directories individually, and the prompt would be too long and
: confusing anyway.
installstyle=$dflt
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/installstyle.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: scandir.C,v 3.0.1.1 1994/01/24 13:58:45 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: scandir.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:45  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/scandir.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_nice.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_nice.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:48  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_nice: Inlibc
?MAKE: -pick add $@ %<
?S:d_nice:
?S: This variable conditionally defines the HAS_NICE symbol, which
?S: indicates to the C program that the nice() routine is available.
?S:.
?C:HAS_NICE :
?C: This symbol, if defined, indicates that the nice routine is
?C: available.
?C:.
?H:#$d_nice
 HAS_NICE  /**/
?H:.
?LINT:set d_nice
: see if nice exists
set nice d_nice
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_nice.U
No license file was found, but licenses were detected in source scan.

```
# $Id: errnolist.sh,v 3.0.1.1 1994/01/24 14:00:00 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
```

```
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Harlan Stenn <harlan@mumps.pfcs.com>
#
# $Log: errnolist.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:00  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:36  ram
# Baseline for dist 3.0 netwide release.
#

case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif
 test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
case "$errnolistc" in
") ;;
*)
 echo "Making $errnolistc ..."
 awk -f errnolist.a < /usr/include/sys/errno.h > $errnolistc
 echo "It would be a good idea to make sure that $errnolistc is correct."
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2019 Karl Williamson
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_towlower: Inlibc
?MAKE: -pick add $@ %<
?S:d_towlower:
?S: This variable conditionally defines the HAS_TOWLOWER symbol, which
?S: indicates to the C program that the towlower() routine is available.
?S:.
?C:HAS_TOWLOWER:
?C: This symbol, if defined, indicates that the towlower () routine is
?C: available to do case conversion.
?C:.
?H:#$d_towlower HAS_TOWLOWER  /**/
?H:.
?LINT:set d_towlower
: see if towlower exists
set towlower d_towlower
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_towlower.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mansrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mansrc.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  16:12:03  ram
?RCS: patch61: don't ask for AFS when they choose to not install pages
?RCS:
?RCS: Revision 3.0.1.8  1995/09/25  09:16:58  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:15:31  ram
?RCS: patch51: was mistakenly duplicating /usr/local/man/man1 (ADO)
?RCS: patch51: added /opt/man/man1 to the lookpath (ADO)
?RCS:
?RCS: Revision
 3.0.1.6  1995/01/30  14:39:34  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
```

```
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:32:25  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:30:38  ram
?RCS: patch32: now uses installation prefix for default setting
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  15:11:10  ram
?RCS: patch23: added lint hint, assuring that nroff is used
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:14:39  ram
?RCS: patch16: now uses _nroff in case user asked for portability
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:09:31  ram
?RCS: patch10: allows for L1 man page extension (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mansrc mansrcexp manext installmansrc: afs cat nroff Loc Oldconfig \
 sysman spackage test Getfile Prefixit prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:mansrc:
?S: This variable
 contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:mansrcexp:
?S: This variable is the same as the mansrc variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installmansrc:
?S: This variable is really the same as mansrcexp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: mansrcexp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:manext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See mansrc.
?S:.
?T:lookpath
: determine where manual pages go
set mansrc mansrc none
```

```
eval $prefixit
$cat <<EOM

$spackage has manual
 pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$mansrc" in
 ") mansrc="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$mansrc" in
")
 lookpath="$prefixexp/share/man/man1 $prefixexp/man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath /usr/local/man/man1 /opt/man/man1 /usr/man/manl"
 lookpath="$lookpath /usr/share/man/man1 /usr/local/share/man/man1"
 lookpath="$lookpath /usr/man/local/man1 /usr/man/l_man/man1"
 lookpath="$lookpath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 lookpath="$lookpath /usr/man/man.L"
 mansrc=`./loc . $prefixexp/man/man1 $lookpath`
 if $test -d "$mansrc"; then
  dflt="$mansrc"
 else
  dflt="$sysman"
 fi
 set dflt
 eval $prefixup
 ;;
' ') dflt=none;;
*)  dflt="$mansrc"
 ;;
esac
echo " "
fn=dn~
rp='Where do the manual pages (source) go?'
. ./getfile
if test
 "X$mansrcexp" != "X$ansexp"; then
 installmansrc="
fi
mansrc="$ans"
mansrcexp="$ansexp"
case "$mansrc" in
") mansrc=' '
```

```
 installmansrc=";;
esac
if $afs && $test "$mansrc"; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installmansrc" in
 ") dflt=`echo $mansrcexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installmansrc";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installmansrc="$ans"
else
 installmansrc="$mansrcexp"
fi

case "$mansrc" in
' ') manext='0';;
*l) manext=l;;
*n) manext=n;;
*o) manext=l;;
*p) manext=n;;
*C) manext=C;;
*L) manext=L;;
*L1) manext=L1;;
*) manext=1;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mansrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?MAKE:usesocks: Myread Oldconfig Setvar spackage package
?MAKE: -pick add $@ %<
?Y:TOP
?S:usesocks:
?S: This variable conditionally defines the USE_SOCKS symbol,
?S: and indicates that Perl should be built to use SOCKS.
?S:.
?C:USE_SOCKS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use socks.
?C:.
?H:?%<:#$usesocks USE_SOCKS  /**/
?H:.
?D:usesocks="
?LINT:set usesocks
: check for requested SOCKS support
case "$usesocks" in
$define|true|[yY]*) dflt='y';;
*)
 dflt='n';;
esac
cat <<EOM

$spackage can be built to use the SOCKS proxy protocol library.
If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp="Build $package for SOCKS?"
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usesocks
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usesocks.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: archlib.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
```

```
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: archlib.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:18  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/02/15  14:14:14  ram
?RCS: patch51: architecture name is now
 computed by a separate unit
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:32:22  ram
?RCS: patch49: archname is now systematically recomputed
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:36  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_archlib archlib archlibexp installarchlib: \
 cat Getfile Setprefixvar Loc Oldconfig archname spackage  \
 privlib sed test Prefixit Prefixup binexp
?MAKE: -pick add $@ %<
?Y:TOP
?S:d_archlib:
?S: This variable conditionally defines ARCHLIB to hold the pathname
?S: of architecture-dependent library files for $package.  If
?S: $archlib is the same as $privlib, then this is set to undef.
?S:.
?D:archlib=''
?S:archlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put architecture-dependent public library files for $package.
?S: It is most often a local directory such as /usr/local/lib.
?S: Programs using this variable must be prepared to deal
?S: with
 filename expansion.
?S:.
?D:archlibexp=''
?S:archlibexp:
?S: This variable is the same as the archlib variable, but is
?S: filename expanded at configuration time, for convenient use.
```

```
?S:.
?D:installarchlib="
?S:installarchlib:
?S: This variable is really the same as archlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:ARCHLIB:
?C: This variable, if defined, holds the name of the directory in
?C: which the user wants to put architecture-dependent public
?C: library files for $package.  It is most often a local directory
?C: such as /usr/local/lib.  Programs using this variable must be
?C: prepared to deal with filename expansion.  If ARCHLIB is the
?C: same as PRIVLIB, it is not defined, since presumably the
?C: program already searches PRIVLIB.
?C:.
?C:ARCHLIB_EXP:
?C: This symbol contains the ~name expanded version of ARCHLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion
 at run-time.
?C:.
?H:#$d_archlib ARCHLIB "$archlib"  /**/
?H:#$d_archlib ARCHLIB_EXP "$archlibexp"  /**/
?H:.
?T: tdflt
?LINT:change prefixvar
?LINT:set archlib
?LINT:set archlibexp
?LINT:set installarchlib
: determine where public architecture dependent libraries go
set archlib archlib
eval $prefixit
: privlib default is /usr/local/lib/$package/$version
: archlib default is /usr/local/lib/$package/$version/$archname
: privlib may have an optional trailing /share.
tdflt=`echo $privlib | $sed 's,/share$,,'`
tdflt=$tdflt/$archname
case "$archlib" in
") dflt=$tdflt
 ;;
*) dflt="$archlib"
   ;;
esac
$cat <<EOM

$spackage contains architecture-dependent library files.  If you are
sharing libraries in a heterogeneous environment, you might store
these files in a separate location.  Otherwise, you can just include
```

```
them with the rest of the public library files.

EOM
?X: Force dependency on bin.U
fn=$binexp
fn=d+~
rp='Where do you want to put the public architecture-dependent libraries?'
.
 ./getfile
prefixvar=archlib
. ./setprefixvar
if $test X"$archlib" = X"$privlib"; then
 d_archlib="$undef"
else
 d_archlib="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/archlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ebcdic.U,v 3.0.1.3 1994/05/06 15:11:49 doughera Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:ebcdic: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:ebcdic:
?S: This variable conditionally defines EBCDIC if this
?S: system uses EBCDIC encoding.
?S:.
?C:EBCDIC:
?C: This symbol, if defined, indicates that this system uses
?C: EBCDIC encoding.
?C:.
?H:#$ebcdic EBCDIC  /**/
?H:.
?F:!try
?LINT:set ebcdic
: Determine if this is an EBCDIC system
echo " "
echo "Determining whether or not we are on an EBCDIC system..." >&4
```

```
$cat >try.c <<'EOM'
int main()
{
 if ('M'==0xd4) return 0;
 return 1;
}
EOM

val=$undef
set try
if eval
 $compile_ok; then
 if $run ./try; then
  echo "You seem to speak EBCDIC." >&4
  val="$define"
 else
  echo "Nope, no EBCDIC, probably ASCII or some ISO Latin. Or UTF-8." >&4
 fi
else
 echo "I'm unable to compile the test program." >&4
 echo "I'll assume ASCII or some ISO Latin. Or UTF8." >&4
fi
$rm_try
set ebcdic
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/ebcdic/ebcdic.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigsetmk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigsetmk.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sigsetmk: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_sigsetmk:
?S: This variable conditionally defines the HAS_SIGSETMASK symbol, which
```

```
?S: indicates to the C program that the sigsetmask() routine is available
?S: to set current signal mask.
?S:.
?C:HAS_SIGSETMASK (SIGSETMASK):
?C: This symbol, if defined, indicates that the sigsetmask()
 routine is
?C: available to set current signal mask. Otherwise, you should probably
?C: emulate this by using signal(), but fear race conditions...
?C:.
?H:#$d_sigsetmk HAS_SIGSETMASK  /**/
?H:.
?LINT:set d_sigsetmk
: see if sigsetmask exists
echo " "
if set sigsetmask val -f d_sigsetmk; eval $csym; $val; then
 echo 'sigsetmask() found.' >&4
 val="$define"
else
 echo "sigsetmask() not found -- We'll use signal()." >&4
 val="$undef"
fi
set d_sigsetmk
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigsetmk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: doublesize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:doublesize: cat rm_try Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:doublesize:
```

```
?S: This variable contains the value of the DOUBLESIZE symbol, which
?S: indicates to the C program how many bytes there are in a double.
?S:.
?C:DOUBLESIZE:
?C: This symbol contains the
 size of a double, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define DOUBLESIZE $doublesize  /**/
?H:.
?F:!try
: check for length of double
echo " "
case "$doublesize" in
")
 echo "Checking to see how big your double precision numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(double));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$doublesize"
 ;;
esac
rp="What is the size of a double precision number (in bytes)?"
. ./myread
doublesize="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/doublesize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_telldirproto: Hasproto i_systypes i_dirent
?MAKE: -pick add $@ %<
?S:d_telldirproto:
?S: This variable conditionally defines the HAS_TELLDIR_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the telldir() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_TELLDIR_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the telldir() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess
 is
?C:  extern long telldir(DIR*);
?C:.
?H:#$d_telldirproto HAS_TELLDIR_PROTO /**/
?H:.
?LINT:set d_telldirproto
: see if prototype for telldir is available
echo " "
set d_telldirproto telldir $i_systypes sys/types.h $i_dirent dirent.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_telldirproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_frexpl: Inlibc
?MAKE: -pick add $@ %<
?S:d_frexpl:
?S: This variable conditionally defines the HAS_FREXPL symbol, which
?S: indicates to the C program that the frexpl() routine is available.
?S:.
?C:HAS_FREXPL:
?C: This symbol, if defined, indicates that the frexpl routine is
?C: available to break a long double floating-point number into
```

```
?C: a normalized fraction and an integral power of 2.
?C:.
?H:#$d_frexpl HAS_FREXPL  /**/
?H:.
?LINT:set d_frexpl
: see if frexpl exists
set frexpl d_frexpl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_frexpl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usesocks: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usesocks:
?S: This variable conditionally defines the USE_SOCKS symbol,
?S: and indicates that Perl should be built to use SOCKS.
?S:.
?C:USE_SOCKS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use socks.
?C:.
?H:?%<:#ifndef USE_SOCKS
?H:?%<:#$usesocks USE_SOCKS  /**/
?H:?%<:#endif
?H:.
?LINT:set usesocks
?INIT:: set usesocks on the Configure command line to enable socks.
: Check is we will use socks
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
case "$usesocks" in
$define|true|[yY]*) dflt='y';;
*) dflt='n';;
esac
cat <<EOM

Perl can be built to
```

```
 use the SOCKS proxy protocol library.  To do so,
Configure must be run with -Dusesocks.  If you use SOCKS you also need
to use the PerlIO abstraction layer, this will be implicitly selected.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Build Perl for SOCKS?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usesocks
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usesocks.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
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?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sbrkproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sbrkproto:
?S: This variable conditionally defines the HAS_SBRK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the sbrk() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SBRK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the sbrk() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern void* sbrk(int);
?C:  extern
 void* sbrk(size_t);
?C:.
?H:#$d_sbrkproto HAS_SBRK_PROTO /**/
?H:.
?LINT:set d_sbrkproto
```

```
: see if prototype for sbrk is available
echo " "
set d_sbrkproto sbrk $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sbrkproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_netinettcp: Inhdr
?MAKE: -pick add $@ %<
?S:i_netinettcp:
?S: This variable conditionally defines the I_NETINET_TCP symbol,
?S: and indicates whether a C program should include <netinet/tcp.h>.
?S:.
?C:I_NETINET_TCP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <netinet/tcp.h>.
?C:.
?H:#$i_netinettcp   I_NETINET_TCP               /**/
?H:.
?LINT:set i_netinettcp
: see if netinet/tcp.h is available
set netinet/tcp.h i_netinettcp
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_netinettcp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pthread_y.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_pthread_yield sched_yield d_sched_yield: \
```

```
 Compile Setvar cat rm_try usethreads
?MAKE: -pick add $@ %<
?S:d_pthread_yield:
?S: This variable conditionally defines the HAS_PTHREAD_YIELD
?S: symbol if the pthread_yield routine is available to yield
?S: the execution of the current thread.
?S:.
?S:sched_yield:
?S: This variable defines the way to yield the execution
?S: of the current thread.
?S:.
?S:d_sched_yield:
?S: This variable conditionally defines the HAS_SCHED_YIELD
?S: symbol if the sched_yield routine is available to yield
?S: the execution of the current thread.
?S:.
?C:HAS_PTHREAD_YIELD:
?C: This symbol, if defined, indicates that the pthread_yield
?C: routine is available
 to yield the execution of the current
?C: thread.  sched_yield is preferable to pthread_yield.
?C:.
?C:SCHED_YIELD:
?C: This symbol defines the way to yield the execution of
?C: the current thread.  Known ways are sched_yield,
?C: pthread_yield, and pthread_yield with NULL.
?C:.
?C:HAS_SCHED_YIELD:
?C: This symbol, if defined, indicates that the sched_yield
?C: routine is available to yield the execution of the current
?C: thread.  sched_yield is preferable to pthread_yield.
?C:.
?H:#$d_pthread_yield HAS_PTHREAD_YIELD /**/
?H:#define SCHED_YIELD $sched_yield /**/
?H:#$d_sched_yield HAS_SCHED_YIELD /**/
?H:.
?LINT: set d_pthread_yield d_sched_yield
: see whether the various POSIXish _yields exist
$cat >try.c <<EOP
#include <pthread.h>
#include <stdio.h>
int main() {
#ifdef SCHED_YIELD
 sched_yield();
#else
#ifdef PTHREAD_YIELD
 pthread_yield();
#else
```

```
#ifdef PTHREAD_YIELD_NULL
 pthread_yield(NULL);
#endif
#endif
#endif
}
EOP
: see if sched_yield exists
set try -DSCHED_YIELD
if eval $compile;
 then
   val="$define"
   sched_yield='sched_yield()'
else
   val="$undef"
fi
case "$usethreads" in
$define)
 case "$val" in
 $define) echo 'sched_yield() found.' >&4 ;;
 *)  echo 'sched_yield() NOT found.' >&4 ;;
 esac
esac
set d_sched_yield
eval $setvar

: see if pthread_yield exists
set try -DPTHREAD_YIELD
if eval $compile; then
   val="$define"
   case "$sched_yield" in
   ") sched_yield='pthread_yield()' ;;
   esac
else
   set try -DPTHREAD_YIELD_NULL
   if eval $compile; then
 val="$define"
 case "$sched_yield" in
 ") sched_yield='pthread_yield(NULL)' ;;
 esac
   else
 val="$undef"
   fi
fi
case "$usethreads" in
$define)
 case "$val" in
 $define) echo 'pthread_yield() found.' >&4 ;;
```

```
 *)  echo 'pthread_yield() NOT found.' >&4 ;;
 esac
 ;;
esac
set d_pthread_yield
eval $setvar
case "$sched_yield" in
") sched_yield=undef ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthread_y.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usedefaultstrict: Setvar Myread
?MAKE: -pick add $@ %<
?LINT:set usedefaultstrict
?S:usedefaultstrict:
?S: This setting provides a mechanism for perl developers to enable
?S: strict by default. These defaults do not apply when perl is run
?S: via -e or -E.
?S:.
?C:USE_STRICT_BY_DEFAULT:
?C: This symbol, if defined, enables additional defaults.
?C: At this time it only enables implicit strict by default.
?C:.
?H:#$usedefaultstrict USE_STRICT_BY_DEFAULT /* use strict by default */
?H:.
: Ask about strict by default.
case "$usedefaultstrict" in
  $define|true|[Yy]*)
    dflt="y"
    ;;
  *)
    dflt="n"
    ;;
  esac

cat <<EOM

EXPERIMENTAL: Perl can now be built with strict on by default when not
invoked with -e or -E. This is a diagnostic tool
 for development.
```

```
Unless you are familiar with this feature, you should probably answer 'no'.

EOM

rp='Would you like to build perl with strict enabled by default?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)   val="$undef"  ;;
esac
set usedefaultstrict
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usedefaultstrict.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: MailList.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: MailList.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:01:49  ram
?RCS: patch16: created
?RCS:
?RCS:
?X:
?X: This unit offers the user the option of subscribing to the mailing
?X: list. To force inclusion of this unit, you must add it's name to the
?X: dependancies on the MAKE line in your private copy of End.U.
?X: The address of the mailing list server must be set via a "list_request=..."
?X:
 entry in the .package file. This is usually done by running packinit and
?X: answering the proper questions.
?X:
?MAKE:MailList: cat mailer package Myread cf_name cf_email
?MAKE: -pick wipe $@ %<
?T:list_request list_sub list_unsub list_name
?X:
?X: The cf_name dependency is used through list_sub when the mailing list
```

```
?X: manager happens to be listserv, whereas cf_email is used whith majordomo
?X: or when the mailing list request address is scanned by a human. Since
?X: they do not appear within the unit itself, we need a lint hint.
?X:
?LINT:use cf_name cf_email
: offer to join the mailing list
list_request='<$list_request>'
list_sub="<$list_sub>"
list_unsub="<$list_unsub>"
list_name="<$list_name>"
$cat <<EOM

There is a mailing list for discussion about $package and related issues.
This is the preferred place to ask questions about the program and discuss
modifications and additions with the author and other users.  If you are able
to send mail to the Internet, you
 are encouraged to subscribe.  You need only
ever subscribe once, and you can unsubscribe automatically at any time in the
future.  If you have already subscribed and you wish to unsubscribe now, you
may do so by answering "unsubscribe".  Answer "subscribe" to subscribe to the
list.

EOM
rp="Subscribe to or unsubscribe from the $list_name mailing list?"
dflt=neither
. ./myread
case "$ans" in
[sS]*) $cat <<EOM

You will be sent a message from the list server to let you know when your
subscription has been successful and telling you how to submit articles and
how to unsubscribe again when necessary. You may also unsubscribe by running
this script again and asking it to do so for you.

EOM
 echo "Sending mail to subscribe you to the $list_name list..." >&4
 $mailer $list_request <<EOM >/dev/null 2>&1
Precedence: junk
To: $list_request

$list_sub
EOM
 ;;
[uU]*) echo "Sending mail to unsubscribe you from the $list_name list..." >&4
 $mailer $list_request <<EOM >/dev/null 2>&1
Precedence: junk
To:
```

```
 $list_request

$list_unsub
EOM
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/MailList.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: scriptdir.U,v 3.1 1999/07/09 18:20:13 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: scriptdir.U,v $
?RCS: Revision 3.1  1999/07/09 18:20:13  doughera
?RCS: Updated for installprefix
?RCS:
?RCS: Revision 3.0.1.3  1995/09/25  09:17:15  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:46:13  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:32:04  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:scriptdir scriptdirexp installscript: cat test Getfile Loc \
 Oldconfig +bin Prefixit Setprefixvar prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?D:scriptdir=''
?S:scriptdir:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly scripts for the package in question.  It is either
?S: the same directory as for binaries, or a special one that can be
?S: mounted across different architectures, like /usr/share. Programs
```

```
?S: must be prepared to deal with ~name expansion.
?S:.
?D:scriptdirexp="
?S:scriptdirexp:
?S: This variable is the same as scriptdir, but is filename expanded
?S: at configuration time, for programs not wanting to bother with it.
?S:.
?S:installscript:
?S: This variable is usually the same as scriptdirexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable
 within your makefiles for portability.
?S:.
?C:SCRIPTDIR:
?C: This symbol holds the name of the directory in which the user wants
?C: to put publicly executable scripts for the package in question.  It
?C: is often a directory that is mounted across diverse architectures.
?C: Programs must be prepared to deal with ~name expansion.
?C:.
?C:SCRIPTDIR_EXP:
?C: This is the same as SCRIPTDIR, but is filename expanded at
?C: configuration time, for use in programs not prepared to do
?C: ~name substitutions at run-time.
?C:.
?H:#define SCRIPTDIR "$scriptdir" /**/
?H:#define SCRIPTDIR_EXP "$scriptdirexp" /**/
?H:.
?T:installscriptdir
?LINT:change prefixvar
?LINT:set scriptdir
?LINT:set scriptdirexp
: determine where public executable scripts go
set scriptdir scriptdir
eval $prefixit
case "$scriptdir" in
")
 dflt="$bin"
 : guess some guesses
 $test -d /usr/share/scripts && dflt=/usr/share/scripts
 $test -d /usr/share/bin     && dflt=/usr/share/bin
 $test -d /usr/local/script  && dflt=/usr/local/script
 $test
 -d /usr/local/scripts && dflt=/usr/local/scripts
 $test -d $prefixexp/script  && dflt=$prefixexp/script
 set dflt
 eval $prefixup
 ;;
*)  dflt="$scriptdir"
```

```
 ;;
esac
$cat <<EOM

Some installations have a separate directory just for executable scripts so
that they can mount it across multiple architectures but keep the scripts in
one spot.  You might, for example, have a subdirectory of /usr/share for this.
Or you might just lump your scripts in with all your other executables.

EOM
fn=d~
rp='Where do you keep publicly executable scripts?'
. ./getfile
if $test "X$ansexp" != "X$scriptdirexp"; then
 installscript=''
fi
installscriptdir=''
prefixvar=scriptdir
. ./setprefixvar
: A little fix up for an irregularly named variable.
installscript="$installscriptdir"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/scriptdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: stdchar.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:stdchar: contains Findhdr cppstdin cppminus rm
?MAKE: -pick add $@ %<
?S:stdchar:
?S: This variable conditionally defines STDCHAR to be the type of char
?S: used in stdio.h.  It has the values "unsigned char" or "char".
?S:.
?C:STDCHAR:
?C: This symbol is defined to be the type of char used in stdio.h.
```

```
?C: It has the values "unsigned char" or "char".
?C:.
?H:#define STDCHAR $stdchar /**/
?H:.
?F:!stdioh
:
 see what type of char stdio uses.
echo " "
?X: untangle the #include nest
echo '#include <stdio.h>' | $cppstdin $cppminus > stdioh
if $contains 'unsigned.*char.*_ptr;' stdioh >/dev/null 2>&1 ; then
 echo "Your stdio uses unsigned chars." >&4
 stdchar="unsigned char"
else
 echo "Your stdio uses signed chars." >&4
 stdchar="char"
fi
$rm -f stdioh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/stdchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_asctime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_asctime_r asctime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_asctime_r:
?S: This variable conditionally defines the HAS_ASCTIME_R symbol,
?S: which indicates to the C program that the asctime_r()
?S: routine is available.
?S:.
?S:asctime_r_proto:
?S: This variable encodes the prototype of asctime_r.
?S: It is zero if d_asctime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_asctime_r
?S: is defined.
?S:.
?C:HAS_ASCTIME_R:
?C: This symbol, if defined, indicates that the asctime_r routine
?C: is available to asctime
```

```
 re-entrantly.
?C:.
?C:ASCTIME_R_PROTO:
?C: This symbol encodes the prototype of asctime_r.
?C: It is zero if d_asctime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_asctime_r
?C: is defined.
?C:.
?H:#$d_asctime_r HAS_ASCTIME_R /**/
?H:#define ASCTIME_R_PROTO $asctime_r_proto /**/
?H:.
?T:try hdrs d_asctime_r_proto
: see if asctime_r exists
set asctime_r d_asctime_r
eval $inlibc
case "$d_asctime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_asctime_r_proto:$usethreads" in
 ":define") d_asctime_r_proto=define
  set d_asctime_r_proto asctime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_asctime_r_proto" in
 define)
 case "$asctime_r_proto" in
 "|0) try='char* asctime_r(const struct tm*, char*);'
 ./protochk "$extern_C $try" $hdrs && asctime_r_proto=B_SB ;;
 esac
 case "$asctime_r_proto" in
 "|0) try='char* asctime_r(const struct tm*, char*, int);'
 ./protochk "$extern_C $try" $hdrs
 && asctime_r_proto=B_SBI ;;
 esac
 case "$asctime_r_proto" in
 "|0) try='int asctime_r(const struct tm*, char*);'
 ./protochk "$extern_C $try" $hdrs && asctime_r_proto=I_SB ;;
 esac
 case "$asctime_r_proto" in
 "|0) try='int asctime_r(const struct tm*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && asctime_r_proto=I_SBI ;;
 esac
 case "$asctime_r_proto" in
 "|0) d_asctime_r=undef
  asctime_r_proto=0
  echo "Disabling asctime_r, cannot determine prototype." >&4 ;;
 * ) case "$asctime_r_proto" in
```

```
  REENTRANT_PROTO*) ;;
  *) asctime_r_proto="REENTRANT_PROTO_$asctime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "asctime_r has no prototype, not using it." >&4 ;;
  esac
  d_asctime_r=undef
  asctime_r_proto=0
  ;;
 esac
 ;;
*) asctime_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_asctime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethbynm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethbynm.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethbyname: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbyname (d_gethbynm d_gethhstby):
?S: This variable conditionally defines the HAS_GETHOSTBYNAME symbol, which
?S: indicates to the C program that the gethostbyname() routine is available
?S: to look up host names in some data base or other.
?S:.
?C:HAS_GETHOSTBYNAME (GETHOSTBYNAME):
?C: This
 symbol, if defined, indicates that the gethostbyname() routine is
?C: available to look up host names in some data base or other.
?C:.
```

```
?H:#$d_gethbyname HAS_GETHOSTBYNAME  /**/
?H:.
?LINT:set d_gethbyname
: see if gethostbyname exists
set gethostbyname d_gethbyname
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethbynm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_flexfnam.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flexfnam: cat rm test Setvar
?MAKE: -pick add $@ %<
?S:d_flexfnam:
?S: This variable conditionally defines the FLEXFILENAMES symbol, which
?S: indicates that the system supports filenames longer than 14 characters.
?S:.
?C:FLEXFILENAMES:
?C: This symbol, if defined, indicates that the system supports filenames
?C: longer than 14 characters.
?C:.
?H:#$d_flexfnam FLEXFILENAMES  /**/
?H:.
?T:first
 second
?LINT:set d_flexfnam
: see if we can have long filenames
echo " "
?X:
?X: We have to test in both /tmp and . because of NFS (remote server may allow
?X: long filenames while the local filesystem cannot support them). If at least
?X: one of those file systems cannot support long filenames, then we assume the
?X: whole system can't.
?X:
```

```
rmlist="$rmlist /tmp/cf$$"
$test -d /tmp/cf$$ || mkdir /tmp/cf$$
first=123456789abcdef
second=/tmp/cf$$/$first
$rm -f $first $second
if (echo hi >$first) 2>/dev/null; then
 if $test -f 123456789abcde; then
  echo 'You cannot have filenames longer than 14 characters.  Sigh.' >&4
  val="$undef"
 else
  if (echo hi >$second) 2>/dev/null; then
   if $test -f /tmp/cf$$/123456789abcde; then
    $cat <<'EOM'
That's peculiar... You can have filenames longer than 14 characters, but only
on some of the filesystems.  Maybe you are using NFS.  Anyway, to avoid problems
I shall consider your system cannot support long filenames at all.
EOM
    val="$undef"
   else
    echo
 'You can have filenames longer than 14 characters.' >&4
    val="$define"
   fi
  else
   $cat <<'EOM'
How confusing! Some of your filesystems are sane enough to allow filenames
longer than 14 characters but some others like /tmp can't even think about them.
So, for now on, I shall assume your kernel does not allow them at all.
EOM
   val="$undef"
  fi
 fi
else
 $cat <<'EOM'
You can't have filenames longer than 14 chars.  You can't even think about them!
EOM
 val="$undef"
fi
set d_flexfnam
eval $setvar
$rm -rf /tmp/cf$$ 123456789abcde*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_flexfnam.U
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?RCS: $Id: d_setsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setsent:
?S: This variable conditionally defines HAS_SETSERVENT if setservent() is
?S: available.
?S:.
?C:HAS_SETSERVENT:
?C: This symbol, if defined, indicates that the setservent() routine is
?C: available.
?C:.
?H:#$d_setsent HAS_SETSERVENT  /**/
?H:.
?LINT:set d_setsent
: see if setservent exists
set
 setservent d_setsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setsent.U
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```
?RCS: $Id: d_sethostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_sethostent_r sethostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_sethostent_r:
?S: This variable conditionally defines the HAS_SETHOSTENT_R symbol,
?S: which indicates to the C program that the sethostent_r()
```

```
?S: routine is available.
?S:.
?S:sethostent_r_proto:
?S: This variable encodes the prototype of sethostent_r.
?S: It is zero if d_sethostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_sethostent_r
?S: is defined.
?S:.
?C:HAS_SETHOSTENT_R:
?C: This symbol, if defined, indicates that the sethostent_r routine
?C: is
 available to sethostent re-entrantly.
?C:.
?C:SETHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of sethostent_r.
?C: It is zero if d_sethostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_sethostent_r
?C: is defined.
?C:.
?H:#$d_sethostent_r HAS_SETHOSTENT_R /**/
?H:#define SETHOSTENT_R_PROTO $sethostent_r_proto /**/
?H:.
?T:try hdrs d_sethostent_r_proto
: see if sethostent_r exists
set sethostent_r d_sethostent_r
eval $inlibc
case "$d_sethostent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_sethostent_r_proto:$usethreads" in
 ":define") d_sethostent_r_proto=define
  set d_sethostent_r_proto sethostent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_sethostent_r_proto" in
 define)
 case "$sethostent_r_proto" in
 "|0) try='int sethostent_r(int, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && sethostent_r_proto=I_ID ;;
 esac
 case "$sethostent_r_proto" in
 "|0) try='void
 sethostent_r(int, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && sethostent_r_proto=V_ID ;;
 esac
 case "$sethostent_r_proto" in
 "|0) d_sethostent_r=undef
```

```
  sethostent_r_proto=0
  echo "Disabling sethostent_r, cannot determine prototype." >&4 ;;
 * ) case "$sethostent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) sethostent_r_proto="REENTRANT_PROTO_$sethostent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "sethostent_r has no prototype, not using it." >&4 ;;
  esac
  d_sethostent_r=undef
  sethostent_r_proto=0
  ;;
 esac
 ;;
*) sethostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_sethostent_r.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_dirent.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:01  ram
?RCS: patch36: failed scanning for 'd_namlen' with missing <dirent.h> (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:01:25  ram
?RCS: patch30: added direntrytype for hints, merely for NeXT (ADO)
?RCS: patch30: now checks for both struct dirent and direct (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:22:37  ram
?RCS: patch27: new variable direntrytype for proper type setting (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24
```

```
 14:11:15  ram
?RCS: patch16: added new Direntry_t pseudo-type for directory entries
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks whether there is a dirent system or not
?X:
?MAKE:i_dirent d_dirnamlen direntrytype: test contains Setvar \
 Myread Findhdr cppstdin cppflags cppminus rm_try
?MAKE: -pick add $@ %<
?S:i_dirent:
?S: This variable conditionally defines I_DIRENT, which indicates
?S: to the C program that it should include <dirent.h>.
?S:.
?S:d_dirnamlen:
?S: This variable conditionally defines DIRNAMLEN, which indicates
?S: to the C program that the length of directory entry names is
?S: provided by a d_namelen field.
?S:.
?S:direntrytype:
?S: This symbol is set to 'struct direct' or 'struct dirent' depending on
?S: whether dirent is available or not. You should use this pseudo type to
?S: portably declare your directory entries.
?S:.
?C:I_DIRENT:
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <dirent.h>. Using this symbol also triggers the definition
?C: of the Direntry_t define which ends up being 'struct dirent' or
?C: 'struct direct' depending on the availability of <dirent.h>.
?C:.
?C:DIRNAMLEN:
?C: This symbol, if defined, indicates to the C program that the length
?C: of directory entry names is provided by a d_namlen field.  Otherwise
?C: you need to do strlen() on the d_name field.
?C:.
?C:Direntry_t:
?C: This symbol is set to 'struct direct' or 'struct dirent' depending on
?C: whether dirent is available or not. You should use this pseudo type to
?C: portably declare your directory entries.
?C:.
?H:#$i_dirent I_DIRENT  /**/
?H:#$d_dirnamlen DIRNAMLEN /**/
?H:?%<:@if I_DIRENT && Direntry_t
?H:?%<:#define Direntry_t $direntrytype
?H:?%<:@end
```

```
?H:.
?T:xinc guess1 guess2
?LINT:set i_dirent d_dirnamlen
: see if this is a dirent system
echo " "
if xinc=`./findhdr dirent.h`; $test "$xinc"; then
 val="$define"
 echo "<dirent.h> found." >&4
else
 val="$undef"
 if
 xinc=`./findhdr sys/dir.h`; $test "$xinc"; then
  echo "<sys/dir.h> found." >&4
  echo " "
 else
  xinc=`./findhdr sys/ndir.h`
 fi
 echo "<dirent.h> NOT found." >&4
fi
set i_dirent
eval $setvar

?X: Use struct dirent or struct direct?   If we're using dirent.h,
?X: it's probably struct dirent, but apparently not always.
?X: Assume $xinc still contains the name of the header file we're using.
@if direntrytype || Direntry_t
: Look for type of directory structure.
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c

case "$direntrytype" in
"|' ')
 case "$i_dirent" in
 $define) guess1='struct dirent' ;;
 *) guess1='struct direct'  ;;
 esac
 ;;
*) guess1="$direntrytype"
 ;;
esac

case "$guess1" in
'struct dirent') guess2='struct direct' ;;
*) guess2='struct dirent' ;;
esac

if $contains "$guess1" try.c >/dev/null 2>&1; then
 direntrytype="$guess1"
```

```
 echo "Your directory entries are $direntrytype." >&4
elif $contains "$guess2" try.c >/dev/null 2>&1; then
 direntrytype="$guess2"
 echo
 "Your directory entries seem to be $direntrytype." >&4
else
 echo "I don't recognize your system's directory entries." >&4
 rp="What type is used for directory entries on this system?"
 dflt="$guess1"
 . ./myread
 direntrytype="$ans"
fi
$rm_try

@end

@if d_dirnamlen || DIRNAMLEN
: see if the directory entry stores field length
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c
if $contains 'd_namlen' try.c >/dev/null 2>&1; then
 echo "Good, your directory entry keeps length information in d_namlen." >&4
 val="$define"
else
 echo "Your directory entry does not know about the d_namlen field." >&4
 val="$undef"
fi
set d_dirnamlen
eval $setvar
$rm_try

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dirent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: fpostype.U,v $
```

```
?RCS: Revision 3.0.1.2  1994/08/29  16:20:52  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:59  ram
?RCS: patch30: created
?RCS:
?MAKE:fpostype: Myread Typedef
?MAKE: -pick add $@ %<
?S:fpostype:
?S: This variable defines Fpos_t to be something like fpost_t, long,
?S: uint, or whatever type is used to declare file positions in libc.
?S:.
?C:Fpos_t:
?C: This symbol holds the type used to declare file positions
 in libc.
?C: It can be fpos_t, long, uint, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Fpos_t $fpostype  /* File position type */
?H:.
: see what type file positions are declared as in the library
set fpos_t fpostype long stdio.h sys/types.h
eval $typedef
echo " "
dflt="$fpostype"
rp="What is the type for file position used by fsetpos()?"
. ./myread
fpostype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/fpostype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_byacc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_byacc.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:31:14  ram
?RCS: patch61: created
?RCS:
```

```
?MAKE:d_byacc: byacc Setvar
?MAKE: -pick add $@ %<
?S:d_byacc:
?S: This variable indicates whether byacc is available.
?S: If the user has specified 'portability', then Makefile.SH
?S: sees $byacc='byacc' whether or not the user actually has
?S: byacc.  This variable allows us to determine in a makefile
?S: if we really
 have byacc.
?S:.
?LINT:set d_byacc
: Check if we really have byacc
case "$byacc" in
"|'byacc') val="$undef" ;;
*) val="$define" ;;
esac
set d_byacc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_byacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_stdstdio.U,v 3.0.1.3 1997/02/28 15:46:32 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Tye McQueen <tye@metronet.com>
?RCS:
?RCS: $Log: d_stdstdio.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:46:32  ram
?RCS: patch61: merged with perl5's unit
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:06:54  ram
?RCS: patch56: typo fix on ?C: line for FILE_bufsiz
?RCS: patch56: fixed unbalanced parenthesis (ADO)
?RCS: patch56: check whether FILE_cnt and FILE_ptr can be assigned to (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:12:11  ram
?RCS:
 patch54: complete rewrite by Tye McQueen to fit modern systems
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:07:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stdstdio d_stdiobase stdio_ptr stdio_cnt \
 d_stdio_ptr_lval_sets_cnt d_stdio_ptr_lval_nochange_cnt stdio_base \
 stdio_bufsiz d_stdio_cnt_lval d_stdio_ptr_lval stdio_filbuf: cat \
 Compile contains rm_try d_gnulibc gnulibc_version i_stdlib \
 Setvar Findhdr Oldconfig run to
?MAKE: -pick weed $@ %<
?S:d_stdstdio:
?S: This variable conditionally defines USE_STDIO_PTR if this system
?S: has a FILE structure declaring usable _ptr and _cnt fields (or
?S: equivalent) in stdio.h.
?S:.
?S:stdio_ptr:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _ptr field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_ptr(fp).
?S:.
?S:d_stdio_ptr_lval:
?S: This variable conditionally defines STDIO_PTR_LVALUE if the
?S: FILE_ptr macro can be used as an lvalue.
?S:.
?S:stdio_cnt:
?S: This
 variable defines how, given a FILE pointer, fp, to access the
?S: _cnt field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_cnt(fp).
?S:.
?S:d_stdio_cnt_lval:
?S: This variable conditionally defines STDIO_CNT_LVALUE if the
?S: FILE_cnt macro can be used as an lvalue.
?S:.
?S:d_stdio_ptr_lval_sets_cnt:
?S: This symbol is defined if using the FILE_ptr macro as an lvalue
?S: to increase the pointer by n has the side effect of decreasing the
?S: value of File_cnt(fp) by n.
?S:.
?S:d_stdio_ptr_lval_nochange_cnt:
?S: This symbol is defined if using the FILE_ptr macro as an lvalue
?S: to increase the pointer by n leaves File_cnt(fp) unchanged.
?S:.
?S:stdio_filbuf:
?S: This variable defines how, given a FILE pointer, fp, to tell
?S: stdio to refill its internal buffers (?).  This will
?S: be used to define the macro FILE_filbuf(fp).
?S:.
?S:d_stdiobase:
```

```
?S: This variable conditionally defines USE_STDIO_BASE if this system
?S: has
 a FILE structure declaring a usable _base field (or equivalent)
?S: in stdio.h.
?S:.
?S:stdio_base:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _base field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_base(fp).
?S:.
?S:stdio_bufsiz:
?S: This variable defines how, given a FILE pointer, fp, to determine
?S: the number of bytes store in the I/O buffer pointer to by the
?S: _base field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_bufsiz(fp).
?S:.
?C:USE_STDIO_PTR ~ d_stdstdio (USE_STD_STDIO STDSTDIO):
?C: This symbol is defined if the _ptr and _cnt fields (or similar)
?C: of the stdio FILE structure can be used to access the stdio buffer
?C: for a file handle.  If this is defined, then the FILE_ptr(fp)
?C: and FILE_cnt(fp) macros will also be defined and should be used
?C: to access these fields.
?C:.
?C:FILE_ptr:
?C: This macro is used to access the _ptr
 field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_PTR_LVALUE:
?C: This symbol is defined if the FILE_ptr macro can be used as an
?C: lvalue.
?C:.
?C:FILE_cnt:
?C: This macro is used to access the _cnt field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_CNT_LVALUE:
?C: This symbol is defined if the FILE_cnt macro can be used as an
?C: lvalue.
?C:.
?C:STDIO_PTR_LVAL_SETS_CNT:
?C: This symbol is defined if using the FILE_ptr macro as an lvalue
?C: to increase the pointer by n has the side effect of decreasing the
?C: value of File_cnt(fp) by n.
?C:.
?C:STDIO_PTR_LVAL_NOCHANGE_CNT:
```

```
?C: This symbol is defined if using the FILE_ptr macro as an lvalue
?C: to increase the pointer by n leaves File_cnt(fp) unchanged.
?C:.
?C:FILE_filbuf:
?C: This macro is used to access the internal stdio
 _filbuf function
?C: (or equivalent), if STDIO_CNT_LVALUE and STDIO_PTR_LVALUE
?C: are defined.  It is typically either _filbuf or __filbuf.
?C: This macro will only be defined if both STDIO_CNT_LVALUE and
?C: STDIO_PTR_LVALUE are defined.
?C:.
?H:?d_stdstdio:#$d_stdstdio USE_STDIO_PTR /**/
?H:?d_stdstdio:#ifdef USE_STDIO_PTR
?H:#define FILE_ptr(fp) $stdio_ptr
?H:#$d_stdio_ptr_lval STDIO_PTR_LVALUE  /**/
?H:#define FILE_cnt(fp) $stdio_cnt
?H:#$d_stdio_cnt_lval STDIO_CNT_LVALUE  /**/
?H:#$d_stdio_ptr_lval_sets_cnt STDIO_PTR_LVAL_SETS_CNT /**/
?H:#$d_stdio_ptr_lval_nochange_cnt STDIO_PTR_LVAL_NOCHANGE_CNT /**/
?H:?FILE_filbuf:#if defined(STDIO_PTR_LVALUE) && defined(STDIO_CNT_LVALUE)
?H:?FILE_filbuf:#define FILE_filbuf(fp) $stdio_filbuf  /**/
?H:?FILE_filbuf:#endif
?H:?d_stdstdio:#endif
?H:.
?W:d_stdstdio:FILE_ptr FILE_cnt FILE_filbuf
?C:USE_STDIO_BASE ~ d_stdiobase:
?C: This symbol is defined if the _base field (or similar) of the
?C: stdio FILE structure can be used to access the
 stdio buffer for
?C: a file handle.  If this is defined, then the FILE_base(fp) macro
?C: will also be defined and should be used to access this field.
?C: Also, the FILE_bufsiz(fp) macro will be defined and should be used
?C: to determine the number of bytes in the buffer.  USE_STDIO_BASE
?C: will never be defined unless USE_STDIO_PTR is.
?C:.
?C:FILE_base:
?C: This macro is used to access the _base field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_BASE is defined.
?C:.
?C:FILE_bufsiz:
?C: This macro is used to determine the number of bytes in the I/O
?C: buffer pointed to by _base field (or equivalent) of the FILE
?C: structure pointed to its argument. This macro will always be defined
?C: if USE_STDIO_BASE is defined.
?C:.
?H:?d_stdiobase:#$d_stdiobase USE_STDIO_BASE /**/
?H:?d_stdiobase:#ifdef USE_STDIO_BASE
```

```
?H:#define FILE_base(fp) $stdio_base
?H:#define FILE_bufsiz(fp) $stdio_bufsiz
?H:?d_stdiobase:#endif
?H:.
?W:d_stdiobase:FILE_base
 FILE_bufsiz
?T:ptr_lval cnt_lval filbuf xxx
?F:!try
?LINT:set d_stdstdio d_stdiobase
: see if _ptr and _cnt from stdio act std
echo " "

if $contains '_lbfsize' `./findhdr stdio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from BSD.)"
 case "$stdio_ptr" in
 '') stdio_ptr='((fp)->_p)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 '') stdio_cnt='((fp)->_r)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 '') stdio_base='((fp)->_ub._base ? (fp)->_ub._base : (fp)->_bf._base)';;
 esac
 case "$stdio_bufsiz" in
 '') stdio_bufsiz='((fp)->_ub._base ? (fp)->_ub._size : (fp)->_bf._size)';;
 esac
elif $contains '_IO_fpos_t' `./findhdr stdio.h` `./findhdr libio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from Linux.)"
 case "$stdio_ptr" in
 '') stdio_ptr='((fp)->_IO_read_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt"
 in
 '') stdio_cnt='((fp)->_IO_read_end - (fp)->_IO_read_ptr)'
  cnt_lval=$undef
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
```

```
 ") stdio_base='((fp)->_IO_read_base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_IO_read_end - (fp)->_IO_read_base)';;
 esac
else
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 ") stdio_cnt='((fp)->_cnt)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_cnt + (fp)->_ptr - (fp)->_base)';;
 esac
fi

: test whether _ptr and _cnt really work
echo "Checking how std your stdio is..." >&4
$cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if
 (
  18 <= FILE_cnt(fp) &&
  strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
 )
  exit(0);
 exit(1);
}
EOP
```

```
val="$undef"
set try
if eval $compile && $to try.c; then
 if $run ./try; then
  echo "Your stdio acts pretty std."
  val="$define"
 else
  echo "Your stdio isn't very std."
 fi
else
 echo "Your stdio doesn't appear very std."
fi
$rm_try

# glibc 2.2.90 and above apparently change stdio streams so Perl's
# direct buffer manipulation no longer works.  The Configure tests
# should be changed to correctly detect this, but until then,
# the following check should at least let perl compile and run.
# (This quick fix should be updated before 5.8.1.)
# To be defensive, reject all unknown versions, and all versions  > 2.2.9.
# A. Dougherty, June 3, 2002.
case "$d_gnulibc" in
$define)
 case "$gnulibc_version" in
 2.[01]*)  ;;
 2.2) ;;
 2.2.[0-9]) ;;
 *)  echo "But I will not snoop inside glibc $gnulibc_version stdio buffers."
  val="$undef"
  ;;
 esac
 ;;
esac
set d_stdstdio
eval
 $setvar

@if STDIO_PTR_LVALUE || d_stdio_ptr_lval
: Can _ptr be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$ptr_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_ptr_lval
eval $setvar
@end
```

```
@if STDIO_CNT_LVALUE || d_stdio_cnt_lval
: Can _cnt be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$cnt_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_cnt_lval
eval $setvar
@end

@if FILE_filbuf
: How to access the stdio _filbuf or __filbuf function.
: If this fails, check how the getc macro in stdio.h works.
case "${d_stdio_ptr_lval}${d_stdio_cnt_lval}" in
${define}${define})
 : Try $hint value, if any, then _filbuf, __filbuf, _fill, then punt.
 : _fill is for os/2.
 xxx='notok'
 for filbuf in $stdio_filbuf '_filbuf(fp)' '__filbuf(fp) ' '_fill(fp)' ; do
  $cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define
 FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#define FILE_filbuf(fp) $filbuf
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 c = getc(fp);
 c = FILE_filbuf(fp);  /* Just looking for linker errors.*/
 exit(0);
}
EOP
  set try
  if eval $compile && $to try.c && $run ./try; then
   echo "Your stdio appears to use $filbuf"
   stdio_filbuf="$filbuf"
   xxx='ok'
   break
  else
   echo "Hmm.  $filbuf doesn't seem to work."
  fi
  $rm_try
```

```
 done
 case "$xxx" in
 notok) echo "I can't figure out how to access _filbuf"
   echo "I'll just have to work around it."
   d_stdio_ptr_lval="$undef"
   d_stdio_cnt_lval="$undef"
   ;;
 esac
 ;;
esac
@end

@if STDIO_PTR_LVALUE
: test whether setting _ptr sets _cnt as a side effect
d_stdio_ptr_lval_sets_cnt="$undef"
d_stdio_ptr_lval_nochange_cnt="$undef"
case "$d_stdio_ptr_lval$d_stdstdio" in
$define$define)
 echo "Checking to see what happens if we set the stdio ptr..." >&4
$cat >try.c <<EOP
#include <stdio.h>
/* Can
 we scream? */
/* Eat dust sed :-) */
/* In the buffer space, no one can hear you scream. */
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#include <sys/types.h>
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 char *ptr;
 size_t cnt;
 if (!fp) {
     puts("Fail even to read");
     exit(1);
 }
 c = getc(fp); /* Read away the first # */
 if (c == EOF) {
     puts("Fail even to read");
     exit(1);
 }
 if (!(
  18 <= FILE_cnt(fp) &&
```

```
 strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
)) {
 puts("Fail even to read");
 exit (1);
}
ptr = (char*) FILE_ptr(fp);
cnt = (size_t)FILE_cnt(fp);

FILE_ptr(fp) += 42;

if ((char*)FILE_ptr(fp) != (ptr + 42)) {
 printf("Fail ptr check %p != %p", FILE_ptr(fp), (ptr + 42));
 exit (1);
}
if (FILE_cnt(fp) <= 20) {
 printf ("Fail (<20 chars to test)");
 exit (1);
}
if (strncmp(FILE_ptr(fp), "Eat dust sed :-) */\n", 20) != 0) {
 puts("Fail compare");
 exit
(1);
}
if (cnt == FILE_cnt(fp)) {
 puts("Pass_unchanged");
 exit (0);
}
if (FILE_cnt(fp) == (cnt - 42)) {
 puts("Pass_changed");
 exit (0);
}
printf("Fail count was %d now %d\n", cnt, FILE_cnt(fp));
return 1;

}
EOP
set try
if eval $compile && $to try.c; then
 case `$run ./try` in
 Pass_changed)
  echo "Increasing ptr in your stdio decreases cnt by the same amount.  Good." >&4
  d_stdio_ptr_lval_sets_cnt="$define" ;;
 Pass_unchanged)
  echo "Increasing ptr in your stdio leaves cnt unchanged.  Good." >&4
  d_stdio_ptr_lval_nochange_cnt="$define" ;;
 Fail*)
  echo "Increasing ptr in your stdio didn't do exactly what I expected.  We'll not be doing that then." >&4 ;;
 *)
```

```
  echo "It appears attempting to set ptr in your stdio is a bad plan." >&4 ;;
 esac
 else
  echo "It seems we can't set ptr in your stdio.  Nevermind." >&4
 fi
 $rm_try
 ;;
esac
@end

@if d_stdiobase || USE_STDIO_BASE || FILE_base || FILE_bufsiz
: see if _base is also standard
val="$undef"
case
 "$d_stdstdio" in
$define)
 $cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_base(fp) $stdio_base
#define FILE_bufsiz(fp) $stdio_bufsiz
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  19 <= FILE_bufsiz(fp) &&
  strncmp(FILE_base(fp), "#include <stdio.h>\n", 19) == 0
 )
  exit(0);
 exit(1);
}
EOP
 set try
 if eval $compile && $to try.c; then
  if $run ./try; then
   echo "And its _base field acts std."
   val="$define"
  else
   echo "But its _base field isn't std."
  fi
 else
  echo "However, it seems to be lacking the _base field."
 fi
 $rm_try
 ;;
```

```
esac
set d_stdiobase
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_stdstdio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lgamma: Inlibc
?MAKE: -pick add $@ %<
?S:d_lgamma:
?S: This variable conditionally defines the HAS_LGAMMA symbol, which
?S: indicates to the C program that the lgamma() routine is available
?S: for the log gamma function.  See also d_tgamma and d_lgamma_r.
?S:.
?C:HAS_LGAMMA:
?C: This symbol, if defined, indicates that the lgamma routine is
?C: available to do the log gamma function.  See also HAS_TGAMMA and
?C: HAS_LGAMMA_R.
?C:.
?H:#$d_lgamma HAS_LGAMMA  /**/
?H:.
?LINT:set d_lgamma
: see if lgamma exists
set lgamma d_lgamma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lgamma.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setpgid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:49  ram
```

```
?RCS: patch61: reworded symbol comments
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:40  ram
?RCS: patch16: created
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpgid:
?S: This variable conditionally defines the HAS_SETPGID symbol if the
?S: setpgid(pid, gpid) function is
 available to set process group ID.
?S:.
?C:HAS_SETPGID:
?C: This symbol, if defined, indicates that the setpgid(pid, gpid)
?C: routine is available to set process group ID.
?C:.
?H:#$d_setpgid HAS_SETPGID /**/
?H:.
?LINT:set d_setpgid
: see if setpgid exists
set setpgid d_setpgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgrp2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgrp2.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpgrp2:
?S: This variable conditionally defines the HAS_GETPGRP2 symbol, which
```

```
?S: indicates to the C program that the getpgrp2() (as in DG/UX) routine
?S: is available to get the current process group.
?S:.
?C:HAS_GETPGRP2 (GETPGRP2):
?C: This symbol, if defined, indicates that the
 getpgrp2() (as in DG/UX)
?C: routine is available to get the current process group.
?C:.
?H:#$d_getpgrp2 HAS_GETPGRP2  /**/
?H:.
?LINT:set d_getpgrp2
: see if getpgrp2 exists
set getpgrp2 d_getpgrp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgrp2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_socklen_t: Inhdr cat rm_try Setvar Compile d_socket sizetype
?MAKE: -pick add $@ %<
?S:d_socklen_t:
?S: This symbol will be defined if the C compiler supports socklen_t.
?S:.
?C:HAS_SOCKLEN_T:
?C: This symbol will defined if the C compiler supports socklen_t.
?C: Usually the <sys/socket.h> needs to be included.
?C:.
?H:#$d_socklen_t     HAS_SOCKLEN_T              /**/
?H:.
?LINT:set d_socklen_t
: check for socklen_t
echo " "
echo "Checking to see if you have socklen_t..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#$d_socket
```

```
 HAS_SOCKET
#ifdef HAS_SOCKET
#include <sys/socket.h>
#endif
int main() { socklen_t x = 16; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have socklen_t."
else
 val="$undef"
 echo "You do not have socklen_t."
 case "$sizetype" in
 size_t) echo "(You do have size_t, that might work. Some people are happy with just an int.)" ;;
 esac
fi
$rm_try
set d_socklen_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_socklen_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: locdist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: locdist.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  15:09:20  ram
?RCS: patch23: added support for multi-state regions (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:locdist orgdist citydist statedist multistatedist cntrydist contdist: \
 test newslibexp cat Myread Oldconfig
?MAKE: -pick add $@ %<
?S:locdist:
?S: This variable contains the eventual value of the LOCDIST symbol,
?S: which
```

is the local organization's distribution name for news.
?S:.
?S:orgdist:
?S: This variable contains the eventual value of the ORGDIST symbol,
?S: which is the organization's distribution name for news.
?S:.
?S:citydist:
?S: This variable contains the eventual value of the CITYDIST symbol,
?S: which is the city's distribution name for news.
?S:.
?S:statedist:
?S: This variable contains the eventual value of the STATEDIST symbol,
?S: which is the state's or province's distribution name for news.
?S:.
?S:multistatedist:
?S: This variable contains the eventual value of the MULTISTATEDIST symbol,
?S: which is the news distribution code for multi-state region.
?S:.
?S:cntrydist:
?S: This variable contains the eventual value of the CNTRYDIST symbol,
?S: which is the country's distribution name for news.
?S:.
?S:contdist:
?S: This variable contains the eventual value of the CONTDIST symbol,
?S: which is the continent's distribution name for news.
?S:.
?C:LOCDIST:
?C: This symbol contains the
distribution name for the news system that
?C: restricts article distribution to the local organization.
?C:.
?C:ORGDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the organization.
?C:.
?C:CITYDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the city.
?C:.
?C:STATEDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the state or province.
?C:.
?C:MULTISTATEDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to a multi-state region.
?C:.
?C:CNTRYDIST:

```
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the country.
?C:.
?C:CONTDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the continent.
?C:.
?H:#define LOCDIST
 "$locdist"  /**/
?H:#define ORGDIST "$orgdist"  /**/
?H:#define CITYDIST "$citydist"  /**/
?H:#define MULTISTATEDIST "$multistatedist" /**/
?H:#define STATEDIST "$statedist"  /**/
?H:#define CNTRYDIST "$cntrydist"  /**/
?H:#define CONTDIST "$contdist"  /**/
?H:.
: get the local distributions
$cat <<'EOH'

Distribution groups are the things you use on the Distribution line to limit
where an article will go to.  You are likely to be a member of several
distribution groups, such as organization, city, state, province, country,
continent, etc.  For example, Los Angeles has the distribution code "la",
New Jersey has the code "nj", and Europe has the code "eunet".

The categories you will be asked are:

local organization (Could be just one machine or a cluster or an office)
organization  att, dec, kgb, ...
city   la, ny, mosc, ...
state/province  ca, nj, bc, ...
multi-state region pnw, ne, ...
country   usa, can, rok, whatever
continent  na (North America), asia, etc.

EOH
if $test
 -f $newslibexp/distributions; then
 case "$silent" in
 true) ;;
 *) dflt='Hit return to continue'
  rp=''
  . ./myread
  ;;
 esac
 echo "Here is your distributions file:" >&4
 echo " " >&4
 $cat >&4 $newslibexp/distributions
```

```
 echo " " >&4
fi
echo "Use 'none' for any distributions you don't have."
echo " "
case "$locdist" in
") dflt="none";;
*)  dflt="$locdist";;
esac
rp="What is the distribution code for your local organization?"
. ./myread
locdist="$ans"
case "$orgdist" in
") dflt="none";;
*)  dflt="$orgdist";;
esac
rp="What is the distribution code for your organization?"
. ./myread
orgdist="$ans"
case "$citydist" in
") dflt="none";;
*)  dflt="$citydist";;
esac
rp="What is the distribution code for your city?"
. ./myread
citydist="$ans"
case "$statedist" in
") dflt="none";;
*)  dflt="$statedist";;
esac
rp="What is the distribution code for your state/province?"
. ./myread
statedist="$ans"
case "$multistatedist" in
") dflt="none";;
*) dflt="$multistatedist";;
esac
rp="What is the
 distribution code for your multi-state region?"
. ./myread
multistatedist="$ans"
case "$cntrydist" in
") dflt="none";;
*)  dflt="$cntrydist";;
esac
rp="What is the distribution code for your country?"
. ./myread
cntrydist="$ans"
case "$contdist" in
```

```
") dflt="none";;
*)  dflt="$contdist";;
esac
rp="What is the distribution code for your continent?"
. ./myread
contdist="$ans"
$cat <<'EOM'

If you have any other distribution groups you will need to edit Pnews
and newsetup to add them.
EOM
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/locdist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ilogbl: Inlibc
?MAKE: -pick add $@ %<
?S:d_ilogbl:
?S: This variable conditionally defines the HAS_ILOGBL symbol, which
?S: indicates to the C program that the ilogbl() routine is available
?S: for extracting the exponent of long double x as a signed integer.
?S: If scalbnl is also present we can emulate frexpl.
?S:.
?C:HAS_ILOGBL:
?C: This symbol, if defined, indicates that the ilogbl routine is
?C: available.  If scalbnl is also present we can emulate frexpl.
?C:.
?H:#$d_ilogbl HAS_ILOGBL  /**/
?H:.
?LINT:set d_ilogbl
: see if ilogbl exists
set ilogbl d_ilogbl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ilogbl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usedtrace.U,v $
?RCS:
```

```
?RCS: Copyright (c) 2008 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usedtrace.U,v $
?RCS:
?MAKE:usedtrace dtrace: Myread Oldconfig Setvar Getfile test
?MAKE: -pick add $@ %<
?Y:TOP
?S:usedtrace:
?S: This variable indicates whether we are compiling with dtrace
?S: support. See also dtrace.
?S:.
?S:dtrace:
?S: This variable holds the location of the dtrace executable.
?S:.
?C:USE_DTRACE:
?C: This symbol, if defined, indicates that Perl should
?C: be built with support for DTrace.
?C:.
?H:#$usedtrace USE_DTRACE  /**/
?H:.
?T:dflt_dtrace
?LINT:set usedtrace
?LINT:set dtrace
: DTrace support
dflt_dtrace='/usr/sbin/dtrace'
$test -x /usr/bin/dtrace && dflt_dtrace='/usr/bin/dtrace'

cat <<EOM

Perl can be built to support DTrace on platforms that support
 it.
DTrace is a diagnosis and performance analysis tool from Sun.

If this doesn't make any sense to you, just accept the default.
EOM

while $test 1 ; do
 case "$usedtrace" in
 $define|true|[yY]*)
  dflt='y'
  ;;
 $undef|false|[nN]*)
  dflt='n'
  dflt_dtrace=""
  ;;
```

```
?*)
 dflt='y'
 dflt_dtrace=$usedtrace
 ;;
*)
 dflt='n'
 ;;
esac

rp='Support DTrace if available?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usedtrace
eval $setvar

test "X$usedtrace" != "X$define" && break

echo " "
rp='Where is the dtrace executable?'
dflt=$dflt_dtrace
. ./getfile
val="$ans"
set dtrace
eval $setvar

if $test -f $dtrace
then
 if $dtrace -h -s ../perldtrace.d \
  -o perldtrace.tmp >/dev/null 2>&1 \
  && rm -f perldtrace.tmp
 then
  echo " "
  echo "Good: your $dtrace knows about the -h flag."
 else
  cat >&2 <<EOM

*** $me:  Fatal Error:  $dtrace doesn't support -h flag
***
*** Your installed dtrace doesn't support the -h switch to
 compile a D
*** program into a C header. Can't continue.

EOM
  exit 1
 fi
```

```
  break;
 fi

 case "$fastread" in
 yes)
  cat >&2 <<EOM

*** $me:  Fatal Error:  $dtrace not found.
*** Can't continue.

EOM
  exit 1
  ;;
 *)
  echo "*** $dtrace was not found."
  echo " "
  ;;
 esac
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usedtrace.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sitehtml1dir sitehtml1direxp installsitehtml1dir: Getfile \
 Setprefixvar prefix siteprefix html1dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitehtml1dir="
?S:sitehtml1dir:
?S: This variable contains the name of the directory in which site-specific
?S: html source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After perl
 has been installed, users may install their own local
?S: html pages in this directory with
```

```
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitehtml1direxp=''
?S:sitehtml1direxp:
?S: This variable is the same as the sitehtml1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsitehtml1dir=''
?S:installsitehtml1dir:
?S: This variable is really the same as sitehtml1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: html1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsitehtml1dir
?LINT:set sitehtml1dir
?LINT:set sitehtml1direxp
: determine where add-on html pages go
: There is no standard location, so try to copy the previously-selected
: directory structure for the core html pages.
case "$sitehtml1dir" in
'')
   dflt=`echo "$html1dir" | $sed "s#^$prefix#$siteprefix#"` ;;
*)     dflt=$sitehtml1dir ;;
esac
case "$dflt" in
'|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname where the site-specific html pages should be installed?'
. ./getfile
prefixvar=sitehtml1dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitehtml1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Tr.U,v 3.0.1.2 1994/10/29 18:00:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Tr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  18:00:54  ram
?RCS: patch43: forgot to quote $@ to protect against "evil" characters
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:58:35  ram
?RCS: patch36: created
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a character translation. It catches translations to uppercase or
?X: to lowercase, and then invokes the real tr to perform the job.
?X:
?X: This unit is necessary
 on HP machines (HP strikes again!) with non-ascii
?X: ROMAN8-charset, where normal letters are not arranged in a row, so a-z
?X: covers not the whole alphabet but lots of special chars. This was reported
?X: by Andreas Sahlbach <a.sahlbach@tu-bs.de>.
?X:
?X: Units performing a tr '[A-Z]' '[a-z]' or the other way round should include
?X: us in their dependency and use ./tr instead.
?X:
?MAKE:Tr: startsh tr eunicefix
?MAKE: -pick add $@ %<
?F:./tr
?T:up low
: see whether [:lower:] and [:upper:] are supported character classes
echo " "
case "`echo AbyZ | $tr '[:lower:]' '[:upper:]' 2>/dev/null`"-"`echo AbyZ | $tr '[:upper:]' '[:lower:]' 2>/dev/null`" in
ABYZ-abyz)
 echo "Good, your tr supports [:lower:] and [:upper:] to convert case." >&4
 up='[:upper:]'
 low='[:lower:]'
 ;;
*) # There is a discontinuity in EBCDIC between 'R' and 'S'
 # (0xd9 and 0xe2), therefore that is a nice testing point.
 if test "X$up" = X -o "X$low" = X; then
    case "`echo RS | $tr '[R-S]' '[r-s]' 2>/dev/null`"
 in
    rs) up='[A-Z]'
  low='[a-z]'
  ;;
    esac
 fi
 if test "X$up" = X -o "X$low" = X; then
    case "`echo RS | $tr R-S r-s 2>/dev/null`" in
    rs) up='A-Z'
```

```
  low='a-z'
  ;;
     esac
 fi
 if test "X$up" = X -o "X$low" = X; then
     case "`echo RS | od -x 2>/dev/null`" in
     *D9E2*|*d9e2*)
  echo "Hey, this might be EBCDIC." >&4
  if test "X$up" = X -o "X$low" = X; then
      case "`echo RS | $tr '[A-IJ-RS-Z]' '[a-ij-rs-z]' 2>/dev/null`" in
      rs) up='[A-IJ-RS-Z]'
   low='[a-ij-rs-z]'
   ;;
      esac
  fi
  if test "X$up" = X -o "X$low" = X; then
      case "`echo RS | $tr A-IJ-RS-Z a-ij-rs-z 2>/dev/null`" in
      rs) up='A-IJ-RS-Z'
   low='a-ij-rs-z'
   ;;
      esac
  fi
  ;;
     esac
 fi
esac
case "`echo RS | $tr \"$up\" \"$low\" 2>/dev/null`" in
rs)
   echo "Using $up and $low to convert case." >&4
   ;;
*)
   echo "I don't know how to translate letters from upper to lower case." >&4
   echo "Your tr is not acting any way I know of." >&4
   exit 1
   ;;
esac
:
 set up the translation script tr, must be called with ./tr of course
cat >tr <<EOSC
$startsh
case "\$1\$2" in
'[A-Z][a-z]') exec $tr '$up' '$low';;
'[a-z][A-Z]') exec $tr '$low' '$up';;
esac
exec $tr "\$@"
EOSC
chmod +x tr
$eunicefix tr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Tr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sjis2jis.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sjis2jis.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sjis2jis: Inlibc
?MAKE: -pick add $@ %<
?S:d_sjis2jis:
?S: This variable conditionally defines the HAS_SJIS2JIS symbol, which
?S: indicates to the C program that the sjis2jis() routine is available
?S: to convert SJIS to JIS.
?S:.
?C:HAS_SJIS2JIS:
?C: This symbol, if defined, indicates that the sjis2jis routine is
?C: available
 to convert SJIS to JIS.
?C:.
?H:#$d_sjis2jis HAS_SJIS2JIS  /**/
?H:.
?LINT:set d_sjis2jis
: see if sjis2jis exists
set sjis2jis d_sjis2jis
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sjis2jis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Instruct.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:02:55  ram
?RCS: patch61: logname / whoami sequence rewritten to use case
?RCS:
?RCS: Revision 3.0.1.2  1995/02/15  14:11:34  ram
?RCS: patch51: author name now appears at the end of the paragraph (WED)
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:12:05  ram
?RCS: patch45: now documents the & escape to turn -d on at the read prompt
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X:
 This unit spew out the directions that we want everyone to read.  I try to
?X: keep the first "pagefull" much less than a page since they don't know it
?X: isn't going to go shooting off the top of the screen, and we don't want
?X: to panic them yet.
?X:
?MAKE:Instruct: Begin Myread Configdir contains
?MAKE: -pick wipe $@ %<
?T:user needman firsttime
: general instructions
needman=true
firsttime=true
user=`(logname) 2>/dev/null`
case "$user" in
") user=`whoami 2>&1`;;
esac
if $contains "^$user\$" ../.config/instruct >/dev/null 2>&1; then
 firsttime=false
 echo " "
 rp='Would you like to see the instructions?'
 dflt=n
 . ./myread
 case "$ans" in
 [yY]*) ;;
 *) needman=false;;
 esac
fi
if $needman; then
 cat <<EOH
```

```
This installation shell script will examine your system and ask you questions
to determine how the <PACKAGENAME> package should be installed. If you get
stuck on a question, you may use a ! shell escape to start a subshell or
execute a command.  Many of the questions will have
 default answers in square
brackets; typing carriage return will give you the default.

On some of the questions which ask for file or directory names you are allowed
to use the ~name construct to specify the login directory belonging to "name",
even if you don't have a shell which knows about that.  Questions where this is
allowed will be marked "(~name ok)".

EOH
 rp="
 dflt='Type carriage return to continue'
 . ./myread
 cat <<'EOH'

The prompter used in this script allows you to use shell variables and
backticks in your answers.  You may use $1, $2, etc...  to refer to the words
in the default answer, as if the default line was a set of arguments given to a
script shell.  This means you may also use $* to repeat the whole default line,
so you do not have to re-type everything to add something to the default.

Everytime there is a substitution, you will have to confirm.  If there is an
error (e.g. an unmatched backtick), the default answer will remain unchanged
and you will be prompted
 again.

If you are in a hurry, you may run 'Configure -d'.  This will bypass nearly all
the questions and use the computed defaults (or the previous answers if there
was already a config.sh file). Type 'Configure -h' for a list of options.
You may also start interactively and then answer '& -d' at any prompt to turn
on the non-interactive behaviour for the remainder of the execution.

EOH
 . ./myread
 cat <<EOH

Much effort has been expended to ensure that this shell script will run on any
Unix system.  If despite that it blows up on yours, your best bet is to edit
Configure and run it again.  If you can't run Configure for some reason,
you'll have to generate a config.sh file by hand.  Whatever problems you
have, let me (<MAINTLOC>) know how I blew it.

This installation script affects things in two ways:

1) it may do direct variable substitutions on some of the files included
```

```
  in this kit.
2) it builds a config.h file for inclusion in C programs.  You may edit
  any of these
 files as the need arises after running this script.

If you make a mistake on a question, there is no easy way to back up to it
currently.  The easiest thing to do is to edit config.sh and rerun all the SH
files.  Configure will offer to let you do this before it runs the SH files.

EOH
?X: In case they played with the prompter...
 dflt='Type carriage return to continue'
 . ./myread
 case "$firsttime" in
 true) echo $user >>../.config/instruct;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Instruct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_db.U,v 3.0.1.3 1995/07/25 14:10:22 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_db.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:10:22  ram
?RCS: patch56: conditionally use const in test programs (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:14:42  ram
?RCS: patch54: extended for more intimate DB probing (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:21:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_db db_hashtype db_prefixtype \
 db_version_major
 db_version_minor db_version_patch : \
 Inhdr +cc +ccflags rm_try compiler_warning cat \
```

```
 Compile libs sed run i_stdlib
?MAKE: -pick add $@ %<
?S:i_db:
?S: This variable conditionally defines the I_DB symbol, and indicates
?S: whether a C program may include Berkeley's DB include file <db.h>.
?S:.
?S:db_hashtype:
?S: This variable contains the type of the hash structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is u_int32_t.
?S:.
?S:db_prefixtype:
?S: This variable contains the type of the prefix structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is size_t.
?S:.
?S:db_version_major:
?S: This variable contains the major version number of
?S: Berkeley DB found in the <db.h> header file.
?S:.
?S:db_version_minor:
?S: This variable contains the minor version number of
?S: Berkeley DB found in the <db.h> header file.
?S: For DB version 1 this is always 0.
?S:.
?S:db_version_patch:
?S: This
 variable contains the patch version number of
?S: Berkeley DB found in the <db.h> header file.
?S: For DB version 1 this is always 0.
?S:.
?C:I_DB:
?C: This symbol, if defined, indicates to the C program that it should
?C: include Berkeley's DB include file <db.h>.
?C:.
?C:DB_Prefix_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is u_int32_t.
?C:.
?C:DB_Hash_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is size_t.
?C:.
?C:DB_VERSION_MAJOR_CFG:
?C: This symbol, if defined, defines the major version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
```

```
?C:.
?C:DB_VERSION_MINOR_CFG:
?C: This symbol, if defined, defines the minor version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
?C: For
 DB version 1 this is always 0.
?C:.
?C:DB_VERSION_PATCH_CFG:
?C: This symbol, if defined, defines the patch version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
?C: For DB version 1 this is always 0.
?C:.
?H:#$i_db I_DB  /**/
?H:#define DB_Hash_t $db_hashtype  /**/
?H:#define DB_Prefix_t $db_prefixtype  /**/
?H:#define DB_VERSION_MAJOR_CFG $db_version_major /**/
?H:#define DB_VERSION_MINOR_CFG $db_version_minor /**/
?H:#define DB_VERSION_PATCH_CFG $db_version_patch /**/
?H:.
?F:!try
?LINT:change libs
: see if this is a db.h system
set db.h i_db
eval $inhdr

case "$i_db" in
$define)
 : Check db version.
 echo " "
 echo "Checking Berkeley DB version ..." >&4
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <db.h>
int main(int argc, char *argv[])
{
#ifdef DB_VERSION_MAJOR /* DB version >= 2 */
   int Major, Minor, Patch ;
   unsigned long Version ;
   (void)db_version(&Major,
 &Minor, &Patch) ;
   if (argc == 2) {
       printf("%d %d %d %d %d %d\n",
             DB_VERSION_MAJOR, DB_VERSION_MINOR, DB_VERSION_PATCH,
```

```
            Major, Minor, Patch);
        exit(0);
    }
    printf("You have Berkeley DB Version 2 or greater.\n");

    printf("db.h is from Berkeley DB Version %d.%d.%d\n",
   DB_VERSION_MAJOR, DB_VERSION_MINOR, DB_VERSION_PATCH);
    printf("libdb is from Berkeley DB Version %d.%d.%d\n",
   Major, Minor, Patch) ;

    /* check that db.h & libdb are compatible */
    if (DB_VERSION_MAJOR != Major || DB_VERSION_MINOR != Minor || DB_VERSION_PATCH != Patch) {
  printf("db.h and libdb are incompatible.\n") ;
        exit(3);
    }

    printf("db.h and libdb are compatible.\n") ;

    Version = DB_VERSION_MAJOR * 1000000 + DB_VERSION_MINOR * 1000
   + DB_VERSION_PATCH ;

    /* needs to be >= 2.3.4 */
    if (Version < 2003004) {
    /* if (DB_VERSION_MAJOR == 2 && DB_VERSION_MINOR == 0 && DB_VERSION_PATCH < 5) { */
  printf("Perl
  needs Berkeley DB 2.3.4 or greater.\n") ;
        exit(2);
    }

    exit(0);
#else
#if defined(_DB_H_) && defined(BTREEMAGIC) && defined(HASHMAGIC)
    if (argc == 2) {
        printf("1 0 0\n");
        exit(0);
    }
    printf("You have Berkeley DB Version 1.\n");
    exit(0); /* DB version < 2: the coast is clear. */
#else
    exit(1); /* <db.h> not Berkeley DB? */
#endif
#endif
}
EOCP
 set try
 if eval $compile_ok && $run ./try; then
  echo 'Looks OK.' >&4
  set `$run ./try 1`
```

```
  db_version_major=$1
  db_version_minor=$2
  db_version_patch=$3
 else
  echo "I can't use Berkeley DB with your <db.h>.  I'll disable Berkeley DB." >&4
  i_db=$undef
  case " $libs " in
  *"-ldb "*)
   : Remove db from list of libraries to use
   echo "Removing unusable -ldb from library list" >&4
   set `echo X $libs | $sed -e 's/-ldb / /' -e 's/-ldb$//'`
   shift
   libs="$*"
   echo "libs = $libs" >&4
   ;;
  esac
 fi
 $rm_try
 ;;
esac

@if DB_Hash_t
case "$i_db" in
define)
 : Check the return
 type needed for hash
 echo " "
 echo "Checking return type needed for hash for Berkeley DB ..." >&4
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <db.h>

#ifndef DB_VERSION_MAJOR
u_int32_t hash_cb (const void* ptr, size_t size)
{
 return 0;
}
HASHINFO info;
int main()
{
 info.hash = hash_cb;
}
#endif
EOCP
 if $cc $ccflags -c try.c >try.out 2>&1 ; then
  if $compiler_warning try.out >>/dev/null 2>&1 ; then
   db_hashtype='int'
  else
```

```
   db_hashtype='u_int32_t'
  fi
 else
  : XXX Maybe we should just give up here.
  db_hashtype=u_int32_t
  $cat try.out >&4
  echo "Help:  I can't seem to compile the db test program." >&4
  echo "Something's wrong, but I'll assume you use $db_hashtype." >&4
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_hashtype for hash."
 ;;
*) db_hashtype=u_int32_t
 ;;
esac
@end
@if DB_Prefix_t
case "$i_db" in
define)
 : Check the return type needed for prefix
 echo " "
 echo "Checking return type needed for prefix for Berkeley DB ..." >&4
 cat >try.c <<EOCP
#include
 <sys/types.h>
#include <db.h>

#ifndef DB_VERSION_MAJOR
size_t prefix_cb (const DBT *key1, const DBT *key2)
{
 return 0;
}
BTREEINFO info;
int main()
{
 info.prefix = prefix_cb;
}
#endif
EOCP
 if $cc $ccflags -c try.c  >try.out 2>&1 ; then
  if $compiler_warning try.out >>/dev/null 2>&1 ; then
   db_prefixtype='int'
  else
   db_prefixtype='size_t'
  fi
 else
  db_prefixtype='size_t'
  : XXX Maybe we should just give up here.
```

```
  $cat try.out >&4
  echo "Help:  I can't seem to compile the db test program." >&4
  echo "Something's wrong, but I'll assume you use $db_prefixtype." >&4
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_prefixtype for prefix."
 ;;
*) db_prefixtype='size_t'
 ;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_db.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_neterrno.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:20:29  ram
?RCS: patch36: forgot to initialize 'val' to an empty value (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:22:10  ram
?RCS: patch32: removed spurious echo
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:02:05  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:i_neterrno: Inhdr +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:i_neterrno:
?S: This variable
 conditionally defines the I_NET_ERRNO symbol, which
?S: indicates to the C program that <net/errno.h> exists and should
?S: be included.
?S:.
?C:I_NET_ERRNO:
?C: This symbol, if defined, indicates that <net/errno.h> exists and
```

```
?C: should be included.
?C:.
?H:#$i_neterrno I_NET_ERRNO  /**/
?H:.
?LINT:set i_neterrno
: see if net/errno.h is available
val="
set net/errno.h val
eval $inhdr

: Unfortunately, it causes problems on some systems.  Arrgh.
case "$val" in
$define)
 cat > try.c <<'EOM'
#include <stdio.h>
#include <errno.h>
#include <net/errno.h>
int func()
{
 return ENOTSOCK;
}
EOM
 if $cc $ccflags -c try.c >/dev/null 2>&1; then
  echo "We'll be including <net/errno.h>." >&4
 else
  echo "We won't be including <net/errno.h>." >&4
  val="$undef"
 fi
 $rm_try
 ;;
esac
set i_neterrno
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_neterrno.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigaction.U,v 3.0.1.1 1997/02/28 15:44:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: d_sigaction.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:29  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sigaction: Csym Compile Setvar cat rm_try i_stdlib
?MAKE: -pick add $@ %<
?S:d_sigaction:
?S: This variable conditionally defines the HAS_SIGACTION symbol, which
?S: indicates that the Vr4 sigaction() routine is available.
?S:.
?C:HAS_SIGACTION:
?C: This symbol, if defined, indicates that Vr4's sigaction() routine
?C: is available.
?C:.
?H:#$d_sigaction
 HAS_SIGACTION /**/
?H:.
?T:val
?LINT:set d_sigaction
: see if we have sigaction
echo " "
if set sigaction val -f d_sigaction; eval $csym; $val; then
 echo 'sigaction() found.' >&4
?X:
?X: Solaris 2.5_x86 with SunWorks Pro C 3.0.1 doesn't have a complete
?X: sigaction structure if compiled with cc -Xc.  This compile test
?X: will fail then.  <doughera@lafcol.lafayette.edu>
?X:
 $cat > try.c <<EOP
#include <stdio.h>
#include <sys/types.h>
#include <signal.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
   struct sigaction act, oact;
   act.sa_flags = 0;
   oact.sa_handler = 0;
   /* so that act and oact are used */
   exit(act.sa_flags == 0 &&  oact.sa_handler == 0);
}
EOP
 set try
 if eval $compile_ok; then
```

```
  val="$define"
 else
  echo "But you don't seem to have a usable struct sigaction." >&4
  val="$undef"
 fi
else
 echo 'sigaction NOT found.' >&4
 val="$undef"
fi
set d_sigaction; eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sigaction.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:trnl: Nothing
?MAKE: -pick add $@ %<
?S:trnl:
?S: This variable contains the value to be passed to the tr(1)
?S: command to transliterate a newline.  Typical values are
?S: '\012' and '\n'.  This is needed for EBCDIC systems where
?S: newline is not necessarily '\012'.
?S:.
?T: DJGPP
: Find the appropriate value for a newline for tr
?X: We can't
 use $tr since that would cause a circular dependency via Myread
?X: dos djgpp uses '\015\012', but reportedly is happy with '\012' in the
?X: tr command.  I don't know why it passes the '\n' test but later
?X: refuses to work correctly with it.  --AD  6/14/98
if test -n "$DJGPP"; then
    trnl='\012'
```

```
fi
if test X"$trnl" = X; then
 case "`echo foo | tr '\n' x 2>/dev/null`" in
 foox) trnl='\n' ;;
 esac
fi
if test X"$trnl" = X; then
 case "`echo foo | tr '\012' x 2>/dev/null`" in
 foox) trnl='\012' ;;
 esac
fi
if test X"$trnl" = X; then
      case "`echo foo | tr '\r\n' xy 2>/dev/null`" in
      fooxy) trnl='\n\r' ;;
      esac
fi
if test X"$trnl" = X; then
 cat <<EOM >&2

$me: Fatal Error: cannot figure out how to translate newlines with 'tr'.

EOM
 exit 1
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/trnl.U
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```
?RCS: $Id: i_fp.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_fp: Inhdr
?MAKE: -pick add $@ %<
?S:i_fp:
?S: This variable conditionally defines the I_FP symbol, and indicates
?S: whether a C program should include <fp.h>.
?S:.
?C:I_FP:
?C: This symbol, if defined, indicates that <fp.h> exists and
?C: should be included.
?C:.
?H:#$i_fp I_FP  /**/
?H:.
```

```
?LINT:set i_fp
: see if this is a fp.h system
set fp.h i_fp
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sbrktype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sbrktype.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sbrktype: Myread Oldconfig Loc contains Findhdr
?MAKE: -pick add $@ %<
?S:sbrktype:
?S: This variable defines sbrktype to be something like caddr_t, char *,
?S: or whatever type is used to declare sbrk() in the kernel.
?S:.
?C:Caddr_t (SBRKTYPE):
?C: This symbol holds the type of a core address. It is inteded to be used
?C: to safely
 declare the return type of system calls like sbrk(). It might
?C: be necessary to include <sys/types.h> as well.
?C:.
?H:#define Caddr_t $sbrktype /* <core address> type */
?H:.
: see what type sbrk is declared as in the kernel
case "$sbrktype" in
")
 if $contains 'caddr_t;' `./findhdr sys/types.h` >/dev/null 2>&1 ; then
  dflt='caddr_t';
 else
  dflt='char *';
 fi
 ;;
*)  dflt="$sbrktype"
 ;;
```

```
esac
echo " "
rp="What is the return type of sbrk() on this system?"
. ./myread
sbrktype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sbrktype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_preadv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_preadv.U,v $
?RCS:
?MAKE:d_preadv: Inlibc
?MAKE: -pick add $@ %<
?S:d_preadv:
?S: This variable conditionally defines the HAS_PREADV symbol, which
?S: indicates to the C program that the preadv() routine is available.
?S:.
?C:HAS_PREADV :
?C: This symbol, if defined, indicates that the preadv routine is
?C: available to perform vectored reads on a file descriptor at a
?C: given offset.
?C:.
?H:#$d_preadv HAS_PREADV  /**/
?H:.
?LINT:set d_preadv
:
 see if preadv exists
set preadv d_preadv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_preadv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pipe.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pipe.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:44  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_pipe: Inlibc
?MAKE: -pick add $@ %<
?S:d_pipe:
?S: This variable conditionally defines the HAS_PIPE symbol, which
?S: indicates to the C program that the pipe() routine is available
?S: to create an inter-process channel.
?S:.
?C:HAS_PIPE :
?C: This symbol, if defined, indicates
 that the pipe routine is
?C: available to create an inter-process channel.
?C:.
?H:#$d_pipe HAS_PIPE  /**/
?H:.
?LINT:set d_pipe
: see if pipe exists
set pipe d_pipe
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pipe.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpos64_t: \
 Inlibc Setvar Compile rm_try cat fpossize
?MAKE: -pick add $@ %<
?S:d_fpos64_t:
?S: This symbol will be defined if the C compiler supports fpos64_t.
```

```
?S:.
?C:HAS_FPOS64_T:
?C: This symbol will be defined if the C compiler supports fpos64_t.
?C:.
?H:#$d_fpos64_t HAS_FPOS64_T /**/
?H:.
?LINT:set d_fpos64_t
: check for fpos64_t
echo " "
echo "Checking to see if you have fpos64_t..." >&4
$cat >try.c <<EOCP
#include <stdio.h>
int main() { fpos64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have fpos64_t."
else
 val="$undef"
 echo "You do not have fpos64_t."
 case "$fpossize" in
 8) echo "(Your fpos_t is 64 bits, so you could use that.)" ;;
 esac
fi
$rm_try
set
 d_fpos64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpos64_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorscript.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorscript.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
```

```
?MAKE:d_vendorscript vendorscript vendorscriptexp installvendorscript: Getfile \
 vendorbin cat Setprefixvar Oldconfig Prefixit test vendorprefix
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorscript:
?S: This variable contains the eventual value of the VENDORSCRIPT symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this
 directory.
?S: Vendors who distribute perl may wish to place additional
?S: executable scripts in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorscriptexp:
?S: This variable is the ~name expanded version of vendorscript, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorscript="
?S:installvendorscript:
?S: This variable is really the same as vendorscriptexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorscript:
?S: This variable conditionally defines PERL_VENDORSCRIPT.
?S:.
?C:PERL_VENDORSCRIPT:
?C: If defined, this symbol contains the name of a directory
?C: for holding vendor-supplied executable scripts.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place additional
?C: executable
 scripts in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORSCRIPT_EXP:
?C: This symbol contains the ~name expanded version of VENDORSCRIPT, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorscript PERL_VENDORSCRIPT "$vendorscript"  /**/
?H:#$d_vendorscript PERL_VENDORSCRIPT_EXP "$vendorscriptexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorscript
: Set the vendorscript variables
```

```
case "$vendorprefix" in
") d_vendorscript="$undef"
 vendorscript="
 vendorscriptexp="
 ;;
*) d_vendorscript="$define"
 : determine where vendor-supplied scripts go.
 case "$vendorscript" in
 ") dflt=$vendorprefix/script
  $test -d $dflt || dflt=$vendorbin ;;
 *)  dflt="$vendorscript" ;;
 esac
 $cat <<EOM

The installation process will create a directory for
vendor-supplied scripts.

EOM
 fn=d~+
 rp='Pathname for the vendor-supplied scripts directory?'
 . ./getfile
 vendorscript="$ans"
 vendorscriptexp="$ansexp"
 ;;
esac
prefixvar=vendorscript
.
 ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorscript.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
```

```
?MAKE:ebcdic: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:ebcdic:
?S: This variable conditionally defines EBCDIC if this
?S: system uses EBCDIC encoding.  Among other things, this
?S: means that the character ranges are not contiguous.
?S: See trnl.U
?S:.
?C:EBCDIC:
?C:     This symbol, if defined, indicates that this system uses
?C: EBCDIC
 encoding.
?C:.
?H:#$ebcdic EBCDIC   /**/
?H:.
?F:!try
?LINT:set ebcdic
: look whether system uses EBCDIC
echo " "
echo "Determining whether or not we are on an EBCDIC system..." >&4
$cat >try.c <<'EOM'
int main()
{
 if ('M'==0xd4) return 0;
 return 1;
}
EOM
val=$undef
set try
if eval $compile_ok; then
 if $run ./try; then
  echo "You seem to speak EBCDIC." >&4
  val="$define"
 else
  echo "Nope, no EBCDIC, probably ASCII or some ISO Latin. Or UTF-8." >&4
 fi
else
 echo "I'm unable to compile the test program." >&4
 echo "I'll assume ASCII or some ISO Latin. Or UTF8." >&4
fi
$rm_try
set ebcdic
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ebcdic.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_fcntl: h_fcntl h_sysfile +i_sysfile Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_fcntl:
?S: This variable controls the value of I_FCNTL (which tells
?S: the C program to include <fcntl.h>).
?S:.
?C:I_FCNTL (HDR_O_STUFF FCNTL):
?C: This manifest constant tells the C program to include <fcntl.h>.
?C:.
?H:#$i_fcntl I_FCNTL /**/
?H:.
?T:val
?X:
 Make line lists +i_sysfile to ensure tests for <sys/file.h> will be
?X: conducted prior tests for <fcntl.h>, hece making sure the h_sysfile
?X: variable is correctly set when we reach that unit.
?LINT:set i_fcntl
?LINT:use i_sysfile
?LINT:change h_fcntl
: see if fcntl.h is there
val=''
set fcntl.h val
eval $inhdr

: see if we can include fcntl.h
case "$val" in
"$define")
 echo " "
 if $h_fcntl; then
  val="$define"
  echo "We'll be including <fcntl.h>." >&4
 else
  val="$undef"
  if $h_sysfile; then
```

```
 echo "We don't need to include <fcntl.h> if we include <sys/file.h>." >&4
  else
   echo "We won't be including <fcntl.h>." >&4
  fi
 fi
 ;;
*)
 h_fcntl=false
 val="$undef"
 ;;
esac
set i_fcntl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_fcntl.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lseektype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:30:10  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lseektype: Myread Typedef
?MAKE: -pick add $@ %<
?S:lseektype:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?C:Off_t
 (LSEEKTYPE):
?C: This symbol holds the type used to declare offsets in the kernel.
?C: It can be int, long, off_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
```

```
?H:#define Off_t $lseektype  /* <offset> type */
?H:.
: see what type lseek is declared as in the kernel
set off_t lseektype long stdio.h sys/types.h
eval $typedef
echo " "
dflt="$lseektype"
rp="What type is lseek's offset on this system declared as?"
. ./myread
lseektype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lseektype.U
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```
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?RCS:
?RCS: $Log: d_sanemcmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:41:19  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sanemcmp: cat d_memcmp +cc +optimize +ccflags +libs +ldflags rm \
 i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_sanemcmp:
?S: This variable conditionally defines the HAS_SANE_MEMCMP symbol if
?S: the memcpy() routine is available and can be used to compare relative
?S: magnitudes of chars with their high bits set.
?S:.
?C:HAS_SANE_MEMCMP:
?C: This symbol,
 if defined, indicates that the memcmp routine is available
?C: and can be used to compare relative magnitudes of chars with their high
?C: bits set.  If it is not defined, roll your own version.
?C:.
?H:#$d_sanemcmp HAS_SANE_MEMCMP /**/
?H:.
?F:!sanemcmp
?LINT: set d_sanemcmp
```

```
: can memcmp be trusted to compare relative magnitude?
?X: assume the worst
val="$undef"
case "$d_memcmp" in
"$define")
 echo " "
 echo \
   "Checking to see if your memcmp() can compare relative magnitude..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char a = -1;
char b = 0;
if ((a < b) && memcmp(&a, &b, 1) < 0)
 exit(1);
exit(0);
}
EOCP
 if $cc $optimize $ccflags
 $ldflags \
      -o sanemcmp foo.c $libs >/dev/null 2>&1; then
  if ./sanemcmp 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "No, it can't (it uses signed chars)."
  fi
```

```
 else
  echo "(I can't compile the test program, so we'll assume not...)"
 fi
 ;;
esac
$rm -f foo.* sanemcmp core
set d_sanemcmp
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sanemcmp.U
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```
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?RCS:
?MAKE:d_isnanl: Inlibc
?MAKE: -pick add $@ %<
?S:d_isnanl:
?S: This variable conditionally defines the HAS_ISNANL symbol, which
?S: indicates to the C program that the isnanl() routine is available.
?S:.
?C:HAS_ISNANL:
?C: This symbol, if defined, indicates that the isnanl routine is
?C: available to check whether a long double is a NaN.
?C:.
?H:#$d_isnanl HAS_ISNANL  /**/
?H:.
?LINT:set d_isnanl
: see if isnanl exists
set isnanl d_isnanl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnanl.U
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```
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?RCS:
```

```
?MAKE:d_unsetenv: Inlibc
?MAKE: -pick add $@ %<
?S:d_unsetenv:
?S: This variable conditionally defines the HAS_UNSETENV symbol, which
?S: indicates to the C program that the unsetenv () routine is available.
?S:.
?C:HAS_UNSETENV:
?C: This symbol, if defined, indicates that the unsetenv () routine is
?C: available for use.
?C:.
?H:#$d_unsetenv HAS_UNSETENV  /**/
?H:.
?LINT:set d_unsetenv
: see if unsetenv exists
set unsetenv d_unsetenv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_unsetenv.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlopen.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:56  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dlopen: Inlibc runnm
?MAKE: -pick add $@ %<
?S:d_dlopen:
?S: This variable conditionally defines the HAS_DLOPEN symbol, which
?S: indicates to the C program that the dlopen() routine
 is available.
?S:.
?C:HAS_DLOPEN :
```

```
?C: This symbol, if defined, indicates that the dlopen routine is
?C: available.
?C:.
?H:#$d_dlopen HAS_DLOPEN  /**/
?H:.
?T: xxx_runnm
?LINT:set d_dlopen
?X: We don't permanently change runnm, but we do temporarily.
?LINT: change runnm
: see if dlopen exists
?X: On NetBSD and FreeBSD, dlopen is available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
runnm=false
set dlopen d_dlopen
eval $inlibc
runnm="$xxx_runnm"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dlopen.U
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```
?RCS: $Id: Extract.U,v 3.0.1.2 1997/02/28 14:58:52 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can be doted in order to extract
?X: .SH files with variable substitutions.
?X:
?X: When running
```

```
 Configure from a remote directory ($src is not '.'),
?X: then the files will be created in that directory, so beware!
?X:
?MAKE:Extract: src
?MAKE: -pick add $@ %<
?F:./extract
?T:PERL_CONFIG_SH dir file name create mkdir_p
: script used to extract .SH files with variable substitutions
cat >extract <<'EOS'
PERL_CONFIG_SH=true
echo "Doing variable substitutions on .SH files..."
if test -f MANIFEST; then
 set x `awk '{print $1}' < MANIFEST | grep '\.SH$'`
else
 echo "(Looking for .SH files under the source directory.)"
 set x `(cd "$src"; find . -name "*.SH" -print)`
fi
shift
case $# in
0) set x `(cd "$src"; echo *.SH)`; shift;;
esac
if test ! -f "$src/$1"; then
 shift
fi
?X: script to emulate mkdir -p
mkdir_p='
name=$1;
create="";
while test $name; do
 if test ! -d "$name"; then
  create="$name $create";
  name=`echo $name | sed -e "s|^[^/]*$||"`;
  name=`echo $name | sed -e "s|\(.*\)/.*|\1|"`;
 else
  name="";
 fi;
done;
for file in $create; do
 mkdir $file;
done
'
for file in $*;
 do
 case "$src" in
 ".")
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
```

```
   file=`expr X$file : 'X.*/\(.*\)'`
   (cd "$dir" && . ./$file)
   ;;
  *)
   . ./$file
   ;;
  esac
  ;;
 *)
?X:
?X: When running Configure remotely ($src is not '.'), we cannot source
?X: the files directly, since that would wrongly cause the extraction
?X: where the source lie instead of withing the current directory. Therefore,
?X: we need to 'sh <file' then, which is okay since they will source the
?X: existing config.sh file. It's not possible to use:
?X:  ../src/Configure -S -O -Dsomething
?X: unfortunately since no new config.sh with the -Dsomething override
?X: will be created before running the .SH files. A minor buglet.
?X:
?X: Note that we must create the directory hierarchy ourselves if it does
?X: not exist already, and that is done through a shell emulation of the
?X: 'mkdir -p' command. We don't want to use the $installdir metaconfig
?X: symbol here since that would require too much to
 be configured for
?X: this simple extraction task that may happen quickly with 'Configure -S'.
?X:  -- RAM, 18/03/96
?X:
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (set x $dir; shift; eval $mkdir_p)
   sh <"$src/$dir/$file"
   ;;
  *)
   sh <"$src/$file"
   ;;
  esac
  ;;
 esac
done
if test -f "$src/config_h.SH"; then
 if test ! -f config.h; then
 : oops, they left it out of MANIFEST, probably, so do it anyway.
 . "$src/config_h.SH"
 fi
fi
EOS
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Extract.U
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```
?RCS: $Id: i_shadow.U,v $
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?RCS:
?MAKE:i_shadow: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_shadow:
?S: This variable conditionally defines the I_SHADOW symbol, and indicates
?S: whether a C program should include <shadow.h>.
?S:.
?C:I_SHADOW:
?C: This symbol, if defined, indicates that <shadow.h> exists and
?C: should be included.
?C:.
?H:#$i_shadow I_SHADOW  /**/
?H:.
?LINT:set i_shadow
: see if this is a shadow.h system
set shadow.h i_shadow
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_shadow.U
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```
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?RCS:
?MAKE:d_accessx: Inlibc
?MAKE: -pick add $@ %<
?S:d_accessx:
?S: This variable conditionally defines the HAS_ACCESSX symbol, which
?S: indicates to the C program that the accessx() routine is available.
?S:.
?C:HAS_ACCESSX :
?C: This symbol, if defined, indicates that the accessx routine is
```

```
?C: available to do extended access checks.
?C:.
?H:#$d_accessx HAS_ACCESSX  /**/
?H:.
?LINT:set d_accessx
: see if accessx exists
set accessx d_accessx
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/d_accessx.U
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```
?RCS: $Id: d_popen.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: $Log: d_popen.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_popen: Inlibc
?MAKE: -pick add $@ %<
?S:d_popen:
?S: This variable conditionally defines HAS_POPEN if popen() is
?S: available to open a pipe from a process.
?S:.
?C:HAS_POPEN (POPEN):
?C: This symbol, if defined, indicates that the popen routine is
?C: available to open a pipe from a process.
?C:.
?H:#$d_popen HAS_POPEN  /**/
?H:.
?LINT:set
 d_popen
: see if popen exists
set popen d_popen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_popen.U

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```
?RCS: $Id: ptrsize.U,v 3.0.1.1 1994/10/29 16:28:19 ram Exp $
?RCS:
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?RCS:
?RCS: $Log: ptrsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:28:19  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ptrsize: cat rm_try Myread Compile run use64bitall i_stdlib d_quad
?MAKE: -pick add $@ %<
?S:ptrsize:
?S: This variable contains the value of the PTRSIZE symbol, which
?S: indicates to the C program how many bytes there are in a pointer.
?S:.
?C:PTRSIZE:
?C: This
 symbol contains the size of a pointer, so that the C preprocessor
?C: can make decisions based on it.  It will be sizeof(void *) if
?C: the compiler supports (void *); otherwise it will be
?C: sizeof(char *).
?C:.
?H:#define PTRSIZE $ptrsize  /**/
?H:.
?F:!try
?LINT:extern use64bitint
: check for length of pointer
echo " "
case "$ptrsize" in
")
 echo "Checking to see how big your pointers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
```

```
{
   printf("%d\n", (int)sizeof(void *));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  ptrsize=`$run ./try`
  echo "Your pointers are $ptrsize bytes long."
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)" >&4
  rp="What is the size of a pointer (in bytes)?"
  . ./myread
  ptrsize="$ans"
 fi
 ;;
esac
$rm_try
case "$use64bitall" in
"$define"|true|[yY]*)
 case "$ptrsize" in
 4) cat <<EOM >&4

*** You
 have chosen a maximally 64-bit build,
*** but your pointers are only 4 bytes wide.
*** Please rerun Configure without -Duse64bitall.
EOM
  case "$d_quad" in
  define)
   cat <<EOM >&4
*** Since you have quads, you could possibly try with -Duse64bitint.
EOM
   ;;
  esac
  cat <<EOM >&4
*** Cannot continue, aborting.

EOM

  exit 1
  ;;
 esac
 ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ptrsize.U
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?RCS:
?RCS: Original Author: H.Merijn Brand
?RCS:
?MAKE:d_isblank: cc cat ccflags ldflags rm libs Setvar
?MAKE: -pick add $@ %<
?S:d_isblank:
?S: This variable conditionally defines the HAS_ISBLANK constant,
?S: which indicates to the C program that isblank() is available.
?S:.
?C:HAS_ISBLANK:
?C: This manifest constant lets the C program know that isblank
?C: is available.
?C:.
?H:#$d_isblank HAS_ISBLANK  /**/
?H:.
?LINT:set d_isblank
?X: Can't use Inlibc because isblank() might be a macro.
: Look for isblank
echo " "
$cat >isblank.c <<'EOCP'
#include
 <stdio.h>
#include <ctype.h>
int main() {
 int c = ' ';
 if (isblank(c))
  return 0 ;
 else
  return 1 ;
}
EOCP
if $cc $ccflags $ldflags -o isblank isblank.c $libs >/dev/null 2>&1 ; then
 echo "isblank() found." >&4
 val="$define"
else
 echo "isblank() NOT found." >&4
 val="$undef"
fi
```

```
set d_isblank
eval $setvar
$rm -f isblank*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isblank.U
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```
?RCS: $Id: d_wait3.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wait3.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wait3: Inlibc
?MAKE: -pick add $@ %<
?S:d_wait3:
?S: This variable conditionally defines the HAS_WAIT3 symbol, which
?S: indicates to the C program that the wait3() subroutine exists.
?S:.
?C:HAS_WAIT3:
?C: This symbol, if defined, indicates that the wait3() subroutine
?C: exists.
?C:.
?H:#$d_wait3 HAS_WAIT3 /**/
?H:.
?LINT:set d_wait3
:
 see if 'wait3()' exists
set wait3 d_wait3
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wait3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasfield string that is used internally
?X: by Configure to check if this system has a field for a
?X: particular struct (of if this system has a particular struct!)
?X:
?X: To use it, say something like:
?X:  set d_statblocks stat st_blocks i_sysstat sys/stat.h
?X:  eval $hasfield
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/foo.h
?X:  $i_sysbar sys/bar.h
?X:  $i_syszot sys/zot.h
?X:  $i_zappa zappa.h"
?X: set d_statblocks stat st_blocks $hdrs
?X: eval $hasfield
?X:
?MAKE:Hasfield: Setvar rm_try test Compile
?MAKE: -pick add $@ %<
?T:varname struct field
?V:hasfield
: Define hasfield macro for Configure internal use
hasfield='varname=$1;
 struct=$2; field=$3; shift; shift; shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 esac ;
   shift 2;
done > try.c;
echo "int main () { struct $struct foo; char* bar; bar = (char*)foo.$field; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasfield.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: MailAuthor.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: MailAuthor.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:04:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:05:09  ram
?RCS: patch32: avoid message sending if they said no previously
?RCS:
?RCS: Revision 3.0.1.3  1993/10/16  13:47:30  ram
?RCS: patch12: now makes sure user-specified address is in Internet format
?RCS:
?RCS: Revision
 3.0.1.2  1993/09/13  15:48:49  ram
?RCS: patch10: reverted to original intent by the Author himself
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:38  ram
?RCS: patch7: now prompts user for its e-mail address
?RCS: patch7: no longer silent when mail has been sent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?RCS:
?X:
?X: This unit asks the user to please send a message to the author.
?X: To force inclusion of this unit, you must add it's name to the
?X: dependancies on the MAKE line in your private copy of End.U.
?X: This allows a smart mailagent program to automatically let users know
?X: when their package is out of date, and to allow users to be notified of
?X: any future patches.
?X:
?MAKE:MailAuthor mailpatches notifypatches usermail: test cat mailer \
 package Myread patchlevel baserev rm rsrc Oldconfig Configdir
?MAKE: -pick wipe $@ %<
?S:mailpatches:
?S: Indicates whether the user would like future patches to be mailed
?S: directly
 to them.
?S:.
```

```
?S:notifypatches:
?S: Indicates whether the user would like notification of future patches
?S: mailed to them.
?S:.
?S:usermail:
?S: This variable is used internally by Configure to keep track of the
?S: user e-mail address, where notifications or patches should be sent.
?S: A '-' value means the return address will be extracted by parsing
?S: the mail headers.
?S:.
?T:opt mailpatches notifypatches atsh status
: notify author that his package is used
if $test -f ../.config/mailauthor &&
 cmp $rsrc/patchlevel.h ../.config/mailauthor >/dev/null 2>&1
then
 status="say that you're using $package";
 case "$mailpatches" in
 true) status='have patches mailed to you as they are issued';;
 esac
 case "$notifypatches" in
 true) status='be notified when new patches are issued';;
 esac
 $cat <<EOM

You have already sent the author of $package (<MAINTLOC>) mail to
$status. If you wish, you may modify
your previous request by sending a new mail with different options.

EOM
 rp='Should
 I send a status update to <MAINTLOC>?'
 dflt=n
else
 $cat <<EOM

If you are able to send mail to the Internet, the author of $package would
really appreciate you letting me send off a quick note, just to say that you've
tried it. The author is more likely to spend time maintaining $package if it's
known that many people are using it, and you can even ask to get sent new
patches automagically this way if you wish. To protect your privacy, all I'll
say in the mail is the version of $package that you're using.

EOM
 rp='Should I send mail to <MAINTLOC>?'
 dflt=y
?X: Ensure default is 'n' if question has been asked already, in case they
?X: run Configure -d next time and answered 'n' the first time. Therefore,
?X: an empty nomail will be created later on even if no mail is sent.
```

```
 $test -f ../.config/nomail && dflt=n
fi
. ./myread
case "$ans" in
[yY]*)
 echo " "
 echo "Great! Your cooperation is really appreciated."
 $cat <<EOM

Some braindead sites do not set a proper return
 address in the From: header of
their outgoing mail, making it impossible to reply to mail they generate.
If your site is broken in this way, write to your system administrator and get
it fixed!!! In the mean time, you can manually specify the Internet e-mail
address by which the author can get back to you, should there be a need to do
so. If manually specified, it should be something like "user@domain.top".
If your mail system generates addresses correctly, specify "none".

EOM
 case "$usermail" in
 '-'|'') dflt=none;;
 *) dflt="$usermail";;
 esac
 rp='Manually specify a return address to use:'
 . ./myread
 case "$ans" in
 none|*@*.*)
  case "$ans" in
  none) usermail='-';;
  *) usermail="$ans";;
  esac
  ;;
 *)
  echo "(Address does not look like an Internet one -- ignoring it.)"
?X:
?X: If we can't trust their mailer or their return address, it's highly
?X: suggested that they only register and don't ask to get anything from
?X: the author, since it's likely to bounce in null-land --
 RAM.
?X:
  usermail='-'
  mailpatches=false
  notifypatches=false
  ;;
 esac
 echo " "
 opt=''
 rp='Would you like to have new patches automatically mailed to you?'
```

```
 case "$mailpatches" in
 true) dflt=y;;
 *) dflt=n;;
 esac
 . ./myread
 case "$ans" in
 [yY]*) opt=' mailpatches'; mailpatches=true;;
 *)
  mailpatches=false
  echo " "
  rp='Ok, would you like to simply be notified of new patches?'
  case "$notifypatches" in
  false) dflt=n;;
  *) dflt=y;;
  esac
  . ./myread
  echo " "
  case "$ans" in
  [yY]*) opt=' notifypatches'; notifypatches=true;;
  *)
   echo "Fine, I'll simply say that you've tried it then."
   notifypatches=false
   ;;
  esac
  ;;
 esac
 echo "Sending mail to <MAINTLOC>..." >&4
?X: Bizarre hack here. We can't just put @SH in the hereis lines below, because
?X: metaconfig will interpret it as a command, and there's no quoting mechanism.
?X: Do it via a variable instead.
 atsh='@SH'
 $mailer <MAINTLOC> <<EOM >/dev/null 2>&1
Subject: Command
Precedence: junk
To: <MAINTLOC>

$atsh
 package $usermail $package $baserev $patchlevel$opt
EOM
 $rm -f ../.config/mailauthor ../.config/nomail
 cp $rsrc/patchlevel.h ../.config/mailauthor
 ;;
*)
 case "$dflt" in
 "y")
  echo "Oh well, maybe next time."
  cp /dev/null ../.config/nomail
  ;;
```

```
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/MailAuthor.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_crypt.U,v $
?RCS:
?RCS: Copyright (c) 2002 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_crypt: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_crypt:
?S: This variable conditionally defines the I_CRYPT symbol, and indicates
?S: whether a C program should include <crypt.h>.
?S:.
?C:I_CRYPT:
?C: This symbol, if defined, indicates that <crypt.h> exists and
?C: should be included.
?C:.
?H:#$i_crypt I_CRYPT  /**/
?H:.
?LINT:set i_crypt
: see if this is a crypt.h system
set crypt.h i_crypt
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_crypt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_socket.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:46:00  ram
```

```
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:04  ram
?RCS: patch16: can now safely declare private nm_extract in dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_socket d_oldsock d_sockpair socketlib sockethdr: contains libc \
 echo n c nm_opt nm_extract Inlibc Csym _a
?MAKE: -pick add $@ %<
?S:d_socket:
?S: This
 variable conditionally defines HAS_SOCKET, which indicates
?S: that the BSD socket interface is supported.
?S:.
?S:d_sockpair:
?S: This variable conditionally defines the HAS_SOCKETPAIR symbol, which
?S: indicates that the BSD socketpair() is supported.
?S:.
?S:d_oldsock:
?S: This variable conditionally defines the OLDSOCKET symbol, which
?S: indicates that the BSD socket interface is based on 4.1c and not 4.2.
?S:.
?S:socketlib:
?S: This variable has the names of any libraries needed for socket support.
?S:.
?S:sockethdr:
?S: This variable has any cpp -I flags needed for socket support.
?S:.
?C:HAS_SOCKET (SOCKET):
?C: This symbol, if defined, indicates that the BSD socket interface is
?C: supported.
?C:.
?C:HAS_SOCKETPAIR (SOCKETPAIR):
?C: This symbol, if defined, indicates that the BSD socketpair() call is
?C: supported.
?C:.
?C:USE_OLDSOCKET (OLDSOCKET):
?C: This symbol, if defined, indicates that the 4.1c BSD socket interface
?C: is supported instead of the 4.2/4.3 BSD
 socket interface. For instance,
?C: there is no setsockopt() call.
?C:.
?H:#$d_socket HAS_SOCKET  /**/
?H:#$d_sockpair HAS_SOCKETPAIR /**/
?H:#$d_oldsock USE_OLDSOCKET /**/
?H:.
```

```
?T:val
?LINT:use libc
?LINT:set d_sockpair
: see whether socket exists
socketlib=''
sockethdr=''
echo " "
$echo $n "Hmm... $c" >&4
if set socket val -f d_socket; eval $csym; $val; then
 echo "Looks like you have Berkeley networking support." >&4
 d_socket="$define"
?X: now check for advanced features
 if set setsockopt val -f; eval $csym; $val; then
  d_oldsock="$undef"
 else
  echo "...but it uses the old 4.1c interface, rather than 4.2" >&4
  d_oldsock="$define"
 fi
else
?X: HP-UX, for one, puts all the socket stuff in socklib.o. Note that if we
?X: come here on HP-UX, then we must have used nm to get symbols, or we really
?X: don't have sockets anyway...
 if $contains socklib libc.list >/dev/null 2>&1; then
  echo "Looks like you have Berkeley networking support." >&4
  d_socket="$define"
  : we will have
 to assume that it supports the 4.2 BSD interface
  d_oldsock="$undef"
 else
  echo "You don't have Berkeley networking in libc$_a..." >&4
?X: look for an optional networking library
  if test -f /usr/lib/libnet$_a; then
?X: space between two  '(' needed for ksh
   ( (nm $nm_opt /usr/lib/libnet$_a | eval $nm_extract) ||  \
   ar t /usr/lib/libnet$_a) 2>/dev/null >> libc.list
   if $contains socket libc.list >/dev/null 2>&1; then
   echo "...but the Wollongong group seems to have hacked it in." >&4
    socketlib="-lnet"
    sockethdr="-I/usr/netinclude"
    d_socket="$define"
?X: now check for advanced features
    if $contains setsockopt libc.list >/dev/null 2>&1; then
     d_oldsock="$undef"
    else
     echo "...using the old 4.1c interface, rather than 4.2" >&4
     d_oldsock="$define"
    fi
   else
```

```
    echo "or even in libnet$_a, which is peculiar." >&4
    d_socket="$undef"
    d_oldsock="$undef"
   fi
  else
   echo "or anywhere else I see." >&4
   d_socket="$undef"
   d_oldsock="$undef"
  fi
 fi
fi

@if
 HAS_SOCKETPAIR || d_sockpair
: see if socketpair exists
set socketpair d_sockpair
eval $inlibc

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_socket.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostbyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostbyname_r gethostbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostbyname_r:
?S: This variable conditionally defines the HAS_GETHOSTBYNAME_R symbol,
?S: which indicates to the C program that the gethostbyname_r()
?S: routine is available.
?S:.
?S:gethostbyname_r_proto:
?S: This variable encodes the prototype of gethostbyname_r.
?S: It is zero if d_gethostbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyname_r
?S: is defined.
?S:.
?C:HAS_GETHOSTBYNAME_R:
?C: This symbol, if defined, indicates
```

```
 that the gethostbyname_r routine
?C: is available to gethostbyname re-entrantly.
?C:.
?C:GETHOSTBYNAME_R_PROTO:
?C: This symbol encodes the prototype of gethostbyname_r.
?C: It is zero if d_gethostbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyname_r
?C: is defined.
?C:.
?H:#$d_gethostbyname_r HAS_GETHOSTBYNAME_R /**/
?H:#define GETHOSTBYNAME_R_PROTO $gethostbyname_r_proto /**/
?H:.
?T:try hdrs d_gethostbyname_r_proto
: see if gethostbyname_r exists
set gethostbyname_r d_gethostbyname_r
eval $inlibc
case "$d_gethostbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_gethostbyname_r_proto:$usethreads" in
 ":define") d_gethostbyname_r_proto=define
  set d_gethostbyname_r_proto gethostbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gethostbyname_r_proto" in
 define)
 case "$gethostbyname_r_proto" in
 "|0) try='int gethostbyname_r(const char*, struct hostent*, char*, size_t, struct
 hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=I_CSBWRE ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) try='struct hostent* gethostbyname_r(const char*, struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=S_CSBIE ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) try='int gethostbyname_r(const char*, struct hostent*, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=I_CSD ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) d_gethostbyname_r=undef
  gethostbyname_r_proto=0
  echo "Disabling gethostbyname_r, cannot determine prototype." >&4 ;;
 * ) case "$gethostbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gethostbyname_r_proto="REENTRANT_PROTO_$gethostbyname_r_proto" ;;
  esac
```

```
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gethostbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_gethostbyname_r=undef
  gethostbyname_r_proto=0
  ;;
 esac
 ;;
*) gethostbyname_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostbyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lrintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_lrintl:
?S: This variable conditionally defines the HAS_LRINTL symbol, which
?S: indicates to the C program that the lrintl() routine is available
?S: to return the integral value closest to a long double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LRINTL:
?C: This symbol, if defined, indicates that the lrintl routine is
?C: available to return the integral value closest to a long double
?C: (according to the current rounding mode).
?C:.
?H:#$d_lrintl HAS_LRINTL  /**/
?H:.
?LINT:set d_lrintl
: see if lrintl exists
set lrintl d_lrintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lrintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sizetype.U,v 3.0.1.1 1994/08/29 16:32:10 ram Exp $
```

```
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: sizetype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:32:10  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:sizetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:sizetype:
?S: This variable defines sizetype to be something like size_t,
?S: unsigned long, or whatever type is used to declare length
?S: parameters for string functions.
?S:.
?C:Size_t:
?C: This symbol holds the type used
 to declare length parameters
?C: for string functions.  It is usually size_t, but may be
?C: unsigned long, int, etc.  It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Size_t $sizetype  /* length parameter for string functions */
?H:.
?LINT: set sizetype
: see what type is used for size_t
rp="What is the type used for the length parameter for string functions?"
set size_t sizetype 'unsigned int' stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/sizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_passwd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_passwd.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:21  ram
?RCS: patch61: useless unit dropped.
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:51  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Useless unit dropped.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_passwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: afs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: afs.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:23:06  ram
?RCS: patch61: can now explicitly tell Configure whether AFS is running
?RCS:
?RCS: Revision 3.0.1.1  1993/08/24  12:24:43  ram
?RCS: patch3: created
?RCS:
?MAKE:afs afsroot: test
?MAKE: -pick add $@ %<
?S:afs:
?S: This variable is set to 'true' if AFS (Andrew File System) is used
?S: on the system, 'false' otherwise.  It is possible to override this
?S: with a hint value or command line option,
 but you'd better know
?S: what you are doing.
?S:.
?S:afsroot:
```

```
?S: This variable is by default set to '/afs'. In the unlikely case
?S: this is not the correct root, it is possible to override this with
?S: a hint value or command line option.  This will be used in subsequent
?S: tests for AFSness in the configure and test process.
?S:.
: allow them to override the AFS root
case "$afsroot" in
") afsroot=/afs ;;
*) afsroot=$afsroot ;;
esac

: is AFS running?
echo " "
case "$afs" in
$define|true) afs=true ;;
$undef|false) afs=false ;;
*) if $test -d $afsroot; then
  afs=true
 else
  afs=false
 fi
 ;;
esac
if $afs; then
 echo "AFS may be running... I'll be extra cautious then..." >&4
else
 echo "AFS does not seem to be running..." >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/afs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dlsymun.U,v $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_dlsymun.U,v $
?RCS:
?RCS:
?MAKE:d_dlsymun: cat cc ccflags ldflags ld rm Setvar dlsrc i_dlfcn i_stdlib \
 cccdlflags ccdlflags lddlflags libs dlext _o run to
?MAKE: -pick add $@ %<
?X: This is specific to perl5.
?S:d_dlsymun:
```

```
?S: This variable conditionally defines DLSYM_NEEDS_UNDERSCORE, which
?S: indicates that we need to prepend an underscore to the symbol
?S: name before calling dlsym().
?S:.
?C:DLSYM_NEEDS_UNDERSCORE:
?C: This symbol, if defined, indicates that we need to prepend an
?C: underscore to the symbol name before calling dlsym().  This only
?C: makes sense if you *have* dlsym, which we will presume is the
?C: case if you're using dl_dlopen.xs.
?C:.
?H:#$d_dlsymun DLSYM_NEEDS_UNDERSCORE /**/
?H:.
?LINT:set
 d_dlsymun
?T: xxx
?F:!fred
: Check if dlsym need a leading underscore
echo " "
val="$undef"

case "$dlsrc" in
dl_dlopen.xs)
 echo "Checking whether your dlsym() needs a leading underscore ..." >&4
 $cat >dyna.c <<'EOM'
fred () { }
EOM

$cat >fred.c<<EOM

#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_dlfcn I_DLFCN
#ifdef I_DLFCN
#include <dlfcn.h>      /* the dynamic linker include file for SunOS/Solaris */
#else
#include <sys/types.h>
#include <nlist.h>
#include <link.h>
#endif

extern int fred() ;

int main()
{
   void * handle ;
```

```
   void * symbol ;
#ifndef RTLD_LAZY
   int mode = 1 ;
#else
   int mode = RTLD_LAZY ;
#endif
   handle = dlopen("./dyna.$dlext", mode) ;
   if (handle == NULL) {
 printf ("1\n") ;
 fflush (stdout) ;
 exit(0);
   }
   symbol = dlsym(handle, "fred") ;
   if (symbol == NULL) {
 /* try putting a leading underscore */
 symbol = dlsym(handle, "_fred") ;
 if (symbol ==
 NULL) {
     printf ("2\n") ;
     fflush (stdout) ;
     exit(0);
 }
 printf ("3\n") ;
   }
   else
 printf ("4\n") ;
   fflush (stdout) ;
   exit(0);
}
EOM
 : Call the object file tmp-dyna.o in case dlext=o.
 if $cc $ccflags $cccdlflags -c dyna.c > /dev/null 2>&1 &&
  mv dyna${_o} tmp-dyna${_o} > /dev/null 2>&1 &&
  $ld -o dyna.$dlext $ldflags $lddlflags tmp-dyna${_o} > /dev/null 2>&1 &&
  $cc -o fred $ccflags $ldflags $cccdlflags $ccdlflags fred.c $libs > /dev/null 2>&1 && $to dyna.$dlext; then
  xxx=`$run ./fred`
  case $xxx in
  1) echo "Test program failed using dlopen." >&4
   echo "Perhaps you should not use dynamic loading." >&4;;
  2) echo "Test program failed using dlsym." >&4
   echo "Perhaps you should not use dynamic loading." >&4;;
  3) echo "dlsym needs a leading underscore" >&4
   val="$define" ;;
  4) echo "dlsym doesn't need a leading underscore." >&4;;
  esac
 else
  echo "I can't compile and run the test program." >&4
              echo "I'm guessing that dlsym
```

```
 doesn't need a leading underscore." >&4
 fi
 ;;
esac

$rm -f fred fred.* dyna.$dlext dyna.* tmp-dyna.*

set d_dlsymun
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dlsymun.U
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?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Unix.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:06  ram
?RCS: patch61: created
?RCS:
?X:
?X: The purpose of this unit is to define things that are common across all
?X: known UNIX platforms. If Configure is ported/used on a non-UNIX
?X: environment, then some of the following variables can be redefined in hint
?X: files.
?X:
?MAKE:Unix _a _o firstmakefile archobjs: Oldconfig
?MAKE: -pick add $@ %<
?S:_a (lib_ext):
?S: This variable defines the extension
 used for ordinary libraries.
?S: For unix, it is '.a'.  The '.' is included.  Other possible
?S: values include '.lib'.
?S:.
?S:_o (obj_ext):
?S: This variable defines the extension used for object files.
?S: For unix, it is '.o'.  The '.' is included.  Other possible
?S: values include '.obj'.
?S:.
```

```
?S:firstmakefile:
?S: This variable defines the first file searched by make.  On unix,
?S: it is makefile (then Makefile).  On case-insensitive systems,
?S: it might be something else.  This is only used to deal with
?S: convoluted make depend tricks.
?S:.
?S:archobjs:
?S: This variable defines any additional objects that must be linked
?S: in with the program on this architecture.  On unix, it is usually
?S: empty.  It is typically used to include emulations of unix calls
?S: or other facilities.  For perl on OS/2, for example, this would
?S: include os2/os2.obj.
?S:.
?INIT:: Extra object files, if any, needed on this platform.
?INIT:archobjs=''
: Define several unixisms.
: Hints files
 or command line option can be used to override them.
case "$_a" in
'') _a='.a';;
esac
case "$_o" in
'') _o='.o';;
esac

@if firstmakefile
: Which makefile gets called first.  This is used by make depend.
case "$firstmakefile" in
'') firstmakefile='makefile';;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Unix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usefaststdio: Myread Oldconfig Setvar rsrc
?MAKE: -pick add $@ %<
?Y:TOP
?S:usefaststdio:
```

```
?S: This variable conditionally defines the USE_FAST_STDIO symbol,
?S: and indicates that Perl should be built to use 'fast stdio'.
?S: Defaults to define in Perls 5.8 and earlier, to undef later.
?S:.
?C:USE_FAST_STDIO:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use 'fast stdio'.
?C: Defaults to define in Perls 5.8 and earlier, to undef later.
?C:.
?H:?%<:#ifndef USE_FAST_STDIO
?H:?%<:#$usefaststdio USE_FAST_STDIO  /**/
?H:?%<:#endif
?H:.
?T:xversion
?LINT:set usefaststdio
: Check if faststdio is requested and available
case "$usefaststdio" in
$define|true|[yY]*|")
 xversion=`awk
 '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
 case "$xversion" in
 [68]) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
*) dflt='n';;
esac
cat <<EOM

Perl can be built to use 'fast stdio', which means using the stdio
library but also directly manipulating the stdio buffers to enable
faster I/O.  Using stdio is better for backward compatibility (especially
for Perl extensions), but on the other hand since Perl 5.8 the 'perlio'
interface has been preferred instead of stdio.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Use the "fast stdio" if available?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usefaststdio
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usefaststdio.U
```

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```
?RCS: $Id: d_strtod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtod.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:36  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_strtod: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtod:
?S: This variable conditionally defines the HAS_STRTOD symbol, which
?S: indicates to the C program that the strtod() routine is available
?S: to provide better numeric string conversion than atof().
?S:.
?C:HAS_STRTOD (STRTOD):
?C: This symbol, if defined,
 indicates that the strtod routine is
?C: available to provide better numeric string conversion than atof().
?C:.
?H:#$d_strtod HAS_STRTOD /**/
?H:.
?LINT:set d_strtod
: see if strtod exists
set strtod d_strtod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_values.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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```

```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_values.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:34  ram
?RCS: patch61: created
?RCS:
?MAKE:i_values: Inhdr
?MAKE: -pick add $@ %<
?S:i_values:
?S: This variable conditionally defines the I_VALUES symbol, and indicates
?S: whether a C program may include <values.h> to get symbols like MAXLONG
?S: and friends.
?S:.
?C:I_VALUES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
 <values.h> to get definition of symbols like MINFLOAT or
?C: MAXLONG, i.e. machine dependant limitations.  Probably, you
?C: should use <limits.h> instead, if it is available.
?C:.
?H:#$i_values I_VALUES  /**/
?H:.
?LINT:set i_values
: see if this is a values.h system
set values.h i_values
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_values.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_drem.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_drem.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:14  ram
?RCS: patch36: created by ADO
```

```
?RCS:
?MAKE:d_drem: Inlibc
?MAKE: -pick add $@ %<
?S:d_drem:
?S: This variable conditionally defines the HAS_DREM symbol, which
?S: indicates to the C program that the drem() routine is available.
?S:.
?C:HAS_DREM :
?C: This symbol, if defined, indicates that the drem routine is
?C: available.
  This routine is roughly the same as fmod, i.e. it
?C: computes the remainder r=x-n*y, where n=rint(x/y), whereas fmod
?C: uses n=trunc(x/y).
?C:.
?H:#$d_drem HAS_DREM  /**/
?H:.
?LINT:set d_drem
: see if drem exists
set drem d_drem
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_drem.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cppfilecom.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: cppfilecom.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppfilecom cppstdinflags d_cppignhdrs d_cppcanstdin: \
 contains package test Myread Oldconfig Loc Setvar cpp cc cat rm
?MAKE: -pick add $@ %<
?S:cppfilecom:
?S: This variable contains the first part of the string which will invoke
?S: the C preprocessor a file
```

```
 and produce to standard output, preserving
?S: comments. Typical value of "cc -E -C" or "/lib/cpp -C".
?S:.
?S:cppstdinflags:
?S: This variable contains any flags necessary to get cppfilecom to read
?S: from the standard input.
?S:.
?S:d_cppignhdrs:
?S: This symbol conditionally defines CPP_IGN_HDRS if CPP_FILE_COM ignores
?S: *.h files.
?S:.
?S:d_cppcanstdin:
?S: This symbol conditionally defines CPP_CAN_STDIN if CPP_FILE_COM can
?S: read standard input directly.
?S:.
?C:CPP_FILE_COM (CPPFILECOM):
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor a file and produce to standard output, preserving
?C: comments. Typical value of "cc -E -C" or "/lib/cpp -C".
?C:.
?C:CPP_STDIN_FLAGS (CPPSTDINFLAGS):
?C: This variable contains any flags necessary to get CPP_FILE_COM to
?C: read from the standard input.
?C:.
?C:CPP_IGN_HDRS (CPPIGNHDRS):
?C: This symbol is defined if CPP_FILE_COM ignores *.h files.
?C:.
?C:CPP_CAN_STDIN (CPPCANSTDIN):
?C: This
 symbol is defined if CPP_FILE_COM can read standard input
?C: directly.
?C:.
?H:#define CPP_FILE_COM "$cppfilecom"
?H:#define CPP_STDIN_FLAGS "$cppstdinflags"
?H:#$d_cppignhdrs CPP_IGN_HDRS  /* does CPP ignore .h files? */
?H:#$d_cppcanstdin CPP_CAN_STDIN  /* can CPP read stdin directly? */
?H:.
?T:cont
?F:!testcpp.c !testcpp.h !testcpp.out
?LINT:set d_cppcanstdin d_cppignhdrs
?LINT:usefile testcpp.c testcpp.out
: see how we invoke the C preprocessor
$cat <<EOM

$package needs to be able to preprocess its input files in a mode which
preserves comments, which is often not the default behaviour.  It should run
the C preprocessor you will use when compiling your own source code, which
should be ISO/ANSI C compliant if you want $package to handle the latest
```

```
standard C.  I will try to guess, but I might guess wrongly because it is not
necessarily the same preprocessor used to build $package.

EOM
$cat <<'EOT' >testcpp.c
#define ABC abc
#define XYZ xyz
ABC.XYZ
/* comment */
EOT
:
if $test "X$cppfilecom"
 != "X" && \
 $cppfilecom testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "You used to use $cppfilecom so we'll use that again."
elif echo 'Maybe "'$cc' -E -C" will work...' && \
 $cc -E -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "It works!"
 cppfilecom="$cc -E -C"
elif echo 'Nope...maybe """$cc"' -P -C" will work...' && \
 $cc -P -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Yup, that does."
 cppfilecom="$cc -P -C"
elif echo 'No such luck, maybe """$cpp"' -C" will work...' && \
 $cpp -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out
 >/dev/null 2>&1
then
 echo "Yup, it does."
 cppfilecom="$cpp -C"
else
 cppfilecom="
 $cat <<'EOM'
I can't find a C preprocessor that will preserve comments. Please name one.
EOM
fi
:
dflt="$cppfilecom"
```

```
cont=true
while $test "$cont" ; do
 echo " "
 rp="How should $package run your preprocessor preserving comments?"
 . ./myread
 cppfilecom="$ans"
 $cppfilecom testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
  $contains comment testcpp.out >/dev/null 2>&1
 then
  echo "OK, that will do."
  cont=''
 else
  echo "Sorry, I can't get that to work."
 fi
done

@if CPP_IGN_HDRS || d_cppignhdrs
: Now see if it ignores header files.
cp testcpp.c testcpp.h
$cppfilecom testcpp.h >testcpp.out 2>&1
if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Terrific; it processes .h files passed on the command line too."
 val="$undef"
else
 echo "It ignores .h files on the command line; pity."
 val="$define"
fi
set
 d_cppignhdrs
eval $setvar

@end
@if CPP_STDIN_FLAGS || CPP_CAN_STDIN || cppstdinflags || d_cppcanstdin
: Now see how to send stdin to it.
echo " "
cp testcpp.c testcpp.h
$cppfilecom <testcpp.h >testcpp.out 2>&1
if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Great; and it will read stdin if passed no arguments."
 val="$define"
 cppstdinflags=''
else
 $cppfilecom - <testcpp.h >testcpp.out 2>&1
```

```
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
  $contains comment testcpp.out >/dev/null 2>&1
 then
  echo "Great; and it can read stdin by passing it '-'."
  val="$define"
  cppstdinflags='-'
 else
  $cat <<FOO
Unfortunately, I can't find an easy way to get that preprocessor to read from
standard input. Do you know any flags I can pass it to get it to do so?
If that preprocessor can't read directly form standard input, answer 'none'.

FOO
 val='dunno'
 while $test "$val" = "dunno"; do
  rp='Flags to get preprocessor
 to read stdin?'
  dflt='none'
  . ./myread
  if $test $ans = 'none'; then
   echo "Oh well, if $package wants it done, it will do it for itself."
   val="$undef"
  else
   $cppfilecom $ans <testcpp.h >testcpp.out 2>&1
   if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
    $contains comment testcpp.out >/dev/null 2>&1
   then
    echo "Good; that works fine."
    val="$define"
    cppstdinflags="$ans"
   else
    echo "Sorry, I couldn't get that to work."
   fi
  fi
 done
 fi
fi
set d_cppcanstdin
eval $setvar

@end
: cleanup cpp test files anyway
$rm -f testcpp.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cppfilecom.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: rcs_branch.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: rcs_branch.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:rcs_branch: Myread contains Loc
?MAKE: -pick add $@ %<
?S:rcs_branch:
?S: This variable will hold "true" if rcs can take the -b<revision>
?S: option, which can make Life Easier on those folks who like to run
?S: rcsdiff manually.
?S:.
?T:xxx
: Tra la la la la
echo " "
echo "Checking to see if RCS understands the -b switch..." >&4
xxx=`./loc
 rcs " $pth`
case "$xxx" in
")
 rcs_branch=false
 echo "Oh.  You don't seem to have RCS here."
 ;;
*)
 rcs > rcsbranch.out 2>&1
 if $contains 'b\[rev\]' rcsbranch.out  >/dev/null 2>&1 ; then
  rcs_branch=true
  echo "Nice!  Your RCS is spiffy!"
 else
  rcs_branch=false
 echo "Well, at least you have RCS.  You know, a newer version is available."
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/rcs_branch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999-2016 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_PRIfldbl sPRIfldbl d_PRIgldbl d_PRIFUldbl sPRIGUldbl d_PRIEUldbl \
 sPRIgldbl d_PRIeldbl sPRIeldbl sPRIFUldbl d_PRIGUldbl sPRIEUldbl \
 d_SCNfldbl  d_double_style_vax d_double_style_ieee \
 d_double_style_ibm d_double_style_cray d_double_has_subnormals \
 d_double_has_inf d_double_has_nan d_double_has_negative_zero \
 sSCNfldbl doublekind: \
 d_longdbl longdblsize doublesize uselongdouble test echo cat rm_try \
 Setvar Compile run i_stdlib osname gccversion ccflags
?MAKE: -pick add $@ %<
?S:doublekind:
?S: This variable, if defined, encodes the type of a double:
?S:  1 = IEEE 754 32-bit little endian,
?S:  2 = IEEE 754 32-bit big endian,
?S:  3 = IEEE 754 64-bit little endian,
?S:  4 = IEEE
 754 64-bit big endian,
?S:  5 = IEEE 754 128-bit little endian,
?S:  6 = IEEE 754 128-bit big endian,
?S:  7 = IEEE 754 64-bit mixed endian le-be,
?S:  8 = IEEE 754 64-bit mixed endian be-le,
?S:  9 = VAX 32bit little endian F float format
?S: 10 = VAX 64bit little endian D float format
?S: 11 = VAX 64bit little endian G float format
?S: 12 = IBM 32bit format
?S: 13 = IBM 64bit format
?S: 14 = Cray 64bit format
?S: -1 = unknown format.
?S:.
?S:d_PRIfldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIgldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIeldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIFUldbl:
```

?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates
 that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIfldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_PRIGUldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIgldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_PRIEUldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIeldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_SCNfldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to scan long doubles.
?S:.
?S:sPRIfldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'f') for
 output.
?S:.
?S:sPRIgldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'g') for output.
?S:.
?S:sPRIeldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'e') for output.
?S:.
?S:sPRIFUldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'F') for output.
?S: The 'U' in the name is to separate this from sPRIfldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRIGUldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'G') for output.
?S: The 'U' in the name is to separate this from sPRIgldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRIEUldbl:

?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'E') for output.
?S: The 'U' in the name is to separate this from sPRIeldbl so that even
?S: case-blind
 systems can see the difference.
?S:.
?S:sSCNfldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'f') for input.
?S:.
?S:d_double_has_inf:
?S: This variable conditionally defines the symbol DOUBLE_HAS_INF
?S: which indicates that the double type has an infinity.
?S:.
?S:d_double_has_nan:
?S: This variable conditionally defines the symbol DOUBLE_HAS_NAN
?S: which indicates that the double type has a not-a-number.
?S:.
?S:d_double_has_negative_zero:
?S: This variable conditionally defines the symbol DOUBLE_HAS_NEGATIVE_ZERO
?S: which indicates that the double type has a negative zero.
?S:.
?S:d_double_has_subnormals:
?S: This variable conditionally defines the symbol DOUBLE_HAS_SUBNORMALS
?S: which indicates that the double type has subnormals (denormals).
?S:.
?S:d_double_style_cray:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_CRAY
?S: which indicates that the double is the 64-bit CRAY mainframe
 format.
?S:.
?S:d_double_style_ibm:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_IBM,
?S: which indicates that the double is the 64-bit IBM mainframe format.
?S:.
?S:d_double_style_ieee:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_IEEE,
?S: which indicates that the double is the 64-bit IEEE 754.
?S:.
?S:d_double_style_vax:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_VAX,
?S: which indicates that the double is the 64-bit VAX format D or G.
?S:.
?C:PERL_PRIfldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'f') for output.
?C:.
?C:PERL_PRIgldbl:

?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'g') for output.
?C:.
?C:PERL_PRIeldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'e') for output.
?C:.
?C:PERL_PRIFldbl:
?C: This symbol, if defined, contains the string used by stdio
to
?C: format long doubles (format 'f') for output.
?C:.
?C:PERL_PRIGldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'g') for output.
?C:.
?C:PERL_PRIEldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'e') for output.
?C:.
?C:PERL_SCNfldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'f') for input.
?C:.
?C:DOUBLEKIND:
?C: DOUBLEKIND will be one of
?C: DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE
?C: DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE
?C: DOUBLE_IS_VAX_F_FLOAT
?C: DOUBLE_IS_VAX_D_FLOAT
?C: DOUBLE_IS_VAX_G_FLOAT
?C: DOUBLE_IS_IBM_SINGLE_32_BIT
?C: DOUBLE_IS_IBM_DOUBLE_64_BIT
?C: DOUBLE_IS_CRAY_SINGLE_64_BIT
?C: DOUBLE_IS_UNKNOWN_FORMAT
?C:.
?C:DOUBLE_HAS_INF:
?C: This
symbol, if defined, indicates that the double has
?C: the infinity.
?C:.
?C:DOUBLE_HAS_NAN:

```
?C: This symbol, if defined, indicates that the double has
?C: the not-a-number.
?C:.
?C:DOUBLE_HAS_NEGATIVE_ZERO:
?C: This symbol, if defined, indicates that the double has
?C: the negative_zero.
?C:.
?C:DOUBLE_HAS_SUBNORMALS:
?C: This symbol, if defined, indicates that the double has
?C: the subnormals (denormals).
?C:.
?C:DOUBLE_STYLE_CRAY:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit CRAY mainframe format.
?C:.
?C:DOUBLE_STYLE_IBM:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit IBM mainframe format.
?C:.
?C:DOUBLE_STYLE_IEEE:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit IEEE 754.
?C:.
?C:DOUBLE_STYLE_VAX:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit VAX format D or G.
?C:.
?LINT:known
 DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE
?LINT:known DOUBLE_IS_VAX_F_FLOAT
?LINT:known DOUBLE_IS_VAX_D_FLOAT
?LINT:known DOUBLE_IS_VAX_G_FLOAT
?LINT:known DOUBLE_IS_IBM_SINGLE_32_BIT
?LINT:known DOUBLE_IS_IBM_DOUBLE_64_BIT
?LINT:known DOUBLE_IS_CRAY_SINGLE_64_BIT
?LINT:known DOUBLE_IS_UNKNOWN_FORMAT
?H:#define DOUBLEKIND $doublekind  /**/
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN 1
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN 2
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN 3
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN 4
```

```
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN 5
?H:?DOUBLEKIND:#define
 DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN 6
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE 7
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE 8
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_F_FLOAT 9
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_D_FLOAT 10
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_G_FLOAT 11
?H:?DOUBLEKIND:#define DOUBLE_IS_IBM_SINGLE_32_BIT 12
?H:?DOUBLEKIND:#define DOUBLE_IS_IBM_DOUBLE_64_BIT 13
?H:?DOUBLEKIND:#define DOUBLE_IS_CRAY_SINGLE_64_BIT 14
?H:?DOUBLEKIND:#define DOUBLE_IS_UNKNOWN_FORMAT  -1
?H:#$d_PRIfldbl PERL_PRIfldbl $sPRIfldbl /**/
?H:#$d_PRIgldbl PERL_PRIgldbl $sPRIgldbl /**/
?H:#$d_PRIeldbl PERL_PRIeldbl $sPRIeldbl /**/
?H:#$d_PRIFUldbl PERL_PRIFldbl $sPRIFUldbl /**/
?H:#$d_PRIGUldbl PERL_PRIGldbl $sPRIGUldbl /**/
?H:#$d_PRIEUldbl PERL_PRIEldbl $sPRIEUldbl /**/
?H:#$d_SCNfldbl PERL_SCNfldbl $sSCNfldbl /**/
?H:#$d_double_has_inf DOUBLE_HAS_INF
?H:#$d_double_has_nan DOUBLE_HAS_NAN
?H:#$d_double_has_negative_zero
 DOUBLE_HAS_NEGATIVE_ZERO
?H:#$d_double_has_subnormals DOUBLE_HAS_SUBNORMALS
?H:#$d_double_style_cray DOUBLE_STYLE_CRAY
?H:#$d_double_style_ibm DOUBLE_STYLE_IBM
?H:#$d_double_style_ieee DOUBLE_STYLE_IEEE
?H:#$d_double_style_vax DOUBLE_STYLE_VAX
?H:.
?T:yyy message saveccflags
?F:!try
?LINT:change ccflags
?LINT:change uselongdouble
: Check what kind of doubles your system has
$echo "Checking the kind of doubles you have..." >&4
$cat >try.c <<EOP
#$i_stdlib I_STDLIB
#define DOUBLESIZE $doublesize
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
static const double d = -0.1;
int main() {
 unsigned const char* b = (unsigned const char*)(&d);
#if DOUBLESIZE == 4
 if (b[0] == 0xCD && b[3] == 0xBD) {
   /* IEEE 754 32-bit little-endian */
```

```
  printf("1\n");
  exit(0);
 }
 if (b[0] == 0xBD && b[3] == 0xCD) {
  /* IEEE 754 32-bit big-endian */
  printf("2\n");
  exit(0);
 }
 if (b[0] == 0xCC && b[3] == 0xCC) {
  /* VAX format F, 32-bit
 PDP-style mixed endian. */
  printf("9\n");
  exit(0);
 }
 if (b[0] == 0xC0 && b[3] == 0x9A) {
  /* IBM single 32-bit */
  printf("12\n");
  exit(0);
 }
#endif
#if DOUBLESIZE == 8
 if (b[0] == 0x9A && b[7] == 0xBF) {
  /* IEEE 754 64-bit little-endian */
  printf("3\n");
  exit(0);
 }
 if (b[0] == 0xBF && b[7] == 0x9A) {
  /* IEEE 754 64-bit big-endian */
  printf("4\n");
  exit(0);
 }
 if (b[0] == 0x99 && b[3] == 0xBF && b[4] == 0x9A && b[7] == 0x99) {
  /* ARM mixed endian: two little-endian 32-bit floats, in big endian order:
   * 4 5 6 7 0 1 2 3 (MSB = 7, LSB = 0)
   * 99 99 b9 bf 9a 99 99 99 */
  printf("7\n");
  exit(0);
 }
 if (b[0] == 0x99 && b[3] == 0x9A && b[4] == 0xBF && b[7] == 0x99) {
  /* The opposite of case 7, mixed endian: two big-endian 32-bit floats,
   * in little endian order: 3 2 1 0 7 6 5 4 (MSB = 7, LSB = 0)
   * 99 99 99 9a bf b9 99 99 */
  printf("8\n");
  exit(0);
 }
 if (b[0] == 0xCC && b[7] == 0xCC) {
  /* VAX
```

```
 format D, 64-bit PDP-style mixed endian. */
   printf("10\n");
   exit(0);
 }
 if (b[0] == 0xD9 && b[7] == 0x99) {
  /* VAX format G, 64-bit PDP-style mixed endian. */
   printf("11\n");
   exit(0);
 }
 if (b[0] == 0xC0 && b[7] == 0x9A) {
   /* IBM double 64-bit */
   printf("13\n");
   exit(0);
 }
 if (b[0] == 0xBF && b[7] == 0xCD) {
   /* CRAY single 64-bit */
   printf("14\n");
   exit(0);
 }
#endif
#if DOUBLESIZE == 16
 if (b[0] == 0x9A && b[15] == 0xBF) {
   /* IEEE 754 128-bit little-endian */
   printf("5\n");
   exit(0);
 }
 if (b[0] == 0xBF && b[15] == 0x9A) {
   /* IEEE 754 128-bit big-endian */
   printf("6\n");
   exit(0);
 }
#endif
 /* Then there are old mainframe/miniframe formats like IBM and CRAY.
  * Whether those environments can still build Perl is debatable. */
 printf("-1\n"); /* unknown */
 exit(0);
}
EOP
set try
if eval $compile; then
   doublekind=`$run ./try`
else
   doublekind=-1
fi
case "$doublekind" in
1) echo "You have IEEE
 754 32-bit little endian doubles." >&4 ;;
2) echo "You have IEEE 754 32-bit big endian doubles." >&4 ;;
```

```
3) echo "You have IEEE 754 64-bit little endian doubles." >&4 ;;
4) echo "You have IEEE 754 64-bit big endian doubles." >&4 ;;
5) echo "You have IEEE 754 128-bit little endian doubles." >&4 ;;
6) echo "You have IEEE 754 128-bit big endian doubles." >&4 ;;
7) echo "You have IEEE 754 64-bit mixed endian doubles (32-bit LEs in BE)." >&4 ;;
8) echo "You have IEEE 754 64-bit mixed endian doubles (32-bit BEs in LE)." >&4 ;;
9) echo "You have VAX format F 32-bit PDP-style mixed endian doubles." >&4 ;;
10) echo "You have VAX format D 64-bit PDP-style mixed endian doubles." >&4 ;;
11) echo "You have VAX format G 64-bit PDP-style mixed endian doubles." >&4 ;;
12) echo "You have IBM short 32-bit doubles." >&4 ;;
13) echo "You have IBM long 64-bit doubles." >&4 ;;
14) echo "You have Cray single 64-bit doubles." >&4 ;;
*) echo "Cannot figure out your double.  You Cyber, or something?" >&4 ;;
esac
d_double_style_ieee=$undef
d_double_style_vax=$undef
d_double_style_ibm=$undef
d_double_style_cray=$undef
case
 "$doublekind" in
1|2|3|4|5|6|7|8) d_double_style_ieee=$define ;;
9|10|11) d_double_style_vax=$define ;;
12|13) d_double_style_ibm=$define ;;
14) d_double_style_cray=$define ;;
esac
case "$d_double_style_ieee" in
$define)
   d_double_has_inf=$define
   d_double_has_nan=$define
   d_double_has_negative_zero=$define
   d_double_has_subnormals=$define
   ;;
*)
   d_double_has_inf=$undef
   d_double_has_nan=$undef
   d_double_has_negative_zero=$undef
   d_double_has_subnormals=$undef
   ;;
esac
$rm_try

: Check print/scan long double stuff
echo " "

if $test X"$d_longdbl" = X"$define"; then

echo "Checking how to print long doubles..." >&4
```

```
if $test X"$sPRIfldbl" = X -a X"$doublesize" = X"$longdblsize"; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 double d = 123.456;
 printf("%.3f\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run
 ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"f"'; sPRIgldbl='"g"'; sPRIeldbl='"e"';
   sPRIFUldbl='"F"'; sPRIGUldbl='"G"'; sPRIEUldbl='"E"';
   echo "We will use %f."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3Lf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"Lf"'; sPRIgldbl='"Lg"'; sPRIeldbl='"Le"';
   sPRIFUldbl='"LF"'; sPRIGUldbl='"LG"'; sPRIEUldbl='"LE"';
   echo "We will use %Lf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
```

```
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3llf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"llf"'; sPRIgldbl='"llg"'; sPRIeldbl='"lle"';
   sPRIFUldbl='"llF"'; sPRIGUldbl='"llG"'; sPRIEUldbl='"llE"';
   echo "We
 will use %llf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3lf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"lf"'; sPRIgldbl='"lg"'; sPRIeldbl='"le"';
   sPRIFUldbl='"lF"'; sPRIGUldbl='"lG"'; sPRIEUldbl='"lE"';
   echo "We will use %lf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 echo "Cannot figure out how to print long doubles." >&4
else
 sSCNfldbl=$sPRIfldbl # expect consistency
fi
```

```
$rm_try

fi # d_longdbl

case "$sPRIfldbl" in
") d_PRIfldbl="$undef"; d_PRIgldbl="$undef"; d_PRIeldbl="$undef";
 d_PRIFUldbl="$undef"; d_PRIGUldbl="$undef"; d_PRIEUldbl="$undef";
 d_SCNfldbl="$undef";
 ;;
*) d_PRIfldbl="$define"; d_PRIgldbl="$define"; d_PRIeldbl="$define";
 d_PRIFUldbl="$define"; d_PRIGUldbl="$define"; d_PRIEUldbl="$define";
 d_SCNfldbl="$define";
 ;;
esac

: Before committing on uselongdouble,
 see whether that looks sane.
if $test "$uselongdouble" = "$define"; then
   message=""
   echo " "
   echo "Checking if your long double math functions work right..." >&4
   $cat > try.c <<EOF
#include <math.h>
#include <stdio.h>
int main() {
 printf("%"$sPRIgldbl"\n", sqrtl(logl(expl(cosl(sinl(0.0L))))+powl(2.0L, 3.0L)));
}
EOF
   case "$osname:$gccversion" in
   aix:) saveccflags="$ccflags"
  ccflags="$ccflags -qlongdouble" ;; # to avoid core dump
   esac
   set try
   if eval $compile_ok; then
     yyy=`$run ./try`
   fi
   case "$yyy" in
   3) echo "Your long double math functions are working correctly." >&4 ;;
   *) echo "Your long double math functions are broken, not using long doubles." >&4
      uselongdouble=$undef
      ;;
   esac
   $rm_try
   case "$osname:$gccversion" in
   aix:) ccflags="$saveccflags" ;; # restore
   esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/longdblfio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpagsz.U,v 3.0.1.1 1994/10/29 16:13:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpagsz.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:10  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpagsz: Compile Oldconfig Myread Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_getpagsz:
?S: This variable conditionally defines HAS_GETPAGESIZE if getpagesize()
?S: is available to get the system page size.
?S:.
?C:HAS_GETPAGESIZE
 (GETPAGESIZE):
?C: This symbol, if defined, indicates that the getpagesize system call
?C: is available to get system page size, which is the granularity of
?C: many memory management calls.
?C:.
?H:#$d_getpagsz HAS_GETPAGESIZE  /**/
?H:.
?LINT:set d_getpagsz
: see if getpagesize exists
set getpagesize d_getpagsz
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_getpagsz.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setrgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setrgid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setrgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setrgid:
?S: This variable conditionally defines the HAS_SETRGID symbol, which
?S: indicates to the C program that the setrgid() routine is available
?S: to change the real gid of the current program.
?S:.
?C:HAS_SETRGID (SETRGID):
?C: This symbol, if defined, indicates that the setrgid
 routine is available
?C: to change the real gid of the current program.
?C:.
?H:#$d_setrgid HAS_SETRGID  /**/
?H:.
?LINT:set d_setrgid
: see if setrgid exists
set setrgid d_setrgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setrgid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endpent: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_endpent:
?S: This variable conditionally defines HAS_ENDPROTOENT if endprotoent() is
?S: available to close whatever was being used for protocol queries.
?S:.
?C:HAS_ENDPROTOENT:
?C: This symbol, if defined, indicates that the endprotoent() routine is
?C: available to close whatever was being used
 for protocol queries.
?C:.
?H:#$d_endpent HAS_ENDPROTOENT  /**/
?H:.
?LINT:set d_endpent
: see if endprotoent exists
set endprotoent d_endpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endpent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mkstemp.U,v 3.0.1.1 1994/08/29 16:11:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mkstemp.U,v $
?RCS:
?MAKE:d_mkstemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkstemp:
?S: This variable conditionally defines the HAS_MKSTEMP symbol, which
?S: indicates to the C program that the mkstemp() routine is available
?S: to exclusively create and open a uniquely named temporary file.
?S:.
?C:HAS_MKSTEMP :
?C: This symbol, if defined, indicates that the mkstemp routine is
?C: available to exclusively create and open a uniquely named
?C: temporary file.
?C:.
?H:#$d_mkstemp HAS_MKSTEMP  /**/
?H:.
?LINT:set d_mkstemp
: see if mkstemp exists
```

```
set mkstemp d_mkstemp
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_mkstemp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_havetlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_havetlib.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:36:31  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:44:06  ram
?RCS: patch23: added AIX support to accept shared lib stub as termlib (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_havetlib termlib: cat contains Myread Loc
 Filexp Oldconfig libpth \
 test uname _a _o
?MAKE: -pick add $@ %<
?S:d_havetlib:
?S: This variable conditionally defines the HAS_TERMLIB symbol, which
?S: indicates to the C program that termlib-style routines are available.
?S:.
?S:termlib:
?S: This variable contains the argument to pass to the loader to get
?S: termlib-style routines.  It is up to the Makefile.SH to make sure
?S: the value gets to the right command.  Note that on many systems the
?S: termlib routines are emulated by the curses or terminfo library.
?S:.
?C:HAS_TERMLIB (HAVETERMLIB):
?C: This symbol, when defined, indicates that termlib-style routines
?C: are available.  There is nothing to include.
?C:.
?H:#$d_havetlib HAS_TERMLIB /**/
```

```
?H:.
?T:xxx
: where do we get termlib routines from
echo " "
xxx=`./loc libcurses$_a x $libpth`
case "$xxx" in
/*)
 ar t $xxx >grimble
 if $contains tputs$_o grimble >/dev/null 2>&1; then
  termlib='-lcurses'
  d_havetlib="$define"
  echo "Terminfo library found." >&4
 elif $test "x`$uname
 2>/dev/null`" = xAIX; then
  # Ok, do the AIX shr.o fun thing
  /usr/ccs/bin/nm -en $xxx 2>/dev/null >grimble
  if $contains '^tputs .*|extern|' grimble >/dev/null 2>&1; then
   termlib='-lcurses'
   d_havetlib="$define"
   echo "AIX Terminfo library found." >&4
  else
   xxx=x
  fi
 else
  xxx=x
 fi
 rm -f grimble
 ;;
esac
case "$xxx" in
x)
 xxx=`./loc libtermlib$_a x $libpth`
 case "$xxx" in
 /usr/lib*|/lib*)
  termlib='-ltermlib'
  d_havetlib="$define"
  echo "Termlib library found." >&4
  ;;
 /*)
  termlib="$xxx"
  d_havetlib="$define"
  echo "Termlib library found." >&4
  ;;
 *)
  xxx=`./loc libtermcap$_a x $libpth`
  case "$xxx" in
  /usr/lib*|/lib*)
   termlib='-ltermcap'
```

```
  d_havetlib="$define"
  echo "Termcap library found." >&4
  ;;
 /*)
  termlib="$xxx"
  d_havetlib="$define"
  echo "Termcap library found." >&4
  ;;
 *)
  case "$termlib" in
  ")
   dflt=y
rp="Your system appears to NOT have termlib-style routines. Is this true?"
   . ./myread
   case "$ans"
 in
   n*|f*) d_havetlib="$define"
    $cat <<'EOM'
Then where are the termlib-style routines kept? Specify either -llibname
or a full pathname (~name ok).

EOM
    dflt="
    rp='Specify termlib path:'
    . ./myread
    termlib=`./filexp $ans`
    ;;
   *)
    d_havetlib="$undef"
    termlib="
    echo "You will have to play around with term.c then." >&4
    ;;
   esac
  echo " ";;
  *)  echo "You said termlib was $termlib before." >&4;;
  esac;;
 esac;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_havetlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ckeypad.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ckeypad.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ckeypad: cat cc termlib Setvar
?MAKE: -pick add $@ %<
?S:d_ckeypad:
?S: This variable controls the definition of HAS_CURSES_KEYPAD,
?S: which tells the application that the keypad() curses function
?S: is available.
?S:.
?C:HAS_CURSES_KEYPAD:
?C: This symbol indicates the availability of the keypad() function
?C: of the curses library.
?C:.
?H:#$d_ckeypad
 HAS_CURSES_KEYPAD /**/
?H:.
?LINT:set d_ckeypad
: check for the "keypad()" function in the curses library
echo " "
case "$termlib" in
")
 echo "You don't have a curses library, so I won't waste time looking" >&4
 echo "to see if has the keypad() function." >&4
*)
echo "Checking the curses library ($termlib) for the keypad() function..." >&4
 $cat >c_keypad.c <<'EOCP'
#include <curses.h>
int main() {
 keypad(stdscr, TRUE);
 exit(0);
}
EOCP
 if $cc c_keypad.c >c_keypad.out 2>&1 ; then
  val=$define
  echo "It appears to have the keypad() function."
 else
  val=$undef
  echo "Your curses library doesn't appear to have the keypad() function."
 fi
esac
```

```
set d_ckeypad
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ckeypad.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_malloc.U,v 3.1 2003/01/21 18:51:51 merijn Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.1  2003/01/21  18:51:51  merijn
?RCS: Moved to modified: Ihdr replaced with Compile
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_malloc: cat rm_try Compile Setvar i_mallocmalloc
?MAKE: -pick add $@ %<
?S:i_malloc:
?S: This variable conditionally defines the I_MALLOC symbol, and indicates
?S: whether a C program should include <malloc.h>.
?S:.
?C:I_MALLOC:
?C: This
 symbol, if defined, indicates to the C program that it should
?C: include <malloc.h>.
?C:.
?H:#$i_malloc I_MALLOC  /**/
?H:.
?LINT:set i_malloc
: see if this is a malloc.h system
: we want a real compile instead of Inhdr because some systems have a
: malloc.h that just gives a compile error saying to use stdlib.h instead
echo " "
$cat >try.c <<EOCP
#include <stdlib.h>
#include <malloc.h>
#$i_mallocmalloc I_MALLOCMALLOC
#ifdef I_MALLOCMALLOC
```

```
# include <malloc/malloc.h>
#endif

int main () { return 0; }
EOCP
set try
if eval $compile; then
   echo "<malloc.h> found." >&4
   val="$define"
else
   echo "<malloc.h> NOT found." >&4
   val="$undef"
fi
$rm_try
set i_malloc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_malloc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lib.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:16:47  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:38:08  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:27:40  ram
?RCS: patch32: now uses installation prefix to set the default
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lib libexp: Getfile
 Loc Oldconfig Prefixit Prefixup prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
```

```
?S:lib:
?S: This variable holds the name of the directory in which the user wants
?S: to put public library files for the package in question.  It is most
?S: often a local directory such as /usr/local/lib. Programs using this
?S: variable must be prepared to deal with filename expansion.
?S:.
?S:libexp:
?S: This variable is the same as the lib variable, but is filename expanded
?S: at configuration time, for convenient use in your makefiles.
?S:.
: determine where public libraries go
set lib lib
eval $prefixit
case "$lib" in
")
 dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
 set dflt
 eval $prefixup
 ;;
*)  dflt="$lib";;
esac
echo " "
fn=d~
rp='Where do you want to put the public libraries?'
. ./getfile
lib="$ans"
libexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_cbrt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_cbrt.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_cbrt: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_cbrt:
?S: This variable conditionally defines the HAS_CBRT symbol, which
?S: indicates to the C program that the cbrt() (cube root) function
?S: is available.
?S:.
?C:HAS_CBRT (CBRT):
?C: This symbol, if defined, indicates that the cbrt() (cube root)
?C: function is available.
?C:.
?H:#$d_cbrt HAS_CBRT /**/
?H:.
?LINT:set
 d_cbrt
: see if cbrt exists
set cbrt d_cbrt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_cbrt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2015 Jarkko Hietaniemi, H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:longdblinfbytes longdblnanbytes doubleinfbytes doublenanbytes: Inlibc \
 cat Compile run rm_try Setvar echo d_longdbl \
 doublekind doublesize longdblkind longdblsize
?MAKE: -pick add $@ %<
?S:longdblinfbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the long double precision infinity.
?S:.
?S:longdblnanbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the long double precision not-a-number.
?S:.
?S:doubleinfbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the double precision infinity.
?S:.
?S:doublenanbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for
```

```
 the double precision not-a-number.
?S:.
?C:DOUBLEINFBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes for the double precision infinity.
?C:.
?C:DOUBLENANBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes (0xHH) for the double precision not-a-number.
?C:.
?C:LONGDBLINFBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes for the long double precision infinity.
?C:.
?C:LONGDBLNANBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes (0xHH) for the long double precision not-a-number.
?C:.
?H:#define DOUBLEINFBYTES  $doubleinfbytes  /**/
?H:#define DOUBLENANBYTES  $doublenanbytes  /**/
?H:#define LONGDBLINFBYTES $longdblinfbytes  /**/
?H:#define LONGDBLNANBYTES $longdblnanbytes  /**/
?H:.
?F:!try
: Check what kind of inf/nan your system has
$echo "Checking the kind of infinities and nans you have..." >&4
$echo "(The following tests may crash.  That's
 okay.)" >&4
$cat >try.c <<EOP
#define DOUBLESIZE $doublesize
#$d_longdbl HAS_LONG_DOUBLE
#ifdef HAS_LONG_DOUBLE
#define LONG_DOUBLESIZE $longdblsize
#define LONG_DOUBLEKIND $longdblkind
#endif
#include <math.h>
#include <string.h>
#include <stdio.h>
/* Note that whether the sign bit is on or off
* for NaN depends on the CPU/FPU, and possibly
* can be affected by the build toolchain.
*
* For example for older MIPS and HP-PA 2.0 the quiet NaN is:
* 0x7f, 0xf7, 0xff, 0xff, 0xff, 0xff, 0xff, 0xff
* 0x7f, 0xf4, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00
* (respectively) as opposed to the more usual
* 0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00
*
```

```
* Pre-IEEE-754 floating point format do not even have inf/nan support
* at all.  They might have a "max" value (DBL_MAX), which may be deadly
* to even mention, causing immediate SIGFPE or equivalent: this is
* the case with VAX floating point, for example.
*/
static void bytes(void *v, unsigned int n) {
 unsigned char *p = (unsigned
 char *)v;
 int i;
 for (i = 0; i < n; i++) {
   printf("0x%02x%s", p[i], i < n - 1 ? ", " : "\n");
 }
}
int main(int argc, char *argv[]) {
  /* We cannot use 1.0/0.0 and 0.0/0.0 (with L suffixes for long double)
   * because some compilers are 'smart' and not only warn but refuse to
   * compile such 'illegal' values. */
  double dinf = exp(1e9);
  double dnan = sqrt(-1.0);
#ifdef HAS_LONG_DOUBLE
  long double ldinf = (long double)exp(1e9);
  long double ldnan = (long double)sqrt(-1.0);
# if LONG_DOUBLEKIND == 3 || LONG_DOUBLEKIND == 4
/* the 80-bit long doubles might have garbage in their excess bytes */
   memset((char *)&ldinf + 10, '\0', LONG_DOUBLESIZE - 10);
   memset((char *)&ldnan + 10, '\0', LONG_DOUBLESIZE - 10);
# endif
#endif
 if (argc == 2) {
   switch (argv[1][0]) {
   case '1': bytes(&dinf, sizeof(dinf)); break;
   case '2': bytes(&dnan, sizeof(dnan)); break;
#ifdef HAS_LONG_DOUBLE
   case '3': bytes(&ldinf, sizeof(ldinf)); break;
   case '4': bytes(&ldnan,
 sizeof(ldnan)); break;
#endif
   }
 }
 return 0;
}
EOP
set try
if eval $compile; then
   doubleinfbytes=`$run ./try 1`
   doublenanbytes=`$run ./try 2`
   case "$d_longdbl" in
   $define)
```

```
    longdblinfbytes=`$run ./try 3`
    longdblnanbytes=`$run ./try 4`
    ;;
  esac
else
  # Defaults in case the above test program failed.
  case "$doublekind" in
  1) # IEEE 754 32-bit LE
    doubleinfbytes='0x00, 0x00, 0xf0, 0x7f'
    doublenanbytes='0x00, 0x00, 0xf8, 0x7f'
    ;;
  2) # IEEE 754 32-bit BE
    doubleinfbytes='0x7f, 0xf0, 0x00, 0x00'
    doublenanbytes='0x7f, 0xf8, 0x00, 0x00'
    ;;
  3) # IEEE 754 64-bit LE
    doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0, 0x7f'
    doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8, 0x7f'
    ;;
  4) # IEEE 754 64-bit BE
    doubleinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
    doublenanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'

 ;;
  5) # IEEE 754 128-bit LE
    doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0,
0x7f'
    doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8,
0x7f'
    ;;
  6) # IEEE 754 128-bit BE
    doubleinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    doublenanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  7) # IEEE 754 64-bit mixed: 32-bit LEs in BE
    doubleinfbytes='0x00, 0x00, 0xf0, 0x7f, 0x00, 0x00, 0x00, 0x00'
    doublenanbytes='0x00, 0x00, 0xf8, 0x7f, 0x00, 0x00, 0x00, 0x00'
    ;;
  8) # IEEE 754 64-bit mixed: 32-bit BEs in LE
    doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x7f, 0xf0, 0x00, 0x00'
    doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x7f, 0xf8, 0x00, 0x00'
    ;;
  9|10|11|12|13|14) # VAX/Cray/IBM floating
 point formats, no inf/nan.
    doubleinfbytes=$undef
    doublenanbytes=$undef
```

```
    ;;
  *) # No idea.
    doubleinfbytes=$undef
    doublenanbytes=$undef
    ;;
  esac
  case "$longdblkind" in
  1) # IEEE 754 128-bit LE
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xff,
0x7f'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff,
0x7f'
    ;;
  2) # IEEE 754 128-bit BE
    longdblinfbytes='0x7f, 0xff, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  3) # IEEE 754 80-bit LE, 12 or 16 bytes (x86)
    case "$longdblsize" in
    12) # x86 32-bit (96 bits, or 4 x 32, or 12 x 8)
      longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff, 0x7f,
 0x00, 0x00'
      longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xc0, 0xff, 0x7f, 0x00, 0x00'
      ;;
    16) # x86_64
      longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
      longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xc0, 0xff, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
      ;;
    *)  # No idea.
      longdblinfbytes=$undef
      longdblnanbytes=$undef
    ;;
    esac
    ;;
  4) # IEEE 754 80-bit BE, 12 or 16 bytes
    case "$longdblsize" in
    12) # 32-bit system
      longdblinfbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
      longdblnanbytes='0x7f, 0xff, 0xc0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
      ;;
    16) # 64-bit system
      longdblinfbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
```

```
        longdblnanbytes='0x7f, 0xff, 0xc0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
        ;;
    *)  # No idea.
        longdblinfbytes=$undef
        longdblnanbytes=$undef
    ;;
    esac
    ;;
  5) # 128-bit LE-LE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0,
0x7f'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8,
0x7f'
    ;;
  6) # 128-bit BE-BE "double double"
    longdblinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  7) # 128-bit LE-BE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'

    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  8) # 128-bit BE-LE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  9|10|11|12|13|14) # VAX/Cray/IBM floating point formats, no inf/nan.
    longdblinfbytes=$undef
    longdblnanbytes=$undef
    ;;
  *) # No idea.
    longdblinfbytes=$undef
    longdblnanbytes=$undef
    ;;
  esac
fi
# In case the program crashed the values are empty, turn them undef.
case "$doubleinfbytes" in
") doubleinfbytes=$undef ;;
esac
```

```
case "$doublenanbytes" in
") doublenanbytes=$undef ;;
esac
case "$longdblinfbytes" in
") longdblinfbytes=$undef ;;
esac
case "$longdblnanbytes" in
") longdblnanbytes=$undef ;;
esac
$rm_try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/infnan.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getlogin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_getlogin.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:41  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_getlogin: Inlibc
?MAKE: -pick add $@ %<
?S:d_getlogin:
?S: This variable conditionally defines the HAS_GETLOGIN symbol, which
?S: indicates to the C program that the getlogin() routine is available
?S: to get the login name.
?S:.
?C:HAS_GETLOGIN :
?C: This symbol,
 if defined, indicates that the getlogin routine is
?C: available to get the login name.
?C:.
?H:#$d_getlogin HAS_GETLOGIN  /**/
?H:.
?LINT:set d_getlogin
: see if getlogin exists
```

```
set getlogin d_getlogin
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getlogin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cppstdin.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:08:34  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:05:38  ram
?RCS: patch16: comment for CPPLAST was missing
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:18:58  ram
?RCS: patch15: new variables cpprun and cpplast, guaranteed wrapper-free
?RCS: patch15: cppstdin now tries to use cc, even at the cost of a wrapper
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:53  ram
?RCS: patch6:
 remove wrapper when not actually used
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppstdin cppminus cpprun cpplast: contains test Myread Oldconfig Loc \
 cpp +cc rm hint osname gccversion startsh eunicefix
?MAKE: -pick add $@ %<
?S:cppstdin:
?S: This variable contains the command which will invoke the C
?S: preprocessor on standard input and put the output to stdout.
?S: It is primarily used by other Configure units that ask about
?S: preprocessor symbols.
?S:.
?S:cppminus:
?S: This variable contains the second part of the string which will invoke
?S: the C preprocessor on the standard input and produce to standard
?S: output.  This variable will have the value "-" if cppstdin needs
```

```
?S: a minus to specify standard input, otherwise the value is "".
?S:.
?S:cpprun:
?S: This variable contains the command which will invoke a C preprocessor
?S: on standard input and put the output to stdout. It is guaranteed not
?S: to be a wrapper
 and may be a null string if no preprocessor can be
?S: made directly available. This preprocessor might be different from the
?S: one used by the C compiler. Don't forget to append cpplast after the
?S: preprocessor options.
?S:.
?S:cpplast:
?S: This variable has the same functionality as cppminus, only it applies to
?S: cpprun and not cppstdin.
?S:.
?C:CPPSTDIN:
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  Typical value of "cc -E" or "/lib/cpp", but it can also
?C: call a wrapper. See CPPRUN.
?C:.
?C:CPPMINUS:
?C: This symbol contains the second part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  This symbol will have the value "-" if CPPSTDIN needs a minus
?C: to specify standard input, otherwise the value is "".
?C:.
?C:CPPRUN:
?C: This symbol contains the string which will invoke a C preprocessor on
?C: the
 standard input and produce to standard output. It needs to end
?C: with CPPLAST, after all other preprocessor flags have been specified.
?C: The main difference with CPPSTDIN is that this program will never be a
?C: pointer to a shell wrapper, i.e. it will be empty if no preprocessor is
?C: available directly to the user. Note that it may well be different from
?C: the preprocessor used to compile the C program.
?C:.
?C:CPPLAST:
?C: This symbol is intended to be used along with CPPRUN in the same manner
?C: symbol CPPMINUS is used with CPPSTDIN. It contains either "-" or "".
?C:.
?H:#define CPPSTDIN "$cppstdin"
?H:#define CPPMINUS "$cppminus"
?H:#define CPPRUN "$cpprun"
?H:#define CPPLAST "$cpplast"
?H:.
?F:cppstdin !testcpp.out !testcpp.c
?T:wrapper x_cpp x_minus ok
```

```
: see how we invoke the C preprocessor
echo " "
echo "Now, how can we feed standard input to your C preprocessor..." >&4
cat <<'EOT' >testcpp.c
#define ABC abc
#define XYZ xyz
ABC.XYZ
EOT
cd ..
if $test ! -f cppstdin;
 then
 echo "$startsh" >cppstdin
if $test "X$osname" = "Xaix" -a "X$gccversion" = X; then
?X: AIX cc -E doesn't show the absolute headerfile
?X: locations but we'll cheat by using the -M flag.
 echo 'cat >.$$.c; rm -f .$$.u; "$cc" ${1+"$@"} -M -c .$$.c 2>/dev/null; \
 test -s .$$.u && \
 awk """"$2 ~ /\.h$/ { print "# 0 \""$2"\"" }"""" .$$.u; \
 rm -f .$$.o .$$.u; "$cc" -E ${1+"$@"} .$$.c; rm .$$.c' >> cppstdin
else
 echo 'cat >.$$.c; "$cc" -E ${1+"$@"} .$$.c; rm .$$.c' >>cppstdin
fi; else
 echo "Keeping your $hint cppstdin wrapper."
fi
chmod 755 cppstdin
$eunicefix cppstdin
wrapper=`pwd`/cppstdin
ok='false'
cd UU

?X:
?X: We'll run the cpp tests again if we don't have any valid C preprocessor
?X: yet or don't know how to proceed without a wrapper (in which case cpprun
?X: is empty and that's really annoying...)
?X:
if $test "X$cppstdin" != "X" && \
 $cppstdin $cppminus <testcpp.c >testcpp.out 2>&1 && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
then
 echo "You used to use
 $cppstdin $cppminus so we'll use that again."
 case "$cpprun" in
 ") echo "But let's see if we can live without a wrapper..." ;;
 *)
  if $cpprun $cpplast <testcpp.c >testcpp.out 2>&1 && \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
   echo "(And we'll use $cpprun $cpplast to preprocess directly.)"
```

```
   ok='true'
  else
   echo "(However, $cpprun $cpplast does not work, let's see...)"
  fi
  ;;
 esac
else
 case "$cppstdin" in
 '') ;;
 *)
  echo "Good old $cppstdin $cppminus does not seem to be of any help..."
  ;;
 esac
fi

if $ok; then
 : nothing
elif echo 'Maybe """$cc"' -E" will work...'; \
 $cc -E <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc -E"
 x_minus='';
elif echo 'Nope...maybe """$cc"' -E -" will work...'; \
 $cc -E - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc -E"
 x_minus='-';
elif echo 'Nope...maybe """$cc"'
 -P" will work...'; \
 $cc -P <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yipee, that works!"
 x_cpp="$cc -P"
 x_minus='';
elif echo 'Nope...maybe """$cc"' -P -" will work...'; \
 $cc -P - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "At long last!"
 x_cpp="$cc -P"
 x_minus='-';
elif echo 'No such luck, maybe "$cpp" will work...'; \
 $cpp <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "It works!"
 x_cpp="$cpp"
 x_minus='';
```

```
elif echo 'Nixed again...maybe "'$cpp' -" will work...'; \
 $cpp - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Hooray, it works!  I was beginning to wonder."
 x_cpp="$cpp"
 x_minus='-';
elif echo 'Uh-uh.  Time to get fancy.  Trying a wrapper...'; \
 $wrapper <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 x_cpp="$wrapper"
 x_minus=''
 echo
 "Eureka!"
else
 dflt=''
 rp="No dice.  I can't find a C preprocessor.  Name one:"
 . ./myread
 x_cpp="$ans"
 x_minus=''
 $x_cpp <testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
  echo "OK, that will do." >&4
 else
echo "Sorry, I can't get that to work.  Go find one and rerun Configure." >&4
  exit 1
 fi
fi

case "$ok" in
false)
 cppstdin="$x_cpp"
 cppminus="$x_minus"
 cpprun="$x_cpp"
 cpplast="$x_minus"
?X:
?X: If /lib/cpp is used, try using a wrapper to increase our chances to have
?X: the C compiler and our $cppstdin agree on the same symbols... However,
?X: since cpprun is guaranteed not to be a wrapper, we must clear it if the
?X: only preprocessor we found was a wrapper, with all our luck...
?X:
 set X $x_cpp
 shift
 case "$1" in
 "$cpp")
  echo "Perhaps can we force $cc -E using a wrapper..."
  if $wrapper <testcpp.c >testcpp.out 2>&1; \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
```

```
  echo "Yup, we can."
  cppstdin="$wrapper"
  cppminus=";
 else
  echo
"Nope, we'll have to live without it..."
 fi
 ;;
esac
case "$cpprun" in
"$wrapper")
 cpprun="
 cpplast="
 ;;
esac
;;
esac

case "$cppstdin" in
"$wrapper"|'cppstdin') ;;
*) $rm -f $wrapper;;
esac
$rm -f testcpp.c testcpp.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cppstdin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fdim: Inlibc
?MAKE: -pick add $@ %<
?S:d_fdim:
?S: This variable conditionally defines the HAS_FDIM symbol, which
?S: indicates to the C program that the fdim() routine is available.
?S:.
?C:HAS_FDIM:
?C: This symbol, if defined, indicates that the fdim routine is
?C: available to do the positive difference function.
?C:.
?H:#$d_fdim HAS_FDIM  /**/
?H:.
?LINT:set d_fdim
: see if fdim exists
set fdim d_fdim
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fdim.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: h_sysfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: h_sysfile.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:h_sysfile: Nothing
?MAKE: -pick add $@ %<
?S:h_sysfile:
?S: This is variable gets set in various places to tell i_sys_file that
?S: <sys/file.h> should be included.
?S:.
: Initialize h_sysfile
h_sysfile=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/h_sysfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dld.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_dld.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:20:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:i_dld: Inhdr
```

```
?MAKE: -pick add $@ %<
?S:i_dld:
?S: This variable conditionally defines the I_DLD symbol, which
?S: indicates to the C program that <dld.h> (GNU dynamic loading)
?S: exists and should be included.
?S:.
?C:I_DLD:
?C: This symbol, if defined, indicates that <dld.h>
 exists and should
?C: be included before using GNU dynamic loading features.
?C:.
?H:#$i_dld I_DLD /**/
?H:.
?LINT:set i_dld
: see if dld is available
set dld.h i_dld
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dld.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Begin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Begin.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:56:35  ram
?RCS: patch61: added Extractall dependency
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:25:08  ram
?RCS: patch49: avoid an empty rmlist: systems might choke on it (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/31  09:32:20  ram
?RCS: patch44: created
?RCS:
?X:
?X: This file comes after option processing had been done and after all
?X: the default values have been set up. It marks the beginning
 of questions.
?X: It is important that Options be listed *after* Myinit to ensure that the
?X: default initializations performed by Init and Myinit will not clobber
```

```
?X: any setting done on the command line via -D or -U.
?X:
?MAKE:Begin: Myinit Options package Extractall
?MAKE: -pick add $@ %<
: Eunice requires " " instead of "", can you believe it
echo " "
: Here we go...
echo "Beginning of configuration questions for $package."

?X: Make sure the rm below is given a non-empty list for some systems.
?X: This is run only when within the UU directory, hence we can safely
?X: attempt to rm a non-existent 'X' file...
trap 'echo " "; test -d ../UU && rm -rf X $rmlist; exit 1' 1 2 3 15
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Begin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sgndchr.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:44:25  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:00:24  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sgndchr: cat rm +cc +ccflags Setvar
?MAKE: -pick add $@ %<
?S:d_sgndchr:
?S: This variable conditionally defines the SIGNEDCHAR symbol, which
?S: indicates to the C program
 that signed characters are available.
?S:.
?C:SIGNEDCHAR:
?C: This symbol, if defined, indicates that characters are a signed type.
?C: If not defined, things declared as signed characters (and that make
```

```
?C: use of negative values) should probably be declared as shorts instead.
?C:.
?H:#$d_sgndchr SIGNEDCHAR /**/
?H:.
?F:!try
?LINT:set d_sgndchr
: check for signed chars
echo " "
echo "Checking to see if your C compiler can do signed chars..." >&4
$cat >try.c <<'EOCP'
int main()
{
 char c = 0;

 c--;
 exit(c >= 0);
}
EOCP
$cc $ccflags -o try try.c
if ./try; then
 val="$define"
 echo "It certainly can."
else
 val="$undef"
 echo "It can't.  I'll have to make some things type short."
fi
set d_sgndchr
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sgndchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_endnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endnent:
?S: This variable conditionally defines HAS_ENDNETENT if endnetent() is
?S: available to close whatever was being used for network queries.
?S:.
?C:HAS_ENDNETENT:
?C: This symbol, if defined, indicates that the endnetent() routine is
?C: available to close whatever was being used for network
 queries.
?C:.
?H:#$d_endnent HAS_ENDNETENT  /**/
?H:.
?LINT:set d_endnent
: see if endnetent exists
set endnetent d_endnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endnent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llrint: Inlibc
?MAKE: -pick add $@ %<
?S:d_llrint:
?S: This variable conditionally defines the HAS_LLRINT symbol, which
?S: indicates to the C program that the llrint() routine is available
?S: to return the long long value closest to a double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LLRINT:
?C: This symbol, if defined, indicates that the llrint routine is
?C: available to return the long long value closest to a double
?C: (according to the current rounding mode).
?C:.
?H:#$d_llrint HAS_LLRINT  /**/
?H:.
?LINT:set d_llrint
: see if llrint exists
set llrint d_llrint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llrint.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dosuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Tye McQueen <tye@metronet.com> added safe setuid script checks.
?RCS:
?RCS: $Log: d_dosuid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:33:03  ram
?RCS: patch61: moved unit to TOP via a ?Y: layout directive
?RCS: patch61: tell them /dev/fd is not about floppy disks
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:08  ram
?RCS: patch36: added checks for secure setuid scripts (Tye McQueen)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:55  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?MAKE:d_dosuid d_suidsafe: cat contains ls rm test Myread Setvar \
 Oldconfig Guess package hint patchlevel
?MAKE: -pick add $@ %<
?S:d_suidsafe:
?S: This variable conditionally defines SETUID_SCRIPTS_ARE_SECURE_NOW
?S: if setuid scripts can be secure.  This test looks in /dev/fd/.
?S:.
?S:d_dosuid:
?S: This variable conditionally defines the symbol DOSUID, which
?S: tells the C program that it should insert setuid emulation code
?S: on hosts which have setuid #! scripts disabled.
?S:.
?C:SETUID_SCRIPTS_ARE_SECURE_NOW:
?C: This symbol, if defined, indicates that the bug that prevents
?C: setuid scripts from being secure is not present in this kernel.
?C:.
?C:DOSUID:
?C: This symbol, if defined, indicates that the C program should
?C: check the script that it is executing for setuid/setgid bits, and
?C: attempt to emulate setuid/setgid on systems that have disabled
?C: setuid #! scripts because the kernel can't do it securely.
?C: It is up to the package
```

```
 designer to make sure that this emulation
?C: is done securely.  Among other things, it should do an fstat on
?C: the script it just opened to make sure it really is a setuid/setgid
?C: script, it should make sure the arguments passed correspond exactly
?C: to the argument on the #! line, and it should not trust any
?C: subprocesses to which it must pass the filename rather than the
?C: file descriptor of the script to be executed.
?C:.
?H:#$d_suidsafe SETUID_SCRIPTS_ARE_SECURE_NOW /**/
?H:#$d_dosuid DOSUID  /**/
?H:.
?Y:TOP
?F:!reflect
?LINT: set d_suidsafe
: see if setuid scripts can be secure
$cat <<EOM

Some kernels have a bug that prevents setuid #! scripts from being
secure.  Some sites have disabled setuid #! scripts because of this.

First let's decide if your kernel supports secure setuid #! scripts.
(If setuid #! scripts would be secure but have been disabled anyway,
don't say that they are secure if asked.)

EOM

val="$undef"
if $test -d /dev/fd; then
 echo "#!$ls" >reflect
 chmod
 +x,u+s reflect
 ./reflect >flect 2>&1
 if $contains "/dev/fd" flect >/dev/null; then
  echo "Congratulations, your kernel has secure setuid scripts!" >&4
  val="$define"
 else
  $cat <<EOM
If you are not sure if they are secure, I can check but I'll need a
username and password different from the one you are using right now.
If you don't have such a username or don't want me to test, simply
enter 'none'.

EOM
  rp='Other username to test security of setuid scripts with?'
  dflt='none'
  . ./myread
  case "$ans" in
  n|none)
```

```
  case "$d_suidsafe" in
  ") echo "I'll assume setuid scripts are *not* secure." >&4
   dflt=n;;
  "$undef")
   echo "Well, the $hint value is *not* secure." >&4
   dflt=n;;
  *) echo "Well, the $hint value *is* secure." >&4
   dflt=y;;
  esac
  ;;
 *)
  $rm -f reflect flect
  echo "#!$ls" >reflect
  chmod +x,u+s reflect
  echo >flect
  chmod a+w flect
  echo "'su" will (probably) prompt you for "'$ans's password."
  su $ans -c './reflect
>flect'
  if $contains "/dev/fd" flect >/dev/null; then
   echo "Okay, it looks like setuid scripts are secure." >&4
   dflt=y
  else
   echo "I don't think setuid scripts are secure." >&4
   dflt=n
  fi
  ;;
 esac
 rp='Does your kernel have *secure* setuid scripts?'
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
fi
else
 echo "I don't think setuid scripts are secure (no /dev/fd directory)." >&4
 echo "(That's for file descriptors, not floppy disks.)"
 val="$undef"
fi
set d_suidsafe
eval $setvar

$rm -f reflect flect

: now see if they want to do setuid emulation
if $test $patchlevel -lt 11; then
echo " "
```

```
val="$undef"
case "$d_suidsafe" in
"$define")
 val="$undef"
 echo "No need to emulate SUID scripts since they are secure here." >&4
 ;;
*)
 $cat <<EOM
Some systems have disabled setuid scripts, especially systems where
setuid scripts cannot be secure.  On systems where setuid scripts have
been disabled, the setuid/setgid bits on scripts are
 currently
useless.  It is possible for $package to detect those bits and emulate
setuid/setgid in a secure fashion.  This emulation will only work if
setuid scripts have been disabled in your kernel.

EOM
 case "$d_dosuid" in
 "$define") dflt=y ;;
 *) dflt=n ;;
 esac
 rp="Do you want to do setuid/setgid emulation?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
 ;;
esac
set d_dosuid
eval $setvar
else
   case "$d_dosuid" in
 "$define")
 cat >&4 <<EOH

SUID emulation has been removed for 5.12
Please re-run Configure without -Dd_dosuid

EOH
 exit 1;
 ;;
   esac
   d_dosuid=undef
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dosuid.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sanemcmp.U,v 3.0.1.1 1997/02/28 15:41:19 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sanemcmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:41:19  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sanemcmp: Compile cat d_memcmp rm_try run \
 i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_sanemcmp:
?S: This variable conditionally defines the HAS_SANE_MEMCMP symbol if
?S: the memcpy() routine is available and can be used to compare relative
?S: magnitudes of chars with their high bits set.
?S:.
?C:HAS_SANE_MEMCMP:
?C: This
 symbol, if defined, indicates that the memcmp routine is available
?C: and can be used to compare relative magnitudes of chars with their high
?C: bits set.  If it is not defined, roll your own version.
?C:.
?H:#$d_sanemcmp HAS_SANE_MEMCMP /**/
?H:.
?F:!try
?LINT: set d_sanemcmp
: can memcmp be trusted to compare relative magnitude?
?X: assume the worst
val="$undef"
case "$d_memcmp" in
"$define")
 echo " "
 echo "Checking if your memcmp() can compare relative magnitude..." >&4
 $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
```

```
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char a = -1;
char b = 0;
if ((a < b) && memcmp(&a, &b, 1) < 0)
 exit(1);
exit(0);
}
EOCP
 set try
 if eval
 $compile_ok; then
  if $run ./try 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "No, it can't (it uses signed chars)."
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
 fi
 ;;
esac
$rm_try
set d_sanemcmp
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sanemcmp.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_erfc: Inlibc
?MAKE: -pick add $@ %<
?S:d_erfc:
?S: This variable conditionally defines the HAS_ERFC symbol, which
?S: indicates to the C program that the erfc() routine is available.
?S:.
?C:HAS_ERFC:
?C: This symbol, if defined, indicates that the erfc routine is
?C: available to do the complementary error function.
?C:.
?H:#$d_erfc HAS_ERFC  /**/
?H:.
?LINT:set d_erfc
: see if erfc exists
set erfc d_erfc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_erfc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tzmin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tzmin.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:16:58  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_tzmin: contains cppstdin cppminus timeincl rm Setvar Guess
?MAKE: -pick add $@ %<
?S:d_tzmin:
?S: This symbol conditionally defines TZ_MINUTESWEST if the system uses
?S: tz_minuteswest in time header instead of timezone.
?S:.
?C:TZ_MINUTESWEST:
?C: This
```

```
 symbol is defined if this system uses tz_minuteswest
?C: in time header instead of timezone.
?C: If not defined, you may have to use struct timeb and ftime() rather
?C: than the new gettimeofday() system call.
?C:.
?H:#$d_tzmin TZ_MINUTESWEST  /**/
?H:.
?LINT:set d_tzmin
: see if tz_minuteswest is defined in time header
echo " "
val="$undef"
$cppstdin $cppminus < $timeincl > try 2>&1
if $contains 'tz_minuteswest' try >/dev/null 2>&1; then
echo "You have tz_minuteswest defined in $timeincl rather than timezone." >&4
 val="$define"
elif $contains 'timezone' try >/dev/null 2>&1; then
echo "You have timezone defined in $timeincl rather than tz_minuteswest." >&4
else
 echo "Your $timeincl file looks strange." >&4
fi
if ./bsd; then
 case "$d_tzmin" in
 "$undef") echo "(Maybe your system is an USG one after all?)";;
 esac
fi
set d_tzmin
eval $setvar
$rm -f try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tzmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_setpwent.U,v $
?RCS:
?MAKE:d_setpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpwent:
?S: This variable conditionally defines the HAS_SETPWENT symbol, which
?S: indicates to the C program that the setpwent() routine is available
?S: for initializing sequential access to the passwd database.
```

```
?S:.
?C:HAS_SETPWENT:
?C: This symbol, if defined, indicates that the setpwent routine is
?C: available for initializing sequential access of the passwd database.
?C:.
?H:#$d_setpwent HAS_SETPWENT  /**/
?H:.
?LINT:set d_setpwent
: see if setpwent exists
set setpwent d_setpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mprotect: Inlibc
?MAKE: -pick add $@ %<
?S:d_mprotect:
?S: This variable conditionally defines HAS_MPROTECT if mprotect() is
?S: available to modify the access protection of a memory mapped file.
?S:.
?C:HAS_MPROTECT:
?C: This symbol, if defined, indicates that the mprotect system call is
?C: available to modify the access protection of a memory mapped file.
?C:.
?H:#$d_mprotect HAS_MPROTECT  /**/
?H:.
?LINT:set d_mprotect
: see if mprotect exists
set mprotect d_mprotect
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mprotect.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lround: Inlibc
?MAKE: -pick add $@ %<
?S:d_lround:
?S: This variable conditionally defines the HAS_LROUND symbol, which
?S: indicates to the C program that the lround() routine is available
?S: to return the integral value nearest to x.
?S:.
?C:HAS_LROUND:
?C: This symbol, if defined, indicates that the lround routine is
?C: available to return the nearest integral value.
?C:.
?H:#$d_lround HAS_LROUND  /**/
?H:.
?LINT:set d_lround
: see if lround exists
set lround d_lround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Loc.U 14 2006-08-28 16:51:14Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Loc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:04:16  ram
?RCS: patch61: allow users to specify paths on the command line
?RCS: patch61: will now substitute cp for ln if not supported
?RCS:
?RCS: Revision 3.0.1.9  1995/09/25  09:11:24  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS: patch59: abort Configure run when mandatory command is missing
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:40  ram
?RCS: patch56: now knows about
 OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.7  1995/01/11  15:13:37  ram
```

```
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS: patch45: added path lookup for the 'comm' program
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:56:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: be careful and guard against wildcard searching (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:54:55  ram
?RCS: patch30: now locates find
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:18:15  ram
?RCS: patch27: added byacc to the trylist (ADO)
?RCS: patch27: lint lines reformatted (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:01:44  ram
?RCS: patch16: added metalint hint on changed PATH variable
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:16:52  ram
?RCS: patch15: now set _test variable when test is built-in
?RCS: patch15: fixed rare cases where echo is not needed
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:47:13  ram
?RCS: patch10: test program not always
 in /bin/test (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script "loc" which can be used to find out
?X: where in a list of directories something is.  It then uses loc to
?X: determine the location of commonly used programs.  It leaves loc sitting
?X: around for other Configure units to use, but arranges for its demise
?X: at the end of Configure.
?X:
?X: To add a new program to find, add it both to the ?MAKE: line and to either
?X: the loclist or trylist variable.
?X:
?X: I put startsh at the end of the dependency list, in order to avoid the
?X: loading of the spitshell unit before the instructions.
?X:
?MAKE:Loc awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort
 submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip: eunicefix n c startsh Instruct sysroot
```

```
?MAKE: -pick weed $@ %<
?LINT:describe awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip
?V::pth loclist trylist
?F:./loc test_h
?T:thisthing thing xxx dir file say _test DJGPP
?LINT:change PATH _egrep _ln _make _less
?LINT:extern _exe
: find out where common programs are
echo " "
echo "Locating common programs..." >&4
cat <<EOSC >loc
$startsh
case \$# in
0) exit 1;;
esac
thing=\$1
shift
dflt=\$1
shift
for dir in \$*; do
 case "\$thing" in
 .)
 if test -d \$dir/\$thing; then
  echo \$dir
  exit 0
 fi
 ;;
 *)
?X: Be careful in case thing includes wildcards that might expand
 to multiple
?X: files.  Choose the last one.  This happens when searching for shared
?X: libraries with version numbers.  How to choose which one we want is
?X: probably an insoluble problem, in general.
?X: Some folks leave things like libc.so.orig around w/o read
?X: permission.  A -r test would handle that, but since ./loc is
?X: also used to find executables (which are installed w/o read
?X: permission on SCO ODT 3.0, we can't include the -r test.
?X: If you need to use an _exe that is different from .exe
?X: you need to set it in Head.U.
 for thisthing in \$dir/\$thing; do
  : just loop through to pick last item
 done
 if test -f \$thisthing; then
```

```
  echo \$thisthing
  exit 0
 elif test "X$_exe" != X -a -f \$thisthing$_exe; then
  echo \$thisthing
  exit 0
 elif test -f \$dir/\$thing.exe; then
  if test -n "$DJGPP"; then
   echo \$dir/\$thing.exe
  elif test "$eunicefix" != ":"; then
   : on Eunice apparently
   echo \$dir/\$thing
  fi
  exit 0
 fi
 ;;
 esac
done
echo \$dflt
exit
 1
EOSC
chmod +x loc
$eunicefix loc
loclist="
?awk:awk
?cat:cat
?chgrp:chgrp
?chmod:chmod
?chown:chown
?comm:comm
?cp:cp
?echo:echo
?expr:expr
?find:find
?grep:grep
?ls:ls
?mkdir:mkdir
?mv:mv
?rm:rm
?sed:sed
?sleep:sleep
?sort:sort
?tail:tail
?touch:touch
?tr:tr
?uniq:uniq
"
trylist="
```

?Mcc:Mcc
?ar:ar
?bash:bash
?bison:bison
?byacc:byacc
?compress:compress
?cpio:cpio
?cpp:cpp
?csh:csh
?date:date
?egrep:egrep
?emacs:emacs
?flex:flex
?gmake:gmake
?gzip:gzip
?inews:inews
?ksh:ksh
?less:less
?line:line
?lint:lint
?ln:ln
?lp:lp
?lpr:lpr
?mail:mail
?mailx:mailx
?make:make
?more:more
?nm:nm
?nroff:nroff
?perl:perl
?pg:pg
?pmake:pmake
?pr:pr
?rmail:rmail
?sendmail:sendmail
?shar:shar
?smail:smail
?submit:submit
?tar:tar
?tbl:tbl
?tee:tee
?test:test
?troff:troff
?uname:uname
?uuname:uuname
?vi:vi
?zcat:zcat
?zip:zip

```
"
?LINT:set awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo emacs expr find flex \
 gmake gzip grep inews ksh line lint lp lpr ls mail mailx
 \
 mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee touch tr troff \
 uname uniq uuname vi zcat zip
pth=`echo $PATH | sed -e "s/$p_/ /g"`
pth="$pth $sysroot/lib $sysroot/usr/lib"
for file in $loclist; do
?X:
?X: Allow them to -Dmake=pmake on the command line for instance...
?X: If the file is not fully qualified, as in -Dmake=pmake, then we
?X: look the for the specified command (pmake here). If they say
?X: -Dmake=/sbin/make for instance, then we make sure the file
?X: exists, or we die...
?X:
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   echo "WARNING: no $xxx -- ignoring your setting for $file." >&4
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo
 "I don't know where '$file' is, and my life depends on it." >&4
  echo "Go find a public domain implementation or fix your PATH setting!" >&4
  exit 1
  ;;
 esac
```

```
done
echo " "
echo "Don't worry if any of the following aren't found..."
say=offhand
for file in $trylist; do
?X: Allow them to -Dmake=pmake on the command line for instance (see above)
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   echo "WARNING: no $xxx -- ignoring your setting for $file." >&4
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo "I don't see $file out there, $say."
  say=either
  ;;
 esac
done
case "$egrep" in
egrep)
 echo "Substituting grep for egrep."
 egrep=$grep
 _egrep=$grep
 ;;
esac
@if less
case "$less"
 in
") ;;
*) if $less -R </dev/null >/dev/null 2>&1; then
        echo "Substituting less -R for less."
```

```
        less="$less -R"
        _less=$less
 fi
 ;;
esac
@end
@if ln
case "$ln" in
ln)
 echo "Substituting cp for ln."
 ln=$cp
 _ln=$cp
 ;;
esac
@end
@if make || gmake
case "$make" in
make)
 case "$gmake" in
 gmake)
 echo "I can't find make or gmake, and my life depends on it." >&4
 echo "Go find a public domain implementation or fix your PATH setting!" >&4
 exit 1
 ;;
 esac
 ;;
esac
case "$gmake" in
gmake) ;;
*) # We can't have osname yet.
 if test -f "/system/gnu_library/bin/ar.pm"; then # Stratus VOS
  # Assume that gmake, if found, is definitely GNU make
  # and prefer it over the system make.
  echo "Substituting gmake for make."
  make=$gmake
  _make=$gmake
 fi
 ;;
esac
@end
case "$test" in
test)
 echo "Hopefully test is built into your sh."
 ;;
*)
 if `sh -c "PATH= test true" >/dev/null 2>&1`; then
  echo "Using the test built into your sh."
?X:
```

```
?X: We need to set both test
 and _test, since Oldconfig.U will use the _test
?X: value to systematically restore computed paths, which may be wrong if
?X: we choose to load an old config.sh generated on another platform.
?X:
  test=test
  _test=test
 fi
 ;;
esac
?LINT:change n c
case "$echo" in
echo)
 echo "Hopefully echo is built into your sh."
 ;;
?X: For those rare cases where we don't need $echo...
") ;;
*)
 echo " "
echo "Checking compatibility between $echo and builtin echo (if any)..." >&4
 $echo $n "hi there$c" >foo1
 echo $n "hi there$c" >foo2
 if cmp foo1 foo2 >/dev/null 2>&1; then
  echo "They are compatible.  In fact, they may be identical."
 else
  case "$n" in
  '-n') n=" c='\c';;
  *) n='-n' c=";;
  esac
  cat <<FOO
They are not compatible!  You are probably running ksh on a non-USG system.
I'll have to use $echo instead of the builtin, since Bourne shell doesn't
have echo built in and we may have to run some Bourne shell scripts.  That
means I'll have to use '$n$c' to suppress newlines now.
  Life is ridiculous.

FOO
  $echo $n "The star should be here-->$c"
  $echo "*"
 fi
 $rm -f foo1 foo2
 ;;
esac

?X: The next part is irrelevant to the real process
# This question was auctioned at YAPC::Europe-2007 in Vienna
# I never promised you could answer it. I only auctioned the question.
cat <<FOO
```

```
The following message is sponsored by

 Dresden.pm<--The stars should be here.

Dear Perl user, system administrator or package
maintainer, the Perl community sends greetings to
you. Do you (emblematical) greet back [Y/n]? n

FOO

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Loc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_modfl d_modflproto: Inlibc Compile Hasproto cat \
 test ccflags uselongdouble \
 d_sqrtl d_aintl d_copysignl d_ilogbl d_scalbnl d_frexpl d_ldexpl \
 d_truncl
?MAKE: -pick add $@ %<
?S:d_modfl:
?S: This variable conditionally defines the HAS_MODFL symbol, which
?S: indicates to the C program that the modfl() routine is available.
?S:.
?S:d_modflproto:
?S: This symbol, if defined, indicates that the system provides
?S: a prototype for the modfl() function.  Otherwise, it is up
?S: to the program to supply one.  C99 says it should be
?S:  long double modfl(long double, long double *);
?S:.
?C:HAS_MODFL:
?C: This symbol, if defined, indicates that the modfl routine is
?C: available to split a long double
 x into a fractional part f and
?C: an integer part i such that |f| < 1.0 and (f + i) = x.
?C:.
?C:HAS_MODFL_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the modfl() function.  Otherwise, it is up
?C: to the program to supply one.
?C:.
?H:#$d_modfl HAS_MODFL  /**/
```

```
?H:#$d_modflproto HAS_MODFL_PROTO  /**/
?H:.
?T:message
?LINT:set d_modfl
?LINT:set d_modflproto
?LINT:change ccflags
: see if modfl exists
set modfl d_modfl
eval $inlibc

: see if prototype for modfl is available
echo " "
set d_modflproto modfl define math.h
eval $hasproto

if $test "$uselongdouble" = "$define"; then
  message=""
  if $test "$d_sqrtl" != "$define"; then
 message="$message sqrtl"
  fi
  if $test "$d_modfl" != "$define"; then
 if $test "$d_truncl:$d_copysignl" = "$define:$define"; then
    echo "You have both truncl and copysignl, so I can emulate modfl."
 else
    if $test "$d_aintl:$d_copysignl" = "$define:$define"; then
  echo "You have both aintl
 and copysignl, so I can emulate modfl."
    else
  message="$message modfl"
    fi
 fi
  fi
  if $test "$d_frexpl" != "$define"; then
 if $test "$d_ilogbl:$d_scalbnl" = "$define:$define"; then
    echo "You have both ilogbl and scalbnl, so I can emulate frexpl."
 else
    message="$message frexpl"
 fi
  fi
  if $test "$d_ldexpl" != "$define"; then
 message="$message ldexpl"
  fi

  if $test "$message" != ""; then
 $cat <<EOM >&4

*** You requested the use of long doubles but you do not seem to have
*** the following mathematical functions needed for long double support:
```

```
***    $message
*** Please rerun Configure without -Duselongdouble and/or -Dusemorebits.
*** Cannot continue, aborting.

EOM

 exit 1
   fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_modfl.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, 2012 Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:byteorder: cat Myread Oldconfig Loc +cc +ccflags rm_try
?MAKE: -pick add $@ %<
?S:byteorder:
?S: This variable holds the byte order. In the following, larger digits
?S: indicate more significance.  The variable byteorder is either 4321
?S: on a big-endian machine, or 1234 on a little-endian, or 87654321
?S: on a Cray ... or 3412 with weird order !
?S:.
?C:BYTEORDER:
?C: This symbol hold the hexadecimal constant defined in byteorder,
?C: i.e. 0x1234 or 0x4321, etc...
?C:.
?H:#define BYTEORDER 0x$byteorder /*
 large digits for MSB */
?H:.
?T:xxx_prompt
?F:!try
: check for ordering of bytes in a long
case "$byteorder" in
")
 $cat <<'EOM'

In the following, larger digits indicate more significance.  A big-endian
machine like a Pyramid or a Motorola 680?0 chip will come out to 4321. A
little-endian machine like a Vax or an Intel 80?86 chip would be 1234. Other
```

```
machines may have weird orders like 3412.  A Cray will report 87654321. If
the test program works the default is probably right.
I'm now running the test program...
EOM
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 int i;
 union {
  unsigned long l;
  char c[sizeof(long)];
 } u;

 if (sizeof(long) > 4)
  u.l = (0x08070605L << 32) | 0x04030201L;
 else
  u.l = 0x04030201L;
 for (i = 0; i < sizeof(long); i++)
  printf("%c", u.c[i]+'0');
 printf("\n");
 exit(0);
}
EOCP
 xxx_prompt=y
 if $cc $ccflags -o try try.c >/dev/null 2>&1 && ./try > /dev/null; then
  dflt=`./try`
  case "$dflt" in
  [1-4][1-4][1-4][1-4]|12345678|87654321)
   echo
 "(The test program ran ok.)"
   echo "byteorder=$dflt"
   xxx_prompt=n
   ;;
  ????|????????) echo "(The test program ran ok.)" ;;
  *) echo "(The test program didn't run right for some reason.)" ;;
  esac
 else
  dflt='4321'
  cat <<'EOM'
(I can't seem to compile the test program.  Guessing big-endian...)
EOM
 fi
 case "$xxx_prompt" in
 y)
  rp="What is the order of bytes in a long?"
  . ./myread
  byteorder="$ans"
```

```
  ;;
 *) byteorder=$dflt
  ;;
 esac
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/byteorder.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: abortsig.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:19  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:abortsig: Myread Oldconfig Guess cat +cc ccflags rm
?MAKE: -pick add $@ %<
?S:abortsig:
?S: This variable holds the name of the signal used by the abort() call.
?S:.
?C:ABORTSIG:
?C: This symbol holds the signal number (symbol) used by the abort() call. To
?C: actually
 define the signal symbol, <signal.h> should be included.
?C:.
?H:#define ABORTSIG $abortsig  /**/
?H:.
?T:signal
: which signal is sent by abort ?
echo " "
case "$abortsig" in
")
 echo "Checking to see which signal is sent to the process by abort()..." >&4
 echo "abort" > abort.sh
```

```
 chmod +x abort.sh
?X: SIGABRT should replace SIGIOT on USG machines in a near future (1991).
 for signal in SIGIOT SIGILL SIGABRT; do
  case "$abortsig" in
  ") $cat >abort.c <<EOP
/* FIXME: Missing #include <stdlib.h>*/
#include <signal.h>
caught() { exit(0); } /* FIXME: Use _exit() or _Exit() in signal handler  */
int main()
{
#ifdef $signal
 signal($signal, caught);
#endif
 if (-1 == abort())
  exit(1);
 exit(1);
}
EOP
?X: We have to use the abort.sh script otherwise sh behaves strangely on AIX.
   if $cc $ccflags -o abort abort.c >/dev/null 2>&1; then
    (./abort.sh) >/dev/null 2>&1
    case $? in
    0) abortsig="$signal";;
    esac
   fi
   ;;
  esac
 done
 ;;
esac
case "$abortsig" in
") echo
 "(I wasn't able to compute the signal name--guessing)"
 if ./usg; then
  dflt="SIGIOT"
 else
  dflt="SIGILL"
 fi;;
*)  dflt="$abortsig"
 ;;
esac
rp="Which signal does abort() send to the process (signal name)?"
. ./myread
abortsig="$ans"
$rm -f core abort.sh abort abort.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/abortsig.U

No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fegetround: Inlibc
?MAKE: -pick add $@ %<
?S:d_fegetround:
?S: This variable conditionally defines HAS_FEGETROUND if fegetround() is
?S: available to get the floating point rounding mode.
?S:.
?C:HAS_FEGETROUND:
?C: This symbol, if defined, indicates that the fegetround routine is
?C: available to return the macro corresponding to the current rounding
?C: mode.
?C:.
?H:#$d_fegetround HAS_FEGETROUND /**/
?H:.
?LINT:set d_fegetround
: see if fegetround exists
set fegetround d_fegetround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fegetround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_linuxstd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_linuxstd.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:05  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_linuxstd: d_stdstdio cppstdin cppflags cppminus \
 contains rm Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_linuxstd:
?S: This variable conditionally defines USE_LINUX_STDIO if this system
```

```
?S: has a FILE structure declaring _IO_read_base, _IO_read_ptr,
?S: and _IO_read_end
 in stdio.h.
?S:.
?C:USE_LINUX_STDIO:
?C: This symbol is defined if this system has a FILE structure declaring
?C: _IO_read_base, _IO_read_ptr, and _IO_read_end in stdio.h.
?C:.
?H:#$d_linuxstd USE_LINUX_STDIO  /**/
?H:.
?T:xxx
?LINT:set d_linuxstd
: see if stdio is like that in linux
case "$d_stdstdio" in
"$undef")
 echo " "
 xxx=`./findhdr stdio.h`
 $cppstdin $cppflags $cppminus < "$xxx" > stdio.E
 if $contains 'char.*_IO_read_base' stdio.E >/dev/null 2>&1 && \
  $contains '_IO_read_ptr' stdio.E >/dev/null 2>&1 && \
  $contains '_IO_read_end' stdio.E >/dev/null 2>&1 ; then
   echo "Your stdio looks like linux." >&4
   val="$define"
 else
  echo "You don't have linux stdio, either." >&4
  val="$undef"
 fi
 $rm -f stdio.E
 ;;
*) val="$undef" ;;
esac

set d_linuxstd
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_linuxstd.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_signbit: nvtype Compile Setvar cat run rm_try echo n c i_sunmath
?MAKE: -pick add $@ %<
?S:d_signbit:
?S: This variable conditionally defines the HAS_SIGNBIT symbol, which
```

```
?S: indicates to the C program that the signbit() routine is available
?S: and safe to use with perl's intern NV type.
?S:.
?C:HAS_SIGNBIT:
?C: This symbol, if defined, indicates that the signbit routine is
?C: available to check if the given number has the sign bit set.
?C: This should include correct testing of -0.0.  This will only be set
?C: if the signbit() routine is safe to use with the NV type used internally
?C: in perl.  Users should call Perl_signbit(), which will be #defined to
?C: the system's signbit() function or macro if this symbol is defined.
?C:.
?H:#$d_signbit
 HAS_SIGNBIT  /**/
?H:.
?F:!try
?LINT:set d_signbit
: see if signbit exists
$echo $n "Checking to see if you have signbit() available to work on $nvtype... $c" >&4
$cat >try.c <<EOCP
#$i_sunmath I_SUNMATH
#include <math.h>
#ifdef I_SUNMATH  /* Solaris special math library */
#  include <sunmath.h>
#endif
#define NV $nvtype
int main(int argc, char **argv)
{
   NV x = 0.0;
   NV y = -1.0;
   if ((signbit(x) == 0) && (signbit(y) != 0))
 return 0;
   else
 return 1;
}
EOCP
val="$undef"
set try
if eval $compile; then
   if $run ./try; then
       $echo "Yes." >&4
 val="$define"
   else
       $echo "Signbit seems to be available, but doesn't work as I expected."
       $echo "I won't use it." >&4
 val="$undef"
   fi
else
   $echo "Nope." >&4
```

```
   dflt="$undef"
fi
set d_signbit
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_signbit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Configdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Configdir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  14:58:36  ram
?RCS: patch61: have README explicitly mention the package name
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Configdir: package
?MAKE: -pick add $@ %<
: create .config dir to save info across Configure sessions
test -d ../.config || mkdir ../.config
cat >../.config/README <<EOF
This directory created by Configure to save
 information that should
persist across sessions for $package.

You may safely delete it if you wish.
EOF
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Configdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wctomb.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_wctomb.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:20:43  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_wctomb: Inlibc
?MAKE: -pick add $@ %<
?S:d_wctomb:
?S: This variable conditionally defines the HAS_WCTOMB symbol, which
?S: indicates to the C program that the wctomb() routine is available
?S: to convert a wide character to a multibyte.
?S:.
?C:HAS_WCTOMB (WCTOMB):
?C: This
 symbol, if defined, indicates that the wctomb routine is available
?C: to convert a wide character to a multibyte.
?C:.
?H:#$d_wctomb HAS_WCTOMB  /**/
?H:.
?LINT:set d_wctomb
: see if wctomb exists
set wctomb d_wctomb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wctomb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: scriptdir.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:17:15  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
```

```
?RCS: Revision 3.0.1.2  1995/01/30  14:46:13  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:32:04  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:scriptdir scriptdirexp installscript:
 afs cat test Getfile Loc \
 Oldconfig +bin Prefixit prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:scriptdir:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly scripts for the package in question.  It is either
?S: the same directory as for binaries, or a special one that can be
?S: mounted across different architectures, like /usr/share. Programs
?S: must be prepared to deal with ~name expansion.
?S:.
?S:scriptdirexp:
?S: This variable is the same as scriptdir, but is filename expanded
?S: at configuration time, for programs not wanting to bother with it.
?S:.
?S:installscript:
?S: This variable is usually the same as scriptdirexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?C:SCRIPTDIR:
?C: This symbol holds the name of the directory in which the user wants
?C: to put publicly executable scripts for the
 package in question.  It
?C: is often a directory that is mounted across diverse architectures.
?C: Programs must be prepared to deal with ~name expansion.
?C:.
?C:SCRIPTDIR_EXP:
?C: This is the same as SCRIPTDIR, but is filename expanded at
?C: configuration time, for use in programs not prepared to do
?C: ~name substitutions at run-time.
?C:.
?H:#define SCRIPTDIR "$scriptdir" /**/
?H:#define SCRIPTDIR_EXP "$scriptdirexp" /**/
?H:.
: determine where public executable scripts go
set scriptdir scriptdir
eval $prefixit
```

```
case "$scriptdir" in
")
 dflt="$bin"
 : guess some guesses
 $test -d /usr/share/scripts && dflt=/usr/share/scripts
 $test -d /usr/share/bin && dflt=/usr/share/bin
 $test -d /usr/local/script && dflt=/usr/local/script
 $test -d $prefixexp/script && dflt=$prefixexp/script
 set dflt
 eval $prefixup
 ;;
*)  dflt="$scriptdir"
 ;;
esac
$cat <<EOM

Some installations have a separate directory just for executable scripts so
that they can mount it across multiple architectures but
 keep the scripts in
one spot.  You might, for example, have a subdirectory of /usr/share for this.
Or you might just lump your scripts in with all your other executables.

EOM
fn=d~
rp='Where do you keep publicly executable scripts?'
. ./getfile
if $test "X$ansexp" != "X$scriptdirexp"; then
 installscript=''
fi
scriptdir="$ans"
scriptdirexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
scripts reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installscript" in
 '') dflt=`echo $scriptdirexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installscript";;
 esac
 fn=de~
 rp='Where will public scripts be installed?'
 . ./getfile
 installscript="$ans"
else
```

```
 installscript="$scriptdirexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/scriptdir.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_pipe2: Inlibc
?MAKE: -pick add $@ %<
?S:d_pipe2:
?S: This variable conditionally defines the HAS_PIPE2 symbol, which
?S: indicates to the C program that the pipe2() routine is available
?S: to create an inter-process channel.
?S:.
?C:HAS_PIPE2:
?C: This symbol, if defined, indicates that the pipe2 routine is
?C: available to create an inter-process channel.
?C:.
?H:#$d_pipe2 HAS_PIPE2  /**/
?H:.
?LINT:set d_pipe2
: see if pipe2 exists
set pipe2 d_pipe2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_pipe2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_longlong.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_longlong.U,v $
?RCS:
?MAKE:d_longlong longlongsize: Compile Setvar Myread run \
 cat rm_try test longsize
```

```
?MAKE: -pick add $@ %<
?S:d_longlong:
?S: This variable conditionally defines HAS_LONG_LONG if
?S: the long long type is supported.
?S:.
?S:longlongsize:
?S: This variable contains the value of the LONGLONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long long,
?S: if this system supports long long.
?S:.
?C:HAS_LONG_LONG:
?C: This symbol will be defined if the C compiler supports long long.
?C:.
?C:LONGLONGSIZE:
?C: This symbol contains the size of a long long, so that the
?C: C preprocessor can make decisions based on it.  It is only
?C: defined
 if the system supports long long.
?C:.
?H:#$d_longlong HAS_LONG_LONG  /**/
?H:?LONGLONGSIZE:#ifdef HAS_LONG_LONG
?H:?LONGLONGSIZE:#define LONGLONGSIZE $longlongsize  /**/
?H:?LONGLONGSIZE:#endif
?H:.
?F:!try
?LINT:set d_longlong
: check for long long
echo " "
echo "Checking to see if you have long long..." >&4
echo 'int main() { long long x = 7; return 0; }' > try.c
set try
if eval $compile; then
 val="$define"
 echo "You have long long."
else
 val="$undef"
 echo "You do not have long long."
fi
$rm_try
set d_longlong
eval $setvar

@if LONGLONGSIZE || longlongsize
: check for length of long long
?X:  Check only if d_longlong and if longlongsize is not already set.
case "${d_longlong}${longlongsize}" in
$define)
 echo " "
```

```
 echo "Checking to see how big your long longs are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof(long long));
   return(0);
}
EOCP
 set try
 if eval $compile_ok; then
  longlongsize=`$run ./try`
  echo "Your long
 longs are $longlongsize bytes long."
 else
  dflt='8'
  echo " "
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a long long (in bytes)?"
  . ./myread
  longlongsize="$ans"
 fi
 if $test "X$longsize" = "X$longlongsize"; then
  echo "(That isn't any different from an ordinary long.)"
 fi
 ;;
esac
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_longlong.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmdt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmdt.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_shmdt: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmdt:
?S: This variable conditionally defines the HAS_SHMDT symbol, which
?S: indicates to the C program that the shmdt() routine is available.
?S:.
?C:HAS_SHMDT:
?C: This symbol, if defined, indicates that the shmdt() routine is
?C: available to detach a shared memory segment from the process
 space.
?C:.
?H:#$d_shmdt HAS_SHMDT  /**/
?H:.
?LINT:set d_shmdt
: see if shmdt exists
set shmdt d_shmdt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmdt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libs.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:09:11  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.5  1995/07/25  14:12:05  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  16:24:22  ram
?RCS: patch36: removed old broken thislib/thatlib processing (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:05:44  ram
?RCS: patch30: code cleanup with if/elif by ADO and RAM
?RCS: patch30: undone patch23 for libswanted default
 setting
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:08:45  ram
```

```
?RCS: patch23: now includes ordered default libswanted variable (ADO)
?RCS: patch23: major cleanup for library lookups (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:31  ram
?RCS: patch6: added default for libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libs libsfound libsfiles libsdirs libspath libscheck: \
 test cat Myread Oldconfig Loc libpth package xlibpth so _a \
 +usesocks sed +cc +ccflags +ldflags rm
?MAKE: -pick add $@ %<
?S:libs:
?S: This variable holds the additional libraries we want to use.
?S: It is up to the Makefile to deal with it.  The list can be empty.
?S:.
?S:libsfound:
?S: This variable holds the full pathnames of the libraries
?S: we found and accepted.
?S:.
?S:libsfiles:
?S: This variable holds the filenames aka basenames of the libraries
?S: we found and accepted.
?S:.
?S:libsdirs:
?S: This variable holds the directory
 names aka dirnames of the libraries
?S: we found and accepted, duplicates are removed.
?S:.
?S:libspath:
?S: This variable holds the directory names probed for libraries.
?S:.
?S:libscheck:
?S: This variable is intended to be set by hint files, if needed.
?S: It should contain shell code that will be eval'ed with $xxx holding
?S: some library file.  It may change $xxx if needed.
?S: For instance, on an Irix platform, you may make sure the right
?S: library file is used depending on the cc command line, so that the
?S: correct library is used depending on the selected ABI (for 32 and
?S: 64-bit compilations).
?S:
?S: Here is an example of code that could be found in a hint file on Irix
?S: when the selected compiler was for 32-bit -- that code is put in the
?S: cc.cbu call-back unit to be invoked AFTER the C compiler and its
?S: flags have been chosen:
?S:
?S:  libscheck='case "$xxx" in
```

```
?S:  *.a) /bin/ar p $xxx `/bin/ar t $xxx | sed q` >$$.o;
?S:   case "`/usr/bin/file $$.o`" in
?S:   *N32*)
 rm -f $$.o ;;
?S:   *) rm -f $$.o; xxx=/no/n32$xxx ;;
?S:   esac ;;
?S:  *) case "`/usr/bin/file $xxx`" in
?S:   *N32*) ;;
?S:   *) xxx=/no/n32$xxx ;;
?S:   esac ;;
?S:  esac'
?S:.
?D:libs="
?LINT:extern libswanted
?LINT:change libswanted
?INIT:: default library list
?INIT:libswanted="
?X: This order is chosen so that libraries  -lndir, -ldir, -lucb, -lbsd,
?X: -lBSD, -lPW, and -lx only get used if there are unresolved
?X: routines at link time.  Usually, these are backwards compatability
?X: libraries, and may not be as reliable as the standard c library.
?X:
?X: The -lsocket -linet -lnsl order has been reported to be necessary
?X: for at least one SVR4 implementation.
?X: -lc must proceed -lucb or -lbsd for most Solaris applications.
?X: -lc_s proceeds -lc so we pick up the shared library version, if
?X: it is available.
?X:
?X: The ordering of c, posix, and cposix is a guess and almost
?X: certainly wrong on about half of all systems.
?X:
?X: Set proper libswanted in your private
 Myinit.U if needed.
?X:
?X:: default ordered library list
?X:libswanted='net socket inet bind nsl nm sdbm gdbm ndbm dbm malloc dl'
?X:libswanted="$libswanted dld sun m c_s c posix cposix ndir dir ucb"
?X:libswanted="$libswanted bsd BSD PW x"
?X:
?INIT:: should be set by hint files if needed
?INIT:libscheck="
?T:xxx yyy thislib thisdir libstyle linkmsg
?F:lt.c lt
: Looking for optional libraries
echo " "
echo "Checking for optional libraries..." >&4
case "$libs" in
' '|'') dflt='';;
```

```
*) dflt="$libs";;
esac
case "$libswanted" in
") libswanted='c_s';;
esac
?X: libsocks has nasty naming scheme.
?X: This does not work if somebody wants SOCKS 4.
case "$usesocks" in
"$define") libswanted="$libswanted socks5 socks5_sh" ;;
esac
?X: Used later for link checks
echo "extern char printf(); int main() { printf(); return 0; }" > lt.c
libsfound="
libsfiles="
libsdirs="
libspath="
for thisdir in $libpth $xlibpth; do
 test -d $thisdir && libspath="$libspath $thisdir"
done
for thislib in $libswanted;
 do
 for thisdir in $libspath; do
    xxx="
    if $test ! -f "$xxx" ; then
   xxx=`ls $thisdir/lib$thislib.$so.[0-9]* 2>/dev/null | $sed -n '1p'`
   $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/lib$thislib.$so
   $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/lib$thislib$_a
        $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/$thislib$_a
        $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/lib${thislib}_s$_a
        $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=static
   $test -f "$xxx" && thislib=${thislib}_s
```

```
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/Slib$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test
 -f "$xxx" && libstyle=static
    fi
    if $test -f "$xxx"; then
?X:
?X: It is not sufficient to find a .so on the disk.  We must make sure
?X: that we can indeed supply the -lfoo line on the cc line to link against
?X: that library.  On Linux for instance, a versionned .so will not be
?X: implicitly linked against, whereas it will work fine on Solaris 2.6.
?X:  --RAM, 10/10/2003
?X:
  if $cc -o lt $ccflags $ldflags lt.c -l$thislib >/dev/null 2>&1;
  then
   linkmsg=""
  else
   linkmsg=" but I can't link against it"
  fi
  case "$libstyle" in
  shared) echo "Found -l$thislib (shared)$linkmsg." ;;
  static) echo "Found -l$thislib$linkmsg." ;;
  *)      echo "Found -l$thislib ($libstyle)$linkmsg." ;;
  esac
  case " $dflt " in
  *"-l$thislib "*) ;;
  *)
   case "$linkmsg" in
   ")
    dflt="$dflt -l$thislib"
    libsfound="$libsfound $xxx"
    yyy=`basename $xxx`
    libsfiles="$libsfiles $yyy"
    yyy=`echo $xxx|$sed -e "s%/$yyy\\$%%"`
    case " $libsdirs
 " in
    *" $yyy "*) ;;
    *) libsdirs="$libsdirs $yyy" ;;
    esac
      ;;
   esac
   ;;
  esac
  break
    fi
 done
```

```
 if $test ! -f "$xxx"; then
     echo "No -l$thislib."
 fi
done
set X $dflt
shift
dflt="$*"
case "$libs" in
") dflt="$dflt";;
*) dflt="$libs";;
esac
case "$dflt" in
' '|") dflt='none';;
esac
$rm -f lt.c lt

$cat <<EOM

In order to compile $package on your machine, a number of libraries
are usually needed.  Include any other special libraries here as well.
Say "none" for none.  The default list is almost always right.
EOM

echo " "
rp="Which libraries to use?"
. ./myread
case "$ans" in
none) libs=' ';;
*) libs="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_scannl.U,v 3.0.1.2 1997/02/28 15:41:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_scannl.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:27  ram
?RCS: patch61: added ?F: metalint hint
```

```
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:59:12  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Does the scanf routine read "\n" correctly ? This is was not
?X: the case on AIX...
?X:
?MAKE:d_scannl: cat rm Setvar Compile run
?MAKE: -pick
 add $@ %<
?S:d_scannl:
?S: This variable conditionally defines SCAN_NL, which indicates
?S: whether the C library routines scanf() and friends can deal with
?S: a '\n' in the input correctly. They do most of the time.
?S:.
?C:SCAN_NL:
?C: This symbol is defined if the C library routines scanf() and friends
?C: can deal with a '\n' in the input correctly, so that you can say
?C: scanf("%d\n"); instead of scanf("%d"); getc(c); to handle the '\n'.
?C:.
?H:#$d_scannl SCAN_NL  /* scanf("%d\n") works */
?H:.
?F:!try
?LINT:set d_scannl
: does scanf handle "\n" correctly ?
echo " "
val="$define"
?X: I really want to say "\n" instead of '\n', because I am referring
?X: to the string given as argument to scanf().
echo 'Let""""s see if scanf() handles "\\n" correctly...' >&4
$cat >try.c <<'EOCP'
int main()
{
 int i = 0, j = 0;
 scanf("%d\n%d", &i, &j);
 if (j != 3)
  exit(1);
 exit(0);
}
EOCP
set try
if eval $compile_ok; then
 if $run ./try <<'EOD'
2
```

```
3
EOD
 then
  echo "Yes, it does."
 else
  echo
 "No, it doesn't."
  val="$undef"
 fi
else
 echo "(I can't seem to compile the test program. Assuming it does.)"
fi
set d_scannl
eval $setvar
$rm -f try.* try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_scannl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_statvfs d_fstatvfs: Inlibc
?MAKE: -pick add $@ %<
?S:d_statvfs:
?S: This variable conditionally defines the HAS_STATVFS symbol, which
?S: indicates to the C program that the statvfs() routine is available.
?S:.
?S:d_fstatvfs:
?S: This variable conditionally defines the HAS_FSTATVFS symbol, which
?S: indicates to the C program that the fstatvfs() routine is available.
?S:.
?C:HAS_STATVFS:
?C: This symbol, if defined, indicates that the statvfs routine is
?C: available to stat filesystems by filenames.
?C:.
?C:HAS_FSTATVFS:
?C: This symbol, if defined, indicates that the fstatvfs routine is
?C: available to stat filesystems by file descriptors.
?C:.
?H:#$d_statvfs HAS_STATVFS  /**/
?H:#$d_fstatvfs
```

```
 HAS_FSTATVFS  /**/
?H:.
?LINT:set d_statvfs
?LINT:set d_fstatvfs
: see if statvfs exists
set statvfs d_statvfs
eval $inlibc

: see if fstatvfs exists
set fstatvfs d_fstatvfs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statvfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setpgrp.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:44:16  ram
?RCS: patch61: obsoleted USE_BSDGRP in favor of USE_BSD_SETPGRP
?RCS: patch61: another unit now also defines a USE_BSD_GETPGRP
?RCS: patch61: fallback for test program failure improved
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:59:30  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:15:37  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
 patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp d_bsdsetpgrp: cat rm +cc +libs +ccflags \
 +ldflags Inlibc Guess Setvar i_unistd
?MAKE: -pick add $@ %<
?S:d_setpgrp:
?S: This variable conditionally defines HAS_SETPGRP if setpgrp() is
```

```
?S: available to set the current process group.
?S:.
?S:d_bsdsetpgrp (d_bsdpgrp):
?S: This variable conditionally defines USE_BSD_SETPGRP if
?S: setpgrp needs two arguments whereas USG one needs none.
?S: See also d_setpgid for a POSIX interface.
?S:.
?C:HAS_SETPGRP (SETPGRP):
?C: This symbol, if defined, indicates that the setpgrp routine is
?C: available to set the current process group.
?C:.
?C:USE_BSD_SETPGRP (USE_BSDPGRP BSDPGRP):
?C: This symbol, if defined, indicates that setpgrp needs two
?C: arguments whereas USG one needs none.  See also HAS_SETPGID
?C: for a POSIX interface.
?C:.
?H:#$d_setpgrp HAS_SETPGRP  /**/
?H:#$d_bsdsetpgrp
 USE_BSD_SETPGRP /**/
?H:.
?F:!set.c !set
?T:xxx
?LINT:set d_setpgrp d_bsdsetpgrp
: see if setpgrp exists
set setpgrp d_setpgrp
eval $inlibc

@if USE_BSD_SETPGRP || d_bsdsetpgrp
case "$d_setpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of setpgrp is in use..."
 $cat >set.c <<EOP
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (-1 == setpgrp(1, 1))
  exit(0);
#else
```

```
 if (setpgrp() != -1)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -DTRY_BSD_PGRP $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo 'You have to use setpgrp(pid,pgrp) instead of setpgrp().' >&4
  val="$define"
 elif $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo 'You have to use setpgrp() instead of setpgrp(pid,pgrp).' >&4
  val="$undef"
 else
  echo "(I can't
 seem to compile and run the test program.)"
  if ./usg; then
   xxx="a USG one, i.e. you use setpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use setpgrp(pid,pgrp)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use setpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your setpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set d_bsdsetpgrp
eval $setvar
$rm -f set set.c
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Cygnus Support
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Tom Tromey <tromey@cygnus.com>
?RCS:
?RCS: $Log: src.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:23:54  ram
?RCS: patch61: created
?RCS:
?MAKE:src +rsrc: Options package contains
?MAKE: -pick add $@ %<
?Y:TOP
?S:src (srcdir):
?S: This variable holds the (possibly relative) path of the package source.
?S: It is up to the Makefile to use this variable and set VPATH accordingly
?S: to find the sources remotely.  Use $pkgsrc to have an absolute path.
?S:.
?S:rsrc
 (relsrcdir):
?S: This variable holds a potentially relative path to the package
?S: source.  The contents are correct for the configuration environment,
?S: i.e. there might be an extra .. prepended to get out of the UU dir.
?S: Configure units should use this, not the src variable.
?S:.
: Find the path to the source tree
case "$src" in
") case "$0" in
   */*) src=`echo $0 | sed -e 's%/[^/][^/]*$%%'`
        case "$src" in
  /*) ;;
  .) ;;
        *) src=`cd ../$src && pwd` ;;
  esac
        ;;
   *)   src='.';;
   esac;;
esac
case "$src" in
") src=/
 rsrc=/
 ;;
/*) rsrc="$src";;
*) rsrc="../$src";;
esac
```

```
?X:
?X: Now check whether we have found the right source tree (i.e. the one for the
?X: package we're about to configure). The original unit from Tom Tromey forced
?X: the user to pick a unique file from his distribution, and we were merely
?X: checking the existence of that file. I prefer to rely on Configure (which
?X: we know *is* present since this unit is
 part of it!) and look for the
?X: definition of the package variable, making sure it's the same as ours.
?X: If it matches, we know we found the right source tree. -- RAM, 15/03/96
?X:
if test -f $rsrc/Configure && \
 $contains "^package='$package'\$" $rsrc/Configure >/dev/null 2>&1
then
  : found it, so we are ok.
else
?X: Otherwise try "." and up to 4 parent directories...
?X: Note that we prepend a ".." to get out of the configuration environment.
 rsrc=''
 for src in . .. ../.. ../../.. ../../../..; do
  if test -f ../$src/Configure && \
   $contains "^package=$package$" ../$src/Configure >/dev/null 2>&1
  then
   rsrc=../$src
   break
  fi
 done
fi
case "$rsrc" in
'')
 cat <<EOM >&4

Sorry, I can't seem to locate the source dir for $package.  Please start
Configure with an explicit path -- i.e. /some/path/Configure.

EOM
 exit 1
 ;;
?X: Don't echo anything if the sources are in . -- they should know already ;-)
?X: In that case, rsrc is ../. since we lookup from within UU
../.) rsrc='..';;
*)
 echo
 " "
 echo "Sources for $package found in \"$src\"." >&4
 ;;
esac

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/src.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lchown.U,v 3.0.1.1 1994/08/29 16:07:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_lchown.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:14  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_lchown: Compile Setvar cat echo i_unistd rm_try
?MAKE: -pick add $@ %<
?S:d_lchown:
?S: This variable conditionally defines the HAS_LCHOWN symbol, which
?S: indicates to the C program that the lchown() routine is available
?S: to operate on a symbolic link (instead of following
 the link).
?S:.
?C:HAS_LCHOWN :
?C: This symbol, if defined, indicates that the lchown routine is
?C: available to operate on a symbolic link (instead of following the
?C: link).
?C:.
?H:#$d_lchown HAS_LCHOWN  /**/
?H:.
?F:!try
?LINT:set d_lchown
: see if lchown exists
echo " "
?X: Some functions (such as lchown()) are present in libc, but are
?X: unimplemented.  That is, they always fail and set errno=ENOSYS.
?X:
?X: Thomas Bushnell provided the following sample code and the explanation
?X: that follows.
?X:
?X: The choice of <assert.h> is essentially arbitrary.  The GNU libc
?X: macros are found in <gnu/stubs.h>.  You can include that file instead
?X: of <assert.h> (which itself includes <gnu/stubs.h>) if you test for
?X: its existence first.  <assert.h> is assumed to exist on every system,
```

```
?X: which is why it's used here.  Any GNU libc header file will include
?X: the stubs macros.  If either __stub_NAME or __stub___NAME is defined,
?X: then the function doesn't actually exist.
  Tests using <assert.h> work
?X: on every system around.
?X:
?X: The declaration of FOO is there to override builtin prototypes for
?X: ANSI C functions.
?X:
?X:  I really ought to enhance the inlibc test to check for this, but
?X:  I don't have time now.  --A.D.  5/1998
?X:
?X: Unfortunately, this trick fails under clang++-7.  Apparently to
?X: cover both the stub issue and clang's requirements, we need to do
?X: a compile and run test. -- A.D. 8/2019
?X:
$cat > try.c <<EOCP
#include <pwd.h>
#include <stdio.h>
#include <stdlib.h>
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main(int argc, char *argv[])
{
  if (lchown("./try.c", -1, getgid()) == -1) {
      exit(EXIT_FAILURE);
  }
  exit(EXIT_SUCCESS);
}
EOCP
set try
if eval $compile && ./try; then
   $echo "lchown() found." >&4
   val="$define"
else
   $echo "lchown() NOT found." >&4
   val="$undef"
fi
set d_lchown
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_lchown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isnan: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isnan:
?S: This variable conditionally defines the HAS_ISNAN symbol, which
?S: indicates to the C program that the isnan() routine is available.
?S:.
?C:HAS_ISNAN:
?C: This symbol, if defined, indicates that the isnan routine is
?C: available to check whether a double is a NaN.
?C:.
?H:#$d_isnan HAS_ISNAN  /**/
?H:.
?LINT:set d_isnan
: check for isnan
echo "Checking to see if you have isnan..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isnan(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isnan."
else
 val="$undef"
 echo "You do not have isnan."
fi
$rm_try
set d_isnan
eval $setvar
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnan.U
No license file was found, but licenses were detected in source scan.

```
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```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Whoa.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:21:21  ram
?RCS: patch61: whoa script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:01  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to warn the user in case a change into a variable is noticed.
?X:
?X: To use this
 unit, $was must hold the old value that has changed. Upon
?X: exit, the two variables $td and $tu are set to the correct value for
?X: respectively defining or undefining a variable. For instance, if $vas was
?X: $undef, but now $var is $define, after calling . whoa, you should use
?X: eval "$var=\$tu" to finally set $var to the correct value. See unit Inlibc.
?X:
?MAKE:Whoa: Myread startsh hint
?MAKE: -pick add $@ %<
?F:./whoa
?T:var was
?LINT:change td tu
: set up the script used to warn in case of inconsistency
cat <<EOS >whoa
$startsh
EOS
cat <<'EOSC' >>whoa
dflt=y
echo " "
echo "*** WHOA THERE!!! ***" >&4
echo "    The $hint value for \$$var on this machine was \"$was\"!" >&4
rp="    Keep the $hint value?"
. ./myread
case "$ans" in
y) td=$was; tu=$was;;
esac
EOSC
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Whoa.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setgrent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_setgrent.U,v $
?RCS:
?MAKE:d_setgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setgrent:
?S: This variable conditionally defines the HAS_SETGRENT symbol, which
?S: indicates to the C program that the setgrent() routine is available
?S: for initializing sequential access to the group database.
?S:.
?C:HAS_SETGRENT:
?C: This symbol, if defined, indicates that the setgrent routine is
?C: available for initializing sequential access of the group database.
?C:.
?H:#$d_setgrent HAS_SETGRENT  /**/
?H:.
?LINT:set d_setgrent
: see if setgrent exists
set setgrent d_setgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setgrent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endgrent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_endgrent.U,v $
?RCS:
?MAKE:d_endgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endgrent:
?S: This variable conditionally defines the HAS_ENDGRENT symbol, which
?S: indicates to the C program that the endgrent() routine is available
```

```
?S: for sequential access of the group database.
?S:.
?C:HAS_ENDGRENT:
?C: This symbol, if defined, indicates that the getgrent routine is
?C: available for finalizing sequential access of the group database.
?C:.
?H:#$d_endgrent HAS_ENDGRENT  /**/
?H:.
?LINT:set d_endgrent
: see if endgrent exists
set endgrent d_endgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endgrent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fma: Inlibc
?MAKE: -pick add $@ %<
?S:d_fma:
?S: This variable conditionally defines the HAS_FMA symbol, which
?S: indicates to the C program that the fma() routine is available.
?S:.
?C:HAS_FMA:
?C: This symbol, if defined, indicates that the fma routine is
?C: available to do the multiply-add function.
?C:.
?H:#$d_fma HAS_FMA  /**/
?H:.
?LINT:set d_fma
: see if fma exists
set fma d_fma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fma.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llroundl: Inlibc
?MAKE: -pick add $@ %<
?S:d_llroundl:
?S: This variable conditionally defines the HAS_LLROUNDL symbol, which
```

```
?S: indicates to the C program that the llroundl() routine is available
?S: to return the long long value nearest to x away from zero.
?S:.
?C:HAS_LLROUNDL:
?C: This symbol, if defined, indicates that the llroundl routine is
?C: available to return the nearest long long value away from zero of
?C: the long double argument value.
?C:.
?H:#$d_llroundl HAS_LLROUNDL  /**/
?H:.
?LINT:set d_llroundl
: see if llroundl exists
set llroundl d_llroundl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llroundl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_symlink.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_symlink.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_symlink: Inlibc
?MAKE: -pick add $@ %<
?S:d_symlink:
?S: This variable conditionally defines the HAS_SYMLINK symbol, which
?S: indicates to the C program that the symlink() routine is available
?S: to create symbolic links.
?S:.
?C:HAS_SYMLINK (SYMLINK):
?C: This symbol, if defined, indicates that the symlink routine is available
?C: to
 create symbolic links.
?C:.
?H:#$d_symlink HAS_SYMLINK /**/
?H:.
?LINT:set d_symlink
```

: see if symlink exists
set symlink d_symlink
eval $inlibc

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_symlink.U

1.1209 libperl5.36 5.36.0-7+deb12u1

1.1209.1 Available under license :

No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldconfig.U,v $
?RCS: Revision 3.0.1.10 1997/02/28 15:06:39 ram
?RCS: patch61: added support for src.U
?RCS: patch61: new OSNAME define
?RCS: patch61: can now sense new OSes
?RCS:
?RCS: Revision 3.0.1.9 1995/07/25 13:40:51 ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8 1995/05/12 12:04:18 ram
?RCS: patch54: config.sh reload logic now knows about new -K switch
?RCS: patch54: cleaned up and extended osvers for DEC OSF/1 (ADO)
?RCS: patch54: added MachTen detection
 (ADO)
?RCS:
?RCS: Revision 3.0.1.7 1995/02/15 14:13:41 ram
?RCS: patch51: adapted osvers computation for AIX (ADO)
?RCS:
?RCS: Revision 3.0.1.6 1995/01/30 14:27:15 ram
?RCS: patch49: unit Options.U now exports file optdef.sh, not a variable
?RCS: patch49: update code for myuname changed (WED)
?RCS:
?RCS: Revision 3.0.1.5 1995/01/11 15:15:36 ram
?RCS: patch45: added quotes around the INITPROG variable (ADO)
?RCS: patch45: allows variable overriding after config file loading

```
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:57:05  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: merged with the version used for perl5's Configure (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:24:17  ram
?RCS: patch23: added support for osf1 hints
?RCS: patch23: new support for solaris and i386 systems (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:05:02  ram
?RCS: patch16: added post-processing on myuname for Xenix targets
?RCS: patch16: message proposing config.sh
 defaults made consistent
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:32  ram
?RCS: patch10: force use of config.sh when -d option is used (WAD)
?RCS: patch10: complain about non-existent hint files (WAD)
?RCS: patch10: added Options dependency for fastread variable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit tries to remember what we did last time we ran Configure, mostly
?X: for the sake of setting defaults.
?X:
?MAKE:Oldconfig hint myuname osname osvers: Instruct Myread Checkcc \
 Mksymlinks Loc Options Tr src trnl ln uname sh awk sed test cat grep \
 rm lns tr n c contains targetarch
?MAKE: -pick wipe $@ %<
?S:myuname:
?S: The output of 'uname -a' if available, otherwise the hostname. On Xenix,
?S: pseudo variables assignments in the output are stripped, thank you. The
?S: whole thing is then lower-cased.
?S:.
?S:hint:
?S: Gives the type of hints used for previous answers. May be one of
?S: "default",
 "recommended" or "previous".
?S:.
?S:osname:
?S: This variable contains the operating system name (e.g. sunos,
?S: solaris, hpux, etc.).  It can be useful later on for setting
?S: defaults.  Any spaces are replaced with underscores.  It is set
?S: to a null string if we can't figure it out.
?S:.
?S:osvers:
?S: This variable contains the operating system version (e.g.
```

```
?S: 4.1.3, 5.2, etc.).  It is primarily used for helping select
?S: an appropriate hints file, but might be useful elsewhere for
?S: setting defaults.  It is set to " if we can't figure it out.
?S: We try to be flexible about how much of the version number
?S: to keep, e.g. if 4.1.1, 4.1.2, and 4.1.3 are essentially the
?S: same for this package, hints files might just be os_4.0 or
?S: os_4.1, etc., not keeping separate files for each little release.
?S:.
?C:OSNAME:
?C: This symbol contains the name of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature
 tests from Configure are generally more reliable.
?C:.
?C:OSVERS:
?C: This symbol contains the version of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests from Configure are generally more reliable.
?C:.
?H:#define OSNAME "$osname"  /**/
?H:#define OSVERS "$osvers"  /**/
?H:.
?F:!config.sh
?T:tmp tmp_n tmp_c tmp_sh file
?T:xxxxfile xxxfile xxfile xfile hintfile newmyuname
?T:tans _ isesix INITPROG DJGPP has_uname
?D:osname="
?LINT:change n c sh
?LINT:extern hostarch
?LINT:change hostarch
: Determine the name of the machine
myuname=`$uname -a 2>/dev/null`
$test -z "$myuname" && myuname=`hostname 2>/dev/null`
?X: Special mention for Xenix, whose 'uname -a' gives us output like this:
?X:  sysname=XENIX
?X:  nodename=whatever
?X:  release=2.3.2 .. etc...
?X: Therefore, we strip all this variable assignment junk and remove all the
?X: new lines to keep the myuname variable sane... --RAM
myuname=`echo $myuname | $sed -e
 's/^[^=]*=//' -e 's/\//g' | \
 ./tr '[A-Z]' '[a-z]' | $tr $trnl ' '`
?X: Save the value we just computed to reset myuname after we get done here.
newmyuname="$myuname"
$test -f "$uname$_exe" && has_uname=y

: Guessing of the OS name -- half the following guesses are probably wrong...
: If you have better tests or hints, please send them to the metaconfig
```

```
: authors and to <MAINTLOC>
$test -f /irix && osname=irix
$test -f /xenix && osname=sco_xenix
$test -f /dynix && osname=dynix
$test -f /dnix && osname=dnix
$test -f /lynx.os && osname=lynxos
$test -f /unicos && osname=unicos && osvers=`$uname -r`
$test -f /unicosmk && osname=unicosmk && osvers=`$uname -r`
$test -f /unicosmk.ar && osname=unicosmk && osvers=`$uname -r`
$test -f /bin/mips && /bin/mips && osname=mips
$test -d /NextApps && set X `hostinfo | $grep 'NeXT Mach.*:' | \
 $sed -e 's/://' -e 's/\./_/'` && osname=next && osvers=$4
$test -d /usr/apollo/bin && osname=apollo
$test -f /etc/saf/_sactab && osname=svr4
$test -d /usr/include/minix
 && osname=minix
$test -f /system/gnu_library/bin/ar.pm && osname=vos
if $test -d /MachTen -o -d /MachTen_Folder; then
?X:  MachTen uname -a output looks like
?X:  xxx 4 0.0 Macintosh
?X:  MachTen /sbin/version output looks like
?X:  MachTen 4.0 Mon Aug 28 10:18:00 1995
?X:  MachTen 3.x had the 'version' command in /usr/etc/version.
 osname=machten
 if $test -x /sbin/version; then
  osvers=`/sbin/version | $awk '{print $2}' |
  $sed -e 's/[A-Za-z]$//'`
 elif $test -x /usr/etc/version; then
  osvers=`/usr/etc/version | $awk '{print $2}' |
  $sed -e 's/[A-Za-z]$//'`
 else
  osvers="$2.$3"
 fi
fi
$test -f /sys/posix.dll &&
 $test -f /usr/bin/what &&
 set X `/usr/bin/what /sys/posix.dll` &&
 $test "$3" = UWIN &&
 osname=uwin &&
 osvers="$5"
?X: If we have uname, we already computed a suitable uname -a output, correctly
?X: formatted for Xenix, and it lies in $myuname.
if $test "X$has_uname" != X; then
 set X $myuname
 shift
 case "$5" in
 fps*) osname=fps ;;
 mips*)
```

```
  case "$4"
 in
  umips) osname=umips ;;
  *) osname=mips ;;
  esac;;
 [23]100) osname=mips ;;
 next*) osname=next ;;
?X: Interactive Unix.
 i386*)
  tmp=`/bin/uname -X 2>/dev/null|awk '/3\.2v[45]/{ print $(NF) }'`
  if $test "$tmp" != "" -a "$3" = "3.2" -a -f '/etc/systemid'; then
   osname='sco'
   osvers=$tmp
  elif $test -f /etc/kconfig; then
   osname=isc
   if $test "$lns" = "$ln -s"; then
    osvers=4
   elif $contains _SYSV3 /usr/include/stdio.h > /dev/null 2>&1 ; then
    osvers=3
   elif $contains _POSIX_SOURCE /usr/include/stdio.h > /dev/null 2>&1 ; then
    osvers=2
   fi
  fi
  tmp=''
  ;;
?X: MS-DOS djgpp uname -a output looks like:
?X: ms-dos xxx 6 22 pc
?X:  $1 is the "dos flavor" (need not be "ms-dos").
?X:  $2 is the node name
?X:  $3 and $4 are version/subversion
?X:  $5 is always "pc", but that might not be unique to DJGPP.
?X: (e.g. Solaris_x86 has $5 = i86pc, which doesn't actually conflict,
?X: but it's close enought that I can easily imagine other vendors also
?X: using variants
 of pc* in $5.)
?X:  The "DJGPP" environment variable is always set when djgpp is active.
 pc*)
  if $test -n "$DJGPP"; then
   osname=dos
   osvers=djgpp
  fi
  ;;
 esac
 case "$1" in
 aix) osname=aix
?X: aix 4.1 uname -a output looks like
?X:  AIX  foo  1 4 000123456789
?X: where $4 is the major release number and $3 is the (minor) version.
```

```
?X: More detail on the version is available with the oslevel command.
?X: in 3.2.x, it output a string (see case statements below).  In 4.1,
?X: it puts out something like  4.1.1.0
  tmp=`( (oslevel) 2>/dev/null || echo "not found") 2>&1`
  case "$tmp" in
  'not found') osvers="$4"."$3" ;;
  '<3240'|'<>3240') osvers=3.2.0 ;;
  '=3240'|'>3240'|'<3250'|'<>3250') osvers=3.2.4 ;;
  '=3250'|'>3250') osvers=3.2.5 ;;
  *) osvers=$tmp;;
  esac
  ;;
 bsd386) osname=bsd386
  osvers=`$uname -r`
  ;;
 cygwin*) osname=cygwin
  osvers="$3"
  ;;
 *dc.osx) osname=dcosx
  osvers="$3"
  ;;
 dnix) osname=dnix
  osvers="$3"
  ;;
 domainos) osname=apollo
  osvers="$3"
  ;;
 dgux)
 osname=dgux
  osvers="$3"
  ;;
?X:  uname -a returns
?X:  DYNIX/ptx xxx 4.0 V4.1.2 i386
 dynixptx*) osname=dynixptx
  osvers=`echo "$4"|sed 's/^v//'`
  ;;
 freebsd) osname=freebsd
  osvers="$3" ;;
 genix) osname=genix ;;
?X: HP-UX uname -a gives something like
?X: HP-UX foobar B.10.20 A 9000/735 2016483812 two-user license
?X: Preserve the full 10.20 string instead of the previous plain '10'.
?X:  Thanks to Graham Barr.    --AD 6/30/1998
 hp*) osname=hpux
  osvers=`echo "$3" | $sed 's,.*\.\([0-9]*\.[0-9]*\),\1,'`
  ;;
 irix*) osname=irix
  case "$3" in
```

```
 4*) osvers=4 ;;
 5*) osvers=5 ;;
 *) osvers="$3" ;;
 esac
 ;;
linux) osname=linux
 case "$3" in
 *) osvers="$3" ;;
 esac
 ;;
MiNT) osname=mint
 ;;
netbsd*) osname=netbsd
 osvers="$3"
 ;;
news-os) osvers="$3"
 case "$3" in
 4*) osname=newsos4 ;;
 *) osname=newsos ;;
 esac
 ;;
next*) osname=next ;;
nonstop-ux) osname=nonstopux ;;
openbsd) osname=openbsd
   osvers="$3"
   ;;
POSIX-BC | posix-bc
) osname=posix-bc
 osvers="$3"
 ;;
powerux | power_ux | powermax_os | powermaxos | \
powerunix | power_unix) osname=powerux
 osvers="$3"
 ;;
qnx) osname=qnx
 osvers="$4"
 ;;
solaris) osname=solaris
 case "$3" in
 5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
 *) osvers="$3" ;;
 esac
 ;;
sunos) osname=sunos
 case "$3" in
 5*) osname=solaris
  osvers=`echo $3 | $sed 's/^5/2/g'` ;;
 *) osvers="$3" ;;
```

```
 esac
 ;;
titanos) osname=titanos
 case "$3" in
 1*) osvers=1 ;;
 2*) osvers=2 ;;
 3*) osvers=3 ;;
 4*) osvers=4 ;;
 *) osvers="$3" ;;
 esac
 ;;
ultrix) osname=ultrix
 osvers="$3"
 ;;
osf1|mls+) case "$5" in
 alpha)
?X: DEC OSF/1 myuname -a output looks like:  osf1 xxxx t3.2 123.4 alpha
?X: where the version number can be something like [xvt]n.n
  osname=dec_osf
?X: sizer knows the minor minor version: the letter
  osvers=`sizer -v | awk '{print $3}' | \
   ./tr '[A-Z]' '[a-z]' | sed 's/^[xvt]//'`
  case "$osvers" in
  [1-9].[0-9]*) ;;
  *) osvers=`echo
"$3" | sed 's/^[xvt]//'` ;;
  esac
  ;;
 hp*) osname=hp_osf1 ;;
 mips) osname=mips_osf1 ;;
?X: hp and mips were unsupported Technology Releases -- ADO, 24/10/94
 esac
 ;;
unixware) osname=svr5
 osvers="$4"
 ;;
uts) osname=uts
 osvers="$3"
 ;;
vos) osvers="$3"
 ;;
$2) case "$osname" in
 *isc*) ;;
 *freebsd*) ;;
 svr*)
  : svr4.x or possibly later
  case "svr$3" in
  ${osname}*)
```

```
   osname=svr$3
   osvers=$4
   ;;
  esac
  case "$osname" in
  svr4.0)
   : Check for ESIX
   if $test -f /stand/boot ; then
    eval `$grep '^INITPROG=[a-z/0-9]*$' /stand/boot`
    if $test -n "$INITPROG" -a -f "$INITPROG"; then
     isesix=`strings -a $INITPROG | \
      $grep 'ESIX SYSTEM V/386 Release 4.0'`
     if $test -n "$isesix"; then
      osname=esix4
     fi
    fi
   fi
   ;;
  esac
  ;;
 *) if $test -f /etc/systemid; then
   osname=sco
   set `echo $3 | $sed 's/\./ /g'` $4
   if $test -f $src/hints/sco_$1_$2_$3.sh; then
    osvers=$1.$2.$3
   elif $test
-f $src/hints/sco_$1_$2.sh; then
    osvers=$1.$2
   elif $test -f $src/hints/sco_$1.sh; then
    osvers=$1
   fi
  else
   case "$osname" in
   ") : Still unknown.  Probably a generic Sys V.
    osname="sysv"
    osvers="$3"
    ;;
   esac
  fi
  ;;
 esac
 ;;
*) case "$osname" in
 ") : Still unknown.  Probably a generic BSD.
  osname="$1"
  osvers="$3"
  ;;
 esac
```

```
  ;;
 esac
else
?X: Try to identify sony's NEWS-OS (BSD unix)
 if $test -f /vmunix -a -f $src/hints/news_os.sh; then
  (what /vmunix | UU/tr '[A-Z]' '[a-z]') > UU/kernel.what 2>&1
  if $contains news-os UU/kernel.what >/dev/null 2>&1; then
   osname=news_os
  fi
  $rm -f UU/kernel.what
?X: Maybe it's OS/2 or DOS or something similar
 elif $test -d c:/.; then
  set X $myuname
  osname=os2
  osvers="$5"
 fi
fi

: Try to determine whether config.sh was made on this system
case "$config_sh" in
")
?X: indentation wrong on purpose--RAM
dflt=n
case "$knowitall" in
")
 if test -f ../config.sh; then
  if $contains
 myuname= ../config.sh >/dev/null 2>&1; then
   eval "`$grep myuname= ../config.sh`"
  fi
  if test "X$myuname" = "X$newmyuname"; then
   dflt=y
  fi
 fi
 ;;
*) dflt=y;;
esac

: Get old answers from config file if it was generated on the same system
hint=default
if $test -f ../config.sh; then
 echo " "
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . ./myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it."
  mv ../config.sh ../config.sh.old
  myuname="$newmyuname"
```

```
  ;;
 *)  echo "Fetching default answers from your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  tmp_sh="$sh"
  . ../config.sh
  cp ../config.sh .
  n="$tmp_n"
  c="$tmp_c"
  hint=previous
  ;;
 esac
fi
?X: remember, case indentation is wrong--RAM
;;
*)
 echo " "
 echo "Fetching default answers from $config_sh..." >&4
 tmp_n="$n"
 tmp_c="$c"
 tmp_sh="$sh"
 cd ..
?X: preserve symbolic links, if any
 cp $config_sh config.sh 2>/dev/null
 chmod +w config.sh
 . ./config.sh
 cd UU
 cp ../config.sh
 .
 n="$tmp_n"
 c="$tmp_c"
 hint=previous
 ;;
esac
?X: Older versions did not always set $sh.
case "$sh" in
") sh="$tmp_sh" ;;
esac
$test "$override" && . ./optdef.sh

: Restore computed paths
for file in $loclist $trylist; do
 eval $file="\$_$file"
done

. ./checkcc
?X: Cross-compiling support
case "$targetarch" in
```

```
") ;;
*)  hostarch=$osname
 osname=`echo $targetarch|sed 's,^[^-]*-,,'`
 osvers=''
 ;;
esac

@if {test -d ../hints}
: Offer them some hints based on their OS
cd ..
?X: Since we are now at the root of the source tree, we must use $src
?X: to access the sources and not $rsrc. See src.U for details...
if $test ! -f config.sh; then
 $cat <<EOM

First time through, eh?  I have some defaults handy for some systems
that need some extra help getting the Configure answers right:

EOM
 (cd $src/hints; ls -C *.sh) | $sed 's/\.sh/   /g' >&4
 dflt=''

 : Now look for a hint file osname_osvers, unless one has been
 : specified already.
 case "$hintfile" in
 ''|' ')
  file=`echo "${osname}_${osvers}"
| $sed -e 's%\.%_%g' -e 's%_$%%'`
  : Also try without trailing minor version numbers.
  xfile=`echo $file | $sed -e 's%_[^_]*$%%'`
  xxfile=`echo $xfile | $sed -e 's%_[^_]*$%%'`
  xxxfile=`echo $xxfile | $sed -e 's%_[^_]*$%%'`
  xxxxfile=`echo $xxxfile | $sed -e 's%_[^_]*$%%'`
  case "$file" in
  '') dflt=none ;;
  *)  case "$osvers" in
   '') dflt=$file
    ;;
   *)  if $test -f $src/hints/$file.sh ; then
     dflt=$file
    elif $test -f $src/hints/$xfile.sh ; then
     dflt=$xfile
    elif $test -f $src/hints/$xxfile.sh ; then
     dflt=$xxfile
    elif $test -f $src/hints/$xxxfile.sh ; then
     dflt=$xxxfile
    elif $test -f $src/hints/$xxxxfile.sh ; then
     dflt=$xxxxfile
```

```
    elif $test -f "$src/hints/${osname}.sh" ; then
     dflt="${osname}"
    else
     dflt=none
    fi
    ;;
   esac
   ;;
  esac
  if $test -f Policy.sh ; then
   case "$dflt" in
   *Policy*) ;;
   none) dflt="Policy" ;;
   *) dflt="Policy $dflt" ;;
   esac
  fi
  ;;
 *)
  dflt=`echo
 $hintfile | $sed 's/\.sh$//'`
  ;;
 esac

 if $test -f Policy.sh ; then
  $cat <<EOM

There's also a Policy hint file available, which should make the
site-specific (policy) questions easier to answer.
EOM

 fi

 $cat <<EOM

You may give one or more space-separated answers, or "none" if appropriate.
A well-behaved OS will have no hints, so answering "none" or just "Policy"
is a good thing.  DO NOT give a wrong version or a wrong OS.

EOM

 rp="Which of these apply, if any?"
 . UU/myread
 tans=$ans
 for file in $tans; do
  if $test X$file = XPolicy -a -f Policy.sh; then
   . Policy.sh
   $cat Policy.sh >> UU/config.sh
  elif $test -f $src/hints/$file.sh; then
```

```
  . $src/hints/$file.sh
  $cat $src/hints/$file.sh >> UU/config.sh
 elif $test X"$tans" = X -o X"$tans" = Xnone ; then
  : nothing
 else
  : Give one chance to correct a possible typo.
  echo "$file.sh does not exist"
  dflt=$file
  rp="hint to use instead?"
  . UU/myread
  for file in $ans; do
   if $test -f "$src/hints/$file.sh";
then
    . $src/hints/$file.sh
    $cat $src/hints/$file.sh >> UU/config.sh
   elif $test X$ans = X -o X$ans = Xnone ; then
    : nothing
   else
    echo "$file.sh does not exist -- ignored."
   fi
  done
 fi
done

hint=recommended
: Remember our hint file for later.
if $test -f "$src/hints/$file.sh" ; then
 hintfile="$file"
else
 hintfile=''
fi
fi
cd UU
?X: From here on, we must use $rsrc instead of $src

@end
: Process their -A options
. ./posthint.sh

@if osname || osvers
: Ask them to confirm the OS name
cat << EOM

Configure uses the operating system name and version to set some defaults.
The default value is probably right if the name rings a bell. Otherwise,
since spelling matters for me, either accept the default or answer "none"
to leave it blank.
```

```
EOM
@end
@if osname
case "$osname" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *)  dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/_.*$//'` ;;
  esac
  ;;
 *) dflt="$osname" ;;
esac
rp="Operating
 system name?"
. ./myread
case "$ans" in
none)  osname=" ;;
*) osname=`echo "$ans" | $sed -e 's/[  ][ ]*/_/g' | ./tr '[A-Z]' '[a-z]'`;;
esac
@end
@if osvers
@if osname
echo " "
@end
case "$osvers" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *) dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/^[^_]*//'`
   dflt=`echo $dflt | $sed -e 's/^_//' -e 's/_/./g'`
   case "$dflt" in
   "|' ') dflt=none ;;
   esac
   ;;
  esac
  ;;
 *) dflt="$osvers" ;;
esac
rp="Operating system version?"
. ./myread
case "$ans" in
none)  osvers=" ;;
*) osvers="$ans" ;;
esac

@end
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Oldconfig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_syscallproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_syscallproto:
?S: This variable conditionally defines the HAS_SYSCALL_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the syscall() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SYSCALL_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the syscall() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
 int syscall(int,  ...);
?C:  extern int syscall(long, ...);
?C:.
?H:#$d_syscallproto HAS_SYSCALL_PROTO /**/
?H:.
?LINT:set d_syscallproto
: see if prototype for syscall is available
echo " "
set d_syscallproto syscall $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_syscallproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cppstdin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cppstdin.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:08:34  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:05:38  ram
?RCS: patch16: comment for CPPLAST was missing
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:18:58  ram
?RCS: patch15: new variables cpprun and cpplast, guaranteed wrapper-free
?RCS: patch15: cppstdin now tries to use cc, even at the cost of a wrapper
?RCS:
?RCS: Revision 3.0.1.1
  1993/08/25  14:00:53  ram
?RCS: patch6: remove wrapper when not actually used
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppstdin cppminus cpprun cpplast: contains test \
 Myread Oldconfig Loc cpp +cc rm hint osname gccversion
?MAKE: -pick add $@ %<
?S:cppstdin:
?S: This variable contains the command which will invoke the C
?S: preprocessor on standard input and put the output to stdout.
?S: It is primarily used by other Configure units that ask about
?S: preprocessor symbols.
?S:.
?S:cppminus:
?S: This variable contains the second part of the string which will invoke
?S: the C preprocessor on the standard input and produce to standard
?S: output.  This variable will have the value "-" if cppstdin needs
?S: a minus to specify standard input, otherwise the value is "".
?S:.
?S:cpprun:
?S: This variable contains the command which will invoke a C preprocessor
?S: on standard input and put the output to stdout. It is guaranteed
 not
?S: to be a wrapper and may be a null string if no preprocessor can be
?S: made directly available. This preprocessor might be different from the
?S: one used by the C compiler. Don't forget to append cpplast after the
?S: preprocessor options.
?S:.
?S:cpplast:
?S: This variable has the same functionality as cppminus, only it applies
?S: to cpprun and not cppstdin.
```

```
?S:.
?C:CPPSTDIN:
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  Typical value of "cc -E" or "/lib/cpp", but it can also
?C: call a wrapper. See CPPRUN.
?C:.
?C:CPPMINUS:
?C: This symbol contains the second part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  This symbol will have the value "-" if CPPSTDIN needs a minus
?C: to specify standard input, otherwise the value is "".
?C:.
?C:CPPRUN:
?C: This symbol contains the string which will invoke
 a C preprocessor on
?C: the standard input and produce to standard output. It needs to end
?C: with CPPLAST, after all other preprocessor flags have been specified.
?C: The main difference with CPPSTDIN is that this program will never be a
?C: pointer to a shell wrapper, i.e. it will be empty if no preprocessor is
?C: available directly to the user. Note that it may well be different from
?C: the preprocessor used to compile the C program.
?C:.
?C:CPPLAST:
?C: This symbol is intended to be used along with CPPRUN in the same manner
?C: symbol CPPMINUS is used with CPPSTDIN. It contains either "-" or "".
?C:.
?H:#define CPPSTDIN "$cppstdin"
?H:#define CPPMINUS "$cppminus"
?H:#define CPPRUN "$cpprun"
?H:#define CPPLAST "$cpplast"
?H:.
?F:cppstdin !testcpp.out !testcpp.c
?T:wrapper x_cpp x_minus ok
?LINT:extern cppflags
: see how we invoke the C preprocessor
echo " "
echo "Now, how can we feed standard input to your C preprocessor..." >&4
cat <<'EOT' >testcpp.c
#define ABC abc
#define
 XYZ xyz
ABC.XYZ
EOT
cd ..
if test ! -f cppstdin; then
 if test "X$osname" = "Xaix" -a "X$gccversion" = X; then
  # AIX cc -E doesn't show the absolute headerfile
```

```
  # locations but we'll cheat by using the -M flag.
  echo 'cat >.$$.c; rm -f .$$.u; '"$cc" ${1+"$@"} -M -c .$$.c 2>/dev/null; test -s .$$.u && awk '""""$2 ~ /\.h$/ { print
"# 0 \""$2"\"" }"""" .$$.u; rm -f .$$.o .$$.u; '"$cc" -E ${1+"$@"} .$$.c; rm .$$.c' > cppstdin
 else
  echo 'cat >.$$.c; '"$cc $cppflags" -E ${1+"$@"} .$$.c; rm .$$.c' >cppstdin
 fi
else
 echo "Keeping your $hint cppstdin wrapper."
fi
chmod 755 cppstdin
wrapper=`pwd`/cppstdin
ok='false'
cd UU

?X:
?X: We'll run the cpp tests again if we don't have any valid C preprocessor
?X: yet or don't know how to proceed without a wrapper (in which case cpprun
?X: is empty and that's really annoying...)
?X:
if $test "X$cppstdin" != "X" && \
 $cppstdin $cppminus <testcpp.c >testcpp.out 2>&1 && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
then
 echo "You used
 to use $cppstdin $cppminus so we'll use that again."
 case "$cpprun" in
 '') echo "But let's see if we can live without a wrapper..." ;;
 *)
  if $cpprun $cpplast <testcpp.c >testcpp.out 2>&1 && \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
   echo "(And we'll use $cpprun $cpplast to preprocess directly.)"
   ok='true'
  else
   echo "(However, $cpprun $cpplast does not work, let's see...)"
  fi
  ;;
 esac
else
 case "$cppstdin" in
 '') ;;
 *)
  echo "Good old $cppstdin $cppminus does not seem to be of any help..."
  ;;
 esac
fi

if $ok; then
```

```
 : nothing
elif echo 'Maybe """$cc"' -E" will work...'; \
 $cc -E <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc $cppflags -E"
 x_minus=";
elif echo 'Nope...maybe """$cc"' -E -" will work...'; \
 $cc -E - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc $cppflags -E"
 x_minus='-';
elif
 echo 'Nope...maybe """$cc"' -P" will work...'; \
 $cc -P <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yipee, that works!"
 x_cpp="$cc $cppflags -P"
 x_minus=";
elif echo 'Nope...maybe """$cc"' -P -" will work...'; \
 $cc -P - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "At long last!"
 x_cpp="$cc $cppflags -P"
 x_minus='-';
elif echo 'No such luck, maybe "'$cpp"' will work...'; \
 $cpp <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "It works!"
 x_cpp="$cpp $cppflags"
 x_minus=";
elif echo 'Nixed again...maybe "'$cpp' -" will work...'; \
 $cpp - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Hooray, it works!  I was beginning to wonder."
 x_cpp="$cpp $cppflags"
 x_minus='-';
elif echo 'Uh-uh.  Time to get fancy.  Trying a wrapper...'; \
 $wrapper <testcpp.c >testcpp.out 2>&1; \
 $contains
 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 x_cpp="$wrapper"
 x_minus="
 echo "Eureka!"
else
 dflt="
 rp="No dice.  I can't find a C preprocessor.  Name one:"
```

```
 . ./myread
 x_cpp="$ans"
 x_minus="
 $x_cpp <testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
  echo "OK, that will do." >&4
 else
echo "Sorry, I can't get that to work.  Go find one and rerun Configure." >&4
  exit 1
 fi
fi

case "$ok" in
false)
 cppstdin="$x_cpp"
 cppminus="$x_minus"
 cpprun="$x_cpp"
 cpplast="$x_minus"
?X:
?X: If /lib/cpp is used, try using a wrapper to increase our chances to have
?X: the C compiler and our $cppstdin agree on the same symbols... However,
?X: since cpprun is guaranteed not to be a wrapper, we must clear it if the
?X: only preprocessor we found was a wrapper, with all our luck...
?X:
 set X $x_cpp
 shift
 case "$1" in
 "$cpp")
  echo "Perhaps can we force $cc -E using a wrapper..."
  if $wrapper <testcpp.c >testcpp.out 2>&1; \
   $contains 'abc.*xyz'
 testcpp.out >/dev/null 2>&1
  then
   echo "Yup, we can."
   cppstdin="$wrapper"
   cppminus=";
  else
   echo "Nope, we'll have to live without it..."
  fi
  ;;
 esac
 case "$cpprun" in
 "$wrapper")
  cpprun="
  cpplast="
  ;;
 esac
 ;;
```

```
esac

case "$cppstdin" in
"$wrapper"|'cppstdin') ;;
*) $rm -f $wrapper;;
esac
$rm -f testcpp.c testcpp.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/cppstdin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strdup.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strdup.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:21:41  ram
?RCS: patch15: created
?RCS:
?MAKE:d_strdup: Inlibc
?MAKE: -pick add $@ %<
?S:d_strdup:
?S: This variable conditionally defines HAS_STRDUP if strdup() is
?S: available to duplicate strings in memory.
?S:.
?C:HAS_STRDUP:
?C: This symbol, if defined, indicates that the strdup routine is
?C: available to duplicate strings in memory. Otherwise, roll up
?C: your own...
?C:.
?H:#$d_strdup HAS_STRDUP  /**/
?H:.
?LINT:set
 d_strdup
: see if strdup exists
set strdup d_strdup
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strdup.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: kernel.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: kernel.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:kernel: Getfile test
?MAKE: -pick add $@ %<
?S:kernel:
?S: This variable becomes the (fully rooted) path name of the kernel.
?S:.
: find the name of the kernel.
echo " "
case "$kernel" in
")
 if $test -r /unix; then
  dflt=/unix
 elif $test -r /vmunix; then
  dflt=/vmunix
 elif $test -r /xenix; then
  dflt=/xenix
 elif $test -r /mach; then
  dflt=/mach
 elif
 $test -r /dgux; then
  dflt=/dgux
 elif $test -r /hp-ux; then
  dflt=/hp-ux
 elif $test -r /syst; then
  dflt=/syst
 elif $test -r /arix; then
  dflt=/arix
 elif $test -r /irix; then
  dflt=/arix
 else
  dflt='unknown'
  set X /*x
  shift
```

```
  case $# in
  1)
   if $test -r "$1"; then
    dflt="$1"
   fi
   ;;
  esac
 fi
 ;;
*)
 dflt="$kernel"
 ;;
esac
fn=f
rp='What is the name of your kernel?'
. ./getfile
kernel="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/kernel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_expm1: Inlibc
?MAKE: -pick add $@ %<
?S:d_expm1:
?S: This variable conditionally defines the HAS_EXPM1 symbol, which
?S: indicates to the C program that the expm1() routine is available.
?S:.
?C:HAS_EXPM1:
?C: This symbol, if defined, indicates that the expm1 routine is
?C: available to do the exp(x) - 1 when x is near 1 function.
?C:.
?H:#$d_expm1 HAS_EXPM1  /**/
?H:.
?LINT:set d_expm1
: see if expm1 exists
set expm1 d_expm1
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_expm1.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Csym.U,v 3.0.1.4 1995/07/25 13:36:29 ram Exp $
?RCS:
```

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Csym.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:36:29  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS: patch56: added quotes for OS/2 support
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:00:33  ram
?RCS: patch54: fixed C test program to bypass gcc builtin type checks (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/31  09:34:13  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision
 3.0.1.1  1993/08/25  14:00:05  ram
?RCS: patch6: added ldflags as a conditional dependency and to compile line
?RCS: patch6: a final double quote was missing in csym variable after eval
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Csym mistrustnm extern_C: Options contains libc libs runnm test \
 +cc +optimize +ccflags +ldflags run rm_try _exe d_cplusplus
?MAKE: -pick add $@ %<
?LINT:define csym
?LINT:use libc
?LINT:extern mistrustnm
?LINT:set mistrustnm
?S:csym:
?S: This shell variable is used internally by Configure to check
?S: whether a given C symbol is defined or not. A typical use is:
?S:  set symbol result [-fva] [previous]
?S:  eval $csym
?S: That will set result to 'true' if the function [-f], variable [-v]
?S: or array [-a] is defined, 'false' otherwise. If a previous value is
?S: given and the -r flag was provided on the command line, that value
?S: is reused without questioning.
?S:.
?S:extern_C:
?S: ANSI C
 requires 'extern' where C++ requires 'extern "C"'. This
?S: variable can be used in Configure to do the right thing.
```

```
?S:.
?S:mistrustnm:
?S: This variable can be used to establish a fallthrough for the cases
?S: where nm fails to find a symbol.  If usenm is false or usenm is true
?S: and mistrustnm is false, this variable has no effect.  If usenm is true
?S: and mistrustnm is "compile", a test program will be compiled to try to
?S: find any symbol that can't be located via nm lookup.  If mistrustnm is
?S: "run", the test program will be run as well as being compiled.
?S:.
?V:csym
?T:tval tx tlook tf tdc
?F:!try
: is a C symbol defined?
csym='tlook=$1;
case "$3" in
-v) tf=libc.tmp; tdc="";;
-a) tf=libc.tmp; tdc="[]";;
*) tlook="^$1\$"; tf=libc.list; tdc="()";;
esac;
case "$d_cplusplus" in
   $define) extern_C="extern \"C\"" ;;
   *)  extern_C="extern" ;;
esac;
tx=yes;
case "$reuseval-$4" in
true-) ;;
true-*) tx=no; eval "tval=\$$4"; case "$tval" in "") tx=yes;; esac;;
esac;
case "$tx"
 in
yes)
?X:
?X: Put symbol inside a printf to fool optimizing compilers...
?X:
?X: We use 'short' instead of 'int' to try to circumvent overzealous
?X: optimizing compilers using built-in prototypes for commonly used
?X: routines to complain when seeing a different external declaration. For
?X: instance, gcc 2.6.3 fails if we use 'int' and we attempt a test against
?X: memcpy() on machines where sizeof(int) == sizeof(char *) (the usual return
?X: type), the compiler assuming it's a built-in declaration given that the
?X: returned size matches. At least with 'short' we are safe! -- RAM, for ADO
?X:
?X: Let's thank GNU cc for making our lives so easy! :-)
?X: (An alternative for the future would be to use our knowledge about gcc
?X: to force a -fno-builtin option in the compile test, in case the 'short'
?X: trick is obsoleted by future gcc releases). -- RAM
?X:
 tval=false;
```

```
 if $test "$runnm" = true; then
  if $contains $tlook $tf >/dev/null 2>&1; then
   tval=true;
  elif $test "$mistrustnm"
 = compile -o "$mistrustnm" = run; then
   echo "$extern_C void *$1$tdc; void *(*(p()))$tdc { return &$1; } int main(int argc, char **argv) { if(p() && p() !=
(void *)argv[0]) return(0); else return(1); }"> try.c;
   $cc -o try $optimize $ccflags $ldflags try.c >/dev/null 2>&1 $libs && tval=true;
   $test "$mistrustnm" = run -a -x try && { $run ./try$_exe >/dev/null 2>&1 || tval=false; };
   $rm_try;
  fi;
 else
  echo "$extern_C void *$1$tdc; void *(*(p()))$tdc { return &$1; } int main(int argc, char **argv) { if(p() && p() !=
(void *)argv[0]) return(0); else return(1); }"> try.c;
  $cc -o try $optimize $ccflags $ldflags try.c $libs >/dev/null 2>&1 && tval=true;
  $rm_try;
 fi;
 ;;
*)
 case "$tval" in
 $define) tval=true;;
 *) tval=false;;
 esac;
 ;;
esac;
eval "$2=$tval"'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/Csym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gnulibc.U,v 3.0.1.1 1997/02/28 15:34:33 ram Exp $
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
?RCS: Copyright (c) 1996, Sven Verdoolaege
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_gnulibc.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_gnulibc gnulibc_version: Myread Oldconfig Setvar rm_try \
```

```
 cat Compile run
?MAKE: -pick add $@ %<
?S:d_gnulibc:
?S: Defined if we're dealing with the GNU C Library.
?S:.
?S:gnulibc_version:
?S: This variable contains the version number of the GNU C library.
?S: It is
 usually something like '2.2.5'.  It is a plain " if this
?S: is not the GNU C library, or if the version is unknown.
?S:.
?C:HAS_GNULIBC:
?C: This symbol, if defined, indicates to the C program that
?C: the GNU C library is being used.  A better check is to use
?C: the __GLIBC__ and __GLIBC_MINOR__ symbols supplied with glibc.
?C:.
?H:#$d_gnulibc HAS_GNULIBC /**/
?H:?%<:#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)
?H:?%<:#   define _GNU_SOURCE
?H:?%<:#endif
?H:.
?F:!glibc.ver !try
?LINT: set d_gnulibc
?X: gnulibc can be executed by calling __libc_main().
?X: Ulrich Drepper doesn't think any other libc does that,
?X: but we check if it says 'GNU C Library' to be sure.
?X:
?X: Alas, as of 3/1998 glibc 2.0.7 reportedly isn't going to
?X: have __libc_main() anymore. :-(.  Fortunately, all released
?X: versions of glibc 2.x.x _do_ have CPP variables.  For 2.0.6,
?X: they are:
?X: #define __GLIBC__  2
?X: #define__GLIBC_MINOR__ 0.
?X: (The '6' isn't available :-(.
?X: glibc2.1 will also
 have
?X:  extern const char * __gnu_get_libc_release(void);
?X:  extern const char * __gnu_get_libc_version(void);
?X: functions.   --thanks to Andreas Jaeger.   --AD  6/1998.
?X: Although the exact format isn't documented, __gnu_get_libc_version()
?X: returns a simple string '2.1.3' in glibc 2.1.3.
?X:
: Check if we are using the GNU C library
echo " "
echo "Checking for GNU C Library..." >&4
cat >try.c <<'EOCP'
/* Find out version of GNU C library.  __GLIBC__ and __GLIBC_MINOR__
  alone are insufficient to distinguish different versions, such as
```

```
  2.0.6 and 2.0.7.  The function gnu_get_libc_version() appeared in
  libc version 2.1.0.      A. Dougherty,  June 3, 2002.
*/
#include <stdio.h>
int main(void)
{
#ifdef __GLIBC__
#   ifdef __GLIBC_MINOR__
#       if __GLIBC__ >= 2 && __GLIBC_MINOR__ >= 1 && !defined(__cplusplus)
#           include <gnu/libc-version.h>
     printf("%s\n",  gnu_get_libc_version());
#       else
     printf("%d.%d\n",  __GLIBC__, __GLIBC_MINOR__);
#
   endif
#   else
 printf("%d\n",  __GLIBC__);
#   endif
   return 0;
#else
   return 1;
#endif
}
EOCP
set try
if eval $compile_ok && $run ./try > glibc.ver; then
 val="$define"
 gnulibc_version=`$cat glibc.ver`
 echo "You are using the GNU C Library version $gnulibc_version"
else
 val="$undef"
 gnulibc_version=''
 echo "You are not using the GNU C Library"
fi
$rm_try glibc.ver
set d_gnulibc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_gnulibc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: netdbtype.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: netdbtype.U,v $
?RCS:
?MAKE:netdb_host_type netdb_hlen_type netdb_name_type netdb_net_type: \
 Protochk Oldconfig Myread cat \
 d_gethbyaddr d_gethbyname d_getnbyaddr \
 i_niin i_netdb i_unistd d_socket sizetype extern_C
?MAKE: -pick add $@ %<
?S:netdb_host_type:
?S: This variable holds the type used for the 1st argument to
?S: gethostbyaddr().  Usually, this is char * or void *,  possibly
?S: with or without a const prefix.
?S: This is only useful if you have gethostbyaddr(), naturally.
?S:.
?S:netdb_hlen_type:
?S: This variable holds the type used for the 2nd argument to
?S: gethostbyaddr().  Usually,
 this is int or size_t or unsigned.
?S: This is only useful if you have gethostbyaddr(), naturally.
?S:.
?S:netdb_name_type:
?S: This variable holds the type used for the argument to
?S: gethostbyname().  Usually, this is char * or const char *.
?S: This is only useful if you have gethostbyname(), naturally.
?S:.
?S:netdb_net_type:
?S: This variable holds the type used for the 1st argument to
?S: getnetbyaddr().  Usually, this is int or long.
?S: This is only useful if you have getnetbyaddr(), naturally.
?S:.
?C:Netdb_host_t:
?C: This symbol holds the type used for the 1st argument
?C: to gethostbyaddr().
?C:.
?C:Netdb_hlen_t:
?C: This symbol holds the type used for the 2nd argument
?C: to gethostbyaddr().
?C:.
?C:Netdb_name_t:
?C: This symbol holds the type used for the argument to
?C: gethostbyname().
?C:.
?C:Netdb_net_t:
?C: This symbol holds the type used for the 1st argument to
?C: getnetbyaddr().
?C:.
```

```
?H:#define Netdb_host_t  $netdb_host_type /**/
?H:#define Netdb_hlen_t  $netdb_hlen_type
 /**/
?H:#define Netdb_name_t  $netdb_name_type /**/
?H:#define Netdb_net_t  $netdb_net_type /**/
?H:.
?T:xxx yyy try hdrs
@if netdb_host_type || Netdb_host_t || netdb_hlen_type || Netdb_hlen_t
: check for type of arguments to gethostbyaddr.
if test "X$netdb_host_type" = X -o "X$netdb_hlen_type" = X; then
 case "$d_gethbyaddr" in
 $define)
  $cat <<EOM

Checking to see what type of arguments are accepted by gethostbyaddr().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin netinet/in.h
   $i_netdb netdb.h
   $i_unistd unistd.h"
  : The first arg can 'char *' or 'void *'
  : The second arg is some of integral type
  for xxx in in_addr_t 'const void *' 'const char *' 'void *' 'char *'; do
   for yyy in size_t long int; do
    case "$netdb_host_type" in
    ") try="$extern_C struct hostent *gethostbyaddr($xxx, $yyy, int);"
     if ./protochk "$try" $hdrs; then
      echo "Your system accepts $xxx for the first arg."
      echo "...and $yyy for the second arg."
      netdb_host_type="$xxx"
      netdb_hlen_type="$yyy"
     fi
     ;;
    esac
   done
  done
  :
 In case none of those worked, prompt the user.
  case "$netdb_host_type" in
  ") rp='What is the type for the 1st argument to gethostbyaddr?'
   dflt='char *'
   . ./myread
   netdb_host_type=$ans
   rp='What is the type for the 2nd argument to gethostbyaddr?'
   dflt="$sizetype"
   . ./myread
   netdb_hlen_type=$ans
```

```
  ;;
  esac
  ;;
 *) : no gethostbyaddr, so pick harmless defaults
  netdb_host_type='char *'
  netdb_hlen_type="$sizetype"
  ;;
 esac
 # Remove the "const" if needed. -- but then we'll have a
 # prototype clash!
 # netdb_host_type=`echo "$netdb_host_type" | sed 's/^const //'`
fi
@end

@if netdb_name_type || Netdb_name_t
: check for type of argument to gethostbyname.
if test "X$netdb_name_type" = X ; then
 case "$d_gethbyname" in
 $define)
  $cat <<EOM

Checking to see what type of argument is accepted by gethostbyname().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin
 netinet/in.h
   $i_netdb netdb.h
   $i_unistd unistd.h"
  for xxx in "const char *" "char *"; do
   case "$netdb_name_type" in
   ") try="$extern_C struct hostent *gethostbyname($xxx);"
    if ./protochk "$try" $hdrs; then
     echo "Your system accepts $xxx."
     netdb_name_type="$xxx"
    fi
    ;;
   esac
  done
  : In case none of those worked, prompt the user.
  case "$netdb_name_type" in
  ") rp='What is the type for the 1st argument to gethostbyname?'
   dflt='char *'
   . ./myread
   netdb_name_type=$ans
   ;;
  esac
  ;;
```

```
 *) : no gethostbyname, so pick harmless default
  netdb_name_type='char *'
  ;;
 esac
fi
@end

@if netdb_net_type || Netdb_net_t
: check for type of 1st argument to getnetbyaddr.
if test "X$netdb_net_type" = X ; then
 case "$d_getnbyaddr" in
 $define)
  $cat <<EOM

Checking to see what type of 1st argument is accepted by getnetbyaddr().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin netinet/in.h
   $i_netdb netdb.h
   $i_unistd
 unistd.h"
  for xxx in in_addr_t "unsigned long" long "unsigned int" int; do
   case "$netdb_net_type" in
   ") try="$extern_C struct netent *getnetbyaddr($xxx, int);"
    if ./protochk "$try" $hdrs; then
     echo "Your system accepts $xxx."
     netdb_net_type="$xxx"
    fi
    ;;
   esac
  done
  : In case none of those worked, prompt the user.
  case "$netdb_net_type" in
  ") rp='What is the type for the 1st argument to getnetbyaddr?'
   dflt='long'
   . ./myread
   netdb_net_type=$ans
   ;;
  esac
  ;;
 *) : no getnetbyaddr, so pick harmless default
  netdb_net_type='long'
  ;;
 esac
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/netdbtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS:
?X:
?X: This unit is just a quick shorthand for the compile command
?X: to be used in all the other metaconfig units.
?X:
?MAKE:Compile: +cc +optimize +ccflags +ldflags +libs
?MAKE: -pick add $@ %<
?LINT:define compile compile_ok
?V:compile compile_ok mc_file
?S:compile:
?S: This shell variable is used internally
 by Configure to provide
?S: a convenient shorthand for the typical compile command, namely
?S: $cc $optimize $ccflags $ldflags -o $1 $1.c $libs > /dev/null 2>&1
?S: Note that the output filename does _not_ include the _exe
?S: extension.  Instead we assume that the linker will be
?S: "helpful" and automatically appending the correct suffix.
?S: OS/2 users will apparently need to supply the -Zexe flag to
?S: get this behavior.
?S:
?S: To use this variable, say something like:
?S:  echo 'int main() { exit(0); }' > try.c
?S:  set try
?S:  if eval $compile; then
?S:   echo "success"   # and do whatever . . .
?S:  else
?S:   echo "failure"   # and do whatever . . .
?S:  fi
?S: To add extra flags cc flags (e.g. -DWHATEVER) just put them
```

```
?S: in $*, e.g.
?S:  set try -DTRY_THIS_FLAG
?S:.
?S:compile_ok:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command that you
?S: expect to work ok.  It is the same as $compile,
 except we
?S: deliberately let the user see any error messages.
?S:.
: define a shorthand compile call
compile='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
: define a shorthand compile call for compilations that should be ok.
compile_ok='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs;'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Compile.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmat.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:04:23  ram
?RCS: patch56: use findhdr to find <sys/shm.h>, to get the right one (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:18:56  ram
?RCS: patch27: added new symbol HAS_SHMAT_PROTOTYPE (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:54:18  ram
?RCS: patch23: new Shmat_t symbol to declare return type of shmat()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_shmat shmattype
 d_shmatprototype: Inlibc cat +cc +ccflags \
 rm cppstdin cppflags cppminus Findhdr Setvar contains
?MAKE: -pick add $@ %<
?S:d_shmat:
?S: This variable conditionally defines the HAS_SHMAT symbol, which
?S: indicates to the C program that the shmat() routine is available.
?S:.
?S:shmattype:
?S: This symbol contains the type of pointer returned by shmat().
?S: It can be 'void *' or 'char *'.
?S:.
?S:d_shmatprototype:
?S: This variable conditionally defines the HAS_SHMAT_PROTOTYPE
?S: symbol, which indicates that sys/shm.h has a prototype for
?S: shmat.
?S:.
?C:HAS_SHMAT:
?C: This symbol, if defined, indicates that the shmat() routine is
?C: available to attach a shared memory segment to the process space.
?C:.
?C:Shmat_t:
?C: This symbol holds the return type of the shmat() system call.
?C: Usually set to 'void *' or 'char *'.
?C:.
?C:HAS_SHMAT_PROTOTYPE:
?C: This symbol, if defined, indicates that the sys/shm.h includes
?C: a prototype for shmat().  Otherwise, it is up to the program
 to
?C: guess one.  Shmat_t shmat _((int, Shmat_t, int)) is a good guess,
?C: but not always right so it should be emitted by the program only
?C: when HAS_SHMAT_PROTOTYPE is not defined to avoid conflicting defs.
?C:.
?H:#$d_shmat HAS_SHMAT  /**/
?H:#define Shmat_t $shmattype /**/
?H:#$d_shmatprototype HAS_SHMAT_PROTOTYPE /**/
?H:.
?LINT:set d_shmat d_shmatprototype
?T:xxx
: see if shmat exists
set shmat d_shmat
eval $inlibc
: see what shmat returns
case "$d_shmat" in
"$define")
 $cat >shmat.c <<'END'
#include <sys/shm.h>
void *shmat();
```

```
END
 if $cc $ccflags -c shmat.c >/dev/null 2>&1; then
  shmattype='void *'
 else
  shmattype='char *'
 fi
 echo "and it returns ($shmattype)." >&4
 : see if a prototype for shmat is available
 xxx=`./findhdr sys/shm.h`
 $cppstdin $cppflags $cppminus < $xxx > shmat.c 2>/dev/null
 if $contains 'shmat.*(' shmat.c >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 $rm -f shmat.[co]
 ;;
*)
 val="$undef"
 ;;
esac
set d_shmatprototype
eval $setvar
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmat.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_varhdr.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:54:42  ram
?RCS: patch61: varargs script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:21:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:26:05  ram
?RCS: patch27: this unit now supersedes old i_stdarg.U and i_varargs.U
```

```
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:49  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?MAKE:i_stdarg i_varargs i_varhdr: cat +cc +ccflags rm test Setvar \
 Findhdr Warn startsh _o
?MAKE: -pick add $@ %<
?S:i_stdarg:
?S: This variable conditionally defines the I_STDARG symbol, which
?S: indicates to the C program that <stdarg.h> exists and should
?S: be included.
?S:.
?S:i_varargs:
?S: This variable conditionally defines I_VARARGS, which indicates
?S: to the C program that it should include <varargs.h>.
?S:.
?S:i_varhdr:
?S: Contains the name of the header to be included to get va_dcl definition.
?S: Typically one of varargs.h or stdarg.h.
?S:.
?C:I_STDARG:
?C: This symbol, if defined, indicates that <stdarg.h> exists and should
?C: be included.
?C:.
?C:I_VARARGS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <varargs.h>.
?C:.
?H:#$i_stdarg I_STDARG  /**/
?H:#$i_varargs I_VARARGS /**/
?H:.
?W:%<:va_dcl
?F:!varargs
?T:valstd
?LINT:set i_stdarg i_varargs
?X:
?X: Don't use setvar because the varags test
 below might override these.
?X: Actually, the messages here are just informative. We don't wish to set
?X: i_varargs or i_stdarg to their final value before knowing which of the
?X: two we'll include.
?X:
: see if stdarg is available
echo " "
if $test `./findhdr stdarg.h`; then
 echo "<stdarg.h> found." >&4
```

```
 valstd="$define"
else
 echo "<stdarg.h> NOT found." >&4
 valstd="$undef"
fi

: see if varags is available
echo " "
if $test `./findhdr varargs.h`; then
 echo "<varargs.h> found." >&4
else
 echo "<varargs.h> NOT found, but that's ok (I hope)." >&4
fi

?X:
?X: if you have stdarg.h, you need to support prototypes to actually use it;
?X: but if stdarg.h exists and the compiler doesn't support prototypes (for some
?X: bizarre reason), we'll fall back to varargs.h anyway so it's not so bad.
?X:
: set up the varargs testing programs
$cat > varargs.c <<EOP
#ifdef I_STDARG
#include <stdarg.h>
#endif
#ifdef I_VARARGS
#include <varargs.h>
#endif

#ifdef I_STDARG
int f(char *p, ...)
#else
int
 f(va_alist)
va_dcl
#endif
{
 va_list ap;
#ifndef I_STDARG
 char *p;
#endif
#ifdef I_STDARG
 va_start(ap,p);
#else
 va_start(ap);
 p = va_arg(ap, char *);
#endif
 va_end(ap);
}
```

```
EOP
$cat > varargs <<EOP
$startsh
if $cc -c $ccflags -D\$1 varargs.c >/dev/null 2>&1; then
 echo "true"
else
 echo "false"
fi
$rm -f varargs$_o
EOP
chmod +x varargs

: now check which varargs header should be included
echo " "
i_varhdr=''
case "$valstd" in
"$define")
 if `./varargs I_STDARG`; then
  val='stdarg.h'
 elif `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
*)
 if `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
esac
case "$val" in
'')
 ./warn "I could not find the definition for va_dcl... You have problems..."
 val="$undef"; set i_stdarg; eval $setvar
 val="$undef"; set i_varargs; eval $setvar
 ;;
*)
 set i_varhdr
 eval $setvar
 case "$i_varhdr" in
 stdarg.h)
  val="$define"; set i_stdarg; eval $setvar
  val="$undef"; set i_varargs; eval $setvar
  ;;
 varargs.h)
  val="$undef"; set i_stdarg;
 eval $setvar
  val="$define"; set i_varargs; eval $setvar
  ;;
```

```
 esac
 echo "We'll include <$i_varhdr> to get va_dcl definition." >&4;;
esac
$rm -f varargs*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_varhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_raster.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_raster.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_raster rasterlib: cat test Setvar Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_raster:
?S: Conditionally defines RASTER_TEK if this is a raster tech machine.
?S:.
?S:rasterlib (d_rasterlib):
?S: Set to the needed compile flag if this is a raster tech machine.
?S: It is up to the Makefile to use this variable.
?S:.
?C:RASTER_TEK:
?C: Defined
 if this is a rastertech machine.
?C:.
?H:#$d_raster RASTER_TEK /**/
?H:.
?LINT:set d_raster
: See if this is a raster tech machine.
val="$undef"
rasterlib="
if $test -r /dev/mirage; then
 $cat <<'EOM'

You seem to have a mirage device... this is normally associated with a raster
technologies graphics workstation. If this is right, you may want to use raster
tech in this program.
```

```
EOM
 dflt=y
 case "$d_raster" in
 "$undef") dflt=n;;
 esac
 rp='Use raster tech?'
 . ./myread
 case "$ans" in
 y*) val="$define";;
 esac
fi
set d_raster
eval $setvar

case "$d_raster" in
"$define") rasterlib='-lphigs';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_raster.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pause.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pause.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:54  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_pause: Inlibc
?MAKE: -pick add $@ %<
?S:d_pause:
?S: This variable conditionally defines the HAS_PAUSE symbol, which
?S: indicates to the C program that the pause() routine is available
?S: to suspend a process until a signal is received.
?S:.
?C:HAS_PAUSE :
?C: This symbol,
```

```
 if defined, indicates that the pause routine is
?C: available to suspend a process until a signal is received.
?C:.
?H:#$d_pause HAS_PAUSE  /**/
?H:.
?LINT:set d_pause
: see if pause exists
set pause d_pause
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pause.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_pwd.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:10:57  ram
?RCS: patch56: use setvar so hint file values can override our guesses (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:03:27  ram
?RCS: patch23: had forgotten cppminus in cppstdin test (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks whether there is a pwd system or not
?X:
?MAKE:i_pwd d_pwquota d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment:
 \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_pwd:
?S: This variable conditionally defines I_PWD, which indicates
?S: to the C program that it should include <pwd.h>.
?S:.
?S:d_pwquota:
?S: This varaible conditionally defines PWQUOTA, which indicates
?S: that struct passwd contains pw_quota.
```

```
?S:.
?S:d_pwage:
?S: This varaible conditionally defines PWAGE, which indicates
?S: that struct passwd contains pw_age.
?S:.
?S:d_pwchange:
?S: This varaible conditionally defines PWCHANGE, which indicates
?S: that struct passwd contains pw_change.
?S:.
?S:d_pwclass:
?S: This varaible conditionally defines PWCLASS, which indicates
?S: that struct passwd contains pw_class.
?S:.
?S:d_pwexpire:
?S: This varaible conditionally defines PWEXPIRE, which indicates
?S: that struct passwd contains pw_expire.
?S:.
?S:d_pwcomment:
?S: This varaible conditionally defines PWCOMMENT, which indicates
?S: that struct passwd contains pw_comment.
?S:.
?C:I_PWD:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include <pwd.h>.
?C:.
?C:PWQUOTA:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_quota.
?C:.
?C:PWAGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_age.
?C:.
?C:PWCHANGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_change.
?C:.
?C:PWCLASS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_class.
?C:.
?C:PWEXPIRE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_expire.
?C:.
?C:PWCOMMENT:
?C: This symbol, if defined, indicates to the C program that struct passwd
```

```
?C: contains pw_comment.
?C:.
?H:#$i_pwd I_PWD  /**/
?H:#$d_pwquota PWQUOTA /**/
?H:#$d_pwage PWAGE /**/
?H:#$d_pwchange PWCHANGE /**/
?H:#$d_pwclass PWCLASS /**/
?H:#$d_pwexpire PWEXPIRE /**/
?H:#$d_pwcomment PWCOMMENT /**/
?H:.
?LINT: set i_pwd d_pwquota
 d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment
?T:xxx
: see if this is a pwd.h system
set pwd.h i_pwd
eval $inhdr

case "$i_pwd" in
$define)
 xxx=`./findhdr pwd.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'pw_quota' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwquota
 eval $setvar

 if $contains 'pw_age' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwage
 eval $setvar

 if $contains 'pw_change' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwchange
 eval $setvar

 if $contains 'pw_class' $$.h >/dev/null 2>&1; then
  val="$define"
```

```
 else
  val="$undef"
 fi
 set d_pwclass
 eval $setvar

 if $contains 'pw_expire' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwexpire
 eval $setvar

 if $contains 'pw_comment' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwcomment
 eval $setvar

 $rm -f $$.h
 ;;
*)
 val="$undef";
 set
 d_pwquota; eval $setvar
 set d_pwage; eval $setvar
 set d_pwchange; eval $setvar
 set d_pwclass; eval $setvar
 set d_pwexpire; eval $setvar
 set d_pwcomment; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_pwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:versiononly: cat Myread Setvar Devel
?MAKE: -pick add $@ %<
?LINT:set versiononly
?Y:TOP
?S:versiononly:
?S: If set, this symbol indicates that only the version-specific
?S: components of a perl installation should be installed.
?S: This may be useful for making a test installation of a new
?S: version without disturbing the existing installation.
?S: Setting versiononly is equivalent to setting installperl's -v option.
?S: In particular, the non-versioned scripts and programs such as
?S: a2p, c2ph, h2xs, pod2*, and perldoc
 are not installed
?S: (see INSTALL for a more complete list).  Nor are the man
?S: pages installed.
?S: Usually, this is undef.
?S:.
?LINT:extern inc_version_list
?LINT:change inc_version_list
?LINT:extern inc_version_list_init
?LINT:change inc_version_list_init
?LINT:extern version
: determine whether to use a version number suffix for installed binaries
echo " "
$cat <<EOM
Do you want to use a version number suffix for installed binaries? This
will install 'perl$version' instead of 'perl', and likewise for other
binaries like 'perldoc' and 'cpan'. This allows many versions of perl
to be installed side-by-side. Unless you are a developer, you probably
do *not* want to do this.
EOM
case "$versiononly" in
"$define"|[Yy]*|true) dflt='y' ;;
*) dflt='n';
esac
rp="Do you want to use a version number suffix for installed binaries?"
. ./myread
case "$ans" in
[yY]*) val="$define";;
*) val="$undef" ;;
esac
set versiononly
eval $setvar

case "$versiononly" in
"$define") inc_version_list="
```

```
        inc_version_list_init=0
       ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/versiononly.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nan: Inlibc
?MAKE: -pick add $@ %<
?S:d_nan:
?S: This variable conditionally defines HAS_NAN if nan() is
?S: available to generate NaN.
?S:.
?C:HAS_NAN:
?C: This symbol, if defined, indicates that the nan routine is
?C: available to generate NaN.
?C:.
?H:#$d_nan HAS_NAN  /**/
?H:.
?LINT:set d_nan
: see if nan exists
set nan d_nan
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nan.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perlxv.U,v 1.1 2000/08/31 17:53:56 jhi Exp jhi $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:ivtype uvtype nvtype ivsize uvsize nvsize \
    i8type u8type i16type u16type i32type u32type i64type u64type \
    i8size u8size i16size u16size i32size u32size i64size u64size \
    d_nv_preserves_uv nv_preserves_uv_bits nv_overflows_integers_at \
    d_nv_zero_is_allbits_zero: \
 echo rm_try use64bitint d_quad quadtype uquadtype usequadmath \
 d_longdbl uselongdouble longdblsize doublesize i_quadmath \
 shortsize intsize longsize i_stdlib libs gccversion \
 cat Compile i_inttypes test signal_t run
```

```
?MAKE: -pick add $@ %<
?S:ivtype:
?S: This variable contains the C type used for Perl's IV.
?S:.
?S:uvtype:
?S: This variable contains the C type
 used for Perl's UV.
?S:.
?S:nvtype:
?S: This variable contains the C type used for Perl's NV.
?S:.
?S:i8type:
?S: This variable contains the C type used for Perl's I8.
?S:.
?S:u8type:
?S: This variable contains the C type used for Perl's U8.
?S:.
?S:i16type:
?S: This variable contains the C type used for Perl's I16.
?S:.
?S:u16type:
?S: This variable contains the C type used for Perl's U16.
?S:.
?S:i32type:
?S: This variable contains the C type used for Perl's I32.
?S:.
?S:u32type:
?S: This variable contains the C type used for Perl's U32.
?S:.
?S:i64type:
?S: This variable contains the C type used for Perl's I64.
?S:.
?S:u64type:
?S: This variable contains the C type used for Perl's U64.
?S:.
?S:ivsize:
?S: This variable is the size of an IV in bytes.
?S:.
?S:uvsize:
?S: This variable is the size of a UV in bytes.
?S:.
?S:i8size:
?S: This variable is the size of an I8 in bytes.
?S:.
?S:u8size:
?S: This variable is the size of an U8 in bytes.
?S:.
?S:i16size:
```

```
?S: This variable is the
 size of an I16 in bytes.
?S:.
?S:u16size:
?S: This variable is the size of an U16 in bytes.
?S:.
?S:i32size:
?S: This variable is the size of an I32 in bytes.
?S:.
?S:u32size:
?S: This variable is the size of an U32 in bytes.
?S:.
?S:i64size:
?S: This variable is the size of an I64 in bytes.
?S:.
?S:u64size:
?S: This variable is the size of an U64 in bytes.
?S:.
?S:nvsize:
?S: This variable is the size of a Perl NV in bytes.
?S: Note that some floating point formats have unused bytes.
?S:.
?S:d_nv_preserves_uv:
?S: This variable indicates whether a variable of type nvtype
?S: can preserve all the bits a variable of type uvtype.
?S:.
?S:nv_preserves_uv_bits:
?S: This variable indicates how many of bits type uvtype
?S: a variable nvtype can preserve.
?S:.
?S:nv_overflows_integers_at:
?S: This variable gives the largest integer value that NVs can hold
?S: as a constant floating point expression.
?S: If it could not be determined, it holds the value 0.
?S:.
?S:d_nv_zero_is_allbits_zero:
?S: This
 variable indicates whether a variable of type nvtype
?S: stores 0.0 in memory as all bits zero.
?S:.
?C:IVTYPE:
?C: This symbol defines the C type used for Perl's IV.
?C:.
?C:UVTYPE:
?C: This symbol defines the C type used for Perl's UV.
?C:.
?C:I8TYPE:
?C: This symbol defines the C type used for Perl's I8.
```

?C:.
?C:U8TYPE:
?C: This symbol defines the C type used for Perl's U8.
?C:.
?C:I16TYPE:
?C: This symbol defines the C type used for Perl's I16.
?C:.
?C:U16TYPE:
?C: This symbol defines the C type used for Perl's U16.
?C:.
?C:I32TYPE:
?C: This symbol defines the C type used for Perl's I32.
?C:.
?C:U32TYPE:
?C: This symbol defines the C type used for Perl's U32.
?C:.
?C:I64TYPE:
?C: This symbol defines the C type used for Perl's I64.
?C:.
?C:U64TYPE:
?C: This symbol defines the C type used for Perl's U64.
?C:.
?C:NVTYPE:
?C: This symbol defines the C type used for Perl's NV.
?C:.
?C:IVSIZE:
?C: This symbol contains the sizeof(IV).
?C:.
?C:UVSIZE:
?C: This symbol contains the
 sizeof(UV).
?C:.
?C:I8SIZE:
?C: This symbol contains the sizeof(I8).
?C:.
?C:U8SIZE:
?C: This symbol contains the sizeof(U8).
?C:.
?C:I16SIZE:
?C: This symbol contains the sizeof(I16).
?C:.
?C:U16SIZE:
?C: This symbol contains the sizeof(U16).
?C:.
?C:I32SIZE:
?C: This symbol contains the sizeof(I32).
?C:.
?C:U32SIZE:

```
?C: This symbol contains the sizeof(U32).
?C:.
?C:I64SIZE:
?C: This symbol contains the sizeof(I64).
?C:.
?C:U64SIZE:
?C: This symbol contains the sizeof(U64).
?C:.
?C:NVSIZE:
?C: This symbol contains the sizeof(NV).
?C: Note that some floating point formats have unused bytes.
?C: The most notable example is the x86* 80-bit extended precision
?C: which comes in byte sizes of 12 and 16 (for 32 and 64 bit
?C: platforms, respectively), but which only uses 10 bytes.
?C: Perl compiled with -Duselongdouble on x86* is like this.
?C:.
?C:NV_PRESERVES_UV:
?C: This symbol, if defined, indicates that a variable of type NVTYPE
?C: can preserve all the bits of a variable of type UVTYPE.
?C:.
?C:NV_PRESERVES_UV_BITS:
?C: This
 symbol contains the number of bits a variable of type NVTYPE
?C: can preserve of a variable of type UVTYPE.
?C:.
?C:NV_OVERFLOWS_INTEGERS_AT:
?C: This symbol gives the largest integer value that NVs can hold. This
?C: value + 1.0 cannot be stored accurately. It is expressed as constant
?C: floating point expression to reduce the chance of decimal/binary
?C: conversion issues. If it can not be determined, the value 0 is given.
?C:.
?C:NV_ZERO_IS_ALLBITS_ZERO:
?C: This symbol, if defined, indicates that a variable of type NVTYPE
?C: stores 0.0 in memory as all bits zero.
?C:.
?H:#define IVTYPE  $ivtype  /**/
?H:#define UVTYPE  $uvtype  /**/
?H:#define I8TYPE  $i8type  /**/
?H:#define U8TYPE  $u8type  /**/
?H:#define I16TYPE  $i16type /**/
?H:#define U16TYPE  $u16type /**/
?H:#define I32TYPE  $i32type /**/
?H:#define U32TYPE  $u32type /**/
?H:?%<:#ifdef HAS_QUAD
?H:?%<:#define I64TYPE  $i64type /**/
?H:?%<:#define U64TYPE  $u64type /**/
?H:?%<:#endif
?H:#define NVTYPE  $nvtype  /**/
```

```
?H:#define IVSIZE  $ivsize  /**/
?H:#define UVSIZE  $uvsize  /**/
?H:#define I8SIZE  $i8size  /**/
?H:#define U8SIZE  $u8size  /**/
?H:#define I16SIZE  $i16size /**/
?H:#define U16SIZE  $u16size /**/
?H:#define I32SIZE  $i32size /**/
?H:#define U32SIZE  $u32size /**/
?H:?%<:#ifdef
 HAS_QUAD
?H:?%<:#define I64SIZE  $i64size /**/
?H:?%<:#define U64SIZE  $u64size /**/
?H:?%<:#endif
?H:#define NVSIZE  $nvsize  /**/
?H:#$d_nv_preserves_uv NV_PRESERVES_UV
?H:#define NV_PRESERVES_UV_BITS $nv_preserves_uv_bits
?H:#define NV_OVERFLOWS_INTEGERS_AT ($nv_overflows_integers_at)
?H:#$d_nv_zero_is_allbits_zero NV_ZERO_IS_ALLBITS_ZERO
?H:?%<:#if UVSIZE == 8
?H:?%<:#   ifdef BYTEORDER
?H:?%<:#       if BYTEORDER == 0x1234
?H:?%<:#           undef BYTEORDER
?H:?%<:#           define BYTEORDER 0x12345678
?H:?%<:#       else
?H:?%<:#           if BYTEORDER == 0x4321
?H:?%<:#               undef BYTEORDER
?H:?%<:#               define BYTEORDER 0x87654321
?H:?%<:#
    endif
?H:?%<:#       endif
?H:?%<:#   endif
?H:?%<:#endif
?H:.
?T:xxx
?T:d
?F:!try
: Check basic sizes
echo " "
$echo "Choosing the C types to be used for Perl's internal types..." >&4

case "$use64bitint:$d_quad:$quadtype" in
define:define:?*)
 ivtype="$quadtype"
 uvtype="$uquadtype"
 ivsize=8
 uvsize=8
 ;;
*) ivtype="long"
```

```
 uvtype="unsigned long"
 ivsize=$longsize
 uvsize=$longsize
 ;;
esac

case "$uselongdouble:$d_longdbl" in
define:define)
 nvtype="long double"
 nvsize=$longdblsize
 ;;
*) nvtype=double
 nvsize=$doublesize
 ;;
esac

case "$usequadmath:$i_quadmath" in
define:define)
 nvtype="__float128"
 nvsize=16
 case "$libs" in
 *quadmath*) ;;
 *) $cat <<EOM >&4

*** You requested the use of the quadmath library, but you
*** do not seem to have the quadmath library installed.
*** Cannot continue, aborting.
EOM
   exit 1
   ;;
 esac
 ;;
define:*) $cat <<EOM >&4

*** You requested the use of the quadmath library, but you
*** do not seem to have the required header, <quadmath.h>.
EOM
  case "$gccversion" in
 [23].*|4.[0-5]*)
  $cat <<EOM >&4
*** Your gcc looks a bit old:
*** $gccversion
EOM
   ;;
 ")
  $cat <<EOM >&4
*** You are not running a gcc.
EOM
```

```
   ;;
 esac
 $cat <<EOM >&4
*** For the quadmath library you need at least gcc 4.6.
*** Cannot continue, aborting.
EOM
 exit 1
 ;;
esac

$echo "(IV will be "$ivtype", $ivsize bytes)"
$echo "(UV will be "$uvtype", $uvsize bytes)"
$echo "(NV will be "$nvtype", $nvsize bytes)"

$cat >try.c <<EOCP
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#include <stdio.h>
int main() {
#ifdef INT8
  int8_t i =  INT8_MAX;
 uint8_t u = UINT8_MAX;
 printf("int8_t\n");
#endif
#ifdef INT16
  int16_t i =  INT16_MAX;
 uint16_t u = UINT16_MAX;
 printf("int16_t\n");
#endif
#ifdef INT32
  int32_t i =  INT32_MAX;
 uint32_t u = UINT32_MAX;
 printf("int32_t\n");
#endif
}
EOCP

i8type="signed char"
u8type="unsigned char"
i8size=1
u8size=1

case "$i16type" in
") case "$shortsize" in
 2) i16type=short
  u16type="unsigned
```

```
 short"
  i16size=$shortsize
  u16size=$shortsize
  ;;
 esac
 ;;
esac
case "$i16type" in
") set try -DINT16
 if eval $compile; then
  case "`$run ./try`" in
  int16_t)
   i16type=int16_t
   u16type=uint16_t
   i16size=2
   u16size=2
   ;;
  esac
 fi
 ;;
esac
case "$i16type" in
") if $test $shortsize -ge 2; then
  i16type=short
  u16type="unsigned short"
  i16size=$shortsize
  u16size=$shortsize
 fi
 ;;
esac

case "$i32type" in
") case "$longsize" in
 4) i32type=long
  u32type="unsigned long"
  i32size=$longsize
  u32size=$longsize
  ;;
 *) case "$intsize" in
  4) i32type=int
   u32type="unsigned int"
   i32size=$intsize
   u32size=$intsize
   ;;
  esac
  ;;
 esac
 ;;
```

```
esac
case "$i32type" in
") set try -DINT32
 if eval $compile; then
  case "`$run ./try`" in
  int32_t)
   i32type=int32_t
   u32type=uint32_t
   i32size=4
   u32size=4
   ;;
  esac
 fi
 ;;
esac
case "$i32type" in
") if $test $intsize -ge 4; then
  i32type=int
  u32type="unsigned int"
  i32size=$intsize
  u32size=$intsize
 fi
 ;;
esac

case
 "$i64type" in
") case "$d_quad:$quadtype" in
 define:?*)
  i64type="$quadtype"
  u64type="$uquadtype"
  i64size=8
  u64size=8
  ;;
 esac
 ;;
esac

$echo "Checking how many bits of your UVs your NVs can preserve..." >&4
$cat <<EOP >try.c
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
#ifdef SIGFPE
```

```
/* volatile so that the compiler has to store it out to memory */
volatile int bletched = 0;
$signal_t blech(int s) { bletched = 1; }
#endif
int main() {
   $uvtype u = 0;
   $nvtype d;
   int     n = 8 * $uvsize;
   int     i;
#ifdef SIGFPE
   signal(SIGFPE, blech);
#endif

   for (i = 0; i < n; i++) {
     u = u << 1 | ($uvtype)1;
     d = ($nvtype)u;
     if (($uvtype)d != u)
       break;
     if (d <= 0)
 break;
     d = ($nvtype)(u - 1);
     if (($uvtype)d != (u - 1))
       break;
#ifdef SIGFPE
     if (bletched)
 break;
#endif
   }
   printf("%d\n",
 ((i == n) ? -n : i));
   exit(0);
}
EOP
set try

d_nv_preserves_uv="$undef"
if eval $compile; then
 nv_preserves_uv_bits="`$run ./try`"
fi
case "$nv_preserves_uv_bits" in
\-[1-9]*)
 nv_preserves_uv_bits=`expr 0 - $nv_preserves_uv_bits`
 $echo "Your NVs can preserve all $nv_preserves_uv_bits bits of your UVs."  >&4
 d_nv_preserves_uv="$define"
 ;;
[1-9]*) $echo "Your NVs can preserve only $nv_preserves_uv_bits bits of your UVs."  >&4
 d_nv_preserves_uv="$undef" ;;
*) $echo "Can't figure out how many bits your NVs preserve." >&4
```

```
 nv_preserves_uv_bits="0" ;;
esac
$rm_try

$echo "Checking to find the largest integer value your NVs can hold..." >&4
$cat <<EOP >try.c
#include <stdio.h>

typedef $nvtype NV;

int
main() {
 NV value = 2;
 int count = 1;

 while(count < 256) {
   /* volatile so that the compiler has to store it out to memory */
   volatile NV up = value + 1.0;
   volatile NV negated = -value;
   volatile NV down = negated - 1.0;
   volatile NV got_up = up -
 value;
   int up_good = got_up == 1.0;
   int got_down = down - negated;
   int down_good = got_down == -1.0;

   if (down_good != up_good) {
     fprintf(stderr,
       "Inconsistency - up %d %f; down %d %f; for 2**%d (%.20f)\n",
       up_good, (double) got_up, down_good, (double) got_down,
       count, (double) value);
     return 1;
   }
   if (!up_good) {
     while (1) {
 if (count > 8) {
   count -= 8;
   fputs("256.0", stdout);
 } else {
   count--;
   fputs("2.0", stdout);
 }
 if (!count) {
   puts("");
   return 0;
 }
 fputs("*", stdout);
     }
```

```
   }
   value *= 2;
   ++count;
 }
 fprintf(stderr, "Cannot overflow integer range, even at 2**%d (%.20f)\n",
   count, (double) value);
 return 1;
}
EOP
set try

nv_overflows_integers_at='0'
if eval $compile; then
   xxx="`$run ./try`"
   case "$?" in
 0)
     case "$xxx" in
  2*)  cat >&4 <<EOM
The largest integer your NVs can preserve is equal to $xxx
EOM
      nv_overflows_integers_at="$xxx"
      ;;
  *)  cat
 >&4 <<EOM
Cannot determine the largest integer value your NVs can hold, unexpected output
'$xxx'
EOM
      ;;
     esac
     ;;
 *)  cat >&4 <<EOM
Cannot determine the largest integer value your NVs can hold
EOM
     ;;
   esac
fi
$rm_try

$echo "Checking whether NV 0.0 is all bits zero in memory..." >&4
$cat <<EOP >try.c
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>
#include <sys/types.h>
#include <signal.h>
```

```
#ifdef SIGFPE
/* volatile so that the compiler has to store it out to memory */
volatile int bletched = 0;
$signal_t blech(int s) { bletched = 1; }
#endif

int checkit($nvtype d, const char *where) {
   void *v = &d;
   unsigned char *p = (unsigned char *)v;
   unsigned char *end = p + sizeof(d);
   int fail = 0;

   while (p < end)
 fail += *p++;

   if (!fail)
 return 0;

   p = (unsigned char *)v;
   printf("No - %s: 0x", where);
   while (p < end)
 printf ("%02X", *p++);
   printf("\n");
   return 1;
}

int main(int
 argc, char **argv) {
   $nvtype d = 0.0;
   int fail = 0;
   fail += checkit(d, "0.0");

   /* The compiler shouldn't be assuming that bletched is 0  */
   d = bletched;

   fail += checkit(d, "bleched");

#ifdef SIGFPE
   signal(SIGFPE, blech);
#endif

   /* Paranoia - the compiler should have no way of knowing that ANSI says
      that argv[argc] will always be NULL.  Actually, if it did assume this it
      would be buggy, as this is C and main() can be called from elsewhere in
      the program.  */
   d = argv[argc] ? 1 : 0;

   if (d) {
```

```
 printf("Odd argv[argc]=%p, d=%g\n", argv[argc], d);
   }

   fail += checkit(d, "ternary");

   memset(&d, sizeof(d), argv[argc] ? 1 : 0);

   if (d != 0.0) {
 printf("No - memset doesn't give 0.0\n");
 /* This might just blow up:  */
 printf("(gives %g)\n", d);
 return 1;
   }

#ifdef SIGFPE
   if (bletched) {
 printf("No - something bleched\n");
 return 1;
   }
#endif
   if (fail) {
     printf("No - %d fail(s)\n",
 fail);
     return 1;
   }
   printf("Yes\n");
   return 0;
}
EOP
set try

d_nv_zero_is_allbits_zero="$undef"
if eval $compile; then
   xxx="`$run ./try`"
   case "$?" in
 0)
     case "$xxx" in
  Yes)  cat >&4 <<EOM
0.0 is represented as all bits zero in memory
EOM
      d_nv_zero_is_allbits_zero="$define"
      ;;
  *)  cat >&4 <<EOM
0.0 is not represented as all bits zero in memory
EOM
      d_nv_zero_is_allbits_zero="$undef"
      ;;
     esac
```

```
    ;;
 *)  cat >&4 <<EOM
0.0 is not represented as all bits zero in memory
EOM
    d_nv_zero_is_allbits_zero="$undef"
    ;;
  esac
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlxv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: fpostype.U,v 3.0.1.2 1994/08/29 16:20:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: fpostype.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:20:52  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:59  ram
?RCS: patch30: created
?RCS:
?MAKE:fpostype: Myread Typedef
?MAKE: -pick add $@ %<
?S:fpostype:
?S: This variable defines Fpos_t to be something like fpos_t, long,
?S: uint, or whatever type is used to declare file positions in libc.
?S:.
?C:Fpos_t:
?C: This symbol holds
 the type used to declare file positions in libc.
?C: It can be fpos_t, long, uint, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Fpos_t $fpostype  /* File position type */
?H:.
?LINT:set fpostype
: see what type file positions are declared as in the library
rp="What is the type for file position used by fsetpos()?"
```

```
set fpos_t fpostype long stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/fpostype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: randfunc.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the new unit that should be used when random
?X: functions are to be used. It thus makes randbits.U obsolete.
?X:
?MAKE:randfunc mrand seedfunc nrandbits: cat +cc rm test Myread Csym
?MAKE: -pick add $@ %<
?S:randfunc:
?S: Indicates the name of the random number function to use.
?S: Values include drand48, random, and rand. In C programs,
?S: the 'nrand' macro is defined
 to generate uniformly distributed
?S: random numbers over the range [0., 1.] (see mrand and nrand).
?S:.
?S:mrand:
?S: Indicates the macro to be used to generate normalized
?S: random numbers.  Uses randfunc, often divided by
?S: (double) ((1 << nrandbits) -1) in order to normalize the result.
?S: In C programs, the macro 'nrand' is maped on mrand.
?S:.
?S:seedfunc:
?S: Indicates the random number generating seed function.
?S: Values include srand48, srandom, and srand.
?S:.
?S:nrandbits:
?S: Indicates how many bits are produced by the function used to
?S: generate normalized random numbers.
?S:.
```

```
?C:nrand:
?C: This macro is to be used to generate uniformly distributed
?C: random numbers over the range [0., 1.].
?C:.
?C:seednrand:
?C: This symbol defines the macro to be used in seeding the
?C: random number generator (see nrand).
?C:.
?H:#define nrand()  $mrand  /**/
?H:#define seednrand(x) $seedfunc(x) /**/
?H:.
?T:cont val
?LINT:nothere $nrandbits)
: How can we generate normalized
 random numbers ?
echo " "
case "$randfunc" in
")
 if set drand48 val -f; eval $csym; $val; then
  dflt="drand48"
  echo "Good, found drand48()." >&4
 elif set random val -f; eval $csym; $val; then
  dflt="random"
  echo "OK, found random()." >&4
 else
  dflt="rand"
  echo "Yick, looks like I have to use rand()." >&4
 fi
 echo " "
 ;;
*)
 dflt="$randfunc"
 ;;
esac
cont=true
while $test "$cont"; do
 rp="Use which function to generate random numbers?"
 . ./myread
?X: Invalidates nrandbits if the answer is not the default so
?X: that the value stored in config.sh will not be used when
?X: we change our random function.
 if $test "$ans" = "$dflt"; then
  : null
 else
  nrandbits=''
 fi
 randfunc="$ans"
 if set $ans val -f; eval $csym; $val; then
```

```
  cont=''
 else
  dflt=n
  rp="Function $ans does not exists. Use that name anyway?"
  . ./myread
  dflt=rand
  case "$ans" in
   [yY]*) cont='';;
  esac
 fi
 case "$cont" in
 '')
  case "$randfunc" in
  drand48)
   mrand="drand48()"
   seedfunc="srand48"
   ;;
  rand*)
   case
 "$nrandbits" in
   '')
echo "Checking to see how many bits your $randfunc() function produces..." >&4
   $cat >try.c <<EOCP
#include <stdio.h>
int main()
{
 register int i;
 register unsigned long tmp;
 register unsigned long max = 0L;
 extern long random();

 for (i = 1000; i; i--) {
  tmp = (unsigned long)$randfunc();
  if (tmp > max) max = tmp;
 }
 for (i = 0; max; i++)
  max /= 2;
 printf("%d\n",i);
}
EOCP
   if $cc -o try try.c >/dev/null 2>&1 ; then
   dflt=`try`
   else
   dflt='?'
   echo "(I can't seem to compile the test program...)"
   fi
   ;;
   *)
```

```
    dflt="$nrandbits"
    ;;
   esac
   rp="How many bits does your $randfunc() function produce?"
   . ./myread
   nrandbits="$ans"
   $rm -f try.c try
   mrand="($randfunc() / (double) ((1 << $nrandbits) -1))"
   seedfunc="srand"
   ;;
?X: The following is provided just in case...
  *)
   dflt="31"
   rp="How many bits does your $randfunc() function produce?"
   . ./myread
   nrandbits="$ans"
   seedfunc="s$randfunc"
   mrand="($randfunc()
 / (double) ((1 << $nrandbits) -1))"
   if set $seedfunc val -f; eval $csym; $val; then
    echo "(Using $seedfunc() to seed random generator)"
   else
    echo "(Warning: no $seedfunc() to seed random generator)"
    seedfunc=rand
   fi
   ;;
  esac
  ;;
 esac
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/randfunc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: filexp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: filexp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:08  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:filexp: privlib
?MAKE: -pick add $@ %<
?S:filexp:
?S: This symbol contains the full pathname of the filexp script, in case we
?S: are saving the script for posterity.
?S:.
: must not allow self reference
case "$privlib" in
 /*)
 filexp=$privlib/filexp
 ;;
 *)
 filexp=`pwd`/filexp
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/filexp_path.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Hasproto.U $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasproto string that is used internally
?X: by Configure to check if this system has a prototype for a
?X: particular function
?X:
?X: To use it, say something like:
?X:  set d_getnetent_proto getnetent $i_netdb netdb.h
?X:  eval $hasproto
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/types.h
?X:  $i_systime sys/time.h
?X:  $i_sysselct sys/select.h
?X:  $i_netdb netdb.h"
?X: set d_getnetent_proto getnetent $hdrs
?X: eval $hasproto
?X:
?X: There is also an 'escape' hatch built in.  If you have a pair
?X: of args   'literal 'stuff' then 'stuff' gets included literally
?X: into the test program.  See Protochk.U for more details.
?X:
?MAKE:Hasproto:
```

```
 Setvar cppstdin cppflags cppminus contains rm_try test
?MAKE: -pick add $@ %<
?T:func varname
?F:!try.c
?V:hasproto
: Define hasproto macro for Configure internal use
hasproto='varname=$1; func=$2; shift; shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 literal) echo "$2" ;;
 esac ;
   shift 2;
done > try.c;
$cppstdin $cppflags $cppminus < try.c > tryout.c 2>/dev/null;
if $contains "$func.*(" tryout.c >/dev/null 2>&1; then
 echo "$func() prototype found.";
 val="$define";
else
 echo "$func() prototype NOT found.";
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try tryout.c'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_tgamma: Inlibc
?MAKE: -pick add $@ %<
?S:d_tgamma:
?S: This variable conditionally defines the HAS_TGAMMA symbol, which
?S: indicates to the C program that the tgamma() routine is available
?S: for the gamma function.  See also d_lgamma.
?S:.
?C:HAS_TGAMMA:
?C: This symbol, if defined, indicates that the tgamma routine is
?C: available to do the gamma function. See also HAS_LGAMMA.
?C:.
?H:#$d_tgamma HAS_TGAMMA  /**/
?H:.
?LINT:set d_tgamma
: see if tgamma exists
```

```
set tgamma d_tgamma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_tgamma.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Options.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Options.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:08:15  ram
?RCS: patch61: optdef.sh now starts with a "startsh"
?RCS: patch61: moved some code from Head.U
?RCS:
?RCS: Revision 3.0.1.6  1995/09/25  09:14:46  ram
?RCS: patch59: protected option parsing code against 'echo -*' option failure
?RCS:
?RCS: Revision 3.0.1.5  1995/05/12  12:04:52  ram
?RCS: patch54: added -K option for experts
?RCS:
?RCS: Revision 3.0.1.4  1995/01/30  14:27:52  ram
?RCS:
 patch49: this unit now exports file optdef.sh, not a variable
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:19:00  ram
?RCS: patch45: new -O option allowing -D and -U to override config.sh settings
?RCS: patch45: file optdef.sh is no longer removed after sourcing
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  15:58:06  ram
?RCS: patch36: ensure option definition file is removed before appending
?RCS: patch36: protect variable definitions with spaces in them
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:55:44  ram
?RCS: patch30: now uses new me symbol to tag error messages
?RCS: patch30: new -D and -U options to define/undef symbols (JHI)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: Command line parsing. It is really important that the variables used here
?X: be not listed in the MAKE line, or they will be saved in config.sh and
?X: loading this file to fetch default answers would clobber the values set
?X: herein.
?X:
?MAKE:Options:
 startsh
?MAKE: -pick wipe $@ %<
?V:reuseval alldone error realsilent silent extractsh fastread \
 knowitall: config_sh
?T:arg argn symbol config_arg0 config_args config_argc xxx yyy zzz uuu
?T:args_exp args_sep arg_exp ccflags
?F:!Configure
?F:./optdef.sh ./cmdline.opt ./posthint.sh ./cmdl.opt
: Save command line options in file UU/cmdline.opt for later use in
: generating config.sh.
?X: This temporary file will be read by Oldsym.U.  I used a temporary
?X: file to preserve all sorts of potential command line quotes and
?X: also because we don't know in advance how many variables we'll
?X: need, so I can't actually declare them on the MAKE line.
?X: The config_args variable won't be quite correct if Configure is
?X: fed something like    ./Configure -Dcc="gcc -B/usr/ccs/bin/"
?X: since the quotes are gone by the time we see them.  You'd have to
?X: reconstruct the command line from the config_arg? lines, but since
?X: I don't imagine anyone actually having to do that, I'm not going
?X:
 to worry too much.
cat > cmdline.opt <<EOSH
: Configure command line arguments.
config_arg0='$0'
config_args='$*'
config_argc=$#
EOSH
argn=1
args_exp=''
args_sep=''
for arg in "$@"; do
 cat >>cmdline.opt <<EOSH
config_arg$argn='$arg'
EOSH
?X: Extreme backslashitis: replace each ' by '''''
 cat <<EOC | sed -e "s/'/'''''''''''''''/g" > cmdl.opt
$arg
EOC
 arg_exp=`cat cmdl.opt`
 args_exp="$args_exp$args_sep'$arg_exp'"
 argn=`expr $argn + 1`
 args_sep=' '
```

```
done
?X: args_exp is good for restarting self: eval "set X $args_exp"; shift; $0 "$@"
?X: used by hints/os2.sh in Perl, for instance
rm -f cmdl.opt

: produce awk script to parse command line options
cat >options.awk <<'EOF'
BEGIN {
 optstr = "A:dD:eEf:hKOrsSU:V"; # getopt-style specification

 len = length(optstr);
 for (i = 1; i <= len; i++) {
  c = substr(optstr, i, 1);
?X: some older awk's do not have the C ?: construct
  if (i < len) a = substr(optstr, i + 1, 1); else a = "";
  if (a == ":") {
   arg[c] = 1;
   i++;
  }
  opt[c]
 = 1;
 }
}
{
 expect = 0;
 str = $0;
 if (substr(str, 1, 1) != "-") {
  printf("'%s'\n", str);
  next;
 }
 len = length($0);
 for (i = 2; i <= len; i++) {
  c = substr(str, i, 1);
  if (!opt[c]) {
   printf("-%s\n", substr(str, i));
   next;
  }
  printf("-%s\n", c);
  if (arg[c]) {
   if (i < len)
    printf("'%s'\n", substr(str, i + 1));
   else
    expect = 1;
   next;
  }
 }
}
END {
```

```
 if (expect)
  print "?";
}
EOF

: process the command line options
?X: Use "$@" to keep arguments with spaces in them from being split apart.
?X: For the same reason, awk will output quoted arguments and the final eval
?X: removes them and sets a proper $* array. An 'X' is prepended to each
?X: argument before being fed to echo to guard against 'echo -x', where -x
?X: would be understood as an echo option! It is removed before feeding awk.
set X `for arg in "$@"; do echo "X$arg"; done |
 sed -e s/X// | awk -f options.awk`
eval "set $*"
shift
rm -f options.awk

: set up default values
fastread=''
reuseval=false
config_sh=''
alldone=''
error=''
silent=''
extractsh=''
knowitall=''
rm
 -f optdef.sh posthint.sh
cat >optdef.sh <<EOS
$startsh
EOS

?X:
?X: Given that we now have the possibility to execute Configure remotely
?X: thanks to the new src.U support, we have to face the possibility
?X: of having to ask where the source lie, which means we need the Myread.U
?X: stuff and possibly other things that might echo something on the
?X: screen...
?X:
?X: That's not pretty, and might be confusing in 99% of the time. So...
?X: We introduce a new realsilent variable which is set when -s is given,
?X: and we force silent=true if -S is supplied. The Extractall.U unit
?X: will then undo the >&4 redirection based on the value of the
?X: realsilent variable... -- RAM, 18/93/96
?X:

: option parsing
while test $# -gt 0; do
```

```
case "$1" in
-d) shift; fastread=yes;;
-e) shift; alldone=cont;;
-f)
 shift
 cd ..
 if test -r "$1"; then
  config_sh="$1"
 else
  echo "$me: cannot read config file $1."
>&2
  error=true
 fi
 cd UU
 shift;;
--help|\
-h) shift; error=true;;
-r) shift; reuseval=true;;
-s) shift; silent=true; realsilent=true;;
-E) shift; alldone=exit;;
-K) shift; knowitall=true;;
-O) shift;;
-S) shift; silent=true; extractsh=true;;
-D)
 shift
 case "$1" in
 *=)
  echo "$me: use '-U symbol=', not '-D symbol='." >&2
  echo "$me: ignoring -D $1" >&2
  ;;
 *=*) echo "$1" | \
   sed -e "s/'/\'\"\'\"'/g" -e "s/=\(.*\)/='\1'/" >> optdef.sh;;
 *) echo "$1='define'" >> optdef.sh;;
 esac
 shift
 ;;
-U)
 shift
 case "$1" in
 *=) echo "$1" >> optdef.sh;;
 *=*)
  echo "$me: use '-D symbol=val', not '-U symbol=val'." >&2
  echo "$me: ignoring -U $1" >&2
  ;;
 *) echo "$1='undef'" >> optdef.sh;;
 esac
 shift
 ;;
```

```
-A)
   shift
   xxx=''
   yyy="$1"
   zzz=''
   uuu=undef
   case "$yyy" in
        *=*) zzz=`echo "$yyy"|sed 's!=.*!!'`
             case "$zzz" in
             *:*) zzz='' ;;
             *)   xxx=append

             zzz=' '`echo "$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             esac
             ;;
        esac
        case "$xxx" in
        '')  case "$yyy" in
             *:*) xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'`
                  zzz=`echo "$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             *)   xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'` ;;
             esac
             ;;
        esac
   case "$xxx" in
   append)
echo "$yyy=\"\${$yyy}$zzz\"" >> posthint.sh ;;
   clear)
echo "$yyy=''"   >> posthint.sh ;;
   define)
       case "$zzz" in
'') zzz=define ;;
esac
echo "$yyy='$zzz'"  >> posthint.sh ;;
   eval)
echo "eval \"$yyy=$zzz\"" >> posthint.sh ;;
   prepend)
echo "$yyy=\"$zzz\${$yyy}\"" >> posthint.sh ;;
   undef)

     case "$zzz" in
'') zzz="$uuu" ;;
esac
echo "$yyy=$zzz"  >> posthint.sh ;;
```

```
        *)  echo "$me: unknown -A command '$xxx', ignoring -A $1" >&2 ;;
    esac
    shift
    ;;
 -V) echo "$me generated by metaconfig <VERSION> PL<PATCHLEVEL>." >&2
    exit 0;;
 --) break;;
 -*) echo "$me: unknown option $1" >&2; shift; error=true;;
 *) break;;
 esac
done

case "$error" in
true)
 cat >&2 <<EOM
Usage: $me [-dehrsEKOSV] [-f config.sh] [-D symbol] [-D symbol=value]
               [-U symbol] [-U symbol=] [-A command:symbol...]
 -d : use defaults for all answers.
 -e : go on without questioning past the production of config.sh.
 -f : specify an alternate default configuration file.
 -h : print this help message and exit (with an error status).
 -r : reuse C symbols value if possible (skips costly nm extraction).
 -s : silent mode, only echoes questions and essential information.
 -D : define symbol to have some value:
       -D symbol               symbol gets the
 value 'define'
       -D symbol='some value'   symbol is set to 'some value'
     common used examples (see INSTALL for more info):
       -Duse64bitint           use 64bit integers
       -Duse64bitall           use 64bit integers and pointers
       -Dusethreads            use thread support
       -Dinc_version_list=none  do not include older perl trees in @INC
       -DEBUGGING=none         DEBUGGING options
       -Dcc=gcc                choose your compiler
       -Dprefix=/opt/perl5      choose your destination
 -E : stop at the end of questions, after having produced config.sh.
 -K : do not use unless you know what you are doing.
 -O : ignored for backward compatibility
 -S : perform variable substitutions on all .SH files (can mix with -f)
 -U : undefine symbol:
       -U symbol    symbol gets the value 'undef'
       -U symbol=   symbol gets completely empty
     e.g.:  -Uversiononly
 -A : manipulate symbol after the platform specific hints
 have been applied:
       -A append:symbol=value   append value to symbol
       -A symbol=value          like append:, but with a separating space
       -A define:symbol=value   define symbol to have value
```

```
        -A clear:symbol          define symbol to be ''
        -A define:symbol         define symbol to be 'define'
        -A eval:symbol=value     define symbol to be eval of value
        -A prepend:symbol=value  prepend value to symbol
        -A undef:symbol          define symbol to be 'undef'
        -A undef:symbol=         define symbol to be ''
      e.g.:  -A prepend:libswanted='cl pthread '
             -A ccflags=-DSOME_MACRO
 -V : print version number and exit (with a zero status).
EOM
 exit 1
 ;;
esac

?X:
?X: Unless they specified either -S or both -d and -e/E, make sure we're
?X: running interactively, i.e. attached to a terminal. Moved from Head.U to
?X: be able to handle batch configurations...
?X:
?X: We have to hardwire the Configure name and
 cannot use $me, since if they
?X: said 'sh <Configure', then $me is 'sh'...
?X:
: Sanity checks
case "$fastread$alldone" in
yescont|yesexit) ;;
*)
 case "$extractsh" in
 true) ;;
 *)
  if test ! -t 0; then
   echo "Say 'sh Configure', not 'sh <Configure'"
   exit 1
  fi
  ;;
 esac
 ;;
esac

?X: In silent mode, the standard output is closed. Questions are asked by
?X: outputing on file descriptor #4, which is the original stdout descriptor.
?X: This filters out all the "junk", since all the needed information is written
?X: on #4. Note that ksh will not let us redirect output if the file descriptor
?X: has not be defined yet, unlike sh, hence the following line...--RAM.
exec 4>&1
case "$silent" in
true) exec 1>/dev/null;;
esac
```

```
: run the defines and the undefines, if any, but leave the file out there...
touch optdef.sh
?X: -q is POSIX
?X: It does not work in SysV (solaris) or old BSD greps.
grep '\\' optdef.sh >/dev/null 2>&1
if test $? = 0; then
   echo "Configure does not support \\
 in -D arguments"
   exit 1
fi
. ./optdef.sh
: create the posthint manipulation script and leave the file out there...
?X: this file will be perused by Oldconfig.U
touch posthint.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Options.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memccpy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memccpy.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memccpy: Inlibc
?MAKE: -pick add $@ %<
?S:d_memccpy:
?S: This variable conditionally defines the HAS_MEMCCPY symbol, which
?S: indicates to the C program that the memccpy() routine is available
?S: to copy a character into a block of memory.
?S:.
?C:HAS_MEMCCPY (MEMCCPY):
?C: This symbol, if defined, indicates that the memccpy routine
 is available
?C: to copy a character into a block of memory.  Otherwise you should
?C: roll your own.
?C:.
?H:#$d_memccpy HAS_MEMCCPY  /**/
```

```
?H:.
?LINT:set d_memccpy
: see if memccpy exists
set memccpy d_memccpy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memccpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_inetpton: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetpton:
?S: This variable conditionally defines the HAS_INETPTON symbol,
?S: which indicates to the C program that the inet_pton() function
?S: is available.
?S:.
?C:HAS_INETPTON:
?C: This symbol, if defined, indicates that the inet_pton() function
?C: is available to parse IPv4 and IPv6 strings.
?C:.
?H:#$d_inetpton HAS_INETPTON  /**/
?H:.
?LINT:set d_inetpton
: see if inet_pton exists
set inet_pton d_inetpton
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_inetpton.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlocale.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setlocale.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:51  ram
?RCS: patch30: created
?RCS:
?MAKE:d_setlocale: Inlibc
?MAKE: -pick add $@ %<
?S:d_setlocale:
?S: This variable conditionally defines HAS_SETLOCALE if setlocale() is
?S: available to handle locale-specific ctype implementations.
?S:.
?C:HAS_SETLOCALE:
?C: This symbol, if defined, indicates that the setlocale
 routine is
?C: available to handle locale-specific ctype implementations.
?C:.
?H:#$d_setlocale HAS_SETLOCALE /**/
?H:.
?LINT:set d_setlocale
: see if setlocale exists
set setlocale d_setlocale
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setlocale.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorhtml3dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorhtml3dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorhtml3dir vendorhtml3direxp installvendorhtml3dir: html3dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorhtml3dir:
```

```
?S: This variable contains the name of the directory for html
?S: library pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing
 in this directory.
?S: Vendors who distribute perl may wish to place their own
?S: html pages for modules and extensions in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorhtml3direxp:
?S: This variable is the ~name expanded version of vendorhtml3dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorhtml3dir="
?S:installvendorhtml3dir:
?S: This variable is really the same as vendorhtml3direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorhtml3dir
: Set the vendorhtml3dir variables
case "$vendorprefix" in
") vendorhtml3dir="
 vendorhtml3direxp="
 ;;
*) : determine where vendor-supplied module html pages go.
 : There is no standard location, so try to copy the previously-selected
 : directory structure for the core html pages.
 : XXX Better default
 suggestions would be welcome.
 case "$vendorhtml3dir" in
 ") dflt=`echo "$html3dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorhtml3dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=dn+~
 rp='Pathname for the vendor-supplied html pages?'
 . ./getfile
 vendorhtml3dir="$ans"
 vendorhtml3direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorhtml3dir" = "X" && vendorhtml3dir=' '
prefixvar=vendorhtml3dir
```

```
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorhtml3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_dbminitproto: Hasproto i_dbm
?MAKE: -pick add $@ %<
?S:d_dbminitproto:
?S: This variable conditionally defines the HAS_DBMINIT_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the dbminit() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_DBMINIT_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the dbminit() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern
 int dbminit(char *);
?C:.
?H:#$d_dbminitproto HAS_DBMINIT_PROTO /**/
?H:.
?LINT:set d_dbminitproto
: see if prototype for dbminit is available
echo " "
set d_dbminitproto dbminit $i_dbm dbm.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dbminitproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Tr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  18:00:54  ram
?RCS: patch43: forgot to quote $@ to protect against "evil" characters
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:58:35  ram
?RCS: patch36: created
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a character translation. It catches translations to uppercase or
?X: to lowercase, and then invokes the real tr to perform the job.
?X:
?X: This unit is necessary on HP machines (HP strikes again!)
 with non-ascii
?X: ROMAN8-charset, where normal letters are not arranged in a row, so a-z
?X: covers not the whole alphabet but lots of special chars. This was reported
?X: by Andreas Sahlbach <a.sahlbach@tu-bs.de>.
?X:
?X: Units performing a tr '[A-Z]' '[a-z]' or the other way round should include
?X: us in their dependency and use ./tr instead.
?X:
?MAKE:Tr: startsh tr eunicefix
?MAKE: -pick add $@ %<
?F:./tr
?T:up low LC_ALL
: see whether [:lower:] and [:upper:] are supported character classes
echo " "
case "`echo AbyZ | LC_ALL=C $tr '[:lower:]' '[:upper:]' 2>/dev/null`" in
ABYZ)
 echo "Good, your tr supports [:lower:] and [:upper:] to convert case." >&4
 up='[:upper:]'
 low='[:lower:]'
 ;;
*) # There is a discontinuity in EBCDIC between 'I' and 'J'
       # (0xc9 and 0xd1), therefore that is a nice testing point.
       if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | LC_ALL=C $tr '[I-J]' '[i-j]' 2>/dev/null`" in
     ij) up='[A-Z]'
         low='[a-z]'
  ;;

 esac
       fi
```

```
 if test "X$up" = X -o "X$low" = X; then
    case "`echo IJ | LC_ALL=C $tr I-J i-j 2>/dev/null`" in
    ij) up='A-Z'
  low='a-z'
  ;;
    esac
      fi
 if test "X$up" = X -o "X$low" = X; then
    case "`echo IJ | od -x 2>/dev/null`" in
    *C9D1*|*c9d1*)
  echo "Hey, this might be EBCDIC." >&4
  if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | \
   LC_ALL=C $tr '[A-IJ-RS-Z]' '[a-ij-rs-z]' 2>/dev/null`" in
     ij) up='[A-IJ-RS-Z]'
         low='[a-ij-rs-z]'
   ;;
     esac
  fi
  if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | LC_ALL=C $tr A-IJ-RS-Z a-ij-rs-z 2>/dev/null`" in
     ij) up='A-IJ-RS-Z'
         low='a-ij-rs-z'
   ;;
     esac
  fi
  ;;
    esac
 fi
esac
case "`echo IJ | LC_ALL=C $tr \"$up\" \"$low\" 2>/dev/null`" in
ij)
   echo "Using $up and $low to convert case." >&4
   ;;
*)
   echo "I don't know how to translate letters from upper to lower case." >&4
   echo "Your tr is not acting any way I know of." >&4
    exit 1
   ;;
esac
: set up the translation script tr, must be called with ./tr of course
cat >tr <<EOSC
$startsh
case "\$1\$2" in
'[A-Z][a-z]') LC_ALL=C exec $tr '$up' '$low';;
'[a-z][A-Z]') LC_ALL=C exec $tr '$low' '$up';;
esac
LC_ALL=C exec $tr "\$@"
```

```
EOSC
chmod +x tr
$eunicefix tr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Tr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: rootid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: rootid.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:45:36  ram
?RCS: patch49: now only prints a single empty line when outputting something
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:rootid: sed
?MAKE: -pick add $@ %<
?S:rootid:
?S: This variable contains the eventual value of the ROOTID symbol,
?S: which is the uid of root.
?S:.
?C:ROOTID:
?C: This symbol contains the uid of root, normally
 0.
?C:.
?H:#define ROOTID $rootid  /**/
?H:.
: determine root id
rootid=`$sed -e "/^root:/{s/^[^:]*:[^:]*:\([^:]*\).*'''$'''/\1/" -e "q" -e "}" -e "d" </etc/passwd`
case "$rootid" in
") rootid=0 ;;
*) echo " "; echo "Root uid = $rootid" >&4 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/rootid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigvec.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigvec.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:45:37  ram
?RCS: patch61: there is now a separate routine for sigaction()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: d_sigvec.U, from d_ftime.U 1.0
?X:
?MAKE:d_sigvec d_sigvectr d_sigintrp: Csym Inlibc Setvar
?MAKE: -pick add $@ %<
?S:d_sigvec:
?S: This variable conditionally defines the HAS_SIGVEC symbol, which indicates
?S: that BSD
 reliable signals are supported.
?S:.
?S:d_sigvectr:
?S: This variable conditionally defines the HAS_SIGVECTOR symbol, which
?S: indicates that the sigvec() routine is called sigvector() instead, for
?S: reasons known only to Hewlett-Packard.
?S:.
?S:d_sigintrp:
?S: This variable conditionally defines the HAS_SIGINTRP symbol, which
?S: indicates that the siginterrupt() routine is available.
?S:.
?C:HAS_SIGVEC (SIGVEC):
?C: This symbol, if defined, indicates that BSD reliable signals are
?C: supported.
?C:.
?C:HAS_SIGVECTOR (SIGVECTOR):
?C: This symbol, if defined, indicates that the sigvec() routine is called
?C: sigvector() instead, and that sigspace() is provided instead of
?C: sigstack().  This is probably only true for HP-UX.
?C:.
?C:HAS_SIGINTRP (SIGINTRP):
?C: This symbol, if defined, indicates that the siginterrupt() routine
?C: is available.
?C:.
```

```
?H:#$d_sigvec HAS_SIGVEC /**/
?H:#$d_sigvectr HAS_SIGVECTOR /**/
?H:#$d_sigintrp HAS_SIGINTRP /**/
?H:.
?T:val
?LINT:set d_sigvec d_sigintrp
@if
 d_sigvectr || d_sigvec || HAS_SIGVEC || HAS_SIGVECTOR
: see if sigvector exists -- since sigvec will match the substring
echo " "
if set sigvector val -f d_sigvectr; eval $csym; $val; then
 echo 'sigvector() found--you must be running HP-UX.' >&4
 val="$define"; set d_sigvectr; eval $setvar
 val="$define"; set d_sigvec; eval $setvar
else
: try the original name
 d_sigvectr="$undef"
 if set sigvec val -f d_sigvec; eval $csym; $val; then
  echo 'sigvec() found.' >&4
  val="$define"; set d_sigvec; eval $setvar
 else
  echo 'sigvec() not found--race conditions with signals may occur.' >&4
  val="$undef"; set d_sigvec; eval $setvar
 fi
fi

@end
@if d_sigintrp || HAS_SIGINTRP
: see if we have siginterrupt
set siginterrupt d_sigintrp
eval $inlibc

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigvec.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getwd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_getwd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getwd: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_getwd:
?S: This variable conditionally defines HAS_GETWD if getwd() is
?S: available to get working directory. If not, you should
?S: probably use getcwd().
?S:.
?C:HAS_GETWD (GETWD):
?C: This symbol, if defined, indicates that the getwd routine is
?C: available to get working directory.
 If not, you should
?C: probably use getcwd().
?C:.
?H:#$d_getwd HAS_GETWD  /**/
?H:.
?LINT:set d_getwd
: see if getwd exists
echo " "
if set getwd val -f d_getwd; eval $csym; $val; then
 echo 'getwd() found.' >&4
 val="$define"
else
 echo 'getwd() not found. Assuming getcwd() exists.' >&4
 val="$undef"
fi
set d_getwd
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservent_r getservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservent_r:
```

```
?S: This variable conditionally defines the HAS_GETSERVENT_R symbol,
?S: which indicates to the C program that the getservent_r()
?S: routine is available.
?S:.
?S:getservent_r_proto:
?S: This variable encodes the prototype of getservent_r.
?S: It is zero if d_getservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservent_r
?S: is defined.
?S:.
?C:HAS_GETSERVENT_R:
?C: This symbol, if defined, indicates that the getservent_r routine
?C: is
 available to getservent re-entrantly.
?C:.
?C:GETSERVENT_R_PROTO:
?C: This symbol encodes the prototype of getservent_r.
?C: It is zero if d_getservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservent_r
?C: is defined.
?C:.
?H:#$d_getservent_r HAS_GETSERVENT_R /**/
?H:#define GETSERVENT_R_PROTO $getservent_r_proto /**/
?H:.
?T:try hdrs d_getservent_r_proto
: see if getservent_r exists
set getservent_r d_getservent_r
eval $inlibc
case "$d_getservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservent_r_proto:$usethreads" in
 ":define") d_getservent_r_proto=define
  set d_getservent_r_proto getservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getservent_r_proto" in
 define)
 case "$getservent_r_proto" in
 "|0) try='int getservent_r(struct servent*, char*, size_t, struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SBWR ;;
 esac
 case "$getservent_r_proto"
 in
 "|0) try='int getservent_r(struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SBI ;;
 esac
```

```
 case "$getservent_r_proto" in
 "|0) try='struct servent* getservent_r(struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=S_SBI ;;
 esac
 case "$getservent_r_proto" in
 "|0) try='int getservent_r(struct servent*, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SD ;;
 esac
 case "$getservent_r_proto" in
 "|0) d_getservent_r=undef
  getservent_r_proto=0
  echo "Disabling getservent_r, cannot determine prototype." >&4 ;;
 * ) case "$getservent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getservent_r_proto="REENTRANT_PROTO_$getservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getservent_r has no prototype, not using it." >&4 ;;
  esac
  d_getservent_r=undef
  getservent_r_proto=0
  ;;
 esac
 ;;
*) getservent_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extractall.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:00:43  ram
```

```
?RCS: patch61: created
?RCS:
?X:
?X: If extraction has been requested, load the configuration file, perform
?X: the extraction and exit.
?X:
?X: This unit was originally a part of Options.U. It had to be removed from
?X: it to prevent a dependency cycle: Extract -> src -> Options -> Extract
?X: The Begin.U unit now requires us before beginning to do anything
?X: interesting, to ensure proper semantics. -- RAM, 15/03/96
?X:
?MAKE:Extractall:
 Extract Options
?MAKE: -pick wipe $@ %<
: extract files and exit if asked to do so
case "$extractsh" in
true)
?X: Undo the forced silent=true when -S was supplied, by probing realsilent
?X: which was set iff -s was also given. See Options.U for details.
 case "$realsilent" in
 true) ;;
 *) exec 1>&4;;
 esac
 case "$config_sh" in
 '') config_sh='config.sh';;
 esac
 echo " "
 echo "Fetching answers from $config_sh..."
 cd ..
 . $config_sh
 test "$override" && . ./optdef.sh
 echo " "
?X: extract has to be run from the top directory, not within UU.
 . UU/extract
 rm -rf UU
 echo "Extraction done."
 exit 0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Extractall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endhostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endhostent_r endhostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endhostent_r:
?S: This variable conditionally defines the HAS_ENDHOSTENT_R symbol,
?S: which indicates to the C program that the endhostent_r()
?S: routine is available.
?S:.
?S:endhostent_r_proto:
?S: This variable encodes the prototype of endhostent_r.
?S: It is zero if d_endhostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endhostent_r
?S: is defined.
?S:.
?C:HAS_ENDHOSTENT_R:
?C: This symbol, if defined, indicates that the endhostent_r routine
?C: is
 available to endhostent re-entrantly.
?C:.
?C:ENDHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of endhostent_r.
?C: It is zero if d_endhostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endhostent_r
?C: is defined.
?C:.
?H:#$d_endhostent_r HAS_ENDHOSTENT_R /**/
?H:#define ENDHOSTENT_R_PROTO $endhostent_r_proto /**/
?H:.
?T:try hdrs d_endhostent_r_proto
: see if endhostent_r exists
set endhostent_r d_endhostent_r
eval $inlibc
case "$d_endhostent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endhostent_r_proto:$usethreads" in
 ":define") d_endhostent_r_proto=define
  set d_endhostent_r_proto endhostent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endhostent_r_proto" in
 define)
 case "$endhostent_r_proto" in
```

```
"|0) try='int endhostent_r(struct hostent_data*);'
./protochk "$extern_C $try" $hdrs && endhostent_r_proto=I_D ;;
esac
case "$endhostent_r_proto" in
"|0) try='void endhostent_r(struct
hostent_data*);'
./protochk "$extern_C $try" $hdrs && endhostent_r_proto=V_D ;;
esac
case "$endhostent_r_proto" in
"|0) d_endhostent_r=undef
 endhostent_r_proto=0
 echo "Disabling endhostent_r, cannot determine prototype." >&4 ;;
* ) case "$endhostent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) endhostent_r_proto="REENTRANT_PROTO_$endhostent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "endhostent_r has no prototype, not using it." >&4 ;;
 esac
 d_endhostent_r=undef
 endhostent_r_proto=0
 ;;
esac
;;
*) endhostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endhostent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:01  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_fcntl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fcntl:
?S: This variable conditionally defines the HAS_FCNTL symbol, and indicates
?S: whether the fcntl() function exists
?S:.
?C:HAS_FCNTL:
?C: This symbol, if defined, indicates to the C program that
?C: the fcntl() function exists.
?C:.
?H:#$d_fcntl HAS_FCNTL  /**/
?H:.
?LINT:set d_fcntl
:
 see if this is an fcntl system
set fcntl d_fcntl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fcntl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_vprintf.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vprintf d_charvspr: Guess cat +cc +ccflags Csym Setvar
?MAKE: -pick add $@ %<
?S:d_vprintf:
?S: This variable conditionally defines the HAS_VPRINTF symbol, which
?S: indicates to the C program that the vprintf() routine is available
?S: to printf with a pointer to an argument list.
?S:.
?S:d_charvspr:
?S: This variable conditionally defines CHARVSPRINTF if this system
?S: has
```

```
 vsprintf returning type (char*).  The trend seems to be to
?S: declare it as "int vsprintf()".
?S:.
?C:HAS_VPRINTF (VPRINTF):
?C: This symbol, if defined, indicates that the vprintf routine is available
?C: to printf with a pointer to an argument list.  If unavailable, you
?C: may need to write your own, probably in terms of _doprnt().
?C:.
?C:USE_CHAR_VSPRINTF (CHARVSPRINTF):
?C: This symbol is defined if this system has vsprintf() returning type
?C: (char*).  The trend seems to be to declare it as "int vsprintf()".  It
?C: is up to the package author to declare vsprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_vprintf HAS_VPRINTF /**/
?H:#$d_charvspr USE_CHAR_VSPRINTF  /**/
?H:.
?F:!vprintf !vprintf.c
?T:val2
?LINT:set d_vprintf d_charvspr
: see if vprintf exists
echo " "
if set vprintf val -f d_vprintf; eval $csym; $val; then
 echo 'vprintf() found.' >&4
 val="$define"
 $cat >vprintf.c <<'EOF'
#include <varargs.h>

int main() { xxx("foo"); }

xxx(va_alist)
va_dcl
{
 va_list args;
 char
 buf[10];

 va_start(args);
 exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
EOF
 if $cc $ccflags -o vprintf vprintf.c >/dev/null 2>&1 && ./vprintf; then
  echo "Your vsprintf() returns (int)." >&4
  val2="$undef"
 else
  echo "Your vsprintf() returns (char*)." >&4
  val2="$define"
 fi
```

```
else
 echo 'vprintf() NOT found.' >&4
  val="$undef"
  val2="$undef"
fi
set d_vprintf
eval $setvar
val=$val2
set d_charvspr
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_vprintf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strchr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strchr.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:49:20  ram
?RCS: patch12: added support for HAS_INDEX
?RCS: patch12: added magic for index() and rindex()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:05:26  ram
?RCS: patch10: now only defines HAS_STRCHR, no macro remap of index (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strchr d_index: contains strings Setvar Myread Oldconfig
 Csym
?MAKE: -pick add $@ %<
?S:d_strchr:
?S: This variable conditionally defines HAS_STRCHR if strchr() and
?S: strrchr() are available for string searching.
?S:.
?S:d_index:
?S: This variable conditionally defines HAS_INDEX if index() and
?S: rindex() are available for string searching.
?S:.
?C:HAS_STRCHR:
```

```
?C: This symbol is defined to indicate that the strchr()/strrchr()
?C: functions are available for string searching. If not, try the
?C: index()/rindex() pair.
?C:.
?C:HAS_INDEX:
?C: This symbol is defined to indicate that the index()/rindex()
?C: functions are available for string searching.
?C:.
?H:#$d_strchr HAS_STRCHR /**/
?H:#$d_index HAS_INDEX /**/
?H:.
?M:index: HAS_INDEX
?M:#ifndef HAS_INDEX
?M:#ifndef index
?M:#define index strchr
?M:#endif
?M:#endif
?M:.
?M:rindex: HAS_INDEX
?M:#ifndef HAS_INDEX
?M:#ifndef rindex
?M:#define rindex strrchr
?M:#endif
?M:#endif
?M:.
?T:vali
?LINT:set d_strchr d_index
: index or strchr
echo " "
if set index val -f; eval $csym; $val; then
 if
 set strchr val -f d_strchr; eval $csym; $val; then
  if $contains strchr "$strings" >/dev/null 2>&1 ; then
?X: has index, strchr, and strchr in string header
   val="$define"
   vali="$undef"
   echo "strchr() found." >&4
  else
?X: has index, strchr, and no strchr in string header
   val="$undef"
   vali="$define"
   echo "index() found." >&4
  fi
 else
?X: has only index, no strchr, string header is a moot point
  val="$undef"
  vali="$define"
  echo "index() found." >&4
```

```
 fi
else
 if set strchr val -f d_strchr; eval $csym; $val; then
  val="$define"
  vali="$undef"
  echo "strchr() found." >&4
 else
  echo "No index() or strchr() found!" >&4
  val="$undef"
  vali="$undef"
 fi
fi
set d_strchr; eval $setvar
val="$vali"
set d_index; eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usenm.U,v 3.0.1.1 1997/02/28 16:26:40 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: usenm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:26:40  ram
?RCS: patch61: don't use nm with the GNU C library
?RCS: patch61: added support for Linux shared libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usenm runnm nm_opt nm_so_opt: cat test Myread Oldconfig myuname grep \
 nm d_gnulibc osname egrep rsrc
?MAKE: -pick add $@ %<
?S:usenm:
?S: This variable contains 'true' or 'false' depending
 whether the
?S: nm extraction is wanted or not.
?S:.
?S:runnm:
?S: This variable contains 'true' or 'false' depending whether the
```

```
?S: nm extraction should be performed or not, according to the value
?S: of usenm and the flags on the Configure command line.
?S:.
?S:nm_opt:
?S: This variable holds the options that may be necessary for nm.
?S:.
?S:nm_so_opt:
?S: This variable holds the options that may be necessary for nm
?S: to work on a shared library but that can not be used on an
?S: archive library.  Currently, this is only used by Linux, where
?S: nm --dynamic is *required* to get symbols from an ELF library which
?S: has been stripped, but nm --dynamic is *fatal* on an archive library.
?S: Maybe Linux should just always set usenm=false.
?S:.
: see if nm is to be used to determine whether a symbol is defined or not
?X: If there is enough inquiries, it might be worth to wait for the nm
?X: extraction. Otherwise, the C compilations might be a better deal.
?X:
?X: Don't bother if we're
 using GNU libc -- skimo
?LINT:extern PASE
case "$usenm" in
")
 dflt="
 case "$d_gnulibc" in
 "$define")
  echo " "
  echo "nm probably won't work on the GNU C Library." >&4
  dflt=n
  ;;
 esac
 case "$dflt" in
 ")
  if $test "$osname" = aix -a "X$PASE" != "Xdefine" -a ! -f /lib/syscalls.exp; then
   echo " "
   echo "Whoops!  This is an AIX system without /lib/syscalls.exp!" >&4
   echo "'nm' won't be sufficient on this system." >&4
   dflt=n
  fi
  ;;
 esac
 case "$dflt" in
 ") dflt=`$egrep 'inlibc|csym' $rsrc/Configure | wc -l 2>/dev/null`
  if $test $dflt -gt 20; then
   dflt=y
  else
   dflt=n
  fi
```

```
  ;;
 esac
 ;;
*)
 case "$usenm" in
 true|$define) dflt=y;;
 *) dflt=n;;
 esac
 ;;
esac
$cat <<EOM

I can use $nm to extract the symbols from your C libraries. This
is a time consuming task which may generate huge output on the disk (up
to 3 megabytes) but that should make the symbols extraction faster. The
alternative is to skip the 'nm' extraction part and to compile a small
test
 program instead to determine whether each symbol is present. If
you have a fast C compiler and/or if your 'nm' output cannot be parsed,
this may be the best solution.

You probably shouldn't let me use 'nm' if you are using the GNU C Library.

EOM
rp="Shall I use $nm to extract C symbols from the libraries?"
. ./myread
case "$ans" in
[Nn]*) usenm=false;;
*) usenm=true;;
esac

?X: Name extraction is to be run if 'nm' usage is wanted and if no -r flag
?X: was provided to configure (in which case we simply re-use the previous
?X: values).
runnm=$usenm
case "$reuseval" in
true) runnm=false;;
esac

: nm options which may be necessary
case "$nm_opt" in
") if $test -f /mach_boot; then
  nm_opt=" # Mach
 elif $test -d /usr/ccs/lib; then
  nm_opt='-p' # Solaris (and SunOS?)
 elif $test -f /dgux; then
  nm_opt='-p' # DG-UX
 elif $test -f /lib64/rld; then
```

```
  nm_opt='-p' # 64-bit Irix
 else
  nm_opt=''
 fi;;
esac

: nm options which may be necessary for shared libraries but illegal
: for archive
 libraries.  Thank you, Linux.
case "$nm_so_opt" in
'') case "$myuname" in
 *linux*|gnu*)
  if $nm --help | $grep 'dynamic' > /dev/null 2>&1; then
   nm_so_opt='--dynamic'
  fi
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/usenm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: yacc.U,v 3.0.1.1 1994/05/13 15:28:48 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: yacc.U,v $
?RCS: Revision 3.0.1.1  1994/05/13  15:28:48  ram
?RCS: patch27: added byacc as another alternative (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:yacc yaccflags: Guess Myread Oldconfig byacc bison cat test _exe
?MAKE: -pick add $@ %<
?S:yacc:
?S: This variable holds the name of the compiler compiler we
?S: want to use in the Makefile. It can be yacc, byacc, or bison -y.
?S:.
?S:yaccflags:
```

```
?S: This
 variable contains any additional yacc flags desired by the
?S: user.  It is up to the Makefile to use this.
?S:.
?T:comp
: determine compiler compiler
case "$yacc" in
")
 dflt=yacc;;
*)
 dflt="$yacc";;
esac
echo " "
comp='yacc'
if $test -f "$byacc$_exe"; then
 dflt="$byacc"
 comp="byacc or $comp"
fi
if $test -f "$bison$_exe"; then
 comp="$comp or bison -y"
fi
rp="Which compiler compiler ($comp) shall I use?"
. ./myread
yacc="$ans"
case "$yacc" in
*bis*)
 case "$yacc" in
 *-y*) ;;
 *)
  yacc="$yacc -y"
  echo "(Adding -y option to bison to get yacc-compatible behavior.)"
  ;;
 esac
 ;;
esac

@if yaccflags
: see if we need extra yacc flags
dflt="$yaccflags"
case "$dflt" in
") dflt=none;;
esac
$cat <<EOH

Your yacc program may need extra flags to normally process the parser sources.
Do NOT specify any -d or -v flags here, since those are explicitly known
by the various Makefiles. However, if your machine has strange/undocumented
options (like -Sr# on SCO to specify the
```

```
 maximum number of grammar rules), then
please add them here.  To use no flags, specify the word "none".

EOH
rp="Any additional yacc flags?"
. ./myread
case "$ans" in
none) yaccflags="";;
*) yaccflags="$ans";;
esac

@end

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/yacc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_getsrvby.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getsbyname d_getsbyport: Inlibc
?MAKE: -pick add $@ %<
?S:d_getsbyname:
?S: This variable conditionally defines the HAS_GETSERVBYNAME
?S: symbol, which indicates to the C program that the
?S: getservbyname() routine is available to look up services
?S: by their name.
?S:.
?S:d_getsbyport:
?S: This variable conditionally defines the HAS_GETSERVBYPORT
?S: symbol, which indicates to the C program that the
?S: getservbyport() routine is available to look up services
?S: by their port.
?S:.
?C:HAS_GETSERVBYNAME:
?C: This symbol, if defined, indicates that the getservbyname()
?C: routine is available to look up services by their name.
?C:.
?C:HAS_GETSERVBYPORT:
?C: This symbol, if defined,
 indicates that the getservbyport()
?C: routine is available to look up services by their port.
?C:.
?H:#$d_getsbyname HAS_GETSERVBYNAME  /**/
```

```
?H:#$d_getsbyport HAS_GETSERVBYPORT  /**/
?H:.
?LINT:set d_getsbyname d_getsbyport
: Optional checks for getsbyname and getsbyport

@if d_getsbyname || HAS_GETSERVBYNAME
: see if getservbyname exists
set getservbyname d_getsbyname
eval $inlibc
@end

@if d_getsbyport || HAS_GETSERVBYPORT
: see if getservbyport exists
set getservbyport d_getsbyport
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getsrvby.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_scalbnl: Inlibc
?MAKE: -pick add $@ %<
?S:d_scalbnl:
?S: This variable conditionally defines the HAS_SCALBNL symbol, which
?S: indicates to the C program that the scalbnl() routine is available.
?S: If ilogbl is also present we can emulate frexpl.
?S:.
?C:HAS_SCALBNL:
?C: This symbol, if defined, indicates that the scalbnl routine is
?C: available.  If ilogbl is also present we can emulate frexpl.
?C:.
?H:#$d_scalbnl HAS_SCALBNL  /**/
?H:.
?LINT:set d_scalbnl
: see if scalbnl exists
set scalbnl d_scalbnl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_scalbnl.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vaproto.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: vaproto.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:17:16  ram
?RCS: patch16: definition of _V now appears only when needed
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:vaproto: prototype i_stdarg Setvar
?MAKE: -pick add $@ %<
?S:vaproto:
?S: This variable conditionally defines CAN_VAPROTO on systems supporting
?S: prototype
 declaration of functions with a variable number of
?S: arguments. See also prototype.
?S:.
?C:CAN_VAPROTO ~ %<:
?C: This variable is defined on systems supporting prototype declaration
?C: of functions with a variable number of arguments.
?C:.
?C:_V:
?C: This macro is used to declare function parameters in prototypes for
?C: functions with a variable number of parameters. Use double parentheses.
?C: For example:
?C:
?C:  int printf _V((char *fmt, ...));
?C:
?C: Remember to use the plain simple _() macro when declaring a function
?C: with no variable number of arguments, since it might be possible to
?C: have a non-effect _V() macro and still get prototypes via _().
?C:.
?H:?%<:#$vaproto CAN_VAPROTO /**/
?H:?_V:#ifdef CAN_VAPROTO
?H:?_V:#define _V(args) args
?H:?_V:#else
```

```
?H:?_V:#define _V(args) ()
?H:?_V:#endif
?H:.
?W:%<:_V
?LINT:set vaproto
: see if prototypes support variable argument declarations
echo " "
case "$prototype$i_stdarg" in
$define$define)
 echo "It appears we'll
 be able to prototype varargs functions." >&4
 val="$define"
 ;;
*)
 echo "Too bad... We won't be using prototyped varargs functions..." >&4
 val="$undef"
 ;;
esac
set vaproto
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/vaproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_csh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:32:18  ram
?RCS: patch61: added full_csh to preserve the full path even when portable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_csh full_csh: csh Setvar
?MAKE: -pick add $@ %<
?S:d_csh:
?S: This variable conditionally defines the CSH symbol, which
?S: indicates to the C program that the C-shell exists.
?S:.
```

```
?S:full_csh:
?S: This variable contains the full pathname to 'csh', whether
 or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'csh.'
?S:.
?X: Yes, I know about the C symbol PORTABLE, but I think csh
?X: is unlikely to move, and I'm too lazy to add all the
?X: #ifdef PORTABLE sections to the perl source.
?X:
?C:HAS_CSH:
?C: This symbol, if defined, indicates that the C-shell exists.
?C:.
?C:CSH:
?C: This symbol, if defined, contains the full pathname of csh.
?C:.
?X: Previously, I just did $d_csh CSH "$full_csh", but that caused
?X: problems on VMS where the config.sh extraction program changes
?X: $undef to a real cpp undef, and they then had  #undef CSH ""
?X: which the compiler didn't like.  It's easy to work around this,
?X: so I did.  --AD  3/1998.
?X: And we don't want to define CSH if !HAS_CSH, but we don't want
?X: those lines in config.h if they don't need CSH, so protect with ?CSH
?X: and not
 ?%<. --RAM, 15/02/2004
?H:?%<:#$d_csh HAS_CSH  /**/
?H:?CSH:#ifdef HAS_CSH
?H:?CSH:#define CSH "$full_csh" /**/
?H:?CSH:#endif
?H:.
?LINT:set d_csh
: get csh whereabouts
case "$csh" in
'csh') val="$undef" ;;
*) val="$define" ;;
esac
set d_csh
eval $setvar
: Respect a hint or command line value for full_csh.
case "$full_csh" in
") full_csh=$csh ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_csh.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: myhostname.U,v 3.0.1.3 1997/02/28 16:15:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: myhostname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:15:55  ram
?RCS: patch61: improved hostname lookup by using ypmatch when NIS is used
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:25:43  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS: patch36: now uses new Tr unit to convert to/from lowercase
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:20  ram
?RCS: patch30: now a little more clever for domain name guessing
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:myhostname phostname mydomain: contains sed test Myread Oldconfig \
 Guess Loc awk echo sort uniq +usrinc rm hostcat Tr
?MAKE: -pick add $@ %<
?S:myhostname (hostname):
?S: This variable contains the eventual value of the MYHOSTNAME symbol,
?S: which is the name of the host the program is going to run on.
?S: The domain is not kept with hostname, but must be gotten from mydomain.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:mydomain:
?S: This variable contains the eventual value of the MYDOMAIN symbol,
?S: which is the domain of the host the program is going to run on.
?S: The domain must be appended to myhostname to form a complete host name.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:phostname:
?S: This variable contains the eventual value of the PHOSTNAME symbol,
?S: which is a command that can be fed to popen()
 to get the host name.
?S: The program should probably not presume that the domain is or isn't
?S: there already.
```

```
?S:.
?C:MYHOSTNAME (HOSTNAME):
?C: This symbol contains name of the host the program is going to run on.
?C: The domain is not kept with hostname, but must be gotten from MYDOMAIN.
?C: The dot comes with MYDOMAIN, and need not be supplied by the program.
?C: If gethostname() or uname() exist, MYHOSTNAME may be ignored. If MYDOMAIN
?C: is not used, MYHOSTNAME will hold the name derived from PHOSTNAME.
?C:.
?C:MYDOMAIN:
?C: This symbol contains the domain of the host the program is going to
?C: run on.  The domain must be appended to HOSTNAME to form a complete
?C: host name.  The dot comes with MYDOMAIN, and need not be supplied by
?C: the program.  If the host name is derived from PHOSTNAME, the domain
?C: may or may not already be there, and the program should check.
?C:.
?H:#define MYHOSTNAME "$myhostname"  /**/
?H:#define MYDOMAIN "$mydomain"  /**/
?H:.
?LINT:extern osname
?T:cont
 i tans tmp_re
: now get the host name
echo " "
echo "Figuring out host name..." >&4
case "$myhostname" in
") cont=true
 echo 'Maybe "hostname" will work...'
 if tans=`sh -c hostname 2>&1` ; then
  myhostname=$tans
  phostname=hostname
  cont=''
 fi
 ;;
*) cont='';;
esac
if $test "$cont"; then
 if ./xenix; then
  echo 'Oh, dear.  Maybe "/etc/systemid" is the key...'
  if tans=`cat /etc/systemid 2>&1` ; then
   myhostname=$tans
   phostname='cat /etc/systemid'
   echo "Whadyaknow.  Xenix always was a bit strange..."
   cont=''
  fi
 elif $test -r /etc/systemid; then
  echo "(What is a non-Xenix system doing with /etc/systemid?)"
 fi
fi
```

```
if $test "$cont"; then
 echo 'No, maybe "uuname -l" will work...'
 if tans=`sh -c 'uuname -l' 2>&1` ; then
  myhostname=$tans
  phostname='uuname -l'
 else
  echo 'Strange.  Maybe "uname -n" will work...'
  if tans=`sh -c 'uname -n' 2>&1` ; then
   myhostname=$tans
   phostname='uname -n'
  else
   echo 'Oh well, maybe I can mine it out of whoami.h...'
   if
 tans=`sh -c $contains' sysname $usrinc/whoami.h' 2>&1` ; then
    myhostname=`echo "$tans" | $sed 's/^.*"\(.*\)"/\1/'`
    phostname="sed -n -e ""/sysname/s/^.*\"\\(.*\\)\"/\1/{"" -e p -e q -e '}' <$usrinc/whoami.h"
   else
    case "$myhostname" in
    ") echo "Does this machine have an identity crisis or something?"
     phostname=";;
    *)
     echo "Well, you said $myhostname before..."
     phostname='echo $myhostname';;
    esac
   fi
  fi
 fi
fi
case "$myhostname" in
") myhostname=noname ;;
esac
: you do not want to know about this
set $myhostname
myhostname=$1

: verify guess
if $test "$myhostname" ; then
 dflt=y
 rp='Your host name appears to be "'$myhostname'".' Right?"
 . ./myread
 case "$ans" in
 y*) ;;
 *) myhostname=";;
 esac
fi

: bad guess or no guess
while $test "X$myhostname" = X ; do
```

```
 dflt=''
 rp="Please type the (one word) name of your host:"
 . ./myread
 myhostname="$ans"
done

: translate upper to lower if necessary
case "$myhostname" in
*[A-Z]*)
 echo
 "(Normalizing case in your host name)"
 myhostname=`echo $myhostname | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

?X: Do not ask for domain name if this is not used later on. In that
?X: case, the hostname may keep its domain name, but it doesn't matter.
@if MYDOMAIN || mydomain
case "$myhostname" in
*.*)
 dflt=`expr "X$myhostname" : "X[^.]*\(\..*\)"`
 myhostname=`expr "X$myhostname" : "X\([^.]*\)\."`
 echo "(Trimming domain name from host name--host name is now $myhostname)"
 ;;
*) case "$mydomain" in
 '')
?X:
?X: There is currently no way to say we do not want hostcat if mydomain is not
?X: used. One way to achieve that would be to put that code in a mydomain.U
?X: unit. However, we want to stick the sanity checks right after the domain
?X: name computation, or if none is done, right after the hostname computation.
?X:
  {
?X: If we use NIS, try ypmatch.
   test "X$hostcat" = "Xypcat hosts" &&
   ypmatch "$myhostname" hosts 2>/dev/null |\
    $sed -e 's/[ ]*#.*//; s/$/ /' > hosts
 && \
   $test -s hosts
  } || {
?X: Extract only the relevant hosts, reducing file size,
?X: remove comments, insert trailing space for later use.
?X: Test to be sure we *have* a hostcat command.  os390 doesn't.
   test "X$hostcat" != "X" &&
   $hostcat | $sed -n -e "s/[ ]*#.*//; s/\$/ /
     /[ ]$myhostname[ . ]/p" > hosts
  }
  tmp_re="[ . ]"
```

```
 if $test -f hosts; then
  $test x`$awk "/[0-9].*[  ]$myhostname$tmp_re/ { sum++ }
      END { print sum }" hosts` = x1 || tmp_re="[  ]"
  dflt=.`$awk "/[0-9].*[  ]$myhostname$tmp_re/ {for(i=2; i<=NF;i++) print \\\$i}" \
   hosts | $sort | $uniq | \
   $sed -n -e "s/$myhostname\.\([-a-zA-Z0-9_.]\)/\1/p"`
  case `$echo X$dflt` in
  X*\ *) echo "(Several hosts in the database matched hostname)"
   dflt=.
   ;;
  X.) echo "(You do not have fully-qualified names in the hosts database)"
   ;;
  esac
 else
  echo "(I cannot locate a hosts database anywhere)"
  dflt=.
 fi
 case "$dflt" in
 .)
  tans=`./loc resolv.conf X /etc /usr/etc`
  if
$test -f "$tans"; then
   echo "(Attempting domain name extraction from $tans)"
?X: Look for either a search or a domain directive.
   dflt=.`$sed -n -e 's/ / /g' \
     -e 's/^search  *\([^ ]*\).*/\1/p' $tans \
     -e 1q 2>/dev/null`
   case "$dflt" in
   .) dflt=.`$sed -n -e 's/ / /g' \
        -e 's/^domain  *\([^ ]*\).*/\1/p' $tans \
        -e 1q 2>/dev/null`
    ;;
   esac
  fi
  ;;
 esac
 case "$dflt" in
 .) echo "(No help from resolv.conf either -- attempting clever guess)"
  dflt=.`sh -c domainname 2>/dev/null`
  case "$dflt" in
  ") dflt='.';;
  .nis.*|.yp.*|.main.*) dflt=`echo $dflt | $sed -e 's/^\.[^.]*//'`;;
  esac
  ;;
 esac
 case "$dflt$osname" in
 .os390) echo "(Attempting domain name extraction from //'SYS1.TCPPARMS(TCPDATA)')"
  dflt=.`awk '/^DOMAINORIGIN/ {print $2}' "//'SYS1.TCPPARMS(TCPDATA)'" 2>/dev/null`
```

```
  ;;
  esac
  case "$dflt" in
  .) echo "(Lost all hope -- silly guess then)"
   dflt='.nonet'
   ;;
  esac
  $rm -f hosts
  ;;
 *)
 dflt="$mydomain";;
 esac;;
esac
echo " "
rp="What is your domain name?"
. ./myread
tans="$ans"
case "$ans" in
") ;;
.*) ;;
*) tans=".$tans";;
esac
mydomain="$tans"

: translate upper to lower if necessary
case "$mydomain" in
*[A-Z]*)
 echo "(Normalizing case in your domain name)"
 mydomain=`echo $mydomain | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

@end
: a little sanity check here
case "$phostname" in
") ;;
*)
 case `$phostname | ./tr '[A-Z]' '[a-z]'` in
 $myhostname$mydomain|$myhostname) ;;
 *)
  case "$phostname" in
  sed*)
   echo "(That doesn't agree with your whoami.h file, by the way.)"
   ;;
  *)
   echo "(That doesn't agree with your $phostname command, by the way.)"
   ;;
  esac
```

```
 ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/myhostname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mailfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mailfile.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:24:57  ram
?RCS: patch36: the Loc unit was missing from the dependency line
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:22:08  ram
?RCS: patch15: now also looks under /var/mail for BSD/386
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mailfile: Myread Oldconfig Filexp Loc
?MAKE: -pick add $@ %<
?S:mailfile:
?S: This variable contains
 the eventual value of the MAILFILE symbol,
?S: which contains an interpretable name of the mail spool file for the
?S: current user.
?S:.
?C:MAILFILE:
?C: This symbol contains the interpretable name of the mail spool file
?C: for the current user.  The program must be prepared to substitute
?C: the HOME directory for %~, and the login id for %L.
?C:.
?H:#define MAILFILE "$mailfile"  /**/
?H:.
: determine where mail is spooled
case "$mailfile" in
")
 dflt=`./loc . XXX /usr/spool/mail /usr/mail /var/mail`
```

```
 case "$dflt" in
 XXX) dflt='%~/mailbox';;
 *) dflt="$dflt/%L";;
 esac
 ;;
*)  dflt="$mailfile"
 ;;
esac
cat <<'EOM'

In the following question, you may use %~ to represent the user's home
directory, and %L to represent a users name.

EOM
rp='In which file is yet-to-be-read mail spooled? (~name ok)'
. ./myread
mailfile=`./filexp "$ans"`

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mailfile.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_inetd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_inetd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_inetd: cat test package Myread Setvar
?MAKE: -pick add $@ %<
?S:d_inetd:
?S: This symbol conditionally defines USE_INETD which indicates to the C
?S: program that the initial socket connection will be done via inetd.
?S:.
?C:USE_INETD (INETD):
?C: This symbol if defined indicates to the C program that inetd will be
?C: in charge of the
 initial socket connection. The file descriptors 0 and
?C: 1 have been dup()ed from the original connected socket descriptor and
?C: are ready for send() and recv().
```

```
?C:.
?H:#$d_inetd USE_INETD  /**/
?H:.
?LINT:set d_inetd
: ask whether initial socket connection is to be done via inetd
echo " "
dflt=n
case "$d_inetd" in
") if $test -f /etc/inetd.conf; then
  $cat <<EOM
Your system provides a so called "Internet super-server", the inetd daemon.
Network services like ftp or rlogin are usually handled via ftpd and rlogind
daemons. Without inetd, these daemons must always be running for the service
to be on. On the contrary, inetd listens to specific ports defined in file
/etc/inetd.conf and will run the appropriate daemon upon request. This scheme
avoids eating up the process table and memory with useless daemons.

I can set up things so that internet connections for $package will be done
using inetd, in which case you will have to edit /etc/inetd.conf to add some
specific informations.

EOM
  dflt=y
 else
  $cat
 <<EOM
I do not see any trace of a configuration file for inetd, hence I assume your
system does not support the so called "Internet super-server". This means
$package will need to have a daemon process running on this machine to allow
network connections.

EOM
 fi;;
*) case "$d_inetd" in
 "$define") dflt=y;;
 esac;;
esac
rp='Do you wish to use inetd for network connections?'
. ./myread
val="$undef"
case "$ans" in
y*|Y*) val="$define";;
esac
set d_inetd
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_inetd.U
```

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mktime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mktime.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:44  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_mktime: Inlibc
?MAKE: -pick add $@ %<
?S:d_mktime:
?S: This variable conditionally defines the HAS_MKTIME symbol, which
?S: indicates to the C program that the mktime() routine is available.
?S:.
?C:HAS_MKTIME :
?C: This symbol, if defined, indicates that the mktime routine
 is
?C: available.
?C:.
?H:#$d_mktime HAS_MKTIME  /**/
?H:.
?LINT:set d_mktime
: see if mktime exists
set mktime d_mktime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mktime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memset.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memset.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:03:11  ram
?RCS: patch10: removed text recommending bzero over memset (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memset: Inlibc
?MAKE: -pick add $@ %<
?S:d_memset:
?S: This variable conditionally defines the HAS_MEMSET symbol, which
?S: indicates to the C program that the memset() routine is available
?S: to set blocks of memory.
?S:.
?C:HAS_MEMSET
 (MEMSET):
?C: This symbol, if defined, indicates that the memset routine is available
?C: to set blocks of memory.
?C:.
?H:#$d_memset HAS_MEMSET /**/
?H:.
?LINT:set d_memset
: see if memset exists
set memset d_memset
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memset.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017 Dagfinn Ilmari Mannsåker
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strnlen: Inlibc
?MAKE: -pick add $@ %<
?S:d_strnlen:
?S: This variable conditionally defines the HAS_STRNLEN symbol, which
?S: indicates to the C program that the strnlen () routine is available.
?S:.
?C:HAS_STRNLEN:
?C: This symbol, if defined, indicates that the strnlen () routine is
?C: available to check the length of a string up to a maximum.
```

```
?C:.
?H:#$d_strnlen HAS_STRNLEN  /**/
?H:.
?LINT:set d_strnlen
: see if strnlen exists
set strnlen d_strnlen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strnlen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_closedir.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:31:26  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:11:18  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:21  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_closedir d_void_closedir: Inlibc i_dirent i_sysdir i_sysndir \
 cc ccflags ldflags libs Setvar rm
?MAKE: -pick
 add $@ %<
?S:d_closedir:
?S: This variable conditionally defines HAS_CLOSEDIR if closedir() is
?S: available.
?S:.
?C:HAS_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine is
?C: available.
?C:.
?H:#$d_closedir HAS_CLOSEDIR  /**/
?H:.
```

```
?S:d_void_closedir:
?S: This variable conditionally defines VOID_CLOSEDIR if closedir()
?S: does not return a value.
?S:.
?C:VOID_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine
?C: does not return a value.
?C:.
?H:#$d_void_closedir VOID_CLOSEDIR  /**/
?H:.
?F:!closedir
?LINT:set d_closedir d_void_closedir
: see if closedir exists
set closedir d_closedir
eval $inlibc

@if VOID_CLOSEDIR || d_void_closedir
?X: The following contortions are designed so we can call closedir()
?X: and check whether it returns a value.  The contortions are designed
?X: to portably pick up the correct directory header, for those
?X: systems that support various mutually incompatible directory functions.
?X: This
 is from perl5's perl.h
case "$d_closedir" in
"$define")
 echo " "
 echo "Checking whether closedir() returns a status..." >&4
 cat > closedir.c <<EOM
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/

#if defined(I_DIRENT)
#include <dirent.h>
#if defined(NeXT) && defined(I_SYS_DIR) /* NeXT needs dirent + sys/dir.h */
#include <sys/dir.h>
#endif
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#ifdef hp9000s500
#include <ndir.h> /* may be wrong in the future */
#else
#include <sys/dir.h>
#endif
#endif
```

```
#endif
#endif
int main() { return closedir(opendir(".")); }
EOM
 if $cc $ccflags $ldflags -o closedir closedir.c $libs > /dev/null 2>&1; then
  if ./closedir > /dev/null 2>&1 ; then
   echo "Yes, it does."
   val="$undef"
  else
   echo "No, it doesn't."
   val="$define"
  fi
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  val="$define"
 fi
 ;;
*)
 val="$undef";
 ;;
esac
set d_void_closedir
eval $setvar
$rm
 -f closedir*
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_closedir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysparam.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysparam.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:22:43  ram
?RCS: patch32: created
?RCS:
?MAKE:i_sysparam: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysparam:
```

```
?S: This variable conditionally defines the I_SYS_PARAM symbol, and indicates
?S: whether a C program should include <sys/param.h>.
?S:.
?C:I_SYS_PARAM:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/param.h>.
?C:.
?H:#$i_sysparam I_SYS_PARAM  /**/
?H:.
?LINT:set
 i_sysparam
: see if this is a sys/param system
set sys/param.h i_sysparam
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysparam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorarch.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorarch.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorarch vendorarch vendorarchexp installvendorarch: sed Getfile \
 Setprefixvar Oldconfig Prefixit archname vendorlib vendorprefix test
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorarch:
?S: This variable contains the value of the PERL_VENDORARCH symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: architecture-dependent modules and extensions in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorarchexp:
```

```
?S: This variable is the ~name expanded version of vendorarch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorarch="
?S:installvendorarch:
?S: This variable is really the same as vendorarchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorarch:
?S: This variable conditionally defined PERL_VENDORARCH.
?S:.
?C:PERL_VENDORARCH:
?C: If defined, this symbol contains the name of a private library.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this
 directory.
?C: Vendors who distribute perl may wish to place their own
?C: architecture-dependent modules and extensions in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORARCH_EXP:
?C: This symbol contains the ~name expanded version of PERL_VENDORARCH, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorarch PERL_VENDORARCH "$vendorarch"  /**/
?H:#$d_vendorarch PERL_VENDORARCH_EXP "$vendorarchexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorarch
: Set the vendorarch variables
case "$vendorprefix" in
") d_vendorarch="$undef"
 vendorarch="
 vendorarchexp="
 ;;
*) d_vendorarch="$define"
 : determine where vendor-supplied architecture-dependent libraries go.
 : vendorlib  default is /usr/local/lib/perl5/vendor_perl/$version
 : vendorarch default is /usr/local/lib/perl5/vendor_perl/$version/$archname
 : vendorlib may have an optional trailing
 /share.
 case "$vendorarch" in
 ") dflt=`echo $vendorlib | $sed 's,/share$,,'`
  dflt="$dflt/$archname"
```

```
  ;;
 *) dflt="$vendorarch" ;;
 esac
 fn=d~+
 rp='Pathname for vendor-supplied architecture-dependent files?'
 . ./getfile
 vendorarch="$ans"
 vendorarchexp="$ansexp"
 ;;
esac
prefixvar=vendorarch
. ./installprefix
if $test X"$vendorarch" = X"$vendorlib"; then
 d_vendorarch="$undef"
else
 d_vendorarch="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorarch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Typedef.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  13:42:07  ram
?RCS: patch56: added backslash escapes within evals to prevent space problems
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:01:16  ram
?RCS: patch36: don't clobber visible 'val' variable, use 'varval' instead
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:05:14  ram
?RCS: patch32: created
?RCS:
?X:
?X: This unit checks for the definition of a given typedef.
?X:
?X: To use it, say:
?X: set typedef val_t default [includes]
?X: eval $typedef
```

```
?X:
?MAKE:Typedef:
 cppstdin cppminus cppflags rm contains Oldconfig
?MAKE: -pick add $@ %<
?F:!temp.c
?LINT:define typedef
?V:typedef
?S:typedef:
?S: This shell variable is used internally by Configure to check
?S: wether a given typedef is defined or not. A typical use is:
?S:  set typedef val_t default [includes]
?S:  eval $typedef
?S: That will return val_t set to default if the typedef was not found,
?S: to typedef otherwise. If no includes are specified, look in sys/types.h.
?S:.
?T:type var def inclist varval inc
: define an is-a-typedef? function
typedef='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 if $contains $type temp.E >/dev/null 2>&1; then
  eval "$var=\$type";
 else
  eval "$var=\$def";
 fi;
 $rm -f temp.?;;
*) eval
 "$var=\$varval";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Typedef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nlist_pfx.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nlist_pfx.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:26:18  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:nlist_pfx nlist_fnd: cat test Myread Oldconfig libnlist \
 +cc +ccflags
?MAKE: -pick add $@ %<
?S:nlist_pfx:
?S: This variable holds any characters which precede the symbol name
?S: when doing an nlist search.
?S:.
?S:nlist_fnd:
?S: This
 variable holds the member of the nlist structure which is
?S: nonzero if an nlist search succeeds.  Presently, it is always "n_value".
?S:.
?C:NLIST_PREFIX:
?C: This manifest constant holds the string of characters which should
?C: precede the symbol name when doing an nlist search.
?C:.
?C:NLIST_FOUND:
?C: This manifest constant holds the member of the nlist structure which
?C: is nonzero if an nlist search succeeds.
?C:.
?H:#define NLIST_PREFIX $nlist_pfx /**/
?H:#define NLIST_FOUND $nlist_fnd /**/
?H:.
?F:!nlisttest
?T:nlist_loc
: Nose around for nlist stuff
echo " "
echo "Checking out nlist stuff..." >&4
$cat >nlisttest.c <<'EOCP'
#include <stdio.h>
#include <nlist.h>

main(argc, argv)
int argc;
char **argv;
{
```

```
 int (*loc)();
 extern int hereIam();
 static struct nlist nl[] = {
  { "IamNotFound", 0 },
  { "hereIam", 0 },
  { "_hereIam", 0 },
  { ".hereIam", 0 },
  { "", 0 }
 };

 loc = hereIam;

 if(argc == 1) {
  printf("%ld\n", loc);}
 else {
  int i;
  int rc;

  if(nlist("./nlisttest",
 nl) == -1) exit(-1);
  i = argv[1][0] - '0';
  printf("%d %d %d\n", nl[i].n_name, nl[i].n_type, nl[i].n_value);
  }
 exit(0);}

int hereIam() {

 return;}
EOCP
nlist_fnd=n_value
if $cc $ccflags -o nlisttest nlisttest.c $libnlist >/dev/null 2>&1 ; then
 set `./nlisttest`
 nlist_loc=$1

 set `./nlisttest 0`
 if $test "$3" = "0" ; then
  echo "$nlist_fnd is 0 if nlist() fails, as I expected."
 else
  $cat <<EOM
Hello, Jim.  We have just discovered that $nlist_fnd was nonzero on an
nlist() lookup failure!  Your mission, should you choose to accept it, is to
edit either config.sh (to provide a Good value for nlist_fnd) or The Code
(to find an alternative to NLIST_FOUND), and reporting the full details of
your success to the MetaConfig Police.  Of course, should you fail...
EOM
  nlist_fnd="/* Bletch! */ */"
 fi
```

```
 set `./nlisttest 1`
 if $test "$nlist_loc" = "$3" ; then
  echo "Symbols are stored with no initial characters."
  nlist_pfx=
 else
  set `./nlisttest 2`
  if
 $test "$nlist_loc" = "$3" ; then
   echo "Symbols are stored with an initial underscore."
   nlist_pfx=_
  else
   set `./nlisttest 3`
   if $test "$nlist_loc" = "$3" ; then
    echo "Symbols are stored with an initial dot."
    nlist_pfx=.
   else
    $cat <<EOM
I can't figure out the symbol prefix!
You get to edit config.sh and fix 'nlist_pfx' (Configure will let you do this
at the end of its configuration questions), or config.h and fix the value of
the NLIST_PREFIX symbol.
EOM
    nlist_pfx="/* Bletch! */ */"
   fi
  fi
 fi
else
 $cat <<EOM
I can't get the nlist test program working!
You get to edit config.sh and fix 'nlist_pfx' (Configure will let you do this
at the end of its configuration questions) and 'nlist_fnd', or config.h and
fix the value of the NLIST_PREFIX and NLIST_FOUND symbols.
EOM
 nlist_pfx="/* Bletch! */ */"
 nlist_fnd="/* Bletch! */ */"
fi

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nlist_pfx.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_exp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_exp2:
?S: This variable conditionally defines the HAS_EXP2 symbol, which
```

```
?S: indicates to the C program that the exp2() routine is available.
?S:.
?C:HAS_EXP2:
?C: This symbol, if defined, indicates that the exp2 routine is
?C: available to do the 2**x function.
?C:.
?H:#$d_exp2 HAS_EXP2  /**/
?H:.
?LINT:set d_exp2
: see if exp2 exists
set exp2 d_exp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_exp2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_quadmath: Inhdr
?MAKE: -pick add $@ %<
?S:i_quadmath:
?S: This variable conditionally defines I_QUADMATH, which indicates
?S: to the C program that it should include <quadmath.h>.
?S:.
?C:I_QUADMATH:
?C: This symbol, if defined, indicates that <quadmath.h> exists and
?C: should be included.
?C:.
?H:#$i_quadmath I_QUADMATH  /**/
?H:.
?LINT:set i_quadmath
: see if this is a quadmath.h system
set quadmath.h i_quadmath
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_quadmath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getppid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_getppid.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:45  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_getppid: Inlibc
?MAKE: -pick add $@ %<
?S:d_getppid:
?S: This variable conditionally defines the HAS_GETPPID symbol, which
?S: indicates to the C program that the getppid() routine is available
?S: to get the parent process ID.
?S:.
?C:HAS_GETPPID :
?C: This symbol,
 if defined, indicates that the getppid routine is
?C: available to get the parent process ID.
?C:.
?H:#$d_getppid HAS_GETPPID  /**/
?H:.
?LINT:set d_getppid
: see if getppid exists
set getppid d_getppid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getppid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libflex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libflex.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:57:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:07:02  ram
?RCS: patch23: now uses full library path instead of -l notation
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:13:25  ram
?RCS: patch16: un-obsoleted this unit to allow smooth lex/flex compilations
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:59  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:libflex: Loc lex libpth _a
?MAKE: -pick add $@ %<
?S:libflex:
?S: This variable contains the argument to pass to the loader in order
?S: to get the flex/lex library routines.  If there is no flex or flex
?S: library, it is null.
?S:.
?T:xxx
: see if we should include -lfl
echo " "
case "$lex" in
*flex)
 xxx=`./loc libfl$_a x $libpth`
 case "$xxx" in
 x)
  echo "No flex library found." >&4
  libflex=''
  ;;
 *)
  echo "flex library found in $xxx." >&4
  libflex="$xxx"
  ;;
 esac
 ;;
*lex)
 xxx=`./loc libl$_a x $libpth`
 case "$xxx" in
 x)
  echo "No lex library found." >&4
  libflex=''
  ;;
 *)
  echo "lex library found in $xxx." >&4
  libflex="$xxx"
  ;;
 esac
 ;;
*)
echo "You don't seem to have lex or flex, so I won't look for libraries." >&4
 ;;
```

```
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libflex.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:sysroot: Head
?MAKE: -pick add $@ %<
?S:sysroot:
?S: This variable is empty unless supplied by the Configure user.
?S: It can contain a path to an alternative root directory, under which
?S: headers and libraries for the compilation target can be found. This
?S: is generally used when cross-compiling using a gcc-like compiler.
?S:.
?LINT:extern cc
?LINT:extern cppflags
?LINT:change cppflags
?LINT:extern ccflags
?LINT:change ccflags
?LINT:extern ldflags
?LINT:change ldflags
?LINT:extern cccdlflags
?X: _sysroot is later used in ccflags, but we do not want it in config.sh
?T:var xxx path _sysroot
: Set 'sysroot' to change the logical root directory to your headers and libraries see man gcc
: This is primarily meant for cross-compile environments, and
 may fail to be useful in other cases
if test "X$sysroot" = X; then
   sysroot=""
else
   case "$cc" in
 *gcc*|*g++*)
     echo "Using $sysroot to find your headers and libraries, adding to ccflags"
     # _sysroot is used in places where we need --sysroot=foo
     # but using the rest of the flags could cause issues.
     _sysroot="--sysroot=$sysroot";
     case "$ccflags" in
  *sysroot*) ;;
  'undef'|*)
  ccflags="$ccflags $_sysroot"
     esac
     case "$ldflags" in
  *sysroot*) ;;
```

```
 'undef'|*)
 ldflags="$ldflags $_sysroot"
   esac
   case "$cppflags" in
 *sysroot*) ;;
 'undef'|*)
 cppflags="$cppflags $_sysroot"
   esac
   # lddlflags updated below in lddlflags section;
   # same with cccdlflags
   ;;
  esac

  # Adjust some defaults to also use $sysroot
  for var in xlibpth loclibpth locincpth glibpth; do
 eval xxx=\$$var
 eval $var=''
 for path in $xxx; do
    eval $var=\"\$$var $sysroot$path\"
 done
  done

fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Sysroot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_unistd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_unistd.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_unistd: Inhdr
?MAKE: -pick add $@ %<
?S:i_unistd:
?S: This variable conditionally defines the I_UNISTD symbol, and indicates
?S: whether a C program should include <unistd.h>.
?S:.
```

```
?C:I_UNISTD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <unistd.h>.
?C:.
?H:#$i_unistd I_UNISTD  /**/
?H:.
?LINT:set
 i_unistd
: see if this is a unistd.h system
set unistd.h i_unistd
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_unistd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctermid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ctermid_r ctermid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_ctermid_r:
?S: This variable conditionally defines the HAS_CTERMID_R symbol,
?S: which indicates to the C program that the ctermid_r()
?S: routine is available.
?S:.
?S:ctermid_r_proto:
?S: This variable encodes the prototype of ctermid_r.
?S: It is zero if d_ctermid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctermid_r
?S: is defined.
?S:.
?C:HAS_CTERMID_R:
?C: This symbol, if defined, indicates that the ctermid_r routine
?C: is available to ctermid re-entrantly.
?C:.
?C:CTERMID_R_PROTO:
?C: This
 symbol encodes the prototype of ctermid_r.
?C: It is zero if d_ctermid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctermid_r
?C: is defined.
```

```
?C:.
?H:#$d_ctermid_r HAS_CTERMID_R /**/
?H:#define CTERMID_R_PROTO $ctermid_r_proto /**/
?H:.
?T:try hdrs d_ctermid_r_proto
: see if ctermid_r exists
set ctermid_r d_ctermid_r
eval $inlibc
case "$d_ctermid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h "
 case "$d_ctermid_r_proto:$usethreads" in
 ":define") d_ctermid_r_proto=define
  set d_ctermid_r_proto ctermid_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ctermid_r_proto" in
 define)
 case "$ctermid_r_proto" in
 "|0) try='char* ctermid_r(char*);'
 ./protochk "$extern_C $try" $hdrs && ctermid_r_proto=B_B ;;
 esac
 case "$ctermid_r_proto" in
 "|0) d_ctermid_r=undef
  ctermid_r_proto=0
  echo "Disabling ctermid_r, cannot determine prototype." >&4 ;;
 * ) case "$ctermid_r_proto" in
  REENTRANT_PROTO*) ;;
  *)
 ctermid_r_proto="REENTRANT_PROTO_$ctermid_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "ctermid_r has no prototype, not using it." >&4 ;;
  esac
  d_ctermid_r=undef
  ctermid_r_proto=0
  ;;
 esac
 ;;
*) ctermid_r_proto=0
 ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ctermid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strerror.U,v 3.0.1.3 1994/05/13 15:20:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_strerror.U,v $
?RCS: Revision 3.0.1.3  1994/05/13  15:20:27  ram
?RCS: patch27: now uses new macro support for cleaner Strerror def
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  14:58:26  ram
?RCS: patch23: renamed strerror into Strerror to protect name space (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:56  ram
?RCS: patch16: protected code looking for sys_errnolist[] with @if
?RCS: patch16: added default value for d_sysernlst
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:07:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syserrlst d_sysernlst: Csym Findhdr
?MAKE: -pick add $@ %<
?S:d_syserrlst:
?S: This variable conditionally defines HAS_SYS_ERRLIST if sys_errlist[] is
?S: available to translate error numbers to strings.
?S:.
?S:d_sysernlst:
?S: This variable conditionally defines HAS_SYS_ERRNOLIST if sys_errnolist[]
?S: is available to translate error numbers to the symbolic name.
?S:.
?C:HAS_SYS_ERRLIST (SYSERRLIST):
?C: This symbol, if defined, indicates that the sys_errlist array is
?C: available to translate error numbers to strings. The extern int
?C: sys_nerr gives the size of that table.
?C:.
?C:HAS_SYS_ERRNOLIST (SYSERRNOLIST):
?C: This symbol, if defined, indicates that the sys_errnolist array is
?C: available to translate an errno code into its symbolic name (e.g.
?C: ENOENT). The extern int sys_nerrno gives the size of that table.
?C:.
```

```
?H:#$d_syserrlst HAS_SYS_ERRLIST /**/
?H:#$d_sysernlst HAS_SYS_ERRNOLIST /**/
?H:.
?D:d_sysernlst="
?T:val
:
 see if sys_errlist[] exists
echo " "
if test "X$d_syserrlst" = X; then
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "You have sys_errlist[], so we could roll our own strerror."
  d_syserrlst="$define"
 else
  echo "You don't have sys_errlist[], so strerror() is welcome."
  d_syserrlst="$undef"
 fi
fi
@if d_sysernlst || HAS_SYS_ERRNOLIST
if set sys_errnolist val -a d_sysernlst; eval $csym; $val; then
 echo "(Symbolic error codes can be fetched via the sys_errnolist[] array.)"
 d_sysernlst="$define"
else
 echo "(However, I can't extract the symbolic error code out of errno.)"
 d_sysernlst="$undef"
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_strerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?X:
?X: This unit produces a shell script which can be run in order to emit
?X: an important warning to the user, which will be remembered and shown
?X: at the end of the Configure run as well.
?X:
?X: A typical use would be:
```

```
?X:
?X:  ./warn <<EOM
?X:  Problem with your C compiler: can't turn debugging on.
?X:  EOM
?X:
?X: or:
?X:
?X:  ./warn "Problem with your C compiler: can't turn debugging on."
?X:
?X: Which will both display to the user:
?X:
?X:  ***
 WARNING:
?X:  *** Problem with your C compiler: can't turn debugging on.
?X:  ***
?X:
?MAKE:Warn: startsh eunicefix
?MAKE: -pick add $@ %<
?F:./warn
: script used to emit important warnings
cat >warn <<EOS
$startsh
?X: Read the whole warning message from stdin into a temporary file
?X: when no argument was supplied.
if test \$# -gt 0; then
 echo "\$@" >msg
else
 cat >msg
fi
?X: Emit the warning, prefixing all lines with '*** '
echo "*** WARNING:" >&4
sed -e 's/^/*** /' <msg >&4
echo "*** " >&4
?X: Save the warning in the logs, which will be shown again at the end
cat msg >>config.msg
echo " " >>config.msg
rm -f msg
EOS
chmod +x warn
$eunicefix warn
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysstatvfs.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysstatvfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysstatvfs:
?S: This variable conditionally defines the I_SYSSTATVFS symbol,
?S: and indicates whether a C program should include <sys/statvfs.h>.
?S:.
?C:I_SYS_STATVFS:
?C: This symbol, if defined, indicates that <sys/statvfs.h> exists and
?C: should be included.
?C:.
?H:#$i_sysstatvfs I_SYS_STATVFS  /**/
?H:.
?LINT:set i_sysstatvfs
: see if this is a sys/statvfs.h system
set sys/statvfs.h i_sysstatvfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysstatvfs.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: setsid.C,v 3.0.1.1 1994/01/24 13:58:47 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: setsid.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:47  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/setsid.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fseeko: Inlibc longsize
?MAKE: -pick add $@ %<
?S:d_fseeko:
?S: This variable conditionally defines the HAS_FSEEKO symbol, which
?S: indicates to the C program that the fseeko() routine is available.
?S:.
?C:HAS_FSEEKO:
?C: This symbol, if defined, indicates that the fseeko routine is
?C: available to fseek beyond 32 bits (useful for ILP32 hosts).
?C:.
?H:#$d_fseeko HAS_FSEEKO  /**/
?H:.
?LINT:set d_fseeko
: see if fseeko exists
set fseeko d_fseeko
eval $inlibc
case "$longsize" in
8) echo "(Your long is 64 bits, so you could use fseek.)" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fseeko.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_setitimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_setitimer:
?S: This variable conditionally defines the HAS_SETITIMER symbol, which
?S: indicates to the C program that the setitimer() routine is available.
?S:.
?C:HAS_SETITIMER:
?C: This symbol, if defined, indicates that the setitimer routine is
?C: available to set interval timers.
?C:.
?H:#$d_setitimer HAS_SETITIMER  /**/
?H:.
```

```
?LINT:set d_setitimer
: see if setitimer exists
set setitimer d_setitimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setitimer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_machcthr: Inhdr usethreads
?MAKE: -pick add $@ %<
?S:i_machcthr:
?S: This variable conditionally defines the I_MACH_CTHREADS symbol,
?S: and indicates whether a C program should include <mach/cthreads.h>.
?S:.
?C:I_MACH_CTHREADS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <mach/cthreads.h>.
?C:.
?H:#$i_machcthr   I_MACH_CTHREADS /**/
?H:.
: see if mach cthreads are available
if test "X$usethreads" = "X$define"; then
 set mach/cthreads.h i_machcthr
 eval $inhdr
else
 i_machcthr="$undef"
fi
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/i_machcthr.U
No license file was found, but licenses were detected in source scan.

Perl5 Metaconfig Units

Copyright (c) 1996-1998, Andy Dougherty
Copyright (c) 1999-2011, H.Merijn Brand

All rights reserved.

These units are the ones I used to build Configure and config_h.SH
in the Perl5 distribution.

The Configure script and config_h.SH file in the Perl distribution are
generated by a program called metaconfig. To run metaconfig, you will
need the full dist 3.0 distribution, maintained by Raphael Manfredi.
As of this writing, the current version is dist3.0, patchlevel 70.
Dist version dist-3.0@70.tar.gz is available on CPAN (the Comprehensive
Perl Archive Network) as
<http://www.perl.com/perl/CPAN/authors/id/RAM/dist-3.0@70.tar.gz>.

Instructions:

1. Unpack the full perl5 sources. Execute the following command

```
chmod +w Configure config_h.SH Porting/Glossary Porting/config*
```

2. Unpack the archive containing this file in the perl5 source
directory. This will create a directory
'U' under the perl5
sources. That directory will contain the metaconfig units for perl5.
This will also create two files in the perl5 source tree:
MANIFEST.new and .package.

3. Apply any patches to perl in the perl_patches/ directory.
(This may well be empty.)

4. Obtain and install dist-3.0pl70.

4. Apply any patches to dist under the dist_patches subdirectory.

5. From your main perl5 source directory, run packinit to
regenerate the .package file. IMPORTANT: Change the name and
address of the maintainer to your own name and address. I don't
want bug reports intended for you coming to me.

6. From your main perl5 source directory, run

```
metalint (or mlint)
```

and repair every failure it reports.

7. From your main perl5 source directory, run

```
metaconfig -m (or mconfig -m)
```

8. Edit U/mkglossary and/or U/mkgloss.pl to point to your dist-3.0pl70
location. (See comments at the top.)

9. Run the Porting/mksample script to update the contents
of the Porting/
subdirectory, or run all parts by hand. (see README)

NB: this script used to be U/mksample replaced by Porting/mksample;
see Porting/pumpkin.pod instead for current documentation on its
use.

10. Let me know about any changes, corrections, or enhancements.

Things to watch out for:

1. Future support of better random number generators should probably
start with the randfunc.U unit included here. It's currently
broken, but well commented and probably a good place to start.

Descriptions:

The units and other related files have been broken up into the following
directories:

acl/
This is an old patch to begin to detect and use ACL (access
control list) file protection schemes.

compline/
These are similar to the standard units, but I have modified them
to have a more uniform compile command line, usually using the new
Compile.U unit. I have submitted these for inclusion into the
regular dist distribution. (The ccflags.U
unit is actually
perl-specific since it mentions -DDEBUGGING and -DPOSIX_SOURCE,
but that's the only place it is perl-specific.)

dist_patches/
These are patches to dist that must be applied before it is built
and installed. I have submitted these for inclusion in the
regular dist distribution.

modified/
These are modified versions of the standard units. Also included in
this directory are new units that are clearly derived from existing
units. I have submitted these for inclusion in the regular dist
distribution.

perl/
These are specific to perl. Some are heavily derived from original dist units, and are marked as such. Others are original.

perl_patches/
These are patches to the perl source. This directory should ordinarily be empty, but there may have been drift between the standard version of perl and the one associated with these units.

protos/
These are units modified to use the new Hasproto.U or Protochk.U units to check for prototypes. I have submitted these for inclusion into the regular dist distribution.

target/
This is the very, very beginning of cross-compiler support. It doesn't work yet, and many standard units will need modification.

typedefs/
These are standard units modified to use the modified Typedef.U unit to check for typedefs. (The modified Typdef.U includes a function to avoid unnecessary prompts if the typdef being searched for exists.) I have submitted these for inclusion into the regular dist distribution.

threads/
These are specific to threading perl.

Copyright Information:

Unless otherwise indicated, the files contained in this distribution are:

Copyright (c) 1996-1998, Andy Dougherty

The following licensing terms apply to all files contained in this distribution:

You may distribute the files contained in this distribution under the terms of either

a) the "Artistic License" which comes with Perl,
or

b) the "Artistic License" which comes with dist, or

c) the GNU General Public License as published by the Free
Software Foundation; either version 1, or (at your option) any
later version (see the file "Copying" that comes with the
Perl distribution).

Which one to use is your choice.

The units in the "modified" directory have been derived from units
associated with the metaconfig program of Raphael Manfredi's "dist"
distribution. These units list Raphael Manfredi as the Copyright holder.
dist is distributed under a modified version of the Perl Artistic License.
Clause 7 of this modified license as contained in dist-3.0-pl60 provides:

7. You may reuse parts of this Package in your own programs, provided
that you explicitly state where you got them from, in the source code
(and, left to your courtesy, in the documentation), duplicating
all the associated copyright notices and disclaimers. Besides
your changes, if any, must be clearly marked
as such. Parts reused
that way will no longer fall under this license if, and only if,
the name of your program(s) have no immediate connection with the
name of the Package itself or its associated programs. You may then
apply whatever restrictions you wish on the reused parts or choose
to place them in the Public Domain--this will apply only within the
context of your package.

In accordance with this clause, the versions of these units
contained here are made available under the same terms as the
rest of the units.

If you have any questions about the use of these units or about
the differences between these units and the standard versions, please
feel free to ask.

Andy Dougherty doughera@lafayette.edu
Dept. of Physics
Lafayette College
Easton, PA 18042-1782

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/README.dist
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Finish.U,v $
?RCS: Revision 3.0.1.6  1995/02/15  14:09:30  ram
?RCS: patch51: now clearer about how to edit config.sh at the prompt (WED)
?RCS:
?RCS: Revision 3.0.1.5  1994/10/29  15:53:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:19:37  ram
?RCS: patch23: added blank lines around 'End of Configure'
?RCS:
?RCS: Revision 3.0.1.3  1993/10/16  13:46:09  ram
?RCS: patch12: replaced Config_h by Magic_h in the dependency line
?RCS:
?RCS:
 Revision 3.0.1.2  1993/09/13  15:45:26  ram
?RCS: patch10: fixed shell evaluation w/o shell escape while in silent mode
?RCS:
?RCS: Revision 3.0.1.1  1993/08/30  08:55:59  ram
?RCS: patch8: prevents myread from blocking on empty answers, exceptionally
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit is the very last one in the Configure script.  It runs all the
?X: SH files, which among other things produce config.h and (usually) Makefile.
?X: It offers to do a make depend if the Makefile contains that target.
?X:
?MAKE:Finish: Chk_MANI Extract Myread Oldsym Magic_h cat rm contains \
 test package make
?MAKE: -pick add $@ %<
?F:!config.sh
?T:pwd
: Finish up by extracting the .SH files
case "$alldone" in
exit)
?X: They supplied the -E switch
 echo "Stopping at your request, leaving temporary files around."
 exit 0
 ;;
cont)
 ;;
")
```

```
 dflt="
 nostick=true
 $cat <<EOM

If you'd like to make any changes to the config.sh
 file before I begin
to configure things, do it as a shell escape now (e.g. !vi config.sh).

EOM
 rp="Press return or use a shell escape to edit config.sh:"
 . UU/myread
 nostick="
 case "$ans" in
 ") ;;
 *) : in case they cannot read
  sh 1>&4 -c "$ans";;
 esac
 ;;
esac

: if this fails, just run all the .SH files by hand
. ./config.sh

?X:
?X: Turn silent mode off from now on (we want a verbose file extraction).
?X: This means we have to explicitly test for '$silent' from now on to
?X: strip off any verbose messages.
?X:
echo " "
exec 1>&4
pwd=`pwd`
. ./UU/extract
cd "$pwd"

if $contains '^depend:' [Mm]akefile >/dev/null 2>&1; then
 dflt=y
 case "$silent" in
 true) ;;
 *)
  $cat <<EOM

Now you need to generate make dependencies by running "$make depend".
You might prefer to run it in background: "$make depend > makedepend.out &"
It can take a while, so you might not want to run it right now.

EOM
  ;;
 esac
```

```
 rp="Run $make depend now?"
 . UU/myread
 case "$ans" in
 y*)
  $make depend
 && echo "Now you must run '$make'."
  ;;
 *)
  echo "You must run '$make depend' then '$make'."
  ;;
 esac
elif test -f [Mm]akefile; then
 echo " "
 echo "Now you must run a $make."
else
 echo "Configure done."
fi

if $test -f Policy.sh; then
   $cat <<EOM

If you compile $package on a different machine or from a different object
directory, copy the Policy.sh file from this object directory to the
new one before you run Configure -- this will help you with most of
the policy defaults.

EOM
fi
if $test -f UU/config.msg; then
   echo "Hmm.  I also noted the following information while running:"
   echo " "
   $cat UU/config.msg >&4
fi
?X:
?X: kit*isdone files are left over by shell archives built using the makedist
?X: script which comes from dist, while ark*isdone files are left over by
?X: the cshar archive maker.
?X:
$rm -f kit*isdone ark*isdone
$rm -rf UU

: End of Configure
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Finish.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: usenm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:26:40  ram
?RCS: patch61: don't use nm with the GNU C library
?RCS: patch61: added support for Linux shared libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usenm runnm nm_opt nm_so_opt: cat test Myread Oldconfig grep \
 d_gnulibc nm egrep rsrc osname Guess
?MAKE: -pick add $@ %<
?S:usenm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction is wanted
 or not.
?S:.
?S:runnm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction should be performed or not, according to the value
?S: of usenm and the flags on the Configure command line.
?S:.
?S:nm_opt:
?S: This variable holds the options that may be necessary for nm.
?S:.
?S:nm_so_opt:
?S: This variable holds the options that may be necessary for nm
?S: to work on a shared library but that can not be used on an
?S: archive library.  Currently, this is only used by Linux, where
?S: nm --dynamic is *required* to get symbols from an ELF library which
?S: has been stripped, but nm --dynamic is *fatal* on an archive library.
?S: Maybe Linux should just always set usenm=false.
?S:.
: see if nm is to be used to determine whether a symbol is defined or not
?X: If there is enough inquiries, it might be worth to wait for the nm
?X: extraction. Otherwise, the C compilations might be a better deal.
?X:
?X: Don't bother if we're using GNU libc -- skimo
case "$usenm"
```

```
 in
")
 dflt=''
 case "$d_gnulibc" in
 "$define")
  echo " "
  echo "$nm probably won't work on the GNU C Library." >&4
  dflt=n
  ;;
 esac
 case "$dflt" in
 ")
  if $test "$osname" = aix -a ! -f /lib/syscalls.exp; then
   echo " "
   echo "Whoops!  This is an AIX system without /lib/syscalls.exp!" >&4
   echo "'nm' won't be sufficient on this system." >&4
   dflt=n
  fi
  ;;
 esac
 case "$dflt" in
 ")
  if ./gnu; then
   echo " "
   echo "Hmm...  A GNU system without a GNU C Library?  Weird..." >&4
   dflt=n
  else
   dflt=`$egrep 'inlibc|csym' $rsrc/Configure | wc -l 2>/dev/null`
   if $test $dflt -gt 20; then
    dflt=y
   else
    dflt=n
   fi
  fi
  ;;
 esac
 ;;
*)
 case "$usenm" in
 true|$define) dflt=y;;
 *) dflt=n;;
 esac
 ;;
esac
$cat <<EOM

I can use $nm to extract the symbols from your C libraries. This
is a time consuming task which may generate huge output on the disk (up
```

```
to 3 megabytes) but that should make the symbols extraction faster. The
alternative is to skip the
 'nm' extraction part and to compile a small
test program instead to determine whether each symbol is present. If
you have a fast C compiler and/or if your 'nm' output cannot be parsed,
this may be the best solution.

EOM
rp='Shall I use nm to extract C symbols from the libraries?'
. ./myread
case "$ans" in
[Nn]*) usenm=false;;
*) usenm=true;;
esac

?X: Name extraction is to be run if 'nm' usage is wanted and if no -r flag
?X: was provided to configure (in which case we simply re-use the previous
?X: values).
runnm=$usenm
case "$reuseval" in
true) runnm=false;;
esac

: nm options which may be necessary
case "$nm_opt" in
") if $test -f /mach_boot; then
  nm_opt="  # Mach
 elif $test -d /usr/ccs/lib; then
  nm_opt='-p'  # Solaris (and SunOS?)
 elif $test -f /dgux; then
  nm_opt='-p'  # DG-UX
 elif $test -f /lib64/rld; then
  nm_opt='-p'  # 64-bit Irix
 else
  nm_opt="
 fi;;
esac

?X: nm options which may be necessary for shared libraries but illegal
?X: for archive libraries.  Thank you,
 Linux.
case "$nm_so_opt" in
") case "$osname" in
 *linux*)
  if $nm --help | $grep 'dynamic' > /dev/null 2>&1; then
   nm_so_opt='--dynamic'
  fi
  ;;
```

```
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usenm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_attribut.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 2020, Raphael Manfredi, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_non_int_bitfields: \
    Myread Oldconfig cat cc ccflags Setvar compiler_warning rm_try
?MAKE: -pick add $@ %<
?S:d_non_int_bitfields:
?S: This variable conditionally defines HAS_NON_INT_BITFIELDS
?S: which indicates that the C compiler accepts struct bitfields of sizes
?S: that aren't 'int' or 'unsigned int'
?S:.
?C:HAS_NON_INT_BITFIELDS:
?C: This symbol, if defined, indicates that the C compiler accepts, without
?C: error or warning, struct bitfields
 that are declared with sizes other
?C: than plain 'int'; for example 'unsigned char' is accepted.
?C:.
?H:?%<:#$d_non_int_bitfields HAS_NON_INT_BITFIELDS /**/
?H:.
?LINT:set d_non_int_bitfields
?F:!try.out !try.c
: Look for non 'int'-sized bitfields
case "$d_non_int_bitfields" in
")
echo " " >&4
echo "Checking whether your compiler can handle struct bitfields that aren't 'int' or 'unsigned int' ..." >&4
$cat >try.c <<'EOCP'
#include <stdio.h>
struct foo {
   unsigned char byte:1;
   unsigned short halfword:1;
} bar;
EOCP
```

```
if $cc $ccflags -c try.c >try.out 2>&1 ; then
 if $compiler_warning try.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support struct bitfields that aren't 'int' or 'unsigned int'." >&4
  val="$undef"
 else
  echo "Your C compiler supports struct bitfields besides 'int' and 'unsigned int'." >&4
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand struct bitfields that aren't 'int' or 'unsigned int' at all." >&4
 val="$undef"
fi
;;
*)
 val="$d_non_int_bitfields" ;;
esac
set d_non_int_bitfields
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_bitfield.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bcopy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bcopy.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:48:04  ram
?RCS: patch12: added magic support for bcopy()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:01:11  ram
?RCS: patch10: now only defines HAS_BCOPY, no macro remap on memcpy (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bcopy: Inlibc
?MAKE: -pick add $@ %<
?S:d_bcopy:
?S: This variable conditionally defines the HAS_BCOPY
```

```
 symbol if
?S: the bcopy() routine is available to copy strings.
?S:.
?C:HAS_BCOPY:
?C: This symbol is defined if the bcopy() routine is available to
?C: copy blocks of memory.
?C:.
?H:#$d_bcopy HAS_BCOPY /**/
?H:.
?M:bcopy: HAS_BCOPY
?M:#ifndef HAS_BCOPY
?M:#ifndef bcopy
?M:#define bcopy(s,d,l) memcpy((d),(s),(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bcopy
: see if bcopy exists
set bcopy d_bcopy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bcopy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcrtomb: Inlibc
?MAKE: -pick add $@ %<
?S:d_wcrtomb:
?S: This variable conditionally defines the HAS_WCRTOMB symbol if the
?S: wcrtomb() routine is available to be used to convert a wide character
?S: into a multi-byte character.
?S:.
?C:HAS_WCRTOMB:
?C: This symbol, if defined, indicates that the wcrtomb routine is
?C: available to convert a wide character into a multi-byte character.
?C:.
?H:#$d_wcrtomb HAS_WCRTOMB /**/
?H:.
?LINT: set d_wcrtomb
: see if wcrtomb exists
```

```
set wcrtomb d_wcrtomb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_wcrtomb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sigprocmask: Inlibc
?MAKE: -pick add $@ %<
?S:d_sigprocmask:
?S: This variable conditionally defines HAS_SIGPROCMASK
?S: if sigprocmask() is available to examine or change the signal mask
?S: of the calling process.
?S:.
?C:HAS_SIGPROCMASK:
?C: This symbol, if defined, indicates that the sigprocmask
?C: system call is available to examine or change the signal mask
?C: of the calling process.
?C:.
?H:#$d_sigprocmask HAS_SIGPROCMASK  /**/
?H:.
?LINT:set d_sigprocmask
: see if sigprocmask exists
set sigprocmask d_sigprocmask
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sigprocmask.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Compile.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?RCS:
?X:
?X: This unit is just a quick shorthand for the compile command
?X: to be used in all the other metaconfig units.
?X:
?MAKE:Compile: +cc +optimize +ccflags +ldflags +libs test
?MAKE: -pick wipe $@ %<
?LINT:extern usedevel maintloc
?LINT:define compile compile_ok
?V:compile compile_ok mc_file
?S:compile:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command, namely
?S: $cc $optimize $ccflags $ldflags -o $1 $1.c $libs > /dev/null 2>&1
?S: Note that the output filename does _not_ include the _exe
?S: extension.  Instead we assume that the linker will be
?S: "helpful" and automatically appending the correct suffix.
?S: OS/2
 users will apparently need to supply the -Zexe flag to
?S: get this behavior.
?S:
?S: To use this variable, say something like:
?S:  echo 'int main() { exit(0); }' > try.c
?S:  set try
?S:  if eval $compile; then
?S:   echo "success"   # and do whatever . . .
?S:  else
?S:   echo "failure"   # and do whatever . . .
?S:  fi
?S: To add extra flags cc flags (e.g. -DWHATEVER) just put them
?S: in $*, e.g.
?S:  set try -DTRY_THIS_FLAG
?S:.
?S:compile_ok:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command that you
?S: expect to work ok.  It is the same as $compile, except we
?S: deliberately let the user see any error messages.
?S:.
: define a shorthand compile call
compile='
mc_file=$1;
shift;
case "$usedevel" in $define|true|[yY]*) if $test ! -f "${mc_file}.c"; then
echo "Internal Configure script bug - compiler test file ${mc_file}.c is missing. Please report this to <$maintloc>"
>&4;
exit 1;
fi;
```

```
esac;
$cc
 -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
: define a shorthand compile call for compilations that should be ok.
compile_ok='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/Compile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?MAKE:run to from targetarch usecrosscompile: src awk cat grep test rm \
 echo sed mkdir cp touch chmod
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecrosscompile:
?S: This variable conditionally defines the USE_CROSS_COMPILE symbol,
?S: and indicates that our package has been cross-compiled.
?S:.
?S:run:
?S: This variable contains the command used by Configure
?S: to copy and execute a cross-compiled executable in the
?S: target host.  Useful and available only during
 the build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:from:
?S: This variable contains the command used by Configure
?S: to copy files from the target host.  Useful and available
?S: only during the build.
?S: The string ':' if not cross-compiling.
?S:.
?S:to:
?S: This variable contains the command used by Configure
```

```
?S: to copy to from the target host.  Useful and available
?S: only during the build.
?S: The string ':' if not cross-compiling.
?S:.
?S:targetarch:
?S: If cross-compiling, this variable contains the target architecture.
?S: If not, this will be empty.
?S:.
?C:USE_CROSS_COMPILE:
?C: This symbol, if defined, indicates that the package is being
?C: cross-compiled.
?C:.
?C:CROSS_TARGET_ARCH:
?C: This symbol, if defined, indicates the target architecture
?C: the package has been cross-compiled to.
?C: Undefined if not a cross-compile.
?C:.
?H:?usecrosscompile:#ifndef USE_CROSS_COMPILE
?H:?usecrosscompile:#$usecrosscompile USE_CROSS_COMPILE /**/
?H:?usecrosscompile:#define
 CROSS_TARGET_ARCH "$targetarch" /**/
?H:?usecrosscompile:#endif
?H:.
?T:croak pwd exe f q i j cwd
?LINT:extern usecrosscompile
?LINT:extern cc
?LINT:extern usrinc
?LINT:change usrinc
?LINT:change ar
?LINT:change nm
?LINT:change ranlib
?LINT:extern targethost
?LINT:extern targetdir
?LINT:change targetdir
?LINT:extern targetuser
?LINT:change targetuser
?LINT:extern targetrun
?LINT:extern targetfrom
?LINT:extern targetto
?LINT:extern targetmkdir
?LINT:change targetrun
?LINT:change targetfrom
?LINT:change targetto
?LINT:change targetmkdir
?LINT:extern incpth
?LINT:extern libpth
?LINT:change incpth
?LINT:change libpth
```

```
?LINT:extern locincpth
?LINT:extern loclibpth
?LINT:change locincpth
?LINT:change loclibpth
?LINT:extern TMPDIR
: setup for possible cross-compilation
run=''
to=:
from=:
usecrosscompile='undef'
targetarch=''
case "$usecrosscompile" in
$define|true|[yY]*)
@if { test -d ../Cross }
?X:
?X: Cross-compilation is enabled when there is a 'Cross' directory found
?X: at the root
 of the package.  This directory must contain the following
?X: entries for defining the cross-compilation process:
?X:
?X: FIXME FIXME
?X: WE MUST DISTINGUISH BETWEEN LOCAL cross-compiling AND REMOTE ONE
?X: ACTUALLY, REMOTE COMPILATION SHOULD BE CONFIGURED INTERACTIVELY
?X: IT WILL COPY ALL THE FILES FROM THE MANIFEST DOWN TO THE REMOTE DIR...
?X: (and copy things like 'mkdep', etc...)
?X:
 $echo "Cross-compiling..."
 croak=''
 case "$cc" in
 *-*-gcc)
?X: A cross-compiling gcc, probably.
    targetarch=`$echo $cc|$sed 's/-gcc$//'`
    ar=$targetarch-ar
?X: leave out ld, choosing it is more complex
    nm=$targetarch-nm
    ranlib=$targetarch-ranlib
    $echo 'extern int foo;' > try.c
    set X `$cc -v -E try.c 2>&1 | \
  $awk '/^#include </,/^End of search /'|$grep '/include'`
    shift
  if $test $# -gt 0; then
       incpth="$incpth $*"
  incpth="`$echo $incpth|$sed 's/^ //'`"
  echo "Guessing incpth '$incpth'." >&4
  for i in $*; do
   j="`$echo $i|$sed 's,/include$,/lib,'`"
   if
```

```
$test -d $j; then
    libpth="$libpth $j"
   fi
  done
  libpth="`$echo $libpth|$sed 's/^ //'`"
  echo "Guessing libpth '$libpth'." >&4
    fi
    $rm -f try.c
    ;;
esac
case "$targetarch" in
") echo "Targetarch not defined." >&4; croak=y ;;
*)  echo "Using targetarch $targetarch." >&4 ;;
esac
case "$incpth" in
") echo "Incpth not defined." >&4; croak=y ;;
*)  echo "Using incpth '$incpth'." >&4 ;;
esac
case "$libpth" in
") echo "Libpth not defined." >&4; croak=y ;;
*)  echo "Using libpth '$libpth'." >&4 ;;
esac
case "$usrinc" in
")
 for i in $incpth; do
  if $test -f $i/errno.h -a -f $i/stdio.h -a -f $i/time.h; then
   usrinc=$i
   echo "Guessing usrinc $usrinc." >&4
   break
  fi
    done
    case "$usrinc" in
    ") echo "Usrinc not defined." >&4; croak=y ;;
    esac
 ;;
*)  echo "Using usrinc $usrinc." >&4 ;;
esac
case "$targethost" in
") echo "Targethost not defined." >&4; croak=y ;;
*)  echo "Using targethost $targethost."
>&4
esac
locincpth=' '
loclibpth=' '
case "$croak" in
y) echo "Cannot continue, aborting." >&4; exit 1 ;;
esac
case "$src" in
```

```
 /*) run=$src/Cross/run
     targetmkdir=$src/Cross/mkdir
     to=$src/Cross/to
     from=$src/Cross/from
     ;;
 *)  pwd=`$test -f ../Configure & cd ..; pwd`
     run=$pwd/Cross/run
     targetmkdir=$pwd/Cross/mkdir
     to=$pwd/Cross/to
     from=$pwd/Cross/from
     ;;
 esac
 case "$targetrun" in
 ") targetrun=ssh ;;
 esac
 case "$targetto" in
 ") targetto=scp ;;
 esac
 case "$targetfrom" in
 ") targetfrom=scp ;;
 esac
 run=$run-$targetrun
 to=$to-$targetto
 from=$from-$targetfrom
 case "$targetdir" in
 ")
  targetdir="${TMPDIR:-/tmp}"
  echo "Guessing targetdir $targetdir." >&4
  ;;
 esac
 case "$targetuser" in
 ")
  targetuser=root
  echo "Guessing targetuser $targetuser." >&4
  ;;
 esac
 case "$targetfrom" in
 scp) q=-q ;;
 *) q=" ;;
 esac
 case "$targetrun" in
 ssh|rsh)
  $cat >$run <<EOF
#!/bin/sh
case "\$1" in
-cwd)
 shift
 cwd=\$1
```

```
  shift
 ;;
esac
case "\$cwd" in
") cwd=$targetdir ;;
esac
exe=\$1
shift
if $test ! -f \$exe.xok; then
 $to \$exe
 $touch \$exe.xok
fi
$targetrun -l $targetuser $targethost "cd \$cwd && ./\$exe \$@"
EOF
  ;;
 *)  echo "Unknown targetrun '$targetrun'" >&4
     exit 1
     ;;
 esac
 case "$targetmkdir" in
 */Cross/mkdir)
  $cat >$targetmkdir <<EOF
#!/bin/sh
$targetrun -l $targetuser $targethost "mkdir -p \$@"
EOF
     $chmod a+rx $targetmkdir
     ;;
 *)  echo "Unknown targetmkdir '$targetmkdir'" >&4
     exit 1
     ;;
 esac
 case "$targetto" in
 scp|rcp)
     $cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $targetmkdir \`dirname \$f\`
   $targetto $q \$f $targetuser@$targethost:\$f            || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $targetto $q \$f $targetuser@$targethost:$targetdir/\$f || exit 1
   ;;
 esac
done
```

```
exit 0
EOF
     ;;
 cp) $cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $mkdir -p $targetdir/\`dirname
 \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 *)  echo "Unknown targetto '$targetto'" >&4
     exit 1
     ;;
 esac
 case "$targetfrom" in
 scp|rcp)
   $cat >$from <<EOF
#!/bin/sh
for f in \$@
do
 $rm -f \$f
 $targetfrom $q $targetuser@$targethost:$targetdir/\$f . || exit 1
done
exit 0
EOF
     ;;
 cp) $cat >$from <<EOF
#!/bin/sh
for f in \$@
do
 $rm -f \$f
 cp $targetdir/\$f . || exit 1
done
exit 0
EOF
     ;;
```

```
 *)  echo "Unknown targetfrom '$targetfrom'" >&4
    exit 1
    ;;
 esac
 if $test ! -f $run; then
    echo "Target 'run' script '$run' not found." >&4
 else
    $chmod a+rx $run
 fi
 if $test ! -f $to; then
    echo "Target 'to' script '$to' not found." >&4
 else
    $chmod a+rx $to
 fi
 if $test ! -f $from; then
    echo "Target 'from' script '$from' not found." >&4
 else
    $chmod a+rx $from
 fi
 if $test ! -f $run -o ! -f $to -o !
 -f $from; then
    exit 1
 fi
 $cat >&4 <<EOF
Using '$run' for remote execution,
and '$from' and '$to'
for remote file transfer.
EOF
@else
 echo "Cross-compilation is not supported for this package." >&4
 exit 1
@end
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Cross.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: d_shmget.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmget: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmget:
?S: This variable conditionally defines the HAS_SHMGET symbol, which
?S: indicates to the C program that the shmget() routine is available.
?S:.
?C:HAS_SHMGET:
?C: This symbol, if defined, indicates that the shmget() routine is
?C: available to request a shared memory segment from
 the kernel.
?C:.
?H:#$d_shmget HAS_SHMGET  /**/
?H:.
?LINT:set d_shmget
: see if shmget exists
set shmget d_shmget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fork.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_fork.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:38  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_fork: Inlibc
?MAKE: -pick add $@ %<
?S:d_fork:
?S: This variable conditionally defines the HAS_FORK symbol, which
?S: indicates to the C program that the fork() routine is available.
```

```
?S:.
?C:HAS_FORK :
?C: This symbol, if defined, indicates that the fork routine is
?C: available.
?C:.
?H:#$d_fork
 HAS_FORK  /**/
?H:.
?LINT:set d_fork
: see if fork exists
set fork d_fork
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_remquo: Inlibc
?MAKE: -pick add $@ %<
?S:d_remquo:
?S: This variable conditionally defines the HAS_REMQUO symbol, which
?S: indicates to the C program that the remquo() routine is available.
?S:.
?C:HAS_REMQUO:
?C: This symbol, if defined, indicates that the remquo routine is
?C: available to return the remainder and part of quotient.
?C:.
?H:#$d_remquo HAS_REMQUO  /**/
?H:.
?LINT:set d_remquo
: see if remquo exists
set remquo d_remquo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_remquo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Nothing.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Nothing.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this file is to supply an empty target for the private
?X: Makefile built by metaconfig to order the units.
?X:
?MAKE:Nothing: Head
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Nothing.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: startperl.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:25:06  ram
?RCS: patch61: warn them if the #! line is too long for their OS
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startperl: cat rm sharpbang perlpath d_portable Myread
?MAKE: -pick add $@ %<
?S:startperl:
?S: This variable contains the string to put on the front of a perl
?S: script to make sure (hopefully) that it runs with perl and not some
?S: shell. Of course, that
 leading line must be followed by the classical
?S: perl idiom:
?S:  eval 'exec perl -S $0 ${1+"$@"}'
?S:   if $running_under_some_shell;
?S: to guarantee perl startup should the shell execute the script. Note
?S: that this magic incantation is not understood by csh.
?S:.
?C:STARTPERL:
```

```
?C: This symbol is the string that should be put on the front of a
?C: perl script to make sure (hopefully) that it runs with perl and
?C: not under some shell. That line should be followed by the classical
?C: invocation magic:
?C:  eval 'exec perl -S $0 ${1+"$@"}'
?C:   if $running_under_some_shell;
?C: to guarantee perl startup should the shell execute the script at first.
?C:.
?H:#define STARTPERL "$startperl"
?H:.
?T:pdflt
?F:!xtry
: figure out how to guarantee perl startup
case "$sharpbang" in
*!)
?X:
?X: Make sure the #!$perlpath magic incantation indeed works on this
?X: system... It might not if the length of the #! hook is greater
?X: than some hardwired kernel limit. -- RAM, 15/03/96
?X:
 $cat
 >xtry <<EOP
#!$perlpath
system("exit 0");
EOP
 chmod a+x xtry
 if ./xtry >/dev/null 2>&1; then
  $cat <<EOH

I can use the #! construct to start perl on your system. This will make
startup of perl scripts faster, but may cause problems if you want to share
those scripts and perl is not in a standard place (/usr/bin/perl) on all your
platforms. The alternative is to force a shell by starting the script with a
single ':' character.

EOH
  pdflt=y
 else
  $cat <<EOH

I could use the #! construct to start perl on your system, but using
   #!$perlpath
would be too long for your kernel to grok. Indeed, most systems do
limit the size of the leading #! string to 32 characters.

EOH
  pdflt=n
 fi
```

```
 $rm -f xtry
 case "$startperl" in
 *!*) dflt=y;;
 ") case "$d_portable" in
  "$define") dflt=n;;
  *) dflt=$pdflt;;
  esac;;
 *) dflt=n;;
 esac
 rp='Shall I use #! to start up perl?'
 . ./myread
 case "$ans" in
 y*|Y*) startperl="#!$perlpath";;
 *) startperl=": # use perl";;
 esac;;
*) startperl=":
 # use perl";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/startperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isinf: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isinf:
?S: This variable conditionally defines the HAS_ISINF symbol, which
?S: indicates to the C program that the isinf() routine is available.
?S:.
?C:HAS_ISINF:
?C: This symbol, if defined, indicates that the isinf routine is
?C: available to check whether a double is an infinity.
?C:.
?H:#$d_isinf HAS_ISINF  /**/
?H:.
?LINT:set d_isinf
: check for isinf
echo "Checking to see if you have isinf..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isinf(0.0); }
```

```
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isinf."
else
 val="$undef"
 echo "You do not have isinf."
fi
$rm_try
set d_isinf
eval $setvar

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isinf.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_gdbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_gdbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:39  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_gdbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_gdbm (d_gdbm):
?S: This variable conditionally defines the I_GDBM symbol, which
?S: indicates to the C program that <gdbm.h> exists and should
?S: be included.
?S:.
?C:I_GDBM
 (HAS_GDBM):
?C: This symbol, if defined, indicates that <gdbm.h> exists and should
?C: be included.
?C:.
?H:#$i_gdbm I_GDBM /**/
```

```
?H:.
?T:t_gdbm d_gdbm_open
?LINT:set i_gdbm
: see if gdbm.h is available
?X: t_gdbm is a tentative check. We might just have the .h, not the lib -- ADO
set gdbm.h t_gdbm
eval $inhdr
case "$t_gdbm" in
$define)
 : see if gdbm_open exists
 set gdbm_open d_gdbm_open
 eval $inlibc
 case "$d_gdbm_open" in
 $undef)
  t_gdbm="$undef"
  echo "We won't be including <gdbm.h>"
  ;;
 esac
 ;;
esac
val="$t_gdbm"
set i_gdbm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_gdbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: selecttype.U,v 3.0.1.3 1997/02/28 16:20:09 ram Exp $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: selecttype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:20:09  ram
?RCS: patch61: always include <sys/select.h> when available for test
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:14:06  ram
?RCS: patch56: removed harmful spaces in assignment
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:31  ram
```

```
?RCS: patch30: created by ADO
?RCS:
?MAKE:selecttype: Protochk Oldconfig Myread cat
 \
 d_fd_set d_select d_socket i_systime i_sysselct extern_C
?MAKE: -pick add $@ %<
?S:selecttype:
?S: This variable holds the type used for the 2nd, 3rd, and 4th
?S: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?S: is defined, and 'int *' otherwise.  This is only useful if you
?S: have select(), naturally.
?S:.
?C:Select_fd_set_t:
?C: This symbol holds the type used for the 2nd, 3rd, and 4th
?C: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?C: is defined, and 'int *' otherwise.  This is only useful if you
?C: have select(), of course.
?C:.
?H:#define Select_fd_set_t $selecttype /**/
?H:.
?T:xxx nfd tmo try hdrs val
: check for type of arguments to select.
case "$selecttype" in
") case "$d_select" in
 $define)
  echo " "
  $cat <<EOM
Checking to see what type of arguments are accepted by select().
EOM
  hdrs="$define sys/types.h
   $i_systime sys/time.h
   $i_sysselct sys/select.h
   $d_socket sys/socket.h"
  : The first arg can be int, unsigned,
 or size_t
  : The last arg may or may not be 'const'
  val="
  : void pointer has been seen but using that
  : breaks the selectminbits test
  for xxx in 'fd_set *' 'int *'; do
   for nfd in 'int' 'size_t' 'unsigned long' 'unsigned' ; do
    for tmo in 'struct timeval *' 'const struct timeval *'; do
     case "$val" in
     ") try="$extern_C select _(($nfd, $xxx, $xxx, $xxx, $tmo));"
      if ./protochk "$try" $hdrs; then
       echo "Your system accepts $xxx."
       val="$xxx"
      fi
```

```
      ;;
     esac
    done
   done
  done
?X: In the unlikely event that none of those worked, prompt the user.
  case "$val" in
  ") rp='What is the type for the 2nd, 3rd, and 4th arguments to select?'
   case "$d_fd_set" in
    $define) dflt="fd_set *" ;;
    *)  dflt="int *" ;;
   esac
   . ./myread
   val=$ans
   ;;
  esac
  selecttype="$val"
  ;;
 *) : no select, so pick a harmless default
  selecttype='int *'
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/selecttype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dirent.U,v 3.0.1.4 1994/10/29 16:20:01 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_dirent.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:01  ram
?RCS: patch36: failed scanning for 'd_namlen' with missing <dirent.h> (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:01:25  ram
?RCS: patch30: added direntrytype for hints, merely for NeXT (ADO)
?RCS: patch30: now checks for both struct dirent and direct (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:22:37  ram
```

```
?RCS: patch27: new variable direntrytype for proper type setting (ADO)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/01/24  14:11:15  ram
?RCS: patch16: added new Direntry_t pseudo-type for directory entries
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks whether there is a dirent system or not
?X:
?MAKE:i_dirent d_dirnamlen direntrytype: test contains Setvar \
 Myread Findhdr cppstdin cppflags cppminus rm_try
?MAKE: -pick add $@ %<
?S:i_dirent:
?S: This variable conditionally defines I_DIRENT, which indicates
?S: to the C program that it should include <dirent.h>.
?S:.
?S:d_dirnamlen:
?S: This variable conditionally defines DIRNAMLEN, which indicates
?S: to the C program that the length of directory entry names is
?S: provided by a d_namelen field.
?S:.
?S:direntrytype:
?S: This symbol is set to 'struct direct' or 'struct dirent' depending on
?S: whether dirent is available or not. You should use this pseudo type to
?S: portably declare your directory entries.
?S:.
?C:I_DIRENT:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include <dirent.h>. Using this symbol also triggers the definition
?C: of the Direntry_t define which ends up being 'struct dirent' or
?C: 'struct direct' depending on the availability of <dirent.h>.
?C:.
?C:DIRNAMLEN:
?C: This symbol, if defined, indicates to the C program that the length
?C: of directory entry names is provided by a d_namlen field.  Otherwise
?C: you need to do strlen() on the d_name field.
?C:.
?C:Direntry_t:
?C: This symbol is set to 'struct direct' or 'struct dirent' depending on
?C: whether dirent is available or not. You should use this pseudo type to
?C: portably declare your directory entries.
?C:.
?H:#$i_dirent I_DIRENT  /**/
?H:#$d_dirnamlen DIRNAMLEN /**/
```

```
?H:?%<:@if I_DIRENT && Direntry_t
?H:?%<:#define Direntry_t $direntrytype
?H:?%<:@end
?H:.
?T:xinc guess1 guess2
?LINT:set i_dirent d_dirnamlen
: see if this is a dirent system
echo " "
if xinc=`./findhdr dirent.h`; $test "$xinc"; then
 val="$define"
 echo
 "<dirent.h> found." >&4
else
 val="$undef"
 if xinc=`./findhdr sys/dir.h`; $test "$xinc"; then
  echo "<sys/dir.h> found." >&4
  echo " "
 else
  xinc=`./findhdr sys/ndir.h`
 fi
 echo "<dirent.h> NOT found." >&4
fi
set i_dirent
eval $setvar

?X: Use struct dirent or struct direct?   If we're using dirent.h,
?X: it's probably struct dirent, but apparently not always.
?X: Assume $xinc still contains the name of the header file we're using.
@if direntrytype || Direntry_t
: Look for type of directory structure.
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c

case "$direntrytype" in
"|' ')
 case "$i_dirent" in
 $define) guess1='struct dirent' ;;
 *) guess1='struct direct'  ;;
 esac
 ;;
*) guess1="$direntrytype"
 ;;
esac

case "$guess1" in
'struct dirent') guess2='struct direct' ;;
*) guess2='struct dirent' ;;
esac
```

```
if $contains "$guess1" try.c >/dev/null 2>&1; then
 direntrytype="$guess1"
 echo "Your directory entries are $direntrytype." >&4
elif $contains "$guess2"
 try.c >/dev/null 2>&1; then
 direntrytype="$guess2"
 echo "Your directory entries seem to be $direntrytype." >&4
else
 echo "I don't recognize your system's directory entries." >&4
 rp="What type is used for directory entries on this system?"
 dflt="$guess1"
 . ./myread
 direntrytype="$ans"
fi
$rm_try

@end
@if d_dirnamlen || DIRNAMLEN
: see if the directory entry stores field length
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c
if $contains 'd_namlen' try.c >/dev/null 2>&1; then
 echo "Good, your directory entry keeps length information in d_namlen." >&4
 val="$define"
else
 echo "Your directory entry does not know about the d_namlen field." >&4
 val="$undef"
fi
set d_dirnamlen
eval $setvar
$rm_try

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_dirent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Loc_sed.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?X: This is used in perl.c.
?MAKE:full_sed: sed
?MAKE: -pick add $@ %<
?S:full_sed:
?S: This variable contains the full pathname to 'sed', whether or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'sed.'
?S:.
?X: Yes, I know about the C symbol PORTABLE, but I think sed
?X: is
 unlikely to move, and I'm too lazy to add all the
?X: #ifdef PORTABLE sections to the perl source.
?X:
?C:LOC_SED:
?C: This symbol holds the complete pathname to the sed program.
?C:.
?H:#define LOC_SED  "$full_sed" /**/
?H:.
: Store the full pathname to the sed program for use in the C program
full_sed=$sed
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Loc_sed.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2005, H.Merijn Brand
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_malloc_size d_malloc_good_size d_malloc_usable_size: Inlibc
?MAKE: -pick add $@ %<
?S:d_malloc_size:
?S: This symbol, if defined, indicates that the malloc_size
?S: routine is available for use.
?S:.
?S:d_malloc_good_size:
?S: This symbol, if defined, indicates that the malloc_good_size
?S: routine is available for use.
```

```
?S:.
?S:d_malloc_usable_size:
?S: This symbol, if defined, indicates that the malloc_usable_size
?S: routine is available for use.
?S:.
?C:HAS_MALLOC_SIZE:
?C: This symbol, if defined, indicates that
 the malloc_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_size HAS_MALLOC_SIZE  /**/
?H:.
?C:HAS_MALLOC_GOOD_SIZE:
?C: This symbol, if defined, indicates that the malloc_good_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_good_size HAS_MALLOC_GOOD_SIZE /**/
?H:.
?C:HAS_MALLOC_USABLE_SIZE:
?C: This symbol, if defined, indicates that the malloc_usable_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_usable_size HAS_MALLOC_USABLE_SIZE  /**/
?H:.
?LINT:set d_malloc_size
?LINT:set d_malloc_good_size
?LINT:set d_malloc_usable_size
: see if malloc_size exists
set malloc_size d_malloc_size
eval $inlibc

: see if malloc_size_good exists
set malloc_good_size d_malloc_good_size
eval $inlibc

: see if malloc_usable_size exists
set malloc_usable_size d_malloc_usable_size
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_malloc_size.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pwrite.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pwrite.U,v $
?RCS:
?MAKE:d_pwrite: Inlibc
?MAKE: -pick add $@ %<
?S:d_pwrite:
?S: This variable conditionally defines the HAS_PWRITE symbol, which
?S: indicates to the C program that the pwrite() routine is available.
?S:.
?C:HAS_PWRITE :
?C: This symbol, if defined, indicates that the pwrite routine is
?C: available to perform writes on a file descriptor at a given offset.
?C:.
?H:#$d_pwrite HAS_PWRITE  /**/
?H:.
?LINT:set d_pwrite
: see if pwrite
 exists
set pwrite d_pwrite
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pwrite.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Cppsym.U,v $
?RCS: Revision 3.0.1.5  1995/05/12  11:59:11  ram
?RCS: patch54: split awk command onto two lines for older awks (ADO)
?RCS:
?RCS: Revision 3.0.1.4  1995/01/11  14:55:57  ram
?RCS: patch45: new cc vs. cpp symbol checking suggested by JHI
?RCS: patch45: added more cpp symbols (JHI)
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  15:51:32  ram
```

```
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: new symbols ardent and titan (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20
  06:53:32  ram
?RCS: patch30: extended cpp symbol lookup list (JHI)
?RCS: patch30: renamed attrlist symbol into al for brevity
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:14:14  ram
?RCS: patch15: added new cpp symbols __bsdi__ and BSD_NET2
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script called Cppsym, which can be used to
?X: determine whether any in a list of symbols is defined by the C compilation
?X: chain (C preprocessor symbols plus C compiler native ones).
?X: It can determine the status of any symbol, though the symbols in $al
?X: are more easily determined.  If you want to add to $al you can do
?X: it in Myinit.U.
?X:
?MAKE:Cppsym ccsymbols cppsymbols cppccsymbols: run \
 eunicefix Guess awk cat tr sed sort rm startsh osname \
 +cc gccversion test comm uniq echo Options trnl \
 optimize ccflags ldflags libs
?MAKE: -pick add $@ %<
?S:ccsymbols:
?S: The variable contains the symbols
 defined by the C compiler alone.
?S: The symbols defined by cpp or by cc when it calls cpp are not in
?S: this list, see cppsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppsymbols:
?S: The variable contains the symbols defined by the C preprocessor
?S: alone.  The symbols defined by cc or by cc when it calls cpp are
?S: not in this list, see ccsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppccsymbols:
?S: The variable contains the symbols defined by the C compiler
?S: when it calls cpp.  The symbols defined by the cc alone or cpp
?S: alone are not in this list, see ccsymbols and cppsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?T:also symbols i postprocess_cc_v flags
?F:./Cppsym
```

```
?F:!Cppsym.true !Cppsym.know !ccsym.com !ccsym.cpp !ccsym.own
: determine known pre-processor and compiler symbols
echo " "
$echo "Guessing which symbols your C compiler and preprocessor
 define..." >&4
?X:
?X: The symbol list is in alpha order for ease of maintenance...
?X:
?X: Lots of new symbols (mostly rummaged from gcc), courtesy of
?X: Jarkko Hietaniemi <jhi@snakemail.hut.fi> -- RAM, 06/06/94
?X:
?X: If your symbol is mixed case, just add it as-is.
?X: All symbols will be transformed to both all-lower and all-upper.
?X: Also drop any leading/trailing underscores, the scan will try all those.
?X:
$cat <<'EOSH' > Cppsym.know
a29k ABI64 aegis AES_SOURCE AIX AIX32 AIX370
AIX41 AIX42 AIX43 AIX_SOURCE aixpc ALL_SOURCE
alliant alpha am29000 AM29000 AMD64 amiga AMIGAOS AMIX
ansi ANSI_C_SOURCE apollo ardent ARM32 atarist att386 att3b
BeOS BIG_ENDIAN BIT_MSF bsd BSD bsd43 bsd4_2 bsd4_3 BSD4_3 bsd4_4
BSD_4_3 BSD_4_4 BSD_NET2 BSD_TIME BSD_TYPES BSDCOMPAT bsdi
bull c cadmus clipper CMU COFF COMPILER_VERSION
concurrent convex cpu cray CRAY CRAYMPP ctix CX_UX
CYGWIN DGUX DGUX_SOURCE DJGPP dmert DOLPHIN DPX2 DSO
Dynix DynixPTX ELF encore EPI EXTENSIONS FAVOR_BSD
FILE_OFFSET_BITS
 FreeBSD GCC_NEW_VARARGS gcos gcx gimpel
GLIBC GLIBC_MINOR
GNU_SOURCE GNUC GNUC_MINOR GNU_LIBRARY GO32 gould GOULD_PN
H3050R H3050RX hbullx20 hcx host_mips
hp200 hp300 hp700 HP700 hp800 hp9000
hp9000s200 hp9000s300 hp9000s400 hp9000s500
hp9000s700 hp9000s800 hp9k8 hp_osf hppa hpux HPUX_SOURCE
i186 i286 i386 i486 i586 i686 i8086 i80960 i860 I960
IA64 iAPX286 ibm ibm032 ibmesa IBMR2 ibmrt ILP32 ILP64
INLINE_INTRINSICS INTRINSICS INT64 interdata is68k ksr1
LANGUAGE_C LARGE_FILE_API LARGEFILE64_SOURCE
LARGEFILE_SOURCE LFS64_LARGEFILE LFS_LARGEFILE
Linux LITTLE_ENDIAN LONG64 LONG_DOUBLE LONG_LONG
LONGDOUBLE LONGLONG LP64 luna luna88k Lynx
M68000 m68k m88100 m88k M88KBCS_TARGET M_COFF
M_I186 M_I286 M_I386 M_I8086 M_I86 M_I86SM M_SYS3
M_SYS5 M_SYSIII M_SYSV M_UNIX M_XENIX MACH machine MachTen
MATH_HAS_NO_SIDE_EFFECTS
mc300 mc500 mc68000 mc68010 mc68020 mc68030 mc68040
mc68060 mc68k mc68k32 mc700 mc88000 mc88100 merlin
mert MiNT mips MIPS_FPSET MIPS_ISA MIPS_SIM MIPS_SZINT
```

```
MIPS_SZLONG
 MIPS_SZPTR MIPSEB MIPSEL MODERN_C motorola
mpeix MSDOS MTXINU MULTIMAX mvs MVS n16 ncl_el ncl_mr
NetBSD news1500 news1700 news1800 news1900 news3700
news700 news800 news900 NeXT NLS nonstopux ns16000 ns32000
ns32016 ns32332 ns32k nsc32000
OCS88 OEMVS OpenBSD os OS2 OS390 osf OSF1 OSF_SOURCE
pa_risc PA_RISC1_1 PA_RISC2_0 PARAGON parisc
pc532 pdp11 PGC PIC plexus PORTAR posix
POSIX1B_SOURCE POSIX2_SOURCE POSIX4_SOURCE
POSIX_C_SOURCE POSIX_SOURCE POWER
PROTOTYPES PWB pyr QNX R3000 REENTRANT RES Rhapsody RISC6000
riscix riscos RT S390 SA110 scs SCO sequent sgi SGI_SOURCE SH3 sinix
SIZE_INT SIZE_LONG SIZE_PTR SOCKET_SOURCE SOCKETS_SOURCE
sony sony_news sonyrisc sparc sparclite spectrum
stardent stdc STDC_EXT stratos sun sun3 sun386
Sun386i svr3 svr4 SVR4_2 SVR4_SOURCE svr5
SX system SYSTYPE_BSD SYSTYPE_BSD43 SYSTYPE_BSD44
SYSTYPE_SVR4 SYSTYPE_SVR5 SYSTYPE_SYSV SYSV SYSV3 SYSV4 SYSV5
sysV68 sysV88 Tek4132 Tek4300 titan
TM3200 TM5400 TM5600
tower tower32 tower32_200 tower32_600 tower32_700
tower32_800
 tower32_850 tss
u370 u3b u3b2 u3b20 u3b200 u3b20d u3b5
ultrix UMAXV UnicomPBB UnicomPBD UNICOS UNICOSMK
unix UNIX95 UNIX99 unixpc unos
USE_BSD USE_FILE_OFFSET64 USE_GNU USE_ISOC9X USE_LARGEFILE USE_LARGEFILE64
USE_MISC USE_POSIX USE_POSIX199309 USE_POSIX199506 USE_POSIX2
USE_REENTRANT USE_SVID USE_UNIX98 USE_XOPEN USE_XOPEN_EXTENDED
USGr4 USGr4_2
Utek UTek UTS UWIN uxpm uxps vax venix VMESA vms xenix Xenix286
XOPEN_SOURCE XOPEN_SOURCE_EXTENDED XPG2 XPG2_EXTENDED
XPG3 XPG3_EXTENDED XPG4 XPG4_EXTENDED
z8000
EOSH
?X: Maybe put other stuff here too.
cat <<EOSH >>Cppsym.know
$osname
EOSH
./tr '[a-z]' '[A-Z]' < Cppsym.know > Cppsym.a
./tr '[A-Z]' '[a-z]' < Cppsym.know > Cppsym.b
$cat Cppsym.know > Cppsym.c
$cat Cppsym.a Cppsym.b Cppsym.c | $tr ' ' $trnl | $sort | $uniq > Cppsym.know
$rm -f Cppsym.a Cppsym.b Cppsym.c
cat <<EOSH > Cppsym
$startsh
if $test \$# -gt 0; then
```

```
  echo \$* | $tr " " "$trnl" | ./Cppsym.try > Cppsym.got
  if $test -s Cppsym.got; then
     $rm -f Cppsym.got
      exit 0
  fi
  $rm -f Cppsym.got
  exit 1
else
  $tr " " "$trnl" | ./Cppsym.try
  exit 0
fi
EOSH
chmod +x Cppsym
$eunicefix Cppsym
?X: The below awk script will die a horrible death if
?X: some of the tested symbols are not long ints.
?X: Also, we do not make difference between just defined and defined zero.
cat <<EOSH > Cppsym.try
$startsh
cat <<'EOCP' > try.c
#include <stdio.h>
int main() {
EOCP
?X: The length($1) command guards against possible empty entries.
?X: The awk snippet is know to give heartburn to UNICOS/mk awk.
$awk \\
EOSH
cat <<'EOSH' >> Cppsym.try
'length($1) > 0 {
  printf "#ifdef %s\n#if %s+0\nprintf(\"%s=%%ld\\n\", (long)%s);\n#else\nprintf(\"%s\\n\");\n#endif\n#endif\n", $1,
$1, $1, $1, $1
  printf "#ifdef _%s\n#if _%s+0\nprintf(\"_%s=%%ld\\n\",
(long)_%s);\n#else\nprintf(\"_%s\\n\");\n#endif\n#endif\n", $1, $1, $1, $1, $1
  printf "#ifdef __%s\n#if __%s+0\nprintf(\"__%s=%%ld\\n\",
(long)__%s);\n#else\nprintf(\"__%s\\n\");\n#endif\n#endif\n",
 $1, $1, $1, $1, $1
  printf "#ifdef __%s__\n#if __%s__+0\nprintf(\"__%s__=%%ld\\n\",
(long)__%s__);\n#else\nprintf(\"__%s__\\n\");\n#endif\n#endif\n", $1, $1, $1, $1, $1
}'  >> try.c
echo 'return 0;}' >> try.c
EOSH
cat <<EOSH >> Cppsym.try
flags="$ccflags"
case "$osname-$gccversion" in
irix-) flags="\$flags -woff 1178" ;;
os2-*) flags="\$flags -Zlinker /PM:VIO" ;;
esac
$cc -o try $optimize \$flags $ldflags try.c $libs && $run ./try
```

```
EOSH
chmod +x Cppsym.try
$eunicefix Cppsym.try
./Cppsym < Cppsym.know > Cppsym.true
: now check the C compiler for additional symbols
?X: suggested by Jarkko Hietaniemi <jhi@snakemail.hut.fi>, thanks!
postprocess_cc_v="
case "$osname" in
aix) postprocess_cc_v="|$tr , ' '" ;;
esac
$cat >ccsym <<EOS
$startsh
$cat >tmp.c <<EOF
extern int foo;
EOF
for i in \`$cc -v -c tmp.c 2>&1 $postprocess_cc_v\`
do
 case "\$i" in
 -D*) echo "\$i" | $sed 's/^-D//';;
 -A*) $test "$gccversion" && echo "\$i" | $sed 's/^-A//' | $sed 's/\(.*\)(\(.*\))/\1=\2/';;
 esac
done
$rm
 -f try.c
EOS
postprocess_cc_v="
chmod +x ccsym
$eunicefix ccsym
./ccsym > ccsym1.raw
?X: AIX complains if $uniq is passed an empty file.  ($sort apparently
?X: doesn't care.)  --AD  14 July 1998
if $test -s ccsym1.raw; then
	$sort ccsym1.raw | $uniq >ccsym.raw
else
	mv ccsym1.raw ccsym.raw
fi

?X: canonicalize symbols for easier sort/uniq/comm usage: append =1 if no = sign
?X: the awk script must be on two lines for older awk programs, sigh! -- ADO
$awk '/\=/ { print $0; next }
 { print $0"=1" }' ccsym.raw >ccsym.list
$awk '/\=/ { print $0; next }
 { print $0"=1" }' Cppsym.true >ccsym.true
$comm -13 ccsym.true ccsym.list >ccsym.own
$comm -12 ccsym.true ccsym.list >ccsym.com
$comm -23 ccsym.true ccsym.list >ccsym.cpp
also="
if $test -z ccsym.raw; then
```

```
 echo "Your C compiler doesn't seem to define any symbols!" >&4
 echo " "
 echo "However, your C preprocessor defines the following symbols:"
 $cat Cppsym.true
    ccsymbols="
 cppsymbols=`$cat Cppsym.true`
       cppsymbols=`echo
 $cppsymbols`
 cppccsymbols="$cppsymbols"
else
 if $test -s ccsym.com; then
  echo "Your C compiler and pre-processor define these symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.com
  also='also '
  symbols='ones'
  cppccsymbols=`$cat ccsym.com`
  cppccsymbols=`echo $cppccsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.cpp; then
  $test "$also" && echo " "
  echo "Your C pre-processor ${also}defines the following symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.cpp
  also='further '
  cppsymbols=`$cat ccsym.cpp`
  cppsymbols=`echo $cppsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.own; then
  $test "$also" && echo " "
  echo "Your C compiler ${also}defines the following cpp symbols:"
  $sed -e 's/\(..*\)=1/\1/' ccsym.own
  $sed -e 's/\(..*\)=.*/\1/' ccsym.own | $uniq >>Cppsym.true
         ccsymbols=`$cat ccsym.own`
         ccsymbols=`echo $ccsymbols`
  $test "$silent" || sleep 1
 fi
fi
$rm -f Cppsym.know Cppsym.true
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Cppsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?MAKE:gccversion gccosandvers: cat cpp rm +cc \
 Myread Guess Options Oldconfig Loc osname osvers grep run ccname
?MAKE: -pick add $@ %<
?S:gccversion:
?S: If GNU cc (gcc) is used, this variable holds '1' or '3' (for instance)
?S: to indicate whether the compiler is version 1 or 3.  This is used in
?S: setting some of the default cflags.  It is set to '' if not gcc.
?S:.
?S:gccosandvers:
?S: If GNU cc (gcc) is used, this variable the operating system and
?S: version
 used to compile the gcc.  It is set to '' if not gcc,
?S: or if nothing useful can be parsed as the os version.
?S:.
?T:gccshortvers incdir d
?F:!try.c !try
?LINT:extern locincpth ccflags ldflags
?LINT:change locincpth ccname cpp
: Check whether they have gcc in any guise.
echo " "
echo "Checking for GNU cc in disguise and/or its version number..." >&4
$cat >try.c <<EOM
#include <stdio.h>
int main() {
#ifdef __GNUC__
#ifdef __VERSION__
 printf("%s\n", __VERSION__);
#else
 printf("%s\n", "1");
#endif
#endif
 exit(0);
}
EOM
if $cc -o try $ccflags $ldflags try.c >/dev/null 2>&1; then
 gccversion=`$run ./try`
 case "$gccversion" in
 '') echo "You are not using GNU cc." ;;
 *)  echo "You are using GNU cc $gccversion."
     ccname=gcc
```

```
    ;;
 esac
else
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to be working!" >&4
?X: using -K will prevent aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
 echo "    You'd better
 start hunting for one and let me know about it." >&4
  exit 1
  ;;
 esac
fi
$rm -f try try.*
case "$gccversion" in
1*) cpp=`./loc gcc-cpp $cpp $pth` ;;
esac
case "$gccversion" in
") gccosandvers=" ;;
*) gccshortvers=`echo "$gccversion"|sed 's/ .*//'`
  gccosandvers=`$cc -v 2>&1 | \
 $grep '/specs$'|sed "s!.*/[^-/]*-[^-/]*-\([^-/]*\)/$gccshortvers/specs!\1!"`
  gccshortvers="
  case "$gccosandvers" in
  $osname) gccosandvers=" ;; # linux gccs seem to have no linux osvers, grr
  $osname$osvers) ;; # looking good
  $osname*) cat <<EOM >&4

*** WHOA THERE!!! ***

   Your gcc has not been compiled for the exact release of
   your operating system ($gccosandvers versus $osname$osvers).

   In general it is a good idea to keep gcc synchronized with
   the operating system because otherwise serious problems
   may ensue when trying to compile software, like Perl.

   I'm trying to be optimistic here, though, and will continue.
   If later during the configuration and build icky
 compilation
   problems appear (headerfile conflicts being the most common
   manifestation), I suggest reinstalling the gcc to match
   your operating system release.

EOM
    ;;
```

```
  *) gccosandvers=" ;; # failed to parse, better be silent
  esac
  ;;
esac
case "$ccname" in
") ccname="$cc" ;;
esac

: gcc 3.1 complains about adding -Idirectories that it already knows about,
: so we will take those off from locincpth.
case "$gccversion" in
3*)
   echo "main(){}">try.c
   for incdir in `$cc -v -c try.c 2>&1 | \
      sed '1,/^#include <\.\.\.>/d;/^End of search list/,$d;s/^ //'` ; do
      locincpth=`echo $locincpth | sed s!$incdir!!`
   done
   $rm -f try try.*
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/gccvers.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Cppsym.U,v 3.0.1.5 1995/05/12 11:59:11 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Cppsym.U,v $
?RCS: Revision 3.0.1.5  1995/05/12  11:59:11  ram
?RCS: patch54: split awk command onto two lines for older awk's (ADO)
?RCS:
?RCS: Revision 3.0.1.4  1995/01/11  14:55:57  ram
?RCS: patch45: new cc vs. cpp symbol checking suggested by JHI
?RCS: patch45: added more cpp symbols (JHI)
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  15:51:32  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: new symbols ardent and titan (ADO)
?RCS:
?RCS:
```

```
 Revision 3.0.1.2  1994/06/20  06:53:32  ram
?RCS: patch30: extended cpp symbol lookup list (JHI)
?RCS: patch30: renamed attrlist symbol into al for brevity
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:14:14  ram
?RCS: patch15: added new cpp symbols __bsdi__ and BSD_NET2
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: This unit produces a shell script called Cppsym, which can be used to
?X: determine whether any in a list of symbols is defined by the C compilation
?X: chain (C preprocessor symbols plus C compiler native ones).
?X: It can determine the status of any symbol, though the symbols in $al
?X: are more easily determined.  If you want to add to $al you can do
?X: it in Myinit.U.
?MAKE:Cppsym ccsymbols cppsymbols cppccsymbols: run \
 eunicefix Guess awk cat tr sed sort rm rm_try startsh osname \
 +cc +gccversion test comm uniq echo Options trnl \
 optimize ccflags ldflags libs cpp_stuff cpp
?MAKE: -pick add $@ %<
?T:also
 symbols i postprocess_cc_v tHdrH
?X:
?X: The symbol list is in alpha order for ease of maintenance...
?X:
?X: Lots of new symbols (mostly rummaged from gcc), courtesy of
?X: Jarkko Hietaniemi <jhi@snakemail.hut.fi> -- RAM, 06/06/94
?X:
?S:ccsymbols:
?S: The variable contains the symbols defined by the C compiler alone.
?S: The symbols defined by cpp or by cc when it calls cpp are not in
?S: this list, see cppsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppsymbols:
?S: The variable contains the symbols defined by the C preprocessor
?S: alone.  The symbols defined by cc or by cc when it calls cpp are
?S: not in this list, see ccsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppccsymbols:
?S: The variable contains the symbols defined by the C compiler
?S: when it calls cpp.  The symbols defined by the cc alone or cpp
?S: alone are not in this list, see ccsymbols and cppsymbols.
?S: The
 list is a space-separated list of symbol=value tokens.
?S:.
```

```
?F:./Cppsym
?F:./Cppsym.know
?F:!Cppsym.true
?F:!ccsym.com
?F:!ccsym.cpp
?F:!ccsym.own
?X: fake LINT hints
?LINT:change ccflags
?LINT:extern s
?LINT:extern s__
: Preprocessor symbols
echo " "
$echo "Guessing which symbols your C compiler and preprocessor define..." >&4
?X: If your symbol is mixed case, just add it as-is.
?X: All symbols will be transformed to both all-lower and all-upper.
?X: Also drop any leading/trailing underscores, the scan will try all those.
$cat <<'EOSH' > Cppsym.know
a29k aarch64 ABI64 aegis AES_SOURCE AIX AIX32 AIX370 AIX41 AIX42
AIX43 aixpc AIX_SOURCE alliant ALL_SOURCE alpha AM29000 am29000
AMD64 amd64 amiga AMIGAOS AMIX ansi ANSI_C_SOURCE apollo arch_ppc
arch_pwr ardent ARM ARM32 atarist att386 att3b
BeOS BIG_ENDIAN BIT_MSF BSD bsd bsd43 bsd4_2 BSD4_3 bsd4_3 bsd4_4
BSDCOMPAT bsdi BSD_4_3 BSD_4_4 BSD_NET2 BSD_TIME BSD_TYPES bull
byteorder byte_order
c cadmus clang clipper CMU COFF COMPILER_VERSION
 concurrent
convex cpu CRAY cray CRAYMPP ctix CX_UX CYGWIN
DECC DGUX DGUX_SOURCE DJGPP dmert DOLPHIN DPX2 DSO Dynix DynixPTX
ELF encore EPI EXTENSIONS
FAVOR_BSD FILE_OFFSET_BITS FORTIFY_SOURCE FreeBSD
GCC_NEW_VARARGS gcos gcx gimpel GLIBC GLIBC_MINOR GNUC GNUC_MINOR
GNU_LIBRARY GNU_SOURCE GO32 gould GOULD_PN
H3050R H3050RX hbullx20 hcx host_mips hp200 hp300 HP700 hp700
hp800 hp9000 hp9000s200 hp9000s300 hp9000s400
hp9000s700 hp9000s800 hp9k8 hppa hpux HPUX_SOURCE hp_osf
i186 i286 i386 i486 i586 i686 i8086 i80960 i860 I960 IA32 IA64
iAPX286 ibm ibm032 ibmesa IBMR2 ibmrt ILP32 ILP64
INLINE_INTRINSICS INT64 INTEL interdata INTRINSICS is68k itanium
ksr1
LANGUAGE_C LARGEFILE64_SOURCE LARGEFILE_SOURCE LARGE_FILE_API
LFS64_LARGEFILE LFS_LARGEFILE LIBCATAMOUNT Linux LITTLE_ENDIAN
LONG64 LONGDOUBLE LONGLONG LONG_DOUBLE LONG_LONG LP64 luna
luna88k Lynx
M68000 m68k m88100 m88k M88KBCS_TARGET MACH machine MachTen
MATH_HAS_NO_SIDE_EFFECTS mc300 mc500 mc68000 mc68010 mc68020
mc68030 mc68040 mc68060
 mc68k mc68k32 mc700 mc88000 mc88100
merlin mert MiNT mips MIPSEB MIPSEL MIPS_FPSET MIPS_ISA MIPS_SIM
```

```
MIPS_SZINT MIPS_SZLONG MIPS_SZPTR MODERN_C motorola MSDOS
MTXINU MULTIMAX MVS mvs M_AMD64 M_ARM M_ARMT M_COFF M_I186 M_I286
M_I386 M_I8086 M_I86 M_I86SM M_IA64 M_IX86 M_PPC M_SYS3 M_SYS5
M_SYSIII M_SYSV M_UNIX M_X86 M_XENIX
n16 ncl_el ncl_mr NetBSD news1500 news1700 news1800 news1900
news3700 news700 news800 news900 NeXT NLS nonstopux ns16000
ns32000 ns32016 ns32332 ns32k nsc32000
OCS88 OEMVS OpenBSD os OS2 OS390 osf OSF1 OSF_SOURCE
PARAGON parisc pa_risc PA_RISC1_1 PA_RISC2_0 pc532 pdp11 PGC PIC
plexus PORTAR posix POSIX1B_SOURCE POSIX2_SOURCE POSIX4_SOURCE
POSIX_C_SOURCE POSIX_SOURCE POWER powerpc ppc PROTOTYPES PWB pyr
QK_USER QNX
R3000 REENTRANT RES Rhapsody RISC6000 riscix riscos RT
S390 S390x SA110 SCO scs sequent sgi SGI_SOURCE SH SH3 sinix
SIZE_INT SIZE_LONG SIZE_PTR SOCKETS_SOURCE SOCKET_SOURCE sony
sonyrisc sony_news sparc sparclite sparcv8 sparcv9 spectrum
stardent stdc
 STDC_EXT stratos sun sun3 sun386 Sun386i svr3 svr4
SVR4_2 SVR4_SOURCE svr5 SX system SYSTYPE_BSD SYSTYPE_BSD43
SYSTYPE_BSD44 SYSTYPE_SVR4 SYSTYPE_SVR5 SYSTYPE_SYSV SYSV SYSV3
SYSV4 SYSV5 sysV68 sysV88
Tek4132 Tek4300 thumb thw_370 thw_intel thw_rs6000 titan TM3200
TM5400 TM5600 tower tower32 tower32_200 tower32_600 tower32_700
tower32_800 tower32_850 tss
u370 u3b u3b2 u3b20 u3b200 u3b20d u3b5 ultrix UMAXV UnicomPBB
UnicomPBD UNICOS UNICOSMK unix UNIX95 UNIX99 unixpc unos USE_BSD
USE_FILE_OFFSET64 USE_GNU USE_ISOC9X USE_LARGEFILE
USE_LARGEFILE64 USE_MISC USE_POSIX USE_POSIX199309
USE_POSIX199506 USE_POSIX2 USE_REENTRANT USE_SVID USE_UNIX98
USE_XOPEN USE_XOPEN_EXTENDED USGr4 USGr4_2 UTek Utek UTS UWIN
uxpm uxps
vax venix VMESA vms
x86_64 xenix Xenix286 XOPEN_SOURCE XOPEN_SOURCE_EXTENDED XPG2
XPG2_EXTENDED XPG3 XPG3_EXTENDED XPG4 XPG4_EXTENDED
z8000 zarch
EOSH
# Maybe put other stuff here too.
?X:Some OS's will have a dash in their $osname
?X:e.g. Android is known as linux-android
?X:The
 preprocessor will interpret the dash as a minus
./tr '-' '_' <<EOSH >>Cppsym.know
$osname
EOSH
./tr '[a-z]' '[A-Z]' < Cppsym.know > Cppsym.a
./tr '[A-Z]' '[a-z]' < Cppsym.know > Cppsym.b
$cat Cppsym.know > Cppsym.c
$cat Cppsym.a Cppsym.b Cppsym.c | $tr ' ' $trnl | $sort | $uniq > Cppsym.know
```

```
$rm -f Cppsym.a Cppsym.b Cppsym.c
cat <<EOSH > Cppsym
$startsh
if $test \$# -gt 0; then
   echo \$* | $tr " " "$trnl" | ./Cppsym.try > Cppsym.got
   if $test -s Cppsym.got; then
 $rm -f Cppsym.got
 exit 0
   fi
   $rm -f Cppsym.got
   exit 1
else
   $tr " " "$trnl" | ./Cppsym.try
   exit 0
fi
EOSH
chmod +x Cppsym
$eunicefix Cppsym
?X: The below awk script will die a horrible death if
?X: some of the tested symbols are not long ints.
?X: Also, we do not make difference between just defined and defined zero.
cat <<EOSH > Cppsym.try
$startsh
cat <<'EOCP' > try.c
#include <stdio.h>
#if cpp_stuff == 1
#define STRINGIFY(a)    "a"
#endif
#if cpp_stuff == 42
#define StGiFy(a)  #a
#define STRINGIFY(a)
    StGiFy(a)
#endif
#if $cpp_stuff != 1 && $cpp_stuff != 42
#   include "Bletch: How does this C preprocessor stringify macros?"
#endif
int main() {
EOCP
?X: The length($1) command guards against possible empty entries.
?X: The awk snippet is know to give heartburn to UNICOS/mk awk.
$awk \\
EOSH
cat <<'EOSH' >> Cppsym.try
'length($1) > 0 {
   printf "#ifdef %s\nprintf(\"%s=%%s\\n\", STRINGIFY(%s));\n#endif\n", $1, $1, $1
   printf "#ifdef _%s\nprintf(\"_%s=%%s\\n\", STRINGIFY(_%s));\n#endif\n", $1, $1, $1
   printf "#ifdef __%s\nprintf(\"__%s=%%s\\n\", STRINGIFY(__%s));\n#endif\n", $1, $1, $1
   printf "#ifdef __%s__\nprintf(\"__%s__=%%s\\n\", STRINGIFY(__%s__));\n#endif\n", $1, $1, $1
```

```
}' >> try.c
echo 'return 0;}' >> try.c
EOSH
cat <<EOSH >> Cppsym.try
ccflags="$ccflags"
case "$osname-$gccversion" in
irix-) ccflags="\$ccflags -woff 1178" ;;
os2-*) ccflags="\$ccflags -Zlinker /PM:VIO" ;;
esac
$cc -o try -Dcpp_stuff=$cpp_stuff $optimize \$ccflags $ldflags try.c $libs 2>/dev/null
 && $run ./try | $sed 's/ /\\\\ /g'
EOSH
chmod +x Cppsym.try
$eunicefix Cppsym.try
./Cppsym < Cppsym.know | $sort | $uniq > Cppsym.true
: Add in any Linux cpp "predefined macros":
case "$osname::$gccversion" in
 *linux*::*.*|*gnukfreebsd*::*.*|gnu::*.*)
   tHdrH=_tmpHdr
   rm -f $tHdrH'.h' $tHdrH
   touch $tHdrH'.h'
   # Filter out macro arguments, such as Linux's __INT8_C(c)
   if $cpp -dM $tHdrH'.h' > $tHdrH'_cppsym.h' && [ -s $tHdrH'_cppsym.h' ]; then
      sed -e 's/#define[\ \  ]*//;s/[\ \     ].*$//' -e 's/(.*//' <$tHdrH'_cppsym.h' >$tHdrH'_cppsym.real'
      if [ -s $tHdrH'_cppsym.real' ]; then
   cat $tHdrH'_cppsym.real' Cppsym.know | sort | uniq | ./Cppsym | sort | uniq > Cppsym.true
      fi
   fi
   rm -f $tHdrH'.h' $tHdrH'_cppsym.h' $tHdrH'_cppsym.real'
 ;;
esac
: now check the C compiler for additional symbols
?X: suggested by Jarkko Hietaniemi <jhi@snakemail.hut.fi>, thanks!
postprocess_cc_v=''
case "$osname" in
aix) postprocess_cc_v="|$tr , ' '" ;;
esac
$cat >ccsym
 <<EOS
$startsh
$cat >tmp.c <<EOF
extern int foo;
EOF
for i in \`$cc -v -c tmp.c 2>&1 $postprocess_cc_v\`
do
 case "\$i" in
 -D*) echo "\$i" | $sed 's/^-D//';;
 -A*) $test "$gccversion" && echo "\$i" | $sed 's/^-A//' | $sed 's/\(.*\)(\(.*\))/\1=\2/';;
```

```
 esac
done
$rm_try
EOS
postprocess_cc_v="
chmod +x ccsym
$eunicefix ccsym
./ccsym > ccsym1.raw
?X: AIX complains if $uniq is passed an empty file.  ($sort apparently
?X: doesn't care.)  --AD  14 July 1998
if $test -s ccsym1.raw; then
   $sort ccsym1.raw | $uniq >ccsym.raw
else
   mv ccsym1.raw ccsym.raw
fi

?X: canonicalize symbols for easier sort/uniq/comm usage: append =1 if no = sign
?X: the awk script must be on two lines for older awk programs, sigh! -- ADO
$awk '/\=/ { print $0; next }
 { print $0"=1" }' ccsym.raw >ccsym.list
$comm -13 Cppsym.true ccsym.list >ccsym.own
$comm -12 Cppsym.true ccsym.list >ccsym.com
$comm -23 Cppsym.true ccsym.list >ccsym.cpp
also="
if $test -z ccsym.raw; then
 echo "Your C compiler doesn't seem
 to define any symbols!" >&4
 echo " "
 echo "However, your C preprocessor defines the following symbols:"
 $cat Cppsym.true
 ccsymbols="
 cppsymbols=`$cat Cppsym.true`
 cppsymbols=`echo $cppsymbols`
 cppccsymbols="$cppsymbols"
else
 if $test -s ccsym.com; then
  echo "Your C compiler and pre-processor define these symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.com
  also='also '
  symbols='ones'
  cppccsymbols=`$cat ccsym.com`
  cppccsymbols=`echo $cppccsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.cpp; then
  $test "$also" && echo " "
  echo "Your C pre-processor ${also}defines the following symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.cpp
```

```
  also='further '
  cppsymbols=`$cat ccsym.cpp`
  cppsymbols=`echo $cppsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.own; then
  $test "$also" && echo " "
  echo "Your C compiler ${also}defines the following cpp symbols:"
  $sed -e 's/\(..*\)=1/\1/' ccsym.own
  $sed -e 's/\(..*\)=.*/\1/' ccsym.own | $uniq >>Cppsym.true
  ccsymbols=`$cat
 ccsym.own`
  ccsymbols=`echo $ccsymbols`
  $test "$silent" || sleep 1
 fi
fi

: add -D_FORTIFY_SOURCE if feasible and not already there
case "$gccversion" in
[456789].*|[1-9][0-9]*) case "$optimize$ccflags" in
 *-O*) case "$ccflags$cppsymbols" in
  *_FORTIFY_SOURCE=*) # Don't add it again.
   echo "You seem to have -D_FORTIFY_SOURCE already, not adding it." >&4
   ;;
  *) echo "Adding -D_FORTIFY_SOURCE=2 to ccflags..." >&4
   ccflags="$ccflags -D_FORTIFY_SOURCE=2"
   ;;
  esac
  ;;
 *) echo "You have gcc 4.* or later but not optimizing, not adding -D_FORTIFY_SOURCE." >&4
  ;;
 esac
 ;;
*) echo "You seem not to have gcc 4.* or later, not adding -D_FORTIFY_SOURCE." >&4
 ;;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Cppsym.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_nolnbuf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_nolnbuf.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  14:46:07  ram
?RCS: patch23: avoid looping in the "see that again?" prompt (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_nolnbuf: test +cc cat rm Setvar Myread
?MAKE: -pick add $@ %<
?S:d_nolnbuf:
?S: This variable conditionally defines the NOLINEBUF symbol, which
?S: indicates to the C program that stdout is not buffered, so that
?S: the
 program can call setbuf() or setlinebuf() for efficiency.
?S:.
?C:NOLINEBUF:
?C: This symbol, if defined, indicates that stdout is not buffered, so that
?C: the program can call setbuf() or setlinebuf() for efficiency.
?C:.
?H:#$d_nolnbuf NOLINEBUF /**/
?H:.
?T:xxx
?F:!blurfl
?LINT:set d_nolnbuf
: check for buffering of stdout
echo " "
case "$d_nolnbuf" in
")
 $cat <<'EOT' >blurfl.c
#include <stdio.h>
int main()
{
 int i;

 for (i = 0; i < 5; i++) {
  putchar(i+'a');
  sleep(1);
 }
 putchar('\n');
}
EOT
 $cc -o blurfl blurfl.c >/dev/null 2>&1;
 $rm -f blurfl.c
 $cat >&4 <<'EOM'
Checking for buffering of stdout to terminal.
```

```
Observe the following characters as they are printed out, to see whether they
print out all at once, or with a 1 second pause between each of them.  If they
print out one by one, you don't have buffering.  If they print together (after
about a 5 second pause), you do have buffering.

EOM
 dflt='Type return to start printing the test characters'
 rp="
 .
 ./myread
 xxx=y
 while $test "$xxx" = 'y'; do
  ./blurfl 1>&4
  dflt=n
  rp='Would you like to see that again?'
  . ./myread
  case "$ans" in
  [yY]*) xxx="y";;
  *) xxx="n";;
  esac
 done
 dflt=y
 rp="Do you have buffering (printed all at once)?"
 . ./myread
 case "$ans" in
 n*) val="$define";;
 *)  val="$undef";;
 esac
 ;;
*)
 case "$d_nolnbuf" in
 "$define") dflt=n;;
 *) dflt=y;;
 esac
 rp="Do you have buffering on stdout to terminals?"
 . ./myread
 case "$ans" in
 n*) val="$define";;
 *)  val="$undef";;
 esac
 ;;
esac
set d_nolnbuf
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_nolnbuf.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitearch.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitearch.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:21:30  ram
?RCS: patch61: created
?RCS:
?MAKE:sitearch sitearchexp installsitearch d_sitearch: cat sed Getfile \
 Oldconfig Setprefixvar Prefixit test archname sitelib
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitearch=''
?S:sitearch:
?S: This variable contains the eventual
 value of the SITEARCH symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S: The standard distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: architecture-dependent modules in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitearchexp=''
?S:sitearchexp:
?S: This variable is the ~name expanded version of sitearch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installsitearch=''
?S:installsitearch:
?S: This variable is really the same as sitearchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
```

```
?D:d_sitearch="
?S:d_sitearch:
?S: This variable conditionally defines SITEARCH to hold the
 pathname
?S: of architecture-dependent library files for $package.  If
?S: $sitearch is the same as $archlib, then this is set to undef.
?S:.
?C:SITEARCH:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: After perl has been installed, users may install their own local
?C: architecture-dependent modules in this directory with
?C:  MakeMaker Makefile.PL
?C: or equivalent.  See INSTALL for details.
?C:.
?C:SITEARCH_EXP:
?C: This symbol contains the ~name expanded version of SITEARCH, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_sitearch SITEARCH "$sitearch"  /**/
?H:#$d_sitearch SITEARCH_EXP "$sitearchexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installsitearch
?LINT:set
 sitearch
?LINT:set sitearchexp
: determine where site specific architecture-dependent libraries go.
: sitelib  default is /usr/local/lib/perl5/site_perl/$version
: sitearch default is /usr/local/lib/perl5/site_perl/$version/$archname
: sitelib may have an optional trailing /share.
case "$sitearch" in
") dflt=`echo $sitelib | $sed 's,/share$,,'`
 dflt="$dflt/$archname"
 ;;
*) dflt="$sitearch"
 ;;
esac
set sitearch sitearch none
eval $prefixit
$cat <<EOM

The installation process will also create a directory for
architecture-dependent site-specific extensions and modules.
```

```
EOM
fn=d~+
rp='Pathname for the site-specific architecture-dependent library files?'
. ./getfile
prefixvar=sitearch
. ./setprefixvar
if $test X"$sitearch" = X"$sitelib"; then
 d_sitearch="$undef"
else
 d_sitearch="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitearch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libnm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libnm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:08:26  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libnm: test Loc libpth _a
?MAKE: -pick add $@ %<
?S:libnm:
?S: This variable contains the argument to pass to the loader in order
?S: to get the new math library routines.  If there is no new math
?S: library, it is null.
?S:.
?T:ans
?O:
 use libswanted='-lnm' instead (see libs.U).
: see if we should include -lnm
echo " "
if $test -r /usr/lib/libnm$_a || $test -r /usr/local/lib/libnm$_a ; then
 echo "New math library found." >&4
 libnm='-lnm'
```

```
else
 ans=`./loc libnm$_a x $libpth`
 case "$ans" in
 x)
  echo "No nm library found--the normal math library will have to do." >&4
  libnm=''
  ;;
 *)
  echo "New math library found in $ans." >&4
  libnm="$ans"
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libnm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: maildir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: maildir.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:21:56  ram
?RCS: patch15: now also looks under /var/mail for BSD/386
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:maildir maildirexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:maildir:
?S: This variable contains the name of the directory in which mail is
?S: spooled. Programs using this variable must be prepared to deal with
?S: ~name
 substitutions.
?S:.
?S:maildirexp:
?S: This is the same as the maildir variable, but is filename expanded
?S: at configuration time, for programs not willing to deal with it at
?S: run-time.
?S:.
```

```
: determine where mail is spooled
case "$maildir" in
") dflt=`./loc . /usr/spool/mail /usr/spool/mail /usr/mail /var/mail`;;
*) dflt="$maildir";;
esac
echo " "
fn=d~
rp='Where is yet-to-be-read mail spooled?'
. ./getfile
maildir="$ans"
maildirexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/maildir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_xdrs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_xdrs.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_xdrs: cat Csym Setvar
?MAKE: -pick add $@ %<
?S:d_xdrs:
?S: This symbol conditionally defines HAS_XDRS which indicates to the C
?S: program that XDR serialization routines are available.
?S:.
?C:HAS_XDRS (XDRS):
?C: This symbol if defined indicates to the C program that the XDR
?C: serialization routines are available to transfer data
 accross
?C: various architectures.
?C:.
?H:#$d_xdrs HAS_XDRS /**/
?H:.
?LINT:set d_xdrs
: see if XDR is available
echo " "
if set xdr_int val -f d_xdrs; eval $csym; $val; then
```

```
 echo "Ahh! You have XDR routines for network communications." >&4
 val="$define"
else
 $cat >&4 <<EOM
Sigh! You do not have XDR routines -- Network communications may be hazardous.
EOM
 val="$undef"
fi
set d_xdrs
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_xdrs.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: voidflags.U,v 3.0.1.2 1997/02/28 16:27:58 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: voidflags.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:27:58  ram
?RCS: patch61: don't prompt them if the void support is high enough for us
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:37:44  ram
?RCS: patch45: cosmetic change to avoid spurious blank lines when using -s
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:voidflags defvoidused: cat rm_try compiler_warning +cc +ccflags package \
 Oldconfig
 Myread i_stdlib
?MAKE: -pick add $@ %<
?S:voidflags:
?S: This variable contains the eventual value of the VOIDFLAGS symbol,
?S: which indicates how much support of the void type is given by this
?S: compiler.  See VOIDFLAGS for more info.
?S:.
?S:defvoidused:
?S: This variable contains the default value of the VOIDUSED symbol (15).
?S:.
?X: Exceptionally, we have to explicitly alias the symbol name for
```

```
?X: config_h.SH, otherwise the comment would not appear.
?C:VOIDFLAGS ~ %<:
?C: This symbol indicates how much support of the void type is given by this
?C: compiler.  What various bits mean:
?C:
?C:     1 = supports declaration of void
?C:     2 = supports arrays of pointers to functions returning void
?C:     4 = supports comparisons between pointers to void functions and
?C:      addresses of void functions
?C:     8 = supports declaration of generic void pointers
?C:
?C: The package designer should define VOIDUSED to indicate the requirements
?C: of the package.  This can be
 done either by #defining VOIDUSED before
?C: including config.h, or by defining defvoidused in Myinit.U.  If the
?C: latter approach is taken, only those flags will be tested.  If the
?C: level of void support necessary is not present, defines void to int.
?C:.
?H:?%<:#ifndef VOIDUSED
?H:?%<:#define VOIDUSED $defvoidused
?H:?%<:#endif
?H:?%<:#define VOIDFLAGS $voidflags
?H:?%<:#if (VOIDFLAGS & VOIDUSED) != VOIDUSED
?H:?%<:#define void int  /* is void to be avoided? */
?H:?%<:#define M_VOID   /* Xenix strikes again */
?H:?%<:#endif
?H:.
?INIT:: full support for void wanted by default
?INIT:defvoidused=15
?INIT:
?LINT:known void M_VOID VOIDUSED
: check for void type
echo " "
echo "Checking to see how well your C compiler groks the void type..." >&4
case "$voidflags" in
")
 $cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#if TRY & 1
void sub() {
#else
sub() {
#endif
 extern void moo(); /* function returning void */
 void (*goo)();  /* ptr to func returning
```

```
 void */
#if TRY & 8
 void *hue;  /* generic ptr */
#endif
#if TRY & 2
 void (*foo[10])();
#endif

#if TRY & 4
 if(goo == moo) {
  exit(0);
 }
#endif
 exit(0);
}
int main() { sub(); }
EOCP
?X: This unit used to use cc -S in those tests to try to speed up things, but
?X: unfortunately, AIX 3.2 does not support this option.
 if $cc $ccflags -c -DTRY=$defvoidused try.c >.out 2>&1 ; then
  voidflags=$defvoidused
 echo "Good.  It appears to support void to the level $package wants.">&4
  if $compiler_warning .out >/dev/null 2>&1; then
   echo "However, you might get some warnings that look like this:"
   $cat .out
  fi
 else
echo "Hmm, your compiler has some difficulty with void. Checking further..." >&4
  if $cc $ccflags -c -DTRY=1 try.c >/dev/null 2>&1; then
   echo "It supports 1..."
   if $cc $ccflags -c -DTRY=3 try.c >/dev/null 2>&1; then
    echo "It also supports 2..."
    if $cc $ccflags -c -DTRY=7 try.c >/dev/null 2>&1; then
     voidflags=7
     echo "And it supports 4 but not 8
 definitely."
    else
     echo "It doesn't support 4..."
     if $cc $ccflags -c -DTRY=11 try.c >/dev/null 2>&1; then
      voidflags=11
      echo "But it supports 8."
     else
      voidflags=3
      echo "Neither does it support 8."
     fi
    fi
   else
    echo "It does not support 2..."
```

```
    if $cc $ccflags -c -DTRY=13 try.c >/dev/null 2>&1; then
     voidflags=13
     echo "But it supports 4 and 8."
    else
     if $cc $ccflags -c -DTRY=5 try.c >/dev/null 2>&1; then
      voidflags=5
      echo "And it supports 4 but has not heard about 8."
     else
      echo "However it supports 8 but not 4."
     fi
    fi
   fi
  else
   echo "There is no support at all for void."
   voidflags=0
  fi
 fi
esac
?X: Only prompt user if support does not match the level we want
case "$voidflags" in
"$defvoidused") ;;
*) $cat >&4 <<'EOM'
 Support flag bits are:
   1: basic void declarations.
   2: arrays of pointers to functions returning void.
   4: operations between pointers to and addresses
 of void functions.
   8: generic void pointers.
EOM
 dflt="$voidflags";
 rp="Your void support flags add up to what?"
 . ./myread
 voidflags="$ans"
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/voidflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fmin: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmin:
?S: This variable conditionally defines the HAS_FMIN symbol, which
```

```
?S: indicates to the C program that the fmin() routine is available.
?S:.
?C:HAS_FMIN:
?C: This symbol, if defined, indicates that the fmin routine is
?C: available to do the minimum function.
?C:.
?H:#$d_fmin HAS_FMIN  /**/
?H:.
?LINT:set d_fmin
: see if fmin exists
set fmin d_fmin
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fmin.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_clearenv: Inlibc
?MAKE: -pick add $@ %<
?S:d_clearenv:
?S: This variable conditionally defines the HAS_CLEARENV symbol, which
?S: indicates to the C program that the clearenv () routine is available.
?S:.
?C:HAS_CLEARENV:
?C: This symbol, if defined, indicates that the clearenv () routine is
?C: available for use.
?C:.
?H:#$d_clearenv HAS_CLEARENV  /**/
?H:.
?LINT:set d_clearenv
: see if clearenv exists
set clearenv d_clearenv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_clearenv.U
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```
?RCS: $Id$
?RCS:
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```

```
?RCS:
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?RCS:
?MAKE:d_getaddrinfo: Inlibc
?MAKE: -pick add $@ %<
?S:d_getaddrinfo:
?S: This variable conditionally defines the HAS_GETADDRINFO symbol,
?S: which indicates to the C program that the getaddrinfo() function
?S: is available.
?S:.
?C:HAS_GETADDRINFO:
?C: This symbol, if defined, indicates that the getaddrinfo() function
?C: is available for use.
?C:.
?H:#$d_getaddrinfo HAS_GETADDRINFO  /**/
?H:.
?LINT:set d_getaddrinfo
: see if getaddrinfo exists
set getaddrinfo d_getaddrinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getaddrinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: models.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: models.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:13:17  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:39  ram
?RCS: patch6: added default for large
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:models split small medium large huge: test cat Myread sysman Oldconfig \
 Loc contains rm
```

```
?MAKE: -pick add $@ %<
?S:models:
?S: This variable contains
 the list of memory models supported by this
?S: system.  Possible component values are none, split, unsplit, small,
?S: medium, large, and huge.  The component values are space separated.
?S:.
?S:split:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program that will run in separate I and D space, for those
?S: machines that support separation of instruction and data space.  It is
?S: up to the Makefile to use this.
?S:.
?S:small:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a small memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:medium:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a medium memory model.  If the
?S: medium model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?S:large:
?S: This variable contains a flag
 which will tell the C compiler and loader
?S: to produce a program running with a large memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:huge:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a huge memory model.  If the
?S: huge model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?T:unsplit tans modelcc
?F:!pdp11
?D:large=''
?LINT:extern cc
: see what memory models we can support
case "$models" in
")
?X: We may not use Cppsym or we get a circular dependency through cc.
?X: But this should work regardless of which cc we eventually use.
 $cat >pdp11.c <<'EOP'
int main() {
#ifdef pdp11
```

```
 exit(0);
#else
 exit(1);
#endif
}
EOP
?X: Run cc in a subshell in case they don't have a 'cc' command.
?X: Presumably they do have gcc or something.
 case "$cc" in
 ") modelcc="$cc" ;;
 *) modelcc="cc" ;;
 esac
 ( $modelcc -o pdp11 pdp11.c ) >/dev/null 2>&1
 if
 $test -f pdp11 && ./pdp11 2>/dev/null; then
  dflt='unsplit split'
 else
  tans=`./loc . X /lib/small /lib/large /usr/lib/small /usr/lib/large /lib/medium /usr/lib/medium /lib/huge`
  case "$tans" in
  X) dflt='none';;
  *) if $test -d /lib/small || $test -d /usr/lib/small; then
   dflt='small'
   else
   dflt="
   fi
   if $test -d /lib/medium || $test -d /usr/lib/medium; then
   dflt="$dflt medium"
   fi
   if $test -d /lib/large || $test -d /usr/lib/large; then
   dflt="$dflt large"
   fi
   if $test -d /lib/huge || $test -d /usr/lib/huge; then
   dflt="$dflt huge"
   fi
  esac
 fi;;
*) dflt="$models";;
esac
$cat <<EOM

Some systems have different model sizes.  On most systems they are called
small, medium, large, and huge.  On the PDP11 they are called unsplit and
split.  If your system doesn't support different memory models, say "none".
If you wish to force everything to one memory model, say "none" here and
put the appropriate flags later when it asks you for other
 cc and ld flags.
Venix systems may wish to put "none" and let the compiler figure things out.
(In the following question multiple model names should be space separated.)
```

```
The default for most systems is "none".

EOM
rp="Which memory models are supported?"
. ./myread
models="$ans"

case "$models" in
none)
 small=''
 medium=''
 large=''
 huge=''
 unsplit=''
 split=''
 ;;
*split)
 case "$split" in
 '') if $contains '\-i' $sysman/ld.1 >/dev/null 2>&1 || \
    $contains '\-i' $sysman/cc.1 >/dev/null 2>&1; then
   dflt='-i'
  else
   dflt='none'
  fi;;
 *) dflt="$split";;
 esac
 rp="What flag indicates separate I and D space?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans='';;
 esac
 split="$tans"
 unsplit='';;
*large*|*small*|*medium*|*huge*)
 case "$models" in
 *large*)
  case "$large" in
  '') dflt='-Ml';;
  *) dflt="$large";;
  esac
 rp="What flag indicates large model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans='';
 esac
```

```
large="$tans";;
*) large=";;
esac
case "$models"
in
*huge*) case "$huge" in
 ") dflt='-Mh';;
 *) dflt="$huge";;
 esac
 rp="What flag indicates huge model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 huge="$tans";;
*) huge="$large";;
esac
case "$models" in
*medium*) case "$medium" in
 ") dflt='-Mm';;
 *) dflt="$medium";;
 esac
 rp="What flag indicates medium model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 medium="$tans";;
*) medium="$large";;
esac
case "$models" in
*small*) case "$small" in
 ") dflt='none';;
 *) dflt="$small";;
 esac
 rp="What flag indicates small model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 small="$tans";;
*) small=";;
esac
;;
*)
```

```
 echo "Unrecognized memory models--you may have to edit Makefile.SH" >&4
 ;;
esac
$rm -f pdp11.* pdp11
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/models.U
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```
?RCS: $Id: cpp_trad.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?MAKE:cpp_trad: cpp cat contains rm
?MAKE: -pick add $@ %<
?S:cpp_trad:
?S: This variable contains the program to run to get traditional C
?S: preprocessor semantics and not ISO C semantics: we want something
?S: that knows as little about C as possible to use as a more general
?S: purpose preprocessor.
?S:.
?F:!foo.c !foo.cpp
: how do we get traditional cpp semantics?
echo " "
echo "Checking to see how to get traditional cpp semantics..."
 >&4
$cat >foo.c <<'EOF'
#define A(x) x
#define B(y) y
A(a)B(b)
EOF
if $cpp foo.c >foo.cpp; $contains ab foo.cpp >/dev/null 2>&1; then
 echo "Plain '$cpp' works just fine."
 cpp_trad="$cpp"
elif $cpp -traditional foo.c >foo.cpp; \
 $contains ab foo.cpp >/dev/null 2>&1; then
 echo "We'll use '$cpp -traditional' to get proper semantics."
 cpp_trad="$cpp -traditional"
else
 echo "I don't know how to get traditional semantics with '$cpp'." >&4
 cpp_trad="$cpp"
```

```
fi
$rm -f foo.c foo.cpp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cpp_trad.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_lroundl: Inlibc
?MAKE: -pick add $@ %<
?S:d_lroundl:
?S: This variable conditionally defines the HAS_LROUNDL symbol, which
?S: indicates to the C program that the lroundl() routine is available
?S: to return the integral value nearest to x away from zero.
?S:.
?C:HAS_LROUNDL:
?C: This symbol, if defined, indicates that the lroundl routine is
?C: available to return the nearest integral value away from zero of
?C: the long double argument value.
?C:.
?H:#$d_lroundl HAS_LROUNDL  /**/
?H:.
?LINT:set d_lroundl
: see if lroundl exists
set lroundl d_lroundl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lroundl.U
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```
?RCS: $Id: fpu.U,v 3.0 1993/08/18 12:08:10 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: fpu.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?LINT: empty
```

```
?X:?MAKE:fpu: test cat cc Myread
?X:?MAKE: -pick add $@ %<
?X:?S:fpu (fpunit):
?X:?S: Set to be the compile flag for the local floating point unit.
?X:?S:.
?X:?C:FPU (FPUNIT):
?X:?C: String containing the flags for the local floating point unit.
?X:?C:.
?X:?H:#define FPU "$fpu" /**/
?X:?H:.
?X:: see what floating point compile flags should be used.
?X:fpu="
?X:if
 $test -r /dev/fpa; then
?X: $cat>fpa.c << GOOP
?X: main(){return(1);}
?X:GOOP
?X: $cc -ffpa -o fpa fpa.c
?X: fpa > fpa.out 2>&1
?X: if $test ! -s fpa.out; then
?X:  dflt='y'
?X:  $cat <<'EOM'
?X:
?X:You seem to have a sun fpa...  I can compile the code to use the fpa but it will
?X:mean that the code can ONLY run on a machine with a fpa...
?X:
?X:EOM
?X:  rp="Should I compile for fpa?"
?X:  . ./myread
?X:  if $test $ans = "n"; then
?X:   fpu="
?X:  else
?X:   fpu='-ffpa'
?X:  fi
?X: else
?X:  $cat <<'EOM'
?X:
?X:You have the fpa device but I can't seem to use it.  Maybe you should talk to
?X:your sysadmin about this.  For now, I am not going to compile it in.
?X:
?X:EOM
?X: fi
?X:fi
?X:if $test "$fpu" = ''; then
?X: if $test -r /usr/etc/mc68881version; then
?X:  dflt='y'
?X:  $cat <<'EOM'
?X:
```

```
?X:There also seems to be the pieces for a 68881.  If I compile this in, it will
?X:work on almost all Sun 3's except for a few Sun-3/50s without a 68881...
?X:
?X:EOM
?X:  rp="Should
 I compile for a 68881?"
?X:  . ./myread
?X:  if $test $ans = "y"; then
?X:   fpu='-f68881'
?X:  fi
?X: fi
?X:fi
?X:
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/nullified/fpu.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_remainder: Inlibc
?MAKE: -pick add $@ %<
?S:d_remainder:
?S: This variable conditionally defines the HAS_REMAINDER symbol, which
?S: indicates to the C program that the remainder() routine is available.
?S:.
?C:HAS_REMAINDER:
?C: This symbol, if defined, indicates that the remainder routine is
?C: available to return the floating-point remainder.
?C:.
?H:#$d_remainder HAS_REMAINDER  /**/
?H:.
?LINT:set d_remainder
: see if remainder exists
set remainder d_remainder
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_remainder.U
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```
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```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?X:
?X: This unit checks whether symbolic links are really supported.
?X: We can't rely on d_symlink because that may be listed in the
?X: C library but unimplemented.
?X:
?MAKE:lns: ln rm touch test
?MAKE: -pick add $@ %<
?S:lns:
?S: This variable holds the name of the command to make
?S: symbolic links (if they are supported).
  It can be used
?S: in the Makefile. It is either 'ln -s' or 'ln'
?S:.
: determine whether symbolic links are supported
echo " "
$rm -f blurfl sym
$touch blurfl
if $ln -s blurfl sym > /dev/null 2>&1 && $test -f sym; then
 echo "Symbolic links are supported." >&4
 lns="$ln -s"
else
 echo "Symbolic links are NOT supported." >&4
 lns="$ln"
fi
$rm -f blurfl sym
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lns.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: charorder.U,v 3.0.1.1 1994/10/29 16:07:08 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: charorder.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:chorder_int chorder_short chorder_long: Myread cat Compile rm
?MAKE: -pick add $@ %<
?S:chorder_short (d_cos d_bos):
?S: Holds the value describing the byte ordering of characters in a short.
?S: On a Big-Endian machine, that
 would be "c0c1".
?S:.
?S:chorder_int (charoder):
?S: Holds the value describing the byte ordering of characters in an int.
?S: For instance, on a Big-Endian machine, this would be: "c0c1c2c3".
?S:.
?S:chorder_long (d_col d_bol):
?S: Holds the value describing the byte ordering of characters in a long.
?S: On a 64 bits Big-Endian machine, that would yield: "c0c1c2c3c4c5c6c7".
?S:.
?C:CHAR_ORDER_SHORT:
?C: Holds the byte ordering of characters in a short. It's a string
?C: value like "c0c1" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_INT:
?C: Holds the byte ordering of characters in an int. It's a string
?C: value like "c0c1c2c3" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_LONG:
?C: Holds the byte ordering of characters in a long. It's a string
?C: value like "c0c1c2c3c4c5c6c7" on a 64 bits Big-Endian machine.
?C:.
?H:#define CHAR_ORDER_SHORT "$chorder_short" /* byte order in a short */
?H:#define CHAR_ORDER_INT "$chorder_int" /* byte order in an int */
?H:#define CHAR_ORDER_LONG "$chorder_long"
 /* byte order in a long */
?H:.
?F:!byteorder
: check for character ordering
echo " "
echo "Checking out byte order..." >&4
$cat >byteorder.c <<'EOCP'
#include <stdio.h>
```

```
int main(argc, argv)
 int argc;
 char *argv[]; {
 int i;
 int max;
 union {
  short u_s;
  int u_i;
  long u_l;
  char u_c[sizeof(long)];
 } u;
 switch (argv[1][0]) {
 case 'l':
  u.u_l = 0L;
  /* HMS: ASSERT: sizeof(long) < 10. */
  for(i = 0; i < sizeof(long); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(long);
  break;
 case 's':
  u.u_s = 0;
  /* HMS: ASSERT: sizeof(short) < 10. */
  for(i = 0; i < sizeof(short); ++i) {
   u.u_s *= 0x100L;
   u.u_s += (0xc0 + i);
  }
  max = sizeof(short);
  break;
 case 'i':
  u.u_i = 0;
  /* RAM: ASSERT: sizeof(int) < 10. */
  for(i = 0; i < sizeof(int); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(int);
  break;
 default:
  max = 0;
  break;
 }
 for(i = 0; i < max; i++) {
  printf("%x", u.u_c[i] & 0x00FF);
 }
 printf("\n");
 exit(0);
```

```
}
EOCP
set
 byteorder
if eval $compile_ok ; then
 : null statement
@if chorder_short
   chorder_short=`./byteorder s`
@end
@if chorder_int
   chorder_int=`./byteorder i`
@end
@if chorder_long
   chorder_long=`./byteorder l`
@end
else
 $cat <<EOM
(I can't seem to get my test program to work.  Guessing 32 bits big-endian.)
EOM
   chorder_short="c0c1"
   chorder_int="c0c1c2c3"
   chorder_long="c0c1c2c3"
fi
@if chorder_short
dflt=$chorder_short
rp='What is the order of characters in a short?'
. ./myread
chorder_short="$ans"
@end
@if chorder_int
dflt=$chorder_int
rp='What is the order of characters in an int?'
. ./myread
chorder_int="$ans"
@end
@if chorder_long
dflt=$chorder_long
rp='What is the order of characters in a long?'
. ./myread
chorder_long="$ans"
@end
$rm -f byteorder* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/charorder.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_PRId64 d_PRIi64 d_PRIu64 d_PRIo64 d_PRIx64 d_PRIXU64 \
 sPRId64 sPRIi64 sPRIu64 sPRIo64 sPRIx64 sPRIXU64: \
 quadtype i_inttypes test cat rm_try Setvar Compile run
?MAKE: -pick add $@ %<
?S:d_PRId64:
?S: This variable conditionally defines the PERL_PRId64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit decimal numbers.
?S:.
?S:d_PRIi64:
?S: This variable conditionally defines the PERL_PRIi64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit decimal numbers.
?S:.
?S:d_PRIu64:
?S: This variable conditionally defines the PERL_PRIu64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit unsigned decimal
?S: numbers.
?S:.
?S:d_PRIo64:
?S: This variable
 conditionally defines the PERL_PRIo64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit octal numbers.
?S:.
?S:d_PRIx64:
?S: This variable conditionally defines the PERL_PRIx64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit hexadecimal numbers.
?S:.
?S:d_PRIXU64:
?S: This variable conditionally defines the PERL_PRIXU64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit hExADECimAl numbers.
?S: The 'U' in the name is to separate this from d_PRIx64 so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRId64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit decimal numbers (format 'd') for output.
?S:.
?S:sPRIi64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit decimal numbers (format 'i') for output.
?S:.
?S:sPRIu64:
?S: This variable, if defined, contains the string used by stdio to
```

```
?S: format 64-bit unsigned decimal numbers (format 'u')
 for output.
?S:.
?S:sPRIo64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit octal numbers (format 'o') for output.
?S:.
?S:sPRIx64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit hexadecimal numbers (format 'x') for output.
?S:.
?S:sPRIXU64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit hExADECimAl numbers (format 'X') for output.
?S: The 'U' in the name is to separate this from sPRIx64 so that even
?S: case-blind systems can see the difference.
?S:.
?C:PERL_PRId64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit decimal numbers (format 'd') for output.
?C:.
?C:PERL_PRIi64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit decimal numbers (format 'i') for output.
?C:.
?C:PERL_PRIu64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit unsigned decimal numbers (format 'u')
 for output.
?C:.
?C:PERL_PRIo64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit octal numbers (format 'o') for output.
?C:.
?C:PERL_PRIx64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit hexadecimal numbers (format 'x') for output.
?C:.
?C:PERL_PRIXU64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit hExADECimAl numbers (format 'X') for output.
?C:.
?H:#$d_PRId64 PERL_PRId64 $sPRId64 /**/
?H:#$d_PRIi64 PERL_PRIi64 $sPRIi64 /**/
?H:#$d_PRIu64 PERL_PRIu64 $sPRIu64 /**/
?H:#$d_PRIo64 PERL_PRIo64 $sPRIo64 /**/
?H:#$d_PRIx64 PERL_PRIx64 $sPRIx64 /**/
?H:#$d_PRIx64 PERL_PRIXU64 $sPRIXU64 /**/
```

```
?H:.
?T:yyy
?F:!try
: Check 64bit sizes
echo " "

if $test X"$quadtype" != X; then

echo "Checking how to print 64-bit integers..." >&4

if $test X"$sPRId64" = X -a X"$quadtype" = Xint; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 int q = 12345678901;

 printf("%ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"d"'; sPRIi64='"i"'; sPRIu64='"u"';
   sPRIo64='"o"'; sPRIx64='"x"'; sPRIXU64='"X"';
   echo "We will use %d."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" = Xlong; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long q = 12345678901;
 printf("%ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"ld"'; sPRIi64='"li"'; sPRIu64='"lu"';
```

```
   sPRIo64='"lo"'; sPRIx64='"lx"'; sPRIXU64='"lX"';
   echo "We will use %ld."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$i_inttypes" = X"$define" -a X"$quadtype" = Xint64_t; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <inttypes.h>
#include <stdio.h>
int main() {
 int64_t q = 12345678901;
 printf("%" PRId64 "\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64=PRId64;
 sPRIi64=PRIi64; sPRIu64=PRIu64;
   sPRIo64=PRIo64; sPRIx64=PRIx64; sPRIXU64=PRIXU64;
   echo "We will use the C9X style."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" != X; then
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main() {
 $quadtype q = 12345678901;
 printf("%Ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"Ld"'; sPRIi64='"Li"'; sPRIu64='"Lu"';
   sPRIo64='"Lo"'; sPRIx64='"Lx"'; sPRIXU64='"LX"';
   echo "We will use %Ld."
```

```
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" = X"long long"; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long long q = 12345678901LL; /* AIX cc requires the LL suffix. */
 printf("%lld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64="'lld'"; sPRIi64="'lli'"; sPRIu64="'llu'";
   sPRIo64="'llo'"; sPRIx64="'llx'";
 sPRIXU64="'llX'";
   echo "We will use the %lld style."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" != X; then
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main() {
 $quadtype q = 12345678901;
 printf("%qd\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64="'qd'"; sPRIi64="'qi'"; sPRIu64="'qu'";
   sPRIo64="'qo'"; sPRIx64="'qx'"; sPRIXU64="'qX'";
   echo "We will use %qd."
   ;;
  esac
 fi
```

```
fi

if $test X"$sPRId64" = X; then
 echo "Cannot figure out how to print 64-bit integers." >&4
fi
$rm_try

fi

case "$sPRId64" in
") d_PRId64="$undef"; d_PRIi64="$undef"; d_PRIu64="$undef";
 d_PRIo64="$undef"; d_PRIx64="$undef"; d_PRIXU64="$undef";
 ;;
*) d_PRId64="$define"; d_PRIi64="$define"; d_PRIu64="$define";
 d_PRIo64="$define"; d_PRIx64="$define"; d_PRIXU64="$define";
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/quadfio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotobyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotobyname_r getprotobyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotobyname_r:
?S: This variable conditionally defines the HAS_GETPROTOBYNAME_R symbol,
?S: which indicates to the C program that the getprotobyname_r()
?S: routine is available.
?S:.
?S:getprotobyname_r_proto:
?S: This variable encodes the prototype of getprotobyname_r.
?S: It is zero if d_getprotobyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobyname_r
?S: is defined.
?S:.
?C:HAS_GETPROTOBYNAME_R:
?C: This symbol, if
 defined, indicates that the getprotobyname_r routine
?C: is available to getprotobyname re-entrantly.
```

```
?C:.
?C:GETPROTOBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getprotobyname_r.
?C: It is zero if d_getprotobyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobyname_r
?C: is defined.
?C:.
?H:#$d_getprotobyname_r HAS_GETPROTOBYNAME_R /**/
?H:#define GETPROTOBYNAME_R_PROTO $getprotobyname_r_proto /**/
?H:.
?T:try hdrs d_getprotobyname_r_proto
: see if getprotobyname_r exists
set getprotobyname_r d_getprotobyname_r
eval $inlibc
case "$d_getprotobyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotobyname_r_proto:$usethreads" in
 ":define") d_getprotobyname_r_proto=define
  set d_getprotobyname_r_proto getprotobyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getprotobyname_r_proto" in
 define)
 case "$getprotobyname_r_proto" in
 "|0) try='int getprotobyname_r(const char*, struct
 protoent*, char*, size_t, struct protoent**);'
 ./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=I_CSBWR ;;
 esac
 case "$getprotobyname_r_proto" in
 "|0) try='struct protoent* getprotobyname_r(const char*, struct protoent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=S_CSBI ;;
 esac
 case "$getprotobyname_r_proto" in
 "|0) try='int getprotobyname_r(const char*, struct protoent*, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=I_CSD ;;
 esac
 case "$getprotobyname_r_proto" in
 "|0) d_getprotobyname_r=undef
  getprotobyname_r_proto=0
  echo "Disabling getprotobyname_r, cannot determine prototype." >&4 ;;
 * ) case "$getprotobyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getprotobyname_r_proto="REENTRANT_PROTO_$getprotobyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
```

```
 ;;
 *) case "$usethreads" in
  define) echo "getprotobyname_r has no prototype, not using it." >&4 ;;
  esac
  d_getprotobyname_r=undef
  getprotobyname_r_proto=0
  ;;
 esac
 ;;
*) getprotobyname_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotobyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:issymlink: lns test rm
?MAKE: -pick add $@ %<
?S:issymlink:
?S: This variable holds the test command to test for a symbolic link
?S: (if they are supported).  Typical values include 'test -h' and
?S: 'test -L'.
?S:.
?T:pth p
?LINT:change PATH test
?LINT:extern newsh
: determine whether symbolic links are supported
echo
 " "
case "$lns" in
```

```
*"ln"*" -s")
 echo "Checking how to test for symbolic links..." >&4
 $lns blurfl sym
 if $test "X$issymlink" = X; then
?X:
?X: In some AIX 4 versions the (ksh) builtin test (-h) is broken.
?X:
  case "$newsh" in
  ") sh     -c "PATH= test -h sym" >/dev/null 2>&1 ;;
  *)  $newsh -c "PATH= test -h sym" >/dev/null 2>&1 ;;
  esac
  if test $? = 0; then
   issymlink="test -h"
  else
   echo "Your builtin 'test -h' may be broken." >&4
   case "$test" in
   /*) ;;
   *) pth=`echo $PATH | sed -e "s/$p_/ /g"`
    for p in $pth
    do
     if test -f "$p/$test"; then
      test="$p/$test"
      break
     fi
    done
    ;;
   esac
   case "$test" in
   /*)
    echo "Trying external '$test -h'." >&4
    issymlink="$test -h"
    if $test ! -h sym >/dev/null 2>&1; then
     echo "External '$test -h' is broken, too." >&4
     issymlink="
    fi
    ;;
   *) issymlink=" ;;
   esac
  fi
 fi
 if $test "X$issymlink" = X; then
  if $test -L sym 2>/dev/null; then
   issymlink="$test
 -L"
   echo "The builtin '$test -L' worked." >&4
  fi
 fi
 if $test "X$issymlink" != X; then
```

```
  echo "You can test for symbolic links with '$issymlink'." >&4
 else
  echo "I do not know how you can test for symbolic links." >&4
 fi
 $rm -f blurfl sym
 ;;
*) echo "No symbolic links, so not testing for their testing..." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/issymlink.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: gidtype.U,v 3.0.1.3 1994/08/29 16:21:44 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: gidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:21:44  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS: patch32: removed useless usage of Setvar (for now)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:21:07  ram
?RCS: patch27: added lint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:01:51  ram
?RCS: patch23: protected gidtype setting via setvar (ADO)
?RCS: patch23: made Gid_t comment more explicit (ADO)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:08:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:gidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:gidtype:
?S: This variable defines Gid_t to be something like gid_t, int,
?S: ushort, or whatever type is used to declare the return type
?S: of getgid().  Typically, it is the type of group ids in the kernel.
?S:.
?C:Gid_t (GIDTYPE):
```

```
?C: This symbol holds the return type of getgid() and the type of
?C: argument to setrgid() and related functions.  Typically,
?C: it is the type of group ids in the kernel. It can be int, ushort,
?C: gid_t, etc... It may be necessary to include <sys/types.h> to get
?C: any typedef'ed information.
?C:.
?H:#define Gid_t $gidtype  /* Type for getgid(), etc... */
?H:.
?T:xxx
: see what type gids are declared as in the kernel
echo " "
echo "Looking for the type for group ids returned by getgid()."
set gid_t gidtype xxx stdio.h sys/types.h
eval $typedef
case "$gidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep
 'groups\[NGROUPS\];' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$gidtype";;
esac
case "$gidtype" in
gid_t) echo "gid_t found." ;;
*) rp="What is the type for group ids returned by getgid()?"
 . ./myread
 gidtype="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rusage.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_rusage.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: We may need to include <sys/resource.h> and <sys/time.h> FIXME
?X:INC: i_sysresrc i_systime
?MAKE:d_rusage: Inlibc
?MAKE: -pick add $@ %<
?S:d_rusage (d_getrusg):
?S: This variable conditionally defines the HAS_GETRUSAGE symbol, which
?S: indicates that the getrusage() routine exists.  The getrusage() routine
?S: supports sub-second accuracy
 for process cpu accounting. You may need
?S: to include <sys/resource.h> and <sys/time.h>.
?S:.
?C:HAS_GETRUSAGE (RUSAGE GETRUSAGE):
?C: This symbol, if defined, indicates that the getrusage() routine is
?C: available to get process statistics with a sub-second accuracy.
?C: Inclusion of <sys/resource.h> and <sys/time.h> may be necessary.
?C:.
?H:#$d_rusage HAS_GETRUSAGE  /**/
?H:.
?LINT:set d_rusage
: see if getrusage exists
set getrusage d_rusage
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rusage.U
No license file was found, but licenses were detected in source scan.

```
# $Id: errnolist.a,v 3.0 1993/08/18 12:04:35 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Harlan Stenn <harlan@mumps.pfcs.com>
#
# $Log: errnolist.a,v $
# Revision 3.0  1993/08/18 12:04:35  ram
# Baseline for dist 3.0 netwide release.
#
#
```

```
# This is a simple-minded awk script to generate an initialization for
# sys_errnolist on systems that don't have it.
# This file now depends only on sys/errno.h error numbers under maxerr being
# in order.  It will complain and die if not.  NOTE: It will still produce
# a compilable output file, even with errors, so you
 must check the output.


BEGIN  {
   format = "\t\"%s\",\n"
   printf("/*\n** This is a generated file.  Do NOT edit it unless you really have to...\n*/\n\n")
   printf("char *sys_errnolist[] = {\n")
   maxerr = 89
  }

$1=="#define" {
   if(count > maxerr || substr($2,1,1) != "E")
    next   # we're not interested
   if($3 < count) { # this is bad
    printf("Fatal error: %s out of order at %s\n",\
    FILENAME, $2)>"/dev/tty"
    exit 1
   }
   # fill in the blanks
   while($3 > count) {
    dummy=sprintf("EDUMMY%d",count)
    printf(format,dummy)
    count++
   }
   printf(format,$2)
   count++
  }

END  {
   printf("\t0\n};\n")
  }
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.a
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_getnbyaddr: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnbyaddr:
?S: This variable conditionally defines the HAS_GETNETBYADDR symbol, which
?S: indicates to the C program that the getnetbyaddr() routine is available
?S: to look up networks by their IP addresses.
?S:.
?C:HAS_GETNETBYADDR:
?C: This symbol, if defined, indicates that the getnetbyaddr() routine is
?C: available to look up networks by their IP addresses.
?C:.
?H:#$d_getnbyaddr HAS_GETNETBYADDR  /**/
?H:.
?LINT:set d_getnbyaddr
: see if getnetbyaddr exists
set getnetbyaddr d_getnbyaddr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnbyad.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dbl_dig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dbl_dig.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:28  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dbl_dig: Myread contains cat rm Setvar \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_dbl_dig:
?S: This variable conditionally defines d_dbl_dig if this system's
?S: header files provide DBL_DIG, which is the number of significant
?S: digits in a double precision
 number.
?S:.
?C:HAS_DBL_DIG:
```

```
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol DBL_DIG, which is the number
?C: of significant digits in a double precision number.  If this
?C: symbol is not defined, a guess of 15 is usually pretty good.
?C:.
?H:#$d_dbl_dig HAS_DBL_DIG /**/
?H:.
?F:!dbl_dig.c
?LINT:set d_dbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >dbl_dig.c <<EOM
#include <limits.h>
#include <float.h>
#ifdef DBL_DIG
printf("Contains DBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < dbl_dig.c >dbl_dig.E 2>/dev/null
if $contains 'DBL_DIG' dbl_dig.E >/dev/null 2>&1; then
 echo "DBL_DIG found." >&4
 val="$define"
else
 echo "DBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f dbl_dig.?
set d_dbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dbl_dig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoll: Inlibc d_longlong Compile cat run
?MAKE: -pick add $@ %<
?S:d_strtoll:
?S: This variable conditionally defines the HAS_STRTOLL symbol, which
?S: indicates to the C program that the strtoll() routine is available.
?S:.
?C:HAS_STRTOLL:
```

```
?C: This symbol, if defined, indicates that the strtoll routine is
?C: available to convert strings to long longs.
?C:.
?H:#$d_strtoll HAS_STRTOLL  /**/
?H:.
?T:yyy
?F:!try
: see if strtoll exists
set strtoll d_strtoll
eval $inlibc

case "$d_longlong-$d_strtoll" in
"$define-$define")
 $cat <<EOM
Checking whether your strtoll() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <errno.h>
#ifdef __hpux
#define strtoll __strtoll
#endif
#ifdef __EMX__
#define strtoll
 _strtoll
#endif
#include <stdio.h>
#include <stdlib.h>
static int bad = 0;
void check(const char *s, long long ell, int een) {
 long long gll;
 errno = 0;
 gll = strtoll(s, 0, 10);
 if (!((gll == ell) && (errno == een)))
  bad++;
}
int main() {
 check(" 1",                                1LL, 0);
 check(" 0",                                0LL, 0);
 check("-1",                               -1LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check(" 9223372036854775807",  9223372036854775807LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check(" 9223372036854775808",  9223372036854775807LL, ERANGE);
 check("-9223372036854775809", -9223372036854775808LL, ERANGE);
 if (!bad)
  printf("ok\n");
}
```

```
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  ok) echo "Your strtoll() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtoll() doesn't seem
 to be working okay.
EOM
     d_strtoll="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtoll="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetbyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetbyname_r getnetbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetbyname_r:
?S: This variable conditionally defines the HAS_GETNETBYNAME_R symbol,
?S: which indicates to the C program that the getnetbyname_r()
?S: routine is available.
?S:.
?S:getnetbyname_r_proto:
?S: This variable encodes the prototype of getnetbyname_r.
?S: It is zero if d_getnetbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyname_r
?S: is defined.
?S:.
?C:HAS_GETNETBYNAME_R:
?C: This symbol, if defined, indicates that
```

```
 the getnetbyname_r routine
?C: is available to getnetbyname re-entrantly.
?C:.
?C:GETNETBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getnetbyname_r.
?C: It is zero if d_getnetbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyname_r
?C: is defined.
?C:.
?H:#$d_getnetbyname_r HAS_GETNETBYNAME_R /**/
?H:#define GETNETBYNAME_R_PROTO $getnetbyname_r_proto /**/
?H:.
?T:try hdrs d_getnetbyname_r_proto
: see if getnetbyname_r exists
set getnetbyname_r d_getnetbyname_r
eval $inlibc
case "$d_getnetbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetbyname_r_proto:$usethreads" in
 ":define") d_getnetbyname_r_proto=define
  set d_getnetbyname_r_proto getnetbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getnetbyname_r_proto" in
 define)
 case "$getnetbyname_r_proto" in
 "|0) try='int getnetbyname_r(const char*, struct netent*, char*, size_t, struct netent**, int*);'
 ./protochk "$extern_C
 $try" $hdrs && getnetbyname_r_proto=I_CSBWRE ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) try='int getnetbyname_r(const char*, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=I_CSBI ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) try='struct netent* getnetbyname_r(const char*, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=S_CSBI ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) try='int getnetbyname_r(const char*, struct netent*, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=I_CSD ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) d_getnetbyname_r=undef
  getnetbyname_r_proto=0
  echo "Disabling getnetbyname_r, cannot determine prototype." >&4 ;;
```

```
 * ) case "$getnetbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getnetbyname_r_proto="REENTRANT_PROTO_$getnetbyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo
 "getnetbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_getnetbyname_r=undef
  getnetbyname_r_proto=0
  ;;
 esac
 ;;
*) getnetbyname_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetbyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sbrksmart.U,v 3.0.1.2 1995/01/11 15:35:41 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sbrksmart.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:35:41  ram
?RCS: patch45: now sets sbrksmart to undef explicitly when lacking sbrk()
?RCS: patch45: forgot a cast when using return value from sbrk()
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:16:45  ram
?RCS: patch16: created
?RCS:
?MAKE:sbrksmart: cat d_sbrk Compile rm
?MAKE: -pick add $@ %<
?S:sbrksmart:
?S: This variable conditionally defines HAS_SMART_SBRK if the sbrk()
?S: routine honors a negative
```

```
 argument to lower the break value.
?S:.
?C:HAS_SMART_SBRK:
?C: This symbol is defined when the sbrk() system call may be used with
?C: a negative argument to lower the break value, therefore releasing
?C: core to the system. If not, you'd probably be better off using the
?C: mmap() system call.
?C:.
?H:#$sbrksmart HAS_SMART_SBRK /**/
?H:.
?T:dumb
?F:!sbrk
: see if sbrk can release core to the kernel
echo " "
case "$d_sbrk" in
"$define")
 echo "Let's see if your sbrk() is smart enough to release core..." >&4
 $cat > sbrk.c <<'EOC'
#define INC 256  /* Small enough to be less than a page size */

int main()
{
 char *obrk = (char *) sbrk(0);
 char *nbrk;

 nbrk = (char *) sbrk(INC);
 if (nbrk == (char *) -1)
  exit(1); /* Not enough memory */
 if (nbrk != obrk)
  exit(2); /* Unreliable sbrk() */
 nbrk = (char *) sbrk(-INC);
 if (nbrk == (char *) -1)
  exit(3); /* May have understood negative arg as huge positive */
 if (obrk != (char *) sbrk(0))
  exit(4); /* Not smart, definitely */

 exit(0);  /*
 Ok */
}
EOC
 sbrksmart="$undef"
 dumb='-- assuming dumb sbrk().'
 set sbrk
 if eval $compile_ok; then
  ./sbrk >/dev/null 2>&1
  case $? in
  0) sbrksmart="$define"
   echo "Yes, it can be used with negative values." ;;
```

```
  1) echo "Sorry, not enough memory $dumb" ;;
  2) echo "No it's not, and besides it seems to be buggy..." ;;
  3) echo "No, it fails with negative values." ;;
  4) echo "Nope, your sbrk() is too dumb." ;;
  *) echo "Err... Unexpected result $dumb" ;;
  esac
 else
  echo "(Could not compile test program $dumb)"
 fi
 ;;
*)
 echo "Since you don't have sbrk(), let's forget about the smart test!"
 sbrksmart="$undef"
 ;;
esac
$rm -f sbrk sbrk.* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sbrksmart.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Magic_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Magic_h.U,v $
?RCS: Revision 3.0.1.2  1993/11/10  17:32:58  ram
?RCS: patch14: forgot to mention Id in the dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:46:59  ram
?RCS: patch12: created for ?M: lines support (magic symbols)
?RCS:
?X:
?X: This file ends up producing the confmagic.h include, which is used to
?X: automagically remap some C symbols via cpp redefinitions.
?X:
?X: The file ./Magic_h below contains all the ?M: lines extracted out
 of all
?X: the units.  Metaconfig itself adds the final #endif statement.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?MAKE:Magic_h: Id Config_h
```

```
?MAKE: -pick cm_h_weed $@ %<
?MAKE: -pick cm_h_weed $@ ./Magic_h
?LINT:nocomment
/*
* This file was produced by running metaconfig and is intended to be included
* after config.h and after all the other needed includes have been dealt with.
*
* This file may be empty, and should not be edited. Rerun metaconfig instead.
* If you wish to get rid of this magic, remove this file and rerun metaconfig
* without the -M option.
*
*  $Id: Magic_h.U 1 2006-08-24 12:32:52Z rmanfredi $
*/

#ifndef _confmagic_h_
#define _confmagic_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Magic_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysun.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <inttypes.h> is available or not
?X:
?MAKE:i_inttypes: Inhdr
?MAKE: -pick add $@ %<
?S:i_inttypes:
?S: This variable conditionally defines I_INTTYPES, which indicates
?S: to the C program that it should include <inttypes.h> to get
?S: format conversions of integer types.
?S:.
?C:I_INTTYPES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
```

```
 <inttypes.h> to get format conversions of integer types.
?C:.
?H:#$i_inttypes I_INTTYPES  /**/
?H:.
?LINT:set i_inttypes
: see if this is a inttypes.h system
set inttypes.h i_inttypes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_inttypes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2014-2014, Karl Williamson & H.Merijn Brand
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcsxfrm: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_wcsxfrm:
?S: This variable conditionally defines the HAS_WCSXFRM symbol if the
?S: wcsxfrm() routine is available and can be used to compare wide
?S: character strings.
?S:.
?C:HAS_WCSXFRM:
?C: This symbol, if defined, indicates that the wcsxfrm routine is
?C: available to tranform a wide character string for wcscmp().
?C:.
?H:#$d_wcsxfrm HAS_WCSXFRM /**/
?H:.
?F:!try
?LINT: set d_wcsxfrm
: look for wcsxfrm
echo " "
$cat >try.c <<'EOCP'
#include
 <errno.h>
#include <wchar.h>
int main ()
{
   wchar_t dst[4], *src = L" ";
   errno = 0;
   return (wcsxfrm (dst, src, 1) ? errno ? errno : 0 : 1);
   }
```

```
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working wcsxfrm() found." >&4
     val="$define" ;;
 *)  echo "wcsxfrm() found, but it doesn't work" >&4
     ;;
 esac
else
   echo "wcsxfrm() NOT found." >&4
   fi
set d_wcsxfrm
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_wcsxfrm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fmax: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmax:
?S: This variable conditionally defines the HAS_FMAX symbol, which
?S: indicates to the C program that the fmax() routine is available.
?S:.
?C:HAS_FMAX:
?C: This symbol, if defined, indicates that the fmax routine is
?C: available to do the maximum function.
?C:.
?H:#$d_fmax HAS_FMAX  /**/
?H:.
?LINT:set d_fmax
: see if fmax exists
set fmax d_fmax
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fmax.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_portable.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:28:52  ram
?RCS: patch45: executable path stripping moved to the end in Config_sh.U
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:21:17  ram
?RCS: patch15: did not strip variables properly when needed
?RCS: patch15: now also strips down variables from trylist
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The Loc unit is wanted to get the definition of all the locating variables.
?X:
?MAKE:d_portable:
 cat Loc Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_portable:
?S: This variable conditionally defines the PORTABLE symbol, which
?S: indicates to the C program that it should not assume that it is
?S: running on the machine it was compiled on.
?S:.
?C:PORTABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: not assume that it is running on the machine it was compiled on.
?C: The program should be prepared to look up the host name, translate
?C: generic filenames, use PATH, etc.
?C:.
?H:#$d_portable PORTABLE /**/
?H:.
?D:d_portable="
: decide how portable to be
case "$d_portable" in
"$define") dflt=y;;
*) dflt=n;;
esac
$cat <<'EOH'

I can set things up so that your shell scripts and binaries are more portable,
```

```
at what may be a noticable cost in performance.  In particular, if you
ask to be portable, the following happens:

    1) Shell scripts will rely on the PATH variable rather than using
 the paths derived above.
    2) ~username
 interpretations will be done at run time rather than
 by Configure.
@if PHOSTNAME
    3) The system name will be determined at run time, if at all possible.
@end

EOH
rp="Do you expect to run these scripts and binaries on multiple machines?"
. ./myread
case "$ans" in
 y*) d_portable="$define"
?X:
?X: Paths will be stripped down (/usr/bin/vi -> vi) in Config_sh.U if needed.
?X:
 ;;
 *)  d_portable="$undef" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_portable.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: bin.U,v $
?RCS: Revision 3.0.1.4  1995/09/25  09:15:32  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:32:40  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:05:28  ram
?RCS: patch32: now uses installation prefix
?RCS:
```

```
?RCS: Revision 3.0.1.1  1993/09/13  15:56:51  ram
?RCS: patch10: made prompting more explicit (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18
  12:05:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bin binexp installbin: Prefixit Getfile Oldconfig afs cat test
?MAKE: -pick add $@ %<
?Y:TOP
?S:bin:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly executable images for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S:.
?S:binexp:
?S: This is the same as the bin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?S:installbin:
?S: This variable is the same as binexp unless AFS is running in which case
?S: the user is explicitly prompted for it. This variable should always
?S: be used in your makefiles for maximum portability.
?S:.
?C:BIN:
?C: This symbol holds the path of the bin directory where the package will
?C: be installed. Program must be prepared to deal with ~name substitution.
?C:.
?C:BIN_EXP:
?C: This
 symbol is the filename expanded version of the BIN symbol, for
?C: programs that do not want to deal with that at run-time.
?C:.
?H:#define BIN "$bin" /**/
?H:#define BIN_EXP "$binexp" /**/
?H:.
?D:bin='/usr/local/bin'
: determine where public executables go
echo " "
set dflt bin bin
eval $prefixit
fn=d~
rp='Pathname where the public executables will reside?'
. ./getfile
if $test "X$ansexp" != "X$binexp"; then
 installbin=''
fi
```

```
bin="$ans"
binexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
executables reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installbin" in
 ") dflt=`echo $binexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installbin";;
 esac
 fn=de~
 rp='Where will public executables be installed?'
 . ./getfile
 installbin="$ans"
else
 installbin="$binexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/bin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_erf: Inlibc
?MAKE: -pick add $@ %<
?S:d_erf:
?S: This variable conditionally defines the HAS_ERF symbol, which
?S: indicates to the C program that the erf() routine is available.
?S:.
?C:HAS_ERF:
?C: This symbol, if defined, indicates that the erf routine is
?C: available to do the error function.
?C:.
?H:#$d_erf HAS_ERF  /**/
?H:.
?LINT:set d_erf
: see if erf exists
set erf d_erf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_erf.U

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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2008 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_timegm: Inlibc
?MAKE: -pick add $@ %<
?S:d_timegm:
?S: This variable conditionally defines the HAS_TIMEGM symbol, which
?S: indicates to the C program that the timegm () routine is available.
?S:.
?C:HAS_TIMEGM:
?C: This symbol, if defined, indicates that the timegm routine is
?C: available to do the opposite of gmtime ()
?C:.
?H:#$d_timegm HAS_TIMEGM  /**/
?H:.
?LINT:set d_timegm
: see if timegm exists
set timegm d_timegm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_timegm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2005-2007 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_libm_lib_version: Compile cat run rm_try
?MAKE: -pick add $@ %<
?S:d_libm_lib_version:
?S: This variable conditionally defines the LIBM_LIB_VERSION symbol,
?S: which indicates to the C program that math.h defines _LIB_VERSION
?S: being available in libm
?S:.
?C:LIBM_LIB_VERSION:
?C: This symbol, if defined, indicates that libm exports _LIB_VERSION
?C: and that math.h defines the enum to manipulate it.
?C:.
?H:#$d_libm_lib_version LIBM_LIB_VERSION  /**/
?H:.
```

```
?T:foo
?F:!try
: check to see if math.h defines _LIB_VERSION
d_libm_lib_version="$undef"
echo " "
echo "Checking to see if your libm supports _LIB_VERSION..." >&4
$cat >try.c <<EOCP
#include <unistd.h>
#include <math.h>
int main (int argc, char *argv[])
{
    printf ("%d\n", _LIB_VERSION);
   return (0);
   } /* main */
EOCP
set try
if eval $compile; then
   foo=`$run ./try`
   echo "Yes, it does ($foo)" >&4
   d_libm_lib_version="$define"
else
   echo "No, it does not (probably harmless)" >&4
   fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_libm_lib_version.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setegid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setegid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setegid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setegid:
?S: This variable conditionally defines the HAS_SETEGID symbol, which
?S: indicates to the C program that the setegid() routine is available
```

```
?S: to change the effective gid of the current program.
?S:.
?C:HAS_SETEGID (SETEGID):
?C: This symbol, if defined, indicates that the setegid
 routine is available
?C: to change the effective gid of the current program.
?C:.
?H:#$d_setegid HAS_SETEGID  /**/
?H:.
?LINT:set d_setegid
: see if setegid exists
set setegid d_setegid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setegid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_srandom_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_srandom_r srandom_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_srandom_r:
?S: This variable conditionally defines the HAS_SRANDOM_R symbol,
?S: which indicates to the C program that the srandom_r()
?S: routine is available.
?S:.
?S:srandom_r_proto:
?S: This variable encodes the prototype of srandom_r.
?S: It is zero if d_srandom_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srandom_r
?S: is defined.
?S:.
?C:HAS_SRANDOM_R:
?C: This symbol, if defined, indicates that the srandom_r routine
?C: is available to srandom re-entrantly.
?C:.
?C:SRANDOM_R_PROTO:
?C: This
 symbol encodes the prototype of srandom_r.
?C: It is zero if d_srandom_r is undef, and one of the
```

```
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srandom_r
?C: is defined.
?C:.
?H:#$d_srandom_r HAS_SRANDOM_R /**/
?H:#define SRANDOM_R_PROTO $srandom_r_proto /**/
?H:.
?T:try hdrs d_srandom_r_proto
: see if srandom_r exists
set srandom_r d_srandom_r
eval $inlibc
case "$d_srandom_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_srandom_r_proto:$usethreads" in
 ":define") d_srandom_r_proto=define
  set d_srandom_r_proto srandom_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_srandom_r_proto" in
 define)
 case "$srandom_r_proto" in
 "|0) try='int srandom_r(unsigned int, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && srandom_r_proto=I_TS ;;
 esac
 case "$srandom_r_proto" in
 "|0) d_srandom_r=undef
  srandom_r_proto=0
  echo "Disabling srandom_r, cannot determine prototype." >&4 ;;
 *
 ) case "$srandom_r_proto" in
  REENTRANT_PROTO*) ;;
  *) srandom_r_proto="REENTRANT_PROTO_$srandom_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "srandom_r has no prototype, not using it." >&4 ;;
  esac
  d_srandom_r=undef
  srandom_r_proto=0
  ;;
 esac
 ;;
*) srandom_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_srandom_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_libutil.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_libutil: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_libutil:
?S: This variable conditionally defines the I_LIBUTIL symbol, and indicates
?S: whether a C program should include <libutil.h>.
?S:.
?C:I_LIBUTIL:
?C: This symbol, if defined, indicates that <libutil.h> exists and
?C: should be included.
?C:.
?H:#$i_libutil I_LIBUTIL  /**/
?H:.
?LINT:set i_libutil
: see if this is a libutil.h system
set libutil.h i_libutil
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_libutil.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ccflags.U,v 3.0.1.9 1997/02/28 15:27:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: ccflags.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:27:07  ram
?RCS: patch61: removed support for NO_PROTOTYPE detection on SCO
?RCS: patch61: new locincpth variable
?RCS: patch61: added info on the "additional ld flags" question
```

```
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:48:54  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.7  1995/05/12  12:08:33  ram
?RCS: patch54: now checks for cc/ccflags/ldflags
 coherency
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  16:07:02  ram
?RCS: patch36: gcc versioning no longer relies on the C compiler's name
?RCS: patch36: simplified check for gcc version checking (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:06:35  ram
?RCS: patch32: propagate -posix flag from ccflags to ldflags
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:28:45  ram
?RCS: patch23: -fpcc-struct-return only needed in gcc 1.x (ADO)
?RCS: patch23: cppflags now computed on an option-by-option basis
?RCS: patch23: magically added cc flags now only done the first time
?RCS:
?RCS: Revision 3.0.1.3  1993/09/13  15:58:29  ram
?RCS: patch10: explicitly mention -DDEBUG just in case they need it (WAD)
?RCS: patch10: removed all the "tans" variable usage (WAD)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/27  14:39:38  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:24  ram
?RCS: patch6: added defaults for cppflags, ccflags and ldflags
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:05:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ccflags ldflags lkflags cppflags optimize locincpth: test cat \
 Myread Guess Options Oldconfig +gccversion mips_type +usrinc \
 package contains rm +cc cppstdin cppminus cpprun cpplast libpth \
 libs loclibpth hint usesocks sh run rm_try sysroot
?MAKE: -pick add $@ %<
?S:ccflags:
?S: This variable contains any additional C compiler flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:cppflags:
?S: This variable holds the flags that will be passed to the C pre-
?S: processor. It is up to the Makefile to use it.
?S:.
?S:optimize:
```

```
?S: This variable contains any optimizer/debugger flag that should be used.
?S: It is up to the Makefile to use it.
?S:.
?S:ldflags:
?S: This variable contains any additional C loader flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:lkflags:
?S: This variable contains any additional C partial linker flags desired
 by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:locincpth:
?S: This variable contains a list of additional directories to be
?S: searched by the compiler.  The appropriate '-I' directives will
?S: be added to ccflags.  This is intended to simplify setting
?S: local directories from the Configure command line.
?S: It's not much, but it parallels the loclibpth stuff in libpth.U.
?S:.
?T:inctest thisincl xxx inclwanted ftry previous thislibdir
?T:EBUGGING DEBUGGING
?T:check flag callback checkccflag
?F:!cpp.c !gcctest !try
?D:cppflags=''
?D:ccflags=''
?D:ldflags=''
?D:optimize=''
?LINT:extern _sysroot
?INIT:: Possible local include directories to search.
?INIT:: Set locincpth to "" in a hint file to defeat local include searches.
?INIT:locincpth="/usr/local/include /opt/local/include /usr/gnu/include"
?INIT:locincpth="$locincpth /opt/gnu/include /usr/GNU/include /opt/GNU/include"
?INIT::
?INIT:: no include file wanted by default
?INIT:inclwanted=''
?INIT:
?INIT:: Enable
 -DEBUGGING and -DDEBUGGING from the command line
?INIT:EBUGGING=''
?INIT:DEBUGGING=''
?INIT:
: determine optimization, if desired, or use for debug flag also
?X: Allow for Configure -Uoptimize -- it's not strictly sensible, but
?X: it has happened and we know what they mean.   AD  2/16/98
case "$optimize" in
' '|$undef) dflt='none';;
'') dflt='-O';;
*) dflt="$optimize";;
```

```
esac
$cat <<EOH

By default, $package compiles with the -O flag to use the optimizer.
Alternately, you might want to use the symbolic debugger, which uses
the -g flag (on traditional Unix systems).  Either flag can be
specified here.  To use neither flag, specify the word "none".

EOH
rp="What optimizer/debugger flag should be used?"
. ./myread
optimize="$ans"
case "$optimize" in
'none') optimize=" ";;
esac

: Check what DEBUGGING is required from the command line
: -DEBUGGING      or -DDEBUGGING or
: -DEBUGGING=both   = -g + -DDEBUGGING
: -DEBUGGING=-g   or -Doptimize=-g = -g
: -DEBUGGING=none or -UDEBUGGING =
: -DEBUGGING=old
  or -DEBUGGING=default = ? $optimize
case "$EBUGGING" in
") ;;
*) DEBUGGING=$EBUGGING ;;
esac

case "$DEBUGGING" in
-g|both|$define)
   case "$optimize" in
 *-g*) ;;
 *)    optimize="$optimize -g" ;;
   esac ;;
none|$undef)
   case "$optimize" in
 *-g*) set `echo "X $optimize " | sed 's/ -g / /'`
  shift
  optimize="$*"
  ;;
   esac ;;
esac

dflt="
case "$DEBUGGING" in
both|$define) dflt='-DDEBUGGING'
esac
```

```
: argument order is deliberate, as the flag will start with - which set could
: think is an option
checkccflag='check=$1; flag=$2; callback=$3;
echo " ";
echo "Checking if your compiler accepts $flag" >&4;
[ "X$sysroot" != "X" ] && echo "For sysroot = $sysroot";
echo "int main(void) { return 0; }" > gcctest.c;
if $cc $_sysroot -O2 $flag -o gcctest gcctest.c 2>gcctest.out && $run ./gcctest; then
   echo "Yes, it does." >&4;
   if $test -s gcctest.out ; then
       echo "But your platform does not like it:";
       cat gcctest.out;
   else
 case "$ccflags" in
 *$check*)

    echo "Leaving current flags $ccflags alone." >&4
     ;;
 *) dflt="$dflt $flag";
     eval $callback
     ;;
 esac
   fi
else
   echo "Nope, it does not, but that is ok." >&4;
fi
'

: We will not override a previous value, but we might want to
: augment a hint file
case "$hint" in
default|recommended)
 case "$gccversion" in
 1.*) dflt="$dflt -fpcc-struct-return" ;;
 esac
 case "$optimize:$DEBUGGING" in
 *-g*:old) dflt="$dflt -DDEBUGGING";;
 esac
?X: check for POSIXized ISC
 case "$gccversion" in
 2.*) if $test -d /etc/conf/kconfig.d &&
   $contains _POSIX_VERSION $usrinc/sys/unistd.h >/dev/null 2>&1
  then
   # Interactive Systems (ISC) POSIX mode.
   dflt="$dflt -posix"
  fi
  ;;
 esac
```

```
?X: If the user has gcc-2.95 or greater, try adding -fno-strict-alias.
?X: Since the gcc "version" can be non-numeric, e.g.
?X: "2.95.1 19990809 (prerelease)" , we'll do the test on any version
?X: greater than 2.8.
?X: --Andy Dougherty  27 Aug 1999
 case "$gccversion" in
 1.*) ;;
 2.[0-8]*)
 ;;
 ?*) set strict-aliasing -fno-strict-aliasing
  eval $checkccflag
  ;;
 esac
?X: HMB 200405
?X: -pipe has shown a compile time speedup of about 40% on Linux and HP-UX
?X: and also worked on cygwin-1.5.9
?X: If a system fails, disable it in the hints. 99% of gcc uses binutils
 # For gcc, adding -pipe speeds up compilations for some, but apparently
 # some assemblers can't read from stdin.  (It also slows down compilations
 # in other cases, but those are apparently rarer these days.)  AD 5/2004.
 case "$gccversion" in
 ?*) set pipe -pipe
  eval $checkccflag
  ;;
 esac

?X: NWC 200712
 # on x86_64 (at least) we require an extra library (libssp) in the
 # link command line. This library is not named, so I infer that it is
 # an implementation detail that may change. Hence the safest approach
 # is to add the flag to the flags passed to the compiler at link time,
 # as that way the compiler can do the right implementation dependant
 # thing. (NWC)
 case "$ccflags" in
 *-fno-stack-protector*)

   echo "Do not add -fstack-protector nor -fstack-protector-strong" 2>&1
    ;;
 *) case "$gccversion" in
   ?*) set stack-protector-strong -fstack-protector-strong
  eval $checkccflag
  case "$dflt" in
  *-fstack-protector-strong*) ;; # It got added.
  *) # Try the plain/older -fstack-protector.
    set stack-protector -fstack-protector
    eval $checkccflag
    ;;
  esac
```

```
  ;;
     esac
     ;;
 esac
esac

?X: In USG mode, a MIPS system may need some BSD includes
case "$mips_type" in
*BSD*|") inclwanted="$locincpth $usrinc";;
*) inclwanted="$locincpth $inclwanted $usrinc/bsd";;
esac
for thisincl in $inclwanted; do
 if $test -d $thisincl; then
  if $test x$thisincl != x$usrinc; then
   case "$dflt" in
   *" -I$thisincl "*);;
   *) dflt="$dflt -I$thisincl ";;
   esac
  fi
 fi
done

?X: Include test function (header, symbol)
inctest='if $contains $2 $usrinc/$1 >/dev/null 2>&1; then
 xxx=true;
elif $contains $2 $usrinc/sys/$1 >/dev/null 2>&1; then
 xxx=true;
else
 xxx=false;
fi;
if
 $xxx; then
 case "$dflt" in
 *$2*);;
 *) dflt="$dflt -D$2";;
 esac;
fi'

set signal.h LANGUAGE_C; eval $inctest

case "$usesocks" in
$define)
 ccflags="$ccflags -DSOCKS"
 ;;
esac

case "$hint" in
default|recommended) dflt="$ccflags $dflt" ;;
```

```
*) dflt="$ccflags";;
esac

case "$dflt" in
"|' ') dflt=none;;
esac

$cat <<EOH

Your C compiler may want other flags.  For this question you should include
-I/whatever and -DWHATEVER flags and any other flags used by the C compiler,
but you should NOT include libraries or ld flags like -lwhatever.  If you
want $package to honor its debug switch, you should include -DDEBUGGING here.
Your C compiler might also need additional flags, such as -D_POSIX_SOURCE.

To use no flags, specify the word "none".

EOH
?X: strip leading space
set X $dflt
shift
dflt=${1+"$@"}
rp="Any additional cc flags?"
. ./myread
case "$ans" in
none) ccflags="";;
*) ccflags="$ans";;
esac

: the following weeds options from ccflags that are of no interest to cpp
case
 "$cppflags" in
") cppflags="$ccflags" ;;
*)  set X $ccflags; shift
   case " $cppflags " in
   *" $1 "*) ;;  # Try to avoid doubling the cppflags.
   *) cppflags="$cppflags $ccflags" ;;
   esac
   ;;
esac
case "$gccversion" in
1.*) cppflags="$cppflags -D__GNUC__"
esac
case "$mips_type" in
");;
*BSD*) cppflags="$cppflags -DSYSTYPE_BSD43";;
esac
case "$cppflags" in
```

```
");;
*)
 echo " "
 echo "Let me guess what the preprocessor flags are..." >&4
 set X $cppflags
 shift
 cppflags="
 $cat >cpp.c <<'EOM'
#define BLURFL foo

BLURFL xx LFRULB
EOM
?X:
?X: For each cc flag, try it out with both cppstdin and cpprun, since the
?X: first is almost surely a cc wrapper. We have to try both in case
?X: of cc flags like '-Olimit 2900' that are actually two words...
?X:
 previous="
 for flag in $*
 do
  case "$flag" in
  -*) ftry="$flag";;
  *) ftry="$previous $flag";;
  esac
  if $cppstdin -DLFRULB=bar $cppflags $ftry $cppminus <cpp.c \
   >cpp1.out 2>/dev/null && \
   $cpprun -DLFRULB=bar $cppflags
 $ftry $cpplast <cpp.c \
   >cpp2.out 2>/dev/null && \
   $contains 'foo.*xx.*bar' cpp1.out >/dev/null 2>&1 && \
   $contains 'foo.*xx.*bar' cpp2.out >/dev/null 2>&1
  then
   cppflags="$cppflags $ftry"
   previous="
  else
   previous="$flag"
  fi
 done
 set X $cppflags
 shift
 cppflags=${1+"$@"}
 case "$cppflags" in
 *-*)  echo "They appear to be: $cppflags";;
 esac
 $rm -f cpp.c cpp?.out
 ;;
esac
```

```
: flags used in final linking phase
case "$ldflags" in
") if ./venix; then
  dflt='-i -z'
 else
  dflt=''
 fi
 case "$ccflags" in
 *-posix*) dflt="$dflt -posix" ;;
 esac
 ;;
*) dflt="$ldflags";;
esac
# See note above about -fstack-protector
case "$ccflags" in
*-fstack-protector-strong*)
 case "$dflt" in
 *-fstack-protector-strong*) ;; # Don't add it again
 *) dflt="$dflt -fstack-protector-strong" ;;
 esac
 ;;
*-fstack-protector*)
 case "$dflt" in
 *-fstack-protector*) ;; # Don't add it again
 *) dflt="$dflt -fstack-protector" ;;
 esac
 ;;
esac

: Try to guess additional flags to pick
 up local libraries.
for thislibdir in $libpth; do
 case " $loclibpth " in
 *" $thislibdir "*)
  case "$dflt " in
  *"-L$thislibdir "*) ;;
  *)  dflt="$dflt -L$thislibdir" ;;
  esac
  ;;
 esac
done

case "$dflt" in
") dflt='none' ;;
esac

$cat <<EOH
```

```
Your C linker may need flags.  For this question you should
include -L/whatever and any other flags used by the C linker, but you
should NOT include libraries like -lwhatever.

Make sure you include the appropriate -L/path flags if your C linker
does not normally search all of the directories you specified above,
namely
 $libpth
To use no flags, specify the word "none".

EOH

rp="Any additional ld flags (NOT including libraries)?"
. ./myread
case "$ans" in
none) ldflags="";;
*) ldflags="$ans";;
esac
rmlist="$rmlist pdp11"

@if lkflags
: partial linking may need other flags
case "$lkflags" in
") case "$ldflags" in
 ") dflt='none';;
 *) dflt="$ldflags";;
 esac;;
*) dflt="$lkflags";;
esac
echo " "
rp="Partial linking flags to be used (NOT
 including -r)?"
. ./myread
case "$ans" in
none) lkflags="";;
*) lkflags="$ans";;
esac

@end
?X:
?X: If the user changes compilers after selecting a hint file, it's
?X: possible that the suggested ccflags/ldflags will be wrong.  Try to
?X: compile and run a simple test program.  Let the user see all the
?X: error messages. -- ADO and RAM
?X: Sometimes, particularly on Linux systems, there is a bad library
?X: (e.g. a dangling symlink or incompatible library or a "run-time"
?X: version but not a "development" version of a library).  This test
?X: will catch those sorts of problems too, though how to fix them
```

```
?X: may not be obvious.
?X:
: coherency check
echo " "
echo "Checking your choice of C compiler and flags for coherency..." >&4
$cat > try.c <<'EOF'
#include <stdio.h>
int main() { printf("Ok\n"); return(0); }
EOF
?X: Strip extra blanks in case some of the following variables are empty
set X $cc -o try $optimize $ccflags $ldflags try.c $libs
shift
$cat >try.msg <<'EOM'
I've tried to
 compile and run the following simple program:

EOM
$cat try.c >> try.msg

$cat >> try.msg <<EOM

I used the command:

 $*
 $run ./try

and I got the following output:

EOM
dflt=y
?X: Use "sh -c" to avoid error messages tagged with leading "Configure:".
?X: We need to try the resulting executable, because cc might yield a 0 status
?X: even when ld failed, in which case the executable will not run properly,
?X: if its x bit is set at all...
if $sh -c "$cc -o try $optimize $ccflags $ldflags try.c $libs" >>try.msg 2>&1; then
 if $sh -c "$run ./try " >>try.msg 2>&1; then
  xxx=`$run ./try`
  case "$xxx" in
  "Ok") dflt=n ;;
  *)    echo 'The program compiled OK, but produced no output.' >> try.msg ;;
  esac
 else
  echo "The program compiled OK, but exited with status $?." >>try.msg
  rp="You have a problem.  Shall I abort Configure"
  dflt=y
 fi
else
 echo "I can't compile the test program." >>try.msg
```

```
 rp="You have a BIG problem.  Shall I abort Configure"
 dflt=y
fi
case "$dflt" in
y)
 $cat
 try.msg >&4
?X: using -K will prevent default aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
  echo "(The supplied flags or libraries might be incorrect.)"
  ;;
 *) dflt=n;;
 esac
 echo " "
 . ./myread
 case "$ans" in
 n*|N*) ;;
 *) echo "Ok.  Stopping Configure." >&4
  exit 1
  ;;
 esac
 ;;
n) echo "OK, that should do.";;
esac
$rm_try gcctest gcctest.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ccflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Inhdr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Inhdr.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:01:31  ram
?RCS: patch54: deleted tabs that caused some /bin/sh to core dump (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:55:01  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:05:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks wether a set of header files exists or not.
?X: If the first header is not
 found, the function tries to locate
?X: the next header, and so on, until one is found or there is no
?X: more header in the list.
?X:
?X: To use it, say:
?X: set header i_header [ header2 i_header2 ... ]
?X: eval $inhdr
?X:
?MAKE:Inhdr: test Findhdr Whoa
?MAKE: -pick add $@ %<
?LINT:define inhdr
?V:inhdr
?S:inhdr:
?S: This shell variable is used internally by Configure to check
?S: wether a set of headers exist or not. A typical use is:
?S:  set header i_header [ header2 i_header2 ... ]
?S:  eval $inhdr
?S: That will print a message, saying wether header was found or not
?S: and set i_header* accordingly. If the first header is not found,
?S: we try the next one, until the list is empty or one is found.
?S:.
?T:xxx xxf var td xxnf tu yyy instead was cont
: define an alternate in-header-list? function
inhdr='echo " "; td=$define; tu=$undef; yyy=$@;
cont=true; xxf="echo \"<\$1> found.\" >&4";
case $# in 2) xxnf="echo \"<\$1> NOT found.\" >&4";;
*) xxnf="echo \"<\$1> NOT found, ...\" >&4";;
esac;
case
 $# in 4) instead=instead;; *) instead="at last";; esac;
while $test "$cont"; do
 xxx=`./findhdr $1`
 var=$2; eval "was=\$$2";
 if $test "$xxx" && $test -r "$xxx";
 then eval $xxf;
?X: Next line shifted left 1 tabstop to avoid sh core dump on MachTen 2.1.1.
 eval "case \"\$$var\" in $undef) . ./whoa; esac"; eval "$var=\$td";
  cont="";
 else eval $xxnf;
?X: Likewise, the next line has been shifted left 1 tabstop -- ADO, 08/03/95
 eval "case \"\$$var\" in $define) . ./whoa; esac"; eval "$var=\$tu"; fi;
 set $yyy; shift; shift; yyy=$@;
```

```
 case $# in 0) cont="";;
 2) xxf="echo \"but I found <\$1> $instead.\" >&4";
  xxnf="echo \"and I did not find <\$1> either.\" >&4";;
 *) xxf="echo \"but I found <\$1\> instead.\" >&4";
  xxnf="echo \"there is no <\$1>, ...\" >&4";;
 esac;
done;
?X: Remaining values are set to 'undef'
while $test "$yyy";
do set $yyy; var=$2; eval "was=\$$2";
 eval "case \"\$$var\" in $define) . ./whoa; esac"; eval "$var=\$tu";
 set $yyy; shift; shift; yyy=$@;
done'
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Inhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: orderlib.U,v 3.0.1.4 1997/02/28 16:18:18 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: orderlib.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:18:18  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS: patch61: now uses the ar located by Loc.U
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:33:04  ram
?RCS: patch45: allows hint files to specify their own value for 'ranlib'
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:26:48  ram
?RCS: patch36: now performs a real small compile for accurate
 checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:31:17  ram
?RCS: patch32: use cc variable instead of hardwired 'cc' in 1st compile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:orderlib ranlib: Loc ar cat test rm +cc +ccflags +ldflags +libs i_stdlib _a _o run
?MAKE: -pick add $@ %<
?S:orderlib:
?S: This variable is "true" if the components of libraries must be ordered
?S: (with `lorder $* | tsort`) before placing them in an archive.  Set to
?S: "false" if ranlib or ar can generate random libraries.
?S:.
?S:ranlib:
?S: This variable is set to the pathname of the ranlib program, if it is
?S: needed to generate random libraries.  Set to ":" if ar can generate
?S: random libraries or if random libraries are not supported
?S:.
?F:!foobar
: see if ar generates random libraries by itself
echo " "
echo "Checking how to generate random libraries on your machine..." >&4
?X: Some systems (like MIPS) complain when running
 ar... Others like Ultrix
?X: need an explicit 'ar ts' to add the table of contents.
?X: Still others like Linux run ar ts successfully, but still need ranlib.
?X: This set of tests seems the minimum necessary to check out Linux.
?X: We need to explicitly put the entries in out-of-order so that Sun's ld
?X: will fail.  (Otherwise it complains, but gives an exit status of 0.)
echo 'int bar1() { return bar2(); }' > bar1.c
echo 'int bar2() { return 2; }' > bar2.c
$cat > foo.c <<EOP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() { printf("%d\n", bar1()); exit(0); }
EOP
$cc $ccflags -c bar1.c >/dev/null 2>&1
$cc $ccflags -c bar2.c >/dev/null 2>&1
$cc $ccflags -c foo.c >/dev/null 2>&1
$ar rc bar$_a bar2$_o bar1$_o >/dev/null 2>&1
if $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
 echo "$ar appears to generate random libraries itself."
 orderlib=false
 if [ "X$ranlib" = "X" ]; then
     ranlib=":"
 fi
elif
 $ar s bar$_a >/dev/null 2>&1 &&
 $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
  echo "a table of contents needs to be added with '$ar s'."
```

```
  orderlib=false
  ranlib="$ar s"
elif $ar ts bar$_a >/dev/null 2>&1 &&
 $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
  echo "a table of contents needs to be added with '$ar ts'."
  orderlib=false
  ranlib="$ar ts"
else
?X: Allow hints to specify their own ranlib "script". For instance, on
?X: some NeXT machines, the timestamp put by ranlib is not correct, and this
?X: may raise tedious recompiles for nothing. Therefore, NeXT may add the
?X: ranlib='sleep 5; /bin/ranlib' line in their hints to "fix" that.
?X: (reported by Andreas Koenig <k@franz.ww.tu-berlin.de>)
 case "$ranlib" in
 :) ranlib=";;
 ")
  ranlib=`./loc ranlib X /usr/bin /bin /usr/local/bin`
  $test -f $ranlib || ranlib="
  ;;
 esac
 if $test -n "$ranlib";
 then
  echo "your system has '$ranlib'; we'll use that."
  orderlib=false
 else
  echo "your system doesn't seem to support random libraries"
  echo "so we'll use lorder and tsort to order the libraries."
  orderlib=true
  ranlib=":"
 fi
fi
$rm -f foo* bar*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/orderlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlnbuf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setlnbuf.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:57  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_setlinebuf: Inlibc
?MAKE: -pick add $@ %<
?S:d_setlinebuf:
?S: This variable conditionally defines the HAS_SETLINEBUF symbol, which
?S: indicates to the C program that the setlinebuf() routine is available
?S: to change stderr or stdout from block-buffered or unbuffered
 to a
?S: line-buffered mode.
?S:.
?C:HAS_SETLINEBUF :
?C: This symbol, if defined, indicates that the setlinebuf routine is
?C: available to change stderr or stdout from block-buffered or unbuffered
?C: to a line-buffered mode.
?C:.
?H:#$d_setlinebuf HAS_SETLINEBUF  /**/
?H:.
?LINT:set d_setlinebuf
: see if setlinebuf exists
set setlinebuf d_setlinebuf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setlnbuf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mailer.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mailer.U,v $
?RCS: Revision 3.0.1.3  1995/01/11  15:32:11  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:10:04  ram
?RCS: patch23: ensure full path value is used for rmail also
?RCS:
```

```
?RCS: Revision 3.0.1.1  1994/01/24  14:14:18  ram
?RCS: patch16: now use _sendmail vars and friends for portability issues
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:10  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:mailer: test cat rmail mail smail sendmail Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:mailer:
?S: This variable contains the full pathname of a reasonable mailer.
?S: By reasonable, we mean some program which can understand internet
?S: addresses or at least forward them to some internet router. This
?S: mailer should be invoked as "mailer [options] recipients <mail".
?S:.
: determine the name of a reasonable mailer
case "$mailer" in
")
 if $test -f "$sendmail"; then
  dflt="$sendmail"
 elif $test -f "$smail"; then
  dflt="$smail"
 elif $test -f "$rmail"; then
  dflt="$rmail"
 elif $test -f /bin/mail; then
  dflt=/bin/mail
 else
  dflt=$mail
 fi
 ;;
*)  dflt="$mail";;
esac
$cat <<EOM

I need the full pathname of the program used to deliver mail on your system.
A typical answer would be /usr/lib/sendmail or /bin/rmail, but you may choose
any other program, as long as it can be fed from standard input and will
honour any user-supplied headers.

EOM
fn=f
rp='Mail
 transport agent to be used?'
. ./getfile
mailer="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mailer.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysmode.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysmode: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysmode:
?S: This variable conditionally defines the I_SYSMODE symbol,
?S: and indicates whether a C program should include <sys/mode.h>.
?S:.
?C:I_SYSMODE:
?C: This symbol, if defined, indicates that <sys/mode.h> exists and
?C: should be included.
?C:.
?H:#$i_sysmode I_SYSMODE  /**/
?H:.
?LINT:set i_sysmode
: see if this is a sys/mode.h system
set sys/mode.h i_sysmode
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysmode.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_wchar: Inhdr
?MAKE: -pick add $@ %<
?S:i_wchar:
?S: This variable conditionally defines the I_WCHAR symbol,
?S: that indicates whether a C program may include <wchar.h>.
?S:.
?C:I_WCHAR:
?C: This symbol, if defined, indicates to the C program that <wchar.h>
```

```
?C: is available for inclusion
?C:.
?H:#$i_wchar   I_WCHAR /**/
?H:.
?LINT:set i_wchar
: see if wchar.h is present
set wchar.h i_wchar
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_wchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_copysignl: Inlibc
?MAKE: -pick add $@ %<
?S:d_copysignl:
?S: This variable conditionally defines the HAS_COPYSIGNL symbol, which
?S: indicates to the C program that the copysignl() routine is available.
?S: If aintl is also present we can emulate modfl.
?S:.
?C:HAS_COPYSIGNL:
?C: This symbol, if defined, indicates that the copysignl routine is
?C: available.  If aintl is also present we can emulate modfl.
?C:.
?H:#$d_copysignl HAS_COPYSIGNL  /**/
?H:.
?LINT:set d_copysignl
: see if copysignl exists
set copysignl d_copysignl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_copysignl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_truncate.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_truncate.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_truncate: Inlibc
?MAKE: -pick add $@ %<
?S:d_truncate:
?S: This variable conditionally defines HAS_TRUNCATE if truncate() is
?S: available to truncate files.
?S:.
?C:HAS_TRUNCATE (TRUNCATE):
?C: This symbol, if defined, indicates that the truncate routine is
?C: available to truncate files.
?C:.
?H:#$d_truncate HAS_TRUNCATE /**/
?H:.
?LINT:set
 d_truncate
: see if truncate exists
set truncate d_truncate
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_truncate.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Null.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Null.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit ends up producing shell code to set all variables to ".  This
?X: probably isn't necessary, but I'm paranoid.  About certain things.
?X:
```

```
?MAKE:Null: Head
?MAKE: -pick add.Null $@ %<

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Null.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: Init.U,v 3.0.1.1 1994/10/31 09:45:59 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Init.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:45:59  ram
?RCS: patch44: removed Options from MAKE to prevent Init overrides
?RCS: patch44: option processing now done after Myinit thanks to new Begin.U
?RCS: patch44: moved "Beginning of configuration questions" to Begin.U
?RCS: patch44: moved signal trapping instruction to Begin.U as well
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file
 initializes certain default variables used by Configure.  They
?X: may be overridden or added to by definitions in Myinit.U.
?X:
?MAKE:Init eunicefix: Null
?MAKE: -pick add $@ %<
?MAKE: -pick weed $@ ./Init
?S:eunicefix:
?S: When running under Eunice this variable contains a command which will
?S: convert a shell script to the proper form of text file for it to be
?S: executable by the shell.  On other systems it is a no-op.
?S:.
?V:define undef smallmach:rmlist
?X:
?X: Throughout the units, one may make use of $define and $undef to reference
?X: a defined symbol or an undefined one. There is no need to add them in
?X: the dependency line since this unit makes them visible via ?V:, and
?X: everyone inherits from those symbols since by convention Init.U is the
?X: root dependency.
?X:
```

```
?LINT:extern DJGPP
?LINT:extern _exe
?LINT:change _exe
?LINT:extern is_os2
: Detect odd OSs
define='define'
undef='undef'
smallmach='pdp11 i8086 z8000 i80286 iAPX286'
rmlist=''

: We must find out about
 Eunice early
eunicefix=':'
if test -f /etc/unixtovms; then
 eunicefix=/etc/unixtovms
fi
if test -f /etc/unixtovms.exe; then
 eunicefix=/etc/unixtovms.exe
fi

: Set executable suffix now -- needed before hints available
if test -f "/libs/version.library"; then
: Amiga OS
   _exe=""
elif test -f "/system/gnu_library/bin/ar.pm"; then
: Stratus VOS
   _exe=".pm"
elif test -n "$DJGPP"; then
: DOS DJGPP
   _exe=".exe"
elif test -f /kern/cookiejar; then
: MiNT
   _exe=""
elif test -d c:/. -o -n "$is_os2" ; then
: OS/2 or cygwin
   _exe=".exe"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Init.U
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```
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```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gidsize: Myread Typedef gidtype Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:gidsize:
?S: This variable contains the size of a gidtype in bytes.
?S:.
?C:Gid_t_size:
?C: This symbol holds the size of a Gid_t in bytes.
?C:.
?H:#define Gid_t_size $gidsize  /* GID size */
?H:.
?T:yyy zzz
?F:!try
: Check the size of GID
echo " "
case "$gidtype" in
*_t) zzz="$gidtype" ;;
*)   zzz="gid"  ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($gidtype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") gidsize=4
  echo "(I can't execute the test program--guessing $gidsize.)" >&4
  ;;
 *) gidsize=$yyy
  echo "Your $zzz is $gidsize bytes long."
  ;;
 esac
else
 gidsize=4
```

```
 echo "(I can't compile the test program--guessing $gidsize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidsize.U
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```
?RCS: $Id: libs.U,v 3.0.1.6 1997/02/28 16:09:11 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: libs.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:09:11  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.5  1995/07/25  14:12:05  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  16:24:22  ram
?RCS: patch36: removed old broken thislib/thatlib processing (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:05:44  ram
?RCS: patch30: code cleanup with if/elif by ADO and RAM
?RCS: patch30:
 undone patch23 for libswanted default setting
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:08:45  ram
?RCS: patch23: now includes ordered default libswanted variable (ADO)
?RCS: patch23: major cleanup for library lookups (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:31  ram
?RCS: patch6: added default for libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libs ignore_versioned_solibs libsfound libsfiles libsdirs libspath: \
 test cat Myread Oldconfig Loc libpth package xlibpth so _a \
 usesocks sed uselongdouble usequadmath
?MAKE: -pick add $@ %<
?S:libs:
?S: This variable holds the additional libraries we want to use.
```

```
?S: It is up to the Makefile to deal with it.  The list can be empty.
?S:.
?S:libsfound:
?S: This variable holds the full pathnames of the libraries
?S: we found and accepted.
?S:.
?S:libsfiles:
?S: This variable holds the filenames aka basenames of the libraries
?S: we found and accepted.
?S:.
?S:libsdirs:
?S: This
 variable holds the directory names aka dirnames of the libraries
?S: we found and accepted, duplicates are removed.
?S:.
?S:libspath:
?S: This variable holds the directory names probed for libraries.
?S:.
?S:ignore_versioned_solibs:
?S: This variable should be non-empty if non-versioned shared
?S: libraries (libfoo.so.x.y) are to be ignored (because they
?S: cannot be linked against).
?S:.
?T:xxx yyy thislib thisdir libswanted libstyle
?D:libs=''
?X:
?X: This order is chosen so that libraries  -lndir, -ldir, -lucb, -lbsd,
?X: -lBSD, -lPW, and -lx only get used if there are unresolved
?X: routines at link time.  Usually, these are backwards compatibility
?X: libraries, and may not be as reliable as the standard c library.
?X:
?X: The -lsocket -linet -lnsl order has been reported to be necessary
?X: for at least one SVR4 implementation.
?X: -lc must proceed -lucb or -lbsd for most Solaris applications.
?X: -lc_s proceeds -lc so we pick up the shared library version,
 if
?X: it is available.
?X:
?X: The ordering of c, posix, and cposix is a guess and almost
?X: certainly wrong on about half of all systems.
?X:
?X: Set proper libswanted in your private Myinit.U if needed.
?X:
?X:: default ordered library list
?X:libswanted='net socket inet bind nsl nm sdbm gdbm ndbm dbm malloc dl'
?X:libswanted="$libswanted dld sun m c_s c posix cposix ndir dir ucb"
?X:libswanted="$libswanted bsd BSD PW x"
?X:
```

```
?INIT:: default library list
?INIT:libswanted="
?INIT:: some systems want to use only the non-versioned libso:s
?INIT:ignore_versioned_solibs="
?LINT:extern usecbacktrace
?LINT:extern libscheck
?LINT:extern p
?LINT:use uselongdouble
: Looking for optional libraries
echo " "
echo "Checking for optional libraries..." >&4
case "$libs" in
' '|'') dflt='';;
*) dflt="$libs";;
esac
case "$libswanted" in
'') libswanted='c_s';;
esac
?X: libsocks has nasty naming scheme.
?X: This does not work if somebody wants SOCKS 4.
case "$usesocks" in
"$define") libswanted="$libswanted
 socks5 socks5_sh" ;;
esac
case "$usecbacktrace" in
"$define") libswanted="$libswanted bfd" ;;
esac
case "$usequadmath" in
"$define") libswanted="$libswanted quadmath" ;;
esac
libsfound="
libsfiles="
libsdirs="
libspath="
for thisdir in $libpth $xlibpth; do
 test -d $thisdir && libspath="$libspath $thisdir"
done
for thislib in $libswanted; do
 for thisdir in $libspath; do
    xxx=''
    if $test ! -f "$xxx" -a "X$ignore_versioned_solibs" = "X"; then
  xxx=`ls $thisdir/lib$thislib.$so.[0-9] 2>/dev/null|sed -n '$p'`
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
  xxx=`ls $thisdir/lib$thislib.[0-9].$so 2>/dev/null|sed -n '$p'`
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
    fi
```

```
   if test ! -f "$xxx"; then
 xxx=$thisdir/lib$thislib.$so
       $test -f "$xxx" && eval $libscheck
 $test -f "$xxx" && libstyle=shared
   fi
   if test ! -f "$xxx"; then
 xxx=$thisdir/lib$thislib$_a
       $test -f "$xxx"
&& eval $libscheck
 $test -f "$xxx" && libstyle=static
   fi
   if test ! -f "$xxx"; then
 xxx=$thisdir/$thislib$_a
       $test -f "$xxx" && eval $libscheck
 $test -f "$xxx" && libstyle=static
   fi
   if test ! -f "$xxx"; then
 xxx=$thisdir/lib${thislib}_s$_a
       $test -f "$xxx" && eval $libscheck
 $test -f "$xxx" && libstyle=static
 $test -f "$xxx" && thislib=${thislib}_s
   fi
   if test ! -f "$xxx"; then
 xxx=$thisdir/Slib$thislib$_a
       $test -f "$xxx" && eval $libscheck
 $test -f "$xxx" && libstyle=static
   fi
   if $test -f "$xxx"; then
 case "$libstyle" in
 shared) echo "Found -l$thislib (shared)." ;;
 static) echo "Found -l$thislib." ;;
 *)      echo "Found -l$thislib ($libstyle)." ;;
 esac
 case " $dflt " in
 *"-l$thislib "*);;
 *) dflt="$dflt -l$thislib"
               libsfound="$libsfound $xxx"
               yyy=`basename $xxx`
               libsfiles="$libsfiles $yyy"
               yyy=`echo $xxx|$sed -e
"s%/$yyy\\$%%"`
               case " $libsdirs " in
               *" $yyy "*) ;;
               *) libsdirs="$libsdirs $yyy" ;;
               esac
   ;;
 esac
 break
```

```
    fi
 done
 if $test ! -f "$xxx"; then
    echo "No -l$thislib."
 fi
done
set X $dflt
shift
dflt="$*"
case "$libs" in
") dflt="$dflt";;
*) dflt="$libs";;
esac
case "$dflt" in
' '|") dflt='none';;
esac

$cat <<EOM

In order to compile $package on your machine, a number of libraries
are usually needed.  Include any other special libraries here as well.
Say "none" for none.  The default list is almost always right.
EOM

echo " "
rp="What libraries to use?"
. ./myread
case "$ans" in
none) libs=' ';;
*) libs="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libs.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sresuproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
```

```
?S:d_sresuproto:
?S: This variable conditionally defines the HAS_SETRESUID_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the setresuid() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SETRESUID_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the setresuid() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
 int setresuid(uid_t ruid, uid_t euid, uid_t suid);
?C:.
?H:#$d_sresuproto HAS_SETRESUID_PROTO /**/
?H:.
?LINT:set d_sresuproto
: see if prototype for setresuid is available
echo " "
set d_sresuproto setresuid $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sresuproto.U
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```
?RCS: $Id: d_tmpnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_tmpnam_r tmpnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_tmpnam_r:
?S: This variable conditionally defines the HAS_TMPNAM_R symbol,
?S: which indicates to the C program that the tmpnam_r()
?S: routine is available.
?S:.
?S:tmpnam_r_proto:
?S: This variable encodes the prototype of tmpnam_r.
?S: It is zero if d_tmpnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_tmpnam_r
?S: is defined.
?S:.
?C:HAS_TMPNAM_R:
```

```
?C: This symbol, if defined, indicates that the tmpnam_r routine
?C: is available to tmpnam re-entrantly.
?C:.
?C:TMPNAM_R_PROTO:
?C: This
 symbol encodes the prototype of tmpnam_r.
?C: It is zero if d_tmpnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_tmpnam_r
?C: is defined.
?C:.
?H:#$d_tmpnam_r HAS_TMPNAM_R /**/
?H:#define TMPNAM_R_PROTO $tmpnam_r_proto /**/
?H:.
?T:try hdrs d_tmpnam_r_proto
: see if tmpnam_r exists
set tmpnam_r d_tmpnam_r
eval $inlibc
case "$d_tmpnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h "
 case "$d_tmpnam_r_proto:$usethreads" in
 ":define") d_tmpnam_r_proto=define
  set d_tmpnam_r_proto tmpnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_tmpnam_r_proto" in
 define)
 case "$tmpnam_r_proto" in
 "|0) try='char* tmpnam_r(char*);'
 ./protochk "$extern_C $try" $hdrs && tmpnam_r_proto=B_B ;;
 esac
 case "$tmpnam_r_proto" in
 "|0) d_tmpnam_r=undef
  tmpnam_r_proto=0
  echo "Disabling tmpnam_r, cannot determine prototype." >&4 ;;
 * ) case "$tmpnam_r_proto" in
  REENTRANT_PROTO*) ;;
  *) tmpnam_r_proto="REENTRANT_PROTO_$tmpnam_r_proto"
 ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "tmpnam_r has no prototype, not using it." >&4 ;;
  esac
  d_tmpnam_r=undef
```

```
  tmpnam_r_proto=0
  ;;
 esac
 ;;
*) tmpnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_tmpnam_r.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_pthread: Inhdr
?MAKE: -pick add $@ %<
?S:i_pthread:
?S: This variable conditionally defines the I_PTHREAD symbol,
?S: and indicates whether a C program should include <pthread.h>.
?S:.
?C:I_PTHREAD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <pthread.h>.
?C:.
?H:#$i_pthread   I_PTHREAD /**/
?H:.
?LINT:set i_pthread
: see if POSIX threads are available
set pthread.h i_pthread
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/i_pthread.U
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```
?RCS: $Id: libyacc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
?RCS: $Log: libyacc.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:09:19  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.3  1994/05/13  15:27:12  ram
?RCS: patch27: added byacc case (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:09:01  ram
?RCS: patch23: now uses full library path instead of -l notation
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:13:49  ram
?RCS: patch16: un-obsoleted this unit for smooth yacc compilations
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libyacc: Loc yacc libpth _a
?MAKE: -pick add $@ %<
?S:libyacc:
?S: This variable contains the argument to pass to the loader in order
?S: to get the yacc library routines.  If there is no yacc or yacc
?S: library, it is null.
?S:.
?T:xxx
: see if we should include -ly
echo " "
case "$yacc" in
*byacc*)
 echo "You are using byacc, so I won't look for a yacc library." >&4
 libyacc=''
 ;;
*yacc)
 xxx=`./loc liby$_a x $libpth`
 case "$xxx" in
 x)
  echo "No yacc library found." >&4
  libyacc=''
  ;;
 *)
  echo "yacc library found in $xxx." >&4
  libyacc="$xxx"
  ;;
```

```
 esac
 ;;
*bison*)
 echo "You are using bison, so I won't look for a yacc library." >&4
 libyacc=''
 ;;
*)
echo "You don't seem to have yacc, so I won't look for the yacc library." >&4
 libyacc=''
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libyacc.U
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```
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?RCS:
?MAKE:d_strlcpy: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_strlcpy:
?S: This variable conditionally defines the HAS_STRLCPY symbol, which
?S: indicates to the C program that the strlcpy () routine is available.
?S:.
?C:HAS_STRLCPY:
?C: This symbol, if defined, indicates that the strlcpy () routine is
?C: available to do string copying.
?C:.
?H:#$d_strlcpy HAS_STRLCPY  /**/
?H:.
?T:d_strlcpy_proto xx1 xx2 xx3 xx4
?LINT:set d_strlcpy
: see if strlcpy exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_strlcpy_proto=''
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_strlcpy_proto strlcpy
 literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
```

```
case "$d_strlcpy_proto" in
   define) # see if strlcpy exists
 set strlcpy d_strlcpy
 eval $inlibc
 ;;
   *)  val=$undef
 set d_strlcpy
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strlcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: AAAAA.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: AAAAA.U,v $
?RCS: Revision 3.0.1.4  1994/06/20  06:50:26  ram
?RCS: patch30: changes from Jarkko Hietaniemi are tagged with JHI
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:01:39  ram
?RCS: patch23: initials for Wayne Davison are now WED
?RCS: patch23: added initials for new unit contributor Andy Dougherty
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:01:09  ram
?RCS: patch16: make metalint shut up on special unit definition for All target
?RCS:
?RCS: Revision
 3.0.1.1  1993/09/13  15:43:57  ram
?RCS: patch10: documents initials used for Wayne Davison's contributions
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this file is to supply the head of the Makefile created
?X: by metaconfig.  For this reason it must be first in alphabetical order.
?X: The leading '+' in front of the unit name is a hint for metalint, since
?X: the use of that special unit name as a "made" unit is legitimate here.
```

```
?X:
?MAKE:+All: Finish
?X:
?X: Throughout the units, the following initials are used to identify comments:
?X:
?X:  HMS: Harlan Stenn
?X:  RAM: Raphael Manfredi
?X:  WED: Wayne Davison (was WAD by mistake--RAM)
?X:  ADO: Andy Dougherty
?X:  JHI: Jarkko Hietaniemi
?X:
?X: Agreed, this is a weird place to document it, but I couldn't find a better
?X: place to do so. I've bet on the curiosity of users, who would probably
?X: want to know what's in this strangely-named file--RAM.
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/AAAAA.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sitecustomize.U,v $
?RCS:
?RCS: Copyright (c) 2005-2006 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_sitecustomize.U,v $
?RCS:
?MAKE:usesitecustomize: Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:usesitecustomize:
?S: This variable is set to true when the user requires a mechanism that
?S: allows the sysadmin to add entries to @INC at runtime.  This variable
?S: being set, makes perl run '$sitelib/sitecustomize.pl' at startup.
?S:.
?C:USE_SITECUSTOMIZE:
?C: This symbol, if defined, indicates that sitecustomize should
?C: be used.
?C:.
?H:?%<:@if USE_SITECUSTOMIZE
?H:?%<:#ifndef USE_SITECUSTOMIZE
?H:?%<:#$usesitecustomize USE_SITECUSTOMIZE  /**/
?H:?%<:#endif
?H:?%<:@end
?H:.
: Check if site customization support was requested
case "$usesitecustomize" in
```

```
  $define|true|[Yy]*)
 usesitecustomize="$define"
 ;;
   *)
 usesitecustomize="$undef"
 ;;
  esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sitecustomize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2006-2007, H.Merijn Brand
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_builtin_choose_expr d_builtin_expect : Compile Setvar cat run rm_try
?MAKE: -pick add $@ %<
?S:d_builtin_choose_expr:
?S: This conditionally defines HAS_BUILTIN_CHOOSE_EXPR, which
?S: indicates that the compiler supports __builtin_choose_expr(x,y,z).
?S: This built-in function is analogous to the "x?y:z" operator in C,
?S: except that the expression returned has its type unaltered by
?S: promotion rules. Also, the built-in function does not evaluate
?S: the expression that was not chosen.
?S:.
?S:d_builtin_expect:
?S: This conditionally
 defines HAS_BUILTIN_EXPECT, which indicates
?S: that the compiler supports __builtin_expect(exp,c).  You may use
?S: __builtin_expect to provide the compiler with branch prediction
?S: information.
?S:.
?C:HAS_BUILTIN_CHOOSE_EXPR:
?C: Can we handle GCC builtin for compile-time ternary-like expressions
?C:.
?C:HAS_BUILTIN_EXPECT:
?C: Can we handle GCC builtin for telling that certain values are more
?C: likely
?C:.
?H:#$d_builtin_expect HAS_BUILTIN_EXPECT /**/
?H:#$d_builtin_choose_expr HAS_BUILTIN_CHOOSE_EXPR /**/
?H:.
?F:!try
```

```
?LINT:set d_builtin_expect d_builtin_choose_expr
: Look for GCC-style __builtin_choose_expr
case "$d_builtin_choose_expr" in
")
   echo " "
   echo "Checking whether your compiler can handle __builtin_choose_expr ..." >&4
   $cat >try.c <<'EOCP'
#include <assert.h>
#include <stdlib.h>
#include <stdio.h>

#define SYRINX(x) __builtin_choose_expr( x, (1056*2), (103*50) )

int main(void) {
   assert( SYRINX(1) == 2112 );
   assert( SYRINX(1) != 5150 );
    assert( SYRINX(0) == 5150 );
   assert( SYRINX(0) != 2112 );
   puts( "All good!" );
   exit(0);
}

EOCP
   set try
   if eval $compile && $run ./try; then
 echo "Your C compiler supports __builtin_choose_expr."
 val="$define"
   else
 echo "Your C compiler doesn't seem to understand __builtin_choose_expr."
 val="$undef"
   fi
;;
*) val="$d_builtin_choose_expr" ;;
esac

set d_builtin_choose_expr
eval $setvar
$rm_try

: Look for GCC-style __builtin_expect
case "$d_builtin_expect" in
")
   echo " "
   echo "Checking whether your compiler can handle __builtin_expect ..." >&4
   $cat >try.c <<'EOCP'
int main(void) {
   int n = 50;
   if ( __builtin_expect(n, 0) ) n = 1;
```

```
  /* Remember shell exit code truth is 0, C truth is non-zero */
  return !(n == 1);
}
EOCP
  set try
  if eval $compile && $run ./try; then
 echo "Your C compiler supports __builtin_expect."
 val="$define"
  else
 echo "Your C compiler doesn't seem to understand __builtin_expect."
 val="$undef"
   fi
  ;;
*) val="$d_builtin_expect" ;;
esac

set d_builtin_expect
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_builtin.U
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```
?RCS: $Id$
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_time.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit finds which "time" include to use. If 'timezone' is used by the
?X: program, we also try to find which header should be included. Eventually,
?X: we look for <sys/select.h> if I_SYSSELECT is used, to get struct timeval.
?X:
?MAKE:i_time i_systime i_systimek timeincl: cat cc ccflags contains rm_try \
 echo n c +i_sysselct Findhdr
?MAKE: -pick add $@ %<
?S:i_time:
?S: This
```

```
 variable conditionally defines I_TIME, which indicates
?S: to the C program that it should include <time.h>.
?S:.
?S:i_systime:
?S: This variable conditionally defines I_SYS_TIME, which indicates
?S: to the C program that it should include <sys/time.h>.
?S:.
?S:i_systimek:
?S: This variable conditionally defines I_SYS_TIME_KERNEL, which
?S: indicates to the C program that it should include <sys/time.h>
?S: with KERNEL defined.
?S:.
?S:timeincl:
?S: This variable holds the full path of the included time header(s).
?S:.
?C:I_TIME (USE_TIME_H):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <time.h>.
?C:.
?C:I_SYS_TIME (I_SYSTIME USE_SYS_TIME_H NO_TIME_WITH_SYS_TIME):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h>.
?C:.
?C:I_SYS_TIME_KERNEL (I_SYSTIMEKERNEL):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h> with KERNEL defined.
?C:.
?H:#$i_time I_TIME  /**/
?H:#$i_systime
 I_SYS_TIME  /**/
?H:#$i_systimek I_SYS_TIME_KERNEL  /**/
?H:.
?W::timezone
?T:xselect flags sysselect s_timeval s_timezone
?LINT:change i_sysselct
: see if we should include time.h, sys/time.h, or both
echo " "
echo "Testing to see if we should include <time.h>, <sys/time.h> or both." >&4
$echo $n "I'm now running the test program...$c"
$cat >try.c <<'EOCP'
#include <sys/types.h>
#ifdef I_TIME
#include <time.h>
#endif
#ifdef I_SYSTIME
#ifdef SYSTIMEKERNEL
#define KERNEL
#endif
```

```
#include <sys/time.h>
#endif
#ifdef I_SYSSELECT
#include <sys/select.h>
#endif
int main()
{
 struct tm foo;
#ifdef S_TIMEVAL
 struct timeval bar;
#endif
#ifdef S_TIMEZONE
 struct timezone tzp;
#endif
 if (foo.tm_sec == foo.tm_sec)
  exit(0);
#ifdef S_TIMEVAL
 if (bar.tv_sec == bar.tv_sec)
  exit(0);
#endif
 exit(1);
}
EOCP
flags=''
@if I_SYSSELECT
if $contains 'timeval.*{' `./findhdr sys/select.h` >/dev/null 2>&1; then
 xselect='-DI_SYSSELECT'
else
 xselect=''
fi
@end
@if timezone
for s_timezone
 in '-DS_TIMEZONE' ''; do
@else
s_timezone=''
@end
?X: Every package is given a try with 'struct timeval'
@if I_SYSSELECT
for sysselect in $xselect ''; do
@else
sysselect=''
@end
for s_timeval in '-DS_TIMEVAL' ''; do
for i_systimek in '' '-DSYSTIMEKERNEL'; do
for i_time in '' '-DI_TIME'; do
for i_systime in '-DI_SYSTIME' ''; do
 case "$flags" in
```

```
 ") $echo $n ".$c"
  if $cc $ccflags \
  $i_time $i_systime $i_systimek $sysselect $s_timeval $s_timezone \
  -o try try.c >/dev/null 2>&1 ; then
   set X $i_time $i_systime $i_systimek $sysselect $s_timeval
   shift
   flags="$*"
   echo " "
   $echo $n "Succeeded with $flags$c"
  fi
  ;;
 esac
done
done
done
done
@if I_SYSSELECT
done
@end
@if timezone
done
@end
timeincl="
echo " "
case "$flags" in
*SYSTIMEKERNEL*) i_systimek="$define"
 timeincl=`./findhdr sys/time.h`
 echo "We'll include <sys/time.h> with KERNEL defined." >&4;;
*) i_systimek="$undef";;
esac
case "$flags" in
*I_TIME*) i_time="$define"
 timeincl=`./findhdr time.h`" $timeincl"
 echo
 "We'll include <time.h>." >&4;;
*) i_time="$undef";;
esac
case "$flags" in
*I_SYSTIME*) i_systime="$define"
 timeincl=`./findhdr sys/time.h`" $timeincl"
 echo "We'll include <sys/time.h>." >&4;;
*) i_systime="$undef";;
esac
@if I_SYSSELECT
case "$flags" in
*I_SYSSELECT*) i_sysselct="$define"
 timeincl=`./findhdr sys/select.h`" $timeincl"
 echo "We'll also include <sys/select.h> to get struct timeval." >&4;;
```

```
*) case "$i_sysselct" in
 ") i_sysselct="$undef";;
 esac
esac
@end
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_localeconv_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_localeconv_l:
?S: This variable conditionally defines the HAS_LOCALECONV_L symbol, which
?S: indicates to the C program that the localeconv_l() routine is available.
?S:.
?C:HAS_LOCALECONV_L:
?C: This symbol, if defined, indicates that the localeconv_l routine is
?C: available to query certain information about a locale.
?C:.
?H:#$d_localeconv_l HAS_LOCALECONV_L  /**/
?H:.
?LINT:set d_localeconv_l
: see if localeconv_l exists
set localeconv_l d_localeconv_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_localeconv_l.U
No license file was found, but licenses were detected in source scan.

* Feel free to modify any of this as the need arises. Note, however,

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/metaconfig.html
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Guess.U,v $
?RCS: Revision 3.0.1.5  1995/07/25  13:37:14  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:53:55  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:14:35  ram
?RCS: patch15: variable d_bsd was not always set properly
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:14  ram
?RCS: patch8: fixed comment which wrongly
 attributed the usrinc symbol
?RCS: patch8: no more ugly messages when no /usr/include/ctype.h
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:37:37  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit hazards some guesses as to what the general nature of the system
?X: is.  The information it collects here is used primarily to establish default
?X: answers to other questions.
?X:
?MAKE:Guess d_eunice d_xenix d_bsd d_linux d_dos d_os2: cat test echo n c \
 contains rm tr Loc eunicefix
?MAKE: -pick add $@ %<
?S:d_eunice:
?S: This variable conditionally defines the symbols EUNICE_SYSTEM, which
?S: alerts the C program that it must deal with ideosyncracies of VMS.
?S:.
?S:d_xenix:
?S: This variable conditionally defines the symbol XENIX_SYSTEM, which alerts
?S: the C program that it runs under Xenix.
?S:.
?S:d_dos:
?S: This symbol conditionally defines the symbol DOS_SYSTEM
```

```
 when running on
?S: DOS with DJGPP or Cygwin.
?S:.
?S:d_os2:
?S: This symbol conditionally defines the symbol OS2_SYSTEM when running on
?S: an OS/2 system.
?S:.
?S:d_bsd:
?S: This symbol conditionally defines the symbol BSD_SYSTEM when running on a
?S: BSD system.
?S:.
?S:d_linux:
?S: This symbol conditionally defines the symbol LINUX_SYSTEM when running
?S: on a Linux system.
?S:.
?C:EUNICE_SYSTEM (EUNICE):
?C: This symbol, if defined, indicates that the program is being compiled
?C: under the EUNICE package under VMS.  The program will need to handle
?C: things like files that don't go away the first time you unlink them,
?C: due to version numbering.  It will also need to compensate for lack
?C: of a respectable link() command.
?C:.
?C:VMS_SYSTEM (VMS):
?C: This symbol, if defined, indicates that the program is running under
?C: VMS.  It is currently only set in conjunction with the EUNICE symbol.
?C:.
?C:XENIX_SYSTEM (XENIX):
?C: This symbol, if defined, indicates that the program
 is running under
?C: Xenix (at least 3.0 ?).
?C:.
?C:DOS_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: DOS with DJGPP.
?C:.
?C:OS2_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: an OS/2 system.
?C:.
?C:BSD_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: a BSD system.
?C:.
?C:LINUX_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: a Linux system.
?C:.
?H:#$d_eunice EUNICE_SYSTEM  /**/
```

```
?H:#$d_eunice VMS_SYSTEM  /**/
?H:#$d_xenix XENIX_SYSTEM  /**/
?H:#$d_dos DOS_SYSTEM  /**/
?H:#$d_os2 OS2_SYSTEM  /**/
?H:#$d_bsd BSD_SYSTEM  /**/
?H:#$d_linux LINUX_SYSTEM  /**/
?H:.
?F:./bsd ./usg ./v7 ./osf1 ./eunice ./xenix ./venix ./dos ./os2 ./gnu ./linux
?T:xxx DJGPP MACHTYPE
: make some quick guesses about what we are up against
echo " "
$echo $n "Hmm...  $c"
echo exit 1 >bsd
echo exit 1 >usg
echo exit 1 >v7
echo exit 1 >osf1
echo exit 1 >eunice
echo
 exit 1 >xenix
echo exit 1 >venix
echo exit 1 >os2
echo exit 1 >gnu
echo exit 1 >linux
echo exit 1 >dos
d_bsd="$undef"
d_linux="$undef"
d_dos="$undef"
d_os2="$undef"
?X:
?X: Do not use 'usrinc', or we get a circular dependency. because
?X: usrinc is defined in usrinc.U, which relies on us...
?X:
$cat /usr/include/signal.h /usr/include/sys/signal.h >foo 2>/dev/null
if test -f /osf_boot || $contains 'OSF/1' /usr/include/ctype.h >/dev/null 2>&1
then
 echo "Looks kind of like an OSF/1 system, but we'll see..."
 echo exit 0 >osf1
elif test `echo abc | $tr a-z A-Z` = Abc ; then
 xxx=`./loc addbib blurfl $pth`
 if $test -f $xxx; then
 echo "Looks kind of like a USG system with BSD features, but we'll see..."
  echo exit 0 >bsd
  echo exit 0 >usg
 else
  if $contains SIGTSTP foo >/dev/null 2>&1 ; then
   echo "Looks kind of like an extended USG system, but we'll see..."
  else
   echo "Looks kind of like a USG system, but we'll see..."
```

```
  fi
  echo exit 0 >usg
 fi
elif $contains SIGTSTP foo >/dev/null
 2>&1 ; then
 echo "Looks kind of like a BSD system, but we'll see..."
 d_bsd="$define"
 echo exit 0 >bsd
elif
 $rm --version 2>/dev/null >foo;
 $contains "Free Software Foundation" foo >/dev/null
then
 xxx=`uname`
 echo exit 0 >gnu
 echo "Looks kind of like a GNU/$xxx system, but we'll see..."
 if $test X$xxx = XLinux; then
  d_linux="$define"
  echo exit 0 >linux
 fi
else
 echo "Looks kind of like a Version 7 system, but we'll see..."
 echo exit 0 >v7
fi
case "$eunicefix" in
*unixtovms*)
 $cat <<'EOI'
There is, however, a strange, musty smell in the air that reminds me of
something...hmm...yes...I've got it...there's a VMS nearby, or I'm a Blit.
EOI
 echo exit 0 >eunice
 d_eunice="$define"
: it so happens the Eunice I know will not run shell scripts in Unix format
 ;;
*)
 echo " "
 echo "Congratulations.  You aren't running Eunice."
 d_eunice="$undef"
 ;;
esac
case "$p_" in
:) ;;
*)
 $cat <<'EOI'
I have the feeling something is not exactly right, however...don't tell me...
EOI
 if
 test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
```

```
  cygwin) echo "hah!... you're running under Cygwin!";;
  *) echo "got it... you're running DOS with DJGPP!";;
  esac
  echo exit 0 >dos
  d_dos="$define"
 else
  $cat <<'EOI'
lemme think...does HAL ring a bell?...no, of course, you're only running OS/2!
EOI
  echo exit 0 >os2
  d_os2="$define"
 fi
 ;;
esac
if test -f /xenix; then
 echo "Actually, this looks more like a XENIX system..."
 echo exit 0 >xenix
 d_xenix="$define"
else
 echo " "
 echo "It's not Xenix..."
 d_xenix="$undef"
fi
chmod +x xenix
$eunicefix xenix
if test -f /venix; then
 echo "Actually, this looks more like a VENIX system..."
 echo exit 0 >venix
else
 echo " "
 if ./xenix; then
  : null
 else
  echo "Nor is it Venix..."
 fi
fi
chmod +x bsd usg v7 osf1 eunice xenix venix dos os2 gnu linux
$eunicefix bsd usg v7 osf1 eunice xenix venix dos os2 gnu linux
$rm -f foo
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Guess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dbl_dig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dbl_dig.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:28  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dbl_dig: Myread contains cat rm Setvar i_limits i_float \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_dbl_dig:
?S: This variable conditionally defines d_dbl_dig if this system's
?S: header files provide DBL_DIG, which is the number of significant
?S: digits
 in a double precision number.
?S:.
?C:HAS_DBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol DBL_DIG, which is the number
?C: of significant digits in a double precision number.  If this
?C: symbol is not defined, a guess of 15 is usually pretty good.
?C:.
?H:#$d_dbl_dig HAS_DBL_DIG  /**/
?H:.
?F:!dbl_dig.c
?LINT:set d_dbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >dbl_dig.c <<EOM
#$i_limits I_LIMITS
#$i_float I_FLOAT
#ifdef I_LIMITS
#include <limits.h>
#endif
#ifdef I_FLOAT
#include <float.h>
#endif
#ifdef DBL_DIG
printf("Contains DBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < dbl_dig.c >dbl_dig.E 2>/dev/null
if $contains 'DBL_DIG' dbl_dig.E >/dev/null 2>&1; then
```

```
 echo "DBL_DIG found." >&4
 val="$define"
else
 echo "DBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f dbl_dig.?
set d_dbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dbl_dig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: perlpath.U,v $
?RCS: Revision 3.0.1.2  1995/09/25  09:17:04  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:33:53  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this unit is to locate perl good enough to construct a #!
?X:
?MAKE:perlpath: Getfile Oldconfig Loc perl
?MAKE: -pick
 add $@ %<
?Y:TOP
?S:perlpath:
?S: This variable contains the eventual value of the PERLPATH symbol,
?S: which contains the absolute location of the perl interpreter.
?S:.
?C:PERLPATH:
?C: This symbol contains the absolute location of the perl interpreter.
?C:.
```

```
?H:#define PERLPATH "$perlpath"  /**/
?H:.
: determine perl absolute location
case "$perlpath" in
")
 if test -f /usr/bin/perl; then
  dflt=/usr/bin/perl
 else
  case "$perl" in
  */*) dflt="$perl";;
  *) dflt=/usr/bin/perl;;
  esac
 fi
 ;;
*)  dflt="$perlpath"
 ;;
esac
echo " "
fn=f~/
rp="Where is perl located on your system?"
. ./getfile
perlpath="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/perlpath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_eofpipe.U,v 3.0.1.1 1994/10/29 16:12:40 ram Exp $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_eofpipe.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:40  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_eofpipe: Compile cat rm Oldconfig Guess echo n c
?MAKE: -pick add $@ %<
?S:d_eofpipe:
?S: This variable conditionally defines the EOFPIPE symbol, which
```

```
?S: indicates to the C program that select will correctly detect
 the EOF
?S: condition when pipe is closed from the other end.
?S:.
?C:EOFPIPE:
?C: This symbol, if defined, indicates that EOF condition will be detected
?C: by the reader of the pipe when it is closed by the writing process.
?C: That is, a select() call on that file descriptor will not block when
?C: only an EOF remains (typical behavior for BSD systems).
?C:.
?H:#$d_eofpipe EOFPIPE  /**/
?H:.
?F:!mpipe
: see if pipe correctly gives the EOF condition
echo " "
case "$d_eofpipe" in
")
 echo "Let's see if your pipes return EOF to select() upon closing..." >&4
 $cat >pipe.c <<'EOP'
int main()
{
 int pd[2];
 int mask;

 pipe(pd);
 if (0 == fork()) {
  close(pd[0]);
  close(pd[1]);
  exit(0);
 }

 close(pd[1]);
 mask = 1 << pd[0];
 alarm(2);
 select(32, &mask, (int *) 0, (int *) 0, (char *) 0);
 if (0 == read(pd[0], &mask, 1))
  exit(0);

 exit(1);
}
EOP
 set pipe
 if eval $compile_ok; then
?X: Use a script to avoid the possible 'alarm call' message
  echo "./pipe || exit 1" > mpipe
  chmod
 +x mpipe
  ./mpipe >/dev/null 2>&1
```

```
  case $? in
  0) d_eofpipe="$define";;
  *) d_eofpipe="$undef";;
  esac
 else
  echo "(The test program did not compile correctly -- Guessing.)"
  if ./bsd; then
   d_eofpipe="$define"
  else
   d_eofpipe="$undef"
  fi
 fi
 case "$d_eofpipe" in
 "$define") echo "Yes, they do.";;
 *) echo "No, they don't! (sigh)";;
 esac
 ;;
*)
 $echo $n "Your pipes $c"
 case "$d_eofpipe" in
 "$define") echo "allow select() to see EOF upon closing.";;
 *) echo "won't let select() see EOF on closing.";;
 esac
 ;;
esac
$rm -f *pipe* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_eofpipe.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_strftime:
?S: This variable conditionally defines the HAS_STRFTIME symbol, which
?S: indicates to the C program that the strftime() routine is available.
?S:.
?C:HAS_STRFTIME:
?C: This symbol, if defined, indicates that the strftime routine is
?C: available to do time formatting.
?C:.
```

```
?H:#$d_strftime HAS_STRFTIME  /**/
?H:.
?LINT:set d_strftime
: see if strftime exists
set strftime d_strftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libpth.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libpth.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:08:49  ram
?RCS: patch61: new loclibpth variable
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:31:30  ram
?RCS: patch45: call ./mips instead of just mips (WED)
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:29:15  ram
?RCS: patch32: added /lib/pa1.1 for HP-UX specially tuned PA-RISC libs (ADO)
?RCS: patch32: fixed information message, making it clearer (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:03:54
  ram
?RCS: patch30: added /usr/shlib to glibpth for shared-only libraries
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:26:57  ram
?RCS: patch27: fixed a typo (libpth -> glibpth)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:07:53  ram
?RCS: patch23: now asks for library directories to be searched (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit initializes the path for C library lookup.
?X:
```

```
?MAKE:libpth glibpth xlibpth plibpth loclibpth incpth: \
 usrinc incpath test cat Myread Oldconfig sysroot osname \
 ccname echo cppstdin awk grep sed rm usecrosscompile
?MAKE: -pick add $@ %<
?S:libpth:
?S: This variable holds the general path (space-separated) used to find
?S: libraries. It is intended to be used by other units.
?S:.
?S:glibpth:
?S: This variable holds the general path (space-separated) used to
?S: find libraries.  It may contain directories that do not exist on
?S: this platform, libpth is the cleaned-up
 version.
?S:.
?S:xlibpth:
?S: This variable holds extra path (space-separated) used to find
?S: libraries on this platform, for example CPU-specific libraries
?S: (on multi-CPU platforms) may be listed here.
?S:.
?S:loclibpth:
?S: This variable holds the paths (space-separated) used to find local
?S: libraries.  It is prepended to libpth, and is intended to be easily
?S: set from the command line.
?S:.
?S:plibpth:
?S: Holds the private path used by Configure to find out the libraries.
?S: Its value is prepend to libpth. This variable takes care of special
?S: machines, like the mips.  Usually, it should be empty.
?S:.
?S:incpth:
?S: This variable must precede the normal include path to get the
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
?S:.
?T: xxx dlist i j croak realpath inclibpth
?LINT:extern incpth
?LINT:change usrinc
?INIT:: change the next line if compiling for Xenix/286 on Xenix/386
?INIT:xlibpth='/usr/lib/386
 /lib/386'
?INIT:: Possible local library directories to search.
?INIT:loclibpth="/usr/local/lib /opt/local/lib /usr/gnu/lib"
?INIT:loclibpth="$loclibpth /opt/gnu/lib /usr/GNU/lib /opt/GNU/lib"
?INIT:
?INIT:: general looking path for locating libraries
?INIT:glibpth="/lib /usr/lib $xlibpth"
?INIT:glibpth="$glibpth /usr/ccs/lib /usr/ucblib /usr/local/lib"
?X: /shlib is for Digital Unix 4.0
```

```
?X: /usr/shlib is for OSF/1 systems.
?INIT:test -f /usr/shlib/libc.so && glibpth="/usr/shlib $glibpth"
?INIT:test -f /shlib/libc.so     && glibpth="/shlib $glibpth"
?INIT:test -d /usr/lib64         && glibpth="$glibpth /lib64 /usr/lib64 /usr/local/lib64"
?INIT:
?INIT:: Private path used by Configure to find libraries.  Its value
?INIT:: is prepended to libpth. This variable takes care of special
?INIT:: machines, like the mips.  Usually, it should be empty.
?INIT:plibpth=''
?INIT:
?X:cppfilter is later used in Findhdr.U, but we not want to expose it to config.h
?T:cppfilter
: Adjust cppfilter for path
 component separator
case "$osname" in
vos) cppfilter="tr '\\\\>' '/' |" ;; # path component separator is >
os2) cppfilter="sed -e 's|\\\\\\\\|/|g' |" ;; # path component separator is \
*)   cppfilter='' ;;
esac

: Use gcc to determine libpth and incpth
# If using gcc or clang, we can get better values for libpth, incpth
# and usrinc directly from the compiler.
# Note that ccname for clang is also gcc.
case "$ccname" in
   gcc)
 realpath=`which realpath 2>/dev/null | sed 's/no realpath in.*//'`
 $echo 'extern int foo;' > try.c
 set X `$cppstdin -v try.c 2>&1 | $awk '/^#include </,/^End of search /'|$cppfilter $grep '/include'`
 shift
 inclibpth=''
 if $test $# -gt 0; then
     for i in $*; do
  case $realpath in
      */realpath) i=`$realpath $i` ;;
  esac
  incpth="$incpth $i"
  j="`$echo $i | $sed 's,/include[^/]*,/lib,'`"
  if $test -d $j; then
      inclibpth="$inclibpth $j"
  fi
     done
     incpth="`$echo $incpth | $sed 's/^ //'`"
     for xxx in $inclibpth $loclibpth $plibpth
 $glibpth; do
  if $test -d $xxx; then
      case $realpath in
   */realpath) xxx=`$realpath $xxx` ;;
```

```
      esac
      case " $libpth " in
      *" $xxx "*) ;;
      *) libpth="$libpth $xxx";;
      esac
  fi
    done
    libpth="`$echo $libpth | $sed 's/^ //'`"
 fi
 $rm -f try.c
 case "$usrinc" in
 ") for i in $incpth; do
  if $test -f $i/errno.h -a -f $i/stdio.h -a -f $i/time.h; then
      usrinc="$i"
      break
  fi
    done
    ;;
 esac

 case "$usecrosscompile" in
 $define|true|[yY]*)
    case "$incpth" in
  ") echo "Incpth not defined." >&4; croak=y ;;
  *)  echo "Using incpth '$incpth'." >&4 ;;
    esac
    case "$libpth" in
  ") echo "Libpth not defined." >&4; croak=y ;;
  *)  echo "Using libpth '$libpth'." >&4 ;;
    esac
    case "$usrinc" in
  ") echo "Usrinc not defined." >&4; croak=y ;;
  *)  echo "Using usrinc $usrinc." >&4 ;;
    esac
    case "$croak" in
  y)
  if test "X$sysroot" = X; then
      echo "Cannot continue, aborting." >&4; exit 1
  else

    echo "Cross-compiling using sysroot $sysroot, failing to guess inc/lib paths is not fatal" >&4
  fi
  ;;
    esac
    ;;
 esac
   ;;
esac
```

```
: Default value for incpth is just usrinc
case "$incpth" in
") incpth="$usrinc";;
esac

: Set private lib path
case "$plibpth" in
") if ./mips; then
?X: on mips, we DO NOT want /lib, and we want $incpath/usr/lib
 plibpth="$incpath/usr/lib $sysroot/usr/local/lib $sysroot/usr/ccs/lib"
   fi;;
esac
case "$libpth" in
' ') dlist=";;
") dlist="$loclibpth $plibpth $glibpth";;
*) dlist="$libpth";;
esac

: Now check and see which directories actually exist, avoiding duplicates
for xxx in $dlist
do
   if $test -d $xxx; then
  case " $libpth " in
  *" $xxx "*) ;;
  *) libpth="$libpth $xxx";;
  esac
   fi
done
$cat <<'EOM'

Some systems have incompatible or broken versions of libraries.  Among
the directories listed in the question below, please remove any you
know not to be holding relevant libraries, and add any that are needed.
Say "none" for none.

EOM

if
 test "X$sysroot" != X; then
   $cat <<EOM
You have set sysroot to $sysroot, please supply the directories excluding sysroot

EOM
fi

case "$libpth" in
") dflt='none';;
```

```
*)
?X: strip leading space
 set X $libpth
 shift
 dflt=${1+"$@"}
 ;;
esac
rp="Directories to use for library searches?"
. ./myread
case "$ans" in
none) libpth=' ';;
*) libpth="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libpth.U
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```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:ivdformat uvuformat uvoformat uvxformat uvXUformat \
 nvEUformat nvFUformat nvGUformat \
 nveformat nvfformat nvgformat: \
 ivsize longsize intsize shortsize \
 sPRId64 sPRIu64 sPRIo64 sPRIx64 sPRIXU64 \
 uselongdouble d_longdbl usequadmath d_PRIgldbl \
 sPRIEUldbl sPRIFUldbl sPRIGUldbl sPRIeldbl sPRIfldbl sPRIgldbl \
 test echo
?MAKE: -pick add $@ %<
?S:ivdformat:
?S: This variable contains the format string used for printing
?S: a Perl IV as a signed decimal integer.
?S:.
?S:uvuformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned decimal integer.
?S:.
?S:uvoformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned
 octal integer.
?S:.
?S:uvxformat:
```

?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned hexadecimal integer in lowercase abcdef.
?S:.
?S:uvXUformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned hexadecimal integer in uppercase ABCDEF.
?S:.
?S:nveformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %e-ish floating point format.
?S:.
?S:nvfformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %f-ish floating point format.
?S:.
?S:nvgformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %g-ish floating point format.
?S:.
?S:nvEUformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %E-ish floating point format.
?S:.
?S:nvFUformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %F-ish floating point format.
?S:.
?S:nvGUformat:
?S: This
variable contains the format string used for printing
?S: a Perl NV using %G-ish floating point format.
?S:.
?C:IVdf:
?C: This symbol defines the format string used for printing a Perl IV
?C: as a signed decimal integer.
?C:.
?C:UVuf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned decimal integer.
?C:.
?C:UVof:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned octal integer.
?C:.
?C:UVxf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned hexadecimal integer in lowercase abcdef.
?C:.

```
?C:UVXf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned hexadecimal integer in uppercase ABCDEF.
?C:.
?C:NVef:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %e-ish floating point format.
?C:.
?C:NVff:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %f-ish floating point
 format.
?C:.
?C:NVgf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %g-ish floating point format.
?C:.
?C:NVEf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %E-ish floating point format.
?C:.
?C:NVFf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %F-ish floating point format.
?C:.
?C:NVGf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %G-ish floating point format.
?C:.
?H:#define IVdf  $ivdformat  /**/
?H:#define UVuf  $uvuformat  /**/
?H:#define UVof  $uvoformat  /**/
?H:#define UVxf  $uvxformat  /**/
?H:#define UVXf  $uvXUformat  /**/
?H:#define NVef  $nveformat  /**/
?H:#define NVff  $nvfformat  /**/
?H:#define NVgf  $nvgformat  /**/
?H:#define NVEf  $nvEUformat  /**/
?H:#define NVFf  $nvFUformat  /**/
?H:#define NVGf  $nvGUformat  /**/
?H:.
: Check format strings for internal types
echo " "
$echo "Checking the format strings to be used for Perl's
 internal types..." >&4

if $test X"$ivsize" = X8; then
 ivdformat="$sPRId64"
```

```
 uvuformat="$sPRIu64"
 uvoformat="$sPRIo64"
 uvxformat="$sPRIx64"
 uvXUformat="$sPRIXU64"
else
 if $test X"$ivsize" = X"$longsize"; then
  ivdformat="'ld'"
  uvuformat="'lu'"
  uvoformat="'lo'"
  uvxformat="'lx'"
  uvXUformat="'lX'"
 else
  if $test X"$ivsize" = X"$intsize"; then
   ivdformat="'d'"
   uvuformat="'u'"
   uvoformat="'o'"
   uvxformat="'x'"
   uvXUformat="'X'"
  else
   : far out
   if $test X"$ivsize" = X"$shortsize"; then
    ivdformat="'hd'"
    uvuformat="'hu'"
    uvoformat="'ho'"
    uvxformat="'hx'"
    uvXUformat="'hX'"
   fi
  fi
 fi
fi

if $test X"$usequadmath" = X"$define"; then
   nveformat="'Qe'"
   nvfformat="'Qf'"
   nvgformat="'Qg'"
   nvEUformat="'QE'"
   nvFUformat="'QF'"
   nvGUformat="'QG'"
else
   if $test X"$uselongdouble" = X"$define" -a X"$d_longdbl" = X"$define" -a X"$d_PRIgldbl" = X"$define"; then
 nveformat="$sPRIeldbl"
 nvfformat="$sPRIfldbl"
 nvgformat="$sPRIgldbl"
 nvEUformat="$sPRIEUldbl"
 nvFUformat="$sPRIFUldbl"
 nvGUformat="$sPRIGUldbl"
    else
 nveformat="'e'"
```

```
 nvfformat="'f'"
 nvgformat="'g'"
 nvEUformat="'E'"
 nvFUformat="'F'"
 nvGUformat="'G'"
   fi
fi

case "$ivdformat" in
") echo "$0: Fatal: failed to find format strings, cannot continue." >&4
   exit 1
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlxvf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ipc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: ipc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ipc serve_shm serve_msg serve_inet_udp serve_inet_tcp serve_unix_udp \
 serve_unix_tcp: test Myread Oldconfig d_socket d_msg d_shm d_sem
?MAKE: -pick add $@ %<
?LINT:use d_msg d_sem
?S:ipc:
?S: This variable holds the type of IPC service we'll be using.  Values
?S: include "ip", "shm", "msg", "cms" and "os9".  We don't worry about
?S: cms or os9
 here, because Configure doesn't run in those places--HMS.
?S:.
?S:serve_shm:
?S: This variable controls the definition of SERVE_SHM, which tells the
?S: C program to use USG shared memory for IPC.
?S:.
?S:serve_msg:
?S: This variable controls the definition of SERVE_MSG, which tells the
```

```
?S: C program to use USG message queues for IPC.
?S:.
?S:serve_inet_udp:
?S: This variable controls the definition of SERVE_INET_UDP, which tells
?S: the C program to enable InterNet-domain UDP support for IPC.
?S:.
?S:serve_inet_tcp:
?S: This variable controls the definition of SERVE_INET_TCP, which tells
?S: the C program to enable InterNet-domain TCP support for IPC.
?S:.
?S:serve_unix_udp:
?S: This variable controls the definition of SERVE_UNIX_UDP, which tells
?S: the C program to enable Unix-domain UDP support for IPC.
?S:.
?S:serve_unix_tcp:
?S: This variable controls the definition of SERVE_UNIX_TCP, which tells
?S: the C program to enable Unix-domain TCP support for IPC.
?S:.
?C:SERVE_SHM:
?C: If
 defined, tells the C program to use USG shared memory for IPC.
?C:.
?C:SERVE_MSG:
?C: If defined, tells the C program to use USG message queues for IPC.
?C:.
?C:SERVE_INET_UDP:
?C: If defined, tells the C program to enable InterNet-domain UDP
?C: support for IPC.
?C:.
?C:SERVE_INET_TCP:
?C: If defined, tells the C program to enable InterNet-domain TCP
?C: support for IPC.
?C:.
?C:SERVE_UNIX_UDP:
?C: If defined, tells the C program to enable Unix-domain UDP
?C: support for IPC.
?C:.
?C:SERVE_UNIX_TCP:
?C: If defined, tells the C program to enable Unix-domain TCP
?C: support for IPC.
?C:.
?H:#$serve_shm SERVE_SHM /**/
?H:#$serve_msg SERVE_MSG /**/
?H:#$serve_inet_udp SERVE_INET_UDP /**/
?H:#$serve_inet_tcp SERVE_INET_TCP /**/
?H:#$serve_unix_udp SERVE_UNIX_UDP /**/
?H:#$serve_unix_tcp SERVE_UNIX_TCP /**/
?H:.
```

```
?X: FIXME -- RAM
?INIT:serve_shm="
?INIT:serve_msg="$undef"
?INIT:serve_inet_udp="
?INIT:serve_inet_tcp="
?INIT:serve_unix_udp="
?INIT:serve_unix_tcp="
: get IPC mechanism
echo
 " "
ipc="
while $test -z "$ipc"
do
 if $test "$ipc" != "shm" -a "$d_socket" = "$define"; then
  ipc="
  if $test "$serve_inet_udp" = "$undef"; then
   dflt=n
  else
   dflt=y
  fi
  rp='Provide InterNet-domain UDP service?'
  . ./myread
  dflt="
  case "$ans" in
  n*) serve_inet_udp="$undef";;
  *)
   serve_inet_udp="$define"
   ipc='ip'
   ;;
  esac

  if $test "$serve_inet_tcp" = "$define"; then
   dflt=y
  else
   dflt=n
  fi
  rp='Provide InterNet-domain TCP service?'
  . ./myread
  dflt="
  case "$ans" in
  n*) serve_inet_tcp="$undef";;
  *)
   serve_inet_tcp="$define"
   ipc='ip'
   ;;
  esac

  if $test "$serve_unix_udp" = "$define"; then
```

```
  dflt=y
 else
  dflt=n
 fi
 rp='Provide Unix-domain UDP service?'
 . ./myread
 dflt=''
 case "$ans" in
 n*) serve_unix_udp="$undef";;
 *)
  serve_unix_udp="$define"
  ipc='ip'
  ;;
 esac

 if $test "$serve_unix_tcp" = "$define"; then
  dflt=y
 else
  dflt=n
 fi
 rp='Provide Unix-domain TCP service?'
 . ./myread
 dflt=''
 case
"$ans" in
 n*) serve_unix_tcp="$undef";;
 *)
  serve_unix_tcp="$define"
  ipc='ip'
  ;;
 esac
else
 serve_inet_udp="$undef"
 serve_inet_tcp="$undef"
 serve_unix_udp="$undef"
 serve_unix_tcp="$undef"
fi
if $test "$ipc" != "ip" -a "$d_shm" = "$define"; then
 echo "Providing USG shared memory IPC support." >&4
 serve_shm="$define"
 ipc='shm'
else
 serve_shm="$undef"
fi
if $test -z "$ipc"; then
 echo "You must select an IPC mechanism." >&4
fi
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ipc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_static_inline.U,v $
?RCS:
?RCS: Copyright (c) 2010 Andrew Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafayette.edu>
?RCS:
?MAKE:d_static_inline perl_static_inline: Compile Setvar gccversion \
 cat echo run hint rm rm_try
?MAKE: -pick add $@ %<
?S:d_static_inline:
?S: This variable conditionally defines the HAS_STATIC_INLINE symbol,
?S: which indicates that the C compiler supports C99-style static
?S: inline.  That is, the function can't be called from another
?S: translation unit.
?S:.
?S:perl_static_inline:
?S: This variable defines the PERL_STATIC_INLINE
 symbol to
?S: the best-guess incantation to use for static inline functions.
?S: Possibilities include
?S:  static inline       (c99)
?S:  static __inline__   (gcc -ansi)
?S:  static __inline     (MSVC)
?S:  static _inline      (older MSVC)
?S:  static              (c89 compilers)
?S:.
?C:HAS_STATIC_INLINE :
?C: This symbol, if defined, indicates that the C compiler supports
?C: C99-style static inline.  That is, the function can't be called
?C: from another translation unit.
?C:.
?C:PERL_STATIC_INLINE:
?C: This symbol gives the best-guess incantation to use for static
?C: inline functions.  If HAS_STATIC_INLINE is defined, this will
?C: give C99-style inline.  If HAS_STATIC_INLINE is not defined,
?C: this will give a plain 'static'.  It will always be defined
?C: to something that gives static linkage.
```

```
?C: Possibilities include
?C:  static inline       (c99)
?C:  static __inline__   (gcc -ansi)
?C:  static __inline     (MSVC)
?C:  static _inline      (older MSVC)
?C:  static
        (c89 compilers)
?C:.
?H:#$d_static_inline HAS_STATIC_INLINE    /**/
?H:#define PERL_STATIC_INLINE $perl_static_inline /**/
?H:.
?LINT:set d_static_inline
?T:inline xxx
?F:!try
: see what flavor, if any, of static inline is supported
echo " "
echo "Checking to see if your system supports static inline..."
?X: Build two programs.  The first uses static inline in file a.c and
?X: should work.  The second also includes b.c which tries to link against
?X: the static function in a.c.  This should fail.
?X:.
$cat > try.c <<'EOCP'
#include <stdlib.h>
extern int f_via_a(int x);
extern int f_via_b(int x);
int main(int argc, char **argv)
{
   int y;

   y = f_via_a(0);
#ifdef USE_B
   y = f_via_b(0);
#endif
   if (y == 42) {
      return EXIT_SUCCESS;
   }
   else {
      return EXIT_FAILURE;
   }
}
EOCP
$cat > a.c <<'EOCP'
static INLINE int f(int x) {
   int y;
   y = x + 42;
   return y;
}
```

```
int f_via_a(int x)
{
   return f(x);
}
EOCP
$cat > b.c <<'EOCP'
extern int f(int x);

int
 f_via_b(int x)
{
   return f(x);
}
EOCP

# Respect a hint (or previous) value for perl_static_inline, if there is one.
case "$perl_static_inline" in
") # Check the various possibilities, and break out on success.
 # For gcc, prefer __inline__, which will still permit
 # cflags.SH to add in -ansi.
 case "$gccversion" in
  ") xxx="inline __inline__ __inline _inline";;
  *)  xxx="__inline__ inline __inline _inline";;
 esac
 for inline in $xxx; do
  set try -DINLINE=$inline a.c
  if eval $compile && $run ./try; then
   # Now make sure there is no external linkage of static
   # functions
   set try -DINLINE=$inline -DUSE_B a.c b.c
   if eval $compile && $run ./try; then
    $echo "Your compiler supports static $inline, " >&4
    $echo "but it also creates an external definition," >&4
    $echo "so I won't use it." >&4
    val=$undef
   else
    $echo "Your compiler supports static $inline." >&4
    val=$define
    perl_static_inline="static $inline";
    break;
   fi
  else
   $echo
 "Your compiler does NOT support static $inline." >&4
   val="$undef"
  fi
 done
 ;;
```

```
*inline*) # Some variant of inline exists.
 echo "Keeping your $hint value of $perl_static_inline."
 val=$define
 ;;
static)  # No inline capabilities
 echo "Keeping your $hint value of $perl_static_inline."
 val=$undef
 ;;
*)  # Unrecognized previous value -- blindly trust the supplied
 # value and hope it makes sense.  Use old value for
 # d_static_inline, if there is one.
 echo "Keeping your $hint value of $perl_static_inline."
 case "$d_static_inline" in
  ") val=$define ;;
  *)  val=$d_static_inline ;;
 esac
 ;;
esac
# Fallback to plain 'static' if nothing worked.
case "$perl_static_inline" in
")
 perl_static_inline="static"
 val=$undef
 ;;
esac
set d_static_inline
eval $setvar
$rm -f a.[co] b.[co]
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_static_inline.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysioctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysioctl.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  15:04:57  ram
?RCS: patch23: added knowledge for <sys/filio.h> (WED)
?RCS: patch23: optimized amount of findhdr calls
```

```
?RCS:
?RCS: Revision 3.0.1.1  1993/11/10  17:36:09  ram
?RCS: patch14: now use a compiler check for TIOCNOTTY because of HP-UX 9.x
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysioctl i_bsdioctl i_sysfilio i_syssockio
 d_voidtty: test contains \
 cat i_termio i_termios i_sgtty Setvar Findhdr +cc rm Inhdr
?MAKE: -pick add $@ %<
?S:i_sysioctl:
?S: This variable conditionally defines the I_SYS_IOCTL symbol, which
?S: indicates to the C program that <sys/ioctl.h> exists and should
?S: be included.
?S:.
?S:i_sysfilio:
?S: This variable conditionally defines the I_SYS_FILIO symbol, which
?S: indicates to the C program that <sys/filio.h> exists and should
?S: be included in preference to <sys/ioctl.h>.
?S:.
?S:i_bsdioctl:
?S: This variable conditionally defines the I_SYS_BSDIOCTL symbol, which
?S: indicates to the C program that <sys/bsdioctl.h> exists and should
?S: be included.
?S:.
?S:i_syssockio:
?S: This variable conditionally defines I_SYS_SOCKIO to indicate to the
?S: C program that socket ioctl codes may be found in <sys/sockio.h>
?S: instead of <sys/ioctl.h>.
?S:.
?S:d_voidtty:
?S: This variable conditionally defines USE_IOCNOTTY to indicate that the
?S: ioctl() call with TIOCNOTTY should be used
 to void tty association.
?S: Otherwise (on USG probably), it is enough to close the standard file
?S: descriptors and do a setpgrp().
?S:.
?C:I_SYS_IOCTL (I_SYSIOCTL):
?C: This symbol, if defined, indicates that <sys/ioctl.h> exists and should
?C: be included. Otherwise, include <sgtty.h> or <termio.h>.
?C:.
?C:I_SYS_FILIO:
?C: This symbol, if defined, indicates that <sys/filio.h> exists and
?C: should be included instead of <sys/ioctl.h>.
?C:.
?C:I_SYS_BSDIOCTL (I_BSDIOCTL):
?C: This symbol, if defined, indicates that <sys/bsdioctl.h> exists and should
```

```
?C: be included. Otherwise, try <sys/ioctl.h>. This is primarly intended for
?C: definitions of sockets options, like SIOCATMARK.
?C:.
?C:I_SYS_SOCKIO (I_SYSSOCKIO):
?C: This symbol, if defined, indicates the <sys/sockio.h> should be included
?C: to get socket ioctl options, like SIOCATMARK.
?C:.
?C:USE_TIOCNOTTY (VOIDTTY):
?C: This symbol, if defined indicate to the C program that the ioctl()
?C: call with TIOCNOTTY should be used
 to void tty association.
?C: Otherwise (on USG probably), it is enough to close the standard file
?C: descriptors and do a setpgrp().
?C:.
?H:#$i_sysioctl I_SYS_IOCTL  /**/
?H:#$i_sysfilio I_SYS_FILIO  /**/
?H:#$i_bsdioctl I_SYS_BSDIOCTL  /**/
?H:#$i_syssockio I_SYS_SOCKIO /**/
?H:#$d_voidtty USE_TIOCNOTTY /**/
?H:.
?T:xxx
: see if ioctl defs are in sgtty, termio, sys/filio or sys/ioctl
?LINT:set i_sysfilio
set sys/filio.h i_sysfilio
eval $inhdr
echo " "
if $test `./findhdr sys/ioctl.h`; then
 val="$define"
 echo '<sys/ioctl.h> found.' >&4
else
 val="$undef"
 if $test $i_sysfilio = "$define"; then
     echo '<sys/ioctl.h> NOT found.' >&4
 else
  $test $i_sgtty = "$define" && xxx="sgtty.h"
  $test $i_termio = "$define" && xxx="termio.h"
  $test $i_termios = "$define" && xxx="termios.h"
echo "No <sys/ioctl.h> found, assuming ioctl args are defined in <$xxx>." >&4
 fi
fi
?LINT:set i_sysioctl
set i_sysioctl
eval $setvar

@if I_BSDIOCTL || i_bsdioctl
?X:
?X: The only machine I know where this
```

```
 inclusion was necessary is a
?X: BULL DPX 5000 (a French machine).
?X:
: see if socket ioctl defs are in sys/bsdioctl or sys/ioctl
echo " "
xxx=`./findhdr sys/bsdioctl.h`
if $test "$xxx"; then
 if $contains SIOCATMARK $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have socket ioctls defined in <sys/bsdioctl.h>." >&4
 else
  val="$undef"
  echo "No socket ioctls found in <sys/bsdioctl.h>." >&4
 fi
else
 val="$undef"
 echo "<sys/bsdioctl.h> not found, but that's ok." >&4
fi
?LINT:set i_bsdioctl
set i_bsdioctl
eval $setvar

@end
@if I_SYSSOCKIO || i_syssockio
: see if socket ioctl defs are in sys/sockio.h
echo " "
xxx=`./findhdr sys/sockio.h`
if $test "$xxx"; then
 if $contains SIOCATMARK $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have socket ioctls defined in <sys/sockio.h>." >&4
 else
  val="$undef"
  echo "No socket ioctls found in <sys/sockio.h>." >&4
 fi
else
 val="$undef"
@if I_BSDIOCTL
 case "$i_bsdioctl" in
 "$define") $cat <<EOM
<sys/sockio.h> not found, using
 ioctls from <sys/bsdioctl.h>.
EOM
 ;;
 *) $cat <<EOM
<sys/sockio.h> not found, assuming socket ioctls are in <sys/ioctl.h>.
EOM
 ;;
```

```
 esac
@else
 $cat <<EOM
<sys/sockio.h> not found, assuming socket ioctls are in <sys/ioctl.h>.
EOM
@end
fi
?LINT:set i_syssockio
set i_syssockio
eval $setvar

@end
@if VOIDTTY || d_voidtty
: check how to void tty association
echo " "
case "$i_sysioctl" in
"$define") xxx='sys/ioctl.h';;
?X: otherwise $xxx was set during the determination of i_sysioctl, above.
esac
?X:
?X: Can't use $contains here since HP-UX 9.x has TIOCNOTTY between a pair
?X: of #ifdef/#endif and is never actually defined. Oh well...
?X:
$cat > tcio.c <<EOM
#include <sys/types.h> /* Just in case */
#include <$xxx>

int main()
{
#ifdef TIOCNOTTY
 exit(0);
#else
 exit(1);
#endif
}
EOM
if ($cc -o tcio tcio.c && ./tcio) >/dev/null 2>&1; then
 val="$define"
 echo "TIOCNOTTY found in <$xxx>." >&4
 echo "Using ioctl() call on /dev/tty to void tty association." >&4
else
 val="$undef"
 echo "Closing
 standard file descriptors should void tty association." >&4
fi
?LINT:set d_voidtty
set d_voidtty
eval $setvar
```

```
$rm -f tcio tcio.? core

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysioctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_scalbn: Inlibc
?MAKE: -pick add $@ %<
?S:d_scalbn:
?S: This variable conditionally defines the HAS_SCALBN symbol, which
?S: indicates to the C program that the scalbn() routine is available.
?S:.
?C:HAS_SCALBN:
?C: This symbol, if defined, indicates that the scalbn routine is
?C: available to multiply floating-point number by integral power
?C: of radix.
?C:.
?H:#$d_scalbn HAS_SCALBN  /**/
?H:.
?LINT:set d_scalbn
: see if scalbn exists
set scalbn d_scalbn
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_scalbn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memalign.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memalign.U,v $
?RCS:
?MAKE:d_memalign: Inlibc
?MAKE: -pick add $@ %<
?S:d_memalign:
```

```
?S: This variable conditionally defines the HAS_MEMALIGN symbol, which
?S: indicates to the C program that the memalign() routine is available.
?S:.
?C:HAS_MEMALIGN :
?C: This symbol, if defined, indicates that the memalign routine is
?C: available to allocate aligned memory.
?C:.
?H:#$d_memalign HAS_MEMALIGN  /**/
?H:.
?LINT:set d_memalign
: see if memalign exists
set
 memalign d_memalign
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memalign.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Head.U 6 2006-08-25 22:21:46Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Head.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:02:09  ram
?RCS: patch61: make sure we unset CDPATH for shells that support this
?RCS: patch61: improved Korn shell detection and handling
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:02  ram
?RCS: patch56: added SVR4-ish /opt directories to path list (ADO)
?RCS: patch56: OS/2 platforms are using another path separator
?RCS:
?RCS: Revision 3.0.1.7  1995/03/21  08:46:15  ram
?RCS: patch52: definition of
 paths wrongly added spurious ':' chars
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:54:19  ram
?RCS: patch36: make sure ENV is unset before calling /bin/ksh
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:03:44  ram
?RCS: patch32: now sets PATH only using existing directories
?RCS:
```

```
?RCS: Revision 3.0.1.4  1994/06/20  06:54:28  ram
?RCS: patch30: now computes its invocation name into 'me'
?RCS: patch30: symbol me is made visible to all units read-only
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:15:07  ram
?RCS: patch15: added /sbin:/usr/sbin:/usr/libexec in PATH for BSD/386
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:32:35  ram
?RCS: patch14: ensure PATH is reset to '.' before testing for alias
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:07  ram
?RCS: patch7: not all 'test' programs support the -x option
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the very first unit in the Configure script.  It is mostly just
?X:
 things to keep people from getting into a tizzy right off the bat.
?X:
?MAKE:Head:
?MAKE: -pick wipe $@ %<
?V:PATH p_ _exe me newsh
?T:argv p paths OS2_SHELL DJGPP
?T:inksh needksh avoidksh newsh changesh reason
?F:!*
?LINT:extern ENV CDPATH SHELL MACHTYPE _exe is_os2
?LINT:change ENV CDPATH is_os2
?LINT:nocomment
#! /bin/sh
#
# If these # comments don't work, trim them. Don't worry about any other
# shell scripts, Configure will trim # comments from them for you.
#
# (If you are trying to port this package to a machine without sh,
# I would suggest you have a look at the prototypical config_h.SH file
# and edit it to reflect your system. Some packages may include samples
# of config.h for certain machines, so you might look for one of those.)
#
?X:
?X: NOTE THAT A CONFIGURE SCRIPT IS IN THE PUBLIC DOMAIN (whether or not
?X: the software which uses it is in the public domain).
?X:
# Yes, you may rip this off to use in other distribution packages. This
# script belongs to the public
 domain and cannot be copyrighted.
#
```

```
?X:
?X: WE ASK YOU NOT TO REMOVE OR ALTER THE FOLLOWING PARAGRAPH, PLEASE:
?X:
# Note: this Configure script was generated automatically by the tool
# called "metaconfig". Rather than working with this copy of Configure,
# you should use metaconfig. Perl uses a modified version of this
# tool, and this, together with the metaconfig units, are available
# in the git repository:
#    $ git clone https://github.com/Perl/metaconfig metaconfig
# The original dist package (including metaconfig) is available on github:
#    $ git clone https://github.com/rmanfredi/dist.git dist-git
#
?X: OK, I'll not alter, but I'll add to it then ...
# Though this script was generated by metaconfig from metaunits, it is
# OK to send patches against Configure itself (but not to commit them
# to blead). It's up to
# the Configure maintainers to backport the patch to the metaunits if it
# is accepted. Exceptions to this rule, and more information, is in
# Porting/pumpkin.pod.
?X:
?X:
 NOTA BENE:
?X: If you develop you own version of metaconfig based on this work,
?X: you have to add some comments telling that the script was generated
?X: by your version, not mine: It credits your work.
?X:

# Generated using [metaconfig <VERSION> PL<PATCHLEVEL>]
# with additional metaconfig patches from https://github.com/Perl/metaconfig

cat >c1$$ <<EOF
ARGGGHHHH!!!!!

SCO csh still thinks true is false.  Write to SCO today and tell them that next
year Configure ought to "rm /bin/csh" unless they fix their blasted shell. :-)

(Actually, Configure ought to just patch csh in place.  Hmm.  Hmmmmm.  All
we'd have to do is go in and swap the && and || tokens, wherever they are.)

[End of diatribe. We now return you to your regularly scheduled programming...]
EOF
cat >c2$$ <<EOF

OOPS!  You naughty creature!  You didn't run Configure with sh!
I will attempt to remedy the situation by running sh for you...
EOF

true || cat c1$$ c2$$
```

```
true || exec sh $0 $argv:q

(exit $?0) || cat
 c2$$
(exit $?0) || exec sh $0 $argv:q
rm -f c1$$ c2$$

if test -f /dev/cputype -a -f /dev/drivers -a -f /dev/osversion; then
 cat <<EOF
***
*** I'm sorry but this system looks like Plan 9 and Plan 9 doesn't do
*** Configure that well.  (Plan 9 is close to UNIX but not close enough.)
*** Please read the README.plan9 for further instructions.
*** Cannot continue, aborting.
***
EOF
 exit 1
fi

if test -f /sys/utilities/MultiView ; then
 # AmigaOS, test -c for /dev/null is not useful
 :
elif test ! -c /dev/null ; then
 cat <<EOF
***
*** I'm sorry, but /dev/null appears to be a file rather than a device.
*** Please consult your operating sytem's notes for making a device
*** in /dev.
*** Cannot continue, aborting.
***
EOF
 exit 1
fi

: compute my invocation name
me=$0
case "$0" in
*/*)
 me=`echo $0 | sed -e 's!.*/\(.*\)!\1!' 2>/dev/null`
 test "$me" || me=$0
 ;;
esac

?X:
?X: To be able to run under OS/2, we must detect that early enough to use
?X: the proper path separator, stored in $p_.
 It is : on UNIX and ; on
?X: DOS-ish systems such as OS/2.
```

```
?X:
: Proper separator for the PATH environment variable
p_=:
: On OS/2 this directory should exist if this is not floppy only system ":-]"
if test -d c:/. || ( uname -a | grep -i 'os\(/\|\)2' 2>&1 ) 2>&1 >/dev/null ; then
 if test -n "$OS2_SHELL"; then
  p_=\;
  PATH=`cmd /c "echo %PATH%" | tr '\\\\' / `
?X: That's a bug in ksh5.22
  OS2_SHELL=`cmd /c "echo %OS2_SHELL%" | tr '\\\\' / | tr '[A-Z]' '[a-z]'`
  is_os2=yes
 elif test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
  *cygwin|*msys) ;;
  *) p_=\; ;;
  esac
 fi
fi

?X:
?X: There are two schools of thoughts here. Some people correctly argue that
?X: the user has a better chance than we do of setting a reasonable PATH and
?X: others argue that Configure is the best place there is to set up a suitable
?X: PATH. Well, here we try to compromise by keeping the user's PATH and
?X: appending some directories which are known to work on some machine or the
?X: other.
 The rationale behind this being that a novice user might not have a
?X: proper environment variable set, and some directories like /etc (where
?X: chown is located on some BSD systems) may be missing--RAM.
?X:
?X: SVR4 adds an /opt directory for optional packages.  Some sites use
?X: various permutations on /opt as opposed to /usr or /usr/local.-- ADO
?X:
?X: We only add directories that are not already in the PATH of the
?X: user and the directories must exist also.
?X:
?X: 20040627, Merijn, HP-UX's ANSI compiler is in /opt/ansic/bin if present
?X:  and should be before /usr/ccs/bin, where the braindead bundled compiler
?X:  can be found. The /usr/ccs/bin compiler cannot be used to build perl.
?X:
: Proper PATH setting
paths='/bin /usr/bin /usr/local/bin /usr/ucb /usr/local /usr/lbin'
paths="$paths /opt/bin /opt/local/bin /opt/local /opt/lbin"
paths="$paths /usr/5bin /etc /usr/gnu/bin /usr/new /usr/new/bin /usr/nbin"
paths="$paths /opt/gnu/bin /opt/new /opt/new/bin /opt/nbin"
paths="$paths
 /sys5.3/bin /sys5.3/usr/bin /bsd4.3/bin /bsd4.3/usr/ucb"
paths="$paths /bsd4.3/usr/bin /usr/bsd /bsd43/bin /opt/ansic/bin /usr/ccs/bin"
```

```
paths="$paths /etc /usr/lib /usr/ucblib /lib /usr/ccs/lib"
paths="$paths /sbin /usr/sbin /usr/libexec"
paths="$paths /system/gnu_library/bin"

for p in $paths
do
 case "$p_$PATH$p_" in
 *$p_$p$p_*) ;;
 *) test -d $p && PATH=$PATH$p_$p ;;
 esac
done

PATH=.$p_$PATH
export PATH

: shall we be using ksh?
inksh=''
needksh=''
avoidksh=''
newsh=/bin/ksh
changesh=''
?X: Use (alias -x) and not (alias) since zsh and bash recognize the alias
?X: builtin but not the -x option which is typically ksh...
?X: We need to set up PATH before calling the "alias" built-in since some
?X: systems like HP-UX have a binary called /bin/alias.
if (PATH=.; alias -x) >/dev/null 2>&1; then
  inksh=true
fi
?X: On HP-UX, large Configure scripts may exercise a bug in /bin/sh, use ksh
if test -f /hp-ux -a -f /bin/ksh; then
 needksh='to avoid sh bug in "here document" expansion'
fi
?X:
 On AIX4, /bin/sh is really ksh and it causes problems, use sh
if test -d /usr/lpp -a -f /usr/bin/bsh -a -f /usr/bin/uname; then
 if test X`/usr/bin/uname -v` = X4; then
  avoidksh="to avoid AIX 4's /bin/sh"
  newsh=/usr/bin/bsh
 fi
fi
?X: On Digital UNIX, /bin/sh may start up buggy /bin/ksh, use sh
if test -f /osf_boot -a -f /usr/sbin/setld; then
 if test X`/usr/bin/uname -s` = XOSF1; then
  avoidksh="to avoid Digital UNIX' ksh"
  newsh=/bin/sh
?X: if BIN_SH is set to 'xpg4', sh will start up ksh
  unset BIN_SH
 fi
```

```
fi
?X: If we are not in ksh and need it, then feed us back to it
case "$inksh/$needksh" in
/[a-z]*)
?X: Clear ENV to avoid any ~/.kshrc that could alias cd or whatever...
?X: Don't use "unset ENV", that is not portable enough
  ENV=''
  changesh=true
  reason="$needksh"
 ;;
esac
?X: If we are in ksh and must avoid it, then feed us back to a new shell
case "$inksh/$avoidksh" in
true/[a-z]*)
 changesh=true
 reason="$avoidksh"
 ;;
esac
?X: Warn them if they use ksh on
 other systems, which are those where
?X: we don't need ksh nor want to avoid it explicitly, yet are using it.
case "$inksh/$needksh-$avoidksh-" in
true/--)
  cat <<EOM
(I see you are using the Korn shell.  Some ksh's blow up on $me,
mainly on older exotic systems.  If yours does, try the Bourne shell instead.)
EOM
 ;;
esac
case "$changesh" in
true)
 export newsh
 echo "(Feeding myself to $newsh $reason.)"
?X: Make sure they didn't say sh <Configure by checking whether $0 ends
?X: with Configure or not. If they did say sh <../../Configure, then too
?X: bad for them anyway, since we lost that path indication...
?X: Otherwise, execing $0 ensures we keep the full remote source dir
?X: indication for src.U.
 case "$0" in
 Configure|*/Configure) exec $newsh $0 "$@";;
 *) exec $newsh Configure "$@";;
 esac
 ;;
esac
?X: 2004.06.09 rac
?X: having $newsh persist as ksh here is bad news if ksh doesn't really
?X: exist. this causes us to toss away a perfectly good working test in
?X: bash in favor
```

```
 of more exotic external options. see bug 42665.
test -x "${newsh}" || unset newsh

?X: Unset CDPATH to avoid surprises when using cd under some shells
?X: Can't unset it because that's not portable to very old shells.
?X: Can't set it to '' because then bash 2.02 won't do "cd UU"  --AD  6/98.
?X: Don't want to set it to '.' because then ksh prints out the
?X: name of the directory every time you cd to it. --AD 6/98
?X: In order to inflict the least harm, change it only if it's set.
: if needed, set CDPATH to a harmless value that is not chatty
: avoid bash 2.02 problems with empty CDPATH.
case "$CDPATH" in
'') ;;
*) case "$SHELL" in
 *bash*) CDPATH='.' ;;
 *) CDPATH='' ;;
 esac
 ;;
esac

: Configure runs within the UU subdirectory
test -d UU || mkdir UU
?X: Use ./* to avoid any confirmation prompts from enhanced shells -- WED
cd UU && rm -f ./*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Head.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: inc_version_list.U,v $
?RCS:
?RCS: Copyright (c) 2000 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: inc_version_list.U,v $
?RCS:
?MAKE:inc_version_list inc_version_list_init d_inc_version_list: cat sed \
 Getfile perl5 version api_versionstring rm Myread archname \
 prefix sitelib_stem exe_ext
?MAKE: -pick add $@ %<
?Y:TOP
?S:inc_version_list:
?S: This variable specifies the list of subdirectories in over
```

```
?S: which perl.c:incpush() and lib/lib.pm will automatically
?S: search when adding directories to @INC.  The elements in
?S: the list are separated by spaces.  This is only useful
?S: if
 you have a perl library directory tree structured like the
?S: default one.  See INSTALL for how this works.  The versioned
?S: site_perl directory was introduced in 5.005, so that is the
?S: lowest possible value.
?S:
?S: This list includes architecture-dependent directories back to
?S: version $api_versionstring (e.g. 5.5.640) and
?S: architecture-independent directories all the way back to
?S: 5.005.
?S:.
?S:inc_version_list_init:
?S: This variable holds the same list as inc_version_list, but
?S: each item is enclosed in double quotes and separated by commas,
?S: suitable for use in the PERL_INC_VERSION_LIST initialization.
?S:.
?S:d_inc_version_list:
?S: This variable conditionally defines PERL_INC_VERSION_LIST.
?S: It is set to undef when PERL_INC_VERSION_LIST is empty.
?S:.
?C:PERL_INC_VERSION_LIST:
?C: This variable specifies the list of subdirectories in over
?C: which perl.c:incpush() and lib/lib.pm will automatically
?C: search when adding directories to @INC, in a format suitable
?C: for
 a C initialization string.  See the inc_version_list entry
?C: in Porting/Glossary for more details.
?C:.
?H:#$d_inc_version_list PERL_INC_VERSION_LIST $inc_version_list_init  /**/
?H:.
?T:stem
: Determine list of previous versions to include in @INC
$cat > getverlist <<EOPL
#!$perl5
use strict;
use warnings;
use File::Basename;
my \$api_versionstring = "$api_versionstring";
my \$version = "$version";
my \$stem = "$sitelib_stem";
my \$archname = "$archname";
EOPL
 $cat >> getverlist <<'EOPL'
# The list found is stored twice for each entry: the original name, and
# the binary broken down version into pack "s>s>s>", so sorting is easy
```

```
# and unambiguous.  This will work for all versions that have a maximum
# of three digit per group separate by '.'s or '_'s. Names are extended
# with ".0.0" to ensure at least three elements for the pack.
#                                -- H.Merijn Brand (m)'06 23-10-2006

my @inc_version_list;
my @candidates;
# XXX Redo to do opendir/readdir?
if
 (-d $stem) {
   chdir($stem);
   ;@candidates = map {
 [ $_, pack "s>s>s>", split m/[._]/, "$_.0.0" ] } glob("5.*");
   ;@candidates = sort { $a->[1] cmp $b->[1]} @candidates;
}
else {
   ;@candidates = ();
}

my ($pversion, $aversion, $vsn5005) = map {
   pack "s>s>s>", split m/[._]/, "$_.0.0" } $version, $api_versionstring, "5.005";
foreach my $d (@candidates) {
   if ($d->[1] lt $pversion) {
 if ($d->[1] ge $aversion) {
     unshift(@inc_version_list, grep { -d } $d->[0]."/$archname", $d->[0]);
 }
 elsif ($d->[1] ge $vsn5005) {
     unshift(@inc_version_list, grep { -d } $d->[0]);
 }
   }
   else {
 # Skip newer version.  I.e. don't look in
 # 5.7.0 if we're installing 5.6.1.
   }
}

if (@inc_version_list) {
   print join(' ', @inc_version_list);
}
else {
   # Blank space to preserve value for next Configure run.
   print " ";
}
EOPL
chmod +x getverlist
case "$inc_version_list" in
") if test -x "$perl5$exe_ext"; then
  dflt=`$perl5 getverlist`
```

```
 else
  dflt='none'
 fi
 ;;
$undef)
 dflt='none' ;;
?X:     Configure -Dinc_version_list='5.6.0/$archname 5.6.0' ...
*)  eval dflt=\"$inc_version_list\" ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
case "$dflt" in
5.005) dflt=none ;;
esac
$cat <<EOM

In order to ease the process of upgrading, this version of perl
can be configured to use modules built and installed with earlier
versions of perl that were installed under $prefix.  Specify here
the list of earlier versions that this version of perl should check.
If Configure detected no earlier versions of perl installed under
$prefix, then the list will be empty.  Answer 'none' to tell perl
to not search earlier versions.

The default should almost always be sensible, so if you're not sure,
just accept the default.
EOM

rp='List of earlier versions to include in @INC?'
. ./myread
case "$ans" in
[Nn]one|"|' '|$undef) inc_version_list=' ' ;;
*) inc_version_list="$ans" ;;
esac
case "$inc_version_list" in
"|' ')
 inc_version_list_init='0'
 d_inc_version_list="$undef"
 ;;
*) inc_version_list_init=`echo
 $inc_version_list |
  $sed -e 's/^/"/' -e 's/ /","/g' -e 's/$/",0/'`
 d_inc_version_list="$define"
 ;;
esac
$rm -f getverlist
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/inc_version_list.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_poll.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_poll: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_poll:
?S: This variable conditionally defines the I_POLL symbol, and indicates
?S: whether a C program should include <poll.h>.
?S:.
?C:I_POLL:
?C: This symbol, if defined, indicates that <poll.h> exists and
?C: should be included. (see also HAS_POLL)
?C:.
?H:#$i_poll I_POLL  /**/
?H:.
?LINT:set i_poll
: see if this is a poll.h system
set poll.h i_poll
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_poll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2008 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:sGMTIME_max sGMTIME_min sLOCALTIME_max sLOCALTIME_min: cat rm_try \
 Setvar Compile run
?MAKE: -pick add $@ %<
?S:sGMTIME_max:
?S: This variable defines the maximum value of the time_t offset that
?S: the system function gmtime () accepts
?S:.
?S:sGMTIME_min:
?S: This variable defines the minimum value of the time_t offset that
```

```
?S: the system function gmtime () accepts
?S:.
?S:sLOCALTIME_max:
?S: This variable defines the maximum value of the time_t offset that
?S: the system function localtime () accepts
?S:.
?S:sLOCALTIME_min:
?S: This variable defines the minimum value of the time_t offset that
?S: the system function localtime () accepts
?S:.
?C:GMTIME_MAX:
?C: This symbol contains the maximum value
 for the time_t offset that
?C: the system function gmtime () accepts, and defaults to 0
?C:.
?C:GMTIME_MIN:
?C: This symbol contains the minimum value for the time_t offset that
?C: the system function gmtime () accepts, and defaults to 0
?C:.
?C:LOCALTIME_MAX:
?C: This symbol contains the maximum value for the time_t offset that
?C: the system function localtime () accepts, and defaults to 0
?C:.
?C:LOCALTIME_MIN:
?C: This symbol contains the minimum value for the time_t offset that
?C: the system function localtime () accepts, and defaults to 0
?C:.
?H:#define GMTIME_MAX  $sGMTIME_max /**/
?H:#define GMTIME_MIN  $sGMTIME_min /**/
?H:#define LOCALTIME_MAX $sLOCALTIME_max /**/
?H:#define LOCALTIME_MIN $sLOCALTIME_min /**/
?H:.
?D:sGMTIME_max=0
?D:sGMTIME_min=0
?D:sLOCALTIME_max=0
?D:sLOCALTIME_min=0
?F:!try
: Check the max offset that gmtime and localtime accept
echo "Checking max offsets that gmtime () accepts"

case "$sGMTIME_min/$sGMTIME_max" in
   0/0|/)
 $cat >try.c <<EOCP
#include
 <sys/types.h>
#include <stdio.h>
#include <time.h>
```

```
int i;
struct tm *tmp;
time_t pt;

void gm_check (time_t t, int min_year, int max_year)
{
   tmp = gmtime (&t);
   if ( tmp == NULL ||
 /* Check tm_year overflow */
  tmp->tm_year < min_year || tmp->tm_year > max_year)
 tmp = NULL;
   else
 pt = t;
   } /* gm_check */

int check_max ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MAXLONG
   gm_check (MAXLONG, 69, 0x7fffffff);
#endif
   if (tmp == NULL || tmp->tm_year < 0) {
 for (i = 63; i >= 0; i--) {
     time_t x = pt | ((time_t)1 << i);
     if (x < 0 || x < pt) continue;
     gm_check (x, 69, 0x7fffffff);
     }
 }
   printf ("sGMTIME_max=%ld\n", pt);
   return (0);
   } /* check_max */

int check_min ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MINLONG
   gm_check (MINLONG, -1900, 70);
#endif
   if (tmp == NULL) {
 for (i = 36; i >= 0; i--) {
     time_t x = pt - ((time_t)1 << i);
     if (x > 0) continue;
     gm_check (x, -1900, 70);
     }
 }
   printf ("sGMTIME_min=%ld\n",
```

```
 pt);
   return (0);
   } /* check_min */

int main (int argc, char *argv[])
{
   /* fprintf (stderr, "Sizeof time_t = %ld\n", sizeof (time_t)); */
   check_max ();
   check_min ();
   return (0);
   } /* main */
EOCP
 set try
 if eval $compile; then
     eval `$run ./try 2>/dev/null`
 else
     echo "Cannot determine sGMTIME_max and sGMTIME_min." >&4
     fi
 $rm_try
 ;;
   esac

echo "Checking max offsets that localtime () accepts"

case "$sLOCALTIME_min/$sLOCALTIME_max" in
   0/0|/)
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#include <time.h>

int i;
struct tm *tmp;
time_t pt;

void local_check (time_t t, int min_year, int max_year)
{
   if (sizeof (time_t) > 4 && t > 0x7fffffffffff000LL)
 tmp = NULL;
   else
 tmp = localtime (&t);
   if ( tmp == NULL ||
 /* Check tm_year overflow */
  tmp->tm_year < min_year || tmp->tm_year > max_year)
 tmp = NULL;
   else
 pt = t;
   } /* local_check */
```

```
int check_max ()
{
   tmp = NULL;
   pt  = 0;
#ifdef
 MAXLONG
   local_check (MAXLONG, 69, 0x7fffffff);
#endif
   if (tmp == NULL || tmp->tm_year < 0) {
 for (i = 63; i >= 0; i--) {
     time_t x = pt | ((time_t)1 << i);
     if (x < 0 || x < pt) continue;
     local_check (x, 69, 0x7fffffff);
     }
 }
   printf ("sLOCALTIME_max=%ld\n", pt);
   return (0);
  } /* check_max */

int check_min ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MINLONG
   local_check (MINLONG, -1900, 70);
#endif
   if (tmp == NULL) {
 for (i = 36; i >= 0; i--) {
     time_t x = pt - ((time_t)1 << i);
     if (x > 0) continue;
     local_check (x, -1900, 70);
     }
 }
   printf ("sLOCALTIME_min=%ld\n", pt);
   return (0);
   } /* check_min */

int main (int argc, char *argv[])
{
   check_max ();
   check_min ();
   return (0);
   } /* main */
EOCP
 set try
 if eval $compile; then
     eval `$run ./try 2>/dev/null`
```

```
 else
    echo "Cannot determine sLOCALTIME_max and sLOCALTIME_min." >&4
    fi
 $rm_try
 ;;
   esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/time_size.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_gethostprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_gethostprotos:
?S: This variable conditionally defines the HAS_GETHOST_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various gethost*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETHOST_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for gethostent(), gethostbyname(), and
?C: gethostbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_gethostprotos HAS_GETHOST_PROTOS /**/
?H:.
?LINT:set d_gethostprotos
?X: This test actually only checks for gethostent() and assumes the
?X: others follow suit.  This test fails for ChorusOS, which has
?X: gethostbyname and gethostbyaddr, but not gethostent.
: see if prototypes for various gethostxxx netdb.h functions are available
echo " "
set d_gethostprotos gethostent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_gethostprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fmod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_fmod.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:46  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_fmod: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmod:
?S: This variable conditionally defines the HAS_FMOD symbol, which
?S: indicates to the C program that the fmod() routine is available.
?S: See also d_drem for the drem() routine which does roughly the same.
?S:.
?C:HAS_FMOD
 :
?C: This symbol, if defined, indicates that the fmod routine is
?C: available to compute the remainder r=x-n*y where n=trunc(x/y).
?C:.
?H:#$d_fmod HAS_FMOD  /**/
?H:.
?LINT:set d_fmod
: see if fmod exists
set fmod d_fmod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fmod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethid.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethid: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethid:
?S: This variable conditionally defines HAS_GETHOSTID if gethostid() is
?S: available to get the host id.
?S:.
?C:HAS_GETHOSTID (GETHOSTID):
?C: This symbol, if defined, indicates that the gethostid system call is
?C: available to get the host id.
?C:.
?H:#$d_gethid HAS_GETHOSTID  /**/
?H:.
?LINT:set
 d_gethid
: see if gethid exists
set gethostid d_gethid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_siglist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_siglist.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_siglist: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_siglist:
?S: This variable conditionally defines HAS_SYS_SIGLIST if sys_siglist[] is
```

```
?S: available to translate signal numbers to strings.
?S:.
?C:HAS_SYS_SIGLIST (SYS_SIGLIST):
?C: This symbol, if defined, indicates that the sys_siglist array is
?C: available to translate signal numbers
 to strings.
?C:.
?H:#$d_siglist HAS_SYS_SIGLIST  /**/
?H:.
?LINT:set d_siglist
: see if sys_siglist[] exist
echo " "
if set sys_siglist val -a d_siglist; eval $csym; $val; then
 echo "You have sys_siglist[] for signal description." >&4
 val="$define"
else
 echo "You don't have sys_siglist[]." >&4
 val="$undef"
fi
set d_siglist
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_siglist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?X:
?X: Useless unit dropped.  Use randfunc instead.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/randbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_vfork.U,v 3.0.1.6 1994/08/29 16:18:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_vfork.U,v $
?RCS: Revision 3.0.1.6  1994/08/29  16:18:21  ram
?RCS: patch32: set default to 'y' the first time
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:59:14  ram
?RCS: patch30: usevfork was not always properly set
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:20:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:59:09  ram
?RCS: patch23: now explicitly ask whether vfork() should be used
 (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1993/10/16  13:49:39  ram
?RCS: patch12: added magic for vfork()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:06:57  ram
?RCS: patch10: removed automatic remapping of vfork on fork (WAD)
?RCS: patch10: added compatibility code for older config.sh (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vfork usevfork d_pseudofork: Inlibc Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_vfork:
?S: This variable conditionally defines the HAS_VFORK symbol, which
?S: indicates the vfork() routine is available.
?S:.
?S:usevfork:
?S: This variable is set to true when the user accepts to use vfork.
?S: It is set to false when no vfork is available or when the user
?S: explicitly requests not to use vfork.
?S:.
?S:d_pseudofork:
?S: This variable conditionally defines the HAS_PSEUDOFORK symbol,
?S: which indicates that an emulation of the fork routine is available.
?S:.
?C:HAS_VFORK (VFORK):
?C: This
```

```
 symbol, if defined, indicates that vfork() exists.
?C:.
?H:#$d_vfork HAS_VFORK /**/
?H:.
?C:HAS_PSEUDOFORK:
?C: This symbol, if defined, indicates that an emulation of the
?C: fork routine is available.
?C:.
?H:#$d_pseudofork HAS_PSEUDOFORK /**/
?H:.
?M:vfork: HAS_VFORK
?M:#ifndef HAS_VFORK
?M:#define vfork fork
?M:#endif
?M:.
?T:d_hvfork
: backward compatibility for d_hvfork
if test X$d_hvfork != X; then
 d_vfork="$d_hvfork"
 d_hvfork="
fi
?X:==========================
: see if there is a vfork
val="
set vfork val
eval $inlibc

d_pseudofork=$undef

: Ok, but do we want to use it. vfork is reportedly unreliable in
: perl on Solaris 2.x, and probably elsewhere.
case "$val" in
$define)
 echo " "
 case "$usevfork" in
 false) dflt='n';;
 *) dflt='y';;
 esac
 cat <<'EOM'

Perl can only use a vfork() that doesn't suffer from strict
restrictions on calling functions or modifying global data in
the child.  For example, glibc-2.1 contains such a vfork()
that is unsuitable.  If your system
 provides a proper fork()
call, chances are that you do NOT want perl to use vfork().

EOM
```

```
 rp="Do you still want to use vfork()?"
 . ./myread
 case "$ans" in
 y|Y) ;;
 *)
  echo "Ok, we won't use vfork()."
  val="$undef"
  ;;
 esac
 ;;
esac
?X:
?X: Only set it when final value is known to avoid spurious Whoa's
?X: Then set usevfork accordingly to the current value, for next run
?X:
set d_vfork
eval $setvar
case "$d_vfork" in
$define) usevfork='true';;
*) usevfork='false';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_vfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Instruct.U,v 3.0.1.3 1997/02/28 15:02:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Instruct.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:02:55  ram
?RCS: patch61: logname / whoami sequence rewritten to use case
?RCS:
?RCS: Revision 3.0.1.2  1995/02/15  14:11:34  ram
?RCS: patch51: author name now appears at the end of the paragraph (WED)
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:12:05  ram
?RCS: patch45: now documents the & escape to turn -d on at the read prompt
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:04  ram
?RCS: Baseline for
```

```
 dist 3.0 netwide release.
?RCS:
?X:
?X: This unit spew out the directions that we want everyone to read.  I try to
?X: keep the first "pagefull" much less than a page since they don't know it
?X: isn't going to go shooting off the top of the screen, and we don't want
?X: to panic them yet.
?X:
?MAKE:Instruct: Myread Configdir Devel contains
?MAKE: -pick wipe $@ %<
?T:user needman firsttime
: general instructions
needman=true
firsttime=true
user=`(logname) 2>/dev/null`
case "$user" in
") user=`whoami 2>&1`;;
esac
if $contains "^$user\$" ../.config/instruct >/dev/null 2>&1; then
 firsttime=false
 echo " "
 rp='Would you like to see the instructions?'
 dflt=n
 . ./myread
 case "$ans" in
 [yY]*) ;;
 *) needman=false;;
 esac
fi
if $needman; then
 cat <<EOH

This installation shell script will examine your system and ask you questions
to determine how the <PACKAGENAME> package should be installed. If you get
stuck on a question, you may use a ! shell escape to start a subshell or
execute a
 command.  Many of the questions will have default answers in square
brackets; typing carriage return will give you the default.

On some of the questions which ask for file or directory names you are allowed
to use the ~name construct to specify the login directory belonging to "name",
even if you don't have a shell which knows about that.  Questions where this is
allowed will be marked "(~name ok)".

EOH
 rp="
 dflt='Type carriage return to continue'
 . ./myread
```

```
 cat <<'EOH'

The prompter used in this script allows you to use shell variables and
backticks in your answers.  You may use $1, $2, etc...  to refer to the words
in the default answer, as if the default line was a set of arguments given to a
script shell.  This means you may also use $* to repeat the whole default line,
so you do not have to re-type everything to add something to the default.

Every time there is a substitution, you will have to confirm.  If there is an
error (e.g. an unmatched backtick), the default answer
 will remain unchanged
and you will be prompted again.

If you are in a hurry, you may run 'Configure -d'.  This will bypass nearly all
the questions and use the computed defaults (or the previous answers if there
was already a config.sh file). Type 'Configure -h' for a list of options.
You may also start interactively and then answer '& -d' at any prompt to turn
on the non-interactive behaviour for the remainder of the execution.

EOH
 . ./myread
 cat <<EOH

Much effort has been expended to ensure that this shell script will run on any
Unix system.  If despite that it blows up on yours, your best bet is to edit
Configure and run it again.  If you can't run Configure for some reason,
you'll have to generate a config.sh file by hand.  Whatever problems you
have, let me (<MAINTLOC>) know how I blew it.

This installation script affects things in two ways:

1) it may do direct variable substitutions on some of the files included
  in this kit.
2) it builds a config.h file for inclusion in
 C programs.  You may edit
  any of these files as the need arises after running this script.

If you make a mistake on a question, there is no easy way to back up to it
currently.  The easiest thing to do is to edit config.sh and rerun all the SH
files.  Configure will offer to let you do this before it runs the SH files.

EOH
?X: In case they played with the prompter...
 dflt='Type carriage return to continue'
 . ./myread
 case "$firsttime" in
 true) echo $user >>../.config/instruct;;
 esac
```

```
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Instruct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_limits.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_limits.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_limits: Inhdr
?MAKE: -pick add $@ %<
?S:i_limits:
?S: This variable conditionally defines the I_LIMITS symbol, and indicates
?S: whether a C program may include <limits.h> to get symbols like WORD_BIT
?S: and friends.
?S:.
?C:I_LIMITS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <limits.h> to
 get definition of symbols like WORD_BIT or
?C: LONG_MAX, i.e. machine dependant limitations.
?C:.
?H:#$i_limits I_LIMITS  /**/
?H:.
?LINT:set i_limits
: see if this is a limits.h system
set limits.h i_limits
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_limits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_log1p: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_log1p:
?S: This variable conditionally defines the HAS_LOG1P symbol, which
?S: indicates to the C program that the logp1() routine is available
?S: to compute log(1 + x) for values of x close to zero.
?S:.
?C:HAS_LOG1P:
?C: This symbol, if defined, indicates that the log1p routine is
?C: available to do the logarithm of 1 plus argument function.
?C:.
?H:#$d_log1p HAS_LOG1P  /**/
?H:.
?LINT:set d_log1p
: see if log1p exists
set log1p d_log1p
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_log1p.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: fpu.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:fpu: test cat cc Myread
?MAKE: -pick add $@ %<
?S:fpu (fpunit):
?S: Set to be the compile flag for the local floating point unit.
?S:.
?C:FPU (FPUNIT):
?C: String containing the flags for the local floating point unit.
?C:.
?H:#define FPU "$fpu" /**/
?H:.
: see what floating point compile flags should be used.
fpu=''
if $test -r /dev/fpa; then
```

```
 $cat>fpa.c << GOOP
 main(){return(1);}
GOOP
 $cc
 -ffpa -o fpa fpa.c
 fpa > fpa.out 2>&1
 if $test ! -s fpa.out; then
  dflt='y'
  $cat <<'EOM'

You seem to have a sun fpa...  I can compile the code to use the fpa but it will
mean that the code can ONLY run on a machine with a fpa...

EOM
  rp="Should I compile for fpa?"
  . ./myread
  if $test $ans = "n"; then
   fpu=''
  else
   fpu='-ffpa'
  fi
 else
  $cat <<'EOM'

You have the fpa device but I can't seem to use it.  Maybe you should talk to
your sysadmin about this.  For now, I am not going to compile it in.

EOM
 fi
fi
if $test "$fpu" = ''; then
 if $test -r /usr/etc/mc68881version; then
  dflt='y'
  $cat <<'EOM'

There also seems to be the pieces for a 68881.  If I compile this in, it will
work on almost all Sun 3's except for a few Sun-3/50s without a 68881...

EOM
  rp="Should I compile for a 68881?"
  . ./myread
  if $test $ans = "y"; then
   fpu='-f68881'
  fi
 fi
fi

Found in path(s):
```

```
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/fpu.U
No license file was found, but licenses were detected in source scan.

?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS: Copyright (c) 2019, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_setlocale d_setlocale_accepts_any_locale_name d_has_C_UTF8: \
 cat Compile run rm_try i_locale i_wctype d_towupper Setvar Myread
?MAKE: -pick add $@ %<
?S:d_has_C_UTF8:
?S: This variable is set to either "true" or "false" depending on
?S: whether the compilation system supports the C.UTF-8 locale.
?S:.
?S:d_setlocale:
?S: This variable conditionally defines HAS_SETLOCALE if setlocale() is
?S: available to handle locale-specific ctype implementations.
?S:.
?S:d_setlocale_accepts_any_locale_name:
?S: This
 variable conditionally defines SETLOCALE_ACCEPTS_ANY_LOCALE_NAME
?S: if setlocale() accepts any locale name.
?S:.
?C:HAS_SETLOCALE:
?C: This symbol, if defined, indicates that the setlocale routine is
?C: available to handle locale-specific ctype implementations.
?C:.
?C:SETLOCALE_ACCEPTS_ANY_LOCALE_NAME:
?C: This symbol, if defined, indicates that the setlocale routine is
?C: available and it accepts any input locale name as valid.
?C:.
?H:#$d_setlocale HAS_SETLOCALE /**/
?H:#$d_setlocale_accepts_any_locale_name SETLOCALE_ACCEPTS_ANY_LOCALE_NAME /**/
?H:.
?F:!try
?T:LC_CTYPE c_utf8_locale
: check for setlocale function and behavior
case "$d_setlocale" in
")
$cat >&4 <<EOM

Checking to see if you have setlocale() and its behavior
EOM
```

```
$cat >try.c <<EOCP
#include <stdlib.h>
#include <string.h>
#$i_locale I_LOCALE
#ifdef I_LOCALE
#  include <locale.h>
#endif
#$i_wctype I_WCTYPE
#ifdef I_WCTYPE
#  include <wctype.h>
#endif

int main() {
   const char * invalid_name
 = "\a";   /* This is really invalid! */
   int accepts_any_locale_name = 0;
   int has_C_UTF8 = 0;
   unsigned char bad_setlocale = 255;

   /* If LC_CTYPE isn't defined the compilation will fail, and locales will be
    * disabled.  It's hard to imagine an instance where meaningful locale
    * handling could be done without LC_CTYPE */
   const char *  name = setlocale(LC_CTYPE, "C");

   if (name == NULL || strcmp(name, "C") != 0) {
       exit(bad_setlocale);
   }

   name = setlocale(LC_CTYPE, invalid_name);
   if (name != NULL) {

       /* Let it pass if it accepts the name but gives back one of the C
        * locales */
       if (strcmp(name, "C") != 0 && strcmp(name, "C.UTF-8") != 0) {
           accepts_any_locale_name = 1;
       }
   }

   name = setlocale(LC_CTYPE, "C.UTF-8");
   if (name != NULL) {
       unsigned char y_with_diaeresis = ('A' == 193) ? 0xDF : 0xFF;

#$d_towupper HAS_TOWUPPER
#ifdef HAS_TOWUPPER

       /* We assume that if
 the machine doesn't have the C99 towupper, it
        * doesn't have C.UTF-8, even if we successfully changed locales to
```

```
     * include it.  This seems safer even on platforms that didn't accept
     * the really invalid name */

    if (towupper(y_with_diaeresis) == 0x178) {
        has_C_UTF8 = 1;
    }

#endif

  }

#if 0

  /* Currently unused code to determine if LC_ALL with disparate values uses
   * category = value pairs or positional, and to determine the separator
   * between the categories.  We could add code so that if the separator were
   * > '9', we subtract 10; similarly for 'Z' and 'z', and then just about
   * every possible ASCII separator would fit in the 5 bits available in the
   * exit code.  This would not be true in EBCDIC.  And then if LC_ALL is
   * positional, we probably would want to know the order of the categories.
   * Using a file between the C program and the shell script would really be
   * require to do that
 */
#ifdef LC_ALL

  unsigned char min_separator = ' ' - 1;
  unsigned char separator = min_separator;
  int uses_name_value_pair_names = 0;

  name = setlocale(LC_ALL, "C");
  if (name == NULL || strcmp(name, "C") != 0) {
      exit(bad_setlocale);
  }

  if (has_C_UTF8) {
      char * pos;

      name = setlocale(LC_CTYPE, "C.UTF-8");
      if (name == NULL) {
          exit(bad_setlocale);
      }
      name = setlocale(LC_ALL, NULL);
      if (name == NULL) {
          exit(bad_setlocale);
      }

      pos = strstr(name, "LC_CTYPE" "=C.UTF-8");
      if (pos != NULL) {
```

```
            uses_name_value_pair_names = 1;
            if (pos == name) {
                separator = name[sizeof("LC_CTYPE=C.UTF-8") - 1];
            }
            else {
                separator = *(pos - 1);
            }
        }
        else {
            pos = strstr(name, "C.UTF-8");
            if (pos == NULL) {
                /* bad */
            }

  else if (pos == name) {
                separator = name[sizeof("C.UTF-8") - 1];
            }
            else {
                separator = *(pos - 1);
            }
        }
    }

#endif
#endif

    exit( 0 /* (separator - min_separator) << 3
        | uses_name_value_pair_names      << 2
          */
        | has_C_UTF8                      << 1
        | accepts_any_locale_name);

}
EOCP
val=
set d_setlocale
eval $setvar
case $d_setlocale in
    $undef) d_setlocale_accepts_any_locale_name="$undef"
            d_has_C_UTF8="false"
            ;;
    *) set try
       if eval $compile; then
           echo "Your system has setlocale()..." >&4
           $run ./try
           case $? in
               0) echo "and it seems sane; you don't have a C.UTF-8 locale" >&4
                  d_setlocale="$define"
```

```
            d_setlocale_accepts_any_locale_name="$undef"
            d_has_C_UTF8="false"
            ;;
          1) echo "and it seems sane, but accepts
any locale name as valid" >&4
            d_setlocale="$define"
            d_setlocale_accepts_any_locale_name="$define"
            d_has_C_UTF8="false"
            ;;
          2) echo "and it seems sane; you have a C.UTF-8 locale" >&4
            d_setlocale="$define"
            d_setlocale_accepts_any_locale_name="$undef"
            d_has_C_UTF8="true"
            ;;
          3) echo "and it seems sane, but accepts any locale name as valid" >&4
            d_setlocale="$define"
            d_setlocale_accepts_any_locale_name="$define"
            d_has_C_UTF8="true"
            ;;
          *) echo "but it doesn't seem to work, so we won't use it." >&4
            d_setlocale="$undef"
            d_setlocale_accepts_any_locale_name="$undef"
            d_has_C_UTF8="false"
            ;;
        esac
      else
        echo "your system does not have setlocale()"
>&4
        d_setlocale="$undef"
        d_setlocale_accepts_any_locale_name="$undef"
        d_has_C_UTF8="false"
      fi
esac
$rm_try
;;
*) val="$d_setlocale"
  set d_setlocale
  eval $setvar
  case "$d_setlocale" in
    $undef) echo "There may be other ways to set the locale on your system, so we need to ask:" >&4
    ;;
  esac
  rp="Does your system have the C.UTF-8 locale?"
  dflt=n
  . ./myread
  case "$ans" in
    [Yy]*) d_has_C_UTF8="true"
          c_utf8_locale=" or C.UTF-8"
```

```
            ;;
        *)    d_has_C_UTF8="false"
            c_utf8_locale=""
            ;;
    esac
    case "$d_setlocale" in
        $define)
            rp="When you set your locale to something besides C$c_utf8_locale, does it do so, or just pretend to?" >&4
            dflt=n
            . ./myread
            case "$ans" in
                true|[Yy]*)
      d_setlocale_accepts_any_locale_name="$undef"
      ;;
    *) d_setlocale_accepts_any_locale_name="$define"

    ;;
            esac
            ;;
        *) d_setlocale_accepts_any_locale_name="$undef"
     ;;
    esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setlocale.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpclassl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpclassl:
?S: This variable conditionally defines the HAS_FPCLASSL symbol, which
?S: indicates to the C program that the fpclassl() routine is available.
?S:.
?C:HAS_FPCLASSL:
?C: This symbol, if defined, indicates that the fpclassl routine is
?C: available to classify long doubles.  Available for example in IRIX.
?C: The returned values are defined in <ieeefp.h> and are:
?C:
?C: FP_SNAN  signaling NaN
?C: FP_QNAN  quiet NaN
```

```
?C: FP_NINF  negative infinity
?C: FP_PINF  positive infinity
?C: FP_NDENORM negative denormalized non-zero
?C: FP_PDENORM positive denormalized non-zero
?C: FP_NZERO negative zero
?C: FP_PZERO positive zero
?C: FP_NNORM negative
 normalized non-zero
?C: FP_PNORM positive normalized non-zero
?C:.
?H:#$d_fpclassl HAS_FPCLASSL  /**/
?H:.
?LINT:set d_fpclassl
: see if fpclassl exists
set fpclassl d_fpclassl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclassl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systypes.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systypes.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/types.h> needs to be included.
?X:
?MAKE:i_systypes: Inhdr
?MAKE: -pick add $@ %<
?S:i_systypes:
?S: This variable conditionally defines the I_SYS_TYPES symbol,
?S: and indicates whether a C program should include <sys/types.h>.
?S:.
?C:I_SYS_TYPES (I_SYSTYPES):
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <sys/types.h>.
```

```
?C:.
?H:#$i_systypes I_SYS_TYPES  /**/
?H:.
?LINT:set i_systypes
: see if sys/types.h has to be included
set sys/types.h i_systypes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systypes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_open3.U,v 3.0.1.2 1997/02/28 15:37:12 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_open3.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:12  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:58:26  ram
?RCS: patch56: added knowledge of the O_NONBLOCK symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_open3: Compile test cat h_fcntl h_sysfile rm_try Setvar Findhdr run i_stdlib
?MAKE: -pick add $@ %<
?X: It would be easy to separate the
 h_O_stuff from this.
?X: Is there a reason to do so? -- HMS
?S:d_open3:
?S: This variable conditionally defines the HAS_OPEN3 manifest constant,
?S: which indicates to the C program that the 3 argument version of
?S: the open(2) function is available.
?S:.
?C:HAS_OPEN3 (OPEN3):
?C: This manifest constant lets the C program know that the three
?C: argument form of open(2) is available.
?C:.
?H:#$d_open3 HAS_OPEN3  /**/
?H:.
```

```
?W:%<:O_RDONLY O_WRONLY O_RDWR O_NDELAY O_APPEND O_SYNC O_CREAT O_TRUNC
?W:%<:O_EXCL O_NONBLOCK
?F:!try
?LINT:set d_open3
?LINT:change h_fcntl h_sysfile
: Locate the flags for 'open()'
echo " "
$cat >try.c <<EOCP
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 if(O_RDONLY);
#ifdef O_TRUNC
 exit(0);
#else
 exit(1);
#endif
}
EOCP
: check sys/file.h first to get FREAD on Sun
if $test `./findhdr sys/file.h` && \
  set try -DI_SYS_FILE
 && eval $compile; then
 h_sysfile=true;
 echo "<sys/file.h> defines the O_* constants..." >&4
 if $run ./try; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
elif $test `./findhdr fcntl.h` && \
  set try -DI_FCNTL && eval $compile; then
 h_fcntl=true;
 echo "<fcntl.h> defines the O_* constants..." >&4
 if $run ./try; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
```

```
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
else
 val="$undef"
 echo "I can't find the O_* constant definitions!  You got problems." >&4
fi
set d_open3
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_open3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_socket.U,v 3.0.1.2 1997/02/28 15:46:00 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_socket.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:46:00  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:04  ram
?RCS: patch16: can now safely declare private nm_extract in dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_socket d_oldsock d_sockpair socketlib sockethdr \
 d_msg_ctrunc d_msg_dontroute d_msg_oob d_msg_peek
 d_msg_proxy \
 d_scm_rights d_sockaddr_sa_len d_sockaddr_in6 d_sin6_scope_id \
 d_ip_mreq d_ip_mreq_source d_ipv6_mreq d_ipv6_mreq_source \
 d_sockaddr_storage: \
 contains echo n c ar nm nm_opt nm_extract Inlibc Csym _a \
 Compile cat rm_try Setvar Hasfield sysroot
?MAKE: -pick add $@ %<
?S:d_socket:
?S: This variable conditionally defines HAS_SOCKET, which indicates
?S: that the BSD socket interface is supported.
```

```
?S:.
?S:d_sockpair:
?S: This variable conditionally defines the HAS_SOCKETPAIR symbol, which
?S: indicates that the BSD socketpair() is supported.
?S:.
?S:d_oldsock:
?S: This variable conditionally defines the OLDSOCKET symbol, which
?S: indicates that the BSD socket interface is based on 4.1c and not 4.2.
?S:.
?S:d_msg_ctrunc:
?S: This variable conditionally defines the HAS_MSG_CTRUNC symbol,
?S: which indicates that the MSG_CTRUNC is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_dontroute:
?S: This variable
 conditionally defines the HAS_MSG_DONTROUTE symbol,
?S: which indicates that the MSG_DONTROUTE is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_oob:
?S: This variable conditionally defines the HAS_MSG_OOB symbol,
?S: which indicates that the MSG_OOB is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_peek:
?S: This variable conditionally defines the HAS_MSG_PEEK symbol,
?S: which indicates that the MSG_PEEK is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_proxy:
?S: This variable conditionally defines the HAS_MSG_PROXY symbol,
?S: which indicates that the MSG_PROXY is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_scm_rights:
?S: This variable conditionally defines the HAS_SCM_RIGHTS symbol,
?S: which indicates that the SCM_RIGHTS is available.
  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_sockaddr_sa_len:
?S: This variable conditionally defines the HAS_SOCKADDR_SA_LEN symbol,
?S: which indicates that a struct sockaddr structure has the sa_len
?S: member.
?S:.
?S:d_sockaddr_in6:
?S: This variable conditionally defines the HAS_SOCKADDR_IN6 symbol, which
```

?S: indicates the availability of a struct sockaddr_in6.
?S:.
?S:d_sockaddr_storage:
?S: This variable conditionally defines the HAS_SOCKADDR_STORAGE symbol,
?S: which indicates the availability of a struct sockaddr_storage.
?S:.
?S:d_sin6_scope_id:
?S: This variable conditionally defines the HAS_SIN6_SCOPE_ID symbol, which
?S: indicates that a struct sockaddr_in6 structure has the sin6_scope_id
?S: member.
?S:.
?S:d_ip_mreq:
?S: This variable conditionally defines the HAS_IP_MREQ symbol, which
?S: indicates the availability of a struct ip_mreq.
?S:.
?S:d_ip_mreq_source:
?S: This variable conditionally defines the HAS_IP_MREQ_SOURCE
symbol,
?S: which indicates the availability of a struct ip_mreq_source.
?S:.
?S:d_ipv6_mreq:
?S: This variable conditionally defines the HAS_IPV6_MREQ symbol, which
?S: indicates the availability of a struct ipv6_mreq.
?S:.
?S:d_ipv6_mreq_source:
?S: This variable conditionally defines the HAS_IPV6_MREQ_SOURCE symbol,
?S: which indicates the availability of a struct ipv6_mreq_source.
?S:.
?S:socketlib:
?S: This variable has the names of any libraries needed for socket support.
?S:.
?S:sockethdr:
?S: This variable has any cpp '-I' flags needed for socket support.
?S:.
?C:HAS_SOCKET (SOCKET):
?C: This symbol, if defined, indicates that the BSD socket interface is
?C: supported.
?C:.
?C:HAS_SOCKETPAIR (SOCKETPAIR):
?C: This symbol, if defined, indicates that the BSD socketpair() call is
?C: supported.
?C:.
?C:USE_OLDSOCKET (OLDSOCKET):
?C: This symbol, if defined, indicates that the 4.1c BSD socket interface
?C: is supported instead of the 4.2/4.3 BSD socket interface. For instance,
?C: there
is no setsockopt() call.
?C:.

```
?C:HAS_MSG_CTRUNC:
?C: This symbol, if defined, indicates that the MSG_CTRUNC is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_DONTROUTE:
?C: This symbol, if defined, indicates that the MSG_DONTROUTE is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_OOB:
?C: This symbol, if defined, indicates that the MSG_OOB is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_PEEK:
?C: This symbol, if defined, indicates that the MSG_PEEK is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_PROXY:
?C: This symbol, if defined, indicates that the MSG_PROXY is supported.
?C: Checking just with #ifdef might not be enough because this
 symbol
?C: has been known to be an enum.
?C:.
?C:HAS_SCM_RIGHTS:
?C: This symbol, if defined, indicates that the SCM_RIGHTS is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_SOCKADDR_SA_LEN:
?C: This symbol, if defined, indicates that the struct sockaddr
?C: structure has a member called sa_len, indicating the length of
?C: the structure.
?C:.
?C:HAS_SOCKADDR_IN6:
?C: This symbol, if defined, indicates the availability of
?C: struct sockaddr_in6;
?C:.
?C:HAS_SOCKADDR_STORAGE:
?C: This symbol, if defined, indicates the availability of
?C: struct sockaddr_storage;
?C:.
?C:HAS_SIN6_SCOPE_ID:
?C: This symbol, if defined, indicates that the struct sockaddr_in6
?C: structure has a member called sin6_scope_id.
?C:.
```

```
?C:HAS_IP_MREQ:
?C: This symbol, if defined, indicates the availability of
?C: struct ip_mreq;
?C:.
?C:HAS_IP_MREQ_SOURCE:
?C: This symbol, if defined, indicates the availability of
?C: struct ip_mreq_source;
?C:.
?C:HAS_IPV6_MREQ:
?C: This
 symbol, if defined, indicates the availability of
?C: struct ipv6_mreq;
?C:.
?C:HAS_IPV6_MREQ_SOURCE:
?C: This symbol, if defined, indicates the availability of
?C: struct ipv6_mreq_source;
?C:.
?H:#$d_socket HAS_SOCKET  /**/
?H:#$d_sockpair HAS_SOCKETPAIR /**/
?H:#$d_sockaddr_sa_len HAS_SOCKADDR_SA_LEN /**/
?H:#$d_oldsock USE_OLDSOCKET /**/
?H:#$d_msg_ctrunc HAS_MSG_CTRUNC /**/
?H:#$d_msg_dontroute HAS_MSG_DONTROUTE /**/
?H:#$d_msg_oob HAS_MSG_OOB /**/
?H:#$d_msg_peek HAS_MSG_PEEK /**/
?H:#$d_msg_proxy HAS_MSG_PROXY /**/
?H:#$d_scm_rights HAS_SCM_RIGHTS /**/
?H:#$d_sockaddr_in6 HAS_SOCKADDR_IN6 /**/
?H:#$d_sockaddr_storage HAS_SOCKADDR_STORAGE /**/
?H:#$d_sin6_scope_id HAS_SIN6_SCOPE_ID /**/
?H:#$d_ip_mreq HAS_IP_MREQ /**/
?H:#$d_ip_mreq_source HAS_IP_MREQ_SOURCE /**/
?H:#$d_ipv6_mreq HAS_IPV6_MREQ /**/
?H:#$d_ipv6_mreq_source HAS_IPV6_MREQ_SOURCE /**/
?H:.
?T:val net ENUM enum
?LINT:set d_sockpair d_sockaddr_sa_len
?LINT:set d_msg_ctrunc d_msg_dontroute
 d_msg_oob d_msg_peek d_msg_proxy
?LINT:set d_scm_rights d_sockaddr_in6 d_sin6_scope_id d_ip_mreq
?LINT:set d_ip_mreq_source d_ipv6_mreq d_ipv6_mreq_source d_sockaddr_storage
: see whether socket exists
socketlib=''
sockethdr=''
echo " "
$echo $n "Hmm... $c" >&4
if set socket val -f d_socket; eval $csym; $val; then
   echo "Looks like you have Berkeley networking support." >&4
```

```
  d_socket="$define"
?X: now check for advanced features
  if set setsockopt val -f; eval $csym; $val; then
 d_oldsock="$undef"
  else
 echo "...but it uses the old BSD 4.1c interface, rather than 4.2." >&4
 d_oldsock="$define"
  fi
else
?X: HP-UX, for one, puts all the socket stuff in socklib.o. Note that if we
?X: come here on HP-UX, then we must have used nm to get symbols, or we really
?X: don't have sockets anyway...
  if $contains socklib libc.list >/dev/null 2>&1; then
 echo "Looks like you have Berkeley networking support." >&4
 d_socket="$define"
 : we will have to assume that it supports
 the 4.2 BSD interface
 d_oldsock="$undef"
  else
 echo "You don't have Berkeley networking in libc$_a..." >&4
?X: look for optional networking libraries
 if test "X$d_socket" = "X$define"; then
    echo "...but you seem to believe that you have sockets." >&4
 else
    for net in net socket
    do
  if test -f $sysroot/usr/lib/lib$net$_a; then
?X: space between two  '(' needed for ksh
     ( ($nm $nm_opt $sysroot/usr/lib/lib$net$_a | eval $nm_extract) ||  \
     $ar t $sysroot/usr/lib/lib$net$_a) 2>/dev/null >> libc.list
     if $contains socket libc.list >/dev/null 2>&1; then
  d_socket="$define"
  socketlib="-l$net"
  case "$net" in
  net)
      echo "...but the Wollongong group seems to have hacked it in." >&4
      sockethdr="-I$sysroot/usr/netinclude"
      ;;
  esac
  echo "Found Berkeley sockets interface in lib$net." >&4
?X: now check for advanced features
  if $contains setsockopt libc.list >/dev/null 2>&1; then
      d_oldsock="$undef"
  else
      echo
 "...using the old BSD 4.1c interface, rather than 4.2." >&4
      d_oldsock="$define"
  fi
```

```
  break
     fi
  fi
    done
    if test "X$d_socket" != "X$define"; then
       echo "or anywhere else I see." >&4
       d_socket="$undef"
       d_oldsock="$undef"
    fi
 fi
   fi
fi

@if HAS_SOCKETPAIR || d_sockpair
: see if socketpair exists
set socketpair d_sockpair
eval $inlibc

@end

echo "Checking the availability sa_len in the sock struct ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
int main() {
struct sockaddr sa;
return (sa.sa_len);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sockaddr_sa_len; eval $setvar
$rm_try

echo "Checking the availability struct sockaddr_in6 ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_in6 sin6;
return (sin6.sin6_family);
}
EOF
val="$undef"
set try; if eval $compile; then
```

```
   val="$define"
fi
set d_sockaddr_in6;
 eval $setvar
$rm_try

echo "Checking the availability struct sockaddr_storage ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_storage sastor;
return (sastor.ss_family);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sockaddr_storage; eval $setvar
$rm_try

echo "Checking the availability sin6_scope_id in struct sockaddr_in6 ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_in6 sin6;
return (sin6.sin6_scope_id);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sin6_scope_id; eval $setvar
$rm_try

echo "Checking the availability struct ip_mreq ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ip_mreq mreq;
return (mreq.imr_multiaddr.s_addr);
```

```
}
EOF
val="$undef"
set try; if eval $compile; then

 val="$define"
fi
set d_ip_mreq; eval $setvar
$rm_try

echo "Checking the availability struct ip_mreq_source ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ip_mreq_source mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile; then
      val="$define"
fi
set d_ip_mreq_source; eval $setvar
$rm_try

echo "Checking the availability struct ipv6_mreq ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ipv6_mreq mreq;
return (mreq.ipv6mr_interface);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_ipv6_mreq; eval $setvar
$rm_try

echo "Checking the availability struct ipv6_mreq_source ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
```

```
#include <netinet/in.h>
int main() {
struct ipv6_mreq_source mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile;
 then
      val="$define"
fi
set d_ipv6_mreq_source; eval $setvar
$rm_try

?X: these constants are known to be troublesomely defined as enums
?X: so that ifdef will not work for detecting their presence.
echo "Checking the availability of certain socket constants..." >&4
for ENUM in MSG_CTRUNC MSG_DONTROUTE MSG_OOB MSG_PEEK MSG_PROXY SCM_RIGHTS; do
   enum=`$echo $ENUM|./tr '[A-Z]' '[a-z]'`
   $cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
int main() {
   int i = $ENUM;
}
EOF
   val="$undef"
   set try; if eval $compile; then
 val="$define"
   fi
   set d_${enum}; eval $setvar
   $rm_try
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_socket.U
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```
?RCS: $Id: d_group.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_group.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:34:52  ram
?RCS: patch61: useless unit dropped.
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:48  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Useless unit dropped.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_group.U
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```
?RCS: $Id: d_setprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setprotoent_r setprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setprotoent_r:
?S: This variable conditionally defines the HAS_SETPROTOENT_R symbol,
?S: which indicates to the C program that the setprotoent_r()
?S: routine is available.
?S:.
?S:setprotoent_r_proto:
?S: This variable encodes the prototype of setprotoent_r.
?S: It is zero if d_setprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setprotoent_r
?S: is defined.
?S:.
?C:HAS_SETPROTOENT_R:
?C: This symbol, if defined, indicates that the setprotoent_r
 routine
?C: is available to setprotoent re-entrantly.
?C:.
?C:SETPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of setprotoent_r.
?C: It is zero if d_setprotoent_r is undef, and one of the
```

```
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setprotoent_r
?C: is defined.
?C:.
?H:#$d_setprotoent_r HAS_SETPROTOENT_R /**/
?H:#define SETPROTOENT_R_PROTO $setprotoent_r_proto /**/
?H:.
?T:try hdrs d_setprotoent_r_proto
: see if setprotoent_r exists
set setprotoent_r d_setprotoent_r
eval $inlibc
case "$d_setprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setprotoent_r_proto:$usethreads" in
 ":define") d_setprotoent_r_proto=define
  set d_setprotoent_r_proto setprotoent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setprotoent_r_proto" in
 define)
 case "$setprotoent_r_proto" in
 "|0) try='int setprotoent_r(int, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && setprotoent_r_proto=I_ID ;;
 esac
 case "$setprotoent_r_proto"
 in
 "|0) try='void setprotoent_r(int, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && setprotoent_r_proto=V_ID ;;
 esac
 case "$setprotoent_r_proto" in
 "|0) d_setprotoent_r=undef
  setprotoent_r_proto=0
  echo "Disabling setprotoent_r, cannot determine prototype." >&4 ;;
 * ) case "$setprotoent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setprotoent_r_proto="REENTRANT_PROTO_$setprotoent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setprotoent_r has no prototype, not using it." >&4 ;;
  esac
  d_setprotoent_r=undef
  setprotoent_r_proto=0
  ;;
 esac
```

```
 ;;
*) setprotoent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setprotoent_r.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:siteman3dir siteman3direxp installsiteman3dir: Getfile \
 Setprefixvar prefix siteprefix man3dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:siteman3dir=''
?S:siteman3dir:
?S: This variable contains the name of the directory in which site-specific
?S: library man source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After
 perl has been installed, users may install their own local
?S: man3 pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:siteman3direxp=''
?S:siteman3direxp:
?S: This variable is the same as the siteman3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsiteman3dir=''
?S:installsiteman3dir:
?S: This variable is really the same as siteman3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
```

```
?LINT:change prefixvar
?LINT:set installsiteman3dir
?LINT:set siteman3dir
?LINT:set siteman3direxp
: determine where add-on library man pages go
case "$siteman3dir" in
") dflt=`echo $man3dir | $sed "s#^$prefix#$siteprefix#"` ;;
*) dflt=$siteman3dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname
 where the site-specific library manual pages should be installed?'
. ./getfile
prefixvar=siteman3dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteman3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: newslib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: newslib.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:newslib newslibexp: test inews Oldconfig Getfile
?MAKE: -pick add $@ %<
?S:newslib:
?S: This variable contains the eventual value of the NEWSLIB symbol,
?S: which holds the name of the directory serving as the news library.
?S: It may have a ~ on the front.  See newslibexp for expanded version.
?S:.
?S:newslibexp:
?S: This variable contains
 the ~ expanded name of the news library
?S: directory.  See newslib.
```

```
?S:.
?C:NEWSLIB:
?C: This symbol contains the name of the directory serving as the news
?C: library.  The program must be prepared to do ~ expansion on it.
?C:.
?C:NEWSLIB_EXP:
?C: This symbol is the ~ expanded version of NEWSLIB, for programs that
?C: do not wish to deal with it at run-time.
?C:.
?H:#define NEWSLIB "$newslib"  /**/
?H:#define NEWSLIB_EXP "$newslibexp" /**/
?H:.
?LINT:change inews
: figure out news library
case "$newslib" in
")
 dflt=/usr/lib/news
 ;;
*)  dflt=$newslib ;;
esac
echo " "
fn=d~
rp='Where is your news library?'
. ./getfile
newslib="$ans"
newslibexp="$ansexp"
if $test -f $newslibexp/inews; then
 echo "Aha!  Inews is really in $newslibexp!  Maybe this is 2.10.2..." >&4
 case "$inews" in
 inews)
  : null
  ;;
 *) echo "(Make sure $inews isn't an old version.)";;
 esac
 inews=$newslibexp/inews
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/newslib.U
No license file was found, but licenses were detected in source scan.

```
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: errnolist.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:01  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:10:54  ram
?RCS: patch16: created
?RCS:
?MAKE:errnolist errnolist_SH errnolist_a errnolist_c errnolist_o: cat +cc \
 +ccflags +libs +d_sysernlst _a _o
?MAKE: -pick add $@ %<
?S:errnolist:
?S: This variable holds the base name of a file containing the
?S: definition of the sys_errnolist
 array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S: The following lines should be included in your Makefile.SH:
?S:
?S:  case "$errnolist" in
?S:  ") ;;
?S:  *)
?S:   $spitshell >>Makefile <<!GROK!THIS!
?S:  $errnolist_c: $errnolist_SH $errnolist_a
?S:   sh ./$errnolist_SH
?S:
?S:  !GROK!THIS!
?S:   ;;
?S:  esac
?S:
?S: You may define the 'errnolist' variable in your Myinit.U if you
?S: wish to override its default value "errnolist".
?S:.
?S:errnolist_SH:
?S: This is the name of a file which will generate errnolistc.
?S:.
?S:errnolist_a:
?S: This is the name of the awk script called by errnolist_SH.
?S:.
?S:errnolist_c:
?S: This is the name of a generated C file which provides the
?S: definition of the sys_errnolist array.
?S:.
?S:errnolist_o:
?S: This is the name of the object file which provides the
?S: definition of the sys_errnolist array, if the C library
```

```
?S: doesn't provide it already.  Otherwise, its value is empty.
?S:.
?INIT:errnolist=errnolist
:
 check for sys_errnolist
@if d_sysernlst || HAS_SYS_ERRNOLIST
case "$d_sysernlst" in
"$define")
   errnolist=''
   errnolist_SH=''
   errnolist_a=''
   errnolist_c=''
   errnolist_o=''
 ;;
*)
 echo " "
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
 ;;
esac
@else
echo " "
$cat <<EOM
Checking to see if your C library provides us with sys_errnolist[]...
EOM
$cat >errnolist.c <<'EOCP'
extern char *sys_errnolist[];
int main() {
   char *p0 = sys_errnolist[0];
   char *p1 = sys_errnolist[1];

   return (p0 == p1); /* Make sure they're not optimized away */
}
EOCP
if $cc $ccflags -o errnolist errnolist.c $libs >/dev/null 2>&1 ; then
   echo "It does."
   errnolist=''
   errnolist_SH=''
   errnolist_a=''
   errnolist_c=''
   errnolist_o=''
else
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
```

```
  errnolist_SH=$errnolist.SH
  errnolist_a=$errnolist$_a
  errnolist_c=$errnolist.c
  errnolist_o=$errnolist$_o
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/errnolist.U
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```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_readv: Inlibc
?MAKE: -pick add $@ %<
?S:d_readv:
?S: This variable conditionally defines the HAS_READV symbol, which
?S: indicates to the C program that the readv() routine is available.
?S:.
?C:HAS_READV:
?C: This symbol, if defined, indicates that the readv routine is
?C: available to do gather reads.  You will also need <sys/uio.h>
?C: and there I_SYSUIO.
?C:.
?H:#$d_readv HAS_READV  /**/
?H:.
?LINT:set d_readv
: see if readv exists
set readv d_readv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_readv.U
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```
?RCS: $Id: d_usleep.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_usleep.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_usleep: Inlibc
?MAKE: -pick add $@ %<
?S:d_usleep:
?S: This variable conditionally defines HAS_USLEEP if usleep() is
?S: available to do high granularity sleeps.
?S:.
?C:HAS_USLEEP (USLEEP):
?C: This symbol, if defined, indicates that the usleep routine is
?C: available to let the process sleep on a sub-second accuracy.
?C:.
?H:#$d_usleep
 HAS_USLEEP  /**/
?H:.
?LINT:set d_usleep
: see if usleep exists
set usleep d_usleep
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_usleep.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endpwent_r endpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_endpwent_r:
?S: This variable conditionally defines the HAS_ENDPWENT_R symbol,
?S: which indicates to the C program that the endpwent_r()
?S: routine is available.
?S:.
?S:endpwent_r_proto:
?S: This variable encodes the prototype of endpwent_r.
?S: It is zero if d_endpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endpwent_r
```

```
?S: is defined.
?S:.
?C:HAS_ENDPWENT_R:
?C: This symbol, if defined, indicates that the endpwent_r routine
?C: is available to
 endpwent re-entrantly.
?C:.
?C:ENDPWENT_R_PROTO:
?C: This symbol encodes the prototype of endpwent_r.
?C: It is zero if d_endpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endpwent_r
?C: is defined.
?C:.
?H:#$d_endpwent_r HAS_ENDPWENT_R /**/
?H:#define ENDPWENT_R_PROTO $endpwent_r_proto /**/
?H:.
?T:try hdrs d_endpwent_r_proto
: see if endpwent_r exists
set endpwent_r d_endpwent_r
eval $inlibc
case "$d_endpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_endpwent_r_proto:$usethreads" in
 ":define") d_endpwent_r_proto=define
  set d_endpwent_r_proto endpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endpwent_r_proto" in
 define)
 case "$endpwent_r_proto" in
 "|0) try='int endpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endpwent_r_proto=I_H ;;
 esac
 case "$endpwent_r_proto" in
 "|0) try='void endpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endpwent_r_proto=V_H ;;
 esac
 case "$endpwent_r_proto"
 in
 "|0) d_endpwent_r=undef
  endpwent_r_proto=0
  echo "Disabling endpwent_r, cannot determine prototype." >&4 ;;
 * ) case "$endpwent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endpwent_r_proto="REENTRANT_PROTO_$endpwent_r_proto" ;;
  esac
```

```
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endpwent_r has no prototype, not using it." >&4 ;;
  esac
  d_endpwent_r=undef
  endpwent_r_proto=0
  ;;
 esac
 ;;
*) endpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endpwent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lintlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lintlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lintlib lintlibexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:lintlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put public lint-library files for the package in question.  It is
?S: most often a local directory such as /usr/local/lib/lint. Programs using
?S: this variable must be prepared to
 deal with ~name expansion.
?S:.
?S:lintlibexp:
?S: This variable is the same as the lintlib variable, but is filename
?S: expanded at configuration time, for convenient use in your makefiles.
?S:.
: determine where public lint libraries go
case "$lintlib" in
```

```
") dflt=`./loc . "." /usr/local/lib/lint /usr/lib/lint /usr/lib`;;
*) dflt="$lintlib" ;;
esac
echo " "
fn=d~
rp='Where do you want to put the public lint libraries?'
. ./getfile
lintlib="$ans"
lintlibexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lintlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_rint: Inlibc
?MAKE: -pick add $@ %<
?S:d_rint:
?S: This variable conditionally defines the HAS_RINT symbol, which
?S: indicates to the C program that the rint() routine is available.
?S:.
?C:HAS_RINT:
?C: This symbol, if defined, indicates that the rint routine is
?C: available to return the nearest integral value to x as double
?C: using the current rounding mode.
?C:.
?H:#$d_rint HAS_RINT  /**/
?H:.
?LINT:set d_rint
: see if rint exists
set rint d_rint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_rint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
```

```
?RCS:
?MAKE:d_ustat: Inlibc
?MAKE: -pick add $@ %<
?S:d_ustat:
?S: This variable conditionally defines HAS_USTAT if ustat() is
?S: available to query file system statistics by dev_t.
?S:.
?C:HAS_USTAT:
?C: This symbol, if defined, indicates that the ustat system call is
?C: available to query file system statistics by dev_t.
?C:.
?H:#$d_ustat HAS_USTAT  /**/
?H:.
?LINT:set d_ustat
: see if ustat exists
set ustat d_ustat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ustat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotby.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getpbyname d_getpbynumber: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpbyname:
?S: This variable conditionally defines the HAS_GETPROTOBYNAME
?S: symbol, which indicates to the C program that the
?S: getprotobyname() routine is available to look up protocols
?S: by their name.
?S:.
?S:d_getpbynumber:
?S: This variable conditionally defines the HAS_GETPROTOBYNUMBER
?S: symbol, which indicates to the C program that the
?S: getprotobynumber() routine is available to look up protocols
?S: by their number.
?S:.
?C:HAS_GETPROTOBYNAME:
?C: This symbol, if defined, indicates that the getprotobyname()
?C: routine is available to look up protocols by their name.
?C:.
?C:HAS_GETPROTOBYNUMBER:
```

```
?C: This
 symbol, if defined, indicates that the getprotobynumber()
?C: routine is available to look up protocols by their number.
?C:.
?H:#$d_getpbyname HAS_GETPROTOBYNAME  /**/
?H:#$d_getpbynumber HAS_GETPROTOBYNUMBER  /**/
?H:.
?LINT:set d_getpbyname d_getpbynumber
: Optional checks for getprotobyname and getprotobynumber

@if d_getpbyname || HAS_GETPROTOBYNAME
: see if getprotobyname exists
set getprotobyname d_getpbyname
eval $inlibc
@end

@if d_getpbynumber || HAS_GETPROTOBYNUMBER
: see if getprotobynumber exists
set getprotobynumber d_getpbynumber
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getprotby.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Mkdirp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can launched to create a
```

```
?X: directory path like "mkdir -p" would do.
?X:
?MAKE:Mkdirp:
 eunicefix startsh
?MAKE: -pick add $@ %<
?F:./mkdirp
?T:name create file
: script used to emulate mkdir -p
cat >mkdirp <<EOS
$startsh
EOS
cat >>mkdirp <<'EOS'
name=$1;
create="";
while test $name; do
 if test ! -d "$name"; then
  create="$name $create"
  name=`echo $name | sed -e "s|^[^/]*$||"`
  name=`echo $name | sed -e "s|\(.*\)/.*|\1|"`
 else
  name=""
 fi
done
for file in $create; do
 mkdir $file
done
EOS
chmod +x mkdirp
$eunicefix mkdirp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Mkdirp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Rcs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Rcs.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?X:
?X: This is a unit that helps people who write SH scripts and keep them under
?X: RCS, but don't think to protect the $Log and other $Id keywords from
?X: variable substitution (or people like me who do not like to).
?X:
?MAKE:Author Date Header Id Locker Log RCSfile Revision Source State: Oldconfig
?MAKE: -pick weed $@ %<
?LINT:describe Author
 Date Header Id Locker Log RCSfile Revision Source State
: preserve RCS keywords in files with variable substitution, grrr
?Author:Author='$Author'
?Date:Date='$Date'
?Header:Header='$Header'
?Id:Id='$Id'
?$Locker'
?Log:Log='$Log'
?RCSfile:RCSfile='$RCSfile'
?Revision:Revision='$Revision'
?Source:Source='$Source'
?State:State='$State'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Rcs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgid.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:33:44  ram
?RCS: patch61: created
?RCS:
?MAKE:d_getpgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpgid:
?S: This variable conditionally defines the HAS_GETPGID symbol, which
?S: indicates to the C program that the getpgid(pid) function
?S: is available to get the process group id.
?S:.
?C:HAS_GETPGID:
```

```
?C: This symbol, if defined, indicates to the C program
 that
?C: the getpgid(pid) function is available to get the
?C: process group id.
?C:.
?H:#$d_getpgid HAS_GETPGID  /**/
?H:.
?LINT:set d_getpgid
: see if getpgid exists
set getpgid d_getpgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strstr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strstr.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strstr: Inlibc
?MAKE: -pick add $@ %<
?S:d_strstr:
?S: This variable conditionally defines HAS_STRSTR if strstr() is
?S: available to find substrings.
?S:.
?C:HAS_STRSTR (STRSTR):
?C: This symbol, if defined, indicates that the strstr routine is
?C: available to find substrings.
?C:.
?H:#$d_strstr HAS_STRSTR /**/
?H:.
?LINT:set d_strstr
:
 see if strstr exists
set strstr d_strstr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strstr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017 H.Merijn Brand (original change by Tony Cook)
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_openat d_unlinkat d_renameat d_linkat d_fchmodat: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchmodat:
?S: This variable conditionally defines the HAS_FCHMODAT symbol, which
?S: indicates the POSIX fchmodat() function is available.
?S:.
?S:d_linkat:
?S: This variable conditionally defines the HAS_LINKAT symbol, which
?S: indicates the POSIX linkat() function is available.
?S:.
?S:d_openat:
?S: This variable conditionally defines the HAS_OPENAT symbol, which
?S: indicates the POSIX openat() function is available.
?S:.
?S:d_renameat:
?S: This variable conditionally defines the HAS_RENAMEAT symbol, which
?S: indicates the POSIX renameat() function is available.
?S:.
?S:d_unlinkat:
?S: This variable
 conditionally defines the HAS_UNLINKAT symbol, which
?S: indicates the POSIX unlinkat() function isavailable.
?S:.
?C:HAS_FCHMODAT:
?C: This symbol is defined if the fchmodat() routine is available.
?C:.
?C:HAS_LINKAT:
?C: This symbol is defined if the linkat() routine is available.
?C:.
?C:HAS_OPENAT:
?C: This symbol is defined if the openat() routine is available.
?C:.
?C:HAS_RENAMEAT:
?C: This symbol is defined if the renameat() routine is available.
?C:.
?C:HAS_UNLINKAT:
?C: This symbol is defined if the unlinkat() routine is available.
?C:.
?H:#$d_fchmodat HAS_FCHMODAT /**/
```

```
?H:#$d_linkat HAS_LINKAT /**/
?H:#$d_openat HAS_OPENAT /**/
?H:#$d_renameat HAS_RENAMEAT /**/
?H:#$d_unlinkat HAS_UNLINKAT /**/
?H:.
?LINT:set d_openat d_unlinkat d_renameat d_linkat d_fchmodat
: check for openat, unlinkat, renameat, linkat, fchmodat
set openat d_openat
eval $inlibc

set unlinkat d_unlinkat
eval $inlibc

set renameat d_renameat
eval $inlibc

set linkat d_linkat
eval $inlibc

set fchmodat d_fchmodat
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fsat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perlpath.U,v 3.0.1.2 1995/09/25 09:17:04 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: perlpath.U,v $
?RCS:
?RCS: Special perl5 unit -- we haven't installed perl yet.
?RCS:
?RCS: Revision 3.0.1.2  1995/09/25  09:17:04  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:33:53  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:09:32  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this unit is to locate perl good enough to construct a #!
?X:
?MAKE:perlpath: cat Getfile Loc Myread Oldconfig initialinstalllocation \
 startperl version versionony
?MAKE: -pick add $@ %<
?Y:TOP
?S:perlpath:
?S: This variable contains the eventual value of the PERLPATH symbol,
?S: which contains the name of the perl interpreter to be used in
?S: shell scripts and in the "eval 'exec'" idiom.  This variable is
?S: not necessarily the pathname of the file containing the perl
?S: interpreter; you must append the executable extension (_exe) if
?S: it is not already present.  Note that Perl code that runs during
?S: the Perl build process cannot reference this variable, as Perl
?S: may not have been installed, or even if installed, may be a
?S: different version of Perl.
?S:.
?C:PERLPATH:
?C: This symbol contains the name of the perl interpreter to be
?C: used in shell scripts and in the "eval 'exec'" idiom.
?C:.
?H:#define PERLPATH "$perlpath"  /**/
?H:.
:
 figure best path for perl in scripts
case "$perlpath" in
")
 case "$versionony" in
 "$define") perlpath="$initialinstalllocation/perl$version";;
 *)  perlpath="$initialinstalllocation/perl";;
 esac
 case "$startperl" in
 *!*) ;;
 *)
  $cat <<EOH

I will use the "eval 'exec'" idiom to start Perl on your system.
I can use the full path of your Perl binary for this purpose, but
doing so may cause problems if you want to share those scripts and
Perl is not always in a standard place ($initialinstalllocation/perl).

EOH
  dflt="$initialinstalllocation/perl"
```

```
  rp="What path shall I use in \"eval 'exec'\"?"
  . ./myread
  perlpath="$ans"
  ;;
 esac
 ;;
esac
case "$startperl" in
*!*) ;;
*) echo "I'll use $perlpath in \"eval 'exec'\"" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlpath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_inttypes: Inhdr cat rm_try Setvar Compile
?MAKE: -pick add $@ %<
?S:i_inttypes:
?S: This variable conditionally defines the I_INTTYPES symbol,
?S: and indicates whether a C program should include <inttypes.h>.
?S:.
?C:I_INTTYPES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <inttypes.h>.
?C:.
?H:#$i_inttypes   I_INTTYPES                /**/
?H:.
?LINT:set i_inttypes
: see if inttypes.h is available
: we want a real compile instead of Inhdr because some systems
: have an inttypes.h
 which includes non-existent headers
echo " "
$cat >try.c <<EOCP
#include <inttypes.h>
int main() {
 static int32_t foo32 = 0x12345678;
```

```
}
EOCP
set try
if eval $compile; then
 echo "<inttypes.h> found." >&4
 val="$define"
else
 echo "<inttypes.h> NOT found." >&4
 val="$undef"
fi
$rm_try
set i_inttypes
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_inttypes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rename.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rename.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_rename: Inlibc
?MAKE: -pick add $@ %<
?S:d_rename:
?S: This variable conditionally defines the HAS_RENAME symbol, which
?S: indicates to the C program that the rename() routine is available
?S: to rename files.
?S:.
?C:HAS_RENAME (RENAME):
?C: This symbol, if defined, indicates that the rename routine is available
?C: to rename files.
  Otherwise you should do the unlink(), link(), unlink()
?C: trick.
?C:.
?H:#$d_rename HAS_RENAME /**/
?H:.
?LINT:set d_rename
```

```
: see if rename exists
set rename d_rename
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rename.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_hypot: Inlibc
?MAKE: -pick add $@ %<
?S:d_hypot:
?S: This variable conditionally defines HAS_HYPOT if hypot is available
?S: for numerically stable hypotenuse function.
?S:.
?C:HAS_HYPOT:
?C: This symbol, if defined, indicates that the hypot routine is
?C: available to do the hypotenuse function.
?C:.
?H:#$d_hypot HAS_HYPOT  /**/
?H:.
?LINT:set d_hypot
: see if hypot exists
set hypot d_hypot
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_hypot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_portable.U,v 3.0.1.2 1995/01/11 15:28:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_portable.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:28:52  ram
?RCS: patch45: executable path stripping moved to the end in Config_sh.U
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:21:17  ram
```

```
?RCS: patch15: did not strip variables properly when needed
?RCS: patch15: now also strips down variables from trylist
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
   This is the same as the dist version, except I don't bother
?X:   prompting people since it makes no difference for perl5,
?X:   and only confuses people.
?X:
?X: The Loc unit is wanted to get the definition of all the locating variables.
?X:
?MAKE:d_portable: Loc Oldconfig
?MAKE: -pick add $@ %<
?S:d_portable:
?S: This variable conditionally defines the PORTABLE symbol, which
?S: indicates to the C program that it should not assume that it is
?S: running on the machine it was compiled on.
?S:.
?C:PORTABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: not assume that it is running on the machine it was compiled on.
?C: The program should be prepared to look up the host name, translate
?C: generic filenames, use PATH, etc.
?C:.
?H:#$d_portable PORTABLE /**/
?H:.
?D:d_portable="
: decide how portable to be.  Allow command line overrides.
case "$d_portable" in
"$undef") ;;
*) d_portable="$define" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_portable.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ilogb: Inlibc
?MAKE: -pick add $@ %<
?S:d_ilogb:
?S: This variable conditionally defines the HAS_ILOGB symbol, which
?S: indicates to the C program that the ilogb() routine is available
?S: for extracting the exponent of double x as a signed integer.
```

```
?S:.
?C:HAS_ILOGB:
?C: This symbol, if defined, indicates that the ilogb routine is
?C: available to get integer exponent of a floating-point value.
?C:.
?H:#$d_ilogb HAS_ILOGB  /**/
?H:.
?LINT:set d_ilogb
: see if ilogb exists
set ilogb d_ilogb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ilogb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:selectminbits: Compile cat rm_try Oldconfig d_select \
 i_time i_systime i_systimek i_sysselct selecttype d_socket \
 byteorder Myread Setvar run i_stdlib ptrsize
?MAKE: -pick add $@ %<
?S:selectminbits:
?S: This variable holds the minimum number of bits operated by select.
?S: That is, if you do select(n, ...), how many bits at least will be
?S: cleared in the masks if some activity is detected.  Usually this
?S: is either n or 32*ceil(n/32), especially many little-endians do
?S: the latter.  This is only useful if
 you have select(), naturally.
?S:.
?C:SELECT_MIN_BITS:
?C: This symbol holds the minimum number of bits operated by select.
?C: That is, if you do select(n, ...), how many bits at least will be
?C: cleared in the masks if some activity is detected.  Usually this
?C: is either n or 32*ceil(n/32), especially many little-endians do
?C: the latter.  This is only useful if you have select(), naturally.
?C:.
?H:#define SELECT_MIN_BITS $selectminbits /**/
?H:.
?T:bits
```

```
?T:safebits
?F:!try
: check for the select 'width'
case "$selectminbits" in
") safebits=`expr $ptrsize \* 8`
   case "$d_select" in
 $define)
  $cat <<EOM

Checking to see on how many bits at a time your select() operates...
EOM
  $cat >try.c <<EOCP
#include <sys/types.h>
#$i_time I_TIME
#$i_systime I_SYS_TIME
#$i_systimek I_SYS_TIME_KERNEL
#ifdef I_TIME
#   include <time.h>
#endif
#ifdef I_SYS_TIME
#   ifdef I_SYS_TIME_KERNEL
# define KERNEL
#   endif
#   include <sys/time.h>
#   ifdef I_SYS_TIME_KERNEL
# undef KERNEL
#   endif
#endif
#$i_sysselct
 I_SYS_SELECT
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
#$d_socket HAS_SOCKET
#ifdef HAS_SOCKET
#   include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
$selecttype b;
#define S sizeof(*(b))
#define MINBITS 64
#define NBYTES (S * 8 > MINBITS ? S : MINBITS/8)
#define NBITS  (NBYTES * 8)
int main() {
```

```
  char *s = (char *)malloc(NBYTES);
  struct timeval t;
  int i;
  FILE* fp;
  int fd;

  if (!s)
 exit(1);
  fclose(stdin);
  fp = fopen("try.c", "r");
  if (fp == 0)
    exit(2);
  fd = fileno(fp);
  if (fd < 0)
    exit(3);
  b = ($selecttype)s;
  for (i = 0; i < NBITS; i++)
 FD_SET(i, b);
  t.tv_sec  = 0;
  t.tv_usec = 0;
  select(fd + 1, b, 0, 0, &t);
  for (i = NBITS - 1; i > fd && FD_ISSET(i, b); i--);
  free(s);
  printf("%d\n", i + 1);
  return 0;
}
EOCP
  set try
  if eval $compile_ok; then
   selectminbits=`$run
 ./try 2>/dev/null`
   case "$selectminbits" in
   ") cat >&4 <<EOM
Cannot figure out on how many bits at a time your select() operates.
I'll play safe and guess it is $safebits bits.
EOM
    selectminbits=$safebits
    bits="$safebits bits"
    ;;
   1) bits="1 bit" ;;
   *) bits="$selectminbits bits" ;;
   esac
   echo "Your select() operates on $bits at a time." >&4
  else
   rp='What is the minimum number of bits your select() operates on?'
   case "$byteorder" in
   12345678) dflt=64 ;;
   1234)  dflt=32 ;;
```

```
   *)  dflt=1 ;;
   esac
   . ./myread
   val=$ans
   selectminbits="$val"
  fi
  $rm_try
  ;;
 *) : no select, so pick a harmless default
  selectminbits=$safebits
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/selectminbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetprotos.U,v $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getnetprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getnetprotos:
?S: This variable conditionally defines the HAS_GETNET_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getnet*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETNET_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getnetent(), getnetbyname(), and
?C: getnetbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getnetprotos HAS_GETNET_PROTOS /**/
?H:.
?LINT:set d_getnetprotos
: see if prototypes for various getnetxxx netdb.h functions are available
```

```
echo " "
set d_getnetprotos getnetent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getnetprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgrp.U,v 3.0.1.3 1997/02/28 15:44:16 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setpgrp.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:44:16  ram
?RCS: patch61: obsoleted USE_BSDGRP in favor of USE_BSD_SETPGRP
?RCS: patch61: another unit now also defines a USE_BSD_GETPGRP
?RCS: patch61: fallback for test program failure improved
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:59:30  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:15:37  ram
?RCS: patch36: added
 'ldflags' to the test compile line (ADO)
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp d_bsdsetpgrp: cat rm_try +cc +libs +ccflags \
 +ldflags Inlibc Guess Setvar i_unistd i_stdlib run
?MAKE: -pick add $@ %<
?S:d_setpgrp:
?S: This variable conditionally defines HAS_SETPGRP if setpgrp() is
?S: available to set the current process group.
?S:.
?S:d_bsdsetpgrp (d_bsdpgrp):
?S: This variable conditionally defines USE_BSD_SETPGRP if
?S: setpgrp needs two arguments whereas USG one needs none.
?S: See also d_setpgid for a POSIX interface.
?S:.
?C:HAS_SETPGRP (SETPGRP):
```

```
?C: This symbol, if defined, indicates that the setpgrp routine is
?C: available to set the current process group.
?C:.
?C:USE_BSD_SETPGRP (USE_BSDPGRP BSDPGRP):
?C: This symbol, if defined, indicates that setpgrp needs two
?C: arguments whereas USG one needs none.  See also HAS_SETPGID
?C: for
 a POSIX interface.
?C:.
?H:#$d_setpgrp HAS_SETPGRP  /**/
?H:#$d_bsdsetpgrp USE_BSD_SETPGRP /**/
?H:.
?T:xxx
?F:!try
?LINT:set d_setpgrp d_bsdsetpgrp
: see if setpgrp exists
set setpgrp d_setpgrp
eval $inlibc

@if USE_BSD_SETPGRP || d_bsdsetpgrp
case "$d_setpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of setpgrp is in use..."
 $cat >try.c <<EOP
#include <stdio.h>
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (-1 == setpgrp(1, 1))
  exit(0);
#else
 if (setpgrp() != -1)
  exit(0);
#endif
```

```
 exit(1);
}
EOP
 if $cc -o try -DTRY_BSD_PGRP $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo 'You have to use setpgrp(pid,pgrp) instead of setpgrp().' >&4
  val="$define"
 elif $cc -o try $ccflags $ldflags try.c $libs
 >/dev/null 2>&1 && $run ./try; then
  echo 'You have to use setpgrp() instead of setpgrp(pid,pgrp).' >&4
  val="$undef"
 else
  echo "(I can't seem to compile and run the test program.)"
  if ./usg; then
   xxx="a USG one, i.e. you use setpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use setpgrp(pid,pgrp)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use setpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your setpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set d_bsdsetpgrp
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwuid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
```

```
?RCS:
?MAKE:d_getpwuid_r getpwuid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwuid_r:
?S: This variable conditionally defines the HAS_GETPWUID_R symbol,
?S: which indicates to the C program that the getpwuid_r()
?S: routine is available.
?S:.
?S:getpwuid_r_proto:
?S: This variable encodes the prototype of getpwuid_r.
?S: It is zero if d_getpwuid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwuid_r
?S: is defined.
?S:.
?C:HAS_GETPWUID_R:
?C: This symbol, if defined, indicates that the getpwuid_r routine
?C: is available to
 getpwuid re-entrantly.
?C:.
?C:GETPWUID_R_PROTO:
?C: This symbol encodes the prototype of getpwuid_r.
?C: It is zero if d_getpwuid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwuid_r
?C: is defined.
?C:.
?H:#$d_getpwuid_r HAS_GETPWUID_R /**/
?H:#define GETPWUID_R_PROTO $getpwuid_r_proto /**/
?H:.
?T:try hdrs d_getpwuid_r_proto
: see if getpwuid_r exists
set getpwuid_r d_getpwuid_r
eval $inlibc
case "$d_getpwuid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwuid_r_proto:$usethreads" in
 ":define") d_getpwuid_r_proto=define
  set d_getpwuid_r_proto getpwuid_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getpwuid_r_proto" in
 define)
 case "$getpwuid_r_proto" in
 "|0) try='int getpwuid_r(uid_t, struct passwd*, char*, size_t, struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBWR ;;
 esac
```

```
 case "$getpwuid_r_proto" in
 "|0) try='int getpwuid_r(uid_t, struct passwd*, char*, int,
 struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBIR ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) try='int getpwuid_r(uid_t, struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBI ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) try='struct passwd* getpwuid_r(uid_t, struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=S_TSBI ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) d_getpwuid_r=undef
  getpwuid_r_proto=0
  echo "Disabling getpwuid_r, cannot determine prototype." >&4 ;;
 * ) case "$getpwuid_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getpwuid_r_proto="REENTRANT_PROTO_$getpwuid_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getpwuid_r has no prototype, not using it." >&4 ;;
  esac
  d_getpwuid_r=undef
  getpwuid_r_proto=0
  ;;
 esac
 ;;
*) getpwuid_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwuid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sysman.U,v $
?RCS: Revision 3.0.1.2  1994/06/20  07:08:43  ram
?RCS: patch30: now explicitly states that /usr/man/man1 is the default
?RCS: patch30: added /usr/local/man/man1 to the search list
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:13:50  ram
?RCS: patch10: added support for /local/man/man1 (WAD)
?RCS: patch10: added temporary syspath variable to cut down on line length
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sysman: test
 Loc Oldconfig
?MAKE: -pick add $@ %<
?S:sysman:
?S: This variable holds the place where the manual is located on this
?S: system. It is not the place where the user wants to put his manual
?S: pages. Rather it is the place where Configure may look to find manual
?S: for unix commands (section 1 of the manual usually). See mansrc.
?S:.
?T:syspath
: determine where manual pages are on this system
echo " "
case "$sysman" in
")
 syspath='/usr/share/man/man1 /usr/man/man1'
 syspath="$syspath /usr/man/mann /usr/man/manl /usr/man/local/man1"
 syspath="$syspath /usr/man/u_man/man1 /usr/share/man/man1"
 syspath="$syspath /usr/catman/u_man/man1 /usr/man/l_man/man1"
 syspath="$syspath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 syspath="$syspath /usr/man/man.L /local/man/man1 /usr/local/man/man1"
 sysman=`./loc . /usr/man/man1 $syspath`
 ;;
esac
if $test -d "$sysman"; then
 echo "System manual is in $sysman." >&4
else
 echo "Could not find manual pages in source form." >&4
fi

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sysman.U
No license file was found, but licenses were detected in source scan.
```

```
?RCS: $Id: startsh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: startsh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:25:31  ram
?RCS: patch61: avoid needless chatter since this is now done very early
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startsh: sh sharpbang eunicefix
?MAKE: -pick add $@ %<
?S:startsh:
?S: This variable contains the string to put on the front of a shell
?S: script to make sure (hopefully) that it runs with sh and not some
?S: other
 shell.
?S:.
?F:!sharp
: figure out how to guarantee sh startup
?X: Avoid needless chatter since this is now done very early.
?X: echo " "
?X: echo "Checking out how to guarantee sh startup..." >&2
case "$startsh" in
") startsh=${sharpbang}${sh} ;;
*)
?X: echo "Let's see if '$startsh' works..." ;;
esac
cat >sharp <<EOSS
$startsh
set abc
test "$?abc" != 1
EOSS

chmod +x sharp
$eunicefix sharp
if ./sharp; then
 : echo "Yup, it does."
else
 echo "Hmm... '$startsh' does not guarantee sh startup..."
 echo "You may have to fix up the shell scripts to make sure $sh runs them."
```

```
fi
rm -f sharp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/startsh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: alignbytes.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:02:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:25:20  ram
?RCS: patch23: avoid ALIGNBYTES, since it conflicts on NetBSD
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:alignbytes: Assert Myread Trylink cat i_inttypes i_limits i_math
?MAKE: -pick add $@ %<
?S:alignbytes:
?S: This variable holds the number of bytes required
 to align an
?S: arbitrary standard type. Usual values are 2, 4 and 8.
?S:.
?X: This used to be called ALIGNBYTES, but that conflicts with
?X: <machines/param.h> in NetBSD.
?C:MEM_ALIGNBYTES (ALIGNBYTES):
?C: This symbol contains the number of bytes required to align a
?C: double. Usual values are 2, 4 and 8.
?C:.
?H:#define MEM_ALIGNBYTES $alignbytes /**/
?H:.
?T:alignment result
: check for alignment requirements
echo " "
case "$alignbytes" in
")
 echo "Checking alignment constraints..." >&4
```

```
 for alignment in 8 4 2 1 16 32 error
 do
  $cat >try.c <<EOCP
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#$i_limits I_LIMITS
#ifdef I_LIMITS
#include <limits.h>
#endif
#$i_math I_MATH
#ifdef I_MATH
#include <math.h>
#endif

union u {
 void *void_ptr;
 void (*func_ptr)(void);
 char c;
 short s;
 int i;
 long l;
 float f;
 double d;
#ifdef LLONG_MAX
 long long ll;
#else
#warning "LLONG_MAX undefined"
#endif
#if defined(HUGE_VALL)
 long double ld;
#else
#warning
 "HUGE_VALL undefined"
#endif
#ifdef UINT32_MAX
 uint32_t u32;
#else
#warning "UINT32_MAX undefined"
#endif
#ifdef UINT16_MAX
 uint16_t u16;
#else
#warning "UINT32_MAX undefined"
#endif
#ifdef UINT64_MAX
```

```
 uint64_t u64;
#else
#warning "UINT64_MAX undefined"
#endif
#ifdef UINTMAX_MAX
 uintmax_t m;
#else
#warning "UINTMAX_MAX undefined"
#endif
#ifdef UINTPTR_MAX
 uintptr_t up;
#else
#warning "UINTPTR_MAX undefined"
#endif
};

struct s {
 char a;
 union u b;
};

#include "static_assert.h"

int
main(void)
{
 STATIC_ASSERT($alignment == ((sizeof (struct s) - (sizeof (union u)))));
 return 0;
}
EOCP

  result=''
  set result
  eval $trylink
  case "$result" in
  "$define") break;;
  esac
 done

 case "$alignment" in
 error) dflt='8'
  echo "(I can't seem to compile the test program...)" >&4
  ;;
 *) dflt=$alignment
  ;;
 esac
;;
*) dflt="$alignbytes"
```

```
 ;;
esac
rp="What is the maximum alignment in bytes required for a standard type?"
. ./myread
alignbytes="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/alignbytes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_vfork.U,v $
?RCS: Revision 3.0.1.6  1994/08/29  16:18:21  ram
?RCS: patch32: set default to 'y' the first time
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:59:14  ram
?RCS: patch30: usevfork was not always properly set
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:20:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:59:09  ram
?RCS: patch23: now explicitly ask whether vfork() should be used (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1993/10/16
  13:49:39  ram
?RCS: patch12: added magic for vfork()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:06:57  ram
?RCS: patch10: removed automatic remapping of vfork on fork (WAD)
?RCS: patch10: added compatibility code for older config.sh (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vfork usevfork: Inlibc Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_vfork:
?S: This variable conditionally defines the HAS_VFORK symbol, which
```

```
?S: indicates the vfork() routine is available.
?S:.
?S:usevfork:
?S: This variable is set to true when the user accepts to use vfork.
?S: It is set to false when no vfork is available or when the user
?S: explicitly requests not to use vfork.
?S:.
?C:HAS_VFORK (VFORK):
?C: This symbol, if defined, indicates that vfork() exists.
?C:.
?H:#$d_vfork HAS_VFORK /**/
?H:.
?M:vfork: HAS_VFORK
?M:#ifndef HAS_VFORK
?M:#define vfork fork
?M:#endif
?M:.
?LINT:set d_vfork
: see if there is a vfork
val=''
set
 vfork val
eval $inlibc

: Ok, but do we want to use it. vfork is reportedly unreliable in
: perl on Solaris 2.x, and probably elsewhere.
case "$val" in
$define)
 echo " "
 case "$usevfork" in
 false) dflt='n';;
 *) dflt='y';;
 esac
 rp="Some systems have problems with vfork().  Do you want to use it?"
 . ./myread
 case "$ans" in
 y|Y) ;;
 *)
  echo "Ok, we won't use vfork()."
  val="$undef"
  ;;
 esac
 ;;
esac
?X:
?X: Only set it when final value is known to avoid spurious Whoas
?X: Then set usevfork accordingly to the current value, for next run
?X:
```

```
set d_vfork
eval $setvar
case "$d_vfork" in
$define) usevfork='true';;
*) usevfork='false';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_vfork.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fp_classl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fp_classl:
?S: This variable conditionally defines the HAS_FP_CLASSL symbol, which
?S: indicates to the C program that the fp_classl() routine is available.
?S:.
?C:HAS_FP_CLASSL:
?C: This symbol, if defined, indicates that the fp_classl routine is
?C: available to classify long doubles.  Available for example in
?C: Digital UNIX.  See for possible values HAS_FP_CLASS.
?C:.
?H:#$d_fp_classl HAS_FP_CLASSL  /**/
?H:.
?LINT:set d_fp_classl
: see if fp_classl exists
set fp_classl d_fp_classl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fp_classl.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Tye McQueen <tye@metronet.com>
?RCS:
?RCS: $Log: d_stdstdio.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:46:32  ram
?RCS: patch61: merged with perl5's unit
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:06:54  ram
?RCS: patch56: typo fix on ?C: line for FILE_bufsiz
?RCS: patch56: fixed unbalanced parenthesis (ADO)
?RCS: patch56: check whether FILE_cnt and FILE_ptr can be assigned to (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:12:11  ram
?RCS: patch54: complete rewrite by Tye McQueen
 to fit modern systems
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stdstdio d_stdiobase stdio_ptr stdio_cnt stdio_base \
 stdio_bufsiz d_stdio_cnt_lval d_stdio_ptr_lval stdio_filbuf: cat \
 +cc +ccflags contains +ldflags +libs rm_try \
 Setvar Findhdr Oldconfig
?MAKE: -pick add $@ %<
?S:d_stdstdio:
?S: This variable conditionally defines USE_STDIO_PTR if this system
?S: has a FILE structure declaring usable _ptr and _cnt fields (or
?S: equivalent) in stdio.h.
?S:.
?S:stdio_ptr:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _ptr field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_ptr(fp).
?S:.
?S:d_stdio_ptr_lval:
?S: This variable conditionally defines STDIO_PTR_LVALUE if the
?S: FILE_ptr macro can be used as an lvalue.
?S:.
?S:stdio_cnt:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _cnt field (or equivalent) of
 stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_cnt(fp).
?S:.
?S:d_stdio_cnt_lval:
?S: This variable conditionally defines STDIO_CNT_LVALUE if the
?S: FILE_cnt macro can be used as an lvalue.
```

```
?S:.
?S:stdio_filbuf:
?S: This variable defines how, given a FILE pointer, fp, to tell
?S: stdio to refill it's internal buffers (?).  This will
?S: be used to define the macro FILE_filbuf(fp).
?S:.
?S:d_stdiobase:
?S: This variable conditionally defines USE_STDIO_BASE if this system
?S: has a FILE structure declaring a usable _base field (or equivalent)
?S: in stdio.h.
?S:.
?S:stdio_base:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _base field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_base(fp).
?S:.
?S:stdio_bufsiz:
?S: This variable defines how, given a FILE pointer, fp, to determine
?S: the number of bytes store in the I/O buffer pointer to by the
?S: _base field (or equivalent) of stdio.h's
 FILE structure.  This will
?S: be used to define the macro FILE_bufsiz(fp).
?S:.
?C:USE_STDIO_PTR ~ d_stdstdio (USE_STD_STDIO STDSTDIO):
?C: This symbol is defined if the _ptr and _cnt fields (or similar)
?C: of the stdio FILE structure can be used to access the stdio buffer
?C: for a file handle.  If this is defined, then the FILE_ptr(fp)
?C: and FILE_cnt(fp) macros will also be defined and should be used
?C: to access these fields.
?C:.
?C:FILE_ptr:
?C: This macro is used to access the _ptr field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_PTR_LVALUE:
?C: This symbol is defined if the FILE_ptr macro can be used as an
?C: lvalue.
?C:.
?C:FILE_cnt:
?C: This macro is used to access the _cnt field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_CNT_LVALUE:
?C: This symbol is defined
 if the FILE_cnt macro can be used as an
?C: lvalue.
```

```
?C:.
?C:FILE_filbuf:
?C: This macro is used to access the internal stdio _filbuf function
?C: (or equivalent), if STDIO_CNT_LVALUE and STDIO_PTR_LVALUE
?C: are defined.  It is typically either _filbuf or __filbuf.
?C: This macro will only be defined if both STDIO_CNT_LVALUE and
?C: STDIO_PTR_LVALUE are defined.
?C:.
?H:?d_stdstdio:#$d_stdstdio USE_STDIO_PTR  /**/
?H:?d_stdstdio:#ifdef USE_STDIO_PTR
?H:#define FILE_ptr(fp) $stdio_ptr
?H:#$d_stdio_ptr_lval STDIO_PTR_LVALUE   /**/
?H:#define FILE_cnt(fp) $stdio_cnt
?H:#$d_stdio_cnt_lval STDIO_CNT_LVALUE   /**/
?H:?d_stdstdio:#if defined(STDIO_PTR_LVALUE) && defined(STDIO_CNT_LVALUE)
?H:#define FILE_filbuf(fp) $stdio_filbuf   /**/
?H:?d_stdstdio:#endif
?H:?d_stdstdio:#endif
?H:.
?W:d_stdstdio:FILE_ptr FILE_cnt FILE_filbuf
?C:USE_STDIO_BASE ~ d_stdiobase:
?C: This symbol is defined if the _base field (or similar) of the
?C: stdio FILE structure can be used to access the stdio buffer
 for
?C: a file handle.  If this is defined, then the FILE_base(fp) macro
?C: will also be defined and should be used to access this field.
?C: Also, the FILE_bufsiz(fp) macro will be defined and should be used
?C: to determine the number of bytes in the buffer.  USE_STDIO_BASE
?C: will never be defined unless USE_STDIO_PTR is.
?C:.
?C:FILE_base:
?C: This macro is used to access the _base field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_BASE is defined.
?C:.
?C:FILE_bufsiz:
?C: This macro is used to determine the number of bytes in the I/O
?C: buffer pointed to by _base field (or equivalent) of the FILE
?C: structure pointed to its argument. This macro will always be defined
?C: if USE_STDIO_BASE is defined.
?C:.
?H:?d_stdiobase:#$d_stdiobase USE_STDIO_BASE  /**/
?H:?d_stdiobase:#ifdef USE_STDIO_BASE
?H:#define FILE_base(fp) $stdio_base
?H:#define FILE_bufsiz(fp) $stdio_bufsiz
?H:?d_stdiobase:#endif
?H:.
?W:d_stdiobase:FILE_base
```

```
 FILE_bufsiz
?LINT:set d_stdstdio d_stdiobase
?T:ptr_lval cnt_lval filbuf xxx
?F:!try
: see if _ptr and _cnt from stdio act std
echo " "
if $contains '_IO_fpos_t' `./findhdr stdio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from Linux.)"
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_IO_read_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 ") stdio_cnt='((fp)->_IO_read_end - (fp)->_IO_read_ptr)'
  cnt_lval=$undef
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_IO_read_base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_IO_read_end - (fp)->_IO_read_base)';;
 esac
else
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 ") stdio_cnt='((fp)->_cnt)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_base)';;
 esac
 case
 "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_cnt + (fp)->_ptr - (fp)->_base)';;
 esac
fi
: test whether _ptr and _cnt really work
```

```
echo "Checking how std your stdio is..." >&4
$cat >try.c <<EOP
#include <stdio.h>
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  18 <= FILE_cnt(fp) &&
  strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
 )
  exit(0);
 exit(1);
}
EOP
val="$undef"
if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1; then
 if ./try; then
  echo "Your stdio acts pretty std."
  val="$define"
 else
  echo "Your stdio isn't very std."
 fi
else
 echo "Your stdio doesn't appear very std."
fi
$rm_try
set d_stdstdio
eval $setvar

@if STDIO_PTR_LVALUE || d_stdio_ptr_lval
: Can _ptr be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$ptr_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_ptr_lval
eval
 $setvar

@end
@if STDIO_CNT_LVALUE || d_stdio_cnt_lval
: Can _cnt be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$cnt_lval" in
$define$define) val=$define ;;
```

```
*) val=$undef ;;
esac
set d_stdio_cnt_lval
eval $setvar

@end
@if FILE_filbuf
: How to access the stdio _filbuf or __filbuf function.
: If this fails, check how the getc macro in stdio.h works.
case "${d_stdio_ptr_lval}${d_stdio_cnt_lval}" in
${define}${define})
 : Try hint value, if any, then _filbuf, __filbuf, _fill, then punt.
 : _fill is for OS/2.
 xxx='notok'
 for filbuf in $stdio_filbuf '_filbuf(fp)' '__filbuf(fp) ' '_fill(fp)' ; do
  $cat >try.c <<EOP
#include <stdio.h>
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#define FILE_filbuf(fp) $filbuf
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 c = getc(fp);
 c = FILE_filbuf(fp);  /* Just looking for linker errors.*/
 exit(0);
}
EOP
  if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 &&
 ./try; then
   echo "Your stdio appears to use $filbuf"
   stdio_filbuf="$filbuf"
   xxx='ok'
   break
  else
   echo "Hmm.  $filbuf doesn't seem to work."
  fi
  $rm_try
 done
 case "$xxx" in
 notok) echo "I can't figure out how to access _filbuf"
   echo "I'll just have to work around it."
   d_stdio_ptr_lval="$undef"
   d_stdio_cnt_lval="$undef"
   ;;
 esac
 ;;
esac
```

```
@end
@if d_stdiobase || USE_STDIO_BASE || FILE_base || FILE_bufsiz
: see if _base is also standard
val="$undef"
case "$d_stdstdio" in
$define)
 $cat >try.c <<EOP
#include <stdio.h>
#define FILE_base(fp) $stdio_base
#define FILE_bufsiz(fp) $stdio_bufsiz
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  19 <= FILE_bufsiz(fp) &&
  strncmp(FILE_base(fp), "#include <stdio.h>\n", 19) == 0
 )
  exit(0);
 exit(1);
}
EOP
 if $cc $ccflags $ldflags -o try try.c $libs > /dev/null 2>&1; then
  if ./try; then
   echo "And its _base field acts std."
   val="$define"
  else
   echo "But its _base field isn't std."
  fi
 else
  echo
 "However, it seems to be lacking the _base field."
 fi
 $rm_try
 ;;
esac
set d_stdiobase
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_stdstdio.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sitelib.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:21:35  ram
?RCS: patch61: created
?RCS:
?MAKE:sitelib sitelibexp installsitelib: afs cat Getfile \
 Oldconfig Prefixit test privlib package sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:sitelib:
?S: This variable contains the eventual value of the SITELIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this
 directory while performing installation (with ~ substitution).
?S:.
?S:sitelibexp:
?S: This variable is the ~name expanded version of sitelib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installsitelib:
?S: This variable is really the same as sitelibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:SITELIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Individual sites may place their own extensions and modules in
?C: this directory.
?C:.
?C:SITELIB_EXP:
?C: This symbol contains the ~name expanded version of SITELIB, to be used
?C: in programs that are not prepared to deal with ~ expansion
 at run-time.
?C:.
?H:#define SITELIB "$sitelib"  /**/
?H:#define SITELIB_EXP "$sitelibexp"  /**/
?H:.
```

```
?T:prog
: determine where site specific libraries go.
set sitelib sitelib
eval $prefixit
case "$sitelib" in
")
?X: remove any trailing -3.0 or other version indentification
 prog=`echo $package | $sed 's/-*[0-9.]*$//'`
 dflt="$privlib/site_$prog" ;;
*) dflt="$sitelib" ;;
esac
$cat <<EOM

The installation process will also create a directory for
site-specific extensions and modules.  Some users find it convenient
to place all local files in this directory rather than in the main
distribution directory.

EOM
fn=d~+
rp='Pathname for the site-specific library files?'
. ./getfile
if $test "X$sitelibexp" != "X$ansexp"; then
 installsitelib="
fi
sitelib="$ans"
sitelibexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to
 the former directory by occult means).

EOM
 case "$installsitelib" in
 ") dflt=`echo $sitelibexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installsitelib";;
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installsitelib="$ans"
else
 installsitelib="$sitelibexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sitelib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_locconv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_locconv.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:11  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_locconv: Inlibc
?MAKE: -pick add $@ %<
?S:d_locconv:
?S: This variable conditionally defines HAS_LOCALECONV if localeconv() is
?S: available for numeric and monetary formatting conventions.
?S:.
?C:HAS_LOCALECONV:
?C: This symbol, if defined, indicates that the localeconv
 routine is
?C: available for numeric and monetary formatting conventions.
?C:.
?H:#$d_locconv HAS_LOCALECONV /**/
?H:.
?LINT:set d_locconv
: see if localeconv exists
set localeconv d_locconv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_locconv.U
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```
?RCS: $Id: dlsrc.U,v$
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```

```
?RCS:
?RCS: $Log: dlsrc.U,v $
?RCS:
?X:  hpux support thanks to Jeff Okamoto <okamoto@hpcc101.corp.hp.com>
?X:
?X:  To create a shared library, you must compile ALL source files in the
?X:  library with +z (or possibly +Z if the library is whopping huge),
?X:  then link the library with -b.  Example:
?X:   cc -c +z module_a.c
?X:   cc -c +z module_b.c
?X:   ld -b module_a.o module_b.o -o module.sl
?X:
?MAKE:usedl ld dlsrc cccdlflags lddlflags ccdlflags bin_ELF ld_can_script: \
 rm_try Getfile Myread test osname sed d_dlopen Findhdr Setvar \
 src run cc ccflags ldflags optimize ls gccversion cat rsrc i_stdlib \
 i_unistd osvers sysroot
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:usedl:
?S: This variable
 indicates if the system supports dynamic
?S: loading of some sort.  See also dlsrc and dlobj.
?S:.
?S:ld:
?S: This variable indicates the program to be used to link
?S: libraries for dynamic loading.  On some systems, it is 'ld'.
?S: On ELF systems, it should be $cc.  Mostly, we'll try to respect
?S: the hint file setting.
?S:.
?S:dlsrc:
?S: This variable contains the name of the dynamic loading file that
?S: will be used with the package.
?S:.
?S:cccdlflags:
?S: This variable contains any special flags that might need to be
?S: passed with 'cc -c' to compile modules to be used to create a shared
?S: library that will be used for dynamic loading.  For hpux, this
?S: should be +z.  It is up to the makefile to use it.
?S:.
?S:lddlflags:
?S: This variable contains any special flags that might need to be
?S: passed to $ld to create a shared library suitable for dynamic
?S: loading.  It is up to the makefile to use it.  For hpux, it
?S: should be '-b'.  For sunos 4.1, it is empty.
?S:.
?S:ccdlflags:
?S: This
```

```
 variable contains any special flags that might need to be
?S: passed to cc to link with a shared library for dynamic loading.
?S: It is up to the makefile to use it.  For sunos 4.1, it should
?S: be empty.
?S:.
?S:bin_ELF:
?S: This variable saves the result from configure if generated binaries
?S: are in ELF format. Only set to defined when the test has actually
?S: been performed, and the result was positive.
?S:.
?S:ld_can_script:
?S: This variable shows if the loader accepts scripts in the form of
?S: -Wl,--version-script=ld.script. This is currently only supported
?S: for GNU ld on ELF in dynamic loading builds.
?S:.
?C:USE_DYNAMIC_LOADING ~ %<:
?C: This symbol, if defined, indicates that dynamic loading of
?C: some sort is available.
?C:.
?H:?%<:#$usedl USE_DYNAMIC_LOADING  /**/
?H:.
?W:%<:dlopen
?T:dldir thisflag tdir
?F:!a.out
: determine which dynamic loading, if any, to compile in
echo " "
dldir="ext/DynaLoader"
case "$usedl" in
   $define|y|true)
 dflt='y'
 usedl="$define"
 ;;
    $undef|n|false)
 dflt='n'
 usedl="$undef"
 ;;
   *)
 dflt='n'
 case "$d_dlopen" in
     $define) dflt='y' ;;
 esac
 : Does a dl_xxx.xs file exist for this operating system
 $test -f $rsrc/$dldir/dl_${osname}.xs && dflt='y'
 ;;
esac
rp="Do you wish to use dynamic loading?"
. ./myread
usedl="$ans"
```

```
bin_ELF="$undef"
case "$ans" in
   y*) usedl="$define"
 case "$dlsrc" in
     ") if $test -f $rsrc/$dldir/dl_${osname}.xs ; then
      dflt="$dldir/dl_${osname}.xs"
  elif $test "$d_dlopen" = "$define" ; then
      dflt="$dldir/dl_dlopen.xs"
  else
      dflt="
  fi
  ;;
     *)  dflt="$dldir/$dlsrc"
  ;;
 esac
 echo "The following dynamic loading files are available:"
 : Can not go over to $dldir because getfile has path hard-coded in.
 tdir=`pwd`; cd "$rsrc"; $ls -C $dldir/dl*.xs; cd "$tdir"
 rp="Source file to use for dynamic loading"
 fn="fne"
 gfpth="$src"
 . ./getfile
 usedl="$define"
 : emulate basename
 dlsrc=`echo $ans | $sed -e 's%.*/\([^/]*\)$%\1%'`

 $cat
 << EOM

Some systems may require passing special flags to $cc -c to
compile modules that will be used to create a shared library.
To use no flags, say "none".

EOM
 case "$cccdlflags" in
     ") case "$gccversion" in
  ") case "$osname" in
   hpux) dflt='+z' ;;
   irix*) dflt='-KPIC' ;;
   svr4*|esix*|solaris|nonstopux) dflt='-KPIC' ;;
   sunos) dflt='-pic' ;;
   *) dflt='none' ;;
      esac
      ;;
  *)  case "$osname" in
   darwin) dflt='none' ;;
   *linux*|svr4*|esix*|solaris|nonstopux) dflt='-fPIC' ;;
   *) dflt='-fpic' ;;
```

```
     esac ;;
 esac ;;
    ' ') dflt='none' ;;
    *)   dflt="$cccdlflags" ;;
esac

case "$dflt" in
    none) dflt=" ;;
esac

# If -Dsysroot was specified, now's the time to add it
# to cccdlflags
if test "X$sysroot" != X; then
    case "$gccversion" in
 ") ;;
 *)  case "$dflt" in
  *sysroot*) ;;
  'undef'|*)
      dflt="$dflt --sysroot=$sysroot" ;;
     esac
     ;;
    esac
fi

case "$dflt" in
    ") dflt='none';;
esac

rp="Any
special flags to pass to $cc -c to compile shared library modules?"
. ./myread
case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
    none) cccdlflags=' ' ;;
    *)    cccdlflags="$ans" ;;
esac

cat << EOM

Some systems use ld to create libraries that can be dynamically loaded,
while other systems (such as those using ELF) use $cc.

EOM

: Determine if this is ELF
 $cat >try.c <<EOM
/* Test for whether ELF binaries are produced */
#include <fcntl.h>
```

```
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#include <unistd.h>
#endif
int main() {
  char b[4];
  int i = open("a.out",O_RDONLY);
  if(i == -1)
 exit(1); /* fail */
  if(read(i,b,4)==4 && b[0]==127 && b[1]=='E' && b[2]=='L' && b[3]=='F')
 exit(0); /* succeed (yes, it is ELF) */
  exit(1); /* fail */
}
EOM
 if $cc $ccflags $ldflags -o a.out try.c >/dev/null 2>&1 && $run ./a.out; then
    bin_ELF="$define"
 fi
 $rm_try

 case "$ld" in

   ") if $test $bin_ELF = "$define"; then
     cat <<EOM
You appear to have ELF support.  I'll use $cc to build dynamic libraries.
EOM
     dflt="$cc"
  else
     echo "I'll use ld to build dynamic libraries."
     dflt='ld'
  fi
  ;;
    *)  dflt="$ld"
  ;;
 esac

 rp="What command should be used to create dynamic libraries?"
 . ./myread
 ld="$ans"

 cat << EOM

Some systems may require passing special flags to $ld to create a
library that can be dynamically loaded.  If your ld flags include
-L/other/path options to locate libraries outside your loader's normal
```

```
search path, you may need to specify those -L options here as well.  To
use no flags, say "none".

EOM
 case "$lddlflags" in
    ") case "$osname" in
     haiku) dflt='-shared' ;;
     hpux) dflt='-b';
    case "$gccversion" in
        ") dflt="$dflt +vnocompatwarnings" ;;
    esac
    ;;
     *linux*|irix*|gnu*)  dflt="-shared $optimize" ;;
     solaris) # See [perl #66604].
      # On Solaris 11, gcc -m64
 on amd64
      # appears not to understand -G.  gcc versions at
      # least as old as 3.4.3 support -shared, so just
      # use that with Solaris 11 and later, but keep
      # the old behavior for older Solaris versions.
      case "$gccversion" in
   ") dflt='-G' ;;
   *)  case "$osvers" in
    2.?|2.10) dflt='-G' ;;
    *) dflt='-shared' ;;
       esac
       ;;
      esac
      ;;
     sunos) dflt='-assert nodefinitions' ;;
     svr4*|esix*|nonstopux) dflt="-G $ldflags" ;;
     *)     dflt='none' ;;
 esac
 ;;
    *) dflt="$lddlflags" ;;
esac

: Only do this for gcc, since, for example, qcc has no concept
: of --sysroot.
if $test "X$sysroot" != X; then
    case "$gccversion" in
 ") ;;
 *)  dflt="$dflt --sysroot=$sysroot" ;;
    esac
fi

: Try to guess additional flags to pick up local libraries.
: Be careful not to append to a plain 'none'
```

```
case "$dflt" in
    none) dflt=" ;;
esac
for thisflag in $ldflags; do
    case "$thisflag" in
 -L*|-R*|-Wl,-R*)

   case " $dflt " in
  *" $thisflag "*) ;;
  *) dflt="$dflt $thisflag" ;;
     esac
     ;;
    esac
done

case "$dflt" in
    "|' ') dflt='none' ;;
esac

case "$ldflags" in
    *-fstack-protector-strong*)
 case "$dflt" in
     *-fstack-protector-strong*) ;; # Don't add it again
     *) dflt="$dflt -fstack-protector-strong" ;;
 esac
 ;;
    *-fstack-protector*)
 case "$dflt" in
     *-fstack-protector*) ;; # Don't add it again
     *) dflt="$dflt -fstack-protector" ;;
 esac
 ;;
esac

rp="Any special flags to pass to $ld to create a dynamically loaded library?"
. ./myread
case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
    none) lddlflags=' ' ;;
    *) lddlflags="$ans" ;;
esac

cat <<EOM

Some systems may require passing special flags to $cc to indicate that
the resulting executable will use dynamic linking.  To use no flags,
say "none".
```

```
EOM
 case "$ccdlflags" in
    ") case "$osname" in
     *linux*|hpux|gnu*)
 dflt='-Wl,-E' ;;
     sunos)            dflt='none'   ;;
     *)                dflt='none'   ;;
  esac ;;
    ' ') dflt='none' ;;
    *)   dflt="$ccdlflags" ;;
 esac
 rp="Any special flags to pass to $cc to use dynamic linking?"
 . ./myread
 case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
    none) ccdlflags=' ' ;;
    *)    ccdlflags="$ans" ;;
 esac
 ;;
?X: End of usedl=y section

   *)  usedl="$undef"
 ld='ld'
 dlsrc='dl_none.xs'
 lddlflags=''
 ccdlflags=''
 ;;
esac

ld_can_script="$undef"
case "$bin_ELF$usedl" in
   $define$define)
 # Abuse try.h and a.out names for neat cleanup
 $cat >try.c <<EOM
void foo() {}
void bar() {}
EOM
 $cat >try.h <<EOM
LIBTEST_42 {
global:
 foo;
local: *;
};
EOM
 if $cc $cccdlflags $ccdlflags $ccflags \
        $ldflags $lddlflags -o a.out try.c \
        -Wl,--version-script=try.h >/dev/null 2>&1 \
    &&  $test -s a.out ; then
```

```
    echo "ld supports scripting" >&4
    ld_can_script="$define"
 else

   echo "ld does not support scripting" >&4
 fi
 $rm_try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dlsrc.U
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```
?RCS: $Id: d_crypt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_crypt.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:31:47  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_crypt cryptlib: Loc test xlibpth libpth Csym Setvar _a Inlibc
?MAKE: -pick add $@ %<
?S:d_crypt:
?S: This variable conditionally defines the CRYPT symbol, which
?S: indicates to the C program that the crypt() routine is available
?S: to
 encrypt passwords and the like.
?S:.
?S:cryptlib:
?S: This variable holds -lcrypt or the path to a libcrypt.a archive if
?S: the crypt() function is not defined in the standard C library. It is
?S: up to the Makefile to use this.
?S:.
?C:HAS_CRYPT (CRYPT):
?C: This symbol, if defined, indicates that the crypt routine is available
?C: to encrypt passwords and the like.
?C:.
```

```
?H:#$d_crypt HAS_CRYPT  /**/
?H:.
?LINT:set d_crypt
?T:val
: see if crypt exists
echo " "
set crypt d_crypt
eval $inlibc
case "$d_crypt" in
$define) cryptlib=" ;;
*) if set crypt val -f d_crypt; eval $csym; $val; then
  echo 'crypt() found.' >&4
  val="$define"
  cryptlib="
 else
  cryptlib=`./loc Slibcrypt$_a "" $xlibpth`
  if $test -z "$cryptlib"; then
   cryptlib=`./loc Mlibcrypt$_a "" $xlibpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   cryptlib=`./loc Llibcrypt$_a "" $xlibpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   cryptlib=`./loc libcrypt$_a ""
 $libpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   echo 'crypt() NOT found.' >&4
   val="$undef"
  else
   val="$define"
  fi
 fi
 set d_crypt
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_crypt.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strctcpy.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strctcpy: cat rm_try cc Setvar
?MAKE: -pick add $@ %<
?S:d_strctcpy:
?S: This variable conditionally defines the USE_STRUCT_COPY symbol, which
?S: indicates to the C program that this C compiler knows how to copy
?S: structures.
?S:.
?C:USE_STRUCT_COPY (STRUCTCOPY):
?C: This symbol, if defined, indicates that this C compiler knows how
?C: to copy structures.  If undefined, you'll
 need to use a block copy
?C: routine of some sort instead.
?C:.
?H:#$d_strctcpy USE_STRUCT_COPY /**/
?H:.
?LINT:set d_strctcpy
: check for structure copying
echo " "
echo "Checking to see if your C compiler can copy structs..." >&4
$cat >try.c <<'EOCP'
int main()
{
 struct blurfl {
  int dyick;
 } foo, bar;

 foo = bar;
}
EOCP
if $cc -c try.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup, it can."
else
 val="$undef"
```

```
 echo "Nope, it can't."
fi
set d_strctcpy
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strctcpy.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: yacc.U,v $
?RCS: Revision 3.0.1.1  1994/05/13  15:28:48  ram
?RCS: patch27: added byacc as another alternative (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:yacc yaccflags: Guess Myread Loc Oldconfig byacc bison cat test
?MAKE: -pick add $@ %<
?S:yacc:
?S: This variable holds the name of the compiler compiler we
?S: want to use in the Makefile. It can be yacc, byacc, or bison -y.
?S:.
?S:yaccflags:
?S: This variable contains any
 additional yacc flags desired by the
?S: user.  It is up to the Makefile to use this.
?S:.
?T:comp
: determine compiler compiler
echo " "
comp='yacc'
if $test -f "$byacc$_exe"; then
 comp="byacc or $comp"
fi
if $test -f "$bison$_exe"; then
 comp="$comp or bison -y"
fi
```

```
case "$yacc" in
")
 yacc=`./loc yacc yacc $pth`
 if $test -f "$yacc$_exe"; then
  dflt='yacc'
 elif $test -f "$byacc$_exe"; then
  dflt='byacc'
 elif $test -f "$bison$_exe"; then
  dflt='bison'
 else
  dflt=''
 fi
 ;;
*) dflt="$yacc";;
esac
rp="Which compiler compiler ($comp) shall I use?"
. ./myread
yacc="$ans"
case "$yacc" in
*bis*)
 case "$yacc" in
 *-y*) ;;
 *)
  yacc="$yacc -y"
  echo "(Adding -y option to bison to get yacc-compatible behaviour.)"
  ;;
 esac
 ;;
esac

@if yaccflags
: see if we need extra yacc flags
dflt="$yaccflags"
case "$dflt" in
") dflt=none;;
esac
$cat <<EOH

Your yacc program may need extra flags to normally process the parser sources.
Do NOT specify any -d or -v flags here, since those are
 explicitly known
by the various Makefiles. However, if your machine has strange/undocumented
options (like -Sr# on SCO to specify the maximum number of grammar rules), then
please add them here.  To use no flags, specify the word "none".

EOH
rp="Any additional yacc flags?"
. ./myread
```

```
case "$ans" in
none) yaccflags="";;
*) yaccflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/yacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: inc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: inc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:inc incexp: Loc Oldconfig Getfile usrinc
?MAKE: -pick add $@ %<
?S:inc:
?S: This variable holds the name of the directory in which the user wants
?S: to put public header files for the package in question.  It is most
?S: often a local directory such as /usr/local/include.
?S:.
?S:incexp:
?S: This is the same as the inc variable, but is filename
 expaned
?S: at configuration time for convenient use in your makefiles.
?S:.
: determine where public header files go
case "$inc" in
")
 dflt=`./loc . "." /usr/local/include /usr/include/local $usrinc`
 ;;
*)  dflt="$inc"
 ;;
esac
fn=d~
rp='Where do you want to put the public header files?'
. ./getfile
```

```
inc="$ans"
incexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/inc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_class: Inlibc
?MAKE: -pick add $@ %<
?S:d_class:
?S: This variable conditionally defines the HAS_CLASS symbol, which
?S: indicates to the C program that the class() routine is available.
?S:.
?C:HAS_CLASS:
?C: This symbol, if defined, indicates that the class routine is
?C: available to classify doubles.  Available for example in AIX.
?C: The returned values are defined in <float.h> and are:
?C:
?C: FP_PLUS_NORM Positive normalized, nonzero
?C: FP_MINUS_NORM Negative normalized, nonzero
?C: FP_PLUS_DENORM Positive denormalized, nonzero
?C: FP_MINUS_DENORM Negative denormalized, nonzero
?C: FP_PLUS_ZERO +0.0
?C: FP_MINUS_ZERO -0.0
?C: FP_PLUS_INF +INF
?C: FP_MINUS_INF -INF
?C: FP_NANS  Signaling
 Not a Number (NaNS)
?C: FP_NANQ  Quiet Not a Number (NaNQ)
?C:.
?H:#$d_class HAS_CLASS  /**/
?H:.
?LINT:set d_class
: see if class exists
set class d_class
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_class.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorbin.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorbin.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorbin vendorbin vendorbinexp installvendorbin: Getfile \
 Setprefixvar Oldconfig Prefixit vendorprefix
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorbin:
?S: This variable contains the eventual value of the VENDORBIN symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors who distribute perl
 may wish to place additional
?S: binaries in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorbinexp:
?S: This variable is the ~name expanded version of vendorbin, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorbin="
?S:installvendorbin:
?S: This variable is really the same as vendorbinexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorbin:
?S: This variable conditionally defines PERL_VENDORBIN.
?S:.
?C:PERL_VENDORBIN:
?C: If defined, this symbol contains the name of a directory
?C: for holding vendor-supplied executables.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place additional
?C: binaries in this directory with
```

```
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.
  See INSTALL for details.
?C:.
?C:PERL_VENDORBIN_EXP:
?C: This symbol contains the ~name expanded version of VENDORBIN, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorbin PERL_VENDORBIN "$vendorbin"  /**/
?H:#$d_vendorbin PERL_VENDORBIN_EXP "$vendorbinexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorbin
: Set the vendorbin variables
case "$vendorprefix" in
") d_vendorbin="$undef"
 vendorbin="
 vendorbinexp="
 ;;
*) d_vendorbin="$define"
 : determine where vendor-supplied executables go.
 case "$vendorbin" in
 ") dflt=$vendorprefix/bin ;;
 *) dflt="$vendorbin" ;;
 esac
 fn=d~+
 rp='Pathname for the vendor-supplied executables directory?'
 . ./getfile
 vendorbin="$ans"
 vendorbinexp="$ansexp"
 ;;
esac
prefixvar=vendorbin
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorbin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasstruct string that is used internally
?X: by Configure to check if this system has a field for a
```

```
?X: particular struct (of if this system has a particular struct!)
?X:
?X: To use it, say something like:
?X:  set d_statblocks stat i_sysstat sys/stat.h
?X:  eval $hasstruct
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/foo.h
?X:  $i_sysbar sys/bar.h
?X:  $i_syszot sys/zot.h
?X:  $i_zappa zappa.h"
?X: set d_statblocks stat $hdrs
?X: eval $hasstruct
?X:
?MAKE:Hasstruct: Setvar rm_try test Compile
?MAKE: -pick add $@ %<
?T:varname struct
?V:hasstruct
: Define hasstruct macro for Configure internal use
hasstruct='varname=$1; struct=$2; shift;
 shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 esac ;
   shift 2;
done > try.c;
echo "int main () { struct $struct foo; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasstruct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Init.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:45:59  ram
?RCS: patch44: removed Options from MAKE to prevent Init overrides
?RCS: patch44: option processing now done after Myinit thanks to new Begin.U
?RCS: patch44: moved "Beginning of configuration questions" to Begin.U
?RCS: patch44: moved signal trapping instruction to Begin.U as well
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file initializes certain default variables
 used by Configure.  They
?X: may be overridden or added to by definitions in Myinit.U.
?X:
?MAKE:Init eunicefix _exe: Null
?MAKE: -pick add $@ %<
?MAKE: -pick weed $@ ./Init
?S:eunicefix:
?S: When running under Eunice this variable contains a command which will
?S: convert a shell script to the proper form of text file for it to be
?S: executable by the shell.  On other systems it is a no-op.
?S:.
?S:_exe (exe_ext):
?S: This variable defines the extension used for executable files.
?S: For unix it is empty.  Other possible values include '.exe'.
?S: DJGPP, Cygwin and OS/2 use '.exe'.  Stratus VOS uses '.pm'.
?S: On operating systems which do not require a specific extension
?S: for executable files, this variable is empty.
?S:.
?V:define undef smallmach:rmlist
?X:
?X: Throughout the units, one may make use of $define and $undef to reference
?X: a defined symbol or an undefined one. There is no need to add them in
?X: the dependency line since this unit makes them visible via ?V:, and
?X:
 everyone inherits from those symbols since by convention Init.U is the
?X: root dependency.
?X:
?T: DJGPP
: Initialize wide constants
define='define'
undef='undef'
smallmach='pdp11 i8086 z8000 i80286 iAPX286'
rmlist=''
```

```
: We must find out about Eunice early
eunicefix=':'
if test -f /etc/unixtovms; then
 eunicefix=/etc/unixtovms
fi
if test -f /etc/unixtovms.exe; then
 eunicefix=/etc/unixtovms.exe
fi

: Set executable suffix now -- needed before hints available
if test -f "/libs/version.library"; then
 : Amiga OS
  _exe=""
elif test -f "/system/gnu_library/bin/ar.pm"; then
 : Stratus VOS
 _exe=".pm"
elif test -n "$DJGPP"; then
 : DOS DJGPP
  _exe=".exe"
elif test -d c:/. ; then
 : OS/2 or cygwin
 _exe=".exe"
else
 : All other UNIX systems
 _exe=""
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Init.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_netdb.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_netdb: Inhdr
?MAKE: -pick add $@ %<
?S:i_netdb:
?S: This variable conditionally defines the I_NETDB symbol, and indicates
?S: whether a C program should include <netdb.h>.
?S:.
?C:I_NETDB:
?C: This symbol, if defined, indicates that <netdb.h> exists and
?C: should be included.
```

```
?C:.
?H:#$i_netdb I_NETDB  /**/
?H:.
?LINT:set i_netdb
: see if this is a netdb.h system
set netdb.h i_netdb
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_netdb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_flexfnam.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_flexfnam.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flexfnam: cat rm test Setvar
?MAKE: -pick add $@ %<
?S:d_flexfnam:
?S: This variable conditionally defines the FLEXFILENAMES symbol, which
?S: indicates that the system supports filenames longer than 14 characters.
?S:.
?C:FLEXFILENAMES:
?C: This symbol, if defined, indicates that the system supports filenames
?C: longer than 14
 characters.
?C:.
?H:#$d_flexfnam FLEXFILENAMES  /**/
?H:.
?T:first
?LINT:set d_flexfnam
: see if we can have long filenames
echo " "
?X:
?X: We have to test in both /tmp and . because of NFS (remote server may allow
?X: long filenames while the local filesystem cannot support them). If at least
?X: one of those file systems cannot support long filenames, then we assume the
?X: whole system can't.
```

```
?X:
first=123456789abcdef
$rm -f $first
if (echo hi >$first) 2>/dev/null; then
 if $test -f 123456789abcde; then
  echo 'You cannot have filenames longer than 14 characters.  Sigh.' >&4
  val="$undef"
 else
  echo 'You can have filenames longer than 14 characters.'>&4
  val="$define"
 fi
else
 $cat <<'EOM'
You can't have filenames longer than 14 chars.
You can't even think about them!
EOM
 val="$undef"
fi
set d_flexfnam
eval $setvar
$rm -rf 123456789abcde*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_flexfnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getsent:
?S: This variable conditionally defines HAS_GETSERVENT if getservent() is
?S: available to look up network services in some data base or another.
?S:.
?C:HAS_GETSERVENT:
?C: This symbol, if defined, indicates that the getservent() routine is
```

```
?C: available to look up network services in some
 data base or another.
?C:.
?H:#$d_getsent HAS_GETSERVENT  /**/
?H:.
?LINT:set d_getsent
: see if getservent exists
set getservent d_getsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mbtowc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mbtowc.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mbtowc: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbtowc:
?S: This variable conditionally defines the HAS_MBTOWC symbol, which
?S: indicates to the C program that the mbtowc() routine is available
?S: to convert multibyte to a wide character.
?S:.
?C:HAS_MBTOWC (MBTOWC):
?C: This symbol, if defined, indicates that the mbtowc routine is available
?C: to
 convert a multibyte to a wide character.
?C:.
?H:#$d_mbtowc HAS_MBTOWC  /**/
?H:.
?LINT:set d_mbtowc
: see if mbtowc exists
set mbtowc d_mbtowc
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mbtowc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ulimit.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ulimit.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ulimit: Inlibc
?MAKE: -pick add $@ %<
?S:d_ulimit:
?S: This variable conditionally defines HAS_ULIMIT if ulimit() is
?S: available to get the user limits.
?S:.
?C:HAS_ULIMIT (ULIMIT):
?C: This symbol, if defined, indicates that the ulimit system call is
?C: available to get the user limits.
?C:.
?H:#$d_ulimit HAS_ULIMIT  /**/
?H:.
?LINT:set
 d_ulimit
: see if ulimit exists
set ulimit d_ulimit
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ulimit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetbyaddr_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetbyaddr_r getnetbyaddr_r_proto: Inlibc Protochk Hasproto \
```

```
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetbyaddr_r:
?S: This variable conditionally defines the HAS_GETNETBYADDR_R symbol,
?S: which indicates to the C program that the getnetbyaddr_r()
?S: routine is available.
?S:.
?S:getnetbyaddr_r_proto:
?S: This variable encodes the prototype of getnetbyaddr_r.
?S: It is zero if d_getnetbyaddr_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyaddr_r
?S: is defined.
?S:.
?C:HAS_GETNETBYADDR_R:
?C: This symbol, if defined, indicates that
 the getnetbyaddr_r routine
?C: is available to getnetbyaddr re-entrantly.
?C:.
?C:GETNETBYADDR_R_PROTO:
?C: This symbol encodes the prototype of getnetbyaddr_r.
?C: It is zero if d_getnetbyaddr_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyaddr_r
?C: is defined.
?C:.
?H:#$d_getnetbyaddr_r HAS_GETNETBYADDR_R /**/
?H:#define GETNETBYADDR_R_PROTO $getnetbyaddr_r_proto /**/
?H:.
?T:try hdrs d_getnetbyaddr_r_proto
: see if getnetbyaddr_r exists
set getnetbyaddr_r d_getnetbyaddr_r
eval $inlibc
case "$d_getnetbyaddr_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetbyaddr_r_proto:$usethreads" in
 ":define") d_getnetbyaddr_r_proto=define
  set d_getnetbyaddr_r_proto getnetbyaddr_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getnetbyaddr_r_proto" in
 define)
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(unsigned long, int, struct netent*, char*, size_t, struct netent**, int*);'
 ./protochk
 "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_UISBWRE ;;
 esac
 case "$getnetbyaddr_r_proto" in
```

```
"|0) try='int getnetbyaddr_r(long, int, struct netent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_LISBI ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='struct netent* getnetbyaddr_r(in_addr_t, int, struct netent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=S_TISBI ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='struct netent* getnetbyaddr_r(long, int, struct netent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=S_LISBI ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(in_addr_t, int, struct netent*, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_TISD ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(long, int, struct netent*, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_LISD
;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(int, int, struct netent*, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_IISD ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) try='int getnetbyaddr_r(uint32_t, int, struct netent*, char*, size_t, struct netent**, int*);'
./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_uISBWRE ;;
esac
case "$getnetbyaddr_r_proto" in
"|0) d_getnetbyaddr_r=undef
 getnetbyaddr_r_proto=0
 echo "Disabling getnetbyaddr_r, cannot determine prototype." >&4 ;;
* ) case "$getnetbyaddr_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getnetbyaddr_r_proto="REENTRANT_PROTO_$getnetbyaddr_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getnetbyaddr_r has no prototype, not using it." >&4 ;;
 esac
 d_getnetbyaddr_r=undef
 getnetbyaddr_r_proto=0
 ;;
esac
;;
*) getnetbyaddr_r_proto=0
```

```
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetbyaddr_r.U
No license file was found, but licenses were detected in source scan.

```
case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting makedepend (with variable substitutions)"
$spitshell >makedepend <<!GROK!THIS!
$startsh
# $Id: makedepend.sh,v 3.0.1.1 1994/01/24 14:00:05 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
#
 Original Author: Larry Wall <lwall@netlabs.com>
#
# $Log: makedepend.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:05  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:37  ram
# Baseline for dist 3.0 netwide release.
#

export PATH || (echo "OOPS, this isn't sh.  Desperation time.  I will feed myself to sh."; sh \$0; kill \$\$)
```

```
cat='$cat'
cppflags='$cppflags'
cp='$cp'
cpp='$cppstdin'
echo='$echo'
egrep='$egrep'
expr='$expr'
mv='$mv'
rm='$rm'
sed='$sed'
sort='$sort'
test='$test'
tr='$tr'
uniq='$uniq'
!GROK!THIS!

$spitshell >>makedepend <<'!NO!SUBS!'

$cat /dev/null >.deptmp
$rm -f *.c.c c/*.c.c
if test -f Makefile; then
   mf=Makefile
else
   mf=makefile
fi
if test -f $mf; then
   defrule=`<$mf sed -n  \
 -e '/^\.c\.o:.*;/{'  \
 -e    's/\$\*\.c//'  \
 -e    's/^[^;]*;[  ]*//p' \
 -e    q    \
 -e '}'    \
 -e '/^\.c\.o: *$/{'  \
 -e    N    \
 -e    's/\$\*\.c//'  \
 -e    's/^.*\n[  ]*//p'  \
 -e    q    \
 -e '}'`
fi
case
 "$defrule" in
") defrule='$(CC) -c $(CFLAGS)' ;;
esac

make clist || ($echo "Searching for .c files..."; \
 $echo *.c | $tr ' ' '\012' | $egrep -v '\*' >.clist)
gotnone=true
```

```
for file in `$cat .clist`; do
# for file in `cat /dev/null`; do
   case "$file" in
   *.c) filebase=`basename $file .c` ;;
   *.y) filebase=`basename $file .c` ;;
   ")  continue ;;
   esac
   gotnone=false
   $echo "Finding dependencies for $filebase.o."
   $sed -n <$file >$file.c \
 -e "/^${filebase}_init(/q" \
 -e '/^#/{' \
 -e 's|/\*.*$||' \
 -e 's|\\$||' \
 -e p \
 -e '}'
   $cpp -I/usr/local/include -I. $cppflags $file.c | \
   $sed \
 -e '/^# *[0-9]/!d' \
 -e 's/^.*"\(.*\)".*$/'$filebase'.o: \1/' \
 -e 's|: \./|: |' \
 -e 's|\.c\.c|.c|' | \
   $uniq | $sort | $uniq >> .deptmp
done

$sed <Makefile >Makefile.new -e '1,/^# AUTOMATICALLY/!d'

make shlist || ($echo "Searching for .SH files..."; \
 $echo *.SH | $tr ' ' '\012' | $egrep -v '\*' >.shlist)
if $gotnone || $test -s .deptmp; then

  for file in `cat .shlist`; do
 $echo `$expr X$file : 'X\(.*\).SH`: $file config.sh \; \
     /bin/sh $file >> .deptmp
   done
   $echo "Updating Makefile..."
   $echo "# If this runs make out of memory, delete /usr/include lines." \
 >> Makefile.new
   $sed 's|^\(.*\.o:\) *\(.*/.*\.c\) *$|\1 \2; '"$defrule \2|" .deptmp \
      >>Makefile.new
else
   make hlist || ($echo "Searching for .h files..."; \
 $echo *.h | $tr ' ' '\012' | $egrep -v '\*' >.hlist)
   $echo "You don't seem to have a proper C preprocessor.  Using grep instead."
   $egrep '^#include ' `cat .clist` `cat .hlist`  >.deptmp
   $echo "Updating Makefile..."
   <.clist $sed -n       \
 -e '/\//{'       \
```

```
 -e   's|^\(.*\)/\(.*\)\.c|\2.o: \1/\2.c; "'$defrule \1/\2.c|p" \
 -e   d        \
 -e '}'        \
 -e 's|^\(.*\)\.c|\1.o: \1.c|p' >> Makefile.new
   <.hlist $sed -n 's|\(.*/\)\(.*\)|s= \2= \1\2=|p' >.hsed
   <.deptmp $sed -n 's|c:#include "\(.*\)".*$|o: \1|p' | \
      $sed 's|^[^;]*/||' | \
      $sed -f
 .hsed >> Makefile.new
   <.deptmp $sed -n 's|c:#include <\(.*\)>.*$|o: /usr/include/\1|p' \
      >> Makefile.new
   <.deptmp $sed -n 's|h:#include "\(.*\)".*$|h: \1|p' | \
      $sed -f .hsed >> Makefile.new
   <.deptmp $sed -n 's|h:#include <\(.*\)>.*$|h: /usr/include/\1|p' \
      >> Makefile.new
   for file in `$cat .shlist`; do
 $echo `$expr X$file : 'X\(.*\).SH`: $file config.sh \; \
     /bin/sh $file >> Makefile.new
   done
fi
$rm -f Makefile.old
$cp Makefile Makefile.old
$cp Makefile.new Makefile
$rm Makefile.new
$echo "# WARNING: Put nothing here or make depend will gobble it up!" >> Makefile
$rm -f .deptmp `sed 's/\.c/.c.c/' .clist` .shlist .clist .hlist .hsed

!NO!SUBS!
$eunicefix makedepend
chmod +x makedepend
case `pwd` in
*SH)
   $rm -f ../makedepend
   ln makedepend ../makedepend
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/makedepend.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Myinit.U,v 3.0 1993/08/18 12:05:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
```

```
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: Myinit.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: If you want to initialize any default values, copy this unit to your
?X: personal U directory and add the assignments to the end.  This file
?X: is included after variables are initialized but before any old
?X: config.sh file is read in and before any Configure switch processing.
?X:
?MAKE:Myinit
 libswanted: Init
?MAKE: -pick add $@ %<
?S:libswanted:
?S: This variable holds a list of all the libraries we want to
?S: search.  The order is chosen to pick up the c library
?S: ahead of ucb or bsd libraries for SVR4.
?S:.
?LINT:extern usevfork glibpth
?LINT:change usevfork glibpth
: List of libraries we want.
?X: Put crypt here, even though I should really fix d_crypt.U to look
?X: for it correctly, including possible shared library versions.
: If anyone needs extra -lxxx, put those in a hint file.
libswanted="cl pthread socket bind inet nsl ndbm gdbm dbm db malloc dl ld"
libswanted="$libswanted sun m crypt sec util c cposix posix ucb bsd BSD"
: We probably want to search /usr/shlib before most other libraries.
: This is only used by the lib/ExtUtils/MakeMaker.pm routine extliblist.
glibpth=`echo " $glibpth " | sed -e 's! /usr/shlib ! !'`
glibpth="/usr/shlib $glibpth"
: Do not use vfork unless overridden by a hint file.
usevfork=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Myinit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_poll.U 15 2006-08-30 18:21:51Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_poll.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:38:17  ram
?RCS: patch61: mention that <poll.h> can be included if HAS_POLL defined
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:26:31  ram
?RCS: patch45: created
?RCS:
?MAKE:d_poll: Inlibc
?MAKE: -pick add $@ %<
?S:d_poll:
?S: This variable conditionally defines the HAS_POLL symbol, which
?S: indicates to the C program that the poll() routine is available
?S: to poll active file descriptors.
?S:.
?C:HAS_POLL
 :
?C: This symbol, if defined, indicates that the poll routine is
?C: available to poll active file descriptors.  Please check I_POLL and
?C: I_SYS_POLL to know which header should be included as well.
?C:.
?H:#$d_poll HAS_POLL  /**/
?H:.
?LINT:set d_poll
: see if poll exists
set poll d_poll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_poll.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 2012 Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:ilp d_ilp32 d_ilp64 d_lp64 d_can64: Assert Myread Setvar \
 cat rm +cc +ccflags echo n c intsize longsize ptrsize
?MAKE: -pick add $@ %<
?S:ilp:
?S: This variable contains the largest amount of bits that the CPU supports,
```

```
?S: from the compiler's point of view.  Typically 32 or 64.
?S:.
?S:d_ilp32:
?S: This variable conditionally defines the CPU_IS_ILP32.
?S:.
?S:d_ilp64:
?S: This variable conditionally defines the CPU_IS_ILP64.
?S:.
?S:d_lp64:
?S: This variable conditionally defines the CPU_IS_LP64.
?S:.
?S:d_can64:
?S: This variable
 conditionally defines CAN_HANDLE_64BITS.
?S:.
?C:CPU_ILP_MAXBITS:
?C: This symbol contains the largest amount of bits that the CPU natively
?C: supports from the compiler's point of view.  Typically 32 or 64.
?C:.
?C:CPU_IS_ILP32:
?C: When defined, this indicates that the integer, long and pointer variables
?C: hold 32-bit values.
?C:.
?C:CPU_IS_ILP64:
?C: When defined, this indicates that the integer, long and pointer variables
?C: hold 64-bit values.
?C:.
?C:CPU_IS_LP64:
?C: When defined, this indicates that the long and pointer variables hold
?C: 64-bit values but integers are smaller (probably only 32-bit wide).
?C:.
?C:CAN_HANDLE_64BITS:
?C: When defined, this indicates that the compiler can handle 64-bit values
?C: despite the CPU having only 32-bit registers.  These are available using
?C: the "long long" C type.  It is only defined for ILP32 machines, since
?C: 64-bit support is naturally available on ILP64 and LP64 machines.
?C:.
?H:#define CPU_ILP_MAXBITS $ilp
?H:#$d_ilp32
 CPU_IS_ILP32 /**/
?H:#$d_ilp64 CPU_IS_ILP64 /**/
?H:#$d_lp64 CPU_IS_LP64  /**/
?H:#$d_can64 CAN_HANDLE_64BITS /**/
?H:.
?LINT: set d_ilp32 d_ilp64 d_lp64 d_can64
: check for architecture type
echo " "
$echo $n "Computing CPU architecture type...$c" >&4
```

```
ilp=`expr $longsize \* 8`
case "$ptrsize" in
8)
 val=$undef; set d_ilp32; eval $setvar
 case "$intsize" in
 8)
  echo " ILP64." >&4
  val=$define; set d_ilp64; eval $setvar
  val=$undef; set d_lp64; eval $setvar
  ;;
 *)
  echo " LP64." >&4
  val=$define; set d_lp64; eval $setvar
  val=$undef; set d_ilp64; eval $setvar
  ;;
 esac
 ;;
*)
 echo " ILP${ilp}." >&4
 case "$ilp" in
 32) val=$define;;
 *) val=$undef;;
 esac
 set d_ilp32; eval $setvar
 val=$undef; set d_ilp64; eval $setvar
 val=$undef; set d_lp64; eval $setvar
 ;;
esac

@if CAN_HANDLE_64BITS || d_can64
: see whether compiler supports 64-bit emulation
val=$undef
case "$ilp" in
64) val=$define;;
*)
 $cat >try.c <<EOCP
#include "static_assert.h"
long long foo;
int main()
{
 STATIC_ASSERT(8
 == sizeof(foo));
 return 0;
}
EOCP
 if $cc -c $ccflags try.c >/dev/null 2>&1; then
  echo " "
  echo "Your compiler also supports 64-bit emulation." >&4
```

```
  val=$define
 fi
 $rm -f try.*
 ;;
esac
set d_can64
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ilp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_syssecrt: Inhdr
?MAKE: -pick add $@ %<
?S:i_syssecrt:
?S: This variable conditionally defines the I_SYS_SECURITY symbol,
?S: and indicates whether a C program should include <sys/security.h>.
?S:.
?C:I_SYS_SECURITY:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/security.h>.
?C:.
?H:#$i_syssecrt   I_SYS_SECURITY /**/
?H:.
?LINT:set i_syssecrt
: see if sys/security.h is available
set sys/security.h i_syssecrt
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/i_syssecrt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysun.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysun.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/un.h> is available or not
?X:
?MAKE:i_sysun: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysun:
?S: This variable conditionally defines I_SYS_UN, which indicates
?S: to the C program that it should include <sys/un.h> to get UNIX
?S: domain socket definitions.
?S:.
?C:I_SYS_UN:
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <sys/un.h> to get UNIX domain socket definitions.
?C:.
?H:#$i_sysun I_SYS_UN  /**/
?H:.
?LINT:set i_sysun
: see if this is a sys/un.h system
set sys/un.h i_sysun
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysun.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strxfrm_l.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
```

```
?RCS:
?RCS: $Log: d_strxfrm_l.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:04  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strxfrm_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strxfrm_l:
?S: This variable conditionally defines HAS_STRXFRM_L if strxfrm_l() is
?S: available to transform strings.
?S:.
?C:HAS_STRXFRM_L:
?C: This symbol, if defined, indicates that the strxfrm_l() routine is
?C: available
 to transform strings.
?C:.
?H:#$d_strxfrm_l HAS_STRXFRM_L /**/
?H:.
?LINT:set d_strxfrm_l
: see if strxfrm_l exists
set strxfrm_l d_strxfrm_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strxfrm_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fchdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchdir:
?S: This variable conditionally defines the HAS_FCHDIR symbol, which
?S: indicates to the C program that the fchdir() routine is available.
?S:.
?C:HAS_FCHDIR:
?C: This symbol, if defined, indicates that the fchdir routine is
?C: available to change directory using a file descriptor.
?C:.
?H:#$d_fchdir HAS_FCHDIR  /**/
?H:.
?LINT:set d_fchdir
: see if fchdir exists
```

```
set fchdir d_fchdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fchdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wcstombs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wcstombs.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wcstombs: Inlibc
?MAKE: -pick add $@ %<
?S:d_wcstombs:
?S: This variable conditionally defines the HAS_WCSTOMBS symbol, which
?S: indicates to the C program that the wcstombs() routine is available
?S: to convert wide character strings to multibyte strings.
?S:.
?C:HAS_WCSTOMBS:
?C: This symbol, if defined, indicates that the wcstombs
 routine is
?C: available to convert wide character strings to multibyte strings.
?C:.
?H:#$d_wcstombs HAS_WCSTOMBS /**/
?H:.
?LINT:set d_wcstombs
: see if wcstombs exists
set wcstombs d_wcstombs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wcstombs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setprior.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setprior.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setprior: Inlibc
?MAKE: -pick add $@ %<
?S:d_setprior:
?S: This variable conditionally defines HAS_SETPRIORITY if setpriority()
?S: is available to set a process's priority.
?S:.
?C:HAS_SETPRIORITY (SETPRIORITY):
?C: This symbol, if defined, indicates that the setpriority routine is
?C: available to set a process's priority.
?C:.
?H:#$d_setprior
 HAS_SETPRIORITY  /**/
?H:.
?LINT:set d_setprior
: see if setpriority exists
set setpriority d_setprior
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setprior.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Setvar.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Setvar.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  15:58:28  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:16  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?X:
?X: This unit produces a variable that is intended to be eval'ed in
?X: order to define/undefine a symbol. A consistency check is made
?X: regarding any previous value and a warning is issued if there
?X: is any discrepancy.
?X:
?X:
 To use it, say:
?X: val=<value>
?X: set d_variable
?X: eval $setvar
?X:
?MAKE:Setvar: Whoa
?MAKE: -pick add $@ %<
?LINT:define setvar
?S:setvar:
?S: This shell variable is used internally by Configure to set a value
?S: to a given symbol that is defined or not. A typical use is:
?S: val=<value computed>
?S:  set d_variable
?S:  eval $setvar
?S: That will print a message in case the $val value is not the same
?S: as the previous value of $d_variable.
?S:.
?V:setvar:val
?T:var was td tu
: function used to set '$1' to '$val'
setvar='var=$1; eval "was=\$$1"; td=$define; tu=$undef;
case "$val$was" in
$define$undef) . ./whoa; eval "$var=\$td";;
$undef$define) . ./whoa; eval "$var=\$tu";;
*) eval "$var=$val";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Setvar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrnam_r getgrnam_r_proto: Inlibc Protochk Hasproto i_systypes \
```

```
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrnam_r:
?S: This variable conditionally defines the HAS_GETGRNAM_R symbol,
?S: which indicates to the C program that the getgrnam_r()
?S: routine is available.
?S:.
?S:getgrnam_r_proto:
?S: This variable encodes the prototype of getgrnam_r.
?S: It is zero if d_getgrnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrnam_r
?S: is defined.
?S:.
?C:HAS_GETGRNAM_R:
?C: This symbol, if defined, indicates that the getgrnam_r routine
?C: is available to
 getgrnam re-entrantly.
?C:.
?C:GETGRNAM_R_PROTO:
?C: This symbol encodes the prototype of getgrnam_r.
?C: It is zero if d_getgrnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrnam_r
?C: is defined.
?C:.
?H:#$d_getgrnam_r HAS_GETGRNAM_R /**/
?H:#define GETGRNAM_R_PROTO $getgrnam_r_proto /**/
?H:.
?T:try hdrs d_getgrnam_r_proto
: see if getgrnam_r exists
set getgrnam_r d_getgrnam_r
eval $inlibc
case "$d_getgrnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_getgrnam_r_proto:$usethreads" in
 ":define") d_getgrnam_r_proto=define
  set d_getgrnam_r_proto getgrnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getgrnam_r_proto" in
 define)
 case "$getgrnam_r_proto" in
 "|0) try='int getgrnam_r(const char*, struct group*, char*, size_t, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBWR ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='int getgrnam_r(const char*, struct group*, char*,
```

```
 int, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBIR ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='struct group* getgrnam_r(const char*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=S_CBI ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='int getgrnam_r(const char*, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBI ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='struct group* getgrnam_r(const char*, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=S_CSBI ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) d_getgrnam_r=undef
  getgrnam_r_proto=0
  echo "Disabling getgrnam_r, cannot determine prototype." >&4 ;;
 * ) case "$getgrnam_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getgrnam_r_proto="REENTRANT_PROTO_$getgrnam_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getgrnam_r has no prototype, not using it."
 >&4 ;;
  esac
  d_getgrnam_r=undef
  getgrnam_r_proto=0
  ;;
 esac
 ;;
*) getgrnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrnam_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgget.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgget: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgget:
?S: This variable conditionally defines the HAS_MSGGET symbol, which
?S: indicates to the C program that the msgget() routine is available.
?S:.
?C:HAS_MSGGET:
?C: This symbol, if defined, indicates that the msgget() routine is
?C: available to get a new message queue.
?C:.
?H:#$d_msgget
 HAS_MSGGET  /**/
?H:.
?LINT:set d_msgget
: see if msgget exists
set msgget d_msgget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: doublesize.U,v 3.0.1.1 1994/10/29 16:17:06 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: doublesize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:doublesize: cat rm_try Myread Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:doublesize:
?S: This variable contains the value of the DOUBLESIZE symbol, which
?S: indicates to the C program how many bytes there are in a double.
?S:.
?C:DOUBLESIZE:
?C: This
 symbol contains the size of a double, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define DOUBLESIZE $doublesize  /**/
?H:.
?F:!try
: check for length of double
echo " "
case "$doublesize" in
")
 echo "Checking to see how big your double precision numbers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
   printf("%d\n", (int)sizeof(double));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  doublesize=`$run ./try`
  echo "Your double is $doublesize bytes long."
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a double precision number (in bytes)?"
  . ./myread
  doublesize="$ans"
 fi
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/doublesize.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: patchlevel.U,v 3.0.1.1 1997/02/28 16:18:41 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: patchlevel.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:18:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:patchlevel revision version subversion \
 perl_patchlevel version_patchlevel_string \
 api_revision api_version api_subversion api_versionstring: \
 package test rsrc echo awk osname
?MAKE: -pick
 add $@ %<
?S:revision:
?S: The value of revision comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "5".
?S: In patchlevel.h, this is referred to as "PERL_REVISION".
?S:.
?S:patchlevel:
?S: The patchlevel level of this package.
?S: The value of patchlevel comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "6".
?S: In patchlevel.h, this is referred to as "PERL_VERSION".
?S:.
?S:subversion:
?S: The subversion level of this package.
?S: The value of subversion comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "1".
?S: In patchlevel.h, this is referred to as "PERL_SUBVERSION".
?S: This is unique to perl.
?S:.
?S:version:
?S: The full version number of this package, such as 5.6.1 (or 5_6_1).
?S: This combines revision, patchlevel, and subversion to get the
?S: full version number, including any possible subversions.
```

```
?S: This is suitable for use as a directory name, and hence is
?S: filesystem
 dependent.
?S:.
?S:api_revision:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_revision is the '5'.
?S: Prior to 5.5.640, the format was a floating point number,
?S: like 5.00563.
?S:
?S: perl.c:incpush() and lib/lib.pm will automatically search in
?S: $sitelib/.. for older directories back to the limit specified
?S: by these api_ variables.  This is only useful if you have a
?S: perl library directory tree structured like the default one.
?S: See INSTALL for how this works.  The versioned site_perl
?S: directory was introduced in 5.005, so that is the lowest
?S: possible value.  The version list appropriate for the current
?S: system is determined in inc_version_list.U.
?S:
?S: XXX To do:  Since compatibility can depend on compile time
?S: options (such as bincompat, longlong, etc.) it should
?S: (perhaps) be set by
 Configure, but currently it isn't.
?S: Currently, we read a hard-wired value from patchlevel.h.
?S: Perhaps what we ought to do is take the hard-wired value from
?S: patchlevel.h but then modify it if the current Configure
?S: options warrant.  patchlevel.h then would use an #ifdef guard.
?S:.
?S:api_version:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_version is the '6'.  See api_revision for
?S: full details.  As a special case, 5.5.0 is rendered in the
?S: old-style as 5.005.  (In the 5.005_0x maintenance series,
?S: this was the only versioned directory in $sitelib.)
?S:.
?S:api_subversion:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_subversion is the
 '1'.  See api_revision for
?S: full details.
?S:.
?S:api_versionstring:
```

```
?S: This variable combines api_revision, api_version, and
?S: api_subversion in a format such as 5.6.1 (or 5_6_1) suitable
?S: for use as a directory name.  This is filesystem dependent.
?S:.
?S:perl_patchlevel:
?S: This is the Perl patch level, a numeric change identifier,
?S: as defined by whichever source code maintenance system
?S: is used to maintain the patches; currently Perforce.
?S: It does not correlate with the Perl version numbers or
?S: the maintenance versus development dichotomy except
?S: by also being increasing.
?S:.
?S:version_patchlevel_string:
?S: This is a string combining version, subversion and
?S: perl_patchlevel (if perl_patchlevel is non-zero).
?S: It is typically something like
?S: 'version 7 subversion 1'  or
?S: 'version 7 subversion 1 patchlevel 11224'
?S: It is computed here to avoid duplication of code in myconfig.SH
?S: and lib/Config.pm.
?S:.
?LINT:extern LC_ALL
?LINT:extern LANGUAGE
:
 get the patchlevel
echo " "
echo "Getting the current patchlevel..." >&4
if $test -r $rsrc/patchlevel.h;then
 revision=`awk '/define[  ]+PERL_REVISION/ {print $3}' $rsrc/patchlevel.h`
 patchlevel=`awk '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
 subversion=`awk '/define[  ]+PERL_SUBVERSION/ {print $3}' $rsrc/patchlevel.h`
 api_revision=`awk '/define[  ]+PERL_API_REVISION/ {print $3}' $rsrc/patchlevel.h`
 api_version=`awk '/define[  ]+PERL_API_VERSION/ {print $3}' $rsrc/patchlevel.h`
 api_subversion=`awk '/define[  ]+PERL_API_SUBVERSION/ {print $3}' $rsrc/patchlevel.h`
 perl_patchlevel=`egrep ',"(MAINT|SMOKE)[0-9][0-9]*"' $rsrc/patchlevel.h|tail -1|sed 's/[^0-9]//g'`
else
 revision=0
 patchlevel=0
 subversion=0
 api_revision=0
 api_version=0
 api_subversion=0
 perl_patchlevel=0
 $echo "(You do not have patchlevel.h.  Eek.)"
fi
: Define a handy string here to avoid duplication in myconfig.SH and configpm.
version_patchlevel_string="version $patchlevel subversion $subversion"
case
```

```
 "$perl_patchlevel" in
0|") ;;
*)  perl_patchlevel=`echo $perl_patchlevel | sed 's/.* //'`
   version_patchlevel_string="$version_patchlevel_string patch $perl_patchlevel"
   ;;
esac

$echo "(You have $package $version_patchlevel_string.)"

case "$osname" in
dos|vms)
 : XXX Should be a Configure test for double-dots in filenames.
 version=`echo $revision $patchlevel $subversion | \
   $awk '{ printf "%d_%d_%d", $1, $2, $3 }'`
 api_versionstring=`echo $api_revision $api_version $api_subversion | \
   $awk '{ printf "%d_%d_%d", $1, $2, $3 }'`
 ;;
*)
 version=`echo $revision $patchlevel $subversion | \
   $awk '{ printf "%d.%d.%d", $1, $2, $3 }'`
 api_versionstring=`echo $api_revision $api_version $api_subversion | \
   $awk '{ printf "%d.%d.%d", $1, $2, $3 }'`
 ;;
esac
: Special case the 5.005_xx maintenance series, which used 5.005
: without any subversion label as a subdirectory in $sitelib
if test "${api_revision}${api_version}${api_subversion}" = "550"; then
 api_versionstring='5.005'
fi
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/patchlevel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systwgcf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systwgcf.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:39  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:i_systwgcf: Inhdr
?MAKE: -pick add $@ %<
?S:i_systwgcf:
?S: This variable conditionally defines the I_SYS_TWG_CF symbol, and
?S: indicates whether a C program should include sys/twg_config.h.
?S:.
?C:I_SYS_TWG_CF:
?C: This symbol, if defined, indicates to the C program that it should
?C: include sys/twg_config.h.
?C:.
?H:#$i_systwgcf
 I_SYS_TWG_CF /**/
?H:.
?LINT:set i_systwgcf
: see if this is a sys/twg_config.h system
set sys/twg_config.h i_systwgcf
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systwgcf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sockopt.U,v 3.0.1.1 1995/07/25 14:16:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sockopt.U,v $
?RCS: Revision 3.0.1.1  1995/07/25  14:16:14  ram
?RCS: patch56: obsoleted KEEPALIVE in favor of CAN_KEEPALIVE for consistency
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepalive: cat rm contains +cc +ccflags +ldflags socketlib sockethdr \
 d_oldsock libs Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_keepalive:
?S: This symbol conditionally defines CAN_KEEPALIVE which
 indicates to the C
?S: program that setsockopt SO_KEEPALIVE will work properly.
?S:.
```

```
?C:CAN_KEEPALIVE (KEEPALIVE):
?C: This symbol if defined indicates to the C program that the SO_KEEPALIVE
?C: option of setsockopt() will work as advertised in the manual.
?C:.
?H:#$d_keepalive CAN_KEEPALIVE  /**/
?H:.
?F:!socket
?LINT:set d_keepalive
: see if setsockopt with SO_KEEPALIVE works as advertised
echo " "
case "$d_oldsock" in
"$undef")
 if $contains SO_KEEPALIVE `./findhdr sys/socket.h` \
  /dev/null >/dev/null 2>&1
 then
  echo "OK, let's see if SO_KEEPALIVE works as advertised..." >&4
  $cat > socket.c <<EOP
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netdb.h>

int main()
{
 int s = socket(AF_INET, SOCK_STREAM, 0);
 if (s == -1)
  exit(1);
 if (-1 == setsockopt(s, SOL_SOCKET, SO_KEEPALIVE, 0, 0))
  exit(2);
 exit(0);
}
EOP
  if $cc $ccflags $sockethdr $ldflags -o socket socket.c $libs \
   $socketlib >/dev/null 2>&1; then
   ./socket >/dev/null 2>&1
   case
 $? in
   0) echo "Yes, it does!"
    val="$define";;
   1) $cat <<EOM
(Something went wrong -- Assuming SO_KEEPALIVE is broken)
EOM
    val="$undef";;
   2) echo "No, it doesn't.  Don't trust your manuals!!"
    val="$undef";;
   esac
  else
   cat <<EOM
```

```
(I can't compile the test program -- Assuming SO_KEEPALIVE is broken)
EOM
   val="$undef"
  fi
 else
  echo "Strange!! You have BSD 4.2 sockets but no SO_KEEPALIVE option."
  val="$undef"
 fi;;
*) cat <<EOM
As you have an old socket interface, you can't have heard of SO_KEEPALIVE.
EOM
 val="$undef";;
esac
set d_keepalive
eval $setvar
$rm -f socket socket.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sockopt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: startperl.U,v 3.0 1993/08/18 12:09:50 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: startperl.U,v $
?RCS: Perl5 version -- I always have d_portable=define.
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startperl: cat Myread sharpbang initialinstalllocation test \
 versiononly version
?MAKE: -pick add $@ %<
?Y:TOP
?X: This is different from dist's standard startperl.U unit because
?X: we can't directly test #!/usr/local/bin/perl (or
 whatever) because
?X: we haven't built and installed perl yet.
?S:startperl:
?S: This variable contains the string to put on the front of a perl
```

```
?S: script to make sure (hopefully) that it runs with perl and not some
?S: shell. Of course, that leading line must be followed by the classical
?S: perl idiom:
?S:  eval 'exec perl -S $0 ${1+"$@"}'
?S:   if $running_under_some_shell;
?S: to guarantee perl startup should the shell execute the script. Note
?S: that this magic incantation is not understood by csh.
?S:.
?C:STARTPERL:
?C: This variable contains the string to put in front of a perl
?C: script to make sure (one hopes) that it runs with perl and not
?C: some shell.
?C:.
?H:#define STARTPERL "$startperl"  /**/
?H:.
: figure out how to guarantee perl startup
: XXX Note that this currently takes advantage of the bug that binexp ignores
:     the Configure -Dinstallprefix setting, which in turn means that under
:     relocatable @INC, initialinstalllocation is what binexp started as.
case
 "$startperl" in
")
 case "$sharpbang" in
 *!)
  $cat <<EOH

I can use the #! construct to start perl on your system. This will
make startup of perl scripts faster, but may cause problems if you
want to share those scripts and perl is not in a standard place
($initialinstalllocation/perl) on all your platforms. The alternative
is to force a shell by starting the script with a single ':' character.

EOH
  case "$versionONLY" in
  "$define")      dflt="$initialinstalllocation/perl$version";;
  *)              dflt="$initialinstalllocation/perl";;
  esac
  rp='What shall I put after the #! to start up perl ("none" to not use #!)?'
  . ./myread
  case "$ans" in
  none) startperl=": # use perl";;
  *) startperl="#!$ans"
   if $test 30 -lt `echo "$ans" | wc -c`; then
    $cat >&4 <<EOM

WARNING:  Some systems limit the #! command to 32 characters.
If you experience difficulty running Perl scripts with #!, try
installing Perl in a directory with a shorter pathname.
```

```
EOM
   fi ;;
  esac
  ;;
 *)
 startperl=": # use perl"
  ;;
 esac
 ;;
esac
echo "I'll use $startperl to start perl scripts."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/startperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lseektype.U,v 3.0.1.1 1994/08/29 16:30:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: lseektype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:30:10  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lseektype lseeksize: Myread Typedef cat Compile rm_try longsize run
?MAKE: -pick add $@ %<
?S:lseektype:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare
 lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?S:lseeksize:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?C:Off_t (LSEEKTYPE):
```

```
?C: This symbol holds the type used to declare offsets in the kernel.
?C: It can be int, long, off_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?C:LSEEKSIZE:
?C: This symbol holds the number of bytes used by the Off_t.
?C:.
?C:Off_t_size:
?C: This symbol holds the number of bytes used by the Off_t.
?C:.
?H:#define Off_t $lseektype  /* <offset> type */
?H:#define LSEEKSIZE $lseeksize  /* <offset> size */
?H:#define Off_t_size $lseeksize /* <offset> size */
?H:.
?F:!try
?LINT:set lseektype
: see what type lseek is declared as in the kernel
rp="What is the type used for lseek's offset on this system?"
set off_t lseektype
 long stdio.h sys/types.h
eval $typedef_ask

echo " "
echo "Checking to see how big your file offsets are..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof($lseektype));
   return(0);
}
EOCP
set try
if eval $compile_ok; then
 lseeksize=`$run ./try`
 echo "Your file offsets are $lseeksize bytes long."
else
 dflt=$longsize
 echo " "
 echo "(I can't seem to compile the test program.  Guessing...)"
 rp="What is the size of your file offsets (in bytes)?"
 . ./myread
 lseeksize="$ans"
fi
$rm_try

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/lseektype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setreuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setreuid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setreuid d_setresuid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setreuid:
?S: This variable conditionally defines HAS_SETREUID if setreuid() is
?S: available to change the real and effective uid of the current
?S: process.
?S:.
?S:d_setresuid:
?S: This variable conditionally defines HAS_SETREUID if setresuid() is
?S: available to change
 the real, effective and saved uid of the current
?S: process.
?S:.
?C:HAS_SETREUID (SETREUID):
?C: This symbol, if defined, indicates that the setreuid routine is
?C: available to change the real and effective uid of the current
?C: process.
?C:.
?C:HAS_SETRESUID (SETRESUID):
?C: This symbol, if defined, indicates that the setresuid routine is
?C: available to change the real, effective and saved uid of the current
?C: process.
?C:.
?H:#$d_setreuid HAS_SETREUID  /**/
?H:#$d_setresuid HAS_SETRESUID  /**/
?H:.
?LINT:set d_setreuid d_setresuid
: see if setreuid exists
set setreuid d_setreuid
eval $inlibc
set setresuid d_setresuid
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setreuid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getspnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getspnam_r getspnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_shadow extern_C
?MAKE: -pick add $@ %<
?S:d_getspnam_r:
?S: This variable conditionally defines the HAS_GETSPNAM_R symbol,
?S: which indicates to the C program that the getspnam_r()
?S: routine is available.
?S:.
?S:getspnam_r_proto:
?S: This variable encodes the prototype of getspnam_r.
?S: It is zero if d_getspnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getspnam_r
?S: is defined.
?S:.
?C:HAS_GETSPNAM_R:
?C: This symbol, if defined, indicates that the getspnam_r routine
?C: is available
 to getspnam re-entrantly.
?C:.
?C:GETSPNAM_R_PROTO:
?C: This symbol encodes the prototype of getspnam_r.
?C: It is zero if d_getspnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getspnam_r
?C: is defined.
?C:.
?H:#$d_getspnam_r HAS_GETSPNAM_R /**/
?H:#define GETSPNAM_R_PROTO $getspnam_r_proto /**/
?H:.
?T:try hdrs d_getspnam_r_proto
: see if getspnam_r exists
set getspnam_r d_getspnam_r
eval $inlibc
case "$d_getspnam_r" in
"$define")
```

```
hdrs="$i_systypes sys/types.h define stdio.h $i_shadow shadow.h"
case "$d_getspnam_r_proto:$usethreads" in
":define") d_getspnam_r_proto=define
 set d_getspnam_r_proto getspnam_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_getspnam_r_proto" in
define)
case "$getspnam_r_proto" in
"|0) try='int getspnam_r(const char*, struct spwd*, char*, size_t, struct spwd**);'
./protochk "$extern_C $try" $hdrs && getspnam_r_proto=I_CSBWR ;;
esac
case "$getspnam_r_proto" in
"|0) try='struct spwd* getspnam_r(const char*, struct
spwd*, char*, int);'
./protochk "$extern_C $try" $hdrs && getspnam_r_proto=S_CSBI ;;
esac
case "$getspnam_r_proto" in
"|0) d_getspnam_r=undef
 getspnam_r_proto=0
 echo "Disabling getspnam_r, cannot determine prototype." >&4 ;;
* ) case "$getspnam_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getspnam_r_proto="REENTRANT_PROTO_$getspnam_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getspnam_r has no prototype, not using it." >&4 ;;
 esac
 d_getspnam_r=undef
 getspnam_r_proto=0
 ;;
esac
;;
*) getspnam_r_proto=0
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getspnam_r.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:
?RCS: Copyright (c) 2010 H.Merijn Brand

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_prctl d_prctl_set_name: Inlibc cat Compile run rm_try
?MAKE: -pick add $@ %<
?S:d_prctl:
?S: This variable conditionally defines the HAS_PRCTL symbol, which
?S: indicates to the C program that the prctl() routine is available.
?S: Note that there are at least two prctl variants: Linux and Irix.
?S: While they are somewhat similar, they are incompatible.
?S:.
?S:d_prctl_set_name:
?S: This variable conditionally defines the HAS_PRCTL_SET_NAME symbol,
?S: which indicates to the C program that the prctl() routine supports
?S: the PR_SET_NAME option.
?S:.
?C:HAS_PRCTL:
?C: This symbol, if defined, indicates that the prctl routine is
?C: available to set process title.
?C: Note that there are at least two
 prctl variants: Linux and Irix.
?C: While they are somewhat similar, they are incompatible.
?C:.
?C:HAS_PRCTL_SET_NAME:
?C: This symbol, if defined, indicates that the prctl routine is
?C: available to set process title and supports PR_SET_NAME.
?C:.
?H:#$d_prctl HAS_PRCTL  /**/
?H:#$d_prctl_set_name HAS_PRCTL_SET_NAME  /**/
?H:.
?F:!try
?LINT:set d_prctl
: see if prctl exists
set prctl d_prctl
eval $inlibc

: see if prctl supports PR_SET_NAME
d_prctl_set_name=$undef
case $d_prctl in
   $define)
 $cat >try.c <<EOM
#ifdef __ANDROID__
#include <unistd.h>
#endif
#include <sys/prctl.h>

int main (int argc, char *argv[])
```

```
{
  return (prctl (PR_SET_NAME, "Test"));
  } /* main */
EOM
 set try
 if eval $compile_ok && $run ./try; then
    echo "Your prctl (PR_SET_NAME, ...) works"
    d_prctl_set_name=$define
    fi
 $rm_try
 ;;
  esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_prctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_keepsig.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:57:56  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:26:25  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:13:59  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:48:47  ram
?RCS: patch12: comment for SIGNALS_KEPT was the other way round
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:06:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepsig: cat Compile rm Guess contains echo n c Setvar run
?MAKE: -pick add $@ %<
?S:d_keepsig:
?S: This variable contains the eventual value of the SIGNALS_KEPT symbol,
```

```
?S: which indicates to the C program if signal handlers need not reinstated
?S: after receipt of a signal.
?S:.
?C:SIGNALS_KEPT (PERSISTENT_SIGNAL):
?C: This symbol is defined if signal handlers needn't be reinstated after
?C: receipt of a signal.
?C:.
?H:#$d_keepsig SIGNALS_KEPT /**/
?H:.
?F:!try !try.out
?LINT:set d_keepsig
: see if signals are kept
val="$undef";
echo " "
echo "Checking to see if signal handlers stick around..." >&4
$cat >try.c <<'EOCP'
foo() {}

int main()
{
 signal(2, foo);
 kill(getpid(), 2);
 kill(getpid(), 2);
 printf("abc\n");
}
EOCP
set try
if eval $compile; then
?X: On AIX a single ./try will not work (with ksh)
?X: Backquotes required on Linux and SGI (prevents "ambiguous output redirect")
?X:
 (reported by Xavier LeVourch <xavierl@eiffel.com>)
 echo `sh -c $run ./try >try.out 2>/dev/null` >/dev/null
 if $contains abc try.out >/dev/null 2>&1; then
  echo "Yes, they do."
  val="$define";
 else
  echo "No, they don't."
 fi
else
 $echo $n "(I can't seem to compile the test program. Assuming $c"
 if ./bsd; then
  echo "they do.)"
  val="$define"
 else
  echo "they don't.)"
 fi
fi
```

```
set d_keepsig
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_keepsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: bin.U,v 3.1 1999/07/09 18:20:13 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: bin.U,v $
?RCS: Revision 3.1  1999/07/09 18:20:13  doughera
?RCS: Updated for installprefix
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:32  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:32:40  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:05:28  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS:
 Revision 3.0.1.1  1993/09/13  15:56:51  ram
?RCS: patch10: made prompting more explicit (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bin binexp installbin userelocatableinc initialinstalllocation: \
 Myread Prefixit Getfile Setvar Setprefixvar Oldconfig \
 test prefix prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:bin=''
?S:bin:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly executable images for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
```

```
?S: this variable must be prepared to deal with ~name substitution.
?S:.
?D:binexp=''
?S:binexp:
?S: This is the same as the bin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installbin=''
?S:installbin:
?S: This variable is the same as binexp unless AFS is running in which case
?S: the user is explicitly prompted for it. This variable
 should always
?S: be used in your makefiles for maximum portability.
?S:.
?D:userelocatableinc=''
?S:userelocatableinc:
?S: This variable is set to true to indicate that perl should relocate
?S: @INC entries at runtime based on the path to the perl binary.
?S: Any @INC paths starting '.../' are relocated relative to the directory
?S: containing the perl binary, and a logical cleanup of the path is then
?S: made around the join point (removing 'dir/../' pairs)
?S:.
?S:initialinstalllocation:
?S: When userelocatableinc is true, this variable holds the location
?S: that make install should copy the perl binary to, with all the
?S: run-time relocatable paths calculated from this at install time.
?S: When used, it is initialized to the original value of binexp, and
?S: then binexp is set to '.../', as the other binaries are found
?S: relative to the perl binary.
?S:.
?C:BIN:
?C: This symbol holds the path of the bin directory where the package will
?C: be installed. Program must be
 prepared to deal with ~name substitution.
?C:.
?C:BIN_EXP:
?C: This symbol is the filename expanded version of the BIN symbol, for
?C: programs that do not want to deal with that at run-time.
?C:.
?C:PERL_RELOCATABLE_INC:
?C: This symbol, if defined, indicates that we'd like to relocate entries
?C: in @INC at run time based on the location of the perl binary.
?C:.
?H:#define BIN "$bin" /**/
?H:#define BIN_EXP "$binexp" /**/
?H:#define PERL_RELOCATABLE_INC "$userelocatableinc"  /**/
?H:.
?D:bin='/usr/local/bin'
```

```
?LINT:change prefix
?LINT:change prefixexp
?LINT:change prefixvar
?LINT:change installprefixexp
?LINT:set userelocatableinc
: determine where public executables go
echo " "
set dflt bin bin
eval $prefixit
fn=d~
rp='Pathname where the public executables will reside?'
. ./getfile
if $test "X$ansexp" != "X$binexp"; then
 installbin=''
fi
prefixvar=bin
: XXX Bug? -- ignores Configure -Dinstallprefix setting.
: XXX If this is fixed, also fix the "start perl" hunk below, which relies on
:
    this via initialinstalllocation
. ./setprefixvar

case "$userelocatableinc" in
$define|true|[yY]*) dflt='y' ;;
*)   dflt='n' ;;
esac
cat <<EOM

Would you like to build Perl so that the installation is relocatable, so that
library paths in @INC are determined relative to the path of the perl binary?
This is not advised for system Perl installs, or if you need to run setid
scripts or scripts under taint mode.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Use relocatable @INC?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*) val="$undef"  ;;
esac
set userelocatableinc
eval $setvar

initialinstalllocation="$binexp"
: Default prefix is now "up one level from where the binaries are"
case "$userelocatableinc" in
$define|true|[yY]*)
```

```
   bin="../"
   binexp="../"
   prefix="../.."
   prefixexp="../.."
   installprefixexp="../.."
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/bin.U
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```
?RCS: $Id: i_varhdr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_varhdr.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:54:42  ram
?RCS: patch61: varargs script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:21:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:26:05  ram
?RCS: patch27: this unit now supersedes old i_stdarg.U and i_varargs.U
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0
  1993/08/18  12:08:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdarg i_varargs i_varhdr: cat +cc +ccflags rm test Setvar \
 Findhdr startsh _o
?MAKE: -pick add $@ %<
?S:i_stdarg:
?S: This variable conditionally defines the I_STDARG symbol, which
?S: indicates to the C program that <stdarg.h> exists and should
?S: be included.
?S:.
?S:i_varargs:
?S: This variable conditionally defines I_VARARGS, which indicates
?S: to the C program that it should include <varargs.h>.
```

```
?S:.
?S:i_varhdr:
?S: Contains the name of the header to be included to get va_dcl definition.
?S: Typically one of varargs.h or stdarg.h.
?S:.
?C:I_STDARG:
?C: This symbol, if defined, indicates that <stdarg.h> exists and should
?C: be included.
?C:.
?C:I_VARARGS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <varargs.h>.
?C:.
?H:#$i_stdarg I_STDARG  /**/
?H:#$i_varargs I_VARARGS /**/
?H:.
?W:%<:va_dcl
?F:!varargs
?T:valstd
?LINT:set i_stdarg i_varargs
?X:
?X:
 Don't use setvar because the varargs test below might override these.
?X: Actually, the messages here are just informative. We don't wish to set
?X: i_varargs or i_stdarg to their final value before knowing which of the
?X: two we'll include.
?X:
: see if stdarg is available
echo " "
if $test `./findhdr stdarg.h`; then
 echo "<stdarg.h> found." >&4
 valstd="$define"
else
 echo "<stdarg.h> NOT found." >&4
 valstd="$undef"
fi

: see if varargs is available
echo " "
if $test `./findhdr varargs.h`; then
 echo "<varargs.h> found." >&4
else
 echo "<varargs.h> NOT found, but that's ok (I hope)." >&4
fi

?X:
?X: if you have stdarg.h, you need to support prototypes to actually use it;
?X: but if stdarg.h exists and the compiler doesn't support prototypes (for some
```

```
?X: bizarre reason), we'll fall back to varargs.h anyway so it's not so bad.
?X:
: set up the varargs testing programs
$cat > varargs.c <<EOP
#ifdef I_STDARG
#include <stdarg.h>
#endif
#ifdef I_VARARGS
#include <varargs.h>
#endif

#ifdef
 I_STDARG
int f(char *p, ...)
#else
int f(va_alist)
va_dcl
#endif
{
 va_list ap;
#ifndef I_STDARG
 char *p;
#endif
#ifdef I_STDARG
 va_start(ap,p);
#else
 va_start(ap);
 p = va_arg(ap, char *);
#endif
 va_end(ap);
 return 0;
}
EOP
$cat > varargs <<EOP
$startsh
if $cc -c $ccflags -D\$1 varargs.c >/dev/null 2>&1; then
 echo "true"
else
 echo "false"
fi
$rm -f varargs$_o
EOP
chmod +x varargs

: now check which varargs header should be included
echo " "
i_varhdr="
val="
```

```
case "$valstd" in
"$define")
 if `./varargs I_STDARG`; then
  val='stdarg.h'
 elif `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
*)
 if `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
esac
case "$val" in
")
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to support stdarg or varargs!" >&4
 case "$knowitall" in
 ")
 echo "    I'm giving up; maybe you can try again with a different compiler?" >&4
  exit 1
  ;;
 esac
echo "I could not find the definition for va_dcl...
 You have problems..." >&4
 val="$undef"; set i_stdarg; eval $setvar
 val="$undef"; set i_varargs; eval $setvar
 ;;
*)
 set i_varhdr
 eval $setvar
 case "$i_varhdr" in
 stdarg.h)
  val="$define"; set i_stdarg; eval $setvar
  val="$undef"; set i_varargs; eval $setvar
  ;;
 varargs.h)
  val="$undef"; set i_stdarg; eval $setvar
  val="$define"; set i_varargs; eval $setvar
  ;;
 esac
 echo "We'll include <$i_varhdr> to get va_dcl definition." >&4;;
esac
$rm -f varargs*
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_varhdr.U
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```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: archname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:24:32  ram
?RCS: patch61: changed the way the archname is mangled from uname
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:05:24  ram
?RCS: patch54: protect against spaces in "uname -m" output (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:14:21  ram
?RCS: patch51: created
?RCS:
?MAKE:archname myarchname: sed Loc Myread Oldconfig osname test rm
?MAKE: -pick add $@ %<
?S:archname:
?S: This variable is a short name to characterize the current
?S: architecture.
  It is used mainly to construct the default archlib.
?S:.
?S:myarchname:
?S: This variable holds the architecture name computed by Configure in
?S: a previous run. It is not intended to be perused by any user and
?S: should never be set in a hint file.
?S:.
?C:ARCHNAME:
?C: This symbol holds a string representing the architecture name.
?C: It may be used to construct an architecture-dependant pathname
?C: where library files may be held under a private library, for
?C: instance.
?C:.
?H:#define ARCHNAME "$archname"  /**/
?H:.
?T:xxx tarch
: determine the architecture name
echo " "
?X: We always recompute archname in case osname changes. However, we need
?X: to be careful since, as ADO rightfully pointed out, some systems pick
```

```
?X: silly architecture names (0001307135000-aix on AIX or 9000/715-ux under
?X: HP-UX). Therefore, we allow hint files to superseed our guess and ask
?X: the user for confirmation.
if xxx=`./loc arch blurfl $pth`; $test -f "$xxx"; then
 tarch=`arch`"-$osname"
elif
 xxx=`./loc uname blurfl $pth`; $test -f "$xxx" ; then
 if uname -m > tmparch 2>&1 ; then
  tarch=`$sed -e 's/ *$//' -e 's/ /_/g' \
   -e 's/$/"'-$osname/" tmparch`
 else
  tarch="$osname"
 fi
 $rm -f tmparch
else
 tarch="$osname"
fi
case "$myarchname" in
"|"$tarch") ;;
*)
 echo "(Your architecture name used to be $myarchname.)"
 archname=''
 ;;
esac
case "$archname" in
'') dflt="$tarch";;
*) dflt="$archname";;
esac
rp='What is your architecture name'
. ./myread
archname="$ans"
myarchname="$tarch"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/archname.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_qgcvt: Inlibc
?MAKE: -pick add $@ %<
?S:d_qgcvt:
?S: This variable conditionally defines the HAS_QGCVT symbol, which
```

```
?S: indicates to the C program that the qgcvt() routine is available.
?S:.
?C:HAS_QGCVT:
?C: This symbol, if defined, indicates that the qgcvt routine is
?C: available to convert long doubles ("quad doubles") to strings.
?C: This is a low-level routine hopefully faster than sprintf.
?C:.
?H:#$d_qgcvt HAS_QGCVT  /**/
?H:.
?LINT:set d_qgcvt
: see if qgcvt exists
set qgcvt d_qgcvt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_qgcvt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmat.U,v 3.0.1.3 1995/07/25 14:04:23 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_shmat.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:04:23  ram
?RCS: patch56: use findhdr to find <sys/shm.h>, to get the right one (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:18:56  ram
?RCS: patch27: added new symbol HAS_SHMAT_PROTOTYPE (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:54:18  ram
?RCS: patch23: new Shmat_t symbol to declare return type of shmat()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:d_shmat shmattype d_shmatprototype: Inlibc cat +cc +ccflags \
 rm cppstdin cppflags cppminus Findhdr Setvar contains
?MAKE: -pick add $@ %<
?S:d_shmat:
?S: This variable conditionally defines the HAS_SHMAT symbol, which
?S: indicates to the C program that the shmat() routine is available.
```

```
?S:.
?S:shmattype:
?S: This symbol contains the type of pointer returned by shmat().
?S: It can be 'void *' or 'char *'.
?S:.
?S:d_shmatprototype:
?S: This variable conditionally defines the HAS_SHMAT_PROTOTYPE
?S: symbol, which indicates that sys/shm.h has a prototype for
?S: shmat.
?S:.
?C:HAS_SHMAT:
?C: This symbol, if defined, indicates that the shmat() routine is
?C: available to attach a shared memory segment to the process space.
?C:.
?C:Shmat_t:
?C: This symbol holds the return type of the shmat() system call.
?C: Usually set to 'void *' or 'char *'.
?C:.
?C:HAS_SHMAT_PROTOTYPE:
?C: This symbol, if defined, indicates that the sys/shm.h includes
?C: a prototype for shmat().
  Otherwise, it is up to the program to
?C: guess one.  Shmat_t shmat(int, Shmat_t, int) is a good guess,
?C: but not always right so it should be emitted by the program only
?C: when HAS_SHMAT_PROTOTYPE is not defined to avoid conflicting defs.
?C:.
?H:#$d_shmat HAS_SHMAT  /**/
?H:#define Shmat_t $shmattype /**/
?H:#$d_shmatprototype HAS_SHMAT_PROTOTYPE /**/
?H:.
?LINT:set d_shmat d_shmatprototype
?T:xxx
: see if shmat exists
set shmat d_shmat
eval $inlibc
: see what shmat returns
case "$d_shmat" in
"$define")
 $cat >shmat.c <<'END'
#include <sys/shm.h>
void *shmat();
END
 if $cc $ccflags -c shmat.c >/dev/null 2>&1; then
  shmattype='void *'
 else
  shmattype='char *'
 fi
 echo "and it returns ($shmattype)." >&4
```

```
 : see if a prototype for shmat is available
 xxx=`./findhdr sys/shm.h`
 $cppstdin $cppflags $cppminus < $xxx > shmat.c 2>/dev/null
 if $contains 'shmat.*(' shmat.c >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 $rm -f shmat.[co]
 ;;
*)
 val="$undef"
 ;;
esac
set
 d_shmatprototype
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_shmat.U
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```
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?RCS:
?MAKE:d_hasmntopt: Inlibc
?MAKE: -pick add $@ %<
?S:d_hasmntopt:
?S: This variable conditionally defines the HAS_HASMNTOPT symbol, which
?S: indicates to the C program that the hasmntopt() routine is available
?S: to query the mount options of file systems.
?S:.
?C:HAS_HASMNTOPT:
?C: This symbol, if defined, indicates that the hasmntopt routine is
?C: available to query the mount options of file systems.
?C:.
?H:#$d_hasmntopt HAS_HASMNTOPT  /**/
?H:.
?LINT:set d_hasmntopt
: see if hasmntopt exists
set hasmntopt d_hasmntopt
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_hasmntopt.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_const.U,v $
?RCS: Revision 3.0.1.1  1993/11/10  17:33:41  ram
?RCS: patch14: stronger const check with added typedef for MIPS cc
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_const: cat rm cc ccflags Setvar
?MAKE: -pick add $@ %<
?S:d_const:
?S: This variable conditionally defines the HASCONST symbol, which
?S: indicates to the C program that this C compiler knows about the
?S: const type.
?S:.
?C:HASCONST ~ %<:
?C: This symbol,
 if defined, indicates that this C compiler knows about
?C: the const type. There is no need to actually test for that symbol
?C: within your programs. The mere use of the "const" keyword will
?C: trigger the necessary tests.
?C:.
?H:?%<:#$d_const HASCONST /**/
?H:?%<:#ifndef HASCONST
?H:?%<:#define const
?H:?%<:#endif
?H:.
?W:%<:const
?F:const.c const.o
?LINT:set d_const
?LINT:known const
: check for const keyword
echo " "
echo 'Checking to see if your C compiler knows about "const"...' >&4
$cat >const.c <<'EOCP'
?X: mmcg@bruce.cs.monash.edu.au reports that:
```

```
?X: The MIPS cc compiler (V2.10) on a dec 5000 running Ultrix 4.2A
?X: pretends to understand `const' but doesn't - it'll also fail to
?X: handle typedefs properly if they're declared const. To guard
?X: against this, boost up the test by using an explicit typedef...
typedef struct spug { int drokk; } spug;
int main()
{
 const char *foo;
 const spug y;
}
EOCP
if $cc -c $ccflags const.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup,
 it does."
else
 val="$undef"
 echo "Nope, it doesn't."
fi
set d_const
eval $setvar
$rm -f const.c const.o
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_const.U
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```
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?RCS:
?MAKE:d_fs_data_s: Hasstruct i_sysparam i_sysmount i_systypes Setvar
?MAKE: -pick add $@ %<
?S:d_fs_data_s:
?S: This variable conditionally defines the HAS_STRUCT_FS_DATA symbol,
?S: which indicates that the struct fs_data is supported.
?S:.
?C:HAS_STRUCT_FS_DATA:
?C: This symbol, if defined, indicates that the struct fs_data
?C: to do statfs() is supported.
?C:.
?H:#$d_fs_data_s HAS_STRUCT_FS_DATA /**/
?H:.
?LINT:set d_fs_data_s
: Check for fs_data_s
```

```
echo " "
echo "Checking to see if your system supports struct fs_data..." >&4
set d_fs_data_s fs_data $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h
eval $hasstruct
case "$d_fs_data_s" in
"$define")      echo "Yes, it does."   ;;
*)
            echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fs_data_s.U
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```
?RCS: $Id: longsize.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: longsize.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:09:35  ram
?RCS: patch61: code moved to intsize.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:24:31  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: 'longsize' is now defined within intsize.U
?X:
?LINT: empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/longsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pidcheck.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pidcheck.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:37:55  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_pidcheck: cat rm +cc _o
?MAKE: -pick add $@ %<
?S:d_pidcheck:
?S: This variable conditionally defines the variable PIDCHECK
?S: which indicates that kill(pid, 0) will check for an
 active pid.
?S:.
?C:PIDCHECK:
?C: This symbol, if defined, means that the kill(pid, 0) will
?C: check for an active pid (i.e. the kernel will run all the
?C: necessary pid checks, but no signal is actually sent).
?C:.
?H:#$d_pidcheck PIDCHECK  /**/
?H:.
?F:!try
: check for "kill(pid, 0)"
echo " "
case "$d_pidcheck" in
"$define")
echo "I already know your system supports kill(pid, 0) for pid checks." >&4
 ;;
"$undef")
echo "We both know your system does not support signal #0 for pid checks." >&4
 ;;
*)
 echo "Checking to see if kill(pid, 0) works..." >&4
 $cat >try.c <<'EOCP'
int main()
 {
 int pid, status0, status9;

 if ((pid = fork()) == 0)
  {
  sleep(30);
  exit(1);
```

```
  }
 status0 = kill(pid, 0);
 status9 = kill(pid, 9);
 exit(status0 == status9);
 }
EOCP
 if $cc -o try try.c >/dev/null 2>&1 ; then
  if ./try >/dev/null 2>&1 ; then
   echo "Yes, it does marvels."
   d_pidcheck="$undef"
  else
   d_pidcheck="$define"
   echo "No, it doesn't."
  fi
 else
  echo "(I was unable to compile
 the test program.)"
  echo "Your system does not appear to support kill(pid, 0)."
  d_pidcheck="$undef"
 fi
 $rm -f try.c try$_o try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pidcheck.U
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```
?RCS: $Id: d_attribut.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_attribut.U,v $
?RCS: Revision 3.0.1.3  1995/01/30  14:33:45  ram
?RCS: patch49: test C program now includes <stdio.h> (WED)
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:25:47  ram
?RCS: patch45: fixed typo in the d_attribut variable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:55  ram
```

```
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_attribute_deprecated d_attribute_format
 d_attribute_malloc \
 d_attribute_nonnull d_attribute_noreturn d_attribute_pure \
 d_attribute_unused d_attribute_warn_unused_result \
 d_printf_format_null d_attribute_always_inline: \
    Myread Oldconfig cat cc ccflags rm Setvar compiler_warning \
        i_stdlib run i_inttypes
?MAKE: -pick add $@ %<
?S:d_attribute_format:
?S: This variable conditionally defines HASATTRIBUTE_FORMAT, which
?S: indicates the C compiler can check for printf-like formats.
?S:.
?S:d_attribute_deprecated:
?S: This variable conditionally defines HASATTRIBUTE_DEPRECATED, which
?S: indicates that GCC can handle the attribute for marking deprecated
?S: APIs
?S:.
?S:d_printf_format_null:
?S: This variable conditionally defines PRINTF_FORMAT_NULL_OK, which
?S: indicates the C compiler allows printf-like formats to be null.
?S:.
?S:d_attribute_malloc:
?S: This variable conditionally defines HASATTRIBUTE_MALLOC, which
?S: indicates the C compiler can understand functions as having
?S: malloc-like semantics.
?S:.
?S:d_attribute_nonnull:
?S: This
 variable conditionally defines HASATTRIBUTE_NONNULL, which
?S: indicates that the C compiler can know that certain arguments
?S: must not be NULL, and will check accordingly at compile time.
?S:.
?S:d_attribute_noreturn:
?S: This variable conditionally defines HASATTRIBUTE_NORETURN, which
?S: indicates that the C compiler can know that certain functions
?S: are guaranteed never to return.
?S:.
?S:d_attribute_pure:
?S: This variable conditionally defines HASATTRIBUTE_PURE, which
?S: indicates that the C compiler can know that certain functions
?S: are "pure" functions, meaning that they have no side effects, and
?S: only rely on function input and/or global data for their results.
?S:.
?S:d_attribute_unused:
?S: This variable conditionally defines HASATTRIBUTE_UNUSED, which
?S: indicates that the C compiler can know that certain variables
```

```
?S: and arguments may not always be used, and to not throw warnings
?S: if they don't get used.
?S:.
?S:d_attribute_warn_unused_result:
?S: This
 variable conditionally defines
?S: HASATTRIBUTE_WARN_UNUSED_RESULT, which indicates that the C
?S: compiler can know that certain functions have a return values
?S: that must not be ignored, such as malloc() or open().
?S:.
?S:d_attribute_always_inline:
?S: This variable conditionally defines HASATTRIBUTE_ALWAYS_INLINE,
?S: which indicates that the C compiler can know that certain
?S: functions should always be inlined.
?S:.
?C:HASATTRIBUTE_FORMAT ~ %< (GNUC_ATTRIBUTE_CHECK):
?C: Can we handle GCC attribute for checking printf-style formats
?C:.
?C:PRINTF_FORMAT_NULL_OK:
?C: Allows __printf__ format to be null when checking printf-style
?C:.
?C:HASATTRIBUTE_MALLOC:
?C: Can we handle GCC attribute for malloc-style functions.
?C:.
?C:HASATTRIBUTE_NONNULL:
?C: Can we handle GCC attribute for nonnull function parms.
?C:.
?C:HASATTRIBUTE_NORETURN:
?C: Can we handle GCC attribute for functions that do not return
?C:.
?C:HASATTRIBUTE_PURE:
?C: Can we handle
 GCC attribute for pure functions
?C:.
?C:HASATTRIBUTE_UNUSED:
?C: Can we handle GCC attribute for unused variables and arguments
?C:.
?C:HASATTRIBUTE_DEPRECATED:
?C: Can we handle GCC attribute for marking deprecated APIs
?C:.
?C:HASATTRIBUTE_WARN_UNUSED_RESULT ~ %< (HASATTRIBUTE):
?C: Can we handle GCC attribute for warning on unused results
?C:.
?C:HASATTRIBUTE_ALWAYS_INLINE:
?C: Can we handle GCC attribute for functions that should always be
?C: inlined.
?C:.
?H:?%<:#$d_attribute_deprecated HASATTRIBUTE_DEPRECATED /**/
```

```
?H:?%<:#$d_attribute_format HASATTRIBUTE_FORMAT /**/
?H:?%<:#$d_printf_format_null PRINTF_FORMAT_NULL_OK /**/
?H:?%<:#$d_attribute_noreturn HASATTRIBUTE_NORETURN /**/
?H:?%<:#$d_attribute_malloc HASATTRIBUTE_MALLOC /**/
?H:?%<:#$d_attribute_nonnull HASATTRIBUTE_NONNULL /**/
?H:?%<:#$d_attribute_pure HASATTRIBUTE_PURE /**/
?H:?%<:#$d_attribute_unused HASATTRIBUTE_UNUSED /**/
?H:?%<:#$d_attribute_warn_unused_result HASATTRIBUTE_WARN_UNUSED_RESULT /**/
?H:?%<:#$d_attribute_always_inline
 HASATTRIBUTE_ALWAYS_INLINE /**/
?H:.
?F:!attrib !attrib.out !attrib.c
?LINT:set d_attribute_deprecated
?LINT:set d_attribute_format
?LINT:set d_printf_format_null
?LINT:set d_attribute_malloc
?LINT:set d_attribute_nonnull
?LINT:set d_attribute_noreturn
?LINT:set d_attribute_pure
?LINT:set d_attribute_unused
?LINT:set d_attribute_warn_unused_result
?LINT:set d_attribute_always_inline
: Look for GCC-style attribute format
case "$d_attribute_format" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((format)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void my_special_printf(char* pat,...) __attribute__((__format__(__printf__,1,2)));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((format))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((format))."
  val="$define"
 fi
else
 echo "Your C compiler
 doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_format" ;;
esac
set d_attribute_format
```

```
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute format with null format allowed
case "$d_printf_format_null" in
") case "$d_attribute_format" in
   $define)
 echo " "
 echo "Checking whether your compiler allows __printf__ format to be null ..." >&4
$cat >attrib.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#ifndef INTPTR_MAX
#define intptr_t int
#endif
int null_printf (char* pat,...) __attribute__((__format__(__printf__,1,2)));
int null_printf (char* pat,...) { return (int)(intptr_t)pat; }
int main () { exit(null_printf(NULL)); }
EOCP
 if $cc $ccflags -o attrib attrib.c >attrib.out 2>&1 ; then
     : run the executable in case it produces a run-time warning
     if $run ./attrib >>attrib.out 2>&1; then
  if $compiler_warning attrib.out
 >/dev/null 2>&1; then
      echo "Your C compiler doesn't allow __printf__ format to be null."
      val="$undef"
  else
      echo "Your C compiler allows __printf__ format to be null."
      val="$define"
  fi
     else
     echo "Your C compiler executable failed with __printf__ format null."
     val="$undef"
 fi
   else
 echo "Your C compiler fails with __printf__ format null."
 val="$undef"
   fi
   ;;
   *)  val="$undef" ;;
   esac
```

```
;;
*)  val="$d_printf_format_null" ;;
esac
set d_printf_format_null
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute malloc
case "$d_attribute_malloc" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((malloc)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
char *go_get_some_memory( int how_many_bytes ) __attribute__((malloc));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((malloc))."
  val="$undef"
 else
  echo
 "Your C compiler supports __attribute__((malloc))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_malloc" ;;
esac
set d_attribute_malloc
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute nonnull
case "$d_attribute_nonnull" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((nonnull(1))) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void do_something (char *some_pointer,...) __attribute__((nonnull(1)));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((nonnull))."
```

```
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((nonnull))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_nonnull" ;;
esac
set d_attribute_nonnull
eval
 $setvar
$rm -f attrib*

: Look for GCC-style attribute noreturn
case "$d_attribute_noreturn" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((noreturn)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void fall_over_dead( void ) __attribute__((noreturn));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((noreturn))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((noreturn))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_noreturn" ;;
esac
set d_attribute_noreturn
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute pure
case "$d_attribute_pure" in
")
```

```
echo " "
echo "Checking whether your compiler can handle __attribute__((pure)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int square( int
 n ) __attribute__((pure));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((pure))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((pure))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_pure" ;;
esac
set d_attribute_pure
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute unused
case "$d_attribute_unused" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((unused)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int do_something( int dummy __attribute__((unused)), int n );
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((unused))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((unused))."
  val="$define"
 fi
else
 echo
 "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
```

```
;;
*) val="$d_attribute_unused" ;;
esac
set d_attribute_unused
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute deprecated
case "$d_attribute_deprecated" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((deprecated)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int I_am_deprecated(void) __attribute__((deprecated));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((deprecated))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((deprecated))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_deprecated" ;;
esac
set d_attribute_deprecated
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute
 warn_unused_result
case "$d_attribute_warn_unused_result" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((warn_unused_result)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int I_will_not_be_ignored(void) __attribute__((warn_unused_result));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((warn_unused_result))."
```

```
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((warn_unused_result))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_warn_unused_result" ;;
esac
set d_attribute_warn_unused_result
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute always_inline
case "$d_attribute_always_inline" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((always_inline)) ..." >&4
$cat >attrib.c <<'EOCP'
#include
 <stdio.h>
static __inline__ __attribute__((always_inline)) int I_will_always_be_inlined(void);
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((always_inline))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((always_inline))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_always_inline" ;;
esac
set d_attribute_always_inline
eval $setvar
$rm -f attrib*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_attribut.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_crypt_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_crypt_r crypt_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_crypt extern_C
?MAKE: -pick add $@ %<
?S:d_crypt_r:
?S: This variable conditionally defines the HAS_CRYPT_R symbol,
?S: which indicates to the C program that the crypt_r()
?S: routine is available.
?S:.
?S:crypt_r_proto:
?S: This variable encodes the prototype of crypt_r.
?S: It is zero if d_crypt_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_crypt_r
?S: is defined.
?S:.
?C:HAS_CRYPT_R:
?C: This symbol, if defined, indicates that the crypt_r routine
?C: is available to crypt re-entrantly.
?C:.
?C:CRYPT_R_PROTO:
?C: This
 symbol encodes the prototype of crypt_r.
?C: It is zero if d_crypt_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_crypt_r
?C: is defined.
?C:.
?H:#$d_crypt_r HAS_CRYPT_R /**/
?H:#define CRYPT_R_PROTO $crypt_r_proto /**/
?H:.
?T:try hdrs d_crypt_r_proto
: see if crypt_r exists
set crypt_r d_crypt_r
eval $inlibc
case "$d_crypt_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_crypt crypt.h"
 case "$d_crypt_r_proto:$usethreads" in
 ":define") d_crypt_r_proto=define
  set d_crypt_r_proto crypt_r $hdrs
```

```
 eval $hasproto ;;
*) ;;
esac
case "$d_crypt_r_proto" in
define)
case "$crypt_r_proto" in
"|0) try='char* crypt_r(const char*, const char*, struct crypt_data*);'
./protochk "$extern_C $try" $hdrs && crypt_r_proto=B_CCS ;;
esac
case "$crypt_r_proto" in
"|0) try='char* crypt_r(const char*, const char*, CRYPTD*);'
./protochk "$extern_C $try" $hdrs && crypt_r_proto=B_CCD ;;
esac
case "$crypt_r_proto" in
"|0) d_crypt_r=undef
 crypt_r_proto=0
 echo
"Disabling crypt_r, cannot determine prototype." >&4 ;;
* ) case "$crypt_r_proto" in
 REENTRANT_PROTO*) ;;
 *) crypt_r_proto="REENTRANT_PROTO_$crypt_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "crypt_r has no prototype, not using it." >&4 ;;
 esac
 d_crypt_r=undef
 crypt_r_proto=0
 ;;
esac
;;
*) crypt_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_crypt_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: prefix.U,v $
?RCS: Revision 3.0.1.2  1995/01/30  14:44:05  ram
?RCS: patch49: new prefixexp variable holding a fully expanded prefix
?RCS: patch49: save off previous prefix value in oldprefix if changed (WED)
?RCS: patch49: added the INSTALLPREFIX define for C programs to use (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:31:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:prefix prefixexp +oldprefix: Getfile Loc Oldconfig
 cat package
?MAKE: -pick add $@ %<
?S:prefix:
?S: This variable holds the name of the directory below which the
?S: user will install the package.  Usually, this is /usr/local, and
?S: executables go in /usr/local/bin, library stuff in /usr/local/lib,
?S: man pages in /usr/local/man, etc.  It is only used to set defaults
?S: for things in bin.U, mansrc.U, privlib.U, or scriptdir.U.
?S:.
?S:prefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install the package.  Derived from prefix.
?S:.
?S:oldprefix:
?S: This variable is set non-null if the prefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
?C:INSTALLPREFIX:
?C: This symbol contains the name of the install prefix for this package.
?C:.
?H:#define INSTALLPREFIX "$prefix"  /**/
?H:.
: determine root of directory hierarchy where package will be installed.
case "$prefix" in
")
 dflt=`./loc . /usr/local /usr/local /local /opt
 /usr`
 ;;
*)
 dflt="$prefix"
 ;;
esac
$cat <<EOM
```

```
By default, $package will be installed in $dflt/bin, manual
pages under $dflt/man, etc..., i.e. with $dflt as prefix for
all installation directories. Typically set to /usr/local, but you
may choose /usr if you wish to install $package among your system
binaries. If you wish to have binaries under /bin but manual pages
under /usr/local/man, that's ok: you will be prompted separately
for each of the installation directories, the prefix being only used
to set the defaults.

EOM
fn=d~
rp='Installation prefix to use?'
. ./getfile
oldprefix=''
case "$prefix" in
'') ;;
*)
 case "$ans" in
 "$prefix") ;;
 *) oldprefix="$prefix";;
 esac
 ;;
esac
prefix="$ans"
prefixexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_charsprf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_charsprf.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_charsprf: cat rm +cc Setvar
?MAKE: -pick add $@ %<
?S:d_charsprf:
```

```
?S: This variable conditionally defines CHARSPRINTF if this system
?S: declares "char *sprintf()" in stdio.h.  The trend seems to be to
?S: declare it as "int sprintf()".
?S:.
?C:CHARSPRINTF:
?C: This symbol is defined if this system declares "char *sprintf()" in
?C: stdio.h.
  The trend seems to be to declare it as "int sprintf()".  It
?C: is up to the package author to declare sprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_charsprf CHARSPRINTF  /**/
?H:.
?F:!ucbsprf.c !ucbsprf
?LINT:set d_charsprf
: see if sprintf is declared as int or pointer to char
echo " "
$cat >ucbsprf.c <<'EOF'
int main()
{
 int sprintf();
 char buf[10];
 exit((unsigned long)sprintf(buf,"%s","foo") > 10L);
}
EOF
if $cc -o ucbsprf ucbsprf.c >/dev/null 2>&1 && ./ucbsprf; then
 echo "Your sprintf() returns (int)." >&4
 val="$undef"
else
 echo "Your sprintf() returns (char*)." >&4
 val="$define"
fi
set d_charsprf
eval $setvar
$rm -f ucbsprf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_charsprf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nextafter: Inlibc
?MAKE: -pick add $@ %<
?S:d_nextafter:
?S: This variable conditionally defines HAS_NEXTAFTER if nextafter()
?S: is available to return the next machine representable double from
```

```
?S: x in direction y.
?S:.
?C:HAS_NEXTAFTER:
?C: This symbol, if defined, indicates that the nextafter routine is
?C: available to return the next machine representable double from
?C: x in direction y.
?C:.
?H:#$d_nextafter HAS_NEXTAFTER  /**/
?H:.
?LINT:set d_nextafter
: see if nextafter exists
set nextafter d_nextafter
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nextafter.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgsnd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgsnd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgsnd: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgsnd:
?S: This variable conditionally defines the HAS_MSGSND symbol, which
?S: indicates to the C program that the msgsnd() routine is available.
?S:.
?C:HAS_MSGSND:
?C: This symbol, if defined, indicates that the msgsnd() routine is
?C: available to send a message into the message queue.
?C:.
?H:#$d_msgsnd
 HAS_MSGSND  /**/
?H:.
?LINT:set d_msgsnd
: see if msgsnd exists
set msgsnd d_msgsnd
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgsnd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017-2018, H.Merijn Brand
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?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_accept4: Inlibc
?MAKE: -pick add $@ %<
?S:d_accept4:
?S: This variable conditionally defines HAS_ACCEPT4 if accept4() is
?S: available to accept socket connections.
?S:.
?C:HAS_ACCEPT4:
?C: This symbol, if defined, indicates that the accept4 routine is
?C: available to accept socket connections.
?C:.
?H:#$d_accept4 HAS_ACCEPT4 /**/
?H:.
?LINT:set d_accept4
: see if accept4 exists
set accept4 d_accept4
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_accept4.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
```

```
?RCS:
?MAKE:usevendorprefix vendorprefix vendorprefixexp +oldvendorprefix: \
 Getfile Loc Oldconfig cat prefix Myread
?MAKE: -pick add $@ %<
?S:usevendorprefix:
?S: This variable tells whether the vendorprefix
?S: and consequently other vendor* paths are in use.
?S:.
?S:vendorprefix:
?S: This variable holds the full absolute path of the directory below
?S: which
 the vendor will install add-on packages.
?S: See INSTALL for usage and examples.
?S:.
?S:vendorprefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the vendor will install add-on packages.  Derived from vendorprefix.
?S:.
?S:oldvendorprefix:
?S: This variable is set non-null if the vendorprefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
: Set the vendorprefix variables
$cat <<EOM

The installation process will also create a directory for
vendor-supplied add-ons.  Vendors who supply perl with their system
may find it convenient to place all vendor-supplied files in this
directory rather than in the main distribution directory.  This will
ease upgrades between binary-compatible maintenance versions of perl.

Of course you may also use these directories in whatever way you see
fit.  For example, you might use them to access modules shared over a
company-wide network.

The default answer should be
 fine for most people.
This causes further questions about vendor add-ons to be skipped
and no vendor-specific directories will be configured for perl.

EOM
rp='Do you want to configure vendor-specific add-on directories?'
case "$usevendorprefix" in
define|true|[yY]*) dflt=y ;;
*) : User may have set vendorprefix directly on Configure command line.
 case "$vendorprefix" in
 "|' ') dflt=n ;;
 *) dflt=y ;;
```

```
 esac
 ;;
esac
. ./myread
case "$ans" in
[yY]*) fn=d~+
 rp='Installation prefix to use for vendor-supplied add-ons?'
 case "$vendorprefix" in
 ") dflt="$prefix" ;;
 *)  dflt=$vendorprefix ;;
 esac
 . ./getfile
 : XXX Prefixit unit does not yet support siteprefix and vendorprefix
 oldvendorprefix="
 case "$vendorprefix" in
 ") ;;
 *) case "$ans" in
  "$prefix") ;;
  *) oldvendorprefix="$prefix";;
  esac
  ;;
 esac
 usevendorprefix="$define"
 vendorprefix="$ans"
 vendorprefixexp="$ansexp"
 ;;
*) usevendorprefix="$undef"
 vendorprefix="
 vendorprefixexp="
 ;;
esac
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorprefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sbrk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sbrk.U,v $
```

```
?RCS: Revision 3.0.1.1  1994/01/24  14:06:31  ram
?RCS: patch16: created
?RCS:
?MAKE:d_sbrk: Inlibc
?MAKE: -pick add $@ %<
?S:d_sbrk:
?S: This variable conditionally defines HAS_SBRK if sbrk() is
?S: available to add more core to the process.
?S:.
?C:HAS_SBRK:
?C: This symbol, if defined, indicates that the sbrk system call is
?C: available to add/relase core. Always true on Unix.
?C:.
?H:#$d_sbrk HAS_SBRK /**/
?H:.
?LINT:set d_sbrk
: see
 if sbrk exists
set sbrk d_sbrk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sbrk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vaproto.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: vaproto.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:17:16  ram
?RCS: patch16: definition of _V now appears only when needed
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:vaproto: prototype i_stdarg Setvar
?MAKE: -pick add $@ %<
?S:vaproto:
?S: This variable conditionally defines CAN_VAPROTO on systems supporting
```

```
?S: prototype
 declaration of functions with a variable number of
?S: arguments. See also prototype.
?S:.
?C:CAN_VAPROTO ~ %<:
?C: This variable is defined on systems supporting prototype declaration
?C: of functions with a variable number of arguments.
?C:.
?C:_V:
?C: This macro is used to declare function parameters in prototypes for
?C: functions with a variable number of parameters. Use double parentheses.
?C: For example:
?C:
?C:  int printf _V((char *fmt, ...));
?C:
?C: Remember to use the plain simple _() macro when declaring a function
?C: with no variable number of arguments, since it might be possible to
?C: have a non-effect _V() macro and still get prototypes via _().
?C:.
?H:?%<:#$vaproto CAN_VAPROTO /**/
?H:?_V:#ifdef CAN_VAPROTO
?H:?_V:#define _V(args) args
?H:?_V:#else
?H:?_V:#define _V(args) ()
?H:?_V:#endif
?H:.
?LINT:set vaproto
: see if prototypes support variable argument declarations
echo " "
case "$prototype$i_stdarg" in
$define$define)
 echo "It appears we'll be able
 to prototype varargs functions." >&4
 val="$define"
 ;;
*)
 echo "Too bad... We won't be using prototyped varargs functions..." >&4
 val="$undef"
 ;;
esac
set vaproto
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/vaproto.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: Findhdr.U,v 3.0.1.2 1994/10/29 15:53:08 ram Exp $

```
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Thomas Neumann <tom@smart.bo.open.de>
?RCS:
?RCS: $Log: Findhdr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:53:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:56  ram
?RCS: patch23: cppminus must be after other cppflags, not before
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a findhdr script which
 is used to locate the header
?X: files in $usrinc or other stranger places using cpp capabilities. The
?X: script is given an include file base name, like 'stdio.h' or 'sys/file.h'
?X: and it returns the full path of the include file and a zero status or an
?X: empty string with an error status if the file could not be located.
?X:
?MAKE:Findhdr: grep test tr rm incpth awk cat startsh \
 cppstdin cppminus +cppflags osname
?MAKE: -pick add $@ %<
?LINT:extern cppfilter
?LINT:define fieldn
?S:fieldn:
?S: This variable is used internally by Configure. It contains the position
?S: of the included file name in cpp output. That is to say, when cpp
?S: pre-processes a #include <file> line, it replaces it by a # line which
?S: contains the original position in the input file and the full name of
?S: included file, between "quotes".
?S:.
?V:fieldn
?F:./findhdr !fieldn
?T:cline pos wanted name awkprg usrincdir status testaccess
: determine filename position in cpp output
echo " "
echo "Computing
```

```
 filename position in cpp output for #include directives..." >&4
case "$osname" in
amigaos) fieldn=3 ;;  # Workaround for a bug in abc (pdksh).
esac
case "$fieldn" in
")
case "$osname" in
vos) testaccess=-e ;;
*)   testaccess=-r ;;
esac
echo '#include <stdio.h>' > foo.c
$cat >fieldn <<EOF
$startsh
$cppstdin $cppflags $cppminus <foo.c 2>/dev/null | \
$grep '^[  ]*#.*stdio\.h' | \
while read cline; do
 pos=1
 set \$cline
 while $test \$# -gt 0; do
  if $test $testaccess \`echo \$1 | $tr -d ""\`; then
   echo "\$pos"
   exit 0
  fi
  shift
  pos=\`expr \$pos + 1\`
 done
done
EOF
chmod +x fieldn
fieldn=`./fieldn`
$rm -f foo.c fieldn
;;
esac
case $fieldn in
") pos='???';;
1) pos=first;;
2) pos=second;;
3) pos=third;;
*) pos="${fieldn}th";;
esac
echo "Your cpp writes the filename in the $pos field of the line."

?X: To locate a header file, we cannot simply check for $usrinc/file.h, since
?X: some machine have the headers in weird places and our only hope is that
?X: the C pre-processor
 will know how to find those headers. Thank you NexT!
: locate header file
$cat >findhdr <<EOF
```

```
$startsh
wanted=\$1
name=''
for usrincdir in $incpth
do
 if test -f \$usrincdir/\$wanted; then
  echo "\$usrincdir/\$wanted"
  exit 0
 fi
done
awkprg='{ print \$$fieldn }'
echo "#include <\$wanted>" > foo\$\$.c
$cppstdin $cppminus $cppflags < foo\$\$.c 2>/dev/null | \
$cppfilter $grep "^[  ]*#.*\$wanted" | \
while read cline; do
 name=\`echo \$cline | $awk "\$awkprg" | $tr -d '"'\`
 case "\$name" in
 *[/\\\]\$wanted) echo "\$name"; exit 1;;
 *[\\\/]\$wanted) echo "\$name"; exit 1;;
 *) exit 2;;
 esac;
done;
#
# status = 0: grep returned 0 lines, case statement not executed
# status = 1: headerfile found
# status = 2: while loop executed, no headerfile found
#
status=\$?
$rm -f foo\$\$.c;
if test \$status -eq 1; then
 exit 0;
fi
exit 1
EOF
chmod +x findhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Findhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ualarm: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_ualarm:
?S: This variable conditionally defines the HAS_UALARM symbol, which
?S: indicates to the C program that the ualarm() routine is available.
?S:.
?C:HAS_UALARM:
?C: This symbol, if defined, indicates that the ualarm routine is
?C: available to do alarms with microsecond granularity.
?C:.
?H:#$d_ualarm HAS_UALARM  /**/
?H:.
?LINT:set d_ualarm
: see if ualarm exists
set ualarm d_ualarm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ualarm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_vfork.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_vfork.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  15:05:44  ram
?RCS: patch23: avoid inclusion of <vfork.h> if no vfork() used (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_vfork: Inhdr d_vfork
?MAKE: -pick add $@ %<
?S:i_vfork:
?S: This variable conditionally defines the I_VFORK symbol, and indicates
?S: whether a C program should include vfork.h.
?S:.
?C:I_VFORK:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include vfork.h.
?C:.
```

```
?H:#$i_vfork I_VFORK /**/
?H:.
: see if this is a vfork system
case "$d_vfork" in
"$define")
 set vfork.h i_vfork
 eval $inhdr
 ;;
*)
 i_vfork="$undef"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_vfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Inlibc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Inlibc.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  15:55:08  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks for the definition of a given function.
?X:
?X: To use it, say:
?X: set function d_func
?X: eval $inlibc
?X:
?MAKE:Inlibc: Csym Whoa Oldconfig
?MAKE: -pick add $@ %<
?LINT:define inlibc
?V:inlibc
?S:inlibc:
?S: This
```

```
 shell variable is used internally by Configure to check
?S: wether a given function is defined or not. A typical use is:
?S:  set function d_func
?S:  eval $inlibc
?S: That will print a message, saying wether function was found or
?S: not and set d_func accordingly.
?S:.
?T:was tx sym tres td tu var
: define an is-in-libc? function
inlibc='echo " "; td=$define; tu=$undef;
sym=$1; var=$2; eval "was=\$$2";
tx=yes;
case "$reuseval$was" in
true) ;;
true*) tx=no;;
esac;
case "$tx" in
yes)
 set $sym tres -f;
 eval $csym;
 case "$tres" in
 true)
  echo "$sym() found." >&4;
  case "$was" in $undef) . ./whoa; esac; eval "$var=\$td";;
 *)
  echo "$sym() NOT found." >&4;
  case "$was" in $define) . ./whoa; esac; eval "$var=\$tu";;
 esac;;
*)
 case "$was" in
 $define) echo "$sym() found." >&4;;
 *) echo "$sym() NOT found." >&4;;
 esac;;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Inlibc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
?RCS: Copyright (c) 1996, Sven Verdoolaege
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_gnulibc gnulibc_version: Myread Oldconfig Setvar rm_try \
 cat Compile run
?MAKE: -pick add $@ %<
?S:d_gnulibc:
?S: Defined if we're dealing with the GNU C Library.
?S:.
?S:gnulibc_version:
?S: This variable contains the version number of the GNU C library.
?S: It is usually something like '2.2.5'.  It is a plain '' if this
?S: is not the GNU C library, or if the version is unknown.
?S:.
?C:HAS_GNULIBC ~ %<:
?C: This
 symbol, if defined, indicates to the C program that
?C: the GNU C library is being used.  A better check is to use
?C: the __GLIBC__ and __GLIBC_MINOR__ symbols supplied with glibc.
?C:.
?H:?%<:#$d_gnulibc HAS_GNULIBC   /**/
?H:?%<:#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)
?H:?%<:#define _GNU_SOURCE
?H:?%<:#endif
?H:.
?F:!glibc.ver !try.c !try
?LINT: set d_gnulibc
?LINT: usefile try.c
?LINT: known _GNU_SOURCE
?X: gnulibc can be executed by calling __libc_main().
?X: Ulrich Drepper doesn't think any other libc does that,
?X: but we check if it says 'GNU C Library' to be sure.
?X:
?X: Alas, as of 3/1998 glibc 2.0.7 reportedly isn't going to
?X: have __libc_main() anymore. :-(.  Fortunately, all released
?X: versions of glibc 2.x.x _do_ have CPP variables.  For 2.0.6,
?X: they are:
?X: #define __GLIBC__  2
?X: #define__GLIBC_MINOR__ 0.
?X: (The '6' isn't available :-(.
?X: glibc2.1 will also have
?X:  extern const char * __gnu_get_libc_release(void);
?X:  extern const char *
 __gnu_get_libc_version(void);
?X: functions.   --thanks to Andreas Jaeger.   --AD  6/1998.
?X: Although the exact format isn't documented, __gnu_get_libc_version()
?X: returns a simple string '2.1.3' in glibc 2.1.3.
?X:
```

```
: determine whether we are using a GNU C library
echo " "
echo "Checking for GNU C Library..." >&4
cat >try.c <<'EOCP'
/* Find out version of GNU C library.  __GLIBC__ and __GLIBC_MINOR__
  alone are insufficient to distinguish different versions, such as
  2.0.6 and 2.0.7.  The function gnu_get_libc_version() appeared in
  libc version 2.1.0.      A. Dougherty,  June 3, 2002.
*/
#include <stdio.h>
int main(void)
{
#ifdef __GLIBC__
#   ifdef __GLIBC_MINOR__
#       if __GLIBC__ >= 2 && __GLIBC_MINOR__ >= 1
#           include <gnu/libc-version.h>
     printf("%s\n",  gnu_get_libc_version());
#       else
     printf("%d.%d\n",  __GLIBC__, __GLIBC_MINOR__);
#       endif
#   else
 printf("%d\n",  __GLIBC__);
#   endif
   return 0;
#else
   return 1;
#endif
}
EOCP
set
 try
if eval $compile_ok && $run ./try > glibc.ver; then
 val="$define"
 gnulibc_version=`$cat glibc.ver`
 echo "You are using the GNU C Library version $gnulibc_version"
else
 val="$undef"
 gnulibc_version=''
 echo "You are not using the GNU C Library"
fi
$rm_try glibc.ver
set d_gnulibc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gnulibc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getopt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getopt.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getopt: Inlibc
?MAKE: -pick add $@ %<
?S:d_getopt:
?S: This variable conditionally defines the HAS_GETOPT symbol, which
?S: indicates that the getopt() routine exists.  The getopt() routine
?S: parses command line options in a standard fashion.
?S:.
?C:HAS_GETOPT (GETOPT):
?C: This symbol, if defined, indicates that the getopt() routine
 exists.
?C:.
?H:#$d_getopt HAS_GETOPT  /**/
?H:.
?LINT:set d_getopt
: see if getopt exists
set getopt d_getopt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getopt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stddef.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stddef.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stddef: Inhdr
?MAKE: -pick add $@ %<
?S:i_stddef:
?S: This variable conditionally defines the I_STDDEF symbol, which
?S: indicates to the C program that <stddef.h> exists and should
?S: be included.
?S:.
?C:I_STDDEF:
?C: This symbol, if defined, indicates that <stddef.h> exists and should
?C: be included.
?C:.
?H:#$i_stddef I_STDDEF /**/
?H:.
?LINT:set
 i_stddef
: see if stddef is available
set stddef.h i_stddef
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_stddef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_statblks.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_statblks: contains Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_statblks:
?S: This variable conditionally defines USE_STAT_BLOCKS if this system
?S: has a stat structure declaring st_blksize and st_blocks.
?S:.
?C:USE_STAT_BLOCKS (STATBLOCKS):
?C: This symbol is defined if this system has a stat structure declaring
?C: st_blksize and st_blocks.
```

```
?C:.
?H:#$d_statblks USE_STAT_BLOCKS
  /**/
?H:.
?T:xxx
?LINT:set d_statblks
: see if stat knows about block sizes
echo " "
xxx=`./findhdr sys/stat.h`
if $contains 'st_blocks;' "$xxx" >/dev/null 2>&1 ; then
 if $contains 'st_blksize;' "$xxx" >/dev/null 2>&1 ; then
  echo "Your stat() knows about block sizes." >&4
  val="$define"
 else
  echo "Your stat() doesn't know about block sizes." >&4
  val="$undef"
 fi
else
 echo "Your stat() doesn't know about block sizes." >&4
 val="$undef"
fi
set d_statblks
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_statblks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usequadmath: Setvar cat uselongdouble
?MAKE: -pick add $@ %<
?S:usequadmath:
?S: This variable conditionally defines the USE_QUADMATH symbol,
?S: and indicates that the quadmath library __float128 long doubles
?S: should be used when available.
?S:.
?C:USE_QUADMATH:
?C: This symbol, if defined, indicates that the quadmath library should
?C: be used when available.
?C:.
?H:?%<:#ifndef USE_QUADMATH
?H:?%<:#$usequadmath USE_QUADMATH  /**/
?H:?%<:#endif
?H:.
: Check if quadmath is requested
case "$usequadmath" in
```

```
"$define"|true|[yY]*) usequadmath="$define" ;;
*)                    usequadmath="$undef"  ;;
esac

: Fail if both uselongdouble and usequadmath are requested
case "$usequadmath:$uselongdouble" in
define:define)
 $cat <<EOM >&4

*** You requested the use of
 the quadmath library and use
*** of long doubles.
***
*** Please select one or the other.
EOM
 exit 1
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usequadmath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprior.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getprior.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getprior: Inlibc
?MAKE: -pick add $@ %<
?S:d_getprior:
?S: This variable conditionally defines HAS_GETPRIORITY if getpriority()
?S: is available to get a process's priority.
?S:.
?C:HAS_GETPRIORITY (GETPRIORITY):
?C: This symbol, if defined, indicates that the getpriority routine is
?C: available to get a process's priority.
?C:.
?H:#$d_getprior
```

```
 HAS_GETPRIORITY  /**/
?H:.
: see if getpriority exists
?LINT:set d_getprior
set getpriority d_getprior
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getprior.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ieeefp.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_ieeefp: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_ieeefp:
?S: This variable conditionally defines the I_IEEEFP symbol, and indicates
?S: whether a C program should include <ieeefp.h>.
?S:.
?C:I_IEEEFP:
?C: This symbol, if defined, indicates that <ieeefp.h> exists and
?C: should be included.
?C:.
?H:#$i_ieeefp I_IEEEFP  /**/
?H:.
?LINT:set i_ieeefp
: see if this is a ieeefp.h system
case "$i_ieeefp" in
" ) set ieeefp.h i_ieeefp
    eval $inhdr
    ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_ieeefp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:d_ftello: Inlibc longsize
?MAKE: -pick add $@ %<
?S:d_ftello:
?S: This variable conditionally defines the HAS_FTELLO symbol, which
?S: indicates to the C program that the ftello() routine is available.
?S:.
?C:HAS_FTELLO:
?C: This symbol, if defined, indicates that the ftello routine is
?C: available to ftell beyond 32 bits (useful for ILP32 hosts).
?C:.
?H:#$d_ftello HAS_FTELLO  /**/
?H:.
?LINT:set d_ftello
: see if ftello exists
set ftello d_ftello
eval $inlibc
case "$longsize" in
8) echo "(Your long is 64 bits, so you could use ftell.)" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ftello.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: uidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:33:25  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:09:36  ram
?RCS: patch30: comment for uidtype referred to the obsoleted symbol
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:28:27  ram
?RCS: patch27: made conform to its gidtype.U companion
?RCS: patch27: question now explicitly mentions getuid()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:56  ram
?RCS: Baseline for dist
```

```
 3.0 netwide release.
?RCS:
?MAKE:uidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:uidtype:
?S: This variable defines Uid_t to be something like uid_t, int,
?S: ushort, or whatever type is used to declare user ids in the kernel.
?S:.
?C:Uid_t (UIDTYPE):
?C: This symbol holds the type used to declare user ids in the kernel.
?C: It can be int, ushort, uid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Uid_t $uidtype  /* UID type */
?H:.
?T:xxx
: see what type uids are declared as in the kernel
set uid_t uidtype xxx stdio.h sys/types.h
eval $typedef
case "$uidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep '_ruid;' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$uidtype";;
esac
echo " "
rp="What is the type for user ids returned by getuid()?"
. ./myread
uidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/uidtype.U
No license file was found, but licenses were detected in source scan.

Perl5 Metaconfig Units

Copyright (c) 1996-1998, Andy Dougherty
Copyright (c) 1999-2011, H.Merijn Brand
All rights reserved.

These units are the ones used to build Configure and config_h.SH
in the Perl5 distribution.

metaconfig will first look in its standard locations (specified when you installed dist). It will then recurse through the 'U' subdirectory and find any additional "private" units. Private units override standard ones supplied with metaconfig.

Files in this directory:

README
This file.

Glossary.patch
The standard dist units contain some strings that make pod2man complain. This patch silences those warnings. As new units are added and Configure is regenerated, this patch may need more and more 'fuzz' to be applied. It should be freshly regenerated every once in a while. See also mkgloss.pl

ln-all.pl
Re-generate the all/ folder

mkglossary
A script
to regenerate Porting/Glossary. You have to manually edit the top of the script to point the location of your metaconfig units. It is called automatically by 'mksample'. See also mkgloss.pl

mkgloss.pl
A perl script that calls U/mkglossary from the perl source tree, sorts the list of symbols, and applies the patch mentioned in Glossary.patch. When called on its own, redirect the output to a temporary file, and compare that file to Porting/Glossary before applying.

mksample
A script to regenerate Porting/config.sh and Porting/config.H. It also calls mkglossary, if necessary.

Subdirectories:

The units and other related files have been broken up into the following directories.

a_dvisory/
These are units that have to go first in the generated config_h.SH. A word of explanation: Configure and config_h.SH are generated from 'Units' (the *.U files). Files indicate dependencies (using make(1)), and Configure is built to follow those dependencies.
However, config_h.SH is simply built by putting all the units in alphabetical order and

extracting the relevant lines. (This could be fixed, I suppose, but
it wasn't trivial the one time I looked.)
The a_dvisory/ directory, then, is a place to put units that need
to be early in config_h.SH. (Most units are self-contained
and ought to be able to go anywhere. However, some things, like
byteorder, need to have the #defines from multiarch available.)

acl/
This is an old patch to begin to detect and use ACL (access
control list) file protection schemes.

all/
A folder that conveniently holds symbolic links to all the modules
that are used to build the current Configure and config_h.SH.

compline/
These are similar to the standard units, but I have modified them
to have a more uniform compile command line, usually using the
new Compile.U unit. (The ccflags.U unit is perl-specific since it
mentions -DDEBUGGING and
-DPOSIX_SOURCE, but that's the only place
it is perl-specific.)

dist_patches/
These are patches to dist that must be applied before it is built
and installed. I have submitted these for inclusion in the
regular dist distribution. They have already been applied
to the ../dist-3.0at70b directory.

ebcdic/
These are units that had to be specially modified to work under
either EBCDIC or ASCII.

installdirs/
These are units to handle perl's installation directories and
related issues.

modified/
These are modified versions of the standard units. Also included in
this directory are new units that are clearly derived from existing
units. I have submitted these for inclusion in the regular dist
distribution.

nullified/
These are null units that replace units in the standard
distribution. Typically they are there because some part of the
perl source accidentally uses a symbol that metaconfig thinks means we
want the corresponding

unit.

perl/
These are specific to perl. Some are heavily derived from original dist units, and are marked as such. Others are original.

perl_patches/
These are patches to the perl source. This directory should ordinarily be empty, but there may have been drift between the standard version of perl and the one associated with these units.

protos/
These are units modified to use the new Hasproto.U or Protochk.U units to check for prototypes.

threads/
These are specific to threading perl.

typedefs/
These are standard units modified to use the modified Typedef.U unit to check for typedefs. (The modified Typdef.U includes a function to avoid unnecessary prompts if the typdef being searched for exists.)

Where appropriate, I submitted these units for inclusion into the regular dist distribution. However, since dist is no longer actively maintained, and the alternative is for *me* to actively maintain it, the units just
sit here.

Copyright Information:

Unless otherwise indicated, the files contained in this distribution are:

Copyright (c) 1996-1998, Andy Dougherty

The following licensing terms apply to all files contained in this distribution:

You may distribute the files contained in this distribution under the terms of either

a) the "Artistic License" which comes with Perl, or

b) the "Artistic License" which comes with dist, or

c) the GNU General Public License as published by the Free
Software Foundation; either version 1, or (at your option) any
later version (see the file "Copying" that comes with the
Perl distribution).

Which one to use is your choice.

The units in the "modified" directory have been derived from units
associated with the metaconfig program of Raphael Manfredi's "dist"
distribution. These units list Raphael Manfredi as the Copyright holder.
dist is distributed under a modified version of the Perl Artistic License.
Clause 7 of this modified
license as contained in dist-3.0-pl60 provides:

7. You may reuse parts of this Package in your own programs, provided
that you explicitly state where you got them from, in the source code
(and, left to your courtesy, in the documentation), duplicating
all the associated copyright notices and disclaimers. Besides
your changes, if any, must be clearly marked as such. Parts reused
that way will no longer fall under this license if, and only if,
the name of your program(s) have no immediate connection with the
name of the Package itself or its associated programs. You may then
apply whatever restrictions you wish on the reused parts or choose
to place them in the Public Domain--this will apply only within the
context of your package.

In accordance with this clause, the versions of these units
contained here are made available under the same terms as the
rest of the units.

If you have any questions about the use of these units or about
the differences
between these units and the standard versions, please
feel free to ask.

Andy Dougherty doughera@lafayette.edu
Dept. of Physics
Lafayette College
Easton, PA 18042-1782

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/README
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_access.U,v 3.0 1993/08/18 12:05:42 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_access.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_access: test +cc cat +cppflags h_fcntl h_sysfile i_stdlib rm Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_access:
?S: This variable conditionally defines HAS_ACCESS if the access() system
?S: call is available to check for access permissions using real IDs.
?S:.
?C:HAS_ACCESS:
?C: This manifest constant lets the C program know that the access()
?C: system
 call is available to check for accessibility using real UID/GID.
?C: (always present on UNIX.)
?C:.
?H:#$d_access HAS_ACCESS  /**/
?H:.
?W:%<:R_OK W_OK X_OK F_OK
?LINT:set d_access
?LINT:change h_fcntl h_sysfile
: access call always available on UNIX
set access d_access
eval $inlibc

: locate the flags for 'access()'
case "$d_access" in
"$define")
 echo " "
 $cat >access.c <<EOCP
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#ifdef I_UNISTD
#include <unistd.h>
#endif
#$i_stdlib I_STDLIB
```

```
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 exit(R_OK);
}
EOCP
 : check sys/file.h first, no particular reason here
 if $test `./findhdr sys/file.h` && \
  $cc -o access $cppflags -DI_SYS_FILE access.c >/dev/null 2>&1 ; then
  h_sysfile=true;
  echo "<sys/file.h> defines the *_OK access constants." >&4
 elif $test `./findhdr fcntl.h` && \
  $cc -o access $cppflags -DI_FCNTL access.c >/dev/null 2>&1 ; then
  h_fcntl=true;
  echo
 "<fcntl.h> defines the *_OK access constants." >&4
@if I_UNISTD
 elif $test `./findhdr unistd.h` && \
  $cc -o access $cppflags -DI_UNISTD access.c >/dev/null 2>&1 ; then
  echo "<unistd.h> defines the *_OK access constants." >&4
@end
 else
  echo "I can't find the four *_OK access constants--I'll use mine." >&4
 fi
 ;;
esac
$rm -f access*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_access.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_attribut.U,v $
?RCS: Revision 3.0.1.3  1995/01/30  14:33:45  ram
?RCS: patch49: test C program now includes <stdio.h> (WED)
```

```
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:25:47  ram
?RCS: patch45: fixed typo in the d_attribut variable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:55  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_attribut: Myread Oldconfig cat cc ccflags rm Setvar contains
?MAKE: -pick add $@ %<
?S:d_attribut
 (d_attrib):
?S: This variable conditionally defines HASATTRIBUTE, which
?S: indicates the C compiler can check for function attributes,
?S: such as printf formats.
?S:.
?C:HASATTRIBUTE ~ %< (GNUC_ATTRIBUTE_CHECK):
?C: This symbol indicates the C compiler can check for function attributes,
?C: such as printf formats. This is normally only supported by GNU cc.
?C:.
?H:?%<:#$d_attribut HASATTRIBUTE  /**/
?H:?%<:#ifndef HASATTRIBUTE
?H:?%<:#define __attribute__(_arg_)
?H:?%<:#endif
?H:.
?W:%<:__attribute__
?LINT:set d_attribut
?LINT:known __attribute__
: Look for GNU-cc style attribute checking
echo " "
echo "Checking whether your compiler can handle __attribute__ ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void croak (char* pat,...) __attribute__((format(printf,1,2),noreturn));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $contains 'warning' attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't fully support __attribute__."
  val="$undef"
 else
  echo
 "Your C compiler supports __attribute__."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
set d_attribut
```

```
eval $setvar
$rm -f attrib*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_attribut.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017, 2019, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_wctype: Inhdr
?MAKE: -pick add $@ %<
?S:i_wctype:
?S: This variable conditionally defines the I_WCTYPE symbol,
?S: that indicates whether a C program may include <wctype.h>.
?S:.
?C:I_WCTYPE:
?C: This symbol, if defined, indicates that <wctype.h> exists.
?C:.
?H:#$i_wctype I_WCTYPE  /**/
?H:.
?LINT:set i_wctype
: see if this system has wctype.h
set wctype.h i_wctype
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_wctype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitelib.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: sitelib.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:21:35  ram
?RCS: patch61: created
?RCS:
?MAKE:sitelib sitelibexp installsitelib sitelib_stem: cat Getfile Oldconfig \
 Setprefixvar Prefixit package version sed installstyle siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitelib=''
?S:sitelib:
?S: This variable contains the
 eventual value of the SITELIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S: The standard distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: architecture-independent modules in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitelibexp=''
?S:sitelibexp:
?S: This variable is the ~name expanded version of sitelib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installsitelib=''
?S:installsitelib:
?S: This variable is really the same as sitelibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:sitelib_stem:
?S: This variable is $sitelibexp with any trailing version-specific component
?S: removed.
  The elements in inc_version_list (inc_version_list.U) can
?S: be tacked onto this variable to generate a list of directories to search.
?S:.
?C:SITELIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: After perl has been installed, users may install their own local
```

```
?C: architecture-independent modules in this directory with
?C:  MakeMaker Makefile.PL
?C: or equivalent.  See INSTALL for details.
?C:.
?C:SITELIB_EXP:
?C: This symbol contains the ~name expanded version of SITELIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?C:SITELIB_STEM:
?C: This define is SITELIB_EXP with any trailing version-specific component
?C: removed.  The elements in
 inc_version_list (inc_version_list.U) can
?C: be tacked onto this variable to generate a list of directories to search.
?C:.
?H:#define SITELIB "$sitelib"  /**/
?H:#define SITELIB_EXP "$sitelibexp"  /**/
?H:#define SITELIB_STEM "$sitelib_stem"  /**/
?H:.
?T:prog
?LINT:change prefixvar
?LINT:set installsitelib
?LINT:set sitelib
?LINT:set sitelibexp
: determine where site specific libraries go.
: Usual default is /usr/local/lib/perl5/site_perl/$version
: The default "style" setting is made in installstyle.U
: XXX No longer works with Prefixit stuff.
?X: remove any trailing -3.0 or other version identification
prog=`echo $package | $sed 's/-*[0-9.]*$//'`
case "$sitelib" in
") case "$installstyle" in
 *lib/perl5*) dflt=$siteprefix/lib/$package/site_$prog/$version ;;
 *)  dflt=$siteprefix/lib/site_$prog/$version ;;
 esac
 ;;
*) dflt="$sitelib"
 ;;
esac
$cat <<EOM

The installation process will create a directory for
site-specific extensions and modules.  Most users find it convenient
to place
 all site-specific files in this directory rather than in the
main distribution directory.

EOM
fn=d~+
```

```
rp='Pathname for the site-specific library files?'
. ./getfile
prefixvar=sitelib
. ./setprefixvar
sitelib_stem=`echo "$sitelibexp" | sed "s,/$version$,,"`
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitelib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getspnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getspnam:
?S: This variable conditionally defines HAS_GETSPNAM if getspnam() is
?S: available to retrieve SysV shadow password entries by name.
?S:.
?C:HAS_GETSPNAM:
?C: This symbol, if defined, indicates that the getspnam system call is
?C: available to retrieve SysV shadow password entries by name.
?C:.
?H:#$d_getspnam HAS_GETSPNAM  /**/
?H:.
?LINT:set d_getspnam
: see if getspnam exists
set getspnam d_getspnam
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getspnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2019 Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_towupper: Inlibc
?MAKE: -pick add $@ %<
?S:d_towupper:
?S: This variable conditionally defines the HAS_TOWUPPER symbol, which
?S: indicates to the C program that the towupper() routine is available.
?S:.
?C:HAS_TOWUPPER:
?C: This symbol, if defined, indicates that the towupper () routine is
?C: available to do case conversion.
?C:.
?H:#$d_towupper HAS_TOWUPPER  /**/
?H:.
?LINT:set d_towupper
: see if towupper exists
set towupper d_towupper
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_towupper.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: ccflags.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:27:07  ram
?RCS: patch61: removed support for NO_PROTOTYPE detection on SCO
?RCS: patch61: new locincpth variable
?RCS: patch61: added info on the "additional ld flags" question
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:48:54  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.7  1995/05/12  12:08:33  ram
?RCS: patch54: now checks for cc/ccflags/ldflags coherency
?RCS:
?RCS: Revision 3.0.1.6
  1994/10/29  16:07:02  ram
?RCS: patch36: gcc versioning no longer relies on the C compiler's name
?RCS: patch36: simplified check for gcc version checking (ADO)
?RCS:
```

```
?RCS: Revision 3.0.1.5  1994/08/29  16:06:35  ram
?RCS: patch32: propagate -posix flag from ccflags to ldflags
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:28:45  ram
?RCS: patch23: -fpcc-struct-return only needed in gcc 1.x (ADO)
?RCS: patch23: cppflags now computed on an option-by-option basis
?RCS: patch23: magically added cc flags now only done the first time
?RCS:
?RCS: Revision 3.0.1.3  1993/09/13  15:58:29  ram
?RCS: patch10: explicitly mention -DDEBUG just in case they need it (WAD)
?RCS: patch10: removed all the "tans" variable usage (WAD)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/27  14:39:38  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:24  ram
?RCS: patch6: added defaults for cppflags, ccflags and ldflags
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:31  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ccflags ldflags lkflags cppflags optimize locincpth: test cat \
 Myread Guess Options Oldconfig gccversion mips_type +usrinc \
 package contains rm rm_try +cc cppstdin cppminus cpprun cpplast libpth \
 loclibpth hint
?MAKE: -pick add $@ %<
?S:ccflags:
?S: This variable contains any additional C compiler flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:cppflags:
?S: This variable holds the flags that will be passed to the C pre-
?S: processor. It is up to the Makefile to use it.
?S:.
?S:optimize:
?S: This variable contains any optimizer/debugger flag that should be used.
?S: It is up to the Makefile to use it.
?S:.
?S:ldflags:
?S: This variable contains any additional C loader flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:lkflags:
?S: This variable contains any additional C partial linker flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:locincpth:
```

```
?S: This
 variable contains a list of additional directories to be
?S: searched by the compiler.  The appropriate -I directives will
?S: be added to ccflags.  This is intended to simplify setting
?S: local directories from the Configure command line.
?S: It's not much, but it parallels the loclibpth stuff in libpth.U.
?S:.
?T:inctest thisincl xxx flag inclwanted ftry previous thislibdir
?F:!cpp.c
?D:cppflags=''
?D:ccflags=''
?D:ldflags=''
?D:optimize=''
?INIT:: Possible local include directories to search.
?INIT:: Set locincpth to "" in a hint file to defeat local include searches.
?INIT:locincpth="/usr/local/include /opt/local/include /usr/gnu/include"
?INIT:locincpth="$locincpth /opt/gnu/include /usr/GNU/include /opt/GNU/include"
?INIT::
?INIT:: no include file wanted by default
?INIT:inclwanted=''
?INIT:
: determine optimize, if desired, or use for debug flag also
case "$optimize" in
' '|$undef) dflt='none';;
'')
 case "$gccversion" in
 '') dflt='-O';;
 *) dflt='-O2 -g';;
 esac
 ;;
*)
 dflt="$optimize";;
esac
case "$gccversion" in
'') $cat <<EOH

Some C compilers have problems with their optimizers.  By default, $package
compiles with the -O flag to use the optimizer.  Alternately, you might want
to use the symbolic debugger, which uses the -g flag (on traditional Unix
systems).  Either flag can be specified here.  To use neither flag, specify
the word "none".

EOH
 ;;
*) $cat <<EOH

With the GNU C compiler, it is possible to supply both -O2 and -g flags, to
be able to reasonably optimize, whilst retaining the ability to use a
```

```
symbolic debugger.  Either flag can be specified here.  To use neither flag,
specify the word "none".

EOH
 ;;
esac
rp="What optimizer/debugger flag should be used?"
. ./myread
optimize="$ans"
case "$optimize" in
'none') optimize=" ";;
esac

dflt="
: We will not override a previous value, but we might want to
: augment a hint file
case "$hint" in
default|recommended)
 case "$gccversion" in
 1*) dflt='-fpcc-struct-return' ;;
 esac
?X:
 check for POSIXized ISC
 case "$gccversion" in
 2*) if test -d /etc/conf/kconfig.d &&
   $contains _POSIX_VERSION $usrinc/sys/unistd.h >/dev/null 2>&1
  then
   dflt="$dflt -posix"
  fi
  ;;
 esac
?X: turn warnings on if they're using gcc
 case "$gccversion" in
 1*|2*) dflt="$dflt -Wall";;
?X: starting with version 3, add "-W -Wall -Wformat=2 -Wshadow" by default
 *) dflt="$dflt -W -Wall -Wformat=2 -Wshadow";;
 esac
 ;;
esac

?X: In USG mode, a MIPS system may need some BSD includes
case "$mips_type" in
*BSD*|") inclwanted="$locincpth $usrinc";;
*) inclwanted="$locincpth $inclwanted $usrinc/bsd";;
esac
for thisincl in $inclwanted; do
 if $test -d $thisincl; then
  if $test x$thisincl != x$usrinc; then
```

```
   case "$dflt" in
   *$thisincl*);;
   *) dflt="$dflt -I$thisincl";;
   esac
  fi
 fi
done

?X: Include test function (header, symbol)
inctest='if $contains $2 $usrinc/$1 >/dev/null 2>&1; then
 xxx=true;
elif $contains $2 $usrinc/sys/$1 >/dev/null 2>&1; then
 xxx=true;
else
 xxx=false;
fi;
if
 $xxx; then
 case "$dflt" in
 *$2*);;
 *) dflt="$dflt -D$2";;
 esac;
fi'

?X:
?X: OSF/1 uses __LANGUAGE_C__ instead of LANGUAGE_C
?X:
if ./osf1; then
 set signal.h __LANGUAGE_C__; eval $inctest
else
 set signal.h LANGUAGE_C; eval $inctest
fi

case "$hint" in
default|recommended) dflt="$ccflags $dflt" ;;
*) dflt="$ccflags";;
esac

case "$dflt" in
"|' ') dflt=none;;
esac
$cat <<EOH

Your C compiler may want other flags.  For this question you should include
-I/whatever and -DWHATEVER flags and any other flags used by the C compiler,
but you should NOT include libraries or ld flags like -lwhatever.

To use no flags, specify the word "none".
```

```
EOH
?X: strip leading space
set X $dflt
shift
dflt=${1+"$@"}
rp="Any additional cc flags?"
. ./myread
case "$ans" in
none) ccflags="";;
*) ccflags="$ans";;
esac

: the following weeds options from ccflags that are of no interest to cpp
cppflags="$ccflags"
case "$gccversion" in
1*) cppflags="$cppflags -D__GNUC__"
esac
case "$mips_type" in
");;
*BSD*)
 cppflags="$cppflags -DSYSTYPE_BSD43";;
esac
case "$cppflags" in
");;
*)
 echo " "
 echo "Let me guess what the preprocessor flags are..." >&4
 set X $cppflags
 shift
 cppflags=''
 $cat >cpp.c <<'EOM'
#define BLURFL foo

BLURFL xx LFRULB
EOM
?X:
?X: For each cc flag, try it out with both cppstdin and cpprun, since the
?X: first is almost surely a cc wrapper. We have to try both in case
?X: of cc flags like '-Olimit 2900' that are actually two words...
?X:
 previous=''
 for flag in $*
 do
  case "$flag" in
  -*) ftry="$flag";;
  *) ftry="$previous $flag";;
  esac
```

```
  if $cppstdin -DLFRULB=bar $ftry $cppminus <cpp.c \
   >cpp1.out 2>/dev/null && \
   $cpprun -DLFRULB=bar $ftry $cpplast <cpp.c \
   >cpp2.out 2>/dev/null && \
   $contains 'foo.*xx.*bar' cpp1.out >/dev/null 2>&1 && \
   $contains 'foo.*xx.*bar' cpp2.out >/dev/null 2>&1
  then
   cppflags="$cppflags $ftry"
   previous=''
  else
   previous="$flag"
  fi
 done
 set X $cppflags
 shift
 cppflags=${1+"$@"}
 case "$cppflags"
 in
 *-*)  echo "They appear to be: $cppflags";;
 esac
 $rm -f cpp.c cpp?.out
 ;;
esac

: flags used in final linking phase
case "$ldflags" in
'') if ./venix; then
  dflt='-i -z'
 else
  dflt=''
 fi
 case "$ccflags" in
 *-posix*) dflt="$dflt -posix" ;;
 esac
 ;;
*) dflt="$ldflags";;
esac

: Try to guess additional flags to pick up local libraries.
for thislibdir in $libpth; do
 case " $loclibpth " in
 *" $thislibdir "*)
  case "$dflt " in
  *"-L$thislibdir "*) ;;
  *)  dflt="$dflt -L$thislibdir" ;;
  esac
  ;;
 esac
```

```
done

case "$dflt" in
") dflt='none' ;;
*) set X $dflt; shift; dflt="$@";;
esac

$cat <<EOH

Your C linker may need flags.  For this question you should
include -L/whatever and any other flags used by the C linker, but you
should NOT include libraries like -lwhatever.

Make sure you include the appropriate -L/path flags if your C linker
does not normally search all of the directories you specified above,
namely
 $libpth
To use no flags, specify the word "none".

EOH

rp="Any
 additional ld flags (NOT including libraries)?"
. ./myread
case "$ans" in
none) ldflags=";;
*) ldflags="$ans";;
esac
rmlist="$rmlist pdp11"

@if lkflags
: partial linking may need other flags
case "$lkflags" in
") case "$ldflags" in
 ") dflt='none';;
 *) dflt="$ldflags";;
 esac;;
*) dflt="$lkflags";;
esac
echo " "
rp="Partial linking flags to be used (NOT including -r)?"
. ./myread
case "$ans" in
none) lkflags=";;
*) lkflags="$ans";;
esac

@end
```

```
?X:
?X: If the user changes compilers after selecting a hint file, it's
?X: possible that the suggested ccflags/ldflags will be wrong.  Try to
?X: compile and run a simple test program.  Let the user see all the
?X: error messages. -- ADO and RAM
?X:
: coherency check
echo " "
echo "Checking your choice of C compiler and flags for coherency..." >&4
?X: Strip extra blanks in case some of the following variables are empty
set X $cc $optimize $ccflags $ldflags -o try try.c
shift
$cat >try.msg <<EOM
I've tried to compile and run a simple program
 with:

 $*
 ./try

and I got the following output:

EOM
$cat > try.c <<'EOF'
#include <stdio.h>
int main() { exit(0); }
EOF
dflt=y
?X: Use "sh -c" to avoid error messages tagged with leading "Configure:".
?X: We need to try the resulting executable, because cc might yield a 0 status
?X: even when ld failed, in which case the executable will not run properly,
?X: if its x bit is set at all...
if sh -c "$cc $optimize $ccflags $ldflags -o try try.c" >>try.msg 2>&1; then
 if sh -c './try' >>try.msg 2>&1; then
  dflt=n
 else
  echo "The program compiled OK, but exited with status $?." >>try.msg
  rp="You have a problem.  Shall I abort Configure"
  dflt=y
 fi
else
 echo "I can't compile the test program." >>try.msg
 rp="You have a BIG problem.  Shall I abort Configure"
 dflt=y
fi
case "$dflt" in
y)
 $cat try.msg >&4
?X: using -K will prevent default aborting--maybe they're cross compiling?
```

```
 case "$knowitall" in
 ")
  echo "(The supplied flags might be incorrect with this C compiler.)"
  ;;
 *)
 dflt=n;;
 esac
 echo " "
 . ./myread
 case "$ans" in
 n*|N*) ;;
 *) echo "Ok.  Stopping Configure." >&4
  exit 1
  ;;
 esac
 ;;
n) echo "OK, that should do.";;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ccflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrgid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrgid_r getgrgid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrgid_r:
?S: This variable conditionally defines the HAS_GETGRGID_R symbol,
?S: which indicates to the C program that the getgrgid_r()
?S: routine is available.
?S:.
?S:getgrgid_r_proto:
?S: This variable encodes the prototype of getgrgid_r.
?S: It is zero if d_getgrgid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrgid_r
?S: is defined.
?S:.
?C:HAS_GETGRGID_R:
?C: This symbol, if defined, indicates that the getgrgid_r routine
```

```
?C: is available to
 getgrgid re-entrantly.
?C:.
?C:GETGRGID_R_PROTO:
?C: This symbol encodes the prototype of getgrgid_r.
?C: It is zero if d_getgrgid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrgid_r
?C: is defined.
?C:.
?H:#$d_getgrgid_r HAS_GETGRGID_R /**/
?H:#define GETGRGID_R_PROTO $getgrgid_r_proto /**/
?H:.
?T:try hdrs d_getgrgid_r_proto
: see if getgrgid_r exists
set getgrgid_r d_getgrgid_r
eval $inlibc
case "$d_getgrgid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_getgrgid_r_proto:$usethreads" in
 ":define") d_getgrgid_r_proto=define
  set d_getgrgid_r_proto getgrgid_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getgrgid_r_proto" in
 define)
 case "$getgrgid_r_proto" in
 "|0) try='int getgrgid_r(gid_t, struct group*, char*, size_t, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBWR ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) try='int getgrgid_r(gid_t, struct group*, char*, int, struct
 group**);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBIR ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) try='int getgrgid_r(gid_t, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBI ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) try='struct group* getgrgid_r(gid_t, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=S_TSBI ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) d_getgrgid_r=undef
  getgrgid_r_proto=0
  echo "Disabling getgrgid_r, cannot determine prototype." >&4 ;;
```

```
 * ) case "$getgrgid_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getgrgid_r_proto="REENTRANT_PROTO_$getgrgid_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getgrgid_r has no prototype, not using it." >&4 ;;
  esac
  d_getgrgid_r=undef
  getgrgid_r_proto=0
  ;;
 esac
 ;;
*) getgrgid_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrgid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tzname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tzname.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:14:43  ram
?RCS: patch32: forgot to set proper value in the val variable
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:57:55  ram
?RCS: patch30: created
?RCS:
?MAKE:d_tzname: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_tzname:
?S: This variable conditionally defines HAS_TZNAME if tzname[] is
?S: available to access timezone names.
?S:.
?C:HAS_TZNAME:
?C: This symbol, if defined, indicates that the tzname[]
```

```
 array is
?C: available to access timezone names.
?C:.
?H:#$d_tzname HAS_TZNAME  /**/
?H:.
?LINT:set d_tzname
: see if tzname[] exists
echo " "
if set tzname val -a d_tzname; eval $csym; $val; then
 val="$define"
 echo 'tzname[] found.' >&4
else
 val="$undef"
 echo 'tzname[] NOT found.' >&4
fi
set d_tzname
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tzname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:56:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: added support for HPUX-10 nm output
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  14:11:56  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:20:47  ram
?RCS: patch54: made sure only most recent version of shared lib is picked
?RCS: patch54: final "nm -p" check now uses xscan and xrun like everybody
?RCS: patch54: can now grok
 linux nm output with lead __IO (ADO)
?RCS: patch54: added support for linux ELF output, using 'W' for alias (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1994/10/29  16:23:40  ram
```

```
?RCS: patch36: now looks for shared libraries before anything else (ADO)
?RCS: patch36: added new nm output format (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1994/08/29  16:28:10  ram
?RCS: patch32: added I-type symbols for nm output parsing on Linux
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  07:03:24  ram
?RCS: patch30: checks are now presented by succession of if/elif
?RCS: patch30: uniformized checks for shared objects with new so symbol
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  15:06:33  ram
?RCS: patch23: added shared library knowledge (ADO and WED)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:12:17  ram
?RCS: patch16: can now export nm_extract as an internal-use only variable
?RCS:
?RCS: Revision 3.0.1.2  1993/09/13  16:09:03  ram
?RCS: patch10: added special handling for Apollo systems (WAD)
?RCS:
?RCS: Revision 3.0.1.1
  1993/08/27  14:40:03  ram
?RCS: patch7: added entry for /usr/shlib/libc.so (OSF/1 machines)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libc libnames +nm_extract: echo n c rm test grep Getfile Myread \
 Oldconfig Loc sed libs incpath libpth ar runnm nm nm_opt nm_so_opt \
 contains xlibpth so osname trnl tr sort uniq _o _a
?MAKE: -pick add $@ %<
?S:libc:
?S: This variable contains the location of the C library.
?S:.
?S:libnames:
?S: The constructed list of library names.  Normally empty, but hint files
?S: may set this for later perusal by Configure.
?S:.
?S:nm_extract:
?S: This variable holds the name of the extraction command used to process
?S: the output of nm and yield the list of defined symbols. It is used
?S: internally by Configure.
?S:.
?T:thislib try libnames xxx xscan xrun thisname com tans file
?F:!libnames !libc.tmp !tmp.imp
?LINT:change nm_opt runnm
?INIT:libnames=''
: Figure out where the libc is located
case
```

```
 "$runnm" in
true)
?X: indentation is wrong on purpose--RAM
: get list of predefined functions in a handy place
echo " "
case "$libc" in
") libc=unknown
 case "$libs" in
 *-lc_s*) libc=`./loc libc_s$_a $libc $libpth`
 esac
 ;;
esac
case "$libs" in
") ;;
*)  for thislib in $libs; do
 case "$thislib" in
 -lc|-lc_s)
  : Handle C library specially below.
  ;;
 -l*)
  thislib=`echo $thislib | $sed -e 's/^-l//'`
  if try=`./loc lib$thislib.$so.'*' X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib.$so X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc Slib$thislib$_a X $xlibpth`; $test -f "$try"; then
   :
  else
   try=''
  fi
  libnames="$libnames $try"
  ;;
 *) libnames="$libnames $thislib"
 ;;
 esac
 done
 ;;
esac
?X:
?X: Some systems (e.g. DG/UX) use "environmental" links, which make the test
```

```
?X: -f fail. Ditto for symbolic links. So in order to reliably check the
?X: existence of a file, we use test -r. It will still fail with DG/UX links
?X: though, but at least it will detect symbolic links. At some strategic
?X: points, we make use of (test -h), using a sub-shell in case builtin test
?X: does not implement the -h check for symbolic links. This makes it
?X: possible to preset libc in a hint file for instance and have it show up
?X: as-is in the question.
?X:
xxx=normal
case "$libc" in
unknown)
?X:
?X: The sed below transforms .so.9 .so.12 into something like .so.0009 .so.0012,
?X: then sorts on it to allow keeping .so.12 instead of .so.9 as the latest
?X: up-to-date library. The initial filename (before sed munging, saved in hold
?X: space via 'h') is appended via 'G' before sorting, then the leading munged
?X: part is removed after sorting. Nice efficient work
 from Tye McQueen.
?X: The initial blurfl is here to prevent the trailing pipe from producing an
?X: empty string, causing Configure to output all its set variables!
?X:
 set /lib/libc.$so
 for xxx in $libpth; do
  $test -r $1 || set $xxx/libc.$so
  : The messy sed command sorts on library version numbers.
  $test -r $1 || \
   set `echo blurfl; echo $xxx/libc.$so.[0-9]* | \
   tr ' ' $trnl | egrep -v '\.[A-Za-z]*$' | $sed -e '
    h
    s/[0-9][0-9]*/0000&/g
    s/0*\([0-9][0-9][0-9][0-9][0-9]\)/\1/g
    G
    s/\n/ /' | \
    $sort | $sed -e 's/^.* //'`
  eval set \$$#
 done
 $test -r $1 || set /usr/ccs/lib/libc.$so
 $test -r $1 || set /lib/libsys_s$_a
 ;;
*)
?X: ensure the test below for the (shared) C library will fail
 set blurfl
 ;;
esac
if $test -r "$1"; then
 echo "Your (shared) C library seems to be in $1."
 libc="$1"
elif $test -r /lib/libc && $test -r /lib/clib; then
```

```
?X:
?X: Apollo has its C library in /lib/clib AND /lib/libc
?X: not to mention its math library in /lib/syslib...
?X:
 echo
 "Your C library seems to be in both /lib/clib and /lib/libc."
 xxx=apollo
 libc='/lib/clib /lib/libc'
 if $test -r /lib/syslib; then
  echo "(Your math library is in /lib/syslib.)"
?X: Put syslib in libc -- not quite right, but won't hurt
  libc="$libc /lib/syslib"
 fi
elif $test -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 echo "Your C library seems to be in $libc, as you said before."
?X: For mips, and...
elif $test -r $incpath/usr/lib/libc$_a; then
 libc=$incpath/usr/lib/libc$_a;
 echo "Your C library seems to be in $libc.  That's fine."
elif $test -r /lib/libc$_a; then
 libc=/lib/libc$_a;
 echo "Your C library seems to be in $libc.  You're normal."
else
 if tans=`./loc libc$_a blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc libc blurfl/dyick $libpth`; $test -r "$tans"; then
  libnames="$libnames "`./loc clib blurfl/dyick $libpth`
 elif tans=`./loc clib blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Slibc$_a blurfl/dyick
 $xlibpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Mlibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 else
  tans=`./loc Llibc$_a blurfl/dyick $xlibpth`
 fi
 if $test -r "$tans"; then
  echo "Your C library seems to be in $tans, of all places."
  libc=$tans
 else
  libc='blurfl'
 fi
fi
if $test $xxx = apollo -o -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 dflt="$libc"
 cat <<EOM
```

```
If the guess above is wrong (which it might be if you're using a strange
compiler, or your machine supports multiple models), you can override it here.

EOM
else
 dflt=''
 echo $libpth | $tr ' ' $trnl | $sort | $uniq > libpath
 cat >&4 <<EOM
I can't seem to find your C library.  I've looked in the following places:

EOM
 $sed 's/^/ /' libpath
 cat <<EOM

None of these seems to contain your C library. I need to get its name...

EOM
fi
fn=f
rp='Where is your C library?'
. ./getfile
libc="$ans"

echo " "
echo $libc $libnames | $tr ' ' $trnl | $sort | $uniq > libnames
set X `cat libnames`
shift
xxx=files
case
 $# in 1) xxx=file; esac
echo "Extracting names from the following $xxx for later perusal:" >&4
echo " "
$sed 's/^/ /' libnames >&4
echo " "
$echo $n "This may take a while...$c" >&4

?X:
?X: Linux may need the special Dynamic option to nm for shared libraries.
?X: In general, this is stored in the nm_so_opt variable.
?X: Unfortunately, that option may be fatal on non-shared libraries.
?X:
for file in $*; do
 case $file in
 *$so*) $nm $nm_so_opt $nm_opt $file 2>/dev/null;;
 *) $nm $nm_opt $file 2>/dev/null;;
 esac
done >libc.tmp
```

```
$echo $n ".$c"
?X:
?X: To accelerate processing, we look at the correct 'sed' command
?X: by using a small subset of libc.tmp, i.e. fprintf function.
?X: When we know which sed command to use, do the name extraction
?X:
$grep fprintf libc.tmp > libc.ptf
?X:
?X: In order to enhance readability and save some space, we define
?X: some variables that will be "eval"ed.
?X:
xscan='eval "<libc.ptf $com >libc.list"; $echo $n ".$c" >&4'
xrun='eval
 "<libc.tmp $com >libc.list"; echo "done." >&4'
?X: BSD-like output, I and W types added for Linux
?X: Some versions of Linux include a leading __IO in the symbol name.
?X: HPUX10 reportedly has trailing spaces, though I'm surprised it has
?X: BSD-like output.  (AD).
xxx='[ADTSIW]'
if com="$sed -n -e 's/__IO//' -e 's/^.* $xxx  *_[_.]*//p' -e 's/^.* $xxx  *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: SYSV-like output
elif com="$sed -n -e 's/^__*//' -e 's/^\([a-zA-Z_0-9$]*\).*xtern.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/|UNDEF/d' -e '/FUNC..GL/s/^.*|__*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.* D __*//p' -e 's/^.* D //p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^_//' -e 's/^\([a-zA-Z_0-9]*\).*xtern.*text.*/\1/p'";\
 eval
 $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$grep '|' | $sed -n -e '/|COMMON/d' -e '/|DATA/d' \
    -e '/ file/d' -e 's/^\([^  ]*\).*/\1/p'";\
 eval $xscan;\
```

```
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p' -e 's/^.*|FUNC |WEAK .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: mips nm output (sysV)
elif com="$sed -n -e 's/^__//' -e '/|Undef/d' -e '/|Proc/s/ .*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|Proc .*|Text *| *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/Def. Text/s/.* \([^ ]*\)\$/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null
 2>&1; then
  eval $xrun
?X: OS/2 nm output
elif com="$sed -n -e 's/^[-0-9a-f ]*_\(.*\)=.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/.*\.text n\ \ \ \.//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: AIX nm output
elif com="sed -n -e 's/^__.*//' -e 's/[       ]*D[    ]*[0-9]*.*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
else
 $nm -p $* 2>/dev/null >libc.tmp
 $grep fprintf libc.tmp > libc.ptf
 if com="$sed -n -e 's/^.* [ADTSIW]  *_[_.]*//p' -e 's/^.* [ADTSIW] //p'";\
  eval $xscan; $contains '^fprintf$' libc.list >/dev/null 2>&1
 then
  nm_opt='-p'
  eval $xrun
 else
  echo " "
  echo "$nm didn't seem to work right. Trying $ar instead..." >&4
  com="
  if $ar t $libc > libc.tmp && \
   $contains '^fprintf$' libc.tmp >/dev/null 2>&1
```

```
  then
   for thisname in $libnames $libc; do
    $ar t $thisname >>libc.tmp
   done
   $sed
 -e "s/\\$_o\$//" < libc.tmp > libc.list
   echo "Ok." >&4
  elif test "X$osname" = "Xos2" && $ar tv $libc > libc.tmp; then
?X: Repeat libc to extract forwarders to DLL entries too
   for thisname in $libnames $libc; do
    $ar tv $thisname >>libc.tmp
?X: Revision 50 of EMX has bug in ar: it will not extract forwarders
?X: to DLL entries.  Use emximp which will extract exactly them.
    emximp -o tmp.imp $thisname \
        2>/dev/null && \
        $sed -e 's/^\([_a-zA-Z0-9]*\) .*$/\1/p' \
        < tmp.imp >>libc.tmp
    $rm -f tmp.imp
   done
   $sed -e "s/\\$_o\$//" -e 's/^ \+//' < libc.tmp > libc.list
   echo "Ok." >&4
  else
   echo "$ar didn't seem to work right." >&4
   echo "Maybe this is a Cray...trying bld instead..." >&4
   if
    bld t $libc | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" > libc.list &&
    $test -s libc.list
   then
    for thisname in $libnames; do
     bld t $libnames | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" >>libc.list
     $ar t $thisname >>libc.tmp
    done
    echo
 "Ok." >&4
   else
    echo "That didn't work either." >&4
    echo "No problem, I'll be compiling test programs then..." >&4
    runnm=false
   fi
  fi
 fi
fi
nm_extract="$com"
if $test -f /lib/syscalls.exp; then
 echo " "
 echo "Also extracting names from /lib/syscalls.exp for good ole AIX..." >&4
```

```
 $sed -n 's/^\([^  ]*\)[  ]*syscall[0-9]*[  ]*$/\1/p' \
  /lib/syscalls.exp >>libc.list
fi
?X: remember, indentation is wrong on purpose--RAM
;;
esac
$rm -f libnames libpath
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stdlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdlib: Inhdr
?MAKE: -pick add $@ %<
?S:i_stdlib:
?S: This variable conditionally defines the I_STDLIB symbol, which
?S: indicates to the C program that <stdlib.h> exists and should
?S: be included.
?S:.
?C:I_STDLIB:
?C: This symbol, if defined, indicates that <stdlib.h> exists and should
?C: be included.
?C:.
?H:#$i_stdlib I_STDLIB  /**/
?H:.
?LINT:set
 i_stdlib
: see if stdlib is available
set stdlib.h i_stdlib
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_stdlib.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_unordered: Inlibc
?MAKE: -pick add $@ %<
?S:d_unordered:
?S: This variable conditionally defines the HAS_UNORDERED symbol, which
?S: indicates to the C program that the unordered() routine is available.
?S:.
?C:HAS_UNORDERED:
?C: This symbol, if defined, indicates that the unordered routine is
?C: available to check whether two doubles are unordered
?C: (effectively: whether either of them is NaN)
?C:.
?H:#$d_unordered HAS_UNORDERED  /**/
?H:.
?LINT:set d_unordered
: see if unordered exists
set unordered d_unordered
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_unordered.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Loc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:04:16  ram
?RCS: patch61: allow users to specify paths on the command line
?RCS: patch61: will now substitute cp for ln if not supported
?RCS:
?RCS: Revision 3.0.1.9  1995/09/25  09:11:24  ram
?RCS: patch59: commented the purpose of the #un-def directive
```

```
?RCS: patch59: abort Configure run when mandatory command is missing
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:40  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.7
  1995/01/11  15:13:37  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS: patch45: added path lookup for the 'comm' program
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:56:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: be careful and guard against wildcard searching (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:54:55  ram
?RCS: patch30: now locates find
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:18:15  ram
?RCS: patch27: added byacc to the trylist (ADO)
?RCS: patch27: lint lines reformatted (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:01:44  ram
?RCS: patch16: added metalint hint on changed PATH variable
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:16:52  ram
?RCS: patch15: now set _test variable when test is built-in
?RCS: patch15: fixed rare cases where echo is not needed
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:47:13  ram
?RCS: patch10: test program not always in /bin/test (WAD)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:05:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script "loc" which can be used to find out
?X: where in a list of directories something is.  It then uses loc to
?X: determine the location of commonly used programs.  It leaves loc sitting
?X: around for other Configure units to use, but arranges for its demise
?X: at the end of Configure.
?X:
?X: To add a new program to find, add it both to the ?MAKE: line and to either
?X: the loclist or trylist variable.
?X:
?X: I put startsh at the end of the dependency list, in order to avoid the
?X: loading of the spitshell unit before the instructions.
?X:
```

```
?MAKE:Loc awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff
 \
 uname uniq uuname vi zcat zip:  eunicefix n c startsh Instruct Warn
?MAKE: -pick weed $@ %<
?LINT:describe awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip
?V::pth loclist trylist
?F:./loc
?T:thisthing thing xxx dir file say DJGPP
?T:_test _grep _cp _gmake _egrep _ln _make dflt
?LINT: change PATH
: find out where common programs are
echo " "
echo "Locating common programs..." >&4
cat <<EOSC >loc
$startsh
case \$# in
0) exit 1;;
esac
thing=\$1
shift
dflt=\$1
shift
for dir in \$*; do
 case "\$thing" in
 .)
 if test -d \$dir/\$thing; then
  echo \$dir
  exit 0
 fi
 ;;
 *)
?X: Be careful in case thing includes wildcards that might expand to multiple
?X: files.  Choose the last one.
  This happens when searching for shared
?X: libraries with version numbers.  How to choose which one we want is
?X: probably an insoluble problem, in general.
?X: Some folks leave things like libc.so.orig around w/o read
?X: permission.  A -r test would handle that, but since ./loc is
?X: also used to find executables (which are installed w/o read
```

```
?X: permission on SCO ODT 3.0, we can't include the -r test.
 for thisthing in \$dir/\$thing; do
  : just loop through to pick last item
 done
 if test -f \$thisthing; then
  echo \$thisthing
  exit 0
 elif test -f \$thisthing$_exe; then
  echo \$thisthing
  exit 0
 elif test -f \$dir/\$thing.exe; then
  if test -n "$DJGPP"; then
   echo \$dir/\$thing.exe
  else
   : on Eunice apparently
   echo \$dir/\$thing
  fi
  exit 0
 fi
 ;;
 esac
done
echo \$dflt
exit 1
EOSC
chmod +x loc
$eunicefix loc
loclist="
?awk:awk
?cat:cat
?chgrp:chgrp
?chmod:chmod
?chown:chown
?comm:comm
?cp:cp
?echo:echo
?expr:expr
?find:find
?grep:grep
?ls:ls
?mkdir:mkdir
?mv:mv
?rm:rm
?sed:sed
?sleep:sleep
?sort:sort
?tail:tail
?touch:touch
```

?tr:tr
?uniq:uniq
"
trylist="
?Mcc:Mcc
?ar:ar
?bash:bash
?bison:bison
?byacc:byacc
?compress:compress
?cpio:cpio
?cpp:cpp
?csh:csh
?date:date
?egrep:egrep
?emacs:emacs
?flex:flex
?gmake:gmake
?gzip:gzip
?inews:inews
?ksh:ksh
?less:less
?line:line
?lint:lint
?ln:ln
?lp:lp
?lpr:lpr
?mail:mail
?mailx:mailx
?make:make
?more:more
?nm:nm
?nroff:nroff
?perl:perl
?pg:pg
?pmake:pmake
?pr:pr
?rmail:rmail
?sendmail:sendmail
?shar:shar
?smail:smail
?submit:submit
?tar:tar
?tbl:tbl
?tee:tee
?test:test
?troff:troff
?uname:uname

```
?uuname:uuname
?vi:vi
?zcat:zcat
?zip:zip
"
?LINT:set
 awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo emacs expr find flex \
 gmake gzip grep inews ksh less line lint lp lpr ls mail mailx \
 mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee touch tr troff \
 uname uniq uuname vi zcat zip
pth=`echo $PATH | sed
 -e "s/$p_/ /g"`
pth="$pth /lib /usr/lib"
for file in $loclist; do
?X:
?X: Allow them to -Dmake=pmake on the command line for instance...
?X: If the file is not fully qualified, as in -Dmake=pmake, then we
?X: look the for the specified command (pmake here). If they say
?X: -Dmake=/sbin/make for instance, then we make sure the file
?X: exists, or we die...
?X:
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   ./warn "no $xxx -- ignoring your setting for $file."
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo "I don't know where '$file' is, and my life depends on it." >&4
```

```
  echo "Go find a public domain implementation or fix your PATH setting!" >&4
  exit 1
  ;;
 esac
done
echo " "
echo "Don't worry
 if any of the following aren't found..."
say=offhand
for file in $trylist; do
?X: Allow them to -Dmake=pmake on the command line for instance (see above)
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   ./warn "no $xxx -- ignoring your setting for $file."
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo "I don't see $file out there, $say."
  say=either
  ;;
 esac
done
case "$egrep" in
egrep)
 echo "Substituting grep for egrep."
 egrep=$grep
 _egrep=$_grep
 ;;
esac
@if ln
```

```
case "$ln" in
ln)
 echo "Substituting cp for ln."
 ln=$cp
 _ln=$_cp
 ;;
esac
@end
@if make || gmake
case "$make" in
make)
 case "$gmake" in
 gmake)
 echo "I can't find make or gmake, and my life depends on it." >&4
 echo "Go find a
 public domain implementation or fix your PATH setting!" >&4
 exit 1
 ;;
 esac
 ;;
esac
case "$gmake" in
gmake) ;;
*) # We can't have osname yet.
 if test -f "/system/gnu_library/bin/ar.pm"; then # Stratus VOS
  # Assume that gmake, if found, is definitely GNU make
  # and prefer it over the system make.
  echo "Substituting gmake for make."
  make=$gmake
  _make=$_gmake
 fi
 ;;
esac
@end
case "$test" in
test)
 echo "Hopefully test is built into your sh."
 ;;
*)
 if `sh -c "PATH= test true" >/dev/null 2>&1`; then
  echo "Using the test built into your sh."
?X:
?X: We need to set both test and _test, since Oldconfig.U will use the _test
?X: value to systematically restore computed paths, which may be wrong if
?X: we choose to load an old config.sh generated on another platform.
?X:
  test=test
  _test=test
```

```
 fi
 ;;
esac
?LINT:change n c
case "$echo" in
echo)
 echo "Hopefully echo is built into your sh."
 ;;
?X: For those rare cases where we don't need $echo...
") ;;
*)
 echo " "
echo "Checking
 compatibility between $echo and builtin echo (if any)..." >&4
 $echo $n "hi there$c" >foo1
 echo $n "hi there$c" >foo2
 if cmp foo1 foo2 >/dev/null 2>&1; then
  echo "They are compatible.  In fact, they may be identical."
 else
  case "$n" in
  '-n') n=" c='\c';;
  *) n='-n' c=";;
  esac
  cat <<FOO
They are not compatible!  You are probably running ksh on a non-USG system.
I'll have to use $echo instead of the builtin, since Bourne shell doesn't
have echo built in and we may have to run some Bourne shell scripts.  That
means I'll have to use '$n$c' to suppress newlines now.  Life is ridiculous.

FOO
  $echo $n "The star should be here-->$c"
  $echo "*"
 fi
 $rm -f foo1 foo2
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Loc.U
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```
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sockopt.U,v $
?RCS: Revision 3.0.1.1  1995/07/25  14:16:14  ram
?RCS: patch56: obsoleted KEEPALIVE in favor of CAN_KEEPALIVE for consistency
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepalive: cat rm contains +cc +ccflags socketlib sockethdr \
 d_oldsock libs Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_keepalive:
?S: This symbol conditionally defines CAN_KEEPALIVE which indicates to the C
?S: program that setsockopt
 SO_KEEPALIVE will work properly.
?S:.
?C:CAN_KEEPALIVE (KEEPALIVE):
?C: This symbol if defined indicates to the C program that the SO_KEEPALIVE
?C: option of setsockopt() will work as advertised in the manual.
?C:.
?H:#$d_keepalive CAN_KEEPALIVE  /**/
?H:.
?F:!socket
?LINT:set d_keepalive
: see if setsockopt with SO_KEEPALIVE works as advertised
echo " "
case "$d_oldsock" in
"$undef")
 if $contains SO_KEEPALIVE `./findhdr sys/socket.h` \
  /dev/null >/dev/null 2>&1
 then
  echo "OK, let's see if SO_KEEPALIVE works as advertised..." >&4
  $cat > socket.c <<EOP
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netdb.h>

int main()
{
 int s = socket(AF_INET, SOCK_STREAM, 0);
 if (s == -1)
  exit(1);
 if (-1 == setsockopt(s, SOL_SOCKET, SO_KEEPALIVE, 0, 0))
  exit(2);
 exit(0);
```

```
}
EOP
  if $cc $ccflags $sockethdr -o socket socket.c $libs \
   $socketlib >/dev/null 2>&1; then
   ./socket >/dev/null 2>&1
   case $? in
   0) echo "Yes, it does!"
    val="$define";;
   1)
 $cat <<EOM
(Something went wrong -- Assuming SO_KEEPALIVE is broken)
EOM
    val="$undef";;
   2) echo "No, it doesn't.  Don't trust your manuals!!"
    val="$undef";;
   esac
  else
   cat <<EOM
(I can't compile the test program -- Assuming SO_KEEPALIVE is broken)
EOM
   val="$undef"
  fi
 else
  echo "Strange!! You have BSD 4.2 sockets but no SO_KEEPALIVE option."
  val="$undef"
 fi;;
*) cat <<EOM
As you have an old socket interface, you can't have heard of SO_KEEPALIVE.
EOM
 val="$undef";;
esac
set d_keepalive
eval $setvar
$rm -f socket socket.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sockopt.U
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```
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?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: Oldsym.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:06:58  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit follows the creation of the config.sh file. It adds some
?X: special symbols: defines from patchlevel.h file if any and CONFIG,
?X: which is set to true. Then, we try to keep all the new symbols that
?X: may come from a hint file or a previous config.sh file.
?X:
?MAKE:Oldsym:
 Config_sh Options test hint src sed sort uniq
?MAKE: -pick add $@ %<
?T:CONFIG sym tmp
?F:!UU
: add special variables
$test -f $src/patchlevel.h && \
awk '/^#define/ {printf "%s=%s\n",$2,$3}' $src/patchlevel.h >>config.sh
echo "CONFIG=true" >>config.sh

: propagate old symbols
if $test -f UU/config.sh; then
?X: Make sure each symbol is unique in oldconfig.sh
 <UU/config.sh $sort | $uniq >UU/oldconfig.sh
?X:
?X: All the symbols that appear twice come only from config.sh (hence the
?X: two config.sh in the command line). These symbols will be removed by
?X: the uniq -u command. The oldsyms file thus contains all the symbols
?X: that did not appear in the produced config.sh (Larry Wall).
?X:
?X: Do not touch the -u flag of uniq.  This means you too, Jarkko.
?X:
 $sed -n 's/^\([a-zA-Z_0-9]*\)=.*/\1/p' \
  config.sh config.sh UU/oldconfig.sh |\
  $sort | $uniq -u >UU/oldsyms
 set X `cat UU/oldsyms`
 shift
 case $# in
 0) ;;
 *)
  cat <<EOM
Hmm...You had some extra variables I don't know about...I'll
 try to keep 'em...
EOM
```

```
  echo ": Variables propagated from previous config.sh file." >>config.sh
  for sym in `cat UU/oldsyms`; do
   echo "    Propagating $hint variable "'$'"$sym..."
   eval 'tmp="$'"${sym}"'"'
   echo "$tmp" | \
    sed -e "s/'/'\''\''/g" -e "s/^/$sym='/" -e "s/$/'/" >>config.sh
  done
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Oldsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_inetaton.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Spider Boardman
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_inetaton.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:36:35  ram
?RCS: patch61: created
?RCS:
?MAKE:d_inetaton: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetaton:
?S: This variable conditionally defines the HAS_INET_ATON symbol, which
?S: indicates to the C program that the inet_aton() function is available
?S: to parse IP address "dotted-quad" strings.
?S:.
?C:HAS_INET_ATON:
?C: This symbol, if defined, indicates
 to the C program that the
?C: inet_aton() function is available to parse IP address "dotted-quad"
?C: strings.
?C:.
?H:#$d_inetaton HAS_INET_ATON  /**/
?H:.
?LINT:set d_inetaton
: check whether inet_aton exists
set inet_aton d_inetaton
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_inetaton.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: pager.U,v $
?RCS: Revision 3.0.1.2  1995/01/30  14:41:26  ram
?RCS: patch49: ensure dflt gets initialized in case no pagers are found (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:27:45  ram
?RCS: patch36: replaced Myread by Getfile in the dependency line
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:pager: pg more less Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:pager:
?S: This variable contains the name of the preferred pager
 on the system.
?S: Usual values are (the full pathnames of) more, less, pg, or cat.
?S:.
: locate the preferred pager for this system
fn=f/
case "$pager" in
")
 dflt="
 case "$pg" in
 /*) dflt=$pg;;
 [a-zA-Z]:/*) dflt=$pg;;
 esac
 case "$more" in
 /*) dflt=$more;;
 [a-zA-Z]:/*) dflt=$more;;
 esac
 case "$less" in
 /*) dflt=$less;;
```

```
 [a-zA-Z]:/*) dflt=$less;;
 esac
 case "$dflt" in
 ") dflt=/usr/ucb/more;;
 esac
 ;;
*) dflt="$pager"
 ;;
esac
?X: Instruct ./getfile to trust the default pager value,
?X: even if it does not begin with a slash.  For example, on os2,
?X: pager might be cmd /c more.  Also, it might include some options,
?X: such as '/usr/bin/less -R'.  ./getfile would report that
?X: "/usr/bin/less -R" doesn't exist.
?X: See comments in Getfile.U.
fn="f/($dflt)"
echo " "
rp='What pager is used on your system?'
. ./getfile
pager="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pager.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysmount.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysmount: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysmount:
?S: This variable conditionally defines the I_SYSMOUNT symbol,
?S: and indicates whether a C program should include <sys/mount.h>.
?S:.
?C:I_SYS_MOUNT:
?C: This symbol, if defined, indicates that <sys/mount.h> exists and
?C: should be included.
?C:.
?H:#$i_sysmount I_SYS_MOUNT  /**/
?H:.
?LINT:set i_sysmount
: see if this is a sys/mount.h system
set sys/mount.h i_sysmount
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysmount.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readlink.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_readlink.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:52  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_readlink: Inlibc
?MAKE: -pick add $@ %<
?S:d_readlink:
?S: This variable conditionally defines the HAS_READLINK symbol, which
?S: indicates to the C program that the readlink() routine is available
?S: to read the value of a symbolic link.
?S:.
?C:HAS_READLINK :
?C: This
 symbol, if defined, indicates that the readlink routine is
?C: available to read the value of a symbolic link.
?C:.
?H:#$d_readlink HAS_READLINK  /**/
?H:.
?LINT:set d_readlink
: see if readlink exists
set readlink d_readlink
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_readlink.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fd_set.U,v 3.0.1.3 1997/02/28 15:33:16 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_fd_set.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:16  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  06:57:23  ram
?RCS: patch30: extended scope for fd_set checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:27  ram
?RCS: patch16: comments for HAS_FD_* symbols were not consistent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fd_set d_fd_macros
 d_fds_bits: Compile cat rm_try Oldconfig \
 d_socket i_systime i_sysselct i_stdlib run
?MAKE: -pick add $@ %<
?S:d_fd_set:
?S: This variable contains the eventual value of the HAS_FD_SET symbol,
?S: which indicates if your C compiler knows about the fd_set typedef.
?S:.
?S:d_fd_macros:
?S: This variable contains the eventual value of the HAS_FD_MACROS symbol,
?S: which indicates if your C compiler knows about the macros which
?S: manipulate an fd_set.
?S:.
?S:d_fds_bits:
?S: This variable contains the eventual value of the HAS_FDS_BITS symbol,
?S: which indicates if your fd_set typedef contains the fds_bits member.
?S: If you have an fd_set typedef, but the dweebs who installed it did
?S: a half-fast job and neglected to provide the macros to manipulate
?S: an fd_set, HAS_FDS_BITS will let us know how to fix the gaffe.
?S:.
?C:HAS_FD_SET:
?C: This symbol, when defined, indicates presence of the fd_set typedef
?C: in <sys/types.h>
?C:.
?C:HAS_FD_MACROS:
?C: This symbol, when defined,
  indicates presence of the macros used to
?C: manipulate an fd_set.
?C:.
```

```
?C:HAS_FDS_BITS:
?C: This symbol, when defined, indicates presence of the fds_bits member in
?C: fd_set.  This knowledge is useful if fd_set is available but the macros
?C: aren't.
?C:.
?H:#$d_fd_set HAS_FD_SET /**/
?H:#$d_fd_macros HAS_FD_MACROS /**/
?H:#$d_fds_bits HAS_FDS_BITS /**/
?H:.
?F:!try
: check for fd_set items
$cat <<EOM

Checking to see how well your C compiler handles fd_set and friends ...
EOM
?X: The FD_SET macros can be in strange places.  On some SysV-based
?X: systems, they are in <sys/bsdtypes.h>, which is included (perhaps)
?X: by <sys/socket.h>.  We won't force people to include
?X: <sys/bsdtypes.h> because it might introduce other
?X: incompatibilities.
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h>
 */
#endif
#ifdef I_SYS_TIME
#include <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main() {
 fd_set fds;

#ifdef TRYBITS
 if(fds.fds_bits);
#endif

#if defined(FD_SET) && defined(FD_CLR) && defined(FD_ISSET) && defined(FD_ZERO)
 exit(0);
```

```
#else
 exit(1);
#endif
}
EOCP
set try -DTRYBITS
if eval $compile; then
 d_fds_bits="$define"
 d_fd_set="$define"
 echo "Well, your system knows about the normal fd_set typedef..." >&4
 if $run ./try; then
  echo "and you have the normal fd_set macros (just as I'd expect)." >&4
  d_fd_macros="$define"
 else
  $cat >&4 <<'EOM'
but not the normal fd_set macros!  Gaaack!  I'll have to cover for you.
EOM
  d_fd_macros="$undef"
 fi
else
 $cat <<'EOM'
Hmm, your compiler has some difficulty with fd_set.  Checking further...
EOM
 set try
 if eval $compile; then
  d_fds_bits="$undef"
  d_fd_set="$define"
  echo "Well, your system has some sort of fd_set available..." >&4
  if $run ./try; then
   echo "and you have the normal
 fd_set macros." >&4
   d_fd_macros="$define"
  else
   $cat <<'EOM'
but not the normal fd_set macros!  Gross!  More work for me...
EOM
   d_fd_macros="$undef"
  fi
 else
 echo "Well, you got zip.  That's OK, I can roll my own fd_set stuff." >&4
  d_fd_set="$undef"
  d_fds_bits="$undef"
  d_fd_macros="$undef"
 fi
fi
$rm_try
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_fd_set.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mbrtowc: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbrtowc:
?S: This variable conditionally defines the HAS_MBRTOWC symbol if the
?S: mbrtowc() routine is available to be used to convert a multi-byte
?S: character into a wide character.
?S:.
?C:HAS_MBRTOWC:
?C: This symbol, if defined, indicates that the mbrtowc routine is
?C: available to convert a multi-byte character into a wide character.
?C:.
?H:#$d_mbrtowc HAS_MBRTOWC /**/
?H:.
?LINT: set d_mbrtowc
: see if mbrtowc exists
set mbrtowc d_mbrtowc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_mbrtowc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2006-2007, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_c99_variadic_macros: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:d_c99_variadic_macros:
?S: This variable conditionally defines the HAS_C99_VARIADIC_MACROS
?S: symbol, which indicates to the C program that C99 variadic macros
?S: are available.
?S:.
```

```
?C:HAS_C99_VARIADIC_MACROS:
?C: If defined, the compiler supports C99 variadic macros.
?C:.
?H:#$d_c99_variadic_macros HAS_C99_VARIADIC_MACROS /**/
?H:.
?F:!try
: see if the Compiler supports C99 variadic macros
echo "Checking for C99 variadic macros." >&4
$cat >try.c <<EOCP
#include
 <stdio.h>
#include <stdarg.h>

#define foo(buffer, format, ...) sprintf(buffer, format, __VA_ARGS__)

int main() {
 char buf[20];
 foo(buf, "%d %g %.*s", 123, 456.0, (int)3, "789fail");
 puts(buf);
 return 0;
}
EOCP
set try
if eval $compile && $run ./try 2>&1 >/dev/null; then
   case "`$run ./try`" in
 "123 456 789")
 echo "You have C99 variadic macros." >&4
 d_c99_variadic_macros="$define"
 ;;
 *)
 echo "You don't have functional C99 variadic macros." >&4
 d_c99_variadic_macros="$undef"
 ;;
   esac
else
   echo "I couldn't compile and run the test program, so I assume that you don't have functional C99 variadic
macros." >&4
   d_c99_variadic_macros="$undef"
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_c99_variadic.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgrcv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgrcv.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgrcv: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgrcv:
?S: This variable conditionally defines the HAS_MSGRCV symbol, which
?S: indicates to the C program that the msgrcv() routine is available.
?S:.
?C:HAS_MSGRCV:
?C: This symbol, if defined, indicates that the msgrcv() routine is
?C: available to extract a message from the message queue.
?C:.
?H:#$d_msgrcv
 HAS_MSGRCV  /**/
?H:.
?LINT:set d_msgrcv
: see if msgrcv exists
set msgrcv d_msgrcv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgrcv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fsetpos.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fsetpos.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:38  ram
?RCS: patch30: created
?RCS:
?MAKE:d_fsetpos: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_fsetpos:
?S: This variable conditionally defines HAS_FSETPOS if fsetpos() is
?S: available to set the file position indicator.
?S:.
?C:HAS_FSETPOS:
?C: This symbol, if defined, indicates that the fsetpos routine is
?C: available to set the file position indicator, similar to fseek().
?C:.
?H:#$d_fsetpos
 HAS_FSETPOS /**/
?H:.
?LINT:set d_fsetpos
: see if fsetpos exists
set fsetpos d_fsetpos
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fsetpos.U
No license file was found, but licenses were detected in source scan.

```
case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting makedir (with variable substitutions)"
$spitshell >makedir <<!GROK!THIS!
$startsh
# $Id: makedir.sh,v 3.0.1.1 1994/01/24 14:00:08 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
```

```
#  of the source tree for dist 4.0.
#
# Original
 Author: Larry Wall <lwall@netlabs.com>
#
# $Log: makedir.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:08  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:38  ram
# Baseline for dist 3.0 netwide release.
#

export PATH || (echo "OOPS, this isn't sh.  Desperation time.  I will feed myself to sh."; sh \$0; kill \$\$)

case \$# in
 0)
   $echo "makedir pathname filenameflag"
   exit 1
   ;;
esac

: guarantee one slash before 1st component
case \$1 in
 /*) ;;
 *)  set ./\$1 \$2 ;;
esac

: strip last component if it is to be a filename
case X\$2 in
 X1) set \`$echo \$1 | $sed 's:\(.*\)/[^/]*\$:\1:'\` ;;
 *)  set \$1 ;;
esac

: return reasonable status if nothing to be created
if $test -d "\$1" ; then
   exit 0
fi

list=''
while true ; do
   case \$1 in
   */*)
 list="\$1 \$list"
 set \`echo \$1 | $sed 's:\(.*\)/:\1 :'\`
 ;;
   *)
 break
```

```
 ;;
   esac
done

set \$list

for dir do
   $mkdir \$dir >/dev/null 2>&1
done
!GROK!THIS!
$eunicefix
 makedir
chmod +x makedir
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/makedir.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_whoami.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_whoami.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:02:21  ram
?RCS: patch6: added default for i_whoami
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_whoami: Inhdr
?MAKE: -pick add $@ %<
?S:i_whoami (d_whoami):
?S: This variable conditionally defines the I_WHOAMI symbol, which
?S: indicates to the C program that it should include <whoami.h>.
?S:.
?C:I_WHOAMI (WHOAMI):
?C: This symbol,
 if defined, indicates that the program may include
?C: <whoami.h>.
?C:.
?H:#$i_whoami I_WHOAMI /**/
?H:.
```

```
?D:i_whoami="
?LINT:set i_whoami
: see if there is a whoami.h file
set whoami.h i_whoami
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_whoami.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_trunc: Inlibc
?MAKE: -pick add $@ %<
?S:d_trunc:
?S: This variable conditionally defines the HAS_TRUNC symbol, which
?S: indicates to the C program that the trunc() routine is available
?S: to round doubles towards zero.
?S:.
?C:HAS_TRUNC:
?C: This symbol, if defined, indicates that the trunc routine is
?C: available to round doubles towards zero.
?C:.
?H:#$d_trunc HAS_TRUNC  /**/
?H:.
?LINT:set d_trunc
: see if trunc exists
set trunc d_trunc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_trunc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigaction.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:29  ram
?RCS: patch61: created
```

```
?RCS:
?RCS:
?MAKE:d_sigaction: Csym Setvar cat cc ccflags ldflags libs rm _o
?MAKE: -pick add $@ %<
?S:d_sigaction:
?S: This variable conditionally defines the HAS_SIGACTION symbol, which
?S: indicates that the Vr4 sigaction() routine is available.
?S:.
?C:HAS_SIGACTION:
?C: This symbol, if defined, indicates that Vr4's sigaction() routine
?C: is available.
?C:.
?H:#$d_sigaction HAS_SIGACTION /**/
?H:.
?T:val
?LINT:set
 d_sigaction
: see if we have sigaction
echo " "
if set sigaction val -f d_sigaction; eval $csym; $val; then
 echo 'sigaction() found.' >&4
 val="$define"
else
 echo 'sigaction NOT found.' >&4
 val="$undef"
fi
?X:
?X: Solaris 2.5_x86 with SunWorks Pro C 3.0.1 doesn't have a complete
?X: sigaction structure if compiled with cc -Xc.  This compile test
?X: will fail then.  <doughera@lafcol.lafayette.edu>
?X:
$cat > set.c <<'EOP'
#include <stdio.h>
#include <sys/types.h>
#include <signal.h>
int main()
{
   struct sigaction act, oact;
}
EOP
if $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1; then
 :
else
 echo "But you don't seem to have a useable struct sigaction." >&4
 val="$undef"
fi
set d_sigaction; eval $setvar
$rm -f set set$_o set.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigaction.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strtol.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtol.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strtol: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtol:
?S: This variable conditionally defines the HAS_STRTOL symbol, which
?S: indicates to the C program that the strtol() routine is available
?S: to provide better numeric string conversion than atoi() and friends.
?S:.
?C:HAS_STRTOL (STRTOL):
?C: This symbol, if defined, indicates that
 the strtol routine is available
?C: to provide better numeric string conversion than atoi() and friends.
?C:.
?H:#$d_strtol HAS_STRTOL /**/
?H:.
?LINT:set d_strtol
: see if strtol exists
set strtol d_strtol
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtol.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_voidsig.U,v 3.0.1.3 1995/05/12 12:12:46 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_voidsig.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:12:46  ram
?RCS: patch54: made cppflags dependency optional
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:20:35  ram
?RCS: patch32: now sets signal_t only once d_voidsig is known (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:54  ram
?RCS: patch30: now properly sets signal_t when re-using previous value
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_voidsig
 signal_t: rm contains cppstdin cppminus +cppflags test Myread \
 Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_voidsig:
?S: This variable conditionally defines VOIDSIG if this system
?S: declares "void (*signal(...))()" in signal.h.  The old way was to
?S: declare it as "int (*signal(...))()".
?S:.
?S:signal_t:
?S: This variable holds the type of the signal handler (void or int).
?S:.
?C:VOIDSIG:
?C: This symbol is defined if this system declares "void (*signal(...))()" in
?C: signal.h.  The old way was to declare it as "int (*signal(...))()".  It
?C: is up to the package author to declare things correctly based on the
?C: symbol.
?C:.
?C:Signal_t (SIGNAL_T):
?C: This symbol's value is either "void" or "int", corresponding to the
?C: appropriate return type of a signal handler.  Thus, you can declare
?C: a signal handler using "Signal_t (*handler)()", and define the
?C: handler using "Signal_t handler(sig)".
?C:.
?H:#$d_voidsig VOIDSIG /**/
?H:#define
 Signal_t $signal_t /* Signal handler's return type */
?H:.
?T:xxx
?LINT:set d_voidsig
: see if signal is declared as pointer to function returning int or void
```

```
echo " "
xxx=`./findhdr signal.h`
$test "$xxx" && $cppstdin $cppminus $cppflags < $xxx >$$.tmp 2>/dev/null
if $contains 'int.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
elif $contains 'void.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have void (*signal())()." >&4
 val="$define"
elif $contains 'extern[  ]*[(\*]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
?X: This next test is kind of sloppy, but it catches Linux
?X: which has a
?X:  typedef void (*__sighandler_t)  (int)  ;
?X: A better fix would be to compile a C program with the proper
?X: prototype, but since nearly everyone uses void, we'll just go with
?X: this.
elif $contains 'void.*\*.*sig' $$.tmp >/dev/null 2>&1 ; then
 echo "You
 have void (*signal())()." >&4
 val="$define"
else
 case "$d_voidsig" in
 ")
 echo "I can't determine whether signal handler returns void or int..." >&4
  dflt=void
  rp="What type does your signal handler return?"
  . ./myread
  case "$ans" in
  v*) val="$define";;
  *) val="$undef";;
  esac;;
 "$define")
  echo "As you already told me, signal handler returns void." >&4
  val="$define"
  ;;
 *) echo "As you already told me, signal handler returns int." >&4
  val="$undef"
  ;;
 esac
fi
set d_voidsig
eval $setvar
case "$d_voidsig" in
"$define") signal_t="void";;
*) signal_t="int";;
esac
```

```
$rm -f $$.tmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_voidsig.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: selecttype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:20:09  ram
?RCS: patch61: always include <sys/select.h> when available for test
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:14:06  ram
?RCS: patch56: removed harmful spaces in assignment
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:31  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:selecttype: cat +cc +ccflags rm Oldconfig Myread \
 d_fd_set d_select d_socket i_systime
 i_sysselct
?MAKE: -pick add $@ %<
?S:selecttype:
?S: This variable holds the type used for the 2nd, 3rd, and 4th
?S: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?S: is defined, and 'int *' otherwise.  This is only useful if you
?S: have select(), naturally.
?S:.
?C:Select_fd_set_t:
?C: This symbol holds the type used for the 2nd, 3rd, and 4th
?C: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?C: is defined, and 'int *' otherwise.  This is only useful if you
?C: have select(), of course.
?C:.
?H:#define Select_fd_set_t  $selecttype /**/
?H:.
?T:xxx yyy
: check for type of arguments to select.  This will only really
```

```
: work if the system supports prototypes and provides one for
: select.
case "$d_select" in
$define)
 : Make initial guess
 case "$selecttype" in
 "|' ')
  case "$d_fd_set" in
  $define) xxx='fd_set *' ;;
  *) xxx='int *' ;;
  esac
  ;;
 *)  xxx="$selecttype"
  ;;
 esac
 : backup guess
 case "$xxx" in
 'fd_set *') yyy='int *'
 ;;
 'int *') yyy='fd_set *' ;;
 esac

 $cat <<EOM

Checking to see what type of arguments are expected by select().
EOM
 $cat >try.c <<EOCP
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#ifdef I_SYS_TIME
#include <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main()
{
 int width;
 Select_fd_set_t readfds;
 Select_fd_set_t writefds;
 Select_fd_set_t exceptfds;
 struct timeval timeout;
 select(width, readfds, writefds, exceptfds, &timeout);
```

```
 exit(0);
}
EOCP
 if $cc $ccflags -c -DSelect_fd_set_t="$xxx" try.c >/dev/null 2>&1 ; then
  selecttype="$xxx"
  echo "Your system uses $xxx for the arguments to select." >&4
 elif $cc $ccflags -c -DSelect_fd_set_t="$yyy" try.c >/dev/null 2>&1 ; then
  selecttype="$yyy"
  echo "Your system uses $yyy for the arguments to select." >&4
 else
  rp='What is the type for the 2nd, 3rd, and 4th arguments
 to select?'
  dflt="$xxx"
  . ./myread
  selecttype="$ans"
 fi
 $rm -f try.[co]
 ;;
*) selecttype='int *'
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/selecttype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysndir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysndir.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysndir: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysndir:
?S: This variable conditionally defines the I_SYS_NDIR symbol, and indicates
?S: whether a C program should include <sys/ndir.h>.
?S:.
?C:I_SYS_NDIR (I_SYSNDIR):
?C: This symbol, if defined, indicates to the C program that it should
```

```
?C: include <sys/ndir.h>.
?C:.
?H:#$i_sysndir
 I_SYS_NDIR /**/
?H:.
?LINT:set i_sysndir
: see if this is an sysndir system
set sys/ndir.h i_sysndir
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysndir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_usleepproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_usleepproto:
?S: This variable conditionally defines the HAS_USLEEP_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the usleep() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_USLEEP_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the usleep() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern int
 usleep(useconds_t);
?C:.
?H:#$d_usleepproto HAS_USLEEP_PROTO /**/
?H:.
?LINT:set d_usleepproto
: see if prototype for usleep is available
echo " "
set d_usleepproto usleep $i_unistd unistd.h
eval $hasproto
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_usleepproto.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethbynm.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethbynm: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbynm (d_gethhstby):
?S: This variable conditionally defines the HAS_GETHOSTBYNAME symbol, which
?S: indicates to the C program that the gethostbyname() routine is available
?S: to lookup host names in some data base or other.
?S:.
?C:HAS_GETHOSTBYNAME (GETHOSTBYNAME):
?C: This symbol, if defined, indicates that the gethostbyname()
 routine is
?C: available to lookup host names in some data base or other.
?C:.
?H:#$d_gethbynm HAS_GETHOSTBYNAME  /**/
?H:.
?LINT:set d_gethbynm
: see if gethostbyname exists
set gethostbyname d_gethbynm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethbynm.U
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```
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgrp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:28  ram
?RCS: patch61: new USE_BSD_GETPGRP to detect the getpgrp() flavour
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp d_bsdgetpgrp: Guess Inlibc Setvar cat rm \
 +cc +ccflags +ldflags +libs i_unistd
?MAKE: -pick add $@ %<
?S:d_getpgrp:
?S: This variable conditionally defines HAS_GETPGRP if getpgrp() is
?S: available to get the current process group.
?S:.
?S:d_bsdgetpgrp:
?S: This
 variable conditionally defines USE_BSD_GETPGRP if
?S: getpgrp needs one arguments whereas USG one needs none.
?S:.
?C:HAS_GETPGRP (GETPGRP):
?C: This symbol, if defined, indicates that the getpgrp routine is
?C: available to get the current process group.
?C:.
?C:USE_BSD_GETPGRP:
?C: This symbol, if defined, indicates that getpgrp needs one
?C: arguments whereas USG one needs none.
?C:.
?H:#$d_getpgrp HAS_GETPGRP  /**/
?H:#$d_bsdgetpgrp USE_BSD_GETPGRP /**/
?H:.
?F:!set !set.c
?T:xxx
?LINT:set d_getpgrp d_bsdgetpgrp
: see if getpgrp exists
set getpgrp d_getpgrp
eval $inlibc

@if USE_BSD_GETPGRP || d_bsdgetpgrp
case "$d_getpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of getpgrp is in use..."
 $cat >set.c <<EOP
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
```

```
#  include <unistd.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (getpgrp(1) ==
 0)
  exit(0);
#else
 if (getpgrp() > 0)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -DTRY_BSD_PGRP $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1
  && ./set
 then
  echo "You have to use getpgrp(pid) instead of getpgrp()." >&4
  val="$define"
 elif $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo "You have to use getpgrp() instead of getpgrp(pid)." >&4
  val="$undef"
 else
  echo "I can't seem to compile and run the test program."
  if ./usg; then
   xxx="a USG one, i.e. you use getpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use getpgrp(pid)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use getpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your getpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
```

```
esac
set d_bsdgetpgrp
eval $setvar
$rm -f set set.c
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdbool.U,v $
?RCS:
?RCS: Copyright (c) 2011 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_stdbool: cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:i_stdbool:
?S: This variable conditionally defines the I_STDBOOL symbol, which
?S: indicates to the C program that <stdbool.h> exists and should
?S: be included.
?S:.
?C:I_STDBOOL:
?C: This symbol, if defined, indicates that <stdbool.h> exists and
?C: can be included.
?C:.
?H:#$i_stdbool I_STDBOOL  /**/
?H:.
?LINT:set i_stdbool
: see if stdbool is available
: we want a real compile instead of Inhdr because some Solaris systems
: have stdbool.h, but it can only be used if the compiler indicates it
: is sufficiently c99-compliant.
echo " "
$cat >try.c <<EOCP
#include <stdio.h>
#include <stdbool.h>
int func(bool x)
{
  return
 x ? 1 : 0;
}
int main(int argc, char **argv)
{
  return func(0);
}
```

```
EOCP
set try
if eval $compile; then
 echo "<stdbool.h> found." >&4
 val="$define"
else
 echo "<stdbool.h> NOT found." >&4
 val="$undef"
fi
$rm_try
set i_stdbool
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_stdbool.U
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```
?RCS: $Id: cpp_stuff.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:24  ram
?RCS: patch36: now uses cppstdin instead of plain cpp for consistency (ADO)
?RCS: patch36: remove temporary files when done
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cpp_stuff: cat contains cppstdin cppflags cppminus rm
?MAKE: -pick add $@ %<
?S:cpp_stuff:
?S: This variable contains an identification of the concatenation
 mechanism
?S: used by the C preprocessor.
?S:.
?C:CAT2:
?C: This macro concatenates 2 tokens together.
?C:.
?C:CAT3:
?C: This macro concatenates 3 tokens together.
?C:.
```

```
?C:CAT4:
?C: This macro concatenates 4 tokens together.
?C:.
?C:CAT5:
?C: This macro concatenates 5 tokens together.
?C:.
?C:STRINGIFY:
?C: This macro surrounds its token with double quotes.
?C:.
?C:SCAT2:
?C: This macro concatenates 2 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT3:
?C: This macro concatenates 3 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT4:
?C: This macro concatenates 4 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT5:
?C: This macro concatenates 5 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?X: Dist pl70 included the following, but AIX's xlc compiler
?X: (which
 is ANSI-ish and has cpp_stuff == 42)) rejects
?X: The SQuoTe/EQuoTe stuff because the string literals are on
?X: separate lines.  Sigh.
?X:  Andy Dougherty   24 Feb 1998
?X: ?H:?%<:#if $cpp_stuff == 1
?X: ?H:?CAT2:#define CAT2(a,b)a/**/b
?X: ?H:?CAT3:#define CAT3(a,b,c)a/**/b/**/c
?X: ?H:?CAT4:#define CAT4(a,b,c,d)a/**/b/**/c/**/d
?X: ?H:?CAT5:#define CAT5(a,b,c,d,e)a/**/b/**/c/**/d/**/e
?X: ?H:?STRINGIFY:#define STRINGIFY(a)"a"
?X: ?H:?%<:#define SQuoTe(a)"a
?X: ?H:?%<:#define EQuoTe(a)a"
?X: ?H:?SCAT2:#define SCAT2(a,b)EQuoTe(SQuoTe(a)b)
?X: ?H:?SCAT3:#define SCAT3(a,b,c)EQuoTe(SQuoTe(a)b/**/c)
?X: ?H:?SCAT4:#define SCAT4(a,b,c,d)EQuoTe(SQuoTe(a)b/**/c/**/d)
?X: ?H:?SCAT5:#define SCAT5(a,b,c,d,e)EQuoTe(SQuoTe(a)b/**/c/**/d/**/e)
?X: ?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 1
?H:?CAT2:#define CAT2(a,b) a/**/b
?H:?CAT3:#define CAT3(a,b,c) a/**/b/**/c
?H:?CAT4:#define CAT4(a,b,c,d) a/**/b/**/c/**/d
```

```
?H:?CAT5:#define CAT5(a,b,c,d,e) a/**/b/**/c/**/d/**/e
?H:?STRINGIFY:#define STRINGIFY(a) "a"
?X: If
 you can get stringification with catify, tell me how!
?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 42
?H:?%<:#define PeRl_CaTiFy(a, b) a ## b
?H:?%<:#define PeRl_StGiFy(a) #a
?X: The additional level of indirection enables these macros to be
?X: used as arguments to other macros.  See K&R 2nd ed., page 231.
?H:?CAT2:#define CAT2(a,b) PeRl_CaTiFy(a,b)
?H:?CAT3:#define CAT3(a,b,c) CAT2(PeRl_CaTiFy(a,b),c)
?H:?CAT4:#define CAT4(a,b,c,d) CAT2(CAT3(a,b,c),d)
?H:?CAT5:#define CAT5(a,b,c,d,e) CAT2(CAT4(a,b,c,d),e)
?H:?%<:#define StGiFy(a) PeRl_StGiFy(a)
?H:?STRINGIFY:#define STRINGIFY(a) PeRl_StGiFy(a)
?H:?SCAT2:#define SCAT2(a,b) PeRl_StGiFy(a) PeRl_StGiFy(b)
?H:?SCAT3:#define SCAT3(a,b,c) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c)
?H:?SCAT4:#define SCAT4(a,b,c,d) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c) PeRl_StGiFy(d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c) PeRl_StGiFy(d)
PeRl_StGiFy(e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff != 1 && $cpp_stuff
 != 42
?H:?%<:#include "Bletch: How does this C preprocessor concatenate tokens?"
?H:?%<:#endif
?H:.
?W:%<:CAT2 CAT3 CAT4 CAT5 STRINGIFY SCAT2 SCAT3 SCAT4 SCAT5
?F:!cpp_stuff.c
?LINT:known StGiFy
?LINT:known PeRl_CaTiFy
?LINT:known PeRl_StGiFy
: how do we concatenate cpp tokens here?
echo " "
echo "Checking to see how your cpp does stuff like concatenate tokens..." >&4
$cat >cpp_stuff.c <<'EOCP'
#define RCAT(a,b)a/**/b
#define ACAT(a,b)a ## b
RCAT(Rei,ser)
ACAT(Cir,cus)
EOCP
$cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out 2>&1
if $contains 'Circus' cpp_stuff.out >/dev/null 2>&1; then
 echo "Oh!  Smells like ANSI's been here." >&4
 echo "We can catify or stringify, separately or together!"
 cpp_stuff=42
elif $contains 'Reiser' cpp_stuff.out >/dev/null 2>&1; then
 echo "Ah, yes!  The good old days!" >&4
```

```
 echo "However, in the good old days we don't know how to stringify and"
 echo "catify at the same time."
 cpp_stuff=1
else
 $cat >&4 <<EOM
Hmm, I don't seem to be able to concatenate
 tokens with your cpp.
You're going to have to edit the values of CAT[2-5] in config.h...
EOM
?X: It would be nice to have configure remind us at the end that some manual
?X: intervention is needed -- FIXME
 cpp_stuff="/* Help! How do we handle cpp_stuff? */*/"
fi
$rm -f cpp_stuff.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/cpp_stuff.U
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```
?RCS: $Id: d_mkdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mkdir.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mkdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkdir:
?S: This variable conditionally defines the HAS_MKDIR symbol, which
?S: indicates to the C program that the mkdir() routine is available
?S: to create directories..
?S:.
?C:HAS_MKDIR (MKDIR):
?C: This symbol, if defined, indicates that the mkdir routine is available
?C: to create directories.
  Otherwise you should fork off a new process to
?C: exec /bin/mkdir.
?C:.
?H:#$d_mkdir HAS_MKDIR  /**/
?H:.
```

```
?LINT:set d_mkdir
: see if mkdir exists
set mkdir d_mkdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mkdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memcmp.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:35  ram
?RCS: patch10: removed text recommending bcmp over memcmp (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memcmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_memcmp:
?S: This variable conditionally defines the HAS_MEMCMP symbol, which
?S: indicates to the C program that the memcmp() routine is available
?S: to compare blocks of
 memory.
?S:.
?C:HAS_MEMCMP (MEMCMP):
?C: This symbol, if defined, indicates that the memcmp routine is available
?C: to compare blocks of memory.
?C:.
?H:#$d_memcmp HAS_MEMCMP /**/
?H:.
?LINT:set d_memcmp
: see if memcmp exists
set memcmp d_memcmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memcmp.U

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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_faststdio: Setvar \
 d_stdstdio d_stdio_ptr_lval d_stdio_cnt_lval d_stdio_ptr_lval_sets_cnt
?MAKE: -pick add $@ %<
?S:d_faststdio:
?S: This variable conditionally defines the HAS_FAST_STDIO symbol,
?S: which indicates to the C program that the "fast stdio" is available
?S: to manipulate the stdio buffers directly.
?S:.
?C:HAS_FAST_STDIO:
?C: This symbol, if defined, indicates that the "fast stdio"
?C: is available to manipulate the stdio buffers directly.
?C:.
?H:#$d_faststdio HAS_FAST_STDIO  /**/
?H:.
?LINT:set d_faststdio
: see if fast_stdio exists
val="$undef"
case "$d_stdstdio:$d_stdio_ptr_lval" in
"$define:$define")
 case "$d_stdio_cnt_lval$d_stdio_ptr_lval_sets_cnt" in
 *$define*)
  echo "You
 seem to have 'fast stdio' to directly manipulate the stdio buffers." >&4
  val="$define"
  ;;
 esac
 ;;
esac
set d_faststdio
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_faststdio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:run to from targetarch targetdir targetmkdir targethost targetport \
 usecrosscompile hostperl hostgenerate hostosname targetenv: \
    src test rm echo sed mkdir cp chmod make touch
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecrosscompile:
?S: This variable conditionally defines the USE_CROSS_COMPILE symbol,
?S: and indicates that Perl has been cross-compiled.
?S:.
?S:run:
?S: This variable contains the command used by Configure
?S: to copy and execute a cross-compiled executable in the
?S: target host.  Useful and available only during Perl build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:from:
?S: This variable contains the command used by Configure
?S: to copy files from the target host.  Useful
 and available
?S: only during Perl build.
?S: The string ':' if not cross-compiling.
?S:.
?S:to:
?S: This variable contains the command used by Configure
?S: to copy to from the target host.  Useful and available
?S: only during Perl build.
?S: The string ':' if not cross-compiling.
?S:.
?S:targetarch:
?S: If cross-compiling, this variable contains the target architecture.
?S: If not, this will be empty.
?S:.
?S:targetdir:
?S: This variable contains a path that will be created on the target
?S: host using targetmkdir, and then used to copy the cross-compiled
?S: executables to. Defaults to '/tmp' if not set.
?S:.
?S:targetmkdir:
?S: This variable contains the command used by Configure to create a
?S: new directory on the target host.
?S:.
?S:targethost:
?S: This variable contains the name of a separate host machine that
?S: can be used to run compiled test programs and perl tests on.
?S: Set to empty string if not in use.
```

```
?S:.
?S:targetport:
?S: This variable contains the number
 of a network port to be used to
?S: connect to the host in targethost, if unset defaults to 22 for ssh.
?S:.
?S:hostperl:
?S: This variable contains the path to a miniperl binary that can be
?S: run on the host OS when cross-compiling.  Useful and available only
?S: during Perl build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:hostgenerate:
?S: This variable contains the path to a generate_uudmap binary that
?S: can be run on the host OS when cross-compiling.  Useful and
?S: available only during Perl build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:hostosname:
?S: This variable contains the original value of '$^O' for hostperl
?S: when cross-compiling.  This is useful to pick the proper tools
?S: when running build code in the host.
?S: Empty string '' if not cross-compiling.
?S:.
?S:targetenv:
?S: If cross-compiling, this variable can be used to modify the
?S: environment on the target system.
?S: However, how and where it's used, and even if it's used at all, is
?S: entirely
 dependent on both the transport mechanism (targetrun) and
?S: what the target system is.  Unless the relevant documentation says
?S: otherwise, it is genereally not useful.
?S:.
?C:USE_CROSS_COMPILE:
?C: This symbol, if defined, indicates that Perl is being cross-compiled.
?C:.
?C:PERL_TARGETARCH:
?C: This symbol, if defined, indicates the target architecture
?C: Perl has been cross-compiled to.  Undefined if not a cross-compile.
?C:.
?H:?%<:#ifndef USE_CROSS_COMPILE
?H:?%<:#$usecrosscompile USE_CROSS_COMPILE /**/
?H:?%<:#define PERL_TARGETARCH "$targetarch" /**/
?H:?%<:#endif
?H:.
?D:targetenv=''
?D:targethost=''
?D:targetmkdir=''
```

```
?T:croak pwd exe f q cwd file xxx env
?LINT:extern usecrosscompile
?LINT:extern cc
?LINT:extern usrinc
?LINT:change ar
?LINT:change nm
?LINT:change ranlib
?LINT:change src
?LINT:extern targetenv
?LINT:extern targetport
?LINT:extern targetdir
?LINT:extern targetuser
?LINT:change targetuser
?LINT:extern targetrun
?LINT:extern targetfrom
?LINT:extern
 targetto
?LINT:change targetrun
?LINT:change targetfrom
?LINT:change targetto
?LINT:extern incpth
?LINT:extern libpth
?LINT:extern locincpth
?LINT:extern loclibpth
?LINT:change locincpth
?LINT:change loclibpth
?LINT:extern hostperl
?LINT:extern hostgenerate
?LINT:extern before_host
?LINT:change before_host
?LINT:extern hostosname
?LINT:extern multiarch
: Check for Cross-Compilation
?X: targethost and targetenv mainly set to allow ?S: documentation
?X:otherwise it could have been declared extern
if $test "X$targethost" = "X"; then
   targethost=""
fi
if $test "X$targetenv" = "X"; then
   targetenv=""
fi
case "$usecrosscompile" in
$define|true|[yY]*)
 $echo "Cross-compiling..."
 croak=''
 case "$cc" in
 *-gcc*|*-g++*) # A cross-compiling gcc, probably.
     # arm-linux-androideabi-gcc  -> arm-linux-androideabi
```

```
    # x86_64-w64-mingw32-gcc.exe -> x86_64-w64-mingw32
    targetarch=`$echo $cc|$sed 's/-g[c\+][c\+].*$//'`
    ar=`$echo $cc|$sed 's/-g[c\+][c\+]/-ar/'`
    # leave out ld,
choosing it is more complex
    nm=`$echo $cc|$sed 's/-g[c\+][c\+]/-nm/'`
    ranlib=`$echo $cc|$sed 's/-g[c\+][c\+]/-ranlib/'`
    # We are in a weird spot. Just before us, some values
    # were 'saved', to be restored after the hints are
    # run.  This means that the changes we made to ar,
    # nm and ranlib will get reverted.
    # To avoid that, we hijack the saving mechanism and
    # have it save our new values.
    for file in ar nm ranlib; do
 eval xxx=\$$file
 eval $file=$xxx$_exe
 eval _$file=$xxx
    done
;;
esac
case "$targetarch" in
") echo "Targetarch not defined." >&4; croak=y ;;
*)  echo "Using targetarch $targetarch." >&4 ;;
esac
case "$targethost" in
") echo "Targethost not defined." >&4; croak=n ;;
*)  echo "Using targethost $targethost." >&4
esac
locincpth=' '
loclibpth=' '
case "$croak" in
y) echo "Cannot continue, aborting." >&4; exit 1 ;;
esac
  : compile a host miniperl and generate_uudmap, unless we got passed them
  if
$test "X$hostperl" = X; then
    echo "Building host miniperl and generate_uudmap binaries" >&4
    before_host=`pwd`
    cd ..
    cd $src
    src=`pwd`
    rm -rf $src/host
    mkdir $src/host
    cd $src/host
    $src/Configure -des -Dusedevel -Dmksymlinks
    $make miniperl
    case "$hostgenerate" in
    ") $make generate_uudmap
```

```
        hostgenerate=$src/host/generate_uudmap
        ;;
      "$undef") hostgenerate="
        ;;
    esac
    hostperl=$src/host/miniperl
    cd $before_host
  fi
  hostosname=`$hostperl -le 'print $^O'`
  ;;
*)
  usecrosscompile="$undef"
  ;;
esac

: Define -Dtargethost=somecomputer to run compiled tests on another machine
case "$targethost" in
  ") echo "Checking for cross-compile" >&4
  case "$usecrosscompile$multiarch" in
     *$define*) echo "Skipping the try tests in the rest of Configure as no targethost was defined when cross-
compiling" >&4
       if [ -f Makefile ]; then
         echo
 " "
         echo "Now you must ensure config.sh, config.h and the generated headers exist and run a $make."
       else
         echo "Configure done."
       fi
     exit 0
     ;;
   *) echo "No targethost for running compiler tests against defined, running locally" >&4
      run="
      to=:
      from=:
      ;;
  esac
  ;;
  *) echo "Using targethost $targethost." >&4
 case "$src" in
 /*) run=$src/Cross/run
    targetmkdir=$src/Cross/mkdir
    to=$src/Cross/to
    from=$src/Cross/from
    ;;
 *)  pwd=`$test -f ../Configure & cd ..; pwd`
    run=$pwd/Cross/run
    targetmkdir=$pwd/Cross/mkdir
    to=$pwd/Cross/to
```

```
    from=$pwd/Cross/from
    ;;
 esac
 case "$targetrun" in
 ") targetrun=ssh ;;
 esac
 case "$targetto" in
 ") targetto=scp ;;
 esac
 case "$targetfrom" in
 ") targetfrom=scp ;;
 esac
 run=$run-$targetrun
 to=$to-$targetto
 from=$from-$targetfrom
 case "$targetdir" in
 ")  targetdir=/tmp
     echo "Guessing targetdir $targetdir."
 >&4
     ;;
 esac
 case "$targetuser" in
 ")  targetuser=root
     echo "Guessing targetuser $targetuser." >&4
     ;;
 esac
 case "$targetport" in
 ")  targetport=22
     echo "Guessing targetport $targetport." >&4
     ;;
 esac
 case "$targetfrom" in
 scp) q=-q ;;
 *) q=" ;;
 esac
 case "$targetrun" in
 ssh|rsh)
    cat >$run <<EOF
#!/bin/sh
env="
case "\$1" in
-cwd)
 shift
 cwd=\$1
 shift
 ;;
esac
case "\$1" in
```

```
-env)
 shift
 env=\$1
 shift
 ;;
esac
case "\$cwd" in
") cwd=$targetdir ;;
esac
exe=\$1
shift
$to \$exe
$targetrun -p $targetport -l $targetuser $targethost "cd \$cwd && \$env \$exe \$@"
EOF
    ;;
 adb)
    $touch $run
    ;;
 *)  echo "Unknown targetrun '$targetrun'" >&4
    exit 1
    ;;
 esac
 case "$targetmkdir" in
 */Cross/mkdir)
    cat >$targetmkdir <<EOF
#!/bin/sh
$targetrun -p $targetport -l $targetuser $targethost "mkdir -p \$@"
EOF
    $chmod a+rx $targetmkdir
    ;;
 *)  echo "Unknown targetmkdir '$targetmkdir'" >&4
    exit 1
    ;;
 esac
 case
 "$targetto" in
 scp|rcp)
    cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $targetmkdir \`dirname \$f\`
   $targetto -P $targetport -r $q \$f $targetuser@$targethost:\$f          2>/dev/null  || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
```

```
   $targetto -P $targetport -r $q \$f $targetuser@$targethost:$targetdir/\$f 2>/dev/null || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 cp) cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $mkdir -p $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 *)  echo "Unknown targetto '$targetto'" >&4
     exit 1
     ;;
 esac
 case "$targetfrom" in
 scp|rcp)
   cat >$from <<EOF
#!/bin/sh
for f in \$@
do
 $rm -f \$f
 $targetfrom -P $targetport $q $targetuser@$targethost:$targetdir/\$f . || exit 1
done
exit 0
EOF
     ;;
 cp) cat >$from <<EOF
#!/bin/sh
for
 f in \$@
do
 $rm -f \$f
 cp $targetdir/\$f . || exit 1
```

```
done
exit 0
EOF
    ;;
 *)  echo "Unknown targetfrom '$targetfrom'" >&4
    exit 1
    ;;
 esac
 if $test ! -f $run; then
    echo "Target 'run' script '$run' not found." >&4
 else
    $chmod a+rx $run
 fi
 if $test ! -f $to; then
    echo "Target 'to' script '$to' not found." >&4
 else
    $chmod a+rx $to
 fi
 if $test ! -f $from; then
    echo "Target 'from' script '$from' not found." >&4
 else
    $chmod a+rx $from
 fi
 if $test ! -f $run -o ! -f $to -o ! -f $from; then
    exit 1
 fi
 cat >&4 <<EOF
Using '$run' for remote execution,
and '$from' and '$to'
for remote file transfer.
EOF
 ;;
*) run=''
 to=:
 from=:
 usecrosscompile="$undef"
 targetarch=''
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Cross.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_semget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_semget.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semget: Inlibc
?MAKE: -pick add $@ %<
?S:d_semget:
?S: This variable conditionally defines the HAS_SEMGET symbol, which
?S: indicates to the C program that the semget() routine is available.
?S:.
?C:HAS_SEMGET:
?C: This symbol, if defined, indicates that the semget() routine is
?C: available to get a set of semaphores.
?C:.
?H:#$d_semget
 HAS_SEMGET /**/
?H:.
?LINT:set d_semget
: see if semget exists
set semget d_semget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uselargefiles \
 ccflags_uselargefiles \
 ldflags_uselargefiles \
 libswanted_uselargefiles: \
 Myread Oldconfig Setvar test lseeksize fpossize \
 fpostype Compile echo n c cat lseektype rm_try run \
 use64bitint use64bitall i_stdlib
?MAKE: -pick add $@ %<
?Y:TOP
```

```
?S:uselargefiles:
?S: This variable conditionally defines the USE_LARGE_FILES symbol,
?S: and indicates that large file interfaces should be used when
?S: available.
?S:.
?S:ccflags_uselargefiles:
?S: This variable contains the compiler flags needed by large file builds
?S: and added to ccflags by hints files.
?S:.
?S:ldflags_uselargefiles:
?S: This variable contains the loader flags needed by large file builds
?S: and added to ldflags by
 hints files.
?S:.
?S:libswanted_uselargefiles:
?S: This variable contains the libraries needed by large file builds
?S: and added to ldflags by hints files.  It is a space separated list
?S: of the library names without the "lib" prefix or any suffix, just
?S: like libswanted..
?S:.
?C:USE_LARGE_FILES:
?C: This symbol, if defined, indicates that large file support
?C: should be used when available.
?C:.
?H:?%<:#ifndef USE_LARGE_FILES
?H:?%<:#$uselargefiles USE_LARGE_FILES  /**/
?H:?%<:#endif
?H:.
?INIT:ccflags_uselargefiles="
?INIT:ldflags_uselargefiles="
?INIT:libswanted_uselargefiles="
?T:yyy zzz
?F:!uselargefiles.cbu !try
?LINT:change lseeksize
?LINT:change fpossize
?LINT:extern uselfs
?LINT:use use64bitint
?LINT:use use64bitall
: Check for large file support
# Backward compatibility (uselfs is deprecated).
case "$uselfs" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duselfs is deprecated, using -Duselargefiles instead.
EOM
 uselargefiles="$define"
 ;;
```

```
esac

case "$lseeksize:$fpossize"
 in
8:8) cat <<EOM

You can have files larger than 2 gigabytes.
EOM
  val="$define" ;;
*)    case "$uselargefiles" in
  "$undef"|false|[nN]*) dflt='n' ;;
  *) dflt='y' ;;
  esac
  cat <<EOM

Perl can be built to understand large files (files larger than 2 gigabytes)
on some systems.  To do so, Configure can be run with -Duselargefiles.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
  rp='Try to understand large files, if available?'
  . ./myread
  case "$ans" in
  y|Y) val="$define" ;;
  *) val="$undef"  ;;
  esac
  ;;
esac
set uselargefiles
eval $setvar
: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a large files perl is to be built,
: we may need to set or change some other defaults.
if $test -f uselargefiles.cbu; then
 echo "Your platform has some specific hints regarding large file builds, using them..."
 . ./uselargefiles.cbu
fi
case "$uselargefiles" in
"$define")
 if $test -f uselargefiles.cbu;
 then
  echo " "
  echo "Rechecking to see how big your file offsets are..." >&4
  $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main()
{
```

```
   printf("%d\n", (int)sizeof($lseektype));
   return(0);
}
EOCP
  set try
  if eval $compile_ok; then
   lseeksize=`$run ./try`
   $echo "Your file offsets are now $lseeksize bytes long."
  else
   dflt="$lseeksize"
   echo " "
   echo "(I can't seem to compile the test program.  Guessing...)"
   rp="What is the size of your file offsets (in bytes)?"
   . ./myread
   lseeksize="$ans"
  fi
  case "$fpostype" in
  *_t) zzz="$fpostype" ;;
  *)   zzz="fpos_t" ;;
  esac
  $echo $n "Rechecking the size of $zzz...$c" >&4
  $cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($fpostype));
   return(0);
}
EOCP
  set try
  if eval $compile_ok; then
   yyy=`$run ./try`
   dflt="$lseeksize"
   case "$yyy" in
   ") echo
 " "
    echo "(I can't execute the test program--guessing $fpossize.)" >&4
    ;;
   *) fpossize=$yyy
    echo " $fpossize bytes." >&4
    ;;
   esac
  else
   dflt="$fpossize"
```

```
   echo " "
   echo "(I can't compile the test program.  Guessing...)" >&4
   rp="What is the size of your file positions (in bytes)?"
   . ./myread
   fpossize="$ans"
  fi
  $rm_try
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/uselfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: html1dir.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: html1dir.U,v $
?RCS:
?MAKE:html1dir html1direxp installhtml1dir: cat Loc Myread \
 spackage test Getfile Setprefixvar Prefixit Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?D:html1dir=''
?S:html1dir:
?S: This variable contains the name of the directory in which html
?S: source pages are to be put.  This directory is for pages
?S: that describe whole programs, not libraries or modules.  It
?S: is intended to correspond roughly to section 1 of the Unix
?S: manuals.
?S:.
?D:html1direxp=''
?S:html1direxp:
?S: This
 variable is the same as the html1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installhtml1dir=''
?S:installhtml1dir:
?S: This variable is really the same as html1direxp, unless you are
```

```
?S: using a different installprefix.  For extra portability, you
?S: should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set html1direxp
?LINT:set installhtml1dir
: determine where html pages for programs go
set html1dir html1dir none
eval $prefixit
$cat <<EOM

If you wish to install html files for programs in $spackage, indicate
the appropriate directory here.  To skip installing html files,
answer "none".
EOM
case "$html1dir" in
"|none|$undef|' ') dflt=none ;;
*) dflt=$html1dir ;;
esac
fn=dn+~
rp="Directory for the main $spackage html pages?"
. ./getfile
prefixvar=html1dir
. ./setprefixvar
: Use ' ' for none so value is preserved next time through Configure
$test X"$html1dir" = "X" && html1dir=' '

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/html1dir.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: contains.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:contains: Nothing
?MAKE: -pick add $@ %<
```

```
?S:contains:
?S: This variable holds the command to do a grep with a proper return
?S: status.  On most sane systems it is simply "grep".  On insane systems
?S: it is a grep followed by a cat followed by a test.  This variable
?S: is primarily for the use of other Configure units.
?S:.
: Some
 greps do not return status, grrr.
echo "grimblepritz" >grimble
if grep blurfldyick grimble >/dev/null 2>&1 ; then
 contains=contains
elif grep grimblepritz grimble >/dev/null 2>&1 ; then
 contains=grep
else
 contains=contains
fi
rm -f grimble
: the following should work in any shell
case "$contains" in
contains*)
 echo " " >&4
 echo "AGH!  Grep doesn't return a status.  Attempting remedial action." >&4
 cat >contains <<'EOSS'
grep "$1" "$2" >.greptmp && cat .greptmp && test -s .greptmp
EOSS
contains=./contains
chmod +x $contains
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/contains.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2014, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_dladdr.U,v $
?RCS:
?MAKE:d_dladdr: Inlibc
?MAKE: -pick add $@ %<
?S:d_dladdr:
```

```
?S: This variable conditionally defines the HAS_DLADDR symbol, which
?S: indicates to the C program that the dladdr() routine is available
?S: to get a stack trace.
?S:.
?C:HAS_DLADDR:
?C: This symbol, if defined, indicates that the dladdr() routine is
?C: available to query dynamic linker information for an address.
?C: The <dlfcn.h> header must be included to use this routine.
?C:.
?H:#$d_dladdr HAS_DLADDR /**/
?H:.
?LINT:set d_dladdr
:
 see if dladdr exists
set dladdr d_dladdr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dladdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_syslog.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_syslog.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:56  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syslog: test Csym Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_syslog:
?S: This variable conditionally defines the HAS_SYSLOG symbol, which
?S: indicates to the C program that syslog() exists on this system.
?S:.
?C:HAS_SYSLOG
 (LIBSYSLOG):
?C: This symbol, if defined, indicates that the program can rely on the
?C: system providing syslog().  Otherwise, the syslog code provided by
```

```
?C: the package should be used.
?C:.
?H:#$d_syslog HAS_SYSLOG /**/
?H:.
?LINT:set d_syslog
: see if syslog is available
echo " "
if $test `./findhdr syslog.h` && \
 (set syslog val -f d_syslog; eval $csym; $val); then
 echo "syslog() found." >&4
 val="$define"
else
 echo "syslog() not found in your C library." >&4
 val="$undef"
fi
set d_syslog
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_syslog.U
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```
?RCS: $Id: d_wait4.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
?RCS: $Log: d_wait4.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wait4: Inlibc
?MAKE: -pick add $@ %<
?S:d_wait4:
?S: This variable conditionally defines the HAS_WAIT4 symbol, which
?S: indicates the wait4() routine is available.
?S:.
?C:HAS_WAIT4 (WAIT4):
?C: This symbol, if defined, indicates that wait4() exists.
?C:.
?H:#$d_wait4 HAS_WAIT4 /**/
?H:.
?LINT:set d_wait4
```

```
: see if there is a wait4
set
 wait4 d_wait4
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wait4.U
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```
?RCS: $Id: ssizetype.U,v 3.0.1.3 1997/02/28 16:24:21 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: ssizetype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:24:21  ram
?RCS: patch61: integrated perl5 concerns for mis-configured sfio
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:30:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:33:06  ram
?RCS: patch32: created
 by ADO
?RCS:
?MAKE:ssizetype: Myread Typedef sizetype cat rm_try Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:ssizetype:
?S: This variable defines ssizetype to be something like ssize_t,
?S: long or int.  It is used by functions that return a count
?S: of bytes or an error condition.  It must be a signed type.
?S: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?S:.
?C:SSize_t:
?C: This symbol holds the type used by functions that return
?C: a count of bytes or an error condition.  It must be a signed type.
?C: It is usually ssize_t, but may be long or int, etc.
?C: It may be necessary to include <sys/types.h> or <unistd.h>
?C: to get any typedef'ed information.
?C: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
```

```
?C:.
?H:#define SSize_t $ssizetype /* signed count of bytes */
?H:.
?F:!try
: see what type is used for signed size_t
set ssize_t ssizetype int stdio.h sys/types.h
eval $typedef
dflt="$ssizetype"
?X: Now check out whether sizeof(SSize_t)
 == sizeof(Size_t)
$cat > try.c <<EOM
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#define Size_t $sizetype
#define SSize_t $dflt
int main()
{
 if (sizeof(Size_t) == sizeof(SSize_t))
  printf("$dflt\n");
 else if (sizeof(Size_t) == sizeof(int))
  printf("int\n");
 else
  printf("long\n");
 exit(0);
}
EOM
echo " "
set try
if eval $compile_ok && $run ./try > /dev/null; then
 ssizetype=`$run ./try`
 echo "I'll be using $ssizetype for functions returning a byte count." >&4
else
 $cat >&4 <<EOM
Help! I can't compile and run the ssize_t test program: please enlighten me!
(This is probably a misconfiguration in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)

I need a type that is the same size as $sizetype, but is guaranteed to
be signed.  Common values are ssize_t, int and long.

EOM
 rp="What signed type is the same size as $sizetype?"
 . ./myread
 ssizetype="$ans"
```

```
fi
$rm_try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ssizetype.U
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```
?RCS: $Id: d_shmctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmctl:
?S: This variable conditionally defines the HAS_SHMCTL symbol, which
?S: indicates to the C program that the shmctl() routine is available.
?S:.
?C:HAS_SHMCTL:
?C: This symbol, if defined, indicates that the shmctl() routine is
?C: available to perform shared memory control operations.
?C:.
?H:#$d_shmctl
 HAS_SHMCTL  /**/
?H:.
?LINT:set d_shmctl
: see if shmctl exists
set shmctl d_shmctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dlerror.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlerror.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:49  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:11:23  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_dlerror: Inlibc runnm
?MAKE: -pick add $@ %<
?S:d_dlerror:
?S: This variable conditionally defines the HAS_DLERROR symbol, which
?S: indicates
 to the C program that the dlerror() routine is available.
?S:.
?C:HAS_DLERROR :
?C: This symbol, if defined, indicates that the dlerror routine is
?C: available to return a string describing the last error that
?C: occurred from a call to dlopen(), dlclose() or dlsym().
?C:.
?H:#$d_dlerror HAS_DLERROR /**/
?H:.
?T: xxx_runnm
?LINT:set d_dlerror
?X: We don't permanently change runnm, but we do temporarily.
?LINT: change runnm
: see if dlerror exists
?X: On NetBSD and FreeBSD, dlerror might be available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
runnm=false
set dlerror d_dlerror
eval $inlibc
runnm="$xxx_runnm"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dlerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_fp_class.U,v $
```

```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_fp_class: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_fp_class:
?S: This variable conditionally defines the I_FP_CLASS symbol, and indicates
?S: whether a C program should include <fp_class.h>.
?S:.
?C:I_FP_CLASS:
?C: This symbol, if defined, indicates that <fp_class.h> exists and
?C: should be included.
?C:.
?H:#$i_fp_class I_FP_CLASS  /**/
?H:.
?LINT:set i_fp_class
: see if this is a fp_class.h system
set fp_class.h i_fp_class
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fp_class.U
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```
?RCS: $Id: d_htonl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_htonl.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:09:25  ram
?RCS: patch32: now properly handles htonl() and friends when macros (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:45:00  ram
?RCS: patch23: now also check for htonl() macro (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_htonl: Inlibc Setvar i_niin i_sysin i_arpainet cat rm contains \
```

```
 cppstdin cppflags cppminus
?MAKE: -pick
 add $@ %<
?S:d_htonl:
?S: This variable conditionally defines HAS_HTONL if htonl() and its
?S: friends are available to do network order byte swapping.
?S:.
?C:HAS_HTONL (HTONL):
?C: This symbol, if defined, indicates that the htonl() routine (and
?C: friends htons() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_HTONS (HTONS):
?C: This symbol, if defined, indicates that the htons() routine (and
?C: friends htonl() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHL (NTOHL):
?C: This symbol, if defined, indicates that the ntohl() routine (and
?C: friends htonl() htons() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHS (NTOHS):
?C: This symbol, if defined, indicates that the ntohs() routine (and
?C: friends htonl() htons() ntohl()) are available to do network
?C: order byte swapping.
?C:.
?H:#$d_htonl HAS_HTONL  /**/
?H:#$d_htonl HAS_HTONS  /**/
?H:#$d_htonl HAS_NTOHL  /**/
?H:#$d_htonl
 HAS_NTOHS  /**/
?H:.
?F:!htonl.c
?LINT:set d_htonl
: see if htonl --and friends-- exists
val=''
set htonl val
eval $inlibc

: Maybe they are macros.
case "$val" in
$undef)
 $cat >htonl.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#$i_niin I_NETINET_IN
#$i_sysin I_SYS_IN
```

```
#$i_arpainet I_ARPA_INET
#ifdef I_NETINET_IN
#include <netinet/in.h>
#endif
#ifdef I_SYS_IN
#include <sys/in.h>
#endif
#ifdef I_ARPA_INET
#include <arpa/inet.h>
#endif
#ifdef htonl
printf("Defined as a macro.");
#endif
EOM
 $cppstdin $cppflags $cppminus < htonl.c >htonl.E 2>/dev/null
 if $contains 'Defined as a macro' htonl.E >/dev/null 2>&1; then
  val="$define"
  echo "But it seems to be defined as a macro." >&4
 fi
 $rm -f htonl.?
 ;;
esac
set d_htonl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_htonl.U
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```
?RCS: $Id: d_getlogin_r.U,v 0RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getlogin_r getlogin_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_unistd extern_C
?MAKE: -pick add $@ %<
?S:d_getlogin_r:
?S: This variable conditionally defines the HAS_GETLOGIN_R symbol,
?S: which indicates to the C program that the getlogin_r()
?S: routine is available.
?S:.
?S:getlogin_r_proto:
?S: This variable encodes the prototype of getlogin_r.
?S: It is zero if d_getlogin_r is undef, and one of the
```

```
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getlogin_r
?S: is defined.
?S:.
?C:HAS_GETLOGIN_R:
?C: This symbol, if defined, indicates that the getlogin_r routine
?C: is available
 to getlogin re-entrantly.
?C:.
?C:GETLOGIN_R_PROTO:
?C: This symbol encodes the prototype of getlogin_r.
?C: It is zero if d_getlogin_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getlogin_r
?C: is defined.
?C:.
?H:#$d_getlogin_r HAS_GETLOGIN_R /**/
?H:#define GETLOGIN_R_PROTO $getlogin_r_proto /**/
?H:.
?T:try hdrs d_getlogin_r_proto
: see if getlogin_r exists
set getlogin_r d_getlogin_r
eval $inlibc
case "$d_getlogin_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_unistd unistd.h"
 case "$d_getlogin_r_proto:$usethreads" in
 ":define") d_getlogin_r_proto=define
  set d_getlogin_r_proto getlogin_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getlogin_r_proto" in
 define)
 case "$getlogin_r_proto" in
 "|0) try='int getlogin_r(char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=I_BW ;;
 esac
 case "$getlogin_r_proto" in
 "|0) try='int getlogin_r(char*, int);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=I_BI
 ;;
 esac
 case "$getlogin_r_proto" in
 "|0) try='char* getlogin_r(char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=B_BW ;;
 esac
 case "$getlogin_r_proto" in
 "|0) try='char* getlogin_r(char*, int);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=B_BI ;;
```

```
 esac
 case "$getlogin_r_proto" in
 "|0) d_getlogin_r=undef
  getlogin_r_proto=0
  echo "Disabling getlogin_r, cannot determine prototype." >&4 ;;
 * ) case "$getlogin_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getlogin_r_proto="REENTRANT_PROTO_$getlogin_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getlogin_r has no prototype, not using it." >&4 ;;
  esac
  d_getlogin_r=undef
  getlogin_r_proto=0
  ;;
 esac
 ;;
*) getlogin_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getlogin_r.U
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```
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?RCS:     b) the "Artistic License" which comes with dist, or
?RCS:     c) the GNU General Public License as published by the Free
?RCS:     Software Foundation; either version 1, or (at your option) any
?RCS:     later version (see the file "Copying" that comes with the
?RCS:     Perl distribution).
?RCS: Which one to use is your choice.
?RCS: See the U/README file.
?MAKE:d_builtin_add_overflow d_builtin_sub_overflow d_builtin_mul_overflow : Compile Setvar cat run rm_try
?MAKE: -pick add $@ %<
?S:d_builtin_add_overflow:
?S: This variable conditionally defines HAS_BUILTIN_ADD_OVERFLOW, which
?S: indicates that the compiler supports __builtin_add_overflow(x,y,&z)
?S: for safely adding x and y into z while checking for overflow.
?S:.
?S:d_builtin_sub_overflow:
?S: This
```

```
 variable conditionally defines HAS_BUILTIN_SUB_OVERFLOW, which
?S: indicates that the compiler supports __builtin_sub_overflow(x,y,&z)
?S: for safely subtracting y from x into z while checking for overflow.
?S:.
?S:d_builtin_mul_overflow:
?S: This variable conditionally defines HAS_BUILTIN_MUL_OVERFLOW, which
?S: indicates that the compiler supports __builtin_mul_overflow(x,y,&z)
?S: for safely multiplying x and y into z while checking for overflow.
?S:.
?C:HAS_BUILTIN_ADD_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_add_overflow for adding integers with overflow checks.
?C:.
?C:HAS_BUILTIN_SUB_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_sub_overflow for subtracting integers with overflow checks.
?C:.
?C:HAS_BUILTIN_MUL_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_mul_overflow for multiplying integers with overflow checks.
?C:.
?H:#$d_builtin_add_overflow
 HAS_BUILTIN_ADD_OVERFLOW /**/
?H:#$d_builtin_sub_overflow HAS_BUILTIN_SUB_OVERFLOW /**/
?H:#$d_builtin_mul_overflow HAS_BUILTIN_MUL_OVERFLOW /**/
?H:.
?F:!try
?LINT:set d_builtin_add_overflow d_builtin_sub_overflow d_builtin_mul_overflow
: Look for GCC-style __builtin_add_overflow
case "$d_builtin_add_overflow" in
")
  echo " "
  echo "Checking whether your compiler can handle __builtin_add_overflow ..." >&4
  $cat >try.c <<'EOCP'
int main(void) {
  const unsigned int uint_max = ~0u;
  int target_int = 0;
  if (__builtin_add_overflow(1, 2, &target_int) || target_int != 3) {
      return 1;
  }
  if (!__builtin_add_overflow((int)(uint_max >> 1), 1, &target_int)) {
      return 1;
  }
  if (!__builtin_add_overflow(uint_max, -1, &target_int)) {
      return 1;
  }
  return 0;
}
```

```
EOCP
  set try
  if eval $compile && $run ./try; then
      echo "Your C compiler supports __builtin_add_overflow."
      val="$define"
  else
      echo
 "Your C compiler doesn't seem to understand __builtin_add_overflow."
      val="$undef"
  fi
  ;;
*) val="$d_builtin_add_overflow" ;;
esac

set d_builtin_add_overflow
eval $setvar
$rm_try

: Look for GCC-style __builtin_sub_overflow
case "$d_builtin_sub_overflow" in
")
  echo " "
  echo "Checking whether your compiler can handle __builtin_sub_overflow ..." >&4
  $cat >try.c <<'EOCP'
int main(void) {
  const unsigned int uint_max = ~0u;
  int target_int = 0;
  if (__builtin_sub_overflow(1, -2, &target_int) || target_int != 3) {
      return 1;
  }
  if (!__builtin_sub_overflow(-(int)(uint_max >> 1), 2, &target_int)) {
      return 1;
  }
  if (!__builtin_sub_overflow(uint_max, 1, &target_int)) {
      return 1;
  }
  return 0;
}
EOCP
  set try
  if eval $compile && $run ./try; then
      echo "Your C compiler supports __builtin_sub_overflow."
      val="$define"
  else
      echo "Your C compiler doesn't seem to understand __builtin_sub_overflow."
       val="$undef"
  fi
  ;;
```

```
*) val="$d_builtin_sub_overflow" ;;
esac

set d_builtin_sub_overflow
eval $setvar
$rm_try

: Look for GCC-style __builtin_mul_overflow
case "$d_builtin_mul_overflow" in
")
  echo " "
  echo "Checking whether your compiler can handle __builtin_mul_overflow ..." >&4
  $cat >try.c <<'EOCP'
int main(void) {
  const unsigned int uint_max = ~0u;
  int target_int = 0;
  if (__builtin_mul_overflow(2, 3, &target_int) || target_int != 6) {
      return 1;
  }
  if (!__builtin_mul_overflow((int)(uint_max >> 1), 2, &target_int)) {
      return 1;
  }
  if (!__builtin_mul_overflow(uint_max, 1, &target_int)) {
      return 1;
  }
  return 0;
}
EOCP
  set try
  if eval $compile && $run ./try; then
      echo "Your C compiler supports __builtin_mul_overflow."
      val="$define"
  else
      echo "Your C compiler doesn't seem to understand __builtin_mul_overflow."
      val="$undef"
  fi
  ;;
*) val="$d_builtin_mul_overflow"
 ;;
esac

set d_builtin_mul_overflow
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_builtin_overflow.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nametype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nametype.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:26:09  ram
?RCS: patch36: call ./usg and ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:36:48  ram
?RCS: patch32: fixed typo: /etc/password -> /etc/passwd (WED)
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:10:09  ram
?RCS: patch10: made questions more explicit for 'Configure -s' prompting (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:20  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?MAKE:nametype d_passnames d_berknames d_usgnames: Myread Guess Oldconfig cat
?MAKE: -pick add $@ %<
?S:nametype:
?S: This variable indicates how full names are stored on this system.
?S: Values are bsd, usg, and other.
?S:.
?S:d_passnames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file.
?S:.
?S:d_berknames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file in Berkeley format.
?S:.
?S:d_usgnames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file in USG format.
?S:.
?C:PASSNAMES:
```

```
?C: This symbol, if defined, indicates that full names are stored in
?C: the /etc/passwd file.
?C:.
?C:BERKNAMES:
?C: This symbol, if defined, indicates that full
 names are stored in
?C: the /etc/passwd file in Berkeley format (name first thing, everything
?C: up to first comma, with & replaced by capitalized login id, yuck).
?C:.
?C:USGNAMES:
?C: This symbol, if defined, indicates that full names are stored in
?C: the /etc/passwd file in USG format (everything after - and before ( is
?C: the name).
?C:.
?H:#$d_passnames PASSNAMES /*  (undef to take name from ~/.fullname) */
?H:#$d_berknames BERKNAMES /* (that is, ":name,stuff:") */
?H:#$d_usgnames USGNAMES  /* (that is, ":stuff-name(stuff):") */
?H:.
: find out how to find out full name
case "$d_berknames" in
"$define")
 dflt=y;;
"$undef")
 dflt=n;;
*)
 if ./bsd; then
  dflt=y
 elif ./xenix; then
  dflt=y
 else
  dflt=n
 fi
 ;;
esac
$cat <<'EOM'

Does your /etc/passwd file keep full names in Berkeley/V7 format (name first
thing after ':' in GCOS field)?  In that case, a typical entry in the password
file looks like this:

   guest:**paswword**:10:100:Mister Guest User:/usr/users:/bin/sh

                         ^^^^^^^^^^^^^^^^^^
EOM
rp="Berkeley/V7 format for full name in /etc/passwd?"
. ./myread
case "$ans" in
y*) d_passnames="$define"
```

```
 d_berknames="$define"
 d_usgnames="$undef"
 nametype=bsd
 ;;
*)
 case "$d_usgnames" in
 "$define") dflt=y;;
 "$undef") dflt=n;;
 *)
  if ./usg; then
   dflt=y
  else
   dflt=n
  fi
  ;;
 esac
$cat <<'EOM'

Does your passwd file keep full names in USG format (name sandwiched between a
'-' and a '(')?  In that case, a typical entry in the password file looks like
this:

   guest:**paswword**:10:100:000-Mister Guest User(000):/usr/users:/bin/sh
                              ^^^^^^^^^^^^^^^^^^
EOM
 rp="USG format for full name in /etc/passwd?"
 . ./myread
 case "$ans" in
 n*) echo "Full name will be taken from ~/.fullname"
  d_passnames="$undef"
  d_berknames="$undef"
  d_usgnames="$undef"
  nametype=other
  ;;
 *)
  d_passnames="$define"
  d_berknames="$undef"
  d_usgnames="$define"
  nametype=usg
  ;;
 esac;;
esac

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nametype.U
No license file was found, but licenses were detected in source scan.
```

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_msghdr_s: Hasstruct i_systypes d_socket i_sysuio Setvar
?MAKE: -pick add $@ %<
?S:d_msghdr_s:
?S: This variable conditionally defines the HAS_STRUCT_MSGHDR symbol,
?S: which indicates that the struct msghdr is supported.
?S:.
?C:HAS_STRUCT_MSGHDR:
?C: This symbol, if defined, indicates that the struct msghdr
?C: is supported.
?C:.
?H:#$d_msghdr_s HAS_STRUCT_MSGHDR /**/
?H:.
?LINT:set d_msghdr_s
: Check for msghdr_s
echo " "
echo "Checking to see if your system supports struct msghdr..." >&4
set d_msghdr_s msghdr $i_systypes sys/types.h $d_socket sys/socket.h $i_sysuio sys/uio.h
eval $hasstruct
case "$d_msghdr_s" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't."
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_msghdr_s.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gmtime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gmtime_r gmtime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_gmtime_r:
?S: This variable conditionally defines the HAS_GMTIME_R symbol,
```

```
?S: which indicates to the C program that the gmtime_r()
?S: routine is available.
?S:.
?S:gmtime_r_proto:
?S: This variable encodes the prototype of gmtime_r.
?S: It is zero if d_gmtime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gmtime_r
?S: is defined.
?S:.
?C:HAS_GMTIME_R:
?C: This symbol, if defined, indicates that the gmtime_r routine
?C: is available to gmtime re-entrantly.
?C:.
?C:GMTIME_R_PROTO:
?C: This
 symbol encodes the prototype of gmtime_r.
?C: It is zero if d_gmtime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gmtime_r
?C: is defined.
?C:.
?H:#$d_gmtime_r HAS_GMTIME_R /**/
?H:#define GMTIME_R_PROTO $gmtime_r_proto /**/
?H:.
?T:try hdrs d_gmtime_r_proto
: see if gmtime_r exists
set gmtime_r d_gmtime_r
eval $inlibc
case "$d_gmtime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_gmtime_r_proto:$usethreads" in
 ":define") d_gmtime_r_proto=define
  set d_gmtime_r_proto gmtime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gmtime_r_proto" in
 define)
 case "$gmtime_r_proto" in
 "|0) try='struct tm* gmtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && gmtime_r_proto=S_TS ;;
 esac
 case "$gmtime_r_proto" in
 "|0) try='int gmtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && gmtime_r_proto=I_TS ;;
 esac
 case
```

```
 "$gmtime_r_proto" in
 "|0) d_gmtime_r=undef
  gmtime_r_proto=0
  echo "Disabling gmtime_r, cannot determine prototype." >&4 ;;
 * ) case "$gmtime_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gmtime_r_proto="REENTRANT_PROTO_$gmtime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gmtime_r has no prototype, not using it." >&4 ;;
  esac
  d_gmtime_r=undef
  gmtime_r_proto=0
  ;;
 esac
 ;;
*) gmtime_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gmtime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016 Dagfinn Ilmari Mannsker & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X:
?X: This unit produces a variable that is intended to be eval'ed in
?X: order to define/undefine a symbol. A consistency check is made
?X: regarding any previous value and a warning is issued if there
?X: is any discrepancy.
?X:
?X: To use it, say:
?X: set d_siginfo_si_errno siginfo_t int si_errno $d_sigaction signal.h
?X: eval $hasfield_t;
?X:
?MAKE:Hasfield_t: test Compile rm_try Setvar
?MAKE: -pick add $@ %<
?LINT:define hasfield_t
?S:hasfield_t:
?S: Internal macro for Configure
?S:.
```

```
?V:hasfield_t:
?T:varname struct type field
: Define hasfield_t macro for Configure internal use
hasfield_t='varname=$1; struct=$2; type=$3; field=$4; shift; shift; shift; shift;
while $test $# -ge 2; do
   case
 "$1" in
 $define) echo "#include <$2>";;
   esac ;
   shift 2;
done > try.c;
echo "int main () { $struct foo; $type bar = foo.$field; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Hasfield_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shm.U,v 3.0 1993/08/18 12:07:17 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_shm.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shm: test d_shmctl d_shmget d_shmat d_shmdt Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_shm:
?S: This variable conditionally defines the HAS_SHM symbol, which
?S: indicates that the entire shm*(2) library is present.
?S:.
?C:HAS_SHM:
?C: This symbol, if defined, indicates that the entire shm*(2) library is
```

```
?C: supported.
?C:.
?H:#$d_shm HAS_SHM  /**/
?H:.
?T:h_shm
?LINT:set
 d_shm
: see how much of the 'shm*(2)' library is present.
h_shm=true
echo " "
case "$d_shmctl$d_shmget$d_shmat$d_shmdt" in
*"$undef"*) h_shm=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID shared memory"*"not configured"*)
 echo "Your $osname does not have the shm*(2) configured." >&4
       h_shm=false
 val="$undef"
 set shmctl d_shmctl
 eval $setvar
 set shmget d_shmget
 eval $setvar
 set shmat d_shmat
 eval $setvar
 set shmdt d_shmdt
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_shm && $test `./findhdr sys/shm.h`; then
 echo "You have the full shm*(2) library." >&4
 val="$define"
else
 echo "You don't have the full shm*(2) library." >&4
 val="$undef"
fi
set d_shm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_shm.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_vprintf.U,v 3.0 1993/08/18 12:07:59 ram Exp $

```
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_vprintf.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vprintf d_charvspr: Compile Guess cat Csym Setvar run rm_try \
 i_stdlib i_unistd i_stdarg i_varargs
?MAKE: -pick add $@ %<
?S:d_vprintf:
?S: This variable conditionally defines the HAS_VPRINTF symbol, which
?S: indicates to the C program that the vprintf() routine is available
?S: to printf with a pointer to an argument list.
?S:.
?S:d_charvspr:
?S: This
 variable conditionally defines CHARVSPRINTF if this system
?S: has vsprintf returning type (char*).  The trend seems to be to
?S: declare it as "int vsprintf()".
?S:.
?C:HAS_VPRINTF (VPRINTF):
?C: This symbol, if defined, indicates that the vprintf routine is available
?C: to printf with a pointer to an argument list.  If unavailable, you
?C: may need to write your own, probably in terms of _doprnt().
?C:.
?C:USE_CHAR_VSPRINTF (CHARVSPRINTF):
?C: This symbol is defined if this system has vsprintf() returning type
?C: (char*).  The trend seems to be to declare it as "int vsprintf()".  It
?C: is up to the package author to declare vsprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_vprintf HAS_VPRINTF /**/
?H:#$d_charvspr USE_CHAR_VSPRINTF /**/
?H:.
?T:val2
?F:!try
?LINT:set d_vprintf d_charvspr
: see if vprintf exists
echo " "
if set vprintf val -f d_vprintf; eval $csym; $val; then
 echo 'vprintf() found.' >&4
```

```
 val="$define"
 $cat >try.c <<EOF
#$i_stdarg I_STDARG  /*
 Only one of these can be defined by i_varhrd */
#$i_varargs I_VARARGS

#$i_stdlib I_STDLIB
#$i_unistd I_UNISTD

#ifdef I_STDARG
#  include <stdarg.h>
#else /* I_VARARGS */
#  include <varargs.h>
#endif

#ifdef I_UNISTD
#  include <unistd.h>
#endif

#ifdef I_STDLIB
#  include <stdlib.h>
#endif

#include <stdio.h> /* vsprintf prototype */

#ifdef I_STDARG
void xxx(int n, ...)
{
   va_list args;
   char buf[10];
   va_start(args, n);
   exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
int main() { xxx(1, "foo"); }

#else /* I_VARARGS */

xxx(va_alist)
va_dcl
{
   va_list args;
   char buf[10];
   va_start(args);
   exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
int main() { xxx("foo"); }

#endif
```

```
EOF
 set try
 if eval $compile_ok; then
  if $run ./try; then
   echo "Your vsprintf() returns (int)." >&4
   val2="$undef"
  else
   echo "Your vsprintf() returns (char*)." >&4
   val2="$define"
  fi
 else
  echo 'I am unable to compile the vsprintf() test program.' >&4
  #
 We shouldn't get here.  If we do, assume the standard signature,
  # not the old BSD one.
  echo 'Guessing that vsprintf() returns (int).' >&4
  val2="$undef"
 fi
else
 echo 'vprintf() NOT found.' >&4
 val="$undef"
 val2="$undef"
fi
$rm_try
set d_vprintf
eval $setvar
val=$val2
set d_charvspr
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_vprintf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: basicshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: basicshell.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:25  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:basicshell: Getfile Oldconfig bash csh ksh sh
?MAKE: -pick add $@ %<
?S:basicshell:
?S: This variable contains the eventual value of the BASICSHELL symbol,
?S: which contains the full name of the basic script shell on this
?S: system.  Usual values are /bin/sh, /bin/ksh, /bin/csh.
?S:.
?C:BASICSHELL:
?C: This symbol contains the
 full name of the basic script shell on this
?C: system.  Usual values are /bin/sh, /bin/ksh, /bin/csh.
?C:.
?H:#define BASICSHELL "$basicshell"  /**/
?H:.
: find the most basic shell for scripts
echo " "
case "$basicshell" in
")
 case "$sh $bash $csh $ksh" in
 */sh*) dflt="$sh" ;;
 */ksh*) dflt="$ksh" ;;
 */csh*) dflt="$csh" ;;
 */bash*) dflt="$bash" ;;
 *) dflt='/bin/sh' ;;
 esac
 ;;
*)
 dflt="$basicshell";;
esac
fn=f
rp="Give the full path name of the most basic shell used on your system"
. ./getfile
basicshell=$ans
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/basicshell.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endgrent_r endgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
```

```
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_endgrent_r:
?S: This variable conditionally defines the HAS_ENDGRENT_R symbol,
?S: which indicates to the C program that the endgrent_r()
?S: routine is available.
?S:.
?S:endgrent_r_proto:
?S: This variable encodes the prototype of endgrent_r.
?S: It is zero if d_endgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endgrent_r
?S: is defined.
?S:.
?C:HAS_ENDGRENT_R:
?C: This symbol, if defined, indicates that the endgrent_r routine
?C: is available to
 endgrent re-entrantly.
?C:.
?C:ENDGRENT_R_PROTO:
?C: This symbol encodes the prototype of endgrent_r.
?C: It is zero if d_endgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endgrent_r
?C: is defined.
?C:.
?H:#$d_endgrent_r HAS_ENDGRENT_R /**/
?H:#define ENDGRENT_R_PROTO $endgrent_r_proto /**/
?H:.
?T:try hdrs d_endgrent_r_proto
: see if endgrent_r exists
set endgrent_r d_endgrent_r
eval $inlibc
case "$d_endgrent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_endgrent_r_proto:$usethreads" in
 ":define") d_endgrent_r_proto=define
  set d_endgrent_r_proto endgrent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endgrent_r_proto" in
 define)
 case "$endgrent_r_proto" in
 "|0) try='int endgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endgrent_r_proto=I_H ;;
 esac
 case "$endgrent_r_proto" in
 "|0) try='void endgrent_r(FILE**);'
```

```
 ./protochk "$extern_C $try" $hdrs && endgrent_r_proto=V_H ;;
 esac
 case "$endgrent_r_proto"
 in
 "|0) d_endgrent_r=undef
  endgrent_r_proto=0
  echo "Disabling endgrent_r, cannot determine prototype." >&4 ;;
 * ) case "$endgrent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endgrent_r_proto="REENTRANT_PROTO_$endgrent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endgrent_r has no prototype, not using it." >&4 ;;
  esac
  d_endgrent_r=undef
  endgrent_r_proto=0
  ;;
 esac
 ;;
*) endgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endgrent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getservprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getservprotos:
?S: This variable conditionally defines the HAS_GETSERV_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getserv*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
```

```
?C:HAS_GETSERV_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getservent(), getservbyname(), and
?C: getservbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getservprotos HAS_GETSERV_PROTOS /**/
?H:.
?LINT:set d_getservprotos
: see if prototypes for various getservxxx netdb.h functions are available
echo " "
set d_getservprotos getservent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getservprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fp_class: Inlibc
?MAKE: -pick add $@ %<
?S:d_fp_class:
?S: This variable conditionally defines the HAS_FP_CLASS symbol, which
?S: indicates to the C program that the fp_class() routine is available.
?S:.
?C:HAS_FP_CLASS:
?C: This symbol, if defined, indicates that the fp_class routine is
?C: available to classify doubles.  Available for example in Digital UNIX.
?C: The returned values are defined in <math.h> and are:
?C:
?C: FP_SNAN           Signaling NaN (Not-a-Number)
?C: FP_QNAN           Quiet NaN (Not-a-Number)
?C: FP_POS_INF        +infinity
?C: FP_NEG_INF        -infinity
?C: FP_POS_NORM       Positive normalized
?C: FP_NEG_NORM       Negative normalized
?C: FP_POS_DENORM     Positive denormalized
?C: FP_NEG_DENORM
    Negative denormalized
?C: FP_POS_ZERO       +0.0 (positive zero)
?C: FP_NEG_ZERO       -0.0 (negative zero)
```

```
?C:.
?H:#$d_fp_class HAS_FP_CLASS  /**/
?H:.
?LINT:set d_fp_class
: see if fp_class exists
set fp_class d_fp_class
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fp_class.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_isascii.U,v 3.0.1.2 1994/10/29 16:13:39 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_isascii.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:13:39  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:32  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_isascii: Compile cat rm Setvar i_stdlib
?MAKE: -pick add $@ %<
?S:d_isascii:
?S: This variable conditionally defines the HAS_ISASCII constant,
?S: which indicates
 to the C program that isascii() is available.
?S:.
?C:HAS_ISASCII:
?C: This manifest constant lets the C program know that isascii
?C: is available.
?C:.
?H:#$d_isascii HAS_ISASCII  /**/
?H:.
?LINT:set d_isascii
?X: Can't use Inlibc because isascii() might be a macro.
: Look for isascii
echo " "
```

```
$cat >isascii.c <<EOCP
#include <stdio.h>
#include <ctype.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 int c = 'A';
 if (isascii(c))
  exit(0);
 else
  exit(1);
}
EOCP
set isascii
if eval $compile; then
 echo "isascii() found." >&4
 val="$define"
else
 echo "isascii() NOT found." >&4
 val="$undef"
fi
set d_isascii
eval $setvar
$rm -f isascii*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_isascii.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotoprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getprotoprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getprotoprotos:
?S: This variable conditionally defines the HAS_GETPROTO_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getproto*() functions.
?S: See also netdbtype.U for probing for various netdb types.
```

```
?S:.
?C:HAS_GETPROTO_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getprotoent(), getprotobyname(), and
?C: getprotobyaddr().
  Otherwise, it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getprotoprotos HAS_GETPROTO_PROTOS /**/
?H:.
?LINT:set d_getprotoprotos
: see if prototypes for various getprotoxxx netdb.h functions are available
echo " "
set d_getprotoprotos getprotoent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getprotoprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Thomas Neumann <tom@smart.bo.open.de>
?RCS:
?RCS: $Log: Findhdr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:53:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:56  ram
?RCS: patch23: cppminus must be after other cppflags, not before
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a findhdr script which is used to locate the header
?X: files
 in $usrinc or other stranger places using cpp capabilities. The
?X: script is given an include file base name, like 'stdio.h' or 'sys/file.h'
?X: and it returns the full path of the include file and a zero status or an
```

```
?X: empty string with an error status if the file could not be located.
?X:
?MAKE:Findhdr: grep test tr rm +usrinc awk cat startsh \
 cppstdin cppminus +cppflags eunicefix osname
?MAKE: -pick add $@ %<
?LINT:define fieldn
?S:fieldn:
?S: This variable is used internally by Configure. It contains the position
?S: of the included file name in cpp output. That is to say, when cpp
?S: pre-processes a #include <file> line, it replaces it by a # line which
?S: contains the original position in the input file and the full name of
?S: included file, between "quotes".
?S:.
?V:fieldn
?F:./findhdr !fieldn
?T:cline pos wanted name awkprg cppfilter testaccess status usrincdir
: determine filename position in cpp output
echo " "
echo "Computing filename position in cpp output for #include
 directives..." >&4
echo '#include <stdio.h>' > foo.c
case "$osname" in
vos)
 testaccess=-e
?X: VOS: path component separator is >
 cppfilter="tr '\\\\>' '/' |"
 ;;
*)
 testaccess=-r
 cppfilter="
 ;;
esac
$cat >fieldn <<EOF
$startsh
$cppstdin $cppflags $cppminus <foo.c 2>/dev/null | \
$grep '^[  ]*#.*stdio\.h' | \
while read cline; do
 pos=1
 set \$cline
 while $test \$# -gt 0; do
  if $test $testaccess \`echo \$1 | $tr -d '"'\`; then
   echo "\$pos"
   exit 0
  fi
  shift
  pos=\`expr \$pos + 1\`
 done
done
```

```
EOF
chmod +x fieldn
fieldn=`./fieldn`
$rm -f foo.c fieldn
case $fieldn in
") pos='???';;
1) pos=first;;
2) pos=second;;
3) pos=third;;
*) pos="${fieldn}th";;
esac
echo "Your cpp writes the filename in the $pos field of the line."

?X: To locate a header file, we cannot simply check for $usrinc/file.h, since
?X: some machine have the headers in weird places and our only hope is that
?X: the C pre-processor will know how to find those headers. Thank you NexT!
: locate header file
$cat
 >findhdr <<EOF
$startsh
wanted=\$1
name="
for usrincdir in $usrinc; do
 if test -f \$usrincdir/\$wanted; then
  echo "\$usrincdir/\$wanted"
  exit 0
 fi
done
awkprg='{ print \$$fieldn }'
echo "#include <\$wanted>" > foo\$\$.c
$cppstdin $cppminus $cppflags < foo\$\$.c 2>/dev/null | \
$cppfilter $grep "^[  ]*#.*\$wanted" | \
while read cline; do
 name=\`echo \$cline | $awk "\$awkprg" | $tr -d ""\`
 case "\$name" in
 *[/\\\\]\$wanted) echo "\$name"; exit 1;;
 *[\\\\/]\$wanted) echo "\$name"; exit 1;;
 *) exit 2;;
 esac
done
?X: status = 0: grep returned 0 lines, case statement not executed
?X: status = 1: headerfile found
?X: status = 2: while loop executed, no headerfile found
status=\$?
$rm -f foo\$\$.c
if test \$status -eq 1; then
 exit 0
fi
```

```
exit 1
EOF
chmod +x findhdr
$eunicefix findhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Findhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: charorder.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:chorder_int chorder_short chorder_long: Myread cat +cc +ccflags rm
?MAKE: -pick add $@ %<
?S:chorder_short (d_cos d_bos):
?S: Holds the value describing the byte ordering of characters in a short.
?S: On a Big-Endian machine, that would be "c0c1".
?S:.
?S:chorder_int
 (charoder):
?S: Holds the value describing the byte ordering of characters in an int.
?S: For instance, on a Big-Endian machine, this would be: "c0c1c2c3".
?S:.
?S:chorder_long (d_col d_bol):
?S: Holds the value describing the byte ordering of characters in a long.
?S: On a 64 bits Big-Endian machine, that would yield: "c0c1c2c3c4c5c6c7".
?S:.
?C:CHAR_ORDER_SHORT:
?C: Holds the byte ordering of characters in a short. It's a string
?C: value like "c0c1" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_INT:
?C: Holds the byte ordering of characters in an int. It's a string
?C: value like "c0c1c2c3" on a Big-Endian machine.
```

```
?C:.
?C:CHAR_ORDER_LONG:
?C: Holds the byte ordering of characters in a long. It's a string
?C: value like "c0c1c2c3c4c5c6c7" on a 64 bits Big-Endian machine.
?C:.
?H:#define CHAR_ORDER_SHORT "$chorder_short" /* byte order in a short */
?H:#define CHAR_ORDER_INT "$chorder_int" /* byte order in an int */
?H:#define CHAR_ORDER_LONG "$chorder_long" /* byte order in a long */
?H:.
?F:!byteorder
:
 check for character ordering
echo " "
echo "Checking out byte order..." >&4
$cat >byteorder.c <<'EOCP'
#include <stdio.h>

main(argc, argv)
 int argc;
 char *argv[]; {
 int i;
 int max;
 union {
  short u_s;
  int u_i;
  long u_l;
  char u_c[sizeof(long)];
 } u;
 switch (argv[1][0]) {
 case 'l':
  u.u_l = 0L;
  /* HMS: ASSERT: sizeof(long) < 10. */
  for(i = 0; i < sizeof(long); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(long);
  break;
 case 's':
  u.u_s = 0;
  /* HMS: ASSERT: sizeof(short) < 10. */
  for(i = 0; i < sizeof(short); ++i) {
   u.u_s *= 0x100L;
   u.u_s += (0xc0 + i);
  }
  max = sizeof(short);
  break;
 case 'i':
```

```
  u.u_i = 0;
  /* RAM: ASSERT: sizeof(int) < 10. */
  for(i = 0; i < sizeof(int); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(int);
  break;
 default:
  max = 0;
  break;
 }
 for(i = 0; i < max; i++) {
  printf("%x", u.u_c[i] & 0x00FF);
 }
 printf("\n");
 exit(0);
}
EOCP
if $cc $ccflags -o
 byteorder byteorder.c >/dev/null 2>&1 ; then
 : null statement
@if chorder_short
   chorder_short=`./byteorder s`
@end
@if chorder_int
   chorder_int=`./byteorder i`
@end
@if chorder_long
   chorder_long=`./byteorder l`
@end
else
 $cat <<EOM
(I can't seem to get my test program to work.  Guessing 32 bits big-endian.)
EOM
   chorder_short="c0c1"
   chorder_int="c0c1c2c3"
   chorder_long="c0c1c2c3"
fi
@if chorder_short
dflt=$chorder_short
rp='What is the order of characters in a short?'
. ./myread
chorder_short="$ans"
@end
@if chorder_int
dflt=$chorder_int
rp='What is the order of characters in an int?'
```

```
. ./myread
chorder_int="$ans"
@end
@if chorder_long
dflt=$chorder_long
rp='What is the order of characters in a long?'
. ./myread
chorder_long="$ans"
@end
$rm -f byteorder* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/charorder.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_newlocale d_freelocale d_uselocale d_duplocale d_querylocale \
 i_xlocale xlocale_needed: Inlibc Inhdr Compile cat rm_try run \
 d_localeconv_l
?MAKE: -pick add $@ %<
?S:d_newlocale:
?S: This variable conditionally defines the HAS_NEWLOCALE symbol, which
?S: indicates to the C program that the newlocale() routine is available
?S: to return a new locale object or modify an existing locale object.
?S:.
?S:d_freelocale:
?S: This variable conditionally defines the HAS_FREELOCALE symbol, which
?S: indicates to the C program that the freelocale() routine is available
?S: to deallocates the resources associated with a locale object.
?S:.
?S:d_uselocale:
?S: This variable conditionally defines the HAS_USELOCALE symbol, which
?S: indicates to the C program that the uselocale()
 routine is available
?S: to set the current locale for the calling thread.
?S:.
?S:d_duplocale:
?S: This variable conditionally defines the HAS_DUPLOCALE symbol, which
?S: indicates to the C program that the duplocale() routine is available
?S: to duplicate a locale object.
?S:.
?S:d_querylocale:
?S: This variable conditionally defines the HAS_QUERYLOCALE symbol, which
?S: indicates to the C program that the querylocale() routine is available
?S: to return the name of the locale for a category mask.
?S:.
```

```
?S:i_xlocale:
?S: This symbol, if defined, indicates to the C program that the
?S: header xlocale.h is available.  See also xlocale_needed.
?S:.
?S:xlocale_needed:
?S: This symbol, if defined, indicates that the C program should
?S: include <xlocale.h> to get newlocale() and its friends.
?S:.
?C:HAS_NEWLOCALE:
?C: This symbol, if defined, indicates that the newlocale routine is
?C: available to return a new locale object or modify an existing
?C: locale object.
?C:.
?C:HAS_FREELOCALE:
?C: This
 symbol, if defined, indicates that the freelocale routine is
?C: available to deallocates the resources associated with a locale object.
?C:.
?C:HAS_USELOCALE:
?C: This symbol, if defined, indicates that the uselocale routine is
?C: available to set the current locale for the calling thread.
?C:.
?C:HAS_DUPLOCALE:
?C: This symbol, if defined, indicates that the duplocale routine is
?C: available to duplicate a locale object.
?C:.
?C:HAS_QUERYLOCALE:
?C: This symbol, if defined, indicates that the querylocale routine is
?C: available to return the name of the locale for a category mask.
?C:.
?C:I_XLOCALE:
?C: This symbol, if defined, indicates to the C program that the
?C: header xlocale.h is available.  See also NEED_XLOCALE_H
?C:.
?C:NEED_XLOCALE_H:
?C: This symbol, if defined, indicates that the C program should
?C: include <xlocale.h> to get newlocale() and its friends.
?C:.
?H:#$d_newlocale HAS_NEWLOCALE /**/
?H:#$d_freelocale HAS_FREELOCALE /**/
?H:#$d_uselocale HAS_USELOCALE /**/
?H:#$d_duplocale HAS_DUPLOCALE /**/
?H:#$d_querylocale HAS_QUERYLOCALE /**/
?H:#$xlocale_needed NEED_XLOCALE_H /**/
?H:#$i_xlocale I_XLOCALE
            /**/
?H:.
?LINT:set i_xlocale
```

```
?LINT:set d_newlocale
?LINT:set d_freelocale
?LINT:set d_uselocale
?LINT:set d_duplocale
?LINT:set d_querylocale
?F:!try
: see if this is an xlocale.h system
set xlocale.h i_xlocale
eval $inhdr

: see if newlocale exists
set newlocale d_newlocale
eval $inlibc

: see if freelocale exists
set freelocale d_freelocale
eval $inlibc

: see if uselocale exists
set uselocale d_uselocale
eval $inlibc

: see if duplocale exists
set duplocale d_duplocale
eval $inlibc

: see if querylocale exists
set querylocale d_querylocale
eval $inlibc

: if we have xlocale.h, check whether it is needed
case "$i_xlocale$d_newlocale$xlocale_needed" in
"$define$define")
 echo "Checking if xlocale.h is needed..." >&4
 $cat >try.c <<EOF
#include <locale.h>
#include <stdio.h>
#ifdef TRY_XLOCALE
#include <xlocale.h>
#endif
#$d_localeconv_l
 HAVE_LOCALECONV_L

#ifdef HAVE_LOCALECONV_L
struct lconv *(*lcptr)(locale_t) = localeconv_l;
#endif

int main(void) {
```

```
 locale_t lc = newlocale(LC_ALL_MASK, "C", (locale_t)0);

#ifdef HAVE_LOCALECONV_L
 /* FreeBSD hides only localeconv_l() in xlocale.h */
 struct lconv *lcbuf = localeconv_l(lc);
 printf("decimal: %s\n", lcbuf->decimal_point);
#endif

 freelocale(lc);
 return 0;
}
EOF
 set try
 if eval $compile && $run ./try > /dev/null 2>&1 ; then
  echo "xlocale.h isn't needed" >&4
  xlocale_needed=$undef
 else
  set try -DTRY_XLOCALE
  if eval $compile && $run ./try > /dev/null 2>&1 ; then
   xlocale_needed=$define
   echo "xlocale.h is needed" >&4
  else
   echo "I can't build my test either way" >&4
   xlocale_needed=$undef
  fi
 fi
 $rm_try
 ;;
*) xlocale_needed=$undef ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_newlocale.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usemorebits: Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usemorebits:
?S: This variable conditionally defines the USE_MORE_BITS symbol,
?S: and indicates that explicit 64-bit interfaces and long doubles
```

```
?S: should be used when available.
?S:.
?C:USE_MORE_BITS:
?C: This symbol, if defined, indicates that 64-bit interfaces and
?C: long doubles should be used when available.
?C:.
?H:?%<:#ifndef USE_MORE_BITS
?H:?%<:#$usemorebits USE_MORE_BITS  /**/
?H:?%<:#endif
?H:.
?LINT:extern use64bitint
?LINT:change use64bitint
?LINT:extern uselongdouble
?LINT:change uselongdouble
: Check if morebits is requested
case "$usemorebits" in
"$define"|true|[yY]*)
 use64bitint="$define"
 uselongdouble="$define"
 usemorebits="$define"
 ;;
*) usemorebits="$undef"
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usemorebits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_eaccess: Inlibc
?MAKE: -pick add $@ %<
?S:d_eaccess:
?S: This variable conditionally defines the HAS_EACCESS symbol, which
?S: indicates to the C program that the eaccess() routine is available.
?S:.
?C:HAS_EACCESS :
?C: This symbol, if defined, indicates that the eaccess routine is
?C: available to do extended access checks.
?C:.
?H:#$d_eaccess HAS_EACCESS  /**/
```

```
?H:.
?LINT:set d_eaccess
: see if eaccess exists
set eaccess d_eaccess
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/d_eaccess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpent:
?S: This variable conditionally defines HAS_GETPROTOENT if getprotoent() is
?S: available to look up protocols in some data base or another.
?S:.
?C:HAS_GETPROTOENT:
?C: This symbol, if defined, indicates that the getprotoent() routine is
?C: available to look up protocols in some data base
 or another.
?C:.
?H:#$d_getpent HAS_GETPROTOENT  /**/
?H:.
?LINT:set d_getpent
: see if getprotoent exists
set getprotoent d_getpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_perlio.U,v $
?RCS:
```

```
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_perlio.U,v $
?RCS:
?MAKE:useperlio: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:useperlio:
?S: This variable conditionally defines the USE_PERLIO symbol,
?S: and indicates that the PerlIO abstraction should be
?S: used throughout.
?S:.
?C:USE_PERLIO:
?C: This symbol, if defined, indicates that the PerlIO abstraction should
?C: be used throughout.  If not defined, stdio should be
?C: used in a fully backward compatible manner.
?C:.
?H:?%<:#ifndef USE_PERLIO
?H:?%<:#$useperlio USE_PERLIO  /**/
?H:?%<:#endif
?H:.
: Check if we want perlio
useperlio="$define"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/useperlio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_random_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_random_r random_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_random_r:
?S: This variable conditionally defines the HAS_RANDOM_R symbol,
?S: which indicates to the C program that the random_r()
?S: routine is available.
?S:.
?S:random_r_proto:
```

```
?S: This variable encodes the prototype of random_r.
?S: It is zero if d_random_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_random_r
?S: is defined.
?S:.
?C:HAS_RANDOM_R:
?C: This symbol, if defined, indicates that the random_r routine
?C: is available to random re-entrantly.
?C:.
?C:RANDOM_R_PROTO:
?C: This
 symbol encodes the prototype of random_r.
?C: It is zero if d_random_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_random_r
?C: is defined.
?C:.
?H:#$d_random_r HAS_RANDOM_R /**/
?H:#define RANDOM_R_PROTO $random_r_proto /**/
?H:.
?T:try hdrs d_random_r_proto
: see if random_r exists
set random_r d_random_r
eval $inlibc
case "$d_random_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_random_r_proto:$usethreads" in
 ":define") d_random_r_proto=define
  set d_random_r_proto random_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_random_r_proto" in
 define)
 case "$random_r_proto" in
 "|0) try='int random_r(int*, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_iS ;;
 esac
 case "$random_r_proto" in
 "|0) try='int random_r(long*, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_lS ;;
 esac
 case "$random_r_proto" in
 "|0)
 try='int random_r(struct random_data*, int32_t*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_St ;;
 esac
 case "$random_r_proto" in
```

```
 "|0) d_random_r=undef
  random_r_proto=0
  echo "Disabling random_r, cannot determine prototype." >&4 ;;
 * ) case "$random_r_proto" in
  REENTRANT_PROTO*) ;;
  *) random_r_proto="REENTRANT_PROTO_$random_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "random_r has no prototype, not using it." >&4 ;;
  esac
  d_random_r=undef
  random_r_proto=0
  ;;
 esac
 ;;
*) random_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_random_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_waitpid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_waitpid.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_waitpid: Inlibc
?MAKE: -pick add $@ %<
?S:d_waitpid:
?S: This variable conditionally defines HAS_WAITPID if waitpid() is
?S: available to wait for child process.
?S:.
?C:HAS_WAITPID (WAITPID):
?C: This symbol, if defined, indicates that the waitpid routine is
```

```
?C: available to wait for child process.
?C:.
?H:#$d_waitpid HAS_WAITPID /**/
?H:.
?LINT:set
 d_waitpid
: see if waitpid exists
set waitpid d_waitpid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_waitpid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: man1dir.U,v 3.2 1999/07/08 20:57:21 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996, 1999 Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: man1dir.U,v $
?RCS: Revision 3.2  1999/07/08 20:57:21  doughera
?RCS: Used installprefix.
?RCS:
?RCS: Revision 3.1  1999/07/08 20:52:19  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:10:29  ram
?RCS: patch61: created
?RCS:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and
 man3dir.  This unit is basically dist's mansrc.U with
?X: man1 used instead of man everywhere.
?X:
?MAKE:man1dir man1direxp man1ext installman1dir: cat nroff Loc Oldconfig \
 spackage test Getfile Setprefixvar Prefixit Prefixup sysman Myread \
 prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:man1dir=''
?S:man1dir:
```

```
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?D:man1direxp=''
?S:man1direxp:
?S: This variable is the same as the man1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installman1dir=''
?S:installman1dir:
?S: This variable is really the same as man1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location.
 For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man1ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See man1dir.
?S:.
?T:lookpath
?LINT:change prefixvar
?LINT:set man1direxp
: determine where manual pages go
set man1dir man1dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$man1dir" in
 '') man1dir="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$man1dir" in
' ') dflt=none
 ;;
'')
 lookpath="$prefixexp/share/man/man1"
 lookpath="$lookpath $prefixexp/man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath $prefixexp/man/p_man/man1"
```

```
 lookpath="$lookpath $prefixexp/man/u_man/man1"
 lookpath="$lookpath $prefixexp/man/man.1"
?X: Experience has shown people
 expect man1dir to be under prefix,
?X: so we now always put it there.  Users who want other behavior
?X: can answer interactively or use a command line option.
?X: Does user have System V-style man paths.
 case "$sysman" in
 */?_man*) dflt=`./loc . $prefixexp/l_man/man1 $lookpath` ;;
 *) dflt=`./loc . $prefixexp/man/man1 $lookpath` ;;
 esac
 set dflt
 eval $prefixup
 ;;
*)  dflt="$man1dir"
 ;;
esac
echo " "
fn=dn+~
rp="Where do the main $spackage manual pages (source) go?"
. ./getfile
if $test "X$man1direxp" != "X$ansexp"; then
 installman1dir="
fi
prefixvar=man1dir
. ./setprefixvar

case "$man1dir" in
") man1dir=' '
 installman1dir=";;
esac

: What suffix to use on installed man pages

case "$man1dir" in
' ')
 man1ext='0'
 ;;
*)
 rp="What suffix should be used for the main $spackage man pages?"
 case "$man1ext" in
 ") case "$man1dir" in
  *1)  dflt=1 ;;
  *1p) dflt=1p ;;
  *1pm) dflt=1pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
```

```
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L1)
 dflt=L1;;
  *) dflt=1;;
  esac
  ;;
 *) dflt="$man1ext";;
 esac
 . ./myread
 man1ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/man1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_lstat.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_lstat: Inlibc
?MAKE: -pick add $@ %<
?S:d_lstat:
?S: This variable conditionally defines HAS_LSTAT if lstat() is
?S: available to do file stats on symbolic links.
?S:.
?C:HAS_LSTAT (LSTAT):
?C: This symbol, if defined, indicates that the lstat routine is
?C: available to do file stats on symbolic links.
?C:.
?H:#$d_lstat HAS_LSTAT  /**/
?H:.
?LINT:set
 d_lstat
: see if lstat exists
```

```
set lstat d_lstat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_lstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethname.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:00  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethname d_uname d_phostname aphostname: phostname cat \
 myhostname package d_portable Loc echo n c +i_whoami +usrinc \
 Myread Guess Oldconfig Csym
?MAKE: -pick add $@ %<
?S:d_gethname:
?S: This variable conditionally defines the HAS_GETHOSTNAME symbol,
 which
?S: indicates to the C program that the gethostname() routine may be
?S: used to derive the host name.
?S:.
?S:d_uname:
?S: This variable conditionally defines the HAS_UNAME symbol, which
?S: indicates to the C program that the uname() routine may be
?S: used to derive the host name.
?S:.
?S:d_phostname:
?S: This variable conditionally defines the PHOSTNAME symbol, which
?S: contains the shell command which, when fed to popen(), may be
?S: used to derive the host name.
?S:.
?S:aphostname:
?S: Thie variable contains the command which can be used to compute the
?S: host name. The command is fully qualified by its absolute path, to make
?S: it safe when used by a process with super-user privileges.
```

```
?S:.
?C:HAS_GETHOSTNAME (GETHOSTNAME):
?C: This symbol, if defined, indicates that the C program may use the
?C: gethostname() routine to derive the host name.  See also HAS_UNAME
?C: and PHOSTNAME.
?C:.
?C:HAS_UNAME (UNAME):
?C: This symbol, if defined, indicates that the C program may
 use the
?C: uname() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and PHOSTNAME.
?C:.
?C:PHOSTNAME:
?C: This symbol, if defined, indicates that the C program may use the
?C: contents of PHOSTNAME as a command to feed to the popen() routine
?C: to derive the host name.  See also HAS_GETHOSTNAME and HAS_UNAME.
?C: Note that the command uses a fully qualified path, so that it is safe
?C: even if used by a process with super-user privileges.
?C:.
?H:#$d_gethname HAS_GETHOSTNAME /**/
?H:#$d_uname HAS_UNAME  /**/
?H:#$d_phostname PHOSTNAME "$aphostname" /* How to get the host name */
?H:.
?T:file val call
?LINT:change i_whoami
: see how we will look up host name
echo " "
if false; then
 : dummy stub to allow use of elif
@if HAS_GETHOSTNAME
elif set gethostname val -f d_gethname; eval $csym; $val; then
 echo 'gethostname() found.' >&4
 d_gethname="$define"
 call=gethostname
@end
@if HAS_UNAME
elif set uname val -f d_uname; eval $csym; $val; then
 if ./xenix; then
  $cat <<'EOM'
uname()
 was found, but you're running xenix, and older versions of xenix
have a broken uname(). If you don't really know whether your xenix is old
enough to have a broken system call, use the default answer.

EOM
  dflt=y
  case "$d_uname" in
  "$define") dflt=n;;
```

```
  esac
  rp='Is your uname() broken?'
  . ./myread
  case "$ans" in
  n*) d_uname="$define"; call=uname;;
  esac
 else
  echo 'uname() found.' >&4
  d_uname="$define"
  call=uname
 fi
@end
fi
case "$d_gethname" in
") d_gethname="$undef";;
esac
case "$d_uname" in
") d_uname="$undef";;
esac
@if PHOSTNAME || MYHOSTNAME
case "$d_uname$d_gethname" in
*define*)
 dflt=n
 cat <<EOM

Every now and then someone has a $call() that lies about the hostname
but can't be fixed for political or economic reasons.  If you wish, I can
@if MYHOSTNAME && PHOSTNAME
pretend $call() isn't there and maybe compile in the hostname or
compute it from the '$phostname' command at run-time.
@elsif MYHOSTNAME
pretend $call() isn't there and maybe compile
 in the hostname.
@elsif PHOSTNAME
pretend $call() isn't there and maybe compute hostname at run-time
thanks to the '$phostname' command.
@elsif WHOAMI
get the hostname from whomai.h (provided you have one).
@else
simply ignore your host name and use someting like "noname" instead.
@end

EOM
 rp="Shall I ignore $call() from now on?"
 . ./myread
 case "$ans" in
 y*) d_uname="$undef" d_gethname="$undef"; $echo $n "Okay...$c";;
 esac;;
```

```
esac
@end
@if PHOSTNAME || aphostname
?X: Compute the full path name for the command
case "$phostname" in
") aphostname=";;
*) case "$aphostname" in
 /*) ;;
 *) set X $phostname
  shift
  file=$1
  shift
  file=`./loc $file $file $pth`
  aphostname=`echo $file $*`
  ;;
 esac
 ;;
esac
@end
@if PHOSTNAME && MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ") ;;
 *)
  $cat <<EOT

There is no gethostname() or uname() on this system.  You have two
possibilities at this point:

1)  You can have your host name ($myhostname) compiled
 into $package, which
   lets $package start up faster, but makes your binaries non-portable, or
2)  you can have $package use a

 popen("$aphostname","r")

   which will start slower but be more portable.

@ if WHOAMI
Option 1 will give you the option of using whoami.h if you have one.
@ end
If you want option 2 but with a different command, you can edit config.sh at
the end of this shell script.

EOT
  case "$d_phostname" in
```

```
  "$define") dflt=n;;
  "$undef")  dflt=y;;
  ")
   case "$d_portable" in
   "$define") dflt=n ;;
   *) dflt=y ;;
   esac;;
  esac
  rp="Do you want your host name compiled in?"
  . ./myread
  case "$ans" in
  n*) d_phostname="$define" ;;
  *) aphostname=''; d_phostname="$undef";;
  esac;;
 esac
 case "$aphostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   dflt=y
   $cat <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier
 ($myhostname) hardwired in.
EOM
   rp="Use whoami.h to get hostname?"
   . ./myread
   case "$ans" in
   n*) i_whoami="$undef";;
   esac
   ;;
  "$undef")
   $cat <<EOM
No hostname function and no whoami.h -- hardwiring "$myhostname".
EOM
   ;;
  esac;;
@ else
  echo 'No hostname function -- hardwiring "'$myhostname'".' >&4;;
@ end
 esac;;
esac
@elsif PHOSTNAME
```

```
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   $cat <<EOM

No hostname function--we'll use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

EOM
   ;;
  *) echo "There will be no way for $package to get your hostname." >&4;;
  esac;;
@ else
  echo "There will be no way for $package to get your hostname." >&4;;
@ end
 *)
 echo "I'll use 'popen(""$aphostname"', "r")"" to get your hostname." >&4
  ;;
 esac;;
esac
@elsif MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
@ if WHOAMI
 case "$i_whoami" in
 "$define")
  dflt=y
  $cat
 <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
  rp="Use whoami.h to get hostname?"
  . ./myread
  case "$ans" in
  n*) i_whoami="$undef";;
  esac
```

```
  ;;
 "$undef")
  echo 'No whoami.h--hardwiring "'$myhostname'".' >&4;;
 esac;;
@ else
 echo 'Hardwiring "'$myhostname'".' >&4;;
@ end
esac
@end
case "$d_phostname" in
") d_phostname="$undef";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Config_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_h.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  14:57:43  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:10:49  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:25:39  ram
?RCS: patch49: typo fixes in leading config.h comment (WED)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/24  12:13:20  ram
?RCS: patch3: added TOP as a local shell temporary variable
?RCS:
?RCS:
 Revision 3.0.1.1  1993/08/19  06:42:20  ram
?RCS: patch1: leading config.sh searching was not aborting properly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: This file ends up producing the config_h.SH script, which is run to produce
?X: the config.h file.  The file ./.Config_h below contains all the ?H: lines
?X: extracted out of all the units.  Metaconfig itself adds the !GROK!THIS!.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?X: For those who wish to know why the file is config_h.SH instead of the more
?X: natural config.h.SH, well... it is to support systems like MS-DOG. Only one
?X: 'dot' is allowed within the file name, as it is part of the "extension" of
?X: the file. MS-DOG will not let you have two 'dots' because that would mean
?X: two "extensions".
?X:
?MAKE:Config_h: Id End Config_sh Obsol_h myuname cf_time cf_by package src
?MAKE: -pick c_h_weed $@ %<
?MAKE: -pick
 c_h_weed $@ ./Config_h
?MAKE: -pick c_h_weed $@ ./Obsol_h
?T:PERL_CONFIG_SH TOP
?LINT:unclosed !GROK!THIS!
?LINT:extern CONFIG_H CONFIG_SH
?LINT:change CONFIG_H CONFIG_SH
?X:?LINT:nocomment
: Set up for generating config_h.SH
case "$CONFIG_SH" in
") CONFIG_SH=config.sh;;
esac
case "$CONFIG_H" in
") CONFIG_H=config.h;;
esac
case $PERL_CONFIG_SH in
")
 if test -f $CONFIG_SH; then TOP=.;
 elif test -f ../$CONFIG_SH; then TOP=..;
 elif test -f ../../$CONFIG_SH; then TOP=../..;
 elif test -f ../../../$CONFIG_SH; then TOP=../../..;
 elif test -f ../../../../$CONFIG_SH; then TOP=../../../..;
 else
  echo "Can't find $CONFIG_SH."; exit 1
 fi
 . $TOP/$CONFIG_SH
 ;;
esac
?X: Make sure we are in the directory where the .SH file is located.
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting $CONFIG_H (with variable substitutions)"
?X:
?X: Since we unconditionally translate leading #undef into /*#define, we're
```

```
?X: stuck when we really want to have a #undef in $CONFIG_H.
 That's why there
?X: is provision here for #un-def, which is translated back into #undef after
?X: all original #undef have been processed.
?X:
?X: Previously, we changed all
?X:  #undef FOO /**/
?X: into
?X:  /*#define FOO /**/
?X: The xlc compiler (available on IBM's AIX) complains that this is
?X: an illegal attempt to write a nested comment, and warns against it.
?X: There's apparently no way to shut the compiler up, either.
?X: This sed command from Hallvard B Furuseth <h.b.furuseth@usit.uio.no>
?X: changes it to
?X:  /*#define FOO / **/
sed <<!GROK!THIS! >$CONFIG_H -e 's!^#undef\(.*/\)\*!/\*#define\1 \*!' -e 's!^#un-def!#undef!'
/* This file was produced by running the config_h.SH script, which
* gets its values from $CONFIG_SH, which is generally produced by
* running Configure.
*
* Feel free to modify any of this as the need arises.  Note, however,
* that running config_h.SH again will wipe out any changes you've made.
* For a more permanent change edit $CONFIG_SH and
 rerun config_h.SH.
*/

/* Package name      : $package
* Source directory  : $src
* Configuration time: $cf_time
* Configured by     : $cf_by
* Target system     : $myuname
*/

#ifndef _config_h_
#define _config_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Config_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?X:
?X: This unit allows the duplication of the source tree to the current
?X: directory via symbolic links.  This must be requested explicitly
?X: by them issuing a -Dmksymlinks on the command line.
?X:
?MAKE:Mksymlinks: Mkdirp lns issymlink src rsrc pkgsrc
?MAKE: -pick add $@ %<
?F:!UU
?T: dir filename tmppwd filelist
?LINT:extern mksymlinks
@if {test -f ../MANIFEST}
: Duplicate the tree with symbolic links if -Dmksymlinks was supplied
case "$mksymlinks"
 in
$define|true|[yY]*)
 echo " "
 case "$src" in
 "|'.') echo "Cannot create symlinks in the original directory." >&4
  exit 1
  ;;
 *) case "$lns:$issymlink" in
  *"ln"*" -s:"*"test -"?)
   echo "Creating the symbolic links..." >&4
   echo "(First creating the subdirectories...)" >&4
   cd ..
   awk '{print $1}' $src/MANIFEST | grep / | sed 's:/[^/]*$::' | \
    sort -u | while true
   do
    read dir
    test -z "$dir" && break
    ./UU/mkdirp $dir 2>/dev/null
    if test -d $dir; then
     : ok
    else
     echo "Failed to create '$dir'.  Aborting." >&4
     exit 1
    fi
   done
   echo "(Now creating the symlinks...)" >&4
   awk '{print $1}' $src/MANIFEST | while true; do
    read filename
    test -z "$filename" && break
    if test -f $filename; then
     if $issymlink $filename; then
```

```
      rm -f $filename
     fi
    fi
    if test -f $filename; then
     echo "$filename already exists, not symlinking."
    else
?X: Note that the following works because "$pkgsrc" is absolute
     ln
 -s $pkgsrc/$filename $filename
    fi
   done
?X: Check that everything was correctly copied
   echo "(Checking current directory...)" >&4
   cd UU
   awk '$1 !~ /PACK[A-Z]+/ {print $1}' "$rsrc/MANIFEST" | \
    (split -l 50 2>/dev/null || split -50)
   rm -f missing
   tmppwd=`pwd`
   for filelist in x??; do
    (cd ..; ls `cat "$tmppwd/$filelist"` \
     >/dev/null 2>>"$tmppwd/missing")
   done
   if test -s missing; then
    echo "Failed duplication of source tree.  Aborting." >&4
    exit 1
   fi
   ;;
  *) echo "(I cannot figure out how to do symbolic links, ignoring!)" >&4
   ;;
  esac
  ;;
 esac
 ;;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Mksymlinks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Whoa.U,v 3.0.1.2 1997/02/28 15:21:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Whoa.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:21:21  ram
?RCS: patch61: whoa script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:01  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to warn the user in case a change into a variable
 is noticed.
?X:
?X: To use this unit, $was must hold the old value that has changed. Upon
?X: exit, the two variables $td and $tu are set to the correct value for
?X: respectively defining or undefining a variable. For instance, if $vas was
?X: $undef, but now $var is $define, after calling . whoa, you should use
?X: eval "$var=\$tu" to finally set $var to the correct value. See unit Inlibc.
?X:
?MAKE:Whoa: Myread startsh hint
?MAKE: -pick add $@ %<
?F:./whoa
?T:var was td tu hintfile
: set up the script used to warn in case of inconsistency
cat <<EOS >whoa
$startsh
EOS
cat <<'EOSC' >>whoa
dflt=y
case "$hint" in
   recommended)
 case "$hintfile" in
 ") echo "The $hint value for \$$var on this machine was \"$was\"!" >&4
  ;;
 *) echo "Hmm.  Based on the hints in hints/$hintfile.sh, " >&4
  echo "the $hint value for \$$var on this machine was \"$was\"!" >&4
  ;;
 esac
 ;;
   *) echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    The $hint value for \$$var on this machine was
```

```
 \"$was\"!" >&4
 ;;
esac
rp="    Keep the $hint value?"
. ./myread
case "$ans" in
y) td=$was; tu=$was;;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Whoa.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpgetround: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpgetround:
?S: This variable conditionally defines HAS_FPGETROUND if fpgetround()
?S: is available to get the floating point rounding mode.
?S:.
?C:HAS_FPGETROUND:
?C: This symbol, if defined, indicates that the fpgetround routine is
?C: available to get the floating point rounding mode.
?C:.
?H:#$d_fpgetround HAS_FPGETROUND  /**/
?H:.
?LINT:set d_fpgetround
: see if fpgetround exists
set fpgetround d_fpgetround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpgetround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gconvert.U,v 3.0.1.3 1997/02/28 15:33:38 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_gconvert.U,v $
?RCS: Revision 3.0.1.3 1997/02/28  15:33:38  ram
?RCS: patch61: integrated new unit from perl5
?RCS:
?RCS: Revision 3.0.1.2 1995/07/25  13:55:59  ram
?RCS: patch56: improved comments about the Gconvert macro (ADO)
?RCS: patch56: force compile-link test since it may exist but be unusable (ADO)
?RCS:
?RCS: Revision 3.0.1.1 1994/10/29  16:12:51  ram
?RCS: patch36:
 created by ADO
?RCS:
?MAKE:d_Gconvert: \
 Compile cat Inlibc rm _o rm_try i_stdlib d_qgcvt run \
 uselongdouble d_longdbl d_PRIgldbl sPRIgldbl
?MAKE: -pick add $@ %<
?S:d_Gconvert:
?S: This variable holds what Gconvert is defined as to convert
?S: floating point numbers into strings.  By default, Configure
?S: sets this macro to use the first of gconvert, gcvt, or sprintf
?S: that pass sprintf-%g-like behavior tests.  If perl is using
?S: long doubles, the macro uses the first of the following
?S: functions that pass Configure's tests: qgcvt, sprintf (if
?S: Configure knows how to make sprintf format long doubles--see
?S: sPRIgldbl), gconvert, gcvt, and sprintf (casting to double).
?S: The gconvert_preference and gconvert_ld_preference variables
?S: can be used to alter Configure's preferences, for doubles and
?S: long doubles, respectively.  If present, they contain a
?S: space-separated list of one or more of the above function
?S: names in the order they should be tried.
?S:
?S: d_Gconvert
 may be set to override Configure with a platform-
?S: specific function.  If this function expects a double, a
?S: different value may need to be set by the uselongdouble.cbu
?S: call-back unit so that long doubles can be formatted without
?S: loss of precision.
?S:.
?C:Gconvert:
?C: This preprocessor macro is defined to convert a floating point
?C: number to a string without a trailing decimal point.  This
?C: emulates the behavior of sprintf("%g"), but is sometimes much more
?C: efficient.  If gconvert() is not available, but gcvt() drops the
?C: trailing decimal point, then gcvt() is used.  If all else fails,
?C: a macro using sprintf("%g") is used. Arguments for the Gconvert
?C: macro are: value, number of digits, whether trailing zeros should
```

```
?C: be retained, and the output buffer.
?C: The usual values are:
?C:  d_Gconvert='gconvert((x),(n),(t),(b))'
?C:  d_Gconvert='gcvt((x),(n),(b))'
?C:  d_Gconvert='sprintf((b),"%.*g",(n),(x))'
?C: The last two assume trailing zeros should
 not be kept.
?C:.
?H:#define Gconvert(x,n,t,b) $d_Gconvert
?H:.
?T: xxx_list xxx_convert xxx_ld_list
?F:!try
?LINT:extern gconvert_preference
?LINT:extern gconvert_ld_preference
: Check how to convert floats to strings.

if test "X$d_Gconvert" = X; then

echo " "
echo "Checking for an efficient way to convert floats to strings."
echo " " > try.c
case "$uselongdouble" in
"$define") echo "#define USE_LONG_DOUBLE" >>try.c ;;
esac
case "$d_longdbl" in
"$define") echo "#define HAS_LONG_DOUBLE" >>try.c ;;
esac
case "$d_PRIgldbl" in
"$define") echo "#define HAS_PRIgldbl"    >>try.c ;;
esac
$cat >>try.c <<EOP
#ifdef TRY_gconvert
#define Gconvert(x,n,t,b) gconvert((x),(n),(t),(b))
const char *myname = "gconvert";
#endif
#ifdef TRY_gcvt
#define Gconvert(x,n,t,b) gcvt((x),(n),(b))
const char *myname = "gcvt";
#endif
#ifdef TRY_qgcvt
#define Gconvert(x,n,t,b) qgcvt((x),(n),(b))
const char *myname = "qgcvt";
#define DOUBLETYPE long double
#endif
#ifdef TRY_sprintf
#if defined(USE_LONG_DOUBLE) &&
 defined(HAS_LONG_DOUBLE)
#ifdef HAS_PRIgldbl
```

```
#define Gconvert(x,n,t,b) sprintf((b),"%.*"$sPRIgldbl,(n),(x))
#else
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(double)(x))
#endif
#else
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(x))
#endif
const char *myname = "sprintf";
#endif

#ifndef DOUBLETYPE
#if defined(USE_LONG_DOUBLE) && defined(HAS_LONG_DOUBLE)
#define DOUBLETYPE long double
#else
#define DOUBLETYPE double
#endif
#endif

#include <stdio.h>

#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>

void checkit(const char *expect, char *got)
{
   if (strcmp(expect, got)) {
  printf("%s oddity:  Expected %s, got %s\n",
   myname, expect, got);
  exit(1);
 }
}

void lencheck(int expect, int got)
{
   if (expect != got) {
  printf("%s length mismatch:  Expected %d, got %d\n",
   myname, expect, got);
  exit(1);
 }
}

int main()
{
 char buf[64];
 buf[63] = '\0';
```

```
/* This must be 1st test on (which?) platform */
/* Alan Burlison <AlanBurlsin@unn.unisys.com>
*/
Gconvert((DOUBLETYPE)0.1, 8, 0, buf);
checkit("0.1", buf);

Gconvert((DOUBLETYPE)0.01, 8, 0, buf);
checkit("0.01", buf);

Gconvert((DOUBLETYPE)0.001, 8, 0, buf);
checkit("0.001", buf);

Gconvert((DOUBLETYPE)0.0001, 8, 0, buf);
checkit("0.0001", buf);

Gconvert((DOUBLETYPE)0.00009, 8, 0, buf);
if (strlen(buf) > 5)
   checkit("9e-005", buf); /* for Microsoft ?? */
else
   checkit("9e-05", buf);

Gconvert((DOUBLETYPE)1.0, 8, 0, buf);
checkit("1", buf);

Gconvert((DOUBLETYPE)1.1, 8, 0, buf);
checkit("1.1", buf);

Gconvert((DOUBLETYPE)1.01, 8, 0, buf);
checkit("1.01", buf);

Gconvert((DOUBLETYPE)1.001, 8, 0, buf);
checkit("1.001", buf);

Gconvert((DOUBLETYPE)1.0001, 8, 0, buf);
checkit("1.0001", buf);

Gconvert((DOUBLETYPE)1.00001, 8, 0, buf);
checkit("1.00001", buf);

Gconvert((DOUBLETYPE)1.000001, 8, 0, buf);
checkit("1.000001", buf);

Gconvert((DOUBLETYPE)0.0, 8, 0, buf);
checkit("0", buf);

Gconvert((DOUBLETYPE)-1.0, 8, 0, buf);
checkit("-1",
```

```
 buf);

 /* Some Linux gcvt's give 1.e+5 here. */
 Gconvert((DOUBLETYPE)100000.0, 8, 0, buf);
 checkit("100000", buf);

 /* Some Linux gcvt's give -1.e+5 here. */
 Gconvert((DOUBLETYPE)-100000.0, 8, 0, buf);
 checkit("-100000", buf);

 Gconvert((DOUBLETYPE)123.456, 8, 0, buf);
 checkit("123.456", buf);

 /* Testing of 1e+129 in bigintpm.t must not get extra '.' here. */
 Gconvert((DOUBLETYPE)1e34, 8, 0, buf);
 /* 34 should be enough to scare even long double
  * places into using the e notation. */
 if (strlen(buf) > 5)
    checkit("1e+034", buf); /* for Microsoft */
 else
    checkit("1e+34", buf);

 /* Test for an Ubuntu/Debian bug in gcvt and qgcvt. See:        *
  * https://bugs.launchpad.net/ubuntu/+source/glibc/+bug/1899553 */

 Gconvert((DOUBLETYPE)0.4, 53, 0, buf);
 lencheck(55, (int)strlen(buf));

 /* For Perl, if you add additional tests here, also add them to
  * t/base/num.t for benefit of platforms not using Configure or
  * overriding d_Gconvert */

 exit(0);
}
EOP
?X:
 List of order in which to search for functions.
?X: Usual order of efficiency is gconvert gcvt sprintf
?X: If a hint file sets a d_Gconvert="gconvert" or "gcvt" or "sprintf",
?X: then that is taken as a hint for which function to try first.
?X: (e.g. that function may be in a problematic /usr/ucblib library, and
?X: the user may or may not choose to use -lucb stuff.)
?X: Any other hint file (or previous config.sh) setting is left intact.
: first add preferred functions to our list
xxx_list=""
for xxx_convert in $gconvert_preference; do
   case $xxx_convert in
   gcvt|gconvert|sprintf) xxx_list="$xxx_list $xxx_convert" ;;
```

```
   *) echo "Discarding unrecognized gconvert_preference $xxx_convert" >&4 ;;
   esac
done
: then add any others
for xxx_convert in gconvert gcvt sprintf; do
   case "$xxx_list" in
   *$xxx_convert*) ;;
   *) xxx_list="$xxx_list $xxx_convert" ;;
   esac
done

case "$d_longdbl$uselongdouble" in
"$define$define")
   : again, add preferred functions to our
 list first
   xxx_ld_list=""
   for xxx_convert in $gconvert_ld_preference; do
       case $xxx_convert in
       qgcvt|gcvt|gconvert|sprintf) xxx_ld_list="$xxx_ld_list $xxx_convert" ;;
       *) echo "Discarding unrecognized gconvert_ld_preference $xxx_convert" ;;
       esac
   done
   : then add qgcvt, sprintf--then, in xxx_list order, gconvert and gcvt
   for xxx_convert in qgcvt sprintf $xxx_list; do
       case "$xxx_ld_list" in
       $xxx_convert*|*" $xxx_convert"*) ;;
       *) xxx_ld_list="$xxx_ld_list $xxx_convert" ;;
       esac
   done
   : if sprintf cannot do long doubles, move it to the end
   if test "$d_PRIgldbl" != "$define"; then
       xxx_ld_list="`echo $xxx_ld_list|sed s/sprintf//` sprintf"
   fi
   : if no qgcvt, remove it
   if test "$d_qgcvt" != "$define"; then
       xxx_ld_list="`echo $xxx_ld_list|sed s/qgcvt//`"
   fi
   : use the ld_list
   xxx_list="$xxx_ld_list"
   ;;
esac

for xxx_convert in $xxx_list; do
 echo "Trying $xxx_convert..."
?X:
 Do NOT use $rm_try here, as we need to keep try.c
 $rm -f try try$_o core
 set try -DTRY_$xxx_convert
```

```
 if eval $compile; then
  echo "$xxx_convert() found." >&4
  if $run ./try; then
   echo "I'll use $xxx_convert to convert floats into a string." >&4
   break;
  else
   echo "...But $xxx_convert didn't work as I expected."
   xxx_convert=''
  fi
 else
  echo "$xxx_convert NOT found." >&4
  xxx_convert=''
 fi
done

if test X$xxx_convert = X; then
   echo "*** WHOA THERE!!! ***" >&4
   echo "None of ($xxx_list)  seemed to work properly.  I'll use sprintf." >&4
   xxx_convert=sprintf
fi

case "$xxx_convert" in
gconvert) d_Gconvert='gconvert((x),(n),(t),(b))' ;;
gcvt) d_Gconvert='gcvt((x),(n),(b))' ;;
qgcvt) d_Gconvert='qgcvt((x),(n),(b))' ;;
*) case "$uselongdouble$d_longdbl$d_PRIgldbl" in
  "$define$define$define")
     d_Gconvert="sprintf((b),\"%.*\"$sPRIgldbl,(n),(x))" ;;
  "$define$define$undef")
     d_Gconvert='sprintf((b),"%.*g",(n),(double)(x))' ;;
  *) d_Gconvert='sprintf((b),"%.*g",(n),(x))'
 ;;
  esac
  ;;
esac

fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_gconvert.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setpwent_r setpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_setpwent_r:
?S: This variable conditionally defines the HAS_SETPWENT_R symbol,
?S: which indicates to the C program that the setpwent_r()
?S: routine is available.
?S:.
?S:setpwent_r_proto:
?S: This variable encodes the prototype of setpwent_r.
?S: It is zero if d_setpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setpwent_r
?S: is defined.
?S:.
?C:HAS_SETPWENT_R:
?C: This symbol, if defined, indicates that the setpwent_r routine
?C: is available to
 setpwent re-entrantly.
?C:.
?C:SETPWENT_R_PROTO:
?C: This symbol encodes the prototype of setpwent_r.
?C: It is zero if d_setpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setpwent_r
?C: is defined.
?C:.
?H:#$d_setpwent_r HAS_SETPWENT_R /**/
?H:#define SETPWENT_R_PROTO $setpwent_r_proto /**/
?H:.
?T:try hdrs d_setpwent_r_proto
: see if setpwent_r exists
set setpwent_r d_setpwent_r
eval $inlibc
case "$d_setpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_setpwent_r_proto:$usethreads" in
 ":define") d_setpwent_r_proto=define
  set d_setpwent_r_proto setpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setpwent_r_proto" in
 define)
 case "$setpwent_r_proto" in
 "|0) try='int setpwent_r(FILE**);'
```

```
 ./protochk "$extern_C $try" $hdrs && setpwent_r_proto=I_H ;;
 esac
 case "$setpwent_r_proto" in
"|0) try='void setpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setpwent_r_proto=V_H ;;
 esac
 case "$setpwent_r_proto"
 in
"|0) d_setpwent_r=undef
  setpwent_r_proto=0
  echo "Disabling setpwent_r, cannot determine prototype." >&4 ;;
 * ) case "$setpwent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setpwent_r_proto="REENTRANT_PROTO_$setpwent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setpwent_r has no prototype, not using it." >&4 ;;
  esac
  d_setpwent_r=undef
  setpwent_r_proto=0
  ;;
 esac
 ;;
*) setpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setpwent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: myhostname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:15:55  ram
?RCS: patch61: improved hostname lookup by using ypmatch when NIS is used
?RCS:
```

```
?RCS: Revision 3.0.1.2  1994/10/29  16:25:43  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS: patch36: now uses new Tr unit to convert to/from lowercase
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:20  ram
?RCS: patch30: now a little more clever for domain name guessing
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:18  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:myhostname phostname mydomain: contains sed test Myread Oldconfig \
 Guess Loc awk echo sort uniq +usrinc rm hostcat Tr osname
?MAKE: -pick add $@ %<
?S:myhostname (hostname):
?S: This variable contains the eventual value of the MYHOSTNAME symbol,
?S: which is the name of the host the program is going to run on.
?S: The domain is not kept with hostname, but must be gotten from mydomain.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:mydomain:
?S: This variable contains the eventual value of the MYDOMAIN symbol,
?S: which is the domain of the host the program is going to run on.
?S: The domain must be appended to myhostname to form a complete host name.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:phostname:
?S: This variable contains the eventual value of the PHOSTNAME symbol,
?S: which is a command that can be fed to popen() to get the host name.
?S: The program
 should probably not presume that the domain is or isn't
?S: there already.
?S:.
?C:MYHOSTNAME (HOSTNAME):
?C: This symbol contains name of the host the program is going to run on.
?C: The domain is not kept with hostname, but must be gotten from MYDOMAIN.
?C: The dot comes with MYDOMAIN, and need not be supplied by the program.
?C: If gethostname() or uname() exist, MYHOSTNAME may be ignored. If MYDOMAIN
?C: is not used, MYHOSTNAME will hold the name derived from PHOSTNAME.
?C:.
?C:MYDOMAIN:
?C: This symbol contains the domain of the host the program is going to
?C: run on.  The domain must be appended to HOSTNAME to form a complete
?C: host name.  The dot comes with MYDOMAIN, and need not be supplied by
?C: the program.  If the host name is derived from PHOSTNAME, the domain
?C: may or may not already be there, and the program should check.
?C:.
?H:#define MYHOSTNAME "$myhostname"  /**/
```

```
?H:#define MYDOMAIN "$mydomain"  /**/
?H:.
?T:cont i tans tmp_re file
: now get the host name
echo
 " "
echo "Figuring out host name..." >&4
case "$myhostname" in
") cont=true
 echo 'Maybe "hostname" will work...'
 if tans=`sh -c hostname 2>&1` ; then
  myhostname=$tans
  phostname=hostname
  cont=''
 fi
 ;;
*) cont='';;
esac
if $test "$cont"; then
 if ./xenix; then
  echo 'Oh, dear.  Maybe "/etc/systemid" is the key...'
  if tans=`cat /etc/systemid 2>&1` ; then
   myhostname=$tans
   phostname='cat /etc/systemid'
   echo "Whadyaknow.  Xenix always was a bit strange..."
   cont=''
  fi
 elif $test -r /etc/systemid; then
  echo "(What is a non-Xenix system doing with /etc/systemid?)"
 fi
fi
if $test "$cont"; then
 echo 'No, maybe "uuname -l" will work...'
 if tans=`sh -c 'uuname -l' 2>&1` ; then
  myhostname=$tans
  phostname='uuname -l'
 else
  echo 'Strange.  Maybe "uname -n" will work...'
  if tans=`sh -c 'uname -n' 2>&1` ; then
   myhostname=$tans
   phostname='uname -n'
  else
   echo 'Oh well, maybe I can mine it out of whoami.h...'
   if tans=`sh -c $contains' sysname $usrinc/whoami.h'
 2>&1` ; then
    myhostname=`echo "$tans" | $sed 's/^.*"\(.*\)"/\1/'`
    phostname="sed -n -e ""/sysname/s/^.*\"\\(.*\\)\"/\1/{'"" -e p -e q -e '}' <$usrinc/whoami.h"
   else
```

```
    case "$myhostname" in
    ") echo "Does this machine have an identity crisis or something?"
     phostname=";;
    *)
     echo "Well, you said $myhostname before..."
     phostname='echo $myhostname';;
    esac
   fi
  fi
 fi
fi
case "$myhostname" in
") myhostname=noname ;;
esac
: you do not want to know about this
set $myhostname
myhostname=$1

: verify guess
if $test "$myhostname" ; then
 dflt=y
 rp='Your host name appears to be "'$myhostname'".' Right?"
 . ./myread
 case "$ans" in
 y*) ;;
 *) myhostname=";;
 esac
fi

: bad guess or no guess
while $test "X$myhostname" = X ; do
 dflt="
 rp="Please type the (one word) name of your host:"
 . ./myread
 myhostname="$ans"
done

: translate upper to lower if necessary
case "$myhostname" in
*[A-Z]*)
 echo "(Normalizing case in your host name)"
 myhostname=`echo
 $myhostname | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

?X: Do not ask for domain name if this is not used later on. In that
?X: case, the hostname may keep its domain name, but it doesn't matter.
```

```
@if MYDOMAIN || mydomain
case "$myhostname" in
*.*)
 dflt=`expr "X$myhostname" : "X[^.]*\(\..*\)"`
 myhostname=`expr "X$myhostname" : "X\([^.]*\)\."`
 echo "(Trimming domain name from host name--host name is now $myhostname)"
 ;;
*) case "$mydomain" in
 ")
?X:
?X: There is currently no way to say we do not want hostcat if mydomain is not
?X: used. One way to achieve that would be to put that code in a mydomain.U
?X: unit. However, we want to stick the sanity checks right after the domain
?X: name computation, or if none is done, right after the hostname computation.
?X:
  {
?X: If we use NIS, try ypmatch.
   test "X$hostcat" = "Xypcat hosts" &&
   ypmatch "$myhostname" hosts 2>/dev/null |\
    $sed -e 's/[  ]*#.*//; s/$/ /' > hosts && \
   $test -s hosts
  } || {
?X: Extract only
 the relevant hosts, reducing file size,
?X: remove comments, insert trailing space for later use.
        $hostcat | $sed -n -e "s/[  ]*#.*//; s/\$/ /
     /[  ]$myhostname[ . ]/p" > hosts
  }
  tmp_re="[ . ]"
  $test x`$awk "/[0-9].*[  ]$myhostname$tmp_re/ { sum++ }
        END { print sum }" hosts` = x1 || tmp_re="[  ]"
  dflt=.`$awk \
  "/[0-9].*[  ]$myhostname$tmp_re/ {for(i=2; i<=NF;i++) print \\\$i}" \
   hosts | $sort | $uniq | \
   $sed -n -e "s/$myhostname\.\([-a-zA-Z0-9_.]\)/\1/p"`
  case `$echo X$dflt` in
  X*\ *) echo "(Several hosts in /etc/hosts matched hostname)"
   dflt=.
   ;;
?X: There is no /etc/hosts on os390
  X.)
   if $test -f /etc/hosts; then
    echo "(You do not have fully-qualified names in /etc/hosts)"
   else
    echo "(I cannot locate a hosts database anywhere)"
   fi
   ;;
  esac
```

```
  case "$dflt" in
  .)
   tans=`./loc resolv.conf X /etc /usr/etc`
   if $test -f "$tans"; then
    echo "(Attempting domain name extraction from $tans)"
?X: Look for either a search
 or a domain directive.
    dflt=.`$sed -n -e 's/ / /g' \
      -e 's/^search  *\([^ ]*\).*/\1/p' $tans \
      | ./tr '[A-Z]' '[a-z]' 2>/dev/null`
    case "$dflt" in
    .) dflt=.`$sed -n -e 's/ / /g' \
         -e 's/^domain  *\([^ ]*\).*/\1/p' $tans \
         | ./tr '[A-Z]' '[a-z]' 2>/dev/null`
      ;;
    esac
   fi
   ;;
  esac
  case "$dflt" in
  .) echo "(No help from resolv.conf either -- attempting clever guess)"
   dflt=.`sh -c domainname 2>/dev/null`
   case "$dflt" in
   ") dflt='.';;
   .nis.*|.yp.*|.main.*) dflt=`echo $dflt | $sed -e 's/^\.[^.]*//'`;;
   esac
   ;;
  esac
  case "$dflt$osname" in
  .os390)
   file="//'SYS1.TCPPARMS(TCPDATA)'"
   echo "(Attempting domain name extraction from $file)"
   dflt=.`awk '/^DOMAINORIGIN/ {print $2}' "$file" 2>/dev/null`
   ;;
   esac
  case "$dflt" in
  .) echo "(Lost all hope -- silly guess then)"
   dflt='.nonet'
   ;;
  esac
  $rm -f hosts
  ;;
 *) dflt="$mydomain";;
 esac;;
esac
echo " "
rp="What is your domain name?"
.
```

```
 ./myread
tans="$ans"
case "$ans" in
") ;;
.*) ;;
*) tans=".$tans";;
esac
mydomain="$tans"

: translate upper to lower if necessary
case "$mydomain" in
*[A-Z]*)
 echo "(Normalizing case in your domain name)"
 mydomain=`echo $mydomain | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

@end
: a little sanity check here
case "$phostname" in
") ;;
*)
 case `$phostname | ./tr '[A-Z]' '[a-z]'` in
 $myhostname$mydomain|$myhostname) ;;
 *)
  case "$phostname" in
  sed*)
   echo "(That doesn't agree with your whoami.h file, by the way.)"
   ;;
  *)
   echo "(That doesn't agree with your $phostname command, by the way.)"
   ;;
  esac
 ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/myhostname.U
No license file was found, but licenses were detected in source scan.

```
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```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: randbits.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:19:29  ram
?RCS: patch61: added <unistd.h> and <stdlib.h> to the C program test
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit has been somewhat made obsolete with creation of the
?X: randfunc function (which finds out how to generate random
?X: numbers between 0 and 1.
?X:
?MAKE:randbits: cat rm Myread cc i_unistd i_stdlib
?MAKE: -pick add $@ %<
?S:randbits:
?S: This
 variable contains the eventual value of the RANDBITS symbol,
?S: which indicates to the C program how many bits of random number
?S: the rand() function produces.
?S:.
?C:RANDBITS:
?C: This symbol contains the number of bits of random number the rand()
?C: function produces.  Usual values are 15, 16, and 31.
?C:.
?H:#define RANDBITS $randbits  /**/
?H:.
: check for size of random number generator
echo " "
case "$randbits" in
")
 echo "Checking to see how many bits your rand function produces..." >&4
 $cat >try.c <<EOCP
#$i_unistd I_UNISTD
#$i_stdlib I_STDLIB
#include <stdio.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
EOCP
 $cat >>try.c <<'EOCP'
int main()
```

```
{
 register int i;
 register unsigned long tmp;
 register unsigned long max = 0L;

 for (i = 1000; i; i--) {
  tmp = (unsigned long)rand();
  if (tmp > max) max = tmp;
 }
 for (i = 0; max; i++)
  max /= 2;
 printf("%d\n",i);
}
EOCP
 if $cc -o try try.c >/dev/null 2>&1 ; then
  dflt=`try`
 else
  dflt='?'
  echo
 "(I can't seem to compile the test program...)"
 fi
 ;;
*)
 dflt="$randbits"
 ;;
esac
rp='How many bits does your rand() function produce?'
. ./myread
randbits="$ans"
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/randbits.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Filexp.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:52:53  ram
?RCS: patch36: added ?F: line for metalint file checking
```

```
?RCS: patch36: added HOME to the ?T: line since metalint now checks ${HOME}
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:00  ram
?RCS: patch23: made sure error status from csh is propagated (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which will expand filenames beginning
?X:
 with tildes.  The script is deleted at the end of Configure.
?X:
?MAKE:Filexp: startsh sed test expr eunicefix
?MAKE: -pick add $@ %<
?F:./filexp
?T:HOME LOGDIR dir me name failed
: set up shell script to do ~ expansion
cat >filexp <<EOSS
$startsh
: expand filename
?X:
?X: The case entries below escape the ~ as some shells have shown expansion
?X: of the ~ during here-doc processing.
?X:
case "\$1" in
\~/*|\~)
 echo \$1 | $sed "s|~|\${HOME-\$LOGDIR}|"
 ;;
\~*)
 if $test -f /bin/csh; then
  /bin/csh -f -c "glob \$1"
  failed=\$?
  echo ""
  exit \$failed
 else
  name=\`$expr x\$1 : '..\([^/]*\)'\`
  dir=\`$sed -n -e "/^\${name}:/{s/^[^:]*:[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\).*'"\$'"/\1/" -e p -e q -e '}' </etc/passwd\`
  if $test ! -d "\$dir"; then
   me=\`basename \$0\`
   echo "\$me: can't locate home directory for: \$name" >&2
   exit 1
  fi
  case "\$1" in
  */*)
   echo \$dir/\`$expr x\$1 : '..[^/]*/\(.*\)'\`
   ;;
  *)
```

```
   echo \$dir
   ;;
  esac
 fi
 ;;
*)
 echo \$1
 ;;
esac
EOSS
chmod
 +x filexp
$eunicefix filexp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Filexp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_sqrtl: Inlibc
?MAKE: -pick add $@ %<
?S:d_sqrtl:
?S: This variable conditionally defines the HAS_SQRTL symbol, which
?S: indicates to the C program that the sqrtl() routine is available.
?S:.
?C:HAS_SQRTL:
?C: This symbol, if defined, indicates that the sqrtl routine is
?C: available to do long double square roots.
?C:.
?H:#$d_sqrtl HAS_SQRTL  /**/
?H:.
?LINT:set d_sqrtl
: see if sqrtl exists
set sqrtl d_sqrtl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sqrtl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usecbacktrace.U,v $
?RCS:
```

```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usecbacktrace.U,v $
?RCS:
?MAKE:usecbacktrace: Myread Oldconfig Setvar Getfile d_backtrace
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecbacktrace:
?S: This variable indicates whether we are compiling with backtrace
?S: support.
?S:.
?C:USE_C_BACKTRACE:
?C: This symbol, if defined, indicates that Perl should
?C: be built with support for backtrace.
?C:.
?H:#$usecbacktrace USE_C_BACKTRACE  /**/
?H:.
: Check if C backtrace is actually supported.
case "$usecbacktrace" in
 "") usecbacktrace=$undef ;;
 [yY]*|true|$define)
   case "$d_backtrace" in
     [yY]*|true|$define)
       ;;
     *)
       echo "This system does not support backtrace" >&4
       usecbacktrace=$undef

  ;;
     esac
   ;;
 esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usebacktrace.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: pkgsrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:pkgsrc: src rsrc
?MAKE: -pick add $@ %<
?S:pkgsrc:
?S: This variable holds the absolute path of the package source.
?S:.
?C:PACKAGE_SOURCE_DIR:
?C: Holds the directory name holding the package source.
?C:.
?H:#define PACKAGE_SOURCE_DIR "$pkgsrc"
?H:.
: define absolute package source directory
case "$src" in
/*) pkgsrc=$src;;
*) pkgsrc=`cd $rsrc; pwd`;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pkgsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ftrncate.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ftrncate.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ftrncate: Inlibc
?MAKE: -pick add $@ %<
?S:d_ftrncate (d_ftruncate):
?S: This variable conditionally defines the HAS_FTRUNCATE symbol, which
?S: indicates to the C program that the ftruncate() subroutine exists.
?S:.
?C:HAS_FTRUNCATE:
?C: This symbol, if defined, indicates that the ftruncate() subroutine
?C: exists.
?C:.
?H:#$d_ftrncate
```

```
 HAS_FTRUNCATE /**/
?H:.
?LINT:set d_ftrncate
: see if ftruncate exists
set ftruncate d_ftrncate
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ftrncate.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_round: Inlibc
?MAKE: -pick add $@ %<
?S:d_round:
?S: This variable conditionally defines the HAS_ROUND symbol, which
?S: indicates to the C program that the round() routine is available.
?S:.
?C:HAS_ROUND:
?C: This symbol, if defined, indicates that the round routine is
?C: available to round to nearest integer, away from zero.
?C:.
?H:#$d_round HAS_ROUND  /**/
?H:.
?LINT:set d_round
: see if round exists
set round d_round
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_round.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mbrlen: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbrlen:
?S: This variable conditionally defines the HAS_MBRLEN symbol if the
?S: mbrlen() routine is available to be used to get the length of
```

```
?S: multi-byte character strings.
?S:.
?C:HAS_MBRLEN:
?C: This symbol, if defined, indicates that the mbrlen routine is
?C: available to get the length of multi-byte character strings.
?C:.
?H:#$d_mbrlen HAS_MBRLEN /**/
?H:.
?LINT: set d_mbrlen
: see if mbrlen exists
set mbrlen d_mbrlen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_mbrlen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libperl.U,v $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:libperl useshrplib shrpenv ldlibpthname: \
 Myread Oldconfig archlibexp awk cat libc \
 _a osname osvers so patchlevel subversion usedl ld \
 ccdlflags installarchlib userelocatableinc
?MAKE: -pick wipe $@ %<
?S:libperl:
?S: The perl executable is obtained by linking perlmain.c with
?S: libperl, any static extensions (usually just DynaLoader),
?S: and any other libraries needed on this system.  libperl
?S: is usually libperl.a, but can also be libperl.so.xxx if
?S: the user wishes to build a perl executable with a shared
?S: library.
?S:.
?S:useshrplib:
?S: This variable is set to 'true' if the user wishes
?S: to build a shared libperl, and 'false' otherwise.
?S:.
?S:shrpenv:
?S: If
 the user builds a shared libperl.so, then we need to tell the
?S: 'perl' executable where it will be able to find the installed libperl.so.
?S: One way to do this on some systems is to set the environment variable
?S: LD_RUN_PATH to the directory that will be the final location of the
?S: shared libperl.so.  The makefile can use this with something like
```

```
?S:  $shrpenv $(CC) -o perl perlmain.o $libperl $libs
?S: Typical values are
?S:  shrpenv="env LD_RUN_PATH=$archlibexp/CORE"
?S: or
?S:  shrpenv="
?S: See the main perl Makefile.SH for actual working usage.
?S:
?S: Alternatively, we might be able to use a command line option such
?S: as -R $archlibexp/CORE (Solaris) or -Wl,-rpath
?S: $archlibexp/CORE (Linux).
?S:.
?S:ldlibpthname:
?S: This variable holds the name of the shared library
?S: search path, often LD_LIBRARY_PATH.  To get an empty
?S: string, the hints file must set this to 'none'.
?S:.
?T:shrpdir majonly majmin also xxx tmp_shrpenv
?X: metalint gets confused and thinks we're
 actually setting LDOPTS
?X: and LD_RUN_PATH.
?LINT:extern LDOPTS
?LINT:change LDOPTS
?LINT:extern LD_RUN_PATH
?LINT:change LD_RUN_PATH
?LINT:change ccdlflags
?LINT:extern maintloc maintname
?Y:top
: Do we want a shared libperl?
also=''
case "$usedl" in
$undef)
 # No dynamic loading being used, so don't bother even to prompt.
 useshrplib='false'
 ;;
*) case "$useshrplib" in
 '') case "$osname" in
  svr4*|nonstopux|dgux|dynixptx|esix|powerux|haiku|cygwin*)
   dflt=y
   also='Building a shared libperl is required for dynamic loading to work on your system.'
   ;;
  *) dflt=n
   ;;
  esac
  ;;
 $define|true|[Yy]*)
  dflt=y
  ;;
 *) dflt=n
```

```
  ;;
 esac
 $cat << EOM

The perl executable is normally obtained by linking perlmain.c with
libperl${_a}, any static extensions (usually just DynaLoader), and
any other libraries needed on this system (such as -lm, etc.).  Since
your system supports dynamic loading, it is probably possible to build
a shared libperl.$so.  If you will have more than one
 executable linked
to libperl.$so, this will significantly reduce the size of each
executable, but it may have a noticeable effect on performance.  The
default is probably sensible for your system.
$also

EOM
 rp="Build a shared libperl.$so (y/n)"
 . ./myread
 case "$ans" in
 true|$define|[Yy]*)
  useshrplib='true'  ;;
 *) useshrplib='false' ;;
 esac
 ;;
esac

case "$useshrplib" in
true)
 case "$userelocatableinc" in
 true|define)
  echo "Cannot build with both -Duserelocatableinc and -Duseshrplib" >&4
  echo "See INSTALL for an explanation why that won't work." >&4
  exit 4
  ;;
 esac
 case "$libperl" in
 ")
  # Figure out a good name for libperl.so.  Since it gets stored in
  # a version-specific architecture-dependent library, the version
  # number isn't really that important, except for making cc/ld happy.
  #
  # A name such as libperl.so.10.1
  majmin="libperl.$so.$patchlevel.$subversion"
  # A name such as libperl.so.100
  majonly=`echo $patchlevel $subversion |
   $awk '{printf
 "%d%02d", $1, $2}'`
  majonly=libperl.$so.$majonly
```

```
  # I'd prefer to keep the os-specific stuff here to a minimum, and
  # rely on figuring it out from the naming of libc.
  case "${osname}${osvers}" in
  *linux*|gnu*)  # ld won't link with a bare -lperl otherwise.
   dflt=libperl.$so
   ;;
  cygwin*) # ld links now against the dll directly
   majmin="cygperl5_${patchlevel}_${subversion}.${so}"
   majonly=`echo $patchlevel $subversion |
    $awk '{printf "%03d%03d", $1, $2}'`
   majonly=cygperl5.$majonly.$so
   dflt=$majmin
   ;;
  *) # Try to guess based on whether libc has major.minor.
   case "$libc" in
   *libc.$so.[0-9]*.[0-9]*) dflt=$majmin ;;
   *libc.$so.[0-9]*) dflt=$majonly ;;
   *) dflt=libperl.$so ;;
   esac
   ;;
  esac
  ;;
 *) dflt=$libperl
  ;;
 esac
 cat << EOM

I need to select a good name for the shared libperl.  If your system uses
library names with major and minor numbers, then you might want something
like $majmin.  Alternatively, if your system uses a single
 version
number for shared libraries, then you might want to use $majonly.
Or, your system might be quite happy with a simple libperl.$so.

Since the shared libperl will get installed into a version-specific
architecture-dependent directory, the version number of the shared perl
library probably isn't important, so the default should be o.k.

EOM
 rp='What name do you want to give to the shared libperl?'
 . ./myread
 libperl=$ans
 echo "Ok, I'll use $libperl"
 ;;
*)
 libperl="libperl${_a}"
 ;;
esac
```

```
# Detect old use of shrpdir via undocumented Configure -Dshrpdir
case "$shrpdir" in
") ;;
*) $cat >&4 <<EOM
WARNING:  Use of the shrpdir variable for the installation location of
the shared $libperl is not supported.  It was never documented and
will not work in this version.  Let me (<$maintloc>)
know of any problems this may cause.

EOM
 case "$shrpdir" in
 "$archlibexp/CORE")
  $cat >&4 <<EOM
But your current setting of $shrpdir is
the default anyway, so it's harmless.
EOM
  ;;
 *)
  $cat
 >&4 <<EOM
Further, your current attempted setting of $shrpdir
conflicts with the value of $archlibexp/CORE
that installperl will use.
EOM
  ;;
 esac
 ;;
esac

# How will the perl executable find the installed shared $libperl?
# Add $xxx to ccdlflags.
# If we can't figure out a command-line option, use $shrpenv to
# set env LD_RUN_PATH.  The main perl makefile uses this.
shrpdir=$archlibexp/CORE
xxx="
tmp_shrpenv="
if "$useshrplib"; then
   case "$osname" in
 aix)
  # We'll set it in Makefile.SH...
  ;;
 solaris)
  xxx="-R $shrpdir"
  ;;
 freebsd|minix|mirbsd|netbsd|openbsd|interix|dragonfly|bitrig)
  xxx="-Wl,-R$shrpdir"
  ;;
```

```
 bsdos|linux|irix*|dec_osf|gnu*|haiku)
  xxx="-Wl,-rpath,$shrpdir"
  ;;
 hpux*)
  # hpux doesn't like the default, either.
  tmp_shrpenv="env LDOPTS=\"+s +b${shrpdir}\""
  ;;
 cygwin)
  # cygwin needs only ldlibpth
  ;;
 *)
  tmp_shrpenv="env LD_RUN_PATH=$shrpdir"
  ;;
 esac
 case "$xxx" in
 '') ;;
 *)
  # Only add $xxx if it isn't already in ccdlflags.
  case
 " $ccdlflags " in
  *" $xxx "*) ;;
  *) ccdlflags="$ccdlflags $xxx"
   cat <<EOM >&4

Adding $xxx to the flags
passed to $ld so that the perl executable will find the
installed shared $libperl.

EOM
   ;;
  esac
  ;;
 esac
fi
# Fix ccdlflags in AIX for building external extensions.
# (For building Perl itself bare -bE:perl.exp is needed,
#  Makefile.SH takes care of this.)
case "$osname" in
aix) ccdlflags="$ccdlflags -bE:$installarchlib/CORE/perl.exp" ;;
esac
# Respect a hint or command-line value.
case "$shrpenv" in
'') shrpenv="$tmp_shrpenv" ;;
esac
case "$ldlibpthname" in
'') ldlibpthname=LD_LIBRARY_PATH ;;
none) ldlibpthname='' ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/libperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ffs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ffs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ffs: Inlibc
?MAKE: -pick add $@ %<
?S:d_ffs:
?S: This variable conditionally defines the HAS_FFS symbol, which
?S: indicates to the C program that the ffs() routine is available
?S: to find the first bit which is set in its integer argument.
?S:.
?C:HAS_FFS:
?C: This symbol, if defined, indicates that the ffs routine is available
?C: to
 find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
?H:#$d_ffs HAS_FFS  /**/
?H:.
?LINT:set d_ffs
: see if ffs exists
set ffs d_ffs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ffs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: charsize.U,v 3.0.1.1 1994/10/29 16:07:13 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: charsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:13  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:charsize charbits: cat rm_try Myread Compile run
?MAKE: -pick add $@ %<
?S:charsize:
?S: This variable contains the value of the CHARSIZE symbol, which
?S: indicates to the C program how many bytes there are in a character.
?S:.
?S:charbits:
?S: This
 variable contains the value of the CHARBITS symbol, which
?S: indicates to the C program how many bits there are in a character.
?S:.
?C:CHARSIZE:
?C: This symbol contains the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?C:CHARBITS:
?C: This symbol contains the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define CHARSIZE $charsize  /**/
?H:#define CHARBITS $charbits  /**/
?H:.
?F:!try
: length of character in bytes. Is always 1, otherwise it is not C
: This used to be a test using sizeof
charsize=1

: Check for the number of bits in a character
case "$charbits" in
") echo "Checking how long a character is (in bits)..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
int main ()
{
   int n;
   unsigned char c;
```

```
   for (c = 1, n = 0; c; c <<= 1, n++) ;
   printf ("%d\n", n);
   return (0);
   }
EOCP
 set try
 if eval $compile_ok; then
  dflt=`$run ./try`
 else
  dflt='8'
  echo "(I
 can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$charbits"
 ;;
esac
rp="What is the length of a character (in bits)?"
. ./myread
charbits="$ans"
$rm_try
case "$charbits" in
8) ;;
*) cat >&4 << EOM
Your system has an unsigned character size of $charbits bits, which
is rather unusual (normally it is 8 bits).  Perl likely will not work
correctly on your system, with subtle bugs in various places.
EOM
 rp='Do you really want to continue?'
 dflt='n'
 . ./myread
 case "$ans" in
  [yY]) echo >&4 "Okay, continuing." ;;
  *) exit 1    ;;
 esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/charsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Tye McQueen <tye@metronet.com> added safe setuid script checks.
?RCS:
?RCS: $Log: d_dosuid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:33:03  ram
?RCS: patch61: moved unit to TOP via a ?Y: layout directive
?RCS: patch61: tell them /dev/fd is not about floppy disks
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:08  ram
?RCS: patch36: added checks for secure setuid scripts (Tye McQueen)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_dosuid
 d_suidsafe: cat contains ls rm test Myread Setvar \
 Oldconfig Guess package hint
?MAKE: -pick add $@ %<
?S:d_suidsafe:
?S: This variable conditionally defines SETUID_SCRIPTS_ARE_SECURE_NOW
?S: if setuid scripts can be secure.  This test looks in /dev/fd/.
?S:.
?S:d_dosuid:
?S: This variable conditionally defines the symbol DOSUID, which
?S: tells the C program that it should insert setuid emulation code
?S: on hosts which have setuid #! scripts disabled.
?S:.
?C:SETUID_SCRIPTS_ARE_SECURE_NOW:
?C: This symbol, if defined, indicates that the bug that prevents
?C: setuid scripts from being secure is not present in this kernel.
?C:.
?C:DOSUID:
?C: This symbol, if defined, indicates that the C program should
?C: check the script that it is executing for setuid/setgid bits, and
?C: attempt to emulate setuid/setgid on systems that have disabled
?C: setuid #! scripts because the kernel can't do it securely.
?C: It is up to the package designer to make sure that this emulation
?C: is done securely.
  Among other things, it should do an fstat on
?C: the script it just opened to make sure it really is a setuid/setgid
?C: script, it should make sure the arguments passed correspond exactly
?C: to the argument on the #! line, and it should not trust any
?C: subprocesses to which it must pass the filename rather than the
?C: file descriptor of the script to be executed.
?C:.
```

```
?H:#$d_suidsafe SETUID_SCRIPTS_ARE_SECURE_NOW /**/
?H:#$d_dosuid DOSUID  /**/
?H:.
?Y:TOP
?F:!reflect
?LINT: set d_suidsafe
?LINT: set d_dosuid
: see if setuid scripts can be secure
$cat <<EOM

Some kernels have a bug that prevents setuid #! scripts from being
secure.  Some sites have disabled setuid #! scripts because of this.

First let's decide if your kernel supports secure setuid #! scripts.
(If setuid #! scripts would be secure but have been disabled anyway,
don't say that they are secure if asked.)

EOM

val="$undef"
if $test -d /dev/fd; then
 echo "#!$ls" >reflect
 chmod +x,u+s reflect
 ./reflect >flect
 2>&1
 if $contains "/dev/fd" flect >/dev/null; then
  echo "Congratulations, your kernel has secure setuid scripts!" >&4
  val="$define"
 else
  $cat <<EOM
If you are not sure if they are secure, I can check but I'll need a
username and password different from the one you are using right now.
If you don't have such a username or don't want me to test, simply
enter 'none'.

EOM
  rp='Other username to test security of setuid scripts with?'
  dflt='none'
  . ./myread
  case "$ans" in
  n|none)
   case "$d_suidsafe" in
   ") echo "I'll assume setuid scripts are *not* secure." >&4
    dflt=n;;
   "$undef")
    echo "Well, the $hint value is *not* secure." >&4
    dflt=n;;
   *) echo "Well, the $hint value *is* secure." >&4
```

```
    dflt=y;;
   esac
   ;;
  *)
   $rm -f reflect flect
   echo "#!$ls" >reflect
   chmod +x,u+s reflect
   echo >flect
   chmod a+w flect
   echo "'su" will (probably) prompt you for "'$ans's password."
   su $ans -c './reflect >flect'
   if $contains "/dev/fd" flect
 >/dev/null; then
    echo "Okay, it looks like setuid scripts are secure." >&4
    dflt=y
   else
    echo "I don't think setuid scripts are secure." >&4
    dflt=n
   fi
   ;;
  esac
  rp='Does your kernel have *secure* setuid scripts?'
  . ./myread
  case "$ans" in
  [yY]*) val="$define";;
  *) val="$undef";;
  esac
 fi
else
 echo "I don't think setuid scripts are secure (no /dev/fd directory)." >&4
 echo "(That's for file descriptors, not floppy disks.)"
 val="$undef"
fi
set d_suidsafe
eval $setvar

$rm -f reflect flect

: now see if they want to do setuid emulation
echo " "
val="$undef"
case "$d_suidsafe" in
"$define")
 val="$undef"
 echo "No need to emulate SUID scripts since they are secure here." >& 4
 ;;
*)
 $cat <<EOM
```

```
Some systems have disabled setuid scripts, especially systems where
setuid scripts cannot be secure.  On systems where setuid scripts have
been disabled, the setuid/setgid bits on scripts are currently
useless.  It is possible for $package to detect those bits
 and emulate
setuid/setgid in a secure fashion.  This emulation will only work if
setuid scripts have been disabled in your kernel.

EOM
 case "$d_dosuid" in
 "$define") dflt=y ;;
 *) dflt=n ;;
 esac
 rp="Do you want to do setuid/setgid emulation?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
 ;;
esac
set d_dosuid
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dosuid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_mntent.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_mntent: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_mntent:
?S: This variable conditionally defines the I_MNTENT symbol, and indicates
?S: whether a C program should include <mntent.h>.
?S:.
?C:I_MNTENT:
?C: This symbol, if defined, indicates that <mntent.h> exists and
?C: should be included.
?C:.
?H:#$i_mntent I_MNTENT  /**/
?H:.
?LINT:set i_mntent
```

```
: see if this is a mntent.h system
set mntent.h i_mntent
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_mntent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysresrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysresrc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/resource.h> needs to be included
?X:
?MAKE:i_sysresrc: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysresrc:
?S: This variable conditionally defines the I_SYS_RESOURCE symbol,
?S: and indicates whether a C program should include <sys/resource.h>.
?S:.
?C:I_SYS_RESOURCE (I_SYSRESOURCE):
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <sys/resource.h>.
?C:.
?H:#$i_sysresrc I_SYS_RESOURCE  /**/
?H:.
?LINT:set i_sysresrc
: see if sys/resource.h has to be included
set sys/resource.h i_sysresrc
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysresrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_sockatmark: Inlibc
?MAKE: -pick add $@ %<
?S:d_sockatmark:
?S: This variable conditionally defines the HAS_SOCKATMARK symbol, which
?S: indicates to the C program that the sockatmark() routine is available.
?S:.
?C:HAS_SOCKATMARK:
?C: This symbol, if defined, indicates that the sockatmark routine is
?C: available to test whether a socket is at the out-of-band mark.
?C:.
?H:#$d_sockatmark HAS_SOCKATMARK  /**/
?H:.
?LINT:set d_sockatmark
: see if sockatmark exists
set sockatmark d_sockatmark
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sockatmark.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cf_name.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: cf_name.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  14:29:36  ram
?RCS: patch23: fixed user name computation from /etc/passwd in bsd systems
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:05:11  ram
?RCS: patch16: created
?RCS:
?RCS:
?MAKE:+cf_name: cf_by passcat Filexp nametype cat test
```

```
?MAKE: -pick add $@ %<
?S:cf_name:
?S: Full name of the person who ran the Configure script and
 answered the
?S: questions. This can be used by units that require the user's full name.
?S: This variable is for internal use only.
?S:.
?T:xxx fn NAME
: figure out their full name
case "$NAME" in
") case "$nametype" in
 other)
  fn=`./filexp ~/.fullname`
  xxx=usg
  $test -f $fn && xxx=other
  ;;
 *)
  xxx="$nametype"
  ;;
 esac

 case "$xxx" in
 bsd)
  cf_name=`$passcat | grep "^$cf_by:" | \
   sed -e 's/^[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\):.*/\1/' \
   -e 's/,.*//'`
  ;;
   usg)
  cf_name=`$passcat | grep "^$cf_by:" | \
   sed -e 's/^[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\):.*/\1/' \
   -e 's/[^-]*-\(.*\)(.*)/\1/'`
  ;;
 *)
  cf_name=`$cat $fn`
  ;;
 esac
 ;;
*)
 cf_name="$NAME"
 ;;
esac
?X:
?X: In the original unit, Graham asked for the user name, in case the above
?X: code was unable to figure it out correctly. Since now cf_name has been
?X: made an internal variable only (i.e. it is not saved in config.sh), letting
?X: the user override the computed default each time would be a pain.
?X:
```

```
 Therefore, I have decided to trust the above code to get it right, and for
?X: those rare cases where it will fail, too bad :-) --RAM.
?X:
echo " "
echo "Pleased to meet you, $cf_name."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_name.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sunscanf.U,v 3.0 1993/08/18 12:09:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sunscanf.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sunscanf: cat rm Compile Myread test Setvar
?MAKE: -pick add $@ %<
?S:sunscanf:
?S: This variable is set if this system runs with the Sun version
?S: of scanf.
?S:.
?C:SUNSCANF:
?C: This variable is set if this system runs with the Sun version
?C: of scanf.
?C:.
?H:#$sunscanf SUNSCANF  /**/
?H:.
?LINT:set sunscanf
?F:!scanf
: check to see what
 kinda scanf your using.
echo " "
echo "Checking to see what flavor of scanf you have..." >&4
$cat >scanf.c <<'EOCP'
int main()
{
 float value;

 sscanf("4.5","%g",&value);
```

```
 printf("%d\n", value == 4.5);
}
EOCP
set scanf
if eval $compile_ok; then
 if $test `./scanf` = 0; then
  echo "Hmm.. seems you are not running the USG flavor.."
  val="$undef"
 else
  echo "Uh... you are running the USG flavor of scanf."
  val="$define"
 fi
else
 echo "(I can't seem to compile the test program... Guessing)"
 val="$undef"
fi
set sunscanf
eval $setvar
$rm -f scanf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sunscanf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgrp2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setpgrp2.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpgrp2:
?S: This variable conditionally defines the HAS_SETPGRP2 symbol, which
?S: indicates to the C program that the setpgrp2() (as in DG/UX) routine
?S: is available to set the current process group.
?S:.
?C:HAS_SETPGRP2 (SETPGRP2):
?C: This symbol, if defined, indicates that the
```

```
 setpgrp2() (as in DG/UX)
?C: routine is available to set the current process group.
?C:.
?H:#$d_setpgrp2 HAS_SETPGRP2  /**/
?H:.
?LINT:set d_setpgrp2
: see if setpgrp2 exists
set setpgrp2 d_setpgrp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgrp2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, 2012 Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:intsize longsize shortsize: Assert Myread cat rm_try +cc +ccflags echo n c
?MAKE: -pick add $@ %<
?S:intsize:
?S: This variable contains the value of the INTSIZE symbol, which
?S: indicates to the C program how many bytes there are in an int.
?S:.
?S:longsize:
?S: This variable contains the value of the LONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long.
?S:.
?S:shortsize:
?S: This variable contains the value of the SHORTSIZE symbol which
?S: indicates to the
 C program how many bytes there are in a short.
?S:.
?C:INTSIZE:
?C: This symbol contains the value of sizeof(int) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:LONGSIZE:
?C: This symbol contains the value of sizeof(long) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:SHORTSIZE:
```

```
?C: This symbol contains the value of sizeof(short) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define INTSIZE $intsize
?H:#define LONGSIZE $longsize
?H:#define SHORTSIZE $shortsize
?H:.
?T:types t size var
?LINT: set shortsize intsize longsize
: check for lengths of integral types
echo " "
types=''
@if SHORTSIZE || shortsize
types="$types short"
@end
@if INTSIZE || intsize
types="$types int"
@end
@if LONGSIZE || longsize
types="$types long"
@end
for t in $types; do
 $echo $n "Checking to see how big your ${t}s are...$c" >&4
 for size in 2 4 8 16 error; do
  $cat >try.c <<EOCP
#include "static_assert.h"
$t foo;
int main()
{
 STATIC_ASSERT($size
 == sizeof(foo));
 return 0;
}
EOCP
  if $cc -c $ccflags try.c >/dev/null 2>&1; then break; fi
 done
 var=${t}size
 case "$size" in
 error)
  echo " cannot compute it." >&4
  case $t in
  short) dflt=2;;
  int) dflt=4;;
  long) dflt=4;;
  esac
  rp="What is the size of the \"$t\" type (in bytes)?"
  . ./myread
  eval $var="$ans"
```

```
  ;;
 *)
  echo " $size bytes." >&4
  eval $var=$size
  ;;
 esac
done
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/intsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isfinitel: Inlibc
?MAKE: -pick add $@ %<
?S:d_isfinitel:
?S: This variable conditionally defines the HAS_ISFINITEL symbol, which
?S: indicates to the C program that the isfinitel() routine is available.
?S:.
?C:HAS_ISFINITEL:
?C: This symbol, if defined, indicates that the isfinitel routine is
?C: available to check whether a long double is finite.
?C: (non-infinity non-NaN).
?C:.
?H:#$d_isfinitel HAS_ISFINITEL  /**/
?H:.
?LINT:set d_isfinitel
: see if isfinitel exists
set isfinitel d_isfinitel
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isfinitel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016-2016, H.Merijn Brand
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_gai_strerror: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_gai_strerror:
?S: This variable conditionally defines the HAS_GAI_STRERROR symbol
?S: if the gai_strerror() routine is available and can be used to
?S: translate error codes returned by getaddrinfo() into human
?S: readable strings.
?S:.
?C:HAS_GAI_STRERROR:
?C: This symbol, if defined, indicates that the gai_strerror routine
?C: is available to translate error codes returned by getaddrinfo()
?C: into human readable strings.
?C:.
?H:#$d_gai_strerror
 HAS_GAI_STRERROR /**/
?H:.
?F:!try
?LINT: set d_gai_strerror
: look for gai_strerror
echo " "
$cat >try.c <<'EOCP'
#include <sys/types.h>
#include <sys/socket.h>
#include <netdb.h>
int main ()
{
   return (gai_strerror (0) ? 0 : 1);
   }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working gai_strerror() found." >&4
     val="$define" ;;
 *)  echo "gai_strerror() found, but it doesn't work" >&4
     ;;
 esac
else
   echo "gai_strerror() NOT found." >&4
   fi
set d_gai_strerror
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_gai_strerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_PORTAR.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_PORTAR.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:42  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_PORTAR: cat +cc rm Setvar
?MAKE: -pick add $@ %<
?S:d_PORTAR:
?S: This variable conditionally handles definition of PORTAR,
?S: a creation of greater minds than I can imagine.
?S:.
?C:PORTAR:
?C: This manifest constant must
 be defined to 1 for some implementations
?C: of ar.h to get the portable ar most everybody uses.
?C:.
?L:ar_fmag:
?L:ARFMAG:
?L:SARMAG:
?H:#$d_PORTAR PORTAR 1 /**/
?H:.
?F:!portar
?LINT:set d_PORTAR
: see if we need to define PORTAR
echo " "
echo 'Checking to see if we need to define PORTAR for portable archives...' >&4
$cat >portar.c <<'EOCP'
#include <ar.h>
int main() {
 char *arfmag = ARFMAG;
 int sarmag = SARMAG;
```

```
 struct ar_hdr arh;

 strncpy(arh.ar_fmag, arfmag, 2);

#ifdef PORTAR
 printf("D\n");
#else
 printf("U\n");
#endif
 exit(0);}
EOCP
if $cc -o portar portar.c >/dev/null 2>&1 || \
 $cc -DPORTAR=1 -o portar portar.c >/dev/null 2>&1 ; then
 case "`./portar`" in
 D)
  val="$define"
  echo "We'll be defining PORTAR for you."
  ;;
 U)
  val="$undef"
  echo "We don't seem to need PORTAR defined here."
  ;;
 *)
  val="$define"
  echo "(My test program gave me an unexpected value!)"
  echo "I'll just define PORTAR to be sure."
  ;;
 esac
else
 echo "(Strange, I couldn't get my test
 program to compile.)"
 echo "We'll just define PORTAR in this case."
 val="$define"
fi
set d_PORTAR
eval $setvar
$rm -f portar*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_PORTAR.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetent_r getnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetent_r:
?S: This variable conditionally defines the HAS_GETNETENT_R symbol,
?S: which indicates to the C program that the getnetent_r()
?S: routine is available.
?S:.
?S:getnetent_r_proto:
?S: This variable encodes the prototype of getnetent_r.
?S: It is zero if d_getnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetent_r
?S: is defined.
?S:.
?C:HAS_GETNETENT_R:
?C: This symbol, if defined, indicates that the getnetent_r routine
?C: is
 available to getnetent re-entrantly.
?C:.
?C:GETNETENT_R_PROTO:
?C: This symbol encodes the prototype of getnetent_r.
?C: It is zero if d_getnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetent_r
?C: is defined.
?C:.
?H:#$d_getnetent_r HAS_GETNETENT_R /**/
?H:#define GETNETENT_R_PROTO $getnetent_r_proto /**/
?H:.
?T:try hdrs d_getnetent_r_proto
: see if getnetent_r exists
set getnetent_r d_getnetent_r
eval $inlibc
case "$d_getnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetent_r_proto:$usethreads" in
 ":define") d_getnetent_r_proto=define
  set d_getnetent_r_proto getnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getnetent_r_proto" in
 define)
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct netent*, char*, size_t, struct netent**, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBWRE ;;
```

```
 esac
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct
 netent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBIE ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='struct netent* getnetent_r(struct netent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=S_SBIE ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='struct netent* getnetent_r(struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=S_SBI ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBI ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct netent*, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SD ;;
 esac
 case "$getnetent_r_proto" in
 "|0) d_getnetent_r=undef
  getnetent_r_proto=0
  echo "Disabling getnetent_r, cannot determine prototype." >&4 ;;
 * ) case "$getnetent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getnetent_r_proto="REENTRANT_PROTO_$getnetent_r_proto"
 ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getnetent_r has no prototype, not using it." >&4 ;;
  esac
  d_getnetent_r=undef
  getnetent_r_proto=0
  ;;
 esac
 ;;
*) getnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetent_r.U

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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_asinh: Inlibc
?MAKE: -pick add $@ %<
?S:d_asinh:
?S: This variable conditionally defines the HAS_ASINH symbol, which
?S: indicates to the C program that the asinh() routine is available.
?S:.
?C:HAS_ASINH:
?C: This symbol, if defined, indicates that the asinh routine is
?C: available to do the inverse hyperbolic sine function.
?C:.
?H:#$d_asinh HAS_ASINH  /**/
?H:.
?LINT:set d_asinh
: see if asinh exists
set asinh d_asinh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_asinh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_link.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_link.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:01:13  ram
?RCS: patch6: created for completeness
?RCS:
?MAKE:d_link: Inlibc
?MAKE: -pick add $@ %<
?S:d_link:
?S: This variable conditionally defines HAS_LINK if link() is
?S: available to create hard links.
?S:.
?C:HAS_LINK:
?C: This symbol, if defined, indicates that the link routine is
```

```
?C: available to create hard links.
?C:.
?H:#$d_link HAS_LINK /**/
?H:.
?LINT:set d_link
: see if link exists
set
 link d_link
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_link.U
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```
?RCS: $Id: libc.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:56:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: added support for HPUX-10 nm output
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  14:11:56  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:20:47  ram
?RCS: patch54: made sure only most recent version of shared lib is picked
?RCS: patch54: final "nm -p" check now uses xscan and xrun
 like everybody
?RCS: patch54: can now grok Linux nm output with lead __IO (ADO)
?RCS: patch54: added support for Linux ELF output, using 'W' for alias (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1994/10/29  16:23:40  ram
?RCS: patch36: now looks for shared libraries before anything else (ADO)
?RCS: patch36: added new nm output format (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1994/08/29  16:28:10  ram
?RCS: patch32: added I-type symbols for nm output parsing on Linux
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  07:03:24  ram
?RCS: patch30: checks are now presented by succession of if/elif
```

```
?RCS: patch30: uniformized checks for shared objects with new so symbol
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  15:06:33  ram
?RCS: patch23: added shared library knowledge (ADO and WED)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:12:17  ram
?RCS: patch16: can now export nm_extract as an internal-use only variable
?RCS:
?RCS: Revision 3.0.1.2  1993/09/13  16:09:03  ram
?RCS: patch10: added special handling for Apollo
 systems (WAD)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:40:03  ram
?RCS: patch7: added entry for /usr/shlib/libc.so (OSF/1 machines)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libc +nm_extract: echo n c rm test grep Getfile Myread Oldconfig Loc \
 sed libs incpath libpth ar runnm nm nm_opt nm_so_opt contains xlibpth \
 so _a _o osname trnl tr sort uniq sysroot
?MAKE: -pick add $@ %<
?S:libc:
?S: This variable contains the location of the C library.
?S:.
?S:nm_extract:
?S: This variable holds the name of the extraction command used to process
?S: the output of nm and yield the list of defined symbols. It is used
?S: internally by Configure.
?S:.
?T:thislib try libnames xxx xscan xrun thisname com tans file
?F:!libnames !libc.tmp !tmp.imp
?LINT:extern PASE
?LINT:extern libnames
?LINT:change nm_opt
?INIT:libnames=''
: Figure out where the libc is located
case "$runnm" in
true)
?X: indentation is wrong on purpose--RAM
:
 get list of predefined functions in a handy place
echo " "
case "$libc" in
'') libc=unknown
 case "$libs" in
 *-lc_s*) libc=`./loc libc_s$_a $libc $libpth`
 esac
```

```
 ;;
esac
case "$libs" in
") ;;
*)  for thislib in $libs; do
 case "$thislib" in
 -lc|-lc_s)
  : Handle C library specially below.
  ;;
 -l*)
  thislib=`echo $thislib | $sed -e 's/^-l//'`
  if try=`./loc lib$thislib.$so.'*' X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib.$so X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc Slib$thislib$_a X $xlibpth`; $test -f "$try"; then
   :
  else
   try="
  fi
  libnames="$libnames $try"
  ;;
 *) libnames="$libnames $thislib" ;;
 esac
 done
 ;;
esac
?X:
?X: Some systems (e.g. DG/UX) use
 "environmental" links, which make the test
?X: -f fail. Ditto for symbolic links. So in order to reliably check the
?X: existence of a file, we use test -r. It will still fail with DG/UX links
?X: though, but at least it will detect symbolic links. At some strategic
?X: points, we make use of (test -h), using a sub-shell in case builtin test
?X: does not implement the -h check for symbolic links. This makes it
?X: possible to preset libc in a hint file for instance and have it show up
?X: as-is in the question.
?X:
xxx=normal
case "$libc" in
```

```
unknown)
?X:
?X: The sed below transforms .so.9 .so.12 into something like .so.0009 .so.0012,
?X: then sorts on it to allow keeping .so.12 instead of .so.9 as the latest
?X: up-to-date library. The initial filename (before sed munging, saved in hold
?X: space via 'h') is appended via 'G' before sorting, then the leading munged
?X: part is removed after sorting. Nice efficient work from Tye McQueen.
?X: The initial blurfl is here to prevent the trailing
 pipe from producing an
?X: empty string, causing Configure to output all its set variables!
?X:
 set /lib/libc.$so
 for xxx in $libpth; do
  $test -r $1 || set $xxx/libc.$so
  : The messy sed command sorts on library version numbers.
  $test -r $1 || \
   set `echo blurfl; echo $xxx/libc.$so.[0-9]* | \
   tr ' ' $trnl | egrep -v '\.[A-Za-z]*$' | $sed -e '
    h
    s/[0-9][0-9]*/0000&/g
    s/0*\([0-9][0-9][0-9][0-9][0-9]\)/\1/g
    G
    s/\n/ /' | \
    $sort | $sed -e 's/^.* //'`
  eval set \$$#
 done
 $test -r $1 || set $sysroot/usr/ccs/lib/libc.$so
 $test -r $1 || set $sysroot/lib/libsys_s$_a
 ;;
*)
?X: ensure the test below for the (shared) C library will fail
 set blurfl
 ;;
esac
if $test -r "$1"; then
 echo "Your (shared) C library seems to be in $1."
 libc="$1"
elif $test -r /lib/libc && $test -r /lib/clib; then
?X:
?X: Apollo has its C library in /lib/clib AND /lib/libc
?X: not to mention its math library in /lib/syslib...
?X:
 echo "Your C library seems to be in both /lib/clib
 and /lib/libc."
 xxx=apollo
 libc='/lib/clib /lib/libc'
 if $test -r /lib/syslib; then
  echo "(Your math library is in /lib/syslib.)"
```

```
?X: Put syslib in libc -- not quite right, but won't hurt
  libc="$libc /lib/syslib"
 fi
elif $test -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 echo "Your C library seems to be in $libc, as you said before."
?X: For mips, and...
elif $test -r $incpath/usr/lib/libc$_a; then
 libc=$incpath/usr/lib/libc$_a;
 echo "Your C library seems to be in $libc.  That's fine."
elif $test -r /lib/libc$_a; then
 libc=/lib/libc$_a;
 echo "Your C library seems to be in $libc.  You're normal."
else
 if tans=`./loc libc$_a blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc libc blurfl/dyick $libpth`; $test -r "$tans"; then
  libnames="$libnames "`./loc clib blurfl/dyick $libpth`
 elif tans=`./loc clib blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Slibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 elif tans=`./loc
 Mlibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 else
  tans=`./loc Llibc$_a blurfl/dyick $xlibpth`
 fi
 if $test -r "$tans"; then
  echo "Your C library seems to be in $tans, of all places."
  libc=$tans
 else
  libc='blurfl'
 fi
fi
if $test $xxx = apollo -o -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 dflt="$libc"
 cat <<EOM

If the guess above is wrong (which it might be if you're using a strange
compiler, or your machine supports multiple models), you can override it here.

EOM
else
 dflt="
 echo $libpth | $tr ' ' $trnl | $sort | $uniq > libpath
 cat >&4 <<EOM
I can't seem to find your C library.  I've looked in the following places:
```

```
EOM
 $sed 's/^/ /' libpath
 cat <<EOM

None of these seems to contain your C library. I need to get its name...

EOM
fi
fn=f
rp='Where is your C library?'
. ./getfile
libc="$ans"

echo " "
echo $libc $libnames | $tr ' ' $trnl | $sort | $uniq > libnames
set X `cat libnames`
shift
xxx=files
case $# in 1) xxx=file; esac
echo
 "Extracting names from the following $xxx for later perusal:" >&4
echo " "
$sed 's/^/ /' libnames >&4
echo " "
$echo $n "This may take a while...$c" >&4

?X:
?X: Linux may need the special Dynamic option to nm for shared libraries.
?X: In general, this is stored in the nm_so_opt variable.
?X: Unfortunately, that option may be fatal on non-shared libraries.
?X:
for file in $*; do
 case $file in
 *$so*) $nm $nm_so_opt $nm_opt $file 2>/dev/null;;
 *) $nm $nm_opt $file 2>/dev/null;;
 esac
done >libc.tmp

$echo $n ".$c"
?X:
?X: To accelerate processing, we look at the correct 'sed' command
?X: by using a small subset of libc.tmp, i.e. fprintf function.
?X: When we know which sed command to use, do the name extraction
?X:
$grep fprintf libc.tmp > libc.ptf
?X:
?X: In order to enhance readability and save some space, we define
?X: some variables that will be "eval"ed.
```

```
?X:
xscan='eval "<libc.ptf $com >libc.list"; $echo $n ".$c" >&4'
xrun='eval "<libc.tmp $com >libc.list"; echo "done." >&4'
?X:
 BSD-like output, I and W types added for Linux
?X: Some versions of Linux include a leading __IO in the symbol name.
?X: HP-UX 10 reportedly has trailing spaces, though I'm surprised it has
?X: BSD-like output.  (AD).
?X: GNU extension: i is "indirect function"
xxx='[ADTSIWi]'
if com="$sed -n -e 's/__IO//' -e 's/^.* $xxx  *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: SYSV-like output
elif com="$sed -n -e 's/^__*//' -e 's/^\([a-zA-Z_0-9$]*\).*xtern.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/|UNDEF/d' -e '/FUNC..GL/s/^.*|__*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.* D __*//p' -e 's/^.* D //p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^_//' -e 's/^\([a-zA-Z_0-9]*\).*xtern.*text.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$'
 libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$grep '|' | $sed -n -e '/|COMMON/d' -e '/|DATA/d' \
    -e '/ file/d' -e 's/^\([^  ]*\).*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p' -e 's/^.*|FUNC |WEAK .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: mips nm output (sysV)
elif com="$sed -n -e 's/^__//' -e '/|Undef/d' -e '/|Proc/s/ .*//p'";\
 eval $xscan;\
```

```
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|Proc .*|Text *| */p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/Def. Text/s/.* \([^ ]*\)\$/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: OS/2
 nm output
elif com="$sed -n -e 's/^[-0-9a-f ]*_\(.*\)=.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/.*\.text n\ \ \ \.//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: AIX nm output
elif com="sed -n -e 's/^__.*//' -e 's/[       ]*D[    ]*[0-9]*.*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
else
 $nm -p $* 2>/dev/null >libc.tmp
 $grep fprintf libc.tmp > libc.ptf
 if com="$sed -n -e 's/^.* [ADTSIW]  *_[_.]*//p' -e 's/^.* [ADTSIW] //p'";\
  eval $xscan; $contains '^fprintf$' libc.list >/dev/null 2>&1
 then
  nm_opt='-p'
  eval $xrun
 else
  echo " "
  echo "$nm didn't seem to work right. Trying $ar instead..." >&4
  com="
  if $ar t $libc > libc.tmp && \
   $contains '^fprintf$' libc.tmp >/dev/null 2>&1
  then
   for thisname in $libnames $libc; do
    $ar t $thisname >>libc.tmp
   done
   $sed -e "s/\\$_o\$//" < libc.tmp > libc.list
   echo
 "Ok." >&4
  elif test "X$osname" = "Xos2" && $ar tv $libc > libc.tmp; then
?X: Repeat libc to extract forwarders to DLL entries too
```

```
   for thisname in $libnames $libc; do
    $ar tv $thisname >>libc.tmp
?X: Revision 50 of EMX has bug in ar: it will not extract forwarders
?X: to DLL entries.  Use emximp which will extract exactly them.
    emximp -o tmp.imp $thisname \
        2>/dev/null && \
        $sed -e 's/^\([_a-zA-Z0-9]*\) .*$/\1/p' \
        < tmp.imp >>libc.tmp
    $rm -f tmp.imp
   done
   $sed -e "s/\\$_o\$//" -e 's/^ \+//' < libc.tmp > libc.list
   echo "Ok." >&4
  else
   echo "$ar didn't seem to work right." >&4
   echo "Maybe this is a Cray...trying bld instead..." >&4
   if  bld t $libc | \
    $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" > libc.list &&
    $test -s libc.list
   then
    for thisname in $libnames; do
     bld t $libnames | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" >>libc.list
     $ar t $thisname >>libc.tmp
    done
    echo "Ok." >&4
   else
    echo
 "That didn't work either.  Giving up." >&4
    exit 1
   fi
  fi
 fi
fi
nm_extract="$com"
case "$PASE" in
define)
   echo " "
   echo "Since you are compiling for PASE, extracting more symbols from libc.a ..."">&4
   dump -Tv /lib/libc.a | awk '$7 == "/unix" {print $5 " " $8}' | grep "^SV" | awk '{print $2}' >> libc.list
   ;;
*)  if $test -f /lib/syscalls.exp; then
 echo " "
 echo "Also extracting names from /lib/syscalls.exp for good ole AIX..." >&4
 $sed -n 's/^\([^  ]*\)[  ]*syscall[0-9]*[  ]*$/\1/p' \
  /lib/syscalls.exp >>libc.list
   fi
   ;;
esac
```

```
;;
esac
$rm -f libnames libpath
```

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* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libc.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strftime.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_strftime:
?S: This variable conditionally defines HAS_STRFTIME if strftime() is
?S: available to format locale-specific times.
?S:.
?C:HAS_STRFTIME:
?C: This symbol, if defined, indicates that the strftime routine is
?C: available to format locale-specific times.
?C:.
?H:#$d_strftime HAS_STRFTIME /**/
?H:.
?LINT:set d_strftime
: see
 if strftime exists
set strftime d_strftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strftime.U
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```
?RCS: $Id: d_table.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_table.U,v $
?RCS: Revision 3.0.1.2  1993/11/10  17:34:14  ram
?RCS: patch14: wrongly mentionned an obsolete symbol
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:49:29  ram
?RCS: patch12: created
?RCS:
?MAKE:d_table: Inlibc
?MAKE: -pick add $@ %<
?S:d_table:
?S: This variable conditionally defines HAS_TABLE if table() is
?S: available to examine/update elements from a system table.
?S:.
?C:HAS_TABLE:
?C: This symbol, if defined, indicates that the OSF/1
 table() system
?C: call is available to examine/update items from a system table.
?C:.
?H:#$d_table HAS_TABLE /**/
?H:.
?LINT:set d_table
: see if table exists
set table d_table
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_table.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extras.U,v$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:extras: Myread Oldconfig Setvar rm
?MAKE: -pick add $@ %<
?Y:TOP
?S:extras:
?S: This variable holds a list of extra modules to install.
?S:.
```

```
: See if we want extra modules installed
echo " "
case "$extras" in
") dflt='n';;
*) dflt='y';;
esac
cat <<EOM
Perl can be built with extra modules or bundles of modules which
will be fetched from the CPAN and installed alongside Perl.

Notice that you will need access to the CPAN; either via the Internet,
or a local copy, for example a CD-ROM or a local CPAN mirror.  (You will
be asked later to configure the CPAN.pm module which will in turn do
the installation of the rest of the extra modules or bundles.)

Notice also that if the modules require
 any external software such as
libraries and headers (the libz library and the zlib.h header for the
Compress::Zlib module, for example) you MUST have any such software
already installed, this configuration process will NOT install such
things for you.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Install any extra modules (y or n)?'
. ./myread
case "$ans" in
y|Y)
 cat <<EOM

Please list any extra modules or bundles to be installed from CPAN,
with spaces between the names.  The names can be in any format the
'install' command of CPAN.pm will understand.  (Answer 'none',
without the quotes, to install no extra modules or bundles.)
EOM
 rp='Extras?'
 dflt="$extras"
 . ./myread
 extras="$ans"
esac
case "$extras" in
"|'none')
 val=''
 $rm -f ../extras.lst
 ;;
*) echo "(Saving the list of extras for later...)"
 echo "$extras" > ../extras.lst
 val="'$extras'"
```

```
 ;;
esac
set extras
eval $setvar
echo " "
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Extras.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwent_r.U,v 0RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwent_r getpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwent_r:
?S: This variable conditionally defines the HAS_GETPWENT_R symbol,
?S: which indicates to the C program that the getpwent_r()
?S: routine is available.
?S:.
?S:getpwent_r_proto:
?S: This variable encodes the prototype of getpwent_r.
?S: It is zero if d_getpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwent_r
?S: is defined.
?S:.
?C:HAS_GETPWENT_R:
?C: This symbol, if defined, indicates that the getpwent_r routine
?C: is available to
 getpwent re-entrantly.
?C:.
?C:GETPWENT_R_PROTO:
?C: This symbol encodes the prototype of getpwent_r.
?C: It is zero if d_getpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwent_r
?C: is defined.
?C:.
?H:#$d_getpwent_r HAS_GETPWENT_R /**/
?H:#define GETPWENT_R_PROTO $getpwent_r_proto /**/
?H:.
?T:try hdrs d_getpwent_r_proto
: see if getpwent_r exists
```

```
set getpwent_r d_getpwent_r
eval $inlibc
case "$d_getpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwent_r_proto:$usethreads" in
 ":define") d_getpwent_r_proto=define
  set d_getpwent_r_proto getpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getpwent_r_proto" in
 define)
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, size_t, struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBWR ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, int, struct passwd**);'
 ./protochk
 "$extern_C $try" $hdrs && getpwent_r_proto=I_SBIR ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='struct passwd* getpwent_r(struct passwd*, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=S_SBW ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='struct passwd* getpwent_r(struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=S_SBI ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBI ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, int, FILE**);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBIH ;;
 esac
 case "$getpwent_r_proto" in
 "|0) d_getpwent_r=undef
  getpwent_r_proto=0
  echo "Disabling getpwent_r, cannot determine prototype." >&4 ;;
* ) case "$getpwent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getpwent_r_proto="REENTRANT_PROTO_$getpwent_r_proto" ;;
  esac
  echo
```

```
 "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getpwent_r has no prototype, not using it." >&4 ;;
  esac
  d_getpwent_r=undef
  getpwent_r_proto=0
  ;;
 esac
 ;;
*) getpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llrintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_llrintl:
?S: This variable conditionally defines the HAS_LLRINTL symbol, which
?S: indicates to the C program that the llrintl() routine is available
?S: to return the long long value closest to a long double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LLRINTL:
?C: This symbol, if defined, indicates that the llrintl routine is
?C: available to return the long long value closest to a long double
?C: (according to the current rounding mode).
?C:.
?H:#$d_llrintl HAS_LLRINTL  /**/
?H:.
?LINT:set d_llrintl
: see if llrintl exists
set llrintl d_llrintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llrintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uidformat: uidsize uidsign ivsize uvsize longsize intsize shortsize \
 ivdformat uvuformat test echo
?MAKE: -pick add $@ %<
?S:uidformat:
?S: This variable contains the format string used for printing a Uid_t.
?S:.
?C:Uid_t_f:
?C: This symbol defines the format string used for printing a Uid_t.
?C:.
?H:#define Uid_t_f  $uidformat  /**/
?H:.
: Check format string for UID
echo " "
$echo "Checking the format string to be used for uids..." >&4

case "$uidsign" in
-1) if $test X"$uidsize" = X"$ivsize"; then
  uidformat="$ivdformat"
 else
  if $test X"$uidsize" = X"$longsize"; then
   uidformat="'ld'"
  else
   if $test X"$uidsize" = X"$intsize"; then
    uidformat="'d'"
   else
    if $test X"$uidsize"
 = X"$shortsize"; then
     uidformat="'hd'"
    fi
   fi
  fi
 fi
 ;;
*) if $test X"$uidsize" = X"$uvsize"; then
  uidformat="$uvuformat"
 else
  if $test X"$uidsize" = X"$longsize"; then
   uidformat="'lu'"
  else
   if $test X"$uidsize" = X"$intsize"; then
    uidformat="'u'"
   else
    if $test X"$uidsize" = X"$shortsize"; then
```

```
    uidformat='"hu"'
   fi
  fi
 fi
fi
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_volatile.U,v 3.0.1.2 1995/07/25 14:08:49 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_volatile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:08:49  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/09  11:49:51  ram
?RCS: patch9: volatile definition was swapped over with undef
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_volatile: cat +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_volatile:
?S: This variable conditionally
 defines the HASVOLATILE symbol, which
?S: indicates to the C program that this C compiler knows about the
?S: volatile declaration.
?S:.
?C:HASVOLATILE ~ %<:
?C: This symbol, if defined, indicates that this C compiler knows about
?C: the volatile declaration.
?C:.
?H:?%<:#$d_volatile HASVOLATILE /**/
?H:?%<:#ifndef HASVOLATILE
?H:?%<:#define volatile
?H:?%<:#endif
```

```
?H:.
?LINT:set d_volatile
?LINT:known volatile
: check for volatile keyword
echo " "
echo 'Checking to see if your C compiler knows about "volatile"...' >&4
$cat >try.c <<'EOCP'
int main()
{
?X:
?X: The following seven lines added by Bill Campbell <billc@sierra.com>
?X: detect that MIPS compilers do not handle volatile in all situations.
?X:
 typedef struct _goo_struct goo_struct;
 goo_struct * volatile goo = ((goo_struct *)0);
 struct _goo_struct {
  long long_int;
  int reg_int;
  char char_var;
 };
 typedef unsigned short foo_t;
 char *volatile foo;
 volatile int bar;
 volatile foo_t blech;
 foo = foo;
}
EOCP
if $cc
 -c $ccflags try.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup, it does."
else
 val="$undef"
 echo "Nope, it doesn't."
fi
set d_volatile
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_volatile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_atolf: Inlibc
?MAKE: -pick add $@ %<
?S:d_atolf:
?S: This variable conditionally defines the HAS_ATOLF symbol, which
?S: indicates to the C program that the atolf() routine is available.
?S:.
?C:HAS_ATOLF:
?C: This symbol, if defined, indicates that the atolf routine is
?C: available to convert strings into long doubles.
?C:.
?H:#$d_atolf HAS_ATOLF  /**/
?H:.
?LINT:set d_atolf
: see if atolf exists
set atolf d_atolf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/atolf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_memrchr: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_memrchr:
?S: This variable conditionally defines the HAS_MEMRCHR symbol, which
?S: indicates to the C program that the memrchr() routine is available
?S: to return a pointer to the last occurrence of a byte in a memory
?S: area (or NULL if not found).
?S:.
?C:HAS_MEMRCHR:
?C: This symbol, if defined, indicates that the memrchr routine is
?C: available to return a pointer to the last occurrence of a byte in
?C: a memory area (or NULL if not found).
?C:.
?H:#$d_memrchr HAS_MEMRCHR  /**/
?H:.
?T:d_memrchr_proto xx1 xx2 xx3 xx4
?LINT:set d_memrchr
: see if memrchr exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_memrchr_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
```

```
xx2='#if defined(HAS_GNULIBC)
 && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_memrchr_proto memrchr literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_memrchr_proto" in
   define) # see if memrchr exists
 set memrchr d_memrchr
 eval $inlibc
 ;;
   *)  val=$undef
 set d_memrchr
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_memrchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usemultiplicity: useithreads Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usemultiplicity:
?S: This variable conditionally defines the MULTIPLICITY symbol,
?S: and indicates that Perl should be built to use multiplicity.
?S:.
?C:MULTIPLICITY:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use multiplicity.
?C:.
?H:?%<:#ifndef MULTIPLICITY
?H:?%<:#$usemultiplicity MULTIPLICITY  /**/
?H:?%<:#endif
?H:.
?LINT:set usemultiplicity
?INIT:: set usemultiplicity on the Configure command line to enable multiplicity.
: Check if multiplicity is required
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
```

```
cat <<EOM

Perl
 can be built so that multiple Perl interpreters can coexist
within the same Perl executable.
EOM

case "$useithreads" in
$define)
 cat <<EOM
This multiple interpreter support is required for interpreter-based threads.
EOM
 val="$define"
 ;;
*) case "$usemultiplicity" in
 $define|true|[yY]*) dflt='y';;
 *) dflt='n';;
 esac
 echo " "
 echo "If this doesn't make any sense to you, just accept the default '$dflt'."
 rp='Build Perl for multiplicity?'
 . ./myread
 case "$ans" in
 y|Y) val="$define" ;;
 *)      val="$undef" ;;
 esac
 ;;
esac
set usemultiplicity
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usemultiplicity.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_poll: Inhdr
?MAKE: -pick add $@ %<
?S:i_poll:
```

```
?S: This variable conditionally defines the I_POLL symbol, which
?S: indicates to the C program that it should include <poll.h>.
?S:.
?C:I_POLL:
?C: This symbol, if defined, indicates that the program may include
?C: <poll.h>.  If there is no <poll.h>, then you may check I_SYS_POLL
?C: instead to see whether there is a <sys/poll.h> to include.
?C:.
?H:#$i_poll I_POLL /**/
?H:.
?LINT:set i_poll
: see if there is a poll.h file
set poll.h i_poll
eval $inhdr
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_poll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_grp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_grp: Inhdr
?MAKE: -pick add $@ %<
?S:i_grp:
?S: This variable conditionally defines the I_GRP symbol, and indicates
?S: whether a C program should include <grp.h>.
?S:.
?C:I_GRP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <grp.h>.
?C:.
?H:#$i_grp I_GRP  /**/
?H:.
?LINT:set i_grp
: see if this is an grp system
```

```
set grp.h i_grp
eval $inhdr

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_grp.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_eofpipe.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:40  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_eofpipe: cat +cc +ccflags +libs rm Oldconfig Guess echo n c
?MAKE: -pick add $@ %<
?S:d_eofpipe:
?S: This variable conditionally defines the EOFPIPE symbol, which
?S: indicates to the C program that select will correctly detect the EOF
?S: condition when pipe
 is closed from the other end.
?S:.
?C:EOFPIPE:
?C: This symbol, if defined, indicates that EOF condition will be detected
?C: by the reader of the pipe when it is closed by the writing process.
?C: That is, a select() call on that file descriptor will not block when
?C: only an EOF remains (typical behaviour for BSD systems).
?C:.
?H:#$d_eofpipe EOFPIPE  /**/
?H:.
?F:!mpipe
: see if pipe correctly gives the EOF condition
echo " "
case "$d_eofpipe" in
")
 echo "Let's see if your pipes return EOF to select() upon closing..." >&4
 $cat >pipe.c <<'EOP'
```

```
int main()
{
 int pd[2];
 int mask;

 pipe(pd);
 if (0 == fork()) {
  close(pd[0]);
  close(pd[1]);
  exit(0);
 }

 close(pd[1]);
 mask = 1 << pd[0];
 alarm(2);
 select(32, &mask, (int *) 0, (int *) 0, (char *) 0);
 if (0 == read(pd[0], &mask, 1))
  exit(0);

 exit(1);
}
EOP
 if $cc $ccflags -o pipe pipe.c $libs >/dev/null 2>&1; then
?X: Use a script to avoid the possible 'alarm call' message
  echo "./pipe || exit 1" > mpipe
  chmod +x
 mpipe
  ./mpipe >/dev/null 2>&1
  case $? in
  0) d_eofpipe="$define";;
  *) d_eofpipe="$undef";;
  esac
 else
  echo "(The test program did not compile correctly -- Guessing.)"
  if ./bsd; then
   d_eofpipe="$define"
  else
   d_eofpipe="$undef"
  fi
 fi
 case "$d_eofpipe" in
 "$define") echo "Yes, they do.";;
 *) echo "No, they don't! (sigh)";;
 esac
 ;;
*)
 $echo $n "Your pipes $c"
 case "$d_eofpipe" in
```

```
 "$define") echo "allow select() to see EOF upon closing.";;
 *) echo "won't let select() see EOF on closing.";;
 esac
 ;;
esac
$rm -f *pipe* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_eofpipe.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Obsol_sh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Obsol_sh.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file is prepended to .MT/Obsol_sh if that file is not empty. That file
?X: contains the necessary mappings of new symbols to obsolete ones.
?X:
?MAKE:Obsol_sh:
?MAKE: -pick prepend $@ ./Obsol_sh
?LINT:nocomment
#
# The following symbols are obsolete. They are mapped to the new
# symbols only to ease the transition process. The
 sources should be
# updated so as to use the new symbols only, since supporting of those
# obsolete symbols may end without notice.
#
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Obsol_sh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_open3.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:12  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:58:26  ram
?RCS: patch56: added knowledge of the O_NONBLOCK symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_open3: test +cc cat +cppflags h_fcntl h_sysfile rm Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?X: It would be easy to separate the h_O_stuff from this.
?X: Is there a reason
 to do so? -- HMS
?S:d_open3:
?S: This variable conditionally defines the HAS_OPEN3 manifest constant,
?S: which indicates to the C program that the 3 argument version of
?S: the open(2) function is available.
?S:.
?C:HAS_OPEN3 (OPEN3):
?C: This manifest constant lets the C program know that the three
?C: argument form of open(2) is available.
?C:.
?H:#$d_open3 HAS_OPEN3  /**/
?H:.
?W:%<:O_RDONLY O_WRONLY O_RDWR O_NDELAY O_APPEND O_SYNC O_CREAT O_TRUNC
?W:%<:O_EXCL O_NONBLOCK
?F:!open3
?LINT:set d_open3
?LINT:change h_fcntl h_sysfile
: Locate the flags for 'open()'
echo " "
$cat >open3.c <<'EOCP'
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
int main() {
```

```
 if(O_RDONLY);
#ifdef O_TRUNC
 exit(0);
#else
 exit(1);
#endif
}
EOCP
: check sys/file.h first to get FREAD on Sun
if $test `./findhdr sys/file.h` && \
  $cc $cppflags "-DI_SYS_FILE" -o open3 open3.c >/dev/null 2>&1 ; then
 h_sysfile=true;
 echo "<sys/file.h> defines the
 O_* constants..." >&4
 if ./open3; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
elif $test `./findhdr fcntl.h` && \
  $cc "-DI_FCNTL" -o open3 open3.c >/dev/null 2>&1 ; then
 h_fcntl=true;
 echo "<fcntl.h> defines the O_* constants..." >&4
 if ./open3; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
else
 val="$undef"
 ./warn "I can't find the O_* constant definitions!  You got problems."
fi
set d_open3
eval $setvar
$rm -f open3*

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_open3.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_fcntl_can_lock.U,v$
?RCS:
?RCS: Copyright (c) 2000, Andrew Dougherty
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_fcntl_can_lock.U,v $
?RCS:
?MAKE:d_fcntl_can_lock: d_fcntl Compile Setvar cat rm_try run signal_t i_stdlib
?MAKE: -pick add $@ %<
?S:d_fcntl_can_lock:
?S: This variable conditionally defines the FCNTL_CAN_LOCK symbol
?S: and indicates whether file locking with fcntl() works.
?S:.
?C:FCNTL_CAN_LOCK:
?C: This symbol, if defined, indicates that fcntl() can be used
?C: for file locking.  Normally on Unix systems this is defined.
?C: It may be undefined on VMS.
?C:.
?H:#$d_fcntl_can_lock FCNTL_CAN_LOCK  /**/
?H:.
?F:!try
?LINT: set d_fcntl_can_lock
?X: fcntl may not be fully functional.  As of November 2000, on VMS and
?X: DOS/DJGPP, fctnl-based locking doesn't work.
?X: Thanks
 to Craig A. Berry <craig.berry@psinetcs.com> for this test.
: See if fcntl-based locking works.
echo " "
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <unistd.h>
#include <fcntl.h>
#include <signal.h>
$signal_t blech(int x) { exit(3); }
int main() {
#if defined(F_SETLK) && defined(F_SETLKW)
    struct flock flock;
    int retval, fd;
    fd = open("try.c", O_RDONLY);
    flock.l_type = F_RDLCK;
    flock.l_whence = SEEK_SET;
    flock.l_start = flock.l_len = 0;
    signal(SIGALRM, blech);
    alarm(10);
    retval = fcntl(fd, F_SETLK, &flock);
    close(fd);
    (retval < 0 ? exit(2) : exit(0));
```

```
#else
    exit(2);
#endif
}
EOCP
echo "Checking if fcntl-based file locking works... "
case "$d_fcntl" in
"$define")
 set try
 if eval $compile_ok; then
  if $run ./try; then
   echo "Yes, it seems to work."
   val="$define"
  else
   echo "Nope, it didn't work."
   val="$undef"
   case "$?" in
   3) $cat >&4 <<EOM
***
*** I had to
 forcibly timeout from fcntl(..., F_SETLK, ...).
*** This is (almost) impossible.
*** If your NFS lock daemons are not feeling well, something like
*** this may happen, please investigate.  Cannot continue, aborting.
***
EOM
    exit 1
    ;;
   esac
  fi
 else
  echo "I'm unable to compile the test program, so I'll assume not."
  val="$undef"
 fi
 ;;
*) val="$undef";
 echo "Nope, since you don't even have fcntl()."
 ;;
esac
set d_fcntl_can_lock
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fcntl_can_lock.U
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?RCS: $Id: d_msem_lck.U 1 2006-08-24 12:32:52Z rmanfredi $

```
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msem_lck.U,v $
?MAKE:d_msem_lck: Inlibc
?MAKE: -pick add $@ %<
?S:d_msem_lck:
?S: This variable conditionally defines HAS_MSEM_LOCK if msem_lock() is
?S: available, thereby indicating kernel support for memory semaphores.
?S:.
?C:HAS_MSEM_LOCK:
?C: This symbol, if defined, indicates that memory semaphores are
?C: available to protect mmap()'ed regions.
?C:.
?H:#$d_msem_lck HAS_MSEM_LOCK  /**/
?H:.
?LINT:set d_msem_lck
: see if msem_lock exists
set
 msem_lock d_msem_lck
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msem_lck.U
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```
?RCS: $Id: d_tcstpgrp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_tcstpgrp.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:11  ram
?RCS: patch32: created by ADO
?RCS:
```

```
?MAKE:d_tcsetpgrp: Inlibc
?MAKE: -pick add $@ %<
?S:d_tcsetpgrp:
?S: This variable conditionally defines the HAS_TCSETPGRP symbol, which
?S: indicates to the C program that the tcsetpgrp() routine is available
?S: to set foreground process group ID.
?S:.
?C:HAS_TCSETPGRP
 :
?C: This symbol, if defined, indicates that the tcsetpgrp routine is
?C: available to set foreground process group ID.
?C:.
?H:#$d_tcsetpgrp HAS_TCSETPGRP  /**/
?H:.
?LINT:set d_tcsetpgrp
: see if tcsetpgrp exists
set tcsetpgrp d_tcsetpgrp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tcstpgrp.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: charsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:13  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:charsize: Assert Myread cat rm_try +cc +ccflags echo n c
?MAKE: -pick add $@ %<
?S:charsize:
?S: This variable contains the value of the CHARSIZE symbol, which
?S: indicates to the C program how many bytes there are in a character.
?S:.
?C:CHARSIZE:
?C: This symbol contains
```

```
 the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define CHARSIZE $charsize
?H:.
?T:size s
: check for length of character
echo " "
$echo $n "Checking to see how big your characters are...$c" >&4
for size in 1 2 4 8 error; do
 $cat >try.c <<EOCP
#include "static_assert.h"
char foo;
int main()
{
 STATIC_ASSERT($size == sizeof(foo));
 return 0;
}
EOCP
 if $cc -c $ccflags try.c >/dev/null 2>&1; then break; fi
done
case "$size" in
error)
 echo " cannot compute it." >&4
 dflt=1
 rp="What is the size of a character (in bytes)?"
 . ./myread
 charsize="$ans"
 ;;
*)
 case "$size" in
 1) s='';;
 *) s='s';;
 esac
 echo " $size byte$s." >&4
 charsize=$size
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/charsize.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2004 H.Merijn Brand
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strlcat: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_strlcat:
?S: This variable conditionally defines the HAS_STRLCAT symbol, which
?S: indicates to the C program that the strlcat () routine is available.
?S:.
?C:HAS_STRLCAT:
?C: This symbol, if defined, indicates that the strlcat () routine is
?C: available to do string concatenation.
?C:.
?H:#$d_strlcat HAS_STRLCAT  /**/
?H:.
?T:d_strlcat_proto xx1 xx2 xx3 xx4
?LINT:set d_strlcat
: see if strlcat exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_strlcat_proto=''
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_strlcat_proto
 strlcat literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_strlcat_proto" in
   define) # see if strlcat exists
 set strlcat d_strlcat
 eval $inlibc
 ;;
   *)  val=$undef
 set d_strlcat
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strlcat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: floatsize.U,v 3.0.1.1 1994/10/29 16:17:09 ram Exp $
?RCS:
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```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: floatsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:09  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:floatsize: cat rm Myread Compile run
?MAKE: -pick add $@ %<
?S:floatsize:
?S: This variable contains the value of the FLOATSIZE symbol, which
?S: indicates to the C program how many bytes there are in a float.
?S:.
?C:FLOATSIZE:
?C: This
 symbol contains the size of a float, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define FLOATSIZE $floatsize  /**/
?H:.
?F:!try
: check for length of float
echo " "
case "$floatsize" in
")
 echo "Checking to see how big your floating point numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof(float));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  floatsize=`$run ./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a floating point number (in bytes)?"
  . ./myread
  floatsize="$ans"
```

```
 fi
 ;;
esac
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/floatsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_recvmsg: Inlibc
?MAKE: -pick add $@ %<
?S:d_recvmsg:
?S: This variable conditionally defines the HAS_RECVMSG symbol, which
?S: indicates to the C program that the recvmsg() routine is available.
?S:.
?C:HAS_RECVMSG:
?C: This symbol, if defined, indicates that the recvmsg routine is
?C: available to send structured socket messages.
?C:.
?H:#$d_recvmsg HAS_RECVMSG  /**/
?H:.
?LINT:set d_recvmsg
: see if recvmsg exists
set recvmsg d_recvmsg
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_recvmsg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_memory.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_memory.U,v $
```

```
?RCS: Revision 3.0.1.3  1994/06/20  07:01:55  ram
?RCS: patch30: cosmetic changes
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:23:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:02:25  ram
?RCS: patch23: avoid conflicts with <string.h>
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_memory: Inhdr strings cppstdin
 cppflags cppminus contains rm Setvar
?MAKE: -pick add $@ %<
?S:i_memory:
?S: This variable conditionally defines the I_MEMORY symbol, and indicates
?S: whether a C program should include <memory.h>.
?S:.
?C:I_MEMORY:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <memory.h>.
?C:.
?H:#$i_memory I_MEMORY  /**/
?H:.
?LINT:set i_memory
?X:
?X: Unfortunately, the definitions of memory functions sometimes
?X: conflict with those in <string.h>.  We'll assume that if
?X: <string.h> contains memcpy, then we don't need memory.h
?X:
: see if memory.h is available.
val=''
set memory.h val
eval $inhdr

: See if it conflicts with string.h
case "$val" in
$define)
 case "$strings" in
 '') ;;
 *)
  $cppstdin $cppflags $cppminus < $strings > mem.h
  if $contains 'memcpy' mem.h >/dev/null 2>&1; then
   echo " "
   echo "We won't be including <memory.h>."
   val="$undef"
  fi
```

```
  $rm -f mem.h
  ;;
 esac
esac
set i_memory
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_memory.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mblen.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mblen.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:40  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_mblen: Inlibc
?MAKE: -pick add $@ %<
?S:d_mblen:
?S: This variable conditionally defines the HAS_MBLEN symbol, which
?S: indicates to the C program that the mblen() routine is available
?S: to find the number of bytes in a multibyte character.
?S:.
?C:HAS_MBLEN:
?C: This
 symbol, if defined, indicates that the mblen routine is available
?C: to find the number of bytes in a multibyte character.
?C:.
?H:#$d_mblen HAS_MBLEN  /**/
?H:.
?LINT:set d_mblen
: see if mblen exists
set mblen d_mblen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mblen.U

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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_snprintf_l d_vsnprintf_l : Inlibc d_snprintf d_vsnprintf
?MAKE: -pick add $@ %<
?S:d_snprintf_l:
?S: This variable conditionally defines the HAS_SNPRINTF_L symbol, which
?S: indicates to the C program that the snprintf_l () library function
?S: is available.
?S:.
?S:d_vsnprintf_l:
?S: This variable conditionally defines the HAS_VSNPRINTF_L symbol, which
?S: indicates to the C program that the vsnprintf_l () library function
?S: is available.
?S:.
?C:HAS_SNPRINTF_L:
?C: This symbol, if defined, indicates that the snprintf_l () library
?C: function
 is available for use.
?C:.
?C:HAS_VSNPRINTF_L:
?C: This symbol, if defined, indicates that the vsnprintf_l () library
?C: function is available for use.
?C:.
?H:#$d_snprintf_l HAS_SNPRINTF_L /**/
?H:#$d_vsnprintf_l HAS_VSNPRINTF_L /**/
?H:.
: see if snprintf_l exists
set snprintf_l d_snprintf_l
eval $inlibc

: see if vsnprintf_l exists
set vsnprintf_l d_vsnprintf_l
eval $inlibc

case "$d_snprintf-$d_vsnprintf-$d_snprintf_l-$d_vsnprintf_l" in
"$define-$define-$define-$define")
   ;;
*) echo "(These require the basic snprintf and vsnprintf to also be available, which they aren't"
 d_snprintf_l="$undef"
 d_vsnprintf_l="$undef"
```

```
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_snprintf_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_alarm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_alarm.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:06:58  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_alarm: Inlibc
?MAKE: -pick add $@ %<
?S:d_alarm:
?S: This variable conditionally defines the HAS_ALARM symbol, which
?S: indicates to the C program that the alarm() routine is available.
?S:.
?C:HAS_ALARM :
?C: This symbol, if defined, indicates that the alarm routine is
?C: available.
?C:.
?H:#$d_alarm
 HAS_ALARM  /**/
?H:.
?LINT:set d_alarm
: see if alarm exists
set alarm d_alarm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_alarm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
```

```
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mmap mmaptype: Inlibc i_sysmman cat cc ccflags
?MAKE: -pick add $@ %<
?S:d_mmap:
?S: This variable conditionally defines HAS_MMAP if mmap() is
?S: available to map a file into memory.
?S:.
?S:mmaptype:
?S: This symbol contains the type of pointer returned by mmap()
?S: (and simultaneously the type of the first argument).
?S: It can be 'void *' or 'caddr_t'.
?S:.
?C:HAS_MMAP:
?C: This symbol, if defined, indicates that the mmap system call is
?C: available to map a file into memory.
?C:.
?C:Mmap_t:
?C: This symbol
 holds the return type of the mmap() system call
?C: (and simultaneously the type of the first argument).
?C: Usually set to 'void *' or 'caddr_t'.
?C:.
?H:#$d_mmap HAS_MMAP  /**/
?H:#define Mmap_t $mmaptype /**/
?H:.
?LINT:set d_mmap
: see if mmap exists
set mmap d_mmap
eval $inlibc
: see what shmat returns
: default to something harmless
mmaptype='void *'
case "$i_sysmman$d_mmap" in
"$define$define")
 $cat >mmap.c <<'END'
#include <sys/mman.h>
void *mmap();
END
 if $cc $ccflags -c mmap.c >/dev/null 2>&1; then
  mmaptype='void *'
 else
  mmaptype='caddr_t'
```

```
 fi
 echo "and it returns ($mmaptype)." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_mmap.U
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```
?RCS: $Id: Typedef.U,v 3.0.1.3 1995/07/25 13:42:07 ram Exp $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Typedef.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  13:42:07  ram
?RCS: patch56: added backslash escapes within evals to prevent space problems
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:01:16  ram
?RCS: patch36: don't clobber visible 'val' variable, use 'varval' instead
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:05:14  ram
?RCS: patch32: created
?RCS:
?X:
?X: This unit checks for the definition of a given typedef.
?X:
?X: To use it, say:
?X: set typedef
 val_t default [includes]
?X: eval $typedef
?X:
?MAKE:Typedef: cppstdin cppminus cppflags rm sed contains Oldconfig Myread
?MAKE: -pick add $@ %<
?LINT:define typedef
?LINT:define typedef_ask
?V:typedef typedef_ask
?S:typedef:
?S: This shell variable is used internally by Configure to check
?S: whether a given typedef is defined or not. A typical use is:
?S:  set typedef val_t default [includes]
?S:  eval $typedef
?S: That will return val_t set to default if the typedef was not found,
```

```
?S: to typedef otherwise. If no includes are specified, look in sys/types.h.
?S:.
?S:typedef_ask:
?S: This shell variable is used internally by Configure to check
?S: whether a given typedef is defined or not.  If it is not defined,
?S: this will call the ./myread script to prompt for an answer.
?S: It is intended to be used to avoid unnecessary prompts.
?S: A typical use is
?S:  rp="What is the type for file position used by fsetpos()?"
?S:  set fpos_t fpostype long stdio.h sys/types.h
?S:  eval $typedef_ask
?S: This
 will set fpostype=fpos_t, if fpos_t is available.  Otherwise
?S: it will call myread with a default of 'long', and a prompt of $rp.
?S:.
?T:type var def inclist varval inc
?F:!temp.c
: define an is-a-typedef? function
typedef='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
?X: Maybe it's a #define instead of a typedef.
 echo "#ifdef $type" >> temp.c;
 echo "printf(\"We have $type\");" >> temp.c;
 echo "#endif" >> temp.c;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 if $contains $type temp.E >/dev/null 2>&1; then
  eval "$var=\$type";
 else
  eval "$var=\$def";
 fi;
 $rm -f temp.?;;
*) eval "$var=\$varval";;
esac'

?X: Originally, I eval'd $typedef and then checked the results against
?X: $type.  Unfortunately, it then became complicated to check
?X: whether you are re-using
 an old config.sh value, and the logic got
?X: so convoluted it became easier to just copy the function above
```

```
?X: and alter it slightly.  A.D.  3/1998
: define an is-a-typedef? function that prompts if the type is not available.
typedef_ask='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
?X: Maybe it's a #define instead of a typedef.
 echo "#ifdef $type" >> temp.c;
 echo "printf(\"We have $type\");" >> temp.c;
 echo "#endif" >> temp.c;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 echo " " ;
 echo "$rp" | $sed -e "s/What is/Looking for/" -e "s/?/./";
 if $contains $type temp.E >/dev/null 2>&1; then
  echo "$type found." >&4;
  eval "$var=\$type";
 else
  echo "$type NOT found." >&4;
  dflt="$def";
  . ./myread ;
  eval "$var=\$ans";
 fi;
 $rm -f temp.?;;
*) eval "$var=\$varval";;
esac'

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/Typedef.U
No license file was found, but licenses were detected in source scan.

?RCS: Copyright (c) 2005-2007 H.Merijn Brand
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_cplusplus: Compile Setvar run cat rm_try
?MAKE: -pick add $@ %<
?S:d_cplusplus (d_cplusplus.U):
?S: This variable conditionally defines the USE_CPLUSPLUS symbol, which
?S: indicates that a C++ compiler was used to compiled Perl and will be
```

```
?S: used to compile extensions.
?S:.
?C:USE_CPLUSPLUS:
?C: This symbol, if defined, indicates that a C++ compiler was
?C: used to compiled Perl and will be used to compile extensions.
?C:.
?H:#$d_cplusplus USE_CPLUSPLUS  /**/
?H:.
?F:!try
?LINT:set d_cplusplus
: Check if we are using C++
echo " "
echo "Checking for C++..." >&4
$cat >try.c <<'EOCP'
#include <stdio.h>
int main(void)
{
#ifdef __cplusplus
   return 0;
#else
   return 1;
#endif
}
EOCP
set try
if eval $compile_ok
 && $run ./try; then
 val="$define"
 echo "You are using a C++ compiler."
else
 val="$undef"
 echo "You are not using a C++ compiler."
fi
$rm_try cplusplus$$
set d_cplusplus
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_cplusplus.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_memmem: Hasproto Inlibc Setvar d_gnulibc
?MAKE: -pick add $@ %<
?S:d_memmem:
?S: This variable conditionally defines the HAS_MEMMEM symbol, which
```

```
?S: indicates to the C program that the memmem() routine is available
?S: to return a pointer to the start of the first occurrence of a
?S: substring in a memory area (or NULL if not found).
?S:.
?C:HAS_MEMMEM:
?C: This symbol, if defined, indicates that the memmem routine is
?C: available to return a pointer to the start of the first occurrence
?C: of a substring in a memory area (or NULL if not found).
?C: In glibc, memmem is a GNU extension.  The function is visible in
?C: libc, but the prototype is only visible if _GNU_SOURCE is #defined.
?C: Thus we only define this if both the prototype and symbol are found.
?C:.
?H:#$d_memmem
 HAS_MEMMEM  /**/
?H:.
?T:d_memmem_proto xx1 xx2 xx3 xx4
?LINT:set d_memmem
: see if memmem exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_memmem_proto=''
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_memmem_proto memmem literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_memmem_proto" in
   define) # see if memmem exists
 set memmem d_memmem
 eval $inlibc
 ;;
   *)  val=$undef
 set d_memmem
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_memmem.U
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```
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```

```
?RCS:
?MAKE:d_strtold: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtold:
?S: This variable conditionally defines the HAS_STRTOLD symbol, which
?S: indicates to the C program that the strtold() routine is available.
?S:.
?C:HAS_STRTOLD:
?C: This symbol, if defined, indicates that the strtold routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtold HAS_STRTOLD  /**/
?H:.
?LINT:set d_strtold
: see if strtold exists
set strtold d_strtold
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtold.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_sigsetjmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_sigsetjmp: Setvar cat +cc +ccflags +ldflags libs rm
?MAKE: -pick add $@ %<
?S:d_sigsetjmp:
?S: This variable conditionally defines the HAS_SIGSETJMP symbol,
?S: which indicates that the sigsetjmp() routine
 is available to
?S: call setjmp() and optionally save the process's signal mask.
?S:.
```

```
?C:HAS_SIGSETJMP:
?C: This variable indicates to the C program that the sigsetjmp()
?C: routine is available to save the calling process's registers
?C: and stack environment for later use by siglongjmp(), and
?C: to optionally save the process's signal mask.  See
?C: Sigjmp_buf, Sigsetjmp, and Siglongjmp.
?C:.
?C:Sigjmp_buf:
?C: This is the buffer type to be used with Sigsetjmp and Siglongjmp.
?C:.
?C:Sigsetjmp:
?C: This macro is used in the same way as sigsetjmp(), but will invoke
?C: traditional setjmp() if sigsetjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?C:Siglongjmp:
?C: This macro is used in the same way as siglongjmp(), but will invoke
?C: traditional longjmp() if siglongjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?H:?%<:#$d_sigsetjmp HAS_SIGSETJMP /**/
?H:?%<:#ifdef HAS_SIGSETJMP
?H:?%<:#define Sigjmp_buf sigjmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) sigsetjmp((buf),(save_mask))
?H:?%<:#define
 Siglongjmp(buf,retval) siglongjmp((buf),(retval))
?H:?%<:#else
?H:?%<:#define Sigjmp_buf jmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) setjmp((buf))
?H:?%<:#define Siglongjmp(buf,retval) longjmp((buf),(retval))
?H:?%<:#endif
?H:.
?W:%<:Sigjmp_buf Sigsetjmp Siglongjmp
?F:!set
?LINT:set d_sigsetjmp
: see if sigsetjmp exists
?X: We can't check for these symbols with Inlibc because sigsetjmp
?X: is (sometimes? always?) a macro under GCC
echo " "
case "$d_sigsetjmp" in
")
 $cat >set.c <<'EOP'
#include <setjmp.h>
sigjmp_buf env;
int set = 1;
int main()
{
 if (sigsetjmp(env,1))
```

```
  exit(set);
 set = 0;
 siglongjmp(env, 1);
 exit(1);
}
EOP
 if $cc $ccflags $ldflags -o set set.c $libs > /dev/null 2>&1 ; then
  if ./set >/dev/null 2>&1; then
   echo "POSIX sigsetjmp found." >&4
   val="$define"
  else
   $cat >&4 <<EOM
Uh-Oh! You have POSIX sigsetjmp and siglongjmp, but they do not work properly!!
I'll ignore them.
EOM
   val="$undef"
  fi
 else
  echo "sigsetjmp not found."
 >&4
  val="$undef"
 fi
 ;;
*) val="$d_sigsetjmp"
 case "$d_sigsetjmp" in
 $define) echo "POSIX sigsetjmp found." >&4;;
 $undef) echo "sigsetjmp not found." >&4;;
 esac
 ;;
esac
set d_sigsetjmp
eval $setvar
$rm -f set.c set
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigsetjmp.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_truncl: Inlibc
?MAKE: -pick add $@ %<
?S:d_truncl:
?S: This variable conditionally defines the HAS_TRUNCL symbol, which
?S: indicates to the C program that the truncl() routine is available
?S: to round long doubles towards zero. If copysignl is also present,
?S: we can emulate modfl.
```

```
?S:.
?C:HAS_TRUNCL :
?C: This symbol, if defined, indicates that the truncl routine is
?C: available. If copysignl is also present we can emulate modfl.
?C:.
?H:#$d_truncl HAS_TRUNCL  /**/
?H:.
?LINT:set d_truncl
: see if truncl exists
set truncl d_truncl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_truncl.U
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```
?RCS: $Id: d_perror.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_perror.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:38  ram
?RCS: patch32: always define HAS_PERROR even when not used in C code
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_perror: Inlibc
?MAKE: -pick add $@ %<
?S:d_perror:
?S: This variable conditionally remaps perror to a null action and
?S: defines the symbol HAS_PERROR, which indicates to the C program
?S: that the perror()
 routine is not available to print system
?S: error messages.
?S:.
?C:HAS_PERROR ~ %<:
?C: This symbol, if defined, indicates that the perror() routine is
?C: available to print system error messages. If not defined, you should
?C: use your own diagnostic routine...
?C:.
?C:perror ~ %<:
```

```
?C: This symbol is maped to null if the  perror() routine is not
?C: available to print system error messages.
?C:.
?H:?%<:#$d_perror HAS_PERROR /**/
?H:?%<:#ifndef HAS_PERROR
?H:?%<:#define perror(s) ;  /* mapped to a null statement */
?H:?%<:#endif
?H:.
?LINT:set d_perror
: see if perror exists
set perror d_perror
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_perror.U
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```
?RCS: $Id$
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libpth.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:08:49  ram
?RCS: patch61: new loclibpth variable
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:31:30  ram
?RCS: patch45: call ./mips instead of just mips (WED)
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:29:15  ram
?RCS: patch32: added /lib/pa1.1 for HP-UX specially tuned PA-RISC libs (ADO)
?RCS: patch32: fixed information message, making it clearer (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:03:54  ram
?RCS: patch30: added /usr/shlib to
 glibpth for shared-only libraries
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:26:57  ram
?RCS: patch27: fixed a typo (libpth -> glibpth)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:07:53  ram
?RCS: patch23: now asks for library directories to be searched (ADO)
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:09:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit initializes the path for C library lookup.
?X:
?MAKE:libpth glibpth xlibpth plibpth loclibpth: \
 usrinc incpath test cat Myread Oldconfig
?MAKE: -pick add $@ %<
?S:libpth:
?S: This variable holds the general path (space-separated) used to find
?S: libraries. It is intended to be used by other units.
?S:.
?S:glibpth:
?S: This variable holds the general path (space-separated) used to
?S: find libraries.  It may contain directories that do not exist on
?S: this platform, libpth is the cleaned-up version.
?S:.
?S:xlibpth:
?S: This variable holds extra path (space-separated) used to find
?S: libraries on this platform,
 for example CPU-specific libraries
?S: (on multi-CPU platforms) may be listed here.
?S:.
?S:loclibpth:
?S: This variable holds the paths (space-separated) used to find local
?S: libraries.  It is prepended to libpth, and is intended to be easily
?S: set from the command line.
?S:.
?S:plibpth:
?S: Holds the private path used by Configure to find out the libraries.
?S: Its value is prepend to libpth. This variable takes care of special
?S: machines, like the mips.  Usually, it should be empty.
?S:.
?T: xxx dlist
?LINT:use usrinc
?INIT:: change the next line if compiling for Xenix/286 on Xenix/386
?INIT:xlibpth='/usr/lib/386 /lib/386'
?INIT:: Possible local library directories to search.
?INIT:loclibpth="/usr/local/lib /opt/local/lib /usr/gnu/lib"
?INIT:loclibpth="$loclibpth /opt/gnu/lib /usr/GNU/lib /opt/GNU/lib"
?INIT:
?INIT:: general looking path for locating libraries
?INIT:glibpth="/lib /usr/lib $xlibpth"
?INIT:glibpth="$glibpth /usr/ccs/lib /usr/ucblib /usr/local/lib"
?X: /shlib
 is for Digital Unix 4.0
?X: /usr/shlib is for OSF/1 systems.
```

```
?INIT:test -f /usr/shlib/libc.so && glibpth="/usr/shlib $glibpth"
?INIT:test -f /shlib/libc.so     && glibpth="/shlib $glibpth"
?INIT:
?INIT:: Private path used by Configure to find libraries.  Its value
?INIT:: is prepended to libpth. This variable takes care of special
?INIT:: machines, like the mips.  Usually, it should be empty.
?INIT:plibpth=''
?INIT:
: Set private lib path
case "$plibpth" in
'') if ./mips; then
?X: on mips, we DO NOT want /lib, and we want $incpath/usr/lib
  plibpth="$incpath/usr/lib /usr/local/lib /usr/ccs/lib"
 fi;;
esac
case "$libpth" in
' ') dlist='';;
'') dlist="$loclibpth $plibpth $glibpth";;
*) dlist="$libpth";;
esac

: Now check and see which directories actually exist, avoiding duplicates
libpth=''
for xxx in $dlist
do
   if $test -d $xxx; then
  case " $libpth " in
  *" $xxx "*) ;;
  *) libpth="$libpth $xxx";;
  esac
   fi
done
$cat <<'EOM'

Some systems have incompatible or broken versions
 of libraries.  Among
the directories listed in the question below, please remove any you
know not to be holding relevant libraries, and add any that are needed.
Say "none" for none.

EOM
case "$libpth" in
'') dflt='none';;
*)
?X: strip leading space
 set X $libpth
 shift
 dflt=${1+"$@"}
```

```
 ;;
esac
rp="Directories to use for library searches?"
. ./myread
case "$ans" in
none) libpth=' ';;
*) libpth="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libpth.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2014 Jarkko Hietaniemi & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_copysign: Inlibc
?MAKE: -pick add $@ %<
?S:d_copysign:
?S: This variable conditionally defines the HAS_COPYSIGN symbol, which
?S: indicates to the C program that the copysign() routine is available.
?S:.
?C:HAS_COPYSIGN:
?C: This symbol, if defined, indicates that the copysign routine is
?C: available to do the copysign function.
?C:.
?H:#$d_copysign HAS_COPYSIGN  /**/
?H:.
?LINT:set d_copysign
: see if copysign exists
set copysign d_copysign
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_copysign.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethent.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethent:
?S: This variable conditionally defines HAS_GETHOSTENT if gethostent() is
?S: available to look up host names in some data base or another.
?S:.
?C:HAS_GETHOSTENT:
?C: This symbol, if defined, indicates that the gethostent() routine is
?C: available to look up host names in some
 data base or another.
?C:.
?H:#$d_gethent HAS_GETHOSTENT  /**/
?H:.
?LINT:set d_gethent
: see if gethostent exists
set gethostent d_gethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethent.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_mkdtemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkdtemp:
?S: This variable conditionally defines the HAS_MKDTEMP symbol, which
?S: indicates to the C program that the mkdtemp() routine is available
?S: to exclusively create a uniquely named temporary directory.
?S:.
?C:HAS_MKDTEMP :
?C: This symbol, if defined, indicates that the mkdtemp routine is
?C: available to exclusively create a uniquely named temporary directory.
?C:.
?H:#$d_mkdtemp HAS_MKDTEMP  /**/
```

```
?H:.
?LINT:set d_mkdtemp
: see if mkdtemp exists
set mkdtemp d_mkdtemp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkdtemp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getcwd: Inlibc
?MAKE: -pick add $@ %<
?S:d_getcwd:
?S: This variable conditionally defines the HAS_GETCWD symbol, which
?S: indicates to the C program that the getcwd() routine is available
?S: to get the current working directory.
?S:.
?C:HAS_GETCWD :
?C: This symbol, if defined, indicates that the getcwd routine is
?C: available to get the current working directory.
?C:.
?H:#$d_getcwd HAS_GETCWD  /**/
?H:.
?LINT:set d_getcwd
: see if getcwd exists
set getcwd d_getcwd
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getcwd.U
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```
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
```

```
?RCS:
?MAKE:need_va_copy: rm_try cat Compile run
?MAKE: -pick add $@ %<
?S:need_va_copy:
?S: This symbol, if defined, indicates that the system stores
?S: the variable argument list datatype, va_list, in a format
?S: that cannot be copied by simple assignment, so that some
?S: other means must be used when copying is required.
?S: As such systems vary in their provision (or non-provision)
?S: of copying mechanisms, handy.h defines a platform-
?S: independent macro, Perl_va_copy(src, dst), to do the job.
?S:.
?C:NEED_VA_COPY:
?C: This
 symbol, if defined, indicates that the system stores
?C: the variable argument list datatype, va_list, in a format
?C: that cannot be copied by simple assignment, so that some
?C: other means must be used when copying is required.
?C: As such systems vary in their provision (or non-provision)
?C: of copying mechanisms, handy.h defines a platform-
?C: independent macro, Perl_va_copy(src, dst), to do the job.
?C:.
?H:#$need_va_copy NEED_VA_COPY  /**/
?H:.
?T:okay
?F:!try
: see if we need va_copy
echo " "
$cat >try.c <<EOCP
#include <stdarg.h>
#include <stdio.h>
#include <stdlib.h>
#include <signal.h>

int
ivfprintf(FILE *f, const char *fmt, va_list *valp)
{
 return vfprintf(f, fmt, *valp);
}

int
myvfprintf(FILE *f, const  char *fmt, va_list val)
{
 return ivfprintf(f, fmt, &val);
}

int
myprintf(char *fmt, ...)
```

```
{
 va_list val;
 va_start(val, fmt);
 return myvfprintf(stdout, fmt, val);
}

int
main(int ac, char **av)
{
 signal(SIGSEGV, exit);
#ifdef SIGBUS
 signal(SIGBUS,
 exit);
#endif

 myprintf("%s%cs all right, then\n", "that", '\');
 exit(0);
}
EOCP
set try
if eval $compile && $run ./try 2>&1 >/dev/null; then
 case "`$run ./try`" in
 "that's all right, then")
  okay=yes
  ;;
 esac
fi
case "$okay" in
yes) echo "It seems that you don't need va_copy()." >&4
 need_va_copy="$undef"
 ;;
*) echo "It seems that va_copy() or similar will be needed." >&4
 need_va_copy="$define"
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/need_va_copy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endservent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
```

```
?RCS:
?MAKE:d_endservent_r endservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endservent_r:
?S: This variable conditionally defines the HAS_ENDSERVENT_R symbol,
?S: which indicates to the C program that the endservent_r()
?S: routine is available.
?S:.
?S:endservent_r_proto:
?S: This variable encodes the prototype of endservent_r.
?S: It is zero if d_endservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endservent_r
?S: is defined.
?S:.
?C:HAS_ENDSERVENT_R:
?C: This symbol, if defined, indicates that the endservent_r routine
?C: is
 available to endservent re-entrantly.
?C:.
?C:ENDSERVENT_R_PROTO:
?C: This symbol encodes the prototype of endservent_r.
?C: It is zero if d_endservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endservent_r
?C: is defined.
?C:.
?H:#$d_endservent_r HAS_ENDSERVENT_R /**/
?H:#define ENDSERVENT_R_PROTO $endservent_r_proto /**/
?H:.
?T:try hdrs d_endservent_r_proto
: see if endservent_r exists
set endservent_r d_endservent_r
eval $inlibc
case "$d_endservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endservent_r_proto:$usethreads" in
 ":define") d_endservent_r_proto=define
  set d_endservent_r_proto endservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endservent_r_proto" in
 define)
 case "$endservent_r_proto" in
 "|0) try='int endservent_r(struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && endservent_r_proto=I_D ;;
 esac
```

```
 case "$endservent_r_proto" in
 "|0) try='void endservent_r(struct
 servent_data*);'
 ./protochk "$extern_C $try" $hdrs && endservent_r_proto=V_D ;;
 esac
 case "$endservent_r_proto" in
 "|0) d_endservent_r=undef
  endservent_r_proto=0
  echo "Disabling endservent_r, cannot determine prototype." >&4 ;;
 * ) case "$endservent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endservent_r_proto="REENTRANT_PROTO_$endservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endservent_r has no prototype, not using it." >&4 ;;
  esac
  d_endservent_r=undef
  endservent_r_proto=0
  ;;
 esac
 ;;
*) endservent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endservent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnbyname: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnbyname:
?S: This variable conditionally defines the HAS_GETNETBYNAME symbol, which
?S: indicates to the C program that the getnetbyname() routine is available
?S: to look up networks by their names.
?S:.
?C:HAS_GETNETBYNAME:
?C: This symbol, if defined, indicates that the getnetbyname() routine is
```

```
?C: available to look up networks by their names.
?C:.
?H:#$d_getnbyname HAS_GETNETBYNAME  /**/
?H:.
?LINT:set d_getnbyname
: see if getnetbyname exists
set getnetbyname d_getnbyname
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnbynm.U
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```
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:30:48  ram
?RCS: patch61: added cute quoting trick for wild stringify support
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:24  ram
?RCS: patch36: now uses cppstdin instead of plain cpp for consistency (ADO)
?RCS: patch36: remove temporary files when done
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cpp_stuff cpp_quote: cat contains cppstdin cppflags cppminus rm Warn \
 package
?MAKE: -pick
 add $@ %<
?S:cpp_stuff:
?S: This variable contains an identification of the catenation mechanism
?S: used by the C preprocessor.
?S:.
?S:cpp_quote:
?S: This variable is set to either "" or '' depending on whether the
?S: pre-processor pre-dates ANSI or not.  It is used in the production of
?S: the SQuoTe() and EQuoTe() macros, and was introduced to overcome a bug
?S: in gcc 3.x whereby the pre-processor complained loudly about the
?S: unterminated strings.
```

```
?S:.
?C:CAT2:
?C: This macro catenates 2 tokens together.
?C:.
?C:CAT3:
?C: This macro catenates 3 tokens together.
?C:.
?C:CAT4:
?C: This macro catenates 4 tokens together.
?C:.
?C:CAT5:
?C: This macro catenates 5 tokens together.
?C:.
?C:STRINGIFY:
?C: This macro surrounds its token with double quotes.
?C:.
?C:SCAT2:
?C: This macro catenates 2 tokens together and stringifies the result.
?C:.
?C:SCAT3:
?C: This macro catenates 3 tokens together and stringifies the result.
?C:.
?C:SCAT4:
?C: This macro catenates 4 tokens
 together and stringifies the result.
?C:.
?C:SCAT5:
?C: This macro catenates 5 tokens together and stringifies the result.
?C:.
?H:?%<:#if $cpp_stuff == 1
?H:?CAT2:#define CAT2(a,b)a/**/b
?H:?CAT3:#define CAT3(a,b,c)a/**/b/**/c
?H:?CAT4:#define CAT4(a,b,c,d)a/**/b/**/c/**/d
?H:?CAT5:#define CAT5(a,b,c,d,e)a/**/b/**/c/**/d/**/e
?H:?STRINGIFY:#define STRINGIFY(a)"a"
?H:?%<:#define SQuoTe(a)${cpp_quote}a
?H:?%<:#define EQuoTe(a)a${cpp_quote}
?H:?SCAT2:#define SCAT2(a,b)EQuoTe(SQuoTe(a)b)
?H:?SCAT3:#define SCAT3(a,b,c)EQuoTe(SQuoTe(a)b/**/c)
?H:?SCAT4:#define SCAT4(a,b,c,d)EQuoTe(SQuoTe(a)b/**/c/**/d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e)EQuoTe(SQuoTe(a)b/**/c/**/d/**/e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 42
?X: The additional level of indirection enables these macros to be
?X: used as arguments to other macros.  See K&R 2nd ed., page 231.
?H:?%<:#define CaTiFy(a,b) a ## b
?H:?%<:#define CAT2(a,b) CaTiFy(a,b)
?H:?CAT3:#define CAT3(a,b,c) CAT2(CaTiFy(a,b),c)
```

```
?H:?CAT4:#define CAT4(a,b,c,d)
 CAT2(CaTiFy(a,b), CaTiFy(c,d))
?H:?CAT5:#define CAT5(a,b,c,d,e) CAT2(CAT2(CaTiFy(a,b), CaTiFy(c,d)), e)
?H:?%<:#define StGiFy(a)# a
?H:?STRINGIFY:#define STRINGIFY(a)StGiFy(a)
?H:?SCAT2:#define SCAT2(a,b)StGiFy(a) StGiFy(b)
?H:?SCAT3:#define SCAT3(a,b,c)StGiFy(a) StGiFy(b) StGiFy(c)
?H:?SCAT4:#define SCAT4(a,b,c,d)StGiFy(a) StGiFy(b) StGiFy(c) StGiFy(d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e)StGiFy(a) StGiFy(b) StGiFy(c) StGiFy(d) StGiFy(e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff != 1 && $cpp_stuff != 42
?H:?%<:#include "Bletch: How does this C preprocessor catenate tokens?"
?H:?%<:#endif
?H:.
?W:%<:CAT2 CAT3 CAT4 CAT5 STRINGIFY SCAT2 SCAT3 SCAT4 SCAT5
?F:!cpp_stuff.c
?LINT:known StGiFy EQuoTe SQuoTe CaTiFy
: how do we catenate cpp tokens here?
echo " "
echo "Checking to see how your cpp does stuff like catenate tokens..." >&4
cpp_quote=''
$cat >cpp_stuff.c <<'EOCP'
#define RCAT(a,b)a/**/b
#define ACAT(a,b)a ## b
RCAT(Rei,ser)
ACAT(Cir,cus)
EOCP
$cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out
 2>&1
if $contains 'Circus' cpp_stuff.out >/dev/null 2>&1; then
 echo "Oh!  Smells like ANSI's been here."
 echo "We can catify or stringify, separately or together!"
 cpp_stuff=42
elif $contains 'Reiser' cpp_stuff.out >/dev/null 2>&1; then
 echo "Ah, yes!  The good old days!"
 cpp_stuff=1
 $cat >cpp_stuff.c <<'EOCP'
#define SQuoTe(a)"a
#define EQuoTe(a)a"
#define CAT2(a,b)EQuoTe(SQuoTe(a)b)
CAT2(Vic,tory)
EOCP
 $cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out 2>&1
 if $contains '"Victory"' cpp_stuff.out >/dev/null 2>&1; then
  echo "I'll resort to a cute trick to also be able to stringify."
  cpp_quote=""
 else
  $cat <<EOM
```

```
However, in the good old days we don't know how to stringify and
catify at the same time...
@if SCAT2 || SCAT3 || SCAT4 || SCAT5
You might have to edit the values of the SCAT[2-5] macros in config.h...
@else
Hopefully, $package does not need this feature.
@end
EOM
 fi
else
 ./warn <<EOM
I can't seem to be able to catenate tokens with your cpp.
@if
 CAT2 || CAT3 || CAT4 || CAT5 || SCAT2 || SCAT3 || SCAT4 || SCAT5
You're going to have to edit the values of the following
macros in config.h:

@if CAT2 || CAT3 || CAT4 || CAT5
 CAT[2-5]
@end
@if SCAT2 || SCAT3 || SCAT4 || SCAT5
 SCAT[2-5]
@end

in order to let me compile.
@end
EOM
 cpp_stuff="/* Help! How do we handle cpp_stuff? */*/"
fi
$rm -f cpp_stuff.*

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cpp_stuff.U
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?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gccversion gccosandvers gccansipedantic: cat cpp rm +cc \
 Myread Guess Options Oldconfig Loc osname osvers run
?MAKE: -pick add $@ %<
```

```
?S:gccversion:
?S: If GNU cc (gcc) is used, this variable holds '1' or '2' to
?S: indicate whether the compiler is version 1 or 2.  This is used in
?S: setting some of the default cflags.  It is set to '' if not gcc.
?S:.
?S:gccosandvers:
?S: If GNU cc (gcc) is used, this variable holds the operating system
?S: and version used to compile gcc.  It is set to '' if not gcc,
?S: or if
 nothing useful can be parsed as the os version.
?S:.
?S:gccansipedantic:
?S: If GNU cc (gcc) is used, this variable will enable (if set) the
?S: -ansi and -pedantic ccflags for building core files (through
?S: cflags script). (See Porting/pumpkin.pod for full description).
?S:.
?D:gccversion=''
?D:gccansipedantic=''
?T:c99_for
?T:flag
?T:gccshortvers
?T:incdir
?T:warn
?F:!try
?LINT:change cpp
?LINT:extern ccflags
?LINT:extern ldflags
?LINT:extern locincpth
?LINT:extern ccname
?LINT:change ccname
?LINT:change locincpth
?LINT:change ccflags
?LINT:set gccansipedantic
?X: Check if they have gcc in any guise.
: Check if we are using GNU gcc and what its version is
echo " "
echo "Checking for GNU cc in disguise and/or its version number..." >&4
$cat >try.c <<EOM
#include <stdio.h>
int main() {
#if defined(__GNUC__) && !defined(__INTEL_COMPILER)
#ifdef __VERSION__
 printf("%s\n", __VERSION__);
#else
 printf("%s\n", "1");
#endif
#endif
 return(0);
```

```
}
EOM
if $cc -o try $ccflags $ldflags try.c; then
 gccversion=`$run
 ./try`
 case "$gccversion" in
 ") echo "You are not using GNU cc." ;;
 *)  echo "You are using GNU cc $gccversion."
     ccname=gcc
     ;;
 esac
else
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to be working!" >&4
?X: using -K will prevent aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
 echo "    You'd better start hunting for one and let me know about it." >&4
  exit 1
  ;;
 esac
fi
$rm -f try try.*
case "$gccversion" in
1.*) cpp=`./loc gcc-cpp $cpp $pth` ;;
esac
case "$gccversion" in
") gccosandvers=" ;;
*) gccshortvers=`echo "$gccversion"|sed 's/ .*//'`
  gccosandvers=`$cc -v 2>&1|grep '/specs$'|sed "s!.*/[^-/]*-[^-/]*-\([^-/]*\)/$gccshortvers/specs!\1!"`
  gccshortvers="
  case "$gccosandvers" in
  $osname) gccosandvers=" ;; # linux gccs seem to have no linux osvers, grr
  $osname$osvers) ;; # looking good
  $osname*) cat <<EOM >&4

*** WHOA THERE!!! ***

   Your gcc has not been
 compiled for the exact release of
   your operating system ($gccosandvers versus $osname$osvers).

   In general it is a good idea to keep gcc synchronized with
   the operating system because otherwise serious problems
   may ensue when trying to compile software, like Perl.

   I'm trying to be optimistic here, though, and will continue.
```

```
   If later during the configuration and build icky compilation
   problems appear (headerfile conflicts being the most common
   manifestation), I suggest reinstalling the gcc to match
   your operating system release.

EOM
     ;;
  *) gccosandvers=" ;; # failed to parse, better be silent
  esac
  ;;
esac
case "$ccname" in
") ccname="$cc" ;;
esac

# gcc 3.* complain about adding -Idirectories that they already know about,
# so we will take those off from locincpth.
case "$gccversion" in
3.*)
   echo "main(){}">try.c
   for incdir in $locincpth; do
      warn=`$cc $ccflags -I$incdir -c try.c 2>&1 | \
      grep '^c[cp]p*[01]: warning:
 changing search order '`
      if test "X$warn" != X; then
    locincpth=`echo " $locincpth " | sed "s! $incdir ! !"`
      fi
   done
   $rm -f try try.*
esac

# gcc 4.9 by default does some optimizations that break perl.
# see ticket 121505.
#
# The -fwrapv disables those optimizations (and probably others,) so
# for gcc 4.9 (and later, since the optimizations probably won't go
# away), add -fwrapv unless the user requests -fno-wrapv, which
# disables -fwrapv, or if the user requests -fsanitize=undefined,
# which turns the overflows -fwrapv ignores into runtime errors.
case "$gccversion" in
4.[3-9].*|4.[1-9][0-9]*|[5-9].*|[1-9][0-9]*)
   case "$ccflags" in
   *-fno-wrapv*|*-fsanitize=undefined*|*-fwrapv*) ;;
   *) ccflags="$ccflags -fwrapv" ;;
   esac
esac

# Really old versions of gcc default to C89 and will error for this code.
```

```
# See if the compiler (gcc or otherwise) needs a flag to compile C99 code
# Initialisations in for loops seem to be the particular problem
# (Does
 this syntax conflict with something else that was valid C89?)
# We also add a declaration after a statement to detect whether the compiler
# (or the user supplied -Accflags) consider such declarations to be errors.
# This causes 'Configure with -Accflags="-Werror=declaration-after-statement"'
# to fail hard and early.
#
# Annoyingly -std=c99 will cause gcc to tell glibc not to define prototypes for
# syscall, drand48 etc when including <unistd.h>, which messes up our build.
# I guess we *could* loop round trying -std=c99 first with checks both for the
# prototype found and the code compiling (because -std=gnu99 might do other
# things we don't want, particularly on non-GCC compilers) but
# 1) We would need to check for the prototype first (without any flags)
# 2) We would still end up with most Linux systems either being -std=gnu99
#    or "" (no flag), and so both common options would not rigorously check our
#    portability to other platforms.
# So it doesn't seem worth the complexity
 and chance of different failure.
$cat >try.c <<'EOCP'
int main(int argc, char **argv) {
   argc = argc + 1;
   /* This is deliberately a declaration after a statement. */
   unsigned long long count = 0;
   for (char **p = argv; *p; ++p) {
       ++count;
   }
   return count == 1 ? 0 : argc;
}
EOCP
c99_for=no
for flag in " '-std=gnu99' '-std=c99'; do
   if $cc -o try $flag $ccflags $ldflags try.c 2>/dev/null && ./try; then
       c99_for="$flag"
       break;
   fi
done
case "$c99_for" in
") echo "Your C compiler doesn't need any special flags to compile C99 code"
   ;;
no) echo >&4 "Your C compiler doesn't seem to be able to compile C99 code"
   rp='Do you really want to continue?'
   dflt='n'
   . ./myread
   case "$ans" in
 [yY]) echo >&4 "Okay, continuing." ;;
 *) exit 1    ;;
```

```
  esac
  ;;
*)  echo "Your C compiler needs $c99_for to compile C99 code"
  ccflags="$c99_for $ccflags"
  ;;
esac
$rm -f try try.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/gccvers.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sresgproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sresgproto:
?S: This variable conditionally defines the HAS_SETRESGID_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the setresgid() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SETRESGID_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the setresgid() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
 int setresgid(uid_t ruid, uid_t euid, uid_t suid);
?C:.
?H:#$d_sresgproto HAS_SETRESGID_PROTO /**/
?H:.
?LINT:set d_sresgproto
: see if prototype for setresgid is available
echo " "
set d_sresgproto setresgid $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sresgproto.U

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```
?RCS: $Id: d_umask.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_umask.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:14:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_umask: Inlibc
?MAKE: -pick add $@ %<
?S:d_umask:
?S: This variable conditionally defines the HAS_UMASK symbol, which
?S: indicates to the C program that the umask() routine is available.
?S: to set and get the value of the file creation mask.
?S:.
?C:HAS_UMASK :
?C: This
 symbol, if defined, indicates that the umask routine is
?C: available to set and get the value of the file creation mask.
?C:.
?H:#$d_umask HAS_UMASK  /**/
?H:.
?LINT:set d_umask
: see if umask exists
set umask d_umask
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_umask.U
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```
?RCS: $Id$
?RCS:
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_nanosleep: Inlibc
?MAKE: -pick add $@ %<
?S:d_nanosleep:
?S: This variable conditionally defines HAS_NANOSLEEP
?S: if nanosleep() is available to sleep with 1E-9 sec accuracy.
?S:.
?C:HAS_NANOSLEEP:
?C: This symbol, if defined, indicates that the nanosleep
?C: system call is available to sleep with 1E-9 sec accuracy.
?C:.
?H:#$d_nanosleep HAS_NANOSLEEP  /**/
?H:.
?LINT:set d_nanosleep
: see if nanosleep exists
set nanosleep d_nanosleep
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nanosleep.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitebin.U,v $
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitebin.U,v $
?RCS:
?MAKE:sitebin sitebinexp installsitebin : Getfile Oldconfig \
 Setprefixvar siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitebin=''
?S:sitebin:
?S: This variable holds the name of the directory in which the user wants
?S: to put add-on publicly executable files for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S: The standard distribution will put nothing
```

```
 in this directory.
?S: After perl has been installed, users may install their own local
?S: executables in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitebinexp="
?S:sitebinexp:
?S: This is the same as the sitebin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installsitebin="
?S:installsitebin:
?S: This variable is usually the same as sitebinexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?LINT:change prefixvar
?LINT:set installsitebin
?LINT:set sitebin
?LINT:set sitebinexp
: determine where add-on public executables go
case "$sitebin" in
") dflt=$siteprefix/bin ;;
*) dflt=$sitebin ;;
esac
fn=d~
rp='Pathname where the add-on public executables should be installed?'
. ./getfile
prefixvar=sitebin
. ./setprefixvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitebin.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: prototype.U,v 3.0.1.3 1994/05/06 15:11:49 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: prototype.U,v $
?RCS: Revision 3.0.1.3  1994/05/06  15:11:49  ram
```

```
?RCS: patch23: ensure cc flags used when looking for prototype support
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:36  ram
?RCS: patch16: prototype handling macros now appear only when needed
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:03:12  ram
?RCS: patch6: defines were referring to non-existent VOID symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:36  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:prototype: Nothing
?S:prototype:
?S: This variable holds the eventual value of CAN_PROTOTYPE, which
?S: indicates the C compiler can handle function prototypes.
?S:.
: stub, never used
prototype=nothing
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/prototype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syslog.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_syslog: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_syslog:
?S: This variable conditionally defines the I_SYSLOG symbol,
?S: and indicates whether a C program should include <syslog.h>.
?S:.
?C:I_SYSLOG:
?C: This symbol, if defined, indicates that <syslog.h> exists and
?C: should be included.
?C:.
?H:#$i_syslog I_SYSLOG  /**/
?H:.
?LINT:set i_syslog
: see if this is a syslog.h system
set syslog.h i_syslog
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_syslog.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: prefshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: prefshell.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:28:13  ram
?RCS: patch36: added SHELL temporary since metalint now sees ${SHELL}
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:47  ram
?RCS: patch10: non-portable var substitution was used (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:prefshell: cat package Getfile Oldconfig ksh csh bash
?MAKE: -pick add $@ %<
?S:prefshell:
?S: This
 variable contains the eventual value of the PREFSHELL symbol,
?S: which contains the full name of the preferred user shell on this
?S: system.  Usual values are /bin/csh, /bin/ksh, /bin/sh.
?S:.
?C:PREFSHELL:
?C: This symbol contains the full name of the preferred user shell on this
?C: system.  Usual values are /bin/csh, /bin/ksh, /bin/sh.
?C:.
?H:#define PREFSHELL "$prefshell"  /**/
?H:.
?T:SHELL
: find out which shell people like to use most
case "$prefshell" in
")
 case "$ksh $bash $csh" in
 */ksh*) dflt="$ksh" ;;
 */bash*) dflt="$bash" ;;
 */csh*) dflt="$csh" ;;
 *) dflt='/bin/sh' ;;
 esac
```

```
 ;;
*)  dflt="$prefshell";;
esac
?X: Some shells (Ultrix) do not understand ${SHELL:-/bin/sh}, sigh!
$cat <<EOM

Give the full path name of the shell most people like to use on your system.
This will be used by $package whenever the user wants to get a shell
escape (for instance) and is not necessarily the same as the shell you are
currently using (${SHELL-/bin/sh}).

EOM
fn=f/~
rp='Preferred
 shell to be used?'
. ./getfile
prefshell=$ans
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prefshell.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_stat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_stat.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stat: Inlibc
?MAKE: -pick add $@ %<
?S:d_stat:
?S: This variable conditionally defines HAS_STAT if stat() is
?S: available to get file status.
?S:.
?C:HAS_STAT (STAT):
?C: This symbol, if defined, indicates that the stat routine is
?C: available to get file status.
?C:.
?H:#$d_stat HAS_STAT /**/
?H:.
```

```
?LINT:set d_stat
: see if stat exists
set
 stat d_stat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_stat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: so.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: so.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:30:04  ram
?RCS: patch36: now tells user how he can suppress shared lib lookup (ADO)
?RCS: patch36: removed echo at the top, since it's now in the here-doc (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:07:02  ram
?RCS: patch30: created
?RCS:
?X:
?X: This unit computes the shared-object / shared-lib extension
?X:
?MAKE:so d_libname_unique: test libpth Loc Myread Oldconfig cat Setvar
?MAKE: -pick add $@ %<
?S:so:
?S: This
 variable holds the extension used to identify shared libraries
?S: (also known as shared objects) on the system. Usually set to 'so'.
?S:.
?S:d_libname_unique:
?S: This variable is defined if the target system insists on unique
?S: basenames for shared library files. This is currently true on Android,
?S: false everywhere else we know of.
?S: Defaults to 'undef'.
?S:.
?LINT:set d_libname_unique
?T: xxx
: compute shared library extension
case "$so" in
```

```
")
 if xxx=`./loc libc.sl X $libpth`; $test -f "$xxx"; then
  dflt='sl'
 else
  dflt='so'
 fi
 ;;
*) dflt="$so";;
esac
$cat <<EOM

On some systems, shared libraries may be available.  Answer 'none' if
you want to suppress searching of shared libraries for the remainder
of this configuration.

EOM
rp='What is the file extension used for shared libraries?'
. ./myread
so="$ans"

: Does target system insist that shared library basenames are unique
$cat << EOM

Some dynamic loaders assume that the *basename* of shared library
 filenames
are globally unique.  We'll default this to undef as we assume your system
is not this weird. Set to defined if you're on one of them.

EOM

dflt='n'
rp='Make shared library basenames unique?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)   val="$undef"  ;;
esac
set d_libname_unique
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/so.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_casti32.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:10:45  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:09:37  ram
?RCS: patch36: declare signal handler correctly (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:06  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Can the compiler cast large floats to 32-bit integers?
?X:
?MAKE:d_casti32: cat
 +cc +ccflags rm_try intsize Setvar test signal_t
?MAKE: -pick add $@ %<
?S:d_casti32:
?S: This variable conditionally defines CASTI32, which indicates
?S: whether the C compiler can cast large floats to 32-bit ints.
?S:.
?C:CASTI32:
?C: This symbol is defined if the C compiler can cast negative
?C: or large floating point numbers to 32-bit ints.
?C:.
?T:xxx yyy
?H:#$d_casti32 CASTI32  /**/
?H:.
?F:!try
?LINT:set d_casti32
: check for ability to cast large floats to 32-bit ints.
echo " "
echo 'Checking whether your C compiler can cast large floats to int32.' >&4
if $test "$intsize" -eq 4; then
 xxx=int
else
 xxx=long
fi
$cat >try.c <<EOCP
#include <sys/types.h>
#include <signal.h>
```

```
$signal_t blech() { exit(3); }
int main()
{
 $xxx i32;
 double f;
 int result = 0;
 signal(SIGFPE, blech);

 f = (double) 0x7fffffff;
 f = 10 * f;
 i32  = ($xxx) f;

 if (i32 != ($xxx) f)
  result |= 1;
 exit(result);
}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 ./try
 yyy=$?
else
 echo "(I can't
 seem to compile the test program--assuming it can't)"
 yyy=1
fi
case "$yyy" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_casti32
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_casti32.U
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?RCS: of the source tree for dist 3.0.

```
?RCS:
?MAKE:d_snprintf d_vsnprintf : Inlibc Compile cat run rm_try
?MAKE: -pick add $@ %<
?S:d_snprintf:
?S: This variable conditionally defines the HAS_SNPRINTF symbol, which
?S: indicates to the C program that the snprintf () library function
?S: is available.
?S:.
?S:d_vsnprintf:
?S: This variable conditionally defines the HAS_VSNPRINTF symbol, which
?S: indicates to the C program that the vsnprintf () library function
?S: is available.
?S:.
?C:HAS_SNPRINTF:
?C: This symbol, if defined, indicates that the snprintf () library
?C: function
 is available for use.
?C:.
?C:HAS_VSNPRINTF:
?C: This symbol, if defined, indicates that the vsnprintf () library
?C: function is available for use.
?C:.
?H:#$d_snprintf HAS_SNPRINTF /**/
?H:#$d_vsnprintf HAS_VSNPRINTF /**/
?H:.
?F:!try
: see if snprintf exists
set snprintf d_snprintf
eval $inlibc

: see if vsnprintf exists
set vsnprintf d_vsnprintf
eval $inlibc

case "$d_snprintf-$d_vsnprintf" in
"$define-$define")
  $cat <<EOM
Checking whether your snprintf() and vsnprintf() work okay...
EOM
  $cat >try.c <<'EOCP'
/* v?snprintf testing logic courtesy of Russ Allbery.
* According to C99:
* - if the buffer is too short it still must be \0-terminated
* - if the buffer is too short the potentially required length
*   must be returned and not -1
* - if the buffer is NULL the potentially required length
*   must be returned and not -1 or core dump
*/
```

```
#include <stdio.h>
#include <stdarg.h>

char buf[2];

int test (char *format, ...)
{
   va_list args;
   int count;

   va_start
 (args, format);
   count = vsnprintf (buf, sizeof buf, format, args);
   va_end (args);
   return count;
}

int main ()
{
   return ((test ("%s", "abcd") == 4 && buf[0] == 'a' && buf[1] == '\0'
           && snprintf (NULL, 0, "%s", "abcd") == 4) ? 0 : 1);
}
EOCP
   set try
   if eval $compile; then
 `$run ./try`
 case "$?" in
 0) echo "Your snprintf() and vsnprintf() seem to be working okay." ;;
 *) cat <<EOM >&4
Your snprintf() and snprintf() don't seem to be working okay.
EOM
    d_snprintf="$undef"
    d_vsnprintf="$undef"
    ;;
 esac
   else
 echo "(I can't seem to compile the test program--assuming they don't)"
 d_snprintf="$undef"
 d_vsnprintf="$undef"
   fi
   $rm_try
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_snprintf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: package.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: package.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:27:21  ram
?RCS: patch36: beware of non-ascii character sets when translating case
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:37:02  ram
?RCS: patch14: skip definition of spackage if not otherwise used
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:10  ram
?RCS: patch10: added spackage, suitable for starting sentences
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:28  ram
?RCS: Baseline for dist 3.0
 netwide release.
?RCS:
?MAKE:package spackage: Nothing
?MAKE: -pick wipe $@ %<
?S:package:
?S: This variable contains the name of the package being constructed.
?S: It is primarily intended for the use of later Configure units.
?S:.
?S:spackage:
?S: This variable contains the name of the package being constructed,
?S: with the first letter uppercased, i.e. suitable for starting
?S: sentences.
?S:.
?X: dist-4 has defined PACKAGE: here, which clashes with perly.h
?X:  as package is a reserved keyword in perl
?T:first last
: set package name
package='<PACKAGENAME>'
@if spackage
first=`echo $package | sed -e 's/^\(.\).*/\1/'`
last=`echo $package | sed -e 's/^.\(.*\)/\1/'`
?X:
?X: So early in the Configure script, we don't have ./tr set up and can't
?X: include Tr in our dependency or that would create a cycle. Therefore,
?X: we have to somehow duplicate the work done in Tr. That's life.
?X:
```

```
case "`echo AbyZ | tr '[:lower:]' '[:upper:]' 2>/dev/null`"-"`echo AbyZ | tr '[:upper:]' '[:lower:]'
 2>/dev/null`" in
ABYZ-abyz) spackage=`echo $first | tr '[:lower:]' '[:upper:]'`$last;;
*) spackage=`echo $first | tr '[a-z]' '[A-Z]'`$last;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/package.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtold_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtold_l:
?S: This variable conditionally defines the HAS_STRTOLD_L symbol, which
?S: indicates to the C program that the strtold_l() routine is available.
?S:.
?C:HAS_STRTOLD_L:
?C: This symbol, if defined, indicates that the strtold_l routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtold_l HAS_STRTOLD_L  /**/
?H:.
?LINT:set d_strtold_l
: see if strtold_l exists
set strtold_l d_strtold_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strtold_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: d_sem.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sem: test d_semctl d_semget d_semop Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_sem:
?S: This variable conditionally defines the HAS_SEM symbol, which
?S: indicates that the entire sem*(2) library is present.
?S:.
?C:HAS_SEM:
?C: This symbol, if defined, indicates that the entire sem*(2) library is
?C: supported.
?C:.
?H:#$d_sem HAS_SEM  /**/
?H:.
?T:h_sem
?LINT:set d_sem
:
 see how much of the 'sem*(2)' library is present.
h_sem=true
echo " "
case "$d_semctl$d_semget$d_semop" in
*"$undef"*) h_sem=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID messages"*"not configured"*)
 echo "Your $osname does not have the sem*(2) configured." >&4
       h_sem=false
 val="$undef"
 set semctl d_semctl
 eval $setvar
 set semget d_semget
 eval $setvar
 set semop d_semop
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_sem && $test `./findhdr sys/sem.h`; then
 echo "You have the full sem*(2) library." >&4
 val="$define"
else
```

```
 echo "You don't have the full sem*(2) library." >&4
 val="$undef"
fi
set d_sem
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sem.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pwritev.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pwritev.U,v $
?RCS:
?MAKE:d_pwritev: Inlibc
?MAKE: -pick add $@ %<
?S:d_pwritev:
?S: This variable conditionally defines the HAS_PWRITEV symbol, which
?S: indicates to the C program that the pwritev() routine is available.
?S:.
?C:HAS_PWRITEV :
?C: This symbol, if defined, indicates that the pwritev routine is
?C: available to perform vectored writes on a file descriptor at a
?C: given offset.
?C:.
?H:#$d_pwritev HAS_PWRITEV  /**/
?H:.
?LINT:set
 d_pwritev
: see if pwritev exists
set pwritev d_pwritev
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pwritev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_time.U,v 3.0.1.2 1995/07/25 14:07:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_time.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:43  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:16:38  ram
?RCS: patch36: now uses new Typedef unit to compute type information (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Maybe <sys/types.h> should be included?
?X:INC: i_systypes
?MAKE:d_time timetype: Csym Setvar Findhdr Myread Typedef
?MAKE: -pick
 add $@ %<
?S:d_time:
?S: This variable conditionally defines the HAS_TIME symbol, which indicates
?S: that the time() routine exists.  The time() routine is normally
?S: provided on UNIX systems.
?S:.
?S:timetype:
?S: This variable holds the type returned by time(). It can be long,
?S: or time_t on BSD sites (in which case <sys/types.h> should be
?S: included). Anyway, the type Time_t should be used.
?S:.
?C:HAS_TIME (TIMER):
?C: This symbol, if defined, indicates that the time() routine exists.
?C:.
?C:Time_t (TIMETYPE):
?C: This symbol holds the type returned by time(). It can be long,
?C: or time_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_time HAS_TIME  /**/
?H:#define Time_t $timetype  /* Time type */
?H:.
?LINT:set d_time
: see if time exists
echo " "
?X: MPE/iX needs this protection of hint values.
?X: See d_sterror.U for more explanation.
```

```
if test "X$d_time" = X -o X"$timetype" = X; then
   if set time val -f d_time; eval $csym; $val;
 then
  echo 'time() found.' >&4
  val="$define"
  rp="What is the type returned by time() on this system?"
  set time_t timetype long stdio.h sys/types.h
  eval $typedef_ask
   else
  echo 'time() not found, hope that will do.' >&4
  val="$undef"
  timetype='int';
   fi
   set d_time
   eval $setvar
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/d_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: byteorder.U,v 3.0.1.2 1997/02/28 15:24:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: byteorder.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:24:55  ram
?RCS: patch61: no longer ask the user if the test runs ok
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:58  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:byteorder: cat Myread Oldconfig Loc Compile rm_try run \
 multiarch uvtype uvsize i_stdlib
?MAKE: -pick add $@ %<
?S:byteorder:
?S: This
 variable holds the byte order in a UV. In the following,
?S: larger digits indicate more significance.  The variable byteorder
```

```
?S: is either 4321 on a big-endian machine, or 1234 on a little-endian,
?S: or 87654321 on a Cray ... or 3412 with weird order !
?S:.
?C:BYTEORDER:
?C: This symbol holds the hexadecimal constant defined in byteorder,
?C: in a UV, i.e. 0x1234 or 0x4321 or 0x12345678, etc...
?C: If the compiler supports cross-compiling or multiple-architecture
?C: binaries, use compiler-defined macros to
?C: determine the byte order.
?C:.
?H:?%<:#if defined(MULTIARCH)
?H:?%<:#  ifdef __LITTLE_ENDIAN__
?H:?%<:#    if LONGSIZE == 4
?H:?%<:#      define BYTEORDER 0x1234
?H:?%<:#    else
?H:?%<:#      if LONGSIZE == 8
?H:?%<:#        define BYTEORDER 0x12345678
?H:?%<:#      endif
?H:?%<:#    endif
?H:?%<:#  else
?H:?%<:#    ifdef __BIG_ENDIAN__
?H:?%<:#      if LONGSIZE == 4
?H:?%<:#        define BYTEORDER 0x4321
?H:?%<:#      else
?H:?%<:#        if LONGSIZE
 == 8
?H:?%<:#          define BYTEORDER 0x87654321
?H:?%<:#        endif
?H:?%<:#      endif
?H:?%<:#    endif
?H:?%<:#  endif
?H:?%<:#else
?H:?%<:#define BYTEORDER 0x$byteorder /* large digits for MSB */
?H:?%<:#endif
?H:.
?T:xxx_prompt
?F:!try
: check for ordering of bytes in a UV
echo " "
case "$multiarch" in
*$define*)
 $cat <<EOM
You seem to be doing a multiarchitecture build,
skipping the byteorder check.

EOM
 byteorder='ffff'
 ;;
```

```
*)
 case "$byteorder" in
 ")
  $cat <<'EOM'
In the following, larger digits indicate more significance.  A big-endian
machine like a Pyramid or a Motorola 680?0 chip will come out to 4321. A
little-endian machine like a Vax or an Intel 80?86 chip would be 1234. Other
machines may have weird orders like 3412.  A Cray will report 87654321,
an Alpha will report 12345678. If the test program works the default is
probably right.
I'm now running the test program...
EOM
  $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include
 <sys/types.h>
typedef $uvtype UV;
int main()
{
 int i;
 union {
  UV l;
  char c[$uvsize];
 } u;

 if ($uvsize > 4)
  u.l = (((UV)0x08070605) << 32) | (UV)0x04030201;
 else
  u.l = (UV)0x04030201;
 for (i = 0; i < $uvsize; i++)
  printf("%c", u.c[i]+'0');
 printf("\n");
 exit(0);
}
EOCP
  xxx_prompt=y
  set try
  if eval $compile && $run ./try > /dev/null; then
   dflt=`$run ./try`
   case "$dflt" in
   [1-4][1-4][1-4][1-4]|12345678|87654321)
    echo "(The test program ran ok.)"
    echo "byteorder=$dflt"
    xxx_prompt=n
```

```
   ;;
   ????|????????) echo "(The test program ran ok.)" ;;
   *) echo "(The test program didn't run right for some reason.)" ;;
   esac
  else
   dflt='4321'
   cat <<'EOM'
(I can't seem to compile the test program.  Guessing big-endian...)
EOM
  fi
  case "$xxx_prompt" in
  y)
   rp="What is the order of bytes in $uvtype?"
   . ./myread
   byteorder="$ans"
   ;;
  *) byteorder=$dflt
   ;;
  esac
  ;;
 esac
 $rm_try
 ;;
esac
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/byteorder.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:multiarch: osname
?MAKE: -pick add $@ %<
?S:multiarch:
?S: This variable conditionally defines the MULTIARCH symbol
?S: which signifies the presence of multiplatform files.
?S: This is normally set by hints files.
?S:.
```

```
?C:MULTIARCH:
?C: This symbol, if defined, signifies that the build
?C: process will produce some binary files that are going to be
?C: used in a cross-platform environment.  This is the case for
?C: example with the NeXT "fat" binaries that contain executables
?C: for
 several CPUs.
?C:.
?H:#$multiarch MULTIARCH  /**/
?H:.
: Check if is a multiplatform env
case "$osname" in
darwin) multiarch="$define" ;;
esac
case "$multiarch" in
"|[nN]*) multiarch="$undef" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/multiarch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nearbyint: Inlibc
?MAKE: -pick add $@ %<
?S:d_nearbyint:
?S: This variable conditionally defines HAS_NEARBYINT if nearbyint()
?S: is available to return the integral value closest to (according to
?S: the current rounding mode) to x.
?S:.
?C:HAS_NEARBYINT:
?C: This symbol, if defined, indicates that the nearbyint routine is
?C: available to return the integral value closest to (according to
?C: the current rounding mode) to x.
?C:.
?H:#$d_nearbyint HAS_NEARBYINT  /**/
?H:.
?LINT:set d_nearbyint
: see if nearbyint exists
set nearbyint d_nearbyint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nearbyint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Getfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Getfile.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:01:06  ram
?RCS: patch61: getfile script now begins with "startsh"
?RCS:
?RCS: Revision 3.0.1.6  1995/02/15  14:11:00  ram
?RCS: patch51: was not working if ~'s allowed with d_portable on (WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:11:25  ram
?RCS: patch45: added support for escaping answers to skip various checks
?RCS: patch45: modified message issued after file expansion
?RCS:
?RCS: Revision
 3.0.1.4  1994/10/29  15:53:19  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:23:36  ram
?RCS: patch23: getfile could be confused by file name in "locate" requests
?RCS: patch23: new 'p' directive to assume file is in people's path (WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:01:31  ram
?RCS: patch16: added metalint hint on changed 'ans' variable
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:46:27  ram
?RCS: patch10: minor format problems and misspellings fixed
?RCS: patch10: now performs from package dir and not from UU subdir
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to get a file name and make some sanity checks. Optionally, a ~name
?X: expansion is performed.
?X:
?X: To use this unit, $rp and $dflt must hold the question and the
?X: default answer, which will be passed as-is
 to the myread script.
?X: The $fn variable must hold the file type (f or d, for file/directory).
```

```
?X: If $gfpth is set to a list of space-separated list of directories,
?X: those are prefixes for the filename.  Unless $gfpthkeep is set to 'y',
?X: gfpth is cleared on return from Getfile.
?X:
?X: If it is followed by a ~, then ~name substitution will occur. Upon return,
?X: $ans is set with the filename value. If a / is specified, then only a full
?X: path name is accepted (but ~ substitution occurs before, if needed). The
?X: expanded path name is returned in that case.
?X:
?X: If a + is specified, the existence checks are skipped. This usually means
?X: the file/directory is under the full control of the program.
?X:
?X: If the 'n' (none) type is used, then the user may answer none.
?X: The 'e' (expand) switch may be used to bypass d_portable, expanding ~name.
?X:
?X: If the 'l' (locate) type is used, then it must end with a ':' and then a
?X: file name. If the answer is a directory,
 the file name will be appended
?X: before testing for file existence. This is useful in locate-style
?X: questions like "where is the active file?". In that case, one should
?X: use:
?X:
?X:   dflt='~news/lib'
?X:   fn='l~:active'
?X:   rp='Where is the active file?'
?X:   . ./getfile
?X:   active="$ans"
?X:
?X: If the 'p' (path) letter is specified along with 'l', then an answer
?X: without a leading / will be expected to be found in everyone's path.
?X:
?X: It is also possible to include a comma-separated list of items within
?X: parentheses to specify which items should be accepted as-is with no
?X: further checks. This is useful when for instance a full path is expected
?X: but the user may escape out via "magical" answers.
?X:
?X: If the answer to the question is 'none', then the existence checks are
?X: skipped and the empty string is returned.
?X:
?MAKE:Getfile: d_portable contains startsh Myread Filexp tr trnl
?MAKE: -pick add $@ %<
?V:ansexp:fn gfpth gfpthkeep
?F:./getfile
?T:tilde
 type what orig_rp orig_dflt fullpath already redo skip none_ok \
 value exp_file nopath_ok loc_file fp pf dir direxp
?LINT:change ans
?LINT:change gfpth
```

```
: now set up to get a file name
cat <<EOS >getfile
$startsh
EOS
cat <<'EOSC' >>getfile
tilde=''
fullpath=''
already=''
skip=''
none_ok=''
exp_file=''
nopath_ok=''
orig_rp="$rp"
orig_dflt="$dflt"
case "$gfpth" in
'') gfpth='.' ;;
esac

?X: Begin by stripping out any (...) grouping.
case "$fn" in
*\(*)
 : getfile will accept an answer from the comma-separated list
 : enclosed in parentheses even if it does not meet other criteria.
 expr "$fn" : '.*(\(.*\)).*' | $tr ',' $trnl >getfile.ok
 fn=`echo $fn | sed 's/(.*)//'`
 ;;
esac

?X: Catch up 'locate' requests early, so that we may strip the file name
?X: before looking at the one-letter commands, in case the file name contains
?X: one of them. Reported by Wayne Davison <davison@borland.com>.
case "$fn" in
*:*)
 loc_file=`expr $fn : '.*:\(.*\)'`
 fn=`expr $fn : '\(.*\):.*'`
 ;;
esac

case
 "$fn" in
*~*) tilde=true;;
esac
case "$fn" in
*/*) fullpath=true;;
esac
case "$fn" in
*+*) skip=true;;
esac
```

```
case "$fn" in
*n*) none_ok=true;;
esac
case "$fn" in
*e*) exp_file=true;;
esac
case "$fn" in
*p*) nopath_ok=true;;
esac

case "$fn" in
*f*) type='File';;
*d*) type='Directory';;
*l*) type='Locate';;
esac

what="$type"
case "$what" in
Locate) what='File';;
esac

case "$exp_file" in
")
 case "$d_portable" in
 "$define") ;;
 *) exp_file=true;;
 esac
 ;;
esac

cd ..
while test "$type"; do
 redo=''
 rp="$orig_rp"
 dflt="$orig_dflt"
 case "$tilde" in
 true) rp="$rp (~name ok)";;
 esac
 . UU/myread
?X: check for allowed escape sequence which may be accepted verbatim.
 if test -f UU/getfile.ok && \
  $contains "^$ans\$" UU/getfile.ok >/dev/null 2>&1
 then
  value="$ans"
  ansexp="$ans"
  break
 fi
 case "$ans" in
```

```
 none)
  value=''
  ansexp=''
  case "$none_ok" in
  true) type='';;
  esac
  ;;
 *)
  case "$tilde" in
  '') value="$ans"
   ansexp="$ans";;
  *)
   value=`UU/filexp $ans`
   case
 $? in
   0)
    if test "$ans" != "$value"; then
     echo "(That expands to $value on this system.)"
    fi
    ;;
   *) value="$ans";;
   esac
   ansexp="$value"
   case "$exp_file" in
   '') value="$ans";;
   esac
   ;;
  esac
  case "$fullpath" in
  true)
?X: Perform all the checks on ansexp and not value since when d_portable
?X: is defined, the original un-expanded answer which is stored in value
?X: would lead to "non-existent" error messages whilst ansexp has been
?X: properly expanded. -- Fixed by Jan.Djarv@sa.erisoft.se (Jan Djarv)
?X: Always expand ~user if '/' was requested
   case "$ansexp" in
   /*) value="$ansexp" ;;
?X: Allow for c:/some/path
   [a-zA-Z]:/*) value="$ansexp" ;;
   *)
    redo=true
    case "$already" in
    true)
    echo "I shall only accept a full path name, as in /bin/ls." >&4
    echo "Use a ! shell escape if you wish to check pathnames." >&4
     ;;
    *)
    echo "Please give a full path name, starting with slash." >&4
```

```
    case "$tilde"
in
    true)
   echo "Note that using ~name is ok provided it expands well." >&4
     already=true
     ;;
    esac
   esac
   ;;
  esac
  ;;
 esac
 case "$redo" in
 ")
  case "$type" in
  File)
   for fp in $gfpth; do
    if test "X$fp" = X.; then
        pf="$ansexp"
    else
        pf="$fp/$ansexp"
    fi
    if test -f "$pf"; then
     type="
    elif test -r "$pf" || (test -h "$pf") >/dev/null 2>&1
    then
     echo "($value is not a plain file, but that's ok.)"
     type="
    fi
    if test X"$type" = X; then
        value="$pf"
        break
    fi
   done
   ;;
  Directory)
   for fp in $gfpth; do
    if test "X$fp" = X.; then
        dir="$ans"
        direxp="$ansexp"
    else
        dir="$fp/$ansexp"
        direxp="$fp/$ansexp"
    fi
    if test -d "$direxp"; then
     type="
     value="$dir"
     break
```

```
    fi
   done
   ;;
  Locate)
   if test -d "$ansexp"; then
    echo "(Looking for $loc_file in directory
$value.)"
    value="$value/$loc_file"
    ansexp="$ansexp/$loc_file"
   fi
   if test -f "$ansexp"; then
    type="
   fi
   case "$nopath_ok" in
   true) case "$value" in
    */*) ;;
    *) echo "Assuming $value will be in people's path."
     type="
     ;;
    esac
    ;;
   esac
   ;;
  esac

  case "$skip" in
  true) type=";
  esac

  case "$type" in
  ") ;;
  *)
   if test "$fastread" = yes; then
    dflt=y
   else
    dflt=n
   fi
   rp="$what $value doesn't exist.  Use that name anyway?"
   . UU/myread
   dflt="
   case "$ans" in
   y*) type=";;
   *) echo " ";;
   esac
   ;;
  esac
  ;;
 esac
```

```
  ;;
 esac
done
cd UU
ans="$value"
rp="$orig_rp"
dflt="$orig_dflt"
rm -f getfile.ok
test "X$gfpthkeep" != Xy && gfpth=""
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Getfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_drand48_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_drand48_r drand48_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_drand48_r:
?S: This variable conditionally defines the HAS_DRAND48_R symbol,
?S: which indicates to the C program that the drand48_r()
?S: routine is available.
?S:.
?S:drand48_r_proto:
?S: This variable encodes the prototype of drand48_r.
?S: It is zero if d_drand48_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_drand48_r
?S: is defined.
?S:.
?C:HAS_DRAND48_R:
?C: This symbol, if defined, indicates that the drand48_r routine
?C: is available to drand48 re-entrantly.
?C:.
?C:DRAND48_R_PROTO:
?C: This
 symbol encodes the prototype of drand48_r.
?C: It is zero if d_drand48_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_drand48_r
?C: is defined.
?C:.
```

```
?H:#$d_drand48_r HAS_DRAND48_R /**/
?H:#define DRAND48_R_PROTO $drand48_r_proto /**/
?H:.
?T:try hdrs d_drand48_r_proto
: see if drand48_r exists
set drand48_r d_drand48_r
eval $inlibc
case "$d_drand48_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_drand48_r_proto:$usethreads" in
 ":define") d_drand48_r_proto=define
  set d_drand48_r_proto drand48_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_drand48_r_proto" in
 define)
 case "$drand48_r_proto" in
 "|0) try='int drand48_r(struct drand48_data*, double*);'
 ./protochk "$extern_C $try" $hdrs && drand48_r_proto=I_ST ;;
 esac
 case "$drand48_r_proto" in
 "|0) d_drand48_r=undef
  drand48_r_proto=0
  echo "Disabling drand48_r, cannot determine prototype." >&4 ;;
 * ) case
 "$drand48_r_proto" in
  REENTRANT_PROTO*) ;;
  *) drand48_r_proto="REENTRANT_PROTO_$drand48_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "drand48_r has no prototype, not using it." >&4 ;;
  esac
  d_drand48_r=undef
  drand48_r_proto=0
  ;;
 esac
 ;;
*) drand48_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_drand48_r.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorman1dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorman1dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorman1dir vendorman1direxp installvendorman1dir: man1dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorman1dir:
?S: This variable contains the name of the directory for man1
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: man1 pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorman1direxp:
?S: This variable is the ~name expanded version of vendorman1dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorman1dir="
?S:installvendorman1dir:
?S: This variable is really the same as vendorman1direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorman1dir
: Set the vendorman1dir variables
case "$vendorprefix" in
") vendorman1dir="
 vendorman1direxp="
 ;;
*) : determine where vendor-supplied manual pages go.
```

```
 case "$vendorman1dir" in
 ") dflt=`echo "$man1dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorman1dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=nd~+
 rp='Pathname for
 the vendor-supplied manual section 1 pages?'
 . ./getfile
 vendorman1dir="$ans"
 vendorman1direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorman1dir" = "X" && vendorman1dir=' '
prefixvar=vendorman1dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorman1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_localtime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS: Copyright (c) 2006,2007 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_localtime_r d_localtime_r_needs_tzset localtime_r_proto: Inlibc \
 cat run Protochk Hasproto i_systypes usethreads i_time i_systime \
 rm_try Compile extern_C i_stdlib i_unistd i_malloc
?MAKE: -pick add $@ %<
?S:d_localtime_r:
?S: This variable conditionally defines the HAS_LOCALTIME_R symbol,
?S: which indicates to the C program that the localtime_r()
?S: routine is available.
?S:.
?S:d_localtime_r_needs_tzset:
?S: This variable conditionally defines the LOCALTIME_R_NEEDS_TZSET
?S: symbol, which makes us call tzset before localtime_r()
?S:.
?S:localtime_r_proto:
?S: This
```

```
 variable encodes the prototype of localtime_r.
?S: It is zero if d_localtime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_localtime_r
?S: is defined.
?S:.
?C:HAS_LOCALTIME_R:
?C: This symbol, if defined, indicates that the localtime_r routine
?C: is available to localtime re-entrantly.
?C:.
?C:LOCALTIME_R_NEEDS_TZSET:
?C: Many libc's localtime_r implementations do not call tzset,
?C: making them differ from localtime(), and making timezone
?C: changes using \$ENV{TZ} without explicitly calling tzset
?C: impossible. This symbol makes us call tzset before localtime_r
?C:.
?H:?%<:#$d_localtime_r_needs_tzset LOCALTIME_R_NEEDS_TZSET /**/
?H:?%<:#ifdef LOCALTIME_R_NEEDS_TZSET
?H:?%<:#define L_R_TZSET tzset(),
?H:?%<:#else
?H:?%<:#define L_R_TZSET
?H:?%<:#endif
?H:.
?W:%<:L_R_TZSET
?C:L_R_TZSET:
?C: If localtime_r() needs tzset, it is defined in this define
?C:.
?C:LOCALTIME_R_PROTO:
?C: This symbol encodes the prototype of localtime_r.
?C: It is
 zero if d_localtime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_localtime_r
?C: is defined.
?C:.
?H:#$d_localtime_r HAS_LOCALTIME_R /**/
?H:#define LOCALTIME_R_PROTO $localtime_r_proto /**/
?H:.
?T:try hdrs d_localtime_r_proto
?F:!try
: see if localtime_r exists
set localtime_r d_localtime_r
eval $inlibc
case "$d_localtime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_localtime_r_proto:$usethreads" in
 ":define") d_localtime_r_proto=define
  set d_localtime_r_proto localtime_r $hdrs
  eval $hasproto ;;
```

```
 *) ;;
 esac
 case "$d_localtime_r_proto" in
 define)
 case "$localtime_r_proto" in
 "|0) try='struct tm* localtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && localtime_r_proto=S_TS ;;
 esac
 case "$localtime_r_proto" in
 "|0) try='int localtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && localtime_r_proto=I_TS ;;
 esac
 case "$localtime_r_proto"
 in
 "|0) d_localtime_r=undef
  localtime_r_proto=0
  echo "Disabling localtime_r, cannot determine prototype." >&4 ;;
 * ) case "$localtime_r_proto" in
  REENTRANT_PROTO*) ;;
  *) localtime_r_proto="REENTRANT_PROTO_$localtime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "localtime_r has no prototype, not using it." >&4 ;;
  esac
  d_localtime_r=undef
  localtime_r_proto=0
  ;;
 esac
 ;;
*) localtime_r_proto=0
 ;;
esac

: see if localtime_r calls tzset
case "$localtime_r_proto" in
REENTRANT_PROTO*)
 $cat >try.c <<EOCP
/*  Does our libc's localtime_r call tzset ?
*  return 0 if so, 1 otherwise.
*/
#$i_systypes I_SYS_TYPES
#$i_unistd I_UNISTD
#$i_time I_TIME
#$i_stdlib I_STDLIB
#$i_malloc I_MALLOC
```

```
#ifdef I_SYS_TYPES
#  include <sys/types.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#ifdef I_TIME
#  include <time.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>
#ifdef I_MALLOC
#  include <malloc.h>
#endif
int
 main()
{
   int result = 0;
   time_t t = time(0L);
   char w_tz[]="TZ" "=GMT+5",
  e_tz[]="TZ" "=GMT-5",
 *tz_e = (char*)malloc(16),
 *tz_w = (char*)malloc(16);
   struct tm tm_e, tm_w;
   memset(&tm_e,'\0',sizeof(struct tm));
   memset(&tm_w,'\0',sizeof(struct tm));
   strcpy(tz_e,e_tz);
   strcpy(tz_w,w_tz);

   putenv(tz_e);
   localtime_r(&t, &tm_e);

   putenv(tz_w);
   localtime_r(&t, &tm_w);

   if( memcmp(&tm_e, &tm_w, sizeof(struct tm)) == 0 )
 result = 1;

   free(tz_e);free(tz_w);
   return result;
}
EOCP
 set try
 if eval $compile; then
     if $run ./try; then
  d_localtime_r_needs_tzset=undef;
```

```
    else
  d_localtime_r_needs_tzset=define;
    fi;
 else
    d_localtime_r_needs_tzset=undef;
 fi;
   ;;
 *)
   d_localtime_r_needs_tzset=undef;
   ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_localtime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nblock_io.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:17:14  ram
?RCS: patch61: simplify here document for shells that can't handle them well
?RCS: patch61: force use of "startsh" at the head of the generated script
?RCS: patch61: added new files to the ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:13:22  ram
?RCS: patch56: created
?RCS:
?X:
?X: Simplify here document for shells that can't handle them well.
?X: (Problem reported on FreeBSD; it's unclear if this helps.)  --AD
?X:
?MAKE:o_nonblock
 eagain rd_nodata d_eofnblk: cat rm_try +cc +ccflags +ldflags \
 d_open3 h_sysfile h_fcntl signal_t hint Oldconfig Setvar startsh Warn
?MAKE: -pick add $@ %<
?S:o_nonblock:
?S: This variable bears the symbol value to be used during open() or fcntl()
?S: to turn on non-blocking I/O for a file descriptor. If you wish to switch
?S: between blocking and non-blocking, you may try ioctl(FIOSNBIO) instead,
```

```
?S: but that is only supported by some devices.
?S:.
?S:eagain:
?S: This variable bears the symbolic errno code set by read() when no
?S: data is present on the file and non-blocking I/O was enabled (otherwise,
?S: read() blocks naturally).
?S:.
?S:rd_nodata:
?S: This variable holds the return code from read() when no data is
?S: present. It should be -1, but some systems return 0 when O_NDELAY is
?S: used, which is a shame because you cannot make the difference between
?S: no data and an EOF.. Sigh!
?S:.
?S:d_eofnblk:
?S: This variable conditionally defines EOF_NONBLOCK
 if EOF can be seen
?S: when reading from a non-blocking I/O source.
?S:.
?C:VAL_O_NONBLOCK:
?C: This symbol is to be used during open() or fcntl(F_SETFL) to turn on
?C: non-blocking I/O for the file descriptor. Note that there is no way
?C: back, i.e. you cannot turn it blocking again this way. If you wish to
?C: alternatively switch between blocking and non-blocking, use the
?C: ioctl(FIOSNBIO) call instead, but that is not supported by all devices.
?C:.
?C:VAL_EAGAIN:
?C: This symbol holds the errno error code set by read() when no data was
?C: present on the non-blocking file descriptor.
?C:.
?C:RD_NODATA:
?C: This symbol holds the return code from read() when no data is present
?C: on the non-blocking file descriptor. Be careful! If EOF_NONBLOCK is
?C: not defined, then you can't distinguish between no data and EOF by
?C: issuing a read(). You'll have to find another way to tell for sure!
?C:.
?C:EOF_NONBLOCK:
?C: This symbol, if defined, indicates to the C program that a read() on
?C: a
 non-blocking file descriptor will return 0 on EOF, and not the value
?C: held in RD_NODATA (-1 usually, in that case!).
?C:.
?H:#define VAL_O_NONBLOCK $o_nonblock
?H:#define VAL_EAGAIN $eagain
?H:#define RD_NODATA $rd_nodata
?H:#$d_eofnblk EOF_NONBLOCK
?H:.
?F:!try !try.out !try.ret !try.err !mtry
?T:status
```

```
?LINT:use d_open3
: check for non-blocking I/O stuff
case "$h_sysfile" in
true) echo "#include <sys/file.h>" > head.c;;
*)
 case "$h_fcntl" in
 true) echo "#include <fcntl.h>" > head.c;;
 *) echo "#include <sys/fcntl.h>" > head.c;;
 esac
 ;;
esac
echo " "
echo "Figuring out the flag used by open() for non-blocking I/O..." >&4
case "$o_nonblock" in
")
 $cat head.c > try.c
 $cat >>try.c <<'EOCP'
int main() {
#ifdef O_NONBLOCK
 printf("O_NONBLOCK\n");
 exit(0);
#endif
#ifdef O_NDELAY
 printf("O_NDELAY\n");
 exit(0);
#endif
?X: Stevens "Advanced Programming in the UNIX Environment" page 364 mentions
?X: the FNDELAY symbol, used in 4.33BSD (source: Paul Marquess).
#ifdef FNDELAY
 printf("FNDELAY\n");
 exit(0);
#endif
 exit(0);
}
EOCP
 if
 $cc $ccflags $ldflags -o try try.c >/dev/null 2>&1; then
  o_nonblock=`./try`
  case "$o_nonblock" in
  ") echo "I can't figure it out, assuming O_NONBLOCK will do.";;
  *) echo "Seems like we can use $o_nonblock.";;
  esac
 else
  echo "(I can't compile the test program; pray O_NONBLOCK is right!)"
 fi
 ;;
*) echo "Using $hint value $o_nonblock.";;
esac
```

```
$rm_try

echo " "
echo "Let's see what value errno gets from read() on a $o_nonblock file..." >&4
case "$eagain" in
")
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <errno.h>
#include <sys/types.h>
#include <signal.h>
#define MY_O_NONBLOCK $o_nonblock
extern int errno;
$signal_t blech(x) int x; { exit(3); }
EOCP
 $cat >> try.c <<'EOCP'
int main()
{
 int pd[2];
 int pu[2];
 char buf[1];
 char string[100];

 pipe(pd); /* Down: child -> parent */
 pipe(pu); /* Up: parent -> child */
 if (0 != fork()) {
  int ret;
  close(pd[1]); /* Parent reads from pd[0] */
  close(pu[0]); /*
 Parent writes (blocking) to pu[1] */
  if (-1 == fcntl(pd[0], F_SETFL, MY_O_NONBLOCK))
   exit(1);
  signal(SIGALRM, blech);
  alarm(5);
  if ((ret = read(pd[0], buf, 1)) > 0) /* Nothing to read! */
   exit(2);
  sprintf(string, "%d\n", ret);
  write(2, string, strlen(string));
  alarm(0);
#ifdef EAGAIN
  if (errno == EAGAIN) {
   printf("EAGAIN\n");
   goto ok;
  }
#endif
#ifdef EWOULDBLOCK
  if (errno == EWOULDBLOCK)
   printf("EWOULDBLOCK\n");
```

```
#endif
 ok:
  write(pu[1], buf, 1); /* Unblocks child, tell it to close our pipe */
  sleep(2);    /* Give it time to close our pipe */
  alarm(5);
  ret = read(pd[0], buf, 1); /* Should read EOF */
  alarm(0);
  sprintf(string, "%d\n", ret);
  write(3, string, strlen(string));
  exit(0);
 }

 close(pd[0]);   /* We write to pd[1] */
 close(pu[1]);   /* We read from pu[0] */
 read(pu[0], buf, 1); /* Wait for parent to signal us we may continue */
 close(pd[1]);   /* Pipe pd is now fully closed! */
 exit(0);    /* Bye bye, thank you for playing!
 */
}
EOCP
 if $cc $ccflags $ldflags -o try try.c >/dev/null 2>&1; then
?X: Use script to avoid the possible 'alarm call' message
  echo "$startsh" >mtry
  echo "./try >try.out 2>try.ret 3>try.err || exit 4" >>mtry
  chmod +x mtry
  ./mtry >/dev/null 2>&1
  case $? in
  0) eagain=`$cat try.out`;;
  1) echo "Could not perform non-blocking setting!";;
  2) echo "I did a successful read() for something that was not there!";;
  3) echo "Hmm... non-blocking I/O does not seem to be working!";;
  *) echo "Something terribly wrong happened during testing.";;
  esac
  rd_nodata=`$cat try.ret`
  echo "A read() system call with no data present returns $rd_nodata."
  case "$rd_nodata" in
  0|-1) ;;
  *)
   echo "(That's peculiar, fixing that to be -1.)"
   rd_nodata=-1
   ;;
  esac
  case "$eagain" in
  ")
   echo "Forcing errno EAGAIN on read() with no data available."
   eagain=EAGAIN
   ;;
  *)
```

```
  echo "Your read() sets errno to $eagain when no data is available."
  ;;
 esac
 status=`$cat
try.err`
 case "$status" in
 0) echo "And it correctly returns 0 to signal EOF.";;
 -1) echo "But it also returns -1 to signal EOF, so be careful!";;
 *) echo "However, your read() returns '$status' on EOF??";;
 esac
 val="$define"
 if test "$status" = "$rd_nodata"; then
  ./warn "your read() can't distinguish between EOF and no data!"
  val="$undef"
 fi
else
 echo "I can't compile the test program--assuming errno EAGAIN will do."
 eagain=EAGAIN
fi
set d_eofnblk
eval $setvar
;;
*)
 echo "Using $hint value $eagain."
 echo "Your read() returns $rd_nodata when no data is present."
 case "$d_eofnblk" in
 "$define") echo "And you can see EOF because read() returns 0.";;
 "$undef") echo "But you can't see EOF status from read() returned value.";;
 *)
?X: Should not happen, but if it does, assume the worst!
  echo "(Assuming you can't see EOF status from read anyway.)"
  d_eofnblk=$undef
  ;;
 esac
 ;;
esac
$rm_try head.c mtry
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nblock_io.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_munmap.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_munmap.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:22  ram
?RCS: patch15: created
?RCS:
?MAKE:d_munmap: Inlibc
?MAKE: -pick add $@ %<
?S:d_munmap:
?S: This variable conditionally defines HAS_MUNMAP if munmap() is
?S: available to unmap a region mapped by mmap().
?S:.
?C:HAS_MUNMAP:
?C: This symbol, if defined, indicates that the munmap system call is
?C: available to unmap a region, usually mapped by mmap().
?C:.
?H:#$d_munmap HAS_MUNMAP  /**/
?H:.
?LINT:set
 d_munmap
: see if munmap exists
set munmap d_munmap
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_munmap.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gidsign: Myread Typedef gidtype Compile run
?MAKE: -pick add $@ %<
?S:gidsign:
?S: This variable contains the signedness of a gidtype.
?S: 1 for unsigned, -1 for signed.
?S:.
?C:Gid_t_sign:
?C: This symbol holds the signedness of a Gid_t.
?C: 1 for unsigned, -1 for signed.
```

```
?C:.
?H:#define Gid_t_sign $gidsign  /* GID sign */
?H:.
?T:yyy zzz
?F:!try
: Check if GID is signed
echo " "
case "$gidtype" in
*_t) zzz="$gidtype" ;;
*)   zzz="gid"  ;;
esac
echo "Checking the sign of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include
 <stdio.h>
int main() {
 $gidtype foo = -1;
 if (foo < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set try
if eval $compile; then
 yyy=`$run ./try`
 case "$yyy" in
 ") gidsign=1
  echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) gidsign=$yyy
  case "$gidsign" in
   1) echo "Your $zzz is unsigned." ;;
  -1) echo "Your $zzz is signed."   ;;
  esac
  ;;
 esac
else
 gidsign=1
 echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidsign.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpclass: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpclass:
?S: This variable conditionally defines the HAS_FPCLASS symbol, which
?S: indicates to the C program that the fpclass() routine is available.
?S:.
?C:HAS_FPCLASS:
?C: This symbol, if defined, indicates that the fpclass routine is
?C: available to classify doubles.  Available for example in Solaris/SVR4.
?C: The returned values are defined in <ieeefp.h> and are:
?C:
?C: FP_SNAN  signaling NaN
?C: FP_QNAN  quiet NaN
?C: FP_NINF  negative infinity
?C: FP_PINF  positive infinity
?C: FP_NDENORM negative denormalized non-zero
?C: FP_PDENORM positive denormalized non-zero
?C: FP_NZERO negative zero
?C: FP_PZERO positive zero
?C: FP_NNORM negative normalized
 non-zero
?C: FP_PNORM positive normalized non-zero
?C:.
?H:#$d_fpclass HAS_FPCLASS  /**/
?H:.
?LINT:set d_fpclass
: see if fpclass exists
set fpclass d_fpclass
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclass.U
No license file was found, but licenses were detected in source scan.

```
*  You may redistribute only under the terms of the Artistic Licence,
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/Jmake.tmpl
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mbstowcs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mbstowcs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mbstowcs: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbstowcs:
?S: This variable conditionally defines the HAS_MBSTOWCS symbol, which
?S: indicates to the C program that the mbstowcs() routine is available
?S: to convert a multibyte string into a wide character string.
?S:.
?C:HAS_MBSTOWCS (MBSTOWCS):
?C: This symbol, if defined, indicates
 that the mbstowcs routine is
?C: available to convert a multibyte string into a wide character string.
?C:.
?H:#$d_mbstowcs HAS_MBSTOWCS  /**/
?H:.
?LINT:set d_mbstowcs
: see if mbstowcs exists
set mbstowcs d_mbstowcs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mbstowcs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pread.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pread.U,v $
?RCS:
?MAKE:d_pread: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_pread:
?S: This variable conditionally defines the HAS_PREAD symbol, which
?S: indicates to the C program that the pread() routine is available.
?S:.
?C:HAS_PREAD :
?C: This symbol, if defined, indicates that the pread routine is
?C: available to perform reads on a file descriptor at a given offset.
?C:.
?H:#$d_pread HAS_PREAD  /**/
?H:.
?LINT:set d_pread
: see if pread exists
set
 pread d_pread
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_time.U,v 3.0 1993/08/18 12:08:45 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_time.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit finds which "time" include to use. If 'timezone' is used by the
?X: program, we also try to find which header should be included. Eventually,
?X: we look for <sys/select.h> if I_SYSSELECT is used, to get struct timeval.
?X:
?MAKE:i_time i_systime i_systimek timeincl d_tm_tm_zone d_tm_tm_gmtoff: \
 Compile cat \
 contains rm_try echo n
 c +i_sysselct Findhdr Hasfield i_stdlib
?MAKE: -pick add $@ %<
?S:i_time:
?S: This variable unconditionally defines I_TIME, which indicates
?S: to the C program that it should include <time.h>.
```

```
?S:.
?S:i_systime:
?S: This variable conditionally defines I_SYS_TIME, which indicates
?S: to the C program that it should include <sys/time.h>.
?S:.
?S:i_systimek:
?S: This variable conditionally defines I_SYS_TIME_KERNEL, which
?S: indicates to the C program that it should include <sys/time.h>
?S: with KERNEL defined.
?S:.
?S:timeincl:
?S: This variable holds the full path of the included time header(s).
?S:.
?S:d_tm_tm_zone:
?S: This variable conditionally defines HAS_TM_TM_ZONE, which indicates
?S: to the C program that the struct tm has the tm_zone field.
?S:.
?S:d_tm_tm_gmtoff:
?S: This variable conditionally defines HAS_TM_TM_GMTOFF, which indicates
?S: to the C program that the struct tm has the tm_gmtoff field.
?S:.
?C:I_TIME (USE_TIME_H):
?C: This symbol is always defined, and indicates
 to the C program that
?C: it should include <time.h>.
?C:.
?C:I_SYS_TIME (I_SYSTIME USE_SYS_TIME_H NO_TIME_WITH_SYS_TIME):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h>.
?C:.
?C:I_SYS_TIME_KERNEL (I_SYSTIMEKERNEL):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h> with KERNEL defined.
?C:.
?C:HAS_TM_TM_ZONE:
?C: This symbol, if defined, indicates to the C program that
?C: the struct tm has a tm_zone field.
?C:.
?C:HAS_TM_TM_GMTOFF:
?C: This symbol, if defined, indicates to the C program that
?C: the struct tm has a tm_gmtoff field.
?C:.
?H:#$i_time I_TIME  /**/
?H:#$i_systime I_SYS_TIME  /**/
?H:#$i_systimek I_SYS_TIME_KERNEL  /**/
?H:#$d_tm_tm_zone HAS_TM_TM_ZONE  /**/
?H:#$d_tm_tm_gmtoff HAS_TM_TM_GMTOFF  /**/
?H:.
```

```
?W::timezone
?T:xselect flags sysselect s_timeval s_timezone
?LINT:change i_sysselct
?LINT:set d_tm_tm_zone
?LINT:set d_tm_tm_gmtoff
: see if we should include sys/time.h
echo
 " "
i_time='define'
if test "X$timeincl" = X; then
 echo "Testing to see if we should include <sys/time.h>." >&4
 $echo $n "I'm now running the test program...$c"
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <time.h>
#ifdef I_SYSTIME
#ifdef SYSTIMEKERNEL
#define KERNEL
#endif
#include <sys/time.h>
#endif
#ifdef I_SYSSELECT
#include <sys/select.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
 struct tm foo;
#ifdef S_TIMEVAL
 struct timeval bar;
#endif
#ifdef S_TIMEZONE
 struct timezone tzp;
#endif
 if (foo.tm_sec == foo.tm_sec)
  exit(0);
#ifdef S_TIMEVAL
 if (bar.tv_sec == bar.tv_sec)
  exit(0);
#endif
 exit(1);
}
EOCP
 flags=''
@if I_SYSSELECT
```

```
 if $contains 'timeval.*{' `./findhdr sys/select.h` >/dev/null 2>&1; then
  xselect='-DI_SYSSELECT'
 else
  xselect=''
 fi
@end
@if timezone
 for s_timezone in '-DS_TIMEZONE' ''; do
@else
 s_timezone=''
@end
?X: Every package is given a try with 'struct timeval'
@if I_SYSSELECT
 for sysselect in $xselect
 ''; do
@else
 sysselect=''
@end
 for s_timeval in '-DS_TIMEVAL' ''; do
 for i_systimek in '' '-DSYSTIMEKERNEL'; do
 for i_systime in '-DI_SYSTIME' ''; do
  case "$flags" in
  '') $echo $n ".$c"
   set try $i_systime $i_systimek $sysselect $s_timeval $s_timezone
   if eval $compile; then
    set X $i_systime $i_systimek $sysselect $s_timeval
    shift
    flags="$*"
    echo " "
    $echo $n "Succeeded with $flags$c"
   fi
   ;;
  esac
 done
 done
 done
@if I_SYSSELECT
 done
@end
@if timezone
 done
@end
 timeincl=''
 echo " "
 case "$flags" in
 *SYSTIMEKERNEL*) i_systimek="$define"
  timeincl=`./findhdr sys/time.h`
  echo "We'll include <sys/time.h> with KERNEL defined." >&4;;
```

```
 *) i_systimek="$undef";;
 esac
 case "$flags" in
 *I_SYSTIME*) i_systime="$define"
  timeincl=`./findhdr sys/time.h`" $timeincl"
  echo "We'll include <sys/time.h>." >&4;;
 *) i_systime="$undef";;
 esac
@if I_SYSSELECT
 case "$flags" in
 *I_SYSSELECT*) i_sysselct="$define"
  timeincl=`./findhdr sys/select.h`"
 $timeincl"
  echo "We'll also include <sys/select.h> to get struct timeval." >&4;;
 *) case "$i_sysselct" in
  ") i_sysselct="$undef";;
  esac
 esac
@end
 $rm_try
fi
: see if struct tm knows about tm_zone
case "$i_systime$i_time" in
*$define*)
	echo " "
	echo "Checking to see if your struct tm has tm_zone field..." >&4
	set d_tm_tm_zone tm tm_zone $i_systime sys/time.h $i_time time.h
	eval $hasfield
	;;
*)	val="$undef"
	set d_tm_tm_zone
	eval $setvar
	;;
esac
case "$d_tm_tm_zone" in
"$define")	echo "Yes, it does."	;;
*)		echo "No, it doesn't." ;;
esac
: see if struct tm knows about tm_gmtoff
case "$i_systime$i_time" in
*$define*)
	echo " "
	echo "Checking to see if your struct tm has tm_gmtoff field..." >&4
	set d_tm_tm_gmtoff tm tm_gmtoff $i_systime sys/time.h $i_time time.h
	eval $hasfield
	;;
*)	val="$undef"
	set d_tm_tm_gmtoff
```

```
      eval $setvar

   ;;
esac
case "$d_tm_tm_gmtoff" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/i_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorman3dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999-2000, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorman3dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorman3dir vendorman3direxp installvendorman3dir: man3dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorman3dir:
?S: This variable contains the name of the directory for man3
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: man3 pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorman3direxp:
?S: This variable is the ~name expanded version of vendorman3dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorman3dir="
?S:installvendorman3dir:
?S: This variable is really the same as vendorman3direxp but may differ on
```

```
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorman3dir
: Set the vendorman3dir variables
case "$vendorprefix" in
") vendorman3dir="
 vendorman3direxp="
 ;;
*) : determine where vendor-supplied module manual pages go.
 case "$vendorman3dir" in
 ") dflt=`echo "$man3dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorman3dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=nd~+
 rp='Pathname
 for the vendor-supplied manual section 3 pages?'
 . ./getfile
 vendorman3dir="$ans"
 vendorman3direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorman3dir" = "X" && vendorman3dir=' '
prefixvar=vendorman3dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorman3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_finitel: Inlibc
?MAKE: -pick add $@ %<
?S:d_finitel:
?S: This variable conditionally defines the HAS_FINITEL symbol, which
?S: indicates to the C program that the finitel() routine is available.
?S:.
```

```
?C:HAS_FINITEL:
?C: This symbol, if defined, indicates that the finitel routine is
?C: available to check whether a long double is finite
?C: (non-infinity non-NaN).
?C:.
?H:#$d_finitel HAS_FINITEL  /**/
?H:.
?LINT:set d_finitel
: see if finitel exists
set finitel d_finitel
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_finitel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Oldconfig.U,v 3.0.1.10 1997/02/28 15:06:39 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Oldconfig.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:06:39  ram
?RCS: patch61: added support for src.U
?RCS: patch61: new OSNAME define
?RCS: patch61: can now sense new OSes
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  13:40:51  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:04:18  ram
?RCS: patch54: config.sh reload logic now knows about new -K switch
?RCS: patch54: cleaned up and extended osvers for DEC
 OSF/1 (ADO)
?RCS: patch54: added MachTen detection (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:13:41  ram
?RCS: patch51: adapted osvers computation for AIX (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1995/01/30  14:27:15  ram
?RCS: patch49: unit Options.U now exports file optdef.sh, not a variable
?RCS: patch49: update code for myuname changed (WED)
?RCS:
```

```
?RCS: Revision 3.0.1.5  1995/01/11  15:15:36  ram
?RCS: patch45: added quotes around the INITPROG variable (ADO)
?RCS: patch45: allows variable overriding after config file loading
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:57:05  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: merged with the version used for perl5's Configure (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:24:17  ram
?RCS: patch23: added support for osf1 hints
?RCS: patch23: new support for solaris and i386 systems (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:05:02  ram
?RCS: patch16: added post-processing on myuname for Xenix targets
?RCS:
 patch16: message proposing config.sh defaults made consistent
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:32  ram
?RCS: patch10: force use of config.sh when -d option is used (WAD)
?RCS: patch10: complain about non-existent hint files (WAD)
?RCS: patch10: added Options dependency for fastread variable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit tries to remember what we did last time we ran Configure, mostly
?X: for the sake of setting defaults.
?X:
?MAKE:Oldconfig hint myuname osname osvers: Instruct Myread uname \
 Checkcc Mksymlinks run \
 sh awk sed test cat rm lns tr n c contains Loc Options Tr src trnl ln
?MAKE: -pick wipe $@ %<
?S:myuname:
?S: The output of 'uname -a' if available, otherwise the hostname.
?S: The whole thing is then lower-cased and slashes and single quotes are
?S: removed.
?S:.
?S:hint:
?S: Gives the type of hints used for previous answers. May be one of
?S: "default",
 "recommended" or "previous".
?S:.
?S:osname:
?S: This variable contains the operating system name (e.g. sunos,
?S: solaris, hpux, etc.).  It can be useful later on for setting
?S: defaults.  Any spaces are replaced with underscores.  It is set
?S: to a null string if we can't figure it out.
```

```
?S:.
?S:osvers:
?S: This variable contains the operating system version (e.g.
?S: 4.1.3, 5.2, etc.).  It is primarily used for helping select
?S: an appropriate hints file, but might be useful elsewhere for
?S: setting defaults.  It is set to '' if we can't figure it out.
?S: We try to be flexible about how much of the version number
?S: to keep, e.g. if 4.1.1, 4.1.2, and 4.1.3 are essentially the
?S: same for this package, hints files might just be os_4.0 or
?S: os_4.1, etc., not keeping separate files for each little release.
?S:.
?C:OSNAME:
?C: This symbol contains the name of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests
 from Configure are generally more reliable.
?C:.
?C:OSVERS:
?C: This symbol contains the version of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests from Configure are generally more reliable.
?C:.
?H:#define OSNAME "$osname"  /**/
?H:#define OSVERS "$osvers"  /**/
?H:.
?F:!config.sh
?T:tmp tmp_n tmp_c tmp_sh file
?T:xxxxfile xxxfile xxfile xfile hintfile newmyuname
?T:tans _ isesix INITPROG DJGPP
?D:osname=''
?LINT:change n c sh
?LINT:extern targetarch
?LINT:extern hostarch
?LINT:change hostarch
?LINT:extern is_os2
: Try to determine whether config.sh was made on this system
case "$config_sh" in
'')
?X: indentation wrong on purpose--RAM
?X: Leave a white space between first two '(' for ksh. The sub-shell is needed
?X: on some machines to avoid the error message when uname is not found; e.g.
?X: old SUN-OS 3.2 would not execute hostname in (uname -a || hostname). Sigh!
?X: Now not using a subshell but instead $test.
myuname=`$uname
 -a 2>/dev/null`
$test -z "$myuname" && myuname=`hostname 2>/dev/null`
# Downcase everything to avoid ambiguity.
# Remove slashes and single quotes so we can use parts of this in
```

```
# directory and file names.
# Remove newlines so myuname is sane to use elsewhere.
# tr '[A-Z]' '[a-z]' would not work in EBCDIC
# because the A-Z/a-z are not consecutive.
myuname=`echo $myuname | $sed -e "s,['/],,g" | \
 ./tr '[A-Z]' '[a-z]' | $tr $trnl ' '`
?X: Save the value we just computed to reset myuname after we get done here.
newmyuname="$myuname"
dflt=n
case "$knowitall" in
")
 if test -f ../config.sh; then
  if $contains myuname= ../config.sh >/dev/null 2>&1; then
   eval "`grep myuname= ../config.sh`"
  fi
  if test "X$myuname" = "X$newmyuname"; then
   dflt=y
  fi
 fi
 ;;
*) dflt=y;;
esac

@if {test -d ../hints}
: Get old answers from old config file if Configure was run on the
: same system, otherwise use the hints.
hint=default
cd ..
?X: Since we are now at the root of the source
 tree, we must use $src
?X: to access the sources and not $rsrc. See src.U for details...
if test -f config.sh; then
 echo " "
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . UU/myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it."
  mv config.sh config.sh.old
  myuname="$newmyuname"
  ;;
 *)  echo "Fetching default answers from your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  tmp_sh="$sh"
  . ./config.sh
  cp config.sh UU
  n="$tmp_n"
  c="$tmp_c"
```

```
  : Older versions did not always set $sh.  Catch re-use of such
  : an old config.sh.
  case "$sh" in
  ") sh="$tmp_sh" ;;
  esac
  hint=previous
  ;;
 esac
fi
. ./UU/checkcc
if test ! -f config.sh; then
 $cat <<EOM

First time through, eh?  I have some defaults handy for some systems
that need some extra help getting the Configure answers right:

EOM
 (cd $src/hints; ls -C *.sh) | $sed 's/\.sh/   /g' >&4
 dflt="
 : Half the following guesses are probably wrong... If you have better
 : tests or hints,
 please send them to <MAINTLOC>
 : The metaconfig authors would also appreciate a copy...
 $test -f /irix && osname=irix
 $test -f /xenix && osname=sco_xenix
 $test -f /dynix && osname=dynix
 $test -f /dnix && osname=dnix
 $test -f /lynx.os && osname=lynxos
 $test -f /unicos && osname=unicos && osvers=`$uname -r`
 $test -f /unicosmk && osname=unicosmk && osvers=`$uname -r`
 $test -f /unicosmk.ar && osname=unicosmk && osvers=`$uname -r`
 $test -f /bin/mips && /bin/mips && osname=mips
 $test -d /usr/apollo/bin && osname=apollo
 $test -f /etc/saf/_sactab && osname=svr4
 $test -d /usr/include/minix && osname=minix && osvers=`$uname -r`
 $test -f /system/gnu_library/bin/ar.pm && osname=vos
 $test -f /sys/utilities/MultiView && osname=amigaos
 if $test -d /MachTen -o -d /MachTen_Folder; then
?X:  MachTen uname -a output looks like
?X:  xxx 4 0.0 Macintosh
?X:  MachTen /sbin/version output looks like
?X:  MachTen 4.0 Mon Aug 28 10:18:00 1995
?X:  MachTen 3.x had the 'version' command in /usr/etc/version.
  osname=machten
  if
 $test -x /sbin/version; then
   osvers=`/sbin/version | $awk '{print $2}' |
   $sed -e 's/[A-Za-z]$//'`
```

```
 elif $test -x /usr/etc/version; then
  osvers=`/usr/etc/version | $awk '{print $2}' |
  $sed -e 's/[A-Za-z]$//'`
 else
  osvers="$2.$3"
 fi
fi

$test -f /sys/posix.dll &&
 $test -f /usr/bin/what &&
 set X `/usr/bin/what /sys/posix.dll` &&
 $test "$3" = UWIN &&
 osname=uwin &&
 osvers="$5"

?X: If we have uname, we already computed a suitable uname -a output,
?X: and it lies in $myuname.
 if $test -f $uname; then
  set X $myuname
  shift

  case "$5" in
  fps*) osname=fps ;;
  mips*)
   case "$4" in
   umips) osname=umips ;;
   *) osname=mips ;;
   esac;;
  [23]100) osname=mips ;;
?X: Interactive Unix.
  i386*)
   tmp=`/bin/uname -X 2>/dev/null|awk '/3\.2v[45]/{ print $(NF) }'`
   if $test "$tmp" != "" -a "$3" = "3.2" -a -f '/etc/systemid'; then
    osname='sco'
    osvers=$tmp
   elif $test -f /etc/kconfig; then
    osname=isc
    if
 test "$lns" = "$ln -s"; then
     osvers=4
    elif $contains _SYSV3 /usr/include/stdio.h > /dev/null 2>&1 ; then
     osvers=3
    elif $contains _POSIX_SOURCE /usr/include/stdio.h > /dev/null 2>&1 ; then
     osvers=2
    fi
   fi
   tmp=''
   ;;
```

```
?X: MS-DOS djgpp uname -a output looks like:
?X: ms-dos xxx 6 22 pc
?X:  $1 is the "dos flavor" (need not be "ms-dos").
?X:  $2 is the node name
?X:  $3 and $4 are version/subversion
?X:  $5 is always "pc", but that might not be unique to DJGPP.
?X: (e.g. Solaris_x86 has $5 = i86pc, which doesn't actually conflict,
?X: but it's close enough that I can easily imagine other vendors also
?X: using variants of pc* in $5.)
?X:  The "DJGPP" environment variable is always set when djgpp is active.
  pc*)
   if test -n "$DJGPP"; then
    osname=dos
    osvers=djgpp
   fi
   ;;
  esac

  case "$1" in
  aix) osname=aix
?X: aix 4.1 uname -a output looks like
?X:  AIX  foo  1 4 000123456789
?X: where $4 is the major release number and $3 is the (minor)
 version.
?X: More detail on the version is available with the oslevel command.
?X: in 3.2.x, it output a string (see case statements below).  In 4.1,
?X: it puts out something like  4.1.1.0
   tmp=`( (oslevel) 2>/dev/null || echo "not found") 2>&1`
   case "$tmp" in
   # oslevel can fail with:
   # oslevel: Unable to acquire lock.
   *not\ found) osvers="$4"."$3" ;;
   '<3240'|'<>3240') osvers=3.2.0 ;;
   '=3240'|'>3240'|'<3250'|'<>3250') osvers=3.2.4 ;;
   '=3250'|'>3250') osvers=3.2.5 ;;
   *) osvers=$tmp;;
   esac
   ;;
  bitrig) osname=bitrig
   osvers="$3"
   ;;
  bsd386) osname=bsd386
   osvers=`$uname -r`
   ;;
  cygwin*) osname=cygwin
   osvers="$3"
   ;;
  *dc.osx) osname=dcosx
```

```
  osvers="$3"
  ;;
 dnix) osname=dnix
  osvers="$3"
  ;;
 domainos) osname=apollo
  osvers="$3"
  ;;
 dgux) osname=dgux
  osvers="$3"
  ;;
 dragonfly) osname=dragonfly
  osvers="$3"
  ;;
?X:  uname -a returns
?X:  DYNIX/ptx xxx 4.0 V4.1.2 i386
 dynixptx*) osname=dynixptx
  osvers=`echo
 "$4"|sed 's/^v//'`
  ;;
 freebsd) osname=freebsd
  osvers="$3" ;;
 genix) osname=genix ;;
?X: GNU/Hurd uname -a gives something like:
?X: GNU foo 0.3 GNU-Mach 1.4/Hurd-0.3 i386-AT386 GNU
?X: GNU gnu 0.3 GNUmach-1.2/Hurd-0.3 i386-AT386 GNU
?X: Note the hostname on the second one, which will fool Configure
?X: into using the SysV case!
 gnu) osname=gnu
  osvers="$3" ;;
?X: HP-UX uname -a gives something like
?X: HP-UX foobar B.10.20 A 9000/735 2016483812 two-user license
?X: Preserve the full 10.20 string instead of the previous plain '10'.
?X:  Thanks to Graham Barr.    --AD 6/30/1998
 hp*) osname=hpux
  osvers=`echo "$3" | $sed 's,.*\.\([0-9]*\.[0-9]*\),\1,'`
  ;;
 irix*) osname=irix
  case "$3" in
  4*) osvers=4 ;;
  5*) osvers=5 ;;
  *) osvers="$3" ;;
  esac
  ;;
 linux) osname=linux
  case "$3" in
  *) osvers="$3" ;;
  esac
```

```
  $test -f /system/lib/libandroid.so && osname=linux-android
  ;;
 MiNT) osname=mint
  ;;
 minix) osname=minix
  osvers=`$uname -r`
  ;;
 netbsd*)
osname=netbsd
  osvers="$3"
  ;;
 news-os) osvers="$3"
  case "$3" in
  4*) osname=newsos4 ;;
  *) osname=newsos ;;
  esac
  ;;
 nonstop-ux) osname=nonstopux ;;
 openbsd) osname=openbsd
  osvers="$3"
  ;;
 os2) osname=os2
  osvers="$4"
  ;;
 POSIX-BC | posix-bc ) osname=posix-bc
  osvers="$3"
  ;;
 powerux | power_ux | powermax_os | powermaxos | \
 powerunix | power_unix) osname=powerux
  osvers="$3"
  ;;
 qnx) osname=qnx
  osvers="$4"
  ;;
 solaris) osname=solaris
  case "$3" in
  5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
  *) osvers="$3" ;;
  esac
  ;;
 sunos) osname=sunos
  case "$3" in
  5*) osname=solaris
   osvers=`echo $3 | $sed 's/^5/2/g'` ;;
  *) osvers="$3" ;;
  esac
  ;;
 titanos) osname=titanos
```

```
  case "$3" in
  1*) osvers=1 ;;
  2*) osvers=2 ;;
  3*) osvers=3 ;;
  4*) osvers=4 ;;
  *) osvers="$3" ;;
  esac
  ;;
 ultrix) osname=ultrix
  osvers="$3"
  ;;
 osf1|mls+) case "$5" in
   alpha)
?X: DEC OSF/1 myuname
 -a output looks like:  osf1 xxxx t3.2 123.4 alpha
?X: where the version number can be something like [xvt]n.n
    osname=dec_osf
?X: sizer knows the minor minor version: the letter
    osvers=`sizer -v | awk -FUNIX '{print $2}' | awk '{print $1}' |  tr '[A-Z]' '[a-z]' | sed 's/^[xvt]//'`
    case "$osvers" in
    [1-9].[0-9]*) ;;
    *) osvers=`echo "$3" | sed 's/^[xvt]//'` ;;
    esac
    ;;
  hp*) osname=hp_osf1 ;;
  mips) osname=mips_osf1 ;;
?X: hp and mips were unsupported Technology Releases -- ADO, 24/10/94
  esac
  ;;
 # UnixWare 7.1.2 is known as Open UNIX 8
 openunix|unixware) osname=svr5
  osvers="$4"
  ;;
 uts) osname=uts
  osvers="$3"
  ;;
 vos) osvers="$3"
  ;;
 $2) case "$osname" in
  *isc*) ;;
  *freebsd*) ;;
  svr*)
   : svr4.x or possibly later
   case "svr$3" in
   ${osname}*)
    osname=svr$3
    osvers=$4
    ;;
```

```
   esac
   case "$osname" in
   svr4.0)
    : Check for ESIX
    if test -f /stand/boot ; then
     eval `grep '^INITPROG=[a-z/0-9]*$'
/stand/boot`
     if test -n "$INITPROG" -a -f "$INITPROG"; then
  isesix=`strings -a $INITPROG|grep 'ESIX SYSTEM V/386 Release 4.0'`
      if test -n "$isesix"; then
       osname=esix4
      fi
     fi
    fi
    ;;
   esac
   ;;
  *) if test -f /etc/systemid; then
    osname=sco
    set `echo $3 | $sed 's/\./ /g'` $4
    if $test -f $src/hints/sco_$1_$2_$3.sh; then
     osvers=$1.$2.$3
    elif $test -f $src/hints/sco_$1_$2.sh; then
     osvers=$1.$2
    elif $test -f $src/hints/sco_$1.sh; then
     osvers=$1
    fi
   else
    case "$osname" in
    ") : Still unknown.  Probably a generic Sys V.
     osname="sysv"
     osvers="$3"
     ;;
    esac
   fi
   ;;
  esac
  ;;
 *) case "$osname" in
  ") : Still unknown.  Probably a generic BSD.
   osname="$1"
   osvers="$3"
   ;;
  esac
  ;;
 esac
else
?X: Try to identify sony's NEWS-OS (BSD unix)
```

```
 if test -f /vmunix -a -f $src/hints/news_os.sh; then
  (what /vmunix | UU/tr '[A-Z]'
'[a-z]') > UU/kernel.what 2>&1
  if $contains news-os UU/kernel.what >/dev/null 2>&1; then
   osname=news_os
  fi
  $rm -f UU/kernel.what
?X: Maybe it's OS/2 or DOS or something similar
 elif test -d c:/. -o -n "$is_os2" ; then
  set X $myuname
  osname=os2
  osvers="$5"
 fi
fi

    case "$targetarch" in
    ") ;;
    *)  hostarch=$osname
       case "$targetarch" in
          nto*|*-nto-*)
             # Will load qnx.sh, which should change osname to nto
             osname=qnx
             osvers="
             ;;
          *linux-android*)
             # Catch arm-linux-androideabi, mipsel-linux-android,
             # and i686-linux-android
             osname=linux-android
             osvers="
             ;;
          *linux*)
             # Something like arm-linux-gnueabihf is really just
             # plain linux.
             osname=linux

             osvers="
             ;;
          *solaris*|*sunos*)
             osname=solaris
             # XXX perhaps we should just assume
             # osvers to be 2, or maybe take the value
             # from targetarch. Using $run before the
             # hints are run is somewhat icky.
             set X `$run $uname -a 2>/dev/null`
             shift
             case "$3" in
                5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
                *)  osvers="$3" ;;
```

```
                esac
                ;;
            *)
    osname=`echo $targetarch|sed 's,^[^-]*-,,'`
    osvers=''
            ;;
        esac
        ;;
     esac

: Now look for a hint file osname_osvers, unless one has been
: specified already.
case "$hintfile" in
''|' ')
 file=`echo "${osname}_${osvers}" | $sed -e 's%\.%_%g' -e 's%_$%%'`
 : Also try without trailing minor version
numbers.
 xfile=`echo $file | $sed -e 's%_[^_]*$%%'`
 xxfile=`echo $xfile | $sed -e 's%_[^_]*$%%'`
 xxxfile=`echo $xxfile | $sed -e 's%_[^_]*$%%'`
 xxxxfile=`echo $xxxfile | $sed -e 's%_[^_]*$%%'`
 case "$file" in
 '') dflt=none ;;
 *)  case "$osvers" in
  '') dflt=$file
   ;;
  *)  if $test -f $src/hints/$file.sh ; then
    dflt=$file
   elif $test -f $src/hints/$xfile.sh ; then
    dflt=$xfile
   elif $test -f $src/hints/$xxfile.sh ; then
    dflt=$xxfile
   elif $test -f $src/hints/$xxxfile.sh ; then
    dflt=$xxxfile
   elif $test -f $src/hints/$xxxxfile.sh ; then
    dflt=$xxxxfile
   elif $test -f "$src/hints/${osname}.sh" ; then
    dflt="${osname}"
   else
    dflt=none
   fi
   ;;
  esac
  ;;
 esac
 if $test -f Policy.sh ; then
  case "$dflt" in
  *Policy*) ;;
```

```
  none) dflt="Policy" ;;
  *) dflt="Policy $dflt" ;;
  esac
 fi
 ;;
*)
 dflt=`echo $hintfile | $sed 's/\.sh$//'`
 ;;
esac

if $test -f Policy.sh ; then
 $cat <<EOM

There's also
 a Policy hint file available, which should make the
site-specific (policy) questions easier to answer.
EOM

 fi

 $cat <<EOM

You may give one or more space-separated answers, or "none" if appropriate.
If you have a handcrafted Policy.sh file or a Policy.sh file generated by a
previous run of Configure, you may specify it as well as or instead of
OS-specific hints.  If hints are provided for your OS, you should use them:
although Perl can probably be built without hints on many platforms, using
hints often improve performance and may enable features that Configure can't
set up on its own. If there are no hints that match your OS, specify "none";
DO NOT give a wrong version or a wrong OS.

EOM

 rp="Which of these apply, if any?"
 . UU/myread
 tans=$ans
 for file in $tans; do
  if $test X$file = XPolicy -a -f Policy.sh; then
   . Policy.sh
   $cat Policy.sh >> UU/config.sh
  elif $test -f $src/hints/$file.sh; then
   . $src/hints/$file.sh
   $cat $src/hints/$file.sh >> UU/config.sh
  elif
 $test X"$tans" = X -o X"$tans" = Xnone ; then
   : nothing
  else
   : Give one chance to correct a possible typo.
```

```
  echo "$file.sh does not exist"
  dflt=$file
  rp="hint to use instead?"
  . UU/myread
  for file in $ans; do
   if $test -f "$src/hints/$file.sh"; then
    . $src/hints/$file.sh
    $cat $src/hints/$file.sh >> UU/config.sh
   elif $test X$ans = X -o X$ans = Xnone ; then
    : nothing
   else
    echo "$file.sh does not exist -- ignored."
   fi
  done
 fi
done

hint=recommended
: Remember our hint file for later.
if $test -f "$src/hints/$file.sh" ; then
 hintfile="$file"
else
 hintfile=''
fi
fi
cd UU
?X: From here on, we must use $rsrc instead of $src
@else
: Get old answers, if there is a config file out there
hint=default
hintfile=''
if test -f ../config.sh; then
 echo " "
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . ./myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it.";;
 *)  echo "Fetching default answers from
 your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  . ../config.sh
  cp ../config.sh .
  n="$tmp_n"
  c="$tmp_c"
  hint=previous
  ;;
 esac
```

```
fi
@end
?X: remember, indentation is wrong--RAM
;;
*)
 echo " "
 echo "Fetching default answers from $config_sh..." >&4
 tmp_n="$n"
 tmp_c="$c"
 cd ..
?X: preserve symbolic links, if any
 cp $config_sh config.sh 2>/dev/null
 chmod +w config.sh
 . ./config.sh
 cd UU
 cp ../config.sh .
 n="$tmp_n"
 c="$tmp_c"
 hint=previous
 ;;
esac
. ./optdef.sh

: Restore computed paths
for file in $loclist $trylist; do
 eval $file="\$_$file"
done

@if osname || osvers
cat << EOM

Configure uses the operating system name and version to set some defaults.
The default value is probably right if the name rings a bell. Otherwise,
since spelling matters for me, either accept the default or answer "none"
to leave it blank.

EOM
@end
@if osname
case "$osname" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *)  dflt=`echo $hintfile | $sed -e 's/\.sh$//'
 -e 's/_.*$//'` ;;
  esac
  ;;
 *) dflt="$osname" ;;
```

```
esac
rp="Operating system name?"
. ./myread
case "$ans" in
none)  osname=" ;;
*) osname=`echo "$ans" | $sed -e 's/[  ][ ]*/_/g' | ./tr '[A-Z]' '[a-z]'`;;
esac
@end
@if osvers
@if osname
echo " "
@end
case "$osvers" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *) dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/^[^_]*//'`
   dflt=`echo $dflt | $sed -e 's/^_//' -e 's/_./g'`
   case "$dflt" in
   "|' ') dflt=none ;;
   esac
   ;;
  esac
  ;;
 *) dflt="$osvers" ;;
esac
rp="Operating system version?"
. ./myread
case "$ans" in
none)  osvers=" ;;
*) osvers="$ans" ;;
esac

@end

. ./posthint.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Oldconfig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nis.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:17:38  ram
?RCS: patch61: ensure suitable defaults for hostcat and friends
?RCS:
?RCS: Revision 3.0.1.2  1995/03/21  08:48:34  ram
?RCS: patch52: continued fix for NeXT NIS/NetInfo handling
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:16:23  ram
?RCS: patch51: now correctly handles NeXT using NIS rather than NetInfo
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:passcat groupcat hostcat:
 Myread Oldconfig test contains
?MAKE: -pick add $@ %<
?S:passcat:
?S: This variable contains a command that produces the text of the
?S: /etc/passwd file.  This is normally "cat /etc/passwd", but can be
?S: "ypcat passwd" when NIS is used.
?S:.
?S:groupcat:
?S: This variable contains a command that produces the text of the
?S: /etc/group file.  This is normally "cat /etc/group", but can be
?S: "ypcat group" when NIS is used.
?S:.
?S:hostcat:
?S: This variable contains a command that produces the text of the
?S: /etc/hosts file.  This is normally "cat /etc/hosts", but can be
?S: "ypcat hosts" when NIS is used.
?S:.
: see if we have to deal with yellow pages, now NIS.
?X: NeXT gives us some fun here, as always, by having both NIS (former YP)
?X: and NetInfo. But since it has both, it's ok to put the test inside the if.
?X: Contributed by Thomas Neumann <tom@smart.bo.open.de>.
if $test -d /usr/etc/yp || $test -d /etc/yp || $test -d /usr/lib/yp; then
 if $test -f /usr/etc/nibindd; then
  echo
 " "
  echo "I'm fairly confident you're on a NeXT."
@if passcat || groupcat
  echo " "
  rp='Do you get the passwd file via NetInfo?'
  dflt=y
  case "$passcat" in
```

```
  nidump*) ;;
  ") ;;
  *) dflt=n;;
  esac
  . ./myread
  case "$ans" in
  y*) passcat='nidump passwd .'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='nidump group .'
@end
   ;;
  *) echo "You told me, so don't blame me."
   case "$passcat" in
   nidump*) passcat="
@if groupcat
     groupcat=";;
@end
   esac
@if groupcat
   echo "(Assuming /etc/group is handled the same way.)"
@end
   ;;
  esac
@end
@if hostcat
  echo " "
  rp='Do you get the hosts file via NetInfo?'
  dflt=y
  case "$hostcat" in
  nidump*) ;;
  ") ;;
  *) dflt=n;;
  esac
  . ./myread
  case "$ans" in
  y*) hostcat='nidump hosts .';;
  *) case "$hostcat" in
   nidump*) hostcat=";;
   esac
   ;;
  esac
@end
 fi
@if passcat || groupcat
 case "$passcat" in
 nidump*) ;;
 *)
```

```
 case "$passcat" in
 *ypcat*) dflt=y;;
 ")
if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
   dflt=y
  else
   dflt=n
  fi;;
 *) dflt=n;;
 esac
 echo " "
 rp='Are you getting the passwd file via yellow pages?'
 . ./myread
 case "$ans" in
 y*) passcat='ypcat passwd'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='ypcat group'
@end
   ;;
 *) passcat='cat /etc/passwd'
@if groupcat
   echo "(Assuming /etc/group is also local.)"
   groupcat='cat /etc/group'
@end
   ;;
 esac
 ;;
esac
@end
@if hostcat
case "$hostcat" in
nidump*) ;;
*)
 case "$hostcat" in
 *ypcat*) dflt=y;;
 ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
   dflt=y
  else
   dflt=n
  fi;;
 *) dflt=n;;
 esac
 echo " "
 rp='Are you getting the hosts file via yellow pages?'
 . ./myread
 case "$ans" in
 y*) hostcat='ypcat hosts';;
```

```
  *) hostcat='cat /etc/hosts';;
  esac
  ;;
 esac
@end
fi
?X: Ensure suitable default -- Manoj Srivastava
case "$hostcat" in
") hostcat=':'
 $test -f /etc/hosts && hostcat='cat
 /etc/hosts';;
esac
case "$groupcat" in
") groupcat=':'
 $test -f /etc/group && groupcat='cat /etc/group';;
esac
case "$passcat" in
") passcat=':'
 $test -f /etc/passwd && passcat='cat /etc/passwd';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:use64bitint use64bitall archname64: Myread Oldconfig Setvar test \
 usemorebits longsize ccflags d_quad uquadtype Compile rm_try run
?MAKE: -pick add $@ %<
?Y:TOP
?S:use64bitint:
?S: This variable conditionally defines the USE_64_BIT_INT symbol,
?S: and indicates that 64-bit integer types should be used
?S: when available.  The minimal possible 64-bitness
?S: is employed, just enough to get 64-bit integers into Perl.
?S: This may mean using for example "long longs", while your memory
?S: may still be limited to 2 gigabytes.
?S:.
?S:use64bitall:
?S: This variable conditionally defines the USE_64_BIT_ALL symbol,
?S: and indicates that 64-bit integer types should be used
?S: when available.  The maximal
```

```
 possible
?S: 64-bitness is employed: LP64 or ILP64, meaning that you will
?S: be able to use more than 2 gigabytes of memory.  This mode is
?S: even more binary incompatible than USE_64_BIT_INT. You may not
?S: be able to run the resulting executable in a 32-bit CPU at all or
?S: you may need at least to reboot your OS to 64-bit mode.
?S:.
?S:archname64:
?S: This variable is used for the 64-bitness part of $archname.
?S:.
?C:USE_64_BIT_INT:
?C: This symbol, if defined, indicates that 64-bit integers should
?C: be used when available.  If not defined, the native integers
?C: will be employed (be they 32 or 64 bits).  The minimal possible
?C: 64-bitness is used, just enough to get 64-bit integers into Perl.
?C: This may mean using for example "long longs", while your memory
?C: may still be limited to 2 gigabytes.
?C:.
?C:USE_64_BIT_ALL:
?C: This symbol, if defined, indicates that 64-bit integers should
?C: be used when available.  If not defined, the native integers
?C: will be used (be
 they 32 or 64 bits).  The maximal possible
?C: 64-bitness is employed: LP64 or ILP64, meaning that you will
?C: be able to use more than 2 gigabytes of memory.  This mode is
?C: even more binary incompatible than USE_64_BIT_INT. You may not
?C: be able to run the resulting executable in a 32-bit CPU at all or
?C: you may need at least to reboot your OS to 64-bit mode.
?C:.
?H:?%<:#ifndef USE_64_BIT_INT
?H:?%<:#$use64bitint USE_64_BIT_INT  /**/
?H:?%<:#endif
?H:?%<:#ifndef USE_64_BIT_ALL
?H:?%<:#$use64bitall USE_64_BIT_ALL  /**/
?H:?%<:#endif
?H:.
?INIT:archname64="
?LINT:extern ccflags
?LINT:use usemorebits
?LINT:extern use64bits
?LINT:extern uselonglong
?LINT:extern uselonglongs
?LINT:extern use64bitints
?LINT:extern use64bitsint
?LINT:extern use64bitsall
?T:libcquad
?F:!try
?F:!use64bitint.cbu
```

```
?F:!use64bitall.cbu
: Do we want 64bit support
case "$uselonglong" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duselonglong is deprecated, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case
 "$use64bits" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duse64bits is deprecated, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitints" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitints, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitsint" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitsint, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$uselonglongs" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duselonglongs, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
```

```
case "$use64bitsall" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitsall, using -Duse64bitall instead.
EOM
 use64bitall="$define"
 ;;
esac

case "$ccflags" in
*-DUSE_LONG_LONG*|*-DUSE_64_BIT_INT*|*-DUSE_64_BIT_ALL*) use64bitint="$define";;
esac
case "$use64bitall" in
"$define"|true|[yY]*)
 use64bitint="$define" ;;
esac

case "$longsize" in
8) cat <<EOM

You have natively 64-bit long integers.
EOM
  val="$define"
  ;;
*) case "$use64bitint" in
  "$define"|true|[yY]*) dflt='y';;
  *) dflt='n';;
  esac
  case "$d_quad" in
  "$define") ;;
  *) dflt='n' ;;
  esac
  cat <<EOM

Perl can be built to take advantage of 64-bit integer types
on some systems.  To do so, Configure can be run with -Duse64bitint.
Choosing this option will most probably introduce binary incompatibilities.

If this doesn't make any sense to you, just accept the default '$dflt'.
(The default has been chosen based on your configuration.)
EOM
  rp='Try to use 64-bit integers, if available?'
  . ./myread
  case "$ans" in
  [yY]*) val="$define" ;;
  *)     val="$undef"  ;;
  esac
```

```
  ;;
esac
set use64bitint
eval $setvar

case "$use64bitall" in
"$define"|true|[yY]*) dflt='y' ;;
*) case "$longsize" in
  8) dflt='y' ;;
  *) dflt='n' ;;
  esac
  ;;
esac
cat <<EOM

You may also
 choose to try maximal 64-bitness.  It means using as much
64-bitness as possible on the platform.  This in turn means even more
binary incompatibilities.  On the other hand, your platform may not
have any more 64-bitness available than what you already have chosen.

If this doesn't make any sense to you, just accept the default '$dflt'.
(The default has been chosen based on your configuration.)
EOM
rp='Try to use maximal 64-bit support, if available?'
. ./myread
case "$ans" in
[yY]*) val="$define" ;;
*)     val="$undef"  ;;
esac
set use64bitall
eval $setvar
case "$use64bitall" in
"$define")
 case "$use64bitint" in
 "$undef")
  cat <<EOM

Since you have chosen a maximally 64-bit build, I'm also turning on
the use of 64-bit integers.
EOM
  use64bitint="$define" ;;
 esac
 ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a 64-bit perl is to be built,
```

```
: we may need to set or change some other defaults.
if $test -f use64bitint.cbu; then
 echo "Your
 platform has some specific hints regarding 64-bit integers, using them..."
 . ./use64bitint.cbu
fi
case "$use64bitint" in
"$define"|true|[yY]*)
 : This test was common to all the OpenBSD forks, and seems harmless for
 : other platforms:
 echo " "
 echo "Checking if your C library has broken 64-bit functions..." >&4
 cat >try.c <<EOCP
#include <stdio.h>
typedef $uquadtype myULL;
int main (void)
{
   struct {
 double d;
 myULL  u;
   } *p, test[] = {
 {4294967303.15, 4294967303ULL},
 {4294967294.2,  4294967294ULL},
 {4294967295.7,  4294967295ULL},
 {0.0, 0ULL}
   };
   for (p = test; p->u; p++) {
 myULL x = (myULL)p->d;
 if (x != p->u) {
     printf("buggy\n");
     return 0;
 }
   }
   printf("ok\n");
   return 0;
}
EOCP
 set try
 if eval $compile_ok; then
     libcquad=`$run ./try`
     echo "Your C library's 64-bit functions are $libcquad."
 else
     echo "(I can't seem to compile the test program.)"
     echo "Assuming that your C library's 64-bit functions are ok."
     libcquad="ok"
 fi
 $rm_try
```

```
 case
 "$libcquad" in
    buggy*)
  cat >&4 <<EOM

*** You have a C library with broken 64-bit functions.
*** 64-bit support does not work reliably in this configuration.
*** Please rerun Configure without -Duse64bitint and/or -Dusemorebits.
*** Cannot continue, aborting.

EOM
  exit 1
  ;;
 esac
 case "$longsize" in
 4) case "$archname64" in
    ") archname64=64int ;;
    esac
    ;;
 esac
 ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a maximally 64-bit perl is to be built,
: we may need to set or change some other defaults.
if $test -f use64bitall.cbu; then
 echo "Your platform has some specific hints regarding 64-bit builds, using them..."
 . ./use64bitall.cbu
fi
case "$use64bitall" in
"$define"|true|[yY]*)
 case "$longsize" in
 4) case "$archname64" in
    "|64int) archname64=64all ;;
    esac
    ;;
 esac
 ;;
esac

case "$d_quad:$use64bitint" in
$undef:$define)
 cat >&4 <<EOF

*** You have chosen to use 64-bit
 integers,
*** but none can be found.
```

```
*** Please rerun Configure without -Duse64bitint and/or -Dusemorebits.
*** Cannot continue, aborting.

EOF
 exit 1
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/use64bits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_select.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_select.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_select: Inlibc
?MAKE: -pick add $@ %<
?S:d_select:
?S: This variable conditionally defines HAS_SELECT if select() is
?S: available to select active file descriptors. A <sys/time.h>
?S: inclusion may be necessary for the timeout field.
?S:.
?C:HAS_SELECT:
?C: This symbol, if defined, indicates that the select routine is
?C: available
 to select active file descriptors. If the timeout field
?C: is used, <sys/time.h> may need to be included.
?C:.
?H:#$d_select HAS_SELECT /**/
?H:.
?LINT:set d_select
: see if select exists
set select d_select
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_select.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ctime_r ctime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_ctime_r:
?S: This variable conditionally defines the HAS_CTIME_R symbol,
?S: which indicates to the C program that the ctime_r()
?S: routine is available.
?S:.
?S:ctime_r_proto:
?S: This variable encodes the prototype of ctime_r.
?S: It is zero if d_ctime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctime_r
?S: is defined.
?S:.
?C:HAS_CTIME_R:
?C: This symbol, if defined, indicates that the ctime_r routine
?C: is available to ctime re-entrantly.
?C:.
?C:CTIME_R_PROTO:
?C: This
 symbol encodes the prototype of ctime_r.
?C: It is zero if d_ctime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctime_r
?C: is defined.
?C:.
?H:#$d_ctime_r HAS_CTIME_R /**/
?H:#define CTIME_R_PROTO $ctime_r_proto /**/
?H:.
?T:try hdrs d_ctime_r_proto
: see if ctime_r exists
set ctime_r d_ctime_r
eval $inlibc
case "$d_ctime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_ctime_r_proto:$usethreads" in
 ":define") d_ctime_r_proto=define
  set d_ctime_r_proto ctime_r $hdrs
```

```
 eval $hasproto ;;
*) ;;
esac
case "$d_ctime_r_proto" in
define)
case "$ctime_r_proto" in
"|0) try='char* ctime_r(const time_t*, char*);'
./protochk "$extern_C $try" $hdrs && ctime_r_proto=B_SB ;;
esac
case "$ctime_r_proto" in
"|0) try='char* ctime_r(const time_t*, char*, int);'
./protochk "$extern_C $try" $hdrs && ctime_r_proto=B_SBI ;;
esac
case "$ctime_r_proto" in
"|0) try='int ctime_r(const
time_t*, char*);'
./protochk "$extern_C $try" $hdrs && ctime_r_proto=I_SB ;;
esac
case "$ctime_r_proto" in
"|0) try='int ctime_r(const time_t*, char*, int);'
./protochk "$extern_C $try" $hdrs && ctime_r_proto=I_SBI ;;
esac
case "$ctime_r_proto" in
"|0) d_ctime_r=undef
 ctime_r_proto=0
 echo "Disabling ctime_r, cannot determine prototype." >&4 ;;
* ) case "$ctime_r_proto" in
 REENTRANT_PROTO*) ;;
 *) ctime_r_proto="REENTRANT_PROTO_$ctime_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "ctime_r has no prototype, not using it." >&4 ;;
 esac
 d_ctime_r=undef
 ctime_r_proto=0
 ;;
esac
;;
*) ctime_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ctime_r.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pathconf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pathconf.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:54  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_pathconf d_fpathconf: Inlibc
?MAKE: -pick add $@ %<
?S:d_pathconf:
?S: This variable conditionally defines the HAS_PATHCONF symbol, which
?S: indicates to the C program that the pathconf() routine is available
?S: to determine file-system related limits and options
 associated
?S: with a given filename.
?S:.
?S:d_fpathconf:
?S: This variable conditionally defines the HAS_FPATHCONF symbol, which
?S: indicates to the C program that the pathconf() routine is available
?S: to determine file-system related limits and options associated
?S: with a given open file descriptor.
?S:.
?C:HAS_PATHCONF:
?C: This symbol, if defined, indicates that pathconf() is available
?C: to determine file-system related limits and options associated
?C: with a given filename.
?C:.
?C:HAS_FPATHCONF:
?C: This symbol, if defined, indicates that pathconf() is available
?C: to determine file-system related limits and options associated
?C: with a given open file descriptor.
?C:.
?H:#$d_pathconf HAS_PATHCONF  /**/
?H:#$d_fpathconf HAS_FPATHCONF  /**/
?H:.
?LINT:set d_pathconf
?LINT:set d_fpathconf
```

```
: see if pathconf exists
set pathconf d_pathconf
eval $inlibc

@if d_fpathconf || HAS_FPATHCONF
: see if fpathconf exists
set fpathconf d_fpathconf
eval $inlibc

@end
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pathconf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_lseekproto: Hasproto i_systypes i_unistd
?MAKE: -pick add $@ %<
?S:d_lseekproto:
?S: This variable conditionally defines the HAS_LSEEK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the lseek() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_LSEEK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the lseek() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern
 off_t lseek(int, off_t, int);
?C:.
?H:#$d_lseekproto HAS_LSEEK_PROTO /**/
?H:.
?LINT:set d_lseekproto
: see if prototype for lseek is available
echo " "
set d_lseekproto lseek $i_systypes sys/types.h $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_lseekproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysselct.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysselct.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:01:33  ram
?RCS: patch6: added default for i_sysselct
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/select.h> exists
?X:
?MAKE:i_sysselct: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysselct:
?S: This variable conditionally defines I_SYS_SELECT, which indicates
?S: to the C program that it should include <sys/select.h> in
 order to
?S: get the definition of struct timeval.
?S:.
?C:I_SYS_SELECT (I_SYSSELECT):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/select.h> in order to get definition of struct timeval.
?C:.
?H:#$i_sysselct I_SYS_SELECT /**/
?H:.
?D:i_sysselct="
?LINT:set i_sysselct
: see if sys/select.h has to be included
set sys/select.h i_sysselct
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysselct.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_endpwent.U,v $
?RCS:
?MAKE:d_endpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endpwent:
?S: This variable conditionally defines the HAS_ENDPWENT symbol, which
?S: indicates to the C program that the endpwent() routine is available
?S: for sequential access of the passwd database.
?S:.
?C:HAS_ENDPWENT:
?C: This symbol, if defined, indicates that the endpwent routine is
?C: available for finalizing sequential access of the passwd database.
?C:.
?H:#$d_endpwent HAS_ENDPWENT  /**/
?H:.
?LINT:set d_endpwent
: see if endpwent exists
set endpwent d_endpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Options.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:08:15  ram
?RCS: patch61: optdef.sh now starts with a "startsh"
?RCS: patch61: moved some code from Head.U
?RCS:
```

```
?RCS: Revision 3.0.1.6  1995/09/25  09:14:46  ram
?RCS: patch59: protected option parsing code against 'echo -*' option failure
?RCS:
?RCS: Revision 3.0.1.5  1995/05/12  12:04:52  ram
?RCS: patch54: added -K option for experts
?RCS:
?RCS: Revision 3.0.1.4  1995/01/30  14:27:52  ram
?RCS: patch49: this unit now exports file optdef.sh,
 not a variable
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:19:00  ram
?RCS: patch45: new -O option allowing -D and -U to override config.sh settings
?RCS: patch45: file optdef.sh is no longer removed after sourcing
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  15:58:06  ram
?RCS: patch36: ensure option definition file is removed before appending
?RCS: patch36: protect variable definitions with spaces in them
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:55:44  ram
?RCS: patch30: now uses new me symbol to tag error messages
?RCS: patch30: new -D and -U options to define/undef symbols (JHI)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Command line parsing. It is really important that the variables used here
?X: be not listed in the MAKE line, or they will be saved in config.sh and
?X: loading this file to fetch default answers would clobber the values set
?X: herein.
?X:
?MAKE:Options: startsh
?MAKE: -pick wipe $@ %<
?V:reuseval
 alldone error realsilent silent extractsh fastread \
 override knowitall: config_sh
?T:arg argn symbol config_arg0 config_args config_argc xxx yyy zzz uuu
?T:args_exp args_sep arg_exp
?F:!Configure
?F:./optdef.sh ./cmdline.opt ./posthint.sh ./cmdl.opt
: Save command line options in file UU/cmdline.opt for later use in
: generating config.sh.
?X: This temporary file will be read by Oldsym.U.  I used a temporary
?X: file to preserve all sorts of potential command line quotes and
?X: also because we don't know in advance how many variables we'll
?X: need, so I can't actually declare them on the MAKE line.
?X: The config_args variable won't be quite correct if Configure is
?X: fed something like    ./Configure -Dcc="gcc -B/usr/ccs/bin/"
```

```
?X: since the quotes are gone by the time we see them.  You'd have to
?X: reconstruct the command line from the config_arg? lines, but since
?X: I don't imagine anyone actually having to do that, I'm not going
?X: to worry too much.
cat > cmdline.opt
 <<EOSH
: Configure command line arguments.
config_arg0='$0'
config_args='$*'
config_argc=$#
EOSH
argn=1
args_exp=''
args_sep=''
for arg in "$@"; do
 cat >>cmdline.opt <<EOSH
config_arg$argn='$arg'
EOSH
?X: Extreme backslashitis: replace each ' by '''''
 cat <<EOC | sed -e "s/'/'''''''''''''''/g" > cmdl.opt
$arg
EOC
 arg_exp=`cat cmdl.opt`
 args_exp="$args_exp$args_sep'$arg_exp'"
 argn=`expr $argn + 1`
 args_sep=' '
done
?X: args_exp is good for restarting self: eval "set X $args_exp"; shift; $0 "$@"
?X: used by hints/os2.sh in Perl, for instance
rm -f cmdl.opt

: produce awk script to parse command line options
cat >options.awk <<'EOF'
BEGIN {
 optstr = "A:dD:eEf:hKOrsSU:V"; # getopt-style specification

 len = length(optstr);
 for (i = 1; i <= len; i++) {
  c = substr(optstr, i, 1);
?X: some older awk's do not have the C ?: construct
  if (i < len) a = substr(optstr, i + 1, 1); else a = "";
  if (a == ":") {
   arg[c] = 1;
   i++;
  }
  opt[c] = 1;
 }
}
```

```
{
 expect = 0;
 str = $0;
 if (substr(str,
 1, 1) != "-") {
  printf("'%s'\n", str);
  next;
 }
 len = length($0);
 for (i = 2; i <= len; i++) {
  c = substr(str, i, 1);
  if (!opt[c]) {
   printf("-%s\n", substr(str, i));
   next;
  }
  printf("-%s\n", c);
  if (arg[c]) {
   if (i < len)
    printf("'%s'\n", substr(str, i + 1));
   else
    expect = 1;
   next;
  }
 }
}
END {
 if (expect)
  print "?";
}
EOF

: process the command line options
?X: Use "$@" to keep arguments with spaces in them from being split apart.
?X: For the same reason, awk will output quoted arguments and the final eval
?X: removes them and sets a proper $* array. An 'X' is prependend to each
?X: argument before being fed to echo to guard against 'echo -x', where -x
?X: would be understood as an echo option! It is removed before feeding awk.
set X `for arg in "$@"; do echo "X$arg"; done |
 sed -e s/X// | awk -f options.awk`
eval "set $*"
shift
rm -f options.awk

: set up default values
fastread=''
reuseval=false
config_sh=''
alldone=''
```

```
error=''
silent=''
extractsh=''
override=''
knowitall=''
rm
 -f optdef.sh posthint.sh
cat >optdef.sh <<EOS
$startsh
EOS

?X:
?X: Given that we now have the possibility to execute Configure remotely
?X: thanks to the new src.U support, we have to face the possibility
?X: of having to ask where the source lie, which means we need the Myread.U
?X: stuff and possibly other things that might echo something on the
?X: screen...
?X:
?X: That's not pretty, and might be confusing in 99% of the time. So...
?X: We introduce a new realsilent variable which is set when -s is given,
?X: and we force silent=true if -S is supplied. The Extractall.U unit
?X: will then undo the >&4 redirection based on the value of the
?X: realsilent variable... -- RAM, 18/93/96
?X:

: option parsing
while test $# -gt 0; do
 case "$1" in
 -d) shift; fastread=yes;;
 -e) shift; alldone=cont;;
 -f)
  shift
  cd ..
  if test -r "$1"; then
   config_sh="$1"
  else
   echo "$me: cannot read config file $1." >&2
   error=true
  fi
  cd UU
  shift;;
 -h)
 shift; error=true;;
 -r) shift; reuseval=true;;
 -s) shift; silent=true; realsilent=true;;
 -E) shift; alldone=exit;;
 -K) shift; knowitall=true;;
 -O) shift; override=true;;
```

```
-S) shift; silent=true; extractsh=true;;
-D)
 shift
 case "$1" in
 *=)
  echo "$me: use '-U symbol=', not '-D symbol='." >&2
  echo "$me: ignoring -D $1" >&2
  ;;
 *=*) echo "$1" | \
   sed -e "s/'/\"\'\"/g" -e "s/=\(.*\)/='\1'/" >> optdef.sh;;
 *) echo "$1='define'" >> optdef.sh;;
 esac
 shift
 ;;
-U)
 shift
 case "$1" in
 *=) echo "$1" >> optdef.sh;;
 *=*)
  echo "$me: use '-D symbol=val', not '-U symbol=val'." >&2
  echo "$me: ignoring -U $1" >&2
  ;;
 *) echo "$1='undef'" >> optdef.sh;;
 esac
 shift
 ;;
-A)
    shift
    xxx=''
    yyy="$1"
    zzz=''
    uuu=undef
    case "$yyy" in
          *=*) zzz=`echo "$yyy"|sed 's!=.*!!'`
               case "$zzz" in
               *:*) zzz='' ;;
               *)   xxx=append
                    zzz=' "`echo
"$yyy"|sed 's!^[^=]*=!!'`
                    yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
               esac
               ;;
          esac
          case "$xxx" in
          '')  case "$yyy" in
               *:*) xxx=`echo "$yyy"|sed 's!:.*!!'`
                    yyy=`echo "$yyy"|sed 's!^[^:]*:!!'`
                    zzz=`echo "$yyy"|sed 's!^[^=]*=!!'`
```

```
                yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
            *)   xxx=`echo "$yyy"|sed 's!:.*!!'`
                yyy=`echo "$yyy"|sed 's!^[^:]*:!!'` ;;
            esac
            ;;
        esac
    case "$xxx" in
    append)
 echo "$yyy=\"\${$yyy}$zzz\"" >> posthint.sh ;;
    clear)
 echo "$yyy=""   >> posthint.sh ;;
    define)
        case "$zzz" in
 ") zzz=define ;;
 esac
 echo "$yyy='$zzz'"  >> posthint.sh ;;
    eval)
 echo "eval \"$yyy=$zzz\"" >> posthint.sh ;;
    prepend)
 echo "$yyy=\"$zzz\${$yyy}\"" >> posthint.sh ;;
    undef)
        case "$zzz" in
 ")
zzz="$uuu" ;;
 esac
 echo "$yyy=$zzz"  >> posthint.sh ;;
         *)  echo "$me: unknown -A command '$xxx', ignoring -A $1" >&2 ;;
    esac
    shift
    ;;
 -V) echo "$me generated by metaconfig <VERSION> PL<PATCHLEVEL>." >&2
    exit 0;;
 --) break;;
 -*) echo "$me: unknown option $1" >&2; shift; error=true;;
 *) break;;
 esac
done

case "$error" in
true)
 cat >&2 <<EOM
Usage: $me [-dehrsEKOSV] [-f config.sh] [-D symbol] [-D symbol=value]
            [-U symbol] [-U symbol=] [-A command:symbol...]
 -d : use defaults for all answers.
 -e : go on without questioning past the production of config.sh.
 -f : specify an alternate default configuration file.
 -h : print this help message and exit (with an error status).
 -r : reuse C symbols value if possible (skips costly nm extraction).
```

```
 -s : silent mode, only echoes questions and essential information.
 -D : define symbol to have some value:
      -D symbol         symbol gets the value 'define'
      -D symbol=value
   symbol gets the value 'value'
 -E : stop at the end of questions, after having produced config.sh.
 -K : do not use unless you know what you are doing.
 -O : let -D and -U override definitions from loaded configuration file.
 -S : perform variable substitutions on all .SH files (can mix with -f)
 -U : undefine symbol:
      -U symbol    symbol gets the value 'undef'
      -U symbol=   symbol gets completely empty
 -A : manipulate symbol after the platform specific hints have been applied:
  -A symbol=value  append " "value to symbol
  -A append:symbol=value  append value to symbol
  -A define:symbol=value  define symbol to have value
      -A clear:symbol  define symbol to be "
  -A define:symbol  define symbol to be 'define'
  -A eval:symbol=value  define symbol to be eval of value
  -A prepend:symbol=value prepend value to symbol
  -A undef:symbol  define symbol to be 'undef'
  -A undef:symbol=  define symbol to be "
 -V : print version number and exit (with
 a zero status).
EOM
 exit 1
 ;;
esac

?X:
?X: Unless they specified either -S or both -d and -e/E, make sure we're
?X: running interactively, i.e. attached to a terminal. Moved from Head.U to
?X: be able to handle batch configurations...
?X:
?X: We have to hardwire the Configure name and cannot use $me, since if they
?X: said 'sh <Configure', then $me is 'sh'...
?X:
: Sanity checks
case "$fastread$alldone" in
yescont|yesexit) ;;
*)
 case "$extractsh" in
 true) ;;
 *)
  if test ! -t 0; then
   echo "Say 'sh Configure', not 'sh <Configure'"
   exit 1
  fi
```

```
  ;;
 esac
 ;;
esac

?X: In silent mode, the standard output is closed. Questions are asked by
?X: outputing on file descriptor #4, which is the original stdout descriptor.
?X: This filters out all the "junk", since all the needed information is written
?X: on #4. Note that ksh will not let us redirect output if the file descriptor
?X: has not be defined yet, unlike sh, hence the following line...--RAM.
exec 4>&1
case "$silent" in
true)
 exec 1>/dev/null;;
esac

: run the defines and the undefines, if any, but leave the file out there...
touch optdef.sh
. ./optdef.sh
: create the posthint manipulation script and leave the file out there...
?X: this file will be perused by Oldconfig.U
touch posthint.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Options.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_pwd.U,v 3.0.1.2 1995/07/25 14:10:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_pwd.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:10:57  ram
?RCS: patch56: use setvar so hint file values can override our guesses (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:03:27  ram
?RCS: patch23: had forgotten cppminus in cppstdin test (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: This unit checks whether there is a pwd system or not
?X:
?MAKE:i_pwd d_pwquota d_pwage d_pwchange
 d_pwclass d_pwexpire \
 d_pwgecos d_pwpasswd d_pwcomment: \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_pwd:
?S: This variable conditionally defines I_PWD, which indicates
?S: to the C program that it should include <pwd.h>.
?S:.
?S:d_pwquota:
?S: This variable conditionally defines PWQUOTA, which indicates
?S: that struct passwd contains pw_quota.
?S:.
?S:d_pwage:
?S: This variable conditionally defines PWAGE, which indicates
?S: that struct passwd contains pw_age.
?S:.
?S:d_pwchange:
?S: This variable conditionally defines PWCHANGE, which indicates
?S: that struct passwd contains pw_change.
?S:.
?S:d_pwclass:
?S: This variable conditionally defines PWCLASS, which indicates
?S: that struct passwd contains pw_class.
?S:.
?S:d_pwexpire:
?S: This variable conditionally defines PWEXPIRE, which indicates
?S: that struct passwd contains pw_expire.
?S:.
?S:d_pwcomment:
?S: This variable conditionally defines PWCOMMENT, which indicates
?S: that
 struct passwd contains pw_comment.
?S:.
?S:d_pwgecos:
?S: This variable conditionally defines PWGECOS, which indicates
?S: that struct passwd contains pw_gecos.
?S:.
?S:d_pwpasswd:
?S: This variable conditionally defines PWPASSWD, which indicates
?S: that struct passwd contains pw_passwd.
?S:.
?C:I_PWD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <pwd.h>.
?C:.
```

```
?C:PWQUOTA:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_quota.
?C:.
?C:PWAGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_age.
?C:.
?C:PWCHANGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_change.
?C:.
?C:PWCLASS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_class.
?C:.
?C:PWEXPIRE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_expire.
?C:.
?C:PWCOMMENT:
?C: This
 symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_comment.
?C:.
?C:PWGECOS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_gecos.
?C:.
?C:PWPASSWD:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_passwd.
?C:.
?H:#$i_pwd I_PWD  /**/
?H:#$d_pwquota PWQUOTA /**/
?H:#$d_pwage PWAGE /**/
?H:#$d_pwchange PWCHANGE /**/
?H:#$d_pwclass PWCLASS /**/
?H:#$d_pwexpire PWEXPIRE /**/
?H:#$d_pwcomment PWCOMMENT /**/
?H:#$d_pwgecos PWGECOS /**/
?H:#$d_pwpasswd PWPASSWD /**/
?H:.
?LINT: set i_pwd d_pwquota d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment
?LINT: set d_pwgecos d_pwpasswd
?T:xxx
: see if this is a pwd.h system
set pwd.h i_pwd
```

```
eval $inhdr

case "$i_pwd" in
$define)
 xxx=`./findhdr pwd.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'pw_quota' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwquota
 eval $setvar

 if $contains 'pw_age'
 $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwage
 eval $setvar

 if $contains 'pw_change' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwchange
 eval $setvar

 if $contains 'pw_class' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwclass
 eval $setvar

 if $contains 'pw_expire' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwexpire
 eval $setvar
```

```
 if $contains 'pw_comment' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwcomment
 eval $setvar

 if $contains 'pw_gecos' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwgecos
 eval $setvar

 if $contains 'pw_passwd' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwpasswd
 eval $setvar

 $rm -f $$.h
 ;;
*)
 val="$undef";
 set d_pwquota; eval $setvar
 set d_pwage; eval $setvar
 set d_pwchange; eval $setvar
 set d_pwclass; eval $setvar
 set
 d_pwexpire; eval $setvar
 set d_pwcomment; eval $setvar
 set d_pwgecos; eval $setvar
 set d_pwpasswd; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_pwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_times.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:50  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:14:00  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: What is the type returned by times() ?
?X:
?X: Force inclusion of <sys/types.h>
?X:INC: i_systypes
?MAKE:d_times clocktype: Csym Myread Typedef i_systimes
?MAKE: -pick
 add $@ %<
?S:d_times:
?S: This variable conditionally defines the HAS_TIMES symbol, which indicates
?S: that the times() routine exists.  The times() routine is normally
?S: provided on UNIX systems. You may have to include <sys/times.h>.
?S:.
?S:clocktype:
?S: This variable holds the type returned by times(). It can be long,
?S: or clock_t on BSD sites (in which case <sys/types.h> should be
?S: included).
?S:.
?C:HAS_TIMES (TIMES):
?C: This symbol, if defined, indicates that the times() routine exists.
?C: Note that this became obsolete on some systems (SUNOS), which now
?C: use getrusage(). It may be necessary to include <sys/times.h>.
?C:.
?C:Clock_t (CLOCKTYPE):
?C: This symbol holds the type returned by times(). It can be long,
?C: or clock_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_times HAS_TIMES  /**/
?H:#define Clock_t $clocktype /* Clock time */
?H:.
?T:val inc
```

```
: see if times exists
echo " "
if set times val -f d_times; eval $csym;
 $val; then
 echo 'times() found.' >&4
 d_times="$define"
 inc=''
 case "$i_systimes" in
 "$define") inc='sys/times.h';;
 esac
 set clock_t clocktype long stdio.h sys/types.h $inc
 eval $typedef
 dflt="$clocktype"
 echo " "
 rp="What type is returned by times() on this system?"
 . ./myread
 clocktype="$ans"
else
 echo 'times() NOT found, hope that will do.' >&4
 d_times="$undef"
?X: The following is needed for typedef (won't like an empty variable)
 clocktype='int'
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_times.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getfsstat : Inlibc
?MAKE: -pick add $@ %<
?S:d_getfsstat:
?S: This variable conditionally defines the HAS_GETFSSTAT symbol, which
?S: indicates to the C program that the getfsstat() routine is available.
?S:.
?C:HAS_GETFSSTAT:
?C: This symbol, if defined, indicates that the getfsstat routine is
?C: available to stat filesystems in bulk.
?C:.
?H:#$d_getfsstat HAS_GETFSSTAT  /**/
?H:.
?LINT:set d_getfsstat
```

```
: see if getfsstat exists
set getfsstat d_getfsstat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getfsstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_hidnet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_hidnet.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_hidnet hiddennet: cat sed myhostname mydomain Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_hidnet:
?S: This variable conditionally defines the symbol HIDDEN_NET, which
?S: tells the C program that it should pretend it is on a different
?S: host for purposes of advertising a mailing address.
?S:.
?S:hiddennet:
?S: This variable contains
 the value eventually given to the symbol
?S: HIDDEN_NET, if d_hidnet defines it.  If defined, it's the name
?S: of the host which serves as the mail server for a network that
?S: is invisible to the outside world.
?S:.
?C:HIDDEN_NET (HIDDENNET):
?C: This symbol, if defined, contains the host name that you want to
?C: advertise to the outside world.  This name can be different from
?C: your actual host name, as long as the machine you specify knows
?C: how to forward mail to you.
?C:.
?H:#$d_hidnet HIDDEN_NET "$hiddennet" /**/
?H:.
: now get the host name to advertise as our mailing address
case "$hiddennet" in
") dflt=n;;
*) dflt=y;;
```

```
esac
$cat <<EOM

Some sites are on "hidden" networks, in the sense that the network appears
to the outside world as a single machine.  The advertised name of any host
on this hidden network is the name of one machine on the local network which
knows how to forward mail to any other host on the hidden network.

Do you wish to advertise a different hostname
 to the world than the one your
own host ($myhostname$mydomain) has?

EOM
rp='Use "hidden" network?'
. ./myread
case "$ans" in
n*) d_hidnet="$undef" hiddennet="";;
*)
 d_hidnet="$define"
 echo " "
 case "$hiddennet" in
 "") dflt=`echo $mydomain | $sed -e 's/^\.//'`;;
 *) dflt="$hiddennet";;
 esac
 rp='What hostname do you wish to advertise?'
 . ./myread
 hiddennet="$ans"
 ;;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_hidnet.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_futimes: Compile cat rm_try run
?MAKE: -pick add $@ %<
?S:d_futimes:
?S: This variable conditionally defines the HAS_FUTIMES symbol, which
?S: indicates to the C program that the futimes() routine is available.
?S:.
?C:HAS_FUTIMES:
```

```
?C: This symbol, if defined, indicates that the futimes routine is
?C: available to change file descriptor time stamps with struct timevals.
?C:.
?H:#$d_futimes HAS_FUTIMES  /**/
?H:.
?T:rc
?F:!try
: check for a working futimes
d_futimes="$undef"
echo " "
echo "Checking if you have a working futimes()" >&4
$cat >try.c <<EOCP
#include <stdio.h>
#include <stdlib.h>
#include <sys/time.h>
#include <errno.h>
#include <fcntl.h>
#include <stdlib.h>

int main ()
{
   int fd,
 rv;
   fd = open ("try.c", O_RDWR);
   if (-1 == fd) exit (1);
   rv = futimes (fd, NULL);
   exit (rv == -1 ? errno : 0);
}
EOCP
set try
if eval $compile; then
   `$run ./try`
   rc=$?
   case "$rc" in
 0)  echo "Yes, you have" >&4
     d_futimes="$define"
     ;;
 *)  echo "No, you have futimes, but it isn't working ($rc) (probably harmless)" >&4
     ;;
   esac
else
   echo "No, it does not (probably harmless)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_futimes.U

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```
?RCS: $Id: sh.U,v 3.0.1.1 1997/02/28 16:20:13 ram Exp $
?RCS:
?RCS: Copyright (c) 1997, Chip Salzenberg
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:20:13  ram
?RCS: patch61: created
?RCS:
?MAKE:sh targetsh: Head
?MAKE: -pick wipe $@ %<
?S:sh:
?S: This variable contains the full pathname of the shell used
?S: on this system to execute Bourne shell scripts.  Usually, this will be
?S: /bin/sh, though it's possible that some systems will have /bin/ksh,
?S: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?S: D:/bin/sh.exe.
?S: This
 unit comes before Options.U, so you can't set sh with a -D
?S: option, though you can override this (and startsh)
?S: with -O -Dsh=/bin/whatever -Dstartsh=whatever
?S:.
?S:targetsh:
?S: If cross-compiling, this variable contains the location of sh on the
?S: target system.
?S: If not, this will be the same as $sh.
?S:.
?C:SH_PATH:
?C: This symbol contains the full pathname to the shell used on this
?C: on this system to execute Bourne shell scripts.  Usually, this will be
?C: /bin/sh, though it's possible that some systems will have /bin/ksh,
?C: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?C: D:/bin/sh.exe.
?C:.
?H:#define SH_PATH "$targetsh"  /**/
?H:.
?T:xxx try pth p SYSTYPE
?LINT:extern maintloc maintname _exe
?X:
?X: Be quiet unless something unusual happens because this gets
```

```
?X: loaded up even before options are processed.
?X: Can't use ./loc because that depends on startsh, which, in turn
?X: depends on this unit.
?X:
: Find the basic shell for
 Bourne shell scripts
case "$sh" in
")
?X: SYSTYPE is for some older MIPS systems.
?X: I do not know if it is still needed.
 case "$SYSTYPE" in
 *bsd*|sys5*) xxx="/$SYSTYPE/bin/sh";;
 *) xxx='/bin/sh';;
 esac
 if test -f "$xxx"; then
  sh="$xxx"
 else
  : Build up a list and do a single loop so we can 'break' out.
  pth=`echo $PATH | sed -e "s/$p_/ /g"`
  for xxx in sh bash ksh pdksh ash; do
   for p in $pth; do
    try="$try ${p}/${xxx}"
   done
  done
  for xxx in $try; do
   if test -f "$xxx"; then
    sh="$xxx";
    break
   elif test "X$_exe" != X -a -f "$xxx$_exe"; then
    sh="$xxx";
    break
   elif test -f "$xxx.exe"; then
    sh="$xxx";
    break
   fi
  done
 fi
 ;;
esac

?X: fd 4 isn't open yet...
case "$sh" in
") cat >&2 <<EOM
$me:  Fatal Error:  I can't find a Bourne Shell anywhere.

Usually it's in /bin/sh.  How did you even get this far?
Please report this issue at <$maintloc>
and we'll try to straighten this all out.
```

```
EOM
 exit 1
 ;;
esac

: When cross-compiling we
 need to separate the sh-to-run-Configure-with from the sh-to-use-in-Perl
: default both to the same thing, cross-compilers can then set targetsh differently if they like
targetsh=$sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_readdir.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  14:46:37  ram
?RCS: patch23: added support for seekdir, telldir and rewinddir (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Force checking for <dirent.h> inclusion
?X:INC: i_dirent
?MAKE:d_readdir d_seekdir d_telldir d_rewinddir: Inlibc
?MAKE: -pick add $@ %<
?S:d_readdir:
?S: This variable conditionally defines HAS_READDIR if readdir()
 is
?S: available to read directory entries.
?S:.
?C:HAS_READDIR (READDIR):
?C: This symbol, if defined, indicates that the readdir routine is
?C: available to read directory entries. You may have to include
?C: <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_readdir HAS_READDIR  /**/
?H:.
?S:d_seekdir:
```

```
?S: This variable conditionally defines HAS_SEEKDIR if seekdir() is
?S: available.
?S:.
?C:HAS_SEEKDIR:
?C: This symbol, if defined, indicates that the seekdir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_seekdir HAS_SEEKDIR  /**/
?H:.
?S:d_telldir:
?S: This variable conditionally defines HAS_TELLDIR if telldir() is
?S: available.
?S:.
?C:HAS_TELLDIR:
?C: This symbol, if defined, indicates that the telldir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_telldir HAS_TELLDIR  /**/
?H:.
?S:d_rewinddir:
?S: This variable conditionally defines HAS_REWINDDIR if rewinddir() is
?S: available.
?S:.
?C:HAS_REWINDDIR:
?C: This
 symbol, if defined, indicates that the rewinddir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_rewinddir HAS_REWINDDIR  /**/
?H:.
?LINT:set d_readdir d_seekdir d_telldir d_rewinddir
: see if readdir and friends exist
set readdir d_readdir
eval $inlibc
@if d_seekdir || HAS_SEEKDIR
set seekdir d_seekdir
eval $inlibc
@end
@if d_telldir || HAS_TELLDIR
set telldir d_telldir
eval $inlibc
@end
@if d_rewinddir || HAS_REWINDDIR
set rewinddir d_rewinddir
eval $inlibc
@end
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_readdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fsync: Inlibc
?MAKE: -pick add $@ %<
?S:d_fsync:
?S: This variable conditionally defines the HAS_FSYNC symbol, which
?S: indicates to the C program that the fsync() routine is available.
?S:.
?C:HAS_FSYNC:
?C: This symbol, if defined, indicates that the fsync routine is
?C: available to write a file's modified data and attributes to
?C: permanent storage.
?C:.
?H:#$d_fsync HAS_FSYNC  /**/
?H:.
?LINT:set d_fsync
: see if fsync exists
set fsync d_fsync
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fsync.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservbyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservbyname_r getservbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservbyname_r:
?S: This variable conditionally defines the HAS_GETSERVBYNAME_R symbol,
?S: which indicates to the C program that the getservbyname_r()
?S: routine is available.
?S:.
```

```
?S:getservbyname_r_proto:
?S: This variable encodes the prototype of getservbyname_r.
?S: It is zero if d_getservbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyname_r
?S: is defined.
?S:.
?C:HAS_GETSERVBYNAME_R:
?C: This symbol, if defined, indicates
 that the getservbyname_r routine
?C: is available to getservbyname re-entrantly.
?C:.
?C:GETSERVBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getservbyname_r.
?C: It is zero if d_getservbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyname_r
?C: is defined.
?C:.
?H:#$d_getservbyname_r HAS_GETSERVBYNAME_R /**/
?H:#define GETSERVBYNAME_R_PROTO $getservbyname_r_proto /**/
?H:.
?T:try hdrs d_getservbyname_r_proto
: see if getservbyname_r exists
set getservbyname_r d_getservbyname_r
eval $inlibc
case "$d_getservbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservbyname_r_proto:$usethreads" in
 ":define") d_getservbyname_r_proto=define
  set d_getservbyname_r_proto getservbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getservbyname_r_proto" in
 define)
 case "$getservbyname_r_proto" in
 "|0) try='int getservbyname_r(const char*, const char*, struct servent*, char*,
 size_t, struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=I_CCSBWR ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) try='struct servent* getservbyname_r(const char*, const char*, struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=S_CCSBI ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) try='int getservbyname_r(const char*, const char*, struct servent*, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=I_CCSD ;;
 esac
```

```
 case "$getservbyname_r_proto" in
 "|0) d_getservbyname_r=undef
  getservbyname_r_proto=0
  echo "Disabling getservbyname_r, cannot determine prototype." >&4 ;;
 * ) case "$getservbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getservbyname_r_proto="REENTRANT_PROTO_$getservbyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getservbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_getservbyname_r=undef
  getservbyname_r_proto=0
  ;;
 esac
 ;;
*) getservbyname_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservbyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endnetent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endnetent_r endnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endnetent_r:
?S: This variable conditionally defines the HAS_ENDNETENT_R symbol,
?S: which indicates to the C program that the endnetent_r()
?S: routine is available.
?S:.
?S:endnetent_r_proto:
?S: This variable encodes the prototype of endnetent_r.
?S: It is zero if d_endnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endnetent_r
```

```
?S: is defined.
?S:.
?C:HAS_ENDNETENT_R:
?C: This symbol, if defined, indicates that the endnetent_r routine
?C: is
 available to endnetent re-entrantly.
?C:.
?C:ENDNETENT_R_PROTO:
?C: This symbol encodes the prototype of endnetent_r.
?C: It is zero if d_endnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endnetent_r
?C: is defined.
?C:.
?H:#$d_endnetent_r HAS_ENDNETENT_R /**/
?H:#define ENDNETENT_R_PROTO $endnetent_r_proto /**/
?H:.
?T:try hdrs d_endnetent_r_proto
: see if endnetent_r exists
set endnetent_r d_endnetent_r
eval $inlibc
case "$d_endnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endnetent_r_proto:$usethreads" in
 ":define") d_endnetent_r_proto=define
  set d_endnetent_r_proto endnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endnetent_r_proto" in
 define)
 case "$endnetent_r_proto" in
 "|0) try='int endnetent_r(struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && endnetent_r_proto=I_D ;;
 esac
 case "$endnetent_r_proto" in
 "|0) try='void endnetent_r(struct netent_data*);'
 ./protochk
 "$extern_C $try" $hdrs && endnetent_r_proto=V_D ;;
 esac
 case "$endnetent_r_proto" in
 "|0) d_endnetent_r=undef
  endnetent_r_proto=0
  echo "Disabling endnetent_r, cannot determine prototype." >&4 ;;
 * ) case "$endnetent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endnetent_r_proto="REENTRANT_PROTO_$endnetent_r_proto" ;;
  esac
```

```
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endnetent_r has no prototype, not using it." >&4 ;;
  esac
  d_endnetent_r=undef
  endnetent_r_proto=0
  ;;
 esac
 ;;
*) endnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endnetent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_drand48proto: Hasproto i_stdlib i_unistd
?MAKE: -pick add $@ %<
?S:d_drand48proto:
?S: This variable conditionally defines the HAS_DRAND48_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the drand48() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_DRAND48_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the drand48() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess
 is
?C:  extern double drand48(void);
?C:.
?H:#$d_drand48proto HAS_DRAND48_PROTO /**/
?H:.
?LINT:set d_drand48proto
: see if prototype for drand48 is available
```

```
echo " "
set d_drand48proto drand48 $i_stdlib stdlib.h $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_drand48proto.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: floatsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:09  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:floatsize: cat rm Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:floatsize:
?S: This variable contains the value of the FLOATSIZE symbol, which
?S: indicates to the C program how many bytes there are in a float.
?S:.
?C:FLOATSIZE:
?C: This symbol contains the size of
 a float, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define FLOATSIZE $floatsize  /**/
?H:.
?F:!try
: check for length of float
echo " "
case "$floatsize" in
")
 echo "Checking to see how big your floating point numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
```

```
 printf("%d\n", sizeof(float));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$floatsize"
 ;;
esac
rp="What is the size of a floating point number (in bytes)?"
. ./myread
floatsize="$ans"
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/floatsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setgrent_r setgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_setgrent_r:
?S: This variable conditionally defines the HAS_SETGRENT_R symbol,
?S: which indicates to the C program that the setgrent_r()
?S: routine is available.
?S:.
?S:setgrent_r_proto:
?S: This variable encodes the prototype of setgrent_r.
?S: It is zero if d_setgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setgrent_r
?S: is defined.
?S:.
?C:HAS_SETGRENT_R:
?C: This symbol, if defined, indicates that the setgrent_r routine
?C: is available to
```

```
 setgrent re-entrantly.
?C:.
?C:SETGRENT_R_PROTO:
?C: This symbol encodes the prototype of setgrent_r.
?C: It is zero if d_setgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setgrent_r
?C: is defined.
?C:.
?H:#$d_setgrent_r HAS_SETGRENT_R /**/
?H:#define SETGRENT_R_PROTO $setgrent_r_proto /**/
?H:.
?T:try hdrs d_setgrent_r_proto
: see if setgrent_r exists
set setgrent_r d_setgrent_r
eval $inlibc
case "$d_setgrent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_setgrent_r_proto:$usethreads" in
 ":define") d_setgrent_r_proto=define
  set d_setgrent_r_proto setgrent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setgrent_r_proto" in
 define)
 case "$setgrent_r_proto" in
 "|0) try='int setgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setgrent_r_proto=I_H ;;
 esac
 case "$setgrent_r_proto" in
 "|0) try='void setgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setgrent_r_proto=V_H ;;
 esac
 case "$setgrent_r_proto"
 in
 "|0) d_setgrent_r=undef
  setgrent_r_proto=0
  echo "Disabling setgrent_r, cannot determine prototype." >&4 ;;
 * ) case "$setgrent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setgrent_r_proto="REENTRANT_PROTO_$setgrent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setgrent_r has no prototype, not using it." >&4 ;;
```

```
  esac
  d_setgrent_r=undef
  setgrent_r_proto=0
  ;;
 esac
 ;;
*) setgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setgrent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dlopen.U,v 3.0.1.2 1995/07/25 13:52:56 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlopen.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:56  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dlopen: Inlibc runnm d_cplusplus ccflags gccversion
?MAKE: -pick add $@ %<
?S:d_dlopen:
?S: This variable conditionally defines the HAS_DLOPEN
 symbol, which
?S: indicates to the C program that the dlopen() routine is available.
?S:.
?C:HAS_DLOPEN :
?C: This symbol, if defined, indicates that the dlopen routine is
?C: available.
?C:.
?H:#$d_dlopen HAS_DLOPEN  /**/
?H:.
?T: xxx_runnm
?T: xxx_ccflags
```

```
?LINT:set d_dlopen
?X: We don't permanently change runnm and ccflags, but we do temporarily.
?LINT: change runnm
?LINT: change ccflags
: see if dlopen exists
?X: On NetBSD and FreeBSD, dlopen is available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
xxx_ccflags="$ccflags"
runnm=false
: with g++ one needs -shared to get is-in-libc to work for dlopen
case "$gccversion" in
") ;;
*Clang*) ;;
*) case "$d_cplusplus" in
 "$define") ccflags="$ccflags -shared" ;;
 esac
 ;;
esac
set dlopen d_dlopen
eval $inlibc
runnm="$xxx_runnm"
ccflags="$xxx_ccflags"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dlopen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syspoll.U 15 2006-08-30 18:21:51Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_syspoll: Inhdr
?MAKE: -pick add $@ %<
?S:i_syspoll:
?S: This variable conditionally defines the I_SYS_POLL symbol, which
?S: indicates to the C program that it should include <sys/poll.h>.
?S:.
?C:I_SYS_POLL:
?C: This symbol, if defined, indicates that the program may include
?C: <sys/poll.h>.  When I_POLL is also defined, it's probably safest
```

```
?C: to only include <poll.h>.
?C:.
?H:#$i_syspoll I_SYS_POLL /**/
?H:.
?LINT:set i_syspoll
: see if there is
 a sys/poll.h file
set sys/poll.h i_syspoll
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syspoll.U
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```
?RCS: $Id: d_ftime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ftime.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ftime d_gettimeod: Inlibc Setvar
?MAKE: -pick add $@ %<
?S:d_ftime:
?S: This variable conditionally defines the HAS_FTIME symbol, which indicates
?S: that the ftime() routine exists.  The ftime() routine is basically
?S: a sub-second accuracy clock.
?S:.
?S:d_gettimeod:
?S: This variable conditionally defines the HAS_GETTIMEOFDAY symbol,
 which
?S: indicates that the gettimeofday() system call exists (to obtain a
?S: sub-second accuracy clock). You should probably include <sys/resource.h>.
?S:.
?C:HAS_FTIME (FTIMER):
?C: This symbol, if defined, indicates that the ftime() routine exists.
?C: It is basically a sub-second accuracy clock, but is less accurate
?C: than gettimeofday(2) anyway. The type "Timeval" should be used to
?C: refer to "struct timeb".
?C:.
?C:HAS_GETTIMEOFDAY (GETTIMEOFDAY):
```

```
?C: This symbol, if defined, indicates that the gettimeofday() system
?C: call is available for a sub-second accuracy clock. Usually, the file
?C: <sys/resource.h> needs to be included (see I_SYS_RESOURCE).
?C: The type "Timeval" should be used to refer to "struct timeval".
?C:.
?H:#$d_ftime HAS_FTIME  /**/
?H:#$d_gettimeod HAS_GETTIMEOFDAY /**/
?H:?%<:@if HAS_FTIME
?H:?%<:#ifdef HAS_FTIME
?H:?%<:#define Timeval struct timeb  /* Structure used by ftime() */
?H:?%<:#endif
?H:?%<:@end
?H:?%<:@if HAS_GETTIMEOFDAY
?H:?%<:#ifdef HAS_GETTIMEOFDAY
?H:?%<:#define
 Timeval struct timeval /* Structure used by gettimeofday() */
?H:?%<:#endif
?H:?%<:@end
?H:.
?X:FIXME
?X:?I:?d_ftime:i_systimeb
?X:?I:?d_gettimeod:i_sysresrc
?LINT:set d_gettimeod d_ftime
?LINT:known Timeval
: see if gettimeofday or ftime exists
?X:
?X: Give priority to gettimeofday(2) because timing is more accurate
?X:
set gettimeofday d_gettimeod
eval $inlibc
case "$d_gettimeod" in
"$undef")
 set ftime d_ftime
 eval $inlibc
 ;;
*)
 val="$undef"; set d_ftime; eval $setvar
 ;;
esac
case "$d_gettimeod$d_ftime" in
"$undef$undef")
 echo " "
 echo 'No ftime() nor gettimeofday() -- timing may be less accurate.' >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ftime.U

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```
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?RCS:
?MAKE:gidformat: gidsize gidsign ivsize uvsize longsize intsize shortsize \
 ivdformat uvuformat test echo
?MAKE: -pick add $@ %<
?S:gidformat:
?S: This variable contains the format string used for printing a Gid_t.
?S:.
?C:Gid_t_f:
?C: This symbol defines the format string used for printing a Gid_t.
?C:.
?H:#define Gid_t_f  $gidformat  /**/
?H:.
: Check format string for GID

echo " "
$echo "Checking the format string to be used for gids..." >&4

case "$gidsign" in
-1) if $test X"$gidsize" = X"$ivsize"; then
  gidformat="$ivdformat"
 else
  if $test X"$gidsize" = X"$longsize"; then
   gidformat="'ld'"
  else
   if $test X"$gidsize" = X"$intsize"; then
    gidformat="'d'"
   else
    if $test X"$gidsize"
 = X"$shortsize"; then
     gidformat="'hd'"
    fi
   fi
  fi
 fi
 ;;
*) if $test X"$gidsize" = X"$uvsize"; then
  gidformat="$uvuformat"
 else
  if $test X"$gidsize" = X"$longsize"; then
   gidformat="'lu'"
```

```
  else
   if $test X"$gidsize" = X"$intsize"; then
    gidformat="'u'"
   else
    if $test X"$gidsize" = X"$shortsize"; then
     gidformat="'hu'"
    fi
   fi
  fi
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidf.U
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```
?RCS: $Id: d_NeWS.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_NeWS.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_news d_news0 d_newshome d_textcan: test rm Myread Getfile
?MAKE: -pick add $@ %<
?S:d_news:
?S: Set if running NeWS 1.1
?S:.
?S:d_news0:
?S: Set if running NeWS 1.0
?S:.
?S:d_newshome:
?S: Path to the top directory of the NeWS structure.
?S:.
?S:d_textcan:
?S: Path to where the textcan.ps stuff is...
?S:.
?C:HAS_NEWS1_1 (NEWS1_1):
?C: This
```

```
 symbol defined if running NeWS 1.1.
?C:.
?C:HAS_NEWS1_0 (NEWS1_0):
?C: This symbol defined if running NeWS 1.0.
?C:.
?C:TEXTCAN:
?C: Tells path to where the textcan.ps stuff is...
?C:.
?H:#$d_news HAS_NEWS1_1     /**/
?H:#$d_news0 HAS_NEWS1_0     /**/
?H:#define TEXTCAN $d_textcan /**/
?H:.
?INIT:: default path for NeWS
?INIT:d_newshome="/usr/NeWS"
?INIT:
: Check to see what version of NeWS is being run?
cd ..
echo " "
echo "Now for the interesting stuff... Lets see what kind of NeWS"
echo "they grow round here...."
echo " "
dflt='y'
if $test -d $d_newshome; then
 d_newshome=`(cd $d_newshome ; /bin/pwd)`
 echo "Ah...found myself a NeWS in $d_newshome..."
 dflt='y'
 rp="Is this the NeWS you want your children to grow up with?"
 . UU/myread
fi
while $test $ans = "n"; do
dflt=$d_newshome
fn=d
rp="Path to NeWS you want:"
. UU/getfile
d_newshome=$ans

echo " "
if $test ! -d $d_newshome/lib; then
 echo "ARG!  No lib directory in $d_newshome!!!"
 : heavy medicine.  I wonder what the disease
 is...
 $rm -f kit*isdone
 $rm -rf UU
 : bye bye
 set -t; echo "Sorry... no NeWS is bad news..."
fi

if $test -r $d_newshome/lib/NeWS/colors.ps ; then
```

```
 echo 'Ahh... your running NeWS 1.1!  Boy... that makes stuff easy....'
 echo " "
 d_news="$define"
 d_news0="$undef"
 if $test -r $d_newshome/lib/NeWS/textcan.ps; then
  d_textcan=$d_newshome/lib/NeWS
  echo "The textcan.ps stuff seems to be in : $d_textcan"
 else
  d_textcan=$d_newshome/clientsrc/client/nterm
  if $test ! -r $d_textcan/textcan.ps; then
   d_news="$undef"
   d_news0="$define"
   echo 'Hmm... must have been fooled... gotta be NeWS 1.1 beta!'
  else
   echo "The textcan.ps stuff seems to be in : $d_textcan"
  fi
 fi
else
 echo 'snif... snif... I smell the dilapidated smell of NeWS 1.0..'
 echo 'Some things will not work under NeWS 1.0...'
 d_news="$undef"
 d_news0="$define"
fi
cd UU
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_NeWS.U
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```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:fpossize: Myread Typedef fpostype Compile longsize run i_stdlib
?MAKE: -pick add $@ %<
?S:fpossize:
?S: This variable contains the size of a fpostype in bytes.
?S:.
?C:Fpos_t_size:
?C: This symbol holds the size of a Fpos_t in bytes.
?C:.
?H:#define Fpos_t_size $fpossize  /* FPOS size */
?H:.
```

```
?T:yyy zzz
?F:!try
: Check size for Fpos_t
echo " "
case "$fpostype" in
*_t) zzz="$fpostype" ;;
*)   zzz="fpos_t" ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef
 I_STDLIB
#include <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($fpostype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") fpossize=4
  echo "(I can't execute the test program--guessing $fpossize.)" >&4
  ;;
 *) fpossize=$yyy
  echo "Your $zzz is $fpossize bytes long."
  ;;
 esac
else
 dflt="$longsize"
 echo " " >&4
 echo "(I can't compile the test program.  Guessing...)" >&4
 rp="What is the size of your file positions (in bytes)?"
 . ./myread
 fpossize="$ans"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/fpossize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysdir.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:22:30  ram
?RCS: patch32: fixed typo in I_SYS_DIR symbol name
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysdir: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysdir:
?S: This variable conditionally defines the I_SYS_DIR symbol, and indicates
?S: whether a C program should include <sys/dir.h>.
?S:.
?C:I_SYS_DIR (I_SYSDIR):
?C: This symbol, if
 defined, indicates to the C program that it should
?C: include <sys/dir.h>.
?C:.
?H:#$i_sysdir I_SYS_DIR  /**/
?H:.
?LINT:set i_sysdir
: see if this is an sysdir system
set sys/dir.h i_sysdir
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sysconf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
```

```
?RCS:
?RCS: $Log: d_sysconf.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:15:57  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_sysconf: Inlibc
?MAKE: -pick add $@ %<
?S:d_sysconf:
?S: This variable conditionally defines the HAS_SYSCONF symbol, which
?S: indicates to the C program that the sysconf() routine is available
?S: to determine system related limits and options.
?S:.
?C:HAS_SYSCONF:
?C: This
 symbol, if defined, indicates that sysconf() is available
?C: to determine system related limits and options.
?C:.
?H:#$d_sysconf HAS_SYSCONF /**/
?H:.
?LINT:set d_sysconf
: see if sysconf exists
set sysconf d_sysconf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sysconf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Guess.U,v 3.0.1.5 1995/07/25 13:37:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Guess.U,v $
?RCS: Revision 3.0.1.5  1995/07/25  13:37:14  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:53:55  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:14:35  ram
?RCS: patch15: variable d_bsd was not always set properly
```

```
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:14  ram
?RCS:
 patch8: fixed comment which wrongly attributed the usrinc symbol
?RCS: patch8: no more ugly messages when no /usr/include/ctype.h
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:37:37  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit hazards some guesses as to what the general nature of the system
?X: is.  The information it collects here is used primarily to establish default
?X: answers to other questions.
?X:
?MAKE:Guess d_eunice d_xenix d_bsd: cat test echo n c contains \
 rm Loc eunicefix tr sysroot
?MAKE: -pick add $@ %<
?S:d_eunice:
?S: This variable conditionally defines the symbols EUNICE and VAX, which
?S: alerts the C program that it must deal with idiosyncrasies of VMS.
?S:.
?S:d_xenix:
?S: This variable conditionally defines the symbol XENIX, which alerts
?S: the C program that it runs under Xenix.
?S:.
?S:d_bsd:
?S: This symbol conditionally defines the
 symbol BSD when running on a
?S: BSD system.
?S:.
?C:EUNICE:
?C: This symbol, if defined, indicates that the program is being compiled
?C: under the EUNICE package under VMS.  The program will need to handle
?C: things like files that don't go away the first time you unlink them,
?C: due to version numbering.  It will also need to compensate for lack
?C: of a respectable link() command.
?C:.
?X: Should we define VMS here?  Is Eunice actually used anymore?
?X:?C:VMS:
?X:?C: This symbol, if defined, indicates that the program is running under
?X:?C: VMS.  It is currently only set in conjunction with the EUNICE symbol.
?X:?C:.
?C:XENIX:
?C: This symbol, if defined, indicates that the program is running under
?C: Xenix (at least 3.0 ?).
```

```
?C:.
?X:  We don't use BSD in the perl source.  It's too vague, and already
?X:  defined in some header files anyway (e.g. NetBSD).  This just gives
?X:  us a spurious redefinition error upon compilation.
?X: --Andy Dougherty  Feb 11, 1998
?X: ?C:BSD:
?X:
 ?C: This symbol, if defined, indicates that the program is running under
?X: ?C: a BSD system.
?X: ?C:.
?H:#$d_eunice EUNICE  /**/
?X:?H:#$d_eunice VMS  /**/
?H:#$d_xenix XENIX  /**/
?X: ?H:#$d_bsd BSD  /**/
?H:.
?F:./bsd ./usg ./v7 ./osf1 ./eunice ./xenix ./venix ./os2
?T:xxx
: make some quick guesses about what we are up against
echo " "
$echo $n "Hmm...  $c"
echo exit 1 >bsd
echo exit 1 >usg
echo exit 1 >v7
echo exit 1 >osf1
echo exit 1 >eunice
echo exit 1 >xenix
echo exit 1 >venix
echo exit 1 >os2
d_bsd="$undef"
?X:
?X: Do not use 'usrinc', or we get a circular dependency. because
?X: usrinc is defined in usrinc.U, which relies on us...
?X:
$cat $sysroot/usr/include/signal.h $sysroot/usr/include/sys/signal.h >foo 2>/dev/null
if test -f /osf_boot || $contains 'OSF/1' $sysroot/usr/include/ctype.h >/dev/null 2>&1
then
 echo "Looks kind of like an OSF/1 system, but we'll see..."
 echo exit 0 >osf1
elif test `echo abc | $tr a-z A-Z` = Abc ; then
 xxx=`./loc addbib blurfl $pth`
 if $test
 -f $xxx; then
 echo "Looks kind of like a USG system with BSD features, but we'll see..."
  echo exit 0 >bsd
  echo exit 0 >usg
 else
  if $contains SIGTSTP foo >/dev/null 2>&1 ; then
   echo "Looks kind of like an extended USG system, but we'll see..."
```

```
  else
   echo "Looks kind of like a USG system, but we'll see..."
  fi
  echo exit 0 >usg
 fi
elif $contains SIGTSTP foo >/dev/null 2>&1 ; then
 echo "Looks kind of like a BSD system, but we'll see..."
 d_bsd="$define"
 echo exit 0 >bsd
else
 echo "Looks kind of like a Version 7 system, but we'll see..."
 echo exit 0 >v7
fi
case "$eunicefix" in
*unixtovms*)
 $cat <<'EOI'
There is, however, a strange, musty smell in the air that reminds me of
something...hmm...yes...I've got it...there's a VMS nearby, or I'm a Blit.
EOI
 echo exit 0 >eunice
 d_eunice="$define"
: it so happens the Eunice I know will not run shell scripts in Unix format
 ;;
*)
 echo " "
 echo "Congratulations.  You aren't running Eunice."
 d_eunice="$undef"
 ;;
esac
: Detect
 OS2.  The p_ variable is set above in the Head.U unit.
: Note that this also -- wrongly -- detects e.g. dos-djgpp, which also uses
: semicolon as a patch separator
case "$p_" in
:) ;;
*)
 $cat <<'EOI'
I have the feeling something is not exactly right, however...don't tell me...
lemme think...does HAL ring a bell?...no, of course, you're only running OS/2!
(Or you may be running DOS with DJGPP.)
EOI
 echo exit 0 >os2
 ;;
esac
if test -f /xenix; then
 echo "Actually, this looks more like a XENIX system..."
 echo exit 0 >xenix
 d_xenix="$define"
```

```
else
 echo " "
 echo "It's not Xenix..."
 d_xenix="$undef"
fi
chmod +x xenix
$eunicefix xenix
if test -f /venix; then
 echo "Actually, this looks more like a VENIX system..."
 echo exit 0 >venix
else
 echo " "
 if ./xenix; then
  : null
 else
  echo "Nor is it Venix..."
 fi
fi
chmod +x bsd usg v7 osf1 eunice xenix venix os2
$eunicefix bsd usg v7 osf1 eunice xenix venix os2
$rm -f foo
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Guess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ustat.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_ustat: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_ustat:
?S: This variable conditionally defines the I_USTAT symbol, and indicates
?S: whether a C program should include <ustat.h>.
?S:.
?C:I_USTAT:
?C: This symbol, if defined, indicates that <ustat.h> exists and
?C: should be included.
?C:.
?H:#$i_ustat I_USTAT  /**/
?H:.
?LINT:set i_ustat
: see if this is a ustat.h system
set ustat.h i_ustat
```

```
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_ustat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setgrps.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setgrps.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setgrps: Inlibc
?MAKE: -pick add $@ %<
?S:d_setgrps:
?S: This variable conditionally defines the HAS_SETGROUPS symbol, which
?S: indicates to the C program that the setgroups() routine is available
?S: to set the list of process groups.
?S:.
?C:HAS_SETGROUPS:
?C: This symbol, if defined, indicates that the setgroups() routine is
?C: available
 to set the list of process groups.  If unavailable, multiple
?C: groups are probably not supported.
?C:.
?H:#$d_setgrps HAS_SETGROUPS  /**/
?H:.
?LINT:set d_setgrps
: see if setgroups exists
set setgroups d_setgrps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setgrps.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setnetent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setnetent_r setnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setnetent_r:
?S: This variable conditionally defines the HAS_SETNETENT_R symbol,
?S: which indicates to the C program that the setnetent_r()
?S: routine is available.
?S:.
?S:setnetent_r_proto:
?S: This variable encodes the prototype of setnetent_r.
?S: It is zero if d_setnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setnetent_r
?S: is defined.
?S:.
?C:HAS_SETNETENT_R:
?C: This symbol, if defined, indicates that the setnetent_r routine
?C: is
 available to setnetent re-entrantly.
?C:.
?C:SETNETENT_R_PROTO:
?C: This symbol encodes the prototype of setnetent_r.
?C: It is zero if d_setnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setnetent_r
?C: is defined.
?C:.
?H:#$d_setnetent_r HAS_SETNETENT_R /**/
?H:#define SETNETENT_R_PROTO $setnetent_r_proto /**/
?H:.
?T:try hdrs d_setnetent_r_proto
: see if setnetent_r exists
set setnetent_r d_setnetent_r
eval $inlibc
case "$d_setnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setnetent_r_proto:$usethreads" in
 ":define") d_setnetent_r_proto=define
  set d_setnetent_r_proto setnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setnetent_r_proto" in
 define)
 case "$setnetent_r_proto" in
```

```
"|0) try='int setnetent_r(int, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && setnetent_r_proto=I_ID ;;
esac
case "$setnetent_r_proto" in
"|0) try='void setnetent_r(int, struct netent_data*);'
./protochk
"$extern_C $try" $hdrs && setnetent_r_proto=V_ID ;;
esac
case "$setnetent_r_proto" in
"|0) d_setnetent_r=undef
 setnetent_r_proto=0
 echo "Disabling setnetent_r, cannot determine prototype." >&4 ;;
* ) case "$setnetent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) setnetent_r_proto="REENTRANT_PROTO_$setnetent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "setnetent_r has no prototype, not using it." >&4 ;;
 esac
 d_setnetent_r=undef
 setnetent_r_proto=0
 ;;
esac
;;
*) setnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setnetent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_sendmsg: Inlibc
?MAKE: -pick add $@ %<
?S:d_sendmsg:
?S: This variable conditionally defines the HAS_SENDMSG symbol, which
?S: indicates to the C program that the sendmsg() routine is available.
?S:.
```

```
?C:HAS_SENDMSG:
?C: This symbol, if defined, indicates that the sendmsg routine is
?C: available to send structured socket messages.
?C:.
?H:#$d_sendmsg HAS_SENDMSG  /**/
?H:.
?LINT:set d_sendmsg
: see if sendmsg exists
set sendmsg d_sendmsg
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sendmsg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sig_name.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sig_name.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:21:25  ram
?RCS: patch61: brand new algorithm for sig_name and (new!) sig_num
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  14:14:54  ram
?RCS: patch56: added <asm/signal.h> lookup for Linux
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:24:11  ram
?RCS: patch54: now looks for <linux/signal.h> too (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:06:57  ram
?RCS: patch30: final echo was missing to close
 awk-printed string
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:17:55  ram
?RCS: patch23: signal list now formatted to avoid scroll-ups (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sig_name sig_name_init sig_num sig_num_init sig_count sig_size: \
 awk Signal Oldconfig rm
?MAKE: -pick add $@ %<
```

```
?S:sig_name:
?S: This variable holds the signal names, space separated. The leading
?S: SIG in signal name is removed.  A ZERO is prepended to the list.
?S: This is currently not used, sig_name_init is used instead.
?S:.
?S:sig_name_init:
?S: This variable holds the signal names, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NAME definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.  The leading SIG in signal names
?S: is removed. See sig_num.
?S:.
?S:sig_num:
?S: This variable holds the signal numbers, space separated. A ZERO is
?S: prepended
 to the list (corresponding to the fake SIGZERO).
?S: Those numbers correspond to  the value of the signal listed
?S: in the same place within the sig_name list.
?S: This is currently not used, sig_num_init is used instead.
?S:.
?S:sig_num_init:
?S: This variable holds the signal numbers, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NUM definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.
?S:.
?S:sig_count (sig_name.U):
?S: This variable holds a number larger than the largest valid
?S: signal number.  This is usually the same as the NSIG macro.
?S:.
?S:sig_size:
?S: This variable contains the number of elements of the sig_name
?S: and sig_num arrays.
?S:.
?C:SIG_NAME:
?C: This symbol contains a list of signal names in order of
?C: signal number. This is intended
?C: to be used as a static array initialization, like this:
?C:  char *sig_name[] = { SIG_NAME };
?C: The signals in the list are separated
 with commas, and each signal
?C: is surrounded by double quotes. There is no leading SIG in the signal
?C: name, i.e. SIGQUIT is known as "QUIT".
?C: Gaps in the signal numbers (up to NSIG) are filled in with NUMnn,
?C: etc., where nn is the actual signal number (e.g. NUM37).
?C: The signal number for sig_name[i] is stored in sig_num[i].
?C: The last element is 0 to terminate the list with a NULL.  This
?C: corresponds to the 0 at the end of the sig_name_init list.
```

```
?C: Note that this variable is initialized from the sig_name_init,
?C: not from sig_name (which is unused).
?C:.
?C:SIG_NUM:
?C: This symbol contains a list of signal numbers, in the same order as the
?C: SIG_NAME list. It is suitable for static array initialization, as in:
?C:  int sig_num[] = { SIG_NUM };
?C: The signals in the list are separated with commas, and the indices
?C: within that list and the SIG_NAME list match, so it's easy to compute
?C: the signal name from a number or vice versa at the price of a small
?C: dynamic
 linear lookup.
?C: Duplicates are allowed, but are moved to the end of the list.
?C: The signal number corresponding to sig_name[i] is sig_number[i].
?C: if (i < NSIG) then sig_number[i] == i.
?C: The last element is 0, corresponding to the 0 at the end of
?C: the sig_name_init list.
?C: Note that this variable is initialized from the sig_num_init,
?C: not from sig_num (which is unused).
?C:.
?C:SIG_COUNT:
?C: This variable contains a number larger than the largest
?C: signal number.  This is usually the same as the NSIG macro.
?C:.
?C:SIG_SIZE:
?C: This variable contains the number of elements of the SIG_NAME
?C: and SIG_NUM arrays, excluding the final NULL entry.
?C:.
?H:#define SIG_NAME $sig_name_init  /**/
?H:#define SIG_NUM  $sig_num_init  /**/
?H:#define SIG_COUNT $sig_count   /**/
?H:#define SIG_SIZE $sig_size   /**/
?H:.
?T:i doinit
?F:!= !signal_cmd
?X: signal.cmd creates a file  signal.lst which has two columns:
?X: NAME  number, e.g.
?X:  HUP 1
?X: The list is
 sorted on signal number, with duplicates moved to
?X: the end..
: generate list of signal names
case "$sig_num_init" in
")
echo " "
case "$sig_name_init" in
") doinit=yes ;;
*)  case "$sig_num_init" in
```

```
   "|*,*) doinit=yes ;;
   esac ;;
esac
case "$doinit" in
yes)
 echo "Generating a list of signal names and numbers..." >&4
 . ./signal_cmd
 sig_count=`$awk '/^NSIG/ { printf "%d", $2 }' signal.lst`
 sig_name=`$awk 'BEGIN { printf "ZERO " }
   !/^NSIG/ { printf "%s ", $1 }' signal.lst`
 sig_num=`$awk  'BEGIN { printf "0 " }
   !/^NSIG/ { printf "%d ", $2 }' signal.lst`
 sig_name_init=`$awk 'BEGIN { printf "\"ZERO\", " }
        !/^NSIG/ { printf "\"%s\", ", $1 }
        END { printf "0\n" }' signal.lst`
 sig_num_init=`$awk  'BEGIN { printf "0, " }
        !/^NSIG/ { printf "%d, ", $2}
        END { printf "0\n"}' signal.lst`
 ;;
esac
echo "The following $sig_count signals are available:"
echo " "
echo $sig_name | $awk \
'BEGIN { linelen = 0 }
{
 for (i = 1; i <= NF; i++) {
  name
 = "SIG" $i " "
  linelen = linelen + length(name)
  if (linelen > 70) {
   printf "\n"
   linelen = length(name)
  }
  printf "%s", name
 }
 printf "\n"
}'
sig_size=`echo $sig_name | awk '{print NF}'`
$rm -f signal signal.c signal.awk signal.lst signal_cmd
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sig_name.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: contains.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:contains: Nothing
?MAKE: -pick add $@ %<
?S:contains:
?S: This variable holds the command to do a grep with a proper return
?S: status.  On most sane systems it is simply "grep".  On insane systems
?S: it is a grep followed by a cat followed by a test.  This variable
?S: is primarily for the use of other Configure units.
?S:.
: Some
 greps do not return status, grrr.
echo "grimblepritz" >grimble
if grep blurfldyick grimble >/dev/null 2>&1 ; then
 contains=contains
elif grep grimblepritz grimble >/dev/null 2>&1 ; then
 contains=grep
else
 contains=contains
fi
rm -f grimble
: the following should work in any shell
case "$contains" in
contains*)
 echo " "
 echo "AGH!  Grep doesn't return a status.  Attempting remedial action."
 cat >contains <<'EOSS'
grep "$1" "$2" >.greptmp && cat .greptmp && test -s .greptmp
EOSS
chmod +x contains
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/contains.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: make.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: make.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:09:40  ram
?RCS: patch61: created
?RCS:
?MAKE:make_set_make : Loc rm sed make
?MAKE: -pick add $@ %<
?S:make_set_make:
?S: Some versions of 'make' set the variable MAKE.  Others do not.
?S: This variable contains the string to be included in Makefile.SH
?S: so that MAKE is set if needed, and not if not needed.
?S: Possible values are:
?S:
?S: make_set_make='#'  #
 If your make program handles this for you,
?S:
?S: make_set_make="MAKE=$make" # if it doesn't.
?S:
?S: This uses a comment character so that we can distinguish a
?S: 'set' value (from a previous config.sh or Configure -D option)
?S: from an uncomputed value.
?S:.
?LINT: extern MAKE
?LINT: change MAKE
?X: This test is based on one from an autoconf-generated configure
?X: script. Autoconf stole a lot from Configure, but now it's our
?X: turn to do so... ;-) -- RAM, 21/02/97
: check whether make sets MAKE
echo " "
echo "Checking if your $make program sets \$(MAKE)..." >&4
case "$make_set_make" in
")
?X: Use sed so we don't have a line begining with @echo.  Metaconfig
?X: will think that's a command like @if or @end.
 $sed 's/^X //' > testmake.mak << 'EOF'
Xall:
X  @echo 'maketemp="$(MAKE)"'
EOF
?X: GNU make sometimes prints "make[1]: Entering...", which would confuse us
 case "`$make -f testmake.mak 2>/dev/null`" in
```

```
 *maketemp=*) make_set_make='#' ;;
 *) make_set_make="MAKE=$make" ;;
 esac
 $rm
 -f testmake.mak
 ;;
esac
case "$make_set_make" in
'#') echo "Yup, it does.";;
*) echo "Nope, it doesn't.";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/make.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Signal.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:01  ram
?RCS: patch61: created
?RCS:
?X:
?X: This unit produces three files:
?X:
?X: 1- A signal.c file, which, when compiled and run, produces an output like:
?X:
?X:   HUP 1
?X:   INT 2
?X:   QUIT 3
?X:   etc...
?X:
?X: 2- A signal.awk script to parse the output of signal.c, fill
?X: in gaps (up to NSIG) and move duplicates to the end.
?X:
?X: 3- A signal_cmd script to compile signal.c and run it
?X: through sort -n -k 2 | uniq | awk -f signal.awk.
?X:
 (we try also sort -n +1 since some old hosts don't grok sort -k)
?X: (This is called signal_cmd to avoid OS/2 confusion with
```

```
?X: signal.cmd vs. signal.
?X: The signal_cmd script also falls back on checking signals one at a
?X: time in case the signal.c program fails.  On at least one version of
?X: Linux 2.1.x, the header file #define'd SIGRTMAX to a symbol that
?X: is not defined by the compiler/linker. :-(.  Further, on that same
?X: version of Linux, the user had a defective C-shell that gave an
?X: incorrect list for kill -l, so the fall-back didn't work.
?X:
?X: This unit is then used by sig_name.U.
?X:
?MAKE:Signal: test tr rm awk cat grep startsh eunicefix sed sort uniq \
 Findhdr cppstdin +cppflags cppminus Compile trnl run
?MAKE: -pick add $@ %<
?X:all files declared as "public" since they're used from other units
?F:signal.c signal_cmd signal.lst signal signal.awk
?T: xx xxx xxxfiles
?LINT:use rm run
: Trace out the files included by signal.h, then look for SIGxxx
 names.
?X: Remove SIGARRAYSIZE used by HPUX.
?X: Remove SIGSTKSIZE used by Linux.
?X: Remove SIGSTKSZ used by Posix.
?X: Remove SIGTYP void lines used by OS2.
?X: Some cpps, like os390, dont give the file name anywhere
if [ "X$fieldn" = X ]; then
 : Just make some guesses.  We check them later.
 xxx='/usr/include/signal.h /usr/include/sys/signal.h'
else
 xxx=`echo '#include <signal.h>' |
 $cppstdin $cppminus $cppflags 2>/dev/null |
 $grep '^[  ]*#.*include' |
 $awk "{print \\$$fieldn}" | $sed 's!"!!g' |\
  $sed 's!\\\\\\\\!/!g' | $sort | $uniq`
fi
?X: Check this list of files to be sure we have parsed the cpp output ok.
?X: This will also avoid potentially non-existent files, such
?X: as ../foo/bar.h
xxxfiles="
?X: Add /dev/null in case the $xxx list is empty.
for xx in $xxx /dev/null ; do
 $test -f "$xx" && xxxfiles="$xxxfiles $xx"
done
?X: If we have found no files, at least try signal.h
case "$xxxfiles" in
") xxxfiles=`./findhdr signal.h` ;;
esac
xxx=`awk '
$1 ~ /^#define$/ &&
```

```
 $2 ~ /^SIG[A-Z0-9]*$/ && $2 !~ /SIGARRAYSIZE/ && $2 !~ /SIGSTKSIZE/ && $2 !~ /SIGSTKSZ/ && $3 !~
/void/ {
 print substr($2, 4, 20)
}
$1 == "#" && $2 ~ /^define$/ && $3 ~ /^SIG[A-Z0-9]*$/ && $3 !~ /SIGARRAYSIZE/ && $4 !~ /void/ {
 print substr($3, 4, 20)
}' $xxxfiles`
: Append some common names just in case the awk scan failed.
xxx="$xxx ABRT ALRM BUS CANCEL CHLD CLD CONT DIL EMT FPE"
xxx="$xxx FREEZE HUP ILL INT IO IOT KILL LOST LWP PHONE"
xxx="$xxx PIPE POLL PROF PWR QUIT RTMAX RTMIN SEGV STKFLT STOP"
xxx="$xxx SYS TERM THAW TRAP TSTP TTIN TTOU URG USR1 USR2"
xxx="$xxx USR3 USR4 VTALRM WAITING WINCH WIND WINDOW XCPU XFSZ"

: generate a few handy files for later
$cat > signal.c <<'EOCP'
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {

/* Strange style to avoid deeply-nested #if/#else/#endif */
#ifndef NSIG
#  ifdef _NSIG
#    define NSIG (_NSIG)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGMAX
#    define NSIG (SIGMAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIG_MAX
#
    define NSIG (SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAXSIG
#    define NSIG (MAXSIG+1)
#  endif
#endif

#ifndef NSIG
```

```
#  ifdef MAX_SIG
#    define NSIG (MAX_SIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGARRAYSIZE
#    define NSIG (SIGARRAYSIZE+1) /* Not sure of the +1 */
#  endif
#endif

#ifndef NSIG
#  ifdef _sys_nsig
#    define NSIG (_sys_nsig) /* Solaris 2.5 */
#  endif
#endif

/* Default to some arbitrary number that's big enough to get most
  of the common signals.
*/
#ifndef NSIG
#    define NSIG 50
#endif

printf("NSIG %d\n", NSIG);

#ifndef JUST_NSIG

EOCP

echo $xxx | $tr ' ' $trnl | $sort | $uniq | $awk '
{
 printf "#ifdef SIG"; printf $1; printf "\n"
 printf "printf(\""; printf $1; printf " %%d\\n\",SIG";
 printf $1; printf ");\n"
 printf "#endif\n"
}
END {
 printf "#endif /* JUST_NSIG */\n";
 printf "exit(0);\n}\n";
}
' >>signal.c
$cat >signal.awk <<'EOP'
BEGIN { ndups = 0 }
$1 ~ /^NSIG$/ { nsig = $2 }
($1 !~ /^NSIG$/) && (NF == 2) {
   if ($2 >
```

```
 maxsig) { maxsig = $2 }
   if (sig_name[$2]) {
 dup_name[ndups] = $1
 dup_num[ndups] = $2
 ndups++
   }
   else {
 sig_name[$2] = $1
 sig_num[$2] = $2
   }
}
END {
   if (nsig == 0) {
    nsig = maxsig + 1
   }
   printf("NSIG %d\n", nsig);
   for (n = 1; n < nsig; n++) {
 if (sig_name[n]) {
     printf("%s %d\n", sig_name[n], sig_num[n])
 }
 else {
     printf("NUM%d %d\n", n, n)
 }
   }
   for (n = 0; n < ndups; n++) {
 printf("%s %d\n", dup_name[n], dup_num[n])
   }
}
EOP
$cat >signal_cmd <<EOS
$startsh
if $test -s signal.lst; then
   echo "Using your existing signal.lst file"
 exit 0
fi
xxx="$xxx"
EOS
?X: Avoid variable interpolation problems, especially with
?X: xxx, which contains newlines.
$cat >>signal_cmd <<'EOS'

set signal
if eval $compile_ok; then
 $run ./signal$_exe | ($sort -n -k 2 2>/dev/null || $sort -n +1) |\
  $uniq | $awk -f signal.awk >signal.lst
else
 echo "(I can't seem be able to compile the whole test program)" >&4
 echo "(I'll try it in little
```

```
 pieces.)" >&4
 set signal -DJUST_NSIG
 if eval $compile_ok; then
  $run ./signal$_exe > signal.nsg
  $cat signal.nsg
 else
  echo "I can't seem to figure out how many signals you have." >&4
  echo "Guessing 50." >&4
  echo 'NSIG 50' > signal.nsg
 fi
 : Now look at all the signal names, one at a time.
 for xx in `echo $xxx | $tr ' ' $trnl | $sort | $uniq`; do
  $cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {
printf("$xx %d\n", SIG${xx});
return 0;
}
EOCP
  set signal
  if eval $compile; then
   echo "SIG${xx} found."
   $run ./signal$_exe  >> signal.ls1
  else
   echo "SIG${xx} NOT found."
  fi
 done
 if $test -s signal.ls1; then
  $cat signal.nsg signal.ls1 |
   $sort -n | $uniq | $awk -f signal.awk >signal.lst
 fi

fi
if $test -s signal.lst; then
 :
else
 echo "(AAK! I can't compile the test programs -- Guessing)" >&4
 echo 'kill -l' >signal
 set X `csh -f <signal`
 $rm -f signal
 shift
 case $# in
 0) set HUP INT QUIT ILL TRAP ABRT
 EMT FPE KILL BUS SEGV SYS PIPE ALRM TERM;;
 esac
 echo $@ | $tr ' ' $trnl | \
```

```
    $awk '{ printf "%s %d\n", $1, ++s; }
   END { printf "NSIG %d\n", ++s }' >signal.lst
fi
$rm -f signal.c signal$_exe signal$_o signal.nsg signal.ls1
EOS
chmod a+x signal_cmd
$eunicefix signal_cmd
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Signal.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:ptrsize: cat rm_try Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:ptrsize:
?S: This variable contains the value of the PTRSIZE symbol, which
?S: indicates to the C program how many bytes there are in a pointer.
?S:.
?C:PTRSIZE:
?C: This symbol contains the size of a pointer, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define PTRSIZE $ptrsize  /**/
?H:.
?F:!try
: check for length of pointer
echo " "
case "$ptrsize" in
")
 echo "Checking to see how big your pointers are..."
 >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(char *));
}
EOCP
```

```
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$ptrsize"
 ;;
esac
rp="What is the size of a pointer (in bytes)?"
. ./myread
ptrsize="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ptrsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: packadmin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:packadmin: cf_email Oldconfig Myread cat spackage package
?MAKE: -pick add $@ %<
?Y:TOP
?S:packadmin:
?S: Electronic mail address of the package administrator.
?S:.
: check wehther they will act as local admin for the package
$cat <<EOM

If you or somebody else will be maintaining $package at your site, please
fill in the correct e-mail address here so that they may be contacted
if necessary.  You may enter "none"
 for no administrator.

EOM
case "$packadmin" in
") dflt="$cf_email";;
```

```
*) dflt="$packadmin";;
esac
rp="$spackage administrator e-mail address"
. ./myread
packadmin="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/packadmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Config_sh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_sh.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:57:53  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  14:53:31  ram
?RCS: patch45: moved path stripping from d_portable.U to end of Configure
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:50:37  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X:
 This unit ends up producing the config.sh script, which contains all the
?X: definitions figured out by Configure.  The add.Config_sh command knows
?X: which variables need to be remembered.  It also adds the EOT (ends the
?X: here document redirection with variable substitution).
?X:
?MAKE:Config_sh: cf_time cf_by test spitshell startsh myuname Myread \
 End Obsol_sh Loc +d_portable package src cat
?MAKE: -pick add.Config_sh $@ %<
?MAKE: -pick add $@ ./Obsol_sh
?MAKE: -pick close.Config_sh $@ %<
?F:!config.over !config.arch
?T:file temp
?LINT:unclosed EOT
```

```
: back to where it started
if test -d ../UU; then
 cd ..
fi

: configuration may be unconditionally patched via a 'config.arch' file
if $test -f config.arch; then
 echo "I see a config.arch file, loading it." >&4
 . ./config.arch
fi

: configuration may be patched via a 'config.over' file
if $test -f config.over; then
 echo " "
 dflt=y
 rp='I see a config.over file.  Do you wish to load it?'
 . UU/myread
 case "$ans" in
 n*) echo
 "OK, I'll ignore it.";;
 *) . ./config.over
  echo "Configuration override changes have been loaded."
  ;;
 esac
fi

@if d_portable
: in case they want portability, strip down executable paths
?X:
?X: Strip down paths in located executables. For each file, e.g. vi, there
?X: is a $vi variable whose value is for instance '/usr/bin/vi'. By resetting
?X: $vi to 'vi', we rely on the PATH variable to locate the executable...
?X:
case "$d_portable" in
"$define")
 echo " "
 echo "Stripping down executable paths..." >&4
?X:
?X: Previously, we used to do    eval $file="\$file"  but in order
?X: to handle things like  sh Configure -Dmake=gmake, we can't do
?X: that.  What we *really* want is to strip away the absolute path
?X: and rely on the end user's $PATH to correctly find the executable.
?X: This method assumes there is a "basename" command available.  If
?X: not, replace it with the following expr-based command:
?X:   expr  $temp : '.*/\(.*\)' \| $temp
?X: Since this preserves the actual
 command name, we can now drop the
?X: OS/2 specific code.
```

```
?X:  --Andy Dougherty  August 1999
?X:
?X: On OS/2, a special $ar command not even named 'ar' is required,
?X: so we don't strip that name.
?X: Also, on DOS-ish systems, there might not be a ln command, but we
?X: might have ln='cp'.
?X: However, we can't set d_portable=undef on such systems since
?X: Unix-ish tools don't have standard locations there.  Thus we
?X: MUST rely on the user's $PATH.
?X: --Andy Dougherty  4/1998
?X:
 for file in $loclist $trylist; do
  eval temp=\$$file
  eval $file=`basename $temp`
 done
 ;;
esac

@end
: create config.sh file
echo " "
echo "Creating config.sh..." >&4
$spitshell <<EOT >config.sh
$startsh
#
# This file was produced by running the Configure script. It holds all the
# definitions figured out by Configure. Should you modify one of these values,
# do not forget to propagate your changes by running "Configure -der". You may
# instead choose to run each of the .SH files by yourself, or "Configure
 -S".
#

# Package name      : $package
# Source directory  : $src
# Configuration time: $cf_time
# Configured by     : $cf_by
# Target system     : $myuname

EOT
?X: Command line options are saved by the Options.U unit in the
?X: temporary file UU/cmdline.opt
: Add in command line options if available
$test -f UU/cmdline.opt && $cat UU/cmdline.opt >> config.sh

$spitshell <<EOT >>config.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Config_sh.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Signal.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Signal.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:01  ram
?RCS: patch61: created
?RCS:
?X:
?X: This unit produces three files:
?X: 1- A signal.c file, which, when compiled and run, produces an output like:
?X:
?X:   HUP 1
?X:   INT 2
?X:   QUIT 3
?X:   etc...
?X:
?X: 2- A signal.awk script to parse the output of signal.c, fill
?X: in gaps (up to NSIG) and move duplicates to the end.
?X: 3- A signal_cmd script to compile signal.c and run it
?X: through
 sort -n -k 2 | uniq | awk -f signal.awk.
?X: (we try also sort -n +1 since some old hosts don't grok sort -k)
?X: (This is called signal_cmd to avoid OS/2 confusion with
?X: signal.cmd vs. signal.
?X: The signal_cmd script also falls back on checking signals one at a
?X: time in case the signal.c program fails.  On at least one version of
?X: Linux 2.1.x, the header file #define'd SIGRTMAX to a symbol that
?X: is not defined by the compiler/linker. :-(.  Further, on that same
?X: version of Linux, the user had a defective C-shell that gave an
?X: incorrect list for kill -l, so the fall-back didn't work.
?X:
?X: This unit is then used by sig_name.U.
?X:
?MAKE:Signal: test tr rm awk cat grep startsh eunicefix sed sort uniq \
 Findhdr cppstdin +cppflags cppminus Compile _o _exe trnl run i_stdlib \
 sysroot
?MAKE: -pick add $@ %<
?X:all files declared as "public" since they're used from other units
?F:signal.c signal_cmd signal.lst signal signal.awk
```

```
?T: xx xxx xxxfiles
?LINT:use rm run
 _o _exe
?LINT:extern sig_num_init
: Trace out the files included by signal.h, then look for SIGxxx names.
?X: Remove SIGARRAYSIZE used by HPUX.
?X: Remove SIGSTKSIZE used by Linux.
?X: Remove SIGSTKSZ used by POSIX.
?X: Remove SIGTYP void lines used by OS2.
?X: Some cpps, like os390, do not give the file name anywhere
case "$sig_num_init" in
")
if [ "X$fieldn" = X ]; then
 : Just make some guesses.  We check them later.
 xxx="$sysroot/usr/include/signal.h $sysroot/usr/include/sys/signal.h"
else
 xxx=`echo '#include <signal.h>' |
 $cppstdin $cppminus $cppflags 2>/dev/null |
 $grep '^[  ]*#.*include' |
 $awk "{print \\$$fieldn}" | $sed 's!"!!g' |\
  $sed 's!\\\\\\\\!/!g' | $sort | $uniq`
fi
?X: Check this list of files to be sure we have parsed the cpp output ok.
?X: This will also avoid potentially non-existent files, such
?X: as ../foo/bar.h
xxxfiles="
?X: Add /dev/null in case the $xxx list is empty.
for xx in $xxx /dev/null ; do
 $test -f "$xx" && xxxfiles="$xxxfiles $xx"
done
?X:
 If we have found no files, at least try signal.h
case "$xxxfiles" in
") xxxfiles=`./findhdr signal.h` ;;
esac
xxx=`awk '
$1 ~ /^#define$/ && $2 ~ /^SIG[A-Z0-9]*$/ && $2 !~ /SIGARRAYSIZE/ && $2 !~ /SIGSTKSIZE/ && $2 !~
/SIGSTKSZ/ && $3 !~ /void/ {
 print substr($2, 4, 20)
}
$1 == "#" && $2 ~ /^define$/ && $3 ~ /^SIG[A-Z0-9]*$/ && $3 !~ /SIGARRAYSIZE/ && $4 !~ /void/ {
 print substr($3, 4, 20)
}' $xxxfiles`
: Append some common names just in case the awk scan failed.
xxx="$xxx ABRT ALRM BUS CANCEL CHLD CLD CONT DIL EMT FPE"
xxx="$xxx FREEZE HUP ILL INT IO IOT KILL LOST LWP PHONE"
xxx="$xxx PIPE POLL PROF PWR QUIT RTMAX RTMIN SEGV STKFLT STOP"
xxx="$xxx SYS TERM THAW TRAP TSTP TTIN TTOU URG USR1 USR2"
```

```
xxx="$xxx USR3 USR4 VTALRM WAITING WINCH WIND WINDOW XCPU XFSZ"

: generate a few handy files for later
$cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
int main() {

/* Strange style to avoid
 deeply-nested #if/#else/#endif */
#ifndef NSIG
#  ifdef _NSIG
#    define NSIG (_NSIG)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGMAX
#    define NSIG (SIGMAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIG_MAX
#    define NSIG (SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef _SIG_MAX
#    define NSIG (_SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAXSIG
#    define NSIG (MAXSIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAX_SIG
#    define NSIG (MAX_SIG+1)
```

```
#  endif
#endif

#ifndef NSIG
#  ifdef SIGARRAYSIZE
#    define NSIG SIGARRAYSIZE /* Assume ary[SIGARRAYSIZE] */
#  endif
#endif

#ifndef NSIG
#  ifdef _sys_nsig
#    define NSIG (_sys_nsig) /* Solaris 2.5 */
#  endif
#endif

/* Default to some arbitrary number that's big enough to get most
  of the common signals.
*/
#ifndef NSIG
#    define NSIG 50
#endif

printf("NSIG %d\n", NSIG);

#ifndef JUST_NSIG

EOCP

echo $xxx | $tr ' ' $trnl | $sort | $uniq | $awk '
{
 printf "#ifdef SIG"; printf $1; printf "\n"
 printf "printf(\"";
 printf $1; printf " %%d\\n\",SIG";
 printf $1; printf ");\n"
 printf "#endif\n"
}
END {
 printf "#endif /* JUST_NSIG */\n";
 printf "exit(0);\n}\n";
}
' >>signal.c
$cat >signal.awk <<'EOP'
BEGIN { ndups = 0 }
$1 ~ /^NSIG$/ { nsig = $2 }
($1 !~ /^NSIG$/) && (NF == 2) && ($2 ~ /^[0-9][0-9]*$/) {
   if ($2 > maxsig) { maxsig = $2 }
   if (sig_name[$2]) {
 dup_name[ndups] = $1
```

```
 dup_num[ndups] = $2
 ndups++
   }
   else {
 sig_name[$2] = $1
 sig_num[$2] = $2
   }
}
END {
   if (nsig == 0) {
    nsig = maxsig + 1
   }
   printf("NSIG %d\n", nsig);
   for (n = 1; n < nsig; n++) {
 if (sig_name[n]) {
     printf("%s %d\n", sig_name[n], sig_num[n])
 }
 else {
     printf("NUM%d %d\n", n, n)
 }
   }
   for (n = 0; n < ndups; n++) {
 printf("%s %d\n", dup_name[n], dup_num[n])
   }
}
EOP
$cat >signal_cmd <<EOS
$startsh
if $test -s signal.lst; then
   echo "Using your existing signal.lst file"
 exit 0
fi
xxx="$xxx"
EOS
?X: Avoid variable interpolation problems, especially with
?X:
 xxx, which contains newlines.
$cat >>signal_cmd <<'EOS'

set signal
if eval $compile_ok; then
 $run ./signal$_exe | ($sort -n -k 2 2>/dev/null || $sort -n +1) |\
  $uniq | $awk -f signal.awk >signal.lst
else
 echo "(I can't seem be able to compile the whole test program)" >&4
 echo "(I'll try it in little pieces.)" >&4
 set signal -DJUST_NSIG
 if eval $compile_ok; then
```

```
  $run ./signal$_exe > signal.nsg
  $cat signal.nsg
 else
  echo "I can't seem to figure out how many signals you have." >&4
  echo "Guessing 50." >&4
  echo 'NSIG 50' > signal.nsg
 fi
 : Now look at all the signal names, one at a time.
 for xx in `echo $xxx | $tr ' ' $trnl | $sort | $uniq`; do
  $cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {
printf("$xx %d\n", SIG${xx});
return 0;
}
EOCP
  set signal
  if eval $compile; then
   echo "SIG${xx} found."
   $run ./signal$_exe  >> signal.ls1
  else
   echo "SIG${xx} NOT found."
  fi
 done
 if $test -s signal.ls1; then
  $cat
 signal.nsg signal.ls1 |
   $sort -n | $uniq | $awk -f signal.awk >signal.lst
 fi

fi
if $test -s signal.lst; then
 :
else
 echo "(AAK! I can't compile the test programs -- Guessing)" >&4
 echo 'kill -l' >signal
 set X `csh -f <signal`
 $rm -f signal
 shift
 case $# in
 0) set HUP INT QUIT ILL TRAP ABRT EMT FPE KILL BUS SEGV SYS PIPE ALRM TERM;;
 esac
 echo $@ | $tr ' ' $trnl | \
     $awk '{ printf "%s %d\n", $1, ++s; }
    END { printf "NSIG %d\n", ++s }' >signal.lst
fi
```

```
$rm -f signal.c signal$_exe signal$_o signal.nsg signal.ls1
EOS
chmod a+x signal_cmd
$eunicefix signal_cmd
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Signal.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: dlsrc.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: dlext.U,v $
?RCS:
?X:  hpux support thanks to Jeff Okamoto <okamoto@hpcc101.corp.hp.com>
?X:
?X:  To create a shared library, you must compile ALL source files in the
?X:  library with +z (or possibly +Z if the library is whopping huge),
?X:  then link the library with -b.  Example:
?X:   cc -c +z module_a.c
?X:   cc -c +z module_b.c
?X:   ld -b module_a.o module_b.o -o module.sl
?X:
?MAKE:dlext: \
 Getfile Myread cat usedl so
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:dlext:
?S: This variable contains the extension that is to be used for the
?S: dynamically loaded modules that perl generates.
?S:.
: Check what extension to use for shared libs
case "$usedl" in
$define|y|true)
 $cat <<
 EOM

On a few systems, the dynamically loaded modules that perl generates and uses
will need a different extension than shared libs. The default will probably
be appropriate.

EOM
```

```
 case "$dlext" in
 ") dflt="$so" ;;
 *) dflt="$dlext" ;;
 esac
 rp='What is the extension of dynamically loaded modules'
 . ./myread
 dlext="$ans"
 ;;
*)
 dlext="none"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dlext.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:fflushNULL fflushall: Compile cat rm rm_try test osname run to from \
 Oldconfig Myread Setvar echo targethost \
 d_sysconf i_unistd d_stdio_stream_array stdio_stream_array i_stdlib
?MAKE: -pick add $@ %<
?S:fflushNULL:
?S: This symbol, if defined, tells that fflush(NULL) correctly
?S: flushes all pending stdio output without side effects. In
?S: particular, on some platforms calling fflush(NULL) *still*
?S: corrupts STDIN if it is a pipe.
?S:.
?S:fflushall:
?S: This symbol, if defined, tells that to flush
?S: all
 pending stdio output one must loop through all
?S: the stdio file handles stored in an array and fflush them.
?S: Note that if fflushNULL is defined, fflushall will not
?S: even be probed for and will be left undefined.
?S:.
?C:FFLUSH_NULL:
?C: This symbol, if defined, tells that fflush(NULL) correctly
?C: flushes all pending stdio output without side effects. In
```

```
?C: particular, on some platforms calling fflush(NULL) *still*
?C: corrupts STDIN if it is a pipe.
?C:.
?C:FFLUSH_ALL:
?C: This symbol, if defined, tells that to flush
?C: all pending stdio output one must loop through all
?C: the stdio file handles stored in an array and fflush them.
?C: Note that if fflushNULL is defined, fflushall will not
?C: even be probed for and will be left undefined.
?C:.
?H:#$fflushNULL FFLUSH_NULL  /**/
?H:#$fflushall FFLUSH_ALL  /**/
?H:.
?T:output code
?F:!try.out !try !tryp
: Check how to flush
echo " "
$cat >&4 <<EOM
Checking how to flush all pending stdio output...
EOM
# I only know how to find
 the first 32 possibly open files on SunOS.
# See also hints/sunos_4_1.sh and util.c  --AD
case "$osname" in
sunos) $echo '#define PERL_FFLUSH_ALL_FOPEN_MAX 32' > try.c ;;
esac
$cat >>try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
# include <unistd.h>
#endif
#$d_sysconf HAS_SYSCONF
#$d_stdio_stream_array HAS_STDIO_STREAM_ARRAY
#ifdef HAS_STDIO_STREAM_ARRAY
# define STDIO_STREAM_ARRAY $stdio_stream_array
#endif
int main() {
 FILE* p;
 unlink("try.out");
 p = fopen("try.out", "w");
#ifdef TRY_FPUTC
 fputc('x', p);
#else
```

```
# ifdef TRY_FPRINTF
 fprintf(p, "x");
# endif
#endif
#ifdef TRY_FFLUSH_NULL
 fflush(NULL);
#endif
#ifdef TRY_FFLUSH_ALL
 {
   long open_max = -1;
# ifdef PERL_FFLUSH_ALL_FOPEN_MAX
   open_max = PERL_FFLUSH_ALL_FOPEN_MAX;
# else
#  if defined(HAS_SYSCONF) && defined(_SC_OPEN_MAX)
   open_max = sysconf(_SC_OPEN_MAX);
#  else
#   ifdef FOPEN_MAX
   open_max = FOPEN_MAX;
#   else
#
    ifdef OPEN_MAX
   open_max = OPEN_MAX;
#    else
#     ifdef _NFILE
   open_max = _NFILE;
#     endif
#    endif
#   endif
#  endif
# endif
# ifdef HAS_STDIO_STREAM_ARRAY
   if (open_max > 0) {
     long i;
     for (i = 0; i < open_max; i++)
     if (STDIO_STREAM_ARRAY[i]._file >= 0 &&
  STDIO_STREAM_ARRAY[i]._file < open_max &&
  STDIO_STREAM_ARRAY[i]._flag)
  fflush(&STDIO_STREAM_ARRAY[i]);
   }
 }
# endif
#endif
 _exit(42);
}
EOCP
: first we have to find out how _not_ to flush
$to try.c
if $test "X$fflushNULL" = X -o "X$fflushall" = X; then
```

```
  output=''
  set try -DTRY_FPUTC
  if eval $compile; then
    $run ./try 2>/dev/null
    code="$?"
    $from try.out
    if $test ! -s try.out -a "X$code" = X42; then
  output=-DTRY_FPUTC
    fi
  fi
  case "$output" in
  '')
    set try -DTRY_FPRINTF
    if eval $compile; then
     $run ./try 2>/dev/null
     code="$?"
     $from try.out
     if $test ! -s try.out -a "X$code" = X42; then
  output=-DTRY_FPRINTF

    fi
     fi
 ;;
  esac
fi
: check for fflush NULL behavior
case "$fflushNULL" in
'') set try -DTRY_FFLUSH_NULL $output
 if eval $compile; then
  $run ./try 2>/dev/null
  code="$?"
  $from try.out
  if $test -s try.out -a "X$code" = X42; then
   fflushNULL="`$cat try.out`"
  else
   if $test "X$code" != X42; then
    $cat >&4 <<EOM
(If this test failed, don't worry, we'll try another method shortly.)
EOM
   fi
  fi
 fi
 $rm -f core try.core core.try.*
 case "$fflushNULL" in
 x) $cat >&4 <<EOM
Your fflush(NULL) works okay for output streams.
Let's see if it clobbers input pipes...
EOM
```

```
# As of mid-March 2000 all versions of Solaris appear to have a stdio
# bug that improperly flushes the input end of pipes.  So we avoid the
# autoflush on fork/system/exec support for now. :-(
$cat >tryp.c <<EOCP
#include <stdio.h>
int
main(int argc, char **argv)
{
   char buf[1024];
   int i;
   char *bp = buf;
   while (1) {
 while ((i = getc(stdin)) != -1
        && (*bp++ = i) != '\n'

     && bp < &buf[1024])
 /* DO NOTHING */ ;
 *bp = '\0';
 fprintf(stdout, "%s", buf);
 fflush(NULL);
 if (i == -1)
     return 0;
 bp = buf;
   }
}
EOCP
  fflushNULL="$define"
  set tryp
  if eval $compile; then
      $rm -f tryp.out
      # Copy the .c file to the remote host ($to is an ssh-alike if targethost is set)
      if $test "X$targethost" != X; then
   $to tryp.c
   $to tryp
   $run "cat tryp.c | ./tryp " 2>/dev/null > tryp.out
      else
   $cat tryp.c | $run ./tryp   2>/dev/null > tryp.out
      fi
      if cmp tryp.c tryp.out >/dev/null 2>&1; then
         $cat >&4 <<EOM
fflush(NULL) seems to behave okay with input streams.
EOM
   fflushNULL="$define"
      else
   $cat >&4 <<EOM
Ouch, fflush(NULL) clobbers input pipes!  We will not use it.
EOM
   fflushNULL="$undef"
```

```
      fi
  fi
  $rm -f core tryp.c tryp.core core.tryp.*
  ;;
 ") $cat >&4 <<EOM
Your fflush(NULL) isn't working (contrary to ANSI C).
EOM
  fflushNULL="$undef"
  ;;
 *) $cat >&4 <<EOM
Cannot figure out whether
 your fflush(NULL) works or not.
I'm assuming it doesn't (contrary to ANSI C).
EOM
  fflushNULL="$undef"
  ;;
 esac
 ;;
$define|true|[yY]*)
 fflushNULL="$define"
 ;;
*)
 fflushNULL="$undef"
 ;;
esac
: check explicit looping only if NULL did not work, and if the pipe
: bug does not show up on an explicit flush too
case "$fflushNULL" in
"$undef")
 $cat >tryp.c <<EOCP
#include <stdio.h>
int
main(int argc, char **argv)
{
   char buf[1024];
   int i;
   char *bp = buf;
   while (1) {
 while ((i = getc(stdin)) != -1
        && (*bp++ = i) != '\n'
        && bp < &buf[1024])
 /* DO NOTHING */ ;
 *bp = '\0';
 fprintf(stdout, "%s", buf);
 fflush(stdin);
 if (i == -1)
     return 0;
 bp = buf;
```

```
   }
}
EOCP
 set tryp
 if eval $compile; then
     $rm -f tryp.out
     if $test "X$targethost" != X; then
  $to tryp.c
  $to tryp
  $run "cat tryp.c | ./tryp " 2>/dev/null > tryp.out
     else
  $cat tryp.c | $run ./tryp   2>/dev/null > tryp.out
     fi
     if cmp tryp.c tryp.out >/dev/null 2>&1;
 then
        $cat >&4 <<EOM
Good, at least fflush(stdin) seems to behave okay when stdin is a pipe.
EOM
  : now check for fflushall behaviour
  case "$fflushall" in
  ") set try -DTRY_FFLUSH_ALL $output
   if eval $compile; then
    $cat >&4 <<EOM
(Now testing the other method--but note that this also may fail.)
EOM
    $run ./try 2>/dev/null
    code=$?
    $from try.out
    if $test -s try.out -a "X$code" = X42; then
     fflushall="`$cat try.out`"
    fi
   fi
   $rm_try
   case "$fflushall" in
   x) $cat >&4 <<EOM
Whew. Flushing explicitly all the stdio streams works.
EOM
    fflushall="$define"
    ;;
   ") $cat >&4 <<EOM
Sigh. Flushing explicitly all the stdio streams doesn't work.
EOM
    fflushall="$undef"
    ;;
   *) $cat >&4 <<EOM
Cannot figure out whether flushing stdio streams explicitly works or not.
I'm assuming it doesn't.
EOM
```

```
    fflushall="$undef"
    ;;
   esac
   ;;
  "$define"|true|[yY]*)
   fflushall="$define"
   ;;
  *)
   fflushall="$undef"
   ;;
  esac

 else
  $cat >&4 <<EOM
All is futile.  Even fflush(stdin) clobbers input pipes!
EOM
  fflushall="$undef"
     fi
 else
     fflushall="$undef"
 fi
 $rm -f core tryp.c tryp.core core.tryp.*
 ;;
*) fflushall="$undef"
 ;;
esac

case "$fflushNULL$fflushall" in
undefundef)
 $cat <<EOM
OK, I give up.  I cannot figure out how to flush pending stdio output.
We won't be flushing handles at all before fork/exec/popen.
EOM
 ;;
esac
$rm_try tryp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/fflushall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setruid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setruid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setruid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setruid:
?S: This variable conditionally defines the HAS_SETRUID symbol, which
?S: indicates to the C program that the setruid() routine is available
?S: to change the real uid of the current program.
?S:.
?C:HAS_SETRUID (SETRUID):
?C: This symbol, if defined, indicates that the setruid
 routine is available
?C: to change the real uid of the current program.
?C:.
?H:#$d_setruid HAS_SETRUID  /**/
?H:.
?LINT:set d_setruid
: see if setruid exists
set setruid d_setruid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setruid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: errnolist.U,v 3.0.1.2 1997/02/28 15:48:01 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: errnolist.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:01  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:10:54  ram
?RCS: patch16: created
?RCS:
```

```
?MAKE:errnolist errnolist_SH errnolist_a errnolist_c errnolist_o: cat \
 Compile +d_sysernlst _a _o
?MAKE: -pick add $@ %<
?S:errnolist:
?S: This variable holds the base name of a file containing the
?S: definition
 of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S: The following lines should be included in your Makefile.SH:
?S:
?S:  case "$errnolist" in
?S:  ") ;;
?S:  *)
?S:   $spitshell >>Makefile <<!GROK!THIS!
?S:  $errnolist_c: $errnolist_SH $errnolist_a
?S:   sh ./$errnolist_SH
?S:
?S:  !GROK!THIS!
?S:   ;;
?S:  esac
?S:
?S: You may define the 'errnolist' variable in your Myinit.U if you
?S: wish to override its default value "errnolist".
?S:.
?S:errnolist_SH:
?S: This is the name of a file which will generate errnolistc.
?S:.
?S:errnolist_a:
?S: This is the name of the awk script called by errnolist_SH.
?S:.
?S:errnolist_c:
?S: This is the name of a generated C file which provides the
?S: definition of the sys_errnolist array.
?S:.
?S:errnolist_o:
?S: This is the name of the object file which provides the
?S: definition of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is
 empty.
?S:.
?INIT:errnolist=errnolist
: check for sys_errnolist
@if d_sysernlst || HAS_SYS_ERRNOLIST
case "$d_sysernlst" in
"$define")
   errnolist="
   errnolist_SH="
   errnolist_a="
```

```
   errnolist_c="
   errnolist_o="
 ;;
*)
 echo " "
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
 ;;
esac
@else
echo " "
$cat <<EOM
Checking to see if your C library provides us with sys_errnolist[]...
EOM
$cat >errnolist.c <<'EOCP'
extern char *sys_errnolist[];
int main() {
   char *p0 = sys_errnolist[0];
   char *p1 = sys_errnolist[1];

   return (p0 == p1); /* Make sure they're not optimized away */
}
EOCP
set errnolist
if eval $compile; then
   echo "It does."
   errnolist="
   errnolist_SH="
   errnolist_a="
   errnolist_c="
   errnolist_o="
else
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
    errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/errnolist.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_getprotobynumber_r.U,v 0RCS:

```
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotobynumber_r getprotobynumber_r_proto: Inlibc Protochk \
 Hasproto i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotobynumber_r:
?S: This variable conditionally defines the HAS_GETPROTOBYNUMBER_R symbol,
?S: which indicates to the C program that the getprotobynumber_r()
?S: routine is available.
?S:.
?S:getprotobynumber_r_proto:
?S: This variable encodes the prototype of getprotobynumber_r.
?S: It is zero if d_getprotobynumber_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobynumber_r
?S: is defined.
?S:.
?C:HAS_GETPROTOBYNUMBER_R:
?C: This
 symbol, if defined, indicates that the getprotobynumber_r routine
?C: is available to getprotobynumber re-entrantly.
?C:.
?C:GETPROTOBYNUMBER_R_PROTO:
?C: This symbol encodes the prototype of getprotobynumber_r.
?C: It is zero if d_getprotobynumber_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobynumber_r
?C: is defined.
?C:.
?H:#$d_getprotobynumber_r HAS_GETPROTOBYNUMBER_R /**/
?H:#define GETPROTOBYNUMBER_R_PROTO $getprotobynumber_r_proto /**/
?H:.
?T:try hdrs d_getprotobynumber_r_proto
: see if getprotobynumber_r exists
set getprotobynumber_r d_getprotobynumber_r
eval $inlibc
case "$d_getprotobynumber_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotobynumber_r_proto:$usethreads" in
 ":define") d_getprotobynumber_r_proto=define
  set d_getprotobynumber_r_proto getprotobynumber_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
```

```
 case "$d_getprotobynumber_r_proto" in
 define)
 case "$getprotobynumber_r_proto"
 in
"|0) try='int getprotobynumber_r(int, struct protoent*, char*, size_t, struct protoent**);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=I_ISBWR ;;
 esac
 case "$getprotobynumber_r_proto" in
"|0) try='struct protoent* getprotobynumber_r(int, struct protoent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=S_ISBI ;;
 esac
 case "$getprotobynumber_r_proto" in
"|0) try='int getprotobynumber_r(int, struct protoent*, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=I_ISD ;;
 esac
 case "$getprotobynumber_r_proto" in
"|0) d_getprotobynumber_r=undef
  getprotobynumber_r_proto=0
  echo "Disabling getprotobynumber_r, cannot determine prototype." >&4 ;;
* ) case "$getprotobynumber_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getprotobynumber_r_proto="REENTRANT_PROTO_$getprotobynumber_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getprotobynumber_r
 has no prototype, not using it." >&4 ;;
  esac
  d_getprotobynumber_r=undef
  getprotobynumber_r_proto=0
  ;;
 esac
 ;;
*) getprotobynumber_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotobynumber_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_usendir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_usendir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:47:34  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_usendir i_ndir ndirlib: test Setvar Findhdr d_readdir _a
?MAKE: -pick add $@ %<
?S:d_usendir:
?S: This variable conditionally defines the EMULATE_NDIR symbol, which
?S: indicates
 to the C program that it should compile the ndir.c code
?S: provided with the package.
?S:.
?S:i_ndir (d_libndir):
?S: This variable conditionally defines the I_NDIR symbol, which
?S: indicates to the C program that it should include the system's
?S: version of ndir.h, rather than the one with this package.
?S:.
?S:ndirlib:
?S: The name of the library to include at linking stage to resolve ndir
?S: symbols. It is up to the makefile to use this value.
?S:.
?C:EMULATE_NDIR (USENDIR):
?C: This symbol, if defined, indicates that the program should compile
?C: the ndir.c code provided with the package.
?C:.
?C:I_NDIR (LIBNDIR):
?C: This symbol, if defined, indicates that the program should include the
?C: system's version of ndir.h, rather than the one with this package.
?C:.
?H:#$d_usendir EMULATE_NDIR  /**/
?H:#$i_ndir I_NDIR  /**/
?H:.
?T:val2
?LINT: set d_usendir i_ndir
: see if there are directory access routines out there
echo " "
if $test `./findhdr ndir.h` && \
 ( $test -r /usr/lib/libndir$_a
```

```
 || $test -r /usr/local/lib/libndir$_a ); then
 echo "Ndir library found." >&4
 if $test -r /usr/lib/libndir$_a; then
  ndirlib='-lndir'
 else
  ndirlib="/usr/local/lib/libndir$_a"
 fi
 val2="$define"
 val="$undef"
else
 ndirlib=''
 val2="$undef"
 case "$d_readdir" in
 "$define")
 echo "No ndir library found, but you have readdir() so we'll use that." >&4
  val="$undef";
  ;;
 *)
  echo "No ndir library found." >&4
  val="$define"
  ;;
 esac
fi
set d_usendir
eval $setvar
val="$val2"
set i_ndir
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_usendir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_string.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_string.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:50:12  ram
?RCS: patch12: special units Loc and Guess were missing from dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:07:26  ram
```

```
?RCS: patch10: removed "(Actually, this looks more like...)" messages (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: See if we should include <string.h> or <strings.h>
?X:
?MAKE:i_string strings:
 test Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?S:i_string:
?S: This variable conditionally defines the I_STRING symbol, which
?S: indicates that <string.h> should be included rather than <strings.h>.
?S:.
?S:strings:
?S: This variable holds the full path of the string header that will be
?S: used. Typically /usr/include/string.h or /usr/include/strings.h.
?S:.
?C:I_STRING:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <string.h> (USG systems) instead of <strings.h> (BSD systems).
?C:.
?H:#$i_string I_STRING  /**/
?H:.
?LINT:set i_string
: see which of string.h or strings.h is needed
echo " "
strings=`./findhdr string.h`
if $test "$strings" && $test -r "$strings"; then
 echo "Using <string.h> instead of <strings.h>." >&4
 val="$define"
else
 val="$undef"
 strings=`./findhdr strings.h`
 if $test "$strings" && $test -r "$strings"; then
  echo "Using <strings.h> instead of <string.h>." >&4
 else
  ./warn "No string header found -- You'll surely
 have problems."
 fi
fi
set i_string
eval $setvar
case "$i_string" in
"$undef") strings=`./findhdr strings.h`;;
*)   strings=`./findhdr string.h`;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_string.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_access.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_access: test +cc cat +cppflags h_fcntl h_sysfile rm Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_access:
?S: This variable conditionally defines HAS_ACCESS if the access() system
?S: call is available to check for access permissions using real IDs.
?S:.
?C:HAS_ACCESS:
?C: This manifest constant lets the C program know that the access()
?C: system call is available to check for accessibility
 using real UID/GID.
?C: (always present on UNIX.)
?C:.
?H:#$d_access HAS_ACCESS  /**/
?H:.
?W:%<:R_OK W_OK X_OK F_OK
?LINT:set d_access
?LINT:change h_fcntl h_sysfile
: access call always available on UNIX
set access d_access
eval $inlibc

: locate the flags for 'access()'
case "$d_access" in
"$define")
 echo " "
 $cat >access.c <<'EOCP'
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
```

```
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#ifdef I_UNISTD
#include <unistd.h>
#endif
int main() {
 exit(R_OK);
}
EOCP
 : check sys/file.h first, no particular reason here
 if $test `./findhdr sys/file.h` && \
  $cc -o access $cppflags -DI_SYS_FILE access.c >/dev/null 2>&1 ; then
  h_sysfile=true;
  echo "<sys/file.h> defines the *_OK access constants." >&4
 elif $test `./findhdr fcntl.h` && \
  $cc -o access $cppflags -DI_FCNTL access.c >/dev/null 2>&1 ; then
  h_fcntl=true;
  echo "<fcntl.h> defines the *_OK access constants." >&4
@if I_UNISTD
 elif $test `./findhdr unistd.h`
 && \
  $cc -o access $cppflags -DI_UNISTD access.c >/dev/null 2>&1 ; then
  echo "<unistd.h> defines the *_OK access constants." >&4
@end
 else
  echo "I can't find the four *_OK access constants--I'll use mine." >&4
 fi
 ;;
esac
$rm -f access*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_access.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mallocsrc.U,v 3.0.1.2 1997/02/28 16:10:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: mallocsrc.U,v $
```

```
?RCS: Revision 3.0.1.2  1997/02/28  16:10:26  ram
?RCS: patch61: added support for Free_t, the type of free()
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:10:46  ram
?RCS: patch23: added support for MYMALLOC, mainly  for perl5 (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mallocsrc mallocobj usemallocwrap usemymalloc
 malloctype d_mymalloc \
 freetype: Myread \
 Oldconfig package Guess Setvar rm cat +cc +ccflags Findhdr \
 i_malloc i_stdlib sed libs _o ptrsize useithreads
?MAKE: -pick add $@ %<
?X: Put near top so that other tests don't erroneously include
?X: -lmalloc.  --AD  22 June 1998
?Y:TOP
?S:usemymalloc:
?S: This variable contains y if the malloc that comes with this package
?S: is desired over the system's version of malloc.  People often include
?S: special versions of malloc for efficiency, but such versions are often
?S: less portable.  See also mallocsrc and mallocobj.
?S: If this is 'y', then -lmalloc is removed from $libs.
?S:.
?S:usemallocwrap:
?S: This variable contains y if we are wrapping malloc to prevent
?S: integer overflow during size calculations.
?S:.
?S:mallocsrc:
?S: This variable contains the name of the malloc.c that comes with
?S: the package, if that malloc.c is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.
?S:.
?S:d_mymalloc:
?S: This
 variable conditionally defines MYMALLOC in case other parts
?S: of the source want to take special action if MYMALLOC is used.
?S: This may include different sorts of profiling or error detection.
?S:.
?S:mallocobj:
?S: This variable contains the name of the malloc.o that this package
?S: generates, if that malloc.o is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.  See mallocsrc.
?S:.
```

```
?S:freetype:
?S: This variable contains the return type of free().  It is usually
?S: void, but occasionally int.
?S:.
?S:malloctype:
?S: This variable contains the kind of ptr returned by malloc and realloc.
?S:.
?C:Free_t:
?C: This variable contains the return type of free().  It is usually
?C: void, but occasionally int.
?C:.
?C:Malloc_t (MALLOCPTRTYPE):
?C: This symbol is the type of pointer returned by malloc and realloc.
?C:.
?H:#define Malloc_t $malloctype   /**/
?H:#define Free_t
 $freetype   /**/
?H:.
?C:PERL_MALLOC_WRAP:
?C: This symbol, if defined, indicates that we'd like malloc wrap checks.
?C:.
?H:#$usemallocwrap PERL_MALLOC_WRAP  /**/
?H:.
?C:MYMALLOC:
?C: This symbol, if defined, indicates that we're using our own malloc.
?C:.
?H:#$d_mymalloc MYMALLOC   /**/
?H:.
?LINT:extern usedevel
?LINT:change libs
?X: Cannot test for mallocsrc; it is the unit's name and there is a bug in
?X: the interpreter which defines all the names, even though they are not used.
@if mallocobj
: determine whether to use malloc wrapping
echo " "
case "$usemallocwrap" in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*) case "$usedevel" in
 [yY]*|true|$define) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
esac
rp="Do you wish to wrap malloc calls to protect against potential overflows?"
. ./myread
usemallocwrap="$ans"
case "$ans" in
```

```
y*|true)
 usemallocwrap="$define" ;;
*)
 usemallocwrap="$undef" ;;
esac

: determine which malloc to compile in
echo " "
case "$usemymalloc"
 in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*) case "$ptrsize" in
 4) dflt='y' ;;
 *) dflt='n' ;;
 esac
 if test "$useithreads" = "$define"; then dflt='n'; fi
 ;;
esac
rp="Do you wish to attempt to use the malloc that comes with $package?"
. ./myread
usemymalloc="$ans"
case "$ans" in
y*|true)
 usemymalloc='y'
 mallocsrc='malloc.c'
 mallocobj="malloc$_o"
 d_mymalloc="$define"
?X: Maybe libs.U should be dependent on mallocsrc.U, but then
?X: most packages that use dist probably don't supply their own
?X: malloc, so this is probably an o.k. compromise
 case "$libs" in
 *-lmalloc*)
  : Remove malloc from list of libraries to use
  echo "Removing unneeded -lmalloc from library list" >&4
  set `echo X $libs | $sed -e 's/-lmalloc / /' -e 's/-lmalloc$//'`
  shift
  libs="$*"
  echo "libs = $libs" >&4
  ;;
 esac
 ;;
*)
 usemymalloc='n'
 mallocsrc=''
 mallocobj=''
 d_mymalloc="$undef"
 ;;
```

```
esac

@end
@if MALLOCPTRTYPE || Malloc_t || Free_t
: compute the return types of
 malloc and free
echo " "
$cat >malloc.c <<END
#$i_malloc I_MALLOC
#$i_stdlib I_STDLIB
#include <stdio.h>
#include <sys/types.h>
#ifdef I_MALLOC
#include <malloc.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#ifdef TRY_MALLOC
void *malloc();
#endif
#ifdef TRY_FREE
void free();
#endif
END
@if MALLOCPTRTYPE || Malloc_t
case "$malloctype" in
")
 if $cc $ccflags -c -DTRY_MALLOC malloc.c >/dev/null 2>&1; then
  malloctype='void *'
 else
  malloctype='char *'
 fi
 ;;
esac
echo "Your system wants malloc to return '$malloctype', it would seem." >&4
@end

@if Free_t
case "$freetype" in
")
 if $cc $ccflags -c -DTRY_FREE malloc.c >/dev/null 2>&1; then
  freetype='void'
 else
  freetype='int'
 fi
 ;;
esac
```

```
echo "Your system uses $freetype free(), it would seem." >&4
@end
$rm -f malloc.[co]
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/mallocsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mkfifo.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mkfifo.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:17  ram
?RCS: patch36: created by ADO
?RCS:
?RCS:
?MAKE:d_mkfifo: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkfifo:
?S: This variable conditionally defines the HAS_MKFIFO symbol, which
?S: indicates to the C program that the mkfifo() routine is available.
?S:.
?C:HAS_MKFIFO :
?C: This symbol, if defined, indicates that the mkfifo
 routine is
?C: available to create FIFOs. Otherwise, mknod should be able to
?C: do it for you. However, if mkfifo is there, mknod might require
?C: super-user privileges which mkfifo will not.
?C:.
?H:#$d_mkfifo HAS_MKFIFO  /**/
?H:.
?LINT:set d_mkfifo
: see if mkfifo exists
set mkfifo d_mkfifo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mkfifo.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_scandir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scandir.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:35  ram
?RCS: patch16: created
?RCS:
?MAKE:d_scandir: Inlibc
?MAKE: -pick add $@ %<
?S:d_scandir:
?S: This variable conditionally defines HAS_SCANDIR if scandir() is
?S: available to scan a directory.
?S:.
?C:HAS_SCANDIR:
?C: This symbol, if defined, indicates that the scandir routine is
?C: available to scan a directory.
?C:.
?H:#$d_scandir HAS_SCANDIR /**/
?H:.
?LINT:set d_scandir
: see if
 scandir exists
set scandir d_scandir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scandir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?MAKE:d_u32align: Compile cat rm_try Oldconfig run i_stdlib \
 byteorder u32type Myread Setvar u8type signal_t
?MAKE: -pick add $@ %<
?S:d_u32align:
?S: This variable tells whether you must access character data
?S: through U32-aligned pointers.
?S:.
?C:U32_ALIGNMENT_REQUIRED:
?C: This symbol, if defined, indicates that you must access
?C: character data through U32-aligned pointers.
?C:.
?H:?%<:#ifndef U32_ALIGNMENT_REQUIRED
?H:?%<:#$d_u32align U32_ALIGNMENT_REQUIRED /**/
?H:?%<:#endif
?H:.
?F:!try
: Checking 32bit alignedness
$cat
 <<EOM

Checking to see whether you can access character data unalignedly...
EOM
case "$d_u32align" in
")   $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define U32 $u32type
#define BYTEORDER 0x$byteorder
#define U8 $u8type
#include <signal.h>
#ifdef SIGBUS
$signal_t bletch(int s) { exit(4); }
#endif
int main() {
#if BYTEORDER == 0x1234 || BYTEORDER == 0x4321
   volatile U8 buf[8];
   volatile U32 *up;
   int i;

   if (sizeof(U32) != 4) {
 printf("sizeof(U32) is not 4, but %d\n", sizeof(U32));
 exit(1);
   }

   fflush(stdout);
```

```
#ifdef SIGBUS
   signal(SIGBUS, bletch);
#endif

   buf[0] = 0;
   buf[1] = 0;
   buf[2] = 0;
   buf[3] = 1;
   buf[4] = 0;
   buf[5] = 0;
   buf[6] = 0;
   buf[7] = 1;

   for (i = 0; i < 4; i++) {
 up = (U32*)(buf + i);
 if (! ((*up == 1 << (8*i)) ||   /* big-endian */
        (*up == 1 << (8*(3-i)))  /* little-endian */
       )
    )
 {
     printf("read failed (%x)\n", *up);

    exit(2);
 }
   }

   /* write test */
   for (i = 0; i < 4; i++) {
 up = (U32*)(buf + i);
 *up = 0xBeef;
 if (*up != 0xBeef) {
     printf("write failed (%x)\n", *up);
     exit(3);
 }
   }

   exit(0);
#else
   printf("1\n");
   exit(1);
#endif
   return 0;
}
EOCP
set try
if eval $compile_ok; then
 echo "(Testing for character data alignment may crash the test.  That's okay.)" >&4
```

```
 $run ./try 2>&1 >/dev/null
 case "$?" in
 0) cat >&4 <<EOM
You can access character data pretty unalignedly.
EOM
  d_u32align="$undef"
  ;;
 *) cat >&4 <<EOM
It seems that you must access character data in an aligned manner.
EOM
  d_u32align="$define"
  ;;
 esac
else
 rp='Can you access character data at unaligned addresses?'
 dflt='n'
 . ./myread
 case "$ans" in
 [yY]*) d_u32align="$undef"  ;;
 *) d_u32align="$define" ;;
 esac
fi
$rm_try
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_u32align.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_getpwent.U,v $
?RCS:
?MAKE:d_getpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpwent:
?S: This variable conditionally defines the HAS_GETPWENT symbol, which
?S: indicates to the C program that the getpwent() routine is available
?S: for sequential access of the passwd database.
?S:.
?C:HAS_GETPWENT:
?C: This symbol, if defined, indicates that the getpwent routine is
```

```
?C: available for sequential access of the passwd database.
?C: If this is not available, the older getpw() function may be available.
?C:.
?H:#$d_getpwent HAS_GETPWENT  /**/
?H:.
?LINT:set d_getpwent
: see if getpwent exists
set getpwent d_getpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_stdio_stream_array stdio_stream_array: run \
 Compile cat rm_try Oldconfig Myread Setvar
?MAKE: -pick add $@ %<
?S:d_stdio_stream_array:
?S: This variable tells whether there is an array holding
?S: the stdio streams.
?S:.
?S:stdio_stream_array:
?S: This variable tells the name of the array holding the stdio streams.
?S: Usual values include _iob, __iob, and __sF.
?S:.
?C:HAS_STDIO_STREAM_ARRAY:
?C: This symbol, if defined, tells that there is an array
?C: holding the stdio streams.
?C:.
?C:STDIO_STREAM_ARRAY:
?C: This
 symbol tells the name of the array holding the stdio streams.
?C: Usual values include _iob, __iob, and __sF.
?C:.
?H:#$d_stdio_stream_array HAS_STDIO_STREAM_ARRAY /**/
?H:?%<:#ifdef HAS_STDIO_STREAM_ARRAY
?H:?%<:#define STDIO_STREAM_ARRAY $stdio_stream_array
?H:?%<:#endif
```

```
?H:.
?T:s
?F:!try
: Check stream access
$cat >&4 <<EOM
Checking how to access stdio streams by file descriptor number...
EOM
case "$stdio_stream_array" in
") $cat >try.c <<EOCP
#include <stdio.h>
int main() {
 if (&STDIO_STREAM_ARRAY[fileno(stdin)] == stdin)
   printf("yes\n");
}
EOCP
 for s in _iob __iob __sF
 do
        set try -DSTDIO_STREAM_ARRAY=$s
  if eval $compile; then
   case "`$run ./try`" in
   yes) stdio_stream_array=$s; break ;;
   esac
  fi
 done
 $rm_try
esac
case "$stdio_stream_array" in
") $cat >&4 <<EOM
I can't figure out how to access stdio streams by file descriptor number.
EOM
 d_stdio_stream_array="$undef"
 ;;
*) $cat >&4 <<EOM
You can access stdio streams by file descriptor number
 by the $stdio_stream_array array.
EOM
 d_stdio_stream_array="$define"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/stdio_streams.U
No license file was found, but licenses were detected in source scan.

?RCS: Copyright (c) 2006-2007, H.Merijn Brand
?RCS:
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS:
?MAKE:d_dir_dd_fd: Compile cat rm_try Setvar i_dirent i_stdlib
?MAKE: -pick add $@ %<
?S:d_dir_dd_fd (d_dir_dd_fd.U):
?S: This variable conditionally defines the HAS_DIR_DD_FD symbol, which
?S: indicates that the DIR directory stream type contains a member
?S: variable called dd_fd.
?S:.
?C:HAS_DIR_DD_FD:
?C: This symbol, if defined, indicates that the the DIR* dirstream
?C: structure contains a member variable named dd_fd.
?C:.
?H:#$d_dir_dd_fd HAS_DIR_DD_FD  /**/
?H:.
?LINT:set d_dir_dd_fd
: Look for DIR.dd_fd
case "$i_dirent"
 in
"$define")
   echo "Checking to see if DIR has a dd_fd member variable" >&4
   $cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <dirent.h>

int main() {
   DIR dir;
   dir.dd_fd = 1;
   return 0;
}
EOCP
   val=$undef
   set try
   if eval $compile; then
       echo "Yes, it does."
       val="$define"
   else
       echo "No, it does not."
       val="$undef"
   fi
   ;;
*)
```

```
   echo "You don't have a <dirent.h>, so not checking for dd_fd." >&4
   val="$undef"
   ;;
esac
set d_dir_dd_fd
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dir_dd_fd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getenv_thread.U,v 0RCS:
?RCS: Copyright (c) 2021 H.Merijn Brand, Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getenv_preserves_other_thread: echo cat i_stdlib i_pthread run rm_try \
 Compile Setvar
?MAKE: -pick add $@ %<
?S:d_getenv_preserves_other_thread:
?S: This variable conditionally defines the GETENV_PRESERVES_OTHER_THREAD
?S: symbol, which indicates to the C program that the getenv() system call
?S: does not zap the static buffer in a different thread.
?S:.
?C:GETENV_PRESERVES_OTHER_THREAD:
?C: This symbol, if defined, indicates that the getenv system call doesn't
?C: zap the static buffer of getenv() in a different thread.
?C:
?C: The typical getenv() implementation will return a pointer to the proper
?C: position in **environ.  But some may instead copy them to
 a static
?C: buffer in getenv().  If there is a per-thread instance of that buffer,
?C: or the return points to **environ, then a many-reader/1-writer mutex
?C: will work; otherwise an exclusive locking mutex is required to prevent
?C: races.
?C:.
?H:#$d_getenv_preserves_other_thread GETENV_PRESERVES_OTHER_THREAD /**/
?H:.
?T:rc
?F:!try
?LINT:set d_getenv_preserves_other_thread
: check for getenv behavior
case "$d_getenv_preserves_other_thread" in
")
$echo "Checking to see if getenv() preserves a different thread's results" >&4
$cat >try.c <<EOCP
```

```
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#include <stdio.h>
#include <string.h>
#$i_pthread I_PTHREAD
#ifdef I_PTHREAD
#  include <pthread.h>
#endif

void *
thread_start(void * arg)
{
   return (void *) getenv("HOME");
}

int main() {
   char * main_buffer;
   char save_main_buffer[1000];
   pthread_t subthread;
   pthread_attr_t attr;

   main_buffer = getenv("PATH");

   /* If too large for our generous allowance,
 return we couldn't figure it
    * out. */
   if (strlen(main_buffer) >= sizeof(save_main_buffer)) {
       exit(2);
   }

   strcpy(save_main_buffer, main_buffer);

   if (pthread_attr_init(&attr) != 0) {
       exit(2);
   }

   if (pthread_create(&subthread, &attr, thread_start, NULL) != 0) {
       exit(2);
   }

   if (pthread_join(subthread, NULL) != 0) {
       exit(2);
   }

   exit(! (strcmp(main_buffer, save_main_buffer) == 0));
}
```

```
EOCP
val=
set try
if eval $compile_ok; then
   $run ./try
   rc=$?
   case "$rc" in
 0) echo "getenv() didn't destroy another thread's buffer" >&4
    val=$define
    ;;
 1) echo "getenv() does destroy another thread's buffer" >&4
    val=$undef
    ;;
 *) echo "Couldn't determine if getenv() destroys another thread's return value (code=$rc); assuming it does" >&4
    val=$undef
    ;;
   esac
else
   echo "(I can't seem to compile the test program.)" >&4
   echo "Assuming that your C library's getenv destroys another thread's
 return value." >&4
   val=$undef
fi
set d_getenv_preserves_other_thread
eval $setvar
$rm_try
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getenv_thread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: prefix.U,v 3.1 1999/07/08 18:27:51 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: prefix.U,v $
?RCS: Revision 3.1  1999/07/08 18:27:51  doughera
?RCS: 5.005_5x version -- Andy Dougherty
```

```
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:44:05  ram
?RCS: patch49: new prefixexp variable holding a fully expanded prefix
?RCS: patch49: save off previous prefix value in oldprefix if changed (WED)
?RCS: patch49: added the INSTALLPREFIX define for C programs to use (WED)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/08/29  16:31:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:prefix prefixexp +oldprefix: Getfile Loc Oldconfig cat package
?MAKE: -pick add $@ %<
?S:prefix:
?S: This variable holds the name of the directory below which the
?S: user will install the package.  Usually, this is /usr/local, and
?S: executables go in /usr/local/bin, library stuff in /usr/local/lib,
?S: man pages in /usr/local/man, etc.  It is only used to set defaults
?S: for things in bin.U, mansrc.U, privlib.U, or scriptdir.U.
?S:.
?S:prefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install the package.  Derived from prefix.
?S:.
?S:oldprefix:
?S: This variable is set non-null if the prefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
?C:INSTALLPREFIX:
?C: This symbol contains the name of the install prefix for this package.
?C:.
?H:#define INSTALLPREFIX "$prefix"  /**/
?H:.
:
 determine root of directory hierarchy where package will be installed.
case "$prefix" in
") dflt=`./loc . /usr/local /usr/local /local /opt /usr`
 ;;
*) dflt="$prefix"
 ;;
esac
$cat <<EOM

By default, $package will be installed in $dflt/bin, manual pages
under $dflt/man, etc..., i.e. with $dflt as prefix for all
installation directories. Typically this is something like /usr/local.
If you wish to have binaries under /usr/bin but other parts of the
installation under /usr/local, that's ok: you will be prompted
separately for each of the installation directories, the prefix being
```

```
only used to set the defaults.

EOM
fn=d~
rp='Installation prefix to use?'
. ./getfile
oldprefix=''
case "$prefix" in
'') ;;
*) case "$ans" in
 "$prefix") ;;
 *) oldprefix="$prefix";;
 esac
 ;;
esac

case "$ans" in
*?/) prefix=`echo "$ans" | sed 's/.$//'`
 ;;
*) prefix="$ans"
esac

case "$ansexp" in
*?/) prefixexp=`echo "$ansexp" | sed 's/.$//'`
 ;;
*) prefixexp="$ansexp"
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/prefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_malloc: Inhdr
?MAKE: -pick add $@ %<
```

```
?S:i_malloc:
?S: This variable conditionally defines the I_MALLOC symbol, and indicates
?S: whether a C program should include <malloc.h>.
?S:.
?C:I_MALLOC:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <malloc.h>.
?C:.
?H:#$i_malloc I_MALLOC  /**/
?H:.
?LINT:set i_malloc
: see if this is a malloc.h system
set
 malloc.h i_malloc
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_malloc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2016 H.Merijn Brand & Todd Rinaldo
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:default_inc_excludes_dot: Myread cat
?MAKE: -pick add $@ %<
?S:default_inc_excludes_dot:
?S: When defined, remove the legacy '.' from @INC
?S:.
?C:DEFAULT_INC_EXCLUDES_DOT:
?C: This symbol, if defined, removes the legacy default behavior of
?C: including '.' at the end of @INC.
?C:.
?H:#$default_inc_excludes_dot DEFAULT_INC_EXCLUDES_DOT /**/
?H:.
: Include . in @INC
$cat <<EOM

Historically Perl has provided a final fallback of the current working
directory '.' when searching for a library. This, however, can lead to
problems when a Perl program which loads optional modules is called from
a shared directory. This can lead to executing unexpected code.

EOM
```

```
# When changing to exclude by
 default:
case "$default_inc_excludes_dot" in
   $undef|false|[nN]*) dflt="n" ;;
   *)                  dflt="y" ;;
esac
# To turn exclude off by default:
#case "$default_inc_excludes_dot" in
#    $define|true|[yY]*) dflt="y" ;;
#    *)                  dflt="n" ;;
#esac

rp='Exclude '.' from @INC by default? '
. ./myread
case "$ans" in
   [nN]|undef) default_inc_excludes_dot="$undef"  ;;
   *)          default_inc_excludes_dot="$define" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/defaultincdot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: privlib.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: privlib.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:17:09  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:44:23  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:31:52  ram
?RCS:
 patch32: now uses installation prefix
?RCS:
```

```
?RCS: Revision 3.0.1.1  1993/09/13  16:12:34  ram
?RCS: patch10: added support for /local/lib (WED)
?RCS: patch10: prompt phrasing made more explicit (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:privlib privlibexp installprivlib: package cat Getfile Oldconfig \
 Setprefixvar Prefixit version installstyle binexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:privlib=''
?S:privlib:
?S: This variable contains the eventual value of the PRIVLIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S:.
?D:privlibexp=''
?S:privlibexp:
?S: This variable is the ~name expanded version of privlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installprivlib=''
?S:installprivlib:
?S: This variable
 is really the same as privlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:PRIVLIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C:.
?C:PRIVLIB_EXP:
?C: This symbol contains the ~name expanded version of PRIVLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#define PRIVLIB "$privlib"  /**/
?H:#define PRIVLIB_EXP "$privlibexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installprivlib
?LINT:set privlib
?LINT:set privlibexp
: determine where private library files go
```

```
: Usual default is /usr/local/lib/perl5/$version.
: Also allow things like /opt/perl/lib/$version, since
: /opt/perl/lib/perl5... would be redundant.
: The default "style"
 setting is made in installstyle.U
case "$installstyle" in
*lib/perl5*) set dflt privlib lib/$package/$version ;;
*)  set dflt privlib lib/$version ;;
esac
eval $prefixit
$cat <<EOM

There are some auxiliary files for $package that need to be put into a
private library directory that is accessible by everyone.

EOM
?X: Force dependency on bin.U
fn=$binexp
fn=d~+
rp='Pathname where the private library files will reside?'
. ./getfile
prefixvar=privlib
. ./setprefixvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/privlib.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Csym.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:36:29  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS: patch56: added quotes for OS/2 support
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:00:33  ram
?RCS: patch54: fixed C test program to bypass gcc builtin type checks (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/31  09:34:13  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
```

```
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:05  ram
?RCS:
 patch6: added ldflags as a conditional dependency and to compile line
?RCS: patch6: a final double quote was missing in csym variable after eval
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Csym: Options contains libc libs runnm +cc +ccflags +ldflags rm
?MAKE: -pick add $@ %<
?LINT:define csym
?LINT:use libc
?S:csym:
?S: This shell variable is used internally by Configure to check
?S: wether a given C symbol is defined or not. A typical use is:
?S:  set symbol result [-fva] [previous]
?S:  eval $csym
?S: That will set result to 'true' if the function [-f], variable [-v]
?S: or array [-a] is defined, 'false' otherwise. If a previous value is
?S: given and the -r flag was provided on the command line, that value
?S: is reused without questioning.
?S:.
?V:csym
?T:tval tx tlook tf tdc tc
: is a C symbol defined?
csym='tlook=$1;
case "$3" in
-v) tf=libc.tmp; tc=""; tdc="";;
-a) tf=libc.tmp; tc="[0]"; tdc="[]";;
*) tlook="^$1\$";
 tf=libc.list; tc=""; tdc="()";;
esac;
tx=yes;
case "$reuseval-$4" in
true-) ;;
true-*) tx=no; eval "tval=\$$4"; case "$tval" in "") tx=yes;; esac;;
esac;
case "$tx" in
yes)
 case "$runnm" in
 true)
  if $contains $tlook $tf >/dev/null 2>&1;
  then tval=true;
  else tval=false;
  fi;;
 *)
?X:
```

```
?X: We use 'char' instead of 'int' to try to circumvent overzealous
?X: optimizing compilers using built-in prototypes for commonly used
?X: routines to complain when seeing a different external declaration. For
?X: instance, gcc 2.6.3 fails if we use 'int' and we attempt a test against
?X: memcpy() on machines where sizeof(int) == sizeof(char *) (the usual return
?X: type), the compiler assuming it's a built-in declaration given that the
?X: returned size matches. At least with 'char' we are safe! -- RAM, for ADO
?X:
?X: Let's thank GNU cc for making our lifes so easy! :-)
?X: (An alternative for the future would be to use our knowledge about gcc
?X: to force a -fno-builtin option in the
 compile test, in case the 'char'
?X: trick is obsoleted by future gcc releases). -- RAM
?X:
?X: Lastly, gcc 3.4 otimizes &missing == 0 away, so we use + 2 instead now.
?X: The GNU folks like to do weird things, don't they? -- RAM, 2004-06-05
?X:
  echo "extern char $1$tdc; int main() { return &$1$tc + 2; }" > t.c;
  if $cc $ccflags $ldflags -o t t.c $libs >/dev/null 2>&1;
  then tval=true;
  else tval=false;
  fi;
  $rm -f t t.c;;
 esac;;
*)
 case "$tval" in
 $define) tval=true;;
 *) tval=false;;
 esac;;
esac;
eval "$2=$tval"'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Csym.U
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```
?RCS: $Id: defeditor.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: defeditor.U,v $
?RCS: Revision 3.0.1.1  1995/01/11  15:30:16  ram
```

```
?RCS: patch45: can now use the 'vi' variable since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:defeditor: Getfile Oldconfig Loc vi
?MAKE: -pick add $@ %<
?S:defeditor:
?S: This variable contains the eventual value of the DEFEDITOR symbol,
?S: which contains the name of the default editor.
?S:.
?C:DEFEDITOR:
?C: This
 symbol contains the full pathname of the default editor.
?C:.
?H:#define DEFEDITOR "$defeditor"  /**/
?H:.
: determine default editor
echo " "
case "$defeditor" in
")
 case "$vi" in
 */*) dflt="$vi";;
 *) dflt=/usr/ucb/vi;;
 esac
 ;;
*)  dflt="$defeditor"
 ;;
esac
fn=f/
rp="What is the default editor on your system?"
. ./getfile
defeditor="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/defeditor.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: sh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:20:13  ram
?RCS: patch61: created
?RCS:
?MAKE:sh: Head
?MAKE: -pick wipe $@ %<
?S:sh:
?S: This variable contains the full pathname of the shell used
?S: on this system to execute Bourne shell scripts.  Usually, this will be
?S: /bin/sh, though it's possible that some systems will have /bin/ksh,
?S: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?S: D:/bin/sh.exe.
?S: This unit comes before Options.U,
 so you can't set sh with a -D
?S: option, though you can override this (and startsh)
?S: with -O -Dsh=/bin/whatever -Dstartsh=whatever
?S:.
?C:SH_PATH:
?C: This symbol contains the full pathname to the shell used on this
?C: on this system to execute Bourne shell scripts.  Usually, this will be
?C: /bin/sh, though it's possible that some systems will have /bin/ksh,
?C: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?C: D:/bin/sh.exe.
?C:.
?H:#define SH_PATH "$sh"  /**/
?H:.
?T:xxx try pth p SYSTYPE
?LINT:extern maintloc maintname
?X:
?X: Be quiet unless something unusual happens because this gets
?X: loaded up even before options are processed.
?X: Can't use ./loc because that depends on startsh, which, in turn
?X: depends on this unit.
?X:
: Find the basic shell for Bourne shell scripts
case "$sh" in
")
?X: SYSTYPE is for some older MIPS systems.
?X: I do not know if it is still needed.
 case "$SYSTYPE" in
 *bsd*|sys5*) xxx="/$SYSTYPE/bin/sh";;
 *) xxx='/bin/sh';;
 esac
 if
 test -f "$xxx"; then
  sh="$xxx"
 else
```

```
  : Build up a list and do a single loop so we can 'break' out.
  pth=`echo $PATH | sed -e "s/$p_/ /g"`
  for xxx in sh bash ksh pdksh ash; do
   for p in $pth; do
    try="$try ${p}/${xxx}"
   done
  done
  for xxx in $try; do
   if test -f "$xxx"; then
    sh="$xxx"
    break
   elif test -f "$xxx$_exe"; then
    sh="$xxx"
    break
   elif test -f "$xxx.exe"; then
    sh="$xxx"
    break
   fi
  done
 fi
 ;;
esac

?X: fd 4 isn't open yet...
case "$sh" in
") cat >&2 <<EOM
$me:  Fatal Error:  I can't find a Bourne Shell anywhere.

Usually it's in /bin/sh.  How did you even get this far?
Please contact me (<$maintname>) at <$maintloc> and
we'll try to straighten this all out.
EOM
 exit 1
 ;;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sh.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_setservent_r.U,v 0RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
```

```
?MAKE:d_setservent_r setservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setservent_r:
?S: This variable conditionally defines the HAS_SETSERVENT_R symbol,
?S: which indicates to the C program that the setservent_r()
?S: routine is available.
?S:.
?S:setservent_r_proto:
?S: This variable encodes the prototype of setservent_r.
?S: It is zero if d_setservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setservent_r
?S: is defined.
?S:.
?C:HAS_SETSERVENT_R:
?C: This symbol, if defined, indicates that the setservent_r routine
?C: is
 available to setservent re-entrantly.
?C:.
?C:SETSERVENT_R_PROTO:
?C: This symbol encodes the prototype of setservent_r.
?C: It is zero if d_setservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setservent_r
?C: is defined.
?C:.
?H:#$d_setservent_r HAS_SETSERVENT_R /**/
?H:#define SETSERVENT_R_PROTO $setservent_r_proto /**/
?H:.
?T:try hdrs d_setservent_r_proto
: see if setservent_r exists
set setservent_r d_setservent_r
eval $inlibc
case "$d_setservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setservent_r_proto:$usethreads" in
 ":define") d_setservent_r_proto=define
  set d_setservent_r_proto setservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setservent_r_proto" in
 define)
 case "$setservent_r_proto" in
 "|0) try='int setservent_r(int, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && setservent_r_proto=I_ID ;;
 esac
 case "$setservent_r_proto" in
```

```
"|0) try='void
setservent_r(int, struct servent_data*);'
./protochk "$extern_C $try" $hdrs && setservent_r_proto=V_ID ;;
esac
case "$setservent_r_proto" in
"|0) d_setservent_r=undef
 setservent_r_proto=0
 echo "Disabling setservent_r, cannot determine prototype." >&4 ;;
* ) case "$setservent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) setservent_r_proto="REENTRANT_PROTO_$setservent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "setservent_r has no prototype, not using it." >&4 ;;
 esac
 d_setservent_r=undef
 setservent_r_proto=0
 ;;
esac
;;
*) setservent_r_proto=0
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setservent_r.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_sh.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:57:53  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  14:53:31  ram
?RCS: patch45: moved path stripping from d_portable.U to end of Configure
?RCS:
```

```
?RCS: Revision 3.0.1.1  1994/10/29  15:50:37  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit ends up producing the config.sh
 script, which contains all the
?X: definitions figured out by Configure.  The add.Config_sh command knows
?X: which variables need to be remembered.  It also adds the EOT (ends the
?X: here document redirection with variable substitution).
?X:
?MAKE:Config_sh: cf_time cf_by test spitshell startsh myuname Myread \
 End Obsol_sh Loc +d_portable package src cat sed
?MAKE: -pick add.Config_sh $@ %<
?MAKE: -pick add $@ ./Obsol_sh
?MAKE: -pick close.Config_sh $@ %<
?F:!config.over !config.arch
?T:file sfile xsed
?LINT:unclosed EOT
: back to where it started
if test -d ../UU; then
 cd ..
fi

: configuration may be unconditionally patched via a 'config.arch' file
if $test -f config.arch; then
 echo "I see a config.arch file, loading it." >&4
 . ./config.arch
fi

: configuration may be patched via a 'config.over' file
if $test -f config.over; then
 echo " "
 dflt=y
 rp='I see a config.over file.  Do you wish to load it?'
 . UU/myread
 case "$ans" in
 n*) echo "OK, I'll ignore it.";;
 *) . ./config.over
  echo
 "Configuration override changes have been loaded."
  ;;
 esac
fi

@if d_portable
```

```
: in case they want portability, strip down executable paths
?X:
?X: Strip down paths in located executables. For each file, e.g. vi, there
?X: is a $vi variable whose value is for instance '/usr/bin/vi'. By resetting
?X: $vi to 'vi', we rely on the PATH variable to locate the executable...
?X: In order to allow vi='/usr/bin/nvi' which will strip down to vi='nvi',
?X: we can't just say 'eval $file="\$file"', we have to recourse to sed.
?X: We don't use basename since it is less portable than sed.
?X:
case "$d_portable" in
"$define")
 echo " "
 echo "Stripping down executable paths..." >&4
 xsed=$sed
 for file in $loclist $trylist; do
  eval sfile="\$$file"
  sfile=`echo $sfile | $xsed -e 's,.*/\(.*\),\1,'`
  eval $file="$sfile"
 done
 ;;
esac

@end
: create config.sh file
echo " "
echo "Creating config.sh..." >&4
$spitshell <<EOT >config.sh
$startsh
#
# This file was produced by running the
 Configure script. It holds all the
# definitions figured out by Configure. Should you modify one of these values,
# do not forget to propagate your changes by running "Configure -der". You may
# instead choose to run each of the .SH files by yourself, or "Configure -S".
#

# Package name      : $package
# Source directory  : $src
# Configuration time: $cf_time
# Configured by     : $cf_by
# Target system     : $myuname

EOT
?X: Command line options are saved by the Options.U unit in the
?X: temporary file UU/cmdline.opt
$test -f UU/cmdline.opt && $cat UU/cmdline.opt >> config.sh
$spitshell <<EOT >>config.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Config_sh.U
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```
?RCS: $Id: i_malloc.U,v 3.5 2008/03/29 14:06:51 merijn Exp $
?RCS:
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?RCS: of the source tree for dist 3.5.
?RCS:
?MAKE:i_mallocmalloc: Inhdr
?MAKE: -pick add $@ %<
?S:i_mallocmalloc:
?S: This variable conditionally defines the I_MALLOCMALLOC symbol,
?S: and indicates whether a C program should include <malloc/malloc.h>.
?S:.
?C:I_MALLOCMALLOC:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <malloc/malloc.h>.
?C:.
?H:#$i_mallocmalloc I_MALLOCMALLOC  /**/
?H:.
?LINT:set i_mallocmalloc
: see if malloc/malloc.h has to be included
set malloc/malloc.h i_mallocmalloc
eval
 $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_mallocmalloc.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wifstat.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:47:43  ram
```

```
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:09:10  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1995/03/21  08:47:46  ram
?RCS: patch52: created
?RCS:
?MAKE:d_wifstat: d_uwait +cc +ccflags +ldflags +libs Oldconfig cat rm
?MAKE: -pick add $@ %<
?S:d_wifstat:
?S: This symbol conditionally defines USE_WIFSTAT if the C program can
?S: safely
 use the WIFxxx macros with the kind of wait() parameter
?S: declared in the program (see UNION_WAIT), or if it can't. Should
?S: only matter on HP-UX, where the macros are incorrectly written and
?S: therefore cause programs using them with an 'union wait' variable
?S: to not compile properly.
?S:.
?C:USE_WIFSTAT:
?C: This symbol, if defined, indicates to the C program that the argument
?C: for the WIFxxx set of macros such as WIFSIGNALED or WIFEXITED can
?C: be of the same kind as the one used to hold the wait() status. Should
?C: only matter on HP-UX, where the macros are incorrectly written and
?C: therefore cause programs using them with an 'union wait' variable
?C: to not compile properly. See also UNION_WAIT.
?C:.
?H:#$d_wifstat USE_WIFSTAT  /**/
?H:.
?T:type
?F:!foo
: see if we can use WIFxxx macros
echo " "
case "$d_wifstat" in
"$define") echo "As before, you can safely use WIFEXITED and friends!" >&4;;
"$undef") echo "You still can't use WIFEXITED and friends!" >&4;;
*)
 echo
 "Let's see whether you can use the WIFEXITED(status) macro and its"
 case "$d_uwait" in
 "$define") type='union wait';;
 *) type='int';;
 esac
 echo "friends with status declared as '$type status'..."
 $cat >foo.c <<EOCP
#include <sys/types.h>
#include <sys/wait.h>
```

```
int main()
{
 $type status;
 int e = 0;

#ifdef WIFEXITED
 if (WIFEXITED(status))
  printf("\n");
 exit(0);
#else
 exit(2);
#endif
}
EOCP
 d_wifstat="$undef"
 if $cc $ccflags $ldflags -o foo foo.c $libs >/dev/null 2>&1; then
  if ./foo >/dev/null; then
   echo "Great! Looks like we can use the WIFxxx macros." >&4
   d_wifstat="$define"
  else
   echo "You don't seem to have WIFxxx macros, but that's ok." >&4
  fi
 else
  echo "Apparently you can't use WIFxxx macros properly." >&4
 fi
 $rm -f foo.* foo core
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wifstat.U
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```
?RCS: $Id: cc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cc.U,v $
?RCS: Revision 3.0.1.4  1995/05/12  12:06:47  ram
?RCS: patch54: may now abort Configure when cc does not work
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:20:11  ram
```

```
?RCS: patch45: changed gcc checking message to a more explicit one (WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:04:29  ram
?RCS: patch36: detect gcc even when not called as 'gcc' (ADO)
?RCS: patch36: simplified gcc version checking (ADO)
?RCS: patch36: added ?F: line for metalint
 file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:26:06  ram
?RCS: patch23: added support for gcc version (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cc: Myread Oldconfig Checkcc test
?MAKE: -pick add $@ %<
?S:cc:
?S: This variable holds the name of a command to execute a C compiler which
?S: can resolve multiple global references that happen to have the same
?S: name.  Usual values are 'cc' and 'gcc'.
?S: Fervent ANSI compilers may be called 'c89'.  AIX has xlc.
?S:.
?F:!cc.cbu
?D:cc='cc'
: Determine the C compiler to be used
echo " "
case "$cc" in
") dflt=cc;;
*) dflt="$cc";;
esac
rp="Use which C compiler?"
. ./myread
cc="$ans"

: See whether they have no cc but they do have gcc
. ./trygcc
?X: Look for a hint-file generated 'call-back-unit'.  Now that the
?X: user has specified the compiler, we may need to set or change some
?X: other defaults.
if $test -f cc.cbu; then
   . ./cc.cbu
fi
. ./checkcc

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cc.U
```

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_arpainet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_arpainet.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_arpainet: Inhdr
?MAKE: -pick add $@ %<
?S:i_arpainet:
?S: This variable conditionally defines the I_ARPA_INET symbol,
?S: and indicates whether a C program should include <arpa/inet.h>.
?S:.
?C:I_ARPA_INET:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <arpa/inet.h> to get inet_addr and friends
 declarations.
?C:.
?H:#$i_arpainet I_ARPA_INET  /**/
?H:.
?LINT:set i_arpainet
: see if arpa/inet.h has to be included
set arpa/inet.h i_arpainet
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_arpainet.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: sunscanf.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sunscanf: cat rm Myread +cc +ccflags test Setvar
?MAKE: -pick add $@ %<
?S:sunscanf:
?S: This variable is set if this system runs with the Sun version
?S: of scanf.
?S:.
?C:SUNSCANF:
?C: This variable is set if this system runs with the Sun version
?C: of scanf.
?C:.
?H:#$sunscanf  SUNSCANF  /**/
?H:.
?LINT:set sunscanf
: check to see what kinda scanf your using.
echo " "
echo "Checking
 to see what flavor of scanf you have..." >&4
$cat >scanf.c <<'EOCP'
int main()
{
 float value;

 sscanf("4.5","%g",&value);
 printf("%d\n", value == 4.5);
}
EOCP
if $cc $ccflags -o scanf scanf.c >/dev/null 2>&1 ; then
 if $test `scanf` = 0; then
  echo "Hmm.. seems your not running the USG flavor.."
  val="$undef"
 else
  echo "Uh... your running the USG flavor of scanf."
  val="$define"
 fi
else
 echo "(I can't seem to compile the test program... Guessing)"
 val="$undef"
fi
set sunscanf
eval $setvar
$rm -f scanf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sunscanf.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostbyaddr_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostbyaddr_r gethostbyaddr_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostbyaddr_r:
?S: This variable conditionally defines the HAS_GETHOSTBYADDR_R symbol,
?S: which indicates to the C program that the gethostbyaddr_r()
?S: routine is available.
?S:.
?S:gethostbyaddr_r_proto:
?S: This variable encodes the prototype of gethostbyaddr_r.
?S: It is zero if d_gethostbyaddr_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyaddr_r
?S: is defined.
?S:.
?C:HAS_GETHOSTBYADDR_R:
?C: This symbol, if defined, indicates
 that the gethostbyaddr_r routine
?C: is available to gethostbyaddr re-entrantly.
?C:.
?C:GETHOSTBYADDR_R_PROTO:
?C: This symbol encodes the prototype of gethostbyaddr_r.
?C: It is zero if d_gethostbyaddr_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyaddr_r
?C: is defined.
?C:.
?H:#$d_gethostbyaddr_r HAS_GETHOSTBYADDR_R /**/
?H:#define GETHOSTBYADDR_R_PROTO $gethostbyaddr_r_proto /**/
?H:.
?T:try hdrs d_gethostbyaddr_r_proto
: see if gethostbyaddr_r exists
set gethostbyaddr_r d_gethostbyaddr_r
eval $inlibc
case "$d_gethostbyaddr_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_gethostbyaddr_r_proto:$usethreads" in
 ":define") d_gethostbyaddr_r_proto=define
  set d_gethostbyaddr_r_proto gethostbyaddr_r $hdrs
```

```
 eval $hasproto ;;
*) ;;
esac
case "$d_gethostbyaddr_r_proto" in
define)
case "$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*,
size_t, struct hostent**, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CWISBWRE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*, size_t, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CWISBWIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CWISBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const void*, size_t, int, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_TWISBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const char*, int, int, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CIISBIE ;;
esac
case
"$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const char*, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CSBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const void*, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_TSBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const char*, size_t, int, struct hostent*, struct hostent_data*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CWISD ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const char*, int, int, struct hostent*, struct hostent_data*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CIISD ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const char*, int, int);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CII ;;
esac
case
```

```
 "$gethostbyaddr_r_proto" in
 "|0) try='int gethostbyaddr_r(const void*, socklen_t, int, struct hostent*, char*, size_t, struct hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_TsISBWRE ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) d_gethostbyaddr_r=undef
  gethostbyaddr_r_proto=0
  echo "Disabling gethostbyaddr_r, cannot determine prototype." >&4 ;;
 * ) case "$gethostbyaddr_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gethostbyaddr_r_proto="REENTRANT_PROTO_$gethostbyaddr_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gethostbyaddr_r has no prototype, not using it." >&4 ;;
  esac
  d_gethostbyaddr_r=undef
  gethostbyaddr_r_proto=0
  ;;
 esac
 ;;
*) gethostbyaddr_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostbyaddr_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systimes.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systimes.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_systimes: Inhdr
?MAKE: -pick add $@ %<
?S:i_systimes:
```

```
?S: This variable conditionally defines the I_SYS_TIMES symbol, and indicates
?S: whether a C program should include <sys/times.h>.
?S:.
?C:I_SYS_TIMES (I_SYSTIMES):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/times.h>.
?C:.
?H:#$i_systimes I_SYS_TIMES  /**/
?H:.
?LINT:set
 i_systimes
: see if this is a sys/times.h system
set sys/times.h i_systimes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systimes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorlib.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorlib.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorlib vendorlib vendorlibexp installvendorlib vendorlib_stem: \
 Getfile Setprefixvar Oldconfig Prefixit package vendorprefix sed \
 installstyle version
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorlib:
?S: This variable contains the eventual value of the VENDORLIB symbol,
?S: which is the name of the private library for this package.
?S: The standard
 distribution will put nothing in this directory.
?S: Vendors who distribute perl may wish to place their own
?S: modules in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
```

```
?S:vendorlibexp:
?S: This variable is the ~name expanded version of vendorlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorlib="
?S:installvendorlib:
?S: This variable is really the same as vendorlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorlib:
?S: This variable conditionally defines PERL_VENDORLIB.
?S:.
?S:vendorlib_stem:
?S: This variable is $vendorlibexp with any trailing version-specific component
?S: removed.  The elements in inc_version_list (inc_version_list.U) can
?S: be tacked onto this variable to generate a list of directories to search.
?S:.
?C:PERL_VENDORLIB:
?C: If defined, this symbol contains
 the name of a private library.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place their own
?C: modules in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORLIB_EXP:
?C: This symbol contains the ~name expanded version of VENDORLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?C:PERL_VENDORLIB_STEM:
?C: This define is PERL_VENDORLIB_EXP with any trailing version-specific component
?C: removed.  The elements in inc_version_list (inc_version_list.U) can
?C: be tacked onto this variable to generate a list of directories to search.
?C:.
?H:#$d_vendorlib PERL_VENDORLIB "$vendorlib"  /**/
?H:#$d_vendorlib PERL_VENDORLIB_EXP
 "$vendorlibexp"  /**/
?H:#$d_vendorlib PERL_VENDORLIB_STEM "$vendorlib_stem"  /**/
?H:.
?T:prog
?LINT:change prefixvar
?LINT:set installvendorlib
: Set the vendorlib variables
```

```
case "$vendorprefix" in
") d_vendorlib="$undef"
 vendorlib="
 vendorlibexp="
 ;;
*) d_vendorlib="$define"
 : determine where vendor-supplied modules go.
 : Usual default is /usr/local/lib/perl5/vendor_perl/$version
 case "$vendorlib" in
 ")
?X:  remove any trailing -3.0 or other version identification
  prog=`echo $package | $sed 's/-*[0-9.]*$//'`
  case "$installstyle" in
  *lib/perl5*) dflt=$vendorprefix/lib/$package/vendor_$prog/$version ;;
  *)      dflt=$vendorprefix/lib/vendor_$prog/$version ;;
  esac
  ;;
 *) dflt="$vendorlib"
  ;;
 esac
 fn=d~+
 rp='Pathname for the vendor-supplied library files?'
 . ./getfile
 vendorlib="$ans"
 vendorlibexp="$ansexp"
 ;;
esac
vendorlib_stem=`echo "$vendorlibexp" | sed "s,/$version$,,"`
prefixvar=vendorlib
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_euc2jis.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_euc2jis.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:58  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_euc2jis: Inlibc
?MAKE: -pick add $@ %<
?S:d_euc2jis:
?S: This variable conditionally defines the HAS_EUC2JIS symbol, which
?S: indicates to the C program that the euc2jis() routine is available
?S: to convert EUC to JIS.
?S:.
?C:HAS_EUC2JIS:
?C: This symbol, if defined, indicates that the euc2jis routine is
?C: available to convert
 EUC to JIS.
?C:.
?H:#$d_euc2jis HAS_EUC2JIS  /**/
?H:.
?LINT:set d_euc2jis
: see if euc2jis exists
set euc2jis d_euc2jis
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_euc2jis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_statfs_s: \
 Hasstruct i_sysparam i_sysmount i_systypes \
 i_sysvfs i_sysstatfs Setvar
?MAKE: -pick add $@ %<
?S:d_statfs_s:
?S: This variable conditionally defines the HAS_STRUCT_STATFS symbol,
?S: which indicates that the struct statfs is supported.
?S:.
?C:HAS_STRUCT_STATFS:
?C: This symbol, if defined, indicates that the struct statfs
?C: to do statfs() is supported.
?C:.
?H:#$d_statfs_s HAS_STRUCT_STATFS /**/
?H:.
?LINT:set d_statfs_s
: Check for statfs_s
echo " "
```

```
echo "Checking to see if your system supports struct statfs..." >&4
set d_statfs_s statfs $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h $i_sysvfs sys/vfs.h
$i_sysstatfs sys/statfs.h
eval $hasstruct
case "$d_statfs_s"
 in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statfs_s.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_bfd.U,v $
?RCS:
?RCS: Copyright (c) 2014 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_bfd: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_bfd:
?S: This variable conditionally defines the I_BFD symbol, and
?S: indicates whether a C program can include <bfd.h>.
?S:.
?C:I_BFD:
?C: This symbol, if defined, indicates that <bfd.h> exists and
?C: can be included.
?C:.
?H:#$i_bfd I_BFD  /**/
?H:.
?LINT:set i_bfd
: see if this is a bfd.h system
set bfd.h i_bfd
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_bfd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libdbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libdbm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:56:57  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libdbm: test Loc libpth _a
?MAKE: -pick add $@ %<
?S:libdbm:
?S: This variable contains the argument to pass to the loader in order
?S: to get the dbm library routines.  If there is no dbm or ndbm
?S: library, it is null.
?S:.
?T:xxx
:
 see if we should include -ldbm
echo " "
if $test -r /usr/lib/libndbm$_a || $test -r /usr/local/lib/libndbm$_a ; then
 echo "-lndbm found." >&4
 libdbm='-lndbm'
elif $test -r /usr/lib/libdbm$_a || $test -r /usr/local/lib/libdbm$_a ; then
 echo "-ldbm found." >&4
 libdbm='-ldbm'
else
 xxx=`./loc libdbm$_a x $libpth`
 case "$xxx" in
 x)
  echo "No dbm library found." >&4
  libdbm=''
  ;;
 *)
  echo "DBM library found in $xxx." >&4
  libdbm="$xxx"
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libdbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Head.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:02:09  ram
?RCS: patch61: make sure we unset CDPATH for shells that support this
?RCS: patch61: improved Korn shell detection and handling
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:02  ram
?RCS: patch56: added SVR4-ish /opt directories to path list (ADO)
?RCS: patch56: OS/2 platforms are using another path separator
?RCS:
?RCS: Revision 3.0.1.7  1995/03/21  08:46:15  ram
?RCS: patch52: definition of paths wrongly added spurious ':' chars
?RCS:
?RCS:
 Revision 3.0.1.6  1994/10/29  15:54:19  ram
?RCS: patch36: make sure ENV is unset before calling /bin/ksh
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:03:44  ram
?RCS: patch32: now sets PATH only using existing directories
?RCS:
?RCS: Revision 3.0.1.4  1994/06/20  06:54:28  ram
?RCS: patch30: now computes its invocation name into 'me'
?RCS: patch30: symbol me is made visible to all units read-only
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:15:07  ram
?RCS: patch15: added /sbin:/usr/sbin:/usr/libexec in PATH for BSD/386
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:32:35  ram
?RCS: patch14: ensure PATH is reset to '.' before testing for alias
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:07  ram
?RCS: patch7: not all 'test' programs support the -x option
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the very first unit in the Configure script.  It is mostly just
?X: things to keep people from getting
 into a tizzy right off the bat.
?X:
```

```
?MAKE:Head:
?MAKE: -pick wipe $@ %<
?V:PATH p_ _exe me newsh
?T:argv Id p paths OS2_SHELL DJGPP
?T:inksh needksh avoidksh newsh changesh reason
?F:!*
?LINT:extern ENV CDPATH SHELL MACHTYPE
?LINT:change ENV CDPATH
?LINT:nocomment
#! /bin/sh
#
# If these # comments don't work, trim them. Don't worry about any other
# shell scripts, Configure will trim # comments from them for you.
#
# (If you are trying to port this package to a machine without sh,
# I would suggest you have a look at the prototypical config_h.SH file
# and edit it to reflect your system. Some packages may include samples
# of config.h for certain machines, so you might look for one of those.)
#
?X:
?X: NOTE THAT A CONFIGURE SCRIPT IS IN THE PUBLIC DOMAIN (whether or not
?X: the software which uses it is in the public domain).
?X:
# Yes, you may rip this off to use in other distribution packages. This
# script belongs to the public domain and cannot be copyrighted.
#
?X:
?X: WE ASK YOU
 NOT TO REMOVE OR ALTER THE FOLLOWING PARAGRAPH, PLEASE:
?X:
# Note: this Configure script was generated automatically. Rather than
# working with this copy of Configure, you may wish to get metaconfig.
# The dist package (which contains metaconfig) is available via SVN:
#     svn co https://svn.code.sf.net/p/dist/code/trunk/dist
?X:
?X: NOTA BENE:
?X: If you develop you own version of metaconfig based on this work,
?X: you have to add some comments telling that the script was generated
?X: by your version, not mine: It credits your work.
?X:

# $Id: Head.U 6 2006-08-25 22:21:46Z rmanfredi $
#
# Generated on <DATE> [metaconfig <VERSION> PL<PATCHLEVEL>]

cat >c1$$ <<EOF
ARGGGHHHH!!!!!
```

```
SCO csh still thinks true is false.  Write to SCO today and tell them that next
year Configure ought to "rm /bin/csh" unless they fix their blasted shell. :-)

(Actually, Configure ought to just patch csh in place.  Hmm.  Hmmmmm.  All
we'd have to do is go in and swap the && and || tokens, wherever they are.)

[End
 of diatribe. We now return you to your regularly scheduled programming...]
EOF
cat >c2$$ <<EOF

OOPS!  You naughty creature!  You didn't run Configure with sh!
I will attempt to remedy the situation by running sh for you...
EOF

true || cat c1$$ c2$$
true || exec sh $0 $argv:q

(exit $?0) || cat c2$$
(exit $?0) || exec sh $0 $argv:q
rm -f c1$$ c2$$

: compute my invocation name
me=$0
case "$0" in
*/*)
 me=`echo $0 | sed -e 's!.*/\(.*\)!\1!' 2>/dev/null`
 test "$me" || me=$0
 ;;
esac

?X:
?X: To be able to run under OS/2, we must detect that early enough to use
?X: the proper path separator, stored in $p_. It is : on UNIX and ; on
?X: DOSish systems such as OS/2.
?X:
: Proper separator for the PATH environment variable
p_=:
: On OS/2 this directory should exist if this is not floppy only system ":-]"
if test -d c:/. ; then
 if test -n "$OS2_SHELL"; then
  p_=\;
  PATH=`cmd /c "echo %PATH%" | tr '\\\\' / `
?X: That's a bug in ksh5.22
  OS2_SHELL=`cmd /c "echo %OS2_SHELL%" | tr
 '\\\\' / | tr '[A-Z]' '[a-z]'`
 elif test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
```

```
  *cygwin) ;;
  *) p_=\; ;;
  esac
 fi
fi

?X:
?X: There are two schools of thoughts here. Some people correctly argue that
?X: the user has a better chance than we do of setting a reasonable PATH and
?X: others argue that Configure is the best place there is to set up a suitable
?X: PATH. Well, here we try to compromize by keeping the user's PATH and
?X: appending some directories which are known to work on some machine or the
?X: other. The rationale behind this being that a novice user might not have a
?X: proper environment variable set, and some directories like /etc (where
?X: chown is located on some BSD systems) may be missing--RAM.
?X:
?X: SVR4 adds an /opt directory for optional packages.  Some sites use
?X: various permutations on /opt as opposed to /usr or /usr/local.-- ADO
?X:
?X: We only add directories that are not already in the PATH of the
?X: user and the directories must
 exist also.
?X:
: Proper PATH setting
paths='/bin /usr/bin /usr/local/bin /usr/ucb /usr/local /usr/lbin'
paths="$paths /opt/bin /opt/local/bin /opt/local /opt/lbin"
paths="$paths /usr/5bin /etc /usr/gnu/bin /usr/new /usr/new/bin /usr/nbin"
paths="$paths /opt/gnu/bin /opt/new /opt/new/bin /opt/nbin"
paths="$paths /sys5.3/bin /sys5.3/usr/bin /bsd4.3/bin /bsd4.3/usr/ucb"
paths="$paths /bsd4.3/usr/bin /usr/bsd /bsd43/bin /usr/ccs/bin"
paths="$paths /etc /usr/lib /usr/ucblib /lib /usr/ccs/lib"
paths="$paths /sbin /usr/sbin /usr/libexec"
paths="$paths /system/gnu_library/bin"

for p in $paths
do
 case "$p_$PATH$p_" in
 *$p_$p$p_*) ;;
 *) test -d $p && PATH=$PATH$p_$p ;;
 esac
done

PATH=.$p_$PATH
export PATH

: shall we be using ksh?
inksh=''
needksh=''
```

```
avoidksh=''
newsh=/bin/ksh
changesh=''
?X: Use (alias -x) and not (alias) since zsh and bash recognize the alias
?X: builtin but not the -x option which is typically ksh...
?X: We need to set up PATH before calling the "alias" built-in since
 some
?X: systems like HP-UX have a binary called /bin/alias.
if (PATH=.; alias -x) >/dev/null 2>&1; then
  inksh=true
fi
?X: On HP-UX, large Configure scripts may exercise a bug in /bin/sh, use ksh
if test -f /hp-ux -a -f /bin/ksh; then
 needksh='to avoid sh bug in "here document" expansion'
fi
?X: On AIX4, /bin/sh is really ksh and it causes problems, use sh
if test -d /usr/lpp -a -f /usr/bin/bsh -a -f /usr/bin/uname; then
 if test X`/usr/bin/uname -v` = X4; then
  avoidksh="to avoid AIX 4's /bin/sh"
  newsh=/usr/bin/bsh
 fi
fi
?X: On Digital UNIX, /bin/sh may start up buggy /bin/ksh, use sh
if test -f /osf_boot -a -f /usr/sbin/setld; then
 if test X`/usr/bin/uname -s` = XOSF1; then
  avoidksh="to avoid Digital UNIX' ksh"
  newsh=/bin/sh
?X: if BIN_SH is set to 'xpg4', sh will start up ksh
  unset BIN_SH
 fi
fi
?X: If we are not in ksh and need it, then feed us back to it
case "$inksh/$needksh" in
/[a-z]*)
?X: Clear ENV to avoid any ~/.kshrc that could alias cd or whatever...
?X: Don't
 use "unset ENV", that is not portable enough
  ENV=''
  changesh=true
  reason="$needksh"
 ;;
esac
?X: If we are in ksh and must avoid it, then feed us back to a new shell
case "$inksh/$avoidksh" in
true/[a-z]*)
 changesh=true
 reason="$avoidksh"
 ;;
```

```
esac
?X: Warn them if they use ksh on other systems, which are those where
?X: we don't need ksh nor want to avoid it explicitly, yet are using it.
case "$inksh/$needksh-$avoidksh-" in
true/--)
  cat <<EOM
(I see you are using the Korn shell.  Some ksh's blow up on $me,
mainly on older exotic systems.  If yours does, try the Bourne shell instead.)
EOM
 ;;
esac
case "$changesh" in
true)
 export newsh
 echo "(Feeding myself to $newsh $reason.)"
?X: Make sure they didn't say sh <Configure by checking whether $0 ends
?X: with Configure or not. If they did say sh <../../Configure, then too
?X: bad for them anyway, since we lost that path indication...
?X: Otherwise, execing $0 ensures we keep the full remote source dir
?X: indication for src.U.
 case
 "$0" in
 Configure|*/Configure) exec $newsh $0 "$@";;
 *) exec $newsh Configure "$@";;
 esac
 ;;
esac

?X: Unset CDPATH to avoid surprises when using cd under some shells
?X: Can't unset it because that's not portable to very old shells.
?X: Can't set it to '' because then bash 2.02 won't do "cd UU"  --AD  6/98.
?X: Don't want to set it to '.' because then ksh prints out the
?X: name of the directory every time you cd to it. --AD 6/98
?X: In order to inflict the least harm, change it only if it's set.
: if needed, set CDPATH to a harmless value that is not chatty
case "$CDPATH" in
'') ;;
*) case "$SHELL" in
 *bash*) CDPATH='.' ;;
 *) CDPATH='' ;;
 esac
 ;;
esac

: Configure runs within the UU subdirectory
test -d UU || mkdir UU
?X: Use ./* to avoid any confirmation prompts from enhanced shells -- WED
cd UU && rm -f ./*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Head.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: prototype.U,v $
?RCS: Revision 3.0.1.3  1994/05/06  15:11:49  ram
?RCS: patch23: ensure cc flags used when looking for prototype support
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:36  ram
?RCS: patch16: prototype handling macros now appear only when needed
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:03:12  ram
?RCS: patch6: defines were referring to non-existent VOID symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:prototype:
 Myread Oldconfig cat +cc +ccflags rm Setvar
?MAKE: -pick add $@ %<
?S:prototype:
?S: This variable holds the eventual value of CAN_PROTOTYPE, which
?S: indicates the C compiler can handle funciton prototypes.
?S:.
?C:CAN_PROTOTYPE ~ %<:
?C: If defined, this macro indicates that the C compiler can handle
?C: function prototypes.
?C:.
?C:DOTS:
?C: This macro is used to specify the ... in function prototypes which
?C: have arbitrary additional arguments.
?C:.
?C:NXT_ARG:
?C: This macro is used to separate arguments in the declared argument list.
?C:.
?C:P_FUNC:
?C: This macro is used to declare "private" (static) functions.
```

```
?C: It takes three arguments: the function type and name, a parenthesized
?C: traditional (comma separated) argument list, and the declared argument
?C: list (in which arguments are separated with NXT_ARG, and additional
?C: arbitrary arguments are specified with DOTS).  For example:
?C:
?C:  P_FUNC(int foo, (bar, baz), int bar NXT_ARG char *baz[])
?C:.
?C:P_FUNC_VOID:
?C: This
 macro is used to declare "private" (static) functions that have
?C: no arguments.  The macro takes one argument: the function type and name.
?C: For example:
?C:
?C:  P_FUNC_VOID(int subr)
?C:.
?C:V_FUNC:
?C: This macro is used to declare "public" (non-static) functions.
?C: It takes three arguments: the function type and name, a parenthesized
?C: traditional (comma separated) argument list, and the declared argument
?C: list (in which arguments are separated with NXT_ARG, and additional
?C: arbitrary arguments are specified with DOTS).  For example:
?C:
?C:  V_FUNC(int main, (argc, argv), int argc NXT_ARG char *argv[])
?C:.
?C:V_FUNC_VOID:
?C: This macro is used to declare "public" (non-static) functions that have
?C: no arguments.  The macro takes one argument: the function type and name.
?C: For example:
?C:
?C:  V_FUNC_VOID(int fork)
?C:.
?C:_ (P):
?C: This macro is used to declare function parameters for folks who want
?C: to make declarations with prototypes using a
 different style than
?C: the above macros.  Use double parentheses.  For example:
?C:
?C:  int main _((int argc, char *argv[]));
?C:.
?H:?%<:#$prototype CAN_PROTOTYPE /**/
?H:?%<:#ifdef CAN_PROTOTYPE
?H:?NXT_ARG:#define NXT_ARG ,
?H:?DOTS:#define DOTS , ...
?H:?V_FUNC:#define V_FUNC(name, arglist, args)name(args)
?H:?P_FUNC:#define P_FUNC(name, arglist, args)static name(args)
?H:?V_FUNC_VOID:#define V_FUNC_VOID(name)name(void)
?H:?P_FUNC_VOID:#define P_FUNC_VOID(name)static name(void)
?H:?_:#define _(args) args
```

```
?H:?%<:#else
?H:?NXT_ARG:#define NXT_ARG ;
?H:?DOTS:#define DOTS
?H:?V_FUNC:#define V_FUNC(name, arglist, args)name arglist args;
?H:?P_FUNC:#define P_FUNC(name, arglist, args)static name arglist args;
?H:?V_FUNC_VOID:#define V_FUNC_VOID(name)name()
?H:?P_FUNC_VOID:#define P_FUNC_VOID(name)static name()
?H:?_:#define _(args) ()
?H:?%<:#endif
?H:.
?W:%<:NXT_ARG DOTS V_FUNC P_FUNC V_FUNC_VOID P_FUNC_VOID _
?LINT:set prototype
: Cruising for prototypes
echo " "
echo "Checking out
 function prototypes..." >&4
$cat >prototype.c <<'EOCP'
int main(int argc, char *argv[]) {
 exit(0);}
EOCP
if $cc $ccflags -c prototype.c >prototype.out 2>&1 ; then
 echo "Your C compiler appears to support function prototypes."
 val="$define"
else
 echo "Your C compiler doesn't seem to understand function prototypes."
 val="$undef"
fi
set prototype
eval $setvar
$rm -f prototype*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prototype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservbyport_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservbyport_r getservbyport_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservbyport_r:
?S: This variable conditionally defines the HAS_GETSERVBYPORT_R symbol,
```

```
?S: which indicates to the C program that the getservbyport_r()
?S: routine is available.
?S:.
?S:getservbyport_r_proto:
?S: This variable encodes the prototype of getservbyport_r.
?S: It is zero if d_getservbyport_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyport_r
?S: is defined.
?S:.
?C:HAS_GETSERVBYPORT_R:
?C: This symbol, if defined, indicates
 that the getservbyport_r routine
?C: is available to getservbyport re-entrantly.
?C:.
?C:GETSERVBYPORT_R_PROTO:
?C: This symbol encodes the prototype of getservbyport_r.
?C: It is zero if d_getservbyport_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyport_r
?C: is defined.
?C:.
?H:#$d_getservbyport_r HAS_GETSERVBYPORT_R /**/
?H:#define GETSERVBYPORT_R_PROTO $getservbyport_r_proto /**/
?H:.
?T:try hdrs d_getservbyport_r_proto
: see if getservbyport_r exists
set getservbyport_r d_getservbyport_r
eval $inlibc
case "$d_getservbyport_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservbyport_r_proto:$usethreads" in
 ":define") d_getservbyport_r_proto=define
  set d_getservbyport_r_proto getservbyport_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getservbyport_r_proto" in
 define)
 case "$getservbyport_r_proto" in
 "|0) try='int getservbyport_r(int, const char*, struct servent*, char*, size_t,
 struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=I_ICSBWR ;;
 esac
 case "$getservbyport_r_proto" in
 "|0) try='struct servent* getservbyport_r(int, const char*, struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=S_ICSBI ;;
 esac
 case "$getservbyport_r_proto" in
```

```
"|0) try='int getservbyport_r(int, const char*, struct servent*, struct servent_data*);'
./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=I_ICSD ;;
esac
case "$getservbyport_r_proto" in
"|0) d_getservbyport_r=undef
 getservbyport_r_proto=0
 echo "Disabling getservbyport_r, cannot determine prototype." >&4 ;;
* ) case "$getservbyport_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getservbyport_r_proto="REENTRANT_PROTO_$getservbyport_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getservbyport_r has no prototype, not using it." >&4 ;;
 esac
 d_getservbyport_r=undef
 getservbyport_r_proto=0
 ;;
esac
;;
*) getservbyport_r_proto=0
;;
esac
```

Found
in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservbyport_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_utime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_utime.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_utime: Inhdr
?MAKE: -pick add $@ %<
?S:i_utime:
```

```
?S: This variable conditionally defines the I_UTIME symbol, and indicates
?S: whether a C program should include <utime.h>.
?S:.
?C:I_UTIME:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <utime.h>.
?C:.
?H:#$i_utime I_UTIME  /**/
?H:.
?LINT:set i_utime
:
 see if this is an utime system
set utime.h i_utime
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_utime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fstatfs : Inlibc
?MAKE: -pick add $@ %<
?S:d_fstatfs:
?S: This variable conditionally defines the HAS_FSTATFS symbol, which
?S: indicates to the C program that the fstatfs() routine is available.
?S:.
?C:HAS_FSTATFS:
?C: This symbol, if defined, indicates that the fstatfs routine is
?C: available to stat filesystems by file descriptors.
?C:.
?H:#$d_fstatfs HAS_FSTATFS  /**/
?H:.
?LINT:set d_fstatfs
: see if fstatfs exists
set fstatfs d_fstatfs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fstatfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysmman.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:11:20  ram
?RCS: patch16: created
?RCS:
?X:
?X: Look wether <sys/mman.h> needs to be included.
?X:
?MAKE:i_sysmman: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysmman:
?S: This variable conditionally defines the I_SYS_MMAN symbol,
?S: and indicates whether a C program should include <sys/mman.h>.
?S:.
?C:I_SYS_MMAN:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/mman.h>.
?C:.
?H:#$i_sysmman I_SYS_MMAN  /**/
?H:.
?LINT:set
 i_sysmman
: see if sys/mman.h has to be included
set sys/mman.h i_sysmman
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysmman.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fgetpos.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_fgetpos.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:33  ram
?RCS: patch30: created
?RCS:
?MAKE:d_fgetpos: Inlibc
?MAKE: -pick add $@ %<
?S:d_fgetpos:
?S: This variable conditionally defines HAS_FGETPOS if fgetpos() is
?S: available to get the file position indicator.
?S:.
?C:HAS_FGETPOS:
?C: This symbol, if defined, indicates that the fgetpos routine is
?C: available to get the file position indicator, similar to ftell().
?C:.
?H:#$d_fgetpos
 HAS_FGETPOS /**/
?H:.
?LINT:set d_fgetpos
: see if fgetpos exists
set fgetpos d_fgetpos
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fgetpos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: baserev.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: baserev.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:baserev: Null
?MAKE: -pick wipe $@ %<
?S:baserev:
?S: The base revision level of this package, from the .package file.
?S:.
: set the base revision
baserev=<BASEREV>
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/baserev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lib.U,v 3.0.1.3 1995/09/25 09:16:47 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: lib.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:16:47  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:38:08  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:27:40  ram
?RCS: patch32: now uses installation prefix to set the default
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?LINT:
 empty
?X:?MAKE:lib libexp: Getfile Loc Oldconfig Prefixit Prefixup prefixexp
?X:?MAKE: -pick add $@ %<
?X:?Y:TOP
?X:?S:lib:
?X:?S: This variable holds the name of the directory in which the user wants
?X:?S: to put public library files for the package in question.  It is most
?X:?S: often a local directory such as /usr/local/lib. Programs using this
?X:?S: variable must be prepared to deal with filename expansion.
?X:?S:.
?X:?S:libexp:
?X:?S: This variable is the same as the lib variable, but is filename expanded
?X:?S: at configuration time, for convenient use in your makefiles.
?X:?S:.
?X:: determine where public libraries go
?X:set lib lib
?X:eval $prefixit
?X:case "$lib" in
?X:")
?X: dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
```

```
?X: set dflt
?X: eval $prefixup
?X: ;;
?X:*)  dflt="$lib";;
?X:esac
?X:echo " "
?X:fn=d~
?X:rp='Where do you want to put the public libraries?'
?X:. ./getfile
?X:lib="$ans"
?X:libexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/nullified/lib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigblock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigblock.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sigblock: Inlibc
?MAKE: -pick add $@ %<
?S:d_sigblock:
?S: This variable conditionally defines HAS_SIGBLOCK if sigblock() is
?S: available to block signal reception.
?S:.
?C:HAS_SIGBLOCK:
?C: This symbol, if defined, indicates that the sigblock routine is
?C: available to block signal reception.
?C:.
?H:#$d_sigblock HAS_SIGBLOCK /**/
?H:.
?LINT:set
 d_sigblock
: see if sigblock exists
set sigblock d_sigblock
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigblock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memmove.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memmove.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memmove: Inlibc
?MAKE: -pick add $@ %<
?S:d_memmove:
?S: This variable conditionally defines the HAS_MEMMOVE symbol, which
?S: indicates to the C program that the memmove() routine is available
?S: to copy potentially overlapping blocks of memory.
?S:.
?C:HAS_MEMMOVE:
?C: This symbol, if defined, indicates that the memmove routine
 is available
?C: to copy potentially overlapping blocks of memory. This should be used
?C: only when HAS_SAFE_BCOPY is not defined. If neither is there, roll your
?C: own version.
?C:.
?H:#$d_memmove HAS_MEMMOVE /**/
?H:.
?LINT:set d_memmove
: see if memmove exists
set memmove d_memmove
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memmove.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: patchlevel.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:18:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:patchlevel: package baserev test rsrc
?MAKE: -pick add $@ %<
?T:Revision
?S:patchlevel:
?S: The patchlevel level of this package.
?S: The value of patchlevel comes from the patchlevel.h file.
?S:.
: get the patchlevel
echo " "
echo "Getting the current patchlevel..." >&4
if $test -r
 $rsrc/patchlevel.h;then
 patchlevel=`awk \
  '/^#[  ]*define[  ][  ]*PATCHLEVEL/ {print $3}' \
  < $rsrc/patchlevel.h`
else
 patchlevel=0
fi
echo "(You have $package $baserev PL$patchlevel.)"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/patchlevel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:Devel usedevel: Myread rsrc package
?MAKE: -pick wipe $@ %<
```

```
?T:xversion
?X: waiver of rights
?S:usedevel:
?S: This variable indicates that Perl was configured with development
?S: features enabled.  This should not be done for production builds.
?S:.
?C:PERL_USE_DEVEL:
?C: This symbol, if defined, indicates that Perl was configured with
?C: -Dusedevel, to enable development features.  This should not be
?C: done for production builds.
?C:.
?H:#$usedevel PERL_USE_DEVEL  /**/
?H:.
?LINT:extern versiononly
?LINT:extern
 installusrbinperl
?LINT:change versiononly
?LINT:change installusrbinperl
: See if we are using a devel version and want that
xversion=`awk '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
case "$usedevel" in
$define|true|[yY]*)
   usedevel="$define" ;;
*) case "$xversion" in
  *[13579])
 cat >&4 <<EOH
*** WHOA THERE!!! ***

   This is an UNSTABLE DEVELOPMENT release.
   The version of this $package distribution is $xversion, that is, odd,
   (as opposed to even) and that signifies a development release.
   If you want a maintenance release, you want an even-numbered version.

   Do ***NOT*** install this into production use.
   Data corruption and crashes are possible.

   It is most seriously suggested that you do not continue any further
   unless you want to help in developing and debugging Perl.

   If you *still* want to build perl, you can answer 'y' now,
   or pass -Dusedevel to Configure.

EOH
 rp='Do you really want to continue?'
 dflt='n'
 . ./myread
 case
```

```
 "$ans" in
 [yY]) echo >&4 "Okay, continuing."
       usedevel="$define" ;;
 *) echo >&4 "Okay, bye."
    exit 1
    ;;
 esac
 ;;
   esac
   usedevel="$undef"
   ;;
esac
case "$usedevel" in
$define|true|[yY]*)
 case "$versiononly" in
 ") versiononly="$define" ;;
 esac
 case "$installusrbinperl" in
 ") installusrbinperl="$undef" ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Devel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_acosh: Inlibc
?MAKE: -pick add $@ %<
?S:d_acosh:
?S: This variable conditionally defines the HAS_ACOSH symbol, which
?S: indicates to the C program that the acosh() routine is available.
?S:.
?C:HAS_ACOSH:
?C: This symbol, if defined, indicates that the acosh routine is
?C: available to do the inverse hyperbolic cosine function.
?C:.
?H:#$d_acosh HAS_ACOSH  /**/
?H:.
?LINT:set d_acosh
: see if acosh exists
set acosh d_acosh
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_acosh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endprotoent_r endprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endprotoent_r:
?S: This variable conditionally defines the HAS_ENDPROTOENT_R symbol,
?S: which indicates to the C program that the endprotoent_r()
?S: routine is available.
?S:.
?S:endprotoent_r_proto:
?S: This variable encodes the prototype of endprotoent_r.
?S: It is zero if d_endprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endprotoent_r
?S: is defined.
?S:.
?C:HAS_ENDPROTOENT_R:
?C: This symbol, if defined, indicates that the endprotoent_r
 routine
?C: is available to endprotoent re-entrantly.
?C:.
?C:ENDPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of endprotoent_r.
?C: It is zero if d_endprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endprotoent_r
?C: is defined.
?C:.
?H:#$d_endprotoent_r HAS_ENDPROTOENT_R /**/
?H:#define ENDPROTOENT_R_PROTO $endprotoent_r_proto /**/
?H:.
?T:try hdrs d_endprotoent_r_proto
: see if endprotoent_r exists
set endprotoent_r d_endprotoent_r
eval $inlibc
case "$d_endprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endprotoent_r_proto:$usethreads" in
 ":define") d_endprotoent_r_proto=define
```

```
 set d_endprotoent_r_proto endprotoent_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_endprotoent_r_proto" in
define)
case "$endprotoent_r_proto" in
"|0) try='int endprotoent_r(struct protoent_data*);'
./protochk "$extern_C $try" $hdrs && endprotoent_r_proto=I_D ;;
esac
case "$endprotoent_r_proto"
in
"|0) try='void endprotoent_r(struct protoent_data*);'
./protochk "$extern_C $try" $hdrs && endprotoent_r_proto=V_D ;;
esac
case "$endprotoent_r_proto" in
"|0) d_endprotoent_r=undef
 endprotoent_r_proto=0
 echo "Disabling endprotoent_r, cannot determine prototype." >&4 ;;
* ) case "$endprotoent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) endprotoent_r_proto="REENTRANT_PROTO_$endprotoent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "endprotoent_r has no prototype, not using it." >&4 ;;
 esac
 d_endprotoent_r=undef
 endprotoent_r_proto=0
 ;;
esac
;;
*) endprotoent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endprotoent_r.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_madvise: Inlibc
?MAKE: -pick add $@ %<
?S:d_madvise:
?S: This variable conditionally defines HAS_MADVISE if madvise() is
?S: available to map a file into memory.
?S:.
?C:HAS_MADVISE:
?C: This symbol, if defined, indicates that the madvise system call is
?C: available to map a file into memory.
?C:.
?H:#$d_madvise HAS_MADVISE  /**/
?H:.
?LINT:set d_madvise
: see if madvise exists
set madvise d_madvise
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_madvise.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d__fwalk: Inlibc
?MAKE: -pick add $@ %<
?S:d__fwalk:
?S: This variable conditionally defines HAS__FWALK if _fwalk() is
?S: available to apply a function to all the file handles.
?S:.
?C:HAS__FWALK:
?C: This symbol, if defined, indicates that the _fwalk system call is
?C: available to apply a function to all the file handles.
?C:.
?H:#$d__fwalk HAS__FWALK  /**/
?H:.
?LINT:set d__fwalk
```

```
: see if _fwalk exists
set fwalk d__fwalk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d__fwalk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_flock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_flock.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flock: Inlibc
?MAKE: -pick add $@ %<
?S:d_flock:
?S: This variable conditionally defines HAS_FLOCK if flock() is
?S: available to do file locking.
?S:.
?C:HAS_FLOCK (FLOCK):
?C: This symbol, if defined, indicates that the flock routine is
?C: available to do file locking.
?C:.
?H:#$d_flock HAS_FLOCK  /**/
?H:.
?LINT:set d_flock
: see
 if flock exists
set flock d_flock
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_flock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_finite: Inlibc
?MAKE: -pick add $@ %<
?S:d_finite:
?S: This variable conditionally defines the HAS_FINITE symbol, which
?S: indicates to the C program that the finite() routine is available.
?S:.
?C:HAS_FINITE:
?C: This symbol, if defined, indicates that the finite routine is
?C: available to check whether a double is finite (non-infinity non-NaN).
?C:.
?H:#$d_finite HAS_FINITE  /**/
?H:.
?LINT:set d_finite
: see if finite exists
set finite d_finite
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_finite.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_safebcpy.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  15:40:58  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.3  1995/07/25  13:58:40  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:29:23  ram
?RCS: patch45: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:49:03
```

```
  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safebcpy: cat d_bcopy +cc +optimize +ccflags +ldflags +libs rm \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safebcpy:
?S: This variable conditionally defines the HAS_SAFE_BCOPY symbol if
?S: the bcopy() routine can do overlapping copies.
?S:.
?C:HAS_SAFE_BCOPY (SAFE_BCOPY):
?C: This symbol, if defined, indicates that the bcopy routine is available
?C: to copy potentially overlapping memory blocks. Otherwise you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
?H:#$d_safebcpy HAS_SAFE_BCOPY /**/
?H:.
?F:!safebcpy
?LINT: set d_safebcpy
: can bcopy handle overlapping blocks?
?X: assume the worst
val="$undef"
case "$d_bcopy" in
"$define")
 echo " "
 echo "Checking to see if your bcopy() can do overlapping
 copies..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
```

```
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

?X: Copy "abcde..." string to char abc[] so that gcc doesn't
?X: try to store the string in read-only memory.
bcopy("abcdefghijklmnopqrstuvwxyz0123456789", abc, 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  bcopy(abc, b, len);
  for (off = 1; off <= len; off++) {
   bcopy(b, b+off, len);
   bcopy(b+off, b, len);
   if (bcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
 if $cc $optimize $ccflags $ldflags \
      -o safebcpy foo.c $libs >/dev/null 2>&1; then
  if ./safebcpy
 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "It can't, sorry."
   case "$d_memmove" in
   "$define") echo "But that's Ok since you have memmove()." ;;
   esac
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
  case "$d_memmove" in
  "$define") echo "But that's Ok since you have memmove()." ;;
```

```
  esac
 fi
 ;;
esac
$rm -f foo.* safebcpy core
set d_safebcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_safebcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2000,2014 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpclassify d_fp_classify: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?X:the short story is that C99 says use fpclassify.  But the story is confused
?X:by systems "partially C99" (or fully "pre C99") which either user fpclassify
?X:but with different return values, or they use fp_classify (with the expected)
?X:return values, or they use some other spelling of *fp*class* (sometimes even
?X:without the *fp* part), with yet another set(s) of return values ...
?S:d_fpclassify:
?S: This variable conditionally defines the HAS_FPCLASSIFY symbol, which
?S: indicates to the C program that the fpclassify() routine is available.
?S:.
?S:d_fp_classify:
?S: This variable conditionally defines the HAS_FP_CLASSIFY
 symbol, which
?S: indicates to the C program that the fp_classify() routine is available.
?S:.
?C:HAS_FPCLASSIFY:
?C: This symbol, if defined, indicates that the fpclassify routine is
?C: available to classify doubles.  Available for example in HP-UX.
?C: The returned values are defined in <math.h> and are
?C:
?C:   FP_NORMAL     Normalized
?C:   FP_ZERO       Zero
?C:   FP_INFINITE   Infinity
?C:   FP_SUBNORMAL  Denormalized
?C:   FP_NAN        NaN
?C:
?C:.
?C:HAS_FP_CLASSIFY:
?C: This symbol, if defined, indicates that the fp_classify routine is
?C: available to classify doubles. The values are defined in <math.h>
```

```
?C:
?C:   FP_NORMAL     Normalized
?C:   FP_ZERO       Zero
?C:   FP_INFINITE   Infinity
?C:   FP_SUBNORMAL  Denormalized
?C:   FP_NAN        NaN
?C:
?C:.
?H:#$d_fpclassify HAS_FPCLASSIFY  /**/
?H:#$d_fp_classify HAS_FP_CLASSIFY  /**/
?H:.
?LINT:set d_fpclassify
?LINT:set d_fp_classify
: check for fpclassify
?X:classified (Comment by jhi)
?X:fpclassify i_math
?X:fp_classify i_math
?X:fpclass i_math
 i_ieeefp i_fp
?X:fp_class i_math i_fp_class
?X:  No i_fp_class yet. But the systems that have
?X:  this (Tru64 and IRIX) both had <fp_class.h>
?X:class i_math
echo "Checking to see if you have fpclassify..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return fpclassify(1.0) == FP_NORMAL ? 0 : 1; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have fpclassify."
else
 val="$undef"
 echo "You do not have fpclassify."
fi
$rm_try
set d_fpclassify
eval $setvar

: see if fp_classify exists
set fp_classify d_fp_classify
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclassify.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setnent:
?S: This variable conditionally defines HAS_SETNETENT if setnetent() is
?S: available.
?S:.
?C:HAS_SETNETENT:
?C: This symbol, if defined, indicates that the setnetent() routine is
?C: available.
?C:.
?H:#$d_setnent HAS_SETNETENT  /**/
?H:.
?LINT:set d_setnent
: see if setnetent exists
set
 setnetent d_setnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setnent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_shadow.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_prot: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_prot:
?S: This variable conditionally defines the I_PROT symbol, and indicates
?S: whether a C program should include <prot.h>.
```

```
?S:.
?C:I_PROT:
?C: This symbol, if defined, indicates that <prot.h> exists and
?C: should be included.
?C:.
?H:#$i_prot I_PROT  /**/
?H:.
?LINT:set i_prot
: see if this is a prot.h system
set prot.h i_prot
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_prot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2014, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_backtrace.U,v $
?RCS:
?MAKE:d_backtrace: Inlibc
?MAKE: -pick add $@ %<
?S:d_backtrace:
?S: This variable conditionally defines the HAS_BACKTRACE symbol, which
?S: indicates to the C program that the backtrace() routine is available
?S: to get a stack trace.
?S:.
?C:HAS_BACKTRACE:
?C: This symbol, if defined, indicates that the backtrace() routine is
?C: available to get a stack trace.  The <execinfo.h> header must be
?C: included to use this routine.
?C:.
?H:#$d_backtrace HAS_BACKTRACE /**/
?H:.
?LINT:set d_backtrace
:
 see if backtrace exists
set backtrace d_backtrace
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_backtrace.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strerror_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strerror_l:
?S: This variable conditionally defines the HAS_STRERROR_L symbol, which
?S: indicates to the C program that the strerror_l() routine is available
?S: to return the error message for a given errno value in a particular
?S: locale (identified by a locale_t object).
?S:.
?C:HAS_STRERROR_L:
?C: This symbol, if defined, indicates that the strerror_l routine is
?C: available to return the error message for a given errno value in
?C: a particular locale (identified by a locale_t object).
?C:.
?H:#$d_strerror_l HAS_STRERROR_L  /**/
?H:.
?LINT:set d_strerror_l
: see if strerror_l exists
set strerror_l d_strerror_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strerror_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_sysaccess: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysaccess:
?S: This variable conditionally defines the I_SYS_ACCESS symbol,
?S: and indicates whether a C program should include <sys/access.h>.
?S:.
?C:I_SYS_ACCESS:
```

```
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/access.h>.
?C:.
?H:#$i_sysaccess   I_SYS_ACCESS              /**/
?H:.
?LINT:set i_sysaccess
: see if sys/access.h is available
set sys/access.h i_sysaccess
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/i_sysaccess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS:
?MAKE:i_fenv: Inhdr
?MAKE: -pick add $@ %<
?S:i_fenv:
?S: This variable conditionally defines the I_FENV symbol, which
?S: indicates to the C program that <fenv.h> exists and should
?S: be included.
?S:.
?C:I_FENV:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <fenv.h> to get the floating point environment definitions.
?C:.
?H:#$i_fenv I_FENV  /**/
?H:.
?LINT:set i_fenv
: see if this is a fenv.h system
set fenv.h i_fenv
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fenv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrent_r getgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
```

```
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrent_r:
?S: This variable conditionally defines the HAS_GETGRENT_R symbol,
?S: which indicates to the C program that the getgrent_r()
?S: routine is available.
?S:.
?S:getgrent_r_proto:
?S: This variable encodes the prototype of getgrent_r.
?S: It is zero if d_getgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrent_r
?S: is defined.
?S:.
?C:HAS_GETGRENT_R:
?C: This symbol, if defined, indicates that the getgrent_r routine
?C: is available to
 getgrent re-entrantly.
?C:.
?C:GETGRENT_R_PROTO:
?C: This symbol encodes the prototype of getgrent_r.
?C: It is zero if d_getgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrent_r
?C: is defined.
?C:.
?H:#$d_getgrent_r HAS_GETGRENT_R /**/
?H:#define GETGRENT_R_PROTO $getgrent_r_proto /**/
?H:.
?T:try hdrs d_getgrent_r_proto
: see if getgrent_r exists
set getgrent_r d_getgrent_r
eval $inlibc
case "$d_getgrent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_getgrent_r_proto:$usethreads" in
 ":define") d_getgrent_r_proto=define
  set d_getgrent_r_proto getgrent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getgrent_r_proto" in
 define)
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, size_t, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBWR ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, int, struct group**);'
```

```
 ./protochk
 "$extern_C $try" $hdrs && getgrent_r_proto=I_SBIR ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='struct group* getgrent_r(struct group*, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=S_SBW ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='struct group* getgrent_r(struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=S_SBI ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBI ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, int, FILE**);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBIH ;;
 esac
 case "$getgrent_r_proto" in
 "|0) d_getgrent_r=undef
  getgrent_r_proto=0
  echo "Disabling getgrent_r, cannot determine prototype." >&4 ;;
 * ) case "$getgrent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getgrent_r_proto="REENTRANT_PROTO_$getgrent_r_proto" ;;
  esac
  echo "Prototype:
 $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getgrent_r has no prototype, not using it." >&4 ;;
  esac
  d_getgrent_r=undef
  getgrent_r_proto=0
  ;;
 esac
 ;;
*) getgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrent_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: shm_for.U 1 2006-08-24 12:32:52Z rmanfredi $

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: shm_for.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:28:37  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:shm_for shm_att shm_lim: Cppsym Myread ipc uname
?MAKE: -pick add $@ %<
?S:shm_for:
?S: This variable tells us the type of machine we're expecting the
?S: shared memory code to run on.  The value is available to C
 programs
?S: in the C_SHM_FOR manifest.
?S:.
?S:shm_att:
?S: This variable tells us where a shared memory segment should be
?S: attached.  Good values are HIGH, LOW, and ZERO.
?S:.
?S:shm_lim:
?S: This variable tells us if shared memory attached HIGH should
?S: have an upper limit.
?S:.
?X: ----------------------------------------------------------
?X: It's a potential lose to define anything beginning with SHM...
?X: At least we can think that S_ stands for "String version of ..." -- HMS
?X: ----------------------------------------------------------
?C:S_SHM_FOR ~ %<:
?C: This symbol identifies what we chose for the target system's
?C: default shared memory configuration parameters.
?C:.
?C:S_SHM_ATT ~ %<:
?C: This symbol holds the default "place" to attach shared memory.
?C: Values are "HIGH", "ZERO", and "LOW".
?C:.
?C:S_SHM_LIM ~ %<:
?C: This symbol holds the default upper bound address limit if shared
?C: memory is attached HIGH.  If zero, there is no upper limit.
?C:.
```

```
?H:?%<:#ifdef
 SERVE_SHM
?H:?%<:#define S_SHM_FOR "$shm_for"
?H:?%<:#define S_SHM_ATT "$shm_att"
?H:?%<:#define S_SHM_LIM "$shm_lim"
?H:?%<:#endif
?H:.
?W:%<:S_SHM_FOR S_SHM_ATT S_SHM_LIM
: see how to attach shared memory
echo " "
echo "Deciding how to attach shared memory..." >&4

case "$ipc" in
shm)
 shm_for='Default case'
 shm_att='HIGH'
 shm_lim='0x0'
 if ./Cppsym tower32 tower32_600; then
  echo "NCR Towers are usually normal..."
  : echo "Oh, an NCR Tower."
  : This works for the 600
  shm_for='NCR Tower 32'
  shm_att='LOW'
 else
  case "$uname" in
  */uname)
   case "`uname -m`" in
   ACS??68*)
    echo "Oh, an Altos 3068."
    shm_for='Altos 3068:'
    shm_lim='0x800000'
    ;;
    esac
    ;;
  *)
   echo "Looks normal to me..."
   ;;
  esac
 fi

 dflt="$shm_for"
 rp='Description of shared memory configuration?'
 . ./myread
 shm_for="$ans"

 dflt="$shm_att"
 rp='Where should shared memory be attached?'
 . ./myread
```

```
 shm_att="$ans"

 case "$shm_att" in
 HIGH)
  dflt="$shm_lim"
  rp='What is
 the upper address limit for shared memory?'
  . ./myread
  shm_lim="$ans"
  ;;
 *)
  shm_lim=''
  ;;
 esac
 ;;

*)
 echo "but you aren't using shared memory so I won't bother." >&4
 shm_for='NOT CONFIGURED'
 shm_att='NONE'
 shm_lim='-1'
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/shm_for.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_socks5_init: Inlibc
?MAKE: -pick add $@ %<
?S:d_socks5_init:
?S: This variable conditionally defines the HAS_SOCKS5_INIT symbol, which
?S: indicates to the C program that the socks5_init() routine is available.
?S:.
?C:HAS_SOCKS5_INIT:
?C: This symbol, if defined, indicates that the socks5_init routine is
?C: available to initialize SOCKS 5.
?C:.
?H:#$d_socks5_init HAS_SOCKS5_INIT  /**/
?H:.
?LINT:set d_socks5_init
```

```
: see if socks5_init exists
set socks5_init d_socks5_init
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_socks5_init.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can be doted in order to extract
?X: .SH files with variable substitutions.
?X:
?X: When running Configure from a remote directory ($src
 is not '.'),
?X: then the files will be created in that directory, so beware!
?X:
?MAKE:Extract: Mkdirp src
?MAKE: -pick add $@ %<
?F:./extract
?T:CONFIG SRC dir file
: script used to extract .SH files with variable substitutions
cat >extract <<EOS
CONFIG=true
SRC="$src"
EOS
cat >>extract <<'EOS'
echo "Doing variable substitutions on .SH files..."
if test -f "$SRC/MANIFEST"; then
```

```
 set x `awk '{print $1}' <$SRC/MANIFEST | grep '\.SH'`
else
 echo "(Looking for .SH files under the source directory.)"
 set x `(cd "$SRC"; find . -name "*.SH" -print)`
fi
shift
case $# in
0) set x `(cd "$SRC"; echo *.SH)`; shift;;
esac
if test ! -f "$SRC/$1"; then
 shift
fi
for file in $*; do
 case "$SRC" in
 ".")
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (cd $dir && . ./$file)
   ;;
  *)
   . ./$file
   ;;
  esac
  ;;
 *)
?X:
?X: When running Configure remotely ($src is not '.'), we cannot source
?X: the files directly, since that would wrongly cause
 the extraction
?X: where the source lie instead of withing the current directory. Therefore,
?X: we need to 'sh <file' then, which is okay since they will source the
?X: existing config.sh file. It's not possible to use:
?X:  ../src/Configure -S -O -Dsomething
?X: unfortunately since no new config.sh with the -Dsomething override
?X: will be created before running the .SH files. A minor buglet.
?X:
?X: Note that we must create the directory hierarchy ourselves if it does
?X: not exist already, and that is done through a shell emulation of the
?X: 'mkdir -p' command. We don't want to use the $installdir metaconfig
?X: symbol here since that would require too much to be configured for
?X: this simple extraction task that may happen quickly with 'Configure -S'.
?X:  -- RAM, 18/03/96
?X:
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
```

```
   file=`expr X$file : 'X.*/\(.*\)'`
   ./mkdirp $dir
   sh <"$SRC/$dir/$file"
   ;;
  *)
   sh <"$SRC/$file"
   ;;
  esac
  ;;
 esac
done
if
 test -f "$SRC/config_h.SH"; then
 if test ! -f config.h; then
?X: oops, they left it out of MANIFEST, probably, so do it anyway.
  sh <"$SRC/config_h.SH"
 fi
fi
EOS
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Extract.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2021, H.Merijn Brand & Tony Cook
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:st_dev_size st_dev_sign: cat echo i_stdlib Setvar Compile run rm_try
?MAKE: -pick add $@ %<
?S:st_dev_sign:
?S: This variable contains the signedness of struct stat's st_dev.
?S: 1 for unsigned, -1 for signed.
?S:.
?S:st_dev_size:
?S: This variable contains the size of struct stat's st_dev in bytes.
?S:.
?C:ST_DEV_SIZE:
?C: This variable contains the size of struct stat's st_dev in bytes.
?C:.
?C:ST_DEV_SIGN:
?C: This symbol holds the signedness of struct stat's st_dev.
?C: 1 for unsigned, -1 for signed.
?C:.
```

```
?H:#define ST_DEV_SIGN
 $st_dev_sign /* st_dev sign */
?H:#define ST_DEV_SIZE $st_dev_size /* st_dev size */
?H:.
?F:!try
: Check the size of st_dev
$echo " "
$echo "Checking the size of st_dev..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   struct stat st;
   printf("%d\n", (int)sizeof(st.st_dev));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 val=`$run ./try`
 case "$val" in
 ") st_dev_size=4
  $echo "(I can't execute the test program--guessing $st_dev_size.)" >&4
  ;;
 *) st_dev_size=$val
  $echo "Your st_dev is $st_dev_size bytes long."
  ;;
 esac
else
 st_dev_size=4
 $echo "(I can't compile the test program--guessing $st_dev_size.)" >&4
fi
$rm_try

: Check if st_dev is signed
$echo " "
$echo "Checking the sign of st_dev..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
int main() {
 struct stat foo;
       foo.st_dev = -1;
 if (foo.st_dev < 0)
```

```
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set
 try
if eval $compile; then
 val=`$run ./try`
 case "$val" in
 ") st_dev_sign=1
  $echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) st_dev_sign=$val
  case "$st_dev_sign" in
   1) $echo "Your st_dev is unsigned." ;;
  -1) $echo "Your st_dev is signed."   ;;
  esac
  ;;
 esac
else
 st_dev_sign=1
 $echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/st_dev_def.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_math.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_math.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:59  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_math: Inhdr
?MAKE: -pick add $@ %<
```

```
?X: Are there really systems that *DON'T* have math.h?
?S:i_math:
?S: This variable conditionally defines the I_MATH symbol, and indicates
?S: whether a C program may include <math.h>.
?S:.
?C:I_MATH:
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <math.h>.
?C:.
?H:#$i_math I_MATH  /**/
?H:.
?LINT:set i_math
: see if this is a math.h system
set math.h i_math
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_math.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ffs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ffs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ffs d_ffsl: Inlibc
?MAKE: -pick add $@ %<
?S:d_ffs:
?S: This variable conditionally defines the HAS_FFS symbol, which
?S: indicates to the C program that the ffs() routine is available
?S: to find the first bit which is set in its integer argument.
?S:.
?S:d_ffsl:
?S: This variable conditionally defines the HAS_FFSL symbol, which
?S: indicates
 to the C program that the ffsl() routine is available
?S: to find the first bit which is set in its long integer argument.
?S:.
```

```
?C:HAS_FFS:
?C: This symbol, if defined, indicates that the ffs routine is available
?C: to find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
?C:HAS_FFSL:
?C: This symbol, if defined, indicates that the ffsl routine is available
?C: to find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
?H:#$d_ffs HAS_FFS  /**/
?H:#$d_ffsl HAS_FFSL  /**/
?H:.
?LINT:set d_ffs d_ffsl
: see if ffs exists
set ffs d_ffs
eval $inlibc
: see if ffsl exists
set ffsl d_ffsl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ffs.U
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```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cf_email.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:05:06  ram
?RCS: patch16: created
?RCS:
?RCS:
?MAKE:cf_email: cat cf_by test myhostname mydomain Oldconfig Myread
?MAKE: -pick add $@ %<
?S:cf_email:
?S: Electronic mail address of the person who ran Configure. This can be
?S: used by units that require the user's e-mail, like MailList.U.
?S:.
?T:cont maildomain
?LINT:extern MAILDOMAIN
```

```
: determine the e-mail address of the user who is running us
$cat <<EOM

I need to get your e-mail address
 in Internet format if possible, i.e.
something like user@host.domain. Please answer accurately since I have
no easy means to double check it. The default value provided below
is most probably close to reality but may not be valid from outside
your organization...

EOM
cont=x
while test "$cont"; do
 case "$MAILDOMAIN" in
 ")
  if $test -s /etc/mailname; then
   maildomain=`$cat /etc/mailname`
  else
   maildomain="$myhostname$mydomain"
  fi
  ;;
 *)  maildomain="$MAILDOMAIN";;
 esac
 case "$cf_email" in
 ") dflt="$cf_by@$maildomain";;
 *)  dflt="$cf_email";;
 esac
 rp='What is your e-mail address?'
 . ./myread
 cf_email="$ans"
 case "$cf_email" in
 *@*.*) cont=" ;;
 *)
  rp='Address does not look like an Internet one.  Use it anyway?'
  case "$fastread" in
  yes) dflt=y ;;
  *) dflt=n ;;
  esac
  . ./myread
  case "$ans" in
  y*) cont=" ;;
  *) echo " " ;;
  esac
  ;;
 esac
done

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_email.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_chown.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:14  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_chown: Inlibc
?MAKE: -pick add $@ %<
?S:d_chown:
?S: This variable conditionally defines the HAS_CHOWN symbol, which
?S: indicates to the C program that the chown() routine is available.
?S:.
?C:HAS_CHOWN :
?C: This symbol, if defined, indicates that the chown routine is
?C: available.
?C:.
?H:#$d_chown
 HAS_CHOWN  /**/
?H:.
?LINT:set d_chown
: see if chown exists
set chown d_chown
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bcmp.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:47:52  ram
?RCS: patch12: added magic support for bcmp()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:00:44  ram
?RCS: patch10: now only defines HAS_BCMP, no macro remap on memcmp (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bcmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_bcmp:
?S: This variable conditionally defines the HAS_BCMP symbol
 if
?S: the bcmp() routine is available to compare strings.
?S:.
?C:HAS_BCMP:
?C: This symbol is defined if the bcmp() routine is available to
?C: compare blocks of memory.
?C:.
?H:#$d_bcmp HAS_BCMP /**/
?H:.
?M:bcmp: HAS_BCMP
?M:#ifndef HAS_BCMP
?M:#ifndef bcmp
?M:#define bcmp(s,d,l) memcmp((s),(d),(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bcmp
: see if bcmp exists
set bcmp d_bcmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysvfs.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:i_sysvfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysvfs:
?S: This variable conditionally defines the I_SYSVFS symbol,
?S: and indicates whether a C program should include <sys/vfs.h>.
?S:.
?C:I_SYS_VFS:
?C: This symbol, if defined, indicates that <sys/vfs.h> exists and
?C: should be included.
?C:.
?H:#$i_sysvfs I_SYS_VFS  /**/
?H:.
?LINT:set i_sysvfs
: see if this is a sys/vfs.h system
set sys/vfs.h i_sysvfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysvfs.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: usrinc.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:27:12  ram
?RCS: patch61: don't ask for the include path unless they are on a MIPS
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:24:36  ram
?RCS: patch54: ensure that ./mips always exists (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:18:31  ram
?RCS: patch23: ensure usrinc value is preserved across sessions (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usrinc incpath mips_type:
 test cat echo n c Getfile Guess \
 Oldconfig eunicefix contains rm
```

```
?MAKE: -pick add $@ %<
?S:usrinc:
?S: This variable holds the path of the include files, which is
?S: usually /usr/include. It is mainly used by other Configure units.
?S:.
?S:incpath:
?S: This variable must preceed the normal include path to get hte
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
?S:.
?S:mips_type:
?S: This variable holds the environment type for the mips system.
?S: Possible values are "BSD 4.3" and "System V".
?S:.
?D:usrinc='/usr/include'
?LINT:create mips
?T:xxx_prompt
?F:./mips
: What should the include directory be ?
echo " "
$echo $n "Hmm...  $c"
dflt='/usr/include'
incpath=''
?X: mips_type is used later, to add -DSYSTYPE_BSD43 to cppflags if needed.
mips_type=''
?X:
?X: Cannot put the following in Guess, or we get a circular dependency.
?X:
if $test -f /bin/mips && /bin/mips; then
 echo "Looks like a MIPS system..."
 $cat >usr.c
 <<'EOCP'
#ifdef SYSTYPE_BSD43
/bsd43
#endif
EOCP
 if cc -E usr.c > usr.out && $contains / usr.out >/dev/null 2>&1; then
  dflt='/bsd43/usr/include'
  incpath='/bsd43'
  mips_type='BSD 4.3'
 else
  mips_type='System V'
 fi
 $rm -f usr.c usr.out
 echo "and you're compiling with the $mips_type compiler and libraries."
 xxx_prompt=y
 echo "exit 0" >mips
else
```

```
 echo "Doesn't look like a MIPS system."
 xxx_prompt=n
 echo "exit 1" >mips
fi
chmod +x mips
$eunicefix mips
case "$usrinc" in
") ;;
*) dflt="$usrinc";;
esac
case "$xxx_prompt" in
y) fn=d/
 echo " "
 rp='Where are the include files you want to use?'
 . ./getfile
 usrinc="$ans"
 ;;
*) usrinc="$dflt"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usrinc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_htonl.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:09:25  ram
?RCS: patch32: now properly handles htonl() and friends when macros (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:45:00  ram
?RCS: patch23: now also check for htonl() macro (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_htonl: Inlibc Setvar i_niin i_sysin cat rm contains \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
```

```
?S:d_htonl:
?S: This variable conditionally
 defines HAS_HTONL if htonl() and its
?S: friends are available to do network order byte swapping.
?S:.
?C:HAS_HTONL (HTONL):
?C: This symbol, if defined, indicates that the htonl() routine (and
?C: friends htons() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_HTONS (HTONS):
?C: This symbol, if defined, indicates that the htons() routine (and
?C: friends htonl() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHL (NTOHL):
?C: This symbol, if defined, indicates that the ntohl() routine (and
?C: friends htonl() htons() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHS (NTOHS):
?C: This symbol, if defined, indicates that the ntohs() routine (and
?C: friends htonl() htons() ntohl()) are available to do network
?C: order byte swapping.
?C:.
?H:#$d_htonl HAS_HTONL  /**/
?H:#$d_htonl HAS_HTONS  /**/
?H:#$d_htonl HAS_NTOHL  /**/
?H:#$d_htonl HAS_NTOHS  /**/
?H:.
?F:!htonl.c
?LINT:set d_htonl
:
 see if htonl --and friends-- exists
val="
set htonl val
eval $inlibc

: Maybe they are macros.
case "$val" in
$undef)
 $cat >htonl.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#$i_niin I_NETINET_IN
#$i_sysin I_SYS_IN
#ifdef I_NETINET_IN
#include <netinet/in.h>
```

```
#endif
#ifdef I_SYS_IN
#include <sys/in.h>
#endif
#ifdef htonl
printf("Defined as a macro.");
#endif
EOM
 $cppstdin $cppflags $cppminus < htonl.c >htonl.E 2>/dev/null
 if $contains 'Defined as a macro' htonl.E >/dev/null 2>&1; then
  val="$define"
  echo "But it seems to be defined as a macro." >&4
 fi
 $rm -f htonl.?
 ;;
esac
set d_htonl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_htonl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fchmod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fchmod.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fchmod: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchmod:
?S: This variable conditionally defines the HAS_FCHMOD symbol, which
?S: indicates to the C program that the fchmod() routine is available
?S: to change mode of opened files.
?S:.
?C:HAS_FCHMOD (FCHMOD):
?C: This symbol, if defined, indicates that the fchmod routine is available
?C: to
```

```
 change mode of opened files.  If unavailable, use chmod().
?C:.
?H:#$d_fchmod HAS_FCHMOD  /**/
?H:.
?LINT:set d_fchmod
: see if fchmod exists
set fchmod d_fchmod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fchmod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Setprefixvar.U,v 3.0 2006/04/01 17:25:29 hmbrand $
?RCS:
?RCS: Copyright (c) 2006-2006, H.Merijn Brand & Nicholas Clark
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:   You may distribute under the terms of either the GNU General Public
?RCS:   License or the Artistic License, as specified in the README file.
?RCS:
?X:
?X: This unit sets up the scripts installprefix and setprefixvar, so code
?X: in other parts can be more simple and maintainable
?X:
?MAKE:Setprefixvar: Myread Getfile startsh eunicefix test \
 prefix prefixexp installprefix installprefixexp
?MAKE: -pick add $@ %<
?LINT:extern prefixvar
?X: metalint still sees "`\$${prefixvar}exp`" as variable :(
?T:prefixvarexp
?F:./setprefixvar
?F:./installprefix
: Perform
 the prefixexp/installprefixexp correction if necessary
cat <<EOS >installprefix
$startsh
EOS
cat <<'EOSC' >>installprefix
: Change installation prefix, if necessary.
if $test X"$prefix" != X"$installprefix"; then
   eval "install${prefixvar}=\`echo \$${prefixvar}exp | sed \"s#^\$prefixexp#\$installprefixexp#\"\`"
else
   eval "install${prefixvar}=\"\$${prefixvar}exp\""
fi
```

```
EOSC
chmod +x installprefix
$eunicefix installprefix

: Set variables such as privlib and privlibexp from the output of ./getfile
: performing the prefixexp/installprefixexp correction if necessary.
cat <<EOS >setprefixvar
$startsh
EOS
cat <<'EOSC' >>setprefixvar
eval "${prefixvar}=\"\$ans\""
eval "${prefixvar}exp=\"\$ansexp\""
. ./installprefix
EOSC
chmod +x setprefixvar
$eunicefix setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/Setprefixvar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgrp.U,v 3.0.1.1 1997/02/28 15:34:28 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpgrp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:28  ram
?RCS: patch61: new USE_BSD_GETPGRP to detect the getpgrp() flavor
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp d_bsdgetpgrp: Guess Inlibc Setvar cat rm_try \
 +cc +ccflags +ldflags +libs i_unistd i_stdlib run
?MAKE: -pick add $@ %<
?S:d_getpgrp:
?S: This variable conditionally defines HAS_GETPGRP if getpgrp() is
?S: available
 to get the current process group.
?S:.
?S:d_bsdgetpgrp:
?S: This variable conditionally defines USE_BSD_GETPGRP if
```

```
?S: getpgrp needs one arguments whereas USG one needs none.
?S:.
?C:HAS_GETPGRP (GETPGRP):
?C: This symbol, if defined, indicates that the getpgrp routine is
?C: available to get the current process group.
?C:.
?C:USE_BSD_GETPGRP:
?C: This symbol, if defined, indicates that getpgrp needs one
?C: arguments whereas USG one needs none.
?C:.
?H:#$d_getpgrp HAS_GETPGRP  /**/
?H:#$d_bsdgetpgrp USE_BSD_GETPGRP /**/
?H:.
?T:xxx
?F:!try
?LINT:set d_getpgrp d_bsdgetpgrp
: see if getpgrp exists
set getpgrp d_getpgrp
eval $inlibc

@if USE_BSD_GETPGRP || d_bsdgetpgrp
case "$d_getpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of getpgrp is in use..."
 $cat >try.c <<EOP
#include <stdio.h>
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
 if (getuid()
 == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (getpgrp(1) == 0)
  exit(0);
#else
 if (getpgrp() > 0)
```

```
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -o try -DTRY_BSD_PGRP $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo "You have to use getpgrp(pid) instead of getpgrp()." >&4
  val="$define"
 elif $cc -o try $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo "You have to use getpgrp() instead of getpgrp(pid)." >&4
  val="$undef"
 else
  echo "I can't seem to compile and run the test program."
  if ./usg; then
   xxx="a USG one, i.e. you use getpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use getpgrp(pid)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use getpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your getpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set
 d_bsdgetpgrp
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_casti32.U,v 3.0.1.3 1995/05/12 12:10:45 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_casti32.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:10:45  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:09:37  ram
?RCS: patch36: declare signal handler correctly (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:06  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Can the compiler cast large floats to
 32-bit integers?
?X:
?MAKE:d_casti32: cat Compile rm_try intsize Setvar test signal_t run i_stdlib
?MAKE: -pick add $@ %<
?S:d_casti32:
?S: This variable conditionally defines CASTI32, which indicates
?S: whether the C compiler can cast large floats to 32-bit ints.
?S:.
?C:CASTI32:
?C: This symbol is defined if the C compiler can cast negative
?C: or large floating point numbers to 32-bit ints.
?C:.
?H:#$d_casti32 CASTI32  /**/
?H:.
?T:xxx yyy
?F:!try
?LINT:set d_casti32
: check for ability to cast large floats to 32-bit ints.
echo " "
echo 'Checking whether your C compiler can cast large floats to int32.' >&4
if $test "$intsize" -ge 4; then
 xxx=int
else
 xxx=long
fi
$cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
```

```
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
$signal_t blech(int s) { exit(3); }
int main()
{
 $xxx i32;
 double f, g;
 int result = 0;
 char str[16];
 signal(SIGFPE, blech);

 /* Don't let compiler optimize the test away.
  Store the number
   in a writable string for gcc to pass to sscanf under HP-UX.
 */
 sprintf(str, "2147483647");
 sscanf(str, "%lf", &f); /* f = (double) 0x7fffffff; */
 g = 10 * f;
 i32  = ($xxx) g;

 /* x86 processors will probably give 0x8000 0000, which is a
   sign change.  We don't want that.  We want to mimic SPARC
   behavior here, which is to preserve the sign and give
   back 0x7fff ffff.
 */
 if (i32 != ($xxx) f)
  result |= 1;
 exit(result);
}
EOCP
set try
if eval $compile_ok; then
 $run ./try 2>/dev/null
 yyy=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 yyy=1
fi
case "$yyy" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
```

```
set d_casti32
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_casti32.U
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```
?RCS: $Id: groupstype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: groupstype.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:18:08  ram
?RCS: patch36: no longer uses Setvar to set 'groupstype' (ADO)
?RCS: patch36: typo fix in the word 'argument' (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:00:18  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:groupstype: gidtype d_getgrps Myread Oldconfig Findhdr cat d_setgrps
?MAKE: -pick add $@ %<
?INIT:groupstype="
?S:groupstype:
?S: This
 variable defines Groups_t to be something like gid_t, int,
?S: ushort, or whatever type is used for the second argument to
?S: getgroups() and setgroups().  Usually, this is the same as
?S: gidtype (gid_t), but sometimes it isn't.
?S:.
?C:Groups_t (GROUPSTYPE):
?C: This symbol holds the type used for the second argument to
?C: getgroups() and setgroups().  Usually, this is the same as
?C: gidtype (gid_t) , but sometimes it isn't.
?C: It can be int, ushort, gid_t, etc...
?C: It may be necessary to include <sys/types.h> to get any
?C: typedef'ed information.  This is only required if you have
?C: getgroups() or setgroups()..
?C:.
?H:?%<:#if defined(HAS_GETGROUPS) || defined(HAS_SETGROUPS)
```

```
?H:?%<:#define Groups_t $groupstype /* Type for 2nd arg to [sg]etgroups() */
?H:?%<:#endif
?H:.
?W:%<:getgroups HAS_GETGROUPS setgroups HAS_SETGROUPS
: Find type of 2nd arg to 'getgroups()' and 'setgroups()'
echo " "
case "$d_getgrps$d_setgrps" in
*define*)
 case
 "$groupstype" in
 ") dflt="$gidtype" ;;
 *)  dflt="$groupstype" ;;
 esac
 $cat <<EOM
What type of pointer is the second argument to getgroups() and setgroups()?
Usually this is the same as group ids, $gidtype, but not always.

EOM
 rp='What type pointer is the second argument to getgroups() and setgroups()?'
 . ./myread
 groupstype="$ans"
 ;;
*)  groupstype="$gidtype";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/groupstype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: sizetype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:32:10  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:sizetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:sizetype:
```

```
?S: This variable defines sizetype to be something like size_t,
?S: unsigned long, or whatever type is used to declare length
?S: parameters for string functions.
?S:.
?C:Size_t:
?C: This symbol holds the type used to declare length parameters
?C: for string
 functions.  It is usually size_t, but may be
?C: unsigned long, int, etc.  It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Size_t $sizetype  /* length paramater for string functions */
?H:.
: see what type is used for size_t
set size_t sizetype 'unsigned int' stdio.h sys/types.h
eval $typedef
dflt="$sizetype"
echo " "
rp="What type is used for the length parameter for string functions?"
. ./myread
sizetype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sizetype.U
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```
?RCS: $Id: d_setpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpent:
?S: This variable conditionally defines HAS_SETPROTOENT if setprotoent() is
?S: available.
?S:.
?C:HAS_SETPROTOENT:
?C: This symbol, if defined, indicates that the setprotoent() routine is
```

```
?C: available.
?C:.
?H:#$d_setpent HAS_SETPROTOENT  /**/
?H:.
?LINT:set d_setpent
: see if setprotoent
 exists
set setprotoent d_setpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mmap.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:12  ram
?RCS: patch15: created
?RCS:
?MAKE:d_mmap: Inlibc
?MAKE: -pick add $@ %<
?S:d_mmap:
?S: This variable conditionally defines HAS_MMAP if mmap() is
?S: available to map a file into memory.
?S:.
?C:HAS_MMAP:
?C: This symbol, if defined, indicates that the mmap system call is
?C: available to map a file into memory.
?C:.
?H:#$d_mmap HAS_MMAP  /**/
?H:.
?LINT:set d_mmap
: see if mmap exists
set mmap d_mmap
eval $inlibc
```

Found in path(s):
*

/perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mmap.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setsid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setsid.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:49  ram
?RCS: patch16: created
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setsid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setsid:
?S: This variable conditionally defines HAS_SETSID if setsid() is
?S: available to set the process group ID.
?S:.
?C:HAS_SETSID:
?C: This symbol, if defined, indicates that the setsid routine is
?C: available
 to set the process group ID.
?C:.
?H:#$d_setsid HAS_SETSID /**/
?H:.
?LINT:set d_setsid
: see if setsid exists
set setsid d_setsid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setsid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lrint: Inlibc
?MAKE: -pick add $@ %<
?S:d_lrint:
```

```
?S: This variable conditionally defines the HAS_LRINT symbol, which
?S: indicates to the C program that the lrint() routine is available
?S: to return the integral value closest to a double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LRINT:
?C: This symbol, if defined, indicates that the lrint routine is
?C: available to return the integral value closest to a double
?C: (according to the current rounding mode).
?C:.
?H:#$d_lrint HAS_LRINT  /**/
?H:.
?LINT:set d_lrint
: see if lrint exists
set lrint d_lrint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lrint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extractall.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extractall.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:00:43  ram
?RCS: patch61: created
?RCS:
?X:
?X: If extraction has been requested, load the configuration file, perform
?X: the extraction and exit.
?X:
?X: This unit was originally a part of Options.U. It had to be removed from
?X: it to prevent a dependency cycle: Extract -> src -> Options -> Extract
?X: The Begin.U unit now requires us before beginning to do anything
?X: interesting, to ensure
 proper semantics. -- RAM, 15/03/96
?X:
?MAKE:Extractall: Extract Options
?MAKE: -pick wipe $@ %<
: extract files and exit if asked to do so
```

```
case "$extractsh" in
true)
?X: Undo the forced silent=true when -S was supplied, by probing realsilent
?X: which was set iff -s was also given. See Options.U for details.
 case "$realsilent" in
 true) ;;
 *) exec 1>&4;;
 esac
 case "$config_sh" in
 ") config_sh='config.sh';;
 esac
 echo " "
 echo "Fetching answers from $config_sh..."
 cd ..
 . $config_sh
?X: extract has to be run from the top directory, not within UU.
 . UU/optdef.sh
 echo " "
?X: extract has to be run from the top directory, not within UU.
 . UU/extract
 rm -rf UU
 echo "Extraction done."
 exit 0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Extractall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ttyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ttyname_r ttyname_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_unistd extern_C
?MAKE: -pick add $@ %<
?S:d_ttyname_r:
?S: This variable conditionally defines the HAS_TTYNAME_R symbol,
?S: which indicates to the C program that the ttyname_r()
?S: routine is available.
?S:.
?S:ttyname_r_proto:
?S: This variable encodes the prototype of ttyname_r.
```

```
?S: It is zero if d_ttyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ttyname_r
?S: is defined.
?S:.
?C:HAS_TTYNAME_R:
?C: This symbol, if defined, indicates that the ttyname_r routine
?C: is available to ttyname re-entrantly.
?C:.
?C:TTYNAME_R_PROTO:
?C: This
 symbol encodes the prototype of ttyname_r.
?C: It is zero if d_ttyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ttyname_r
?C: is defined.
?C:.
?H:#$d_ttyname_r HAS_TTYNAME_R /**/
?H:#define TTYNAME_R_PROTO $ttyname_r_proto /**/
?H:.
?T:try hdrs d_ttyname_r_proto
: see if ttyname_r exists
set ttyname_r d_ttyname_r
eval $inlibc
case "$d_ttyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_unistd unistd.h"
 case "$d_ttyname_r_proto:$usethreads" in
 ":define") d_ttyname_r_proto=define
  set d_ttyname_r_proto ttyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ttyname_r_proto" in
 define)
 case "$ttyname_r_proto" in
 "|0) try='int ttyname_r(int, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && ttyname_r_proto=I_IBW ;;
 esac
 case "$ttyname_r_proto" in
 "|0) try='int ttyname_r(int, char*, int);'
 ./protochk "$extern_C $try" $hdrs && ttyname_r_proto=I_IBI ;;
 esac
 case "$ttyname_r_proto"
 in
 "|0) try='char* ttyname_r(int, char*, int);'
 ./protochk "$extern_C $try" $hdrs && ttyname_r_proto=B_IBI ;;
 esac
 case "$ttyname_r_proto" in
 "|0) d_ttyname_r=undef
```

```
  ttyname_r_proto=0
  echo "Disabling ttyname_r, cannot determine prototype." >&4 ;;
 * ) case "$ttyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) ttyname_r_proto="REENTRANT_PROTO_$ttyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "ttyname_r has no prototype, not using it." >&4 ;;
  esac
  d_ttyname_r=undef
  ttyname_r_proto=0
  ;;
 esac
 ;;
*) ttyname_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ttyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usethreads.U,v $
?RCS:
?RCS: Copyright (c) 1998-2000 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usethreads.U,v $
?RCS:
?MAKE:usethreads useithreads d_oldpthreads usereentrant: \
 Myread Oldconfig Setvar test cat
?MAKE: -pick add $@ %<
?Y:TOP
?S:usethreads:
?S: This variable conditionally defines the USE_THREADS symbol,
?S: and indicates that Perl should be built to use threads.
?S:.
?S:useithreads:
?S: This variable conditionally defines the USE_ITHREADS symbol,
?S: and indicates that Perl should be built to use the interpreter-based
?S: threading implementation.
?S:.
?X: I'm putting old_pthreads in this unit because it might eventually
```

```
?X: be part of an automatic determination to see if we can use threads
?X: at all.
?S:d_oldpthreads:
?S: This variable conditionally
 defines the OLD_PTHREADS_API symbol,
?S: and indicates that Perl should be built to use the old
?S: draft POSIX threads API.  This is only potentially meaningful if
?S: usethreads is set.
?S:.
?S:usereentrant:
?S: This variable conditionally defines the USE_REENTRANT_API symbol,
?S: which indicates that the thread code may try to use the various
?S: _r versions of library functions.  This is only potentially
?S: meaningful if usethreads is set and is very experimental, it is
?S: not even prompted for.
?S:.
?C:USE_ITHREADS:
?C: This symbol, if defined, indicates that Perl should be built to
?C: use the interpreter-based threading implementation.
?C:.
?C:USE_THREADS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use threads.  At present, it is a synonym for
?C: and USE_ITHREADS, but eventually the source ought to be
?C: changed to use this to mean _any_ threading implementation.
?C:.
?C:OLD_PTHREADS_API:
?C: This symbol, if defined, indicates that Perl should
?C: be
 built to use the old draft POSIX threads API.
?C:.
?C:USE_REENTRANT_API:
?C: This symbol, if defined, indicates that Perl should
?C: try to use the various _r versions of library functions.
?C: This is extremely experimental.
?C:.
?H:#$useithreads USE_ITHREADS  /**/
?H:#$usethreads  USE_THREADS  /**/
?H:#$d_oldpthreads OLD_PTHREADS_API  /**/
?H:#$usereentrant USE_REENTRANT_API /**/
?H:.
?LINT:set usethreads d_oldpthreads
?INIT:: set usethreads on the Configure command line to enable threads.
?INIT:usereentrant='undef'
?F:!usethreads.cbu
: Do we want threads support and if so, what type
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
```

```
case "$usethreads" in
$define|true|[yY]*)     dflt='y';;
*)     # Catch case where user specified ithreads but
      # forgot -Dusethreads (A.D. 4/2002)
      case "$useithreads" in
      *$define*) dflt='y';;
      *)  dflt='n';;
      esac
      ;;
esac
cat <<EOM

Perl can be built to
 offer a form of threading support on some systems
To do so, Configure can be run with -Dusethreads.

Note that Perl built with threading support runs slightly slower
and uses slightly more memory than plain Perl.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Build a threading Perl?'
. ./myread
case "$ans" in
y|Y)    val="$define" ;;
*)      val="$undef" ;;
esac
set usethreads
eval $setvar

useithreads="$usethreads"

?X: Check out what kind of threads API we have
case "$d_oldpthreads" in
") : Configure tests would be welcome here.  For now, assume undef.
 val="$undef" ;;
*) val="$d_oldpthreads" ;;
esac
set d_oldpthreads
eval $setvar

?X: In general, -lpthread needs to come before -lc but after other
?X: libraries such as -lgdbm and such like. We assume here that -lc
?X: is present in libswanted. If that fails to be true, then this
?X: can be changed to add pthread to the very end of libswanted.

: Look for a hint-file generated 'call-back-unit'.  If the
:
```

```
 user has specified that a threading perl is to be built,
: we may need to set or change some other defaults.
if $test -f usethreads.cbu; then
   echo "Your platform has some specific hints regarding threaded builds, using them..."
   . ./usethreads.cbu
else
   case "$usethreads" in
 "$define"|true|[yY]*)
  $cat <<EOM
(Your platform does not have any specific hints for threaded builds.
Assuming POSIX threads, then.)
EOM
 ;;
   esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/usethreads.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_regex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Sidney C. Smith <scsmith@cbda9.apgea.army.mil>
?RCS:
?RCS: $Log: i_regex.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:35:45  ram
?RCS: patch49: created
?RCS:
?RCS:
?MAKE:i_regex: Inhdr
?MAKE: -pick add $@ %<
?S:i_regex:
?S: This variable conditionally defines the I_REGEX symbol, which
?S: indicates to the C program that <regex.h> exists and should
?S: be included.
?S:.
?C:I_REGEX:
?C: This symbol, if defined, indicates that <regex.h> exists
 and should
?C: be included.
```

```
?C:.
?H:#$i_regex I_REGEX /**/
?H:.
?LINT:set i_regex
: see if regex is available
set regex.h i_regex
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_regex.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: gidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:21:44  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS: patch32: removed useless usage of Setvar (for now)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:21:07  ram
?RCS: patch27: added lint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:01:51  ram
?RCS: patch23: protected gidtype setting via setvar (ADO)
?RCS: patch23: made Gid_t comment more explicit (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:11  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:gidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:gidtype:
?S: This variable defines Gid_t to be something like gid_t, int,
?S: ushort, or whatever type is used to declare the return type
?S: of getgid().  Typically, it is the type of group ids in the kernel.
?S:.
?C:Gid_t (GIDTYPE):
?C: This symbol holds the return type of getgid() and the type of
?C: argument to setrgid() and related functions.  Typically,
```

```
?C: it is the type of group ids in the kernel. It can be int, ushort,
?C: uid_t, etc... It may be necessary to include <sys/types.h> to get
?C: any typedef'ed information.
?C:.
?H:#define Gid_t $gidtype  /* Type for getgid(), etc... */
?H:.
?T:xxx
: see what type gids are declared as in the kernel
set gid_t gidtype xxx stdio.h sys/types.h
eval $typedef
case "$gidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep 'groups\[NGROUPS\];' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1"
 ;;
 esac
 ;;
*) dflt="$gidtype";;
esac
echo " "
rp="What is the type for group ids returned by getgid()?"
. ./myread
gidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/gidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: archlib.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:23:38  ram
?RCS: patch61: skip existence checks for archlib
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:18  ram
```

```
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/02/15  14:14:14  ram
?RCS: patch51: architecture name is now computed by a separate unit
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:32:22  ram
?RCS:
 patch49: archname is now systematically recomputed
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:36  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_archlib archlib archlibexp installarchlib: archname afs spackage \
 cat Getfile Loc Oldconfig prefixexp privlib test Prefixit Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:d_archlib:
?S: This variable conditionally defines ARCHLIB to hold the pathname
?S: of architecture-dependent library files for $package.  If
?S: $archlib is the same as $privlib, then this is set to undef.
?S:.
?S:archlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put architecture-dependent public library files for $package.
?S: It is most often a local directory such as /usr/local/lib.
?S: Programs using this variable must be prepared to deal
?S: with filename expansion.
?S:.
?S:archlibexp:
?S: This variable is the same as the archlib variable, but is
?S: filename
 expanded at configuration time, for convenient use.
?S:.
?S:installarchlib:
?S: This variable is really the same as archlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:ARCHLIB:
?C: This variable, if defined, holds the name of the directory in
?C: which the user wants to put architecture-dependent public
?C: library files for $package.  It is most often a local directory
?C: such as /usr/local/lib.  Programs using this variable must be
?C: prepared to deal with filename expansion.  If ARCHLIB is the
?C: same as PRIVLIB, it is not defined, since presumably the
?C: program already searches PRIVLIB.
?C:.
```

```
?C:ARCHLIB_EXP:
?C: This symbol contains the ~name expanded version of ARCHLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_archlib ARCHLIB "$archlib"  /**/
?H:#$d_archlib ARCHLIB_EXP "$archlibexp"  /**/
?H:.
: determine where public architecture
 dependent libraries go
set archlib archlib
eval $prefixit
case "$archlib" in
")
 case "$privlib" in
 ")
  dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
  set dflt
  eval $prefixup
  ;;
 *)  dflt="$privlib/$archname";;
 esac
 ;;
*) dflt="$archlib";;
esac
cat <<EOM

$spackage contains architecture-dependent library files.  If you are
sharing libraries in a heterogeneous environment, you might store
these files in a separate location.  Otherwise, you can just include
them with the rest of the public library files.

EOM
fn=d+~
rp='Where do you want to put the public architecture-dependent libraries?'
. ./getfile
archlib="$ans"
archlibexp="$ansexp"

if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installarchlib" in
 ") dflt=`echo $archlibexp | sed 's#^/afs/#/afs/.#'`;;
```

```
 *)
 dflt="$installarchlib";;
 esac
 fn=de~
 rp='Where will architecture-dependent library files be installed?'
 . ./getfile
 installarchlib="$ans"
else
 installarchlib="$archlibexp"
fi
if $test X"$archlib" = X"$privlib"; then
 d_archlib="$undef"
else
 d_archlib="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/archlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:uidsign: Myread Typedef uidtype Compile run
?MAKE: -pick add $@ %<
?S:uidsign:
?S: This variable contains the signedness of a uidtype.
?S: 1 for unsigned, -1 for signed.
?S:.
?C:Uid_t_sign:
?C: This symbol holds the signedness of a Uid_t.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define Uid_t_sign $uidsign  /* UID sign */
?H:.
?T:yyy zzz
?F:!try
: Check if UID is signed
echo " "
case "$uidtype" in
*_t) zzz="$uidtype" ;;
*)   zzz="uid"  ;;
```

```
esac
echo "Checking the sign of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include
 <stdio.h>
int main() {
 $uidtype foo = -1;
 if (foo < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set try
if eval $compile; then
 yyy=`$run ./try`
 case "$yyy" in
 ") uidsign=1
  echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) uidsign=$yyy
  case "$uidsign" in
   1) echo "Your $zzz is unsigned." ;;
  -1) echo "Your $zzz is signed."   ;;
  esac
  ;;
 esac
else
 uidsign=1
 echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidsign.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_brokstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_brokstat.U,v $
```

```
?RCS: Revision 3.0.1.1  1997/02/28  15:30:53  ram
?RCS: patch61: created
?RCS:
?MAKE:d_brokstat: cat contains cppstdin cppminus +cppflags rm Setvar
?MAKE: -pick add $@ %<
?S:d_brokstat:
?S: This variable conditionally defines STAT_MACROS_BROKEN if some
?S: of the S_IS*() macros from <sys/stat.h> give false positive on
?S: regular files.
?S:.
?C:STAT_MACROS_BROKEN:
?C: This symbol, if defined, indicates that the S_IS*() stat macros
?C: such
 as S_ISBLK() give false positive and are thus unusable.
?C: Your best bet is then to supply your own set.
?C:.
?H:#$d_brokstat STAT_MACROS_BROKEN  /**/
?H:.
?F:!try.c !try
?LINT:set d_brokstat
?LINT:usefile try
?X: This test inspired by autoconf -- RAM, 28/02/97
: are stat macros sane?
echo " "
echo "Checking whether your stat() macros are broken..."
$cat >try.c <<'EOC'
#include <sys/types.h>
#include <sys/stat.h>

#if defined(S_ISBLK) && defined(S_IFDIR)
#if S_ISBLK(S_IFDIR)
Broken
#endif
#endif

#if defined(S_ISBLK) && defined(S_IFCHR)
#if S_ISBLK(S_IFCHR)
Broken
#endif
#endif

#if defined(S_ISLNK) && defined(S_IFREG)
#if S_ISLNK(S_IFREG)
Broken.
#endif
#endif

#if defined(S_ISSOCK) && defined(S_IFREG)
```

```
#if S_ISSOCK(S_IFREG)
Broken.
#endif
#endif
EOC
$cppstdin $cppflags $cppminus <try.c 2>/dev/null >try
if $contains Broken try >/dev/null 2>&1; then
 echo "Alas, they are.  I'll use my own macro set then." >&4
 val="$define"
else
 echo "Nope, working just fine." >&4
 val="$undef"
fi
$rm
 -f try try.c
set d_brokstat
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_brokstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_socks.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_socks: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_socks:
?S: This variable conditionally defines the I_SOCKS symbol, and indicates
?S: whether a C program should include <socks.h>.
?S:.
?C:I_SOCKS:
?C: This symbol, if defined, indicates that <socks.h> exists and
?C: should be included.
?C:.
?H:#$i_socks I_SOCKS  /**/
?H:.
?LINT:set i_socks
: see if this is a socks.h system
set socks.h i_socks
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_socks.U

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```
?RCS: $Id$
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: bitpbyte.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:54  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bitpbyte: cat rm Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:bitpbyte:
?S: This variable contains the value of the BITS_PER_BYTE symbol, which
?S: indicates to the C program how many bits there are in a byte.
?S:.
?C:BITS_PER_BYTE:
?C: This symbol contains the number
 of bits in a byte, so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define BITS_PER_BYTE $bitpbyte  /**/
?H:.
?F:!try
: check for length of byte
echo " "
case "$bitpbyte" in
")
 echo "Checking to see how many bits there are in a byte..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
?X: Standard C requires a macro CHAR_BIT in <limits.h>
#ifdef __STDC__
#include <limits.h>
#ifndef CHAR_BIT
#define CHAR_BIT 8
#endif
#ifndef BITSPERBYTE
#define BITSPERBYTE CHAR_BIT
```

```
#endif
#else
?X: On non standard C, try with <values.h>
#include <values.h>
#ifndef BITSPERBYTE
#define BITSPERBYTE 8
#endif
#endif
int main()
{
 printf("%d\n", BITSPERBYTE);
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$bitpbyte"
 ;;
esac
rp="What is the length of a byte (in bits)?"
. ./myread
bitpbyte="$ans"
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/bitpbyte.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_uwait.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_uwait.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:10:49  ram
?RCS: patch16: added knowledge about wait3()
?RCS: patch16: revised 'union wait' look-up algorithm
?RCS: patch16: fixed make dependency line accordingly
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_uwait d_uwait3: cat contains cppstdin cppminus +cppflags rm \
 Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_uwait:
?S: This symbol
 conditionally defines UNION_WAIT which indicates to the C
?S: program that argument for the wait() system call should be declared as
?S: 'union wait status' instead of 'int status'.
?S:.
?S:d_uwait3:
?S: This symbol conditionally defines UNION_WAIT3 which indicates to the C
?S: program that the first argument for the wait3() system call should be
?S: declared as 'union wait status' instead of 'int status'.
?S:.
?C:UNION_WAIT:
?C: This symbol if defined indicates to the C program that the argument
?C: for the wait() system call should be declared as 'union wait status'
?C: instead of 'int status'. You probably need to include <sys/wait.h>
?C: in the former case (see I_SYSWAIT).
?C:.
?C:UNION_WAIT3:
?C: This symbol if defined indicates to the C program that the first argument
?C: for the wait3() system call should be declared as 'union wait status'
?C: instead of 'int status'. You probably need to include <sys/wait.h>
?C: in the former case (see I_SYSWAIT). It seems safe to assume that
 the
?C: same rule applies to the second parameter of wait4().
?C:.
?H:#$d_uwait UNION_WAIT  /**/
?H:#$d_uwait3 UNION_WAIT3 /**/
?H:.
?T:val2 flags f also
?LINT:set d_uwait d_uwait3
: see if union wait is available
echo " "
?X:
?X: Unfortunately, we can't just grep <sys/wait.h> for "union wait" because
?X: some weird systems (did I hear HP-UX?) define union wait only when _BSD
?X: is defined. The same thing happens on OSF/1, who is pushing weirdness to
?X: its limits by requiring wait() to use (int *) but wait3() to use
?X: (union wait *), unless _BSD is defined and -lbsd is used, in which case
?X: wait() also expects (union wait *). Aaargh!!--RAM
?X:
set X $cppflags
```

```
shift
flags=''
also=''
for f in $*; do
 case "$f" in
 *NO_PROTO*) ;;
 *) flags="$flags $f";;
 esac
done
$cat `./findhdr sys/wait.h` /dev/null | \
 $cppstdin $flags $cppminus >wait.out 2>/dev/null
if $contains 'union.*wait.*{' wait.out >/dev/null 2>&1 ; then
 echo "Looks like your <sys/wait.h> knows about 'union wait'..."
 >&4
 val="$define"
@if UNION_WAIT
 also='also '
 if $contains 'extern.*wait[  ]*([  ]*int' wait.out >/dev/null 2>&1
 then
  echo "But wait() seems to expect an 'int' pointer (POSIX way)." >&4
  val="$undef"
  also=''
 elif $contains 'extern.*wait[  ]*([  ]*union' wait.out >/dev/null 2>&1
 then
  echo "And indeed wait() expects an 'union wait' pointer (BSD way)." >&4
 else
  echo "So we'll use that for wait()." >&4
 fi
@end
@if UNION_WAIT3 || d_uwait3
 val2="$define"
@end
@if UNION_WAIT3
 if $contains 'extern.*wait3[  ]*([  ]*int' wait.out >/dev/null 2>&1
 then
  echo "However wait3() seems to expect an 'int' pointer, weird." >&4
  val2="$undef"
 elif $contains 'extern.*wait3[  ]*([  ]*union' wait.out >/dev/null 2>&1
 then
  echo "And wait3() ${also}expects an 'union wait' pointer, fine." >&4
 else
  echo "As expected, wait3() ${also}uses an 'union wait' pointer." >&4
 fi
@end
else
 echo "No trace of 'union wait' in <sys/wait.h>..." >&4
 val="$undef"
@if UNION_WAIT && UNION_WAIT3
```

```
 echo
 "Both wait() and wait3() will use a plain 'int' pointer then." >&4
@elsif UNION_WAIT
 echo "Your wait() should be happy with a plain 'int' pointer." >&4
@elsif UNION_WAIT3
 echo "Your wait3() should be happy with a plain 'int' pointer." >&4
@end
fi
set d_uwait
eval $setvar
@if UNION_WAIT3 || d_uwait3
val="$val2"; set d_uwait3
eval $setvar
@end
$rm -f wait.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_uwait.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpwent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpwent: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_getpwent:
?S: This variable conditionally defines the HAS_GETPWENT symbol, which
?S: indicates to the C program that it should use the getpwent()
?S: routine instead of the getpw() routine.
?S:.
?C:HAS_GETPWENT (GETPWENT):
?C: This symbol, if defined, indicates that the getpwent() routine
?C: should be used instead of the getpw()
 routine.
?C:.
?H:#$d_getpwent HAS_GETPWENT /**/
?H:.
```

```
?LINT:set d_getpwent
: see if there is a getpwent
echo " "
if set getpwent val -f d_getpwent; eval $csym; $val; then
 echo "getpwent() found." >&4
 val="$define"
else
 echo "No getpwent() found -- will use getpw() instead." >&4
 val="$undef"
fi
set d_getpwent
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mkdep.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mkdep.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:13:07  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  16:25:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:12  ram
?RCS: patch16: cppflags is now an optional dependency
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:22:39  ram
?RCS: patch15: force zero exit status in all mkdep scripts
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit generates the script 'mkdep' in the top-level directory.
?X: It is up to the makefile to use it for automatic dependencies
?X: generation (usage: 'mkdep [cppflags] -- *.c').
```

```
?X:
?MAKE:mkdep: spitshell startsh cpp +cppflags grep contains rm sed sort uniq \
 Getfile Oldconfig eunicefix cat +cc cppminus test pkgsrc _o
?MAKE: -pick add $@ %<
?S:mkdep:
?S: This variable holds the name of a command to generate makefile
?S: dependencies on the standard output. It is the pathname of the
?S: generated mkdep script.
?S:.
?F:mkdep
?T:IFS arg flags takeflags srcfile toplev filebase inc dir files file dep c
: find out how to generate dependencies
echo " "
echo "Checking how to generate makefile dependencies on your machine..." >&4
?X: We are in the UU directory
toplev=`cd ..;pwd`
$cat >dep.c <<'EOCP'
#include "dep.h"
EOCP
?X: Empty dep.h causes RIOS to barf
$cat >dep.h <<'EOCP'

EOCP
takeflags='flags=""
case
 "$@" in
*--*)
 for arg
 do
  shift
  case "$arg" in
  --) break;;
  *) flags="$flags $arg";;
  esac
 done;;
esac'
case "$mkdep" in
")
 ;;
*)
 if test -f "$mkdep" &&
  $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "$mkdep works."
?X: If they copied a config.sh from some other place, they'll have a working
?X: mkdep script probably, but not located at the top of the sources.  And
?X: the Makefiles generated by jmake expect an mkdep script in the top dir.
```

```
  case "$mkdep" in
  "$pkgsrc/mkdep");;
  *) echo "(copying it to $pkgsrc)"
   cp $mkdep $pkgsrc/mkdep 2>/dev/null
      if $pkgsrc/mkdep dep.c >dep.out 2>/dev/null &&
    $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1; then
    mkdep=$pkgsrc/mkdep
   else
    echo "Hmm... The copy failed or something... Guessing again..."
    mkdep=
   fi
   ;;
  esac
 else
  mkdep=
 fi
esac

case "$mkdep" in
")
?X: have to figure something out: Try cpp
?X: have
 to pass source names one by one to cpp...
 $spitshell > ../mkdep <<EOM
$startsh
$takeflags
for srcfile
do
 $cpp -M $cppflags \$flags \$srcfile 2>/dev/null
done
exit 0
EOM
 mkdep=$toplev/mkdep
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "Looks like we can use $cpp -M."
 else
  mkdep=
 fi
 ;;
esac

case "$mkdep" in
")
?X: have to figure something out: on NeXT, use cc -MM
```

```
?X: have to pass source names one by one to cc...
 $spitshell > ../mkdep <<EOM
$startsh
$takeflags
for srcfile
do
 $cc -MM $cppflags \$flags \$srcfile 2>/dev/null
done
exit 0
EOM
 mkdep=$toplev/mkdep
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o: dep.h" dep.out >/dev/null 2>&1
 then
  echo "Looks like we can use $cc -MM."
 else
  mkdep=
 fi
 ;;
esac

case "$mkdep" in
")
?X: still no luck -- try something fancier.
 $spitshell >../mkdep <<EOS
$startsh
$takeflags
for srcfile
do
 case
 "\$srcfile" in
 *.c) c='.c';;
 *.y) c='.y';;
 *.l) c='.l';;
 esac
 filebase=\`basename \$srcfile \$c\`
 <\$srcfile $cpp $cppminus $cppflags \$flags 2>/dev/null | \\
 $sed -e '/^# *[0-9]/!d' \\
  -e 's/^.*"\(.*\)".*\$/"\$filebase"$_o: \1/' \\
  -e 's|: \./|: |' \\
  -e 's|: *$|: "\$srcfile"|' | \\
 $grep -v '^#' | $sort | $uniq
done
exit 0
EOS
 mkdep=$toplev/mkdep
```

```
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "A shell script using $cpp does the trick."
 else
  echo "$cpp doesn't seem to be any use at all."
  $spitshell >../mkdep <<EOS
$startsh
$takeflags
files="\$@"
set X \$flags
shift
inc='.'
while test \$# -gt 0
do
 case "\$1" in
 -I)
  shift
  inc="\$inc:\$1"
  ;;
 -I*)
  dir=\`echo \$1 | sed -e 's/^-I//'\`
  inc="\$inc:\$dir"
  ;;
 esac
 shift
done
set X \$files
shift
trap "$rm -f /tmp/mkdep\$\$; exit 1" 1 2 3 15
for srcfile
do
 case "\$srcfile" in
 *.c) c='.c';;
 *.y) c='.y';;
 *.l)
 c='.l';;
 esac
 filebase=\`basename \$srcfile \$c\`
 echo \$filebase$_o: \$srcfile
 $grep '^#[  ]*include' \$srcfile /dev/null | \
 $sed -n -e 's/#[   ]*include[  ]*//' \\
  -e '/<\(.*\)>/ d' \\
  -e 's/:[^"]*"\([^"]*\)".*/: \1/' \\
  -e "s/\\.c:/$_o:/p" > /tmp/mkdep\$\$
?X: Deal with directories specified via -I requests to locate files
```

```
 IFS=': '
 while read file dep; do
  for dir in \$inc; do
   if $test -f "\$dir/\$dep"; then
    dep="\$dir/\$dep"
    break
   fi
  done
  echo "\$file: \$dep" | $sed -e 's,: \./,: ,'
 done </tmp/mkdep\$\$
 IFS=' '
 $rm -f /tmp/mkdep\$\$
done
exit 0
EOS
  mkdep=$toplev/mkdep
  chmod +x $mkdep
  $eunicefix $mkdep
  if $mkdep dep.c >dep.out 2>/dev/null &&
   $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
  then
   cat << EOM

I can use a script with grep instead, but it will make some incorrect
dependencies, since it doesn't understand about conditional compilation.
Moreover, some dependencies may be missing, because scanning won't be
a
 recursive process.
If you have a program which generates makefile dependencies, you may want
to use it.  If not, you can use the script and edit the Makefile by hand
if you need to.
EOM
  else
   mkdep=
   cat << EOM

I can't seem to generate makefile dependencies at all!  Perhaps you have a
program that does?  If you don't, you might look at the mkdep script to
see if you can create one which works.
EOM
  fi
 fi
esac
echo " "
dflt="$mkdep"
fn=f~/
rp="Name of program to make makefile dependencies?"
. ./getfile
```

```
mkdep="$ans"
$rm -f dep.c dep.h dep$_o dep.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mkdep.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: modetype.U,v 3.0.1.1 1994/10/29 16:25:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: modetype.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:25:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:modetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:modetype:
?S: This variable defines modetype to be something like mode_t,
?S: int, unsigned short, or whatever type is used to declare file
?S: modes for system calls.
?S:.
?C:Mode_t:
?C: This symbol holds the type used to declare
 file modes
?C: for systems calls.  It is usually mode_t, but may be
?C: int or unsigned short.  It may be necessary to include <sys/types.h>
?C: to get any typedef'ed information.
?C:.
?H:#define Mode_t $modetype  /* file mode parameter for system calls */
?H:.
?LINT:set modetype
: see what type is used for mode_t
rp="What is the type used for file modes for system calls (e.g. fchmod())?"
set mode_t modetype int stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/modetype.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_srand48_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_srand48_r srand48_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_srand48_r:
?S: This variable conditionally defines the HAS_SRAND48_R symbol,
?S: which indicates to the C program that the srand48_r()
?S: routine is available.
?S:.
?S:srand48_r_proto:
?S: This variable encodes the prototype of srand48_r.
?S: It is zero if d_srand48_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srand48_r
?S: is defined.
?S:.
?C:HAS_SRAND48_R:
?C: This symbol, if defined, indicates that the srand48_r routine
?C: is available to srand48 re-entrantly.
?C:.
?C:SRAND48_R_PROTO:
?C: This
 symbol encodes the prototype of srand48_r.
?C: It is zero if d_srand48_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srand48_r
?C: is defined.
?C:.
?H:#$d_srand48_r HAS_SRAND48_R /**/
?H:#define SRAND48_R_PROTO $srand48_r_proto /**/
?H:.
?T:try hdrs d_srand48_r_proto
: see if srand48_r exists
set srand48_r d_srand48_r
eval $inlibc
case "$d_srand48_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_srand48_r_proto:$usethreads" in
 ":define") d_srand48_r_proto=define
  set d_srand48_r_proto srand48_r $hdrs
```

```
 eval $hasproto ;;
*) ;;
esac
case "$d_srand48_r_proto" in
define)
case "$srand48_r_proto" in
"|0) try='int srand48_r(long, struct drand48_data*);'
./protochk "$extern_C $try" $hdrs && srand48_r_proto=I_LS ;;
esac
case "$srand48_r_proto" in
"|0) d_srand48_r=undef
 srand48_r_proto=0
 echo "Disabling srand48_r, cannot determine prototype." >&4 ;;
* ) case
"$srand48_r_proto" in
 REENTRANT_PROTO*) ;;
 *) srand48_r_proto="REENTRANT_PROTO_$srand48_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "srand48_r has no prototype, not using it." >&4 ;;
 esac
 d_srand48_r=undef
 srand48_r_proto=0
 ;;
esac
;;
*) srand48_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_srand48_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_log2: Inlibc
?MAKE: -pick add $@ %<
?S:d_log2:
?S: This variable conditionally defines the HAS_LOG2 symbol, which
?S: indicates to the C program that the log2() routine is available
?S: to compute log base two.
?S:.
?C:HAS_LOG2:
```

```
?C: This symbol, if defined, indicates that the log2 routine is
?C: available to do the log2 function.
?C:.
?H:#$d_log2 HAS_LOG2  /**/
?H:.
?LINT:set d_log2
: see if log2 exists
set log2 d_log2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_log2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotoent_r getprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotoent_r:
?S: This variable conditionally defines the HAS_GETPROTOENT_R symbol,
?S: which indicates to the C program that the getprotoent_r()
?S: routine is available.
?S:.
?S:getprotoent_r_proto:
?S: This variable encodes the prototype of getprotoent_r.
?S: It is zero if d_getprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotoent_r
?S: is defined.
?S:.
?C:HAS_GETPROTOENT_R:
?C: This symbol, if defined, indicates that the getprotoent_r
 routine
?C: is available to getprotoent re-entrantly.
?C:.
?C:GETPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of getprotoent_r.
?C: It is zero if d_getprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotoent_r
?C: is defined.
?C:.
?H:#$d_getprotoent_r HAS_GETPROTOENT_R /**/
```

```
?H:#define GETPROTOENT_R_PROTO $getprotoent_r_proto /**/
?H:.
?T:try hdrs d_getprotoent_r_proto
: see if getprotoent_r exists
set getprotoent_r d_getprotoent_r
eval $inlibc
case "$d_getprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotoent_r_proto:$usethreads" in
 ":define") d_getprotoent_r_proto=define
  set d_getprotoent_r_proto getprotoent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getprotoent_r_proto" in
 define)
 case "$getprotoent_r_proto" in
 "|0) try='int getprotoent_r(struct protoent*, char*, size_t, struct protoent**);'
 ./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SBWR
 ;;
 esac
 case "$getprotoent_r_proto" in
 "|0) try='int getprotoent_r(struct protoent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SBI ;;
 esac
 case "$getprotoent_r_proto" in
 "|0) try='struct protoent* getprotoent_r(struct protoent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=S_SBI ;;
 esac
 case "$getprotoent_r_proto" in
 "|0) try='int getprotoent_r(struct protoent*, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SD ;;
 esac
 case "$getprotoent_r_proto" in
 "|0) d_getprotoent_r=undef
  getprotoent_r_proto=0
  echo "Disabling getprotoent_r, cannot determine prototype." >&4 ;;
 * ) case "$getprotoent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getprotoent_r_proto="REENTRANT_PROTO_$getprotoent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getprotoent_r has no prototype, not using it." >&4 ;;
  esac
```

```
  d_getprotoent_r=undef
  getprotoent_r_proto=0
  ;;
 esac
 ;;
*) getprotoent_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotoent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: siteprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: siteprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:siteprefix siteprefixexp +oldsiteprefix: Getfile Loc Oldconfig cat package prefix
?MAKE: -pick add $@ %<
?S:siteprefix:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install add-on packages.
?S: See INSTALL for usage and examples.
?S:.
?S:siteprefixexp:
?S: This variable holds the full absolute path of the
 directory below
?S: which the user will install add-on packages.  Derived from siteprefix.
?S:.
?S:oldsiteprefix:
?S: This variable is set non-null if the siteprefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
: Set the siteprefix variables
$cat <<EOM

After $package is installed, you may wish to install various
```

```
add-on modules and utilities.  Typically, these add-ons will
be installed under $prefix with the rest
of this package.  However, you may wish to install such add-ons
elsewhere under a different prefix.

If you do not wish to put everything under a single prefix, that's
ok.  You will be prompted for the individual locations; this siteprefix
is only used to suggest the defaults.

The default should be fine for most people.

EOM
fn=d~+
rp='Installation prefix to use for add-on modules and utilities?'
: XXX Here might be another good place for an installstyle setting.
case "$siteprefix" in
") dflt=$prefix ;;
*)  dflt=$siteprefix
 ;;
esac
. ./getfile
: XXX Prefixit unit does not yet support siteprefix and vendorprefix
oldsiteprefix="
case "$siteprefix" in
") ;;
*) case "$ans" in
 "$prefix") ;;
 *) oldsiteprefix="$prefix";;
 esac
 ;;
esac
siteprefix="$ans"
siteprefixexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteprefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nis.U,v 3.0.1.3 1997/02/28 16:17:38 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: nis.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:17:38  ram
?RCS: patch61: ensure suitable defaults for hostcat and friends
?RCS:
?RCS: Revision 3.0.1.2  1995/03/21  08:48:34  ram
?RCS: patch52: continued fix for NeXT NIS/NetInfo handling
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:16:23  ram
?RCS: patch51: now correctly handles NeXT using NIS rather than NetInfo
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:passcat
 groupcat hostcat: Myread Oldconfig test contains
?MAKE: -pick add $@ %<
?S:passcat:
?S: This variable contains a command that produces the text of the
?S: /etc/passwd file.  This is normally "cat /etc/passwd", but can be
?S: "ypcat passwd" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
?S:groupcat:
?S: This variable contains a command that produces the text of the
?S: /etc/group file.  This is normally "cat /etc/group", but can be
?S: "ypcat group" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
?S:hostcat:
?S: This variable contains a command that produces the text of the
?S: /etc/hosts file.  This is normally "cat /etc/hosts", but can be
?S: "ypcat hosts" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
:
 see if we have to deal with yellow pages, now NIS.
?X: NeXT gives us some fun here, as always, by having both NIS (former YP)
?X: and NetInfo. But since it has both, it's ok to put the test inside the if.
?X: Contributed by Thomas Neumann <tom@smart.bo.open.de>.
if $test -d /usr/etc/yp || $test -d /etc/yp || $test -d /usr/lib/yp; then
@if passcat || groupcat
 case "$passcat" in
 nidump*) ;;
 *)
  case "$passcat" in
```

```
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the passwd file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) passcat='ypcat passwd'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='ypcat group'
@end
   ;;
  *) passcat='cat /etc/passwd'
@if groupcat
   echo "(Assuming /etc/group is also local.)"
   groupcat='cat /etc/group'
@end
   ;;
  esac
  ;;
 esac
@end
@if hostcat
 case "$hostcat" in
 nidump*) ;;
 *)
  case
 "$hostcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the hosts file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) hostcat='ypcat hosts';;
  *) hostcat='cat /etc/hosts';;
```

```
  esac
  ;;
 esac
@end
fi
?X: Ensure suitable default -- Manoj Srivastava
case "$hostcat" in
") test -f /etc/hosts && hostcat='cat /etc/hosts';;
esac
case "$groupcat" in
") test -f /etc/group && groupcat='cat /etc/group';;
esac
case "$passcat" in
") test -f /etc/passwd && passcat='cat /etc/passwd';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/nis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017 Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nl_langinfo_l d_thread_safe_nl_langinfo_l: Compile cat rm_try Oldconfig \
 i_pthread i_stdlib i_langinfo i_locale  \
 usethreads run
?MAKE: -pick add $@ %<
?S:d_nl_langinfo_l:
?S: This variable contains the eventual value of the
?S: HAS_NL_LANGINFO_L symbol, which indicates if the
?S: nl_langinfo_l() function exists.
?S:.
?S:d_thread_safe_nl_langinfo_l:
?S: This variable contains the eventual value of the
?S: HAS_THREAD_SAFE_NL_LANGINFO_L symbol, which indicates if the
?S: nl_langinfo_l() function exists and is thread-safe.
?S:.
?C:HAS_NL_LANGINFO_L:
?C: This symbol, when defined, indicates presence of the nl_langinfo_l()
?C: function
?C:.
?C:HAS_THREAD_SAFE_NL_LANGINFO_L:
?C: This symbol, when defined,
```

```
 indicates presence of the nl_langinfo_l()
?C: function, and that it is thread-safe.
?C:.
?H:#$d_nl_langinfo_l HAS_NL_LANGINFO_L /**/
?H:#$d_thread_safe_nl_langinfo_l HAS_THREAD_SAFE_NL_LANGINFO_L /**/
?H:.
?F:!try
: check for nl_langinfo_l item
$cat <<EOM

Checking to see if you have nl_langinfo_l(), and that it is thread-safe
EOM
?X: Despite claiming that nl_langinfo_l() is thread-safe, the POSIX 2008
?X: standard allows for a non-safe implementation:
?X:
?X:    "nl_langinfo_l() uses an internal per-thread buffer, and nl_langinfo()
?X: uses (in all threads) the same buffer that nl_langinfo_l() uses in the
?X: initial thread. There can be interactions, but only when
?X: nl_langinfo_l() is called in the initial thread"
?X:
?X: This program calls nl_langinfo_l(), then creates a thread, calling plain
?X: nl_langinfo() from within it, then sees if the buffer in the original
?X: thread was changed.
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#include
 <string.h>
#$i_langinfo I_LANGINFO
#ifdef I_LANGINFO
#  include <langinfo.h>
#endif
#$i_pthread I_PTHREAD
#ifdef I_PTHREAD
#  include <pthread.h>
#endif
#$i_locale I_LOCALE
#ifdef I_LOCALE
#  include <locale.h>
#endif

void *
thread_start(void * arg)
{
   nl_langinfo(RADIXCHAR);
}
```

```
int main() {
  char * main_buffer;
  char save_main_buffer[1000];
  pthread_t subthread;
  pthread_attr_t attr;

  main_buffer = nl_langinfo_l(CODESET, newlocale(LC_ALL_MASK, "C", 0));

  /* If too large for our generous allowance, just assume we don't have
   * it. */
  if (strlen(main_buffer) >= sizeof(save_main_buffer)) {
      exit(1);
  }

  strcpy(save_main_buffer, main_buffer);

  if (pthread_attr_init(&attr) != 0) {
      exit(1);
  }

  if (pthread_create(&subthread, &attr, thread_start, NULL) != 0) {
      exit(1);
  }

  if (pthread_join(subthread, NULL) != 0) {
      exit(1);
  }

  exit(! (strcmp(main_buffer, save_main_buffer) == 0));
}
EOCP
case
 "$usethreads" in
  define)
      set try
      if eval $compile; then
          echo "Your system has nl_langinfo_l()..." >&4
          d_nl_langinfo_l="$define"
          echo "$d_nl_langinfo_l" >&4
          if $run ./try; then
              echo "and it is thread-safe (just as I'd hoped)." >&4
              d_thread_safe_nl_langinfo_l="$define"
              echo "$d_thread_safe_nl_langinfo_l" >&4
          else
              echo "but it isn't thread-safe." >&4
          fi
      else
```

```
        echo "your system does not have nl_langinfo_l()" >&4
      fi
      ;;
  *) echo "Since threads aren't selected, we won't bother looking for nl_langinfo_l()" >&4
esac
if test X"$d_nl_langinfo_l" = X; then
 d_nl_langinfo_l="$undef"
fi
if test X"$d_thread_safe_nl_langinfo_l" = X; then
 d_thread_safe_nl_langinfo_l="$undef"
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_nl_langinfo_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msg.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msg: test d_msgctl d_msgget d_msgsnd d_msgrcv Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_msg:
?S: This variable conditionally defines the HAS_MSG symbol, which
?S: indicates that the entire msg*(2) library is present.
?S:.
?C:HAS_MSG:
?C: This symbol, if defined, indicates that the entire msg*(2) library is
?C: supported (IPC mechanism based on message queues).
?C:.
?H:#$d_msg
 HAS_MSG  /**/
?H:.
?T:h_msg
?LINT:set d_msg
: see how much of the 'msg*(2)' library is present.
h_msg=true
```

```
echo " "
case "$d_msgctl$d_msgget$d_msgsnd$d_msgrcv" in
*"$undef"*) h_msg=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID messages"*"not configured"*)
 echo "Your $osname does not have the msg*(2) configured." >&4
       h_msg=false
 val="$undef"
 set msgctl d_msgctl
 eval $setvar
 set msgget d_msgget
 eval $setvar
 set msgsnd d_msgsnd
 eval $setvar
 set msgrcv d_msgrcv
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_msg && $test `./findhdr sys/msg.h`; then
 echo "You have the full msg*(2) library." >&4
 val="$define"
else
 echo "You don't have the full msg*(2) library." >&4
 val="$undef"
fi
set d_msg
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_locale.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS:
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?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: i_locale.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:23  ram
?RCS: patch61: created
?RCS:
?MAKE:i_locale: Inhdr
?MAKE: -pick add $@ %<
?S:i_locale:
?S: This variable conditionally defines the I_LOCALE symbol,
?S: and indicates whether a C program should include <locale.h>.
?S:.
?C:I_LOCALE:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <locale.h>.
?C:.
?H:#$i_locale I_LOCALE  /**/
?H:.
?LINT:set
 i_locale
: see if locale.h is available
set locale.h i_locale
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_locale.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigsetjmp.U,v 3.0.1.1 1997/02/28 15:44:33 ram Exp $
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_sigsetjmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_sigsetjmp: Compile Setvar cat rm_try run i_stdlib
?MAKE: -pick add $@ %<
?S:d_sigsetjmp:
```

```
?S: This variable conditionally defines the HAS_SIGSETJMP symbol,
?S: which
 indicates that the sigsetjmp() routine is available to
?S: call setjmp() and optionally save the process's signal mask.
?S:.
?C:HAS_SIGSETJMP:
?C: This variable indicates to the C program that the sigsetjmp()
?C: routine is available to save the calling process's registers
?C: and stack environment for later use by siglongjmp(), and
?C: to optionally save the process's signal mask.  See
?C: Sigjmp_buf, Sigsetjmp, and Siglongjmp.
?C:.
?C:Sigjmp_buf:
?C: This is the buffer type to be used with Sigsetjmp and Siglongjmp.
?C:.
?C:Sigsetjmp:
?C: This macro is used in the same way as sigsetjmp(), but will invoke
?C: traditional setjmp() if sigsetjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?C:Siglongjmp:
?C: This macro is used in the same way as siglongjmp(), but will invoke
?C: traditional longjmp() if siglongjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?H:?%<:#$d_sigsetjmp HAS_SIGSETJMP /**/
?H:?%<:#ifdef HAS_SIGSETJMP
?H:?%<:#define Sigjmp_buf sigjmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask)
 sigsetjmp((buf),(save_mask))
?H:?%<:#define Siglongjmp(buf,retval) siglongjmp((buf),(retval))
?H:?%<:#else
?H:?%<:#define Sigjmp_buf jmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) setjmp((buf))
?H:?%<:#define Siglongjmp(buf,retval) longjmp((buf),(retval))
?H:?%<:#endif
?H:.
?W:%<:Sigjmp_buf Sigsetjmp Siglongjmp
?F:!try
?LINT:set d_sigsetjmp
: see if sigsetjmp exists
?X: We can't check for these symbols with Inlibc because sigsetjmp
?X: is (sometimes? always?) a macro under GCC
echo " "
case "$d_sigsetjmp" in
")
 $cat >try.c <<EOP
#include <setjmp.h>
```

```
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
sigjmp_buf env;
int set = 1;
int main()
{
 if (sigsetjmp(env,1))
  exit(set);
 set = 0;
 siglongjmp(env, 1);
 exit(1);
}
EOP
 set try
 if eval $compile; then
  if $run ./try >/dev/null 2>&1; then
   echo "POSIX sigsetjmp found." >&4
   val="$define"
  else
   $cat >&4 <<EOM
Uh-Oh! You have POSIX sigsetjmp and siglongjmp, but they do not work properly!!
I'll
 ignore them.
EOM
   val="$undef"
  fi
 else
  echo "sigsetjmp not found." >&4
  val="$undef"
 fi
 ;;
*) val="$d_sigsetjmp"
 case "$d_sigsetjmp" in
 $define) echo "POSIX sigsetjmp found." >&4;;
 $undef) echo "sigsetjmp not found." >&4;;
 esac
 ;;
esac
set d_sigsetjmp
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sigsetjmp.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: getopt.C,v 3.0.1.1 1994/01/24 13:58:40 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* Original Author: unknown, got this off net.sources
*
* $Log: getopt.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:40  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/getopt.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: lex.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:22:50  ram
?RCS: patch36: spurious single quote could cause Configure to crash
?RCS: patch36: (reported by Xavier Le Vourch <xavierl@eiffel.com>.)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:27:09  ram
?RCS: patch32: added lexflags variable for lex flags setting
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:06:01  ram
?RCS: patch23: added
 trailing blank line for metalint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:55  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lex lexflags: Guess Myread Oldconfig flex test
?MAKE: -pick add $@ %<
?S:lex:
?S: This variable holds the name of the lexical analyser generator we
?S: want to use in the Makefile. It can be lex or flex.
?S:.
?S:lexflags:
?S: This variable holds any flags that should be passed to the lexical
?S: analyzer.  It is up to the Makefile to use it.
?S:.
: determine lexical analyser generator
case "$lex" in
")
 dflt=lex;;
*)
 dflt="$lex";;
esac
echo " "
if $test -f "$flex"; then
 rp='Which lexical analyser generator (lex or flex) shall I use?'
else
 rp='Which lexical analyser generator shall I use?'
fi
. ./myread
lex="$ans"

@if lexflags
: if using lex this will normally be useless, but flex frequently takes args
echo " "
case "$lexflags" in
") dflt='none';;
*) dflt="$lexflags";;
esac
rp="What flags should be given to $lex?"
. ./myread
case "$ans"
 in
none) lexflags=";;
*) lexflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lex.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readdir64_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_readdir64_r readdir64_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_dirent extern_C
?MAKE: -pick add $@ %<
?S:d_readdir64_r:
?S: This variable conditionally defines the HAS_READDIR64_R symbol,
?S: which indicates to the C program that the readdir64_r()
?S: routine is available.
?S:.
?S:readdir64_r_proto:
?S: This variable encodes the prototype of readdir64_r.
?S: It is zero if d_readdir64_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir64_r
?S: is defined.
?S:.
?C:HAS_READDIR64_R:
?C: This symbol, if defined, indicates that the readdir64_r routine
?C: is
 available to readdir64 re-entrantly.
?C:.
?C:READDIR64_R_PROTO:
?C: This symbol encodes the prototype of readdir64_r.
?C: It is zero if d_readdir64_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir64_r
?C: is defined.
?C:.
?H:#$d_readdir64_r HAS_READDIR64_R /**/
?H:#define READDIR64_R_PROTO $readdir64_r_proto /**/
?H:.
?T:try hdrs d_readdir64_r_proto
: see if readdir64_r exists
set readdir64_r d_readdir64_r
eval $inlibc
case "$d_readdir64_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_dirent dirent.h"
 case "$d_readdir64_r_proto:$usethreads" in
 ":define") d_readdir64_r_proto=define
  set d_readdir64_r_proto readdir64_r $hdrs
```

```
 eval $hasproto ;;
*) ;;
esac
case "$d_readdir64_r_proto" in
define)
case "$readdir64_r_proto" in
"|0) try='int readdir64_r(DIR*, struct dirent64*, struct dirent64**);'
./protochk "$extern_C $try" $hdrs && readdir64_r_proto=I_TSR ;;
esac
case "$readdir64_r_proto" in
"|0) try='int readdir64_r(DIR*,
struct dirent64*);'
./protochk "$extern_C $try" $hdrs && readdir64_r_proto=I_TS ;;
esac
case "$readdir64_r_proto" in
"|0) d_readdir64_r=undef
 readdir64_r_proto=0
 echo "Disabling readdir64_r, cannot determine prototype." >&4 ;;
* ) case "$readdir64_r_proto" in
 REENTRANT_PROTO*) ;;
 *) readdir64_r_proto="REENTRANT_PROTO_$readdir64_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "readdir64_r has no prototype, not using it." >&4 ;;
 esac
 d_readdir64_r=undef
 readdir64_r_proto=0
 ;;
esac
;;
*) readdir64_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_readdir64_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_safebcpy.U,v 3.0.1.4 1997/02/28 15:40:58 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_safebcpy.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  15:40:58  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.3  1995/07/25  13:58:40  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:29:23  ram
?RCS: patch45: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/05/06  14:49:03  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safebcpy: cat d_bcopy Compile rm_try run \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safebcpy:
?S: This variable conditionally defines the HAS_SAFE_BCOPY symbol if
?S: the bcopy() routine can do overlapping copies.  Normally, you
?S: should probably use memmove().
?S:.
?C:HAS_SAFE_BCOPY (SAFE_BCOPY):
?C: This symbol, if defined, indicates that the bcopy routine is available
?C: to copy potentially overlapping memory blocks. Normally, you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
?H:#$d_safebcpy HAS_SAFE_BCOPY /**/
?H:.
?F:!try
?LINT: set d_safebcpy
: can bcopy handle overlapping blocks?
echo " "
?X: assume the worst.
val="$undef"
case "$d_memmove" in
"$define")
 echo "I'll use memmove() instead of bcopy() for overlapping copies." ;;
*) case "$d_bcopy" in
```

```
 "$define")
  echo "Checking to see if bcopy() can do overlapping copies..." >&4
  $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
bcopy("abcdefghijklmnopqrstuvwxyz0123456789", abc, 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  bcopy(abc, b, len);
  for (off = 1; off <= len; off++) {
   bcopy(b, b+off, len);
   bcopy(b+off,
 b, len);
   if (bcmp(b, abc, len))
    exit(1);
  }
 }
```

```
}
exit(0);
}
EOCP
  set try
  if eval $compile_ok; then
   if $run ./try 2>/dev/null; then
    echo "Yes, it can."
    val="$define"
   else
    echo "It can't, sorry."
   fi
  else
   echo "(I can't compile the test program, so we'll assume not...)"
  fi
  ;;
 esac
 $rm_try
 ;;
esac
set d_safebcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_safebcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_castneg.U,v 3.0.1.2 1995/05/12 12:11:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_castneg.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:11:21  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS: patch54: added improved test case for Interactive Unix
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:10:50  ram
?RCS: patch36: don't forget to tell user about compilation failures (ADO)
?RCS: patch36: declare signal handler correctly using 'signal_t' (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:47  ram
?RCS: Baseline
```

```
 for dist 3.0 netwide release.
?RCS:
?X:
?X: Can the compiler cast negative / odd floats to unsigned values.
?X:
?MAKE:d_castneg castflags: cat Compile rm_try Setvar signal_t run i_stdlib
?MAKE: -pick add $@ %<
?S:d_castneg:
?S: This variable conditionally defines CASTNEG, which indicates
?S: whether the C compiler can cast negative float to unsigned.
?S:.
?S:castflags:
?S: This variable contains a flag that precise difficulties the
?S: compiler has casting odd floating values to unsigned long:
?S:  0 = ok
?S:  1 = couldn't cast < 0
?S:  2 = couldn't cast >= 0x80000000
?S:  4 = couldn't cast in argument expression list
?S:.
?C:CASTNEGFLOAT:
?C: This symbol is defined if the C compiler can cast negative
?C: numbers to unsigned longs, ints and shorts.
?C:.
?C:CASTFLAGS:
?C: This symbol contains flags that say what difficulties the compiler
?C: has casting odd floating values to unsigned long:
?C:  0 = ok
?C:  1 = couldn't cast < 0
?C:  2 = couldn't cast >= 0x80000000
?C:  4 = couldn't
 cast in argument expression list
?C:.
?H:#$d_castneg CASTNEGFLOAT  /**/
?H:#define CASTFLAGS $castflags  /**/
?H:.
?F:!try
?LINT:set d_castneg
: check for ability to cast negative floats to unsigned
echo " "
echo 'Checking whether your C compiler can cast negative float to unsigned.' >&4
$cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
```

```
$signal_t blech(int s) { exit(7); }
$signal_t blech_in_list(int s) { exit(4); }
unsigned long dummy_long(unsigned long p) { return p; }
unsigned int dummy_int(unsigned int p) { return p; }
unsigned short dummy_short(unsigned short p) { return p; }
int main()
{
 double f;
 unsigned long along;
 unsigned int aint;
 unsigned short ashort;
 int result = 0;
 char str[16];

 /* Frustrate gcc-2.7.2's optimizer which failed this test with
    a direct f = -123. assignment.  gcc-2.8.0 reportedly
    optimized the whole file away
 */
 /* Store the number in a writable
 string for gcc to pass to
    sscanf under HP-UX.
 */
 sprintf(str, "-123");
 sscanf(str, "%lf", &f);  /* f = -123.; */

 signal(SIGFPE, blech);
 along = (unsigned long)f;
 aint = (unsigned int)f;
 ashort = (unsigned short)f;
 if (along != (unsigned long)-123)
  result |= 1;
 if (aint != (unsigned int)-123)
  result |= 1;
 if (ashort != (unsigned short)-123)
  result |= 1;
 sprintf(str, "1073741824.");
 sscanf(str, "%lf", &f); /* f = (double)0x40000000; */
 f = f + f;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x80000000)
  result |= 2;
 f -= 1.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x7fffffff)
  result |= 1;
 f += 2.;
```

```
 along = 0;
 along = (unsigned long)f;
 if (along != 0x80000001)
  result |= 2;
 if (result)
  exit(result);
?X:
?X: The following is a test for Interactive Unix Version 4.1, which
?X: has an 'improved' compiler which can correctly cast negative
?X: floats in expression lists, but apparently not in argument lists.
?X: Contributed by Winfried Koenig
 <win@incom.rhein-main.de>
?X:
 signal(SIGFPE, blech_in_list);
 sprintf(str, "123.");
 sscanf(str, "%lf", &f);  /* f = 123.; */
 along = dummy_long((unsigned long)f);
 aint = dummy_int((unsigned int)f);
 ashort = dummy_short((unsigned short)f);
 if (along != (unsigned long)123)
  result |= 4;
 if (aint != (unsigned int)123)
  result |= 4;
 if (ashort != (unsigned short)123)
  result |= 4;
 exit(result);

}
EOCP
set try
if eval $compile_ok; then
 $run ./try 2>/dev/null
 castflags=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 castflags=7
fi
case "$castflags" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_castneg
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_castneg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syswait.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_syswait.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/wait.h> is available or not
?X:
?MAKE:i_syswait: Inhdr
?MAKE: -pick add $@ %<
?S:i_syswait:
?S: This variable conditionally defines I_SYS_WAIT, which indicates
?S: to the C program that it should include <sys/wait.h>.
?S:.
?C:I_SYS_WAIT (I_SYSWAIT):
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <sys/wait.h>.
?C:.
?H:#$i_syswait I_SYS_WAIT /**/
?H:.
?LINT:set i_syswait
: see if this is a syswait system
set sys/wait.h i_syswait
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syswait.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extensions.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: Extensions.U,v $
?RCS:
?MAKE:known_extensions extensions dynamic_ext static_ext nonxs_ext \
 useposix useopcode uselanginfo : \
 Myread hint usedl d_sem d_socket i_db i_dbm i_rpcsvcdbm i_gdbm \
 d_ndbm package test cat rsrc \
 d_msg d_shm osname use64bitint \
 libs d_cplusplus sed ls rm contains trnl sort
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:known_extensions:
?S: This variable holds a list of all extensions (both XS and non-xs)
?S: included in the package source distribution.  This information is
?S: only really of use during the Perl build, as the list makes no
?S: distinction between extensions which were build and installed, and
?S: those which where not.  See "extensions"
 for the list of extensions
?S: actually built and available.
?S:.
?S:dynamic_ext:
?S: This variable holds a list of XS extension files we want to
?S: link dynamically into the package.  It is used by Makefile.
?S:.
?S:static_ext:
?S: This variable holds a list of XS extension files we want to
?S: link statically into the package.  It is used by Makefile.
?S:.
?S:nonxs_ext:
?S: This variable holds a list of all non-xs extensions built and
?S: installed by the package.  By default, all non-xs extensions
?S: distributed will be built, with the exception of platform-specific
?S: extensions (currently only one VMS specific extension).
?S:.
?S:extensions:
?S: This variable holds a list of all extension files (both XS and
?S: non-xs) installed with the package.  It is propagated to Config.pm
?S: and is typically used to test whether a particular extension
?S: is available.
?S:.
?S:useposix:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the POSIX extension should
 be used.  The sole
?S: use for this currently is to allow an easy mechanism
?S: for hints files to indicate that POSIX will not compile
```

```
?S: on a particular system.
?S:.
?S:useopcode:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the Opcode extension should be used.  The sole
?S: use for this currently is to allow an easy mechanism
?S: for users to skip the Opcode extension from the Configure
?S: command line.
?S:.
?S:uselanginfo:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the I18N::Langinfo extension should be used.  The sole
?S: use for this currently is to allow an easy mechanism for users to skip
?S: this extension from the Configure command line.
?S:.
?T:xxx avail_ext this_ext tdir xs_extensions nonxs_extensions find_extensions
?INIT:: set useposix=false in your hint file to disable the POSIX extension.
?INIT:useposix=true
?INIT:: set useopcode=false in your hint file to disable the Opcode extension.
?INIT:useopcode=true
?INIT::
 set uselanginfo=false in your hint file to disable the I18N::Langinfo extension.
?INIT:uselanginfo=true
?LINT:extern noextensions
?LINT:extern onlyextensions
?T:keepextensions i
: Check extensions
echo " "
echo "Looking for extensions..." >&4
: If we are using the old config.sh, nonxs_extensions and xs_extensions may
: contain old or inaccurate or duplicate values.
nonxs_extensions=''
xs_extensions=''
: We do not use find because it might not be available.
: We do not just use MANIFEST because the user may have dropped
: some additional extensions into the source tree and expect them
: to be built.

: Function to recursively find available extensions, ignoring DynaLoader
: NOTE: recursion limit of 10 to prevent runaway in case of symlink madness
: In 5.10.1 and later, extensions are stored in directories
: like File-Glob instead of the older File/Glob/.
find_extensions='
   for xxx in *; do
 case "$xxx" in
    DynaLoader|dynaload) ;;
    *)
    this_ext=`echo "$xxx" | $sed -e s/-/\\/g`;
```

```
  case "$this_ext" in
 Scalar/List/Utils) this_ext="List/Util" ;;
 PathTools)         this_ext="Cwd" ;;
   esac;
   echo " $xs_extensions $nonxs_extensions" > "$tdir/$$.tmp";
   if $contains " $this_ext " "$tdir/$$.tmp"; then
 echo >&4;
 echo "Duplicate directories detected for extension $xxx" >&4;
 echo "Configure cannot correctly recover from this - shall I abort?" >&4;
 case "$knowitall" in
 "") dflt=y;;
 *) dflt=n;;
 esac;
 . ../UU/myread;
 case "$ans" in
 n*|N*) ;;
 *) echo >&4;
    echo "Ok.  Stopping Configure." >&4;
    echo "Please remove the duplicate directory (e.g. using git clean) and then re-run Configure" >&4;
    exit 1;;
 esac;
 echo "Ok.  You will need to correct config.sh before running make." >&4;
   fi;
   $ls -1 "$xxx" > "$tdir/$$.tmp";
   if   $contains "\.xs$" "$tdir/$$.tmp" > /dev/null 2>&1; then
 xs_extensions="$xs_extensions $this_ext";
   elif $contains "\.c$"  "$tdir/$$.tmp" > /dev/null 2>&1; then
 xs_extensions="$xs_extensions
$this_ext";
   elif $test -d "$xxx"; then
 nonxs_extensions="$nonxs_extensions $this_ext";
   fi;
   $rm -f "$tdir/$$.tmp";
   ;;
esac;
  done'
tdir=`pwd`
cd "$rsrc/cpan"
set X
shift
eval $find_extensions
cd "$rsrc/dist"
set X
shift
eval $find_extensions
cd "$rsrc/ext"
set X
```

```
shift
eval $find_extensions
set X $xs_extensions
shift
xs_extensions=`echo "$*" | tr ' ' $trnl | $sort | tr $trnl ' '`
set X $nonxs_extensions
shift
nonxs_extensions=`echo "$*" | tr ' ' $trnl | $sort | tr $trnl ' '`
cd "$tdir"
known_extensions=`echo $nonxs_extensions $xs_extensions  | tr ' ' $trnl | $sort | tr $trnl ' '`

: Now see which are supported on this system.
?X: avail_ext lists available XS extensions.
avail_ext="
for xxx in $xs_extensions ; do
 case "$xxx" in
?X: Handle possible DOS 8.3 filename and case alterations
 Amiga*)
  case "$osname" in
  amigaos) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 DB_File|db_file)
  case "$i_db" in
  $define) avail_ext="$avail_ext $xxx"
 ;;
  esac
  ;;
 GDBM_File|gdbm_fil)
  case "$i_gdbm" in
  $define) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 IPC/SysV|ipc/sysv)
  : XXX Do we need a useipcsysv variable here
  case "${d_msg}${d_sem}${d_shm}" in
  *"${define}"*) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 NDBM_File|ndbm_fil)
  case "$d_ndbm" in
  $define)
     case "$osname-$use64bitint" in
     hpux-define)
   case "$libs" in
   *-lndbm*) avail_ext="$avail_ext $xxx" ;;
   esac
   ;;
```

```
    *) avail_ext="$avail_ext $xxx" ;;
    esac
    ;;
 esac
 ;;
ODBM_File|odbm_fil)
 case "${i_dbm}${i_rpcsvcdbm}" in
 *"${define}"*)
    case "$d_cplusplus" in
    define) ;; # delete as a function name will not work
    *)  case "$osname-$use64bitint" in
  hpux-define)
     case "$libs" in
     *-ldbm*) avail_ext="$avail_ext $xxx" ;;
     esac
     ;;
  *) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
    esac
    ;;
 esac
 ;;
Opcode|opcode)
 case "$useopcode" in
 true|define|y) avail_ext="$avail_ext
$xxx" ;;
 esac
 ;;
POSIX|posix)
 case "$useposix" in
 true|define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
Socket|socket)
 case "$d_socket" in
 true|$define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
I18N/Langinfo|langinfo)
 case "$uselanginfo" in
 true|define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
Sys/Syslog|sys/syslog)
 case $osname in
  amigaos) ;; # not really very useful on AmigaOS
  *)
```

```
  : XXX syslog requires socket
  case "$d_socket" in
  true|$define|y) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 esac
 ;;
threads|threads/shared)
 # threads and threads::shared are special cases.
 # To stop people from asking "Perl 5.8.0 was supposed
 # to have this new fancy threads implementation but my
 # perl doesn't have it" and from people trying to
 # (re)install the threads module using CPAN.pm and
 # CPAN.pm then offering to reinstall Perl 5.8.0,
 # the threads.pm and threads/shared.pm will always be
 # there, croaking informatively ("you
need to rebuild
 # all of Perl with threads, sorry") when threads haven't
 # been compiled in.
 # --jhi
 avail_ext="$avail_ext $xxx"
 ;;
VMS*)
 ;;
Win32*)
 case "$osname" in
 cygwin) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
XS/APItest|xs/apitest)
 # This is just for testing.  Skip it unless we have dynamic loading.

 case "$usedl" in
 $define) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
XS/Typemap|xs/typemap)
 # This is just for testing.  Skip it unless we have dynamic loading.
 case "$usedl" in
 $define) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
*) avail_ext="$avail_ext $xxx"
 ;;
esac
done

set X $avail_ext
```

```
shift
avail_ext="$*"

case "$onlyextensions" in
") ;;
*)  keepextensions="
   echo "You have requested that only certain extensions be included..." >&4
   for i in $onlyextensions; do
       case " $avail_ext " in
       *" $i "*)
           echo "Keeping extension $i."
           keepextensions="$keepextensions $i"
           ;;
       *) echo "Ignoring
 extension $i." ;;
       esac
   done
   avail_ext="$keepextensions"
   ;;
esac

case "$noextensions" in
") ;;
*)  keepextensions="
   echo "You have requested that certain extensions be ignored..." >&4
   for i in $avail_ext; do
       case " $noextensions " in
       *" $i "*) echo "Ignoring extension $i." ;;
       *) echo "Keeping extension $i.";
          keepextensions="$keepextensions $i"
          ;;
       esac
   done
   avail_ext="$keepextensions"
   ;;
esac

: Now see which nonxs extensions are supported on this system.
: For now assume all are.
nonxs_ext="
for xxx in $nonxs_extensions ; do
 case "$xxx" in
 VMS*)
  ;;
 *) nonxs_ext="$nonxs_ext $xxx"
  ;;
 esac
done
```

```
set X $nonxs_ext
shift
nonxs_ext="$*"

case $usedl in
$define)
 $cat <<EOM
A number of extensions are supplied with $package.  You may choose to
compile these extensions for dynamic loading (the default), compile
them into the $package executable (static loading), or not include
them at all.
  Answer "none" to include no extensions.
Note that DynaLoader is always built and need not be mentioned here.

EOM
 case "$dynamic_ext" in
 ")
  : Exclude those listed in static_ext
  dflt="
  for xxx in $avail_ext; do
   case " $static_ext " in
   *" $xxx "*) ;;
   *) dflt="$dflt $xxx" ;;
   esac
  done
  set X $dflt
  shift
  dflt="$*"
  ;;
 *) dflt="$dynamic_ext"
  # Perhaps we are reusing an old out-of-date config.sh.
  case "$hint" in
  previous)
   if test X"$dynamic_ext" != X"$avail_ext"; then
    $cat <<EOM
NOTICE:  Your previous config.sh list may be incorrect.
The extensions now available to you are
 ${avail_ext}
but the default list from your previous config.sh is
 ${dynamic_ext}

EOM
   fi
   ;;
  esac
  ;;
 esac
```

```
 case "$dflt" in
 ") dflt=none;;
 esac
 rp="What extensions do you wish to load dynamically?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
 none) dynamic_ext=' ' ;;
 *) dynamic_ext="$ans" ;;
 esac

 case "$static_ext"
 in
 ")
  : Exclude those already listed in dynamic linking
  dflt="
  for xxx in $avail_ext; do
   case " $dynamic_ext " in
   *" $xxx "*) ;;
   *) dflt="$dflt $xxx" ;;
   esac
  done
  set X $dflt
  shift
  dflt="$*"
  ;;
 *)  dflt="$static_ext"
  ;;
 esac

 case "$dflt" in
 ") dflt=none;;
 esac
 rp="What extensions do you wish to load statically?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
 none) static_ext=' ' ;;
 *) static_ext="$ans" ;;
 esac
 ;;
*)
 $cat <<EOM
A number of extensions are supplied with $package.  Answer "none"
to include no extensions.
Note that DynaLoader is always built and need not be mentioned here.

EOM
```

```
 case "$static_ext" in
 ") dflt="$avail_ext" ;;
 *) dflt="$static_ext"
  # Perhaps we are reusing an old out-of-date config.sh.
  case "$hint" in
  previous)
   if test X"$static_ext" != X"$avail_ext"; then
    $cat <<EOM
NOTICE:  Your previous config.sh list may be incorrect.
The extensions now available
 to you are
 ${avail_ext}
but the default list from your previous config.sh is
 ${static_ext}

EOM
   fi
   ;;
  esac
  ;;
 esac
 : Exclude those that are not xs extensions
 case "$dflt" in
 ") dflt=none;;
 esac
 rp="What extensions do you wish to include?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
 none) static_ext=' ' ;;
 *) static_ext="$ans" ;;
 esac
 ;;
esac
#
# Encode is a special case.  If we are building Encode as a static
# extension, we need to explicitly list its subextensions as well.
# For other nested extensions, this is handled automatically by
# the appropriate Makefile.PL.
case " $static_ext " in
 *" Encode "*) # Add the subextensions of Encode
 cd "$rsrc/cpan"
 for xxx in `ls Encode/*/Makefile.PL|awk -F/ '{print $2}'`; do
  static_ext="$static_ext Encode/$xxx"
  known_extensions="$known_extensions Encode/$xxx"
 done
 cd "$tdir"
 ;;
```

```
esac

set X $dynamic_ext $static_ext $nonxs_ext
shift
extensions="$*"

# Sanity check:
  We require an extension suitable for use with
# AnyDBM_File, as well as Fcntl and IO.  (Failure to have these
# should show up as failures in the test suite, but it's helpful to
# catch them now.) The 'extensions' list is normally sorted
# alphabetically, so we need to accept either
#    DB_File ... Fcntl ... IO  ....
# or something like
#    Fcntl ... NDBM_File ... IO  ....
case " $extensions"  in
*"_File "*" Fcntl "*" IO "*) ;; # DB_File
*" Fcntl "*"_File "*" IO "*) ;; # GDBM_File
*" Fcntl "*" IO "*"_File "*) ;; # NDBM_File
*) echo "WARNING: Extensions DB_File or *DBM_File, Fcntl, and IO not configured." >&4
  echo "WARNING: The Perl you are building will be quite crippled." >& 4
  ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Extensions.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctermid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ctermid.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ctermid: Inlibc
?MAKE: -pick add $@ %<
?S:d_ctermid:
?S: This variable conditionally defines CTERMID if ctermid() is
?S: available to generate filename for terminal.
?S:.
```

```
?C:HAS_CTERMID (CTERMID):
?C: This symbol, if defined, indicates that the ctermid routine is
?C: available to generate filename for terminal.
?C:.
?H:#$d_ctermid
 HAS_CTERMID  /**/
?H:.
?LINT:set d_ctermid
: see if ctermid exists
set ctermid d_ctermid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ctermid.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_cmsghdr_s: Hasstruct i_systypes d_socket i_sysuio Setvar
?MAKE: -pick add $@ %<
?S:d_cmsghdr_s:
?S: This variable conditionally defines the HAS_STRUCT_CMSGHDR symbol,
?S: which indicates that the struct cmsghdr is supported.
?S:.
?C:HAS_STRUCT_CMSGHDR:
?C: This symbol, if defined, indicates that the struct cmsghdr
?C: is supported.
?C:.
?H:#$d_cmsghdr_s HAS_STRUCT_CMSGHDR /**/
?H:.
?LINT:set d_cmsghdr_s
: Check for cmsghdr support
echo " "
echo "Checking to see if your system supports struct cmsghdr..." >&4
set d_cmsghdr_s cmsghdr $i_systypes sys/types.h $d_socket sys/socket.h $i_sysuio sys/uio.h
eval $hasstruct
case "$d_cmsghdr_s" in
"$define")      echo "Yes, it does."   ;;
*)              echo
 "No, it doesn't." ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_cmsghdr_s.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: modetype.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:25:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:modetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:modetype:
?S: This variable defines modetype to be something like mode_t,
?S: int, unsigned short, or whatever type is used to declare file
?S: modes for system calls.
?S:.
?C:Mode_t:
?C: This symbol holds the type used to declare file modes
?C: for systems calls.
  It is usually mode_t, but may be
?C: int or unsigned short.  It may be necessary to include <sys/types.h>
?C: to get any typedef'ed information.
?C:.
?H:#define Mode_t $modetype  /* file mode parameter for system calls */
?H:.
: see what type is used for mode_t
set mode_t modetype int stdio.h sys/types.h
eval $typedef
dflt="$modetype"
echo " "
rp="What type is used for file modes?"
. ./myread
modetype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/modetype.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sizesize: Myread Typedef sizetype Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:sizesize:
?S: This variable contains the size of a sizetype in bytes.
?S:.
?C:Size_t_size:
?C: This symbol holds the size of a Size_t in bytes.
?C:.
?H:#define Size_t_size $sizesize  /**/
?H:.
?T:yyy zzz
?F:!try
: Check size of size
echo " "
case "$sizetype" in
*_t) zzz="$sizetype" ;;
*)   zzz="filesize" ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($sizetype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") sizesize=4
  echo "(I can't execute the test program--guessing $sizesize.)" >&4
  ;;
```

```
 *) sizesize=$yyy
  echo "Your $zzz size is $sizesize bytes."
  ;;
 esac
else
 sizesize=4
 echo "(I can't compile the test program--guessing $sizesize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/sizesize.U
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```
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_isascii.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:13:39  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:32  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_isascii: cc cat ccflags ldflags rm libs Setvar
?MAKE: -pick add $@ %<
?S:d_isascii:
?S: This variable conditionally defines the HAS_ISASCII constant,
?S: which indicates to the C program that isascii()
 is available.
?S:.
?C:HAS_ISASCII:
?C: This manifest constant lets the C program know that isascii
?C: is available.
?C:.
?H:#$d_isascii HAS_ISASCII  /**/
?H:.
?LINT:set d_isascii
?X: Can't use Inlibc because isascii() might be a macro.
: Look for isascii
```

```
echo " "
$cat >isascii.c <<'EOCP'
#include <stdio.h>
#include <ctype.h>
int main() {
 int c = 'A';
 if (isascii(c))
  exit(0);
 else
  exit(1);
}
EOCP
if $cc $ccflags $ldflags -o isascii isascii.c $libs >/dev/null 2>&1 ; then
 echo "isascii() found." >&4
 val="$define"
else
 echo "isascii() NOT found." >&4
 val="$undef"
fi
set d_isascii
eval $setvar
$rm -f isascii*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_isascii.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ctime64 d_localtime64 d_gmtime64 d_mktime64 d_difftime64 d_asctime64: Inlibc
?MAKE: -pick add $@ %<
?S:d_ctime64:
?S: This variable conditionally defines the HAS_CTIME64 symbol, which
?S: indicates to the C program that the ctime64 () routine is available.
?S:.
?S:d_localtime64:
?S: This variable conditionally defines the HAS_LOCALTIME64 symbol, which
?S: indicates to the C program that the localtime64 () routine is available.
?S:.
?S:d_gmtime64:
?S: This variable conditionally defines the HAS_GMTIME64 symbol, which
?S: indicates to the C program that the gmtime64 () routine is available.
?S:.
```

```
?S:d_mktime64:
?S: This variable conditionally defines the HAS_MKTIME64 symbol, which
?S: indicates to the
 C program that the mktime64 () routine is available.
?S:.
?S:d_difftime64:
?S: This variable conditionally defines the HAS_DIFFTIME64 symbol, which
?S: indicates to the C program that the difftime64 () routine is available.
?S:.
?S:d_asctime64:
?S: This variable conditionally defines the HAS_ASCTIME64 symbol, which
?S: indicates to the C program that the asctime64 () routine is available.
?S:.
?C:HAS_CTIME64:
?C: This symbol, if defined, indicates that the ctime64 () routine is
?C: available to do the 64bit variant of ctime ()
?C:.
?C:HAS_LOCALTIME64:
?C: This symbol, if defined, indicates that the localtime64 () routine is
?C: available to do the 64bit variant of localtime ()
?C:.
?C:HAS_GMTIME64:
?C: This symbol, if defined, indicates that the gmtime64 () routine is
?C: available to do the 64bit variant of gmtime ()
?C:.
?C:HAS_MKTIME64:
?C: This symbol, if defined, indicates that the mktime64 () routine is
?C: available to do the 64bit variant of mktime ()
?C:.
?C:HAS_DIFFTIME64:
?C: This
 symbol, if defined, indicates that the difftime64 () routine is
?C: available to do the 64bit variant of difftime ()
?C:.
?C:HAS_ASCTIME64:
?C: This symbol, if defined, indicates that the asctime64 () routine is
?C: available to do the 64bit variant of asctime ()
?C:.
?H:#$d_ctime64 HAS_CTIME64  /**/
?H:#$d_localtime64 HAS_LOCALTIME64  /**/
?H:#$d_gmtime64 HAS_GMTIME64  /**/
?H:#$d_mktime64 HAS_MKTIME64  /**/
?H:#$d_difftime64 HAS_DIFFTIME64  /**/
?H:#$d_asctime64 HAS_ASCTIME64  /**/
?H:.
?LINT:set d_ctime64 d_localtime64 d_gmtime64 d_mktime64 d_difftime64 d_asctime64
: see if 64bit time functions exists
```

```
set ctime64 d_ctime64
eval $inlibc

set localtime64 d_localtime64
eval $inlibc

set gmtime64 d_gmtime64
eval $inlibc

set mktime64 d_mktime64
eval $inlibc

set difftime64 d_difftime64
eval $inlibc

set asctime64 d_asctime64
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_timefuncs64.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getespwnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getespwnam:
?S: This variable conditionally defines HAS_GETESPWNAM if getespwnam() is
?S: available to retrieve enhanced (shadow) password entries by name.
?S:.
?C:HAS_GETESPWNAM:
?C: This symbol, if defined, indicates that the getespwnam system call is
?C: available to retrieve enhanced (shadow) password entries by name.
?C:.
?H:#$d_getespwnam HAS_GETESPWNAM  /**/
?H:.
?LINT:set d_getespwnam
: see if getespwnam exists
set getespwnam d_getespwnam
eval $inlibc
```

Found in
 path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getespwnam.U
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```
?RCS: $Id: i_dlfcn.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_dlfcn.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:53  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_dlfcn: Inhdr
?MAKE: -pick add $@ %<
?S:i_dlfcn:
?S: This variable conditionally defines the I_DLFCN symbol, which
?S: indicates to the C program that <dlfcn.h> exists and should
?S: be included.
?S:.
?C:I_DLFCN:
?C: This symbol, if defined, indicates that <dlfcn.h> exists
 and should
?C: be included.
?C:.
?H:#$i_dlfcn I_DLFCN  /**/
?H:.
?LINT:set i_dlfcn
: see if dlfcn is available
set dlfcn.h i_dlfcn
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dlfcn.U
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```
?RCS: $Id: d_strccmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strccmp.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  14:54:34  ram
?RCS: patch23: fixed a typo (WED)
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:04:39  ram
?RCS: patch10: created (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strccmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_strccmp:
?S: This variable conditionally defines the HAS_STRCASECMP symbol, which
?S: indicates to the C program
 that the strcasecmp() routine is available
?S: for case-insensitive string compares.
?S:.
?C:HAS_STRCASECMP:
?C: This symbol, if defined, indicates that the strcasecmp() routine is
?C: available for case-insensitive string compares.
?C:.
?H:#$d_strccmp HAS_STRCASECMP /**/
?H:.
?LINT:set d_strccmp
: see if strcasecmp exists
set strcasecmp d_strccmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strccmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cf_who.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:28:50  ram
?RCS: patch61: new computation method avoiding use of temporary file
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:42:34  ram
?RCS: patch23: login name now computed the hard way
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Oldconfig dependency is there to ensure computation occurs after old values
?X: from config.sh have been loaded, so that we can supersede them.
?X:
?MAKE:cf_time
 cf_by: date Oldconfig
?MAKE: -pick add $@ %<
?S:cf_time:
?S: Holds the output of the "date" command when the configuration file was
?S: produced. This is used to tag both config.sh and config_h.SH.
?S:.
?S:cf_by:
?S: Login name of the person who ran the Configure script and answered the
?S: questions. This is used to tag both config.sh and config_h.SH.
?S:.
?LINT:change LC_ALL LANGUAGE
: who configured the system
?X: Ensure English date -- Jarkko Hietaniemi
cf_time=`LC_ALL=C; LANGUAGE=C; export LC_ALL; export LANGUAGE; $date 2>&1`
?X:
?X: Leave a white space between first two '(' for ksh. The sub-shell is needed
?X: on some machines to avoid the error message when logname is not found; e.g.
?X: on SUN-OS 3.2, (logname || whoami) would not execute whoami if logname was
?X: not found. Sigh!
?X:
?X: Convex had a broken logname executable which returned a non-zero status,
?X: and that broke the previous:
?X:   cf_by=`( (logname) 2>/dev/null || whoami) 2>&1`
?X: Switch to emergency
 mode... -- RAM, 19/04/94
?X:
?X: Parentheses needed to avoid error message if the program does not exist.
?X: Uses case instead of $test so it can be put before $test is defined.
?X: Don't redirect to a file because on Ultrix (under script?) logname
?X: outputs a blank line first.  This method will apparently work.
case "$cf_by" in
```

```
"")
 cf_by=`(logname) 2>/dev/null`
 case "$cf_by" in
 "")
  cf_by=`(whoami) 2>/dev/null`
  case "$cf_by" in
  "") cf_by=unknown ;;
  esac ;;
 esac ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_who.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_difftime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_difftime.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:31  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_difftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_difftime:
?S: This variable conditionally defines the HAS_DIFFTIME symbol, which
?S: indicates to the C program that the difftime() routine is available.
?S:.
?C:HAS_DIFFTIME :
?C: This symbol, if defined, indicates that
 the difftime routine is
?C: available.
?C:.
?H:#$d_difftime HAS_DIFFTIME  /**/
?H:.
?LINT:set d_difftime
: see if difftime exists
set difftime d_difftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_difftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: End.U,v 3.0 1993/08/18 12:04:51 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: End.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit serves as the goal which forces make to choose all the units that
?X: ask questions.  The $W on the ?MAKE: line is the list of all symbols wanted.
?X: To force any unit to be included, copy this unit to your private U directory
?X: and add the name of the unit desired to the ?MAKE: dependency line.
?X:
?MAKE:End perllibs: $W cppstdin gzip zip
 libs usedl osname osvers
?MAKE: -pick add $@ %<
?S:perllibs:
?S: The list of libraries needed by Perl only (any libraries needed
?S: by extensions only will by dropped, if using dynamic loading).
?S:.
?INIT:perllibs="
?LINT:use $W
?LINT:use gzip zip
?LINT:change cppstdin
: Remove libraries needed only for extensions
: The appropriate ext/Foo/Makefile.PL will add them back in, if necessary.
: The exception is SunOS 4.x, which needs them.
case "${osname}X${osvers}" in
sunos*X4*)
   perllibs="$libs"
   ;;
*) case "$usedl" in
   $define|true|[yY]*)
     set X `echo " $libs " | sed -e 's@ -lndbm @ @' -e 's@ -lgdbm @ @' -e 's@ -lgdbm_compat @ @' -e 's@ -ldbm @
@' -e 's@ -ldb @ @'`
     shift
```

```
    perllibs="$*"
    ;;
  *) perllibs="$libs"
    ;;
  esac
  ;;
esac

?X: If the user has the cppstdin wrapper, perl.c will try to call
?X: CPPSTDIN, but that will point to a location in the build
?X: directory, not the installed version!.  Here, we'll just strip the
?X: name down to 'cppstdin',
 and rely on the fact that perl.c will
?X: then call SCRIPTDIR/cppstdin, but local things like 'make depend'
?X: will continue to work.
: Remove build directory name from cppstdin so it can be used from
: either the present location or the final installed location.
echo " "
: Get out of the UU directory to get correct path name.
cd ..
case "$cppstdin" in
`pwd`/cppstdin)
 echo "Stripping down cppstdin path name"
 cppstdin=cppstdin
 ;;
esac
cd UU

: end of configuration questions
echo " "
echo "End of configuration questions."
echo " "
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/End.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lgamma_r: Inlibc
?MAKE: -pick add $@ %<
?S:d_lgamma_r:
?S: This variable conditionally defines the HAS_LGAMMA_R symbol, which
?S: indicates to the C program that the lgamma_r() routine is available
?S: for the log gamma function, without using the global signgam variable.
?S:.
?C:HAS_LGAMMA_R:
```

```
?C: This symbol, if defined, indicates that the lgamma_r routine is
?C: available to do the log gamma function without using the global
?C: signgam variable.
?C:.
?H:#$d_lgamma_r HAS_LGAMMA_R  /**/
?H:.
?LINT:set d_lgamma_r
: see if lgamma_r exists
set lgamma_r d_lgamma_r
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lgamma_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Chk_MANI.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Chk_MANI.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:57:25  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/31  09:33:14  ram
?RCS: patch44: now lists Begin instead of Myinit in its dependencies
?RCS: patch44: leading comment now explains how this unit is included
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks the package by making sure
 every file listed in MANIFEST
?X: is present. It is systematically "included" via the Finish unit (which
?X: is always present in every Configure script), although it may result in
?X: an empty inclusion when no MANIFEST is present.
?X:
?MAKE:Chk_MANI: Begin c n rsrc
?MAKE: -pick wipe $@ %<
?T:filelist ans tmppwd
?X: This check happens at metaconfig-time, so it's ok to hard-code the path.
@if {test -f ../MANIFEST}
```

```
: Now test for existence of everything in MANIFEST
echo " "
if test -f "$rsrc/MANIFEST"; then
 echo "First let's make sure your kit is complete.  Checking..." >&4
?X:
?X: Files spelled uppercased and beginning with PACK are produced by the
?X: shell archive builder and may be removed by the user. Usually, they are
?X: not listed in the MANIFEST file, but you never know...
?X:
?X: "split -l" is the new way of running a split, but we also try the older way
?X:
 awk '$1 !~ /PACK[A-Z]+/ {print $1}' "$rsrc/MANIFEST" | \
  (split -l 50 2>/dev/null || split -50)
 rm -f missing
 tmppwd=`pwd`
 for
 filelist in x??; do
  (cd "$rsrc"; ls `cat "$tmppwd/$filelist"` \
   >/dev/null 2>>"$tmppwd/missing")
 done
 if test -s missing; then
  cat missing >&4
  cat >&4 <<'EOM'

THIS PACKAGE SEEMS TO BE INCOMPLETE.

You have the option of continuing the configuration process, despite the
distinct possibility that your kit is damaged, by typing 'y'es.  If you
do, don't blame me if something goes wrong.  I advise you to type 'n'o
and contact the author (<MAINTLOC>).

EOM
?X: Can't use $echo at this early stage
  echo $n "Continue? [n] $c" >&4
  read ans
  case "$ans" in
  y*)
   echo "Continuing..." >&4
   rm -f missing
   ;;
  *)
?X:
?X: Use kill and not exit, so that the trap gets executed to clean up
?X:
   echo "ABORTING..." >&4
   kill $$
   ;;
  esac
```

```
 else
  echo "Looks good..."
 fi
else
 echo "There is no MANIFEST file.  I hope your kit is complete !"
fi
rm -f missing x??

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Chk_MANI.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shm.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shm: test d_shmctl d_shmget d_shmat d_shmdt Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_shm:
?S: This variable conditionally defines the HAS_SHM symbol, which
?S: indicates that the entire shm*(2) library is present.
?S:.
?C:HAS_SHM:
?C: This symbol, if defined, indicates that the entire shm*(2) library is
?C: supported.
?C:.
?H:#$d_shm HAS_SHM  /**/
?H:.
?T:h_shm
?LINT:set d_shm
:
 see how much of the 'shm*(2)' library is present.
h_shm=true
echo " "
case "$d_shmctl$d_shmget$d_shmat$d_shmdt" in
*"$undef"*) h_shm=false;;
```

```
esac
: we could also check for sys/ipc.h ...
if $h_shm && $test `./findhdr sys/shm.h`; then
 echo "You have the full shm*(2) library." >&4
 val="$define"
else
 echo "You don't have the full shm*(2) library." >&4
 val="$undef"
fi
set d_shm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: etc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: etc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:etc etcexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:etc:
?S: This variable holds the name of the directory in which the user wants
?S: to put "administrative" executable images for the package in question.
?S: It is most often a local directory such as /usr/local/etc. Programs
?S: relying on this variable must be prepared to deal with
 ~name
?S: substitutions.
?S:.
?S:etcexp:
?S: This is the same as the etc variable, but is filename expanded at
?S: configuration time, for convenient use in makefiles.
?S:.
: determine where administrative executables go
case "$etc" in
")
 dflt=`./loc . /local/etc /usr/local/etc /local/etc /usr/etc /etc`
```

```
 ;;
*)
 dflt="$etc"
 ;;
esac
fn=d~
rp='Where should the administrative executables go?'
. ./getfile
etc="$ans"
etcexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/etc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Obsol_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Obsol_h.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file is prepended to .MT/Obsol_h if that file is not empty. That file
?X: contains the necessary mappings of new symbols to obsolete ones.
?X:
?MAKE:Obsol_h:
?MAKE: -pick prepend $@ ./Obsol_h
?LINT:nocomment
/*
* The following symbols are obsolete. They are mapped to the new
* symbols only to ease the transition process. The sources
 should be
* updated so as to use the new symbols only, as the support for these
* obsolete symbols may end without notice.
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Obsol_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtouq: Inlibc cat Compile run
?MAKE: -pick add $@ %<
?S:d_strtouq:
?S: This variable conditionally defines the HAS_STRTOUQ symbol, which
?S: indicates to the C program that the strtouq() routine is available.
?S:.
?C:HAS_STRTOUQ:
?C: This symbol, if defined, indicates that the strtouq routine is
?C: available to convert strings to unsigned long longs (quads).
?C:.
?H:#$d_strtouq HAS_STRTOUQ  /**/
?H:.
?F:!try
: see if strtouq exists
set strtouq d_strtouq
eval $inlibc

case "$d_strtouq" in
"$define")
 $cat <<EOM
Checking whether your strtouq() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#include <stdio.h>
static int bad = 0;
void check(const char *s, unsigned
 long long eull, int een) {
 unsigned long long gull;
 errno = 0;
 gull = strtouq(s, 0, 10);
 if (!((gull == eull) && (errno == een)))
  bad++;
}
int main() {
 check(" 1",                                1LL, 0);
 check(" 0",                                0LL, 0);
 check("18446744073709551615",  18446744073709551615ULL, 0);
 check("18446744073709551616",  18446744073709551615ULL, ERANGE);
#if 0 /* strtouq() for /^-/ strings is undefined. */
```

```
 check("-1",                    18446744073709551615ULL, 0);
 check("-18446744073709551614",                   2LL, 0);
 check("-18446744073709551615",                   1LL, 0);
 check("-18446744073709551616", 18446744073709551615ULL, ERANGE);
 check("-18446744073709551617", 18446744073709551615ULL, ERANGE);
#endif
 if (!bad)
  printf("ok\n");
 return 0;
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
  ok) echo "Your strtouq() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtouq() doesn't seem to be working
 okay.
EOM
     d_strtouq="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtouq="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtouq.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nexttoward: Inlibc
?MAKE: -pick add $@ %<
?S:d_nexttoward:
?S: This variable conditionally defines HAS_NEXTTOWARD if nexttoward()
?S: is available to return the next machine representable long double from
?S: x in direction y.
?S:.
?C:HAS_NEXTTOWARD:
?C: This symbol, if defined, indicates that the nexttoward routine is
?C: available to return the next machine representable long double from
?C: x in direction y.
?C:.
```

```
?H:#$d_nexttoward HAS_NEXTTOWARD  /**/
?H:.
?LINT:set d_nexttoward
: see if nexttoward exists
set nexttoward d_nexttoward
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nexttoward.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: so.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:30:04  ram
?RCS: patch36: now tells user how he can suppress shared lib lookup (ADO)
?RCS: patch36: removed echo at the top, since it's now in the here-doc (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:07:02  ram
?RCS: patch30: created
?RCS:
?X:
?X: This unit computes the shared-object / shared-lib extension
?X:
?MAKE:so: test libpth Loc Myread Oldconfig cat
?MAKE: -pick add $@ %<
?S:so:
?S: This variable holds the extension used to identify
 shared libraries
?S: (also known as shared objects) on the system. Usually set to 'so'.
?S:.
?T: xxx
: compute shared library extension
case "$so" in
")
 if xxx=`./loc libc.sl X $libpth`; $test -f "$xxx"; then
  dflt='sl'
 else
  dflt='so'
 fi
```

```
 ;;
*) dflt="$so";;
esac
$cat <<EOM

On some systems, shared libraries may be available.  Answer 'none' if
you want to suppress searching of shared libraries for the remainder
of this configuration.

EOM
rp='What is the file extension used for shared libraries?'
. ./myread
so="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/so.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtod_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtod_l:
?S: This variable conditionally defines the HAS_STRTOD_L symbol, which
?S: indicates to the C program that the strtod_l() routine is available.
?S:.
?C:HAS_STRTOD_L:
?C: This symbol, if defined, indicates that the strtod_l routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtod_l HAS_STRTOD_L  /**/
?H:.
?LINT:set d_strtod_l
: see if strtod_l exists
set strtod_l d_strtod_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strtod_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_statblks.U,v 3.0 1993/08/18 12:07:29 ram Exp $
?RCS:
```

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_statblks.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_statblks: Hasfield i_sysstat
?MAKE: -pick add $@ %<
?S:d_statblks:
?S: This variable conditionally defines USE_STAT_BLOCKS
?S: if this system has a stat structure declaring
?S: st_blksize and st_blocks.
?S:.
?C:USE_STAT_BLOCKS (STATBLOCKS):
?C: This symbol is defined if this system has a stat structure declaring
?C: st_blksize and st_blocks.
?C:.
?H:?%<:#ifndef
 USE_STAT_BLOCKS
?H:?%<:#$d_statblks USE_STAT_BLOCKS /**/
?H:?%<:#endif
?H:.
?LINT:set d_statblks
: see if stat knows about block sizes
echo " "
echo "Checking to see if your struct stat has st_blocks field..." >&4
set d_statblks stat st_blocks $i_sysstat sys/stat.h
eval $hasfield
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_statblks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: man3dir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:10:34  ram
?RCS: patch61: created
?RCS:
?X:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man3 used instead of man everywhere.
?X: I then added various tests because perl5 has *lots* of man3
?X: pages with long file names. -- ADO
?X:
?MAKE:man3dir
 man3direxp man3ext installman3dir: afs cat nroff Loc Oldconfig \
 sed man1dir spackage package Getfile prefix Prefixit Prefixup \
 d_flexfnam privlib Myread
?MAKE: -pick add $@ %<
?Y:TOP
?S:man3dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:man3direxp:
?S: This variable is the same as the man3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installman3dir:
?S: This variable is really the same as man3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man3ext:
?S: This variable contains the extension that the manual
 page should
?S: have: one of 'n', 'l', or '3'.  The Makefile must supply the '.'.
?S: See man3dir.
?S:.
: determine where library module manual pages go
set man3dir man3dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages for many of the library modules.
```

```
EOM

case "$nroff" in
nroff)
 $cat <<'EOM'
However, you don't have nroff, so they're probably useless to you.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

case "$d_flexfnam" in
undef)
 $cat <<'EOM'
However, your system can't handle the long file names like File::Basename.3.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

echo "If you don't want the manual sources installed, answer 'none'."
?X: We dont use /usr/local/man/man3 because some man programs will
?X: only show the /usr/local/man/man3 contents, and not the system ones,
?X: thus man less will show the perl module less.pm, but not the system
?X: less command.  We might also conflict with TCL man pages.
?X: However, something like /opt/perl/man/man3
 is fine.
case "$man3dir" in
") case "$prefix" in
 *$package*) dflt=`echo $man1dir |
   $sed -e 's/man1/man3/g' -e 's/man\.1/man\.3/g'` ;;
 *) dflt="$privlib/man/man3" ;;
 esac
 ;;
' ') dflt=none;;
*) dflt="$man3dir" ;;
esac
echo " "

fn=dn+~
rp="Where do the $package library man pages (source) go?"
. ./getfile
if test "X$man3direxp" != "X$ansexp"; then
 installman3dir="
fi
```

```
man3dir="$ans"
man3direxp="$ansexp"
case "$man3dir" in
") man3dir=' '
 installman3dir=";;
esac
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installman3dir" in
 ") dflt=`echo $man3direxp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installman3dir";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installman3dir="$ans"
else
 installman3dir="$man3direxp"
fi

: What suffix
 to use on installed man pages

case "$man3dir" in
' ')
 man3ext='0'
 ;;
*)
 rp="What suffix should be used for the $package library man pages?"
 case "$man3ext" in
 ") case "$man3dir" in
  *3)  dflt=3 ;;
  *3p) dflt=3p ;;
  *3pm) dflt=3pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L3) dflt=L3;;
  *) dflt=3;;
```

```
  esac
  ;;
 *) dflt="$man3ext";;
 esac
 . ./myread
 man3ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/man3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Chk_whoami.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Chk_whoami.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit makes sure we don't try to include whoami.h if uname() exists.
?X:
?MAKE:Chk_whoami: d_uname i_whoami
?MAKE: -pick add $@ %<
?LINT:change i_whoami
: weed out incompatibilities
case "$d_uname" in
 "$define") i_whoami="$undef" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Chk_whoami.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:d_aintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_aintl:
?S: This variable conditionally defines the HAS_AINTL symbol, which
?S: indicates to the C program that the aintl() routine is available.
?S: If copysignl is also present we can emulate modfl.
?S:.
?C:HAS_AINTL:
?C: This symbol, if defined, indicates that the aintl routine is
?C: available.  If copysignl is also present we can emulate modfl.
?C:.
?H:#$d_aintl HAS_AINTL  /**/
?H:.
?LINT:set d_aintl
: see if aintl exists
set aintl d_aintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_aintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rdchk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rdchk.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_rdchk: Inlibc
?MAKE: -pick add $@ %<
?S:d_rdchk:
?S: This variable conditionally defines the HAS_RDCHK symbol, which
?S: indicates to the C program that the rdchk() routine is available
?S: to find out if there is input pending on an IO channel.
?S:.
?C:HAS_RDCHK (RDCHK):
?C: This symbol, if defined, indicates that the rdchk routine
 is available
?C: to find out if there is input pending on an IO channel.  Generally
```

```
?C: the routine is used only if FIONREAD and O_NDELAY aren't available.
?C:.
?H:#$d_rdchk HAS_RDCHK  /**/
?H:.
?LINT:set d_rdchk
: see if rdchk exists
set rdchk d_rdchk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rdchk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_killpg.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_killpg.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_killpg: Inlibc
?MAKE: -pick add $@ %<
?S:d_killpg:
?S: This variable conditionally defines the HAS_KILLPG symbol, which
?S: indicates to the C program that the killpg() routine is available
?S: to kill process groups.
?S:.
?C:HAS_KILLPG (KILLPG):
?C: This symbol, if defined, indicates that the killpg routine is available
?C: to kill
 process groups.  If unavailable, you probably should use kill
?C: with a negative process number.
?C:.
?H:#$d_killpg HAS_KILLPG /**/
?H:.
?LINT:set d_killpg
: see if killpg exists
set killpg d_killpg
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_killpg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: pidtype.U,v 3.0.1.1 1994/08/29 16:31:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: pidtype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:31:27  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:pidtype: Myread Typedef
?MAKE: -pick add $@ %<
?S:pidtype:
?S: This variable defines PIDTYPE to be something like pid_t, int,
?S: ushort, or whatever type is used to declare process ids in the kernel.
?S:.
?C:Pid_t (PIDTYPE):
?C: This
 symbol holds the type used to declare process ids in the kernel.
?C: It can be int, uint, pid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Pid_t $pidtype  /* PID type */
?H:.
?LINT: set pidtype
: see what type pids are declared as in the kernel
rp="What is the type of process ids on this system?"
set pid_t pidtype int stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/pidtype.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_lc_monetary_2008: cat Compile rm_try d_locconv
?MAKE: -pick add $@ %<
?S:d_lc_monetary_2008:
?S: This variable conditionally defines HAS_LC_MONETARY_2008 if libc
?S: has the international currency locale rules from POSIX
?S: 1003.1-2008.
?S:.
?C:HAS_LC_MONETARY_2008:
?C: This symbol, if defined, indicates that the localeconv routine is
?C: available and has the additional members added in POSIX 1003.1-2008.
?C:.
?H:#$d_lc_monetary_2008 HAS_LC_MONETARY_2008  /**/
?H:.
: see if libc has the POSIX.1-2008 currency locale rules
case "$d_locconv:$d_lc_monetary_2008" in
$define:)
 $cat
 >try.c <<EOCP
#include <locale.h>
int main() {
 struct lconv *lc = localeconv();
 char int_p_cs_precedes = lc->int_p_cs_precedes;
 return 0;
}
EOCP
 set try
 if eval $compile; then
  d_lc_monetary_2008="$define"
 else
  d_lc_monetary_2008="$undef"
 fi;
 $rm_try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lc_monetary_2008.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_strtoull: Inlibc d_longlong Compile cat run
?MAKE: -pick add $@ %<
?S:d_strtoull:
?S: This variable conditionally defines the HAS_STRTOULL symbol, which
?S: indicates to the C program that the strtoull() routine is available.
?S:.
?C:HAS_STRTOULL:
?C: This symbol, if defined, indicates that the strtoull routine is
?C: available to convert strings to unsigned long longs.
?C:.
?H:#$d_strtoull HAS_STRTOULL  /**/
?H:.
?F:!try
: see if strtoull exists
set strtoull d_strtoull
eval $inlibc

case "$d_longlong-$d_strtoull" in
"$define-$define")
 $cat <<EOM
Checking whether your strtoull() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#ifdef __hpux
#define strtoull __strtoull
#endif
#include
 <stdio.h>
static int bad = 0;
void check(const char *s, long long eull, int een) {
 long long gull;
 errno = 0;
 gull = strtoull(s, 0, 10);
 if (!((gull == eull) && (errno == een)))
  bad++;
}
int main() {
 check(" 1",                                1LL, 0);
 check(" 0",                                0LL, 0);
 check("18446744073709551615",  18446744073709551615ULL, 0);
 check("18446744073709551616",  18446744073709551615ULL, ERANGE);
#if 0 /* strtoull() for /^-/ strings is undefined. */
 check("-1",                  18446744073709551615ULL, 0);
 check("-18446744073709551614",                  2LL, 0);
 check("-18446744073709551615",                  1LL, 0);
 check("-18446744073709551616", 18446744073709551615ULL, ERANGE);
```

```
 check("-18446744073709551617", 18446744073709551615ULL, ERANGE);
#endif
 if (!bad)
  printf("ok\n");
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
  ok) echo "Your strtoull() seems to be working okay."
 ;;
  *) cat <<EOM >&4
Your strtoull() doesn't seem to be working okay.
EOM
     d_strtoull="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtoull="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoull.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sgndchr.U,v 3.0.1.2 1997/02/28 15:44:25 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sgndchr.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:44:25  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:00:24  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_sgndchr: cat rm Compile Setvar run
?MAKE: -pick add $@ %<
?S:d_sgndchr:
?S: This variable conditionally defines the SIGNEDCHAR
 symbol, which
?S: indicates to the C program that signed characters are available.
?S:.
?C:SIGNEDCHAR:
?C: This symbol, if defined, indicates that characters are a signed type.
?C: If not defined, things declared as signed characters (and that make
?C: use of negative values) should probably be declared as shorts instead.
?C:.
?H:#$d_sgndchr SIGNEDCHAR /**/
?H:.
?F:!try
?LINT:set d_sgndchr
: check for signed chars
echo " "
echo "Checking to see if your C compiler can do signed chars..." >&4
$cat >try.c <<'EOCP'
int main()
{
 char c = 0;

 c--;
 exit(c >= 0);
}
EOCP
set try
if eval $compile && $run ./try; then
if $run ./try; then
 val="$define"
 echo "It certainly can."
else
 val="$undef"
 echo "It can't.  I'll have to make some things type short."
fi
set d_sgndchr
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sgndchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: orgname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: orgname.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:10:25  ram
?RCS: patch10: added support for /local/src to the search (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orgname: sed cat Myread Loc Oldconfig
?MAKE: -pick add $@ %<
?S:orgname:
?S: This variable contains the eventual value of the ORGNAME symbol,
?S: which contains either the organizaton name or the full pathname
?S: of
 a file containing the organization name.
?S:.
?C:ORGNAME:
?C: This symbol contains either the organizaton name or the full pathname
?C: of a file containing the organization name, which the program must
?C: be prepared to open and substitute the contents of.
?C:.
?H:#define ORGNAME "$orgname"  /**/
?H:.
?T:longshots xxx
: get organization name
longshots='/local/src /usr/src/new /usr/src/local /usr/local/src'
case "$orgname" in
") if xxx=`./loc news/src/defs.h x $longshots`; then
  dflt=`$sed -n 's/^.*MYORG[  ]*"\(.*\)".*$/\1/p' $xxx`
 else
  dflt=''
 fi
 ;;
*)  dflt="$orgname";;
esac
$cat << 'EOH'

Please type the name of your organization as you want it to appear on the
Organization line of outgoing articles.  (It's nice if this also specifies
your location.  Your city name is probably sufficient if well known.)
For example:
```

```
   University of Southern North Dakota, Hoople

You may also put the name of a file, as long as it begins with a slash.
For example:

   /etc/organization

EOH
orgname=""
while
 test "X$orgname" = "X"; do
 rp='Organization:'
 . ./myread
 orgname="$ans"
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/orgname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: uidtype.U,v 3.0.1.3 1994/08/29 16:33:25 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: uidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:33:25  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:09:36  ram
?RCS: patch30: comment for uidtype referred to the obsoleted symbol
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:28:27  ram
?RCS: patch27: made conformant to its gidtype.U companion
?RCS: patch27: question now explicitly mentions getuid()
?RCS:
?RCS: Revision 3.0  1993/08/18
  12:09:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:uidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:uidtype:
```

```
?S: This variable defines Uid_t to be something like uid_t, int,
?S: ushort, or whatever type is used to declare user ids in the kernel.
?S:.
?C:Uid_t (UIDTYPE):
?C: This symbol holds the type used to declare user ids in the kernel.
?C: It can be int, ushort, uid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Uid_t $uidtype  /* UID type */
?H:.
?T:xxx
: see what type uids are declared as in the kernel
echo " "
echo "Looking for the type for user ids returned by getuid()."
set uid_t uidtype xxx stdio.h sys/types.h
eval $typedef
case "$uidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep '_ruid;' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$uidtype";;
esac
case "$uidtype" in
uid_t) echo "uid_t found." ;;
*) rp="What
 is the type for user ids returned by getuid()?"
 . ./myread
 uidtype="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: pidtype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:31:27  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:pidtype: Myread Typedef
?MAKE: -pick add $@ %<
?S:pidtype:
?S: This variable defines PIDTYPE to be something like pid_t, int,
?S: ushort, or whatever type is used to declare process ids in the kernel.
?S:.
?C:Pid_t (PIDTYPE):
?C: This symbol holds the type
 used to declare process ids in the kernel.
?C: It can be int, uint, pid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Pid_t $pidtype  /* PID type */
?H:.
: see what type pids are declared as in the kernel
set pid_t pidtype int stdio.h sys/types.h
eval $typedef
dflt="$pidtype"
echo " "
rp="What type are process ids on this system declared as?"
. ./myread
pidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Myread.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myread.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  15:05:39  ram
```

```
?RCS: patch61: myread script now starts with a "startsh"
?RCS: patch61: miscellaneous fixes
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:14:22  ram
?RCS: patch45: added & escape allowing user to turn on -d from the prompt
?RCS:
?RCS: Revision 3.0.1.4  1994/10/31  09:48:04  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29
  15:56:20  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:59  ram
?RCS: patch8: added new visible 'nostick' symbol, mainly for Finish.U
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:39:20  ram
?RCS: patch7: now sticks to the question when no default and empty answer
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a read.  It allows for shell escapes, default assignment and
?X: parameter evaluation.
?X:
?X: To use this unit, $rp and $dflt must hold the question and the
?X: default answer. The question will be printed by the script itself.
?X: Neither $rp nor $dflt is altered by the script.
?X:
?X: The myread script will stick to the question if no default is proposed
?X: and the user answer is empty, which prevents mistakes. However, at the
?X: end of Configure, there is an exception
 to this rule (Finish.U) where we
?X: set nostick to a non-empty value to allow the Return key to play its role!
?X:
?MAKE:Myread: Options startsh n c trnl
?MAKE: -pick add $@ %<
?V:ans:dflt rp nostick
?F:./myread
?T:COLUMNS xxxm rp dflt answ aok myecho
?LINT:change fastread
?X: Some shells (Ultrix) do not understand ${COLUMNS:-80}, sigh!
: compute the number of columns on the terminal for proper question formatting
case "$COLUMNS" in
") COLUMNS='80';;
esac
```

```
: set up the echo used in my read
?X:
?X: This variable is intended to be eval'ed. It will echo the two
?X: variables $rp and $dflt (provided this latter has a non null value).
?X: It is mainly used by the myread script to echo the questions.
?X:
?X: The $n and $c below are substituted before Loc does its silly echo check
?X: so don't put a $ on the echo below so we get builtin, even if $echo is
?X: pointing to /bin/echo.
?X:
myecho="case \"\$xxxm\" in
") echo $n \"\$rp $c\" >&4;;
*) case \"\$rp\" in
 ") echo $n \"[\$xxxm] $c\";;
 *)
  if
 test \`echo \"\$rp [\$xxxm]  \" | wc -c\` -ge $COLUMNS; then
   echo \"\$rp\" >&4
   echo $n \"[\$xxxm] $c\" >&4
  else
   echo $n \"\$rp [\$xxxm] $c\" >&4
  fi
  ;;
 esac;;
esac"

: now set up to do reads with possible shell escape and default assignment
cat <<EOSC >myread
$startsh
?X:
?X: Save value of default -- do not alter original in case of eval
?X:
xxxm=\$dflt
$myecho
?X:
?X: If there is no default, then stop, regardless of the value in fastread.
?X: In silent mode, no new-line is to be echoed if the question is empty,
?X: since this is used to wait for the "return" key.
?X:
ans='!'
case "\$fastread" in
yes) case "\$dflt" in
 ") ;;
 *) ans=";
  case "\$silent-\$rp" in
  true-) ;;
  *) echo " " >&4;;
```

```
  esac;;
 esac;;
*) case "\$silent" in
 true) case "\$rp" in
  ") ans=";;
  esac;;
 esac;;
esac
while expr "X\$ans" : "X!" >/dev/null; do
 read answ
?X:
?X: Run 'eval' on the answer, in order to do variable substitution, in case
?X: the user types $HOME or $WHATEVER.
 Variables must be evaluated now.
?X: Typing '\$HOME' won't currently prevent from substitution -- use '\\$HOME'
?X: The $1 .. $9 and $*, as well as $@, are available to refer to the
?X: default value.
?X:
 set x \$xxxm
 shift
 aok=''; eval "ans=\\"\$answ\\"" && aok=y
 case  "\$answ" in
?X:
?X: Use "!" and not a plain ! because of a bug in BSD 4.4 shell
?X: (reported by Wayne Davison)
?X: We must handle the shell escapes before dealing with possible variable
?X: substitution, since the shell we're launching in that case will be able
?X: to do it as well as we can -- RAM, 15/03/96
?X
 "!")
  sh 1>&4
  echo " "
  $myecho
  ;;
 !*)
  set x \`expr "X\$ans" : "X!\(.*\)\$"\`
  shift
  sh 1>&4 -c "\$*"
  echo " "
  $myecho
  ;;
 "\$ans")
  case "\$ans" in
?X:
?X: Answers starting with & are hooks allowing to dynamically turn on/off
?X: some Configure options. That's for the future. -- RAM, 09/01/95
?X: Today, we only recognize '& -d' to mean 'go on as if Configure -d, which
?X: is a hardwired
```

```
 behaviour compatible with our general scheme.
?X:
  \\&*)
   set x \`expr "X\$ans" : "X&\(.*\)\$"\`
   shift
   case "\$1" in
   -d)
    fastread=yes
    echo "(OK, I'll run with -d after this question.)" >&4
    ;;
   -*)
    echo "*** Sorry, \$1 not supported yet." >&4
    ;;
   esac
   $myecho
   ans=!
   ;;
  esac;;
 *)
  case "\$aok" in
  y)
   echo "*** Substitution done -- please confirm."
   xxxm="\$ans"
   ans=\`echo $n "\$ans$c" | tr '$trnl' ' '\`
   xxxm="\$ans"
   ans=!
   ;;
  *)
   echo "*** Error -- try again."
   ans=!
   ;;
  esac
  $myecho
  ;;
 esac
?X: Stick in myread if no default answer and nothing was answered
 case "\$ans\$xxxm\$nostick" in
 ")
  ans=!
  $myecho
  ;;
 esac
done
case "\$ans" in
") ans="\$xxxm";;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Myread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_h.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  14:57:43  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:10:49  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:25:39  ram
?RCS: patch49: typo fixes in leading config.h comment (WED)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/24  12:13:20  ram
?RCS: patch3: added TOP as a local shell temporary variable
?RCS:
?RCS: Revision 3.0.1.1  1993/08/19  06:42:20
  ram
?RCS: patch1: leading config.sh searching was not aborting properly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file ends up producing the config_h.SH script, which is run to produce
?X: the config.h file.  The file ./.Config_h below contains all the ?H: lines
?X: extracted out of all the units.  Metaconfig itself adds the !GROK!THIS!.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?X: For those who wish to know why the file is config_h.SH instead of the more
?X: natural config.h.SH, well... it is to support systems like MS-DOG. Only one
?X: 'dot' is allowed within the file name, as it is part of the "extension" of
?X: the file. MS-DOG will not let you have two 'dots' because that would mean
?X: two "extensions".
?X:
?MAKE:Config_h: Id End Config_sh Obsol_h myuname cf_time cf_by package src
?MAKE: -pick c_h_weed $@ %<
```

```
?MAKE: -pick c_h_weed $@ ./Config_h
?MAKE: -pick
 c_h_weed $@ ./Obsol_h
?T:CONFIG TOP
?LINT:unclosed !GROK!THIS!
?LINT:extern CONFIG_H CONFIG_SH
?LINT:change CONFIG_H CONFIG_SH
?LINT:nocomment
case "$CONFIG_SH" in
") CONFIG_SH=config.sh;;
esac
case "$CONFIG_H" in
") CONFIG_H=config.h;;
esac
case $CONFIG in
")
 if test -f $CONFIG_SH; then TOP=.;
 elif test -f ../$CONFIG_SH; then TOP=..;
 elif test -f ../../$CONFIG_SH; then TOP=../..;
 elif test -f ../../../$CONFIG_SH; then TOP=../../..;
 elif test -f ../../../../$CONFIG_SH; then TOP=../../../..;
 else
  echo "Can't find $CONFIG_SH."; exit 1
 fi
 . $TOP/$CONFIG_SH
 ;;
esac
?X: Make sure we are in the directory where the .SH file is located.
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting $CONFIG_H (with variable substitutions)"
?X:
?X: Since we unconditionally translate leading #undef into /*#define, we're
?X: stuck when we really want to have a #undef in config.h. That's why there
?X: is provision here for #un-def, which is translated back into #undef after
?X:
 all original #undef have been processed.
?X:
?X: Previously, we changed all
?X:  #undef FOO /**/
?X: into
?X:  /*#define FOO /**/
?X: The xlc compiler (available on IBM's AIX) complains that this is
?X: an illegal attempt to write a nested comment, and warns against it.
?X: There's apparently no way to shut the compiler up, either.
?X: This sed command from Hallvard B Furuseth <h.b.furuseth@usit.uio.no>
?X: changes it to
```

```
?X:  /*#define FOO / **/
sed <<!GROK!THIS! >$CONFIG_H -e 's!^#undef\(.*/\)\*!/\*#define\1 \*!' -e 's!^#un-def!#undef!'
/*
* This file was produced by running the config_h.SH script, which
* gets its values from $CONFIG_SH, which is generally produced by
* running Configure.
*
* Feel free to modify any of this as the need arises.  Note, however,
* that running config_h.SH again will wipe out any changes you've made.
* For a more permanent change edit $CONFIG_SH and rerun config_h.SH.
*
* \$Id: Config_h.U 1 2006-08-24 12:32:52Z rmanfredi $
*/

/*
* Package name
     : $package
* Source directory  : $src
* Configuration time: $cf_time
* Configured by     : $cf_by
* Target system     : $myuname
*/

#ifndef _config_h_
#define _config_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Config_h.U
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```
?RCS: $Id: i_syssock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_syssock.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_syssock: Inhdr
?MAKE: -pick add $@ %<
?S:i_syssock:
?S: This variable conditionally defines the I_SYS_SOCKET symbol, and indicates
```

```
?S: whether a C program should include <sys/socket.h> before performing socket
?S: operations.
?S:.
?C:I_SYS_SOCKET:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
 <sys/socket.h> before performing socket calls.
?C:.
?H:#$i_syssock I_SYS_SOCKET  /**/
?H:.
?LINT:set i_syssock
: see if this is a sys/socket.h system
set sys/socket.h i_syssock
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syssock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sitehtml3dir sitehtml3direxp installsitehtml3dir: Getfile \
 Setprefixvar prefix siteprefix html3dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitehtml3dir=''
?S:sitehtml3dir:
?S: This variable contains the name of the directory in which site-specific
?S: library html source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After
 perl has been installed, users may install their own local
?S: library html pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitehtml3direxp=''
?S:sitehtml3direxp:
```

```
?S: This variable is the same as the sitehtml3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsitehtml3dir="
?S:installsitehtml3dir:
?S: This variable is really the same as sitehtml3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: html3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsitehtml3dir
?LINT:set sitehtml3dir
?LINT:set sitehtml3direxp
: determine where add-on library html pages go
: There is no standard location, so try to copy the previously-selected
: directory structure for the core html pages.
case
 "$sitehtml3dir" in
")    dflt=`echo "$html3dir" | $sed "s#^$prefix#$siteprefix#"` ;;
*)     dflt=$sitehtml3dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname where the site-specific library html pages should be installed?'
. ./getfile
prefixvar=sitehtml3dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitehtml3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_flockproto: Hasproto i_sysfile
?MAKE: -pick add $@ %<
?S:d_flockproto:
```

```
?S: This variable conditionally defines the HAS_FLOCK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the flock() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_FLOCK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the flock() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern int flock(int,
 int);
?C:.
?H:#$d_flockproto HAS_FLOCK_PROTO /**/
?H:.
?LINT:set d_flockproto
: see if prototype for flock is available
echo " "
set d_flockproto flock $i_sysfile sys/file.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_flockproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strcoll.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_strcoll.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:01  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strcoll: Inlibc
?MAKE: -pick add $@ %<
?S:d_strcoll:
?S: This variable conditionally defines HAS_STRCOLL if strcoll() is
?S: available to compare strings using collating information.
?S:.
?C:HAS_STRCOLL:
?C: This symbol, if defined, indicates that the strcoll routine
```

```
 is
?C: available to compare strings using collating information.
?C:.
?H:#$d_strcoll HAS_STRCOLL /**/
?H:.
?LINT:set d_strcoll
: see if strcoll exists
set strcoll d_strcoll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strcoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: End.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit serves as the goal which forces make to choose all the units that
?X: ask questions.  The $W on the ?MAKE: line is the list of all symbols wanted.
?X: To force any unit to be included, copy this unit to your private U directory
?X: and add the name of the unit desired to the ?MAKE: dependency line.
?X:
?MAKE:End: $W
?MAKE: -pick add $@ %<
?LINT:use $W
: end of configuration
 questions
echo " "
echo "End of configuration questions."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/End.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:d_llround: Inlibc
?MAKE: -pick add $@ %<
?S:d_llround:
?S: This variable conditionally defines the HAS_LLROUND symbol, which
?S: indicates to the C program that the llround() routine is available
?S: to return the long long value nearest to x.
?S:.
?C:HAS_LLROUND:
?C: This symbol, if defined, indicates that the llround routine is
?C: available to return the nearest long long value.
?C:.
?H:#$d_llround HAS_LLROUND  /**/
?H:.
?LINT:set d_llround
: see if llround exists
set llround d_llround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msync.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msync.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:17  ram
?RCS: patch15: created
?RCS:
?MAKE:d_msync: Inlibc
?MAKE: -pick add $@ %<
?S:d_msync:
?S: This variable conditionally defines HAS_MSYNC if msync() is
?S: available to synchronize a mapped file.
?S:.
?C:HAS_MSYNC:
?C: This symbol, if defined, indicates that the msync system call is
?C: available to synchronize a mapped file.
?C:.
?H:#$d_msync HAS_MSYNC  /**/
```

```
?H:.
?LINT:set d_msync
: see if
 msync exists
set msync d_msync
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msync.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: dup2.C,v 3.0.1.1 1994/01/24 13:58:37 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* Original Author: Larry Wall <lwall@netlabs.com>
*
* $Log: dup2.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:37  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/dup2.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: n.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: n.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:n c: contains
?MAKE: -pick add $@ %<
?S:n:
?S: This variable contains the -n flag if that is what causes the echo
?S: command to suppress newline.  Otherwise it is null.  Correct usage is
?S:     $echo $n "prompt for a question: $c".
?S:.
?S:c:
?S: This variable contains the \c string if that is what causes the echo
?S: command to suppress newline.
  Otherwise it is null.  Correct usage is
?S:     $echo $n "prompt for a question: $c".
?S:.
: first determine how to suppress newline on echo command
echo " "
echo "Checking echo to see how to suppress newlines..."
(echo "hi there\c" ; echo " ") >.echotmp
if $contains c .echotmp >/dev/null 2>&1 ; then
 echo "...using -n."
 n='-n'
 c=''
else
 cat <<'EOM'
...using \c
EOM
 n=''
 c='\c'
fi
echo $n "The star should be here-->$c"
echo '*'
rm -f .echotmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/n.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS:
?MAKE:i_stdint: Inhdr
?MAKE: -pick add $@ %<
?S:i_stdint:
?S: This variable conditionally defines the I_STDINT symbol, which
?S: indicates to the C program that <stdint.h> exists and should
?S: be included.
?S:.
?C:I_STDINT:
?C: This symbol, if defined, indicates that <stdint.h> exists and
```

```
?C: should be included.
?C:.
?H:#$i_stdint I_STDINT  /**/
?H:.
?LINT:set i_stdint
: see if stdint is available
set stdint.h i_stdint
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_stdint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn_v7ND.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Warn_v7ND.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:01:46  ram
?RCS: patch36: call ./v7 explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit warns V7 sites that they may not have a non-blocking read.
?X: This unit needs to be mentioned in End.U to get included.
?X:
?MAKE:Warn_v7ND: package Guess
?MAKE: -pick add $@ %<
: Warnings
if ./v7; then
 cat
 <<EOM

NOTE: many V7 systems do not have a way to do a non-blocking read.  If you
don't have any of FIONREAD, O_NDELAY, or rdchk(), the $package package
may not work as well as it might.  It might not work at all.
EOM
fi
```

Found in path(s):

```
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn_v7ND.U
No license file was found, but licenses were detected in source scan.

?RCS: Copyright (c) 1996, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:perladmin: cf_email Oldconfig Myread cat
?MAKE: -pick add $@ %<
?Y:TOP
?S:perladmin:
?S: Electronic mail address of the perl5 administrator.
?S:.
: Ask e-mail of administrator
$cat <<EOM

If you or somebody else will be maintaining perl at your site, please
fill in the correct e-mail address here so that they may be contacted
if necessary. You may enter "none" for no administrator.

EOM
case "$perladmin" in
") dflt="$cf_email";;
*) dflt="$perladmin";;
esac
rp='Perl administrator e-mail address'
. ./myread
perladmin="$ans"

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perladmin.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sockatmarkproto: Hasproto d_socket
?MAKE: -pick add $@ %<
?S:d_sockatmarkproto:
?S: This variable conditionally defines the HAS_SOCKATMARK_PROTO symbol,
```

```
?S: which indicates to the C program that the system provides
?S: a prototype for the sockatmark() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SOCKATMARK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the sockatmark() function.  Otherwise, it is up
?C: to the program to supply one.  A good
 guess is
?C:  extern int sockatmark(int);
?C:.
?H:#$d_sockatmarkproto HAS_SOCKATMARK_PROTO /**/
?H:.
?LINT:set d_sockatmarkproto
: see if prototype for sockatmark is available
echo " "
set d_sockatmarkproto sockatmark $d_socket sys/socket.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sockatmarkproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rmdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rmdir.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_rmdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_rmdir:
?S: This variable conditionally defines HAS_RMDIR if rmdir() is
?S: available to remove directories.
?S:.
?C:HAS_RMDIR (RMDIR):
?C: This symbol, if defined, indicates that the rmdir routine is
?C: available to remove directories. Otherwise you should fork off a
?C: new process to exec
```

```
 /bin/rmdir.
?C:.
?H:#$d_rmdir HAS_RMDIR  /**/
?H:.
?LINT:set d_rmdir
: see if rmdir exists
set rmdir d_rmdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rmdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: man3dir.U,v 3.1 1999/07/08 20:52:19 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1999, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: man3dir.U,v $
?RCS: Revision 3.1  1999/07/08 20:52:19  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:10:34  ram
?RCS: patch61: created
?RCS:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man3 used instead
 of man everywhere.
?X: I then added various tests because perl5 has *lots* of man3
?X: pages with long file names. -- ADO
?X:
?MAKE:man3dir man3direxp man3ext installman3dir: cat nroff Loc Oldconfig \
 sed man1dir spackage package Getfile Setprefixvar Prefixit Prefixup \
 d_flexfnam privlib Myread test
?MAKE: -pick add $@ %<
?Y:TOP
?D:man3dir=''
?S:man3dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
```

```
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?D:man3direxp=''
?S:man3direxp:
?S: This variable is the same as the man3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installman3dir=''
?S:installman3dir:
?S: This variable is really the same as man3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only
 points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man3ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '3'.  The Makefile must supply the '.'.
?S: See man3dir.
?S:.
?T:prog tdflt
?LINT:change prefixvar
?LINT:set man3direxp
: determine where library module manual pages go
set man3dir man3dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages for many of the library modules.
EOM

case "$nroff" in
nroff)
 $cat <<'EOM'
However, you don't have nroff, so they're probably useless to you.
EOM
 case "$man3dir" in
 '') man3dir="none";;
 esac;;
esac

case "$d_flexfnam" in
undef)
 $cat <<'EOM'
However, your system can't handle the long file names like File::Basename.3.
EOM
 case "$man3dir" in
```

```
 ") man3dir="none";;
 esac;;
esac

echo "If you don't want the manual sources installed, answer 'none'."
?X: In 5.005_57 and earlier, I had the following notes:
?X:
 We do not use /usr/local/man/man3 because some man programs will
?X: only show the /usr/local/man/man3 contents, and not the system ones,
?X: thus man less will show the perl module less.pm, but not the system
?X: less command.  We might also conflict with Tcl man pages.
?X: However, something like /opt/perl/man/man3 is fine.
?X:
?X: However, opinion seems to be shifting such that 'man POSIX' ought
?X: to just work.  -- Andy Dougherty  July 8, 1999
?X:
?X: remove any trailing -3.0 or other version indication from $package
prog=`echo $package | $sed 's/-*[0-9.]*$//'`
case "$man3dir" in
") dflt=`echo "$man1dir" | $sed -e 's/man1/man3/g' -e 's/man\.1/man\.3/g'`
 if $test -d "$privlib/man/man3"; then
  cat <<EOM >&4

WARNING:  Previous versions of perl installed man3 pages into
$privlib/man/man3.  This version will suggest a
new default of $dflt.
EOM
  tdflt=$dflt
  dflt='n'
  rp='Do you wish to preserve the old behavior?(y/n)'
  . ./myread
  case "$ans" in
  y*) dflt="$privlib/man/man3"
 ;;
  *)  dflt=$tdflt ;;
  esac
   fi
 ;;
*) dflt="$man3dir" ;;
esac
case "$dflt" in
' ') dflt=none ;;
esac
echo " "
fn=dn+~
rp="Where do the $package library man pages (source) go?"
. ./getfile
prefixvar=man3dir
```

```
. ./setprefixvar

case "$man3dir" in
") man3dir=' '
 installman3dir=";;
esac

: What suffix to use on installed man pages
case "$man3dir" in
' ')
 man3ext='0'
 ;;
*)
 rp="What suffix should be used for the $package library man pages?"
 case "$man3ext" in
 ") case "$man3dir" in
  *3)  dflt=3 ;;
  *3p) dflt=3p ;;
  *3pm) dflt=3pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L3) dflt=L3;;
  *) dflt=3;;
  esac
  ;;
 *) dflt="$man3ext";;
 esac
 . ./myread
 man3ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/man3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endhent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endhent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endhent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endhent:
?S: This variable conditionally defines HAS_ENDHOSTENT if endhostent() is
?S: available to close whatever was being used for host queries.
?S:.
?C:HAS_ENDHOSTENT:
?C: This symbol, if defined, indicates that the endhostent() routine is
?C: available to close whatever was being used for host
 queries.
?C:.
?H:#$d_endhent HAS_ENDHOSTENT  /**/
?H:.
?LINT:set d_endhent
: see if endhostent exists
set endhostent d_endhent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endhent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_psignal.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_psignal.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_psignal: Inlibc
?MAKE: -pick add $@ %<
?S:d_psignal:
?S: This variable conditionally defines the HAS_PSIGNAL symbol, which
?S: indicates that the psignal() routine exists.  The psignal() routine
?S: prints a description of a signal on the standard error output.
```

```
?S:.
?C:HAS_PSIGNAL (PSIGNAL):
?C: This symbol, if defined, indicates
 that the psignal() routine exists.
?C:.
?H:#$d_psignal HAS_PSIGNAL  /**/
?H:.
?LINT:set d_psignal
: see if psignal exists
set psignal d_psignal
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_psignal.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isnormal: cat Compile Setvar rm_try
?MAKE: -pick add $@ %<
?S:d_isnormal:
?S: This variable conditionally defines the HAS_ISNORMAL symbol, which
?S: indicates to the C program that the isnormal() routine is available.
?S:.
?C:HAS_ISNORMAL:
?C: This symbol, if defined, indicates that the isnormal routine is
?C: available to check whether a double is normal (non-zero normalized).
?C:.
?H:#$d_isnormal HAS_ISNORMAL  /**/
?H:.
?LINT:set d_isnormal
: check for isnormal
echo "Checking to see if you have isnormal..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isnormal(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isnormal."
else
 val="$undef"
 echo "You do not have isnormal."
fi
$rm_try
set d_isnormal
```

```
eval $setvar

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnormal.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_semop.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_semop.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semop: Inlibc
?MAKE: -pick add $@ %<
?S:d_semop:
?S: This variable conditionally defines the HAS_SEMOP symbol, which
?S: indicates to the C program that the semop() routine is available.
?S:.
?C:HAS_SEMOP:
?C: This symbol, if defined, indicates that the semop() routine is
?C: available to execute semaphore operations.
?C:.
?H:#$d_semop
 HAS_SEMOP  /**/
?H:.
?LINT:set d_semop
: see if semop exists
set semop d_semop
eval $inlibc

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semop.U
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```

```
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?RCS:
?MAKE:d_quad quadtype uquadtype quadkind: \
 longsize intsize d_longlong longlongsize d_int64_t \
 Inhdr Setvar
?MAKE: -pick add $@ %<
?S:d_quad:
?S: This variable, if defined, tells that there's a 64-bit integer type,
?S: quadtype.
?S:.
?S:quadtype:
?S: This variable defines Quad_t to be something like long, int,
?S: long long, int64_t, or whatever type is used for 64-bit integers.
?S:.
?S:quadkind:
?S: This variable, if defined, encodes the type of a quad:
?S: 1 = int, 2 = long, 3 = long long, 4 = int64_t.
?S:.
?S:uquadtype:
?S: This variable defines Uquad_t to be something like unsigned long,
?S: unsigned int, unsigned long long, uint64_t, or whatever type is
?S: used for 64-bit integers.
?S:.
?C:HAS_QUAD:
?C: This
 symbol, if defined, tells that there's a 64-bit integer type,
?C: Quad_t, and its unsigned counterpart, Uquad_t. QUADKIND will be one
?C: of QUAD_IS_INT, QUAD_IS_LONG, QUAD_IS_LONG_LONG, QUAD_IS_INT64_T,
?C: or QUAD_IS___INT64.
?C:.
?H:#$d_quad HAS_QUAD /**/
?H:?%<:#ifdef HAS_QUAD
?H:?%<:#   define Quad_t $quadtype /**/
?H:?%<:#   define Uquad_t $uquadtype /**/
?H:?%<:#   define QUADKIND $quadkind /**/
?H:?%<:#   define QUAD_IS_INT 1
?H:?%<:#   define QUAD_IS_LONG 2
?H:?%<:#   define QUAD_IS_LONG_LONG 3
?H:?%<:#   define QUAD_IS_INT64_T 4
?H:?%<:#   define QUAD_IS___INT64 5
?H:?%<:#endif
?H:.
?LINT:set quadtype
?LINT:set uquadtype
: Check if 64bit ints have a quad type
echo " "
echo "Checking which 64-bit integer type we could use..." >&4
?X: We prefer quad types in order of int, long, long long, int64_t.
```

```
case "$intsize" in
8) val=int
  set quadtype
  eval $setvar
  val='"unsigned int"'
  set uquadtype
  eval $setvar
  quadkind=1
  ;;
*) case "$longsize" in
  8)
 val=long
     set quadtype
     eval $setvar
     val='"unsigned long"'
     set uquadtype
     eval $setvar
     quadkind=2
     ;;
  *) case "$d_longlong:$longlongsize" in
     define:8)
       val='"long long"'
       set quadtype
       eval $setvar
       val='"unsigned long long"'
       set uquadtype
       eval $setvar
       quadkind=3
       ;;
     *) case "$d_int64_t" in
        define)
          val=int64_t
          set quadtype
          eval $setvar
          val=uint64_t
          set uquadtype
          eval $setvar
          quadkind=4
          ;;
        esac
        ;;
     esac
     ;;
  esac
  ;;
esac
```

```
case "$quadtype" in
") echo "Alas, no 64-bit integer types in sight." >&4
 d_quad="$undef"
 ;;
*) echo "We could use '$quadtype' for 64-bit integers." >&4
 d_quad="$define"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/quadtype.U
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```
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?RCS:
?MAKE:d_atoll: Inlibc
?MAKE: -pick add $@ %<
?S:d_atoll:
?S: This variable conditionally defines the HAS_ATOLL symbol, which
?S: indicates to the C program that the atoll() routine is available.
?S:.
?C:HAS_ATOLL:
?C: This symbol, if defined, indicates that the atoll routine is
?C: available to convert strings into long longs.
?C:.
?H:#$d_atoll HAS_ATOLL  /**/
?H:.
?LINT:set d_atoll
: see if atoll exists
set atoll d_atoll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/atoll.U
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```
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?RCS:
```

```
?MAKE:d_ptrdiff_t: Inlibc Setvar Compile rm_try cat
?MAKE: -pick add $@ %<
?S:d_ptrdiff_t:
?S: This symbol will be defined if the C compiler supports ptrdiff_t.
?S:.
?C:HAS_PTRDIFF_T:
?C: This symbol will be defined if the C compiler supports ptrdiff_t.
?C:.
?H:#$d_ptrdiff_t HAS_PTRDIFF_T  /**/
?H:.
?LINT:set d_ptrdiff_t
: check for ptrdiff_t
echo " "
echo "Checking to see if you have ptrdiff_t..." >&4
$cat >try.c <<EOCP
#include <stddef.h>
int main() { ptrdiff_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have ptrdiff_t."
else
 val="$undef"
 echo "You do not have ptrdiff_t."
fi
$rm_try
set d_ptrdiff_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ptrdiff_t.U
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```
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?RCS:
?MAKE:d_isless: cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isless:
?S: This variable conditionally defines the HAS_ISLESS symbol, which
?S: indicates to the C program that the isless() routine is available.
?S:.
?C:HAS_ISLESS:
?C: This symbol, if defined, indicates that the isless routine is
?C: available to do the isless function.
?C:.
?H:#$d_isless HAS_ISLESS  /**/
```

```
?H:.
?LINT:set d_isless
: check for isless
echo "Checking to see if you have isless..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isless(2.0, 1.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isless."
else
 val="$undef"
 echo "You do not have isless."
fi
$rm_try
set d_isless
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isless.U
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```
?RCS: $Id: d_times.U,v 3.0.1.2 1995/07/25 14:07:50 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_times.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:50  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:14:00  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: What is the type returned by times() ?
?X:
?X: Force inclusion of <sys/types.h>
```

```
?X:INC: i_systypes
?MAKE:d_times clocktype:
 Csym Myread Typedef i_systimes
?MAKE: -pick add $@ %<
?S:d_times:
?S: This variable conditionally defines the HAS_TIMES symbol, which indicates
?S: that the times() routine exists.  The times() routine is normally
?S: provided on UNIX systems. You may have to include <sys/times.h>.
?S:.
?S:clocktype:
?S: This variable holds the type returned by times(). It can be long,
?S: or clock_t on BSD sites (in which case <sys/types.h> should be
?S: included).
?S:.
?C:HAS_TIMES (TIMES):
?C: This symbol, if defined, indicates that the times() routine exists.
?C: Note that this became obsolete on some systems (SUNOS), which now
?C: use getrusage(). It may be necessary to include <sys/times.h>.
?C:.
?C:Clock_t (CLOCKTYPE):
?C: This symbol holds the type returned by times(). It can be long,
?C: or clock_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_times HAS_TIMES  /**/
?H:#define Clock_t $clocktype /* Clock time */
?H:.
?T:val inc
: see if times exists
echo "
 "
if set times val -f d_times; eval $csym; $val; then
 echo 'times() found.' >&4
 d_times="$define"
 inc="
 case "$i_systimes" in
 "$define") inc='sys/times.h';;
 esac
 rp="What is the type returned by times() on this system?"
 set clock_t clocktype long stdio.h sys/types.h $inc
 eval $typedef_ask
else
 echo 'times() NOT found, hope that will do.' >&4
 d_times="$undef"
?X: The following is needed for typedef (won't like an empty variable)
 clocktype='int'
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/d_times.U
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```
?RCS: $Id: usrinc.U,v 1.1 2000/06/27 00:20:28 jhi Exp $
?RCS:
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?RCS:
?RCS: $Log: usrinc.U,v $
?RCS: Revision 1.1  2000/06/27 00:20:28  jhi
?RCS: Initial revision
?RCS:
?RCS: Revision 3.0.1.3  1997/02/28  16:27:12  ram
?RCS: patch61: don't ask for the include path unless they are on a MIPS
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:24:36  ram
?RCS: patch54: ensure that ./mips always exists (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:18:31  ram
?RCS: patch23: ensure usrinc value is preserved across sessions (WED)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:09:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usrinc incpath mips_type: test cat echo n c Getfile Guess \
 Oldconfig eunicefix contains rm sysroot cc
?MAKE: -pick add $@ %<
?S:usrinc:
?S: This variable holds the path of the include files, which is
?S: usually /usr/include. It is mainly used by other Configure units.
?S:.
?S:incpath:
?S: This variable must precede the normal include path to get the
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
?S:.
?S:mips_type:
?S: This variable holds the environment type for the mips system.
?S: Possible values are "BSD 4.3" and "System V".
?S:.
?D:usrinc='/usr/include'
```

```
?LINT:extern cppflags
?LINT:create mips
?T:xxx_prompt
?F:./mips
: What should the include directory be ?
: Use sysroot if set, so findhdr looks in the right place.
echo " "
$echo $n "Hmm...  $c"
dflt="$sysroot/usr/include"
incpath=''
?X: mips_type is used later, to add -DSYSTYPE_BSD43
 to cppflags if needed.
mips_type=''
?X:
?X: Cannot put the following in Guess, or we get a circular dependency.
?X:
if $test -f /bin/mips && /bin/mips; then
 echo "Looks like a MIPS system..."
 $cat >usr.c <<'EOCP'
#ifdef SYSTYPE_BSD43
/bsd43
#endif
EOCP
 if $cc $cppflags -E usr.c > usr.out && $contains / usr.out >/dev/null 2>&1; then
  dflt='/bsd43/usr/include'
  incpath='/bsd43'
  mips_type='BSD 4.3'
 else
  mips_type='System V'
 fi
 $rm -f usr.c usr.out
 echo "and you're compiling with the $mips_type compiler and libraries."
 xxx_prompt=y
 echo "exit 0" >mips
else
 echo "Doesn't look like a MIPS system."
 xxx_prompt=n
 echo "exit 1" >mips
fi
chmod +x mips
$eunicefix mips
case "$usrinc" in
'') ;;
*) dflt="$usrinc";;
esac
case "$xxx_prompt" in
y) fn=d/
 echo " "
```

```
 rp='Where are the include files you want to use?'
 . ./getfile
 usrinc="$ans"
 ;;
*) usrinc="$dflt"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/usrinc.U
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```
?RCS: $Id: i_sfio.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
?RCS: $Log: i_sfio.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:27  ram
?RCS: patch61: created
?RCS:
?MAKE:i_sfio: Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_sfio:
?S: This variable conditionally defines the I_SFIO symbol,
?S: and indicates whether a C program should include <sfio.h>.
?S:.
?C:I_SFIO:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sfio.h>.
?C:.
?H:#$i_sfio I_SFIO  /**/
?H:.
?LINT:set
 i_sfio
: see if sfio.h is available
set sfio.h i_sfio
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sfio.U

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```
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?RCS:
?MAKE:d_isfinite: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isfinite:
?S: This variable conditionally defines the HAS_ISFINITE symbol, which
?S: indicates to the C program that the isfinite() routine is available.
?S:.
?C:HAS_ISFINITE:
?C: This symbol, if defined, indicates that the isfinite routine is
?C: available to check whether a double is finite (non-infinity non-NaN).
?C:.
?LINT:set d_isfinite
?H:#$d_isfinite HAS_ISFINITE  /**/
?H:.
: check for isfinite
echo "Checking to see if you have isfinite..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isfinite(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isfinite."
else
 val="$undef"
 echo
 "You do not have isfinite."
fi
$rm_try
set d_isfinite
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isfinite.U
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```
?RCS: $Id: warnflags.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
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?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: warnflags.U,v $
?RCS: Revision 3.0  1993/08/18  12:10:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:warnflags: cat cc contains Myread Guess Oldconfig Findhdr
?MAKE: -pick add $@ %<
?S:warnflags:
?S: This variable contains any additional C compiler flags to generate
?S: warnings from the compiler. It is up to the Makefile to use this.
?S:.
: offer additional
 warning flags for compilation
$cat <<EOH

You may wish to compile with extra compiler warnings enabled.
Note that doing so enhances your chance of receiving your free set of steak
knives, particularly if you find any bugs and report them.
If you don't want extra warnings, answer "none".

EOH
case "$warnflags" in
") case "$cc" in
 *gcc*)
  dflt="-Wall -Wno-comment"
  if $contains 'fprintf' `./findhdr stdio.h` >/dev/null 2>&1; then
   :
  else
   dflt="$dflt -Wno-implicit"
  fi
  ;;
 *) dflt="none";;
 esac
 ;;
' ') dflt="none";;
*) dflt="$warnflags";;
esac

rp="Any $cc flags to enable warnings?"
. ./myread
```

```
case "$ans" in
none) warnflags=' ';;
*) warnflags="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/warnflags.U
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```
?RCS: $Id: d_strxfrm.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_strxfrm.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:04  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strxfrm: Inlibc
?MAKE: -pick add $@ %<
?S:d_strxfrm:
?S: This variable conditionally defines HAS_STRXFRM if strxfrm() is
?S: available to transform strings.
?S:.
?C:HAS_STRXFRM:
?C: This symbol, if defined, indicates that the strxfrm() routine is
?C: available to transform
 strings.
?C:.
?H:#$d_strxfrm HAS_STRXFRM /**/
?H:.
?LINT:set d_strxfrm
: see if strxfrm exists
set strxfrm d_strxfrm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strxfrm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_system.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_system.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_system: Inlibc
?MAKE: -pick add $@ %<
?S:d_system:
?S: This variable conditionally defines HAS_SYSTEM if system() is
?S: available to issue a shell command.
?S:.
?C:HAS_SYSTEM (SYSTEM):
?C: This symbol, if defined, indicates that the system routine is
?C: available to issue a shell command.
?C:.
?H:#$d_system HAS_SYSTEM /**/
?H:.
?LINT:set
 d_system
: see if system exists
set system d_system
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_system.U
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```
?RCS: $Id: html3dir.U,v $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: html3dir.U,v $
?RCS:
?MAKE:html3dir html3direxp installhtml3dir: cat sed Loc Myread \
```

```
 spackage test Getfile Setprefixvar Prefixit Prefixup html1dir
?MAKE: -pick add $@ %<
?Y:TOP
?D:html3dir="
?S:html3dir:
?S: This variable contains the name of the directory in which html
?S: source pages are to be put.  This directory is for pages
?S: that describe libraries or modules.  It is intended to
?S: correspond roughly to section 3 of the Unix manuals.
?S:.
?D:html3direxp="
?S:html3direxp:
?S: This variable
 is the same as the html3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installhtml3dir="
?S:installhtml3dir:
?S: This variable is really the same as html3direxp, unless you are
?S: using a different installprefix.  For extra portability, you
?S: should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set html3direxp
?LINT:set installhtml3dir
: determine where html pages for libraries and modules go
set html3dir html3dir none
eval $prefixit
$cat <<EOM

If you wish to install html files for modules associated with $spackage,
indicate the appropriate directory here.  To skip installing html files,
answer "none".
EOM
: There is no obvious default.  If they have specified html1dir, then
: try to key off that, possibly changing .../html1 into .../html3.
case "$html3dir" in
") html3dir=`echo "$html1dir" | $sed 's/1$/3$/'` ;;
*) dflt=$html3dir ;;
esac
fn=dn+~
rp="Directory for the $spackage module
 html pages?"
. ./getfile
prefixvar=html3dir
. ./setprefixvar
: Use ' ' for none so value is preserved next time through Configure
$test X"$html3dir" = "X" && html3dir=' '
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/html3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ndbm.U,v 3.0.1.1 1995/05/12 12:16:53 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_ndbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:53  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_ndbm i_gdbmndbm i_gdbm_ndbm d_ndbm d_ndbm_h_uses_prototypes \
 d_gdbmndbm_h_uses_prototypes d_gdbm_ndbm_h_uses_prototypes: \
    Inhdr Inlibc Setvar test d_cplusplus extern_C echo Protochk
?MAKE: -pick add $@ %<
?S:i_ndbm:
?S: This
 variable conditionally defines the I_NDBM symbol, which
?S: indicates to the C program that <ndbm.h> exists and should
?S: be included.
?S:.
?C:I_NDBM:
?C: This symbol, if defined, indicates that <ndbm.h> exists and should
?C: be included.
?C:.
?S:i_gdbmndbm:
?S: This variable conditionally defines the I_GDBMNDBM symbol, which
?S: indicates to the C program that <gdbm/ndbm.h> exists and should
?S: be included.  This was the location of the ndbm.h compatibility file
?S: in RedHat 7.1.
?S:.
?C:I_GDBMNDBM:
?C: This symbol, if defined, indicates that <gdbm/ndbm.h> exists and should
?C: be included.  This was the location of the ndbm.h compatibility file
?C: in RedHat 7.1.
?C:.
?S:i_gdbm_ndbm:
```

?S: This variable conditionally defines the I_GDBM_NDBM symbol, which
?S: indicates to the C program that <gdbm-ndbm.h> exists and should
?S: be included. This is the location of the ndbm.h compatibility file
?S: in Debian 4.0.
?S:.
?C:I_GDBM_NDBM:
?C: This symbol, if defined, indicates
 that <gdbm-ndbm.h> exists and should
?C: be included. This is the location of the ndbm.h compatibility file
?C: in Debian 4.0.
?C:.
?S:d_ndbm:
?S: This variable conditionally defines the HAS_NDBM symbol, which
?S: indicates that both the ndbm.h include file and an appropriate ndbm
?S: library exist. Consult the different i_*ndbm variables
?S: to find out the actual include location. Sometimes, a system has the
?S: header file but not the library. This variable will only be set if
?S: the system has both.
?S:.
?C:HAS_NDBM:
?C: This symbol, if defined, indicates that some form of ndbm.h or compatibility
?C: include exists, along with the appropriate library.
?C:.
?S:d_ndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling
 when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative ndbm.h include files.
?S:.
?C:NDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <ndbm.h> uses real ANSI C
?C: prototypes instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?S:d_gdbmndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the gdbm/ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative

```
 ndbm.h include files.
?S:.
?C:GDBMNDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <gdbm/ndbm.h> uses real ANSI C
?C: prototypes instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?S:d_gdbm_ndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the gdbm-ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative ndbm.h include files.
?S:.
?C:GDBM_NDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <gdbm-ndbm.h> uses real ANSI C
?C: prototypes
 instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?H:#$i_ndbm I_NDBM /**/
?H:#$i_gdbmndbm I_GDBMNDBM /**/
?H:#$i_gdbm_ndbm I_GDBM_NDBM /**/
?H:#$d_ndbm HAS_NDBM /**/
?H:#$d_ndbm_h_uses_prototypes NDBM_H_USES_PROTOTYPES /**/
?H:#$d_gdbmndbm_h_uses_prototypes GDBMNDBM_H_USES_PROTOTYPES /**/
?H:#$d_gdbm_ndbm_h_uses_prototypes GDBM_NDBM_H_USES_PROTOTYPES /**/
?H:.
?T:d_dbm_open name hdr ihdr ndbm_hdr_protochk
?LINT:set d_ndbm d_gdbmndbm_h_uses_prototypes d_gdbm_ndbm_h_uses_prototypes
d_ndbm_h_uses_prototypes
: see if ndbm.h is available
set ndbm.h i_ndbm
eval $inhdr
: Compatibility location for RedHat 7.1
set gdbm/ndbm.h i_gdbmndbm
eval $inhdr
: Compatibility location for Debian 4.0
set gdbm-ndbm.h i_gdbm_ndbm
eval $inhdr

val="$undef"
if $test "$i_ndbm" = "$define" -o "$i_gdbmndbm" = "$define" -o "$i_gdbm_ndbm" = "$define"; then
 : see if dbm_open exists
```

```
 set
 dbm_open d_dbm_open
 eval $inlibc
 case "$d_dbm_open" in
 $undef)
  i_ndbm="$undef"
  i_gdbmndbm="$undef"
  i_gdbm_ndbm="$undef"
  echo "We won't be including <ndbm.h>"
  val="$undef"
  ;;
 *) val="$define"
    ;;
 esac
fi
set d_ndbm
eval $setvar

ndbm_hdr_protochk='name=$1; hdr=$2;
eval "ihdr=\$""i_$name";
val="$undef";
if $test "$ihdr" = "$define"; then
 $echo "Checking if your <$hdr> uses prototypes..." >&4;
 case "$d_cplusplus" in
 $define) ./protochk "$extern_C void dbm_close(DBM *);" literal "extern \"C\" {" $ihdr $hdr literal "}" &&
val="$define" ;;
 *) ./protochk "$extern_C void dbm_close(int, int);" $ihdr $hdr || val="$define" ;;
 esac;
 case "$val" in
 $define) $echo "Your <$hdr> seems to have prototypes";;
 *) $echo "Your <$hdr> does not seem to have prototypes";;
 esac;
fi;
set "d_${name}_h_uses_prototypes";
eval $setvar'

set ndbm ndbm.h
eval $ndbm_hdr_protochk
set gdbmndbm gdbm/ndbm.h
eval $ndbm_hdr_protochk
set gdbm_ndbm gdbm-ndbm.h
eval $ndbm_hdr_protochk
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_ndbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_atanh: Inlibc
?MAKE: -pick add $@ %<
?S:d_atanh:
?S: This variable conditionally defines the HAS_ATANH symbol, which
?S: indicates to the C program that the atanh() routine is available.
?S:.
?C:HAS_ATANH:
?C: This symbol, if defined, indicates that the atanh routine is
?C: available to do the inverse hyperbolic tangent function.
?C:.
?H:#$d_atanh HAS_ATANH  /**/
?H:.
?LINT:set d_atanh
: see if atanh exists
set atanh d_atanh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_atanh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_off64_t: \
 Inlibc Setvar Compile rm_try cat lseeksize
?MAKE: -pick add $@ %<
?S:d_off64_t:
?S: This symbol will be defined if the C compiler supports off64_t.
?S:.
?C:HAS_OFF64_T:
?C: This symbol will be defined if the C compiler supports off64_t.
?C:.
?H:#$d_off64_t HAS_OFF64_T  /**/
?H:.
?LINT:set d_off64_t
: check for off64_t
echo " "
echo "Checking to see if you have off64_t..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
```

```
#include <unistd.h>
int main() { off64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have off64_t."
else
 val="$undef"
 echo "You do not have off64_t."
 case "$lseeksize" in
 8) echo "(Your off_t is 64 bits, so you could use that.)" ;;
 esac
fi
$rm_try
set
 d_off64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_off64_t.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_dup3: Inlibc
?MAKE: -pick add $@ %<
?S:d_dup3:
?S: This variable conditionally defines HAS_DUP3 if dup3() is
?S: available to duplicate file descriptors.
?S:.
?C:HAS_DUP3:
?C: This symbol, if defined, indicates that the dup3 routine is
?C: available to duplicate file descriptors.
?C:.
?H:#$d_dup3 HAS_DUP3 /**/
?H:.
?LINT:set d_dup3
: see if dup3 exists
set dup3 d_dup3
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dup3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tminsys.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tminsys.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_tminsys: contains Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_tminsys:
?S: This variable conditionally defines TM_IN_SYS if this system
?S: declares "struct tm" in <sys/time.h> rather than <time.h>.
?S:.
?C:TM_IN_SYS (TMINSYS):
?C: This symbol is defined if this system declares "struct tm" in
?C: <sys/time.h> rather than <time.h>.
  We can't just say
?C: -I/usr/include/sys because some systems have both time files, and
?C: the -I trick gets the wrong one.
?C:.
?H:#$d_tminsys TM_IN_SYS  /**/
?H:.
?LINT:set d_tminsys
: see if struct tm is defined in sys/time.h
echo " "
if $contains 'struct tm' `./findhdr time.h` >/dev/null 2>&1 ; then
 echo "You have struct tm defined in <time.h> rather than <sys/time.h>." >&4
 val="$undef"
else
 echo "You have struct tm defined in <sys/time.h> rather than <time.h>." >&4
 val="$define"
fi
set d_tminsys
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tminsys.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_internet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_internet.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:04  ram
?RCS: patch10: most mailers support Internet addresses nowadays (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_internet: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_internet:
?S: This variable conditionally defines the INTERNET symbol, which
?S: indicates to the C program that there is a mailer available
 which
?S: supports internet-style addresses (user@site.domain).
?S:.
?C:INTERNET:
?C: This symbol, if defined, indicates that there is a mailer available
?C: which supports internet-style addresses (user@site.domain).
?C:.
?H:#$d_internet INTERNET /**/
?H:.
?LINT:set d_internet
: check for internet mailer
dflt=y
case "$d_internet" in
"$undef") dflt=n;;
esac
cat <<EOM

Most mailers can deliver mail to addresses of the INTERNET persuasion,
such as user@host.edu.  Some older mailers, however, require the complete
path to the destination to be specified in the address.

EOM
rp="Does your mailer understand INTERNET addresses?"
. ./myread
```

```
case "$ans" in
y*) val="$define";;
*)  val="$undef";;
esac
set d_internet
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_internet.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_gconvert.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:38  ram
?RCS: patch61: integrated new unit from perl5
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:55:59  ram
?RCS: patch56: improved comments about the Gconvert macro (ADO)
?RCS: patch56: force compile-link test since it may exist but be unusable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:51  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_Gconvert:
 cat cc ccflags ldflags libs rm_try _o
?MAKE: -pick add $@ %<
?S:d_Gconvert:
?S: This variable holds what Gconvert is defined as to convert
?S: floating point numbers into strings. It could be 'gconvert'
?S: or a more complex macro emulating gconvert with gcvt() or sprintf.
?S:.
?C:Gconvert:
?C: This preprocessor macro is defined to convert a floating point
?C: number to a string without a trailing decimal point.  This
?C: emulates the behavior of sprintf("%g"), but is sometimes much more
?C: efficient.  If gconvert() is not available, but gcvt() drops the
?C: trailing decimal point, then gcvt() is used.  If all else fails,
```

```
?C: a macro using sprintf("%g") is used. Arguments for the Gconvert
?C: macro are: value, number of digits, whether trailing zeros should
?C: be retained, and the output buffer.
?C: Possible values are:
?C:  d_Gconvert='gconvert((x),(n),(t),(b))'
?C:  d_Gconvert='gcvt((x),(n),(b))'
?C:  d_Gconvert='sprintf((b),"%.*g",(n),(x))'
?C: The last two assume trailing zeros should
 not be kept.
?C:.
?H:#define Gconvert(x,n,t,b) $d_Gconvert
?H:.
?T: xxx_list xxx_convert
?F:!try
?X:
: Check how to convert floats to strings.
echo " "
echo "Checking for an efficient way to convert floats to strings."
?X: We want to be sure to drop trailing decimal points (perl5
?X: needs this).
$cat >try.c <<'EOP'
#ifdef TRY_gconvert
#define Gconvert(x,n,t,b) gconvert((x),(n),(t),(b))
char *myname = "gconvert";
#endif
#ifdef TRY_gcvt
#define Gconvert(x,n,t,b) gcvt((x),(n),(b))
char *myname = "gcvt";
#endif
#ifdef TRY_sprintf
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(x))
char *myname = "sprintf";
#endif

#include <stdio.h>

int
checkit(expect, got)
char *expect;
char *got;
{
   if (strcmp(expect, got)) {
  printf("%s oddity:  Expected %s, got %s\n",
   myname, expect, got);
  exit(1);
 }
}
```

```
int
int main()
{
 char buf[64];
 buf[63] = '\0';

 /* This must be 1st test on (which?) platform */
 /* Alan Burlison <AlanBurlsin@unn.unisys.com> */
 Gconvert(0.1, 8, 0, buf);
 checkit("0.1",
 buf);

 Gconvert(1.0, 8, 0, buf);
 checkit("1", buf);

 Gconvert(0.0, 8, 0, buf);
 checkit("0", buf);

 Gconvert(-1.0, 8, 0, buf);
 checkit("-1", buf);

 /* Some Linux gcvt's give 1.e+5 here. */
 Gconvert(100000.0, 8, 0, buf);
 checkit("100000", buf);

 /* Some Linux gcvt's give -1.e+5 here. */
 Gconvert(-100000.0, 8, 0, buf);
 checkit("-100000", buf);

 exit(0);
}
EOP
?X: List of order in which to search for functions.
?X: Usual order of efficiency is gconvert gcvt sprintf
?X: Respect a previous or hinted value.
case "$d_Gconvert" in
gconvert*) xxx_list='gconvert gcvt sprintf' ;;
gcvt*) xxx_list='gcvt gconvert sprintf' ;;
sprintf*) xxx_list='sprintf gconvert gcvt' ;;
*) xxx_list='gconvert gcvt sprintf' ;;
esac

for xxx_convert in $xxx_list; do
 echo "Trying $xxx_convert"
 $rm_try
 if $cc $ccflags -DTRY_$xxx_convert $ldflags -o try \
  try.c $libs > /dev/null 2>&1 ; then
  echo "$xxx_convert" found. >&4
```

```
  if ./try; then
   echo "I'll use $xxx_convert to convert floats
 into a string." >&4
   break;
  else
   echo "...But $xxx_convert didn't work as I expected."
  fi
 else
  echo "$xxx_convert NOT found." >&4
 fi
done

case "$xxx_convert" in
gconvert) d_Gconvert='gconvert((x),(n),(t),(b))' ;;
gcvt) d_Gconvert='gcvt((x),(n),(b))' ;;
*) d_Gconvert='sprintf((b),"%.*g",(n),(x))' ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gconvert.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpagsz.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:10  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpagsz pagesize: Oldconfig Myread Inlibc cat contains +cc +ccflags \
 libs rm Findhdr
?MAKE: -pick add $@ %<
?S:d_getpagsz:
?S: This variable conditionally defines HAS_GETPAGESIZE if getpagesize()
?S: is available to get the system page size.
?S:.
?S:pagesize (pagsize):
?S: This
```

```
 variable holds the size in bytes of a system page.
?S:.
?C:HAS_GETPAGESIZE (GETPAGESIZE):
?C: This symbol, if defined, indicates that the getpagesize system call
?C: is available to get system page size, which is the granularity of
?C: many memory management calls.
?C:.
?X: Don't name it PAGESIZE, this is sometimes used by <sys/param.h>
?C:PAGESIZE_VALUE (PAGSIZE):
?C: This symbol holds the size in bytes of a system page (obtained via
?C: the getpagesize() system call at configuration time or asked to the
?C: user if the system call is not available).
?C:.
?H:#$d_getpagsz HAS_GETPAGESIZE  /**/
?H:#define PAGESIZE_VALUE $pagesize /* System page size, in bytes */
?H:.
?F:!page
?T:guess
?LINT:set d_getpagsz
: see if getpagesize exists
set getpagesize d_getpagsz
eval $inlibc

@if pagesize || PAGESIZE_VALUE
: determine the system page size
echo " "
guess=' (OK to guess)'
case "$pagesize" in
")
 $cat >page.c <<EOP
extern int getpagesize();
int main()
{
 printf("%d\n", getpagesize());
}
EOP
 echo
 "Computing the granularity of memory management calls..." >&4
 dflt='4096'
 case "$d_getpagsz" in
 "$define")
  if $cc $ccflags -o page page.c $libs >/dev/null 2>&1; then
   dflt=`./page`
   guess="
  else
   echo "(I can't seem to compile the test program--guessing)"
  fi
  ;;
```

```
 *)
  if $cc $ccflags -o page page.c $libs -lPW >/dev/null 2>&1; then
   dflt=`./page`
   guess=''
   echo "(For your eyes only: I used the getpagesize() from -lPW.)"
  else
   if $contains PAGESIZE `./findhdr sys/param.h` >/dev/null 2>&1; then
    $cat >page.c <<EOP
#include <sys/param.h>
int main()
{
 printf("%d\n", PAGESIZE);
}
EOP
    if $cc $ccflags -o page page.c $libs >/dev/null 2>&1; then
     dflt=`./page`
     guess=''
     echo "(Using value of PAGESIZE found in <sys/param.h>.)"
    fi
   fi
  fi
  ;;
 esac
 ;;
*) dflt="$pagesize"; guess='';;
esac
rp="What is the system page size, in bytes$guess?"
. ./myread
pagesize=$ans
$rm -f page.c page

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpagsz.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getitimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_getitimer:
?S: This variable conditionally defines the HAS_GETITIMER symbol, which
```

```
?S: indicates to the C program that the getitimer() routine is available.
?S:.
?C:HAS_GETITIMER:
?C: This symbol, if defined, indicates that the getitimer routine is
?C: available to return interval timers.
?C:.
?H:#$d_getitimer HAS_GETITIMER  /**/
?H:.
?LINT:set d_getitimer
: see if getitimer exists
set getitimer d_getitimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getitimer.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:siteman1dir siteman1direxp installsiteman1dir: Getfile \
 Setprefixvar prefix siteprefix man1dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:siteman1dir=''
?S:siteman1dir:
?S: This variable contains the name of the directory in which site-specific
?S: manual source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After perl
 has been installed, users may install their own local
?S: man1 pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:siteman1direxp=''
?S:siteman1direxp:
?S: This variable is the same as the siteman1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
```

```
?S:.
?D:installsiteman1dir=''
?S:installsiteman1dir:
?S: This variable is really the same as siteman1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsiteman1dir
?LINT:set siteman1dir
?LINT:set siteman1direxp
: determine where add-on manual pages go
case "$siteman1dir" in
'') dflt=`echo $man1dir | $sed "s#^$prefix#$siteprefix#"` ;;
*) dflt=$siteman1dir ;;
esac
case "$dflt" in
'|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname
 where the site-specific manual pages should be installed?'
. ./getfile
prefixvar=siteman1dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteman1dir.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_castneg.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:11:21  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS: patch54: added improved test case for Interactive Unix
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:10:50  ram
?RCS: patch36: don't forget to tell user about compilation failures (ADO)
```

```
?RCS: patch36: declare signal handler correctly using 'signal_t' (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Can
 the compiler cast negative / odd floats to unsigned values.
?X:
?MAKE:d_castneg castflags: cat +cc +ccflags rm_try Setvar signal_t
?MAKE: -pick add $@ %<
?S:d_castneg:
?S: This variable conditionally defines CASTNEG, which indicates
?S: wether the C compiler can cast negative float to unsigned.
?S:.
?S:castflags:
?S: This variable contains a flag that precise difficulties the
?S: compiler has casting odd floating values to unsigned long:
?S:  0 = ok
?S:  1 = couldn't cast < 0
?S:  2 = couldn't cast >= 0x80000000
?S:  4 = couldn't cast in argument expression list
?S:.
?C:CASTNEGFLOAT:
?C: This symbol is defined if the C compiler can cast negative
?C: numbers to unsigned longs, ints and shorts.
?C:.
?C:CASTFLAGS:
?C: This symbol contains flags that say what difficulties the compiler
?C: has casting odd floating values to unsigned long:
?C:  0 = ok
?C:  1 = couldn't cast < 0
?C:  2 = couldn't cast >= 0x80000000
?C:  4 = couldn't cast in argument expression list
?C:.
?H:#$d_castneg CASTNEGFLOAT  /**/
?H:#define
 CASTFLAGS $castflags  /**/
?H:.
?F:!try
?LINT:set d_castneg
: check for ability to cast negative floats to unsigned
echo " "
echo 'Checking whether your C compiler can cast negative float to unsigned.' >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <signal.h>
$signal_t blech() { exit(7); }
```

```
$signal_t blech_in_list() { exit(4); }
unsigned long dummy_long(p) unsigned long p; { return p; }
unsigned int dummy_int(p) unsigned int p; { return p; }
unsigned short dummy_short(p) unsigned short p; { return p; }
int main()
{
 double f = -123.;
 unsigned long along;
 unsigned int aint;
 unsigned short ashort;
 int result = 0;

 signal(SIGFPE, blech);
 along = (unsigned long)f;
 aint = (unsigned int)f;
 ashort = (unsigned short)f;
 if (along != (unsigned long)-123)
  result |= 1;
 if (aint != (unsigned int)-123)
  result |= 1;
 if (ashort != (unsigned short)-123)
  result |= 1;
 f = (double)0x40000000;
 f = f + f;
 along = 0;
 along = (unsigned long)f;
 if
 (along != 0x80000000)
  result |= 2;
 f -= 1.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x7fffffff)
  result |= 1;
 f += 2.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x80000001)
  result |= 2;
 if (result)
  exit(result);
?X:
?X: The following is a test for Interactive Unix Version 4.1, which
?X: has an 'improved' compiler which can correctly cast negative
?X: floats in expression lists, but apparently not in argument lists.
?X: Contributed by Winfried Koenig <win@incom.rhein-main.de>
?X:
 signal(SIGFPE, blech_in_list);
```

```
 f = 123.;
 along = dummy_long((unsigned long)f);
 aint = dummy_int((unsigned int)f);
 ashort = dummy_short((unsigned short)f);
 if (along != (unsigned long)123)
  result |= 4;
 if (aint != (unsigned int)123)
  result |= 4;
 if (ashort != (unsigned short)123)
  result |= 4;
 exit(result);

}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 ./try
 castflags=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 castflags=7
fi
case
 "$castflags" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_castneg
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_castneg.U
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```
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?RCS:
?MAKE:d_getmnt: Inlibc
?MAKE: -pick add $@ %<
?S:d_getmnt:
```

```
?S: This variable conditionally defines the HAS_GETMNT symbol, which
?S: indicates to the C program that the getmnt() routine is available
?S: to retrieve one or more mount info blocks by filename.
?S:.
?C:HAS_GETMNT:
?C: This symbol, if defined, indicates that the getmnt routine is
?C: available to get filesystem mount info by filename.
?C:.
?H:#$d_getmnt HAS_GETMNT  /**/
?H:.
?LINT:set d_getmnt
: see if getmnt exists
set getmnt d_getmnt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getmnt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libnlist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libnlist.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:08:02  ram
?RCS: patch61: added usrinc and mips on the dependency line
?RCS: patch61: make sure we call ./mips
?RCS: patch61: added a ?LINT: hint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libnlist: Loc libpth Guess usrinc _a
?MAKE: -pick add $@ %<
?S:libnlist (libmld):
?S: This variable contains the name of the library required to
 get the
?S: definition of the nlist() function.  On a MIPS RISC/OS box, it is -lmld.
?S: Under Sys Vr4, it is -lelf.  Otherwise, its value is empty.
?S:.
?T:xxx
?LINT:use usrinc
```

```
: see if we need a special library for 'nlist()'
echo " "
: How about doing this if nlist is not in libc...
if ./mips ; then
 libnlist='-lmld'
else
 xxx=`./loc libelf$_a x $libpth`
 case "$xxx" in
 x)  ;;
 *)
  libnlist="$xxx"
  ;;
 esac
fi
case "$libnlist" in
") echo "No special library for nlist() seems necessary." >&4
 ;;
*)  echo "nlist() can be found in $libnlist." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libnlist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uselongdouble: Myread Oldconfig Setvar cat test usemorebits
?MAKE: -pick add $@ %<
?Y:TOP
?S:uselongdouble:
?S: This variable conditionally defines the USE_LONG_DOUBLE symbol,
?S: and indicates that long doubles should be used when available.
?S:.
?C:USE_LONG_DOUBLE:
?C: This symbol, if defined, indicates that long doubles should
?C: be used when available.
?C:.
?H:?%<:#ifndef USE_LONG_DOUBLE
?H:?%<:#$uselongdouble USE_LONG_DOUBLE  /**/
?H:?%<:#endif
?H:.
?LINT:extern ccflags
```

```
?LINT:use usemorebits
?F:!uselongdouble.cbu
: Check for uselongdouble support
case "$ccflags" in
*-DUSE_LONG_DOUBLE*|*-DUSE_MORE_BITS*) uselongdouble="$define" ;;
esac

case "$uselongdouble" in
$define|true|[yY]*) dflt='y';;
*)
 dflt='n';;
esac
cat <<EOM

Perl can be built to take advantage of long doubles which
(if available) may give more accuracy and range for floating point numbers.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Try to use long doubles if available?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set uselongdouble
eval $setvar

case "$uselongdouble" in
true|[yY]*) uselongdouble="$define" ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that long doubles should be used,
: we may need to set or change some other defaults.
if $test -f uselongdouble.cbu; then
   echo "Your platform has some specific hints regarding long doubles, using them..."
   . ./uselongdouble.cbu
else
   case "$uselongdouble" in
 $define)
  $cat <<EOM
(Your platform does not have any specific hints for long doubles.)
EOM
 ;;
   esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/uselongdbl.U
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```
?RCS: $Id: d_SHM_MAC.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_SHM_MAC.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_SHM_MAC d_SHM_PRM d_SHM_SEG d_SHM_IMMU: cat d_shm test rm +cc +ccflags
?MAKE: -pick add $@ %<
?S:d_SHM_MAC:
?S: Sometimes, the SHMLBA manifest needs sys/sysmacros.h, usually for
?S: the ctob() macro.
?S:.
?S:d_SHM_PRM:
?S: Sometimes, the SHMLBA manifest needs sys/param.h, usually for the
?S: NBPC constant.
?S:.
?S:d_SHM_SEG:
?S: Sometimes,
 the SHMLBA manifest needs sys/seg.h, usually for the
?S: SNUMSHFT constant.
?S:.
?S:d_SHM_IMMU:
?S: Sometimes, the SHMLBA manifest needs sys/immu.h, usually for the
?S: stob() macro.
?S:.
?C:SHMLBA_WANTS_SYSMACROS:
?C: This value tells us to include <sys/sysmacros.h> because SHMLBA
?C: needs something from there, probably the ctob() macro.
?C:.
?C:SHMLBA_WANTS_PARAM:
?C: This value tells us to include <sys/param.h> because SHMLBA needs
?C: something from there, probably the NBPC constant.
?C:.
?C:SHMLBA_WANTS_SEG:
?C: This value tells us to include <sys/seg.h> because SHMLBA needs
?C: something from there, probably the SNUMSHFT constant.
```

```
?C:.
?C:SHMLBA_WANTS_IMMU:
?C: This value tells us to include <sys/immu.h> because SHMLBA needs
?C: something from there, probably the stob() macro.  (tower_600 only?)
?C:.
?H:#$d_SHM_MAC SHMLBA_WANTS_SYSMACROS /* SHMLBA wants ctob()? */
?H:#$d_SHM_PRM SHMLBA_WANTS_PARAM /* SHMLBA wants NBPC? */
?H:#$d_SHM_SEG SHMLBA_WANTS_SEG /* SHMLBA wants
 SNUMSHFT? */
?H:#$d_SHM_IMMU SHMLBA_WANTS_IMMU /* SHMLBA wants stob()? */
?H:.
?T:flags D_sys_immu D_sys_seg D_sys_sysmacros D_sys_param
: check for SHMLBA braindamage
d_SHM_MAC="$undef"
d_SHM_PRM="$undef"
d_SHM_SEG="$undef"
d_SHM_IMMU="$undef"
if $test "$d_shm" = "$define" ; then
 echo " "
 $cat >&4 <<EOM
Checking to see if SHMLBA needs additional headers.
The headers I'll be checking are:

   sys/macros.h (for the ctob() macro)
   sys/param.h  (for NBPC)
   sys/seg.h    (for SNUMSHFT)
   sys/immu.h  (for the stob() macro)

EOM
 $cat >shm_mac.c <<'EOCP'
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/shm.h>
#ifdef I_SYS_IMMU
#include <sys/immu.h>
#endif
#ifdef I_SYS_SYSMACROS
#include <sys/sysmacros.h>
#endif
#ifdef I_SYS_PARAM
#include <sys/param.h>
#endif
#ifdef I_SYS_SEG
#include <sys/seg.h>
#endif

int main() {
 int foo = SHMLBA ;
```

```
 }
EOCP
 flags='xxx'
 for D_sys_immu in " '-DI_SYS_IMMU'; do
 for D_sys_seg in " '-DI_SYS_SEG'; do
 for D_sys_sysmacros in " '-DI_SYS_SYSMACROS';
 do
 for D_sys_param in " '-DI_SYS_PARAM'; do
  case "$flags" in
  'xxx')
   case "$D_sys_immu$D_sys_param$D_sys_sysmacros$D_sys_seg" in
   ")
    echo "Trying it normally..."
    ;;
   *)
   echo "Trying $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg"
   ;;
   esac
   if $cc $ccflags \
   $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg \
   -o shm_mac shm_mac.c >/dev/null 2>&1 ; then
    set X $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg
    shift
    flags="$*"
    echo "Succeeded with $flags"
   fi
   ;;
  esac
 done
 done
 done
 done
 case "$flags" in
 xxx)
  echo "I don't know how to keep SHMLBA happy.  Good luck!"
  ;;
 esac
 case "$flags" in
 *I_SYS_PARAM*) d_SHM_PRM="$define";;
 esac
 case "$flags" in
 *I_SYS_SYSMACROS*) d_SHM_MAC="$define";;
 esac
 case "$flags" in
 *I_SYS_SEG*) d_SHM_SEG="$define";;
 esac
 case "$flags" in
 *I_SYS_IMMU*) d_SHM_IMMU="$define";;
```

```
 esac
fi
$rm -f shm_mac*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_SHM_MAC.U
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```
?RCS: $Id: d_getnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnent:
?S: This variable conditionally defines HAS_GETNETENT if getnetent() is
?S: available to look up network names in some data base or another.
?S:.
?C:HAS_GETNETENT:
?C: This symbol, if defined, indicates that the getnetent() routine is
?C: available to look up network names in some data base
 or another.
?C:.
?H:#$d_getnent HAS_GETNETENT  /**/
?H:.
?LINT:set d_getnent
: see if getnetent exists
set getnetent d_getnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bzero.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bzero.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:48:15  ram
?RCS: patch12: added magic support for bzero()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:01:33  ram
?RCS: patch10: now only defines HAS_BZERO, no macro remap on memset (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bzero: Inlibc
?MAKE: -pick add $@ %<
?S:d_bzero:
?S: This variable conditionally defines the HAS_BZERO
 symbol if
?S: the bzero() routine is available to set memory to 0.
?S:.
?C:HAS_BZERO:
?C: This symbol is defined if the bzero() routine is available to
?C: set a memory block to 0.
?C:.
?H:#$d_bzero HAS_BZERO /**/
?H:.
?M:bzero: HAS_BZERO
?M:#ifndef HAS_BZERO
?M:#ifndef bzero
?M:#define bzero(s,l) memset((s),0,(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bzero
: see if bzero exists
set bzero d_bzero
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bzero.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_gethbyaddr: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbyaddr:
?S: This variable conditionally defines the HAS_GETHOSTBYADDR symbol, which
?S: indicates to the C program that the gethostbyaddr() routine is available
?S: to look up hosts by their IP addresses.
?S:.
?C:HAS_GETHOSTBYADDR:
?C: This symbol, if defined, indicates that the gethostbyaddr() routine is
?C: available to look up hosts by their IP addresses.
?C:.
?H:#$d_gethbyaddr HAS_GETHOSTBYADDR  /**/
?H:.
?LINT:set d_gethbyaddr
: see if gethostbyaddr exists
set gethostbyaddr d_gethbyaddr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethbyad.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_termio.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:54  ram
?RCS: patch36: call ./usg and ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1994/08/29  16:26:38  ram
?RCS: patch32: don't include all three I_* symbols in config.h
?RCS: patch32: (had forgotten to undo this part last time)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:25:03  ram
?RCS: patch27: undone ADO's fix in previous patch since it was useless
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:05:23
```

```
 ram
?RCS: patch23: now include all three defines in config.h (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_termio i_sgtty i_termios: test Inlibc Cppsym Guess Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?S:i_termio:
?S: This variable conditionally defines the I_TERMIO symbol, which
?S: indicates to the C program that it should include <termio.h> rather
?S: than <sgtty.h>.
?S:.
?S:i_termios:
?S: This variable conditionally defines the I_TERMIOS symbol, which
?S: indicates to the C program that the POSIX <termios.h> file is
?S: to be included.
?S:.
?S:i_sgtty:
?S: This variable conditionally defines the I_SGTTY symbol, which
?S: indicates to the C program that it should include <sgtty.h> rather
?S: than <termio.h>.
?S:.
?C:I_TERMIO:
?C: This symbol, if defined, indicates that the program should include
?C: <termio.h> rather than <sgtty.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of
 this symbol.
?C:.
?C:I_TERMIOS:
?C: This symbol, if defined, indicates that the program should include
?C: the POSIX termios.h rather than sgtty.h or termio.h.
?C: There are also differences in the ioctl() calls that depend on the
?C: value of this symbol.
?C:.
?C:I_SGTTY:
?C: This symbol, if defined, indicates that the program should include
?C: <sgtty.h> rather than <termio.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of this symbol.
?C:.
?H:#$i_termio I_TERMIO  /**/
?H:#$i_termios I_TERMIOS  /**/
?H:#$i_sgtty I_SGTTY  /**/
?H:.
?T:val2 val3
?LINT:set i_termio i_sgtty i_termios
: see if this is a termio system
val="$undef"
```

```
val2="$undef"
val3="$undef"
?X: Prefer POSIX-approved termios.h over all else
if $test `./findhdr termios.h`; then
 set tcsetattr i_termios
 eval $inlibc
 val3="$i_termios"
fi
echo " "
case "$val3" in
"$define") echo "You have POSIX termios.h... good!" >&4;;
*) if ./Cppsym pyr; then
  case "`/bin/universe`" in
  ucb) if $test `./findhdr
 sgtty.h`; then
    val2="$define"
    echo "<sgtty.h> found." >&4
   else
    echo "System is pyramid with BSD universe."
    ./warn "<sgtty.h> not found--you could have problems."
   fi;;
  *) if $test `./findhdr termio.h`; then
    val="$define"
    echo "<termio.h> found." >&4
   else
    echo "System is pyramid with USG universe."
    ./warn "<termio.h> not found--you could have problems."
   fi;;
  esac
?X: Start with USG to avoid problems if both usg/bsd was guessed
 elif ./usg; then
  if $test `./findhdr termio.h`; then
   echo "<termio.h> found." >&4
   val="$define"
  elif $test `./findhdr sgtty.h`; then
   echo "<sgtty.h> found." >&4
   val2="$define"
  else
   ./warn "Neither <termio.h> nor <sgtty.h> found--cross fingers!"
  fi
 else
  if $test `./findhdr sgtty.h`; then
   echo "<sgtty.h> found." >&4
   val2="$define"
  elif $test `./findhdr termio.h`; then
   echo "<termio.h> found." >&4
   val="$define"
  else
```

```
   ./warn "Neither <sgtty.h> nor <termio.h> found--cross
 fingers!"
  fi
 fi;;
esac
set i_termio; eval $setvar
val=$val2; set i_sgtty; eval $setvar
val=$val3; set i_termios; eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_termio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myinit.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:47:29  ram
?RCS: patch44: leading comment states this unit comes before option processing
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: If you want to initialize any default values, copy this unit to your
?X: personal U directory and add the assignments to the end.  This file
?X: is included after variables are initialized but before any old
?X: config.sh file is read in and before
 any Configure switch processing.
?X:
?MAKE:Myinit: Init
?MAKE: -pick add $@ %<
?LINT: nocomment
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Myinit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003, Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_pthread_attr_setscope: Inlibc
?MAKE: -pick add $@ %<
?S:d_pthread_attr_setscope:
?S: This variable conditionally defines HAS_PTHREAD_ATTR_SETSCOPE if
?S: pthread_attr_setscope() is available to set the contention scope
?S: attribute of a thread attribute object.
?S:.
?C:HAS_PTHREAD_ATTR_SETSCOPE:
?C: This symbol, if defined, indicates that the pthread_attr_setscope
?C: system call is available to set the contention scope attribute of
?C: a thread attribute object.
?C:.
?H:#$d_pthread_attr_setscope HAS_PTHREAD_ATTR_SETSCOPE  /**/
?H:.
?LINT:set
 d_pthread_attr_setscope
: see if pthread_attr_setscope exists
set pthread_attr_setscope d_pthread_attr_setscope
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_pthread_attr_ss.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chsize.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_chsize.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_chsize: Inlibc
?MAKE: -pick add $@ %<
?S:d_chsize:
```

```
?S: This variable conditionally defines the CHSIZE symbol, which
?S: indicates to the C program that the chsize() routine is available
?S: to truncate files.  You might need a -lx to get this routine.
?S:.
?C:HAS_CHSIZE (CHSIZE):
?C: This symbol, if defined, indicates that the chsize
 routine is available
?C: to truncate files.  You might need a -lx to get this routine.
?C:.
?H:#$d_chsize HAS_CHSIZE  /**/
?H:.
?LINT:set d_chsize
: see if chsize exists
set chsize d_chsize
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mboxchar.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mboxchar.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:13:12  ram
?RCS: patch56: ensure ctrl-A characters are visible in prompt (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:11:22  ram
?RCS: patch23: added support for MMDF mailboxes (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mboxchar: cat package shsharp Myread Oldconfig
?MAKE: -pick add $@ %<
?S:mboxchar:
?S: This variable
 contains the eventual value of the MBOXCHAR symbol,
?S: which is how a C program can identify a file as a mailbox.
?S:.
?C:MBOXCHAR:
```

```
?C: This symbol contains a character which will match the beginning
?C: of a mailbox file.
?C:.
?H:#define MBOXCHAR '$mboxchar'  /**/
?H:.
?T:CTRLA
?INIT:CTRLA=`echo a | tr a '\001'`
: determine how to determine when a file is a mailbox
case "$mboxchar" in
") dflt=F;;
?X: The following ^A is two-chars to ensure it will print out -- WED
"$CTRLA") dflt='^A';;
*)  dflt="$mboxchar";;
esac
$cat <<EOM

In saving articles, $package wants to differentiate between saving to
mailbox format files and normal files.  It does this by examining the
first character of the file in question.  On most systems the first line
starts with "From ...", so the first character is an F.  Other systems
use magic cookies like control codes between articles, so one of those
would be first.  For example, MMDF messages are separated with lines of
four control-A's (you may specify one
 as ^A, i.e. caret A).

EOM
rp="What's the first character of a mailbox file?"
. ./myread
mboxchar="$ans"
case "$mboxchar" in
'F') ;;
"$CTRLA") ;;
'^A'|'^a') mboxchar="$CTRLA";;
*)  cat <<'EOM'

You will need to edit the shell script mbox.saver to properly append an
article to a mailbox.  The arguments to the script are documented in
EOM
 case "$shsharp" in
 false) echo "comments in mbox.saver.std.";;
 true) echo "comments in the shell script itself.";;
 esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mboxchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setvbuf.U,v 3.0.1.1 1994/08/29 16:11:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setvbuf.U,v $
?RCS:
?MAKE:d_setvbuf: Inlibc
?MAKE: -pick add $@ %<
?S:d_setvbuf:
?S: This variable conditionally defines the HAS_SETVBUF symbol, which
?S: indicates to the C program that the setvbuf() routine is available
?S: to change buffering on an open stdio stream.
?S:.
?C:HAS_SETVBUF :
?C: This symbol, if defined, indicates that the setvbuf routine is
?C: available to change buffering on an open stdio stream.
?C: to a line-buffered mode.
?C:.
?H:#$d_setvbuf HAS_SETVBUF  /**/
?H:.
?LINT:set d_setvbuf
: see if setvbuf exists
set setvbuf d_setvbuf
eval $inlibc

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setvbuf.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: instubperl.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:installusrbinperl: installbin cat bin Myread Setvar test Devel
?MAKE: -pick add $@ %<
?LINT:set installusrbinperl
```

```
?Y:TOP
?S:installusrbinperl:
?S: This variable tells whether Perl should be installed also as
?S: /usr/bin/perl in addition to
?S: $installbin/perl
?S:.
?C:INSTALL_USR_BIN_PERL:
?C: This symbol, if defined, indicates that Perl is to be installed
?C: also as /usr/bin/perl.
?C:.
?H:#$installusrbinperl INSTALL_USR_BIN_PERL /**/
?H:.
: determine
 whether to install perl also as /usr/bin/perl

echo " "
if $test -d /usr/bin -a "X$installbin" != X/usr/bin; then
 $cat <<EOM
Many scripts expect perl to be installed as /usr/bin/perl.

If you want to, I can install the perl you are about to compile
as /usr/bin/perl (in addition to $bin/perl).
EOM
 if test -f /usr/bin/perl; then
    $cat <<EOM

However, please note that because you already have a /usr/bin/perl,
overwriting that with a new Perl would very probably cause problems.
Therefore I'm assuming you don't want to do that (unless you insist).

EOM
    case "$installusrbinperl" in
    "$define"|[yY]*) dflt='y';;
    *)   dflt='n';;
    esac
 else
    $cat <<EOM

Since you don't have a /usr/bin/perl I'm assuming creating one is okay.

EOM
    case "$installusrbinperl" in
    "$undef"|[nN]*) dflt='n';;
    *)   dflt='y';;
    esac
 fi
 rp="Do you want to install perl as /usr/bin/perl?"
 . ./myread
```

```
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef" ;;
 esac
else
 val="$undef"
fi
set
 installusrbinperl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/instubperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sitearch.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:21:30  ram
?RCS: patch61: created
?RCS:
?MAKE:sitearch sitearchexp installsitearch: afs cat Getfile \
 Oldconfig Prefixit prefix test archname sitelib
?MAKE: -pick add $@ %<
?Y:TOP
?S:sitearch:
?S: This variable contains the eventual value of the SITEARCH symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this
 directory while performing installation (with ~ substitution).
?S:.
?S:sitearchexp:
?S: This variable is the ~name expanded version of sitearch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installsitearch:
?S: This variable is really the same as sitearchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
```

```
?S: should be used in makefiles.
?S:.
?C:SITEARCH:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Individual sites may place their own extensions and modules in
?C: this directory.
?C:.
?C:SITEARCH_EXP:
?C: This symbol contains the ~name expanded version of SITEARCH, to be used
?C: in programs that are not prepared to deal
 with ~ expansion at run-time.
?C:.
?H:#define SITEARCH "$sitearch"  /**/
?H:#define SITEARCH_EXP "$sitearchexp"  /**/
?H:.
?T:xxx
: determine where site specific architecture-dependent libraries go.
xxx=`echo $sitelib/$archname | sed 's!^$prefix!!'`
: xxx is usually lib/site_perl/archname.
set sitearch sitearch none
eval $prefixit
case "$sitearch" in
") dflt="$sitelib/$archname" ;;
*) dflt="$sitearch" ;;
esac
$cat <<EOM

The installation process will also create a directory for
architecture-dependent site-specific extensions and modules.

EOM
fn=nd~+
rp='Pathname for the site-specific architecture-dependent library files?'
. ./getfile
if $test "X$sitearchexp" != "X$ansexp"; then
 installsitearch="
fi
sitearch="$ans"
sitearchexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
```

which they are presumably copied to the former directory by occult means).

```
EOM
 case
 "$installsitearch" in
 ") dflt=`echo $sitearchexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installsitearch";;
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installsitearch="$ans"
else
 installsitearch="$sitearchexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sitearch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Unix.U,v 3.0.1.1 1997/02/28 15:20:06 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Unix.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:06  ram
?RCS: patch61: created
?RCS:
?X:
?X: The purpose of this unit is to define things that are common across all
?X: known UNIX platforms. If Configure is ported/used on a non-UNIX
?X: environment, then some of the following variables can be redefined in hint
?X: files.
?X:
?MAKE:Unix _exe _a _o exe_ext lib_ext obj_ext path_sep \
 firstmakefile archobjs rm_try: Oldconfig rm
?MAKE: -pick add $@ %<
?S:_exe:
?S: This
 variable defines the extension used for executable files.
?S: DJGPP, Cygwin and OS/2 use '.exe'.  Stratus VOS uses '.pm'.
?S: On operating systems which do not require a specific extension
```

```
?S: for executable files, this variable is empty.
?S:.
?S:_a:
?S: This variable defines the extension used for ordinary library files.
?S: For unix, it is '.a'.  The '.' is included.  Other possible
?S: values include '.lib'.
?S:.
?S:_o:
?S: This variable defines the extension used for object files.
?S: For unix, it is '.o'.  The '.' is included.  Other possible
?S: values include '.obj'.
?S:.
?S:firstmakefile:
?S: This variable defines the first file searched by make.  On unix,
?S: it is makefile (then Makefile).  On case-insensitive systems,
?S: it might be something else.  This is only used to deal with
?S: convoluted make depend tricks.
?S:.
?S:archobjs:
?S: This variable defines any additional objects that must be linked
?S: in with the program on this architecture.  On unix, it is usually
?S: empty.
  It is typically used to include emulations of unix calls
?S: or other facilities.  For perl on OS/2, for example, this would
?S: include os2/os2.obj.
?S:.
?X: Metaconfig's Obsolete symbol stuff is too over-eager.  In the
?X: perl sources, it picks up things like "P" and "FLOCK" that are
?X: not used in the way Metaconfig thinks they are.  Thus I can't
?X: just declare these obsolete and then run metaconfig -o.
?X: Instead, I'll just handle them here.
?X: Sadly, history has conspired to give us a web of definitions;
?X: this could have been much simpler.
?S:lib_ext:
?S: This is an old synonym for _a.
?S:.
?S:exe_ext:
?S: This is an old synonym for _exe.
?S:.
?S:obj_ext:
?S: This is an old synonym for _o.
?S:.
?S:path_sep:
?S: This is an old synonym for p_ in Head.U, the character
?S: used to separate elements in the command shell search PATH.
?S:.
?S:rm_try:
?S: This is a cleanup variable for try test programs.
```

```
?S: Internal Configure use only.
?S:.
?LINT: change p_
?INIT::
 Trailing extension.  Override this in a hint file, if needed.
?INIT:: Extra object files, if any, needed on this platform.
?INIT:archobjs="
: Define several unixisms.
: Hints files or command line option can be used to override them.
: The convoluted testing is in case hints files set either the old
: or the new name.
case "$_exe" in
") case "$exe_ext" in
 ") ;;
 *) _exe="$exe_ext" ;;
 esac
 ;;
esac
case "$_a" in
") case "$lib_ext" in
   ") _a='.a';;
 *) _a="$lib_ext" ;;
 esac
 ;;
esac
case "$_o" in
") case "$obj_ext" in
 ") _o='.o';;
 *) _o="$obj_ext";;
 esac
 ;;
esac
case "$p_" in
") case "$path_sep" in
 ") p_=':';;
 *) p_="$path_sep";;
 esac
 ;;
esac
exe_ext=$_exe
lib_ext=$_a
obj_ext=$_o
path_sep=$p_

rm_try="$rm -f try try$_exe a.out .out try.[cho] try.$_o core core.try* try.core*"

@if firstmakefile
: Which makefile gets called first.  This is used by make depend.
```

```
case "$firstmakefile" in
") firstmakefile='makefile';;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Unix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgctl:
?S: This variable conditionally defines the HAS_MSGCTL symbol, which
?S: indicates to the C program that the msgctl() routine is available.
?S:.
?C:HAS_MSGCTL:
?C: This symbol, if defined, indicates that the msgctl() routine is
?C: available to perform message control operations.
?C:.
?H:#$d_msgctl
 HAS_MSGCTL  /**/
?H:.
?LINT:set d_msgctl
: see if msgctl exists
set msgctl d_msgctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stdlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdlib: Nothing
?MAKE: -pick add $@ %<
?S:i_stdlib:
?S: This variable unconditionally defines the I_STDLIB symbol.
?S:.
?C:I_STDLIB:
?C: This symbol is always defined, indicating that <stdlib.h> exists
?C: and should be included.
?C:.
?H:#define I_STDLIB  /**/
?H:.
: stub, used only to satisfy other units
i_stdlib='define'
```

Found in
 path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_stdlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the WRITEME file.
?RCS:
?MAKE:d_writev: Inlibc
?MAKE: -pick add $@ %<
?S:d_writev:
?S: This variable conditionally defines the HAS_WRITEV symbol, which
?S: indicates to the C program that the writev() routine is available.
?S:.
?C:HAS_WRITEV:
?C: This symbol, if defined, indicates that the writev routine is
?C: available to do scatter writes.
?C:.
```

```
?H:#$d_writev HAS_WRITEV  /**/
?H:.
?LINT:set d_writev
: see if writev exists
set writev d_writev
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_writev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strerror_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_strerror_r strerror_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_strerror_r:
?S: This variable conditionally defines the HAS_STRERROR_R symbol,
?S: which indicates to the C program that the strerror_r()
?S: routine is available.
?S:.
?S:strerror_r_proto:
?S: This variable encodes the prototype of strerror_r.
?S: It is zero if d_strerror_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_strerror_r
?S: is defined.
?S:.
?C:HAS_STRERROR_R:
?C: This symbol, if defined, indicates that the strerror_r routine
?C: is available to strerror
 re-entrantly.
?C:.
?C:STRERROR_R_PROTO:
?C: This symbol encodes the prototype of strerror_r.
?C: It is zero if d_strerror_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_strerror_r
?C: is defined.
?C:.
?H:#$d_strerror_r HAS_STRERROR_R /**/
?H:#define STRERROR_R_PROTO $strerror_r_proto /**/
?H:.
?T:try hdrs d_strerror_r_proto
```

```
: see if strerror_r exists
set strerror_r d_strerror_r
eval $inlibc
case "$d_strerror_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h define string.h"
 case "$d_strerror_r_proto:$usethreads" in
 ":define") d_strerror_r_proto=define
  set d_strerror_r_proto strerror_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_strerror_r_proto" in
 define)
 case "$strerror_r_proto" in
 "|0) try='int strerror_r(int, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && strerror_r_proto=I_IBW ;;
 esac
 case "$strerror_r_proto" in
 "|0) try='int strerror_r(int, char*, int);'
 ./protochk "$extern_C $try" $hdrs && strerror_r_proto=I_IBI
 ;;
 esac
 case "$strerror_r_proto" in
 "|0) try='char* strerror_r(int, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && strerror_r_proto=B_IBW ;;
 esac
 case "$strerror_r_proto" in
 "|0) d_strerror_r=undef
  strerror_r_proto=0
  echo "Disabling strerror_r, cannot determine prototype." >&4 ;;
 * ) case "$strerror_r_proto" in
  REENTRANT_PROTO*) ;;
  *) strerror_r_proto="REENTRANT_PROTO_$strerror_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "strerror_r has no prototype, not using it." >&4 ;;
  esac
  d_strerror_r=undef
  strerror_r_proto=0
  ;;
 esac
 ;;
*) strerror_r_proto=0
 ;;
```

```
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strerror_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sysman.U,v 3.0.1.2 1994/06/20 07:08:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sysman.U,v $
?RCS: Revision 3.0.1.2  1994/06/20  07:08:43  ram
?RCS: patch30: now explicitly states that /usr/man/man1 is the default
?RCS: patch30: added /usr/local/man/man1 to the search list
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:13:50  ram
?RCS: patch10: added support for /local/man/man1 (WAD)
?RCS: patch10: added temporary syspath variable to cut down on line length
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:55  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:sysman: test Loc Oldconfig
?MAKE: -pick add $@ %<
?S:sysman:
?S: This variable holds the place where the manual is located on this
?S: system. It is not the place where the user wants to put his manual
?S: pages. Rather it is the place where Configure may look to find manual
?S: for unix commands (section 1 of the manual usually). See mansrc.
?S:.
?T:syspath
: determine where manual pages are on this system
echo " "
case "$sysman" in
")
 syspath='/usr/share/man/man1 /usr/man/man1'
 syspath="$syspath /usr/man/mann /usr/man/manl /usr/man/local/man1"
 syspath="$syspath /usr/man/u_man/man1"
 syspath="$syspath /usr/catman/u_man/man1 /usr/man/l_man/man1"
 syspath="$syspath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 syspath="$syspath /usr/man/man.L /local/man/man1 /usr/local/man/man1"
```

```
 sysman=`./loc . /usr/man/man1 $syspath`
 ;;
esac
if $test -d "$sysman"; then
 echo "System manual is in $sysman." >&4
else
 echo "Could not find manual pages in source form."
 >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sysman.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scannl.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:27  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:59:12  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Does the scanf routine read "\n" correctly ? This is was not
?X: the case on AIX...
?X:
?MAKE:d_scannl: cat +cc +ccflags rm Setvar
?MAKE: -pick add $@ %<
?S:d_scannl:
?S: This
 variable conditionally defines SCAN_NL, which indicates
?S: wether the C library routines scanf() and friends can deal with
?S: a '\n' in the input correctly. They do most of the time.
?S:.
?C:SCAN_NL:
?C: This symbol is defined if the C library routines scanf() and friends
```

```
?C: can deal with a '\n' in the input correctly, so that you can say
?C: scanf("%d\n"); instead of scanf("%d"); getc(c); to handle the '\n'.
?C:.
?H:#$d_scannl SCAN_NL  /* scanf("%d\n") works */
?H:.
?F:!try
?LINT:set d_scannl
: does scanf handle "\n" correctly ?
echo " "
val="$define"
?X: I really want to say "\n" instead of '\n', because I am referring
?X: to the string given as argument to scanf().
echo 'Let"""'s see if scanf() handles "\\n" correctly...' >&4
$cat >try.c <<'EOCP'
int main()
{
 int i = 0, j = 0;
 scanf("%d\n%d", &i, &j);
 if (j != 3)
  exit(1);
 exit(0);
}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 if ./try <<'EOD'
2
3
EOD
 then
  echo "Yes, it does."
 else
  echo "No, it doesn't."
  val="$undef"
 fi
else
 echo
 "(I can't seem to compile the test program. Assuming it does.)"
fi
set d_scannl
eval $setvar
$rm -f try.* try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scannl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_NOFILE.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:38  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:nofile d_gettblsz tablesize: Myread Guess cat +cc +ccflags +libs \
 test rm Csym
?MAKE: -pick add $@ %<
?S:nofile:
?S: This variable contains the number of file descriptors available to the
?S: process.
?S:.
?S:d_gettblsz:
?S: This variable conditionally handles remapping
 of the getdtablesize()
?S: subroutine to ulimit(4,0), or the NOFILE manifest constant.
?S:.
?S:tablesize:
?S: This variable contains either the 'NOFILE' constant or 'ulimit(4, 0L)'
?S: and is used as the remapped value for the getdtablesize() macro.
?S:.
?C:getdtablesize:
?C: This catches use of the getdtablesize() subroutine, and remaps it
?C: to either ulimit(4,0) or NOFILE, if getdtablesize() isn't available.
?C:.
?C:VAL_NOFILE:
?C: This symbol contains the number of file descriptors available to the
?C: process, as determined at configuration time. Unless a static constant
?C: is needed, you should rely on getdtablesize() to obtain that number.
?C:.
?H:#$d_gettblsz getdtablesize() $tablesize /**/
?H:#define VAL_NOFILE $nofile /* Number of file descriptors */
?H:.
?F:!nofile
?T:d_ulimit4 val
: see if getdtablesize exists
echo " "
?X: Revert logical value (d_gettblsz is undef iff getdtablesize is present)
```

```
case "$d_gettblsz" in
$define) d_gettblsz="$undef";;
$undef) d_gettblsz="$define";;
esac
if
 set getdtablesize val -f d_gettblsz; eval $csym; $val; then
 echo 'getdtablesize() found.' >&4
 d_gettblsz="$undef"
 tablesize="
@if VAL_NOFILE || nofile
 $cat >nofile.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", getdtablesize());
}
EOCP
 nofile="
 if $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1; then
  nofile=`./nofile 2>/dev/null`
 fi
 if $test "$nofile"; then
  echo "(You have $nofile file descriptors available per process.)"
 else
  nofile='20'
  if ./bsd; then
   nofile='64'
  fi
 echo "(Hmm... Let's say you have $nofile file descriptors available.)"
 fi
@end
else
 echo 'getdtablesize() NOT found...' >&4
 if set ulimit val -f; eval $csym; $val; then
  echo 'Maybe ulimit(4,0) will work...'
  $cat >nofile.c <<'EOCP'
#include <stdio.h>
#ifdef GETPARAM_H
#include <sys/param.h>
#endif
int main()
{
 printf("%d %d\n",
#ifdef NOFILE
  NOFILE,
#else
  0,
#endif
```

```
  ulimit(4,0));
  exit(0);
}
EOCP
  if $cc $ccflags -DGETPARAM_H -o nofile nofile.c $libs
 >/dev/null 2>&1 \
   || $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1 ; then
   set `./nofile`
   d_gettblsz=$1
   d_ulimit4=$2
   if $test "$d_ulimit4" -lt 0; then
    echo "Your ulimit() call doesn't tell me what I want to know."
    echo "We'll just use NOFILE in this case."
    nofile=$d_gettblsz
    d_gettblsz="$define"
    tablesize='NOFILE'
   else
    if $test "$d_gettblsz" -gt 0; then
    echo "Your system defines NOFILE to be $d_gettblsz, and" >&4
    else
    echo "I had trouble getting NOFILE from your system, but" >&4
    fi
echo "ulimit returns $d_ulimit4 as the number of available file descriptors." >&4
    dflt='y';
    echo " "
 rp='Should I use ulimit to get the number of available file descriptors?'
    . ./myread
    case "$ans" in
    y*)
     nofile=$d_ulimit4
     d_gettblsz="$define"
     tablesize='ulimit(4, 0L)'
     echo "Using ulimit(4,0)."
     ;;
    *)
     nofile=$d_gettblsz
     d_gettblsz="$define"
     tablesize='NOFILE'
     echo "Using NOFILE."
     ;;
    esac
   fi
  else
   echo
 "Strange, I couldn't get my test program to compile."
   echo "We'll just use NOFILE in this case."
   d_gettblsz="$define"
   tablesize='NOFILE'
```

```
   nofile=''
  fi
 else
  echo 'Using NOFILE instead.'
  d_gettblsz="$define"
  tablesize='NOFILE'
  nofile=''
 fi
fi
@if VAL_NOFILE || nofile
case "$nofile" in
'')
 $cat >nofile.c <<'EOCP'
#include <stdio.h>
#ifdef GETPARAM_H
#include <sys/param.h>
#endif
int main()
{
 printf("%d\n",
#ifdef NOFILE
  NOFILE,
#else
  0,
#endif
  );
  exit(0);
}
EOCP
 if $cc $ccflags -DGETPARAM_H -o nofile nofile.c $libs >/dev/null 2>&1 \
  || $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1 ; then
  nofile=`./nofile 2>/dev/null`
 fi
 if $test "$nofile"; then
  echo "(You have $nofile file descriptors available per process.)"
 else
  nofile='20'
  if ./bsd; then
   nofile='64'
  fi
 echo "(Hmm... Let's say you have $nofile file descriptors available.)"
 fi
 ;;
esac
@end
$rm -f nofile*
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_NOFILE.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: newsspool.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: newsspool.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:newsspool newsspoolexp: Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:newsspool:
?S: This variable contains the eventual value of the NEWSSPOOL symbol,
?S: which is the directory name where news articles are spooled.  It
?S: may have a ~ on the front of it.
?S:.
?S:newsspoolexp:
?S: This is the same as the newsspool variable, but is
 filename expanded
?S: at configuration time, for programs not wanting to deal with it at
?S: run-time.
?S:.
?C:NEWSSPOOL:
?C: This symbol contains the directory name where news articles are
?C: spooled.  The program must be prepared to do ~ expansion on it.
?C:.
?C:NEWSSPOOL_EXP:
?C: This is the same as NEWSSPOOL, but is filename expanded at
?C: configuration time, for use in programs not willing to do so
?C: at run-time.
?C:.
?H:#define NEWSSPOOL "$newsspool" /**/
?H:#define NEWSSPOOL_EXP "$newsspoolexp" /**/
?H:.
: locate news spool directory
case "$newsspool" in
")
 dflt=/usr/spool/news
 ;;
*) dflt="$newsspool";;
```

```
esac
echo " "
fn=d~
rp='Where are news spooled?'
. ./getfile
newsspool="$ans"
newsspoolexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/newsspool.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_newsadm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_newsadm.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:36:53  ram
?RCS: patch61: added Guess dependency
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:14:33  ram
?RCS: patch36: call ./eunice explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_newsadm newsadmin: cat contains Guess Setvar Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_newsadm:
?S: This variable
 conditionally defines the NEWS_ADMIN symbol, which
?S: indicates to the C program that there is a user who is in charge
?S: of news administration.
?S:.
?S:newsadmin:
?S: This variable holds the login name of the news administrator, if any.
?S:.
?C:NEWS_ADMIN (NEWSADMIN):
?C: This symbol, if defined, contains the login name of the news
?C: administrator.
?C:.
?H:#$d_newsadm NEWS_ADMIN "$newsadmin"  /**/
```

```
?H:.
?LINT:set d_newsadm
: get news administrator name
case "$newsadmin" in
")
 if $contains "^news:" /etc/passwd >/dev/null 2>&1 ; then
  dflt=news
 elif $contains "^usenet:" /etc/passwd >/dev/null 2>&1 ; then
  dflt=usenet
 elif ./eunice; then
  dflt=system
 else
  dflt=root
 fi
 ;;
*)
 dflt="$newsadmin"
 ;;
esac
$cat <<'EOM'

Many systems keep their news in a private directory, or have a non-superuser
in charge of administering news.  (If you don't have such a user, take the
default answer.)  I need the login name (not directory) which is used for
news administration.

EOM
rp="News
 admin login?"
. ./myread
newsadmin="$ans"
case "$newsadmin" in
root) val="$undef" ;;
*) val="$define" ;;
esac
set d_newsadm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_newsadm.U
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```
?RCS: $Id: d_itimer.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_itimer.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_itimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_itimer:
?S: This variable conditionally defines the HAS_ITIMER symbol, which
?S: indicates that the setitimer() routine exists.  The setitimer()
?S: routine supports sub-second accuracy for one real-time and two
?S: cpu clocks.
?S:.
?C:HAS_ITIMER (ITIMER):
?C: This symbol, if defined, indicates
 that the setitimer() routine exists.
?C:.
?H:#$d_itimer HAS_ITIMER /**/
?H:.
?LINT:set d_itimer
: see if setitimer exists
set setitimer d_itimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_itimer.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_time.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:43  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:16:38  ram
?RCS: patch36: now uses new Typedef unit to compute type information (ADO)
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:07:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Maybe <sys/types.h> should be included?
?X:INC: i_systypes
?MAKE:d_time timetype: Csym Setvar Findhdr Myread Typedef
?MAKE: -pick add $@ %<
?S:d_time:
?S: This
 variable conditionally defines the HAS_TIME symbol, which indicates
?S: that the time() routine exists.  The time() routine is normally
?S: provided on UNIX systems.
?S:.
?S:timetype:
?S: This variable holds the type returned by time(). It can be long,
?S: or time_t on BSD sites (in which case <sys/types.h> should be
?S: included). Anyway, the type Time_t should be used.
?S:.
?C:HAS_TIME (TIMER):
?C: This symbol, if defined, indicates that the time() routine exists.
?C:.
?C:Time_t (TIMETYPE):
?C: This symbol holds the type returned by time(). It can be long,
?C: or time_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_time HAS_TIME  /**/
?H:#define Time_t $timetype  /* Time type */
?H:.
?LINT:set d_time
: see if time exists
echo " "
if set time val -f d_time; eval $csym; $val; then
 echo 'time() found.' >&4
 val="$define"
 set time_t timetype long stdio.h sys/types.h
 eval $typedef
 dflt="$timetype"
 echo " "
 rp="What type is returned by time() on this
 system?"
 . ./myread
 timetype="$ans"
else
 echo 'time() not found, hope that will do.' >&4
 val="$undef"
 timetype='int';
fi
```

```
set d_time
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_time.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:st_ino_size st_ino_sign: cat echo i_stdlib Setvar Compile run rm_try
?MAKE: -pick add $@ %<
?S:st_ino_sign:
?S: This variable contains the signedness of struct stat's st_ino.
?S: 1 for unsigned, -1 for signed.
?S:.
?S:st_ino_size:
?S: This variable contains the size of struct stat's st_ino in bytes.
?S:.
?C:ST_INO_SIZE:
?C: This variable contains the size of struct stat's st_ino in bytes.
?C:.
?C:ST_INO_SIGN:
?C: This symbol holds the signedness of struct stat's st_ino.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define ST_INO_SIGN
 $st_ino_sign /* st_ino sign */
?H:#define ST_INO_SIZE $st_ino_size /* st_ino size */
?H:.
?F:!try
: Check the size of st_ino
$echo " "
$echo "Checking the size of st_ino..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   struct stat st;
```

```
   printf("%d\n", (int)sizeof(st.st_ino));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 val=`$run ./try`
 case "$val" in
 ") st_ino_size=4
  $echo "(I can't execute the test program--guessing $st_ino_size.)" >&4
  ;;
 *) st_ino_size=$val
  $echo "Your st_ino is $st_ino_size bytes long."
  ;;
 esac
else
 st_ino_size=4
 $echo "(I can't compile the test program--guessing $st_ino_size.)" >&4
fi
$rm_try

: Check if st_ino is signed
$echo " "
$echo "Checking the sign of st_ino..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
int main() {
 struct stat foo;
       foo.st_ino = -1;
 if (foo.st_ino < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set
 try
if eval $compile; then
 val=`$run ./try`
 case "$val" in
 ") st_ino_sign=1
  $echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) st_ino_sign=$val
  case "$st_ino_sign" in
   1) $echo "Your st_ino is unsigned." ;;
  -1) $echo "Your st_ino is signed."   ;;
```

```
  esac
  ;;
 esac
else
 st_ino_sign=1
 $echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/st_ino_def.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_ldbl_dig: Myread contains cat rm Setvar \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_ldbl_dig:
?S: This variable conditionally defines d_ldbl_dig if this system's
?S: header files provide LDBL_DIG, which is the number of significant
?S: digits in a long double precision number.
?S:.
?C:HAS_LDBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol LDBL_DIG, which is the number
?C: of significant digits in a long double precision number. Unlike
?C: for
 DBL_DIG, there's no good guess for LDBL_DIG if it is undefined.
?C:.
?H:#$d_ldbl_dig HAS_LDBL_DIG /* */
?H:.
?F:!ldbl_dig.c
?LINT:set d_ldbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >ldbl_dig.c <<EOM
#include <limits.h>
#include <float.h>
#ifdef LDBL_DIG
```

```
printf("Contains LDBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < ldbl_dig.c >ldbl_dig.E 2>/dev/null
if $contains 'LDBL_DIG' ldbl_dig.E >/dev/null 2>&1; then
 echo "LDBL_DIG found." >&4
 val="$define"
else
 echo "LDBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f ldbl_dig.?
set d_ldbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ldbl_dig.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_siginfo_si_errno d_siginfo_si_pid d_siginfo_si_uid d_siginfo_si_addr d_siginfo_si_status
d_siginfo_si_band d_siginfo_si_value d_siginfo_si_fd: d_sigaction pidtype uidtype Hasfield_t
?MAKE: -pick add $@ %<
?S:d_siginfo_si_errno:
?S: This variable conditionally defines the HAS_SIGINFO_SI_ERRNO symbol,
?S: which indicates that the siginfo_t struct has the si_errno member.
?S:.
?S:d_siginfo_si_pid:
?S: This variable conditionally defines the HAS_SIGINFO_SI_PID symbol,
?S: which indicates that the siginfo_t struct has the si_pid member.
?S:.
?S:d_siginfo_si_uid:
?S: This variable conditionally defines the HAS_SIGINFO_SI_UID symbol,
?S: which indicates that the siginfo_t struct has the si_uid member.
?S:.
?S:d_siginfo_si_addr:
?S: This
 variable conditionally defines the HAS_SIGINFO_SI_ADDR symbol,
?S: which indicates that the siginfo_t struct has the si_addr member.
?S:.
?S:d_siginfo_si_status:
?S: This variable conditionally defines the HAS_SIGINFO_SI_STATUS symbol,
?S: which indicates that the siginfo_t struct has the si_status member.
?S:.
```

```
?S:d_siginfo_si_band:
?S: This variable conditionally defines the HAS_SIGINFO_SI_BAND symbol,
?S: which indicates that the siginfo_t struct has the si_band member.
?S:.
?S:d_siginfo_si_value:
?S: This variable conditionally defines the HAS_SIGINFO_SI_VALUE symbol,
?S: which indicates that the siginfo_t struct has the si_value member.
?S:.
?S:d_siginfo_si_fd:
?S: This variable conditionally defines the HAS_SIGINFO_SI_FD symbol,
?S: which indicates that the siginfo_t struct has the si_fd member.
?S:.
?C:HAS_SIGINFO_SI_ERRNO:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_errno member
?C:.
?C:HAS_SIGINFO_SI_PID:
?C: This
 symbol, if defined, indicates that siginfo_t has the
?C: si_pid member
?C:.
?C:HAS_SIGINFO_SI_UID:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_uid member
?C:.
?C:HAS_SIGINFO_SI_ADDR:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_addr member
?C:.
?C:HAS_SIGINFO_SI_STATUS:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_status member
?C:.
?C:HAS_SIGINFO_SI_BAND:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_band member
?C:.
?C:HAS_SIGINFO_SI_VALUE:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_value member
?C:.
?C:HAS_SIGINFO_SI_FD:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_fd member
?C:.
?H:#$d_siginfo_si_errno HAS_SIGINFO_SI_ERRNO /**/
?H:#$d_siginfo_si_pid HAS_SIGINFO_SI_PID /**/
?H:#$d_siginfo_si_uid HAS_SIGINFO_SI_UID /**/
```

```
?H:#$d_siginfo_si_addr HAS_SIGINFO_SI_ADDR /**/
?H:#$d_siginfo_si_status HAS_SIGINFO_SI_STATUS /**/
?H:#$d_siginfo_si_band HAS_SIGINFO_SI_BAND /**/
?H:#$d_siginfo_si_value HAS_SIGINFO_SI_VALUE /**/
?H:#$d_siginfo_si_fd HAS_SIGINFO_SI_FD /**/
?H:.
:
 see what siginfo fields we have
case "$d_sigaction" in
"$define")
 echo "Checking if your siginfo_t has si_errno field...">&4
 set d_siginfo_si_errno siginfo_t int si_errno $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_pid field...">&4
 set d_siginfo_si_pid siginfo_t $pidtype si_pid $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_uid field...">&4
 set d_siginfo_si_uid siginfo_t $uidtype si_uid $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_addr field...">&4
 set d_siginfo_si_addr siginfo_t "void *" si_addr $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_status field...">&4
 set d_siginfo_si_status siginfo_t int si_status $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_band field...">&4
 set
 d_siginfo_si_band siginfo_t long si_band $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_value field...">&4
 set d_siginfo_si_value siginfo_t "union sigval" si_value $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_fd field...">&4
 set d_siginfo_si_fd siginfo_t int si_fd $d_sigaction signal.h
 eval $hasfield_t;

 ;;
*)
 d_siginfo_si_errno="$undef"
 d_siginfo_si_pid="$undef"
 d_siginfo_si_uid="$undef"
```

```
 d_siginfo_si_addr="$undef"
 d_siginfo_si_status="$undef"
 d_siginfo_si_band="$undef"
 d_siginfo_si_value="$undef"
 d_siginfo_si_fd="$undef"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_siginfo_si.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_ndbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:53  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_ndbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_ndbm (d_ndbm):
?S: This variable conditionally defines the I_NDBM symbol, which
?S: indicates to the C program that <ndbm.h> exists and should
?S: be included.
?S:.
?C:I_NDBM (HAS_NDBM NDBM):
?C: This
 symbol, if defined, indicates that <ndbm.h> exists and should
?C: be included.
?C:.
?H:#$i_ndbm I_NDBM /**/
?H:.
?T:t_ndbm d_dbm_open
?LINT:set i_ndbm
: see if ndbm.h is available
?X: t_ndbm is a tentative check.  We might just have the .h, not the lib -- ADO
set ndbm.h t_ndbm
```

```
eval $inhdr
case "$t_ndbm" in
$define)
 : see if dbm_open exists
 set dbm_open d_dbm_open
 eval $inlibc
 case "$d_dbm_open" in
 $undef)
  t_ndbm="$undef"
  echo "We won't be including <ndbm.h>"
  ;;
 esac
 ;;
esac
val="$t_ndbm"
set i_ndbm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_ndbm.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: package.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:27:21  ram
?RCS: patch36: beware of non-ascii character sets when translating case
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:37:02  ram
?RCS: patch14: skip definition of spackage if not otherwise used
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:10  ram
?RCS: patch10: added spackage, suitable for starting sentences
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:package spackage:
 Nothing
?MAKE: -pick wipe $@ %<
```

```
?S:package:
?S: This variable contains the name of the package being constructed.
?S: It is primarily intended for the use of later Configure units.
?S:.
?S:spackage:
?S: This variable contains the name of the package being constructed,
?S: with the first letter uppercased, i.e. suitable for starting
?S: sentences.
?S:.
?C:PACKAGE:
?C: This variable contains the name of the package being built.
?C:.
?H:#define PACKAGE "$package"
?H:.
?T:first last
: set package name
package='<PACKAGENAME>'
@if spackage
first=`echo $package | sed -e 's/^\(.\).*/\1/'`
last=`echo $package | sed -e 's/^.\(.*\)/\1/'`
?X:
?X: So early in the Configure script, we don't have ./tr set up and can't
?X: include Tr in our dependency or that would create a cycle. Therefore,
?X: we have to somehow duplicate the work done in Tr. That's life.
?X:
case "`echo AbyZ | tr '[:lower:]' '[:upper:]' 2>/dev/null`" in
ABYZ) spackage=`echo $first | tr '[:lower:]' '[:upper:]'`$last;;
*) spackage=`echo
 $first | tr '[a-z]' '[A-Z]'`$last;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/package.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysstat.U,v $
```

```
?RCS: Revision 3.0.1.1  1997/02/28  15:48:30  ram
?RCS: patch61: created
?RCS:
?MAKE:i_sysstat: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysstat:
?S: This variable conditionally defines the I_SYS_STAT symbol,
?S: and indicates whether a C program should include <sys/stat.h>.
?S:.
?C:I_SYS_STAT (I_SYSSTAT):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/stat.h>.
?C:.
?H:#$i_sysstat I_SYS_STAT  /**/
?H:.
?LINT:set
 i_sysstat
: see if sys/stat.h is available
set sys/stat.h i_sysstat
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysstat.U
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```
?RCS: $Id$
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getprpwnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getprpwnam:
?S: This variable conditionally defines HAS_GETPRPWNAM if getprpwnam() is
?S: available to retrieve protected (shadow) password entries by name.
?S:.
?C:HAS_GETPRPWNAM:
?C: This symbol, if defined, indicates that the getprpwnam system call is
?C: available to retrieve protected (shadow) password entries by name.
?C:.
?H:#$d_getprpwnam HAS_GETPRPWNAM  /**/
?H:.
?LINT:set d_getprpwnam
```

```
: see if getprpwnam exists
set getprpwnam d_getprpwnam
eval $inlibc

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getprpwnam.U
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_statfs_f_flags: \
 Hasfield i_sysparam i_sysmount i_systypes \
 i_sysvfs i_sysstatfs Setvar d_statfs_s
?MAKE: -pick add $@ %<
?S:d_statfs_f_flags:
?S: This variable conditionally defines the HAS_STRUCT_STATFS_F_FLAGS
?S: symbol, which indicates to struct statfs from has f_flags member.
?S: This kind of struct statfs is coming from sys/mount.h (BSD),
?S: not from sys/statfs.h (SYSV).
?S:.
?C:HAS_STRUCT_STATFS_F_FLAGS:
?C: This symbol, if defined, indicates that the struct statfs
?C: does have the f_flags member containing the mount flags of
?C: the filesystem containing the file.
?C: This kind of struct statfs is coming from <sys/mount.h> (BSD 4.3),
?C: not from <sys/statfs.h> (SYSV).  Older BSDs
 (like Ultrix) do not
?C: have statfs() and struct statfs, they have ustat() and getmnt()
?C: with struct ustat and struct fs_data.
?C:.
?H:#$d_statfs_f_flags HAS_STRUCT_STATFS_F_FLAGS  /**/
?H:.
?LINT:set d_statfs_f_flags
: see if struct statfs knows about f_flags
case "$d_statfs_s" in
define)
 echo " "
 echo "Checking to see if your struct statfs has f_flags field..." >&4
 set d_statfs_f_flags statfs f_flags $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h
$i_sysvfs sys/vfs.h $i_sysstatfs sys/statfs.h
 eval $hasfield
 ;;
```

```
*) val="$undef"
 set d_statfs_f_flags
 eval $setvar
 ;;
esac
case "$d_statfs_f_flags" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statfs_f_flags.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
?MAKE:d_mkstemps: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkstemps:
?S: This variable conditionally defines the HAS_MKSTEMPS symbol, which
?S: indicates to the C program that the mkstemps() routine is available
?S: to exclusively create and open a uniquely named (with a suffix)
?S: temporary file.
?S:.
?C:HAS_MKSTEMPS :
?C: This symbol, if defined, indicates that the mkstemps routine is
?C: available to exclusively create and open a uniquely named
?C: (with a suffix) temporary file.
?C:.
?H:#$d_mkstemps HAS_MKSTEMPS  /**/
?H:.
?LINT:set d_mkstemps
: see if mkstemps exists
set mkstemps d_mkstemps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkstemps.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Prefixup.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Prefixup.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:30:40  ram
?RCS: patch49: created
?RCS:
?X:
?X: Used as: "set dflt; eval $prefixup" to set $dflt to be $prefix/dir
?X: instead of $prefixexp/dir, in case portability was involved somehow
?X: and $prefix uses ~name expansion.
?X:
?MAKE:Prefixup: prefix prefixexp
?MAKE: -pick add $@ %<
?LINT:define prefixup
?S:prefixup:
?S: This shell variable is used internally by Configure to reset
?S: the leading
 installation prefix correctly when $prefix uses
?S: ~name expansion.
?S:  set dflt
?S:  eval $prefixup
?S: That will set $dflt to $prefix/dir if it was $prefixexp/dir and
?S: $prefix differs from $prefixexp.
?S:.
?V:prefixup
: set the prefixup variable, to restore leading tilda escape
prefixup='case "$prefixexp" in
"$prefix") ;;
*) eval "$1=\`echo \$$1 | sed \"s,^$prefixexp,$prefix,\"\`";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Prefixup.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memcpy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memcpy.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:58  ram
?RCS: patch10: removed text recommending bcopy over memcpy (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memcpy: Inlibc
?MAKE: -pick add $@ %<
?S:d_memcpy:
?S: This variable conditionally defines the HAS_MEMCPY symbol, which
?S: indicates to the C program that the memcpy() routine is available
?S: to copy blocks of
 memory.
?S:.
?C:HAS_MEMCPY (MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy blocks of memory.
?C:.
?H:#$d_memcpy HAS_MEMCPY /**/
?H:.
?LINT:set d_memcpy
: see if memcpy exists
set memcpy d_memcpy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lockf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_lockf.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:36  ram
?RCS: patch32: created by ADO
?RCS:
```

```
?MAKE:d_lockf: Inlibc
?MAKE: -pick add $@ %<
?S:d_lockf:
?S: This variable conditionally defines HAS_LOCKF if lockf() is
?S: available to do file locking.
?S:.
?C:HAS_LOCKF (LOCKF):
?C: This symbol, if defined, indicates that the lockf routine is
?C: available to do file locking.
?C:.
?H:#$d_lockf
 HAS_LOCKF  /**/
?H:.
?LINT:set d_lockf
: see if lockf exists
set lockf d_lockf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_lockf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lns.U,v 3.0.1.1 1994/06/20 07:05:52 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?X:
?X: This unit checks whether symbolic links are really supported.
?X: We can't rely on d_symlink because that may be listed in the
?X: C library but unimplemented.
?X:
?MAKE:lns: ln rm touch
?MAKE: -pick add $@ %<
?S:lns:
?S: This variable holds the name of the command to make
?S: symbolic
```

```
 links (if they are supported).  It can be used
?S: in the Makefile. It is either 'ln -s' or 'ln'
?S:.
: determine whether symbolic links are supported
echo " "
$touch blurfl
if $ln -s blurfl sym > /dev/null 2>&1 ; then
 echo "Symbolic links are supported." >&4
 lns="$ln -s"
else
 echo "Symbolic links are NOT supported." >&4
 lns="$ln"
fi
$rm -f blurfl sym
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/lns.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: ssizetype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:24:21  ram
?RCS: patch61: integrated perl5 concerns for mis-configured sfio
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:30:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:33:06  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:ssizetype: Myread Typedef
 sizetype cat rm \
 +cc +optimize +ccflags +ldflags +libs _o
?MAKE: -pick add $@ %<
?S:ssizetype:
?S: This variable defines ssizetype to be something like ssize_t,
```

```
?S: long or int.  It is used by functions that return a count
?S: of bytes or an error condition.  It must be a signed type.
?S: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?S:.
?C:SSize_t:
?C: This symbol holds the type used by functions that return
?C: a count of bytes or an error condition.  It must be a signed type.
?C: It is usually ssize_t, but may be long or int, etc.
?C: It may be necessary to include <sys/types.h> or <unistd.h>
?C: to get any typedef'ed information.
?C: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?C:.
?H:#define SSize_t $ssizetype  /* signed count of bytes */
?H:.
?F:!ssize.out !ssize
: see what type is used for signed size_t
set ssize_t ssizetype int stdio.h sys/types.h
eval $typedef
dflt="$ssizetype"
?X: Now check out whether sizeof(SSize_t) == sizeof(Size_t)
$cat
 > ssize.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#define Size_t $sizetype
#define SSize_t $dflt
int main()
{
 if (sizeof(Size_t) == sizeof(SSize_t))
  printf("$dflt\n");
 else if (sizeof(Size_t) == sizeof(int))
  printf("int\n");
 else
  printf("long\n");
 fflush(stdout);
 exit(0);
}
EOM
echo " "
?X: If $libs contains -lsfio, and sfio is mis-configured, then it
?X: sometimes (apparently) runs and exits with a 0 status, but with no
?X: output!.  Thus we check with test -s whether we actually got any
?X: output.  I think it has to do with sfio's use of _exit vs. exit,
?X: but I don't know for sure.  --Andy Dougherty  1/27/97.
if $cc $optimize $ccflags $ldflags -o ssize ssize.c $libs > /dev/null 2>&1  &&
  ./ssize > ssize.out 2>/dev/null && test -s ssize.out ; then
 ssizetype=`$cat ssize.out`
 echo "I'll be using $ssizetype for functions returning a byte count." >&4
```

```
else
 $cat >&4 <<EOM
Help! I can't compile and run the ssize_t test program: please enlighten me!
(This
 is probably a misconfiguration in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)

I need a type that is the same size as $sizetype, but is guaranteed to
be signed.  Common values are ssize_t, int and long.

EOM
 rp="What signed type is the same size as $sizetype?"
 . ./myread
 ssizetype="$ans"
fi
$rm -f ssize ssize$_o ssize.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ssizetype.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_mkostemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkostemp:
?S: This variable conditionally defines HAS_MKOSTEMP if mkostemp() is
?S: available to exclusively create and open a uniquely named (with a
?S: suffix) temporary file.
?S:.
?C:HAS_MKOSTEMP:
?C: This symbol, if defined, indicates that the mkostemp routine is
?C: available to exclusively create and open a uniquely named (with a
?C: suffix) temporary file.
?C:.
?H:#$d_mkostemp HAS_MKOSTEMP /**/
?H:.
?LINT:set d_mkostemp
: see if mkostemp exists
set mkostemp d_mkostemp
eval $inlibc
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkostemp.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
?MAKE:d_logb: Inlibc
?MAKE: -pick add $@ %<
?S:d_logb:
?S: This variable conditionally defines the HAS_LOGB symbol, which
?S: indicates to the C program that the logb() routine is available
?S: to extract the exponent of x.
?S:.
?C:HAS_LOGB:
?C: This symbol, if defined, indicates that the logb routine is
?C: available to do the logb function.
?C:.
?H:#$d_logb HAS_LOGB  /**/
?H:.
?LINT:set d_logb
: see if logb exists
set logb d_logb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_logb.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcscmp: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_wcscmp:
?S: This variable conditionally defines the HAS_WCSCMP symbol if the
?S: wcscmp() routine is available and can be used to compare wide
?S: character strings.
?S:.
?C:HAS_WCSCMP:
?C: This symbol, if defined, indicates that the wcscmp routine is
?C: available to compare two wide character strings.
```

```
?C:.
?H:#$d_wcscmp HAS_WCSCMP /**/
?H:.
?F:!try
?LINT: set d_wcscmp
: look for wcscmp
echo " "
$cat >try.c <<'EOCP'
#include <stdio.h>
#include
 <wchar.h>
int main ()
{
   wchar_t *s = L" ";
   return (wcscmp (s, s) ? 1 : 0);
   }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working wcscmp() found." >&4
     val="$define" ;;
 *)  echo "wcscmp() found, but it doesn't work" >&4
     ;;
 esac
else
   echo "wcscmp() NOT found." >&4
   fi
set d_wcscmp
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_wcscmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysutsname.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysutsname: Inhdr Hasfield
?MAKE: -pick add $@ %<
```

```
?S:i_sysutsname:
?S: This variable conditionally defines the I_SYSUTSNAME symbol,
?S: and indicates whether a C program should include <sys/utsname.h>.
?S:.
?C:I_SYSUTSNAME:
?C: This symbol, if defined, indicates that <sys/utsname.h> exists and
?C: should be included.
?C:.
?H:#$i_sysutsname I_SYSUTSNAME  /**/
?H:.
?LINT:set i_sysutsname
: see if this is a sys/utsname.h system
set sys/utsname.h i_sysutsname
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysutsname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorhtml1dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorhtml1dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorhtml1dir vendorhtml1direxp installvendorhtml1dir: html1dir Getfile \
 Setprefixvar Oldconfig Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorhtml1dir:
?S: This variable contains the name of the directory for html
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this
 directory.
?S: Vendors who distribute perl may wish to place their own
?S: html pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorhtml1direxp:
```

```
?S: This variable is the ~name expanded version of vendorhtml1dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorhtml1dir=''
?S:installvendorhtml1dir:
?S: This variable is really the same as vendorhtml1direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorhtml1dir
: Set the vendorhtml1dir variables
case "$vendorprefix" in
'') vendorhtml1dir=''
 vendorhtml1direxp=''
 ;;
*) : determine where vendor-supplied html pages go.
 : There is no standard location, so try to copy the previously-selected
 : directory structure for the core html pages.
 : XXX Better default suggestions would be welcome.
 case "$vendorhtml1dir"
 in
 '') dflt=`echo "$html1dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorhtml1dir ;;
 esac
 case "$dflt" in
 '|' ') dflt=none ;;
 esac
 fn=dn+~
 rp='Pathname for the vendor-supplied html pages?'
 . ./getfile
 vendorhtml1dir="$ans"
 vendorhtml1direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorhtml1dir" = "X" && vendorhtml1dir=' '
prefixvar=vendorhtml1dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorhtml1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: spitshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: spitshell.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:22:12  ram
?RCS: patch61: removed useless chatter as this is now done very early
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:37:01  ram
?RCS: patch45: use 'test -f' instead of 'test -r' for exec-only cat progs (WED)
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:33:00  ram
?RCS: patch32: don't create spitshell under the UU directory
?RCS:
 patch32: allow for cat in /bin or /usr/bin
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:58  ram
?RCS: patch10: made #!-failure message more friendly (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:spitshell shsharp sharpbang: eunicefix sh Head
?MAKE: -pick add $@ %<
?S:spitshell:
?S: This variable contains the command necessary to spit out a runnable
?S: shell on this system.  It is either cat or a grep -v for # comments.
?S:.
?S:shsharp:
?S: This variable tells further Configure units whether your sh can
?S: handle # comments.
?S:.
?S:sharpbang:
?S: This variable contains the string #! if this system supports that
?S: construct.
?S:.
?F:!sharp
?T:xcat p
?X: "paths" comes from Head
?LINT:extern paths _exe
: see if sh knows # comments
?X: This is loaded up early, so avoid being chatty.
?X: echo " "
?X: echo "Checking your $sh to see if it knows about # comments..." >&2
if `$sh -c '#' >/dev/null 2>&1`; then
```

```
?X: echo
 "Your $sh handles # comments correctly."
 shsharp=true
 spitshell=cat
?X: echo " "
?X: echo "Okay, let's see if #! works on this system..."
 xcat=/bin/cat
 test -f $xcat$_exe || xcat=/usr/bin/cat
 if test ! -f $xcat$_exe; then
  for p in `echo $PATH | sed -e "s/$p_/ /g"` $paths; do
   if test -f $p/cat$_exe; then
    xcat=$p/cat
    break
   fi
  done
  if test ! -f $xcat$_exe; then
   echo "Can't find cat anywhere!"
   exit 1
  fi
 fi
 echo "#!$xcat" >sharp
 $eunicefix sharp
 chmod +x sharp
 ./sharp > today 2>/dev/null
 if test -s today; then
?X:  echo "It does."
  sharpbang='#!'
 else
  echo "#! $xcat" > sharp
  $eunicefix sharp
  chmod +x sharp
  ./sharp > today 2>/dev/null
  if test -s today; then
?X:   echo "It does."
   sharpbang='#! '
  else
?X:   echo "Okay, let's see if #! works on this system..."
?X:   echo "It's just a comment."
   sharpbang=': use '
  fi
 fi
else
 echo " "
 echo "Your $sh doesn't grok # comments--I will strip them later on."
 shsharp=false
?X: The
 spitshell script will be perused, so leave it out the UU directory
 cd ..
```

```
 echo "exec grep -v '^[  ]*#'" >spitshell
 chmod +x spitshell
 $eunicefix spitshell
 spitshell=`pwd`/spitshell
 cd UU
 echo "I presume that if # doesn't work, #! won't work either!"
 sharpbang=': use '
fi
rm -f sharp today
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/spitshell.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sbrksmart.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:35:41  ram
?RCS: patch45: now sets sbrksmart to undef explicitly when lacking sbrk()
?RCS: patch45: forgot a cast when using return value from sbrk()
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:16:45  ram
?RCS: patch16: created
?RCS:
?MAKE:sbrksmart: cat d_sbrk +cc +ccflags +libs rm
?MAKE: -pick add $@ %<
?S:sbrksmart:
?S: This variable conditionally defines HAS_SMART_SBRK if the sbrk()
?S: routine honors a negative argument to lower the break
 value.
?S:.
?C:HAS_SMART_SBRK:
?C: This symbol is defined when the sbrk() system call may be used with
?C: a negative argument to lower the break value, therefore releasing
?C: core to the system. If not, you'd probably be better off using the
?C: mmap() system call.
?C:.
?H:#$sbrksmart HAS_SMART_SBRK /**/
?H:.
?T:dumb
```

```
?F:!sbrk
: see whether sbrk can release core to the kernel
echo " "
case "$d_sbrk" in
"$define")
 echo "Let's see if your sbrk() is smart enough to release core..." >&4
 $cat > sbrk.c <<EOC
#define INC 256  /* Small enough to be less than a page size */

int main()
{
 char *obrk = (char *) sbrk(0);
 char *nbrk;

 nbrk = (char *) sbrk(INC);
 if (nbrk == (char *) -1)
  exit(1); /* Not enough memory */
 if (nbrk != obrk)
  exit(2); /* Unreliable sbrk() */
 nbrk = (char *) sbrk(-INC);
 if (nbrk == (char *) -1)
  exit(3); /* May have understood negative arg as huge positive */
 if (obrk != (char *) sbrk(0))
  exit(4); /* Not smart, definitely */

 exit(0);  /* Ok */
}
EOC
 sbrksmart="$undef"
 dumb='--
 assuming dumb sbrk().'
 if $cc $ccflags -o sbrk sbrk.c $libs >/dev/null 2>&1; then
  ./sbrk >/dev/null 2>&1
  case $? in
  0) sbrksmart="$define"
   echo "Yes, it can be used with negative values." ;;
  1) echo "Sorry, not enough memory $dumb" ;;
  2) echo "No it's not, and besides it seems to be buggy..." ;;
  3) echo "No, it fails with negative values." ;;
  4) echo "Nope, your sbrk() is too dumb." ;;
  *) echo "Err... Unexpected result $dumb" ;;
  esac
 else
  echo "(Could not compile test program $dumb)"
 fi
 ;;
*)
 echo "Since you don't have sbrk(), let's forget about the smart test!"
```

```
 sbrksmart="$undef"
 ;;
esac
$rm -f sbrk sbrk.* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sbrksmart.U
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```
?RCS: $Id: i_sysstatfs.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysstatfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysstatfs:
?S: This variable conditionally defines the I_SYSSTATFS symbol,
?S: and indicates whether a C program should include <sys/statfs.h>.
?S:.
?C:I_SYS_STATFS:
?C: This symbol, if defined, indicates that <sys/statfs.h> exists.
?C:.
?H:#$i_sysstatfs I_SYS_STATFS  /**/
?H:.
?LINT:set i_sysstatfs
: see if this is a sys/statfs.h system
set sys/statfs.h i_sysstatfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysstatfs.U
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```
?RCS: $Id: d_sethent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
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?RCS:
?RCS: $Log: d_sethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_sethent:
?S: This variable conditionally defines HAS_SETHOSTENT if sethostent() is
?S: available.
?S:.
?C:HAS_SETHOSTENT:
?C: This symbol, if defined, indicates that the sethostent() routine is
?C: available.
?C:.
?H:#$d_sethent HAS_SETHOSTENT  /**/
?H:.
?LINT:set d_sethent
: see if sethostent exists
set
 sethostent d_sethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_sethent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:full_ar: ar
?MAKE: -pick add $@ %<
?S:full_ar:
?S: This variable contains the full pathname to 'ar', whether or
?S: not the user has specified 'portability'.  This is only used
?S: in the Makefile.SH.
?S:.
: Store the full pathname to the ar program for use in the C program
: Respect a hint or command line value for full_ar.
case "$full_ar" in
") full_ar=$ar ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Loc_ar.U
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```
?RCS: $Id: d_su_chown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS:
?RCS: $Log: d_su_chown.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_su_chown: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_su_chown (d_rootchown):
?S: This variable conditionally defines the SU_CHOWN symbol, which
?S: indicates to the C program that only root can chown() the owner
?S: of a file.
?S:.
?C:SU_CHOWN (ROOT_CHOWN):
?C: This symbol, if defined, indicates that the system allows only root
?C: can
 change the owner of a file with chown().
?C:.
?H:#$d_su_chown SU_CHOWN /**/
?H:.
?LINT:set d_su_chown
: see if 'chown()' is restricted.
: but not too hard, as it is late and I am tired. -- HMS
echo " "
if set setreuid val -f d_su_chown; eval $csym; $val; then
 echo 'It looks like only root can chown() the owner of a file.' >&4
 val="$define"
else
 echo 'It looks like root or the owner can chown() a file away.' >&4
 val="$undef"
fi
set d_su_chown
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_su_chown.U

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```
?RCS: $Id: i_execinfo.U 34 2010-11-27 11:55:39Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_execinfo: Inhdr
?MAKE: -pick add $@ %<
?S:i_execinfo:
?S: This variable conditionally defines the I_EXECINFO symbol, and indicates
?S: whether a C program may include <execinfo.h>, for backtrace() support.
?S:.
?C:I_EXECINFO:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <execinfo.h> for backtrace() support.
?C:.
?H:#$i_execinfo I_EXECINFO  /**/
?H:.
?LINT:set i_execinfo
: see if this is an execinfo.h system
set execinfo.h i_execinfo
eval
 $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_execinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bsdjmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bsdjmp.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:31:10  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
```

```
?RCS: Revision 3.0.1.1  1994/10/29  16:09:09  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bsdjmp: Guess Setvar cat +cc libs rm
?MAKE: -pick add $@ %<
?S:d_bsdjmp:
?S: This variable conditionally defines USE_BSDJMP
 if BSD _setjmp and
?S: _longjmp routines are available to do non-local gotos without saving
?S: or restoring the signal mask flag.
?S:.
?C:USE_BSDJMP (BSDJMP):
?C: This symbol, if defined, indicates that the BSD _setjmp and _longjmp
?C: routines are available to do non-local gotos wihtout saving or restoring
?C: the signal mask flag.
?C:.
?H:#$d_bsdjmp USE_BSDJMP  /**/
?H:.
?F:!set
?LINT:set d_bsdjmp
: see if _setjmp and _longjmp exists
?X: We can't check for these symbols with Inlibc because of the leading "_"
echo " "
case "$d_bsdjmp" in
")
 $cat >set.c <<EOP
#include <setjmp.h>
jmp_buf env;
int set = 1;
int main()
{
 if (_setjmp(env))
  exit(set);
 set = 0;
 _longjmp(env, 1);
 exit(1);
}
EOP
 if $cc -o set set.c $libs >/dev/null 2>&1; then
  if ./set >/dev/null 2>&1; then
   echo "Good! You have BSD _setjmp and _longjmp routines." >&4
   val="$define"
  else
   $cat <<EOM
Uh-Oh! You have BSD _setjmp and _longjmp, but they do not work properly!!
```

```
EOM
   val="$undef"
  fi
 else
  if
 ./usg; then
   echo "You do not have _setjmp and _longjmp, but that's fine." >&4
  else
   cat <<EOM
It sounds strange for a BSD system to miss _setjmp and _longjmp, but that's ok.
EOM
  fi
  val="$undef"
 fi
 ;;
*) val="$d_bsdjmp"
 case "$d_bsdjmp" in
 $define) echo "Good! You have BSD _setjmp and _longjmp routines." >&4;;
 $undef) echo "You do not have _setjmp and _longjmp, but that's fine." >&4;;
 esac
 ;;
esac
set d_bsdjmp
eval $setvar
$rm -f set.c set
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bsdjmp.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memchr.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memchr: Inlibc
?MAKE: -pick add $@ %<
?S:d_memchr:
?S: This variable conditionally defines the HAS_MEMCHR symbol, which
```

```
?S: indicates to the C program that the memchr() routine is available
?S: to scan a block of memory for a character.
?S:.
?C:HAS_MEMCHR:
?C: This symbol, if defined, indicates that the memchr routine is available
?C: to scan a block of memory for a character.
  If undefined, roll your own.
?C:.
?H:#$d_memchr HAS_MEMCHR  /**/
?H:.
?LINT:set d_memchr
: see if memchr exists
set memchr d_memchr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memchr.U
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```
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```

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* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/makegloss
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/bindex
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.mk
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/fixcpp
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlocale_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setlocale_r setlocale_r_proto: Inlibc Protochk Hasproto i_systypes \
  usethreads i_locale extern_C
?MAKE: -pick add $@ %<
?S:d_setlocale_r:
?S: This variable conditionally defines the HAS_SETLOCALE_R symbol,
?S: which indicates to the C program that the setlocale_r()
?S: routine is available.
?S:.
?S:setlocale_r_proto:
?S: This variable encodes the prototype of setlocale_r.
?S: It is zero if d_setlocale_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setlocale_r
```

```
?S: is defined.
?S:.
?C:HAS_SETLOCALE_R:
?C: This symbol, if defined, indicates that the setlocale_r routine
?C: is
 available to setlocale re-entrantly.
?C:.
?C:SETLOCALE_R_PROTO:
?C: This symbol encodes the prototype of setlocale_r.
?C: It is zero if d_setlocale_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setlocale_r
?C: is defined.
?C:.
?H:#$d_setlocale_r HAS_SETLOCALE_R /**/
?H:#define SETLOCALE_R_PROTO $setlocale_r_proto /**/
?H:.
?T:try hdrs d_setlocale_r_proto
: see if setlocale_r exists
set setlocale_r d_setlocale_r
eval $inlibc
case "$d_setlocale_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_locale locale.h"
 case "$d_setlocale_r_proto:$usethreads" in
 ":define") d_setlocale_r_proto=define
  set d_setlocale_r_proto setlocale_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setlocale_r_proto" in
 define)
 case "$setlocale_r_proto" in
 "|0) try='int setlocale_r(int, const char*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && setlocale_r_proto=I_ICBI ;;
 esac
 case "$setlocale_r_proto" in
 "|0) d_setlocale_r=undef
  setlocale_r_proto=0
  echo
 "Disabling setlocale_r, cannot determine prototype." >&4 ;;
 * ) case "$setlocale_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setlocale_r_proto="REENTRANT_PROTO_$setlocale_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
```

```
  define) echo "setlocale_r has no prototype, not using it." >&4 ;;
  esac
  d_setlocale_r=undef
  setlocale_r_proto=0
  ;;
 esac
 ;;
*) setlocale_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setlocale_r.U
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```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isinfl: Inlibc
?MAKE: -pick add $@ %<
?S:d_isinfl:
?S: This variable conditionally defines the HAS_ISINFL symbol, which
?S: indicates to the C program that the isinfl() routine is available.
?S:.
?C:HAS_ISINFL:
?C: This symbol, if defined, indicates that the isinfl routine is
?C: available to check whether a long double is an infinity.
?C:.
?H:#$d_isinfl HAS_ISINFL  /**/
?H:.
?LINT:set d_isinfl
: see if isinfl exists
set isinfl d_isinfl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isinfl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: privlib.U,v $
?RCS: Revision 3.0.1.4  1995/09/25  09:17:09  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:44:23  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:31:52  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:34  ram
?RCS: patch10: added support for /local/lib (WED)
?RCS: patch10: prompt phrasing made
 more explicit (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:privlib privlibexp installprivlib: afs package cat Getfile \
 Oldconfig Prefixit test
?MAKE: -pick add $@ %<
?Y:TOP
?S:privlib:
?S: This variable contains the eventual value of the PRIVLIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S:.
?S:privlibexp:
?S: This variable is the ~name expanded version of privlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installprivlib:
?S: This variable is really the same as privlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:PRIVLIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is
 private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
```

```
?C:.
?C:PRIVLIB_EXP:
?C: This symbol contains the ~name expanded version of PRIVLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#define PRIVLIB "$privlib"  /**/
?H:#define PRIVLIB_EXP "$privlibexp"  /**/
?H:.
: determine where private executables go
set dflt privlib lib/$package
eval $prefixit
$cat <<EOM

There are some auxiliary files for $package that need to be put into a
private library directory that is accessible by everyone.

EOM
fn=d~+
rp='Pathname where the private library files will reside?'
. ./getfile
if $test "X$privlibexp" != "X$ansexp"; then
 installprivlib=''
fi
privlib="$ans"
privlibexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed
 (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installprivlib" in
 '') dflt=`echo $privlibexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installprivlib";;
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installprivlib="$ans"
else
 installprivlib="$privlibexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/privlib.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dup2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_dup2.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_dup2: Inlibc
?MAKE: -pick add $@ %<
?S:d_dup2:
?S: This variable conditionally defines HAS_DUP2 if dup2() is
?S: available to duplicate file descriptors.
?S:.
?C:HAS_DUP2 (DUP2):
?C: This symbol, if defined, indicates that the dup2 routine is
?C: available to duplicate file descriptors.
?C:.
?H:#$d_dup2 HAS_DUP2 /**/
?H:.
?LINT:set d_dup2
:
 see if dup2 exists
set dup2 d_dup2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dup2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: randfunc.U,v 3.0 1993/08/18 12:09:39 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: randfunc.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the new unit that should be used when random
?X: functions are to be used. It thus makes randbits.U obsolete.
?X:
?X: This unit gives a simple #define for Drand01, which produces
?X: doubles in the range [0,1) using the "best" random number
?X: generator available.  The source should just call Drand01
?X: and not worry about the underlying
 implementation.
?X:     Andy Dougherty  July 1998
?X:
?MAKE:randfunc drand01 seedfunc randbits randseedtype: \
 Compile Myread Csym ccflags
?MAKE: -pick add $@ %<
?S:randfunc:
?S: Indicates the name of the random number function to use.
?S: Values include drand48, random, and rand. In C programs,
?S: the 'Drand01' macro is defined to generate uniformly distributed
?S: random numbers over the range [0., 1.[ (see drand01 and nrand).
?S:.
?S:drand01:
?S: Indicates the macro to be used to generate normalized
?S: random numbers.  Uses randfunc, often divided by
?S: (double) (((unsigned long) 1 << randbits)) in order to
?S: normalize the result.
?S: In C programs, the macro 'Drand01' is mapped to drand01.
?S:.
?S:randseedtype:
?S: Indicates the type of the argument of the seedfunc.
?S:.
?S:seedfunc:
?S: Indicates the random number generating seed function.
?S: Values include srand48, srandom, and srand.
?S:.
?S:randbits:
?S: Indicates how many bits are produced by the function used to
?S: generate
 normalized random numbers.
?S:.
?C:RANDFUNC:
?C: This symbol defines the random function used to define Drand01().
?C:.
?C:Drand01:
?C: This macro is to be used to generate uniformly distributed
```

```
?C: random numbers over the range [0., 1.[.  You may have to supply
?C: an 'extern double drand48();' in your program since SunOS 4.1.3
?C: doesn't provide you with anything relevant in its headers.
?C: See HAS_DRAND48_PROTO.
?C:.
?C:Rand_seed_t:
?C: This symbol defines the type of the argument of the
?C: random seed function.
?C:.
?C:seedDrand01:
?C: This symbol defines the macro to be used in seeding the
?C: random number generator (see Drand01).
?C:.
?C:RANDBITS:
?C: This symbol indicates how many bits are produced by the
?C: function used to generate normalized random numbers.
?C: Values include 15, 16, 31, and 48.
?C:.
?H:#define RANDFUNC  $randfunc  /**/
?H:#define Drand01()  $drand01  /**/
?H:#define Rand_seed_t  $randseedtype  /**/
?H:#define seedDrand01(x) $seedfunc((Rand_seed_t)x) /**/
?H:#define
 RANDBITS  $randbits  /**/
?H:.
?LINT:change ccflags
?LINT:unclosed $randbits))"
: How can we generate normalized random numbers ?
echo " "
echo "Using our internal random number implementation..." >&4

case "$ccflags" in
*-Dmy_rand=*|*-Dmy_srand=*)
 echo "Removing obsolete -Dmy_rand, -Dmy_srand, and -Drandbits from ccflags." >&4
 ccflags="`echo $ccflags | sed -e 's/-Dmy_rand=random/ /'`"
 ccflags="`echo $ccflags | sed -e 's/-Dmy_srand=srandom/ /'`"
 ccflags="`echo $ccflags | sed -e 's/-Drandbits=[0-9][0-9]*/ /'`"
 ;;
esac

randfunc=Perl_drand48
drand01="Perl_drand48()"
seedfunc="Perl_drand48_init"
randbits=48
randseedtype=U32

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/randfunc.U
```

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strcspn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strcspn.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strcspn: Inlibc
?MAKE: -pick add $@ %<
?S:d_strcspn:
?S: This variable conditionally defines the HAS_STRCSPN symbol, which
?S: indicates to the C program that the strcspn() routine is available
?S: to scan strings.
?S:.
?C:HAS_STRCSPN (STRCSPN):
?C: This symbol, if defined, indicates that the strcspn routine is
?C: available to scan
 strings.
?C:.
?H:#$d_strcspn HAS_STRCSPN  /**/
?H:.
?LINT:set d_strcspn
: see if strcspn exists
set strcspn d_strcspn
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strcspn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fdclose: Inlibc
?MAKE: -pick add $@ %<
?S:d_fdclose:
?S: This variable conditionally defines the HAS_FDCLOSE symbol, which
?S: indicates to the C program that the fdclose() routine is available.
?S:.
```

```
?C:HAS_FDCLOSE:
?C: This symbol, if defined, indicates that the fdclose routine is
?C: available to free a FILE structure without closing the underlying
?C: file descriptor.  This function appeared in FreeBSD 10.2.
?C:.
?H:#$d_fdclose HAS_FDCLOSE  /**/
?H:.
?LINT:set d_fdclose
: see if fdclose exists
set fdclose d_fdclose
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fdclose.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtoul.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:43  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_strtoul: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtoul:
?S: This variable conditionally defines the HAS_STRTOUL symbol, which
?S: indicates to the C program that the strtoul() routine is available
?S: to provide conversion of strings to unsigned long.
?S:.
?C:HAS_STRTOUL (STRTOUL):
?C: This symbol, if defined, indicates that the strtoul routine is
?C: available
 to provide conversion of strings to unsigned long.
?C:.
?H:#$d_strtoul HAS_STRTOUL /**/
?H:.
?LINT:set d_strtoul
: see if strtoul exists
```

```
set strtoul d_strtoul
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtoul.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readdir_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_readdir_r readdir_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_dirent extern_C
?MAKE: -pick add $@ %<
?S:d_readdir_r:
?S: This variable conditionally defines the HAS_READDIR_R symbol,
?S: which indicates to the C program that the readdir_r()
?S: routine is available.
?S:.
?S:readdir_r_proto:
?S: This variable encodes the prototype of readdir_r.
?S: It is zero if d_readdir_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir_r
?S: is defined.
?S:.
?C:HAS_READDIR_R:
?C: This symbol, if defined, indicates that the readdir_r routine
?C: is available to readdir re-entrantly.
?C:.
?C:READDIR_R_PROTO:
?C: This
 symbol encodes the prototype of readdir_r.
?C: It is zero if d_readdir_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir_r
?C: is defined.
?C:.
?H:#$d_readdir_r HAS_READDIR_R /**/
?H:#define READDIR_R_PROTO $readdir_r_proto /**/
?H:.
?T:try hdrs d_readdir_r_proto
: see if readdir_r exists
set readdir_r d_readdir_r
eval $inlibc
case "$d_readdir_r" in
```

```
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_dirent dirent.h"
 case "$d_readdir_r_proto:$usethreads" in
 ":define") d_readdir_r_proto=define
  set d_readdir_r_proto readdir_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_readdir_r_proto" in
 define)
 case "$readdir_r_proto" in
 "|0) try='int readdir_r(DIR*, struct dirent*, struct dirent**);'
 ./protochk "$extern_C $try" $hdrs && readdir_r_proto=I_TSR ;;
 esac
 case "$readdir_r_proto" in
 "|0) try='int readdir_r(DIR*, struct dirent*);'
 ./protochk "$extern_C $try" $hdrs && readdir_r_proto=I_TS
 ;;
 esac
 case "$readdir_r_proto" in
 "|0) d_readdir_r=undef
  readdir_r_proto=0
  echo "Disabling readdir_r, cannot determine prototype." >&4 ;;
 * ) case "$readdir_r_proto" in
  REENTRANT_PROTO*) ;;
  *) readdir_r_proto="REENTRANT_PROTO_$readdir_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "readdir_r has no prototype, not using it." >&4 ;;
  esac
  d_readdir_r=undef
  readdir_r_proto=0
  ;;
 esac
 ;;
*) readdir_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_readdir_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: install.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: install.U,v $
?RCS: Revision 3.0.1.2  1995/09/25  09:16:37  ram
?RCS: patch59: all possible install programs are now looked for
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:30:41  ram
?RCS: patch45: created
?RCS:
?MAKE:install installdir: Loc Oldconfig Getfile cat test startsh rm +cc \
 eunicefix package contains mkdir echo n c
?MAKE: -pick add $@ %<
?S:install:
?S: This variable contains the name of an install program that can accept
?S: BSD-style arguments.
 It must correctly support -c, -s, and -m at least.
?S: It is a fully qualified pathname when found. If you have a local
?S: install.SH file at the root directory of your package, it is assumed to
?S: be the default script emulating a BSD install and the variable will be
?S: set to ./install. Otherwise, it is set to plain 'install', relying on
?S: the user's PATH to perform miracles.
?S:.
?S:installdir:
?S: This variable contains the name of a program that can install nested
?S: directories. Often set to 'mkdir -p', it can also be 'install -d' if
?S: you have such a beast and lack the former. If you have an install.SH
?S: file at the root directory of your package, it will be used in last
?S: resort, setting the variable to './install -d'. Otherwise, it is set to
?S: plain 'mkdir', and cross your fingers!
?S:.
?T:dir file tryit prog creatdir either
?F:!tryinst
: locate a BSD compatible install program
echo " "
echo "Looking for a BSD-compatible install program..." >&4
@if installdir
creatdir="
@end
case
 "$install" in
")
 tryit="
```

```
 for dir in $pth; do
  for file in ginstall installbsd scoinst install; do
   if $test -f $dir/$file; then
    tryit="$tryit $dir/$file"
   fi
  done
 done
 $cat >try.c <<EOC
int main()
{
 printf("OK\n");
 exit(0);
}
EOC
 if $cc -o try try.c >/dev/null 2>&1; then
  cp try try.ns
  strip try >/dev/null 2>&1
 else
  echo "(I can't seem to compile a trivial C program -- bypassing.)"
  echo "try" >try
  cp try try.ns
 fi
 $cat >tryinst <<EOS
$startsh
$rm -rf foo d
@if installdir
\$1 -d foo/bar
@end
$mkdir d
\$1 -c -m 764 try.ns d
\$1 -c -s -m 642 try.ns d/try
EOS
 chmod +x tryinst
 $eunicefix tryinst
 dflt=''
 either=''
 for prog in $tryit; do
  $echo $n "Checking $prog... $c"
  ./tryinst $prog >/dev/null 2>&1
@if installdir
  if $test -d foo/bar; then
   creatdir="$prog -d"
  fi
@end
  (ls -l d/try >try.ls; ls -l d/try.ns >tryno.ls) 2>/dev/null
  if (cmp -s d/try try && cmp -s d/try.ns try.ns && \
   $contains 'rwxrw-r--' tryno.ls &&
```

```
\
  $contains 'rw-r---w-' try.ls) >/dev/null 2>&1
 then
  dflt="$prog"
  echo "ok, that will do."
  break
 fi
 echo "not good$either."
 either=' either'
 $rm -f try*.ls
done
$rm -rf foo d tryinst try try*.ls try.*
case "$dflt" in
")
@if {test -f ../install.SH}
  echo "Hopefully, $package comes with its own install script!"
  dflt='./install'
@else
  dflt='install'
@end
  ;;
esac
;;
*) dflt="$install";;
esac
$cat <<EOM

I will be requiring a BSD-compatible install program (one that allows
options like -s to strip executables or -m to specify a file mode) to
install $package.

If the question below contains a fully qualified default path, then it
is probably ok. If it is an unqualified name such as 'install', then it
means I was unable to find out a good install program I could use. If
@if {test -f ../install.SH}
you know of one, please tell me about it. If the default is './install',
then I shall be using the install script supplied with $package.
@else
you know of one,
 please tell me about it.
@end

EOM
@if {test -f ../install.SH}
fn='/fe~(install,./install)'
@else
fn='/fe~(install)'
@end
```

```
rp='Which install program shall I use?'
. ./getfile
install="$ans"

@if installdir
: how can we create nested directories?
echo " "
echo "Ok, let's see how we can create nested directories..." >&4
case "$installdir" in
")
?X: First time, maybe we already found out a working one in $creatdir above...
?X: Prefer "mkdir -p" because of bugs in GNU install when not running as root
 $mkdir -p foo/bar >/dev/null 2>&1
 if $test -d foo/bar; then
  echo "Great, we can build them using 'mkdir -p'."
  creatdir='mkdir -p'
 else
  case "$creatdir" in
  ")
   if eval "$install -d foo/bar"; $test -d foo/bar; then
    creatdir="install -d"
    echo "It looks like '$creatdir' will do it for us."
   fi
   ;;
  *)
   eval "$creatdir foo/bar" >/dev/null 2>&1
   if $test -d foo/bar; then
    echo "Ah! We can use '$creatdir' to do just that."
   else
    creatdir="
   fi
   ;;
  esac
 fi
 $rm
 -rf foo
 case "$creatdir" in
 ")
  echo "Heck! Another ancient system lacking the comfort of modern ones!"
@if {test -f ../install.SH}
  echo "You can thank $package for bringing you its own install script!"
  installdir='./install -d'
@else
  echo "We have no choice but to use plain old 'mkdir' -- wish me luck!"
  installdir=mkdir
@end
  ;;
 *) installdir="$creatdir";;
```

```
 esac
 ;;
*) echo "As you already told me, '$installdir' should work.";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/install.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_pthread_atfork: Inlibc cat Compile usethreads Setvar
?MAKE: -pick add $@ %<
?S:d_pthread_atfork:
?S: This variable conditionally defines the HAS_PTHREAD_ATFORK symbol,
?S: which indicates to the C program that the pthread_atfork()
?S: routine is available.
?S:.
?C:HAS_PTHREAD_ATFORK:
?C: This symbol, if defined, indicates that the pthread_atfork routine
?C: is available to setup fork handlers.
?C:.
?H:#$d_pthread_atfork HAS_PTHREAD_ATFORK  /**/
?H:.
?LINT:set d_pthread_atfork
: see whether the pthread_atfork exists
$cat >try.c <<EOP
#include <pthread.h>
#include <stdio.h>
int main() {
#ifdef  PTHREAD_ATFORK
	pthread_atfork(NULL,NULL,NULL);
#endif
}
EOP

: see if pthread_atfork exists
set
 try -DPTHREAD_ATFORK
if eval $compile; then
   val="$define"
```

```
else
   val="$undef"
fi
case "$usethreads" in
$define)
       case "$val" in
       $define) echo 'pthread_atfork found.' >&4        ;;
       *)       echo 'pthread_atfork NOT found.' >&4    ;;
       esac
esac
set d_pthread_atfork
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthread_atfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: h_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: h_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:h_fcntl: Nothing
?MAKE: -pick add $@ %<
?S:h_fcntl:
?S: This is variable gets set in various places to tell i_fcntl that
?S: <fcntl.h> should be included.
?S:.
: Initialize h_fcntl
h_fcntl=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/h_fcntl.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: rename.C,v 3.0.1.1 1994/01/24 13:58:42 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
*
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*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: rename.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:42  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/rename.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_getgrent.U,v $
?RCS:
?MAKE:d_getgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getgrent:
?S: This variable conditionally defines the HAS_GETGRENT symbol, which
?S: indicates to the C program that the getgrent() routine is available
?S: for sequential access of the group database.
?S:.
?C:HAS_GETGRENT:
?C: This symbol, if defined, indicates that the getgrent routine is
?C: available for sequential access of the group database.
?C:.
?H:#$d_getgrent HAS_GETGRENT  /**/
?H:.
?LINT:set d_getgrent
: see if getgrent exists
set getgrent d_getgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getgrent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wifstat.U,v 3.0.1.3 1997/02/28 15:47:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_wifstat.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:47:43  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:09:10  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1995/03/21  08:47:46  ram
?RCS: patch52: created
?RCS:
?MAKE:d_wifstat: Compile d_uwait Oldconfig cat rm
?MAKE: -pick add $@ %<
?S:d_wifstat:
?S: This symbol conditionally defines USE_WIFSTAT
 if the C program can
?S: safely use the WIFxxx macros with the kind of wait() parameter
?S: declared in the program (see UNION_WAIT), or if it can't. Should
?S: only matter on HP-UX, where the macros are incorrectly written and
?S: therefore cause programs using them with an 'union wait' variable
?S: to not compile properly.
?S:.
?C:USE_WIFSTAT:
?C: This symbol, if defined, indicates to the C program that the argument
?C: for the WIFxxx set of macros such as WIFSIGNALED or WIFEXITED can
?C: be of the same kind as the one used to hold the wait() status. Should
?C: only matter on HP-UX, where the macros are incorrectly written and
?C: therefore cause programs using them with an 'union wait' variable
?C: to not compile properly. See also UNION_WAIT.
?C:.
?H:#$d_wifstat USE_WIFSTAT  /**/
?H:.
?T:type
?F:!foo
: see if we can use WIFxxx macros
echo " "
case "$d_wifstat" in
"$define") echo "As before, you can safely use WIFEXITED and friends!" >&4;;
"$undef") echo "You still can't use WIFEXITED
```

```
 and friends!" >&4;;
*)
 echo "Let's see whether you can use the WIFEXITED(status) macro and its"
 case "$d_uwait" in
 "$define") type='union wait';;
 *) type='int';;
 esac
 echo "friends with status declared as '$type status'..."
 $cat >foo.c <<EOCP
#include <sys/types.h>
#include <sys/wait.h>

int main()
{
 $type status;
 int e = 0;

#ifdef WIFEXITED
 if (WIFEXITED(status))
  printf("\n");
 exit(0);
#else
 exit(2);
#endif
}
EOCP
 d_wifstat="$undef"
 set foo
 if eval $compile; then
  if ./foo >/dev/null; then
   echo "Great! Looks like we can use the WIFxxx macros." >&4
   d_wifstat="$define"
  else
   echo "You don't seem to have WIFxxx macros, but that's ok." >&4
  fi
 else
  echo "Apparently you can't use WIFxxx macros properly." >&4
 fi
 $rm -f foo.* foo core
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_wifstat.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:

```
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?RCS:
?RCS: $Log: d_gethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethent:
?S: This variable conditionally defines HAS_GETHOSTENT if gethostent() is
?S: available to dup file descriptors.
?S:.
?C:HAS_GETHOSTENT (GETHOSTENT):
?C: This symbol, if defined, indicates that the gethostent routine is
?C: available to lookup host names in some data base or other.
?C:.
?H:#$d_gethent HAS_GETHOSTENT  /**/
?H:.
?LINT:set
 d_gethent
: see if gethostent exists
set gethostent d_gethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethent.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:Assert: cat
?MAKE: -pick add $@ %<
?F:./static_assert.h
: static assertion checking include file
?X:
```

```
?X: C programs can include this file to perform STATIC_ASSERT() checks
?X: which are done at compile-time and cause the compilation to fail when
?X: the expression is false.
?X:
?X: It is sufficient to compile with: $cc -c $ccflags try.c
?X: There is no need to link the file to spot the assertion failure.
?X:
$cat >static_assert.h <<'EOC'
#define STATIC_ASSERT(expr) \
 do { switch (0) { case ((expr) ? 1 : 0): case 0: break; } }
 while(0)
EOC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Assert.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sighold.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sighold.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sighold: Inlibc
?MAKE: -pick add $@ %<
?S:d_sighold:
?S: This variable conditionally defines HAS_SIGHOLD if sighold() is
?S: available to hold signals.
?S:.
?C:HAS_SIGHOLD:
?C: This symbol, if defined, indicates that the sighold routine is
?C: available to hold signals.
?C:.
?H:#$d_sighold HAS_SIGHOLD /**/
?H:.
?LINT:set d_sighold
:
 see if sighold exists
set sighold d_sighold
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sighold.U
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```
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?RCS:
?MAKE:d_nl_langinfo: Inlibc i_langinfo
?MAKE: -pick add $@ %<
?S:d_nl_langinfo:
?S: This variable conditionally defines the HAS_NL_LANGINFO symbol, which
?S: indicates to the C program that the nl_langinfo() routine is available.
?S:.
?C:HAS_NL_LANGINFO:
?C: This symbol, if defined, indicates that the nl_langinfo routine is
?C: available to return local data.  You will also need <langinfo.h>
?C: and therefore I_LANGINFO.
?C:.
?H:#$d_nl_langinfo HAS_NL_LANGINFO  /**/
?H:.
?LINT:set d_nl_langinfo
?LINT:use i_langinfo
: see if nl_langinfo exists
set nl_langinfo d_nl_langinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nl_langinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_seteuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_seteuid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:08  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_seteuid: Inlibc
?MAKE: -pick add $@ %<
?S:d_seteuid:
?S: This variable conditionally defines the HAS_SETEUID symbol, which
?S: indicates to the C program that the seteuid() routine is available
?S: to change the effective uid of the current program.
?S:.
?C:HAS_SETEUID (SETEUID):
?C: This symbol, if defined, indicates that the seteuid
 routine is available
?C: to change the effective uid of the current program.
?C:.
?H:#$d_seteuid HAS_SETEUID  /**/
?H:.
?LINT:set d_seteuid
: see if seteuid exists
set seteuid d_seteuid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_seteuid.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:uidsize: Myread Typedef uidtype Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:uidsize:
?S: This variable contains the size of a uidtype in bytes.
?S:.
?C:Uid_t_size:
?C: This symbol holds the size of a Uid_t in bytes.
?C:.
?H:#define Uid_t_size $uidsize  /* UID size */
?H:.
?T:yyy zzz
?F:!try
: Check size of UID
echo " "
case "$uidtype" in
```

```
*_t) zzz="$uidtype" ;;
*)   zzz="uid"  ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($uidtype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") uidsize=4
  echo "(I can't execute the test program--guessing $uidsize.)" >&4
  ;;
 *) uidsize=$yyy
  echo "Your $zzz is $uidsize bytes long."
  ;;
 esac
else
 uidsize=4
 echo "(I can't compile the test program--guessing $uidsize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sunmath.U,v $
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sunmath: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sunmath:
?S: This variable conditionally defines the I_SUNMATH symbol, and indicates
```

```
?S: whether a C program should include <sunmath.h>.
?S:.
?C:I_SUNMATH:
?C: This symbol, if defined, indicates that <sunmath.h> exists and
?C: should be included.
?C:.
?H:#$i_sunmath I_SUNMATH  /**/
?H:.
?LINT:set i_sunmath
: see if this is a sunmath.h system
set sunmath.h i_sunmath
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sunmath.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fd_set.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:16  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  06:57:23  ram
?RCS: patch30: extended scope for fd_set checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:27  ram
?RCS: patch16: comments for HAS_FD_* symbols were not consistent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fd_set d_fd_macros d_fds_bits: cat +cc +ccflags rm Oldconfig
 \
 d_socket i_systime i_sysselct i_syssock
?MAKE: -pick add $@ %<
?S:d_fd_set:
?S: This variable contains the eventual value of the HAS_FD_SET symbol,
?S: which indicates if your C compiler knows about the fd_set typedef.
?S:.
```

```
?S:d_fd_macros:
?S: This variable contains the eventual value of the HAS_FD_MACROS symbol,
?S: which indicates if your C compiler knows about the macros which
?S: manipulate an fd_set.
?S:.
?S:d_fds_bits:
?S: This variable contains the eventual value of the HAS_FDS_BITS symbol,
?S: which indicates if your fd_set typedef contains the fds_bits member.
?S: If you have an fd_set typedef, but the dweebs who installed it did
?S: a half-fast job and neglected to provide the macros to manipulate
?S: an fd_set, HAS_FDS_BITS will let us know how to fix the gaffe.
?S:.
?C:HAS_FD_SET:
?C: This symbol, when defined, indicates presence of the fd_set typedef
?C: in <sys/types.h>
?C:.
?C:HAS_FD_MACROS:
?C: This symbol, when defined,  indicates presence of the macros used
 to
?C: manipulate an fd_set.
?C:.
?C:HAS_FDS_BITS:
?C: This symbol, when defined, indicates presence of the fds_bits member in
?C: fd_set.  This knowledge is useful if fd_set is available but the macros
?C: aren't.
?C:.
?H:#$d_fd_set HAS_FD_SET /**/
?H:#$d_fd_macros HAS_FD_MACROS /**/
?H:#$d_fds_bits HAS_FDS_BITS /**/
?H:.
?F:!fd_set
: check for fd_set items
$cat <<EOM

Checking to see how well your C compiler handles fd_set and friends ...
EOM
?X: The FD_SET macros can be in strange places.  On some SysV-based
?X: systems, they are in <sys/bsdtypes.h>, which is included (perhaps)
?X: by <sys/socket.h>.  We won't force people to include
?X: <sys/bsdtypes.h> because it might introduce other
?X: incompatibilities.
$cat >fd_set.c <<EOCP
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#$i_syssock I_SYS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
```

```
#ifdef I_SYS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#endif
#ifdef I_SYS_TIME
#include
 <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main() {
 fd_set fds;

#ifdef TRYBITS
 if(fds.fds_bits);
#endif

#if defined(FD_SET) && defined(FD_CLR) && defined(FD_ISSET) && defined(FD_ZERO)
 exit(0);
#else
 exit(1);
#endif
}
EOCP
if $cc $ccflags -DTRYBITS -o fd_set fd_set.c >fd_set.out 2>&1 ; then
 d_fds_bits="$define"
 d_fd_set="$define"
 echo "Well, your system knows about the normal fd_set typedef..." >&4
 if ./fd_set; then
  echo "and you have the normal fd_set macros (just as I'd expect)." >&4
  d_fd_macros="$define"
 else
  $cat >&4 <<'EOM'
but not the normal fd_set macros!  Gaaack!  I'll have to cover for you.
EOM
  d_fd_macros="$undef"
 fi
else
 $cat <<'EOM'
Hmm, your compiler has some difficulty with fd_set.  Checking further...
EOM
 if $cc $ccflags -o fd_set fd_set.c >fd_set.out 2>&1 ; then
  d_fds_bits="$undef"
  d_fd_set="$define"
  echo "Well, your system has some sort of fd_set available..." >&4
  if ./fd_set; then
   echo "and you have the
```

```
 normal fd_set macros." >&4
   d_fd_macros="$define"
  else
   $cat <<'EOM'
but not the normal fd_set macros!  Gross!  More work for me...
EOM
   d_fd_macros="$undef"
  fi
 else
 echo "Well, you got zip.  That's OK, I can roll my own fd_set stuff." >&4
  d_fd_set="$undef"
  d_fds_bits="$undef"
  d_fd_macros="$undef"
 fi
fi
$rm -f fd_set*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fd_set.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_safemcpy.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:41:12  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  13:58:46  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.3  1995/03/21  08:47:26  ram
?RCS: patch52: swapped two first arguments of memcpy() calls
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:15:10
  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:53:12  ram
```

```
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safemcpy: cat d_memcpy +cc +optimize +ccflags +libs +ldflags rm \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safemcpy:
?S: This variable conditionally defines the HAS_SAFE_MEMCPY symbol if
?S: the memcpy() routine can do overlapping copies.
?S:.
?C:HAS_SAFE_MEMCPY (SAFE_MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy potentially overlapping memory blocks. Otherwise you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
?H:#$d_safemcpy HAS_SAFE_MEMCPY /**/
?H:.
?F:!safemcpy
?LINT: set d_safemcpy
: can memcpy handle overlapping blocks?
?X:
 assume the worst
val="$undef"
case "$d_memcpy" in
"$define")
 echo " "
 echo "Checking to see if your memcpy() can do overlapping copies..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
```

```
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
memcpy(abc, "abcdefghijklmnopqrstuvwxyz0123456789", 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  memcpy(b, abc, len);
  for (off = 1; off <= len; off++) {
   memcpy(b+off, b, len);
   memcpy(b, b+off, len);
   if (memcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
 if
 $cc $optimize $ccflags $ldflags \
      -o safemcpy foo.c $libs >/dev/null 2>&1; then
  if ./safemcpy 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "It can't, sorry."
   case "$d_memmove" in
   "$define") echo "But that's Ok since you have memmove()." ;;
   esac
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
  case "$d_memmove" in
  "$define") echo "But that's Ok since you have memmove()." ;;
  esac
```

```
 fi
 ;;
esac
$rm -f foo.* safemcpy core
set d_safemcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_safemcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_dbm.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:20  ram
?RCS: patch61: added I_RPCSVC_DBM check
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:16:05  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_dbm i_rpcsvcdbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_dbm (d_odbm):
?S: This variable conditionally defines
 the I_DBM symbol, which
?S: indicates to the C program that <dbm.h> exists and should
?S: be included.
?S:.
?S:i_rpcsvcdbm:
?S: This variable conditionally defines the I_RPCSVC_DBM symbol, which
?S: indicates to the C program that <rpcsvc/dbm.h> exists and should
?S: be included.  Some System V systems might need this instead of <dbm.h>.
?S:.
?C:I_DBM (HAS_ODBM ODBM):
?C: This symbol, if defined, indicates that <dbm.h> exists and should
?C: be included.
?C:.
```

```
?C:I_RPCSVC_DBM:
?C: This symbol, if defined, indicates that <rpcsvc/dbm.h> exists and
?C: should be included.
?C:.
?H:#$i_dbm I_DBM /**/
?H:#$i_rpcsvcdbm I_RPCSVC_DBM /**/
?H:.
?T:d_dbmclose
?LINT:set i_dbm i_rpcsvcdbm
: see if dbm.h is available
?X: We might just have the header, not the library.
?X: We look for dbmclose() rather than dbminit() because
?X: some versions of SCO Unix have -ldbm, but are missing dbmclose(). -- ADO
?X: Some System V systems have <rpcsvc/dbm.h> instead of <dbm.h>.
: see if dbmclose exists
set dbmclose
 d_dbmclose
eval $inlibc

case "$d_dbmclose" in
$define)
 set dbm.h i_dbm
 eval $inhdr
 case "$i_dbm" in
 $define)
  val="$undef"
  set i_rpcsvcdbm
  eval $setvar
  ;;
 *) set rpcsvc/dbm.h i_rpcsvcdbm
  eval $inhdr
  ;;
 esac
 ;;
*) echo "We won't be including <dbm.h>"
 val="$undef"
 set i_dbm
 eval $setvar
 val="$undef"
 set i_rpcsvcdbm
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_csh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:32:18  ram
?RCS: patch61: added full_csh to preserve the full path even when portable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_csh full_csh: csh Setvar
?MAKE: -pick add $@ %<
?S:d_csh:
?S: This variable conditionally defines the CSH symbol, which
?S: indicates to the C program that the C-shell exists.
?S:.
?S:full_csh:
?S: This variable contains the full pathname to 'csh', whether
 or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'csh.'
?S:.
?C:HAS_CSH:
?C: This symbol, if defined, indicates that the C-shell exists.
?C:.
?C:CSH:
?C: This symbol, if defined, contains the full pathname of csh.
?C:.
?X: Previously, I just did $d_csh CSH "$full_csh", but that caused
?X: problems on VMS where the config.sh extraction program changes
?X: $undef to a real cpp undef, and they then had  #undef CSH ""
?X: which the compiler didn't like.  It's easy to work around this,
?X: so I did.  --AD  3/1998.
?X: And we don't want to define CSH if !HAS_CSH, but we don't want
?X: those lines in config.h if they don't need CSH, so protect with ?CSH
?X: and not ?%<. --RAM, 15/02/2004
?H:?%<:#$d_csh HAS_CSH  /**/
?H:?CSH:#ifdef HAS_CSH
?H:?CSH:#define CSH "$full_csh" /**/
```

```
?H:?CSH:#endif
?H:.
?LINT:set d_csh
: get csh whereabouts
case
 "$csh" in
'csh') val="$undef" ;;
*) val="$define" ;;
esac
set d_csh
eval $setvar
: Respect a hint or command line value for full_csh.
case "$full_csh" in
") full_csh=$csh ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_csh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: installprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: installprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:installprefix installprefixexp: Getfile Loc \
 Oldconfig afs cat package prefix
?MAKE: -pick add $@ %<
?S:installprefix:
?S: This variable holds the name of the directory below which
?S: "make install" will install the package.  For most users, this
?S: is the same
 as prefix.  However, it is useful for
?S: installing the software into a different (usually temporary)
?S: location after which it can be bundled up and moved somehow
?S: to the final location specified by prefix.
```

```
?S:.
?S:installprefixexp:
?S: This variable holds the full absolute path of installprefix
?S: with all ~-expansion done.
?S:.
: determine installation prefix for where package is to be installed.
if $afs; then
$cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
files will reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installprefix" in
 ") dflt=`echo $prefix | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installprefix";;
 esac
else
$cat <<EOM

In some special cases, particularly when building $package for distribution,
it is convenient to distinguish the directory in which files should be
installed from the directory ($prefix) in which they will
eventually
 reside.  For most users, these two directories are the same.

EOM
 case "$installprefix" in
 ") dflt=$prefix ;;
 *) dflt=$installprefix;;
 esac
fi
fn=d~
rp='What installation prefix should I use for installing files?'
. ./getfile
installprefix="$ans"
installprefixexp="$ansexp"

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/installprefix.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_systimeb.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systimeb.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/timeb.h> should be included
?X: or not when using ftime() (for struct timeb definition).
?X:
?X: Force looking for <sys/time.h> for struct timeb.
?X:INC: i_systime
?MAKE:i_systimeb: test contains Loc Setvar Findhdr
?MAKE: -pick add $@ %<
?S:i_systimeb:
?S: This variable conditionally defines I_SYS_TIMEB,
 which indicates
?S: to the C program that it should include <sys/timeb.h>.
?S:.
?C:I_SYS_TIMEB (I_SYSTIMEB):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/timeb.h>, in order to define struct timeb (some systems
?C: define this in <sys/time.h>). This is useful when using ftime().
?C: You should include <sys/time.h> if I_SYS_TIMEB is not defined,
?C: nor is I_SYS_TIME.
?C:.
?H:#$i_systimeb I_SYS_TIMEB  /**/
?H:.
?T:xxx
?LINT:set i_systimeb
: see where struct timeb is defined
echo " "
xxx=`./findhdr sys/timeb.h`
if $test "$xxx"; then
 if $contains 'struct timeb' $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have struct timeb defined in <sys/timeb.h>." >&4
 else
  val="$undef"
  echo "Assuming struct timeb is defined in <sys/time.h>." >&4
 fi
else
 val="$undef"
echo "No <sys/timeb.h> -- Assuming struct timeb is defined in <sys/time.h>." >&4
fi
```

```
set i_systimeb
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systimeb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_neterrno.U,v 3.0.1.3 1994/10/29 16:20:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_neterrno.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:20:29  ram
?RCS: patch36: forgot to initialize 'val' to an empty value (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:22:10  ram
?RCS: patch32: removed spurious echo
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:02:05  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:i_neterrno: Inhdr +cc +ccflags rm_try Setvar
?MAKE: -pick
 add $@ %<
?S:i_neterrno:
?S: This variable conditionally defines the I_NET_ERRNO symbol, which
?S: indicates to the C program that <net/errno.h> exists and should
?S: be included.
?S:.
?C:I_NET_ERRNO:
?C: This symbol, if defined, indicates that <net/errno.h> exists and
?C: should be included.
?C:.
?H:#$i_neterrno I_NET_ERRNO  /**/
?H:.
?LINT:set i_neterrno
: see if net/errno.h is available
val=''
set net/errno.h val
eval $inhdr
```

```
: Unfortunately, it causes problems on some systems.  Arrgh.
case "$val" in
$define)
 cat > try.c <<'EOM'
#include <stdio.h>
#include <errno.h>
#include <net/errno.h>
int func()
{
 return ENOTSOCK;
}
EOM
 if $cc $ccflags -c try.c >/dev/null 2>&1; then
  echo "We'll be including <net/errno.h>." >&4
 else
  echo "We won't be including <net/errno.h>." >&4
  val="$undef"
 fi
 $rm_try
 ;;
esac
set i_neterrno
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_neterrno.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2015 Jarkko Hietaniemi, H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:longdblmantbits doublemantbits nvmantbits: Inlibc cat Compile run \
 rm_try Setvar echo i_sunmath usequadmath \
 d_longdbl longdblkind nvsize doublesize longdblsize
?MAKE: -pick add $@ %<
?S:doublemantbits:
?S: This symbol, if defined, tells how many mantissa bits
?S: there are in double precision floating point format.
?S: Note that this is usually DBL_MANT_DIG minus one, since
?S: with the standard IEEE 754 formats DBL_MANT_DIG includes
?S: the implicit bit which doesn't really exist.
?S:.
?S:longdblmantbits:
```

```
?S: This symbol, if defined, tells how many mantissa bits
?S: there are in long double precision floating point format.
?S: Note that this can be LDBL_MANT_DIG minus one,
?S: since
 LDBL_MANT_DIG can include the IEEE 754 implicit bit.
?S: The common x86-style 80-bit long double does not have
?S: an implicit bit.
?S:.
?S:nvmantbits:
?S: This variable tells how many bits the mantissa of a Perl NV has,
?S: not including the possible implicit bit.
?S:.
?C:DOUBLEMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: there are in double precision floating point format.
?C: Note that this is usually DBL_MANT_DIG minus one, since
?C: with the standard IEEE 754 formats DBL_MANT_DIG includes
?C: the implicit bit, which doesn't really exist.
?C:.
?C:LONGDBLMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: there are in long double precision floating point format.
?C: Note that this can be LDBL_MANT_DIG minus one,
?C: since LDBL_MANT_DIG can include the IEEE 754 implicit bit.
?C: The common x86-style 80-bit long double does not have
?C: an implicit bit.
?C:.
?C:NVMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: (not
 including implicit bit) there are in a Perl NV.
?C: This depends on which floating point type was chosen.
?C:.
?H:#define DOUBLEMANTBITS  $doublemantbits
?H:#define LONGDBLMANTBITS $longdblmantbits
?H:#define NVMANTBITS      $nvmantbits
?H:.
?F:!try
: Check the length of the double mantissa
$echo "Checking how many mantissa bits your doubles have..." >&4
$cat >try.c <<EOP
#$i_sunmath I_SUNMATH
#include <float.h>
#ifdef I_SUNMATH
# include <sunmath.h>
#endif
#ifdef DBL_MANT_DIG
# define BITS (DBL_MANT_DIG - 1) /* the implicit bit does not count */
```

```
#endif
#include <stdio.h>
int main(int argc, char *argv[]) {
#ifdef BITS
 printf("%d\n", BITS);
#endif
 return 0;
}
EOP
set try
if eval $compile; then
   doublemantbits=`$run ./try`
else
   doublemantbits="$undef"
fi
$rm_try

: Check the length of the longdouble mantissa
$echo "Checking how many mantissa bits your long doubles have..." >&4
$cat >try.c <<EOP
#$i_sunmath I_SUNMATH
#include <float.h>
#ifdef I_SUNMATH
# include <sunmath.h>
#endif
#$d_longdbl
 HAS_LONG_DOUBLE
#if defined(HAS_LONG_DOUBLE) && defined(LDBL_MANT_DIG)
# if ($longdblkind == 3) || ($longdblkind == 4) /* 80-bit extended precision */
/* This format has no implicit bit.  Beware, however, that for
* this format the bare LDBL_MANT_DIG is misleading for inf/nan:
* the top three bits are used for inf (100) / qnan (11x) / snan (101),
* and the top bit must have been one since 387, zero is plain invalid.
* For normal fp values, the LDBL_MANT_DIG is fine, though. */
#  define BITS LDBL_MANT_DIG
# elif ($longdblkind == 5 || $longdblkind == 6 || $longdblkind == 7 || $longdblkind == 8) /* double double */
/* LDBL_MANT_DIG of 106 (twice 53) would be logical, but for some
* reason e.g. Irix thinks 107.  But in any case, we want only
* the number of real bits, the implicit bits are of no interest.  */
#  define BITS 2 * (DBL_MANT_DIG - 1)
# else
#  define BITS (LDBL_MANT_DIG - 1) /* the implicit bit does not count */
# endif
#endif
#include <stdio.h>
int
 main(int argc, char *argv[]) {
#ifdef BITS
```

```
 printf("%d\n", BITS);
#endif
 return 0;
}
EOP
set try
if eval $compile; then
   longdblmantbits=`$run ./try`
else
   longdblmantbits="$undef"
fi
$rm_try

: Check the length of the NV mantissa
$echo "Checking how many mantissa bits your NVs have..." >&4
if test "X$usequadmath" = "X$define"; then
 nvmantbits=112 # 128-1-15
else
 if test "X$nvsize" = "X$doublesize"; then
   nvmantbits="$doublemantbits"
 else
    if test "X$nvsize" = "X$longdblsize"; then
      nvmantbits="$longdblmantbits"
    else
      nvmantbits="$undef"
    fi
 fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/mantbits.U
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```
?RCS: $Id: i_niin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_niin.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: This unit looks wether <netinet/in.h> is available or not
?X:
?MAKE:i_niin i_sysin: Inhdr
?MAKE: -pick add $@ %<
?S:i_niin:
?S: This variable conditionally defines I_NETINET_IN, which indicates
?S: to the C program that it should include <netinet/in.h>. Otherwise,
?S: you may try <sys/in.h>.
?S:.
?S:i_sysin:
?S: This variable conditionally
 defines I_SYS_IN, which indicates
?S: to the C program that it should include <sys/in.h> instead of
?S: <netinet/in.h>.
?S:.
?C:I_NETINET_IN:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <netinet/in.h>. Otherwise, you may try <sys/in.h>.
?C:.
?C:I_SYS_IN (I_SYSIN):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/in.h> instead of <netinet/in.h>.
?C:.
?H:#$i_niin I_NETINET_IN /**/
?H:#$i_sysin I_SYS_IN  /**/
?H:.
?LINT:set i_niin i_sysin
: see if this is a netinet/in.h or sys/in.h system
set netinet/in.h i_niin sys/in.h i_sysin
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_niin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: abortsig.U,v 3.0.1.1 1994/10/29 16:02:19 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: abortsig.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:19  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:abortsig: Myread Oldconfig Guess cat Compile rm
?MAKE: -pick add $@ %<
?S:abortsig:
?S: This variable holds the name of the signal used by the abort() call.
?S:.
?C:ABORTSIG:
?C: This symbol holds the signal number (symbol)
 used by the abort() call. To
?C: actually define the signal symbol, <signal.h> should be included.
?C:.
?H:#define ABORTSIG $abortsig  /**/
?H:.
?T:signal
: which signal is sent by abort ?
echo " "
case "$abortsig" in
")
 echo "Checking to see which signal is sent to the process by abort()..." >&4
 echo "abort" > abort.sh
 chmod +x abort.sh
?X: SIGABRT should replace SIGIOT on USG machines in a near future (1991).
 for signal in SIGIOT SIGILL SIGABRT; do
  case "$abortsig" in
  ") $cat >abort.c <<EOP
#include <signal.h>
caught() { exit(0); }
int main()
{
#ifdef $signal
 signal($signal, caught);
#endif
 if (-1 == abort())
  exit(1);
 exit(1);
}
EOP
?X: We have to use the abort.sh script otherwise sh behaves strangely on AIX.
   set abort
   if eval $compile; then
    (./abort.sh) >/dev/null 2>&1
    case $? in
    0) abortsig="$signal";;
    esac
   fi
```

```
   ;;
  esac
 done
 ;;
esac
case "$abortsig" in
") echo "(I wasn't able to compute the signal name--guessing)"
 if ./usg; then
  dflt="SIGIOT"
 else
  dflt="SIGILL"
 fi;;
*)
  dflt="$abortsig"
 ;;
esac
rp="Which signal does abort() send to the process (signal name)?"
. ./myread
abortsig="$ans"
$rm -f core abort.sh abort abort.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/abortsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysfile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:11:36  ram
?RCS: patch56: removed <> characters from comment, per metalint suggestion
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:01:23  ram
?RCS: patch6: added default for i_sysfile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysfile: h_sysfile Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_sysfile:
```

```
?S: This variable conditionally defines
 the I_SYS_FILE symbol, and indicates
?S: whether a C program should include <sys/file.h> to get R_OK and friends.
?S:.
?C:I_SYS_FILE (I_SYSFILE):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/file.h> to get definition of R_OK and friends.
?C:.
?H:#$i_sysfile I_SYS_FILE  /**/
?H:.
?T:val
?D:i_sysfile="
?LINT:change h_sysfile
?LINT:set i_sysfile
: see if this is a sys/file.h system
val="
set sys/file.h val
eval $inhdr

: do we need to include sys/file.h ?
case "$val" in
"$define")
 echo " "
 if $h_sysfile; then
  val="$define"
  echo "We'll be including <sys/file.h>." >&4
 else
  val="$undef"
  echo "We won't be including <sys/file.h>." >&4
 fi
 ;;
*)
 h_sysfile=false
 ;;
esac
set i_sysfile
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nblock_io.U,v 3.0.1.2 1997/02/28 16:17:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: nblock_io.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:17:14  ram
?RCS: patch61: simplify here document for shells that can't handle them well
?RCS: patch61: force use of "startsh" at the head of the generated script
?RCS: patch61: added new files to the ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:13:22  ram
?RCS: patch56: created
?RCS:
?X:
?X: Simplify here document for shells that can't handle them well.
?X: (Problem reported on FreeBSD;
 it's unclear if this helps.)  --AD
?X:
?MAKE:o_nonblock eagain rd_nodata d_eofnblk: cat rm_try Compile run \
 d_open3 h_sysfile h_fcntl signal_t hint Oldconfig Setvar \
 startsh i_unistd i_fcntl i_stdlib d_fork d_pipe d_alarm
?MAKE: -pick add $@ %<
?S:o_nonblock:
?S: This variable bears the symbol value to be used during open() or fcntl()
?S: to turn on non-blocking I/O for a file descriptor. If you wish to switch
?S: between blocking and non-blocking, you may try ioctl(FIOSNBIO) instead,
?S: but that is only supported by some devices.
?S:.
?S:eagain:
?S: This variable bears the symbolic errno code set by read() when no
?S: data is present on the file and non-blocking I/O was enabled (otherwise,
?S: read() blocks naturally).
?S:.
?S:rd_nodata:
?S: This variable holds the return code from read() when no data is
?S: present. It should be -1, but some systems return 0 when O_NDELAY is
?S: used, which is a shame because you cannot make the difference between
?S: no data and an EOF.. Sigh!
?S:.
?S:d_eofnblk:
?S: This
 variable conditionally defines EOF_NONBLOCK if EOF can be seen
?S: when reading from a non-blocking I/O source.
?S:.
?C:VAL_O_NONBLOCK:
?C: This symbol is to be used during open() or fcntl(F_SETFL) to turn on
?C: non-blocking I/O for the file descriptor. Note that there is no way
?C: back, i.e. you cannot turn it blocking again this way. If you wish to
```

```
?C: alternatively switch between blocking and non-blocking, use the
?C: ioctl(FIOSNBIO) call instead, but that is not supported by all devices.
?C:.
?C:VAL_EAGAIN:
?C: This symbol holds the errno error code set by read() when no data was
?C: present on the non-blocking file descriptor.
?C:.
?C:RD_NODATA:
?C: This symbol holds the return code from read() when no data is present
?C: on the non-blocking file descriptor. Be careful! If EOF_NONBLOCK is
?C: not defined, then you can't distinguish between no data and EOF by
?C: issuing a read(). You'll have to find another way to tell for sure!
?C:.
?C:EOF_NONBLOCK:
?C: This
 symbol, if defined, indicates to the C program that a read() on
?C: a non-blocking file descriptor will return 0 on EOF, and not the value
?C: held in RD_NODATA (-1 usually, in that case!).
?C:.
?H:#define VAL_O_NONBLOCK $o_nonblock
?H:#define VAL_EAGAIN $eagain
?H:#define RD_NODATA $rd_nodata
?H:#$d_eofnblk EOF_NONBLOCK
?H:.
?T:status
?F:!try.out !try.ret !try.err !try !mtry
?LINT:use d_open3
: check for non-blocking I/O stuff
case "$h_sysfile" in
true) echo "#include <sys/file.h>" > head.c;;
*)
	case "$h_fcntl" in
	true) echo "#include <fcntl.h>" > head.c;;
	*) echo "#include <sys/fcntl.h>" > head.c;;
	esac
	;;
esac
echo " "
echo "Figuring out the flag used by open() for non-blocking I/O..." >&4
case "$o_nonblock" in
")
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
```

```
#$i_fcntl I_FCNTL
#ifdef I_FCNTL
#include <fcntl.h>
#endif
int main() {
#ifdef O_NONBLOCK
 printf("O_NONBLOCK\n");
 exit(0);
#endif
#ifdef
 O_NDELAY
 printf("O_NDELAY\n");
 exit(0);
#endif
?X: Stevens "Advanced Programming in the UNIX Environment" page 364 mentions
?X: the FNDELAY symbol, used in 4.3BSD (source: Paul Marquess).
#ifdef FNDELAY
 printf("FNDELAY\n");
 exit(0);
#endif
 exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  o_nonblock=`$run ./try`
  case "$o_nonblock" in
  ") echo "I can't figure it out, assuming O_NONBLOCK will do.";;
  *) echo "Seems like we can use $o_nonblock.";;
  esac
 else
  echo "(I can't compile the test program; pray O_NONBLOCK is right!)"
 fi
 ;;
*) echo "Using $hint value $o_nonblock.";;
esac
$rm_try

echo " "
echo "Let's see what value errno gets from read() on a $o_nonblock file..." >&4
case "$eagain" in
")
 case "$d_fork:$d_pipe:$d_alarm" in
 define:define:define)
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <errno.h>
#include <sys/types.h>
```

```
#include <signal.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_fcntl
 I_FCNTL
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#define MY_O_NONBLOCK $o_nonblock
#ifndef errno  /* XXX need better Configure test */
extern int errno;
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#include <unistd.h>
#endif
#include <string.h>
$signal_t blech(int x) { exit(3); }
EOCP
 $cat >> try.c <<'EOCP'
int main()
{
 int pd[2];
 int pu[2];
 char buf[1];
 char string[100];
 int ret;

 ret = pipe(pd); /* Down: child -> parent */
 if (ret != 0)
  exit(3);
 ret = pipe(pu); /* Up: parent -> child */
 if (ret != 0)
  exit(3);
 if (0 != fork()) {
  close(pd[1]); /* Parent reads from pd[0] */
  close(pu[0]); /* Parent writes (blocking) to pu[1] */
#ifdef F_SETFL
  if (-1 == fcntl(pd[0], F_SETFL, MY_O_NONBLOCK))
   exit(1);
#else
  exit(4);
#endif
  signal(SIGALRM, blech);
  alarm(5);
```

```
  if ((ret = read(pd[0], buf, 1)) > 0) /* Nothing to read! */
   exit(2);
  sprintf(string, "%d\n", ret);
  ret = write(2, string, strlen(string));
  if (ret != strlen(string))
   exit(3);
  alarm(0);
#ifdef
 EAGAIN
  if (errno == EAGAIN) {
   printf("EAGAIN\n");
   goto ok;
  }
#endif
#ifdef EWOULDBLOCK
  if (errno == EWOULDBLOCK)
   printf("EWOULDBLOCK\n");
#endif
 ok:
  ret = write(pu[1], buf, 1); /* Unblocks child, tell it to close our pipe */
  if (ret != 1)
   exit(3);
  sleep(2);    /* Give it time to close our pipe */
  alarm(5);
  ret = read(pd[0], buf, 1); /* Should read EOF */
  alarm(0);
  sprintf(string, "%d\n", ret);
  ret = write(4, string, strlen(string));
  if (ret != strlen(string))
   exit(3);
  exit(0);
 }

 close(pd[0]);   /* We write to pd[1] */
 close(pu[1]);   /* We read from pu[0] */
 ret = read(pu[0], buf, 1); /* Wait for parent to signal us we may continue */
 if (ret != 1)
  exit(3);
 close(pd[1]);   /* Pipe pd is now fully closed! */
 exit(0);    /* Bye bye, thank you for playing! */
}
EOCP
 set try
 if eval $compile_ok; then
?X: Use script to avoid the possible 'alarm call' message
  echo "$startsh" >mtry
  echo "$run ./try >try.out 2>try.ret 4>try.err
```

```
|| exit 4" >>mtry
 chmod +x mtry
 $run ./mtry >/dev/null 2>&1
 case $? in
 0) eagain=`$cat try.out`;;
 1) echo "Could not perform non-blocking setting!";;
 2) echo "I did a successful read() for something that was not there!";;
 3) echo "Hmm... non-blocking I/O does not seem to be working!";;
 4) echo "Could not find F_SETFL!";;
 *) echo "Something terribly wrong happened during testing.";;
 esac
 rd_nodata=`$cat try.ret`
 echo "A read() system call with no data present returns $rd_nodata."
 case "$rd_nodata" in
 0|-1) ;;
 *)
  echo "(That's peculiar, fixing that to be -1.)"
  rd_nodata=-1
  ;;
 esac
 case "$eagain" in
 ")
  echo "Forcing errno EAGAIN on read() with no data available."
  eagain=EAGAIN
  ;;
 *)
  echo "Your read() sets errno to $eagain when no data is available."
  ;;
 esac
 status=`$cat try.err`
 case "$status" in
 0) echo "And it correctly returns 0 to signal EOF.";;
 -1) echo "But it also returns -1 to signal EOF, so be careful!";;
 *)
echo "However, your read() returns '$status' on EOF??";;
 esac
 val="$define"
 if test "$status" = "$rd_nodata"; then
  echo "WARNING: you can't distinguish between EOF and no data!"
  val="$undef"
 fi
else
 echo "I can't compile the test program--assuming errno EAGAIN will do."
 eagain=EAGAIN
fi
;;
*) echo "Can't figure out how to test this--assuming errno EAGAIN will do."
 eagain=EAGAIN
```

```
  val="$define"
  ;;
 esac
 set d_eofnblk
 eval $setvar
 ;;
*)
 echo "Using $hint value $eagain."
 echo "Your read() returns $rd_nodata when no data is present."
 case "$d_eofnblk" in
 "$define") echo "And you can see EOF because read() returns 0.";;
 "$undef") echo "But you can't see EOF status from read() returned value.";;
 *)
?X: Should not happen, but if it does, assume the worst!
  echo "(Assuming you can't see EOF status from read anyway.)"
  d_eofnblk=$undef
  ;;
 esac
 ;;
esac
$rm_try head.c mtry
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/nblock_io.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: socksizetype.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:socksizetype: \
 Protochk Oldconfig Myread cat d_socket d_socklen_t sizetype \
 usesocks i_socks i_systypes extern_C
?MAKE: -pick add $@ %<
?S:socksizetype:
?S: This variable holds the type used for the size argument
?S: for various socket calls like accept.  Usual values include
?S: socklen_t, size_t, and int.
?S:.
?C:Sock_size_t:
?C: This symbol holds the type used for the size argument of
?C: various socket calls (just the base type, not the pointer-to).
?C:.
?H:#define Sock_size_t  $socksizetype /**/
?H:.
```

```
?T:xxx yyy try
@if Sock_size_t
: check for type of the size argument to socket calls
case "$d_socket" in
"$define")
 $cat <<EOM

Checking to see what type is the last argument
 of accept().
EOM
 yyy=''
 case "$d_socklen_t" in
 "$define") yyy="$yyy socklen_t"
 esac
 yyy="$yyy $sizetype int long unsigned"
 for xxx in $yyy; do
  case "$socksizetype" in
  '') try="$extern_C int accept(int, struct sockaddr *, $xxx *);"
   case "$usesocks" in
   "$define")
    if ./protochk "$try" $i_systypes sys/types.h $d_socket sys/socket.h literal '#define INCLUDE_PROTOTYPES'
$i_socks socks.h.; then
     echo "Your system accepts '$xxx *' for the last argument of accept()."
     socksizetype="$xxx"
    fi
    ;;
   *) if ./protochk "$try"  $i_systypes sys/types.h $d_socket sys/socket.h; then
     echo "Your system accepts '$xxx *' for the last argument of accept()."
     socksizetype="$xxx"
    fi
    ;;
   esac
   ;;
  esac
 done
: In case none of those worked, prompt the user.
 case "$socksizetype" in
 '') rp='What is the type for socket address structure sizes?'
  dflt='int'
  . ./myread
  socksizetype=$ans
  ;;
 esac
 ;;
*) : no sockets, so pick relatively harmless default
 socksizetype='int'
 ;;
esac
```

@end

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/socksizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_cuserid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_cuserid.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:25  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_cuserid: Inlibc
?MAKE: -pick add $@ %<
?S:d_cuserid:
?S: This variable conditionally defines the HAS_CUSERID symbol, which
?S: indicates to the C program that the cuserid() routine is available
?S: to get character login names.
?S:.
?C:HAS_CUSERID :
?C: This symbol,
 if defined, indicates that the cuserid routine is
?C: available to get character login names.
?C:.
?H:#$d_cuserid HAS_CUSERID  /**/
?H:.
?LINT:set d_cuserid
: see if cuserid exists
set cuserid d_cuserid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_cuserid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 2021 Nicholas Clark & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_thread_local perl_thread_local: cat echo Setvar Compile run rm_try hint
?MAKE: -pick add $@ %<
?S:d_thread_local:
?S: This variable conditionally defines the PERL_THREAD_LOCAL symbol. In
?S: turn that gives a linkage specification for thread-local storage.
?S:.
?S:perl_thread_local:
?S: This variable gives the value for the PERL_THREAD_LOCAL symbol (when
?S: defined), which gives a linkage specification for thread-local storage.
?S:.
?C:PERL_THREAD_LOCAL:
?C: This symbol, if defined, gives a linkage specification for thread-local
?C: storage. For example, for a C11 compiler this will be _Thread_local.
?C: Beware, some compilers are sensitive to the C language standard they are
?C: told
 to parse. For example, suncc defaults to C11, so our probe will
?C: report that _Thread_local can be used. However, if the -std=c99 is later
?C: added to the compiler flags, then _Thread_local will become a syntax
?C: error. Hence it is important for these flags to be consistent between
?C: probing and use.
?C:.
?H:#$d_thread_local PERL_THREAD_LOCAL $perl_thread_local /**/
?H:.
?T:thread_local
?F:!try
?LINT:set d_thread_local
: see what flavor, if any, of thread local storage is supported
echo " "
echo "Checking to see if your system supports C11 thread local storage..."
$cat > try.c <<'EOCP'
#include <stdio.h>
#include <stdlib.h>
#include <pthread.h>

static int plus_one = 1;
static int minus_one = -1;

PROBE_MACRO int *minion;

int callback (const void *a, const void *b) {
   int val_a = *minion * *(const int *)a;
   int val_b = *minion * *(const int *)b;
   return val_a < val_b ? -1 : val_a > val_b;
```

```
}

#define SIZE 8

void *thread_function(void *arg) {
  /* thread local variables
 should start zeroed in each thread. */
  if (minion != NULL) {
      fprintf(stderr, "__thread variable started with %p, should be NULL\n",
              minion);
      exit(2);
  }
  minion = &minus_one;

  int array[SIZE];
  unsigned int i;
  for (i = 0; i < SIZE; ++i) {
      /* "Hash randomisation" - this array isn't in sorted order: */
      array[i ^ 5] = i * i;
  }

  qsort(array, SIZE, sizeof(int), callback);

  int bad = 0;
  for (i = 0; i < SIZE; ++i) {
      int want = (SIZE - 1 - i) * (SIZE - 1 - i);
      int have = array[i];
      if (want != have) {
          ++bad;
          fprintf(stderr, "array[%u] - want %i, have %i\n", i, want, have);
      }
  }
  if (bad)
      exit(3);

  return NULL;
}

int main(int argc, char **argv) {
  if (minion != NULL) {
      fprintf(stderr, "__thread variable started with %p, should be NULL\n",
              minion);
      exit(4);
  }

  minion = &plus_one;

  pthread_t
```

```
 tid;
   int result = pthread_create(&tid, NULL, thread_function, NULL);
   if (result) {
       fprintf(stderr, "pthread_create failed (%d)\n", result);
       exit(5);
   }

   result = pthread_join(tid, NULL);
   if (result) {
       fprintf(stderr, "pthread_join failed (%d)\n", result);
       exit(6);
   }

   if (minion == NULL) {
       fprintf(stderr, "__thread variable should not be NULL\n");
       exit(7);
   }
   if (!(minion == &plus_one && *minion == 1)) {
       fprintf(stderr, "__thread variable should be %d @ %p, not %d @ %p\n",
               1, &plus_one, *minion, minion);
       exit(8);
   }

   return 0;
}
EOCP

# Respect a hint (or previous) value for perl_thread_local, if there is one.
case "$perl_thread_local" in
") # Check the various possibilities, and break out on success.
 for thread_local in _Thread_local __thread; do
  set try -DPROBE_MACRO=$thread_local
  if eval $compile && $run ./try; then
   $echo "Your compiler supports $thread_local."
 >&4
   val=$define
   perl_thread_local="$thread_local";
   break;
  fi
  $echo "Your compiler does NOT support $thread_local." >&4
  val="$undef"
 done
 ;;
*thread*|*Thread*) # Some variant of thread local exists.
 echo "Keeping your $hint value of $perl_thread_local."
 val=$define
 ;;
*)  # Unrecognized previous value -- blindly trust the supplied
```

```
 # value and hope it makes sense.  Use old value for
 # d_thread_local, if there is one.
 echo "Keeping your $hint value of $perl_thread_local."
 case "$d_thread_local" in
  ") val=$define ;;
  *)  val=$d_thread_local ;;
 esac
 ;;
esac
set d_thread_local
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_thread_local.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016 Tony Cook
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:dtraceobject dtracexnolibs: usedtrace dtrace cc ccflags optimize \
  Compile cat rm_try
?MAKE: -pick add $@ %<
?S:dtraceobject:
?S: Whether we need to build an object file with the dtrace tool.
?S:.
?S:dtracexnolibs:
?S: Whether dtrace accepts -xnolibs.  If available we call dtrace -h
?S: and dtrace -G with -xnolibs to allow dtrace to run in a jail on
?S: FreeBSD.
?S:.
?F: !perldtrace.h
?T:xnolibs
: Probe whether dtrace builds an object, as newer Illumos requires an input
: object file that uses at least one of the probes defined in the .d file
case "$usedtrace" in
$define)
   case "$dtracexnolibs" in
   $define|true|[yY]*)
       dtracexnolibs=$define
 $dtrace -h -xnolibs -s ../perldtrace.d -o perldtrace.h
 ;;
   ' '|'')
        if $dtrace -h -xnolibs -s ../perldtrace.d -o perldtrace.h 2>&1 ; then
      dtracexnolibs=$define
      echo "Your dtrace accepts -xnolibs"
```

```
 elif $dtrace -h -s ../perldtrace.d -o perldtrace.h 2>&1 ; then
     dtracexnolibs=$undef
     echo "Your dtrace doesn't accept -xnolibs"
 else
          echo "Your dtrace doesn't work at all, try building without dtrace support" >&4
     exit 1
 fi
 ;;
   *)
      dtracexnolibs=$undef
 $dtrace -h -s ../perldtrace.d -o perldtrace.h
 ;;
   esac
   case $dtracexnolibs in
   $define) xnolibs=-xnolibs ;;
   *) xnolibs= ;;
   esac

   case "$dtraceobject" in
   $define|true|[yY]*)
       dtraceobject=$define
       ;;
   ' '|'')
       $cat >try.c <<EOM
#include "perldtrace.h"
int main(void) {
   PERL_LOADED_FILE("dummy");
   return 0;
}
EOM
       dtraceobject=$undef
       if $cc -c -o try.o $optimize $ccflags try.c \
                && $dtrace -G $xnolibs -s ../perldtrace.d try.o >/dev/null 2>&1; then

         dtraceobject=$define
           echo "Your dtrace builds an object file"
       fi
       ;;
   *) dtraceobject=$undef ;;
   esac
   $rm_try perldtrace.o perldtrace.h
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dtraceobject.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: alignbytes.U,v 3.0.1.2 1994/10/29 16:02:28 ram Exp $

```
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: alignbytes.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:02:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:25:20  ram
?RCS: patch23: avoid ALIGNBYTES, since it conflicts on NetBSD
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:alignbytes: Myread Compile cat rm_try multiarch run test nvtype
?MAKE: -pick add $@ %<
?S:alignbytes:
?S: This
 variable holds the number of bytes required to align a
?S: double-- or a long double when applicable. Usual values are
?S: 2, 4 and 8.  The default is eight, for safety.
?S:.
?X: This used to be called ALIGNBYTES, but that conflicts with
?X: <machines/param.h> in NetBSD.
?C:MEM_ALIGNBYTES (ALIGNBYTES):
?C: This symbol contains the number of bytes required to align a
?C: double, or a long double when applicable. Usual values are 2,
?C: 4 and 8. The default is eight, for safety.  For cross-compiling
?C: or multiarch support, Configure will set a minimum of 8.
?C:.
?H:?%<:#define MEM_ALIGNBYTES $alignbytes
?H:.
?F:!try
: check for alignment requirements
echo " "
case "$alignbytes" in
   ") echo "Checking alignment constraints..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
struct foobar {
   char foo;
   $nvtype bar;
} try_algn;
```

```
int main()
{
   printf("%d\n", (int)((char *)&try_algn.bar - (char *)&try_algn.foo));
   return(0);
}
EOCP
 set try
 if eval $compile_ok; then
     dflt=`$run
 ./try`
 else
     dflt='8'
     echo "(I can't seem to compile the test program...)"
 fi
 case "$multiarch" in
     *$define*)
  : The usual safe value is 8, but Darwin with -Duselongdouble
  : needs 16.  Hence, we will take 8 as a minimum, but allow
  : Configure to pick a larger value if needed.
  if $test "$dflt" -lt 8; then
      dflt='8'
      echo "Setting alignment to 8 for multiarch support.">&4
  fi
  ;;
 esac
 ;;
   *) dflt="$alignbytes"
 ;;
esac
rp="Doubles must be aligned on a how-many-byte boundary?"
. ./myread
alignbytes="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/alignbytes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Prefixit.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: Prefixit.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:29:22  ram
?RCS: patch49: created
?RCS:
?X:
?X: Used as: "set dflt var dir; eval $prefixit" to set $dflt to be
?X: $prefix/dir by default, or the previous $var depending on certain
?X: conditions:
?X: - If the $oldprefix variable is empty, then $prefix holds the same
?X:   value as on previous runs. Therefore, reuse $var if set, otherwise
?X:   set $dflt to $prefix/dir.
?X: - If $oldprefix is not
 empty, then set $dflt to $prefix/dir if $var
?X:   is empty (first run). Otherwise, if $var is $oldprefix/dir, then
?X:   change it to $prefix/dir. If none of the above, reuse the old $var.
?X:
?X: When dir is omitted, the dflt variable is set to $var if prefix did not
?X: change, to an empty value otherwise. If dir=none, then a single space
?X: in var is kept as-is, even if the prefix changes.
?X:
?MAKE:Prefixit: prefix oldprefix
?MAKE: -pick add $@ %<
?LINT:define prefixit
?S:prefixit:
?S: This shell variable is used internally by Configure to reset
?S: the leading installation prefix correctly when it is changed.
?S:  set dflt var [dir]
?S:  eval $prefixit
?S: That will set $dflt to $var or $prefix/dir depending on the
?S: value of $var and $oldprefix.
?S:.
?V:prefixit
?T:tp
: set the prefixit variable, to compute a suitable default value
prefixit='case "$3" in
""|none)
 case "$oldprefix" in
 "") eval "$1=\"\$$2\"";;
 *)
  case "$3" in
  "") eval "$1=";;
  none)
   eval "tp=\"\$$2\"";
   case
 "$tp" in
   ""|" "|none) eval "$1=\"\$$2\"";;
   *) eval "$1=";;
   esac;;
```

```
  esac;;
 esac;;
*)
 eval "tp=\"$oldprefix-\$$2-\"; eval "tp=\"$tp\"";
 case "$tp" in
 --|/*--|\~*--) eval "$1=\"$prefix/$3\"";;
 /*-$oldprefix/*|\~*-$oldprefix/*)
  eval "$1=\`echo \$$2 | sed \"s,^$oldprefix,$prefix,\"\`";;
 *) eval "$1=\"\$$2\"";;
 esac;;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Prefixit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tcgtpgrp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_tcgtpgrp.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:08  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_tcgetpgrp: Inlibc
?MAKE: -pick add $@ %<
?S:d_tcgetpgrp:
?S: This variable conditionally defines the HAS_TCGETPGRP symbol, which
?S: indicates to the C program that the tcgetpgrp() routine is available.
?S: to get foreground process group ID.
?S:.
?C:HAS_TCGETPGRP
 :
?C: This symbol, if defined, indicates that the tcgetpgrp routine is
?C: available to get foreground process group ID.
?C:.
?H:#$d_tcgetpgrp HAS_TCGETPGRP  /**/
?H:.
?LINT:set d_tcgetpgrp
: see if tcgetpgrp exists
```

```
set tcgetpgrp d_tcgetpgrp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tcgtpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn_v7EXT.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Warn_v7EXT.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:01:42  ram
?RCS: patch36: call ./v7 explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit issues warnings to V7 sites that they are living dangerously.
?X: This unit needs to get mentioned in End.U to get included.
?X:
?MAKE:Warn_v7EXT: package Guess
?MAKE: -pick add $@ %<
: Warnings
if ./v7;
 then
 cat <<EOM

NOTE: the V7 compiler may ignore some #undefs that $package uses.  If so,
you may get messages about redefining EXT.  Some V7 compilers also have
difficulties with #defines near buffer boundaries, so beware.  You may have
to play with the spacing in some .h files, believe it or not.
EOM
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn_v7EXT.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mallocsrc.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:10:26  ram
?RCS: patch61: added support for Free_t, the type of free()
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:10:46  ram
?RCS: patch23: added support for MYMALLOC, mainly  for perl5 (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mallocsrc mallocobj usemymalloc malloctype d_mymalloc \
 freetype: Myread \
 Oldconfig
 package Guess Setvar rm cat +cc +ccflags Findhdr \
 i_malloc i_stdlib sed libs _o ptrsize
?MAKE: -pick add $@ %<
?X: Put near top so that other tests don't erroneously include
?X: -lmalloc.  --AD  22 June 1998
?Y:TOP
?S:usemymalloc:
?S: This variable contains y if the malloc that comes with this package
?S: is desired over the system's version of malloc.  People often include
?S: special versions of malloc for effiency, but such versions are often
?S: less portable.  See also mallocsrc and mallocobj.
?S: If this is 'y', then -lmalloc is removed from $libs.
?S:.
?S:mallocsrc:
?S: This variable contains the name of the malloc.c that comes with
?S: the package, if that malloc.c is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.
?S:.
?S:d_mymalloc:
?S: This variable conditionally defines MYMALLOC in case other parts
?S: of the source want to take special action if MYMALLOC is used.
?S: This may include different sorts
 of profiling or error detection.
?S:.
?S:mallocobj:
```

```
?S: This variable contains the name of the malloc.o that this package
?S: generates, if that malloc.o is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.  See mallocsrc.
?S:.
?S:freetype:
?S: This variable contains the return type of free().  It is usually
?S: void, but occasionally int.
?S:.
?S:malloctype:
?S: This variable contains the kind of ptr returned by malloc and realloc.
?S:.
?C:Free_t:
?C: This variable contains the return type of free().  It is usually
?C: void, but occasionally int.
?C:.
?C:Malloc_t (MALLOCPTRTYPE):
?C: This symbol is the type of pointer returned by malloc and realloc.
?C:.
?H:#define Malloc_t $malloctype   /**/
?H:#define Free_t $freetype   /**/
?H:.
?C:MYMALLOC:
?C: This symbol, if defined, indicates that we're using our own malloc.
?C:.
?H:#$d_mymalloc MYMALLOC   /**/
?H:.
?LINT:change libs
?X: Cannot test for mallocsrc; it
 is the unit's name and there is a bug in
?X: the interpreter which defines all the names, even though they are not used.
@if mallocobj
: determine which malloc to compile in
echo " "
case "$usemymalloc" in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*)
 case "$ptrsize" in
 4) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
esac
rp="Do you wish to attempt to use the malloc that comes with $package?"
. ./myread
usemymalloc="$ans"
case "$ans" in
```

```
y*|true)
 usemymalloc='y'
 mallocsrc='malloc.c'
 mallocobj="malloc$_o"
 d_mymalloc="$define"
?X: Maybe libs.U should be dependent on mallocsrc.U, but then
?X: most packages that use dist probably don't supply their own
?X: malloc, so this is probably an o.k. comprpomise
 case "$libs" in
 *-lmalloc*)
  : Remove malloc from list of libraries to use
  echo "Removing unneeded -lmalloc from library list" >&4
  set `echo X $libs | $sed -e 's/-lmalloc / /' -e 's/-lmalloc$//'`
  shift
  libs="$*"
  echo "libs = $libs" >&4
  ;;
 esac
 ;;
*)
 usemymalloc='n'
 mallocsrc=''
 mallocobj=''
 d_mymalloc="$undef"
 ;;
esac

@end
@if
 MALLOCPTRTYPE || Malloc_t || Free_t
: compute the return types of malloc and free
echo " "
$cat >malloc.c <<END
#$i_malloc I_MALLOC
#$i_stdlib I_STDLIB
#include <stdio.h>
#include <sys/types.h>
#ifdef I_MALLOC
#include <malloc.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#ifdef TRY_MALLOC
void *malloc();
#endif
#ifdef TRY_FREE
void free();
```

```
#endif
END
@if MALLOCPTRTYPE || Malloc_t
case "$malloctype" in
")
 if $cc $ccflags -c -DTRY_MALLOC malloc.c >/dev/null 2>&1; then
  malloctype='void *'
 else
  malloctype='char *'
 fi
 ;;
esac
echo "Your system wants malloc to return '$malloctype', it would seem." >&4
@end

@if Free_t
case "$freetype" in
")
 if $cc $ccflags -c -DTRY_FREE malloc.c >/dev/null 2>&1; then
  freetype='void'
 else
  freetype='int'
 fi
 ;;
esac
echo "Your system uses $freetype free(), it would seem." >&4
@end
$rm -f malloc.[co]
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mallocsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strtoul.U,v 3.0.1.1 1997/02/28 15:46:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_strtoul.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:43  ram
?RCS: patch61: created
```

```
?RCS:
?RCS:
?MAKE:d_strtoul: Inlibc cat longsize Compile run
?MAKE: -pick add $@ %<
?S:d_strtoul:
?S: This variable conditionally defines the HAS_STRTOUL symbol, which
?S: indicates to the C program that the strtoul() routine is available
?S: to provide conversion of strings to unsigned long.
?S:.
?C:HAS_STRTOUL (STRTOUL):
?C: This
 symbol, if defined, indicates that the strtoul routine is
?C: available to provide conversion of strings to unsigned long.
?C:.
?H:#$d_strtoul HAS_STRTOUL /**/
?H:.
?F:!try
: see if strtoul exists
set strtoul d_strtoul
eval $inlibc

case "$d_strtoul" in
"$define")
 $cat <<EOM
Checking whether your strtoul() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#include <stdio.h>
static int bad = 0;
void check(const char *s, unsigned long eul, int een) {
 unsigned long gul;
 errno = 0;
 gul = strtoul(s, 0, 10);
 if (!((gul == eul) && (errno == een)))
  bad++;
}
int main() {
 check(" 1", 1L, 0);
 check(" 0", 0L, 0);
EOCP
 case "$longsize" in
 8)
     $cat >>try.c <<'EOCP'
 check("18446744073709551615", 18446744073709551615UL, 0);
 check("18446744073709551616", 18446744073709551615UL, ERANGE);
#if 0 /* strtoul() for /^-/ strings is undefined. */
```

```
 check("-1", 18446744073709551615UL, 0);
 check("-18446744073709551614", 2, 0);
 check("-18446744073709551615", 1,
 0);
 check("-18446744073709551616", 18446744073709551615UL, ERANGE);
 check("-18446744073709551617", 18446744073709551615UL, ERANGE);
#endif
EOCP
  ;;
 4)
     $cat >>try.c <<'EOCP'
 check("4294967295", 4294967295UL, 0);
 check("4294967296", 4294967295UL, ERANGE);
#if 0 /* strtoul() for /^-/ strings is undefined. */
 check("-1", 4294967295UL, 0);
 check("-4294967294", 2, 0);
 check("-4294967295", 1, 0);
 check("-4294967296", 4294967295UL, ERANGE);
 check("-4294967297", 4294967295UL, ERANGE);
#endif
EOCP
  ;;
 *)
: Should we write these tests to be more portable by sprintf-ing
: ~0 and then manipulating that char string as input for strtol?
  ;;
 esac
 $cat >>try.c <<'EOCP'
 if (!bad)
  printf("ok\n");
 return 0;
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
  ok) echo "Your strtoul() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtoul() doesn't seem to be working okay.
EOM
     d_strtoul="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test
 program--assuming it doesn't)"
  d_strtoul="$undef"
 fi
```

```
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_strtoul.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strerror.U,v $
?RCS: Revision 3.0.1.3  1994/05/13  15:20:27  ram
?RCS: patch27: now uses new macro support for cleaner Strerror def
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  14:58:26  ram
?RCS: patch23: renamed strerror into Strerror to protect name space (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:56  ram
?RCS: patch16: protected code looking for sys_errnolist[] with @if
?RCS: patch16: added default value for d_sysernlst
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:35  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?MAKE:d_strerror d_syserrlst d_sysernlst d_strerrm: contains Csym Findhdr
?MAKE: -pick add $@ %<
?S:d_strerror:
?S: This variable conditionally defines HAS_STRERROR if strerror() is
?S: available to translate error numbers to strings.
?S:.
?S:d_syserrlst:
?S: This variable conditionally defines HAS_SYS_ERRLIST if sys_errlist[] is
?S: available to translate error numbers to strings.
?S:.
?S:d_sysernlst:
?S: This variable conditionally defines HAS_SYS_ERRNOLIST if sys_errnolist[]
?S: is available to translate error numbers to the symbolic name.
?S:.
?S:d_strerrm:
?S: This variable holds what Strerrr is defined as to translate an error
```

```
?S: code condition into an error message string. It could be 'strerror'
?S: or a more complex macro emulating strrror with sys_errlist[], or the
?S: "unknown" string when both strerror and sys_errlist are missing.
?S:.
?C:HAS_STRERROR (STRERROR):
?C: This symbol, if defined, indicates that the strerror routine is
?C: available
 to translate error numbers to strings. See the writeup
?C: of Strerror() in this file before you try to define your own.
?C:.
?C:HAS_SYS_ERRLIST (SYSERRLIST):
?C: This symbol, if defined, indicates that the sys_errlist array is
?C: available to translate error numbers to strings. The extern int
?C: sys_nerr gives the size of that table.
?C:.
?C:HAS_SYS_ERRNOLIST (SYSERRNOLIST):
?C: This symbol, if defined, indicates that the sys_errnolist array is
?C: available to translate an errno code into its symbolic name (e.g.
?C: ENOENT). The extern int sys_nerrno gives the size of that table.
?C:.
?C:Strerror:
?C: This preprocessor symbol is defined as a macro if strerror() is
?C: not available to translate error numbers to strings but sys_errlist[]
?C: array is there.
?C:.
?H:#$d_strerror HAS_STRERROR  /**/
?H:#$d_syserrlst HAS_SYS_ERRLIST /**/
?H:#$d_sysernlst HAS_SYS_ERRNOLIST /**/
?H:#define Strerror(e) $d_strerrm
?H:.
?D:d_sysernlst=''
?T:xxx val
: see if strerror and/or sys_errlist[]
 exist
echo " "
if set strerror val -f d_strerror; eval $csym; $val; then
 echo 'strerror() found.' >&4
 d_strerror="$define"
 d_strerrm='strerror(e)'
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "(You also have sys_errlist[], so we could roll our own strerror.)"
  d_syserrlst="$define"
 else
 echo "(Since you don't have sys_errlist[], sterror() is welcome.)"
  d_syserrlst="$undef"
 fi
elif xxx=`./findhdr string.h`; test "$xxx" || xxx=`./findhdr strings.h`; \
 $contains '#[  ]*define.*strerror' "$xxx" >/dev/null 2>&1; then
```

```
 echo 'strerror() found in string header.' >&4
 d_strerror="$define"
 d_strerrm='strerror(e)'
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "(Most probably, strerror() uses sys_errlist[] for descriptions.)"
  d_syserrlst="$define"
 else
  echo "(You don't appear to have any sys_errlist[], how can this be?)"
  d_syserrlst="$undef"
 fi
elif set sys_errlist val -a d_syserrlst; eval $csym; $val; then
echo "strerror()
 not found, but you have sys_errlist[] so we'll use that." >&4
 d_strerror="$undef"
 d_syserrlst="$define"
 d_strerrm='((e)<0||(e)>=sys_nerr?"unknown":sys_errlist[e])'
else
 echo 'strerror() and sys_errlist[] NOT found.' >&4
 d_strerror="$undef"
 d_syserrlst="$undef"
 d_strerrm='"unknown"'
fi
@if d_sysernlst || HAS_SYS_ERRNOLIST
if set sys_errnolist val -a d_sysernlst; eval $csym; $val; then
 echo "(Symbolic error codes can be fetched via the sys_errnolist[] array.)"
 d_sysernlst="$define"
else
 echo "(However, I can't extract the symbolic error code out of errno.)"
 d_sysernlst="$undef"
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoq: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtoq:
?S: This variable conditionally defines the HAS_STRTOQ symbol, which
?S: indicates to the C program that the strtoq() routine is available.
```

```
?S:.
?C:HAS_STRTOQ:
?C: This symbol, if defined, indicates that the strtoq routine is
?C: available to convert strings to long longs (quads).
?C:.
?H:#$d_strtoq HAS_STRTOQ  /**/
?H:.
?LINT:set d_strtoq
: see if strtoq exists
set strtoq d_strtoq
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoq.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_termio.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_termio.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:54  ram
?RCS: patch36: call ./usg and ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1994/08/29  16:26:38  ram
?RCS: patch32: don't include all threee I_* symbols in config.h
?RCS: patch32: (had forgotten to undo this part last time)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:25:03  ram
?RCS: patch27: undone ADO's fix in previous patch since it was useless
?RCS:
?RCS:
 Revision 3.0.1.1  1994/05/06  15:05:23  ram
?RCS: patch23: now include all three defines in config.h (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_termio i_sgtty i_termios: test Inlibc Cppsym Guess Setvar Findhdr Warn run
?MAKE: -pick add $@ %<
?S:i_termio:
?S: This variable conditionally defines the I_TERMIO symbol, which
```

```
?S: indicates to the C program that it should include <termio.h> rather
?S: than <sgtty.h>.
?S:.
?S:i_termios:
?S: This variable conditionally defines the I_TERMIOS symbol, which
?S: indicates to the C program that the POSIX <termios.h> file is
?S: to be included.
?S:.
?S:i_sgtty:
?S: This variable conditionally defines the I_SGTTY symbol, which
?S: indicates to the C program that it should include <sgtty.h> rather
?S: than <termio.h>.
?S:.
?C:I_TERMIO:
?C: This symbol, if defined, indicates that the program should include
?C: <termio.h> rather than <sgtty.h>.  There are also differences in
?C: the
 ioctl() calls that depend on the value of this symbol.
?C:.
?C:I_TERMIOS:
?C: This symbol, if defined, indicates that the program should include
?C: the POSIX termios.h rather than sgtty.h or termio.h.
?C: There are also differences in the ioctl() calls that depend on the
?C: value of this symbol.
?C:.
?C:I_SGTTY:
?C: This symbol, if defined, indicates that the program should include
?C: <sgtty.h> rather than <termio.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of this symbol.
?C:.
?H:#$i_termio I_TERMIO  /**/
?H:#$i_termios I_TERMIOS  /**/
?H:#$i_sgtty I_SGTTY  /**/
?H:.
?T:val2 val3
?LINT:set i_termio i_sgtty i_termios
: see if this is a termio system
val="$undef"
val2="$undef"
val3="$undef"
?X: Prefer POSIX-approved termios.h over all else
if $test `./findhdr termios.h`; then
   set tcsetattr i_termios
   eval $inlibc
   val3="$i_termios"
fi
echo " "
case "$val3" in
```

```
  "$define") echo "You have POSIX termios.h... good!" >&4;;
  *)
 if ./Cppsym pyr; then
    case "`$run /bin/universe`" in
 ucb) if $test `./findhdr sgtty.h`; then
  val2="$define"
  echo "<sgtty.h> found." >&4
     else
  echo "System is pyramid with BSD universe."
  ./warn "<sgtty.h> not found--you could have problems."
     fi;;
 *)  if $test `./findhdr termio.h`; then
  val="$define"
  echo "<termio.h> found." >&4
     else
  echo "System is pyramid with USG universe."
  ./warn "<termio.h> not found--you could have problems."
     fi;;
    esac
?X: Start with USG to avoid problems if both usg/bsd was guessed
 elif ./usg; then
    if $test `./findhdr termio.h`; then
  echo "<termio.h> found." >&4
  val="$define"
    elif $test `./findhdr sgtty.h`; then
  echo "<sgtty.h> found." >&4
  val2="$define"
    else
  ./warn "Neither <termio.h> nor <sgtty.h> found--cross fingers!"
    fi
 else
    if $test `./findhdr sgtty.h`; then
  echo "<sgtty.h> found." >&4
  val2="$define"
    elif $test `./findhdr termio.h`; then
  echo "<termio.h>
 found." >&4
  val="$define"
    else
  ./warn "Neither <sgtty.h> nor <termio.h> found--cross fingers!"
    fi
 fi;;
esac
set i_termio; eval $setvar
val=$val2; set i_sgtty; eval $setvar
val=$val3; set i_termios; eval $setvar

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_termio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endsent:
?S: This variable conditionally defines HAS_ENDSERVENT if endservent() is
?S: available to close whatever was being used for service queries.
?S:.
?C:HAS_ENDSERVENT:
?C: This symbol, if defined, indicates that the endservent() routine is
?C: available to close whatever was being used for
 service queries.
?C:.
?H:#$d_endsent HAS_ENDSERVENT  /**/
?H:.
?LINT:set d_endsent
: see if endservent exists
set endservent d_endsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_db.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:10:22  ram
?RCS: patch56: conditionally use const in test programs (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:14:42  ram
?RCS: patch54: extended for more intimate DB probing (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:21:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_db db_hashtype db_prefixtype: Inhdr +cc +ccflags rm_try contains cat \
  d_const
?MAKE: -pick
 add $@ %<
?S:i_db:
?S: This variable conditionally defines the I_DB symbol, and indicates
?S: whether a C program may include Berkeley's DB include file <db.h>.
?S:.
?S:db_hashtype:
?S: This variable contains the type of the hash structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is u_int32_t.
?S:.
?S:db_prefixtype:
?S: This variable contains the type of the prefix structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is size_t.
?S:.
?C:I_DB:
?C: This symbol, if defined, indicates to the C program that it should
?C: include Berkeley's DB include file <db.h>.
?C:.
?C:DB_Prefix_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is u_int32_t.
?C:.
?C:DB_Hash_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header
 file.  In older versions of DB, it was
?C: int, while in newer ones it is size_t.
?C:.
?H:#$i_db I_DB  /**/
?H:#define DB_Hash_t $db_hashtype  /**/
```

```
?H:#define DB_Prefix_t $db_prefixtype   /**/
?H:.
?LINT:set i_db
: see if this is a db.h system
set db.h i_db
eval $inhdr

@if DB_Hash_t
case "$i_db" in
define)
 : Check the return type needed for hash
 echo " "
 echo "Checking return type needed for hash for Berkeley DB ..." >&4
 $cat >try.c <<EOCP
#$d_const HASCONST
#ifndef HASCONST
#define const
#endif
#include <sys/types.h>
#include <db.h>
u_int32_t hash_cb (ptr, size)
const void *ptr;
size_t size;
{
}
HASHINFO info;
int main()
{
 info.hash = hash_cb;
}
EOCP
 if $cc $ccflags -c try.c >try.out 2>&1 ; then
  if $contains warning try.out >>/dev/null 2>&1 ; then
   db_hashtype='int'
  else
   db_hashtype='u_int32_t'
  fi
 else
  echo "I can't seem to compile the test program." >&4
  db_hashtype=int
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_hashtype for hash."
 ;;
*) db_hashtype=int
 ;;
esac
```

```
@end
@if
 DB_Prefix_t
case "$i_db" in
define)
 : Check the return type needed for prefix
 echo " "
 echo "Checking return type needed for prefix for Berkeley DB ..." >&4
 cat >try.c <<EOCP
#$d_const HASCONST
#ifndef HASCONST
#define const
#endif
#include <sys/types.h>
#include <db.h>
size_t prefix_cb (key1, key2)
const DBT *key1;
const DBT *key2;
{
}
BTREEINFO info;
int main()
{
 info.prefix = prefix_cb;
}
EOCP
 if $cc $ccflags -c try.c  >try.out 2>&1 ; then
  if $contains warning try.out >>/dev/null 2>&1 ; then
   db_prefixtype='int'
  else
   db_prefixtype='size_t'
  fi
 else
  echo "I can't seem to compile the test program." >&4
  db_prefixtype='int'
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_prefixtype for prefix."
 ;;
*) db_prefixtype='int'
 ;;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_db.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pthrattrj.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_old_pthread_create_joinable old_pthread_create_joinable: \
 cat Compile rm_try Setvar usethreads i_pthread
?MAKE: -pick add $@ %<
?S:d_old_pthread_create_joinable:
?S: This variable conditionally defines pthread_create_joinable.
?S: undef if pthread.h defines PTHREAD_CREATE_JOINABLE.
?S:.
?S:old_pthread_create_joinable:
?S: This variable defines the constant to use for creating joinable
?S: (aka undetached) pthreads.  Unused if pthread.h defines
?S: PTHREAD_CREATE_JOINABLE.  If used, possible values are
?S: PTHREAD_CREATE_UNDETACHED and __UNDETACHED.
?S:.
?C:OLD_PTHREAD_CREATE_JOINABLE:
?C: This symbol, if defined, indicates how to create pthread
?C: in joinable (aka undetached)
 state.  NOTE: not defined
?C: if pthread.h already has defined PTHREAD_CREATE_JOINABLE
?C: (the new version of the constant).
?C: If defined, known values are PTHREAD_CREATE_UNDETACHED
?C: and __UNDETACHED.
?C:.
?H:#$d_old_pthread_create_joinable OLD_PTHREAD_CREATE_JOINABLE $old_pthread_create_joinable /**/
?H:.
: how to create joinable pthreads
if test "X$usethreads" = "X$define" -a "X$i_pthread" = "X$define"; then
 echo " "
 echo "Checking what constant to use for creating joinable pthreads..." >&4
 $cat >try.c <<'EOCP'
#include <pthread.h>
int main() {
   int detachstate = JOINABLE;
}
EOCP
 set try -DJOINABLE=PTHREAD_CREATE_JOINABLE
 if eval $compile; then
  echo "You seem to use PTHREAD_CREATE_JOINABLE." >&4
  val="$undef" # Yes, undef.
  set d_old_pthread_create_joinable
```

```
  eval $setvar
  val=""
  set old_pthread_create_joinable
  eval $setvar
 else
  set try -DJOINABLE=PTHREAD_CREATE_UNDETACHED
  if eval $compile; then
   echo "You seem to use PTHREAD_CREATE_UNDETACHED." >&4
   val="$define"
   set
 d_old_pthread_create_joinable
   eval $setvar
   val=PTHREAD_CREATE_UNDETACHED
   set old_pthread_create_joinable
   eval $setvar
  else
   set try -DJOINABLE=__UNDETACHED
   if eval $compile; then
    echo "You seem to use __UNDETACHED." >&4
    val="$define"
    set d_old_pthread_create_joinable
    eval $setvar
    val=__UNDETACHED
    set old_pthread_create_joinable
    eval $setvar
   else
    echo "Egads, nothing obvious found.  Guessing that you use 0." >&4
    val="$define"
    set d_old_pthread_create_joinable
    eval $setvar
    val=0
    set old_pthread_create_joinable
    eval $setvar
   fi
  fi
 fi
 $rm_try
else
   d_old_pthread_create_joinable="$undef"
   old_pthread_create_joinable=""
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthrattrj.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: archname.U,v 3.0.1.3 1997/02/28 15:24:32 ram Exp $
?RCS:

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: archname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:24:32  ram
?RCS: patch61: changed the way the archname is mangled from uname
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:05:24  ram
?RCS: patch54: protect against spaces in "uname -m" output (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:14:21  ram
?RCS: patch51: created
?RCS:
?MAKE:archname myarchname useversionedarchname: sed Loc Myread Oldconfig \
 osname test rm usethreads usemultiplicity use64bitint
 use64bitall \
 archname64 uselongdouble longdblsize doublesize targetarch Setvar \
 api_versionstring usequadmath
?MAKE: -pick add $@ %<
?S:archname:
?S: This variable is a short name to characterize the current
?S: architecture.  It is used mainly to construct the default archlib.
?S:.
?S:myarchname:
?S: This variable holds the architecture name computed by Configure in
?S: a previous run. It is not intended to be perused by any user and
?S: should never be set in a hint file.
?S:.
?S:useversionedarchname:
?S: This variable indicates whether to include the $api_versionstring
?S: as a component of the $archname.
?S:.
?C:ARCHNAME:
?C: This symbol holds a string representing the architecture name.
?C: It may be used to construct an architecture-dependant pathname
?C: where library files may be held under a private library, for
?C: instance.
?C:.
?H:#define ARCHNAME "$archname"  /**/
?H:.
?T:xxx tarch
?F:!archname.cbu
?INIT:archname="
```

```
: determine the architecture name
echo " "
?X:
 We always recompute archname in case osname changes. However, we need
?X: to be careful since, as ADO rightfully pointed out, some systems pick
?X: silly architecture names (0001307135000-aix on AIX or 9000/715-ux under
?X: HP-UX). Therefore, we allow hint files to superseed our guess and ask
?X: the user for confirmation.
if xxx=`./loc arch blurfl $pth`; $test -f "$xxx"; then
 tarch=`arch`"-$osname"
elif xxx=`./loc uname blurfl $pth`; $test -f "$xxx" ; then
 if uname -m > tmparch 2>&1 ; then
  tarch=`$sed -e 's/ *$//' -e 's/ /_/g' \
   -e 's/$/"'-$osname/" tmparch`
 else
  tarch="$osname"
 fi
 $rm -f tmparch
else
 tarch="$osname"
fi
case "$myarchname" in
"|"$tarch") ;;
*)
 echo "(Your architecture name used to be $myarchname.)"
 archname=''
 ;;
esac
case "$targetarch" in
'') ;;
?X: Very GCCian.
*)  archname=`echo $targetarch|sed 's,^[^-]*-,,'` ;;
esac
myarchname="$tarch"
case "$archname" in
'') dflt="$tarch";;
*) dflt="$archname";;
esac
rp='What is your architecture name'
. ./myread
archname="$ans"

:
 optionally add API version to the architecture for versioned archlibs
case "$useversionedarchname" in
$define|true|[yY]*) dflt='y';;
*)                  dflt='n';;
esac
```

```
rp='Add the Perl API version to your archname?'
. ./myread
case "$ans" in
y|Y) useversionedarchname="$define" ;;
*)      useversionedarchname="$undef" ;;
esac
case "$useversionedarchname" in
$define)
 case "$archname" in
 *-$api_versionstring)
  echo "...and architecture name already has -$api_versionstring" >&4
  ;;
 *)
  archname="$archname-$api_versionstring"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac

@if usethreads
case "$usethreads" in
$define)
 echo "Threads selected." >&4
 case "$archname" in
 *-thread*) echo "...and architecture name already has -thread." >&4
  ;;
 *)      archname="$archname-thread"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
@if usemultiplicity
case "$usemultiplicity" in
$define)
 echo "Multiplicity selected."
 >&4
 case "$archname" in
 *-multi*) echo "...and architecture name already has -multi." >&4
  ;;
 *)      archname="$archname-multi"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
```

```
@end
@if use64bitint
case "$use64bitint$use64bitall" in
*"$define"*)
 case "$archname64" in
 ")
  echo "This architecture is naturally 64-bit, not changing architecture name." >&4
  ;;
 *)
  case "$use64bitint" in
  "$define") echo "64 bit integers selected." >&4 ;;
  esac
  case "$use64bitall" in
  "$define") echo "Maximal 64 bitness selected." >&4 ;;
  esac
  case "$archname" in
  *-$archname64*) echo "...and architecture name already has $archname64." >&4
   ;;
  *)      archname="$archname-$archname64"
   echo "...setting architecture name to $archname." >&4
   ;;
  esac
  ;;
 esac
esac
@end
@if uselongdouble
case "$uselongdouble" in
$define)
 echo "Long doubles selected." >&4
 case "$longdblsize" in
 $doublesize)
  echo "...but long doubles are equal to doubles, not
 changing architecture name." >&4
  ;;
 *)
  case "$archname" in
  *-ld*) echo "...and architecture name already has -ld." >&4
   ;;
  *)      archname="$archname-ld"
   echo "...setting architecture name to $archname." >&4
   ;;
  esac
  ;;
 esac
 ;;
esac
@end
```

```
@if usequadmath
case "$usequadmath" in
$define)
 echo "quadmath selected." >&4
 case "$archname" in
 *-quadmath*) echo "...and architecture name already has -quadmath." >&4
  ;;
 *)      archname="$archname-quadmath"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
if $test -f archname.cbu; then
 echo "Your platform has some specific hints for architecture name, using them..."
 . ./archname.cbu
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/archname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_float.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_float.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:57  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_float: Inhdr
?MAKE: -pick add $@ %<
?S:i_float:
?S: This variable conditionally defines the I_FLOAT symbol, and indicates
?S: whether a C program may include <float.h> to get symbols like DBL_MAX
?S: or DBL_MIN, i.e. machine dependent floating point values.
?S:.
?C:I_FLOAT:
?C: This
```

```
 symbol, if defined, indicates to the C program that it should
?C: include <float.h> to get definition of symbols like DBL_MAX or
?C: DBL_MIN, i.e. machine dependent floating point values.
?C:.
?H:#$i_float I_FLOAT  /**/
?H:.
?LINT:set i_float
: see if this is a float.h system
set float.h i_float
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_float.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_setproctitle: Inlibc
?MAKE: -pick add $@ %<
?S:d_setproctitle:
?S: This variable conditionally defines the HAS_SETPROCTITLE symbol,
?S: which indicates to the C program that the setproctitle() routine
?S: is available.
?S:.
?C:HAS_SETPROCTITLE:
?C: This symbol, if defined, indicates that the setproctitle routine is
?C: available to set process title.
?C:.
?H:#$d_setproctitle HAS_SETPROCTITLE  /**/
?H:.
?LINT:set d_setproctitle
: see if setproctitle exists
set setproctitle d_setproctitle
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setproctitle.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sig_name.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:21:25  ram
?RCS: patch61: brand new algorithm for sig_name and (new!) sig_num
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  14:14:54  ram
?RCS: patch56: added <asm/signal.h> lookup for linux
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:24:11  ram
?RCS: patch54: now looks for <linux/signal.h> too (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:06:57  ram
?RCS: patch30: final echo was missing to close awk-printed string
?RCS:
?RCS: Revision 3.0.1.1
  1994/05/06  15:17:55  ram
?RCS: patch23: signal list now formatted to avoid scroll-ups (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sig_name sig_name_init sig_num sig_num_init sig_count sig_size: \
 awk Signal Oldconfig rm
?MAKE: -pick add $@ %<
?S:sig_name:
?S: This variable holds the signal names, space separated. The leading
?S: SIG in signal name is removed.  A ZERO is prepended to the
?S: list.  This is currently not used.
?S:.
?S:sig_name_init:
?S: This variable holds the signal names, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NAME definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.  The leading SIG in signal names
?S: is removed. See sig_num.
?S:.
?S:sig_num:
?S: This variable holds the signal numbers, space separated. A ZERO is
?S: prepended to the list (corresponding to the fake SIGZERO), and
?S: the list is terminated
 with a 0.  Those numbers correspond to
?S: the value of the signal listed in the same place within the
?S: sig_name list.
```

```
?S:.
?S:sig_num_init:
?S: This variable holds the signal numbers, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NUM definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.
?S:.
?S:sig_count (sig_name.U):
?S:  This variable holds a number larger than the largest valid
?S:  signal number.  This is usually the same as the NSIG macro.
?S:.
?S:sig_size:
?S:  This variable contains the number of elements of the sig_name
?S:  and sig_num arrays, excluding the final NULL entry.
?S:.
?C:SIG_NAME:
?C: This symbol contains a list of signal names in order of
?C: signal number. This is intended
?C: to be used as a static array initialization, like this:
?C:  char *sig_name[] = { SIG_NAME };
?C: The signals in the list are separated with commas, and each signal
?C: is surrounded by double
 quotes. There is no leading SIG in the signal
?C: name, i.e. SIGQUIT is known as "QUIT".
?C: Gaps in the signal numbers (up to NSIG) are filled in with NUMnn,
?C: etc., where nn is the actual signal number (e.g. NUM37).
?C: The signal number for sig_name[i] is stored in sig_num[i].
?C: The last element is 0 to terminate the list with a NULL.  This
?C: corresponds to the 0 at the end of the sig_num list.
?C:.
?C:SIG_NUM:
?C: This symbol contains a list of signal numbers, in the same order as the
?C: SIG_NAME list. It is suitable for static array initialization, as in:
?C:  int sig_num[] = { SIG_NUM };
?C: The signals in the list are separated with commas, and the indices
?C: within that list and the SIG_NAME list match, so it's easy to compute
?C: the signal name from a number or vice versa at the price of a small
?C: dynamic linear lookup.
?C: Duplicates are allowed, but are moved to the end of the list.
?C: The signal number corresponding to sig_name[i] is sig_number[i].
?C: if (i
 < NSIG) then sig_number[i] == i.
?C: The last element is 0, corresponding to the 0 at the end of
?C: the sig_name list.
?C:.
?C:SIG_COUNT:
?C: This variable contains a number larger than the largest
?C: signal number.  This is usually the same as the NSIG macro.
```

```
?C:.
?C:SIG_SIZE:
?C: This variable contains the number of elements of the sig_name
?C: and sig_num arrays, excluding the final NULL entry.
?C:.
?H:#define SIG_NAME $sig_name_init  /**/
?H:#define SIG_NUM  $sig_num_init  /**/
?H:#define SIG_COUNT $sig_count   /**/
?H:#define SIG_SIZE $sig_size   /**/
?H:.
?T:i doinit
?F:!= !signal_cmd
?X: signal.cmd creates a file  signal.lst which has two columns:
?X: NAME  number, e.g.
?X:  HUP 1
?X: The list is sorted on signal number, with duplicates moved to
?X: the end..
: generate list of signal names
echo " "
case "$sig_name_init" in
") doinit=yes ;;
*)  case "$sig_num_init" in
   "|*,*) doinit=yes ;;
   esac ;;
esac
case "$doinit" in
yes)
 echo "Generating a list of signal names and
 numbers..." >&4
 . ./signal_cmd
 sig_count=`$awk '/^NSIG/ { printf "%d", $2 }' signal.lst`
 sig_name=`$awk 'BEGIN { printf "ZERO " }
   !/^NSIG/ { printf "%s ", $1 }' signal.lst`
 sig_num=`$awk  'BEGIN { printf "0 " }
   !/^NSIG/ { printf "%d ", $2 }' signal.lst`
 sig_name_init=`$awk 'BEGIN { printf "\"ZERO\", " }
        !/^NSIG/ { printf "\"%s\", ", $1 }
        END { printf "0\n" }' signal.lst`
 sig_num_init=`$awk  'BEGIN { printf "0, " }
        !/^NSIG/ { printf "%d, ", $2}
        END { printf "0\n"}' signal.lst`
 ;;
esac
echo "The following $sig_count signals are available:"
echo " "
echo $sig_name | $awk \
'BEGIN { linelen = 0 }
{
```

```
 for (i = 1; i <= NF; i++) {
  name = "SIG" $i " "
  linelen = linelen + length(name)
  if (linelen > 70) {
   printf "\n"
   linelen = length(name)
  }
  printf "%s", name
 }
 printf "\n"
}'
sig_size=`echo $sig_name | awk '{print NF}'`
$rm -f signal signal.c signal.awk signal.lst signal_cmd
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sig_name.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnameinfo: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnameinfo:
?S: This variable conditionally defines the HAS_GETNAMEINFO symbol,
?S: which indicates to the C program that the getnameinfo() function
?S: is available.
?S:.
?C:HAS_GETNAMEINFO:
?C: This symbol, if defined, indicates that the getnameinfo() function
?C: is available for use.
?C:.
?H:#$d_getnameinfo HAS_GETNAMEINFO  /**/
?H:.
?LINT:set d_getnameinfo
: see if getnameinfo exists
set getnameinfo d_getnameinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getnameinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS:
?MAKE:d_dirfd: Compile cat rm Setvar i_dirent i_sysdir i_sysndir i_systypes i_stdlib
?MAKE: -pick add $@ %<
?S:d_dirfd:
?S: This variable conditionally defines the HAS_DIRFD constant,
?S: which indicates to the C program that dirfd() is available
?S: to return the file descriptor of a directory stream.
?S:.
?C:HAS_DIRFD:
?C: This manifest constant lets the C program know that dirfd
?C: is available.
?C:.
?H:#$d_dirfd HAS_DIRFD  /**/
?H:.
?LINT:set d_dirfd
?X: Can't use Inlibc because dirfd() might be a macro.
: Look
 for dirfd
echo " "
$cat >dirfd.c <<EOM
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/
#$i_systypes I_SYS_TYPES /**/
#if defined(I_SYS_TYPES)
#include <sys/types.h>
#endif
#if defined(I_DIRENT)
#include <dirent.h>
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
```

```
#include <sys/dir.h>
#endif
#endif
#endif
int main() {
 DIR *dirp = opendir(".");
 if (dirfd(dirp) >= 0)
  exit(0);
 else
  exit(1);
}
EOM
val=$undef
set dirfd
if eval $compile; then
 val="$define"
fi
case "$val" in
$define) echo "dirfd() found." >&4 ;;
*)  echo "dirfd() NOT found." >&4 ;;
esac
set d_dirfd
eval $setvar
$rm -f dirfd*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dirfd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_grp.U,v 3.0 1993/08/18 12:08:20 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: GRPASSWD detection added by Andy Dougherty  July 14, 1998.
?RCS:
?RCS: $Log: i_grp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_grp d_grpasswd: \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
```

```
?S:i_grp:
?S: This variable conditionally defines the I_GRP symbol, and indicates
?S: whether a C program should include <grp.h>.
?S:.
?S:d_grpasswd:
?S: This variable conditionally
 defines GRPASSWD, which indicates
?S: that struct group in <grp.h> contains gr_passwd.
?S:.
?C:I_GRP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <grp.h>.
?C:.
?C:GRPASSWD:
?C: This symbol, if defined, indicates to the C program that struct group
?C: in <grp.h> contains gr_passwd.
?C:.
?H:#$i_grp I_GRP  /**/
?H:#$d_grpasswd GRPASSWD /**/
?H:.
?LINT:set i_grp d_grpasswd
?T: xxx
: see if this is an grp system
set grp.h i_grp
eval $inhdr

case "$i_grp" in
$define)
 xxx=`./findhdr grp.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'gr_passwd' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_grpasswd
 eval $setvar

 $rm -f $$.h
 ;;
*)
 val="$undef";
 set d_grpasswd; eval $setvar
 ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_grp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: voidflags.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:27:58  ram
?RCS: patch61: don't prompt them if the void support is high enough for us
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:37:44  ram
?RCS: patch45: cosmetic change to avoid spurious blank lines when using -s
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:voidflags defvoidused: cat sed rm rm_try contains +cc +ccflags package \
 Oldconfig Myread
?MAKE: -pick add $@ %<
?S:voidflags:
?S: This
 variable contains the eventual value of the VOIDFLAGS symbol,
?S: which indicates how much support of the void type is given by this
?S: compiler.  See VOIDFLAGS for more info.
?S:.
?S:defvoidused:
?S: This variable contains the default value of the VOIDUSED symbol (15).
?S:.
?X: Exceptionally, we have to explicitly alias the symbol name for
?X: config_h.SH, otherwise the comment would not appear.
?C:VOIDFLAGS ~ %<:
?C: This symbol indicates how much support of the void type is given by this
?C: compiler.  What various bits mean:
?C:
?C:     1 = supports declaration of void
?C:     2 = supports arrays of pointers to functions returning void
?C:     4 = supports comparisons between pointers to void functions and
?C:      addresses of void functions
?C:     8 = suports declaration of generic void pointers
?C:
?C: The package designer should define VOIDUSED to indicate the requirements
```

```
?C: of the package.  This can be done either by #defining VOIDUSED before
?C: including
 config.h, or by defining defvoidused in Myinit.U.  If the
?C: latter approach is taken, only those flags will be tested.  If the
?C: level of void support necessary is not present, defines void to int.
?C:.
?H:?%<:#ifndef VOIDUSED
?H:?%<:#define VOIDUSED $defvoidused
?H:?%<:#endif
?H:?%<:#define VOIDFLAGS $voidflags
?H:?%<:#if (VOIDFLAGS & VOIDUSED) != VOIDUSED
?H:?%<:#define void int  /* is void to be avoided? */
?H:?%<:#define M_VOID   /* Xenix strikes again */
?H:?%<:#endif
?H:.
?W:%<:void
?F:!.out !try.c !flags
?LINT:usefile .out flags try.c
?INIT:: full support for void wanted by default
?INIT:defvoidused=15
?INIT:
?LINT:known void M_VOID VOIDUSED
: check for void type
echo " "
echo "Checking to see how well your C compiler groks the void type..." >&4
$cat >flags <<EOM

 Support flag bits are:
   1: basic void declarations.
   2: arrays of pointers to functions returning void.
   4: operations between pointers to and addresses of void functions.
   8: generic void pointers.

EOM
case
 "$voidflags" in
")
 $cat >try.c <<'EOCP'
#if TRY & 1
void sub() {
#else
sub() {
#endif
 extern void moo(); /* function returning void */
 void (*goo)();  /* ptr to func returning void */
#if TRY & 8
 void *hue;  /* generic ptr */
#endif
```

```
#if TRY & 2
 void (*foo[10])();
#endif

#if TRY & 4
 if(goo == moo) {
  exit(0);
 }
#endif
 exit(0);
}
int main() { sub(); }
EOCP
?X: This unit used to use cc -S in those tests to try to speed up things, but
?X: unfortunately, AIX 3.2 does not support this option.
 if $cc $ccflags -c -DTRY=$defvoidused try.c >.out 2>&1 ; then
  voidflags=$defvoidused
  echo "Good.  It appears to support void to the level $package wants."
  if $contains warning .out >/dev/null 2>&1; then
   echo "However, you might get some warnings that look like this:"
   $sed -e 's/^/ /' .out
  fi
 else
echo "Hmm, your compiler has some difficulty with void. Checking further..." >&4
  $cat >&4 flags
  $rm -f flags
  if $cc $ccflags -c -DTRY=1 try.c >/dev/null 2>&1; then
   echo
 "It supports 1..."
   if $cc $ccflags -c -DTRY=3 try.c >/dev/null 2>&1; then
    echo "It also supports 2..."
    if $cc $ccflags -c -DTRY=7 try.c >/dev/null 2>&1; then
     voidflags=7
     echo "And it supports 4 but not 8 definitely."
    else
     echo "It doesn't support 4..."
     if $cc $ccflags -c -DTRY=11 try.c >/dev/null 2>&1; then
      voidflags=11
      echo "But it supports 8."
     else
      voidflags=3
      echo "Neither does it support 8."
     fi
    fi
   else
    echo "It does not support 2..."
    if $cc $ccflags -c -DTRY=13 try.c >/dev/null 2>&1; then
     voidflags=13
```

```
    echo "But it supports 4 and 8."
   else
    if $cc $ccflags -c -DTRY=5 try.c >/dev/null 2>&1; then
     voidflags=5
     echo "And it supports 4 but has not heard about 8."
    else
     echo "However it supports 8 but not 4."
    fi
   fi
  fi
 else
  echo "There is no support at all for void."
  voidflags=0
 fi
fi
esac
?X: Only prompt user if support does not match the
 level we want
case "$voidflags" in
"$defvoidused")
 echo "Good.  I already know it supports void to the level $package wants."
 ;;
*)
 dflt="$voidflags";
 test -f flags && $cat flags
 rp="Your void support flags add up to what?"
 . ./myread
 voidflags="$ans"
 ;;
esac
$rm_try flags
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/voidflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: models.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:13:17  ram
```

```
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:39  ram
?RCS: patch6: added default for large
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:models split small medium large huge: test cat Myread sysman Oldconfig \
 Loc Warn contains rm
?MAKE: -pick add $@ %<
?S:models:
?S: This variable contains the list of memory models supported by
 this
?S: system.  Possible component values are none, split, unsplit, small,
?S: medium, large, and huge.  The component values are space separated.
?S:.
?S:split:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program that will run in separate I and D space, for those
?S: machines that support separation of instruction and data space.  It is
?S: up to the Makefile to use this.
?S:.
?S:small:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a small memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:medium:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a medium memory model.  If the
?S: medium model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?S:large:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to
 produce a program running with a large memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:huge:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a huge memory model.  If the
?S: huge model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?T:unsplit tans modelcc
?F:!pdp11
```

```
?D:large="
?LINT:extern cc
: see what memory models we can support
case "$models" in
")
?X: We may not use Cppsym or we get a circular dependency through cc.
?X: But this should work regardless of which cc we eventually use.
 $cat >pdp11.c <<'EOP'
int main() {
#ifdef pdp11
 exit(0);
#else
 exit(1);
#endif
}
EOP
?X: Run cc in a subshell in case they don't have a 'cc' command.
?X: Presumably they do have gcc or something.
 case "$cc" in
 ") modelcc="$cc" ;;
 *) modelcc="cc" ;;
 esac
 ( $modelcc -o pdp11 pdp11.c ) >/dev/null 2>&1
 if $test -f pdp11 && ./pdp11 2>/dev/null;
 then
  dflt='unsplit split'
 else
  tans=`./loc . X /lib/small /lib/large /usr/lib/small /usr/lib/large /lib/medium /usr/lib/medium /lib/huge`
  case "$tans" in
  X) dflt='none';;
  *) if $test -d /lib/small || $test -d /usr/lib/small; then
    dflt='small'
   else
    dflt="
   fi
   if $test -d /lib/medium || $test -d /usr/lib/medium; then
    dflt="$dflt medium"
   fi
   if $test -d /lib/large || $test -d /usr/lib/large; then
    dflt="$dflt large"
   fi
   if $test -d /lib/huge || $test -d /usr/lib/huge; then
    dflt="$dflt huge"
   fi
  esac
 fi;;
*) dflt="$models";;
esac
```

```
$cat <<EOM

Some systems have different model sizes.  On most systems they are called
small, medium, large, and huge.  On the PDP11 they are called unsplit and
split.  If your system doesn't support different memory models, say "none".
If you wish to force everything to one memory model, say "none" here and
put the appropriate flags later when it asks you for other cc and ld flags.
Venix systems may wish
 to put "none" and let the compiler figure things out.
(In the following question multiple model names should be space separated.)

The default for most systems is "none".

EOM
rp="Which memory models are supported?"
. ./myread
models="$ans"

case "$models" in
none)
 small="
 medium="
 large="
 huge="
 unsplit="
 split="
 ;;
*split)
 case "$split" in
 ") if $contains '\-i' $sysman/ld.1 >/dev/null 2>&1 || \
    $contains '\-i' $sysman/cc.1 >/dev/null 2>&1; then
   dflt='-i'
  else
   dflt='none'
  fi;;
 *) dflt="$split";;
 esac
 rp="What flag indicates separate I and D space?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";;
 esac
 split="$tans"
 unsplit=";;
*large*|*small*|*medium*|*huge*)
 case "$models" in
 *large*)
```

```
 case "$large" in
 ") dflt='-Ml';;
 *) dflt="$large";;
 esac
rp="What flag indicates large model?"
. ./myread
tans="$ans"
case "$tans" in
none) tans=";
esac
large="$tans";;
*) large=";;
esac
case "$models" in
*huge*) case "$huge" in
 ")
dflt='-Mh';;
 *) dflt="$huge";;
 esac
 rp="What flag indicates huge model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 huge="$tans";;
*) huge="$large";;
esac
case "$models" in
*medium*) case "$medium" in
 ") dflt='-Mm';;
 *) dflt="$medium";;
 esac
 rp="What flag indicates medium model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 medium="$tans";;
*) medium="$large";;
esac
case "$models" in
*small*) case "$small" in
 ") dflt='none';;
 *) dflt="$small";;
 esac
 rp="What flag indicates small model?"
```

```
  . ./myread
  tans="$ans"
  case "$tans" in
  none) tans=";
  esac
  small="$tans";;
 *) small=";;
 esac
 ;;
*)
 ./warn "Unrecognized memory models--you may have to edit Makefile.SH"
 ;;
esac
$rm -f pdp11.* pdp11
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/models.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_poll.U,v $
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_langinfo: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_langinfo:
?S: This variable conditionally defines the I_LANGINFO symbol,
?S: and indicates whether a C program should include <langinfo.h>.
?S:.
?C:I_LANGINFO:
?C: This symbol, if defined, indicates that <langinfo.h> exists and
?C: should be included.
?C:.
?H:#$i_langinfo I_LANGINFO  /**/
?H:.
?LINT:set i_langinfo
: see if this is a langinfo.h system
set langinfo.h i_langinfo
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_langinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chroot.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_chroot.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:17  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_chroot: Inlibc
?MAKE: -pick add $@ %<
?S:d_chroot:
?S: This variable conditionally defines the HAS_CHROOT symbol, which
?S: indicates to the C program that the chroot() routine is available.
?S:.
?C:HAS_CHROOT :
?C: This symbol, if defined, indicates that the chroot routine
 is
?C: available.
?C:.
?H:#$d_chroot HAS_CHROOT  /**/
?H:.
?LINT:set d_chroot
: see if chroot exists
set chroot d_chroot
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chroot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: registers.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: registers.U,v $
```

```
?RCS: Revision 3.0.1.2  1997/02/28  16:19:41  ram
?RCS: patch61: removed empty ?LINT lines
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:28:33  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:registers reg1 reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11 \
 reg12 reg13 reg14 reg15 reg16: awk rm Cppsym
 Myread Oldconfig
?MAKE: -pick add $@ %<
?S:registers:
?S: This variable contains the number of register declarations paid
?S: attention to by the C compiler.
?S:.
?S:reg1:
?S: This variable, along with reg2, reg3, etc. contains the eventual
?S: value for the symbols register1, register2, register3, etc.  It has
?S: either the value "register" or is null.
?S:.
?C:register1:
?C: This symbol, along with register2, register3, etc. is either the word
?C: "register" or null, depending on whether the C compiler pays attention
?C: to this many register declarations.  The intent is that you don't have
?C: to order your register declarations in the order of importance, so you
?C: can freely declare register variables in sub-blocks of code and as
?C: function parameters.  Do not use register<n> more than once per routine.
?C:.
?LINT:describe reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11
?LINT:describe reg12 reg13 reg14 reg15 reg16
?LINT:known register2 register3 register4 register5 register6
 register7
?LINT:known register8 register9 register10 register11 register12 register13
?LINT:known register14 register15 register16
?H:#define register1 $reg1  /**/
?H:#define register2 $reg2  /**/
?H:#define register3 $reg3  /**/
?H:#define register4 $reg4  /**/
?H:#define register5 $reg5  /**/
?H:#define register6 $reg6  /**/
?H:#define register7 $reg7  /**/
?H:#define register8 $reg8  /**/
?H:#define register9 $reg9  /**/
?H:#define register10 $reg10 /**/
?H:#define register11 $reg11 /**/
?H:#define register12 $reg12 /**/
```

```
?H:#define register13 $reg13 /**/
?H:#define register14 $reg14 /**/
?H:#define register15 $reg15 /**/
?H:#define register16 $reg16 /**/
?H:.
?F:!.foo
: see how many register declarations we want to use
case "$registers" in
")
 if ./Cppsym vax; then
  dflt=6
 elif ./Cppsym sun mc68000 mips; then
  dflt=10
 elif ./Cppsym pyr; then
  dflt=14
 elif ./Cppsym ns32000 ns16000; then
  dflt=5
 elif ./Cppsym $smallmach; then
  dflt=3
 else
  : if you have any other numbers
 for me, please send them in
  dflt=6
 fi;;
*) dflt=$registers ;;
esac
?LINT:set reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11
?LINT:set reg12 reg13 reg14 reg15 reg16
cat <<EOM

Different C compilers on different machines pay attention to different numbers
of register declarations.  About how many register declarations in each routine
does your C compiler pay attention to?  (OK to guess)

EOM
rp="Maximum register declarations?"
. ./myread
registers=$ans
reg1="
$awk "BEGIN { for (i=1; i<=16; i++) printf \"reg%d="\n\", i}" \
 </dev/null >.foo
. ./.foo
$awk "BEGIN { for (i=1; i<=$registers; i++) printf \"reg%d=register\n\", i}" \
 </dev/null >.foo
. ./.foo
$rm -f .foo

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/registers.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_longdbl.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_longdbl.U,v $
?RCS:
?MAKE:d_longdbl longdblsize d_ldexpl longdblkind \
 d_long_double_style_ieee d_long_double_style_ieee_doubledouble \
 d_long_double_style_ieee_extended d_long_double_style_ieee_std \
 d_long_double_style_vax: Compile Setvar Myread \
 Inlibc run echo cat rm_try test doublesize i_stdlib
?MAKE: -pick add $@ %<
?S:d_longdbl:
?S: This variable conditionally defines HAS_LONG_DOUBLE if
?S: the long double type is supported.
?S:.
?S:d_ldexpl:
?S: This variable conditionally defines the HAS_LDEXPL symbol, which
?S: indicates to the C program that the ldexpl() routine is available.
?S:.
?S:longdblsize:
?S: This variable contains the value of the LONG_DOUBLESIZE symbol,
 which
?S: indicates to the C program how many bytes there are in a long double,
?S: if this system supports long doubles.  Note that this is
?S: sizeof(long double), which may include unused bytes.
?S:.
?S:longdblkind:
?S: This variable, if defined, encodes the type of a long double:
?S:  0 = double,
?S:  1 = IEEE 754 128-bit little endian,
?S:  2 = IEEE 754 128-bit big endian,
?S:  3 = x86 80-bit little endian,
?S:  4 = x86 80-bit big endian,
?S:  5 = double-double 128-bit little endian,
?S:  6 = double-double 128-bit big endian,
?S:  7 = 128-bit mixed-endian double-double (64-bit LEs in BE),
?S:  8 = 128-bit mixed-endian double-double (64-bit BEs in LE),
?S:  9 = 128-bit PDP-style mixed-endian long doubles,
?S: -1 = unknown format.
?S:.
?S:d_long_double_style_ieee:
```

```
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE
?S: if the long double is any of the IEEE 754 style long doubles:
?S: LONG_DOUBLE_STYLE_IEEE_STD, LONG_DOUBLE_STYLE_IEEE_EXTENDED,
?S: LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE.
?S:.
?S:d_long_double_style_ieee_doubledouble:
?S: This
 variable conditionally defines LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE
?S: if the long double is the 128-bit IEEE 754 double-double.
?S:.
?S:d_long_double_style_ieee_extended:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE_EXTENDED
?S: if the long double is the 80-bit IEEE 754 extended precision.
?S: Note that despite the 'extended' this is less than the 'std',
?S: since this is an extension of the double precision.
?S:.
?S:d_long_double_style_ieee_std:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE_STD
?S: if the long double is the 128-bit IEEE 754.
?S:.
?S:d_long_double_style_vax:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_VAX
?S: if the long double is the 128-bit VAX format H.
?S:.
?C:HAS_LONG_DOUBLE:
?C: This symbol will be defined if the C compiler supports long
?C: doubles.
?C:.
?C:LONG_DOUBLESIZE:
?C: This symbol contains the size of a long double, so that the
?C: C
 preprocessor can make decisions based on it.  It is only
?C: defined if the system supports long doubles.  Note that this
?C: is sizeof(long double), which may include unused bytes.
?C:.
?C:HAS_LDEXPL:
?C: This symbol, if defined, indicates that the ldexpl routine is
?C: available to shift a long double floating-point number
?C: by an integral power of 2.
?C:.
?C:LONG_DOUBLEKIND:
?C: LONG_DOUBLEKIND will be one of
?C: LONG_DOUBLE_IS_DOUBLE
?C: LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
```

```
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_VAX_H_FLOAT
?C: LONG_DOUBLE_IS_UNKNOWN_FORMAT
?C: It is only defined
 if the system supports long doubles.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE:
?C: This symbol, if defined, indicates that the long double
?C: is any of the IEEE 754 style long doubles:
?C: LONG_DOUBLE_STYLE_IEEE_STD, LONG_DOUBLE_STYLE_IEEE_EXTENDED,
?C: LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit double-double.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_EXTENDED:
?C: This symbol, if defined, indicates that the long double is
?C: the 80-bit IEEE 754. Note that despite the 'extended' this
?C: is less than the 'std', since this is an extension of
?C: the double precision.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_STD:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit IEEE 754.
?C:.
?C:LONG_DOUBLE_STYLE_VAX:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit VAX format H.
?C:.
?H:#$d_ldexpl  HAS_LDEXPL  /**/
?H:#$d_longdbl HAS_LONG_DOUBLE  /**/
?H:?LONG_DOUBLESIZE:#ifdef
 HAS_LONG_DOUBLE
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLESIZE $longdblsize  /**/
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLEKIND $longdblkind  /**/
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLE    0
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN 1
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN 2
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN  3
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN  4
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE 5
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE 6
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE 7
```

```
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE 8
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_VAX_H_FLOAT   9
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_UNKNOWN_FORMAT   -1
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
 /* back-compat */
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE /* back-compat */
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee LONG_DOUBLE_STYLE_IEEE
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_doubledouble
LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_extended
LONG_DOUBLE_STYLE_IEEE_EXTENDED
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_std LONG_DOUBLE_STYLE_IEEE_STD
?H:?LONG_DOUBLESIZE:#$d_long_double_style_vax LONG_DOUBLE_STYLE_VAX
?H:?LONG_DOUBLESIZE:#endif
?H:.
?F:!try
?LINT:known LONG_DOUBLE_IS_DOUBLE LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_UNKNOWN_FORMAT
?LINT:known
 LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE
?LINT:known LONG_DOUBLE_IS_VAX_H_FLOAT
?LINT:set d_longdbl
?LINT:set d_ldexpl
: check for long doubles
echo " " >&4
echo "Checking to see if you have long double..." >&4
echo 'int main() { long double x = 7.0; }' > try.c
set try
if eval $compile; then
 val="$define"
 echo "You have long double." >&4
else
 val="$undef"
 echo "You do not have long double." >&4
fi
$rm_try
set d_longdbl
eval $setvar
```

```
: see if ldexpl exists
set ldexpl d_ldexpl
eval $inlibc

@if LONG_DOUBLESIZE || longdblsize
: check for length of long double
?X:  Check only if d_longdbl and if longdblsize is not already set.
case "${d_longdbl}${longdblsize}" in
$define)
 echo " " >&4
 echo "Checking to see how big your long doubles are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(long
 double));
}
EOCP
 set try
?X: Don't use compile_ok because some compilers warn you that they have
?X: 'long double' as just 'double'.
 set try
 if eval $compile; then
  longdblsize=`$run ./try`
  echo "Your long doubles are $longdblsize bytes long." >&4
 else
  dflt='8'
  echo " " >&4
  echo "(I can't seem to compile the test program.  Guessing...)" >&4
  rp="What is the size of a long double (in bytes)?"
  . ./myread
  longdblsize="$ans"
 fi
 if $test "X$doublesize" = "X$longdblsize"; then
  echo "That isn't any different from an ordinary double." >&4
  echo "I'll keep your setting anyway, but you may see some" >&4
  echo "harmless compilation warnings." >&4
 fi
 ;;
esac
$rm_try
@end

$echo "Checking the kind of long doubles you have..." >&4
case "$d_longdbl" in
define)
```

```
$cat <<EOP >try.c
#$i_stdlib I_STDLIB
#define LONGDBLSIZE $longdblsize
#define DOUBLESIZE $doublesize
#include <float.h>
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
static const long double
 d = -0.1L;
int main() {
 unsigned const char* b = (unsigned const char*)(&d);
#if DOUBLESIZE == LONGDBLSIZE
 printf("0\n"); /* if it floats like double */
 exit(0);
#endif
#if (LDBL_MANT_DIG == 113 || FLT128_MANT_DIG == 113) && LONGDBLSIZE == 16
 if (b[0] == 0x9A && b[1] == 0x99 && b[15] == 0xBF) {
   /* IEEE 754 128-bit little-endian */
   printf("1\n");
   exit(0);
 }
 if (b[0] == 0xBF && b[14] == 0x99 && b[15] == 0x9A) {
   /* IEEE 128-bit big-endian, e.g. solaris sparc */
   printf("2\n");
   exit(0);
 }
#endif
/* For alignment 32-bit platforms have the 80 bits in 12 bytes,
* while 64-bits platforms have it in 16 bytes.  The trailing bytes
* cannot be trusted. */
#if LDBL_MANT_DIG == 64 && (LONGDBLSIZE == 16 || LONGDBLSIZE == 12)
 if (b[0] == 0xCD && b[9] == 0xBF) {
   /* x86 80-bit little-endian, sizeof 12 (ILP32, Solaris x86)
    * or 16 (LP64, Linux and OS X), 4 or 6 bytes of padding.
    * Also known as "extended precision". */
   printf("3\n");
   exit(0);
  }
 if (b[0] == 0xBF && b[9] == 0xCD) {
   /* Is there ever big-endian 80-bit, really?
    *
    * The Motorola 68881 had another "extended precision" format:
    * sign:1 exp:15 zero:16 integer:1 mantissa:63
    * for total of 96 bits of bytes.  The zero bits were unused.
    * See "M68000 FAMILY PROGRAMMER'S REFERENCE MANUAL" for more details.
    * If it ever becomes relevant, this format should be allocated a
```

```
    * new doublekind code since it is quite different from the Intel x87.
    */
   printf("4\n");
   exit(0);
  }
#endif
#if (LDBL_MANT_DIG == 106 || LDBL_MANT_DIG == 107) && LONGDBLSIZE == 16
 /* software "double double", the 106 is 53+53.
  * but irix thinks it is 107. */
 if (b[0] == 0x9A && b[7] == 0x3C && b[8] == 0x9A && b[15] == 0xBF) {
   /* double double 128-bit fully little-endian,
    * little-endian doubles in little-endian order,
    * 9a 99 99 99 99 99 59 3c 9a 99 99 99 99 99 b9 bf */
   printf("5\n");
   exit(0);
  }
 if (b[0] == 0xBF && b[7]
 == 0x9A && b[8] == 0x3C && b[15] == 0x9A) {
   /* double double 128-bit fully big-endian,
    * big-endian doubles in big-endian order,
    * e.g. PPC/Power and MIPS:
    * bf b9 99 99 99 99 99 9a 3c 59 99 99 99 99 99 9a */
   printf("6\n");
   exit(0);
  }
 if (b[0] == 0x9A && b[7] == 0xBF && b[8] == 0x9A && b[15] == 0x3C) {
   /* double double 128-bit mixed endian.
    * little-endian doubles in big-endian order,
    * e.g. ppc64el,
    * 9a 99 99 99 99 99 b9 bf 9a 99 99 99 99 99 59 3c */
   printf("7\n");
   exit(0);
  }
 if (b[0] == 0x3C && b[7] == 0x9A && b[8] == 0xBF && b[15] == 0x9A) {
   /* double double 128-bit mixed endian,
    * big-endian doubles in little-endian order,
    * 3c 59 99 99 99 99 99 9a bf b9 99 99 99 99 99 9a */
   printf("8\n");
   exit(0);
  }
#endif
/* We are largely making this up because it may well be
* that the VAX format H was never made available to C,
* only to Fortran. */
#if LONGDBLSIZE == 16 && defined(__vax__)
 if (b[0]
 == 0xFD && b[15] == 0x99) {
   /* VAX format H, PDP-11 mixed endian. */
```

```
   printf("9\n");
   exit(0);
 }
#endif
 printf("-1\n"); /* unknown */
 exit(0);
}
EOP
set try
if eval $compile; then
   longdblkind=`$run ./try`
else
   longdblkind=-1
fi
;;
*) longdblkind=0 ;;
esac
case "$longdblkind" in
0) echo "Your long doubles are doubles." >&4 ;;
1) echo "You have IEEE 754 128-bit little endian long doubles." >&4 ;;
2) echo "You have IEEE 754 128-bit big endian long doubles." >&4 ;;
3) echo "You have x86 80-bit little endian long doubles." >&4 ;;
4) echo "You have x86 80-bit big endian long doubles." >&4 ;;
5) echo "You have 128-bit fully little-endian double-double long doubles (64-bit LEs in LE)." >&4 ;;
6) echo "You have 128-bit fully big-endian double-double long doubles (64-bit BEs in BE)." >&4 ;;
7) echo "You have 128-bit mixed-endian double-double long doubles (64-bit LEs in BE)." >&4 ;;
8) echo "You have 128-bit mixed-endian double-double long doubles (64-bit BEs in LE)." >&4
 ;;
9) echo "You have 128-bit PDP-style mixed-endian long doubles (VAX format H)." >&4 ;;
*) echo "Cannot figure out your long double." >&4 ;;
esac
d_long_double_style_ieee=$undef
d_long_double_style_ieee_std=$undef
d_long_double_style_ieee_extended=$undef
d_long_double_style_ieee_doubledouble=$undef
d_long_double_style_vax=$undef
case "$longdblkind" in
1|2|3|4|5|6|7|8) d_long_double_style_ieee=$define ;;
esac
case "$longdblkind" in
1|2) d_long_double_style_ieee_std=$define ;;
esac
case "$longdblkind" in
3|4) d_long_double_style_ieee_extended=$define ;;
esac
case "$longdblkind" in
5|6|7|8) d_long_double_style_ieee_doubledouble=$define ;;
esac
```

```
case "$longdblkind" in
9) d_long_double_style_vax=$define ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_longdbl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_speedopt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_speedopt.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:15:51  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_speedopt: Myread Cppsym Oldconfig cat models Setvar
?MAKE: -pick add $@ %<
?S:d_speedopt:
?S: This variable conditionally defines the SPEED_OVER_MEM symbol, which
?S: indicates to the C program that it can
 burn memory in order to save
?S: CPU time.
?S:.
?C:SPEED_OVER_MEM (SPEEDOVERMEM):
?C: This symbol, if defined, indicates that the program can use more
?C: memory in order to reduce CPU time.  The symbol doesn't say whether
?C: we are more interested in saving text space or data space.
?C:.
?H:#$d_speedopt SPEED_OVER_MEM /**/
?H:.
?LINT:set d_speedopt
: do we want speed at the expense of memory
$cat <<'EOM'

I can try to optimize this package for either speed or memory.  If you have
limited address space you may wish to optimize for memory.  Otherwise you
should probably optimize for speed.
```

```
EOM
case "$d_speedopt" in
") if ./Cppsym $smallmach; then
 case "$models" in
  *large*|*huge*) dflt=speed;;
  *) dflt=memory;;
  esac
 else
  dflt=speed
 fi
 ;;
*define*) dflt=speed;;
*) dflt=memory;;
esac
rp="What to optimize for?"
. ./myread
case "$ans" in
mem*) val="$undef";;
*) val="$define";;
esac
set d_speedopt
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_speedopt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitescript.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitescript.U,v $
?RCS:
?MAKE:sitescript sitescriptexp installsitescript : Getfile Oldconfig test \
 Setprefixvar sitebin siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitescript="
?S:sitescript:
?S: This variable holds the name of the directory in which the user wants
?S: to put add-on publicly executable files for the package in question.  It
```

```
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S: The standard
 distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: scripts in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitescriptexp="
?S:sitescriptexp:
?S: This is the same as the sitescript variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installsitescript="
?S:installsitescript:
?S: This variable is usually the same as sitescriptexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?LINT:change prefixvar
?LINT:set installsitescript
?LINT:set sitescript
?LINT:set sitescriptexp
: determine where add-on public executable scripts go
case "$sitescript" in
") dflt=$siteprefix/script
 $test -d $dflt || dflt=$sitebin ;;
*)  dflt="$sitescript" ;;
esac
fn=d~+
rp='Pathname where add-on public executable scripts
 should be installed?'
. ./getfile
prefixvar=sitescript
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitescript.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_voidsig.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:12:46  ram
?RCS: patch54: made cppflags dependency optional
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:20:35  ram
?RCS: patch32: now sets signal_t only once d_voidsig is known (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:54  ram
?RCS: patch30: now properly sets signal_t when re-using previous value
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_voidsig signal_t: rm contains
 cppstdin cppminus +cppflags test Myread \
 Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_voidsig:
?S: This variable conditionally defines VOIDSIG if this system
?S: declares "void (*signal(...))()" in signal.h.  The old way was to
?S: declare it as "int (*signal(...))()".
?S:.
?S:signal_t:
?S: This variable holds the type of the signal handler (void or int).
?S:.
?C:VOIDSIG:
?C: This symbol is defined if this system declares "void (*signal(...))()" in
?C: signal.h.  The old way was to declare it as "int (*signal(...))()".  It
?C: is up to the package author to declare things correctly based on the
?C: symbol.
?C:.
?C:Signal_t (SIGNAL_T):
?C: This symbol's value is either "void" or "int", corresponding to the
?C: appropriate return type of a signal handler.  Thus, you can declare
?C: a signal handler using "Signal_t (*handler)()", and define the
?C: handler using "Signal_t handler(sig)".
?C:.
?H:#$d_voidsig VOIDSIG  /**/
?H:#define Signal_t $signal_t /* Signal handler's return
 type */
?H:.
?T:xxx
?LINT:set d_voidsig
: see if signal is declared as pointer to function returning int or void
echo " "
```

```
xxx=`./findhdr signal.h`
$test "$xxx" && $cppstdin $cppminus $cppflags < $xxx >$$.tmp 2>/dev/null
if $contains 'int.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
elif $contains 'void.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have void (*signal())() instead of int." >&4
 val="$define"
elif $contains 'extern[  ]*[(\*]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
else
 case "$d_voidsig" in
 ")
 echo "I can't determine whether signal handler returns void or int..." >&4
  dflt=void
  rp="What type does your signal handler return?"
  . ./myread
  case "$ans" in
  v*) val="$define";;
  *) val="$undef";;
  esac;;
 "$define")
  echo "As you already told me, signal handler returns void." >&4;;
 *)
  echo "As you already told
 me, signal handler returns int." >&4;;
 esac
fi
set d_voidsig
eval $setvar
case "$d_voidsig" in
"$define") signal_t="void";;
*) signal_t="int";;
esac
$rm -f $$.tmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_voidsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_safemcpy.U,v 3.0.1.5 1997/02/28 15:41:12 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_safemcpy.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:41:12  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  13:58:46  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.3  1995/03/21  08:47:26  ram
?RCS: patch52: swapped two first arguments of memcpy() calls
?RCS:
?RCS:
 Revision 3.0.1.2  1994/10/29  16:15:10  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:53:12  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safemcpy: Compile cat d_memcpy rm_try run \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safemcpy:
?S: This variable conditionally defines the HAS_SAFE_MEMCPY symbol if
?S: the memcpy() routine can do overlapping copies.
?S: For overlapping copies, memmove() should be used, if available.
?S:.
?C:HAS_SAFE_MEMCPY (SAFE_MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy potentially overlapping memory blocks.  If you need to
?C: copy overlapping memory blocks, you should check HAS_MEMMOVE and
?C: use memmove() instead, if available.
?C:.
?H:#$d_safemcpy HAS_SAFE_MEMCPY /**/
?H:.
?F:!try
?LINT:
 set d_safemcpy
: can memcpy handle overlapping blocks?
echo " "
?X: assume the worst
val="$undef"
```

```
case "$d_memmove" in
"$define") echo "I'll use memmove() instead of memcpy() for overlapping copies." ;;
*) case "$d_memcpy" in
 "$define")
  echo "Checking to see if memcpy() can do overlapping copies..." >&4
  $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
memcpy(abc, "abcdefghijklmnopqrstuvwxyz0123456789", 36);

for (align = 7; align >=
 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  memcpy(b, abc, len);
  for (off = 1; off <= len; off++) {
   memcpy(b+off, b, len);
   memcpy(b, b+off, len);
   if (memcmp(b, abc, len))
```

```
    exit(1);
  }
 }
}
exit(0);
}
EOCP
  set try
  if eval $compile_ok; then
   if $run ./try 2>/dev/null; then
    echo "Yes, it can."
    val="$define"
   else
    echo "It can't, sorry."
   fi
  else
   echo "(I can't compile the test program, so we'll assume not...)"
  fi
  ;;
 esac
 $rm_try
 ;;
esac
set d_safemcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_safemcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: otherlibdirs.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999-2000, Andy Dougherty
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: otherlibdirs.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS: Revision 1.1  1999/07/08 18:20:26  doughera
?RCS: Initial revision
?RCS:
?RCS:
```

```
?MAKE:otherlibdirs d_perl_otherlibdirs: Myread cat sitelib sitearch \
 vendorarch vendorlib Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:otherlibdirs:
?S: This variable contains a colon-separated set of paths for the perl
?S: binary to search for additional library files
 or modules.
?S: These directories will be tacked to the end of @INC.
?S: Perl will automatically search below each path for version-
?S: and architecture-specific directories.  See inc_version_list
?S: for more details.
?S: A value of ' ' means 'none' and is used to preserve this value
?S: for the next run through Configure.
?S:.
?S:d_perl_otherlibdirs:
?S: This variable conditionally defines PERL_OTHERLIBDIRS, which
?S: contains a colon-separated set of paths for the perl binary to
?S: include in @INC.  See also otherlibdirs.
?S:.
?C:PERL_OTHERLIBDIRS:
?C: This variable contains a colon-separated set of paths for the perl
?C: binary to search for additional library files or modules.
?C: These directories will be tacked to the end of @INC.
?C: Perl will automatically search below each path for version-
?C: and architecture-specific directories.  See PERL_INC_VERSION_LIST
?C: for more details.
?C:.
?H:#$d_perl_otherlibdirs PERL_OTHERLIBDIRS "$otherlibdirs"  /**/
?H:.
?LINT: set d_perl_otherlibdirs
:
 Final catch-all directories to search
$cat <<EOM

Lastly, you can have perl look in other directories for extensions and
modules in addition to those already specified.
These directories will be searched after
 $sitearch
 $sitelib
EOM
test X"$vendorlib" != "X" && echo ' ' $vendorlib
test X"$vendorarch" != "X" && echo ' ' $vendorarch
echo ' '
case "$otherlibdirs" in
"|' ') dflt='none' ;;
*) dflt="$otherlibdirs" ;;
esac
```

```
$cat <<EOM
Enter a colon-separated set of extra paths to include in perl's @INC
search path, or enter 'none' for no extra paths.

EOM

rp='Colon-separated list of additional directories for perl to search?'
. ./myread
case "$ans" in
' '|''|none) otherlibdirs=' ' ;;
*) otherlibdirs="$ans" ;;
esac
case "$otherlibdirs" in
' ') val=$undef ;;
*) val=$define ;;
esac
set d_perl_otherlibdirs
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/otherlibdirs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwnam_r getpwnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwnam_r:
?S: This variable conditionally defines the HAS_GETPWNAM_R symbol,
?S: which indicates to the C program that the getpwnam_r()
?S: routine is available.
?S:.
?S:getpwnam_r_proto:
?S: This variable encodes the prototype of getpwnam_r.
?S: It is zero if d_getpwnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwnam_r
?S: is defined.
?S:.
?C:HAS_GETPWNAM_R:
?C: This symbol, if defined, indicates that the getpwnam_r routine
?C: is available to
```

```
 getpwnam re-entrantly.
?C:.
?C:GETPWNAM_R_PROTO:
?C: This symbol encodes the prototype of getpwnam_r.
?C: It is zero if d_getpwnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwnam_r
?C: is defined.
?C:.
?H:#$d_getpwnam_r HAS_GETPWNAM_R /**/
?H:#define GETPWNAM_R_PROTO $getpwnam_r_proto /**/
?H:.
?T:try hdrs d_getpwnam_r_proto
: see if getpwnam_r exists
set getpwnam_r d_getpwnam_r
eval $inlibc
case "$d_getpwnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwnam_r_proto:$usethreads" in
 ":define") d_getpwnam_r_proto=define
  set d_getpwnam_r_proto getpwnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getpwnam_r_proto" in
 define)
 case "$getpwnam_r_proto" in
 "|0) try='int getpwnam_r(const char*, struct passwd*, char*, size_t, struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBWR ;;
 esac
 case "$getpwnam_r_proto" in
 "|0) try='int getpwnam_r(const char*, struct passwd*,
 char*, int, struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBIR ;;
 esac
 case "$getpwnam_r_proto" in
 "|0) try='struct passwd* getpwnam_r(const char*, struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=S_CSBI ;;
 esac
 case "$getpwnam_r_proto" in
 "|0) try='int getpwnam_r(const char*, struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBI ;;
 esac
 case "$getpwnam_r_proto" in
 "|0) d_getpwnam_r=undef
  getpwnam_r_proto=0
  echo "Disabling getpwnam_r, cannot determine prototype." >&4 ;;
 * ) case "$getpwnam_r_proto" in
```

```
  REENTRANT_PROTO*) ;;
  *) getpwnam_r_proto="REENTRANT_PROTO_$getpwnam_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getpwnam_r has no prototype, not using it." >&4 ;;
  esac
  d_getpwnam_r=undef
  getpwnam_r_proto=0
  ;;
 esac
 ;;
*) getpwnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwnam_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrps.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getgrps.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getgrps: Inlibc
?MAKE: -pick add $@ %<
?S:d_getgrps:
?S: This variable conditionally defines the HAS_GETGROUPS symbol, which
?S: indicates to the C program that the getgroups() routine is available
?S: to get the list of process groups.
?S:.
?C:HAS_GETGROUPS (GETGROUPS):
?C: This symbol, if defined, indicates that the getgroups()
 routine is
?C: available to get the list of process groups.  If unavailable, multiple
?C: groups are probably not supported.
```

```
?C:.
?H:#$d_getgrps HAS_GETGROUPS  /**/
?H:.
?LINT:set d_getgrps
: see if getgroups exists
set getgroups d_getgrps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getgrps.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: man1dir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:10:29  ram
?RCS: patch61: created
?RCS:
?X:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man1 used instead of man everywhere.
?X:
?MAKE:man1dir man1direxp man1ext installman1dir: afs cat nroff Loc Oldconfig \
 spackage test Getfile Prefixit prefixexp
 Prefixup sysman Myread
?MAKE: -pick add $@ %<
?Y:TOP
?S:man1dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:man1direxp:
?S: This variable is the same as the man1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
```

```
?S:installman1dir:
?S: This variable is really the same as man1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man1ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See man1dir.
?S:.
?T:lookpath
: determine
 where manual pages go
set man1dir man1dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$man1dir" in
 ") man1dir="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$man1dir" in
' ') dflt=none
 ;;
")
 lookpath="$prefixexp/man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath $prefixexp/man/p_man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1"
 lookpath="$lookpath $prefixexp/man/man.1"
?X: Experience has shown people expect man1dir to be under prefix,
?X: so we now always put it there.  Users who want other behavior
?X: can answer interactively or use a command line option.
?X: Does user have System V-style man paths.
 case "$sysman" in
 */?_man*) dflt=`./loc . $prefixexp/l_man/man1 $lookpath` ;;
 *) dflt=`./loc . $prefixexp/man/man1 $lookpath` ;;
 esac
 set dflt
 eval $prefixup
 ;;
*)
```

```
  dflt="$man1dir"
 ;;
esac
echo " "
fn=dn+~
rp="Where do the main $spackage manual pages (source) go?"
. ./getfile
if $test "X$man1direxp" != "X$ansexp"; then
 installman1dir=''
fi
man1dir="$ans"
man1direxp="$ansexp"
case "$man1dir" in
'') man1dir=' '
 installman1dir='';;
esac
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installman1dir" in
 '') dflt=`echo $man1direxp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installman1dir";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installman1dir="$ans"
else
 installman1dir="$man1direxp"
fi

: What suffix to use on installed man pages

case "$man1dir" in
' ')
 man1ext='0'
 ;;
*)
 rp="What suffix should be used for the main $spackage man pages?"
 case "$man1ext" in
 '') case "$man1dir" in
  *1)  dflt=1 ;;
  *1p)
```

```
 dflt=1p ;;
  *1pm) dflt=1pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L1) dflt=L1;;
  *) dflt=1;;
  esac
  ;;
 *) dflt="$man1ext";;
 esac
 . ./myread
 man1ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/man1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: orderlib.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:18:18  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS: patch61: now uses the ar located by Loc.U
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:33:04  ram
?RCS: patch45: allows hint files to specify their own value for 'ranlib'
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:26:48  ram
?RCS: patch36: now performs a real small compile for accurate checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1
  1994/08/29  16:31:17  ram
?RCS: patch32: use cc variable instead of hardwired 'cc' in 1st compile
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orderlib ranlib: Loc ar cat test rm +cc +ccflags +ldflags +libs _a _o
?MAKE: -pick add $@ %<
?S:orderlib:
?S: This variable is "true" if the components of libraries must be ordered
?S: (with `lorder $* | tsort`) before placing them in an archive.  Set to
?S: "false" if ranlib or ar can generate random libraries.
?S:.
?S:ranlib:
?S: This variable is set to the pathname of the ranlib program, if it is
?S: needed to generate random libraries.  Set to ":" if ar can generate
?S: random libraries or if random libraries are not supported
?S:.
?F:!foobar
: see if ar generates random libraries by itself
echo " "
echo "Checking how to generate random libraries on your machine..." >&4
?X: Some systems (like MIPS) complain when running ar... Others like Ultrix
?X: need an explicit 'ar ts'
 to add the table of contents.
?X: Still others like Linux run ar ts successfully, but still need ranlib.
?X: This set of tests seems the minimum necessary to check out Linux.
?X: We need to explicitly put the entries in out-of-order so that Sun's ld
?X: will fail.  (Otherwise it complains, but gives an exit status of 0.)
echo 'int bar1() { return bar2(); }' > bar1.c
echo 'int bar2() { return 2; }' > bar2.c
$cat > foo.c <<'EOP'
int main() { printf("%d\n", bar1()); exit(0); }
EOP
$cc $ccflags -c bar1.c >/dev/null 2>&1
$cc $ccflags -c bar2.c >/dev/null 2>&1
$cc $ccflags -c foo.c >/dev/null 2>&1
$ar rc bar$_a bar2$_o bar1$_o >/dev/null 2>&1
if $cc $ccflags $ldflags -o foobar foo$_o bar$_a $libs > /dev/null 2>&1 &&
 ./foobar >/dev/null 2>&1; then
 echo "ar appears to generate random libraries itself."
 orderlib=false
 ranlib=":"
elif $ar ts bar$_a >/dev/null 2>&1 &&
 $cc $ccflags $ldflags -o foobar foo$_o bar$_a $libs > /dev/null 2>&1 &&
 ./foobar >/dev/null 2>&1; then
  echo "a table of contents
 needs to be added with 'ar ts'."
  orderlib=false
  ranlib="$ar ts"
```

```
else
?X: Allow hints to specify their own ranlib "script". For instance, on
?X: some NeXT machines, the timestamp put by ranlib is not correct, and this
?X: may raise tedious recompiles for nothing. Therefore, NeXT may add the
?X: ranlib='sleep 5; /bin/ranlib' line in their hints to "fix" that.
?X: (reported by Andreas Koenig <k@franz.ww.tu-berlin.de>)
 case "$ranlib" in
 :) ranlib='';;
 '')
  ranlib=`./loc ranlib X /usr/bin /bin /usr/local/bin`
  $test -f $ranlib || ranlib=''
  ;;
 esac
 if $test -n "$ranlib"; then
  echo "your system has '$ranlib'; we'll use that."
  orderlib=false
 else
  echo "your system doesn't seem to support random libraries"
  echo "so we'll use lorder and tsort to order the libraries."
  orderlib=true
  ranlib=':'
 fi
fi
$rm -f foo* bar*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/orderlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_keepsig.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:57:56  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:26:25  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:13:59  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
```

```
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:48:47  ram
?RCS: patch12: comment for SIGNALS_KEPT was the other way round
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:06:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepsig: cat Compile rm Guess contains echo n c Setvar run
?MAKE: -pick add $@ %<
?S:d_keepsig:
?S: This variable contains the eventual value of the SIGNALS_KEPT symbol,
?S: which indicates to the C program if signal handlers need not reinstated
?S: after receipt of a signal.
?S:.
?C:SIGNALS_KEPT (PERSISTENT_SIGNAL):
?C: This symbol is defined if signal handlers needn't be reinstated after
?C: receipt of a signal.
?C:.
?H:#$d_keepsig SIGNALS_KEPT /**/
?H:.
?F:!try !try.out
?LINT:set d_keepsig
: see if signals are kept
val="$undef";
echo " "
echo "Checking to see if signal handlers stick around..." >&4
$cat >try.c <<'EOCP'
foo() {}

int main()
{
 signal(2, foo);
 kill(getpid(), 2);
 kill(getpid(), 2);
 printf("abc\n");
}
EOCP
set try
if eval $compile_ok; then
?X: On AIX a single ./try will not work (with ksh)
?X: Backquotes required on Linux and SGI (prevents "ambiguous output redirect")
?X:
 (reported by Xavier LeVourch <xavierl@eiffel.com>)
 `sh -c $run ./try >try.out 2>/dev/null`
 if $contains abc try.out >/dev/null 2>&1; then
  echo "Yes, they do."
  val="$define";
```

```
 else
  echo "No, they don't."
 fi
else
 $echo $n "(I can't seem to compile the test program. Assuming $c"
 if ./bsd; then
  echo "they do.)"
  val="$define"
 else
  echo "they don't.)"
 fi
fi
set d_keepsig
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_keepsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 2020, Raphael Manfredi and Karl Williamson
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:compiler_warning: contains grep osname
?MAKE: -pick add $@ %<
?S:compiler_warning:
?S: This variable holds the command to check if the file specified as a
?S: parameter contains a compiler warning
?S:.
: See if a file contains compiler warnings
: See if a file contains compiler warnings
case "$osname" in
 'aix')
 cat >compiler_warning <<EOSS
# Sample for aix ('.5' indicates the column number in the line):
#    "op.h", line 203.5: 1506-159 (E) Bit field
 type specified for op_type
# Since the word 'warning' isn't present, use a fairly rigorous match of what
# warning messages look like
#            "    o       p       .  h   ", line    203     .   5       :   1506     -    159      (  E  )
$grep -E "^\\"[A-Za-z][A-Za-z0-9_]*\.[ch]\\", line [1-9][0-9]*[.][1-9][0-9]*: [1-9][0-9]*-[1-9][0-9]* \([EW][)] "
```

```
"\$1"
EOSS
      compiler_warning=./compiler_warning
      chmod +x $compiler_warning
   ;;
    # Maybe a colon after the 'warning' would be appropriate
 *) compiler_warning="$contains -i warning"
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/compiler_warning.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Oldsym.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldsym.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:06:58  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit follows the creation of the config.sh file. It adds some
?X: special symbols: defines from patchlevel.h file if any and PERL_CONFIG_SH,
?X: which is set to true. Then, we try to keep all the new symbols that
?X: may come from a hint
 file or a previous config.sh file.
?X:
?MAKE:Oldsym: Config_sh cat test hint src sed sort uniq perl_patchlevel
?MAKE: -pick add $@ %<
?T:PERL_CONFIG_SH PERL_PATCHLEVEL sym tmp
?F:!UU
: add special variables
$test -f $src/patchlevel.h && \
awk '/^#define[  ]+PERL_/ {printf "%s=%s\n",$2,$3}' $src/patchlevel.h >>config.sh
echo "PERL_PATCHLEVEL='$perl_patchlevel'" >>config.sh
echo "PERL_CONFIG_SH=true" >>config.sh
```

```
: propagate old symbols
if $test -f UU/config.sh; then
?X: Make sure each symbol is unique in oldconfig.sh
 <UU/config.sh $sort | $uniq >UU/oldconfig.sh
?X:
?X: All the symbols that appear twice come only from config.sh (hence the
?X: two config.sh in the command line). These symbols will be removed by
?X: the uniq -u command. The oldsyms file thus contains all the symbols
?X: that did not appear in the produced config.sh (Larry Wall).
?X:
?X: Do not touch the -u flag of uniq.  This means you too, Jarkko.
?X:
 $sed -n 's/^\([a-zA-Z_0-9]*\)=.*/\1/p' \
  config.sh config.sh UU/oldconfig.sh
 |\
  $sort | $uniq -u >UU/oldsyms
 set X `$cat UU/oldsyms`
 shift
 case $# in
 0) ;;
 *)
  $cat <<EOM
Hmm...You had some extra variables I don't know about...I'll try to keep 'em...
EOM
  echo ": Variables propagated from previous config.sh file." >>config.sh
  for sym in `$cat UU/oldsyms`; do
   echo "    Propagating $hint variable "'$'"$sym..."
   eval 'tmp="$'"${sym}"'"'
   echo "$tmp" | \
    sed -e "s/'/'\''\''/g" -e "s/^/$sym='/" -e "s/$/'/" >>config.sh
  done
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Oldsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in order
?X: to make quick check on whether the current C compiler is working.
?X:
?MAKE:Checkcc ccname ccversion: Myread Warn startsh cat contains test
?MAKE: -pick add $@ %<
?S:ccname:
?S: This can set either by hints files or by Configure.  If using
?S: gcc, this is gcc, and if not, usually equal to cc, unimpressive, no?
?S: Some platforms, however, make good use of this by storing the
?S: flavor
 of the C compiler being used here.  For example if using
?S: the Sun WorkShop suite, ccname will be 'workshop'.
?S:.
?S:ccversion:
?S: This can set either by hints files or by Configure.  If using
?S: a (non-gcc) vendor cc, this variable may contain a version for
?S: the compiler.
?S:.
?F:./checkcc ./trygcc !checktmp
?V:despair
?T:trygcc
?LINT:extern cc rm ccflags ldflags
?LINT:change cc ccflags
?LINT:usefile checktmp
?INIT:ccname=''
?INIT:ccversion=''
: generate the trygcc script for later perusal
cat <<EOS >trygcc
$startsh
EOS
cat <<'EOSC' >>trygcc
case "$cc" in
'') ;;
*)  $rm -f try try.*
   $cat >try.c <<EOM
int main(int argc, char *argv[]) {
 (void) argc;
 (void) argv;
 return 0;
}
EOM
   if $cc -o try $ccflags $ldflags try.c; then
      :
   else
```

```
        echo "Uh-oh, the C compiler '$cc' doesn't seem to be working." >&4
        despair=yes
        trygcc=yes
        case "$cc" in
        *gcc*) trygcc=no ;;
        esac
        case "`$cc -v -c try.c 2>&1`" in

       *gcc*) trygcc=no ;;
        esac
        if $test X"$trygcc" = Xyes; then
            if gcc -o try -c try.c; then
                echo " "
                echo "You seem to have a working gcc, though." >&4
                rp="Would you like to use it?"
                dflt=y
                if $test -f myread; then
                    . ./myread
                else
                    if $test -f UU/myread; then
                        . ./UU/myread
                    else
                        echo "Cannot find myread, sorry.  Aborting." >&2
                        exit 1
                    fi
                fi
                case "$ans" in
                [yY]*) cc=gcc; ccname=gcc; ccflags=''; despair=no;
?X: Look whether we have 'call-back units' generated by hints that would
?X: seemingly affect the compiling environment.
                        $cat *.cbu >checktmp 2>/dev/null
                        if $contains ccflags checktmp >/dev/null; then

        ./warn <<EOM
Any previous setting of the C compiler flags has been lost.
It may be necessary to pass -Dcc=gcc to Configure right away.
EOM
                        fi;;
                esac
            fi
        fi
    fi
    $rm -f try try.*
    ;;
esac
EOSC

: generate the checkcc script for later perusal
```

```
cat <<EOS >checkcc
$startsh
EOS
cat <<'EOSC' >>checkcc
case "$cc" in
") ;;
*)  $rm -f try try.*
   $cat >try.c <<EOM
int main(int argc, char *argv[]) {
 (void) argc;
 (void) argv;
 return 0;
}
EOM
   if $cc -o try $ccflags $ldflags try.c; then
      :
   else
      if $test X"$despair" = Xyes; then
         echo "Uh-oh, the C compiler '$cc' doesn't seem to be working." >&4
      fi
      $cat >&4 <<EOM
You need to find a working C compiler.
Either (purchase and) install the C compiler supplied by your OS vendor,
or for a free C compiler try http://gcc.gnu.org/
I cannot continue any further, aborting.
EOM
      exit 1
   fi

 $rm -f try try.*
   ;;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Checkcc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?MAKE:d_int64_t: Inhdr cat rm_try Setvar Compile i_inttypes
?MAKE: -pick add $@ %<
?S:d_int64_t:
?S: This symbol will be defined if the C compiler supports int64_t.
?S:.
?C:HAS_INT64_T:
?C: This symbol will defined if the C compiler supports int64_t.
?C: Usually the <inttypes.h> needs to be included, but sometimes
?C: <sys/types.h> is enough.
?C:.
?H:#$d_int64_t     HAS_INT64_T              /**/
?H:.
?LINT:set d_int64_t
: check for int64_t
echo " "
echo "Checking to see if you have int64_t..." >&4
$cat >try.c <<EOCP
#include
 <sys/types.h>
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
int main() { int64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have int64_t."
else
 val="$undef"
 echo "You do not have int64_t."
fi
$rm_try
set d_int64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_int64_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systable.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systable.U,v $
?RCS: Revision 3.0.1.1  1993/10/16  13:50:20  ram
?RCS: patch12: created
?RCS:
?RCS:
?MAKE:i_systable: Inhdr
?MAKE: -pick add $@ %<
?S:i_systable:
?S: This variable conditionally defines the I_SYS_TABLE symbol, and
?S: indicates whether a C program should include <sys/table.h>.
?S:.
?C:I_SYS_TABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/table.h> for the OSF/1 table() system call.
?C:.
?H:#$i_systable
 I_SYS_TABLE  /**/
?H:.
?LINT:set i_systable
: see if this is an OSF sys/table system
set sys/table.h i_systable
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systable.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_normsig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_normsig.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:03  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:14:48  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_normsig jobslib: test Setvar Guess _a
?MAKE: -pick add $@ %<
?S:d_normsig:
?S: This variable conditionally
 defines the NORMSIG symbol, which
?S: indicates to the C program that the normal signal handling routines
?S: should be used, as opposed to the ones in 4.1bsd (sigset, etc.).
?S:.
?S:jobslib:
?S: This variable holds the argument to be passed to the loader to include
?S: the strange signal handling routines from 4.1bsd.  On systems that
?S: have NORMSIG defined this variable is null.
?S:.
?C:NORMSIG:
?C: This symbol, if defined, indicates that normal signal handling routines
?C: should be used, as opposed to the ones in 4.1bsd (sigset, etc.).
?C:.
?H:#$d_normsig NORMSIG  /**/
?H:.
?LINT:set d_normsig
: see if we need -ljobs and if we have sigset, etc.
echo " "
if $test -r /usr/lib/libjobs$_a || $test -r /usr/local/lib/libjobs$_a ; then
 echo "Jobs library found." >&4
 val="$undef"
 jobslib='-ljobs'
else
 if ./bsd; then
  echo "No jobs library found. (I suppose this is at least 4.2...)" >&4
 else
  echo "No jobs library found. (That's okay, we all have our faults.)" >&4
 fi
 val="$define"
 jobslib=''
fi
set
 d_normsig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_normsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perl5.U,v $
?RCS:
?RCS: Copyright (c) 2000 Andrew Dougherty
```

```
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: perl5.U,v $
?RCS:
?X:
?X: The purpose of this unit is to locate a previously installed
?X: version of perl5 suitable for running inc_version_list.U.
?X: We check for 5.005 and later because inc_version_list is
?X: irrelevant for earlier versions.
?X:
?MAKE:perl5: path_sep binexp test sed exe_ext
?MAKE: -pick add $@ %<
?Y:TOP
?S:perl5:
?S: This variable contains the full path (if any) to a previously
?S: installed perl5.005 or later suitable for running the script
?S: to determine inc_version_list.
?S:.
?T: tdir
: Find perl5.005 or later.
echo "Looking for a previously installed perl5.005 or later... "
case "$perl5" in
") for tdir in `echo "$binexp$path_sep$PATH" | $sed "s/$path_sep/
 /g"`; do
  : Check if this perl is recent and can load a simple module
  if $test -x $tdir/perl$exe_ext && $tdir/perl -Mless -e 'use 5.005;' >/dev/null 2>&1; then
   perl5=$tdir/perl
   break;
  elif $test -x $tdir/perl5$exe_ext && $tdir/perl5 -Mless -e 'use 5.005;' >/dev/null 2>&1; then
   perl5=$tdir/perl5
   break;
  fi
 done
 ;;
*) perl5="$perl5"
 ;;
esac
case "$perl5" in
") echo "None found.  That's ok.";;
*) echo "Using $perl5." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/perl5.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setregid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setregid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setregid d_setresgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setregid:
?S: This variable conditionally defines HAS_SETREGID if setregid() is
?S: available to change the real and effective gid of the current
?S: process.
?S:.
?S:d_setresgid:
?S: This variable conditionally defines HAS_SETRESGID if setresgid() is
?S: available to change
 the real, effective and saved gid of the current
?S: process.
?S:.
?C:HAS_SETREGID (SETREGID):
?C: This symbol, if defined, indicates that the setregid routine is
?C: available to change the real and effective gid of the current
?C: process.
?C:.
?C:HAS_SETRESGID (SETRESGID):
?C: This symbol, if defined, indicates that the setresgid routine is
?C: available to change the real, effective and saved gid of the current
?C: process.
?C:.
?H:#$d_setregid HAS_SETREGID  /**/
?H:#$d_setresgid HAS_SETRESGID  /**/
?H:.
?LINT: set d_setregid d_setresgid
: see if setregid exists
set setregid d_setregid
eval $inlibc
set setresgid d_setresgid
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setregid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_regcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_regcmp.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:34:45  ram
?RCS: patch49: now looks for POSIX regcomp() routine
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_regcmp d_re_comp d_regcomp: Csym cat
?MAKE: -pick add $@ %<
?S:d_regcomp:
?S: This variable conditionally defines the HAS_REGCOMP symbol, which
?S: indicates to the C program that the regcomp() routine is available
?S: for regular
 pattern matching (usually on POSIX.2 conforming systems).
?S:.
?S:d_regcmp:
?S: This variable conditionally defines the HAS_REGCMP symbol, which
?S: indicates to the C program that the regcmp() routine is available
?S: for regular pattern matching (usually on System V).
?S:.
?S:d_re_comp:
?S: This variable conditionally defines the HAS_RECOMP symbol, which
?S: indicates to the C program that the re_comp() routine is available
?S: for regular pattern matching (usually on BSD). If so, it is likely that
?S: re_exec() exists.
?S:.
?C:HAS_REGCOMP (REGCOMP):
?C: This symbol, if defined, indicates that the regcomp() routine is
?C: available to do some regular pattern matching (usually on POSIX.2
?C: conforming systems).
?C:.
?C:HAS_REGCMP (REGCMP):
?C: This symbol, if defined, indicates that the regcmp() routine is
?C: available to do some regular pattern matching (usually on System V).
?C:.
```

```
?C:HAS_RECOMP (RECOMP):
?C: This symbol, if defined, indicates that the re_comp() routine is
?C: available
 to do some regular pattern matching (usually on BSD). If so,
?C: it is likely that re_exec() be available.
?C:.
?H:#$d_regcomp HAS_REGCOMP  /* POSIX.2 */
?H:#$d_regcmp HAS_REGCMP  /* sysV */
?H:#$d_re_comp HAS_RECOMP  /* BSD */
?H:.
?T:val
: see if regcomp, regcmp, or re_comp exist, for regular pattern matching
echo " "
if set regcomp val -f d_regcomp; eval $csym; $val; then
 echo 'regcomp() found.' >&4
 d_regcomp="$define"
 d_regcmp="$undef"
 d_re_comp="$undef"
elif set regcmp val -f d_regcmp; eval $csym; $val; then
 echo 'regcmp() found.' >&4
 d_regcmp="$define"
 d_regcomp="$undef"
 d_re_comp="$undef"
elif set re_comp val -f d_re_comp; eval $csym; $val; then
 echo 're_comp() found, assuming re_exec() also exists.' >&4
 d_re_comp="$define"
 d_regcomp="$undef"
 d_regcmp="$undef"
else
 $cat >&4 <<EOM
No regcomp(), regcmp() nor re_comp() found !! No regular pattern matching.
EOM
 d_regcmp="$undef"
 d_re_comp="$undef"
 d_regcomp="$undef"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_regcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: intsize.U,v 3.0.1.2 1997/02/28 15:55:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: intsize.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:55:26  ram
?RCS: patch61: avoid prompting the user if the test runs ok
?RCS: patch61: moved code from longsize.U into there
?RCS: patch61: new tests for shortsize as well
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:21:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:intsize longsize
 shortsize: Compile Myread cat run i_stdlib rm_try
?MAKE: -pick add $@ %<
?S:intsize:
?S: This variable contains the value of the INTSIZE symbol, which
?S: indicates to the C program how many bytes there are in an int.
?S:.
?S:longsize:
?S: This variable contains the value of the LONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long.
?S:.
?S:shortsize:
?S: This variable contains the value of the SHORTSIZE symbol which
?S: indicates to the C program how many bytes there are in a short.
?S:.
?C:INTSIZE:
?C: This symbol contains the value of sizeof(int) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:LONGSIZE:
?C: This symbol contains the value of sizeof(long) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:SHORTSIZE:
?C: This symbol contains the value of sizeof(short) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define INTSIZE $intsize  /**/
?H:#define LONGSIZE $longsize  /**/
?H:#define
 SHORTSIZE $shortsize  /**/
?H:.
?F:!try
```

```
: check for lengths of integral types
echo " "
case "$intsize" in
")
 echo "Checking to see how big your integers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
@if INTSIZE || intsize
 printf("intsize=%d;\n", (int)sizeof(int));
@end
@if LONGSIZE || longsize
 printf("longsize=%d;\n", (int)sizeof(long));
@end
@if SHORTSIZE || shortsize
 printf("shortsize=%d;\n", (int)sizeof(short));
@end
 exit(0);
}
EOCP
 set try
 if eval $compile_ok && $run ./try > /dev/null; then
  eval `$run ./try`
@if INTSIZE || intsize
  echo "Your integers are $intsize bytes long."
@end
@if LONGSIZE || longsize
  echo "Your long integers are $longsize bytes long."
@end
@if SHORTSIZE || shortsize
  echo "Your short integers are $shortsize bytes long."
@end
 else
  $cat >&4 <<EOM
!
Help! I can't compile and run the intsize test program: please enlighten me!
(This is probably a misconfiguration
 in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)
!
EOM
@if INTSIZE || intsize
  dflt=4
```

```
  rp="What is the size of an integer (in bytes)?"
  . ./myread
  intsize="$ans"
@end
@if LONGSIZE || longsize
  dflt=$intsize
  rp="What is the size of a long integer (in bytes)?"
  . ./myread
  longsize="$ans"
@end
@if SHORTSIZE || shortsize
  dflt=2
  rp="What is the size of a short integer (in bytes)?"
  . ./myread
  shortsize="$ans"
@end
 fi
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/intsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostent_r gethostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostent_r:
?S: This variable conditionally defines the HAS_GETHOSTENT_R symbol,
?S: which indicates to the C program that the gethostent_r()
?S: routine is available.
?S:.
?S:gethostent_r_proto:
?S: This variable encodes the prototype of gethostent_r.
?S: It is zero if d_gethostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostent_r
?S: is defined.
?S:.
?C:HAS_GETHOSTENT_R:
```

```
?C: This symbol, if defined, indicates that the gethostent_r routine
?C: is
 available to gethostent re-entrantly.
?C:.
?C:GETHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of gethostent_r.
?C: It is zero if d_gethostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostent_r
?C: is defined.
?C:.
?H:#$d_gethostent_r HAS_GETHOSTENT_R /**/
?H:#define GETHOSTENT_R_PROTO $gethostent_r_proto /**/
?H:.
?T:try hdrs d_gethostent_r_proto
: see if gethostent_r exists
set gethostent_r d_gethostent_r
eval $inlibc
case "$d_gethostent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_gethostent_r_proto:$usethreads" in
 ":define") d_gethostent_r_proto=define
  set d_gethostent_r_proto gethostent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gethostent_r_proto" in
 define)
 case "$gethostent_r_proto" in
 "|0) try='int gethostent_r(struct hostent*, char*, size_t, struct hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBWRE ;;
 esac
 case "$gethostent_r_proto"
 in
 "|0) try='int gethostent_r(struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBIE ;;
 esac
 case "$gethostent_r_proto" in
 "|0) try='struct hostent* gethostent_r(struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=S_SBIE ;;
 esac
 case "$gethostent_r_proto" in
 "|0) try='struct hostent* gethostent_r(struct hostent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=S_SBI ;;
 esac
 case "$gethostent_r_proto" in
 "|0) try='int gethostent_r(struct hostent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBI ;;
```

```
 esac
 case "$gethostent_r_proto" in
 "|0) try='int gethostent_r(struct hostent*, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SD ;;
 esac
 case "$gethostent_r_proto" in
 "|0) d_gethostent_r=undef
  gethostent_r_proto=0
  echo "Disabling gethostent_r, cannot determine prototype." >&4 ;;
 * ) case
 "$gethostent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gethostent_r_proto="REENTRANT_PROTO_$gethostent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gethostent_r has no prototype, not using it." >&4 ;;
  esac
  d_gethostent_r=undef
  gethostent_r_proto=0
  ;;
 esac
 ;;
*) gethostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostent_r.U
No license file was found, but licenses were detected in source scan.

```
;###########################################################################
;# Jmake rules for building libraries, programs, scripts, and data files
;# $Id: Jmake.rules 18 2006-12-27 10:35:09Z rmanfredi $

/*
*     MACHINE-INDEPENDENT RULES -- DO NOT MODIFY
*/

/* $Id: Jmake.rules 18 2006-12-27 10:35:09Z rmanfredi $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
```

```
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: Jmake.rules,v $
* Revision 3.0.1.7  2004/08/22 08:28:58  ram
* patch71: random cleanup
*
* Revision 3.0.1.6  1997/02/28  14:56:01  ram
* patch61: now handles USRINC for dependencies
* patch61: smarter about dependencies
 computation
*
* Revision 3.0.1.5  1995/09/25  09:07:19  ram
* patch59: smarter sed command to strip /usr/include dependencies
*
* Revision 3.0.1.4  1995/07/25  13:33:59  ram
* patch56: install of script man pages can now cope with missing files
* patch56: the clobber target now removes the .config directory as well
*
* Revision 3.0.1.3  1995/03/21  08:35:28  ram
* patch52: suppressed extra argument to NormalProgramTarget call
*
* Revision 3.0.1.2  1995/01/11  14:49:55  ram
* patch45: new macros ShellScriptTargetExt and SimpleShellScriptTargetExt
* patch45: directory installation is now made via INSTALLDIR (Configure)
*
* Revision 3.0.1.1  1994/10/29  15:46:30  ram
* patch36: added RemoteDependency rule
*
* Revision 3.0  1993/08/18  12:04:14  ram
* Baseline for dist 3.0 netwide release.
*
*/

/* Please, edit only with tabstops = 4 (":set ts=4" under vi) */

/*
* AddedByConfigure:
* Gives name of the files generated by Configure that can safely
* be removed
 when a "make clobber" is issued. Not that it is useless
* to name config.h or config.sh because these are already taken care
* of by jmake.
*/
#define AddedByConfigure(files) @!\
local_clobber::   @@\
 $(RM) files
```

```
/*
* AddSuffix:
* Adds a sufix to the .SUFFIXES: list.
*/
#define AddSuffix(ext) @!\
|suffix ext


/*
* AllTarget:
* Generate rules to build necessary things during make all.
*/
#define AllTarget(depends) @!\
all:: depends    @!\
       @!\
local_realclean::   @@\
 $(RM) depends

/*
* RemoveTargetProgram:
* This is used in some other macros in order to remove the target
* before starting its building (saves disk space).  There should be
* no '@!' at the end of the '#define' line, because this macro is
* used *inside* building rules.
*/
#define RemoveTargetProgram(program) \
 $(RM) program @@\
 if test -f program^^^$(_EXE); then \ @@\
  $(MV) program^^^$(_EXE) program^^~^^^$(_EXE); fi

/*
* NormalProgramTarget:
* Generate rules to compile and link the
 indicated program; since
* it does not use any default object files, it may be used for
* multiple programs in the same Jmakefile.
*/
#define NormalProgramTarget(program,sources,objects) @!\
++OBJECTS objects @!\
++SOURCES sources @!\
NormalObjectRule()    @!\
AllTarget(program)    @!\
       @!\
program: objects    @@\
 RemoveTargetProgram($@)  @@\
 $(CC) -o $@ objects $(JLDFLAGS) $(LIBS) @!\
```

```
/*
* SingleProgramTarget:
* Obsolete version of NormalProgramTarget that doesn't have
* deplibs.
*/
#define SingleProgramTarget(program,objects,libs)  \
NormalProgramTarget(program,objects,libs)

/*
* SimpleProgramTarget:
* Generate rules for compiling and linking programs that only have
* one C source file.  It should only be used in Jmakefiles that
* describe a single program.
*/
#define SimpleProgramTarget(program) @!\
NormalProgramTarget(program,program.c,program.o)



/*
* ComplexProgramTarget:
* Generate rules for compiling and linking the program specified by
* $(OBJS) and
 $(SRCS), installing the program and its man page, and
* generating dependencies.  It should only be used in Jmakefiles
* that describe a single program.
*/
#define ComplexProgramTarget(program) @!\
++OBJECTS $(OBJS) @!\
++SOURCES $(SRCS) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC)) @!\
DependTarget()      @!\
LintTarget()


/*
* ComplexProgramTarget_1:
* Generate rules for compiling and linking the program specified by
* $(OBJS1) and $(SRCS1), installing the program and its man page,
* and generating dependencies for it and any programs described by
```

```
* $(SRCS2) and $(SRCS3).  It should be used to build the primary
* program in Jmakefiles that describe multiple programs.
*/
#define ComplexProgramTarget_1(program) @!\
++OBJECTS $(OBJS1) @!\
++SOURCES $(SRCS1) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program:
 $(OBJS1)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS1) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC)) @!\
        @!\
DependTarget()      @!\
LintTarget()


/*
* ComplexProgramTarget_2:
* Generate rules for compiling and linking the program specified by
* $(OBJS2) and $(SRCS2) and installing the program and man page.
* It should be used to build the second program in Jmakefiles
* describing more than one program.
*/
#define ComplexProgramTarget_2(program) @!\
++OBJECTS $(OBJS2) @!\
++SOURCES $(SRCS2) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS2)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS2) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC))


/*
* ComplexProgramTarget_3:
* Generate rules for compiling and linking the
 program specified by
* $(OBJS3) and $(SRCS3) and installing the program and man page.  It
* should be used to build the third program in Jmakefiles describing
```

```
* more than one program.
*/
#define ComplexProgramTarget_3(program) @!\
++OBJECTS $(OBJS3) @!\
++SOURCES $(SRCS3) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS3)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS3) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC))


/*
* ComplexShellManualTarget:
* Builds manual pages that are to be extracted from .SH files into
* .$manext files.
*/
#define ComplexShellManualTarget(manpages) @!\
++MANPAGE manpages @!\
|once _ShellManualRule_  @!\
|rule:.SH.$manext:   @!\
|rule: /bin/sh $<   @!\
|rule:      @!\
-once      @!\
AddSuffix(.SH)    @!\
AddSuffix(.$manext)   @!\
AllTarget(manpages)   @!\
       @!\
local_install.man::   @@\
 _MakeInstallDirIgnore($(MANSRC)) \     @@\
 for
 file in manpages; do \  @@\
  (set -x; $(INSTALL) -c -m 444 $$file \ @@\
   $(INSTALL_PREFIX)$(MANSRC)) || exit 1; \ @@\
 done     @!\
       @!\
local_deinstall.man::  @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for file in manpages; do \  @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(MANSRC)/$$file); \ @@\
 done


/*
```

```
* Initialize:
* Puts the line symbol = value in the initialization section of
* Makefile.SH (the one that is subject to parameter substitutions).
*/
#define Initialize(symbol,value) @!\
+symbol = value


/*
* InstallLibrary:
* Generate rules to install the indicated library.
*/
#define InstallLibrary(libname,dest) @!\
local_install:: lib^^libname.a  @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 644 lib^^libname.a $(INSTALL_PREFIX)^^^dest  @@\
 $(RANLIB) dest/lib^^libname.a @@\
 chmod 444 dest/lib^^libnane.a @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.a


/*
* InstallSharedLibrary:
* Generate rules to install
 the shared library.
*/
#define InstallSharedLibrary(libname,rev,dest) @!\
local_install:: lib^^libname.so.rev  @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 lib^^libname.so.rev $(INSTALL_PREFIX)^^^dest @!\
         @!\
local_deinstall::      @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.so.rev


/*
* InstallSharedLibraryData:
* Generate rules to install the shared library data
*/
#define InstallSharedLibraryData(libname,rev,dest) @!\
local_install:: lib^^libname.sa.rev  @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 lib^^libname.sa.rev $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.sa.rev
```

```
/*
* InstallLibraryAlias:
* Generate rules to create a link from one library name to another
* for the purposes of aliasing.
*/
#define InstallLibraryAlias(libname,alias,dest) @!\
local_install:: lib^^libname.a @@\
 $(RM) lib^^alias.a  @@\
 -(cd dest; $(LN) lib^^libname.a lib^^alias.a)
 @!\
      @!\
local_deinstall::   @@\
 $(RM) dest/lib^^alias.a


/*
* InstallLintLibrary:
* Generate rules to install the indicated lint library.
*/
#define InstallLintLibrary(libname,dest) @!\
install.ln:: llib-l^^libname.ln   @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 llib-l^^libname.ln $(INSTALL_PREFIX)^^^dest @!\
      @!\
deinstall.ln::    @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/llib-l^^libname.ln


/*
* InstallManPageLong:
* Generate rules to install the indicated manual page, giving it an
* alternate name.  This is used for installing man pages whose base
* name without the .man suffix would normally be longer than 8
* characters (the limit for using source code control systems on
* files systems with short file names).
*/
#define InstallManPageLong(file,destdir,dest) @!\
local_install.man:: file.man   @@\
 _MakeInstallDirIgnore(destdir) \ @@\
 $(INSTALL) -c -m 444 file.man $(INSTALL_PREFIX)^^^destdir/dest.$(L) @!\
        @!\
local_deinstall.man::     @@\
 $(RM)
 $(INSTALL_PREFIX)^^^destdir/dest.$(L)  @!\
```

```
/*
* InstallManPage:
* Generate rules to install the indicated manual page.
*/
#define InstallManPage(file,dest) @!\
InstallManPageLong(file,dest,file)


/*
* InstallNonExec:
* Generate rules to install a data file using any special
*  install flags.
*/
#define InstallNonExec(file,dest) @!\
local_install:: file    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 444 file $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/file


/*
* InstallProgramWithFlags:
* Generate rules to install an executable program using given
* install flags.
*/
#define InstallProgramWithFlags(program,dest,flags) @!\
local_install:: program    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -s -m 555 flags program^^^$(_EXE) $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/program^^^$(_EXE)


/*
* InstallProgramNoStripWithFlags:
 * Generate rules to install an executable program using given
* install flags.
*/
#define InstallProgramNoStripWithFlags(program,dest,flags) @!\
local_install:: program    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 555 flags program^^^$(_EXE) $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/program^^^$(_EXE)
```

```
/*
* InstallProgram:
* Generate rules to install an executable program using any special
* install flags set in $(INSTALLFLAGS).
*/
#define InstallProgram(program,dest) @!\
InstallProgramWithFlags(program,dest,^^)


/*
* InstallProgramNoStrip:
* Generate rules to install an executable program using any special
* install flags set in $(INSTALLFLAGS), but without stripping the
* executable from debugging symbols.
*/
#define InstallProgramNoStrip(program,dest) @!\
InstallProgramNoStripWithFlags(program,dest,^^)


/*
* InstallScriptWithFlags:
* Generate rules to install an executable script using given
* install
 flags.
*/
#define InstallScriptWithFlags(script,dest,flags) @!\
local_install:: script    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 555 flags script $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/script


/*
* InstallScript:
* Generate rules to install an executable script using any special
* install flags set in $(INSTALLFLAGS).
*/
#define InstallScript(script,dest) @!\
InstallScriptWithFlags(script,dest,^^)


/*
* InstallScripts:
* Generate rules to install all the scripts listed in the generated
```

```
*  $(SCRIPTS) and $(LSCRIPTS) macros.
*/
#define InstallScripts() @!\
|once _InstallScripts_  @!\
local_install:: $(SCRIPTS) $(LSCRIPTS)    @@\
 _MakeInstallDirIgnore($(SCRIPTDIR)) \  @@\
 for file in $(SCRIPTS) $(LSCRIPTS); do \ @@\
  (set -x; \ @@\
  $(INSTALL) -c -m 555 $$file $(INSTALL_PREFIX)$(SCRIPTDIR)) || \ @@\
  exit 1; \ @@\
 done     @!\
      @!\
local_deinstall::   @@\
 @for file in $(SCRIPTS)
 $(LSCRIPTS); do \ @@\
  case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(SCRIPTDIR)/$$file); \ @@\
 done     @!\
-once

/*
* InstallManScripts:
* Generate rule to install/deinstall manual pages for scripts listed
* in the automatically generated $(SCRIPTS) macro.
*/
#define InstallManScripts() @!\
|once _InstallManScripts_ @!\
?NOMAN:|skip    @!\
local_install.man::   @@\
 _MakeInstallDirIgnore($(MANSRC)) \  @@\
 for file in $(SCRIPTS); do \   @@\
  if test -f $$file.man; then \  @@\
   (set -x; \      @@\
   $(INSTALL) -c -m 444 $$file.man \ @@\
    $(INSTALL_PREFIX)$(MANSRC)/$$file.$(L)) || \ @@\
    exit 1; \ @@\
  fi; \    @@\
 done     @!\
      @!\
local_deinstall.man::  @@\
 case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for file in $(SCRIPTS); do \ @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(MANSRC)/$$file.$(L)); \ @@\
 done     @!\
      @!\
-skip      @!\
-once
```

```
/*
* LinkFileList:
* Link a list of list of files from one place to another
 */
#define LinkFileList(step,list,dir,sub) @!\
step:: list       @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 echo " cd" dir; cd dir; for i in list; do (set -x; $(LN) sub/$$i .); done


/*
* InstallMultipleDestFlags:
* Generate rules to install multiple files at once during a particular
* step in the build using a specific set of install flags.
*/
#define InstallMultipleDestFlags(step,list,dest,flags) @!\
step:: list       @@\
 _MakeInstallDirIgnore(dest) \ @@\
 for i in list; do \    @@\
  (set -x; $(INSTALL) -c flags \ @@\
   $$i $(INSTALL_PREFIX)^^^dest) || exit 1;\ @@\
 done

/*
* DeinstallMultipleDest:
* Generate rules to deinstall multiple files at once during a particular
* step in the build.
*/
#define DeinstallMultipleDest(step,list,dest) @!\
step::        @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for i in list; do \    @@\
  (set -x; $(RM) $(INSTALL_PREFIX)^^^dest/$$i); \ @@\
 done

/*
* InstallMultiple:
* Generate rules to install multiple
 files at once during the install
* step of the build using any install flags set in $(INSTALLFLAGS)
* and deinstall them.
*/
#define InstallMultiple(list,dest) @!\
InstallMultipleDestFlags(local_install,list,dest,$(INSTALLFLAGS)) @!\
DeinstallMultipleDest(local_deinstall,list,dest)
```

```
/*
* InstallMultipleFlags:
* Generate rules to install multiple files at once during the
* install step of the build using the given install flags.
*/
#define InstallMultipleFlags(list,dest,flags) @!\
InstallMultipleDestFlags(local_install,list,dest,flags) @!\
DeinstallMultipleDest(local_deinstall,list,dest)


/*
* InstallMultipleMan:
* Generate rules to install a variety of manual pages
* during the install.man step of the build.
*/
#define InstallMultipleMan(list,dest) @!\
InstallMultipleDestFlags(local_install.man,list,dest,$(INSTALLFLAGS)) @!\
DeinstallMultipleDest(local_deinstall.man,list,dest)


/*
* DependDependency:
* Generate rules to build the makedepend program.
*/
#define DependDependency()
    @!\
depend:: TOPDIR/mkdep    @!\
        @!\
TOPDIR/mkdep:      @!\
?TOP: @echo "You have to run Configure first."; exit 1 @!\
%TOP: @echo "You have to run Configure in $(TOP) first."; exit 1


/*
* DependTarget:
* Generate rules to compute dependencies for all files listed
* in $(SOURCES) (automatically generated macro).
*/
#define DependTarget()    @!\
+USRINC = $usrinc @!\
|once _DependTarget_    @!\
DependDependency()     @!\
        @!\
depend::       @@\
 ($(SED) '/^# DO NOT DELETE/q' Makefile && \ @@\
 $(MKDEP) $(SOURCES) | \   @@\
 $(SED) -e 's:/usr/lib[^ ]*::g; s:$(USRINC)[^ ]*::g; ' \ @@\
```

```
  -e '/: / b print' -e '$$ b print' -e 'H; d; n; : print' \ @@\
  -e 'x; s/\\$$//; s/\\\n//g; s/ ^^ */ /g; s/ :/:/;' -e '/: *$$/d' \ @@\
 ) > Makefile.new    @@\
 cp Makefile Makefile.bak  @@\
 cp Makefile.new Makefile  @@\
 $(RM) Makefile.new    @!\
        @!\
-once


/*
* CleanTarget:
* Generate rules to remove any garbage files.
*/
#define CleanTarget()    @!\
?SUBDIRS:clean:
 sub_clean local_clean    @!\
%SUBDIRS:clean: local_clean       @!\
?SUBDIRS:realclean: sub_realclean local_realclean @!\
%SUBDIRS:realclean: local_realclean     @!\
?SUBDIRS:clobber: sub_clobber local_clobber   @!\
%SUBDIRS:clobber: local_clobber      @!\
        @!\
local_clean::       @@\
 if test -f core; then $(RM) core; fi @@\
 $(RM) *~ *.o     @!\
        @!\
local_realclean:: local_clean  @!\
?TOP: $(RM) -r UU     @!\
        @!\
local_clobber:: local_realclean  @!\
%TOP: $(RM) Makefile config.sh  @!\
?TOP: $(RM) config.sh config.h  @!\
?TOP: $(RM) -r .config    @!\
?TOP: $(RM) Makefile    @!\


/*
* InstallTarget:
* Generate rules to recursively install files
*/
#define InstallTarget()           @!\
?SUBDIRS:install:: local_install sub_install     @!\
%SUBDIRS:install:: local_install        @!\
?SUBDIRS:install.man:: maybe_install.man sub_install.man  @!\
%SUBDIRS:install.man:: maybe_install.man      @!\
?SUBDIRS:deinstall:: sub_deinstall local_deinstall    @!\
%SUBDIRS:deinstall::
```

```
 local_deinstall       @!\
?SUBDIRS:deinstall.man:: sub_deinstall.man maybe_deinstall.man @!\
%SUBDIRS:deinstall.man:: maybe_deinstall.man     @!\
                @!\
?MANSRC:install.man-yes: local_install.man      @!\
install.man-no:             @!\
?MANSRC:deinstall.man-yes: local_deinstall.man     @!\
deinstall.man-no:            @!\


/*
* TagsTarget:
* Generate rules to compute tags files for C source code.
*/
#define TagsTarget()    @!\
tags::        @@\
 $(CTAGS) -w *.[ch]    @@\
 $(CTAGS) -xw *.[ch] > tags  @!\
        @!\
local_clobber::      @@\
 $(RM) tags



/*
* BuildMakefileSH:
* Generate rules to build a Makefile.SH from an Jmakefile and any
* special jmake flags.  This is generally done automatically by the
* template or by any special Jmakefiles.
* This function will simply touch Makefile.SH if no $(TOP)/.package
* exists, assuming the Jmakefile is not in a production environment.
*/
#define BuildMakefileSH(jmakeflags) @!\
Makefile.SH:
 Jmakefile     @@\
 -@if test -f $(TOP)/.package; then \ @@\
  if test -f Makefile.SH; then \ @@\
   echo " $(RM) Makefile.SH~; $(MV) Makefile.SH Makefile.SH~"; \ @@\
   $(RM) Makefile.SH~; $(MV) Makefile.SH Makefile.SH~; \ @@\
  fi; \      @@\
  echo " $(JMAKE) -DTOPDIR=$(TOP) -DCURDIR=$(CURRENT)" jmakeflags; \ @@\
  $(JMAKE) -DTOPDIR=$(TOP) -DCURDIR=$(CURRENT) jmakeflags; \ @@\
 else touch $@; fi


/*
* BuildMakefile:
* Generate rules to build a Makefile from a Makefile.SH.
```

```
*/
#define BuildMakefile() @!\
Makefile: Makefile.SH    @@\
 /bin/sh Makefile.SH


/*
* MakefileTarget:
* Generate rules to build a normal Makefile.
*/
#define MakefileTarget()  @!\
BuildMakefileSH(^^)    @!\
BuildMakefile()


/*
* NormalObjectRule:
* Generate make rule to build usual object files.
*/
#define NormalObjectRule()   @!\
|once _ObjectRule_     @!\
|rule:.c.o:       @!\
|rule: $(CC) -c $(JCFLAGS) $<  @!\
|rule:        @!\
-once

/*
* NormalLibraryObjectRule:
* Generate make rules to build
 "normal" objects.
*/
#define NormalLibraryObjectRule() @!\
|once _ObjectRule_     @!\
|rule:.c.o:       @!\
|rule: $(RM) $@      @!\
|rule: $(CC) -c $(JCFLAGS) $<  @!\
|rule:        @!\
-once

/*
* ProfiledLibraryObjectRule:
* Generate make rules to build both profiled and "normal" objects.
*/
#define ProfiledLibraryObjectRule() @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @!\
        @!\
|rule:.c.o:       @!\
```

```
|rule: $(RM) $@ profiled/$@   @!\
|rule: $(CC) -pg -c $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o profiled/$*.o  @!\
|rule: $(CC) -c $(JCFLAGS) $*.c  @!\
|rule:       @!\
local_clean::       @@\
 -@if [ -d profiled ]; then echo " $(RM) profiled/?*.o"; \ @@\
  $(RM) profiled/?*.o; fi


/*
* DebuggedLibraryObjectRule:
* Generate make rules to build both debuggable and "normal"
* objects.
*/
#define DebuggedLibraryObjectRule()     @!\
all::        @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
        @!\
|rule:.c.o:       @!\
|rule: $(RM) $@
 debugger/$@   @!\
|rule: $(CC) -g -c $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o debugger/$*.o  @!\
|rule: $(CC) -c $(JCFLAGS) $*.c  @!\
|rule:       @!\
local_clean::      @@\
 -@if [ -d debugger ]; then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi


/*
* DebuggedAndProfiledLibraryOjbectRule:
* Generate make rules to build debuggable, profiled, and "normal"
* objects.
*/
#define DebuggedAndProfiledLibraryObjectRule() @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
        @!\
|rule:.c.o:       @!\
|rule: $(RM) $@ profiled/$@ debugger/$@ @!\
|rule: $(CC) -pg -c $(JCFLAGS) $*.c  @!\
|rule: $(MV) $*.o profiled/$*.o   @!\
|rule: $(CC) -g -c $(JCFLAGS) $*.c  @!\
|rule: $(MV) $*.o debugger/$*.o   @!\
|rule: $(CC) -c $(JCFLAGS) $*.c   @!\
```

```
|rule:        @!\
local_clean::       @@\
 -@if [ -d profiled ]; then echo " $(RM) profiled/?*.o"; \ @@\
  $(RM) profiled/?*.o; fi   @@\
 -@if [ -d debugger ];
 then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi


/*
* SharedLibraryObjectRule:
* Generate make rules to build shared and "normal" object files.
*/
#define SharedLibraryObjectRule()     @!\
all::       @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @!\
        @!\
|rule:.c.o:       @!\
|rule: $(RM) $@ shared/$@   @!\
|rule: $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o shared/$*.o  @!\
|rule: $(CC) -c $(SHLIBDEF) $(JCFLAGS) $*.c    @!\
|rule:       @!\
local_clean::      @@\
 -@if [ -d shared ]; then echo " $(RM) shared/?*.o"; \  @@\
  $(RM) shared/?*.o; fi

/*
* SharedAndDebuggedLibraryObjectRule:
* Generate make rules to build shared, debuggable, and "normal"
* object files.
*/
#define SharedAndDebuggedLibraryObjectRule() @!\
all::         @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
          @!\
|rule:.c.o:        @!\
|rule: $(RM) $@ shared/$@ debugger/$@  @!\
|rule:
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o shared/$*.o    @!\
|rule: $(CC) -g -c $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o debugger/$*.o    @!\
|rule: $(CC) -c $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule:         @!\
local_clean::        @@\
 -@if [ -d shared ]; then echo " $(RM) shared/?*.o"; \  @@\
```

```
  $(RM) shared/?*.o; fi    @@\
 -@if [ -d debugger ]; then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi

/*
* SpecialSharedAndDebuggedObjectRule:
* Generate rules to compile a file with special flags and to make
* shared and debuggable versions.
*/
#define SpecialSharedAndDebuggedObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ shared/$@ debugger/$@  @@\
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) options $*.c @@\
 $(MV) $*.o shared/$*.o    @@\
 $(CC)
 -g -c $(SHLIBDEF) $(JCFLAGS) options $*.c   @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(SHLIBDEF) $(JCFLAGS) options $*.c

/*
* SpecialSharedObjectRule:
* Generate rules to compile a file with special flags and to make
* shared and debuggable versions.
*/
#define SpecialSharedObjectRule(objs,depends,options)  @!\
all::        @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @!\
        @!\
objs: depends       @@\
 $(RM) $@ shared/$@      @@\
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) options $*.c @@\
 $(MV) $*.o shared/$*.o    @@\
 $(CC) -c $(SHLIBDEF) $(JCFLAGS) options $*.c


/*
* SpecialObjectRule:
* Generate rules to compile a file with special flags.
*/
#define SpecialObjectRule(objs,depends,options)  @!\
objs: depends       @@\
 $(RM) $@       @@\
 $(CC) -c $(JCFLAGS) options $*.c
```

```
/*
* SpecialProfiledObjectRule:
* Generate rules to compile a file with special flags and to make a
* profiled version.
*/
#define SpecialProfiledObjectRule(objs,depends,options)   @!\
all::        @@\
 @if
 [ ! -d profiled ]; then mkdir profiled; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ profiled/$@    @@\
 $(CC) -pg -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o profiled/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* SpecialDebuggedObjectRule:
* Generate rules to compile a file with special flags and to make a
* debuggable version.
*/
#define SpecialDebuggedObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ debugger/$@    @@\
 $(CC) -g -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* SpecialDebuggedAndProfiledObjectRule:
* Generate rules to compile a file with special flags and to make
* debuggable and profiled versions.
*/
#define SpecialDebuggedAndProfiledObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @@\
 @if [ ! -d
 debugger ]; then mkdir debugger; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ profiled/$@ debugger/$@ @@\
 $(CC) -pg -c $(JCFLAGS) options $*.c @@\
```

```
 $(MV) $*.o profiled/$*.o   @@\
 $(CC) -g -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* NormalLibraryTarget:
* Generate rules to create a library. The 'srclist' and 'objlist'
* parameters are added to SOURCES and OBJECTS macros. The 'srclist'
* is not otherwise used by this rule, but is necessary for make depend.
*/
#define NormalLibraryTarget(libname,srclist,objlist) @!\
++OBJECTS objlist @!\
++SOURCES srclist @!\
NormalLibraryObjectRule()  @!\
AllTarget(lib^^libname.a)  @!\
        @!\
lib^^libname.a: objlist   @@\
 $(RM) $@     @@\
 $(AR) $@ objlist   @@\
 $(RANLIB) $@


/*
* NormalSharedLibraryTarget:
* Generate rules to create a shared library; build it into a
* different name so that the we don't hose people by having the
* library gone for long periods.
*/
#define
 NormalSharedLibraryTarget(libname,rev,solist) @!\
AllTarget(lib^^libname.so.rev) @!\
         @!\
lib^^libname.so.rev:  solist  @@\
 $(RM) $@~      @@\
 (cd shared; $(LD) -o ../$@~ -assert pure-text solist)  @@\
 $(RM) $@       @@\
 $(MV) $@~ $@

/*
* NormalSharedLibraryDataTarget:
* Generate rules to create shlib data file; build it into a
* different name so that the we don't hose people by having the
* library gone for long periods.
*/
#define NormalSharedLibraryDataTarget(libname,rev,salist) @!\
AllTarget(lib^^libname.sa.rev) @!\
```

```
        @!\
lib^^libname.sa.rev:  salist  @@\
 $(RM) $@      @@\
 $(AR) $@ salist     @@\
 $(RANLIB) $@


/*
* NormalLibraryTarget2:
* Generate rules to create a library in two steps.  This is used to
* create libraries with large numbers of files.
*/
#define NormalLibraryTarget2(libname,srclist,objlist1,objlist2) @!\
++SOURCES srclist @!\
++OBJECTS objlist1 @!\
++OBJECTS objlist2 @!\
NormalLibraryObjectRule()   @!\
AllTarget(lib^^libname.a)   @!\
        @!\
lib^^libname.a:
 objlist1 objlist2 @@\
 $(RM) $@      @@\
 $(AR) $@ objlist1    @@\
 $(AR) $@ objlist2    @@\
 $(RANLIB) $@


/*
* ProfiledLibraryTarget:
* Generate rules to create a profiled library.
*/
#define ProfiledLibraryTarget(libname,srclist,objlist) @!\
++SOURCES srclist @!\
++OBJECTS objlist @!\
AllTarget(lib^^libname^^_p.a)  @!\
        @!\
lib^^libname^^_p.a: objlist   @@\
 $(RM) $@      @@\
 cd profiled; $(AR) ../$@ objlist @@\
 $(RANLIB) $@


/*
* DebuggedLibraryTarget:
* Generate rules to create a debuggable library.
*/
#define DebuggedLibraryTarget(libname,srclist,objlist) @!\
++SOURCES srclist @!\
```

```
++OBJECTS objlist @!\
AllTarget(lib^^libname^^_d.a)  @!\
        @!\
lib^^libname^^_d.a: objlist   @@\
 $(RM) $@       @@\
 cd debugger; $(AR) ../$@ objlist @@\
 $(RANLIB) $@


/*
* AliasedLibraryTarget:
* Generate rules to link one library to another.
*/
#define AliasedLibraryTarget(libname,alias) @!\
AllTarget(lib^^alias.a)   @!\
       @!\
lib^^alias.a:
 lib^^libname.a @@\
 $(RM) $@     @@\
 $(LN) lib^^libname.a $@


/*
* PrelinkedRelocatableTarget:
* Generate rules to produce a relocatable object file instead of a
* library.
*/
#define PrelinkedRelocatableTarget(objname,objlist,libs) @!\
AllTarget(objname.o)    @!\
        @!\
objname.o: objlist     @@\
 $(RM) $@      @@\
 $(LD) $(JLDFLAGS) -r objlist -o $@ libs


/*
* NormalObjectTarget:
* Generate rules to produce a single object file.o from a file.c.
*/
#define NormalObjectTarget(file) @!\
++SOURCES file^^.c     @!\
AllTarget(file^^.o)     @!\
NormalObjectRule()

/*
* NormalRelocatableTarget:
* Generate rules to produce a relocatable object file instead of a
* library.
```

```
*/
#define NormalRelocatableTarget(objname,objlist) @!\
AllTarget(objname.o)    @!\
        @!\
objname.o: objlist     @@\
 $(RM) $@      @@\
 $(LD) $(JLDFLAGS) -r objlist -o $@


/*
* ProfiledRelocatableTarget:
* Generate rules to produce a profiled relocatable object file
* instead
 of a library.
*/
#define ProfiledRelocatableTarget(objname,objlist) @!\
AllTarget(objname^^_p.o)  @!\
       @!\
objname^^_p.o: objlist   @@\
 $(RM) $@     @@\
 $(LD) -X -r objlist -o $@


/*
* DebuggedRelocatableTarget:
* Generate rules to produce a debuggable relocatable object file
* instead of a library.
*/
#define DebuggedRelocatableTarget(objname,objlist) @!\
AllTarget(objname^^_d.o)  @!\
       @!\
objname^^_d.o: objlist   @@\
 $(RM) $@     @@\
 $(LD) -X -r objlist -o $@

/*
* LintLibraryTarget:
* Generate rules to create a lint library.  Note that the lint
* library is always forced to be newer than the library itself.
*/
#define LintLibraryTarget(libname,srclist) @!\
lintlib:: llib-l^^libname.ln @!\
       @!\
llib-l^^libname.ln: srclist  @@\
 $(RM) $@     @@\
 $(LINT) $(LINTLIBFLAG)^^libname $(LINTFLAGS) srclist
```

```
/*
* NormalLintTarget:
* Generate rules to lint a set of sources.
*/
#define NormalLintTarget(srclist) @!\
lint:       @@\
 $(LINT) $(LINTFLAGS) srclist
 $(LINTLIBS)


/*
* LintTarget:
* Generate rules to lint $(SOURCES) (automatically generated)
*/
#define LintTarget()   @!\
|once _LintTarget_    @!\
NormalLintTarget($(SOURCES)) @!\
-once


/*
* LinkSourceFile:
* Snag source file from some other directory
*/
#define LinkSourceFile(src,dir)  @!\
src:  dir/src   @@\
 $(RM) $@   @@\
 $(LN) $? $@   @!\


/*
* MakeSubincludesForBuild:
* Make includes in sub directories.
*/
#define MakeSubincludesForBuild(step,dir,srclist) @!\
step::  dir srclist        @@\
 @-(list=`echo srclist | sed -e 's/[^ ]*\//g'`; \  @@\
  set -x; cd dir; $(RM) $$list)   @@\
 @for i in srclist; do \      @@\
  (set -x; cd dir; $(LN) ../$$i .) || exit 1; \  @@\
 done          @!\
            @!\
MakeDirectories(dir,dir)      @!\
            @!\
local_realclean::         @@\
 @-(if [ -d dir ]; then \     @@\
  list=`echo srclist | sed -e 's/[^ ]*\//g'`; \  @@\
  set -x; cd dir; $(RM) $$list; fi)
```

```
/*
* CommonSubdirsRule:
* Rule for making $(TARGET) in
 every subdirectory, with $(VERB) as
* verbose message and $(FLAGS) as additional flags.
*/
#define CommonSubdirsRule(dirs) @!\
subdirs:       @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \   @@\
 for i in dirs ;\     @@\
 do \        @@\
  (cd $$i ; echo $(VERB) "in $(DIR)$$i..."; \  @@\
   $(MAKE) $(MFLAGS) $(FLAGS) $(TARGET)) || exit 1; \ @@\
 done


/*
* NamedTargetSubdirsRule:
* Recursively make a series of steps in the specified directories.
*/
#define NamedTargetSubdirsRule(dirs,name,verb,flags) @!\
name::         @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \  @@\
 for i in dirs ;\     @@\
 do \        @@\
  (cd $$i ; echo verb "in $(DIR)$$i..."; \ @@\
   $(MAKE) $(MFLAGS) flags name) || exit 1; \ @@\
 done


/*
* NamedTargetSubdirs:
* Recursively make a series of steps.
*/
#define NamedTargetSubdirs(name,verb,flags)  @!\
name::          @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags


/*
* NamedSubTargetSubdirs:
* Recursively make a series of steps,
 like NamedTargetSubdirs.
* However, the supplied "name" has "sub_" prefixed to it.
*/
#define NamedSubTargetSubdirs(name,verb,flags) @!\
```

```
sub_^^^name::          @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags

/*
* NamedDepthTargetSubdirs:
* Recursively make a series of steps. We first enter the
* subdirectories, then perform the local entries.
* The supplied "name" has "sub_" prefixed to it.
*/
#define NamedDepthTargetSubdirs(name,verb,flags)  @!\
sub_^^^name::      @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags @@\
 @echo "Back to $(CURRENT) for "name^^...


/*
* MakeSubdirs:
* Generate rules to do makes in the given subdirectories.
*/
#define MakeSubdirs() \
NamedTargetSubdirs(all,"Making all",^^)


/*
* DependDirs:
* Generate rules to recursively compute dependencies as part of the
* make depend step.
*/
#define DependDirs(dirs) \
NamedTargetSubdirsRule(dirs,depend,"Depending",^^)


/*
* DependSubdirs:
* Generate rules to recursively compute dependencies
 as part of the
* make depend step.
*/
#define DependSubdirs() \
DependDirs($(SUBDIRS))


/*
* InstallSubdirs:
* Generate rules to recursively install and deinstall programs and
* files.
*/
#define InstallSubdirs() \
```

```
NamedSubTargetSubdirs(install,"Installing",^^) @!\
NamedDepthTargetSubdirs(deinstall,"Deinstalling",^^)


/*
* InstallManSubdirs:
* Generate rules to recursively install and deinstall manual pages.
*/
#define InstallManSubdirs() \
NamedSubTargetSubdirs(install.man,"Installing man pages",^^) @!\
NamedDepthTargetSubdirs(deinstall.man,"Deinstalling man pages",^^)


/*
* IncludesSubdirs:
* Generate rules to recursively put include files in build
*/
#define IncludesSubdirs() \
NamedTargetSubdirs(includes,including,^^)


/*
* CleanSubdirs:
* Generate rules to recursively clean out garbage files.
*/
#define CleanSubdirs() \
NamedDepthTargetSubdirs(clean,"Cleaning",^^) @!\
NamedDepthTargetSubdirs(realclean,"Real cleaning",^^) @!\
NamedDepthTargetSubdirs(clobber,"Clobbering",^^)


/*
 * TagSubdirs:
* Generate rules to recursively create tags files.
*/
#define TagSubdirs(dirs) \
NamedTargetSubdirsRule(dirs,tag,"Tagging",^^)

/*
* MakeLintSubdirs:
* Generate rules to recursively lint directories as part of the
* named step.
*/
#define MakeLintSubdirs(dirs,target) \
NamedTargetSubdirsRule(dirs,target,"Linting",^^)


/*
```

```
* LintDirs:
* Generate rules to recursively lint directories as part of the
* make lint step.
*/
#define LintDirs(dirs) \
MakeLintSubdirs(dirs,lint)


/*
* LintSubdirs:
* Generate rules to recursively lint directories as part of the
* make lint step.
*/
#define LintSubdirs() \
LintDirs($(SUBDIRS))


/*
* MakeDirs:
* Creates a set of directories, even if some directories in the path
* do not already exist. There should be no '@!' at the end of the
* '#define' line, because this macro is used *inside* building rules.
*/
#define MakeDirs(dirs) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \   @@\
 for dir in dirs;
 do \         @@\
  (set -x; test -d $$dir || $(INSTALLDIR) $$dir) || \ @@\
  exit 1; \  @@\
 done

/*
* _MakeInstallDirs:
* Creates a set of intall directories, even if some directories in the path
* do not already exist. There should be no '@!' at the end of the
* '#define' line, because this macro is used *inside* building rules.
*/
#define _MakeInstallDirs(dirs) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for dir in dirs; do \       @@\
  _MakeInstallDir($$dir) \     @@\
 done

/*
* _MakeInstallDir:
* Internal macro to create a missing install directory.
*/
#define _MakeInstallDir(dir) \
```

```
 (set -x; test -d $(INSTALL_PREFIX)^^^dir || \ @@\
  $(INSTALLDIR) $(INSTALL_PREFIX)^^^dir);

/*
* _MakeInstallDirIgnore:
* Same as _MakeInstallDir but handles "make -i" as well.
*/
#define _MakeInstallDirIgnore(dir) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac;  \ @@\
 _MakeInstallDir(dir)

/*
* _RmInstallDirs:
* Removes a set of intall directories.
* There should be no '@!'
 at the end of the '#define' line, because this
* macro is used *inside* building rules.
*/
#define _RmInstallDirs(dirs) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for dir in dirs; do \       @@\
  (set -x; test -d $$dir && $(RM) -r $(INSTALL_PREFIX)$$dir); \ @@\
 done

/*
* MakeDirectories:
* Generate rules to create a hierarchy of directories.
*/
#define MakeDirectories(step,dirs)  @!\
step::         @@\
 MakeDirs(dirs)


/*
* MakeInstallDirectories:
* Generate a rule to create a set of directories at installation
* time (removed by deinstall).
*/
#define MakeInstallDirectories(dirs) @!\
local_install::    @@\
 _MakeInstallDirs(dirs) @!\
       @!\
local_deinstall::   @@\
 _RmInstallDirs(dirs)


/*
* MakeLintLibSubdirs:
```

```
* Generate rules to recursively create lint libraries.
*/
#define MakeLintLibSubdirs(dirs) @!\
MakeLintSubdirs(dirs,lintlib)


/*
* MakeMakeSubdirs:
* Generate rules to recursively recreate target as part of the
* specified step in the build.
  This assumes Makefile.SH has
* already been built (which is the case for a delivery), but does
* not rely on the existence of a Makefile.
*/
#define MakeMakeSubdirs(target) @!\
target::        @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \ @@\
 for i in $(SUBDIRS);\    @@\
 do \        @@\
  echo "Making "target" in $(DIR)$$i..."; \ @@\
  (cd $$i || exit 1; \   @@\
  if test ! -f Makefile; then /bin/sh Makefile.SH; fi; \ @@\
  $(MAKE) $(MFLAGS) target) || exit 1;\ @@\
 done


/*
* MakeMakefilesSH:
* Generate rules to recursively recreate target as part of the
* specified step in the build.  If $(TOP) is set to an absolute
* path, don't prepend the ../ prefix.  This makes running things
* outside of the source tree to be much easier.
*/
#define MakeMakefilesSH()  @!\
Makefiles.SH:: Makefile.SH    @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \ @@\
 for i in $(SUBDIRS);\     @@\
 do \        @@\
  case "$(DIR)$$i/" in \        @@\
  ^^*^^/^^*^^/^^*^^/^^*^^/) newtop=../../../..;;
 \ @@\
  ^^*^^/^^*^^/^^*^^/) newtop=../../..;; \    @@\
  ^^*^^/^^*^^/) newtop=../..;; \      @@\
  *^^/) newtop=..;; \         @@\
  esac; \            @@\
  case "$(TOP)" in \    @@\
  /^^*) newtop="$(TOP)" ;; \  @@\
  esac; \       @@\
```

```
  echo "Making Makefiles.SH in $(DIR)$$i..."; \ @@\
  (cd $$i || exit 1; \   @@\
   if test -f Jmakefile; then \ @@\
    $(MAKE) $(MFLAGS) -f ../Makefile \ @@\
     Makefile TOP=$$newtop CURRENT=$(DIR)$$i && \  @@\
    $(MAKE) $(MFLAGS) Makefiles.SH; \ @@\
   fi; \      @@\
  ) || exit 1; \ @@\
 done


/*
* MakefileSubdirs:
* Generate rules to create Makefiles.
*/
#define MakefileSubdirs()  @!\
MakeMakeSubdirs(Makefiles)  @!\
MakeMakefilesSH()


/*
* CppScriptTarget:
* Generate rules to create a shell script by running the input
* through cpp.
*/
#define CppScriptTarget(dst,src,defs,deplist) @!\
dst::  src deplist      @@\
 $(RM) $@       @@\
 $(CPP) defs <src | \    @@\
  sed -e '/^#  *[0-9][0-9]*  *.*$$/d' >$@  @@\
 chmod a+x $@


/*
 * MakeScriptFromCpp:
* Generate rules to create a script from a file with a
* .cpp suffix.
*/
#define MakeScriptFromCpp(name,defs) @!\
CppScriptTarget(name,name.cpp,defs,^^)


/*
* ShellScriptTargetExt:
* Generate rules to create and install a set of scripts from
* ext files (.sh and .SH are the most common examples). Man pages
* derived from the name of the scripts are also installed unless
* NoManPages() is specified.
```

```
*/
#define ShellScriptTargetExt(scripts,ext) @!\
++SCRIPTS scripts @!\
SimpleShellScriptTargetExt(scripts,ext)  @!\
InstallScripts()       @!\
InstallManScripts()


/*
* ShellScriptTarget:
* Generate rules to create and install a set of scripts from
* .SH files. Man pages derived from the name of the scripts are
* also installed unless NoManPages() is specified.
*/
#define ShellScriptTarget(scripts) @!\
ShellScriptTargetExt(scripts,.SH)


/*
* SimpleShellScriptTargetExt:
* Generate rules to create a set of scripts from ext files where
* ext is usually
 something like .sh or .SH, or whatever file
* extension you like..
*/
#define SimpleShellScriptTargetExt(scripts,ext) @!\
AllTarget(scripts)   @!\
       @!\
|expand s!scripts!   @!\
!s: !s^^ext     @@\
 /bin/sh !s^^ext   @!\
       @!\
-expand


/*
* SimpleShellScriptTarget:
* Generate rules to create a set of scripts from .SH files.
*/
#define SimpleShellScriptTarget(scripts) @!\
SimpleShellScriptTargetExt(scripts,.SH)


/*
* ShellScriptLongTarget:
* Generate rules to create a set of scripts from .SH files where
* the name of the generated file is different from the basename of
* the .SH file (when, for instance, the total length with the .SH
```

```
* extension would not leave enough space for RCS ,v extension).
*/
#define ShellScriptLongTarget(basename,scriptname) @!\
++LSCRIPTS scriptname @!\
AllTarget(scriptname)  @!\
	@!\
scriptname: basename^^.SH @@\
 /bin/sh basename^^.SH @!\
	@!\
InstallScripts()   @!\
?NOMAN:|skip    @!\
InstallManPageLong(basename,$(MANSRC),scriptname) @!\
-skip


/*
 * ForceTarget:
* The force target will force reconstruction of all the other
* targets which include .FORCE in their own dependencies.
*/
#define ForceTarget() @!\
|once _force_   @!\
.FORCE:     @!\
	@!\
-once


/*
* RemoteTargetDependency:
* A local target may rely on a remote dependency (e.g. a library)
* made in a separate directory. This rule explicits the dependency
* and forces a make of that dependency in the remote directory.
*/
#define RemoteTargetDependency(target,directory,dependency) @!\
RemoteDependency(directory,dependency) @!\
target: directory/^^^dependency @!\


/*
* RemoteDependency:
* Specify rules for making a remote dependency.
*/
#define RemoteDependency(directory,dependency) @!\
ForceTarget()       @!\
|once =directory/^^^dependency=   @!\
directory/^^^dependency: .FORCE   @@\
 @echo "Checking "^^^dependency" in "^^^directory"..." @@\
 cd ^^^directory; $(MAKE) ^^^dependency @@\
```

```
 @echo "Continuing in $(CURRENT)..." @!\
     @!\
-once

/*
 * SetSubdirs:
* Actually forces the definition of SUBDIRS, and lets the user
* specify what the sub-directories are.  This will be added to the
* customization part.
*/
#define SetSubdirs(subdirs) @!\
>SUBDIRS @!\
+SUBDIRS = subdirs


/*
* NoManPages:
* Actually forces the definition of NOMAN, which tells the jmake
* program to not generate rules for installing manual pages.
*/
#define NoManPages() @!\
>NOMAN


/*
* Expand:
* This powerful macro expands the `rule' given a `pattern'. It
* relies on a built-in command in jmake. The expansion is
* documented in the short notes file that comes with jmake and
* gives some insights on the internal syntax.
*/
#define Expand(rule, pattern) @!\
|expand pattern @!\
rule @!\
-expand


/*
* Lex and yacc stuff.
*/

/*
* YaccRule:
* This is the rule which is used to build a .c file from a .y file.
*/
#define YaccRule() @!\
AddSuffix(.y)     @!\
|once _YaccRule_    @!\
```

```
|rule:.y.c:      @!\
|rule: $(YACC) $(JYFLAGS)
 $< @!\
|rule: $(MV) y.tab.c $@   @!\
|rule:       @!\
-once

/*
* SimpleYaccTarget:
* Declare a yacc base.y file to be used in the building of the
* specified target program. The source file must be given without
* its final .y extension. The name of the .c and .o will be
* derived from the source file basename provided.
*/
#define SimpleYaccTarget(program,base) @!\
++SOURCES base.y @!\
++OBJECTS base.o @!\
YaccRule()    @!\
program: base.c   @!\
      @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* ComplexYaccTarget:
* Declare a yacc base.y file to be used in the building of the
* specified target program. The source file must be given without
* its final .y extension. The name of the .c and .o will be
* derived from the source file basename provided.
* The difference with SimpleYaccTarget is the identifying process
* where all the 'yy' are replaced by the specified prefix.
*/
#define ComplexYaccTarget(program,base,prefix) @!\
++SOURCES base.y @!\
++OBJECTS base.o
 @!\
program: base.c   @!\
      @!\
base.c: base.y     @@\
 $(YACC) $(JYFLAGS) base.y @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.c > base.c @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h @@\
 $(RM) y.tab.c y.tab.h @!\
       @!\
local_realclean::  @@\
 $(RM) base.c  @!\
```

```
/*
* SimpleYaccInclude:
* Declare that program will need an include file produced by
* the output of yacc on base.y, which typically produces a file
* named y.tab.h, which will be renamed as base.h.
* The only problem is that the dependencies towards base.h have
* to be manually given in the Jmakefile.
*/
#define SimpleYaccInclude(base) @!\
base.h: base.c  @@\
 @if test -f y.tab.h; then \ @@\
  echo " $(MV) y.tab.h $@"; \ @@\
  $(MV) y.tab.h $@; \  @@\
 fi       @!\
       @!\
local_realclean::    @@\
 $(RM) base.h

/*
* ComplexYaccInclude:
* Declare that program will need an include file produced by
* the output of yacc on base.y, which typically produces a file
* named y.tab.h, which will
 be renamed as base.h.
* The difference with SimpleYaccInclude is the identifying process
* of the y.tab.h file where all 'yy' are renamed to prefix.
* The only problem is that the dependencies towards base.h have
* to be manually given in the Jmakefile.
*/
#define ComplexYaccInclude(base,prefix) @!\
base.h: base.c  @@\
 @if test -f y.tab.h; then \ @@\
  echo " $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h"; \ @@\
  $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h; \ @@\
  echo " $(RM) y.tab.h"; \ @@\
  $(RM) y.tab.h; \  @@\
 elif test -f base.h; then \ @@\
  echo " $(CP) base.h base.ht"; \ @@\
  $(CP) base.h base.ht; \ @@\
  echo " $(SED) -e 's/yy\(.\)/prefix\1/g' < base.ht > base.h"; \ @@\
  $(SED) -e 's/yy\(.\)/prefix\1/g' < base.ht > base.h; \ @@\
  echo " $(RM) base.ht"; \ @@\
  $(RM) base.ht; \  @@\
 fi       @!\
       @!\
local_realclean::    @@\
 $(RM) base.h
```

```
/*
* NormalYaccTarget:
* Declare a yacc base.y file which should produce a base.c and
* base.h file
 as derived from the output of yacc, to be used by
* the specified program.
*/
#define NormalYaccTarget(program,base) @!\
SimpleYaccTarget(program,base) @!\
SimpleYaccInclude(base)


/*
* IdentifiedYaccTarget:
* Declare a yacc base.y file which should produce a base.c and
* base.h file as derived from the output of yacc, to be used by
* the specified program. The specified prefix is used to remplace
* all the 'yy' in the generated file, for use when more than a
* single parser is needed in one executable.
*/
#define IdentifiedYaccTarget(program,base,prefix) @!\
ComplexYaccTarget(program,base,prefix) @!\
ComplexYaccInclude(base,prefix)


/*
* SimpleLexTarget:
* This declares a lex base.l file which is to be ran through
* lex to produce a base.c file.
*/
#define SimpleLexTarget(program,base) @!\
++SOURCES base.l @!\
++OBJECTS base.o @!\
|once _LexRule_     @!\
|rule:.l.c:      @!\
|rule: $(LEX) $(JLFLAGS) $<  @!\
|rule: $(MV) lex.yy.c $@  @!\
|rule:       @!\
-once       @!\
AddSuffix(.l)   @!\
program:
 base.c   @!\
     @!\
local_realclean::  @@\
 $(RM) base.c  @!\
```

```
/*
* IdentifiedLexTarget:
* This declares a lex base.l file which is to be ran through
* lex to produce a base.c file. The prefix is used to replace
* the 'yy', so that the lexical analyzer may be identified.
*/
#define IdentifiedLexTarget(program,base,prefix) @!\
++SOURCES base.l @!\
++OBJECTS base.o @!\
program: base.c   @!\
     @!\
base.c: base.l     @@\
 $(LEX) $(JLFLAGS) base.l @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < lex.yy.c > base.c @@\
 $(RM) lex.yy.c    @!\
     @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* NormalLexDependTarget:
* Declare that program will need an include file produced by
* the output of lex on base.l, which typically produces a file
* named lex.yy.c which will be renamed as base.c. Besides, the
* lexical analyzer needs the file parser.h produced by running
* parser.y through yacc and renaming y.tab.h as parser.h.
*/
#define NormalLexDependTarget(program,base,parser)
 @!\
base.o: parser.h @!\
    @!\
SimpleLexTarget(program,base)


/*
* IdentifiedLexDependTarget:
* Declare that program will need an include file produced by
* the output of lex on base.l, which typically produces a file
* named lex.yy.c which will be renamed as base.c. Besides, the
* lexical analyzer needs the file parser.h produced by running
* parser.y through yacc and renaming y.tab.h as parser.h.
* The lexical analyzer is identified with the supplied prefix,
* which replaces the regular 'yy' prefix in the symbol names.
*/
#define IdentifiedLexDependTarget(program,base,parser,prefix) @!\
base.o: parser.h @!\
```

```
    @!\
IdentifiedLexTarget(program,base,prefix)


/*
* NormalParserTarget:
* Specify that program is using the lex/yacc combination to
* produce a parser. The lexic and parser parameters are the
* base name of the .l and .y file, respectively.
*/
#define NormalParserTarget(program,lexic,parser) @!\
NormalLexDependTarget(program,lexic,parser)
 @!\
NormalYaccTarget(program,parser)


/*
* IdentifiedParserTarget:
* Specify that program is using the lex/yacc combination to
* produce a parser. The lexic and parser parameters are the
* base name of the .l and .y file, respectively. The parser
* produced is identified via its prefix, which replaces all
* the normally supplied 'yy' prefix, hence making it possible
* to have multiple parsers in a single executable.
*/
#define IdentifiedParserTarget(program,lexic,parser,prefix) @!\
IdentifiedLexDependTarget(program,lexic,parser,prefix) @!\
IdentifiedYaccTarget(program,parser,prefix)
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/Jmake.rules
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_inetntop: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetntop:
?S: This variable conditionally defines the HAS_INETNTOP symbol,
?S: which indicates to the C program that the inet_ntop() function
?S: is available.
?S:.
?C:HAS_INETNTOP:
```

```
?C: This symbol, if defined, indicates that the inet_ntop() function
?C: is available to parse IPv4 and IPv6 strings.
?C:.
?H:#$d_inetntop HAS_INETNTOP  /**/
?H:.
?LINT:set d_inetntop
: see if inet_ntop exists
set inet_ntop d_inetntop
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_inetntop.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_volatile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:08:49  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/09  11:49:51  ram
?RCS: patch9: volatile definition was swapped over with undef
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_volatile: cat +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_volatile:
?S: This variable conditionally defines the HASVOLATILE symbol, which
?S: indicates
 to the C program that this C compiler knows about the
?S: volatile declaration.
?S:.
?C:HASVOLATILE ~ %<:
?C: This symbol, if defined, indicates that this C compiler knows about
?C: the volatile declaration.
?C:.
?H:?%<:#$d_volatile HASVOLATILE /**/
?H:?%<:#ifndef HASVOLATILE
```

```
?H:?%<:#define volatile
?H:?%<:#endif
?H:.
?W:%<:volatile
?LINT:set d_volatile
?LINT:known volatile
: check for volatile keyword
echo " "
echo 'Checking to see if your C compiler knows about "volatile"...' >&4
$cat >try.c <<'EOCP'
int main()
{
?X:
?X: The following seven lines added by Bill Campbell <billc@sierra.com>
?X: detect that MIPS compilers do not handle volatile in all situations.
?X:
 typedef struct _goo_struct goo_struct;
 goo_struct * volatile goo = ((goo_struct *)0);
 struct _goo_struct {
  long long_int;
  int reg_int;
  char char_var;
 };
 typedef unsigned short foo_t;
 char *volatile foo;
 volatile int bar;
 volatile foo_t blech;
 foo = foo;
}
EOCP
if $cc -c $ccflags try.c >/dev/null
 2>&1 ; then
 val="$define"
 echo "Yup, it does."
else
 val="$undef"
 echo "Nope, it doesn't."
fi
set d_volatile
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_volatile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getmntent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getmntent:
?S: This variable conditionally defines the HAS_GETMNTENT symbol, which
?S: indicates to the C program that the getmntent() routine is available
?S: to iterate through mounted files to get their mount info.
?S:.
?C:HAS_GETMNTENT:
?C: This symbol, if defined, indicates that the getmntent routine is
?C: available to iterate through mounted file systems to get their info.
?C:.
?H:#$d_getmntent HAS_GETMNTENT  /**/
?H:.
?LINT:set d_getmntent
: see if getmntent exists
set getmntent d_getmntent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getmntent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysuio.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysuio: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysuio:
?S: This variable conditionally defines the I_SYSUIO symbol, and indicates
?S: whether a C program should include <sys/uio.h>.
?S:.
?C:I_SYSUIO:
?C: This symbol, if defined, indicates that <sys/uio.h> exists and
?C: should be included.
?C:.
?H:#$i_sysuio I_SYSUIO  /**/
?H:.
?LINT:set i_sysuio
: see if this is a sys/uio.h system
```

```
set sys/uio.h i_sysuio
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_sysuio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strtok.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtok.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The strtok routine now appears to be a standard one, but it was
?X: missing in early BSD systems.
?X:
?MAKE:d_strtok: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtok:
?S: This variable conditionally defines HAS_STRTOK if strtok() is
?S: available to scan strings for tokens.
?S:.
?C:HAS_STRTOK (STRTOK):
?C: This symbol, if defined, indicates
 that the strtok routine is
?C: available to scan strings for tokens.
?C:.
?H:#$d_strtok HAS_STRTOK /**/
?H:.
?LINT:set d_strtok
: see if strtok exists
set strtok d_strtok
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtok.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: manfmt.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: manfmt.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:11:57  ram
?RCS: patch61: don't ask for AFS when they choose to not install pages
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:16:52  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:39:20  ram
?RCS: patch49: new installmanfmt and AFS-lookup for formatted man pages
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS:
 Revision 3.0.1.2  1994/08/29  16:30:31  ram
?RCS: patch32: now uses installation prefix for default setting
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:09:22  ram
?RCS: patch10: allows for L1 man page extension (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:manfmt manfmtexp installmanfmt: Getfile Loc Oldconfig cat manext \
 spackage Prefixit prefixexp Prefixup afs test
?MAKE: -pick add $@ %<
?Y:TOP
?S:manfmt:
?S: This variable contains the name of the directory in which formatted
?S: manual pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command. Note
?S: that you may have to do ~name substitution. Use manfmtexp otherwise.
?S:.
?S:manfmtexp:
?S: This is the same as the manfmt variable, but is filename expanded
?S: at configuration time, for programs not willing to deal with it at
?S: run-time.
?S:.
?S:installmanfmt:
?S: This variable is really
```

```
 the same as manfmtexp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: mansrcexp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change manext
?T:lookpath
: determine where manual pages go
set manfmt manfmt
eval $prefixit
$cat <<EOM

$spackage has pre-formatted manual pages.  If you don't want these installed,
answer 'none' to the next question.

EOM
case "$manfmt" in
")
 lookpath="$prefixexp/catman/man1 $prefixexp/man/cat1"
 lookpath="$lookpath $prefixexp/catman/u_man/man1"
 lookpath="$lookpath $prefixexp/catman/l_man/man1"
 lookpath="$lookpath $prefixexp/catman/cat1 /usr/catman/local/man1"
 lookpath="$lookpath /usr/catman/manl /usr/man/cat1"
 lookpath="$lookpath /usr/catman/mann /usr/catman/l_man/man1"
 lookpath="$lookpath /usr/catman/u_man/man1 /usr/catman/man1"
 dflt=`./loc . none $lookpath`
 set dflt
 eval $prefixup
 ;;
*)  dflt="$manfmt"
 ;;
esac
fn=dn~
rp='Where
 do pre-formatted manual pages go?'
. ./getfile
if test "X$manfmtexp" != "X$ansexp"; then
 installmanfmt=''
fi
manfmt="$ans"
manfmtexp="$ansexp"
if $afs && $test "$manfmt"; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).
```

```
EOM
 case "$installmanfmt" in
 ") dflt=`echo $manfmtexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installmanfmt";;
 esac
 fn=de~
 rp='Where will pre-formatted man pages be installed?'
 . ./getfile
 installmanfmt="$ans"
else
 installmanfmt="$manfmtexp"
fi

case "$manfmt" in
") manext='0';;
*l) manext=l;;
*n) manext=n;;
*o) manext=l;;
*p) manext=n;;
*C) manext=C;;
*L) manext=L;;
*L1) manext=L1;;
*) manext=1;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/manfmt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: bitpbyte.U,v 3.0.1.1 1994/10/29 16:02:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: bitpbyte.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:54  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bitpbyte: cat rm Myread Compile run
?MAKE: -pick add $@ %<
```

```
?S:bitpbyte:
?S: This variable contains the value of the BITS_PER_BYTE symbol, which
?S: indicates to the C program how many bits there are in a byte.
?S:.
?C:BITS_PER_BYTE:
?C: This
 symbol contains the number of bits in a byte, so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define BITS_PER_BYTE $bitpbyte  /**/
?H:.
?F:!try
: check for length of byte
echo " "
case "$bitpbyte" in
")
 echo "Checking to see how many bits there are in a byte..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
?X: Standard C requires a macro CHAR_BIT in <limits.h>
#ifdef __STDC__
#include <limits.h>
#ifndef CHAR_BIT
#define CHAR_BIT 8
#endif
#ifndef BITSPERBYTE
#define BITSPERBYTE CHAR_BIT
#endif
#else
?X: On non standard C, try with <values.h>
#include <values.h>
#ifndef BITSPERBYTE
#define BITSPERBYTE 8
#endif
#endif
int main()
{
 printf("%d\n", BITSPERBYTE);
}
EOCP
 set try
 if eval $compile_ok; then
  dflt=`$run ./try`
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
```

```
*)
 dflt="$bitpbyte"
 ;;
esac
rp="What is the length of a byte (in bits)?"
. ./myread
bitpbyte="$ans"
$rm -f try.c try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/bitpbyte.U
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```
?RCS: $Id: d_union_semun.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_union_semun.U,v $
?RCS:
?MAKE:d_union_semun d_semctl_semun d_semctl_semid_ds: Compile Setvar Myread run \
 cat rm_try d_sem
?MAKE: -pick add $@ %<
?S:d_union_semun:
?S: This variable conditionally defines HAS_UNION_SEMUN if the
?S: union semun is defined by including <sys/sem.h>.
?S:.
?S:d_semctl_semun:
?S: This variable conditionally defines USE_SEMCTL_SEMUN, which
?S: indicates that union semun is to be used for semctl IPC_STAT.
?S:.
?S:d_semctl_semid_ds:
?S: This variable conditionally defines USE_SEMCTL_SEMID_DS, which
?S: indicates that struct semid_ds * is to be used for semctl IPC_STAT.
?S:.
?C:HAS_UNION_SEMUN:
?C: This symbol, if defined, indicates that the union semun
 is
?C: defined by including <sys/sem.h>.  If not, the user code
?C: probably needs to define it as:
?C:  union semun {
?C:     int val;
?C:     struct semid_ds *buf;
?C:     unsigned short *array;
?C:  }
```

```
?C:.
?C:USE_SEMCTL_SEMUN:
?C: This symbol, if defined, indicates that union semun is
?C: used for semctl IPC_STAT.
?C:.
?C:USE_SEMCTL_SEMID_DS:
?C: This symbol, if defined, indicates that struct semid_ds * is
?C: used for semctl IPC_STAT.
?C:.
?H:#$d_union_semun HAS_UNION_SEMUN /**/
?H:#$d_semctl_semun USE_SEMCTL_SEMUN /**/
?H:#$d_semctl_semid_ds USE_SEMCTL_SEMID_DS /**/
?H:.
?T:xxx also
?F:!try !tryh.h
?LINT: set d_union_semun d_semctl_semun d_semctl_semid_ds
: see whether sys/sem.h defines union semun
echo " "
$cat > try.c <<'END'
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
int main () { union semun semun; semun.buf = 0; }
END
set try
if eval $compile; then
   echo "You have union semun in <sys/sem.h>." >&4
   val="$define"
else
   echo "You do not have union
 semun in <sys/sem.h>." >&4
   val="$undef"
fi
$rm_try
set d_union_semun
eval $setvar

: see how to do semctl IPC_STAT
case "$d_sem" in
$define)
   echo " "
?X: use tryh.h instead of try.h because $rm_try cleans up try.*
   $cat > tryh.h <<END
#ifndef S_IRUSR
#   ifdef S_IREAD
# define S_IRUSR S_IREAD
# define S_IWUSR S_IWRITE
# define S_IXUSR S_IEXEC
```

```
#   else
# define S_IRUSR 0400
# define S_IWUSR 0200
# define S_IXUSR 0100
#   endif
#   define S_IRGRP (S_IRUSR>>3)
#   define S_IWGRP (S_IWUSR>>3)
#   define S_IXGRP (S_IXUSR>>3)
#   define S_IROTH (S_IRUSR>>6)
#   define S_IWOTH (S_IWUSR>>6)
#   define S_IXOTH (S_IXUSR>>6)
#endif
#ifndef S_IRWXU
#   define S_IRWXU (S_IRUSR|S_IWUSR|S_IXUSR)
#   define S_IRWXG (S_IRGRP|S_IWGRP|S_IXGRP)
#   define S_IRWXO (S_IROTH|S_IWOTH|S_IXOTH)
#endif
END
   : see whether semctl IPC_STAT can use union semun
   case "$d_semctl_semun" in
   ")
     val="$undef"
     $cat > try.c <<END
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#include
 <sys/stat.h>
#include <stdio.h>
#include <errno.h>
#include "tryh.h"
#ifndef errno
extern int errno;
#endif
#$d_union_semun HAS_UNION_SEMUN
int main() {
   union semun
#ifndef HAS_UNION_SEMUN
   {
 int val;
 struct semid_ds *buf;
 unsigned short *array;
   }
#endif
   arg;
   int sem, st;

#if defined(IPC_PRIVATE) && defined(S_IRWXU) && defined(S_IRWXG) && defined(S_IRWXO) &&
```

```
defined(IPC_CREAT)
   sem = semget(IPC_PRIVATE, 1, S_IRWXU|S_IRWXG|S_IRWXO|IPC_CREAT);
   if (sem > -1) {
 struct semid_ds argbuf;
 arg.buf = &argbuf;
# ifdef IPC_STAT
 st = semctl(sem, 0, IPC_STAT, arg);
 if (st == 0)
     printf("semun\n");
 else
# endif /* IPC_STAT */
     printf("semctl IPC_STAT failed: errno = %d\n", errno);
# ifdef IPC_RMID
 if (semctl(sem, 0, IPC_RMID, arg) != 0)
# endif /* IPC_RMID */
     printf("semctl IPC_RMID failed: errno = %d\n", errno);
   } else
#endif /* IPC_PRIVATE && ... */
 printf("semget failed: errno = %d\n", errno);
 return 0;
}
END
     set try

     if eval $compile; then
   xxx=`$run ./try`
         case "$xxx" in
         semun) val="$define" ;;
         esac
     fi
     $rm_try
     set d_semctl_semun
     eval $setvar
     ;;
   esac
   case "$d_semctl_semun" in
   $define)
       echo "You can use union semun for semctl IPC_STAT." >&4
 also='also'
       ;;
   *)  echo "You cannot use union semun for semctl IPC_STAT." >&4
 also=''
       ;;
   esac

   : see whether semctl IPC_STAT can use struct semid_ds pointer
   case "$d_semctl_semid_ds" in
   '')
```

```
    val="$undef"
    $cat > try.c <<'END'
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#include <sys/stat.h>
#include "tryh.h"
#include <stdio.h>
#include <errno.h>
#ifndef errno
extern int errno;
#endif
int main() {
  union semun
#ifndef HAS_UNION_SEMUN
  {
 int val;
 struct semid_ds *buf;
 unsigned short *array;
  }
#endif
  arg;
  struct semid_ds argbuf;
  int sem, st;

#if defined(IPC_PRIVATE) && defined(S_IRWXU) &&
 defined(S_IRWXG) &&  defined(S_IRWXO) && defined(IPC_CREAT)
  sem = semget(IPC_PRIVATE, 1, S_IRWXU|S_IRWXG|S_IRWXO|IPC_CREAT);
  if (sem > -1) {
 arg.buf = &argbuf;
# ifdef IPC_STAT
 st = semctl(sem, 0, IPC_STAT, arg);
 if (st == 0)
    printf("semid_ds\n");
 else
# endif /* IPC_STAT */
    printf("semctl IPC_STAT failed: errno = %d\n", errno);
# ifdef IPC_RMID
 if (semctl(sem, 0, IPC_RMID, arg) != 0)
# endif /* IPC_RMID */
    printf("semctl IPC_RMID failed: errno = %d\n", errno);
  } else
#endif /* IPC_PRIVATE && ... */
 printf("semget failed: errno = %d\n", errno);

  return 0;
}
END
```

```
    set try
    if eval $compile; then
        xxx=`$run ./try`
        case "$xxx" in
        semid_ds) val="$define" ;;
        esac
    fi
    $rm_try
    set d_semctl_semid_ds
    eval $setvar
    ;;
  esac
  case "$d_semctl_semid_ds" in
  $define)
      echo "You can $also use struct semid_ds* for semctl IPC_STAT." >&4
      ;;
  *)  echo "You cannot use
 struct semid_ds* for semctl IPC_STAT." >&4
      ;;
  esac
  ;;
*)  val="$undef"

  # We do not have the full sem*(2) library, so assume we can not
  # use either.

  set d_semctl_semun
  eval $setvar

  set d_semctl_semid_ds
  eval $setvar
  ;;
esac
$rm_try tryh.h
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_union_semun.U
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```
?RCS: $Id: d_semctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
?RCS:
?RCS: $Log: d_semctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_semctl:
?S: This variable conditionally defines the HAS_SEMCTL symbol, which
?S: indicates to the C program that the semctl() routine is available.
?S:.
?C:HAS_SEMCTL:
?C: This symbol, if defined, indicates that the semctl() routine is
?C: available to perform semaphore control operations.
?C:.
?H:#$d_semctl
 HAS_SEMCTL /**/
?H:.
?LINT:set d_semctl
: see if semctl exists
set semctl d_semctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semctl.U
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```
?RCS: $Id: d_scorfl.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: $Log: d_scorfl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_scorfl: cat Myread Oldconfig nametype Setvar
?MAKE: -pick add $@ %<
?S:d_scorfl:
?S: This variable conditionally defines the SCOREFULL symbol, which
?S: indicates to the C program that any scoreboard kept by the program
?S: should be kept on the basis of the user's full name as opposed to
?S: the user's login name.
```

```
?S:.
?C:SCOREFULL:
?C: This
 symbol, if defined, indicates that any scoreboard kept by the
?C: program should be kept on the basis of the user's full name as opposed
?C: to the user's login name.  If the user can change his full name he
?C: can enter multiple scores if this is defined.
?C:.
?H:#$d_scorfl SCOREFULL /**/
?H:.
?LINT:set d_scorfl
: see how they want the scoreboard kept
case "$d_scorfl" in
"$define") dflt=y ;;
*) dflt=n ;;
esac
case "$nametype" in
other) val="$undef" ;;
*)
 $cat <<'EOM'

The scoreboard can be kept with one score per login name, or one score per full
name.  If users can change their full name, or if there is more than one person
on your system with the same full name, you should keep the score by login name
(the full name is still printed).

EOM
 rp='Do you want the scoreboard kept by full name?'
 . ./myread
 case "$ans" in
 y*) val="$define" ;;
 *) val="$undef" ;;
 esac
 ;;
esac
set d_scorfl
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scorfl.U
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?RCS: $Id: d_closedir.U,v 3.0.1.3 1997/02/28 15:31:26 ram Exp $
?RCS:
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_closedir.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:31:26  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:11:18  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:21  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_closedir d_void_closedir: Inlibc i_dirent i_sysdir i_sysndir
 \
 i_systypes Compile Setvar rm_try run
?MAKE: -pick add $@ %<
?S:d_closedir:
?S: This variable conditionally defines HAS_CLOSEDIR if closedir() is
?S: available.
?S:.
?C:HAS_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine is
?C: available.
?C:.
?H:#$d_closedir HAS_CLOSEDIR  /**/
?H:.
?S:d_void_closedir:
?S: This variable conditionally defines VOID_CLOSEDIR if closedir()
?S: does not return a value.
?S:.
?C:VOID_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine
?C: does not return a value.
?C:.
?H:#$d_void_closedir VOID_CLOSEDIR  /**/
?H:.
?F:!try
?LINT:set d_closedir d_void_closedir
: see if closedir exists
set closedir d_closedir
eval $inlibc

@if VOID_CLOSEDIR || d_void_closedir
?X: The following contortions are designed so we can call closedir()
```

```
?X: and check whether it returns a value.  The contortions are designed
?X: to portably pick up the correct directory header, for those
?X: systems that support various mutually incompatible
 directory functions.
?X: This is from perl5's perl.h
case "$d_closedir" in
"$define")
 echo " "
 echo "Checking whether closedir() returns a status..." >&4
 cat > try.c <<EOM
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/
#$i_systypes I_SYS_TYPES /**/

#if defined(I_SYS_TYPES)
#include <sys/types.h>
#endif
#if defined(I_DIRENT)
#include <dirent.h>
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#include <sys/dir.h>
#endif
#endif
#endif
int main() { return closedir(opendir(".")); }
EOM
 set try
 if eval $compile_ok; then
  if $run ./try > /dev/null 2>&1 ; then
   echo "Yes, it does."
   val="$undef"
  else
   echo "No, it doesn't."
   val="$define"
  fi
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  val="$define"
 fi
 ;;
*)
 val="$undef";
 ;;
```

```
esac
set d_void_closedir
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_closedir.U
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```
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?RCS:
?MAKE:d_j0 d_j0l: Inlibc
?MAKE: -pick add $@ %<
?S:d_j0:
?S: This variable conditionally defines the HAS_J0 symbol, which
?S: indicates to the C program that the j0() routine is available.
?S:.
?S:d_j0l:
?S: This variable conditionally defines the HAS_J0L symbol, which
?S: indicates to the C program that the j0l() routine is available.
?S:.
?C:HAS_J0:
?C: This symbol, if defined, indicates to the C program that the
?C: j0() function is available for Bessel functions of the first
?C: kind of the order zero, for doubles.
?C:.
?C:HAS_J0L:
?C: This symbol, if defined, indicates to the C program that the
?C: j0l() function is available for Bessel functions of the first
?C: kind of the order zero, for long doubles.
?C:.
?H:#$d_j0 HAS_J0  /**/
?H:#$d_j0l HAS_J0L  /**/
?H:.
?LINT:set
 d_j0
?LINT:set d_j0l
: see if j0 exists
set j0 d_j0
eval $inlibc

: see if j0l exists
set j0l d_j0l
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_j0.U
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```
?RCS: $Id: d_syscall.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_syscall.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syscall: Inlibc
?MAKE: -pick add $@ %<
?S:d_syscall:
?S: This variable conditionally defines HAS_SYSCALL if syscall() is
?S: available call arbitrary system calls.
?S:.
?C:HAS_SYSCALL (SYSCALL):
?C: This symbol, if defined, indicates that the syscall routine is
?C: available to call arbitrary system calls. If undefined, that's tough.
?C:.
?H:#$d_syscall
 HAS_SYSCALL /**/
?H:.
?LINT:set d_syscall
: see if syscall exists
set syscall d_syscall
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_syscall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fchown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: d_fchown.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fchown: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchown:
?S: This variable conditionally defines the HAS_FCHOWN symbol, which
?S: indicates to the C program that the fchown() routine is available
?S: to change ownership of opened files.
?S:.
?C:HAS_FCHOWN (FCHOWN):
?C: This symbol, if defined, indicates that the fchown routine is available
?C: to
 change ownership of opened files.  If unavailable, use chown().
?C:.
?H:#$d_fchown HAS_FCHOWN  /**/
?H:.
?LINT:set d_fchown
: see if fchown exists
set fchown d_fchown
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fchown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethname.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:00  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethname d_uname d_phostname aphostname: phostname cat \
 myhostname package d_portable Loc echo n c +i_whoami +usrinc \
 Myread Guess Oldconfig Csym
```

```
?MAKE: -pick add $@ %<
?S:d_gethname:
?S: This variable conditionally
 defines the HAS_GETHOSTNAME symbol, which
?S: indicates to the C program that the gethostname() routine may be
?S: used to derive the host name.
?S:.
?S:d_uname:
?S: This variable conditionally defines the HAS_UNAME symbol, which
?S: indicates to the C program that the uname() routine may be
?S: used to derive the host name.
?S:.
?S:d_phostname:
?S: This variable conditionally defines the HAS_PHOSTNAME symbol, which
?S: contains the shell command which, when fed to popen(), may be
?S: used to derive the host name.
?S:.
?S:aphostname:
?S: This variable contains the command which can be used to compute the
?S: host name. The command is fully qualified by its absolute path, to make
?S: it safe when used by a process with super-user privileges.
?S:.
?C:HAS_GETHOSTNAME (GETHOSTNAME):
?C: This symbol, if defined, indicates that the C program may use the
?C: gethostname() routine to derive the host name.  See also HAS_UNAME
?C: and PHOSTNAME.
?C:.
?C:HAS_UNAME (UNAME):
?C: This symbol,
 if defined, indicates that the C program may use the
?C: uname() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and PHOSTNAME.
?C:.
?C:PHOSTNAME:
?C: This symbol, if defined, indicates the command to feed to the
?C: popen() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and HAS_UNAME. Note that the command uses a fully qualified path,
?C: so that it is safe even if used by a process with super-user
?C: privileges.
?C:.
?C:HAS_PHOSTNAME:
?C: This symbol, if defined, indicates that the C program may use the
?C: contents of PHOSTNAME as a command to feed to the popen() routine
?C: to derive the host name.
?C:.
?H:?%<:#$d_gethname HAS_GETHOSTNAME /**/
?H:?%<:#$d_uname HAS_UNAME  /**/
?H:?%<:#$d_phostname HAS_PHOSTNAME /**/
```

```
?H:?%<:#ifdef HAS_PHOSTNAME
?H:?%<:#define PHOSTNAME "$aphostname" /* How to get the host name */
?H:?%<:#endif
?H:.
?T:file val call
?LINT:change i_whoami
: see how we will look up host name
echo " "
call=''
@if HAS_GETHOSTNAME
if
 set gethostname val -f d_gethname; eval $csym; $val; then
 echo 'gethostname() found.' >&4
 d_gethname="$define"
 call=gethostname
fi
@end
@if HAS_UNAME
if set uname val -f d_uname; eval $csym; $val; then
 if ./xenix; then
  $cat <<'EOM'
uname() was found, but you're running xenix, and older versions of xenix
have a broken uname(). If you don't really know whether your xenix is old
enough to have a broken system call, use the default answer.

EOM
  dflt=y
  case "$d_uname" in
  "$define") dflt=n;;
  esac
  rp='Is your uname() broken?'
  . ./myread
  case "$ans" in
  n*) d_uname="$define"; call=uname;;
  esac
 else
  echo 'uname() found.' >&4
  d_uname="$define"
  case "$call" in
  '') call=uname ;;
  esac
 fi
fi
@end
case "$d_gethname" in
'') d_gethname="$undef";;
esac
case "$d_uname" in
```

```
") d_uname="$undef";;
esac
@if PHOSTNAME || MYHOSTNAME
case "$d_uname$d_gethname" in
*define*)
 dflt=n
 cat <<EOM

Every now and then someone has a $call() that lies about the hostname
but can't be fixed
 for political or economic reasons.  If you wish, I can
@if MYHOSTNAME && PHOSTNAME
pretend $call() isn't there and maybe compile in the hostname or
compute it from the '$phostname' command at run-time.
@elsif MYHOSTNAME
pretend $call() isn't there and maybe compile in the hostname.
@elsif PHOSTNAME
pretend $call() isn't there and maybe compute hostname at run-time
thanks to the '$phostname' command.
@elsif WHOAMI
get the hostname from whomai.h (provided you have one).
@else
simply ignore your host name and use someting like "noname" instead.
@end

EOM
 rp="Shall I ignore $call() from now on?"
 . ./myread
 case "$ans" in
 y*) d_uname="$undef" d_gethname="$undef"; $echo $n "Okay...$c";;
 esac;;
esac
@end
@if PHOSTNAME || aphostname
?X: Compute the full path name for the command
case "$phostname" in
") aphostname=";;
*) case "$aphostname" in
 /*) ;;
 *) set X $phostname
  shift
  file=$1
  shift
  file=`./loc $file $file $pth`
  aphostname=`echo $file $*`
  ;;
 esac
 ;;
```

```
esac
@end
@if
 PHOSTNAME && MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ") ;;
 *)
  $cat <<EOT

There is no gethostname() or uname() on this system.  You have two
possibilities at this point:

1)  You can have your host name ($myhostname) compiled into $package, which
   lets $package start up faster, but makes your binaries non-portable, or
2)  you can have $package use a

 popen("$aphostname","r")

   which will start slower but be more portable.

@ if WHOAMI
Option 1 will give you the option of using whoami.h if you have one.
@ end
If you want option 2 but with a different command, you can edit config.sh at
the end of this shell script.

EOT
  case "$d_phostname" in
  "$define") dflt=n;;
  "$undef")  dflt=y;;
  ")
   case "$d_portable" in
   "$define") dflt=n ;;
   *) dflt=y ;;
   esac;;
  esac
  rp="Do you want your host name compiled in?"
  . ./myread
  case "$ans" in
  n*) d_phostname="$define" ;;
  *) aphostname="; d_phostname="$undef";;
  esac;;
 esac
 case
```

```
 "$aphostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   dflt=y
   $cat <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
   rp="Use whoami.h to get hostname?"
   . ./myread
   case "$ans" in
   n*) i_whoami="$undef";;
   esac
   ;;
  "$undef")
   $cat <<EOM
No hostname function and no whoami.h -- hardwiring "$myhostname".
EOM
   ;;
  esac;;
@ else
  echo 'No hostname function -- hardwiring "'$myhostname'".' >&4;;
@ end
 esac;;
esac
@elsif PHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   $cat <<EOM

No hostname function--we'll use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

EOM
   ;;
```

```
  *) echo "There will be no way for $package to get your hostname." >&4;;
  esac;;
@ else
  echo "There will be no way
 for $package to get your hostname." >&4;;
@ end
 *)
 echo "I'll use 'popen("""$aphostname"", "r")"" to get your hostname." >&4
  ;;
 esac;;
esac
@elsif MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
@ if WHOAMI
 case "$i_whoami" in
 "$define")
  dflt=y
  $cat <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
  rp="Use whoami.h to get hostname?"
  . ./myread
  case "$ans" in
  n*) i_whoami="$undef";;
  esac
  ;;
 "$undef")
  echo 'No whoami.h--hardwiring "'$myhostname'".' >&4;;
 esac;;
@ else
 echo 'Hardwiring "'$myhostname'".' >&4;;
@ end
esac
@end
case "$d_phostname" in
") d_phostname="$undef";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethname.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Protochk.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a ./protochk script that is used internally
?X: by Configure to check if this system will accept a particular
?X: prototype.
?X:
?X: To use it, say something like:
?X: hdrs="$define sys/types.h
?X:  $i_systime sys/time.h
?X:  $i_sysselct sys/select.h
?X:  $d_socket sys/socket.h"
?X: $xxx='fd_set *'
?X: try='extern int select _((int, $xxx, $xxx, $xxx, struct timeval *'));'
?X: if ./protochk "$try" $hdrs; then
?X:  echo "Your system accepts $xxx for the arguments to select."
?X: fi
?X:  (Of course select is harder, since the first arg can be int,
?X: size_t, or unsigned long, and the last arg may or may not have a
?X: 'const' before the 'struct timeval' :-(.  Also SunOS
 4.1.3 doesn't
?X: provide a select prototype so the compiler accepts anything :-).
?X:
?X: The C compiler on QNX warns about invalid pointer types, but
?X: still exits with a 0 exit status, so it's not much help here.
?X: (It does correctly detect incorrect non-pointer arguments).
?X: Still, since QNX is a POSIX-ish system, just make your first
?X: a POSIX-ish one, and QNX will probably accept it.
?X:
?X: For determining argument types, your compiler must support
?X: prototypes, and the header files must use them.  Determining
?X: return types, however, is easier.  Just give an ridiculous
?X: return type, something like
?X: ./protochk 'extern int atof _((void));' $i_stdlib stdlib.h
?X: that should surely fail if atof() is defined in <stdlib.h>
?X:
?X: There is also an 'escape' hatch built in.  If you have a pair
?X: of args   'literal 'stuff' then 'stuff' gets included literally
?X: into the test program.  This could be useful for doing something
?X: like
?X: hdrs="$define stdio.h
?X:  $define
```

```
 sys/types.h"
?X: ./protochk 'extern int fsetpos(FILE *, Fpos_t);' $args \
?X:   'literal' '#define Fpos_t long long'
?X: but you have to be really careful about the spaces in "literal".
?X:
?X:  Andy Dougherty   Feb. 1998
?MAKE:Protochk: cat rm_try startsh eunicefix +cc +optimize +ccflags \
 i_pthread usethreads
?MAKE: -pick add $@ %<
?F:./protochk
?X: Comfort metalint.  All these are actually used in the protochk script.
?T:foo status pthread_h_done
?LINT: change cc optimize ccflags define rm_try
?LINT: extern pthread_h_first
?LINT: change pthread_h_first
?LINT: change usethreads
?LINT: change i_pthread
: define a function to check prototypes
$cat > protochk <<EOSH
$startsh
cc="$cc"
optimize="$optimize"
ccflags="$ccflags"
define="$define"
rm_try="$rm_try"
usethreads=$usethreads
i_pthread=$i_pthread
pthread_h_first=$pthread_h_first
EOSH

$cat >> protochk <<'EOSH'

$rm_try
foo="$1"
shift
while test $# -ge 2; do
 case "$1" in
  $define) echo "#include <$2>" >> try.c ;;
  literal)
 echo "$2" >> try.c ;;
 esac
   # Extra magic for the benefit of systems that need pthread.h
   # to be included early to correctly detect threadsafe functions.
   # Such functions must guarantee themselves, though, that the usethreads
   # and i_pthread have been defined, before calling protochk.
   if test "$usethreads" = "$define" -a "$i_pthread" = "$define" -a "$pthread_h_first" = "$define" -a
"$pthread_h_done" = ""; then
 echo "#include <pthread.h>" >> try.c
```

```
 pthread_h_done=yes
   fi
   shift 2
done
cat >> try.c <<'EOCP'
#define _(args) args
EOCP
echo "$foo" >> try.c
?X: Just so we have something to compile.
echo 'int no_real_function_has_this_name _((void)) { return 0; }' >> try.c
$cc $optimize $ccflags -c try.c > /dev/null 2>&1
status=$?
$rm_try
exit $status
EOSH
chmod +x protochk
$eunicefix protochk
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Protochk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: installstyle.U,v 1.2 1999/07/13 14:56:06 doughera Exp $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: installstyle.U,v $
?RCS: Revision 1.2  1999/07/13 14:56:06  doughera
?RCS: Fix dependencies.  Add more comments.
?RCS:
?RCS: Revision 1.1  1999/07/12 17:30:41  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:installstyle: prefix Myread
?MAKE: -pick add $@ %<
?X: Myread dependence is for dflt.
?S:installstyle:
?S: This variable describes the "style" of the perl installation.
?S: This is intended to be useful for tools that need to
?S: manipulate entire perl
```

```
 distributions.  Perl itself doesn't use
?S: this to find its libraries -- the library directories are
?S: stored directly in Config.pm.  Currently, there are only two
?S: styles:  "lib" and "lib/perl5".  The default library locations
?S: (e.g. privlib, sitelib) are either $prefix/lib or
?S: $prefix/lib/perl5.  The former is useful if $prefix is a
?S: directory dedicated to perl (e.g. /opt/perl), while the latter
?S: is useful if $prefix is shared by many packages, e.g. if
?S: $prefix=/usr/local.
?S:
?S: Unfortunately, while this "style" variable is used to set
?S: defaults for all three directory hierarchies (core, vendor, and
?S: site), there is no guarantee that the same style is actually
?S: appropriate for all those directories.  For example, $prefix
?S: might be /opt/perl, but $siteprefix might be /usr/local.
?S: (Perhaps, in retrospect, the "lib" style should never have been
?S: supported, but it did seem like a nice idea at the time.)
?S:
?S: The situation is even less clear for
 tools such as MakeMaker
?S: that can be used to install additional modules into
?S: non-standard places.  For example, if a user intends to install
?S: a module into a private directory (perhaps by setting PREFIX on
?S: the Makefile.PL command line), then there is no reason to
?S: assume that the Configure-time $installstyle setting will be
?S: relevant for that PREFIX.
?S:
?S: This may later be extended to include other information, so
?S: be careful with pattern-matching on the results.
?S:
?S: For compatibility with perl5.005 and earlier, the default
?S: setting is based on whether or not $prefix contains the string
?S: "perl".
?S:.
: determine installation style
: For now, try to deduce it from prefix unless it is already set.
: Reproduce behavior of 5.005 and earlier, maybe drop that in 5.7.
case "$installstyle" in
") case "$prefix" in
  *perl*) dflt='lib';;
  *) dflt='lib/perl5' ;;
 esac
 ;;
*) dflt="$installstyle" ;;
esac
: Probably not worth prompting for this since we prompt
 for all
: the directories individually, and the prompt would be too long and
```

```
: confusing anyway.
installstyle=$dflt
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/installstyle.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: scandir.C,v 3.0.1.1 1994/01/24 13:58:45 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: scandir.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:45  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/scandir.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_nice.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_nice.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:48  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_nice: Inlibc
?MAKE: -pick add $@ %<
?S:d_nice:
?S: This variable conditionally defines the HAS_NICE symbol, which
```

```
?S: indicates to the C program that the nice() routine is available.
?S:.
?C:HAS_NICE :
?C: This symbol, if defined, indicates that the nice routine is
?C: available.
?C:.
?H:#$d_nice
 HAS_NICE  /**/
?H:.
?LINT:set d_nice
: see if nice exists
set nice d_nice
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_nice.U
No license file was found, but licenses were detected in source scan.

```
# $Id: errnolist.sh,v 3.0.1.1 1994/01/24 14:00:00 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Harlan Stenn <harlan@mumps.pfcs.com>
#
# $Log: errnolist.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:00  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:36  ram
# Baseline for dist 3.0 netwide release.
#

case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif
 test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
```

```
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
case "$errnolistc" in
") ;;
*)
 echo "Making $errnolistc ..."
 awk -f errnolist.a < /usr/include/sys/errno.h > $errnolistc
 echo "It would be a good idea to make sure that $errnolistc is correct."
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2019 Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_towlower: Inlibc
?MAKE: -pick add $@ %<
?S:d_towlower:
?S: This variable conditionally defines the HAS_TOWLOWER symbol, which
?S: indicates to the C program that the towlower() routine is available.
?S:.
?C:HAS_TOWLOWER:
?C: This symbol, if defined, indicates that the towlower () routine is
?C: available to do case conversion.
?C:.
?H:#$d_towlower HAS_TOWLOWER  /**/
?H:.
?LINT:set d_towlower
: see if towlower exists
set towlower d_towlower
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_towlower.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mansrc.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mansrc.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  16:12:03  ram
?RCS: patch61: don't ask for AFS when they choose to not install pages
?RCS:
?RCS: Revision 3.0.1.8  1995/09/25  09:16:58  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:15:31  ram
?RCS: patch51: was mistakenly duplicating /usr/local/man/man1 (ADO)
?RCS: patch51: added /opt/man/man1 to the lookpath (ADO)
?RCS:
?RCS: Revision
 3.0.1.6  1995/01/30  14:39:34  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:32:25  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:30:38  ram
?RCS: patch32: now uses installation prefix for default setting
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  15:11:10  ram
?RCS: patch23: added lint hint, assuring that nroff is used
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:14:39  ram
?RCS: patch16: now uses _nroff in case user asked for portability
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:09:31  ram
?RCS: patch10: allows for L1 man page extension (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mansrc mansrcexp manext installmansrc: afs cat nroff Loc Oldconfig \
 sysman spackage test Getfile Prefixit prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:mansrc:
?S: This variable
```

```
 contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:mansrcexp:
?S: This variable is the same as the mansrc variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installmansrc:
?S: This variable is really the same as mansrcexp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: mansrcexp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:manext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See mansrc.
?S:.
?T:lookpath
: determine where manual pages go
set mansrc mansrc none
eval $prefixit
$cat <<EOM

$spackage has manual
 pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$mansrc" in
 ") mansrc="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$mansrc" in
")
 lookpath="$prefixexp/share/man/man1 $prefixexp/man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath /usr/local/man/man1 /opt/man/man1 /usr/man/manl"
 lookpath="$lookpath /usr/share/man/man1 /usr/local/share/man/man1"
 lookpath="$lookpath /usr/man/local/man1 /usr/man/l_man/man1"
 lookpath="$lookpath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 lookpath="$lookpath /usr/man/man.L"
 mansrc=`./loc . $prefixexp/man/man1 $lookpath`
 if $test -d "$mansrc"; then
```

```
  dflt="$mansrc"
 else
  dflt="$sysman"
 fi
 set dflt
 eval $prefixup
 ;;
' ') dflt=none;;
*)  dflt="$mansrc"
 ;;
esac
echo " "
fn=dn~
rp='Where do the manual pages (source) go?'
. ./getfile
if test
 "X$mansrcexp" != "X$ansexp"; then
 installmansrc="
fi
mansrc="$ans"
mansrcexp="$ansexp"
case "$mansrc" in
") mansrc=' '
 installmansrc=";;
esac
if $afs && $test "$mansrc"; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installmansrc" in
 ") dflt=`echo $mansrcexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installmansrc";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installmansrc="$ans"
else
 installmansrc="$mansrcexp"
fi

case "$mansrc" in
' ') manext='0';;
*l) manext=l;;
```

```
*n) manext=n;;
*o) manext=l;;
*p) manext=n;;
*C) manext=C;;
*L) manext=L;;
*L1) manext=L1;;
*) manext=1;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mansrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?MAKE:usesocks: Myread Oldconfig Setvar spackage package
?MAKE: -pick add $@ %<
?Y:TOP
?S:usesocks:
?S: This variable conditionally defines the USE_SOCKS symbol,
?S: and indicates that Perl should be built to use SOCKS.
?S:.
?C:USE_SOCKS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use socks.
?C:.
?H:?%<:#$usesocks USE_SOCKS  /**/
?H:.
?D:usesocks="
?LINT:set usesocks
: check for requested SOCKS support
case "$usesocks" in
$define|true|[yY]*) dflt='y';;
*)
 dflt='n';;
esac
cat <<EOM
```

```
$spackage can be built to use the SOCKS proxy protocol library.
If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp="Build $package for SOCKS?"
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usesocks
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usesocks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: archlib.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: archlib.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:18  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/02/15  14:14:14  ram
?RCS: patch51: architecture name is now
 computed by a separate unit
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:32:22  ram
?RCS: patch49: archname is now systematically recomputed
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:36  ram
?RCS: patch36: created by ADO
?RCS:
```

```
?MAKE:d_archlib archlib archlibexp installarchlib: \
 cat Getfile Setprefixvar Loc Oldconfig archname spackage  \
 privlib sed test Prefixit Prefixup binexp
?MAKE: -pick add $@ %<
?Y:TOP
?S:d_archlib:
?S: This variable conditionally defines ARCHLIB to hold the pathname
?S: of architecture-dependent library files for $package.  If
?S: $archlib is the same as $privlib, then this is set to undef.
?S:.
?D:archlib=''
?S:archlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put architecture-dependent public library files for $package.
?S: It is most often a local directory such as /usr/local/lib.
?S: Programs using this variable must be prepared to deal
?S: with
 filename expansion.
?S:.
?D:archlibexp=''
?S:archlibexp:
?S: This variable is the same as the archlib variable, but is
?S: filename expanded at configuration time, for convenient use.
?S:.
?D:installarchlib=''
?S:installarchlib:
?S: This variable is really the same as archlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:ARCHLIB:
?C: This variable, if defined, holds the name of the directory in
?C: which the user wants to put architecture-dependent public
?C: library files for $package.  It is most often a local directory
?C: such as /usr/local/lib.  Programs using this variable must be
?C: prepared to deal with filename expansion.  If ARCHLIB is the
?C: same as PRIVLIB, it is not defined, since presumably the
?C: program already searches PRIVLIB.
?C:.
?C:ARCHLIB_EXP:
?C: This symbol contains the ~name expanded version of ARCHLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion
 at run-time.
?C:.
?H:#$d_archlib ARCHLIB "$archlib"  /**/
?H:#$d_archlib ARCHLIB_EXP "$archlibexp"  /**/
?H:.
?T: tdflt
```

```
?LINT:change prefixvar
?LINT:set archlib
?LINT:set archlibexp
?LINT:set installarchlib
: determine where public architecture dependent libraries go
set archlib archlib
eval $prefixit
: privlib default is /usr/local/lib/$package/$version
: archlib default is /usr/local/lib/$package/$version/$archname
: privlib may have an optional trailing /share.
tdflt=`echo $privlib | $sed 's,/share$,,'`
tdflt=$tdflt/$archname
case "$archlib" in
") dflt=$tdflt
 ;;
*) dflt="$archlib"
   ;;
esac
$cat <<EOM

$spackage contains architecture-dependent library files.  If you are
sharing libraries in a heterogeneous environment, you might store
these files in a separate location.  Otherwise, you can just include
them with the rest of the public library files.

EOM
?X: Force dependency on bin.U
fn=$binexp
fn=d+~
rp='Where do you want to put the public architecture-dependent libraries?'
.
 ./getfile
prefixvar=archlib
. ./setprefixvar
if $test X"$archlib" = X"$privlib"; then
 d_archlib="$undef"
else
 d_archlib="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/archlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ebcdic.U,v 3.0.1.3 1994/05/06 15:11:49 doughera Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:ebcdic: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:ebcdic:
?S: This variable conditionally defines EBCDIC if this
?S: system uses EBCDIC encoding.
?S:.
?C:EBCDIC:
?C: This symbol, if defined, indicates that this system uses
?C: EBCDIC encoding.
?C:.
?H:#$ebcdic EBCDIC  /**/
?H:.
?F:!try
?LINT:set ebcdic
: Determine if this is an EBCDIC system
echo " "
echo "Determining whether or not we are on an EBCDIC system..." >&4
$cat >try.c <<'EOM'
int main()
{
 if ('M'==0xd4) return 0;
 return 1;
}
EOM

val=$undef
set try
if eval
 $compile_ok; then
 if $run ./try; then
  echo "You seem to speak EBCDIC." >&4
  val="$define"
 else
  echo "Nope, no EBCDIC, probably ASCII or some ISO Latin. Or UTF-8." >&4
 fi
else
 echo "I'm unable to compile the test program." >&4
 echo "I'll assume ASCII or some ISO Latin. Or UTF8." >&4
fi
$rm_try
set ebcdic
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/ebcdic/ebcdic.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigsetmk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigsetmk.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sigsetmk: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_sigsetmk:
?S: This variable conditionally defines the HAS_SIGSETMASK symbol, which
?S: indicates to the C program that the sigsetmask() routine is available
?S: to set current signal mask.
?S:.
?C:HAS_SIGSETMASK (SIGSETMASK):
?C: This symbol, if defined, indicates that the sigsetmask()
 routine is
?C: available to set current signal mask. Otherwise, you should probably
?C: emulate this by using signal(), but fear race conditions...
?C:.
?H:#$d_sigsetmk HAS_SIGSETMASK  /**/
?H:.
?LINT:set d_sigsetmk
: see if sigsetmask exists
echo " "
if set sigsetmask val -f d_sigsetmk; eval $csym; $val; then
 echo 'sigsetmask() found.' >&4
 val="$define"
else
 echo "sigsetmask() not found -- We'll use signal()." >&4
 val="$undef"
fi
set d_sigsetmk
eval $setvar
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigsetmk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: doublesize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:doublesize: cat rm_try Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:doublesize:
?S: This variable contains the value of the DOUBLESIZE symbol, which
?S: indicates to the C program how many bytes there are in a double.
?S:.
?C:DOUBLESIZE:
?C: This symbol contains the
 size of a double, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define DOUBLESIZE $doublesize  /**/
?H:.
?F:!try
: check for length of double
echo " "
case "$doublesize" in
")
 echo "Checking to see how big your double precision numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(double));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
```

```
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$doublesize"
 ;;
esac
rp="What is the size of a double precision number (in bytes)?"
. ./myread
doublesize="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/doublesize.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_telldirproto: Hasproto i_systypes i_dirent
?MAKE: -pick add $@ %<
?S:d_telldirproto:
?S: This variable conditionally defines the HAS_TELLDIR_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the telldir() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_TELLDIR_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the telldir() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess
 is
?C:  extern long telldir(DIR*);
?C:.
?H:#$d_telldirproto HAS_TELLDIR_PROTO /**/
?H:.
?LINT:set d_telldirproto
: see if prototype for telldir is available
echo " "
```

```
set d_telldirproto telldir $i_systypes sys/types.h $i_dirent dirent.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_telldirproto.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_frexpl: Inlibc
?MAKE: -pick add $@ %<
?S:d_frexpl:
?S: This variable conditionally defines the HAS_FREXPL symbol, which
?S: indicates to the C program that the frexpl() routine is available.
?S:.
?C:HAS_FREXPL:
?C: This symbol, if defined, indicates that the frexpl routine is
?C: available to break a long double floating-point number into
?C: a normalized fraction and an integral power of 2.
?C:.
?H:#$d_frexpl HAS_FREXPL  /**/
?H:.
?LINT:set d_frexpl
: see if frexpl exists
set frexpl d_frexpl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_frexpl.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usesocks: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usesocks:
?S: This variable conditionally defines the USE_SOCKS symbol,
```

```
?S: and indicates that Perl should be built to use SOCKS.
?S:.
?C:USE_SOCKS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use socks.
?C:.
?H:?%<:#ifndef USE_SOCKS
?H:?%<:#$usesocks USE_SOCKS  /**/
?H:?%<:#endif
?H:.
?LINT:set usesocks
?INIT:: set usesocks on the Configure command line to enable socks.
: Check is we will use socks
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
case "$usesocks" in
$define|true|[yY]*) dflt='y';;
*) dflt='n';;
esac
cat <<EOM

Perl can be built to
 use the SOCKS proxy protocol library.  To do so,
Configure must be run with -Dusesocks.  If you use SOCKS you also need
to use the PerlIO abstraction layer, this will be implicitly selected.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Build Perl for SOCKS?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usesocks
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usesocks.U
No license file was found, but licenses were detected in source scan.

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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sbrkproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sbrkproto:
?S: This variable conditionally defines the HAS_SBRK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the sbrk() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SBRK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the sbrk() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern void* sbrk(int);
?C:  extern
 void* sbrk(size_t);
?C:.
?H:#$d_sbrkproto HAS_SBRK_PROTO /**/
?H:.
?LINT:set d_sbrkproto
: see if prototype for sbrk is available
echo " "
set d_sbrkproto sbrk $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sbrkproto.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_netinettcp: Inhdr
?MAKE: -pick add $@ %<
?S:i_netinettcp:
?S: This variable conditionally defines the I_NETINET_TCP symbol,
?S: and indicates whether a C program should include <netinet/tcp.h>.
?S:.
?C:I_NETINET_TCP:
```

```
?C: This symbol, if defined, indicates to the C program that it should
?C: include <netinet/tcp.h>.
?C:.
?H:#$i_netinettcp   I_NETINET_TCP               /**/
?H:.
?LINT:set i_netinettcp
: see if netinet/tcp.h is available
set netinet/tcp.h i_netinettcp
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_netinettcp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pthread_y.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_pthread_yield sched_yield d_sched_yield: \
 Compile Setvar cat rm_try usethreads
?MAKE: -pick add $@ %<
?S:d_pthread_yield:
?S: This variable conditionally defines the HAS_PTHREAD_YIELD
?S: symbol if the pthread_yield routine is available to yield
?S: the execution of the current thread.
?S:.
?S:sched_yield:
?S: This variable defines the way to yield the execution
?S: of the current thread.
?S:.
?S:d_sched_yield:
?S: This variable conditionally defines the HAS_SCHED_YIELD
?S: symbol if the sched_yield routine is available to yield
?S: the execution of the current thread.
?S:.
?C:HAS_PTHREAD_YIELD:
?C: This symbol, if defined, indicates that the pthread_yield
?C: routine is available
 to yield the execution of the current
?C: thread.  sched_yield is preferable to pthread_yield.
?C:.
?C:SCHED_YIELD:
?C: This symbol defines the way to yield the execution of
?C: the current thread.  Known ways are sched_yield,
?C: pthread_yield, and pthread_yield with NULL.
```

```
?C:.
?C:HAS_SCHED_YIELD:
?C: This symbol, if defined, indicates that the sched_yield
?C: routine is available to yield the execution of the current
?C: thread.  sched_yield is preferable to pthread_yield.
?C:.
?H:#$d_pthread_yield HAS_PTHREAD_YIELD /**/
?H:#define SCHED_YIELD $sched_yield /**/
?H:#$d_sched_yield HAS_SCHED_YIELD /**/
?H:.
?LINT: set d_pthread_yield d_sched_yield
: see whether the various POSIXish _yields exist
$cat >try.c <<EOP
#include <pthread.h>
#include <stdio.h>
int main() {
#ifdef SCHED_YIELD
 sched_yield();
#else
#ifdef PTHREAD_YIELD
 pthread_yield();
#else
#ifdef PTHREAD_YIELD_NULL
 pthread_yield(NULL);
#endif
#endif
#endif
}
EOP
: see if sched_yield exists
set try -DSCHED_YIELD
if eval $compile;
 then
   val="$define"
   sched_yield='sched_yield()'
else
   val="$undef"
fi
case "$usethreads" in
$define)
 case "$val" in
 $define) echo 'sched_yield() found.' >&4 ;;
 *)  echo 'sched_yield() NOT found.' >&4 ;;
 esac
esac
set d_sched_yield
eval $setvar
```

```
: see if pthread_yield exists
set try -DPTHREAD_YIELD
if eval $compile; then
   val="$define"
   case "$sched_yield" in
   ") sched_yield='pthread_yield()' ;;
   esac
else
   set try -DPTHREAD_YIELD_NULL
   if eval $compile; then
 val="$define"
 case "$sched_yield" in
 ") sched_yield='pthread_yield(NULL)' ;;
 esac
   else
 val="$undef"
   fi
fi
case "$usethreads" in
$define)
 case "$val" in
 $define) echo 'pthread_yield() found.' >&4 ;;
 *)  echo 'pthread_yield() NOT found.' >&4 ;;
 esac
 ;;
esac
set d_pthread_yield
eval $setvar
case "$sched_yield" in
") sched_yield=undef ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthread_y.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usedefaultstrict: Setvar Myread
?MAKE: -pick add $@ %<
?LINT:set usedefaultstrict
?S:usedefaultstrict:
?S: This setting provides a mechanism for perl developers to enable
?S: strict by default. These defaults do not apply when perl is run
?S: via -e or -E.
?S:.
```

```
?C:USE_STRICT_BY_DEFAULT:
?C: This symbol, if defined, enables additional defaults.
?C: At this time it only enables implicit strict by default.
?C:.
?H:#$usedefaultstrict USE_STRICT_BY_DEFAULT /* use strict by default */
?H:.
: Ask about strict by default.
case "$usedefaultstrict" in
  $define|true|[Yy]*)
    dflt="y"
    ;;
  *)
    dflt="n"
    ;;
  esac

cat <<EOM

EXPERIMENTAL: Perl can now be built with strict on by default when not
invoked with -e or -E. This is a diagnostic tool
 for development.

Unless you are familiar with this feature, you should probably answer 'no'.

EOM

rp='Would you like to build perl with strict enabled by default?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)   val="$undef"  ;;
esac
set usedefaultstrict
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usedefaultstrict.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: MailList.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: MailList.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:01:49  ram
?RCS: patch16: created
?RCS:
?RCS:
?X:
?X: This unit offers the user the option of subscribing to the mailing
?X: list. To force inclusion of this unit, you must add it's name to the
?X: dependancies on the MAKE line in your private copy of End.U.
?X: The address of the mailing list server must be set via a "list_request=..."
?X:
 entry in the .package file. This is usually done by running packinit and
?X: answering the proper questions.
?X:
?MAKE:MailList: cat mailer package Myread cf_name cf_email
?MAKE: -pick wipe $@ %<
?T:list_request list_sub list_unsub list_name
?X:
?X: The cf_name dependency is used through list_sub when the mailing list
?X: manager happens to be listserv, whereas cf_email is used whith majordomo
?X: or when the mailing list request address is scanned by a human. Since
?X: they do not appear within the unit itself, we need a lint hint.
?X:
?LINT:use cf_name cf_email
: offer to join the mailing list
list_request='<$list_request>'
list_sub="<$list_sub>"
list_unsub="<$list_unsub>"
list_name="<$list_name>"
$cat <<EOM

There is a mailing list for discussion about $package and related issues.
This is the preferred place to ask questions about the program and discuss
modifications and additions with the author and other users.  If you are able
to send mail to the Internet, you
 are encouraged to subscribe.  You need only
ever subscribe once, and you can unsubscribe automatically at any time in the
future.  If you have already subscribed and you wish to unsubscribe now, you
may do so by answering "unsubscribe".  Answer "subscribe" to subscribe to the
list.

EOM
rp="Subscribe to or unsubscribe from the $list_name mailing list?"
dflt=neither
. ./myread
```

```
case "$ans" in
[sS]*) $cat <<EOM

You will be sent a message from the list server to let you know when your
subscription has been successful and telling you how to submit articles and
how to unsubscribe again when necessary. You may also unsubscribe by running
this script again and asking it to do so for you.

EOM
 echo "Sending mail to subscribe you to the $list_name list..." >&4
 $mailer $list_request <<EOM >/dev/null 2>&1
Precedence: junk
To: $list_request

$list_sub
EOM
 ;;
[uU]*) echo "Sending mail to unsubscribe you from the $list_name list..." >&4
 $mailer $list_request <<EOM >/dev/null 2>&1
Precedence: junk
To:
 $list_request

$list_unsub
EOM
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/MailList.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: stdchar.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:stdchar: contains Findhdr cppstdin cppminus rm
?MAKE: -pick add $@ %<
```

```
?S:stdchar:
?S: This variable conditionally defines STDCHAR to be the type of char
?S: used in stdio.h.  It has the values "unsigned char" or "char".
?S:.
?C:STDCHAR:
?C: This symbol is defined to be the type of char used in stdio.h.
?C: It has the values "unsigned char" or "char".
?C:.
?H:#define STDCHAR $stdchar /**/
?H:.
?F:!stdioh
:
 see what type of char stdio uses.
echo " "
?X: untangle the #include nest
echo '#include <stdio.h>' | $cppstdin $cppminus > stdioh
if $contains 'unsigned.*char.*_ptr;' stdioh >/dev/null 2>&1 ; then
 echo "Your stdio uses unsigned chars." >&4
 stdchar="unsigned char"
else
 echo "Your stdio uses signed chars." >&4
 stdchar="char"
fi
$rm -f stdioh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/stdchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: scriptdir.U,v 3.1 1999/07/09 18:20:13 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: scriptdir.U,v $
?RCS: Revision 3.1  1999/07/09 18:20:13  doughera
?RCS: Updated for installprefix
?RCS:
?RCS: Revision 3.0.1.3  1995/09/25  09:17:15  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:46:13  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:32:04  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:scriptdir scriptdirexp installscript: cat test Getfile Loc \
 Oldconfig +bin Prefixit Setprefixvar prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?D:scriptdir=''
?S:scriptdir:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly scripts for the package in question.  It is either
?S: the same directory as for binaries, or a special one that can be
?S: mounted across different architectures, like /usr/share. Programs
?S: must be prepared to deal with ~name expansion.
?S:.
?D:scriptdirexp=''
?S:scriptdirexp:
?S: This variable is the same as scriptdir, but is filename expanded
?S: at configuration time, for programs not wanting to bother with it.
?S:.
?S:installscript:
?S: This variable is usually the same as scriptdirexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable
 within your makefiles for portability.
?S:.
?C:SCRIPTDIR:
?C: This symbol holds the name of the directory in which the user wants
?C: to put publicly executable scripts for the package in question.  It
?C: is often a directory that is mounted across diverse architectures.
?C: Programs must be prepared to deal with ~name expansion.
?C:.
?C:SCRIPTDIR_EXP:
?C: This is the same as SCRIPTDIR, but is filename expanded at
?C: configuration time, for use in programs not prepared to do
?C: ~name substitutions at run-time.
?C:.
?H:#define SCRIPTDIR "$scriptdir" /**/
?H:#define SCRIPTDIR_EXP "$scriptdirexp" /**/
?H:.
?T:installscriptdir
?LINT:change prefixvar
?LINT:set scriptdir
```

```
?LINT:set scriptdirexp
: determine where public executable scripts go
set scriptdir scriptdir
eval $prefixit
case "$scriptdir" in
")
 dflt="$bin"
 : guess some guesses
 $test -d /usr/share/scripts && dflt=/usr/share/scripts
 $test -d /usr/share/bin     && dflt=/usr/share/bin
 $test -d /usr/local/script  && dflt=/usr/local/script
 $test
 -d /usr/local/scripts && dflt=/usr/local/scripts
 $test -d $prefixexp/script  && dflt=$prefixexp/script
 set dflt
 eval $prefixup
 ;;
*)  dflt="$scriptdir"
 ;;
esac
$cat <<EOM

Some installations have a separate directory just for executable scripts so
that they can mount it across multiple architectures but keep the scripts in
one spot.  You might, for example, have a subdirectory of /usr/share for this.
Or you might just lump your scripts in with all your other executables.

EOM
fn=d~
rp='Where do you keep publicly executable scripts?'
. ./getfile
if $test "X$ansexp" != "X$scriptdirexp"; then
 installscript=''
fi
installscriptdir=''
prefixvar=scriptdir
. ./setprefixvar
: A little fix up for an irregularly named variable.
installscript="$installscriptdir"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/scriptdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_asctime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_asctime_r asctime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_asctime_r:
?S: This variable conditionally defines the HAS_ASCTIME_R symbol,
?S: which indicates to the C program that the asctime_r()
?S: routine is available.
?S:.
?S:asctime_r_proto:
?S: This variable encodes the prototype of asctime_r.
?S: It is zero if d_asctime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_asctime_r
?S: is defined.
?S:.
?C:HAS_ASCTIME_R:
?C: This symbol, if defined, indicates that the asctime_r routine
?C: is available to asctime
 re-entrantly.
?C:.
?C:ASCTIME_R_PROTO:
?C: This symbol encodes the prototype of asctime_r.
?C: It is zero if d_asctime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_asctime_r
?C: is defined.
?C:.
?H:#$d_asctime_r HAS_ASCTIME_R /**/
?H:#define ASCTIME_R_PROTO $asctime_r_proto /**/
?H:.
?T:try hdrs d_asctime_r_proto
: see if asctime_r exists
set asctime_r d_asctime_r
eval $inlibc
case "$d_asctime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_asctime_r_proto:$usethreads" in
 ":define") d_asctime_r_proto=define
  set d_asctime_r_proto asctime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_asctime_r_proto" in
 define)
 case "$asctime_r_proto" in
```

```
"|0) try='char* asctime_r(const struct tm*, char*);'
./protochk "$extern_C $try" $hdrs && asctime_r_proto=B_SB ;;
esac
case "$asctime_r_proto" in
"|0) try='char* asctime_r(const struct tm*, char*, int);'
./protochk "$extern_C $try" $hdrs
&& asctime_r_proto=B_SBI ;;
esac
case "$asctime_r_proto" in
"|0) try='int asctime_r(const struct tm*, char*);'
./protochk "$extern_C $try" $hdrs && asctime_r_proto=I_SB ;;
esac
case "$asctime_r_proto" in
"|0) try='int asctime_r(const struct tm*, char*, int);'
./protochk "$extern_C $try" $hdrs && asctime_r_proto=I_SBI ;;
esac
case "$asctime_r_proto" in
"|0) d_asctime_r=undef
 asctime_r_proto=0
 echo "Disabling asctime_r, cannot determine prototype." >&4 ;;
* ) case "$asctime_r_proto" in
 REENTRANT_PROTO*) ;;
 *) asctime_r_proto="REENTRANT_PROTO_$asctime_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "asctime_r has no prototype, not using it." >&4 ;;
 esac
 d_asctime_r=undef
 asctime_r_proto=0
 ;;
esac
;;
*) asctime_r_proto=0
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_asctime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethbynm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethbynm.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethbyname: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbyname (d_gethbynm d_gethhstby):
?S: This variable conditionally defines the HAS_GETHOSTBYNAME symbol, which
?S: indicates to the C program that the gethostbyname() routine is available
?S: to look up host names in some data base or other.
?S:.
?C:HAS_GETHOSTBYNAME (GETHOSTBYNAME):
?C: This
 symbol, if defined, indicates that the gethostbyname() routine is
?C: available to look up host names in some data base or other.
?C:.
?H:#$d_gethbyname HAS_GETHOSTBYNAME  /**/
?H:.
?LINT:set d_gethbyname
: see if gethostbyname exists
set gethostbyname d_gethbyname
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethbynm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_flexfnam.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flexfnam: cat rm test Setvar
?MAKE: -pick add $@ %<
```

```
?S:d_flexfnam:
?S: This variable conditionally defines the FLEXFILENAMES symbol, which
?S: indicates that the system supports filenames longer than 14 characters.
?S:.
?C:FLEXFILENAMES:
?C: This symbol, if defined, indicates that the system supports filenames
?C: longer than 14 characters.
?C:.
?H:#$d_flexfnam FLEXFILENAMES  /**/
?H:.
?T:first
 second
?LINT:set d_flexfnam
: see if we can have long filenames
echo " "
?X:
?X: We have to test in both /tmp and . because of NFS (remote server may allow
?X: long filenames while the local filesystem cannot support them). If at least
?X: one of those file systems cannot support long filenames, then we assume the
?X: whole system can't.
?X:
rmlist="$rmlist /tmp/cf$$"
$test -d /tmp/cf$$ || mkdir /tmp/cf$$
first=123456789abcdef
second=/tmp/cf$$/$first
$rm -f $first $second
if (echo hi >$first) 2>/dev/null; then
 if $test -f 123456789abcde; then
  echo 'You cannot have filenames longer than 14 characters.  Sigh.' >&4
  val="$undef"
 else
  if (echo hi >$second) 2>/dev/null; then
   if $test -f /tmp/cf$$/123456789abcde; then
    $cat <<'EOM'
That's peculiar... You can have filenames longer than 14 characters, but only
on some of the filesystems.  Maybe you are using NFS.  Anyway, to avoid problems
I shall consider your system cannot support long filenames at all.
EOM
    val="$undef"
   else
    echo
 'You can have filenames longer than 14 characters.' >&4
    val="$define"
   fi
  else
   $cat <<'EOM'
How confusing! Some of your filesystems are sane enough to allow filenames
longer than 14 characters but some others like /tmp can't even think about them.
```

```
So, for now on, I shall assume your kernel does not allow them at all.
EOM
   val="$undef"
  fi
 fi
else
 $cat <<'EOM'
You can't have filenames longer than 14 chars.  You can't even think about them!
EOM
 val="$undef"
fi
set d_flexfnam
eval $setvar
$rm -rf /tmp/cf$$ 123456789abcde*

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_flexfnam.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_setsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setsent:
?S: This variable conditionally defines HAS_SETSERVENT if setservent() is
?S: available.
?S:.
?C:HAS_SETSERVENT:
?C: This symbol, if defined, indicates that the setservent() routine is
?C: available.
?C:.
?H:#$d_setsent HAS_SETSERVENT  /**/
?H:.
?LINT:set d_setsent
: see if setservent exists
set
```

```
 setservent d_setsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sethostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_sethostent_r sethostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_sethostent_r:
?S: This variable conditionally defines the HAS_SETHOSTENT_R symbol,
?S: which indicates to the C program that the sethostent_r()
?S: routine is available.
?S:.
?S:sethostent_r_proto:
?S: This variable encodes the prototype of sethostent_r.
?S: It is zero if d_sethostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_sethostent_r
?S: is defined.
?S:.
?C:HAS_SETHOSTENT_R:
?C: This symbol, if defined, indicates that the sethostent_r routine
?C: is
 available to sethostent re-entrantly.
?C:.
?C:SETHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of sethostent_r.
?C: It is zero if d_sethostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_sethostent_r
?C: is defined.
?C:.
?H:#$d_sethostent_r HAS_SETHOSTENT_R /**/
?H:#define SETHOSTENT_R_PROTO $sethostent_r_proto /**/
?H:.
?T:try hdrs d_sethostent_r_proto
: see if sethostent_r exists
set sethostent_r d_sethostent_r
eval $inlibc
case "$d_sethostent_r" in
```

```
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_sethostent_r_proto:$usethreads" in
 ":define") d_sethostent_r_proto=define
  set d_sethostent_r_proto sethostent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_sethostent_r_proto" in
 define)
 case "$sethostent_r_proto" in
 "|0) try='int sethostent_r(int, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && sethostent_r_proto=I_ID ;;
 esac
 case "$sethostent_r_proto" in
 "|0) try='void
 sethostent_r(int, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && sethostent_r_proto=V_ID ;;
 esac
 case "$sethostent_r_proto" in
 "|0) d_sethostent_r=undef
  sethostent_r_proto=0
  echo "Disabling sethostent_r, cannot determine prototype." >&4 ;;
 * ) case "$sethostent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) sethostent_r_proto="REENTRANT_PROTO_$sethostent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "sethostent_r has no prototype, not using it." >&4 ;;
  esac
  d_sethostent_r=undef
  sethostent_r_proto=0
  ;;
 esac
 ;;
*) sethostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_sethostent_r.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_dirent.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:01  ram
?RCS: patch36: failed scanning for 'd_namlen' with missing <dirent.h> (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:01:25  ram
?RCS: patch30: added direntrytype for hints, merely for NeXT (ADO)
?RCS: patch30: now checks for both struct dirent and direct (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:22:37  ram
?RCS: patch27: new variable direntrytype for proper type setting (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24
 14:11:15  ram
?RCS: patch16: added new Direntry_t pseudo-type for directory entries
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks whether there is a dirent system or not
?X:
?MAKE:i_dirent d_dirnamlen direntrytype: test contains Setvar \
 Myread Findhdr cppstdin cppflags cppminus rm_try
?MAKE: -pick add $@ %<
?S:i_dirent:
?S: This variable conditionally defines I_DIRENT, which indicates
?S: to the C program that it should include <dirent.h>.
?S:.
?S:d_dirnamlen:
?S: This variable conditionally defines DIRNAMLEN, which indicates
?S: to the C program that the length of directory entry names is
?S: provided by a d_namelen field.
?S:.
?S:direntrytype:
?S: This symbol is set to 'struct direct' or 'struct dirent' depending on
?S: whether dirent is available or not. You should use this pseudo type to
?S: portably declare your directory entries.
?S:.
?C:I_DIRENT:
?C: This symbol, if defined, indicates to the C program
```

```
 that it should
?C: include <dirent.h>. Using this symbol also triggers the definition
?C: of the Direntry_t define which ends up being 'struct dirent' or
?C: 'struct direct' depending on the availability of <dirent.h>.
?C:.
?C:DIRNAMLEN:
?C: This symbol, if defined, indicates to the C program that the length
?C: of directory entry names is provided by a d_namlen field.  Otherwise
?C: you need to do strlen() on the d_name field.
?C:.
?C:Direntry_t:
?C: This symbol is set to 'struct direct' or 'struct dirent' depending on
?C: whether dirent is available or not. You should use this pseudo type to
?C: portably declare your directory entries.
?C:.
?H:#$i_dirent I_DIRENT  /**/
?H:#$d_dirnamlen DIRNAMLEN /**/
?H:?%<:@if I_DIRENT && Direntry_t
?H:?%<:#define Direntry_t $direntrytype
?H:?%<:@end
?H:.
?T:xinc guess1 guess2
?LINT:set i_dirent d_dirnamlen
: see if this is a dirent system
echo " "
if xinc=`./findhdr dirent.h`; $test "$xinc"; then
 val="$define"
 echo "<dirent.h> found." >&4
else
 val="$undef"
 if
 xinc=`./findhdr sys/dir.h`; $test "$xinc"; then
  echo "<sys/dir.h> found." >&4
  echo " "
 else
  xinc=`./findhdr sys/ndir.h`
 fi
 echo "<dirent.h> NOT found." >&4
fi
set i_dirent
eval $setvar

?X: Use struct dirent or struct direct?   If we're using dirent.h,
?X: it's probably struct dirent, but apparently not always.
?X: Assume $xinc still contains the name of the header file we're using.
@if direntrytype || Direntry_t
: Look for type of directory structure.
echo " "
```

```
$cppstdin $cppflags $cppminus < "$xinc" > try.c

case "$direntrytype" in
"|' ')
 case "$i_dirent" in
 $define) guess1='struct dirent' ;;
 *) guess1='struct direct'  ;;
 esac
 ;;
*) guess1="$direntrytype"
 ;;
esac

case "$guess1" in
'struct dirent') guess2='struct direct' ;;
*) guess2='struct dirent' ;;
esac

if $contains "$guess1" try.c >/dev/null 2>&1; then
 direntrytype="$guess1"
 echo "Your directory entries are $direntrytype." >&4
elif $contains "$guess2" try.c >/dev/null 2>&1; then
 direntrytype="$guess2"
 echo
 "Your directory entries seem to be $direntrytype." >&4
else
 echo "I don't recognize your system's directory entries." >&4
 rp="What type is used for directory entries on this system?"
 dflt="$guess1"
 . ./myread
 direntrytype="$ans"
fi
$rm_try

@end

@if d_dirnamlen || DIRNAMLEN
: see if the directory entry stores field length
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c
if $contains 'd_namlen' try.c >/dev/null 2>&1; then
 echo "Good, your directory entry keeps length information in d_namlen." >&4
 val="$define"
else
 echo "Your directory entry does not know about the d_namlen field." >&4
 val="$undef"
fi
set d_dirnamlen
```

```
eval $setvar
$rm_try

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dirent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: fpostype.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:20:52  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:59  ram
?RCS: patch30: created
?RCS:
?MAKE:fpostype: Myread Typedef
?MAKE: -pick add $@ %<
?S:fpostype:
?S: This variable defines Fpos_t to be something like fpost_t, long,
?S: uint, or whatever type is used to declare file positions in libc.
?S:.
?C:Fpos_t:
?C: This symbol holds the type used to declare file positions
 in libc.
?C: It can be fpos_t, long, uint, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Fpos_t $fpostype  /* File position type */
?H:.
: see what type file positions are declared as in the library
set fpos_t fpostype long stdio.h sys/types.h
eval $typedef
echo " "
dflt="$fpostype"
rp="What is the type for file position used by fsetpos()?"
. ./myread
fpostype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/fpostype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_byacc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_byacc.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:31:14  ram
?RCS: patch61: created
?RCS:
?MAKE:d_byacc: byacc Setvar
?MAKE: -pick add $@ %<
?S:d_byacc:
?S: This variable indicates whether byacc is available.
?S: If the user has specified 'portability', then Makefile.SH
?S: sees $byacc='byacc' whether or not the user actually has
?S: byacc.  This variable allows us to determine in a makefile
?S: if we really
 have byacc.
?S:.
?LINT:set d_byacc
: Check if we really have byacc
case "$byacc" in
"|'byacc') val="$undef" ;;
*) val="$define" ;;
esac
set d_byacc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_byacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_stdstdio.U,v 3.0.1.3 1997/02/28 15:46:32 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Tye McQueen <tye@metronet.com>
?RCS:
?RCS: $Log: d_stdstdio.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:46:32  ram
?RCS: patch61: merged with perl5's unit
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:06:54  ram
?RCS: patch56: typo fix on ?C: line for FILE_bufsiz
?RCS: patch56: fixed unbalanced parenthesis (ADO)
?RCS: patch56: check whether FILE_cnt and FILE_ptr can be assigned to (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:12:11  ram
?RCS:
 patch54: complete rewrite by Tye McQueen to fit modern systems
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stdstdio d_stdiobase stdio_ptr stdio_cnt \
 d_stdio_ptr_lval_sets_cnt d_stdio_ptr_lval_nochange_cnt stdio_base \
 stdio_bufsiz d_stdio_cnt_lval d_stdio_ptr_lval stdio_filbuf: cat \
 Compile contains rm_try d_gnulibc gnulibc_version i_stdlib \
 Setvar Findhdr Oldconfig run to
?MAKE: -pick weed $@ %<
?S:d_stdstdio:
?S: This variable conditionally defines USE_STDIO_PTR if this system
?S: has a FILE structure declaring usable _ptr and _cnt fields (or
?S: equivalent) in stdio.h.
?S:.
?S:stdio_ptr:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _ptr field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_ptr(fp).
?S:.
?S:d_stdio_ptr_lval:
?S: This variable conditionally defines STDIO_PTR_LVALUE if the
?S: FILE_ptr macro can be used as an lvalue.
?S:.
?S:stdio_cnt:
?S: This
 variable defines how, given a FILE pointer, fp, to access the
?S: _cnt field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_cnt(fp).
```

```
?S:.
?S:d_stdio_cnt_lval:
?S: This variable conditionally defines STDIO_CNT_LVALUE if the
?S: FILE_cnt macro can be used as an lvalue.
?S:.
?S:d_stdio_ptr_lval_sets_cnt:
?S: This symbol is defined if using the FILE_ptr macro as an lvalue
?S: to increase the pointer by n has the side effect of decreasing the
?S: value of File_cnt(fp) by n.
?S:.
?S:d_stdio_ptr_lval_nochange_cnt:
?S: This symbol is defined if using the FILE_ptr macro as an lvalue
?S: to increase the pointer by n leaves File_cnt(fp) unchanged.
?S:.
?S:stdio_filbuf:
?S: This variable defines how, given a FILE pointer, fp, to tell
?S: stdio to refill its internal buffers (?).  This will
?S: be used to define the macro FILE_filbuf(fp).
?S:.
?S:d_stdiobase:
?S: This variable conditionally defines USE_STDIO_BASE if this system
?S: has
 a FILE structure declaring a usable _base field (or equivalent)
?S: in stdio.h.
?S:.
?S:stdio_base:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _base field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_base(fp).
?S:.
?S:stdio_bufsiz:
?S: This variable defines how, given a FILE pointer, fp, to determine
?S: the number of bytes store in the I/O buffer pointer to by the
?S: _base field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_bufsiz(fp).
?S:.
?C:USE_STDIO_PTR ~ d_stdstdio (USE_STD_STDIO STDSTDIO):
?C: This symbol is defined if the _ptr and _cnt fields (or similar)
?C: of the stdio FILE structure can be used to access the stdio buffer
?C: for a file handle.  If this is defined, then the FILE_ptr(fp)
?C: and FILE_cnt(fp) macros will also be defined and should be used
?C: to access these fields.
?C:.
?C:FILE_ptr:
?C: This macro is used to access the _ptr
 field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
```

```
?C:.
?C:STDIO_PTR_LVALUE:
?C: This symbol is defined if the FILE_ptr macro can be used as an
?C: lvalue.
?C:.
?C:FILE_cnt:
?C: This macro is used to access the _cnt field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_CNT_LVALUE:
?C: This symbol is defined if the FILE_cnt macro can be used as an
?C: lvalue.
?C:.
?C:STDIO_PTR_LVAL_SETS_CNT:
?C: This symbol is defined if using the FILE_ptr macro as an lvalue
?C: to increase the pointer by n has the side effect of decreasing the
?C: value of File_cnt(fp) by n.
?C:.
?C:STDIO_PTR_LVAL_NOCHANGE_CNT:
?C: This symbol is defined if using the FILE_ptr macro as an lvalue
?C: to increase the pointer by n leaves File_cnt(fp) unchanged.
?C:.
?C:FILE_filbuf:
?C: This macro is used to access the internal stdio
 _filbuf function
?C: (or equivalent), if STDIO_CNT_LVALUE and STDIO_PTR_LVALUE
?C: are defined.  It is typically either _filbuf or __filbuf.
?C: This macro will only be defined if both STDIO_CNT_LVALUE and
?C: STDIO_PTR_LVALUE are defined.
?C:.
?H:?d_stdstdio:#$d_stdstdio USE_STDIO_PTR /**/
?H:?d_stdstdio:#ifdef USE_STDIO_PTR
?H:#define FILE_ptr(fp) $stdio_ptr
?H:#$d_stdio_ptr_lval STDIO_PTR_LVALUE  /**/
?H:#define FILE_cnt(fp) $stdio_cnt
?H:#$d_stdio_cnt_lval STDIO_CNT_LVALUE  /**/
?H:#$d_stdio_ptr_lval_sets_cnt STDIO_PTR_LVAL_SETS_CNT /**/
?H:#$d_stdio_ptr_lval_nochange_cnt STDIO_PTR_LVAL_NOCHANGE_CNT /**/
?H:?FILE_filbuf:#if defined(STDIO_PTR_LVALUE) && defined(STDIO_CNT_LVALUE)
?H:?FILE_filbuf:#define FILE_filbuf(fp) $stdio_filbuf  /**/
?H:?FILE_filbuf:#endif
?H:?d_stdstdio:#endif
?H:.
?W:d_stdstdio:FILE_ptr FILE_cnt FILE_filbuf
?C:USE_STDIO_BASE ~ d_stdiobase:
?C: This symbol is defined if the _base field (or similar) of the
?C: stdio FILE structure can be used to access the
```

```
 stdio buffer for
?C: a file handle.  If this is defined, then the FILE_base(fp) macro
?C: will also be defined and should be used to access this field.
?C: Also, the FILE_bufsiz(fp) macro will be defined and should be used
?C: to determine the number of bytes in the buffer.  USE_STDIO_BASE
?C: will never be defined unless USE_STDIO_PTR is.
?C:.
?C:FILE_base:
?C: This macro is used to access the _base field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_BASE is defined.
?C:.
?C:FILE_bufsiz:
?C: This macro is used to determine the number of bytes in the I/O
?C: buffer pointed to by _base field (or equivalent) of the FILE
?C: structure pointed to its argument. This macro will always be defined
?C: if USE_STDIO_BASE is defined.
?C:.
?H:?d_stdiobase:#$d_stdiobase USE_STDIO_BASE /**/
?H:?d_stdiobase:#ifdef USE_STDIO_BASE
?H:#define FILE_base(fp) $stdio_base
?H:#define FILE_bufsiz(fp) $stdio_bufsiz
?H:?d_stdiobase:#endif
?H:.
?W:d_stdiobase:FILE_base
 FILE_bufsiz
?T:ptr_lval cnt_lval filbuf xxx
?F:!try
?LINT:set d_stdstdio d_stdiobase
: see if _ptr and _cnt from stdio act std
echo " "

if $contains '_lbfsize' `./findhdr stdio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from BSD.)"
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_p)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 ") stdio_cnt='((fp)->_r)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_ub._base ? (fp)->_ub._base : (fp)->_bf._base)';;
```

```
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_ub._base ? (fp)->_ub._size : (fp)->_bf._size)';;
 esac
elif $contains '_IO_fpos_t' `./findhdr stdio.h` `./findhdr libio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from Linux.)"
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_IO_read_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt"
 in
 ") stdio_cnt='((fp)->_IO_read_end - (fp)->_IO_read_ptr)'
  cnt_lval=$undef
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_IO_read_base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_IO_read_end - (fp)->_IO_read_base)';;
 esac
else
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 ") stdio_cnt='((fp)->_cnt)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_cnt + (fp)->_ptr - (fp)->_base)';;
 esac
fi

: test whether _ptr and _cnt really work
echo "Checking how std your stdio is..." >&4
```

```
$cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if
 (
  18 <= FILE_cnt(fp) &&
  strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
 )
  exit(0);
 exit(1);
}
EOP
val="$undef"
set try
if eval $compile && $to try.c; then
 if $run ./try; then
  echo "Your stdio acts pretty std."
  val="$define"
 else
  echo "Your stdio isn't very std."
 fi
else
 echo "Your stdio doesn't appear very std."
fi
$rm_try

# glibc 2.2.90 and above apparently change stdio streams so Perl's
# direct buffer manipulation no longer works.  The Configure tests
# should be changed to correctly detect this, but until then,
# the following check should at least let perl compile and run.
# (This quick fix should be updated before 5.8.1.)
# To be defensive, reject all unknown versions, and all versions  > 2.2.9.
# A. Dougherty, June 3, 2002.
case "$d_gnulibc" in
$define)
 case "$gnulibc_version" in
 2.[01]*)  ;;
 2.2) ;;
 2.2.[0-9]) ;;
 *)  echo "But I will not snoop inside glibc $gnulibc_version stdio buffers."
```

```
  val="$undef"
  ;;
 esac
 ;;
esac
set d_stdstdio
eval
 $setvar

@if STDIO_PTR_LVALUE || d_stdio_ptr_lval
: Can _ptr be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$ptr_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_ptr_lval
eval $setvar
@end

@if STDIO_CNT_LVALUE || d_stdio_cnt_lval
: Can _cnt be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$cnt_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_cnt_lval
eval $setvar
@end

@if FILE_filbuf
: How to access the stdio _filbuf or __filbuf function.
: If this fails, check how the getc macro in stdio.h works.
case "${d_stdio_ptr_lval}${d_stdio_cnt_lval}" in
${define}${define})
 : Try $hint value, if any, then _filbuf, __filbuf, _fill, then punt.
 : _fill is for os/2.
 xxx='notok'
 for filbuf in $stdio_filbuf '_filbuf(fp)' '__filbuf(fp) ' '_fill(fp)' ; do
  $cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define
```

```
 FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#define FILE_filbuf(fp) $filbuf
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 c = getc(fp);
 c = FILE_filbuf(fp);  /* Just looking for linker errors.*/
 exit(0);
}
EOP
  set try
  if eval $compile && $to try.c && $run ./try; then
   echo "Your stdio appears to use $filbuf"
   stdio_filbuf="$filbuf"
   xxx='ok'
   break
  else
   echo "Hmm.  $filbuf doesn't seem to work."
  fi
  $rm_try
 done
 case "$xxx" in
 notok) echo "I can't figure out how to access _filbuf"
   echo "I'll just have to work around it."
   d_stdio_ptr_lval="$undef"
   d_stdio_cnt_lval="$undef"
   ;;
 esac
 ;;
esac
@end

@if STDIO_PTR_LVALUE
: test whether setting _ptr sets _cnt as a side effect
d_stdio_ptr_lval_sets_cnt="$undef"
d_stdio_ptr_lval_nochange_cnt="$undef"
case "$d_stdio_ptr_lval$d_stdstdio" in
$define$define)
 echo "Checking to see what happens if we set the stdio ptr..." >&4
$cat >try.c <<EOP
#include <stdio.h>
/* Can
 we scream? */
/* Eat dust sed :-) */
/* In the buffer space, no one can hear you scream. */
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
```

```
#include <stdlib.h>
#endif
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#include <sys/types.h>
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 char *ptr;
 size_t cnt;
 if (!fp) {
     puts("Fail even to read");
     exit(1);
 }
 c = getc(fp); /* Read away the first # */
 if (c == EOF) {
     puts("Fail even to read");
     exit(1);
 }
 if (!(
  18 <= FILE_cnt(fp) &&
  strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
 )) {
  puts("Fail even to read");
  exit (1);
 }
 ptr = (char*) FILE_ptr(fp);
 cnt = (size_t)FILE_cnt(fp);

 FILE_ptr(fp) += 42;

 if ((char*)FILE_ptr(fp) != (ptr + 42)) {
  printf("Fail ptr check %p != %p", FILE_ptr(fp), (ptr + 42));
  exit (1);
 }
 if (FILE_cnt(fp) <= 20) {
  printf ("Fail (<20 chars to test)");
  exit (1);
 }
 if (strncmp(FILE_ptr(fp), "Eat dust sed :-) */\n", 20) != 0) {
  puts("Fail compare");
  exit
 (1);
 }
 if (cnt == FILE_cnt(fp)) {
  puts("Pass_unchanged");
  exit (0);
 }
```

```
 if (FILE_cnt(fp) == (cnt - 42)) {
  puts("Pass_changed");
  exit (0);
 }
 printf("Fail count was %d now %d\n", cnt, FILE_cnt(fp));
 return 1;

}
EOP
 set try
 if eval $compile && $to try.c; then
  case `$run ./try` in
  Pass_changed)
   echo "Increasing ptr in your stdio decreases cnt by the same amount.  Good." >&4
   d_stdio_ptr_lval_sets_cnt="$define" ;;
  Pass_unchanged)
   echo "Increasing ptr in your stdio leaves cnt unchanged.  Good." >&4
   d_stdio_ptr_lval_nochange_cnt="$define" ;;
  Fail*)
   echo "Increasing ptr in your stdio didn't do exactly what I expected.  We'll not be doing that then." >&4 ;;
  *)
   echo "It appears attempting to set ptr in your stdio is a bad plan." >&4 ;;
 esac
 else
  echo "It seems we can't set ptr in your stdio.  Nevermind." >&4
 fi
 $rm_try
 ;;
esac
@end

@if d_stdiobase || USE_STDIO_BASE || FILE_base || FILE_bufsiz
: see if _base is also standard
val="$undef"
case
 "$d_stdstdio" in
$define)
 $cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_base(fp) $stdio_base
#define FILE_bufsiz(fp) $stdio_bufsiz
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
```

```
 if (
  19 <= FILE_bufsiz(fp) &&
  strncmp(FILE_base(fp), "#include <stdio.h>\n", 19) == 0
 )
  exit(0);
 exit(1);
}
EOP
 set try
 if eval $compile && $to try.c; then
  if $run ./try; then
   echo "And its _base field acts std."
   val="$define"
  else
   echo "But its _base field isn't std."
  fi
 else
  echo "However, it seems to be lacking the _base field."
 fi
 $rm_try
 ;;
esac
set d_stdiobase
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_stdstdio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lgamma: Inlibc
?MAKE: -pick add $@ %<
?S:d_lgamma:
?S: This variable conditionally defines the HAS_LGAMMA symbol, which
?S: indicates to the C program that the lgamma() routine is available
?S: for the log gamma function.  See also d_tgamma and d_lgamma_r.
?S:.
?C:HAS_LGAMMA:
?C: This symbol, if defined, indicates that the lgamma routine is
?C: available to do the log gamma function.  See also HAS_TGAMMA and
?C: HAS_LGAMMA_R.
?C:.
?H:#$d_lgamma HAS_LGAMMA  /**/
?H:.
```

```
?LINT:set d_lgamma
: see if lgamma exists
set lgamma d_lgamma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lgamma.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setpgid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:49  ram
?RCS: patch61: reworded symbol comments
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:40  ram
?RCS: patch16: created
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpgid:
?S: This variable conditionally defines the HAS_SETPGID symbol if the
?S: setpgid(pid, gpid) function is
 available to set process group ID.
?S:.
?C:HAS_SETPGID:
?C: This symbol, if defined, indicates that the setpgid(pid, gpid)
?C: routine is available to set process group ID.
?C:.
?H:#$d_setpgid HAS_SETPGID /**/
?H:.
?LINT:set d_setpgid
: see if setpgid exists
set setpgid d_setpgid
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgrp2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgrp2.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpgrp2:
?S: This variable conditionally defines the HAS_GETPGRP2 symbol, which
?S: indicates to the C program that the getpgrp2() (as in DG/UX) routine
?S: is available to get the current process group.
?S:.
?C:HAS_GETPGRP2 (GETPGRP2):
?C: This symbol, if defined, indicates that the
 getpgrp2() (as in DG/UX)
?C: routine is available to get the current process group.
?C:.
?H:#$d_getpgrp2 HAS_GETPGRP2  /**/
?H:.
?LINT:set d_getpgrp2
: see if getpgrp2 exists
set getpgrp2 d_getpgrp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgrp2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_socklen_t: Inhdr cat rm_try Setvar Compile d_socket sizetype
?MAKE: -pick add $@ %<
?S:d_socklen_t:
?S: This symbol will be defined if the C compiler supports socklen_t.
?S:.
?C:HAS_SOCKLEN_T:
?C: This symbol will defined if the C compiler supports socklen_t.
?C: Usually the <sys/socket.h> needs to be included.
?C:.
?H:#$d_socklen_t     HAS_SOCKLEN_T              /**/
?H:.
?LINT:set d_socklen_t
: check for socklen_t
echo " "
echo "Checking to see if you have socklen_t..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#$d_socket
 HAS_SOCKET
#ifdef HAS_SOCKET
#include <sys/socket.h>
#endif
int main() { socklen_t x = 16; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have socklen_t."
else
 val="$undef"
 echo "You do not have socklen_t."
 case "$sizetype" in
 size_t) echo "(You do have size_t, that might work. Some people are happy with just an int.)" ;;
 esac
fi
$rm_try
set d_socklen_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_socklen_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: locdist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: locdist.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  15:09:20  ram
?RCS: patch23: added support for multi-state regions (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:locdist orgdist citydist statedist multistatedist cntrydist contdist: \
 test newslibexp cat Myread Oldconfig
?MAKE: -pick add $@ %<
?S:locdist:
?S: This variable contains the eventual value of the LOCDIST symbol,
?S: which
 is the local organization's distribution name for news.
?S:.
?S:orgdist:
?S: This variable contains the eventual value of the ORGDIST symbol,
?S: which is the organization's distribution name for news.
?S:.
?S:citydist:
?S: This variable contains the eventual value of the CITYDIST symbol,
?S: which is the city's distribution name for news.
?S:.
?S:statedist:
?S: This variable contains the eventual value of the STATEDIST symbol,
?S: which is the state's or province's distribution name for news.
?S:.
?S:multistatedist:
?S: This variable contains the eventual value of the MULTISTATEDIST symbol,
?S: which is the news distribution code for multi-state region.
?S:.
?S:cntrydist:
?S: This variable contains the eventual value of the CNTRYDIST symbol,
?S: which is the country's distribution name for news.
?S:.
?S:contdist:
?S: This variable contains the eventual value of the CONTDIST symbol,
?S: which is the continent's distribution name for news.
?S:.
?C:LOCDIST:
?C: This symbol contains the
```

```
 distribution name for the news system that
?C: restricts article distribution to the local organization.
?C:.
?C:ORGDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the organization.
?C:.
?C:CITYDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the city.
?C:.
?C:STATEDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the state or province.
?C:.
?C:MULTISTATEDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to a multi-state region.
?C:.
?C:CNTRYDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the country.
?C:.
?C:CONTDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the continent.
?C:.
?H:#define LOCDIST
 "$locdist"  /**/
?H:#define ORGDIST "$orgdist"  /**/
?H:#define CITYDIST "$citydist"  /**/
?H:#define MULTISTATEDIST "$multistatedist" /**/
?H:#define STATEDIST "$statedist"  /**/
?H:#define CNTRYDIST "$cntrydist"  /**/
?H:#define CONTDIST "$contdist"  /**/
?H:.
: get the local distributions
$cat <<'EOH'

Distribution groups are the things you use on the Distribution line to limit
where an article will go to.  You are likely to be a member of several
distribution groups, such as organization, city, state, province, country,
continent, etc.  For example, Los Angeles has the distribution code "la",
New Jersey has the code "nj", and Europe has the code "eunet".

The categories you will be asked are:

local organization (Could be just one machine or a cluster or an office)
```

```
organization  att, dec, kgb, ...
city   la, ny, mosc, ...
state/province  ca, nj, bc, ...
multi-state region pnw, ne, ...
country   usa, can, rok, whatever
continent  na (North America), asia, etc.

EOH
if $test
 -f $newslibexp/distributions; then
 case "$silent" in
 true) ;;
 *) dflt='Hit return to continue'
  rp=''
  . ./myread
  ;;
 esac
 echo "Here is your distributions file:" >&4
 echo " " >&4
 $cat >&4 $newslibexp/distributions
 echo " " >&4
fi
echo "Use 'none' for any distributions you don't have."
echo " "
case "$locdist" in
'') dflt="none";;
*)  dflt="$locdist";;
esac
rp="What is the distribution code for your local organization?"
. ./myread
locdist="$ans"
case "$orgdist" in
'') dflt="none";;
*)  dflt="$orgdist";;
esac
rp="What is the distribution code for your organization?"
. ./myread
orgdist="$ans"
case "$citydist" in
'') dflt="none";;
*)  dflt="$citydist";;
esac
rp="What is the distribution code for your city?"
. ./myread
citydist="$ans"
case "$statedist" in
'') dflt="none";;
*)  dflt="$statedist";;
```

```
esac
rp="What is the distribution code for your state/province?"
. ./myread
statedist="$ans"
case "$multistatedist" in
") dflt="none";;
*) dflt="$multistatedist";;
esac
rp="What is the
 distribution code for your multi-state region?"
. ./myread
multistatedist="$ans"
case "$cntrydist" in
") dflt="none";;
*)  dflt="$cntrydist";;
esac
rp="What is the distribution code for your country?"
. ./myread
cntrydist="$ans"
case "$contdist" in
") dflt="none";;
*)  dflt="$contdist";;
esac
rp="What is the distribution code for your continent?"
. ./myread
contdist="$ans"
$cat <<'EOM'

If you have any other distribution groups you will need to edit Pnews
and newsetup to add them.
EOM

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/locdist.U
No license file was found, but licenses were detected in source scan.

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?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ilogbl: Inlibc
?MAKE: -pick add $@ %<
?S:d_ilogbl:
?S: This variable conditionally defines the HAS_ILOGBL symbol, which
?S: indicates to the C program that the ilogbl() routine is available
```

```
?S: for extracting the exponent of long double x as a signed integer.
?S: If scalbnl is also present we can emulate frexpl.
?S:.
?C:HAS_ILOGBL:
?C: This symbol, if defined, indicates that the ilogbl routine is
?C: available.  If scalbnl is also present we can emulate frexpl.
?C:.
?H:#$d_ilogbl HAS_ILOGBL  /**/
?H:.
?LINT:set d_ilogbl
: see if ilogbl exists
set ilogbl d_ilogbl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ilogbl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usedtrace.U,v $
?RCS:
?RCS: Copyright (c) 2008 H.Merijn Brand
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usedtrace.U,v $
?RCS:
?MAKE:usedtrace dtrace: Myread Oldconfig Setvar Getfile test
?MAKE: -pick add $@ %<
?Y:TOP
?S:usedtrace:
?S: This variable indicates whether we are compiling with dtrace
?S: support. See also dtrace.
?S:.
?S:dtrace:
?S: This variable holds the location of the dtrace executable.
?S:.
?C:USE_DTRACE:
?C: This symbol, if defined, indicates that Perl should
?C: be built with support for DTrace.
?C:.
?H:#$usedtrace USE_DTRACE  /**/
?H:.
?T:dflt_dtrace
?LINT:set usedtrace
?LINT:set dtrace
: DTrace support
dflt_dtrace='/usr/sbin/dtrace'
```

```
$test -x /usr/bin/dtrace && dflt_dtrace='/usr/bin/dtrace'

cat <<EOM

Perl can be built to support DTrace on platforms that support
 it.
DTrace is a diagnosis and performance analysis tool from Sun.

If this doesn't make any sense to you, just accept the default.
EOM

while $test 1 ; do
 case "$usedtrace" in
 $define|true|[yY]*)
  dflt='y'
  ;;
 $undef|false|[nN]*)
  dflt='n'
  dflt_dtrace=""
  ;;
 ?*)
  dflt='y'
  dflt_dtrace=$usedtrace
  ;;
 *)
  dflt='n'
  ;;
 esac

 rp='Support DTrace if available?'
 . ./myread
 case "$ans" in
 y|Y) val="$define" ;;
 *)      val="$undef" ;;
 esac
 set usedtrace
 eval $setvar

 test "X$usedtrace" != "X$define" && break

 echo " "
 rp='Where is the dtrace executable?'
 dflt=$dflt_dtrace
 . ./getfile
 val="$ans"
 set dtrace
 eval $setvar
```

```
 if $test -f $dtrace
 then
  if $dtrace -h -s ../perldtrace.d \
   -o perldtrace.tmp >/dev/null 2>&1 \
   && rm -f perldtrace.tmp
  then
   echo " "
   echo "Good: your $dtrace knows about the -h flag."
  else
   cat >&2 <<EOM

*** $me:  Fatal Error:  $dtrace doesn't support -h flag
***
*** Your installed dtrace doesn't support the -h switch to
 compile a D
*** program into a C header. Can't continue.

EOM
   exit 1
  fi
  break;
 fi

 case "$fastread" in
 yes)
  cat >&2 <<EOM

*** $me:  Fatal Error:  $dtrace not found.
*** Can't continue.

EOM
  exit 1
  ;;
 *)
  echo "*** $dtrace was not found."
  echo " "
  ;;
 esac
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usedtrace.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sitehtml1dir sitehtml1direxp installsitehtml1dir: Getfile \
 Setprefixvar prefix siteprefix html1dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitehtml1dir=''
?S:sitehtml1dir:
?S: This variable contains the name of the directory in which site-specific
?S: html source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After perl
 has been installed, users may install their own local
?S: html pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitehtml1direxp=''
?S:sitehtml1direxp:
?S: This variable is the same as the sitehtml1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsitehtml1dir=''
?S:installsitehtml1dir:
?S: This variable is really the same as sitehtml1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: html1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsitehtml1dir
?LINT:set sitehtml1dir
?LINT:set sitehtml1direxp
: determine where add-on html pages go
: There is no standard location, so try to copy the previously-selected
: directory structure for the core html pages.
case "$sitehtml1dir" in
'')
   dflt=`echo "$html1dir" | $sed "s#^$prefix#$siteprefix#"` ;;
*)     dflt=$sitehtml1dir ;;
esac
case "$dflt" in
```

```
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname where the site-specific html pages should be installed?'
. ./getfile
prefixvar=sitehtml1dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitehtml1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Tr.U,v 3.0.1.2 1994/10/29 18:00:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Tr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  18:00:54  ram
?RCS: patch43: forgot to quote $@ to protect against "evil" characters
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:58:35  ram
?RCS: patch36: created
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a character translation. It catches translations to uppercase or
?X: to lowercase, and then invokes the real tr to perform the job.
?X:
?X: This unit is necessary
 on HP machines (HP strikes again!) with non-ascii
?X: ROMAN8-charset, where normal letters are not arranged in a row, so a-z
?X: covers not the whole alphabet but lots of special chars. This was reported
?X: by Andreas Sahlbach <a.sahlbach@tu-bs.de>.
?X:
?X: Units performing a tr '[A-Z]' '[a-z]' or the other way round should include
?X: us in their dependency and use ./tr instead.
?X:
?MAKE:Tr: startsh tr eunicefix
?MAKE: -pick add $@ %<
?F:./tr
?T:up low
: see whether [:lower:] and [:upper:] are supported character classes
```

```
echo " "
case "`echo AbyZ | $tr '[:lower:]' '[:upper:]' 2>/dev/null`"-"`echo AbyZ | $tr '[:upper:]' '[:lower:]' 2>/dev/null`" in
ABYZ-abyz)
 echo "Good, your tr supports [:lower:] and [:upper:] to convert case." >&4
 up='[:upper:]'
 low='[:lower:]'
 ;;
*) # There is a discontinuity in EBCDIC between 'R' and 'S'
 # (0xd9 and 0xe2), therefore that is a nice testing point.
 if test "X$up" = X -o "X$low" = X; then
    case "`echo RS | $tr '[R-S]' '[r-s]' 2>/dev/null`"
 in
    rs) up='[A-Z]'
  low='[a-z]'
  ;;
    esac
 fi
 if test "X$up" = X -o "X$low" = X; then
    case "`echo RS | $tr R-S r-s 2>/dev/null`" in
    rs) up='A-Z'
  low='a-z'
  ;;
    esac
 fi
 if test "X$up" = X -o "X$low" = X; then
    case "`echo RS | od -x 2>/dev/null`" in
    *D9E2*|*d9e2*)
  echo "Hey, this might be EBCDIC." >&4
  if test "X$up" = X -o "X$low" = X; then
     case "`echo RS | $tr '[A-IJ-RS-Z]' '[a-ij-rs-z]' 2>/dev/null`" in
     rs) up='[A-IJ-RS-Z]'
   low='[a-ij-rs-z]'
   ;;
     esac
  fi
  if test "X$up" = X -o "X$low" = X; then
     case "`echo RS | $tr A-IJ-RS-Z a-ij-rs-z 2>/dev/null`" in
     rs) up='A-IJ-RS-Z'
   low='a-ij-rs-z'
   ;;
     esac
  fi
  ;;
    esac
 fi
esac
case "`echo RS | $tr \"$up\" \"$low\" 2>/dev/null`" in
rs)
```

```
   echo "Using $up and $low to convert case." >&4
   ;;
*)
   echo "I don't know how to translate letters from upper to lower case." >&4
   echo "Your tr is not acting any way I know of." >&4
   exit 1
   ;;
esac
:
 set up the translation script tr, must be called with ./tr of course
cat >tr <<EOSC
$startsh
case "\$1\$2" in
'[A-Z][a-z]') exec $tr '$up' '$low';;
'[a-z][A-Z]') exec $tr '$low' '$up';;
esac
exec $tr "\$@"
EOSC
chmod +x tr
$eunicefix tr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Tr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sjis2jis.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sjis2jis.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sjis2jis: Inlibc
?MAKE: -pick add $@ %<
?S:d_sjis2jis:
?S: This variable conditionally defines the HAS_SJIS2JIS symbol, which
?S: indicates to the C program that the sjis2jis() routine is available
?S: to convert SJIS to JIS.
?S:.
?C:HAS_SJIS2JIS:
?C: This symbol, if defined, indicates that the sjis2jis routine is
```

```
?C: available
 to convert SJIS to JIS.
?C:.
?H:#$d_sjis2jis HAS_SJIS2JIS  /**/
?H:.
?LINT:set d_sjis2jis
: see if sjis2jis exists
set sjis2jis d_sjis2jis
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sjis2jis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Instruct.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:02:55  ram
?RCS: patch61: logname / whoami sequence rewritten to use case
?RCS:
?RCS: Revision 3.0.1.2  1995/02/15  14:11:34  ram
?RCS: patch51: author name now appears at the end of the paragraph (WED)
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:12:05  ram
?RCS: patch45: now documents the & escape to turn -d on at the read prompt
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X:
 This unit spew out the directions that we want everyone to read.  I try to
?X: keep the first "pagefull" much less than a page since they don't know it
?X: isn't going to go shooting off the top of the screen, and we don't want
?X: to panic them yet.
?X:
?MAKE:Instruct: Begin Myread Configdir contains
?MAKE: -pick wipe $@ %<
?T:user needman firsttime
: general instructions
```

```
needman=true
firsttime=true
user=`(logname) 2>/dev/null`
case "$user" in
") user=`whoami 2>&1`;;
esac
if $contains "^$user\$" ../.config/instruct >/dev/null 2>&1; then
 firsttime=false
 echo " "
 rp='Would you like to see the instructions?'
 dflt=n
 . ./myread
 case "$ans" in
 [yY]*) ;;
 *) needman=false;;
 esac
fi
if $needman; then
 cat <<EOH

This installation shell script will examine your system and ask you questions
to determine how the <PACKAGENAME> package should be installed. If you get
stuck on a question, you may use a ! shell escape to start a subshell or
execute a command.  Many of the questions will have
 default answers in square
brackets; typing carriage return will give you the default.

On some of the questions which ask for file or directory names you are allowed
to use the ~name construct to specify the login directory belonging to "name",
even if you don't have a shell which knows about that.  Questions where this is
allowed will be marked "(~name ok)".

EOH
 rp="
 dflt='Type carriage return to continue'
 . ./myread
 cat <<'EOH'

The prompter used in this script allows you to use shell variables and
backticks in your answers.  You may use $1, $2, etc...  to refer to the words
in the default answer, as if the default line was a set of arguments given to a
script shell.  This means you may also use $* to repeat the whole default line,
so you do not have to re-type everything to add something to the default.

Everytime there is a substitution, you will have to confirm.  If there is an
error (e.g. an unmatched backtick), the default answer will remain unchanged
and you will be prompted
```

```
 again.

If you are in a hurry, you may run 'Configure -d'.  This will bypass nearly all
the questions and use the computed defaults (or the previous answers if there
was already a config.sh file). Type 'Configure -h' for a list of options.
You may also start interactively and then answer '& -d' at any prompt to turn
on the non-interactive behaviour for the remainder of the execution.

EOH
 . ./myread
 cat <<EOH

Much effort has been expended to ensure that this shell script will run on any
Unix system.  If despite that it blows up on yours, your best bet is to edit
Configure and run it again.  If you can't run Configure for some reason,
you'll have to generate a config.sh file by hand.  Whatever problems you
have, let me (<MAINTLOC>) know how I blew it.

This installation script affects things in two ways:

1) it may do direct variable substitutions on some of the files included
  in this kit.
2) it builds a config.h file for inclusion in C programs.  You may edit
  any of these
 files as the need arises after running this script.

If you make a mistake on a question, there is no easy way to back up to it
currently.  The easiest thing to do is to edit config.sh and rerun all the SH
files.  Configure will offer to let you do this before it runs the SH files.

EOH
?X: In case they played with the prompter...
 dflt='Type carriage return to continue'
 . ./myread
 case "$firsttime" in
 true) echo $user >>../.config/instruct;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Instruct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_db.U,v 3.0.1.3 1995/07/25 14:10:22 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_db.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:10:22  ram
?RCS: patch56: conditionally use const in test programs (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:14:42  ram
?RCS: patch54: extended for more intimate DB probing (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:21:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_db db_hashtype db_prefixtype \
 db_version_major
 db_version_minor db_version_patch : \
 Inhdr +cc +ccflags rm_try compiler_warning cat \
 Compile libs sed run i_stdlib
?MAKE: -pick add $@ %<
?S:i_db:
?S: This variable conditionally defines the I_DB symbol, and indicates
?S: whether a C program may include Berkeley's DB include file <db.h>.
?S:.
?S:db_hashtype:
?S: This variable contains the type of the hash structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is u_int32_t.
?S:.
?S:db_prefixtype:
?S: This variable contains the type of the prefix structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is size_t.
?S:.
?S:db_version_major:
?S: This variable contains the major version number of
?S: Berkeley DB found in the <db.h> header file.
?S:.
?S:db_version_minor:
?S: This variable contains the minor version number of
?S: Berkeley DB found in the <db.h> header file.
?S: For DB version 1 this is always 0.
?S:.
?S:db_version_patch:
?S: This
```

```
 variable contains the patch version number of
?S: Berkeley DB found in the <db.h> header file.
?S: For DB version 1 this is always 0.
?S:.
?C:I_DB:
?C: This symbol, if defined, indicates to the C program that it should
?C: include Berkeley's DB include file <db.h>.
?C:.
?C:DB_Prefix_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is u_int32_t.
?C:.
?C:DB_Hash_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is size_t.
?C:.
?C:DB_VERSION_MAJOR_CFG:
?C: This symbol, if defined, defines the major version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
?C:.
?C:DB_VERSION_MINOR_CFG:
?C: This symbol, if defined, defines the minor version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
?C: For
 DB version 1 this is always 0.
?C:.
?C:DB_VERSION_PATCH_CFG:
?C: This symbol, if defined, defines the patch version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
?C: For DB version 1 this is always 0.
?C:.
?H:#$i_db I_DB  /**/
?H:#define DB_Hash_t $db_hashtype  /**/
?H:#define DB_Prefix_t $db_prefixtype  /**/
?H:#define DB_VERSION_MAJOR_CFG $db_version_major /**/
?H:#define DB_VERSION_MINOR_CFG $db_version_minor /**/
?H:#define DB_VERSION_PATCH_CFG $db_version_patch /**/
?H:.
?F:!try
?LINT:change libs
: see if this is a db.h system
set db.h i_db
eval $inhdr

case "$i_db" in
$define)
```

```
 : Check db version.
 echo " "
 echo "Checking Berkeley DB version ..." >&4
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <db.h>
int main(int argc, char *argv[])
{
#ifdef DB_VERSION_MAJOR /* DB version >= 2 */
  int Major, Minor, Patch ;
  unsigned long Version ;
  (void)db_version(&Major,
 &Minor, &Patch) ;
  if (argc == 2) {
      printf("%d %d %d %d %d %d\n",
            DB_VERSION_MAJOR, DB_VERSION_MINOR, DB_VERSION_PATCH,
            Major, Minor, Patch);
      exit(0);
  }
  printf("You have Berkeley DB Version 2 or greater.\n");

  printf("db.h is from Berkeley DB Version %d.%d.%d\n",
 DB_VERSION_MAJOR, DB_VERSION_MINOR, DB_VERSION_PATCH);
  printf("libdb is from Berkeley DB Version %d.%d.%d\n",
 Major, Minor, Patch) ;

  /* check that db.h & libdb are compatible */
  if (DB_VERSION_MAJOR != Major || DB_VERSION_MINOR != Minor || DB_VERSION_PATCH != Patch) {
printf("db.h and libdb are incompatible.\n") ;
      exit(3);
  }

  printf("db.h and libdb are compatible.\n") ;

  Version = DB_VERSION_MAJOR * 1000000 + DB_VERSION_MINOR * 1000
 + DB_VERSION_PATCH ;

  /* needs to be >= 2.3.4 */
  if (Version < 2003004) {
  /* if (DB_VERSION_MAJOR == 2 && DB_VERSION_MINOR == 0 && DB_VERSION_PATCH < 5) { */
printf("Perl
needs Berkeley DB 2.3.4 or greater.\n") ;
      exit(2);
```

```
   }

   exit(0);
#else
#if defined(_DB_H_) && defined(BTREEMAGIC) && defined(HASHMAGIC)
   if (argc == 2) {
       printf("1 0 0\n");
       exit(0);
   }
   printf("You have Berkeley DB Version 1.\n");
   exit(0); /* DB version < 2: the coast is clear. */
#else
   exit(1); /* <db.h> not Berkeley DB? */
#endif
#endif
}
EOCP
 set try
 if eval $compile_ok && $run ./try; then
  echo 'Looks OK.' >&4
  set `$run ./try 1`
  db_version_major=$1
  db_version_minor=$2
  db_version_patch=$3
 else
  echo "I can't use Berkeley DB with your <db.h>.  I'll disable Berkeley DB." >&4
  i_db=$undef
  case " $libs " in
  *"-ldb "*)
   : Remove db from list of libraries to use
   echo "Removing unusable -ldb from library list" >&4
   set `echo X $libs | $sed -e 's/-ldb / /' -e 's/-ldb$//'`
   shift
   libs="$*"
   echo "libs = $libs" >&4
   ;;
  esac
 fi
 $rm_try
 ;;
esac

@if DB_Hash_t
case "$i_db" in
define)
 : Check the return
 type needed for hash
 echo " "
```

```
 echo "Checking return type needed for hash for Berkeley DB ..." >&4
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <db.h>

#ifndef DB_VERSION_MAJOR
u_int32_t hash_cb (const void* ptr, size_t size)
{
 return 0;
}
HASHINFO info;
int main()
{
 info.hash = hash_cb;
}
#endif
EOCP
 if $cc $ccflags -c try.c >try.out 2>&1 ; then
  if $compiler_warning try.out >>/dev/null 2>&1 ; then
   db_hashtype='int'
  else
   db_hashtype='u_int32_t'
  fi
 else
  : XXX Maybe we should just give up here.
  db_hashtype=u_int32_t
  $cat try.out >&4
  echo "Help:  I can't seem to compile the db test program." >&4
  echo "Something's wrong, but I'll assume you use $db_hashtype." >&4
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_hashtype for hash."
 ;;
*) db_hashtype=u_int32_t
 ;;
esac
@end
@if DB_Prefix_t
case "$i_db" in
define)
 : Check the return type needed for prefix
 echo " "
 echo "Checking return type needed for prefix for Berkeley DB ..." >&4
 cat >try.c <<EOCP
#include
 <sys/types.h>
#include <db.h>
```

```
#ifndef DB_VERSION_MAJOR
size_t prefix_cb (const DBT *key1, const DBT *key2)
{
 return 0;
}
BTREEINFO info;
int main()
{
 info.prefix = prefix_cb;
}
#endif
EOCP
 if $cc $ccflags -c try.c  >try.out 2>&1 ; then
  if $compiler_warning try.out >>/dev/null 2>&1 ; then
   db_prefixtype='int'
  else
   db_prefixtype='size_t'
  fi
 else
  db_prefixtype='size_t'
  : XXX Maybe we should just give up here.
  $cat try.out >&4
  echo "Help:  I can't seem to compile the db test program." >&4
  echo "Something's wrong, but I'll assume you use $db_prefixtype." >&4
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_prefixtype for prefix."
 ;;
*) db_prefixtype='size_t'
 ;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_db.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
```

```
?RCS:
?RCS: $Log: i_neterrno.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:20:29  ram
?RCS: patch36: forgot to initialize 'val' to an empty value (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:22:10  ram
?RCS: patch32: removed spurious echo
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:02:05  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:i_neterrno: Inhdr +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:i_neterrno:
?S: This variable
 conditionally defines the I_NET_ERRNO symbol, which
?S: indicates to the C program that <net/errno.h> exists and should
?S: be included.
?S:.
?C:I_NET_ERRNO:
?C: This symbol, if defined, indicates that <net/errno.h> exists and
?C: should be included.
?C:.
?H:#$i_neterrno I_NET_ERRNO  /**/
?H:.
?LINT:set i_neterrno
: see if net/errno.h is available
val=''
set net/errno.h val
eval $inhdr

: Unfortunately, it causes problems on some systems.  Arrgh.
case "$val" in
$define)
 cat > try.c <<'EOM'
#include <stdio.h>
#include <errno.h>
#include <net/errno.h>
int func()
{
 return ENOTSOCK;
}
EOM
 if $cc $ccflags -c try.c >/dev/null 2>&1; then
  echo "We'll be including <net/errno.h>." >&4
 else
  echo "We won't be including <net/errno.h>." >&4
  val="$undef"
```

```
 fi
 $rm_try
 ;;
esac
set i_neterrno
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_neterrno.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigaction.U,v 3.0.1.1 1997/02/28 15:44:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sigaction.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:29  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sigaction: Csym Compile Setvar cat rm_try i_stdlib
?MAKE: -pick add $@ %<
?S:d_sigaction:
?S: This variable conditionally defines the HAS_SIGACTION symbol, which
?S: indicates that the Vr4 sigaction() routine is available.
?S:.
?C:HAS_SIGACTION:
?C: This symbol, if defined, indicates that Vr4's sigaction() routine
?C: is available.
?C:.
?H:#$d_sigaction
 HAS_SIGACTION /**/
?H:.
?T:val
?LINT:set d_sigaction
: see if we have sigaction
echo " "
if set sigaction val -f d_sigaction; eval $csym; $val; then
 echo 'sigaction() found.' >&4
?X:
?X: Solaris 2.5_x86 with SunWorks Pro C 3.0.1 doesn't have a complete
?X: sigaction structure if compiled with cc -Xc.  This compile test
```

```
?X: will fail then.  <doughera@lafcol.lafayette.edu>
?X:
 $cat > try.c <<EOP
#include <stdio.h>
#include <sys/types.h>
#include <signal.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
   struct sigaction act, oact;
   act.sa_flags = 0;
   oact.sa_handler = 0;
   /* so that act and oact are used */
   exit(act.sa_flags == 0 &&  oact.sa_handler == 0);
}
EOP
 set try
 if eval $compile_ok; then
  val="$define"
 else
  echo "But you don't seem to have a usable struct sigaction." >&4
  val="$undef"
 fi
else
 echo 'sigaction NOT found.' >&4
 val="$undef"
fi
set d_sigaction; eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sigaction.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
```

```
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:trnl: Nothing
?MAKE: -pick add $@ %<
?S:trnl:
?S: This variable contains the value to be passed to the tr(1)
?S: command to transliterate a newline.  Typical values are
?S: '\012' and '\n'.  This is needed for EBCDIC systems where
?S: newline is not necessarily '\012'.
?S:.
?T: DJGPP
: Find the appropriate value for a newline for tr
?X: We can't
 use $tr since that would cause a circular dependency via Myread
?X: dos djgpp uses '\015\012', but reportedly is happy with '\012' in the
?X: tr command.  I don't know why it passes the '\n' test but later
?X: refuses to work correctly with it.  --AD  6/14/98
if test -n "$DJGPP"; then
	trnl='\012'
fi
if test X"$trnl" = X; then
 case "`echo foo | tr '\n' x 2>/dev/null`" in
 foox) trnl='\n' ;;
 esac
fi
if test X"$trnl" = X; then
 case "`echo foo | tr '\012' x 2>/dev/null`" in
 foox) trnl='\012' ;;
 esac
fi
if test X"$trnl" = X; then
	case "`echo foo | tr '\r\n' xy 2>/dev/null`" in
	fooxy) trnl='\n\r' ;;
	esac
fi
if test X"$trnl" = X; then
 cat <<EOM >&2

$me: Fatal Error: cannot figure out how to translate newlines with 'tr'.

EOM
 exit 1
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/trnl.U

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```
?RCS: $Id: i_fp.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_fp: Inhdr
?MAKE: -pick add $@ %<
?S:i_fp:
?S: This variable conditionally defines the I_FP symbol, and indicates
?S: whether a C program should include <fp.h>.
?S:.
?C:I_FP:
?C: This symbol, if defined, indicates that <fp.h> exists and
?C: should be included.
?C:.
?H:#$i_fp I_FP  /**/
?H:.
?LINT:set i_fp
: see if this is a fp.h system
set fp.h i_fp
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sbrktype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sbrktype.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sbrktype: Myread Oldconfig Loc contains Findhdr
?MAKE: -pick add $@ %<
?S:sbrktype:
?S: This variable defines sbrktype to be something like caddr_t, char *,
```

```
?S: or whatever type is used to declare sbrk() in the kernel.
?S:.
?C:Caddr_t (SBRKTYPE):
?C: This symbol holds the type of a core address. It is inteded to be used
?C: to safely
 declare the return type of system calls like sbrk(). It might
?C: be necessary to include <sys/types.h> as well.
?C:.
?H:#define Caddr_t $sbrktype /* <core address> type */
?H:.
: see what type sbrk is declared as in the kernel
case "$sbrktype" in
")
 if $contains 'caddr_t;' `./findhdr sys/types.h` >/dev/null 2>&1 ; then
  dflt='caddr_t';
 else
  dflt='char *';
 fi
 ;;
*)  dflt="$sbrktype"
 ;;
esac
echo " "
rp="What is the return type of sbrk() on this system?"
. ./myread
sbrktype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sbrktype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_preadv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_preadv.U,v $
?RCS:
?MAKE:d_preadv: Inlibc
?MAKE: -pick add $@ %<
?S:d_preadv:
?S: This variable conditionally defines the HAS_PREADV symbol, which
?S: indicates to the C program that the preadv() routine is available.
```

```
?S:.
?C:HAS_PREADV :
?C: This symbol, if defined, indicates that the preadv routine is
?C: available to perform vectored reads on a file descriptor at a
?C: given offset.
?C:.
?H:#$d_preadv HAS_PREADV  /**/
?H:.
?LINT:set d_preadv
:
 see if preadv exists
set preadv d_preadv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_preadv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pipe.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pipe.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:44  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_pipe: Inlibc
?MAKE: -pick add $@ %<
?S:d_pipe:
?S: This variable conditionally defines the HAS_PIPE symbol, which
?S: indicates to the C program that the pipe() routine is available
?S: to create an inter-process channel.
?S:.
?C:HAS_PIPE :
?C: This symbol, if defined, indicates
 that the pipe routine is
?C: available to create an inter-process channel.
?C:.
?H:#$d_pipe HAS_PIPE  /**/
?H:.
```

```
?LINT:set d_pipe
: see if pipe exists
set pipe d_pipe
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pipe.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpos64_t: \
 Inlibc Setvar Compile rm_try cat fpossize
?MAKE: -pick add $@ %<
?S:d_fpos64_t:
?S: This symbol will be defined if the C compiler supports fpos64_t.
?S:.
?C:HAS_FPOS64_T:
?C: This symbol will be defined if the C compiler supports fpos64_t.
?C:.
?H:#$d_fpos64_t HAS_FPOS64_T /**/
?H:.
?LINT:set d_fpos64_t
: check for fpos64_t
echo " "
echo "Checking to see if you have fpos64_t..." >&4
$cat >try.c <<EOCP
#include <stdio.h>
int main() { fpos64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have fpos64_t."
else
 val="$undef"
 echo "You do not have fpos64_t."
 case "$fpossize" in
 8) echo "(Your fpos_t is 64 bits, so you could use that.)" ;;
 esac
fi
$rm_try
set
```

```
 d_fpos64_t
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpos64_t.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: vendorscript.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorscript.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorscript vendorscript vendorscriptexp installvendorscript: Getfile \
 vendorbin cat Setprefixvar Oldconfig Prefixit test vendorprefix
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorscript:
?S: This variable contains the eventual value of the VENDORSCRIPT symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this
 directory.
?S: Vendors who distribute perl may wish to place additional
?S: executable scripts in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorscriptexp:
?S: This variable is the ~name expanded version of vendorscript, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorscript="
?S:installvendorscript:
?S: This variable is really the same as vendorscriptexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorscript:
?S: This variable conditionally defines PERL_VENDORSCRIPT.
?S:.
```

```
?C:PERL_VENDORSCRIPT:
?C: If defined, this symbol contains the name of a directory
?C: for holding vendor-supplied executable scripts.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place additional
?C: executable
 scripts in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORSCRIPT_EXP:
?C: This symbol contains the ~name expanded version of VENDORSCRIPT, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorscript PERL_VENDORSCRIPT "$vendorscript"  /**/
?H:#$d_vendorscript PERL_VENDORSCRIPT_EXP "$vendorscriptexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorscript
: Set the vendorscript variables
case "$vendorprefix" in
") d_vendorscript="$undef"
 vendorscript="
 vendorscriptexp="
 ;;
*) d_vendorscript="$define"
 : determine where vendor-supplied scripts go.
 case "$vendorscript" in
 ") dflt=$vendorprefix/script
  $test -d $dflt || dflt=$vendorbin ;;
 *)  dflt="$vendorscript" ;;
 esac
 $cat <<EOM

The installation process will create a directory for
vendor-supplied scripts.

EOM
 fn=d~+
 rp='Pathname for the vendor-supplied scripts directory?'
 . ./getfile
 vendorscript="$ans"
 vendorscriptexp="$ansexp"
 ;;
esac
prefixvar=vendorscript
.
```

```
 ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorscript.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:ebcdic: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:ebcdic:
?S: This variable conditionally defines EBCDIC if this
?S: system uses EBCDIC encoding.  Among other things, this
?S: means that the character ranges are not contiguous.
?S: See trnl.U
?S:.
?C:EBCDIC:
?C:     This symbol, if defined, indicates that this system uses
?C: EBCDIC
 encoding.
?C:.
?H:#$ebcdic EBCDIC   /**/
?H:.
?F:!try
?LINT:set ebcdic
: look whether system uses EBCDIC
echo " "
echo "Determining whether or not we are on an EBCDIC system..." >&4
$cat >try.c <<'EOM'
int main()
{
 if ('M'==0xd4) return 0;
 return 1;
}
EOM
```

```
val=$undef
set try
if eval $compile_ok; then
 if $run ./try; then
  echo "You seem to speak EBCDIC." >&4
  val="$define"
 else
  echo "Nope, no EBCDIC, probably ASCII or some ISO Latin. Or UTF-8." >&4
 fi
else
 echo "I'm unable to compile the test program." >&4
 echo "I'll assume ASCII or some ISO Latin. Or UTF8." >&4
fi
$rm_try
set ebcdic
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ebcdic.U
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```
?RCS: $Id: i_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_fcntl: h_fcntl h_sysfile +i_sysfile Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_fcntl:
?S: This variable controls the value of I_FCNTL (which tells
?S: the C program to include <fcntl.h>).
?S:.
?C:I_FCNTL (HDR_O_STUFF FCNTL):
?C: This manifest constant tells the C program to include <fcntl.h>.
?C:.
?H:#$i_fcntl I_FCNTL /**/
?H:.
?T:val
?X:
```

```
 Make line lists +i_sysfile to ensure tests for <sys/file.h> will be
?X: conducted prior tests for <fcntl.h>, hece making sure the h_sysfile
?X: variable is correctly set when we reach that unit.
?LINT:set i_fcntl
?LINT:use i_sysfile
?LINT:change h_fcntl
: see if fcntl.h is there
val=''
set fcntl.h val
eval $inhdr

: see if we can include fcntl.h
case "$val" in
"$define")
 echo " "
 if $h_fcntl; then
  val="$define"
  echo "We'll be including <fcntl.h>." >&4
 else
  val="$undef"
  if $h_sysfile; then
 echo "We don't need to include <fcntl.h> if we include <sys/file.h>." >&4
  else
   echo "We won't be including <fcntl.h>." >&4
  fi
 fi
 ;;
*)
 h_fcntl=false
 val="$undef"
 ;;
esac
set i_fcntl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_fcntl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: lseektype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:30:10  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lseektype: Myread Typedef
?MAKE: -pick add $@ %<
?S:lseektype:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?C:Off_t
 (LSEEKTYPE):
?C: This symbol holds the type used to declare offsets in the kernel.
?C: It can be int, long, off_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Off_t $lseektype  /* <offset> type */
?H:.
: see what type lseek is declared as in the kernel
set off_t lseektype long stdio.h sys/types.h
eval $typedef
echo " "
dflt="$lseektype"
rp="What type is lseek's offset on this system declared as?"
. ./myread
lseektype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lseektype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sanemcmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:41:19  ram
```

```
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sanemcmp: cat d_memcmp +cc +optimize +ccflags +libs +ldflags rm \
 i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_sanemcmp:
?S: This variable conditionally defines the HAS_SANE_MEMCMP symbol if
?S: the memcpy() routine is available and can be used to compare relative
?S: magnitudes of chars with their high bits set.
?S:.
?C:HAS_SANE_MEMCMP:
?C: This symbol,
 if defined, indicates that the memcmp routine is available
?C: and can be used to compare relative magnitudes of chars with their high
?C: bits set.  If it is not defined, roll your own version.
?C:.
?H:#$d_sanemcmp HAS_SANE_MEMCMP /**/
?H:.
?F:!sanemcmp
?LINT: set d_sanemcmp
: can memcmp be trusted to compare relative magnitude?
?X: assume the worst
val="$undef"
case "$d_memcmp" in
"$define")
 echo " "
 echo \
   "Checking to see if your memcmp() can compare relative magnitude..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
```

```
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char a = -1;
char b = 0;
if ((a < b) && memcmp(&a, &b, 1) < 0)
 exit(1);
exit(0);
}
EOCP
 if $cc $optimize $ccflags
 $ldflags \
      -o sanemcmp foo.c $libs >/dev/null 2>&1; then
  if ./sanemcmp 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "No, it can't (it uses signed chars)."
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
 fi
 ;;
esac
$rm -f foo.* sanemcmp core
set d_sanemcmp
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sanemcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isnanl: Inlibc
?MAKE: -pick add $@ %<
?S:d_isnanl:
?S: This variable conditionally defines the HAS_ISNANL symbol, which
?S: indicates to the C program that the isnanl() routine is available.
?S:.
?C:HAS_ISNANL:
```

```
?C: This symbol, if defined, indicates that the isnanl routine is
?C: available to check whether a long double is a NaN.
?C:.
?H:#$d_isnanl HAS_ISNANL  /**/
?H:.
?LINT:set d_isnanl
: see if isnanl exists
set isnanl d_isnanl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnanl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2005 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_unsetenv: Inlibc
?MAKE: -pick add $@ %<
?S:d_unsetenv:
?S: This variable conditionally defines the HAS_UNSETENV symbol, which
?S: indicates to the C program that the unsetenv () routine is available.
?S:.
?C:HAS_UNSETENV:
?C: This symbol, if defined, indicates that the unsetenv () routine is
?C: available for use.
?C:.
?H:#$d_unsetenv HAS_UNSETENV  /**/
?H:.
?LINT:set d_unsetenv
: see if unsetenv exists
set unsetenv d_unsetenv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_unsetenv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlopen.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:56  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dlopen: Inlibc runnm
?MAKE: -pick add $@ %<
?S:d_dlopen:
?S: This variable conditionally defines the HAS_DLOPEN symbol, which
?S: indicates to the C program that the dlopen() routine
 is available.
?S:.
?C:HAS_DLOPEN :
?C: This symbol, if defined, indicates that the dlopen routine is
?C: available.
?C:.
?H:#$d_dlopen HAS_DLOPEN  /**/
?H:.
?T: xxx_runnm
?LINT:set d_dlopen
?X: We don't permanently change runnm, but we do temporarily.
?LINT: change runnm
: see if dlopen exists
?X: On NetBSD and FreeBSD, dlopen is available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
runnm=false
set dlopen d_dlopen
eval $inlibc
runnm="$xxx_runnm"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dlopen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extract.U,v 3.0.1.2 1997/02/28 14:58:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can be doted in order to extract
?X: .SH files with variable substitutions.
?X:
?X: When running
 Configure from a remote directory ($src is not '.'),
?X: then the files will be created in that directory, so beware!
?X:
?MAKE:Extract: src
?MAKE: -pick add $@ %<
?F:./extract
?T:PERL_CONFIG_SH dir file name create mkdir_p
: script used to extract .SH files with variable substitutions
cat >extract <<'EOS'
PERL_CONFIG_SH=true
echo "Doing variable substitutions on .SH files..."
if test -f MANIFEST; then
 set x `awk '{print $1}' < MANIFEST | grep '\.SH$'`
else
 echo "(Looking for .SH files under the source directory.)"
 set x `(cd "$src"; find . -name "*.SH" -print)`
fi
shift
case $# in
0) set x `(cd "$src"; echo *.SH)`; shift;;
esac
if test ! -f "$src/$1"; then
 shift
fi
?X: script to emulate mkdir -p
mkdir_p='
name=$1;
```

```
create="";
while test $name; do
 if test ! -d "$name"; then
  create="$name $create";
  name=`echo $name | sed -e "s|^[^/]*$||"`;
  name=`echo $name | sed -e "s|\(.*\)/.*|\1|"`;
 else
  name="";
 fi;
done;
for file in $create; do
 mkdir $file;
done
'
for file in $*;
 do
 case "$src" in
 ".")
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (cd "$dir" && . ./$file)
   ;;
  *)
   . ./$file
   ;;
  esac
  ;;
 *)
?X:
?X: When running Configure remotely ($src is not '.'), we cannot source
?X: the files directly, since that would wrongly cause the extraction
?X: where the source lie instead of withing the current directory. Therefore,
?X: we need to 'sh <file' then, which is okay since they will source the
?X: existing config.sh file. It's not possible to use:
?X:  ../src/Configure -S -O -Dsomething
?X: unfortunately since no new config.sh with the -Dsomething override
?X: will be created before running the .SH files. A minor buglet.
?X:
?X: Note that we must create the directory hierarchy ourselves if it does
?X: not exist already, and that is done through a shell emulation of the
?X: 'mkdir -p' command. We don't want to use the $installdir metaconfig
?X: symbol here since that would require too much to
 be configured for
?X: this simple extraction task that may happen quickly with 'Configure -S'.
?X:  -- RAM, 18/03/96
?X:
```

```
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (set x $dir; shift; eval $mkdir_p)
   sh <"$src/$dir/$file"
   ;;
  *)
   sh <"$src/$file"
   ;;
  esac
  ;;
 esac
done
if test -f "$src/config_h.SH"; then
 if test ! -f config.h; then
 : oops, they left it out of MANIFEST, probably, so do it anyway.
 . "$src/config_h.SH"
 fi
fi
EOS
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Extract.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_shadow.U,v $
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_shadow: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_shadow:
?S: This variable conditionally defines the I_SHADOW symbol, and indicates
?S: whether a C program should include <shadow.h>.
?S:.
?C:I_SHADOW:
?C: This symbol, if defined, indicates that <shadow.h> exists and
?C: should be included.
?C:.
?H:#$i_shadow I_SHADOW  /**/
?H:.
?LINT:set i_shadow
: see if this is a shadow.h system
set shadow.h i_shadow
```

```
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_shadow.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_accessx: Inlibc
?MAKE: -pick add $@ %<
?S:d_accessx:
?S: This variable conditionally defines the HAS_ACCESSX symbol, which
?S: indicates to the C program that the accessx() routine is available.
?S:.
?C:HAS_ACCESSX :
?C: This symbol, if defined, indicates that the accessx routine is
?C: available to do extended access checks.
?C:.
?H:#$d_accessx HAS_ACCESSX  /**/
?H:.
?LINT:set d_accessx
: see if accessx exists
set accessx d_accessx
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/d_accessx.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_popen.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_popen.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_popen: Inlibc
?MAKE: -pick add $@ %<
?S:d_popen:
?S: This variable conditionally defines HAS_POPEN if popen() is
?S: available to open a pipe from a process.
?S:.
?C:HAS_POPEN (POPEN):
?C: This symbol, if defined, indicates that the popen routine is
?C: available to open a pipe from a process.
?C:.
?H:#$d_popen HAS_POPEN  /**/
?H:.
?LINT:set
 d_popen
: see if popen exists
set popen d_popen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_popen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ptrsize.U,v 3.0.1.1 1994/10/29 16:28:19 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: ptrsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:28:19  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ptrsize: cat rm_try Myread Compile run use64bitall i_stdlib d_quad
?MAKE: -pick add $@ %<
?S:ptrsize:
?S: This variable contains the value of the PTRSIZE symbol, which
?S: indicates to the C program how many bytes there are in a pointer.
?S:.
?C:PTRSIZE:
?C: This
```

```
 symbol contains the size of a pointer, so that the C preprocessor
?C: can make decisions based on it.  It will be sizeof(void *) if
?C: the compiler supports (void *); otherwise it will be
?C: sizeof(char *).
?C:.
?H:#define PTRSIZE $ptrsize  /**/
?H:.
?F:!try
?LINT:extern use64bitint
: check for length of pointer
echo " "
case "$ptrsize" in
")
 echo "Checking to see how big your pointers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
   printf("%d\n", (int)sizeof(void *));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  ptrsize=`$run ./try`
  echo "Your pointers are $ptrsize bytes long."
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)" >&4
  rp="What is the size of a pointer (in bytes)?"
  . ./myread
  ptrsize="$ans"
 fi
 ;;
esac
$rm_try
case "$use64bitall" in
"$define"|true|[yY]*)
 case "$ptrsize" in
 4) cat <<EOM >&4

*** You
 have chosen a maximally 64-bit build,
*** but your pointers are only 4 bytes wide.
```

```
*** Please rerun Configure without -Duse64bitall.
EOM
  case "$d_quad" in
  define)
   cat <<EOM >&4
*** Since you have quads, you could possibly try with -Duse64bitint.
EOM
   ;;
  esac
  cat <<EOM >&4
*** Cannot continue, aborting.

EOM

  exit 1
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ptrsize.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: H.Merijn Brand
?RCS:
?MAKE:d_isblank: cc cat ccflags ldflags rm libs Setvar
?MAKE: -pick add $@ %<
?S:d_isblank:
?S: This variable conditionally defines the HAS_ISBLANK constant,
?S: which indicates to the C program that isblank() is available.
?S:.
?C:HAS_ISBLANK:
?C: This manifest constant lets the C program know that isblank
?C: is available.
?C:.
?H:#$d_isblank HAS_ISBLANK  /**/
?H:.
?LINT:set d_isblank
?X: Can't use Inlibc because isblank() might be a macro.
```

```
: Look for isblank
echo " "
$cat >isblank.c <<'EOCP'
#include
 <stdio.h>
#include <ctype.h>
int main() {
 int c = ' ';
 if (isblank(c))
  return 0 ;
 else
  return 1 ;
}
EOCP
if $cc $ccflags $ldflags -o isblank isblank.c $libs >/dev/null 2>&1 ; then
 echo "isblank() found." >&4
 val="$define"
else
 echo "isblank() NOT found." >&4
 val="$undef"
fi
set d_isblank
eval $setvar
$rm -f isblank*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isblank.U
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```
?RCS: $Id: d_wait3.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wait3.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wait3: Inlibc
?MAKE: -pick add $@ %<
?S:d_wait3:
?S: This variable conditionally defines the HAS_WAIT3 symbol, which
?S: indicates to the C program that the wait3() subroutine exists.
```

```
?S:.
?C:HAS_WAIT3:
?C: This symbol, if defined, indicates that the wait3() subroutine
?C: exists.
?C:.
?H:#$d_wait3 HAS_WAIT3 /**/
?H:.
?LINT:set d_wait3
:
 see if 'wait3()' exists
set wait3 d_wait3
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wait3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasfield string that is used internally
?X: by Configure to check if this system has a field for a
?X: particular struct (of if this system has a particular struct!)
?X:
?X: To use it, say something like:
?X:  set d_statblocks stat st_blocks i_sysstat sys/stat.h
?X:  eval $hasfield
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/foo.h
?X:  $i_sysbar sys/bar.h
?X:  $i_syszot sys/zot.h
?X:  $i_zappa zappa.h"
?X: set d_statblocks stat st_blocks $hdrs
?X: eval $hasfield
?X:
?MAKE:Hasfield: Setvar rm_try test Compile
?MAKE: -pick add $@ %<
?T:varname struct field
?V:hasfield
: Define hasfield macro for Configure internal use
hasfield='varname=$1;
 struct=$2; field=$3; shift; shift; shift;
while $test $# -ge 2; do
 case "$1" in
```

```
 $define) echo "#include <$2>";;
 esac ;
   shift 2;
done > try.c;
echo "int main () { struct $struct foo; char* bar; bar = (char*)foo.$field; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasfield.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: MailAuthor.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: MailAuthor.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:04:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:05:09  ram
?RCS: patch32: avoid message sending if they said no previously
?RCS:
?RCS: Revision 3.0.1.3  1993/10/16  13:47:30  ram
?RCS: patch12: now makes sure user-specified address is in Internet format
?RCS:
?RCS: Revision
 3.0.1.2  1993/09/13  15:48:49  ram
?RCS: patch10: reverted to original intent by the Author himself
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:38  ram
?RCS: patch7: now prompts user for its e-mail address
?RCS: patch7: no longer silent when mail has been sent
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?RCS:
?X:
?X: This unit asks the user to please send a message to the author.
?X: To force inclusion of this unit, you must add it's name to the
?X: dependancies on the MAKE line in your private copy of End.U.
?X: This allows a smart mailagent program to automatically let users know
?X: when their package is out of date, and to allow users to be notified of
?X: any future patches.
?X:
?MAKE:MailAuthor mailpatches notifypatches usermail: test cat mailer \
 package Myread patchlevel baserev rm rsrc Oldconfig Configdir
?MAKE: -pick wipe $@ %<
?S:mailpatches:
?S: Indicates whether the user would like future patches to be mailed
?S: directly
 to them.
?S:.
?S:notifypatches:
?S: Indicates whether the user would like notification of future patches
?S: mailed to them.
?S:.
?S:usermail:
?S: This variable is used internally by Configure to keep track of the
?S: user e-mail address, where notifications or patches should be sent.
?S: A '-' value means the return address will be extracted by parsing
?S: the mail headers.
?S:.
?T:opt mailpatches notifypatches atsh status
: notify author that his package is used
if $test -f ../.config/mailauthor &&
 cmp $rsrc/patchlevel.h ../.config/mailauthor >/dev/null 2>&1
then
 status="say that you're using $package";
 case "$mailpatches" in
 true) status='have patches mailed to you as they are issued';;
 esac
 case "$notifypatches" in
 true) status='be notified when new patches are issued';;
 esac
 $cat <<EOM

You have already sent the author of $package (<MAINTLOC>) mail to
$status. If you wish, you may modify
your previous request by sending a new mail with different options.
```

```
EOM
 rp='Should
 I send a status update to <MAINTLOC>?'
 dflt=n
else
 $cat <<EOM

If you are able to send mail to the Internet, the author of $package would
really appreciate you letting me send off a quick note, just to say that you've
tried it. The author is more likely to spend time maintaining $package if it's
known that many people are using it, and you can even ask to get sent new
patches automagically this way if you wish. To protect your privacy, all I'll
say in the mail is the version of $package that you're using.

EOM
 rp='Should I send mail to <MAINTLOC>?'
 dflt=y
?X: Ensure default is 'n' if question has been asked already, in case they
?X: run Configure -d next time and answered 'n' the first time. Therefore,
?X: an empty nomail will be created later on even if no mail is sent.
 $test -f ../.config/nomail && dflt=n
fi
. ./myread
case "$ans" in
[yY]*)
 echo " "
 echo "Great! Your cooperation is really appreciated."
 $cat <<EOM

Some braindead sites do not set a proper return
 address in the From: header of
their outgoing mail, making it impossible to reply to mail they generate.
If your site is broken in this way, write to your system administrator and get
it fixed!!! In the mean time, you can manually specify the Internet e-mail
address by which the author can get back to you, should there be a need to do
so. If manually specified, it should be something like "user@domain.top".
If your mail system generates addresses correctly, specify "none".

EOM
 case "$usermail" in
 '-'|'') dflt=none;;
 *) dflt="$usermail";;
 esac
 rp='Manually specify a return address to use:'
 . ./myread
 case "$ans" in
 none|*@*.*)
```

```
 case "$ans" in
 none) usermail='-';;
 *) usermail="$ans";;
 esac
 ;;
*)
 echo "(Address does not look like an Internet one -- ignoring it.)"
?X:
?X: If we can't trust their mailer or their return address, it's highly
?X: suggested that they only register and don't ask to get anything from
?X: the author, since it's likely to bounce in null-land --
 RAM.
?X:
 usermail='-'
 mailpatches=false
 notifypatches=false
 ;;
esac
echo " "
opt=''
rp='Would you like to have new patches automatically mailed to you?'
case "$mailpatches" in
true) dflt=y;;
*) dflt=n;;
esac
. ./myread
case "$ans" in
[yY]*) opt=' mailpatches'; mailpatches=true;;
*)
 mailpatches=false
 echo " "
 rp='Ok, would you like to simply be notified of new patches?'
 case "$notifypatches" in
 false) dflt=n;;
 *) dflt=y;;
 esac
 . ./myread
 echo " "
 case "$ans" in
 [yY]*) opt=' notifypatches'; notifypatches=true;;
 *)
  echo "Fine, I'll simply say that you've tried it then."
  notifypatches=false
  ;;
 esac
 ;;
esac
echo "Sending mail to <MAINTLOC>..." >&4
```

```
?X: Bizarre hack here. We can't just put @SH in the hereis lines below, because
?X: metaconfig will interpret it as a command, and there's no quoting mechanism.
?X: Do it via a variable instead.
 atsh='@SH'
 $mailer <MAINTLOC> <<EOM >/dev/null 2>&1
Subject: Command
Precedence: junk
To: <MAINTLOC>

$atsh
 package $usermail $package $baserev $patchlevel$opt
EOM
 $rm -f ../.config/mailauthor ../.config/nomail
 cp $rsrc/patchlevel.h ../.config/mailauthor
 ;;
*)
 case "$dflt" in
 "y")
  echo "Oh well, maybe next time."
  cp /dev/null ../.config/nomail
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/MailAuthor.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_crypt.U,v $
?RCS:
?RCS: Copyright (c) 2002 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_crypt: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_crypt:
?S: This variable conditionally defines the I_CRYPT symbol, and indicates
?S: whether a C program should include <crypt.h>.
?S:.
?C:I_CRYPT:
?C: This symbol, if defined, indicates that <crypt.h> exists and
?C: should be included.
?C:.
?H:#$i_crypt I_CRYPT  /**/
?H:.
```

```
?LINT:set i_crypt
: see if this is a crypt.h system
set crypt.h i_crypt
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_crypt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_socket.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:46:00  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:04  ram
?RCS: patch16: can now safely declare private nm_extract in dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_socket d_oldsock d_sockpair socketlib sockethdr: contains libc \
 echo n c nm_opt nm_extract Inlibc Csym _a
?MAKE: -pick add $@ %<
?S:d_socket:
?S: This
 variable conditionally defines HAS_SOCKET, which indicates
?S: that the BSD socket interface is supported.
?S:.
?S:d_sockpair:
?S: This variable conditionally defines the HAS_SOCKETPAIR symbol, which
?S: indicates that the BSD socketpair() is supported.
?S:.
?S:d_oldsock:
?S: This variable conditionally defines the OLDSOCKET symbol, which
?S: indicates that the BSD socket interface is based on 4.1c and not 4.2.
?S:.
?S:socketlib:
?S: This variable has the names of any libraries needed for socket support.
?S:.
```

```
?S:sockethdr:
?S: This variable has any cpp -I flags needed for socket support.
?S:.
?C:HAS_SOCKET (SOCKET):
?C: This symbol, if defined, indicates that the BSD socket interface is
?C: supported.
?C:.
?C:HAS_SOCKETPAIR (SOCKETPAIR):
?C: This symbol, if defined, indicates that the BSD socketpair() call is
?C: supported.
?C:.
?C:USE_OLDSOCKET (OLDSOCKET):
?C: This symbol, if defined, indicates that the 4.1c BSD socket interface
?C: is supported instead of the 4.2/4.3 BSD
 socket interface. For instance,
?C: there is no setsockopt() call.
?C:.
?H:#$d_socket HAS_SOCKET  /**/
?H:#$d_sockpair HAS_SOCKETPAIR /**/
?H:#$d_oldsock USE_OLDSOCKET /**/
?H:.
?T:val
?LINT:use libc
?LINT:set d_sockpair
: see whether socket exists
socketlib=''
sockethdr=''
echo " "
$echo $n "Hmm... $c" >&4
if set socket val -f d_socket; eval $csym; $val; then
 echo "Looks like you have Berkeley networking support." >&4
 d_socket="$define"
?X: now check for advanced features
 if set setsockopt val -f; eval $csym; $val; then
  d_oldsock="$undef"
 else
  echo "...but it uses the old 4.1c interface, rather than 4.2" >&4
  d_oldsock="$define"
 fi
else
?X: HP-UX, for one, puts all the socket stuff in socklib.o. Note that if we
?X: come here on HP-UX, then we must have used nm to get symbols, or we really
?X: don't have sockets anyway...
 if $contains socklib libc.list >/dev/null 2>&1; then
  echo "Looks like you have Berkeley networking support." >&4
  d_socket="$define"
  : we will have
```

```
 to assume that it supports the 4.2 BSD interface
  d_oldsock="$undef"
 else
  echo "You don't have Berkeley networking in libc$_a..." >&4
?X: look for an optional networking library
  if test -f /usr/lib/libnet$_a; then
?X: space between two  '(' needed for ksh
   ( (nm $nm_opt /usr/lib/libnet$_a | eval $nm_extract) ||  \
   ar t /usr/lib/libnet$_a) 2>/dev/null >> libc.list
   if $contains socket libc.list >/dev/null 2>&1; then
   echo "...but the Wollongong group seems to have hacked it in." >&4
    socketlib="-lnet"
    sockethdr="-I/usr/netinclude"
    d_socket="$define"
?X: now check for advanced features
    if $contains setsockopt libc.list >/dev/null 2>&1; then
     d_oldsock="$undef"
    else
     echo "...using the old 4.1c interface, rather than 4.2" >&4
     d_oldsock="$define"
    fi
   else
    echo "or even in libnet$_a, which is peculiar." >&4
    d_socket="$undef"
    d_oldsock="$undef"
   fi
  else
   echo "or anywhere else I see." >&4
   d_socket="$undef"
   d_oldsock="$undef"
  fi
 fi
fi

@if
 HAS_SOCKETPAIR || d_sockpair
: see if socketpair exists
set socketpair d_sockpair
eval $inlibc

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_socket.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostbyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostbyname_r gethostbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostbyname_r:
?S: This variable conditionally defines the HAS_GETHOSTBYNAME_R symbol,
?S: which indicates to the C program that the gethostbyname_r()
?S: routine is available.
?S:.
?S:gethostbyname_r_proto:
?S: This variable encodes the prototype of gethostbyname_r.
?S: It is zero if d_gethostbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyname_r
?S: is defined.
?S:.
?C:HAS_GETHOSTBYNAME_R:
?C: This symbol, if defined, indicates
 that the gethostbyname_r routine
?C: is available to gethostbyname re-entrantly.
?C:.
?C:GETHOSTBYNAME_R_PROTO:
?C: This symbol encodes the prototype of gethostbyname_r.
?C: It is zero if d_gethostbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyname_r
?C: is defined.
?C:.
?H:#$d_gethostbyname_r HAS_GETHOSTBYNAME_R /**/
?H:#define GETHOSTBYNAME_R_PROTO $gethostbyname_r_proto /**/
?H:.
?T:try hdrs d_gethostbyname_r_proto
: see if gethostbyname_r exists
set gethostbyname_r d_gethostbyname_r
eval $inlibc
case "$d_gethostbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_gethostbyname_r_proto:$usethreads" in
 ":define") d_gethostbyname_r_proto=define
  set d_gethostbyname_r_proto gethostbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gethostbyname_r_proto" in
```

```
 define)
 case "$gethostbyname_r_proto" in
 "|0) try='int gethostbyname_r(const char*, struct hostent*, char*, size_t, struct
 hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=I_CSBWRE ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) try='struct hostent* gethostbyname_r(const char*, struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=S_CSBIE ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) try='int gethostbyname_r(const char*, struct hostent*, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=I_CSD ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) d_gethostbyname_r=undef
  gethostbyname_r_proto=0
  echo "Disabling gethostbyname_r, cannot determine prototype." >&4 ;;
 * ) case "$gethostbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gethostbyname_r_proto="REENTRANT_PROTO_$gethostbyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gethostbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_gethostbyname_r=undef
  gethostbyname_r_proto=0
  ;;
 esac
 ;;
*) gethostbyname_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostbyname_r.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lrintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_lrintl:

```
?S: This variable conditionally defines the HAS_LRINTL symbol, which
?S: indicates to the C program that the lrintl() routine is available
?S: to return the integral value closest to a long double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LRINTL:
?C: This symbol, if defined, indicates that the lrintl routine is
?C: available to return the integral value closest to a long double
?C: (according to the current rounding mode).
?C:.
?H:#$d_lrintl HAS_LRINTL  /**/
?H:.
?LINT:set d_lrintl
: see if lrintl exists
set lrintl d_lrintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lrintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sizetype.U,v 3.0.1.1 1994/08/29 16:32:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: sizetype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:32:10  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:sizetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:sizetype:
?S: This variable defines sizetype to be something like size_t,
?S: unsigned long, or whatever type is used to declare length
?S: parameters for string functions.
?S:.
?C:Size_t:
?C: This symbol holds the type used
 to declare length parameters
?C: for string functions.  It is usually size_t, but may be
```

```
?C: unsigned long, int, etc.  It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Size_t $sizetype  /* length parameter for string functions */
?H:.
?LINT: set sizetype
: see what type is used for size_t
rp="What is the type used for the length parameter for string functions?"
set size_t sizetype 'unsigned int' stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/sizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_passwd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_passwd.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:21  ram
?RCS: patch61: useless unit dropped.
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:51  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Useless unit dropped.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_passwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: afs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: afs.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:23:06  ram
?RCS: patch61: can now explicitly tell Configure whether AFS is running
?RCS:
?RCS: Revision 3.0.1.1  1993/08/24  12:24:43  ram
?RCS: patch3: created
?RCS:
?MAKE:afs afsroot: test
?MAKE: -pick add $@ %<
?S:afs:
?S: This variable is set to 'true' if AFS (Andrew File System) is used
?S: on the system, 'false' otherwise.  It is possible to override this
?S: with a hint value or command line option,
 but you'd better know
?S: what you are doing.
?S:.
?S:afsroot:
?S: This variable is by default set to '/afs'. In the unlikely case
?S: this is not the correct root, it is possible to override this with
?S: a hint value or command line option.  This will be used in subsequent
?S: tests for AFSness in the configure and test process.
?S:.
: allow them to override the AFS root
case "$afsroot" in
") afsroot=/afs ;;
*) afsroot=$afsroot ;;
esac

: is AFS running?
echo " "
case "$afs" in
$define|true) afs=true ;;
$undef|false) afs=false ;;
*) if $test -d $afsroot; then
  afs=true
 else
  afs=false
 fi
 ;;
esac
if $afs; then
 echo "AFS may be running... I'll be extra cautious then..." >&4
else
```

```
 echo "AFS does not seem to be running..." >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/afs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dlsymun.U,v $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_dlsymun.U,v $
?RCS:
?RCS:
?MAKE:d_dlsymun: cat cc ccflags ldflags ld rm Setvar dlsrc i_dlfcn i_stdlib \
 cccdlflags ccdlflags lddlflags libs dlext _o run to
?MAKE: -pick add $@ %<
?X: This is specific to perl5.
?S:d_dlsymun:
?S: This variable conditionally defines DLSYM_NEEDS_UNDERSCORE, which
?S: indicates that we need to prepend an underscore to the symbol
?S: name before calling dlsym().
?S:.
?C:DLSYM_NEEDS_UNDERSCORE:
?C: This symbol, if defined, indicates that we need to prepend an
?C: underscore to the symbol name before calling dlsym().  This only
?C: makes sense if you *have* dlsym, which we will presume is the
?C: case if you're using dl_dlopen.xs.
?C:.
?H:#$d_dlsymun DLSYM_NEEDS_UNDERSCORE /**/
?H:.
?LINT:set
 d_dlsymun
?T: xxx
?F:!fred
: Check if dlsym need a leading underscore
echo " "
val="$undef"

case "$dlsrc" in
dl_dlopen.xs)
 echo "Checking whether your dlsym() needs a leading underscore ..." >&4
 $cat >dyna.c <<'EOM'
fred () { }
EOM
```

```
$cat >fred.c<<EOM

#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_dlfcn I_DLFCN
#ifdef I_DLFCN
#include <dlfcn.h>      /* the dynamic linker include file for SunOS/Solaris */
#else
#include <sys/types.h>
#include <nlist.h>
#include <link.h>
#endif

extern int fred() ;

int main()
{
   void * handle ;
   void * symbol ;
#ifndef RTLD_LAZY
   int mode = 1 ;
#else
   int mode = RTLD_LAZY ;
#endif
   handle = dlopen("./dyna.$dlext", mode) ;
   if (handle == NULL) {
 printf ("1\n") ;
 fflush (stdout) ;
 exit(0);
   }
   symbol = dlsym(handle, "fred") ;
   if (symbol == NULL) {
 /* try putting a leading underscore */
 symbol = dlsym(handle, "_fred") ;
 if (symbol ==
 NULL) {
     printf ("2\n") ;
     fflush (stdout) ;
     exit(0);
 }
 printf ("3\n") ;
   }
   else
 printf ("4\n") ;
```

```
   fflush (stdout) ;
   exit(0);
}
EOM
 : Call the object file tmp-dyna.o in case dlext=o.
 if $cc $ccflags $cccdlflags -c dyna.c > /dev/null 2>&1 &&
  mv dyna${_o} tmp-dyna${_o} > /dev/null 2>&1 &&
  $ld -o dyna.$dlext $ldflags $lddlflags tmp-dyna${_o} > /dev/null 2>&1 &&
  $cc -o fred $ccflags $ldflags $cccdlflags $ccdlflags fred.c $libs > /dev/null 2>&1 && $to dyna.$dlext; then
  xxx=`$run ./fred`
  case $xxx in
  1) echo "Test program failed using dlopen." >&4
   echo "Perhaps you should not use dynamic loading." >&4;;
  2) echo "Test program failed using dlsym." >&4
   echo "Perhaps you should not use dynamic loading." >&4;;
  3) echo "dlsym needs a leading underscore" >&4
   val="$define" ;;
  4) echo "dlsym doesn't need a leading underscore." >&4;;
  esac
 else
  echo "I can't compile and run the test program." >&4
              echo "I'm guessing that dlsym
 doesn't need a leading underscore." >&4
 fi
 ;;
esac

$rm -f fred fred.* dyna.$dlext dyna.* tmp-dyna.*

set d_dlsymun
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dlsymun.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Unix.U,v $
```

```
?RCS: Revision 3.0.1.1  1997/02/28  15:20:06  ram
?RCS: patch61: created
?RCS:
?X:
?X: The purpose of this unit is to define things that are common across all
?X: known UNIX platforms. If Configure is ported/used on a non-UNIX
?X: environment, then some of the following variables can be redefined in hint
?X: files.
?X:
?MAKE:Unix _a _o firstmakefile archobjs: Oldconfig
?MAKE: -pick add $@ %<
?S:_a (lib_ext):
?S: This variable defines the extension
 used for ordinary libraries.
?S: For unix, it is '.a'.  The '.' is included.  Other possible
?S: values include '.lib'.
?S:.
?S:_o (obj_ext):
?S: This variable defines the extension used for object files.
?S: For unix, it is '.o'.  The '.' is included.  Other possible
?S: values include '.obj'.
?S:.
?S:firstmakefile:
?S: This variable defines the first file searched by make.  On unix,
?S: it is makefile (then Makefile).  On case-insensitive systems,
?S: it might be something else.  This is only used to deal with
?S: convoluted make depend tricks.
?S:.
?S:archobjs:
?S: This variable defines any additional objects that must be linked
?S: in with the program on this architecture.  On unix, it is usually
?S: empty.  It is typically used to include emulations of unix calls
?S: or other facilities.  For perl on OS/2, for example, this would
?S: include os2/os2.obj.
?S:.
?INIT:: Extra object files, if any, needed on this platform.
?INIT:archobjs=''
: Define several unixisms.
: Hints files
 or command line option can be used to override them.
case "$_a" in
'') _a='.a';;
esac
case "$_o" in
'') _o='.o';;
esac

@if firstmakefile
```

```
: Which makefile gets called first.  This is used by make depend.
case "$firstmakefile" in
") firstmakefile='makefile';;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Unix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usefaststdio: Myread Oldconfig Setvar rsrc
?MAKE: -pick add $@ %<
?Y:TOP
?S:usefaststdio:
?S: This variable conditionally defines the USE_FAST_STDIO symbol,
?S: and indicates that Perl should be built to use 'fast stdio'.
?S: Defaults to define in Perls 5.8 and earlier, to undef later.
?S:.
?C:USE_FAST_STDIO:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use 'fast stdio'.
?C: Defaults to define in Perls 5.8 and earlier, to undef later.
?C:.
?H:?%<:#ifndef USE_FAST_STDIO
?H:?%<:#$usefaststdio USE_FAST_STDIO  /**/
?H:?%<:#endif
?H:.
?T:xversion
?LINT:set usefaststdio
: Check if faststdio is requested and available
case "$usefaststdio" in
$define|true|[yY]*|")
 xversion=`awk
 '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
 case "$xversion" in
 [68]) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
*) dflt='n';;
```

```
esac
cat <<EOM

Perl can be built to use 'fast stdio', which means using the stdio
library but also directly manipulating the stdio buffers to enable
faster I/O.  Using stdio is better for backward compatibility (especially
for Perl extensions), but on the other hand since Perl 5.8 the 'perlio'
interface has been preferred instead of stdio.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Use the "fast stdio" if available?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usefaststdio
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usefaststdio.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_strtod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtod.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:36  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_strtod: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtod:
?S: This variable conditionally defines the HAS_STRTOD symbol, which
?S: indicates to the C program that the strtod() routine is available
?S: to provide better numeric string conversion than atof().
?S:.
?C:HAS_STRTOD (STRTOD):
```

```
?C: This symbol, if defined,
 indicates that the strtod routine is
?C: available to provide better numeric string conversion than atof().
?C:.
?H:#$d_strtod HAS_STRTOD /**/
?H:.
?LINT:set d_strtod
: see if strtod exists
set strtod d_strtod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_values.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_values.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:34  ram
?RCS: patch61: created
?RCS:
?MAKE:i_values: Inhdr
?MAKE: -pick add $@ %<
?S:i_values:
?S: This variable conditionally defines the I_VALUES symbol, and indicates
?S: whether a C program may include <values.h> to get symbols like MAXLONG
?S: and friends.
?S:.
?C:I_VALUES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
 <values.h> to get definition of symbols like MINFLOAT or
?C: MAXLONG, i.e. machine dependant limitations.  Probably, you
?C: should use <limits.h> instead, if it is available.
?C:.
?H:#$i_values I_VALUES  /**/
?H:.
?LINT:set i_values
: see if this is a values.h system
```

```
set values.h i_values
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_values.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_drem.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_drem.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:14  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_drem: Inlibc
?MAKE: -pick add $@ %<
?S:d_drem:
?S: This variable conditionally defines the HAS_DREM symbol, which
?S: indicates to the C program that the drem() routine is available.
?S:.
?C:HAS_DREM :
?C: This symbol, if defined, indicates that the drem routine is
?C: available.
  This routine is roughly the same as fmod, i.e. it
?C: computes the remainder r=x-n*y, where n=rint(x/y), whereas fmod
?C: uses n=trunc(x/y).
?C:.
?H:#$d_drem HAS_DREM  /**/
?H:.
?LINT:set d_drem
: see if drem exists
set drem d_drem
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_drem.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cppfilecom.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: cppfilecom.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppfilecom cppstdinflags d_cppignhdrs d_cppcanstdin: \
 contains package test Myread Oldconfig Loc Setvar cpp cc cat rm
?MAKE: -pick add $@ %<
?S:cppfilecom:
?S: This variable contains the first part of the string which will invoke
?S: the C preprocessor a file
 and produce to standard output, preserving
?S: comments. Typical value of "cc -E -C" or "/lib/cpp -C".
?S:.
?S:cppstdinflags:
?S: This variable contains any flags necessary to get cppfilecom to read
?S: from the standard input.
?S:.
?S:d_cppignhdrs:
?S: This symbol conditionally defines CPP_IGN_HDRS if CPP_FILE_COM ignores
?S: *.h files.
?S:.
?S:d_cppcanstdin:
?S: This symbol conditionally defines CPP_CAN_STDIN if CPP_FILE_COM can
?S: read standard input directly.
?S:.
?C:CPP_FILE_COM (CPPFILECOM):
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor a file and produce to standard output, preserving
?C: comments. Typical value of "cc -E -C" or "/lib/cpp -C".
?C:.
?C:CPP_STDIN_FLAGS (CPPSTDINFLAGS):
?C: This variable contains any flags necessary to get CPP_FILE_COM to
?C: read from the standard input.
?C:.
?C:CPP_IGN_HDRS (CPPIGNHDRS):
?C: This symbol is defined if CPP_FILE_COM ignores *.h files.
?C:.
```

```
?C:CPP_CAN_STDIN (CPPCANSTDIN):
?C: This
 symbol is defined if CPP_FILE_COM can read standard input
?C: directly.
?C:.
?H:#define CPP_FILE_COM "$cppfilecom"
?H:#define CPP_STDIN_FLAGS "$cppstdinflags"
?H:#$d_cppignhdrs CPP_IGN_HDRS  /* does CPP ignore .h files? */
?H:#$d_cppcanstdin CPP_CAN_STDIN  /* can CPP read stdin directly? */
?H:.
?T:cont
?F:!testcpp.c !testcpp.h !testcpp.out
?LINT:set d_cppcanstdin d_cppignhdrs
?LINT:usefile testcpp.c testcpp.out
: see how we invoke the C preprocessor
$cat <<EOM

$package needs to be able to preprocess its input files in a mode which
preserves comments, which is often not the default behaviour.  It should run
the C preprocessor you will use when compiling your own source code, which
should be ISO/ANSI C compliant if you want $package to handle the latest
standard C.  I will try to guess, but I might guess wrongly because it is not
necessarily the same preprocessor used to build $package.

EOM
$cat <<'EOT' >testcpp.c
#define ABC abc
#define XYZ xyz
ABC.XYZ
/* comment */
EOT
:
if $test "X$cppfilecom"
 != "X" && \
 $cppfilecom testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "You used to use $cppfilecom so we'll use that again."
elif echo 'Maybe "'$cc' -E -C" will work...' && \
 $cc -E -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "It works!"
 cppfilecom="$cc -E -C"
elif echo 'Nope...maybe """$cc"' -P -C" will work...' && \
 $cc -P -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
```

```
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Yup, that does."
 cppfilecom="$cc -P -C"
elif echo 'No such luck, maybe """$cpp"' -C" will work...' && \
 $cpp -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out
 >/dev/null 2>&1
then
 echo "Yup, it does."
 cppfilecom="$cpp -C"
else
 cppfilecom=''
 $cat <<'EOM'
I can't find a C preprocessor that will preserve comments. Please name one.
EOM
fi
:
dflt="$cppfilecom"
cont=true
while $test "$cont" ; do
 echo " "
 rp="How should $package run your preprocessor preserving comments?"
 . ./myread
 cppfilecom="$ans"
 $cppfilecom testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
  $contains comment testcpp.out >/dev/null 2>&1
 then
  echo "OK, that will do."
  cont=''
 else
  echo "Sorry, I can't get that to work."
 fi
done

@if CPP_IGN_HDRS || d_cppignhdrs
: Now see if it ignores header files.
cp testcpp.c testcpp.h
$cppfilecom testcpp.h >testcpp.out 2>&1
if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Terrific; it processes .h files passed on the command line too."
 val="$undef"
else
```

```
 echo "It ignores .h files on the command line; pity."
 val="$define"
fi
set
 d_cppignhdrs
eval $setvar

@end
@if CPP_STDIN_FLAGS || CPP_CAN_STDIN || cppstdinflags || d_cppcanstdin
: Now see how to send stdin to it.
echo " "
cp testcpp.c testcpp.h
$cppfilecom <testcpp.h >testcpp.out 2>&1
if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Great; and it will read stdin if passed no arguments."
 val="$define"
 cppstdinflags="
else
 $cppfilecom - <testcpp.h >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
  $contains comment testcpp.out >/dev/null 2>&1
 then
  echo "Great; and it can read stdin by passing it '-'."
  val="$define"
  cppstdinflags='-'
 else
  $cat <<FOO
Unfortunately, I can't find an easy way to get that preprocessor to read from
standard input. Do you know any flags I can pass it to get it to do so?
If that preprocessor can't read directly form standard input, answer 'none'.

FOO
 val='dunno'
 while $test "$val" = "dunno"; do
  rp='Flags to get preprocessor
 to read stdin?'
  dflt='none'
  . ./myread
  if $test $ans = 'none'; then
   echo "Oh well, if $package wants it done, it will do it for itself."
   val="$undef"
  else
   $cppfilecom $ans <testcpp.h >testcpp.out 2>&1
   if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
    $contains comment testcpp.out >/dev/null 2>&1
   then
```

```
    echo "Good; that works fine."
    val="$define"
    cppstdinflags="$ans"
   else
    echo "Sorry, I couldn't get that to work."
   fi
  fi
 done
 fi
fi
set d_cppcanstdin
eval $setvar

@end
: cleanup cpp test files anyway
$rm -f testcpp.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cppfilecom.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: rcs_branch.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: rcs_branch.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:rcs_branch: Myread contains Loc
?MAKE: -pick add $@ %<
?S:rcs_branch:
?S: This variable will hold "true" if rcs can take the -b<revision>
?S: option, which can make Life Easier on those folks who like to run
?S: rcsdiff manually.
?S:.
?T:xxx
: Tra la la la la
echo " "
echo "Checking to see if RCS understands the -b switch..." >&4
xxx=`./loc
```

```
 rcs " $pth`
case "$xxx" in
")
 rcs_branch=false
 echo "Oh.  You don't seem to have RCS here."
 ;;
*)
 rcs > rcsbranch.out 2>&1
 if $contains 'b\[rev\]' rcsbranch.out  >/dev/null 2>&1 ; then
  rcs_branch=true
  echo "Nice!  Your RCS is spiffy!"
 else
  rcs_branch=false
 echo "Well, at least you have RCS.  You know, a newer version is available."
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/rcs_branch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999-2016 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_PRIfldbl sPRIfldbl d_PRIgldbl d_PRIFUldbl sPRIGUldbl d_PRIEUldbl \
 sPRIgldbl d_PRIeldbl sPRIeldbl sPRIFUldbl d_PRIGUldbl sPRIEUldbl \
 d_SCNfldbl  d_double_style_vax d_double_style_ieee \
 d_double_style_ibm d_double_style_cray d_double_has_subnormals \
 d_double_has_inf d_double_has_nan d_double_has_negative_zero \
 sSCNfldbl doublekind: \
 d_longdbl longdblsize doublesize uselongdouble test echo cat rm_try \
 Setvar Compile run i_stdlib osname gccversion ccflags
?MAKE: -pick add $@ %<
?S:doublekind:
?S: This variable, if defined, encodes the type of a double:
?S:  1 = IEEE 754 32-bit little endian,
?S:  2 = IEEE 754 32-bit big endian,
?S:  3 = IEEE 754 64-bit little endian,
?S:  4 = IEEE
 754 64-bit big endian,
?S:  5 = IEEE 754 128-bit little endian,
?S:  6 = IEEE 754 128-bit big endian,
?S:  7 = IEEE 754 64-bit mixed endian le-be,
```

```
?S:  8 = IEEE 754 64-bit mixed endian be-le,
?S:  9 = VAX 32bit little endian F float format
?S: 10 = VAX 64bit little endian D float format
?S: 11 = VAX 64bit little endian G float format
?S: 12 = IBM 32bit format
?S: 13 = IBM 64bit format
?S: 14 = Cray 64bit format
?S: -1 = unknown format.
?S:.
?S:d_PRIfldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIgldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIeldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIFUldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates
 that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIfldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_PRIGUldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIgldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_PRIEUldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIeldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_SCNfldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to scan long doubles.
?S:.
?S:sPRIfldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'f') for
```

output.
?S:.
?S:sPRIgldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'g') for output.
?S:.
?S:sPRIeldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'e') for output.
?S:.
?S:sPRIFUldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'F') for output.
?S: The 'U' in the name is to separate this from sPRIfldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRIGUldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'G') for output.
?S: The 'U' in the name is to separate this from sPRIgldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRIEUldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'E') for output.
?S: The 'U' in the name is to separate this from sPRIeldbl so that even
?S: case-blind
systems can see the difference.
?S:.
?S:sSCNfldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'f') for input.
?S:.
?S:d_double_has_inf:
?S: This variable conditionally defines the symbol DOUBLE_HAS_INF
?S: which indicates that the double type has an infinity.
?S:.
?S:d_double_has_nan:
?S: This variable conditionally defines the symbol DOUBLE_HAS_NAN
?S: which indicates that the double type has a not-a-number.
?S:.
?S:d_double_has_negative_zero:
?S: This variable conditionally defines the symbol DOUBLE_HAS_NEGATIVE_ZERO
?S: which indicates that the double type has a negative zero.
?S:.
?S:d_double_has_subnormals:
?S: This variable conditionally defines the symbol DOUBLE_HAS_SUBNORMALS
?S: which indicates that the double type has subnormals (denormals).

```
?S:.
?S:d_double_style_cray:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_CRAY
?S: which indicates that the double is the 64-bit CRAY mainframe
 format.
?S:.
?S:d_double_style_ibm:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_IBM,
?S: which indicates that the double is the 64-bit IBM mainframe format.
?S:.
?S:d_double_style_ieee:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_IEEE,
?S: which indicates that the double is the 64-bit IEEE 754.
?S:.
?S:d_double_style_vax:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_VAX,
?S: which indicates that the double is the 64-bit VAX format D or G.
?S:.
?C:PERL_PRIfldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'f') for output.
?C:.
?C:PERL_PRIgldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'g') for output.
?C:.
?C:PERL_PRIeldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'e') for output.
?C:.
?C:PERL_PRIFldbl:
?C: This symbol, if defined, contains the string used by stdio
 to
?C: format long doubles (format 'f') for output.
?C:.
?C:PERL_PRIGldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'g') for output.
?C:.
?C:PERL_PRIEldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'e') for output.
?C:.
?C:PERL_SCNfldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'f') for input.
?C:.
?C:DOUBLEKIND:
```

?C: DOUBLEKIND will be one of
?C: DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE
?C: DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE
?C: DOUBLE_IS_VAX_F_FLOAT
?C: DOUBLE_IS_VAX_D_FLOAT
?C: DOUBLE_IS_VAX_G_FLOAT
?C: DOUBLE_IS_IBM_SINGLE_32_BIT
?C: DOUBLE_IS_IBM_DOUBLE_64_BIT
?C: DOUBLE_IS_CRAY_SINGLE_64_BIT
?C: DOUBLE_IS_UNKNOWN_FORMAT
?C:.
?C:DOUBLE_HAS_INF:
?C: This
 symbol, if defined, indicates that the double has
?C: the infinity.
?C:.
?C:DOUBLE_HAS_NAN:
?C: This symbol, if defined, indicates that the double has
?C: the not-a-number.
?C:.
?C:DOUBLE_HAS_NEGATIVE_ZERO:
?C: This symbol, if defined, indicates that the double has
?C: the negative_zero.
?C:.
?C:DOUBLE_HAS_SUBNORMALS:
?C: This symbol, if defined, indicates that the double has
?C: the subnormals (denormals).
?C:.
?C:DOUBLE_STYLE_CRAY:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit CRAY mainframe format.
?C:.
?C:DOUBLE_STYLE_IBM:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit IBM mainframe format.
?C:.
?C:DOUBLE_STYLE_IEEE:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit IEEE 754.
?C:.
?C:DOUBLE_STYLE_VAX:
?C: This symbol, if defined, indicates that the double is

```
?C: the 64-bit VAX format D or G.
?C:.
?LINT:known
 DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE
?LINT:known DOUBLE_IS_VAX_F_FLOAT
?LINT:known DOUBLE_IS_VAX_D_FLOAT
?LINT:known DOUBLE_IS_VAX_G_FLOAT
?LINT:known DOUBLE_IS_IBM_SINGLE_32_BIT
?LINT:known DOUBLE_IS_IBM_DOUBLE_64_BIT
?LINT:known DOUBLE_IS_CRAY_SINGLE_64_BIT
?LINT:known DOUBLE_IS_UNKNOWN_FORMAT
?H:#define DOUBLEKIND $doublekind  /**/
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN 1
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN 2
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN 3
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN 4
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN 5
?H:?DOUBLEKIND:#define
 DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN 6
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE 7
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE 8
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_F_FLOAT 9
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_D_FLOAT 10
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_G_FLOAT 11
?H:?DOUBLEKIND:#define DOUBLE_IS_IBM_SINGLE_32_BIT 12
?H:?DOUBLEKIND:#define DOUBLE_IS_IBM_DOUBLE_64_BIT 13
?H:?DOUBLEKIND:#define DOUBLE_IS_CRAY_SINGLE_64_BIT 14
?H:?DOUBLEKIND:#define DOUBLE_IS_UNKNOWN_FORMAT  -1
?H:#$d_PRIfldbl PERL_PRIfldbl $sPRIfldbl /**/
?H:#$d_PRIgldbl PERL_PRIgldbl $sPRIgldbl /**/
?H:#$d_PRIeldbl PERL_PRIeldbl $sPRIeldbl /**/
?H:#$d_PRIFUldbl PERL_PRIFldbl $sPRIFUldbl /**/
?H:#$d_PRIGUldbl PERL_PRIGldbl $sPRIGUldbl /**/
?H:#$d_PRIEUldbl PERL_PRIEldbl $sPRIEUldbl /**/
?H:#$d_SCNfldbl PERL_SCNfldbl $sSCNfldbl /**/
?H:#$d_double_has_inf DOUBLE_HAS_INF
?H:#$d_double_has_nan DOUBLE_HAS_NAN
?H:#$d_double_has_negative_zero
 DOUBLE_HAS_NEGATIVE_ZERO
?H:#$d_double_has_subnormals DOUBLE_HAS_SUBNORMALS
?H:#$d_double_style_cray DOUBLE_STYLE_CRAY
```

```
?H:#$d_double_style_ibm DOUBLE_STYLE_IBM
?H:#$d_double_style_ieee DOUBLE_STYLE_IEEE
?H:#$d_double_style_vax DOUBLE_STYLE_VAX
?H:.
?T:yyy message saveccflags
?F:!try
?LINT:change ccflags
?LINT:change uselongdouble
: Check what kind of doubles your system has
$echo "Checking the kind of doubles you have..." >&4
$cat >try.c <<EOP
#$i_stdlib I_STDLIB
#define DOUBLESIZE $doublesize
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
static const double d = -0.1;
int main() {
 unsigned const char* b = (unsigned const char*)(&d);
#if DOUBLESIZE == 4
 if (b[0] == 0xCD && b[3] == 0xBD) {
   /* IEEE 754 32-bit little-endian */
   printf("1\n");
   exit(0);
 }
 if (b[0] == 0xBD && b[3] == 0xCD) {
   /* IEEE 754 32-bit big-endian */
   printf("2\n");
   exit(0);
 }
 if (b[0] == 0xCC && b[3] == 0xCC) {
   /* VAX format F, 32-bit
 PDP-style mixed endian. */
   printf("9\n");
   exit(0);
 }
 if (b[0] == 0xC0 && b[3] == 0x9A) {
   /* IBM single 32-bit */
   printf("12\n");
   exit(0);
 }
#endif
#if DOUBLESIZE == 8
 if (b[0] == 0x9A && b[7] == 0xBF) {
   /* IEEE 754 64-bit little-endian */
   printf("3\n");
   exit(0);
```

```
 }
 if (b[0] == 0xBF && b[7] == 0x9A) {
   /* IEEE 754 64-bit big-endian */
   printf("4\n");
   exit(0);
 }
 if (b[0] == 0x99 && b[3] == 0xBF && b[4] == 0x9A && b[7] == 0x99) {
  /* ARM mixed endian: two little-endian 32-bit floats, in big endian order:
   * 4 5 6 7 0 1 2 3 (MSB = 7, LSB = 0)
   * 99 99 b9 bf 9a 99 99 99 */
   printf("7\n");
   exit(0);
 }
 if (b[0] == 0x99 && b[3] == 0x9A && b[4] == 0xBF && b[7] == 0x99) {
  /* The opposite of case 7, mixed endian: two big-endian 32-bit floats,
   * in little endian order: 3 2 1 0 7 6 5 4 (MSB = 7, LSB = 0)
   * 99 99 99 9a bf b9 99 99 */
   printf("8\n");
   exit(0);
 }
 if (b[0] == 0xCC && b[7] == 0xCC) {
  /* VAX
 format D, 64-bit PDP-style mixed endian. */
   printf("10\n");
   exit(0);
 }
 if (b[0] == 0xD9 && b[7] == 0x99) {
  /* VAX format G, 64-bit PDP-style mixed endian. */
   printf("11\n");
   exit(0);
 }
 if (b[0] == 0xC0 && b[7] == 0x9A) {
   /* IBM double 64-bit */
   printf("13\n");
   exit(0);
 }
 if (b[0] == 0xBF && b[7] == 0xCD) {
   /* CRAY single 64-bit */
   printf("14\n");
   exit(0);
 }
#endif
#if DOUBLESIZE == 16
 if (b[0] == 0x9A && b[15] == 0xBF) {
   /* IEEE 754 128-bit little-endian */
   printf("5\n");
   exit(0);
 }
```

```
 if (b[0] == 0xBF && b[15] == 0x9A) {
   /* IEEE 754 128-bit big-endian */
   printf("6\n");
   exit(0);
 }
#endif
 /* Then there are old mainframe/miniframe formats like IBM and CRAY.
  * Whether those environments can still build Perl is debatable. */
 printf("-1\n"); /* unknown */
 exit(0);
}
EOP
set try
if eval $compile; then
   doublekind=`$run ./try`
else
   doublekind=-1
fi
case "$doublekind" in
1) echo "You have IEEE
 754 32-bit little endian doubles." >&4 ;;
2) echo "You have IEEE 754 32-bit big endian doubles." >&4 ;;
3) echo "You have IEEE 754 64-bit little endian doubles." >&4 ;;
4) echo "You have IEEE 754 64-bit big endian doubles." >&4 ;;
5) echo "You have IEEE 754 128-bit little endian doubles." >&4 ;;
6) echo "You have IEEE 754 128-bit big endian doubles." >&4 ;;
7) echo "You have IEEE 754 64-bit mixed endian doubles (32-bit LEs in BE)." >&4 ;;
8) echo "You have IEEE 754 64-bit mixed endian doubles (32-bit BEs in LE)." >&4 ;;
9) echo "You have VAX format F 32-bit PDP-style mixed endian doubles." >&4 ;;
10) echo "You have VAX format D 64-bit PDP-style mixed endian doubles." >&4 ;;
11) echo "You have VAX format G 64-bit PDP-style mixed endian doubles." >&4 ;;
12) echo "You have IBM short 32-bit doubles." >&4 ;;
13) echo "You have IBM long 64-bit doubles." >&4 ;;
14) echo "You have Cray single 64-bit doubles." >&4 ;;
*) echo "Cannot figure out your double.  You Cyber, or something?" >&4 ;;
esac
d_double_style_ieee=$undef
d_double_style_vax=$undef
d_double_style_ibm=$undef
d_double_style_cray=$undef
case
 "$doublekind" in
1|2|3|4|5|6|7|8) d_double_style_ieee=$define ;;
9|10|11) d_double_style_vax=$define ;;
12|13) d_double_style_ibm=$define ;;
14) d_double_style_cray=$define ;;
esac
case "$d_double_style_ieee" in
```

```
$define)
   d_double_has_inf=$define
   d_double_has_nan=$define
   d_double_has_negative_zero=$define
   d_double_has_subnormals=$define
   ;;
*)
   d_double_has_inf=$undef
   d_double_has_nan=$undef
   d_double_has_negative_zero=$undef
   d_double_has_subnormals=$undef
   ;;
esac
$rm_try

: Check print/scan long double stuff
echo " "

if $test X"$d_longdbl" = X"$define"; then

echo "Checking how to print long doubles..." >&4

if $test X"$sPRIfldbl" = X -a X"$doublesize" = X"$longdblsize"; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 double d = 123.456;
 printf("%.3f\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run
 ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"f"'; sPRIgldbl='"g"'; sPRIeldbl='"e"';
   sPRIFUldbl='"F"'; sPRIGUldbl='"G"'; sPRIEUldbl='"E"';
   echo "We will use %f."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
```

```
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3Lf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"Lf"'; sPRIgldbl='"Lg"'; sPRIeldbl='"Le"';
   sPRIFUldbl='"LF"'; sPRIGUldbl='"LG"'; sPRIEUldbl='"LE"';
   echo "We will use %Lf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3llf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"llf"'; sPRIgldbl='"llg"'; sPRIeldbl='"lle"';
   sPRIFUldbl='"llF"'; sPRIGUldbl='"llG"'; sPRIEUldbl='"llE"';
   echo "We
 will use %llf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long double d = 123.456;
```

```
 printf("%.3lf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl="'lf'"; sPRIgldbl="'lg'"; sPRIeldbl="'le'";
   sPRIFUldbl="'lF'"; sPRIGUldbl="'lG'"; sPRIEUldbl="'lE'";
   echo "We will use %lf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 echo "Cannot figure out how to print long doubles." >&4
else
 sSCNfldbl=$sPRIfldbl # expect consistency
fi

$rm_try

fi # d_longdbl

case "$sPRIfldbl" in
") d_PRIfldbl="$undef"; d_PRIgldbl="$undef"; d_PRIeldbl="$undef";
 d_PRIFUldbl="$undef"; d_PRIGUldbl="$undef"; d_PRIEUldbl="$undef";
 d_SCNfldbl="$undef";
 ;;
*) d_PRIfldbl="$define"; d_PRIgldbl="$define"; d_PRIeldbl="$define";
 d_PRIFUldbl="$define"; d_PRIGUldbl="$define"; d_PRIEUldbl="$define";
 d_SCNfldbl="$define";
 ;;
esac

: Before committing on uselongdouble,
 see whether that looks sane.
if $test "$uselongdouble" = "$define"; then
   message=""
   echo " "
   echo "Checking if your long double math functions work right..." >&4
   $cat > try.c <<EOF
#include <math.h>
#include <stdio.h>
int main() {
 printf("%"$sPRIgldbl"\n", sqrtl(logl(expl(cosl(sinl(0.0L))))+powl(2.0L, 3.0L)));
```

```
}
EOF
  case "$osname:$gccversion" in
  aix:) saveccflags="$ccflags"
 ccflags="$ccflags -qlongdouble" ;; # to avoid core dump
  esac
  set try
  if eval $compile_ok; then
    yyy=`$run ./try`
  fi
  case "$yyy" in
  3) echo "Your long double math functions are working correctly." >&4 ;;
  *) echo "Your long double math functions are broken, not using long doubles." >&4
     uselongdouble=$undef
     ;;
  esac
  $rm_try
  case "$osname:$gccversion" in
  aix:) ccflags="$saveccflags" ;; # restore
  esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/longdblfio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpagsz.U,v 3.0.1.1 1994/10/29 16:13:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpagsz.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:10  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpagsz: Compile Oldconfig Myread Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_getpagsz:
?S: This variable conditionally defines HAS_GETPAGESIZE if getpagesize()
?S: is available to get the system page size.
```

```
?S:.
?C:HAS_GETPAGESIZE
 (GETPAGESIZE):
?C: This symbol, if defined, indicates that the getpagesize system call
?C: is available to get system page size, which is the granularity of
?C: many memory management calls.
?C:.
?H:#$d_getpagsz HAS_GETPAGESIZE  /**/
?H:.
?LINT:set d_getpagsz
: see if getpagesize exists
set getpagesize d_getpagsz
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_getpagsz.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setrgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setrgid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setrgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setrgid:
?S: This variable conditionally defines the HAS_SETRGID symbol, which
?S: indicates to the C program that the setrgid() routine is available
?S: to change the real gid of the current program.
?S:.
?C:HAS_SETRGID (SETRGID):
?C: This symbol, if defined, indicates that the setrgid
 routine is available
?C: to change the real gid of the current program.
?C:.
?H:#$d_setrgid HAS_SETRGID  /**/
?H:.
?LINT:set d_setrgid
: see if setrgid exists
```

```
set setrgid d_setrgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setrgid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endpent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endpent:
?S: This variable conditionally defines HAS_ENDPROTOENT if endprotoent() is
?S: available to close whatever was being used for protocol queries.
?S:.
?C:HAS_ENDPROTOENT:
?C: This symbol, if defined, indicates that the endprotoent() routine is
?C: available to close whatever was being used
 for protocol queries.
?C:.
?H:#$d_endpent HAS_ENDPROTOENT  /**/
?H:.
?LINT:set d_endpent
: see if endprotoent exists
set endprotoent d_endpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endpent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mkstemp.U,v 3.0.1.1 1994/08/29 16:11:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mkstemp.U,v $
?RCS:
?MAKE:d_mkstemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkstemp:
?S: This variable conditionally defines the HAS_MKSTEMP symbol, which
?S: indicates to the C program that the mkstemp() routine is available
?S: to exclusively create and open a uniquely named temporary file.
?S:.
?C:HAS_MKSTEMP :
?C: This symbol, if defined, indicates that the mkstemp routine is
?C: available to exclusively create and open a uniquely named
?C: temporary file.
?C:.
?H:#$d_mkstemp HAS_MKSTEMP  /**/
?H:.
?LINT:set d_mkstemp
: see if mkstemp exists
set mkstemp d_mkstemp
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_mkstemp.U
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```
?RCS: $Id: d_havetlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_havetlib.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:36:31  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:44:06  ram
?RCS: patch23: added AIX support to accept shared lib stub as termlib (WED)
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:06:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_havetlib termlib: cat contains Myread Loc
 Filexp Oldconfig libpth \
 test uname _a _o
?MAKE: -pick add $@ %<
?S:d_havetlib:
?S: This variable conditionally defines the HAS_TERMLIB symbol, which
?S: indicates to the C program that termlib-style routines are available.
?S:.
?S:termlib:
?S: This variable contains the argument to pass to the loader to get
?S: termlib-style routines.  It is up to the Makefile.SH to make sure
?S: the value gets to the right command.  Note that on many systems the
?S: termlib routines are emulated by the curses or terminfo library.
?S:.
?C:HAS_TERMLIB (HAVETERMLIB):
?C: This symbol, when defined, indicates that termlib-style routines
?C: are available.  There is nothing to include.
?C:.
?H:#$d_havetlib HAS_TERMLIB /**/
?H:.
?T:xxx
: where do we get termlib routines from
echo " "
xxx=`./loc libcurses$_a x $libpth`
case "$xxx" in
/*)
 ar t $xxx >grimble
 if $contains tputs$_o grimble >/dev/null 2>&1; then
  termlib='-lcurses'
  d_havetlib="$define"
  echo "Terminfo library found." >&4
 elif $test "x`$uname
 2>/dev/null`" = xAIX; then
  # Ok, do the AIX shr.o fun thing
  /usr/ccs/bin/nm -en $xxx 2>/dev/null >grimble
  if $contains '^tputs .*|extern|' grimble >/dev/null 2>&1; then
   termlib='-lcurses'
   d_havetlib="$define"
   echo "AIX Terminfo library found." >&4
  else
   xxx=x
  fi
 else
  xxx=x
 fi
```

```
 rm -f grimble
 ;;
esac
case "$xxx" in
x)
 xxx=`./loc libtermlib$_a x $libpth`
 case "$xxx" in
 /usr/lib*|/lib*)
  termlib='-ltermlib'
  d_havetlib="$define"
  echo "Termlib library found." >&4
  ;;
 /*)
  termlib="$xxx"
  d_havetlib="$define"
  echo "Termlib library found." >&4
  ;;
 *)
  xxx=`./loc libtermcap$_a x $libpth`
  case "$xxx" in
  /usr/lib*|/lib*)
   termlib='-ltermcap'
   d_havetlib="$define"
   echo "Termcap library found." >&4
   ;;
  /*)
   termlib="$xxx"
   d_havetlib="$define"
   echo "Termcap library found." >&4
   ;;
  *)
   case "$termlib" in
   ")
    dflt=y
rp="Your system appears to NOT have termlib-style routines. Is this true?"
    . ./myread
    case "$ans"
 in
    n*|f*) d_havetlib="$define"
     $cat <<'EOM'
Then where are the termlib-style routines kept? Specify either -llibname
or a full pathname (~name ok).

EOM
     dflt="
     rp='Specify termlib path:'
     . ./myread
     termlib=`./filexp $ans`
```

```
    ;;
   *)
    d_havetlib="$undef"
    termlib=''
    echo "You will have to play around with term.c then." >&4
    ;;
   esac
  echo " ";;
  *)  echo "You said termlib was $termlib before." >&4;;
  esac;;
 esac;;
esac;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_havetlib.U
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```
?RCS: $Id: d_ckeypad.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
?RCS: $Log: d_ckeypad.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ckeypad: cat cc termlib Setvar
?MAKE: -pick add $@ %<
?S:d_ckeypad:
?S: This variable controls the definition of HAS_CURSES_KEYPAD,
?S: which tells the application that the keypad() curses function
?S: is available.
?S:.
?C:HAS_CURSES_KEYPAD:
?C: This symbol indicates the availability of the keypad() function
?C: of the curses library.
?C:.
?H:#$d_ckeypad
 HAS_CURSES_KEYPAD /**/
?H:.
?LINT:set d_ckeypad
: check for the "keypad()" function in the curses library
```

```
echo " "
case "$termlib" in
")
 echo "You don't have a curses library, so I won't waste time looking" >&4
 echo "to see if has the keypad() function." >&4
*)
echo "Checking the curses library ($termlib) for the keypad() function..." >&4
 $cat >c_keypad.c <<'EOCP'
#include <curses.h>
int main() {
 keypad(stdscr, TRUE);
 exit(0);
}
EOCP
 if $cc c_keypad.c >c_keypad.out 2>&1 ; then
  val=$define
  echo "It appears to have the keypad() function."
 else
  val=$undef
  echo "Your curses library doesn't appear to have the keypad() function."
 fi
esac
set d_ckeypad
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ckeypad.U
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```
?RCS: $Id: i_malloc.U,v 3.1 2003/01/21 18:51:51 merijn Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.1  2003/01/21  18:51:51  merijn
?RCS: Moved to modified: Ihdr replaced with Compile
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_malloc: cat rm_try Compile Setvar i_mallocmalloc
```

```
?MAKE: -pick add $@ %<
?S:i_malloc:
?S: This variable conditionally defines the I_MALLOC symbol, and indicates
?S: whether a C program should include <malloc.h>.
?S:.
?C:I_MALLOC:
?C: This
 symbol, if defined, indicates to the C program that it should
?C: include <malloc.h>.
?C:.
?H:#$i_malloc I_MALLOC  /**/
?H:.
?LINT:set i_malloc
: see if this is a malloc.h system
: we want a real compile instead of Inhdr because some systems have a
: malloc.h that just gives a compile error saying to use stdlib.h instead
echo " "
$cat >try.c <<EOCP
#include <stdlib.h>
#include <malloc.h>
#$i_mallocmalloc I_MALLOCMALLOC
#ifdef I_MALLOCMALLOC
# include <malloc/malloc.h>
#endif

int main () { return 0; }
EOCP
set try
if eval $compile; then
   echo "<malloc.h> found." >&4
   val="$define"
else
   echo "<malloc.h> NOT found." >&4
   val="$undef"
fi
$rm_try
set i_malloc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_malloc.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lib.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:16:47  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:38:08  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:27:40  ram
?RCS: patch32: now uses installation prefix to set the default
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lib libexp: Getfile
 Loc Oldconfig Prefixit Prefixup prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?S:lib:
?S: This variable holds the name of the directory in which the user wants
?S: to put public library files for the package in question.  It is most
?S: often a local directory such as /usr/local/lib. Programs using this
?S: variable must be prepared to deal with filename expansion.
?S:.
?S:libexp:
?S: This variable is the same as the lib variable, but is filename expanded
?S: at configuration time, for convenient use in your makefiles.
?S:.
: determine where public libraries go
set lib lib
eval $prefixit
case "$lib" in
")
 dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
 set dflt
 eval $prefixup
 ;;
*)  dflt="$lib";;
esac
echo " "
fn=d~
rp='Where do you want to put the public libraries?'
. ./getfile
lib="$ans"
```

```
libexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lib.U
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```
?RCS: $Id: d_cbrt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_cbrt.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_cbrt: Inlibc
?MAKE: -pick add $@ %<
?S:d_cbrt:
?S: This variable conditionally defines the HAS_CBRT symbol, which
?S: indicates to the C program that the cbrt() (cube root) function
?S: is available.
?S:.
?C:HAS_CBRT (CBRT):
?C: This symbol, if defined, indicates that the cbrt() (cube root)
?C: function is available.
?C:.
?H:#$d_cbrt HAS_CBRT /**/
?H:.
?LINT:set
 d_cbrt
: see if cbrt exists
set cbrt d_cbrt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_cbrt.U
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```
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:longdblinfbytes longdblnanbytes doubleinfbytes doublenanbytes: Inlibc \
 cat Compile run rm_try Setvar echo d_longdbl \
 doublekind doublesize longdblkind longdblsize
?MAKE: -pick add $@ %<
?S:longdblinfbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the long double precision infinity.
?S:.
?S:longdblnanbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the long double precision not-a-number.
?S:.
?S:doubleinfbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the double precision infinity.
?S:.
?S:doublenanbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for
 the double precision not-a-number.
?S:.
?C:DOUBLEINFBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes for the double precision infinity.
?C:.
?C:DOUBLENANBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes (0xHH) for the double precision not-a-number.
?C:.
?C:LONGDBLINFBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes for the long double precision infinity.
?C:.
?C:LONGDBLNANBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes (0xHH) for the long double precision not-a-number.
?C:.
?H:#define DOUBLEINFBYTES  $doubleinfbytes  /**/
?H:#define DOUBLENANBYTES  $doublenanbytes  /**/
?H:#define LONGDBLINFBYTES $longdblinfbytes  /**/
?H:#define LONGDBLNANBYTES $longdblnanbytes  /**/
?H:.
?F:!try
: Check what kind of inf/nan your system has
$echo "Checking the kind of infinities and nans you have..." >&4
$echo "(The following tests may crash.  That's
```

```
 okay.)" >&4
$cat >try.c <<EOP
#define DOUBLESIZE $doublesize
#$d_longdbl HAS_LONG_DOUBLE
#ifdef HAS_LONG_DOUBLE
#define LONG_DOUBLESIZE $longdblsize
#define LONG_DOUBLEKIND $longdblkind
#endif
#include <math.h>
#include <string.h>
#include <stdio.h>
/* Note that whether the sign bit is on or off
* for NaN depends on the CPU/FPU, and possibly
* can be affected by the build toolchain.
*
* For example for older MIPS and HP-PA 2.0 the quiet NaN is:
* 0x7f, 0xf7, 0xff, 0xff, 0xff, 0xff, 0xff, 0xff
* 0x7f, 0xf4, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00
* (respectively) as opposed to the more usual
* 0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00
*
* Pre-IEEE-754 floating point format do not even have inf/nan support
* at all.  They might have a "max" value (DBL_MAX), which may be deadly
* to even mention, causing immediate SIGFPE or equivalent: this is
* the case with VAX floating point, for example.
*/
static void bytes(void *v, unsigned int n) {
 unsigned char *p = (unsigned
 char *)v;
 int i;
 for (i = 0; i < n; i++) {
   printf("0x%02x%s", p[i], i < n - 1 ? ", " : "\n");
 }
}
int main(int argc, char *argv[]) {
  /* We cannot use 1.0/0.0 and 0.0/0.0 (with L suffixes for long double)
   * because some compilers are 'smart' and not only warn but refuse to
   * compile such 'illegal' values. */
  double dinf = exp(1e9);
  double dnan = sqrt(-1.0);
#ifdef HAS_LONG_DOUBLE
  long double ldinf = (long double)exp(1e9);
  long double ldnan = (long double)sqrt(-1.0);
# if LONG_DOUBLEKIND == 3 || LONG_DOUBLEKIND == 4
/* the 80-bit long doubles might have garbage in their excess bytes */
   memset((char *)&ldinf + 10, '\0', LONG_DOUBLESIZE - 10);
   memset((char *)&ldnan + 10, '\0', LONG_DOUBLESIZE - 10);
# endif
```

```
#endif
 if (argc == 2) {
   switch (argv[1][0]) {
   case '1': bytes(&dinf, sizeof(dinf)); break;
   case '2': bytes(&dnan, sizeof(dnan)); break;
#ifdef HAS_LONG_DOUBLE
   case '3': bytes(&ldinf, sizeof(ldinf)); break;
   case '4': bytes(&ldnan,
 sizeof(ldnan)); break;
#endif
   }
 }
 return 0;
}
EOP
set try
if eval $compile; then
   doubleinfbytes=`$run ./try 1`
   doublenanbytes=`$run ./try 2`
   case "$d_longdbl" in
   $define)
     longdblinfbytes=`$run ./try 3`
     longdblnanbytes=`$run ./try 4`
     ;;
   esac
else
   # Defaults in case the above test program failed.
   case "$doublekind" in
   1) # IEEE 754 32-bit LE
      doubleinfbytes='0x00, 0x00, 0xf0, 0x7f'
      doublenanbytes='0x00, 0x00, 0xf8, 0x7f'
      ;;
   2) # IEEE 754 32-bit BE
      doubleinfbytes='0x7f, 0xf0, 0x00, 0x00'
      doublenanbytes='0x7f, 0xf8, 0x00, 0x00'
      ;;
   3) # IEEE 754 64-bit LE
      doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0, 0x7f'
      doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8, 0x7f'
      ;;
   4) # IEEE 754 64-bit BE
      doubleinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
      doublenanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'

 ;;
   5) # IEEE 754 128-bit LE
      doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0,
0x7f'
```

```
    doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8,
0x7f'
    ;;
  6) # IEEE 754 128-bit BE
    doubleinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    doublenanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  7) # IEEE 754 64-bit mixed: 32-bit LEs in BE
    doubleinfbytes='0x00, 0x00, 0xf0, 0x7f, 0x00, 0x00, 0x00, 0x00'
    doublenanbytes='0x00, 0x00, 0xf8, 0x7f, 0x00, 0x00, 0x00, 0x00'
    ;;
  8) # IEEE 754 64-bit mixed: 32-bit BEs in LE
    doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x7f, 0xf0, 0x00, 0x00'
    doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x7f, 0xf8, 0x00, 0x00'
    ;;
  9|10|11|12|13|14) # VAX/Cray/IBM floating
 point formats, no inf/nan.
    doubleinfbytes=$undef
    doublenanbytes=$undef
    ;;
  *) # No idea.
    doubleinfbytes=$undef
    doublenanbytes=$undef
    ;;
  esac
  case "$longdblkind" in
  1) # IEEE 754 128-bit LE
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xff,
0x7f'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff,
0x7f'
    ;;
  2) # IEEE 754 128-bit BE
    longdblinfbytes='0x7f, 0xff, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  3) # IEEE 754 80-bit LE, 12 or 16 bytes (x86)
    case "$longdblsize" in
    12) # x86 32-bit (96 bits, or 4 x 32, or 12 x 8)
      longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff, 0x7f,
 0x00, 0x00'
      longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xc0, 0xff, 0x7f, 0x00, 0x00'
      ;;
    16) # x86_64
```

```
        longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
        longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xc0, 0xff, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
        ;;
    *)  # No idea.
        longdblinfbytes=$undef
        longdblnanbytes=$undef
    ;;
    esac
    ;;
  4) # IEEE 754 80-bit BE, 12 or 16 bytes
    case "$longdblsize" in
    12) # 32-bit system
        longdblinfbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
        longdblnanbytes='0x7f, 0xff, 0xc0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
        ;;
    16) # 64-bit system
        longdblinfbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
         longdblnanbytes='0x7f, 0xff, 0xc0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
        ;;
    *)  # No idea.
        longdblinfbytes=$undef
        longdblnanbytes=$undef
    ;;
    esac
    ;;
  5) # 128-bit LE-LE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0,
0x7f'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8,
0x7f'
    ;;
  6) # 128-bit BE-BE "double double"
    longdblinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  7) # 128-bit LE-BE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'

    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
```

```
  8) # 128-bit BE-LE "double double"
     longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
     longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
     ;;
  9|10|11|12|13|14) # VAX/Cray/IBM floating point formats, no inf/nan.
     longdblinfbytes=$undef
     longdblnanbytes=$undef
     ;;
  *) # No idea.
     longdblinfbytes=$undef
     longdblnanbytes=$undef
     ;;
  esac
fi
# In case the program crashed the values are empty, turn them undef.
case "$doubleinfbytes" in
") doubleinfbytes=$undef ;;
esac
case "$doublenanbytes" in
") doublenanbytes=$undef ;;
esac
case "$longdblinfbytes" in
") longdblinfbytes=$undef ;;
esac
case "$longdblnanbytes" in
") longdblnanbytes=$undef ;;
esac
$rm_try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/infnan.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getlogin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
```

```
?RCS: $Log: d_getlogin.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:41  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_getlogin: Inlibc
?MAKE: -pick add $@ %<
?S:d_getlogin:
?S: This variable conditionally defines the HAS_GETLOGIN symbol, which
?S: indicates to the C program that the getlogin() routine is available
?S: to get the login name.
?S:.
?C:HAS_GETLOGIN :
?C: This symbol,
 if defined, indicates that the getlogin routine is
?C: available to get the login name.
?C:.
?H:#$d_getlogin HAS_GETLOGIN  /**/
?H:.
?LINT:set d_getlogin
: see if getlogin exists
set getlogin d_getlogin
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getlogin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cppstdin.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:08:34  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:05:38  ram
?RCS: patch16: comment for CPPLAST was missing
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:18:58  ram
?RCS: patch15: new variables cpprun and cpplast, guaranteed wrapper-free
?RCS: patch15: cppstdin now tries to use cc, even at the cost of a wrapper
?RCS:
```

```
?RCS: Revision 3.0.1.1  1993/08/25  14:00:53  ram
?RCS: patch6:
 remove wrapper when not actually used
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppstdin cppminus cpprun cpplast: contains test Myread Oldconfig Loc \
 cpp +cc rm hint osname gccversion startsh eunicefix
?MAKE: -pick add $@ %<
?S:cppstdin:
?S: This variable contains the command which will invoke the C
?S: preprocessor on standard input and put the output to stdout.
?S: It is primarily used by other Configure units that ask about
?S: preprocessor symbols.
?S:.
?S:cppminus:
?S: This variable contains the second part of the string which will invoke
?S: the C preprocessor on the standard input and produce to standard
?S: output.  This variable will have the value "-" if cppstdin needs
?S: a minus to specify standard input, otherwise the value is "".
?S:.
?S:cpprun:
?S: This variable contains the command which will invoke a C preprocessor
?S: on standard input and put the output to stdout. It is guaranteed not
?S: to be a wrapper
 and may be a null string if no preprocessor can be
?S: made directly available. This preprocessor might be different from the
?S: one used by the C compiler. Don't forget to append cpplast after the
?S: preprocessor options.
?S:.
?S:cpplast:
?S: This variable has the same functionality as cppminus, only it applies to
?S: cpprun and not cppstdin.
?S:.
?C:CPPSTDIN:
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  Typical value of "cc -E" or "/lib/cpp", but it can also
?C: call a wrapper. See CPPRUN.
?C:.
?C:CPPMINUS:
?C: This symbol contains the second part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  This symbol will have the value "-" if CPPSTDIN needs a minus
?C: to specify standard input, otherwise the value is "".
?C:.
?C:CPPRUN:
```

```
?C: This symbol contains the string which will invoke a C preprocessor on
?C: the
 standard input and produce to standard output. It needs to end
?C: with CPPLAST, after all other preprocessor flags have been specified.
?C: The main difference with CPPSTDIN is that this program will never be a
?C: pointer to a shell wrapper, i.e. it will be empty if no preprocessor is
?C: available directly to the user. Note that it may well be different from
?C: the preprocessor used to compile the C program.
?C:.
?C:CPPLAST:
?C: This symbol is intended to be used along with CPPRUN in the same manner
?C: symbol CPPMINUS is used with CPPSTDIN. It contains either "-" or "".
?C:.
?H:#define CPPSTDIN "$cppstdin"
?H:#define CPPMINUS "$cppminus"
?H:#define CPPRUN "$cpprun"
?H:#define CPPLAST "$cpplast"
?H:.
?F:cppstdin !testcpp.out !testcpp.c
?T:wrapper x_cpp x_minus ok
: see how we invoke the C preprocessor
echo " "
echo "Now, how can we feed standard input to your C preprocessor..." >&4
cat <<'EOT' >testcpp.c
#define ABC abc
#define XYZ xyz
ABC.XYZ
EOT
cd ..
if $test ! -f cppstdin;
 then
 echo "$startsh" >cppstdin
if $test "X$osname" = "Xaix" -a "X$gccversion" = X; then
?X: AIX cc -E doesn't show the absolute headerfile
?X: locations but we'll cheat by using the -M flag.
 echo 'cat >.$$.c; rm -f .$$.u; "$cc" ${1+"$@"} -M -c .$$.c 2>/dev/null; \
 test -s .$$.u && \
 awk """$2 ~ /\.h$/ { print "# 0 \""$2"\"" }""" .$$.u; \
 rm -f .$$.o .$$.u; "$cc" -E ${1+"$@"} .$$.c; rm .$$.c' >> cppstdin
else
 echo 'cat >.$$.c; "$cc" -E ${1+"$@"} .$$.c; rm .$$.c' >>cppstdin
fi; else
 echo "Keeping your $hint cppstdin wrapper."
fi
chmod 755 cppstdin
$eunicefix cppstdin
wrapper=`pwd`/cppstdin
ok='false'
```

```
cd UU

?X:
?X: We'll run the cpp tests again if we don't have any valid C preprocessor
?X: yet or don't know how to proceed without a wrapper (in which case cpprun
?X: is empty and that's really annoying...)
?X:
if $test "X$cppstdin" != "X" && \
 $cppstdin $cppminus <testcpp.c >testcpp.out 2>&1 && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
then
 echo "You used to use
 $cppstdin $cppminus so we'll use that again."
 case "$cpprun" in
 ") echo "But let's see if we can live without a wrapper..." ;;
 *)
  if $cpprun $cpplast <testcpp.c >testcpp.out 2>&1 && \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
   echo "(And we'll use $cpprun $cpplast to preprocess directly.)"
   ok='true'
  else
   echo "(However, $cpprun $cpplast does not work, let's see...)"
  fi
  ;;
 esac
else
 case "$cppstdin" in
 ") ;;
 *)
  echo "Good old $cppstdin $cppminus does not seem to be of any help..."
  ;;
 esac
fi

if $ok; then
 : nothing
elif echo 'Maybe """$cc"' -E" will work...'; \
 $cc -E <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc -E"
 x_minus=";
elif echo 'Nope...maybe """$cc"' -E -" will work...'; \
 $cc -E - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc -E"
```

```
 x_minus='-';
elif echo 'Nope...maybe """$cc"'
 -P" will work...'; \
 $cc -P <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yipee, that works!"
 x_cpp="$cc -P"
 x_minus="";
elif echo 'Nope...maybe """$cc"' -P -" will work...'; \
 $cc -P - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "At long last!"
 x_cpp="$cc -P"
 x_minus='-';
elif echo 'No such luck, maybe "'$cpp'" will work...'; \
 $cpp <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "It works!"
 x_cpp="$cpp"
 x_minus="";
elif echo 'Nixed again...maybe "'$cpp' -" will work...'; \
 $cpp - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Hooray, it works!  I was beginning to wonder."
 x_cpp="$cpp"
 x_minus='-';
elif echo 'Uh-uh.  Time to get fancy.  Trying a wrapper...'; \
 $wrapper <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 x_cpp="$wrapper"
 x_minus="
 echo
 "Eureka!"
else
 dflt="
 rp="No dice.  I can't find a C preprocessor.  Name one:"
 . ./myread
 x_cpp="$ans"
 x_minus="
 $x_cpp <testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
  echo "OK, that will do." >&4
 else
echo "Sorry, I can't get that to work.  Go find one and rerun Configure." >&4
  exit 1
 fi
fi
```

```
case "$ok" in
false)
 cppstdin="$x_cpp"
 cppminus="$x_minus"
 cpprun="$x_cpp"
 cpplast="$x_minus"
?X:
?X: If /lib/cpp is used, try using a wrapper to increase our chances to have
?X: the C compiler and our $cppstdin agree on the same symbols... However,
?X: since cpprun is guaranteed not to be a wrapper, we must clear it if the
?X: only preprocessor we found was a wrapper, with all our luck...
?X:
 set X $x_cpp
 shift
 case "$1" in
 "$cpp")
  echo "Perhaps can we force $cc -E using a wrapper..."
  if $wrapper <testcpp.c >testcpp.out 2>&1; \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
   echo "Yup, we can."
   cppstdin="$wrapper"
   cppminus=";
  else
   echo
 "Nope, we'll have to live without it..."
  fi
  ;;
 esac
 case "$cpprun" in
 "$wrapper")
  cpprun="
  cpplast="
  ;;
 esac
 ;;
esac

case "$cppstdin" in
"$wrapper"|'cppstdin') ;;
*) $rm -f $wrapper;;
esac
$rm -f testcpp.c testcpp.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cppstdin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fdim: Inlibc
?MAKE: -pick add $@ %<
?S:d_fdim:
?S: This variable conditionally defines the HAS_FDIM symbol, which
?S: indicates to the C program that the fdim() routine is available.
?S:.
?C:HAS_FDIM:
?C: This symbol, if defined, indicates that the fdim routine is
?C: available to do the positive difference function.
?C:.
?H:#$d_fdim HAS_FDIM  /**/
?H:.
?LINT:set d_fdim
: see if fdim exists
set fdim d_fdim
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fdim.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: h_sysfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: h_sysfile.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:h_sysfile: Nothing
?MAKE: -pick add $@ %<
?S:h_sysfile:
?S: This is variable gets set in various places to tell i_sys_file that
?S: <sys/file.h> should be included.
?S:.
: Initialize h_sysfile
h_sysfile=false
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/h_sysfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dld.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_dld.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:20:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:i_dld: Inhdr
?MAKE: -pick add $@ %<
?S:i_dld:
?S: This variable conditionally defines the I_DLD symbol, which
?S: indicates to the C program that <dld.h> (GNU dynamic loading)
?S: exists and should be included.
?S:.
?C:I_DLD:
?C: This symbol, if defined, indicates that <dld.h>
 exists and should
?C: be included before using GNU dynamic loading features.
?C:.
?H:#$i_dld I_DLD /**/
?H:.
?LINT:set i_dld
: see if dld is available
set dld.h i_dld
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dld.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Begin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Begin.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:56:35  ram
?RCS: patch61: added Extractall dependency
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:25:08  ram
?RCS: patch49: avoid an empty rmlist: systems might choke on it (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/31  09:32:20  ram
?RCS: patch44: created
?RCS:
?X:
?X: This file comes after option processing had been done and after all
?X: the default values have been set up. It marks the beginning
 of questions.
?X: It is important that Options be listed *after* Myinit to ensure that the
?X: default initializations performed by Init and Myinit will not clobber
?X: any setting done on the command line via -D or -U.
?X:
?MAKE:Begin: Myinit Options package Extractall
?MAKE: -pick add $@ %<
: Eunice requires " " instead of "", can you believe it
echo " "
: Here we go...
echo "Beginning of configuration questions for $package."

?X: Make sure the rm below is given a non-empty list for some systems.
?X: This is run only when within the UU directory, hence we can safely
?X: attempt to rm a non-existent 'X' file...
trap 'echo " "; test -d ../UU && rm -rf X $rmlist; exit 1' 1 2 3 15
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Begin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_sgndchr.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:44:25  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:00:24  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sgndchr: cat rm +cc +ccflags Setvar
?MAKE: -pick add $@ %<
?S:d_sgndchr:
?S: This variable conditionally defines the SIGNEDCHAR symbol, which
?S: indicates to the C program
 that signed characters are available.
?S:.
?C:SIGNEDCHAR:
?C: This symbol, if defined, indicates that characters are a signed type.
?C: If not defined, things declared as signed characters (and that make
?C: use of negative values) should probably be declared as shorts instead.
?C:.
?H:#$d_sgndchr SIGNEDCHAR /**/
?H:.
?F:!try
?LINT:set d_sgndchr
: check for signed chars
echo " "
echo "Checking to see if your C compiler can do signed chars..." >&4
$cat >try.c <<'EOCP'
int main()
{
 char c = 0;

 c--;
 exit(c >= 0);
}
EOCP
$cc $ccflags -o try try.c
if ./try; then
 val="$define"
 echo "It certainly can."
else
 val="$undef"
 echo "It can't.  I'll have to make some things type short."
fi
set d_sgndchr
eval $setvar
```

```
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sgndchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endnent:
?S: This variable conditionally defines HAS_ENDNETENT if endnetent() is
?S: available to close whatever was being used for network queries.
?S:.
?C:HAS_ENDNETENT:
?C: This symbol, if defined, indicates that the endnetent() routine is
?C: available to close whatever was being used for network
 queries.
?C:.
?H:#$d_endnent HAS_ENDNETENT  /**/
?H:.
?LINT:set d_endnent
: see if endnetent exists
set endnetent d_endnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endnent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llrint: Inlibc
?MAKE: -pick add $@ %<
?S:d_llrint:
```

```
?S: This variable conditionally defines the HAS_LLRINT symbol, which
?S: indicates to the C program that the llrint() routine is available
?S: to return the long long value closest to a double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LLRINT:
?C: This symbol, if defined, indicates that the llrint routine is
?C: available to return the long long value closest to a double
?C: (according to the current rounding mode).
?C:.
?H:#$d_llrint HAS_LLRINT  /**/
?H:.
?LINT:set d_llrint
: see if llrint exists
set llrint d_llrint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llrint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dosuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Tye McQueen <tye@metronet.com> added safe setuid script checks.
?RCS:
?RCS: $Log: d_dosuid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:33:03  ram
?RCS: patch61: moved unit to TOP via a ?Y: layout directive
?RCS: patch61: tell them /dev/fd is not about floppy disks
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:08  ram
?RCS: patch36: added checks for secure setuid scripts (Tye McQueen)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:55  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?MAKE:d_dosuid d_suidsafe: cat contains ls rm test Myread Setvar \
 Oldconfig Guess package hint patchlevel
?MAKE: -pick add $@ %<
```

```
?S:d_suidsafe:
?S: This variable conditionally defines SETUID_SCRIPTS_ARE_SECURE_NOW
?S: if setuid scripts can be secure.  This test looks in /dev/fd/.
?S:.
?S:d_dosuid:
?S: This variable conditionally defines the symbol DOSUID, which
?S: tells the C program that it should insert setuid emulation code
?S: on hosts which have setuid #! scripts disabled.
?S:.
?C:SETUID_SCRIPTS_ARE_SECURE_NOW:
?C: This symbol, if defined, indicates that the bug that prevents
?C: setuid scripts from being secure is not present in this kernel.
?C:.
?C:DOSUID:
?C: This symbol, if defined, indicates that the C program should
?C: check the script that it is executing for setuid/setgid bits, and
?C: attempt to emulate setuid/setgid on systems that have disabled
?C: setuid #! scripts because the kernel can't do it securely.
?C: It is up to the package
 designer to make sure that this emulation
?C: is done securely.  Among other things, it should do an fstat on
?C: the script it just opened to make sure it really is a setuid/setgid
?C: script, it should make sure the arguments passed correspond exactly
?C: to the argument on the #! line, and it should not trust any
?C: subprocesses to which it must pass the filename rather than the
?C: file descriptor of the script to be executed.
?C:.
?H:#$d_suidsafe SETUID_SCRIPTS_ARE_SECURE_NOW /**/
?H:#$d_dosuid DOSUID  /**/
?H:.
?Y:TOP
?F:!reflect
?LINT: set d_suidsafe
: see if setuid scripts can be secure
$cat <<EOM

Some kernels have a bug that prevents setuid #! scripts from being
secure.  Some sites have disabled setuid #! scripts because of this.

First let's decide if your kernel supports secure setuid #! scripts.
(If setuid #! scripts would be secure but have been disabled anyway,
don't say that they are secure if asked.)

EOM

val="$undef"
if $test -d /dev/fd; then
 echo "#!$ls" >reflect
```

```
chmod
+x,u+s reflect
./reflect >flect 2>&1
if $contains "/dev/fd" flect >/dev/null; then
 echo "Congratulations, your kernel has secure setuid scripts!" >&4
 val="$define"
else
 $cat <<EOM
If you are not sure if they are secure, I can check but I'll need a
username and password different from the one you are using right now.
If you don't have such a username or don't want me to test, simply
enter 'none'.

EOM
 rp='Other username to test security of setuid scripts with?'
 dflt='none'
 . ./myread
 case "$ans" in
 n|none)
  case "$d_suidsafe" in
  ") echo "I'll assume setuid scripts are *not* secure." >&4
   dflt=n;;
  "$undef")
   echo "Well, the $hint value is *not* secure." >&4
   dflt=n;;
  *) echo "Well, the $hint value *is* secure." >&4
   dflt=y;;
  esac
  ;;
 *)
  $rm -f reflect flect
  echo "#!$ls" >reflect
  chmod +x,u+s reflect
  echo >flect
  chmod a+w flect
  echo '"su" will (probably) prompt you for '"$ans's password."
  su $ans -c './reflect
>flect'
  if $contains "/dev/fd" flect >/dev/null; then
   echo "Okay, it looks like setuid scripts are secure." >&4
   dflt=y
  else
   echo "I don't think setuid scripts are secure." >&4
   dflt=n
  fi
  ;;
 esac
 rp='Does your kernel have *secure* setuid scripts?'
```

```
  . ./myread
  case "$ans" in
  [yY]*) val="$define";;
  *) val="$undef";;
  esac
 fi
else
 echo "I don't think setuid scripts are secure (no /dev/fd directory)." >&4
 echo "(That's for file descriptors, not floppy disks.)"
 val="$undef"
fi
set d_suidsafe
eval $setvar

$rm -f reflect flect

: now see if they want to do setuid emulation
if $test $patchlevel -lt 11; then
echo " "
val="$undef"
case "$d_suidsafe" in
"$define")
 val="$undef"
 echo "No need to emulate SUID scripts since they are secure here." >&4
 ;;
*)
 $cat <<EOM
Some systems have disabled setuid scripts, especially systems where
setuid scripts cannot be secure.  On systems where setuid scripts have
been disabled, the setuid/setgid bits on scripts are
 currently
useless.  It is possible for $package to detect those bits and emulate
setuid/setgid in a secure fashion.  This emulation will only work if
setuid scripts have been disabled in your kernel.

EOM
 case "$d_dosuid" in
 "$define") dflt=y ;;
 *) dflt=n ;;
 esac
 rp="Do you want to do setuid/setgid emulation?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
 ;;
esac
```

```
set d_dosuid
eval $setvar
else
   case "$d_dosuid" in
 "$define")
 cat >&4 <<EOH

SUID emulation has been removed for 5.12
Please re-run Configure without -Dd_dosuid

EOH
 exit 1;
 ;;
   esac
   d_dosuid=undef
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dosuid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sanemcmp.U,v 3.0.1.1 1997/02/28 15:41:19 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sanemcmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:41:19  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sanemcmp: Compile cat d_memcmp rm_try run \
 i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_sanemcmp:
?S: This variable conditionally defines the HAS_SANE_MEMCMP symbol if
?S: the memcpy() routine is available and can be used to compare relative
?S: magnitudes of chars with their high bits set.
?S:.
?C:HAS_SANE_MEMCMP:
?C: This
 symbol, if defined, indicates that the memcmp routine is available
?C: and can be used to compare relative magnitudes of chars with their high
```

```
?C: bits set.  If it is not defined, roll your own version.
?C:.
?H:#$d_sanemcmp HAS_SANE_MEMCMP /**/
?H:.
?F:!try
?LINT: set d_sanemcmp
: can memcmp be trusted to compare relative magnitude?
?X: assume the worst
val="$undef"
case "$d_memcmp" in
"$define")
 echo " "
 echo "Checking if your memcmp() can compare relative magnitude..." >&4
 $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char a = -1;
char b = 0;
if ((a < b) && memcmp(&a, &b, 1) < 0)
 exit(1);
exit(0);
}
EOCP
 set try
 if eval
 $compile_ok; then
  if $run ./try 2>/dev/null; then
```

```
   echo "Yes, it can."
   val="$define"
  else
   echo "No, it can't (it uses signed chars)."
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
 fi
 ;;
esac
$rm_try
set d_sanemcmp
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sanemcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_erfc: Inlibc
?MAKE: -pick add $@ %<
?S:d_erfc:
?S: This variable conditionally defines the HAS_ERFC symbol, which
?S: indicates to the C program that the erfc() routine is available.
?S:.
?C:HAS_ERFC:
?C: This symbol, if defined, indicates that the erfc routine is
?C: available to do the complementary error function.
?C:.
?H:#$d_erfc HAS_ERFC  /**/
?H:.
?LINT:set d_erfc
: see if erfc exists
set erfc d_erfc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_erfc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tzmin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tzmin.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:16:58  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_tzmin: contains cppstdin cppminus timeincl rm Setvar Guess
?MAKE: -pick add $@ %<
?S:d_tzmin:
?S: This symbol conditionally defines TZ_MINUTESWEST if the system uses
?S: tz_minuteswest in time header instead of timezone.
?S:.
?C:TZ_MINUTESWEST:
?C: This
 symbol is defined if this system uses tz_minuteswest
?C: in time header instead of timezone.
?C: If not defined, you may have to use struct timeb and ftime() rather
?C: than the new gettimeofday() system call.
?C:.
?H:#$d_tzmin TZ_MINUTESWEST  /**/
?H:.
?LINT:set d_tzmin
: see if tz_minuteswest is defined in time header
echo " "
val="$undef"
$cppstdin $cppminus < $timeincl > try 2>&1
if $contains 'tz_minuteswest' try >/dev/null 2>&1; then
echo "You have tz_minuteswest defined in $timeincl rather than timezone." >&4
 val="$define"
elif $contains 'timezone' try >/dev/null 2>&1; then
echo "You have timezone defined in $timeincl rather than tz_minuteswest." >&4
else
 echo "Your $timeincl file looks strange." >&4
fi
if ./bsd; then
 case "$d_tzmin" in
 "$undef") echo "(Maybe your system is an USG one after all?)";;
 esac
fi
set d_tzmin
eval $setvar
$rm -f try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tzmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_setpwent.U,v $
?RCS:
?MAKE:d_setpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpwent:
?S: This variable conditionally defines the HAS_SETPWENT symbol, which
?S: indicates to the C program that the setpwent() routine is available
?S: for initializing sequential access to the passwd database.
?S:.
?C:HAS_SETPWENT:
?C: This symbol, if defined, indicates that the setpwent routine is
?C: available for initializing sequential access of the passwd database.
?C:.
?H:#$d_setpwent HAS_SETPWENT  /**/
?H:.
?LINT:set d_setpwent
: see if setpwent exists
set setpwent d_setpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mprotect: Inlibc
?MAKE: -pick add $@ %<
?S:d_mprotect:
```

```
?S: This variable conditionally defines HAS_MPROTECT if mprotect() is
?S: available to modify the access protection of a memory mapped file.
?S:.
?C:HAS_MPROTECT:
?C: This symbol, if defined, indicates that the mprotect system call is
?C: available to modify the access protection of a memory mapped file.
?C:.
?H:#$d_mprotect HAS_MPROTECT  /**/
?H:.
?LINT:set d_mprotect
: see if mprotect exists
set mprotect d_mprotect
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mprotect.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lround: Inlibc
?MAKE: -pick add $@ %<
?S:d_lround:
?S: This variable conditionally defines the HAS_LROUND symbol, which
?S: indicates to the C program that the lround() routine is available
?S: to return the integral value nearest to x.
?S:.
?C:HAS_LROUND:
?C: This symbol, if defined, indicates that the lround routine is
?C: available to return the nearest integral value.
?C:.
?H:#$d_lround HAS_LROUND  /**/
?H:.
?LINT:set d_lround
: see if lround exists
set lround d_lround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Loc.U 14 2006-08-28 16:51:14Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Loc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:04:16  ram
?RCS: patch61: allow users to specify paths on the command line
?RCS: patch61: will now substitute cp for ln if not supported
?RCS:
?RCS: Revision 3.0.1.9  1995/09/25  09:11:24  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS: patch59: abort Configure run when mandatory command is missing
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:40  ram
?RCS: patch56: now knows about
 OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.7  1995/01/11  15:13:37  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS: patch45: added path lookup for the 'comm' program
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:56:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: be careful and guard against wildcard searching (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:54:55  ram
?RCS: patch30: now locates find
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:18:15  ram
?RCS: patch27: added byacc to the trylist (ADO)
?RCS: patch27: lint lines reformatted (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:01:44  ram
?RCS: patch16: added metalint hint on changed PATH variable
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:16:52  ram
?RCS: patch15: now set _test variable when test is built-in
?RCS: patch15: fixed rare cases where echo is not needed
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:47:13  ram
?RCS: patch10: test program not always
 in /bin/test (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: This unit produces a shell script "loc" which can be used to find out
?X: where in a list of directories something is.  It then uses loc to
?X: determine the location of commonly used programs.  It leaves loc sitting
?X: around for other Configure units to use, but arranges for its demise
?X: at the end of Configure.
?X:
?X: To add a new program to find, add it both to the ?MAKE: line and to either
?X: the loclist or trylist variable.
?X:
?X: I put startsh at the end of the dependency list, in order to avoid the
?X: loading of the spitshell unit before the instructions.
?X:
?MAKE:Loc awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort
 submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip: eunicefix n c startsh Instruct sysroot
?MAKE: -pick weed $@ %<
?LINT:describe awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip
?V::pth loclist trylist
?F:./loc test_h
?T:thisthing thing xxx dir file say _test DJGPP
?LINT:change PATH _egrep _ln _make _less
?LINT:extern _exe
: find out where common programs are
echo " "
echo "Locating common programs..." >&4
cat <<EOSC >loc
$startsh
case \$# in
0) exit 1;;
esac
thing=\$1
shift
dflt=\$1
shift
for dir in \$*; do
 case "\$thing" in
 .)
 if test -d \$dir/\$thing; then
  echo \$dir
```

```
  exit 0
 fi
 ;;
 *)
?X: Be careful in case thing includes wildcards that might expand
 to multiple
?X: files.  Choose the last one.  This happens when searching for shared
?X: libraries with version numbers.  How to choose which one we want is
?X: probably an insoluble problem, in general.
?X: Some folks leave things like libc.so.orig around w/o read
?X: permission.  A -r test would handle that, but since ./loc is
?X: also used to find executables (which are installed w/o read
?X: permission on SCO ODT 3.0, we can't include the -r test.
?X: If you need to use an _exe that is different from .exe
?X: you need to set it in Head.U.
 for thisthing in \$dir/\$thing; do
  : just loop through to pick last item
 done
 if test -f \$thisthing; then
  echo \$thisthing
  exit 0
 elif test "X$_exe" != X -a -f \$thisthing$_exe; then
  echo \$thisthing
  exit 0
 elif test -f \$dir/\$thing.exe; then
  if test -n "$DJGPP"; then
   echo \$dir/\$thing.exe
  elif test "$eunicefix" != ":"; then
   : on Eunice apparently
   echo \$dir/\$thing
  fi
  exit 0
 fi
 ;;
 esac
done
echo \$dflt
exit
 1
EOSC
chmod +x loc
$eunicefix loc
loclist="
?awk:awk
?cat:cat
?chgrp:chgrp
?chmod:chmod
?chown:chown
```

```
?comm:comm
?cp:cp
?echo:echo
?expr:expr
?find:find
?grep:grep
?ls:ls
?mkdir:mkdir
?mv:mv
?rm:rm
?sed:sed
?sleep:sleep
?sort:sort
?tail:tail
?touch:touch
?tr:tr
?uniq:uniq
"
trylist="
?Mcc:Mcc
?ar:ar
?bash:bash
?bison:bison
?byacc:byacc
?compress:compress
?cpio:cpio
?cpp:cpp
?csh:csh
?date:date
?egrep:egrep
?emacs:emacs
?flex:flex
?gmake:gmake
?gzip:gzip
?inews:inews
?ksh:ksh
?less:less
?line:line
?lint:lint
?ln:ln
?lp:lp
?lpr:lpr
?mail:mail
?mailx:mailx
?make:make
?more:more
?nm:nm
?nroff:nroff
```

```
?perl:perl
?pg:pg
?pmake:pmake
?pr:pr
?rmail:rmail
?sendmail:sendmail
?shar:shar
?smail:smail
?submit:submit
?tar:tar
?tbl:tbl
?tee:tee
?test:test
?troff:troff
?uname:uname
?uuname:uuname
?vi:vi
?zcat:zcat
?zip:zip
"
?LINT:set awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo emacs expr find flex \
 gmake gzip grep inews ksh line lint lp lpr ls mail mailx
 \
 mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee touch tr troff \
 uname uniq uuname vi zcat zip
pth=`echo $PATH | sed -e "s/$p_/ /g"`
pth="$pth $sysroot/lib $sysroot/usr/lib"
for file in $loclist; do
?X:
?X: Allow them to -Dmake=pmake on the command line for instance...
?X: If the file is not fully qualified, as in -Dmake=pmake, then we
?X: look the for the specified command (pmake here). If they say
?X: -Dmake=/sbin/make for instance, then we make sure the file
?X: exists, or we die...
?X:
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   echo "WARNING: no $xxx -- ignoring your setting for $file." >&4
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
```

```
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo
 "I don't know where '$file' is, and my life depends on it." >&4
  echo "Go find a public domain implementation or fix your PATH setting!" >&4
  exit 1
  ;;
 esac
done
echo " "
echo "Don't worry if any of the following aren't found..."
say=offhand
for file in $trylist; do
?X: Allow them to -Dmake=pmake on the command line for instance (see above)
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   echo "WARNING: no $xxx -- ignoring your setting for $file." >&4
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
```

```
 *)
  echo "I don't see $file out there, $say."
  say=either
  ;;
 esac
done
case "$egrep" in
egrep)
 echo "Substituting grep for egrep."
 egrep=$grep
 _egrep=$grep
 ;;
esac
@if less
case "$less"
 in
") ;;
*) if $less -R </dev/null >/dev/null 2>&1; then
        echo "Substituting less -R for less."
        less="$less -R"
        _less=$less
 fi
 ;;
esac
@end
@if ln
case "$ln" in
ln)
 echo "Substituting cp for ln."
 ln=$cp
 _ln=$cp
 ;;
esac
@end
@if make || gmake
case "$make" in
make)
 case "$gmake" in
 gmake)
 echo "I can't find make or gmake, and my life depends on it." >&4
 echo "Go find a public domain implementation or fix your PATH setting!" >&4
 exit 1
 ;;
 esac
 ;;
esac
case "$gmake" in
gmake) ;;
```

```
*) # We can't have osname yet.
 if test -f "/system/gnu_library/bin/ar.pm"; then # Stratus VOS
  # Assume that gmake, if found, is definitely GNU make
  # and prefer it over the system make.
  echo "Substituting gmake for make."
  make=$gmake
  _make=$gmake
 fi
 ;;
esac
@end
case "$test" in
test)
 echo "Hopefully test is built into your sh."
 ;;
*)
 if `sh -c "PATH= test true" >/dev/null 2>&1`; then
  echo "Using the test built into your sh."
?X:
?X: We need to set both test
 and _test, since Oldconfig.U will use the _test
?X: value to systematically restore computed paths, which may be wrong if
?X: we choose to load an old config.sh generated on another platform.
?X:
  test=test
  _test=test
 fi
 ;;
esac
?LINT:change n c
case "$echo" in
echo)
 echo "Hopefully echo is built into your sh."
 ;;
?X: For those rare cases where we don't need $echo...
") ;;
*)
 echo " "
echo "Checking compatibility between $echo and builtin echo (if any)..." >&4
 $echo $n "hi there$c" >foo1
 echo $n "hi there$c" >foo2
 if cmp foo1 foo2 >/dev/null 2>&1; then
  echo "They are compatible.  In fact, they may be identical."
 else
  case "$n" in
  '-n') n=" c='\c';;
  *) n='-n' c=";;
  esac
```

```
  cat <<FOO
They are not compatible!  You are probably running ksh on a non-USG system.
I'll have to use $echo instead of the builtin, since Bourne shell doesn't
have echo built in and we may have to run some Bourne shell scripts.  That
means I'll have to use '$n$c' to suppress newlines now.
  Life is ridiculous.

FOO
  $echo $n "The star should be here-->$c"
  $echo "*"
 fi
 $rm -f foo1 foo2
 ;;
esac

?X: The next part is irrelevant to the real process
# This question was auctioned at YAPC::Europe-2007 in Vienna
# I never promised you could answer it. I only auctioned the question.
cat <<FOO
The following message is sponsored by

 Dresden.pm<--The stars should be here.

Dear Perl user, system administrator or package
maintainer, the Perl community sends greetings to
you. Do you (emblematical) greet back [Y/n]? n

FOO

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Loc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_modfl d_modflproto: Inlibc Compile Hasproto cat \
 test ccflags uselongdouble \
 d_sqrtl d_aintl d_copysignl d_ilogbl d_scalbnl d_frexpl d_ldexpl \
 d_truncl
?MAKE: -pick add $@ %<
?S:d_modfl:
?S: This variable conditionally defines the HAS_MODFL symbol, which
?S: indicates to the C program that the modfl() routine is available.
```

```
?S:.
?S:d_modflproto:
?S: This symbol, if defined, indicates that the system provides
?S: a prototype for the modfl() function.  Otherwise, it is up
?S: to the program to supply one.  C99 says it should be
?S:  long double modfl(long double, long double *);
?S:.
?C:HAS_MODFL:
?C: This symbol, if defined, indicates that the modfl routine is
?C: available to split a long double
 x into a fractional part f and
?C: an integer part i such that |f| < 1.0 and (f + i) = x.
?C:.
?C:HAS_MODFL_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the modfl() function.  Otherwise, it is up
?C: to the program to supply one.
?C:.
?H:#$d_modfl HAS_MODFL  /**/
?H:#$d_modflproto HAS_MODFL_PROTO  /**/
?H:.
?T:message
?LINT:set d_modfl
?LINT:set d_modflproto
?LINT:change ccflags
: see if modfl exists
set modfl d_modfl
eval $inlibc

: see if prototype for modfl is available
echo " "
set d_modflproto modfl define math.h
eval $hasproto

if $test "$uselongdouble" = "$define"; then
   message=""
   if $test "$d_sqrtl" != "$define"; then
 message="$message sqrtl"
   fi
   if $test "$d_modfl" != "$define"; then
 if $test "$d_truncl:$d_copysignl" = "$define:$define"; then
     echo "You have both truncl and copysignl, so I can emulate modfl."
 else
     if $test "$d_aintl:$d_copysignl" = "$define:$define"; then
  echo "You have both aintl
 and copysignl, so I can emulate modfl."
     else
  message="$message modfl"
```

```
    fi
 fi
   fi
   if $test "$d_frexpl" != "$define"; then
 if $test "$d_ilogbl:$d_scalbnl" = "$define:$define"; then
    echo "You have both ilogbl and scalbnl, so I can emulate frexpl."
 else
    message="$message frexpl"
 fi
   fi
   if $test "$d_ldexpl" != "$define"; then
 message="$message ldexpl"
   fi

   if $test "$message" != ""; then
 $cat <<EOM >&4

*** You requested the use of long doubles but you do not seem to have
*** the following mathematical functions needed for long double support:
***    $message
*** Please rerun Configure without -Duselongdouble and/or -Dusemorebits.
*** Cannot continue, aborting.

EOM

 exit 1
   fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_modfl.U
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```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, 2012 Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:byteorder: cat Myread Oldconfig Loc +cc +ccflags rm_try
?MAKE: -pick add $@ %<
?S:byteorder:
?S: This variable holds the byte order. In the following, larger digits
?S: indicate more significance.  The variable byteorder is either 4321
?S: on a big-endian machine, or 1234 on a little-endian, or 87654321
```

```
?S: on a Cray ... or 3412 with weird order !
?S:.
?C:BYTEORDER:
?C: This symbol hold the hexadecimal constant defined in byteorder,
?C: i.e. 0x1234 or 0x4321, etc...
?C:.
?H:#define BYTEORDER 0x$byteorder /*
 large digits for MSB */
?H:.
?T:xxx_prompt
?F:!try
: check for ordering of bytes in a long
case "$byteorder" in
")
 $cat <<'EOM'

In the following, larger digits indicate more significance.  A big-endian
machine like a Pyramid or a Motorola 680?0 chip will come out to 4321. A
little-endian machine like a Vax or an Intel 80?86 chip would be 1234. Other
machines may have weird orders like 3412.  A Cray will report 87654321. If
the test program works the default is probably right.
I'm now running the test program...
EOM
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 int i;
 union {
  unsigned long l;
  char c[sizeof(long)];
 } u;

 if (sizeof(long) > 4)
  u.l = (0x08070605L << 32) | 0x04030201L;
 else
  u.l = 0x04030201L;
 for (i = 0; i < sizeof(long); i++)
  printf("%c", u.c[i]+'0');
 printf("\n");
 exit(0);
}
EOCP
 xxx_prompt=y
 if $cc $ccflags -o try try.c >/dev/null 2>&1 && ./try > /dev/null; then
  dflt=`./try`
  case "$dflt" in
  [1-4][1-4][1-4][1-4]|12345678|87654321)
```

```
  echo
 "(The test program ran ok.)"
  echo "byteorder=$dflt"
  xxx_prompt=n
  ;;
 ????|????????) echo "(The test program ran ok.)" ;;
 *) echo "(The test program didn't run right for some reason.)" ;;
 esac
 else
  dflt='4321'
  cat <<'EOM'
(I can't seem to compile the test program.  Guessing big-endian...)
EOM
 fi
 case "$xxx_prompt" in
 y)
  rp="What is the order of bytes in a long?"
  . ./myread
  byteorder="$ans"
  ;;
 *) byteorder=$dflt
  ;;
 esac
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/byteorder.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: abortsig.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:19  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:abortsig: Myread Oldconfig Guess cat +cc ccflags rm
?MAKE: -pick add $@ %<
?S:abortsig:
?S: This variable holds the name of the signal used by the abort() call.
?S:.
?C:ABORTSIG:
?C: This symbol holds the signal number (symbol) used by the abort() call. To
?C: actually
 define the signal symbol, <signal.h> should be included.
?C:.
?H:#define ABORTSIG $abortsig  /**/
?H:.
?T:signal
: which signal is sent by abort ?
echo " "
case "$abortsig" in
")
 echo "Checking to see which signal is sent to the process by abort()..." >&4
 echo "abort" > abort.sh
 chmod +x abort.sh
?X: SIGABRT should replace SIGIOT on USG machines in a near future (1991).
 for signal in SIGIOT SIGILL SIGABRT; do
  case "$abortsig" in
  ") $cat >abort.c <<EOP
/* FIXME: Missing #include <stdlib.h>*/
#include <signal.h>
caught() { exit(0); } /* FIXME: Use _exit() or _Exit() in signal handler  */
int main()
{
#ifdef $signal
 signal($signal, caught);
#endif
 if (-1 == abort())
  exit(1);
 exit(1);
}
EOP
?X: We have to use the abort.sh script otherwise sh behaves strangely on AIX.
   if $cc $ccflags -o abort abort.c >/dev/null 2>&1; then
    (./abort.sh) >/dev/null 2>&1
    case $? in
    0) abortsig="$signal";;
    esac
   fi
   ;;
  esac
 done
 ;;
```

```
esac
case "$abortsig" in
") echo
 "(I wasn't able to compute the signal name--guessing)"
 if ./usg; then
  dflt="SIGIOT"
 else
  dflt="SIGILL"
 fi;;
*)  dflt="$abortsig"
 ;;
esac
rp="Which signal does abort() send to the process (signal name)?"
. ./myread
abortsig="$ans"
$rm -f core abort.sh abort abort.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/abortsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fegetround: Inlibc
?MAKE: -pick add $@ %<
?S:d_fegetround:
?S: This variable conditionally defines HAS_FEGETROUND if fegetround() is
?S: available to get the floating point rounding mode.
?S:.
?C:HAS_FEGETROUND:
?C: This symbol, if defined, indicates that the fegetround routine is
?C: available to return the macro corresponding to the current rounding
?C: mode.
?C:.
?H:#$d_fegetround HAS_FEGETROUND /**/
?H:.
?LINT:set d_fegetround
: see if fegetround exists
set fegetround d_fegetround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fegetround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_linuxstd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_linuxstd.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:05  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_linuxstd: d_stdstdio cppstdin cppflags cppminus \
 contains rm Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_linuxstd:
?S: This variable conditionally defines USE_LINUX_STDIO if this system
?S: has a FILE structure declaring _IO_read_base, _IO_read_ptr,
?S: and _IO_read_end
 in stdio.h.
?S:.
?C:USE_LINUX_STDIO:
?C: This symbol is defined if this system has a FILE structure declaring
?C: _IO_read_base, _IO_read_ptr, and _IO_read_end in stdio.h.
?C:.
?H:#$d_linuxstd USE_LINUX_STDIO  /**/
?H:.
?T:xxx
?LINT:set d_linuxstd
: see if stdio is like that in linux
case "$d_stdstdio" in
"$undef")
 echo " "
 xxx=`./findhdr stdio.h`
 $cppstdin $cppflags $cppminus < "$xxx" > stdio.E
 if $contains 'char.*_IO_read_base' stdio.E >/dev/null 2>&1 && \
  $contains '_IO_read_ptr' stdio.E >/dev/null 2>&1 && \
  $contains '_IO_read_end' stdio.E >/dev/null 2>&1 ; then
   echo "Your stdio looks like linux." >&4
   val="$define"
 else
  echo "You don't have linux stdio, either." >&4
  val="$undef"
 fi
 $rm -f stdio.E
 ;;
```

```
*) val="$undef" ;;
esac

set d_linuxstd
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_linuxstd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_signbit: nvtype Compile Setvar cat run rm_try echo n c i_sunmath
?MAKE: -pick add $@ %<
?S:d_signbit:
?S: This variable conditionally defines the HAS_SIGNBIT symbol, which
?S: indicates to the C program that the signbit() routine is available
?S: and safe to use with perl's intern NV type.
?S:.
?C:HAS_SIGNBIT:
?C: This symbol, if defined, indicates that the signbit routine is
?C: available to check if the given number has the sign bit set.
?C: This should include correct testing of -0.0.  This will only be set
?C: if the signbit() routine is safe to use with the NV type used internally
?C: in perl.  Users should call Perl_signbit(), which will be #defined to
?C: the system's signbit() function or macro if this symbol is defined.
?C:.
?H:#$d_signbit
 HAS_SIGNBIT  /**/
?H:.
?F:!try
?LINT:set d_signbit
: see if signbit exists
$echo $n "Checking to see if you have signbit() available to work on $nvtype... $c" >&4
$cat >try.c <<EOCP
#$i_sunmath I_SUNMATH
#include <math.h>
#ifdef I_SUNMATH  /* Solaris special math library */
#  include <sunmath.h>
#endif
#define NV $nvtype
int main(int argc, char **argv)
{
   NV x = 0.0;
   NV y = -1.0;
```

```
   if ((signbit(x) == 0) && (signbit(y) != 0))
 return 0;
   else
 return 1;
}
EOCP
val="$undef"
set try
if eval $compile; then
   if $run ./try; then
       $echo "Yes." >&4
 val="$define"
   else
       $echo "Signbit seems to be available, but doesn't work as I expected."
       $echo "I won't use it." >&4
 val="$undef"
   fi
else
   $echo "Nope." >&4
   dflt="$undef"
fi
set d_signbit
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_signbit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Configdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Configdir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  14:58:36  ram
?RCS: patch61: have README explicitly mention the package name
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Configdir: package
?MAKE: -pick add $@ %<
```

```
: create .config dir to save info across Configure sessions
test -d ../.config || mkdir ../.config
cat >../.config/README <<EOF
This directory created by Configure to save
 information that should
persist across sessions for $package.

You may safely delete it if you wish.
EOF
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Configdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wctomb.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_wctomb.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:20:43  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_wctomb: Inlibc
?MAKE: -pick add $@ %<
?S:d_wctomb:
?S: This variable conditionally defines the HAS_WCTOMB symbol, which
?S: indicates to the C program that the wctomb() routine is available
?S: to convert a wide character to a multibyte.
?S:.
?C:HAS_WCTOMB (WCTOMB):
?C: This
 symbol, if defined, indicates that the wctomb routine is available
?C: to convert a wide character to a multibyte.
?C:.
?H:#$d_wctomb HAS_WCTOMB  /**/
?H:.
?LINT:set d_wctomb
: see if wctomb exists
set wctomb d_wctomb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wctomb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: scriptdir.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:17:15  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:46:13  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:32:04  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:scriptdir scriptdirexp installscript:
 afs cat test Getfile Loc \
 Oldconfig +bin Prefixit prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:scriptdir:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly scripts for the package in question.  It is either
?S: the same directory as for binaries, or a special one that can be
?S: mounted across different architectures, like /usr/share. Programs
?S: must be prepared to deal with ~name expansion.
?S:.
?S:scriptdirexp:
?S: This variable is the same as scriptdir, but is filename expanded
?S: at configuration time, for programs not wanting to bother with it.
?S:.
?S:installscript:
?S: This variable is usually the same as scriptdirexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
```

```
?S:.
?C:SCRIPTDIR:
?C: This symbol holds the name of the directory in which the user wants
?C: to put publicly executable scripts for the
 package in question.  It
?C: is often a directory that is mounted across diverse architectures.
?C: Programs must be prepared to deal with ~name expansion.
?C:.
?C:SCRIPTDIR_EXP:
?C: This is the same as SCRIPTDIR, but is filename expanded at
?C: configuration time, for use in programs not prepared to do
?C: ~name substitutions at run-time.
?C:.
?H:#define SCRIPTDIR "$scriptdir" /**/
?H:#define SCRIPTDIR_EXP "$scriptdirexp" /**/
?H:.
: determine where public executable scripts go
set scriptdir scriptdir
eval $prefixit
case "$scriptdir" in
")
 dflt="$bin"
 : guess some guesses
 $test -d /usr/share/scripts && dflt=/usr/share/scripts
 $test -d /usr/share/bin && dflt=/usr/share/bin
 $test -d /usr/local/script && dflt=/usr/local/script
 $test -d $prefixexp/script && dflt=$prefixexp/script
 set dflt
 eval $prefixup
 ;;
*)  dflt="$scriptdir"
 ;;
esac
$cat <<EOM

Some installations have a separate directory just for executable scripts so
that they can mount it across multiple architectures but
 keep the scripts in
one spot.  You might, for example, have a subdirectory of /usr/share for this.
Or you might just lump your scripts in with all your other executables.

EOM
fn=d~
rp='Where do you keep publicly executable scripts?'
. ./getfile
if $test "X$ansexp" != "X$scriptdirexp"; then
 installscript=''
fi
```

```
scriptdir="$ans"
scriptdirexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
scripts reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installscript" in
 ") dflt=`echo $scriptdirexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installscript";;
 esac
 fn=de~
 rp='Where will public scripts be installed?'
 . ./getfile
 installscript="$ans"
else
 installscript="$scriptdirexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/scriptdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2018-2018, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_pipe2: Inlibc
?MAKE: -pick add $@ %<
?S:d_pipe2:
?S: This variable conditionally defines the HAS_PIPE2 symbol, which
?S: indicates to the C program that the pipe2() routine is available
?S: to create an inter-process channel.
?S:.
?C:HAS_PIPE2:
?C: This symbol, if defined, indicates that the pipe2 routine is
?C: available to create an inter-process channel.
?C:.
?H:#$d_pipe2 HAS_PIPE2  /**/
?H:.
?LINT:set d_pipe2
```

```
: see if pipe2 exists
set pipe2 d_pipe2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_pipe2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_longlong.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_longlong.U,v $
?RCS:
?MAKE:d_longlong longlongsize: Compile Setvar Myread run \
 cat rm_try test longsize
?MAKE: -pick add $@ %<
?S:d_longlong:
?S: This variable conditionally defines HAS_LONG_LONG if
?S: the long long type is supported.
?S:.
?S:longlongsize:
?S: This variable contains the value of the LONGLONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long long,
?S: if this system supports long long.
?S:.
?C:HAS_LONG_LONG:
?C: This symbol will be defined if the C compiler supports long long.
?C:.
?C:LONGLONGSIZE:
?C: This symbol contains the size of a long long, so that the
?C: C preprocessor can make decisions based on it.  It is only
?C: defined
 if the system supports long long.
?C:.
?H:#$d_longlong HAS_LONG_LONG  /**/
?H:?LONGLONGSIZE:#ifdef HAS_LONG_LONG
?H:?LONGLONGSIZE:#define LONGLONGSIZE $longlongsize  /**/
?H:?LONGLONGSIZE:#endif
?H:.
?F:!try
?LINT:set d_longlong
: check for long long
echo " "
echo "Checking to see if you have long long..." >&4
```

```
echo 'int main() { long long x = 7; return 0; }' > try.c
set try
if eval $compile; then
 val="$define"
 echo "You have long long."
else
 val="$undef"
 echo "You do not have long long."
fi
$rm_try
set d_longlong
eval $setvar

@if LONGLONGSIZE || longlongsize
: check for length of long long
?X:  Check only if d_longlong and if longlongsize is not already set.
case "${d_longlong}${longlongsize}" in
$define)
 echo " "
 echo "Checking to see how big your long longs are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof(long long));
   return(0);
}
EOCP
 set try
 if eval $compile_ok; then
  longlongsize=`$run ./try`
  echo "Your long
 longs are $longlongsize bytes long."
 else
  dflt='8'
  echo " "
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a long long (in bytes)?"
  . ./myread
  longlongsize="$ans"
 fi
 if $test "X$longsize" = "X$longlongsize"; then
  echo "(That isn't any different from an ordinary long.)"
 fi
 ;;
esac
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_longlong.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmdt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmdt.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmdt: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmdt:
?S: This variable conditionally defines the HAS_SHMDT symbol, which
?S: indicates to the C program that the shmdt() routine is available.
?S:.
?C:HAS_SHMDT:
?C: This symbol, if defined, indicates that the shmdt() routine is
?C: available to detach a shared memory segment from the process
 space.
?C:.
?H:#$d_shmdt HAS_SHMDT  /**/
?H:.
?LINT:set d_shmdt
: see if shmdt exists
set shmdt d_shmdt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmdt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libs.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:09:11  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.5  1995/07/25  14:12:05  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  16:24:22  ram
?RCS: patch36: removed old broken thislib/thatlib processing (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:05:44  ram
?RCS: patch30: code cleanup with if/elif by ADO and RAM
?RCS: patch30: undone patch23 for libswanted default
 setting
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:08:45  ram
?RCS: patch23: now includes ordered default libswanted variable (ADO)
?RCS: patch23: major cleanup for library lookups (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:31  ram
?RCS: patch6: added default for libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libs libsfound libsfiles libsdirs libspath libscheck: \
 test cat Myread Oldconfig Loc libpth package xlibpth so _a \
 +usesocks sed +cc +ccflags +ldflags rm
?MAKE: -pick add $@ %<
?S:libs:
?S: This variable holds the additional libraries we want to use.
?S: It is up to the Makefile to deal with it.  The list can be empty.
?S:.
?S:libsfound:
?S: This variable holds the full pathnames of the libraries
?S: we found and accepted.
?S:.
?S:libsfiles:
?S: This variable holds the filenames aka basenames of the libraries
?S: we found and accepted.
?S:.
?S:libsdirs:
?S: This variable holds the directory
 names aka dirnames of the libraries
?S: we found and accepted, duplicates are removed.
```

```
?S:.
?S:libspath:
?S: This variable holds the directory names probed for libraries.
?S:.
?S:libscheck:
?S: This variable is intended to be set by hint files, if needed.
?S: It should contain shell code that will be eval'ed with $xxx holding
?S: some library file.  It may change $xxx if needed.
?S: For instance, on an Irix platform, you may make sure the right
?S: library file is used depending on the cc command line, so that the
?S: correct library is used depending on the selected ABI (for 32 and
?S: 64-bit compilations).
?S:
?S: Here is an example of code that could be found in a hint file on Irix
?S: when the selected compiler was for 32-bit -- that code is put in the
?S: cc.cbu call-back unit to be invoked AFTER the C compiler and its
?S: flags have been chosen:
?S:
?S:  libscheck='case "$xxx" in
?S:  *.a) /bin/ar p $xxx `/bin/ar t $xxx | sed q` >$$.o;
?S:   case "`/usr/bin/file $$.o`" in
?S:   *N32*)
 rm -f $$.o ;;
?S:   *) rm -f $$.o; xxx=/no/n32$xxx ;;
?S:   esac ;;
?S:  *) case "`/usr/bin/file $xxx`" in
?S:   *N32*) ;;
?S:   *) xxx=/no/n32$xxx ;;
?S:   esac ;;
?S:  esac'
?S:.
?D:libs="
?LINT:extern libswanted
?LINT:change libswanted
?INIT:: default library list
?INIT:libswanted="
?X: This order is chosen so that libraries  -lndir, -ldir, -lucb, -lbsd,
?X: -lBSD, -lPW, and -lx only get used if there are unresolved
?X: routines at link time.  Usually, these are backwards compatability
?X: libraries, and may not be as reliable as the standard c library.
?X:
?X: The -lsocket -linet -lnsl order has been reported to be necessary
?X: for at least one SVR4 implementation.
?X: -lc must proceed -lucb or -lbsd for most Solaris applications.
?X: -lc_s proceeds -lc so we pick up the shared library version, if
?X: it is available.
?X:
?X: The ordering of c, posix, and cposix is a guess and almost
```

```
?X: certainly wrong on about half of all systems.
?X:
?X: Set proper libswanted in your private
 Myinit.U if needed.
?X:
?X:: default ordered library list
?X:libswanted='net socket inet bind nsl nm sdbm gdbm ndbm dbm malloc dl'
?X:libswanted="$libswanted dld sun m c_s c posix cposix ndir dir ucb"
?X:libswanted="$libswanted bsd BSD PW x"
?X:
?INIT:: should be set by hint files if needed
?INIT:libscheck="
?T:xxx yyy thislib thisdir libstyle linkmsg
?F:lt.c lt
: Looking for optional libraries
echo " "
echo "Checking for optional libraries..." >&4
case "$libs" in
' '|'') dflt='';;
*) dflt="$libs";;
esac
case "$libswanted" in
'') libswanted='c_s';;
esac
?X: libsocks has nasty naming scheme.
?X: This does not work if somebody wants SOCKS 4.
case "$usesocks" in
"$define") libswanted="$libswanted socks5 socks5_sh" ;;
esac
?X: Used later for link checks
echo "extern char printf(); int main() { printf(); return 0; }" > lt.c
libsfound="
libsfiles="
libsdirs="
libspath="
for thisdir in $libpth $xlibpth; do
 test -d $thisdir && libspath="$libspath $thisdir"
done
for thislib in $libswanted;
 do
 for thisdir in $libspath; do
    xxx=''
    if $test ! -f "$xxx" ; then
   xxx=`ls $thisdir/lib$thislib.$so.[0-9]* 2>/dev/null | $sed -n '1p'`
   $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
```

```
  xxx=$thisdir/lib$thislib.$so
  $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib${thislib}_s$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
  $test -f "$xxx" && thislib=${thislib}_s
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/Slib$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test
 -f "$xxx" && libstyle=static
    fi
    if $test -f "$xxx"; then
?X:
?X: It is not sufficient to find a .so on the disk.  We must make sure
?X: that we can indeed supply the -lfoo line on the cc line to link against
?X: that library.  On Linux for instance, a versionned .so will not be
?X: implicitly linked against, whereas it will work fine on Solaris 2.6.
?X:  --RAM, 10/10/2003
?X:
  if $cc -o lt $ccflags $ldflags lt.c -l$thislib >/dev/null 2>&1;
  then
   linkmsg=""
  else
   linkmsg=" but I can't link against it"
  fi
  case "$libstyle" in
  shared) echo "Found -l$thislib (shared)$linkmsg." ;;
  static) echo "Found -l$thislib$linkmsg." ;;
  *)      echo "Found -l$thislib ($libstyle)$linkmsg." ;;
  esac
  case " $dflt " in
  *"-l$thislib "*) ;;
  *)
```

```
    case "$linkmsg" in
    ")
     dflt="$dflt -l$thislib"
     libsfound="$libsfound $xxx"
     yyy=`basename $xxx`
     libsfiles="$libsfiles $yyy"
     yyy=`echo $xxx|$sed -e "s%/$yyy\\$%%"`
     case " $libsdirs
 " in
     *" $yyy "*) ;;
     *) libsdirs="$libsdirs $yyy" ;;
     esac
       ;;
    esac
    ;;
   esac
   break
     fi
 done
 if $test ! -f "$xxx"; then
     echo "No -l$thislib."
 fi
done
set X $dflt
shift
dflt="$*"
case "$libs" in
") dflt="$dflt";;
*) dflt="$libs";;
esac
case "$dflt" in
' '|") dflt='none';;
esac
$rm -f lt.c lt

$cat <<EOM

In order to compile $package on your machine, a number of libraries
are usually needed.  Include any other special libraries here as well.
Say "none" for none.  The default list is almost always right.
EOM

echo " "
rp="Which libraries to use?"
. ./myread
case "$ans" in
none) libs=' ';;
*) libs="$ans";;
```

```
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libs.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_scannl.U,v 3.0.1.2 1997/02/28 15:41:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_scannl.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:27  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:59:12  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Does the scanf routine read "\n" correctly ? This is was not
?X: the case on AIX...
?X:
?MAKE:d_scannl: cat rm Setvar Compile run
?MAKE: -pick
 add $@ %<
?S:d_scannl:
?S: This variable conditionally defines SCAN_NL, which indicates
?S: whether the C library routines scanf() and friends can deal with
?S: a '\n' in the input correctly. They do most of the time.
?S:.
?C:SCAN_NL:
?C: This symbol is defined if the C library routines scanf() and friends
?C: can deal with a '\n' in the input correctly, so that you can say
?C: scanf("%d\n"); instead of scanf("%d"); getc(c); to handle the '\n'.
?C:.
?H:#$d_scannl SCAN_NL  /* scanf("%d\n") works */
?H:.
?F:!try
?LINT:set d_scannl
: does scanf handle "\n" correctly ?
```

```
echo " "
val="$define"
?X: I really want to say "\n" instead of '\n', because I am referring
?X: to the string given as argument to scanf().
echo 'Let""""s see if scanf() handles "\\n" correctly...' >&4
$cat >try.c <<'EOCP'
int main()
{
 int i = 0, j = 0;
 scanf("%d\n%d", &i, &j);
 if (j != 3)
  exit(1);
 exit(0);
}
EOCP
set try
if eval $compile_ok; then
 if $run ./try <<'EOD'
2
3
EOD
 then
  echo "Yes, it does."
 else
  echo
 "No, it doesn't."
  val="$undef"
 fi
else
 echo "(I can't seem to compile the test program. Assuming it does.)"
fi
set d_scannl
eval $setvar
$rm -f try.* try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_scannl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_statvfs d_fstatvfs: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_statvfs:
?S: This variable conditionally defines the HAS_STATVFS symbol, which
?S: indicates to the C program that the statvfs() routine is available.
?S:.
?S:d_fstatvfs:
?S: This variable conditionally defines the HAS_FSTATVFS symbol, which
?S: indicates to the C program that the fstatvfs() routine is available.
?S:.
?C:HAS_STATVFS:
?C: This symbol, if defined, indicates that the statvfs routine is
?C: available to stat filesystems by filenames.
?C:.
?C:HAS_FSTATVFS:
?C: This symbol, if defined, indicates that the fstatvfs routine is
?C: available to stat filesystems by file descriptors.
?C:.
?H:#$d_statvfs HAS_STATVFS  /**/
?H:#$d_fstatvfs
 HAS_FSTATVFS  /**/
?H:.
?LINT:set d_statvfs
?LINT:set d_fstatvfs
: see if statvfs exists
set statvfs d_statvfs
eval $inlibc

: see if fstatvfs exists
set fstatvfs d_fstatvfs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statvfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setpgrp.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:44:16  ram
?RCS: patch61: obsoleted USE_BSDGRP in favor of USE_BSD_SETPGRP
?RCS: patch61: another unit now also defines a USE_BSD_GETPGRP
```

```
?RCS: patch61: fallback for test program failure improved
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:59:30  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:15:37  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
 patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp d_bsdsetpgrp: cat rm +cc +libs +ccflags \
 +ldflags Inlibc Guess Setvar i_unistd
?MAKE: -pick add $@ %<
?S:d_setpgrp:
?S: This variable conditionally defines HAS_SETPGRP if setpgrp() is
?S: available to set the current process group.
?S:.
?S:d_bsdsetpgrp (d_bsdpgrp):
?S: This variable conditionally defines USE_BSD_SETPGRP if
?S: setpgrp needs two arguments whereas USG one needs none.
?S: See also d_setpgid for a POSIX interface.
?S:.
?C:HAS_SETPGRP (SETPGRP):
?C: This symbol, if defined, indicates that the setpgrp routine is
?C: available to set the current process group.
?C:.
?C:USE_BSD_SETPGRP (USE_BSDPGRP BSDPGRP):
?C: This symbol, if defined, indicates that setpgrp needs two
?C: arguments whereas USG one needs none.  See also HAS_SETPGID
?C: for a POSIX interface.
?C:.
?H:#$d_setpgrp HAS_SETPGRP  /**/
?H:#$d_bsdsetpgrp
 USE_BSD_SETPGRP /**/
?H:.
?F:!set.c !set
?T:xxx
?LINT:set d_setpgrp d_bsdsetpgrp
: see if setpgrp exists
set setpgrp d_setpgrp
eval $inlibc

@if USE_BSD_SETPGRP || d_bsdsetpgrp
case "$d_setpgrp" in
"$define")
```

```
 echo " "
 echo "Checking to see which flavor of setpgrp is in use..."
 $cat >set.c <<EOP
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (-1 == setpgrp(1, 1))
  exit(0);
#else
 if (setpgrp() != -1)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -DTRY_BSD_PGRP $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo 'You have to use setpgrp(pid,pgrp) instead of setpgrp().' >&4
  val="$define"
 elif $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo 'You have to use setpgrp() instead of setpgrp(pid,pgrp).' >&4
  val="$undef"
 else
  echo "(I can't
 seem to compile and run the test program.)"
  if ./usg; then
   xxx="a USG one, i.e. you use setpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use setpgrp(pid,pgrp)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use setpgrp()."
    val="$undef"
    ;;
   esac
  fi
```

```
  echo "Assuming your setpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set d_bsdsetpgrp
eval $setvar
$rm -f set set.c
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgrp.U
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```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Tom Tromey <tromey@cygnus.com>
?RCS:
?RCS: $Log: src.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:23:54  ram
?RCS: patch61: created
?RCS:
?MAKE:src +rsrc: Options package contains
?MAKE: -pick add $@ %<
?Y:TOP
?S:src (srcdir):
?S: This variable holds the (possibly relative) path of the package source.
?S: It is up to the Makefile to use this variable and set VPATH accordingly
?S: to find the sources remotely.  Use $pkgsrc to have an absolute path.
?S:.
?S:rsrc
 (relsrcdir):
?S: This variable holds a potentially relative path to the package
?S: source.  The contents are correct for the configuration environment,
?S: i.e. there might be an extra .. prepended to get out of the UU dir.
?S: Configure units should use this, not the src variable.
?S:.
: Find the path to the source tree
case "$src" in
```

```
") case "$0" in
   */*) src=`echo $0 | sed -e 's%/[^/][^/]*$%%'`
        case "$src" in
  /*) ;;
  .) ;;
        *) src=`cd ../$src && pwd` ;;
  esac
        ;;
   *)   src='.';;
   esac;;
esac
case "$src" in
") src=/
 rsrc=/
 ;;
/*) rsrc="$src";;
*) rsrc="../$src";;
esac
?X:
?X: Now check whether we have found the right source tree (i.e. the one for the
?X: package we're about to configure). The original unit from Tom Tromey forced
?X: the user to pick a unique file from his distribution, and we were merely
?X: checking the existence of that file. I prefer to rely on Configure (which
?X: we know *is* present since this unit is
 part of it!) and look for the
?X: definition of the package variable, making sure it's the same as ours.
?X: If it matches, we know we found the right source tree. -- RAM, 15/03/96
?X:
if test -f $rsrc/Configure && \
 $contains "^package='$package'\$" $rsrc/Configure >/dev/null 2>&1
then
  : found it, so we are ok.
else
?X: Otherwise try "." and up to 4 parent directories...
?X: Note that we prepend a ".." to get out of the configuration environment.
 rsrc="
 for src in . .. ../.. ../../.. ../../../..; do
  if test -f ../$src/Configure && \
   $contains "^package=$package$" ../$src/Configure >/dev/null 2>&1
  then
   rsrc=../$src
   break
  fi
 done
fi
case "$rsrc" in
")
 cat <<EOM >&4
```

```
Sorry, I can't seem to locate the source dir for $package.  Please start
Configure with an explicit path -- i.e. /some/path/Configure.

EOM
 exit 1
 ;;
?X: Don't echo anything if the sources are in . -- they should know already ;-)
?X: In that case, rsrc is ../. since we lookup from within UU
../.) rsrc='..';;
*)
 echo
 " "
 echo "Sources for $package found in \"$src\"." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/src.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lchown.U,v 3.0.1.1 1994/08/29 16:07:14 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_lchown.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:14  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_lchown: Compile Setvar cat echo i_unistd rm_try
?MAKE: -pick add $@ %<
?S:d_lchown:
?S: This variable conditionally defines the HAS_LCHOWN symbol, which
?S: indicates to the C program that the lchown() routine is available
?S: to operate on a symbolic link (instead of following
 the link).
?S:.
?C:HAS_LCHOWN :
?C: This symbol, if defined, indicates that the lchown routine is
?C: available to operate on a symbolic link (instead of following the
```

```
?C: link).
?C:.
?H:#$d_lchown HAS_LCHOWN  /**/
?H:.
?F:!try
?LINT:set d_lchown
: see if lchown exists
echo " "
?X: Some functions (such as lchown()) are present in libc, but are
?X: unimplemented.  That is, they always fail and set errno=ENOSYS.
?X:
?X: Thomas Bushnell provided the following sample code and the explanation
?X: that follows.
?X:
?X: The choice of <assert.h> is essentially arbitrary.  The GNU libc
?X: macros are found in <gnu/stubs.h>.  You can include that file instead
?X: of <assert.h> (which itself includes <gnu/stubs.h>) if you test for
?X: its existence first.  <assert.h> is assumed to exist on every system,
?X: which is why it's used here.  Any GNU libc header file will include
?X: the stubs macros.  If either __stub_NAME or __stub___NAME is defined,
?X: then the function doesn't actually exist.
  Tests using <assert.h> work
?X: on every system around.
?X:
?X: The declaration of FOO is there to override builtin prototypes for
?X: ANSI C functions.
?X:
?X:  I really ought to enhance the inlibc test to check for this, but
?X:  I don't have time now.  --A.D.  5/1998
?X:
?X: Unfortunately, this trick fails under clang++-7.  Apparently to
?X: cover both the stub issue and clang's requirements, we need to do
?X: a compile and run test. -- A.D. 8/2019
?X:
$cat > try.c <<EOCP
#include <pwd.h>
#include <stdio.h>
#include <stdlib.h>
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main(int argc, char *argv[])
{
  if (lchown("./try.c", -1, getgid()) == -1) {
      exit(EXIT_FAILURE);
  }
  exit(EXIT_SUCCESS);
```

```
}
EOCP
set try
if eval $compile && ./try; then
   $echo "lchown() found." >&4
   val="$define"
else
   $echo "lchown() NOT found." >&4
   val="$undef"
fi
set d_lchown
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_lchown.U
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```
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?RCS:
?MAKE:d_isnan: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isnan:
?S: This variable conditionally defines the HAS_ISNAN symbol, which
?S: indicates to the C program that the isnan() routine is available.
?S:.
?C:HAS_ISNAN:
?C: This symbol, if defined, indicates that the isnan routine is
?C: available to check whether a double is a NaN.
?C:.
?H:#$d_isnan HAS_ISNAN  /**/
?H:.
?LINT:set d_isnan
: check for isnan
echo "Checking to see if you have isnan..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isnan(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isnan."
```

```
else
 val="$undef"
 echo "You do not have isnan."
fi
$rm_try
set d_isnan
eval $setvar

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnan.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Whoa.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:21:21  ram
?RCS: patch61: whoa script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:01  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to warn the user in case a change into a variable is noticed.
?X:
?X: To use this
 unit, $was must hold the old value that has changed. Upon
?X: exit, the two variables $td and $tu are set to the correct value for
?X: respectively defining or undefining a variable. For instance, if $vas was
?X: $undef, but now $var is $define, after calling . whoa, you should use
?X: eval "$var=\$tu" to finally set $var to the correct value. See unit Inlibc.
?X:
?MAKE:Whoa: Myread startsh hint
?MAKE: -pick add $@ %<
?F:./whoa
?T:var was
```

```
?LINT:change td tu
: set up the script used to warn in case of inconsistency
cat <<EOS >whoa
$startsh
EOS
cat <<'EOSC' >>whoa
dflt=y
echo " "
echo "*** WHOA THERE!!! ***" >&4
echo "    The $hint value for \$$var on this machine was \"$was\"!" >&4
rp="    Keep the $hint value?"
. ./myread
case "$ans" in
y) td=$was; tu=$was;;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Whoa.U
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```
?RCS: $Id: d_setgrent.U,v $
?RCS:
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?RCS:
?RCS: $Log: d_setgrent.U,v $
?RCS:
?MAKE:d_setgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setgrent:
?S: This variable conditionally defines the HAS_SETGRENT symbol, which
?S: indicates to the C program that the setgrent() routine is available
?S: for initializing sequential access to the group database.
?S:.
?C:HAS_SETGRENT:
?C: This symbol, if defined, indicates that the setgrent routine is
?C: available for initializing sequential access of the group database.
?C:.
?H:#$d_setgrent HAS_SETGRENT  /**/
?H:.
?LINT:set d_setgrent
: see if setgrent exists
set setgrent d_setgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setgrent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endgrent.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_endgrent.U,v $
?RCS:
?MAKE:d_endgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endgrent:
?S: This variable conditionally defines the HAS_ENDGRENT symbol, which
?S: indicates to the C program that the endgrent() routine is available
?S: for sequential access of the group database.
?S:.
?C:HAS_ENDGRENT:
?C: This symbol, if defined, indicates that the getgrent routine is
?C: available for finalizing sequential access of the group database.
?C:.
?H:#$d_endgrent HAS_ENDGRENT  /**/
?H:.
?LINT:set d_endgrent
: see if endgrent exists
set endgrent d_endgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endgrent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_fma: Inlibc
?MAKE: -pick add $@ %<
?S:d_fma:
?S: This variable conditionally defines the HAS_FMA symbol, which
?S: indicates to the C program that the fma() routine is available.
?S:.
?C:HAS_FMA:
?C: This symbol, if defined, indicates that the fma routine is
?C: available to do the multiply-add function.
?C:.
```

```
?H:#$d_fma HAS_FMA  /**/
?H:.
?LINT:set d_fma
: see if fma exists
set fma d_fma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fma.U
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```
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?RCS:
?MAKE:d_llroundl: Inlibc
?MAKE: -pick add $@ %<
?S:d_llroundl:
?S: This variable conditionally defines the HAS_LLROUNDL symbol, which
?S: indicates to the C program that the llroundl() routine is available
?S: to return the long long value nearest to x away from zero.
?S:.
?C:HAS_LLROUNDL:
?C: This symbol, if defined, indicates that the llroundl routine is
?C: available to return the nearest long long value away from zero of
?C: the long double argument value.
?C:.
?H:#$d_llroundl HAS_LLROUNDL  /**/
?H:.
?LINT:set d_llroundl
: see if llroundl exists
set llroundl d_llroundl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llroundl.U
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```
?RCS: $Id: d_symlink.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_symlink.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:07:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_symlink: Inlibc
?MAKE: -pick add $@ %<
?S:d_symlink:
?S: This variable conditionally defines the HAS_SYMLINK symbol, which
?S: indicates to the C program that the symlink() routine is available
?S: to create symbolic links.
?S:.
?C:HAS_SYMLINK (SYMLINK):
?C: This symbol, if defined, indicates that the symlink routine is available
?C: to
 create symbolic links.
?C:.
?H:#$d_symlink HAS_SYMLINK /**/
?H:.
?LINT:set d_symlink
: see if symlink exists
set symlink d_symlink
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_symlink.U

1.1210 perl-modules-5.36 5.36.0-7+deb12u1

1.1210.1 Available under license :

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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldconfig.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:06:39  ram
?RCS: patch61: added support for src.U
?RCS: patch61: new OSNAME define
?RCS: patch61: can now sense new OSes
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  13:40:51  ram
```

```
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:04:18  ram
?RCS: patch54: config.sh reload logic now knows about new -K switch
?RCS: patch54: cleaned up and extended osvers for DEC OSF/1 (ADO)
?RCS: patch54: added MachTen detection
 (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:13:41  ram
?RCS: patch51: adapted osvers computation for AIX (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1995/01/30  14:27:15  ram
?RCS: patch49: unit Options.U now exports file optdef.sh, not a variable
?RCS: patch49: update code for myuname changed (WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:15:36  ram
?RCS: patch45: added quotes around the INITPROG variable (ADO)
?RCS: patch45: allows variable overriding after config file loading
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:57:05  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: merged with the version used for perl5's Configure (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:24:17  ram
?RCS: patch23: added support for osf1 hints
?RCS: patch23: new support for solaris and i386 systems (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:05:02  ram
?RCS: patch16: added post-processing on myuname for Xenix targets
?RCS: patch16: message proposing config.sh
 defaults made consistent
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:32  ram
?RCS: patch10: force use of config.sh when -d option is used (WAD)
?RCS: patch10: complain about non-existent hint files (WAD)
?RCS: patch10: added Options dependency for fastread variable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit tries to remember what we did last time we ran Configure, mostly
?X: for the sake of setting defaults.
?X:
?MAKE:Oldconfig hint myuname osname osvers: Instruct Myread Checkcc \
 Mksymlinks Loc Options Tr src trnl ln uname sh awk sed test cat grep \
 rm lns tr n c contains targetarch
?MAKE: -pick wipe $@ %<
```

```
?S:myuname:
?S: The output of 'uname -a' if available, otherwise the hostname. On Xenix,
?S: pseudo variables assignments in the output are stripped, thank you. The
?S: whole thing is then lower-cased.
?S:.
?S:hint:
?S: Gives the type of hints used for previous answers. May be one of
?S: "default",
 "recommended" or "previous".
?S:.
?S:osname:
?S: This variable contains the operating system name (e.g. sunos,
?S: solaris, hpux, etc.).  It can be useful later on for setting
?S: defaults.  Any spaces are replaced with underscores.  It is set
?S: to a null string if we can't figure it out.
?S:.
?S:osvers:
?S: This variable contains the operating system version (e.g.
?S: 4.1.3, 5.2, etc.).  It is primarily used for helping select
?S: an appropriate hints file, but might be useful elsewhere for
?S: setting defaults.  It is set to '' if we can't figure it out.
?S: We try to be flexible about how much of the version number
?S: to keep, e.g. if 4.1.1, 4.1.2, and 4.1.3 are essentially the
?S: same for this package, hints files might just be os_4.0 or
?S: os_4.1, etc., not keeping separate files for each little release.
?S:.
?C:OSNAME:
?C: This symbol contains the name of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature
 tests from Configure are generally more reliable.
?C:.
?C:OSVERS:
?C: This symbol contains the version of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests from Configure are generally more reliable.
?C:.
?H:#define OSNAME "$osname"  /**/
?H:#define OSVERS "$osvers"  /**/
?H:.
?F:!config.sh
?T:tmp tmp_n tmp_c tmp_sh file
?T:xxxxfile xxxfile xxfile xfile hintfile newmyuname
?T:tans _ isesix INITPROG DJGPP has_uname
?D:osname=''
?LINT:change n c sh
?LINT:extern hostarch
?LINT:change hostarch
```

```
: Determine the name of the machine
myuname=`$uname -a 2>/dev/null`
$test -z "$myuname" && myuname=`hostname 2>/dev/null`
?X: Special mention for Xenix, whose 'uname -a' gives us output like this:
?X:  sysname=XENIX
?X:  nodename=whatever
?X:  release=2.3.2 .. etc...
?X: Therefore, we strip all this variable assignment junk and remove all the
?X: new lines to keep the myuname variable sane... --RAM
myuname=`echo $myuname | $sed -e
 's/^[^=]*=//' -e 's/\///g' | \
 ./tr '[A-Z]' '[a-z]' | $tr $trnl ' '`
?X: Save the value we just computed to reset myuname after we get done here.
newmyuname="$myuname"
$test -f "$uname$_exe" && has_uname=y

: Guessing of the OS name -- half the following guesses are probably wrong...
: If you have better tests or hints, please send them to the metaconfig
: authors and to <MAINTLOC>
$test -f /irix && osname=irix
$test -f /xenix && osname=sco_xenix
$test -f /dynix && osname=dynix
$test -f /dnix && osname=dnix
$test -f /lynx.os && osname=lynxos
$test -f /unicos && osname=unicos && osvers=`$uname -r`
$test -f /unicosmk && osname=unicosmk && osvers=`$uname -r`
$test -f /unicosmk.ar && osname=unicosmk && osvers=`$uname -r`
$test -f /bin/mips && /bin/mips && osname=mips
$test -d /NextApps && set X `hostinfo | $grep 'NeXT Mach.*:' | \
 $sed -e 's/://' -e 's/\./_/'` && osname=next && osvers=$4
$test -d /usr/apollo/bin && osname=apollo
$test -f /etc/saf/_sactab && osname=svr4
$test -d /usr/include/minix
 && osname=minix
$test -f /system/gnu_library/bin/ar.pm && osname=vos
if $test -d /MachTen -o -d /MachTen_Folder; then
?X:  MachTen uname -a output looks like
?X:  xxx 4 0.0 Macintosh
?X:  MachTen /sbin/version output looks like
?X:  MachTen 4.0 Mon Aug 28 10:18:00 1995
?X:  MachTen 3.x had the 'version' command in /usr/etc/version.
 osname=machten
 if $test -x /sbin/version; then
  osvers=`/sbin/version | $awk '{print $2}' |
  $sed -e 's/[A-Za-z]$//'`
 elif $test -x /usr/etc/version; then
  osvers=`/usr/etc/version | $awk '{print $2}' |
  $sed -e 's/[A-Za-z]$//'`
```

```
 else
  osvers="$2.$3"
 fi
fi
$test -f /sys/posix.dll &&
 $test -f /usr/bin/what &&
 set X `/usr/bin/what /sys/posix.dll` &&
 $test "$3" = UWIN &&
 osname=uwin &&
 osvers="$5"
?X: If we have uname, we already computed a suitable uname -a output, correctly
?X: formatted for Xenix, and it lies in $myuname.
if $test "X$has_uname" != X; then
 set X $myuname
 shift
 case "$5" in
 fps*) osname=fps ;;
 mips*)
  case "$4"
 in
  umips) osname=umips ;;
  *) osname=mips ;;
  esac;;
 [23]100) osname=mips ;;
 next*) osname=next ;;
?X: Interactive Unix.
 i386*)
  tmp=`/bin/uname -X 2>/dev/null|awk '/3\.2v[45]/{ print $(NF) }'`
  if $test "$tmp" != "" -a "$3" = "3.2" -a -f '/etc/systemid'; then
   osname='sco'
   osvers=$tmp
  elif $test -f /etc/kconfig; then
   osname=isc
   if $test "$lns" = "$ln -s"; then
    osvers=4
   elif $contains _SYSV3 /usr/include/stdio.h > /dev/null 2>&1 ; then
    osvers=3
   elif $contains _POSIX_SOURCE /usr/include/stdio.h > /dev/null 2>&1 ; then
    osvers=2
   fi
  fi
  tmp=''
  ;;
?X: MS-DOS djgpp uname -a output looks like:
?X: ms-dos xxx 6 22 pc
?X:  $1 is the "dos flavor" (need not be "ms-dos").
?X:  $2 is the node name
?X:  $3 and $4 are version/subversion
```

```
?X:  $5 is always "pc", but that might not be unique to DJGPP.
?X: (e.g. Solaris_x86 has $5 = i86pc, which doesn't actually conflict,
?X: but it's close enought that I can easily imagine other vendors also
?X: using variants
 of pc* in $5.)
?X:  The "DJGPP" environment variable is always set when djgpp is active.
 pc*)
  if $test -n "$DJGPP"; then
   osname=dos
   osvers=djgpp
  fi
  ;;
 esac
 case "$1" in
 aix) osname=aix
?X: aix 4.1 uname -a output looks like
?X:  AIX  foo  1 4 000123456789
?X: where $4 is the major release number and $3 is the (minor) version.
?X: More detail on the version is available with the oslevel command.
?X: in 3.2.x, it output a string (see case statements below).  In 4.1,
?X: it puts out something like  4.1.1.0
  tmp=`( (oslevel) 2>/dev/null || echo "not found") 2>&1`
  case "$tmp" in
  'not found') osvers="$4"."$3" ;;
  '<3240'|'<>3240') osvers=3.2.0 ;;
  '=3240'|'>3240'|'<3250'|'<>3250') osvers=3.2.4 ;;
  '=3250'|'>3250') osvers=3.2.5 ;;
  *) osvers=$tmp;;
  esac
  ;;
 bsd386) osname=bsd386
  osvers=`$uname -r`
  ;;
 cygwin*) osname=cygwin
  osvers="$3"
  ;;
 *dc.osx) osname=dcosx
  osvers="$3"
  ;;
 dnix) osname=dnix
  osvers="$3"
  ;;
 domainos) osname=apollo
  osvers="$3"
  ;;
 dgux)
 osname=dgux
  osvers="$3"
```

```
  ;;
?X:  uname -a returns
?X:  DYNIX/ptx xxx 4.0 V4.1.2 i386
 dynixptx*) osname=dynixptx
  osvers=`echo "$4"|sed 's/^v//'`
  ;;
 freebsd) osname=freebsd
  osvers="$3" ;;
 genix) osname=genix ;;
?X: HP-UX uname -a gives something like
?X: HP-UX foobar B.10.20 A 9000/735 2016483812 two-user license
?X: Preserve the full 10.20 string instead of the previous plain '10'.
?X:  Thanks to Graham Barr.    --AD 6/30/1998
 hp*) osname=hpux
  osvers=`echo "$3" | $sed 's,.*\.\([0-9]*\.[0-9]*\),\1,'`
  ;;
 irix*) osname=irix
  case "$3" in
  4*) osvers=4 ;;
  5*) osvers=5 ;;
  *) osvers="$3" ;;
  esac
  ;;
 linux) osname=linux
  case "$3" in
  *) osvers="$3" ;;
  esac
  ;;
 MiNT) osname=mint
  ;;
 netbsd*) osname=netbsd
  osvers="$3"
  ;;
 news-os) osvers="$3"
  case "$3" in
  4*) osname=newsos4 ;;
  *) osname=newsos ;;
  esac
  ;;
 next*) osname=next ;;
 nonstop-ux) osname=nonstopux ;;
 openbsd) osname=openbsd
    osvers="$3"
    ;;
 POSIX-BC | posix-bc
 ) osname=posix-bc
  osvers="$3"
  ;;
```

```
powerux | power_ux | powermax_os | powermaxos | \
powerunix | power_unix) osname=powerux
 osvers="$3"
 ;;
qnx) osname=qnx
 osvers="$4"
 ;;
solaris) osname=solaris
 case "$3" in
 5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
 *) osvers="$3" ;;
 esac
 ;;
sunos) osname=sunos
 case "$3" in
 5*) osname=solaris
  osvers=`echo $3 | $sed 's/^5/2/g'` ;;
 *) osvers="$3" ;;
 esac
 ;;
titanos) osname=titanos
 case "$3" in
 1*) osvers=1 ;;
 2*) osvers=2 ;;
 3*) osvers=3 ;;
 4*) osvers=4 ;;
 *) osvers="$3" ;;
 esac
 ;;
ultrix) osname=ultrix
 osvers="$3"
 ;;
osf1|mls+) case "$5" in
 alpha)
?X: DEC OSF/1 myuname -a output looks like:  osf1 xxxx t3.2 123.4 alpha
?X: where the version number can be something like [xvt]n.n
  osname=dec_osf
?X: sizer knows the minor minor version: the letter
  osvers=`sizer -v | awk '{print $3}' | \
   ./tr '[A-Z]' '[a-z]' | sed 's/^[xvt]//'`
  case "$osvers" in
  [1-9].[0-9]*) ;;
  *) osvers=`echo
"$3" | sed 's/^[xvt]//'` ;;
  esac
  ;;
 hp*) osname=hp_osf1 ;;
 mips) osname=mips_osf1 ;;
```

```
?X: hp and mips were unsupported Technology Releases -- ADO, 24/10/94
  esac
  ;;
 unixware) osname=svr5
  osvers="$4"
  ;;
 uts) osname=uts
  osvers="$3"
  ;;
 vos) osvers="$3"
  ;;
 $2) case "$osname" in
  *isc*) ;;
  *freebsd*) ;;
  svr*)
   : svr4.x or possibly later
   case "svr$3" in
   ${osname}*)
    osname=svr$3
    osvers=$4
    ;;
   esac
   case "$osname" in
   svr4.0)
    : Check for ESIX
    if $test -f /stand/boot ; then
     eval `$grep '^INITPROG=[a-z/0-9]*$' /stand/boot`
     if $test -n "$INITPROG" -a -f "$INITPROG"; then
      isesix=`strings -a $INITPROG | \
       $grep 'ESIX SYSTEM V/386 Release 4.0'`
      if $test -n "$isesix"; then
       osname=esix4
      fi
     fi
    fi
    ;;
   esac
   ;;
  *) if $test -f /etc/systemid; then
    osname=sco
    set `echo $3 | $sed 's/\./ /g'` $4
    if $test -f $src/hints/sco_$1_$2_$3.sh; then
     osvers=$1.$2.$3
    elif $test
 -f $src/hints/sco_$1_$2.sh; then
     osvers=$1.$2
    elif $test -f $src/hints/sco_$1.sh; then
     osvers=$1
```

```
    fi
   else
    case "$osname" in
    ") : Still unknown.  Probably a generic Sys V.
     osname="sysv"
     osvers="$3"
     ;;
    esac
   fi
   ;;
  esac
  ;;
 *) case "$osname" in
  ") : Still unknown.  Probably a generic BSD.
   osname="$1"
   osvers="$3"
   ;;
  esac
  ;;
 esac
else
?X: Try to identify sony's NEWS-OS (BSD unix)
 if $test -f /vmunix -a -f $src/hints/news_os.sh; then
  (what /vmunix | UU/tr '[A-Z]' '[a-z]') > UU/kernel.what 2>&1
  if $contains news-os UU/kernel.what >/dev/null 2>&1; then
   osname=news_os
  fi
  $rm -f UU/kernel.what
?X: Maybe it's OS/2 or DOS or something similar
 elif $test -d c:/.; then
  set X $myuname
  osname=os2
  osvers="$5"
 fi
fi

: Try to determine whether config.sh was made on this system
case "$config_sh" in
")
?X: indentation wrong on purpose--RAM
dflt=n
case "$knowitall" in
")
 if test -f ../config.sh; then
  if $contains
 myuname= ../config.sh >/dev/null 2>&1; then
   eval "`$grep myuname= ../config.sh`"
  fi
```

```
  if test "X$myuname" = "X$newmyuname"; then
   dflt=y
  fi
 fi
 ;;
*) dflt=y;;
esac

: Get old answers from config file if it was generated on the same system
hint=default
if $test -f ../config.sh; then
 echo " "
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . ./myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it."
  mv ../config.sh ../config.sh.old
  myuname="$newmyuname"
  ;;
 *)  echo "Fetching default answers from your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  tmp_sh="$sh"
  . ../config.sh
  cp ../config.sh .
  n="$tmp_n"
  c="$tmp_c"
  hint=previous
  ;;
 esac
fi
?X: remember, case indentation is wrong--RAM
;;
*)
 echo " "
 echo "Fetching default answers from $config_sh..." >&4
 tmp_n="$n"
 tmp_c="$c"
 tmp_sh="$sh"
 cd ..
?X: preserve symbolic links, if any
 cp $config_sh config.sh 2>/dev/null
 chmod +w config.sh
 . ./config.sh
 cd UU
 cp ../config.sh
 .
 n="$tmp_n"
```

```
 c="$tmp_c"
 hint=previous
 ;;
esac
?X: Older versions did not always set $sh.
case "$sh" in
") sh="$tmp_sh" ;;
esac
$test "$override" && . ./optdef.sh

: Restore computed paths
for file in $loclist $trylist; do
 eval $file="\$_$file"
done

. ./checkcc
?X: Cross-compiling support
case "$targetarch" in
") ;;
*)  hostarch=$osname
 osname=`echo $targetarch|sed 's,^[^-]*-,,'`
 osvers="
 ;;
esac

@if {test -d ../hints}
: Offer them some hints based on their OS
cd ..
?X: Since we are now at the root of the source tree, we must use $src
?X: to access the sources and not $rsrc. See src.U for details...
if $test ! -f config.sh; then
 $cat <<EOM

First time through, eh?  I have some defaults handy for some systems
that need some extra help getting the Configure answers right:

EOM
 (cd $src/hints; ls -C *.sh) | $sed 's/\.sh/   /g' >&4
 dflt="

 : Now look for a hint file osname_osvers, unless one has been
 : specified already.
 case "$hintfile" in
 "|' ')
  file=`echo "${osname}_${osvers}"
 | $sed -e 's%\.%_%g' -e 's%_$%%'`
  : Also try without trailing minor version numbers.
  xfile=`echo $file | $sed -e 's%_[^_]*$%%'`
```

```
 xxfile=`echo $xfile | $sed -e 's%_[^_]*$%%'`
 xxxfile=`echo $xxfile | $sed -e 's%_[^_]*$%%'`
 xxxxfile=`echo $xxxfile | $sed -e 's%_[^_]*$%%'`
 case "$file" in
 ") dflt=none ;;
 *)  case "$osvers" in
  ") dflt=$file
   ;;
  *)  if $test -f $src/hints/$file.sh ; then
    dflt=$file
   elif $test -f $src/hints/$xfile.sh ; then
    dflt=$xfile
   elif $test -f $src/hints/$xxfile.sh ; then
    dflt=$xxfile
   elif $test -f $src/hints/$xxxfile.sh ; then
    dflt=$xxxfile
   elif $test -f $src/hints/$xxxxfile.sh ; then
    dflt=$xxxxfile
   elif $test -f "$src/hints/${osname}.sh" ; then
    dflt="${osname}"
   else
    dflt=none
   fi
   ;;
  esac
  ;;
 esac
 if $test -f Policy.sh ; then
  case "$dflt" in
  *Policy*) ;;
  none) dflt="Policy" ;;
  *) dflt="Policy $dflt" ;;
  esac
 fi
 ;;
*)
 dflt=`echo
$hintfile | $sed 's/\.sh$//'`
 ;;
esac

if $test -f Policy.sh ; then
 $cat <<EOM

There's also a Policy hint file available, which should make the
site-specific (policy) questions easier to answer.
EOM
```

```
fi

$cat <<EOM

You may give one or more space-separated answers, or "none" if appropriate.
A well-behaved OS will have no hints, so answering "none" or just "Policy"
is a good thing.  DO NOT give a wrong version or a wrong OS.

EOM

rp="Which of these apply, if any?"
. UU/myread
tans=$ans
for file in $tans; do
 if $test X$file = XPolicy -a -f Policy.sh; then
  . Policy.sh
  $cat Policy.sh >> UU/config.sh
 elif $test -f $src/hints/$file.sh; then
  . $src/hints/$file.sh
  $cat $src/hints/$file.sh >> UU/config.sh
 elif $test X"$tans" = X -o X"$tans" = Xnone ; then
  : nothing
 else
  : Give one chance to correct a possible typo.
  echo "$file.sh does not exist"
  dflt=$file
  rp="hint to use instead?"
  . UU/myread
  for file in $ans; do
   if $test -f "$src/hints/$file.sh";
then
    . $src/hints/$file.sh
    $cat $src/hints/$file.sh >> UU/config.sh
   elif $test X$ans = X -o X$ans = Xnone ; then
    : nothing
   else
    echo "$file.sh does not exist -- ignored."
   fi
  done
 fi
done

hint=recommended
: Remember our hint file for later.
if $test -f "$src/hints/$file.sh" ; then
 hintfile="$file"
else
 hintfile="
```

```
 fi
fi
cd UU
?X: From here on, we must use $rsrc instead of $src

@end
: Process their -A options
. ./posthint.sh

@if osname || osvers
: Ask them to confirm the OS name
cat << EOM

Configure uses the operating system name and version to set some defaults.
The default value is probably right if the name rings a bell. Otherwise,
since spelling matters for me, either accept the default or answer "none"
to leave it blank.

EOM
@end
@if osname
case "$osname" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *)  dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/_.*$//'` ;;
  esac
  ;;
 *) dflt="$osname" ;;
esac
rp="Operating
 system name?"
. ./myread
case "$ans" in
none)  osname=" ;;
*) osname=`echo "$ans" | $sed -e 's/[  ][ ]*/_/g' | ./tr '[A-Z]' '[a-z]'`;;
esac
@end
@if osvers
@if osname
echo " "
@end
case "$osvers" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *) dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/^[^_]*//'`
   dflt=`echo $dflt | $sed -e 's/^_//' -e 's/_/./g'`
```

```
   case "$dflt" in
   "|' ') dflt=none ;;
   esac
   ;;
  esac
  ;;
 *) dflt="$osvers" ;;
esac
rp="Operating system version?"
. ./myread
case "$ans" in
none)  osvers=" ;;
*) osvers="$ans" ;;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Oldconfig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_syscallproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_syscallproto:
?S: This variable conditionally defines the HAS_SYSCALL_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the syscall() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SYSCALL_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the syscall() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
 int syscall(int,  ...);
?C:  extern int syscall(long, ...);
?C:.
?H:#$d_syscallproto HAS_SYSCALL_PROTO /**/
```

```
?H:.
?LINT:set d_syscallproto
: see if prototype for syscall is available
echo " "
set d_syscallproto syscall $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_syscallproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cppstdin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cppstdin.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:08:34  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:05:38  ram
?RCS: patch16: comment for CPPLAST was missing
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:18:58  ram
?RCS: patch15: new variables cpprun and cpplast, guaranteed wrapper-free
?RCS: patch15: cppstdin now tries to use cc, even at the cost of a wrapper
?RCS:
?RCS: Revision 3.0.1.1
  1993/08/25  14:00:53  ram
?RCS: patch6: remove wrapper when not actually used
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppstdin cppminus cpprun cpplast: contains test \
 Myread Oldconfig Loc cpp +cc rm hint osname gccversion
?MAKE: -pick add $@ %<
?S:cppstdin:
?S: This variable contains the command which will invoke the C
?S: preprocessor on standard input and put the output to stdout.
?S: It is primarily used by other Configure units that ask about
?S: preprocessor symbols.
?S:.
```

```
?S:cppminus:
?S: This variable contains the second part of the string which will invoke
?S: the C preprocessor on the standard input and produce to standard
?S: output.  This variable will have the value "-" if cppstdin needs
?S: a minus to specify standard input, otherwise the value is "".
?S:.
?S:cpprun:
?S: This variable contains the command which will invoke a C preprocessor
?S: on standard input and put the output to stdout. It is guaranteed
 not
?S: to be a wrapper and may be a null string if no preprocessor can be
?S: made directly available. This preprocessor might be different from the
?S: one used by the C compiler. Don't forget to append cpplast after the
?S: preprocessor options.
?S:.
?S:cpplast:
?S: This variable has the same functionality as cppminus, only it applies
?S: to cpprun and not cppstdin.
?S:.
?C:CPPSTDIN:
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  Typical value of "cc -E" or "/lib/cpp", but it can also
?C: call a wrapper. See CPPRUN.
?C:.
?C:CPPMINUS:
?C: This symbol contains the second part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  This symbol will have the value "-" if CPPSTDIN needs a minus
?C: to specify standard input, otherwise the value is "".
?C:.
?C:CPPRUN:
?C: This symbol contains the string which will invoke
 a C preprocessor on
?C: the standard input and produce to standard output. It needs to end
?C: with CPPLAST, after all other preprocessor flags have been specified.
?C: The main difference with CPPSTDIN is that this program will never be a
?C: pointer to a shell wrapper, i.e. it will be empty if no preprocessor is
?C: available directly to the user. Note that it may well be different from
?C: the preprocessor used to compile the C program.
?C:.
?C:CPPLAST:
?C: This symbol is intended to be used along with CPPRUN in the same manner
?C: symbol CPPMINUS is used with CPPSTDIN. It contains either "-" or "".
?C:.
?H:#define CPPSTDIN "$cppstdin"
?H:#define CPPMINUS "$cppminus"
?H:#define CPPRUN "$cpprun"
```

```
?H:#define CPPLAST "$cpplast"
?H:.
?F:cppstdin !testcpp.out !testcpp.c
?T:wrapper x_cpp x_minus ok
?LINT:extern cppflags
: see how we invoke the C preprocessor
echo " "
echo "Now, how can we feed standard input to your C preprocessor..." >&4
cat <<'EOT' >testcpp.c
#define ABC abc
#define
 XYZ xyz
ABC.XYZ
EOT
cd ..
if test ! -f cppstdin; then
 if test "X$osname" = "Xaix" -a "X$gccversion" = X; then
  # AIX cc -E doesn't show the absolute headerfile
  # locations but we'll cheat by using the -M flag.
  echo 'cat >.$$.c; rm -f .$$.u; "'"$cc"' ${1+"$@"} -M -c .$$.c 2>/dev/null; test -s .$$.u && awk '"""$2 ~ /\.h$/ { print
"# 0 \""$2"\"" }"""' .$$.u; rm -f .$$.o .$$.u; "'"$cc"' -E ${1+"$@"} .$$.c; rm .$$.c' > cppstdin
 else
  echo 'cat >.$$.c; "'"$cc $cppflags"' -E ${1+"$@"} .$$.c; rm .$$.c' >cppstdin
 fi
else
 echo "Keeping your $hint cppstdin wrapper."
fi
chmod 755 cppstdin
wrapper=`pwd`/cppstdin
ok='false'
cd UU

?X:
?X: We'll run the cpp tests again if we don't have any valid C preprocessor
?X: yet or don't know how to proceed without a wrapper (in which case cpprun
?X: is empty and that's really annoying...)
?X:
if $test "X$cppstdin" != "X" && \
 $cppstdin $cppminus <testcpp.c >testcpp.out 2>&1 && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
then
 echo "You used
 to use $cppstdin $cppminus so we'll use that again."
 case "$cpprun" in
 ") echo "But let's see if we can live without a wrapper..." ;;
 *)
  if $cpprun $cpplast <testcpp.c >testcpp.out 2>&1 && \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
```

```
  then
   echo "(And we'll use $cpprun $cpplast to preprocess directly.)"
   ok='true'
  else
   echo "(However, $cpprun $cpplast does not work, let's see...)"
  fi
  ;;
 esac
else
 case "$cppstdin" in
 ") ;;
 *)
  echo "Good old $cppstdin $cppminus does not seem to be of any help..."
  ;;
 esac
fi

if $ok; then
 : nothing
elif echo 'Maybe """$cc"' -E" will work...'; \
 $cc -E <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc $cppflags -E"
 x_minus="";
elif echo 'Nope...maybe """$cc"' -E -" will work...'; \
 $cc -E - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc $cppflags -E"
 x_minus='-';
elif
 echo 'Nope...maybe """$cc"' -P" will work...'; \
 $cc -P <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yipee, that works!"
 x_cpp="$cc $cppflags -P"
 x_minus="";
elif echo 'Nope...maybe """$cc"' -P -" will work...'; \
 $cc -P - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "At long last!"
 x_cpp="$cc $cppflags -P"
 x_minus='-';
elif echo 'No such luck, maybe "'$cpp"' will work...'; \
 $cpp <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "It works!"
```

```
 x_cpp="$cpp $cppflags"
 x_minus=";
elif echo 'Nixed again...maybe "$cpp' -" will work...'; \
 $cpp - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Hooray, it works!  I was beginning to wonder."
 x_cpp="$cpp $cppflags"
 x_minus='-';
elif echo 'Uh-uh.  Time to get fancy.  Trying a wrapper...'; \
 $wrapper <testcpp.c >testcpp.out 2>&1; \
 $contains
 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 x_cpp="$wrapper"
 x_minus="
 echo "Eureka!"
else
 dflt="
 rp="No dice.  I can't find a C preprocessor.  Name one:"
 . ./myread
 x_cpp="$ans"
 x_minus="
 $x_cpp <testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
  echo "OK, that will do." >&4
 else
echo "Sorry, I can't get that to work.  Go find one and rerun Configure." >&4
  exit 1
 fi
fi

case "$ok" in
false)
 cppstdin="$x_cpp"
 cppminus="$x_minus"
 cpprun="$x_cpp"
 cpplast="$x_minus"
?X:
?X: If /lib/cpp is used, try using a wrapper to increase our chances to have
?X: the C compiler and our $cppstdin agree on the same symbols... However,
?X: since cpprun is guaranteed not to be a wrapper, we must clear it if the
?X: only preprocessor we found was a wrapper, with all our luck...
?X:
 set X $x_cpp
 shift
 case "$1" in
 "$cpp")
  echo "Perhaps can we force $cc -E using a wrapper..."
  if $wrapper <testcpp.c >testcpp.out 2>&1; \
```

```
  $contains 'abc.*xyz'
 testcpp.out >/dev/null 2>&1
  then
   echo "Yup, we can."
   cppstdin="$wrapper"
   cppminus=";
  else
   echo "Nope, we'll have to live without it..."
  fi
  ;;
 esac
 case "$cpprun" in
 "$wrapper")
  cpprun="
  cpplast="
  ;;
 esac
 ;;
esac

case "$cppstdin" in
"$wrapper"|'cppstdin') ;;
*) $rm -f $wrapper;;
esac
$rm -f testcpp.c testcpp.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/cppstdin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strdup.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strdup.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:21:41  ram
?RCS: patch15: created
?RCS:
?MAKE:d_strdup: Inlibc
?MAKE: -pick add $@ %<
?S:d_strdup:
?S: This variable conditionally defines HAS_STRDUP if strdup() is
```

```
?S: available to duplicate strings in memory.
?S:.
?C:HAS_STRDUP:
?C: This symbol, if defined, indicates that the strdup routine is
?C: available to duplicate strings in memory. Otherwise, roll up
?C: your own...
?C:.
?H:#$d_strdup HAS_STRDUP  /**/
?H:.
?LINT:set
 d_strdup
: see if strdup exists
set strdup d_strdup
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strdup.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_expm1: Inlibc
?MAKE: -pick add $@ %<
?S:d_expm1:
?S: This variable conditionally defines the HAS_EXPM1 symbol, which
?S: indicates to the C program that the expm1() routine is available.
?S:.
?C:HAS_EXPM1:
?C: This symbol, if defined, indicates that the expm1 routine is
?C: available to do the exp(x) - 1 when x is near 1 function.
?C:.
?H:#$d_expm1 HAS_EXPM1  /**/
?H:.
?LINT:set d_expm1
: see if expm1 exists
set expm1 d_expm1
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_expm1.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: kernel.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: kernel.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:kernel: Getfile test
?MAKE: -pick add $@ %<
?S:kernel:
?S: This variable becomes the (fully rooted) path name of the kernel.
?S:.
: find the name of the kernel.
echo " "
case "$kernel" in
")
 if $test -r /unix; then
  dflt=/unix
 elif $test -r /vmunix; then
  dflt=/vmunix
 elif $test -r /xenix; then
  dflt=/xenix
 elif $test -r /mach; then
  dflt=/mach
 elif
 $test -r /dgux; then
  dflt=/dgux
 elif $test -r /hp-ux; then
  dflt=/hp-ux
 elif $test -r /syst; then
  dflt=/syst
 elif $test -r /arix; then
  dflt=/arix
 elif $test -r /irix; then
  dflt=/arix
 else
  dflt='unknown'
  set X /*x
  shift
  case $# in
  1)
   if $test -r "$1"; then
    dflt="$1"
   fi
   ;;
  esac
```

```
 fi
 ;;
*)
 dflt="$kernel"
 ;;
esac
fn=f
rp='What is the name of your kernel?'
. ./getfile
kernel="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/kernel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Csym.U,v 3.0.1.4 1995/07/25 13:36:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Csym.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:36:29  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS: patch56: added quotes for OS/2 support
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:00:33  ram
?RCS: patch54: fixed C test program to bypass gcc builtin type checks (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/31  09:34:13  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision
 3.0.1.1  1993/08/25  14:00:05  ram
?RCS: patch6: added ldflags as a conditional dependency and to compile line
?RCS: patch6: a final double quote was missing in csym variable after eval
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Csym mistrustnm extern_C: Options contains libc libs runnm test \
 +cc +optimize +ccflags +ldflags run rm_try _exe d_cplusplus
?MAKE: -pick add $@ %<
?LINT:define csym
```

```
?LINT:use libc
?LINT:extern mistrustnm
?LINT:set mistrustnm
?S:csym:
?S: This shell variable is used internally by Configure to check
?S: whether a given C symbol is defined or not. A typical use is:
?S:  set symbol result [-fva] [previous]
?S:  eval $csym
?S: That will set result to 'true' if the function [-f], variable [-v]
?S: or array [-a] is defined, 'false' otherwise. If a previous value is
?S: given and the -r flag was provided on the command line, that value
?S: is reused without questioning.
?S:.
?S:extern_C:
?S: ANSI C
 requires 'extern' where C++ requires 'extern "C"'. This
?S: variable can be used in Configure to do the right thing.
?S:.
?S:mistrustnm:
?S: This variable can be used to establish a fallthrough for the cases
?S: where nm fails to find a symbol.  If usenm is false or usenm is true
?S: and mistrustnm is false, this variable has no effect.  If usenm is true
?S: and mistrustnm is "compile", a test program will be compiled to try to
?S: find any symbol that can't be located via nm lookup.  If mistrustnm is
?S: "run", the test program will be run as well as being compiled.
?S:.
?V:csym
?T:tval tx tlook tf tdc
?F:!try
: is a C symbol defined?
csym='tlook=$1;
case "$3" in
-v) tf=libc.tmp; tdc="";;
-a) tf=libc.tmp; tdc="[]";;
*) tlook="^$1\$"; tf=libc.list; tdc="()";;
esac;
case "$d_cplusplus" in
   $define) extern_C="extern \"C\"" ;;
   *)  extern_C="extern" ;;
esac;
tx=yes;
case "$reuseval-$4" in
true-) ;;
true-*) tx=no; eval "tval=\$$4"; case "$tval" in "") tx=yes;; esac;;
esac;
case "$tx"
 in
yes)
```

```
?X:
?X: Put symbol inside a printf to fool optimizing compilers...
?X:
?X: We use 'short' instead of 'int' to try to circumvent overzealous
?X: optimizing compilers using built-in prototypes for commonly used
?X: routines to complain when seeing a different external declaration. For
?X: instance, gcc 2.6.3 fails if we use 'int' and we attempt a test against
?X: memcpy() on machines where sizeof(int) == sizeof(char *) (the usual return
?X: type), the compiler assuming it's a built-in declaration given that the
?X: returned size matches. At least with 'short' we are safe! -- RAM, for ADO
?X:
?X: Let's thank GNU cc for making our lives so easy! :-)
?X: (An alternative for the future would be to use our knowledge about gcc
?X: to force a -fno-builtin option in the compile test, in case the 'short'
?X: trick is obsoleted by future gcc releases). -- RAM
?X:
 tval=false;
 if $test "$runnm" = true; then
  if $contains $tlook $tf >/dev/null 2>&1; then
   tval=true;
  elif $test "$mistrustnm"
 = compile -o "$mistrustnm" = run; then
   echo "$extern_C void *$1$tdc; void *(*(p()))$tdc { return &$1; } int main(int argc, char **argv) { if(p() && p() !=
(void *)argv[0]) return(0); else return(1); }"> try.c;
   $cc -o try $optimize $ccflags $ldflags try.c >/dev/null 2>&1 $libs && tval=true;
   $test "$mistrustnm" = run -a -x try && { $run ./try$_exe >/dev/null 2>&1 || tval=false; };
   $rm_try;
  fi;
 else
  echo "$extern_C void *$1$tdc; void *(*(p()))$tdc { return &$1; } int main(int argc, char **argv) { if(p() && p() !=
(void *)argv[0]) return(0); else return(1); }"> try.c;
  $cc -o try $optimize $ccflags $ldflags try.c $libs >/dev/null 2>&1 && tval=true;
  $rm_try;
 fi;
 ;;
*)
 case "$tval" in
 $define) tval=true;;
 *) tval=false;;
 esac;
 ;;
esac;
eval "$2=$tval"'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/Csym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gnulibc.U,v 3.0.1.1 1997/02/28 15:34:33 ram Exp $
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
?RCS: Copyright (c) 1996, Sven Verdoolaege
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_gnulibc.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_gnulibc gnulibc_version: Myread Oldconfig Setvar rm_try \
 cat Compile run
?MAKE: -pick add $@ %<
?S:d_gnulibc:
?S: Defined if we're dealing with the GNU C Library.
?S:.
?S:gnulibc_version:
?S: This variable contains the version number of the GNU C library.
?S: It is
 usually something like '2.2.5'.  It is a plain '' if this
?S: is not the GNU C library, or if the version is unknown.
?S:.
?C:HAS_GNULIBC:
?C: This symbol, if defined, indicates to the C program that
?C: the GNU C library is being used.  A better check is to use
?C: the __GLIBC__ and __GLIBC_MINOR__ symbols supplied with glibc.
?C:.
?H:#$d_gnulibc HAS_GNULIBC /**/
?H:?%<:#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)
?H:?%<:#   define _GNU_SOURCE
?H:?%<:#endif
?H:.
?F:!glibc.ver !try
?LINT: set d_gnulibc
?X: gnulibc can be executed by calling __libc_main().
?X: Ulrich Drepper doesn't think any other libc does that,
?X: but we check if it says 'GNU C Library' to be sure.
?X:
?X: Alas, as of 3/1998 glibc 2.0.7 reportedly isn't going to
?X: have __libc_main() anymore. :-(.  Fortunately, all released
?X: versions of glibc 2.x.x _do_ have CPP variables.  For 2.0.6,
?X: they are:
```

```
?X: #define __GLIBC__  2
?X: #define__GLIBC_MINOR__ 0.
?X: (The '6' isn't available :-(.
?X: glibc2.1 will also
 have
?X:  extern const char * __gnu_get_libc_release(void);
?X:  extern const char * __gnu_get_libc_version(void);
?X: functions.   --thanks to Andreas Jaeger.   --AD  6/1998.
?X: Although the exact format isn't documented, __gnu_get_libc_version()
?X: returns a simple string '2.1.3' in glibc 2.1.3.
?X:
: Check if we are using the GNU C library
echo " "
echo "Checking for GNU C Library..." >&4
cat >try.c <<'EOCP'
/* Find out version of GNU C library.  __GLIBC__ and __GLIBC_MINOR__
  alone are insufficient to distinguish different versions, such as
  2.0.6 and 2.0.7.  The function gnu_get_libc_version() appeared in
  libc version 2.1.0.      A. Dougherty,  June 3, 2002.
*/
#include <stdio.h>
int main(void)
{
#ifdef __GLIBC__
#   ifdef __GLIBC_MINOR__
#       if __GLIBC__ >= 2 && __GLIBC_MINOR__ >= 1 && !defined(__cplusplus)
#           include <gnu/libc-version.h>
     printf("%s\n",  gnu_get_libc_version());
#       else
     printf("%d.%d\n",  __GLIBC__, __GLIBC_MINOR__);
#
   endif
#   else
 printf("%d\n",  __GLIBC__);
#   endif
   return 0;
#else
   return 1;
#endif
}
EOCP
set try
if eval $compile_ok && $run ./try > glibc.ver; then
 val="$define"
 gnulibc_version=`$cat glibc.ver`
 echo "You are using the GNU C Library version $gnulibc_version"
else
 val="$undef"
```

```
 gnulibc_version=''
 echo "You are not using the GNU C Library"
fi
$rm_try glibc.ver
set d_gnulibc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_gnulibc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: netdbtype.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: netdbtype.U,v $
?RCS:
?MAKE:netdb_host_type netdb_hlen_type netdb_name_type netdb_net_type: \
 Protochk Oldconfig Myread cat \
 d_gethbyaddr d_gethbyname d_getnbyaddr \
 i_niin i_netdb i_unistd d_socket sizetype extern_C
?MAKE: -pick add $@ %<
?S:netdb_host_type:
?S: This variable holds the type used for the 1st argument to
?S: gethostbyaddr().  Usually, this is char * or void *,  possibly
?S: with or without a const prefix.
?S: This is only useful if you have gethostbyaddr(), naturally.
?S:.
?S:netdb_hlen_type:
?S: This variable holds the type used for the 2nd argument to
?S: gethostbyaddr().  Usually,
 this is int or size_t or unsigned.
?S: This is only useful if you have gethostbyaddr(), naturally.
?S:.
?S:netdb_name_type:
?S: This variable holds the type used for the argument to
?S: gethostbyname().  Usually, this is char * or const char *.
?S: This is only useful if you have gethostbyname(), naturally.
?S:.
?S:netdb_net_type:
?S: This variable holds the type used for the 1st argument to
?S: getnetbyaddr().  Usually, this is int or long.
?S: This is only useful if you have getnetbyaddr(), naturally.
```

```
?S:.
?C:Netdb_host_t:
?C: This symbol holds the type used for the 1st argument
?C: to gethostbyaddr().
?C:.
?C:Netdb_hlen_t:
?C: This symbol holds the type used for the 2nd argument
?C: to gethostbyaddr().
?C:.
?C:Netdb_name_t:
?C: This symbol holds the type used for the argument to
?C: gethostbyname().
?C:.
?C:Netdb_net_t:
?C: This symbol holds the type used for the 1st argument to
?C: getnetbyaddr().
?C:.
?H:#define Netdb_host_t  $netdb_host_type /**/
?H:#define Netdb_hlen_t  $netdb_hlen_type
 /**/
?H:#define Netdb_name_t  $netdb_name_type /**/
?H:#define Netdb_net_t  $netdb_net_type /**/
?H:.
?T:xxx yyy try hdrs
@if netdb_host_type || Netdb_host_t || netdb_hlen_type || Netdb_hlen_t
: check for type of arguments to gethostbyaddr.
if test "X$netdb_host_type" = X -o "X$netdb_hlen_type" = X; then
 case "$d_gethbyaddr" in
 $define)
  $cat <<EOM

Checking to see what type of arguments are accepted by gethostbyaddr().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin netinet/in.h
   $i_netdb netdb.h
   $i_unistd unistd.h"
  : The first arg can 'char *' or 'void *'
  : The second arg is some of integral type
  for xxx in in_addr_t 'const void *' 'const char *' 'void *' 'char *'; do
   for yyy in size_t long int; do
    case "$netdb_host_type" in
    ") try="$extern_C struct hostent *gethostbyaddr($xxx, $yyy, int);"
     if ./protochk "$try" $hdrs; then
      echo "Your system accepts $xxx for the first arg."
      echo "...and $yyy for the second arg."
      netdb_host_type="$xxx"
```

```
     netdb_hlen_type="$yyy"
    fi
    ;;
   esac
  done
 done
 :
In case none of those worked, prompt the user.
 case "$netdb_host_type" in
 ") rp='What is the type for the 1st argument to gethostbyaddr?'
  dflt='char *'
  . ./myread
  netdb_host_type=$ans
  rp='What is the type for the 2nd argument to gethostbyaddr?'
  dflt="$sizetype"
  . ./myread
  netdb_hlen_type=$ans
  ;;
 esac
 ;;
*) : no gethostbyaddr, so pick harmless defaults
 netdb_host_type='char *'
 netdb_hlen_type="$sizetype"
 ;;
esac
# Remove the "const" if needed. -- but then we'll have a
# prototype clash!
# netdb_host_type=`echo "$netdb_host_type" | sed 's/^const //'`
fi
@end

@if netdb_name_type || Netdb_name_t
: check for type of argument to gethostbyname.
if test "X$netdb_name_type" = X ; then
 case "$d_gethbyname" in
 $define)
  $cat <<EOM

Checking to see what type of argument is accepted by gethostbyname().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin
 netinet/in.h
   $i_netdb netdb.h
   $i_unistd unistd.h"
  for xxx in "const char *" "char *"; do
   case "$netdb_name_type" in
```

```
  ") try="$extern_C struct hostent *gethostbyname($xxx);"
   if ./protochk "$try" $hdrs; then
    echo "Your system accepts $xxx."
    netdb_name_type="$xxx"
   fi
   ;;
  esac
 done
 : In case none of those worked, prompt the user.
 case "$netdb_name_type" in
 ") rp='What is the type for the 1st argument to gethostbyname?'
  dflt='char *'
  . ./myread
  netdb_name_type=$ans
  ;;
 esac
 ;;
*) : no gethostbyname, so pick harmless default
 netdb_name_type='char *'
 ;;
esac
fi
@end

@if netdb_net_type || Netdb_net_t
: check for type of 1st argument to getnetbyaddr.
if test "X$netdb_net_type" = X ; then
 case "$d_getnbyaddr" in
 $define)
  $cat <<EOM

Checking to see what type of 1st argument is accepted by getnetbyaddr().
EOM
  hdrs="$define sys/types.h
   $d_socket sys/socket.h
   $i_niin netinet/in.h
   $i_netdb netdb.h
   $i_unistd
 unistd.h"
  for xxx in in_addr_t "unsigned long" long "unsigned int" int; do
   case "$netdb_net_type" in
   ") try="$extern_C struct netent *getnetbyaddr($xxx, int);"
    if ./protochk "$try" $hdrs; then
     echo "Your system accepts $xxx."
     netdb_net_type="$xxx"
    fi
    ;;
   esac
```

```
  done
  : In case none of those worked, prompt the user.
  case "$netdb_net_type" in
  '') rp='What is the type for the 1st argument to getnetbyaddr?'
   dflt='long'
   . ./myread
   netdb_net_type=$ans
   ;;
  esac
  ;;
 *) : no getnetbyaddr, so pick harmless default
  netdb_net_type='long'
  ;;
 esac
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/netdbtype.U
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?RCS:
?RCS:
?X:
?X: This unit is just a quick shorthand for the compile command
?X: to be used in all the other metaconfig units.
?X:
?MAKE:Compile: +cc +optimize +ccflags +ldflags +libs
?MAKE: -pick add $@ %<
?LINT:define compile compile_ok
?V:compile compile_ok mc_file
?S:compile:
?S: This shell variable is used internally
```

```
 by Configure to provide
?S: a convenient shorthand for the typical compile command, namely
?S: $cc $optimize $ccflags $ldflags -o $1 $1.c $libs > /dev/null 2>&1
?S: Note that the output filename does _not_ include the _exe
?S: extension.  Instead we assume that the linker will be
?S: "helpful" and automatically appending the correct suffix.
?S: OS/2 users will apparently need to supply the -Zexe flag to
?S: get this behavior.
?S:
?S: To use this variable, say something like:
?S:  echo 'int main() { exit(0); }' > try.c
?S:  set try
?S:  if eval $compile; then
?S:   echo "success"   # and do whatever . . .
?S:  else
?S:   echo "failure"   # and do whatever . . .
?S:  fi
?S: To add extra flags cc flags (e.g. -DWHATEVER) just put them
?S: in $*, e.g.
?S:  set try -DTRY_THIS_FLAG
?S:.
?S:compile_ok:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command that you
?S: expect to work ok.  It is the same as $compile,
 except we
?S: deliberately let the user see any error messages.
?S:.
: define a shorthand compile call
compile='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
: define a shorthand compile call for compilations that should be ok.
compile_ok='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs;'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Compile.U
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?RCS:
?RCS: $Log: d_shmat.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:04:23  ram
?RCS: patch56: use findhdr to find <sys/shm.h>, to get the right one (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:18:56  ram
?RCS: patch27: added new symbol HAS_SHMAT_PROTOTYPE (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:54:18  ram
?RCS: patch23: new Shmat_t symbol to declare return type of shmat()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmat shmattype
 d_shmatprototype: Inlibc cat +cc +ccflags \
 rm cppstdin cppflags cppminus Findhdr Setvar contains
?MAKE: -pick add $@ %<
?S:d_shmat:
?S: This variable conditionally defines the HAS_SHMAT symbol, which
?S: indicates to the C program that the shmat() routine is available.
?S:.
?S:shmattype:
?S: This symbol contains the type of pointer returned by shmat().
?S: It can be 'void *' or 'char *'.
?S:.
?S:d_shmatprototype:
?S: This variable conditionally defines the HAS_SHMAT_PROTOTYPE
?S: symbol, which indicates that sys/shm.h has a prototype for
?S: shmat.
?S:.
?C:HAS_SHMAT:
?C: This symbol, if defined, indicates that the shmat() routine is
?C: available to attach a shared memory segment to the process space.
?C:.
?C:Shmat_t:
?C: This symbol holds the return type of the shmat() system call.
?C: Usually set to 'void *' or 'char *'.
?C:.
?C:HAS_SHMAT_PROTOTYPE:
?C: This symbol, if defined, indicates that the sys/shm.h includes
?C: a prototype for shmat().  Otherwise, it is up to the program
 to
?C: guess one.  Shmat_t shmat _((int, Shmat_t, int)) is a good guess,
```

```
?C: but not always right so it should be emitted by the program only
?C: when HAS_SHMAT_PROTOTYPE is not defined to avoid conflicting defs.
?C:.
?H:#$d_shmat HAS_SHMAT  /**/
?H:#define Shmat_t $shmattype /**/
?H:#$d_shmatprototype HAS_SHMAT_PROTOTYPE /**/
?H:.
?LINT:set d_shmat d_shmatprototype
?T:xxx
: see if shmat exists
set shmat d_shmat
eval $inlibc
: see what shmat returns
case "$d_shmat" in
"$define")
 $cat >shmat.c <<'END'
#include <sys/shm.h>
void *shmat();
END
 if $cc $ccflags -c shmat.c >/dev/null 2>&1; then
  shmattype='void *'
 else
  shmattype='char *'
 fi
 echo "and it returns ($shmattype)." >&4
 : see if a prototype for shmat is available
 xxx=`./findhdr sys/shm.h`
 $cppstdin $cppflags $cppminus < $xxx > shmat.c 2>/dev/null
 if $contains 'shmat.*(' shmat.c >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 $rm -f shmat.[co]
 ;;
*)
 val="$undef"
 ;;
esac
set d_shmatprototype
eval $setvar

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmat.U
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```

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?RCS:
?RCS: $Log: i_varhdr.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:54:42  ram
?RCS: patch61: varargs script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:21:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:26:05  ram
?RCS: patch27: this unit now supersedes old i_stdarg.U and i_varargs.U
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:49  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?MAKE:i_stdarg i_varargs i_varhdr: cat +cc +ccflags rm test Setvar \
 Findhdr Warn startsh _o
?MAKE: -pick add $@ %<
?S:i_stdarg:
?S: This variable conditionally defines the I_STDARG symbol, which
?S: indicates to the C program that <stdarg.h> exists and should
?S: be included.
?S:.
?S:i_varargs:
?S: This variable conditionally defines I_VARARGS, which indicates
?S: to the C program that it should include <varargs.h>.
?S:.
?S:i_varhdr:
?S: Contains the name of the header to be included to get va_dcl definition.
?S: Typically one of varargs.h or stdarg.h.
?S:.
?C:I_STDARG:
?C: This symbol, if defined, indicates that <stdarg.h> exists and should
?C: be included.
?C:.
?C:I_VARARGS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <varargs.h>.
?C:.
```

```
?H:#$i_stdarg I_STDARG  /**/
?H:#$i_varargs I_VARARGS /**/
?H:.
?W:%<:va_dcl
?F:!varargs
?T:valstd
?LINT:set i_stdarg i_varargs
?X:
?X: Don't use setvar because the varags test
 below might override these.
?X: Actually, the messages here are just informative. We don't wish to set
?X: i_varargs or i_stdarg to their final value before knowing which of the
?X: two we'll include.
?X:
: see if stdarg is available
echo " "
if $test `./findhdr stdarg.h`; then
 echo "<stdarg.h> found." >&4
 valstd="$define"
else
 echo "<stdarg.h> NOT found." >&4
 valstd="$undef"
fi

: see if varags is available
echo " "
if $test `./findhdr varargs.h`; then
 echo "<varargs.h> found." >&4
else
 echo "<varargs.h> NOT found, but that's ok (I hope)." >&4
fi

?X:
?X: if you have stdarg.h, you need to support prototypes to actually use it;
?X: but if stdarg.h exists and the compiler doesn't support prototypes (for some
?X: bizarre reason), we'll fall back to varargs.h anyway so it's not so bad.
?X:
: set up the varargs testing programs
$cat > varargs.c <<EOP
#ifdef I_STDARG
#include <stdarg.h>
#endif
#ifdef I_VARARGS
#include <varargs.h>
#endif

#ifdef I_STDARG
int f(char *p, ...)
```

```
#else
int
 f(va_alist)
va_dcl
#endif
{
 va_list ap;
#ifndef I_STDARG
 char *p;
#endif
#ifdef I_STDARG
 va_start(ap,p);
#else
 va_start(ap);
 p = va_arg(ap, char *);
#endif
 va_end(ap);
}
EOP
$cat > varargs <<EOP
$startsh
if $cc -c $ccflags -D\$1 varargs.c >/dev/null 2>&1; then
 echo "true"
else
 echo "false"
fi
$rm -f varargs$_o
EOP
chmod +x varargs

: now check which varargs header should be included
echo " "
i_varhdr=''
case "$valstd" in
"$define")
 if `./varargs I_STDARG`; then
  val='stdarg.h'
 elif `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
*)
 if `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
esac
case "$val" in
```

```
")
 ./warn "I could not find the definition for va_dcl... You have problems..."
 val="$undef"; set i_stdarg; eval $setvar
 val="$undef"; set i_varargs; eval $setvar
 ;;
*)
 set i_varhdr
 eval $setvar
 case "$i_varhdr" in
 stdarg.h)
  val="$define"; set i_stdarg; eval $setvar
  val="$undef"; set i_varargs; eval $setvar
  ;;
 varargs.h)
  val="$undef"; set i_stdarg;
 eval $setvar
  val="$define"; set i_varargs; eval $setvar
  ;;
 esac
 echo "We'll include <$i_varhdr> to get va_dcl definition." >&4;;
esac
$rm -f varargs*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_varhdr.U
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```
?RCS: $Id: d_raster.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: $Log: d_raster.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_raster rasterlib: cat test Setvar Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_raster:
?S: Conditionally defines RASTER_TEK if this is a raster tech machine.
?S:.
?S:rasterlib (d_rasterlib):
?S: Set to the needed compile flag if this is a raster tech machine.
```

```
?S: It is up to the Makefile to use this variable.
?S:.
?C:RASTER_TEK:
?C: Defined
 if this is a rastertech machine.
?C:.
?H:#$d_raster RASTER_TEK /**/
?H:.
?LINT:set d_raster
: See if this is a raster tech machine.
val="$undef"
rasterlib="
if $test -r /dev/mirage; then
 $cat <<'EOM'

You seem to have a mirage device... this is normally associated with a raster
technologies graphics workstation. If this is right, you may want to use raster
tech in this program.

EOM
 dflt=y
 case "$d_raster" in
 "$undef") dflt=n;;
 esac
 rp='Use raster tech?'
 . ./myread
 case "$ans" in
 y*) val="$define";;
 esac
fi
set d_raster
eval $setvar

case "$d_raster" in
"$define") rasterlib='-lphigs';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_raster.U
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```
?RCS: $Id: d_pause.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pause.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:54  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_pause: Inlibc
?MAKE: -pick add $@ %<
?S:d_pause:
?S: This variable conditionally defines the HAS_PAUSE symbol, which
?S: indicates to the C program that the pause() routine is available
?S: to suspend a process until a signal is received.
?S:.
?C:HAS_PAUSE :
?C: This symbol,
 if defined, indicates that the pause routine is
?C: available to suspend a process until a signal is received.
?C:.
?H:#$d_pause HAS_PAUSE  /**/
?H:.
?LINT:set d_pause
: see if pause exists
set pause d_pause
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pause.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_pwd.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:10:57  ram
?RCS: patch56: use setvar so hint file values can override our guesses (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:03:27  ram
?RCS: patch23: had forgotten cppminus in cppstdin test (ADO)
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks whether there is a pwd system or not
?X:
?MAKE:i_pwd d_pwquota d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment:
 \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_pwd:
?S: This variable conditionally defines I_PWD, which indicates
?S: to the C program that it should include <pwd.h>.
?S:.
?S:d_pwquota:
?S: This varaible conditionally defines PWQUOTA, which indicates
?S: that struct passwd contains pw_quota.
?S:.
?S:d_pwage:
?S: This varaible conditionally defines PWAGE, which indicates
?S: that struct passwd contains pw_age.
?S:.
?S:d_pwchange:
?S: This varaible conditionally defines PWCHANGE, which indicates
?S: that struct passwd contains pw_change.
?S:.
?S:d_pwclass:
?S: This varaible conditionally defines PWCLASS, which indicates
?S: that struct passwd contains pw_class.
?S:.
?S:d_pwexpire:
?S: This varaible conditionally defines PWEXPIRE, which indicates
?S: that struct passwd contains pw_expire.
?S:.
?S:d_pwcomment:
?S: This varaible conditionally defines PWCOMMENT, which indicates
?S: that struct passwd contains pw_comment.
?S:.
?C:I_PWD:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include <pwd.h>.
?C:.
?C:PWQUOTA:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_quota.
?C:.
```

```
?C:PWAGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_age.
?C:.
?C:PWCHANGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_change.
?C:.
?C:PWCLASS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_class.
?C:.
?C:PWEXPIRE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_expire.
?C:.
?C:PWCOMMENT:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_comment.
?C:.
?H:#$i_pwd I_PWD  /**/
?H:#$d_pwquota PWQUOTA /**/
?H:#$d_pwage PWAGE /**/
?H:#$d_pwchange PWCHANGE /**/
?H:#$d_pwclass PWCLASS /**/
?H:#$d_pwexpire PWEXPIRE /**/
?H:#$d_pwcomment PWCOMMENT /**/
?H:.
?LINT: set i_pwd d_pwquota
 d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment
?T:xxx
: see if this is a pwd.h system
set pwd.h i_pwd
eval $inhdr

case "$i_pwd" in
$define)
 xxx=`./findhdr pwd.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'pw_quota' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwquota
 eval $setvar
```

```
if $contains 'pw_age' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwage
eval $setvar

if $contains 'pw_change' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwchange
eval $setvar

if $contains 'pw_class' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwclass
eval $setvar

if $contains 'pw_expire' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwexpire
eval $setvar

if $contains 'pw_comment' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwcomment
eval $setvar

$rm -f $$.h
;;
*)
val="$undef";
set
d_pwquota; eval $setvar
set d_pwage; eval $setvar
set d_pwchange; eval $setvar
```

```
 set d_pwclass; eval $setvar
 set d_pwexpire; eval $setvar
 set d_pwcomment; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_pwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:versionony: cat Myread Setvar Devel
?MAKE: -pick add $@ %<
?LINT:set versionony
?Y:TOP
?S:versionony:
?S: If set, this symbol indicates that only the version-specific
?S: components of a perl installation should be installed.
?S: This may be useful for making a test installation of a new
?S: version without disturbing the existing installation.
?S: Setting versionony is equivalent to setting installperl's -v option.
?S: In particular, the non-versioned scripts and programs such as
?S: a2p, c2ph, h2xs, pod2*, and perldoc
 are not installed
?S: (see INSTALL for a more complete list).  Nor are the man
?S: pages installed.
?S: Usually, this is undef.
?S:.
?LINT:extern inc_version_list
?LINT:change inc_version_list
?LINT:extern inc_version_list_init
?LINT:change inc_version_list_init
?LINT:extern version
: determine whether to use a version number suffix for installed binaries
echo " "
$cat <<EOM
Do you want to use a version number suffix for installed binaries? This
will install 'perl$version' instead of 'perl', and likewise for other
binaries like 'perldoc' and 'cpan'. This allows many versions of perl
```

```
to be installed side-by-side. Unless you are a developer, you probably
do *not* want to do this.
EOM
case "$versiononly" in
"$define"|[Yy]*|true) dflt='y' ;;
*) dflt='n';
esac
rp="Do you want to use a version number suffix for installed binaries?"
. ./myread
case "$ans" in
[yY]*) val="$define";;
*) val="$undef" ;;
esac
set versiononly
eval $setvar

case "$versiononly" in
"$define") inc_version_list="
        inc_version_list_init=0
        ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/versiononly.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nan: Inlibc
?MAKE: -pick add $@ %<
?S:d_nan:
?S: This variable conditionally defines HAS_NAN if nan() is
?S: available to generate NaN.
?S:.
?C:HAS_NAN:
?C: This symbol, if defined, indicates that the nan routine is
?C: available to generate NaN.
?C:.
?H:#$d_nan HAS_NAN  /**/
?H:.
?LINT:set d_nan
: see if nan exists
set nan d_nan
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nan.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perlxv.U,v 1.1 2000/08/31 17:53:56 jhi Exp jhi $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:ivtype uvtype nvtype ivsize uvsize nvsize \
    i8type u8type i16type u16type i32type u32type i64type u64type \
    i8size u8size i16size u16size i32size u32size i64size u64size \
    d_nv_preserves_uv nv_preserves_uv_bits nv_overflows_integers_at \
    d_nv_zero_is_allbits_zero: \
 echo rm_try use64bitint d_quad quadtype uquadtype usequadmath \
 d_longdbl uselongdouble longdblsize doublesize i_quadmath \
 shortsize intsize longsize i_stdlib libs gccversion \
 cat Compile i_inttypes test signal_t run
?MAKE: -pick add $@ %<
?S:ivtype:
?S: This variable contains the C type used for Perl's IV.
?S:.
?S:uvtype:
?S: This variable contains the C type
 used for Perl's UV.
?S:.
?S:nvtype:
?S: This variable contains the C type used for Perl's NV.
?S:.
?S:i8type:
?S: This variable contains the C type used for Perl's I8.
?S:.
?S:u8type:
?S: This variable contains the C type used for Perl's U8.
?S:.
?S:i16type:
?S: This variable contains the C type used for Perl's I16.
?S:.
?S:u16type:
?S: This variable contains the C type used for Perl's U16.
?S:.
?S:i32type:
?S: This variable contains the C type used for Perl's I32.
?S:.
?S:u32type:
?S: This variable contains the C type used for Perl's U32.
?S:.
?S:i64type:
```

```
?S: This variable contains the C type used for Perl's I64.
?S:.
?S:u64type:
?S: This variable contains the C type used for Perl's U64.
?S:.
?S:ivsize:
?S: This variable is the size of an IV in bytes.
?S:.
?S:uvsize:
?S: This variable is the size of a UV in bytes.
?S:.
?S:i8size:
?S: This variable is the size of an I8 in bytes.
?S:.
?S:u8size:
?S: This variable is the size of an U8 in bytes.
?S:.
?S:i16size:
?S: This variable is the
 size of an I16 in bytes.
?S:.
?S:u16size:
?S: This variable is the size of an U16 in bytes.
?S:.
?S:i32size:
?S: This variable is the size of an I32 in bytes.
?S:.
?S:u32size:
?S: This variable is the size of an U32 in bytes.
?S:.
?S:i64size:
?S: This variable is the size of an I64 in bytes.
?S:.
?S:u64size:
?S: This variable is the size of an U64 in bytes.
?S:.
?S:nvsize:
?S: This variable is the size of a Perl NV in bytes.
?S: Note that some floating point formats have unused bytes.
?S:.
?S:d_nv_preserves_uv:
?S: This variable indicates whether a variable of type nvtype
?S: can preserve all the bits a variable of type uvtype.
?S:.
?S:nv_preserves_uv_bits:
?S: This variable indicates how many of bits type uvtype
?S: a variable nvtype can preserve.
?S:.
```

```
?S:nv_overflows_integers_at:
?S: This variable gives the largest integer value that NVs can hold
?S: as a constant floating point expression.
?S: If it could not be determined, it holds the value 0.
?S:.
?S:d_nv_zero_is_allbits_zero:
?S: This
 variable indicates whether a variable of type nvtype
?S: stores 0.0 in memory as all bits zero.
?S:.
?C:IVTYPE:
?C: This symbol defines the C type used for Perl's IV.
?C:.
?C:UVTYPE:
?C: This symbol defines the C type used for Perl's UV.
?C:.
?C:I8TYPE:
?C: This symbol defines the C type used for Perl's I8.
?C:.
?C:U8TYPE:
?C: This symbol defines the C type used for Perl's U8.
?C:.
?C:I16TYPE:
?C: This symbol defines the C type used for Perl's I16.
?C:.
?C:U16TYPE:
?C: This symbol defines the C type used for Perl's U16.
?C:.
?C:I32TYPE:
?C: This symbol defines the C type used for Perl's I32.
?C:.
?C:U32TYPE:
?C: This symbol defines the C type used for Perl's U32.
?C:.
?C:I64TYPE:
?C: This symbol defines the C type used for Perl's I64.
?C:.
?C:U64TYPE:
?C: This symbol defines the C type used for Perl's U64.
?C:.
?C:NVTYPE:
?C: This symbol defines the C type used for Perl's NV.
?C:.
?C:IVSIZE:
?C: This symbol contains the sizeof(IV).
?C:.
?C:UVSIZE:
?C: This symbol contains the
```

```
 sizeof(UV).
?C:.
?C:I8SIZE:
?C: This symbol contains the sizeof(I8).
?C:.
?C:U8SIZE:
?C: This symbol contains the sizeof(U8).
?C:.
?C:I16SIZE:
?C: This symbol contains the sizeof(I16).
?C:.
?C:U16SIZE:
?C: This symbol contains the sizeof(U16).
?C:.
?C:I32SIZE:
?C: This symbol contains the sizeof(I32).
?C:.
?C:U32SIZE:
?C: This symbol contains the sizeof(U32).
?C:.
?C:I64SIZE:
?C: This symbol contains the sizeof(I64).
?C:.
?C:U64SIZE:
?C: This symbol contains the sizeof(U64).
?C:.
?C:NVSIZE:
?C: This symbol contains the sizeof(NV).
?C: Note that some floating point formats have unused bytes.
?C: The most notable example is the x86* 80-bit extended precision
?C: which comes in byte sizes of 12 and 16 (for 32 and 64 bit
?C: platforms, respectively), but which only uses 10 bytes.
?C: Perl compiled with -Duselongdouble on x86* is like this.
?C:.
?C:NV_PRESERVES_UV:
?C: This symbol, if defined, indicates that a variable of type NVTYPE
?C: can preserve all the bits of a variable of type UVTYPE.
?C:.
?C:NV_PRESERVES_UV_BITS:
?C: This
 symbol contains the number of bits a variable of type NVTYPE
?C: can preserve of a variable of type UVTYPE.
?C:.
?C:NV_OVERFLOWS_INTEGERS_AT:
?C: This symbol gives the largest integer value that NVs can hold. This
?C: value + 1.0 cannot be stored accurately. It is expressed as constant
?C: floating point expression to reduce the chance of decimal/binary
?C: conversion issues. If it can not be determined, the value 0 is given.
```

```
?C:.
?C:NV_ZERO_IS_ALLBITS_ZERO:
?C: This symbol, if defined, indicates that a variable of type NVTYPE
?C: stores 0.0 in memory as all bits zero.
?C:.
?H:#define IVTYPE  $ivtype  /**/
?H:#define UVTYPE  $uvtype  /**/
?H:#define I8TYPE  $i8type  /**/
?H:#define U8TYPE  $u8type  /**/
?H:#define I16TYPE  $i16type /**/
?H:#define U16TYPE  $u16type /**/
?H:#define I32TYPE  $i32type /**/
?H:#define U32TYPE  $u32type /**/
?H:?%<:#ifdef HAS_QUAD
?H:?%<:#define I64TYPE  $i64type /**/
?H:?%<:#define U64TYPE  $u64type /**/
?H:?%<:#endif
?H:#define NVTYPE  $nvtype  /**/
?H:#define IVSIZE  $ivsize  /**/
?H:#define UVSIZE  $uvsize  /**/
?H:#define I8SIZE  $i8size  /**/
?H:#define U8SIZE  $u8size  /**/
?H:#define I16SIZE  $i16size /**/
?H:#define U16SIZE  $u16size /**/
?H:#define I32SIZE  $i32size /**/
?H:#define U32SIZE  $u32size /**/
?H:?%<:#ifdef
 HAS_QUAD
?H:?%<:#define I64SIZE  $i64size /**/
?H:?%<:#define U64SIZE  $u64size /**/
?H:?%<:#endif
?H:#define NVSIZE  $nvsize  /**/
?H:#$d_nv_preserves_uv NV_PRESERVES_UV
?H:#define NV_PRESERVES_UV_BITS $nv_preserves_uv_bits
?H:#define NV_OVERFLOWS_INTEGERS_AT ($nv_overflows_integers_at)
?H:#$d_nv_zero_is_allbits_zero NV_ZERO_IS_ALLBITS_ZERO
?H:?%<:#if UVSIZE == 8
?H:?%<:#   ifdef BYTEORDER
?H:?%<:#       if BYTEORDER == 0x1234
?H:?%<:#           undef BYTEORDER
?H:?%<:#           define BYTEORDER 0x12345678
?H:?%<:#       else
?H:?%<:#           if BYTEORDER == 0x4321
?H:?%<:#               undef BYTEORDER
?H:?%<:#               define BYTEORDER 0x87654321
?H:?%<:#
    endif
?H:?%<:#       endif
```

```
?H:?%<:#   endif
?H:?%<:#endif
?H:.
?T:xxx
?T:d
?F:!try
: Check basic sizes
echo " "
$echo "Choosing the C types to be used for Perl's internal types..." >&4

case "$use64bitint:$d_quad:$quadtype" in
define:define:?*)
 ivtype="$quadtype"
 uvtype="$uquadtype"
 ivsize=8
 uvsize=8
 ;;
*) ivtype="long"
 uvtype="unsigned long"
 ivsize=$longsize
 uvsize=$longsize
 ;;
esac

case "$uselongdouble:$d_longdbl" in
define:define)
 nvtype="long double"
 nvsize=$longdblsize
 ;;
*) nvtype=double
 nvsize=$doublesize
 ;;
esac

case "$usequadmath:$i_quadmath" in
define:define)
 nvtype="__float128"
 nvsize=16
 case "$libs" in
 *quadmath*) ;;
 *) $cat <<EOM >&4

*** You requested the use of the quadmath library, but you
*** do not seem to have the quadmath library installed.
*** Cannot continue, aborting.
EOM
   exit 1
   ;;
```

```
 esac
 ;;
define:*) $cat <<EOM >&4

*** You requested the use of the quadmath library, but you
*** do not seem to have the required header, <quadmath.h>.
EOM
  case "$gccversion" in
 [23].*|4.[0-5]*)
  $cat <<EOM >&4
*** Your gcc looks a bit old:
*** $gccversion
EOM
   ;;
 ")
  $cat <<EOM >&4
*** You are not running a gcc.
EOM
   ;;
 esac
 $cat <<EOM >&4
*** For the quadmath library you need at least gcc 4.6.
*** Cannot continue, aborting.
EOM
 exit 1
 ;;
esac

$echo "(IV will be "$ivtype", $ivsize bytes)"
$echo "(UV will be "$uvtype", $uvsize bytes)"
$echo "(NV will be "$nvtype", $nvsize bytes)"

$cat >try.c <<EOCP
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#include <stdio.h>
int main() {
#ifdef INT8
  int8_t i =  INT8_MAX;
 uint8_t u = UINT8_MAX;
 printf("int8_t\n");
#endif
#ifdef INT16
  int16_t i =  INT16_MAX;
 uint16_t u = UINT16_MAX;
 printf("int16_t\n");
```

```
#endif
#ifdef INT32
  int32_t i =  INT32_MAX;
 uint32_t u = UINT32_MAX;
 printf("int32_t\n");
#endif
}
EOCP

i8type="signed char"
u8type="unsigned char"
i8size=1
u8size=1

case "$i16type" in
") case "$shortsize" in
 2) i16type=short
  u16type="unsigned
 short"
  i16size=$shortsize
  u16size=$shortsize
  ;;
 esac
 ;;
esac
case "$i16type" in
") set try -DINT16
 if eval $compile; then
  case "`$run ./try`" in
  int16_t)
   i16type=int16_t
   u16type=uint16_t
   i16size=2
   u16size=2
   ;;
  esac
 fi
 ;;
esac
case "$i16type" in
") if $test $shortsize -ge 2; then
  i16type=short
  u16type="unsigned short"
  i16size=$shortsize
  u16size=$shortsize
 fi
 ;;
esac
```

```
case "$i32type" in
") case "$longsize" in
 4) i32type=long
  u32type="unsigned long"
  i32size=$longsize
  u32size=$longsize
  ;;
 *) case "$intsize" in
  4) i32type=int
   u32type="unsigned int"
   i32size=$intsize
   u32size=$intsize
   ;;
  esac
  ;;
 esac
 ;;
esac
case "$i32type" in
") set try -DINT32
 if eval $compile; then
  case "`$run ./try`" in
  int32_t)
   i32type=int32_t
   u32type=uint32_t
   i32size=4
   u32size=4
   ;;
  esac
 fi
 ;;
esac
case "$i32type" in
") if $test $intsize -ge 4; then
  i32type=int
  u32type="unsigned int"
  i32size=$intsize
  u32size=$intsize
 fi
 ;;
esac

case
 "$i64type" in
") case "$d_quad:$quadtype" in
 define:?*)
  i64type="$quadtype"
```

```
  u64type="$uquadtype"
  i64size=8
  u64size=8
  ;;
 esac
 ;;
esac

$echo "Checking how many bits of your UVs your NVs can preserve..." >&4
$cat <<EOP >try.c
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
#ifdef SIGFPE
/* volatile so that the compiler has to store it out to memory */
volatile int bletched = 0;
$signal_t blech(int s) { bletched = 1; }
#endif
int main() {
   $uvtype u = 0;
   $nvtype d;
   int     n = 8 * $uvsize;
   int     i;
#ifdef SIGFPE
   signal(SIGFPE, blech);
#endif

   for (i = 0; i < n; i++) {
     u = u << 1 | ($uvtype)1;
     d = ($nvtype)u;
     if (($uvtype)d != u)
       break;
     if (d <= 0)
 break;
     d = ($nvtype)(u - 1);
     if (($uvtype)d != (u - 1))
       break;
#ifdef SIGFPE
     if (bletched)
 break;
#endif
   }
   printf("%d\n",
```

```
 ((i == n) ? -n : i));
   exit(0);
}
EOP
set try

d_nv_preserves_uv="$undef"
if eval $compile; then
 nv_preserves_uv_bits="`$run ./try`"
fi
case "$nv_preserves_uv_bits" in
\-[1-9]*)
 nv_preserves_uv_bits=`expr 0 - $nv_preserves_uv_bits`
 $echo "Your NVs can preserve all $nv_preserves_uv_bits bits of your UVs."  >&4
 d_nv_preserves_uv="$define"
 ;;
[1-9]*) $echo "Your NVs can preserve only $nv_preserves_uv_bits bits of your UVs."  >&4
 d_nv_preserves_uv="$undef" ;;
*) $echo "Can't figure out how many bits your NVs preserve." >&4
 nv_preserves_uv_bits="0" ;;
esac
$rm_try

$echo "Checking to find the largest integer value your NVs can hold..." >&4
$cat <<EOP >try.c
#include <stdio.h>

typedef $nvtype NV;

int
main() {
 NV value = 2;
 int count = 1;

 while(count < 256) {
   /* volatile so that the compiler has to store it out to memory */
   volatile NV up = value + 1.0;
   volatile NV negated = -value;
   volatile NV down = negated - 1.0;
   volatile NV got_up = up -
 value;
   int up_good = got_up == 1.0;
   int got_down = down - negated;
   int down_good = got_down == -1.0;

   if (down_good != up_good) {
     fprintf(stderr,
       "Inconsistency - up %d %f; down %d %f; for 2**%d (%.20f)\n",
```

```
      up_good, (double) got_up, down_good, (double) got_down,
      count, (double) value);
    return 1;
  }
  if (!up_good) {
    while (1) {
 if (count > 8) {
  count -= 8;
  fputs("256.0", stdout);
 } else {
  count--;
  fputs("2.0", stdout);
 }
 if (!count) {
  puts("");
  return 0;
 }
 fputs("*", stdout);
    }
  }
  value *= 2;
  ++count;
 }
 fprintf(stderr, "Cannot overflow integer range, even at 2**%d (%.20f)\n",
  count, (double) value);
 return 1;
}
EOP
set try

nv_overflows_integers_at='0'
if eval $compile; then
  xxx="`$run ./try`"
  case "$?" in
 0)
    case "$xxx" in
  2*)  cat >&4 <<EOM
The largest integer your NVs can preserve is equal to $xxx
EOM
      nv_overflows_integers_at="$xxx"
      ;;
  *)  cat
 >&4 <<EOM
Cannot determine the largest integer value your NVs can hold, unexpected output
'$xxx'
EOM
      ;;
    esac
```

```
    ;;
 *)  cat >&4 <<EOM
Cannot determine the largest integer value your NVs can hold
EOM
    ;;
  esac
fi
$rm_try

$echo "Checking whether NV 0.0 is all bits zero in memory..." >&4
$cat <<EOP >try.c
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>
#include <sys/types.h>
#include <signal.h>
#ifdef SIGFPE
/* volatile so that the compiler has to store it out to memory */
volatile int bletched = 0;
$signal_t blech(int s) { bletched = 1; }
#endif

int checkit($nvtype d, const char *where) {
  void *v = &d;
  unsigned char *p = (unsigned char *)v;
  unsigned char *end = p + sizeof(d);
  int fail = 0;

  while (p < end)
 fail += *p++;

  if (!fail)
 return 0;

  p = (unsigned char *)v;
  printf("No - %s: 0x", where);
  while (p < end)
 printf ("%02X", *p++);
  printf("\n");
  return 1;
}

int main(int
 argc, char **argv) {
  $nvtype d = 0.0;
```

```
  int fail = 0;
  fail += checkit(d, "0.0");

  /* The compiler shouldn't be assuming that bletched is 0  */
  d = bletched;

  fail += checkit(d, "bleched");

#ifdef SIGFPE
  signal(SIGFPE, blech);
#endif

  /* Paranoia - the compiler should have no way of knowing that ANSI says
     that argv[argc] will always be NULL.  Actually, if it did assume this it
     would be buggy, as this is C and main() can be called from elsewhere in
     the program.  */
  d = argv[argc] ? 1 : 0;

  if (d) {
 printf("Odd argv[argc]=%p, d=%g\n", argv[argc], d);
  }

  fail += checkit(d, "ternary");

  memset(&d, sizeof(d), argv[argc] ? 1 : 0);

  if (d != 0.0) {
 printf("No - memset doesn't give 0.0\n");
 /* This might just blow up:  */
 printf("(gives %g)\n", d);
 return 1;
  }

#ifdef SIGFPE
  if (bletched) {
 printf("No - something bleched\n");
 return 1;
  }
#endif
  if (fail) {
    printf("No - %d fail(s)\n",
 fail);
    return 1;
  }
  printf("Yes\n");
  return 0;
}
EOP
```

```
set try

d_nv_zero_is_allbits_zero="$undef"
if eval $compile; then
   xxx="`$run ./try`"
   case "$?" in
 0)
     case "$xxx" in
  Yes)  cat >&4 <<EOM
0.0 is represented as all bits zero in memory
EOM
      d_nv_zero_is_allbits_zero="$define"
      ;;
  *)  cat >&4 <<EOM
0.0 is not represented as all bits zero in memory
EOM
      d_nv_zero_is_allbits_zero="$undef"
      ;;
     esac
     ;;
 *)  cat >&4 <<EOM
0.0 is not represented as all bits zero in memory
EOM
     d_nv_zero_is_allbits_zero="$undef"
     ;;
   esac
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlxv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: fpostype.U,v 3.0.1.2 1994/08/29 16:20:52 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: fpostype.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:20:52  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:59  ram
```

```
?RCS: patch30: created
?RCS:
?MAKE:fpostype: Myread Typedef
?MAKE: -pick add $@ %<
?S:fpostype:
?S: This variable defines Fpos_t to be something like fpos_t, long,
?S: uint, or whatever type is used to declare file positions in libc.
?S:.
?C:Fpos_t:
?C: This symbol holds
 the type used to declare file positions in libc.
?C: It can be fpos_t, long, uint, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Fpos_t $fpostype  /* File position type */
?H:.
?LINT:set fpostype
: see what type file positions are declared as in the library
rp="What is the type for file position used by fsetpos()?"
set fpos_t fpostype long stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/fpostype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: randfunc.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the new unit that should be used when random
?X: functions are to be used. It thus makes randbits.U obsolete.
?X:
?MAKE:randfunc mrand seedfunc nrandbits: cat +cc rm test Myread Csym
?MAKE: -pick add $@ %<
?S:randfunc:
?S: Indicates the name of the random number function to use.
```

```
?S: Values include drand48, random, and rand. In C programs,
?S: the 'nrand' macro is defined
 to generate uniformly distributed
?S: random numbers over the range [0., 1.] (see mrand and nrand).
?S:.
?S:mrand:
?S: Indicates the macro to be used to generate normalized
?S: random numbers.  Uses randfunc, often divided by
?S: (double) ((1 << nrandbits) -1) in order to normalize the result.
?S: In C programs, the macro 'nrand' is maped on mrand.
?S:.
?S:seedfunc:
?S: Indicates the random number generating seed function.
?S: Values include srand48, srandom, and srand.
?S:.
?S:nrandbits:
?S: Indicates how many bits are produced by the function used to
?S: generate normalized random numbers.
?S:.
?C:nrand:
?C: This macro is to be used to generate uniformly distributed
?C: random numbers over the range [0., 1.].
?C:.
?C:seednrand:
?C: This symbol defines the macro to be used in seeding the
?C: random number generator (see nrand).
?C:.
?H:#define nrand()  $mrand  /**/
?H:#define seednrand(x) $seedfunc(x) /**/
?H:.
?T:cont val
?LINT:nothere $nrandbits)
: How can we generate normalized
 random numbers ?
echo " "
case "$randfunc" in
")
 if set drand48 val -f; eval $csym; $val; then
  dflt="drand48"
  echo "Good, found drand48()." >&4
 elif set random val -f; eval $csym; $val; then
  dflt="random"
  echo "OK, found random()." >&4
 else
  dflt="rand"
  echo "Yick, looks like I have to use rand()." >&4
 fi
 echo " "
```

```
 ;;
*)
 dflt="$randfunc"
 ;;
esac
cont=true
while $test "$cont"; do
 rp="Use which function to generate random numbers?"
 . ./myread
?X: Invalidates nrandbits if the answer is not the default so
?X: that the value stored in config.sh will not be used when
?X: we change our random function.
 if $test "$ans" = "$dflt"; then
  : null
 else
  nrandbits=''
 fi
 randfunc="$ans"
 if set $ans val -f; eval $csym; $val; then
  cont=''
 else
  dflt=n
  rp="Function $ans does not exists. Use that name anyway?"
  . ./myread
  dflt=rand
  case "$ans" in
   [yY]*) cont='';;
  esac
 fi
 case "$cont" in
 '')
  case "$randfunc" in
  drand48)
   mrand="drand48()"
   seedfunc="srand48"
   ;;
  rand*)
   case
 "$nrandbits" in
   '')
echo "Checking to see how many bits your $randfunc() function produces..." >&4
   $cat >try.c <<EOCP
#include <stdio.h>
int main()
{
 register int i;
 register unsigned long tmp;
 register unsigned long max = 0L;
```

```
 extern long random();

 for (i = 1000; i; i--) {
  tmp = (unsigned long)$randfunc();
  if (tmp > max) max = tmp;
 }
 for (i = 0; max; i++)
  max /= 2;
 printf("%d\n",i);
}
EOCP
   if $cc -o try try.c >/dev/null 2>&1 ; then
   dflt=`try`
   else
   dflt='?'
   echo "(I can't seem to compile the test program...)"
   fi
   ;;
   *)
    dflt="$nrandbits"
    ;;
   esac
   rp="How many bits does your $randfunc() function produce?"
   . ./myread
   nrandbits="$ans"
   $rm -f try.c try
   mrand="($randfunc() / (double) ((1 << $nrandbits) -1))"
   seedfunc="srand"
   ;;
?X: The following is provided just in case...
  *)
   dflt="31"
   rp="How many bits does your $randfunc() function produce?"
   . ./myread
   nrandbits="$ans"
   seedfunc="s$randfunc"
   mrand="($randfunc()
 / (double) ((1 << $nrandbits) -1))"
   if set $seedfunc val -f; eval $csym; $val; then
    echo "(Using $seedfunc() to seed random generator)"
   else
    echo "(Warning: no $seedfunc() to seed random generator)"
    seedfunc=rand
   fi
   ;;
  esac
  ;;
 esac
```

```
done

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/randfunc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: filexp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: filexp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:filexp: privlib
?MAKE: -pick add $@ %<
?S:filexp:
?S: This symbol contains the full pathname of the filexp script, in case we
?S: are saving the script for posterity.
?S:.
: must not allow self reference
case "$privlib" in
 /*)
 filexp=$privlib/filexp
 ;;
 *)
 filexp=`pwd`/filexp
 ;;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/filexp_path.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: Hasproto.U $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasproto string that is used internally
```

```
?X: by Configure to check if this system has a prototype for a
?X: particular function
?X:
?X: To use it, say something like:
?X:  set d_getnetent_proto getnetent $i_netdb netdb.h
?X:  eval $hasproto
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/types.h
?X:  $i_systime sys/time.h
?X:  $i_sysselct sys/select.h
?X:  $i_netdb netdb.h"
?X: set d_getnetent_proto getnetent $hdrs
?X: eval $hasproto
?X:
?X: There is also an 'escape' hatch built in.  If you have a pair
?X: of args   'literal 'stuff' then 'stuff' gets included literally
?X: into the test program.  See Protochk.U for more details.
?X:
?MAKE:Hasproto:
 Setvar cppstdin cppflags cppminus contains rm_try test
?MAKE: -pick add $@ %<
?T:func varname
?F:!try.c
?V:hasproto
: Define hasproto macro for Configure internal use
hasproto='varname=$1; func=$2; shift; shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 literal) echo "$2" ;;
 esac ;
   shift 2;
done > try.c;
$cppstdin $cppflags $cppminus < try.c > tryout.c 2>/dev/null;
if $contains "$func.*(" tryout.c >/dev/null 2>&1; then
 echo "$func() prototype found.";
 val="$define";
else
 echo "$func() prototype NOT found.";
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try tryout.c'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasproto.U

No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_tgamma: Inlibc
?MAKE: -pick add $@ %<
?S:d_tgamma:
?S: This variable conditionally defines the HAS_TGAMMA symbol, which
?S: indicates to the C program that the tgamma() routine is available
?S: for the gamma function.  See also d_lgamma.
?S:.
?C:HAS_TGAMMA:
?C: This symbol, if defined, indicates that the tgamma routine is
?C: available to do the gamma function. See also HAS_LGAMMA.
?C:.
?H:#$d_tgamma HAS_TGAMMA  /**/
?H:.
?LINT:set d_tgamma
: see if tgamma exists
set tgamma d_tgamma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_tgamma.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Options.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Options.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:08:15  ram
?RCS: patch61: optdef.sh now starts with a "startsh"
?RCS: patch61: moved some code from Head.U
?RCS:
?RCS: Revision 3.0.1.6  1995/09/25  09:14:46  ram
?RCS: patch59: protected option parsing code against 'echo -*' option failure
?RCS:
?RCS: Revision 3.0.1.5  1995/05/12  12:04:52  ram
?RCS: patch54: added -K option for experts
?RCS:
```

```
?RCS: Revision 3.0.1.4  1995/01/30  14:27:52  ram
?RCS:
 patch49: this unit now exports file optdef.sh, not a variable
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:19:00  ram
?RCS: patch45: new -O option allowing -D and -U to override config.sh settings
?RCS: patch45: file optdef.sh is no longer removed after sourcing
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  15:58:06  ram
?RCS: patch36: ensure option definition file is removed before appending
?RCS: patch36: protect variable definitions with spaces in them
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:55:44  ram
?RCS: patch30: now uses new me symbol to tag error messages
?RCS: patch30: new -D and -U options to define/undef symbols (JHI)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Command line parsing. It is really important that the variables used here
?X: be not listed in the MAKE line, or they will be saved in config.sh and
?X: loading this file to fetch default answers would clobber the values set
?X: herein.
?X:
?MAKE:Options:
 startsh
?MAKE: -pick wipe $@ %<
?V:reuseval alldone error realsilent silent extractsh fastread \
 knowitall: config_sh
?T:arg argn symbol config_arg0 config_args config_argc xxx yyy zzz uuu
?T:args_exp args_sep arg_exp ccflags
?F:!Configure
?F:./optdef.sh ./cmdline.opt ./posthint.sh ./cmdl.opt
: Save command line options in file UU/cmdline.opt for later use in
: generating config.sh.
?X: This temporary file will be read by Oldsym.U.  I used a temporary
?X: file to preserve all sorts of potential command line quotes and
?X: also because we don't know in advance how many variables we'll
?X: need, so I can't actually declare them on the MAKE line.
?X: The config_args variable won't be quite correct if Configure is
?X: fed something like    ./Configure -Dcc="gcc -B/usr/ccs/bin/"
?X: since the quotes are gone by the time we see them.  You'd have to
?X: reconstruct the command line from the config_arg? lines, but since
?X: I don't imagine anyone actually having to do that, I'm not going
?X:
 to worry too much.
cat > cmdline.opt <<EOSH
```

```
: Configure command line arguments.
config_arg0='$0'
config_args='$*'
config_argc=$#
EOSH
argn=1
args_exp=''
args_sep=''
for arg in "$@"; do
 cat >>cmdline.opt <<EOSH
config_arg$argn='$arg'
EOSH
?X: Extreme backslashitis: replace each ' by '''''
 cat <<EOC | sed -e "s/'/'''''''''''''''/g" > cmdl.opt
$arg
EOC
 arg_exp=`cat cmdl.opt`
 args_exp="$args_exp$args_sep'$arg_exp'"
 argn=`expr $argn + 1`
 args_sep=' '
done
?X: args_exp is good for restarting self: eval "set X $args_exp"; shift; $0 "$@"
?X: used by hints/os2.sh in Perl, for instance
rm -f cmdl.opt

: produce awk script to parse command line options
cat >options.awk <<'EOF'
BEGIN {
 optstr = "A:dD:eEf:hKOrsSU:V"; # getopt-style specification

 len = length(optstr);
 for (i = 1; i <= len; i++) {
  c = substr(optstr, i, 1);
?X: some older awk's do not have the C ?: construct
  if (i < len) a = substr(optstr, i + 1, 1); else a = "";
  if (a == ":") {
   arg[c] = 1;
   i++;
  }
  opt[c]
 = 1;
 }
}
{
 expect = 0;
 str = $0;
 if (substr(str, 1, 1) != "-") {
  printf("'%s'\n", str);
```

```
  next;
 }
 len = length($0);
 for (i = 2; i <= len; i++) {
  c = substr(str, i, 1);
  if (!opt[c]) {
   printf("-%s\n", substr(str, i));
   next;
  }
  printf("-%s\n", c);
  if (arg[c]) {
   if (i < len)
    printf("'%s'\n", substr(str, i + 1));
   else
    expect = 1;
   next;
  }
 }
}
END {
 if (expect)
  print "?";
}
EOF

: process the command line options
?X: Use "$@" to keep arguments with spaces in them from being split apart.
?X: For the same reason, awk will output quoted arguments and the final eval
?X: removes them and sets a proper $* array. An 'X' is prepended to each
?X: argument before being fed to echo to guard against 'echo -x', where -x
?X: would be understood as an echo option! It is removed before feeding awk.
set X `for arg in "$@"; do echo "X$arg"; done |
 sed -e s/X// | awk -f options.awk`
eval "set $*"
shift
rm -f options.awk

: set up default values
fastread=''
reuseval=false
config_sh=''
alldone=''
error=''
silent=''
extractsh=''
knowitall=''
rm
```

```
 -f optdef.sh posthint.sh
cat >optdef.sh <<EOS
$startsh
EOS

?X:
?X: Given that we now have the possibility to execute Configure remotely
?X: thanks to the new src.U support, we have to face the possibility
?X: of having to ask where the source lie, which means we need the Myread.U
?X: stuff and possibly other things that might echo something on the
?X: screen...
?X:
?X: That's not pretty, and might be confusing in 99% of the time. So...
?X: We introduce a new realsilent variable which is set when -s is given,
?X: and we force silent=true if -S is supplied. The Extractall.U unit
?X: will then undo the >&4 redirection based on the value of the
?X: realsilent variable... -- RAM, 18/93/96
?X:

: option parsing
while test $# -gt 0; do
 case "$1" in
 -d) shift; fastread=yes;;
 -e) shift; alldone=cont;;
 -f)
  shift
  cd ..
  if test -r "$1"; then
   config_sh="$1"
  else
   echo "$me: cannot read config file $1."
 >&2
   error=true
  fi
  cd UU
  shift;;
 --help|\
 -h) shift; error=true;;
 -r) shift; reuseval=true;;
 -s) shift; silent=true; realsilent=true;;
 -E) shift; alldone=exit;;
 -K) shift; knowitall=true;;
 -O) shift;;
 -S) shift; silent=true; extractsh=true;;
 -D)
  shift
  case "$1" in
  *=)
```

```
 echo "$me: use '-U symbol=', not '-D symbol='." >&2
 echo "$me: ignoring -D $1" >&2
 ;;
*=*) echo "$1" | \
  sed -e "s/'/\'"\'"/g" -e "s/=\(.*\)/='\1'/" >> optdef.sh;;
*) echo "$1='define'" >> optdef.sh;;
esac
shift
;;
-U)
shift
case "$1" in
*=) echo "$1" >> optdef.sh;;
*=*)
 echo "$me: use '-D symbol=val', not '-U symbol=val'." >&2
 echo "$me: ignoring -U $1" >&2
 ;;
*) echo "$1='undef'" >> optdef.sh;;
esac
shift
;;
-A)
   shift
   xxx=''
   yyy="$1"
   zzz=''
   uuu=undef
   case "$yyy" in
        *=*) zzz=`echo "$yyy"|sed 's!=.*!!'`
             case "$zzz" in
             *:*) zzz='' ;;
             *)   xxx=append

             zzz=' '`echo "$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             esac
             ;;
        esac
        case "$xxx" in
        '')  case "$yyy" in
             *:*) xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'`
                  zzz=`echo "$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             *)   xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'` ;;
             esac
             ;;
```

```
          esac
    case "$xxx" in
    append)
  echo "$yyy=\"\${$yyy}$zzz\"" >> posthint.sh ;;
    clear)
  echo "$yyy=""   >> posthint.sh ;;
    define)
        case "$zzz" in
  ") zzz=define ;;
  esac
  echo "$yyy='$zzz'"  >> posthint.sh ;;
    eval)
  echo "eval \"$yyy=$zzz\"" >> posthint.sh ;;
    prepend)
  echo "$yyy=\"$zzz\${$yyy}\"" >> posthint.sh ;;
    undef)

      case "$zzz" in
  ") zzz="$uuu" ;;
  esac
  echo "$yyy=$zzz"  >> posthint.sh ;;
          *)  echo "$me: unknown -A command '$xxx', ignoring -A $1" >&2 ;;
    esac
    shift
    ;;
 -V) echo "$me generated by metaconfig <VERSION> PL<PATCHLEVEL>." >&2
    exit 0;;
 --) break;;
 -*) echo "$me: unknown option $1" >&2; shift; error=true;;
 *) break;;
 esac
done

case "$error" in
true)
 cat >&2 <<EOM
Usage: $me [-dehrsEKOSV] [-f config.sh] [-D symbol] [-D symbol=value]
               [-U symbol] [-U symbol=] [-A command:symbol...]
 -d : use defaults for all answers.
 -e : go on without questioning past the production of config.sh.
 -f : specify an alternate default configuration file.
 -h : print this help message and exit (with an error status).
 -r : reuse C symbols value if possible (skips costly nm extraction).
 -s : silent mode, only echoes questions and essential information.
 -D : define symbol to have some value:
       -D symbol               symbol gets the
 value 'define'
       -D symbol='some value'   symbol is set to 'some value'
```

```
    common used examples (see INSTALL for more info):
      -Duse64bitint           use 64bit integers
      -Duse64bitall           use 64bit integers and pointers
      -Dusethreads            use thread support
      -Dinc_version_list=none  do not include older perl trees in @INC
      -DEBUGGING=none         DEBUGGING options
      -Dcc=gcc                choose your compiler
      -Dprefix=/opt/perl5     choose your destination
 -E : stop at the end of questions, after having produced config.sh.
 -K : do not use unless you know what you are doing.
 -O : ignored for backward compatibility
 -S : perform variable substitutions on all .SH files (can mix with -f)
 -U : undefine symbol:
      -U symbol    symbol gets the value 'undef'
      -U symbol=   symbol gets completely empty
    e.g.:  -Uversiononly
 -A : manipulate symbol after the platform specific hints
 have been applied:
      -A append:symbol=value   append value to symbol
      -A symbol=value          like append:, but with a separating space
      -A define:symbol=value   define symbol to have value
      -A clear:symbol          define symbol to be ''
      -A define:symbol         define symbol to be 'define'
      -A eval:symbol=value     define symbol to be eval of value
      -A prepend:symbol=value  prepend value to symbol
      -A undef:symbol          define symbol to be 'undef'
      -A undef:symbol=         define symbol to be ''
    e.g.:  -A prepend:libswanted='cl pthread '
           -A ccflags=-DSOME_MACRO
 -V : print version number and exit (with a zero status).
EOM
 exit 1
 ;;
esac

?X:
?X: Unless they specified either -S or both -d and -e/E, make sure we're
?X: running interactively, i.e. attached to a terminal. Moved from Head.U to
?X: be able to handle batch configurations...
?X:
?X: We have to hardwire the Configure name and
 cannot use $me, since if they
?X: said 'sh <Configure', then $me is 'sh'...
?X:
: Sanity checks
case "$fastread$alldone" in
yescont|yesexit) ;;
*)
```

```
 case "$extractsh" in
 true) ;;
 *)
  if test ! -t 0; then
   echo "Say 'sh Configure', not 'sh <Configure'"
   exit 1
  fi
  ;;
 esac
 ;;
esac

?X: In silent mode, the standard output is closed. Questions are asked by
?X: outputing on file descriptor #4, which is the original stdout descriptor.
?X: This filters out all the "junk", since all the needed information is written
?X: on #4. Note that ksh will not let us redirect output if the file descriptor
?X: has not be defined yet, unlike sh, hence the following line...--RAM.
exec 4>&1
case "$silent" in
true) exec 1>/dev/null;;
esac

: run the defines and the undefines, if any, but leave the file out there...
touch optdef.sh
?X: -q is POSIX
?X: It does not work in SysV (solaris) or old BSD greps.
grep '\\' optdef.sh >/dev/null 2>&1
if test $? = 0; then
   echo "Configure does not support \\
 in -D arguments"
   exit 1
fi
. ./optdef.sh
: create the posthint manipulation script and leave the file out there...
?X: this file will be perused by Oldconfig.U
touch posthint.sh

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Options.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_memccpy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memccpy.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memccpy: Inlibc
?MAKE: -pick add $@ %<
?S:d_memccpy:
?S: This variable conditionally defines the HAS_MEMCCPY symbol, which
?S: indicates to the C program that the memccpy() routine is available
?S: to copy a character into a block of memory.
?S:.
?C:HAS_MEMCCPY (MEMCCPY):
?C: This symbol, if defined, indicates that the memccpy routine
 is available
?C: to copy a character into a block of memory.  Otherwise you should
?C: roll your own.
?C:.
?H:#$d_memccpy HAS_MEMCCPY  /**/
?H:.
?LINT:set d_memccpy
: see if memccpy exists
set memccpy d_memccpy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memccpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_inetpton: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetpton:
?S: This variable conditionally defines the HAS_INETPTON symbol,
?S: which indicates to the C program that the inet_pton() function
?S: is available.
?S:.
?C:HAS_INETPTON:
?C: This symbol, if defined, indicates that the inet_pton() function
?C: is available to parse IPv4 and IPv6 strings.
```

```
?C:.
?H:#$d_inetpton HAS_INETPTON  /**/
?H:.
?LINT:set d_inetpton
: see if inet_pton exists
set inet_pton d_inetpton
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_inetpton.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlocale.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setlocale.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:51  ram
?RCS: patch30: created
?RCS:
?MAKE:d_setlocale: Inlibc
?MAKE: -pick add $@ %<
?S:d_setlocale:
?S: This variable conditionally defines HAS_SETLOCALE if setlocale() is
?S: available to handle locale-specific ctype implementations.
?S:.
?C:HAS_SETLOCALE:
?C: This symbol, if defined, indicates that the setlocale
 routine is
?C: available to handle locale-specific ctype implementations.
?C:.
?H:#$d_setlocale HAS_SETLOCALE /**/
?H:.
?LINT:set d_setlocale
: see if setlocale exists
set setlocale d_setlocale
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setlocale.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorhtml3dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorhtml3dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorhtml3dir vendorhtml3direxp installvendorhtml3dir: html3dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorhtml3dir:
?S: This variable contains the name of the directory for html
?S: library pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing
 in this directory.
?S: Vendors who distribute perl may wish to place their own
?S: html pages for modules and extensions in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorhtml3direxp:
?S: This variable is the ~name expanded version of vendorhtml3dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorhtml3dir="
?S:installvendorhtml3dir:
?S: This variable is really the same as vendorhtml3direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorhtml3dir
: Set the vendorhtml3dir variables
case "$vendorprefix" in
") vendorhtml3dir="
 vendorhtml3direxp="
 ;;
*) : determine where vendor-supplied module html pages go.
```

```
 : There is no standard location, so try to copy the previously-selected
 : directory structure for the core html pages.
 : XXX Better default
 suggestions would be welcome.
 case "$vendorhtml3dir" in
 ") dflt=`echo "$html3dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorhtml3dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=dn+~
 rp='Pathname for the vendor-supplied html pages?'
 . ./getfile
 vendorhtml3dir="$ans"
 vendorhtml3direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorhtml3dir" = "X" && vendorhtml3dir=' '
prefixvar=vendorhtml3dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorhtml3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_dbminitproto: Hasproto i_dbm
?MAKE: -pick add $@ %<
?S:d_dbminitproto:
?S: This variable conditionally defines the HAS_DBMINIT_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the dbminit() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_DBMINIT_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the dbminit() function.  Otherwise, it is up
```

```
?C: to the program to supply one.  A good guess is
?C:  extern
 int dbminit(char *);
?C:.
?H:#$d_dbminitproto HAS_DBMINIT_PROTO /**/
?H:.
?LINT:set d_dbminitproto
: see if prototype for dbminit is available
echo " "
set d_dbminitproto dbminit $i_dbm dbm.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dbminitproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Tr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  18:00:54  ram
?RCS: patch43: forgot to quote $@ to protect against "evil" characters
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:58:35  ram
?RCS: patch36: created
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a character translation. It catches translations to uppercase or
?X: to lowercase, and then invokes the real tr to perform the job.
?X:
?X: This unit is necessary on HP machines (HP strikes again!)
 with non-ascii
?X: ROMAN8-charset, where normal letters are not arranged in a row, so a-z
?X: covers not the whole alphabet but lots of special chars. This was reported
?X: by Andreas Sahlbach <a.sahlbach@tu-bs.de>.
?X:
?X: Units performing a tr '[A-Z]' '[a-z]' or the other way round should include
?X: us in their dependency and use ./tr instead.
?X:
?MAKE:Tr: startsh tr eunicefix
```

```
?MAKE: -pick add $@ %<
?F:./tr
?T:up low LC_ALL
: see whether [:lower:] and [:upper:] are supported character classes
echo " "
case "`echo AbyZ | LC_ALL=C $tr '[:lower:]' '[:upper:]' 2>/dev/null`" in
ABYZ)
 echo "Good, your tr supports [:lower:] and [:upper:] to convert case." >&4
 up='[:upper:]'
 low='[:lower:]'
 ;;
*) # There is a discontinuity in EBCDIC between 'I' and 'J'
       # (0xc9 and 0xd1), therefore that is a nice testing point.
       if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | LC_ALL=C $tr '[I-J]' '[i-j]' 2>/dev/null`" in
     ij) up='[A-Z]'
         low='[a-z]'
  ;;

 esac
       fi
 if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | LC_ALL=C $tr I-J i-j 2>/dev/null`" in
     ij) up='A-Z'
  low='a-z'
  ;;
     esac
       fi
 if test "X$up" = X -o "X$low" = X; then
     case "`echo IJ | od -x 2>/dev/null`" in
     *C9D1*|*c9d1*)
  echo "Hey, this might be EBCDIC." >&4
  if test "X$up" = X -o "X$low" = X; then
      case "`echo IJ | \
    LC_ALL=C $tr '[A-IJ-RS-Z]' '[a-ij-rs-z]' 2>/dev/null`" in
      ij) up='[A-IJ-RS-Z]'
          low='[a-ij-rs-z]'
   ;;
      esac
  fi
  if test "X$up" = X -o "X$low" = X; then
      case "`echo IJ | LC_ALL=C $tr A-IJ-RS-Z a-ij-rs-z 2>/dev/null`" in
      ij) up='A-IJ-RS-Z'
          low='a-ij-rs-z'
   ;;
      esac
  fi
  ;;
```

```
    esac
 fi
esac
case "`echo IJ | LC_ALL=C $tr \"$up\" \"$low\" 2>/dev/null`" in
ij)
   echo "Using $up and $low to convert case." >&4
   ;;
*)
   echo "I don't know how to translate letters from upper to lower case." >&4
   echo "Your tr is not acting any way I know of." >&4
    exit 1
   ;;
esac
: set up the translation script tr, must be called with ./tr of course
cat >tr <<EOSC
$startsh
case "\$1\$2" in
'[A-Z][a-z]') LC_ALL=C exec $tr '$up' '$low';;
'[a-z][A-Z]') LC_ALL=C exec $tr '$low' '$up';;
esac
LC_ALL=C exec $tr "\$@"
EOSC
chmod +x tr
$eunicefix tr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Tr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: rootid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: rootid.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:45:36  ram
?RCS: patch49: now only prints a single empty line when outputting something
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:rootid: sed
?MAKE: -pick add $@ %<
```

```
?S:rootid:
?S: This variable contains the eventual value of the ROOTID symbol,
?S: which is the uid of root.
?S:.
?C:ROOTID:
?C: This symbol contains the uid of root, normally
 0.
?C:.
?H:#define ROOTID $rootid  /**/
?H:.
: determine root id
rootid=`$sed -e "/^root:/{s/^[^:]*:[^:]*:\([^:]*\).*'''$'''/\1/" -e "q" -e "}" -e "d" </etc/passwd`
case "$rootid" in
") rootid=0 ;;
*) echo " "; echo "Root uid = $rootid" >&4 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/rootid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigvec.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigvec.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:45:37  ram
?RCS: patch61: there is now a separate routine for sigaction()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: d_sigvec.U, from d_ftime.U 1.0
?X:
?MAKE:d_sigvec d_sigvectr d_sigintrp: Csym Inlibc Setvar
?MAKE: -pick add $@ %<
?S:d_sigvec:
?S: This variable conditionally defines the HAS_SIGVEC symbol, which indicates
?S: that BSD
 reliable signals are supported.
?S:.
?S:d_sigvectr:
```

```
?S: This variable conditionally defines the HAS_SIGVECTOR symbol, which
?S: indicates that the sigvec() routine is called sigvector() instead, for
?S: reasons known only to Hewlett-Packard.
?S:.
?S:d_sigintrp:
?S: This variable conditionally defines the HAS_SIGINTRP symbol, which
?S: indicates that the siginterrupt() routine is available.
?S:.
?C:HAS_SIGVEC (SIGVEC):
?C: This symbol, if defined, indicates that BSD reliable signals are
?C: supported.
?C:.
?C:HAS_SIGVECTOR (SIGVECTOR):
?C: This symbol, if defined, indicates that the sigvec() routine is called
?C: sigvector() instead, and that sigspace() is provided instead of
?C: sigstack().  This is probably only true for HP-UX.
?C:.
?C:HAS_SIGINTRP (SIGINTRP):
?C: This symbol, if defined, indicates that the siginterrupt() routine
?C: is available.
?C:.
?H:#$d_sigvec HAS_SIGVEC /**/
?H:#$d_sigvectr HAS_SIGVECTOR /**/
?H:#$d_sigintrp HAS_SIGINTRP /**/
?H:.
?T:val
?LINT:set d_sigvec d_sigintrp
@if
 d_sigvectr || d_sigvec || HAS_SIGVEC || HAS_SIGVECTOR
: see if sigvector exists -- since sigvec will match the substring
echo " "
if set sigvector val -f d_sigvectr; eval $csym; $val; then
 echo 'sigvector() found--you must be running HP-UX.' >&4
 val="$define"; set d_sigvectr; eval $setvar
 val="$define"; set d_sigvec; eval $setvar
else
: try the original name
 d_sigvectr="$undef"
 if set sigvec val -f d_sigvec; eval $csym; $val; then
  echo 'sigvec() found.' >&4
  val="$define"; set d_sigvec; eval $setvar
 else
  echo 'sigvec() not found--race conditions with signals may occur.' >&4
  val="$undef"; set d_sigvec; eval $setvar
 fi
fi

@end
```

```
@if d_sigintrp || HAS_SIGINTRP
: see if we have siginterrupt
set siginterrupt d_sigintrp
eval $inlibc

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigvec.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getwd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getwd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getwd: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_getwd:
?S: This variable conditionally defines HAS_GETWD if getwd() is
?S: available to get working directory. If not, you should
?S: probably use getcwd().
?S:.
?C:HAS_GETWD (GETWD):
?C: This symbol, if defined, indicates that the getwd routine is
?C: available to get working directory.
 If not, you should
?C: probably use getcwd().
?C:.
?H:#$d_getwd HAS_GETWD  /**/
?H:.
?LINT:set d_getwd
: see if getwd exists
echo " "
if set getwd val -f d_getwd; eval $csym; $val; then
 echo 'getwd() found.' >&4
 val="$define"
else
 echo 'getwd() not found. Assuming getcwd() exists.' >&4
```

```
 val="$undef"
fi
set d_getwd
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservent_r getservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservent_r:
?S: This variable conditionally defines the HAS_GETSERVENT_R symbol,
?S: which indicates to the C program that the getservent_r()
?S: routine is available.
?S:.
?S:getservent_r_proto:
?S: This variable encodes the prototype of getservent_r.
?S: It is zero if d_getservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservent_r
?S: is defined.
?S:.
?C:HAS_GETSERVENT_R:
?C: This symbol, if defined, indicates that the getservent_r routine
?C: is
 available to getservent re-entrantly.
?C:.
?C:GETSERVENT_R_PROTO:
?C: This symbol encodes the prototype of getservent_r.
?C: It is zero if d_getservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservent_r
?C: is defined.
?C:.
?H:#$d_getservent_r HAS_GETSERVENT_R /**/
?H:#define GETSERVENT_R_PROTO $getservent_r_proto /**/
?H:.
?T:try hdrs d_getservent_r_proto
: see if getservent_r exists
set getservent_r d_getservent_r
```

```
eval $inlibc
case "$d_getservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservent_r_proto:$usethreads" in
 ":define") d_getservent_r_proto=define
  set d_getservent_r_proto getservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getservent_r_proto" in
 define)
 case "$getservent_r_proto" in
 "|0) try='int getservent_r(struct servent*, char*, size_t, struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SBWR ;;
 esac
 case "$getservent_r_proto"
 in
 "|0) try='int getservent_r(struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SBI ;;
 esac
 case "$getservent_r_proto" in
 "|0) try='struct servent* getservent_r(struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=S_SBI ;;
 esac
 case "$getservent_r_proto" in
 "|0) try='int getservent_r(struct servent*, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && getservent_r_proto=I_SD ;;
 esac
 case "$getservent_r_proto" in
 "|0) d_getservent_r=undef
  getservent_r_proto=0
  echo "Disabling getservent_r, cannot determine prototype." >&4 ;;
 * ) case "$getservent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getservent_r_proto="REENTRANT_PROTO_$getservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getservent_r has no prototype, not using it." >&4 ;;
  esac
  d_getservent_r=undef
  getservent_r_proto=0
  ;;
 esac
 ;;
```

```
*) getservent_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservent_r.U
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```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extractall.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:00:43  ram
?RCS: patch61: created
?RCS:
?X:
?X: If extraction has been requested, load the configuration file, perform
?X: the extraction and exit.
?X:
?X: This unit was originally a part of Options.U. It had to be removed from
?X: it to prevent a dependency cycle: Extract -> src -> Options -> Extract
?X: The Begin.U unit now requires us before beginning to do anything
?X: interesting, to ensure proper semantics. -- RAM, 15/03/96
?X:
?MAKE:Extractall:
 Extract Options
?MAKE: -pick wipe $@ %<
: extract files and exit if asked to do so
case "$extractsh" in
true)
?X: Undo the forced silent=true when -S was supplied, by probing realsilent
?X: which was set iff -s was also given. See Options.U for details.
 case "$realsilent" in
 true) ;;
 *) exec 1>&4;;
 esac
 case "$config_sh" in
 ") config_sh='config.sh';;
 esac
 echo " "
```

```
 echo "Fetching answers from $config_sh..."
 cd ..
 . $config_sh
 test "$override" && . ./optdef.sh
 echo " "
?X: extract has to be run from the top directory, not within UU.
 . UU/extract
 rm -rf UU
 echo "Extraction done."
 exit 0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Extractall.U
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```
?RCS: $Id: d_endhostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endhostent_r endhostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endhostent_r:
?S: This variable conditionally defines the HAS_ENDHOSTENT_R symbol,
?S: which indicates to the C program that the endhostent_r()
?S: routine is available.
?S:.
?S:endhostent_r_proto:
?S: This variable encodes the prototype of endhostent_r.
?S: It is zero if d_endhostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endhostent_r
?S: is defined.
?S:.
?C:HAS_ENDHOSTENT_R:
?C: This symbol, if defined, indicates that the endhostent_r routine
?C: is
 available to endhostent re-entrantly.
?C:.
?C:ENDHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of endhostent_r.
?C: It is zero if d_endhostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endhostent_r
```

```
?C: is defined.
?C:.
?H:#$d_endhostent_r HAS_ENDHOSTENT_R /**/
?H:#define ENDHOSTENT_R_PROTO $endhostent_r_proto /**/
?H:.
?T:try hdrs d_endhostent_r_proto
: see if endhostent_r exists
set endhostent_r d_endhostent_r
eval $inlibc
case "$d_endhostent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endhostent_r_proto:$usethreads" in
 ":define") d_endhostent_r_proto=define
  set d_endhostent_r_proto endhostent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endhostent_r_proto" in
 define)
 case "$endhostent_r_proto" in
 "|0) try='int endhostent_r(struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && endhostent_r_proto=I_D ;;
 esac
 case "$endhostent_r_proto" in
 "|0) try='void endhostent_r(struct
 hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && endhostent_r_proto=V_D ;;
 esac
 case "$endhostent_r_proto" in
 "|0) d_endhostent_r=undef
  endhostent_r_proto=0
  echo "Disabling endhostent_r, cannot determine prototype." >&4 ;;
 * ) case "$endhostent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endhostent_r_proto="REENTRANT_PROTO_$endhostent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endhostent_r has no prototype, not using it." >&4 ;;
  esac
  d_endhostent_r=undef
  endhostent_r_proto=0
  ;;
 esac
 ;;
```

```
*) endhostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endhostent_r.U
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```
?RCS: $Id: d_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fcntl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fcntl:
?S: This variable conditionally defines the HAS_FCNTL symbol, and indicates
?S: whether the fcntl() function exists
?S:.
?C:HAS_FCNTL:
?C: This symbol, if defined, indicates to the C program that
?C: the fcntl() function exists.
?C:.
?H:#$d_fcntl HAS_FCNTL  /**/
?H:.
?LINT:set d_fcntl
:
 see if this is an fcntl system
set fcntl d_fcntl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fcntl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_vprintf.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vprintf d_charvspr: Guess cat +cc +ccflags Csym Setvar
?MAKE: -pick add $@ %<
?S:d_vprintf:
?S: This variable conditionally defines the HAS_VPRINTF symbol, which
?S: indicates to the C program that the vprintf() routine is available
?S: to printf with a pointer to an argument list.
?S:.
?S:d_charvspr:
?S: This variable conditionally defines CHARVSPRINTF if this system
?S: has
 vsprintf returning type (char*).  The trend seems to be to
?S: declare it as "int vsprintf()".
?S:.
?C:HAS_VPRINTF (VPRINTF):
?C: This symbol, if defined, indicates that the vprintf routine is available
?C: to printf with a pointer to an argument list.  If unavailable, you
?C: may need to write your own, probably in terms of _doprnt().
?C:.
?C:USE_CHAR_VSPRINTF (CHARVSPRINTF):
?C: This symbol is defined if this system has vsprintf() returning type
?C: (char*).  The trend seems to be to declare it as "int vsprintf()".  It
?C: is up to the package author to declare vsprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_vprintf HAS_VPRINTF /**/
?H:#$d_charvspr USE_CHAR_VSPRINTF  /**/
?H:.
?F:!vprintf !vprintf.c
?T:val2
?LINT:set d_vprintf d_charvspr
: see if vprintf exists
echo " "
if set vprintf val -f d_vprintf; eval $csym; $val; then
 echo 'vprintf() found.' >&4
 val="$define"
 $cat >vprintf.c <<'EOF'
#include <varargs.h>
```

```
int main() { xxx("foo"); }

xxx(va_alist)
va_dcl
{
 va_list args;
 char
 buf[10];

 va_start(args);
 exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
EOF
 if $cc $ccflags -o vprintf vprintf.c >/dev/null 2>&1 && ./vprintf; then
  echo "Your vsprintf() returns (int)." >&4
  val2="$undef"
 else
  echo "Your vsprintf() returns (char*)." >&4
  val2="$define"
 fi
else
 echo 'vprintf() NOT found.' >&4
  val="$undef"
  val2="$undef"
fi
set d_vprintf
eval $setvar
val=$val2
set d_charvspr
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_vprintf.U
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```
?RCS: $Id: d_strchr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strchr.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:49:20  ram
?RCS: patch12: added support for HAS_INDEX
```

```
?RCS: patch12: added magic for index() and rindex()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:05:26  ram
?RCS: patch10: now only defines HAS_STRCHR, no macro remap of index (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strchr d_index: contains strings Setvar Myread Oldconfig
 Csym
?MAKE: -pick add $@ %<
?S:d_strchr:
?S: This variable conditionally defines HAS_STRCHR if strchr() and
?S: strrchr() are available for string searching.
?S:.
?S:d_index:
?S: This variable conditionally defines HAS_INDEX if index() and
?S: rindex() are available for string searching.
?S:.
?C:HAS_STRCHR:
?C: This symbol is defined to indicate that the strchr()/strrchr()
?C: functions are available for string searching. If not, try the
?C: index()/rindex() pair.
?C:.
?C:HAS_INDEX:
?C: This symbol is defined to indicate that the index()/rindex()
?C: functions are available for string searching.
?C:.
?H:#$d_strchr HAS_STRCHR /**/
?H:#$d_index HAS_INDEX /**/
?H:.
?M:index: HAS_INDEX
?M:#ifndef HAS_INDEX
?M:#ifndef index
?M:#define index strchr
?M:#endif
?M:#endif
?M:.
?M:rindex: HAS_INDEX
?M:#ifndef HAS_INDEX
?M:#ifndef rindex
?M:#define rindex strrchr
?M:#endif
?M:#endif
?M:.
?T:vali
?LINT:set d_strchr d_index
: index or strchr
```

```
echo " "
if set index val -f; eval $csym; $val; then
 if
 set strchr val -f d_strchr; eval $csym; $val; then
  if $contains strchr "$strings" >/dev/null 2>&1 ; then
?X: has index, strchr, and strchr in string header
   val="$define"
   vali="$undef"
   echo "strchr() found." >&4
  else
?X: has index, strchr, and no strchr in string header
   val="$undef"
   vali="$define"
   echo "index() found." >&4
  fi
 else
?X: has only index, no strchr, string header is a moot point
  val="$undef"
  vali="$define"
  echo "index() found." >&4
 fi
else
 if set strchr val -f d_strchr; eval $csym; $val; then
  val="$define"
  vali="$undef"
  echo "strchr() found." >&4
 else
  echo "No index() or strchr() found!" >&4
  val="$undef"
  vali="$undef"
 fi
fi
set d_strchr; eval $setvar
val="$vali"
set d_index; eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strchr.U
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```
?RCS: $Id: yacc.U,v 3.0.1.1 1994/05/13 15:28:48 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: yacc.U,v $
?RCS: Revision 3.0.1.1  1994/05/13  15:28:48  ram
?RCS: patch27: added byacc as another alternative (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:yacc yaccflags: Guess Myread Oldconfig byacc bison cat test _exe
?MAKE: -pick add $@ %<
?S:yacc:
?S: This variable holds the name of the compiler compiler we
?S: want to use in the Makefile. It can be yacc, byacc, or bison -y.
?S:.
?S:yaccflags:
?S: This
 variable contains any additional yacc flags desired by the
?S: user.  It is up to the Makefile to use this.
?S:.
?T:comp
: determine compiler compiler
case "$yacc" in
")
 dflt=yacc;;
*)
 dflt="$yacc";;
esac
echo " "
comp='yacc'
if $test -f "$byacc$_exe"; then
 dflt="$byacc"
 comp="byacc or $comp"
fi
if $test -f "$bison$_exe"; then
 comp="$comp or bison -y"
fi
rp="Which compiler compiler ($comp) shall I use?"
. ./myread
yacc="$ans"
case "$yacc" in
*bis*)
 case "$yacc" in
 *-y*) ;;
 *)
  yacc="$yacc -y"
  echo "(Adding -y option to bison to get yacc-compatible behavior.)"
  ;;
```

```
 esac
 ;;
esac

@if yaccflags
: see if we need extra yacc flags
dflt="$yaccflags"
case "$dflt" in
") dflt=none;;
esac
$cat <<EOH

Your yacc program may need extra flags to normally process the parser sources.
Do NOT specify any -d or -v flags here, since those are explicitly known
by the various Makefiles. However, if your machine has strange/undocumented
options (like -Sr# on SCO to specify the
 maximum number of grammar rules), then
please add them here.  To use no flags, specify the word "none".

EOH
rp="Any additional yacc flags?"
. ./myread
case "$ans" in
none) yaccflags=";;
*) yaccflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/yacc.U
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```
?RCS: $Id: usenm.U,v 3.0.1.1 1997/02/28 16:26:40 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: usenm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:26:40  ram
?RCS: patch61: don't use nm with the GNU C library
?RCS: patch61: added support for Linux shared libs
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:09:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usenm runnm nm_opt nm_so_opt: cat test Myread Oldconfig myuname grep \
 nm d_gnulibc osname egrep rsrc
?MAKE: -pick add $@ %<
?S:usenm:
?S: This variable contains 'true' or 'false' depending
 whether the
?S: nm extraction is wanted or not.
?S:.
?S:runnm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction should be performed or not, according to the value
?S: of usenm and the flags on the Configure command line.
?S:.
?S:nm_opt:
?S: This variable holds the options that may be necessary for nm.
?S:.
?S:nm_so_opt:
?S: This variable holds the options that may be necessary for nm
?S: to work on a shared library but that can not be used on an
?S: archive library.  Currently, this is only used by Linux, where
?S: nm --dynamic is *required* to get symbols from an ELF library which
?S: has been stripped, but nm --dynamic is *fatal* on an archive library.
?S: Maybe Linux should just always set usenm=false.
?S:.
: see if nm is to be used to determine whether a symbol is defined or not
?X: If there is enough inquiries, it might be worth to wait for the nm
?X: extraction. Otherwise, the C compilations might be a better deal.
?X:
?X: Don't bother if we're
 using GNU libc -- skimo
?LINT:extern PASE
case "$usenm" in
")
 dflt="
 case "$d_gnulibc" in
 "$define")
  echo " "
  echo "nm probably won't work on the GNU C Library." >&4
  dflt=n
  ;;
 esac
 case "$dflt" in
 ")
  if $test "$osname" = aix -a "X$PASE" != "Xdefine" -a ! -f /lib/syscalls.exp; then
   echo " "
```

```
   echo "Whoops!  This is an AIX system without /lib/syscalls.exp!" >&4
   echo "'nm' won't be sufficient on this system." >&4
   dflt=n
  fi
  ;;
 esac
 case "$dflt" in
 ") dflt=`$egrep 'inlibc|csym' $rsrc/Configure | wc -l 2>/dev/null`
  if $test $dflt -gt 20; then
   dflt=y
  else
   dflt=n
  fi
  ;;
 esac
 ;;
*)
 case "$usenm" in
 true|$define) dflt=y;;
 *) dflt=n;;
 esac
 ;;
esac
$cat <<EOM

I can use $nm to extract the symbols from your C libraries. This
is a time consuming task which may generate huge output on the disk (up
to 3 megabytes) but that should make the symbols extraction faster. The
alternative is to skip the 'nm' extraction part and to compile a small
test
 program instead to determine whether each symbol is present. If
you have a fast C compiler and/or if your 'nm' output cannot be parsed,
this may be the best solution.

You probably shouldn't let me use 'nm' if you are using the GNU C Library.

EOM
rp="Shall I use $nm to extract C symbols from the libraries?"
. ./myread
case "$ans" in
[Nn]*) usenm=false;;
*) usenm=true;;
esac

?X: Name extraction is to be run if 'nm' usage is wanted and if no -r flag
?X: was provided to configure (in which case we simply re-use the previous
?X: values).
runnm=$usenm
```

```
case "$reuseval" in
true) runnm=false;;
esac

: nm options which may be necessary
case "$nm_opt" in
") if $test -f /mach_boot; then
  nm_opt=" # Mach
 elif $test -d /usr/ccs/lib; then
  nm_opt='-p' # Solaris (and SunOS?)
 elif $test -f /dgux; then
  nm_opt='-p' # DG-UX
 elif $test -f /lib64/rld; then
  nm_opt='-p' # 64-bit Irix
 else
  nm_opt="
 fi;;
esac

: nm options which may be necessary for shared libraries but illegal
: for archive
 libraries.  Thank you, Linux.
case "$nm_so_opt" in
") case "$myuname" in
 *linux*|gnu*)
  if $nm --help | $grep 'dynamic' > /dev/null 2>&1; then
   nm_so_opt='--dynamic'
  fi
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/usenm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getsrvby.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getsbyname d_getsbyport: Inlibc
?MAKE: -pick add $@ %<
?S:d_getsbyname:
?S: This variable conditionally defines the HAS_GETSERVBYNAME
```

```
?S: symbol, which indicates to the C program that the
?S: getservbyname() routine is available to look up services
?S: by their name.
?S:.
?S:d_getsbyport:
?S: This variable conditionally defines the HAS_GETSERVBYPORT
?S: symbol, which indicates to the C program that the
?S: getservbyport() routine is available to look up services
?S: by their port.
?S:.
?C:HAS_GETSERVBYNAME:
?C: This symbol, if defined, indicates that the getservbyname()
?C: routine is available to look up services by their name.
?C:.
?C:HAS_GETSERVBYPORT:
?C: This symbol, if defined,
 indicates that the getservbyport()
?C: routine is available to look up services by their port.
?C:.
?H:#$d_getsbyname HAS_GETSERVBYNAME  /**/
?H:#$d_getsbyport HAS_GETSERVBYPORT  /**/
?H:.
?LINT:set d_getsbyname d_getsbyport
: Optional checks for getsbyname and getsbyport

@if d_getsbyname || HAS_GETSERVBYNAME
: see if getservbyname exists
set getservbyname d_getsbyname
eval $inlibc
@end

@if d_getsbyport || HAS_GETSERVBYPORT
: see if getservbyport exists
set getservbyport d_getsbyport
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getsrvby.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_scalbnl: Inlibc
?MAKE: -pick add $@ %<
?S:d_scalbnl:
?S: This variable conditionally defines the HAS_SCALBNL symbol, which
?S: indicates to the C program that the scalbnl() routine is available.
?S: If ilogbl is also present we can emulate frexpl.
?S:.
?C:HAS_SCALBNL:
?C: This symbol, if defined, indicates that the scalbnl routine is
?C: available.  If ilogbl is also present we can emulate frexpl.
?C:.
?H:#$d_scalbnl HAS_SCALBNL  /**/
?H:.
?LINT:set d_scalbnl
: see if scalbnl exists
set scalbnl d_scalbnl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_scalbnl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vaproto.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: vaproto.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:17:16  ram
?RCS: patch16: definition of _V now appears only when needed
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:vaproto: prototype i_stdarg Setvar
?MAKE: -pick add $@ %<
?S:vaproto:
?S: This variable conditionally defines CAN_VAPROTO on systems supporting
?S: prototype
 declaration of functions with a variable number of
?S: arguments. See also prototype.
```

```
?S:.
?C:CAN_VAPROTO ~ %<:
?C: This variable is defined on systems supporting prototype declaration
?C: of functions with a variable number of arguments.
?C:.
?C:_V:
?C: This macro is used to declare function parameters in prototypes for
?C: functions with a variable number of parameters. Use double parentheses.
?C: For example:
?C:
?C:  int printf _V((char *fmt, ...));
?C:
?C: Remember to use the plain simple _() macro when declaring a function
?C: with no variable number of arguments, since it might be possible to
?C: have a non-effect _V() macro and still get prototypes via _().
?C:.
?H:?%<:#$vaproto CAN_VAPROTO /**/
?H:?_V:#ifdef CAN_VAPROTO
?H:?_V:#define _V(args) args
?H:?_V:#else
?H:?_V:#define _V(args) ()
?H:?_V:#endif
?H:.
?W:%<:_V
?LINT:set vaproto
: see if prototypes support variable argument declarations
echo " "
case "$prototype$i_stdarg" in
$define$define)
 echo "It appears we'll
 be able to prototype varargs functions." >&4
 val="$define"
 ;;
*)
 echo "Too bad... We won't be using prototyped varargs functions..." >&4
 val="$undef"
 ;;
esac
set vaproto
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/vaproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_csh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:32:18  ram
?RCS: patch61: added full_csh to preserve the full path even when portable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_csh full_csh: csh Setvar
?MAKE: -pick add $@ %<
?S:d_csh:
?S: This variable conditionally defines the CSH symbol, which
?S: indicates to the C program that the C-shell exists.
?S:.
?S:full_csh:
?S: This variable contains the full pathname to 'csh', whether
 or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'csh.'
?S:.
?X: Yes, I know about the C symbol PORTABLE, but I think csh
?X: is unlikely to move, and I'm too lazy to add all the
?X: #ifdef PORTABLE sections to the perl source.
?X:
?C:HAS_CSH:
?C: This symbol, if defined, indicates that the C-shell exists.
?C:.
?C:CSH:
?C: This symbol, if defined, contains the full pathname of csh.
?C:.
?X: Previously, I just did $d_csh CSH "$full_csh", but that caused
?X: problems on VMS where the config.sh extraction program changes
?X: $undef to a real cpp undef, and they then had  #undef CSH ""
?X: which the compiler didn't like.  It's easy to work around this,
?X: so I did.  --AD  3/1998.
?X: And we don't want to define CSH if !HAS_CSH, but we don't want
?X: those lines in config.h if they don't need CSH, so protect with ?CSH
?X: and not
 ?%<. --RAM, 15/02/2004
?H:?%<:#$d_csh HAS_CSH  /**/
```

```
?H:?CSH:#ifdef HAS_CSH
?H:?CSH:#define CSH "$full_csh" /**/
?H:?CSH:#endif
?H:.
?LINT:set d_csh
: get csh whereabouts
case "$csh" in
'csh') val="$undef" ;;
*) val="$define" ;;
esac
set d_csh
eval $setvar
: Respect a hint or command line value for full_csh.
case "$full_csh" in
") full_csh=$csh ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_csh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: myhostname.U,v 3.0.1.3 1997/02/28 16:15:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: myhostname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:15:55  ram
?RCS: patch61: improved hostname lookup by using ypmatch when NIS is used
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:25:43  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS: patch36: now uses new Tr unit to convert to/from lowercase
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:20  ram
?RCS: patch30: now a little more clever for domain name guessing
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:myhostname phostname mydomain: contains sed test Myread Oldconfig \
 Guess Loc awk echo sort uniq +usrinc rm hostcat Tr
```

```
?MAKE: -pick add $@ %<
?S:myhostname (hostname):
?S: This variable contains the eventual value of the MYHOSTNAME symbol,
?S: which is the name of the host the program is going to run on.
?S: The domain is not kept with hostname, but must be gotten from mydomain.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:mydomain:
?S: This variable contains the eventual value of the MYDOMAIN symbol,
?S: which is the domain of the host the program is going to run on.
?S: The domain must be appended to myhostname to form a complete host name.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:phostname:
?S: This variable contains the eventual value of the PHOSTNAME symbol,
?S: which is a command that can be fed to popen()
 to get the host name.
?S: The program should probably not presume that the domain is or isn't
?S: there already.
?S:.
?C:MYHOSTNAME (HOSTNAME):
?C: This symbol contains name of the host the program is going to run on.
?C: The domain is not kept with hostname, but must be gotten from MYDOMAIN.
?C: The dot comes with MYDOMAIN, and need not be supplied by the program.
?C: If gethostname() or uname() exist, MYHOSTNAME may be ignored. If MYDOMAIN
?C: is not used, MYHOSTNAME will hold the name derived from PHOSTNAME.
?C:.
?C:MYDOMAIN:
?C: This symbol contains the domain of the host the program is going to
?C: run on.  The domain must be appended to HOSTNAME to form a complete
?C: host name.  The dot comes with MYDOMAIN, and need not be supplied by
?C: the program.  If the host name is derived from PHOSTNAME, the domain
?C: may or may not already be there, and the program should check.
?C:.
?H:#define MYHOSTNAME "$myhostname"  /**/
?H:#define MYDOMAIN "$mydomain"  /**/
?H:.
?LINT:extern osname
?T:cont
 i tans tmp_re
: now get the host name
echo " "
echo "Figuring out host name..." >&4
case "$myhostname" in
") cont=true
 echo 'Maybe "hostname" will work...'
 if tans=`sh -c hostname 2>&1` ; then
  myhostname=$tans
```

```
  phostname=hostname
  cont=''
 fi
 ;;
*) cont='';;
esac
if $test "$cont"; then
 if ./xenix; then
  echo 'Oh, dear.  Maybe "/etc/systemid" is the key...'
  if tans=`cat /etc/systemid 2>&1` ; then
   myhostname=$tans
   phostname='cat /etc/systemid'
   echo "Whadyaknow.  Xenix always was a bit strange..."
   cont=''
  fi
 elif $test -r /etc/systemid; then
  echo "(What is a non-Xenix system doing with /etc/systemid?)"
 fi
fi
if $test "$cont"; then
 echo 'No, maybe "uuname -l" will work...'
 if tans=`sh -c 'uuname -l' 2>&1` ; then
  myhostname=$tans
  phostname='uuname -l'
 else
  echo 'Strange.  Maybe "uname -n" will work...'
  if tans=`sh -c 'uname -n' 2>&1` ; then
   myhostname=$tans
   phostname='uname -n'
  else
   echo 'Oh well, maybe I can mine it out of whoami.h...'
   if
 tans=`sh -c $contains' sysname $usrinc/whoami.h' 2>&1` ; then
    myhostname=`echo "$tans" | $sed 's/^.*"\(.*\)"/\1/'`
    phostname="sed -n -e ""/sysname/s/^.*\"\\(.*\\)\"/\1/{"" -e p -e q -e '}' <$usrinc/whoami.h"
   else
    case "$myhostname" in
    '') echo "Does this machine have an identity crisis or something?"
     phostname='';;
    *)
     echo "Well, you said $myhostname before..."
     phostname='echo $myhostname';;
    esac
   fi
  fi
 fi
fi
case "$myhostname" in
```

```
") myhostname=noname ;;
esac
: you do not want to know about this
set $myhostname
myhostname=$1

: verify guess
if $test "$myhostname" ; then
 dflt=y
 rp='Your host name appears to be "'$myhostname'".' Right?"
 . ./myread
 case "$ans" in
 y*) ;;
 *) myhostname="";;
 esac
fi

: bad guess or no guess
while $test "X$myhostname" = X ; do
 dflt=''
 rp="Please type the (one word) name of your host:"
 . ./myread
 myhostname="$ans"
done

: translate upper to lower if necessary
case "$myhostname" in
*[A-Z]*)
 echo
 "(Normalizing case in your host name)"
 myhostname=`echo $myhostname | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

?X: Do not ask for domain name if this is not used later on. In that
?X: case, the hostname may keep its domain name, but it doesn't matter.
@if MYDOMAIN || mydomain
case "$myhostname" in
*.*)
 dflt=`expr "X$myhostname" : "X[^.]*\(\..*\)"`
 myhostname=`expr "X$myhostname" : "X\([^.]*\)\."`
 echo "(Trimming domain name from host name--host name is now $myhostname)"
 ;;
*) case "$mydomain" in
 ")
?X:
?X: There is currently no way to say we do not want hostcat if mydomain is not
?X: used. One way to achieve that would be to put that code in a mydomain.U
```

```
?X: unit. However, we want to stick the sanity checks right after the domain
?X: name computation, or if none is done, right after the hostname computation.
?X:
  {
?X: If we use NIS, try ypmatch.
   test "X$hostcat" = "Xypcat hosts" &&
   ypmatch "$myhostname" hosts 2>/dev/null |\
    $sed -e 's/[  ]*#.*//; s/$/ /' > hosts
 && \
   $test -s hosts
  } || {
?X: Extract only the relevant hosts, reducing file size,
?X: remove comments, insert trailing space for later use.
?X: Test to be sure we *have* a hostcat command.  os390 doesn't.
   test "X$hostcat" != "X" &&
   $hostcat | $sed -n -e "s/[  ]*#.*//; s/\$/ /
     /[  ]$myhostname[ . ]/p" > hosts
  }
  tmp_re="[ . ]"
  if $test -f hosts; then
   $test x`$awk "/[0-9].*[  ]$myhostname$tmp_re/ { sum++ }
        END { print sum }" hosts` = x1 || tmp_re="[  ]"
   dflt=.`$awk "/[0-9].*[  ]$myhostname$tmp_re/ {for(i=2; i<=NF;i++) print \\\$i}" \
    hosts | $sort | $uniq | \
    $sed -n -e "s/$myhostname\.\([-a-zA-Z0-9_.]\)/\1/p"`
   case `$echo X$dflt` in
   X*\ *) echo "(Several hosts in the database matched hostname)"
    dflt=.
    ;;
   X.) echo "(You do not have fully-qualified names in the hosts database)"
    ;;
   esac
  else
   echo "(I cannot locate a hosts database anywhere)"
   dflt=.
  fi
  case "$dflt" in
  .)
   tans=`./loc resolv.conf X /etc /usr/etc`
   if
 $test -f "$tans"; then
    echo "(Attempting domain name extraction from $tans)"
?X: Look for either a search or a domain directive.
    dflt=.`$sed -n -e 's/ / /g' \
      -e 's/^search  *\([^ ]*\).*/\1/p' $tans \
      -e 1q 2>/dev/null`
    case "$dflt" in
    .) dflt=.`$sed -n -e 's/ / /g' \
```

```
        -e 's/^domain  *\([^ ]*\).*/\1/p' $tans \
        -e 1q 2>/dev/null`
    ;;
   esac
  fi
  ;;
 esac
 case "$dflt" in
 .) echo "(No help from resolv.conf either -- attempting clever guess)"
  dflt=.`sh -c domainname 2>/dev/null`
  case "$dflt" in
  ") dflt='.';;
  .nis.*|.yp.*|.main.*) dflt=`echo $dflt | $sed -e 's/^\.[^.]*//'`;;
  esac
  ;;
 esac
 case "$dflt$osname" in
 .os390) echo "(Attempting domain name extraction from //'SYS1.TCPPARMS(TCPDATA)')"
  dflt=.`awk '/^DOMAINORIGIN/ {print $2}' "//'SYS1.TCPPARMS(TCPDATA)'" 2>/dev/null`
  ;;
 esac
 case "$dflt" in
 .) echo "(Lost all hope -- silly guess then)"
  dflt='.nonet'
  ;;
 esac
 $rm -f hosts
 ;;
*)
dflt="$mydomain";;
esac;;
esac
echo " "
rp="What is your domain name?"
. ./myread
tans="$ans"
case "$ans" in
") ;;
.*) ;;
*) tans=".$tans";;
esac
mydomain="$tans"

: translate upper to lower if necessary
case "$mydomain" in
*[A-Z]*)
 echo "(Normalizing case in your domain name)"
 mydomain=`echo $mydomain | ./tr '[A-Z]' '[a-z]'`
```

```
 ;;
esac

@end
: a little sanity check here
case "$phostname" in
") ;;
*)
 case `$phostname | ./tr '[A-Z]' '[a-z]'` in
 $myhostname$mydomain|$myhostname) ;;
 *)
  case "$phostname" in
  sed*)
   echo "(That doesn't agree with your whoami.h file, by the way.)"
   ;;
  *)
   echo "(That doesn't agree with your $phostname command, by the way.)"
   ;;
  esac
 ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/myhostname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mailfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mailfile.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:24:57  ram
?RCS: patch36: the Loc unit was missing from the dependency line
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:22:08  ram
?RCS: patch15: now also looks under /var/mail for BSD/386
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:mailfile: Myread Oldconfig Filexp Loc
?MAKE: -pick add $@ %<
?S:mailfile:
?S: This variable contains
 the eventual value of the MAILFILE symbol,
?S: which contains an interpretable name of the mail spool file for the
?S: current user.
?S:.
?C:MAILFILE:
?C: This symbol contains the interpretable name of the mail spool file
?C: for the current user.  The program must be prepared to substitute
?C: the HOME directory for %~, and the login id for %L.
?C:.
?H:#define MAILFILE "$mailfile"  /**/
?H:.
: determine where mail is spooled
case "$mailfile" in
")
 dflt=`./loc . XXX /usr/spool/mail /usr/mail /var/mail`
 case "$dflt" in
 XXX) dflt='%~/mailbox';;
 *) dflt="$dflt/%L";;
 esac
 ;;
*)  dflt="$mailfile"
 ;;
esac
cat <<'EOM'

In the following question, you may use %~ to represent the user's home
directory, and %L to represent a users name.

EOM
rp='In which file is yet-to-be-read mail spooled? (~name ok)'
. ./myread
mailfile=`./filexp "$ans"`

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mailfile.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_inetd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_inetd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_inetd: cat test package Myread Setvar
?MAKE: -pick add $@ %<
?S:d_inetd:
?S: This symbol conditionally defines USE_INETD which indicates to the C
?S: program that the initial socket connection will be done via inetd.
?S:.
?C:USE_INETD (INETD):
?C: This symbol if defined indicates to the C program that inetd will be
?C: in charge of the
 initial socket connection. The file descriptors 0 and
?C: 1 have been dup()ed from the original connected socket descriptor and
?C: are ready for send() and recv().
?C:.
?H:#$d_inetd USE_INETD  /**/
?H:.
?LINT:set d_inetd
: ask whether initial socket connection is to be done via inetd
echo " "
dflt=n
case "$d_inetd" in
") if $test -f /etc/inetd.conf; then
  $cat <<EOM
Your system provides a so called "Internet super-server", the inetd daemon.
Network services like ftp or rlogin are usually handled via ftpd and rlogind
daemons. Without inetd, these daemons must always be running for the service
to be on. On the contrary, inetd listens to specific ports defined in file
/etc/inetd.conf and will run the appropriate daemon upon request. This scheme
avoids eating up the process table and memory with useless daemons.

I can set up things so that internet connections for $package will be done
using inetd, in which case you will have to edit /etc/inetd.conf to add some
specific informations.

EOM
  dflt=y
 else
  $cat
 <<EOM
I do not see any trace of a configuration file for inetd, hence I assume your
system does not support the so called "Internet super-server". This means
$package will need to have a daemon process running on this machine to allow
```

```
network connections.

EOM
 fi;;
*) case "$d_inetd" in
 "$define") dflt=y;;
 esac;;
esac
rp='Do you wish to use inetd for network connections?'
. ./myread
val="$undef"
case "$ans" in
y*|Y*) val="$define";;
esac
set d_inetd
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_inetd.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_mktime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mktime.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:44  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_mktime: Inlibc
?MAKE: -pick add $@ %<
?S:d_mktime:
?S: This variable conditionally defines the HAS_MKTIME symbol, which
?S: indicates to the C program that the mktime() routine is available.
?S:.
?C:HAS_MKTIME :
?C: This symbol, if defined, indicates that the mktime routine
 is
?C: available.
?C:.
```

```
?H:#$d_mktime HAS_MKTIME  /**/
?H:.
?LINT:set d_mktime
: see if mktime exists
set mktime d_mktime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mktime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memset.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memset.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:03:11  ram
?RCS: patch10: removed text recommending bzero over memset (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memset: Inlibc
?MAKE: -pick add $@ %<
?S:d_memset:
?S: This variable conditionally defines the HAS_MEMSET symbol, which
?S: indicates to the C program that the memset() routine is available
?S: to set blocks of memory.
?S:.
?C:HAS_MEMSET
 (MEMSET):
?C: This symbol, if defined, indicates that the memset routine is available
?C: to set blocks of memory.
?C:.
?H:#$d_memset HAS_MEMSET /**/
?H:.
?LINT:set d_memset
: see if memset exists
set memset d_memset
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memset.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017 Dagfinn Ilmari Mannsåker
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strnlen: Inlibc
?MAKE: -pick add $@ %<
?S:d_strnlen:
?S: This variable conditionally defines the HAS_STRNLEN symbol, which
?S: indicates to the C program that the strnlen () routine is available.
?S:.
?C:HAS_STRNLEN:
?C: This symbol, if defined, indicates that the strnlen () routine is
?C: available to check the length of a string up to a maximum.
?C:.
?H:#$d_strnlen HAS_STRNLEN  /**/
?H:.
?LINT:set d_strnlen
: see if strnlen exists
set strnlen d_strnlen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strnlen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_closedir.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:31:26  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:11:18  ram
```

```
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:21  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_closedir d_void_closedir: Inlibc i_dirent i_sysdir i_sysndir \
 cc ccflags ldflags libs Setvar rm
?MAKE: -pick
 add $@ %<
?S:d_closedir:
?S: This variable conditionally defines HAS_CLOSEDIR if closedir() is
?S: available.
?S:.
?C:HAS_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine is
?C: available.
?C:.
?H:#$d_closedir HAS_CLOSEDIR  /**/
?H:.
?S:d_void_closedir:
?S: This variable conditionally defines VOID_CLOSEDIR if closedir()
?S: does not return a value.
?S:.
?C:VOID_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine
?C: does not return a value.
?C:.
?H:#$d_void_closedir VOID_CLOSEDIR  /**/
?H:.
?F:!closedir
?LINT:set d_closedir d_void_closedir
: see if closedir exists
set closedir d_closedir
eval $inlibc

@if VOID_CLOSEDIR || d_void_closedir
?X: The following contortions are designed so we can call closedir()
?X: and check whether it returns a value.  The contortions are designed
?X: to portably pick up the correct directory header, for those
?X: systems that support various mutually incompatible directory functions.
?X: This
 is from perl5's perl.h
case "$d_closedir" in
"$define")
 echo " "
 echo "Checking whether closedir() returns a status..." >&4
 cat > closedir.c <<EOM
#$i_dirent I_DIRENT  /**/
```

```
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/

#if defined(I_DIRENT)
#include <dirent.h>
#if defined(NeXT) && defined(I_SYS_DIR) /* NeXT needs dirent + sys/dir.h */
#include <sys/dir.h>
#endif
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#ifdef hp9000s500
#include <ndir.h> /* may be wrong in the future */
#else
#include <sys/dir.h>
#endif
#endif
#endif
#endif
int main() { return closedir(opendir(".")); }
EOM
 if $cc $ccflags $ldflags -o closedir closedir.c $libs > /dev/null 2>&1; then
  if ./closedir > /dev/null 2>&1 ; then
   echo "Yes, it does."
   val="$undef"
  else
   echo "No, it doesn't."
   val="$define"
  fi
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  val="$define"
 fi
 ;;
*)
 val="$undef";
 ;;
esac
set d_void_closedir
eval $setvar
$rm
 -f closedir*
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_closedir.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysparam.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysparam.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:22:43  ram
?RCS: patch32: created
?RCS:
?MAKE:i_sysparam: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysparam:
?S: This variable conditionally defines the I_SYS_PARAM symbol, and indicates
?S: whether a C program should include <sys/param.h>.
?S:.
?C:I_SYS_PARAM:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/param.h>.
?C:.
?H:#$i_sysparam I_SYS_PARAM  /**/
?H:.
?LINT:set
 i_sysparam
: see if this is a sys/param system
set sys/param.h i_sysparam
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysparam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorarch.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: vendorarch.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorarch vendorarch vendorarchexp installvendorarch: sed Getfile \
 Setprefixvar Oldconfig Prefixit archname vendorlib vendorprefix test
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorarch:
?S: This variable contains the value of the PERL_VENDORARCH symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: architecture-dependent modules and extensions in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorarchexp:
?S: This variable is the ~name expanded version of vendorarch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorarch=''
?S:installvendorarch:
?S: This variable is really the same as vendorarchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorarch:
?S: This variable conditionally defined PERL_VENDORARCH.
?S:.
?C:PERL_VENDORARCH:
?C: If defined, this symbol contains the name of a private library.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this
 directory.
?C: Vendors who distribute perl may wish to place their own
?C: architecture-dependent modules and extensions in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORARCH_EXP:
?C: This symbol contains the ~name expanded version of PERL_VENDORARCH, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorarch PERL_VENDORARCH "$vendorarch"  /**/
```

```
?H:#$d_vendorarch PERL_VENDORARCH_EXP "$vendorarchexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorarch
: Set the vendorarch variables
case "$vendorprefix" in
'') d_vendorarch="$undef"
 vendorarch=''
 vendorarchexp=''
 ;;
*) d_vendorarch="$define"
 : determine where vendor-supplied architecture-dependent libraries go.
 : vendorlib  default is /usr/local/lib/perl5/vendor_perl/$version
 : vendorarch default is /usr/local/lib/perl5/vendor_perl/$version/$archname
 : vendorlib may have an optional trailing
 /share.
 case "$vendorarch" in
 '') dflt=`echo $vendorlib | $sed 's,/share$,,'`
  dflt="$dflt/$archname"
  ;;
 *) dflt="$vendorarch" ;;
 esac
 fn=d~+
 rp='Pathname for vendor-supplied architecture-dependent files?'
 . ./getfile
 vendorarch="$ans"
 vendorarchexp="$ansexp"
 ;;
esac
prefixvar=vendorarch
. ./installprefix
if $test X"$vendorarch" = X"$vendorlib"; then
 d_vendorarch="$undef"
else
 d_vendorarch="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorarch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Typedef.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  13:42:07  ram
?RCS: patch56: added backslash escapes within evals to prevent space problems
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:01:16  ram
?RCS: patch36: don't clobber visible 'val' variable, use 'varval' instead
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:05:14  ram
?RCS: patch32: created
?RCS:
?X:
?X: This unit checks for the definition of a given typedef.
?X:
?X: To use it, say:
?X: set typedef val_t default [includes]
?X: eval $typedef
?X:
?MAKE:Typedef:
 cppstdin cppminus cppflags rm contains Oldconfig
?MAKE: -pick add $@ %<
?F:!temp.c
?LINT:define typedef
?V:typedef
?S:typedef:
?S: This shell variable is used internally by Configure to check
?S: wether a given typedef is defined or not. A typical use is:
?S:  set typedef val_t default [includes]
?S:  eval $typedef
?S: That will return val_t set to default if the typedef was not found,
?S: to typedef otherwise. If no includes are specified, look in sys/types.h.
?S:.
?T:type var def inclist varval inc
: define an is-a-typedef? function
typedef='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
```

```
 if $contains $type temp.E >/dev/null 2>&1; then
  eval "$var=\$type";
 else
  eval "$var=\$def";
 fi;
 $rm -f temp.?;;
*) eval
 "$var=\$varval";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Typedef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nlist_pfx.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nlist_pfx.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:26:18  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:nlist_pfx nlist_fnd: cat test Myread Oldconfig libnlist \
 +cc +ccflags
?MAKE: -pick add $@ %<
?S:nlist_pfx:
?S: This variable holds any characters which precede the symbol name
?S: when doing an nlist search.
?S:.
?S:nlist_fnd:
?S: This
 variable holds the member of the nlist structure which is
?S: nonzero if an nlist search succeeds.  Presently, it is always "n_value".
?S:.
?C:NLIST_PREFIX:
?C: This manifest constant holds the string of characters which should
?C: precede the symbol name when doing an nlist search.
?C:.
?C:NLIST_FOUND:
```

```
?C: This manifest constant holds the member of the nlist structure which
?C: is nonzero if an nlist search succeeds.
?C:.
?H:#define NLIST_PREFIX $nlist_pfx /**/
?H:#define NLIST_FOUND $nlist_fnd /**/
?H:.
?F:!nlisttest
?T:nlist_loc
: Nose around for nlist stuff
echo " "
echo "Checking out nlist stuff..." >&4
$cat >nlisttest.c <<'EOCP'
#include <stdio.h>
#include <nlist.h>

main(argc, argv)
int argc;
char **argv;
{
 int (*loc)();
 extern int hereIam();
 static struct nlist nl[] = {
  { "IamNotFound", 0 },
  { "hereIam", 0 },
  { "_hereIam", 0 },
  { ".hereIam", 0 },
  { "", 0 }
 };

 loc = hereIam;

 if(argc == 1) {
  printf("%ld\n", loc);}
 else {
  int i;
  int rc;

  if(nlist("./nlisttest",
 nl) == -1) exit(-1);
  i = argv[1][0] - '0';
  printf("%d %d %d\n", nl[i].n_name, nl[i].n_type, nl[i].n_value);
  }
 exit(0);}

int hereIam() {

 return;}
EOCP
```

```
nlist_fnd=n_value
if $cc $ccflags -o nlisttest nlisttest.c $libnlist >/dev/null 2>&1 ; then
 set `./nlisttest`
 nlist_loc=$1

 set `./nlisttest 0`
 if $test "$3" = "0" ; then
  echo "$nlist_fnd is 0 if nlist() fails, as I expected."
 else
  $cat <<EOM
Hello, Jim.  We have just discovered that $nlist_fnd was nonzero on an
nlist() lookup failure!  Your mission, should you choose to accept it, is to
edit either config.sh (to provide a Good value for nlist_fnd) or The Code
(to find an alternative to NLIST_FOUND), and reporting the full details of
your success to the MetaConfig Police.  Of course, should you fail...
EOM
  nlist_fnd="/* Bletch! */ */"
 fi

 set `./nlisttest 1`
 if $test "$nlist_loc" = "$3" ; then
  echo "Symbols are stored with no initial characters."
  nlist_pfx=
 else
  set `./nlisttest 2`
  if
 $test "$nlist_loc" = "$3" ; then
   echo "Symbols are stored with an initial underscore."
   nlist_pfx=_
  else
   set `./nlisttest 3`
   if $test "$nlist_loc" = "$3" ; then
    echo "Symbols are stored with an initial dot."
    nlist_pfx=.
   else
    $cat <<EOM
I can't figure out the symbol prefix!
You get to edit config.sh and fix 'nlist_pfx' (Configure will let you do this
at the end of its configuration questions), or config.h and fix the value of
the NLIST_PREFIX symbol.
EOM
    nlist_pfx="/* Bletch! */ */"
   fi
  fi
 fi
else
 $cat <<EOM
I can't get the nlist test program working!
```

```
You get to edit config.sh and fix 'nlist_pfx' (Configure will let you do this
at the end of its configuration questions) and 'nlist_fnd', or config.h and
fix the value of the NLIST_PREFIX and NLIST_FOUND symbols.
EOM
 nlist_pfx="/* Bletch! */ */"
 nlist_fnd="/* Bletch! */ */"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nlist_pfx.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_exp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_exp2:
?S: This variable conditionally defines the HAS_EXP2 symbol, which
?S: indicates to the C program that the exp2() routine is available.
?S:.
?C:HAS_EXP2:
?C: This symbol, if defined, indicates that the exp2 routine is
?C: available to do the 2**x function.
?C:.
?H:#$d_exp2 HAS_EXP2  /**/
?H:.
?LINT:set d_exp2
: see if exp2 exists
set exp2 d_exp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_exp2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_quadmath: Inhdr
?MAKE: -pick add $@ %<
?S:i_quadmath:
?S: This variable conditionally defines I_QUADMATH, which indicates
?S: to the C program that it should include <quadmath.h>.
?S:.
?C:I_QUADMATH:
?C: This symbol, if defined, indicates that <quadmath.h> exists and
?C: should be included.
```

```
?C:.
?H:#$i_quadmath I_QUADMATH  /**/
?H:.
?LINT:set i_quadmath
: see if this is a quadmath.h system
set quadmath.h i_quadmath
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_quadmath.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getppid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_getppid.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:45  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_getppid: Inlibc
?MAKE: -pick add $@ %<
?S:d_getppid:
?S: This variable conditionally defines the HAS_GETPPID symbol, which
?S: indicates to the C program that the getppid() routine is available
?S: to get the parent process ID.
?S:.
?C:HAS_GETPPID :
?C: This symbol,
 if defined, indicates that the getppid routine is
?C: available to get the parent process ID.
?C:.
?H:#$d_getppid HAS_GETPPID  /**/
?H:.
?LINT:set d_getppid
: see if getppid exists
set getppid d_getppid
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getppid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libflex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libflex.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:57:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:07:02  ram
?RCS: patch23: now uses full library path instead of -l notation
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:13:25  ram
?RCS: patch16: un-obsoleted this unit to allow smooth lex/flex compilations
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:59  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:libflex: Loc lex libpth _a
?MAKE: -pick add $@ %<
?S:libflex:
?S: This variable contains the argument to pass to the loader in order
?S: to get the flex/lex library routines.  If there is no flex or flex
?S: library, it is null.
?S:.
?T:xxx
: see if we should include -lfl
echo " "
case "$lex" in
*flex)
 xxx=`./loc libfl$_a x $libpth`
 case "$xxx" in
 x)
  echo "No flex library found." >&4
  libflex=''
  ;;
 *)
  echo "flex library found in $xxx." >&4
  libflex="$xxx"
```

```
  ;;
 esac
 ;;
*lex)
 xxx=`./loc libl$_a x $libpth`
 case "$xxx" in
 x)
  echo "No lex library found." >&4
  libflex=''
  ;;
 *)
  echo "lex library found in $xxx." >&4
  libflex="$xxx"
  ;;
 esac
 ;;
*)
echo "You don't seem to have lex or flex, so I won't look for libraries." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libflex.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:sysroot: Head
?MAKE: -pick add $@ %<
?S:sysroot:
?S: This variable is empty unless supplied by the Configure user.
?S: It can contain a path to an alternative root directory, under which
?S: headers and libraries for the compilation target can be found. This
?S: is generally used when cross-compiling using a gcc-like compiler.
?S:.
?LINT:extern cc
?LINT:extern cppflags
?LINT:change cppflags
?LINT:extern ccflags
?LINT:change ccflags
?LINT:extern ldflags
?LINT:change ldflags
?LINT:extern cccdlflags
?X: _sysroot is later used in ccflags, but we do not want it in config.sh
?T:var xxx path _sysroot
```

```
: Set 'sysroot' to change the logical root directory to your headers and libraries see man gcc
: This is primarily meant for cross-compile environments, and
 may fail to be useful in other cases
if test "X$sysroot" = X; then
   sysroot=""
else
   case "$cc" in
 *gcc*|*g++*)
     echo "Using $sysroot to find your headers and libraries, adding to ccflags"
     # _sysroot is used in places where we need --sysroot=foo
     # but using the rest of the flags could cause issues.
     _sysroot="--sysroot=$sysroot";
     case "$ccflags" in
  *sysroot*) ;;
  'undef'|*)
  ccflags="$ccflags $_sysroot"
     esac
     case "$ldflags" in
  *sysroot*) ;;
  'undef'|*)
  ldflags="$ldflags $_sysroot"
     esac
     case "$cppflags" in
  *sysroot*) ;;
  'undef'|*)
  cppflags="$cppflags $_sysroot"
     esac
     # lddlflags updated below in lddlflags section;
     # same with cccdlflags
     ;;
   esac

   # Adjust some defaults to also use $sysroot
   for var in xlibpth loclibpth locincpth glibpth; do
 eval xxx=\$$var
 eval $var=''
 for path in $xxx; do
     eval $var=\"\$$var $sysroot$path\"
 done
   done

fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Sysroot.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_unistd.U 1 2006-08-24 12:32:52Z rmanfredi $

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_unistd.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_unistd: Inhdr
?MAKE: -pick add $@ %<
?S:i_unistd:
?S: This variable conditionally defines the I_UNISTD symbol, and indicates
?S: whether a C program should include <unistd.h>.
?S:.
?C:I_UNISTD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <unistd.h>.
?C:.
?H:#$i_unistd I_UNISTD  /**/
?H:.
?LINT:set
 i_unistd
: see if this is a unistd.h system
set unistd.h i_unistd
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_unistd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctermid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ctermid_r ctermid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_ctermid_r:
?S: This variable conditionally defines the HAS_CTERMID_R symbol,
```

```
?S: which indicates to the C program that the ctermid_r()
?S: routine is available.
?S:.
?S:ctermid_r_proto:
?S: This variable encodes the prototype of ctermid_r.
?S: It is zero if d_ctermid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctermid_r
?S: is defined.
?S:.
?C:HAS_CTERMID_R:
?C: This symbol, if defined, indicates that the ctermid_r routine
?C: is available to ctermid re-entrantly.
?C:.
?C:CTERMID_R_PROTO:
?C: This
 symbol encodes the prototype of ctermid_r.
?C: It is zero if d_ctermid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctermid_r
?C: is defined.
?C:.
?H:#$d_ctermid_r HAS_CTERMID_R /**/
?H:#define CTERMID_R_PROTO $ctermid_r_proto /**/
?H:.
?T:try hdrs d_ctermid_r_proto
: see if ctermid_r exists
set ctermid_r d_ctermid_r
eval $inlibc
case "$d_ctermid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h "
 case "$d_ctermid_r_proto:$usethreads" in
 ":define") d_ctermid_r_proto=define
  set d_ctermid_r_proto ctermid_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ctermid_r_proto" in
 define)
 case "$ctermid_r_proto" in
 "|0) try='char* ctermid_r(char*);'
 ./protochk "$extern_C $try" $hdrs && ctermid_r_proto=B_B ;;
 esac
 case "$ctermid_r_proto" in
 "|0) d_ctermid_r=undef
  ctermid_r_proto=0
  echo "Disabling ctermid_r, cannot determine prototype." >&4 ;;
 * ) case "$ctermid_r_proto" in
  REENTRANT_PROTO*) ;;
```

```
  *)
 ctermid_r_proto="REENTRANT_PROTO_$ctermid_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "ctermid_r has no prototype, not using it." >&4 ;;
  esac
  d_ctermid_r=undef
  ctermid_r_proto=0
  ;;
 esac
 ;;
*) ctermid_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ctermid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strerror.U,v 3.0.1.3 1994/05/13 15:20:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_strerror.U,v $
?RCS: Revision 3.0.1.3  1994/05/13  15:20:27  ram
?RCS: patch27: now uses new macro support for cleaner Strerror def
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  14:58:26  ram
?RCS: patch23: renamed strerror into Strerror to protect name space (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:56  ram
?RCS: patch16: protected code looking for sys_errnolist[] with @if
?RCS: patch16: added default value for d_sysernlst
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:07:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syserrlst d_sysernlst: Csym Findhdr
```

```
?MAKE: -pick add $@ %<
?S:d_syserrlst:
?S: This variable conditionally defines HAS_SYS_ERRLIST if sys_errlist[] is
?S: available to translate error numbers to strings.
?S:.
?S:d_sysernlst:
?S: This variable conditionally defines HAS_SYS_ERRNOLIST if sys_errnolist[]
?S: is available to translate error numbers to the symbolic name.
?S:.
?C:HAS_SYS_ERRLIST (SYSERRLIST):
?C: This symbol, if defined, indicates that the sys_errlist array is
?C: available to translate error numbers to strings. The extern int
?C: sys_nerr gives the size of that table.
?C:.
?C:HAS_SYS_ERRNOLIST (SYSERRNOLIST):
?C: This symbol, if defined, indicates that the sys_errnolist array is
?C: available to translate an errno code into its symbolic name (e.g.
?C: ENOENT). The extern int sys_nerrno gives the size of that table.
?C:.
?H:#$d_syserrlst HAS_SYS_ERRLIST /**/
?H:#$d_sysernlst HAS_SYS_ERRNOLIST /**/
?H:.
?D:d_sysernlst=''
?T:val
:
 see if sys_errlist[] exists
echo " "
if test "X$d_syserrlst" = X; then
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "You have sys_errlist[], so we could roll our own strerror."
  d_syserrlst="$define"
 else
  echo "You don't have sys_errlist[], so strerror() is welcome."
  d_syserrlst="$undef"
 fi
fi
@if d_sysernlst || HAS_SYS_ERRNOLIST
if set sys_errnolist val -a d_sysernlst; eval $csym; $val; then
 echo "(Symbolic error codes can be fetched via the sys_errnolist[] array.)"
 d_sysernlst="$define"
else
 echo "(However, I can't extract the symbolic error code out of errno.)"
 d_sysernlst="$undef"
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_strerror.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?X:
?X: This unit produces a shell script which can be run in order to emit
?X: an important warning to the user, which will be remembered and shown
?X: at the end of the Configure run as well.
?X:
?X: A typical use would be:
?X:
?X:  ./warn <<EOM
?X:  Problem with your C compiler: can't turn debugging on.
?X:  EOM
?X:
?X: or:
?X:
?X:  ./warn "Problem with your C compiler: can't turn debugging on."
?X:
?X: Which will both display to the user:
?X:
?X:  ***
 WARNING:
?X:  *** Problem with your C compiler: can't turn debugging on.
?X:  ***
?X:
?MAKE:Warn: startsh eunicefix
?MAKE: -pick add $@ %<
?F:./warn
: script used to emit important warnings
cat >warn <<EOS
$startsh
?X: Read the whole warning message from stdin into a temporary file
?X: when no argument was supplied.
if test \$# -gt 0; then
 echo "\$@" >msg
else
 cat >msg
fi
```

```
?X: Emit the warning, prefixing all lines with '*** '
echo "*** WARNING:" >&4
sed -e 's/^/*** /' <msg >&4
echo "*** " >&4
?X: Save the warning in the logs, which will be shown again at the end
cat msg >>config.msg
echo " " >>config.msg
rm -f msg
EOS
chmod +x warn
$eunicefix warn
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysstatvfs.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysstatvfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysstatvfs:
?S: This variable conditionally defines the I_SYSSTATVFS symbol,
?S: and indicates whether a C program should include <sys/statvfs.h>.
?S:.
?C:I_SYS_STATVFS:
?C: This symbol, if defined, indicates that <sys/statvfs.h> exists and
?C: should be included.
?C:.
?H:#$i_sysstatvfs I_SYS_STATVFS  /**/
?H:.
?LINT:set i_sysstatvfs
: see if this is a sys/statvfs.h system
set sys/statvfs.h i_sysstatvfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysstatvfs.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: setsid.C,v 3.0.1.1 1994/01/24 13:58:47 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: setsid.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:47  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/setsid.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fseeko: Inlibc longsize
?MAKE: -pick add $@ %<
?S:d_fseeko:
?S: This variable conditionally defines the HAS_FSEEKO symbol, which
?S: indicates to the C program that the fseeko() routine is available.
?S:.
?C:HAS_FSEEKO:
?C: This symbol, if defined, indicates that the fseeko routine is
?C: available to fseek beyond 32 bits (useful for ILP32 hosts).
?C:.
?H:#$d_fseeko HAS_FSEEKO  /**/
?H:.
?LINT:set d_fseeko
: see if fseeko exists
set fseeko d_fseeko
eval $inlibc
case "$longsize" in
8) echo "(Your long is 64 bits, so you could use fseek.)" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fseeko.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_setitimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_setitimer:
?S: This variable conditionally defines the HAS_SETITIMER symbol, which
?S: indicates to the C program that the setitimer() routine is available.
?S:.
?C:HAS_SETITIMER:
?C: This symbol, if defined, indicates that the setitimer routine is
?C: available to set interval timers.
?C:.
?H:#$d_setitimer HAS_SETITIMER  /**/
?H:.
?LINT:set d_setitimer
: see if setitimer exists
set setitimer d_setitimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setitimer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_machcthr: Inhdr usethreads
?MAKE: -pick add $@ %<
?S:i_machcthr:
?S: This variable conditionally defines the I_MACH_CTHREADS symbol,
?S: and indicates whether a C program should include <mach/cthreads.h>.
?S:.
?C:I_MACH_CTHREADS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <mach/cthreads.h>.
?C:.
```

```
?H:#$i_machcthr   I_MACH_CTHREADS /**/
?H:.
: see if mach cthreads are available
if test "X$usethreads" = "X$define"; then
 set mach/cthreads.h i_machcthr
 eval $inhdr
else
 i_machcthr="$undef"
fi
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/i_machcthr.U
No license file was found, but licenses were detected in source scan.

Perl5 Metaconfig Units

Copyright (c) 1996-1998, Andy Dougherty
Copyright (c) 1999-2011, H.Merijn Brand
All rights reserved.

These units are the ones I used to build Configure and config_h.SH
in the Perl5 distribution.

The Configure script and config_h.SH file in the Perl distribution are
generated by a program called metaconfig. To run metaconfig, you will
need the full dist 3.0 distribution, maintained by Raphael Manfredi.
As of this writing, the current version is dist3.0, patchlevel 70.
Dist version dist-3.0@70.tar.gz is available on CPAN (the Comprehensive
Perl Archive Network) as
<http://www.perl.com/perl/CPAN/authors/id/RAM/dist-3.0@70.tar.gz>.

Instructions:

1. Unpack the full perl5 sources. Execute the following command

```
 chmod +w Configure config_h.SH Porting/Glossary Porting/config*
```

2. Unpack the archive containing this file in the perl5 source
   directory. This will create a directory
 'U' under the perl5
   sources. That directory will contain the metaconfig units for perl5.
   This will also create two files in the perl5 source tree:
   MANIFEST.new and .package.

3. Apply any patches to perl in the perl_patches/ directory.
   (This may well be empty.)

4. Obtain and install dist-3.0pl70.

4. Apply any patches to dist under the dist_patches subdirectory.

5. From your main perl5 source directory, run packinit to
   regenerate the .package file. IMPORTANT: Change the name and
   address of the maintainer to your own name and address. I don't
   want bug reports intended for you coming to me.

6. From your main perl5 source directory, run

 metalint (or mlint)

   and repair every failure it reports.

7. From your main perl5 source directory, run

 metaconfig -m (or mconfig -m)

8. Edit U/mkglossary and/or U/mkgloss.pl to point to your dist-3.0pl70
   location. (See comments at the top.)

9. Run the Porting/mksample script to update the contents
 of the Porting/
   subdirectory, or run all parts by hand. (see README)

   NB: this script used to be U/mksample replaced by Porting/mksample;
   see Porting/pumpkin.pod instead for current documentation on its
   use.

10. Let me know about any changes, corrections, or enhancements.

Things to watch out for:

1. Future support of better random number generators should probably
   start with the randfunc.U unit included here. It's currently
   broken, but well commented and probably a good place to start.

Descriptions:

The units and other related files have been broken up into the following
directories:

acl/
   This is an old patch to begin to detect and use ACL (access
   control list) file protection schemes.

compline/

These are similar to the standard units, but I have modified them
to have a more uniform compile command line, usually using the new
Compile.U unit. I have submitted these for inclusion into the
regular dist distribution. (The ccflags.U
unit is actually
perl-specific since it mentions -DDEBUGGING and -DPOSIX_SOURCE,
but that's the only place it is perl-specific.)

dist_patches/
These are patches to dist that must be applied before it is built
and installed. I have submitted these for inclusion in the
regular dist distribution.

modified/
These are modified versions of the standard units. Also included in
this directory are new units that are clearly derived from existing
units. I have submitted these for inclusion in the regular dist
distribution.

perl/
These are specific to perl. Some are heavily derived from
original dist units, and are marked as such. Others are original.

perl_patches/
These are patches to the perl source. This directory
should ordinarily be empty, but there may have been drift between
the standard version of perl and the one associated with these
units.

protos/
These are units modified to use the new Hasproto.U or Protochk.U
units to check for prototypes. I have submitted these for inclusion
into the regular dist distribution.

target/
This is the very, very beginning of cross-compiler support.
It doesn't work yet, and many standard units will need
modification.

typedefs/
These are standard units modified to use the modified Typedef.U
unit to check for typedefs. (The modified Typdef.U includes a
function to avoid unnecessary prompts if the typdef being searched
for exists.) I have submitted these for inclusion into the
regular dist distribution.

threads/
These are specific to threading perl.

Copyright Information:

Unless otherwise indicated, the files contained in this
distribution are:

Copyright (c) 1996-1998, Andy Dougherty

The following licensing terms apply to all files contained in
this distribution:

You may distribute the files contained in this distribution
under the terms of either

a) the "Artistic License" which comes with Perl,
or

b) the "Artistic License" which comes with dist, or

c) the GNU General Public License as published by the Free
Software Foundation; either version 1, or (at your option) any
later version (see the file "Copying" that comes with the
Perl distribution).

Which one to use is your choice.

The units in the "modified" directory have been derived from units
associated with the metaconfig program of Raphael Manfredi's "dist"
distribution. These units list Raphael Manfredi as the Copyright holder.
dist is distributed under a modified version of the Perl Artistic License.
Clause 7 of this modified license as contained in dist-3.0-pl60 provides:

7. You may reuse parts of this Package in your own programs, provided
that you explicitly state where you got them from, in the source code
(and, left to your courtesy, in the documentation), duplicating
all the associated copyright notices and disclaimers. Besides
your changes, if any, must be clearly marked
as such. Parts reused
that way will no longer fall under this license if, and only if,
the name of your program(s) have no immediate connection with the
name of the Package itself or its associated programs. You may then
apply whatever restrictions you wish on the reused parts or choose
to place them in the Public Domain--this will apply only within the
context of your package.

In accordance with this clause, the versions of these units
contained here are made available under the same terms as the
rest of the units.

If you have any questions about the use of these units or about
the differences between these units and the standard versions, please
feel free to ask.

Andy Dougherty doughera@lafayette.edu
Dept. of Physics
Lafayette College
Easton, PA 18042-1782

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/README.dist
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Finish.U,v $
?RCS: Revision 3.0.1.6  1995/02/15  14:09:30  ram
?RCS: patch51: now clearer about how to edit config.sh at the prompt (WED)
?RCS:
?RCS: Revision 3.0.1.5  1994/10/29  15:53:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:19:37  ram
?RCS: patch23: added blank lines around 'End of Configure'
?RCS:
?RCS: Revision 3.0.1.3  1993/10/16  13:46:09  ram
?RCS: patch12: replaced Config_h by Magic_h in the dependency line
?RCS:
?RCS:
 Revision 3.0.1.2  1993/09/13  15:45:26  ram
?RCS: patch10: fixed shell evaluation w/o shell escape while in silent mode
?RCS:
?RCS: Revision 3.0.1.1  1993/08/30  08:55:59  ram
?RCS: patch8: prevents myread from blocking on empty answers, exceptionally
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: This unit is the very last one in the Configure script.  It runs all the
?X: SH files, which among other things produce config.h and (usually) Makefile.
?X: It offers to do a make depend if the Makefile contains that target.
?X:
?MAKE:Finish: Chk_MANI Extract Myread Oldsym Magic_h cat rm contains \
 test package make
?MAKE: -pick add $@ %<
?F:!config.sh
?T:pwd
: Finish up by extracting the .SH files
case "$alldone" in
exit)
?X: They supplied the -E switch
 echo "Stopping at your request, leaving temporary files around."
 exit 0
 ;;
cont)
 ;;
")
 dflt=''
 nostick=true
 $cat <<EOM

If you'd like to make any changes to the config.sh
 file before I begin
to configure things, do it as a shell escape now (e.g. !vi config.sh).

EOM
 rp="Press return or use a shell escape to edit config.sh:"
 . UU/myread
 nostick=''
 case "$ans" in
 '') ;;
 *) : in case they cannot read
  sh 1>&4 -c "$ans";;
 esac
 ;;
esac

: if this fails, just run all the .SH files by hand
. ./config.sh

?X:
?X: Turn silent mode off from now on (we want a verbose file extraction).
?X: This means we have to explicitly test for '$silent' from now on to
?X: strip off any verbose messages.
?X:
echo " "
```

```
exec 1>&4
pwd=`pwd`
. ./UU/extract
cd "$pwd"

if $contains '^depend:' [Mm]akefile >/dev/null 2>&1; then
 dflt=y
 case "$silent" in
 true) ;;
 *)
  $cat <<EOM

Now you need to generate make dependencies by running "$make depend".
You might prefer to run it in background: "$make depend > makedepend.out &"
It can take a while, so you might not want to run it right now.

EOM
  ;;
 esac
 rp="Run $make depend now?"
 . UU/myread
 case "$ans" in
 y*)
  $make depend
 && echo "Now you must run '$make'."
  ;;
 *)
  echo "You must run '$make depend' then '$make'."
  ;;
 esac
elif test -f [Mm]akefile; then
 echo " "
 echo "Now you must run a $make."
else
 echo "Configure done."
fi

if $test -f Policy.sh; then
   $cat <<EOM

If you compile $package on a different machine or from a different object
directory, copy the Policy.sh file from this object directory to the
new one before you run Configure -- this will help you with most of
the policy defaults.

EOM
fi
if $test -f UU/config.msg; then
```

```
  echo "Hmm.  I also noted the following information while running:"
  echo " "
  $cat UU/config.msg >&4
fi
?X:
?X: kit*isdone files are left over by shell archives built using the makedist
?X: script which comes from dist, while ark*isdone files are left over by
?X: the cshar archive maker.
?X:
$rm -f kit*isdone ark*isdone
$rm -rf UU

: End of Configure
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Finish.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: usenm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:26:40  ram
?RCS: patch61: don't use nm with the GNU C library
?RCS: patch61: added support for Linux shared libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usenm runnm nm_opt nm_so_opt: cat test Myread Oldconfig grep \
 d_gnulibc nm egrep rsrc osname Guess
?MAKE: -pick add $@ %<
?S:usenm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction is wanted
 or not.
?S:.
?S:runnm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction should be performed or not, according to the value
?S: of usenm and the flags on the Configure command line.
```

```
?S:.
?S:nm_opt:
?S: This variable holds the options that may be necessary for nm.
?S:.
?S:nm_so_opt:
?S: This variable holds the options that may be necessary for nm
?S: to work on a shared library but that can not be used on an
?S: archive library.  Currently, this is only used by Linux, where
?S: nm --dynamic is *required* to get symbols from an ELF library which
?S: has been stripped, but nm --dynamic is *fatal* on an archive library.
?S: Maybe Linux should just always set usenm=false.
?S:.
: see if nm is to be used to determine whether a symbol is defined or not
?X: If there is enough inquiries, it might be worth to wait for the nm
?X: extraction. Otherwise, the C compilations might be a better deal.
?X:
?X: Don't bother if we're using GNU libc -- skimo
case "$usenm"
 in
")
 dflt="
 case "$d_gnulibc" in
 "$define")
  echo " "
  echo "$nm probably won't work on the GNU C Library." >&4
  dflt=n
  ;;
 esac
 case "$dflt" in
 ")
  if $test "$osname" = aix -a ! -f /lib/syscalls.exp; then
   echo " "
   echo "Whoops!  This is an AIX system without /lib/syscalls.exp!" >&4
   echo "'nm' won't be sufficient on this system." >&4
   dflt=n
  fi
  ;;
 esac
 case "$dflt" in
 ")
  if ./gnu; then
   echo " "
   echo "Hmm...  A GNU system without a GNU C Library?  Weird..." >&4
   dflt=n
  else
   dflt=`$egrep 'inlibc|csym' $rsrc/Configure | wc -l 2>/dev/null`
   if $test $dflt -gt 20; then
    dflt=y
```

```
  else
   dflt=n
  fi
 fi
 ;;
esac
;;
*)
case "$usenm" in
true|$define) dflt=y;;
*) dflt=n;;
esac
;;
esac
$cat <<EOM

I can use $nm to extract the symbols from your C libraries. This
is a time consuming task which may generate huge output on the disk (up
to 3 megabytes) but that should make the symbols extraction faster. The
alternative is to skip the
 'nm' extraction part and to compile a small
test program instead to determine whether each symbol is present. If
you have a fast C compiler and/or if your 'nm' output cannot be parsed,
this may be the best solution.

EOM
rp='Shall I use nm to extract C symbols from the libraries?'
. ./myread
case "$ans" in
[Nn]*) usenm=false;;
*) usenm=true;;
esac

?X: Name extraction is to be run if 'nm' usage is wanted and if no -r flag
?X: was provided to configure (in which case we simply re-use the previous
?X: values).
runnm=$usenm
case "$reuseval" in
true) runnm=false;;
esac

: nm options which may be necessary
case "$nm_opt" in
") if $test -f /mach_boot; then
  nm_opt="  # Mach
 elif $test -d /usr/ccs/lib; then
  nm_opt='-p'  # Solaris (and SunOS?)
 elif $test -f /dgux; then
```

```
  nm_opt='-p'  # DG-UX
 elif $test -f /lib64/rld; then
  nm_opt='-p'  # 64-bit Irix
 else
  nm_opt=''
 fi;;
esac

?X: nm options which may be necessary for shared libraries but illegal
?X: for archive libraries.  Thank you,
 Linux.
case "$nm_so_opt" in
'') case "$osname" in
 *linux*)
  if $nm --help | $grep 'dynamic' > /dev/null 2>&1; then
   nm_so_opt='--dynamic'
  fi
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usenm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_attribut.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 2020, Raphael Manfredi, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_non_int_bitfields: \
    Myread Oldconfig cat cc ccflags Setvar compiler_warning rm_try
?MAKE: -pick add $@ %<
?S:d_non_int_bitfields:
?S: This variable conditionally defines HAS_NON_INT_BITFIELDS
?S: which indicates that the C compiler accepts struct bitfields of sizes
?S: that aren't 'int' or 'unsigned int'
?S:.
?C:HAS_NON_INT_BITFIELDS:
?C: This symbol, if defined, indicates that the C compiler accepts, without
?C: error or warning, struct bitfields
```

```
 that are declared with sizes other
?C: than plain 'int'; for example 'unsigned char' is accepted.
?C:.
?H:?%<:#$d_non_int_bitfields HAS_NON_INT_BITFIELDS /**/
?H:.
?LINT:set d_non_int_bitfields
?F:!try.out !try.c
: Look for non 'int'-sized bitfields
case "$d_non_int_bitfields" in
")
echo " " >&4
echo "Checking whether your compiler can handle struct bitfields that aren't 'int' or 'unsigned int' ..." >&4
$cat >try.c <<'EOCP'
#include <stdio.h>
struct foo {
   unsigned char byte:1;
   unsigned short halfword:1;
} bar;
EOCP
if $cc $ccflags -c try.c >try.out 2>&1 ; then
 if $compiler_warning try.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support struct bitfields that aren't 'int' or 'unsigned int'." >&4
  val="$undef"
 else
  echo "Your C compiler supports struct bitfields besides 'int' and 'unsigned int'." >&4
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand struct bitfields that aren't 'int' or 'unsigned int' at all." >&4
 val="$undef"
fi
;;
*)
 val="$d_non_int_bitfields" ;;
esac
set d_non_int_bitfields
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_bitfield.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bcopy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bcopy.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:48:04  ram
?RCS: patch12: added magic support for bcopy()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:01:11  ram
?RCS: patch10: now only defines HAS_BCOPY, no macro remap on memcpy (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bcopy: Inlibc
?MAKE: -pick add $@ %<
?S:d_bcopy:
?S: This variable conditionally defines the HAS_BCOPY
 symbol if
?S: the bcopy() routine is available to copy strings.
?S:.
?C:HAS_BCOPY:
?C: This symbol is defined if the bcopy() routine is available to
?C: copy blocks of memory.
?C:.
?H:#$d_bcopy HAS_BCOPY /**/
?H:.
?M:bcopy: HAS_BCOPY
?M:#ifndef HAS_BCOPY
?M:#ifndef bcopy
?M:#define bcopy(s,d,l) memcpy((d),(s),(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bcopy
: see if bcopy exists
set bcopy d_bcopy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bcopy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Karl Williamson
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?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcrtomb: Inlibc
?MAKE: -pick add $@ %<
?S:d_wcrtomb:
?S: This variable conditionally defines the HAS_WCRTOMB symbol if the
?S: wcrtomb() routine is available to be used to convert a wide character
?S: into a multi-byte character.
?S:.
?C:HAS_WCRTOMB:
?C: This symbol, if defined, indicates that the wcrtomb routine is
?C: available to convert a wide character into a multi-byte character.
?C:.
?H:#$d_wcrtomb HAS_WCRTOMB /**/
?H:.
?LINT: set d_wcrtomb
: see if wcrtomb exists
set wcrtomb d_wcrtomb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_wcrtomb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sigprocmask: Inlibc
?MAKE: -pick add $@ %<
?S:d_sigprocmask:
?S: This variable conditionally defines HAS_SIGPROCMASK
?S: if sigprocmask() is available to examine or change the signal mask
?S: of the calling process.
?S:.
?C:HAS_SIGPROCMASK:
?C: This symbol, if defined, indicates that the sigprocmask
?C: system call is available to examine or change the signal mask
?C: of the calling process.
?C:.
```

```
?H:#$d_sigprocmask HAS_SIGPROCMASK  /**/
?H:.
?LINT:set d_sigprocmask
: see if sigprocmask exists
set sigprocmask d_sigprocmask
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sigprocmask.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Compile.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS:
?X:
?X: This unit is just a quick shorthand for the compile command
?X: to be used in all the other metaconfig units.
?X:
?MAKE:Compile: +cc +optimize +ccflags +ldflags +libs test
?MAKE: -pick wipe $@ %<
?LINT:extern usedevel maintloc
?LINT:define compile compile_ok
?V:compile compile_ok mc_file
?S:compile:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command, namely
?S: $cc $optimize $ccflags $ldflags -o $1 $1.c $libs > /dev/null 2>&1
?S: Note that the output filename does _not_ include the _exe
?S: extension.  Instead we assume that the linker will be
?S: "helpful" and automatically appending the correct suffix.
?S: OS/2
 users will apparently need to supply the -Zexe flag to
?S: get this behavior.
?S:
?S: To use this variable, say something like:
?S:  echo 'int main() { exit(0); }' > try.c
?S:  set try
?S:  if eval $compile; then
?S:   echo "success"   # and do whatever . . .
?S:  else
?S:   echo "failure"   # and do whatever . . .
?S:  fi
```

```
?S: To add extra flags cc flags (e.g. -DWHATEVER) just put them
?S: in $*, e.g.
?S:  set try -DTRY_THIS_FLAG
?S:.
?S:compile_ok:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command that you
?S: expect to work ok.  It is the same as $compile, except we
?S: deliberately let the user see any error messages.
?S:.
: define a shorthand compile call
compile='
mc_file=$1;
shift;
case "$usedevel" in $define|true|[yY]*) if $test ! -f "${mc_file}.c"; then
echo "Internal Configure script bug - compiler test file ${mc_file}.c is missing. Please report this to <$maintloc>"
>&4;
exit 1;
fi;
esac;
$cc
 -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
: define a shorthand compile call for compilations that should be ok.
compile_ok='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/Compile.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?MAKE:run to from targetarch usecrosscompile: src awk cat grep test rm \
 echo sed mkdir cp touch chmod
?MAKE: -pick add $@ %<
?Y:TOP
```

```
?S:usecrosscompile:
?S: This variable conditionally defines the USE_CROSS_COMPILE symbol,
?S: and indicates that our package has been cross-compiled.
?S:.
?S:run:
?S: This variable contains the command used by Configure
?S: to copy and execute a cross-compiled executable in the
?S: target host.  Useful and available only during
 the build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:from:
?S: This variable contains the command used by Configure
?S: to copy files from the target host.  Useful and available
?S: only during the build.
?S: The string ':' if not cross-compiling.
?S:.
?S:to:
?S: This variable contains the command used by Configure
?S: to copy to from the target host.  Useful and available
?S: only during the build.
?S: The string ':' if not cross-compiling.
?S:.
?S:targetarch:
?S: If cross-compiling, this variable contains the target architecture.
?S: If not, this will be empty.
?S:.
?C:USE_CROSS_COMPILE:
?C: This symbol, if defined, indicates that the package is being
?C: cross-compiled.
?C:.
?C:CROSS_TARGET_ARCH:
?C: This symbol, if defined, indicates the target architecture
?C: the package has been cross-compiled to.
?C: Undefined if not a cross-compile.
?C:.
?H:?usecrosscompile:#ifndef USE_CROSS_COMPILE
?H:?usecrosscompile:#$usecrosscompile USE_CROSS_COMPILE /**/
?H:?usecrosscompile:#define
 CROSS_TARGET_ARCH "$targetarch" /**/
?H:?usecrosscompile:#endif
?H:.
?T:croak pwd exe f q i j cwd
?LINT:extern usecrosscompile
?LINT:extern cc
?LINT:extern usrinc
?LINT:change usrinc
?LINT:change ar
```

```
?LINT:change nm
?LINT:change ranlib
?LINT:extern targethost
?LINT:extern targetdir
?LINT:change targetdir
?LINT:extern targetuser
?LINT:change targetuser
?LINT:extern targetrun
?LINT:extern targetfrom
?LINT:extern targetto
?LINT:extern targetmkdir
?LINT:change targetrun
?LINT:change targetfrom
?LINT:change targetto
?LINT:change targetmkdir
?LINT:extern incpth
?LINT:extern libpth
?LINT:change incpth
?LINT:change libpth
?LINT:extern locincpth
?LINT:extern loclibpth
?LINT:change locincpth
?LINT:change loclibpth
?LINT:extern TMPDIR
: setup for possible cross-compilation
run=''
to=:
from=:
usecrosscompile='undef'
targetarch=''
case "$usecrosscompile" in
$define|true|[yY]*)
@if { test -d ../Cross }
?X:
?X: Cross-compilation is enabled when there is a 'Cross' directory found
?X: at the root
 of the package.  This directory must contain the following
?X: entries for defining the cross-compilation process:
?X:
?X: FIXME FIXME
?X: WE MUST DISTINGUISH BETWEEN LOCAL cross-compiling AND REMOTE ONE
?X: ACTUALLY, REMOTE COMPILATION SHOULD BE CONFIGURED INTERACTIVELY
?X: IT WILL COPY ALL THE FILES FROM THE MANIFEST DOWN TO THE REMOTE DIR...
?X: (and copy things like 'mkdep', etc...)
?X:
 $echo "Cross-compiling..."
 croak=''
 case "$cc" in
```

```
 *-*-gcc)
?X: A cross-compiling gcc, probably.
     targetarch=`$echo $cc|$sed 's/-gcc$//'`
     ar=$targetarch-ar
?X: leave out ld, choosing it is more complex
     nm=$targetarch-nm
     ranlib=$targetarch-ranlib
     $echo 'extern int foo;' > try.c
     set X `$cc -v -E try.c 2>&1 | \
   $awk '/^#include </,/^End of search /'|$grep '/include'`
     shift
  if $test $# -gt 0; then
         incpth="$incpth $*"
   incpth="`$echo $incpth|$sed 's/^ //'`"
   echo "Guessing incpth '$incpth'." >&4
   for i in $*; do
    j="`$echo $i|$sed 's,/include$,/lib,'`"
    if
 $test -d $j; then
     libpth="$libpth $j"
    fi
   done
   libpth="`$echo $libpth|$sed 's/^ //'`"
   echo "Guessing libpth '$libpth'." >&4
     fi
     $rm -f try.c
     ;;
 esac
 case "$targetarch" in
 ") echo "Targetarch not defined." >&4; croak=y ;;
 *)  echo "Using targetarch $targetarch." >&4 ;;
 esac
 case "$incpth" in
 ") echo "Incpth not defined." >&4; croak=y ;;
 *)  echo "Using incpth '$incpth'." >&4 ;;
 esac
 case "$libpth" in
 ") echo "Libpth not defined." >&4; croak=y ;;
 *)  echo "Using libpth '$libpth'." >&4 ;;
 esac
 case "$usrinc" in
 ")
  for i in $incpth; do
   if $test -f $i/errno.h -a -f $i/stdio.h -a -f $i/time.h; then
    usrinc=$i
    echo "Guessing usrinc $usrinc." >&4
    break
   fi
```

```
    done
    case "$usrinc" in
    ") echo "Usrinc not defined." >&4; croak=y ;;
    esac
 ;;
*)  echo "Using usrinc $usrinc." >&4 ;;
esac
case "$targethost" in
") echo "Targethost not defined." >&4; croak=y ;;
*)  echo "Using targethost $targethost."
>&4
esac
locincpth=' '
loclibpth=' '
case "$croak" in
y) echo "Cannot continue, aborting." >&4; exit 1 ;;
esac
case "$src" in
/*) run=$src/Cross/run
    targetmkdir=$src/Cross/mkdir
    to=$src/Cross/to
    from=$src/Cross/from
    ;;
*)  pwd=`$test -f ../Configure & cd ..; pwd`
    run=$pwd/Cross/run
    targetmkdir=$pwd/Cross/mkdir
    to=$pwd/Cross/to
    from=$pwd/Cross/from
    ;;
esac
case "$targetrun" in
") targetrun=ssh ;;
esac
case "$targetto" in
") targetto=scp ;;
esac
case "$targetfrom" in
") targetfrom=scp ;;
esac
run=$run-$targetrun
to=$to-$targetto
from=$from-$targetfrom
case "$targetdir" in
")
 targetdir="${TMPDIR:-/tmp}"
 echo "Guessing targetdir $targetdir." >&4
 ;;
esac
```

```
 case "$targetuser" in
 ")
  targetuser=root
  echo "Guessing targetuser $targetuser." >&4
  ;;
 esac
 case "$targetfrom" in
 scp) q=-q ;;
 *) q=" ;;
 esac
 case "$targetrun" in
 ssh|rsh)
  $cat >$run <<EOF
#!/bin/sh
case "\$1" in
-cwd)
 shift
 cwd=\$1
  shift
 ;;
esac
case "\$cwd" in
") cwd=$targetdir ;;
esac
exe=\$1
shift
if $test ! -f \$exe.xok; then
 $to \$exe
 $touch \$exe.xok
fi
$targetrun -l $targetuser $targethost "cd \$cwd && ./\$exe \$@"
EOF
  ;;
 *)  echo "Unknown targetrun '$targetrun'" >&4
     exit 1
     ;;
 esac
 case "$targetmkdir" in
 */Cross/mkdir)
  $cat >$targetmkdir <<EOF
#!/bin/sh
$targetrun -l $targetuser $targethost "mkdir -p \$@"
EOF
     $chmod a+rx $targetmkdir
     ;;
 *)  echo "Unknown targetmkdir '$targetmkdir'" >&4
     exit 1
     ;;
```

```
 esac
 case "$targetto" in
 scp|rcp)
     $cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $targetmkdir \`dirname \$f\`
   $targetto $q \$f $targetuser@$targethost:\$f            || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $targetto $q \$f $targetuser@$targethost:$targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 cp) $cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $mkdir -p $targetdir/\`dirname
 \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 *)  echo "Unknown targetto '$targetto'" >&4
     exit 1
     ;;
 esac
 case "$targetfrom" in
 scp|rcp)
   $cat >$from <<EOF
#!/bin/sh
```

```
for f in \$@
do
 $rm -f \$f
 $targetfrom $q $targetuser@$targethost:$targetdir/\$f . || exit 1
done
exit 0
EOF
    ;;
 cp) $cat >$from <<EOF
#!/bin/sh
for f in \$@
do
 $rm -f \$f
 cp $targetdir/\$f . || exit 1
done
exit 0
EOF
    ;;
 *)  echo "Unknown targetfrom '$targetfrom'" >&4
    exit 1
    ;;
 esac
 if $test ! -f $run; then
    echo "Target 'run' script '$run' not found." >&4
 else
    $chmod a+rx $run
 fi
 if $test ! -f $to; then
    echo "Target 'to' script '$to' not found." >&4
 else
    $chmod a+rx $to
 fi
 if $test ! -f $from; then
    echo "Target 'from' script '$from' not found." >&4
 else
    $chmod a+rx $from
 fi
 if $test ! -f $run -o ! -f $to -o !
 -f $from; then
    exit 1
 fi
 $cat >&4 <<EOF
Using '$run' for remote execution,
and '$from' and '$to'
for remote file transfer.
EOF
@else
 echo "Cross-compilation is not supported for this package." >&4
```

```
 exit 1
@end
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Cross.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmget.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmget: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmget:
?S: This variable conditionally defines the HAS_SHMGET symbol, which
?S: indicates to the C program that the shmget() routine is available.
?S:.
?C:HAS_SHMGET:
?C: This symbol, if defined, indicates that the shmget() routine is
?C: available to request a shared memory segment from
 the kernel.
?C:.
?H:#$d_shmget HAS_SHMGET  /**/
?H:.
?LINT:set d_shmget
: see if shmget exists
set shmget d_shmget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fork.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_fork.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:38  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_fork: Inlibc
?MAKE: -pick add $@ %<
?S:d_fork:
?S: This variable conditionally defines the HAS_FORK symbol, which
?S: indicates to the C program that the fork() routine is available.
?S:.
?C:HAS_FORK :
?C: This symbol, if defined, indicates that the fork routine is
?C: available.
?C:.
?H:#$d_fork
 HAS_FORK  /**/
?H:.
?LINT:set d_fork
: see if fork exists
set fork d_fork
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_remquo: Inlibc
?MAKE: -pick add $@ %<
?S:d_remquo:
?S: This variable conditionally defines the HAS_REMQUO symbol, which
?S: indicates to the C program that the remquo() routine is available.
?S:.
?C:HAS_REMQUO:
?C: This symbol, if defined, indicates that the remquo routine is
?C: available to return the remainder and part of quotient.
?C:.
```

```
?H:#$d_remquo HAS_REMQUO  /**/
?H:.
?LINT:set d_remquo
: see if remquo exists
set remquo d_remquo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_remquo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Nothing.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Nothing.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this file is to supply an empty target for the private
?X: Makefile built by metaconfig to order the units.
?X:
?MAKE:Nothing: Head
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Nothing.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: startperl.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:25:06  ram
?RCS: patch61: warn them if the #! line is too long for their OS
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startperl: cat rm sharpbang perlpath d_portable Myread
?MAKE: -pick add $@ %<
?S:startperl:
?S: This variable contains the string to put on the front of a perl
?S: script to make sure (hopefully) that it runs with perl and not some
?S: shell. Of course, that
 leading line must be followed by the classical
?S: perl idiom:
?S:  eval 'exec perl -S $0 ${1+"$@"}'
?S:   if $running_under_some_shell;
?S: to guarantee perl startup should the shell execute the script. Note
?S: that this magic incantation is not understood by csh.
?S:.
?C:STARTPERL:
?C: This symbol is the string that should be put on the front of a
?C: perl script to make sure (hopefully) that it runs with perl and
?C: not under some shell. That line should be followed by the classical
?C: invocation magic:
?C:  eval 'exec perl -S $0 ${1+"$@"}'
?C:   if $running_under_some_shell;
?C: to guarantee perl startup should the shell execute the script at first.
?C:.
?H:#define STARTPERL "$startperl"
?H:.
?T:pdflt
?F:!xtry
: figure out how to guarantee perl startup
case "$sharpbang" in
*!)
?X:
?X: Make sure the #!$perlpath magic incantation indeed works on this
?X: system... It might not if the length of the #! hook is greater
?X: than some hardwired kernel limit. -- RAM, 15/03/96
?X:
 $cat
 >xtry <<EOP
#!$perlpath
system("exit 0");
EOP
 chmod a+x xtry
 if ./xtry >/dev/null 2>&1; then
  $cat <<EOH

I can use the #! construct to start perl on your system. This will make
```

```
startup of perl scripts faster, but may cause problems if you want to share
those scripts and perl is not in a standard place (/usr/bin/perl) on all your
platforms. The alternative is to force a shell by starting the script with a
single ':' character.

EOH
  pdflt=y
 else
  $cat <<EOH

I could use the #! construct to start perl on your system, but using
   #!$perlpath
would be too long for your kernel to grok. Indeed, most systems do
limit the size of the leading #! string to 32 characters.

EOH
  pdflt=n
 fi
 $rm -f xtry
 case "$startperl" in
 *!*) dflt=y;;
 ") case "$d_portable" in
  "$define") dflt=n;;
  *) dflt=$pdflt;;
  esac;;
 *) dflt=n;;
 esac
 rp='Shall I use #! to start up perl?'
 . ./myread
 case "$ans" in
 y*|Y*) startperl="#!$perlpath";;
 *) startperl=": # use perl";;
 esac;;
*) startperl=":
 # use perl";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/startperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_isinf: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isinf:
?S: This variable conditionally defines the HAS_ISINF symbol, which
?S: indicates to the C program that the isinf() routine is available.
?S:.
?C:HAS_ISINF:
?C: This symbol, if defined, indicates that the isinf routine is
?C: available to check whether a double is an infinity.
?C:.
?H:#$d_isinf HAS_ISINF  /**/
?H:.
?LINT:set d_isinf
: check for isinf
echo "Checking to see if you have isinf..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isinf(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isinf."
else
 val="$undef"
 echo "You do not have isinf."
fi
$rm_try
set d_isinf
eval $setvar
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isinf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_gdbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_gdbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:39  ram
```

```
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_gdbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_gdbm (d_gdbm):
?S: This variable conditionally defines the I_GDBM symbol, which
?S: indicates to the C program that <gdbm.h> exists and should
?S: be included.
?S:.
?C:I_GDBM
 (HAS_GDBM):
?C: This symbol, if defined, indicates that <gdbm.h> exists and should
?C: be included.
?C:.
?H:#$i_gdbm I_GDBM /**/
?H:.
?T:t_gdbm d_gdbm_open
?LINT:set i_gdbm
: see if gdbm.h is available
?X: t_gdbm is a tentative check. We might just have the .h, not the lib -- ADO
set gdbm.h t_gdbm
eval $inhdr
case "$t_gdbm" in
$define)
 : see if gdbm_open exists
 set gdbm_open d_gdbm_open
 eval $inlibc
 case "$d_gdbm_open" in
 $undef)
  t_gdbm="$undef"
  echo "We won't be including <gdbm.h>"
  ;;
 esac
 ;;
esac
val="$t_gdbm"
set i_gdbm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_gdbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Loc_sed.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?X: This is used in perl.c.
?MAKE:full_sed: sed
?MAKE: -pick add $@ %<
?S:full_sed:
?S: This variable contains the full pathname to 'sed', whether or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'sed.'
?S:.
?X: Yes, I know about the C symbol PORTABLE, but I think sed
?X: is
 unlikely to move, and I'm too lazy to add all the
?X: #ifdef PORTABLE sections to the perl source.
?X:
?C:LOC_SED:
?C: This symbol holds the complete pathname to the sed program.
?C:.
?H:#define LOC_SED  "$full_sed" /**/
?H:.
: Store the full pathname to the sed program for use in the C program
full_sed=$sed
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Loc_sed.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dirent.U,v 3.0.1.4 1994/10/29 16:20:01 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_dirent.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:01  ram
```

```
?RCS: patch36: failed scanning for 'd_namlen' with missing <dirent.h> (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:01:25  ram
?RCS: patch30: added direntrytype for hints, merely for NeXT (ADO)
?RCS: patch30: now checks for both struct dirent and direct (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:22:37  ram
?RCS: patch27: new variable direntrytype for proper type setting (ADO)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/01/24  14:11:15  ram
?RCS: patch16: added new Direntry_t pseudo-type for directory entries
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks whether there is a dirent system or not
?X:
?MAKE:i_dirent d_dirnamlen direntrytype: test contains Setvar \
 Myread Findhdr cppstdin cppflags cppminus rm_try
?MAKE: -pick add $@ %<
?S:i_dirent:
?S: This variable conditionally defines I_DIRENT, which indicates
?S: to the C program that it should include <dirent.h>.
?S:.
?S:d_dirnamlen:
?S: This variable conditionally defines DIRNAMLEN, which indicates
?S: to the C program that the length of directory entry names is
?S: provided by a d_namelen field.
?S:.
?S:direntrytype:
?S: This symbol is set to 'struct direct' or 'struct dirent' depending on
?S: whether dirent is available or not. You should use this pseudo type to
?S: portably declare your directory entries.
?S:.
?C:I_DIRENT:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include <dirent.h>. Using this symbol also triggers the definition
?C: of the Direntry_t define which ends up being 'struct dirent' or
?C: 'struct direct' depending on the availability of <dirent.h>.
?C:.
?C:DIRNAMLEN:
?C: This symbol, if defined, indicates to the C program that the length
?C: of directory entry names is provided by a d_namlen field.  Otherwise
?C: you need to do strlen() on the d_name field.
?C:.
```

```
?C:Direntry_t:
?C: This symbol is set to 'struct direct' or 'struct dirent' depending on
?C: whether dirent is available or not. You should use this pseudo type to
?C: portably declare your directory entries.
?C:.
?H:#$i_dirent I_DIRENT  /**/
?H:#$d_dirnamlen DIRNAMLEN /**/
?H:?%<:@if I_DIRENT && Direntry_t
?H:?%<:#define Direntry_t $direntrytype
?H:?%<:@end
?H:.
?T:xinc guess1 guess2
?LINT:set i_dirent d_dirnamlen
: see if this is a dirent system
echo " "
if xinc=`./findhdr dirent.h`; $test "$xinc"; then
 val="$define"
 echo
 "<dirent.h> found." >&4
else
 val="$undef"
 if xinc=`./findhdr sys/dir.h`; $test "$xinc"; then
  echo "<sys/dir.h> found." >&4
  echo " "
 else
  xinc=`./findhdr sys/ndir.h`
 fi
 echo "<dirent.h> NOT found." >&4
fi
set i_dirent
eval $setvar

?X: Use struct dirent or struct direct?   If we're using dirent.h,
?X: it's probably struct dirent, but apparently not always.
?X: Assume $xinc still contains the name of the header file we're using.
@if direntrytype || Direntry_t
: Look for type of directory structure.
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c

case "$direntrytype" in
"|' ')
 case "$i_dirent" in
 $define) guess1='struct dirent' ;;
 *) guess1='struct direct'  ;;
 esac
 ;;
*) guess1="$direntrytype"
```

```
 ;;
esac

case "$guess1" in
'struct dirent') guess2='struct direct' ;;
*) guess2='struct dirent' ;;
esac

if $contains "$guess1" try.c >/dev/null 2>&1; then
 direntrytype="$guess1"
 echo "Your directory entries are $direntrytype." >&4
elif $contains "$guess2"
 try.c >/dev/null 2>&1; then
 direntrytype="$guess2"
 echo "Your directory entries seem to be $direntrytype." >&4
else
 echo "I don't recognize your system's directory entries." >&4
 rp="What type is used for directory entries on this system?"
 dflt="$guess1"
 . ./myread
 direntrytype="$ans"
fi
$rm_try

@end
@if d_dirnamlen || DIRNAMLEN
: see if the directory entry stores field length
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c
if $contains 'd_namlen' try.c >/dev/null 2>&1; then
 echo "Good, your directory entry keeps length information in d_namlen." >&4
 val="$define"
else
 echo "Your directory entry does not know about the d_namlen field." >&4
 val="$undef"
fi
set d_dirnamlen
eval $setvar
$rm_try

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_dirent.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: selecttype.U,v 3.0.1.3 1997/02/28 16:20:09 ram Exp $
?RCS:

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: selecttype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:20:09  ram
?RCS: patch61: always include <sys/select.h> when available for test
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:14:06  ram
?RCS: patch56: removed harmful spaces in assignment
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:31  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:selecttype: Protochk Oldconfig Myread cat
 \
 d_fd_set d_select d_socket i_systime i_sysselct extern_C
?MAKE: -pick add $@ %<
?S:selecttype:
?S: This variable holds the type used for the 2nd, 3rd, and 4th
?S: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?S: is defined, and 'int *' otherwise.  This is only useful if you
?S: have select(), naturally.
?S:.
?C:Select_fd_set_t:
?C: This symbol holds the type used for the 2nd, 3rd, and 4th
?C: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?C: is defined, and 'int *' otherwise.  This is only useful if you
?C: have select(), of course.
?C:.
?H:#define Select_fd_set_t $selecttype /**/
?H:.
?T:xxx nfd tmo try hdrs val
: check for type of arguments to select.
case "$selecttype" in
") case "$d_select" in
 $define)
  echo " "
  $cat <<EOM
Checking to see what type of arguments are accepted by select().
EOM
  hdrs="$define sys/types.h
```

```
  $i_systime sys/time.h
  $i_sysselct sys/select.h
  $d_socket sys/socket.h"
 : The first arg can be int, unsigned,
or size_t
 : The last arg may or may not be 'const'
 val=''
 : void pointer has been seen but using that
 : breaks the selectminbits test
 for xxx in 'fd_set *' 'int *'; do
  for nfd in 'int' 'size_t' 'unsigned long' 'unsigned' ; do
   for tmo in 'struct timeval *' 'const struct timeval *'; do
    case "$val" in
    '') try="$extern_C select _(($nfd, $xxx, $xxx, $xxx, $tmo));"
     if ./protochk "$try" $hdrs; then
      echo "Your system accepts $xxx."
      val="$xxx"
     fi
     ;;
    esac
   done
  done
 done
?X: In the unlikely event that none of those worked, prompt the user.
 case "$val" in
 '') rp='What is the type for the 2nd, 3rd, and 4th arguments to select?'
  case "$d_fd_set" in
   $define) dflt="fd_set *" ;;
   *)  dflt="int *" ;;
  esac
  . ./myread
  val=$ans
  ;;
 esac
 selecttype="$val"
 ;;
*) : no select, so pick a harmless default
 selecttype='int *'
 ;;
esac
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/selecttype.U
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?RCS: Id

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_malloc_size d_malloc_good_size d_malloc_usable_size: Inlibc
?MAKE: -pick add $@ %<
?S:d_malloc_size:
?S: This symbol, if defined, indicates that the malloc_size
?S: routine is available for use.
?S:.
?S:d_malloc_good_size:
?S: This symbol, if defined, indicates that the malloc_good_size
?S: routine is available for use.
?S:.
?S:d_malloc_usable_size:
?S: This symbol, if defined, indicates that the malloc_usable_size
?S: routine is available for use.
?S:.
?C:HAS_MALLOC_SIZE:
?C: This symbol, if defined, indicates that
 the malloc_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_size HAS_MALLOC_SIZE  /**/
?H:.
?C:HAS_MALLOC_GOOD_SIZE:
?C: This symbol, if defined, indicates that the malloc_good_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_good_size HAS_MALLOC_GOOD_SIZE /**/
?H:.
?C:HAS_MALLOC_USABLE_SIZE:
?C: This symbol, if defined, indicates that the malloc_usable_size
?C: routine is available for use.
?C:.
?H:#$d_malloc_usable_size HAS_MALLOC_USABLE_SIZE  /**/
?H:.
?LINT:set d_malloc_size
?LINT:set d_malloc_good_size
?LINT:set d_malloc_usable_size
: see if malloc_size exists
set malloc_size d_malloc_size
eval $inlibc
```

```
: see if malloc_size_good exists
set malloc_good_size d_malloc_good_size
eval $inlibc

: see if malloc_usable_size exists
set malloc_usable_size d_malloc_usable_size
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_malloc_size.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pwrite.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pwrite.U,v $
?RCS:
?MAKE:d_pwrite: Inlibc
?MAKE: -pick add $@ %<
?S:d_pwrite:
?S: This variable conditionally defines the HAS_PWRITE symbol, which
?S: indicates to the C program that the pwrite() routine is available.
?S:.
?C:HAS_PWRITE :
?C: This symbol, if defined, indicates that the pwrite routine is
?C: available to perform writes on a file descriptor at a given offset.
?C:.
?H:#$d_pwrite HAS_PWRITE  /**/
?H:.
?LINT:set d_pwrite
: see if pwrite
 exists
set pwrite d_pwrite
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pwrite.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Cppsym.U,v $
?RCS: Revision 3.0.1.5  1995/05/12  11:59:11  ram
?RCS: patch54: split awk command onto two lines for older awks (ADO)
?RCS:
?RCS: Revision 3.0.1.4  1995/01/11  14:55:57  ram
?RCS: patch45: new cc vs. cpp symbol checking suggested by JHI
?RCS: patch45: added more cpp symbols (JHI)
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  15:51:32  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: new symbols ardent and titan (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20
  06:53:32  ram
?RCS: patch30: extended cpp symbol lookup list (JHI)
?RCS: patch30: renamed attrlist symbol into al for brevity
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:14:14  ram
?RCS: patch15: added new cpp symbols __bsdi__ and BSD_NET2
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script called Cppsym, which can be used to
?X: determine whether any in a list of symbols is defined by the C compilation
?X: chain (C preprocessor symbols plus C compiler native ones).
?X: It can determine the status of any symbol, though the symbols in $al
?X: are more easily determined.  If you want to add to $al you can do
?X: it in Myinit.U.
?X:
?MAKE:Cppsym ccsymbols cppsymbols cppccsymbols: run \
 eunicefix Guess awk cat tr sed sort rm startsh osname \
 +cc gccversion test comm uniq echo Options trnl \
 optimize ccflags ldflags libs
?MAKE: -pick add $@ %<
?S:ccsymbols:
?S: The variable contains the symbols
```

```
 defined by the C compiler alone.
?S: The symbols defined by cpp or by cc when it calls cpp are not in
?S: this list, see cppsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppsymbols:
?S: The variable contains the symbols defined by the C preprocessor
?S: alone.  The symbols defined by cc or by cc when it calls cpp are
?S: not in this list, see ccsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppccsymbols:
?S: The variable contains the symbols defined by the C compiler
?S: when it calls cpp.  The symbols defined by the cc alone or cpp
?S: alone are not in this list, see ccsymbols and cppsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?T:also symbols i postprocess_cc_v flags
?F:./Cppsym
?F:!Cppsym.true !Cppsym.know !ccsym.com !ccsym.cpp !ccsym.own
: determine known pre-processor and compiler symbols
echo " "
$echo "Guessing which symbols your C compiler and preprocessor
 define..." >&4
?X:
?X: The symbol list is in alpha order for ease of maintenance...
?X:
?X: Lots of new symbols (mostly rummaged from gcc), courtesy of
?X: Jarkko Hietaniemi <jhi@snakemail.hut.fi> -- RAM, 06/06/94
?X:
?X: If your symbol is mixed case, just add it as-is.
?X: All symbols will be transformed to both all-lower and all-upper.
?X: Also drop any leading/trailing underscores, the scan will try all those.
?X:
$cat <<'EOSH' > Cppsym.know
a29k ABI64 aegis AES_SOURCE AIX AIX32 AIX370
AIX41 AIX42 AIX43 AIX_SOURCE aixpc ALL_SOURCE
alliant alpha am29000 AM29000 AMD64 amiga AMIGAOS AMIX
ansi ANSI_C_SOURCE apollo ardent ARM32 atarist att386 att3b
BeOS BIG_ENDIAN BIT_MSF bsd BSD bsd43 bsd4_2 bsd4_3 BSD4_3 bsd4_4
BSD_4_3 BSD_4_4 BSD_NET2 BSD_TIME BSD_TYPES BSDCOMPAT bsdi
bull c cadmus clipper CMU COFF COMPILER_VERSION
concurrent convex cpu cray CRAY CRAYMPP ctix CX_UX
CYGWIN DGUX DGUX_SOURCE DJGPP dmert DOLPHIN DPX2 DSO
Dynix DynixPTX ELF encore EPI EXTENSIONS FAVOR_BSD
FILE_OFFSET_BITS
 FreeBSD GCC_NEW_VARARGS gcos gcx gimpel
GLIBC GLIBC_MINOR
```

GNU_SOURCE GNUC GNUC_MINOR GNU_LIBRARY GO32 gould GOULD_PN
H3050R H3050RX hbullx20 hcx host_mips
hp200 hp300 hp700 HP700 hp800 hp9000
hp9000s200 hp9000s300 hp9000s400 hp9000s500
hp9000s700 hp9000s800 hp9k8 hp_osf hppa hpux HPUX_SOURCE
i186 i286 i386 i486 i586 i686 i8086 i80960 i860 I960
IA64 iAPX286 ibm ibm032 ibmesa IBMR2 ibmrt ILP32 ILP64
INLINE_INTRINSICS INTRINSICS INT64 interdata is68k ksr1
LANGUAGE_C LARGE_FILE_API LARGEFILE64_SOURCE
LARGEFILE_SOURCE LFS64_LARGEFILE LFS_LARGEFILE
Linux LITTLE_ENDIAN LONG64 LONG_DOUBLE LONG_LONG
LONGDOUBLE LONGLONG LP64 luna luna88k Lynx
M68000 m68k m88100 m88k M88KBCS_TARGET M_COFF
M_I186 M_I286 M_I386 M_I8086 M_I86 M_I86SM M_SYS3
M_SYS5 M_SYSIII M_SYSV M_UNIX M_XENIX MACH machine MachTen
MATH_HAS_NO_SIDE_EFFECTS
mc300 mc500 mc68000 mc68010 mc68020 mc68030 mc68040
mc68060 mc68k mc68k32 mc700 mc88000 mc88100 merlin
mert MiNT mips MIPS_FPSET MIPS_ISA MIPS_SIM MIPS_SZINT
MIPS_SZLONG
MIPS_SZPTR MIPSEB MIPSEL MODERN_C motorola
mpeix MSDOS MTXINU MULTIMAX mvs MVS n16 ncl_el ncl_mr
NetBSD news1500 news1700 news1800 news1900 news3700
news700 news800 news900 NeXT NLS nonstopux ns16000 ns32000
ns32016 ns32332 ns32k nsc32000
OCS88 OEMVS OpenBSD os OS2 OS390 osf OSF1 OSF_SOURCE
pa_risc PA_RISC1_1 PA_RISC2_0 PARAGON parisc
pc532 pdp11 PGC PIC plexus PORTAR posix
POSIX1B_SOURCE POSIX2_SOURCE POSIX4_SOURCE
POSIX_C_SOURCE POSIX_SOURCE POWER
PROTOTYPES PWB pyr QNX R3000 REENTRANT RES Rhapsody RISC6000
riscix riscos RT S390 SA110 scs SCO sequent sgi SGI_SOURCE SH3 sinix
SIZE_INT SIZE_LONG SIZE_PTR SOCKET_SOURCE SOCKETS_SOURCE
sony sony_news sonyrisc sparc sparclite spectrum
stardent stdc STDC_EXT stratos sun sun3 sun386
Sun386i svr3 svr4 SVR4_2 SVR4_SOURCE svr5
SX system SYSTYPE_BSD SYSTYPE_BSD43 SYSTYPE_BSD44
SYSTYPE_SVR4 SYSTYPE_SVR5 SYSTYPE_SYSV SYSV SYSV3 SYSV4 SYSV5
sysV68 sysV88 Tek4132 Tek4300 titan
TM3200 TM5400 TM5600
tower tower32 tower32_200 tower32_600 tower32_700
tower32_800
tower32_850 tss
u370 u3b u3b2 u3b20 u3b200 u3b20d u3b5
ultrix UMAXV UnicomPBB UnicomPBD UNICOS UNICOSMK
unix UNIX95 UNIX99 unixpc unos
USE_BSD USE_FILE_OFFSET64 USE_GNU USE_ISOC9X USE_LARGEFILE USE_LARGEFILE64
USE_MISC USE_POSIX USE_POSIX199309 USE_POSIX199506 USE_POSIX2

```
USE_REENTRANT USE_SVID USE_UNIX98 USE_XOPEN USE_XOPEN_EXTENDED
USGr4 USGr4_2
Utek UTek UTS UWIN uxpm uxps vax venix VMESA vms xenix Xenix286
XOPEN_SOURCE XOPEN_SOURCE_EXTENDED XPG2 XPG2_EXTENDED
XPG3 XPG3_EXTENDED XPG4 XPG4_EXTENDED
z8000
EOSH
?X: Maybe put other stuff here too.
cat <<EOSH >>Cppsym.know
$osname
EOSH
./tr '[a-z]' '[A-Z]' < Cppsym.know > Cppsym.a
./tr '[A-Z]' '[a-z]' < Cppsym.know > Cppsym.b
$cat Cppsym.know > Cppsym.c
$cat Cppsym.a Cppsym.b Cppsym.c | $tr ' ' $trnl | $sort | $uniq > Cppsym.know
$rm -f Cppsym.a Cppsym.b Cppsym.c
cat <<EOSH > Cppsym
$startsh
if $test \$# -gt 0; then
   echo \$* | $tr " " "$trnl" | ./Cppsym.try > Cppsym.got
   if $test -s Cppsym.got; then
       $rm -f Cppsym.got
        exit 0
   fi
   $rm -f Cppsym.got
   exit 1
else
   $tr " " "$trnl" | ./Cppsym.try
   exit 0
fi
EOSH
chmod +x Cppsym
$eunicefix Cppsym
?X: The below awk script will die a horrible death if
?X: some of the tested symbols are not long ints.
?X: Also, we do not make difference between just defined and defined zero.
cat <<EOSH > Cppsym.try
$startsh
cat <<'EOCP' > try.c
#include <stdio.h>
int main() {
EOCP
?X: The length($1) command guards against possible empty entries.
?X: The awk snippet is know to give heartburn to UNICOS/mk awk.
$awk \\
EOSH
cat <<'EOSH' >> Cppsym.try
'length($1) > 0 {
```

```
   printf "#ifdef %s\n#if %s+0\nprintf(\"%s=%%ld\\n\", (long)%s);\n#else\nprintf(\"%s\\n\");\n#endif\n#endif\n", $1,
$1, $1, $1, $1
   printf "#ifdef _%s\n#if _%s+0\nprintf(\"_%s=%%ld\\n\",
(long)_%s);\n#else\nprintf(\"_%s\\n\");\n#endif\n#endif\n", $1, $1, $1, $1, $1
   printf "#ifdef __%s\n#if __%s+0\nprintf(\"__%s=%%ld\\n\",
(long)__%s);\n#else\nprintf(\"__%s\\n\");\n#endif\n#endif\n",
 $1, $1, $1, $1, $1
   printf "#ifdef __%s__\n#if __%s__+0\nprintf(\"__%s__=%%ld\\n\",
(long)__%s__);\n#else\nprintf(\"__%s__\\n\");\n#endif\n#endif\n", $1, $1, $1, $1, $1
}'  >> try.c
echo 'return 0;}' >> try.c
EOSH
cat <<EOSH >> Cppsym.try
flags="$ccflags"
case "$osname-$gccversion" in
irix-) flags="\$flags -woff 1178" ;;
os2-*) flags="\$flags -Zlinker /PM:VIO" ;;
esac
$cc -o try $optimize \$flags $ldflags try.c $libs && $run ./try
EOSH
chmod +x Cppsym.try
$eunicefix Cppsym.try
./Cppsym < Cppsym.know > Cppsym.true
: now check the C compiler for additional symbols
?X: suggested by Jarkko Hietaniemi <jhi@snakemail.hut.fi>, thanks!
postprocess_cc_v="
case "$osname" in
aix) postprocess_cc_v="|$tr , ' '" ;;
esac
$cat >ccsym <<EOS
$startsh
$cat >tmp.c <<EOF
extern int foo;
EOF
for i in \`$cc -v -c tmp.c 2>&1 $postprocess_cc_v\`
do
 case "\$i" in
 -D*) echo "\$i" | $sed 's/^-D//';;
 -A*) $test "$gccversion" && echo "\$i" | $sed 's/^-A//' | $sed 's/\(.*\)(\(.*\))/\1=\2/';;
 esac
done
$rm
 -f try.c
EOS
postprocess_cc_v="
chmod +x ccsym
$eunicefix ccsym
./ccsym > ccsym1.raw
```

```
?X: AIX complains if $uniq is passed an empty file.  ($sort apparently
?X: doesn't care.)  --AD  14 July 1998
if $test -s ccsym1.raw; then
	$sort ccsym1.raw | $uniq >ccsym.raw
else
	mv ccsym1.raw ccsym.raw
fi

?X: canonicalize symbols for easier sort/uniq/comm usage: append =1 if no = sign
?X: the awk script must be on two lines for older awk programs, sigh! -- ADO
$awk '/\=/ { print $0; next }
 { print $0"=1" }' ccsym.raw >ccsym.list
$awk '/\=/ { print $0; next }
 { print $0"=1" }' Cppsym.true >ccsym.true
$comm -13 ccsym.true ccsym.list >ccsym.own
$comm -12 ccsym.true ccsym.list >ccsym.com
$comm -23 ccsym.true ccsym.list >ccsym.cpp
also=''
if $test -z ccsym.raw; then
 echo "Your C compiler doesn't seem to define any symbols!" >&4
 echo " "
 echo "However, your C preprocessor defines the following symbols:"
 $cat Cppsym.true
    ccsymbols=''
 cppsymbols=`$cat Cppsym.true`
       cppsymbols=`echo
 $cppsymbols`
 cppccsymbols="$cppsymbols"
else
 if $test -s ccsym.com; then
  echo "Your C compiler and pre-processor define these symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.com
  also='also '
  symbols='ones'
  cppccsymbols=`$cat ccsym.com`
  cppccsymbols=`echo $cppccsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.cpp; then
  $test "$also" && echo " "
  echo "Your C pre-processor ${also}defines the following symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.cpp
  also='further '
  cppsymbols=`$cat ccsym.cpp`
  cppsymbols=`echo $cppsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.own; then
```

```
  $test "$also" && echo " "
  echo "Your C compiler ${also}defines the following cpp symbols:"
  $sed -e 's/\(..*\)=1/\1/' ccsym.own
  $sed -e 's/\(..*\)=.*/\1/' ccsym.own | $uniq >>Cppsym.true
        ccsymbols=`$cat ccsym.own`
        ccsymbols=`echo $ccsymbols`
  $test "$silent" || sleep 1
 fi
fi
$rm -f Cppsym.know Cppsym.true
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Cppsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?MAKE:gccversion gccosandvers: cat cpp rm +cc \
 Myread Guess Options Oldconfig Loc osname osvers grep run ccname
?MAKE: -pick add $@ %<
?S:gccversion:
?S: If GNU cc (gcc) is used, this variable holds '1' or '3' (for instance)
?S: to indicate whether the compiler is version 1 or 3.  This is used in
?S: setting some of the default cflags.  It is set to '' if not gcc.
?S:.
?S:gccosandvers:
?S: If GNU cc (gcc) is used, this variable the operating system and
?S: version
 used to compile the gcc.  It is set to '' if not gcc,
?S: or if nothing useful can be parsed as the os version.
?S:.
?T:gccshortvers incdir d
?F:!try.c !try
?LINT:extern locincpth ccflags ldflags
?LINT:change locincpth ccname cpp
: Check whether they have gcc in any guise.
echo " "
echo "Checking for GNU cc in disguise and/or its version number..." >&4
```

```
$cat >try.c <<EOM
#include <stdio.h>
int main() {
#ifdef __GNUC__
#ifdef __VERSION__
 printf("%s\n", __VERSION__);
#else
 printf("%s\n", "1");
#endif
#endif
 exit(0);
}
EOM
if $cc -o try $ccflags $ldflags try.c >/dev/null 2>&1; then
 gccversion=`$run ./try`
 case "$gccversion" in
 ") echo "You are not using GNU cc." ;;
 *)  echo "You are using GNU cc $gccversion."
     ccname=gcc
     ;;
 esac
else
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to be working!" >&4
?X: using -K will prevent aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
 echo "    You'd better
 start hunting for one and let me know about it." >&4
  exit 1
  ;;
 esac
fi
$rm -f try try.*
case "$gccversion" in
1*) cpp=`./loc gcc-cpp $cpp $pth` ;;
esac
case "$gccversion" in
") gccosandvers=" ;;
*) gccshortvers=`echo "$gccversion"|sed 's/ .*//'`
  gccosandvers=`$cc -v 2>&1 | \
 $grep '/specs$'|sed "s!.*/[^-/]*-[^-/]*-\([^-/]*\)/$gccshortvers/specs!\1!"`
  gccshortvers="
  case "$gccosandvers" in
  $osname) gccosandvers=" ;; # linux gccs seem to have no linux osvers, grr
  $osname$osvers) ;; # looking good
  $osname*) cat <<EOM >&4
```

```
*** WHOA THERE!!! ***

   Your gcc has not been compiled for the exact release of
   your operating system ($gccosandvers versus $osname$osvers).

   In general it is a good idea to keep gcc synchronized with
   the operating system because otherwise serious problems
   may ensue when trying to compile software, like Perl.

   I'm trying to be optimistic here, though, and will continue.
   If later during the configuration and build icky
 compilation
   problems appear (headerfile conflicts being the most common
   manifestation), I suggest reinstalling the gcc to match
   your operating system release.

EOM
     ;;
  *) gccosandvers=" ;; # failed to parse, better be silent
  esac
  ;;
esac
case "$ccname" in
") ccname="$cc" ;;
esac

: gcc 3.1 complains about adding -Idirectories that it already knows about,
: so we will take those off from locincpth.
case "$gccversion" in
3*)
   echo "main(){}">try.c
   for incdir in `$cc -v -c try.c 2>&1 | \
      sed '1,/^#include <\.\.\.>/d;/^End of search list/,$d;s/^ //'` ; do
      locincpth=`echo $locincpth | sed s!$incdir!!`
   done
   $rm -f try try.*
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/gccvers.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Cppsym.U,v 3.0.1.5 1995/05/12 11:59:11 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Cppsym.U,v $
?RCS: Revision 3.0.1.5  1995/05/12  11:59:11  ram
?RCS: patch54: split awk command onto two lines for older awk's (ADO)
?RCS:
?RCS: Revision 3.0.1.4  1995/01/11  14:55:57  ram
?RCS: patch45: new cc vs. cpp symbol checking suggested by JHI
?RCS: patch45: added more cpp symbols (JHI)
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  15:51:32  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: new symbols ardent and titan (ADO)
?RCS:
?RCS:
 Revision 3.0.1.2  1994/06/20  06:53:32  ram
?RCS: patch30: extended cpp symbol lookup list (JHI)
?RCS: patch30: renamed attrlist symbol into al for brevity
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:14:14  ram
?RCS: patch15: added new cpp symbols __bsdi__ and BSD_NET2
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: This unit produces a shell script called Cppsym, which can be used to
?X: determine whether any in a list of symbols is defined by the C compilation
?X: chain (C preprocessor symbols plus C compiler native ones).
?X: It can determine the status of any symbol, though the symbols in $al
?X: are more easily determined.  If you want to add to $al you can do
?X: it in Myinit.U.
?MAKE:Cppsym ccsymbols cppsymbols cppccsymbols: run \
 eunicefix Guess awk cat tr sed sort rm rm_try startsh osname \
 +cc +gccversion test comm uniq echo Options trnl \
 optimize ccflags ldflags libs cpp_stuff cpp
?MAKE: -pick add $@ %<
?T:also
 symbols i postprocess_cc_v tHdrH
?X:
?X: The symbol list is in alpha order for ease of maintenance...
?X:
?X: Lots of new symbols (mostly rummaged from gcc), courtesy of
?X: Jarkko Hietaniemi <jhi@snakemail.hut.fi> -- RAM, 06/06/94
?X:
?S:ccsymbols:
```

```
?S: The variable contains the symbols defined by the C compiler alone.
?S: The symbols defined by cpp or by cc when it calls cpp are not in
?S: this list, see cppsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppsymbols:
?S: The variable contains the symbols defined by the C preprocessor
?S: alone.  The symbols defined by cc or by cc when it calls cpp are
?S: not in this list, see ccsymbols and cppccsymbols.
?S: The list is a space-separated list of symbol=value tokens.
?S:.
?S:cppccsymbols:
?S: The variable contains the symbols defined by the C compiler
?S: when it calls cpp.  The symbols defined by the cc alone or cpp
?S: alone are not in this list, see ccsymbols and cppsymbols.
?S: The
 list is a space-separated list of symbol=value tokens.
?S:.
?F:./Cppsym
?F:./Cppsym.know
?F:!Cppsym.true
?F:!ccsym.com
?F:!ccsym.cpp
?F:!ccsym.own
?X: fake LINT hints
?LINT:change ccflags
?LINT:extern s
?LINT:extern s__
: Preprocessor symbols
echo " "
$echo "Guessing which symbols your C compiler and preprocessor define..." >&4
?X: If your symbol is mixed case, just add it as-is.
?X: All symbols will be transformed to both all-lower and all-upper.
?X: Also drop any leading/trailing underscores, the scan will try all those.
$cat <<'EOSH' > Cppsym.know
a29k aarch64 ABI64 aegis AES_SOURCE AIX AIX32 AIX370 AIX41 AIX42
AIX43 aixpc AIX_SOURCE alliant ALL_SOURCE alpha AM29000 am29000
AMD64 amd64 amiga AMIGAOS AMIX ansi ANSI_C_SOURCE apollo arch_ppc
arch_pwr ardent ARM ARM32 atarist att386 att3b
BeOS BIG_ENDIAN BIT_MSF BSD bsd bsd43 bsd4_2 BSD4_3 bsd4_3 bsd4_4
BSDCOMPAT bsdi BSD_4_3 BSD_4_4 BSD_NET2 BSD_TIME BSD_TYPES bull
byteorder byte_order
c cadmus clang clipper CMU COFF COMPILER_VERSION
 concurrent
convex cpu CRAY cray CRAYMPP ctix CX_UX CYGWIN
DECC DGUX DGUX_SOURCE DJGPP dmert DOLPHIN DPX2 DSO Dynix DynixPTX
ELF encore EPI EXTENSIONS
FAVOR_BSD FILE_OFFSET_BITS FORTIFY_SOURCE FreeBSD
```

GCC_NEW_VARARGS gcos gcx gimpel GLIBC GLIBC_MINOR GNUC GNUC_MINOR
GNU_LIBRARY GNU_SOURCE GO32 gould GOULD_PN
H3050R H3050RX hbullx20 hcx host_mips hp200 hp300 HP700 hp700
hp800 hp9000 hp9000s200 hp9000s300 hp9000s400
hp9000s700 hp9000s800 hp9k8 hppa hpux HPUX_SOURCE hp_osf
i186 i286 i386 i486 i586 i686 i8086 i80960 i860 I960 IA32 IA64
iAPX286 ibm ibm032 ibmesa IBMR2 ibmrt ILP32 ILP64
INLINE_INTRINSICS INT64 INTEL interdata INTRINSICS is68k itanium
ksr1
LANGUAGE_C LARGEFILE64_SOURCE LARGEFILE_SOURCE LARGE_FILE_API
LFS64_LARGEFILE LFS_LARGEFILE LIBCATAMOUNT Linux LITTLE_ENDIAN
LONG64 LONGDOUBLE LONGLONG LONG_DOUBLE LONG_LONG LP64 luna
luna88k Lynx
M68000 m68k m88100 m88k M88KBCS_TARGET MACH machine MachTen
MATH_HAS_NO_SIDE_EFFECTS mc300 mc500 mc68000 mc68010 mc68020
mc68030 mc68040 mc68060
mc68k mc68k32 mc700 mc88000 mc88100
merlin mert MiNT mips MIPSEB MIPSEL MIPS_FPSET MIPS_ISA MIPS_SIM
MIPS_SZINT MIPS_SZLONG MIPS_SZPTR MODERN_C motorola MSDOS
MTXINU MULTIMAX MVS mvs M_AMD64 M_ARM M_ARMT M_COFF M_I186 M_I286
M_I386 M_I8086 M_I86 M_I86SM M_IA64 M_IX86 M_PPC M_SYS3 M_SYS5
M_SYSIII M_SYSV M_UNIX M_X86 M_XENIX
n16 ncl_el ncl_mr NetBSD news1500 news1700 news1800 news1900
news3700 news700 news800 news900 NeXT NLS nonstopux ns16000
ns32000 ns32016 ns32332 ns32k nsc32000
OCS88 OEMVS OpenBSD os OS2 OS390 osf OSF1 OSF_SOURCE
PARAGON parisc pa_risc PA_RISC1_1 PA_RISC2_0 pc532 pdp11 PGC PIC
plexus PORTAR posix POSIX1B_SOURCE POSIX2_SOURCE POSIX4_SOURCE
POSIX_C_SOURCE POSIX_SOURCE POWER powerpc ppc PROTOTYPES PWB pyr
QK_USER QNX
R3000 REENTRANT RES Rhapsody RISC6000 riscix riscos RT
S390 S390x SA110 SCO scs sequent sgi SGI_SOURCE SH SH3 sinix
SIZE_INT SIZE_LONG SIZE_PTR SOCKETS_SOURCE SOCKET_SOURCE sony
sonyrisc sony_news sparc sparclite sparcv8 sparcv9 spectrum
stardent stdc
STDC_EXT stratos sun sun3 sun386 Sun386i svr3 svr4
SVR4_2 SVR4_SOURCE svr5 SX system SYSTYPE_BSD SYSTYPE_BSD43
SYSTYPE_BSD44 SYSTYPE_SVR4 SYSTYPE_SVR5 SYSTYPE_SYSV SYSV SYSV3
SYSV4 SYSV5 sysV68 sysV88
Tek4132 Tek4300 thumb thw_370 thw_intel thw_rs6000 titan TM3200
TM5400 TM5600 tower tower32 tower32_200 tower32_600 tower32_700
tower32_800 tower32_850 tss
u370 u3b u3b2 u3b20 u3b200 u3b20d u3b5 ultrix UMAXV UnicomPBB
UnicomPBD UNICOS UNICOSMK unix UNIX95 UNIX99 unixpc unos USE_BSD
USE_FILE_OFFSET64 USE_GNU USE_ISOC9X USE_LARGEFILE
USE_LARGEFILE64 USE_MISC USE_POSIX USE_POSIX199309
USE_POSIX199506 USE_POSIX2 USE_REENTRANT USE_SVID USE_UNIX98
USE_XOPEN USE_XOPEN_EXTENDED USGr4 USGr4_2 UTek Utek UTS UWIN

```
uxpm uxps
vax venix VMESA vms
x86_64 xenix Xenix286 XOPEN_SOURCE XOPEN_SOURCE_EXTENDED XPG2
XPG2_EXTENDED XPG3 XPG3_EXTENDED XPG4 XPG4_EXTENDED
z8000 zarch
EOSH
# Maybe put other stuff here too.
?X:Some OS's will have a dash in their $osname
?X:e.g. Android is known as linux-android
?X:The
 preprocessor will interpret the dash as a minus
./tr '-' '_' <<EOSH >>Cppsym.know
$osname
EOSH
./tr '[a-z]' '[A-Z]' < Cppsym.know > Cppsym.a
./tr '[A-Z]' '[a-z]' < Cppsym.know > Cppsym.b
$cat Cppsym.know > Cppsym.c
$cat Cppsym.a Cppsym.b Cppsym.c | $tr ' ' $trnl | $sort | $uniq > Cppsym.know
$rm -f Cppsym.a Cppsym.b Cppsym.c
cat <<EOSH > Cppsym
$startsh
if $test \$# -gt 0; then
   echo \$* | $tr " " "$trnl" | ./Cppsym.try > Cppsym.got
   if $test -s Cppsym.got; then
 $rm -f Cppsym.got
 exit 0
   fi
   $rm -f Cppsym.got
   exit 1
else
   $tr " " "$trnl" | ./Cppsym.try
   exit 0
fi
EOSH
chmod +x Cppsym
$eunicefix Cppsym
?X: The below awk script will die a horrible death if
?X: some of the tested symbols are not long ints.
?X: Also, we do not make difference between just defined and defined zero.
cat <<EOSH > Cppsym.try
$startsh
cat <<'EOCP' > try.c
#include <stdio.h>
#if cpp_stuff == 1
#define STRINGIFY(a)    "a"
#endif
#if cpp_stuff == 42
#define StGiFy(a)  #a
```

```
#define STRINGIFY(a)
   StGiFy(a)
#endif
#if $cpp_stuff != 1 && $cpp_stuff != 42
#   include "Bletch: How does this C preprocessor stringify macros?"
#endif
int main() {
EOCP
?X: The length($1) command guards against possible empty entries.
?X: The awk snippet is know to give heartburn to UNICOS/mk awk.
$awk \\
EOSH
cat <<'EOSH' >> Cppsym.try
'length($1) > 0 {
   printf "#ifdef %s\nprintf(\"%s=%%s\\n\", STRINGIFY(%s));\n#endif\n", $1, $1, $1
   printf "#ifdef _%s\nprintf(\"_%s=%%s\\n\", STRINGIFY(_%s));\n#endif\n", $1, $1, $1
   printf "#ifdef __%s\nprintf(\"__%s=%%s\\n\", STRINGIFY(__%s));\n#endif\n", $1, $1, $1
   printf "#ifdef __%s__\nprintf(\"__%s__=%%s\\n\", STRINGIFY(__%s__));\n#endif\n", $1, $1, $1
}' >> try.c
echo 'return 0;}' >> try.c
EOSH
cat <<EOSH >> Cppsym.try
ccflags="$ccflags"
case "$osname-$gccversion" in
irix-) ccflags="\$ccflags -woff 1178" ;;
os2-*) ccflags="\$ccflags -Zlinker /PM:VIO" ;;
esac
$cc -o try -Dcpp_stuff=$cpp_stuff $optimize \$ccflags $ldflags try.c $libs 2>/dev/null
 && $run ./try | $sed 's/ /\\\\ /g'
EOSH
chmod +x Cppsym.try
$eunicefix Cppsym.try
./Cppsym < Cppsym.know | $sort | $uniq > Cppsym.true
: Add in any Linux cpp "predefined macros":
case "$osname::$gccversion" in
 *linux*::*.*|*gnukfreebsd*::*.*|gnu::*.*)
   tHdrH=_tmpHdr
   rm -f $tHdrH'.h' $tHdrH
   touch $tHdrH'.h'
   # Filter out macro arguments, such as Linux's __INT8_C(c)
   if $cpp -dM $tHdrH'.h' > $tHdrH'_cppsym.h' && [ -s $tHdrH'_cppsym.h' ]; then
      sed -e 's/#define[\ \  ]*//;s/[\ \     ].*$//' -e 's/(.*//' <$tHdrH'_cppsym.h' >$tHdrH'_cppsym.real'
      if [ -s $tHdrH'_cppsym.real' ]; then
   cat $tHdrH'_cppsym.real' Cppsym.know | sort | uniq | ./Cppsym | sort | uniq > Cppsym.true
      fi
   fi
   rm -f $tHdrH'.h' $tHdrH'_cppsym.h' $tHdrH'_cppsym.real'
 ;;
```

```
esac
: now check the C compiler for additional symbols
?X: suggested by Jarkko Hietaniemi <jhi@snakemail.hut.fi>, thanks!
postprocess_cc_v="
case "$osname" in
aix) postprocess_cc_v="|$tr , ' '" ;;
esac
$cat >ccsym
 <<EOS
$startsh
$cat >tmp.c <<EOF
extern int foo;
EOF
for i in \`$cc -v -c tmp.c 2>&1 $postprocess_cc_v\`
do
 case "\$i" in
 -D*) echo "\$i" | $sed 's/^-D//';;
 -A*) $test "$gccversion" && echo "\$i" | $sed 's/^-A//' | $sed 's/\(.*\)(\(.*\))/\1=\2/';;
 esac
done
$rm_try
EOS
postprocess_cc_v="
chmod +x ccsym
$eunicefix ccsym
./ccsym > ccsym1.raw
?X: AIX complains if $uniq is passed an empty file.  ($sort apparently
?X: doesn't care.)  --AD  14 July 1998
if $test -s ccsym1.raw; then
   $sort ccsym1.raw | $uniq >ccsym.raw
else
   mv ccsym1.raw ccsym.raw
fi

?X: canonicalize symbols for easier sort/uniq/comm usage: append =1 if no = sign
?X: the awk script must be on two lines for older awk programs, sigh! -- ADO
$awk '/\=/ { print $0; next }
 { print $0"=1" }' ccsym.raw >ccsym.list
$comm -13 Cppsym.true ccsym.list >ccsym.own
$comm -12 Cppsym.true ccsym.list >ccsym.com
$comm -23 Cppsym.true ccsym.list >ccsym.cpp
also="
if $test -z ccsym.raw; then
 echo "Your C compiler doesn't seem
 to define any symbols!" >&4
 echo " "
 echo "However, your C preprocessor defines the following symbols:"
 $cat Cppsym.true
```

```
 ccsymbols=''
 cppsymbols=`$cat Cppsym.true`
 cppsymbols=`echo $cppsymbols`
 cppccsymbols="$cppsymbols"
else
 if $test -s ccsym.com; then
  echo "Your C compiler and pre-processor define these symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.com
  also='also '
  symbols='ones'
  cppccsymbols=`$cat ccsym.com`
  cppccsymbols=`echo $cppccsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.cpp; then
  $test "$also" && echo " "
  echo "Your C pre-processor ${also}defines the following symbols:"
  $sed -e 's/\(..*\)=.*/\1/' ccsym.cpp
  also='further '
  cppsymbols=`$cat ccsym.cpp`
  cppsymbols=`echo $cppsymbols`
  $test "$silent" || sleep 1
 fi
 if $test -s ccsym.own; then
  $test "$also" && echo " "
  echo "Your C compiler ${also}defines the following cpp symbols:"
  $sed -e 's/\(..*\)=1/\1/' ccsym.own
  $sed -e 's/\(..*\)=.*/\1/' ccsym.own | $uniq >>Cppsym.true
  ccsymbols=`$cat
 ccsym.own`
  ccsymbols=`echo $ccsymbols`
  $test "$silent" || sleep 1
 fi
fi

: add -D_FORTIFY_SOURCE if feasible and not already there
case "$gccversion" in
[456789].*|[1-9][0-9]*) case "$optimize$ccflags" in
 *-O*) case "$ccflags$cppsymbols" in
  *_FORTIFY_SOURCE=*) # Don't add it again.
   echo "You seem to have -D_FORTIFY_SOURCE already, not adding it." >&4
   ;;
  *) echo "Adding -D_FORTIFY_SOURCE=2 to ccflags..." >&4
   ccflags="$ccflags -D_FORTIFY_SOURCE=2"
   ;;
  esac
  ;;
 *) echo "You have gcc 4.* or later but not optimizing, not adding -D_FORTIFY_SOURCE." >&4
```

```
  ;;
 esac
 ;;
*) echo "You seem not to have gcc 4.* or later, not adding -D_FORTIFY_SOURCE." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Cppsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_nolnbuf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_nolnbuf.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  14:46:07  ram
?RCS: patch23: avoid looping in the "see that again?" prompt (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_nolnbuf: test +cc cat rm Setvar Myread
?MAKE: -pick add $@ %<
?S:d_nolnbuf:
?S: This variable conditionally defines the NOLINEBUF symbol, which
?S: indicates to the C program that stdout is not buffered, so that
?S: the
 program can call setbuf() or setlinebuf() for efficiency.
?S:.
?C:NOLINEBUF:
?C: This symbol, if defined, indicates that stdout is not buffered, so that
?C: the program can call setbuf() or setlinebuf() for efficiency.
?C:.
?H:#$d_nolnbuf NOLINEBUF /**/
?H:.
?T:xxx
?F:!blurfl
?LINT:set d_nolnbuf
: check for buffering of stdout
echo " "
case "$d_nolnbuf" in
```

```
")
 $cat <<'EOT' >blurfl.c
#include <stdio.h>
int main()
{
 int i;

 for (i = 0; i < 5; i++) {
  putchar(i+'a');
  sleep(1);
 }
 putchar('\n');
}
EOT
 $cc -o blurfl blurfl.c >/dev/null 2>&1;
 $rm -f blurfl.c
 $cat >&4 <<'EOM'
Checking for buffering of stdout to terminal.

Observe the following characters as they are printed out, to see whether they
print out all at once, or with a 1 second pause between each of them.  If they
print out one by one, you don't have buffering.  If they print together (after
about a 5 second pause), you do have buffering.

EOM
 dflt='Type return to start printing the test characters'
 rp="
 .
 ./myread
 xxx=y
 while $test "$xxx" = 'y'; do
  ./blurfl 1>&4
  dflt=n
  rp='Would you like to see that again?'
  . ./myread
  case "$ans" in
  [yY]*) xxx="y";;
  *) xxx="n";;
  esac
 done
 dflt=y
 rp="Do you have buffering (printed all at once)?"
 . ./myread
 case "$ans" in
 n*) val="$define";;
 *)  val="$undef";;
 esac
 ;;
```

```
*)
 case "$d_nolnbuf" in
 "$define") dflt=n;;
 *) dflt=y;;
 esac
 rp="Do you have buffering on stdout to terminals?"
 . ./myread
 case "$ans" in
 n*) val="$define";;
 *)  val="$undef";;
 esac
 ;;
esac
set d_nolnbuf
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_nolnbuf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitearch.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitearch.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:21:30  ram
?RCS: patch61: created
?RCS:
?MAKE:sitearch sitearchexp installsitearch d_sitearch: cat sed Getfile \
 Oldconfig Setprefixvar Prefixit test archname sitelib
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitearch="
?S:sitearch:
?S: This variable contains the eventual
 value of the SITEARCH symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
```

```
?S: this directory while performing installation (with ~ substitution).
?S: The standard distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: architecture-dependent modules in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitearchexp="
?S:sitearchexp:
?S: This variable is the ~name expanded version of sitearch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installsitearch="
?S:installsitearch:
?S: This variable is really the same as sitearchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?D:d_sitearch="
?S:d_sitearch:
?S: This variable conditionally defines SITEARCH to hold the
 pathname
?S: of architecture-dependent library files for $package.  If
?S: $sitearch is the same as $archlib, then this is set to undef.
?S:.
?C:SITEARCH:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: After perl has been installed, users may install their own local
?C: architecture-dependent modules in this directory with
?C:  MakeMaker Makefile.PL
?C: or equivalent.  See INSTALL for details.
?C:.
?C:SITEARCH_EXP:
?C: This symbol contains the ~name expanded version of SITEARCH, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_sitearch SITEARCH "$sitearch"  /**/
?H:#$d_sitearch SITEARCH_EXP "$sitearchexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installsitearch
?LINT:set
 sitearch
?LINT:set sitearchexp
```

```
: determine where site specific architecture-dependent libraries go.
: sitelib  default is /usr/local/lib/perl5/site_perl/$version
: sitearch default is /usr/local/lib/perl5/site_perl/$version/$archname
: sitelib may have an optional trailing /share.
case "$sitearch" in
") dflt=`echo $sitelib | $sed 's,/share$,,'`
 dflt="$dflt/$archname"
 ;;
*) dflt="$sitearch"
 ;;
esac
set sitearch sitearch none
eval $prefixit
$cat <<EOM

The installation process will also create a directory for
architecture-dependent site-specific extensions and modules.

EOM
fn=d~+
rp='Pathname for the site-specific architecture-dependent library files?'
. ./getfile
prefixvar=sitearch
. ./setprefixvar
if $test X"$sitearch" = X"$sitelib"; then
 d_sitearch="$undef"
else
 d_sitearch="$define"
fi

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitearch.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: libnm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libnm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:08:26  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:09:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libnm: test Loc libpth _a
?MAKE: -pick add $@ %<
?S:libnm:
?S: This variable contains the argument to pass to the loader in order
?S: to get the new math library routines.  If there is no new math
?S: library, it is null.
?S:.
?T:ans
?O:
 use libswanted='-lnm' instead (see libs.U).
: see if we should include -lnm
echo " "
if $test -r /usr/lib/libnm$_a || $test -r /usr/local/lib/libnm$_a ; then
 echo "New math library found." >&4
 libnm='-lnm'
else
 ans=`./loc libnm$_a x $libpth`
 case "$ans" in
 x)
  echo "No nm library found--the normal math library will have to do." >&4
  libnm=''
  ;;
 *)
  echo "New math library found in $ans." >&4
  libnm="$ans"
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libnm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: maildir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: maildir.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:21:56  ram
```

```
?RCS: patch15: now also looks under /var/mail for BSD/386
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:maildir maildirexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:maildir:
?S: This variable contains the name of the directory in which mail is
?S: spooled. Programs using this variable must be prepared to deal with
?S: ~name
 substitutions.
?S:.
?S:maildirexp:
?S: This is the same as the maildir variable, but is filename expanded
?S: at configuration time, for programs not willing to deal with it at
?S: run-time.
?S:.
: determine where mail is spooled
case "$maildir" in
") dflt=`./loc . /usr/spool/mail /usr/spool/mail /usr/mail /var/mail`;;
*) dflt="$maildir";;
esac
echo " "
fn=d~
rp='Where is yet-to-be-read mail spooled?'
. ./getfile
maildir="$ans"
maildirexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/maildir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_xdrs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_xdrs.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_xdrs: cat Csym Setvar
?MAKE: -pick add $@ %<
?S:d_xdrs:
?S: This symbol conditionally defines HAS_XDRS which indicates to the C
?S: program that XDR serialization routines are available.
?S:.
?C:HAS_XDRS (XDRS):
?C: This symbol if defined indicates to the C program that the XDR
?C: serialization routines are available to transfer data
 accross
?C: various architectures.
?C:.
?H:#$d_xdrs HAS_XDRS /**/
?H:.
?LINT:set d_xdrs
: see if XDR is available
echo " "
if set xdr_int val -f d_xdrs; eval $csym; $val; then
 echo "Ahh! You have XDR routines for network communications." >&4
 val="$define"
else
 $cat >&4 <<EOM
Sigh! You do not have XDR routines -- Network communications may be hazardous.
EOM
 val="$undef"
fi
set d_xdrs
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_xdrs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: voidflags.U,v 3.0.1.2 1997/02/28 16:27:58 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: voidflags.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:27:58  ram
?RCS: patch61: don't prompt them if the void support is high enough for us
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:37:44  ram
```

```
?RCS: patch45: cosmetic change to avoid spurious blank lines when using -s
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:voidflags defvoidused: cat rm_try compiler_warning +cc +ccflags package \
 Oldconfig
 Myread i_stdlib
?MAKE: -pick add $@ %<
?S:voidflags:
?S: This variable contains the eventual value of the VOIDFLAGS symbol,
?S: which indicates how much support of the void type is given by this
?S: compiler.  See VOIDFLAGS for more info.
?S:.
?S:defvoidused:
?S: This variable contains the default value of the VOIDUSED symbol (15).
?S:.
?X: Exceptionally, we have to explicitly alias the symbol name for
?X: config_h.SH, otherwise the comment would not appear.
?C:VOIDFLAGS ~ %<:
?C: This symbol indicates how much support of the void type is given by this
?C: compiler.  What various bits mean:
?C:
?C:     1 = supports declaration of void
?C:     2 = supports arrays of pointers to functions returning void
?C:     4 = supports comparisons between pointers to void functions and
?C:      addresses of void functions
?C:     8 = supports declaration of generic void pointers
?C:
?C: The package designer should define VOIDUSED to indicate the requirements
?C: of the package.  This can be
 done either by #defining VOIDUSED before
?C: including config.h, or by defining defvoidused in Myinit.U.  If the
?C: latter approach is taken, only those flags will be tested.  If the
?C: level of void support necessary is not present, defines void to int.
?C:.
?H:?%<:#ifndef VOIDUSED
?H:?%<:#define VOIDUSED $defvoidused
?H:?%<:#endif
?H:?%<:#define VOIDFLAGS $voidflags
?H:?%<:#if (VOIDFLAGS & VOIDUSED) != VOIDUSED
?H:?%<:#define void int  /* is void to be avoided? */
?H:?%<:#define M_VOID   /* Xenix strikes again */
?H:?%<:#endif
?H:.
?INIT:: full support for void wanted by default
?INIT:defvoidused=15
?INIT:
```

```
?LINT:known void M_VOID VOIDUSED
: check for void type
echo " "
echo "Checking to see how well your C compiler groks the void type..." >&4
case "$voidflags" in
")
 $cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#if TRY & 1
void sub() {
#else
sub() {
#endif
 extern void moo(); /* function returning void */
 void (*goo)();  /* ptr to func returning
 void */
#if TRY & 8
 void *hue;  /* generic ptr */
#endif
#if TRY & 2
 void (*foo[10])();
#endif

#if TRY & 4
 if(goo == moo) {
  exit(0);
 }
#endif
 exit(0);
}
int main() { sub(); }
EOCP
?X: This unit used to use cc -S in those tests to try to speed up things, but
?X: unfortunately, AIX 3.2 does not support this option.
 if $cc $ccflags -c -DTRY=$defvoidused try.c >.out 2>&1 ; then
  voidflags=$defvoidused
 echo "Good.  It appears to support void to the level $package wants.">&4
  if $compiler_warning .out >/dev/null 2>&1; then
   echo "However, you might get some warnings that look like this:"
   $cat .out
  fi
 else
echo "Hmm, your compiler has some difficulty with void. Checking further..." >&4
  if $cc $ccflags -c -DTRY=1 try.c >/dev/null 2>&1; then
   echo "It supports 1..."
```

```
  if $cc $ccflags -c -DTRY=3 try.c >/dev/null 2>&1; then
   echo "It also supports 2..."
   if $cc $ccflags -c -DTRY=7 try.c >/dev/null 2>&1; then
    voidflags=7
    echo "And it supports 4 but not 8
 definitely."
   else
    echo "It doesn't support 4..."
    if $cc $ccflags -c -DTRY=11 try.c >/dev/null 2>&1; then
     voidflags=11
     echo "But it supports 8."
    else
     voidflags=3
     echo "Neither does it support 8."
    fi
   fi
  else
   echo "It does not support 2..."
   if $cc $ccflags -c -DTRY=13 try.c >/dev/null 2>&1; then
    voidflags=13
    echo "But it supports 4 and 8."
   else
    if $cc $ccflags -c -DTRY=5 try.c >/dev/null 2>&1; then
     voidflags=5
     echo "And it supports 4 but has not heard about 8."
    else
     echo "However it supports 8 but not 4."
    fi
   fi
  fi
 else
  echo "There is no support at all for void."
  voidflags=0
 fi
fi
esac
?X: Only prompt user if support does not match the level we want
case "$voidflags" in
"$defvoidused") ;;
*) $cat >&4 <<'EOM'
 Support flag bits are:
   1: basic void declarations.
   2: arrays of pointers to functions returning void.
   4: operations between pointers to and addresses
 of void functions.
   8: generic void pointers.
EOM
 dflt="$voidflags";
```

```
 rp="Your void support flags add up to what?"
 . ./myread
 voidflags="$ans"
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/voidflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fmin: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmin:
?S: This variable conditionally defines the HAS_FMIN symbol, which
?S: indicates to the C program that the fmin() routine is available.
?S:.
?C:HAS_FMIN:
?C: This symbol, if defined, indicates that the fmin routine is
?C: available to do the minimum function.
?C:.
?H:#$d_fmin HAS_FMIN  /**/
?H:.
?LINT:set d_fmin
: see if fmin exists
set fmin d_fmin
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2005 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_clearenv: Inlibc
?MAKE: -pick add $@ %<
?S:d_clearenv:
?S: This variable conditionally defines the HAS_CLEARENV symbol, which
?S: indicates to the C program that the clearenv () routine is available.
?S:.
```

```
?C:HAS_CLEARENV:
?C: This symbol, if defined, indicates that the clearenv () routine is
?C: available for use.
?C:.
?H:#$d_clearenv HAS_CLEARENV  /**/
?H:.
?LINT:set d_clearenv
: see if clearenv exists
set clearenv d_clearenv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_clearenv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getaddrinfo: Inlibc
?MAKE: -pick add $@ %<
?S:d_getaddrinfo:
?S: This variable conditionally defines the HAS_GETADDRINFO symbol,
?S: which indicates to the C program that the getaddrinfo() function
?S: is available.
?S:.
?C:HAS_GETADDRINFO:
?C: This symbol, if defined, indicates that the getaddrinfo() function
?C: is available for use.
?C:.
?H:#$d_getaddrinfo HAS_GETADDRINFO  /**/
?H:.
?LINT:set d_getaddrinfo
: see if getaddrinfo exists
set getaddrinfo d_getaddrinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getaddrinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: models.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: models.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:13:17  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:39  ram
?RCS: patch6: added default for large
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:models split small medium large huge: test cat Myread sysman Oldconfig \
 Loc contains rm
?MAKE: -pick add $@ %<
?S:models:
?S: This variable contains
 the list of memory models supported by this
?S: system.  Possible component values are none, split, unsplit, small,
?S: medium, large, and huge.  The component values are space separated.
?S:.
?S:split:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program that will run in separate I and D space, for those
?S: machines that support separation of instruction and data space.  It is
?S: up to the Makefile to use this.
?S:.
?S:small:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a small memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:medium:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a medium memory model.  If the
?S: medium model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?S:large:
?S: This variable contains a flag
 which will tell the C compiler and loader
?S: to produce a program running with a large memory model.  It is up to
?S: the Makefile to use this.
?S:.
```

```
?S:huge:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a huge memory model.  If the
?S: huge model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?T:unsplit tans modelcc
?F:!pdp11
?D:large=''
?LINT:extern cc
: see what memory models we can support
case "$models" in
'')
?X: We may not use Cppsym or we get a circular dependency through cc.
?X: But this should work regardless of which cc we eventually use.
 $cat >pdp11.c <<'EOP'
int main() {
#ifdef pdp11
 exit(0);
#else
 exit(1);
#endif
}
EOP
?X: Run cc in a subshell in case they don't have a 'cc' command.
?X: Presumably they do have gcc or something.
 case "$cc" in
 '') modelcc="$cc" ;;
 *) modelcc="cc" ;;
 esac
 ( $modelcc -o pdp11 pdp11.c ) >/dev/null 2>&1
 if
 $test -f pdp11 && ./pdp11 2>/dev/null; then
  dflt='unsplit split'
 else
  tans=`./loc . X /lib/small /lib/large /usr/lib/small /usr/lib/large /lib/medium /usr/lib/medium /lib/huge`
  case "$tans" in
  X) dflt='none';;
  *) if $test -d /lib/small || $test -d /usr/lib/small; then
    dflt='small'
   else
    dflt=''
   fi
   if $test -d /lib/medium || $test -d /usr/lib/medium; then
    dflt="$dflt medium"
   fi
   if $test -d /lib/large || $test -d /usr/lib/large; then
    dflt="$dflt large"
```

```
   fi
   if $test -d /lib/huge || $test -d /usr/lib/huge; then
    dflt="$dflt huge"
   fi
  esac
 fi;;
*) dflt="$models";;
esac
$cat <<EOM

Some systems have different model sizes.  On most systems they are called
small, medium, large, and huge.  On the PDP11 they are called unsplit and
split.  If your system doesn't support different memory models, say "none".
If you wish to force everything to one memory model, say "none" here and
put the appropriate flags later when it asks you for other
 cc and ld flags.
Venix systems may wish to put "none" and let the compiler figure things out.
(In the following question multiple model names should be space separated.)

The default for most systems is "none".

EOM
rp="Which memory models are supported?"
. ./myread
models="$ans"

case "$models" in
none)
 small=''
 medium=''
 large=''
 huge=''
 unsplit=''
 split=''
 ;;
*split)
 case "$split" in
 '') if $contains '\-i' $sysman/ld.1 >/dev/null 2>&1 || \
    $contains '\-i' $sysman/cc.1 >/dev/null 2>&1; then
   dflt='-i'
  else
   dflt='none'
  fi;;
 *) dflt="$split";;
 esac
 rp="What flag indicates separate I and D space?"
 . ./myread
 tans="$ans"
```

```
 case "$tans" in
 none) tans=";;
 esac
 split="$tans"
 unsplit=";;
*large*|*small*|*medium*|*huge*)
 case "$models" in
 *large*)
  case "$large" in
  ") dflt='-Ml';;
  *) dflt="$large";;
  esac
 rp="What flag indicates large model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 large="$tans";;
 *) large=";;
 esac
 case "$models"
 in
 *huge*) case "$huge" in
  ") dflt='-Mh';;
  *) dflt="$huge";;
  esac
  rp="What flag indicates huge model?"
  . ./myread
  tans="$ans"
  case "$tans" in
  none) tans=";
  esac
  huge="$tans";;
 *) huge="$large";;
 esac
 case "$models" in
 *medium*) case "$medium" in
  ") dflt='-Mm';;
  *) dflt="$medium";;
  esac
  rp="What flag indicates medium model?"
  . ./myread
  tans="$ans"
  case "$tans" in
  none) tans=";
  esac
  medium="$tans";;
```

```
 *) medium="$large";;
 esac
 case "$models" in
 *small*) case "$small" in
  ") dflt='none';;
  *) dflt="$small";;
  esac
  rp="What flag indicates small model?"
  . ./myread
  tans="$ans"
  case "$tans" in
  none) tans=";
  esac
  small="$tans";;
 *) small=";;
 esac
 ;;
*)
 echo "Unrecognized memory models--you may have to edit Makefile.SH" >&4
 ;;
esac
$rm -f pdp11.* pdp11
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/models.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cpp_trad.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?MAKE:cpp_trad: cpp cat contains rm
?MAKE: -pick add $@ %<
?S:cpp_trad:
?S: This variable contains the program to run to get traditional C
?S: preprocessor semantics and not ISO C semantics: we want something
?S: that knows as little about C as possible to use as a more general
?S: purpose preprocessor.
?S:.
?F:!foo.c !foo.cpp
: how do we get traditional cpp semantics?
```

```
echo " "
echo "Checking to see how to get traditional cpp semantics..."
 >&4
$cat >foo.c <<'EOF'
#define A(x) x
#define B(y) y
A(a)B(b)
EOF
if $cpp foo.c >foo.cpp; $contains ab foo.cpp >/dev/null 2>&1; then
 echo "Plain '$cpp' works just fine."
 cpp_trad="$cpp"
elif $cpp -traditional foo.c >foo.cpp; \
 $contains ab foo.cpp >/dev/null 2>&1; then
 echo "We'll use '$cpp -traditional' to get proper semantics."
 cpp_trad="$cpp -traditional"
else
 echo "I don't know how to get traditional semantics with '$cpp'." >&4
 cpp_trad="$cpp"
fi
$rm -f foo.c foo.cpp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cpp_trad.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lroundl: Inlibc
?MAKE: -pick add $@ %<
?S:d_lroundl:
?S: This variable conditionally defines the HAS_LROUNDL symbol, which
?S: indicates to the C program that the lroundl() routine is available
?S: to return the integral value nearest to x away from zero.
?S:.
?C:HAS_LROUNDL:
?C: This symbol, if defined, indicates that the lroundl routine is
?C: available to return the nearest integral value away from zero of
?C: the long double argument value.
?C:.
?H:#$d_lroundl HAS_LROUNDL  /**/
?H:.
?LINT:set d_lroundl
: see if lroundl exists
set lroundl d_lroundl
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lroundl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: fpu.U,v 3.0 1993/08/18 12:08:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: fpu.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?LINT: empty
?X:?MAKE:fpu: test cat cc Myread
?X:?MAKE: -pick add $@ %<
?X:?S:fpu (fpunit):
?X:?S: Set to be the compile flag for the local floating point unit.
?X:?S:.
?X:?C:FPU (FPUNIT):
?X:?C: String containing the flags for the local floating point unit.
?X:?C:.
?X:?H:#define FPU "$fpu" /**/
?X:?H:.
?X:: see what floating point compile flags should be used.
?X:fpu="
?X:if
 $test -r /dev/fpa; then
?X: $cat>fpa.c << GOOP
?X: main(){return(1);}
?X:GOOP
?X: $cc -ffpa -o fpa fpa.c
?X: fpa > fpa.out 2>&1
?X: if $test ! -s fpa.out; then
?X:  dflt='y'
?X:  $cat <<'EOM'
?X:
?X:You seem to have a sun fpa...  I can compile the code to use the fpa but it will
?X:mean that the code can ONLY run on a machine with a fpa...
?X:
?X:EOM
?X:  rp="Should I compile for fpa?"
?X:  . ./myread
?X:  if $test $ans = "n"; then
```

```
?X:   fpu="
?X:  else
?X:   fpu='-ffpa'
?X:  fi
?X: else
?X:  $cat <<'EOM'
?X:
?X:You have the fpa device but I can't seem to use it.  Maybe you should talk to
?X:your sysadmin about this.  For now, I am not going to compile it in.
?X:
?X:EOM
?X: fi
?X:fi
?X:if $test "$fpu" = ''; then
?X: if $test -r /usr/etc/mc68881version; then
?X:  dflt='y'
?X:  $cat <<'EOM'
?X:
?X:There also seems to be the pieces for a 68881.  If I compile this in, it will
?X:work on almost all Sun 3's except for a few Sun-3/50s without a 68881...
?X:
?X:EOM
?X:  rp="Should
 I compile for a 68881?"
?X:  . ./myread
?X:  if $test $ans = "y"; then
?X:   fpu='-f68881'
?X:  fi
?X: fi
?X:fi
?X:
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/nullified/fpu.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_remainder: Inlibc
?MAKE: -pick add $@ %<
?S:d_remainder:
?S: This variable conditionally defines the HAS_REMAINDER symbol, which
?S: indicates to the C program that the remainder() routine is available.
?S:.
?C:HAS_REMAINDER:
?C: This symbol, if defined, indicates that the remainder routine is
?C: available to return the floating-point remainder.
```

```
?C:.
?H:#$d_remainder HAS_REMAINDER  /**/
?H:.
?LINT:set d_remainder
: see if remainder exists
set remainder d_remainder
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_remainder.U
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```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?X:
?X: This unit checks whether symbolic links are really supported.
?X: We can't rely on d_symlink because that may be listed in the
?X: C library but unimplemented.
?X:
?MAKE:lns: ln rm touch test
?MAKE: -pick add $@ %<
?S:lns:
?S: This variable holds the name of the command to make
?S: symbolic links (if they are supported).
  It can be used
?S: in the Makefile. It is either 'ln -s' or 'ln'
?S:.
: determine whether symbolic links are supported
echo " "
$rm -f blurfl sym
$touch blurfl
if $ln -s blurfl sym > /dev/null 2>&1 && $test -f sym; then
 echo "Symbolic links are supported." >&4
 lns="$ln -s"
```

```
else
 echo "Symbolic links are NOT supported." >&4
 lns="$ln"
fi
$rm -f blurfl sym
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lns.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: charorder.U,v 3.0.1.1 1994/10/29 16:07:08 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: charorder.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:chorder_int chorder_short chorder_long: Myread cat Compile rm
?MAKE: -pick add $@ %<
?S:chorder_short (d_cos d_bos):
?S: Holds the value describing the byte ordering of characters in a short.
?S: On a Big-Endian machine, that
 would be "c0c1".
?S:.
?S:chorder_int (charoder):
?S: Holds the value describing the byte ordering of characters in an int.
?S: For instance, on a Big-Endian machine, this would be: "c0c1c2c3".
?S:.
?S:chorder_long (d_col d_bol):
?S: Holds the value describing the byte ordering of characters in a long.
?S: On a 64 bits Big-Endian machine, that would yield: "c0c1c2c3c4c5c6c7".
?S:.
?C:CHAR_ORDER_SHORT:
?C: Holds the byte ordering of characters in a short. It's a string
?C: value like "c0c1" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_INT:
?C: Holds the byte ordering of characters in an int. It's a string
```

```
?C: value like "c0c1c2c3" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_LONG:
?C: Holds the byte ordering of characters in a long. It's a string
?C: value like "c0c1c2c3c4c5c6c7" on a 64 bits Big-Endian machine.
?C:.
?H:#define CHAR_ORDER_SHORT "$chorder_short" /* byte order in a short */
?H:#define CHAR_ORDER_INT "$chorder_int" /* byte order in an int */
?H:#define CHAR_ORDER_LONG "$chorder_long"
 /* byte order in a long */
?H:.
?F:!byteorder
: check for character ordering
echo " "
echo "Checking out byte order..." >&4
$cat >byteorder.c <<'EOCP'
#include <stdio.h>

int main(argc, argv)
 int argc;
 char *argv[]; {
 int i;
 int max;
 union {
  short u_s;
  int u_i;
  long u_l;
  char u_c[sizeof(long)];
 } u;
 switch (argv[1][0]) {
 case 'l':
  u.u_l = 0L;
  /* HMS: ASSERT: sizeof(long) < 10. */
  for(i = 0; i < sizeof(long); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(long);
  break;
 case 's':
  u.u_s = 0;
  /* HMS: ASSERT: sizeof(short) < 10. */
  for(i = 0; i < sizeof(short); ++i) {
   u.u_s *= 0x100L;
   u.u_s += (0xc0 + i);
  }
  max = sizeof(short);
  break;
```

```
 case 'i':
  u.u_i = 0;
  /* RAM: ASSERT: sizeof(int) < 10. */
  for(i = 0; i < sizeof(int); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(int);
  break;
 default:
  max = 0;
  break;
 }
 for(i = 0; i < max; i++) {
  printf("%x", u.u_c[i] & 0x00FF);
 }
 printf("\n");
 exit(0);
}
EOCP
set
 byteorder
if eval $compile_ok ; then
 : null statement
@if chorder_short
   chorder_short=`./byteorder s`
@end
@if chorder_int
   chorder_int=`./byteorder i`
@end
@if chorder_long
   chorder_long=`./byteorder l`
@end
else
 $cat <<EOM
(I can't seem to get my test program to work.  Guessing 32 bits big-endian.)
EOM
   chorder_short="c0c1"
   chorder_int="c0c1c2c3"
   chorder_long="c0c1c2c3"
fi
@if chorder_short
dflt=$chorder_short
rp='What is the order of characters in a short?'
. ./myread
chorder_short="$ans"
@end
@if chorder_int
```

```
dflt=$chorder_int
rp='What is the order of characters in an int?'
. ./myread
chorder_int="$ans"
@end
@if chorder_long
dflt=$chorder_long
rp='What is the order of characters in a long?'
. ./myread
chorder_long="$ans"
@end
$rm -f byteorder* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/charorder.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_PRId64 d_PRIi64 d_PRIu64 d_PRIo64 d_PRIx64 d_PRIXU64 \
 sPRId64 sPRIi64 sPRIu64 sPRIo64 sPRIx64 sPRIXU64: \
 quadtype i_inttypes test cat rm_try Setvar Compile run
?MAKE: -pick add $@ %<
?S:d_PRId64:
?S: This variable conditionally defines the PERL_PRId64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit decimal numbers.
?S:.
?S:d_PRIi64:
?S: This variable conditionally defines the PERL_PRIi64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit decimal numbers.
?S:.
?S:d_PRIu64:
?S: This variable conditionally defines the PERL_PRIu64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit unsigned decimal
?S: numbers.
?S:.
?S:d_PRIo64:
?S: This variable
 conditionally defines the PERL_PRIo64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit octal numbers.
?S:.
?S:d_PRIx64:
?S: This variable conditionally defines the PERL_PRIx64 symbol, which
```

?S: indicates that stdio has a symbol to print 64-bit hexadecimal numbers.
?S:.
?S:d_PRIXU64:
?S: This variable conditionally defines the PERL_PRIXU64 symbol, which
?S: indicates that stdio has a symbol to print 64-bit hExADECimAl numbers.
?S: The 'U' in the name is to separate this from d_PRIx64 so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRId64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit decimal numbers (format 'd') for output.
?S:.
?S:sPRIi64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit decimal numbers (format 'i') for output.
?S:.
?S:sPRIu64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit unsigned decimal numbers (format 'u')
 for output.
?S:.
?S:sPRIo64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit octal numbers (format 'o') for output.
?S:.
?S:sPRIx64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit hexadecimal numbers (format 'x') for output.
?S:.
?S:sPRIXU64:
?S: This variable, if defined, contains the string used by stdio to
?S: format 64-bit hExADECimAl numbers (format 'X') for output.
?S: The 'U' in the name is to separate this from sPRIx64 so that even
?S: case-blind systems can see the difference.
?S:.
?C:PERL_PRId64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit decimal numbers (format 'd') for output.
?C:.
?C:PERL_PRIi64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit decimal numbers (format 'i') for output.
?C:.
?C:PERL_PRIu64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit unsigned decimal numbers (format 'u')
 for output.
?C:.

```
?C:PERL_PRIo64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit octal numbers (format 'o') for output.
?C:.
?C:PERL_PRIx64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit hexadecimal numbers (format 'x') for output.
?C:.
?C:PERL_PRIXU64:
?C: This symbol, if defined, contains the string used by stdio to
?C: format 64-bit hExADECimAl numbers (format 'X') for output.
?C:.
?H:#$d_PRId64 PERL_PRId64 $sPRId64 /**/
?H:#$d_PRIi64 PERL_PRIi64 $sPRIi64 /**/
?H:#$d_PRIu64 PERL_PRIu64 $sPRIu64 /**/
?H:#$d_PRIo64 PERL_PRIo64 $sPRIo64 /**/
?H:#$d_PRIx64 PERL_PRIx64 $sPRIx64 /**/
?H:#$d_PRIx64 PERL_PRIXU64 $sPRIXU64 /**/
?H:.
?T:yyy
?F:!try
: Check 64bit sizes
echo " "

if $test X"$quadtype" != X; then

echo "Checking how to print 64-bit integers..." >&4

if $test X"$sPRId64" = X -a X"$quadtype" = Xint; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 int q = 12345678901;

 printf("%ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64="'d'"; sPRIi64="'i'"; sPRIu64="'u'";
   sPRIo64="'o'"; sPRIx64="'x'"; sPRIXU64="'X'";
   echo "We will use %d."
   ;;
  esac
```

```
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" = Xlong; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long q = 12345678901;
 printf("%ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64='"ld"'; sPRIi64='"li"'; sPRIu64='"lu"';
   sPRIo64='"lo"'; sPRIx64='"lx"'; sPRIXU64='"lX"';
   echo "We will use %ld."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$i_inttypes" = X"$define" -a X"$quadtype" = Xint64_t; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <inttypes.h>
#include <stdio.h>
int main() {
 int64_t q = 12345678901;
 printf("%" PRId64 "\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64=PRId64;
 sPRIi64=PRIi64; sPRIu64=PRIu64;
   sPRIo64=PRIo64; sPRIx64=PRIx64; sPRIXU64=PRIXU64;
   echo "We will use the C9X style."
   ;;
  esac
 fi
fi
```

```
if $test X"$sPRId64" = X -a X"$quadtype" != X; then
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main() {
 $quadtype q = 12345678901;
 printf("%Ld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64="'Ld'"; sPRIi64="'Li'"; sPRIu64="'Lu'";
   sPRIo64="'Lo'"; sPRIx64="'Lx'"; sPRIXU64="'LX'";
   echo "We will use %Ld."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" = X"long long"; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long long q = 12345678901LL; /* AIX cc requires the LL suffix. */
 printf("%lld\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64="'lld'"; sPRIi64="'lli'"; sPRIu64="'llu'";
   sPRIo64="'llo'"; sPRIx64="'llx'";
 sPRIXU64="'llX'";
   echo "We will use the %lld style."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X -a X"$quadtype" != X; then
 $cat >try.c <<EOCP
```

```
#include <sys/types.h>
#include <stdio.h>
int main() {
 $quadtype q = 12345678901;
 printf("%qd\n", q);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  12345678901)
   sPRId64="'qd'"; sPRIi64="'qi'"; sPRIu64="'qu'";
   sPRIo64="'qo'"; sPRIx64="'qx'"; sPRIXU64="'qX'";
   echo "We will use %qd."
   ;;
  esac
 fi
fi

if $test X"$sPRId64" = X; then
 echo "Cannot figure out how to print 64-bit integers." >&4
fi
$rm_try

fi

case "$sPRId64" in
") d_PRId64="$undef"; d_PRIi64="$undef"; d_PRIu64="$undef";
 d_PRIo64="$undef"; d_PRIx64="$undef"; d_PRIXU64="$undef";
 ;;
*) d_PRId64="$define"; d_PRIi64="$define"; d_PRIu64="$define";
 d_PRIo64="$define"; d_PRIx64="$define"; d_PRIXU64="$define";
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/quadfio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotobyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
```

```
?MAKE:d_getprotobyname_r getprotobyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotobyname_r:
?S: This variable conditionally defines the HAS_GETPROTOBYNAME_R symbol,
?S: which indicates to the C program that the getprotobyname_r()
?S: routine is available.
?S:.
?S:getprotobyname_r_proto:
?S: This variable encodes the prototype of getprotobyname_r.
?S: It is zero if d_getprotobyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobyname_r
?S: is defined.
?S:.
?C:HAS_GETPROTOBYNAME_R:
?C: This symbol, if
 defined, indicates that the getprotobyname_r routine
?C: is available to getprotobyname re-entrantly.
?C:.
?C:GETPROTOBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getprotobyname_r.
?C: It is zero if d_getprotobyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobyname_r
?C: is defined.
?C:.
?H:#$d_getprotobyname_r HAS_GETPROTOBYNAME_R /**/
?H:#define GETPROTOBYNAME_R_PROTO $getprotobyname_r_proto /**/
?H:.
?T:try hdrs d_getprotobyname_r_proto
: see if getprotobyname_r exists
set getprotobyname_r d_getprotobyname_r
eval $inlibc
case "$d_getprotobyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotobyname_r_proto:$usethreads" in
 ":define") d_getprotobyname_r_proto=define
  set d_getprotobyname_r_proto getprotobyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getprotobyname_r_proto" in
 define)
 case "$getprotobyname_r_proto" in
 "|0) try='int getprotobyname_r(const char*, struct
 protoent*, char*, size_t, struct protoent**);'
 ./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=I_CSBWR ;;
 esac
```

```
 case "$getprotobyname_r_proto" in
 "|0) try='struct protoent* getprotobyname_r(const char*, struct protoent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=S_CSBI ;;
 esac
 case "$getprotobyname_r_proto" in
 "|0) try='int getprotobyname_r(const char*, struct protoent*, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && getprotobyname_r_proto=I_CSD ;;
 esac
 case "$getprotobyname_r_proto" in
 "|0) d_getprotobyname_r=undef
  getprotobyname_r_proto=0
  echo "Disabling getprotobyname_r, cannot determine prototype." >&4 ;;
 * ) case "$getprotobyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getprotobyname_r_proto="REENTRANT_PROTO_$getprotobyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getprotobyname_r has no prototype, not using it." >&4 ;;
  esac
  d_getprotobyname_r=undef
  getprotobyname_r_proto=0
  ;;
 esac
 ;;
*) getprotobyname_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotobyname_r.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
```

```
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:issymlink: lns test rm
?MAKE: -pick add $@ %<
?S:issymlink:
?S: This variable holds the test command to test for a symbolic link
?S: (if they are supported).  Typical values include 'test -h' and
?S: 'test -L'.
?S:.
?T:pth p
?LINT:change PATH test
?LINT:extern newsh
: determine whether symbolic links are supported
echo
 " "
case "$lns" in
*"ln"*" -s")
 echo "Checking how to test for symbolic links..." >&4
 $lns blurfl sym
 if $test "X$issymlink" = X; then
?X:
?X: In some AIX 4 versions the (ksh) builtin test (-h) is broken.
?X:
  case "$newsh" in
  ") sh     -c "PATH= test -h sym" >/dev/null 2>&1 ;;
  *)  $newsh -c "PATH= test -h sym" >/dev/null 2>&1 ;;
  esac
  if test $? = 0; then
   issymlink="test -h"
  else
   echo "Your builtin 'test -h' may be broken." >&4
   case "$test" in
   /*) ;;
   *) pth=`echo $PATH | sed -e "s/$p_/ /g"`
    for p in $pth
    do
     if test -f "$p/$test"; then
      test="$p/$test"
      break
     fi
    done
    ;;
   esac
   case "$test" in
   /*)
    echo "Trying external '$test -h'." >&4
```

```
    issymlink="$test -h"
    if $test ! -h sym >/dev/null 2>&1; then
     echo "External '$test -h' is broken, too." >&4
     issymlink="
    fi
    ;;
   *) issymlink=" ;;
   esac
  fi
 fi
 if $test "X$issymlink" = X; then
  if $test -L sym 2>/dev/null; then
   issymlink="$test
 -L"
   echo "The builtin '$test -L' worked." >&4
  fi
 fi
 if $test "X$issymlink" != X; then
  echo "You can test for symbolic links with '$issymlink'." >&4
 else
  echo "I do not know how you can test for symbolic links." >&4
 fi
 $rm -f blurfl sym
 ;;
*) echo "No symbolic links, so not testing for their testing..." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/issymlink.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: gidtype.U,v 3.0.1.3 1994/08/29 16:21:44 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: gidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:21:44  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS: patch32: removed useless usage of Setvar (for now)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:21:07  ram
```

```
?RCS: patch27: added lint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:01:51  ram
?RCS: patch23: protected gidtype setting via setvar (ADO)
?RCS: patch23: made Gid_t comment more explicit (ADO)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:08:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:gidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:gidtype:
?S: This variable defines Gid_t to be something like gid_t, int,
?S: ushort, or whatever type is used to declare the return type
?S: of getgid().  Typically, it is the type of group ids in the kernel.
?S:.
?C:Gid_t (GIDTYPE):
?C: This symbol holds the return type of getgid() and the type of
?C: argument to setrgid() and related functions.  Typically,
?C: it is the type of group ids in the kernel. It can be int, ushort,
?C: gid_t, etc... It may be necessary to include <sys/types.h> to get
?C: any typedef'ed information.
?C:.
?H:#define Gid_t $gidtype  /* Type for getgid(), etc... */
?H:.
?T:xxx
: see what type gids are declared as in the kernel
echo " "
echo "Looking for the type for group ids returned by getgid()."
set gid_t gidtype xxx stdio.h sys/types.h
eval $typedef
case "$gidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep
 'groups\[NGROUPS\];' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$gidtype";;
esac
case "$gidtype" in
gid_t) echo "gid_t found." ;;
*) rp="What is the type for group ids returned by getgid()?"
 . ./myread
```

```
 gidtype="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidtype.U
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```
?RCS: $Id: d_rusage.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rusage.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: We may need to include <sys/resource.h> and <sys/time.h> FIXME
?X:INC: i_sysresrc i_systime
?MAKE:d_rusage: Inlibc
?MAKE: -pick add $@ %<
?S:d_rusage (d_getrusg):
?S: This variable conditionally defines the HAS_GETRUSAGE symbol, which
?S: indicates that the getrusage() routine exists.  The getrusage() routine
?S: supports sub-second accuracy
 for process cpu accounting. You may need
?S: to include <sys/resource.h> and <sys/time.h>.
?S:.
?C:HAS_GETRUSAGE (RUSAGE GETRUSAGE):
?C: This symbol, if defined, indicates that the getrusage() routine is
?C: available to get process statistics with a sub-second accuracy.
?C: Inclusion of <sys/resource.h> and <sys/time.h> may be necessary.
?C:.
?H:#$d_rusage HAS_GETRUSAGE  /**/
?H:.
?LINT:set d_rusage
: see if getrusage exists
set getrusage d_rusage
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rusage.U

No license file was found, but licenses were detected in source scan.

```
# $Id: errnolist.a,v 3.0 1993/08/18 12:04:35 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Harlan Stenn <harlan@mumps.pfcs.com>
#
# $Log: errnolist.a,v $
# Revision 3.0  1993/08/18 12:04:35  ram
# Baseline for dist 3.0 netwide release.
#
#
# This is a simple-minded awk script to generate an initialization for
# sys_errnolist on systems that don't have it.
# This file now depends only on sys/errno.h error numbers under maxerr being
# in order.  It will complain and die if not.  NOTE: It will still produce
# a compilable output file, even with errors, so you
 must check the output.


BEGIN  {
   format = "\t\"%s\",\n"
   printf("/*\n** This is a generated file.  Do NOT edit it unless you really have to...\n*/\n\n")
   printf("char *sys_errnolist[] = {\n")
   maxerr = 89
  }

$1=="#define" {
   if(count > maxerr || substr($2,1,1) != "E")
    next   # we're not interested
   if($3 < count) { # this is bad
    printf("Fatal error: %s out of order at %s\n",\
    FILENAME, $2)>"/dev/tty"
    exit 1
   }
   # fill in the blanks
   while($3 > count) {
    dummy=sprintf("EDUMMY%d",count)
    printf(format,dummy)
    count++
   }
```

```
  printf(format,$2)
  count++
 }

END  {
  printf("\t0\n};\n")
 }
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.a
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
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?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnbyaddr: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnbyaddr:
?S: This variable conditionally defines the HAS_GETNETBYADDR symbol, which
?S: indicates to the C program that the getnetbyaddr() routine is available
?S: to look up networks by their IP addresses.
?S:.
?C:HAS_GETNETBYADDR:
?C: This symbol, if defined, indicates that the getnetbyaddr() routine is
?C: available to look up networks by their IP addresses.
?C:.
?H:#$d_getnbyaddr HAS_GETNETBYADDR  /**/
?H:.
?LINT:set d_getnbyaddr
: see if getnetbyaddr exists
set getnetbyaddr d_getnbyaddr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnbyad.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dbl_dig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dbl_dig.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:28  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dbl_dig: Myread contains cat rm Setvar \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_dbl_dig:
?S: This variable conditionally defines d_dbl_dig if this system's
?S: header files provide DBL_DIG, which is the number of significant
?S: digits in a double precision
 number.
?S:.
?C:HAS_DBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol DBL_DIG, which is the number
?C: of significant digits in a double precision number.  If this
?C: symbol is not defined, a guess of 15 is usually pretty good.
?C:.
?H:#$d_dbl_dig HAS_DBL_DIG /**/
?H:.
?F:!dbl_dig.c
?LINT:set d_dbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >dbl_dig.c <<EOM
#include <limits.h>
#include <float.h>
#ifdef DBL_DIG
printf("Contains DBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < dbl_dig.c >dbl_dig.E 2>/dev/null
if $contains 'DBL_DIG' dbl_dig.E >/dev/null 2>&1; then
 echo "DBL_DIG found." >&4
 val="$define"
else
 echo "DBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f dbl_dig.?
set d_dbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dbl_dig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoll: Inlibc d_longlong Compile cat run
?MAKE: -pick add $@ %<
?S:d_strtoll:
?S: This variable conditionally defines the HAS_STRTOLL symbol, which
?S: indicates to the C program that the strtoll() routine is available.
?S:.
?C:HAS_STRTOLL:
?C: This symbol, if defined, indicates that the strtoll routine is
?C: available to convert strings to long longs.
?C:.
?H:#$d_strtoll HAS_STRTOLL  /**/
?H:.
?T:yyy
?F:!try
: see if strtoll exists
set strtoll d_strtoll
eval $inlibc

case "$d_longlong-$d_strtoll" in
"$define-$define")
 $cat <<EOM
Checking whether your strtoll() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <errno.h>
#ifdef __hpux
#define strtoll __strtoll
#endif
#ifdef __EMX__
#define strtoll
 _strtoll
#endif
#include <stdio.h>
#include <stdlib.h>
static int bad = 0;
void check(const char *s, long long ell, int een) {
```

```
 long long gll;
 errno = 0;
 gll = strtoll(s, 0, 10);
 if (!((gll == ell) && (errno == een)))
  bad++;
}
int main() {
 check(" 1",                          1LL, 0);
 check(" 0",                          0LL, 0);
 check("-1",                         -1LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check(" 9223372036854775807",  9223372036854775807LL, 0);
 check("-9223372036854775808", -9223372036854775808LL, 0);
 check(" 9223372036854775808",  9223372036854775807LL, ERANGE);
 check("-9223372036854775809", -9223372036854775808LL, ERANGE);
 if (!bad)
  printf("ok\n");
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  ok) echo "Your strtoll() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtoll() doesn't seem
 to be working okay.
EOM
     d_strtoll="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtoll="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoll.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_getnetbyname_r.U,v 0RCS:
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?RCS: License or the Artistic License, as specified in the README file.

```
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetbyname_r getnetbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetbyname_r:
?S: This variable conditionally defines the HAS_GETNETBYNAME_R symbol,
?S: which indicates to the C program that the getnetbyname_r()
?S: routine is available.
?S:.
?S:getnetbyname_r_proto:
?S: This variable encodes the prototype of getnetbyname_r.
?S: It is zero if d_getnetbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyname_r
?S: is defined.
?S:.
?C:HAS_GETNETBYNAME_R:
?C: This symbol, if defined, indicates that
 the getnetbyname_r routine
?C: is available to getnetbyname re-entrantly.
?C:.
?C:GETNETBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getnetbyname_r.
?C: It is zero if d_getnetbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyname_r
?C: is defined.
?C:.
?H:#$d_getnetbyname_r HAS_GETNETBYNAME_R /**/
?H:#define GETNETBYNAME_R_PROTO $getnetbyname_r_proto /**/
?H:.
?T:try hdrs d_getnetbyname_r_proto
: see if getnetbyname_r exists
set getnetbyname_r d_getnetbyname_r
eval $inlibc
case "$d_getnetbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetbyname_r_proto:$usethreads" in
 ":define") d_getnetbyname_r_proto=define
  set d_getnetbyname_r_proto getnetbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getnetbyname_r_proto" in
 define)
 case "$getnetbyname_r_proto" in
 "|0) try='int getnetbyname_r(const char*, struct netent*, char*, size_t, struct netent**, int*);'
```

```
 ./protochk "$extern_C
 $try" $hdrs && getnetbyname_r_proto=I_CSBWRE ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) try='int getnetbyname_r(const char*, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=I_CSBI ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) try='struct netent* getnetbyname_r(const char*, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=S_CSBI ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) try='int getnetbyname_r(const char*, struct netent*, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && getnetbyname_r_proto=I_CSD ;;
 esac
 case "$getnetbyname_r_proto" in
 "|0) d_getnetbyname_r=undef
  getnetbyname_r_proto=0
  echo "Disabling getnetbyname_r, cannot determine prototype." >&4 ;;
 * ) case "$getnetbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getnetbyname_r_proto="REENTRANT_PROTO_$getnetbyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo
 "getnetbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_getnetbyname_r=undef
  getnetbyname_r_proto=0
  ;;
 esac
 ;;
*) getnetbyname_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetbyname_r.U
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```
?RCS: $Id: sbrksmart.U,v 3.0.1.2 1995/01/11 15:35:41 ram Exp $
?RCS:
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```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sbrksmart.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:35:41  ram
?RCS: patch45: now sets sbrksmart to undef explicitly when lacking sbrk()
?RCS: patch45: forgot a cast when using return value from sbrk()
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:16:45  ram
?RCS: patch16: created
?RCS:
?MAKE:sbrksmart: cat d_sbrk Compile rm
?MAKE: -pick add $@ %<
?S:sbrksmart:
?S: This variable conditionally defines HAS_SMART_SBRK if the sbrk()
?S: routine honors a negative
 argument to lower the break value.
?S:.
?C:HAS_SMART_SBRK:
?C: This symbol is defined when the sbrk() system call may be used with
?C: a negative argument to lower the break value, therefore releasing
?C: core to the system. If not, you'd probably be better off using the
?C: mmap() system call.
?C:.
?H:#$sbrksmart HAS_SMART_SBRK /**/
?H:.
?T:dumb
?F:!sbrk
: see if sbrk can release core to the kernel
echo " "
case "$d_sbrk" in
"$define")
 echo "Let's see if your sbrk() is smart enough to release core..." >&4
 $cat > sbrk.c <<'EOC'
#define INC 256  /* Small enough to be less than a page size */

int main()
{
 char *obrk = (char *) sbrk(0);
 char *nbrk;

 nbrk = (char *) sbrk(INC);
 if (nbrk == (char *) -1)
  exit(1); /* Not enough memory */
 if (nbrk != obrk)
  exit(2); /* Unreliable sbrk() */
```

```
 nbrk = (char *) sbrk(-INC);
 if (nbrk == (char *) -1)
  exit(3); /* May have understood negative arg as huge positive */
 if (obrk != (char *) sbrk(0))
  exit(4); /* Not smart, definitely */

 exit(0);  /*
 Ok */
}
EOC
 sbrksmart="$undef"
 dumb='-- assuming dumb sbrk().'
 set sbrk
 if eval $compile_ok; then
  ./sbrk >/dev/null 2>&1
  case $? in
  0) sbrksmart="$define"
   echo "Yes, it can be used with negative values." ;;
  1) echo "Sorry, not enough memory $dumb" ;;
  2) echo "No it's not, and besides it seems to be buggy..." ;;
  3) echo "No, it fails with negative values." ;;
  4) echo "Nope, your sbrk() is too dumb." ;;
  *) echo "Err... Unexpected result $dumb" ;;
  esac
 else
  echo "(Could not compile test program $dumb)"
 fi
 ;;
*)
 echo "Since you don't have sbrk(), let's forget about the smart test!"
 sbrksmart="$undef"
 ;;
esac
$rm -f sbrk sbrk.* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sbrksmart.U
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```
?RCS: $Id: Magic_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
?RCS:
?RCS: $Log: Magic_h.U,v $
?RCS: Revision 3.0.1.2  1993/11/10  17:32:58  ram
?RCS: patch14: forgot to mention Id in the dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:46:59  ram
?RCS: patch12: created for ?M: lines support (magic symbols)
?RCS:
?X:
?X: This file ends up producing the confmagic.h include, which is used to
?X: automagically remap some C symbols via cpp redefinitions.
?X:
?X: The file ./Magic_h below contains all the ?M: lines extracted out
 of all
?X: the units.  Metaconfig itself adds the final #endif statement.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?MAKE:Magic_h: Id Config_h
?MAKE: -pick cm_h_weed $@ %<
?MAKE: -pick cm_h_weed $@ ./Magic_h
?LINT:nocomment
/*
* This file was produced by running metaconfig and is intended to be included
* after config.h and after all the other needed includes have been dealt with.
*
* This file may be empty, and should not be edited. Rerun metaconfig instead.
* If you wish to get rid of this magic, remove this file and rerun metaconfig
* without the -M option.
*
*  $Id: Magic_h.U 1 2006-08-24 12:32:52Z rmanfredi $
*/

#ifndef _confmagic_h_
#define _confmagic_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Magic_h.U
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```
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```

```
?RCS:
?RCS: $Log: i_sysun.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <inttypes.h> is available or not
?X:
?MAKE:i_inttypes: Inhdr
?MAKE: -pick add $@ %<
?S:i_inttypes:
?S: This variable conditionally defines I_INTTYPES, which indicates
?S: to the C program that it should include <inttypes.h> to get
?S: format conversions of integer types.
?S:.
?C:I_INTTYPES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
 <inttypes.h> to get format conversions of integer types.
?C:.
?H:#$i_inttypes I_INTTYPES  /**/
?H:.
?LINT:set i_inttypes
: see if this is a inttypes.h system
set inttypes.h i_inttypes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_inttypes.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcsxfrm: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_wcsxfrm:
?S: This variable conditionally defines the HAS_WCSXFRM symbol if the
?S: wcsxfrm() routine is available and can be used to compare wide
?S: character strings.
?S:.
?C:HAS_WCSXFRM:
?C: This symbol, if defined, indicates that the wcsxfrm routine is
```

```
?C: available to tranform a wide character string for wcscmp().
?C:.
?H:#$d_wcsxfrm HAS_WCSXFRM /**/
?H:.
?F:!try
?LINT: set d_wcsxfrm
: look for wcsxfrm
echo " "
$cat >try.c <<'EOCP'
#include
 <errno.h>
#include <wchar.h>
int main ()
{
   wchar_t dst[4], *src = L" ";
   errno = 0;
   return (wcsxfrm (dst, src, 1) ? errno ? errno : 0 : 1);
   }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working wcsxfrm() found." >&4
     val="$define" ;;
 *)  echo "wcsxfrm() found, but it doesn't work" >&4
     ;;
 esac
else
   echo "wcsxfrm() NOT found." >&4
   fi
set d_wcsxfrm
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_wcsxfrm.U
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```
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?RCS:
?MAKE:d_fmax: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmax:
?S: This variable conditionally defines the HAS_FMAX symbol, which
```

```
?S: indicates to the C program that the fmax() routine is available.
?S:.
?C:HAS_FMAX:
?C: This symbol, if defined, indicates that the fmax routine is
?C: available to do the maximum function.
?C:.
?H:#$d_fmax HAS_FMAX  /**/
?H:.
?LINT:set d_fmax
: see if fmax exists
set fmax d_fmax
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fmax.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_portable.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:28:52  ram
?RCS: patch45: executable path stripping moved to the end in Config_sh.U
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:21:17  ram
?RCS: patch15: did not strip variables properly when needed
?RCS: patch15: now also strips down variables from trylist
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The Loc unit is wanted to get the definition of all the locating variables.
?X:
?MAKE:d_portable:
 cat Loc Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_portable:
?S: This variable conditionally defines the PORTABLE symbol, which
?S: indicates to the C program that it should not assume that it is
?S: running on the machine it was compiled on.
```

```
?S:.
?C:PORTABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: not assume that it is running on the machine it was compiled on.
?C: The program should be prepared to look up the host name, translate
?C: generic filenames, use PATH, etc.
?C:.
?H:#$d_portable PORTABLE /**/
?H:.
?D:d_portable="
: decide how portable to be
case "$d_portable" in
"$define") dflt=y;;
*) dflt=n;;
esac
$cat <<'EOH'

I can set things up so that your shell scripts and binaries are more portable,
at what may be a noticable cost in performance.  In particular, if you
ask to be portable, the following happens:

    1) Shell scripts will rely on the PATH variable rather than using
 the paths derived above.
    2) ~username
 interpretations will be done at run time rather than
 by Configure.
@if PHOSTNAME
    3) The system name will be determined at run time, if at all possible.
@end

EOH
rp="Do you expect to run these scripts and binaries on multiple machines?"
. ./myread
case "$ans" in
 y*) d_portable="$define"
?X:
?X: Paths will be stripped down (/usr/bin/vi -> vi) in Config_sh.U if needed.
?X:
 ;;
 *)  d_portable="$undef" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_portable.U
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```
?RCS: $Id$
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: bin.U,v $
?RCS: Revision 3.0.1.4  1995/09/25  09:15:32  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:32:40  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:05:28  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:51  ram
?RCS: patch10: made prompting more explicit (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18
  12:05:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bin binexp installbin: Prefixit Getfile Oldconfig afs cat test
?MAKE: -pick add $@ %<
?Y:TOP
?S:bin:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly executable images for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S:.
?S:binexp:
?S: This is the same as the bin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?S:installbin:
?S: This variable is the same as binexp unless AFS is running in which case
?S: the user is explicitly prompted for it. This variable should always
?S: be used in your makefiles for maximum portability.
?S:.
?C:BIN:
?C: This symbol holds the path of the bin directory where the package will
?C: be installed. Program must be prepared to deal with ~name substitution.
?C:.
?C:BIN_EXP:
```

```
?C: This
 symbol is the filename expanded version of the BIN symbol, for
?C: programs that do not want to deal with that at run-time.
?C:.
?H:#define BIN "$bin" /**/
?H:#define BIN_EXP "$binexp" /**/
?H:.
?D:bin='/usr/local/bin'
: determine where public executables go
echo " "
set dflt bin bin
eval $prefixit
fn=d~
rp='Pathname where the public executables will reside?'
. ./getfile
if $test "X$ansexp" != "X$binexp"; then
 installbin=''
fi
bin="$ans"
binexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
executables reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installbin" in
 '') dflt=`echo $binexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installbin";;
 esac
 fn=de~
 rp='Where will public executables be installed?'
 . ./getfile
 installbin="$ans"
else
 installbin="$binexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/bin.U
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```
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?RCS:
?MAKE:d_erf: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_erf:
?S: This variable conditionally defines the HAS_ERF symbol, which
?S: indicates to the C program that the erf() routine is available.
?S:.
?C:HAS_ERF:
?C: This symbol, if defined, indicates that the erf routine is
?C: available to do the error function.
?C:.
?H:#$d_erf HAS_ERF  /**/
?H:.
?LINT:set d_erf
: see if erf exists
set erf d_erf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_erf.U
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```
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?RCS:
?MAKE:d_timegm: Inlibc
?MAKE: -pick add $@ %<
?S:d_timegm:
?S: This variable conditionally defines the HAS_TIMEGM symbol, which
?S: indicates to the C program that the timegm () routine is available.
?S:.
?C:HAS_TIMEGM:
?C: This symbol, if defined, indicates that the timegm routine is
?C: available to do the opposite of gmtime ()
?C:.
?H:#$d_timegm HAS_TIMEGM  /**/
?H:.
?LINT:set d_timegm
: see if timegm exists
set timegm d_timegm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_timegm.U
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?RCS:
?MAKE:d_libm_lib_version: Compile cat run rm_try
?MAKE: -pick add $@ %<
?S:d_libm_lib_version:
?S: This variable conditionally defines the LIBM_LIB_VERSION symbol,
?S: which indicates to the C program that math.h defines _LIB_VERSION
?S: being available in libm
?S:.
?C:LIBM_LIB_VERSION:
?C: This symbol, if defined, indicates that libm exports _LIB_VERSION
?C: and that math.h defines the enum to manipulate it.
?C:.
?H:#$d_libm_lib_version LIBM_LIB_VERSION  /**/
?H:.
?T:foo
?F:!try
: check to see if math.h defines _LIB_VERSION
d_libm_lib_version="$undef"
echo " "
echo "Checking to see if your libm supports _LIB_VERSION..." >&4
$cat >try.c <<EOCP
#include <unistd.h>
#include <math.h>
int main (int argc, char *argv[])
{
    printf ("%d\n", _LIB_VERSION);
   return (0);
   } /* main */
EOCP
set try
if eval $compile; then
   foo=`$run ./try`
   echo "Yes, it does ($foo)" >&4
   d_libm_lib_version="$define"
else
   echo "No, it does not (probably harmless)" >&4
   fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_libm_lib_version.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_setegid.U 1 2006-08-24 12:32:52Z rmanfredi $

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setegid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setegid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setegid:
?S: This variable conditionally defines the HAS_SETEGID symbol, which
?S: indicates to the C program that the setegid() routine is available
?S: to change the effective gid of the current program.
?S:.
?C:HAS_SETEGID (SETEGID):
?C: This symbol, if defined, indicates that the setegid
 routine is available
?C: to change the effective gid of the current program.
?C:.
?H:#$d_setegid HAS_SETEGID  /**/
?H:.
?LINT:set d_setegid
: see if setegid exists
set setegid d_setegid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setegid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_srandom_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_srandom_r srandom_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_srandom_r:
```

```
?S: This variable conditionally defines the HAS_SRANDOM_R symbol,
?S: which indicates to the C program that the srandom_r()
?S: routine is available.
?S:.
?S:srandom_r_proto:
?S: This variable encodes the prototype of srandom_r.
?S: It is zero if d_srandom_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srandom_r
?S: is defined.
?S:.
?C:HAS_SRANDOM_R:
?C: This symbol, if defined, indicates that the srandom_r routine
?C: is available to srandom re-entrantly.
?C:.
?C:SRANDOM_R_PROTO:
?C: This
 symbol encodes the prototype of srandom_r.
?C: It is zero if d_srandom_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srandom_r
?C: is defined.
?C:.
?H:#$d_srandom_r HAS_SRANDOM_R /**/
?H:#define SRANDOM_R_PROTO $srandom_r_proto /**/
?H:.
?T:try hdrs d_srandom_r_proto
: see if srandom_r exists
set srandom_r d_srandom_r
eval $inlibc
case "$d_srandom_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_srandom_r_proto:$usethreads" in
 ":define") d_srandom_r_proto=define
  set d_srandom_r_proto srandom_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_srandom_r_proto" in
 define)
 case "$srandom_r_proto" in
 "|0) try='int srandom_r(unsigned int, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && srandom_r_proto=I_TS ;;
 esac
 case "$srandom_r_proto" in
 "|0) d_srandom_r=undef
  srandom_r_proto=0
  echo "Disabling srandom_r, cannot determine prototype." >&4 ;;
 *
```

```
 ) case "$srandom_r_proto" in
  REENTRANT_PROTO*) ;;
  *) srandom_r_proto="REENTRANT_PROTO_$srandom_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "srandom_r has no prototype, not using it." >&4 ;;
  esac
  d_srandom_r=undef
  srandom_r_proto=0
  ;;
 esac
 ;;
*) srandom_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_srandom_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_libutil.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_libutil: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_libutil:
?S: This variable conditionally defines the I_LIBUTIL symbol, and indicates
?S: whether a C program should include <libutil.h>.
?S:.
?C:I_LIBUTIL:
?C: This symbol, if defined, indicates that <libutil.h> exists and
?C: should be included.
?C:.
?H:#$i_libutil I_LIBUTIL  /**/
?H:.
?LINT:set i_libutil
: see if this is a libutil.h system
set libutil.h i_libutil
eval $inhdr
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_libutil.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ccflags.U,v 3.0.1.9 1997/02/28 15:27:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: ccflags.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:27:07  ram
?RCS: patch61: removed support for NO_PROTOTYPE detection on SCO
?RCS: patch61: new locincpth variable
?RCS: patch61: added info on the "additional ld flags" question
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:48:54  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.7  1995/05/12  12:08:33  ram
?RCS: patch54: now checks for cc/ccflags/ldflags
 coherency
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  16:07:02  ram
?RCS: patch36: gcc versioning no longer relies on the C compiler's name
?RCS: patch36: simplified check for gcc version checking (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:06:35  ram
?RCS: patch32: propagate -posix flag from ccflags to ldflags
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:28:45  ram
?RCS: patch23: -fpcc-struct-return only needed in gcc 1.x (ADO)
?RCS: patch23: cppflags now computed on an option-by-option basis
?RCS: patch23: magically added cc flags now only done the first time
?RCS:
?RCS: Revision 3.0.1.3  1993/09/13  15:58:29  ram
?RCS: patch10: explicitly mention -DDEBUG just in case they need it (WAD)
?RCS: patch10: removed all the "tans" variable usage (WAD)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/27  14:39:38  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:24  ram
?RCS: patch6: added defaults for cppflags, ccflags and ldflags
?RCS:
```

```
?RCS:
 Revision 3.0  1993/08/18  12:05:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ccflags ldflags lkflags cppflags optimize locincpth: test cat \
 Myread Guess Options Oldconfig +gccversion mips_type +usrinc \
 package contains rm +cc cppstdin cppminus cpprun cpplast libpth \
 libs loclibpth hint usesocks sh run rm_try sysroot
?MAKE: -pick add $@ %<
?S:ccflags:
?S: This variable contains any additional C compiler flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:cppflags:
?S: This variable holds the flags that will be passed to the C pre-
?S: processor. It is up to the Makefile to use it.
?S:.
?S:optimize:
?S: This variable contains any optimizer/debugger flag that should be used.
?S: It is up to the Makefile to use it.
?S:.
?S:ldflags:
?S: This variable contains any additional C loader flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:lkflags:
?S: This variable contains any additional C partial linker flags desired
 by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:locincpth:
?S: This variable contains a list of additional directories to be
?S: searched by the compiler.  The appropriate '-I' directives will
?S: be added to ccflags.  This is intended to simplify setting
?S: local directories from the Configure command line.
?S: It's not much, but it parallels the loclibpth stuff in libpth.U.
?S:.
?T:inctest thisincl xxx inclwanted ftry previous thislibdir
?T:EBUGGING DEBUGGING
?T:check flag callback checkccflag
?F:!cpp.c !gcctest !try
?D:cppflags=''
?D:ccflags=''
?D:ldflags=''
?D:optimize=''
?LINT:extern _sysroot
?INIT:: Possible local include directories to search.
?INIT:: Set locincpth to "" in a hint file to defeat local include searches.
```

```
?INIT:locincpth="/usr/local/include /opt/local/include /usr/gnu/include"
?INIT:locincpth="$locincpth /opt/gnu/include /usr/GNU/include /opt/GNU/include"
?INIT::
?INIT:: no include file wanted by default
?INIT:inclwanted="
?INIT:
?INIT:: Enable
 -DEBUGGING and -DDEBUGGING from the command line
?INIT:EBUGGING="
?INIT:DEBUGGING="
?INIT:
: determine optimization, if desired, or use for debug flag also
?X: Allow for Configure -Uoptimize -- it's not strictly sensible, but
?X: it has happened and we know what they mean.   AD  2/16/98
case "$optimize" in
' '|$undef) dflt='none';;
") dflt='-O';;
*) dflt="$optimize";;
esac
$cat <<EOH

By default, $package compiles with the -O flag to use the optimizer.
Alternately, you might want to use the symbolic debugger, which uses
the -g flag (on traditional Unix systems).  Either flag can be
specified here.  To use neither flag, specify the word "none".

EOH
rp="What optimizer/debugger flag should be used?"
. ./myread
optimize="$ans"
case "$optimize" in
'none') optimize=" ";;
esac

: Check what DEBUGGING is required from the command line
: -DEBUGGING      or -DDEBUGGING or
: -DEBUGGING=both   = -g + -DDEBUGGING
: -DEBUGGING=-g   or -Doptimize=-g = -g
: -DEBUGGING=none or -UDEBUGGING =
: -DEBUGGING=old
  or -DEBUGGING=default = ? $optimize
case "$EBUGGING" in
") ;;
*) DEBUGGING=$EBUGGING ;;
esac

case "$DEBUGGING" in
-g|both|$define)
```

```
   case "$optimize" in
 *-g*) ;;
 *)    optimize="$optimize -g" ;;
   esac ;;
none|$undef)
   case "$optimize" in
 *-g*) set `echo "X $optimize " | sed 's/ -g / /'`
  shift
  optimize="$*"
  ;;
   esac ;;
esac

dflt=''
case "$DEBUGGING" in
both|$define) dflt='-DDEBUGGING'
esac

: argument order is deliberate, as the flag will start with - which set could
: think is an option
checkccflag='check=$1; flag=$2; callback=$3;
echo " ";
echo "Checking if your compiler accepts $flag" >&4;
[ "X$sysroot" != "X" ] && echo "For sysroot = $sysroot";
echo "int main(void) { return 0; }" > gcctest.c;
if $cc $_sysroot -O2 $flag -o gcctest gcctest.c 2>gcctest.out && $run ./gcctest; then
   echo "Yes, it does." >&4;
   if $test -s gcctest.out ; then
       echo "But your platform does not like it:";
       cat gcctest.out;
   else
 case "$ccflags" in
 *$check*)

    echo "Leaving current flags $ccflags alone." >&4
     ;;
 *) dflt="$dflt $flag";
     eval $callback
     ;;
 esac
   fi
else
   echo "Nope, it does not, but that is ok." >&4;
fi
'

: We will not override a previous value, but we might want to
: augment a hint file
```

```
case "$hint" in
default|recommended)
 case "$gccversion" in
 1.*) dflt="$dflt -fpcc-struct-return" ;;
 esac
 case "$optimize:$DEBUGGING" in
 *-g*:old) dflt="$dflt -DDEBUGGING";;
 esac
?X: check for POSIXized ISC
 case "$gccversion" in
 2.*) if $test -d /etc/conf/kconfig.d &&
   $contains _POSIX_VERSION $usrinc/sys/unistd.h >/dev/null 2>&1
  then
   # Interactive Systems (ISC) POSIX mode.
   dflt="$dflt -posix"
  fi
  ;;
 esac
?X: If the user has gcc-2.95 or greater, try adding -fno-strict-alias.
?X: Since the gcc "version" can be non-numeric, e.g.
?X: "2.95.1 19990809 (prerelease)" , we'll do the test on any version
?X: greater than 2.8.
?X: --Andy Dougherty  27 Aug 1999
 case "$gccversion" in
 1.*) ;;
 2.[0-8]*)
 ;;
 ?*) set strict-aliasing -fno-strict-aliasing
  eval $checkccflag
  ;;
 esac
?X: HMB 200405
?X: -pipe has shown a compile time speedup of about 40% on Linux and HP-UX
?X: and also worked on cygwin-1.5.9
?X: If a system fails, disable it in the hints. 99% of gcc uses binutils
 # For gcc, adding -pipe speeds up compilations for some, but apparently
 # some assemblers can't read from stdin.  (It also slows down compilations
 # in other cases, but those are apparently rarer these days.)  AD 5/2004.
 case "$gccversion" in
 ?*) set pipe -pipe
  eval $checkccflag
  ;;
 esac

?X: NWC 200712
 # on x86_64 (at least) we require an extra library (libssp) in the
 # link command line. This library is not named, so I infer that it is
 # an implementation detail that may change. Hence the safest approach
```

```
 # is to add the flag to the flags passed to the compiler at link time,
 # as that way the compiler can do the right implementation dependant
 # thing. (NWC)
 case "$ccflags" in
 *-fno-stack-protector*)

    echo "Do not add -fstack-protector nor -fstack-protector-strong" 2>&1
     ;;
 *) case "$gccversion" in
    ?*) set stack-protector-strong -fstack-protector-strong
  eval $checkccflag
  case "$dflt" in
  *-fstack-protector-strong*) ;; # It got added.
  *) # Try the plain/older -fstack-protector.
     set stack-protector -fstack-protector
     eval $checkccflag
     ;;
  esac
  ;;
     esac
     ;;
 esac
esac

?X: In USG mode, a MIPS system may need some BSD includes
case "$mips_type" in
*BSD*|") inclwanted="$locincpth $usrinc";;
*) inclwanted="$locincpth $inclwanted $usrinc/bsd";;
esac
for thisincl in $inclwanted; do
 if $test -d $thisincl; then
  if $test x$thisincl != x$usrinc; then
   case "$dflt" in
   *" -I$thisincl "*);;
   *) dflt="$dflt -I$thisincl ";;
   esac
  fi
 fi
done

?X: Include test function (header, symbol)
inctest='if $contains $2 $usrinc/$1 >/dev/null 2>&1; then
 xxx=true;
elif $contains $2 $usrinc/sys/$1 >/dev/null 2>&1; then
 xxx=true;
else
 xxx=false;
fi;
```

```
if
 $xxx; then
 case "$dflt" in
 *$2*);;
 *) dflt="$dflt -D$2";;
 esac;
fi'

set signal.h LANGUAGE_C; eval $inctest

case "$usesocks" in
$define)
 ccflags="$ccflags -DSOCKS"
 ;;
esac

case "$hint" in
default|recommended) dflt="$ccflags $dflt" ;;
*) dflt="$ccflags";;
esac

case "$dflt" in
"|' ') dflt=none;;
esac

$cat <<EOH

Your C compiler may want other flags.  For this question you should include
-I/whatever and -DWHATEVER flags and any other flags used by the C compiler,
but you should NOT include libraries or ld flags like -lwhatever.  If you
want $package to honor its debug switch, you should include -DDEBUGGING here.
Your C compiler might also need additional flags, such as -D_POSIX_SOURCE.

To use no flags, specify the word "none".

EOH
?X: strip leading space
set X $dflt
shift
dflt=${1+"$@"}
rp="Any additional cc flags?"
. ./myread
case "$ans" in
none) ccflags=";;
*) ccflags="$ans";;
esac

: the following weeds options from ccflags that are of no interest to cpp
```

```
case
 "$cppflags" in
") cppflags="$ccflags" ;;
*)  set X $ccflags; shift
   case " $cppflags " in
   *" $1 "*) ;;  # Try to avoid doubling the cppflags.
   *) cppflags="$cppflags $ccflags" ;;
   esac
   ;;
esac
case "$gccversion" in
1.*) cppflags="$cppflags -D__GNUC__"
esac
case "$mips_type" in
");;
*BSD*) cppflags="$cppflags -DSYSTYPE_BSD43";;
esac
case "$cppflags" in
");;
*)
 echo " "
 echo "Let me guess what the preprocessor flags are..." >&4
 set X $cppflags
 shift
 cppflags="
 $cat >cpp.c <<'EOM'
#define BLURFL foo

BLURFL xx LFRULB
EOM
?X:
?X: For each cc flag, try it out with both cppstdin and cpprun, since the
?X: first is almost surely a cc wrapper. We have to try both in case
?X: of cc flags like '-Olimit 2900' that are actually two words...
?X:
 previous="
 for flag in $*
 do
  case "$flag" in
  -*) ftry="$flag";;
  *) ftry="$previous $flag";;
  esac
  if $cppstdin -DLFRULB=bar $cppflags $ftry $cppminus <cpp.c \
   >cpp1.out 2>/dev/null && \
   $cpprun -DLFRULB=bar $cppflags
 $ftry $cpplast <cpp.c \
   >cpp2.out 2>/dev/null && \
   $contains 'foo.*xx.*bar' cpp1.out >/dev/null 2>&1 && \
```

```
  $contains 'foo.*xx.*bar' cpp2.out >/dev/null 2>&1
 then
  cppflags="$cppflags $ftry"
  previous=''
 else
  previous="$flag"
 fi
done
set X $cppflags
shift
cppflags=${1+"$@"}
case "$cppflags" in
*-*)  echo "They appear to be: $cppflags";;
esac
$rm -f cpp.c cpp?.out
;;
esac

: flags used in final linking phase
case "$ldflags" in
'') if ./venix; then
  dflt='-i -z'
 else
  dflt=''
 fi
 case "$ccflags" in
 *-posix*) dflt="$dflt -posix" ;;
 esac
 ;;
*) dflt="$ldflags";;
esac
# See note above about -fstack-protector
case "$ccflags" in
*-fstack-protector-strong*)
 case "$dflt" in
 *-fstack-protector-strong*) ;; # Don't add it again
 *) dflt="$dflt -fstack-protector-strong" ;;
 esac
 ;;
*-fstack-protector*)
 case "$dflt" in
 *-fstack-protector*) ;; # Don't add it again
 *) dflt="$dflt -fstack-protector" ;;
 esac
 ;;
esac

: Try to guess additional flags to pick
```

```
 up local libraries.
for thislibdir in $libpth; do
 case " $loclibpth " in
 *" $thislibdir "*)
  case "$dflt " in
  *"-L$thislibdir "*) ;;
  *)  dflt="$dflt -L$thislibdir" ;;
  esac
  ;;
 esac
done

case "$dflt" in
") dflt='none' ;;
esac

$cat <<EOH

Your C linker may need flags.  For this question you should
include -L/whatever and any other flags used by the C linker, but you
should NOT include libraries like -lwhatever.

Make sure you include the appropriate -L/path flags if your C linker
does not normally search all of the directories you specified above,
namely
 $libpth
To use no flags, specify the word "none".

EOH

rp="Any additional ld flags (NOT including libraries)?"
. ./myread
case "$ans" in
none) ldflags=";;
*) ldflags="$ans";;
esac
rmlist="$rmlist pdp11"

@if lkflags
: partial linking may need other flags
case "$lkflags" in
") case "$ldflags" in
 ") dflt='none';;
 *) dflt="$ldflags";;
 esac;;
*) dflt="$lkflags";;
esac
echo " "
```

```
rp="Partial linking flags to be used (NOT
 including -r)?"
. ./myread
case "$ans" in
none) lkflags="";;
*) lkflags="$ans";;
esac

@end
?X:
?X: If the user changes compilers after selecting a hint file, it's
?X: possible that the suggested ccflags/ldflags will be wrong.  Try to
?X: compile and run a simple test program.  Let the user see all the
?X: error messages. -- ADO and RAM
?X: Sometimes, particularly on Linux systems, there is a bad library
?X: (e.g. a dangling symlink or incompatible library or a "run-time"
?X: version but not a "development" version of a library).  This test
?X: will catch those sorts of problems too, though how to fix them
?X: may not be obvious.
?X:
: coherency check
echo " "
echo "Checking your choice of C compiler and flags for coherency..." >&4
$cat > try.c <<'EOF'
#include <stdio.h>
int main() { printf("Ok\n"); return(0); }
EOF
?X: Strip extra blanks in case some of the following variables are empty
set X $cc -o try $optimize $ccflags $ldflags try.c $libs
shift
$cat >try.msg <<'EOM'
I've tried to
 compile and run the following simple program:

EOM
$cat try.c >> try.msg

$cat >> try.msg <<EOM

I used the command:

 $*
 $run ./try

and I got the following output:

EOM
dflt=y
```

```
?X: Use "sh -c" to avoid error messages tagged with leading "Configure:".
?X: We need to try the resulting executable, because cc might yield a 0 status
?X: even when ld failed, in which case the executable will not run properly,
?X: if its x bit is set at all...
if $sh -c "$cc -o try $optimize $ccflags $ldflags try.c $libs" >>try.msg 2>&1; then
 if $sh -c "$run ./try " >>try.msg 2>&1; then
  xxx=`$run ./try`
  case "$xxx" in
  "Ok") dflt=n ;;
  *)    echo 'The program compiled OK, but produced no output.' >> try.msg ;;
  esac
 else
  echo "The program compiled OK, but exited with status $?." >>try.msg
  rp="You have a problem.  Shall I abort Configure"
  dflt=y
 fi
else
 echo "I can't compile the test program." >>try.msg
 rp="You have a BIG problem.  Shall I abort Configure"
 dflt=y
fi
case "$dflt" in
y)
 $cat
 try.msg >&4
?X: using -K will prevent default aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
  echo "(The supplied flags or libraries might be incorrect.)"
  ;;
 *) dflt=n;;
 esac
 echo " "
 . ./myread
 case "$ans" in
 n*|N*) ;;
 *) echo "Ok.  Stopping Configure." >&4
  exit 1
  ;;
 esac
 ;;
n) echo "OK, that should do.";;
esac
$rm_try gcctest gcctest.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ccflags.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Inhdr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Inhdr.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:01:31  ram
?RCS: patch54: deleted tabs that caused some /bin/sh to core dump (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:55:01  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks wether a set of header files exists or not.
?X: If the first header is not
 found, the function tries to locate
?X: the next header, and so on, until one is found or there is no
?X: more header in the list.
?X:
?X: To use it, say:
?X: set header i_header [ header2 i_header2 ... ]
?X: eval $inhdr
?X:
?MAKE:Inhdr: test Findhdr Whoa
?MAKE: -pick add $@ %<
?LINT:define inhdr
?V:inhdr
?S:inhdr:
?S: This shell variable is used internally by Configure to check
?S: wether a set of headers exist or not. A typical use is:
?S:  set header i_header [ header2 i_header2 ... ]
?S:  eval $inhdr
?S: That will print a message, saying wether header was found or not
?S: and set i_header* accordingly. If the first header is not found,
?S: we try the next one, until the list is empty or one is found.
?S:.
?T:xxx xxf var td xxnf tu yyy instead was cont
: define an alternate in-header-list? function
```

```
inhdr='echo " "; td=$define; tu=$undef; yyy=$@;
cont=true; xxf="echo \"<\$1> found.\" >&4";
case $# in 2) xxnf="echo \"<\$1> NOT found.\" >&4";;
*) xxnf="echo \"<\$1> NOT found, ...\" >&4";;
esac;
case
 $# in 4) instead=instead;; *) instead="at last";; esac;
while $test "$cont"; do
 xxx=`./findhdr $1`
 var=$2; eval "was=\$$2";
 if $test "$xxx" && $test -r "$xxx";
 then eval $xxf;
?X: Next line shifted left 1 tabstop to avoid sh core dump on MachTen 2.1.1.
 eval "case \"\$$var\" in $undef) . ./whoa; esac"; eval "$var=\$td";
  cont="";
 else eval $xxnf;
?X: Likewise, the next line has been shifted left 1 tabstop -- ADO, 08/03/95
 eval "case \"\$$var\" in $define) . ./whoa; esac"; eval "$var=\$tu"; fi;
 set $yyy; shift; shift; yyy=$@;
 case $# in 0) cont="";;
 2) xxf="echo \"but I found <\$1> $instead.\" >&4";
  xxnf="echo \"and I did not find <\$1> either.\" >&4";;
 *) xxf="echo \"but I found <\$1\> instead.\" >&4";
  xxnf="echo \"there is no <\$1>, ...\" >&4";;
 esac;
done;
?X: Remaining values are set to 'undef'
while $test "$yyy";
do set $yyy; var=$2; eval "was=\$$2";
 eval "case \"\$$var\" in $define) . ./whoa; esac"; eval "$var=\$tu";
 set $yyy; shift; shift; yyy=$@;
done'
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Inhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: orderlib.U,v 3.0.1.4 1997/02/28 16:18:18 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: orderlib.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:18:18  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS: patch61: now uses the ar located by Loc.U
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:33:04  ram
?RCS: patch45: allows hint files to specify their own value for 'ranlib'
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:26:48  ram
?RCS: patch36: now performs a real small compile for accurate
 checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:31:17  ram
?RCS: patch32: use cc variable instead of hardwired 'cc' in 1st compile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orderlib ranlib: Loc ar cat test rm +cc +ccflags +ldflags +libs i_stdlib _a _o run
?MAKE: -pick add $@ %<
?S:orderlib:
?S: This variable is "true" if the components of libraries must be ordered
?S: (with `lorder $* | tsort`) before placing them in an archive.  Set to
?S: "false" if ranlib or ar can generate random libraries.
?S:.
?S:ranlib:
?S: This variable is set to the pathname of the ranlib program, if it is
?S: needed to generate random libraries.  Set to ":" if ar can generate
?S: random libraries or if random libraries are not supported
?S:.
?F:!foobar
: see if ar generates random libraries by itself
echo " "
echo "Checking how to generate random libraries on your machine..." >&4
?X: Some systems (like MIPS) complain when running
 ar... Others like Ultrix
?X: need an explicit 'ar ts' to add the table of contents.
?X: Still others like Linux run ar ts successfully, but still need ranlib.
?X: This set of tests seems the minimum necessary to check out Linux.
?X: We need to explicitly put the entries in out-of-order so that Sun's ld
?X: will fail.  (Otherwise it complains, but gives an exit status of 0.)
echo 'int bar1() { return bar2(); }' > bar1.c
echo 'int bar2() { return 2; }' > bar2.c
$cat > foo.c <<EOP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
```

```
#endif
int main() { printf("%d\n", bar1()); exit(0); }
EOP
$cc $ccflags -c bar1.c >/dev/null 2>&1
$cc $ccflags -c bar2.c >/dev/null 2>&1
$cc $ccflags -c foo.c >/dev/null 2>&1
$ar rc bar$_a bar2$_o bar1$_o >/dev/null 2>&1
if $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
 echo "$ar appears to generate random libraries itself."
 orderlib=false
 if [ "X$ranlib" = "X" ]; then
     ranlib=":"
 fi
elif
 $ar s bar$_a >/dev/null 2>&1 &&
 $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
  echo "a table of contents needs to be added with '$ar s'."
  orderlib=false
  ranlib="$ar s"
elif $ar ts bar$_a >/dev/null 2>&1 &&
 $cc -o foobar $ccflags $ldflags foo$_o bar$_a $libs > /dev/null 2>&1 &&
 $run ./foobar >/dev/null 2>&1; then
  echo "a table of contents needs to be added with '$ar ts'."
  orderlib=false
  ranlib="$ar ts"
else
?X: Allow hints to specify their own ranlib "script". For instance, on
?X: some NeXT machines, the timestamp put by ranlib is not correct, and this
?X: may raise tedious recompiles for nothing. Therefore, NeXT may add the
?X: ranlib='sleep 5; /bin/ranlib' line in their hints to "fix" that.
?X: (reported by Andreas Koenig <k@franz.ww.tu-berlin.de>)
 case "$ranlib" in
 :) ranlib=";;
 ")
  ranlib=`./loc ranlib X /usr/bin /bin /usr/local/bin`
  $test -f $ranlib || ranlib="
  ;;
 esac
 if $test -n "$ranlib";
 then
  echo "your system has '$ranlib'; we'll use that."
  orderlib=false
 else
  echo "your system doesn't seem to support random libraries"
  echo "so we'll use lorder and tsort to order the libraries."
  orderlib=true
```

```
  ranlib=":"
 fi
fi
$rm -f foo* bar*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/orderlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setlnbuf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setlnbuf.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:57  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_setlinebuf: Inlibc
?MAKE: -pick add $@ %<
?S:d_setlinebuf:
?S: This variable conditionally defines the HAS_SETLINEBUF symbol, which
?S: indicates to the C program that the setlinebuf() routine is available
?S: to change stderr or stdout from block-buffered or unbuffered
 to a
?S: line-buffered mode.
?S:.
?C:HAS_SETLINEBUF :
?C: This symbol, if defined, indicates that the setlinebuf routine is
?C: available to change stderr or stdout from block-buffered or unbuffered
?C: to a line-buffered mode.
?C:.
?H:#$d_setlinebuf HAS_SETLINEBUF  /**/
?H:.
?LINT:set d_setlinebuf
: see if setlinebuf exists
set setlinebuf d_setlinebuf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setlnbuf.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mailer.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mailer.U,v $
?RCS: Revision 3.0.1.3  1995/01/11  15:32:11  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:10:04  ram
?RCS: patch23: ensure full path value is used for rmail also
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:14:18  ram
?RCS: patch16: now use _sendmail vars and friends for portability issues
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:10  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:mailer: test cat rmail mail smail sendmail Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:mailer:
?S: This variable contains the full pathname of a reasonable mailer.
?S: By reasonable, we mean some program which can understand internet
?S: addresses or at least forward them to some internet router. This
?S: mailer should be invoked as "mailer [options] recipients <mail".
?S:.
: determine the name of a reasonable mailer
case "$mailer" in
")
 if $test -f "$sendmail"; then
  dflt="$sendmail"
 elif $test -f "$smail"; then
  dflt="$smail"
 elif $test -f "$rmail"; then
  dflt="$rmail"
 elif $test -f /bin/mail; then
  dflt=/bin/mail
 else
  dflt=$mail
 fi
```

```
 ;;
*)  dflt="$mailer";;
esac
$cat <<EOM

I need the full pathname of the program used to deliver mail on your system.
A typical answer would be /usr/lib/sendmail or /bin/rmail, but you may choose
any other program, as long as it can be fed from standard input and will
honour any user-supplied headers.

EOM
fn=f
rp='Mail
 transport agent to be used?'
. ./getfile
mailer="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mailer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysmode.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysmode: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysmode:
?S: This variable conditionally defines the I_SYSMODE symbol,
?S: and indicates whether a C program should include <sys/mode.h>.
?S:.
?C:I_SYSMODE:
?C: This symbol, if defined, indicates that <sys/mode.h> exists and
?C: should be included.
?C:.
?H:#$i_sysmode I_SYSMODE  /**/
?H:.
?LINT:set i_sysmode
: see if this is a sys/mode.h system
set sys/mode.h i_sysmode
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysmode.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_wchar: Inhdr
?MAKE: -pick add $@ %<
?S:i_wchar:
?S: This variable conditionally defines the I_WCHAR symbol,
?S: that indicates whether a C program may include <wchar.h>.
?S:.
?C:I_WCHAR:
?C: This symbol, if defined, indicates to the C program that <wchar.h>
?C: is available for inclusion
?C:.
?H:#$i_wchar   I_WCHAR /**/
?H:.
?LINT:set i_wchar
: see if wchar.h is present
set wchar.h i_wchar
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_wchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_copysignl: Inlibc
?MAKE: -pick add $@ %<
?S:d_copysignl:
?S: This variable conditionally defines the HAS_COPYSIGNL symbol, which
?S: indicates to the C program that the copysignl() routine is available.
?S: If aintl is also present we can emulate modfl.
?S:.
?C:HAS_COPYSIGNL:
```

```
?C: This symbol, if defined, indicates that the copysignl routine is
?C: available.  If aintl is also present we can emulate modfl.
?C:.
?H:#$d_copysignl HAS_COPYSIGNL  /**/
?H:.
?LINT:set d_copysignl
: see if copysignl exists
set copysignl d_copysignl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_copysignl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_truncate.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_truncate.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_truncate: Inlibc
?MAKE: -pick add $@ %<
?S:d_truncate:
?S: This variable conditionally defines HAS_TRUNCATE if truncate() is
?S: available to truncate files.
?S:.
?C:HAS_TRUNCATE (TRUNCATE):
?C: This symbol, if defined, indicates that the truncate routine is
?C: available to truncate files.
?C:.
?H:#$d_truncate HAS_TRUNCATE /**/
?H:.
?LINT:set
 d_truncate
: see if truncate exists
set truncate d_truncate
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_truncate.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Null.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Null.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit ends up producing shell code to set all variables to ".  This
?X: probably isn't necessary, but I'm paranoid.  About certain things.
?X:
?MAKE:Null: Head
?MAKE: -pick add.Null $@ %<
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Null.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Init.U,v 3.0.1.1 1994/10/31 09:45:59 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Init.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:45:59  ram
?RCS: patch44: removed Options from MAKE to prevent Init overrides
?RCS: patch44: option processing now done after Myinit thanks to new Begin.U
?RCS: patch44: moved "Beginning of configuration questions" to Begin.U
?RCS: patch44: moved signal trapping instruction to Begin.U as well
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: This file
 initializes certain default variables used by Configure.  They
?X: may be overridden or added to by definitions in Myinit.U.
?X:
?MAKE:Init eunicefix: Null
?MAKE: -pick add $@ %<
?MAKE: -pick weed $@ ./Init
?S:eunicefix:
?S: When running under Eunice this variable contains a command which will
?S: convert a shell script to the proper form of text file for it to be
?S: executable by the shell.  On other systems it is a no-op.
?S:.
?V:define undef smallmach:rmlist
?X:
?X: Throughout the units, one may make use of $define and $undef to reference
?X: a defined symbol or an undefined one. There is no need to add them in
?X: the dependency line since this unit makes them visible via ?V:, and
?X: everyone inherits from those symbols since by convention Init.U is the
?X: root dependency.
?X:
?LINT:extern DJGPP
?LINT:extern _exe
?LINT:change _exe
?LINT:extern is_os2
: Detect odd OSs
define='define'
undef='undef'
smallmach='pdp11 i8086 z8000 i80286 iAPX286'
rmlist=''

: We must find out about
 Eunice early
eunicefix=':'
if test -f /etc/unixtovms; then
 eunicefix=/etc/unixtovms
fi
if test -f /etc/unixtovms.exe; then
 eunicefix=/etc/unixtovms.exe
fi

: Set executable suffix now -- needed before hints available
if test -f "/libs/version.library"; then
: Amiga OS
   _exe=""
elif test -f "/system/gnu_library/bin/ar.pm"; then
: Stratus VOS
   _exe=".pm"
elif test -n "$DJGPP"; then
```

```
: DOS DJGPP
   _exe=".exe"
elif test -f /kern/cookiejar; then
: MiNT
   _exe=""
elif test -d c:/. -o -n "$is_os2" ; then
: OS/2 or cygwin
   _exe=".exe"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Init.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gidsize: Myread Typedef gidtype Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:gidsize:
?S: This variable contains the size of a gidtype in bytes.
?S:.
?C:Gid_t_size:
?C: This symbol holds the size of a Gid_t in bytes.
?C:.
?H:#define Gid_t_size $gidsize  /* GID size */
?H:.
?T:yyy zzz
?F:!try
: Check the size of GID
echo " "
case "$gidtype" in
*_t) zzz="$gidtype" ;;
*)   zzz="gid"  ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
```

```
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($gidtype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") gidsize=4
  echo "(I can't execute the test program--guessing $gidsize.)" >&4
  ;;
 *) gidsize=$yyy
  echo "Your $zzz is $gidsize bytes long."
  ;;
 esac
else
 gidsize=4
 echo "(I can't compile the test program--guessing $gidsize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libs.U,v 3.0.1.6 1997/02/28 16:09:11 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: libs.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:09:11  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.5  1995/07/25  14:12:05  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  16:24:22  ram
?RCS: patch36: removed old broken thislib/thatlib processing (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:05:44  ram
```

```
?RCS: patch30: code cleanup with if/elif by ADO and RAM
?RCS: patch30:
 undone patch23 for libswanted default setting
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:08:45  ram
?RCS: patch23: now includes ordered default libswanted variable (ADO)
?RCS: patch23: major cleanup for library lookups (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:31  ram
?RCS: patch6: added default for libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libs ignore_versioned_solibs libsfound libsfiles libsdirs libspath: \
 test cat Myread Oldconfig Loc libpth package xlibpth so _a \
 usesocks sed uselongdouble usequadmath
?MAKE: -pick add $@ %<
?S:libs:
?S: This variable holds the additional libraries we want to use.
?S: It is up to the Makefile to deal with it.  The list can be empty.
?S:.
?S:libsfound:
?S: This variable holds the full pathnames of the libraries
?S: we found and accepted.
?S:.
?S:libsfiles:
?S: This variable holds the filenames aka basenames of the libraries
?S: we found and accepted.
?S:.
?S:libsdirs:
?S: This
 variable holds the directory names aka dirnames of the libraries
?S: we found and accepted, duplicates are removed.
?S:.
?S:libspath:
?S: This variable holds the directory names probed for libraries.
?S:.
?S:ignore_versioned_solibs:
?S: This variable should be non-empty if non-versioned shared
?S: libraries (libfoo.so.x.y) are to be ignored (because they
?S: cannot be linked against).
?S:.
?T:xxx yyy thislib thisdir libswanted libstyle
?D:libs=''
?X:
?X: This order is chosen so that libraries  -lndir, -ldir, -lucb, -lbsd,
?X: -lBSD, -lPW, and -lx only get used if there are unresolved
```

```
?X: routines at link time.  Usually, these are backwards compatibility
?X: libraries, and may not be as reliable as the standard c library.
?X:
?X: The -lsocket -linet -lnsl order has been reported to be necessary
?X: for at least one SVR4 implementation.
?X: -lc must proceed -lucb or -lbsd for most Solaris applications.
?X: -lc_s proceeds -lc so we pick up the shared library version,
 if
?X: it is available.
?X:
?X: The ordering of c, posix, and cposix is a guess and almost
?X: certainly wrong on about half of all systems.
?X:
?X: Set proper libswanted in your private Myinit.U if needed.
?X:
?X:: default ordered library list
?X:libswanted='net socket inet bind nsl nm sdbm gdbm ndbm dbm malloc dl'
?X:libswanted="$libswanted dld sun m c_s c posix cposix ndir dir ucb"
?X:libswanted="$libswanted bsd BSD PW x"
?X:
?INIT:: default library list
?INIT:libswanted="
?INIT:: some systems want to use only the non-versioned libso:s
?INIT:ignore_versioned_solibs="
?LINT:extern usecbacktrace
?LINT:extern libscheck
?LINT:extern p
?LINT:use uselongdouble
: Looking for optional libraries
echo " "
echo "Checking for optional libraries..." >&4
case "$libs" in
' '|'') dflt='';;
*) dflt="$libs";;
esac
case "$libswanted" in
'') libswanted='c_s';;
esac
?X: libsocks has nasty naming scheme.
?X: This does not work if somebody wants SOCKS 4.
case "$usesocks" in
"$define") libswanted="$libswanted
 socks5 socks5_sh" ;;
esac
case "$usecbacktrace" in
"$define") libswanted="$libswanted bfd" ;;
esac
case "$usequadmath" in
```

```
"$define") libswanted="$libswanted quadmath" ;;
esac
libsfound="
libsfiles="
libsdirs="
libspath="
for thisdir in $libpth $xlibpth; do
 test -d $thisdir && libspath="$libspath $thisdir"
done
for thislib in $libswanted; do
 for thisdir in $libspath; do
    xxx="
    if $test ! -f "$xxx" -a "X$ignore_versioned_solibs" = "X"; then
  xxx=`ls $thisdir/lib$thislib.$so.[0-9] 2>/dev/null|sed -n '$p'`
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
  xxx=`ls $thisdir/lib$thislib.[0-9].$so 2>/dev/null|sed -n '$p'`
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib$thislib.$so
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib$thislib$_a
        $test -f "$xxx"
 && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/lib${thislib}_s$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
  $test -f "$xxx" && thislib=${thislib}_s
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/Slib$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test -f "$xxx" && libstyle=static
    fi
    if $test -f "$xxx"; then
```

```
  case "$libstyle" in
  shared) echo "Found -l$thislib (shared)." ;;
  static) echo "Found -l$thislib." ;;
  *)      echo "Found -l$thislib ($libstyle)." ;;
  esac
  case " $dflt " in
  *"-l$thislib "*);;
  *) dflt="$dflt -l$thislib"
                libsfound="$libsfound $xxx"
                yyy=`basename $xxx`
                libsfiles="$libsfiles $yyy"
                yyy=`echo $xxx|$sed -e
 "s%/$yyy\\$%%"`
                case " $libsdirs " in
                *" $yyy "*) ;;
                *) libsdirs="$libsdirs $yyy" ;;
                esac
    ;;
  esac
  break
    fi
 done
 if $test ! -f "$xxx"; then
    echo "No -l$thislib."
 fi
done
set X $dflt
shift
dflt="$*"
case "$libs" in
") dflt="$dflt";;
*) dflt="$libs";;
esac
case "$dflt" in
' '|") dflt='none';;
esac

$cat <<EOM

In order to compile $package on your machine, a number of libraries
are usually needed.  Include any other special libraries here as well.
Say "none" for none.  The default list is almost always right.
EOM

echo " "
rp="What libraries to use?"
. ./myread
case "$ans" in
```

```
none) libs=' ';;
*) libs="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libs.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sresuproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sresuproto:
?S: This variable conditionally defines the HAS_SETRESUID_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the setresuid() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SETRESUID_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the setresuid() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
 int setresuid(uid_t ruid, uid_t euid, uid_t suid);
?C:.
?H:#$d_sresuproto HAS_SETRESUID_PROTO /**/
?H:.
?LINT:set d_sresuproto
: see if prototype for setresuid is available
echo " "
set d_sresuproto setresuid $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sresuproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tmpnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_tmpnam_r tmpnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_tmpnam_r:
?S: This variable conditionally defines the HAS_TMPNAM_R symbol,
?S: which indicates to the C program that the tmpnam_r()
?S: routine is available.
?S:.
?S:tmpnam_r_proto:
?S: This variable encodes the prototype of tmpnam_r.
?S: It is zero if d_tmpnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_tmpnam_r
?S: is defined.
?S:.
?C:HAS_TMPNAM_R:
?C: This symbol, if defined, indicates that the tmpnam_r routine
?C: is available to tmpnam re-entrantly.
?C:.
?C:TMPNAM_R_PROTO:
?C: This
 symbol encodes the prototype of tmpnam_r.
?C: It is zero if d_tmpnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_tmpnam_r
?C: is defined.
?C:.
?H:#$d_tmpnam_r HAS_TMPNAM_R /**/
?H:#define TMPNAM_R_PROTO $tmpnam_r_proto /**/
?H:.
?T:try hdrs d_tmpnam_r_proto
: see if tmpnam_r exists
set tmpnam_r d_tmpnam_r
eval $inlibc
case "$d_tmpnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h "
 case "$d_tmpnam_r_proto:$usethreads" in
 ":define") d_tmpnam_r_proto=define
  set d_tmpnam_r_proto tmpnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_tmpnam_r_proto" in
 define)
```

```
 case "$tmpnam_r_proto" in
 "|0) try='char* tmpnam_r(char*);'
 ./protochk "$extern_C $try" $hdrs && tmpnam_r_proto=B_B ;;
 esac
 case "$tmpnam_r_proto" in
 "|0) d_tmpnam_r=undef
  tmpnam_r_proto=0
  echo "Disabling tmpnam_r, cannot determine prototype." >&4 ;;
 * ) case "$tmpnam_r_proto" in
  REENTRANT_PROTO*) ;;
  *) tmpnam_r_proto="REENTRANT_PROTO_$tmpnam_r_proto"
 ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "tmpnam_r has no prototype, not using it." >&4 ;;
  esac
  d_tmpnam_r=undef
  tmpnam_r_proto=0
  ;;
 esac
 ;;
*) tmpnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_tmpnam_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_pthread: Inhdr
?MAKE: -pick add $@ %<
?S:i_pthread:
?S: This variable conditionally defines the I_PTHREAD symbol,
?S: and indicates whether a C program should include <pthread.h>.
?S:.
```

```
?C:I_PTHREAD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <pthread.h>.
?C:.
?H:#$i_pthread   I_PTHREAD /**/
?H:.
?LINT:set i_pthread
: see if POSIX threads are available
set pthread.h i_pthread
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/i_pthread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libyacc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libyacc.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:09:19  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.3  1994/05/13  15:27:12  ram
?RCS: patch27: added byacc case (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:09:01  ram
?RCS: patch23: now uses full library path instead of -l notation
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:13:49  ram
?RCS: patch16: un-obsoleted this unit for smooth yacc compilations
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libyacc: Loc yacc libpth _a
?MAKE: -pick add $@ %<
?S:libyacc:
?S: This variable contains the argument to pass to the loader in order
?S: to get the yacc library routines.  If there is no yacc or yacc
?S: library, it is null.
```

```
?S:.
?T:xxx
: see if we should include -ly
echo " "
case "$yacc" in
*byacc*)
 echo "You are using byacc, so I won't look for a yacc library." >&4
 libyacc=''
 ;;
*yacc)
 xxx=`./loc liby$_a x $libpth`
 case "$xxx" in
 x)
  echo "No yacc library found." >&4
  libyacc=''
  ;;
 *)
  echo "yacc library found in $xxx." >&4
  libyacc="$xxx"
  ;;
 esac
 ;;
*bison*)
 echo "You are using bison, so I won't look for a yacc library." >&4
 libyacc=''
 ;;
*)
echo "You don't seem to have yacc, so I won't look for the yacc library." >&4
 libyacc=''
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libyacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2004 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strlcpy: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_strlcpy:
?S: This variable conditionally defines the HAS_STRLCPY symbol, which
?S: indicates to the C program that the strlcpy () routine is available.
```

```
?S:.
?C:HAS_STRLCPY:
?C: This symbol, if defined, indicates that the strlcpy () routine is
?C: available to do string copying.
?C:.
?H:#$d_strlcpy HAS_STRLCPY  /**/
?H:.
?T:d_strlcpy_proto xx1 xx2 xx3 xx4
?LINT:set d_strlcpy
: see if strlcpy exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_strlcpy_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_strlcpy_proto strlcpy
 literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_strlcpy_proto" in
   define) # see if strlcpy exists
 set strlcpy d_strlcpy
 eval $inlibc
 ;;
   *)  val=$undef
 set d_strlcpy
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strlcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: AAAAA.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: AAAAA.U,v $
?RCS: Revision 3.0.1.4  1994/06/20  06:50:26  ram
?RCS: patch30: changes from Jarkko Hietaniemi are tagged with JHI
```

```
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:01:39  ram
?RCS: patch23: initials for Wayne Davison are now WED
?RCS: patch23: added initials for new unit contributor Andy Dougherty
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:01:09  ram
?RCS: patch16: make metalint shut up on special unit definition for All target
?RCS:
?RCS: Revision
 3.0.1.1  1993/09/13  15:43:57  ram
?RCS: patch10: documents initials used for Wayne Davison's contributions
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this file is to supply the head of the Makefile created
?X: by metaconfig.  For this reason it must be first in alphabetical order.
?X: The leading '+' in front of the unit name is a hint for metalint, since
?X: the use of that special unit name as a "made" unit is legitimate here.
?X:
?MAKE:+All: Finish
?X:
?X: Throughout the units, the following initials are used to identify comments:
?X:
?X:  HMS: Harlan Stenn
?X:  RAM: Raphael Manfredi
?X:  WED: Wayne Davison (was WAD by mistake--RAM)
?X:  ADO: Andy Dougherty
?X:  JHI: Jarkko Hietaniemi
?X:
?X: Agreed, this is a weird place to document it, but I couldn't find a better
?X: place to do so. I've bet on the curiosity of users, who would probably
?X: want to know what's in this strangely-named file--RAM.

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/AAAAA.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_sitecustomize.U,v $
?RCS:
?RCS: Copyright (c) 2005-2006 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_sitecustomize.U,v $
```

```
?RCS:
?MAKE:usesitecustomize: Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:usesitecustomize:
?S: This variable is set to true when the user requires a mechanism that
?S: allows the sysadmin to add entries to @INC at runtime.  This variable
?S: being set, makes perl run '$sitelib/sitecustomize.pl' at startup.
?S:.
?C:USE_SITECUSTOMIZE:
?C: This symbol, if defined, indicates that sitecustomize should
?C: be used.
?C:.
?H:?%<:@if USE_SITECUSTOMIZE
?H:?%<:#ifndef USE_SITECUSTOMIZE
?H:?%<:#$usesitecustomize USE_SITECUSTOMIZE  /**/
?H:?%<:#endif
?H:?%<:@end
?H:.
: Check if site customization support was requested
case "$usesitecustomize" in
   $define|true|[Yy]*)
 usesitecustomize="$define"
 ;;
    *)
 usesitecustomize="$undef"
 ;;
   esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sitecustomize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2006-2007, H.Merijn Brand
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_builtin_choose_expr d_builtin_expect : Compile Setvar cat run rm_try
?MAKE: -pick add $@ %<
?S:d_builtin_choose_expr:
?S: This conditionally defines HAS_BUILTIN_CHOOSE_EXPR, which
?S: indicates that the compiler supports __builtin_choose_expr(x,y,z).
?S: This built-in function is analogous to the "x?y:z" operator in C,
?S: except that the expression returned has its type unaltered by
?S: promotion rules. Also, the built-in function does not evaluate
```

```
?S: the expression that was not chosen.
?S:.
?S:d_builtin_expect:
?S: This conditionally
 defines HAS_BUILTIN_EXPECT, which indicates
?S: that the compiler supports __builtin_expect(exp,c).  You may use
?S: __builtin_expect to provide the compiler with branch prediction
?S: information.
?S:.
?C:HAS_BUILTIN_CHOOSE_EXPR:
?C: Can we handle GCC builtin for compile-time ternary-like expressions
?C:.
?C:HAS_BUILTIN_EXPECT:
?C: Can we handle GCC builtin for telling that certain values are more
?C: likely
?C:.
?H:#$d_builtin_expect HAS_BUILTIN_EXPECT /**/
?H:#$d_builtin_choose_expr HAS_BUILTIN_CHOOSE_EXPR /**/
?H:.
?F:!try
?LINT:set d_builtin_expect d_builtin_choose_expr
: Look for GCC-style __builtin_choose_expr
case "$d_builtin_choose_expr" in
")
   echo " "
   echo "Checking whether your compiler can handle __builtin_choose_expr ..." >&4
   $cat >try.c <<'EOCP'
#include <assert.h>
#include <stdlib.h>
#include <stdio.h>

#define SYRINX(x) __builtin_choose_expr( x, (1056*2), (103*50) )

int main(void) {
   assert( SYRINX(1) == 2112 );
   assert( SYRINX(1) != 5150 );
    assert( SYRINX(0) == 5150 );
   assert( SYRINX(0) != 2112 );
   puts( "All good!" );
   exit(0);
}

EOCP
   set try
   if eval $compile && $run ./try; then
 echo "Your C compiler supports __builtin_choose_expr."
 val="$define"
   else
```

```
 echo "Your C compiler doesn't seem to understand __builtin_choose_expr."
 val="$undef"
   fi
;;
*) val="$d_builtin_choose_expr" ;;
esac

set d_builtin_choose_expr
eval $setvar
$rm_try

: Look for GCC-style __builtin_expect
case "$d_builtin_expect" in
")
   echo " "
   echo "Checking whether your compiler can handle __builtin_expect ..." >&4
   $cat >try.c <<'EOCP'
int main(void) {
   int n = 50;
   if ( __builtin_expect(n, 0) ) n = 1;
   /* Remember shell exit code truth is 0, C truth is non-zero */
   return !(n == 1);
}
EOCP
   set try
   if eval $compile && $run ./try; then
 echo "Your C compiler supports __builtin_expect."
 val="$define"
   else
 echo "Your C compiler doesn't seem to understand __builtin_expect."
 val="$undef"
    fi
   ;;
*) val="$d_builtin_expect" ;;
esac

set d_builtin_expect
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_builtin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_time.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit finds which "time" include to use. If 'timezone' is used by the
?X: program, we also try to find which header should be included. Eventually,
?X: we look for <sys/select.h> if I_SYSSELECT is used, to get struct timeval.
?X:
?MAKE:i_time i_systime i_systimek timeincl: cat cc ccflags contains rm_try \
 echo n c +i_sysselct Findhdr
?MAKE: -pick add $@ %<
?S:i_time:
?S: This
 variable conditionally defines I_TIME, which indicates
?S: to the C program that it should include <time.h>.
?S:.
?S:i_systime:
?S: This variable conditionally defines I_SYS_TIME, which indicates
?S: to the C program that it should include <sys/time.h>.
?S:.
?S:i_systimek:
?S: This variable conditionally defines I_SYS_TIME_KERNEL, which
?S: indicates to the C program that it should include <sys/time.h>
?S: with KERNEL defined.
?S:.
?S:timeincl:
?S: This variable holds the full path of the included time header(s).
?S:.
?C:I_TIME (USE_TIME_H):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <time.h>.
?C:.
?C:I_SYS_TIME (I_SYSTIME USE_SYS_TIME_H NO_TIME_WITH_SYS_TIME):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h>.
?C:.
?C:I_SYS_TIME_KERNEL (I_SYSTIMEKERNEL):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h> with KERNEL defined.
?C:.
?H:#$i_time I_TIME  /**/
```

```
?H:#$i_systime
 I_SYS_TIME  /**/
?H:#$i_systimek I_SYS_TIME_KERNEL  /**/
?H:.
?W::timezone
?T:xselect flags sysselect s_timeval s_timezone
?LINT:change i_sysselct
: see if we should include time.h, sys/time.h, or both
echo " "
echo "Testing to see if we should include <time.h>, <sys/time.h> or both." >&4
$echo $n "I'm now running the test program...$c"
$cat >try.c <<'EOCP'
#include <sys/types.h>
#ifdef I_TIME
#include <time.h>
#endif
#ifdef I_SYSTIME
#ifdef SYSTIMEKERNEL
#define KERNEL
#endif
#include <sys/time.h>
#endif
#ifdef I_SYSSELECT
#include <sys/select.h>
#endif
int main()
{
 struct tm foo;
#ifdef S_TIMEVAL
 struct timeval bar;
#endif
#ifdef S_TIMEZONE
 struct timezone tzp;
#endif
 if (foo.tm_sec == foo.tm_sec)
  exit(0);
#ifdef S_TIMEVAL
 if (bar.tv_sec == bar.tv_sec)
  exit(0);
#endif
 exit(1);
}
EOCP
flags=''
@if I_SYSSELECT
if $contains 'timeval.*{' `./findhdr sys/select.h` >/dev/null 2>&1; then
 xselect='-DI_SYSSELECT'
else
```

```
 xselect=''
fi
@end
@if timezone
for s_timezone
 in '-DS_TIMEZONE' ''; do
@else
s_timezone=''
@end
?X: Every package is given a try with 'struct timeval'
@if I_SYSSELECT
for sysselect in $xselect ''; do
@else
sysselect=''
@end
for s_timeval in '-DS_TIMEVAL' ''; do
for i_systimek in '' '-DSYSTIMEKERNEL'; do
for i_time in '' '-DI_TIME'; do
for i_systime in '-DI_SYSTIME' ''; do
 case "$flags" in
 '') $echo $n ".$c"
  if $cc $ccflags \
  $i_time $i_systime $i_systimek $sysselect $s_timeval $s_timezone \
  -o try try.c >/dev/null 2>&1 ; then
   set X $i_time $i_systime $i_systimek $sysselect $s_timeval
   shift
   flags="$*"
   echo " "
   $echo $n "Succeeded with $flags$c"
  fi
  ;;
 esac
done
done
done
done
@if I_SYSSELECT
done
@end
@if timezone
done
@end
timeincl=''
echo " "
case "$flags" in
*SYSTIMEKERNEL*) i_systimek="$define"
 timeincl=`./findhdr sys/time.h`
 echo "We'll include <sys/time.h> with KERNEL defined." >&4;;
```

```
*) i_systimek="$undef";;
esac
case "$flags" in
*I_TIME*) i_time="$define"
 timeincl=`./findhdr time.h`" $timeincl"
 echo
 "We'll include <time.h>." >&4;;
*) i_time="$undef";;
esac
case "$flags" in
*I_SYSTIME*) i_systime="$define"
 timeincl=`./findhdr sys/time.h`" $timeincl"
 echo "We'll include <sys/time.h>." >&4;;
*) i_systime="$undef";;
esac
@if I_SYSSELECT
case "$flags" in
*I_SYSSELECT*) i_sysselct="$define"
 timeincl=`./findhdr sys/select.h`" $timeincl"
 echo "We'll also include <sys/select.h> to get struct timeval." >&4;;
*) case "$i_sysselct" in
 ") i_sysselct="$undef";;
 esac
esac
@end
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_localeconv_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_localeconv_l:
?S: This variable conditionally defines the HAS_LOCALECONV_L symbol, which
?S: indicates to the C program that the localeconv_l() routine is available.
?S:.
?C:HAS_LOCALECONV_L:
?C: This symbol, if defined, indicates that the localeconv_l routine is
?C: available to query certain information about a locale.
?C:.
```

```
?H:#$d_localeconv_l HAS_LOCALECONV_L  /**/
?H:.
?LINT:set d_localeconv_l
: see if localeconv_l exists
set localeconv_l d_localeconv_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_localeconv_l.U
No license file was found, but licenses were detected in source scan.

* Feel free to modify any of this as the need arises. Note, however,

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/metaconfig.html
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Guess.U,v $
?RCS: Revision 3.0.1.5  1995/07/25  13:37:14  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:53:55  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:14:35  ram
?RCS: patch15: variable d_bsd was not always set properly
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:14  ram
?RCS: patch8: fixed comment which wrongly
 attributed the usrinc symbol
?RCS: patch8: no more ugly messages when no /usr/include/ctype.h
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:37:37  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:57  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?X:
?X: This unit hazards some guesses as to what the general nature of the system
?X: is.  The information it collects here is used primarily to establish default
?X: answers to other questions.
?X:
?MAKE:Guess d_eunice d_xenix d_bsd d_linux d_dos d_os2: cat test echo n c \
 contains rm tr Loc eunicefix
?MAKE: -pick add $@ %<
?S:d_eunice:
?S: This variable conditionally defines the symbols EUNICE_SYSTEM, which
?S: alerts the C program that it must deal with ideosyncracies of VMS.
?S:.
?S:d_xenix:
?S: This variable conditionally defines the symbol XENIX_SYSTEM, which alerts
?S: the C program that it runs under Xenix.
?S:.
?S:d_dos:
?S: This symbol conditionally defines the symbol DOS_SYSTEM
 when running on
?S: DOS with DJGPP or Cygwin.
?S:.
?S:d_os2:
?S: This symbol conditionally defines the symbol OS2_SYSTEM when running on
?S: an OS/2 system.
?S:.
?S:d_bsd:
?S: This symbol conditionally defines the symbol BSD_SYSTEM when running on a
?S: BSD system.
?S:.
?S:d_linux:
?S: This symbol conditionally defines the symbol LINUX_SYSTEM when running
?S: on a Linux system.
?S:.
?C:EUNICE_SYSTEM (EUNICE):
?C: This symbol, if defined, indicates that the program is being compiled
?C: under the EUNICE package under VMS.  The program will need to handle
?C: things like files that don't go away the first time you unlink them,
?C: due to version numbering.  It will also need to compensate for lack
?C: of a respectable link() command.
?C:.
?C:VMS_SYSTEM (VMS):
?C: This symbol, if defined, indicates that the program is running under
?C: VMS.  It is currently only set in conjunction with the EUNICE symbol.
?C:.
?C:XENIX_SYSTEM (XENIX):
?C: This symbol, if defined, indicates that the program
```

```
 is running under
?C: Xenix (at least 3.0 ?).
?C:.
?C:DOS_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: DOS with DJGPP.
?C:.
?C:OS2_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: an OS/2 system.
?C:.
?C:BSD_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: a BSD system.
?C:.
?C:LINUX_SYSTEM:
?C: This symbol, if defined, indicates that the program is running under
?C: a Linux system.
?C:.
?H:#$d_eunice EUNICE_SYSTEM  /**/
?H:#$d_eunice VMS_SYSTEM  /**/
?H:#$d_xenix XENIX_SYSTEM  /**/
?H:#$d_dos DOS_SYSTEM  /**/
?H:#$d_os2 OS2_SYSTEM  /**/
?H:#$d_bsd BSD_SYSTEM  /**/
?H:#$d_linux LINUX_SYSTEM  /**/
?H:.
?F:./bsd ./usg ./v7 ./osf1 ./eunice ./xenix ./venix ./dos ./os2 ./gnu ./linux
?T:xxx DJGPP MACHTYPE
: make some quick guesses about what we are up against
echo " "
$echo $n "Hmm...  $c"
echo exit 1 >bsd
echo exit 1 >usg
echo exit 1 >v7
echo exit 1 >osf1
echo exit 1 >eunice
echo
 exit 1 >xenix
echo exit 1 >venix
echo exit 1 >os2
echo exit 1 >gnu
echo exit 1 >linux
echo exit 1 >dos
d_bsd="$undef"
d_linux="$undef"
d_dos="$undef"
d_os2="$undef"
```

```
?X:
?X: Do not use 'usrinc', or we get a circular dependency. because
?X: usrinc is defined in usrinc.U, which relies on us...
?X:
$cat /usr/include/signal.h /usr/include/sys/signal.h >foo 2>/dev/null
if test -f /osf_boot || $contains 'OSF/1' /usr/include/ctype.h >/dev/null 2>&1
then
 echo "Looks kind of like an OSF/1 system, but we'll see..."
 echo exit 0 >osf1
elif test `echo abc | $tr a-z A-Z` = Abc ; then
 xxx=`./loc addbib blurfl $pth`
 if $test -f $xxx; then
 echo "Looks kind of like a USG system with BSD features, but we'll see..."
  echo exit 0 >bsd
  echo exit 0 >usg
 else
  if $contains SIGTSTP foo >/dev/null 2>&1 ; then
   echo "Looks kind of like an extended USG system, but we'll see..."
  else
   echo "Looks kind of like a USG system, but we'll see..."
  fi
  echo exit 0 >usg
 fi
elif $contains SIGTSTP foo >/dev/null
 2>&1 ; then
 echo "Looks kind of like a BSD system, but we'll see..."
 d_bsd="$define"
 echo exit 0 >bsd
elif
 $rm --version 2>/dev/null >foo;
 $contains "Free Software Foundation" foo >/dev/null
then
 xxx=`uname`
 echo exit 0 >gnu
 echo "Looks kind of like a GNU/$xxx system, but we'll see..."
 if $test X$xxx = XLinux; then
  d_linux="$define"
  echo exit 0 >linux
 fi
else
 echo "Looks kind of like a Version 7 system, but we'll see..."
 echo exit 0 >v7
fi
case "$eunicefix" in
*unixtovms*)
 $cat <<'EOI'
There is, however, a strange, musty smell in the air that reminds me of
something...hmm...yes...I've got it...there's a VMS nearby, or I'm a Blit.
```

```
EOI
 echo exit 0 >eunice
 d_eunice="$define"
: it so happens the Eunice I know will not run shell scripts in Unix format
 ;;
*)
 echo " "
 echo "Congratulations.  You aren't running Eunice."
 d_eunice="$undef"
 ;;
esac
case "$p_" in
:) ;;
*)
 $cat <<'EOI'
I have the feeling something is not exactly right, however...don't tell me...
EOI
 if
 test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
  cygwin) echo "hah!... you're running under Cygwin!";;
  *) echo "got it... you're running DOS with DJGPP!";;
  esac
  echo exit 0 >dos
  d_dos="$define"
 else
  $cat <<'EOI'
lemme think...does HAL ring a bell?...no, of course, you're only running OS/2!
EOI
  echo exit 0 >os2
  d_os2="$define"
 fi
 ;;
esac
if test -f /xenix; then
 echo "Actually, this looks more like a XENIX system..."
 echo exit 0 >xenix
 d_xenix="$define"
else
 echo " "
 echo "It's not Xenix..."
 d_xenix="$undef"
fi
chmod +x xenix
$eunicefix xenix
if test -f /venix; then
 echo "Actually, this looks more like a VENIX system..."
 echo exit 0 >venix
```

```
else
 echo " "
 if ./xenix; then
  : null
 else
  echo "Nor is it Venix..."
 fi
fi
chmod +x bsd usg v7 osf1 eunice xenix venix dos os2 gnu linux
$eunicefix bsd usg v7 osf1 eunice xenix venix dos os2 gnu linux
$rm -f foo
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Guess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dbl_dig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dbl_dig.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:28  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dbl_dig: Myread contains cat rm Setvar i_limits i_float \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_dbl_dig:
?S: This variable conditionally defines d_dbl_dig if this system's
?S: header files provide DBL_DIG, which is the number of significant
?S: digits
 in a double precision number.
?S:.
?C:HAS_DBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol DBL_DIG, which is the number
?C: of significant digits in a double precision number.  If this
?C: symbol is not defined, a guess of 15 is usually pretty good.
?C:.
?H:#$d_dbl_dig HAS_DBL_DIG  /**/
```

```
?H:.
?F:!dbl_dig.c
?LINT:set d_dbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >dbl_dig.c <<EOM
#$i_limits I_LIMITS
#$i_float I_FLOAT
#ifdef I_LIMITS
#include <limits.h>
#endif
#ifdef I_FLOAT
#include <float.h>
#endif
#ifdef DBL_DIG
printf("Contains DBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < dbl_dig.c >dbl_dig.E 2>/dev/null
if $contains 'DBL_DIG' dbl_dig.E >/dev/null 2>&1; then
 echo "DBL_DIG found." >&4
 val="$define"
else
 echo "DBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f dbl_dig.?
set d_dbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dbl_dig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: perlpath.U,v $
?RCS: Revision 3.0.1.2  1995/09/25  09:17:04  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
```

```
?RCS: Revision 3.0.1.1  1995/01/11  15:33:53  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this unit is to locate perl good enough to construct a #!
?X:
?MAKE:perlpath: Getfile Oldconfig Loc perl
?MAKE: -pick
 add $@ %<
?Y:TOP
?S:perlpath:
?S: This variable contains the eventual value of the PERLPATH symbol,
?S: which contains the absolute location of the perl interpreter.
?S:.
?C:PERLPATH:
?C: This symbol contains the absolute location of the perl interpreter.
?C:.
?H:#define PERLPATH "$perlpath"  /**/
?H:.
: determine perl absolute location
case "$perlpath" in
")
 if test -f /usr/bin/perl; then
  dflt=/usr/bin/perl
 else
  case "$perl" in
  */*) dflt="$perl";;
  *) dflt=/usr/bin/perl;;
  esac
 fi
 ;;
*)  dflt="$perlpath"
 ;;
esac
echo " "
fn=f~/
rp="Where is perl located on your system?"
. ./getfile
perlpath="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/perlpath.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_eofpipe.U,v 3.0.1.1 1994/10/29 16:12:40 ram Exp $

```
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_eofpipe.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:40  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_eofpipe: Compile cat rm Oldconfig Guess echo n c
?MAKE: -pick add $@ %<
?S:d_eofpipe:
?S: This variable conditionally defines the EOFPIPE symbol, which
?S: indicates to the C program that select will correctly detect
 the EOF
?S: condition when pipe is closed from the other end.
?S:.
?C:EOFPIPE:
?C: This symbol, if defined, indicates that EOF condition will be detected
?C: by the reader of the pipe when it is closed by the writing process.
?C: That is, a select() call on that file descriptor will not block when
?C: only an EOF remains (typical behavior for BSD systems).
?C:.
?H:#$d_eofpipe EOFPIPE  /**/
?H:.
?F:!mpipe
: see if pipe correctly gives the EOF condition
echo " "
case "$d_eofpipe" in
")
 echo "Let's see if your pipes return EOF to select() upon closing..." >&4
 $cat >pipe.c <<'EOP'
int main()
{
 int pd[2];
 int mask;

 pipe(pd);
 if (0 == fork()) {
  close(pd[0]);
  close(pd[1]);
```

```
  exit(0);
 }

 close(pd[1]);
 mask = 1 << pd[0];
 alarm(2);
 select(32, &mask, (int *) 0, (int *) 0, (char *) 0);
 if (0 == read(pd[0], &mask, 1))
  exit(0);

 exit(1);
}
EOP
 set pipe
 if eval $compile_ok; then
?X: Use a script to avoid the possible 'alarm call' message
  echo "./pipe || exit 1" > mpipe
  chmod
 +x mpipe
  ./mpipe >/dev/null 2>&1
  case $? in
  0) d_eofpipe="$define";;
  *) d_eofpipe="$undef";;
  esac
 else
  echo "(The test program did not compile correctly -- Guessing.)"
  if ./bsd; then
   d_eofpipe="$define"
  else
   d_eofpipe="$undef"
  fi
 fi
 case "$d_eofpipe" in
 "$define") echo "Yes, they do.";;
 *) echo "No, they don't! (sigh)";;
 esac
 ;;
*)
 $echo $n "Your pipes $c"
 case "$d_eofpipe" in
 "$define") echo "allow select() to see EOF upon closing.";;
 *) echo "won't let select() see EOF on closing.";;
 esac
 ;;
esac
$rm -f *pipe* core
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_eofpipe.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_strftime:
?S: This variable conditionally defines the HAS_STRFTIME symbol, which
?S: indicates to the C program that the strftime() routine is available.
?S:.
?C:HAS_STRFTIME:
?C: This symbol, if defined, indicates that the strftime routine is
?C: available to do time formatting.
?C:.
?H:#$d_strftime HAS_STRFTIME  /**/
?H:.
?LINT:set d_strftime
: see if strftime exists
set strftime d_strftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libpth.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libpth.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:08:49  ram
?RCS: patch61: new loclibpth variable
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:31:30  ram
?RCS: patch45: call ./mips instead of just mips (WED)
?RCS:
```

```
?RCS: Revision 3.0.1.4  1994/08/29  16:29:15  ram
?RCS: patch32: added /lib/pa1.1 for HP-UX specially tuned PA-RISC libs (ADO)
?RCS: patch32: fixed information message, making it clearer (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:03:54
  ram
?RCS: patch30: added /usr/shlib to glibpth for shared-only libraries
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:26:57  ram
?RCS: patch27: fixed a typo (libpth -> glibpth)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:07:53  ram
?RCS: patch23: now asks for library directories to be searched (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit initializes the path for C library lookup.
?X:
?MAKE:libpth glibpth xlibpth plibpth loclibpth incpth: \
 usrinc incpath test cat Myread Oldconfig sysroot osname \
 ccname echo cppstdin awk grep sed rm usecrosscompile
?MAKE: -pick add $@ %<
?S:libpth:
?S: This variable holds the general path (space-separated) used to find
?S: libraries. It is intended to be used by other units.
?S:.
?S:glibpth:
?S: This variable holds the general path (space-separated) used to
?S: find libraries.  It may contain directories that do not exist on
?S: this platform, libpth is the cleaned-up
 version.
?S:.
?S:xlibpth:
?S: This variable holds extra path (space-separated) used to find
?S: libraries on this platform, for example CPU-specific libraries
?S: (on multi-CPU platforms) may be listed here.
?S:.
?S:loclibpth:
?S: This variable holds the paths (space-separated) used to find local
?S: libraries.  It is prepended to libpth, and is intended to be easily
?S: set from the command line.
?S:.
?S:plibpth:
?S: Holds the private path used by Configure to find out the libraries.
?S: Its value is prepend to libpth. This variable takes care of special
?S: machines, like the mips.  Usually, it should be empty.
```

```
?S:.
?S:incpth:
?S: This variable must precede the normal include path to get the
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
?S:.
?T: xxx dlist i j croak realpath inclibpth
?LINT:extern incpth
?LINT:change usrinc
?INIT:: change the next line if compiling for Xenix/286 on Xenix/386
?INIT:xlibpth='/usr/lib/386
 /lib/386'
?INIT:: Possible local library directories to search.
?INIT:loclibpth="/usr/local/lib /opt/local/lib /usr/gnu/lib"
?INIT:loclibpth="$loclibpth /opt/gnu/lib /usr/GNU/lib /opt/GNU/lib"
?INIT:
?INIT:: general looking path for locating libraries
?INIT:glibpth="/lib /usr/lib $xlibpth"
?INIT:glibpth="$glibpth /usr/ccs/lib /usr/ucblib /usr/local/lib"
?X: /shlib is for Digital Unix 4.0
?X: /usr/shlib is for OSF/1 systems.
?INIT:test -f /usr/shlib/libc.so && glibpth="/usr/shlib $glibpth"
?INIT:test -f /shlib/libc.so     && glibpth="/shlib $glibpth"
?INIT:test -d /usr/lib64         && glibpth="$glibpth /lib64 /usr/lib64 /usr/local/lib64"
?INIT:
?INIT:: Private path used by Configure to find libraries.  Its value
?INIT:: is prepended to libpth. This variable takes care of special
?INIT:: machines, like the mips.  Usually, it should be empty.
?INIT:plibpth=''
?INIT:
?X:cppfilter is later used in Findhdr.U, but we not want to expose it to config.h
?T:cppfilter
: Adjust cppfilter for path
 component separator
case "$osname" in
vos) cppfilter="tr '\\\>' '/' |" ;; # path component separator is >
os2) cppfilter="sed -e 's|\\\\\\\\|/|g' |" ;; # path component separator is \
*)   cppfilter='' ;;
esac

: Use gcc to determine libpth and incpth
# If using gcc or clang, we can get better values for libpth, incpth
# and usrinc directly from the compiler.
# Note that ccname for clang is also gcc.
case "$ccname" in
   gcc)
 realpath=`which realpath 2>/dev/null | sed 's/no realpath in.*//'`
 $echo 'extern int foo;' > try.c
```

```
set X `$cppstdin -v try.c 2>&1 | $awk '/^#include </,/^End of search /'|$cppfilter $grep '/include'`
shift
inclibpth=""
if $test $# -gt 0; then
    for i in $*; do
 case $realpath in
     */realpath) i=`$realpath $i` ;;
 esac
 incpth="$incpth $i"
 j="`$echo $i | $sed 's,/include[^/]*,/lib,'`"
 if $test -d $j; then
     inclibpth="$inclibpth $j"
 fi
    done
    incpth="`$echo $incpth | $sed 's/^ //'`"
    for xxx in $inclibpth $loclibpth $plibpth
$glibpth; do
 if $test -d $xxx; then
     case $realpath in
  */realpath) xxx=`$realpath $xxx` ;;
     esac
     case " $libpth " in
     *" $xxx "*) ;;
     *) libpth="$libpth $xxx";;
     esac
 fi
    done
    libpth="`$echo $libpth | $sed 's/^ //'`"
fi
$rm -f try.c
case "$usrinc" in
") for i in $incpth; do
 if $test -f $i/errno.h -a -f $i/stdio.h -a -f $i/time.h; then
     usrinc="$i"
     break
 fi
    done
    ;;
esac

case "$usecrosscompile" in
$define|true|[yY]*)
    case "$incpth" in
 ") echo "Incpth not defined." >&4; croak=y ;;
 *)  echo "Using incpth '$incpth'." >&4 ;;
    esac
    case "$libpth" in
 ") echo "Libpth not defined." >&4; croak=y ;;
```

```
  *)  echo "Using libpth '$libpth'." >&4 ;;
    esac
    case "$usrinc" in
  ") echo "Usrinc not defined." >&4; croak=y ;;
  *)  echo "Using usrinc $usrinc." >&4 ;;
    esac
    case "$croak" in
  y)
  if test "X$sysroot" = X; then
     echo "Cannot continue, aborting." >&4; exit 1
  else

   echo "Cross-compiling using sysroot $sysroot, failing to guess inc/lib paths is not fatal" >&4
  fi
  ;;
    esac
    ;;
 esac
   ;;
esac

: Default value for incpth is just usrinc
case "$incpth" in
") incpth="$usrinc";;
esac

: Set private lib path
case "$plibpth" in
") if ./mips; then
?X: on mips, we DO NOT want /lib, and we want $incpath/usr/lib
 plibpth="$incpath/usr/lib $sysroot/usr/local/lib $sysroot/usr/ccs/lib"
   fi;;
esac
case "$libpth" in
' ') dlist=";;
") dlist="$loclibpth $plibpth $glibpth";;
*) dlist="$libpth";;
esac

: Now check and see which directories actually exist, avoiding duplicates
for xxx in $dlist
do
   if $test -d $xxx; then
  case " $libpth " in
  *" $xxx "*) ;;
  *) libpth="$libpth $xxx";;
  esac
   fi
```

```
done
$cat <<'EOM'

Some systems have incompatible or broken versions of libraries.  Among
the directories listed in the question below, please remove any you
know not to be holding relevant libraries, and add any that are needed.
Say "none" for none.

EOM

if
 test "X$sysroot" != X; then
   $cat <<EOM
You have set sysroot to $sysroot, please supply the directories excluding sysroot

EOM
fi

case "$libpth" in
") dflt='none';;
*)
?X: strip leading space
 set X $libpth
 shift
 dflt=${1+"$@"}
 ;;
esac
rp="Directories to use for library searches?"
. ./myread
case "$ans" in
none) libpth=' ';;
*) libpth="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libpth.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:ivdformat uvuformat uvoformat uvxformat uvXUformat \
 nvEUformat nvFUformat nvGUformat \
 nveformat nvfformat nvgformat: \
```

```
 ivsize longsize intsize shortsize \
 sPRId64 sPRIu64 sPRIo64 sPRIx64 sPRIXU64 \
 uselongdouble d_longdbl usequadmath d_PRIgldbl \
 sPRIEUldbl sPRIFUldbl sPRIGUldbl sPRIeldbl sPRIfldbl sPRIgldbl \
 test echo
?MAKE: -pick add $@ %<
?S:ivdformat:
?S: This variable contains the format string used for printing
?S: a Perl IV as a signed decimal integer.
?S:.
?S:uvuformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned decimal integer.
?S:.
?S:uvoformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned
 octal integer.
?S:.
?S:uvxformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned hexadecimal integer in lowercase abcdef.
?S:.
?S:uvXUformat:
?S: This variable contains the format string used for printing
?S: a Perl UV as an unsigned hexadecimal integer in uppercase ABCDEF.
?S:.
?S:nveformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %e-ish floating point format.
?S:.
?S:nvfformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %f-ish floating point format.
?S:.
?S:nvgformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %g-ish floating point format.
?S:.
?S:nvEUformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %E-ish floating point format.
?S:.
?S:nvFUformat:
?S: This variable contains the format string used for printing
?S: a Perl NV using %F-ish floating point format.
?S:.
?S:nvGUformat:
```

?S: This
variable contains the format string used for printing
?S: a Perl NV using %G-ish floating point format.
?S:.
?C:IVdf:
?C: This symbol defines the format string used for printing a Perl IV
?C: as a signed decimal integer.
?C:.
?C:UVuf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned decimal integer.
?C:.
?C:UVof:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned octal integer.
?C:.
?C:UVxf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned hexadecimal integer in lowercase abcdef.
?C:.
?C:UVXf:
?C: This symbol defines the format string used for printing a Perl UV
?C: as an unsigned hexadecimal integer in uppercase ABCDEF.
?C:.
?C:NVef:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %e-ish floating point format.
?C:.
?C:NVff:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %f-ish floating point
format.
?C:.
?C:NVgf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %g-ish floating point format.
?C:.
?C:NVEf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %E-ish floating point format.
?C:.
?C:NVFf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %F-ish floating point format.
?C:.
?C:NVGf:
?C: This symbol defines the format string used for printing a Perl NV
?C: using %G-ish floating point format.

```
?C:.
?H:#define IVdf  $ivdformat  /**/
?H:#define UVuf  $uvuformat  /**/
?H:#define UVof  $uvoformat  /**/
?H:#define UVxf  $uvxformat  /**/
?H:#define UVXf  $uvXUformat  /**/
?H:#define NVef  $nveformat  /**/
?H:#define NVff  $nvfformat  /**/
?H:#define NVgf  $nvgformat  /**/
?H:#define NVEf  $nvEUformat  /**/
?H:#define NVFf  $nvFUformat  /**/
?H:#define NVGf  $nvGUformat  /**/
?H:.
: Check format strings for internal types
echo " "
$echo "Checking the format strings to be used for Perl's
 internal types..." >&4

if $test X"$ivsize" = X8; then
 ivdformat="$sPRId64"
 uvuformat="$sPRIu64"
 uvoformat="$sPRIo64"
 uvxformat="$sPRIx64"
 uvXUformat="$sPRIXU64"
else
 if $test X"$ivsize" = X"$longsize"; then
  ivdformat='"ld"'
  uvuformat='"lu"'
  uvoformat='"lo"'
  uvxformat='"lx"'
  uvXUformat='"lX"'
 else
  if $test X"$ivsize" = X"$intsize"; then
   ivdformat='"d"'
   uvuformat='"u"'
   uvoformat='"o"'
   uvxformat='"x"'
   uvXUformat='"X"'
  else
   : far out
   if $test X"$ivsize" = X"$shortsize"; then
    ivdformat='"hd"'
    uvuformat='"hu"'
    uvoformat='"ho"'
    uvxformat='"hx"'
    uvXUformat='"hX"'
   fi
  fi
```

```
 fi
fi

if $test X"$usequadmath" = X"$define"; then
   nveformat="'Qe'"
   nvfformat="'Qf'"
   nvgformat="'Qg'"
   nvEUformat="'QE'"
   nvFUformat="'QF'"
   nvGUformat="'QG'"
else
   if $test X"$uselongdouble" = X"$define" -a X"$d_longdbl" = X"$define" -a X"$d_PRIgldbl" = X"$define"; then
 nveformat="$sPRIeldbl"
 nvfformat="$sPRIfldbl"
 nvgformat="$sPRIgldbl"
 nvEUformat="$sPRIEUldbl"
 nvFUformat="$sPRIFUldbl"
 nvGUformat="$sPRIGUldbl"
    else
 nveformat="'e'"
 nvfformat="'f'"
 nvgformat="'g'"
 nvEUformat="'E'"
 nvFUformat="'F'"
 nvGUformat="'G'"
   fi
fi

case "$ivdformat" in
") echo "$0: Fatal: failed to find format strings, cannot continue." >&4
   exit 1
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlxvf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ipc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: ipc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ipc serve_shm serve_msg serve_inet_udp serve_inet_tcp serve_unix_udp \
 serve_unix_tcp: test Myread Oldconfig d_socket d_msg d_shm d_sem
?MAKE: -pick add $@ %<
?LINT:use d_msg d_sem
?S:ipc:
?S: This variable holds the type of IPC service we'll be using.  Values
?S: include "ip", "shm", "msg", "cms" and "os9".  We don't worry about
?S: cms or os9
 here, because Configure doesn't run in those places--HMS.
?S:.
?S:serve_shm:
?S: This variable controls the definition of SERVE_SHM, which tells the
?S: C program to use USG shared memory for IPC.
?S:.
?S:serve_msg:
?S: This variable controls the definition of SERVE_MSG, which tells the
?S: C program to use USG message queues for IPC.
?S:.
?S:serve_inet_udp:
?S: This variable controls the definition of SERVE_INET_UDP, which tells
?S: the C program to enable InterNet-domain UDP support for IPC.
?S:.
?S:serve_inet_tcp:
?S: This variable controls the definition of SERVE_INET_TCP, which tells
?S: the C program to enable InterNet-domain TCP support for IPC.
?S:.
?S:serve_unix_udp:
?S: This variable controls the definition of SERVE_UNIX_UDP, which tells
?S: the C program to enable Unix-domain UDP support for IPC.
?S:.
?S:serve_unix_tcp:
?S: This variable controls the definition of SERVE_UNIX_TCP, which tells
?S: the C program to enable Unix-domain TCP support for IPC.
?S:.
?C:SERVE_SHM:
?C: If
 defined, tells the C program to use USG shared memory for IPC.
?C:.
?C:SERVE_MSG:
?C: If defined, tells the C program to use USG message queues for IPC.
?C:.
?C:SERVE_INET_UDP:
?C: If defined, tells the C program to enable InterNet-domain UDP
?C: support for IPC.
```

```
?C:.
?C:SERVE_INET_TCP:
?C: If defined, tells the C program to enable InterNet-domain TCP
?C: support for IPC.
?C:.
?C:SERVE_UNIX_UDP:
?C: If defined, tells the C program to enable Unix-domain UDP
?C: support for IPC.
?C:.
?C:SERVE_UNIX_TCP:
?C: If defined, tells the C program to enable Unix-domain TCP
?C: support for IPC.
?C:.
?H:#$serve_shm SERVE_SHM /**/
?H:#$serve_msg SERVE_MSG /**/
?H:#$serve_inet_udp SERVE_INET_UDP /**/
?H:#$serve_inet_tcp SERVE_INET_TCP /**/
?H:#$serve_unix_udp SERVE_UNIX_UDP /**/
?H:#$serve_unix_tcp SERVE_UNIX_TCP /**/
?H:.
?X: FIXME -- RAM
?INIT:serve_shm=''
?INIT:serve_msg="$undef"
?INIT:serve_inet_udp=''
?INIT:serve_inet_tcp=''
?INIT:serve_unix_udp=''
?INIT:serve_unix_tcp=''
: get IPC mechanism
echo
 " "
ipc=''
while $test -z "$ipc"
do
 if $test "$ipc" != "shm" -a "$d_socket" = "$define"; then
  ipc=''
  if $test "$serve_inet_udp" = "$undef"; then
   dflt=n
  else
   dflt=y
  fi
  rp='Provide InterNet-domain UDP service?'
  . ./myread
  dflt=''
  case "$ans" in
  n*) serve_inet_udp="$undef";;
  *)
   serve_inet_udp="$define"
   ipc='ip'
```

```
 ;;
esac

if $test "$serve_inet_tcp" = "$define"; then
 dflt=y
else
 dflt=n
fi
rp='Provide InterNet-domain TCP service?'
. ./myread
dflt=''
case "$ans" in
n*) serve_inet_tcp="$undef";;
*)
 serve_inet_tcp="$define"
 ipc='ip'
 ;;
esac

if $test "$serve_unix_udp" = "$define"; then
 dflt=y
else
 dflt=n
fi
rp='Provide Unix-domain UDP service?'
. ./myread
dflt=''
case "$ans" in
n*) serve_unix_udp="$undef";;
*)
 serve_unix_udp="$define"
 ipc='ip'
 ;;
esac

if $test "$serve_unix_tcp" = "$define"; then
 dflt=y
else
 dflt=n
fi
rp='Provide Unix-domain TCP service?'
. ./myread
dflt=''
case
"$ans" in
n*) serve_unix_tcp="$undef";;
*)
 serve_unix_tcp="$define"
```

```
  ipc='ip'
  ;;
 esac
else
 serve_inet_udp="$undef"
 serve_inet_tcp="$undef"
 serve_unix_udp="$undef"
 serve_unix_tcp="$undef"
fi
if $test "$ipc" != "ip" -a "$d_shm" = "$define"; then
 echo "Providing USG shared memory IPC support." >&4
 serve_shm="$define"
 ipc='shm'
else
 serve_shm="$undef"
fi
if $test -z "$ipc"; then
 echo "You must select an IPC mechanism." >&4
fi
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ipc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_static_inline.U,v $
?RCS:
?RCS: Copyright (c) 2010 Andrew Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafayette.edu>
?RCS:
?MAKE:d_static_inline perl_static_inline: Compile Setvar gccversion \
 cat echo run hint rm rm_try
?MAKE: -pick add $@ %<
?S:d_static_inline:
?S: This variable conditionally defines the HAS_STATIC_INLINE symbol,
?S: which indicates that the C compiler supports C99-style static
?S: inline.  That is, the function can't be called from another
?S: translation unit.
?S:.
?S:perl_static_inline:
?S: This variable defines the PERL_STATIC_INLINE
```

```
 symbol to
?S: the best-guess incantation to use for static inline functions.
?S: Possibilities include
?S:  static inline       (c99)
?S:  static __inline__   (gcc -ansi)
?S:  static __inline     (MSVC)
?S:  static _inline      (older MSVC)
?S:  static              (c89 compilers)
?S:.
?C:HAS_STATIC_INLINE :
?C: This symbol, if defined, indicates that the C compiler supports
?C: C99-style static inline.  That is, the function can't be called
?C: from another translation unit.
?C:.
?C:PERL_STATIC_INLINE:
?C: This symbol gives the best-guess incantation to use for static
?C: inline functions.  If HAS_STATIC_INLINE is defined, this will
?C: give C99-style inline.  If HAS_STATIC_INLINE is not defined,
?C: this will give a plain 'static'.  It will always be defined
?C: to something that gives static linkage.
?C: Possibilities include
?C:  static inline       (c99)
?C:  static __inline__   (gcc -ansi)
?C:  static __inline     (MSVC)
?C:  static _inline      (older MSVC)
?C:  static
        (c89 compilers)
?C:.
?H:#$d_static_inline HAS_STATIC_INLINE    /**/
?H:#define PERL_STATIC_INLINE $perl_static_inline /**/
?H:.
?LINT:set d_static_inline
?T:inline xxx
?F:!try
: see what flavor, if any, of static inline is supported
echo " "
echo "Checking to see if your system supports static inline..."
?X: Build two programs.  The first uses static inline in file a.c and
?X: should work.  The second also includes b.c which tries to link against
?X: the static function in a.c.  This should fail.
?X:.
$cat > try.c <<'EOCP'
#include <stdlib.h>
extern int f_via_a(int x);
extern int f_via_b(int x);
int main(int argc, char **argv)
{
   int y;
```

```
   y = f_via_a(0);
#ifdef USE_B
   y = f_via_b(0);
#endif
   if (y == 42) {
       return EXIT_SUCCESS;
   }
   else {
       return EXIT_FAILURE;
   }
}
EOCP
$cat > a.c <<'EOCP'
static INLINE int f(int x) {
   int y;
   y = x + 42;
   return y;
}

int f_via_a(int x)
{
   return f(x);
}
EOCP
$cat > b.c <<'EOCP'
extern int f(int x);

int
 f_via_b(int x)
{
   return f(x);
}
EOCP

# Respect a hint (or previous) value for perl_static_inline, if there is one.
case "$perl_static_inline" in
") # Check the various possibilities, and break out on success.
 # For gcc, prefer __inline__, which will still permit
 # cflags.SH to add in -ansi.
 case "$gccversion" in
  ") xxx="inline __inline__ __inline _inline";;
  *)  xxx="__inline__ inline __inline _inline";;
 esac
 for inline in $xxx; do
  set try -DINLINE=$inline a.c
  if eval $compile && $run ./try; then
   # Now make sure there is no external linkage of static
```

```
  # functions
  set try -DINLINE=$inline -DUSE_B a.c b.c
  if eval $compile && $run ./try; then
   $echo "Your compiler supports static $inline, " >&4
   $echo "but it also creates an external definition," >&4
   $echo "so I won't use it." >&4
   val=$undef
  else
   $echo "Your compiler supports static $inline." >&4
   val=$define
   perl_static_inline="static $inline";
   break;
  fi
 else
  $echo
"Your compiler does NOT support static $inline." >&4
  val="$undef"
 fi
done
;;
*inline*) # Some variant of inline exists.
echo "Keeping your $hint value of $perl_static_inline."
val=$define
;;
static)  # No inline capabilities
echo "Keeping your $hint value of $perl_static_inline."
val=$undef
;;
*)  # Unrecognized previous value -- blindly trust the supplied
# value and hope it makes sense.  Use old value for
# d_static_inline, if there is one.
echo "Keeping your $hint value of $perl_static_inline."
case "$d_static_inline" in
 ") val=$define ;;
 *)  val=$d_static_inline ;;
esac
;;
esac
# Fallback to plain 'static' if nothing worked.
case "$perl_static_inline" in
")
 perl_static_inline="static"
 val=$undef
;;
esac
set d_static_inline
eval $setvar
$rm -f a.[co] b.[co]
```

```
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_static_inline.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysioctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysioctl.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  15:04:57  ram
?RCS: patch23: added knowledge for <sys/filio.h> (WED)
?RCS: patch23: optimized amount of findhdr calls
?RCS:
?RCS: Revision 3.0.1.1  1993/11/10  17:36:09  ram
?RCS: patch14: now use a compiler check for TIOCNOTTY because of HP-UX 9.x
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysioctl i_bsdioctl i_sysfilio i_syssockio
 d_voidtty: test contains \
 cat i_termio i_termios i_sgtty Setvar Findhdr +cc rm Inhdr
?MAKE: -pick add $@ %<
?S:i_sysioctl:
?S: This variable conditionally defines the I_SYS_IOCTL symbol, which
?S: indicates to the C program that <sys/ioctl.h> exists and should
?S: be included.
?S:.
?S:i_sysfilio:
?S: This variable conditionally defines the I_SYS_FILIO symbol, which
?S: indicates to the C program that <sys/filio.h> exists and should
?S: be included in preference to <sys/ioctl.h>.
?S:.
?S:i_bsdioctl:
?S: This variable conditionally defines the I_SYS_BSDIOCTL symbol, which
?S: indicates to the C program that <sys/bsdioctl.h> exists and should
?S: be included.
?S:.
?S:i_syssockio:
?S: This variable conditionally defines I_SYS_SOCKIO to indicate to the
```

```
?S: C program that socket ioctl codes may be found in <sys/sockio.h>
?S: instead of <sys/ioctl.h>.
?S:.
?S:d_voidtty:
?S: This variable conditionally defines USE_IOCNOTTY to indicate that the
?S: ioctl() call with TIOCNOTTY should be used
 to void tty association.
?S: Otherwise (on USG probably), it is enough to close the standard file
?S: descriptors and do a setpgrp().
?S:.
?C:I_SYS_IOCTL (I_SYSIOCTL):
?C: This symbol, if defined, indicates that <sys/ioctl.h> exists and should
?C: be included. Otherwise, include <sgtty.h> or <termio.h>.
?C:.
?C:I_SYS_FILIO:
?C: This symbol, if defined, indicates that <sys/filio.h> exists and
?C: should be included instead of <sys/ioctl.h>.
?C:.
?C:I_SYS_BSDIOCTL (I_BSDIOCTL):
?C: This symbol, if defined, indicates that <sys/bsdioctl.h> exists and should
?C: be included. Otherwise, try <sys/ioctl.h>. This is primarly intended for
?C: definitions of sockets options, like SIOCATMARK.
?C:.
?C:I_SYS_SOCKIO (I_SYSSOCKIO):
?C: This symbol, if defined, indicates the <sys/sockio.h> should be included
?C: to get socket ioctl options, like SIOCATMARK.
?C:.
?C:USE_TIOCNOTTY (VOIDTTY):
?C: This symbol, if defined indicate to the C program that the ioctl()
?C: call with TIOCNOTTY should be used
 to void tty association.
?C: Otherwise (on USG probably), it is enough to close the standard file
?C: descriptors and do a setpgrp().
?C:.
?H:#$i_sysioctl I_SYS_IOCTL  /**/
?H:#$i_sysfilio I_SYS_FILIO  /**/
?H:#$i_bsdioctl I_SYS_BSDIOCTL  /**/
?H:#$i_syssockio I_SYS_SOCKIO /**/
?H:#$d_voidtty USE_TIOCNOTTY /**/
?H:.
?T:xxx
: see if ioctl defs are in sgtty, termio, sys/filio or sys/ioctl
?LINT:set i_sysfilio
set sys/filio.h i_sysfilio
eval $inhdr
echo " "
if $test `./findhdr sys/ioctl.h`; then
 val="$define"
```

```
 echo '<sys/ioctl.h> found.' >&4
else
 val="$undef"
 if $test $i_sysfilio = "$define"; then
     echo '<sys/ioctl.h> NOT found.' >&4
 else
  $test $i_sgtty = "$define" && xxx="sgtty.h"
  $test $i_termio = "$define" && xxx="termio.h"
  $test $i_termios = "$define" && xxx="termios.h"
echo "No <sys/ioctl.h> found, assuming ioctl args are defined in <$xxx>." >&4
 fi
fi
?LINT:set i_sysioctl
set i_sysioctl
eval $setvar

@if I_BSDIOCTL || i_bsdioctl
?X:
?X: The only machine I know where this
 inclusion was necessary is a
?X: BULL DPX 5000 (a French machine).
?X:
: see if socket ioctl defs are in sys/bsdioctl or sys/ioctl
echo " "
xxx=`./findhdr sys/bsdioctl.h`
if $test "$xxx"; then
 if $contains SIOCATMARK $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have socket ioctls defined in <sys/bsdioctl.h>." >&4
 else
  val="$undef"
  echo "No socket ioctls found in <sys/bsdioctl.h>." >&4
 fi
else
 val="$undef"
 echo "<sys/bsdioctl.h> not found, but that's ok." >&4
fi
?LINT:set i_bsdioctl
set i_bsdioctl
eval $setvar

@end
@if I_SYSSOCKIO || i_syssockio
: see if socket ioctl defs are in sys/sockio.h
echo " "
xxx=`./findhdr sys/sockio.h`
if $test "$xxx"; then
 if $contains SIOCATMARK $xxx >/dev/null 2>&1; then
```

```
  val="$define"
  echo "You have socket ioctls defined in <sys/sockio.h>." >&4
 else
  val="$undef"
  echo "No socket ioctls found in <sys/sockio.h>." >&4
 fi
else
 val="$undef"
@if I_BSDIOCTL
 case "$i_bsdioctl" in
 "$define") $cat <<EOM
<sys/sockio.h> not found, using
 ioctls from <sys/bsdioctl.h>.
EOM
 ;;
 *) $cat <<EOM
<sys/sockio.h> not found, assuming socket ioctls are in <sys/ioctl.h>.
EOM
 ;;
 esac
@else
 $cat <<EOM
<sys/sockio.h> not found, assuming socket ioctls are in <sys/ioctl.h>.
EOM
@end
fi
?LINT:set i_syssockio
set i_syssockio
eval $setvar

@end
@if VOIDTTY || d_voidtty
: check how to void tty association
echo " "
case "$i_sysioctl" in
"$define") xxx='sys/ioctl.h';;
?X: otherwise $xxx was set during the determination of i_sysioctl, above.
esac
?X:
?X: Can't use $contains here since HP-UX 9.x has TIOCNOTTY between a pair
?X: of #ifdef/#endif and is never actually defined. Oh well...
?X:
$cat > tcio.c <<EOM
#include <sys/types.h> /* Just in case */
#include <$xxx>

int main()
{
```

```
#ifdef TIOCNOTTY
 exit(0);
#else
 exit(1);
#endif
}
EOM
if ($cc -o tcio tcio.c && ./tcio) >/dev/null 2>&1; then
 val="$define"
 echo "TIOCNOTTY found in <$xxx>." >&4
 echo "Using ioctl() call on /dev/tty to void tty association." >&4
else
 val="$undef"
 echo "Closing
 standard file descriptors should void tty association." >&4
fi
?LINT:set d_voidtty
set d_voidtty
eval $setvar
$rm -f tcio tcio.? core

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysioctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_scalbn: Inlibc
?MAKE: -pick add $@ %<
?S:d_scalbn:
?S: This variable conditionally defines the HAS_SCALBN symbol, which
?S: indicates to the C program that the scalbn() routine is available.
?S:.
?C:HAS_SCALBN:
?C: This symbol, if defined, indicates that the scalbn routine is
?C: available to multiply floating-point number by integral power
?C: of radix.
?C:.
?H:#$d_scalbn HAS_SCALBN  /**/
?H:.
?LINT:set d_scalbn
: see if scalbn exists
set scalbn d_scalbn
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_scalbn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memalign.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memalign.U,v $
?RCS:
?MAKE:d_memalign: Inlibc
?MAKE: -pick add $@ %<
?S:d_memalign:
?S: This variable conditionally defines the HAS_MEMALIGN symbol, which
?S: indicates to the C program that the memalign() routine is available.
?S:.
?C:HAS_MEMALIGN :
?C: This symbol, if defined, indicates that the memalign routine is
?C: available to allocate aligned memory.
?C:.
?H:#$d_memalign HAS_MEMALIGN  /**/
?H:.
?LINT:set d_memalign
: see if memalign exists
set
 memalign d_memalign
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memalign.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Head.U 6 2006-08-25 22:21:46Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: Head.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:02:09  ram
?RCS: patch61: make sure we unset CDPATH for shells that support this
?RCS: patch61: improved Korn shell detection and handling
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:02  ram
?RCS: patch56: added SVR4-ish /opt directories to path list (ADO)
?RCS: patch56: OS/2 platforms are using another path separator
?RCS:
?RCS: Revision 3.0.1.7  1995/03/21  08:46:15  ram
?RCS: patch52: definition of
 paths wrongly added spurious ':' chars
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:54:19  ram
?RCS: patch36: make sure ENV is unset before calling /bin/ksh
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:03:44  ram
?RCS: patch32: now sets PATH only using existing directories
?RCS:
?RCS: Revision 3.0.1.4  1994/06/20  06:54:28  ram
?RCS: patch30: now computes its invocation name into 'me'
?RCS: patch30: symbol me is made visible to all units read-only
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:15:07  ram
?RCS: patch15: added /sbin:/usr/sbin:/usr/libexec in PATH for BSD/386
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:32:35  ram
?RCS: patch14: ensure PATH is reset to '.' before testing for alias
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:07  ram
?RCS: patch7: not all 'test' programs support the -x option
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the very first unit in the Configure script.  It is mostly just
?X:
 things to keep people from getting into a tizzy right off the bat.
?X:
?MAKE:Head:
?MAKE: -pick wipe $@ %<
?V:PATH p_ _exe me newsh
?T:argv p paths OS2_SHELL DJGPP
?T:inksh needksh avoidksh newsh changesh reason
?F:!*
?LINT:extern ENV CDPATH SHELL MACHTYPE _exe is_os2
?LINT:change ENV CDPATH is_os2
```

```
?LINT:nocomment
#! /bin/sh
#
# If these # comments don't work, trim them. Don't worry about any other
# shell scripts, Configure will trim # comments from them for you.
#
# (If you are trying to port this package to a machine without sh,
# I would suggest you have a look at the prototypical config_h.SH file
# and edit it to reflect your system. Some packages may include samples
# of config.h for certain machines, so you might look for one of those.)
#
?X:
?X: NOTE THAT A CONFIGURE SCRIPT IS IN THE PUBLIC DOMAIN (whether or not
?X: the software which uses it is in the public domain).
?X:
# Yes, you may rip this off to use in other distribution packages. This
# script belongs to the public
 domain and cannot be copyrighted.
#
?X:
?X: WE ASK YOU NOT TO REMOVE OR ALTER THE FOLLOWING PARAGRAPH, PLEASE:
?X:
# Note: this Configure script was generated automatically by the tool
# called "metaconfig". Rather than working with this copy of Configure,
# you should use metaconfig. Perl uses a modified version of this
# tool, and this, together with the metaconfig units, are available
# in the git repository:
#    $ git clone https://github.com/Perl/metaconfig metaconfig
# The original dist package (including metaconfig) is available on github:
#    $ git clone https://github.com/rmanfredi/dist.git dist-git
#
?X: OK, I'll not alter, but I'll add to it then ...
# Though this script was generated by metaconfig from metaunits, it is
# OK to send patches against Configure itself (but not to commit them
# to blead). It's up to
# the Configure maintainers to backport the patch to the metaunits if it
# is accepted. Exceptions to this rule, and more information, is in
# Porting/pumpkin.pod.
?X:
?X:
 NOTA BENE:
?X: If you develop you own version of metaconfig based on this work,
?X: you have to add some comments telling that the script was generated
?X: by your version, not mine: It credits your work.
?X:

# Generated using [metaconfig <VERSION> PL<PATCHLEVEL>]
# with additional metaconfig patches from https://github.com/Perl/metaconfig
```

```
cat >c1$$ <<EOF
ARGGGHHHH!!!!!

SCO csh still thinks true is false.  Write to SCO today and tell them that next
year Configure ought to "rm /bin/csh" unless they fix their blasted shell. :-)

(Actually, Configure ought to just patch csh in place.  Hmm.  Hmmmmm.  All
we'd have to do is go in and swap the && and || tokens, wherever they are.)

[End of diatribe. We now return you to your regularly scheduled programming...]
EOF
cat >c2$$ <<EOF

OOPS!  You naughty creature!  You didn't run Configure with sh!
I will attempt to remedy the situation by running sh for you...
EOF

true || cat c1$$ c2$$
true || exec sh $0 $argv:q

(exit $?0) || cat
 c2$$
(exit $?0) || exec sh $0 $argv:q
rm -f c1$$ c2$$

if test -f /dev/cputype -a -f /dev/drivers -a -f /dev/osversion; then
 cat <<EOF
***
*** I'm sorry but this system looks like Plan 9 and Plan 9 doesn't do
*** Configure that well.  (Plan 9 is close to UNIX but not close enough.)
*** Please read the README.plan9 for further instructions.
*** Cannot continue, aborting.
***
EOF
 exit 1
fi

if test -f /sys/utilities/MultiView ; then
 # AmigaOS, test -c for /dev/null is not useful
 :
elif test ! -c /dev/null ; then
 cat <<EOF
***
*** I'm sorry, but /dev/null appears to be a file rather than a device.
*** Please consult your operating sytem's notes for making a device
*** in /dev.
*** Cannot continue, aborting.
```

```
***
EOF
 exit 1
fi

: compute my invocation name
me=$0
case "$0" in
*/*)
 me=`echo $0 | sed -e 's!.*/\(.*\)!\1!' 2>/dev/null`
 test "$me" || me=$0
 ;;
esac

?X:
?X: To be able to run under OS/2, we must detect that early enough to use
?X: the proper path separator, stored in $p_.
 It is : on UNIX and ; on
?X: DOS-ish systems such as OS/2.
?X:
: Proper separator for the PATH environment variable
p_=:
: On OS/2 this directory should exist if this is not floppy only system ":-]"
if test -d c:/. || ( uname -a | grep -i 'os\(/\|\)2' 2>&1 ) 2>&1 >/dev/null ; then
 if test -n "$OS2_SHELL"; then
  p_=\;
  PATH=`cmd /c "echo %PATH%" | tr '\\\\' / `
?X: That's a bug in ksh5.22
  OS2_SHELL=`cmd /c "echo %OS2_SHELL%" | tr '\\\\' / | tr '[A-Z]' '[a-z]'`
  is_os2=yes
 elif test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
  *cygwin|*msys) ;;
  *) p_=\; ;;
  esac
 fi
fi

?X:
?X: There are two schools of thoughts here. Some people correctly argue that
?X: the user has a better chance than we do of setting a reasonable PATH and
?X: others argue that Configure is the best place there is to set up a suitable
?X: PATH. Well, here we try to compromise by keeping the user's PATH and
?X: appending some directories which are known to work on some machine or the
?X: other.
 The rationale behind this being that a novice user might not have a
?X: proper environment variable set, and some directories like /etc (where
?X: chown is located on some BSD systems) may be missing--RAM.
```

```
?X:
?X: SVR4 adds an /opt directory for optional packages.  Some sites use
?X: various permutations on /opt as opposed to /usr or /usr/local.-- ADO
?X:
?X: We only add directories that are not already in the PATH of the
?X: user and the directories must exist also.
?X:
?X: 20040627, Merijn, HP-UX's ANSI compiler is in /opt/ansic/bin if present
?X:  and should be before /usr/ccs/bin, where the braindead bundled compiler
?X:  can be found. The /usr/ccs/bin compiler cannot be used to build perl.
?X:
: Proper PATH setting
paths='/bin /usr/bin /usr/local/bin /usr/ucb /usr/local /usr/lbin'
paths="$paths /opt/bin /opt/local/bin /opt/local /opt/lbin"
paths="$paths /usr/5bin /etc /usr/gnu/bin /usr/new /usr/new/bin /usr/nbin"
paths="$paths /opt/gnu/bin /opt/new /opt/new/bin /opt/nbin"
paths="$paths
 /sys5.3/bin /sys5.3/usr/bin /bsd4.3/bin /bsd4.3/usr/ucb"
paths="$paths /bsd4.3/usr/bin /usr/bsd /bsd43/bin /opt/ansic/bin /usr/ccs/bin"
paths="$paths /etc /usr/lib /usr/ucblib /lib /usr/ccs/lib"
paths="$paths /sbin /usr/sbin /usr/libexec"
paths="$paths /system/gnu_library/bin"

for p in $paths
do
 case "$p_$PATH$p_" in
 *$p_$p$p_*) ;;
 *) test -d $p && PATH=$PATH$p_$p ;;
 esac
done

PATH=.$p_$PATH
export PATH

: shall we be using ksh?
inksh=''
needksh=''
avoidksh=''
newsh=/bin/ksh
changesh=''
?X: Use (alias -x) and not (alias) since zsh and bash recognize the alias
?X: builtin but not the -x option which is typically ksh...
?X: We need to set up PATH before calling the "alias" built-in since some
?X: systems like HP-UX have a binary called /bin/alias.
if (PATH=.; alias -x) >/dev/null 2>&1; then
  inksh=true
fi
?X: On HP-UX, large Configure scripts may exercise a bug in /bin/sh, use ksh
```

```
if test -f /hp-ux -a -f /bin/ksh; then
 needksh='to avoid sh bug in "here document" expansion'
fi
?X:
 On AIX4, /bin/sh is really ksh and it causes problems, use sh
if test -d /usr/lpp -a -f /usr/bin/bsh -a -f /usr/bin/uname; then
 if test X`/usr/bin/uname -v` = X4; then
  avoidksh="to avoid AIX 4's /bin/sh"
  newsh=/usr/bin/bsh
 fi
fi
?X: On Digital UNIX, /bin/sh may start up buggy /bin/ksh, use sh
if test -f /osf_boot -a -f /usr/sbin/setld; then
 if test X`/usr/bin/uname -s` = XOSF1; then
  avoidksh="to avoid Digital UNIX' ksh"
  newsh=/bin/sh
?X: if BIN_SH is set to 'xpg4', sh will start up ksh
  unset BIN_SH
 fi
fi
?X: If we are not in ksh and need it, then feed us back to it
case "$inksh/$needksh" in
/[a-z]*)
?X: Clear ENV to avoid any ~/.kshrc that could alias cd or whatever...
?X: Don't use "unset ENV", that is not portable enough
  ENV=''
  changesh=true
  reason="$needksh"
 ;;
esac
?X: If we are in ksh and must avoid it, then feed us back to a new shell
case "$inksh/$avoidksh" in
true/[a-z]*)
 changesh=true
 reason="$avoidksh"
 ;;
esac
?X: Warn them if they use ksh on
 other systems, which are those where
?X: we don't need ksh nor want to avoid it explicitly, yet are using it.
case "$inksh/$needksh-$avoidksh-" in
true/--)
  cat <<EOM
(I see you are using the Korn shell.  Some ksh's blow up on $me,
mainly on older exotic systems.  If yours does, try the Bourne shell instead.)
EOM
 ;;
esac
```

```
case "$changesh" in
true)
 export newsh
 echo "(Feeding myself to $newsh $reason.)"
?X: Make sure they didn't say sh <Configure by checking whether $0 ends
?X: with Configure or not. If they did say sh <../../Configure, then too
?X: bad for them anyway, since we lost that path indication...
?X: Otherwise, execing $0 ensures we keep the full remote source dir
?X: indication for src.U.
 case "$0" in
 Configure|*/Configure) exec $newsh $0 "$@";;
 *) exec $newsh Configure "$@";;
 esac
 ;;
esac
?X: 2004.06.09 rac
?X: having $newsh persist as ksh here is bad news if ksh doesn't really
?X: exist. this causes us to toss away a perfectly good working test in
?X: bash in favor
 of more exotic external options. see bug 42665.
test -x "${newsh}" || unset newsh

?X: Unset CDPATH to avoid surprises when using cd under some shells
?X: Can't unset it because that's not portable to very old shells.
?X: Can't set it to '' because then bash 2.02 won't do "cd UU"  --AD  6/98.
?X: Don't want to set it to '.' because then ksh prints out the
?X: name of the directory every time you cd to it. --AD 6/98
?X: In order to inflict the least harm, change it only if it's set.
: if needed, set CDPATH to a harmless value that is not chatty
: avoid bash 2.02 problems with empty CDPATH.
case "$CDPATH" in
'') ;;
*) case "$SHELL" in
 *bash*) CDPATH='.' ;;
 *) CDPATH='' ;;
 esac
 ;;
esac

: Configure runs within the UU subdirectory
test -d UU || mkdir UU
?X: Use ./* to avoid any confirmation prompts from enhanced shells -- WED
cd UU && rm -f ./*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Head.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: inc_version_list.U,v $
?RCS:
?RCS: Copyright (c) 2000 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: inc_version_list.U,v $
?RCS:
?MAKE:inc_version_list inc_version_list_init d_inc_version_list: cat sed \
 Getfile perl5 version api_versionstring rm Myread archname \
 prefix sitelib_stem exe_ext
?MAKE: -pick add $@ %<
?Y:TOP
?S:inc_version_list:
?S: This variable specifies the list of subdirectories in over
?S: which perl.c:incpush() and lib/lib.pm will automatically
?S: search when adding directories to @INC.  The elements in
?S: the list are separated by spaces.  This is only useful
?S: if
 you have a perl library directory tree structured like the
?S: default one.  See INSTALL for how this works.  The versioned
?S: site_perl directory was introduced in 5.005, so that is the
?S: lowest possible value.
?S:
?S: This list includes architecture-dependent directories back to
?S: version $api_versionstring (e.g. 5.5.640) and
?S: architecture-independent directories all the way back to
?S: 5.005.
?S:.
?S:inc_version_list_init:
?S: This variable holds the same list as inc_version_list, but
?S: each item is enclosed in double quotes and separated by commas,
?S: suitable for use in the PERL_INC_VERSION_LIST initialization.
?S:.
?S:d_inc_version_list:
?S: This variable conditionally defines PERL_INC_VERSION_LIST.
?S: It is set to undef when PERL_INC_VERSION_LIST is empty.
?S:.
?C:PERL_INC_VERSION_LIST:
?C: This variable specifies the list of subdirectories in over
?C: which perl.c:incpush() and lib/lib.pm will automatically
?C: search when adding directories to @INC, in a format suitable
?C: for
```

```
 a C initialization string.  See the inc_version_list entry
?C: in Porting/Glossary for more details.
?C:.
?H:#$d_inc_version_list PERL_INC_VERSION_LIST $inc_version_list_init  /**/
?H:.
?T:stem
: Determine list of previous versions to include in @INC
$cat > getverlist <<EOPL
#!$perl5
use strict;
use warnings;
use File::Basename;
my \$api_versionstring = "$api_versionstring";
my \$version = "$version";
my \$stem = "$sitelib_stem";
my \$archname = "$archname";
EOPL
 $cat >> getverlist <<'EOPL'
# The list found is stored twice for each entry: the original name, and
# the binary broken down version into pack "s>s>s>", so sorting is easy
# and unambiguous.  This will work for all versions that have a maximum
# of three digit per group separate by '.'s or '_'s. Names are extended
# with ".0.0" to ensure at least three elements for the pack.
#                                -- H.Merijn Brand (m)'06 23-10-2006

my @inc_version_list;
my @candidates;
# XXX Redo to do opendir/readdir?
if
 (-d $stem) {
   chdir($stem);
   ;@candidates = map {
 [ $_, pack "s>s>s>", split m/[._]/, "$_.0.0" ] } glob("5.*");
   ;@candidates = sort { $a->[1] cmp $b->[1]} @candidates;
}
else {
   ;@candidates = ();
}

my ($pversion, $aversion, $vsn5005) = map {
   pack "s>s>s>", split m/[._]/, "$_.0.0" } $version, $api_versionstring, "5.005";
foreach my $d (@candidates) {
   if ($d->[1] lt $pversion) {
 if ($d->[1] ge $aversion) {
     unshift(@inc_version_list, grep { -d } $d->[0]."/$archname", $d->[0]);
 }
 elsif ($d->[1] ge $vsn5005) {
     unshift(@inc_version_list, grep { -d } $d->[0]);
```

```
 }
   }
   else {
 # Skip newer version.  I.e. don't look in
 # 5.7.0 if we're installing 5.6.1.
   }
}

if (@inc_version_list) {
   print join(' ', @inc_version_list);
}
else {
   # Blank space to preserve value for next Configure run.
   print " ";
}
EOPL
chmod +x getverlist
case "$inc_version_list" in
") if test -x "$perl5$exe_ext"; then
  dflt=`$perl5 getverlist`
 else
  dflt='none'
 fi
 ;;
$undef)
 dflt='none' ;;
?X:     Configure -Dinc_version_list='5.6.0/$archname 5.6.0' ...
*)  eval dflt=\"$inc_version_list\" ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
case "$dflt" in
5.005) dflt=none ;;
esac
$cat <<EOM

In order to ease the process of upgrading, this version of perl
can be configured to use modules built and installed with earlier
versions of perl that were installed under $prefix.  Specify here
the list of earlier versions that this version of perl should check.
If Configure detected no earlier versions of perl installed under
$prefix, then the list will be empty.  Answer 'none' to tell perl
to not search earlier versions.

The default should almost always be sensible, so if you're not sure,
just accept the default.
EOM
```

```
rp='List of earlier versions to include in @INC?'
. ./myread
case "$ans" in
[Nn]one|''|' '|$undef) inc_version_list=' ' ;;
*) inc_version_list="$ans" ;;
esac
case "$inc_version_list" in
''|' ')
 inc_version_list_init='0'
 d_inc_version_list="$undef"
 ;;
*) inc_version_list_init=`echo
 $inc_version_list |
  $sed -e 's/^/"/' -e 's/ /","/g' -e 's/$/",0/'`
 d_inc_version_list="$define"
 ;;
esac
$rm -f getverlist
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/inc_version_list.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_poll.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_poll: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_poll:
?S: This variable conditionally defines the I_POLL symbol, and indicates
?S: whether a C program should include <poll.h>.
?S:.
?C:I_POLL:
?C: This symbol, if defined, indicates that <poll.h> exists and
?C: should be included. (see also HAS_POLL)
?C:.
?H:#$i_poll I_POLL  /**/
?H:.
?LINT:set i_poll
: see if this is a poll.h system
set poll.h i_poll
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_poll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2008 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:sGMTIME_max sGMTIME_min sLOCALTIME_max sLOCALTIME_min: cat rm_try \
 Setvar Compile run
?MAKE: -pick add $@ %<
?S:sGMTIME_max:
?S: This variable defines the maximum value of the time_t offset that
?S: the system function gmtime () accepts
?S:.
?S:sGMTIME_min:
?S: This variable defines the minimum value of the time_t offset that
?S: the system function gmtime () accepts
?S:.
?S:sLOCALTIME_max:
?S: This variable defines the maximum value of the time_t offset that
?S: the system function localtime () accepts
?S:.
?S:sLOCALTIME_min:
?S: This variable defines the minimum value of the time_t offset that
?S: the system function localtime () accepts
?S:.
?C:GMTIME_MAX:
?C: This symbol contains the maximum value
 for the time_t offset that
?C: the system function gmtime () accepts, and defaults to 0
?C:.
?C:GMTIME_MIN:
?C: This symbol contains the minimum value for the time_t offset that
?C: the system function gmtime () accepts, and defaults to 0
?C:.
?C:LOCALTIME_MAX:
?C: This symbol contains the maximum value for the time_t offset that
?C: the system function localtime () accepts, and defaults to 0
?C:.
?C:LOCALTIME_MIN:
?C: This symbol contains the minimum value for the time_t offset that
?C: the system function localtime () accepts, and defaults to 0
?C:.
?H:#define GMTIME_MAX  $sGMTIME_max /**/
```

```
?H:#define GMTIME_MIN  $sGMTIME_min /**/
?H:#define LOCALTIME_MAX $sLOCALTIME_max /**/
?H:#define LOCALTIME_MIN $sLOCALTIME_min /**/
?H:.
?D:sGMTIME_max=0
?D:sGMTIME_min=0
?D:sLOCALTIME_max=0
?D:sLOCALTIME_min=0
?F:!try
: Check the max offset that gmtime and localtime accept
echo "Checking max offsets that gmtime () accepts"

case "$sGMTIME_min/$sGMTIME_max" in
   0/0|/)
 $cat >try.c <<EOCP
#include
 <sys/types.h>
#include <stdio.h>
#include <time.h>

int i;
struct tm *tmp;
time_t pt;

void gm_check (time_t t, int min_year, int max_year)
{
   tmp = gmtime (&t);
   if ( tmp == NULL ||
 /* Check tm_year overflow */
  tmp->tm_year < min_year || tmp->tm_year > max_year)
 tmp = NULL;
   else
 pt = t;
   } /* gm_check */

int check_max ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MAXLONG
   gm_check (MAXLONG, 69, 0x7fffffff);
#endif
   if (tmp == NULL || tmp->tm_year < 0) {
 for (i = 63; i >= 0; i--) {
     time_t x = pt | ((time_t)1 << i);
     if (x < 0 || x < pt) continue;
     gm_check (x, 69, 0x7fffffff);
     }
```

```
 }
   printf ("sGMTIME_max=%ld\n", pt);
   return (0);
   } /* check_max */

int check_min ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MINLONG
   gm_check (MINLONG, -1900, 70);
#endif
   if (tmp == NULL) {
 for (i = 36; i >= 0; i--) {
     time_t x = pt - ((time_t)1 << i);
     if (x > 0) continue;
     gm_check (x, -1900, 70);
     }
 }
   printf ("sGMTIME_min=%ld\n",
 pt);
   return (0);
   } /* check_min */

int main (int argc, char *argv[])
{
   /* fprintf (stderr, "Sizeof time_t = %ld\n", sizeof (time_t)); */
   check_max ();
   check_min ();
   return (0);
   } /* main */
EOCP
 set try
 if eval $compile; then
     eval `$run ./try 2>/dev/null`
 else
     echo "Cannot determine sGMTIME_max and sGMTIME_min." >&4
     fi
 $rm_try
 ;;
   esac

echo "Checking max offsets that localtime () accepts"

case "$sLOCALTIME_min/$sLOCALTIME_max" in
   0/0|/)
 $cat >try.c <<EOCP
#include <sys/types.h>
```

```
#include <stdio.h>
#include <time.h>

int i;
struct tm *tmp;
time_t pt;

void local_check (time_t t, int min_year, int max_year)
{
   if (sizeof (time_t) > 4 && t > 0x7fffffffffff000LL)
 tmp = NULL;
   else
 tmp = localtime (&t);
   if ( tmp == NULL ||
 /* Check tm_year overflow */
  tmp->tm_year < min_year || tmp->tm_year > max_year)
 tmp = NULL;
   else
 pt = t;
   } /* local_check */

int check_max ()
{
   tmp = NULL;
   pt  = 0;
#ifdef
 MAXLONG
   local_check (MAXLONG, 69, 0x7fffffff);
#endif
   if (tmp == NULL || tmp->tm_year < 0) {
 for (i = 63; i >= 0; i--) {
     time_t x = pt | ((time_t)1 << i);
     if (x < 0 || x < pt) continue;
     local_check (x, 69, 0x7fffffff);
     }
 }
   printf ("sLOCALTIME_max=%ld\n", pt);
   return (0);
  } /* check_max */

int check_min ()
{
   tmp = NULL;
   pt  = 0;
#ifdef MINLONG
   local_check (MINLONG, -1900, 70);
#endif
   if (tmp == NULL) {
```

```
 for (i = 36; i >= 0; i--) {
     time_t x = pt - ((time_t)1 << i);
     if (x > 0) continue;
     local_check (x, -1900, 70);
     }
 }
   printf ("sLOCALTIME_min=%ld\n", pt);
   return (0);
   } /* check_min */

int main (int argc, char *argv[])
{
   check_max ();
   check_min ();
   return (0);
   } /* main */
EOCP
 set try
 if eval $compile; then
     eval `$run ./try 2>/dev/null`
 else
     echo "Cannot determine sLOCALTIME_max and sLOCALTIME_min." >&4
     fi
 $rm_try
 ;;
   esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/time_size.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_gethostprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_gethostprotos:
?S: This variable conditionally defines the HAS_GETHOST_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various gethost*() functions.
?S: See also netdbtype.U for probing for various netdb types.
```

```
?S:.
?C:HAS_GETHOST_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for gethostent(), gethostbyname(), and
?C: gethostbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_gethostprotos HAS_GETHOST_PROTOS /**/
?H:.
?LINT:set d_gethostprotos
?X: This test actually only checks for gethostent() and assumes the
?X: others follow suit.  This test fails for ChorusOS, which has
?X: gethostbyname and gethostbyaddr, but not gethostent.
: see if prototypes for various gethostxxx netdb.h functions are available
echo " "
set d_gethostprotos gethostent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_gethostprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fmod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_fmod.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:46  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_fmod: Inlibc
?MAKE: -pick add $@ %<
?S:d_fmod:
?S: This variable conditionally defines the HAS_FMOD symbol, which
?S: indicates to the C program that the fmod() routine is available.
?S: See also d_drem for the drem() routine which does roughly the same.
?S:.
?C:HAS_FMOD
```

```
 :
?C: This symbol, if defined, indicates that the fmod routine is
?C: available to compute the remainder r=x-n*y where n=trunc(x/y).
?C:.
?H:#$d_fmod HAS_FMOD  /**/
?H:.
?LINT:set d_fmod
: see if fmod exists
set fmod d_fmod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fmod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethid.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethid: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethid:
?S: This variable conditionally defines HAS_GETHOSTID if gethostid() is
?S: available to get the host id.
?S:.
?C:HAS_GETHOSTID (GETHOSTID):
?C: This symbol, if defined, indicates that the gethostid system call is
?C: available to get the host id.
?C:.
?H:#$d_gethid HAS_GETHOSTID  /**/
?H:.
?LINT:set
 d_gethid
: see if gethid exists
set gethostid d_gethid
eval $inlibc
```

Found in path(s):

```
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethid.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_siglist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_siglist.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_siglist: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_siglist:
?S: This variable conditionally defines HAS_SYS_SIGLIST if sys_siglist[] is
?S: available to translate signal numbers to strings.
?S:.
?C:HAS_SYS_SIGLIST (SYS_SIGLIST):
?C: This symbol, if defined, indicates that the sys_siglist array is
?C: available to translate signal numbers
 to strings.
?C:.
?H:#$d_siglist HAS_SYS_SIGLIST  /**/
?H:.
?LINT:set d_siglist
: see if sys_siglist[] exist
echo " "
if set sys_siglist val -a d_siglist; eval $csym; $val; then
 echo "You have sys_siglist[] for signal description." >&4
 val="$define"
else
 echo "You don't have sys_siglist[]." >&4
 val="$undef"
fi
set d_siglist
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_siglist.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
```

```
?RCS:
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?RCS: of the source tree for dist 3.0.
?X:
?X: Useless unit dropped.  Use randfunc instead.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/randbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_vfork.U,v 3.0.1.6 1994/08/29 16:18:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_vfork.U,v $
?RCS: Revision 3.0.1.6  1994/08/29  16:18:21  ram
?RCS: patch32: set default to 'y' the first time
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:59:14  ram
?RCS: patch30: usevfork was not always properly set
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:20:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:59:09  ram
?RCS: patch23: now explicitly ask whether vfork() should be used
 (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1993/10/16  13:49:39  ram
?RCS: patch12: added magic for vfork()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:06:57  ram
?RCS: patch10: removed automatic remapping of vfork on fork (WAD)
?RCS: patch10: added compatibility code for older config.sh (WAD)
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:07:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vfork usevfork d_pseudofork: Inlibc Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_vfork:
?S: This variable conditionally defines the HAS_VFORK symbol, which
?S: indicates the vfork() routine is available.
?S:.
?S:usevfork:
?S: This variable is set to true when the user accepts to use vfork.
?S: It is set to false when no vfork is available or when the user
?S: explicitly requests not to use vfork.
?S:.
?S:d_pseudofork:
?S: This variable conditionally defines the HAS_PSEUDOFORK symbol,
?S: which indicates that an emulation of the fork routine is available.
?S:.
?C:HAS_VFORK (VFORK):
?C: This
 symbol, if defined, indicates that vfork() exists.
?C:.
?H:#$d_vfork HAS_VFORK /**/
?H:.
?C:HAS_PSEUDOFORK:
?C: This symbol, if defined, indicates that an emulation of the
?C: fork routine is available.
?C:.
?H:#$d_pseudofork HAS_PSEUDOFORK /**/
?H:.
?M:vfork: HAS_VFORK
?M:#ifndef HAS_VFORK
?M:#define vfork fork
?M:#endif
?M:.
?T:d_hvfork
: backward compatibility for d_hvfork
if test X$d_hvfork != X; then
 d_vfork="$d_hvfork"
 d_hvfork="
fi
?X:==========================
: see if there is a vfork
val="
set vfork val
eval $inlibc

d_pseudofork=$undef
```

```
: Ok, but do we want to use it. vfork is reportedly unreliable in
: perl on Solaris 2.x, and probably elsewhere.
case "$val" in
$define)
 echo " "
 case "$usevfork" in
 false) dflt='n';;
 *) dflt='y';;
 esac
 cat <<'EOM'

Perl can only use a vfork() that doesn't suffer from strict
restrictions on calling functions or modifying global data in
the child.  For example, glibc-2.1 contains such a vfork()
that is unsuitable.  If your system
 provides a proper fork()
call, chances are that you do NOT want perl to use vfork().

EOM
 rp="Do you still want to use vfork()?"
 . ./myread
 case "$ans" in
 y|Y) ;;
 *)
  echo "Ok, we won't use vfork()."
  val="$undef"
  ;;
 esac
 ;;
esac
?X:
?X: Only set it when final value is known to avoid spurious Whoa's
?X: Then set usevfork accordingly to the current value, for next run
?X:
set d_vfork
eval $setvar
case "$d_vfork" in
$define) usevfork='true';;
*) usevfork='false';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_vfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Instruct.U,v 3.0.1.3 1997/02/28 15:02:55 ram Exp $
?RCS:
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Instruct.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:02:55  ram
?RCS: patch61: logname / whoami sequence rewritten to use case
?RCS:
?RCS: Revision 3.0.1.2  1995/02/15  14:11:34  ram
?RCS: patch51: author name now appears at the end of the paragraph (WED)
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:12:05  ram
?RCS: patch45: now documents the & escape to turn -d on at the read prompt
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:04  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?X:
?X: This unit spew out the directions that we want everyone to read.  I try to
?X: keep the first "pagefull" much less than a page since they don't know it
?X: isn't going to go shooting off the top of the screen, and we don't want
?X: to panic them yet.
?X:
?MAKE:Instruct: Myread Configdir Devel contains
?MAKE: -pick wipe $@ %<
?T:user needman firsttime
: general instructions
needman=true
firsttime=true
user=`(logname) 2>/dev/null`
case "$user" in
") user=`whoami 2>&1`;;
esac
if $contains "^$user\$" ../.config/instruct >/dev/null 2>&1; then
 firsttime=false
 echo " "
 rp='Would you like to see the instructions?'
 dflt=n
 . ./myread
 case "$ans" in
 [yY]*) ;;
 *) needman=false;;
 esac
```

```
fi
if $needman; then
 cat <<EOH

This installation shell script will examine your system and ask you questions
to determine how the <PACKAGENAME> package should be installed. If you get
stuck on a question, you may use a ! shell escape to start a subshell or
execute a
 command.  Many of the questions will have default answers in square
brackets; typing carriage return will give you the default.

On some of the questions which ask for file or directory names you are allowed
to use the ~name construct to specify the login directory belonging to "name",
even if you don't have a shell which knows about that.  Questions where this is
allowed will be marked "(~name ok)".

EOH
 rp="
 dflt='Type carriage return to continue'
 . ./myread
 cat <<'EOH'

The prompter used in this script allows you to use shell variables and
backticks in your answers.  You may use $1, $2, etc...  to refer to the words
in the default answer, as if the default line was a set of arguments given to a
script shell.  This means you may also use $* to repeat the whole default line,
so you do not have to re-type everything to add something to the default.

Every time there is a substitution, you will have to confirm.  If there is an
error (e.g. an unmatched backtick), the default answer
 will remain unchanged
and you will be prompted again.

If you are in a hurry, you may run 'Configure -d'.  This will bypass nearly all
the questions and use the computed defaults (or the previous answers if there
was already a config.sh file). Type 'Configure -h' for a list of options.
You may also start interactively and then answer '& -d' at any prompt to turn
on the non-interactive behaviour for the remainder of the execution.

EOH
 . ./myread
 cat <<EOH

Much effort has been expended to ensure that this shell script will run on any
Unix system.  If despite that it blows up on yours, your best bet is to edit
Configure and run it again.  If you can't run Configure for some reason,
you'll have to generate a config.sh file by hand.  Whatever problems you
have, let me (<MAINTLOC>) know how I blew it.
```

```
This installation script affects things in two ways:

1) it may do direct variable substitutions on some of the files included
  in this kit.
2) it builds a config.h file for inclusion in
 C programs.  You may edit
  any of these files as the need arises after running this script.

If you make a mistake on a question, there is no easy way to back up to it
currently.  The easiest thing to do is to edit config.sh and rerun all the SH
files.  Configure will offer to let you do this before it runs the SH files.

EOH
?X: In case they played with the prompter...
 dflt='Type carriage return to continue'
 . ./myread
 case "$firsttime" in
 true) echo $user >>../.config/instruct;;
 esac
fi

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Instruct.U
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?RCS: $Id: i_limits.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_limits.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_limits: Inhdr
?MAKE: -pick add $@ %<
?S:i_limits:
?S: This variable conditionally defines the I_LIMITS symbol, and indicates
?S: whether a C program may include <limits.h> to get symbols like WORD_BIT
?S: and friends.
?S:.
?C:I_LIMITS:
```

```
?C: This symbol, if defined, indicates to the C program that it should
?C: include <limits.h> to
 get definition of symbols like WORD_BIT or
?C: LONG_MAX, i.e. machine dependant limitations.
?C:.
?H:#$i_limits I_LIMITS  /**/
?H:.
?LINT:set i_limits
: see if this is a limits.h system
set limits.h i_limits
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_limits.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_log1p: Inlibc
?MAKE: -pick add $@ %<
?S:d_log1p:
?S: This variable conditionally defines the HAS_LOG1P symbol, which
?S: indicates to the C program that the logp1() routine is available
?S: to compute log(1 + x) for values of x close to zero.
?S:.
?C:HAS_LOG1P:
?C: This symbol, if defined, indicates that the log1p routine is
?C: available to do the logarithm of 1 plus argument function.
?C:.
?H:#$d_log1p HAS_LOG1P  /**/
?H:.
?LINT:set d_log1p
: see if log1p exists
set log1p d_log1p
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_log1p.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: fpu.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:fpu: test cat cc Myread
?MAKE: -pick add $@ %<
?S:fpu (fpunit):
?S: Set to be the compile flag for the local floating point unit.
?S:.
?C:FPU (FPUNIT):
?C: String containing the flags for the local floating point unit.
?C:.
?H:#define FPU "$fpu" /**/
?H:.
: see what floating point compile flags should be used.
fpu=''
if $test -r /dev/fpa; then
 $cat>fpa.c << GOOP
 main(){return(1);}
GOOP
 $cc
 -ffpa -o fpa fpa.c
 fpa > fpa.out 2>&1
 if $test ! -s fpa.out; then
  dflt='y'
  $cat <<'EOM'

You seem to have a sun fpa...  I can compile the code to use the fpa but it will
mean that the code can ONLY run on a machine with a fpa...

EOM
  rp="Should I compile for fpa?"
  . ./myread
  if $test $ans = "n"; then
   fpu=''
  else
   fpu='-ffpa'
  fi
 else
  $cat <<'EOM'

You have the fpa device but I can't seem to use it.  Maybe you should talk to
your sysadmin about this.  For now, I am not going to compile it in.

EOM
```

```
 fi
fi
if $test "$fpu" = ''; then
 if $test -r /usr/etc/mc68881version; then
  dflt='y'
  $cat <<'EOM'

There also seems to be the pieces for a 68881.  If I compile this in, it will
work on almost all Sun 3's except for a few Sun-3/50s without a 68881...

EOM
  rp="Should I compile for a 68881?"
  . ./myread
  if $test $ans = "y"; then
   fpu='-f68881'
  fi
 fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/fpu.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: Copyright (c) 2019, Karl Williamson
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_setlocale d_setlocale_accepts_any_locale_name d_has_C_UTF8: \
 cat Compile run rm_try i_locale i_wctype d_towupper Setvar Myread
?MAKE: -pick add $@ %<
?S:d_has_C_UTF8:
?S: This variable is set to either "true" or "false" depending on
?S: whether the compilation system supports the C.UTF-8 locale.
?S:.
?S:d_setlocale:
?S: This variable conditionally defines HAS_SETLOCALE if setlocale() is
?S: available to handle locale-specific ctype implementations.
?S:.
?S:d_setlocale_accepts_any_locale_name:
?S: This
 variable conditionally defines SETLOCALE_ACCEPTS_ANY_LOCALE_NAME
?S: if setlocale() accepts any locale name.
?S:.
```

```
?C:HAS_SETLOCALE:
?C: This symbol, if defined, indicates that the setlocale routine is
?C: available to handle locale-specific ctype implementations.
?C:.
?C:SETLOCALE_ACCEPTS_ANY_LOCALE_NAME:
?C: This symbol, if defined, indicates that the setlocale routine is
?C: available and it accepts any input locale name as valid.
?C:.
?H:#$d_setlocale HAS_SETLOCALE /**/
?H:#$d_setlocale_accepts_any_locale_name SETLOCALE_ACCEPTS_ANY_LOCALE_NAME /**/
?H:.
?F:!try
?T:LC_CTYPE c_utf8_locale
: check for setlocale function and behavior
case "$d_setlocale" in
")
$cat >&4 <<EOM

Checking to see if you have setlocale() and its behavior
EOM
$cat >try.c <<EOCP
#include <stdlib.h>
#include <string.h>
#$i_locale I_LOCALE
#ifdef I_LOCALE
#  include <locale.h>
#endif
#$i_wctype I_WCTYPE
#ifdef I_WCTYPE
#  include <wctype.h>
#endif

int main() {
   const char * invalid_name
 = "\a";   /* This is really invalid! */
   int accepts_any_locale_name = 0;
   int has_C_UTF8 = 0;
   unsigned char bad_setlocale = 255;

   /* If LC_CTYPE isn't defined the compilation will fail, and locales will be
    * disabled.  It's hard to imagine an instance where meaningful locale
    * handling could be done without LC_CTYPE */
   const char *  name = setlocale(LC_CTYPE, "C");

   if (name == NULL || strcmp(name, "C") != 0) {
       exit(bad_setlocale);
   }
```

```
   name = setlocale(LC_CTYPE, invalid_name);
   if (name != NULL) {

      /* Let it pass if it accepts the name but gives back one of the C
       * locales */
      if (strcmp(name, "C") != 0 && strcmp(name, "C.UTF-8") != 0) {
         accepts_any_locale_name = 1;
      }
   }

   name = setlocale(LC_CTYPE, "C.UTF-8");
   if (name != NULL) {
      unsigned char y_with_diaeresis = ('A' == 193) ? 0xDF : 0xFF;

#$d_towupper HAS_TOWUPPER
#ifdef HAS_TOWUPPER

      /* We assume that if
 the machine doesn't have the C99 towupper, it
       * doesn't have C.UTF-8, even if we successfully changed locales to
       * include it.  This seems safer even on platforms that didn't accept
       * the really invalid name */

      if (towupper(y_with_diaeresis) == 0x178) {
         has_C_UTF8 = 1;
      }

#endif

   }

#if 0

   /* Currently unused code to determine if LC_ALL with disparate values uses
    * category = value pairs or positional, and to determine the separator
    * between the categories.  We could add code so that if the separator were
    * > '9', we subtract 10; similarly for 'Z' and 'z', and then just about
    * every possible ASCII separator would fit in the 5 bits available in the
    * exit code.  This would not be true in EBCDIC.  And then if LC_ALL is
    * positional, we probably would want to know the order of the categories.
    * Using a file between the C program and the shell script would really be
    * require to do that
 */
#ifdef LC_ALL

   unsigned char min_separator = ' ' - 1;
   unsigned char separator = min_separator;
   int uses_name_value_pair_names = 0;
```

```
  name = setlocale(LC_ALL, "C");
  if (name == NULL || strcmp(name, "C") != 0) {
      exit(bad_setlocale);
  }

  if (has_C_UTF8) {
      char * pos;

      name = setlocale(LC_CTYPE, "C.UTF-8");
      if (name == NULL) {
          exit(bad_setlocale);
      }
      name = setlocale(LC_ALL, NULL);
      if (name == NULL) {
          exit(bad_setlocale);
      }

      pos = strstr(name, "LC_CTYPE" "=C.UTF-8");
      if (pos != NULL) {
          uses_name_value_pair_names = 1;
          if (pos == name) {
              separator = name[sizeof("LC_CTYPE=C.UTF-8") - 1];
          }
          else {
              separator = *(pos - 1);
          }
      }
      else {
          pos = strstr(name, "C.UTF-8");
          if (pos == NULL) {
              /* bad */
          }

 else if (pos == name) {
              separator = name[sizeof("C.UTF-8") - 1];
          }
          else {
              separator = *(pos - 1);
          }
      }
  }

#endif
#endif

  exit( 0 /* (separator - min_separator) << 3
      | uses_name_value_pair_names      << 2
```

```
        */
      | has_C_UTF8                    << 1
      | accepts_any_locale_name);

}
EOCP
val=
set d_setlocale
eval $setvar
case $d_setlocale in
  $undef) d_setlocale_accepts_any_locale_name="$undef"
          d_has_C_UTF8="false"
          ;;
  *) set try
     if eval $compile; then
        echo "Your system has setlocale()..." >&4
        $run ./try
        case $? in
           0) echo "and it seems sane; you don't have a C.UTF-8 locale" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$undef"
              d_has_C_UTF8="false"
              ;;
           1) echo "and it seems sane, but accepts
 any locale name as valid" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$define"
              d_has_C_UTF8="false"
              ;;
           2) echo "and it seems sane; you have a C.UTF-8 locale" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$undef"
              d_has_C_UTF8="true"
              ;;
           3) echo "and it seems sane, but accepts any locale name as valid" >&4
              d_setlocale="$define"
              d_setlocale_accepts_any_locale_name="$define"
              d_has_C_UTF8="true"
              ;;
           *) echo "but it doesn't seem to work, so we won't use it." >&4
              d_setlocale="$undef"
              d_setlocale_accepts_any_locale_name="$undef"
              d_has_C_UTF8="false"
              ;;
        esac
     else
        echo "your system does not have setlocale()"
```

```
 >&4
        d_setlocale="$undef"
        d_setlocale_accepts_any_locale_name="$undef"
        d_has_C_UTF8="false"
     fi
esac
$rm_try
;;
*) val="$d_setlocale"
   set d_setlocale
   eval $setvar
   case "$d_setlocale" in
      $undef) echo "There may be other ways to set the locale on your system, so we need to ask:" >&4
      ;;
   esac
   rp="Does your system have the C.UTF-8 locale?"
   dflt=n
   . ./myread
   case "$ans" in
      [Yy]*) d_has_C_UTF8="true"
             c_utf8_locale=" or C.UTF-8"
             ;;
      *)     d_has_C_UTF8="false"
             c_utf8_locale=""
             ;;
   esac
   case "$d_setlocale" in
      $define)
         rp="When you set your locale to something besides C$c_utf8_locale, does it do so, or just pretend to?" >&4
         dflt=n
         . ./myread
         case "$ans" in
            true|[Yy]*)
    d_setlocale_accepts_any_locale_name="$undef"
    ;;
  *) d_setlocale_accepts_any_locale_name="$define"

   ;;
         esac
         ;;
      *) d_setlocale_accepts_any_locale_name="$undef"
    ;;
   esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setlocale.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpclassl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpclassl:
?S: This variable conditionally defines the HAS_FPCLASSL symbol, which
?S: indicates to the C program that the fpclassl() routine is available.
?S:.
?C:HAS_FPCLASSL:
?C: This symbol, if defined, indicates that the fpclassl routine is
?C: available to classify long doubles.  Available for example in IRIX.
?C: The returned values are defined in <ieeefp.h> and are:
?C:
?C: FP_SNAN  signaling NaN
?C: FP_QNAN  quiet NaN
?C: FP_NINF  negative infinity
?C: FP_PINF  positive infinity
?C: FP_NDENORM negative denormalized non-zero
?C: FP_PDENORM positive denormalized non-zero
?C: FP_NZERO negative zero
?C: FP_PZERO positive zero
?C: FP_NNORM negative
 normalized non-zero
?C: FP_PNORM positive normalized non-zero
?C:.
?H:#$d_fpclassl HAS_FPCLASSL  /**/
?H:.
?LINT:set d_fpclassl
: see if fpclassl exists
set fpclassl d_fpclassl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclassl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systypes.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systypes.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/types.h> needs to be included.
?X:
?MAKE:i_systypes: Inhdr
?MAKE: -pick add $@ %<
?S:i_systypes:
?S: This variable conditionally defines the I_SYS_TYPES symbol,
?S: and indicates whether a C program should include <sys/types.h>.
?S:.
?C:I_SYS_TYPES (I_SYSTYPES):
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <sys/types.h>.
?C:.
?H:#$i_systypes I_SYS_TYPES  /**/
?H:.
?LINT:set i_systypes
: see if sys/types.h has to be included
set sys/types.h i_systypes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systypes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_open3.U,v 3.0.1.2 1997/02/28 15:37:12 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_open3.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:12  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
```

```
?RCS: Revision 3.0.1.1  1995/07/25  13:58:26  ram
?RCS: patch56: added knowledge of the O_NONBLOCK symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_open3: Compile test cat h_fcntl h_sysfile rm_try Setvar Findhdr run i_stdlib
?MAKE: -pick add $@ %<
?X: It would be easy to separate the
 h_O_stuff from this.
?X: Is there a reason to do so? -- HMS
?S:d_open3:
?S: This variable conditionally defines the HAS_OPEN3 manifest constant,
?S: which indicates to the C program that the 3 argument version of
?S: the open(2) function is available.
?S:.
?C:HAS_OPEN3 (OPEN3):
?C: This manifest constant lets the C program know that the three
?C: argument form of open(2) is available.
?C:.
?H:#$d_open3 HAS_OPEN3  /**/
?H:.
?W:%<:O_RDONLY O_WRONLY O_RDWR O_NDELAY O_APPEND O_SYNC O_CREAT O_TRUNC
?W:%<:O_EXCL O_NONBLOCK
?F:!try
?LINT:set d_open3
?LINT:change h_fcntl h_sysfile
: Locate the flags for 'open()'
echo " "
$cat >try.c <<EOCP
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 if(O_RDONLY);
#ifdef O_TRUNC
 exit(0);
#else
 exit(1);
#endif
```

```
}
EOCP
: check sys/file.h first to get FREAD on Sun
if $test `./findhdr sys/file.h` && \
  set try -DI_SYS_FILE
 && eval $compile; then
 h_sysfile=true;
 echo "<sys/file.h> defines the O_* constants..." >&4
 if $run ./try; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
elif $test `./findhdr fcntl.h` && \
  set try -DI_FCNTL && eval $compile; then
 h_fcntl=true;
 echo "<fcntl.h> defines the O_* constants..." >&4
 if $run ./try; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
else
 val="$undef"
 echo "I can't find the O_* constant definitions!  You got problems." >&4
fi
set d_open3
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_open3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_socket.U,v 3.0.1.2 1997/02/28 15:46:00 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: d_socket.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:46:00  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:04  ram
?RCS: patch16: can now safely declare private nm_extract in dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_socket d_oldsock d_sockpair socketlib sockethdr \
 d_msg_ctrunc d_msg_dontroute d_msg_oob d_msg_peek
 d_msg_proxy \
 d_scm_rights d_sockaddr_sa_len d_sockaddr_in6 d_sin6_scope_id \
 d_ip_mreq d_ip_mreq_source d_ipv6_mreq d_ipv6_mreq_source \
 d_sockaddr_storage: \
 contains echo n c ar nm nm_opt nm_extract Inlibc Csym _a \
 Compile cat rm_try Setvar Hasfield sysroot
?MAKE: -pick add $@ %<
?S:d_socket:
?S: This variable conditionally defines HAS_SOCKET, which indicates
?S: that the BSD socket interface is supported.
?S:.
?S:d_sockpair:
?S: This variable conditionally defines the HAS_SOCKETPAIR symbol, which
?S: indicates that the BSD socketpair() is supported.
?S:.
?S:d_oldsock:
?S: This variable conditionally defines the OLDSOCKET symbol, which
?S: indicates that the BSD socket interface is based on 4.1c and not 4.2.
?S:.
?S:d_msg_ctrunc:
?S: This variable conditionally defines the HAS_MSG_CTRUNC symbol,
?S: which indicates that the MSG_CTRUNC is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_dontroute:
?S: This variable
 conditionally defines the HAS_MSG_DONTROUTE symbol,
?S: which indicates that the MSG_DONTROUTE is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_oob:
?S: This variable conditionally defines the HAS_MSG_OOB symbol,
?S: which indicates that the MSG_OOB is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_peek:
```

```
?S: This variable conditionally defines the HAS_MSG_PEEK symbol,
?S: which indicates that the MSG_PEEK is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_msg_proxy:
?S: This variable conditionally defines the HAS_MSG_PROXY symbol,
?S: which indicates that the MSG_PROXY is available.  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_scm_rights:
?S: This variable conditionally defines the HAS_SCM_RIGHTS symbol,
?S: which indicates that the SCM_RIGHTS is available.
  #ifdef is
?S: not enough because it may be an enum, glibc has been known to do this.
?S:.
?S:d_sockaddr_sa_len:
?S: This variable conditionally defines the HAS_SOCKADDR_SA_LEN symbol,
?S: which indicates that a struct sockaddr structure has the sa_len
?S: member.
?S:.
?S:d_sockaddr_in6:
?S: This variable conditionally defines the HAS_SOCKADDR_IN6 symbol, which
?S: indicates the availability of a struct sockaddr_in6.
?S:.
?S:d_sockaddr_storage:
?S: This variable conditionally defines the HAS_SOCKADDR_STORAGE symbol,
?S: which indicates the availability of a struct sockaddr_storage.
?S:.
?S:d_sin6_scope_id:
?S: This variable conditionally defines the HAS_SIN6_SCOPE_ID symbol, which
?S: indicates that a struct sockaddr_in6 structure has the sin6_scope_id
?S: member.
?S:.
?S:d_ip_mreq:
?S: This variable conditionally defines the HAS_IP_MREQ symbol, which
?S: indicates the availability of a struct ip_mreq.
?S:.
?S:d_ip_mreq_source:
?S: This variable conditionally defines the HAS_IP_MREQ_SOURCE
 symbol,
?S: which indicates the availability of a struct ip_mreq_source.
?S:.
?S:d_ipv6_mreq:
?S: This variable conditionally defines the HAS_IPV6_MREQ symbol, which
?S: indicates the availability of a struct ipv6_mreq.
?S:.
?S:d_ipv6_mreq_source:
?S: This variable conditionally defines the HAS_IPV6_MREQ_SOURCE symbol,
```

```
?S: which indicates the availability of a struct ipv6_mreq_source.
?S:.
?S:socketlib:
?S: This variable has the names of any libraries needed for socket support.
?S:.
?S:sockethdr:
?S: This variable has any cpp '-I' flags needed for socket support.
?S:.
?C:HAS_SOCKET (SOCKET):
?C: This symbol, if defined, indicates that the BSD socket interface is
?C: supported.
?C:.
?C:HAS_SOCKETPAIR (SOCKETPAIR):
?C: This symbol, if defined, indicates that the BSD socketpair() call is
?C: supported.
?C:.
?C:USE_OLDSOCKET (OLDSOCKET):
?C: This symbol, if defined, indicates that the 4.1c BSD socket interface
?C: is supported instead of the 4.2/4.3 BSD socket interface. For instance,
?C: there
 is no setsockopt() call.
?C:.
?C:HAS_MSG_CTRUNC:
?C: This symbol, if defined, indicates that the MSG_CTRUNC is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_DONTROUTE:
?C: This symbol, if defined, indicates that the MSG_DONTROUTE is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_OOB:
?C: This symbol, if defined, indicates that the MSG_OOB is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_PEEK:
?C: This symbol, if defined, indicates that the MSG_PEEK is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_MSG_PROXY:
?C: This symbol, if defined, indicates that the MSG_PROXY is supported.
?C: Checking just with #ifdef might not be enough because this
 symbol
?C: has been known to be an enum.
?C:.
```

```
?C:HAS_SCM_RIGHTS:
?C: This symbol, if defined, indicates that the SCM_RIGHTS is supported.
?C: Checking just with #ifdef might not be enough because this symbol
?C: has been known to be an enum.
?C:.
?C:HAS_SOCKADDR_SA_LEN:
?C: This symbol, if defined, indicates that the struct sockaddr
?C: structure has a member called sa_len, indicating the length of
?C: the structure.
?C:.
?C:HAS_SOCKADDR_IN6:
?C: This symbol, if defined, indicates the availability of
?C: struct sockaddr_in6;
?C:.
?C:HAS_SOCKADDR_STORAGE:
?C: This symbol, if defined, indicates the availability of
?C: struct sockaddr_storage;
?C:.
?C:HAS_SIN6_SCOPE_ID:
?C: This symbol, if defined, indicates that the struct sockaddr_in6
?C: structure has a member called sin6_scope_id.
?C:.
?C:HAS_IP_MREQ:
?C: This symbol, if defined, indicates the availability of
?C: struct ip_mreq;
?C:.
?C:HAS_IP_MREQ_SOURCE:
?C: This symbol, if defined, indicates the availability of
?C: struct ip_mreq_source;
?C:.
?C:HAS_IPV6_MREQ:
?C: This
 symbol, if defined, indicates the availability of
?C: struct ipv6_mreq;
?C:.
?C:HAS_IPV6_MREQ_SOURCE:
?C: This symbol, if defined, indicates the availability of
?C: struct ipv6_mreq_source;
?C:.
?H:#$d_socket HAS_SOCKET  /**/
?H:#$d_sockpair HAS_SOCKETPAIR /**/
?H:#$d_sockaddr_sa_len HAS_SOCKADDR_SA_LEN /**/
?H:#$d_oldsock USE_OLDSOCKET /**/
?H:#$d_msg_ctrunc HAS_MSG_CTRUNC /**/
?H:#$d_msg_dontroute HAS_MSG_DONTROUTE /**/
?H:#$d_msg_oob HAS_MSG_OOB /**/
?H:#$d_msg_peek HAS_MSG_PEEK /**/
?H:#$d_msg_proxy HAS_MSG_PROXY /**/
```

```
?H:#$d_scm_rights HAS_SCM_RIGHTS /**/
?H:#$d_sockaddr_in6 HAS_SOCKADDR_IN6 /**/
?H:#$d_sockaddr_storage HAS_SOCKADDR_STORAGE /**/
?H:#$d_sin6_scope_id HAS_SIN6_SCOPE_ID /**/
?H:#$d_ip_mreq HAS_IP_MREQ /**/
?H:#$d_ip_mreq_source HAS_IP_MREQ_SOURCE /**/
?H:#$d_ipv6_mreq HAS_IPV6_MREQ /**/
?H:#$d_ipv6_mreq_source HAS_IPV6_MREQ_SOURCE /**/
?H:.
?T:val net ENUM enum
?LINT:set d_sockpair d_sockaddr_sa_len
?LINT:set d_msg_ctrunc d_msg_dontroute
 d_msg_oob d_msg_peek d_msg_proxy
?LINT:set d_scm_rights d_sockaddr_in6 d_sin6_scope_id d_ip_mreq
?LINT:set d_ip_mreq_source d_ipv6_mreq d_ipv6_mreq_source d_sockaddr_storage
: see whether socket exists
socketlib=''
sockethdr=''
echo " "
$echo $n "Hmm... $c" >&4
if set socket val -f d_socket; eval $csym; $val; then
   echo "Looks like you have Berkeley networking support." >&4
   d_socket="$define"
?X: now check for advanced features
   if set setsockopt val -f; eval $csym; $val; then
 d_oldsock="$undef"
   else
 echo "...but it uses the old BSD 4.1c interface, rather than 4.2." >&4
 d_oldsock="$define"
   fi
else
?X: HP-UX, for one, puts all the socket stuff in socklib.o. Note that if we
?X: come here on HP-UX, then we must have used nm to get symbols, or we really
?X: don't have sockets anyway...
   if $contains socklib libc.list >/dev/null 2>&1; then
 echo "Looks like you have Berkeley networking support." >&4
 d_socket="$define"
 : we will have to assume that it supports
 the 4.2 BSD interface
 d_oldsock="$undef"
   else
 echo "You don't have Berkeley networking in libc$_a..." >&4
?X: look for optional networking libraries
 if test "X$d_socket" = "X$define"; then
     echo "...but you seem to believe that you have sockets." >&4
 else
     for net in net socket
     do
```

```
  if test -f $sysroot/usr/lib/lib$net$_a; then
?X: space between two  '(' needed for ksh
      ( ($nm $nm_opt $sysroot/usr/lib/lib$net$_a | eval $nm_extract) ||  \
      $ar t $sysroot/usr/lib/lib$net$_a) 2>/dev/null >> libc.list
      if $contains socket libc.list >/dev/null 2>&1; then
   d_socket="$define"
   socketlib="-l$net"
   case "$net" in
   net)
       echo "...but the Wollongong group seems to have hacked it in." >&4
       sockethdr="-I$sysroot/usr/netinclude"
       ;;
   esac
   echo "Found Berkeley sockets interface in lib$net." >&4
?X: now check for advanced features
   if $contains setsockopt libc.list >/dev/null 2>&1; then
       d_oldsock="$undef"
   else
       echo
 "...using the old BSD 4.1c interface, rather than 4.2." >&4
       d_oldsock="$define"
   fi
   break
      fi
  fi
     done
     if test "X$d_socket" != "X$define"; then
        echo "or anywhere else I see." >&4
        d_socket="$undef"
        d_oldsock="$undef"
     fi
 fi
   fi
fi

@if HAS_SOCKETPAIR || d_sockpair
: see if socketpair exists
set socketpair d_sockpair
eval $inlibc

@end

echo "Checking the availability sa_len in the sock struct ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
int main() {
struct sockaddr sa;
```

```
return (sa.sa_len);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sockaddr_sa_len; eval $setvar
$rm_try

echo "Checking the availability struct sockaddr_in6 ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_in6 sin6;
return (sin6.sin6_family);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sockaddr_in6;
 eval $setvar
$rm_try

echo "Checking the availability struct sockaddr_storage ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_storage sastor;
return (sastor.ss_family);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sockaddr_storage; eval $setvar
$rm_try

echo "Checking the availability sin6_scope_id in struct sockaddr_in6 ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
```

```
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct sockaddr_in6 sin6;
return (sin6.sin6_scope_id);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_sin6_scope_id; eval $setvar
$rm_try

echo "Checking the availability struct ip_mreq ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ip_mreq mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile; then

 val="$define"
fi
set d_ip_mreq; eval $setvar
$rm_try

echo "Checking the availability struct ip_mreq_source ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ip_mreq_source mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile; then
     val="$define"
fi
set d_ip_mreq_source; eval $setvar
$rm_try
```

```
echo "Checking the availability struct ipv6_mreq ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ipv6_mreq mreq;
return (mreq.ipv6mr_interface);
}
EOF
val="$undef"
set try; if eval $compile; then
   val="$define"
fi
set d_ipv6_mreq; eval $setvar
$rm_try

echo "Checking the availability struct ipv6_mreq_source ..." >&4
$cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
int main() {
struct ipv6_mreq_source mreq;
return (mreq.imr_multiaddr.s_addr);
}
EOF
val="$undef"
set try; if eval $compile;
 then
      val="$define"
fi
set d_ipv6_mreq_source; eval $setvar
$rm_try

?X: these constants are known to be troublesomely defined as enums
?X: so that ifdef will not work for detecting their presence.
echo "Checking the availability of certain socket constants..." >&4
for ENUM in MSG_CTRUNC MSG_DONTROUTE MSG_OOB MSG_PEEK MSG_PROXY SCM_RIGHTS; do
   enum=`$echo $ENUM|./tr '[A-Z]' '[a-z]'`
   $cat >try.c <<EOF
#include <sys/types.h>
#include <sys/socket.h>
int main() {
   int i = $ENUM;
}
EOF
```

```
  val="$undef"
  set try; if eval $compile; then
 val="$define"
  fi
  set d_${enum}; eval $setvar
  $rm_try
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_socket.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_group.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_group.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:34:52  ram
?RCS: patch61: useless unit dropped.
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:48  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Useless unit dropped.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_group.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
```

```
?MAKE:d_setprotoent_r setprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setprotoent_r:
?S: This variable conditionally defines the HAS_SETPROTOENT_R symbol,
?S: which indicates to the C program that the setprotoent_r()
?S: routine is available.
?S:.
?S:setprotoent_r_proto:
?S: This variable encodes the prototype of setprotoent_r.
?S: It is zero if d_setprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setprotoent_r
?S: is defined.
?S:.
?C:HAS_SETPROTOENT_R:
?C: This symbol, if defined, indicates that the setprotoent_r
 routine
?C: is available to setprotoent re-entrantly.
?C:.
?C:SETPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of setprotoent_r.
?C: It is zero if d_setprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setprotoent_r
?C: is defined.
?C:.
?H:#$d_setprotoent_r HAS_SETPROTOENT_R /**/
?H:#define SETPROTOENT_R_PROTO $setprotoent_r_proto /**/
?H:.
?T:try hdrs d_setprotoent_r_proto
: see if setprotoent_r exists
set setprotoent_r d_setprotoent_r
eval $inlibc
case "$d_setprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setprotoent_r_proto:$usethreads" in
 ":define") d_setprotoent_r_proto=define
  set d_setprotoent_r_proto setprotoent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setprotoent_r_proto" in
 define)
 case "$setprotoent_r_proto" in
 "|0) try='int setprotoent_r(int, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && setprotoent_r_proto=I_ID ;;
 esac
 case "$setprotoent_r_proto"
```

```
 in
 "|0) try='void setprotoent_r(int, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && setprotoent_r_proto=V_ID ;;
 esac
 case "$setprotoent_r_proto" in
 "|0) d_setprotoent_r=undef
  setprotoent_r_proto=0
  echo "Disabling setprotoent_r, cannot determine prototype." >&4 ;;
 * ) case "$setprotoent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setprotoent_r_proto="REENTRANT_PROTO_$setprotoent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setprotoent_r has no prototype, not using it." >&4 ;;
  esac
  d_setprotoent_r=undef
  setprotoent_r_proto=0
  ;;
 esac
 ;;
*) setprotoent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setprotoent_r.U
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```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:siteman3dir siteman3direxp installsiteman3dir: Getfile \
 Setprefixvar prefix siteprefix man3dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:siteman3dir="
?S:siteman3dir:
?S: This variable contains the name of the directory in which site-specific
```

```
?S: library man source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After
 perl has been installed, users may install their own local
?S: man3 pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:siteman3direxp="
?S:siteman3direxp:
?S: This variable is the same as the siteman3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsiteman3dir="
?S:installsiteman3dir:
?S: This variable is really the same as siteman3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsiteman3dir
?LINT:set siteman3dir
?LINT:set siteman3direxp
: determine where add-on library man pages go
case "$siteman3dir" in
") dflt=`echo $man3dir | $sed "s#^$prefix#$siteprefix#"` ;;
*) dflt=$siteman3dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname
 where the site-specific library manual pages should be installed?'
. ./getfile
prefixvar=siteman3dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteman3dir.U
No license file was found, but licenses were detected in source scan.

```
#  You may redistribute only under the terms of the Artistic Licence,
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/makegloss
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/fixcpp
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.mk
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/bindex
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: newslib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: newslib.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:newslib newslibexp: test inews Oldconfig Getfile
?MAKE: -pick add $@ %<
?S:newslib:
?S: This variable contains the eventual value of the NEWSLIB symbol,
?S: which holds the name of the directory serving as the news library.
?S: It may have a ~ on the front.  See newslibexp for expanded version.
?S:.
?S:newslibexp:
?S: This variable contains
 the ~ expanded name of the news library
?S: directory.  See newslib.
?S:.
?C:NEWSLIB:
?C: This symbol contains the name of the directory serving as the news
?C: library.  The program must be prepared to do ~ expansion on it.
?C:.
?C:NEWSLIB_EXP:
?C: This symbol is the ~ expanded version of NEWSLIB, for programs that
?C: do not wish to deal with it at run-time.
?C:.
?H:#define NEWSLIB "$newslib"  /**/
?H:#define NEWSLIB_EXP "$newslibexp" /**/
?H:.
?LINT:change inews
: figure out news library
case "$newslib" in
")
 dflt=/usr/lib/news
```

```
 ;;
*)  dflt=$newslib ;;
esac
echo " "
fn=d~
rp='Where is your news library?'
. ./getfile
newslib="$ans"
newslibexp="$ansexp"
if $test -f $newslibexp/inews; then
 echo "Aha!  Inews is really in $newslibexp!  Maybe this is 2.10.2..." >&4
 case "$inews" in
 inews)
  : null
  ;;
 *) echo "(Make sure $inews isn't an old version.)";;
 esac
 inews=$newslibexp/inews
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/newslib.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: errnolist.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:01  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:10:54  ram
?RCS: patch16: created
?RCS:
?MAKE:errnolist errnolist_SH errnolist_a errnolist_c errnolist_o: cat +cc \
 +ccflags +libs +d_sysernlst _a _o
?MAKE: -pick add $@ %<
?S:errnolist:
?S: This variable holds the base name of a file containing the
?S: definition of the sys_errnolist
```

```
 array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S: The following lines should be included in your Makefile.SH:
?S:
?S:  case "$errnolist" in
?S:  ") ;;
?S:  *)
?S:   $spitshell >>Makefile <<!GROK!THIS!
?S:  $errnolist_c: $errnolist_SH $errnolist_a
?S:   sh ./$errnolist_SH
?S:
?S:  !GROK!THIS!
?S:   ;;
?S:  esac
?S:
?S: You may define the 'errnolist' variable in your Myinit.U if you
?S: wish to override its default value "errnolist".
?S:.
?S:errnolist_SH:
?S: This is the name of a file which will generate errnolistc.
?S:.
?S:errnolist_a:
?S: This is the name of the awk script called by errnolist_SH.
?S:.
?S:errnolist_c:
?S: This is the name of a generated C file which provides the
?S: definition of the sys_errnolist array.
?S:.
?S:errnolist_o:
?S: This is the name of the object file which provides the
?S: definition of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S:.
?INIT:errnolist=errnolist
:
 check for sys_errnolist
@if d_sysernlst || HAS_SYS_ERRNOLIST
case "$d_sysernlst" in
"$define")
   errnolist=''
   errnolist_SH=''
   errnolist_a=''
   errnolist_c=''
   errnolist_o=''
 ;;
*)
 echo " "
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
```

```
   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
 ;;
esac
@else
echo " "
$cat <<EOM
Checking to see if your C library provides us with sys_errnolist[]...
EOM
$cat >errnolist.c <<'EOCP'
extern char *sys_errnolist[];
int main() {
   char *p0 = sys_errnolist[0];
   char *p1 = sys_errnolist[1];

   return (p0 == p1); /* Make sure they're not optimized away */
}
EOCP
if $cc $ccflags -o errnolist errnolist.c $libs >/dev/null 2>&1 ; then
   echo "It does."
   errnolist="
   errnolist_SH="
   errnolist_a="
   errnolist_c="
   errnolist_o="
else
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"

   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/errnolist.U
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```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_readv: Inlibc
?MAKE: -pick add $@ %<
?S:d_readv:
?S: This variable conditionally defines the HAS_READV symbol, which
?S: indicates to the C program that the readv() routine is available.
?S:.
?C:HAS_READV:
?C: This symbol, if defined, indicates that the readv routine is
?C: available to do gather reads.  You will also need <sys/uio.h>
?C: and there I_SYSUIO.
?C:.
?H:#$d_readv HAS_READV  /**/
?H:.
?LINT:set d_readv
: see if readv exists
set readv d_readv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_readv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_usleep.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_usleep.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_usleep: Inlibc
?MAKE: -pick add $@ %<
?S:d_usleep:
?S: This variable conditionally defines HAS_USLEEP if usleep() is
?S: available to do high granularity sleeps.
?S:.
?C:HAS_USLEEP (USLEEP):
?C: This symbol, if defined, indicates that the usleep routine is
?C: available to let the process sleep on a sub-second accuracy.
?C:.
?H:#$d_usleep
```

```
 HAS_USLEEP  /**/
?H:.
?LINT:set d_usleep
: see if usleep exists
set usleep d_usleep
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_usleep.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endpwent_r endpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_endpwent_r:
?S: This variable conditionally defines the HAS_ENDPWENT_R symbol,
?S: which indicates to the C program that the endpwent_r()
?S: routine is available.
?S:.
?S:endpwent_r_proto:
?S: This variable encodes the prototype of endpwent_r.
?S: It is zero if d_endpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endpwent_r
?S: is defined.
?S:.
?C:HAS_ENDPWENT_R:
?C: This symbol, if defined, indicates that the endpwent_r routine
?C: is available to
 endpwent re-entrantly.
?C:.
?C:ENDPWENT_R_PROTO:
?C: This symbol encodes the prototype of endpwent_r.
?C: It is zero if d_endpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endpwent_r
?C: is defined.
?C:.
?H:#$d_endpwent_r HAS_ENDPWENT_R /**/
?H:#define ENDPWENT_R_PROTO $endpwent_r_proto /**/
?H:.
?T:try hdrs d_endpwent_r_proto
```

```
: see if endpwent_r exists
set endpwent_r d_endpwent_r
eval $inlibc
case "$d_endpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_endpwent_r_proto:$usethreads" in
 ":define") d_endpwent_r_proto=define
  set d_endpwent_r_proto endpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endpwent_r_proto" in
 define)
 case "$endpwent_r_proto" in
 "|0) try='int endpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endpwent_r_proto=I_H ;;
 esac
 case "$endpwent_r_proto" in
 "|0) try='void endpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endpwent_r_proto=V_H ;;
 esac
 case "$endpwent_r_proto"
 in
 "|0) d_endpwent_r=undef
  endpwent_r_proto=0
  echo "Disabling endpwent_r, cannot determine prototype." >&4 ;;
 * ) case "$endpwent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endpwent_r_proto="REENTRANT_PROTO_$endpwent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endpwent_r has no prototype, not using it." >&4 ;;
  esac
  d_endpwent_r=undef
  endpwent_r_proto=0
  ;;
 esac
 ;;
*) endpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endpwent_r.U

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```
?RCS: $Id: lintlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lintlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lintlib lintlibexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:lintlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put public lint-library files for the package in question.  It is
?S: most often a local directory such as /usr/local/lib/lint. Programs using
?S: this variable must be prepared to
 deal with ~name expansion.
?S:.
?S:lintlibexp:
?S: This variable is the same as the lintlib variable, but is filename
?S: expanded at configuration time, for convenient use in your makefiles.
?S:.
: determine where public lint libraries go
case "$lintlib" in
") dflt=`./loc . "." /usr/local/lib/lint /usr/lib/lint /usr/lib`;;
*) dflt="$lintlib" ;;
esac
echo " "
fn=d~
rp='Where do you want to put the public lint libraries?'
. ./getfile
lintlib="$ans"
lintlibexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lintlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_rint: Inlibc
?MAKE: -pick add $@ %<
?S:d_rint:
?S: This variable conditionally defines the HAS_RINT symbol, which
?S: indicates to the C program that the rint() routine is available.
?S:.
?C:HAS_RINT:
?C: This symbol, if defined, indicates that the rint routine is
?C: available to return the nearest integral value to x as double
?C: using the current rounding mode.
?C:.
?H:#$d_rint HAS_RINT  /**/
?H:.
?LINT:set d_rint
: see if rint exists
set rint d_rint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_rint.U
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```
?RCS: $Id$
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_ustat: Inlibc
?MAKE: -pick add $@ %<
?S:d_ustat:
?S: This variable conditionally defines HAS_USTAT if ustat() is
?S: available to query file system statistics by dev_t.
?S:.
?C:HAS_USTAT:
?C: This symbol, if defined, indicates that the ustat system call is
?C: available to query file system statistics by dev_t.
?C:.
?H:#$d_ustat HAS_USTAT  /**/
?H:.
?LINT:set d_ustat
: see if ustat exists
set ustat d_ustat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ustat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotby.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getpbyname d_getpbynumber: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpbyname:
?S: This variable conditionally defines the HAS_GETPROTOBYNAME
?S: symbol, which indicates to the C program that the
?S: getprotobyname() routine is available to look up protocols
?S: by their name.
?S:.
?S:d_getpbynumber:
?S: This variable conditionally defines the HAS_GETPROTOBYNUMBER
?S: symbol, which indicates to the C program that the
?S: getprotobynumber() routine is available to look up protocols
?S: by their number.
?S:.
?C:HAS_GETPROTOBYNAME:
?C: This symbol, if defined, indicates that the getprotobyname()
?C: routine is available to look up protocols by their name.
?C:.
?C:HAS_GETPROTOBYNUMBER:
?C: This
 symbol, if defined, indicates that the getprotobynumber()
?C: routine is available to look up protocols by their number.
?C:.
?H:#$d_getpbyname HAS_GETPROTOBYNAME  /**/
?H:#$d_getpbynumber HAS_GETPROTOBYNUMBER  /**/
?H:.
?LINT:set d_getpbyname d_getpbynumber
: Optional checks for getprotobyname and getprotobynumber

@if d_getpbyname || HAS_GETPROTOBYNAME
: see if getprotobyname exists
set getprotobyname d_getpbyname
eval $inlibc
@end

@if d_getpbynumber || HAS_GETPROTOBYNUMBER
```

```
: see if getprotobynumber exists
set getprotobynumber d_getpbynumber
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getprotby.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Mkdirp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can launched to create a
?X: directory path like "mkdir -p" would do.
?X:
?MAKE:Mkdirp:
 eunicefix startsh
?MAKE: -pick add $@ %<
?F:./mkdirp
?T:name create file
: script used to emulate mkdir -p
cat >mkdirp <<EOS
$startsh
EOS
cat >>mkdirp <<'EOS'
name=$1;
create="";
while test $name; do
 if test ! -d "$name"; then
  create="$name $create"
```

```
  name=`echo $name | sed -e "s|^[^/]*$||"`
  name=`echo $name | sed -e "s|\(.*\)/.*|\1|"`
 else
  name=""
 fi
done
for file in $create; do
 mkdir $file
done
EOS
chmod +x mkdirp
$eunicefix mkdirp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Mkdirp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Rcs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Rcs.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is a unit that helps people who write SH scripts and keep them under
?X: RCS, but don't think to protect the $Log and other $Id keywords from
?X: variable substitution (or people like me who do not like to).
?X:
?MAKE:Author Date Header Id Locker Log RCSfile Revision Source State: Oldconfig
?MAKE: -pick weed $@ %<
?LINT:describe Author
 Date Header Id Locker Log RCSfile Revision Source State
: preserve RCS keywords in files with variable substitution, grrr
?Author:Author='$Author'
?Date:Date='$Date'
?Header:Header='$Header'
?Id:Id='$Id'
?$Locker'
?Log:Log='$Log'
?RCSfile:RCSfile='$RCSfile'
```

```
?Revision:Revision='$Revision'
?Source:Source='$Source'
?State:State='$State'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Rcs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgid.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:33:44  ram
?RCS: patch61: created
?RCS:
?MAKE:d_getpgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpgid:
?S: This variable conditionally defines the HAS_GETPGID symbol, which
?S: indicates to the C program that the getpgid(pid) function
?S: is available to get the process group id.
?S:.
?C:HAS_GETPGID:
?C: This symbol, if defined, indicates to the C program
 that
?C: the getpgid(pid) function is available to get the
?C: process group id.
?C:.
?H:#$d_getpgid HAS_GETPGID  /**/
?H:.
?LINT:set d_getpgid
: see if getpgid exists
set getpgid d_getpgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strstr.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strstr.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strstr: Inlibc
?MAKE: -pick add $@ %<
?S:d_strstr:
?S: This variable conditionally defines HAS_STRSTR if strstr() is
?S: available to find substrings.
?S:.
?C:HAS_STRSTR (STRSTR):
?C: This symbol, if defined, indicates that the strstr routine is
?C: available to find substrings.
?C:.
?H:#$d_strstr HAS_STRSTR /**/
?H:.
?LINT:set d_strstr
:
 see if strstr exists
set strstr d_strstr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strstr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017 H.Merijn Brand (original change by Tony Cook)
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_openat d_unlinkat d_renameat d_linkat d_fchmodat: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchmodat:
?S: This variable conditionally defines the HAS_FCHMODAT symbol, which
?S: indicates the POSIX fchmodat() function is available.
?S:.
?S:d_linkat:
?S: This variable conditionally defines the HAS_LINKAT symbol, which
```

```
?S: indicates the POSIX linkat() function is available.
?S:.
?S:d_openat:
?S: This variable conditionally defines the HAS_OPENAT symbol, which
?S: indicates the POSIX openat() function is available.
?S:.
?S:d_renameat:
?S: This variable conditionally defines the HAS_RENAMEAT symbol, which
?S: indicates the POSIX renameat() function is available.
?S:.
?S:d_unlinkat:
?S: This variable
 conditionally defines the HAS_UNLINKAT symbol, which
?S: indicates the POSIX unlinkat() function isavailable.
?S:.
?C:HAS_FCHMODAT:
?C: This symbol is defined if the fchmodat() routine is available.
?C:.
?C:HAS_LINKAT:
?C: This symbol is defined if the linkat() routine is available.
?C:.
?C:HAS_OPENAT:
?C: This symbol is defined if the openat() routine is available.
?C:.
?C:HAS_RENAMEAT:
?C: This symbol is defined if the renameat() routine is available.
?C:.
?C:HAS_UNLINKAT:
?C: This symbol is defined if the unlinkat() routine is available.
?C:.
?H:#$d_fchmodat HAS_FCHMODAT /**/
?H:#$d_linkat HAS_LINKAT /**/
?H:#$d_openat HAS_OPENAT /**/
?H:#$d_renameat HAS_RENAMEAT /**/
?H:#$d_unlinkat HAS_UNLINKAT /**/
?H:.
?LINT:set d_openat d_unlinkat d_renameat d_linkat d_fchmodat
: check for openat, unlinkat, renameat, linkat, fchmodat
set openat d_openat
eval $inlibc

set unlinkat d_unlinkat
eval $inlibc

set renameat d_renameat
eval $inlibc

set linkat d_linkat
```

```
eval $inlibc

set fchmodat d_fchmodat
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fsat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perlpath.U,v 3.0.1.2 1995/09/25 09:17:04 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: perlpath.U,v $
?RCS:
?RCS: Special perl5 unit -- we haven't installed perl yet.
?RCS:
?RCS: Revision 3.0.1.2  1995/09/25  09:17:04  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:33:53  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:32  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this unit is to locate perl good enough to construct a #!
?X:
?MAKE:perlpath: cat Getfile Loc Myread Oldconfig initialinstalllocation \
 startperl version versiononly
?MAKE: -pick add $@ %<
?Y:TOP
?S:perlpath:
?S: This variable contains the eventual value of the PERLPATH symbol,
?S: which contains the name of the perl interpreter to be used in
?S: shell scripts and in the "eval 'exec'" idiom.  This variable is
?S: not necessarily the pathname of the file containing the perl
?S: interpreter; you must append the executable extension (_exe) if
```

```
?S: it is not already present.  Note that Perl code that runs during
?S: the Perl build process cannot reference this variable, as Perl
?S: may not have been installed, or even if installed, may be a
?S: different version of Perl.
?S:.
?C:PERLPATH:
?C: This symbol contains the name of the perl interpreter to be
?C: used in shell scripts and in the "eval 'exec'" idiom.
?C:.
?H:#define PERLPATH "$perlpath"  /**/
?H:.
:
 figure best path for perl in scripts
case "$perlpath" in
")
 case "$versionony" in
 "$define") perlpath="$initialinstalllocation/perl$version";;
 *)  perlpath="$initialinstalllocation/perl";;
 esac
 case "$startperl" in
 *!*) ;;
 *)
  $cat <<EOH

I will use the "eval 'exec'" idiom to start Perl on your system.
I can use the full path of your Perl binary for this purpose, but
doing so may cause problems if you want to share those scripts and
Perl is not always in a standard place ($initialinstalllocation/perl).

EOH
  dflt="$initialinstalllocation/perl"
  rp="What path shall I use in \"eval 'exec'\"?"
  . ./myread
  perlpath="$ans"
  ;;
 esac
 ;;
esac
case "$startperl" in
*!*) ;;
*) echo "I'll use $perlpath in \"eval 'exec'\"" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perlpath.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_inttypes: Inhdr cat rm_try Setvar Compile
?MAKE: -pick add $@ %<
?S:i_inttypes:
?S: This variable conditionally defines the I_INTTYPES symbol,
?S: and indicates whether a C program should include <inttypes.h>.
?S:.
?C:I_INTTYPES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <inttypes.h>.
?C:.
?H:#$i_inttypes   I_INTTYPES                /**/
?H:.
?LINT:set i_inttypes
: see if inttypes.h is available
: we want a real compile instead of Inhdr because some systems
: have an inttypes.h
 which includes non-existent headers
echo " "
$cat >try.c <<EOCP
#include <inttypes.h>
int main() {
 static int32_t foo32 = 0x12345678;
}
EOCP
set try
if eval $compile; then
 echo "<inttypes.h> found." >&4
 val="$define"
else
 echo "<inttypes.h> NOT found." >&4
 val="$undef"
fi
$rm_try
set i_inttypes
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_inttypes.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rename.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rename.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_rename: Inlibc
?MAKE: -pick add $@ %<
?S:d_rename:
?S: This variable conditionally defines the HAS_RENAME symbol, which
?S: indicates to the C program that the rename() routine is available
?S: to rename files.
?S:.
?C:HAS_RENAME (RENAME):
?C: This symbol, if defined, indicates that the rename routine is available
?C: to rename files.
  Otherwise you should do the unlink(), link(), unlink()
?C: trick.
?C:.
?H:#$d_rename HAS_RENAME /**/
?H:.
?LINT:set d_rename
: see if rename exists
set rename d_rename
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rename.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_hypot: Inlibc
?MAKE: -pick add $@ %<
?S:d_hypot:
?S: This variable conditionally defines HAS_HYPOT if hypot is available
?S: for numerically stable hypotenuse function.
```

```
?S:.
?C:HAS_HYPOT:
?C: This symbol, if defined, indicates that the hypot routine is
?C: available to do the hypotenuse function.
?C:.
?H:#$d_hypot HAS_HYPOT  /**/
?H:.
?LINT:set d_hypot
: see if hypot exists
set hypot d_hypot
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_hypot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_portable.U,v 3.0.1.2 1995/01/11 15:28:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_portable.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:28:52  ram
?RCS: patch45: executable path stripping moved to the end in Config_sh.U
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:21:17  ram
?RCS: patch15: did not strip variables properly when needed
?RCS: patch15: now also strips down variables from trylist
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
   This is the same as the dist version, except I don't bother
?X:   prompting people since it makes no difference for perl5,
?X:   and only confuses people.
?X:
?X: The Loc unit is wanted to get the definition of all the locating variables.
?X:
?MAKE:d_portable: Loc Oldconfig
?MAKE: -pick add $@ %<
?S:d_portable:
```

```
?S: This variable conditionally defines the PORTABLE symbol, which
?S: indicates to the C program that it should not assume that it is
?S: running on the machine it was compiled on.
?S:.
?C:PORTABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: not assume that it is running on the machine it was compiled on.
?C: The program should be prepared to look up the host name, translate
?C: generic filenames, use PATH, etc.
?C:.
?H:#$d_portable PORTABLE /**/
?H:.
?D:d_portable="
: decide how portable to be.  Allow command line overrides.
case "$d_portable" in
"$undef") ;;
*) d_portable="$define" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_portable.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ilogb: Inlibc
?MAKE: -pick add $@ %<
?S:d_ilogb:
?S: This variable conditionally defines the HAS_ILOGB symbol, which
?S: indicates to the C program that the ilogb() routine is available
?S: for extracting the exponent of double x as a signed integer.
?S:.
?C:HAS_ILOGB:
?C: This symbol, if defined, indicates that the ilogb routine is
?C: available to get integer exponent of a floating-point value.
?C:.
?H:#$d_ilogb HAS_ILOGB  /**/
?H:.
?LINT:set d_ilogb
: see if ilogb exists
set ilogb d_ilogb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ilogb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:selectminbits: Compile cat rm_try Oldconfig d_select \
 i_time i_systime i_systimek i_sysselct selecttype d_socket \
 byteorder Myread Setvar run i_stdlib ptrsize
?MAKE: -pick add $@ %<
?S:selectminbits:
?S: This variable holds the minimum number of bits operated by select.
?S: That is, if you do select(n, ...), how many bits at least will be
?S: cleared in the masks if some activity is detected.  Usually this
?S: is either n or 32*ceil(n/32), especially many little-endians do
?S: the latter.  This is only useful if
 you have select(), naturally.
?S:.
?C:SELECT_MIN_BITS:
?C: This symbol holds the minimum number of bits operated by select.
?C: That is, if you do select(n, ...), how many bits at least will be
?C: cleared in the masks if some activity is detected.  Usually this
?C: is either n or 32*ceil(n/32), especially many little-endians do
?C: the latter.  This is only useful if you have select(), naturally.
?C:.
?H:#define SELECT_MIN_BITS $selectminbits /**/
?H:.
?T:bits
?T:safebits
?F:!try
: check for the select 'width'
case "$selectminbits" in
") safebits=`expr $ptrsize \* 8`
   case "$d_select" in
 $define)
  $cat <<EOM

Checking to see on how many bits at a time your select() operates...
EOM
  $cat >try.c <<EOCP
#include <sys/types.h>
#$i_time I_TIME
#$i_systime I_SYS_TIME
#$i_systimek I_SYS_TIME_KERNEL
```

```
#ifdef I_TIME
#   include <time.h>
#endif
#ifdef I_SYS_TIME
#   ifdef I_SYS_TIME_KERNEL
# define KERNEL
#   endif
#   include <sys/time.h>
#   ifdef I_SYS_TIME_KERNEL
# undef KERNEL
#   endif
#endif
#$i_sysselct
 I_SYS_SELECT
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
#$d_socket HAS_SOCKET
#ifdef HAS_SOCKET
#   include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
$selecttype b;
#define S sizeof(*(b))
#define MINBITS 64
#define NBYTES (S * 8 > MINBITS ? S : MINBITS/8)
#define NBITS  (NBYTES * 8)
int main() {
   char *s = (char *)malloc(NBYTES);
   struct timeval t;
   int i;
   FILE* fp;
   int fd;

   if (!s)
 exit(1);
   fclose(stdin);
   fp = fopen("try.c", "r");
   if (fp == 0)
     exit(2);
   fd = fileno(fp);
   if (fd < 0)
     exit(3);
   b = ($selecttype)s;
```

```
   for (i = 0; i < NBITS; i++)
 FD_SET(i, b);
   t.tv_sec  = 0;
   t.tv_usec = 0;
   select(fd + 1, b, 0, 0, &t);
   for (i = NBITS - 1; i > fd && FD_ISSET(i, b); i--);
   free(s);
   printf("%d\n", i + 1);
   return 0;
}
EOCP
  set try
  if eval $compile_ok; then
   selectminbits=`$run
 ./try 2>/dev/null`
   case "$selectminbits" in
   ") cat >&4 <<EOM
Cannot figure out on how many bits at a time your select() operates.
I'll play safe and guess it is $safebits bits.
EOM
    selectminbits=$safebits
    bits="$safebits bits"
    ;;
   1) bits="1 bit" ;;
   *) bits="$selectminbits bits" ;;
   esac
   echo "Your select() operates on $bits at a time." >&4
  else
   rp='What is the minimum number of bits your select() operates on?'
   case "$byteorder" in
   12345678) dflt=64 ;;
   1234)  dflt=32 ;;
   *)  dflt=1 ;;
   esac
   . ./myread
   val=$ans
   selectminbits="$val"
  fi
  $rm_try
  ;;
 *) : no select, so pick a harmless default
  selectminbits=$safebits
  ;;
 esac
 ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/selectminbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getnetprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getnetprotos:
?S: This variable conditionally defines the HAS_GETNET_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getnet*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETNET_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getnetent(), getnetbyname(), and
?C: getnetbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getnetprotos HAS_GETNET_PROTOS /**/
?H:.
?LINT:set d_getnetprotos
: see if prototypes for various getnetxxx netdb.h functions are available
echo " "
set d_getnetprotos getnetent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getnetprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgrp.U,v 3.0.1.3 1997/02/28 15:44:16 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setpgrp.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:44:16  ram
?RCS: patch61: obsoleted USE_BSDGRP in favor of USE_BSD_SETPGRP
?RCS: patch61: another unit now also defines a USE_BSD_GETPGRP
?RCS: patch61: fallback for test program failure improved
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:59:30  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:15:37  ram
?RCS: patch36: added
 'ldflags' to the test compile line (ADO)
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp d_bsdsetpgrp: cat rm_try +cc +libs +ccflags \
 +ldflags Inlibc Guess Setvar i_unistd i_stdlib run
?MAKE: -pick add $@ %<
?S:d_setpgrp:
?S: This variable conditionally defines HAS_SETPGRP if setpgrp() is
?S: available to set the current process group.
?S:.
?S:d_bsdsetpgrp (d_bsdpgrp):
?S: This variable conditionally defines USE_BSD_SETPGRP if
?S: setpgrp needs two arguments whereas USG one needs none.
?S: See also d_setpgid for a POSIX interface.
?S:.
?C:HAS_SETPGRP (SETPGRP):
?C: This symbol, if defined, indicates that the setpgrp routine is
?C: available to set the current process group.
?C:.
?C:USE_BSD_SETPGRP (USE_BSDPGRP BSDPGRP):
?C: This symbol, if defined, indicates that setpgrp needs two
?C: arguments whereas USG one needs none.  See also HAS_SETPGID
?C: for
 a POSIX interface.
?C:.
?H:#$d_setpgrp HAS_SETPGRP  /**/
?H:#$d_bsdsetpgrp USE_BSD_SETPGRP /**/
?H:.
?T:xxx
?F:!try
?LINT:set d_setpgrp d_bsdsetpgrp
: see if setpgrp exists
```

```
set setpgrp d_setpgrp
eval $inlibc

@if USE_BSD_SETPGRP || d_bsdsetpgrp
case "$d_setpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of setpgrp is in use..."
 $cat >try.c <<EOP
#include <stdio.h>
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (-1 == setpgrp(1, 1))
  exit(0);
#else
 if (setpgrp() != -1)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -o try -DTRY_BSD_PGRP $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo 'You have to use setpgrp(pid,pgrp) instead of setpgrp().' >&4
  val="$define"
 elif $cc -o try $ccflags $ldflags try.c $libs
 >/dev/null 2>&1 && $run ./try; then
  echo 'You have to use setpgrp() instead of setpgrp(pid,pgrp).' >&4
  val="$undef"
 else
  echo "(I can't seem to compile and run the test program.)"
  if ./usg; then
   xxx="a USG one, i.e. you use setpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
```

```
  case "$i_unistd" in
  $undef)
   xxx="a BSD one, i.e. you use setpgrp(pid,pgrp)."
   val="$define"
   ;;
  $define)
   xxx="probably a USG one, i.e. you use setpgrp()."
   val="$undef"
   ;;
  esac
 fi
 echo "Assuming your setpgrp is $xxx" >&4
fi
;;
*) val="$undef";;
esac
set d_bsdsetpgrp
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwuid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwuid_r getpwuid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwuid_r:
?S: This variable conditionally defines the HAS_GETPWUID_R symbol,
?S: which indicates to the C program that the getpwuid_r()
?S: routine is available.
?S:.
?S:getpwuid_r_proto:
?S: This variable encodes the prototype of getpwuid_r.
?S: It is zero if d_getpwuid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwuid_r
?S: is defined.
?S:.
?C:HAS_GETPWUID_R:
```

```
?C: This symbol, if defined, indicates that the getpwuid_r routine
?C: is available to
 getpwuid re-entrantly.
?C:.
?C:GETPWUID_R_PROTO:
?C: This symbol encodes the prototype of getpwuid_r.
?C: It is zero if d_getpwuid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwuid_r
?C: is defined.
?C:.
?H:#$d_getpwuid_r HAS_GETPWUID_R /**/
?H:#define GETPWUID_R_PROTO $getpwuid_r_proto /**/
?H:.
?T:try hdrs d_getpwuid_r_proto
: see if getpwuid_r exists
set getpwuid_r d_getpwuid_r
eval $inlibc
case "$d_getpwuid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwuid_r_proto:$usethreads" in
 ":define") d_getpwuid_r_proto=define
  set d_getpwuid_r_proto getpwuid_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getpwuid_r_proto" in
 define)
 case "$getpwuid_r_proto" in
 "|0) try='int getpwuid_r(uid_t, struct passwd*, char*, size_t, struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBWR ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) try='int getpwuid_r(uid_t, struct passwd*, char*, int,
 struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBIR ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) try='int getpwuid_r(uid_t, struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=I_TSBI ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) try='struct passwd* getpwuid_r(uid_t, struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwuid_r_proto=S_TSBI ;;
 esac
 case "$getpwuid_r_proto" in
 "|0) d_getpwuid_r=undef
  getpwuid_r_proto=0
```

```
  echo "Disabling getpwuid_r, cannot determine prototype." >&4 ;;
 * ) case "$getpwuid_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getpwuid_r_proto="REENTRANT_PROTO_$getpwuid_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getpwuid_r has no prototype, not using it." >&4 ;;
  esac
  d_getpwuid_r=undef
  getpwuid_r_proto=0
  ;;
 esac
 ;;
*) getpwuid_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwuid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sysman.U,v $
?RCS: Revision 3.0.1.2  1994/06/20  07:08:43  ram
?RCS: patch30: now explicitly states that /usr/man/man1 is the default
?RCS: patch30: added /usr/local/man/man1 to the search list
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:13:50  ram
?RCS: patch10: added support for /local/man/man1 (WAD)
?RCS: patch10: added temporary syspath variable to cut down on line length
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sysman: test
```

```
 Loc Oldconfig
?MAKE: -pick add $@ %<
?S:sysman:
?S: This variable holds the place where the manual is located on this
?S: system. It is not the place where the user wants to put his manual
?S: pages. Rather it is the place where Configure may look to find manual
?S: for unix commands (section 1 of the manual usually). See mansrc.
?S:.
?T:syspath
: determine where manual pages are on this system
echo " "
case "$sysman" in
")
 syspath='/usr/share/man/man1 /usr/man/man1'
 syspath="$syspath /usr/man/mann /usr/man/manl /usr/man/local/man1"
 syspath="$syspath /usr/man/u_man/man1 /usr/share/man/man1"
 syspath="$syspath /usr/catman/u_man/man1 /usr/man/l_man/man1"
 syspath="$syspath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 syspath="$syspath /usr/man/man.L /local/man/man1 /usr/local/man/man1"
 sysman=`./loc . /usr/man/man1 $syspath`
 ;;
esac
if $test -d "$sysman"; then
 echo "System manual is in $sysman." >&4
else
 echo "Could not find manual pages in source form." >&4
fi

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sysman.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: startsh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: startsh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:25:31  ram
?RCS: patch61: avoid needless chatter since this is now done very early
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:51  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startsh: sh sharpbang eunicefix
?MAKE: -pick add $@ %<
?S:startsh:
?S: This variable contains the string to put on the front of a shell
?S: script to make sure (hopefully) that it runs with sh and not some
?S: other
 shell.
?S:.
?F:!sharp
: figure out how to guarantee sh startup
?X: Avoid needless chatter since this is now done very early.
?X: echo " "
?X: echo "Checking out how to guarantee sh startup..." >&2
case "$startsh" in
") startsh=${sharpbang}${sh} ;;
*)
?X: echo "Let's see if '$startsh' works..." ;;
esac
cat >sharp <<EOSS
$startsh
set abc
test "$?abc" != 1
EOSS

chmod +x sharp
$eunicefix sharp
if ./sharp; then
 : echo "Yup, it does."
else
 echo "Hmm... '$startsh' does not guarantee sh startup..."
 echo "You may have to fix up the shell scripts to make sure $sh runs them."
fi
rm -f sharp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/startsh.U
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```
?RCS: $Id$
?RCS:
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_vfork.U,v $
?RCS: Revision 3.0.1.6  1994/08/29  16:18:21  ram
?RCS: patch32: set default to 'y' the first time
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:59:14  ram
?RCS: patch30: usevfork was not always properly set
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:20:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:59:09  ram
?RCS: patch23: now explicitly ask whether vfork() should be used (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1993/10/16
  13:49:39  ram
?RCS: patch12: added magic for vfork()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:06:57  ram
?RCS: patch10: removed automatic remapping of vfork on fork (WAD)
?RCS: patch10: added compatibility code for older config.sh (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vfork usevfork: Inlibc Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_vfork:
?S: This variable conditionally defines the HAS_VFORK symbol, which
?S: indicates the vfork() routine is available.
?S:.
?S:usevfork:
?S: This variable is set to true when the user accepts to use vfork.
?S: It is set to false when no vfork is available or when the user
?S: explicitly requests not to use vfork.
?S:.
?C:HAS_VFORK (VFORK):
?C: This symbol, if defined, indicates that vfork() exists.
?C:.
?H:#$d_vfork HAS_VFORK /**/
?H:.
?M:vfork: HAS_VFORK
?M:#ifndef HAS_VFORK
?M:#define vfork fork
?M:#endif
?M:.
?LINT:set d_vfork
```

```
: see if there is a vfork
val=''
set
 vfork val
eval $inlibc

: Ok, but do we want to use it. vfork is reportedly unreliable in
: perl on Solaris 2.x, and probably elsewhere.
case "$val" in
$define)
 echo " "
 case "$usevfork" in
 false) dflt='n';;
 *) dflt='y';;
 esac
 rp="Some systems have problems with vfork().  Do you want to use it?"
 . ./myread
 case "$ans" in
 y|Y) ;;
 *)
  echo "Ok, we won't use vfork()."
  val="$undef"
  ;;
 esac
 ;;
esac
?X:
?X: Only set it when final value is known to avoid spurious Whoas
?X: Then set usevfork accordingly to the current value, for next run
?X:
set d_vfork
eval $setvar
case "$d_vfork" in
$define) usevfork='true';;
*) usevfork='false';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_vfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: alignbytes.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:02:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:25:20  ram
?RCS: patch23: avoid ALIGNBYTES, since it conflicts on NetBSD
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:alignbytes: Assert Myread Trylink cat i_inttypes i_limits i_math
?MAKE: -pick add $@ %<
?S:alignbytes:
?S: This variable holds the number of bytes required
 to align an
?S: arbitrary standard type. Usual values are 2, 4 and 8.
?S:.
?X: This used to be called ALIGNBYTES, but that conflicts with
?X: <machines/param.h> in NetBSD.
?C:MEM_ALIGNBYTES (ALIGNBYTES):
?C: This symbol contains the number of bytes required to align a
?C: double. Usual values are 2, 4 and 8.
?C:.
?H:#define MEM_ALIGNBYTES $alignbytes /**/
?H:.
?T:alignment result
: check for alignment requirements
echo " "
case "$alignbytes" in
")
 echo "Checking alignment constraints..." >&4

 for alignment in 8 4 2 1 16 32 error
 do
  $cat >try.c <<EOCP
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#$i_limits I_LIMITS
#ifdef I_LIMITS
#include <limits.h>
#endif
#$i_math I_MATH
#ifdef I_MATH
```

```
#include <math.h>
#endif

union u {
 void *void_ptr;
 void (*func_ptr)(void);
 char c;
 short s;
 int i;
 long l;
 float f;
 double d;
#ifdef LLONG_MAX
 long long ll;
#else
#warning "LLONG_MAX undefined"
#endif
#if defined(HUGE_VALL)
 long double ld;
#else
#warning
 "HUGE_VALL undefined"
#endif
#ifdef UINT32_MAX
 uint32_t u32;
#else
#warning "UINT32_MAX undefined"
#endif
#ifdef UINT16_MAX
 uint16_t u16;
#else
#warning "UINT32_MAX undefined"
#endif
#ifdef UINT64_MAX
 uint64_t u64;
#else
#warning "UINT64_MAX undefined"
#endif
#ifdef UINTMAX_MAX
 uintmax_t m;
#else
#warning "UINTMAX_MAX undefined"
#endif
#ifdef UINTPTR_MAX
 uintptr_t up;
#else
#warning "UINTPTR_MAX undefined"
#endif
```

```
};

struct s {
 char a;
 union u b;
};

#include "static_assert.h"

int
main(void)
{
 STATIC_ASSERT($alignment == ((sizeof (struct s) - (sizeof (union u)))));
 return 0;
}
EOCP

  result="
  set result
  eval $trylink
  case "$result" in
  "$define") break;;
  esac
 done

 case "$alignment" in
 error) dflt='8'
  echo "(I can't seem to compile the test program...)" >&4
  ;;
 *) dflt=$alignment
  ;;
 esac
;;
*) dflt="$alignbytes"
 ;;
esac
rp="What is the maximum alignment in bytes required for a standard type?"
. ./myread
alignbytes="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/alignbytes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fp_classl: Inlibc
?MAKE: -pick add $@ %<
?S:d_fp_classl:
?S: This variable conditionally defines the HAS_FP_CLASSL symbol, which
?S: indicates to the C program that the fp_classl() routine is available.
?S:.
?C:HAS_FP_CLASSL:
?C: This symbol, if defined, indicates that the fp_classl routine is
?C: available to classify long doubles.  Available for example in
?C: Digital UNIX.  See for possible values HAS_FP_CLASS.
?C:.
?H:#$d_fp_classl HAS_FP_CLASSL  /**/
?H:.
?LINT:set d_fp_classl
: see if fp_classl exists
set fp_classl d_fp_classl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fp_classl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Tye McQueen <tye@metronet.com>
?RCS:
?RCS: $Log: d_stdstdio.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:46:32  ram
?RCS: patch61: merged with perl5's unit
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:06:54  ram
?RCS: patch56: typo fix on ?C: line for FILE_bufsiz
?RCS: patch56: fixed unbalanced parenthesis (ADO)
?RCS: patch56: check whether FILE_cnt and FILE_ptr can be assigned to (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:12:11  ram
?RCS: patch54: complete rewrite by Tye McQueen
```

```
 to fit modern systems
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stdstdio d_stdiobase stdio_ptr stdio_cnt stdio_base \
 stdio_bufsiz d_stdio_cnt_lval d_stdio_ptr_lval stdio_filbuf: cat \
 +cc +ccflags contains +ldflags +libs rm_try \
 Setvar Findhdr Oldconfig
?MAKE: -pick add $@ %<
?S:d_stdstdio:
?S: This variable conditionally defines USE_STDIO_PTR if this system
?S: has a FILE structure declaring usable _ptr and _cnt fields (or
?S: equivalent) in stdio.h.
?S:.
?S:stdio_ptr:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _ptr field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_ptr(fp).
?S:.
?S:d_stdio_ptr_lval:
?S: This variable conditionally defines STDIO_PTR_LVALUE if the
?S: FILE_ptr macro can be used as an lvalue.
?S:.
?S:stdio_cnt:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _cnt field (or equivalent) of
 stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_cnt(fp).
?S:.
?S:d_stdio_cnt_lval:
?S: This variable conditionally defines STDIO_CNT_LVALUE if the
?S: FILE_cnt macro can be used as an lvalue.
?S:.
?S:stdio_filbuf:
?S: This variable defines how, given a FILE pointer, fp, to tell
?S: stdio to refill it's internal buffers (?).  This will
?S: be used to define the macro FILE_filbuf(fp).
?S:.
?S:d_stdiobase:
?S: This variable conditionally defines USE_STDIO_BASE if this system
?S: has a FILE structure declaring a usable _base field (or equivalent)
?S: in stdio.h.
?S:.
?S:stdio_base:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _base field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_base(fp).
```

```
?S:.
?S:stdio_bufsiz:
?S: This variable defines how, given a FILE pointer, fp, to determine
?S: the number of bytes store in the I/O buffer pointer to by the
?S: _base field (or equivalent) of stdio.h's
 FILE structure.  This will
?S: be used to define the macro FILE_bufsiz(fp).
?S:.
?C:USE_STDIO_PTR ~ d_stdstdio (USE_STD_STDIO STDSTDIO):
?C: This symbol is defined if the _ptr and _cnt fields (or similar)
?C: of the stdio FILE structure can be used to access the stdio buffer
?C: for a file handle.  If this is defined, then the FILE_ptr(fp)
?C: and FILE_cnt(fp) macros will also be defined and should be used
?C: to access these fields.
?C:.
?C:FILE_ptr:
?C: This macro is used to access the _ptr field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_PTR_LVALUE:
?C: This symbol is defined if the FILE_ptr macro can be used as an
?C: lvalue.
?C:.
?C:FILE_cnt:
?C: This macro is used to access the _cnt field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_CNT_LVALUE:
?C: This symbol is defined
 if the FILE_cnt macro can be used as an
?C: lvalue.
?C:.
?C:FILE_filbuf:
?C: This macro is used to access the internal stdio _filbuf function
?C: (or equivalent), if STDIO_CNT_LVALUE and STDIO_PTR_LVALUE
?C: are defined.  It is typically either _filbuf or __filbuf.
?C: This macro will only be defined if both STDIO_CNT_LVALUE and
?C: STDIO_PTR_LVALUE are defined.
?C:.
?H:?d_stdstdio:#$d_stdstdio USE_STDIO_PTR  /**/
?H:?d_stdstdio:#ifdef USE_STDIO_PTR
?H:#define FILE_ptr(fp) $stdio_ptr
?H:#$d_stdio_ptr_lval STDIO_PTR_LVALUE   /**/
?H:#define FILE_cnt(fp) $stdio_cnt
?H:#$d_stdio_cnt_lval STDIO_CNT_LVALUE   /**/
?H:?d_stdstdio:#if defined(STDIO_PTR_LVALUE) && defined(STDIO_CNT_LVALUE)
```

```
?H:#define FILE_filbuf(fp) $stdio_filbuf   /**/
?H:?d_stdstdio:#endif
?H:?d_stdstdio:#endif
?H:.
?W:d_stdstdio:FILE_ptr FILE_cnt FILE_filbuf
?C:USE_STDIO_BASE ~ d_stdiobase:
?C: This symbol is defined if the _base field (or similar) of the
?C: stdio FILE structure can be used to access the stdio buffer
 for
?C: a file handle.  If this is defined, then the FILE_base(fp) macro
?C: will also be defined and should be used to access this field.
?C: Also, the FILE_bufsiz(fp) macro will be defined and should be used
?C: to determine the number of bytes in the buffer.  USE_STDIO_BASE
?C: will never be defined unless USE_STDIO_PTR is.
?C:.
?C:FILE_base:
?C: This macro is used to access the _base field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_BASE is defined.
?C:.
?C:FILE_bufsiz:
?C: This macro is used to determine the number of bytes in the I/O
?C: buffer pointed to by _base field (or equivalent) of the FILE
?C: structure pointed to its argument. This macro will always be defined
?C: if USE_STDIO_BASE is defined.
?C:.
?H:?d_stdiobase:#$d_stdiobase USE_STDIO_BASE  /**/
?H:?d_stdiobase:#ifdef USE_STDIO_BASE
?H:#define FILE_base(fp) $stdio_base
?H:#define FILE_bufsiz(fp) $stdio_bufsiz
?H:?d_stdiobase:#endif
?H:.
?W:d_stdiobase:FILE_base
 FILE_bufsiz
?LINT:set d_stdstdio d_stdiobase
?T:ptr_lval cnt_lval filbuf xxx
?F:!try
: see if _ptr and _cnt from stdio act std
echo " "
if $contains '_IO_fpos_t' `./findhdr stdio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from Linux.)"
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_IO_read_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
```

```
 ") stdio_cnt='((fp)->_IO_read_end - (fp)->_IO_read_ptr)'
  cnt_lval=$undef
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_IO_read_base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_IO_read_end - (fp)->_IO_read_base)';;
 esac
else
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 ") stdio_cnt='((fp)->_cnt)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_base)';;
 esac
 case
 "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_cnt + (fp)->_ptr - (fp)->_base)';;
 esac
fi
: test whether _ptr and _cnt really work
echo "Checking how std your stdio is..." >&4
$cat >try.c <<EOP
#include <stdio.h>
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  18 <= FILE_cnt(fp) &&
  strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
 )
  exit(0);
 exit(1);
}
```

```
EOP
val="$undef"
if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1; then
 if ./try; then
  echo "Your stdio acts pretty std."
  val="$define"
 else
  echo "Your stdio isn't very std."
 fi
else
 echo "Your stdio doesn't appear very std."
fi
$rm_try
set d_stdstdio
eval $setvar

@if STDIO_PTR_LVALUE || d_stdio_ptr_lval
: Can _ptr be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$ptr_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_ptr_lval
eval
 $setvar

@end
@if STDIO_CNT_LVALUE || d_stdio_cnt_lval
: Can _cnt be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$cnt_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_cnt_lval
eval $setvar

@end
@if FILE_filbuf
: How to access the stdio _filbuf or __filbuf function.
: If this fails, check how the getc macro in stdio.h works.
case "${d_stdio_ptr_lval}${d_stdio_cnt_lval}" in
${define}${define})
 : Try hint value, if any, then _filbuf, __filbuf, _fill, then punt.
 : _fill is for OS/2.
 xxx='notok'
 for filbuf in $stdio_filbuf '_filbuf(fp)' '__filbuf(fp) ' '_fill(fp)' ; do
```

```
  $cat >try.c <<EOP
#include <stdio.h>
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#define FILE_filbuf(fp) $filbuf
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 c = getc(fp);
 c = FILE_filbuf(fp);  /* Just looking for linker errors.*/
 exit(0);
}
EOP
  if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 &&
 ./try; then
   echo "Your stdio appears to use $filbuf"
   stdio_filbuf="$filbuf"
   xxx='ok'
   break
  else
   echo "Hmm.  $filbuf doesn't seem to work."
  fi
  $rm_try
 done
 case "$xxx" in
 notok) echo "I can't figure out how to access _filbuf"
   echo "I'll just have to work around it."
   d_stdio_ptr_lval="$undef"
   d_stdio_cnt_lval="$undef"
   ;;
 esac
 ;;
esac
@end
@if d_stdiobase || USE_STDIO_BASE || FILE_base || FILE_bufsiz
: see if _base is also standard
val="$undef"
case "$d_stdstdio" in
$define)
 $cat >try.c <<EOP
#include <stdio.h>
#define FILE_base(fp) $stdio_base
#define FILE_bufsiz(fp) $stdio_bufsiz
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  19 <= FILE_bufsiz(fp) &&
```

```
  strncmp(FILE_base(fp), "#include <stdio.h>\n", 19) == 0
 )
  exit(0);
 exit(1);
}
EOP
 if $cc $ccflags $ldflags -o try try.c $libs > /dev/null 2>&1; then
  if ./try; then
   echo "And its _base field acts std."
   val="$define"
  else
   echo "But its _base field isn't std."
  fi
 else
  echo
 "However, it seems to be lacking the _base field."
 fi
 $rm_try
 ;;
esac
set d_stdiobase
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_stdstdio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sitelib.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:21:35  ram
?RCS: patch61: created
?RCS:
?MAKE:sitelib sitelibexp installsitelib: afs cat Getfile \
 Oldconfig Prefixit test privlib package sed
?MAKE: -pick add $@ %<
?Y:TOP
```

```
?S:sitelib:
?S: This variable contains the eventual value of the SITELIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this
 directory while performing installation (with ~ substitution).
?S:.
?S:sitelibexp:
?S: This variable is the ~name expanded version of sitelib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installsitelib:
?S: This variable is really the same as sitelibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:SITELIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Individual sites may place their own extensions and modules in
?C: this directory.
?C:.
?C:SITELIB_EXP:
?C: This symbol contains the ~name expanded version of SITELIB, to be used
?C: in programs that are not prepared to deal with ~ expansion
 at run-time.
?C:.
?H:#define SITELIB "$sitelib"  /**/
?H:#define SITELIB_EXP "$sitelibexp"  /**/
?H:.
?T:prog
: determine where site specific libraries go.
set sitelib sitelib
eval $prefixit
case "$sitelib" in
")
?X: remove any trailing -3.0 or other version indentification
 prog=`echo $package | $sed 's/-*[0-9.]*$//'`
 dflt="$privlib/site_$prog" ;;
*) dflt="$sitelib" ;;
esac
$cat <<EOM

The installation process will also create a directory for
site-specific extensions and modules.  Some users find it convenient
```

```
to place all local files in this directory rather than in the main
distribution directory.

EOM
fn=d~+
rp='Pathname for the site-specific library files?'
. ./getfile
if $test "X$sitelibexp" != "X$ansexp"; then
 installsitelib=''
fi
sitelib="$ans"
sitelibexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to
 the former directory by occult means).

EOM
 case "$installsitelib" in
 '') dflt=`echo $sitelibexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installsitelib";;
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installsitelib="$ans"
else
 installsitelib="$sitelibexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sitelib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_locconv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
```

```
?RCS:
?RCS: $Log: d_locconv.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:11  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_locconv: Inlibc
?MAKE: -pick add $@ %<
?S:d_locconv:
?S: This variable conditionally defines HAS_LOCALECONV if localeconv() is
?S: available for numeric and monetary formatting conventions.
?S:.
?C:HAS_LOCALECONV:
?C: This symbol, if defined, indicates that the localeconv
 routine is
?C: available for numeric and monetary formatting conventions.
?C:.
?H:#$d_locconv HAS_LOCALECONV /**/
?H:.
?LINT:set d_locconv
: see if localeconv exists
set localeconv d_locconv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_locconv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: dlsrc.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: dlsrc.U,v $
?RCS:
?X:  hpux support thanks to Jeff Okamoto <okamoto@hpcc101.corp.hp.com>
?X:
?X:  To create a shared library, you must compile ALL source files in the
?X:  library with +z (or possibly +Z if the library is whopping huge),
?X:  then link the library with -b.  Example:
?X:   cc -c +z module_a.c
?X:   cc -c +z module_b.c
?X:   ld -b module_a.o module_b.o -o module.sl
?X:
?MAKE:usedl ld dlsrc cccdlflags lddlflags ccdlflags bin_ELF ld_can_script: \
 rm_try Getfile Myread test osname sed d_dlopen Findhdr Setvar \
 src run cc ccflags ldflags optimize ls gccversion cat rsrc i_stdlib \
```

```
 i_unistd osvers sysroot
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:usedl:
?S: This variable
 indicates if the system supports dynamic
?S: loading of some sort.  See also dlsrc and dlobj.
?S:.
?S:ld:
?S: This variable indicates the program to be used to link
?S: libraries for dynamic loading.  On some systems, it is 'ld'.
?S: On ELF systems, it should be $cc.  Mostly, we'll try to respect
?S: the hint file setting.
?S:.
?S:dlsrc:
?S: This variable contains the name of the dynamic loading file that
?S: will be used with the package.
?S:.
?S:cccdlflags:
?S: This variable contains any special flags that might need to be
?S: passed with 'cc -c' to compile modules to be used to create a shared
?S: library that will be used for dynamic loading.  For hpux, this
?S: should be +z.  It is up to the makefile to use it.
?S:.
?S:lddlflags:
?S: This variable contains any special flags that might need to be
?S: passed to $ld to create a shared library suitable for dynamic
?S: loading.  It is up to the makefile to use it.  For hpux, it
?S: should be '-b'.  For sunos 4.1, it is empty.
?S:.
?S:ccdlflags:
?S: This
 variable contains any special flags that might need to be
?S: passed to cc to link with a shared library for dynamic loading.
?S: It is up to the makefile to use it.  For sunos 4.1, it should
?S: be empty.
?S:.
?S:bin_ELF:
?S: This variable saves the result from configure if generated binaries
?S: are in ELF format. Only set to defined when the test has actually
?S: been performed, and the result was positive.
?S:.
?S:ld_can_script:
?S: This variable shows if the loader accepts scripts in the form of
?S: -Wl,--version-script=ld.script. This is currently only supported
?S: for GNU ld on ELF in dynamic loading builds.
?S:.
?C:USE_DYNAMIC_LOADING ~ %<:
```

```
?C: This symbol, if defined, indicates that dynamic loading of
?C: some sort is available.
?C:.
?H:?%<:#$usedl USE_DYNAMIC_LOADING  /**/
?H:.
?W:%<:dlopen
?T:dldir thisflag tdir
?F:!a.out
: determine which dynamic loading, if any, to compile in
echo " "
dldir="ext/DynaLoader"
case "$usedl" in
   $define|y|true)
 dflt='y'
 usedl="$define"
 ;;
    $undef|n|false)
 dflt='n'
 usedl="$undef"
 ;;
   *)
 dflt='n'
 case "$d_dlopen" in
     $define) dflt='y' ;;
 esac
 : Does a dl_xxx.xs file exist for this operating system
 $test -f $rsrc/$dldir/dl_${osname}.xs && dflt='y'
 ;;
esac
rp="Do you wish to use dynamic loading?"
. ./myread
usedl="$ans"
bin_ELF="$undef"
case "$ans" in
   y*) usedl="$define"
 case "$dlsrc" in
     ") if $test -f $rsrc/$dldir/dl_${osname}.xs ; then
      dflt="$dldir/dl_${osname}.xs"
  elif $test "$d_dlopen" = "$define" ; then
      dflt="$dldir/dl_dlopen.xs"
  else
      dflt="
  fi
  ;;
     *)  dflt="$dldir/$dlsrc"
  ;;
 esac
 echo "The following dynamic loading files are available:"
```

```
: Can not go over to $dldir because getfile has path hard-coded in.
tdir=`pwd`; cd "$rsrc"; $ls -C $dldir/dl*.xs; cd "$tdir"
rp="Source file to use for dynamic loading"
fn="fne"
gfpth="$src"
. ./getfile
usedl="$define"
: emulate basename
dlsrc=`echo $ans | $sed -e 's%.*/\([^/]*\)$%\1%'`

$cat
<< EOM

Some systems may require passing special flags to $cc -c to
compile modules that will be used to create a shared library.
To use no flags, say "none".

EOM
case "$cccdlflags" in
    ") case "$gccversion" in
 ") case "$osname" in
  hpux) dflt='+z' ;;
  irix*) dflt='-KPIC' ;;
  svr4*|esix*|solaris|nonstopux) dflt='-KPIC' ;;
  sunos) dflt='-pic' ;;
  *) dflt='none' ;;
     esac
     ;;
 *)  case "$osname" in
  darwin) dflt='none' ;;
  *linux*|svr4*|esix*|solaris|nonstopux) dflt='-fPIC' ;;
  *) dflt='-fpic' ;;
     esac ;;
 esac ;;
    ' ') dflt='none' ;;
    *)   dflt="$cccdlflags" ;;
esac

case "$dflt" in
    none) dflt=" ;;
esac

# If -Dsysroot was specified, now's the time to add it
# to cccdlflags
if test "X$sysroot" != X; then
    case "$gccversion" in
 ") ;;
 *)  case "$dflt" in
```

```
  *sysroot*) ;;
  'undef'|*)
      dflt="$dflt --sysroot=$sysroot" ;;
     esac
     ;;
    esac
fi

case "$dflt" in
    ") dflt='none';;
esac

rp="Any
special flags to pass to $cc -c to compile shared library modules?"
. ./myread
case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
    none) cccdlflags=' ' ;;
    *)    cccdlflags="$ans" ;;
esac

cat << EOM

Some systems use ld to create libraries that can be dynamically loaded,
while other systems (such as those using ELF) use $cc.

EOM

: Determine if this is ELF
 $cat >try.c <<EOM
/* Test for whether ELF binaries are produced */
#include <fcntl.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#include <unistd.h>
#endif
int main() {
  char b[4];
  int i = open("a.out",O_RDONLY);
  if(i == -1)
 exit(1); /* fail */
  if(read(i,b,4)==4 && b[0]==127 && b[1]=='E' && b[2]=='L' && b[3]=='F')
 exit(0); /* succeed (yes, it is ELF) */
  exit(1); /* fail */
```

```
}
EOM
 if $cc $ccflags $ldflags -o a.out try.c >/dev/null 2>&1 && $run ./a.out; then
    bin_ELF="$define"
 fi
 $rm_try

 case "$ld" in

   ") if $test $bin_ELF = "$define"; then
     cat <<EOM
You appear to have ELF support.  I'll use $cc to build dynamic libraries.
EOM
     dflt="$cc"
  else
     echo "I'll use ld to build dynamic libraries."
     dflt='ld'
  fi
  ;;
    *)  dflt="$ld"
  ;;
 esac

 rp="What command should be used to create dynamic libraries?"
 . ./myread
 ld="$ans"

 cat << EOM

Some systems may require passing special flags to $ld to create a
library that can be dynamically loaded.  If your ld flags include
-L/other/path options to locate libraries outside your loader's normal
search path, you may need to specify those -L options here as well.  To
use no flags, say "none".

EOM
 case "$lddlflags" in
    ") case "$osname" in
     haiku) dflt='-shared' ;;
     hpux) dflt='-b';
    case "$gccversion" in
        ") dflt="$dflt +vnocompatwarnings" ;;
    esac
    ;;
     *linux*|irix*|gnu*)  dflt="-shared $optimize" ;;
     solaris) # See [perl #66604].
      # On Solaris 11, gcc -m64
```

```
on amd64
      # appears not to understand -G.  gcc versions at
      # least as old as 3.4.3 support -shared, so just
      # use that with Solaris 11 and later, but keep
      # the old behavior for older Solaris versions.
      case "$gccversion" in
   ") dflt='-G' ;;
   *)  case "$osvers" in
    2.?|2.10) dflt='-G' ;;
    *) dflt='-shared' ;;
       esac
       ;;
      esac
      ;;
     sunos) dflt='-assert nodefinitions' ;;
     svr4*|esix*|nonstopux) dflt="-G $ldflags" ;;
     *)     dflt='none' ;;
 esac
 ;;
    *) dflt="$lddlflags" ;;
esac

: Only do this for gcc, since, for example, qcc has no concept
: of --sysroot.
if $test "X$sysroot" != X; then
    case "$gccversion" in
 ") ;;
 *)  dflt="$dflt --sysroot=$sysroot" ;;
    esac
fi

: Try to guess additional flags to pick up local libraries.
: Be careful not to append to a plain 'none'
case "$dflt" in
    none) dflt=" ;;
esac
for thisflag in $ldflags; do
    case "$thisflag" in
 -L*|-R*|-Wl,-R*)

   case " $dflt " in
  *" $thisflag "*) ;;
  *) dflt="$dflt $thisflag" ;;
     esac
     ;;
    esac
done
```

```
 case "$dflt" in
    "|' ') dflt='none' ;;
 esac

 case "$ldflags" in
    *-fstack-protector-strong*)
  case "$dflt" in
     *-fstack-protector-strong*) ;; # Don't add it again
     *) dflt="$dflt -fstack-protector-strong" ;;
  esac
  ;;
    *-fstack-protector*)
  case "$dflt" in
     *-fstack-protector*) ;; # Don't add it again
     *) dflt="$dflt -fstack-protector" ;;
  esac
  ;;
 esac

 rp="Any special flags to pass to $ld to create a dynamically loaded library?"
 . ./myread
 case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
    none) lddlflags=' ' ;;
    *) lddlflags="$ans" ;;
 esac

 cat <<EOM

Some systems may require passing special flags to $cc to indicate that
the resulting executable will use dynamic linking.  To use no flags,
say "none".

EOM
 case "$ccdlflags" in
    ") case "$osname" in
     *linux*|hpux|gnu*)
 dflt='-Wl,-E' ;;
     sunos)            dflt='none'   ;;
     *)                dflt='none'   ;;
  esac ;;
    ' ') dflt='none' ;;
    *)   dflt="$ccdlflags" ;;
 esac
 rp="Any special flags to pass to $cc to use dynamic linking?"
 . ./myread
 case "$ans" in
?X: Use ' ' so that a subsequent Configure run preserves the old state.
```

```
    none) ccdlflags=' ' ;;
    *)    ccdlflags="$ans" ;;
 esac
 ;;
?X: End of usedl=y section

   *)  usedl="$undef"
 ld='ld'
 dlsrc='dl_none.xs'
 lddlflags=''
 ccdlflags=''
 ;;
esac

ld_can_script="$undef"
case "$bin_ELF$usedl" in
   $define$define)
 # Abuse try.h and a.out names for neat cleanup
 $cat >try.c <<EOM
void foo() {}
void bar() {}
EOM
 $cat >try.h <<EOM
LIBTEST_42 {
global:
 foo;
local: *;
};
EOM
 if $cc $cccdlflags $ccdlflags $ccflags \
        $ldflags $lddlflags -o a.out try.c \
        -Wl,--version-script=try.h >/dev/null 2>&1 \
    &&  $test -s a.out ; then
     echo "ld supports scripting" >&4
     ld_can_script="$define"
 else

    echo "ld does not support scripting" >&4
 fi
 $rm_try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dlsrc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_crypt.U 1 2006-08-24 12:32:52Z rmanfredi $

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_crypt.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:31:47  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_crypt cryptlib: Loc test xlibpth libpth Csym Setvar _a Inlibc
?MAKE: -pick add $@ %<
?S:d_crypt:
?S: This variable conditionally defines the CRYPT symbol, which
?S: indicates to the C program that the crypt() routine is available
?S: to
 encrypt passwords and the like.
?S:.
?S:cryptlib:
?S: This variable holds -lcrypt or the path to a libcrypt.a archive if
?S: the crypt() function is not defined in the standard C library. It is
?S: up to the Makefile to use this.
?S:.
?C:HAS_CRYPT (CRYPT):
?C: This symbol, if defined, indicates that the crypt routine is available
?C: to encrypt passwords and the like.
?C:.
?H:#$d_crypt HAS_CRYPT  /**/
?H:.
?LINT:set d_crypt
?T:val
: see if crypt exists
echo " "
set crypt d_crypt
eval $inlibc
case "$d_crypt" in
$define) cryptlib=" ;;
*) if set crypt val -f d_crypt; eval $csym; $val; then
  echo 'crypt() found.' >&4
  val="$define"
  cryptlib="
 else
```

```
  cryptlib=`./loc Slibcrypt$_a "" $xlibpth`
  if $test -z "$cryptlib"; then
   cryptlib=`./loc Mlibcrypt$_a "" $xlibpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   cryptlib=`./loc Llibcrypt$_a "" $xlibpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   cryptlib=`./loc libcrypt$_a ""
 $libpth`
  else
   cryptlib=-lcrypt
  fi
  if $test -z "$cryptlib"; then
   echo 'crypt() NOT found.' >&4
   val="$undef"
  else
   val="$define"
  fi
 fi
 set d_crypt
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_crypt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strctcpy.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strctcpy: cat rm_try cc Setvar
```

```
?MAKE: -pick add $@ %<
?S:d_strctcpy:
?S: This variable conditionally defines the USE_STRUCT_COPY symbol, which
?S: indicates to the C program that this C compiler knows how to copy
?S: structures.
?S:.
?C:USE_STRUCT_COPY (STRUCTCOPY):
?C: This symbol, if defined, indicates that this C compiler knows how
?C: to copy structures.  If undefined, you'll
 need to use a block copy
?C: routine of some sort instead.
?C:.
?H:#$d_strctcpy USE_STRUCT_COPY /**/
?H:.
?LINT:set d_strctcpy
: check for structure copying
echo " "
echo "Checking to see if your C compiler can copy structs..." >&4
$cat >try.c <<'EOCP'
int main()
{
 struct blurfl {
  int dyick;
 } foo, bar;

 foo = bar;
}
EOCP
if $cc -c try.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup, it can."
else
 val="$undef"
 echo "Nope, it can't."
fi
set d_strctcpy
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strctcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: yacc.U,v $
?RCS: Revision 3.0.1.1  1994/05/13  15:28:48  ram
?RCS: patch27: added byacc as another alternative (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:yacc yaccflags: Guess Myread Loc Oldconfig byacc bison cat test
?MAKE: -pick add $@ %<
?S:yacc:
?S: This variable holds the name of the compiler compiler we
?S: want to use in the Makefile. It can be yacc, byacc, or bison -y.
?S:.
?S:yaccflags:
?S: This variable contains any
 additional yacc flags desired by the
?S: user.  It is up to the Makefile to use this.
?S:.
?T:comp
: determine compiler compiler
echo " "
comp='yacc'
if $test -f "$byacc$_exe"; then
 comp="byacc or $comp"
fi
if $test -f "$bison$_exe"; then
 comp="$comp or bison -y"
fi
case "$yacc" in
")
 yacc=`./loc yacc yacc $pth`
 if $test -f "$yacc$_exe"; then
  dflt='yacc'
 elif $test -f "$byacc$_exe"; then
  dflt='byacc'
 elif $test -f "$bison$_exe"; then
  dflt='bison'
 else
  dflt=''
 fi
 ;;
*) dflt="$yacc";;
esac
```

```
rp="Which compiler compiler ($comp) shall I use?"
. ./myread
yacc="$ans"
case "$yacc" in
*bis*)
 case "$yacc" in
 *-y*) ;;
 *)
  yacc="$yacc -y"
  echo "(Adding -y option to bison to get yacc-compatible behaviour.)"
  ;;
 esac
 ;;
esac

@if yaccflags
: see if we need extra yacc flags
dflt="$yaccflags"
case "$dflt" in
") dflt=none;;
esac
$cat <<EOH

Your yacc program may need extra flags to normally process the parser sources.
Do NOT specify any -d or -v flags here, since those are
 explicitly known
by the various Makefiles. However, if your machine has strange/undocumented
options (like -Sr# on SCO to specify the maximum number of grammar rules), then
please add them here.  To use no flags, specify the word "none".

EOH
rp="Any additional yacc flags?"
. ./myread
case "$ans" in
none) yaccflags=";;
*) yaccflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/yacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: inc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: inc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:inc incexp: Loc Oldconfig Getfile usrinc
?MAKE: -pick add $@ %<
?S:inc:
?S: This variable holds the name of the directory in which the user wants
?S: to put public header files for the package in question.  It is most
?S: often a local directory such as /usr/local/include.
?S:.
?S:incexp:
?S: This is the same as the inc variable, but is filename
 expaned
?S: at configuration time for convenient use in your makefiles.
?S:.
: determine where public header files go
case "$inc" in
")
 dflt=`./loc . "." /usr/local/include /usr/include/local $usrinc`
 ;;
*)  dflt="$inc"
 ;;
esac
fn=d~
rp='Where do you want to put the public header files?'
. ./getfile
inc="$ans"
incexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/inc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_class: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_class:
?S: This variable conditionally defines the HAS_CLASS symbol, which
?S: indicates to the C program that the class() routine is available.
?S:.
?C:HAS_CLASS:
?C: This symbol, if defined, indicates that the class routine is
?C: available to classify doubles.  Available for example in AIX.
?C: The returned values are defined in <float.h> and are:
?C:
?C: FP_PLUS_NORM Positive normalized, nonzero
?C: FP_MINUS_NORM Negative normalized, nonzero
?C: FP_PLUS_DENORM Positive denormalized, nonzero
?C: FP_MINUS_DENORM Negative denormalized, nonzero
?C: FP_PLUS_ZERO +0.0
?C: FP_MINUS_ZERO -0.0
?C: FP_PLUS_INF +INF
?C: FP_MINUS_INF -INF
?C: FP_NANS  Signaling
 Not a Number (NaNS)
?C: FP_NANQ  Quiet Not a Number (NaNQ)
?C:.
?H:#$d_class HAS_CLASS  /**/
?H:.
?LINT:set d_class
: see if class exists
set class d_class
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_class.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorbin.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorbin.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorbin vendorbin vendorbinexp installvendorbin: Getfile \
```

```
 Setprefixvar Oldconfig Prefixit vendorprefix
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorbin:
?S: This variable contains the eventual value of the VENDORBIN symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors who distribute perl
 may wish to place additional
?S: binaries in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorbinexp:
?S: This variable is the ~name expanded version of vendorbin, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorbin="
?S:installvendorbin:
?S: This variable is really the same as vendorbinexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorbin:
?S: This variable conditionally defines PERL_VENDORBIN.
?S:.
?C:PERL_VENDORBIN:
?C: If defined, this symbol contains the name of a directory
?C: for holding vendor-supplied executables.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place additional
?C: binaries in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.
  See INSTALL for details.
?C:.
?C:PERL_VENDORBIN_EXP:
?C: This symbol contains the ~name expanded version of VENDORBIN, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorbin PERL_VENDORBIN "$vendorbin"  /**/
?H:#$d_vendorbin PERL_VENDORBIN_EXP "$vendorbinexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorbin
: Set the vendorbin variables
case "$vendorprefix" in
```

```
") d_vendorbin="$undef"
 vendorbin="
 vendorbinexp="
 ;;
*) d_vendorbin="$define"
 : determine where vendor-supplied executables go.
 case "$vendorbin" in
 ") dflt=$vendorprefix/bin ;;
 *) dflt="$vendorbin" ;;
 esac
 fn=d~+
 rp='Pathname for the vendor-supplied executables directory?'
 . ./getfile
 vendorbin="$ans"
 vendorbinexp="$ansexp"
 ;;
esac
prefixvar=vendorbin
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorbin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasstruct string that is used internally
?X: by Configure to check if this system has a field for a
?X: particular struct (of if this system has a particular struct!)
?X:
?X: To use it, say something like:
?X:  set d_statblocks stat i_sysstat sys/stat.h
?X:  eval $hasstruct
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/foo.h
?X:  $i_sysbar sys/bar.h
?X:  $i_syszot sys/zot.h
?X:  $i_zappa zappa.h"
?X: set d_statblocks stat $hdrs
?X: eval $hasstruct
?X:
?MAKE:Hasstruct: Setvar rm_try test Compile
?MAKE: -pick add $@ %<
```

```
?T:varname struct
?V:hasstruct
: Define hasstruct macro for Configure internal use
hasstruct='varname=$1; struct=$2; shift;
 shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 esac ;
   shift 2;
done > try.c;
echo "int main () { struct $struct foo; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasstruct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Init.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:45:59  ram
?RCS: patch44: removed Options from MAKE to prevent Init overrides
?RCS: patch44: option processing now done after Myinit thanks to new Begin.U
?RCS: patch44: moved "Beginning of configuration questions" to Begin.U
?RCS: patch44: moved signal trapping instruction to Begin.U as well
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file initializes certain default variables
```

```
 used by Configure.  They
?X: may be overridden or added to by definitions in Myinit.U.
?X:
?MAKE:Init eunicefix _exe: Null
?MAKE: -pick add $@ %<
?MAKE: -pick weed $@ ./Init
?S:eunicefix:
?S: When running under Eunice this variable contains a command which will
?S: convert a shell script to the proper form of text file for it to be
?S: executable by the shell.  On other systems it is a no-op.
?S:.
?S:_exe (exe_ext):
?S: This variable defines the extension used for executable files.
?S: For unix it is empty.  Other possible values include '.exe'.
?S: DJGPP, Cygwin and OS/2 use '.exe'.  Stratus VOS uses '.pm'.
?S: On operating systems which do not require a specific extension
?S: for executable files, this variable is empty.
?S:.
?V:define undef smallmach:rmlist
?X:
?X: Throughout the units, one may make use of $define and $undef to reference
?X: a defined symbol or an undefined one. There is no need to add them in
?X: the dependency line since this unit makes them visible via ?V:, and
?X:
 everyone inherits from those symbols since by convention Init.U is the
?X: root dependency.
?X:
?T: DJGPP
: Initialize wide constants
define='define'
undef='undef'
smallmach='pdp11 i8086 z8000 i80286 iAPX286'
rmlist=''

: We must find out about Eunice early
eunicefix=':'
if test -f /etc/unixtovms; then
 eunicefix=/etc/unixtovms
fi
if test -f /etc/unixtovms.exe; then
 eunicefix=/etc/unixtovms.exe
fi

: Set executable suffix now -- needed before hints available
if test -f "/libs/version.library"; then
 : Amiga OS
  _exe=""
elif test -f "/system/gnu_library/bin/ar.pm"; then
```

```
 : Stratus VOS
 _exe=".pm"
elif test -n "$DJGPP"; then
 : DOS DJGPP
  _exe=".exe"
elif test -d c:/. ; then
 : OS/2 or cygwin
 _exe=".exe"
else
 : All other UNIX systems
 _exe=""
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Init.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_netdb.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_netdb: Inhdr
?MAKE: -pick add $@ %<
?S:i_netdb:
?S: This variable conditionally defines the I_NETDB symbol, and indicates
?S: whether a C program should include <netdb.h>.
?S:.
?C:I_NETDB:
?C: This symbol, if defined, indicates that <netdb.h> exists and
?C: should be included.
?C:.
?H:#$i_netdb I_NETDB  /**/
?H:.
?LINT:set i_netdb
: see if this is a netdb.h system
set netdb.h i_netdb
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_netdb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_flexfnam.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_flexfnam.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flexfnam: cat rm test Setvar
?MAKE: -pick add $@ %<
?S:d_flexfnam:
?S: This variable conditionally defines the FLEXFILENAMES symbol, which
?S: indicates that the system supports filenames longer than 14 characters.
?S:.
?C:FLEXFILENAMES:
?C: This symbol, if defined, indicates that the system supports filenames
?C: longer than 14
 characters.
?C:.
?H:#$d_flexfnam FLEXFILENAMES  /**/
?H:.
?T:first
?LINT:set d_flexfnam
: see if we can have long filenames
echo " "
?X:
?X: We have to test in both /tmp and . because of NFS (remote server may allow
?X: long filenames while the local filesystem cannot support them). If at least
?X: one of those file systems cannot support long filenames, then we assume the
?X: whole system can't.
?X:
first=123456789abcdef
$rm -f $first
if (echo hi >$first) 2>/dev/null; then
 if $test -f 123456789abcde; then
  echo 'You cannot have filenames longer than 14 characters.  Sigh.' >&4
  val="$undef"
 else
  echo 'You can have filenames longer than 14 characters.'>&4
  val="$define"
 fi
else
 $cat <<'EOM'
You can't have filenames longer than 14 chars.
You can't even think about them!
```

```
EOM
 val="$undef"
fi
set d_flexfnam
eval $setvar
$rm -rf 123456789abcde*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_flexfnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getsent:
?S: This variable conditionally defines HAS_GETSERVENT if getservent() is
?S: available to look up network services in some data base or another.
?S:.
?C:HAS_GETSERVENT:
?C: This symbol, if defined, indicates that the getservent() routine is
?C: available to look up network services in some
 data base or another.
?C:.
?H:#$d_getsent HAS_GETSERVENT  /**/
?H:.
?LINT:set d_getsent
: see if getservent exists
set getservent d_getsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mbtowc.U 1 2006-08-24 12:32:52Z rmanfredi $
```

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mbtowc.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mbtowc: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbtowc:
?S: This variable conditionally defines the HAS_MBTOWC symbol, which
?S: indicates to the C program that the mbtowc() routine is available
?S: to convert multibyte to a wide character.
?S:.
?C:HAS_MBTOWC (MBTOWC):
?C: This symbol, if defined, indicates that the mbtowc routine is available
?C: to
 convert a multibyte to a wide character.
?C:.
?H:#$d_mbtowc HAS_MBTOWC  /**/
?H:.
?LINT:set d_mbtowc
: see if mbtowc exists
set mbtowc d_mbtowc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mbtowc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ulimit.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ulimit.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:51  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ulimit: Inlibc
?MAKE: -pick add $@ %<
?S:d_ulimit:
?S: This variable conditionally defines HAS_ULIMIT if ulimit() is
?S: available to get the user limits.
?S:.
?C:HAS_ULIMIT (ULIMIT):
?C: This symbol, if defined, indicates that the ulimit system call is
?C: available to get the user limits.
?C:.
?H:#$d_ulimit HAS_ULIMIT  /**/
?H:.
?LINT:set
 d_ulimit
: see if ulimit exists
set ulimit d_ulimit
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ulimit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetbyaddr_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetbyaddr_r getnetbyaddr_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetbyaddr_r:
?S: This variable conditionally defines the HAS_GETNETBYADDR_R symbol,
?S: which indicates to the C program that the getnetbyaddr_r()
?S: routine is available.
?S:.
?S:getnetbyaddr_r_proto:
?S: This variable encodes the prototype of getnetbyaddr_r.
?S: It is zero if d_getnetbyaddr_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyaddr_r
?S: is defined.
?S:.
?C:HAS_GETNETBYADDR_R:
?C: This symbol, if defined, indicates that
```

```
 the getnetbyaddr_r routine
?C: is available to getnetbyaddr re-entrantly.
?C:.
?C:GETNETBYADDR_R_PROTO:
?C: This symbol encodes the prototype of getnetbyaddr_r.
?C: It is zero if d_getnetbyaddr_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetbyaddr_r
?C: is defined.
?C:.
?H:#$d_getnetbyaddr_r HAS_GETNETBYADDR_R /**/
?H:#define GETNETBYADDR_R_PROTO $getnetbyaddr_r_proto /**/
?H:.
?T:try hdrs d_getnetbyaddr_r_proto
: see if getnetbyaddr_r exists
set getnetbyaddr_r d_getnetbyaddr_r
eval $inlibc
case "$d_getnetbyaddr_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetbyaddr_r_proto:$usethreads" in
 ":define") d_getnetbyaddr_r_proto=define
  set d_getnetbyaddr_r_proto getnetbyaddr_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getnetbyaddr_r_proto" in
 define)
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(unsigned long, int, struct netent*, char*, size_t, struct netent**, int*);'
 ./protochk
 "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_UISBWRE ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(long, int, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_LISBI ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='struct netent* getnetbyaddr_r(in_addr_t, int, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=S_TISBI ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='struct netent* getnetbyaddr_r(long, int, struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=S_LISBI ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(in_addr_t, int, struct netent*, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_TISD ;;
 esac
```

```
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(long, int, struct netent*, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_LISD
 ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(int, int, struct netent*, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_IISD ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) try='int getnetbyaddr_r(uint32_t, int, struct netent*, char*, size_t, struct netent**, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetbyaddr_r_proto=I_uISBWRE ;;
 esac
 case "$getnetbyaddr_r_proto" in
 "|0) d_getnetbyaddr_r=undef
  getnetbyaddr_r_proto=0
  echo "Disabling getnetbyaddr_r, cannot determine prototype." >&4 ;;
 * ) case "$getnetbyaddr_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getnetbyaddr_r_proto="REENTRANT_PROTO_$getnetbyaddr_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getnetbyaddr_r has no prototype, not using it." >&4 ;;
  esac
  d_getnetbyaddr_r=undef
  getnetbyaddr_r_proto=0
  ;;
 esac
 ;;
*) getnetbyaddr_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetbyaddr_r.U
No license file was found, but licenses were detected in source scan.

```
case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif test -f ../../../../config.sh; then TOP=../../../..;
 else
```

```
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting makedepend (with variable substitutions)"
$spitshell >makedepend <<!GROK!THIS!
$startsh
# $Id: makedepend.sh,v 3.0.1.1 1994/01/24 14:00:05 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
#
 Original Author: Larry Wall <lwall@netlabs.com>
#
# $Log: makedepend.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:05  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:37  ram
# Baseline for dist 3.0 netwide release.
#

export PATH || (echo "OOPS, this isn't sh.  Desperation time.  I will feed myself to sh."; sh \$0; kill \$\$)

cat='$cat'
cppflags='$cppflags'
cp='$cp'
cpp='$cppstdin'
echo='$echo'
egrep='$egrep'
expr='$expr'
mv='$mv'
rm='$rm'
sed='$sed'
sort='$sort'
test='$test'
tr='$tr'
uniq='$uniq'
```

```
!GROK!THIS!

$spitshell >>makedepend <<'!NO!SUBS!'

$cat /dev/null >.deptmp
$rm -f *.c.c c/*.c.c
if test -f Makefile; then
   mf=Makefile
else
   mf=makefile
fi
if test -f $mf; then
   defrule=`<$mf sed -n  \
 -e '/^\.c\.o:.*;/{'  \
 -e    's/\$\*\.c//'  \
 -e    's/^[^;]*;[  ]*//p' \
 -e    q    \
 -e '}'    \
 -e '/^\.c\.o: *$/{'  \
 -e    N    \
 -e    's/\$\*\.c//'  \
 -e    's/^.*\n[  ]*//p'  \
 -e    q    \
 -e '}'`
fi
case
 "$defrule" in
") defrule='$(CC) -c $(CFLAGS)' ;;
esac

make clist || ($echo "Searching for .c files..."; \
 $echo *.c | $tr ' ' '\012' | $egrep -v '\*' >.clist)
gotnone=true
for file in `$cat .clist`; do
# for file in `cat /dev/null`; do
   case "$file" in
   *.c) filebase=`basename $file .c` ;;
   *.y) filebase=`basename $file .c` ;;
   ")  continue ;;
   esac
   gotnone=false
   $echo "Finding dependencies for $filebase.o."
   $sed -n <$file >$file.c \
 -e "/^${filebase}_init(/q" \
 -e '/^#/{' \
 -e 's|/\*.*$||' \
 -e 's|\\$||' \
 -e p \
```

```
 -e '}'
   $cpp -I/usr/local/include -I. $cppflags $file.c | \
   $sed \
 -e '/^# *[0-9]/!d' \
 -e 's/^.*"\(.*\)".*$/'$filebase'.o: \1/' \
 -e 's|: \./|: |' \
 -e 's|\.c\.c|.c|' | \
   $uniq | $sort | $uniq >> .deptmp
done

$sed <Makefile >Makefile.new -e '1,/^# AUTOMATICALLY/!d'

make shlist || ($echo "Searching for .SH files..."; \
 $echo *.SH | $tr ' ' '\012' | $egrep -v '\*' >.shlist)
if $gotnone || $test -s .deptmp; then

  for file in `cat .shlist`; do
 $echo `$expr X$file : 'X\(.*\).SH`: $file config.sh \; \
     /bin/sh $file >> .deptmp
   done
   $echo "Updating Makefile..."
   $echo "# If this runs make out of memory, delete /usr/include lines." \
 >> Makefile.new
   $sed 's|^\(.*\.o:\) *\(.*/.*\.c\) *$|\1 \2; "'$defrule \2|" .deptmp \
      >>Makefile.new
else
   make hlist || ($echo "Searching for .h files..."; \
 $echo *.h | $tr ' ' '\012' | $egrep -v '\*' >.hlist)
   $echo "You don't seem to have a proper C preprocessor.  Using grep instead."
   $egrep '^#include ' `cat .clist` `cat .hlist`  >.deptmp
   $echo "Updating Makefile..."
   <.clist $sed -n       \
 -e '/\//{'       \
 -e   's|^\(.*\)/\(.*\)\.c|\2.o: \1/\2.c; "'$defrule \1/\2.c|p" \
 -e   d        \
 -e '}'        \
 -e 's|^\(.*\)\.c|\1.o: \1.c|p' >> Makefile.new
   <.hlist $sed -n 's|\(.*/\)\(.*\)|s= \2= \1\2=|p' >.hsed
   <.deptmp $sed -n 's|c:#include "\(.*\)".*$|o: \1|p' | \
      $sed 's|^[^;]*/||' | \
      $sed -f
 .hsed >> Makefile.new
   <.deptmp $sed -n 's|c:#include <\(.*\)>.*$|o: /usr/include/\1|p' \
      >> Makefile.new
   <.deptmp $sed -n 's|h:#include "\(.*\)".*$|h: \1|p' | \
      $sed -f .hsed >> Makefile.new
   <.deptmp $sed -n 's|h:#include <\(.*\)>.*$|h: /usr/include/\1|p' \
      >> Makefile.new
```

```
  for file in `$cat .shlist`; do
 $echo `$expr X$file : 'X\(.*\).SH`: $file config.sh \; \
    /bin/sh $file >> Makefile.new
  done
fi
$rm -f Makefile.old
$cp Makefile Makefile.old
$cp Makefile.new Makefile
$rm Makefile.new
$echo "# WARNING: Put nothing here or make depend will gobble it up!" >> Makefile
$rm -f .deptmp `sed 's/\.c/.c.c/' .clist` .shlist .clist .hlist .hsed

!NO!SUBS!
$eunicefix makedepend
chmod +x makedepend
case `pwd` in
*SH)
  $rm -f ../makedepend
  ln makedepend ../makedepend
  ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/makedepend.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Myinit.U,v 3.0 1993/08/18 12:05:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: Myinit.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: If you want to initialize any default values, copy this unit to your
?X: personal U directory and add the assignments to the end.  This file
?X: is included after variables are initialized but before any old
?X: config.sh file is read in and before any Configure switch processing.
?X:
?MAKE:Myinit
```

```
 libswanted: Init
?MAKE: -pick add $@ %<
?S:libswanted:
?S: This variable holds a list of all the libraries we want to
?S: search.  The order is chosen to pick up the c library
?S: ahead of ucb or bsd libraries for SVR4.
?S:.
?LINT:extern usevfork glibpth
?LINT:change usevfork glibpth
: List of libraries we want.
?X: Put crypt here, even though I should really fix d_crypt.U to look
?X: for it correctly, including possible shared library versions.
: If anyone needs extra -lxxx, put those in a hint file.
libswanted="cl pthread socket bind inet nsl ndbm gdbm dbm db malloc dl ld"
libswanted="$libswanted sun m crypt sec util c cposix posix ucb bsd BSD"
: We probably want to search /usr/shlib before most other libraries.
: This is only used by the lib/ExtUtils/MakeMaker.pm routine extliblist.
glibpth=`echo " $glibpth " | sed -e 's! /usr/shlib ! !'`
glibpth="/usr/shlib $glibpth"
: Do not use vfork unless overridden by a hint file.
usevfork=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Myinit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_poll.U 15 2006-08-30 18:21:51Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_poll.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:38:17  ram
?RCS: patch61: mention that <poll.h> can be included if HAS_POLL defined
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:26:31  ram
?RCS: patch45: created
?RCS:
?MAKE:d_poll: Inlibc
?MAKE: -pick add $@ %<
?S:d_poll:
?S: This variable conditionally defines the HAS_POLL symbol, which
?S: indicates to the C program that the poll() routine is available
```

```
?S: to poll active file descriptors.
?S:.
?C:HAS_POLL
 :
?C: This symbol, if defined, indicates that the poll routine is
?C: available to poll active file descriptors.  Please check I_POLL and
?C: I_SYS_POLL to know which header should be included as well.
?C:.
?H:#$d_poll HAS_POLL  /**/
?H:.
?LINT:set d_poll
: see if poll exists
set poll d_poll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_poll.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 2012 Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:ilp d_ilp32 d_ilp64 d_lp64 d_can64: Assert Myread Setvar \
 cat rm +cc +ccflags echo n c intsize longsize ptrsize
?MAKE: -pick add $@ %<
?S:ilp:
?S: This variable contains the largest amount of bits that the CPU supports,
?S: from the compiler's point of view.  Typically 32 or 64.
?S:.
?S:d_ilp32:
?S: This variable conditionally defines the CPU_IS_ILP32.
?S:.
?S:d_ilp64:
?S: This variable conditionally defines the CPU_IS_ILP64.
?S:.
?S:d_lp64:
?S: This variable conditionally defines the CPU_IS_LP64.
?S:.
?S:d_can64:
?S: This variable
 conditionally defines CAN_HANDLE_64BITS.
?S:.
```

```
?C:CPU_ILP_MAXBITS:
?C: This symbol contains the largest amount of bits that the CPU natively
?C: supports from the compiler's point of view.  Typically 32 or 64.
?C:.
?C:CPU_IS_ILP32:
?C: When defined, this indicates that the integer, long and pointer variables
?C: hold 32-bit values.
?C:.
?C:CPU_IS_ILP64:
?C: When defined, this indicates that the integer, long and pointer variables
?C: hold 64-bit values.
?C:.
?C:CPU_IS_LP64:
?C: When defined, this indicates that the long and pointer variables hold
?C: 64-bit values but integers are smaller (probably only 32-bit wide).
?C:.
?C:CAN_HANDLE_64BITS:
?C: When defined, this indicates that the compiler can handle 64-bit values
?C: despite the CPU having only 32-bit registers.  These are available using
?C: the "long long" C type.  It is only defined for ILP32 machines, since
?C: 64-bit support is naturally available on ILP64 and LP64 machines.
?C:.
?H:#define CPU_ILP_MAXBITS $ilp
?H:#$d_ilp32
 CPU_IS_ILP32 /**/
?H:#$d_ilp64 CPU_IS_ILP64 /**/
?H:#$d_lp64 CPU_IS_LP64  /**/
?H:#$d_can64 CAN_HANDLE_64BITS /**/
?H:.
?LINT: set d_ilp32 d_ilp64 d_lp64 d_can64
: check for architecture type
echo " "
$echo $n "Computing CPU architecture type...$c" >&4
ilp=`expr $longsize \* 8`
case "$ptrsize" in
8)
 val=$undef; set d_ilp32; eval $setvar
 case "$intsize" in
 8)
  echo " ILP64." >&4
  val=$define; set d_ilp64; eval $setvar
  val=$undef; set d_lp64; eval $setvar
  ;;
 *)
  echo " LP64." >&4
  val=$define; set d_lp64; eval $setvar
  val=$undef; set d_ilp64; eval $setvar
  ;;
```

```
 esac
 ;;
*)
 echo " ILP${ilp}." >&4
 case "$ilp" in
 32) val=$define;;
 *) val=$undef;;
 esac
 set d_ilp32; eval $setvar
 val=$undef; set d_ilp64; eval $setvar
 val=$undef; set d_lp64; eval $setvar
 ;;
esac

@if CAN_HANDLE_64BITS || d_can64
: see whether compiler supports 64-bit emulation
val=$undef
case "$ilp" in
64) val=$define;;
*)
 $cat >try.c <<EOCP
#include "static_assert.h"
long long foo;
int main()
{
 STATIC_ASSERT(8
 == sizeof(foo));
 return 0;
}
EOCP
 if $cc -c $ccflags try.c >/dev/null 2>&1; then
  echo " "
  echo "Your compiler also supports 64-bit emulation." >&4
  val=$define
 fi
 $rm -f try.*
 ;;
esac
set d_can64
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ilp.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_syssecrt: Inhdr
?MAKE: -pick add $@ %<
?S:i_syssecrt:
?S: This variable conditionally defines the I_SYS_SECURITY symbol,
?S: and indicates whether a C program should include <sys/security.h>.
?S:.
?C:I_SYS_SECURITY:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/security.h>.
?C:.
?H:#$i_syssecrt   I_SYS_SECURITY /**/
?H:.
?LINT:set i_syssecrt
: see if sys/security.h is available
set sys/security.h i_syssecrt
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/i_syssecrt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysun.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysun.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/un.h> is available or not
?X:
?MAKE:i_sysun: Inhdr
```

```
?MAKE: -pick add $@ %<
?S:i_sysun:
?S: This variable conditionally defines I_SYS_UN, which indicates
?S: to the C program that it should include <sys/un.h> to get UNIX
?S: domain socket definitions.
?S:.
?C:I_SYS_UN:
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <sys/un.h> to get UNIX domain socket definitions.
?C:.
?H:#$i_sysun I_SYS_UN  /**/
?H:.
?LINT:set i_sysun
: see if this is a sys/un.h system
set sys/un.h i_sysun
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysun.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strxfrm_l.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_strxfrm_l.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:04  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strxfrm_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strxfrm_l:
?S: This variable conditionally defines HAS_STRXFRM_L if strxfrm_l() is
?S: available to transform strings.
?S:.
?C:HAS_STRXFRM_L:
?C: This symbol, if defined, indicates that the strxfrm_l() routine is
?C: available
```

```
 to transform strings.
?C:.
?H:#$d_strxfrm_l HAS_STRXFRM_L /**/
?H:.
?LINT:set d_strxfrm_l
: see if strxfrm_l exists
set strxfrm_l d_strxfrm_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strxfrm_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fchdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchdir:
?S: This variable conditionally defines the HAS_FCHDIR symbol, which
?S: indicates to the C program that the fchdir() routine is available.
?S:.
?C:HAS_FCHDIR:
?C: This symbol, if defined, indicates that the fchdir routine is
?C: available to change directory using a file descriptor.
?C:.
?H:#$d_fchdir HAS_FCHDIR  /**/
?H:.
?LINT:set d_fchdir
: see if fchdir exists
set fchdir d_fchdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fchdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wcstombs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wcstombs.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wcstombs: Inlibc
?MAKE: -pick add $@ %<
?S:d_wcstombs:
?S: This variable conditionally defines the HAS_WCSTOMBS symbol, which
?S: indicates to the C program that the wcstombs() routine is available
?S: to convert wide character strings to multibyte strings.
?S:.
?C:HAS_WCSTOMBS:
?C: This symbol, if defined, indicates that the wcstombs
 routine is
?C: available to convert wide character strings to multibyte strings.
?C:.
?H:#$d_wcstombs HAS_WCSTOMBS /**/
?H:.
?LINT:set d_wcstombs
: see if wcstombs exists
set wcstombs d_wcstombs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wcstombs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setprior.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setprior.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setprior: Inlibc
?MAKE: -pick add $@ %<
?S:d_setprior:
?S: This variable conditionally defines HAS_SETPRIORITY if setpriority()
```

```
?S: is available to set a process's priority.
?S:.
?C:HAS_SETPRIORITY (SETPRIORITY):
?C: This symbol, if defined, indicates that the setpriority routine is
?C: available to set a process's priority.
?C:.
?H:#$d_setprior
 HAS_SETPRIORITY  /**/
?H:.
?LINT:set d_setprior
: see if setpriority exists
set setpriority d_setprior
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setprior.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Setvar.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Setvar.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  15:58:28  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a variable that is intended to be eval'ed in
?X: order to define/undefine a symbol. A consistency check is made
?X: regarding any previous value and a warning is issued if there
?X: is any discrepancy.
?X:
?X:
 To use it, say:
?X: val=<value>
?X: set d_variable
?X: eval $setvar
?X:
?MAKE:Setvar: Whoa
```

```
?MAKE: -pick add $@ %<
?LINT:define setvar
?S:setvar:
?S: This shell variable is used internally by Configure to set a value
?S: to a given symbol that is defined or not. A typical use is:
?S: val=<value computed>
?S:  set d_variable
?S:  eval $setvar
?S: That will print a message in case the $val value is not the same
?S: as the previous value of $d_variable.
?S:.
?V:setvar:val
?T:var was td tu
: function used to set '$1' to '$val'
setvar='var=$1; eval "was=\$$1"; td=$define; tu=$undef;
case "$val$was" in
$define$undef) . ./whoa; eval "$var=\$td";;
$undef$define) . ./whoa; eval "$var=\$tu";;
*) eval "$var=$val";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Setvar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrnam_r getgrnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrnam_r:
?S: This variable conditionally defines the HAS_GETGRNAM_R symbol,
?S: which indicates to the C program that the getgrnam_r()
?S: routine is available.
?S:.
?S:getgrnam_r_proto:
?S: This variable encodes the prototype of getgrnam_r.
?S: It is zero if d_getgrnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrnam_r
?S: is defined.
?S:.
?C:HAS_GETGRNAM_R:
```

```
?C: This symbol, if defined, indicates that the getgrnam_r routine
?C: is available to
 getgrnam re-entrantly.
?C:.
?C:GETGRNAM_R_PROTO:
?C: This symbol encodes the prototype of getgrnam_r.
?C: It is zero if d_getgrnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrnam_r
?C: is defined.
?C:.
?H:#$d_getgrnam_r HAS_GETGRNAM_R /**/
?H:#define GETGRNAM_R_PROTO $getgrnam_r_proto /**/
?H:.
?T:try hdrs d_getgrnam_r_proto
: see if getgrnam_r exists
set getgrnam_r d_getgrnam_r
eval $inlibc
case "$d_getgrnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_getgrnam_r_proto:$usethreads" in
 ":define") d_getgrnam_r_proto=define
  set d_getgrnam_r_proto getgrnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getgrnam_r_proto" in
 define)
 case "$getgrnam_r_proto" in
 "|0) try='int getgrnam_r(const char*, struct group*, char*, size_t, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBWR ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='int getgrnam_r(const char*, struct group*, char*,
 int, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBIR ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='struct group* getgrnam_r(const char*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=S_CBI ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='int getgrnam_r(const char*, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=I_CSBI ;;
 esac
 case "$getgrnam_r_proto" in
 "|0) try='struct group* getgrnam_r(const char*, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrnam_r_proto=S_CSBI ;;
```

```
 esac
 case "$getgrnam_r_proto" in
 "|0) d_getgrnam_r=undef
  getgrnam_r_proto=0
  echo "Disabling getgrnam_r, cannot determine prototype." >&4 ;;
 * ) case "$getgrnam_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getgrnam_r_proto="REENTRANT_PROTO_$getgrnam_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getgrnam_r has no prototype, not using it."
 >&4 ;;
  esac
  d_getgrnam_r=undef
  getgrnam_r_proto=0
  ;;
 esac
 ;;
*) getgrnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrnam_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgget.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgget: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgget:
?S: This variable conditionally defines the HAS_MSGGET symbol, which
?S: indicates to the C program that the msgget() routine is available.
```

```
?S:.
?C:HAS_MSGGET:
?C: This symbol, if defined, indicates that the msgget() routine is
?C: available to get a new message queue.
?C:.
?H:#$d_msgget
 HAS_MSGGET  /**/
?H:.
?LINT:set d_msgget
: see if msgget exists
set msgget d_msgget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: doublesize.U,v 3.0.1.1 1994/10/29 16:17:06 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: doublesize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:doublesize: cat rm_try Myread Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:doublesize:
?S: This variable contains the value of the DOUBLESIZE symbol, which
?S: indicates to the C program how many bytes there are in a double.
?S:.
?C:DOUBLESIZE:
?C: This
 symbol contains the size of a double, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define DOUBLESIZE $doublesize  /**/
?H:.
?F:!try
```

```
: check for length of double
echo " "
case "$doublesize" in
")
 echo "Checking to see how big your double precision numbers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
   printf("%d\n", (int)sizeof(double));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  doublesize=`$run ./try`
  echo "Your double is $doublesize bytes long."
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a double precision number (in bytes)?"
  . ./myread
  doublesize="$ans"
 fi
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/doublesize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: patchlevel.U,v 3.0.1.1 1997/02/28 16:18:41 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: patchlevel.U,v $
```

```
?RCS: Revision 3.0.1.1  1997/02/28  16:18:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:patchlevel revision version subversion \
 perl_patchlevel version_patchlevel_string \
 api_revision api_version api_subversion api_versionstring: \
 package test rsrc echo awk osname
?MAKE: -pick
 add $@ %<
?S:revision:
?S: The value of revision comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "5".
?S: In patchlevel.h, this is referred to as "PERL_REVISION".
?S:.
?S:patchlevel:
?S: The patchlevel level of this package.
?S: The value of patchlevel comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "6".
?S: In patchlevel.h, this is referred to as "PERL_VERSION".
?S:.
?S:subversion:
?S: The subversion level of this package.
?S: The value of subversion comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "1".
?S: In patchlevel.h, this is referred to as "PERL_SUBVERSION".
?S: This is unique to perl.
?S:.
?S:version:
?S: The full version number of this package, such as 5.6.1 (or 5_6_1).
?S: This combines revision, patchlevel, and subversion to get the
?S: full version number, including any possible subversions.
?S: This is suitable for use as a directory name, and hence is
?S: filesystem
 dependent.
?S:.
?S:api_revision:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_revision is the '5'.
?S: Prior to 5.5.640, the format was a floating point number,
?S: like 5.00563.
?S:
?S: perl.c:incpush() and lib/lib.pm will automatically search in
?S: $sitelib/.. for older directories back to the limit specified
```

```
?S: by these api_ variables.  This is only useful if you have a
?S: perl library directory tree structured like the default one.
?S: See INSTALL for how this works.  The versioned site_perl
?S: directory was introduced in 5.005, so that is the lowest
?S: possible value.  The version list appropriate for the current
?S: system is determined in inc_version_list.U.
?S:
?S: XXX To do:  Since compatibility can depend on compile time
?S: options (such as bincompat, longlong, etc.) it should
?S: (perhaps) be set by
 Configure, but currently it isn't.
?S: Currently, we read a hard-wired value from patchlevel.h.
?S: Perhaps what we ought to do is take the hard-wired value from
?S: patchlevel.h but then modify it if the current Configure
?S: options warrant.  patchlevel.h then would use an #ifdef guard.
?S:.
?S:api_version:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_version is the '6'.  See api_revision for
?S: full details.  As a special case, 5.5.0 is rendered in the
?S: old-style as 5.005.  (In the 5.005_0x maintenance series,
?S: this was the only versioned directory in $sitelib.)
?S:.
?S:api_subversion:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_subversion is the
 '1'.  See api_revision for
?S: full details.
?S:.
?S:api_versionstring:
?S: This variable combines api_revision, api_version, and
?S: api_subversion in a format such as 5.6.1 (or 5_6_1) suitable
?S: for use as a directory name.  This is filesystem dependent.
?S:.
?S:perl_patchlevel:
?S: This is the Perl patch level, a numeric change identifier,
?S: as defined by whichever source code maintenance system
?S: is used to maintain the patches; currently Perforce.
?S: It does not correlate with the Perl version numbers or
?S: the maintenance versus development dichotomy except
?S: by also being increasing.
?S:.
?S:version_patchlevel_string:
?S: This is a string combining version, subversion and
```

```
?S: perl_patchlevel (if perl_patchlevel is non-zero).
?S: It is typically something like
?S: 'version 7 subversion 1'  or
?S: 'version 7 subversion 1 patchlevel 11224'
?S: It is computed here to avoid duplication of code in myconfig.SH
?S: and lib/Config.pm.
?S:.
?LINT:extern LC_ALL
?LINT:extern LANGUAGE
:
 get the patchlevel
echo " "
echo "Getting the current patchlevel..." >&4
if $test -r $rsrc/patchlevel.h;then
 revision=`awk '/define[  ]+PERL_REVISION/ {print $3}' $rsrc/patchlevel.h`
 patchlevel=`awk '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
 subversion=`awk '/define[  ]+PERL_SUBVERSION/ {print $3}' $rsrc/patchlevel.h`
 api_revision=`awk '/define[  ]+PERL_API_REVISION/ {print $3}' $rsrc/patchlevel.h`
 api_version=`awk '/define[  ]+PERL_API_VERSION/ {print $3}' $rsrc/patchlevel.h`
 api_subversion=`awk '/define[  ]+PERL_API_SUBVERSION/ {print $3}' $rsrc/patchlevel.h`
 perl_patchlevel=`egrep ',"(MAINT|SMOKE)[0-9][0-9]*"' $rsrc/patchlevel.h|tail -1|sed 's/[^0-9]//g'`
else
 revision=0
 patchlevel=0
 subversion=0
 api_revision=0
 api_version=0
 api_subversion=0
 perl_patchlevel=0
 $echo "(You do not have patchlevel.h.  Eek.)"
fi
: Define a handy string here to avoid duplication in myconfig.SH and configpm.
version_patchlevel_string="version $patchlevel subversion $subversion"
case
 "$perl_patchlevel" in
0|") ;;
*)  perl_patchlevel=`echo $perl_patchlevel | sed 's/.* //'`
   version_patchlevel_string="$version_patchlevel_string patch $perl_patchlevel"
   ;;
esac

$echo "(You have $package $version_patchlevel_string.)"

case "$osname" in
dos|vms)
 : XXX Should be a Configure test for double-dots in filenames.
 version=`echo $revision $patchlevel $subversion | \
   $awk '{ printf "%d_%d_%d", $1, $2, $3 }'`
```

```
 api_versionstring=`echo $api_revision $api_version $api_subversion | \
   $awk '{ printf "%d_%d_%d", $1, $2, $3 }'`
 ;;
*)
 version=`echo $revision $patchlevel $subversion | \
   $awk '{ printf "%d.%d.%d", $1, $2, $3 }'`
 api_versionstring=`echo $api_revision $api_version $api_subversion | \
   $awk '{ printf "%d.%d.%d", $1, $2, $3 }'`
 ;;
esac
: Special case the 5.005_xx maintenance series, which used 5.005
: without any subversion label as a subdirectory in $sitelib
if test "${api_revision}${api_version}${api_subversion}" = "550"; then
 api_versionstring='5.005'
fi
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/patchlevel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systwgcf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systwgcf.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_systwgcf: Inhdr
?MAKE: -pick add $@ %<
?S:i_systwgcf:
?S: This variable conditionally defines the I_SYS_TWG_CF symbol, and
?S: indicates whether a C program should include sys/twg_config.h.
?S:.
?C:I_SYS_TWG_CF:
?C: This symbol, if defined, indicates to the C program that it should
?C: include sys/twg_config.h.
?C:.
?H:#$i_systwgcf
 I_SYS_TWG_CF /**/
?H:.
```

```
?LINT:set i_systwgcf
: see if this is a sys/twg_config.h system
set sys/twg_config.h i_systwgcf
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systwgcf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sockopt.U,v 3.0.1.1 1995/07/25 14:16:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sockopt.U,v $
?RCS: Revision 3.0.1.1  1995/07/25  14:16:14  ram
?RCS: patch56: obsoleted KEEPALIVE in favor of CAN_KEEPALIVE for consistency
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepalive: cat rm contains +cc +ccflags +ldflags socketlib sockethdr \
 d_oldsock libs Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_keepalive:
?S: This symbol conditionally defines CAN_KEEPALIVE which
 indicates to the C
?S: program that setsockopt SO_KEEPALIVE will work properly.
?S:.
?C:CAN_KEEPALIVE (KEEPALIVE):
?C: This symbol if defined indicates to the C program that the SO_KEEPALIVE
?C: option of setsockopt() will work as advertised in the manual.
?C:.
?H:#$d_keepalive CAN_KEEPALIVE  /**/
?H:.
?F:!socket
?LINT:set d_keepalive
: see if setsockopt with SO_KEEPALIVE works as advertised
echo " "
case "$d_oldsock" in
"$undef")
 if $contains SO_KEEPALIVE `./findhdr sys/socket.h` \
  /dev/null >/dev/null 2>&1
```

```
 then
  echo "OK, let's see if SO_KEEPALIVE works as advertised..." >&4
  $cat > socket.c <<EOP
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netdb.h>

int main()
{
 int s = socket(AF_INET, SOCK_STREAM, 0);
 if (s == -1)
  exit(1);
 if (-1 == setsockopt(s, SOL_SOCKET, SO_KEEPALIVE, 0, 0))
  exit(2);
 exit(0);
}
EOP
  if $cc $ccflags $sockethdr $ldflags -o socket socket.c $libs \
   $socketlib >/dev/null 2>&1; then
   ./socket >/dev/null 2>&1
   case
 $? in
   0) echo "Yes, it does!"
    val="$define";;
   1) $cat <<EOM
(Something went wrong -- Assuming SO_KEEPALIVE is broken)
EOM
    val="$undef";;
   2) echo "No, it doesn't.  Don't trust your manuals!!"
    val="$undef";;
   esac
  else
   cat <<EOM
(I can't compile the test program -- Assuming SO_KEEPALIVE is broken)
EOM
   val="$undef"
  fi
 else
  echo "Strange!! You have BSD 4.2 sockets but no SO_KEEPALIVE option."
  val="$undef"
 fi;;
*) cat <<EOM
As you have an old socket interface, you can't have heard of SO_KEEPALIVE.
EOM
 val="$undef";;
esac
set d_keepalive
```

```
eval $setvar
$rm -f socket socket.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sockopt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: startperl.U,v 3.0 1993/08/18 12:09:50 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
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?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: startperl.U,v $
?RCS: Perl5 version -- I always have d_portable=define.
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startperl: cat Myread sharpbang initialinstalllocation test \
 versiononly version
?MAKE: -pick add $@ %<
?Y:TOP
?X: This is different from dist's standard startperl.U unit because
?X: we can't directly test #!/usr/local/bin/perl (or
 whatever) because
?X: we haven't built and installed perl yet.
?S:startperl:
?S: This variable contains the string to put on the front of a perl
?S: script to make sure (hopefully) that it runs with perl and not some
?S: shell. Of course, that leading line must be followed by the classical
?S: perl idiom:
?S:  eval 'exec perl -S $0 ${1+"$@"}'
?S:   if $running_under_some_shell;
?S: to guarantee perl startup should the shell execute the script. Note
?S: that this magic incantation is not understood by csh.
?S:.
?C:STARTPERL:
?C: This variable contains the string to put in front of a perl
?C: script to make sure (one hopes) that it runs with perl and not
?C: some shell.
?C:.
?H:#define STARTPERL "$startperl"  /**/
```

```
?H:.
: figure out how to guarantee perl startup
: XXX Note that this currently takes advantage of the bug that binexp ignores
:     the Configure -Dinstallprefix setting, which in turn means that under
:     relocatable @INC, initialinstalllocation is what binexp started as.
case
 "$startperl" in
")
 case "$sharpbang" in
 *!)
  $cat <<EOH

I can use the #! construct to start perl on your system. This will
make startup of perl scripts faster, but may cause problems if you
want to share those scripts and perl is not in a standard place
($initialinstalllocation/perl) on all your platforms. The alternative
is to force a shell by starting the script with a single ':' character.

EOH
  case "$versiononly" in
  "$define")      dflt="$initialinstalllocation/perl$version";;
  *)              dflt="$initialinstalllocation/perl";;
  esac
  rp='What shall I put after the #! to start up perl ("none" to not use #!)?'
  . ./myread
  case "$ans" in
  none) startperl=": # use perl";;
  *) startperl="#!$ans"
   if $test 30 -lt `echo "$ans" | wc -c`; then
    $cat >&4 <<EOM

WARNING:  Some systems limit the #! command to 32 characters.
If you experience difficulty running Perl scripts with #!, try
installing Perl in a directory with a shorter pathname.

EOM
   fi ;;
  esac
  ;;
 *)
 startperl=": # use perl"
  ;;
 esac
 ;;
esac
echo "I'll use $startperl to start perl scripts."
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/startperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lseektype.U,v 3.0.1.1 1994/08/29 16:30:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: lseektype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:30:10  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lseektype lseeksize: Myread Typedef cat Compile rm_try longsize run
?MAKE: -pick add $@ %<
?S:lseektype:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare
 lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?S:lseeksize:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?C:Off_t (LSEEKTYPE):
?C: This symbol holds the type used to declare offsets in the kernel.
?C: It can be int, long, off_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?C:LSEEKSIZE:
?C: This symbol holds the number of bytes used by the Off_t.
?C:.
?C:Off_t_size:
?C: This symbol holds the number of bytes used by the Off_t.
?C:.
?H:#define Off_t $lseektype  /* <offset> type */
?H:#define LSEEKSIZE $lseeksize  /* <offset> size */
?H:#define Off_t_size $lseeksize /* <offset> size */
?H:.
```

```
?F:!try
?LINT:set lseektype
: see what type lseek is declared as in the kernel
rp="What is the type used for lseek's offset on this system?"
set off_t lseektype
 long stdio.h sys/types.h
eval $typedef_ask

echo " "
echo "Checking to see how big your file offsets are..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof($lseektype));
   return(0);
}
EOCP
set try
if eval $compile_ok; then
 lseeksize=`$run ./try`
 echo "Your file offsets are $lseeksize bytes long."
else
 dflt=$longsize
 echo " "
 echo "(I can't seem to compile the test program.  Guessing...)"
 rp="What is the size of your file offsets (in bytes)?"
 . ./myread
 lseeksize="$ans"
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/lseektype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setreuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setreuid.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:07:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setreuid d_setresuid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setreuid:
?S: This variable conditionally defines HAS_SETREUID if setreuid() is
?S: available to change the real and effective uid of the current
?S: process.
?S:.
?S:d_setresuid:
?S: This variable conditionally defines HAS_SETREUID if setresuid() is
?S: available to change
 the real, effective and saved uid of the current
?S: process.
?S:.
?C:HAS_SETREUID (SETREUID):
?C: This symbol, if defined, indicates that the setreuid routine is
?C: available to change the real and effective uid of the current
?C: process.
?C:.
?C:HAS_SETRESUID (SETRESUID):
?C: This symbol, if defined, indicates that the setresuid routine is
?C: available to change the real, effective and saved uid of the current
?C: process.
?C:.
?H:#$d_setreuid HAS_SETREUID  /**/
?H:#$d_setresuid HAS_SETRESUID  /**/
?H:.
?LINT:set d_setreuid d_setresuid
: see if setreuid exists
set setreuid d_setreuid
eval $inlibc
set setresuid d_setresuid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setreuid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getspnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
```

```
?MAKE:d_getspnam_r getspnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_shadow extern_C
?MAKE: -pick add $@ %<
?S:d_getspnam_r:
?S: This variable conditionally defines the HAS_GETSPNAM_R symbol,
?S: which indicates to the C program that the getspnam_r()
?S: routine is available.
?S:.
?S:getspnam_r_proto:
?S: This variable encodes the prototype of getspnam_r.
?S: It is zero if d_getspnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getspnam_r
?S: is defined.
?S:.
?C:HAS_GETSPNAM_R:
?C: This symbol, if defined, indicates that the getspnam_r routine
?C: is available
 to getspnam re-entrantly.
?C:.
?C:GETSPNAM_R_PROTO:
?C: This symbol encodes the prototype of getspnam_r.
?C: It is zero if d_getspnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getspnam_r
?C: is defined.
?C:.
?H:#$d_getspnam_r HAS_GETSPNAM_R /**/
?H:#define GETSPNAM_R_PROTO $getspnam_r_proto /**/
?H:.
?T:try hdrs d_getspnam_r_proto
: see if getspnam_r exists
set getspnam_r d_getspnam_r
eval $inlibc
case "$d_getspnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_shadow shadow.h"
 case "$d_getspnam_r_proto:$usethreads" in
 ":define") d_getspnam_r_proto=define
  set d_getspnam_r_proto getspnam_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getspnam_r_proto" in
 define)
 case "$getspnam_r_proto" in
 "|0) try='int getspnam_r(const char*, struct spwd*, char*, size_t, struct spwd**);'
 ./protochk "$extern_C $try" $hdrs && getspnam_r_proto=I_CSBWR ;;
 esac
 case "$getspnam_r_proto" in
```

```
"|0) try='struct spwd* getspnam_r(const char*, struct
spwd*, char*, int);'
./protochk "$extern_C $try" $hdrs && getspnam_r_proto=S_CSBI ;;
esac
case "$getspnam_r_proto" in
"|0) d_getspnam_r=undef
 getspnam_r_proto=0
 echo "Disabling getspnam_r, cannot determine prototype." >&4 ;;
* ) case "$getspnam_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getspnam_r_proto="REENTRANT_PROTO_$getspnam_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getspnam_r has no prototype, not using it." >&4 ;;
 esac
 d_getspnam_r=undef
 getspnam_r_proto=0
 ;;
esac
;;
*) getspnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getspnam_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2010 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_prctl d_prctl_set_name: Inlibc cat Compile run rm_try
?MAKE: -pick add $@ %<
?S:d_prctl:
?S: This variable conditionally defines the HAS_PRCTL symbol, which
?S: indicates to the C program that the prctl() routine is available.
?S: Note that there are at least two prctl variants: Linux and Irix.
?S: While they are somewhat similar, they are incompatible.
?S:.
?S:d_prctl_set_name:
?S: This variable conditionally defines the HAS_PRCTL_SET_NAME symbol,
```

```
?S: which indicates to the C program that the prctl() routine supports
?S: the PR_SET_NAME option.
?S:.
?C:HAS_PRCTL:
?C: This symbol, if defined, indicates that the prctl routine is
?C: available to set process title.
?C: Note that there are at least two
 prctl variants: Linux and Irix.
?C: While they are somewhat similar, they are incompatible.
?C:.
?C:HAS_PRCTL_SET_NAME:
?C: This symbol, if defined, indicates that the prctl routine is
?C: available to set process title and supports PR_SET_NAME.
?C:.
?H:#$d_prctl HAS_PRCTL  /**/
?H:#$d_prctl_set_name HAS_PRCTL_SET_NAME  /**/
?H:.
?F:!try
?LINT:set d_prctl
: see if prctl exists
set prctl d_prctl
eval $inlibc

: see if prctl supports PR_SET_NAME
d_prctl_set_name=$undef
case $d_prctl in
   $define)
 $cat >try.c <<EOM
#ifdef __ANDROID__
#include <unistd.h>
#endif
#include <sys/prctl.h>

int main (int argc, char *argv[])
{
   return (prctl (PR_SET_NAME, "Test"));
   } /* main */
EOM
 set try
 if eval $compile_ok && $run ./try; then
     echo "Your prctl (PR_SET_NAME, ...) works"
     d_prctl_set_name=$define
     fi
 $rm_try
 ;;
   esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_prctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_keepsig.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:57:56  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:26:25  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:13:59  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:48:47  ram
?RCS: patch12: comment for SIGNALS_KEPT was the other way round
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:06:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepsig: cat Compile rm Guess contains echo n c Setvar run
?MAKE: -pick add $@ %<
?S:d_keepsig:
?S: This variable contains the eventual value of the SIGNALS_KEPT symbol,
?S: which indicates to the C program if signal handlers need not reinstated
?S: after receipt of a signal.
?S:.
?C:SIGNALS_KEPT (PERSISTENT_SIGNAL):
?C: This symbol is defined if signal handlers needn't be reinstated after
?C: receipt of a signal.
?C:.
?H:#$d_keepsig SIGNALS_KEPT /**/
?H:.
?F:!try !try.out
?LINT:set d_keepsig
: see if signals are kept
val="$undef";
echo " "
```

```
echo "Checking to see if signal handlers stick around..." >&4
$cat >try.c <<'EOCP'
foo() {}

int main()
{
 signal(2, foo);
 kill(getpid(), 2);
 kill(getpid(), 2);
 printf("abc\n");
}
EOCP
set try
if eval $compile; then
?X: On AIX a single ./try will not work (with ksh)
?X: Backquotes required on Linux and SGI (prevents "ambiguous output redirect")
?X:
 (reported by Xavier LeVourch <xavierl@eiffel.com>)
 echo `sh -c $run ./try >try.out 2>/dev/null` >/dev/null
 if $contains abc try.out >/dev/null 2>&1; then
  echo "Yes, they do."
  val="$define";
 else
  echo "No, they don't."
 fi
else
 $echo $n "(I can't seem to compile the test program. Assuming $c"
 if ./bsd; then
  echo "they do.)"
  val="$define"
 else
  echo "they don't.)"
 fi
fi
set d_keepsig
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_keepsig.U
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```
?RCS: $Id: bin.U,v 3.1 1999/07/09 18:20:13 doughera Exp doughera $
?RCS:
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```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: bin.U,v $
?RCS: Revision 3.1  1999/07/09 18:20:13  doughera
?RCS: Updated for installprefix
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:32  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:32:40  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:05:28  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS:
 Revision 3.0.1.1  1993/09/13  15:56:51  ram
?RCS: patch10: made prompting more explicit (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bin binexp installbin userelocatableinc initialinstalllocation: \
 Myread Prefixit Getfile Setvar Setprefixvar Oldconfig \
 test prefix prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:bin=''
?S:bin:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly executable images for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S:.
?D:binexp=''
?S:binexp:
?S: This is the same as the bin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installbin=''
?S:installbin:
?S: This variable is the same as binexp unless AFS is running in which case
?S: the user is explicitly prompted for it. This variable
 should always
?S: be used in your makefiles for maximum portability.
?S:.
```

```
?D:userelocatableinc="
?S:userelocatableinc:
?S: This variable is set to true to indicate that perl should relocate
?S: @INC entries at runtime based on the path to the perl binary.
?S: Any @INC paths starting "../" are relocated relative to the directory
?S: containing the perl binary, and a logical cleanup of the path is then
?S: made around the join point (removing "dir/../" pairs)
?S:.
?S:initialinstalllocation:
?S: When userelocatableinc is true, this variable holds the location
?S: that make install should copy the perl binary to, with all the
?S: run-time relocatable paths calculated from this at install time.
?S: When used, it is initialized to the original value of binexp, and
?S: then binexp is set to '../', as the other binaries are found
?S: relative to the perl binary.
?S:.
?C:BIN:
?C: This symbol holds the path of the bin directory where the package will
?C: be installed. Program must be
 prepared to deal with ~name substitution.
?C:.
?C:BIN_EXP:
?C: This symbol is the filename expanded version of the BIN symbol, for
?C: programs that do not want to deal with that at run-time.
?C:.
?C:PERL_RELOCATABLE_INC:
?C: This symbol, if defined, indicates that we'd like to relocate entries
?C: in @INC at run time based on the location of the perl binary.
?C:.
?H:#define BIN "$bin" /**/
?H:#define BIN_EXP "$binexp" /**/
?H:#define PERL_RELOCATABLE_INC "$userelocatableinc"  /**/
?H:.
?D:bin='/usr/local/bin'
?LINT:change prefix
?LINT:change prefixexp
?LINT:change prefixvar
?LINT:change installprefixexp
?LINT:set userelocatableinc
: determine where public executables go
echo " "
set dflt bin bin
eval $prefixit
fn=d~
rp='Pathname where the public executables will reside?'
. ./getfile
if $test "X$ansexp" != "X$binexp"; then
 installbin="
```

```
fi
prefixvar=bin
: XXX Bug? -- ignores Configure -Dinstallprefix setting.
: XXX If this is fixed, also fix the "start perl" hunk below, which relies on
:
    this via initialinstalllocation
. ./setprefixvar

case "$userelocatableinc" in
$define|true|[yY]*) dflt='y' ;;
*)   dflt='n' ;;
esac
cat <<EOM

Would you like to build Perl so that the installation is relocatable, so that
library paths in @INC are determined relative to the path of the perl binary?
This is not advised for system Perl installs, or if you need to run setid
scripts or scripts under taint mode.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Use relocatable @INC?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*) val="$undef"  ;;
esac
set userelocatableinc
eval $setvar

initialinstalllocation="$binexp"
: Default prefix is now "up one level from where the binaries are"
case "$userelocatableinc" in
$define|true|[yY]*)
   bin=".../"
   binexp=".../"
   prefix=".../.."
   prefixexp=".../.."
   installprefixexp=".../.."
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/bin.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_varhdr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_varhdr.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:54:42  ram
?RCS: patch61: varargs script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:21:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:26:05  ram
?RCS: patch27: this unit now supersedes old i_stdarg.U and i_varargs.U
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0
  1993/08/18  12:08:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdarg i_varargs i_varhdr: cat +cc +ccflags rm test Setvar \
 Findhdr startsh _o
?MAKE: -pick add $@ %<
?S:i_stdarg:
?S: This variable conditionally defines the I_STDARG symbol, which
?S: indicates to the C program that <stdarg.h> exists and should
?S: be included.
?S:.
?S:i_varargs:
?S: This variable conditionally defines I_VARARGS, which indicates
?S: to the C program that it should include <varargs.h>.
?S:.
?S:i_varhdr:
?S: Contains the name of the header to be included to get va_dcl definition.
?S: Typically one of varargs.h or stdarg.h.
?S:.
?C:I_STDARG:
?C: This symbol, if defined, indicates that <stdarg.h> exists and should
?C: be included.
?C:.
?C:I_VARARGS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <varargs.h>.
?C:.
?H:#$i_stdarg I_STDARG  /**/
```

```
?H:#$i_varargs I_VARARGS /**/
?H:.
?W:%<:va_dcl
?F:!varargs
?T:valstd
?LINT:set i_stdarg i_varargs
?X:
?X:
 Don't use setvar because the varargs test below might override these.
?X: Actually, the messages here are just informative. We don't wish to set
?X: i_varargs or i_stdarg to their final value before knowing which of the
?X: two we'll include.
?X:
: see if stdarg is available
echo " "
if $test `./findhdr stdarg.h`; then
 echo "<stdarg.h> found." >&4
 valstd="$define"
else
 echo "<stdarg.h> NOT found." >&4
 valstd="$undef"
fi

: see if varargs is available
echo " "
if $test `./findhdr varargs.h`; then
 echo "<varargs.h> found." >&4
else
 echo "<varargs.h> NOT found, but that's ok (I hope)." >&4
fi

?X:
?X: if you have stdarg.h, you need to support prototypes to actually use it;
?X: but if stdarg.h exists and the compiler doesn't support prototypes (for some
?X: bizarre reason), we'll fall back to varargs.h anyway so it's not so bad.
?X:
: set up the varargs testing programs
$cat > varargs.c <<EOP
#ifdef I_STDARG
#include <stdarg.h>
#endif
#ifdef I_VARARGS
#include <varargs.h>
#endif

#ifdef
 I_STDARG
int f(char *p, ...)
```

```
#else
int f(va_alist)
va_dcl
#endif
{
 va_list ap;
#ifndef I_STDARG
 char *p;
#endif
#ifdef I_STDARG
 va_start(ap,p);
#else
 va_start(ap);
 p = va_arg(ap, char *);
#endif
 va_end(ap);
 return 0;
}
EOP
$cat > varargs <<EOP
$startsh
if $cc -c $ccflags -D\$1 varargs.c >/dev/null 2>&1; then
 echo "true"
else
 echo "false"
fi
$rm -f varargs$_o
EOP
chmod +x varargs

: now check which varargs header should be included
echo " "
i_varhdr=''
val=''
case "$valstd" in
"$define")
 if `./varargs I_STDARG`; then
  val='stdarg.h'
 elif `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
*)
 if `./varargs I_VARARGS`; then
  val='varargs.h'
 fi
 ;;
esac
```

```
case "$val" in
")
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to support stdarg or varargs!" >&4
 case "$knowitall" in
 ")
 echo "    I'm giving up; maybe you can try again with a different compiler?" >&4
  exit 1
  ;;
 esac
echo "I could not find the definition for va_dcl...
 You have problems..." >&4
 val="$undef"; set i_stdarg; eval $setvar
 val="$undef"; set i_varargs; eval $setvar
 ;;
*)
 set i_varhdr
 eval $setvar
 case "$i_varhdr" in
 stdarg.h)
  val="$define"; set i_stdarg; eval $setvar
  val="$undef"; set i_varargs; eval $setvar
  ;;
 varargs.h)
  val="$undef"; set i_stdarg; eval $setvar
  val="$define"; set i_varargs; eval $setvar
  ;;
 esac
 echo "We'll include <$i_varhdr> to get va_dcl definition." >&4;;
esac
$rm -f varargs*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_varhdr.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: archname.U,v $
```

```
?RCS: Revision 3.0.1.3  1997/02/28  15:24:32  ram
?RCS: patch61: changed the way the archname is mangled from uname
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:05:24  ram
?RCS: patch54: protect against spaces in "uname -m" output (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:14:21  ram
?RCS: patch51: created
?RCS:
?MAKE:archname myarchname: sed Loc Myread Oldconfig osname test rm
?MAKE: -pick add $@ %<
?S:archname:
?S: This variable is a short name to characterize the current
?S: architecture.
  It is used mainly to construct the default archlib.
?S:.
?S:myarchname:
?S: This variable holds the architecture name computed by Configure in
?S: a previous run. It is not intended to be perused by any user and
?S: should never be set in a hint file.
?S:.
?C:ARCHNAME:
?C: This symbol holds a string representing the architecture name.
?C: It may be used to construct an architecture-dependant pathname
?C: where library files may be held under a private library, for
?C: instance.
?C:.
?H:#define ARCHNAME "$archname"  /**/
?H:.
?T:xxx tarch
: determine the architecture name
echo " "
?X: We always recompute archname in case osname changes. However, we need
?X: to be careful since, as ADO rightfully pointed out, some systems pick
?X: silly architecture names (0001307135000-aix on AIX or 9000/715-ux under
?X: HP-UX). Therefore, we allow hint files to superseed our guess and ask
?X: the user for confirmation.
if xxx=`./loc arch blurfl $pth`; $test -f "$xxx"; then
 tarch=`arch`"-$osname"
elif
 xxx=`./loc uname blurfl $pth`; $test -f "$xxx" ; then
 if uname -m > tmparch 2>&1 ; then
  tarch=`$sed -e 's/ *$//' -e 's/ /_/g' \
   -e 's/$/"-$osname/" tmparch`
 else
  tarch="$osname"
 fi
 $rm -f tmparch
```

```
else
 tarch="$osname"
fi
case "$myarchname" in
"|"$tarch") ;;
*)
 echo "(Your architecture name used to be $myarchname.)"
 archname=''
 ;;
esac
case "$archname" in
'') dflt="$tarch";;
*) dflt="$archname";;
esac
rp='What is your architecture name'
. ./myread
archname="$ans"
myarchname="$tarch"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/archname.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_qgcvt: Inlibc
?MAKE: -pick add $@ %<
?S:d_qgcvt:
?S: This variable conditionally defines the HAS_QGCVT symbol, which
?S: indicates to the C program that the qgcvt() routine is available.
?S:.
?C:HAS_QGCVT:
?C: This symbol, if defined, indicates that the qgcvt routine is
?C: available to convert long doubles ("quad doubles") to strings.
?C: This is a low-level routine hopefully faster than sprintf.
?C:.
?H:#$d_qgcvt HAS_QGCVT  /**/
?H:.
?LINT:set d_qgcvt
: see if qgcvt exists
set qgcvt d_qgcvt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_qgcvt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmat.U,v 3.0.1.3 1995/07/25 14:04:23 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_shmat.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:04:23  ram
?RCS: patch56: use findhdr to find <sys/shm.h>, to get the right one (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:18:56  ram
?RCS: patch27: added new symbol HAS_SHMAT_PROTOTYPE (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:54:18  ram
?RCS: patch23: new Shmat_t symbol to declare return type of shmat()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:d_shmat shmattype d_shmatprototype: Inlibc cat +cc +ccflags \
 rm cppstdin cppflags cppminus Findhdr Setvar contains
?MAKE: -pick add $@ %<
?S:d_shmat:
?S: This variable conditionally defines the HAS_SHMAT symbol, which
?S: indicates to the C program that the shmat() routine is available.
?S:.
?S:shmattype:
?S: This symbol contains the type of pointer returned by shmat().
?S: It can be 'void *' or 'char *'.
?S:.
?S:d_shmatprototype:
?S: This variable conditionally defines the HAS_SHMAT_PROTOTYPE
?S: symbol, which indicates that sys/shm.h has a prototype for
?S: shmat.
?S:.
?C:HAS_SHMAT:
?C: This symbol, if defined, indicates that the shmat() routine is
?C: available to attach a shared memory segment to the process space.
?C:.
```

```
?C:Shmat_t:
?C: This symbol holds the return type of the shmat() system call.
?C: Usually set to 'void *' or 'char *'.
?C:.
?C:HAS_SHMAT_PROTOTYPE:
?C: This symbol, if defined, indicates that the sys/shm.h includes
?C: a prototype for shmat().
  Otherwise, it is up to the program to
?C: guess one.  Shmat_t shmat(int, Shmat_t, int) is a good guess,
?C: but not always right so it should be emitted by the program only
?C: when HAS_SHMAT_PROTOTYPE is not defined to avoid conflicting defs.
?C:.
?H:#$d_shmat HAS_SHMAT  /**/
?H:#define Shmat_t $shmattype /**/
?H:#$d_shmatprototype HAS_SHMAT_PROTOTYPE /**/
?H:.
?LINT:set d_shmat d_shmatprototype
?T:xxx
: see if shmat exists
set shmat d_shmat
eval $inlibc
: see what shmat returns
case "$d_shmat" in
"$define")
 $cat >shmat.c <<'END'
#include <sys/shm.h>
void *shmat();
END
 if $cc $ccflags -c shmat.c >/dev/null 2>&1; then
  shmattype='void *'
 else
  shmattype='char *'
 fi
 echo "and it returns ($shmattype)." >&4
 : see if a prototype for shmat is available
 xxx=`./findhdr sys/shm.h`
 $cppstdin $cppflags $cppminus < $xxx > shmat.c 2>/dev/null
 if $contains 'shmat.*(' shmat.c >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 $rm -f shmat.[co]
 ;;
*)
 val="$undef"
 ;;
esac
```

```
set
 d_shmatprototype
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_shmat.U
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```
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?RCS:
?MAKE:d_hasmntopt: Inlibc
?MAKE: -pick add $@ %<
?S:d_hasmntopt:
?S: This variable conditionally defines the HAS_HASMNTOPT symbol, which
?S: indicates to the C program that the hasmntopt() routine is available
?S: to query the mount options of file systems.
?S:.
?C:HAS_HASMNTOPT:
?C: This symbol, if defined, indicates that the hasmntopt routine is
?C: available to query the mount options of file systems.
?C:.
?H:#$d_hasmntopt HAS_HASMNTOPT  /**/
?H:.
?LINT:set d_hasmntopt
: see if hasmntopt exists
set hasmntopt d_hasmntopt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_hasmntopt.U
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```
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?RCS:
?RCS: $Log: d_const.U,v $
```

```
?RCS: Revision 3.0.1.1  1993/11/10  17:33:41  ram
?RCS: patch14: stronger const check with added typedef for MIPS cc
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_const: cat rm cc ccflags Setvar
?MAKE: -pick add $@ %<
?S:d_const:
?S: This variable conditionally defines the HASCONST symbol, which
?S: indicates to the C program that this C compiler knows about the
?S: const type.
?S:.
?C:HASCONST ~ %<:
?C: This symbol,
 if defined, indicates that this C compiler knows about
?C: the const type. There is no need to actually test for that symbol
?C: within your programs. The mere use of the "const" keyword will
?C: trigger the necessary tests.
?C:.
?H:?%<:#$d_const HASCONST /**/
?H:?%<:#ifndef HASCONST
?H:?%<:#define const
?H:?%<:#endif
?H:.
?W:%<:const
?F:const.c const.o
?LINT:set d_const
?LINT:known const
: check for const keyword
echo " "
echo 'Checking to see if your C compiler knows about "const"...' >&4
$cat >const.c <<'EOCP'
?X: mmcg@bruce.cs.monash.edu.au reports that:
?X: The MIPS cc compiler (V2.10) on a dec 5000 running Ultrix 4.2A
?X: pretends to understand `const' but doesn't - it'll also fail to
?X: handle typedefs properly if they're declared const. To guard
?X: against this, boost up the test by using an explicit typedef...
typedef struct spug { int drokk; } spug;
int main()
{
 const char *foo;
 const spug y;
}
EOCP
if $cc -c $ccflags const.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup,
```

```
 it does."
else
 val="$undef"
 echo "Nope, it doesn't."
fi
set d_const
eval $setvar
$rm -f const.c const.o
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_const.U
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```
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?RCS:
?MAKE:d_fs_data_s: Hasstruct i_sysparam i_sysmount i_systypes Setvar
?MAKE: -pick add $@ %<
?S:d_fs_data_s:
?S: This variable conditionally defines the HAS_STRUCT_FS_DATA symbol,
?S: which indicates that the struct fs_data is supported.
?S:.
?C:HAS_STRUCT_FS_DATA:
?C: This symbol, if defined, indicates that the struct fs_data
?C: to do statfs() is supported.
?C:.
?H:#$d_fs_data_s HAS_STRUCT_FS_DATA /**/
?H:.
?LINT:set d_fs_data_s
: Check for fs_data_s
echo " "
echo "Checking to see if your system supports struct fs_data..." >&4
set d_fs_data_s fs_data $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h
eval $hasstruct
case "$d_fs_data_s" in
"$define")      echo "Yes, it does."   ;;
*)
            echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fs_data_s.U
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```
?RCS: $Id: longsize.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: $Log: longsize.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:09:35  ram
?RCS: patch61: code moved to intsize.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:24:31  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: 'longsize' is now defined within intsize.U
?X:
?LINT: empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/longsize.U
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```
?RCS: $Id: d_pidcheck.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pidcheck.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:37:55  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_pidcheck: cat rm +cc _o
```

```
?MAKE: -pick add $@ %<
?S:d_pidcheck:
?S: This variable conditionally defines the variable PIDCHECK
?S: which indicates that kill(pid, 0) will check for an
 active pid.
?S:.
?C:PIDCHECK:
?C: This symbol, if defined, means that the kill(pid, 0) will
?C: check for an active pid (i.e. the kernel will run all the
?C: necessary pid checks, but no signal is actually sent).
?C:.
?H:#$d_pidcheck PIDCHECK  /**/
?H:.
?F:!try
: check for "kill(pid, 0)"
echo " "
case "$d_pidcheck" in
"$define")
echo "I already know your system supports kill(pid, 0) for pid checks." >&4
 ;;
"$undef")
echo "We both know your system does not support signal #0 for pid checks." >&4
 ;;
*)
 echo "Checking to see if kill(pid, 0) works..." >&4
 $cat >try.c <<'EOCP'
int main()
 {
 int pid, status0, status9;

 if ((pid = fork()) == 0)
  {
  sleep(30);
  exit(1);
  }
 status0 = kill(pid, 0);
 status9 = kill(pid, 9);
 exit(status0 == status9);
 }
EOCP
 if $cc -o try try.c >/dev/null 2>&1 ; then
  if ./try >/dev/null 2>&1 ; then
   echo "Yes, it does marvels."
   d_pidcheck="$undef"
  else
   d_pidcheck="$define"
   echo "No, it doesn't."
  fi
```

```
 else
  echo "(I was unable to compile
 the test program.)"
  echo "Your system does not appear to support kill(pid, 0)."
  d_pidcheck="$undef"
 fi
 $rm -f try.c try$_o try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pidcheck.U
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```
?RCS: $Id: d_attribut.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_attribut.U,v $
?RCS: Revision 3.0.1.3  1995/01/30  14:33:45  ram
?RCS: patch49: test C program now includes <stdio.h> (WED)
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:25:47  ram
?RCS: patch45: fixed typo in the d_attribut variable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:55  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_attribute_deprecated d_attribute_format
 d_attribute_malloc \
 d_attribute_nonnull d_attribute_noreturn d_attribute_pure \
 d_attribute_unused d_attribute_warn_unused_result \
 d_printf_format_null d_attribute_always_inline: \
    Myread Oldconfig cat cc ccflags rm Setvar compiler_warning \
         i_stdlib run i_inttypes
?MAKE: -pick add $@ %<
?S:d_attribute_format:
?S: This variable conditionally defines HASATTRIBUTE_FORMAT, which
?S: indicates the C compiler can check for printf-like formats.
?S:.
```

```
?S:d_attribute_deprecated:
?S: This variable conditionally defines HASATTRIBUTE_DEPRECATED, which
?S: indicates that GCC can handle the attribute for marking deprecated
?S: APIs
?S:.
?S:d_printf_format_null:
?S: This variable conditionally defines PRINTF_FORMAT_NULL_OK, which
?S: indicates the C compiler allows printf-like formats to be null.
?S:.
?S:d_attribute_malloc:
?S: This variable conditionally defines HASATTRIBUTE_MALLOC, which
?S: indicates the C compiler can understand functions as having
?S: malloc-like semantics.
?S:.
?S:d_attribute_nonnull:
?S: This
 variable conditionally defines HASATTRIBUTE_NONNULL, which
?S: indicates that the C compiler can know that certain arguments
?S: must not be NULL, and will check accordingly at compile time.
?S:.
?S:d_attribute_noreturn:
?S: This variable conditionally defines HASATTRIBUTE_NORETURN, which
?S: indicates that the C compiler can know that certain functions
?S: are guaranteed never to return.
?S:.
?S:d_attribute_pure:
?S: This variable conditionally defines HASATTRIBUTE_PURE, which
?S: indicates that the C compiler can know that certain functions
?S: are "pure" functions, meaning that they have no side effects, and
?S: only rely on function input and/or global data for their results.
?S:.
?S:d_attribute_unused:
?S: This variable conditionally defines HASATTRIBUTE_UNUSED, which
?S: indicates that the C compiler can know that certain variables
?S: and arguments may not always be used, and to not throw warnings
?S: if they don't get used.
?S:.
?S:d_attribute_warn_unused_result:
?S: This
 variable conditionally defines
?S: HASATTRIBUTE_WARN_UNUSED_RESULT, which indicates that the C
?S: compiler can know that certain functions have a return values
?S: that must not be ignored, such as malloc() or open().
?S:.
?S:d_attribute_always_inline:
?S: This variable conditionally defines HASATTRIBUTE_ALWAYS_INLINE,
?S: which indicates that the C compiler can know that certain
?S: functions should always be inlined.
```

```
?S:.
?C:HASATTRIBUTE_FORMAT ~ %< (GNUC_ATTRIBUTE_CHECK):
?C: Can we handle GCC attribute for checking printf-style formats
?C:.
?C:PRINTF_FORMAT_NULL_OK:
?C: Allows __printf__ format to be null when checking printf-style
?C:.
?C:HASATTRIBUTE_MALLOC:
?C: Can we handle GCC attribute for malloc-style functions.
?C:.
?C:HASATTRIBUTE_NONNULL:
?C: Can we handle GCC attribute for nonnull function parms.
?C:.
?C:HASATTRIBUTE_NORETURN:
?C: Can we handle GCC attribute for functions that do not return
?C:.
?C:HASATTRIBUTE_PURE:
?C: Can we handle
 GCC attribute for pure functions
?C:.
?C:HASATTRIBUTE_UNUSED:
?C: Can we handle GCC attribute for unused variables and arguments
?C:.
?C:HASATTRIBUTE_DEPRECATED:
?C: Can we handle GCC attribute for marking deprecated APIs
?C:.
?C:HASATTRIBUTE_WARN_UNUSED_RESULT ~ %< (HASATTRIBUTE):
?C: Can we handle GCC attribute for warning on unused results
?C:.
?C:HASATTRIBUTE_ALWAYS_INLINE:
?C: Can we handle GCC attribute for functions that should always be
?C: inlined.
?C:.
?H:?%<:#$d_attribute_deprecated HASATTRIBUTE_DEPRECATED /**/
?H:?%<:#$d_attribute_format HASATTRIBUTE_FORMAT /**/
?H:?%<:#$d_printf_format_null PRINTF_FORMAT_NULL_OK /**/
?H:?%<:#$d_attribute_noreturn HASATTRIBUTE_NORETURN /**/
?H:?%<:#$d_attribute_malloc HASATTRIBUTE_MALLOC /**/
?H:?%<:#$d_attribute_nonnull HASATTRIBUTE_NONNULL /**/
?H:?%<:#$d_attribute_pure HASATTRIBUTE_PURE /**/
?H:?%<:#$d_attribute_unused HASATTRIBUTE_UNUSED /**/
?H:?%<:#$d_attribute_warn_unused_result HASATTRIBUTE_WARN_UNUSED_RESULT /**/
?H:?%<:#$d_attribute_always_inline
 HASATTRIBUTE_ALWAYS_INLINE /**/
?H:.
?F:!attrib !attrib.out !attrib.c
?LINT:set d_attribute_deprecated
?LINT:set d_attribute_format
```

```
?LINT:set d_printf_format_null
?LINT:set d_attribute_malloc
?LINT:set d_attribute_nonnull
?LINT:set d_attribute_noreturn
?LINT:set d_attribute_pure
?LINT:set d_attribute_unused
?LINT:set d_attribute_warn_unused_result
?LINT:set d_attribute_always_inline
: Look for GCC-style attribute format
case "$d_attribute_format" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((format)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void my_special_printf(char* pat,...) __attribute__((__format__(__printf__,1,2)));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((format))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((format))."
  val="$define"
 fi
else
 echo "Your C compiler
 doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_format" ;;
esac
set d_attribute_format
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute format with null format allowed
case "$d_printf_format_null" in
") case "$d_attribute_format" in
   $define)
 echo " "
 echo "Checking whether your compiler allows __printf__ format to be null ..." >&4
$cat >attrib.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
```

```
#endif
#$i_inttypes I_INTTYPES
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
#ifndef INTPTR_MAX
#define intptr_t int
#endif
int null_printf (char* pat,...) __attribute__((__format__(__printf__,1,2)));
int null_printf (char* pat,...) { return (int)(intptr_t)pat; }
int main () { exit(null_printf(NULL)); }
EOCP
 if $cc $ccflags -o attrib attrib.c >attrib.out 2>&1 ; then
     : run the executable in case it produces a run-time warning
     if $run ./attrib >>attrib.out 2>&1; then
  if $compiler_warning attrib.out
 >/dev/null 2>&1; then
      echo "Your C compiler doesn't allow __printf__ format to be null."
      val="$undef"
  else
      echo "Your C compiler allows __printf__ format to be null."
      val="$define"
  fi
     else
     echo "Your C compiler executable failed with __printf__ format null."
     val="$undef"
 fi
   else
 echo "Your C compiler fails with __printf__ format null."
 val="$undef"
   fi
   ;;
   *)  val="$undef" ;;
   esac
;;
*)  val="$d_printf_format_null" ;;
esac
set d_printf_format_null
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute malloc
case "$d_attribute_malloc" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((malloc)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
```

```
char *go_get_some_memory( int how_many_bytes ) __attribute__((malloc));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((malloc))."
  val="$undef"
 else
  echo
 "Your C compiler supports __attribute__((malloc))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_malloc" ;;
esac
set d_attribute_malloc
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute nonnull
case "$d_attribute_nonnull" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((nonnull(1))) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void do_something (char *some_pointer,...) __attribute__((nonnull(1)));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((nonnull))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((nonnull))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_nonnull" ;;
esac
set d_attribute_nonnull
eval
```

```
 $setvar
$rm -f attrib*

: Look for GCC-style attribute noreturn
case "$d_attribute_noreturn" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((noreturn)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void fall_over_dead( void ) __attribute__((noreturn));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((noreturn))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((noreturn))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_noreturn" ;;
esac
set d_attribute_noreturn
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute pure
case "$d_attribute_pure" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((pure)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int square( int
 n ) __attribute__((pure));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((pure))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((pure))."
  val="$define"
```

```
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_pure" ;;
esac
set d_attribute_pure
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute unused
case "$d_attribute_unused" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((unused)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int do_something( int dummy __attribute__((unused)), int n );
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((unused))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((unused))."
  val="$define"
 fi
else
 echo
 "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_unused" ;;
esac
set d_attribute_unused
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute deprecated
case "$d_attribute_deprecated" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((deprecated)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
```

```
int I_am_deprecated(void) __attribute__((deprecated));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((deprecated))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((deprecated))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_deprecated" ;;
esac
set d_attribute_deprecated
eval $setvar
$rm -f attrib*

: Look for GCC-style attribute
 warn_unused_result
case "$d_attribute_warn_unused_result" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((warn_unused_result)) ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
int I_will_not_be_ignored(void) __attribute__((warn_unused_result));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((warn_unused_result))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((warn_unused_result))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_warn_unused_result" ;;
esac
set d_attribute_warn_unused_result
eval $setvar
```

```
$rm -f attrib*

: Look for GCC-style attribute always_inline
case "$d_attribute_always_inline" in
")
echo " "
echo "Checking whether your compiler can handle __attribute__((always_inline)) ..." >&4
$cat >attrib.c <<'EOCP'
#include
 <stdio.h>
static __inline__ __attribute__((always_inline)) int I_will_always_be_inlined(void);
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $compiler_warning attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't support __attribute__((always_inline))."
  val="$undef"
 else
  echo "Your C compiler supports __attribute__((always_inline))."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
;;
*) val="$d_attribute_always_inline" ;;
esac
set d_attribute_always_inline
eval $setvar
$rm -f attrib*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_attribut.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_crypt_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_crypt_r crypt_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_crypt extern_C
?MAKE: -pick add $@ %<
?S:d_crypt_r:
?S: This variable conditionally defines the HAS_CRYPT_R symbol,
```

```
?S: which indicates to the C program that the crypt_r()
?S: routine is available.
?S:.
?S:crypt_r_proto:
?S: This variable encodes the prototype of crypt_r.
?S: It is zero if d_crypt_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_crypt_r
?S: is defined.
?S:.
?C:HAS_CRYPT_R:
?C: This symbol, if defined, indicates that the crypt_r routine
?C: is available to crypt re-entrantly.
?C:.
?C:CRYPT_R_PROTO:
?C: This
 symbol encodes the prototype of crypt_r.
?C: It is zero if d_crypt_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_crypt_r
?C: is defined.
?C:.
?H:#$d_crypt_r HAS_CRYPT_R /**/
?H:#define CRYPT_R_PROTO $crypt_r_proto /**/
?H:.
?T:try hdrs d_crypt_r_proto
: see if crypt_r exists
set crypt_r d_crypt_r
eval $inlibc
case "$d_crypt_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_crypt crypt.h"
 case "$d_crypt_r_proto:$usethreads" in
 ":define") d_crypt_r_proto=define
  set d_crypt_r_proto crypt_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_crypt_r_proto" in
 define)
 case "$crypt_r_proto" in
 "|0) try='char* crypt_r(const char*, const char*, struct crypt_data*);'
 ./protochk "$extern_C $try" $hdrs && crypt_r_proto=B_CCS ;;
 esac
 case "$crypt_r_proto" in
 "|0) try='char* crypt_r(const char*, const char*, CRYPTD*);'
 ./protochk "$extern_C $try" $hdrs && crypt_r_proto=B_CCD ;;
 esac
 case "$crypt_r_proto" in
 "|0) d_crypt_r=undef
```

```
  crypt_r_proto=0
  echo
 "Disabling crypt_r, cannot determine prototype." >&4 ;;
 * ) case "$crypt_r_proto" in
  REENTRANT_PROTO*) ;;
  *) crypt_r_proto="REENTRANT_PROTO_$crypt_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "crypt_r has no prototype, not using it." >&4 ;;
  esac
  d_crypt_r=undef
  crypt_r_proto=0
  ;;
 esac
 ;;
*) crypt_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_crypt_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: prefix.U,v $
?RCS: Revision 3.0.1.2  1995/01/30  14:44:05  ram
?RCS: patch49: new prefixexp variable holding a fully expanded prefix
?RCS: patch49: save off previous prefix value in oldprefix if changed (WED)
?RCS: patch49: added the INSTALLPREFIX define for C programs to use (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:31:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:prefix prefixexp +oldprefix: Getfile Loc Oldconfig
```

```
 cat package
?MAKE: -pick add $@ %<
?S:prefix:
?S: This variable holds the name of the directory below which the
?S: user will install the package.  Usually, this is /usr/local, and
?S: executables go in /usr/local/bin, library stuff in /usr/local/lib,
?S: man pages in /usr/local/man, etc.  It is only used to set defaults
?S: for things in bin.U, mansrc.U, privlib.U, or scriptdir.U.
?S:.
?S:prefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install the package.  Derived from prefix.
?S:.
?S:oldprefix:
?S: This variable is set non-null if the prefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
?C:INSTALLPREFIX:
?C: This symbol contains the name of the install prefix for this package.
?C:.
?H:#define INSTALLPREFIX "$prefix"  /**/
?H:.
: determine root of directory hierarchy where package will be installed.
case "$prefix" in
")
 dflt=`./loc . /usr/local /usr/local /local /opt
 /usr`
 ;;
*)
 dflt="$prefix"
 ;;
esac
$cat <<EOM

By default, $package will be installed in $dflt/bin, manual
pages under $dflt/man, etc..., i.e. with $dflt as prefix for
all installation directories. Typically set to /usr/local, but you
may choose /usr if you wish to install $package among your system
binaries. If you wish to have binaries under /bin but manual pages
under /usr/local/man, that's ok: you will be prompted separately
for each of the installation directories, the prefix being only used
to set the defaults.

EOM
fn=d~
rp='Installation prefix to use?'
. ./getfile
oldprefix="
```

```
case "$prefix" in
") ;;
*)
 case "$ans" in
 "$prefix") ;;
 *) oldprefix="$prefix";;
 esac
 ;;
esac
prefix="$ans"
prefixexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_charsprf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_charsprf.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_charsprf: cat rm +cc Setvar
?MAKE: -pick add $@ %<
?S:d_charsprf:
?S: This variable conditionally defines CHARSPRINTF if this system
?S: declares "char *sprintf()" in stdio.h.  The trend seems to be to
?S: declare it as "int sprintf()".
?S:.
?C:CHARSPRINTF:
?C: This symbol is defined if this system declares "char *sprintf()" in
?C: stdio.h.
  The trend seems to be to declare it as "int sprintf()".  It
?C: is up to the package author to declare sprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_charsprf CHARSPRINTF  /**/
?H:.
?F:!ucbsprf.c !ucbsprf
?LINT:set d_charsprf
```

```
: see if sprintf is declared as int or pointer to char
echo " "
$cat >ucbsprf.c <<'EOF'
int main()
{
 int sprintf();
 char buf[10];
 exit((unsigned long)sprintf(buf,"%s","foo") > 10L);
}
EOF
if $cc -o ucbsprf ucbsprf.c >/dev/null 2>&1 && ./ucbsprf; then
 echo "Your sprintf() returns (int)." >&4
 val="$undef"
else
 echo "Your sprintf() returns (char*)." >&4
 val="$define"
fi
set d_charsprf
eval $setvar
$rm -f ucbsprf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_charsprf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nextafter: Inlibc
?MAKE: -pick add $@ %<
?S:d_nextafter:
?S: This variable conditionally defines HAS_NEXTAFTER if nextafter()
?S: is available to return the next machine representable double from
?S: x in direction y.
?S:.
?C:HAS_NEXTAFTER:
?C: This symbol, if defined, indicates that the nextafter routine is
?C: available to return the next machine representable double from
?C: x in direction y.
?C:.
?H:#$d_nextafter HAS_NEXTAFTER  /**/
?H:.
?LINT:set d_nextafter
: see if nextafter exists
set nextafter d_nextafter
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nextafter.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgsnd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgsnd.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgsnd: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgsnd:
?S: This variable conditionally defines the HAS_MSGSND symbol, which
?S: indicates to the C program that the msgsnd() routine is available.
?S:.
?C:HAS_MSGSND:
?C: This symbol, if defined, indicates that the msgsnd() routine is
?C: available to send a message into the message queue.
?C:.
?H:#$d_msgsnd
 HAS_MSGSND  /**/
?H:.
?LINT:set d_msgsnd
: see if msgsnd exists
set msgsnd d_msgsnd
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgsnd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017-2018, H.Merijn Brand
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_accept4: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_accept4:
?S: This variable conditionally defines HAS_ACCEPT4 if accept4() is
?S: available to accept socket connections.
?S:.
?C:HAS_ACCEPT4:
?C: This symbol, if defined, indicates that the accept4 routine is
?C: available to accept socket connections.
?C:.
?H:#$d_accept4 HAS_ACCEPT4 /**/
?H:.
?LINT:set d_accept4
: see if accept4 exists
set accept4 d_accept4
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_accept4.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:usevendorprefix vendorprefix vendorprefixexp +oldvendorprefix: \
 Getfile Loc Oldconfig cat prefix Myread
?MAKE: -pick add $@ %<
?S:usevendorprefix:
?S: This variable tells whether the vendorprefix
?S: and consequently other vendor* paths are in use.
?S:.
?S:vendorprefix:
?S: This variable holds the full absolute path of the directory below
?S: which
 the vendor will install add-on packages.
?S: See INSTALL for usage and examples.
?S:.
?S:vendorprefixexp:
```

```
?S: This variable holds the full absolute path of the directory below
?S: which the vendor will install add-on packages.  Derived from vendorprefix.
?S:.
?S:oldvendorprefix:
?S: This variable is set non-null if the vendorprefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
: Set the vendorprefix variables
$cat <<EOM

The installation process will also create a directory for
vendor-supplied add-ons.  Vendors who supply perl with their system
may find it convenient to place all vendor-supplied files in this
directory rather than in the main distribution directory.  This will
ease upgrades between binary-compatible maintenance versions of perl.

Of course you may also use these directories in whatever way you see
fit.  For example, you might use them to access modules shared over a
company-wide network.

The default answer should be
 fine for most people.
This causes further questions about vendor add-ons to be skipped
and no vendor-specific directories will be configured for perl.

EOM
rp='Do you want to configure vendor-specific add-on directories?'
case "$usevendorprefix" in
define|true|[yY]*) dflt=y ;;
*) : User may have set vendorprefix directly on Configure command line.
 case "$vendorprefix" in
 ''|' ') dflt=n ;;
 *) dflt=y ;;
 esac
 ;;
esac
. ./myread
case "$ans" in
[yY]*) fn=d~+
 rp='Installation prefix to use for vendor-supplied add-ons?'
 case "$vendorprefix" in
 '') dflt="$prefix" ;;
 *)  dflt=$vendorprefix ;;
 esac
 . ./getfile
 : XXX Prefixit unit does not yet support siteprefix and vendorprefix
 oldvendorprefix=''
 case "$vendorprefix" in
```

```
 ") ;;
 *) case "$ans" in
  "$prefix") ;;
  *) oldvendorprefix="$prefix";;
  esac
  ;;
 esac
 usevendorprefix="$define"
 vendorprefix="$ans"
 vendorprefixexp="$ansexp"
 ;;
*) usevendorprefix="$undef"
 vendorprefix=''
 vendorprefixexp=''
 ;;
esac
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorprefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sbrk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sbrk.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:31  ram
?RCS: patch16: created
?RCS:
?MAKE:d_sbrk: Inlibc
?MAKE: -pick add $@ %<
?S:d_sbrk:
?S: This variable conditionally defines HAS_SBRK if sbrk() is
?S: available to add more core to the process.
?S:.
?C:HAS_SBRK:
?C: This symbol, if defined, indicates that the sbrk system call is
?C: available to add/relase core. Always true on Unix.
?C:.
?H:#$d_sbrk HAS_SBRK /**/
?H:.
```

```
?LINT:set d_sbrk
: see
 if sbrk exists
set sbrk d_sbrk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sbrk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vaproto.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: vaproto.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:17:16  ram
?RCS: patch16: definition of _V now appears only when needed
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:vaproto: prototype i_stdarg Setvar
?MAKE: -pick add $@ %<
?S:vaproto:
?S: This variable conditionally defines CAN_VAPROTO on systems supporting
?S: prototype
 declaration of functions with a variable number of
?S: arguments. See also prototype.
?S:.
?C:CAN_VAPROTO ~ %<:
?C: This variable is defined on systems supporting prototype declaration
?C: of functions with a variable number of arguments.
?C:.
?C:_V:
?C: This macro is used to declare function parameters in prototypes for
?C: functions with a variable number of parameters. Use double parentheses.
?C: For example:
?C:
?C:  int printf _V((char *fmt, ...));
?C:
```

```
?C: Remember to use the plain simple _() macro when declaring a function
?C: with no variable number of arguments, since it might be possible to
?C: have a non-effect _V() macro and still get prototypes via _().
?C:.
?H:?%<:#$vaproto CAN_VAPROTO /**/
?H:?_V:#ifdef CAN_VAPROTO
?H:?_V:#define _V(args) args
?H:?_V:#else
?H:?_V:#define _V(args) ()
?H:?_V:#endif
?H:.
?LINT:set vaproto
: see if prototypes support variable argument declarations
echo " "
case "$prototype$i_stdarg" in
$define$define)
 echo "It appears we'll be able
 to prototype varargs functions." >&4
 val="$define"
 ;;
*)
 echo "Too bad... We won't be using prototyped varargs functions..." >&4
 val="$undef"
 ;;
esac
set vaproto
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/vaproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Findhdr.U,v 3.0.1.2 1994/10/29 15:53:08 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Thomas Neumann <tom@smart.bo.open.de>
?RCS:
?RCS: $Log: Findhdr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:53:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
```

```
?RCS: Revision 3.0.1.1  1994/05/06  14:03:56  ram
?RCS: patch23: cppminus must be after other cppflags, not before
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a findhdr script which
 is used to locate the header
?X: files in $usrinc or other stranger places using cpp capabilities. The
?X: script is given an include file base name, like 'stdio.h' or 'sys/file.h'
?X: and it returns the full path of the include file and a zero status or an
?X: empty string with an error status if the file could not be located.
?X:
?MAKE:Findhdr: grep test tr rm incpth awk cat startsh \
 cppstdin cppminus +cppflags osname
?MAKE: -pick add $@ %<
?LINT:extern cppfilter
?LINT:define fieldn
?S:fieldn:
?S: This variable is used internally by Configure. It contains the position
?S: of the included file name in cpp output. That is to say, when cpp
?S: pre-processes a #include <file> line, it replaces it by a # line which
?S: contains the original position in the input file and the full name of
?S: included file, between "quotes".
?S:.
?V:fieldn
?F:./findhdr !fieldn
?T:cline pos wanted name awkprg usrincdir status testaccess
: determine filename position in cpp output
echo " "
echo "Computing
 filename position in cpp output for #include directives..." >&4
case "$osname" in
amigaos) fieldn=3 ;;  # Workaround for a bug in abc (pdksh).
esac
case "$fieldn" in
")
case "$osname" in
vos) testaccess=-e ;;
*)   testaccess=-r ;;
esac
echo '#include <stdio.h>' > foo.c
$cat >fieldn <<EOF
$startsh
$cppstdin $cppflags $cppminus <foo.c 2>/dev/null | \
$grep '^[  ]*#.*stdio\.h' | \
while read cline; do
```

```
 pos=1
 set \$cline
 while $test \$# -gt 0; do
  if $test $testaccess \`echo \$1 | $tr -d ""\`; then
   echo "\$pos"
   exit 0
  fi
  shift
  pos=\`expr \$pos + 1\`
 done
done
EOF
chmod +x fieldn
fieldn=`./fieldn`
$rm -f foo.c fieldn
;;
esac
case $fieldn in
") pos='???';;
1) pos=first;;
2) pos=second;;
3) pos=third;;
*) pos="${fieldn}th";;
esac
echo "Your cpp writes the filename in the $pos field of the line."

?X: To locate a header file, we cannot simply check for $usrinc/file.h, since
?X: some machine have the headers in weird places and our only hope is that
?X: the C pre-processor
 will know how to find those headers. Thank you NexT!
: locate header file
$cat >findhdr <<EOF
$startsh
wanted=\$1
name=''
for usrincdir in $incpth
do
 if test -f \$usrincdir/\$wanted; then
  echo "\$usrincdir/\$wanted"
  exit 0
 fi
done
awkprg='{ print \$$fieldn }'
echo "#include <\$wanted>" > foo\$\$.c
$cppstdin $cppminus $cppflags < foo\$\$.c 2>/dev/null | \
$cppfilter $grep "^[  ]*#.*\$wanted" | \
while read cline; do
 name=\`echo \$cline | $awk "\$awkprg" | $tr -d ""\`
```

```
 case "\$name" in
 *[/\\\\]\$wanted) echo "\$name"; exit 1;;
 *[\\\\/]\$wanted) echo "\$name"; exit 1;;
 *) exit 2;;
 esac;
done;
#
# status = 0: grep returned 0 lines, case statement not executed
# status = 1: headerfile found
# status = 2: while loop executed, no headerfile found
#
status=\$?
$rm -f foo\$\$.c;
if test \$status -eq 1; then
 exit 0;
fi
exit 1
EOF
chmod +x findhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Findhdr.U
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```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ualarm: Inlibc
?MAKE: -pick add $@ %<
?S:d_ualarm:
?S: This variable conditionally defines the HAS_UALARM symbol, which
?S: indicates to the C program that the ualarm() routine is available.
?S:.
?C:HAS_UALARM:
?C: This symbol, if defined, indicates that the ualarm routine is
?C: available to do alarms with microsecond granularity.
?C:.
?H:#$d_ualarm HAS_UALARM  /**/
?H:.
?LINT:set d_ualarm
: see if ualarm exists
set ualarm d_ualarm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ualarm.U
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```
?RCS: $Id: i_vfork.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_vfork.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  15:05:44  ram
?RCS: patch23: avoid inclusion of <vfork.h> if no vfork() used (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_vfork: Inhdr d_vfork
?MAKE: -pick add $@ %<
?S:i_vfork:
?S: This variable conditionally defines the I_VFORK symbol, and indicates
?S: whether a C program should include vfork.h.
?S:.
?C:I_VFORK:
?C: This symbol,
 if defined, indicates to the C program that it should
?C: include vfork.h.
?C:.
?H:#$i_vfork I_VFORK /**/
?H:.
: see if this is a vfork system
case "$d_vfork" in
"$define")
 set vfork.h i_vfork
 eval $inhdr
 ;;
*)
 i_vfork="$undef"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_vfork.U

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```
?RCS: $Id: Inlibc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Inlibc.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  15:55:08  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks for the definition of a given function.
?X:
?X: To use it, say:
?X: set function d_func
?X: eval $inlibc
?X:
?MAKE:Inlibc: Csym Whoa Oldconfig
?MAKE: -pick add $@ %<
?LINT:define inlibc
?V:inlibc
?S:inlibc:
?S: This
 shell variable is used internally by Configure to check
?S: wether a given function is defined or not. A typical use is:
?S:  set function d_func
?S:  eval $inlibc
?S: That will print a message, saying wether function was found or
?S: not and set d_func accordingly.
?S:.
?T:was tx sym tres td tu var
: define an is-in-libc? function
inlibc='echo " "; td=$define; tu=$undef;
sym=$1; var=$2; eval "was=\$$2";
tx=yes;
case "$reuseval$was" in
true) ;;
true*) tx=no;;
esac;
```

```
case "$tx" in
yes)
 set $sym tres -f;
 eval $csym;
 case "$tres" in
 true)
  echo "$sym() found." >&4;
  case "$was" in $undef) . ./whoa; esac; eval "$var=\$td";;
 *)
  echo "$sym() NOT found." >&4;
  case "$was" in $define) . ./whoa; esac; eval "$var=\$tu";;
 esac;;
*)
 case "$was" in
 $define) echo "$sym() found." >&4;;
 *) echo "$sym() NOT found." >&4;;
 esac;;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Inlibc.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996,1998 Andy Dougherty
?RCS: Copyright (c) 1996, Sven Verdoolaege
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_gnulibc gnulibc_version: Myread Oldconfig Setvar rm_try \
 cat Compile run
?MAKE: -pick add $@ %<
?S:d_gnulibc:
?S: Defined if we're dealing with the GNU C Library.
?S:.
?S:gnulibc_version:
?S: This variable contains the version number of the GNU C library.
?S: It is usually something like '2.2.5'.  It is a plain '' if this
?S: is not the GNU C library, or if the version is unknown.
?S:.
?C:HAS_GNULIBC ~ %<:
?C: This
```

```
 symbol, if defined, indicates to the C program that
?C: the GNU C library is being used.  A better check is to use
?C: the __GLIBC__ and __GLIBC_MINOR__ symbols supplied with glibc.
?C:.
?H:?%<:#$d_gnulibc HAS_GNULIBC   /**/
?H:?%<:#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)
?H:?%<:#define _GNU_SOURCE
?H:?%<:#endif
?H:.
?F:!glibc.ver !try.c !try
?LINT: set d_gnulibc
?LINT: usefile try.c
?LINT: known _GNU_SOURCE
?X: gnulibc can be executed by calling __libc_main().
?X: Ulrich Drepper doesn't think any other libc does that,
?X: but we check if it says 'GNU C Library' to be sure.
?X:
?X: Alas, as of 3/1998 glibc 2.0.7 reportedly isn't going to
?X: have __libc_main() anymore. :-(.  Fortunately, all released
?X: versions of glibc 2.x.x _do_ have CPP variables.  For 2.0.6,
?X: they are:
?X: #define __GLIBC__  2
?X: #define__GLIBC_MINOR__ 0.
?X: (The '6' isn't available :-(.
?X: glibc2.1 will also have
?X:  extern const char * __gnu_get_libc_release(void);
?X:  extern const char *
 __gnu_get_libc_version(void);
?X: functions.   --thanks to Andreas Jaeger.   --AD  6/1998.
?X: Although the exact format isn't documented, __gnu_get_libc_version()
?X: returns a simple string '2.1.3' in glibc 2.1.3.
?X:
: determine whether we are using a GNU C library
echo " "
echo "Checking for GNU C Library..." >&4
cat >try.c <<'EOCP'
/* Find out version of GNU C library.  __GLIBC__ and __GLIBC_MINOR__
  alone are insufficient to distinguish different versions, such as
  2.0.6 and 2.0.7.  The function gnu_get_libc_version() appeared in
  libc version 2.1.0.      A. Dougherty,  June 3, 2002.
*/
#include <stdio.h>
int main(void)
{
#ifdef __GLIBC__
#   ifdef __GLIBC_MINOR__
#       if __GLIBC__ >= 2 && __GLIBC_MINOR__ >= 1
#           include <gnu/libc-version.h>
```

```
    printf("%s\n",  gnu_get_libc_version());
#       else
    printf("%d.%d\n",  __GLIBC__, __GLIBC_MINOR__);
#       endif
#   else
 printf("%d\n",  __GLIBC__);
#   endif
   return 0;
#else
   return 1;
#endif
}
EOCP
set
 try
if eval $compile_ok && $run ./try > glibc.ver; then
 val="$define"
 gnulibc_version=`$cat glibc.ver`
 echo "You are using the GNU C Library version $gnulibc_version"
else
 val="$undef"
 gnulibc_version=''
 echo "You are not using the GNU C Library"
fi
$rm_try glibc.ver
set d_gnulibc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gnulibc.U
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```
?RCS: $Id: d_getopt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getopt.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getopt: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_getopt:
?S: This variable conditionally defines the HAS_GETOPT symbol, which
?S: indicates that the getopt() routine exists.  The getopt() routine
?S: parses command line options in a standard fashion.
?S:.
?C:HAS_GETOPT (GETOPT):
?C: This symbol, if defined, indicates that the getopt() routine
 exists.
?C:.
?H:#$d_getopt HAS_GETOPT  /**/
?H:.
?LINT:set d_getopt
: see if getopt exists
set getopt d_getopt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getopt.U
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```
?RCS: $Id: i_stddef.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stddef.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stddef: Inhdr
?MAKE: -pick add $@ %<
?S:i_stddef:
?S: This variable conditionally defines the I_STDDEF symbol, which
?S: indicates to the C program that <stddef.h> exists and should
?S: be included.
?S:.
?C:I_STDDEF:
?C: This symbol, if defined, indicates that <stddef.h> exists and should
?C: be included.
?C:.
?H:#$i_stddef I_STDDEF /**/
?H:.
?LINT:set
```

```
 i_stddef
: see if stddef is available
set stddef.h i_stddef
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_stddef.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_statblks.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_statblks: contains Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_statblks:
?S: This variable conditionally defines USE_STAT_BLOCKS if this system
?S: has a stat structure declaring st_blksize and st_blocks.
?S:.
?C:USE_STAT_BLOCKS (STATBLOCKS):
?C: This symbol is defined if this system has a stat structure declaring
?C: st_blksize and st_blocks.
?C:.
?H:#$d_statblks USE_STAT_BLOCKS
  /**/
?H:.
?T:xxx
?LINT:set d_statblks
: see if stat knows about block sizes
echo " "
xxx=`./findhdr sys/stat.h`
if $contains 'st_blocks;' "$xxx" >/dev/null 2>&1 ; then
 if $contains 'st_blksize;' "$xxx" >/dev/null 2>&1 ; then
  echo "Your stat() knows about block sizes." >&4
  val="$define"
 else
  echo "Your stat() doesn't know about block sizes." >&4
  val="$undef"
```

```
 fi
else
 echo "Your stat() doesn't know about block sizes." >&4
 val="$undef"
fi
set d_statblks
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_statblks.U
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```
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?RCS:
?MAKE:usequadmath: Setvar cat uselongdouble
?MAKE: -pick add $@ %<
?S:usequadmath:
?S: This variable conditionally defines the USE_QUADMATH symbol,
?S: and indicates that the quadmath library __float128 long doubles
?S: should be used when available.
?S:.
?C:USE_QUADMATH:
?C: This symbol, if defined, indicates that the quadmath library should
?C: be used when available.
?C:.
?H:?%<:#ifndef USE_QUADMATH
?H:?%<:#$usequadmath USE_QUADMATH  /**/
?H:?%<:#endif
?H:.
: Check if quadmath is requested
case "$usequadmath" in
"$define"|true|[yY]*) usequadmath="$define" ;;
*)                    usequadmath="$undef"  ;;
esac

: Fail if both uselongdouble and usequadmath are requested
case "$usequadmath:$uselongdouble" in
define:define)
 $cat <<EOM >&4

*** You requested the use of
 the quadmath library and use
*** of long doubles.
***
*** Please select one or the other.
EOM
 exit 1
```

```
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usequadmath.U
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```
?RCS: $Id: d_getprior.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getprior.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getprior: Inlibc
?MAKE: -pick add $@ %<
?S:d_getprior:
?S: This variable conditionally defines HAS_GETPRIORITY if getpriority()
?S: is available to get a process's priority.
?S:.
?C:HAS_GETPRIORITY (GETPRIORITY):
?C: This symbol, if defined, indicates that the getpriority routine is
?C: available to get a process's priority.
?C:.
?H:#$d_getprior
 HAS_GETPRIORITY  /**/
?H:.
: see if getpriority exists
?LINT:set d_getprior
set getpriority d_getprior
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getprior.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ieeefp.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_ieeefp: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_ieeefp:
?S: This variable conditionally defines the I_IEEEFP symbol, and indicates
?S: whether a C program should include <ieeefp.h>.
?S:.
?C:I_IEEEFP:
?C: This symbol, if defined, indicates that <ieeefp.h> exists and
?C: should be included.
?C:.
?H:#$i_ieeefp I_IEEEFP  /**/
?H:.
?LINT:set i_ieeefp
: see if this is a ieeefp.h system
case "$i_ieeefp" in
" ) set ieeefp.h i_ieeefp
    eval $inhdr
    ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_ieeefp.U
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```
?RCS: $Id$
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ftello: Inlibc longsize
?MAKE: -pick add $@ %<
?S:d_ftello:
?S: This variable conditionally defines the HAS_FTELLO symbol, which
?S: indicates to the C program that the ftello() routine is available.
?S:.
?C:HAS_FTELLO:
?C: This symbol, if defined, indicates that the ftello routine is
?C: available to ftell beyond 32 bits (useful for ILP32 hosts).
?C:.
?H:#$d_ftello HAS_FTELLO  /**/
?H:.
?LINT:set d_ftello
: see if ftello exists
set ftello d_ftello
```

```
eval $inlibc
case "$longsize" in
8) echo "(Your long is 64 bits, so you could use ftell.)" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ftello.U
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```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: uidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:33:25  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:09:36  ram
?RCS: patch30: comment for uidtype referred to the obsoleted symbol
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:28:27  ram
?RCS: patch27: made conform to its gidtype.U companion
?RCS: patch27: question now explicitly mentions getuid()
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:56  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:uidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:uidtype:
?S: This variable defines Uid_t to be something like uid_t, int,
?S: ushort, or whatever type is used to declare user ids in the kernel.
?S:.
?C:Uid_t (UIDTYPE):
?C: This symbol holds the type used to declare user ids in the kernel.
?C: It can be int, ushort, uid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Uid_t $uidtype  /* UID type */
?H:.
?T:xxx
```

```
: see what type uids are declared as in the kernel
set uid_t uidtype xxx stdio.h sys/types.h
eval $typedef
case "$uidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep '_ruid;' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$uidtype";;
esac
echo " "
rp="What is the type for user ids returned by getuid()?"
. ./myread
uidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/uidtype.U
No license file was found, but licenses were detected in source scan.

Perl5 Metaconfig Units

Copyright (c) 1996-1998, Andy Dougherty
Copyright (c) 1999-2011, H.Merijn Brand
All rights reserved.

These units are the ones used to build Configure and config_h.SH
in the Perl5 distribution.

metaconfig will first look in its standard locations (specified when you
installed dist). It will then recurse through the 'U' subdirectory
and find any additional "private" units. Private units override
standard ones supplied with metaconfig.

Files in this directory:

README
This file.

Glossary.patch
The standard dist units contain some strings that make pod2man
complain. This patch silences those warnings. As new units are
added and Configure is regenerated, this patch may need more and more
'fuzz' to be applied. It should be freshly regenerated every once
in a while. See also mkgloss.pl

ln-all.pl
Re-generate the all/ folder

mkglossary
A script
to regenerate Porting/Glossary. You have to manually
edit the top of the script to point the location of your metaconfig
units. It is called automatically by 'mksample'. See also mkgloss.pl

mkgloss.pl
A perl script that calls U/mkglossary from the perl source tree, sorts
the list of symbols, and applies the patch mentioned in Glossary.patch.
When called on its own, redirect the output to a temporary file, and
compare that file to Porting/Glossary before applying.

mksample
A script to regenerate Porting/config.sh and Porting/config.H.
It also calls mkglossary, if necessary.

Subdirectories:

The units and other related files have been broken up into the following
directories.

a_dvisory/
These are units that have to go first in the generated config_h.SH.
A word of explanation: Configure and config_h.SH are generated from 'Units'
(the *.U files). Files indicate dependencies (using make(1)), and
Configure is built to follow those dependencies.
However, config_h.SH
is simply built by putting all the units in alphabetical order and
extracting the relevant lines. (This could be fixed, I suppose, but
it wasn't trivial the one time I looked.)
The a_dvisory/ directory, then, is a place to put units that need
to be early in config_h.SH. (Most units are self-contained
and ought to be able to go anywhere. However, some things, like
byteorder, need to have the #defines from multiarch available.)

acl/
This is an old patch to begin to detect and use ACL (access
control list) file protection schemes.

all/
A folder that conveniently holds symbolic links to all the modules
that are used to build the current Configure and config_h.SH.

compline/

These are similar to the standard units, but I have modified them
to have a more uniform compile command line, usually using the
new Compile.U unit. (The ccflags.U unit is perl-specific since it
mentions -DDEBUGGING and
-DPOSIX_SOURCE, but that's the only place
it is perl-specific.)

dist_patches/
These are patches to dist that must be applied before it is built
and installed. I have submitted these for inclusion in the
regular dist distribution. They have already been applied
to the ../dist-3.0at70b directory.

ebcdic/
These are units that had to be specially modified to work under
either EBCDIC or ASCII.

installdirs/
These are units to handle perl's installation directories and
related issues.

modified/
These are modified versions of the standard units. Also included in
this directory are new units that are clearly derived from existing
units. I have submitted these for inclusion in the regular dist
distribution.

nullified/
These are null units that replace units in the standard
distribution. Typically they are there because some part of the
perl source accidentally uses a symbol that metaconfig thinks means we
want the corresponding
unit.

perl/
These are specific to perl. Some are heavily derived from
original dist units, and are marked as such. Others are original.

perl_patches/
These are patches to the perl source. This directory
should ordinarily be empty, but there may have been drift between
the standard version of perl and the one associated with these
units.

protos/
These are units modified to use the new Hasproto.U or Protochk.U
units to check for prototypes.

threads/
These are specific to threading perl.

typedefs/
These are standard units modified to use the modified Typedef.U unit to check for typedefs. (The modified Typdef.U includes a function to avoid unnecessary prompts if the typdef being searched for exists.)

Where appropriate, I submitted these units for inclusion into the regular dist distribution. However, since dist is no longer actively maintained, and the alternative is for *me* to actively maintain it, the units just
sit here.

Copyright Information:

Unless otherwise indicated, the files contained in this distribution are:

Copyright (c) 1996-1998, Andy Dougherty

The following licensing terms apply to all files contained in this distribution:

You may distribute the files contained in this distribution under the terms of either

a) the "Artistic License" which comes with Perl, or

b) the "Artistic License" which comes with dist, or

c) the GNU General Public License as published by the Free Software Foundation; either version 1, or (at your option) any later version (see the file "Copying" that comes with the Perl distribution).

Which one to use is your choice.

The units in the "modified" directory have been derived from units associated with the metaconfig program of Raphael Manfredi's "dist" distribution. These units list Raphael Manfredi as the Copyright holder. dist is distributed under a modified version of the Perl Artistic License. Clause 7 of this modified
license as contained in dist-3.0-pl60 provides:

7. You may reuse parts of this Package in your own programs, provided

that you explicitly state where you got them from, in the source code
(and, left to your courtesy, in the documentation), duplicating
all the associated copyright notices and disclaimers. Besides
your changes, if any, must be clearly marked as such. Parts reused
that way will no longer fall under this license if, and only if,
the name of your program(s) have no immediate connection with the
name of the Package itself or its associated programs. You may then
apply whatever restrictions you wish on the reused parts or choose
to place them in the Public Domain--this will apply only within the
context of your package.

In accordance with this clause, the versions of these units
contained here are made available under the same terms as the
rest of the units.

If you have any questions about the use of these units or about
the differences
between these units and the standard versions, please
feel free to ask.

Andy Dougherty doughera@lafayette.edu
Dept. of Physics
Lafayette College
Easton, PA 18042-1782

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/README
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_access.U,v 3.0 1993/08/18 12:05:42 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_access.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_access: test +cc cat +cppflags h_fcntl h_sysfile i_stdlib rm Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_access:
?S: This variable conditionally defines HAS_ACCESS if the access() system
?S: call is available to check for access permissions using real IDs.
```

```
?S:.
?C:HAS_ACCESS:
?C: This manifest constant lets the C program know that the access()
?C: system
 call is available to check for accessibility using real UID/GID.
?C: (always present on UNIX.)
?C:.
?H:#$d_access HAS_ACCESS  /**/
?H:.
?W:%<:R_OK W_OK X_OK F_OK
?LINT:set d_access
?LINT:change h_fcntl h_sysfile
: access call always available on UNIX
set access d_access
eval $inlibc

: locate the flags for 'access()'
case "$d_access" in
"$define")
 echo " "
 $cat >access.c <<EOCP
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#ifdef I_UNISTD
#include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 exit(R_OK);
}
EOCP
 : check sys/file.h first, no particular reason here
 if $test `./findhdr sys/file.h` && \
  $cc -o access $cppflags -DI_SYS_FILE access.c >/dev/null 2>&1 ; then
  h_sysfile=true;
  echo "<sys/file.h> defines the *_OK access constants." >&4
 elif $test `./findhdr fcntl.h` && \
  $cc -o access $cppflags -DI_FCNTL access.c >/dev/null 2>&1 ; then
  h_fcntl=true;
  echo
```

```
 "<fcntl.h> defines the *_OK access constants." >&4
@if I_UNISTD
 elif $test `./findhdr unistd.h` && \
  $cc -o access $cppflags -DI_UNISTD access.c >/dev/null 2>&1 ; then
  echo "<unistd.h> defines the *_OK access constants." >&4
@end
 else
  echo "I can't find the four *_OK access constants--I'll use mine." >&4
 fi
 ;;
esac
$rm -f access*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_access.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_attribut.U,v $
?RCS: Revision 3.0.1.3  1995/01/30  14:33:45  ram
?RCS: patch49: test C program now includes <stdio.h> (WED)
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:25:47  ram
?RCS: patch45: fixed typo in the d_attribut variable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:55  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_attribut: Myread Oldconfig cat cc ccflags rm Setvar contains
?MAKE: -pick add $@ %<
?S:d_attribut
 (d_attrib):
?S: This variable conditionally defines HASATTRIBUTE, which
?S: indicates the C compiler can check for function attributes,
?S: such as printf formats.
?S:.
?C:HASATTRIBUTE ~ %< (GNUC_ATTRIBUTE_CHECK):
```

```
?C: This symbol indicates the C compiler can check for function attributes,
?C: such as printf formats. This is normally only supported by GNU cc.
?C:.
?H:?%<:#$d_attribut HASATTRIBUTE  /**/
?H:?%<:#ifndef HASATTRIBUTE
?H:?%<:#define __attribute__(_arg_)
?H:?%<:#endif
?H:.
?W:%<:__attribute__
?LINT:set d_attribut
?LINT:known __attribute__
: Look for GNU-cc style attribute checking
echo " "
echo "Checking whether your compiler can handle __attribute__ ..." >&4
$cat >attrib.c <<'EOCP'
#include <stdio.h>
void croak (char* pat,...) __attribute__((format(printf,1,2),noreturn));
EOCP
if $cc $ccflags -c attrib.c >attrib.out 2>&1 ; then
 if $contains 'warning' attrib.out >/dev/null 2>&1; then
  echo "Your C compiler doesn't fully support __attribute__."
  val="$undef"
 else
  echo
 "Your C compiler supports __attribute__."
  val="$define"
 fi
else
 echo "Your C compiler doesn't seem to understand __attribute__ at all."
 val="$undef"
fi
set d_attribut
eval $setvar
$rm -f attrib*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_attribut.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2017, 2019, Karl Williamson
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
```

```
?RCS:
?MAKE:i_wctype: Inhdr
?MAKE: -pick add $@ %<
?S:i_wctype:
?S: This variable conditionally defines the I_WCTYPE symbol,
?S: that indicates whether a C program may include <wctype.h>.
?S:.
?C:I_WCTYPE:
?C: This symbol, if defined, indicates that <wctype.h> exists.
?C:.
?H:#$i_wctype I_WCTYPE  /**/
?H:.
?LINT:set i_wctype
: see if this system has wctype.h
set wctype.h i_wctype
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_wctype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitelib.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitelib.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:21:35  ram
?RCS: patch61: created
?RCS:
?MAKE:sitelib sitelibexp installsitelib sitelib_stem: cat Getfile Oldconfig \
 Setprefixvar Prefixit package version sed installstyle siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitelib=''
?S:sitelib:
?S: This variable contains the
 eventual value of the SITELIB symbol,
?S: which is the name of the private library for this package.  It may
```

```
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S: The standard distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: architecture-independent modules in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitelibexp="
?S:sitelibexp:
?S: This variable is the ~name expanded version of sitelib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installsitelib="
?S:installsitelib:
?S: This variable is really the same as sitelibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:sitelib_stem:
?S: This variable is $sitelibexp with any trailing version-specific component
?S: removed.
  The elements in inc_version_list (inc_version_list.U) can
?S: be tacked onto this variable to generate a list of directories to search.
?S:.
?C:SITELIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: After perl has been installed, users may install their own local
?C: architecture-independent modules in this directory with
?C:  MakeMaker Makefile.PL
?C: or equivalent.  See INSTALL for details.
?C:.
?C:SITELIB_EXP:
?C: This symbol contains the ~name expanded version of SITELIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?C:SITELIB_STEM:
?C: This define is SITELIB_EXP with any trailing version-specific component
?C: removed.  The elements in
 inc_version_list (inc_version_list.U) can
?C: be tacked onto this variable to generate a list of directories to search.
?C:.
?H:#define SITELIB "$sitelib"  /**/
?H:#define SITELIB_EXP "$sitelibexp"  /**/
```

```
?H:#define SITELIB_STEM "$sitelib_stem"  /**/
?H:.
?T:prog
?LINT:change prefixvar
?LINT:set installsitelib
?LINT:set sitelib
?LINT:set sitelibexp
: determine where site specific libraries go.
: Usual default is /usr/local/lib/perl5/site_perl/$version
: The default "style" setting is made in installstyle.U
: XXX No longer works with Prefixit stuff.
?X: remove any trailing -3.0 or other version identification
prog=`echo $package | $sed 's/-*[0-9.]*$//'`
case "$sitelib" in
") case "$installstyle" in
 *lib/perl5*) dflt=$siteprefix/lib/$package/site_$prog/$version ;;
 *)  dflt=$siteprefix/lib/site_$prog/$version ;;
 esac
 ;;
*) dflt="$sitelib"
 ;;
esac
$cat <<EOM

The installation process will create a directory for
site-specific extensions and modules.  Most users find it convenient
to place
 all site-specific files in this directory rather than in the
main distribution directory.

EOM
fn=d~+
rp='Pathname for the site-specific library files?'
. ./getfile
prefixvar=sitelib
. ./setprefixvar
sitelib_stem=`echo "$sitelibexp" | sed "s,/$version$,,"`
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitelib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getspnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getspnam:
?S: This variable conditionally defines HAS_GETSPNAM if getspnam() is
?S: available to retrieve SysV shadow password entries by name.
?S:.
?C:HAS_GETSPNAM:
?C: This symbol, if defined, indicates that the getspnam system call is
?C: available to retrieve SysV shadow password entries by name.
?C:.
?H:#$d_getspnam HAS_GETSPNAM  /**/
?H:.
?LINT:set d_getspnam
: see if getspnam exists
set getspnam d_getspnam
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getspnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2019 Karl Williamson
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_towupper: Inlibc
?MAKE: -pick add $@ %<
?S:d_towupper:
?S: This variable conditionally defines the HAS_TOWUPPER symbol, which
?S: indicates to the C program that the towupper() routine is available.
?S:.
?C:HAS_TOWUPPER:
?C: This symbol, if defined, indicates that the towupper () routine is
?C: available to do case conversion.
?C:.
?H:#$d_towupper HAS_TOWUPPER  /**/
?H:.
?LINT:set d_towupper
: see if towupper exists
set towupper d_towupper
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_towupper.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: ccflags.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:27:07  ram
?RCS: patch61: removed support for NO_PROTOTYPE detection on SCO
?RCS: patch61: new locincpth variable
?RCS: patch61: added info on the "additional ld flags" question
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:48:54  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.7  1995/05/12  12:08:33  ram
?RCS: patch54: now checks for cc/ccflags/ldflags coherency
?RCS:
?RCS: Revision 3.0.1.6
  1994/10/29  16:07:02  ram
?RCS: patch36: gcc versioning no longer relies on the C compiler's name
?RCS: patch36: simplified check for gcc version checking (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:06:35  ram
?RCS: patch32: propagate -posix flag from ccflags to ldflags
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:28:45  ram
?RCS: patch23: -fpcc-struct-return only needed in gcc 1.x (ADO)
?RCS: patch23: cppflags now computed on an option-by-option basis
?RCS: patch23: magically added cc flags now only done the first time
?RCS:
?RCS: Revision 3.0.1.3  1993/09/13  15:58:29  ram
?RCS: patch10: explicitly mention -DDEBUG just in case they need it (WAD)
?RCS: patch10: removed all the "tans" variable usage (WAD)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/27  14:39:38  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:24  ram
```

```
?RCS: patch6: added defaults for cppflags, ccflags and ldflags
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:31  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ccflags ldflags lkflags cppflags optimize locincpth: test cat \
 Myread Guess Options Oldconfig gccversion mips_type +usrinc \
 package contains rm rm_try +cc cppstdin cppminus cpprun cpplast libpth \
 loclibpth hint
?MAKE: -pick add $@ %<
?S:ccflags:
?S: This variable contains any additional C compiler flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:cppflags:
?S: This variable holds the flags that will be passed to the C pre-
?S: processor. It is up to the Makefile to use it.
?S:.
?S:optimize:
?S: This variable contains any optimizer/debugger flag that should be used.
?S: It is up to the Makefile to use it.
?S:.
?S:ldflags:
?S: This variable contains any additional C loader flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:lkflags:
?S: This variable contains any additional C partial linker flags desired by
?S: the user.  It is up to the Makefile to use this.
?S:.
?S:locincpth:
?S: This
 variable contains a list of additional directories to be
?S: searched by the compiler.  The appropriate -I directives will
?S: be added to ccflags.  This is intended to simplify setting
?S: local directories from the Configure command line.
?S: It's not much, but it parallels the loclibpth stuff in libpth.U.
?S:.
?T:inctest thisincl xxx flag inclwanted ftry previous thislibdir
?F:!cpp.c
?D:cppflags=''
?D:ccflags=''
?D:ldflags=''
?D:optimize=''
?INIT:: Possible local include directories to search.
?INIT:: Set locincpth to "" in a hint file to defeat local include searches.
?INIT:locincpth="/usr/local/include /opt/local/include /usr/gnu/include"
```

```
?INIT:locincpth="$locincpth /opt/gnu/include /usr/GNU/include /opt/GNU/include"
?INIT::
?INIT:: no include file wanted by default
?INIT:inclwanted="
?INIT:
: determine optimize, if desired, or use for debug flag also
case "$optimize" in
' '|$undef) dflt='none';;
")
 case "$gccversion" in
 ") dflt='-O';;
 *) dflt='-O2 -g';;
 esac
 ;;
*)
 dflt="$optimize";;
esac
case "$gccversion" in
") $cat <<EOH

Some C compilers have problems with their optimizers.  By default, $package
compiles with the -O flag to use the optimizer.  Alternately, you might want
to use the symbolic debugger, which uses the -g flag (on traditional Unix
systems).  Either flag can be specified here.  To use neither flag, specify
the word "none".

EOH
 ;;
*) $cat <<EOH

With the GNU C compiler, it is possible to supply both -O2 and -g flags, to
be able to reasonably optimize, whilst retaining the ability to use a
symbolic debugger.  Either flag can be specified here.  To use neither flag,
specify the word "none".

EOH
 ;;
esac
rp="What optimizer/debugger flag should be used?"
. ./myread
optimize="$ans"
case "$optimize" in
'none') optimize=" ";;
esac

dflt="
: We will not override a previous value, but we might want to
: augment a hint file
```

```
case "$hint" in
default|recommended)
 case "$gccversion" in
 1*) dflt='-fpcc-struct-return' ;;
 esac
?X:
 check for POSIXized ISC
 case "$gccversion" in
 2*) if test -d /etc/conf/kconfig.d &&
   $contains _POSIX_VERSION $usrinc/sys/unistd.h >/dev/null 2>&1
  then
   dflt="$dflt -posix"
  fi
  ;;
 esac
?X: turn warnings on if they're using gcc
 case "$gccversion" in
 1*|2*) dflt="$dflt -Wall";;
?X: starting with version 3, add "-W -Wall -Wformat=2 -Wshadow" by default
 *) dflt="$dflt -W -Wall -Wformat=2 -Wshadow";;
 esac
 ;;
esac

?X: In USG mode, a MIPS system may need some BSD includes
case "$mips_type" in
*BSD*|'') inclwanted="$locincpth $usrinc";;
*) inclwanted="$locincpth $inclwanted $usrinc/bsd";;
esac
for thisincl in $inclwanted; do
 if $test -d $thisincl; then
  if $test x$thisincl != x$usrinc; then
   case "$dflt" in
   *$thisincl*);;
   *) dflt="$dflt -I$thisincl";;
   esac
  fi
 fi
done

?X: Include test function (header, symbol)
inctest='if $contains $2 $usrinc/$1 >/dev/null 2>&1; then
 xxx=true;
elif $contains $2 $usrinc/sys/$1 >/dev/null 2>&1; then
 xxx=true;
else
 xxx=false;
fi;
```

```
if
 $xxx; then
 case "$dflt" in
 *$2*);;
 *) dflt="$dflt -D$2";;
 esac;
fi'

?X:
?X: OSF/1 uses __LANGUAGE_C__ instead of LANGUAGE_C
?X:
if ./osf1; then
 set signal.h __LANGUAGE_C__; eval $inctest
else
 set signal.h LANGUAGE_C; eval $inctest
fi

case "$hint" in
default|recommended) dflt="$ccflags $dflt" ;;
*) dflt="$ccflags";;
esac

case "$dflt" in
"|' ') dflt=none;;
esac
$cat <<EOH

Your C compiler may want other flags.  For this question you should include
-I/whatever and -DWHATEVER flags and any other flags used by the C compiler,
but you should NOT include libraries or ld flags like -lwhatever.

To use no flags, specify the word "none".

EOH
?X: strip leading space
set X $dflt
shift
dflt=${1+"$@"}
rp="Any additional cc flags?"
. ./myread
case "$ans" in
none) ccflags="";;
*) ccflags="$ans";;
esac

: the following weeds options from ccflags that are of no interest to cpp
cppflags="$ccflags"
case "$gccversion" in
```

```
1*) cppflags="$cppflags -D__GNUC__"
esac
case "$mips_type" in
");;
*BSD*)
 cppflags="$cppflags -DSYSTYPE_BSD43";;
esac
case "$cppflags" in
");;
*)
 echo " "
 echo "Let me guess what the preprocessor flags are..." >&4
 set X $cppflags
 shift
 cppflags="
 $cat >cpp.c <<'EOM'
#define BLURFL foo

BLURFL xx LFRULB
EOM
?X:
?X: For each cc flag, try it out with both cppstdin and cpprun, since the
?X: first is almost surely a cc wrapper. We have to try both in case
?X: of cc flags like '-Olimit 2900' that are actually two words...
?X:
 previous="
 for flag in $*
 do
  case "$flag" in
  -*) ftry="$flag";;
  *) ftry="$previous $flag";;
  esac
  if $cppstdin -DLFRULB=bar $ftry $cppminus <cpp.c \
   >cpp1.out 2>/dev/null && \
   $cpprun -DLFRULB=bar $ftry $cpplast <cpp.c \
   >cpp2.out 2>/dev/null && \
   $contains 'foo.*xx.*bar' cpp1.out >/dev/null 2>&1 && \
   $contains 'foo.*xx.*bar' cpp2.out >/dev/null 2>&1
  then
   cppflags="$cppflags $ftry"
   previous="
  else
   previous="$flag"
  fi
 done
 set X $cppflags
 shift
 cppflags=${1+"$@"}
```

```
 case "$cppflags"
 in
 *-*)  echo "They appear to be: $cppflags";;
 esac
 $rm -f cpp.c cpp?.out
 ;;
esac

: flags used in final linking phase
case "$ldflags" in
") if ./venix; then
  dflt='-i -z'
 else
  dflt="
 fi
 case "$ccflags" in
 *-posix*) dflt="$dflt -posix" ;;
 esac
 ;;
*) dflt="$ldflags";;
esac

: Try to guess additional flags to pick up local libraries.
for thislibdir in $libpth; do
 case " $loclibpth " in
 *" $thislibdir "*)
  case "$dflt " in
  *"-L$thislibdir "*) ;;
  *)  dflt="$dflt -L$thislibdir" ;;
  esac
  ;;
 esac
done

case "$dflt" in
") dflt='none' ;;
*) set X $dflt; shift; dflt="$@";;
esac

$cat <<EOH

Your C linker may need flags.  For this question you should
include -L/whatever and any other flags used by the C linker, but you
should NOT include libraries like -lwhatever.

Make sure you include the appropriate -L/path flags if your C linker
does not normally search all of the directories you specified above,
namely
```

```
 $libpth
To use no flags, specify the word "none".

EOH

rp="Any
 additional ld flags (NOT including libraries)?"
. ./myread
case "$ans" in
none) ldflags="";;
*) ldflags="$ans";;
esac
rmlist="$rmlist pdp11"

@if lkflags
: partial linking may need other flags
case "$lkflags" in
") case "$ldflags" in
 ") dflt='none';;
 *) dflt="$ldflags";;
 esac;;
*) dflt="$lkflags";;
esac
echo " "
rp="Partial linking flags to be used (NOT including -r)?"
. ./myread
case "$ans" in
none) lkflags="";;
*) lkflags="$ans";;
esac

@end
?X:
?X: If the user changes compilers after selecting a hint file, it's
?X: possible that the suggested ccflags/ldflags will be wrong.  Try to
?X: compile and run a simple test program.  Let the user see all the
?X: error messages. -- ADO and RAM
?X:
: coherency check
echo " "
echo "Checking your choice of C compiler and flags for coherency..." >&4
?X: Strip extra blanks in case some of the following variables are empty
set X $cc $optimize $ccflags $ldflags -o try try.c
shift
$cat >try.msg <<EOM
I've tried to compile and run a simple program
 with:
```

```
 $*
 ./try
```

and I got the following output:

```
EOM
$cat > try.c <<'EOF'
#include <stdio.h>
int main() { exit(0); }
EOF
dflt=y
?X: Use "sh -c" to avoid error messages tagged with leading "Configure:".
?X: We need to try the resulting executable, because cc might yield a 0 status
?X: even when ld failed, in which case the executable will not run properly,
?X: if its x bit is set at all...
if sh -c "$cc $optimize $ccflags $ldflags -o try try.c" >>try.msg 2>&1; then
 if sh -c './try' >>try.msg 2>&1; then
  dflt=n
 else
  echo "The program compiled OK, but exited with status $?." >>try.msg
  rp="You have a problem.  Shall I abort Configure"
  dflt=y
 fi
else
 echo "I can't compile the test program." >>try.msg
 rp="You have a BIG problem.  Shall I abort Configure"
 dflt=y
fi
case "$dflt" in
y)
 $cat try.msg >&4
?X: using -K will prevent default aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
  echo "(The supplied flags might be incorrect with this C compiler.)"
  ;;
 *)
 dflt=n;;
 esac
 echo " "
 . ./myread
 case "$ans" in
 n*|N*) ;;
 *) echo "Ok.  Stopping Configure." >&4
  exit 1
  ;;
 esac
 ;;
```

```
n) echo "OK, that should do.";;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ccflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrgid_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrgid_r getgrgid_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrgid_r:
?S: This variable conditionally defines the HAS_GETGRGID_R symbol,
?S: which indicates to the C program that the getgrgid_r()
?S: routine is available.
?S:.
?S:getgrgid_r_proto:
?S: This variable encodes the prototype of getgrgid_r.
?S: It is zero if d_getgrgid_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrgid_r
?S: is defined.
?S:.
?C:HAS_GETGRGID_R:
?C: This symbol, if defined, indicates that the getgrgid_r routine
?C: is available to
 getgrgid re-entrantly.
?C:.
?C:GETGRGID_R_PROTO:
?C: This symbol encodes the prototype of getgrgid_r.
?C: It is zero if d_getgrgid_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrgid_r
?C: is defined.
?C:.
?H:#$d_getgrgid_r HAS_GETGRGID_R /**/
?H:#define GETGRGID_R_PROTO $getgrgid_r_proto /**/
?H:.
?T:try hdrs d_getgrgid_r_proto
: see if getgrgid_r exists
set getgrgid_r d_getgrgid_r
eval $inlibc
```

```
case "$d_getgrgid_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_getgrgid_r_proto:$usethreads" in
 ":define") d_getgrgid_r_proto=define
  set d_getgrgid_r_proto getgrgid_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getgrgid_r_proto" in
 define)
 case "$getgrgid_r_proto" in
 "|0) try='int getgrgid_r(gid_t, struct group*, char*, size_t, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBWR ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) try='int getgrgid_r(gid_t, struct group*, char*, int, struct
 group**);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBIR ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) try='int getgrgid_r(gid_t, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=I_TSBI ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) try='struct group* getgrgid_r(gid_t, struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrgid_r_proto=S_TSBI ;;
 esac
 case "$getgrgid_r_proto" in
 "|0) d_getgrgid_r=undef
  getgrgid_r_proto=0
  echo "Disabling getgrgid_r, cannot determine prototype." >&4 ;;
 * ) case "$getgrgid_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getgrgid_r_proto="REENTRANT_PROTO_$getgrgid_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getgrgid_r has no prototype, not using it." >&4 ;;
  esac
  d_getgrgid_r=undef
  getgrgid_r_proto=0
  ;;
 esac
 ;;
*) getgrgid_r_proto=0
```

```
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrgid_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tzname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tzname.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:14:43  ram
?RCS: patch32: forgot to set proper value in the val variable
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:57:55  ram
?RCS: patch30: created
?RCS:
?MAKE:d_tzname: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_tzname:
?S: This variable conditionally defines HAS_TZNAME if tzname[] is
?S: available to access timezone names.
?S:.
?C:HAS_TZNAME:
?C: This symbol, if defined, indicates that the tzname[]
 array is
?C: available to access timezone names.
?C:.
?H:#$d_tzname HAS_TZNAME  /**/
?H:.
?LINT:set d_tzname
: see if tzname[] exists
echo " "
if set tzname val -a d_tzname; eval $csym; $val; then
 val="$define"
 echo 'tzname[] found.' >&4
else
 val="$undef"
 echo 'tzname[] NOT found.' >&4
fi
set d_tzname
```

```
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tzname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:56:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: added support for HPUX-10 nm output
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  14:11:56  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:20:47  ram
?RCS: patch54: made sure only most recent version of shared lib is picked
?RCS: patch54: final "nm -p" check now uses xscan and xrun like everybody
?RCS: patch54: can now grok
 linux nm output with lead __IO (ADO)
?RCS: patch54: added support for linux ELF output, using 'W' for alias (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1994/10/29  16:23:40  ram
?RCS: patch36: now looks for shared libraries before anything else (ADO)
?RCS: patch36: added new nm output format (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1994/08/29  16:28:10  ram
?RCS: patch32: added I-type symbols for nm output parsing on Linux
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  07:03:24  ram
?RCS: patch30: checks are now presented by succession of if/elif
?RCS: patch30: uniformized checks for shared objects with new so symbol
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  15:06:33  ram
?RCS: patch23: added shared library knowledge (ADO and WED)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:12:17  ram
?RCS: patch16: can now export nm_extract as an internal-use only variable
?RCS:
```

```
?RCS: Revision 3.0.1.2  1993/09/13  16:09:03  ram
?RCS: patch10: added special handling for Apollo systems (WAD)
?RCS:
?RCS: Revision 3.0.1.1
  1993/08/27  14:40:03  ram
?RCS: patch7: added entry for /usr/shlib/libc.so (OSF/1 machines)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libc libnames +nm_extract: echo n c rm test grep Getfile Myread \
 Oldconfig Loc sed libs incpath libpth ar runnm nm nm_opt nm_so_opt \
 contains xlibpth so osname trnl tr sort uniq _o _a
?MAKE: -pick add $@ %<
?S:libc:
?S: This variable contains the location of the C library.
?S:.
?S:libnames:
?S: The constructed list of library names.  Normally empty, but hint files
?S: may set this for later perusal by Configure.
?S:.
?S:nm_extract:
?S: This variable holds the name of the extraction command used to process
?S: the output of nm and yield the list of defined symbols. It is used
?S: internally by Configure.
?S:.
?T:thislib try libnames xxx xscan xrun thisname com tans file
?F:!libnames !libc.tmp !tmp.imp
?LINT:change nm_opt runnm
?INIT:libnames=''
: Figure out where the libc is located
case
 "$runnm" in
true)
?X: indentation is wrong on purpose--RAM
: get list of predefined functions in a handy place
echo " "
case "$libc" in
'') libc=unknown
 case "$libs" in
 *-lc_s*) libc=`./loc libc_s$_a $libc $libpth`
 esac
 ;;
esac
case "$libs" in
'') ;;
*)  for thislib in $libs; do
 case "$thislib" in
```

```
 -lc|-lc_s)
  : Handle C library specially below.
  ;;
 -l*)
  thislib=`echo $thislib | $sed -e 's/^-l//'`
  if try=`./loc lib$thislib.$so.'*' X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib.$so X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc Slib$thislib$_a X $xlibpth`; $test -f "$try"; then
   :
  else
   try=''
  fi
  libnames="$libnames $try"
  ;;
 *) libnames="$libnames $thislib"
 ;;
 esac
 done
 ;;
esac
?X:
?X: Some systems (e.g. DG/UX) use "environmental" links, which make the test
?X: -f fail. Ditto for symbolic links. So in order to reliably check the
?X: existence of a file, we use test -r. It will still fail with DG/UX links
?X: though, but at least it will detect symbolic links. At some strategic
?X: points, we make use of (test -h), using a sub-shell in case builtin test
?X: does not implement the -h check for symbolic links. This makes it
?X: possible to preset libc in a hint file for instance and have it show up
?X: as-is in the question.
?X:
xxx=normal
case "$libc" in
unknown)
?X:
?X: The sed below transforms .so.9 .so.12 into something like .so.0009 .so.0012,
?X: then sorts on it to allow keeping .so.12 instead of .so.9 as the latest
?X: up-to-date library. The initial filename (before sed munging, saved in hold
?X: space via 'h') is appended via 'G' before sorting, then the leading munged
```

```
?X: part is removed after sorting. Nice efficient work
 from Tye McQueen.
?X: The initial blurfl is here to prevent the trailing pipe from producing an
?X: empty string, causing Configure to output all its set variables!
?X:
 set /lib/libc.$so
 for xxx in $libpth; do
  $test -r $1 || set $xxx/libc.$so
  : The messy sed command sorts on library version numbers.
  $test -r $1 || \
   set `echo blurfl; echo $xxx/libc.$so.[0-9]* | \
   tr ' ' $trnl | egrep -v '\.[A-Za-z]*$' | $sed -e '
    h
    s/[0-9][0-9]*/0000&/g
    s/0*\([0-9][0-9][0-9][0-9][0-9]\)/\1/g
    G
    s/\n/ /' | \
    $sort | $sed -e 's/^.* //'`
  eval set \$$#
 done
 $test -r $1 || set /usr/ccs/lib/libc.$so
 $test -r $1 || set /lib/libsys_s$_a
 ;;
*)
?X: ensure the test below for the (shared) C library will fail
 set blurfl
 ;;
esac
if $test -r "$1"; then
 echo "Your (shared) C library seems to be in $1."
 libc="$1"
elif $test -r /lib/libc && $test -r /lib/clib; then
?X:
?X: Apollo has its C library in /lib/clib AND /lib/libc
?X: not to mention its math library in /lib/syslib...
?X:
 echo
 "Your C library seems to be in both /lib/clib and /lib/libc."
 xxx=apollo
 libc='/lib/clib /lib/libc'
 if $test -r /lib/syslib; then
  echo "(Your math library is in /lib/syslib.)"
?X: Put syslib in libc -- not quite right, but won't hurt
  libc="$libc /lib/syslib"
 fi
elif $test -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 echo "Your C library seems to be in $libc, as you said before."
?X: For mips, and...
```

```
elif $test -r $incpath/usr/lib/libc$_a; then
 libc=$incpath/usr/lib/libc$_a;
 echo "Your C library seems to be in $libc.  That's fine."
elif $test -r /lib/libc$_a; then
 libc=/lib/libc$_a;
 echo "Your C library seems to be in $libc.  You're normal."
else
 if tans=`./loc libc$_a blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc libc blurfl/dyick $libpth`; $test -r "$tans"; then
  libnames="$libnames "`./loc clib blurfl/dyick $libpth`
 elif tans=`./loc clib blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Slibc$_a blurfl/dyick
 $xlibpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Mlibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 else
  tans=`./loc Llibc$_a blurfl/dyick $xlibpth`
 fi
 if $test -r "$tans"; then
  echo "Your C library seems to be in $tans, of all places."
  libc=$tans
 else
  libc='blurfl'
 fi
fi
if $test $xxx = apollo -o -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 dflt="$libc"
 cat <<EOM

If the guess above is wrong (which it might be if you're using a strange
compiler, or your machine supports multiple models), you can override it here.

EOM
else
 dflt="
 echo $libpth | $tr ' ' $trnl | $sort | $uniq > libpath
 cat >&4 <<EOM
I can't seem to find your C library.  I've looked in the following places:

EOM
 $sed 's/^/ /' libpath
 cat <<EOM

None of these seems to contain your C library. I need to get its name...
```

```
EOM
fi
fn=f
rp='Where is your C library?'
. ./getfile
libc="$ans"

echo " "
echo $libc $libnames | $tr ' ' $trnl | $sort | $uniq > libnames
set X `cat libnames`
shift
xxx=files
case
 $# in 1) xxx=file; esac
echo "Extracting names from the following $xxx for later perusal:" >&4
echo " "
$sed 's/^/ /' libnames >&4
echo " "
$echo $n "This may take a while...$c" >&4

?X:
?X: Linux may need the special Dynamic option to nm for shared libraries.
?X: In general, this is stored in the nm_so_opt variable.
?X: Unfortunately, that option may be fatal on non-shared libraries.
?X:
for file in $*; do
 case $file in
 *$so*) $nm $nm_so_opt $nm_opt $file 2>/dev/null;;
 *) $nm $nm_opt $file 2>/dev/null;;
 esac
done >libc.tmp

$echo $n ".$c"
?X:
?X: To accelerate processing, we look at the correct 'sed' command
?X: by using a small subset of libc.tmp, i.e. fprintf function.
?X: When we know which sed command to use, do the name extraction
?X:
$grep fprintf libc.tmp > libc.ptf
?X:
?X: In order to enhance readability and save some space, we define
?X: some variables that will be "eval"ed.
?X:
xscan='eval "<libc.ptf $com >libc.list"; $echo $n ".$c" >&4'
xrun='eval
 "<libc.tmp $com >libc.list"; echo "done." >&4'
?X: BSD-like output, I and W types added for Linux
?X: Some versions of Linux include a leading __IO in the symbol name.
```

```
?X: HPUX10 reportedly has trailing spaces, though I'm surprised it has
?X: BSD-like output.  (AD).
xxx='[ADTSIW]'
if com="$sed -n -e 's/__IO//' -e 's/^.* $xxx  *_[_.]*//p' -e 's/^.* $xxx  *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: SYSV-like output
elif com="$sed -n -e 's/^__*//' -e 's/^\([a-zA-Z_0-9$]*\).*xtern.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/|UNDEF/d' -e '/FUNC..GL/s/^.*|__*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.* D __*//p' -e 's/^.* D //p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^_//' -e 's/^\([a-zA-Z_0-9]*\).*xtern.*text.*/\1/p'";\
 eval
 $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$grep '|' | $sed -n -e '/|COMMON/d' -e '/|DATA/d' \
    -e '/ file/d' -e 's/^\([^  ]*\).*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p' -e 's/^.*|FUNC |WEAK .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: mips nm output (sysV)
elif com="$sed -n -e 's/^__//' -e '/|Undef/d' -e '/|Proc/s/ .*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|Proc .*|Text *| *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/Def. Text/s/.* \([^ ]*\)\$/\1/p'";\
```

```
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null
 2>&1; then
  eval $xrun
?X: OS/2 nm output
elif com="$sed -n -e 's/^[-0-9a-f ]*_\(.*\)=.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/.*\.text n\ \ \ \.//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: AIX nm output
elif com="sed -n -e 's/^__.*//' -e 's/[       ]*D[    ]*[0-9]*.*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
else
 $nm -p $* 2>/dev/null >libc.tmp
 $grep fprintf libc.tmp > libc.ptf
 if com="$sed -n -e 's/^.* [ADTSIW]  *_[_.]*//p' -e 's/^.* [ADTSIW] //p'";\
  eval $xscan; $contains '^fprintf$' libc.list >/dev/null 2>&1
 then
  nm_opt='-p'
  eval $xrun
 else
  echo " "
  echo "$nm didn't seem to work right. Trying $ar instead..." >&4
  com="
  if $ar t $libc > libc.tmp && \
   $contains '^fprintf$' libc.tmp >/dev/null 2>&1
  then
   for thisname in $libnames $libc; do
    $ar t $thisname >>libc.tmp
   done
   $sed
 -e "s/\\$_o\$//" < libc.tmp > libc.list
   echo "Ok." >&4
  elif test "X$osname" = "Xos2" && $ar tv $libc > libc.tmp; then
?X: Repeat libc to extract forwarders to DLL entries too
   for thisname in $libnames $libc; do
    $ar tv $thisname >>libc.tmp
?X: Revision 50 of EMX has bug in ar: it will not extract forwarders
?X: to DLL entries.  Use emximp which will extract exactly them.
    emximp -o tmp.imp $thisname \
        2>/dev/null && \
        $sed -e 's/^\([_a-zA-Z0-9]*\) .*$/\1/p' \
```

```
        < tmp.imp >>libc.tmp
    $rm -f tmp.imp
   done
   $sed -e "s/\\$_o\$//" -e 's/^ \+//' < libc.tmp > libc.list
   echo "Ok." >&4
  else
   echo "$ar didn't seem to work right." >&4
   echo "Maybe this is a Cray...trying bld instead..." >&4
   if
    bld t $libc | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" > libc.list &&
    $test -s libc.list
   then
    for thisname in $libnames; do
     bld t $libnames | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" >>libc.list
     $ar t $thisname >>libc.tmp
    done
    echo
 "Ok." >&4
   else
    echo "That didn't work either." >&4
    echo "No problem, I'll be compiling test programs then..." >&4
    runnm=false
   fi
  fi
 fi
fi
nm_extract="$com"
if $test -f /lib/syscalls.exp; then
 echo " "
 echo "Also extracting names from /lib/syscalls.exp for good ole AIX..." >&4
 $sed -n 's/^\([^  ]*\)[  ]*syscall[0-9]*[  ]*$/\1/p' \
  /lib/syscalls.exp >>libc.list
fi
?X: remember, indentation is wrong on purpose--RAM
;;
esac
$rm -f libnames libpath
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stdlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdlib: Inhdr
?MAKE: -pick add $@ %<
?S:i_stdlib:
?S: This variable conditionally defines the I_STDLIB symbol, which
?S: indicates to the C program that <stdlib.h> exists and should
?S: be included.
?S:.
?C:I_STDLIB:
?C: This symbol, if defined, indicates that <stdlib.h> exists and should
?C: be included.
?C:.
?H:#$i_stdlib I_STDLIB  /**/
?H:.
?LINT:set
 i_stdlib
: see if stdlib is available
set stdlib.h i_stdlib
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_stdlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_unordered: Inlibc
?MAKE: -pick add $@ %<
?S:d_unordered:
?S: This variable conditionally defines the HAS_UNORDERED symbol, which
?S: indicates to the C program that the unordered() routine is available.
?S:.
?C:HAS_UNORDERED:
?C: This symbol, if defined, indicates that the unordered routine is
```

```
?C: available to check whether two doubles are unordered
?C: (effectively: whether either of them is NaN)
?C:.
?H:#$d_unordered HAS_UNORDERED  /**/
?H:.
?LINT:set d_unordered
: see if unordered exists
set unordered d_unordered
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_unordered.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Loc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:04:16  ram
?RCS: patch61: allow users to specify paths on the command line
?RCS: patch61: will now substitute cp for ln if not supported
?RCS:
?RCS: Revision 3.0.1.9  1995/09/25  09:11:24  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS: patch59: abort Configure run when mandatory command is missing
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:40  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.7
  1995/01/11  15:13:37  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS: patch45: added path lookup for the 'comm' program
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:56:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: be careful and guard against wildcard searching (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:54:55  ram
?RCS: patch30: now locates find
?RCS:
```

```
?RCS: Revision 3.0.1.4  1994/05/13  15:18:15  ram
?RCS: patch27: added byacc to the trylist (ADO)
?RCS: patch27: lint lines reformatted (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:01:44  ram
?RCS: patch16: added metalint hint on changed PATH variable
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:16:52  ram
?RCS: patch15: now set _test variable when test is built-in
?RCS: patch15: fixed rare cases where echo is not needed
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:47:13  ram
?RCS: patch10: test program not always in /bin/test (WAD)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:05:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script "loc" which can be used to find out
?X: where in a list of directories something is.  It then uses loc to
?X: determine the location of commonly used programs.  It leaves loc sitting
?X: around for other Configure units to use, but arranges for its demise
?X: at the end of Configure.
?X:
?X: To add a new program to find, add it both to the ?MAKE: line and to either
?X: the loclist or trylist variable.
?X:
?X: I put startsh at the end of the dependency list, in order to avoid the
?X: loading of the spitshell unit before the instructions.
?X:
?MAKE:Loc awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff
 \
 uname uniq uuname vi zcat zip:  eunicefix n c startsh Instruct Warn
?MAKE: -pick weed $@ %<
?LINT:describe awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip
?V::pth loclist trylist
?F:./loc
?T:thisthing thing xxx dir file say DJGPP
```

```
?T:_test _grep _cp _gmake _egrep _ln _make dflt
?LINT: change PATH
: find out where common programs are
echo " "
echo "Locating common programs..." >&4
cat <<EOSC >loc
$startsh
case \$# in
0) exit 1;;
esac
thing=\$1
shift
dflt=\$1
shift
for dir in \$*; do
 case "\$thing" in
 .)
 if test -d \$dir/\$thing; then
  echo \$dir
  exit 0
 fi
 ;;
 *)
?X: Be careful in case thing includes wildcards that might expand to multiple
?X: files.  Choose the last one.
  This happens when searching for shared
?X: libraries with version numbers.  How to choose which one we want is
?X: probably an insoluble problem, in general.
?X: Some folks leave things like libc.so.orig around w/o read
?X: permission.  A -r test would handle that, but since ./loc is
?X: also used to find executables (which are installed w/o read
?X: permission on SCO ODT 3.0, we can't include the -r test.
 for thisthing in \$dir/\$thing; do
  : just loop through to pick last item
 done
 if test -f \$thisthing; then
  echo \$thisthing
  exit 0
 elif test -f \$thisthing$_exe; then
  echo \$thisthing
  exit 0
 elif test -f \$dir/\$thing.exe; then
  if test -n "$DJGPP"; then
   echo \$dir/\$thing.exe
  else
   : on Eunice apparently
   echo \$dir/\$thing
  fi
```

```
  exit 0
 fi
 ;;
 esac
done
echo \$dflt
exit 1
EOSC
chmod +x loc
$eunicefix loc
loclist="
?awk:awk
?cat:cat
?chgrp:chgrp
?chmod:chmod
?chown:chown
?comm:comm
?cp:cp
?echo:echo
?expr:expr
?find:find
?grep:grep
?ls:ls
?mkdir:mkdir
?mv:mv
?rm:rm
?sed:sed
?sleep:sleep
?sort:sort
?tail:tail
?touch:touch
?tr:tr
?uniq:uniq
"
trylist="
?Mcc:Mcc
?ar:ar
?bash:bash
?bison:bison
?byacc:byacc
?compress:compress
?cpio:cpio
?cpp:cpp
?csh:csh
?date:date
?egrep:egrep
?emacs:emacs
?flex:flex
```

```
?gmake:gmake
?gzip:gzip
?inews:inews
?ksh:ksh
?less:less
?line:line
?lint:lint
?ln:ln
?lp:lp
?lpr:lpr
?mail:mail
?mailx:mailx
?make:make
?more:more
?nm:nm
?nroff:nroff
?perl:perl
?pg:pg
?pmake:pmake
?pr:pr
?rmail:rmail
?sendmail:sendmail
?shar:shar
?smail:smail
?submit:submit
?tar:tar
?tbl:tbl
?tee:tee
?test:test
?troff:troff
?uname:uname
?uuname:uuname
?vi:vi
?zcat:zcat
?zip:zip
"
?LINT:set
 awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo emacs expr find flex \
 gmake gzip grep inews ksh less line lint lp lpr ls mail mailx \
 mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee touch tr troff \
 uname uniq uuname vi zcat zip
pth=`echo $PATH | sed
 -e "s/$p_/ /g"`
pth="$pth /lib /usr/lib"
for file in $loclist; do
?X:
```

```
?X: Allow them to -Dmake=pmake on the command line for instance...
?X: If the file is not fully qualified, as in -Dmake=pmake, then we
?X: look the for the specified command (pmake here). If they say
?X: -Dmake=/sbin/make for instance, then we make sure the file
?X: exists, or we die...
?X:
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   ./warn "no $xxx -- ignoring your setting for $file."
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo "I don't know where '$file' is, and my life depends on it." >&4
  echo "Go find a public domain implementation or fix your PATH setting!" >&4
  exit 1
  ;;
 esac
done
echo " "
echo "Don't worry
 if any of the following aren't found..."
say=offhand
for file in $trylist; do
?X: Allow them to -Dmake=pmake on the command line for instance (see above)
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
```

```
   ./warn "no $xxx -- ignoring your setting for $file."
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo "I don't see $file out there, $say."
  say=either
  ;;
 esac
done
case "$egrep" in
egrep)
 echo "Substituting grep for egrep."
 egrep=$grep
 _egrep=$_grep
 ;;
esac
@if ln
case "$ln" in
ln)
 echo "Substituting cp for ln."
 ln=$cp
 _ln=$_cp
 ;;
esac
@end
@if make || gmake
case "$make" in
make)
 case "$gmake" in
 gmake)
 echo "I can't find make or gmake, and my life depends on it." >&4
 echo "Go find a
 public domain implementation or fix your PATH setting!" >&4
 exit 1
```

```
 ;;
 esac
 ;;
esac
case "$gmake" in
gmake) ;;
*) # We can't have osname yet.
 if test -f "/system/gnu_library/bin/ar.pm"; then # Stratus VOS
  # Assume that gmake, if found, is definitely GNU make
  # and prefer it over the system make.
  echo "Substituting gmake for make."
  make=$gmake
  _make=$_gmake
 fi
 ;;
esac
@end
case "$test" in
test)
 echo "Hopefully test is built into your sh."
 ;;
*)
 if `sh -c "PATH= test true" >/dev/null 2>&1`; then
  echo "Using the test built into your sh."
?X:
?X: We need to set both test and _test, since Oldconfig.U will use the _test
?X: value to systematically restore computed paths, which may be wrong if
?X: we choose to load an old config.sh generated on another platform.
?X:
  test=test
  _test=test
 fi
 ;;
esac
?LINT:change n c
case "$echo" in
echo)
 echo "Hopefully echo is built into your sh."
 ;;
?X: For those rare cases where we don't need $echo...
") ;;
*)
 echo " "
echo "Checking
 compatibility between $echo and builtin echo (if any)..." >&4
 $echo $n "hi there$c" >foo1
 echo $n "hi there$c" >foo2
 if cmp foo1 foo2 >/dev/null 2>&1; then
```

```
  echo "They are compatible.  In fact, they may be identical."
 else
  case "$n" in
  '-n') n=" c='\c';;
  *) n='-n' c=";;
  esac
  cat <<FOO
They are not compatible!  You are probably running ksh on a non-USG system.
I'll have to use $echo instead of the builtin, since Bourne shell doesn't
have echo built in and we may have to run some Bourne shell scripts.  That
means I'll have to use '$n$c' to suppress newlines now.  Life is ridiculous.

FOO
  $echo $n "The star should be here-->$c"
  $echo "*"
 fi
 $rm -f foo1 foo2
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Loc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sockopt.U,v $
?RCS: Revision 3.0.1.1  1995/07/25  14:16:14  ram
?RCS: patch56: obsoleted KEEPALIVE in favor of CAN_KEEPALIVE for consistency
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepalive: cat rm contains +cc +ccflags socketlib sockethdr \
 d_oldsock libs Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_keepalive:
?S: This symbol conditionally defines CAN_KEEPALIVE which indicates to the C
?S: program that setsockopt
```

```
 SO_KEEPALIVE will work properly.
?S:.
?C:CAN_KEEPALIVE (KEEPALIVE):
?C: This symbol if defined indicates to the C program that the SO_KEEPALIVE
?C: option of setsockopt() will work as advertised in the manual.
?C:.
?H:#$d_keepalive CAN_KEEPALIVE  /**/
?H:.
?F:!socket
?LINT:set d_keepalive
: see if setsockopt with SO_KEEPALIVE works as advertised
echo " "
case "$d_oldsock" in
"$undef")
 if $contains SO_KEEPALIVE `./findhdr sys/socket.h` \
  /dev/null >/dev/null 2>&1
 then
  echo "OK, let's see if SO_KEEPALIVE works as advertised..." >&4
  $cat > socket.c <<EOP
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netdb.h>

int main()
{
 int s = socket(AF_INET, SOCK_STREAM, 0);
 if (s == -1)
  exit(1);
 if (-1 == setsockopt(s, SOL_SOCKET, SO_KEEPALIVE, 0, 0))
  exit(2);
 exit(0);
}
EOP
  if $cc $ccflags $sockethdr -o socket socket.c $libs \
   $socketlib >/dev/null 2>&1; then
   ./socket >/dev/null 2>&1
   case $? in
   0) echo "Yes, it does!"
    val="$define";;
   1)
 $cat <<EOM
(Something went wrong -- Assuming SO_KEEPALIVE is broken)
EOM
    val="$undef";;
   2) echo "No, it doesn't.  Don't trust your manuals!!"
    val="$undef";;
   esac
```

```
  else
   cat <<EOM
(I can't compile the test program -- Assuming SO_KEEPALIVE is broken)
EOM
   val="$undef"
  fi
 else
  echo "Strange!! You have BSD 4.2 sockets but no SO_KEEPALIVE option."
  val="$undef"
 fi;;
*) cat <<EOM
As you have an old socket interface, you can't have heard of SO_KEEPALIVE.
EOM
 val="$undef";;
esac
set d_keepalive
eval $setvar
$rm -f socket socket.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sockopt.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldsym.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:06:58  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit follows the creation of the config.sh file. It adds some
?X: special symbols: defines from patchlevel.h file if any and CONFIG,
?X: which is set to true. Then, we try to keep all the new symbols that
?X: may come from a hint file or a previous config.sh file.
?X:
?MAKE:Oldsym:
```

```
 Config_sh Options test hint src sed sort uniq
?MAKE: -pick add $@ %<
?T:CONFIG sym tmp
?F:!UU
: add special variables
$test -f $src/patchlevel.h && \
awk '/^#define/ {printf "%s=%s\n",$2,$3}' $src/patchlevel.h >>config.sh
echo "CONFIG=true" >>config.sh

: propagate old symbols
if $test -f UU/config.sh; then
?X: Make sure each symbol is unique in oldconfig.sh
 <UU/config.sh $sort | $uniq >UU/oldconfig.sh
?X:
?X: All the symbols that appear twice come only from config.sh (hence the
?X: two config.sh in the command line). These symbols will be removed by
?X: the uniq -u command. The oldsyms file thus contains all the symbols
?X: that did not appear in the produced config.sh (Larry Wall).
?X:
?X: Do not touch the -u flag of uniq.  This means you too, Jarkko.
?X:
 $sed -n 's/^\([a-zA-Z_0-9]*\)=.*/\1/p' \
  config.sh config.sh UU/oldconfig.sh |\
  $sort | $uniq -u >UU/oldsyms
 set X `cat UU/oldsyms`
 shift
 case $# in
 0) ;;
 *)
  cat <<EOM
Hmm...You had some extra variables I don't know about...I'll
 try to keep 'em...
EOM
  echo ": Variables propagated from previous config.sh file." >>config.sh
  for sym in `cat UU/oldsyms`; do
   echo "    Propagating $hint variable "'$'"$sym..."
   eval 'tmp="$'"${sym}"'"'
   echo "$tmp" | \
    sed -e "s/'/'\''\''/g" -e "s/^/$sym='/" -e "s/$/'/" >>config.sh
  done
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Oldsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_inetaton.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Spider Boardman
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_inetaton.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:36:35  ram
?RCS: patch61: created
?RCS:
?MAKE:d_inetaton: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetaton:
?S: This variable conditionally defines the HAS_INET_ATON symbol, which
?S: indicates to the C program that the inet_aton() function is available
?S: to parse IP address "dotted-quad" strings.
?S:.
?C:HAS_INET_ATON:
?C: This symbol, if defined, indicates
 to the C program that the
?C: inet_aton() function is available to parse IP address "dotted-quad"
?C: strings.
?C:.
?H:#$d_inetaton HAS_INET_ATON  /**/
?H:.
?LINT:set d_inetaton
: check whether inet_aton exists
set inet_aton d_inetaton
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_inetaton.U
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```
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?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: pager.U,v $
?RCS: Revision 3.0.1.2  1995/01/30  14:41:26  ram
?RCS: patch49: ensure dflt gets initialized in case no pagers are found (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:27:45  ram
?RCS: patch36: replaced Myread by Getfile in the dependency line
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:pager: pg more less Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:pager:
?S: This variable contains the name of the preferred pager
 on the system.
?S: Usual values are (the full pathnames of) more, less, pg, or cat.
?S:.
: locate the preferred pager for this system
fn=f/
case "$pager" in
")
 dflt="
 case "$pg" in
 /*) dflt=$pg;;
 [a-zA-Z]:/*) dflt=$pg;;
 esac
 case "$more" in
 /*) dflt=$more;;
 [a-zA-Z]:/*) dflt=$more;;
 esac
 case "$less" in
 /*) dflt=$less;;
 [a-zA-Z]:/*) dflt=$less;;
 esac
 case "$dflt" in
 ") dflt=/usr/ucb/more;;
 esac
 ;;
*) dflt="$pager"
 ;;
esac
?X: Instruct ./getfile to trust the default pager value,
?X: even if it does not begin with a slash.  For example, on os2,
?X: pager might be cmd /c more.  Also, it might include some options,
?X: such as '/usr/bin/less -R'.  ./getfile would report that
?X: "/usr/bin/less -R" doesn't exist.
?X: See comments in Getfile.U.
```

```
fn="f/($dflt)"
echo " "
rp='What pager is used on your system?'
. ./getfile
pager="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pager.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysmount.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysmount: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysmount:
?S: This variable conditionally defines the I_SYSMOUNT symbol,
?S: and indicates whether a C program should include <sys/mount.h>.
?S:.
?C:I_SYS_MOUNT:
?C: This symbol, if defined, indicates that <sys/mount.h> exists and
?C: should be included.
?C:.
?H:#$i_sysmount I_SYS_MOUNT  /**/
?H:.
?LINT:set i_sysmount
: see if this is a sys/mount.h system
set sys/mount.h i_sysmount
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysmount.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readlink.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_readlink.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:52  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_readlink: Inlibc
?MAKE: -pick add $@ %<
?S:d_readlink:
?S: This variable conditionally defines the HAS_READLINK symbol, which
?S: indicates to the C program that the readlink() routine is available
?S: to read the value of a symbolic link.
?S:.
?C:HAS_READLINK :
?C: This
 symbol, if defined, indicates that the readlink routine is
?C: available to read the value of a symbolic link.
?C:.
?H:#$d_readlink HAS_READLINK  /**/
?H:.
?LINT:set d_readlink
: see if readlink exists
set readlink d_readlink
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_readlink.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fd_set.U,v 3.0.1.3 1997/02/28 15:33:16 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_fd_set.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:16  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  06:57:23  ram
?RCS: patch30: extended scope for fd_set checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:27  ram
?RCS: patch16: comments for HAS_FD_* symbols were not consistent
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fd_set d_fd_macros
 d_fds_bits: Compile cat rm_try Oldconfig \
 d_socket i_systime i_sysselct i_stdlib run
?MAKE: -pick add $@ %<
?S:d_fd_set:
?S: This variable contains the eventual value of the HAS_FD_SET symbol,
?S: which indicates if your C compiler knows about the fd_set typedef.
?S:.
?S:d_fd_macros:
?S: This variable contains the eventual value of the HAS_FD_MACROS symbol,
?S: which indicates if your C compiler knows about the macros which
?S: manipulate an fd_set.
?S:.
?S:d_fds_bits:
?S: This variable contains the eventual value of the HAS_FDS_BITS symbol,
?S: which indicates if your fd_set typedef contains the fds_bits member.
?S: If you have an fd_set typedef, but the dweebs who installed it did
?S: a half-fast job and neglected to provide the macros to manipulate
?S: an fd_set, HAS_FDS_BITS will let us know how to fix the gaffe.
?S:.
?C:HAS_FD_SET:
?C: This symbol, when defined, indicates presence of the fd_set typedef
?C: in <sys/types.h>
?C:.
?C:HAS_FD_MACROS:
?C: This symbol, when defined,
  indicates presence of the macros used to
?C: manipulate an fd_set.
?C:.
?C:HAS_FDS_BITS:
?C: This symbol, when defined, indicates presence of the fds_bits member in
?C: fd_set.  This knowledge is useful if fd_set is available but the macros
?C: aren't.
?C:.
?H:#$d_fd_set HAS_FD_SET /**/
?H:#$d_fd_macros HAS_FD_MACROS /**/
?H:#$d_fds_bits HAS_FDS_BITS /**/
?H:.
?F:!try
: check for fd_set items
$cat <<EOM

Checking to see how well your C compiler handles fd_set and friends ...
EOM
```

```
?X: The FD_SET macros can be in strange places.  On some SysV-based
?X: systems, they are in <sys/bsdtypes.h>, which is included (perhaps)
?X: by <sys/socket.h>.  We won't force people to include
?X: <sys/bsdtypes.h> because it might introduce other
?X: incompatibilities.
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h>
 */
#endif
#ifdef I_SYS_TIME
#include <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main() {
 fd_set fds;

#ifdef TRYBITS
 if(fds.fds_bits);
#endif

#if defined(FD_SET) && defined(FD_CLR) && defined(FD_ISSET) && defined(FD_ZERO)
 exit(0);
#else
 exit(1);
#endif
}
EOCP
set try -DTRYBITS
if eval $compile; then
 d_fds_bits="$define"
 d_fd_set="$define"
 echo "Well, your system knows about the normal fd_set typedef..." >&4
 if $run ./try; then
  echo "and you have the normal fd_set macros (just as I'd expect)." >&4
  d_fd_macros="$define"
 else
  $cat >&4 <<'EOM'
```

```
but not the normal fd_set macros!  Gaaack!  I'll have to cover for you.
EOM
  d_fd_macros="$undef"
 fi
else
 $cat <<'EOM'
Hmm, your compiler has some difficulty with fd_set.  Checking further...
EOM
 set try
 if eval $compile; then
  d_fds_bits="$undef"
  d_fd_set="$define"
  echo "Well, your system has some sort of fd_set available..." >&4
  if $run ./try; then
   echo "and you have the normal
 fd_set macros." >&4
   d_fd_macros="$define"
  else
   $cat <<'EOM'
but not the normal fd_set macros!  Gross!  More work for me...
EOM
   d_fd_macros="$undef"
  fi
 else
 echo "Well, you got zip.  That's OK, I can roll my own fd_set stuff." >&4
  d_fd_set="$undef"
  d_fds_bits="$undef"
  d_fd_macros="$undef"
 fi
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_fd_set.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mbrtowc: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbrtowc:
?S: This variable conditionally defines the HAS_MBRTOWC symbol if the
```

```
?S: mbrtowc() routine is available to be used to convert a multi-byte
?S: character into a wide character.
?S:.
?C:HAS_MBRTOWC:
?C: This symbol, if defined, indicates that the mbrtowc routine is
?C: available to convert a multi-byte character into a wide character.
?C:.
?H:#$d_mbrtowc HAS_MBRTOWC /**/
?H:.
?LINT: set d_mbrtowc
: see if mbrtowc exists
set mbrtowc d_mbrtowc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_mbrtowc.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_c99_variadic_macros: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:d_c99_variadic_macros:
?S: This variable conditionally defines the HAS_C99_VARIADIC_MACROS
?S: symbol, which indicates to the C program that C99 variadic macros
?S: are available.
?S:.
?C:HAS_C99_VARIADIC_MACROS:
?C: If defined, the compiler supports C99 variadic macros.
?C:.
?H:#$d_c99_variadic_macros HAS_C99_VARIADIC_MACROS /**/
?H:.
?F:!try
: see if the Compiler supports C99 variadic macros
echo "Checking for C99 variadic macros." >&4
$cat >try.c <<EOCP
#include
 <stdio.h>
#include <stdarg.h>

#define foo(buffer, format, ...) sprintf(buffer, format, __VA_ARGS__)
```

```
int main() {
 char buf[20];
 foo(buf, "%d %g %.*s", 123, 456.0, (int)3, "789fail");
 puts(buf);
 return 0;
}
EOCP
set try
if eval $compile && $run ./try 2>&1 >/dev/null; then
   case "`$run ./try`" in
 "123 456 789")
 echo "You have C99 variadic macros." >&4
 d_c99_variadic_macros="$define"
 ;;
 *)
 echo "You don't have functional C99 variadic macros." >&4
 d_c99_variadic_macros="$undef"
 ;;
   esac
else
   echo "I couldn't compile and run the test program, so I assume that you don't have functional C99 variadic
macros." >&4
   d_c99_variadic_macros="$undef"
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_c99_variadic.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgrcv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgrcv.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgrcv: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgrcv:
?S: This variable conditionally defines the HAS_MSGRCV symbol, which
```

```
?S: indicates to the C program that the msgrcv() routine is available.
?S:.
?C:HAS_MSGRCV:
?C: This symbol, if defined, indicates that the msgrcv() routine is
?C: available to extract a message from the message queue.
?C:.
?H:#$d_msgrcv
 HAS_MSGRCV  /**/
?H:.
?LINT:set d_msgrcv
: see if msgrcv exists
set msgrcv d_msgrcv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgrcv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fsetpos.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fsetpos.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:38  ram
?RCS: patch30: created
?RCS:
?MAKE:d_fsetpos: Inlibc
?MAKE: -pick add $@ %<
?S:d_fsetpos:
?S: This variable conditionally defines HAS_FSETPOS if fsetpos() is
?S: available to set the file position indicator.
?S:.
?C:HAS_FSETPOS:
?C: This symbol, if defined, indicates that the fsetpos routine is
?C: available to set the file position indicator, similar to fseek().
?C:.
?H:#$d_fsetpos
 HAS_FSETPOS /**/
?H:.
?LINT:set d_fsetpos
: see if fsetpos exists
set fsetpos d_fsetpos
```

```
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fsetpos.U
No license file was found, but licenses were detected in source scan.

```
case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting makedir (with variable substitutions)"
$spitshell >makedir <<!GROK!THIS!
$startsh
# $Id: makedir.sh,v 3.0.1.1 1994/01/24 14:00:08 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original
 Author: Larry Wall <lwall@netlabs.com>
#
# $Log: makedir.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:08  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:38  ram
# Baseline for dist 3.0 netwide release.
#

export PATH || (echo "OOPS, this isn't sh.  Desperation time.  I will feed myself to sh."; sh \$0; kill \$\$)
```

```
case \$# in
 0)
   $echo "makedir pathname filenameflag"
   exit 1
   ;;
esac

: guarantee one slash before 1st component
case \$1 in
 /*) ;;
 *)  set ./\$1 \$2 ;;
esac

: strip last component if it is to be a filename
case X\$2 in
 X1) set \`$echo \$1 | $sed 's:\(.*\)/[^/]*\$:\1:'\` ;;
 *)  set \$1 ;;
esac

: return reasonable status if nothing to be created
if $test -d "\$1" ; then
   exit 0
fi

list=''
while true ; do
   case \$1 in
   */*)
 list="\$1 \$list"
 set \`echo \$1 | $sed 's:\(.*\)/:\1 :'\`
 ;;
   *)
 break
 ;;
   esac
done

set \$list

for dir do
   $mkdir \$dir >/dev/null 2>&1
done
!GROK!THIS!
$eunicefix
 makedir
chmod +x makedir
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/makedir.SH
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```
?RCS: $Id: i_whoami.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_whoami.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:02:21  ram
?RCS: patch6: added default for i_whoami
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_whoami: Inhdr
?MAKE: -pick add $@ %<
?S:i_whoami (d_whoami):
?S: This variable conditionally defines the I_WHOAMI symbol, which
?S: indicates to the C program that it should include <whoami.h>.
?S:.
?C:I_WHOAMI (WHOAMI):
?C: This symbol,
 if defined, indicates that the program may include
?C: <whoami.h>.
?C:.
?H:#$i_whoami I_WHOAMI /**/
?H:.
?D:i_whoami="
?LINT:set i_whoami
: see if there is a whoami.h file
set whoami.h i_whoami
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_whoami.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_trunc: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_trunc:
?S: This variable conditionally defines the HAS_TRUNC symbol, which
?S: indicates to the C program that the trunc() routine is available
?S: to round doubles towards zero.
?S:.
?C:HAS_TRUNC:
?C: This symbol, if defined, indicates that the trunc routine is
?C: available to round doubles towards zero.
?C:.
?H:#$d_trunc HAS_TRUNC  /**/
?H:.
?LINT:set d_trunc
: see if trunc exists
set trunc d_trunc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_trunc.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigaction.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:29  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sigaction: Csym Setvar cat cc ccflags ldflags libs rm _o
?MAKE: -pick add $@ %<
?S:d_sigaction:
?S: This variable conditionally defines the HAS_SIGACTION symbol, which
?S: indicates that the Vr4 sigaction() routine is available.
?S:.
?C:HAS_SIGACTION:
?C: This symbol, if defined, indicates that Vr4's sigaction() routine
?C: is available.
?C:.
?H:#$d_sigaction HAS_SIGACTION /**/
?H:.
?T:val
```

```
?LINT:set
 d_sigaction
: see if we have sigaction
echo " "
if set sigaction val -f d_sigaction; eval $csym; $val; then
 echo 'sigaction() found.' >&4
 val="$define"
else
 echo 'sigaction NOT found.' >&4
 val="$undef"
fi
?X:
?X: Solaris 2.5_x86 with SunWorks Pro C 3.0.1 doesn't have a complete
?X: sigaction structure if compiled with cc -Xc.  This compile test
?X: will fail then.  <doughera@lafcol.lafayette.edu>
?X:
$cat > set.c <<'EOP'
#include <stdio.h>
#include <sys/types.h>
#include <signal.h>
int main()
{
   struct sigaction act, oact;
}
EOP
if $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1; then
 :
else
 echo "But you don't seem to have a useable struct sigaction." >&4
 val="$undef"
fi
set d_sigaction; eval $setvar
$rm -f set set$_o set.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigaction.U
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```
?RCS: $Id: d_strtol.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS:
```

```
?RCS: $Log: d_strtol.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strtol: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtol:
?S: This variable conditionally defines the HAS_STRTOL symbol, which
?S: indicates to the C program that the strtol() routine is available
?S: to provide better numeric string conversion than atoi() and friends.
?S:.
?C:HAS_STRTOL (STRTOL):
?C: This symbol, if defined, indicates that
 the strtol routine is available
?C: to provide better numeric string conversion than atoi() and friends.
?C:.
?H:#$d_strtol HAS_STRTOL /**/
?H:.
?LINT:set d_strtol
: see if strtol exists
set strtol d_strtol
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtol.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_voidsig.U,v 3.0.1.3 1995/05/12 12:12:46 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_voidsig.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:12:46  ram
?RCS: patch54: made cppflags dependency optional
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:20:35  ram
?RCS: patch32: now sets signal_t only once d_voidsig is known (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:54  ram
?RCS: patch30: now properly sets signal_t when re-using previous value
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:56  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_voidsig
 signal_t: rm contains cppstdin cppminus +cppflags test Myread \
 Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_voidsig:
?S: This variable conditionally defines VOIDSIG if this system
?S: declares "void (*signal(...))()" in signal.h.  The old way was to
?S: declare it as "int (*signal(...))()".
?S:.
?S:signal_t:
?S: This variable holds the type of the signal handler (void or int).
?S:.
?C:VOIDSIG:
?C: This symbol is defined if this system declares "void (*signal(...))()" in
?C: signal.h.  The old way was to declare it as "int (*signal(...))()".  It
?C: is up to the package author to declare things correctly based on the
?C: symbol.
?C:.
?C:Signal_t (SIGNAL_T):
?C: This symbol's value is either "void" or "int", corresponding to the
?C: appropriate return type of a signal handler.  Thus, you can declare
?C: a signal handler using "Signal_t (*handler)()", and define the
?C: handler using "Signal_t handler(sig)".
?C:.
?H:#$d_voidsig VOIDSIG /**/
?H:#define
 Signal_t $signal_t /* Signal handler's return type */
?H:.
?T:xxx
?LINT:set d_voidsig
: see if signal is declared as pointer to function returning int or void
echo " "
xxx=`./findhdr signal.h`
$test "$xxx" && $cppstdin $cppminus $cppflags < $xxx >$$.tmp 2>/dev/null
if $contains 'int.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
elif $contains 'void.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have void (*signal())()." >&4
 val="$define"
elif $contains 'extern[  ]*[(\*]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
?X: This next test is kind of sloppy, but it catches Linux
?X: which has a
?X:  typedef void (*__sighandler_t)  (int)  ;
```

```
?X: A better fix would be to compile a C program with the proper
?X: prototype, but since nearly everyone uses void, we'll just go with
?X: this.
elif $contains 'void.*\*.*sig' $$.tmp >/dev/null 2>&1 ; then
 echo "You
 have void (*signal())()." >&4
 val="$define"
else
 case "$d_voidsig" in
 ")
 echo "I can't determine whether signal handler returns void or int..." >&4
  dflt=void
  rp="What type does your signal handler return?"
  . ./myread
  case "$ans" in
  v*) val="$define";;
  *) val="$undef";;
  esac;;
 "$define")
  echo "As you already told me, signal handler returns void." >&4
  val="$define"
  ;;
 *) echo "As you already told me, signal handler returns int." >&4
  val="$undef"
  ;;
 esac
fi
set d_voidsig
eval $setvar
case "$d_voidsig" in
"$define") signal_t="void";;
*) signal_t="int";;
esac
$rm -f $$.tmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_voidsig.U
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```
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?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: selecttype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:20:09  ram
?RCS: patch61: always include <sys/select.h> when available for test
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:14:06  ram
?RCS: patch56: removed harmful spaces in assignment
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:31  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:selecttype: cat +cc +ccflags rm Oldconfig Myread \
 d_fd_set d_select d_socket i_systime
 i_sysselct
?MAKE: -pick add $@ %<
?S:selecttype:
?S: This variable holds the type used for the 2nd, 3rd, and 4th
?S: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?S: is defined, and 'int *' otherwise.  This is only useful if you
?S: have select(), naturally.
?S:.
?C:Select_fd_set_t:
?C: This symbol holds the type used for the 2nd, 3rd, and 4th
?C: arguments to select.  Usually, this is 'fd_set *', if HAS_FD_SET
?C: is defined, and 'int *' otherwise.  This is only useful if you
?C: have select(), of course.
?C:.
?H:#define Select_fd_set_t  $selecttype /**/
?H:.
?T:xxx yyy
: check for type of arguments to select.  This will only really
: work if the system supports prototypes and provides one for
: select.
case "$d_select" in
$define)
 : Make initial guess
 case "$selecttype" in
 "|' ')
  case "$d_fd_set" in
  $define) xxx='fd_set *' ;;
  *) xxx='int *' ;;
  esac
  ;;
 *)  xxx="$selecttype"
  ;;
 esac
```

```
: backup guess
case "$xxx" in
'fd_set *') yyy='int *'
;;
'int *') yyy='fd_set *' ;;
esac

$cat <<EOM

Checking to see what type of arguments are expected by select().
EOM
 $cat >try.c <<EOCP
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#ifdef I_SYS_TIME
#include <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main()
{
 int width;
 Select_fd_set_t readfds;
 Select_fd_set_t writefds;
 Select_fd_set_t exceptfds;
 struct timeval timeout;
 select(width, readfds, writefds, exceptfds, &timeout);
 exit(0);
}
EOCP
 if $cc $ccflags -c -DSelect_fd_set_t="$xxx" try.c >/dev/null 2>&1 ; then
  selecttype="$xxx"
  echo "Your system uses $xxx for the arguments to select." >&4
 elif $cc $ccflags -c -DSelect_fd_set_t="$yyy" try.c >/dev/null 2>&1 ; then
  selecttype="$yyy"
  echo "Your system uses $yyy for the arguments to select." >&4
 else
  rp='What is the type for the 2nd, 3rd, and 4th arguments
 to select?'
  dflt="$xxx"
  . ./myread
  selecttype="$ans"
```

```
 fi
 $rm -f try.[co]
 ;;
*) selecttype='int *'
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/selecttype.U
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```
?RCS: $Id: i_sysndir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysndir.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysndir: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysndir:
?S: This variable conditionally defines the I_SYS_NDIR symbol, and indicates
?S: whether a C program should include <sys/ndir.h>.
?S:.
?C:I_SYS_NDIR (I_SYSNDIR):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/ndir.h>.
?C:.
?H:#$i_sysndir
 I_SYS_NDIR /**/
?H:.
?LINT:set i_sysndir
: see if this is an sysndir system
set sys/ndir.h i_sysndir
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysndir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_usleepproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_usleepproto:
?S: This variable conditionally defines the HAS_USLEEP_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the usleep() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_USLEEP_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the usleep() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern int
 usleep(useconds_t);
?C:.
?H:#$d_usleepproto HAS_USLEEP_PROTO /**/
?H:.
?LINT:set d_usleepproto
: see if prototype for usleep is available
echo " "
set d_usleepproto usleep $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_usleepproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethbynm.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethbynm: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbynm (d_gethhstby):
?S: This variable conditionally defines the HAS_GETHOSTBYNAME symbol, which
?S: indicates to the C program that the gethostbyname() routine is available
?S: to lookup host names in some data base or other.
?S:.
?C:HAS_GETHOSTBYNAME (GETHOSTBYNAME):
?C: This symbol, if defined, indicates that the gethostbyname()
 routine is
?C: available to lookup host names in some data base or other.
?C:.
?H:#$d_gethbynm HAS_GETHOSTBYNAME  /**/
?H:.
?LINT:set d_gethbynm
: see if gethostbyname exists
set gethostbyname d_gethbynm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethbynm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgrp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:28  ram
?RCS: patch61: new USE_BSD_GETPGRP to detect the getpgrp() flavour
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp d_bsdgetpgrp: Guess Inlibc Setvar cat rm \
 +cc +ccflags +ldflags +libs i_unistd
?MAKE: -pick add $@ %<
?S:d_getpgrp:
?S: This variable conditionally defines HAS_GETPGRP if getpgrp() is
?S: available to get the current process group.
```

```
?S:.
?S:d_bsdgetpgrp:
?S: This
 variable conditionally defines USE_BSD_GETPGRP if
?S: getpgrp needs one arguments whereas USG one needs none.
?S:.
?C:HAS_GETPGRP (GETPGRP):
?C: This symbol, if defined, indicates that the getpgrp routine is
?C: available to get the current process group.
?C:.
?C:USE_BSD_GETPGRP:
?C: This symbol, if defined, indicates that getpgrp needs one
?C: arguments whereas USG one needs none.
?C:.
?H:#$d_getpgrp HAS_GETPGRP  /**/
?H:#$d_bsdgetpgrp USE_BSD_GETPGRP /**/
?H:.
?F:!set !set.c
?T:xxx
?LINT:set d_getpgrp d_bsdgetpgrp
: see if getpgrp exists
set getpgrp d_getpgrp
eval $inlibc

@if USE_BSD_GETPGRP || d_bsdgetpgrp
case "$d_getpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of getpgrp is in use..."
 $cat >set.c <<EOP
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (getpgrp(1) ==
 0)
  exit(0);
#else
 if (getpgrp() > 0)
  exit(0);
```

```
#endif
 exit(1);
}
EOP
 if $cc -DTRY_BSD_PGRP $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1
  && ./set
 then
  echo "You have to use getpgrp(pid) instead of getpgrp()." >&4
  val="$define"
 elif $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo "You have to use getpgrp() instead of getpgrp(pid)." >&4
  val="$undef"
 else
  echo "I can't seem to compile and run the test program."
  if ./usg; then
   xxx="a USG one, i.e. you use getpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use getpgrp(pid)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use getpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your getpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set d_bsdgetpgrp
eval $setvar
$rm -f set set.c
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdbool.U,v $
?RCS:
?RCS: Copyright (c) 2011 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_stdbool: cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:i_stdbool:
?S: This variable conditionally defines the I_STDBOOL symbol, which
?S: indicates to the C program that <stdbool.h> exists and should
?S: be included.
?S:.
?C:I_STDBOOL:
?C: This symbol, if defined, indicates that <stdbool.h> exists and
?C: can be included.
?C:.
?H:#$i_stdbool I_STDBOOL  /**/
?H:.
?LINT:set i_stdbool
: see if stdbool is available
: we want a real compile instead of Inhdr because some Solaris systems
: have stdbool.h, but it can only be used if the compiler indicates it
: is sufficiently c99-compliant.
echo " "
$cat >try.c <<EOCP
#include <stdio.h>
#include <stdbool.h>
int func(bool x)
{
   return
 x ? 1 : 0;
}
int main(int argc, char **argv)
{
   return func(0);
}
EOCP
set try
if eval $compile; then
 echo "<stdbool.h> found." >&4
 val="$define"
else
 echo "<stdbool.h> NOT found." >&4
 val="$undef"
fi
$rm_try
set i_stdbool
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_stdbool.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cpp_stuff.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:24  ram
?RCS: patch36: now uses cppstdin instead of plain cpp for consistency (ADO)
?RCS: patch36: remove temporary files when done
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cpp_stuff: cat contains cppstdin cppflags cppminus rm
?MAKE: -pick add $@ %<
?S:cpp_stuff:
?S: This variable contains an identification of the concatenation
 mechanism
?S: used by the C preprocessor.
?S:.
?C:CAT2:
?C: This macro concatenates 2 tokens together.
?C:.
?C:CAT3:
?C: This macro concatenates 3 tokens together.
?C:.
?C:CAT4:
?C: This macro concatenates 4 tokens together.
?C:.
?C:CAT5:
?C: This macro concatenates 5 tokens together.
?C:.
?C:STRINGIFY:
?C: This macro surrounds its token with double quotes.
?C:.
?C:SCAT2:
?C: This macro concatenates 2 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT3:
?C: This macro concatenates 3 tokens together and stringifies the result.
```

```
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT4:
?C: This macro concatenates 4 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?C:SCAT5:
?C: This macro concatenates 5 tokens together and stringifies the result.
?C: It might not exist, so #ifdef it in your code!
?C:.
?X: Dist pl70 included the following, but AIX's xlc compiler
?X: (which
 is ANSI-ish and has cpp_stuff == 42)) rejects
?X: The SQuoTe/EQuoTe stuff because the string literals are on
?X: separate lines.  Sigh.
?X:  Andy Dougherty   24 Feb 1998
?X: ?H:?%<:#if $cpp_stuff == 1
?X: ?H:?CAT2:#define CAT2(a,b)a/**/b
?X: ?H:?CAT3:#define CAT3(a,b,c)a/**/b/**/c
?X: ?H:?CAT4:#define CAT4(a,b,c,d)a/**/b/**/c/**/d
?X: ?H:?CAT5:#define CAT5(a,b,c,d,e)a/**/b/**/c/**/d/**/e
?X: ?H:?STRINGIFY:#define STRINGIFY(a)"a"
?X: ?H:?%<:#define SQuoTe(a)"a
?X: ?H:?%<:#define EQuoTe(a)a"
?X: ?H:?SCAT2:#define SCAT2(a,b)EQuoTe(SQuoTe(a)b)
?X: ?H:?SCAT3:#define SCAT3(a,b,c)EQuoTe(SQuoTe(a)b/**/c)
?X: ?H:?SCAT4:#define SCAT4(a,b,c,d)EQuoTe(SQuoTe(a)b/**/c/**/d)
?X: ?H:?SCAT5:#define SCAT5(a,b,c,d,e)EQuoTe(SQuoTe(a)b/**/c/**/d/**/e)
?X: ?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 1
?H:?CAT2:#define CAT2(a,b) a/**/b
?H:?CAT3:#define CAT3(a,b,c) a/**/b/**/c
?H:?CAT4:#define CAT4(a,b,c,d) a/**/b/**/c/**/d
?H:?CAT5:#define CAT5(a,b,c,d,e) a/**/b/**/c/**/d/**/e
?H:?STRINGIFY:#define STRINGIFY(a) "a"
?X: If
 you can get stringification with catify, tell me how!
?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 42
?H:?%<:#define PeRl_CaTiFy(a, b) a ## b
?H:?%<:#define PeRl_StGiFy(a) #a
?X: The additional level of indirection enables these macros to be
?X: used as arguments to other macros.  See K&R 2nd ed., page 231.
?H:?CAT2:#define CAT2(a,b) PeRl_CaTiFy(a,b)
?H:?CAT3:#define CAT3(a,b,c) CAT2(PeRl_CaTiFy(a,b),c)
?H:?CAT4:#define CAT4(a,b,c,d) CAT2(CAT3(a,b,c),d)
?H:?CAT5:#define CAT5(a,b,c,d,e) CAT2(CAT4(a,b,c,d),e)
?H:?%<:#define StGiFy(a) PeRl_StGiFy(a)
```

```
?H:?STRINGIFY:#define STRINGIFY(a) PeRl_StGiFy(a)
?H:?SCAT2:#define SCAT2(a,b) PeRl_StGiFy(a) PeRl_StGiFy(b)
?H:?SCAT3:#define SCAT3(a,b,c) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c)
?H:?SCAT4:#define SCAT4(a,b,c,d) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c) PeRl_StGiFy(d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e) PeRl_StGiFy(a) PeRl_StGiFy(b) PeRl_StGiFy(c) PeRl_StGiFy(d)
PeRl_StGiFy(e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff != 1 && $cpp_stuff
 != 42
?H:?%<:#include "Bletch: How does this C preprocessor concatenate tokens?"
?H:?%<:#endif
?H:.
?W:%<:CAT2 CAT3 CAT4 CAT5 STRINGIFY SCAT2 SCAT3 SCAT4 SCAT5
?F:!cpp_stuff.c
?LINT:known StGiFy
?LINT:known PeRl_CaTiFy
?LINT:known PeRl_StGiFy
: how do we concatenate cpp tokens here?
echo " "
echo "Checking to see how your cpp does stuff like concatenate tokens..." >&4
$cat >cpp_stuff.c <<'EOCP'
#define RCAT(a,b)a/**/b
#define ACAT(a,b)a ## b
RCAT(Rei,ser)
ACAT(Cir,cus)
EOCP
$cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out 2>&1
if $contains 'Circus' cpp_stuff.out >/dev/null 2>&1; then
 echo "Oh!  Smells like ANSI's been here." >&4
 echo "We can catify or stringify, separately or together!"
 cpp_stuff=42
elif $contains 'Reiser' cpp_stuff.out >/dev/null 2>&1; then
 echo "Ah, yes!  The good old days!" >&4
 echo "However, in the good old days we don't know how to stringify and"
 echo "catify at the same time."
 cpp_stuff=1
else
 $cat >&4 <<EOM
Hmm, I don't seem to be able to concatenate
 tokens with your cpp.
You're going to have to edit the values of CAT[2-5] in config.h...
EOM
?X: It would be nice to have configure remind us at the end that some manual
?X: intervention is needed -- FIXME
 cpp_stuff="/* Help! How do we handle cpp_stuff? */*/"
fi
$rm -f cpp_stuff.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/cpp_stuff.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mkdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mkdir.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mkdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkdir:
?S: This variable conditionally defines the HAS_MKDIR symbol, which
?S: indicates to the C program that the mkdir() routine is available
?S: to create directories..
?S:.
?C:HAS_MKDIR (MKDIR):
?C: This symbol, if defined, indicates that the mkdir routine is available
?C: to create directories.
  Otherwise you should fork off a new process to
?C: exec /bin/mkdir.
?C:.
?H:#$d_mkdir HAS_MKDIR  /**/
?H:.
?LINT:set d_mkdir
: see if mkdir exists
set mkdir d_mkdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mkdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memcmp.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:35  ram
?RCS: patch10: removed text recommending bcmp over memcmp (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memcmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_memcmp:
?S: This variable conditionally defines the HAS_MEMCMP symbol, which
?S: indicates to the C program that the memcmp() routine is available
?S: to compare blocks of
 memory.
?S:.
?C:HAS_MEMCMP (MEMCMP):
?C: This symbol, if defined, indicates that the memcmp routine is available
?C: to compare blocks of memory.
?C:.
?H:#$d_memcmp HAS_MEMCMP /**/
?H:.
?LINT:set d_memcmp
: see if memcmp exists
set memcmp d_memcmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_faststdio: Setvar \
 d_stdstdio d_stdio_ptr_lval d_stdio_cnt_lval d_stdio_ptr_lval_sets_cnt
?MAKE: -pick add $@ %<
?S:d_faststdio:
?S: This variable conditionally defines the HAS_FAST_STDIO symbol,
?S: which indicates to the C program that the "fast stdio" is available
?S: to manipulate the stdio buffers directly.
```

```
?S:.
?C:HAS_FAST_STDIO:
?C: This symbol, if defined, indicates that the "fast stdio"
?C: is available to manipulate the stdio buffers directly.
?C:.
?H:#$d_faststdio HAS_FAST_STDIO  /**/
?H:.
?LINT:set d_faststdio
: see if fast_stdio exists
val="$undef"
case "$d_stdstdio:$d_stdio_ptr_lval" in
"$define:$define")
 case "$d_stdio_cnt_lval$d_stdio_ptr_lval_sets_cnt" in
 *$define*)
  echo "You
 seem to have 'fast stdio' to directly manipulate the stdio buffers." >&4
  val="$define"
  ;;
 esac
 ;;
esac
set d_faststdio
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_faststdio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:run to from targetarch targetdir targetmkdir targethost targetport \
 usecrosscompile hostperl hostgenerate hostosname targetenv: \
    src test rm echo sed mkdir cp chmod make touch
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecrosscompile:
?S: This variable conditionally defines the USE_CROSS_COMPILE symbol,
?S: and indicates that Perl has been cross-compiled.
?S:.
?S:run:
?S: This variable contains the command used by Configure
?S: to copy and execute a cross-compiled executable in the
?S: target host.  Useful and available only during Perl build.
```

```
?S: Empty string '' if not cross-compiling.
?S:.
?S:from:
?S: This variable contains the command used by Configure
?S: to copy files from the target host.  Useful
 and available
?S: only during Perl build.
?S: The string ':' if not cross-compiling.
?S:.
?S:to:
?S: This variable contains the command used by Configure
?S: to copy to from the target host.  Useful and available
?S: only during Perl build.
?S: The string ':' if not cross-compiling.
?S:.
?S:targetarch:
?S: If cross-compiling, this variable contains the target architecture.
?S: If not, this will be empty.
?S:.
?S:targetdir:
?S: This variable contains a path that will be created on the target
?S: host using targetmkdir, and then used to copy the cross-compiled
?S: executables to. Defaults to '/tmp' if not set.
?S:.
?S:targetmkdir:
?S: This variable contains the command used by Configure to create a
?S: new directory on the target host.
?S:.
?S:targethost:
?S: This variable contains the name of a separate host machine that
?S: can be used to run compiled test programs and perl tests on.
?S: Set to empty string if not in use.
?S:.
?S:targetport:
?S: This variable contains the number
 of a network port to be used to
?S: connect to the host in targethost, if unset defaults to 22 for ssh.
?S:.
?S:hostperl:
?S: This variable contains the path to a miniperl binary that can be
?S: run on the host OS when cross-compiling.  Useful and available only
?S: during Perl build.
?S: Empty string '' if not cross-compiling.
?S:.
?S:hostgenerate:
?S: This variable contains the path to a generate_uudmap binary that
?S: can be run on the host OS when cross-compiling.  Useful and
?S: available only during Perl build.
```

```
?S: Empty string '' if not cross-compiling.
?S:.
?S:hostosname:
?S: This variable contains the original value of '$^O' for hostperl
?S: when cross-compiling.  This is useful to pick the proper tools
?S: when running build code in the host.
?S: Empty string '' if not cross-compiling.
?S:.
?S:targetenv:
?S: If cross-compiling, this variable can be used to modify the
?S: environment on the target system.
?S: However, how and where it's used, and even if it's used at all, is
?S: entirely
 dependent on both the transport mechanism (targetrun) and
?S: what the target system is.  Unless the relevant documentation says
?S: otherwise, it is genereally not useful.
?S:.
?C:USE_CROSS_COMPILE:
?C: This symbol, if defined, indicates that Perl is being cross-compiled.
?C:.
?C:PERL_TARGETARCH:
?C: This symbol, if defined, indicates the target architecture
?C: Perl has been cross-compiled to.  Undefined if not a cross-compile.
?C:.
?H:?%<:#ifndef USE_CROSS_COMPILE
?H:?%<:#$usecrosscompile USE_CROSS_COMPILE /**/
?H:?%<:#define PERL_TARGETARCH "$targetarch" /**/
?H:?%<:#endif
?H:.
?D:targetenv=''
?D:targethost=''
?D:targetmkdir=''
?T:croak pwd exe f q cwd file xxx env
?LINT:extern usecrosscompile
?LINT:extern cc
?LINT:extern usrinc
?LINT:change ar
?LINT:change nm
?LINT:change ranlib
?LINT:change src
?LINT:extern targetenv
?LINT:extern targetport
?LINT:extern targetdir
?LINT:extern targetuser
?LINT:change targetuser
?LINT:extern targetrun
?LINT:extern targetfrom
?LINT:extern
```

```
 targetto
?LINT:change targetrun
?LINT:change targetfrom
?LINT:change targetto
?LINT:extern incpth
?LINT:extern libpth
?LINT:extern locincpth
?LINT:extern loclibpth
?LINT:change locincpth
?LINT:change loclibpth
?LINT:extern hostperl
?LINT:extern hostgenerate
?LINT:extern before_host
?LINT:change before_host
?LINT:extern hostosname
?LINT:extern multiarch
: Check for Cross-Compilation
?X: targethost and targetenv mainly set to allow ?S: documentation
?X:otherwise it could have been declared extern
if $test "X$targethost" = "X"; then
   targethost=""
fi
if $test "X$targetenv" = "X"; then
   targetenv=""
fi
case "$usecrosscompile" in
$define|true|[yY]*)
 $echo "Cross-compiling..."
 croak="
 case "$cc" in
 *-gcc*|*-g++*) # A cross-compiling gcc, probably.
     # arm-linux-androideabi-gcc  -> arm-linux-androideabi
     # x86_64-w64-mingw32-gcc.exe -> x86_64-w64-mingw32
     targetarch=`$echo $cc|$sed 's/-g[c\+][c\+].*$//'`
     ar=`$echo $cc|$sed 's/-g[c\+][c\+]/-ar/'`
     # leave out ld,
 choosing it is more complex
     nm=`$echo $cc|$sed 's/-g[c\+][c\+]/-nm/'`
     ranlib=`$echo $cc|$sed 's/-g[c\+][c\+]/-ranlib/'`
     # We are in a weird spot. Just before us, some values
     # were 'saved', to be restored after the hints are
     # run.  This means that the changes we made to ar,
     # nm and ranlib will get reverted.
     # To avoid that, we hijack the saving mechanism and
     # have it save our new values.
     for file in ar nm ranlib; do
  eval xxx=\$$file
  eval $file=$xxx$_exe
```

```
 eval _$file=$xxx
    done
;;
esac
case "$targetarch" in
") echo "Targetarch not defined." >&4; croak=y ;;
*)  echo "Using targetarch $targetarch." >&4 ;;
esac
case "$targethost" in
") echo "Targethost not defined." >&4; croak=n ;;
*)  echo "Using targethost $targethost." >&4
esac
locincpth=' '
loclibpth=' '
case "$croak" in
y) echo "Cannot continue, aborting." >&4; exit 1 ;;
esac
  : compile a host miniperl and generate_uudmap, unless we got passed them
  if
$test "X$hostperl" = X; then
    echo "Building host miniperl and generate_uudmap binaries" >&4
    before_host=`pwd`
    cd ..
    cd $src
    src=`pwd`
    rm -rf $src/host
    mkdir $src/host
    cd $src/host
    $src/Configure -des -Dusedevel -Dmksymlinks
    $make miniperl
    case "$hostgenerate" in
    ") $make generate_uudmap
        hostgenerate=$src/host/generate_uudmap
        ;;
     "$undef") hostgenerate="
        ;;
    esac
    hostperl=$src/host/miniperl
    cd $before_host
  fi
  hostosname=`$hostperl -le 'print $^O'`
  ;;
*)
  usecrosscompile="$undef"
  ;;
esac

: Define -Dtargethost=somecomputer to run compiled tests on another machine
```

```
case "$targethost" in
  ") echo "Checking for cross-compile" >&4
  case "$usecrosscompile$multiarch" in
     *$define*) echo "Skipping the try tests in the rest of Configure as no targethost was defined when cross-
compiling" >&4
       if [ -f Makefile ]; then
         echo
" "
         echo "Now you must ensure config.sh, config.h and the generated headers exist and run a $make."
       else
         echo "Configure done."
       fi
     exit 0
     ;;
   *) echo "No targethost for running compiler tests against defined, running locally" >&4
      run="
      to=:
      from=:
      ;;
  esac
  ;;
  *) echo "Using targethost $targethost." >&4
case "$src" in
/*) run=$src/Cross/run
    targetmkdir=$src/Cross/mkdir
    to=$src/Cross/to
    from=$src/Cross/from
    ;;
*)  pwd=`$test -f ../Configure & cd ..; pwd`
    run=$pwd/Cross/run
    targetmkdir=$pwd/Cross/mkdir
    to=$pwd/Cross/to
    from=$pwd/Cross/from
    ;;
esac
case "$targetrun" in
") targetrun=ssh ;;
esac
case "$targetto" in
") targetto=scp ;;
esac
case "$targetfrom" in
") targetfrom=scp ;;
esac
run=$run-$targetrun
to=$to-$targetto
from=$from-$targetfrom
case "$targetdir" in
```

```
 ")  targetdir=/tmp
     echo "Guessing targetdir $targetdir."
 >&4
     ;;
 esac
 case "$targetuser" in
 ")  targetuser=root
     echo "Guessing targetuser $targetuser." >&4
     ;;
 esac
 case "$targetport" in
 ")  targetport=22
     echo "Guessing targetport $targetport." >&4
     ;;
 esac
 case "$targetfrom" in
 scp) q=-q ;;
 *) q=" ;;
 esac
 case "$targetrun" in
 ssh|rsh)
    cat >$run <<EOF
#!/bin/sh
env="
case "\$1" in
-cwd)
 shift
 cwd=\$1
 shift
 ;;
esac
case "\$1" in
-env)
 shift
 env=\$1
 shift
 ;;
esac
case "\$cwd" in
") cwd=$targetdir ;;
esac
exe=\$1
shift
$to \$exe
$targetrun -p $targetport -l $targetuser $targethost "cd \$cwd && \$env \$exe \$@"
EOF
     ;;
 adb)
```

```
    $touch $run
    ;;
 *)  echo "Unknown targetrun '$targetrun'" >&4
    exit 1
    ;;
 esac
 case "$targetmkdir" in
 */Cross/mkdir)
    cat >$targetmkdir <<EOF
#!/bin/sh
$targetrun -p $targetport -l $targetuser $targethost "mkdir -p \$@"
EOF
    $chmod a+rx $targetmkdir
    ;;
 *)  echo "Unknown targetmkdir '$targetmkdir'" >&4
    exit 1
    ;;
 esac
 case
 "$targetto" in
 scp|rcp)
    cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $targetmkdir \`dirname \$f\`
   $targetto -P $targetport -r $q \$f $targetuser@$targethost:\$f          2>/dev/null  || exit 1
   ;;
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $targetto -P $targetport -r $q \$f $targetuser@$targethost:$targetdir/\$f 2>/dev/null || exit 1
   ;;
 esac
done
exit 0
EOF
    ;;
 cp) cat >$to <<EOF
#!/bin/sh
for f in \$@
do
 case "\$f" in
 /*)
   $mkdir -p $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
```

```
 *)
   $targetmkdir $targetdir/\`dirname \$f\`
   $cp \$f $targetdir/\$f || exit 1
   ;;
 esac
done
exit 0
EOF
     ;;
 *)  echo "Unknown targetto '$targetto'" >&4
     exit 1
     ;;
 esac
 case "$targetfrom" in
 scp|rcp)
   cat >$from <<EOF
#!/bin/sh
for f in \$@
do
 $rm -f \$f
 $targetfrom -P $targetport $q $targetuser@$targethost:$targetdir/\$f . || exit 1
done
exit 0
EOF
     ;;
 cp) cat >$from <<EOF
#!/bin/sh
for
 f in \$@
do
 $rm -f \$f
 cp $targetdir/\$f . || exit 1
done
exit 0
EOF
     ;;
 *)  echo "Unknown targetfrom '$targetfrom'" >&4
     exit 1
     ;;
 esac
 if $test ! -f $run; then
     echo "Target 'run' script '$run' not found." >&4
 else
     $chmod a+rx $run
 fi
 if $test ! -f $to; then
     echo "Target 'to' script '$to' not found." >&4
 else
```

```
    $chmod a+rx $to
 fi
 if $test ! -f $from; then
    echo "Target 'from' script '$from' not found." >&4
 else
    $chmod a+rx $from
 fi
 if $test ! -f $run -o ! -f $to -o ! -f $from; then
    exit 1
 fi
 cat >&4 <<EOF
Using '$run' for remote execution,
and '$from' and '$to'
for remote file transfer.
EOF
 ;;
*) run="
 to=:
 from=:
 usecrosscompile="$undef"
 targetarch="
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Cross.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_semget.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_semget.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semget: Inlibc
?MAKE: -pick add $@ %<
?S:d_semget:
?S: This variable conditionally defines the HAS_SEMGET symbol, which
?S: indicates to the C program that the semget() routine is available.
?S:.
```

```
?C:HAS_SEMGET:
?C: This symbol, if defined, indicates that the semget() routine is
?C: available to get a set of semaphores.
?C:.
?H:#$d_semget
 HAS_SEMGET /**/
?H:.
?LINT:set d_semget
: see if semget exists
set semget d_semget
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semget.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uselargefiles \
 ccflags_uselargefiles \
 ldflags_uselargefiles \
 libswanted_uselargefiles: \
 Myread Oldconfig Setvar test lseeksize fpossize \
 fpostype Compile echo n c cat lseektype rm_try run \
 use64bitint use64bitall i_stdlib
?MAKE: -pick add $@ %<
?Y:TOP
?S:uselargefiles:
?S: This variable conditionally defines the USE_LARGE_FILES symbol,
?S: and indicates that large file interfaces should be used when
?S: available.
?S:.
?S:ccflags_uselargefiles:
?S: This variable contains the compiler flags needed by large file builds
?S: and added to ccflags by hints files.
?S:.
?S:ldflags_uselargefiles:
?S: This variable contains the loader flags needed by large file builds
?S: and added to ldflags by
 hints files.
?S:.
?S:libswanted_uselargefiles:
?S: This variable contains the libraries needed by large file builds
```

```
?S: and added to ldflags by hints files.  It is a space separated list
?S: of the library names without the "lib" prefix or any suffix, just
?S: like libswanted..
?S:.
?C:USE_LARGE_FILES:
?C: This symbol, if defined, indicates that large file support
?C: should be used when available.
?C:.
?H:?%<:#ifndef USE_LARGE_FILES
?H:?%<:#$uselargefiles USE_LARGE_FILES  /**/
?H:?%<:#endif
?H:.
?INIT:ccflags_uselargefiles="
?INIT:ldflags_uselargefiles="
?INIT:libswanted_uselargefiles="
?T:yyy zzz
?F:!uselargefiles.cbu !try
?LINT:change lseeksize
?LINT:change fpossize
?LINT:extern uselfs
?LINT:use use64bitint
?LINT:use use64bitall
: Check for large file support
# Backward compatibility (uselfs is deprecated).
case "$uselfs" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duselfs is deprecated, using -Duselargefiles instead.
EOM
 uselargefiles="$define"
 ;;
esac

case "$lseeksize:$fpossize"
 in
8:8) cat <<EOM

You can have files larger than 2 gigabytes.
EOM
  val="$define" ;;
*)    case "$uselargefiles" in
  "$undef"|false|[nN]*) dflt='n' ;;
  *) dflt='y' ;;
  esac
  cat <<EOM

Perl can be built to understand large files (files larger than 2 gigabytes)
```

```
on some systems.  To do so, Configure can be run with -Duselargefiles.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
  rp='Try to understand large files, if available?'
  . ./myread
  case "$ans" in
  y|Y) val="$define" ;;
  *) val="$undef"  ;;
  esac
  ;;
esac
set uselargefiles
eval $setvar
: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a large files perl is to be built,
: we may need to set or change some other defaults.
if $test -f uselargefiles.cbu; then
 echo "Your platform has some specific hints regarding large file builds, using them..."
 . ./uselargefiles.cbu
fi
case "$uselargefiles" in
"$define")
 if $test -f uselargefiles.cbu;
 then
  echo " "
  echo "Rechecking to see how big your file offsets are..." >&4
  $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof($lseektype));
   return(0);
}
EOCP
  set try
  if eval $compile_ok; then
   lseeksize=`$run ./try`
   $echo "Your file offsets are now $lseeksize bytes long."
  else
   dflt="$lseeksize"
   echo " "
   echo "(I can't seem to compile the test program.  Guessing...)"
   rp="What is the size of your file offsets (in bytes)?"
   . ./myread
   lseeksize="$ans"
  fi
```

```
  case "$fpostype" in
  *_t) zzz="$fpostype" ;;
  *)   zzz="fpos_t" ;;
  esac
  $echo $n "Rechecking the size of $zzz...$c" >&4
  $cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($fpostype));
   return(0);
}
EOCP
  set try
  if eval $compile_ok; then
   yyy=`$run ./try`
   dflt="$lseeksize"
   case "$yyy" in
   ") echo
 " "
    echo "(I can't execute the test program--guessing $fpossize.)" >&4
    ;;
   *) fpossize=$yyy
    echo " $fpossize bytes." >&4
    ;;
   esac
  else
   dflt="$fpossize"
   echo " "
   echo "(I can't compile the test program.  Guessing...)" >&4
   rp="What is the size of your file positions (in bytes)?"
   . ./myread
   fpossize="$ans"
  fi
  $rm_try
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/uselfs.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: html1dir.U,v $

```
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: html1dir.U,v $
?RCS:
?MAKE:html1dir html1direxp installhtml1dir: cat Loc Myread \
 spackage test Getfile Setprefixvar Prefixit Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?D:html1dir=''
?S:html1dir:
?S: This variable contains the name of the directory in which html
?S: source pages are to be put.  This directory is for pages
?S: that describe whole programs, not libraries or modules.  It
?S: is intended to correspond roughly to section 1 of the Unix
?S: manuals.
?S:.
?D:html1direxp=''
?S:html1direxp:
?S: This
 variable is the same as the html1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installhtml1dir=''
?S:installhtml1dir:
?S: This variable is really the same as html1direxp, unless you are
?S: using a different installprefix.  For extra portability, you
?S: should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set html1direxp
?LINT:set installhtml1dir
: determine where html pages for programs go
set html1dir html1dir none
eval $prefixit
$cat <<EOM

If you wish to install html files for programs in $spackage, indicate
the appropriate directory here.  To skip installing html files,
answer "none".
EOM
case "$html1dir" in
```

```
"|none|$undef|' ') dflt=none ;;
*) dflt=$html1dir ;;
esac
fn=dn+~
rp="Directory for the main $spackage html pages?"
. ./getfile
prefixvar=html1dir
. ./setprefixvar
: Use ' ' for none so value is preserved next time through Configure
$test X"$html1dir" = "X" && html1dir=' '

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/html1dir.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: contains.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:contains: Nothing
?MAKE: -pick add $@ %<
?S:contains:
?S: This variable holds the command to do a grep with a proper return
?S: status.  On most sane systems it is simply "grep".  On insane systems
?S: it is a grep followed by a cat followed by a test.  This variable
?S: is primarily for the use of other Configure units.
?S:.
: Some
 greps do not return status, grrr.
echo "grimblepritz" >grimble
if grep blurfldyick grimble >/dev/null 2>&1 ; then
 contains=contains
elif grep grimblepritz grimble >/dev/null 2>&1 ; then
 contains=grep
else
 contains=contains
fi
```

```
rm -f grimble
: the following should work in any shell
case "$contains" in
contains*)
 echo " " >&4
 echo "AGH!  Grep doesn't return a status.  Attempting remedial action." >&4
 cat >contains <<'EOSS'
grep "$1" "$2" >.greptmp && cat .greptmp && test -s .greptmp
EOSS
contains=./contains
chmod +x $contains
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/contains.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2014, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_dladdr.U,v $
?RCS:
?MAKE:d_dladdr: Inlibc
?MAKE: -pick add $@ %<
?S:d_dladdr:
?S: This variable conditionally defines the HAS_DLADDR symbol, which
?S: indicates to the C program that the dladdr() routine is available
?S: to get a stack trace.
?S:.
?C:HAS_DLADDR:
?C: This symbol, if defined, indicates that the dladdr() routine is
?C: available to query dynamic linker information for an address.
?C: The <dlfcn.h> header must be included to use this routine.
?C:.
?H:#$d_dladdr HAS_DLADDR /**/
?H:.
?LINT:set d_dladdr
:
 see if dladdr exists
set dladdr d_dladdr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dladdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_syslog.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_syslog.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:56  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syslog: test Csym Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_syslog:
?S: This variable conditionally defines the HAS_SYSLOG symbol, which
?S: indicates to the C program that syslog() exists on this system.
?S:.
?C:HAS_SYSLOG
 (LIBSYSLOG):
?C: This symbol, if defined, indicates that the program can rely on the
?C: system providing syslog().  Otherwise, the syslog code provided by
?C: the package should be used.
?C:.
?H:#$d_syslog HAS_SYSLOG /**/
?H:.
?LINT:set d_syslog
: see if syslog is available
echo " "
if $test `./findhdr syslog.h` && \
 (set syslog val -f d_syslog; eval $csym; $val); then
 echo "syslog() found." >&4
 val="$define"
else
 echo "syslog() not found in your C library." >&4
 val="$undef"
fi
set d_syslog
```

```
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_syslog.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wait4.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wait4.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wait4: Inlibc
?MAKE: -pick add $@ %<
?S:d_wait4:
?S: This variable conditionally defines the HAS_WAIT4 symbol, which
?S: indicates the wait4() routine is available.
?S:.
?C:HAS_WAIT4 (WAIT4):
?C: This symbol, if defined, indicates that wait4() exists.
?C:.
?H:#$d_wait4 HAS_WAIT4 /**/
?H:.
?LINT:set d_wait4
: see if there is a wait4
set
 wait4 d_wait4
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wait4.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ssizetype.U,v 3.0.1.3 1997/02/28 16:24:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: ssizetype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:24:21  ram
?RCS: patch61: integrated perl5 concerns for mis-configured sfio
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:30:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:33:06  ram
?RCS: patch32: created
 by ADO
?RCS:
?MAKE:ssizetype: Myread Typedef sizetype cat rm_try Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:ssizetype:
?S: This variable defines ssizetype to be something like ssize_t,
?S: long or int.  It is used by functions that return a count
?S: of bytes or an error condition.  It must be a signed type.
?S: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?S:.
?C:SSize_t:
?C: This symbol holds the type used by functions that return
?C: a count of bytes or an error condition.  It must be a signed type.
?C: It is usually ssize_t, but may be long or int, etc.
?C: It may be necessary to include <sys/types.h> or <unistd.h>
?C: to get any typedef'ed information.
?C: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?C:.
?H:#define SSize_t $ssizetype /* signed count of bytes */
?H:.
?F:!try
: see what type is used for signed size_t
set ssize_t ssizetype int stdio.h sys/types.h
eval $typedef
dflt="$ssizetype"
?X: Now check out whether sizeof(SSize_t)
 == sizeof(Size_t)
$cat > try.c <<EOM
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
```

```
#include <sys/types.h>
#define Size_t $sizetype
#define SSize_t $dflt
int main()
{
 if (sizeof(Size_t) == sizeof(SSize_t))
  printf("$dflt\n");
 else if (sizeof(Size_t) == sizeof(int))
  printf("int\n");
 else
  printf("long\n");
 exit(0);
}
EOM
echo " "
set try
if eval $compile_ok && $run ./try > /dev/null; then
 ssizetype=`$run ./try`
 echo "I'll be using $ssizetype for functions returning a byte count." >&4
else
 $cat >&4 <<EOM
Help! I can't compile and run the ssize_t test program: please enlighten me!
(This is probably a misconfiguration in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)

I need a type that is the same size as $sizetype, but is guaranteed to
be signed.  Common values are ssize_t, int and long.

EOM
 rp="What signed type is the same size as $sizetype?"
 . ./myread
 ssizetype="$ans"
fi
$rm_try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ssizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shmctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmctl:
?S: This variable conditionally defines the HAS_SHMCTL symbol, which
?S: indicates to the C program that the shmctl() routine is available.
?S:.
?C:HAS_SHMCTL:
?C: This symbol, if defined, indicates that the shmctl() routine is
?C: available to perform shared memory control operations.
?C:.
?H:#$d_shmctl
 HAS_SHMCTL  /**/
?H:.
?LINT:set d_shmctl
: see if shmctl exists
set shmctl d_shmctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dlerror.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlerror.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:49  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:11:23  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_dlerror: Inlibc runnm
```

```
?MAKE: -pick add $@ %<
?S:d_dlerror:
?S: This variable conditionally defines the HAS_DLERROR symbol, which
?S: indicates
 to the C program that the dlerror() routine is available.
?S:.
?C:HAS_DLERROR :
?C: This symbol, if defined, indicates that the dlerror routine is
?C: available to return a string describing the last error that
?C: occurred from a call to dlopen(), dlclose() or dlsym().
?C:.
?H:#$d_dlerror HAS_DLERROR /**/
?H:.
?T: xxx_runnm
?LINT:set d_dlerror
?X: We don't permanently change runnm, but we do temporarily.
?LINT: change runnm
: see if dlerror exists
?X: On NetBSD and FreeBSD, dlerror might be available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
runnm=false
set dlerror d_dlerror
eval $inlibc
runnm="$xxx_runnm"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dlerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_fp_class.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_fp_class: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_fp_class:
?S: This variable conditionally defines the I_FP_CLASS symbol, and indicates
?S: whether a C program should include <fp_class.h>.
?S:.
?C:I_FP_CLASS:
?C: This symbol, if defined, indicates that <fp_class.h> exists and
?C: should be included.
?C:.
```

```
?H:#$i_fp_class I_FP_CLASS  /**/
?H:.
?LINT:set i_fp_class
: see if this is a fp_class.h system
set fp_class.h i_fp_class
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fp_class.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_htonl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_htonl.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:09:25  ram
?RCS: patch32: now properly handles htonl() and friends when macros (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:45:00  ram
?RCS: patch23: now also check for htonl() macro (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_htonl: Inlibc Setvar i_niin i_sysin i_arpainet cat rm contains \
 cppstdin cppflags cppminus
?MAKE: -pick
 add $@ %<
?S:d_htonl:
?S: This variable conditionally defines HAS_HTONL if htonl() and its
?S: friends are available to do network order byte swapping.
?S:.
?C:HAS_HTONL (HTONL):
?C: This symbol, if defined, indicates that the htonl() routine (and
?C: friends htons() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_HTONS (HTONS):
?C: This symbol, if defined, indicates that the htons() routine (and
?C: friends htonl() ntohl() ntohs()) are available to do network
?C: order byte swapping.
```

```
?C:.
?C:HAS_NTOHL (NTOHL):
?C: This symbol, if defined, indicates that the ntohl() routine (and
?C: friends htonl() htons() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHS (NTOHS):
?C: This symbol, if defined, indicates that the ntohs() routine (and
?C: friends htonl() htons() ntohl()) are available to do network
?C: order byte swapping.
?C:.
?H:#$d_htonl HAS_HTONL  /**/
?H:#$d_htonl HAS_HTONS  /**/
?H:#$d_htonl HAS_NTOHL  /**/
?H:#$d_htonl
 HAS_NTOHS  /**/
?H:.
?F:!htonl.c
?LINT:set d_htonl
: see if htonl --and friends-- exists
val=''
set htonl val
eval $inlibc

: Maybe they are macros.
case "$val" in
$undef)
 $cat >htonl.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#$i_niin I_NETINET_IN
#$i_sysin I_SYS_IN
#$i_arpainet I_ARPA_INET
#ifdef I_NETINET_IN
#include <netinet/in.h>
#endif
#ifdef I_SYS_IN
#include <sys/in.h>
#endif
#ifdef I_ARPA_INET
#include <arpa/inet.h>
#endif
#ifdef htonl
printf("Defined as a macro.");
#endif
EOM
 $cppstdin $cppflags $cppminus < htonl.c >htonl.E 2>/dev/null
 if $contains 'Defined as a macro' htonl.E >/dev/null 2>&1; then
```

```
  val="$define"
  echo "But it seems to be defined as a macro." >&4
 fi
 $rm -f htonl.?
 ;;
esac
set d_htonl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_htonl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getlogin_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getlogin_r getlogin_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_unistd extern_C
?MAKE: -pick add $@ %<
?S:d_getlogin_r:
?S: This variable conditionally defines the HAS_GETLOGIN_R symbol,
?S: which indicates to the C program that the getlogin_r()
?S: routine is available.
?S:.
?S:getlogin_r_proto:
?S: This variable encodes the prototype of getlogin_r.
?S: It is zero if d_getlogin_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getlogin_r
?S: is defined.
?S:.
?C:HAS_GETLOGIN_R:
?C: This symbol, if defined, indicates that the getlogin_r routine
?C: is available
 to getlogin re-entrantly.
?C:.
?C:GETLOGIN_R_PROTO:
?C: This symbol encodes the prototype of getlogin_r.
?C: It is zero if d_getlogin_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getlogin_r
?C: is defined.
?C:.
?H:#$d_getlogin_r HAS_GETLOGIN_R /**/
?H:#define GETLOGIN_R_PROTO $getlogin_r_proto /**/
```

```
?H:.
?T:try hdrs d_getlogin_r_proto
: see if getlogin_r exists
set getlogin_r d_getlogin_r
eval $inlibc
case "$d_getlogin_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_unistd unistd.h"
 case "$d_getlogin_r_proto:$usethreads" in
 ":define") d_getlogin_r_proto=define
  set d_getlogin_r_proto getlogin_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getlogin_r_proto" in
 define)
 case "$getlogin_r_proto" in
 "|0) try='int getlogin_r(char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=I_BW ;;
 esac
 case "$getlogin_r_proto" in
 "|0) try='int getlogin_r(char*, int);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=I_BI
 ;;
 esac
 case "$getlogin_r_proto" in
 "|0) try='char* getlogin_r(char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=B_BW ;;
 esac
 case "$getlogin_r_proto" in
 "|0) try='char* getlogin_r(char*, int);'
 ./protochk "$extern_C $try" $hdrs && getlogin_r_proto=B_BI ;;
 esac
 case "$getlogin_r_proto" in
 "|0) d_getlogin_r=undef
  getlogin_r_proto=0
  echo "Disabling getlogin_r, cannot determine prototype." >&4 ;;
 * ) case "$getlogin_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getlogin_r_proto="REENTRANT_PROTO_$getlogin_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getlogin_r has no prototype, not using it." >&4 ;;
  esac
  d_getlogin_r=undef
```

```
  getlogin_r_proto=0
  ;;
 esac
 ;;
*) getlogin_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getlogin_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017, Lukas Mai
?RCS:
?RCS: You may distribute this file under the terms of either
?RCS:     a) the "Artistic License" which comes with Perl, or
?RCS:     b) the "Artistic License" which comes with dist, or
?RCS:     c) the GNU General Public License as published by the Free
?RCS:     Software Foundation; either version 1, or (at your option) any
?RCS:     later version (see the file "Copying" that comes with the
?RCS:     Perl distribution).
?RCS: Which one to use is your choice.
?RCS: See the U/README file.
?MAKE:d_builtin_add_overflow d_builtin_sub_overflow d_builtin_mul_overflow : Compile Setvar cat run rm_try
?MAKE: -pick add $@ %<
?S:d_builtin_add_overflow:
?S: This variable conditionally defines HAS_BUILTIN_ADD_OVERFLOW, which
?S: indicates that the compiler supports __builtin_add_overflow(x,y,&z)
?S: for safely adding x and y into z while checking for overflow.
?S:.
?S:d_builtin_sub_overflow:
?S: This
 variable conditionally defines HAS_BUILTIN_SUB_OVERFLOW, which
?S: indicates that the compiler supports __builtin_sub_overflow(x,y,&z)
?S: for safely subtracting y from x into z while checking for overflow.
?S:.
?S:d_builtin_mul_overflow:
?S: This variable conditionally defines HAS_BUILTIN_MUL_OVERFLOW, which
?S: indicates that the compiler supports __builtin_mul_overflow(x,y,&z)
?S: for safely multiplying x and y into z while checking for overflow.
?S:.
?C:HAS_BUILTIN_ADD_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_add_overflow for adding integers with overflow checks.
?C:.
?C:HAS_BUILTIN_SUB_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_sub_overflow for subtracting integers with overflow checks.
```

```
?C:.
?C:HAS_BUILTIN_MUL_OVERFLOW:
?C: This symbol, if defined, indicates that the compiler supports
?C: __builtin_mul_overflow for multiplying integers with overflow checks.
?C:.
?H:#$d_builtin_add_overflow
 HAS_BUILTIN_ADD_OVERFLOW /**/
?H:#$d_builtin_sub_overflow HAS_BUILTIN_SUB_OVERFLOW /**/
?H:#$d_builtin_mul_overflow HAS_BUILTIN_MUL_OVERFLOW /**/
?H:.
?F:!try
?LINT:set d_builtin_add_overflow d_builtin_sub_overflow d_builtin_mul_overflow
: Look for GCC-style __builtin_add_overflow
case "$d_builtin_add_overflow" in
")
   echo " "
   echo "Checking whether your compiler can handle __builtin_add_overflow ..." >&4
   $cat >try.c <<'EOCP'
int main(void) {
   const unsigned int uint_max = ~0u;
   int target_int = 0;
   if (__builtin_add_overflow(1, 2, &target_int) || target_int != 3) {
       return 1;
   }
   if (!__builtin_add_overflow((int)(uint_max >> 1), 1, &target_int)) {
       return 1;
   }
   if (!__builtin_add_overflow(uint_max, -1, &target_int)) {
       return 1;
   }
   return 0;
}
EOCP
   set try
   if eval $compile && $run ./try; then
       echo "Your C compiler supports __builtin_add_overflow."
       val="$define"
   else
       echo
 "Your C compiler doesn't seem to understand __builtin_add_overflow."
       val="$undef"
   fi
   ;;
*) val="$d_builtin_add_overflow" ;;
esac

set d_builtin_add_overflow
eval $setvar
```

```
$rm_try

: Look for GCC-style __builtin_sub_overflow
case "$d_builtin_sub_overflow" in
")
  echo " "
  echo "Checking whether your compiler can handle __builtin_sub_overflow ..." >&4
  $cat >try.c <<'EOCP'
int main(void) {
  const unsigned int uint_max = ~0u;
  int target_int = 0;
  if (__builtin_sub_overflow(1, -2, &target_int) || target_int != 3) {
     return 1;
  }
  if (!__builtin_sub_overflow(-(int)(uint_max >> 1), 2, &target_int)) {
     return 1;
  }
  if (!__builtin_sub_overflow(uint_max, 1, &target_int)) {
     return 1;
  }
  return 0;
}
EOCP
  set try
  if eval $compile && $run ./try; then
     echo "Your C compiler supports __builtin_sub_overflow."
     val="$define"
  else
     echo "Your C compiler doesn't seem to understand __builtin_sub_overflow."
      val="$undef"
  fi
  ;;
*) val="$d_builtin_sub_overflow" ;;
esac

set d_builtin_sub_overflow
eval $setvar
$rm_try

: Look for GCC-style __builtin_mul_overflow
case "$d_builtin_mul_overflow" in
")
  echo " "
  echo "Checking whether your compiler can handle __builtin_mul_overflow ..." >&4
  $cat >try.c <<'EOCP'
int main(void) {
  const unsigned int uint_max = ~0u;
  int target_int = 0;
```

```
  if (__builtin_mul_overflow(2, 3, &target_int) || target_int != 6) {
      return 1;
  }
  if (!__builtin_mul_overflow((int)(uint_max >> 1), 2, &target_int)) {
      return 1;
  }
  if (!__builtin_mul_overflow(uint_max, 1, &target_int)) {
      return 1;
  }
  return 0;
}
EOCP
  set try
  if eval $compile && $run ./try; then
      echo "Your C compiler supports __builtin_mul_overflow."
      val="$define"
  else
      echo "Your C compiler doesn't seem to understand __builtin_mul_overflow."
      val="$undef"
  fi
  ;;
*) val="$d_builtin_mul_overflow"
 ;;
esac

set d_builtin_mul_overflow
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_builtin_overflow.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nametype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nametype.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:26:09  ram
?RCS: patch36: call ./usg and ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:36:48  ram
```

```
?RCS: patch32: fixed typo: /etc/password -> /etc/passwd (WED)
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:10:09  ram
?RCS: patch10: made questions more explicit for 'Configure -s' prompting (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:20  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?MAKE:nametype d_passnames d_berknames d_usgnames: Myread Guess Oldconfig cat
?MAKE: -pick add $@ %<
?S:nametype:
?S: This variable indicates how full names are stored on this system.
?S: Values are bsd, usg, and other.
?S:.
?S:d_passnames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file.
?S:.
?S:d_berknames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file in Berkeley format.
?S:.
?S:d_usgnames:
?S: This variable conditionally defines the PASSNAMES symbol,
?S: which indicates to the C program that full names are stored in
?S: the /etc/passwd file in USG format.
?S:.
?C:PASSNAMES:
?C: This symbol, if defined, indicates that full names are stored in
?C: the /etc/passwd file.
?C:.
?C:BERKNAMES:
?C: This symbol, if defined, indicates that full
 names are stored in
?C: the /etc/passwd file in Berkeley format (name first thing, everything
?C: up to first comma, with & replaced by capitalized login id, yuck).
?C:.
?C:USGNAMES:
?C: This symbol, if defined, indicates that full names are stored in
?C: the /etc/passwd file in USG format (everything after - and before ( is
?C: the name).
?C:.
?H:#$d_passnames PASSNAMES /*  (undef to take name from ~/.fullname) */
?H:#$d_berknames BERKNAMES /* (that is, ":name,stuff:") */
?H:#$d_usgnames USGNAMES  /* (that is, ":stuff-name(stuff):") */
```

```
?H:.
: find out how to find out full name
case "$d_berknames" in
"$define")
 dflt=y;;
"$undef")
 dflt=n;;
*)
 if ./bsd; then
  dflt=y
 elif ./xenix; then
  dflt=y
 else
  dflt=n
 fi
 ;;
esac
$cat <<'EOM'

Does your /etc/passwd file keep full names in Berkeley/V7 format (name first
thing after ':' in GCOS field)?  In that case, a typical entry in the password
file looks like this:

   guest:**paswword**:10:100:Mister Guest User:/usr/users:/bin/sh

                         ^^^^^^^^^^^^^^^^^^
EOM
rp="Berkeley/V7 format for full name in /etc/passwd?"
. ./myread
case "$ans" in
y*) d_passnames="$define"
 d_berknames="$define"
 d_usgnames="$undef"
 nametype=bsd
 ;;
*)
 case "$d_usgnames" in
 "$define") dflt=y;;
 "$undef") dflt=n;;
 *)
  if ./usg; then
   dflt=y
  else
   dflt=n
  fi
  ;;
 esac
$cat <<'EOM'
```

```
Does your passwd file keep full names in USG format (name sandwiched between a
'-' and a '(')?  In that case, a typical entry in the password file looks like
this:

   guest:**paswword**:10:100:000-Mister Guest User(000):/usr/users:/bin/sh
                              ^^^^^^^^^^^^^^^^^^
EOM
 rp="USG format for full name in /etc/passwd?"
 . ./myread
 case "$ans" in
 n*) echo "Full name will be taken from ~/.fullname"
  d_passnames="$undef"
  d_berknames="$undef"
  d_usgnames="$undef"
  nametype=other
  ;;
 *)
  d_passnames="$define"
  d_berknames="$undef"
  d_usgnames="$define"
  nametype=usg
  ;;
 esac;;
esac

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nametype.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
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?RCS:
?MAKE:d_msghdr_s: Hasstruct i_systypes d_socket i_sysuio Setvar
?MAKE: -pick add $@ %<
?S:d_msghdr_s:
?S: This variable conditionally defines the HAS_STRUCT_MSGHDR symbol,
?S: which indicates that the struct msghdr is supported.
?S:.
?C:HAS_STRUCT_MSGHDR:
?C: This symbol, if defined, indicates that the struct msghdr
?C: is supported.
?C:.
```

```
?H:#$d_msghdr_s HAS_STRUCT_MSGHDR /**/
?H:.
?LINT:set d_msghdr_s
: Check for msghdr_s
echo " "
echo "Checking to see if your system supports struct msghdr..." >&4
set d_msghdr_s msghdr $i_systypes sys/types.h $d_socket sys/socket.h $i_sysuio sys/uio.h
eval $hasstruct
case "$d_msghdr_s" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't."
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_msghdr_s.U
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```
?RCS: $Id: d_gmtime_r.U,v 0RCS:
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gmtime_r gmtime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_gmtime_r:
?S: This variable conditionally defines the HAS_GMTIME_R symbol,
?S: which indicates to the C program that the gmtime_r()
?S: routine is available.
?S:.
?S:gmtime_r_proto:
?S: This variable encodes the prototype of gmtime_r.
?S: It is zero if d_gmtime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gmtime_r
?S: is defined.
?S:.
?C:HAS_GMTIME_R:
?C: This symbol, if defined, indicates that the gmtime_r routine
?C: is available to gmtime re-entrantly.
?C:.
?C:GMTIME_R_PROTO:
?C: This
 symbol encodes the prototype of gmtime_r.
?C: It is zero if d_gmtime_r is undef, and one of the
```

```
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gmtime_r
?C: is defined.
?C:.
?H:#$d_gmtime_r HAS_GMTIME_R /**/
?H:#define GMTIME_R_PROTO $gmtime_r_proto /**/
?H:.
?T:try hdrs d_gmtime_r_proto
: see if gmtime_r exists
set gmtime_r d_gmtime_r
eval $inlibc
case "$d_gmtime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_gmtime_r_proto:$usethreads" in
 ":define") d_gmtime_r_proto=define
  set d_gmtime_r_proto gmtime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gmtime_r_proto" in
 define)
 case "$gmtime_r_proto" in
 "|0) try='struct tm* gmtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && gmtime_r_proto=S_TS ;;
 esac
 case "$gmtime_r_proto" in
 "|0) try='int gmtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && gmtime_r_proto=I_TS ;;
 esac
 case
 "$gmtime_r_proto" in
 "|0) d_gmtime_r=undef
  gmtime_r_proto=0
  echo "Disabling gmtime_r, cannot determine prototype." >&4 ;;
 * ) case "$gmtime_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gmtime_r_proto="REENTRANT_PROTO_$gmtime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gmtime_r has no prototype, not using it." >&4 ;;
  esac
  d_gmtime_r=undef
  gmtime_r_proto=0
  ;;
 esac
```

```
 ;;
*) gmtime_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gmtime_r.U
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```
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?RCS:
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?RCS:
?X:
?X: This unit produces a variable that is intended to be eval'ed in
?X: order to define/undefine a symbol. A consistency check is made
?X: regarding any previous value and a warning is issued if there
?X: is any discrepancy.
?X:
?X: To use it, say:
?X: set d_siginfo_si_errno siginfo_t int si_errno $d_sigaction signal.h
?X: eval $hasfield_t;
?X:
?MAKE:Hasfield_t: test Compile rm_try Setvar
?MAKE: -pick add $@ %<
?LINT:define hasfield_t
?S:hasfield_t:
?S: Internal macro for Configure
?S:.
?V:hasfield_t:
?T:varname struct type field
: Define hasfield_t macro for Configure internal use
hasfield_t='varname=$1; struct=$2; type=$3; field=$4; shift; shift; shift; shift;
while $test $# -ge 2; do
   case
 "$1" in
 $define) echo "#include <$2>";;
   esac ;
   shift 2;
done > try.c;
echo "int main () { $struct foo; $type bar = foo.$field; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
```

```
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Hasfield_t.U
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```
?RCS: $Id: d_shm.U,v 3.0 1993/08/18 12:07:17 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_shm.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shm: test d_shmctl d_shmget d_shmat d_shmdt Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_shm:
?S: This variable conditionally defines the HAS_SHM symbol, which
?S: indicates that the entire shm*(2) library is present.
?S:.
?C:HAS_SHM:
?C: This symbol, if defined, indicates that the entire shm*(2) library is
?C: supported.
?C:.
?H:#$d_shm HAS_SHM  /**/
?H:.
?T:h_shm
?LINT:set
 d_shm
: see how much of the 'shm*(2)' library is present.
h_shm=true
echo " "
case "$d_shmctl$d_shmget$d_shmat$d_shmdt" in
*"$undef"*) h_shm=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID shared memory"*"not configured"*)
 echo "Your $osname does not have the shm*(2) configured." >&4
```

```
      h_shm=false
 val="$undef"
 set shmctl d_shmctl
 eval $setvar
 set shmget d_shmget
 eval $setvar
 set shmat d_shmat
 eval $setvar
 set shmdt d_shmdt
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_shm && $test `./findhdr sys/shm.h`; then
 echo "You have the full shm*(2) library." >&4
 val="$define"
else
 echo "You don't have the full shm*(2) library." >&4
 val="$undef"
fi
set d_shm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_shm.U
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```
?RCS: $Id: d_vprintf.U,v 3.0 1993/08/18 12:07:59 ram Exp $
?RCS:
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?RCS:
?RCS: $Log: d_vprintf.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_vprintf d_charvspr: Compile Guess cat Csym Setvar run rm_try \
 i_stdlib i_unistd i_stdarg i_varargs
?MAKE: -pick add $@ %<
?S:d_vprintf:
?S: This variable conditionally defines the HAS_VPRINTF symbol, which
```

```
?S: indicates to the C program that the vprintf() routine is available
?S: to printf with a pointer to an argument list.
?S:.
?S:d_charvspr:
?S: This
 variable conditionally defines CHARVSPRINTF if this system
?S: has vsprintf returning type (char*).  The trend seems to be to
?S: declare it as "int vsprintf()".
?S:.
?C:HAS_VPRINTF (VPRINTF):
?C: This symbol, if defined, indicates that the vprintf routine is available
?C: to printf with a pointer to an argument list.  If unavailable, you
?C: may need to write your own, probably in terms of _doprnt().
?C:.
?C:USE_CHAR_VSPRINTF (CHARVSPRINTF):
?C: This symbol is defined if this system has vsprintf() returning type
?C: (char*).  The trend seems to be to declare it as "int vsprintf()".  It
?C: is up to the package author to declare vsprintf correctly based on the
?C: symbol.
?C:.
?H:#$d_vprintf HAS_VPRINTF /**/
?H:#$d_charvspr USE_CHAR_VSPRINTF /**/
?H:.
?T:val2
?F:!try
?LINT:set d_vprintf d_charvspr
: see if vprintf exists
echo " "
if set vprintf val -f d_vprintf; eval $csym; $val; then
 echo 'vprintf() found.' >&4
 val="$define"
 $cat >try.c <<EOF
#$i_stdarg I_STDARG  /*
 Only one of these can be defined by i_varhrd */
#$i_varargs I_VARARGS

#$i_stdlib I_STDLIB
#$i_unistd I_UNISTD

#ifdef I_STDARG
#  include <stdarg.h>
#else /* I_VARARGS */
#  include <varargs.h>
#endif

#ifdef I_UNISTD
#  include <unistd.h>
#endif
```

```
#ifdef I_STDLIB
#  include <stdlib.h>
#endif

#include <stdio.h> /* vsprintf prototype */

#ifdef I_STDARG
void xxx(int n, ...)
{
   va_list args;
   char buf[10];
   va_start(args, n);
   exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
int main() { xxx(1, "foo"); }

#else /* I_VARARGS */

xxx(va_alist)
va_dcl
{
   va_list args;
   char buf[10];
   va_start(args);
   exit((unsigned long)vsprintf(buf,"%s",args) > 10L);
}
int main() { xxx("foo"); }

#endif

EOF
 set try
 if eval $compile_ok; then
  if $run ./try; then
   echo "Your vsprintf() returns (int)." >&4
   val2="$undef"
  else
   echo "Your vsprintf() returns (char*)." >&4
   val2="$define"
  fi
 else
  echo 'I am unable to compile the vsprintf() test program.' >&4
  #
 We shouldn't get here.  If we do, assume the standard signature,
  # not the old BSD one.
  echo 'Guessing that vsprintf() returns (int).' >&4
  val2="$undef"
```

```
 fi
else
 echo 'vprintf() NOT found.' >&4
 val="$undef"
 val2="$undef"
fi
$rm_try
set d_vprintf
eval $setvar
val=$val2
set d_charvspr
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_vprintf.U
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```
?RCS: $Id: basicshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: basicshell.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:basicshell: Getfile Oldconfig bash csh ksh sh
?MAKE: -pick add $@ %<
?S:basicshell:
?S: This variable contains the eventual value of the BASICSHELL symbol,
?S: which contains the full name of the basic script shell on this
?S: system.  Usual values are /bin/sh, /bin/ksh, /bin/csh.
?S:.
?C:BASICSHELL:
?C: This symbol contains the
 full name of the basic script shell on this
?C: system.  Usual values are /bin/sh, /bin/ksh, /bin/csh.
?C:.
?H:#define BASICSHELL "$basicshell"  /**/
?H:.
: find the most basic shell for scripts
echo " "
case "$basicshell" in
```

```
")
 case "$sh $bash $csh $ksh" in
 */sh*) dflt="$sh" ;;
 */ksh*) dflt="$ksh" ;;
 */csh*) dflt="$csh" ;;
 */bash*) dflt="$bash" ;;
 *) dflt='/bin/sh' ;;
 esac
 ;;
*)
 dflt="$basicshell";;
esac
fn=f
rp="Give the full path name of the most basic shell used on your system"
. ./getfile
basicshell=$ans
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/basicshell.U
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```
?RCS: $Id: d_endgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endgrent_r endgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_endgrent_r:
?S: This variable conditionally defines the HAS_ENDGRENT_R symbol,
?S: which indicates to the C program that the endgrent_r()
?S: routine is available.
?S:.
?S:endgrent_r_proto:
?S: This variable encodes the prototype of endgrent_r.
?S: It is zero if d_endgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endgrent_r
?S: is defined.
?S:.
?C:HAS_ENDGRENT_R:
?C: This symbol, if defined, indicates that the endgrent_r routine
?C: is available to
 endgrent re-entrantly.
?C:.
```

```
?C:ENDGRENT_R_PROTO:
?C: This symbol encodes the prototype of endgrent_r.
?C: It is zero if d_endgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endgrent_r
?C: is defined.
?C:.
?H:#$d_endgrent_r HAS_ENDGRENT_R /**/
?H:#define ENDGRENT_R_PROTO $endgrent_r_proto /**/
?H:.
?T:try hdrs d_endgrent_r_proto
: see if endgrent_r exists
set endgrent_r d_endgrent_r
eval $inlibc
case "$d_endgrent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_endgrent_r_proto:$usethreads" in
 ":define") d_endgrent_r_proto=define
  set d_endgrent_r_proto endgrent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endgrent_r_proto" in
 define)
 case "$endgrent_r_proto" in
 "|0) try='int endgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endgrent_r_proto=I_H ;;
 esac
 case "$endgrent_r_proto" in
 "|0) try='void endgrent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && endgrent_r_proto=V_H ;;
 esac
 case "$endgrent_r_proto"
 in
 "|0) d_endgrent_r=undef
  endgrent_r_proto=0
  echo "Disabling endgrent_r, cannot determine prototype." >&4 ;;
 * ) case "$endgrent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endgrent_r_proto="REENTRANT_PROTO_$endgrent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endgrent_r has no prototype, not using it." >&4 ;;
  esac
  d_endgrent_r=undef
```

```
  endgrent_r_proto=0
  ;;
 esac
 ;;
*) endgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endgrent_r.U
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```
?RCS: $Id: d_getservprotos.U,v $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getservprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getservprotos:
?S: This variable conditionally defines the HAS_GETSERV_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getserv*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETSERV_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getservent(), getservbyname(), and
?C: getservbyaddr().  Otherwise,
 it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getservprotos HAS_GETSERV_PROTOS /**/
?H:.
?LINT:set d_getservprotos
: see if prototypes for various getservxxx netdb.h functions are available
echo " "
set d_getservprotos getservent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getservprotos.U

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```
?RCS: $Id$
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fp_class: Inlibc
?MAKE: -pick add $@ %<
?S:d_fp_class:
?S: This variable conditionally defines the HAS_FP_CLASS symbol, which
?S: indicates to the C program that the fp_class() routine is available.
?S:.
?C:HAS_FP_CLASS:
?C: This symbol, if defined, indicates that the fp_class routine is
?C: available to classify doubles.  Available for example in Digital UNIX.
?C: The returned values are defined in <math.h> and are:
?C:
?C: FP_SNAN           Signaling NaN (Not-a-Number)
?C: FP_QNAN           Quiet NaN (Not-a-Number)
?C: FP_POS_INF        +infinity
?C: FP_NEG_INF        -infinity
?C: FP_POS_NORM       Positive normalized
?C: FP_NEG_NORM       Negative normalized
?C: FP_POS_DENORM     Positive denormalized
?C: FP_NEG_DENORM
    Negative denormalized
?C: FP_POS_ZERO       +0.0 (positive zero)
?C: FP_NEG_ZERO       -0.0 (negative zero)
?C:.
?H:#$d_fp_class HAS_FP_CLASS  /**/
?H:.
?LINT:set d_fp_class
: see if fp_class exists
set fp_class d_fp_class
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fp_class.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_isascii.U,v 3.0.1.2 1994/10/29 16:13:39 ram Exp $
?RCS:
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```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_isascii.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:13:39  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:32  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_isascii: Compile cat rm Setvar i_stdlib
?MAKE: -pick add $@ %<
?S:d_isascii:
?S: This variable conditionally defines the HAS_ISASCII constant,
?S: which indicates
 to the C program that isascii() is available.
?S:.
?C:HAS_ISASCII:
?C: This manifest constant lets the C program know that isascii
?C: is available.
?C:.
?H:#$d_isascii HAS_ISASCII  /**/
?H:.
?LINT:set d_isascii
?X: Can't use Inlibc because isascii() might be a macro.
: Look for isascii
echo " "
$cat >isascii.c <<EOCP
#include <stdio.h>
#include <ctype.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
 int c = 'A';
 if (isascii(c))
  exit(0);
 else
  exit(1);
}
EOCP
set isascii
if eval $compile; then
```

```
 echo "isascii() found." >&4
 val="$define"
else
 echo "isascii() NOT found." >&4
 val="$undef"
fi
set d_isascii
eval $setvar
$rm -f isascii*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_isascii.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotoprotos.U,v $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getprotoprotos : Hasproto i_netdb
?MAKE: -pick add $@ %<
?S:d_getprotoprotos:
?S: This variable conditionally defines the HAS_GETPROTO_PROTOS symbol,
?S: which indicates to the C program that <netdb.h> supplies
?S: prototypes for the various getproto*() functions.
?S: See also netdbtype.U for probing for various netdb types.
?S:.
?C:HAS_GETPROTO_PROTOS:
?C: This symbol, if defined, indicates that <netdb.h> includes
?C: prototypes for getprotoent(), getprotobyname(), and
?C: getprotobyaddr().
  Otherwise, it is up to the program to guess
?C: them.  See netdbtype.U for probing for various Netdb_xxx_t types.
?C:.
?H:#$d_getprotoprotos HAS_GETPROTO_PROTOS /**/
?H:.
?LINT:set d_getprotoprotos
: see if prototypes for various getprotoxxx netdb.h functions are available
echo " "
set d_getprotoprotos getprotoent $i_netdb netdb.h
eval $hasproto
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_getprotoprotos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Thomas Neumann <tom@smart.bo.open.de>
?RCS:
?RCS: $Log: Findhdr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:53:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:56  ram
?RCS: patch23: cppminus must be after other cppflags, not before
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a findhdr script which is used to locate the header
?X: files
 in $usrinc or other stranger places using cpp capabilities. The
?X: script is given an include file base name, like 'stdio.h' or 'sys/file.h'
?X: and it returns the full path of the include file and a zero status or an
?X: empty string with an error status if the file could not be located.
?X:
?MAKE:Findhdr: grep test tr rm +usrinc awk cat startsh \
 cppstdin cppminus +cppflags eunicefix osname
?MAKE: -pick add $@ %<
?LINT:define fieldn
?S:fieldn:
?S: This variable is used internally by Configure. It contains the position
?S: of the included file name in cpp output. That is to say, when cpp
?S: pre-processes a #include <file> line, it replaces it by a # line which
?S: contains the original position in the input file and the full name of
?S: included file, between "quotes".
?S:.
?V:fieldn
?F:./findhdr !fieldn
?T:cline pos wanted name awkprg cppfilter testaccess status usrincdir
: determine filename position in cpp output
```

```
echo " "
echo "Computing filename position in cpp output for #include
 directives..." >&4
echo '#include <stdio.h>' > foo.c
case "$osname" in
vos)
 testaccess=-e
?X: VOS: path component separator is >
 cppfilter="tr '\\\\>' '/' |"
 ;;
*)
 testaccess=-r
 cppfilter="
 ;;
esac
$cat >fieldn <<EOF
$startsh
$cppstdin $cppflags $cppminus <foo.c 2>/dev/null | \
$grep '^[  ]*#.*stdio\.h' | \
while read cline; do
 pos=1
 set \$cline
 while $test \$# -gt 0; do
  if $test $testaccess \`echo \$1 | $tr -d '"'\`; then
   echo "\$pos"
   exit 0
  fi
  shift
  pos=\`expr \$pos + 1\`
 done
done
EOF
chmod +x fieldn
fieldn=`./fieldn`
$rm -f foo.c fieldn
case $fieldn in
") pos='???';;
1) pos=first;;
2) pos=second;;
3) pos=third;;
*) pos="${fieldn}th";;
esac
echo "Your cpp writes the filename in the $pos field of the line."

?X: To locate a header file, we cannot simply check for $usrinc/file.h, since
?X: some machine have the headers in weird places and our only hope is that
?X: the C pre-processor will know how to find those headers. Thank you NexT!
: locate header file
```

```
$cat
 >findhdr <<EOF
$startsh
wanted=\$1
name=''
for usrincdir in $usrinc; do
 if test -f \$usrincdir/\$wanted; then
  echo "\$usrincdir/\$wanted"
  exit 0
 fi
done
awkprg='{ print \$$fieldn }'
echo "#include <\$wanted>" > foo\$\$.c
$cppstdin $cppminus $cppflags < foo\$\$.c 2>/dev/null | \
$cppfilter $grep "^[  ]*#.*\$wanted" | \
while read cline; do
 name=\`echo \$cline | $awk "\$awkprg" | $tr -d '"'\`
 case "\$name" in
 *[/\\\]\$wanted) echo "\$name"; exit 1;;
 *[\\\/]\$wanted) echo "\$name"; exit 1;;
 *) exit 2;;
 esac
done
?X: status = 0: grep returned 0 lines, case statement not executed
?X: status = 1: headerfile found
?X: status = 2: while loop executed, no headerfile found
status=\$?
$rm -f foo\$\$.c
if test \$status -eq 1; then
 exit 0
fi
exit 1
EOF
chmod +x findhdr
$eunicefix findhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Findhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: charorder.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:chorder_int chorder_short chorder_long: Myread cat +cc +ccflags rm
?MAKE: -pick add $@ %<
?S:chorder_short (d_cos d_bos):
?S: Holds the value describing the byte ordering of characters in a short.
?S: On a Big-Endian machine, that would be "c0c1".
?S:.
?S:chorder_int
 (charoder):
?S: Holds the value describing the byte ordering of characters in an int.
?S: For instance, on a Big-Endian machine, this would be: "c0c1c2c3".
?S:.
?S:chorder_long (d_col d_bol):
?S: Holds the value describing the byte ordering of characters in a long.
?S: On a 64 bits Big-Endian machine, that would yield: "c0c1c2c3c4c5c6c7".
?S:.
?C:CHAR_ORDER_SHORT:
?C: Holds the byte ordering of characters in a short. It's a string
?C: value like "c0c1" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_INT:
?C: Holds the byte ordering of characters in an int. It's a string
?C: value like "c0c1c2c3" on a Big-Endian machine.
?C:.
?C:CHAR_ORDER_LONG:
?C: Holds the byte ordering of characters in a long. It's a string
?C: value like "c0c1c2c3c4c5c6c7" on a 64 bits Big-Endian machine.
?C:.
?H:#define CHAR_ORDER_SHORT "$chorder_short" /* byte order in a short */
?H:#define CHAR_ORDER_INT "$chorder_int" /* byte order in an int */
?H:#define CHAR_ORDER_LONG "$chorder_long" /* byte order in a long */
?H:.
?F:!byteorder
:
 check for character ordering
echo " "
echo "Checking out byte order..." >&4
$cat >byteorder.c <<'EOCP'
#include <stdio.h>
```

```
main(argc, argv)
 int argc;
 char *argv[]; {
 int i;
 int max;
 union {
  short u_s;
  int u_i;
  long u_l;
  char u_c[sizeof(long)];
 } u;
 switch (argv[1][0]) {
 case 'l':
  u.u_l = 0L;
  /* HMS: ASSERT: sizeof(long) < 10. */
  for(i = 0; i < sizeof(long); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(long);
  break;
 case 's':
  u.u_s = 0;
  /* HMS: ASSERT: sizeof(short) < 10. */
  for(i = 0; i < sizeof(short); ++i) {
   u.u_s *= 0x100L;
   u.u_s += (0xc0 + i);
  }
  max = sizeof(short);
  break;
 case 'i':
  u.u_i = 0;
  /* RAM: ASSERT: sizeof(int) < 10. */
  for(i = 0; i < sizeof(int); ++i) {
   u.u_l *= 0x100L;
   u.u_l += (0xc0 + i);
  }
  max = sizeof(int);
  break;
 default:
  max = 0;
  break;
 }
 for(i = 0; i < max; i++) {
  printf("%x", u.u_c[i] & 0x00FF);
 }
 printf("\n");
 exit(0);
```

```
}
EOCP
if $cc $ccflags -o
 byteorder byteorder.c >/dev/null 2>&1 ; then
 : null statement
@if chorder_short
   chorder_short=`./byteorder s`
@end
@if chorder_int
   chorder_int=`./byteorder i`
@end
@if chorder_long
   chorder_long=`./byteorder l`
@end
else
 $cat <<EOM
(I can't seem to get my test program to work.  Guessing 32 bits big-endian.)
EOM
   chorder_short="c0c1"
   chorder_int="c0c1c2c3"
   chorder_long="c0c1c2c3"
fi
@if chorder_short
dflt=$chorder_short
rp='What is the order of characters in a short?'
. ./myread
chorder_short="$ans"
@end
@if chorder_int
dflt=$chorder_int
rp='What is the order of characters in an int?'
. ./myread
chorder_int="$ans"
@end
@if chorder_long
dflt=$chorder_long
rp='What is the order of characters in a long?'
. ./myread
chorder_long="$ans"
@end
$rm -f byteorder* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/charorder.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.

```
?RCS:
?MAKE:d_newlocale d_freelocale d_uselocale d_duplocale d_querylocale \
 i_xlocale xlocale_needed: Inlibc Inhdr Compile cat rm_try run \
 d_localeconv_l
?MAKE: -pick add $@ %<
?S:d_newlocale:
?S: This variable conditionally defines the HAS_NEWLOCALE symbol, which
?S: indicates to the C program that the newlocale() routine is available
?S: to return a new locale object or modify an existing locale object.
?S:.
?S:d_freelocale:
?S: This variable conditionally defines the HAS_FREELOCALE symbol, which
?S: indicates to the C program that the freelocale() routine is available
?S: to deallocates the resources associated with a locale object.
?S:.
?S:d_uselocale:
?S: This variable conditionally defines the HAS_USELOCALE symbol, which
?S: indicates to the C program that the uselocale()
 routine is available
?S: to set the current locale for the calling thread.
?S:.
?S:d_duplocale:
?S: This variable conditionally defines the HAS_DUPLOCALE symbol, which
?S: indicates to the C program that the duplocale() routine is available
?S: to duplicate a locale object.
?S:.
?S:d_querylocale:
?S: This variable conditionally defines the HAS_QUERYLOCALE symbol, which
?S: indicates to the C program that the querylocale() routine is available
?S: to return the name of the locale for a category mask.
?S:.
?S:i_xlocale:
?S: This symbol, if defined, indicates to the C program that the
?S: header xlocale.h is available.  See also xlocale_needed.
?S:.
?S:xlocale_needed:
?S: This symbol, if defined, indicates that the C program should
?S: include <xlocale.h> to get newlocale() and its friends.
?S:.
?C:HAS_NEWLOCALE:
?C: This symbol, if defined, indicates that the newlocale routine is
?C: available to return a new locale object or modify an existing
?C: locale object.
?C:.
?C:HAS_FREELOCALE:
?C: This
 symbol, if defined, indicates that the freelocale routine is
?C: available to deallocates the resources associated with a locale object.
```

```
?C:.
?C:HAS_USELOCALE:
?C: This symbol, if defined, indicates that the uselocale routine is
?C: available to set the current locale for the calling thread.
?C:.
?C:HAS_DUPLOCALE:
?C: This symbol, if defined, indicates that the duplocale routine is
?C: available to duplicate a locale object.
?C:.
?C:HAS_QUERYLOCALE:
?C: This symbol, if defined, indicates that the querylocale routine is
?C: available to return the name of the locale for a category mask.
?C:.
?C:I_XLOCALE:
?C: This symbol, if defined, indicates to the C program that the
?C: header xlocale.h is available.  See also NEED_XLOCALE_H
?C:.
?C:NEED_XLOCALE_H:
?C: This symbol, if defined, indicates that the C program should
?C: include <xlocale.h> to get newlocale() and its friends.
?C:.
?H:#$d_newlocale HAS_NEWLOCALE /**/
?H:#$d_freelocale HAS_FREELOCALE /**/
?H:#$d_uselocale HAS_USELOCALE /**/
?H:#$d_duplocale HAS_DUPLOCALE /**/
?H:#$d_querylocale HAS_QUERYLOCALE /**/
?H:#$xlocale_needed NEED_XLOCALE_H /**/
?H:#$i_xlocale I_XLOCALE
        /**/
?H:.
?LINT:set i_xlocale
?LINT:set d_newlocale
?LINT:set d_freelocale
?LINT:set d_uselocale
?LINT:set d_duplocale
?LINT:set d_querylocale
?F:!try
: see if this is an xlocale.h system
set xlocale.h i_xlocale
eval $inhdr

: see if newlocale exists
set newlocale d_newlocale
eval $inlibc

: see if freelocale exists
set freelocale d_freelocale
eval $inlibc
```

```
: see if uselocale exists
set uselocale d_uselocale
eval $inlibc

: see if duplocale exists
set duplocale d_duplocale
eval $inlibc

: see if querylocale exists
set querylocale d_querylocale
eval $inlibc

: if we have xlocale.h, check whether it is needed
case "$i_xlocale$d_newlocale$xlocale_needed" in
"$define$define")
 echo "Checking if xlocale.h is needed..." >&4
 $cat >try.c <<EOF
#include <locale.h>
#include <stdio.h>
#ifdef TRY_XLOCALE
#include <xlocale.h>
#endif
#$d_localeconv_l
 HAVE_LOCALECONV_L

#ifdef HAVE_LOCALECONV_L
struct lconv *(*lcptr)(locale_t) = localeconv_l;
#endif

int main(void) {
 locale_t lc = newlocale(LC_ALL_MASK, "C", (locale_t)0);

#ifdef HAVE_LOCALECONV_L
 /* FreeBSD hides only localeconv_l() in xlocale.h */
 struct lconv *lcbuf = localeconv_l(lc);
 printf("decimal: %s\n", lcbuf->decimal_point);
#endif

 freelocale(lc);
 return 0;
}
EOF
 set try
 if eval $compile && $run ./try > /dev/null 2>&1 ; then
  echo "xlocale.h isn't needed" >&4
  xlocale_needed=$undef
 else
```

```
  set try -DTRY_XLOCALE
  if eval $compile && $run ./try > /dev/null 2>&1 ; then
   xlocale_needed=$define
   echo "xlocale.h is needed" >&4
  else
   echo "I can't build my test either way" >&4
   xlocale_needed=$undef
  fi
 fi
 $rm_try
 ;;
*) xlocale_needed=$undef ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_newlocale.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_eaccess: Inlibc
?MAKE: -pick add $@ %<
?S:d_eaccess:
?S: This variable conditionally defines the HAS_EACCESS symbol, which
?S: indicates to the C program that the eaccess() routine is available.
?S:.
?C:HAS_EACCESS :
?C: This symbol, if defined, indicates that the eaccess routine is
?C: available to do extended access checks.
?C:.
?H:#$d_eaccess HAS_EACCESS  /**/
?H:.
?LINT:set d_eaccess
: see if eaccess exists
set eaccess d_eaccess
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/d_eaccess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usemorebits: Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usemorebits:
?S: This variable conditionally defines the USE_MORE_BITS symbol,
?S: and indicates that explicit 64-bit interfaces and long doubles
?S: should be used when available.
?S:.
?C:USE_MORE_BITS:
?C: This symbol, if defined, indicates that 64-bit interfaces and
?C: long doubles should be used when available.
?C:.
?H:?%<:#ifndef USE_MORE_BITS
?H:?%<:#$usemorebits USE_MORE_BITS  /**/
?H:?%<:#endif
?H:.
?LINT:extern use64bitint
?LINT:change use64bitint
?LINT:extern uselongdouble
?LINT:change uselongdouble
: Check if morebits is requested
case "$usemorebits" in
"$define"|true|[yY]*)
 use64bitint="$define"
 uselongdouble="$define"
 usemorebits="$define"
 ;;
*) usemorebits="$undef"
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usemorebits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpent:
?S: This variable conditionally defines HAS_GETPROTOENT if getprotoent() is
?S: available to look up protocols in some data base or another.
?S:.
?C:HAS_GETPROTOENT:
?C: This symbol, if defined, indicates that the getprotoent() routine is
?C: available to look up protocols in some data base
 or another.
?C:.
?H:#$d_getpent HAS_GETPROTOENT  /**/
?H:.
?LINT:set d_getpent
: see if getprotoent exists
set getprotoent d_getpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_perlio.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_perlio.U,v $
?RCS:
?MAKE:useperlio: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:useperlio:
?S: This variable conditionally defines the USE_PERLIO symbol,
?S: and indicates that the PerlIO abstraction should be
?S: used throughout.
?S:.
?C:USE_PERLIO:
?C: This symbol, if defined, indicates that the PerlIO abstraction should
```

```
?C: be used throughout.  If not defined, stdio should be
?C: used in a fully backward compatible manner.
?C:.
?H:?%<:#ifndef USE_PERLIO
?H:?%<:#$useperlio USE_PERLIO  /**/
?H:?%<:#endif
?H:.
: Check if we want perlio
useperlio="$define"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/useperlio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_random_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_random_r random_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_random_r:
?S: This variable conditionally defines the HAS_RANDOM_R symbol,
?S: which indicates to the C program that the random_r()
?S: routine is available.
?S:.
?S:random_r_proto:
?S: This variable encodes the prototype of random_r.
?S: It is zero if d_random_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_random_r
?S: is defined.
?S:.
?C:HAS_RANDOM_R:
?C: This symbol, if defined, indicates that the random_r routine
?C: is available to random re-entrantly.
?C:.
?C:RANDOM_R_PROTO:
?C: This
 symbol encodes the prototype of random_r.
?C: It is zero if d_random_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_random_r
?C: is defined.
?C:.
?H:#$d_random_r HAS_RANDOM_R /**/
```

```
?H:#define RANDOM_R_PROTO $random_r_proto /**/
?H:.
?T:try hdrs d_random_r_proto
: see if random_r exists
set random_r d_random_r
eval $inlibc
case "$d_random_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_random_r_proto:$usethreads" in
 ":define") d_random_r_proto=define
  set d_random_r_proto random_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_random_r_proto" in
 define)
 case "$random_r_proto" in
 "|0) try='int random_r(int*, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_iS ;;
 esac
 case "$random_r_proto" in
 "|0) try='int random_r(long*, struct random_data*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_lS ;;
 esac
 case "$random_r_proto" in
 "|0)
 try='int random_r(struct random_data*, int32_t*);'
 ./protochk "$extern_C $try" $hdrs && random_r_proto=I_St ;;
 esac
 case "$random_r_proto" in
 "|0) d_random_r=undef
  random_r_proto=0
  echo "Disabling random_r, cannot determine prototype." >&4 ;;
 * ) case "$random_r_proto" in
  REENTRANT_PROTO*) ;;
  *) random_r_proto="REENTRANT_PROTO_$random_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "random_r has no prototype, not using it." >&4 ;;
  esac
  d_random_r=undef
  random_r_proto=0
  ;;
 esac
```

```
 ;;
*) random_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_random_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_waitpid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_waitpid.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_waitpid: Inlibc
?MAKE: -pick add $@ %<
?S:d_waitpid:
?S: This variable conditionally defines HAS_WAITPID if waitpid() is
?S: available to wait for child process.
?S:.
?C:HAS_WAITPID (WAITPID):
?C: This symbol, if defined, indicates that the waitpid routine is
?C: available to wait for child process.
?C:.
?H:#$d_waitpid HAS_WAITPID /**/
?H:.
?LINT:set
 d_waitpid
: see if waitpid exists
set waitpid d_waitpid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_waitpid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: man1dir.U,v 3.2 1999/07/08 20:57:21 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996, 1999 Andy Dougherty
```

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: man1dir.U,v $
?RCS: Revision 3.2  1999/07/08 20:57:21  doughera
?RCS: Used installprefix.
?RCS:
?RCS: Revision 3.1  1999/07/08 20:52:19  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:10:29  ram
?RCS: patch61: created
?RCS:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and
 man3dir.  This unit is basically dist's mansrc.U with
?X: man1 used instead of man everywhere.
?X:
?MAKE:man1dir man1direxp man1ext installman1dir: cat nroff Loc Oldconfig \
 spackage test Getfile Setprefixvar Prefixit Prefixup sysman Myread \
 prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:man1dir=''
?S:man1dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?D:man1direxp=''
?S:man1direxp:
?S: This variable is the same as the man1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installman1dir=''
?S:installman1dir:
?S: This variable is really the same as man1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location.
 For extra
?S: portability, you should only use this variable within your makefiles.
```

```
?S:.
?S:man1ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See man1dir.
?S:.
?T:lookpath
?LINT:change prefixvar
?LINT:set man1direxp
: determine where manual pages go
set man1dir man1dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$man1dir" in
 ") man1dir="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$man1dir" in
' ') dflt=none
 ;;
")
 lookpath="$prefixexp/share/man/man1"
 lookpath="$lookpath $prefixexp/man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath $prefixexp/man/p_man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1"
 lookpath="$lookpath $prefixexp/man/man.1"
?X: Experience has shown people
 expect man1dir to be under prefix,
?X: so we now always put it there.  Users who want other behavior
?X: can answer interactively or use a command line option.
?X: Does user have System V-style man paths.
 case "$sysman" in
 */?_man*) dflt=`./loc . $prefixexp/l_man/man1 $lookpath` ;;
 *) dflt=`./loc . $prefixexp/man/man1 $lookpath` ;;
 esac
 set dflt
 eval $prefixup
 ;;
*)  dflt="$man1dir"
 ;;
esac
```

```
echo " "
fn=dn+~
rp="Where do the main $spackage manual pages (source) go?"
. ./getfile
if $test "X$man1direxp" != "X$ansexp"; then
 installman1dir=''
fi
prefixvar=man1dir
. ./setprefixvar

case "$man1dir" in
'') man1dir=' '
 installman1dir='';;
esac

: What suffix to use on installed man pages

case "$man1dir" in
' ')
 man1ext='0'
 ;;
*)
 rp="What suffix should be used for the main $spackage man pages?"
 case "$man1ext" in
 '') case "$man1dir" in
  *1)  dflt=1 ;;
  *1p) dflt=1p ;;
  *1pm) dflt=1pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L1)
 dflt=L1;;
  *) dflt=1;;
  esac
  ;;
 *) dflt="$man1ext";;
 esac
 . ./myread
 man1ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/man1dir.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_lstat.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_lstat: Inlibc
?MAKE: -pick add $@ %<
?S:d_lstat:
?S: This variable conditionally defines HAS_LSTAT if lstat() is
?S: available to do file stats on symbolic links.
?S:.
?C:HAS_LSTAT (LSTAT):
?C: This symbol, if defined, indicates that the lstat routine is
?C: available to do file stats on symbolic links.
?C:.
?H:#$d_lstat HAS_LSTAT  /**/
?H:.
?LINT:set
 d_lstat
: see if lstat exists
set lstat d_lstat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_lstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_gethname.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:00  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethname d_uname d_phostname aphostname: phostname cat \
 myhostname package d_portable Loc echo n c +i_whoami +usrinc \
 Myread Guess Oldconfig Csym
?MAKE: -pick add $@ %<
?S:d_gethname:
?S: This variable conditionally defines the HAS_GETHOSTNAME symbol,
 which
?S: indicates to the C program that the gethostname() routine may be
?S: used to derive the host name.
?S:.
?S:d_uname:
?S: This variable conditionally defines the HAS_UNAME symbol, which
?S: indicates to the C program that the uname() routine may be
?S: used to derive the host name.
?S:.
?S:d_phostname:
?S: This variable conditionally defines the PHOSTNAME symbol, which
?S: contains the shell command which, when fed to popen(), may be
?S: used to derive the host name.
?S:.
?S:aphostname:
?S: Thie variable contains the command which can be used to compute the
?S: host name. The command is fully qualified by its absolute path, to make
?S: it safe when used by a process with super-user privileges.
?S:.
?C:HAS_GETHOSTNAME (GETHOSTNAME):
?C: This symbol, if defined, indicates that the C program may use the
?C: gethostname() routine to derive the host name.  See also HAS_UNAME
?C: and PHOSTNAME.
?C:.
?C:HAS_UNAME (UNAME):
?C: This symbol, if defined, indicates that the C program may
 use the
?C: uname() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and PHOSTNAME.
?C:.
?C:PHOSTNAME:
?C: This symbol, if defined, indicates that the C program may use the
?C: contents of PHOSTNAME as a command to feed to the popen() routine
?C: to derive the host name.  See also HAS_GETHOSTNAME and HAS_UNAME.
?C: Note that the command uses a fully qualified path, so that it is safe
```

```
?C: even if used by a process with super-user privileges.
?C:.
?H:#$d_gethname HAS_GETHOSTNAME /**/
?H:#$d_uname HAS_UNAME  /**/
?H:#$d_phostname PHOSTNAME "$aphostname" /* How to get the host name */
?H:.
?T:file val call
?LINT:change i_whoami
: see how we will look up host name
echo " "
if false; then
 : dummy stub to allow use of elif
@if HAS_GETHOSTNAME
elif set gethostname val -f d_gethname; eval $csym; $val; then
 echo 'gethostname() found.' >&4
 d_gethname="$define"
 call=gethostname
@end
@if HAS_UNAME
elif set uname val -f d_uname; eval $csym; $val; then
 if ./xenix; then
  $cat <<'EOM'
uname()
 was found, but you're running xenix, and older versions of xenix
have a broken uname(). If you don't really know whether your xenix is old
enough to have a broken system call, use the default answer.

EOM
  dflt=y
  case "$d_uname" in
  "$define") dflt=n;;
  esac
  rp='Is your uname() broken?'
  . ./myread
  case "$ans" in
  n*) d_uname="$define"; call=uname;;
  esac
 else
  echo 'uname() found.' >&4
  d_uname="$define"
  call=uname
 fi
@end
fi
case "$d_gethname" in
") d_gethname="$undef";;
esac
case "$d_uname" in
```

```
") d_uname="$undef";;
esac
@if PHOSTNAME || MYHOSTNAME
case "$d_uname$d_gethname" in
*define*)
 dflt=n
 cat <<EOM

Every now and then someone has a $call() that lies about the hostname
but can't be fixed for political or economic reasons.  If you wish, I can
@if MYHOSTNAME && PHOSTNAME
pretend $call() isn't there and maybe compile in the hostname or
compute it from the '$phostname' command at run-time.
@elsif MYHOSTNAME
pretend $call() isn't there and maybe compile
 in the hostname.
@elsif PHOSTNAME
pretend $call() isn't there and maybe compute hostname at run-time
thanks to the '$phostname' command.
@elsif WHOAMI
get the hostname from whomai.h (provided you have one).
@else
simply ignore your host name and use someting like "noname" instead.
@end

EOM
 rp="Shall I ignore $call() from now on?"
 . ./myread
 case "$ans" in
 y*) d_uname="$undef" d_gethname="$undef"; $echo $n "Okay...$c";;
 esac;;
esac
@end
@if PHOSTNAME || aphostname
?X: Compute the full path name for the command
case "$phostname" in
") aphostname=";;
*) case "$aphostname" in
 /*) ;;
 *) set X $phostname
  shift
  file=$1
  shift
  file=`./loc $file $file $pth`
  aphostname=`echo $file $*`
  ;;
 esac
 ;;
```

```
esac
@end
@if PHOSTNAME && MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ") ;;
 *)
  $cat <<EOT

There is no gethostname() or uname() on this system.  You have two
possibilities at this point:

1)  You can have your host name ($myhostname) compiled
 into $package, which
   lets $package start up faster, but makes your binaries non-portable, or
2)  you can have $package use a

 popen("$aphostname","r")

   which will start slower but be more portable.

@ if WHOAMI
Option 1 will give you the option of using whoami.h if you have one.
@ end
If you want option 2 but with a different command, you can edit config.sh at
the end of this shell script.

EOT
  case "$d_phostname" in
  "$define") dflt=n;;
  "$undef")  dflt=y;;
  ")
   case "$d_portable" in
   "$define") dflt=n ;;
   *) dflt=y ;;
   esac;;
  esac
  rp="Do you want your host name compiled in?"
  . ./myread
  case "$ans" in
  n*) d_phostname="$define" ;;
  *) aphostname=''; d_phostname="$undef";;
  esac;;
 esac
 case "$aphostname" in
 ")
```

```
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   dflt=y
   $cat <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier
 ($myhostname) hardwired in.
EOM
   rp="Use whoami.h to get hostname?"
   . ./myread
   case "$ans" in
   n*) i_whoami="$undef";;
   esac
   ;;
  "$undef")
   $cat <<EOM
No hostname function and no whoami.h -- hardwiring "$myhostname".
EOM
   ;;
  esac;;
@ else
  echo 'No hostname function -- hardwiring "'$myhostname'".' >&4;;
@ end
 esac;;
esac
@elsif PHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   $cat <<EOM

No hostname function--we'll use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

EOM
   ;;
  *) echo "There will be no way for $package to get your hostname." >&4;;
```

```
  esac;;
@ else
  echo "There will be no way for $package to get your hostname." >&4;;
@ end
 *)
 echo "I'll use 'popen(""""$aphostname"", "r")"" to get your hostname." >&4
  ;;
 esac;;
esac
@elsif MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
@ if WHOAMI
 case "$i_whoami" in
 "$define")
  dflt=y
  $cat
 <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
  rp="Use whoami.h to get hostname?"
  . ./myread
  case "$ans" in
  n*) i_whoami="$undef";;
  esac
  ;;
 "$undef")
  echo 'No whoami.h--hardwiring "'$myhostname'".' >&4;;
 esac;;
@ else
 echo 'Hardwiring "'$myhostname'".' >&4;;
@ end
esac
@end
case "$d_phostname" in
") d_phostname="$undef";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Config_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_h.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  14:57:43  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:10:49  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:25:39  ram
?RCS: patch49: typo fixes in leading config.h comment (WED)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/24  12:13:20  ram
?RCS: patch3: added TOP as a local shell temporary variable
?RCS:
?RCS:
 Revision 3.0.1.1  1993/08/19  06:42:20  ram
?RCS: patch1: leading config.sh searching was not aborting properly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file ends up producing the config_h.SH script, which is run to produce
?X: the config.h file.  The file ./.Config_h below contains all the ?H: lines
?X: extracted out of all the units.  Metaconfig itself adds the !GROK!THIS!.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?X: For those who wish to know why the file is config_h.SH instead of the more
?X: natural config.h.SH, well... it is to support systems like MS-DOG. Only one
?X: 'dot' is allowed within the file name, as it is part of the "extension" of
?X: the file. MS-DOG will not let you have two 'dots' because that would mean
?X: two "extensions".
?X:
?MAKE:Config_h: Id End Config_sh Obsol_h myuname cf_time cf_by package src
?MAKE: -pick c_h_weed $@ %<
?MAKE: -pick
 c_h_weed $@ ./Config_h
?MAKE: -pick c_h_weed $@ ./Obsol_h
?T:PERL_CONFIG_SH TOP
```

```
?LINT:unclosed !GROK!THIS!
?LINT:extern CONFIG_H CONFIG_SH
?LINT:change CONFIG_H CONFIG_SH
?X:?LINT:nocomment
: Set up for generating config_h.SH
case "$CONFIG_SH" in
") CONFIG_SH=config.sh;;
esac
case "$CONFIG_H" in
") CONFIG_H=config.h;;
esac
case $PERL_CONFIG_SH in
")
 if test -f $CONFIG_SH; then TOP=.;
 elif test -f ../$CONFIG_SH; then TOP=..;
 elif test -f ../../$CONFIG_SH; then TOP=../..;
 elif test -f ../../../$CONFIG_SH; then TOP=../../..;
 elif test -f ../../../../$CONFIG_SH; then TOP=../../../..;
 else
  echo "Can't find $CONFIG_SH."; exit 1
 fi
 . $TOP/$CONFIG_SH
 ;;
esac
?X: Make sure we are in the directory where the .SH file is located.
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting $CONFIG_H (with variable substitutions)"
?X:
?X: Since we unconditionally translate leading #undef into /*#define, we're
?X: stuck when we really want to have a #undef in $CONFIG_H.
 That's why there
?X: is provision here for #un-def, which is translated back into #undef after
?X: all original #undef have been processed.
?X:
?X: Previously, we changed all
?X:  #undef FOO /**/
?X: into
?X:  /*#define FOO /**/
?X: The xlc compiler (available on IBM's AIX) complains that this is
?X: an illegal attempt to write a nested comment, and warns against it.
?X: There's apparently no way to shut the compiler up, either.
?X: This sed command from Hallvard B Furuseth <h.b.furuseth@usit.uio.no>
?X: changes it to
?X:  /*#define FOO / **/
sed <<!GROK!THIS! >$CONFIG_H -e 's!^#undef\(.*/\)\*!/\*#define\1 \*!' -e 's!^#un-def!#undef!'
/* This file was produced by running the config_h.SH script, which
```

```
* gets its values from $CONFIG_SH, which is generally produced by
* running Configure.
*
* Feel free to modify any of this as the need arises.  Note, however,
* that running config_h.SH again will wipe out any changes you've made.
* For a more permanent change edit $CONFIG_SH and
 rerun config_h.SH.
*/

/* Package name      : $package
* Source directory  : $src
* Configuration time: $cf_time
* Configured by     : $cf_by
* Target system     : $myuname
*/

#ifndef _config_h_
#define _config_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Config_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?X:
?X: This unit allows the duplication of the source tree to the current
?X: directory via symbolic links.  This must be requested explicitly
?X: by them issuing a -Dmksymlinks on the command line.
?X:
?MAKE:Mksymlinks: Mkdirp lns issymlink src rsrc pkgsrc
?MAKE: -pick add $@ %<
?F:!UU
?T: dir filename tmppwd filelist
?LINT:extern mksymlinks
@if {test -f ../MANIFEST}
: Duplicate the tree with symbolic links if -Dmksymlinks was supplied
case "$mksymlinks"
```

```
 in
$define|true|[yY]*)
 echo " "
 case "$src" in
 "|'.') echo "Cannot create symlinks in the original directory." >&4
  exit 1
  ;;
 *) case "$lns:$issymlink" in
  *"ln"*" -s:"*"test -"?)
   echo "Creating the symbolic links..." >&4
   echo "(First creating the subdirectories...)" >&4
   cd ..
   awk '{print $1}' $src/MANIFEST | grep / | sed 's:/[^/]*$::' | \
    sort -u | while true
   do
    read dir
    test -z "$dir" && break
    ./UU/mkdirp $dir 2>/dev/null
    if test -d $dir; then
     : ok
    else
     echo "Failed to create '$dir'.  Aborting." >&4
     exit 1
    fi
   done
   echo "(Now creating the symlinks...)" >&4
   awk '{print $1}' $src/MANIFEST | while true; do
    read filename
    test -z "$filename" && break
    if test -f $filename; then
     if $issymlink $filename; then
      rm -f $filename
     fi
    fi
    if test -f $filename; then
     echo "$filename already exists, not symlinking."
    else
?X: Note that the following works because "$pkgsrc" is absolute
     ln
 -s $pkgsrc/$filename $filename
    fi
   done
?X: Check that everything was correctly copied
   echo "(Checking current directory...)" >&4
   cd UU
   awk '$1 !~ /PACK[A-Z]+/ {print $1}' "$rsrc/MANIFEST" | \
    (split -l 50 2>/dev/null || split -50)
   rm -f missing
```

```
   tmppwd=`pwd`
   for filelist in x??; do
    (cd ..; ls `cat "$tmppwd/$filelist"` \
     >/dev/null 2>>"$tmppwd/missing")
   done
   if test -s missing; then
    echo "Failed duplication of source tree.  Aborting." >&4
    exit 1
   fi
   ;;
  *) echo "(I cannot figure out how to do symbolic links, ignoring!)" >&4
   ;;
  esac
  ;;
 esac
 ;;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Mksymlinks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Whoa.U,v 3.0.1.2 1997/02/28 15:21:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Whoa.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:21:21  ram
?RCS: patch61: whoa script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:01  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to warn the user in case a change into a variable
```

```
 is noticed.
?X:
?X: To use this unit, $was must hold the old value that has changed. Upon
?X: exit, the two variables $td and $tu are set to the correct value for
?X: respectively defining or undefining a variable. For instance, if $vas was
?X: $undef, but now $var is $define, after calling . whoa, you should use
?X: eval "$var=\$tu" to finally set $var to the correct value. See unit Inlibc.
?X:
?MAKE:Whoa: Myread startsh hint
?MAKE: -pick add $@ %<
?F:./whoa
?T:var was td tu hintfile
: set up the script used to warn in case of inconsistency
cat <<EOS >whoa
$startsh
EOS
cat <<'EOSC' >>whoa
dflt=y
case "$hint" in
   recommended)
 case "$hintfile" in
 ") echo "The $hint value for \$$var on this machine was \"$was\"!" >&4
  ;;
 *) echo "Hmm.  Based on the hints in hints/$hintfile.sh, " >&4
  echo "the $hint value for \$$var on this machine was \"$was\"!" >&4
  ;;
 esac
 ;;
   *) echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    The $hint value for \$$var on this machine was
 \"$was\"!" >&4
 ;;
esac
rp="    Keep the $hint value?"
. ./myread
case "$ans" in
y) td=$was; tu=$was;;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Whoa.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:

```
?MAKE:d_fpgetround: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpgetround:
?S: This variable conditionally defines HAS_FPGETROUND if fpgetround()
?S: is available to get the floating point rounding mode.
?S:.
?C:HAS_FPGETROUND:
?C: This symbol, if defined, indicates that the fpgetround routine is
?C: available to get the floating point rounding mode.
?C:.
?H:#$d_fpgetround HAS_FPGETROUND  /**/
?H:.
?LINT:set d_fpgetround
: see if fpgetround exists
set fpgetround d_fpgetround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpgetround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gconvert.U,v 3.0.1.3 1997/02/28 15:33:38 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_gconvert.U,v $
?RCS: Revision 3.0.1.3 1997/02/28  15:33:38  ram
?RCS: patch61: integrated new unit from perl5
?RCS:
?RCS: Revision 3.0.1.2 1995/07/25  13:55:59  ram
?RCS: patch56: improved comments about the Gconvert macro (ADO)
?RCS: patch56: force compile-link test since it may exist but be unusable (ADO)
?RCS:
?RCS: Revision 3.0.1.1 1994/10/29  16:12:51  ram
?RCS: patch36:
 created by ADO
?RCS:
?MAKE:d_Gconvert: \
 Compile cat Inlibc rm _o rm_try i_stdlib d_qgcvt run \
 uselongdouble d_longdbl d_PRIgldbl sPRIgldbl
```

```
?MAKE: -pick add $@ %<
?S:d_Gconvert:
?S: This variable holds what Gconvert is defined as to convert
?S: floating point numbers into strings.  By default, Configure
?S: sets this macro to use the first of gconvert, gcvt, or sprintf
?S: that pass sprintf-%g-like behavior tests.  If perl is using
?S: long doubles, the macro uses the first of the following
?S: functions that pass Configure's tests: qgcvt, sprintf (if
?S: Configure knows how to make sprintf format long doubles--see
?S: sPRIgldbl), gconvert, gcvt, and sprintf (casting to double).
?S: The gconvert_preference and gconvert_ld_preference variables
?S: can be used to alter Configure's preferences, for doubles and
?S: long doubles, respectively.  If present, they contain a
?S: space-separated list of one or more of the above function
?S: names in the order they should be tried.
?S:
?S: d_Gconvert
 may be set to override Configure with a platform-
?S: specific function.  If this function expects a double, a
?S: different value may need to be set by the uselongdouble.cbu
?S: call-back unit so that long doubles can be formatted without
?S: loss of precision.
?S:.
?C:Gconvert:
?C: This preprocessor macro is defined to convert a floating point
?C: number to a string without a trailing decimal point.  This
?C: emulates the behavior of sprintf("%g"), but is sometimes much more
?C: efficient.  If gconvert() is not available, but gcvt() drops the
?C: trailing decimal point, then gcvt() is used.  If all else fails,
?C: a macro using sprintf("%g") is used. Arguments for the Gconvert
?C: macro are: value, number of digits, whether trailing zeros should
?C: be retained, and the output buffer.
?C: The usual values are:
?C:  d_Gconvert='gconvert((x),(n),(t),(b))'
?C:  d_Gconvert='gcvt((x),(n),(b))'
?C:  d_Gconvert='sprintf((b),"%.*g",(n),(x))'
?C: The last two assume trailing zeros should
 not be kept.
?C:.
?H:#define Gconvert(x,n,t,b) $d_Gconvert
?H:.
?T: xxx_list xxx_convert xxx_ld_list
?F:!try
?LINT:extern gconvert_preference
?LINT:extern gconvert_ld_preference
: Check how to convert floats to strings.

if test "X$d_Gconvert" = X; then
```

```
echo " "
echo "Checking for an efficient way to convert floats to strings."
echo " " > try.c
case "$uselongdouble" in
"$define") echo "#define USE_LONG_DOUBLE" >>try.c ;;
esac
case "$d_longdbl" in
"$define") echo "#define HAS_LONG_DOUBLE" >>try.c ;;
esac
case "$d_PRIgldbl" in
"$define") echo "#define HAS_PRIgldbl"    >>try.c ;;
esac
$cat >>try.c <<EOP
#ifdef TRY_gconvert
#define Gconvert(x,n,t,b) gconvert((x),(n),(t),(b))
const char *myname = "gconvert";
#endif
#ifdef TRY_gcvt
#define Gconvert(x,n,t,b) gcvt((x),(n),(b))
const char *myname = "gcvt";
#endif
#ifdef TRY_qgcvt
#define Gconvert(x,n,t,b) qgcvt((x),(n),(b))
const char *myname = "qgcvt";
#define DOUBLETYPE long double
#endif
#ifdef TRY_sprintf
#if defined(USE_LONG_DOUBLE) &&
 defined(HAS_LONG_DOUBLE)
#ifdef HAS_PRIgldbl
#define Gconvert(x,n,t,b) sprintf((b),"%.*"$sPRIgldbl,(n),(x))
#else
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(double)(x))
#endif
#else
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(x))
#endif
const char *myname = "sprintf";
#endif

#ifndef DOUBLETYPE
#if defined(USE_LONG_DOUBLE) && defined(HAS_LONG_DOUBLE)
#define DOUBLETYPE long double
#else
#define DOUBLETYPE double
#endif
#endif
```

```
#include <stdio.h>

#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>

void checkit(const char *expect, char *got)
{
   if (strcmp(expect, got)) {
  printf("%s oddity:  Expected %s, got %s\n",
   myname, expect, got);
  exit(1);
 }
}

void lencheck(int expect, int got)
{
   if (expect != got) {
  printf("%s length mismatch:  Expected %d, got %d\n",
   myname, expect, got);
  exit(1);
 }
}

int main()
{
 char buf[64];
 buf[63] = '\0';

 /* This must be 1st test on (which?) platform */
 /* Alan Burlison <AlanBurlsin@unn.unisys.com>
 */
 Gconvert((DOUBLETYPE)0.1, 8, 0, buf);
 checkit("0.1", buf);

 Gconvert((DOUBLETYPE)0.01, 8, 0, buf);
 checkit("0.01", buf);

 Gconvert((DOUBLETYPE)0.001, 8, 0, buf);
 checkit("0.001", buf);

 Gconvert((DOUBLETYPE)0.0001, 8, 0, buf);
 checkit("0.0001", buf);

 Gconvert((DOUBLETYPE)0.00009, 8, 0, buf);
```

```
if (strlen(buf) > 5)
    checkit("9e-005", buf); /* for Microsoft ?? */
else
    checkit("9e-05", buf);

Gconvert((DOUBLETYPE)1.0, 8, 0, buf);
checkit("1", buf);

Gconvert((DOUBLETYPE)1.1, 8, 0, buf);
checkit("1.1", buf);

Gconvert((DOUBLETYPE)1.01, 8, 0, buf);
checkit("1.01", buf);

Gconvert((DOUBLETYPE)1.001, 8, 0, buf);
checkit("1.001", buf);

Gconvert((DOUBLETYPE)1.0001, 8, 0, buf);
checkit("1.0001", buf);

Gconvert((DOUBLETYPE)1.00001, 8, 0, buf);
checkit("1.00001", buf);

Gconvert((DOUBLETYPE)1.000001, 8, 0, buf);
checkit("1.000001", buf);

Gconvert((DOUBLETYPE)0.0, 8, 0, buf);
checkit("0", buf);

Gconvert((DOUBLETYPE)-1.0, 8, 0, buf);
checkit("-1",
buf);

/* Some Linux gcvt's give 1.e+5 here. */
Gconvert((DOUBLETYPE)100000.0, 8, 0, buf);
checkit("100000", buf);

/* Some Linux gcvt's give -1.e+5 here. */
Gconvert((DOUBLETYPE)-100000.0, 8, 0, buf);
checkit("-100000", buf);

Gconvert((DOUBLETYPE)123.456, 8, 0, buf);
checkit("123.456", buf);

/* Testing of 1e+129 in bigintpm.t must not get extra '.' here. */
Gconvert((DOUBLETYPE)1e34, 8, 0, buf);
/* 34 should be enough to scare even long double
 * places into using the e notation. */
```

```
 if (strlen(buf) > 5)
     checkit("1e+034", buf); /* for Microsoft */
 else
     checkit("1e+34", buf);

 /* Test for an Ubuntu/Debian bug in gcvt and qgcvt. See:        *
  * https://bugs.launchpad.net/ubuntu/+source/glibc/+bug/1899553 */

 Gconvert((DOUBLETYPE)0.4, 53, 0, buf);
 lencheck(55, (int)strlen(buf));

 /* For Perl, if you add additional tests here, also add them to
  * t/base/num.t for benefit of platforms not using Configure or
  * overriding d_Gconvert */

 exit(0);
}
EOP
?X:
 List of order in which to search for functions.
?X: Usual order of efficiency is gconvert gcvt sprintf
?X: If a hint file sets a d_Gconvert="gconvert" or "gcvt" or "sprintf",
?X: then that is taken as a hint for which function to try first.
?X: (e.g. that function may be in a problematic /usr/ucblib library, and
?X: the user may or may not choose to use -lucb stuff.)
?X: Any other hint file (or previous config.sh) setting is left intact.
: first add preferred functions to our list
xxx_list=""
for xxx_convert in $gconvert_preference; do
   case $xxx_convert in
   gcvt|gconvert|sprintf) xxx_list="$xxx_list $xxx_convert" ;;
   *) echo "Discarding unrecognized gconvert_preference $xxx_convert" >&4 ;;
   esac
done
: then add any others
for xxx_convert in gconvert gcvt sprintf; do
   case "$xxx_list" in
   *$xxx_convert*) ;;
   *) xxx_list="$xxx_list $xxx_convert" ;;
   esac
done

case "$d_longdbl$uselongdouble" in
"$define$define")
   : again, add preferred functions to our
 list first
   xxx_ld_list=""
   for xxx_convert in $gconvert_ld_preference; do
```

```
        case $xxx_convert in
        qgcvt|gcvt|gconvert|sprintf) xxx_ld_list="$xxx_ld_list $xxx_convert" ;;
        *) echo "Discarding unrecognized gconvert_ld_preference $xxx_convert" ;;
        esac
    done
    : then add qgcvt, sprintf--then, in xxx_list order, gconvert and gcvt
    for xxx_convert in qgcvt sprintf $xxx_list; do
        case "$xxx_ld_list" in
        $xxx_convert*|*" $xxx_convert"*) ;;
        *) xxx_ld_list="$xxx_ld_list $xxx_convert" ;;
        esac
    done
    : if sprintf cannot do long doubles, move it to the end
    if test "$d_PRIgldbl" != "$define"; then
        xxx_ld_list="`echo $xxx_ld_list|sed s/sprintf//` sprintf"
    fi
    : if no qgcvt, remove it
    if test "$d_qgcvt" != "$define"; then
        xxx_ld_list="`echo $xxx_ld_list|sed s/qgcvt//`"
    fi
    : use the ld_list
    xxx_list="$xxx_ld_list"
    ;;
esac

for xxx_convert in $xxx_list; do
 echo "Trying $xxx_convert..."
?X:
 Do NOT use $rm_try here, as we need to keep try.c
 $rm -f try try$_o core
 set try -DTRY_$xxx_convert
 if eval $compile; then
  echo "$xxx_convert() found." >&4
  if $run ./try; then
   echo "I'll use $xxx_convert to convert floats into a string." >&4
   break;
  else
   echo "...But $xxx_convert didn't work as I expected."
   xxx_convert=''
  fi
 else
  echo "$xxx_convert NOT found." >&4
  xxx_convert=''
 fi
done

if test X$xxx_convert = X; then
   echo "*** WHOA THERE!!! ***" >&4
```

```
   echo "None of ($xxx_list)  seemed to work properly.  I'll use sprintf." >&4
   xxx_convert=sprintf
fi

case "$xxx_convert" in
gconvert) d_Gconvert='gconvert((x),(n),(t),(b))' ;;
gcvt) d_Gconvert='gcvt((x),(n),(b))' ;;
qgcvt) d_Gconvert='qgcvt((x),(n),(b))' ;;
*) case "$uselongdouble$d_longdbl$d_PRIgldbl" in
  "$define$define$define")
     d_Gconvert="sprintf((b),\"%.*\"$sPRIgldbl,(n),(x))" ;;
  "$define$define$undef")
     d_Gconvert='sprintf((b),"%.*g",(n),(double)(x))' ;;
  *) d_Gconvert='sprintf((b),"%.*g",(n),(x))'
 ;;
  esac
  ;;
esac

fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_gconvert.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setpwent_r setpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_setpwent_r:
?S: This variable conditionally defines the HAS_SETPWENT_R symbol,
?S: which indicates to the C program that the setpwent_r()
?S: routine is available.
?S:.
?S:setpwent_r_proto:
?S: This variable encodes the prototype of setpwent_r.
?S: It is zero if d_setpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setpwent_r
?S: is defined.
?S:.
```

```
?C:HAS_SETPWENT_R:
?C: This symbol, if defined, indicates that the setpwent_r routine
?C: is available to
 setpwent re-entrantly.
?C:.
?C:SETPWENT_R_PROTO:
?C: This symbol encodes the prototype of setpwent_r.
?C: It is zero if d_setpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setpwent_r
?C: is defined.
?C:.
?H:#$d_setpwent_r HAS_SETPWENT_R /**/
?H:#define SETPWENT_R_PROTO $setpwent_r_proto /**/
?H:.
?T:try hdrs d_setpwent_r_proto
: see if setpwent_r exists
set setpwent_r d_setpwent_r
eval $inlibc
case "$d_setpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_setpwent_r_proto:$usethreads" in
 ":define") d_setpwent_r_proto=define
  set d_setpwent_r_proto setpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setpwent_r_proto" in
 define)
 case "$setpwent_r_proto" in
 "|0) try='int setpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setpwent_r_proto=I_H ;;
 esac
 case "$setpwent_r_proto" in
 "|0) try='void setpwent_r(FILE**);'
 ./protochk "$extern_C $try" $hdrs && setpwent_r_proto=V_H ;;
 esac
 case "$setpwent_r_proto"
 in
 "|0) d_setpwent_r=undef
  setpwent_r_proto=0
  echo "Disabling setpwent_r, cannot determine prototype." >&4 ;;
 * ) case "$setpwent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setpwent_r_proto="REENTRANT_PROTO_$setpwent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
```

```
 ;;
 *) case "$usethreads" in
  define) echo "setpwent_r has no prototype, not using it." >&4 ;;
  esac
  d_setpwent_r=undef
  setpwent_r_proto=0
  ;;
 esac
 ;;
*) setpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setpwent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: myhostname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:15:55  ram
?RCS: patch61: improved hostname lookup by using ypmatch when NIS is used
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:25:43  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS: patch36: now uses new Tr unit to convert to/from lowercase
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:06:20  ram
?RCS: patch30: now a little more clever for domain name guessing
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:18  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:myhostname phostname mydomain: contains sed test Myread Oldconfig \
 Guess Loc awk echo sort uniq +usrinc rm hostcat Tr osname
?MAKE: -pick add $@ %<
?S:myhostname (hostname):
?S: This variable contains the eventual value of the MYHOSTNAME symbol,
?S: which is the name of the host the program is going to run on.
```

```
?S: The domain is not kept with hostname, but must be gotten from mydomain.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:mydomain:
?S: This variable contains the eventual value of the MYDOMAIN symbol,
?S: which is the domain of the host the program is going to run on.
?S: The domain must be appended to myhostname to form a complete host name.
?S: The dot comes with mydomain, and need not be supplied by the program.
?S:.
?S:phostname:
?S: This variable contains the eventual value of the PHOSTNAME symbol,
?S: which is a command that can be fed to popen() to get the host name.
?S: The program
 should probably not presume that the domain is or isn't
?S: there already.
?S:.
?C:MYHOSTNAME (HOSTNAME):
?C: This symbol contains name of the host the program is going to run on.
?C: The domain is not kept with hostname, but must be gotten from MYDOMAIN.
?C: The dot comes with MYDOMAIN, and need not be supplied by the program.
?C: If gethostname() or uname() exist, MYHOSTNAME may be ignored. If MYDOMAIN
?C: is not used, MYHOSTNAME will hold the name derived from PHOSTNAME.
?C:.
?C:MYDOMAIN:
?C: This symbol contains the domain of the host the program is going to
?C: run on.  The domain must be appended to HOSTNAME to form a complete
?C: host name.  The dot comes with MYDOMAIN, and need not be supplied by
?C: the program.  If the host name is derived from PHOSTNAME, the domain
?C: may or may not already be there, and the program should check.
?C:.
?H:#define MYHOSTNAME "$myhostname"  /**/
?H:#define MYDOMAIN "$mydomain"  /**/
?H:.
?T:cont i tans tmp_re file
: now get the host name
echo
 " "
echo "Figuring out host name..." >&4
case "$myhostname" in
") cont=true
 echo 'Maybe "hostname" will work...'
 if tans=`sh -c hostname 2>&1` ; then
  myhostname=$tans
  phostname=hostname
  cont="
 fi
 ;;
*) cont=";;
```

```
esac
if $test "$cont"; then
 if ./xenix; then
  echo 'Oh, dear.  Maybe "/etc/systemid" is the key...'
  if tans=`cat /etc/systemid 2>&1` ; then
   myhostname=$tans
   phostname='cat /etc/systemid'
   echo "Whadyaknow.  Xenix always was a bit strange..."
   cont=''
  fi
 elif $test -r /etc/systemid; then
  echo "(What is a non-Xenix system doing with /etc/systemid?)"
 fi
fi
if $test "$cont"; then
 echo 'No, maybe "uuname -l" will work...'
 if tans=`sh -c 'uuname -l' 2>&1` ; then
  myhostname=$tans
  phostname='uuname -l'
 else
  echo 'Strange.  Maybe "uname -n" will work...'
  if tans=`sh -c 'uname -n' 2>&1` ; then
   myhostname=$tans
   phostname='uname -n'
  else
   echo 'Oh well, maybe I can mine it out of whoami.h...'
   if tans=`sh -c $contains' sysname $usrinc/whoami.h'
 2>&1` ; then
    myhostname=`echo "$tans" | $sed 's/^.*"\(.*\)"/\1/'`
    phostname="sed -n -e ""/sysname/s/^.*\"\\(.*\\)\"/\1/{"" -e p -e q -e '}' <$usrinc/whoami.h"
   else
    case "$myhostname" in
    '') echo "Does this machine have an identity crisis or something?"
     phostname='';;
    *)
     echo "Well, you said $myhostname before..."
     phostname='echo $myhostname';;
    esac
   fi
  fi
 fi
fi
case "$myhostname" in
'') myhostname=noname ;;
esac
: you do not want to know about this
set $myhostname
myhostname=$1
```

```
: verify guess
if $test "$myhostname" ; then
 dflt=y
 rp='Your host name appears to be "'$myhostname'".' Right?"
 . ./myread
 case "$ans" in
 y*) ;;
 *) myhostname='';;
 esac
fi

: bad guess or no guess
while $test "X$myhostname" = X ; do
 dflt=''
 rp="Please type the (one word) name of your host:"
 . ./myread
 myhostname="$ans"
done

: translate upper to lower if necessary
case "$myhostname" in
*[A-Z]*)
 echo "(Normalizing case in your host name)"
 myhostname=`echo
 $myhostname | ./tr '[A-Z]' '[a-z]'`
 ;;
esac

?X: Do not ask for domain name if this is not used later on. In that
?X: case, the hostname may keep its domain name, but it doesn't matter.
@if MYDOMAIN || mydomain
case "$myhostname" in
*.*)
 dflt=`expr "X$myhostname" : "X[^.]*\(\..*\)"`
 myhostname=`expr "X$myhostname" : "X\([^.]*\)\."`
 echo "(Trimming domain name from host name--host name is now $myhostname)"
 ;;
*) case "$mydomain" in
 '')
?X:
?X: There is currently no way to say we do not want hostcat if mydomain is not
?X: used. One way to achieve that would be to put that code in a mydomain.U
?X: unit. However, we want to stick the sanity checks right after the domain
?X: name computation, or if none is done, right after the hostname computation.
?X:
  {
?X: If we use NIS, try ypmatch.
```

```
  test "X$hostcat" = "Xypcat hosts" &&
  ypmatch "$myhostname" hosts 2>/dev/null |\
   $sed -e 's/[  ]*#.*//; s/$/ /' > hosts && \
  $test -s hosts
 } || {
?X: Extract only
 the relevant hosts, reducing file size,
?X: remove comments, insert trailing space for later use.
       $hostcat | $sed -n -e "s/[  ]*#.*//; s/\$/ /
    /[  ]$myhostname[ . ]/p" > hosts
 }
 tmp_re="[ . ]"
 $test x`$awk "/[0-9].*[  ]$myhostname$tmp_re/ { sum++ }
       END { print sum }" hosts` = x1 || tmp_re="[  ]"
 dflt=.`$awk \
 "/[0-9].*[  ]$myhostname$tmp_re/ {for(i=2; i<=NF;i++) print \\\$i}" \
  hosts | $sort | $uniq | \
  $sed -n -e "s/$myhostname\.\([-a-zA-Z0-9_.]\)/\1/p"`
 case `$echo X$dflt` in
 X*\ *) echo "(Several hosts in /etc/hosts matched hostname)"
  dflt=.
  ;;
?X: There is no /etc/hosts on os390
 X.)
  if $test -f /etc/hosts; then
   echo "(You do not have fully-qualified names in /etc/hosts)"
  else
   echo "(I cannot locate a hosts database anywhere)"
  fi
  ;;
 esac
 case "$dflt" in
 .)
  tans=`./loc resolv.conf X /etc /usr/etc`
  if $test -f "$tans"; then
   echo "(Attempting domain name extraction from $tans)"
?X: Look for either a search
 or a domain directive.
   dflt=.`$sed -n -e 's/ / /g' \
     -e 's/^search  *\([^ ]*\).*/\1/p' $tans \
     | ./tr '[A-Z]' '[a-z]' 2>/dev/null`
   case "$dflt" in
   .) dflt=.`$sed -n -e 's/ / /g' \
        -e 's/^domain  *\([^ ]*\).*/\1/p' $tans \
        | ./tr '[A-Z]' '[a-z]' 2>/dev/null`
     ;;
   esac
  fi
```

```
   ;;
  esac
  case "$dflt" in
  .) echo "(No help from resolv.conf either -- attempting clever guess)"
   dflt=.`sh -c domainname 2>/dev/null`
   case "$dflt" in
   ") dflt='.';;
   .nis.*|.yp.*|.main.*) dflt=`echo $dflt | $sed -e 's/^\.[^.]*//'`;;
   esac
   ;;
  esac
  case "$dflt$osname" in
  .os390)
   file="//'SYS1.TCPPARMS(TCPDATA)'"
   echo "(Attempting domain name extraction from $file)"
   dflt=.`awk '/^DOMAINORIGIN/ {print $2}' "$file" 2>/dev/null`
   ;;
   esac
  case "$dflt" in
  .) echo "(Lost all hope -- silly guess then)"
   dflt='.nonet'
   ;;
  esac
  $rm -f hosts
  ;;
 *) dflt="$mydomain";;
 esac;;
esac
echo " "
rp="What is your domain name?"
.
 ./myread
tans="$ans"
case "$ans" in
") ;;
.*) ;;
*) tans=".$tans";;
esac
mydomain="$tans"

: translate upper to lower if necessary
case "$mydomain" in
*[A-Z]*)
 echo "(Normalizing case in your domain name)"
 mydomain=`echo $mydomain | ./tr '[A-Z]' '[a-z]'`
 ;;
esac
```

```
@end
: a little sanity check here
case "$phostname" in
") ;;
*)
 case `$phostname | ./tr '[A-Z]' '[a-z]'` in
 $myhostname$mydomain|$myhostname) ;;
 *)
  case "$phostname" in
  sed*)
   echo "(That doesn't agree with your whoami.h file, by the way.)"
   ;;
  *)
   echo "(That doesn't agree with your $phostname command, by the way.)"
   ;;
  esac
 ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/myhostname.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: randbits.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:19:29  ram
?RCS: patch61: added <unistd.h> and <stdlib.h> to the C program test
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit has been somewhat made obsolete with creation of the
?X: randfunc function (which finds out how to generate random
?X: numbers between 0 and 1.
?X:
?MAKE:randbits: cat rm Myread cc i_unistd i_stdlib
```

```
?MAKE: -pick add $@ %<
?S:randbits:
?S: This
 variable contains the eventual value of the RANDBITS symbol,
?S: which indicates to the C program how many bits of random number
?S: the rand() function produces.
?S:.
?C:RANDBITS:
?C: This symbol contains the number of bits of random number the rand()
?C: function produces.  Usual values are 15, 16, and 31.
?C:.
?H:#define RANDBITS $randbits  /**/
?H:.
: check for size of random number generator
echo " "
case "$randbits" in
")
 echo "Checking to see how many bits your rand function produces..." >&4
 $cat >try.c <<EOCP
#$i_unistd I_UNISTD
#$i_stdlib I_STDLIB
#include <stdio.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
EOCP
 $cat >>try.c <<'EOCP'
int main()
{
 register int i;
 register unsigned long tmp;
 register unsigned long max = 0L;

 for (i = 1000; i; i--) {
  tmp = (unsigned long)rand();
  if (tmp > max) max = tmp;
 }
 for (i = 0; max; i++)
  max /= 2;
 printf("%d\n",i);
}
EOCP
 if $cc -o try try.c >/dev/null 2>&1 ; then
  dflt=`try`
 else
```

```
  dflt='?'
  echo
 "(I can't seem to compile the test program...)"
 fi
 ;;
*)
 dflt="$randbits"
 ;;
esac
rp='How many bits does your rand() function produce?'
. ./myread
randbits="$ans"
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/randbits.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Filexp.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:52:53  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added HOME to the ?T: line since metalint now checks ${HOME}
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:00  ram
?RCS: patch23: made sure error status from csh is propagated (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which will expand filenames beginning
?X:
 with tildes.  The script is deleted at the end of Configure.
?X:
?MAKE:Filexp: startsh sed test expr eunicefix
?MAKE: -pick add $@ %<
?F:./filexp
?T:HOME LOGDIR dir me name failed
```

```
: set up shell script to do ~ expansion
cat >filexp <<EOSS
$startsh
: expand filename
?X:
?X: The case entries below escape the ~ as some shells have shown expansion
?X: of the ~ during here-doc processing.
?X:
case "\$1" in
\~/*|\~)
 echo \$1 | $sed "s|~|\${HOME-\$LOGDIR}|"
 ;;
\~*)
 if $test -f /bin/csh; then
  /bin/csh -f -c "glob \$1"
  failed=\$?
  echo ""
  exit \$failed
 else
  name=\`$expr x\$1 : '..\([^/]*\)'\`
  dir=\`$sed -n -e "/^\${name}:/{s/^[^:]*:[^:]*:[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\).*""\$""/\1/" -e p -e q -e '}' </etc/passwd\`
  if $test ! -d "\$dir"; then
   me=\`basename \$0\`
   echo "\$me: can't locate home directory for: \$name" >&2
   exit 1
  fi
  case "\$1" in
  */*)
   echo \$dir/\`$expr x\$1 : '..[^/]*/\(.*\)'\`
   ;;
  *)
   echo \$dir
   ;;
  esac
 fi
 ;;
*)
 echo \$1
 ;;
esac
EOSS
chmod
 +x filexp
$eunicefix filexp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Filexp.U

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```
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?RCS:
?MAKE:d_sqrtl: Inlibc
?MAKE: -pick add $@ %<
?S:d_sqrtl:
?S: This variable conditionally defines the HAS_SQRTL symbol, which
?S: indicates to the C program that the sqrtl() routine is available.
?S:.
?C:HAS_SQRTL:
?C: This symbol, if defined, indicates that the sqrtl routine is
?C: available to do long double square roots.
?C:.
?H:#$d_sqrtl HAS_SQRTL  /**/
?H:.
?LINT:set d_sqrtl
: see if sqrtl exists
set sqrtl d_sqrtl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sqrtl.U
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```
?RCS: $Id: usecbacktrace.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usecbacktrace.U,v $
?RCS:
?MAKE:usecbacktrace: Myread Oldconfig Setvar Getfile d_backtrace
?MAKE: -pick add $@ %<
?Y:TOP
?S:usecbacktrace:
?S: This variable indicates whether we are compiling with backtrace
?S: support.
?S:.
?C:USE_C_BACKTRACE:
?C: This symbol, if defined, indicates that Perl should
```

```
?C: be built with support for backtrace.
?C:.
?H:#$usecbacktrace USE_C_BACKTRACE  /**/
?H:.
: Check if C backtrace is actually supported.
case "$usecbacktrace" in
 "") usecbacktrace=$undef ;;
 [yY]*|true|$define)
   case "$d_backtrace" in
     [yY]*|true|$define)
       ;;
     *)
       echo "This system does not support backtrace" >&4
       usecbacktrace=$undef

  ;;
     esac
   ;;
 esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usebacktrace.U
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```
?RCS: $Id: pkgsrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:pkgsrc: src rsrc
?MAKE: -pick add $@ %<
?S:pkgsrc:
?S: This variable holds the absolute path of the package source.
?S:.
?C:PACKAGE_SOURCE_DIR:
?C: Holds the directory name holding the package source.
?C:.
?H:#define PACKAGE_SOURCE_DIR "$pkgsrc"
?H:.
: define absolute package source directory
case "$src" in
/*) pkgsrc=$src;;
*) pkgsrc=`cd $rsrc; pwd`;;
```

```
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pkgsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ftrncate.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ftrncate.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ftrncate: Inlibc
?MAKE: -pick add $@ %<
?S:d_ftrncate (d_ftruncate):
?S: This variable conditionally defines the HAS_FTRUNCATE symbol, which
?S: indicates to the C program that the ftruncate() subroutine exists.
?S:.
?C:HAS_FTRUNCATE:
?C: This symbol, if defined, indicates that the ftruncate() subroutine
?C: exists.
?C:.
?H:#$d_ftrncate
 HAS_FTRUNCATE /**/
?H:.
?LINT:set d_ftrncate
: see if ftruncate exists
set ftruncate d_ftrncate
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ftrncate.U
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```
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?RCS:
?MAKE:d_round: Inlibc
?MAKE: -pick add $@ %<
?S:d_round:
```

```
?S: This variable conditionally defines the HAS_ROUND symbol, which
?S: indicates to the C program that the round() routine is available.
?S:.
?C:HAS_ROUND:
?C: This symbol, if defined, indicates that the round routine is
?C: available to round to nearest integer, away from zero.
?C:.
?H:#$d_round HAS_ROUND  /**/
?H:.
?LINT:set d_round
: see if round exists
set round d_round
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_round.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mbrlen: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbrlen:
?S: This variable conditionally defines the HAS_MBRLEN symbol if the
?S: mbrlen() routine is available to be used to get the length of
?S: multi-byte character strings.
?S:.
?C:HAS_MBRLEN:
?C: This symbol, if defined, indicates that the mbrlen routine is
?C: available to get the length of multi-byte character strings.
?C:.
?H:#$d_mbrlen HAS_MBRLEN /**/
?H:.
?LINT: set d_mbrlen
: see if mbrlen exists
set mbrlen d_mbrlen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_mbrlen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libperl.U,v $
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:libperl useshrplib shrpenv ldlibpthname: \
 Myread Oldconfig archlibexp awk cat libc \
 _a osname osvers so patchlevel subversion usedl ld \
 ccdlflags installarchlib userelocatableinc
?MAKE: -pick wipe $@ %<
?S:libperl:
?S: The perl executable is obtained by linking perlmain.c with
?S: libperl, any static extensions (usually just DynaLoader),
?S: and any other libraries needed on this system.  libperl
?S: is usually libperl.a, but can also be libperl.so.xxx if
?S: the user wishes to build a perl executable with a shared
?S: library.
?S:.
?S:useshrplib:
?S: This variable is set to 'true' if the user wishes
?S: to build a shared libperl, and 'false' otherwise.
?S:.
?S:shrpenv:
?S: If
 the user builds a shared libperl.so, then we need to tell the
?S: 'perl' executable where it will be able to find the installed libperl.so.
?S: One way to do this on some systems is to set the environment variable
?S: LD_RUN_PATH to the directory that will be the final location of the
?S: shared libperl.so.  The makefile can use this with something like
?S:  $shrpenv $(CC) -o perl perlmain.o $libperl $libs
?S: Typical values are
?S:  shrpenv="env LD_RUN_PATH=$archlibexp/CORE"
?S: or
?S:  shrpenv="
?S: See the main perl Makefile.SH for actual working usage.
?S:
?S: Alternatively, we might be able to use a command line option such
?S: as -R $archlibexp/CORE (Solaris) or -Wl,-rpath
?S: $archlibexp/CORE (Linux).
?S:.
?S:ldlibpthname:
?S: This variable holds the name of the shared library
?S: search path, often LD_LIBRARY_PATH.  To get an empty
?S: string, the hints file must set this to 'none'.
?S:.
?T:shrpdir majonly majmin also xxx tmp_shrpenv
```

```
?X: metalint gets confused and thinks we're
 actually setting LDOPTS
?X: and LD_RUN_PATH.
?LINT:extern LDOPTS
?LINT:change LDOPTS
?LINT:extern LD_RUN_PATH
?LINT:change LD_RUN_PATH
?LINT:change ccdlflags
?LINT:extern maintloc maintname
?Y:top
: Do we want a shared libperl?
also=''
case "$usedl" in
$undef)
 # No dynamic loading being used, so don't bother even to prompt.
 useshrplib='false'
 ;;
*) case "$useshrplib" in
 '') case "$osname" in
  svr4*|nonstopux|dgux|dynixptx|esix|powerux|haiku|cygwin*)
   dflt=y
   also='Building a shared libperl is required for dynamic loading to work on your system.'
   ;;
  *) dflt=n
   ;;
  esac
  ;;
 $define|true|[Yy]*)
  dflt=y
  ;;
 *) dflt=n
  ;;
 esac
 $cat << EOM

The perl executable is normally obtained by linking perlmain.c with
libperl${_a}, any static extensions (usually just DynaLoader), and
any other libraries needed on this system (such as -lm, etc.).  Since
your system supports dynamic loading, it is probably possible to build
a shared libperl.$so.  If you will have more than one
 executable linked
to libperl.$so, this will significantly reduce the size of each
executable, but it may have a noticeable effect on performance.  The
default is probably sensible for your system.
$also

EOM
 rp="Build a shared libperl.$so (y/n)"
```

```
 . ./myread
 case "$ans" in
 true|$define|[Yy]*)
  useshrplib='true'  ;;
 *) useshrplib='false' ;;
 esac
 ;;
esac

case "$useshrplib" in
true)
 case "$userelocatableinc" in
 true|define)
  echo "Cannot build with both -Duserelocatableinc and -Duseshrplib" >&4
  echo "See INSTALL for an explanation why that won't work." >&4
  exit 4
  ;;
 esac
 case "$libperl" in
 ")
  # Figure out a good name for libperl.so.  Since it gets stored in
  # a version-specific architecture-dependent library, the version
  # number isn't really that important, except for making cc/ld happy.
  #
  # A name such as libperl.so.10.1
  majmin="libperl.$so.$patchlevel.$subversion"
  # A name such as libperl.so.100
  majonly=`echo $patchlevel $subversion |
   $awk '{printf
"%d%02d", $1, $2}'`
  majonly=libperl.$so.$majonly
  # I'd prefer to keep the os-specific stuff here to a minimum, and
  # rely on figuring it out from the naming of libc.
  case "${osname}${osvers}" in
  *linux*|gnu*)  # ld won't link with a bare -lperl otherwise.
   dflt=libperl.$so
   ;;
  cygwin*) # ld links now against the dll directly
   majmin="cygperl5_${patchlevel}_${subversion}.${so}"
   majonly=`echo $patchlevel $subversion |
    $awk '{printf "%03d%03d", $1, $2}'`
   majonly=cygperl5.$majonly.$so
   dflt=$majmin
   ;;
  *) # Try to guess based on whether libc has major.minor.
   case "$libc" in
   *libc.$so.[0-9]*.[0-9]*) dflt=$majmin ;;
   *libc.$so.[0-9]*) dflt=$majonly ;;
```

```
   *) dflt=libperl.$so ;;
   esac
   ;;
  esac
  ;;
 *) dflt=$libperl
  ;;
 esac
 cat << EOM

I need to select a good name for the shared libperl.  If your system uses
library names with major and minor numbers, then you might want something
like $majmin.  Alternatively, if your system uses a single
 version
number for shared libraries, then you might want to use $majonly.
Or, your system might be quite happy with a simple libperl.$so.

Since the shared libperl will get installed into a version-specific
architecture-dependent directory, the version number of the shared perl
library probably isn't important, so the default should be o.k.

EOM
 rp='What name do you want to give to the shared libperl?'
 . ./myread
 libperl=$ans
 echo "Ok, I'll use $libperl"
 ;;
*)
 libperl="libperl${_a}"
 ;;
esac

# Detect old use of shrpdir via undocumented Configure -Dshrpdir
case "$shrpdir" in
") ;;
*) $cat >&4 <<EOM
WARNING:  Use of the shrpdir variable for the installation location of
the shared $libperl is not supported.  It was never documented and
will not work in this version.  Let me (<$maintloc>)
know of any problems this may cause.

EOM
 case "$shrpdir" in
 "$archlibexp/CORE")
  $cat >&4 <<EOM
But your current setting of $shrpdir is
the default anyway, so it's harmless.
EOM
```

```
  ;;
 *)
  $cat
 >&4 <<EOM
Further, your current attempted setting of $shrpdir
conflicts with the value of $archlibexp/CORE
that installperl will use.
EOM
  ;;
 esac
 ;;
esac

# How will the perl executable find the installed shared $libperl?
# Add $xxx to ccdlflags.
# If we can't figure out a command-line option, use $shrpenv to
# set env LD_RUN_PATH.  The main perl makefile uses this.
shrpdir=$archlibexp/CORE
xxx=''
tmp_shrpenv=''
if "$useshrplib"; then
   case "$osname" in
 aix)
  # We'll set it in Makefile.SH...
  ;;
 solaris)
  xxx="-R $shrpdir"
  ;;
 freebsd|minix|mirbsd|netbsd|openbsd|interix|dragonfly|bitrig)
  xxx="-Wl,-R$shrpdir"
  ;;
 bsdos|linux|irix*|dec_osf|gnu*|haiku)
  xxx="-Wl,-rpath,$shrpdir"
  ;;
 hpux*)
  # hpux doesn't like the default, either.
  tmp_shrpenv="env LDOPTS=\"+s +b${shrpdir}\""
  ;;
 cygwin)
  # cygwin needs only ldlibpth
  ;;
 *)
  tmp_shrpenv="env LD_RUN_PATH=$shrpdir"
  ;;
 esac
 case "$xxx" in
 '') ;;
 *)
```

```
  # Only add $xxx if it isn't already in ccdlflags.
  case
 " $ccdlflags " in
  *" $xxx "*) ;;
  *) ccdlflags="$ccdlflags $xxx"
   cat <<EOM >&4

Adding $xxx to the flags
passed to $ld so that the perl executable will find the
installed shared $libperl.

EOM
   ;;
  esac
  ;;
 esac
fi
# Fix ccdlflags in AIX for building external extensions.
# (For building Perl itself bare -bE:perl.exp is needed,
#  Makefile.SH takes care of this.)
case "$osname" in
aix) ccdlflags="$ccdlflags -bE:$installarchlib/CORE/perl.exp" ;;
esac
# Respect a hint or command-line value.
case "$shrpenv" in
") shrpenv="$tmp_shrpenv" ;;
esac
case "$ldlibpthname" in
") ldlibpthname=LD_LIBRARY_PATH ;;
none) ldlibpthname=" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/libperl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ffs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ffs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:03  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ffs: Inlibc
?MAKE: -pick add $@ %<
?S:d_ffs:
?S: This variable conditionally defines the HAS_FFS symbol, which
?S: indicates to the C program that the ffs() routine is available
?S: to find the first bit which is set in its integer argument.
?S:.
?C:HAS_FFS:
?C: This symbol, if defined, indicates that the ffs routine is available
?C: to
 find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
?H:#$d_ffs HAS_FFS  /**/
?H:.
?LINT:set d_ffs
: see if ffs exists
set ffs d_ffs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ffs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: charsize.U,v 3.0.1.1 1994/10/29 16:07:13 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: charsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:13  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:charsize charbits: cat rm_try Myread Compile run
?MAKE: -pick add $@ %<
?S:charsize:
?S: This variable contains the value of the CHARSIZE symbol, which
?S: indicates to the C program how many bytes there are in a character.
```

```
?S:.
?S:charbits:
?S: This
 variable contains the value of the CHARBITS symbol, which
?S: indicates to the C program how many bits there are in a character.
?S:.
?C:CHARSIZE:
?C: This symbol contains the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?C:CHARBITS:
?C: This symbol contains the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define CHARSIZE $charsize  /**/
?H:#define CHARBITS $charbits  /**/
?H:.
?F:!try
: length of character in bytes. Is always 1, otherwise it is not C
: This used to be a test using sizeof
charsize=1

: Check for the number of bits in a character
case "$charbits" in
") echo "Checking how long a character is (in bits)..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
int main ()
{
   int n;
   unsigned char c;
   for (c = 1, n = 0; c; c <<= 1, n++) ;
   printf ("%d\n", n);
   return (0);
   }
EOCP
 set try
 if eval $compile_ok; then
  dflt=`$run ./try`
 else
  dflt='8'
  echo "(I
 can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$charbits"
 ;;
```

```
esac
rp="What is the length of a character (in bits)?"
. ./myread
charbits="$ans"
$rm_try
case "$charbits" in
8) ;;
*) cat >&4 << EOM
Your system has an unsigned character size of $charbits bits, which
is rather unusual (normally it is 8 bits).  Perl likely will not work
correctly on your system, with subtle bugs in various places.
EOM
 rp='Do you really want to continue?'
 dflt='n'
 . ./myread
 case "$ans" in
  [yY]) echo >&4 "Okay, continuing." ;;
  *) exit 1    ;;
 esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/charsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Tye McQueen <tye@metronet.com> added safe setuid script checks.
?RCS:
?RCS: $Log: d_dosuid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:33:03  ram
?RCS: patch61: moved unit to TOP via a ?Y: layout directive
?RCS: patch61: tell them /dev/fd is not about floppy disks
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:08  ram
?RCS: patch36: added checks for secure setuid scripts (Tye McQueen)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_dosuid
 d_suidsafe: cat contains ls rm test Myread Setvar \
 Oldconfig Guess package hint
?MAKE: -pick add $@ %<
?S:d_suidsafe:
?S: This variable conditionally defines SETUID_SCRIPTS_ARE_SECURE_NOW
?S: if setuid scripts can be secure.  This test looks in /dev/fd/.
?S:.
?S:d_dosuid:
?S: This variable conditionally defines the symbol DOSUID, which
?S: tells the C program that it should insert setuid emulation code
?S: on hosts which have setuid #! scripts disabled.
?S:.
?C:SETUID_SCRIPTS_ARE_SECURE_NOW:
?C: This symbol, if defined, indicates that the bug that prevents
?C: setuid scripts from being secure is not present in this kernel.
?C:.
?C:DOSUID:
?C: This symbol, if defined, indicates that the C program should
?C: check the script that it is executing for setuid/setgid bits, and
?C: attempt to emulate setuid/setgid on systems that have disabled
?C: setuid #! scripts because the kernel can't do it securely.
?C: It is up to the package designer to make sure that this emulation
?C: is done securely.
  Among other things, it should do an fstat on
?C: the script it just opened to make sure it really is a setuid/setgid
?C: script, it should make sure the arguments passed correspond exactly
?C: to the argument on the #! line, and it should not trust any
?C: subprocesses to which it must pass the filename rather than the
?C: file descriptor of the script to be executed.
?C:.
?H:#$d_suidsafe SETUID_SCRIPTS_ARE_SECURE_NOW /**/
?H:#$d_dosuid DOSUID  /**/
?H:.
?Y:TOP
?F:!reflect
?LINT: set d_suidsafe
?LINT: set d_dosuid
: see if setuid scripts can be secure
$cat <<EOM

Some kernels have a bug that prevents setuid #! scripts from being
secure.  Some sites have disabled setuid #! scripts because of this.

First let's decide if your kernel supports secure setuid #! scripts.
(If setuid #! scripts would be secure but have been disabled anyway,
don't say that they are secure if asked.)
```

```
EOM

val="$undef"
if $test -d /dev/fd; then
 echo "#!$ls" >reflect
 chmod +x,u+s reflect
 ./reflect >flect
 2>&1
 if $contains "/dev/fd" flect >/dev/null; then
  echo "Congratulations, your kernel has secure setuid scripts!" >&4
  val="$define"
 else
  $cat <<EOM
If you are not sure if they are secure, I can check but I'll need a
username and password different from the one you are using right now.
If you don't have such a username or don't want me to test, simply
enter 'none'.

EOM
  rp='Other username to test security of setuid scripts with?'
  dflt='none'
  . ./myread
  case "$ans" in
  n|none)
   case "$d_suidsafe" in
   ") echo "I'll assume setuid scripts are *not* secure." >&4
    dflt=n;;
   "$undef")
    echo "Well, the $hint value is *not* secure." >&4
    dflt=n;;
   *) echo "Well, the $hint value *is* secure." >&4
    dflt=y;;
   esac
   ;;
  *)
   $rm -f reflect flect
   echo "#!$ls" >reflect
   chmod +x,u+s reflect
   echo >flect
   chmod a+w flect
   echo "'su" will (probably) prompt you for "'$ans's password."
   su $ans -c './reflect >flect'
   if $contains "/dev/fd" flect
 >/dev/null; then
    echo "Okay, it looks like setuid scripts are secure." >&4
    dflt=y
   else
    echo "I don't think setuid scripts are secure." >&4
```

```
   dflt=n
  fi
  ;;
 esac
 rp='Does your kernel have *secure* setuid scripts?'
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
fi
else
 echo "I don't think setuid scripts are secure (no /dev/fd directory)." >&4
 echo "(That's for file descriptors, not floppy disks.)"
 val="$undef"
fi
set d_suidsafe
eval $setvar

$rm -f reflect flect

: now see if they want to do setuid emulation
echo " "
val="$undef"
case "$d_suidsafe" in
"$define")
 val="$undef"
 echo "No need to emulate SUID scripts since they are secure here." >& 4
 ;;
*)
 $cat <<EOM
Some systems have disabled setuid scripts, especially systems where
setuid scripts cannot be secure.  On systems where setuid scripts have
been disabled, the setuid/setgid bits on scripts are currently
useless.  It is possible for $package to detect those bits
 and emulate
setuid/setgid in a secure fashion.  This emulation will only work if
setuid scripts have been disabled in your kernel.

EOM
 case "$d_dosuid" in
 "$define") dflt=y ;;
 *) dflt=n ;;
 esac
 rp="Do you want to do setuid/setgid emulation?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
```

```
 *) val="$undef";;
 esac
 ;;
esac
set d_dosuid
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dosuid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_mntent.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_mntent: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_mntent:
?S: This variable conditionally defines the I_MNTENT symbol, and indicates
?S: whether a C program should include <mntent.h>.
?S:.
?C:I_MNTENT:
?C: This symbol, if defined, indicates that <mntent.h> exists and
?C: should be included.
?C:.
?H:#$i_mntent I_MNTENT  /**/
?H:.
?LINT:set i_mntent
: see if this is a mntent.h system
set mntent.h i_mntent
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_mntent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysresrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: i_sysresrc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/resource.h> needs to be included
?X:
?MAKE:i_sysresrc: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysresrc:
?S: This variable conditionally defines the I_SYS_RESOURCE symbol,
?S: and indicates whether a C program should include <sys/resource.h>.
?S:.
?C:I_SYS_RESOURCE (I_SYSRESOURCE):
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <sys/resource.h>.
?C:.
?H:#$i_sysresrc I_SYS_RESOURCE  /**/
?H:.
?LINT:set i_sysresrc
: see if sys/resource.h has to be included
set sys/resource.h i_sysresrc
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysresrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_sockatmark: Inlibc
?MAKE: -pick add $@ %<
?S:d_sockatmark:
?S: This variable conditionally defines the HAS_SOCKATMARK symbol, which
?S: indicates to the C program that the sockatmark() routine is available.
?S:.
?C:HAS_SOCKATMARK:
?C: This symbol, if defined, indicates that the sockatmark routine is
?C: available to test whether a socket is at the out-of-band mark.
?C:.
?H:#$d_sockatmark HAS_SOCKATMARK  /**/
```

```
?H:.
?LINT:set d_sockatmark
: see if sockatmark exists
set sockatmark d_sockatmark
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sockatmark.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cf_name.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: cf_name.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  14:29:36  ram
?RCS: patch23: fixed user name computation from /etc/passwd in bsd systems
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:05:11  ram
?RCS: patch16: created
?RCS:
?RCS:
?MAKE:+cf_name: cf_by passcat Filexp nametype cat test
?MAKE: -pick add $@ %<
?S:cf_name:
?S: Full name of the person who ran the Configure script and
 answered the
?S: questions. This can be used by units that require the user's full name.
?S: This variable is for internal use only.
?S:.
?T:xxx fn NAME
: figure out their full name
case "$NAME" in
") case "$nametype" in
 other)
  fn=`./filexp ~/.fullname`
  xxx=usg
  $test -f $fn && xxx=other
  ;;
 *)
```

```
  xxx="$nametype"
  ;;
 esac

 case "$xxx" in
 bsd)
  cf_name=`$passcat | grep "^$cf_by:" | \
   sed -e 's/^[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\):.*/\1/' \
   -e 's/,.*//'`
  ;;
   usg)
  cf_name=`$passcat | grep "^$cf_by:" | \
   sed -e 's/^[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\):.*/\1/' \
   -e 's/[^-]*-\(.*\)(.*)/\1/'`
  ;;
 *)
  cf_name=`$cat $fn`
  ;;
 esac
 ;;
*)
 cf_name="$NAME"
 ;;
esac
?X:
?X: In the original unit, Graham asked for the user name, in case the above
?X: code was unable to figure it out correctly. Since now cf_name has been
?X: made an internal variable only (i.e. it is not saved in config.sh), letting
?X: the user override the computed default each time would be a pain.
?X:
 Therefore, I have decided to trust the above code to get it right, and for
?X: those rare cases where it will fail, too bad :-) --RAM.
?X:
echo " "
echo "Pleased to meet you, $cf_name."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_name.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sunscanf.U,v 3.0 1993/08/18 12:09:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sunscanf.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sunscanf: cat rm Compile Myread test Setvar
?MAKE: -pick add $@ %<
?S:sunscanf:
?S: This variable is set if this system runs with the Sun version
?S: of scanf.
?S:.
?C:SUNSCANF:
?C: This variable is set if this system runs with the Sun version
?C: of scanf.
?C:.
?H:#$sunscanf SUNSCANF  /**/
?H:.
?LINT:set sunscanf
?F:!scanf
: check to see what
 kinda scanf your using.
echo " "
echo "Checking to see what flavor of scanf you have..." >&4
$cat >scanf.c <<'EOCP'
int main()
{
 float value;

 sscanf("4.5","%g",&value);
 printf("%d\n", value == 4.5);
}
EOCP
set scanf
if eval $compile_ok; then
 if $test `./scanf` = 0; then
  echo "Hmm.. seems you are not running the USG flavor.."
  val="$undef"
 else
  echo "Uh... you are running the USG flavor of scanf."
  val="$define"
 fi
else
 echo "(I can't seem to compile the test program... Guessing)"
 val="$undef"
fi
set sunscanf
eval $setvar
```

```
$rm -f scanf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/sunscanf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgrp2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setpgrp2.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpgrp2:
?S: This variable conditionally defines the HAS_SETPGRP2 symbol, which
?S: indicates to the C program that the setpgrp2() (as in DG/UX) routine
?S: is available to set the current process group.
?S:.
?C:HAS_SETPGRP2 (SETPGRP2):
?C: This symbol, if defined, indicates that the
 setpgrp2() (as in DG/UX)
?C: routine is available to set the current process group.
?C:.
?H:#$d_setpgrp2 HAS_SETPGRP2  /**/
?H:.
?LINT:set d_setpgrp2
: see if setpgrp2 exists
set setpgrp2 d_setpgrp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgrp2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:intsize longsize shortsize: Assert Myread cat rm_try +cc +ccflags echo n c
?MAKE: -pick add $@ %<
?S:intsize:
?S: This variable contains the value of the INTSIZE symbol, which
?S: indicates to the C program how many bytes there are in an int.
?S:.
?S:longsize:
?S: This variable contains the value of the LONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long.
?S:.
?S:shortsize:
?S: This variable contains the value of the SHORTSIZE symbol which
?S: indicates to the
 C program how many bytes there are in a short.
?S:.
?C:INTSIZE:
?C: This symbol contains the value of sizeof(int) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:LONGSIZE:
?C: This symbol contains the value of sizeof(long) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:SHORTSIZE:
?C: This symbol contains the value of sizeof(short) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define INTSIZE $intsize
?H:#define LONGSIZE $longsize
?H:#define SHORTSIZE $shortsize
?H:.
?T:types t size var
?LINT: set shortsize intsize longsize
: check for lengths of integral types
echo " "
types=''
@if SHORTSIZE || shortsize
types="$types short"
@end
@if INTSIZE || intsize
types="$types int"
@end
@if LONGSIZE || longsize
```

```
types="$types long"
@end
for t in $types; do
 $echo $n "Checking to see how big your ${t}s are...$c" >&4
 for size in 2 4 8 16 error; do
  $cat >try.c <<EOCP
#include "static_assert.h"
$t foo;
int main()
{
 STATIC_ASSERT($size
 == sizeof(foo));
 return 0;
}
EOCP
  if $cc -c $ccflags try.c >/dev/null 2>&1; then break; fi
 done
 var=${t}size
 case "$size" in
 error)
  echo " cannot compute it." >&4
  case $t in
  short) dflt=2;;
  int) dflt=4;;
  long) dflt=4;;
  esac
  rp="What is the size of the \"$t\" type (in bytes)?"
  . ./myread
  eval $var="$ans"
  ;;
 *)
  echo " $size bytes." >&4
  eval $var=$size
  ;;
 esac
done
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/intsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:d_isfinitel: Inlibc
?MAKE: -pick add $@ %<
?S:d_isfinitel:
?S: This variable conditionally defines the HAS_ISFINITEL symbol, which
?S: indicates to the C program that the isfinitel() routine is available.
?S:.
?C:HAS_ISFINITEL:
?C: This symbol, if defined, indicates that the isfinitel routine is
?C: available to check whether a long double is finite.
?C: (non-infinity non-NaN).
?C:.
?H:#$d_isfinitel HAS_ISFINITEL  /**/
?H:.
?LINT:set d_isfinitel
: see if isfinitel exists
set isfinitel d_isfinitel
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isfinitel.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_gai_strerror: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_gai_strerror:
?S: This variable conditionally defines the HAS_GAI_STRERROR symbol
?S: if the gai_strerror() routine is available and can be used to
?S: translate error codes returned by getaddrinfo() into human
?S: readable strings.
?S:.
?C:HAS_GAI_STRERROR:
?C: This symbol, if defined, indicates that the gai_strerror routine
?C: is available to translate error codes returned by getaddrinfo()
?C: into human readable strings.
?C:.
?H:#$d_gai_strerror
 HAS_GAI_STRERROR /**/
?H:.
?F:!try
```

```
?LINT: set d_gai_strerror
: look for gai_strerror
echo " "
$cat >try.c <<'EOCP'
#include <sys/types.h>
#include <sys/socket.h>
#include <netdb.h>
int main ()
{
  return (gai_strerror (0) ? 0 : 1);
  }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
  `$run ./try`
  case "$?" in
 0)  echo "A working gai_strerror() found." >&4
    val="$define" ;;
 *)  echo "gai_strerror() found, but it doesn't work" >&4
    ;;
 esac
else
  echo "gai_strerror() NOT found." >&4
  fi
set d_gai_strerror
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_gai_strerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_PORTAR.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_PORTAR.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:42  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:05:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_PORTAR: cat +cc rm Setvar
?MAKE: -pick add $@ %<
?S:d_PORTAR:
?S: This variable conditionally handles definition of PORTAR,
?S: a creation of greater minds than I can imagine.
?S:.
?C:PORTAR:
?C: This manifest constant must
 be defined to 1 for some implementations
?C: of ar.h to get the portable ar most everybody uses.
?C:.
?L:ar_fmag:
?L:ARFMAG:
?L:SARMAG:
?H:#$d_PORTAR PORTAR 1 /**/
?H:.
?F:!portar
?LINT:set d_PORTAR
: see if we need to define PORTAR
echo " "
echo 'Checking to see if we need to define PORTAR for portable archives...' >&4
$cat >portar.c <<'EOCP'
#include <ar.h>
int main() {
 char *arfmag = ARFMAG;
 int sarmag = SARMAG;
 struct ar_hdr arh;

 strncpy(arh.ar_fmag, arfmag, 2);

#ifdef PORTAR
 printf("D\n");
#else
 printf("U\n");
#endif
 exit(0);}
EOCP
if $cc -o portar portar.c >/dev/null 2>&1 || \
 $cc -DPORTAR=1 -o portar portar.c >/dev/null 2>&1 ; then
 case "`./portar`" in
 D)
  val="$define"
  echo "We'll be defining PORTAR for you."
  ;;
 U)
```

```
  val="$undef"
  echo "We don't seem to need PORTAR defined here."
  ;;
 *)
  val="$define"
  echo "(My test program gave me an unexpected value!)"
  echo "I'll just define PORTAR to be sure."
  ;;
 esac
else
 echo "(Strange, I couldn't get my test
 program to compile.)"
 echo "We'll just define PORTAR in this case."
 val="$define"
fi
set d_PORTAR
eval $setvar
$rm -f portar*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_PORTAR.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnetent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getnetent_r getnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getnetent_r:
?S: This variable conditionally defines the HAS_GETNETENT_R symbol,
?S: which indicates to the C program that the getnetent_r()
?S: routine is available.
?S:.
?S:getnetent_r_proto:
?S: This variable encodes the prototype of getnetent_r.
?S: It is zero if d_getnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetent_r
?S: is defined.
?S:.
?C:HAS_GETNETENT_R:
?C: This symbol, if defined, indicates that the getnetent_r routine
?C: is
```

```
 available to getnetent re-entrantly.
?C:.
?C:GETNETENT_R_PROTO:
?C: This symbol encodes the prototype of getnetent_r.
?C: It is zero if d_getnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getnetent_r
?C: is defined.
?C:.
?H:#$d_getnetent_r HAS_GETNETENT_R /**/
?H:#define GETNETENT_R_PROTO $getnetent_r_proto /**/
?H:.
?T:try hdrs d_getnetent_r_proto
: see if getnetent_r exists
set getnetent_r d_getnetent_r
eval $inlibc
case "$d_getnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getnetent_r_proto:$usethreads" in
 ":define") d_getnetent_r_proto=define
  set d_getnetent_r_proto getnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getnetent_r_proto" in
 define)
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct netent*, char*, size_t, struct netent**, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBWRE ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct
 netent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBIE ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='struct netent* getnetent_r(struct netent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=S_SBIE ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='struct netent* getnetent_r(struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=S_SBI ;;
 esac
 case "$getnetent_r_proto" in
 "|0) try='int getnetent_r(struct netent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SBI ;;
 esac
 case "$getnetent_r_proto" in
```

```
"|0) try='int getnetent_r(struct netent*, struct netent_data*);'
./protochk "$extern_C $try" $hdrs && getnetent_r_proto=I_SD ;;
esac
case "$getnetent_r_proto" in
"|0) d_getnetent_r=undef
 getnetent_r_proto=0
 echo "Disabling getnetent_r, cannot determine prototype." >&4 ;;
* ) case "$getnetent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getnetent_r_proto="REENTRANT_PROTO_$getnetent_r_proto"
;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getnetent_r has no prototype, not using it." >&4 ;;
 esac
 d_getnetent_r=undef
 getnetent_r_proto=0
 ;;
esac
;;
*) getnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getnetent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_asinh: Inlibc
?MAKE: -pick add $@ %<
?S:d_asinh:
?S: This variable conditionally defines the HAS_ASINH symbol, which
?S: indicates to the C program that the asinh() routine is available.
?S:.
?C:HAS_ASINH:
?C: This symbol, if defined, indicates that the asinh routine is
?C: available to do the inverse hyperbolic sine function.
?C:.
?H:#$d_asinh HAS_ASINH  /**/
?H:.
?LINT:set d_asinh
: see if asinh exists
```

```
set asinh d_asinh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_asinh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_link.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_link.U,v $
?RCS: Revision 3.0.1.1  1993/08/25  14:01:13  ram
?RCS: patch6: created for completeness
?RCS:
?MAKE:d_link: Inlibc
?MAKE: -pick add $@ %<
?S:d_link:
?S: This variable conditionally defines HAS_LINK if link() is
?S: available to create hard links.
?S:.
?C:HAS_LINK:
?C: This symbol, if defined, indicates that the link routine is
?C: available to create hard links.
?C:.
?H:#$d_link HAS_LINK /**/
?H:.
?LINT:set d_link
: see if link exists
set
 link d_link
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_link.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:56:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: added support for HPUX-10 nm output
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  14:11:56  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:20:47  ram
?RCS: patch54: made sure only most recent version of shared lib is picked
?RCS: patch54: final "nm -p" check now uses xscan and xrun
 like everybody
?RCS: patch54: can now grok Linux nm output with lead __IO (ADO)
?RCS: patch54: added support for Linux ELF output, using 'W' for alias (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1994/10/29  16:23:40  ram
?RCS: patch36: now looks for shared libraries before anything else (ADO)
?RCS: patch36: added new nm output format (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1994/08/29  16:28:10  ram
?RCS: patch32: added I-type symbols for nm output parsing on Linux
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  07:03:24  ram
?RCS: patch30: checks are now presented by succession of if/elif
?RCS: patch30: uniformized checks for shared objects with new so symbol
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  15:06:33  ram
?RCS: patch23: added shared library knowledge (ADO and WED)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:12:17  ram
?RCS: patch16: can now export nm_extract as an internal-use only variable
?RCS:
?RCS: Revision 3.0.1.2  1993/09/13  16:09:03  ram
?RCS: patch10: added special handling for Apollo
 systems (WAD)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:40:03  ram
?RCS: patch7: added entry for /usr/shlib/libc.so (OSF/1 machines)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libc +nm_extract: echo n c rm test grep Getfile Myread Oldconfig Loc \
```

```
 sed libs incpath libpth ar runnm nm nm_opt nm_so_opt contains xlibpth \
 so _a _o osname trnl tr sort uniq sysroot
?MAKE: -pick add $@ %<
?S:libc:
?S: This variable contains the location of the C library.
?S:.
?S:nm_extract:
?S: This variable holds the name of the extraction command used to process
?S: the output of nm and yield the list of defined symbols. It is used
?S: internally by Configure.
?S:.
?T:thislib try libnames xxx xscan xrun thisname com tans file
?F:!libnames !libc.tmp !tmp.imp
?LINT:extern PASE
?LINT:extern libnames
?LINT:change nm_opt
?INIT:libnames=''
: Figure out where the libc is located
case "$runnm" in
true)
?X: indentation is wrong on purpose--RAM
:
 get list of predefined functions in a handy place
echo " "
case "$libc" in
'') libc=unknown
 case "$libs" in
 *-lc_s*) libc=`./loc libc_s$_a $libc $libpth`
 esac
 ;;
esac
case "$libs" in
'') ;;
*)  for thislib in $libs; do
 case "$thislib" in
 -lc|-lc_s)
  : Handle C library specially below.
  ;;
 -l*)
  thislib=`echo $thislib | $sed -e 's/^-l//'`
  if try=`./loc lib$thislib.$so.'*' X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib.$so X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib$_a X $libpth`; $test -f "$try"; then
   :
```

```
  elif try=`./loc lib$thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc Slib$thislib$_a X $xlibpth`; $test -f "$try"; then
   :
  else
   try=''
  fi
  libnames="$libnames $try"
  ;;
 *) libnames="$libnames $thislib" ;;
 esac
 done
 ;;
esac
?X:
?X: Some systems (e.g. DG/UX) use
 "environmental" links, which make the test
?X: -f fail. Ditto for symbolic links. So in order to reliably check the
?X: existence of a file, we use test -r. It will still fail with DG/UX links
?X: though, but at least it will detect symbolic links. At some strategic
?X: points, we make use of (test -h), using a sub-shell in case builtin test
?X: does not implement the -h check for symbolic links. This makes it
?X: possible to preset libc in a hint file for instance and have it show up
?X: as-is in the question.
?X:
xxx=normal
case "$libc" in
unknown)
?X:
?X: The sed below transforms .so.9 .so.12 into something like .so.0009 .so.0012,
?X: then sorts on it to allow keeping .so.12 instead of .so.9 as the latest
?X: up-to-date library. The initial filename (before sed munging, saved in hold
?X: space via 'h') is appended via 'G' before sorting, then the leading munged
?X: part is removed after sorting. Nice efficient work from Tye McQueen.
?X: The initial blurfl is here to prevent the trailing
 pipe from producing an
?X: empty string, causing Configure to output all its set variables!
?X:
 set /lib/libc.$so
 for xxx in $libpth; do
  $test -r $1 || set $xxx/libc.$so
  : The messy sed command sorts on library version numbers.
  $test -r $1 || \
   set `echo blurfl; echo $xxx/libc.$so.[0-9]* | \
   tr ' ' $trnl | egrep -v '\.[A-Za-z]*$' | $sed -e '
    h
```

```
    s/[0-9][0-9]*/0000&/g
    s/0*\([0-9][0-9][0-9][0-9][0-9]\)/\1/g
    G
    s/\n/ /' | \
    $sort | $sed -e 's/^.* //'`
  eval set \$$#
 done
 $test -r $1 || set $sysroot/usr/ccs/lib/libc.$so
 $test -r $1 || set $sysroot/lib/libsys_s$_a
 ;;
*)
?X: ensure the test below for the (shared) C library will fail
 set blurfl
 ;;
esac
if $test -r "$1"; then
 echo "Your (shared) C library seems to be in $1."
 libc="$1"
elif $test -r /lib/libc && $test -r /lib/clib; then
?X:
?X: Apollo has its C library in /lib/clib AND /lib/libc
?X: not to mention its math library in /lib/syslib...
?X:
 echo "Your C library seems to be in both /lib/clib
 and /lib/libc."
 xxx=apollo
 libc='/lib/clib /lib/libc'
 if $test -r /lib/syslib; then
  echo "(Your math library is in /lib/syslib.)"
?X: Put syslib in libc -- not quite right, but won't hurt
  libc="$libc /lib/syslib"
 fi
elif $test -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 echo "Your C library seems to be in $libc, as you said before."
?X: For mips, and...
elif $test -r $incpath/usr/lib/libc$_a; then
 libc=$incpath/usr/lib/libc$_a;
 echo "Your C library seems to be in $libc.  That's fine."
elif $test -r /lib/libc$_a; then
 libc=/lib/libc$_a;
 echo "Your C library seems to be in $libc.  You're normal."
else
 if tans=`./loc libc$_a blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc libc blurfl/dyick $libpth`; $test -r "$tans"; then
  libnames="$libnames "`./loc clib blurfl/dyick $libpth`
 elif tans=`./loc clib blurfl/dyick $libpth`; $test -r "$tans"; then
  :
```

```
 elif tans=`./loc Slibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 elif tans=`./loc
 Mlibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 else
  tans=`./loc Llibc$_a blurfl/dyick $xlibpth`
 fi
 if $test -r "$tans"; then
  echo "Your C library seems to be in $tans, of all places."
  libc=$tans
 else
  libc='blurfl'
 fi
fi
if $test $xxx = apollo -o -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 dflt="$libc"
 cat <<EOM

If the guess above is wrong (which it might be if you're using a strange
compiler, or your machine supports multiple models), you can override it here.

EOM
else
 dflt=''
 echo $libpth | $tr ' ' $trnl | $sort | $uniq > libpath
 cat >&4 <<EOM
I can't seem to find your C library.  I've looked in the following places:

EOM
 $sed 's/^/ /' libpath
 cat <<EOM

None of these seems to contain your C library. I need to get its name...

EOM
fi
fn=f
rp='Where is your C library?'
. ./getfile
libc="$ans"

echo " "
echo $libc $libnames | $tr ' ' $trnl | $sort | $uniq > libnames
set X `cat libnames`
shift
xxx=files
case $# in 1) xxx=file; esac
```

```
echo
 "Extracting names from the following $xxx for later perusal:" >&4
echo " "
$sed 's/^/ /' libnames >&4
echo " "
$echo $n "This may take a while...$c" >&4

?X:
?X: Linux may need the special Dynamic option to nm for shared libraries.
?X: In general, this is stored in the nm_so_opt variable.
?X: Unfortunately, that option may be fatal on non-shared libraries.
?X:
for file in $*; do
 case $file in
 *$so*) $nm $nm_so_opt $nm_opt $file 2>/dev/null;;
 *) $nm $nm_opt $file 2>/dev/null;;
 esac
done >libc.tmp

$echo $n ".$c"
?X:
?X: To accelerate processing, we look at the correct 'sed' command
?X: by using a small subset of libc.tmp, i.e. fprintf function.
?X: When we know which sed command to use, do the name extraction
?X:
$grep fprintf libc.tmp > libc.ptf
?X:
?X: In order to enhance readability and save some space, we define
?X: some variables that will be "eval"ed.
?X:
xscan='eval "<libc.ptf $com >libc.list"; $echo $n ".$c" >&4'
xrun='eval "<libc.tmp $com >libc.list"; echo "done." >&4'
?X:
 BSD-like output, I and W types added for Linux
?X: Some versions of Linux include a leading __IO in the symbol name.
?X: HP-UX 10 reportedly has trailing spaces, though I'm surprised it has
?X: BSD-like output.  (AD).
?X: GNU extension: i is "indirect function"
xxx='[ADTSIWi]'
if com="$sed -n -e 's/__IO//' -e 's/^.* $xxx  *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: SYSV-like output
elif com="$sed -n -e 's/^__*//' -e 's/^\([a-zA-Z_0-9$]*\).*xtern.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
```

```
elif com="$sed -n -e '/|UNDEF/d' -e '/FUNC..GL/s/^.*|__*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.* D __*//p' -e 's/^.* D //p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^_//' -e 's/^\([a-zA-Z_0-9]*\).*xtern.*text.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$'
 libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$grep '|' | $sed -n -e '/|COMMON/d' -e '/|DATA/d' \
    -e '/ file/d' -e 's/^\([^  ]*\).*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p' -e 's/^.*|FUNC |WEAK .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: mips nm output (sysV)
elif com="$sed -n -e 's/^__//' -e '/|Undef/d' -e '/|Proc/s/ .*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|Proc .*|Text *| *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/Def. Text/s/.* \([^ ]*\)\$/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: OS/2
 nm output
elif com="$sed -n -e 's/^[-0-9a-f ]*_\(.*\)=.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/.*\.text n\ \ \ \.//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
```

```
  eval $xrun
?X: AIX nm output
elif com="sed -n -e 's/^__.*//' -e 's/[       ]*D[    ]*[0-9]*.*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
else
 $nm -p $* 2>/dev/null >libc.tmp
 $grep fprintf libc.tmp > libc.ptf
 if com="$sed -n -e 's/^.* [ADTSIW]  *_[_.]*//p' -e 's/^.* [ADTSIW] //p'";\
  eval $xscan; $contains '^fprintf$' libc.list >/dev/null 2>&1
 then
  nm_opt='-p'
  eval $xrun
 else
  echo " "
  echo "$nm didn't seem to work right. Trying $ar instead..." >&4
  com="
  if $ar t $libc > libc.tmp && \
   $contains '^fprintf$' libc.tmp >/dev/null 2>&1
  then
   for thisname in $libnames $libc; do
    $ar t $thisname >>libc.tmp
   done
   $sed -e "s/\\$_o\$//" < libc.tmp > libc.list
   echo
 "Ok." >&4
  elif test "X$osname" = "Xos2" && $ar tv $libc > libc.tmp; then
?X: Repeat libc to extract forwarders to DLL entries too
   for thisname in $libnames $libc; do
    $ar tv $thisname >>libc.tmp
?X: Revision 50 of EMX has bug in ar: it will not extract forwarders
?X: to DLL entries.  Use emximp which will extract exactly them.
    emximp -o tmp.imp $thisname \
        2>/dev/null && \
        $sed -e 's/^\([_a-zA-Z0-9]*\) .*$/\1/p' \
        < tmp.imp >>libc.tmp
    $rm -f tmp.imp
   done
   $sed -e "s/\\$_o\$//" -e 's/^ \+//' < libc.tmp > libc.list
   echo "Ok." >&4
  else
   echo "$ar didn't seem to work right." >&4
   echo "Maybe this is a Cray...trying bld instead..." >&4
   if  bld t $libc | \
    $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" > libc.list &&
    $test -s libc.list
   then
```

```
    for thisname in $libnames; do
     bld t $libnames | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" >>libc.list
     $ar t $thisname >>libc.tmp
    done
    echo "Ok." >&4
   else
    echo
 "That didn't work either.  Giving up." >&4
    exit 1
   fi
  fi
 fi
fi
nm_extract="$com"
case "$PASE" in
define)
   echo " "
   echo "Since you are compiling for PASE, extracting more symbols from libc.a ...">&4
   dump -Tv /lib/libc.a | awk '$7 == "/unix" {print $5 " " $8}' | grep "^SV" | awk '{print $2}' >> libc.list
   ;;
*)  if $test -f /lib/syscalls.exp; then
 echo " "
 echo "Also extracting names from /lib/syscalls.exp for good ole AIX..." >&4
 $sed -n 's/^\([^  ]*\)[  ]*syscall[0-9]*[  ]*$/\1/p' \
  /lib/syscalls.exp >>libc.list
   fi
   ;;
esac
;;
esac
$rm -f libnames libpath
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/libc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strftime.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:07:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_strftime:
?S: This variable conditionally defines HAS_STRFTIME if strftime() is
?S: available to format locale-specific times.
?S:.
?C:HAS_STRFTIME:
?C: This symbol, if defined, indicates that the strftime routine is
?C: available to format locale-specific times.
?C:.
?H:#$d_strftime HAS_STRFTIME /**/
?H:.
?LINT:set d_strftime
: see
 if strftime exists
set strftime d_strftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_table.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_table.U,v $
?RCS: Revision 3.0.1.2  1993/11/10  17:34:14  ram
?RCS: patch14: wrongly mentionned an obsolete symbol
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:49:29  ram
?RCS: patch12: created
?RCS:
?MAKE:d_table: Inlibc
?MAKE: -pick add $@ %<
?S:d_table:
?S: This variable conditionally defines HAS_TABLE if table() is
?S: available to examine/update elements from a system table.
?S:.
```

```
?C:HAS_TABLE:
?C: This symbol, if defined, indicates that the OSF/1
 table() system
?C: call is available to examine/update items from a system table.
?C:.
?H:#$d_table HAS_TABLE /**/
?H:.
?LINT:set d_table
: see if table exists
set table d_table
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_table.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extras.U,v$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:extras: Myread Oldconfig Setvar rm
?MAKE: -pick add $@ %<
?Y:TOP
?S:extras:
?S: This variable holds a list of extra modules to install.
?S:.
: See if we want extra modules installed
echo " "
case "$extras" in
") dflt='n';;
*) dflt='y';;
esac
cat <<EOM
Perl can be built with extra modules or bundles of modules which
will be fetched from the CPAN and installed alongside Perl.

Notice that you will need access to the CPAN; either via the Internet,
or a local copy, for example a CD-ROM or a local CPAN mirror.  (You will
be asked later to configure the CPAN.pm module which will in turn do
the installation of the rest of the extra modules or bundles.)

Notice also that if the modules require
 any external software such as
libraries and headers (the libz library and the zlib.h header for the
Compress::Zlib module, for example) you MUST have any such software
```

```
already installed, this configuration process will NOT install such
things for you.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Install any extra modules (y or n)?'
. ./myread
case "$ans" in
y|Y)
 cat <<EOM

Please list any extra modules or bundles to be installed from CPAN,
with spaces between the names.  The names can be in any format the
'install' command of CPAN.pm will understand.  (Answer 'none',
without the quotes, to install no extra modules or bundles.)
EOM
 rp='Extras?'
 dflt="$extras"
 . ./myread
 extras="$ans"
esac
case "$extras" in
"|'none')
 val=''
 $rm -f ../extras.lst
 ;;
*) echo "(Saving the list of extras for later...)"
 echo "$extras" > ../extras.lst
 val='"$extras"'
 ;;
esac
set extras
eval $setvar
echo " "

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Extras.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_getpwent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwent_r getpwent_r_proto: Inlibc Protochk Hasproto i_systypes \
```

```
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwent_r:
?S: This variable conditionally defines the HAS_GETPWENT_R symbol,
?S: which indicates to the C program that the getpwent_r()
?S: routine is available.
?S:.
?S:getpwent_r_proto:
?S: This variable encodes the prototype of getpwent_r.
?S: It is zero if d_getpwent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwent_r
?S: is defined.
?S:.
?C:HAS_GETPWENT_R:
?C: This symbol, if defined, indicates that the getpwent_r routine
?C: is available to
 getpwent re-entrantly.
?C:.
?C:GETPWENT_R_PROTO:
?C: This symbol encodes the prototype of getpwent_r.
?C: It is zero if d_getpwent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwent_r
?C: is defined.
?C:.
?H:#$d_getpwent_r HAS_GETPWENT_R /**/
?H:#define GETPWENT_R_PROTO $getpwent_r_proto /**/
?H:.
?T:try hdrs d_getpwent_r_proto
: see if getpwent_r exists
set getpwent_r d_getpwent_r
eval $inlibc
case "$d_getpwent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwent_r_proto:$usethreads" in
 ":define") d_getpwent_r_proto=define
  set d_getpwent_r_proto getpwent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getpwent_r_proto" in
 define)
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, size_t, struct passwd**);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBWR ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, int, struct passwd**);'
```

```
 ./protochk
 "$extern_C $try" $hdrs && getpwent_r_proto=I_SBIR ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='struct passwd* getpwent_r(struct passwd*, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=S_SBW ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='struct passwd* getpwent_r(struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=S_SBI ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBI ;;
 esac
 case "$getpwent_r_proto" in
 "|0) try='int getpwent_r(struct passwd*, char*, int, FILE**);'
 ./protochk "$extern_C $try" $hdrs && getpwent_r_proto=I_SBIH ;;
 esac
 case "$getpwent_r_proto" in
 "|0) d_getpwent_r=undef
  getpwent_r_proto=0
  echo "Disabling getpwent_r, cannot determine prototype." >&4 ;;
 * ) case "$getpwent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getpwent_r_proto="REENTRANT_PROTO_$getpwent_r_proto" ;;
  esac
  echo
 "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getpwent_r has no prototype, not using it." >&4 ;;
  esac
  d_getpwent_r=undef
  getpwent_r_proto=0
  ;;
 esac
 ;;
*) getpwent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwent_r.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llrintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_llrintl:
?S: This variable conditionally defines the HAS_LLRINTL symbol, which
?S: indicates to the C program that the llrintl() routine is available
?S: to return the long long value closest to a long double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LLRINTL:
?C: This symbol, if defined, indicates that the llrintl routine is
?C: available to return the long long value closest to a long double
?C: (according to the current rounding mode).
?C:.
?H:#$d_llrintl HAS_LLRINTL  /**/
?H:.
?LINT:set d_llrintl
: see if llrintl exists
set llrintl d_llrintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llrintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uidformat: uidsize uidsign ivsize uvsize longsize intsize shortsize \
 ivdformat uvuformat test echo
?MAKE: -pick add $@ %<
?S:uidformat:
?S: This variable contains the format string used for printing a Uid_t.
?S:.
?C:Uid_t_f:
?C: This symbol defines the format string used for printing a Uid_t.
?C:.
?H:#define Uid_t_f  $uidformat  /**/
?H:.
: Check format string for UID
echo " "
$echo "Checking the format string to be used for uids..." >&4
```

```
case "$uidsign" in
-1) if $test X"$uidsize" = X"$ivsize"; then
  uidformat="$ivdformat"
 else
  if $test X"$uidsize" = X"$longsize"; then
   uidformat="'ld'"
  else
   if $test X"$uidsize" = X"$intsize"; then
    uidformat="'d'"
   else
    if $test X"$uidsize"
 = X"$shortsize"; then
     uidformat="'hd'"
    fi
   fi
  fi
 fi
 ;;
*) if $test X"$uidsize" = X"$uvsize"; then
  uidformat="$uvuformat"
 else
  if $test X"$uidsize" = X"$longsize"; then
   uidformat="'lu'"
  else
   if $test X"$uidsize" = X"$intsize"; then
    uidformat="'u'"
   else
    if $test X"$uidsize" = X"$shortsize"; then
     uidformat="'hu'"
    fi
   fi
  fi
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_volatile.U,v 3.0.1.2 1995/07/25 14:08:49 ram Exp $
?RCS:
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```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_volatile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:08:49  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/09  11:49:51  ram
?RCS: patch9: volatile definition was swapped over with undef
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_volatile: cat +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_volatile:
?S: This variable conditionally
 defines the HASVOLATILE symbol, which
?S: indicates to the C program that this C compiler knows about the
?S: volatile declaration.
?S:.
?C:HASVOLATILE ~ %<:
?C: This symbol, if defined, indicates that this C compiler knows about
?C: the volatile declaration.
?C:.
?H:?%<:#$d_volatile HASVOLATILE /**/
?H:?%<:#ifndef HASVOLATILE
?H:?%<:#define volatile
?H:?%<:#endif
?H:.
?LINT:set d_volatile
?LINT:known volatile
: check for volatile keyword
echo " "
echo 'Checking to see if your C compiler knows about "volatile"...' >&4
$cat >try.c <<'EOCP'
int main()
{
?X:
?X: The following seven lines added by Bill Campbell <billc@sierra.com>
?X: detect that MIPS compilers do not handle volatile in all situations.
?X:
 typedef struct _goo_struct goo_struct;
 goo_struct * volatile goo = ((goo_struct *)0);
 struct _goo_struct {
  long long_int;
  int reg_int;
  char char_var;
 };
```

```
 typedef unsigned short foo_t;
 char *volatile foo;
 volatile int bar;
 volatile foo_t blech;
 foo = foo;
}
EOCP
if $cc
 -c $ccflags try.c >/dev/null 2>&1 ; then
 val="$define"
 echo "Yup, it does."
else
 val="$undef"
 echo "Nope, it doesn't."
fi
set d_volatile
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_volatile.U
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```
?RCS: $Id$
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_atolf: Inlibc
?MAKE: -pick add $@ %<
?S:d_atolf:
?S: This variable conditionally defines the HAS_ATOLF symbol, which
?S: indicates to the C program that the atolf() routine is available.
?S:.
?C:HAS_ATOLF:
?C: This symbol, if defined, indicates that the atolf routine is
?C: available to convert strings into long doubles.
?C:.
?H:#$d_atolf HAS_ATOLF  /**/
?H:.
?LINT:set d_atolf
: see if atolf exists
set atolf d_atolf
eval $inlibc
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/atolf.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_memrchr: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_memrchr:
?S: This variable conditionally defines the HAS_MEMRCHR symbol, which
?S: indicates to the C program that the memrchr() routine is available
?S: to return a pointer to the last occurrence of a byte in a memory
?S: area (or NULL if not found).
?S:.
?C:HAS_MEMRCHR:
?C: This symbol, if defined, indicates that the memrchr routine is
?C: available to return a pointer to the last occurrence of a byte in
?C: a memory area (or NULL if not found).
?C:.
?H:#$d_memrchr HAS_MEMRCHR  /**/
?H:.
?T:d_memrchr_proto xx1 xx2 xx3 xx4
?LINT:set d_memrchr
: see if memrchr exists
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_memrchr_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC)
 && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_memrchr_proto memrchr literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_memrchr_proto" in
   define) # see if memrchr exists
 set memrchr d_memrchr
 eval $inlibc
 ;;
   *)  val=$undef
 set d_memrchr
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_memrchr.U

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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usemultiplicity: useithreads Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usemultiplicity:
?S: This variable conditionally defines the MULTIPLICITY symbol,
?S: and indicates that Perl should be built to use multiplicity.
?S:.
?C:MULTIPLICITY:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use multiplicity.
?C:.
?H:?%<:#ifndef MULTIPLICITY
?H:?%<:#$usemultiplicity MULTIPLICITY  /**/
?H:?%<:#endif
?H:.
?LINT:set usemultiplicity
?INIT:: set usemultiplicity on the Configure command line to enable multiplicity.
: Check if multiplicity is required
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
cat <<EOM

Perl
 can be built so that multiple Perl interpreters can coexist
within the same Perl executable.
EOM

case "$useithreads" in
$define)
 cat <<EOM
This multiple interpreter support is required for interpreter-based threads.
EOM
 val="$define"
 ;;
*) case "$usemultiplicity" in
 $define|true|[yY]*) dflt='y';;
 *) dflt='n';;
 esac
 echo " "
```

```
 echo "If this doesn't make any sense to you, just accept the default '$dflt'."
 rp='Build Perl for multiplicity?'
 . ./myread
 case "$ans" in
 y|Y) val="$define" ;;
 *)      val="$undef" ;;
 esac
 ;;
esac
set usemultiplicity
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usemultiplicity.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_poll: Inhdr
?MAKE: -pick add $@ %<
?S:i_poll:
?S: This variable conditionally defines the I_POLL symbol, which
?S: indicates to the C program that it should include <poll.h>.
?S:.
?C:I_POLL:
?C: This symbol, if defined, indicates that the program may include
?C: <poll.h>.  If there is no <poll.h>, then you may check I_SYS_POLL
?C: instead to see whether there is a <sys/poll.h> to include.
?C:.
?H:#$i_poll I_POLL /**/
?H:.
?LINT:set i_poll
: see if there is a poll.h file
set poll.h i_poll
eval $inhdr
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_poll.U

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```
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_grp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_grp: Inhdr
?MAKE: -pick add $@ %<
?S:i_grp:
?S: This variable conditionally defines the I_GRP symbol, and indicates
?S: whether a C program should include <grp.h>.
?S:.
?C:I_GRP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <grp.h>.
?C:.
?H:#$i_grp I_GRP  /**/
?H:.
?LINT:set i_grp
: see if this is an grp system
set grp.h i_grp
eval $inhdr
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_grp.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_eofpipe.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:40  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_eofpipe: cat +cc +ccflags +libs rm Oldconfig Guess echo n c
?MAKE: -pick add $@ %<
?S:d_eofpipe:
?S: This variable conditionally defines the EOFPIPE symbol, which
?S: indicates to the C program that select will correctly detect the EOF
?S: condition when pipe
 is closed from the other end.
?S:.
?C:EOFPIPE:
?C: This symbol, if defined, indicates that EOF condition will be detected
?C: by the reader of the pipe when it is closed by the writing process.
?C: That is, a select() call on that file descriptor will not block when
?C: only an EOF remains (typical behaviour for BSD systems).
?C:.
?H:#$d_eofpipe EOFPIPE  /**/
?H:.
?F:!mpipe
: see if pipe correctly gives the EOF condition
echo " "
case "$d_eofpipe" in
")
 echo "Let's see if your pipes return EOF to select() upon closing..." >&4
 $cat >pipe.c <<'EOP'
int main()
{
 int pd[2];
 int mask;

 pipe(pd);
 if (0 == fork()) {
  close(pd[0]);
  close(pd[1]);
  exit(0);
 }

 close(pd[1]);
 mask = 1 << pd[0];
 alarm(2);
 select(32, &mask, (int *) 0, (int *) 0, (char *) 0);
 if (0 == read(pd[0], &mask, 1))
  exit(0);
```

```
 exit(1);
}
EOP
 if $cc $ccflags -o pipe pipe.c $libs >/dev/null 2>&1; then
?X: Use a script to avoid the possible 'alarm call' message
  echo "./pipe || exit 1" > mpipe
  chmod +x
 mpipe
  ./mpipe >/dev/null 2>&1
  case $? in
  0) d_eofpipe="$define";;
  *) d_eofpipe="$undef";;
  esac
 else
  echo "(The test program did not compile correctly -- Guessing.)"
  if ./bsd; then
   d_eofpipe="$define"
  else
   d_eofpipe="$undef"
  fi
 fi
 case "$d_eofpipe" in
 "$define") echo "Yes, they do.";;
 *) echo "No, they don't! (sigh)";;
 esac
 ;;
*)
 $echo $n "Your pipes $c"
 case "$d_eofpipe" in
 "$define") echo "allow select() to see EOF upon closing.";;
 *) echo "won't let select() see EOF on closing.";;
 esac
 ;;
esac
$rm -f *pipe* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_eofpipe.U
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```
?RCS: $Id: Obsol_sh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS:
?RCS: $Log: Obsol_sh.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file is prepended to .MT/Obsol_sh if that file is not empty. That file
?X: contains the necessary mappings of new symbols to obsolete ones.
?X:
?MAKE:Obsol_sh:
?MAKE: -pick prepend $@ ./Obsol_sh
?LINT:nocomment
#
# The following symbols are obsolete. They are mapped to the new
# symbols only to ease the transition process. The
 sources should be
# updated so as to use the new symbols only, since supporting of those
# obsolete symbols may end without notice.
#
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Obsol_sh.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_open3.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:12  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:58:26  ram
?RCS: patch56: added knowledge of the O_NONBLOCK symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_open3: test +cc cat +cppflags h_fcntl h_sysfile rm Setvar Findhdr Warn
?MAKE: -pick add $@ %<
```

```
?X: It would be easy to separate the h_O_stuff from this.
?X: Is there a reason
 to do so? -- HMS
?S:d_open3:
?S: This variable conditionally defines the HAS_OPEN3 manifest constant,
?S: which indicates to the C program that the 3 argument version of
?S: the open(2) function is available.
?S:.
?C:HAS_OPEN3 (OPEN3):
?C: This manifest constant lets the C program know that the three
?C: argument form of open(2) is available.
?C:.
?H:#$d_open3 HAS_OPEN3  /**/
?H:.
?W:%<:O_RDONLY O_WRONLY O_RDWR O_NDELAY O_APPEND O_SYNC O_CREAT O_TRUNC
?W:%<:O_EXCL O_NONBLOCK
?F:!open3
?LINT:set d_open3
?LINT:change h_fcntl h_sysfile
: Locate the flags for 'open()'
echo " "
$cat >open3.c <<'EOCP'
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
int main() {
 if(O_RDONLY);
#ifdef O_TRUNC
 exit(0);
#else
 exit(1);
#endif
}
EOCP
: check sys/file.h first to get FREAD on Sun
if $test `./findhdr sys/file.h` && \
  $cc $cppflags "-DI_SYS_FILE" -o open3 open3.c >/dev/null 2>&1 ; then
 h_sysfile=true;
 echo "<sys/file.h> defines the
 O_* constants..." >&4
 if ./open3; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
```

```
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
elif $test `./findhdr fcntl.h` && \
  $cc "-DI_FCNTL" -o open3 open3.c >/dev/null 2>&1 ; then
 h_fcntl=true;
 echo "<fcntl.h> defines the O_* constants..." >&4
 if ./open3; then
  echo "and you have the 3 argument form of open()." >&4
  val="$define"
 else
  echo "but not the 3 argument form of open().  Oh, well." >&4
  val="$undef"
 fi
else
 val="$undef"
 ./warn "I can't find the O_* constant definitions!  You got problems."
fi
set d_open3
eval $setvar
$rm -f open3*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_open3.U
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```
?RCS: $Id: d_fcntl_can_lock.U,v$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_fcntl_can_lock.U,v $
?RCS:
?MAKE:d_fcntl_can_lock: d_fcntl Compile Setvar cat rm_try run signal_t i_stdlib
?MAKE: -pick add $@ %<
?S:d_fcntl_can_lock:
?S: This variable conditionally defines the FCNTL_CAN_LOCK symbol
?S: and indicates whether file locking with fcntl() works.
?S:.
?C:FCNTL_CAN_LOCK:
?C: This symbol, if defined, indicates that fcntl() can be used
?C: for file locking.  Normally on Unix systems this is defined.
?C: It may be undefined on VMS.
?C:.
?H:#$d_fcntl_can_lock FCNTL_CAN_LOCK  /**/
?H:.
```

```
?F:!try
?LINT: set d_fcntl_can_lock
?X: fcntl may not be fully functional.  As of November 2000, on VMS and
?X: DOS/DJGPP, fctnl-based locking doesn't work.
?X: Thanks
 to Craig A. Berry <craig.berry@psinetcs.com> for this test.
: See if fcntl-based locking works.
echo " "
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <unistd.h>
#include <fcntl.h>
#include <signal.h>
$signal_t blech(int x) { exit(3); }
int main() {
#if defined(F_SETLK) && defined(F_SETLKW)
    struct flock flock;
    int retval, fd;
    fd = open("try.c", O_RDONLY);
    flock.l_type = F_RDLCK;
    flock.l_whence = SEEK_SET;
    flock.l_start = flock.l_len = 0;
    signal(SIGALRM, blech);
    alarm(10);
    retval = fcntl(fd, F_SETLK, &flock);
    close(fd);
    (retval < 0 ? exit(2) : exit(0));
#else
    exit(2);
#endif
}
EOCP
echo "Checking if fcntl-based file locking works... "
case "$d_fcntl" in
"$define")
 set try
 if eval $compile_ok; then
  if $run ./try; then
   echo "Yes, it seems to work."
   val="$define"
  else
   echo "Nope, it didn't work."
   val="$undef"
   case "$?" in
   3) $cat >&4 <<EOM
```

```
***
*** I had to
 forcibly timeout from fcntl(..., F_SETLK, ...).
*** This is (almost) impossible.
*** If your NFS lock daemons are not feeling well, something like
*** this may happen, please investigate.  Cannot continue, aborting.
***
EOM
    exit 1
    ;;
   esac
  fi
 else
  echo "I'm unable to compile the test program, so I'll assume not."
  val="$undef"
 fi
 ;;
*) val="$undef";
 echo "Nope, since you don't even have fcntl()."
 ;;
esac
set d_fcntl_can_lock
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fcntl_can_lock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msem_lck.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msem_lck.U,v $
?MAKE:d_msem_lck: Inlibc
?MAKE: -pick add $@ %<
?S:d_msem_lck:
?S: This variable conditionally defines HAS_MSEM_LOCK if msem_lock() is
?S: available, thereby indicating kernel support for memory semaphores.
?S:.
?C:HAS_MSEM_LOCK:
?C: This symbol, if defined, indicates that memory semaphores are
```

```
?C: available to protect mmap()'ed regions.
?C:.
?H:#$d_msem_lck HAS_MSEM_LOCK  /**/
?H:.
?LINT:set d_msem_lck
: see if msem_lock exists
set
 msem_lock d_msem_lck
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msem_lck.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tcstpgrp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_tcstpgrp.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:11  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_tcsetpgrp: Inlibc
?MAKE: -pick add $@ %<
?S:d_tcsetpgrp:
?S: This variable conditionally defines the HAS_TCSETPGRP symbol, which
?S: indicates to the C program that the tcsetpgrp() routine is available
?S: to set foreground process group ID.
?S:.
?C:HAS_TCSETPGRP
 :
?C: This symbol, if defined, indicates that the tcsetpgrp routine is
?C: available to set foreground process group ID.
?C:.
?H:#$d_tcsetpgrp HAS_TCSETPGRP  /**/
?H:.
?LINT:set d_tcsetpgrp
: see if tcsetpgrp exists
set tcsetpgrp d_tcsetpgrp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tcstpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: charsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:07:13  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:charsize: Assert Myread cat rm_try +cc +ccflags echo n c
?MAKE: -pick add $@ %<
?S:charsize:
?S: This variable contains the value of the CHARSIZE symbol, which
?S: indicates to the C program how many bytes there are in a character.
?S:.
?C:CHARSIZE:
?C: This symbol contains
 the size of a char, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define CHARSIZE $charsize
?H:.
?T:size s
: check for length of character
echo " "
$echo $n "Checking to see how big your characters are...$c" >&4
for size in 1 2 4 8 error; do
 $cat >try.c <<EOCP
#include "static_assert.h"
char foo;
int main()
{
 STATIC_ASSERT($size == sizeof(foo));
 return 0;
}
```

```
EOCP
 if $cc -c $ccflags try.c >/dev/null 2>&1; then break; fi
done
case "$size" in
error)
 echo " cannot compute it." >&4
 dflt=1
 rp="What is the size of a character (in bytes)?"
 . ./myread
 charsize="$ans"
 ;;
*)
 case "$size" in
 1) s="";;
 *) s='s';;
 esac
 echo " $size byte$s." >&4
 charsize=$size
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/charsize.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strlcat: Inlibc Hasproto d_gnulibc
?MAKE: -pick add $@ %<
?S:d_strlcat:
?S: This variable conditionally defines the HAS_STRLCAT symbol, which
?S: indicates to the C program that the strlcat () routine is available.
?S:.
?C:HAS_STRLCAT:
?C: This symbol, if defined, indicates that the strlcat () routine is
?C: available to do string concatenation.
?C:.
?H:#$d_strlcat HAS_STRLCAT  /**/
?H:.
?T:d_strlcat_proto xx1 xx2 xx3 xx4
?LINT:set d_strlcat
: see if strlcat exists
```

```
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_strlcat_proto=''
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_strlcat_proto
 strlcat literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_strlcat_proto" in
   define) # see if strlcat exists
 set strlcat d_strlcat
 eval $inlibc
 ;;
   *)  val=$undef
 set d_strlcat
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strlcat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: floatsize.U,v 3.0.1.1 1994/10/29 16:17:09 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: floatsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:09  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:floatsize: cat rm Myread Compile run
?MAKE: -pick add $@ %<
?S:floatsize:
?S: This variable contains the value of the FLOATSIZE symbol, which
?S: indicates to the C program how many bytes there are in a float.
?S:.
```

```
?C:FLOATSIZE:
?C: This
 symbol contains the size of a float, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define FLOATSIZE $floatsize  /**/
?H:.
?F:!try
: check for length of float
echo " "
case "$floatsize" in
")
 echo "Checking to see how big your floating point numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof(float));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  floatsize=`$run ./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a floating point number (in bytes)?"
  . ./myread
  floatsize="$ans"
 fi
 ;;
esac
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/floatsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_recvmsg: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_recvmsg:
?S: This variable conditionally defines the HAS_RECVMSG symbol, which
?S: indicates to the C program that the recvmsg() routine is available.
?S:.
?C:HAS_RECVMSG:
?C: This symbol, if defined, indicates that the recvmsg routine is
?C: available to send structured socket messages.
?C:.
?H:#$d_recvmsg HAS_RECVMSG  /**/
?H:.
?LINT:set d_recvmsg
: see if recvmsg exists
set recvmsg d_recvmsg
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_recvmsg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_memory.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_memory.U,v $
?RCS: Revision 3.0.1.3  1994/06/20  07:01:55  ram
?RCS: patch30: cosmetic changes
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:23:56  ram
?RCS: patch27: modified to avoid spurious Whoa warnings (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:02:25  ram
?RCS: patch23: avoid conflicts with <string.h>
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_memory: Inhdr strings cppstdin
 cppflags cppminus contains rm Setvar
?MAKE: -pick add $@ %<
?S:i_memory:
?S: This variable conditionally defines the I_MEMORY symbol, and indicates
?S: whether a C program should include <memory.h>.
```

```
?S:.
?C:I_MEMORY:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <memory.h>.
?C:.
?H:#$i_memory I_MEMORY  /**/
?H:.
?LINT:set i_memory
?X:
?X: Unfortunately, the definitions of memory functions sometimes
?X: conflict with those in <string.h>.  We'll assume that if
?X: <string.h> contains memcpy, then we don't need memory.h
?X:
: see if memory.h is available.
val=''
set memory.h val
eval $inhdr

: See if it conflicts with string.h
case "$val" in
$define)
 case "$strings" in
 '') ;;
 *)
  $cppstdin $cppflags $cppminus < $strings > mem.h
  if $contains 'memcpy' mem.h >/dev/null 2>&1; then
   echo " "
   echo "We won't be including <memory.h>."
   val="$undef"
  fi
  $rm -f mem.h
  ;;
 esac
esac
set i_memory
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_memory.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mblen.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mblen.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:40  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_mblen: Inlibc
?MAKE: -pick add $@ %<
?S:d_mblen:
?S: This variable conditionally defines the HAS_MBLEN symbol, which
?S: indicates to the C program that the mblen() routine is available
?S: to find the number of bytes in a multibyte character.
?S:.
?C:HAS_MBLEN:
?C: This
 symbol, if defined, indicates that the mblen routine is available
?C: to find the number of bytes in a multibyte character.
?C:.
?H:#$d_mblen HAS_MBLEN  /**/
?H:.
?LINT:set d_mblen
: see if mblen exists
set mblen d_mblen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mblen.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
?MAKE:d_snprintf_l d_vsnprintf_l : Inlibc d_snprintf d_vsnprintf
?MAKE: -pick add $@ %<
?S:d_snprintf_l:
?S: This variable conditionally defines the HAS_SNPRINTF_L symbol, which
?S: indicates to the C program that the snprintf_l () library function
?S: is available.
?S:.
?S:d_vsnprintf_l:
```

```
?S: This variable conditionally defines the HAS_VSNPRINTF_L symbol, which
?S: indicates to the C program that the vsnprintf_l () library function
?S: is available.
?S:.
?C:HAS_SNPRINTF_L:
?C: This symbol, if defined, indicates that the snprintf_l () library
?C: function
 is available for use.
?C:.
?C:HAS_VSNPRINTF_L:
?C: This symbol, if defined, indicates that the vsnprintf_l () library
?C: function is available for use.
?C:.
?H:#$d_snprintf_l HAS_SNPRINTF_L /**/
?H:#$d_vsnprintf_l HAS_VSNPRINTF_L /**/
?H:.
: see if snprintf_l exists
set snprintf_l d_snprintf_l
eval $inlibc

: see if vsnprintf_l exists
set vsnprintf_l d_vsnprintf_l
eval $inlibc

case "$d_snprintf-$d_vsnprintf-$d_snprintf_l-$d_vsnprintf_l" in
"$define-$define-$define-$define")
   ;;
*) echo "(These require the basic snprintf and vsnprintf to also be available, which they aren't"
 d_snprintf_l="$undef"
 d_vsnprintf_l="$undef"
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_snprintf_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_alarm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
```

```
?RCS:
?RCS: $Log: d_alarm.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:06:58  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_alarm: Inlibc
?MAKE: -pick add $@ %<
?S:d_alarm:
?S: This variable conditionally defines the HAS_ALARM symbol, which
?S: indicates to the C program that the alarm() routine is available.
?S:.
?C:HAS_ALARM :
?C: This symbol, if defined, indicates that the alarm routine is
?C: available.
?C:.
?H:#$d_alarm
 HAS_ALARM  /**/
?H:.
?LINT:set d_alarm
: see if alarm exists
set alarm d_alarm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_alarm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mmap mmaptype: Inlibc i_sysmman cat cc ccflags
?MAKE: -pick add $@ %<
?S:d_mmap:
?S: This variable conditionally defines HAS_MMAP if mmap() is
?S: available to map a file into memory.
?S:.
?S:mmaptype:
?S: This symbol contains the type of pointer returned by mmap()
?S: (and simultaneously the type of the first argument).
?S: It can be 'void *' or 'caddr_t'.
?S:.
```

```
?C:HAS_MMAP:
?C: This symbol, if defined, indicates that the mmap system call is
?C: available to map a file into memory.
?C:.
?C:Mmap_t:
?C: This symbol
 holds the return type of the mmap() system call
?C: (and simultaneously the type of the first argument).
?C: Usually set to 'void *' or 'caddr_t'.
?C:.
?H:#$d_mmap HAS_MMAP  /**/
?H:#define Mmap_t $mmaptype /**/
?H:.
?LINT:set d_mmap
: see if mmap exists
set mmap d_mmap
eval $inlibc
: see what shmat returns
: default to something harmless
mmaptype='void *'
case "$i_sysmman$d_mmap" in
"$define$define")
 $cat >mmap.c <<'END'
#include <sys/mman.h>
void *mmap();
END
 if $cc $ccflags -c mmap.c >/dev/null 2>&1; then
  mmaptype='void *'
 else
  mmaptype='caddr_t'
 fi
 echo "and it returns ($mmaptype)." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_mmap.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Typedef.U,v 3.0.1.3 1995/07/25 13:42:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
```

```
?RCS:
?RCS: $Log: Typedef.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  13:42:07  ram
?RCS: patch56: added backslash escapes within evals to prevent space problems
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:01:16  ram
?RCS: patch36: don't clobber visible 'val' variable, use 'varval' instead
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:05:14  ram
?RCS: patch32: created
?RCS:
?X:
?X: This unit checks for the definition of a given typedef.
?X:
?X: To use it, say:
?X: set typedef
 val_t default [includes]
?X: eval $typedef
?X:
?MAKE:Typedef: cppstdin cppminus cppflags rm sed contains Oldconfig Myread
?MAKE: -pick add $@ %<
?LINT:define typedef
?LINT:define typedef_ask
?V:typedef typedef_ask
?S:typedef:
?S: This shell variable is used internally by Configure to check
?S: whether a given typedef is defined or not. A typical use is:
?S:  set typedef val_t default [includes]
?S:  eval $typedef
?S: That will return val_t set to default if the typedef was not found,
?S: to typedef otherwise. If no includes are specified, look in sys/types.h.
?S:.
?S:typedef_ask:
?S: This shell variable is used internally by Configure to check
?S: whether a given typedef is defined or not.  If it is not defined,
?S: this will call the ./myread script to prompt for an answer.
?S: It is intended to be used to avoid unnecessary prompts.
?S: A typical use is
?S:  rp="What is the type for file position used by fsetpos()?"
?S:  set fpos_t fpostype long stdio.h sys/types.h
?S:  eval $typedef_ask
?S: This
 will set fpostype=fpos_t, if fpos_t is available.  Otherwise
?S: it will call myread with a default of 'long', and a prompt of $rp.
?S:.
?T:type var def inclist varval inc
?F:!temp.c
: define an is-a-typedef? function
```

```
typedef='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
?X: Maybe it's a #define instead of a typedef.
 echo "#ifdef $type" >> temp.c;
 echo "printf(\"We have $type\");" >> temp.c;
 echo "#endif" >> temp.c;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 if $contains $type temp.E >/dev/null 2>&1; then
  eval "$var=\$type";
 else
  eval "$var=\$def";
 fi;
 $rm -f temp.?;;
*) eval "$var=\$varval";;
esac'

?X: Originally, I eval'd $typedef and then checked the results against
?X: $type.  Unfortunately, it then became complicated to check
?X: whether you are re-using
 an old config.sh value, and the logic got
?X: so convoluted it became easier to just copy the function above
?X: and alter it slightly.  A.D.  3/1998
: define an is-a-typedef? function that prompts if the type is not available.
typedef_ask='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
?X: Maybe it's a #define instead of a typedef.
 echo "#ifdef $type" >> temp.c;
 echo "printf(\"We have $type\");" >> temp.c;
 echo "#endif" >> temp.c;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
```

```
 echo " " ;
 echo "$rp" | $sed -e "s/What is/Looking for/" -e "s/?/./";
 if $contains $type temp.E >/dev/null 2>&1; then
  echo "$type found." >&4;
  eval "$var=\$type";
 else
  echo "$type NOT found." >&4;
  dflt="$def";
  . ./myread ;
  eval "$var=\$ans";
 fi;
 $rm -f temp.?;;
*) eval "$var=\$varval";;
esac'
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/Typedef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2005-2007 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_cplusplus: Compile Setvar run cat rm_try
?MAKE: -pick add $@ %<
?S:d_cplusplus (d_cplusplus.U):
?S: This variable conditionally defines the USE_CPLUSPLUS symbol, which
?S: indicates that a C++ compiler was used to compiled Perl and will be
?S: used to compile extensions.
?S:.
?C:USE_CPLUSPLUS:
?C: This symbol, if defined, indicates that a C++ compiler was
?C: used to compiled Perl and will be used to compile extensions.
?C:.
?H:#$d_cplusplus USE_CPLUSPLUS  /**/
?H:.
?F:!try
?LINT:set d_cplusplus
: Check if we are using C++
echo " "
echo "Checking for C++..." >&4
$cat >try.c <<'EOCP'
#include <stdio.h>
int main(void)
{
#ifdef __cplusplus
```

```
   return 0;
#else
   return 1;
#endif
}
EOCP
set try
if eval $compile_ok
 && $run ./try; then
 val="$define"
 echo "You are using a C++ compiler."
else
 val="$undef"
 echo "You are not using a C++ compiler."
fi
$rm_try cplusplus$$
set d_cplusplus
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_cplusplus.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_memmem: Hasproto Inlibc Setvar d_gnulibc
?MAKE: -pick add $@ %<
?S:d_memmem:
?S: This variable conditionally defines the HAS_MEMMEM symbol, which
?S: indicates to the C program that the memmem() routine is available
?S: to return a pointer to the start of the first occurrence of a
?S: substring in a memory area (or NULL if not found).
?S:.
?C:HAS_MEMMEM:
?C: This symbol, if defined, indicates that the memmem routine is
?C: available to return a pointer to the start of the first occurrence
?C: of a substring in a memory area (or NULL if not found).
?C: In glibc, memmem is a GNU extension.  The function is visible in
?C: libc, but the prototype is only visible if _GNU_SOURCE is #defined.
?C: Thus we only define this if both the prototype and symbol are found.
?C:.
?H:#$d_memmem
 HAS_MEMMEM  /**/
?H:.
?T:d_memmem_proto xx1 xx2 xx3 xx4
?LINT:set d_memmem
: see if memmem exists
```

```
: We need both a prototype in string.h and the symbol in libc.
echo " "
d_memmem_proto="
xx1="#$d_gnulibc HAS_GNULIBC"
xx2='#if defined(HAS_GNULIBC) && !defined(_GNU_SOURCE)'
xx3='#   define _GNU_SOURCE'
xx4='#endif'
set d_memmem_proto memmem literal "$xx1" literal "$xx2" literal "$xx3" literal "$xx4" define string.h
eval $hasproto
case "$d_memmem_proto" in
   define) # see if memmem exists
 set memmem d_memmem
 eval $inlibc
 ;;
   *)  val=$undef
 set d_memmem
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_memmem.U
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```
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?RCS:
?MAKE:d_strtold: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtold:
?S: This variable conditionally defines the HAS_STRTOLD symbol, which
?S: indicates to the C program that the strtold() routine is available.
?S:.
?C:HAS_STRTOLD:
?C: This symbol, if defined, indicates that the strtold routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtold HAS_STRTOLD  /**/
?H:.
?LINT:set d_strtold
: see if strtold exists
set strtold d_strtold
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtold.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_sigsetjmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_sigsetjmp: Setvar cat +cc +ccflags +ldflags libs rm
?MAKE: -pick add $@ %<
?S:d_sigsetjmp:
?S: This variable conditionally defines the HAS_SIGSETJMP symbol,
?S: which indicates that the sigsetjmp() routine
 is available to
?S: call setjmp() and optionally save the process's signal mask.
?S:.
?C:HAS_SIGSETJMP:
?C: This variable indicates to the C program that the sigsetjmp()
?C: routine is available to save the calling process's registers
?C: and stack environment for later use by siglongjmp(), and
?C: to optionally save the process's signal mask.  See
?C: Sigjmp_buf, Sigsetjmp, and Siglongjmp.
?C:.
?C:Sigjmp_buf:
?C: This is the buffer type to be used with Sigsetjmp and Siglongjmp.
?C:.
?C:Sigsetjmp:
?C: This macro is used in the same way as sigsetjmp(), but will invoke
?C: traditional setjmp() if sigsetjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?C:Siglongjmp:
?C: This macro is used in the same way as siglongjmp(), but will invoke
?C: traditional longjmp() if siglongjmp isn't available.
```

```
?C: See HAS_SIGSETJMP.
?C:.
?H:?%<:#$d_sigsetjmp HAS_SIGSETJMP /**/
?H:?%<:#ifdef HAS_SIGSETJMP
?H:?%<:#define Sigjmp_buf sigjmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) sigsetjmp((buf),(save_mask))
?H:?%<:#define
 Siglongjmp(buf,retval) siglongjmp((buf),(retval))
?H:?%<:#else
?H:?%<:#define Sigjmp_buf jmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) setjmp((buf))
?H:?%<:#define Siglongjmp(buf,retval) longjmp((buf),(retval))
?H:?%<:#endif
?H:.
?W:%<:Sigjmp_buf Sigsetjmp Siglongjmp
?F:!set
?LINT:set d_sigsetjmp
: see if sigsetjmp exists
?X: We can't check for these symbols with Inlibc because sigsetjmp
?X: is (sometimes? always?) a macro under GCC
echo " "
case "$d_sigsetjmp" in
")
 $cat >set.c <<'EOP'
#include <setjmp.h>
sigjmp_buf env;
int set = 1;
int main()
{
 if (sigsetjmp(env,1))
  exit(set);
 set = 0;
 siglongjmp(env, 1);
 exit(1);
}
EOP
 if $cc $ccflags $ldflags -o set set.c $libs > /dev/null 2>&1 ; then
  if ./set >/dev/null 2>&1; then
   echo "POSIX sigsetjmp found." >&4
   val="$define"
  else
   $cat >&4 <<EOM
Uh-Oh! You have POSIX sigsetjmp and siglongjmp, but they do not work properly!!
I'll ignore them.
EOM
   val="$undef"
  fi
 else
```

```
  echo "sigsetjmp not found."
 >&4
  val="$undef"
 fi
 ;;
*) val="$d_sigsetjmp"
 case "$d_sigsetjmp" in
 $define) echo "POSIX sigsetjmp found." >&4;;
 $undef) echo "sigsetjmp not found." >&4;;
 esac
 ;;
esac
set d_sigsetjmp
eval $setvar
$rm -f set.c set
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigsetjmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_truncl: Inlibc
?MAKE: -pick add $@ %<
?S:d_truncl:
?S: This variable conditionally defines the HAS_TRUNCL symbol, which
?S: indicates to the C program that the truncl() routine is available
?S: to round long doubles towards zero. If copysignl is also present,
?S: we can emulate modfl.
?S:.
?C:HAS_TRUNCL :
?C: This symbol, if defined, indicates that the truncl routine is
?C: available. If copysignl is also present we can emulate modfl.
?C:.
?H:#$d_truncl HAS_TRUNCL  /**/
?H:.
?LINT:set d_truncl
: see if truncl exists
set truncl d_truncl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_truncl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_perror.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_perror.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:38  ram
?RCS: patch32: always define HAS_PERROR even when not used in C code
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_perror: Inlibc
?MAKE: -pick add $@ %<
?S:d_perror:
?S: This variable conditionally remaps perror to a null action and
?S: defines the symbol HAS_PERROR, which indicates to the C program
?S: that the perror()
 routine is not available to print system
?S: error messages.
?S:.
?C:HAS_PERROR ~ %<:
?C: This symbol, if defined, indicates that the perror() routine is
?C: available to print system error messages. If not defined, you should
?C: use your own diagnostic routine...
?C:.
?C:perror ~ %<:
?C: This symbol is maped to null if the  perror() routine is not
?C: available to print system error messages.
?C:.
?H:?%<:#$d_perror HAS_PERROR /**/
?H:?%<:#ifndef HAS_PERROR
?H:?%<:#define perror(s) ;  /* mapped to a null statement */
?H:?%<:#endif
?H:.
?LINT:set d_perror
: see if perror exists
set perror d_perror
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_perror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libpth.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:08:49  ram
?RCS: patch61: new loclibpth variable
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:31:30  ram
?RCS: patch45: call ./mips instead of just mips (WED)
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:29:15  ram
?RCS: patch32: added /lib/pa1.1 for HP-UX specially tuned PA-RISC libs (ADO)
?RCS: patch32: fixed information message, making it clearer (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:03:54  ram
?RCS: patch30: added /usr/shlib to
 glibpth for shared-only libraries
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:26:57  ram
?RCS: patch27: fixed a typo (libpth -> glibpth)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:07:53  ram
?RCS: patch23: now asks for library directories to be searched (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit initializes the path for C library lookup.
?X:
?MAKE:libpth glibpth xlibpth plibpth loclibpth: \
 usrinc incpath test cat Myread Oldconfig
?MAKE: -pick add $@ %<
?S:libpth:
?S: This variable holds the general path (space-separated) used to find
?S: libraries. It is intended to be used by other units.
?S:.
?S:glibpth:
?S: This variable holds the general path (space-separated) used to
?S: find libraries.  It may contain directories that do not exist on
?S: this platform, libpth is the cleaned-up version.
?S:.
```

```
?S:xlibpth:
?S: This variable holds extra path (space-separated) used to find
?S: libraries on this platform,
 for example CPU-specific libraries
?S: (on multi-CPU platforms) may be listed here.
?S:.
?S:loclibpth:
?S: This variable holds the paths (space-separated) used to find local
?S: libraries.  It is prepended to libpth, and is intended to be easily
?S: set from the command line.
?S:.
?S:plibpth:
?S: Holds the private path used by Configure to find out the libraries.
?S: Its value is prepend to libpth. This variable takes care of special
?S: machines, like the mips.  Usually, it should be empty.
?S:.
?T: xxx dlist
?LINT:use usrinc
?INIT:: change the next line if compiling for Xenix/286 on Xenix/386
?INIT:xlibpth='/usr/lib/386 /lib/386'
?INIT:: Possible local library directories to search.
?INIT:loclibpth="/usr/local/lib /opt/local/lib /usr/gnu/lib"
?INIT:loclibpth="$loclibpth /opt/gnu/lib /usr/GNU/lib /opt/GNU/lib"
?INIT:
?INIT:: general looking path for locating libraries
?INIT:glibpth="/lib /usr/lib $xlibpth"
?INIT:glibpth="$glibpth /usr/ccs/lib /usr/ucblib /usr/local/lib"
?X: /shlib
 is for Digital Unix 4.0
?X: /usr/shlib is for OSF/1 systems.
?INIT:test -f /usr/shlib/libc.so && glibpth="/usr/shlib $glibpth"
?INIT:test -f /shlib/libc.so     && glibpth="/shlib $glibpth"
?INIT:
?INIT:: Private path used by Configure to find libraries.  Its value
?INIT:: is prepended to libpth. This variable takes care of special
?INIT:: machines, like the mips.  Usually, it should be empty.
?INIT:plibpth=''
?INIT:
: Set private lib path
case "$plibpth" in
'') if ./mips; then
?X: on mips, we DO NOT want /lib, and we want $incpath/usr/lib
  plibpth="$incpath/usr/lib /usr/local/lib /usr/ccs/lib"
 fi;;
esac
case "$libpth" in
' ') dlist='';;
'') dlist="$loclibpth $plibpth $glibpth";;
```

```
*) dlist="$libpth";;
esac

: Now check and see which directories actually exist, avoiding duplicates
libpth="
for xxx in $dlist
do
   if $test -d $xxx; then
  case " $libpth " in
  *" $xxx "*) ;;
  *) libpth="$libpth $xxx";;
  esac
   fi
done
$cat <<'EOM'

Some systems have incompatible or broken versions
 of libraries.  Among
the directories listed in the question below, please remove any you
know not to be holding relevant libraries, and add any that are needed.
Say "none" for none.

EOM
case "$libpth" in
") dflt='none';;
*)
?X: strip leading space
 set X $libpth
 shift
 dflt=${1+"$@"}
 ;;
esac
rp="Directories to use for library searches?"
. ./myread
case "$ans" in
none) libpth=' ';;
*) libpth="$ans";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libpth.U
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```
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?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_copysign: Inlibc
?MAKE: -pick add $@ %<
?S:d_copysign:
?S: This variable conditionally defines the HAS_COPYSIGN symbol, which
?S: indicates to the C program that the copysign() routine is available.
?S:.
?C:HAS_COPYSIGN:
?C: This symbol, if defined, indicates that the copysign routine is
?C: available to do the copysign function.
?C:.
?H:#$d_copysign HAS_COPYSIGN  /**/
?H:.
?LINT:set d_copysign
: see if copysign exists
set copysign d_copysign
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_copysign.U
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```
?RCS: $Id: d_gethent.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethent:
?S: This variable conditionally defines HAS_GETHOSTENT if gethostent() is
?S: available to look up host names in some data base or another.
?S:.
?C:HAS_GETHOSTENT:
?C: This symbol, if defined, indicates that the gethostent() routine is
?C: available to look up host names in some
 data base or another.
?C:.
```

```
?H:#$d_gethent HAS_GETHOSTENT  /**/
?H:.
?LINT:set d_gethent
: see if gethostent exists
set gethostent d_gethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethent.U
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```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_mkdtemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkdtemp:
?S: This variable conditionally defines the HAS_MKDTEMP symbol, which
?S: indicates to the C program that the mkdtemp() routine is available
?S: to exclusively create a uniquely named temporary directory.
?S:.
?C:HAS_MKDTEMP :
?C: This symbol, if defined, indicates that the mkdtemp routine is
?C: available to exclusively create a uniquely named temporary directory.
?C:.
?H:#$d_mkdtemp HAS_MKDTEMP  /**/
?H:.
?LINT:set d_mkdtemp
: see if mkdtemp exists
set mkdtemp d_mkdtemp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkdtemp.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getcwd: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_getcwd:
?S: This variable conditionally defines the HAS_GETCWD symbol, which
?S: indicates to the C program that the getcwd() routine is available
?S: to get the current working directory.
?S:.
?C:HAS_GETCWD :
?C: This symbol, if defined, indicates that the getcwd routine is
?C: available to get the current working directory.
?C:.
?H:#$d_getcwd HAS_GETCWD  /**/
?H:.
?LINT:set d_getcwd
: see if getcwd exists
set getcwd d_getcwd
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getcwd.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:need_va_copy: rm_try cat Compile run
?MAKE: -pick add $@ %<
?S:need_va_copy:
?S: This symbol, if defined, indicates that the system stores
?S: the variable argument list datatype, va_list, in a format
?S: that cannot be copied by simple assignment, so that some
?S: other means must be used when copying is required.
?S: As such systems vary in their provision (or non-provision)
?S: of copying mechanisms, handy.h defines a platform-
?S: independent macro, Perl_va_copy(src, dst), to do the job.
?S:.
?C:NEED_VA_COPY:
?C: This
 symbol, if defined, indicates that the system stores
?C: the variable argument list datatype, va_list, in a format
?C: that cannot be copied by simple assignment, so that some
?C: other means must be used when copying is required.
```

```
?C: As such systems vary in their provision (or non-provision)
?C: of copying mechanisms, handy.h defines a platform-
?C: independent macro, Perl_va_copy(src, dst), to do the job.
?C:.
?H:#$need_va_copy NEED_VA_COPY  /**/
?H:.
?T:okay
?F:!try
: see if we need va_copy
echo " "
$cat >try.c <<EOCP
#include <stdarg.h>
#include <stdio.h>
#include <stdlib.h>
#include <signal.h>

int
ivfprintf(FILE *f, const char *fmt, va_list *valp)
{
 return vfprintf(f, fmt, *valp);
}

int
myvfprintf(FILE *f, const  char *fmt, va_list val)
{
 return ivfprintf(f, fmt, &val);
}

int
myprintf(char *fmt, ...)
{
 va_list val;
 va_start(val, fmt);
 return myvfprintf(stdout, fmt, val);
}

int
main(int ac, char **av)
{
 signal(SIGSEGV, exit);
#ifdef SIGBUS
 signal(SIGBUS,
 exit);
#endif

 myprintf("%s%cs all right, then\n", "that", '\');
 exit(0);
}
```

```
EOCP
set try
if eval $compile && $run ./try 2>&1 >/dev/null; then
 case "`$run ./try`" in
 "that's all right, then")
  okay=yes
  ;;
 esac
fi
case "$okay" in
yes) echo "It seems that you don't need va_copy()." >&4
 need_va_copy="$undef"
 ;;
*) echo "It seems that va_copy() or similar will be needed." >&4
 need_va_copy="$define"
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/need_va_copy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endservent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endservent_r endservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endservent_r:
?S: This variable conditionally defines the HAS_ENDSERVENT_R symbol,
?S: which indicates to the C program that the endservent_r()
?S: routine is available.
?S:.
?S:endservent_r_proto:
?S: This variable encodes the prototype of endservent_r.
?S: It is zero if d_endservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endservent_r
?S: is defined.
?S:.
?C:HAS_ENDSERVENT_R:
?C: This symbol, if defined, indicates that the endservent_r routine
?C: is
```

```
 available to endservent re-entrantly.
?C:.
?C:ENDSERVENT_R_PROTO:
?C: This symbol encodes the prototype of endservent_r.
?C: It is zero if d_endservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endservent_r
?C: is defined.
?C:.
?H:#$d_endservent_r HAS_ENDSERVENT_R /**/
?H:#define ENDSERVENT_R_PROTO $endservent_r_proto /**/
?H:.
?T:try hdrs d_endservent_r_proto
: see if endservent_r exists
set endservent_r d_endservent_r
eval $inlibc
case "$d_endservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endservent_r_proto:$usethreads" in
 ":define") d_endservent_r_proto=define
  set d_endservent_r_proto endservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endservent_r_proto" in
 define)
 case "$endservent_r_proto" in
 "|0) try='int endservent_r(struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && endservent_r_proto=I_D ;;
 esac
 case "$endservent_r_proto" in
 "|0) try='void endservent_r(struct
 servent_data*);'
 ./protochk "$extern_C $try" $hdrs && endservent_r_proto=V_D ;;
 esac
 case "$endservent_r_proto" in
 "|0) d_endservent_r=undef
  endservent_r_proto=0
  echo "Disabling endservent_r, cannot determine prototype." >&4 ;;
 * ) case "$endservent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endservent_r_proto="REENTRANT_PROTO_$endservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endservent_r has no prototype, not using it." >&4 ;;
```

```
  esac
  d_endservent_r=undef
  endservent_r_proto=0
  ;;
 esac
 ;;
*) endservent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endservent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnbyname: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnbyname:
?S: This variable conditionally defines the HAS_GETNETBYNAME symbol, which
?S: indicates to the C program that the getnetbyname() routine is available
?S: to look up networks by their names.
?S:.
?C:HAS_GETNETBYNAME:
?C: This symbol, if defined, indicates that the getnetbyname() routine is
?C: available to look up networks by their names.
?C:.
?H:#$d_getnbyname HAS_GETNETBYNAME  /**/
?H:.
?LINT:set d_getnbyname
: see if getnetbyname exists
set getnetbyname d_getnbyname
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnbynm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cpp_stuff.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:30:48  ram
?RCS: patch61: added cute quoting trick for wild stringify support
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:08:24  ram
?RCS: patch36: now uses cppstdin instead of plain cpp for consistency (ADO)
?RCS: patch36: remove temporary files when done
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cpp_stuff cpp_quote: cat contains cppstdin cppflags cppminus rm Warn \
 package
?MAKE: -pick
 add $@ %<
?S:cpp_stuff:
?S: This variable contains an identification of the catenation mechanism
?S: used by the C preprocessor.
?S:.
?S:cpp_quote:
?S: This variable is set to either "" or " depending on whether the
?S: pre-processor pre-dates ANSI or not.  It is used in the production of
?S: the SQuoTe() and EQuoTe() macros, and was introduced to overcome a bug
?S: in gcc 3.x whereby the pre-processor complained loudly about the
?S: unterminated strings.
?S:.
?C:CAT2:
?C: This macro catenates 2 tokens together.
?C:.
?C:CAT3:
?C: This macro catenates 3 tokens together.
?C:.
?C:CAT4:
?C: This macro catenates 4 tokens together.
?C:.
?C:CAT5:
?C: This macro catenates 5 tokens together.
?C:.
?C:STRINGIFY:
?C: This macro surrounds its token with double quotes.
?C:.
?C:SCAT2:
?C: This macro catenates 2 tokens together and stringifies the result.
```

```
?C:.
?C:SCAT3:
?C: This macro catenates 3 tokens together and stringifies the result.
?C:.
?C:SCAT4:
?C: This macro catenates 4 tokens
 together and stringifies the result.
?C:.
?C:SCAT5:
?C: This macro catenates 5 tokens together and stringifies the result.
?C:.
?H:?%<:#if $cpp_stuff == 1
?H:?CAT2:#define CAT2(a,b)a/**/b
?H:?CAT3:#define CAT3(a,b,c)a/**/b/**/c
?H:?CAT4:#define CAT4(a,b,c,d)a/**/b/**/c/**/d
?H:?CAT5:#define CAT5(a,b,c,d,e)a/**/b/**/c/**/d/**/e
?H:?STRINGIFY:#define STRINGIFY(a)"a"
?H:?%<:#define SQuoTe(a)${cpp_quote}a
?H:?%<:#define EQuoTe(a)a${cpp_quote}
?H:?SCAT2:#define SCAT2(a,b)EQuoTe(SQuoTe(a)b)
?H:?SCAT3:#define SCAT3(a,b,c)EQuoTe(SQuoTe(a)b/**/c)
?H:?SCAT4:#define SCAT4(a,b,c,d)EQuoTe(SQuoTe(a)b/**/c/**/d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e)EQuoTe(SQuoTe(a)b/**/c/**/d/**/e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff == 42
?X: The additional level of indirection enables these macros to be
?X: used as arguments to other macros.  See K&R 2nd ed., page 231.
?H:?%<:#define CaTiFy(a,b) a ## b
?H:?%<:#define CAT2(a,b) CaTiFy(a,b)
?H:?CAT3:#define CAT3(a,b,c) CAT2(CaTiFy(a,b),c)
?H:?CAT4:#define CAT4(a,b,c,d)
 CAT2(CaTiFy(a,b), CaTiFy(c,d))
?H:?CAT5:#define CAT5(a,b,c,d,e) CAT2(CAT2(CaTiFy(a,b), CaTiFy(c,d)), e)
?H:?%<:#define StGiFy(a)# a
?H:?STRINGIFY:#define STRINGIFY(a)StGiFy(a)
?H:?SCAT2:#define SCAT2(a,b)StGiFy(a) StGiFy(b)
?H:?SCAT3:#define SCAT3(a,b,c)StGiFy(a) StGiFy(b) StGiFy(c)
?H:?SCAT4:#define SCAT4(a,b,c,d)StGiFy(a) StGiFy(b) StGiFy(c) StGiFy(d)
?H:?SCAT5:#define SCAT5(a,b,c,d,e)StGiFy(a) StGiFy(b) StGiFy(c) StGiFy(d) StGiFy(e)
?H:?%<:#endif
?H:?%<:#if $cpp_stuff != 1 && $cpp_stuff != 42
?H:?%<:#include "Bletch: How does this C preprocessor catenate tokens?"
?H:?%<:#endif
?H:.
?W:%<:CAT2 CAT3 CAT4 CAT5 STRINGIFY SCAT2 SCAT3 SCAT4 SCAT5
?F:!cpp_stuff.c
?LINT:known StGiFy EQuoTe SQuoTe CaTiFy
: how do we catenate cpp tokens here?
```

```
echo " "
echo "Checking to see how your cpp does stuff like catenate tokens..." >&4
cpp_quote="
$cat >cpp_stuff.c <<'EOCP'
#define RCAT(a,b)a/**/b
#define ACAT(a,b)a ## b
RCAT(Rei,ser)
ACAT(Cir,cus)
EOCP
$cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out
 2>&1
if $contains 'Circus' cpp_stuff.out >/dev/null 2>&1; then
 echo "Oh!  Smells like ANSI's been here."
 echo "We can catify or stringify, separately or together!"
 cpp_stuff=42
elif $contains 'Reiser' cpp_stuff.out >/dev/null 2>&1; then
 echo "Ah, yes!  The good old days!"
 cpp_stuff=1
 $cat >cpp_stuff.c <<'EOCP'
#define SQuoTe(a)"a
#define EQuoTe(a)a"
#define CAT2(a,b)EQuoTe(SQuoTe(a)b)
CAT2(Vic,tory)
EOCP
 $cppstdin $cppflags $cppminus <cpp_stuff.c >cpp_stuff.out 2>&1
 if $contains '"Victory"' cpp_stuff.out >/dev/null 2>&1; then
  echo "I'll resort to a cute trick to also be able to stringify."
  cpp_quote=""
 else
  $cat <<EOM
However, in the good old days we don't know how to stringify and
catify at the same time...
@if SCAT2 || SCAT3 || SCAT4 || SCAT5
You might have to edit the values of the SCAT[2-5] macros in config.h...
@else
Hopefully, $package does not need this feature.
@end
EOM
 fi
else
 ./warn <<EOM
I can't seem to be able to catenate tokens with your cpp.
@if
 CAT2 || CAT3 || CAT4 || CAT5 || SCAT2 || SCAT3 || SCAT4 || SCAT5
You're going to have to edit the values of the following
macros in config.h:

@if CAT2 || CAT3 || CAT4 || CAT5
```

```
 CAT[2-5]
@end
@if SCAT2 || SCAT3 || SCAT4 || SCAT5
 SCAT[2-5]
@end

in order to let me compile.
@end
EOM
 cpp_stuff="/* Help! How do we handle cpp_stuff? */*/"
fi
$rm -f cpp_stuff.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cpp_stuff.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gccversion gccosandvers gccansipedantic: cat cpp rm +cc \
 Myread Guess Options Oldconfig Loc osname osvers run
?MAKE: -pick add $@ %<
?S:gccversion:
?S: If GNU cc (gcc) is used, this variable holds '1' or '2' to
?S: indicate whether the compiler is version 1 or 2.  This is used in
?S: setting some of the default cflags.  It is set to '' if not gcc.
?S:.
?S:gccosandvers:
?S: If GNU cc (gcc) is used, this variable holds the operating system
?S: and version used to compile gcc.  It is set to '' if not gcc,
?S: or if
 nothing useful can be parsed as the os version.
?S:.
?S:gccansipedantic:
?S: If GNU cc (gcc) is used, this variable will enable (if set) the
?S: -ansi and -pedantic ccflags for building core files (through
?S: cflags script). (See Porting/pumpkin.pod for full description).
?S:.
?D:gccversion=''
?D:gccansipedantic=''
```

```
?T:c99_for
?T:flag
?T:gccshortvers
?T:incdir
?T:warn
?F:!try
?LINT:change cpp
?LINT:extern ccflags
?LINT:extern ldflags
?LINT:extern locincpth
?LINT:extern ccname
?LINT:change ccname
?LINT:change locincpth
?LINT:change ccflags
?LINT:set gccansipedantic
?X: Check if they have gcc in any guise.
: Check if we are using GNU gcc and what its version is
echo " "
echo "Checking for GNU cc in disguise and/or its version number..." >&4
$cat >try.c <<EOM
#include <stdio.h>
int main() {
#if defined(__GNUC__) && !defined(__INTEL_COMPILER)
#ifdef __VERSION__
 printf("%s\n", __VERSION__);
#else
 printf("%s\n", "1");
#endif
#endif
 return(0);
}
EOM
if $cc -o try $ccflags $ldflags try.c; then
 gccversion=`$run
 ./try`
 case "$gccversion" in
 ") echo "You are not using GNU cc." ;;
 *)  echo "You are using GNU cc $gccversion."
     ccname=gcc
     ;;
 esac
else
 echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    Your C compiler \"$cc\" doesn't seem to be working!" >&4
?X: using -K will prevent aborting--maybe they're cross compiling?
 case "$knowitall" in
 ")
```

```
 echo "    You'd better start hunting for one and let me know about it." >&4
  exit 1
  ;;
 esac
fi
$rm -f try try.*
case "$gccversion" in
1.*) cpp=`./loc gcc-cpp $cpp $pth` ;;
esac
case "$gccversion" in
") gccosandvers=" ;;
*) gccshortvers=`echo "$gccversion"|sed 's/ .*//'`
  gccosandvers=`$cc -v 2>&1|grep '/specs$'|sed "s!.*/[^-/]*-[^-/]*-\([^-/]*\)/$gccshortvers/specs!\1!"`
  gccshortvers="
  case "$gccosandvers" in
  $osname) gccosandvers=" ;; # linux gccs seem to have no linux osvers, grr
  $osname$osvers) ;; # looking good
  $osname*) cat <<EOM >&4

*** WHOA THERE!!! ***

   Your gcc has not been
 compiled for the exact release of
   your operating system ($gccosandvers versus $osname$osvers).

   In general it is a good idea to keep gcc synchronized with
   the operating system because otherwise serious problems
   may ensue when trying to compile software, like Perl.

   I'm trying to be optimistic here, though, and will continue.
   If later during the configuration and build icky compilation
   problems appear (headerfile conflicts being the most common
   manifestation), I suggest reinstalling the gcc to match
   your operating system release.

EOM
     ;;
  *) gccosandvers=" ;; # failed to parse, better be silent
  esac
  ;;
esac
case "$ccname" in
") ccname="$cc" ;;
esac

# gcc 3.* complain about adding -Idirectories that they already know about,
# so we will take those off from locincpth.
case "$gccversion" in
```

```
3.*)
   echo "main(){}">try.c
   for incdir in $locincpth; do
      warn=`$cc $ccflags -I$incdir -c try.c 2>&1 | \
      grep '^c[cp]p*[01]: warning:
 changing search order '`
      if test "X$warn" != X; then
    locincpth=`echo " $locincpth " | sed "s! $incdir ! !"`
      fi
   done
   $rm -f try try.*
esac

# gcc 4.9 by default does some optimizations that break perl.
# see ticket 121505.
#
# The -fwrapv disables those optimizations (and probably others,) so
# for gcc 4.9 (and later, since the optimizations probably won't go
# away), add -fwrapv unless the user requests -fno-wrapv, which
# disables -fwrapv, or if the user requests -fsanitize=undefined,
# which turns the overflows -fwrapv ignores into runtime errors.
case "$gccversion" in
4.[3-9].*|4.[1-9][0-9]*|[5-9].*|[1-9][0-9]*)
   case "$ccflags" in
   *-fno-wrapv*|*-fsanitize=undefined*|*-fwrapv*) ;;
   *) ccflags="$ccflags -fwrapv" ;;
   esac
esac

# Really old versions of gcc default to C89 and will error for this code.
# See if the compiler (gcc or otherwise) needs a flag to compile C99 code
# Initialisations in for loops seem to be the particular problem
# (Does
 this syntax conflict with something else that was valid C89?)
# We also add a declaration after a statement to detect whether the compiler
# (or the user supplied -Accflags) consider such declarations to be errors.
# This causes 'Configure with -Accflags="-Werror=declaration-after-statement"'
# to fail hard and early.
#
# Annoyingly -std=c99 will cause gcc to tell glibc not to define prototypes for
# syscall, drand48 etc when including <unistd.h>, which messes up our build.
# I guess we *could* loop round trying -std=c99 first with checks both for the
# prototype found and the code compiling (because -std=gnu99 might do other
# things we don't want, particularly on non-GCC compilers) but
# 1) We would need to check for the prototype first (without any flags)
# 2) We would still end up with most Linux systems either being -std=gnu99
#    or "" (no flag), and so both common options would not rigorously check our
#    portability to other platforms.
```

```
# So it doesn't seem worth the complexity
 and chance of different failure.
$cat >try.c <<'EOCP'
int main(int argc, char **argv) {
   argc = argc + 1;
   /* This is deliberately a declaration after a statement. */
   unsigned long long count = 0;
   for (char **p = argv; *p; ++p) {
       ++count;
   }
   return count == 1 ? 0 : argc;
}
EOCP
c99_for=no
for flag in " '-std=gnu99' '-std=c99'; do
   if $cc -o try $flag $ccflags $ldflags try.c 2>/dev/null && ./try; then
       c99_for="$flag"
       break;
   fi
done
case "$c99_for" in
") echo "Your C compiler doesn't need any special flags to compile C99 code"
   ;;
no) echo >&4 "Your C compiler doesn't seem to be able to compile C99 code"
   rp='Do you really want to continue?'
   dflt='n'
   . ./myread
   case "$ans" in
 [yY]) echo >&4 "Okay, continuing." ;;
 *) exit 1    ;;
   esac
   ;;
*)  echo "Your C compiler needs $c99_for to compile C99 code"
   ccflags="$c99_for $ccflags"
   ;;
esac
$rm -f try try.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/gccvers.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sresgproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sresgproto:
?S: This variable conditionally defines the HAS_SETRESGID_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the setresgid() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SETRESGID_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the setresgid() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern
 int setresgid(uid_t ruid, uid_t euid, uid_t suid);
?C:.
?H:#$d_sresgproto HAS_SETRESGID_PROTO /**/
?H:.
?LINT:set d_sresgproto
: see if prototype for setresgid is available
echo " "
set d_sresgproto setresgid $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sresgproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_umask.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_umask.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:14:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_umask: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_umask:
?S: This variable conditionally defines the HAS_UMASK symbol, which
?S: indicates to the C program that the umask() routine is available.
?S: to set and get the value of the file creation mask.
?S:.
?C:HAS_UMASK :
?C: This
 symbol, if defined, indicates that the umask routine is
?C: available to set and get the value of the file creation mask.
?C:.
?H:#$d_umask HAS_UMASK  /**/
?H:.
?LINT:set d_umask
: see if umask exists
set umask d_umask
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_umask.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_nanosleep: Inlibc
?MAKE: -pick add $@ %<
?S:d_nanosleep:
?S: This variable conditionally defines HAS_NANOSLEEP
?S: if nanosleep() is available to sleep with 1E-9 sec accuracy.
?S:.
?C:HAS_NANOSLEEP:
?C: This symbol, if defined, indicates that the nanosleep
?C: system call is available to sleep with 1E-9 sec accuracy.
?C:.
?H:#$d_nanosleep HAS_NANOSLEEP  /**/
?H:.
?LINT:set d_nanosleep
: see if nanosleep exists
set nanosleep d_nanosleep
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nanosleep.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitebin.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitebin.U,v $
?RCS:
?MAKE:sitebin sitebinexp installsitebin : Getfile Oldconfig \
 Setprefixvar siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitebin=''
?S:sitebin:
?S: This variable holds the name of the directory in which the user wants
?S: to put add-on publicly executable files for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S: The standard distribution will put nothing
 in this directory.
?S: After perl has been installed, users may install their own local
?S: executables in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitebinexp=''
?S:sitebinexp:
?S: This is the same as the sitebin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installsitebin=''
?S:installsitebin:
?S: This variable is usually the same as sitebinexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?LINT:change prefixvar
?LINT:set installsitebin
?LINT:set sitebin
```

```
?LINT:set sitebinexp
: determine where add-on public executables go
case "$sitebin" in
") dflt=$siteprefix/bin ;;
*) dflt=$sitebin ;;
esac
fn=d~
rp='Pathname where the add-on public executables should be installed?'
. ./getfile
prefixvar=sitebin
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitebin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: prototype.U,v 3.0.1.3 1994/05/06 15:11:49 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: prototype.U,v $
?RCS: Revision 3.0.1.3  1994/05/06  15:11:49  ram
?RCS: patch23: ensure cc flags used when looking for prototype support
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:36  ram
?RCS: patch16: prototype handling macros now appear only when needed
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:03:12  ram
?RCS: patch6: defines were referring to non-existent VOID symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:36  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:prototype: Nothing
?S:prototype:
?S: This variable holds the eventual value of CAN_PROTOTYPE, which
?S: indicates the C compiler can handle function prototypes.
?S:.
: stub, never used
prototype=nothing
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/prototype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syslog.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_syslog: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_syslog:
?S: This variable conditionally defines the I_SYSLOG symbol,
?S: and indicates whether a C program should include <syslog.h>.
?S:.
?C:I_SYSLOG:
?C: This symbol, if defined, indicates that <syslog.h> exists and
?C: should be included.
?C:.
?H:#$i_syslog I_SYSLOG  /**/
?H:.
?LINT:set i_syslog
: see if this is a syslog.h system
set syslog.h i_syslog
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_syslog.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: prefshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: prefshell.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:28:13  ram
?RCS: patch36: added SHELL temporary since metalint now sees ${SHELL}
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:47  ram
?RCS: patch10: non-portable var substitution was used (WAD)
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:prefshell: cat package Getfile Oldconfig ksh csh bash
?MAKE: -pick add $@ %<
?S:prefshell:
?S: This
 variable contains the eventual value of the PREFSHELL symbol,
?S: which contains the full name of the preferred user shell on this
?S: system.  Usual values are /bin/csh, /bin/ksh, /bin/sh.
?S:.
?C:PREFSHELL:
?C: This symbol contains the full name of the preferred user shell on this
?C: system.  Usual values are /bin/csh, /bin/ksh, /bin/sh.
?C:.
?H:#define PREFSHELL "$prefshell"  /**/
?H:.
?T:SHELL
: find out which shell people like to use most
case "$prefshell" in
")
 case "$ksh $bash $csh" in
 */ksh*) dflt="$ksh" ;;
 */bash*) dflt="$bash" ;;
 */csh*) dflt="$csh" ;;
 *) dflt='/bin/sh' ;;
 esac
 ;;
*)  dflt="$prefshell";;
esac
?X: Some shells (Ultrix) do not understand ${SHELL:-/bin/sh}, sigh!
$cat <<EOM

Give the full path name of the shell most people like to use on your system.
This will be used by $package whenever the user wants to get a shell
escape (for instance) and is not necessarily the same as the shell you are
currently using (${SHELL-/bin/sh}).

EOM
fn=f/~
rp='Preferred
 shell to be used?'
. ./getfile
prefshell=$ans
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prefshell.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_stat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_stat.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stat: Inlibc
?MAKE: -pick add $@ %<
?S:d_stat:
?S: This variable conditionally defines HAS_STAT if stat() is
?S: available to get file status.
?S:.
?C:HAS_STAT (STAT):
?C: This symbol, if defined, indicates that the stat routine is
?C: available to get file status.
?C:.
?H:#$d_stat HAS_STAT /**/
?H:.
?LINT:set d_stat
: see if stat exists
set
 stat d_stat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_stat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: so.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: so.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:30:04  ram
?RCS: patch36: now tells user how he can suppress shared lib lookup (ADO)
?RCS: patch36: removed echo at the top, since it's now in the here-doc (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:07:02  ram
?RCS: patch30: created
?RCS:
?X:
?X: This unit computes the shared-object / shared-lib extension
?X:
?MAKE:so d_libname_unique: test libpth Loc Myread Oldconfig cat Setvar
?MAKE: -pick add $@ %<
?S:so:
?S: This
 variable holds the extension used to identify shared libraries
?S: (also known as shared objects) on the system. Usually set to 'so'.
?S:.
?S:d_libname_unique:
?S: This variable is defined if the target system insists on unique
?S: basenames for shared library files. This is currently true on Android,
?S: false everywhere else we know of.
?S: Defaults to 'undef'.
?S:.
?LINT:set d_libname_unique
?T: xxx
: compute shared library extension
case "$so" in
")
 if xxx=`./loc libc.sl X $libpth`; $test -f "$xxx"; then
  dflt='sl'
 else
  dflt='so'
 fi
 ;;
*) dflt="$so";;
esac
$cat <<EOM

On some systems, shared libraries may be available.  Answer 'none' if
you want to suppress searching of shared libraries for the remainder
of this configuration.

EOM
rp='What is the file extension used for shared libraries?'
. ./myread
so="$ans"
```

```
: Does target system insist that shared library basenames are unique
$cat << EOM

Some dynamic loaders assume that the *basename* of shared library
 filenames
are globally unique.  We'll default this to undef as we assume your system
is not this weird. Set to defined if you're on one of them.

EOM

dflt='n'
rp='Make shared library basenames unique?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)   val="$undef"  ;;
esac
set d_libname_unique
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/so.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_casti32.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:10:45  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:09:37  ram
?RCS: patch36: declare signal handler correctly (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:06  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Can the compiler cast large floats to 32-bit integers?
```

```
?X:
?MAKE:d_casti32: cat
 +cc +ccflags rm_try intsize Setvar test signal_t
?MAKE: -pick add $@ %<
?S:d_casti32:
?S: This variable conditionally defines CASTI32, which indicates
?S: whether the C compiler can cast large floats to 32-bit ints.
?S:.
?C:CASTI32:
?C: This symbol is defined if the C compiler can cast negative
?C: or large floating point numbers to 32-bit ints.
?C:.
?T:xxx yyy
?H:#$d_casti32 CASTI32  /**/
?H:.
?F:!try
?LINT:set d_casti32
: check for ability to cast large floats to 32-bit ints.
echo " "
echo 'Checking whether your C compiler can cast large floats to int32.' >&4
if $test "$intsize" -eq 4; then
 xxx=int
else
 xxx=long
fi
$cat >try.c <<EOCP
#include <sys/types.h>
#include <signal.h>
$signal_t blech() { exit(3); }
int main()
{
 $xxx i32;
 double f;
 int result = 0;
 signal(SIGFPE, blech);

 f = (double) 0x7fffffff;
 f = 10 * f;
 i32  = ($xxx) f;

 if (i32 != ($xxx) f)
  result |= 1;
 exit(result);
}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 ./try
 yyy=$?
```

```
else
 echo "(I can't
 seem to compile the test program--assuming it can't)"
 yyy=1
fi
case "$yyy" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_casti32
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_casti32.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2006-2007, H.Merijn Brand
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_snprintf d_vsnprintf : Inlibc Compile cat run rm_try
?MAKE: -pick add $@ %<
?S:d_snprintf:
?S: This variable conditionally defines the HAS_SNPRINTF symbol, which
?S: indicates to the C program that the snprintf () library function
?S: is available.
?S:.
?S:d_vsnprintf:
?S: This variable conditionally defines the HAS_VSNPRINTF symbol, which
?S: indicates to the C program that the vsnprintf () library function
?S: is available.
?S:.
?C:HAS_SNPRINTF:
?C: This symbol, if defined, indicates that the snprintf () library
?C: function
 is available for use.
?C:.
?C:HAS_VSNPRINTF:
?C: This symbol, if defined, indicates that the vsnprintf () library
```

```
?C: function is available for use.
?C:.
?H:#$d_snprintf HAS_SNPRINTF /**/
?H:#$d_vsnprintf HAS_VSNPRINTF /**/
?H:.
?F:!try
: see if snprintf exists
set snprintf d_snprintf
eval $inlibc

: see if vsnprintf exists
set vsnprintf d_vsnprintf
eval $inlibc

case "$d_snprintf-$d_vsnprintf" in
"$define-$define")
  $cat <<EOM
Checking whether your snprintf() and vsnprintf() work okay...
EOM
  $cat >try.c <<'EOCP'
/* v?snprintf testing logic courtesy of Russ Allbery.
* According to C99:
* - if the buffer is too short it still must be \0-terminated
* - if the buffer is too short the potentially required length
*   must be returned and not -1
* - if the buffer is NULL the potentially required length
*   must be returned and not -1 or core dump
*/
#include <stdio.h>
#include <stdarg.h>

char buf[2];

int test (char *format, ...)
{
  va_list args;
  int count;

  va_start
 (args, format);
  count = vsnprintf (buf, sizeof buf, format, args);
  va_end (args);
  return count;
}

int main ()
{
  return ((test ("%s", "abcd") == 4 && buf[0] == 'a' && buf[1] == '\0'
```

```
        && snprintf (NULL, 0, "%s", "abcd") == 4) ? 0 : 1);
}
EOCP
  set try
  if eval $compile; then
 `$run ./try`
 case "$?" in
 0) echo "Your snprintf() and vsnprintf() seem to be working okay." ;;
 *) cat <<EOM >&4
Your snprintf() and snprintf() don't seem to be working okay.
EOM
   d_snprintf="$undef"
   d_vsnprintf="$undef"
   ;;
 esac
  else
 echo "(I can't seem to compile the test program--assuming they don't)"
 d_snprintf="$undef"
 d_vsnprintf="$undef"
  fi
  $rm_try
  ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_snprintf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: package.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: package.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:27:21  ram
?RCS: patch36: beware of non-ascii character sets when translating case
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:37:02  ram
?RCS: patch14: skip definition of spackage if not otherwise used
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:10  ram
?RCS: patch10: added spackage, suitable for starting sentences
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:09:28  ram
?RCS: Baseline for dist 3.0
 netwide release.
?RCS:
?MAKE:package spackage: Nothing
?MAKE: -pick wipe $@ %<
?S:package:
?S: This variable contains the name of the package being constructed.
?S: It is primarily intended for the use of later Configure units.
?S:.
?S:spackage:
?S: This variable contains the name of the package being constructed,
?S: with the first letter uppercased, i.e. suitable for starting
?S: sentences.
?S:.
?X: dist-4 has defined PACKAGE: here, which clashes with perly.h
?X:  as package is a reserved keyword in perl
?T:first last
: set package name
package='<PACKAGENAME>'
@if spackage
first=`echo $package | sed -e 's/^\(.\).*/\1/'`
last=`echo $package | sed -e 's/^.\(.*\)/\1/'`
?X:
?X: So early in the Configure script, we don't have ./tr set up and can't
?X: include Tr in our dependency or that would create a cycle. Therefore,
?X: we have to somehow duplicate the work done in Tr. That's life.
?X:
case "`echo AbyZ | tr '[:lower:]' '[:upper:]' 2>/dev/null`"-"`echo AbyZ | tr '[:upper:]' '[:lower:]'
 2>/dev/null`" in
ABYZ-abyz) spackage=`echo $first | tr '[:lower:]' '[:upper:]'`$last;;
*) spackage=`echo $first | tr '[a-z]' '[A-Z]'`$last;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/package.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtold_l: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_strtold_l:
?S: This variable conditionally defines the HAS_STRTOLD_L symbol, which
?S: indicates to the C program that the strtold_l() routine is available.
?S:.
?C:HAS_STRTOLD_L:
?C: This symbol, if defined, indicates that the strtold_l routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtold_l HAS_STRTOLD_L  /**/
?H:.
?LINT:set d_strtold_l
: see if strtold_l exists
set strtold_l d_strtold_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strtold_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sem.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sem: test d_semctl d_semget d_semop Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_sem:
?S: This variable conditionally defines the HAS_SEM symbol, which
?S: indicates that the entire sem*(2) library is present.
?S:.
?C:HAS_SEM:
?C: This symbol, if defined, indicates that the entire sem*(2) library is
?C: supported.
?C:.
?H:#$d_sem HAS_SEM  /**/
?H:.
?T:h_sem
?LINT:set d_sem
:
```

```
 see how much of the 'sem*(2)' library is present.
h_sem=true
echo " "
case "$d_semctl$d_semget$d_semop" in
*"$undef"*) h_sem=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID messages"*"not configured"*)
 echo "Your $osname does not have the sem*(2) configured." >&4
       h_sem=false
 val="$undef"
 set semctl d_semctl
 eval $setvar
 set semget d_semget
 eval $setvar
 set semop d_semop
 eval $setvar
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_sem && $test `./findhdr sys/sem.h`; then
 echo "You have the full sem*(2) library." >&4
 val="$define"
else
 echo "You don't have the full sem*(2) library." >&4
 val="$undef"
fi
set d_sem
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sem.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pwritev.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_pwritev.U,v $
?RCS:
?MAKE:d_pwritev: Inlibc
?MAKE: -pick add $@ %<
?S:d_pwritev:
?S: This variable conditionally defines the HAS_PWRITEV symbol, which
?S: indicates to the C program that the pwritev() routine is available.
?S:.
?C:HAS_PWRITEV :
?C: This symbol, if defined, indicates that the pwritev routine is
?C: available to perform vectored writes on a file descriptor at a
?C: given offset.
?C:.
?H:#$d_pwritev HAS_PWRITEV  /**/
?H:.
?LINT:set
 d_pwritev
: see if pwritev exists
set pwritev d_pwritev
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pwritev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_time.U,v 3.0.1.2 1995/07/25 14:07:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_time.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:43  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:16:38  ram
?RCS: patch36: now uses new Typedef unit to compute type information (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Maybe <sys/types.h> should be included?
?X:INC: i_systypes
?MAKE:d_time timetype: Csym Setvar Findhdr Myread Typedef
```

```
?MAKE: -pick
 add $@ %<
?S:d_time:
?S: This variable conditionally defines the HAS_TIME symbol, which indicates
?S: that the time() routine exists.  The time() routine is normally
?S: provided on UNIX systems.
?S:.
?S:timetype:
?S: This variable holds the type returned by time(). It can be long,
?S: or time_t on BSD sites (in which case <sys/types.h> should be
?S: included). Anyway, the type Time_t should be used.
?S:.
?C:HAS_TIME (TIMER):
?C: This symbol, if defined, indicates that the time() routine exists.
?C:.
?C:Time_t (TIMETYPE):
?C: This symbol holds the type returned by time(). It can be long,
?C: or time_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_time HAS_TIME  /**/
?H:#define Time_t $timetype  /* Time type */
?H:.
?LINT:set d_time
: see if time exists
echo " "
?X: MPE/iX needs this protection of hint values.
?X: See d_sterror.U for more explanation.
if test "X$d_time" = X -o X"$timetype" = X; then
   if set time val -f d_time; eval $csym; $val;
 then
  echo 'time() found.' >&4
  val="$define"
  rp="What is the type returned by time() on this system?"
  set time_t timetype long stdio.h sys/types.h
  eval $typedef_ask
   else
  echo 'time() not found, hope that will do.' >&4
  val="$undef"
  timetype='int';
   fi
   set d_time
   eval $setvar
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/d_time.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: byteorder.U,v 3.0.1.2 1997/02/28 15:24:55 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: byteorder.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:24:55  ram
?RCS: patch61: no longer ask the user if the test runs ok
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:58  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:byteorder: cat Myread Oldconfig Loc Compile rm_try run \
 multiarch uvtype uvsize i_stdlib
?MAKE: -pick add $@ %<
?S:byteorder:
?S: This
 variable holds the byte order in a UV. In the following,
?S: larger digits indicate more significance.  The variable byteorder
?S: is either 4321 on a big-endian machine, or 1234 on a little-endian,
?S: or 87654321 on a Cray ... or 3412 with weird order !
?S:.
?C:BYTEORDER:
?C: This symbol holds the hexadecimal constant defined in byteorder,
?C: in a UV, i.e. 0x1234 or 0x4321 or 0x12345678, etc...
?C: If the compiler supports cross-compiling or multiple-architecture
?C: binaries, use compiler-defined macros to
?C: determine the byte order.
?C:.
?H:?%<:#if defined(MULTIARCH)
?H:?%<:#  ifdef __LITTLE_ENDIAN__
?H:?%<:#    if LONGSIZE == 4
?H:?%<:#      define BYTEORDER 0x1234
?H:?%<:#    else
?H:?%<:#      if LONGSIZE == 8
?H:?%<:#        define BYTEORDER 0x12345678
?H:?%<:#      endif
?H:?%<:#    endif
```

```
?H:?%<:#  else
?H:?%<:#    ifdef __BIG_ENDIAN__
?H:?%<:#      if LONGSIZE == 4
?H:?%<:#        define BYTEORDER 0x4321
?H:?%<:#      else
?H:?%<:#        if LONGSIZE
 == 8
?H:?%<:#          define BYTEORDER 0x87654321
?H:?%<:#        endif
?H:?%<:#      endif
?H:?%<:#    endif
?H:?%<:#  endif
?H:?%<:#else
?H:?%<:#define BYTEORDER 0x$byteorder /* large digits for MSB */
?H:?%<:#endif
?H:.
?T:xxx_prompt
?F:!try
: check for ordering of bytes in a UV
echo " "
case "$multiarch" in
*$define*)
 $cat <<EOM
You seem to be doing a multiarchitecture build,
skipping the byteorder check.

EOM
 byteorder='ffff'
 ;;
*)
 case "$byteorder" in
 ")
  $cat <<'EOM'
In the following, larger digits indicate more significance.  A big-endian
machine like a Pyramid or a Motorola 680?0 chip will come out to 4321. A
little-endian machine like a Vax or an Intel 80?86 chip would be 1234. Other
machines may have weird orders like 3412.  A Cray will report 87654321,
an Alpha will report 12345678. If the test program works the default is
probably right.
I'm now running the test program...
EOM
  $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include
```

```
 <sys/types.h>
typedef $uvtype UV;
int main()
{
 int i;
 union {
  UV l;
  char c[$uvsize];
 } u;

 if ($uvsize > 4)
  u.l = (((UV)0x08070605) << 32) | (UV)0x04030201;
 else
  u.l = (UV)0x04030201;
 for (i = 0; i < $uvsize; i++)
  printf("%c", u.c[i]+'0');
 printf("\n");
 exit(0);
}
EOCP
  xxx_prompt=y
  set try
  if eval $compile && $run ./try > /dev/null; then
   dflt=`$run ./try`
   case "$dflt" in
   [1-4][1-4][1-4][1-4]|12345678|87654321)
    echo "(The test program ran ok.)"
    echo "byteorder=$dflt"
    xxx_prompt=n
   ;;
   ????|????????) echo "(The test program ran ok.)" ;;
   *) echo "(The test program didn't run right for some reason.)" ;;
   esac
  else
   dflt='4321'
   cat <<'EOM'
(I can't seem to compile the test program.  Guessing big-endian...)
EOM
  fi
  case "$xxx_prompt" in
  y)
   rp="What is the order of bytes in $uvtype?"
   . ./myread
   byteorder="$ans"
   ;;
  *) byteorder=$dflt
   ;;
  esac
```

```
  ;;
 esac
 $rm_try
 ;;
esac
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/byteorder.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:multiarch: osname
?MAKE: -pick add $@ %<
?S:multiarch:
?S: This variable conditionally defines the MULTIARCH symbol
?S: which signifies the presence of multiplatform files.
?S: This is normally set by hints files.
?S:.
?C:MULTIARCH:
?C: This symbol, if defined, signifies that the build
?C: process will produce some binary files that are going to be
?C: used in a cross-platform environment.  This is the case for
?C: example with the NeXT "fat" binaries that contain executables
?C: for
 several CPUs.
?C:.
?H:#$multiarch MULTIARCH  /**/
?H:.
: Check if is a multiplatform env
case "$osname" in
darwin) multiarch="$define" ;;
esac
case "$multiarch" in
"|[nN]*) multiarch="$undef" ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/multiarch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nearbyint: Inlibc
?MAKE: -pick add $@ %<
?S:d_nearbyint:
?S: This variable conditionally defines HAS_NEARBYINT if nearbyint()
?S: is available to return the integral value closest to (according to
?S: the current rounding mode) to x.
?S:.
?C:HAS_NEARBYINT:
?C: This symbol, if defined, indicates that the nearbyint routine is
?C: available to return the integral value closest to (according to
?C: the current rounding mode) to x.
?C:.
?H:#$d_nearbyint HAS_NEARBYINT  /**/
?H:.
?LINT:set d_nearbyint
: see if nearbyint exists
set nearbyint d_nearbyint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nearbyint.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Getfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Getfile.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:01:06  ram
?RCS: patch61: getfile script now begins with "startsh"
?RCS:
?RCS: Revision 3.0.1.6  1995/02/15  14:11:00  ram
?RCS: patch51: was not working if ~'s allowed with d_portable on (WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:11:25  ram
?RCS: patch45: added support for escaping answers to skip various checks
```

```
?RCS: patch45: modified message issued after file expansion
?RCS:
?RCS: Revision
 3.0.1.4  1994/10/29  15:53:19  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:23:36  ram
?RCS: patch23: getfile could be confused by file name in "locate" requests
?RCS: patch23: new 'p' directive to assume file is in people's path (WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:01:31  ram
?RCS: patch16: added metalint hint on changed 'ans' variable
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:46:27  ram
?RCS: patch10: minor format problems and misspellings fixed
?RCS: patch10: now performs from package dir and not from UU subdir
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to get a file name and make some sanity checks. Optionally, a ~name
?X: expansion is performed.
?X:
?X: To use this unit, $rp and $dflt must hold the question and the
?X: default answer, which will be passed as-is
 to the myread script.
?X: The $fn variable must hold the file type (f or d, for file/directory).
?X: If $gfpth is set to a list of space-separated list of directories,
?X: those are prefixes for the filename.  Unless $gfpthkeep is set to 'y',
?X: gfpth is cleared on return from Getfile.
?X:
?X: If it is followed by a ~, then ~name substitution will occur. Upon return,
?X: $ans is set with the filename value. If a / is specified, then only a full
?X: path name is accepted (but ~ substitution occurs before, if needed). The
?X: expanded path name is returned in that case.
?X:
?X: If a + is specified, the existence checks are skipped. This usually means
?X: the file/directory is under the full control of the program.
?X:
?X: If the 'n' (none) type is used, then the user may answer none.
?X: The 'e' (expand) switch may be used to bypass d_portable, expanding ~name.
?X:
?X: If the 'l' (locate) type is used, then it must end with a ':' and then a
?X: file name. If the answer is a directory,
 the file name will be appended
?X: before testing for file existence. This is useful in locate-style
```

```
?X: questions like "where is the active file?". In that case, one should
?X: use:
?X:
?X:   dflt='~news/lib'
?X:   fn='l~:active'
?X:   rp='Where is the active file?'
?X:   . ./getfile
?X:   active="$ans"
?X:
?X: If the 'p' (path) letter is specified along with 'l', then an answer
?X: without a leading / will be expected to be found in everyone's path.
?X:
?X: It is also possible to include a comma-separated list of items within
?X: parentheses to specify which items should be accepted as-is with no
?X: further checks. This is useful when for instance a full path is expected
?X: but the user may escape out via "magical" answers.
?X:
?X: If the answer to the question is 'none', then the existence checks are
?X: skipped and the empty string is returned.
?X:
?MAKE:Getfile: d_portable contains startsh Myread Filexp tr trnl
?MAKE: -pick add $@ %<
?V:ansexp:fn gfpth gfpthkeep
?F:./getfile
?T:tilde
 type what orig_rp orig_dflt fullpath already redo skip none_ok \
 value exp_file nopath_ok loc_file fp pf dir direxp
?LINT:change ans
?LINT:change gfpth
: now set up to get a file name
cat <<EOS >getfile
$startsh
EOS
cat <<'EOSC' >>getfile
tilde=''
fullpath=''
already=''
skip=''
none_ok=''
exp_file=''
nopath_ok=''
orig_rp="$rp"
orig_dflt="$dflt"
case "$gfpth" in
'') gfpth='.' ;;
esac

?X: Begin by stripping out any (...) grouping.
```

```
case "$fn" in
*\(*)
 : getfile will accept an answer from the comma-separated list
 : enclosed in parentheses even if it does not meet other criteria.
 expr "$fn" : '.*(\(.*\)).*' | $tr ',' $trnl >getfile.ok
 fn=`echo $fn | sed 's/(.*)//'`
 ;;
esac

?X: Catch up 'locate' requests early, so that we may strip the file name
?X: before looking at the one-letter commands, in case the file name contains
?X: one of them. Reported by Wayne Davison <davison@borland.com>.
case "$fn" in
*:*)
 loc_file=`expr $fn : '.*:\(.*\)'`
 fn=`expr $fn : '\(.*\):.*'`
 ;;
esac

case
 "$fn" in
*~*) tilde=true;;
esac
case "$fn" in
*/*) fullpath=true;;
esac
case "$fn" in
*+*) skip=true;;
esac
case "$fn" in
*n*) none_ok=true;;
esac
case "$fn" in
*e*) exp_file=true;;
esac
case "$fn" in
*p*) nopath_ok=true;;
esac

case "$fn" in
*f*) type='File';;
*d*) type='Directory';;
*l*) type='Locate';;
esac

what="$type"
case "$what" in
Locate) what='File';;
```

```
esac

case "$exp_file" in
")
 case "$d_portable" in
 "$define") ;;
 *) exp_file=true;;
 esac
 ;;
esac

cd ..
while test "$type"; do
 redo="
 rp="$orig_rp"
 dflt="$orig_dflt"
 case "$tilde" in
 true) rp="$rp (~name ok)";;
 esac
 . UU/myread
?X: check for allowed escape sequence which may be accepted verbatim.
 if test -f UU/getfile.ok && \
  $contains "^$ans\$" UU/getfile.ok >/dev/null 2>&1
 then
  value="$ans"
  ansexp="$ans"
  break
 fi
 case "$ans" in
 none)
  value="
  ansexp="
  case "$none_ok" in
  true) type=";;
  esac
  ;;
 *)
  case "$tilde" in
  ") value="$ans"
   ansexp="$ans";;
  *)
   value=`UU/filexp $ans`
   case
 $? in
   0)
    if test "$ans" != "$value"; then
     echo "(That expands to $value on this system.)"
    fi
```

```
   ;;
  *) value="$ans";;
  esac
  ansexp="$value"
  case "$exp_file" in
  ") value="$ans";;
  esac
  ;;
 esac
 case "$fullpath" in
 true)
?X: Perform all the checks on ansexp and not value since when d_portable
?X: is defined, the original un-expanded answer which is stored in value
?X: would lead to "non-existent" error messages whilst ansexp has been
?X: properly expanded. -- Fixed by Jan.Djarv@sa.erisoft.se (Jan Djarv)
?X: Always expand ~user if '/' was requested
  case "$ansexp" in
  /*) value="$ansexp" ;;
?X: Allow for c:/some/path
  [a-zA-Z]:/*) value="$ansexp" ;;
  *)
   redo=true
   case "$already" in
   true)
   echo "I shall only accept a full path name, as in /bin/ls." >&4
   echo "Use a ! shell escape if you wish to check pathnames." >&4
    ;;
   *)
   echo "Please give a full path name, starting with slash." >&4
    case "$tilde"
 in
    true)
   echo "Note that using ~name is ok provided it expands well." >&4
     already=true
     ;;
    esac
   esac
   ;;
  esac
  ;;
 esac
 case "$redo" in
 ")
  case "$type" in
  File)
   for fp in $gfpth; do
    if test "X$fp" = X.; then
        pf="$ansexp"
```

```
    else
        pf="$fp/$ansexp"
    fi
    if test -f "$pf"; then
     type="
    elif test -r "$pf" || (test -h "$pf") >/dev/null 2>&1
    then
     echo "($value is not a plain file, but that's ok.)"
     type="
    fi
    if test X"$type" = X; then
        value="$pf"
        break
    fi
   done
   ;;
  Directory)
   for fp in $gfpth; do
    if test "X$fp" = X.; then
        dir="$ans"
        direxp="$ansexp"
    else
        dir="$fp/$ansexp"
        direxp="$fp/$ansexp"
    fi
    if test -d "$direxp"; then
     type="
     value="$dir"
     break
    fi
   done
   ;;
  Locate)
   if test -d "$ansexp"; then
    echo "(Looking for $loc_file in directory
$value.)"
    value="$value/$loc_file"
    ansexp="$ansexp/$loc_file"
   fi
   if test -f "$ansexp"; then
    type="
   fi
   case "$nopath_ok" in
   true) case "$value" in
    */*) ;;
    *) echo "Assuming $value will be in people's path."
     type="
     ;;
```

```
    esac
    ;;
   esac
   ;;
  esac

  case "$skip" in
  true) type='';
  esac

  case "$type" in
  '') ;;
  *)
   if test "$fastread" = yes; then
    dflt=y
   else
    dflt=n
   fi
   rp="$what $value doesn't exist.  Use that name anyway?"
   . UU/myread
   dflt=''
   case "$ans" in
   y*) type='';;
   *) echo " ";;
   esac
   ;;
  esac
  ;;
 esac
 ;;
esac
done
cd UU
ans="$value"
rp="$orig_rp"
dflt="$orig_dflt"
rm -f getfile.ok
test "X$gfpthkeep" != Xy && gfpth=''
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Getfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_drand48_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_drand48_r drand48_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_drand48_r:
?S: This variable conditionally defines the HAS_DRAND48_R symbol,
?S: which indicates to the C program that the drand48_r()
?S: routine is available.
?S:.
?S:drand48_r_proto:
?S: This variable encodes the prototype of drand48_r.
?S: It is zero if d_drand48_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_drand48_r
?S: is defined.
?S:.
?C:HAS_DRAND48_R:
?C: This symbol, if defined, indicates that the drand48_r routine
?C: is available to drand48 re-entrantly.
?C:.
?C:DRAND48_R_PROTO:
?C: This
 symbol encodes the prototype of drand48_r.
?C: It is zero if d_drand48_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_drand48_r
?C: is defined.
?C:.
?H:#$d_drand48_r HAS_DRAND48_R /**/
?H:#define DRAND48_R_PROTO $drand48_r_proto /**/
?H:.
?T:try hdrs d_drand48_r_proto
: see if drand48_r exists
set drand48_r d_drand48_r
eval $inlibc
case "$d_drand48_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_drand48_r_proto:$usethreads" in
 ":define") d_drand48_r_proto=define
  set d_drand48_r_proto drand48_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_drand48_r_proto" in
 define)
 case "$drand48_r_proto" in
```

```
"|0) try='int drand48_r(struct drand48_data*, double*);'
./protochk "$extern_C $try" $hdrs && drand48_r_proto=I_ST ;;
esac
case "$drand48_r_proto" in
"|0) d_drand48_r=undef
 drand48_r_proto=0
 echo "Disabling drand48_r, cannot determine prototype." >&4 ;;
* ) case
"$drand48_r_proto" in
 REENTRANT_PROTO*) ;;
 *) drand48_r_proto="REENTRANT_PROTO_$drand48_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "drand48_r has no prototype, not using it." >&4 ;;
 esac
 d_drand48_r=undef
 drand48_r_proto=0
 ;;
esac
;;
*) drand48_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_drand48_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorman1dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorman1dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorman1dir vendorman1direxp installvendorman1dir: man1dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
```

```
?Y:TOP
?S:vendorman1dir:
?S: This variable contains the name of the directory for man1
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: man1 pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorman1direxp:
?S: This variable is the ~name expanded version of vendorman1dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorman1dir=''
?S:installvendorman1dir:
?S: This variable is really the same as vendorman1direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorman1dir
: Set the vendorman1dir variables
case "$vendorprefix" in
'') vendorman1dir=''
 vendorman1direxp=''
 ;;
*) : determine where vendor-supplied manual pages go.
 case "$vendorman1dir" in
 '') dflt=`echo "$man1dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorman1dir ;;
 esac
 case "$dflt" in
 '|' ') dflt=none ;;
 esac
 fn=nd~+
 rp='Pathname for
 the vendor-supplied manual section 1 pages?'
 . ./getfile
 vendorman1dir="$ans"
 vendorman1direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorman1dir" = "X" && vendorman1dir=' '
prefixvar=vendorman1dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorman1dir.U
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```
?RCS: $Id: d_localtime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_localtime_r d_localtime_r_needs_tzset localtime_r_proto: Inlibc \
 cat run Protochk Hasproto i_systypes usethreads i_time i_systime \
 rm_try Compile extern_C i_stdlib i_unistd i_malloc
?MAKE: -pick add $@ %<
?S:d_localtime_r:
?S: This variable conditionally defines the HAS_LOCALTIME_R symbol,
?S: which indicates to the C program that the localtime_r()
?S: routine is available.
?S:.
?S:d_localtime_r_needs_tzset:
?S: This variable conditionally defines the LOCALTIME_R_NEEDS_TZSET
?S: symbol, which makes us call tzset before localtime_r()
?S:.
?S:localtime_r_proto:
?S: This
 variable encodes the prototype of localtime_r.
?S: It is zero if d_localtime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_localtime_r
?S: is defined.
?S:.
?C:HAS_LOCALTIME_R:
?C: This symbol, if defined, indicates that the localtime_r routine
?C: is available to localtime re-entrantly.
?C:.
?C:LOCALTIME_R_NEEDS_TZSET:
?C: Many libc's localtime_r implementations do not call tzset,
?C: making them differ from localtime(), and making timezone
?C: changes using \$ENV{TZ} without explicitly calling tzset
?C: impossible. This symbol makes us call tzset before localtime_r
?C:.
?H:?%<:#$d_localtime_r_needs_tzset LOCALTIME_R_NEEDS_TZSET /**/
?H:?%<:#ifdef LOCALTIME_R_NEEDS_TZSET
?H:?%<:#define L_R_TZSET tzset(),
?H:?%<:#else
```

```
?H:?%<:#define L_R_TZSET
?H:?%<:#endif
?H:.
?W:%<:L_R_TZSET
?C:L_R_TZSET:
?C: If localtime_r() needs tzset, it is defined in this define
?C:.
?C:LOCALTIME_R_PROTO:
?C: This symbol encodes the prototype of localtime_r.
?C: It is
 zero if d_localtime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_localtime_r
?C: is defined.
?C:.
?H:#$d_localtime_r HAS_LOCALTIME_R /**/
?H:#define LOCALTIME_R_PROTO $localtime_r_proto /**/
?H:.
?T:try hdrs d_localtime_r_proto
?F:!try
: see if localtime_r exists
set localtime_r d_localtime_r
eval $inlibc
case "$d_localtime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_localtime_r_proto:$usethreads" in
 ":define") d_localtime_r_proto=define
  set d_localtime_r_proto localtime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_localtime_r_proto" in
 define)
 case "$localtime_r_proto" in
 "|0) try='struct tm* localtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && localtime_r_proto=S_TS ;;
 esac
 case "$localtime_r_proto" in
 "|0) try='int localtime_r(const time_t*, struct tm*);'
 ./protochk "$extern_C $try" $hdrs && localtime_r_proto=I_TS ;;
 esac
 case "$localtime_r_proto"
 in
 "|0) d_localtime_r=undef
  localtime_r_proto=0
  echo "Disabling localtime_r, cannot determine prototype." >&4 ;;
 * ) case "$localtime_r_proto" in
  REENTRANT_PROTO*) ;;
```

```
  *) localtime_r_proto="REENTRANT_PROTO_$localtime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "localtime_r has no prototype, not using it." >&4 ;;
  esac
  d_localtime_r=undef
  localtime_r_proto=0
  ;;
 esac
 ;;
*) localtime_r_proto=0
 ;;
esac

: see if localtime_r calls tzset
case "$localtime_r_proto" in
REENTRANT_PROTO*)
 $cat >try.c <<EOCP
/*  Does our libc's localtime_r call tzset ?
*  return 0 if so, 1 otherwise.
*/
#$i_systypes I_SYS_TYPES
#$i_unistd I_UNISTD
#$i_time I_TIME
#$i_stdlib I_STDLIB
#$i_malloc I_MALLOC
#ifdef I_SYS_TYPES
#  include <sys/types.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#ifdef I_TIME
#  include <time.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <string.h>
#ifdef I_MALLOC
#  include <malloc.h>
#endif
int
 main()
{
```

```
  int result = 0;
  time_t t = time(0L);
  char w_tz[]="TZ" "=GMT+5",
 e_tz[]="TZ" "=GMT-5",
*tz_e = (char*)malloc(16),
*tz_w = (char*)malloc(16);
  struct tm tm_e, tm_w;
  memset(&tm_e,'\0',sizeof(struct tm));
  memset(&tm_w,'\0',sizeof(struct tm));
  strcpy(tz_e,e_tz);
  strcpy(tz_w,w_tz);

  putenv(tz_e);
  localtime_r(&t, &tm_e);

  putenv(tz_w);
  localtime_r(&t, &tm_w);

  if( memcmp(&tm_e, &tm_w, sizeof(struct tm)) == 0 )
 result = 1;

  free(tz_e);free(tz_w);
  return result;
}
EOCP
 set try
 if eval $compile; then
    if $run ./try; then
  d_localtime_r_needs_tzset=undef;
    else
  d_localtime_r_needs_tzset=define;
    fi;
 else
    d_localtime_r_needs_tzset=undef;
 fi;
   ;;
 *)
   d_localtime_r_needs_tzset=undef;
   ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_localtime_r.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nblock_io.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:17:14  ram
?RCS: patch61: simplify here document for shells that can't handle them well
?RCS: patch61: force use of "startsh" at the head of the generated script
?RCS: patch61: added new files to the ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:13:22  ram
?RCS: patch56: created
?RCS:
?X:
?X: Simplify here document for shells that can't handle them well.
?X: (Problem reported on FreeBSD; it's unclear if this helps.)  --AD
?X:
?MAKE:o_nonblock
 eagain rd_nodata d_eofnblk: cat rm_try +cc +ccflags +ldflags \
 d_open3 h_sysfile h_fcntl signal_t hint Oldconfig Setvar startsh Warn
?MAKE: -pick add $@ %<
?S:o_nonblock:
?S: This variable bears the symbol value to be used during open() or fcntl()
?S: to turn on non-blocking I/O for a file descriptor. If you wish to switch
?S: between blocking and non-blocking, you may try ioctl(FIOSNBIO) instead,
?S: but that is only supported by some devices.
?S:.
?S:eagain:
?S: This variable bears the symbolic errno code set by read() when no
?S: data is present on the file and non-blocking I/O was enabled (otherwise,
?S: read() blocks naturally).
?S:.
?S:rd_nodata:
?S: This variable holds the return code from read() when no data is
?S: present. It should be -1, but some systems return 0 when O_NDELAY is
?S: used, which is a shame because you cannot make the difference between
?S: no data and an EOF.. Sigh!
?S:.
?S:d_eofnblk:
?S: This variable conditionally defines EOF_NONBLOCK
 if EOF can be seen
?S: when reading from a non-blocking I/O source.
?S:.
?C:VAL_O_NONBLOCK:
```

```
?C: This symbol is to be used during open() or fcntl(F_SETFL) to turn on
?C: non-blocking I/O for the file descriptor. Note that there is no way
?C: back, i.e. you cannot turn it blocking again this way. If you wish to
?C: alternatively switch between blocking and non-blocking, use the
?C: ioctl(FIOSNBIO) call instead, but that is not supported by all devices.
?C:.
?C:VAL_EAGAIN:
?C: This symbol holds the errno error code set by read() when no data was
?C: present on the non-blocking file descriptor.
?C:.
?C:RD_NODATA:
?C: This symbol holds the return code from read() when no data is present
?C: on the non-blocking file descriptor. Be careful! If EOF_NONBLOCK is
?C: not defined, then you can't distinguish between no data and EOF by
?C: issuing a read(). You'll have to find another way to tell for sure!
?C:.
?C:EOF_NONBLOCK:
?C: This symbol, if defined, indicates to the C program that a read() on
?C: a
 non-blocking file descriptor will return 0 on EOF, and not the value
?C: held in RD_NODATA (-1 usually, in that case!).
?C:.
?H:#define VAL_O_NONBLOCK $o_nonblock
?H:#define VAL_EAGAIN $eagain
?H:#define RD_NODATA $rd_nodata
?H:#$d_eofnblk EOF_NONBLOCK
?H:.
?F:!try !try.out !try.ret !try.err !mtry
?T:status
?LINT:use d_open3
: check for non-blocking I/O stuff
case "$h_sysfile" in
true) echo "#include <sys/file.h>" > head.c;;
*)
 case "$h_fcntl" in
 true) echo "#include <fcntl.h>" > head.c;;
 *) echo "#include <sys/fcntl.h>" > head.c;;
 esac
 ;;
esac
echo " "
echo "Figuring out the flag used by open() for non-blocking I/O..." >&4
case "$o_nonblock" in
")
 $cat head.c > try.c
 $cat >>try.c <<'EOCP'
int main() {
#ifdef O_NONBLOCK
```

```
 printf("O_NONBLOCK\n");
 exit(0);
#endif
#ifdef O_NDELAY
 printf("O_NDELAY\n");
 exit(0);
#endif
?X: Stevens "Advanced Programming in the UNIX Environment" page 364 mentions
?X: the FNDELAY symbol, used in 4.33BSD (source: Paul Marquess).
#ifdef FNDELAY
 printf("FNDELAY\n");
 exit(0);
#endif
 exit(0);
}
EOCP
 if
 $cc $ccflags $ldflags -o try try.c >/dev/null 2>&1; then
  o_nonblock=`./try`
  case "$o_nonblock" in
  ") echo "I can't figure it out, assuming O_NONBLOCK will do.";;
  *) echo "Seems like we can use $o_nonblock.";;
  esac
 else
  echo "(I can't compile the test program; pray O_NONBLOCK is right!)"
 fi
 ;;
*) echo "Using $hint value $o_nonblock.";;
esac
$rm_try

echo " "
echo "Let's see what value errno gets from read() on a $o_nonblock file..." >&4
case "$eagain" in
")
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <errno.h>
#include <sys/types.h>
#include <signal.h>
#define MY_O_NONBLOCK $o_nonblock
extern int errno;
$signal_t blech(x) int x; { exit(3); }
EOCP
 $cat >> try.c <<'EOCP'
int main()
{
 int pd[2];
```

```
 int pu[2];
 char buf[1];
 char string[100];

 pipe(pd); /* Down: child -> parent */
 pipe(pu); /* Up: parent -> child */
 if (0 != fork()) {
  int ret;
  close(pd[1]); /* Parent reads from pd[0] */
  close(pu[0]); /*
 Parent writes (blocking) to pu[1] */
  if (-1 == fcntl(pd[0], F_SETFL, MY_O_NONBLOCK))
   exit(1);
  signal(SIGALRM, blech);
  alarm(5);
  if ((ret = read(pd[0], buf, 1)) > 0) /* Nothing to read! */
   exit(2);
  sprintf(string, "%d\n", ret);
  write(2, string, strlen(string));
  alarm(0);
#ifdef EAGAIN
  if (errno == EAGAIN) {
   printf("EAGAIN\n");
   goto ok;
  }
#endif
#ifdef EWOULDBLOCK
  if (errno == EWOULDBLOCK)
   printf("EWOULDBLOCK\n");
#endif
 ok:
  write(pu[1], buf, 1); /* Unblocks child, tell it to close our pipe */
  sleep(2);    /* Give it time to close our pipe */
  alarm(5);
  ret = read(pd[0], buf, 1); /* Should read EOF */
  alarm(0);
  sprintf(string, "%d\n", ret);
  write(3, string, strlen(string));
  exit(0);
 }

 close(pd[0]);   /* We write to pd[1] */
 close(pu[1]);   /* We read from pu[0] */
 read(pu[0], buf, 1); /* Wait for parent to signal us we may continue */
 close(pd[1]);   /* Pipe pd is now fully closed! */
 exit(0);    /* Bye bye, thank you for playing!
 */
}
```

```
EOCP
 if $cc $ccflags $ldflags -o try try.c >/dev/null 2>&1; then
?X: Use script to avoid the possible 'alarm call' message
  echo "$startsh" >mtry
  echo "./try >try.out 2>try.ret 3>try.err || exit 4" >>mtry
  chmod +x mtry
  ./mtry >/dev/null 2>&1
  case $? in
  0) eagain=`$cat try.out`;;
  1) echo "Could not perform non-blocking setting!";;
  2) echo "I did a successful read() for something that was not there!";;
  3) echo "Hmm... non-blocking I/O does not seem to be working!";;
  *) echo "Something terribly wrong happened during testing.";;
  esac
  rd_nodata=`$cat try.ret`
  echo "A read() system call with no data present returns $rd_nodata."
  case "$rd_nodata" in
  0|-1) ;;
  *)
   echo "(That's peculiar, fixing that to be -1.)"
   rd_nodata=-1
   ;;
  esac
  case "$eagain" in
  ")
   echo "Forcing errno EAGAIN on read() with no data available."
   eagain=EAGAIN
   ;;
  *)
   echo "Your read() sets errno to $eagain when no data is available."
   ;;
  esac
  status=`$cat
 try.err`
  case "$status" in
  0) echo "And it correctly returns 0 to signal EOF.";;
  -1) echo "But it also returns -1 to signal EOF, so be careful!";;
  *) echo "However, your read() returns '$status' on EOF??";;
  esac
  val="$define"
  if test "$status" = "$rd_nodata"; then
   ./warn "your read() can't distinguish between EOF and no data!"
   val="$undef"
  fi
 else
  echo "I can't compile the test program--assuming errno EAGAIN will do."
  eagain=EAGAIN
 fi
```

```
 set d_eofnblk
 eval $setvar
 ;;
*)
 echo "Using $hint value $eagain."
 echo "Your read() returns $rd_nodata when no data is present."
 case "$d_eofnblk" in
 "$define") echo "And you can see EOF because read() returns 0.";;
 "$undef") echo "But you can't see EOF status from read() returned value.";;
 *)
?X: Should not happen, but if it does, assume the worst!
  echo "(Assuming you can't see EOF status from read anyway.)"
  d_eofnblk=$undef
  ;;
 esac
 ;;
esac
$rm_try head.c mtry
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nblock_io.U
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```
?RCS: $Id: d_munmap.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_munmap.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:22  ram
?RCS: patch15: created
?RCS:
?MAKE:d_munmap: Inlibc
?MAKE: -pick add $@ %<
?S:d_munmap:
?S: This variable conditionally defines HAS_MUNMAP if munmap() is
?S: available to unmap a region mapped by mmap().
?S:.
?C:HAS_MUNMAP:
?C: This symbol, if defined, indicates that the munmap system call is
?C: available to unmap a region, usually mapped by mmap().
?C:.
?H:#$d_munmap HAS_MUNMAP  /**/
```

```
?H:.
?LINT:set
 d_munmap
: see if munmap exists
set munmap d_munmap
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_munmap.U
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```
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:gidsign: Myread Typedef gidtype Compile run
?MAKE: -pick add $@ %<
?S:gidsign:
?S: This variable contains the signedness of a gidtype.
?S: 1 for unsigned, -1 for signed.
?S:.
?C:Gid_t_sign:
?C: This symbol holds the signedness of a Gid_t.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define Gid_t_sign $gidsign  /* GID sign */
?H:.
?T:yyy zzz
?F:!try
: Check if GID is signed
echo " "
case "$gidtype" in
*_t) zzz="$gidtype" ;;
*)   zzz="gid"  ;;
esac
echo "Checking the sign of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include
 <stdio.h>
int main() {
 $gidtype foo = -1;
 if (foo < 0)
```

```
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set try
if eval $compile; then
 yyy=`$run ./try`
 case "$yyy" in
 ") gidsign=1
  echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) gidsign=$yyy
  case "$gidsign" in
   1) echo "Your $zzz is unsigned." ;;
  -1) echo "Your $zzz is signed."   ;;
  esac
  ;;
 esac
else
 gidsign=1
 echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidsign.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpclass: Inlibc
?MAKE: -pick add $@ %<
?S:d_fpclass:
?S: This variable conditionally defines the HAS_FPCLASS symbol, which
?S: indicates to the C program that the fpclass() routine is available.
?S:.
?C:HAS_FPCLASS:
?C: This symbol, if defined, indicates that the fpclass routine is
?C: available to classify doubles.  Available for example in Solaris/SVR4.
?C: The returned values are defined in <ieeefp.h> and are:
?C:
?C: FP_SNAN  signaling NaN
?C: FP_QNAN  quiet NaN
```

```
?C: FP_NINF  negative infinity
?C: FP_PINF  positive infinity
?C: FP_NDENORM negative denormalized non-zero
?C: FP_PDENORM positive denormalized non-zero
?C: FP_NZERO negative zero
?C: FP_PZERO positive zero
?C: FP_NNORM negative normalized
 non-zero
?C: FP_PNORM positive normalized non-zero
?C:.
?H:#$d_fpclass HAS_FPCLASS  /**/
?H:.
?LINT:set d_fpclass
: see if fpclass exists
set fpclass d_fpclass
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclass.U
No license file was found, but licenses were detected in source scan.

```
*  You may redistribute only under the terms of the Artistic Licence,
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/Jmake.tmpl
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mbstowcs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mbstowcs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_mbstowcs: Inlibc
?MAKE: -pick add $@ %<
?S:d_mbstowcs:
?S: This variable conditionally defines the HAS_MBSTOWCS symbol, which
?S: indicates to the C program that the mbstowcs() routine is available
?S: to convert a multibyte string into a wide character string.
?S:.
```

```
?C:HAS_MBSTOWCS (MBSTOWCS):
?C: This symbol, if defined, indicates
 that the mbstowcs routine is
?C: available to convert a multibyte string into a wide character string.
?C:.
?H:#$d_mbstowcs HAS_MBSTOWCS  /**/
?H:.
?LINT:set d_mbstowcs
: see if mbstowcs exists
set mbstowcs d_mbstowcs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mbstowcs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pread.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_pread.U,v $
?RCS:
?MAKE:d_pread: Inlibc
?MAKE: -pick add $@ %<
?S:d_pread:
?S: This variable conditionally defines the HAS_PREAD symbol, which
?S: indicates to the C program that the pread() routine is available.
?S:.
?C:HAS_PREAD :
?C: This symbol, if defined, indicates that the pread routine is
?C: available to perform reads on a file descriptor at a given offset.
?C:.
?H:#$d_pread HAS_PREAD  /**/
?H:.
?LINT:set d_pread
: see if pread exists
set
 pread d_pread
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pread.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_time.U,v 3.0 1993/08/18 12:08:45 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_time.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit finds which "time" include to use. If 'timezone' is used by the
?X: program, we also try to find which header should be included. Eventually,
?X: we look for <sys/select.h> if I_SYSSELECT is used, to get struct timeval.
?X:
?MAKE:i_time i_systime i_systimek timeincl d_tm_tm_zone d_tm_tm_gmtoff: \
 Compile cat \
 contains rm_try echo n
 c +i_sysselct Findhdr Hasfield i_stdlib
?MAKE: -pick add $@ %<
?S:i_time:
?S: This variable unconditionally defines I_TIME, which indicates
?S: to the C program that it should include <time.h>.
?S:.
?S:i_systime:
?S: This variable conditionally defines I_SYS_TIME, which indicates
?S: to the C program that it should include <sys/time.h>.
?S:.
?S:i_systimek:
?S: This variable conditionally defines I_SYS_TIME_KERNEL, which
?S: indicates to the C program that it should include <sys/time.h>
?S: with KERNEL defined.
?S:.
?S:timeincl:
?S: This variable holds the full path of the included time header(s).
?S:.
?S:d_tm_tm_zone:
?S: This variable conditionally defines HAS_TM_TM_ZONE, which indicates
?S: to the C program that the struct tm has the tm_zone field.
?S:.
?S:d_tm_tm_gmtoff:
?S: This variable conditionally defines HAS_TM_TM_GMTOFF, which indicates
```

```
?S: to the C program that the struct tm has the tm_gmtoff field.
?S:.
?C:I_TIME (USE_TIME_H):
?C: This symbol is always defined, and indicates
 to the C program that
?C: it should include <time.h>.
?C:.
?C:I_SYS_TIME (I_SYSTIME USE_SYS_TIME_H NO_TIME_WITH_SYS_TIME):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h>.
?C:.
?C:I_SYS_TIME_KERNEL (I_SYSTIMEKERNEL):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/time.h> with KERNEL defined.
?C:.
?C:HAS_TM_TM_ZONE:
?C: This symbol, if defined, indicates to the C program that
?C: the struct tm has a tm_zone field.
?C:.
?C:HAS_TM_TM_GMTOFF:
?C: This symbol, if defined, indicates to the C program that
?C: the struct tm has a tm_gmtoff field.
?C:.
?H:#$i_time I_TIME  /**/
?H:#$i_systime I_SYS_TIME  /**/
?H:#$i_systimek I_SYS_TIME_KERNEL  /**/
?H:#$d_tm_tm_zone HAS_TM_TM_ZONE  /**/
?H:#$d_tm_tm_gmtoff HAS_TM_TM_GMTOFF  /**/
?H:.
?W::timezone
?T:xselect flags sysselect s_timeval s_timezone
?LINT:change i_sysselct
?LINT:set d_tm_tm_zone
?LINT:set d_tm_tm_gmtoff
: see if we should include sys/time.h
echo
 " "
i_time='define'
if test "X$timeincl" = X; then
 echo "Testing to see if we should include <sys/time.h>." >&4
 $echo $n "I'm now running the test program...$c"
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <time.h>
#ifdef I_SYSTIME
#ifdef SYSTIMEKERNEL
#define KERNEL
#endif
```

```
#include <sys/time.h>
#endif
#ifdef I_SYSSELECT
#include <sys/select.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
 struct tm foo;
#ifdef S_TIMEVAL
 struct timeval bar;
#endif
#ifdef S_TIMEZONE
 struct timezone tzp;
#endif
 if (foo.tm_sec == foo.tm_sec)
  exit(0);
#ifdef S_TIMEVAL
 if (bar.tv_sec == bar.tv_sec)
  exit(0);
#endif
 exit(1);
}
EOCP
 flags=''
@if I_SYSSELECT
 if $contains 'timeval.*{' `./findhdr sys/select.h` >/dev/null 2>&1; then
  xselect='-DI_SYSSELECT'
 else
  xselect=''
 fi
@end
@if timezone
 for s_timezone in '-DS_TIMEZONE' ''; do
@else
 s_timezone=''
@end
?X: Every package is given a try with 'struct timeval'
@if I_SYSSELECT
 for sysselect in $xselect
 ''; do
@else
 sysselect=''
@end
 for s_timeval in '-DS_TIMEVAL' ''; do
```

```
 for i_systimek in " '-DSYSTIMEKERNEL'; do
 for i_systime in '-DI_SYSTIME' "; do
  case "$flags" in
  ") $echo $n ".$c"
   set try $i_systime $i_systimek $sysselect $s_timeval $s_timezone
   if eval $compile; then
    set X $i_systime $i_systimek $sysselect $s_timeval
    shift
    flags="$*"
    echo " "
    $echo $n "Succeeded with $flags$c"
   fi
   ;;
  esac
 done
 done
 done
@if I_SYSSELECT
 done
@end
@if timezone
 done
@end
 timeincl="
 echo " "
 case "$flags" in
 *SYSTIMEKERNEL*) i_systimek="$define"
  timeincl=`./findhdr sys/time.h`
  echo "We'll include <sys/time.h> with KERNEL defined." >&4;;
 *) i_systimek="$undef";;
 esac
 case "$flags" in
 *I_SYSTIME*) i_systime="$define"
  timeincl=`./findhdr sys/time.h`" $timeincl"
  echo "We'll include <sys/time.h>." >&4;;
 *) i_systime="$undef";;
 esac
@if I_SYSSELECT
 case "$flags" in
 *I_SYSSELECT*) i_sysselct="$define"
  timeincl=`./findhdr sys/select.h`"
 $timeincl"
  echo "We'll also include <sys/select.h> to get struct timeval." >&4;;
 *) case "$i_sysselct" in
  ") i_sysselct="$undef";;
  esac
 esac
@end
```

```
 $rm_try
fi
: see if struct tm knows about tm_zone
case "$i_systime$i_time" in
*$define*)
	echo " "
	echo "Checking to see if your struct tm has tm_zone field..." >&4
	set d_tm_tm_zone tm tm_zone $i_systime sys/time.h $i_time time.h
	eval $hasfield
	;;
*)	val="$undef"
	set d_tm_tm_zone
	eval $setvar
	;;
esac
case "$d_tm_tm_zone" in
"$define")	echo "Yes, it does."	;;
*)		echo "No, it doesn't." ;;
esac
: see if struct tm knows about tm_gmtoff
case "$i_systime$i_time" in
*$define*)
	echo " "
	echo "Checking to see if your struct tm has tm_gmtoff field..." >&4
	set d_tm_tm_gmtoff tm tm_gmtoff $i_systime sys/time.h $i_time time.h
	eval $hasfield
	;;
*)	val="$undef"
	set d_tm_tm_gmtoff
	eval $setvar

	;;
esac
case "$d_tm_tm_gmtoff" in
"$define")	echo "Yes, it does."	;;
*)		echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/i_time.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorman3dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999-2000, Andy Dougherty
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorman3dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorman3dir vendorman3direxp installvendorman3dir: man3dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorman3dir:
?S: This variable contains the name of the directory for man3
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: man3 pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorman3direxp:
?S: This variable is the ~name expanded version of vendorman3dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorman3dir=''
?S:installvendorman3dir:
?S: This variable is really the same as vendorman3direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorman3dir
: Set the vendorman3dir variables
case "$vendorprefix" in
'') vendorman3dir=''
 vendorman3direxp=''
 ;;
*) : determine where vendor-supplied module manual pages go.
 case "$vendorman3dir" in
 '') dflt=`echo "$man3dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorman3dir ;;
 esac
 case "$dflt" in
 '|' ') dflt=none ;;
 esac
 fn=nd~+
```

```
 rp='Pathname
 for the vendor-supplied manual section 3 pages?'
 . ./getfile
 vendorman3dir="$ans"
 vendorman3direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorman3dir" = "X" && vendorman3dir=' '
prefixvar=vendorman3dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorman3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_finitel: Inlibc
?MAKE: -pick add $@ %<
?S:d_finitel:
?S: This variable conditionally defines the HAS_FINITEL symbol, which
?S: indicates to the C program that the finitel() routine is available.
?S:.
?C:HAS_FINITEL:
?C: This symbol, if defined, indicates that the finitel routine is
?C: available to check whether a long double is finite
?C: (non-infinity non-NaN).
?C:.
?H:#$d_finitel HAS_FINITEL  /**/
?H:.
?LINT:set d_finitel
: see if finitel exists
set finitel d_finitel
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_finitel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Oldconfig.U,v 3.0.1.10 1997/02/28 15:06:39 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
```

```
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Oldconfig.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:06:39  ram
?RCS: patch61: added support for src.U
?RCS: patch61: new OSNAME define
?RCS: patch61: can now sense new OSes
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  13:40:51  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8  1995/05/12  12:04:18  ram
?RCS: patch54: config.sh reload logic now knows about new -K switch
?RCS: patch54: cleaned up and extended osvers for DEC
 OSF/1 (ADO)
?RCS: patch54: added MachTen detection (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:13:41  ram
?RCS: patch51: adapted osvers computation for AIX (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1995/01/30  14:27:15  ram
?RCS: patch49: unit Options.U now exports file optdef.sh, not a variable
?RCS: patch49: update code for myuname changed (WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:15:36  ram
?RCS: patch45: added quotes around the INITPROG variable (ADO)
?RCS: patch45: allows variable overriding after config file loading
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:57:05  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: merged with the version used for perl5's Configure (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:24:17  ram
?RCS: patch23: added support for osf1 hints
?RCS: patch23: new support for solaris and i386 systems (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:05:02  ram
?RCS: patch16: added post-processing on myuname for Xenix targets
?RCS:
 patch16: message proposing config.sh defaults made consistent
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:56:32  ram
?RCS: patch10: force use of config.sh when -d option is used (WAD)
```

```
?RCS: patch10: complain about non-existent hint files (WAD)
?RCS: patch10: added Options dependency for fastread variable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit tries to remember what we did last time we ran Configure, mostly
?X: for the sake of setting defaults.
?X:
?MAKE:Oldconfig hint myuname osname osvers: Instruct Myread uname \
 Checkcc Mksymlinks run \
 sh awk sed test cat rm lns tr n c contains Loc Options Tr src trnl ln
?MAKE: -pick wipe $@ %<
?S:myuname:
?S: The output of 'uname -a' if available, otherwise the hostname.
?S: The whole thing is then lower-cased and slashes and single quotes are
?S: removed.
?S:.
?S:hint:
?S: Gives the type of hints used for previous answers. May be one of
?S: "default",
 "recommended" or "previous".
?S:.
?S:osname:
?S: This variable contains the operating system name (e.g. sunos,
?S: solaris, hpux, etc.).  It can be useful later on for setting
?S: defaults.  Any spaces are replaced with underscores.  It is set
?S: to a null string if we can't figure it out.
?S:.
?S:osvers:
?S: This variable contains the operating system version (e.g.
?S: 4.1.3, 5.2, etc.).  It is primarily used for helping select
?S: an appropriate hints file, but might be useful elsewhere for
?S: setting defaults.  It is set to '' if we can't figure it out.
?S: We try to be flexible about how much of the version number
?S: to keep, e.g. if 4.1.1, 4.1.2, and 4.1.3 are essentially the
?S: same for this package, hints files might just be os_4.0 or
?S: os_4.1, etc., not keeping separate files for each little release.
?S:.
?C:OSNAME:
?C: This symbol contains the name of the operating system, as determined
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests
 from Configure are generally more reliable.
?C:.
?C:OSVERS:
?C: This symbol contains the version of the operating system, as determined
```

```
?C: by Configure.  You shouldn't rely on it too much; the specific
?C: feature tests from Configure are generally more reliable.
?C:.
?H:#define OSNAME "$osname"  /**/
?H:#define OSVERS "$osvers"  /**/
?H:.
?F:!config.sh
?T:tmp tmp_n tmp_c tmp_sh file
?T:xxxxfile xxxfile xxfile xfile hintfile newmyuname
?T:tans _ isesix INITPROG DJGPP
?D:osname="
?LINT:change n c sh
?LINT:extern targetarch
?LINT:extern hostarch
?LINT:change hostarch
?LINT:extern is_os2
: Try to determine whether config.sh was made on this system
case "$config_sh" in
")
?X: indentation wrong on purpose--RAM
?X: Leave a white space between first two '(' for ksh. The sub-shell is needed
?X: on some machines to avoid the error message when uname is not found; e.g.
?X: old SUN-OS 3.2 would not execute hostname in (uname -a || hostname). Sigh!
?X: Now not using a subshell but instead $test.
myuname=`$uname
 -a 2>/dev/null`
$test -z "$myuname" && myuname=`hostname 2>/dev/null`
# Downcase everything to avoid ambiguity.
# Remove slashes and single quotes so we can use parts of this in
# directory and file names.
# Remove newlines so myuname is sane to use elsewhere.
# tr '[A-Z]' '[a-z]' would not work in EBCDIC
# because the A-Z/a-z are not consecutive.
myuname=`echo $myuname | $sed -e "s,['/],,g" | \
 ./tr '[A-Z]' '[a-z]' | $tr $trnl ' '`
?X: Save the value we just computed to reset myuname after we get done here.
newmyuname="$myuname"
dflt=n
case "$knowitall" in
")
 if test -f ../config.sh; then
  if $contains myuname= ../config.sh >/dev/null 2>&1; then
   eval "`grep myuname= ../config.sh`"
  fi
  if test "X$myuname" = "X$newmyuname"; then
   dflt=y
  fi
 fi
```

```
 ;;
*) dflt=y;;
esac

@if {test -d ../hints}
: Get old answers from old config file if Configure was run on the
: same system, otherwise use the hints.
hint=default
cd ..
?X: Since we are now at the root of the source
 tree, we must use $src
?X: to access the sources and not $rsrc. See src.U for details...
if test -f config.sh; then
 echo " "
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . UU/myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it."
  mv config.sh config.sh.old
  myuname="$newmyuname"
  ;;
 *)  echo "Fetching default answers from your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  tmp_sh="$sh"
  . ./config.sh
  cp config.sh UU
  n="$tmp_n"
  c="$tmp_c"
  : Older versions did not always set $sh.  Catch re-use of such
  : an old config.sh.
  case "$sh" in
  ") sh="$tmp_sh" ;;
  esac
  hint=previous
  ;;
 esac
fi
. ./UU/checkcc
if test ! -f config.sh; then
 $cat <<EOM

First time through, eh?  I have some defaults handy for some systems
that need some extra help getting the Configure answers right:

EOM
 (cd $src/hints; ls -C *.sh) | $sed 's/\.sh/   /g' >&4
 dflt="
```

```
: Half the following guesses are probably wrong... If you have better
: tests or hints,
please send them to <MAINTLOC>
: The metaconfig authors would also appreciate a copy...
$test -f /irix && osname=irix
$test -f /xenix && osname=sco_xenix
$test -f /dynix && osname=dynix
$test -f /dnix && osname=dnix
$test -f /lynx.os && osname=lynxos
$test -f /unicos && osname=unicos && osvers=`$uname -r`
$test -f /unicosmk && osname=unicosmk && osvers=`$uname -r`
$test -f /unicosmk.ar && osname=unicosmk && osvers=`$uname -r`
$test -f /bin/mips && /bin/mips && osname=mips
$test -d /usr/apollo/bin && osname=apollo
$test -f /etc/saf/_sactab && osname=svr4
$test -d /usr/include/minix && osname=minix && osvers=`$uname -r`
$test -f /system/gnu_library/bin/ar.pm && osname=vos
$test -f /sys/utilities/MultiView && osname=amigaos
if $test -d /MachTen -o -d /MachTen_Folder; then
?X:  MachTen uname -a output looks like
?X:  xxx 4 0.0 Macintosh
?X:  MachTen /sbin/version output looks like
?X:  MachTen 4.0 Mon Aug 28 10:18:00 1995
?X:  MachTen 3.x had the 'version' command in /usr/etc/version.
  osname=machten
  if
 $test -x /sbin/version; then
   osvers=`/sbin/version | $awk '{print $2}' |
   $sed -e 's/[A-Za-z]$//'`
  elif $test -x /usr/etc/version; then
   osvers=`/usr/etc/version | $awk '{print $2}' |
   $sed -e 's/[A-Za-z]$//'`
  else
   osvers="$2.$3"
  fi
 fi

 $test -f /sys/posix.dll &&
  $test -f /usr/bin/what &&
  set X `/usr/bin/what /sys/posix.dll` &&
  $test "$3" = UWIN &&
  osname=uwin &&
  osvers="$5"

?X: If we have uname, we already computed a suitable uname -a output,
?X: and it lies in $myuname.
 if $test -f $uname; then
  set X $myuname
```

```
  shift

  case "$5" in
  fps*) osname=fps ;;
  mips*)
   case "$4" in
   umips) osname=umips ;;
   *) osname=mips ;;
   esac;;
  [23]100) osname=mips ;;
?X: Interactive Unix.
  i386*)
   tmp=`/bin/uname -X 2>/dev/null|awk '/3\.2v[45]/{ print $(NF) }'`
   if $test "$tmp" != "" -a "$3" = "3.2" -a -f '/etc/systemid'; then
    osname='sco'
    osvers=$tmp
   elif $test -f /etc/kconfig; then
    osname=isc
    if
 test "$lns" = "$ln -s"; then
     osvers=4
    elif $contains _SYSV3 /usr/include/stdio.h > /dev/null 2>&1 ; then
     osvers=3
    elif $contains _POSIX_SOURCE /usr/include/stdio.h > /dev/null 2>&1 ; then
     osvers=2
    fi
   fi
   tmp=''
   ;;
?X: MS-DOS djgpp uname -a output looks like:
?X: ms-dos xxx 6 22 pc
?X:  $1 is the "dos flavor" (need not be "ms-dos").
?X:  $2 is the node name
?X:  $3 and $4 are version/subversion
?X:  $5 is always "pc", but that might not be unique to DJGPP.
?X: (e.g. Solaris_x86 has $5 = i86pc, which doesn't actually conflict,
?X: but it's close enough that I can easily imagine other vendors also
?X: using variants of pc* in $5.)
?X:  The "DJGPP" environment variable is always set when djgpp is active.
  pc*)
   if test -n "$DJGPP"; then
    osname=dos
    osvers=djgpp
   fi
   ;;
  esac

  case "$1" in
```

```
  aix) osname=aix
?X: aix 4.1 uname -a output looks like
?X:  AIX  foo  1 4 000123456789
?X: where $4 is the major release number and $3 is the (minor)
 version.
?X: More detail on the version is available with the oslevel command.
?X: in 3.2.x, it output a string (see case statements below).  In 4.1,
?X: it puts out something like  4.1.1.0
   tmp=`( (oslevel) 2>/dev/null || echo "not found") 2>&1`
   case "$tmp" in
   # oslevel can fail with:
   # oslevel: Unable to acquire lock.
   *not\ found) osvers="$4"."$3" ;;
   '<3240'|'<>3240') osvers=3.2.0 ;;
   '=3240'|'>3240'|'<3250'|'<>3250') osvers=3.2.4 ;;
   '=3250'|'>3250') osvers=3.2.5 ;;
   *) osvers=$tmp;;
   esac
   ;;
  bitrig) osname=bitrig
   osvers="$3"
   ;;
  bsd386) osname=bsd386
   osvers=`$uname -r`
   ;;
  cygwin*) osname=cygwin
   osvers="$3"
   ;;
  *dc.osx) osname=dcosx
   osvers="$3"
   ;;
  dnix) osname=dnix
   osvers="$3"
   ;;
  domainos) osname=apollo
   osvers="$3"
   ;;
  dgux) osname=dgux
   osvers="$3"
   ;;
  dragonfly) osname=dragonfly
   osvers="$3"
   ;;
?X:  uname -a returns
?X:  DYNIX/ptx xxx 4.0 V4.1.2 i386
  dynixptx*) osname=dynixptx
   osvers=`echo
```

```
 "$4"|sed 's/^v//'`
  ;;
  freebsd) osname=freebsd
   osvers="$3" ;;
  genix) osname=genix ;;
?X: GNU/Hurd uname -a gives something like:
?X: GNU foo 0.3 GNU-Mach 1.4/Hurd-0.3 i386-AT386 GNU
?X: GNU gnu 0.3 GNUmach-1.2/Hurd-0.3 i386-AT386 GNU
?X: Note the hostname on the second one, which will fool Configure
?X: into using the SysV case!
  gnu) osname=gnu
   osvers="$3" ;;
?X: HP-UX uname -a gives something like
?X: HP-UX foobar B.10.20 A 9000/735 2016483812 two-user license
?X: Preserve the full 10.20 string instead of the previous plain '10'.
?X:  Thanks to Graham Barr.    --AD 6/30/1998
  hp*) osname=hpux
   osvers=`echo "$3" | $sed 's,.*\.\([0-9]*\.[0-9]*\),\1,'`
   ;;
  irix*) osname=irix
   case "$3" in
   4*) osvers=4 ;;
   5*) osvers=5 ;;
   *) osvers="$3" ;;
   esac
   ;;
  linux) osname=linux
   case "$3" in
   *) osvers="$3" ;;
   esac
   $test -f /system/lib/libandroid.so && osname=linux-android
   ;;
  MiNT) osname=mint
   ;;
  minix) osname=minix
   osvers=`$uname -r`
   ;;
  netbsd*)
 osname=netbsd
   osvers="$3"
   ;;
  news-os) osvers="$3"
   case "$3" in
   4*) osname=newsos4 ;;
   *) osname=newsos ;;
   esac
   ;;
  nonstop-ux) osname=nonstopux ;;
```

```
 openbsd) osname=openbsd
  osvers="$3"
  ;;
 os2) osname=os2
  osvers="$4"
  ;;
 POSIX-BC | posix-bc ) osname=posix-bc
  osvers="$3"
  ;;
 powerux | power_ux | powermax_os | powermaxos | \
 powerunix | power_unix) osname=powerux
  osvers="$3"
  ;;
 qnx) osname=qnx
  osvers="$4"
  ;;
 solaris) osname=solaris
  case "$3" in
  5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
  *) osvers="$3" ;;
  esac
  ;;
 sunos) osname=sunos
  case "$3" in
  5*) osname=solaris
   osvers=`echo $3 | $sed 's/^5/2/g'` ;;
  *) osvers="$3" ;;
  esac
  ;;
 titanos) osname=titanos
  case "$3" in
  1*) osvers=1 ;;
  2*) osvers=2 ;;
  3*) osvers=3 ;;
  4*) osvers=4 ;;
  *) osvers="$3" ;;
  esac
  ;;
 ultrix) osname=ultrix
  osvers="$3"
  ;;
 osf1|mls+) case "$5" in
   alpha)
?X: DEC OSF/1 myuname
 -a output looks like:  osf1 xxxx t3.2 123.4 alpha
?X: where the version number can be something like [xvt]n.n
     osname=dec_osf
?X: sizer knows the minor minor version: the letter
```

```
    osvers=`sizer -v | awk -FUNIX '{print $2}' | awk '{print $1}' |  tr '[A-Z]' '[a-z]' | sed 's/^[xvt]//'`
    case "$osvers" in
    [1-9].[0-9]*) ;;
    *) osvers=`echo "$3" | sed 's/^[xvt]//'` ;;
    esac
    ;;
  hp*) osname=hp_osf1 ;;
  mips) osname=mips_osf1 ;;
?X: hp and mips were unsupported Technology Releases -- ADO, 24/10/94
  esac
  ;;
  # UnixWare 7.1.2 is known as Open UNIX 8
  openunix|unixware) osname=svr5
   osvers="$4"
   ;;
  uts) osname=uts
   osvers="$3"
   ;;
  vos) osvers="$3"
   ;;
  $2) case "$osname" in
   *isc*) ;;
   *freebsd*) ;;
   svr*)
    : svr4.x or possibly later
    case "svr$3" in
    ${osname}*)
     osname=svr$3
     osvers=$4
     ;;
    esac
    case "$osname" in
    svr4.0)
     : Check for ESIX
     if test -f /stand/boot ; then
      eval `grep '^INITPROG=[a-z/0-9]*$'
/stand/boot`
      if test -n "$INITPROG" -a -f "$INITPROG"; then
   isesix=`strings -a $INITPROG|grep 'ESIX SYSTEM V/386 Release 4.0'`
       if test -n "$isesix"; then
        osname=esix4
       fi
      fi
     fi
     ;;
    esac
    ;;
   *) if test -f /etc/systemid; then
```

```
    osname=sco
    set `echo $3 | $sed 's/\./ /g'` $4
    if $test -f $src/hints/sco_$1_$2_$3.sh; then
     osvers=$1.$2.$3
    elif $test -f $src/hints/sco_$1_$2.sh; then
     osvers=$1.$2
    elif $test -f $src/hints/sco_$1.sh; then
     osvers=$1
    fi
   else
    case "$osname" in
    ") : Still unknown.  Probably a generic Sys V.
     osname="sysv"
     osvers="$3"
     ;;
    esac
   fi
   ;;
  esac
  ;;
 *) case "$osname" in
  ") : Still unknown.  Probably a generic BSD.
   osname="$1"
   osvers="$3"
   ;;
  esac
  ;;
 esac
else
?X: Try to identify sony's NEWS-OS (BSD unix)
 if test -f /vmunix -a -f $src/hints/news_os.sh; then
  (what /vmunix | UU/tr '[A-Z]'
'[a-z]') > UU/kernel.what 2>&1
  if $contains news-os UU/kernel.what >/dev/null 2>&1; then
   osname=news_os
  fi
  $rm -f UU/kernel.what
?X: Maybe it's OS/2 or DOS or something similar
 elif test -d c:/. -o -n "$is_os2" ; then
  set X $myuname
  osname=os2
  osvers="$5"
 fi
fi

     case "$targetarch" in
     ") ;;
     *)  hostarch=$osname
```

```
        case "$targetarch" in
            nto*|*-nto-*)
                # Will load qnx.sh, which should change osname to nto
                osname=qnx
                osvers=''
                ;;
            *linux-android*)
                # Catch arm-linux-androideabi, mipsel-linux-android,
                # and i686-linux-android
                osname=linux-android
                osvers=''
                ;;
            *linux*)
                # Something like arm-linux-gnueabihf is really just
                # plain linux.
                osname=linux

                osvers=''
                ;;
            *solaris*|*sunos*)
                osname=solaris
                # XXX perhaps we should just assume
                # osvers to be 2, or maybe take the value
                # from targetarch. Using $run before the
                # hints are run is somewhat icky.
                set X `$run $uname -a 2>/dev/null`
                shift
                case "$3" in
                    5*) osvers=`echo $3 | $sed 's/^5/2/g'` ;;
                    *)  osvers="$3" ;;
                esac
                ;;
            *)
    osname=`echo $targetarch|sed 's,^[^-]*-,,'`
    osvers=''
            ;;
        esac
        ;;
     esac

: Now look for a hint file osname_osvers, unless one has been
: specified already.
case "$hintfile" in
''|' ')
 file=`echo "${osname}_${osvers}" | $sed -e 's%\.%_%g' -e 's%_$%%'`
 : Also try without trailing minor version
numbers.
 xfile=`echo $file | $sed -e 's%_[^_]*$%%'`
```

```
 xxfile=`echo $xfile | $sed -e 's%_[^_]*$%%'`
 xxxfile=`echo $xxfile | $sed -e 's%_[^_]*$%%'`
 xxxxfile=`echo $xxxfile | $sed -e 's%_[^_]*$%%'`
 case "$file" in
 ") dflt=none ;;
 *)  case "$osvers" in
  ") dflt=$file
   ;;
  *)  if $test -f $src/hints/$file.sh ; then
    dflt=$file
   elif $test -f $src/hints/$xfile.sh ; then
    dflt=$xfile
   elif $test -f $src/hints/$xxfile.sh ; then
    dflt=$xxfile
   elif $test -f $src/hints/$xxxfile.sh ; then
    dflt=$xxxfile
   elif $test -f $src/hints/$xxxxfile.sh ; then
    dflt=$xxxxfile
   elif $test -f "$src/hints/${osname}.sh" ; then
    dflt="${osname}"
   else
    dflt=none
   fi
   ;;
  esac
  ;;
 esac
 if $test -f Policy.sh ; then
  case "$dflt" in
  *Policy*) ;;
  none) dflt="Policy" ;;
  *) dflt="Policy $dflt" ;;
  esac
 fi
 ;;
*)
 dflt=`echo $hintfile | $sed 's/\.sh$//'`
 ;;
esac

if $test -f Policy.sh ; then
 $cat <<EOM

There's also
 a Policy hint file available, which should make the
site-specific (policy) questions easier to answer.
EOM
```

```
fi

$cat <<EOM

You may give one or more space-separated answers, or "none" if appropriate.
If you have a handcrafted Policy.sh file or a Policy.sh file generated by a
previous run of Configure, you may specify it as well as or instead of
OS-specific hints.  If hints are provided for your OS, you should use them:
although Perl can probably be built without hints on many platforms, using
hints often improve performance and may enable features that Configure can't
set up on its own. If there are no hints that match your OS, specify "none";
DO NOT give a wrong version or a wrong OS.

EOM

rp="Which of these apply, if any?"
. UU/myread
tans=$ans
for file in $tans; do
 if $test X$file = XPolicy -a -f Policy.sh; then
  . Policy.sh
  $cat Policy.sh >> UU/config.sh
 elif $test -f $src/hints/$file.sh; then
  . $src/hints/$file.sh
  $cat $src/hints/$file.sh >> UU/config.sh
 elif
$test X"$tans" = X -o X"$tans" = Xnone ; then
  : nothing
 else
  : Give one chance to correct a possible typo.
  echo "$file.sh does not exist"
  dflt=$file
  rp="hint to use instead?"
  . UU/myread
  for file in $ans; do
   if $test -f "$src/hints/$file.sh"; then
    . $src/hints/$file.sh
    $cat $src/hints/$file.sh >> UU/config.sh
   elif $test X$ans = X -o X$ans = Xnone ; then
    : nothing
   else
    echo "$file.sh does not exist -- ignored."
   fi
  done
 fi
done

hint=recommended
```

```
 : Remember our hint file for later.
 if $test -f "$src/hints/$file.sh" ; then
  hintfile="$file"
 else
  hintfile=''
 fi
fi
cd UU
?X: From here on, we must use $rsrc instead of $src
@else
: Get old answers, if there is a config file out there
hint=default
hintfile=''
if test -f ../config.sh; then
 echo " "
 rp="I see a config.sh file.  Shall I use it to set the defaults?"
 . ./myread
 case "$ans" in
 n*|N*) echo "OK, I'll ignore it.";;
 *)  echo "Fetching default answers from
 your old config.sh file..." >&4
  tmp_n="$n"
  tmp_c="$c"
  . ../config.sh
  cp ../config.sh .
  n="$tmp_n"
  c="$tmp_c"
  hint=previous
  ;;
 esac
fi
@end
?X: remember, indentation is wrong--RAM
;;
*)
 echo " "
 echo "Fetching default answers from $config_sh..." >&4
 tmp_n="$n"
 tmp_c="$c"
 cd ..
?X: preserve symbolic links, if any
 cp $config_sh config.sh 2>/dev/null
 chmod +w config.sh
 . ./config.sh
 cd UU
 cp ../config.sh .
 n="$tmp_n"
 c="$tmp_c"
```

```
 hint=previous
 ;;
esac
. ./optdef.sh

: Restore computed paths
for file in $loclist $trylist; do
 eval $file="\$_$file"
done

@if osname || osvers
cat << EOM

Configure uses the operating system name and version to set some defaults.
The default value is probably right if the name rings a bell. Otherwise,
since spelling matters for me, either accept the default or answer "none"
to leave it blank.

EOM
@end
@if osname
case "$osname" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *)  dflt=`echo $hintfile | $sed -e 's/\.sh$//'
 -e 's/_.*$//'` ;;
  esac
  ;;
 *) dflt="$osname" ;;
esac
rp="Operating system name?"
. ./myread
case "$ans" in
none)  osname=" ;;
*) osname=`echo "$ans" | $sed -e 's/[  ][ ]*/_/g' | ./tr '[A-Z]' '[a-z]'`;;
esac
@end
@if osvers
@if osname
echo " "
@end
case "$osvers" in
 "|' ')
  case "$hintfile" in
  "|' '|none) dflt=none ;;
  *) dflt=`echo $hintfile | $sed -e 's/\.sh$//' -e 's/^[^_]*//'`
   dflt=`echo $dflt | $sed -e 's/^_//' -e 's/_/./g'`
```

```
   case "$dflt" in
   "|' ') dflt=none ;;
   esac
   ;;
  esac
  ;;
 *) dflt="$osvers" ;;
esac
rp="Operating system version?"
. ./myread
case "$ans" in
none)  osvers=" ;;
*) osvers="$ans" ;;
esac

@end

. ./posthint.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Oldconfig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nis.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:17:38  ram
?RCS: patch61: ensure suitable defaults for hostcat and friends
?RCS:
?RCS: Revision 3.0.1.2  1995/03/21  08:48:34  ram
?RCS: patch52: continued fix for NeXT NIS/NetInfo handling
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:16:23  ram
?RCS: patch51: now correctly handles NeXT using NIS rather than NetInfo
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:passcat groupcat hostcat:
```

```
 Myread Oldconfig test contains
?MAKE: -pick add $@ %<
?S:passcat:
?S: This variable contains a command that produces the text of the
?S: /etc/passwd file.  This is normally "cat /etc/passwd", but can be
?S: "ypcat passwd" when NIS is used.
?S:.
?S:groupcat:
?S: This variable contains a command that produces the text of the
?S: /etc/group file.  This is normally "cat /etc/group", but can be
?S: "ypcat group" when NIS is used.
?S:.
?S:hostcat:
?S: This variable contains a command that produces the text of the
?S: /etc/hosts file.  This is normally "cat /etc/hosts", but can be
?S: "ypcat hosts" when NIS is used.
?S:.
: see if we have to deal with yellow pages, now NIS.
?X: NeXT gives us some fun here, as always, by having both NIS (former YP)
?X: and NetInfo. But since it has both, it's ok to put the test inside the if.
?X: Contributed by Thomas Neumann <tom@smart.bo.open.de>.
if $test -d /usr/etc/yp || $test -d /etc/yp || $test -d /usr/lib/yp; then
 if $test -f /usr/etc/nibindd; then
  echo
 " "
  echo "I'm fairly confident you're on a NeXT."
@if passcat || groupcat
  echo " "
  rp='Do you get the passwd file via NetInfo?'
  dflt=y
  case "$passcat" in
  nidump*) ;;
  ") ;;
  *) dflt=n;;
  esac
  . ./myread
  case "$ans" in
  y*) passcat='nidump passwd .'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='nidump group .'
@end
   ;;
  *) echo "You told me, so don't blame me."
   case "$passcat" in
   nidump*) passcat="
@if groupcat
     groupcat=";;
```

```
@end
   esac
@if groupcat
   echo "(Assuming /etc/group is handled the same way.)"
@end
   ;;
  esac
@end
@if hostcat
  echo " "
  rp='Do you get the hosts file via NetInfo?'
  dflt=y
  case "$hostcat" in
  nidump*) ;;
  ") ;;
  *) dflt=n;;
  esac
  . ./myread
  case "$ans" in
  y*) hostcat='nidump hosts .';;
  *) case "$hostcat" in
   nidump*) hostcat=";;
   esac
   ;;
  esac
@end
 fi
@if passcat || groupcat
 case "$passcat" in
 nidump*) ;;
 *)
  case "$passcat" in
  *ypcat*) dflt=y;;
  ")
 if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the passwd file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) passcat='ypcat passwd'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
```

```
   groupcat='ypcat group'
@end
   ;;
  *) passcat='cat /etc/passwd'
@if groupcat
   echo "(Assuming /etc/group is also local.)"
   groupcat='cat /etc/group'
@end
   ;;
  esac
  ;;
 esac
@end
@if hostcat
 case "$hostcat" in
 nidump*) ;;
 *)
  case "$hostcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the hosts file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) hostcat='ypcat hosts';;
  *) hostcat='cat /etc/hosts';;
  esac
  ;;
 esac
@end
fi
?X: Ensure suitable default -- Manoj Srivastava
case "$hostcat" in
") hostcat=':'
 $test -f /etc/hosts && hostcat='cat
 /etc/hosts';;
esac
case "$groupcat" in
") groupcat=':'
 $test -f /etc/group && groupcat='cat /etc/group';;
esac
case "$passcat" in
```

```
") passcat=':'
 $test -f /etc/passwd && passcat='cat /etc/passwd';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/nis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:use64bitint use64bitall archname64: Myread Oldconfig Setvar test \
 usemorebits longsize ccflags d_quad uquadtype Compile rm_try run
?MAKE: -pick add $@ %<
?Y:TOP
?S:use64bitint:
?S: This variable conditionally defines the USE_64_BIT_INT symbol,
?S: and indicates that 64-bit integer types should be used
?S: when available.  The minimal possible 64-bitness
?S: is employed, just enough to get 64-bit integers into Perl.
?S: This may mean using for example "long longs", while your memory
?S: may still be limited to 2 gigabytes.
?S:.
?S:use64bitall:
?S: This variable conditionally defines the USE_64_BIT_ALL symbol,
?S: and indicates that 64-bit integer types should be used
?S: when available.  The maximal
 possible
?S: 64-bitness is employed: LP64 or ILP64, meaning that you will
?S: be able to use more than 2 gigabytes of memory.  This mode is
?S: even more binary incompatible than USE_64_BIT_INT. You may not
?S: be able to run the resulting executable in a 32-bit CPU at all or
?S: you may need at least to reboot your OS to 64-bit mode.
?S:.
?S:archname64:
?S: This variable is used for the 64-bitness part of $archname.
?S:.
?C:USE_64_BIT_INT:
?C: This symbol, if defined, indicates that 64-bit integers should
?C: be used when available.  If not defined, the native integers
?C: will be employed (be they 32 or 64 bits).  The minimal possible
?C: 64-bitness is used, just enough to get 64-bit integers into Perl.
?C: This may mean using for example "long longs", while your memory
?C: may still be limited to 2 gigabytes.
```

```
?C:.
?C:USE_64_BIT_ALL:
?C: This symbol, if defined, indicates that 64-bit integers should
?C: be used when available.  If not defined, the native integers
?C: will be used (be
 they 32 or 64 bits).  The maximal possible
?C: 64-bitness is employed: LP64 or ILP64, meaning that you will
?C: be able to use more than 2 gigabytes of memory.  This mode is
?C: even more binary incompatible than USE_64_BIT_INT. You may not
?C: be able to run the resulting executable in a 32-bit CPU at all or
?C: you may need at least to reboot your OS to 64-bit mode.
?C:.
?H:?%<:#ifndef USE_64_BIT_INT
?H:?%<:#$use64bitint USE_64_BIT_INT  /**/
?H:?%<:#endif
?H:?%<:#ifndef USE_64_BIT_ALL
?H:?%<:#$use64bitall USE_64_BIT_ALL  /**/
?H:?%<:#endif
?H:.
?INIT:archname64="
?LINT:extern ccflags
?LINT:use usemorebits
?LINT:extern use64bits
?LINT:extern uselonglong
?LINT:extern uselonglongs
?LINT:extern use64bitints
?LINT:extern use64bitsint
?LINT:extern use64bitsall
?T:libcquad
?F:!try
?F:!use64bitint.cbu
?F:!use64bitall.cbu
: Do we want 64bit support
case "$uselonglong" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duselonglong is deprecated, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case
 "$use64bits" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** Configure -Duse64bits is deprecated, using -Duse64bitint instead.
```

```
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitints" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitints, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitsint" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitsint, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$uselonglongs" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duselonglongs, using -Duse64bitint instead.
EOM
 use64bitint="$define"
 ;;
esac
case "$use64bitsall" in
"$define"|true|[yY]*)
 cat <<EOM >&4

*** There is no Configure -Duse64bitsall, using -Duse64bitall instead.
EOM
 use64bitall="$define"
 ;;
esac

case "$ccflags" in
*-DUSE_LONG_LONG*|*-DUSE_64_BIT_INT*|*-DUSE_64_BIT_ALL*) use64bitint="$define";;
esac
case "$use64bitall" in
"$define"|true|[yY]*)
 use64bitint="$define" ;;
esac
```

```
case "$longsize" in
8) cat <<EOM

You have natively 64-bit long integers.
EOM
  val="$define"
  ;;
*) case "$use64bitint" in
  "$define"|true|[yY]*) dflt='y';;
  *) dflt='n';;
  esac
  case "$d_quad" in
  "$define") ;;
  *) dflt='n' ;;
  esac
  cat <<EOM

Perl can be built to take advantage of 64-bit integer types
on some systems.  To do so, Configure can be run with -Duse64bitint.
Choosing this option will most probably introduce binary incompatibilities.

If this doesn't make any sense to you, just accept the default '$dflt'.
(The default has been chosen based on your configuration.)
EOM
  rp='Try to use 64-bit integers, if available?'
  . ./myread
  case "$ans" in
  [yY]*) val="$define" ;;
  *)     val="$undef"  ;;
  esac
  ;;
esac
set use64bitint
eval $setvar

case "$use64bitall" in
"$define"|true|[yY]*) dflt='y' ;;
*) case "$longsize" in
  8) dflt='y' ;;
  *) dflt='n' ;;
  esac
  ;;
esac
cat <<EOM

You may also
```

```
 choose to try maximal 64-bitness.  It means using as much
64-bitness as possible on the platform.  This in turn means even more
binary incompatibilities.  On the other hand, your platform may not
have any more 64-bitness available than what you already have chosen.

If this doesn't make any sense to you, just accept the default '$dflt'.
(The default has been chosen based on your configuration.)
EOM
rp='Try to use maximal 64-bit support, if available?'
. ./myread
case "$ans" in
[yY]*) val="$define" ;;
*)     val="$undef"  ;;
esac
set use64bitall
eval $setvar
case "$use64bitall" in
"$define")
 case "$use64bitint" in
 "$undef")
  cat <<EOM

Since you have chosen a maximally 64-bit build, I'm also turning on
the use of 64-bit integers.
EOM
  use64bitint="$define" ;;
 esac
 ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a 64-bit perl is to be built,
: we may need to set or change some other defaults.
if $test -f use64bitint.cbu; then
 echo "Your
 platform has some specific hints regarding 64-bit integers, using them..."
 . ./use64bitint.cbu
fi
case "$use64bitint" in
"$define"|true|[yY]*)
 : This test was common to all the OpenBSD forks, and seems harmless for
 : other platforms:
 echo " "
 echo "Checking if your C library has broken 64-bit functions..." >&4
 cat >try.c <<EOCP
#include <stdio.h>
typedef $uquadtype myULL;
int main (void)
```

```
{
  struct {
 double d;
 myULL  u;
  } *p, test[] = {
 {4294967303.15, 4294967303ULL},
 {4294967294.2,  4294967294ULL},
 {4294967295.7,  4294967295ULL},
 {0.0, 0ULL}
  };
  for (p = test; p->u; p++) {
 myULL x = (myULL)p->d;
 if (x != p->u) {
    printf("buggy\n");
    return 0;
 }
  }
  printf("ok\n");
  return 0;
}
EOCP
 set try
 if eval $compile_ok; then
    libcquad=`$run ./try`
    echo "Your C library's 64-bit functions are $libcquad."
 else
    echo "(I can't seem to compile the test program.)"
    echo "Assuming that your C library's 64-bit functions are ok."
    libcquad="ok"
 fi
 $rm_try

 case
 "$libcquad" in
    buggy*)
  cat >&4 <<EOM

*** You have a C library with broken 64-bit functions.
*** 64-bit support does not work reliably in this configuration.
*** Please rerun Configure without -Duse64bitint and/or -Dusemorebits.
*** Cannot continue, aborting.

EOM
  exit 1
  ;;
 esac
 case "$longsize" in
 4) case "$archname64" in
```

```
    ") archname64=64int ;;
    esac
    ;;
 esac
 ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that a maximally 64-bit perl is to be built,
: we may need to set or change some other defaults.
if $test -f use64bitall.cbu; then
 echo "Your platform has some specific hints regarding 64-bit builds, using them..."
 . ./use64bitall.cbu
fi
case "$use64bitall" in
"$define"|true|[yY]*)
 case "$longsize" in
 4) case "$archname64" in
    "|64int) archname64=64all ;;
    esac
    ;;
 esac
 ;;
esac

case "$d_quad:$use64bitint" in
$undef:$define)
 cat >&4 <<EOF

*** You have chosen to use 64-bit
 integers,
*** but none can be found.
*** Please rerun Configure without -Duse64bitint and/or -Dusemorebits.
*** Cannot continue, aborting.

EOF
 exit 1
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/use64bits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_select.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_select.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_select: Inlibc
?MAKE: -pick add $@ %<
?S:d_select:
?S: This variable conditionally defines HAS_SELECT if select() is
?S: available to select active file descriptors. A <sys/time.h>
?S: inclusion may be necessary for the timeout field.
?S:.
?C:HAS_SELECT:
?C: This symbol, if defined, indicates that the select routine is
?C: available
 to select active file descriptors. If the timeout field
?C: is used, <sys/time.h> may need to be included.
?C:.
?H:#$d_select HAS_SELECT /**/
?H:.
?LINT:set d_select
: see if select exists
set select d_select
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_select.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ctime_r ctime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_ctime_r:
?S: This variable conditionally defines the HAS_CTIME_R symbol,
?S: which indicates to the C program that the ctime_r()
```

```
?S: routine is available.
?S:.
?S:ctime_r_proto:
?S: This variable encodes the prototype of ctime_r.
?S: It is zero if d_ctime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctime_r
?S: is defined.
?S:.
?C:HAS_CTIME_R:
?C: This symbol, if defined, indicates that the ctime_r routine
?C: is available to ctime re-entrantly.
?C:.
?C:CTIME_R_PROTO:
?C: This
 symbol encodes the prototype of ctime_r.
?C: It is zero if d_ctime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ctime_r
?C: is defined.
?C:.
?H:#$d_ctime_r HAS_CTIME_R /**/
?H:#define CTIME_R_PROTO $ctime_r_proto /**/
?H:.
?T:try hdrs d_ctime_r_proto
: see if ctime_r exists
set ctime_r d_ctime_r
eval $inlibc
case "$d_ctime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_ctime_r_proto:$usethreads" in
 ":define") d_ctime_r_proto=define
  set d_ctime_r_proto ctime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ctime_r_proto" in
 define)
 case "$ctime_r_proto" in
 "|0) try='char* ctime_r(const time_t*, char*);'
 ./protochk "$extern_C $try" $hdrs && ctime_r_proto=B_SB ;;
 esac
 case "$ctime_r_proto" in
 "|0) try='char* ctime_r(const time_t*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && ctime_r_proto=B_SBI ;;
 esac
 case "$ctime_r_proto" in
 "|0) try='int ctime_r(const
```

```
 time_t*, char*);'
 ./protochk "$extern_C $try" $hdrs && ctime_r_proto=I_SB ;;
 esac
 case "$ctime_r_proto" in
 "|0) try='int ctime_r(const time_t*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && ctime_r_proto=I_SBI ;;
 esac
 case "$ctime_r_proto" in
 "|0) d_ctime_r=undef
  ctime_r_proto=0
  echo "Disabling ctime_r, cannot determine prototype." >&4 ;;
 * ) case "$ctime_r_proto" in
  REENTRANT_PROTO*) ;;
  *) ctime_r_proto="REENTRANT_PROTO_$ctime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "ctime_r has no prototype, not using it." >&4 ;;
  esac
  d_ctime_r=undef
  ctime_r_proto=0
  ;;
 esac
 ;;
*) ctime_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ctime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pathconf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pathconf.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:54  ram
```

```
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_pathconf d_fpathconf: Inlibc
?MAKE: -pick add $@ %<
?S:d_pathconf:
?S: This variable conditionally defines the HAS_PATHCONF symbol, which
?S: indicates to the C program that the pathconf() routine is available
?S: to determine file-system related limits and options
 associated
?S: with a given filename.
?S:.
?S:d_fpathconf:
?S: This variable conditionally defines the HAS_FPATHCONF symbol, which
?S: indicates to the C program that the pathconf() routine is available
?S: to determine file-system related limits and options associated
?S: with a given open file descriptor.
?S:.
?C:HAS_PATHCONF:
?C: This symbol, if defined, indicates that pathconf() is available
?C: to determine file-system related limits and options associated
?C: with a given filename.
?C:.
?C:HAS_FPATHCONF:
?C: This symbol, if defined, indicates that pathconf() is available
?C: to determine file-system related limits and options associated
?C: with a given open file descriptor.
?C:.
?H:#$d_pathconf HAS_PATHCONF  /**/
?H:#$d_fpathconf HAS_FPATHCONF  /**/
?H:.
?LINT:set d_pathconf
?LINT:set d_fpathconf
: see if pathconf exists
set pathconf d_pathconf
eval $inlibc

@if d_fpathconf || HAS_FPATHCONF
: see if fpathconf exists
set fpathconf d_fpathconf
eval $inlibc

@end
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pathconf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_lseekproto: Hasproto i_systypes i_unistd
?MAKE: -pick add $@ %<
?S:d_lseekproto:
?S: This variable conditionally defines the HAS_LSEEK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the lseek() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_LSEEK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the lseek() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern
 off_t lseek(int, off_t, int);
?C:.
?H:#$d_lseekproto HAS_LSEEK_PROTO /**/
?H:.
?LINT:set d_lseekproto
: see if prototype for lseek is available
echo " "
set d_lseekproto lseek $i_systypes sys/types.h $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_lseekproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysselct.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysselct.U,v $
```

```
?RCS: Revision 3.0.1.1  1993/08/25  14:01:33  ram
?RCS: patch6: added default for i_sysselct
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Look wether <sys/select.h> exists
?X:
?MAKE:i_sysselct: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysselct:
?S: This variable conditionally defines I_SYS_SELECT, which indicates
?S: to the C program that it should include <sys/select.h> in
 order to
?S: get the definition of struct timeval.
?S:.
?C:I_SYS_SELECT (I_SYSSELECT):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/select.h> in order to get definition of struct timeval.
?C:.
?H:#$i_sysselct I_SYS_SELECT /**/
?H:.
?D:i_sysselct="
?LINT:set i_sysselct
: see if sys/select.h has to be included
set sys/select.h i_sysselct
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysselct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_endpwent.U,v $
?RCS:
?MAKE:d_endpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endpwent:
?S: This variable conditionally defines the HAS_ENDPWENT symbol, which
?S: indicates to the C program that the endpwent() routine is available
?S: for sequential access of the passwd database.
```

```
?S:.
?C:HAS_ENDPWENT:
?C: This symbol, if defined, indicates that the endpwent routine is
?C: available for finalizing sequential access of the passwd database.
?C:.
?H:#$d_endpwent HAS_ENDPWENT  /**/
?H:.
?LINT:set d_endpwent
: see if endpwent exists
set endpwent d_endpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Options.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:08:15  ram
?RCS: patch61: optdef.sh now starts with a "startsh"
?RCS: patch61: moved some code from Head.U
?RCS:
?RCS: Revision 3.0.1.6  1995/09/25  09:14:46  ram
?RCS: patch59: protected option parsing code against 'echo -*' option failure
?RCS:
?RCS: Revision 3.0.1.5  1995/05/12  12:04:52  ram
?RCS: patch54: added -K option for experts
?RCS:
?RCS: Revision 3.0.1.4  1995/01/30  14:27:52  ram
?RCS: patch49: this unit now exports file optdef.sh,
 not a variable
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:19:00  ram
?RCS: patch45: new -O option allowing -D and -U to override config.sh settings
?RCS: patch45: file optdef.sh is no longer removed after sourcing
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  15:58:06  ram
?RCS: patch36: ensure option definition file is removed before appending
?RCS: patch36: protect variable definitions with spaces in them
```

```
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:55:44  ram
?RCS: patch30: now uses new me symbol to tag error messages
?RCS: patch30: new -D and -U options to define/undef symbols (JHI)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Command line parsing. It is really important that the variables used here
?X: be not listed in the MAKE line, or they will be saved in config.sh and
?X: loading this file to fetch default answers would clobber the values set
?X: herein.
?X:
?MAKE:Options: startsh
?MAKE: -pick wipe $@ %<
?V:reuseval
 alldone error realsilent silent extractsh fastread \
 override knowitall: config_sh
?T:arg argn symbol config_arg0 config_args config_argc xxx yyy zzz uuu
?T:args_exp args_sep arg_exp
?F:!Configure
?F:./optdef.sh ./cmdline.opt ./posthint.sh ./cmdl.opt
: Save command line options in file UU/cmdline.opt for later use in
: generating config.sh.
?X: This temporary file will be read by Oldsym.U.  I used a temporary
?X: file to preserve all sorts of potential command line quotes and
?X: also because we don't know in advance how many variables we'll
?X: need, so I can't actually declare them on the MAKE line.
?X: The config_args variable won't be quite correct if Configure is
?X: fed something like    ./Configure -Dcc="gcc -B/usr/ccs/bin/"
?X: since the quotes are gone by the time we see them.  You'd have to
?X: reconstruct the command line from the config_arg? lines, but since
?X: I don't imagine anyone actually having to do that, I'm not going
?X: to worry too much.
cat > cmdline.opt
 <<EOSH
: Configure command line arguments.
config_arg0='$0'
config_args='$*'
config_argc=$#
EOSH
argn=1
args_exp=''
args_sep=''
for arg in "$@"; do
 cat >>cmdline.opt <<EOSH
config_arg$argn='$arg'
```

```
EOSH
?X: Extreme backslashitis: replace each ' by '''''
 cat <<EOC | sed -e "s/'/'''''''''''''''/g" > cmdl.opt
$arg
EOC
 arg_exp=`cat cmdl.opt`
 args_exp="$args_exp$args_sep'$arg_exp'"
 argn=`expr $argn + 1`
 args_sep=' '
done
?X: args_exp is good for restarting self: eval "set X $args_exp"; shift; $0 "$@"
?X: used by hints/os2.sh in Perl, for instance
rm -f cmdl.opt

: produce awk script to parse command line options
cat >options.awk <<'EOF'
BEGIN {
 optstr = "A:dD:eEf:hKOrsSU:V"; # getopt-style specification

 len = length(optstr);
 for (i = 1; i <= len; i++) {
  c = substr(optstr, i, 1);
?X: some older awk's do not have the C ?: construct
  if (i < len) a = substr(optstr, i + 1, 1); else a = "";
  if (a == ":") {
   arg[c] = 1;
   i++;
  }
  opt[c] = 1;
 }
}
{
 expect = 0;
 str = $0;
 if (substr(str,
 1, 1) != "-") {
  printf("'%s'\n", str);
  next;
 }
 len = length($0);
 for (i = 2; i <= len; i++) {
  c = substr(str, i, 1);
  if (!opt[c]) {
   printf("-%s\n", substr(str, i));
   next;
  }
  printf("-%s\n", c);
  if (arg[c]) {
```

```
   if (i < len)
    printf("'%s'\n", substr(str, i + 1));
   else
    expect = 1;
   next;
  }
 }
}
END {
 if (expect)
  print "?";
}
EOF

: process the command line options
?X: Use "$@" to keep arguments with spaces in them from being split apart.
?X: For the same reason, awk will output quoted arguments and the final eval
?X: removes them and sets a proper $* array. An 'X' is prependend to each
?X: argument before being fed to echo to guard against 'echo -x', where -x
?X: would be understood as an echo option! It is removed before feeding awk.
set X `for arg in "$@"; do echo "X$arg"; done |
 sed -e s/X// | awk -f options.awk`
eval "set $*"
shift
rm -f options.awk

: set up default values
fastread=''
reuseval=false
config_sh=''
alldone=''
error=''
silent=''
extractsh=''
override=''
knowitall=''
rm
 -f optdef.sh posthint.sh
cat >optdef.sh <<EOS
$startsh
EOS

?X:
?X: Given that we now have the possibility to execute Configure remotely
?X: thanks to the new src.U support, we have to face the possibility
?X: of having to ask where the source lie, which means we need the Myread.U
?X: stuff and possibly other things that might echo something on the
?X: screen...
```

```
?X:
?X: That's not pretty, and might be confusing in 99% of the time. So...
?X: We introduce a new realsilent variable which is set when -s is given,
?X: and we force silent=true if -S is supplied. The Extractall.U unit
?X: will then undo the >&4 redirection based on the value of the
?X: realsilent variable... -- RAM, 18/93/96
?X:

: option parsing
while test $# -gt 0; do
 case "$1" in
 -d) shift; fastread=yes;;
 -e) shift; alldone=cont;;
 -f)
  shift
  cd ..
  if test -r "$1"; then
   config_sh="$1"
  else
   echo "$me: cannot read config file $1." >&2
   error=true
  fi
  cd UU
  shift;;
 -h)
 shift; error=true;;
 -r) shift; reuseval=true;;
 -s) shift; silent=true; realsilent=true;;
 -E) shift; alldone=exit;;
 -K) shift; knowitall=true;;
 -O) shift; override=true;;
 -S) shift; silent=true; extractsh=true;;
 -D)
  shift
  case "$1" in
  *=)
   echo "$me: use '-U symbol=', not '-D symbol='." >&2
   echo "$me: ignoring -D $1" >&2
   ;;
  *=*) echo "$1" | \
    sed -e "s/'/'\''\''/g" -e "s/=\(.*\)/='\1'/" >> optdef.sh;;
  *) echo "$1='define'" >> optdef.sh;;
  esac
  shift
  ;;
 -U)
  shift
  case "$1" in
```

```
 *=) echo "$1" >> optdef.sh;;
 *=*)
  echo "$me: use '-D symbol=val', not '-U symbol=val'." >&2
  echo "$me: ignoring -U $1" >&2
  ;;
 *) echo "$1='undef'" >> optdef.sh;;
 esac
 shift
 ;;
-A)
   shift
   xxx=''
   yyy="$1"
   zzz=''
   uuu=undef
   case "$yyy" in
        *=*) zzz=`echo "$yyy"|sed 's!=.*!!'`
             case "$zzz" in
             *:*) zzz='' ;;
             *)   xxx=append
                  zzz=' '`echo
"$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             esac
             ;;
        esac
        case "$xxx" in
        '')  case "$yyy" in
             *:*) xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'`
                  zzz=`echo "$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             *)   xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'` ;;
             esac
             ;;
        esac
   case "$xxx" in
   append)
 echo "$yyy=\"\${$yyy}$zzz\"" >> posthint.sh ;;
   clear)
 echo "$yyy=''"   >> posthint.sh ;;
   define)
       case "$zzz" in
 '') zzz=define ;;
 esac
 echo "$yyy='$zzz'"  >> posthint.sh ;;
   eval)
```

```
 echo "eval \"$yyy=$zzz\"" >> posthint.sh ;;
    prepend)
 echo "$yyy=\"$zzz\${$yyy}\"" >> posthint.sh ;;
    undef)
        case "$zzz" in
 ")
zzz="$uuu" ;;
 esac
 echo "$yyy=$zzz"  >> posthint.sh ;;
          *)  echo "$me: unknown -A command '$xxx', ignoring -A $1" >&2 ;;
    esac
    shift
    ;;
-V) echo "$me generated by metaconfig <VERSION> PL<PATCHLEVEL>." >&2
    exit 0;;
--) break;;
-*) echo "$me: unknown option $1" >&2; shift; error=true;;
*) break;;
esac
done

case "$error" in
true)
 cat >&2 <<EOM
Usage: $me [-dehrsEKOSV] [-f config.sh] [-D symbol] [-D symbol=value]
               [-U symbol] [-U symbol=] [-A command:symbol...]
 -d : use defaults for all answers.
 -e : go on without questioning past the production of config.sh.
 -f : specify an alternate default configuration file.
 -h : print this help message and exit (with an error status).
 -r : reuse C symbols value if possible (skips costly nm extraction).
 -s : silent mode, only echoes questions and essential information.
 -D : define symbol to have some value:
       -D symbol         symbol gets the value 'define'
       -D symbol=value
  symbol gets the value 'value'
 -E : stop at the end of questions, after having produced config.sh.
 -K : do not use unless you know what you are doing.
 -O : let -D and -U override definitions from loaded configuration file.
 -S : perform variable substitutions on all .SH files (can mix with -f)
 -U : undefine symbol:
       -U symbol    symbol gets the value 'undef'
       -U symbol=   symbol gets completely empty
 -A : manipulate symbol after the platform specific hints have been applied:
  -A symbol=value  append " "value to symbol
  -A append:symbol=value  append value to symbol
  -A define:symbol=value  define symbol to have value
       -A clear:symbol  define symbol to be "
```

```
  -A define:symbol  define symbol to be 'define'
  -A eval:symbol=value  define symbol to be eval of value
  -A prepend:symbol=value prepend value to symbol
  -A undef:symbol  define symbol to be 'undef'
  -A undef:symbol=  define symbol to be ''
 -V : print version number and exit (with
 a zero status).
EOM
 exit 1
 ;;
esac

?X:
?X: Unless they specified either -S or both -d and -e/E, make sure we're
?X: running interactively, i.e. attached to a terminal. Moved from Head.U to
?X: be able to handle batch configurations...
?X:
?X: We have to hardwire the Configure name and cannot use $me, since if they
?X: said 'sh <Configure', then $me is 'sh'...
?X:
: Sanity checks
case "$fastread$alldone" in
yescont|yesexit) ;;
*)
 case "$extractsh" in
 true) ;;
 *)
  if test ! -t 0; then
   echo "Say 'sh Configure', not 'sh <Configure'"
   exit 1
  fi
  ;;
 esac
 ;;
esac

?X: In silent mode, the standard output is closed. Questions are asked by
?X: outputing on file descriptor #4, which is the original stdout descriptor.
?X: This filters out all the "junk", since all the needed information is written
?X: on #4. Note that ksh will not let us redirect output if the file descriptor
?X: has not be defined yet, unlike sh, hence the following line...--RAM.
exec 4>&1
case "$silent" in
true)
 exec 1>/dev/null;;
esac

: run the defines and the undefines, if any, but leave the file out there...
```

```
touch optdef.sh
. ./optdef.sh
: create the posthint manipulation script and leave the file out there...
?X: this file will be perused by Oldconfig.U
touch posthint.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Options.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_pwd.U,v 3.0.1.2 1995/07/25 14:10:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_pwd.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:10:57  ram
?RCS: patch56: use setvar so hint file values can override our guesses (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:03:27  ram
?RCS: patch23: had forgotten cppminus in cppstdin test (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks whether there is a pwd system or not
?X:
?MAKE:i_pwd d_pwquota d_pwage d_pwchange
 d_pwclass d_pwexpire \
 d_pwgecos d_pwpasswd d_pwcomment: \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_pwd:
?S: This variable conditionally defines I_PWD, which indicates
?S: to the C program that it should include <pwd.h>.
?S:.
?S:d_pwquota:
?S: This variable conditionally defines PWQUOTA, which indicates
?S: that struct passwd contains pw_quota.
?S:.
?S:d_pwage:
?S: This variable conditionally defines PWAGE, which indicates
```

```
?S: that struct passwd contains pw_age.
?S:.
?S:d_pwchange:
?S: This variable conditionally defines PWCHANGE, which indicates
?S: that struct passwd contains pw_change.
?S:.
?S:d_pwclass:
?S: This variable conditionally defines PWCLASS, which indicates
?S: that struct passwd contains pw_class.
?S:.
?S:d_pwexpire:
?S: This variable conditionally defines PWEXPIRE, which indicates
?S: that struct passwd contains pw_expire.
?S:.
?S:d_pwcomment:
?S: This variable conditionally defines PWCOMMENT, which indicates
?S: that
 struct passwd contains pw_comment.
?S:.
?S:d_pwgecos:
?S: This variable conditionally defines PWGECOS, which indicates
?S: that struct passwd contains pw_gecos.
?S:.
?S:d_pwpasswd:
?S: This variable conditionally defines PWPASSWD, which indicates
?S: that struct passwd contains pw_passwd.
?S:.
?C:I_PWD:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <pwd.h>.
?C:.
?C:PWQUOTA:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_quota.
?C:.
?C:PWAGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_age.
?C:.
?C:PWCHANGE:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_change.
?C:.
?C:PWCLASS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_class.
?C:.
?C:PWEXPIRE:
```

```
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_expire.
?C:.
?C:PWCOMMENT:
?C: This
 symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_comment.
?C:.
?C:PWGECOS:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_gecos.
?C:.
?C:PWPASSWD:
?C: This symbol, if defined, indicates to the C program that struct passwd
?C: contains pw_passwd.
?C:.
?H:#$i_pwd I_PWD  /**/
?H:#$d_pwquota PWQUOTA /**/
?H:#$d_pwage PWAGE /**/
?H:#$d_pwchange PWCHANGE /**/
?H:#$d_pwclass PWCLASS /**/
?H:#$d_pwexpire PWEXPIRE /**/
?H:#$d_pwcomment PWCOMMENT /**/
?H:#$d_pwgecos PWGECOS /**/
?H:#$d_pwpasswd PWPASSWD /**/
?H:.
?LINT: set i_pwd d_pwquota d_pwage d_pwchange d_pwclass d_pwexpire d_pwcomment
?LINT: set d_pwgecos d_pwpasswd
?T:xxx
: see if this is a pwd.h system
set pwd.h i_pwd
eval $inhdr

case "$i_pwd" in
$define)
 xxx=`./findhdr pwd.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'pw_quota' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwquota
 eval $setvar

 if $contains 'pw_age'
```

```
$$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwage
eval $setvar

if $contains 'pw_change' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwchange
eval $setvar

if $contains 'pw_class' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwclass
eval $setvar

if $contains 'pw_expire' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwexpire
eval $setvar

if $contains 'pw_comment' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwcomment
eval $setvar

if $contains 'pw_gecos' $$.h >/dev/null 2>&1; then
 val="$define"
else
 val="$undef"
fi
set d_pwgecos
eval $setvar
```

```
 if $contains 'pw_passwd' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_pwpasswd
 eval $setvar

 $rm -f $$.h
 ;;
*)
 val="$undef";
 set d_pwquota; eval $setvar
 set d_pwage; eval $setvar
 set d_pwchange; eval $setvar
 set d_pwclass; eval $setvar
 set
 d_pwexpire; eval $setvar
 set d_pwcomment; eval $setvar
 set d_pwgecos; eval $setvar
 set d_pwpasswd; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_pwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_times.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:50  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:14:00  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?X:
?X: What is the type returned by times() ?
?X:
?X: Force inclusion of <sys/types.h>
?X:INC: i_systypes
?MAKE:d_times clocktype: Csym Myread Typedef i_systimes
?MAKE: -pick
 add $@ %<
?S:d_times:
?S: This variable conditionally defines the HAS_TIMES symbol, which indicates
?S: that the times() routine exists.  The times() routine is normally
?S: provided on UNIX systems. You may have to include <sys/times.h>.
?S:.
?S:clocktype:
?S: This variable holds the type returned by times(). It can be long,
?S: or clock_t on BSD sites (in which case <sys/types.h> should be
?S: included).
?S:.
?C:HAS_TIMES (TIMES):
?C: This symbol, if defined, indicates that the times() routine exists.
?C: Note that this became obsolete on some systems (SUNOS), which now
?C: use getrusage(). It may be necessary to include <sys/times.h>.
?C:.
?C:Clock_t (CLOCKTYPE):
?C: This symbol holds the type returned by times(). It can be long,
?C: or clock_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_times HAS_TIMES  /**/
?H:#define Clock_t $clocktype /* Clock time */
?H:.
?T:val inc
: see if times exists
echo " "
if set times val -f d_times; eval $csym;
 $val; then
 echo 'times() found.' >&4
 d_times="$define"
 inc=''
 case "$i_systimes" in
 "$define") inc='sys/times.h';;
 esac
 set clock_t clocktype long stdio.h sys/types.h $inc
 eval $typedef
 dflt="$clocktype"
 echo " "
 rp="What type is returned by times() on this system?"
 . ./myread
```

```
 clocktype="$ans"
else
 echo 'times() NOT found, hope that will do.' >&4
 d_times="$undef"
?X: The following is needed for typedef (won't like an empty variable)
 clocktype='int'
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_times.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getfsstat : Inlibc
?MAKE: -pick add $@ %<
?S:d_getfsstat:
?S: This variable conditionally defines the HAS_GETFSSTAT symbol, which
?S: indicates to the C program that the getfsstat() routine is available.
?S:.
?C:HAS_GETFSSTAT:
?C: This symbol, if defined, indicates that the getfsstat routine is
?C: available to stat filesystems in bulk.
?C:.
?H:#$d_getfsstat HAS_GETFSSTAT  /**/
?H:.
?LINT:set d_getfsstat
: see if getfsstat exists
set getfsstat d_getfsstat
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getfsstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_hidnet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_hidnet.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_hidnet hiddennet: cat sed myhostname mydomain Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_hidnet:
?S: This variable conditionally defines the symbol HIDDEN_NET, which
?S: tells the C program that it should pretend it is on a different
?S: host for purposes of advertising a mailing address.
?S:.
?S:hiddennet:
?S: This variable contains
 the value eventually given to the symbol
?S: HIDDEN_NET, if d_hidnet defines it.  If defined, it's the name
?S: of the host which serves as the mail server for a network that
?S: is invisible to the outside world.
?S:.
?C:HIDDEN_NET (HIDDENNET):
?C: This symbol, if defined, contains the host name that you want to
?C: advertise to the outside world.  This name can be different from
?C: your actual host name, as long as the machine you specify knows
?C: how to forward mail to you.
?C:.
?H:#$d_hidnet HIDDEN_NET "$hiddennet" /**/
?H:.
: now get the host name to advertise as our mailing address
case "$hiddennet" in
") dflt=n;;
*) dflt=y;;
esac
$cat <<EOM

Some sites are on "hidden" networks, in the sense that the network appears
to the outside world as a single machine.  The advertised name of any host
on this hidden network is the name of one machine on the local network which
knows how to forward mail to any other host on the hidden network.

Do you wish to advertise a different hostname
 to the world than the one your
own host ($myhostname$mydomain) has?

EOM
rp='Use "hidden" network?'
. ./myread
case "$ans" in
```

```
n*) d_hidnet="$undef" hiddennet="";;
*)
 d_hidnet="$define"
 echo " "
 case "$hiddennet" in
 "") dflt=`echo $mydomain | $sed -e 's/^\.//'`;;
 *) dflt="$hiddennet";;
 esac
 rp='What hostname do you wish to advertise?'
 . ./myread
 hiddennet="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_hidnet.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_futimes: Compile cat rm_try run
?MAKE: -pick add $@ %<
?S:d_futimes:
?S: This variable conditionally defines the HAS_FUTIMES symbol, which
?S: indicates to the C program that the futimes() routine is available.
?S:.
?C:HAS_FUTIMES:
?C: This symbol, if defined, indicates that the futimes routine is
?C: available to change file descriptor time stamps with struct timevals.
?C:.
?H:#$d_futimes HAS_FUTIMES  /**/
?H:.
?T:rc
?F:!try
: check for a working futimes
d_futimes="$undef"
echo " "
echo "Checking if you have a working futimes()" >&4
$cat >try.c <<EOCP
#include <stdio.h>
#include <stdlib.h>
#include <sys/time.h>
#include <errno.h>
```

```
#include <fcntl.h>
#include <stdlib.h>

int main ()
{
   int fd,
 rv;
   fd = open ("try.c", O_RDWR);
   if (-1 == fd) exit (1);
   rv = futimes (fd, NULL);
   exit (rv == -1 ? errno : 0);
}
EOCP
set try
if eval $compile; then
   `$run ./try`
   rc=$?
   case "$rc" in
 0)  echo "Yes, you have" >&4
     d_futimes="$define"
     ;;
 *)  echo "No, you have futimes, but it isn't working ($rc) (probably harmless)" >&4
     ;;
   esac
else
   echo "No, it does not (probably harmless)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_futimes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sh.U,v 3.0.1.1 1997/02/28 16:20:13 ram Exp $
?RCS:
?RCS: Copyright (c) 1997, Chip Salzenberg
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:20:13  ram
?RCS: patch61: created
?RCS:
```

```
?MAKE:sh targetsh: Head
?MAKE: -pick wipe $@ %<
?S:sh:
?S: This variable contains the full pathname of the shell used
?S: on this system to execute Bourne shell scripts.  Usually, this will be
?S: /bin/sh, though it's possible that some systems will have /bin/ksh,
?S: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?S: D:/bin/sh.exe.
?S: This
 unit comes before Options.U, so you can't set sh with a -D
?S: option, though you can override this (and startsh)
?S: with -O -Dsh=/bin/whatever -Dstartsh=whatever
?S:.
?S:targetsh:
?S: If cross-compiling, this variable contains the location of sh on the
?S: target system.
?S: If not, this will be the same as $sh.
?S:.
?C:SH_PATH:
?C: This symbol contains the full pathname to the shell used on this
?C: on this system to execute Bourne shell scripts.  Usually, this will be
?C: /bin/sh, though it's possible that some systems will have /bin/ksh,
?C: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?C: D:/bin/sh.exe.
?C:.
?H:#define SH_PATH "$targetsh"  /**/
?H:.
?T:xxx try pth p SYSTYPE
?LINT:extern maintloc maintname _exe
?X:
?X: Be quiet unless something unusual happens because this gets
?X: loaded up even before options are processed.
?X: Can't use ./loc because that depends on startsh, which, in turn
?X: depends on this unit.
?X:
: Find the basic shell for
 Bourne shell scripts
case "$sh" in
")
?X: SYSTYPE is for some older MIPS systems.
?X: I do not know if it is still needed.
 case "$SYSTYPE" in
 *bsd*|sys5*) xxx="/$SYSTYPE/bin/sh";;
 *) xxx='/bin/sh';;
 esac
 if test -f "$xxx"; then
  sh="$xxx"
 else
```

```
  : Build up a list and do a single loop so we can 'break' out.
  pth=`echo $PATH | sed -e "s/$p_/ /g"`
  for xxx in sh bash ksh pdksh ash; do
   for p in $pth; do
    try="$try ${p}/${xxx}"
   done
  done
  for xxx in $try; do
   if test -f "$xxx"; then
    sh="$xxx";
    break
   elif test "X$_exe" != X -a -f "$xxx$_exe"; then
    sh="$xxx";
    break
   elif test -f "$xxx.exe"; then
    sh="$xxx";
    break
   fi
  done
 fi
 ;;
esac

?X: fd 4 isn't open yet...
case "$sh" in
") cat >&2 <<EOM
$me:  Fatal Error:  I can't find a Bourne Shell anywhere.

Usually it's in /bin/sh.  How did you even get this far?
Please report this issue at <$maintloc>
and we'll try to straighten this all out.
EOM
 exit 1
 ;;
esac

: When cross-compiling we
 need to separate the sh-to-run-Configure-with from the sh-to-use-in-Perl
: default both to the same thing, cross-compilers can then set targetsh differently if they like
targetsh=$sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sh.U
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```
?RCS: $Id: d_readdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_readdir.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  14:46:37  ram
?RCS: patch23: added support for seekdir, telldir and rewinddir (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Force checking for <dirent.h> inclusion
?X:INC: i_dirent
?MAKE:d_readdir d_seekdir d_telldir d_rewinddir: Inlibc
?MAKE: -pick add $@ %<
?S:d_readdir:
?S: This variable conditionally defines HAS_READDIR if readdir()
 is
?S: available to read directory entries.
?S:.
?C:HAS_READDIR (READDIR):
?C: This symbol, if defined, indicates that the readdir routine is
?C: available to read directory entries. You may have to include
?C: <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_readdir HAS_READDIR  /**/
?H:.
?S:d_seekdir:
?S: This variable conditionally defines HAS_SEEKDIR if seekdir() is
?S: available.
?S:.
?C:HAS_SEEKDIR:
?C: This symbol, if defined, indicates that the seekdir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_seekdir HAS_SEEKDIR  /**/
?H:.
?S:d_telldir:
?S: This variable conditionally defines HAS_TELLDIR if telldir() is
?S: available.
?S:.
?C:HAS_TELLDIR:
?C: This symbol, if defined, indicates that the telldir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
```

```
?H:#$d_telldir HAS_TELLDIR  /**/
?H:.
?S:d_rewinddir:
?S: This variable conditionally defines HAS_REWINDDIR if rewinddir() is
?S: available.
?S:.
?C:HAS_REWINDDIR:
?C: This
 symbol, if defined, indicates that the rewinddir routine is
?C: available. You may have to include <dirent.h>. See I_DIRENT.
?C:.
?H:#$d_rewinddir HAS_REWINDDIR  /**/
?H:.
?LINT:set d_readdir d_seekdir d_telldir d_rewinddir
: see if readdir and friends exist
set readdir d_readdir
eval $inlibc
@if d_seekdir || HAS_SEEKDIR
set seekdir d_seekdir
eval $inlibc
@end
@if d_telldir || HAS_TELLDIR
set telldir d_telldir
eval $inlibc
@end
@if d_rewinddir || HAS_REWINDDIR
set rewinddir d_rewinddir
eval $inlibc
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_readdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fsync: Inlibc
?MAKE: -pick add $@ %<
?S:d_fsync:
?S: This variable conditionally defines the HAS_FSYNC symbol, which
?S: indicates to the C program that the fsync() routine is available.
?S:.
?C:HAS_FSYNC:
```

```
?C: This symbol, if defined, indicates that the fsync routine is
?C: available to write a file's modified data and attributes to
?C: permanent storage.
?C:.
?H:#$d_fsync HAS_FSYNC  /**/
?H:.
?LINT:set d_fsync
: see if fsync exists
set fsync d_fsync
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fsync.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservbyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservbyname_r getservbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservbyname_r:
?S: This variable conditionally defines the HAS_GETSERVBYNAME_R symbol,
?S: which indicates to the C program that the getservbyname_r()
?S: routine is available.
?S:.
?S:getservbyname_r_proto:
?S: This variable encodes the prototype of getservbyname_r.
?S: It is zero if d_getservbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyname_r
?S: is defined.
?S:.
?C:HAS_GETSERVBYNAME_R:
?C: This symbol, if defined, indicates
 that the getservbyname_r routine
?C: is available to getservbyname re-entrantly.
?C:.
?C:GETSERVBYNAME_R_PROTO:
?C: This symbol encodes the prototype of getservbyname_r.
?C: It is zero if d_getservbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyname_r
?C: is defined.
?C:.
```

```
?H:#$d_getservbyname_r HAS_GETSERVBYNAME_R /**/
?H:#define GETSERVBYNAME_R_PROTO $getservbyname_r_proto /**/
?H:.
?T:try hdrs d_getservbyname_r_proto
: see if getservbyname_r exists
set getservbyname_r d_getservbyname_r
eval $inlibc
case "$d_getservbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservbyname_r_proto:$usethreads" in
 ":define") d_getservbyname_r_proto=define
  set d_getservbyname_r_proto getservbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getservbyname_r_proto" in
 define)
 case "$getservbyname_r_proto" in
 "|0) try='int getservbyname_r(const char*, const char*, struct servent*, char*,
 size_t, struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=I_CCSBWR ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) try='struct servent* getservbyname_r(const char*, const char*, struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=S_CCSBI ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) try='int getservbyname_r(const char*, const char*, struct servent*, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && getservbyname_r_proto=I_CCSD ;;
 esac
 case "$getservbyname_r_proto" in
 "|0) d_getservbyname_r=undef
  getservbyname_r_proto=0
  echo "Disabling getservbyname_r, cannot determine prototype." >&4 ;;
 * ) case "$getservbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getservbyname_r_proto="REENTRANT_PROTO_$getservbyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getservbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_getservbyname_r=undef
  getservbyname_r_proto=0
  ;;
```

```
 esac
 ;;
*) getservbyname_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservbyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endnetent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endnetent_r endnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endnetent_r:
?S: This variable conditionally defines the HAS_ENDNETENT_R symbol,
?S: which indicates to the C program that the endnetent_r()
?S: routine is available.
?S:.
?S:endnetent_r_proto:
?S: This variable encodes the prototype of endnetent_r.
?S: It is zero if d_endnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endnetent_r
?S: is defined.
?S:.
?C:HAS_ENDNETENT_R:
?C: This symbol, if defined, indicates that the endnetent_r routine
?C: is
 available to endnetent re-entrantly.
?C:.
?C:ENDNETENT_R_PROTO:
?C: This symbol encodes the prototype of endnetent_r.
?C: It is zero if d_endnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endnetent_r
?C: is defined.
?C:.
?H:#$d_endnetent_r HAS_ENDNETENT_R /**/
?H:#define ENDNETENT_R_PROTO $endnetent_r_proto /**/
?H:.
?T:try hdrs d_endnetent_r_proto
```

```
: see if endnetent_r exists
set endnetent_r d_endnetent_r
eval $inlibc
case "$d_endnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endnetent_r_proto:$usethreads" in
 ":define") d_endnetent_r_proto=define
  set d_endnetent_r_proto endnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endnetent_r_proto" in
 define)
 case "$endnetent_r_proto" in
 "|0) try='int endnetent_r(struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && endnetent_r_proto=I_D ;;
 esac
 case "$endnetent_r_proto" in
 "|0) try='void endnetent_r(struct netent_data*);'
 ./protochk
 "$extern_C $try" $hdrs && endnetent_r_proto=V_D ;;
 esac
 case "$endnetent_r_proto" in
 "|0) d_endnetent_r=undef
  endnetent_r_proto=0
  echo "Disabling endnetent_r, cannot determine prototype." >&4 ;;
 * ) case "$endnetent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endnetent_r_proto="REENTRANT_PROTO_$endnetent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endnetent_r has no prototype, not using it." >&4 ;;
  esac
  d_endnetent_r=undef
  endnetent_r_proto=0
  ;;
 esac
 ;;
*) endnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endnetent_r.U

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```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_drand48proto: Hasproto i_stdlib i_unistd
?MAKE: -pick add $@ %<
?S:d_drand48proto:
?S: This variable conditionally defines the HAS_DRAND48_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the drand48() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_DRAND48_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the drand48() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess
 is
?C:  extern double drand48(void);
?C:.
?H:#$d_drand48proto HAS_DRAND48_PROTO /**/
?H:.
?LINT:set d_drand48proto
: see if prototype for drand48 is available
echo " "
set d_drand48proto drand48 $i_stdlib stdlib.h $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/d_drand48proto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: floatsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:09  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:floatsize: cat rm Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:floatsize:
?S: This variable contains the value of the FLOATSIZE symbol, which
?S: indicates to the C program how many bytes there are in a float.
?S:.
?C:FLOATSIZE:
?C: This symbol contains the size of
 a float, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define FLOATSIZE $floatsize  /**/
?H:.
?F:!try
: check for length of float
echo " "
case "$floatsize" in
")
 echo "Checking to see how big your floating point numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(float));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$floatsize"
 ;;
esac
rp="What is the size of a floating point number (in bytes)?"
. ./myread
floatsize="$ans"
```

```
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/floatsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setgrent_r setgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_setgrent_r:
?S: This variable conditionally defines the HAS_SETGRENT_R symbol,
?S: which indicates to the C program that the setgrent_r()
?S: routine is available.
?S:.
?S:setgrent_r_proto:
?S: This variable encodes the prototype of setgrent_r.
?S: It is zero if d_setgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setgrent_r
?S: is defined.
?S:.
?C:HAS_SETGRENT_R:
?C: This symbol, if defined, indicates that the setgrent_r routine
?C: is available to
 setgrent re-entrantly.
?C:.
?C:SETGRENT_R_PROTO:
?C: This symbol encodes the prototype of setgrent_r.
?C: It is zero if d_setgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setgrent_r
?C: is defined.
?C:.
?H:#$d_setgrent_r HAS_SETGRENT_R /**/
?H:#define SETGRENT_R_PROTO $setgrent_r_proto /**/
?H:.
?T:try hdrs d_setgrent_r_proto
: see if setgrent_r exists
set setgrent_r d_setgrent_r
eval $inlibc
case "$d_setgrent_r" in
"$define")
```

```
hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
case "$d_setgrent_r_proto:$usethreads" in
":define") d_setgrent_r_proto=define
 set d_setgrent_r_proto setgrent_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_setgrent_r_proto" in
define)
case "$setgrent_r_proto" in
"|0) try='int setgrent_r(FILE**);'
./protochk "$extern_C $try" $hdrs && setgrent_r_proto=I_H ;;
esac
case "$setgrent_r_proto" in
"|0) try='void setgrent_r(FILE**);'
./protochk "$extern_C $try" $hdrs && setgrent_r_proto=V_H ;;
esac
case "$setgrent_r_proto"
in
"|0) d_setgrent_r=undef
 setgrent_r_proto=0
 echo "Disabling setgrent_r, cannot determine prototype." >&4 ;;
* ) case "$setgrent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) setgrent_r_proto="REENTRANT_PROTO_$setgrent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "setgrent_r has no prototype, not using it." >&4 ;;
 esac
 d_setgrent_r=undef
 setgrent_r_proto=0
 ;;
esac
;;
*) setgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setgrent_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_dlopen.U,v 3.0.1.2 1995/07/25 13:52:56 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlopen.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:56  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dlopen: Inlibc runnm d_cplusplus ccflags gccversion
?MAKE: -pick add $@ %<
?S:d_dlopen:
?S: This variable conditionally defines the HAS_DLOPEN
 symbol, which
?S: indicates to the C program that the dlopen() routine is available.
?S:.
?C:HAS_DLOPEN :
?C: This symbol, if defined, indicates that the dlopen routine is
?C: available.
?C:.
?H:#$d_dlopen HAS_DLOPEN  /**/
?H:.
?T: xxx_runnm
?T: xxx_ccflags
?LINT:set d_dlopen
?X: We don't permanently change runnm and ccflags, but we do temporarily.
?LINT: change runnm
?LINT: change ccflags
: see if dlopen exists
?X: On NetBSD and FreeBSD, dlopen is available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
xxx_ccflags="$ccflags"
runnm=false
: with g++ one needs -shared to get is-in-libc to work for dlopen
case "$gccversion" in
") ;;
*Clang*) ;;
*) case "$d_cplusplus" in
 "$define") ccflags="$ccflags -shared" ;;
```

```
 esac
 ;;
esac
set dlopen d_dlopen
eval $inlibc
runnm="$xxx_runnm"
ccflags="$xxx_ccflags"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dlopen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syspoll.U 15 2006-08-30 18:21:51Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_syspoll: Inhdr
?MAKE: -pick add $@ %<
?S:i_syspoll:
?S: This variable conditionally defines the I_SYS_POLL symbol, which
?S: indicates to the C program that it should include <sys/poll.h>.
?S:.
?C:I_SYS_POLL:
?C: This symbol, if defined, indicates that the program may include
?C: <sys/poll.h>.  When I_POLL is also defined, it's probably safest
?C: to only include <poll.h>.
?C:.
?H:#$i_syspoll I_SYS_POLL /**/
?H:.
?LINT:set i_syspoll
: see if there is
 a sys/poll.h file
set sys/poll.h i_syspoll
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syspoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ftime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ftime.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ftime d_gettimeod: Inlibc Setvar
?MAKE: -pick add $@ %<
?S:d_ftime:
?S: This variable conditionally defines the HAS_FTIME symbol, which indicates
?S: that the ftime() routine exists.  The ftime() routine is basically
?S: a sub-second accuracy clock.
?S:.
?S:d_gettimeod:
?S: This variable conditionally defines the HAS_GETTIMEOFDAY symbol,
 which
?S: indicates that the gettimeofday() system call exists (to obtain a
?S: sub-second accuracy clock). You should probably include <sys/resource.h>.
?S:.
?C:HAS_FTIME (FTIMER):
?C: This symbol, if defined, indicates that the ftime() routine exists.
?C: It is basically a sub-second accuracy clock, but is less accurate
?C: than gettimeofday(2) anyway. The type "Timeval" should be used to
?C: refer to "struct timeb".
?C:.
?C:HAS_GETTIMEOFDAY (GETTIMEOFDAY):
?C: This symbol, if defined, indicates that the gettimeofday() system
?C: call is available for a sub-second accuracy clock. Usually, the file
?C: <sys/resource.h> needs to be included (see I_SYS_RESOURCE).
?C: The type "Timeval" should be used to refer to "struct timeval".
?C:.
?H:#$d_ftime HAS_FTIME  /**/
?H:#$d_gettimeod HAS_GETTIMEOFDAY /**/
?H:?%<:@if HAS_FTIME
?H:?%<:#ifdef HAS_FTIME
?H:?%<:#define Timeval struct timeb  /* Structure used by ftime() */
?H:?%<:#endif
?H:?%<:@end
?H:?%<:@if HAS_GETTIMEOFDAY
?H:?%<:#ifdef HAS_GETTIMEOFDAY
?H:?%<:#define
 Timeval struct timeval /* Structure used by gettimeofday() */
?H:?%<:#endif
```

```
?H:?%<:@end
?H:.
?X:FIXME
?X:?I:?d_ftime:i_systimeb
?X:?I:?d_gettimeod:i_sysresrc
?LINT:set d_gettimeod d_ftime
?LINT:known Timeval
: see if gettimeofday or ftime exists
?X:
?X: Give priority to gettimeofday(2) because timing is more accurate
?X:
set gettimeofday d_gettimeod
eval $inlibc
case "$d_gettimeod" in
"$undef")
 set ftime d_ftime
 eval $inlibc
 ;;
*)
 val="$undef"; set d_ftime; eval $setvar
 ;;
esac
case "$d_gettimeod$d_ftime" in
"$undef$undef")
 echo " "
 echo 'No ftime() nor gettimeofday() -- timing may be less accurate.' >&4
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:gidformat: gidsize gidsign ivsize uvsize longsize intsize shortsize \
 ivdformat uvuformat test echo
?MAKE: -pick add $@ %<
?S:gidformat:
?S: This variable contains the format string used for printing a Gid_t.
?S:.
?C:Gid_t_f:
?C: This symbol defines the format string used for printing a Gid_t.
```

```
?C:.
?H:#define Gid_t_f  $gidformat  /**/
?H:.
: Check format string for GID

echo " "
$echo "Checking the format string to be used for gids..." >&4

case "$gidsign" in
-1) if $test X"$gidsize" = X"$ivsize"; then
  gidformat="$ivdformat"
 else
  if $test X"$gidsize" = X"$longsize"; then
   gidformat="'ld'"
  else
   if $test X"$gidsize" = X"$intsize"; then
    gidformat="'d'"
   else
    if $test X"$gidsize"
 = X"$shortsize"; then
     gidformat="'hd'"
    fi
   fi
  fi
 fi
 ;;
*) if $test X"$gidsize" = X"$uvsize"; then
  gidformat="$uvuformat"
 else
  if $test X"$gidsize" = X"$longsize"; then
   gidformat="'lu'"
  else
   if $test X"$gidsize" = X"$intsize"; then
    gidformat="'u'"
   else
    if $test X"$gidsize" = X"$shortsize"; then
     gidformat="'hu'"
    fi
   fi
  fi
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/gidf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_NeWS.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_NeWS.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_news d_news0 d_newshome d_textcan: test rm Myread Getfile
?MAKE: -pick add $@ %<
?S:d_news:
?S: Set if running NeWS 1.1
?S:.
?S:d_news0:
?S: Set if running NeWS 1.0
?S:.
?S:d_newshome:
?S: Path to the top directory of the NeWS structure.
?S:.
?S:d_textcan:
?S: Path to where the textcan.ps stuff is...
?S:.
?C:HAS_NEWS1_1 (NEWS1_1):
?C: This
 symbol defined if running NeWS 1.1.
?C:.
?C:HAS_NEWS1_0 (NEWS1_0):
?C: This symbol defined if running NeWS 1.0.
?C:.
?C:TEXTCAN:
?C: Tells path to where the textcan.ps stuff is...
?C:.
?H:#$d_news HAS_NEWS1_1     /**/
?H:#$d_news0 HAS_NEWS1_0     /**/
?H:#define TEXTCAN $d_textcan /**/
?H:.
?INIT:: default path for NeWS
?INIT:d_newshome="/usr/NeWS"
?INIT:
: Check to see what version of NeWS is being run?
cd ..
echo " "
```

```
echo "Now for the interesting stuff... Lets see what kind of NeWS"
echo "they grow round here...."
echo " "
dflt='y'
if $test -d $d_newshome; then
 d_newshome=`(cd $d_newshome ; /bin/pwd)`
 echo "Ah...found myself a NeWS in $d_newshome..."
 dflt='y'
 rp="Is this the NeWS you want your children to grow up with?"
 . UU/myread
fi
while $test $ans = "n"; do
dflt=$d_newshome
fn=d
rp="Path to NeWS you want:"
. UU/getfile
d_newshome=$ans

echo " "
if $test ! -d $d_newshome/lib; then
 echo "ARG!  No lib directory in $d_newshome!!!"
 : heavy medicine.  I wonder what the disease
 is...
 $rm -f kit*isdone
 $rm -rf UU
 : bye bye
 set -t; echo "Sorry... no NeWS is bad news..."
fi

if $test -r $d_newshome/lib/NeWS/colors.ps ; then
 echo 'Ahh... your running NeWS 1.1!  Boy... that makes stuff easy....'
 echo " "
 d_news="$define"
 d_news0="$undef"
 if $test -r $d_newshome/lib/NeWS/textcan.ps; then
  d_textcan=$d_newshome/lib/NeWS
  echo "The textcan.ps stuff seems to be in : $d_textcan"
 else
  d_textcan=$d_newshome/clientsrc/client/nterm
  if $test ! -r $d_textcan/textcan.ps; then
   d_news="$undef"
   d_news0="$define"
   echo 'Hmm... must have been fooled... gotta be NeWS 1.1 beta!'
  else
   echo "The textcan.ps stuff seems to be in : $d_textcan"
  fi
 fi
else
```

```
 echo 'snif... snif... I smell the dilapidated smell of NeWS 1.0..'
 echo 'Some things will not work under NeWS 1.0...'
 d_news="$undef"
 d_news0="$define"
fi
cd UU
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_NeWS.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:fpossize: Myread Typedef fpostype Compile longsize run i_stdlib
?MAKE: -pick add $@ %<
?S:fpossize:
?S: This variable contains the size of a fpostype in bytes.
?S:.
?C:Fpos_t_size:
?C: This symbol holds the size of a Fpos_t in bytes.
?C:.
?H:#define Fpos_t_size $fpossize  /* FPOS size */
?H:.
?T:yyy zzz
?F:!try
: Check size for Fpos_t
echo " "
case "$fpostype" in
*_t) zzz="$fpostype" ;;
*)   zzz="fpos_t" ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef
 I_STDLIB
#include <stdlib.h>
#endif
int main() {
```

```
   printf("%d\n", (int)sizeof($fpostype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") fpossize=4
  echo "(I can't execute the test program--guessing $fpossize.)" >&4
  ;;
 *) fpossize=$yyy
  echo "Your $zzz is $fpossize bytes long."
  ;;
 esac
else
 dflt="$longsize"
 echo " " >&4
 echo "(I can't compile the test program.  Guessing...)" >&4
 rp="What is the size of your file positions (in bytes)?"
 . ./myread
 fpossize="$ans"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/fpossize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysdir.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:22:30  ram
?RCS: patch32: fixed typo in I_SYS_DIR symbol name
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysdir: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysdir:
```

```
?S: This variable conditionally defines the I_SYS_DIR symbol, and indicates
?S: whether a C program should include <sys/dir.h>.
?S:.
?C:I_SYS_DIR (I_SYSDIR):
?C: This symbol, if
 defined, indicates to the C program that it should
?C: include <sys/dir.h>.
?C:.
?H:#$i_sysdir I_SYS_DIR  /**/
?H:.
?LINT:set i_sysdir
: see if this is an sysdir system
set sys/dir.h i_sysdir
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sysconf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_sysconf.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:15:57  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_sysconf: Inlibc
?MAKE: -pick add $@ %<
?S:d_sysconf:
?S: This variable conditionally defines the HAS_SYSCONF symbol, which
?S: indicates to the C program that the sysconf() routine is available
?S: to determine system related limits and options.
?S:.
?C:HAS_SYSCONF:
?C: This
 symbol, if defined, indicates that sysconf() is available
?C: to determine system related limits and options.
?C:.
?H:#$d_sysconf HAS_SYSCONF /**/
```

```
?H:.
?LINT:set d_sysconf
: see if sysconf exists
set sysconf d_sysconf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sysconf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Guess.U,v 3.0.1.5 1995/07/25 13:37:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Guess.U,v $
?RCS: Revision 3.0.1.5  1995/07/25  13:37:14  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  15:53:55  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:14:35  ram
?RCS: patch15: variable d_bsd was not always set properly
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:14  ram
?RCS:
 patch8: fixed comment which wrongly attributed the usrinc symbol
?RCS: patch8: no more ugly messages when no /usr/include/ctype.h
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:37:37  ram
?RCS: patch7: added support for OSF/1 machines
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit hazards some guesses as to what the general nature of the system
?X: is.  The information it collects here is used primarily to establish default
?X: answers to other questions.
?X:
?MAKE:Guess d_eunice d_xenix d_bsd: cat test echo n c contains \
```

```
 rm Loc eunicefix tr sysroot
?MAKE: -pick add $@ %<
?S:d_eunice:
?S: This variable conditionally defines the symbols EUNICE and VAX, which
?S: alerts the C program that it must deal with idiosyncrasies of VMS.
?S:.
?S:d_xenix:
?S: This variable conditionally defines the symbol XENIX, which alerts
?S: the C program that it runs under Xenix.
?S:.
?S:d_bsd:
?S: This symbol conditionally defines the
 symbol BSD when running on a
?S: BSD system.
?S:.
?C:EUNICE:
?C: This symbol, if defined, indicates that the program is being compiled
?C: under the EUNICE package under VMS.  The program will need to handle
?C: things like files that don't go away the first time you unlink them,
?C: due to version numbering.  It will also need to compensate for lack
?C: of a respectable link() command.
?C:.
?X: Should we define VMS here?  Is Eunice actually used anymore?
?X:?C:VMS:
?X:?C: This symbol, if defined, indicates that the program is running under
?X:?C: VMS.  It is currently only set in conjunction with the EUNICE symbol.
?X:?C:.
?C:XENIX:
?C: This symbol, if defined, indicates that the program is running under
?C: Xenix (at least 3.0 ?).
?C:.
?X:  We don't use BSD in the perl source.  It's too vague, and already
?X:  defined in some header files anyway (e.g. NetBSD).  This just gives
?X:  us a spurious redefinition error upon compilation.
?X: --Andy Dougherty  Feb 11, 1998
?X: ?C:BSD:
?X:
 ?C: This symbol, if defined, indicates that the program is running under
?X: ?C: a BSD system.
?X: ?C:.
?H:#$d_eunice EUNICE  /**/
?X:?H:#$d_eunice VMS  /**/
?H:#$d_xenix XENIX  /**/
?X: ?H:#$d_bsd BSD  /**/
?H:.
?F:./bsd ./usg ./v7 ./osf1 ./eunice ./xenix ./venix ./os2
?T:xxx
: make some quick guesses about what we are up against
```

```
echo " "
$echo $n "Hmm...  $c"
echo exit 1 >bsd
echo exit 1 >usg
echo exit 1 >v7
echo exit 1 >osf1
echo exit 1 >eunice
echo exit 1 >xenix
echo exit 1 >venix
echo exit 1 >os2
d_bsd="$undef"
?X:
?X: Do not use 'usrinc', or we get a circular dependency. because
?X: usrinc is defined in usrinc.U, which relies on us...
?X:
$cat $sysroot/usr/include/signal.h $sysroot/usr/include/sys/signal.h >foo 2>/dev/null
if test -f /osf_boot || $contains 'OSF/1' $sysroot/usr/include/ctype.h >/dev/null 2>&1
then
 echo "Looks kind of like an OSF/1 system, but we'll see..."
 echo exit 0 >osf1
elif test `echo abc | $tr a-z A-Z` = Abc ; then
 xxx=`./loc addbib blurfl $pth`
 if $test
 -f $xxx; then
 echo "Looks kind of like a USG system with BSD features, but we'll see..."
  echo exit 0 >bsd
  echo exit 0 >usg
 else
  if $contains SIGTSTP foo >/dev/null 2>&1 ; then
   echo "Looks kind of like an extended USG system, but we'll see..."
  else
   echo "Looks kind of like a USG system, but we'll see..."
  fi
  echo exit 0 >usg
 fi
elif $contains SIGTSTP foo >/dev/null 2>&1 ; then
 echo "Looks kind of like a BSD system, but we'll see..."
 d_bsd="$define"
 echo exit 0 >bsd
else
 echo "Looks kind of like a Version 7 system, but we'll see..."
 echo exit 0 >v7
fi
case "$eunicefix" in
*unixtovms*)
 $cat <<'EOI'
There is, however, a strange, musty smell in the air that reminds me of
something...hmm...yes...I've got it...there's a VMS nearby, or I'm a Blit.
```

```
EOI
 echo exit 0 >eunice
 d_eunice="$define"
: it so happens the Eunice I know will not run shell scripts in Unix format
 ;;
*)
 echo " "
 echo "Congratulations.  You aren't running Eunice."
 d_eunice="$undef"
 ;;
esac
: Detect
 OS2.  The p_ variable is set above in the Head.U unit.
: Note that this also -- wrongly -- detects e.g. dos-djgpp, which also uses
: semicolon as a patch separator
case "$p_" in
:) ;;
*)
 $cat <<'EOI'
I have the feeling something is not exactly right, however...don't tell me...
lemme think...does HAL ring a bell?...no, of course, you're only running OS/2!
(Or you may be running DOS with DJGPP.)
EOI
 echo exit 0 >os2
 ;;
esac
if test -f /xenix; then
 echo "Actually, this looks more like a XENIX system..."
 echo exit 0 >xenix
 d_xenix="$define"
else
 echo " "
 echo "It's not Xenix..."
 d_xenix="$undef"
fi
chmod +x xenix
$eunicefix xenix
if test -f /venix; then
 echo "Actually, this looks more like a VENIX system..."
 echo exit 0 >venix
else
 echo " "
 if ./xenix; then
  : null
 else
  echo "Nor is it Venix..."
 fi
fi
```

```
chmod +x bsd usg v7 osf1 eunice xenix venix os2
$eunicefix bsd usg v7 osf1 eunice xenix venix os2
$rm -f foo
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Guess.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_ustat.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_ustat: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_ustat:
?S: This variable conditionally defines the I_USTAT symbol, and indicates
?S: whether a C program should include <ustat.h>.
?S:.
?C:I_USTAT:
?C: This symbol, if defined, indicates that <ustat.h> exists and
?C: should be included.
?C:.
?H:#$i_ustat I_USTAT  /**/
?H:.
?LINT:set i_ustat
: see if this is a ustat.h system
set ustat.h i_ustat
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_ustat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setgrps.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setgrps.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setgrps: Inlibc
?MAKE: -pick add $@ %<
?S:d_setgrps:
?S: This variable conditionally defines the HAS_SETGROUPS symbol, which
?S: indicates to the C program that the setgroups() routine is available
?S: to set the list of process groups.
?S:.
?C:HAS_SETGROUPS:
?C: This symbol, if defined, indicates that the setgroups() routine is
?C: available
 to set the list of process groups.  If unavailable, multiple
?C: groups are probably not supported.
?C:.
?H:#$d_setgrps HAS_SETGROUPS  /**/
?H:.
?LINT:set d_setgrps
: see if setgroups exists
set setgroups d_setgrps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setgrps.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setnetent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setnetent_r setnetent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setnetent_r:
?S: This variable conditionally defines the HAS_SETNETENT_R symbol,
?S: which indicates to the C program that the setnetent_r()
?S: routine is available.
?S:.
?S:setnetent_r_proto:
?S: This variable encodes the prototype of setnetent_r.
?S: It is zero if d_setnetent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setnetent_r
?S: is defined.
?S:.
```

```
?C:HAS_SETNETENT_R:
?C: This symbol, if defined, indicates that the setnetent_r routine
?C: is
 available to setnetent re-entrantly.
?C:.
?C:SETNETENT_R_PROTO:
?C: This symbol encodes the prototype of setnetent_r.
?C: It is zero if d_setnetent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setnetent_r
?C: is defined.
?C:.
?H:#$d_setnetent_r HAS_SETNETENT_R /**/
?H:#define SETNETENT_R_PROTO $setnetent_r_proto /**/
?H:.
?T:try hdrs d_setnetent_r_proto
: see if setnetent_r exists
set setnetent_r d_setnetent_r
eval $inlibc
case "$d_setnetent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setnetent_r_proto:$usethreads" in
 ":define") d_setnetent_r_proto=define
  set d_setnetent_r_proto setnetent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setnetent_r_proto" in
 define)
 case "$setnetent_r_proto" in
 "|0) try='int setnetent_r(int, struct netent_data*);'
 ./protochk "$extern_C $try" $hdrs && setnetent_r_proto=I_ID ;;
 esac
 case "$setnetent_r_proto" in
 "|0) try='void setnetent_r(int, struct netent_data*);'
 ./protochk
 "$extern_C $try" $hdrs && setnetent_r_proto=V_ID ;;
 esac
 case "$setnetent_r_proto" in
 "|0) d_setnetent_r=undef
  setnetent_r_proto=0
  echo "Disabling setnetent_r, cannot determine prototype." >&4 ;;
 * ) case "$setnetent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setnetent_r_proto="REENTRANT_PROTO_$setnetent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
```

```
 ;;
 *) case "$usethreads" in
  define) echo "setnetent_r has no prototype, not using it." >&4 ;;
  esac
  d_setnetent_r=undef
  setnetent_r_proto=0
  ;;
 esac
 ;;
*) setnetent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setnetent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_sendmsg: Inlibc
?MAKE: -pick add $@ %<
?S:d_sendmsg:
?S: This variable conditionally defines the HAS_SENDMSG symbol, which
?S: indicates to the C program that the sendmsg() routine is available.
?S:.
?C:HAS_SENDMSG:
?C: This symbol, if defined, indicates that the sendmsg routine is
?C: available to send structured socket messages.
?C:.
?H:#$d_sendmsg HAS_SENDMSG  /**/
?H:.
?LINT:set d_sendmsg
: see if sendmsg exists
set sendmsg d_sendmsg
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sendmsg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sig_name.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sig_name.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:21:25  ram
?RCS: patch61: brand new algorithm for sig_name and (new!) sig_num
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  14:14:54  ram
?RCS: patch56: added <asm/signal.h> lookup for Linux
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:24:11  ram
?RCS: patch54: now looks for <linux/signal.h> too (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:06:57  ram
?RCS: patch30: final echo was missing to close
 awk-printed string
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:17:55  ram
?RCS: patch23: signal list now formatted to avoid scroll-ups (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sig_name sig_name_init sig_num sig_num_init sig_count sig_size: \
 awk Signal Oldconfig rm
?MAKE: -pick add $@ %<
?S:sig_name:
?S: This variable holds the signal names, space separated. The leading
?S: SIG in signal name is removed.  A ZERO is prepended to the list.
?S: This is currently not used, sig_name_init is used instead.
?S:.
?S:sig_name_init:
?S: This variable holds the signal names, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NAME definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.  The leading SIG in signal names
?S: is removed. See sig_num.
?S:.
?S:sig_num:
?S: This variable holds the signal numbers, space separated. A ZERO is
?S: prepended
 to the list (corresponding to the fake SIGZERO).
?S: Those numbers correspond to  the value of the signal listed
?S: in the same place within the sig_name list.
```

```
?S: This is currently not used, sig_num_init is used instead.
?S:.
?S:sig_num_init:
?S: This variable holds the signal numbers, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NUM definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.
?S:.
?S:sig_count (sig_name.U):
?S: This variable holds a number larger than the largest valid
?S: signal number.  This is usually the same as the NSIG macro.
?S:.
?S:sig_size:
?S: This variable contains the number of elements of the sig_name
?S: and sig_num arrays.
?S:.
?C:SIG_NAME:
?C: This symbol contains a list of signal names in order of
?C: signal number. This is intended
?C: to be used as a static array initialization, like this:
?C:  char *sig_name[] = { SIG_NAME };
?C: The signals in the list are separated
 with commas, and each signal
?C: is surrounded by double quotes. There is no leading SIG in the signal
?C: name, i.e. SIGQUIT is known as "QUIT".
?C: Gaps in the signal numbers (up to NSIG) are filled in with NUMnn,
?C: etc., where nn is the actual signal number (e.g. NUM37).
?C: The signal number for sig_name[i] is stored in sig_num[i].
?C: The last element is 0 to terminate the list with a NULL.  This
?C: corresponds to the 0 at the end of the sig_name_init list.
?C: Note that this variable is initialized from the sig_name_init,
?C: not from sig_name (which is unused).
?C:.
?C:SIG_NUM:
?C: This symbol contains a list of signal numbers, in the same order as the
?C: SIG_NAME list. It is suitable for static array initialization, as in:
?C:  int sig_num[] = { SIG_NUM };
?C: The signals in the list are separated with commas, and the indices
?C: within that list and the SIG_NAME list match, so it's easy to compute
?C: the signal name from a number or vice versa at the price of a small
?C: dynamic
 linear lookup.
?C: Duplicates are allowed, but are moved to the end of the list.
?C: The signal number corresponding to sig_name[i] is sig_number[i].
?C: if (i < NSIG) then sig_number[i] == i.
?C: The last element is 0, corresponding to the 0 at the end of
?C: the sig_name_init list.
?C: Note that this variable is initialized from the sig_num_init,
```

```
?C: not from sig_num (which is unused).
?C:.
?C:SIG_COUNT:
?C: This variable contains a number larger than the largest
?C: signal number.  This is usually the same as the NSIG macro.
?C:.
?C:SIG_SIZE:
?C: This variable contains the number of elements of the SIG_NAME
?C: and SIG_NUM arrays, excluding the final NULL entry.
?C:.
?H:#define SIG_NAME $sig_name_init  /**/
?H:#define SIG_NUM  $sig_num_init  /**/
?H:#define SIG_COUNT $sig_count   /**/
?H:#define SIG_SIZE $sig_size   /**/
?H:.
?T:i doinit
?F:!= !signal_cmd
?X: signal.cmd creates a file  signal.lst which has two columns:
?X: NAME  number, e.g.
?X:  HUP 1
?X: The list is
 sorted on signal number, with duplicates moved to
?X: the end..
: generate list of signal names
case "$sig_num_init" in
")
echo " "
case "$sig_name_init" in
") doinit=yes ;;
*)  case "$sig_num_init" in
   "|*,*) doinit=yes ;;
   esac ;;
esac
case "$doinit" in
yes)
 echo "Generating a list of signal names and numbers..." >&4
 . ./signal_cmd
 sig_count=`$awk '/^NSIG/ { printf "%d", $2 }' signal.lst`
 sig_name=`$awk 'BEGIN { printf "ZERO " }
   !/^NSIG/ { printf "%s ", $1 }' signal.lst`
 sig_num=`$awk  'BEGIN { printf "0 " }
   !/^NSIG/ { printf "%d ", $2 }' signal.lst`
 sig_name_init=`$awk 'BEGIN { printf "\"ZERO\", " }
        !/^NSIG/ { printf "\"%s\", ", $1 }
        END { printf "0\n" }' signal.lst`
 sig_num_init=`$awk  'BEGIN { printf "0, " }
        !/^NSIG/ { printf "%d, ", $2}
        END { printf "0\n"}' signal.lst`
```

```
 ;;
esac
echo "The following $sig_count signals are available:"
echo " "
echo $sig_name | $awk \
'BEGIN { linelen = 0 }
{
 for (i = 1; i <= NF; i++) {
  name
 = "SIG" $i " "
  linelen = linelen + length(name)
  if (linelen > 70) {
   printf "\n"
   linelen = length(name)
  }
  printf "%s", name
 }
 printf "\n"
}'
sig_size=`echo $sig_name | awk '{print NF}'`
$rm -f signal signal.c signal.awk signal.lst signal_cmd
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sig_name.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: contains.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:contains: Nothing
?MAKE: -pick add $@ %<
?S:contains:
?S: This variable holds the command to do a grep with a proper return
?S: status.  On most sane systems it is simply "grep".  On insane systems
?S: it is a grep followed by a cat followed by a test.  This variable
```

```
?S: is primarily for the use of other Configure units.
?S:.
: Some
 greps do not return status, grrr.
echo "grimblepritz" >grimble
if grep blurfldyick grimble >/dev/null 2>&1 ; then
 contains=contains
elif grep grimblepritz grimble >/dev/null 2>&1 ; then
 contains=grep
else
 contains=contains
fi
rm -f grimble
: the following should work in any shell
case "$contains" in
contains*)
 echo " "
 echo "AGH!  Grep doesn't return a status.  Attempting remedial action."
 cat >contains <<'EOSS'
grep "$1" "$2" >.greptmp && cat .greptmp && test -s .greptmp
EOSS
chmod +x contains
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/contains.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: make.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: make.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:09:40  ram
?RCS: patch61: created
?RCS:
?MAKE:make_set_make : Loc rm sed make
?MAKE: -pick add $@ %<
?S:make_set_make:
?S: Some versions of 'make' set the variable MAKE.  Others do not.
?S: This variable contains the string to be included in Makefile.SH
```

```
?S: so that MAKE is set if needed, and not if not needed.
?S: Possible values are:
?S:
?S: make_set_make='#'  #
 If your make program handles this for you,
?S:
?S: make_set_make="MAKE=$make" # if it doesn't.
?S:
?S: This uses a comment character so that we can distinguish a
?S: 'set' value (from a previous config.sh or Configure -D option)
?S: from an uncomputed value.
?S:.
?LINT: extern MAKE
?LINT: change MAKE
?X: This test is based on one from an autoconf-generated configure
?X: script. Autoconf stole a lot from Configure, but now it's our
?X: turn to do so... ;-) -- RAM, 21/02/97
: check whether make sets MAKE
echo " "
echo "Checking if your $make program sets \$(MAKE)..." >&4
case "$make_set_make" in
")
?X: Use sed so we don't have a line begining with @echo.  Metaconfig
?X: will think that's a command like @if or @end.
 $sed 's/^X //' > testmake.mak << 'EOF'
Xall:
X  @echo 'maketemp="$(MAKE)"'
EOF
?X: GNU make sometimes prints "make[1]: Entering...", which would confuse us
 case "`$make -f testmake.mak 2>/dev/null`" in
 *maketemp=*) make_set_make='#' ;;
 *) make_set_make="MAKE=$make" ;;
 esac
 $rm
 -f testmake.mak
 ;;
esac
case "$make_set_make" in
'#') echo "Yup, it does.";;
*) echo "Nope, it doesn't.";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/make.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Signal.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:01  ram
?RCS: patch61: created
?RCS:
?X:
?X: This unit produces three files:
?X:
?X: 1- A signal.c file, which, when compiled and run, produces an output like:
?X:
?X:   HUP 1
?X:   INT 2
?X:   QUIT 3
?X:   etc...
?X:
?X: 2- A signal.awk script to parse the output of signal.c, fill
?X: in gaps (up to NSIG) and move duplicates to the end.
?X:
?X: 3- A signal_cmd script to compile signal.c and run it
?X: through sort -n -k 2 | uniq | awk -f signal.awk.
?X:
 (we try also sort -n +1 since some old hosts don't grok sort -k)
?X: (This is called signal_cmd to avoid OS/2 confusion with
?X: signal.cmd vs. signal.
?X: The signal_cmd script also falls back on checking signals one at a
?X: time in case the signal.c program fails.  On at least one version of
?X: Linux 2.1.x, the header file #define'd SIGRTMAX to a symbol that
?X: is not defined by the compiler/linker. :-(.  Further, on that same
?X: version of Linux, the user had a defective C-shell that gave an
?X: incorrect list for kill -l, so the fall-back didn't work.
?X:
?X: This unit is then used by sig_name.U.
?X:
?MAKE:Signal: test tr rm awk cat grep startsh eunicefix sed sort uniq \
 Findhdr cppstdin +cppflags cppminus Compile trnl run
?MAKE: -pick add $@ %<
?X:all files declared as "public" since they're used from other units
?F:signal.c signal_cmd signal.lst signal signal.awk
?T: xx xxx xxxfiles
?LINT:use rm run
: Trace out the files included by signal.h, then look for SIGxxx
```

```
 names.
?X: Remove SIGARRAYSIZE used by HPUX.
?X: Remove SIGSTKSIZE used by Linux.
?X: Remove SIGSTKSZ used by Posix.
?X: Remove SIGTYP void lines used by OS2.
?X: Some cpps, like os390, dont give the file name anywhere
if [ "X$fieldn" = X ]; then
 : Just make some guesses.  We check them later.
 xxx='/usr/include/signal.h /usr/include/sys/signal.h'
else
 xxx=`echo '#include <signal.h>' |
 $cppstdin $cppminus $cppflags 2>/dev/null |
 $grep '^[  ]*#.*include' |
 $awk "{print \\$$fieldn}" | $sed 's!"!!g' |\
  $sed 's!\\\\\\\\\!/!g' | $sort | $uniq`
fi
?X: Check this list of files to be sure we have parsed the cpp output ok.
?X: This will also avoid potentially non-existent files, such
?X: as ../foo/bar.h
xxxfiles="
?X: Add /dev/null in case the $xxx list is empty.
for xx in $xxx /dev/null ; do
 $test -f "$xx" && xxxfiles="$xxxfiles $xx"
done
?X: If we have found no files, at least try signal.h
case "$xxxfiles" in
") xxxfiles=`./findhdr signal.h` ;;
esac
xxx=`awk '
$1 ~ /^#define$/ &&
 $2 ~ /^SIG[A-Z0-9]*$/ && $2 !~ /SIGARRAYSIZE/ && $2 !~ /SIGSTKSIZE/ && $2 !~ /SIGSTKSZ/ && $3 !~
/void/ {
 print substr($2, 4, 20)
}
$1 == "#" && $2 ~ /^define$/ && $3 ~ /^SIG[A-Z0-9]*$/ && $3 !~ /SIGARRAYSIZE/ && $4 !~ /void/ {
 print substr($3, 4, 20)
}' $xxxfiles`
: Append some common names just in case the awk scan failed.
xxx="$xxx ABRT ALRM BUS CANCEL CHLD CLD CONT DIL EMT FPE"
xxx="$xxx FREEZE HUP ILL INT IO IOT KILL LOST LWP PHONE"
xxx="$xxx PIPE POLL PROF PWR QUIT RTMAX RTMIN SEGV STKFLT STOP"
xxx="$xxx SYS TERM THAW TRAP TSTP TTIN TTOU URG USR1 USR2"
xxx="$xxx USR3 USR4 VTALRM WAITING WINCH WIND WINDOW XCPU XFSZ"

: generate a few handy files for later
$cat > signal.c <<'EOCP'
#include <sys/types.h>
#include <signal.h>
```

```
#include <stdio.h>
int main() {

/* Strange style to avoid deeply-nested #if/#else/#endif */
#ifndef NSIG
#  ifdef _NSIG
#    define NSIG (_NSIG)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGMAX
#    define NSIG (SIGMAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIG_MAX
#
   define NSIG (SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAXSIG
#    define NSIG (MAXSIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAX_SIG
#    define NSIG (MAX_SIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGARRAYSIZE
#    define NSIG (SIGARRAYSIZE+1) /* Not sure of the +1 */
#  endif
#endif

#ifndef NSIG
#  ifdef _sys_nsig
#    define NSIG (_sys_nsig) /* Solaris 2.5 */
#  endif
#endif

/* Default to some arbitrary number that's big enough to get most
```

```
  of the common signals.
*/
#ifndef NSIG
#    define NSIG 50
#endif

printf("NSIG %d\n", NSIG);

#ifndef JUST_NSIG

EOCP

echo $xxx | $tr ' ' $trnl | $sort | $uniq | $awk '
{
 printf "#ifdef SIG"; printf $1; printf "\n"
 printf "printf(\""; printf $1; printf " %%d\\n\",SIG";
 printf $1; printf ");\n"
 printf "#endif\n"
}
END {
 printf "#endif /* JUST_NSIG */\n";
 printf "exit(0);\n}\n";
}
' >>signal.c
$cat >signal.awk <<'EOP'
BEGIN { ndups = 0 }
$1 ~ /^NSIG$/ { nsig = $2 }
($1 !~ /^NSIG$/) && (NF == 2) {
   if ($2 >
 maxsig) { maxsig = $2 }
   if (sig_name[$2]) {
 dup_name[ndups] = $1
 dup_num[ndups] = $2
 ndups++
   }
   else {
 sig_name[$2] = $1
 sig_num[$2] = $2
   }
}
END {
   if (nsig == 0) {
    nsig = maxsig + 1
   }
   printf("NSIG %d\n", nsig);
   for (n = 1; n < nsig; n++) {
 if (sig_name[n]) {
     printf("%s %d\n", sig_name[n], sig_num[n])
```

```
 }
 else {
     printf("NUM%d %d\n", n, n)
 }
   }
   for (n = 0; n < ndups; n++) {
 printf("%s %d\n", dup_name[n], dup_num[n])
   }
}
EOP
$cat >signal_cmd <<EOS
$startsh
if $test -s signal.lst; then
   echo "Using your existing signal.lst file"
 exit 0
fi
xxx="$xxx"
EOS
?X: Avoid variable interpolation problems, especially with
?X: xxx, which contains newlines.
$cat >>signal_cmd <<'EOS'

set signal
if eval $compile_ok; then
 $run ./signal$_exe | ($sort -n -k 2 2>/dev/null || $sort -n +1) |\
  $uniq | $awk -f signal.awk >signal.lst
else
 echo "(I can't seem be able to compile the whole test program)" >&4
 echo "(I'll try it in little
 pieces.)" >&4
 set signal -DJUST_NSIG
 if eval $compile_ok; then
  $run ./signal$_exe > signal.nsg
  $cat signal.nsg
 else
  echo "I can't seem to figure out how many signals you have." >&4
  echo "Guessing 50." >&4
  echo 'NSIG 50' > signal.nsg
 fi
 : Now look at all the signal names, one at a time.
 for xx in `echo $xxx | $tr ' ' $trnl | $sort | $uniq`; do
  $cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {
printf("$xx %d\n", SIG${xx});
return 0;
```

```
}
EOCP
  set signal
  if eval $compile; then
   echo "SIG${xx} found."
   $run ./signal$_exe  >> signal.ls1
  else
   echo "SIG${xx} NOT found."
  fi
 done
 if $test -s signal.ls1; then
  $cat signal.nsg signal.ls1 |
   $sort -n | $uniq | $awk -f signal.awk >signal.lst
 fi

fi
if $test -s signal.lst; then
 :
else
 echo "(AAK! I can't compile the test programs -- Guessing)" >&4
 echo 'kill -l' >signal
 set X `csh -f <signal`
 $rm -f signal
 shift
 case $# in
 0) set HUP INT QUIT ILL TRAP ABRT
 EMT FPE KILL BUS SEGV SYS PIPE ALRM TERM;;
 esac
 echo $@ | $tr ' ' $trnl | \
     $awk '{ printf "%s %d\n", $1, ++s; }
    END { printf "NSIG %d\n", ++s }' >signal.lst
fi
$rm -f signal.c signal$_exe signal$_o signal.nsg signal.ls1
EOS
chmod a+x signal_cmd
$eunicefix signal_cmd
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Signal.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, 2012 Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:ptrsize: cat rm_try Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:ptrsize:
?S: This variable contains the value of the PTRSIZE symbol, which
?S: indicates to the C program how many bytes there are in a pointer.
?S:.
?C:PTRSIZE:
?C: This symbol contains the size of a pointer, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define PTRSIZE $ptrsize  /**/
?H:.
?F:!try
: check for length of pointer
echo " "
case "$ptrsize" in
")
 echo "Checking to see how big your pointers are..."
 >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(char *));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$ptrsize"
 ;;
esac
rp="What is the size of a pointer (in bytes)?"
. ./myread
ptrsize="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ptrsize.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Config_sh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_sh.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:57:53  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  14:53:31  ram
?RCS: patch45: moved path stripping from d_portable.U to end of Configure
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:50:37  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X:
 This unit ends up producing the config.sh script, which contains all the
?X: definitions figured out by Configure.  The add.Config_sh command knows
?X: which variables need to be remembered.  It also adds the EOT (ends the
?X: here document redirection with variable substitution).
?X:
?MAKE:Config_sh: cf_time cf_by test spitshell startsh myuname Myread \
 End Obsol_sh Loc +d_portable package src cat
?MAKE: -pick add.Config_sh $@ %<
?MAKE: -pick add $@ ./Obsol_sh
?MAKE: -pick close.Config_sh $@ %<
?F:!config.over !config.arch
?T:file temp
?LINT:unclosed EOT
: back to where it started
if test -d ../UU; then
 cd ..
fi

: configuration may be unconditionally patched via a 'config.arch' file
if $test -f config.arch; then
 echo "I see a config.arch file, loading it." >&4
```

```
 . ./config.arch
fi

: configuration may be patched via a 'config.over' file
if $test -f config.over; then
 echo " "
 dflt=y
 rp='I see a config.over file.  Do you wish to load it?'
 . UU/myread
 case "$ans" in
 n*) echo
 "OK, I'll ignore it.";;
 *) . ./config.over
  echo "Configuration override changes have been loaded."
  ;;
 esac
fi

@if d_portable
: in case they want portability, strip down executable paths
?X:
?X: Strip down paths in located executables. For each file, e.g. vi, there
?X: is a $vi variable whose value is for instance '/usr/bin/vi'. By resetting
?X: $vi to 'vi', we rely on the PATH variable to locate the executable...
?X:
case "$d_portable" in
"$define")
 echo " "
 echo "Stripping down executable paths..." >&4
?X:
?X: Previously, we used to do    eval $file="\$file"  but in order
?X: to handle things like  sh Configure -Dmake=gmake, we can't do
?X: that.  What we *really* want is to strip away the absolute path
?X: and rely on the end user's $PATH to correctly find the executable.
?X: This method assumes there is a "basename" command available.  If
?X: not, replace it with the following expr-based command:
?X:   expr  $temp : '.*/\(.*\)' \| $temp
?X: Since this preserves the actual
 command name, we can now drop the
?X: OS/2 specific code.
?X:  --Andy Dougherty  August 1999
?X:
?X: On OS/2, a special $ar command not even named 'ar' is required,
?X: so we don't strip that name.
?X: Also, on DOS-ish systems, there might not be a ln command, but we
?X: might have ln='cp'.
?X: However, we can't set d_portable=undef on such systems since
?X: Unix-ish tools don't have standard locations there.  Thus we
```

```
?X: MUST rely on the user's $PATH.
?X: --Andy Dougherty  4/1998
?X:
 for file in $loclist $trylist; do
  eval temp=\$$file
  eval $file=`basename $temp`
 done
 ;;
esac

@end
: create config.sh file
echo " "
echo "Creating config.sh..." >&4
$spitshell <<EOT >config.sh
$startsh
#
# This file was produced by running the Configure script. It holds all the
# definitions figured out by Configure. Should you modify one of these values,
# do not forget to propagate your changes by running "Configure -der". You may
# instead choose to run each of the .SH files by yourself, or "Configure
 -S".
#

# Package name      : $package
# Source directory  : $src
# Configuration time: $cf_time
# Configured by     : $cf_by
# Target system     : $myuname

EOT
?X: Command line options are saved by the Options.U unit in the
?X: temporary file UU/cmdline.opt
: Add in command line options if available
$test -f UU/cmdline.opt && $cat UU/cmdline.opt >> config.sh

$spitshell <<EOT >>config.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Config_sh.U
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```
?RCS: $Id: packadmin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:packadmin: cf_email Oldconfig Myread cat spackage package
?MAKE: -pick add $@ %<
?Y:TOP
?S:packadmin:
?S: Electronic mail address of the package administrator.
?S:.
: check wehther they will act as local admin for the package
$cat <<EOM

If you or somebody else will be maintaining $package at your site, please
fill in the correct e-mail address here so that they may be contacted
if necessary.  You may enter "none"
 for no administrator.

EOM
case "$packadmin" in
") dflt="$cf_email";;
*) dflt="$packadmin";;
esac
rp="$spackage administrator e-mail address"
. ./myread
packadmin="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/packadmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Signal.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Signal.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:01  ram
?RCS: patch61: created
?RCS:
?X:
?X: This unit produces three files:
```

```
?X: 1- A signal.c file, which, when compiled and run, produces an output like:
?X:
?X:   HUP 1
?X:   INT 2
?X:   QUIT 3
?X:   etc...
?X:
?X: 2- A signal.awk script to parse the output of signal.c, fill
?X: in gaps (up to NSIG) and move duplicates to the end.
?X: 3- A signal_cmd script to compile signal.c and run it
?X: through
 sort -n -k 2 | uniq | awk -f signal.awk.
?X: (we try also sort -n +1 since some old hosts don't grok sort -k)
?X: (This is called signal_cmd to avoid OS/2 confusion with
?X: signal.cmd vs. signal.
?X: The signal_cmd script also falls back on checking signals one at a
?X: time in case the signal.c program fails.  On at least one version of
?X: Linux 2.1.x, the header file #define'd SIGRTMAX to a symbol that
?X: is not defined by the compiler/linker. :-(.  Further, on that same
?X: version of Linux, the user had a defective C-shell that gave an
?X: incorrect list for kill -l, so the fall-back didn't work.
?X:
?X: This unit is then used by sig_name.U.
?X:
?MAKE:Signal: test tr rm awk cat grep startsh eunicefix sed sort uniq \
 Findhdr cppstdin +cppflags cppminus Compile _o _exe trnl run i_stdlib \
 sysroot
?MAKE: -pick add $@ %<
?X:all files declared as "public" since they're used from other units
?F:signal.c signal_cmd signal.lst signal signal.awk
?T: xx xxx xxxfiles
?LINT:use rm run
 _o _exe
?LINT:extern sig_num_init
: Trace out the files included by signal.h, then look for SIGxxx names.
?X: Remove SIGARRAYSIZE used by HPUX.
?X: Remove SIGSTKSIZE used by Linux.
?X: Remove SIGSTKSZ used by POSIX.
?X: Remove SIGTYP void lines used by OS2.
?X: Some cpps, like os390, do not give the file name anywhere
case "$sig_num_init" in
")
if [ "X$fieldn" = X ]; then
 : Just make some guesses.  We check them later.
 xxx="$sysroot/usr/include/signal.h $sysroot/usr/include/sys/signal.h"
else
 xxx=`echo '#include <signal.h>' |
 $cppstdin $cppminus $cppflags 2>/dev/null |
```

```
 $grep '^[  ]*#.*include' |
 $awk "{print \\$$fieldn}" | $sed 's!"!!g' |\
  $sed 's!\\\\\\\\!/!g' | $sort | $uniq`
fi
?X: Check this list of files to be sure we have parsed the cpp output ok.
?X: This will also avoid potentially non-existent files, such
?X: as ../foo/bar.h
xxxfiles="
?X: Add /dev/null in case the $xxx list is empty.
for xx in $xxx /dev/null ; do
 $test -f "$xx" && xxxfiles="$xxxfiles $xx"
done
?X:
 If we have found no files, at least try signal.h
case "$xxxfiles" in
") xxxfiles=`./findhdr signal.h` ;;
esac
xxx=`awk '
$1 ~ /^#define$/ && $2 ~ /^SIG[A-Z0-9]*$/ && $2 !~ /SIGARRAYSIZE/ && $2 !~ /SIGSTKSIZE/ && $2 !~
/SIGSTKSZ/ && $3 !~ /void/ {
 print substr($2, 4, 20)
}
$1 == "#" && $2 ~ /^define$/ && $3 ~ /^SIG[A-Z0-9]*$/ && $3 !~ /SIGARRAYSIZE/ && $4 !~ /void/ {
 print substr($3, 4, 20)
}' $xxxfiles`
: Append some common names just in case the awk scan failed.
xxx="$xxx ABRT ALRM BUS CANCEL CHLD CLD CONT DIL EMT FPE"
xxx="$xxx FREEZE HUP ILL INT IO IOT KILL LOST LWP PHONE"
xxx="$xxx PIPE POLL PROF PWR QUIT RTMAX RTMIN SEGV STKFLT STOP"
xxx="$xxx SYS TERM THAW TRAP TSTP TTIN TTOU URG USR1 USR2"
xxx="$xxx USR3 USR4 VTALRM WAITING WINCH WIND WINDOW XCPU XFSZ"

: generate a few handy files for later
$cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
int main() {

/* Strange style to avoid
 deeply-nested #if/#else/#endif */
#ifndef NSIG
#  ifdef _NSIG
#    define NSIG (_NSIG)
```

```
#  endif
#endif

#ifndef NSIG
#  ifdef SIGMAX
#    define NSIG (SIGMAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIG_MAX
#    define NSIG (SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef _SIG_MAX
#    define NSIG (_SIG_MAX+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAXSIG
#    define NSIG (MAXSIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef MAX_SIG
#    define NSIG (MAX_SIG+1)
#  endif
#endif

#ifndef NSIG
#  ifdef SIGARRAYSIZE
#    define NSIG SIGARRAYSIZE /* Assume ary[SIGARRAYSIZE] */
#  endif
#endif

#ifndef NSIG
#  ifdef _sys_nsig
#    define NSIG (_sys_nsig) /* Solaris 2.5 */
#  endif
#endif

/* Default to some arbitrary number that's big enough to get most
  of the common signals.
*/
```

```
#ifndef NSIG
#    define NSIG 50
#endif

printf("NSIG %d\n", NSIG);

#ifndef JUST_NSIG

EOCP

echo $xxx | $tr ' ' $trnl | $sort | $uniq | $awk '
{
 printf "#ifdef SIG"; printf $1; printf "\n"
 printf "printf(\"";
 printf $1; printf " %%d\\n\",SIG";
 printf $1; printf ");\n"
 printf "#endif\n"
}
END {
 printf "#endif /* JUST_NSIG */\n";
 printf "exit(0);\n}\n";
}
' >>signal.c
$cat >signal.awk <<'EOP'
BEGIN { ndups = 0 }
$1 ~ /^NSIG$/ { nsig = $2 }
($1 !~ /^NSIG$/) && (NF == 2) && ($2 ~ /^[0-9][0-9]*$/) {
   if ($2 > maxsig) { maxsig = $2 }
   if (sig_name[$2]) {
 dup_name[ndups] = $1
 dup_num[ndups] = $2
 ndups++
   }
   else {
 sig_name[$2] = $1
 sig_num[$2] = $2
   }
}
END {
   if (nsig == 0) {
    nsig = maxsig + 1
   }
   printf("NSIG %d\n", nsig);
   for (n = 1; n < nsig; n++) {
 if (sig_name[n]) {
     printf("%s %d\n", sig_name[n], sig_num[n])
 }
 else {
```

```
    printf("NUM%d %d\n", n, n)
 }
   }
   for (n = 0; n < ndups; n++) {
 printf("%s %d\n", dup_name[n], dup_num[n])
   }
}
EOP
$cat >signal_cmd <<EOS
$startsh
if $test -s signal.lst; then
   echo "Using your existing signal.lst file"
 exit 0
fi
xxx="$xxx"
EOS
?X: Avoid variable interpolation problems, especially with
?X:
 xxx, which contains newlines.
$cat >>signal_cmd <<'EOS'

set signal
if eval $compile_ok; then
 $run ./signal$_exe | ($sort -n -k 2 2>/dev/null || $sort -n +1) |\
  $uniq | $awk -f signal.awk >signal.lst
else
 echo "(I can't seem be able to compile the whole test program)" >&4
 echo "(I'll try it in little pieces.)" >&4
 set signal -DJUST_NSIG
 if eval $compile_ok; then
  $run ./signal$_exe > signal.nsg
  $cat signal.nsg
 else
  echo "I can't seem to figure out how many signals you have." >&4
  echo "Guessing 50." >&4
  echo 'NSIG 50' > signal.nsg
 fi
 : Now look at all the signal names, one at a time.
 for xx in `echo $xxx | $tr ' ' $trnl | $sort | $uniq`; do
  $cat > signal.c <<EOCP
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
int main() {
printf("$xx %d\n", SIG${xx});
return 0;
}
EOCP
```

```
  set signal
  if eval $compile; then
   echo "SIG${xx} found."
   $run ./signal$_exe  >> signal.ls1
  else
   echo "SIG${xx} NOT found."
  fi
 done
 if $test -s signal.ls1; then
  $cat
 signal.nsg signal.ls1 |
   $sort -n | $uniq | $awk -f signal.awk >signal.lst
 fi

fi
if $test -s signal.lst; then
 :
else
 echo "(AAK! I can't compile the test programs -- Guessing)" >&4
 echo 'kill -l' >signal
 set X `csh -f <signal`
 $rm -f signal
 shift
 case $# in
 0) set HUP INT QUIT ILL TRAP ABRT EMT FPE KILL BUS SEGV SYS PIPE ALRM TERM;;
 esac
 echo $@ | $tr ' ' $trnl | \
     $awk '{ printf "%s %d\n", $1, ++s; }
    END { printf "NSIG %d\n", ++s }' >signal.lst
fi
$rm -f signal.c signal$_exe signal$_o signal.nsg signal.ls1
EOS
chmod a+x signal_cmd
$eunicefix signal_cmd
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Signal.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: dlsrc.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?RCS: $Log: dlext.U,v $
?RCS:
?X:  hpux support thanks to Jeff Okamoto <okamoto@hpcc101.corp.hp.com>
?X:
?X:  To create a shared library, you must compile ALL source files in the
?X:  library with +z (or possibly +Z if the library is whopping huge),
?X:  then link the library with -b.  Example:
?X:   cc -c +z module_a.c
?X:   cc -c +z module_b.c
?X:   ld -b module_a.o module_b.o -o module.sl
?X:
?MAKE:dlext: \
 Getfile Myread cat usedl so
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:dlext:
?S: This variable contains the extension that is to be used for the
?S: dynamically loaded modules that perl generates.
?S:.
: Check what extension to use for shared libs
case "$usedl" in
$define|y|true)
 $cat <<
 EOM

On a few systems, the dynamically loaded modules that perl generates and uses
will need a different extension than shared libs. The default will probably
be appropriate.

EOM
 case "$dlext" in
 ") dflt="$so" ;;
 *) dflt="$dlext" ;;
 esac
 rp='What is the extension of dynamically loaded modules'
 . ./myread
 dlext="$ans"
 ;;
*)
 dlext="none"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dlext.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:fflushNULL fflushall: Compile cat rm rm_try test osname run to from \
 Oldconfig Myread Setvar echo targethost \
 d_sysconf i_unistd d_stdio_stream_array stdio_stream_array i_stdlib
?MAKE: -pick add $@ %<
?S:fflushNULL:
?S: This symbol, if defined, tells that fflush(NULL) correctly
?S: flushes all pending stdio output without side effects. In
?S: particular, on some platforms calling fflush(NULL) *still*
?S: corrupts STDIN if it is a pipe.
?S:.
?S:fflushall:
?S: This symbol, if defined, tells that to flush
?S: all
 pending stdio output one must loop through all
?S: the stdio file handles stored in an array and fflush them.
?S: Note that if fflushNULL is defined, fflushall will not
?S: even be probed for and will be left undefined.
?S:.
?C:FFLUSH_NULL:
?C: This symbol, if defined, tells that fflush(NULL) correctly
?C: flushes all pending stdio output without side effects. In
?C: particular, on some platforms calling fflush(NULL) *still*
?C: corrupts STDIN if it is a pipe.
?C:.
?C:FFLUSH_ALL:
?C: This symbol, if defined, tells that to flush
?C: all pending stdio output one must loop through all
?C: the stdio file handles stored in an array and fflush them.
?C: Note that if fflushNULL is defined, fflushall will not
?C: even be probed for and will be left undefined.
?C:.
?H:#$fflushNULL FFLUSH_NULL  /**/
?H:#$fflushall FFLUSH_ALL  /**/
?H:.
?T:output code
?F:!try.out !try !tryp
: Check how to flush
echo " "
$cat >&4 <<EOM
```

```
Checking how to flush all pending stdio output...
EOM
# I only know how to find
 the first 32 possibly open files on SunOS.
# See also hints/sunos_4_1.sh and util.c  --AD
case "$osname" in
sunos) $echo '#define PERL_FFLUSH_ALL_FOPEN_MAX 32' > try.c ;;
esac
$cat >>try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
# include <unistd.h>
#endif
#$d_sysconf HAS_SYSCONF
#$d_stdio_stream_array HAS_STDIO_STREAM_ARRAY
#ifdef HAS_STDIO_STREAM_ARRAY
# define STDIO_STREAM_ARRAY $stdio_stream_array
#endif
int main() {
 FILE* p;
 unlink("try.out");
 p = fopen("try.out", "w");
#ifdef TRY_FPUTC
 fputc('x', p);
#else
# ifdef TRY_FPRINTF
 fprintf(p, "x");
# endif
#endif
#ifdef TRY_FFLUSH_NULL
 fflush(NULL);
#endif
#ifdef TRY_FFLUSH_ALL
 {
   long open_max = -1;
# ifdef PERL_FFLUSH_ALL_FOPEN_MAX
   open_max = PERL_FFLUSH_ALL_FOPEN_MAX;
# else
#  if defined(HAS_SYSCONF) && defined(_SC_OPEN_MAX)
   open_max = sysconf(_SC_OPEN_MAX);
#  else
#   ifdef FOPEN_MAX
   open_max = FOPEN_MAX;
```

```
#   else
#
    ifdef OPEN_MAX
   open_max = OPEN_MAX;
#    else
#     ifdef _NFILE
   open_max = _NFILE;
#     endif
#    endif
#   endif
#  endif
# endif
# ifdef HAS_STDIO_STREAM_ARRAY
   if (open_max > 0) {
     long i;
     for (i = 0; i < open_max; i++)
     if (STDIO_STREAM_ARRAY[i]._file >= 0 &&
  STDIO_STREAM_ARRAY[i]._file < open_max &&
  STDIO_STREAM_ARRAY[i]._flag)
  fflush(&STDIO_STREAM_ARRAY[i]);
   }
 }
# endif
#endif
 _exit(42);
}
EOCP
: first we have to find out how _not_ to flush
$to try.c
if $test "X$fflushNULL" = X -o "X$fflushall" = X; then
   output=''
   set try -DTRY_FPUTC
   if eval $compile; then
     $run ./try 2>/dev/null
     code="$?"
     $from try.out
     if $test ! -s try.out -a "X$code" = X42; then
  output=-DTRY_FPUTC
     fi
   fi
   case "$output" in
   '')
     set try -DTRY_FPRINTF
     if eval $compile; then
      $run ./try 2>/dev/null
      code="$?"
      $from try.out
      if $test ! -s try.out -a "X$code" = X42; then
```

```
   output=-DTRY_FPRINTF

    fi
     fi
 ;;
   esac
fi
: check for fflush NULL behavior
case "$fflushNULL" in
") set try -DTRY_FFLUSH_NULL $output
 if eval $compile; then
  $run ./try 2>/dev/null
  code="$?"
  $from try.out
  if $test -s try.out -a "X$code" = X42; then
   fflushNULL="`$cat try.out`"
  else
   if $test "X$code" != X42; then
    $cat >&4 <<EOM
(If this test failed, don't worry, we'll try another method shortly.)
EOM
   fi
  fi
 fi
 $rm -f core try.core core.try.*
 case "$fflushNULL" in
 x) $cat >&4 <<EOM
Your fflush(NULL) works okay for output streams.
Let's see if it clobbers input pipes...
EOM
# As of mid-March 2000 all versions of Solaris appear to have a stdio
# bug that improperly flushes the input end of pipes.  So we avoid the
# autoflush on fork/system/exec support for now. :-(
$cat >tryp.c <<EOCP
#include <stdio.h>
int
main(int argc, char **argv)
{
   char buf[1024];
   int i;
   char *bp = buf;
   while (1) {
 while ((i = getc(stdin)) != -1
        && (*bp++ = i) != '\n'

     && bp < &buf[1024])
 /* DO NOTHING */ ;
 *bp = '\0';
```

```
 fprintf(stdout, "%s", buf);
 fflush(NULL);
 if (i == -1)
     return 0;
 bp = buf;
   }
}
EOCP
  fflushNULL="$define"
  set tryp
  if eval $compile; then
      $rm -f tryp.out
      # Copy the .c file to the remote host ($to is an ssh-alike if targethost is set)
      if $test "X$targethost" != X; then
   $to tryp.c
   $to tryp
   $run "cat tryp.c | ./tryp " 2>/dev/null > tryp.out
      else
   $cat tryp.c | $run ./tryp   2>/dev/null > tryp.out
      fi
      if cmp tryp.c tryp.out >/dev/null 2>&1; then
         $cat >&4 <<EOM
fflush(NULL) seems to behave okay with input streams.
EOM
   fflushNULL="$define"
      else
   $cat >&4 <<EOM
Ouch, fflush(NULL) clobbers input pipes!  We will not use it.
EOM
   fflushNULL="$undef"
      fi
  fi
  $rm -f core tryp.c tryp.core core.tryp.*
  ;;
 ") $cat >&4 <<EOM
Your fflush(NULL) isn't working (contrary to ANSI C).
EOM
  fflushNULL="$undef"
  ;;
 *) $cat >&4 <<EOM
Cannot figure out whether
 your fflush(NULL) works or not.
I'm assuming it doesn't (contrary to ANSI C).
EOM
  fflushNULL="$undef"
  ;;
 esac
 ;;
```

```
$define|true|[yY]*)
 fflushNULL="$define"
 ;;
*)
 fflushNULL="$undef"
 ;;
esac
: check explicit looping only if NULL did not work, and if the pipe
: bug does not show up on an explicit flush too
case "$fflushNULL" in
"$undef")
 $cat >tryp.c <<EOCP
#include <stdio.h>
int
main(int argc, char **argv)
{
   char buf[1024];
   int i;
   char *bp = buf;
   while (1) {
 while ((i = getc(stdin)) != -1
        && (*bp++ = i) != '\n'
        && bp < &buf[1024])
 /* DO NOTHING */ ;
 *bp = '\0';
 fprintf(stdout, "%s", buf);
 fflush(stdin);
 if (i == -1)
     return 0;
 bp = buf;
   }
}
EOCP
 set tryp
 if eval $compile; then
     $rm -f tryp.out
     if $test "X$targethost" != X; then
  $to tryp.c
  $to tryp
  $run "cat tryp.c | ./tryp " 2>/dev/null > tryp.out
     else
  $cat tryp.c | $run ./tryp   2>/dev/null > tryp.out
     fi
     if cmp tryp.c tryp.out >/dev/null 2>&1;
 then
        $cat >&4 <<EOM
Good, at least fflush(stdin) seems to behave okay when stdin is a pipe.
EOM
```

```
  : now check for fflushall behaviour
  case "$fflushall" in
  ") set try -DTRY_FFLUSH_ALL $output
   if eval $compile; then
    $cat >&4 <<EOM
(Now testing the other method--but note that this also may fail.)
EOM
    $run ./try 2>/dev/null
    code=$?
    $from try.out
    if $test -s try.out -a "X$code" = X42; then
     fflushall="`$cat try.out`"
    fi
   fi
   $rm_try
   case "$fflushall" in
   x) $cat >&4 <<EOM
Whew. Flushing explicitly all the stdio streams works.
EOM
    fflushall="$define"
    ;;
   ") $cat >&4 <<EOM
Sigh. Flushing explicitly all the stdio streams doesn't work.
EOM
    fflushall="$undef"
    ;;
   *) $cat >&4 <<EOM
Cannot figure out whether flushing stdio streams explicitly works or not.
I'm assuming it doesn't.
EOM
    fflushall="$undef"
    ;;
   esac
   ;;
  "$define"|true|[yY]*)
   fflushall="$define"
   ;;
  *)
   fflushall="$undef"
   ;;
  esac

 else
  $cat >&4 <<EOM
All is futile.  Even fflush(stdin) clobbers input pipes!
EOM
  fflushall="$undef"
     fi
```

```
 else
    fflushall="$undef"
 fi
 $rm -f core tryp.c tryp.core core.tryp.*
 ;;
*) fflushall="$undef"
 ;;
esac

case "$fflushNULL$fflushall" in
undefundef)
 $cat <<EOM
OK, I give up.  I cannot figure out how to flush pending stdio output.
We won't be flushing handles at all before fork/exec/popen.
EOM
 ;;
esac
$rm_try tryp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/fflushall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setruid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setruid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setruid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setruid:
?S: This variable conditionally defines the HAS_SETRUID symbol, which
?S: indicates to the C program that the setruid() routine is available
?S: to change the real uid of the current program.
?S:.
?C:HAS_SETRUID (SETRUID):
?C: This symbol, if defined, indicates that the setruid
 routine is available
?C: to change the real uid of the current program.
```

```
?C:.
?H:#$d_setruid HAS_SETRUID  /**/
?H:.
?LINT:set d_setruid
: see if setruid exists
set setruid d_setruid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setruid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: errnolist.U,v 3.0.1.2 1997/02/28 15:48:01 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: errnolist.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:01  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:10:54  ram
?RCS: patch16: created
?RCS:
?MAKE:errnolist errnolist_SH errnolist_a errnolist_c errnolist_o: cat \
 Compile +d_sysernlst _a _o
?MAKE: -pick add $@ %<
?S:errnolist:
?S: This variable holds the base name of a file containing the
?S: definition
 of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is empty.
?S: The following lines should be included in your Makefile.SH:
?S:
?S:  case "$errnolist" in
?S:  ") ;;
?S:  *)
?S:   $spitshell >>Makefile <<!GROK!THIS!
?S:  $errnolist_c: $errnolist_SH $errnolist_a
?S:   sh ./$errnolist_SH
?S:
?S:  !GROK!THIS!
```

```
?S:   ;;
?S:  esac
?S:
?S: You may define the 'errnolist' variable in your Myinit.U if you
?S: wish to override its default value "errnolist".
?S:.
?S:errnolist_SH:
?S: This is the name of a file which will generate errnolistc.
?S:.
?S:errnolist_a:
?S: This is the name of the awk script called by errnolist_SH.
?S:.
?S:errnolist_c:
?S: This is the name of a generated C file which provides the
?S: definition of the sys_errnolist array.
?S:.
?S:errnolist_o:
?S: This is the name of the object file which provides the
?S: definition of the sys_errnolist array, if the C library
?S: doesn't provide it already.  Otherwise, its value is
 empty.
?S:.
?INIT:errnolist=errnolist
: check for sys_errnolist
@if d_sysernlst || HAS_SYS_ERRNOLIST
case "$d_sysernlst" in
"$define")
   errnolist="
   errnolist_SH="
   errnolist_a="
   errnolist_c="
   errnolist_o="
 ;;
*)
 echo " "
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
   errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
 ;;
esac
@else
echo " "
$cat <<EOM
Checking to see if your C library provides us with sys_errnolist[]...
EOM
$cat >errnolist.c <<'EOCP'
```

```
extern char *sys_errnolist[];
int main() {
   char *p0 = sys_errnolist[0];
   char *p1 = sys_errnolist[1];

   return (p0 == p1); /* Make sure they're not optimized away */
}
EOCP
set errnolist
if eval $compile; then
   echo "It does."
   errnolist=''
   errnolist_SH=''
   errnolist_a=''
   errnolist_c=''
   errnolist_o=''
else
 echo "I'll make sure your Makefile provides sys_errnolist in $errnolist.c"
   errnolist_SH=$errnolist.SH
    errnolist_a=$errnolist$_a
   errnolist_c=$errnolist.c
   errnolist_o=$errnolist$_o
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/errnolist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotobynumber_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotobynumber_r getprotobynumber_r_proto: Inlibc Protochk \
 Hasproto i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotobynumber_r:
?S: This variable conditionally defines the HAS_GETPROTOBYNUMBER_R symbol,
?S: which indicates to the C program that the getprotobynumber_r()
?S: routine is available.
?S:.
?S:getprotobynumber_r_proto:
?S: This variable encodes the prototype of getprotobynumber_r.
?S: It is zero if d_getprotobynumber_r is undef, and one of the
```

```
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobynumber_r
?S: is defined.
?S:.
?C:HAS_GETPROTOBYNUMBER_R:
?C: This
 symbol, if defined, indicates that the getprotobynumber_r routine
?C: is available to getprotobynumber re-entrantly.
?C:.
?C:GETPROTOBYNUMBER_R_PROTO:
?C: This symbol encodes the prototype of getprotobynumber_r.
?C: It is zero if d_getprotobynumber_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotobynumber_r
?C: is defined.
?C:.
?H:#$d_getprotobynumber_r HAS_GETPROTOBYNUMBER_R /**/
?H:#define GETPROTOBYNUMBER_R_PROTO $getprotobynumber_r_proto /**/
?H:.
?T:try hdrs d_getprotobynumber_r_proto
: see if getprotobynumber_r exists
set getprotobynumber_r d_getprotobynumber_r
eval $inlibc
case "$d_getprotobynumber_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotobynumber_r_proto:$usethreads" in
 ":define") d_getprotobynumber_r_proto=define
  set d_getprotobynumber_r_proto getprotobynumber_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getprotobynumber_r_proto" in
 define)
 case "$getprotobynumber_r_proto"
 in
 "|0) try='int getprotobynumber_r(int, struct protoent*, char*, size_t, struct protoent**);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=I_ISBWR ;;
 esac
 case "$getprotobynumber_r_proto" in
 "|0) try='struct protoent* getprotobynumber_r(int, struct protoent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=S_ISBI ;;
 esac
 case "$getprotobynumber_r_proto" in
 "|0) try='int getprotobynumber_r(int, struct protoent*, struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && getprotobynumber_r_proto=I_ISD ;;
 esac
 case "$getprotobynumber_r_proto" in
 "|0) d_getprotobynumber_r=undef
  getprotobynumber_r_proto=0
```

```
  echo "Disabling getprotobynumber_r, cannot determine prototype." >&4 ;;
 * ) case "$getprotobynumber_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getprotobynumber_r_proto="REENTRANT_PROTO_$getprotobynumber_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getprotobynumber_r
 has no prototype, not using it." >&4 ;;
  esac
  d_getprotobynumber_r=undef
  getprotobynumber_r_proto=0
  ;;
 esac
 ;;
*) getprotobynumber_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotobynumber_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_usendir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_usendir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:47:34  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_usendir i_ndir ndirlib: test Setvar Findhdr d_readdir _a
?MAKE: -pick add $@ %<
?S:d_usendir:
?S: This variable conditionally defines the EMULATE_NDIR symbol, which
?S: indicates
```

```
 to the C program that it should compile the ndir.c code
?S: provided with the package.
?S:.
?S:i_ndir (d_libndir):
?S: This variable conditionally defines the I_NDIR symbol, which
?S: indicates to the C program that it should include the system's
?S: version of ndir.h, rather than the one with this package.
?S:.
?S:ndirlib:
?S: The name of the library to include at linking stage to resolve ndir
?S: symbols. It is up to the makefile to use this value.
?S:.
?C:EMULATE_NDIR (USENDIR):
?C: This symbol, if defined, indicates that the program should compile
?C: the ndir.c code provided with the package.
?C:.
?C:I_NDIR (LIBNDIR):
?C: This symbol, if defined, indicates that the program should include the
?C: system's version of ndir.h, rather than the one with this package.
?C:.
?H:#$d_usendir EMULATE_NDIR  /**/
?H:#$i_ndir I_NDIR  /**/
?H:.
?T:val2
?LINT: set d_usendir i_ndir
: see if there are directory access routines out there
echo " "
if $test `./findhdr ndir.h` && \
 ( $test -r /usr/lib/libndir$_a
 || $test -r /usr/local/lib/libndir$_a ); then
 echo "Ndir library found." >&4
 if $test -r /usr/lib/libndir$_a; then
  ndirlib='-lndir'
 else
  ndirlib="/usr/local/lib/libndir$_a"
 fi
 val2="$define"
 val="$undef"
else
 ndirlib=''
 val2="$undef"
 case "$d_readdir" in
 "$define")
 echo "No ndir library found, but you have readdir() so we'll use that." >&4
  val="$undef";
  ;;
 *)
  echo "No ndir library found." >&4
```

```
  val="$define"
  ;;
 esac
fi
set d_usendir
eval $setvar
val="$val2"
set i_ndir
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_usendir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_string.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_string.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:50:12  ram
?RCS: patch12: special units Loc and Guess were missing from dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:07:26  ram
?RCS: patch10: removed "(Actually, this looks more like...)" messages (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: See if we should include <string.h> or <strings.h>
?X:
?MAKE:i_string strings:
 test Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?S:i_string:
?S: This variable conditionally defines the I_STRING symbol, which
?S: indicates that <string.h> should be included rather than <strings.h>.
?S:.
?S:strings:
?S: This variable holds the full path of the string header that will be
?S: used. Typically /usr/include/string.h or /usr/include/strings.h.
?S:.
```

```
?C:I_STRING:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <string.h> (USG systems) instead of <strings.h> (BSD systems).
?C:.
?H:#$i_string I_STRING  /**/
?H:.
?LINT:set i_string
: see which of string.h or strings.h is needed
echo " "
strings=`./findhdr string.h`
if $test "$strings" && $test -r "$strings"; then
 echo "Using <string.h> instead of <strings.h>." >&4
 val="$define"
else
 val="$undef"
 strings=`./findhdr strings.h`
 if $test "$strings" && $test -r "$strings"; then
  echo "Using <strings.h> instead of <string.h>." >&4
 else
  ./warn "No string header found -- You'll surely
 have problems."
 fi
fi
set i_string
eval $setvar
case "$i_string" in
"$undef") strings=`./findhdr strings.h`;;
*)   strings=`./findhdr string.h`;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_string.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_access.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_access: test +cc cat +cppflags h_fcntl h_sysfile rm Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_access:
?S: This variable conditionally defines HAS_ACCESS if the access() system
?S: call is available to check for access permissions using real IDs.
?S:.
?C:HAS_ACCESS:
?C: This manifest constant lets the C program know that the access()
?C: system call is available to check for accessibility
 using real UID/GID.
?C: (always present on UNIX.)
?C:.
?H:#$d_access HAS_ACCESS  /**/
?H:.
?W:%<:R_OK W_OK X_OK F_OK
?LINT:set d_access
?LINT:change h_fcntl h_sysfile
: access call always available on UNIX
set access d_access
eval $inlibc

: locate the flags for 'access()'
case "$d_access" in
"$define")
 echo " "
 $cat >access.c <<'EOCP'
#include <sys/types.h>
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#ifdef I_SYS_FILE
#include <sys/file.h>
#endif
#ifdef I_UNISTD
#include <unistd.h>
#endif
int main() {
 exit(R_OK);
}
EOCP
 : check sys/file.h first, no particular reason here
 if $test `./findhdr sys/file.h` && \
  $cc -o access $cppflags -DI_SYS_FILE access.c >/dev/null 2>&1 ; then
  h_sysfile=true;
  echo "<sys/file.h> defines the *_OK access constants." >&4
 elif $test `./findhdr fcntl.h` && \
  $cc -o access $cppflags -DI_FCNTL access.c >/dev/null 2>&1 ; then
  h_fcntl=true;
```

```
  echo "<fcntl.h> defines the *_OK access constants." >&4
@if I_UNISTD
 elif $test `./findhdr unistd.h`
 && \
  $cc -o access $cppflags -DI_UNISTD access.c >/dev/null 2>&1 ; then
  echo "<unistd.h> defines the *_OK access constants." >&4
@end
 else
  echo "I can't find the four *_OK access constants--I'll use mine." >&4
 fi
 ;;
esac
$rm -f access*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_access.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mallocsrc.U,v 3.0.1.2 1997/02/28 16:10:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: mallocsrc.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:10:26  ram
?RCS: patch61: added support for Free_t, the type of free()
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:10:46  ram
?RCS: patch23: added support for MYMALLOC, mainly  for perl5 (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mallocsrc mallocobj usemallocwrap usemymalloc
 malloctype d_mymalloc \
 freetype: Myread \
 Oldconfig package Guess Setvar rm cat +cc +ccflags Findhdr \
 i_malloc i_stdlib sed libs _o ptrsize useithreads
?MAKE: -pick add $@ %<
?X: Put near top so that other tests don't erroneously include
?X: -lmalloc.  --AD  22 June 1998
?Y:TOP
```

```
?S:usemymalloc:
?S: This variable contains y if the malloc that comes with this package
?S: is desired over the system's version of malloc.  People often include
?S: special versions of malloc for efficiency, but such versions are often
?S: less portable.  See also mallocsrc and mallocobj.
?S: If this is 'y', then -lmalloc is removed from $libs.
?S:.
?S:usemallocwrap:
?S: This variable contains y if we are wrapping malloc to prevent
?S: integer overflow during size calculations.
?S:.
?S:mallocsrc:
?S: This variable contains the name of the malloc.c that comes with
?S: the package, if that malloc.c is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.
?S:.
?S:d_mymalloc:
?S: This
 variable conditionally defines MYMALLOC in case other parts
?S: of the source want to take special action if MYMALLOC is used.
?S: This may include different sorts of profiling or error detection.
?S:.
?S:mallocobj:
?S: This variable contains the name of the malloc.o that this package
?S: generates, if that malloc.o is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.  See mallocsrc.
?S:.
?S:freetype:
?S: This variable contains the return type of free().  It is usually
?S: void, but occasionally int.
?S:.
?S:malloctype:
?S: This variable contains the kind of ptr returned by malloc and realloc.
?S:.
?C:Free_t:
?C: This variable contains the return type of free().  It is usually
?C: void, but occasionally int.
?C:.
?C:Malloc_t (MALLOCPTRTYPE):
?C: This symbol is the type of pointer returned by malloc and realloc.
?C:.
?H:#define Malloc_t $malloctype   /**/
?H:#define Free_t
 $freetype   /**/
?H:.
?C:PERL_MALLOC_WRAP:
```

```
?C: This symbol, if defined, indicates that we'd like malloc wrap checks.
?C:.
?H:#$usemallocwrap PERL_MALLOC_WRAP  /**/
?H:.
?C:MYMALLOC:
?C: This symbol, if defined, indicates that we're using our own malloc.
?C:.
?H:#$d_mymalloc MYMALLOC   /**/
?H:.
?LINT:extern usedevel
?LINT:change libs
?X: Cannot test for mallocsrc; it is the unit's name and there is a bug in
?X: the interpreter which defines all the names, even though they are not used.
@if mallocobj
: determine whether to use malloc wrapping
echo " "
case "$usemallocwrap" in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*) case "$usedevel" in
 [yY]*|true|$define) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
esac
rp="Do you wish to wrap malloc calls to protect against potential overflows?"
. ./myread
usemallocwrap="$ans"
case "$ans" in
y*|true)
 usemallocwrap="$define" ;;
*)
 usemallocwrap="$undef" ;;
esac

: determine which malloc to compile in
echo " "
case "$usemymalloc"
 in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*) case "$ptrsize" in
 4) dflt='y' ;;
 *) dflt='n' ;;
 esac
 if test "$useithreads" = "$define"; then dflt='n'; fi
 ;;
esac
```

```
rp="Do you wish to attempt to use the malloc that comes with $package?"
. ./myread
usemymalloc="$ans"
case "$ans" in
y*|true)
 usemymalloc='y'
 mallocsrc='malloc.c'
 mallocobj="malloc$_o"
 d_mymalloc="$define"
?X: Maybe libs.U should be dependent on mallocsrc.U, but then
?X: most packages that use dist probably don't supply their own
?X: malloc, so this is probably an o.k. compromise
 case "$libs" in
 *-lmalloc*)
  : Remove malloc from list of libraries to use
  echo "Removing unneeded -lmalloc from library list" >&4
  set `echo X $libs | $sed -e 's/-lmalloc / /' -e 's/-lmalloc$//'`
  shift
  libs="$*"
  echo "libs = $libs" >&4
  ;;
 esac
 ;;
*)
 usemymalloc='n'
 mallocsrc=''
 mallocobj=''
 d_mymalloc="$undef"
 ;;
esac

@end
@if MALLOCPTRTYPE || Malloc_t || Free_t
: compute the return types of
 malloc and free
echo " "
$cat >malloc.c <<END
#$i_malloc I_MALLOC
#$i_stdlib I_STDLIB
#include <stdio.h>
#include <sys/types.h>
#ifdef I_MALLOC
#include <malloc.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#ifdef TRY_MALLOC
```

```
void *malloc();
#endif
#ifdef TRY_FREE
void free();
#endif
END
@if MALLOCPTRTYPE || Malloc_t
case "$malloctype" in
")
 if $cc $ccflags -c -DTRY_MALLOC malloc.c >/dev/null 2>&1; then
  malloctype='void *'
 else
  malloctype='char *'
 fi
 ;;
esac
echo "Your system wants malloc to return '$malloctype', it would seem." >&4
@end

@if Free_t
case "$freetype" in
")
 if $cc $ccflags -c -DTRY_FREE malloc.c >/dev/null 2>&1; then
  freetype='void'
 else
  freetype='int'
 fi
 ;;
esac
echo "Your system uses $freetype free(), it would seem." >&4
@end
$rm -f malloc.[co]
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/mallocsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mkfifo.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mkfifo.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:17  ram
?RCS: patch36: created by ADO
?RCS:
?RCS:
?MAKE:d_mkfifo: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkfifo:
?S: This variable conditionally defines the HAS_MKFIFO symbol, which
?S: indicates to the C program that the mkfifo() routine is available.
?S:.
?C:HAS_MKFIFO :
?C: This symbol, if defined, indicates that the mkfifo
 routine is
?C: available to create FIFOs. Otherwise, mknod should be able to
?C: do it for you. However, if mkfifo is there, mknod might require
?C: super-user privileges which mkfifo will not.
?C:.
?H:#$d_mkfifo HAS_MKFIFO  /**/
?H:.
?LINT:set d_mkfifo
: see if mkfifo exists
set mkfifo d_mkfifo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mkfifo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_scandir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scandir.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:35  ram
?RCS: patch16: created
?RCS:
?MAKE:d_scandir: Inlibc
?MAKE: -pick add $@ %<
?S:d_scandir:
```

```
?S: This variable conditionally defines HAS_SCANDIR if scandir() is
?S: available to scan a directory.
?S:.
?C:HAS_SCANDIR:
?C: This symbol, if defined, indicates that the scandir routine is
?C: available to scan a directory.
?C:.
?H:#$d_scandir HAS_SCANDIR /**/
?H:.
?LINT:set d_scandir
: see if
 scandir exists
set scandir d_scandir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scandir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_u32align: Compile cat rm_try Oldconfig run i_stdlib \
 byteorder u32type Myread Setvar u8type signal_t
?MAKE: -pick add $@ %<
?S:d_u32align:
?S: This variable tells whether you must access character data
?S: through U32-aligned pointers.
?S:.
?C:U32_ALIGNMENT_REQUIRED:
?C: This symbol, if defined, indicates that you must access
?C: character data through U32-aligned pointers.
?C:.
?H:?%<:#ifndef U32_ALIGNMENT_REQUIRED
?H:?%<:#$d_u32align U32_ALIGNMENT_REQUIRED /**/
?H:?%<:#endif
?H:.
?F:!try
: Checking 32bit alignedness
$cat
```

```
 <<EOM

Checking to see whether you can access character data unalignedly...
EOM
case "$d_u32align" in
")   $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define U32 $u32type
#define BYTEORDER 0x$byteorder
#define U8 $u8type
#include <signal.h>
#ifdef SIGBUS
$signal_t bletch(int s) { exit(4); }
#endif
int main() {
#if BYTEORDER == 0x1234 || BYTEORDER == 0x4321
   volatile U8 buf[8];
   volatile U32 *up;
   int i;

   if (sizeof(U32) != 4) {
 printf("sizeof(U32) is not 4, but %d\n", sizeof(U32));
 exit(1);
   }

   fflush(stdout);

#ifdef SIGBUS
   signal(SIGBUS, bletch);
#endif

   buf[0] = 0;
   buf[1] = 0;
   buf[2] = 0;
   buf[3] = 1;
   buf[4] = 0;
   buf[5] = 0;
   buf[6] = 0;
   buf[7] = 1;

   for (i = 0; i < 4; i++) {
 up = (U32*)(buf + i);
 if (! ((*up == 1 << (8*i)) ||   /* big-endian */
        (*up == 1 << (8*(3-i)))  /* little-endian */
```

```
      )
    )
 {
     printf("read failed (%x)\n", *up);

    exit(2);
 }
   }

   /* write test */
   for (i = 0; i < 4; i++) {
 up = (U32*)(buf + i);
 *up = 0xBeef;
 if (*up != 0xBeef) {
     printf("write failed (%x)\n", *up);
     exit(3);
 }
   }

   exit(0);
#else
   printf("1\n");
   exit(1);
#endif
   return 0;
}
EOCP
set try
if eval $compile_ok; then
 echo "(Testing for character data alignment may crash the test.  That's okay.)" >&4
 $run ./try 2>&1 >/dev/null
 case "$?" in
 0) cat >&4 <<EOM
You can access character data pretty unalignedly.
EOM
  d_u32align="$undef"
  ;;
 *) cat >&4 <<EOM
It seems that you must access character data in an aligned manner.
EOM
  d_u32align="$define"
  ;;
 esac
else
 rp='Can you access character data at unaligned addresses?'
 dflt='n'
 . ./myread
 case "$ans" in
```

```
 [yY]*) d_u32align="$undef"  ;;
 *) d_u32align="$define" ;;
 esac
fi
$rm_try
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_u32align.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_getpwent.U,v $
?RCS:
?MAKE:d_getpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpwent:
?S: This variable conditionally defines the HAS_GETPWENT symbol, which
?S: indicates to the C program that the getpwent() routine is available
?S: for sequential access of the passwd database.
?S:.
?C:HAS_GETPWENT:
?C: This symbol, if defined, indicates that the getpwent routine is
?C: available for sequential access of the passwd database.
?C: If this is not available, the older getpw() function may be available.
?C:.
?H:#$d_getpwent HAS_GETPWENT  /**/
?H:.
?LINT:set d_getpwent
: see if getpwent exists
set getpwent d_getpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_stdio_stream_array stdio_stream_array: run \
 Compile cat rm_try Oldconfig Myread Setvar
?MAKE: -pick add $@ %<
?S:d_stdio_stream_array:
?S: This variable tells whether there is an array holding
?S: the stdio streams.
?S:.
?S:stdio_stream_array:
?S: This variable tells the name of the array holding the stdio streams.
?S: Usual values include _iob, __iob, and __sF.
?S:.
?C:HAS_STDIO_STREAM_ARRAY:
?C: This symbol, if defined, tells that there is an array
?C: holding the stdio streams.
?C:.
?C:STDIO_STREAM_ARRAY:
?C: This
 symbol tells the name of the array holding the stdio streams.
?C: Usual values include _iob, __iob, and __sF.
?C:.
?H:#$d_stdio_stream_array HAS_STDIO_STREAM_ARRAY /**/
?H:?%<:#ifdef HAS_STDIO_STREAM_ARRAY
?H:?%<:#define STDIO_STREAM_ARRAY $stdio_stream_array
?H:?%<:#endif
?H:.
?T:s
?F:!try
: Check stream access
$cat >&4 <<EOM
Checking how to access stdio streams by file descriptor number...
EOM
case "$stdio_stream_array" in
") $cat >try.c <<EOCP
#include <stdio.h>
int main() {
 if (&STDIO_STREAM_ARRAY[fileno(stdin)] == stdin)
   printf("yes\n");
}
EOCP
 for s in _iob __iob __sF
 do
        set try -DSTDIO_STREAM_ARRAY=$s
```

```
  if eval $compile; then
   case "`$run ./try`" in
   yes) stdio_stream_array=$s; break ;;
   esac
  fi
 done
 $rm_try
esac
case "$stdio_stream_array" in
") $cat >&4 <<EOM
I can't figure out how to access stdio streams by file descriptor number.
EOM
 d_stdio_stream_array="$undef"
 ;;
*) $cat >&4 <<EOM
You can access stdio streams by file descriptor number
 by the $stdio_stream_array array.
EOM
 d_stdio_stream_array="$define"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/stdio_streams.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS:
?MAKE:d_dir_dd_fd: Compile cat rm_try Setvar i_dirent i_stdlib
?MAKE: -pick add $@ %<
?S:d_dir_dd_fd (d_dir_dd_fd.U):
?S: This variable conditionally defines the HAS_DIR_DD_FD symbol, which
?S: indicates that the DIR directory stream type contains a member
?S: variable called dd_fd.
?S:.
?C:HAS_DIR_DD_FD:
?C: This symbol, if defined, indicates that the the DIR* dirstream
?C: structure contains a member variable named dd_fd.
?C:.
?H:#$d_dir_dd_fd HAS_DIR_DD_FD  /**/
?H:.
```

```
?LINT:set d_dir_dd_fd
: Look for DIR.dd_fd
case "$i_dirent"
 in
"$define")
   echo "Checking to see if DIR has a dd_fd member variable" >&4
   $cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <dirent.h>

int main() {
   DIR dir;
   dir.dd_fd = 1;
   return 0;
}
EOCP
   val=$undef
   set try
   if eval $compile; then
       echo "Yes, it does."
       val="$define"
   else
       echo "No, it does not."
       val="$undef"
   fi
   ;;
*)
   echo "You don't have a <dirent.h>, so not checking for dd_fd." >&4
   val="$undef"
   ;;
esac
set d_dir_dd_fd
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dir_dd_fd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getenv_thread.U,v 0RCS:
?RCS: Copyright (c) 2021 H.Merijn Brand, Karl Williamson
?RCS:
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?RCS:
```

```
?MAKE:d_getenv_preserves_other_thread: echo cat i_stdlib i_pthread run rm_try \
 Compile Setvar
?MAKE: -pick add $@ %<
?S:d_getenv_preserves_other_thread:
?S: This variable conditionally defines the GETENV_PRESERVES_OTHER_THREAD
?S: symbol, which indicates to the C program that the getenv() system call
?S: does not zap the static buffer in a different thread.
?S:.
?C:GETENV_PRESERVES_OTHER_THREAD:
?C: This symbol, if defined, indicates that the getenv system call doesn't
?C: zap the static buffer of getenv() in a different thread.
?C:
?C: The typical getenv() implementation will return a pointer to the proper
?C: position in **environ.  But some may instead copy them to
 a static
?C: buffer in getenv().  If there is a per-thread instance of that buffer,
?C: or the return points to **environ, then a many-reader/1-writer mutex
?C: will work; otherwise an exclusive locking mutex is required to prevent
?C: races.
?C:.
?H:#$d_getenv_preserves_other_thread GETENV_PRESERVES_OTHER_THREAD /**/
?H:.
?T:rc
?F:!try
?LINT:set d_getenv_preserves_other_thread
: check for getenv behavior
case "$d_getenv_preserves_other_thread" in
")
$echo "Checking to see if getenv() preserves a different thread's results" >&4
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#include <stdio.h>
#include <string.h>
#$i_pthread I_PTHREAD
#ifdef I_PTHREAD
#  include <pthread.h>
#endif

void *
thread_start(void * arg)
{
   return (void *) getenv("HOME");
}

int main() {
```

```
  char * main_buffer;
  char save_main_buffer[1000];
  pthread_t subthread;
  pthread_attr_t attr;

  main_buffer = getenv("PATH");

  /* If too large for our generous allowance,
 return we couldn't figure it
   * out. */
  if (strlen(main_buffer) >= sizeof(save_main_buffer)) {
      exit(2);
  }

  strcpy(save_main_buffer, main_buffer);

  if (pthread_attr_init(&attr) != 0) {
      exit(2);
  }

  if (pthread_create(&subthread, &attr, thread_start, NULL) != 0) {
      exit(2);
  }

  if (pthread_join(subthread, NULL) != 0) {
      exit(2);
  }

  exit(! (strcmp(main_buffer, save_main_buffer) == 0));
}
EOCP
val=
set try
if eval $compile_ok; then
  $run ./try
  rc=$?
  case "$rc" in
 0) echo "getenv() didn't destroy another thread's buffer" >&4
   val=$define
   ;;
 1) echo "getenv() does destroy another thread's buffer" >&4
   val=$undef
   ;;
 *) echo "Couldn't determine if getenv() destroys another thread's return value (code=$rc); assuming it does" >&4
   val=$undef
   ;;
  esac
else
```

```
   echo "(I can't seem to compile the test program.)" >&4
   echo "Assuming that your C library's getenv destroys another thread's
 return value." >&4
   val=$undef
fi
set d_getenv_preserves_other_thread
eval $setvar
$rm_try
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getenv_thread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: prefix.U,v 3.1 1999/07/08 18:27:51 doughera Exp doughera $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: prefix.U,v $
?RCS: Revision 3.1  1999/07/08 18:27:51  doughera
?RCS: 5.005_5x version -- Andy Dougherty
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:44:05  ram
?RCS: patch49: new prefixexp variable holding a fully expanded prefix
?RCS: patch49: save off previous prefix value in oldprefix if changed (WED)
?RCS: patch49: added the INSTALLPREFIX define for C programs to use (WED)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/08/29  16:31:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:prefix prefixexp +oldprefix: Getfile Loc Oldconfig cat package
?MAKE: -pick add $@ %<
?S:prefix:
?S: This variable holds the name of the directory below which the
?S: user will install the package.  Usually, this is /usr/local, and
?S: executables go in /usr/local/bin, library stuff in /usr/local/lib,
?S: man pages in /usr/local/man, etc.  It is only used to set defaults
?S: for things in bin.U, mansrc.U, privlib.U, or scriptdir.U.
```

```
?S:.
?S:prefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install the package.  Derived from prefix.
?S:.
?S:oldprefix:
?S: This variable is set non-null if the prefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
?C:INSTALLPREFIX:
?C: This symbol contains the name of the install prefix for this package.
?C:.
?H:#define INSTALLPREFIX "$prefix"  /**/
?H:.
:
 determine root of directory hierarchy where package will be installed.
case "$prefix" in
") dflt=`./loc . /usr/local /usr/local /local /opt /usr`
 ;;
*) dflt="$prefix"
 ;;
esac
$cat <<EOM

By default, $package will be installed in $dflt/bin, manual pages
under $dflt/man, etc..., i.e. with $dflt as prefix for all
installation directories. Typically this is something like /usr/local.
If you wish to have binaries under /usr/bin but other parts of the
installation under /usr/local, that's ok: you will be prompted
separately for each of the installation directories, the prefix being
only used to set the defaults.

EOM
fn=d~
rp='Installation prefix to use?'
. ./getfile
oldprefix=''
case "$prefix" in
") ;;
*) case "$ans" in
 "$prefix") ;;
 *) oldprefix="$prefix";;
 esac
 ;;
esac

case "$ans" in
*?/) prefix=`echo "$ans" | sed 's/.$//'`
```

```
 ;;
*) prefix="$ans"
esac

case "$ansexp" in
*?/) prefixexp=`echo "$ansexp" | sed 's/.$//'`
 ;;
*) prefixexp="$ansexp"
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/prefix.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_malloc: Inhdr
?MAKE: -pick add $@ %<
?S:i_malloc:
?S: This variable conditionally defines the I_MALLOC symbol, and indicates
?S: whether a C program should include <malloc.h>.
?S:.
?C:I_MALLOC:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <malloc.h>.
?C:.
?H:#$i_malloc I_MALLOC  /**/
?H:.
?LINT:set i_malloc
: see if this is a malloc.h system
set
 malloc.h i_malloc
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_malloc.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:default_inc_excludes_dot: Myread cat
?MAKE: -pick add $@ %<
?S:default_inc_excludes_dot:
?S: When defined, remove the legacy '.' from @INC
?S:.
?C:DEFAULT_INC_EXCLUDES_DOT:
?C: This symbol, if defined, removes the legacy default behavior of
?C: including '.' at the end of @INC.
?C:.
?H:#$default_inc_excludes_dot DEFAULT_INC_EXCLUDES_DOT /**/
?H:.
: Include . in @INC
$cat <<EOM

Historically Perl has provided a final fallback of the current working
directory '.' when searching for a library. This, however, can lead to
problems when a Perl program which loads optional modules is called from
a shared directory. This can lead to executing unexpected code.

EOM

# When changing to exclude by
 default:
case "$default_inc_excludes_dot" in
   $undef|false|[nN]*) dflt="n" ;;
   *)                  dflt="y" ;;
esac
# To turn exclude off by default:
#case "$default_inc_excludes_dot" in
#    $define|true|[yY]*) dflt="y" ;;
#    *)                  dflt="n" ;;
#esac

rp='Exclude '.' from @INC by default? '
. ./myread
case "$ans" in
   [nN]|undef) default_inc_excludes_dot="$undef"  ;;
   *)          default_inc_excludes_dot="$define" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/defaultincdot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: privlib.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: privlib.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:17:09  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:44:23  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:31:52  ram
?RCS:
 patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:34  ram
?RCS: patch10: added support for /local/lib (WED)
?RCS: patch10: prompt phrasing made more explicit (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:privlib privlibexp installprivlib: package cat Getfile Oldconfig \
 Setprefixvar Prefixit version installstyle binexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:privlib=''
?S:privlib:
?S: This variable contains the eventual value of the PRIVLIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S:.
```

```
?D:privlibexp="
?S:privlibexp:
?S: This variable is the ~name expanded version of privlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installprivlib="
?S:installprivlib:
?S: This variable
 is really the same as privlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:PRIVLIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C:.
?C:PRIVLIB_EXP:
?C: This symbol contains the ~name expanded version of PRIVLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#define PRIVLIB "$privlib"  /**/
?H:#define PRIVLIB_EXP "$privlibexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installprivlib
?LINT:set privlib
?LINT:set privlibexp
: determine where private library files go
: Usual default is /usr/local/lib/perl5/$version.
: Also allow things like /opt/perl/lib/$version, since
: /opt/perl/lib/perl5... would be redundant.
: The default "style"
 setting is made in installstyle.U
case "$installstyle" in
*lib/perl5*) set dflt privlib lib/$package/$version ;;
*)  set dflt privlib lib/$version ;;
esac
eval $prefixit
$cat <<EOM

There are some auxiliary files for $package that need to be put into a
private library directory that is accessible by everyone.

EOM
?X: Force dependency on bin.U
fn=$binexp
```

```
fn=d~+
rp='Pathname where the private library files will reside?'
. ./getfile
prefixvar=privlib
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/privlib.U
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```
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Csym.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:36:29  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS: patch56: added quotes for OS/2 support
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:00:33  ram
?RCS: patch54: fixed C test program to bypass gcc builtin type checks (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/31  09:34:13  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:05  ram
?RCS:
 patch6: added ldflags as a conditional dependency and to compile line
?RCS: patch6: a final double quote was missing in csym variable after eval
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Csym: Options contains libc libs runnm +cc +ccflags +ldflags rm
?MAKE: -pick add $@ %<
?LINT:define csym
?LINT:use libc
?S:csym:
?S: This shell variable is used internally by Configure to check
?S: wether a given C symbol is defined or not. A typical use is:
?S:  set symbol result [-fva] [previous]
?S:  eval $csym
```

```
?S: That will set result to 'true' if the function [-f], variable [-v]
?S: or array [-a] is defined, 'false' otherwise. If a previous value is
?S: given and the -r flag was provided on the command line, that value
?S: is reused without questioning.
?S:.
?V:csym
?T:tval tx tlook tf tdc tc
: is a C symbol defined?
csym='tlook=$1;
case "$3" in
-v) tf=libc.tmp; tc=""; tdc="";;
-a) tf=libc.tmp; tc="[0]"; tdc="[]";;
*) tlook="^$1\$";
 tf=libc.list; tc=""; tdc="()";;
esac;
tx=yes;
case "$reuseval-$4" in
true-) ;;
true-*) tx=no; eval "tval=\$$4"; case "$tval" in "") tx=yes;; esac;;
esac;
case "$tx" in
yes)
 case "$runnm" in
 true)
  if $contains $tlook $tf >/dev/null 2>&1;
  then tval=true;
  else tval=false;
  fi;;
 *)
?X:
?X: We use 'char' instead of 'int' to try to circumvent overzealous
?X: optimizing compilers using built-in prototypes for commonly used
?X: routines to complain when seeing a different external declaration. For
?X: instance, gcc 2.6.3 fails if we use 'int' and we attempt a test against
?X: memcpy() on machines where sizeof(int) == sizeof(char *) (the usual return
?X: type), the compiler assuming it's a built-in declaration given that the
?X: returned size matches. At least with 'char' we are safe! -- RAM, for ADO
?X:
?X: Let's thank GNU cc for making our lifes so easy! :-)
?X: (An alternative for the future would be to use our knowledge about gcc
?X: to force a -fno-builtin option in the
 compile test, in case the 'char'
?X: trick is obsoleted by future gcc releases). -- RAM
?X:
?X: Lastly, gcc 3.4 otimizes &missing == 0 away, so we use + 2 instead now.
?X: The GNU folks like to do weird things, don't they? -- RAM, 2004-06-05
?X:
  echo "extern char $1$tdc; int main() { return &$1$tc + 2; }" > t.c;
```

```
  if $cc $ccflags $ldflags -o t t.c $libs >/dev/null 2>&1;
  then tval=true;
  else tval=false;
  fi;
  $rm -f t t.c;;
 esac;;
*)
 case "$tval" in
 $define) tval=true;;
 *) tval=false;;
 esac;;
esac;
eval "$2=$tval"'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Csym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: defeditor.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: defeditor.U,v $
?RCS: Revision 3.0.1.1  1995/01/11  15:30:16  ram
?RCS: patch45: can now use the 'vi' variable since path stripping is deferred
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:defeditor: Getfile Oldconfig Loc vi
?MAKE: -pick add $@ %<
?S:defeditor:
?S: This variable contains the eventual value of the DEFEDITOR symbol,
?S: which contains the name of the default editor.
?S:.
?C:DEFEDITOR:
?C: This
 symbol contains the full pathname of the default editor.
?C:.
?H:#define DEFEDITOR "$defeditor"  /**/
?H:.
: determine default editor
```

```
echo " "
case "$defeditor" in
")
 case "$vi" in
 */*) dflt="$vi";;
 *) dflt=/usr/ucb/vi;;
 esac
 ;;
*)  dflt="$defeditor"
 ;;
esac
fn=f/
rp="What is the default editor on your system?"
. ./getfile
defeditor="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/defeditor.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1997, Chip Salzenberg
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:20:13  ram
?RCS: patch61: created
?RCS:
?MAKE:sh: Head
?MAKE: -pick wipe $@ %<
?S:sh:
?S: This variable contains the full pathname of the shell used
?S: on this system to execute Bourne shell scripts.  Usually, this will be
?S: /bin/sh, though it's possible that some systems will have /bin/ksh,
?S: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?S: D:/bin/sh.exe.
?S: This unit comes before Options.U,
 so you can't set sh with a -D
?S: option, though you can override this (and startsh)
?S: with -O -Dsh=/bin/whatever -Dstartsh=whatever
?S:.
```

```
?C:SH_PATH:
?C: This symbol contains the full pathname to the shell used on this
?C: on this system to execute Bourne shell scripts.  Usually, this will be
?C: /bin/sh, though it's possible that some systems will have /bin/ksh,
?C: /bin/pdksh, /bin/ash, /bin/bash, or even something such as
?C: D:/bin/sh.exe.
?C:.
?H:#define SH_PATH "$sh"  /**/
?H:.
?T:xxx try pth p SYSTYPE
?LINT:extern maintloc maintname
?X:
?X: Be quiet unless something unusual happens because this gets
?X: loaded up even before options are processed.
?X: Can't use ./loc because that depends on startsh, which, in turn
?X: depends on this unit.
?X:
: Find the basic shell for Bourne shell scripts
case "$sh" in
")
?X: SYSTYPE is for some older MIPS systems.
?X: I do not know if it is still needed.
 case "$SYSTYPE" in
 *bsd*|sys5*) xxx="/$SYSTYPE/bin/sh";;
 *) xxx='/bin/sh';;
 esac
 if
 test -f "$xxx"; then
  sh="$xxx"
 else
  : Build up a list and do a single loop so we can 'break' out.
  pth=`echo $PATH | sed -e "s/$p_/ /g"`
  for xxx in sh bash ksh pdksh ash; do
   for p in $pth; do
    try="$try ${p}/${xxx}"
   done
  done
  for xxx in $try; do
   if test -f "$xxx"; then
    sh="$xxx"
    break
   elif test -f "$xxx$_exe"; then
    sh="$xxx"
    break
   elif test -f "$xxx.exe"; then
    sh="$xxx"
    break
   fi
```

```
  done
 fi
 ;;
esac

?X: fd 4 isn't open yet...
case "$sh" in
") cat >&2 <<EOM
$me:  Fatal Error:  I can't find a Bourne Shell anywhere.

Usually it's in /bin/sh.  How did you even get this far?
Please contact me (<$maintname>) at <$maintloc> and
we'll try to straighten this all out.
EOM
 exit 1
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setservent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setservent_r setservent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_setservent_r:
?S: This variable conditionally defines the HAS_SETSERVENT_R symbol,
?S: which indicates to the C program that the setservent_r()
?S: routine is available.
?S:.
?S:setservent_r_proto:
?S: This variable encodes the prototype of setservent_r.
?S: It is zero if d_setservent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setservent_r
?S: is defined.
?S:.
?C:HAS_SETSERVENT_R:
?C: This symbol, if defined, indicates that the setservent_r routine
?C: is
```

```
 available to setservent re-entrantly.
?C:.
?C:SETSERVENT_R_PROTO:
?C: This symbol encodes the prototype of setservent_r.
?C: It is zero if d_setservent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setservent_r
?C: is defined.
?C:.
?H:#$d_setservent_r HAS_SETSERVENT_R /**/
?H:#define SETSERVENT_R_PROTO $setservent_r_proto /**/
?H:.
?T:try hdrs d_setservent_r_proto
: see if setservent_r exists
set setservent_r d_setservent_r
eval $inlibc
case "$d_setservent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_setservent_r_proto:$usethreads" in
 ":define") d_setservent_r_proto=define
  set d_setservent_r_proto setservent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_setservent_r_proto" in
 define)
 case "$setservent_r_proto" in
 "|0) try='int setservent_r(int, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && setservent_r_proto=I_ID ;;
 esac
 case "$setservent_r_proto" in
 "|0) try='void
 setservent_r(int, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && setservent_r_proto=V_ID ;;
 esac
 case "$setservent_r_proto" in
 "|0) d_setservent_r=undef
  setservent_r_proto=0
  echo "Disabling setservent_r, cannot determine prototype." >&4 ;;
 * ) case "$setservent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) setservent_r_proto="REENTRANT_PROTO_$setservent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "setservent_r has no prototype, not using it." >&4 ;;
```

```
  esac
  d_setservent_r=undef
  setservent_r_proto=0
  ;;
 esac
 ;;
*) setservent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setservent_r.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_sh.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:57:53  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  14:53:31  ram
?RCS: patch45: moved path stripping from d_portable.U to end of Configure
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:50:37  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit ends up producing the config.sh
 script, which contains all the
?X: definitions figured out by Configure.  The add.Config_sh command knows
?X: which variables need to be remembered.  It also adds the EOT (ends the
?X: here document redirection with variable substitution).
?X:
?MAKE:Config_sh: cf_time cf_by test spitshell startsh myuname Myread \
 End Obsol_sh Loc +d_portable package src cat sed
?MAKE: -pick add.Config_sh $@ %<
?MAKE: -pick add $@ ./Obsol_sh
```

```
?MAKE: -pick close.Config_sh $@ %<
?F:!config.over !config.arch
?T:file sfile xsed
?LINT:unclosed EOT
: back to where it started
if test -d ../UU; then
 cd ..
fi

: configuration may be unconditionally patched via a 'config.arch' file
if $test -f config.arch; then
 echo "I see a config.arch file, loading it." >&4
 . ./config.arch
fi

: configuration may be patched via a 'config.over' file
if $test -f config.over; then
 echo " "
 dflt=y
 rp='I see a config.over file.  Do you wish to load it?'
 . UU/myread
 case "$ans" in
 n*) echo "OK, I'll ignore it.";;
 *) . ./config.over
  echo
 "Configuration override changes have been loaded."
  ;;
 esac
fi

@if d_portable
: in case they want portability, strip down executable paths
?X:
?X: Strip down paths in located executables. For each file, e.g. vi, there
?X: is a $vi variable whose value is for instance '/usr/bin/vi'. By resetting
?X: $vi to 'vi', we rely on the PATH variable to locate the executable...
?X: In order to allow vi='/usr/bin/nvi' which will strip down to vi='nvi',
?X: we can't just say 'eval $file="\$file"', we have to recourse to sed.
?X: We don't use basename since it is less portable than sed.
?X:
case "$d_portable" in
"$define")
 echo " "
 echo "Stripping down executable paths..." >&4
 xsed=$sed
 for file in $loclist $trylist; do
  eval sfile="\$$file"
  sfile=`echo $sfile | $xsed -e 's,.*/\(.*\),\1,'`
```

```
  eval $file="$sfile"
 done
 ;;
esac

@end
: create config.sh file
echo " "
echo "Creating config.sh..." >&4
$spitshell <<EOT >config.sh
$startsh
#
# This file was produced by running the
 Configure script. It holds all the
# definitions figured out by Configure. Should you modify one of these values,
# do not forget to propagate your changes by running "Configure -der". You may
# instead choose to run each of the .SH files by yourself, or "Configure -S".
#

# Package name      : $package
# Source directory  : $src
# Configuration time: $cf_time
# Configured by     : $cf_by
# Target system     : $myuname

EOT
?X: Command line options are saved by the Options.U unit in the
?X: temporary file UU/cmdline.opt
$test -f UU/cmdline.opt && $cat UU/cmdline.opt >> config.sh
$spitshell <<EOT >>config.sh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Config_sh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_malloc.U,v 3.5 2008/03/29 14:06:51 merijn Exp $
?RCS:
?RCS: Copyright (c) 2008, H.Merijn Brand
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: of the source tree for dist 3.5.
?RCS:
?MAKE:i_mallocmalloc: Inhdr
?MAKE: -pick add $@ %<
?S:i_mallocmalloc:
```

```
?S: This variable conditionally defines the I_MALLOCMALLOC symbol,
?S: and indicates whether a C program should include <malloc/malloc.h>.
?S:.
?C:I_MALLOCMALLOC:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <malloc/malloc.h>.
?C:.
?H:#$i_mallocmalloc I_MALLOCMALLOC  /**/
?H:.
?LINT:set i_mallocmalloc
: see if malloc/malloc.h has to be included
set malloc/malloc.h i_mallocmalloc
eval
 $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_mallocmalloc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wifstat.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:47:43  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:09:10  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1995/03/21  08:47:46  ram
?RCS: patch52: created
?RCS:
?MAKE:d_wifstat: d_uwait +cc +ccflags +ldflags +libs Oldconfig cat rm
?MAKE: -pick add $@ %<
?S:d_wifstat:
?S: This symbol conditionally defines USE_WIFSTAT if the C program can
?S: safely
 use the WIFxxx macros with the kind of wait() parameter
?S: declared in the program (see UNION_WAIT), or if it can't. Should
?S: only matter on HP-UX, where the macros are incorrectly written and
?S: therefore cause programs using them with an 'union wait' variable
```

```
?S: to not compile properly.
?S:.
?C:USE_WIFSTAT:
?C: This symbol, if defined, indicates to the C program that the argument
?C: for the WIFxxx set of macros such as WIFSIGNALED or WIFEXITED can
?C: be of the same kind as the one used to hold the wait() status. Should
?C: only matter on HP-UX, where the macros are incorrectly written and
?C: therefore cause programs using them with an 'union wait' variable
?C: to not compile properly. See also UNION_WAIT.
?C:.
?H:#$d_wifstat USE_WIFSTAT  /**/
?H:.
?T:type
?F:!foo
: see if we can use WIFxxx macros
echo " "
case "$d_wifstat" in
"$define") echo "As before, you can safely use WIFEXITED and friends!" >&4;;
"$undef") echo "You still can't use WIFEXITED and friends!" >&4;;
*)
 echo
 "Let's see whether you can use the WIFEXITED(status) macro and its"
 case "$d_uwait" in
 "$define") type='union wait';;
 *) type='int';;
 esac
 echo "friends with status declared as '$type status'..."
 $cat >foo.c <<EOCP
#include <sys/types.h>
#include <sys/wait.h>

int main()
{
 $type status;
 int e = 0;

#ifdef WIFEXITED
 if (WIFEXITED(status))
  printf("\n");
 exit(0);
#else
 exit(2);
#endif
}
EOCP
 d_wifstat="$undef"
 if $cc $ccflags $ldflags -o foo foo.c $libs >/dev/null 2>&1; then
  if ./foo >/dev/null; then
```

```
  echo "Great! Looks like we can use the WIFxxx macros." >&4
  d_wifstat="$define"
 else
  echo "You don't seem to have WIFxxx macros, but that's ok." >&4
 fi
else
 echo "Apparently you can't use WIFxxx macros properly." >&4
fi
$rm -f foo.* foo core
;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wifstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cc.U,v $
?RCS: Revision 3.0.1.4  1995/05/12  12:06:47  ram
?RCS: patch54: may now abort Configure when cc does not work
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:20:11  ram
?RCS: patch45: changed gcc checking message to a more explicit one (WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:04:29  ram
?RCS: patch36: detect gcc even when not called as 'gcc' (ADO)
?RCS: patch36: simplified gcc version checking (ADO)
?RCS: patch36: added ?F: line for metalint
 file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:26:06  ram
?RCS: patch23: added support for gcc version (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cc: Myread Oldconfig Checkcc test
?MAKE: -pick add $@ %<
?S:cc:
```

```
?S: This variable holds the name of a command to execute a C compiler which
?S: can resolve multiple global references that happen to have the same
?S: name.  Usual values are 'cc' and 'gcc'.
?S: Fervent ANSI compilers may be called 'c89'.  AIX has xlc.
?S:.
?F:!cc.cbu
?D:cc='cc'
: Determine the C compiler to be used
echo " "
case "$cc" in
") dflt=cc;;
*) dflt="$cc";;
esac
rp="Use which C compiler?"
. ./myread
cc="$ans"

: See whether they have no cc but they do have gcc
. ./trygcc
?X: Look for a hint-file generated 'call-back-unit'.  Now that the
?X: user has specified the compiler, we may need to set or change some
?X: other defaults.
if $test -f cc.cbu; then
   . ./cc.cbu
fi
. ./checkcc

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_arpainet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_arpainet.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_arpainet: Inhdr
?MAKE: -pick add $@ %<
```

```
?S:i_arpainet:
?S: This variable conditionally defines the I_ARPA_INET symbol,
?S: and indicates whether a C program should include <arpa/inet.h>.
?S:.
?C:I_ARPA_INET:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <arpa/inet.h> to get inet_addr and friends
 declarations.
?C:.
?H:#$i_arpainet I_ARPA_INET  /**/
?H:.
?LINT:set i_arpainet
: see if arpa/inet.h has to be included
set arpa/inet.h i_arpainet
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_arpainet.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sunscanf.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sunscanf: cat rm Myread +cc +ccflags test Setvar
?MAKE: -pick add $@ %<
?S:sunscanf:
?S: This variable is set if this system runs with the Sun version
?S: of scanf.
?S:.
?C:SUNSCANF:
?C: This variable is set if this system runs with the Sun version
?C: of scanf.
?C:.
?H:#$sunscanf  SUNSCANF  /**/
?H:.
?LINT:set sunscanf
: check to see what kinda scanf your using.
```

```
echo " "
echo "Checking
 to see what flavor of scanf you have..." >&4
$cat >scanf.c <<'EOCP'
int main()
{
 float value;

 sscanf("4.5","%g",&value);
 printf("%d\n", value == 4.5);
}
EOCP
if $cc $ccflags -o scanf scanf.c >/dev/null 2>&1 ; then
 if $test `scanf` = 0; then
  echo "Hmm.. seems your not running the USG flavor.."
  val="$undef"
 else
  echo "Uh... your running the USG flavor of scanf."
  val="$define"
 fi
else
 echo "(I can't seem to compile the test program... Guessing)"
 val="$undef"
fi
set sunscanf
eval $setvar
$rm -f scanf*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sunscanf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostbyaddr_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostbyaddr_r gethostbyaddr_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostbyaddr_r:
?S: This variable conditionally defines the HAS_GETHOSTBYADDR_R symbol,
?S: which indicates to the C program that the gethostbyaddr_r()
?S: routine is available.
?S:.
```

```
?S:gethostbyaddr_r_proto:
?S: This variable encodes the prototype of gethostbyaddr_r.
?S: It is zero if d_gethostbyaddr_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyaddr_r
?S: is defined.
?S:.
?C:HAS_GETHOSTBYADDR_R:
?C: This symbol, if defined, indicates
 that the gethostbyaddr_r routine
?C: is available to gethostbyaddr re-entrantly.
?C:.
?C:GETHOSTBYADDR_R_PROTO:
?C: This symbol encodes the prototype of gethostbyaddr_r.
?C: It is zero if d_gethostbyaddr_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyaddr_r
?C: is defined.
?C:.
?H:#$d_gethostbyaddr_r HAS_GETHOSTBYADDR_R /**/
?H:#define GETHOSTBYADDR_R_PROTO $gethostbyaddr_r_proto /**/
?H:.
?T:try hdrs d_gethostbyaddr_r_proto
: see if gethostbyaddr_r exists
set gethostbyaddr_r d_gethostbyaddr_r
eval $inlibc
case "$d_gethostbyaddr_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_gethostbyaddr_r_proto:$usethreads" in
 ":define") d_gethostbyaddr_r_proto=define
  set d_gethostbyaddr_r_proto gethostbyaddr_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gethostbyaddr_r_proto" in
 define)
 case "$gethostbyaddr_r_proto" in
 "|0) try='int gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*,
 size_t, struct hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CWISBWRE ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) try='struct hostent* gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*, size_t, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CWISBWIE ;;
 esac
 case "$gethostbyaddr_r_proto" in
 "|0) try='struct hostent* gethostbyaddr_r(const char*, size_t, int, struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CWISBIE ;;
 esac
```

```
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const void*, size_t, int, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_TWISBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const char*, int, int, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CIISBIE ;;
esac
case
"$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const char*, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_CSBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='struct hostent* gethostbyaddr_r(const void*, struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=S_TSBIE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const char*, size_t, int, struct hostent*, struct hostent_data*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CWISD ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const char*, int, int, struct hostent*, struct hostent_data*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CIISD ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const char*, int, int);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_CII ;;
esac
case
"$gethostbyaddr_r_proto" in
"|0) try='int gethostbyaddr_r(const void*, socklen_t, int, struct hostent*, char*, size_t, struct hostent**, int*);'
./protochk "$extern_C $try" $hdrs && gethostbyaddr_r_proto=I_TsISBWRE ;;
esac
case "$gethostbyaddr_r_proto" in
"|0) d_gethostbyaddr_r=undef
 gethostbyaddr_r_proto=0
 echo "Disabling gethostbyaddr_r, cannot determine prototype." >&4 ;;
* ) case "$gethostbyaddr_r_proto" in
 REENTRANT_PROTO*) ;;
 *) gethostbyaddr_r_proto="REENTRANT_PROTO_$gethostbyaddr_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "gethostbyaddr_r has no prototype, not using it." >&4 ;;
 esac
```

```
  d_gethostbyaddr_r=undef
  gethostbyaddr_r_proto=0
  ;;
 esac
 ;;
*) gethostbyaddr_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostbyaddr_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systimes.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systimes.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_systimes: Inhdr
?MAKE: -pick add $@ %<
?S:i_systimes:
?S: This variable conditionally defines the I_SYS_TIMES symbol, and indicates
?S: whether a C program should include <sys/times.h>.
?S:.
?C:I_SYS_TIMES (I_SYSTIMES):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/times.h>.
?C:.
?H:#$i_systimes I_SYS_TIMES  /**/
?H:.
?LINT:set
 i_systimes
: see if this is a sys/times.h system
set sys/times.h i_systimes
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systimes.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorlib.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorlib.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:d_vendorlib vendorlib vendorlibexp installvendorlib vendorlib_stem: \
 Getfile Setprefixvar Oldconfig Prefixit package vendorprefix sed \
 installstyle version
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorlib:
?S: This variable contains the eventual value of the VENDORLIB symbol,
?S: which is the name of the private library for this package.
?S: The standard
 distribution will put nothing in this directory.
?S: Vendors who distribute perl may wish to place their own
?S: modules in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorlibexp:
?S: This variable is the ~name expanded version of vendorlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorlib="
?S:installvendorlib:
?S: This variable is really the same as vendorlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorlib:
?S: This variable conditionally defines PERL_VENDORLIB.
?S:.
?S:vendorlib_stem:
?S: This variable is $vendorlibexp with any trailing version-specific component
?S: removed.  The elements in inc_version_list (inc_version_list.U) can
?S: be tacked onto this variable to generate a list of directories to search.
```

```
?S:.
?C:PERL_VENDORLIB:
?C: If defined, this symbol contains
 the name of a private library.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place their own
?C: modules in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORLIB_EXP:
?C: This symbol contains the ~name expanded version of VENDORLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?C:PERL_VENDORLIB_STEM:
?C: This define is PERL_VENDORLIB_EXP with any trailing version-specific component
?C: removed.  The elements in inc_version_list (inc_version_list.U) can
?C: be tacked onto this variable to generate a list of directories to search.
?C:.
?H:#$d_vendorlib PERL_VENDORLIB "$vendorlib"  /**/
?H:#$d_vendorlib PERL_VENDORLIB_EXP
 "$vendorlibexp"  /**/
?H:#$d_vendorlib PERL_VENDORLIB_STEM "$vendorlib_stem"  /**/
?H:.
?T:prog
?LINT:change prefixvar
?LINT:set installvendorlib
: Set the vendorlib variables
case "$vendorprefix" in
") d_vendorlib="$undef"
 vendorlib="
 vendorlibexp="
 ;;
*) d_vendorlib="$define"
 : determine where vendor-supplied modules go.
 : Usual default is /usr/local/lib/perl5/vendor_perl/$version
 case "$vendorlib" in
 ")
?X:  remove any trailing -3.0 or other version identification
  prog=`echo $package | $sed 's/-*[0-9.]*$//'`
  case "$installstyle" in
  *lib/perl5*) dflt=$vendorprefix/lib/$package/vendor_$prog/$version ;;
  *)      dflt=$vendorprefix/lib/vendor_$prog/$version ;;
  esac
  ;;
```

```
 *) dflt="$vendorlib"
  ;;
 esac
 fn=d~+
 rp='Pathname for the vendor-supplied library files?'
 . ./getfile
 vendorlib="$ans"
 vendorlibexp="$ansexp"
 ;;
esac
vendorlib_stem=`echo "$vendorlibexp" | sed "s,/$version$,,"`
prefixvar=vendorlib
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_euc2jis.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_euc2jis.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_euc2jis: Inlibc
?MAKE: -pick add $@ %<
?S:d_euc2jis:
?S: This variable conditionally defines the HAS_EUC2JIS symbol, which
?S: indicates to the C program that the euc2jis() routine is available
?S: to convert EUC to JIS.
?S:.
?C:HAS_EUC2JIS:
?C: This symbol, if defined, indicates that the euc2jis routine is
?C: available to convert
 EUC to JIS.
?C:.
?H:#$d_euc2jis HAS_EUC2JIS  /**/
?H:.
?LINT:set d_euc2jis
: see if euc2jis exists
```

```
set euc2jis d_euc2jis
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_euc2jis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_statfs_s: \
 Hasstruct i_sysparam i_sysmount i_systypes \
 i_sysvfs i_sysstatfs Setvar
?MAKE: -pick add $@ %<
?S:d_statfs_s:
?S: This variable conditionally defines the HAS_STRUCT_STATFS symbol,
?S: which indicates that the struct statfs is supported.
?S:.
?C:HAS_STRUCT_STATFS:
?C: This symbol, if defined, indicates that the struct statfs
?C: to do statfs() is supported.
?C:.
?H:#$d_statfs_s HAS_STRUCT_STATFS /**/
?H:.
?LINT:set d_statfs_s
: Check for statfs_s
echo " "
echo "Checking to see if your system supports struct statfs..." >&4
set d_statfs_s statfs $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h $i_sysvfs sys/vfs.h
$i_sysstatfs sys/statfs.h
eval $hasstruct
case "$d_statfs_s"
 in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statfs_s.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_bfd.U,v $
?RCS:
?RCS: Copyright (c) 2014 H.Merijn Brand
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_bfd: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_bfd:
?S: This variable conditionally defines the I_BFD symbol, and
?S: indicates whether a C program can include <bfd.h>.
?S:.
?C:I_BFD:
?C: This symbol, if defined, indicates that <bfd.h> exists and
?C: can be included.
?C:.
?H:#$i_bfd I_BFD  /**/
?H:.
?LINT:set i_bfd
: see if this is a bfd.h system
set bfd.h i_bfd
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_bfd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libdbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libdbm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:56:57  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libdbm: test Loc libpth _a
?MAKE: -pick add $@ %<
?S:libdbm:
?S: This variable contains the argument to pass to the loader in order
?S: to get the dbm library routines.  If there is no dbm or ndbm
?S: library, it is null.
```

```
?S:.
?T:xxx
:
 see if we should include -ldbm
echo " "
if $test -r /usr/lib/libndbm$_a || $test -r /usr/local/lib/libndbm$_a ; then
 echo "-lndbm found." >&4
 libdbm='-lndbm'
elif $test -r /usr/lib/libdbm$_a || $test -r /usr/local/lib/libdbm$_a ; then
 echo "-ldbm found." >&4
 libdbm='-ldbm'
else
 xxx=`./loc libdbm$_a x $libpth`
 case "$xxx" in
 x)
  echo "No dbm library found." >&4
  libdbm=''
  ;;
 *)
  echo "DBM library found in $xxx." >&4
  libdbm="$xxx"
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libdbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Head.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  15:02:09  ram
?RCS: patch61: make sure we unset CDPATH for shells that support this
?RCS: patch61: improved Korn shell detection and handling
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:02  ram
?RCS: patch56: added SVR4-ish /opt directories to path list (ADO)
?RCS: patch56: OS/2 platforms are using another path separator
?RCS:
```

```
?RCS: Revision 3.0.1.7  1995/03/21  08:46:15  ram
?RCS: patch52: definition of paths wrongly added spurious ':' chars
?RCS:
?RCS:
 Revision 3.0.1.6  1994/10/29  15:54:19  ram
?RCS: patch36: make sure ENV is unset before calling /bin/ksh
?RCS:
?RCS: Revision 3.0.1.5  1994/08/29  16:03:44  ram
?RCS: patch32: now sets PATH only using existing directories
?RCS:
?RCS: Revision 3.0.1.4  1994/06/20  06:54:28  ram
?RCS: patch30: now computes its invocation name into 'me'
?RCS: patch30: symbol me is made visible to all units read-only
?RCS:
?RCS: Revision 3.0.1.3  1993/12/15  08:15:07  ram
?RCS: patch15: added /sbin:/usr/sbin:/usr/libexec in PATH for BSD/386
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:32:35  ram
?RCS: patch14: ensure PATH is reset to '.' before testing for alias
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:07  ram
?RCS: patch7: not all 'test' programs support the -x option
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the very first unit in the Configure script.  It is mostly just
?X: things to keep people from getting
 into a tizzy right off the bat.
?X:
?MAKE:Head:
?MAKE: -pick wipe $@ %<
?V:PATH p_ _exe me newsh
?T:argv Id p paths OS2_SHELL DJGPP
?T:inksh needksh avoidksh newsh changesh reason
?F:!*
?LINT:extern ENV CDPATH SHELL MACHTYPE
?LINT:change ENV CDPATH
?LINT:nocomment
#! /bin/sh
#
# If these # comments don't work, trim them. Don't worry about any other
# shell scripts, Configure will trim # comments from them for you.
#
# (If you are trying to port this package to a machine without sh,
# I would suggest you have a look at the prototypical config_h.SH file
# and edit it to reflect your system. Some packages may include samples
```

```
# of config.h for certain machines, so you might look for one of those.)
#
?X:
?X: NOTE THAT A CONFIGURE SCRIPT IS IN THE PUBLIC DOMAIN (whether or not
?X: the software which uses it is in the public domain).
?X:
# Yes, you may rip this off to use in other distribution packages. This
# script belongs to the public domain and cannot be copyrighted.
#
?X:
?X: WE ASK YOU
 NOT TO REMOVE OR ALTER THE FOLLOWING PARAGRAPH, PLEASE:
?X:
# Note: this Configure script was generated automatically. Rather than
# working with this copy of Configure, you may wish to get metaconfig.
# The dist package (which contains metaconfig) is available via SVN:
#     svn co https://svn.code.sf.net/p/dist/code/trunk/dist
?X:
?X: NOTA BENE:
?X: If you develop you own version of metaconfig based on this work,
?X: you have to add some comments telling that the script was generated
?X: by your version, not mine: It credits your work.
?X:

# $Id: Head.U 6 2006-08-25 22:21:46Z rmanfredi $
#
# Generated on <DATE> [metaconfig <VERSION> PL<PATCHLEVEL>]

cat >c1$$ <<EOF
ARGGGHHHH!!!!!

SCO csh still thinks true is false.  Write to SCO today and tell them that next
year Configure ought to "rm /bin/csh" unless they fix their blasted shell. :-)

(Actually, Configure ought to just patch csh in place.  Hmm.  Hmmmmm.  All
we'd have to do is go in and swap the && and || tokens, wherever they are.)

[End
 of diatribe. We now return you to your regularly scheduled programming...]
EOF
cat >c2$$ <<EOF

OOPS!  You naughty creature!  You didn't run Configure with sh!
I will attempt to remedy the situation by running sh for you...
EOF

true || cat c1$$ c2$$
true || exec sh $0 $argv:q
```

```
(exit $?0) || cat c2$$
(exit $?0) || exec sh $0 $argv:q
rm -f c1$$ c2$$

: compute my invocation name
me=$0
case "$0" in
*/*)
 me=`echo $0 | sed -e 's!.*/\(.*\)!\1!' 2>/dev/null`
 test "$me" || me=$0
 ;;
esac

?X:
?X: To be able to run under OS/2, we must detect that early enough to use
?X: the proper path separator, stored in $p_. It is : on UNIX and ; on
?X: DOSish systems such as OS/2.
?X:
: Proper separator for the PATH environment variable
p_=:
: On OS/2 this directory should exist if this is not floppy only system ":-]"
if test -d c:/. ; then
 if test -n "$OS2_SHELL"; then
  p_=\;
  PATH=`cmd /c "echo %PATH%" | tr '\\\\' / `
?X: That's a bug in ksh5.22
  OS2_SHELL=`cmd /c "echo %OS2_SHELL%" | tr
 '\\\\' / | tr '[A-Z]' '[a-z]'`
 elif test -n "$DJGPP"; then
  case "X${MACHTYPE:-nonesuchmach}" in
  *cygwin) ;;
  *) p_=\; ;;
  esac
 fi
fi

?X:
?X: There are two schools of thoughts here. Some people correctly argue that
?X: the user has a better chance than we do of setting a reasonable PATH and
?X: others argue that Configure is the best place there is to set up a suitable
?X: PATH. Well, here we try to compromize by keeping the user's PATH and
?X: appending some directories which are known to work on some machine or the
?X: other. The rationale behind this being that a novice user might not have a
?X: proper environment variable set, and some directories like /etc (where
?X: chown is located on some BSD systems) may be missing--RAM.
?X:
?X: SVR4 adds an /opt directory for optional packages.  Some sites use
```

```
?X: various permutations on /opt as opposed to /usr or /usr/local.-- ADO
?X:
?X: We only add directories that are not already in the PATH of the
?X: user and the directories must
 exist also.
?X:
: Proper PATH setting
paths='/bin /usr/bin /usr/local/bin /usr/ucb /usr/local /usr/lbin'
paths="$paths /opt/bin /opt/local/bin /opt/local /opt/lbin"
paths="$paths /usr/5bin /etc /usr/gnu/bin /usr/new /usr/new/bin /usr/nbin"
paths="$paths /opt/gnu/bin /opt/new /opt/new/bin /opt/nbin"
paths="$paths /sys5.3/bin /sys5.3/usr/bin /bsd4.3/bin /bsd4.3/usr/ucb"
paths="$paths /bsd4.3/usr/bin /usr/bsd /bsd43/bin /usr/ccs/bin"
paths="$paths /etc /usr/lib /usr/ucblib /lib /usr/ccs/lib"
paths="$paths /sbin /usr/sbin /usr/libexec"
paths="$paths /system/gnu_library/bin"

for p in $paths
do
 case "$p_$PATH$p_" in
 *$p_$p$p_*) ;;
 *) test -d $p && PATH=$PATH$p_$p ;;
 esac
done

PATH=.$p_$PATH
export PATH

: shall we be using ksh?
inksh=''
needksh=''
avoidksh=''
newsh=/bin/ksh
changesh=''
?X: Use (alias -x) and not (alias) since zsh and bash recognize the alias
?X: builtin but not the -x option which is typically ksh...
?X: We need to set up PATH before calling the "alias" built-in since
 some
?X: systems like HP-UX have a binary called /bin/alias.
if (PATH=.; alias -x) >/dev/null 2>&1; then
  inksh=true
fi
?X: On HP-UX, large Configure scripts may exercise a bug in /bin/sh, use ksh
if test -f /hp-ux -a -f /bin/ksh; then
 needksh='to avoid sh bug in "here document" expansion'
fi
?X: On AIX4, /bin/sh is really ksh and it causes problems, use sh
if test -d /usr/lpp -a -f /usr/bin/bsh -a -f /usr/bin/uname; then
```

```
 if test X`/usr/bin/uname -v` = X4; then
  avoidksh="to avoid AIX 4's /bin/sh"
  newsh=/usr/bin/bsh
 fi
fi
?X: On Digital UNIX, /bin/sh may start up buggy /bin/ksh, use sh
if test -f /osf_boot -a -f /usr/sbin/setld; then
 if test X`/usr/bin/uname -s` = XOSF1; then
  avoidksh="to avoid Digital UNIX' ksh"
  newsh=/bin/sh
?X: if BIN_SH is set to 'xpg4', sh will start up ksh
  unset BIN_SH
 fi
fi
?X: If we are not in ksh and need it, then feed us back to it
case "$inksh/$needksh" in
/[a-z]*)
?X: Clear ENV to avoid any ~/.kshrc that could alias cd or whatever...
?X: Don't
 use "unset ENV", that is not portable enough
  ENV="
  changesh=true
  reason="$needksh"
 ;;
esac
?X: If we are in ksh and must avoid it, then feed us back to a new shell
case "$inksh/$avoidksh" in
true/[a-z]*)
 changesh=true
 reason="$avoidksh"
 ;;
esac
?X: Warn them if they use ksh on other systems, which are those where
?X: we don't need ksh nor want to avoid it explicitly, yet are using it.
case "$inksh/$needksh-$avoidksh-" in
true/--)
  cat <<EOM
(I see you are using the Korn shell.  Some ksh's blow up on $me,
mainly on older exotic systems.  If yours does, try the Bourne shell instead.)
EOM
 ;;
esac
case "$changesh" in
true)
 export newsh
 echo "(Feeding myself to $newsh $reason.)"
?X: Make sure they didn't say sh <Configure by checking whether $0 ends
?X: with Configure or not. If they did say sh <../../Configure, then too
```

```
?X: bad for them anyway, since we lost that path indication...
?X: Otherwise, execing $0 ensures we keep the full remote source dir
?X: indication for src.U.
 case
 "$0" in
 Configure|*/Configure) exec $newsh $0 "$@";;
 *) exec $newsh Configure "$@";;
 esac
 ;;
esac

?X: Unset CDPATH to avoid surprises when using cd under some shells
?X: Can't unset it because that's not portable to very old shells.
?X: Can't set it to '' because then bash 2.02 won't do "cd UU"  --AD  6/98.
?X: Don't want to set it to '.' because then ksh prints out the
?X: name of the directory every time you cd to it. --AD 6/98
?X: In order to inflict the least harm, change it only if it's set.
: if needed, set CDPATH to a harmless value that is not chatty
case "$CDPATH" in
'') ;;
*) case "$SHELL" in
 *bash*) CDPATH='.' ;;
 *) CDPATH='' ;;
 esac
 ;;
esac

: Configure runs within the UU subdirectory
test -d UU || mkdir UU
?X: Use ./* to avoid any confirmation prompts from enhanced shells -- WED
cd UU && rm -f ./*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Head.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: prototype.U,v $
?RCS: Revision 3.0.1.3  1994/05/06  15:11:49  ram
```

```
?RCS: patch23: ensure cc flags used when looking for prototype support
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:36  ram
?RCS: patch16: prototype handling macros now appear only when needed
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:03:12  ram
?RCS: patch6: defines were referring to non-existent VOID symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:prototype:
 Myread Oldconfig cat +cc +ccflags rm Setvar
?MAKE: -pick add $@ %<
?S:prototype:
?S: This variable holds the eventual value of CAN_PROTOTYPE, which
?S: indicates the C compiler can handle funciton prototypes.
?S:.
?C:CAN_PROTOTYPE ~ %<:
?C: If defined, this macro indicates that the C compiler can handle
?C: function prototypes.
?C:.
?C:DOTS:
?C: This macro is used to specify the ... in function prototypes which
?C: have arbitrary additional arguments.
?C:.
?C:NXT_ARG:
?C: This macro is used to separate arguments in the declared argument list.
?C:.
?C:P_FUNC:
?C: This macro is used to declare "private" (static) functions.
?C: It takes three arguments: the function type and name, a parenthesized
?C: traditional (comma separated) argument list, and the declared argument
?C: list (in which arguments are separated with NXT_ARG, and additional
?C: arbitrary arguments are specified with DOTS).  For example:
?C:
?C:  P_FUNC(int foo, (bar, baz), int bar NXT_ARG char *baz[])
?C:.
?C:P_FUNC_VOID:
?C: This
 macro is used to declare "private" (static) functions that have
?C: no arguments.  The macro takes one argument: the function type and name.
?C: For example:
?C:
?C:  P_FUNC_VOID(int subr)
?C:.
?C:V_FUNC:
?C: This macro is used to declare "public" (non-static) functions.
```

```
?C: It takes three arguments: the function type and name, a parenthesized
?C: traditional (comma separated) argument list, and the declared argument
?C: list (in which arguments are separated with NXT_ARG, and additional
?C: arbitrary arguments are specified with DOTS).  For example:
?C:
?C:  V_FUNC(int main, (argc, argv), int argc NXT_ARG char *argv[])
?C:.
?C:V_FUNC_VOID:
?C: This macro is used to declare "public" (non-static) functions that have
?C: no arguments.  The macro takes one argument: the function type and name.
?C: For example:
?C:
?C:  V_FUNC_VOID(int fork)
?C:.
?C:_ (P):
?C: This macro is used to declare function parameters for folks who want
?C: to make declarations with prototypes using a
 different style than
?C: the above macros.  Use double parentheses.  For example:
?C:
?C:  int main _((int argc, char *argv[]));
?C:.
?H:?%<:#$prototype CAN_PROTOTYPE /**/
?H:?%<:#ifdef CAN_PROTOTYPE
?H:?NXT_ARG:#define NXT_ARG ,
?H:?DOTS:#define DOTS , ...
?H:?V_FUNC:#define V_FUNC(name, arglist, args)name(args)
?H:?P_FUNC:#define P_FUNC(name, arglist, args)static name(args)
?H:?V_FUNC_VOID:#define V_FUNC_VOID(name)name(void)
?H:?P_FUNC_VOID:#define P_FUNC_VOID(name)static name(void)
?H:?_:#define _(args) args
?H:?%<:#else
?H:?NXT_ARG:#define NXT_ARG ;
?H:?DOTS:#define DOTS
?H:?V_FUNC:#define V_FUNC(name, arglist, args)name arglist args;
?H:?P_FUNC:#define P_FUNC(name, arglist, args)static name arglist args;
?H:?V_FUNC_VOID:#define V_FUNC_VOID(name)name()
?H:?P_FUNC_VOID:#define P_FUNC_VOID(name)static name()
?H:?_:#define _(args) ()
?H:?%<:#endif
?H:.
?W:%<:NXT_ARG DOTS V_FUNC P_FUNC V_FUNC_VOID P_FUNC_VOID _
?LINT:set prototype
: Cruising for prototypes
echo " "
echo "Checking out
 function prototypes..." >&4
$cat >prototype.c <<'EOCP'
```

```
int main(int argc, char *argv[]) {
 exit(0);}
EOCP
if $cc $ccflags -c prototype.c >prototype.out 2>&1 ; then
 echo "Your C compiler appears to support function prototypes."
 val="$define"
else
 echo "Your C compiler doesn't seem to understand function prototypes."
 val="$undef"
fi
set prototype
eval $setvar
$rm -f prototype*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/prototype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getservbyport_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getservbyport_r getservbyport_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getservbyport_r:
?S: This variable conditionally defines the HAS_GETSERVBYPORT_R symbol,
?S: which indicates to the C program that the getservbyport_r()
?S: routine is available.
?S:.
?S:getservbyport_r_proto:
?S: This variable encodes the prototype of getservbyport_r.
?S: It is zero if d_getservbyport_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyport_r
?S: is defined.
?S:.
?C:HAS_GETSERVBYPORT_R:
?C: This symbol, if defined, indicates
 that the getservbyport_r routine
?C: is available to getservbyport re-entrantly.
?C:.
?C:GETSERVBYPORT_R_PROTO:
?C: This symbol encodes the prototype of getservbyport_r.
?C: It is zero if d_getservbyport_r is undef, and one of the
```

```
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getservbyport_r
?C: is defined.
?C:.
?H:#$d_getservbyport_r HAS_GETSERVBYPORT_R /**/
?H:#define GETSERVBYPORT_R_PROTO $getservbyport_r_proto /**/
?H:.
?T:try hdrs d_getservbyport_r_proto
: see if getservbyport_r exists
set getservbyport_r d_getservbyport_r
eval $inlibc
case "$d_getservbyport_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getservbyport_r_proto:$usethreads" in
 ":define") d_getservbyport_r_proto=define
  set d_getservbyport_r_proto getservbyport_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getservbyport_r_proto" in
 define)
 case "$getservbyport_r_proto" in
 "|0) try='int getservbyport_r(int, const char*, struct servent*, char*, size_t,
 struct servent**);'
 ./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=I_ICSBWR ;;
 esac
 case "$getservbyport_r_proto" in
 "|0) try='struct servent* getservbyport_r(int, const char*, struct servent*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=S_ICSBI ;;
 esac
 case "$getservbyport_r_proto" in
 "|0) try='int getservbyport_r(int, const char*, struct servent*, struct servent_data*);'
 ./protochk "$extern_C $try" $hdrs && getservbyport_r_proto=I_ICSD ;;
 esac
 case "$getservbyport_r_proto" in
 "|0) d_getservbyport_r=undef
  getservbyport_r_proto=0
  echo "Disabling getservbyport_r, cannot determine prototype." >&4 ;;
 * ) case "$getservbyport_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getservbyport_r_proto="REENTRANT_PROTO_$getservbyport_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getservbyport_r has no prototype, not using it." >&4 ;;
  esac
```

```
  d_getservbyport_r=undef
  getservbyport_r_proto=0
  ;;
 esac
 ;;
*) getservbyport_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getservbyport_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_utime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_utime.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_utime: Inhdr
?MAKE: -pick add $@ %<
?S:i_utime:
?S: This variable conditionally defines the I_UTIME symbol, and indicates
?S: whether a C program should include <utime.h>.
?S:.
?C:I_UTIME:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <utime.h>.
?C:.
?H:#$i_utime I_UTIME  /**/
?H:.
?LINT:set i_utime
:
 see if this is an utime system
set utime.h i_utime
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_utime.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fstatfs : Inlibc
?MAKE: -pick add $@ %<
?S:d_fstatfs:
?S: This variable conditionally defines the HAS_FSTATFS symbol, which
?S: indicates to the C program that the fstatfs() routine is available.
?S:.
?C:HAS_FSTATFS:
?C: This symbol, if defined, indicates that the fstatfs routine is
?C: available to stat filesystems by file descriptors.
?C:.
?H:#$d_fstatfs HAS_FSTATFS  /**/
?H:.
?LINT:set d_fstatfs
: see if fstatfs exists
set fstatfs d_fstatfs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fstatfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysmman.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:11:20  ram
?RCS: patch16: created
?RCS:
?X:
?X: Look wether <sys/mman.h> needs to be included.
?X:
?MAKE:i_sysmman: Inhdr
```

```
?MAKE: -pick add $@ %<
?S:i_sysmman:
?S: This variable conditionally defines the I_SYS_MMAN symbol,
?S: and indicates whether a C program should include <sys/mman.h>.
?S:.
?C:I_SYS_MMAN:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/mman.h>.
?C:.
?H:#$i_sysmman I_SYS_MMAN  /**/
?H:.
?LINT:set
 i_sysmman
: see if sys/mman.h has to be included
set sys/mman.h i_sysmman
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysmman.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fgetpos.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fgetpos.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  06:57:33  ram
?RCS: patch30: created
?RCS:
?MAKE:d_fgetpos: Inlibc
?MAKE: -pick add $@ %<
?S:d_fgetpos:
?S: This variable conditionally defines HAS_FGETPOS if fgetpos() is
?S: available to get the file position indicator.
?S:.
?C:HAS_FGETPOS:
?C: This symbol, if defined, indicates that the fgetpos routine is
?C: available to get the file position indicator, similar to ftell().
?C:.
?H:#$d_fgetpos
 HAS_FGETPOS /**/
?H:.
```

```
?LINT:set d_fgetpos
: see if fgetpos exists
set fgetpos d_fgetpos
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fgetpos.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: baserev.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: baserev.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:baserev: Null
?MAKE: -pick wipe $@ %<
?S:baserev:
?S: The base revision level of this package, from the .package file.
?S:.
: set the base revision
baserev=<BASEREV>
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/baserev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lib.U,v 3.0.1.3 1995/09/25 09:16:47 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: lib.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:16:47  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
```

```
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:38:08  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:27:40  ram
?RCS: patch32: now uses installation prefix to set the default
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?LINT:
 empty
?X:?MAKE:lib libexp: Getfile Loc Oldconfig Prefixit Prefixup prefixexp
?X:?MAKE: -pick add $@ %<
?X:?Y:TOP
?X:?S:lib:
?X:?S: This variable holds the name of the directory in which the user wants
?X:?S: to put public library files for the package in question.  It is most
?X:?S: often a local directory such as /usr/local/lib. Programs using this
?X:?S: variable must be prepared to deal with filename expansion.
?X:?S:.
?X:?S:libexp:
?X:?S: This variable is the same as the lib variable, but is filename expanded
?X:?S: at configuration time, for convenient use in your makefiles.
?X:?S:.
?X:: determine where public libraries go
?X:set lib lib
?X:eval $prefixit
?X:case "$lib" in
?X:")
?X: dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
?X: set dflt
?X: eval $prefixup
?X: ;;
?X:*)  dflt="$lib";;
?X:esac
?X:echo " "
?X:fn=d~
?X:rp='Where do you want to put the public libraries?'
?X:. ./getfile
?X:lib="$ans"
?X:libexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/nullified/lib.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_sigblock.U 1 2006-08-24 12:32:52Z rmanfredi $

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigblock.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sigblock: Inlibc
?MAKE: -pick add $@ %<
?S:d_sigblock:
?S: This variable conditionally defines HAS_SIGBLOCK if sigblock() is
?S: available to block signal reception.
?S:.
?C:HAS_SIGBLOCK:
?C: This symbol, if defined, indicates that the sigblock routine is
?C: available to block signal reception.
?C:.
?H:#$d_sigblock HAS_SIGBLOCK /**/
?H:.
?LINT:set
 d_sigblock
: see if sigblock exists
set sigblock d_sigblock
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigblock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memmove.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memmove.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:35  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_memmove: Inlibc
?MAKE: -pick add $@ %<
?S:d_memmove:
?S: This variable conditionally defines the HAS_MEMMOVE symbol, which
?S: indicates to the C program that the memmove() routine is available
?S: to copy potentially overlapping blocks of memory.
?S:.
?C:HAS_MEMMOVE:
?C: This symbol, if defined, indicates that the memmove routine
 is available
?C: to copy potentially overlapping blocks of memory. This should be used
?C: only when HAS_SAFE_BCOPY is not defined. If neither is there, roll your
?C: own version.
?C:.
?H:#$d_memmove HAS_MEMMOVE /**/
?H:.
?LINT:set d_memmove
: see if memmove exists
set memmove d_memmove
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memmove.U
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```
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: patchlevel.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:18:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:patchlevel: package baserev test rsrc
?MAKE: -pick add $@ %<
?T:Revision
?S:patchlevel:
?S: The patchlevel level of this package.
```

```
?S: The value of patchlevel comes from the patchlevel.h file.
?S:.
: get the patchlevel
echo " "
echo "Getting the current patchlevel..." >&4
if $test -r
 $rsrc/patchlevel.h;then
 patchlevel=`awk \
  '/^#[  ]*define[  ][  ]*PATCHLEVEL/ {print $3}' \
  < $rsrc/patchlevel.h`
else
 patchlevel=0
fi
echo "(You have $package $baserev PL$patchlevel.)"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/patchlevel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:Devel usedevel: Myread rsrc package
?MAKE: -pick wipe $@ %<
?T:xversion
?X: waiver of rights
?S:usedevel:
?S: This variable indicates that Perl was configured with development
?S: features enabled.  This should not be done for production builds.
?S:.
?C:PERL_USE_DEVEL:
?C: This symbol, if defined, indicates that Perl was configured with
?C: -Dusedevel, to enable development features.  This should not be
?C: done for production builds.
?C:.
?H:#$usedevel PERL_USE_DEVEL  /**/
?H:.
?LINT:extern versiononly
?LINT:extern
 installusrbinperl
?LINT:change versiononly
```

```
?LINT:change installusrbinperl
: See if we are using a devel version and want that
xversion=`awk '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
case "$usedevel" in
$define|true|[yY]*)
   usedevel="$define" ;;
*) case "$xversion" in
  *[13579])
 cat >&4 <<EOH
*** WHOA THERE!!! ***

   This is an UNSTABLE DEVELOPMENT release.
   The version of this $package distribution is $xversion, that is, odd,
   (as opposed to even) and that signifies a development release.
   If you want a maintenance release, you want an even-numbered version.

   Do ***NOT*** install this into production use.
   Data corruption and crashes are possible.

   It is most seriously suggested that you do not continue any further
   unless you want to help in developing and debugging Perl.

   If you *still* want to build perl, you can answer 'y' now,
   or pass -Dusedevel to Configure.

EOH
 rp='Do you really want to continue?'
 dflt='n'
 . ./myread
 case
 "$ans" in
 [yY]) echo >&4 "Okay, continuing."
       usedevel="$define" ;;
 *) echo >&4 "Okay, bye."
    exit 1
    ;;
 esac
 ;;
   esac
   usedevel="$undef"
   ;;
esac
case "$usedevel" in
$define|true|[yY]*)
 case "$versiononly" in
 ") versiononly="$define" ;;
 esac
 case "$installusrbinperl" in
```

```
 ") installusrbinperl="$undef" ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Devel.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_acosh: Inlibc
?MAKE: -pick add $@ %<
?S:d_acosh:
?S: This variable conditionally defines the HAS_ACOSH symbol, which
?S: indicates to the C program that the acosh() routine is available.
?S:.
?C:HAS_ACOSH:
?C: This symbol, if defined, indicates that the acosh routine is
?C: available to do the inverse hyperbolic cosine function.
?C:.
?H:#$d_acosh HAS_ACOSH  /**/
?H:.
?LINT:set d_acosh
: see if acosh exists
set acosh d_acosh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_acosh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_endprotoent_r endprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_endprotoent_r:
?S: This variable conditionally defines the HAS_ENDPROTOENT_R symbol,
?S: which indicates to the C program that the endprotoent_r()
?S: routine is available.
```

```
?S:.
?S:endprotoent_r_proto:
?S: This variable encodes the prototype of endprotoent_r.
?S: It is zero if d_endprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endprotoent_r
?S: is defined.
?S:.
?C:HAS_ENDPROTOENT_R:
?C: This symbol, if defined, indicates that the endprotoent_r
 routine
?C: is available to endprotoent re-entrantly.
?C:.
?C:ENDPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of endprotoent_r.
?C: It is zero if d_endprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_endprotoent_r
?C: is defined.
?C:.
?H:#$d_endprotoent_r HAS_ENDPROTOENT_R /**/
?H:#define ENDPROTOENT_R_PROTO $endprotoent_r_proto /**/
?H:.
?T:try hdrs d_endprotoent_r_proto
: see if endprotoent_r exists
set endprotoent_r d_endprotoent_r
eval $inlibc
case "$d_endprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_endprotoent_r_proto:$usethreads" in
 ":define") d_endprotoent_r_proto=define
  set d_endprotoent_r_proto endprotoent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_endprotoent_r_proto" in
 define)
 case "$endprotoent_r_proto" in
 "|0) try='int endprotoent_r(struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && endprotoent_r_proto=I_D ;;
 esac
 case "$endprotoent_r_proto"
 in
 "|0) try='void endprotoent_r(struct protoent_data*);'
 ./protochk "$extern_C $try" $hdrs && endprotoent_r_proto=V_D ;;
 esac
 case "$endprotoent_r_proto" in
 "|0) d_endprotoent_r=undef
  endprotoent_r_proto=0
```

```
  echo "Disabling endprotoent_r, cannot determine prototype." >&4 ;;
 * ) case "$endprotoent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) endprotoent_r_proto="REENTRANT_PROTO_$endprotoent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "endprotoent_r has no prototype, not using it." >&4 ;;
  esac
  d_endprotoent_r=undef
  endprotoent_r_proto=0
  ;;
 esac
 ;;
*) endprotoent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_endprotoent_r.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_madvise: Inlibc
?MAKE: -pick add $@ %<
?S:d_madvise:
?S: This variable conditionally defines HAS_MADVISE if madvise() is
?S: available to map a file into memory.
?S:.
?C:HAS_MADVISE:
?C: This symbol, if defined, indicates that the madvise system call is
?C: available to map a file into memory.
?C:.
?H:#$d_madvise HAS_MADVISE  /**/
?H:.
?LINT:set d_madvise
: see if madvise exists
```

```
set madvise d_madvise
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_madvise.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d__fwalk: Inlibc
?MAKE: -pick add $@ %<
?S:d__fwalk:
?S: This variable conditionally defines HAS__FWALK if _fwalk() is
?S: available to apply a function to all the file handles.
?S:.
?C:HAS__FWALK:
?C: This symbol, if defined, indicates that the _fwalk system call is
?C: available to apply a function to all the file handles.
?C:.
?H:#$d__fwalk HAS__FWALK  /**/
?H:.
?LINT:set d__fwalk
: see if _fwalk exists
set fwalk d__fwalk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d__fwalk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_flock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_flock.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flock: Inlibc
?MAKE: -pick add $@ %<
?S:d_flock:
?S: This variable conditionally defines HAS_FLOCK if flock() is
?S: available to do file locking.
?S:.
?C:HAS_FLOCK (FLOCK):
?C: This symbol, if defined, indicates that the flock routine is
?C: available to do file locking.
?C:.
?H:#$d_flock HAS_FLOCK  /**/
?H:.
?LINT:set d_flock
: see
 if flock exists
set flock d_flock
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_flock.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
?MAKE:d_finite: Inlibc
?MAKE: -pick add $@ %<
?S:d_finite:
?S: This variable conditionally defines the HAS_FINITE symbol, which
?S: indicates to the C program that the finite() routine is available.
?S:.
?C:HAS_FINITE:
?C: This symbol, if defined, indicates that the finite routine is
?C: available to check whether a double is finite (non-infinity non-NaN).
?C:.
?H:#$d_finite HAS_FINITE  /**/
?H:.
?LINT:set d_finite
: see if finite exists
set finite d_finite
```

```
eval $inlibc

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_finite.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_safebcpy.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  15:40:58  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.3  1995/07/25  13:58:40  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:29:23  ram
?RCS: patch45: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:49:03
  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safebcpy: cat d_bcopy +cc +optimize +ccflags +ldflags +libs rm \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safebcpy:
?S: This variable conditionally defines the HAS_SAFE_BCOPY symbol if
?S: the bcopy() routine can do overlapping copies.
?S:.
?C:HAS_SAFE_BCOPY (SAFE_BCOPY):
?C: This symbol, if defined, indicates that the bcopy routine is available
?C: to copy potentially overlapping memory blocks. Otherwise you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
```

```
?H:#$d_safebcpy HAS_SAFE_BCOPY /**/
?H:.
?F:!safebcpy
?LINT: set d_safebcpy
: can bcopy handle overlapping blocks?
?X: assume the worst
val="$undef"
case "$d_bcopy" in
"$define")
 echo " "
 echo "Checking to see if your bcopy() can do overlapping
 copies..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

?X: Copy "abcde..." string to char abc[] so that gcc doesn't
?X: try to store the string in read-only memory.
bcopy("abcdefghijklmnopqrstuvwxyz0123456789", abc, 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
```

```
  b = buf+align;
  bcopy(abc, b, len);
  for (off = 1; off <= len; off++) {
   bcopy(b, b+off, len);
   bcopy(b+off, b, len);
   if (bcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
 if $cc $optimize $ccflags $ldflags \
      -o safebcpy foo.c $libs >/dev/null 2>&1; then
  if ./safebcpy
 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "It can't, sorry."
   case "$d_memmove" in
   "$define") echo "But that's Ok since you have memmove()." ;;
   esac
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
  case "$d_memmove" in
  "$define") echo "But that's Ok since you have memmove()." ;;
  esac
 fi
 ;;
esac
$rm -f foo.* safebcpy core
set d_safebcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_safebcpy.U
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?RCS:
?MAKE:d_fpclassify d_fp_classify: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<

```
?X:the short story is that C99 says use fpclassify.  But the story is confused
?X:by systems "partially C99" (or fully "pre C99") which either user fpclassify
?X:but with different return values, or they use fp_classify (with the expected)
?X:return values, or they use some other spelling of *fp*class* (sometimes even
?X:without the *fp* part), with yet another set(s) of return values ...
?S:d_fpclassify:
?S: This variable conditionally defines the HAS_FPCLASSIFY symbol, which
?S: indicates to the C program that the fpclassify() routine is available.
?S:.
?S:d_fp_classify:
?S: This variable conditionally defines the HAS_FP_CLASSIFY
 symbol, which
?S: indicates to the C program that the fp_classify() routine is available.
?S:.
?C:HAS_FPCLASSIFY:
?C: This symbol, if defined, indicates that the fpclassify routine is
?C: available to classify doubles.  Available for example in HP-UX.
?C: The returned values are defined in <math.h> and are
?C:
?C:   FP_NORMAL     Normalized
?C:   FP_ZERO       Zero
?C:   FP_INFINITE   Infinity
?C:   FP_SUBNORMAL  Denormalized
?C:   FP_NAN        NaN
?C:
?C:.
?C:HAS_FP_CLASSIFY:
?C: This symbol, if defined, indicates that the fp_classify routine is
?C: available to classify doubles. The values are defined in <math.h>
?C:
?C:   FP_NORMAL     Normalized
?C:   FP_ZERO       Zero
?C:   FP_INFINITE   Infinity
?C:   FP_SUBNORMAL  Denormalized
?C:   FP_NAN        NaN
?C:
?C:.
?H:#$d_fpclassify HAS_FPCLASSIFY  /**/
?H:#$d_fp_classify HAS_FP_CLASSIFY  /**/
?H:.
?LINT:set d_fpclassify
?LINT:set d_fp_classify
: check for fpclassify
?X:classified (Comment by jhi)
?X:fpclassify i_math
?X:fp_classify i_math
?X:fpclass i_math
```

```
 i_ieeefp i_fp
?X:fp_class i_math i_fp_class
?X:  No i_fp_class yet. But the systems that have
?X:  this (Tru64 and IRIX) both had <fp_class.h>
?X:class i_math
echo "Checking to see if you have fpclassify..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return fpclassify(1.0) == FP_NORMAL ? 0 : 1; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have fpclassify."
else
 val="$undef"
 echo "You do not have fpclassify."
fi
$rm_try
set d_fpclassify
eval $setvar

: see if fp_classify exists
set fp_classify d_fp_classify
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpclassify.U
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```
?RCS: $Id: d_setnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setnent:
?S: This variable conditionally defines HAS_SETNETENT if setnetent() is
```

```
?S: available.
?S:.
?C:HAS_SETNETENT:
?C: This symbol, if defined, indicates that the setnetent() routine is
?C: available.
?C:.
?H:#$d_setnent HAS_SETNETENT  /**/
?H:.
?LINT:set d_setnent
: see if setnetent exists
set
 setnetent d_setnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setnent.U
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```
?RCS: $Id: i_shadow.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_prot: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_prot:
?S: This variable conditionally defines the I_PROT symbol, and indicates
?S: whether a C program should include <prot.h>.
?S:.
?C:I_PROT:
?C: This symbol, if defined, indicates that <prot.h> exists and
?C: should be included.
?C:.
?H:#$i_prot I_PROT  /**/
?H:.
?LINT:set i_prot
: see if this is a prot.h system
set prot.h i_prot
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_prot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_backtrace.U,v $
?RCS:
?MAKE:d_backtrace: Inlibc
?MAKE: -pick add $@ %<
?S:d_backtrace:
?S: This variable conditionally defines the HAS_BACKTRACE symbol, which
?S: indicates to the C program that the backtrace() routine is available
?S: to get a stack trace.
?S:.
?C:HAS_BACKTRACE:
?C: This symbol, if defined, indicates that the backtrace() routine is
?C: available to get a stack trace.  The <execinfo.h> header must be
?C: included to use this routine.
?C:.
?H:#$d_backtrace HAS_BACKTRACE /**/
?H:.
?LINT:set d_backtrace
:
 see if backtrace exists
set backtrace d_backtrace
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_backtrace.U
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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_strerror_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strerror_l:
?S: This variable conditionally defines the HAS_STRERROR_L symbol, which
?S: indicates to the C program that the strerror_l() routine is available
?S: to return the error message for a given errno value in a particular
?S: locale (identified by a locale_t object).
?S:.
?C:HAS_STRERROR_L:
?C: This symbol, if defined, indicates that the strerror_l routine is
?C: available to return the error message for a given errno value in
```

```
?C: a particular locale (identified by a locale_t object).
?C:.
?H:#$d_strerror_l HAS_STRERROR_L  /**/
?H:.
?LINT:set d_strerror_l
: see if strerror_l exists
set strerror_l d_strerror_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strerror_l.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_sysaccess: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysaccess:
?S: This variable conditionally defines the I_SYS_ACCESS symbol,
?S: and indicates whether a C program should include <sys/access.h>.
?S:.
?C:I_SYS_ACCESS:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/access.h>.
?C:.
?H:#$i_sysaccess   I_SYS_ACCESS                /**/
?H:.
?LINT:set i_sysaccess
: see if sys/access.h is available
set sys/access.h i_sysaccess
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/i_sysaccess.U
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```
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS:
?MAKE:i_fenv: Inhdr
```

```
?MAKE: -pick add $@ %<
?S:i_fenv:
?S: This variable conditionally defines the I_FENV symbol, which
?S: indicates to the C program that <fenv.h> exists and should
?S: be included.
?S:.
?C:I_FENV:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <fenv.h> to get the floating point environment definitions.
?C:.
?H:#$i_fenv I_FENV  /**/
?H:.
?LINT:set i_fenv
: see if this is a fenv.h system
set fenv.h i_fenv
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fenv.U
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```
?RCS: $Id: d_getgrent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getgrent_r getgrent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_grp extern_C
?MAKE: -pick add $@ %<
?S:d_getgrent_r:
?S: This variable conditionally defines the HAS_GETGRENT_R symbol,
?S: which indicates to the C program that the getgrent_r()
?S: routine is available.
?S:.
?S:getgrent_r_proto:
?S: This variable encodes the prototype of getgrent_r.
?S: It is zero if d_getgrent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrent_r
?S: is defined.
?S:.
?C:HAS_GETGRENT_R:
?C: This symbol, if defined, indicates that the getgrent_r routine
?C: is available to
 getgrent re-entrantly.
?C:.
```

```
?C:GETGRENT_R_PROTO:
?C: This symbol encodes the prototype of getgrent_r.
?C: It is zero if d_getgrent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getgrent_r
?C: is defined.
?C:.
?H:#$d_getgrent_r HAS_GETGRENT_R /**/
?H:#define GETGRENT_R_PROTO $getgrent_r_proto /**/
?H:.
?T:try hdrs d_getgrent_r_proto
: see if getgrent_r exists
set getgrent_r d_getgrent_r
eval $inlibc
case "$d_getgrent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_grp grp.h"
 case "$d_getgrent_r_proto:$usethreads" in
 ":define") d_getgrent_r_proto=define
  set d_getgrent_r_proto getgrent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getgrent_r_proto" in
 define)
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, size_t, struct group**);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBWR ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, int, struct group**);'
 ./protochk
 "$extern_C $try" $hdrs && getgrent_r_proto=I_SBIR ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='struct group* getgrent_r(struct group*, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=S_SBW ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='struct group* getgrent_r(struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=S_SBI ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBI ;;
 esac
 case "$getgrent_r_proto" in
 "|0) try='int getgrent_r(struct group*, char*, int, FILE**);'
 ./protochk "$extern_C $try" $hdrs && getgrent_r_proto=I_SBIH ;;
```

```
 esac
 case "$getgrent_r_proto" in
 "|0) d_getgrent_r=undef
  getgrent_r_proto=0
  echo "Disabling getgrent_r, cannot determine prototype." >&4 ;;
 * ) case "$getgrent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) getgrent_r_proto="REENTRANT_PROTO_$getgrent_r_proto" ;;
  esac
  echo "Prototype:
 $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "getgrent_r has no prototype, not using it." >&4 ;;
  esac
  d_getgrent_r=undef
  getgrent_r_proto=0
  ;;
 esac
 ;;
*) getgrent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getgrent_r.U
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```
?RCS: $Id: shm_for.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: shm_for.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:28:37  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:shm_for shm_att shm_lim: Cppsym Myread ipc uname
?MAKE: -pick add $@ %<
```

```
?S:shm_for:
?S: This variable tells us the type of machine we're expecting the
?S: shared memory code to run on.  The value is available to C
 programs
?S: in the C_SHM_FOR manifest.
?S:.
?S:shm_att:
?S: This variable tells us where a shared memory segment should be
?S: attached.  Good values are HIGH, LOW, and ZERO.
?S:.
?S:shm_lim:
?S: This variable tells us if shared memory attached HIGH should
?S: have an upper limit.
?S:.
?X: ----------------------------------------------------------
?X: It's a potential lose to define anything beginning with SHM...
?X: At least we can think that S_ stands for "String version of ..." -- HMS
?X: ----------------------------------------------------------
?C:S_SHM_FOR ~ %<:
?C: This symbol identifies what we chose for the target system's
?C: default shared memory configuration parameters.
?C:.
?C:S_SHM_ATT ~ %<:
?C: This symbol holds the default "place" to attach shared memory.
?C: Values are "HIGH", "ZERO", and "LOW".
?C:.
?C:S_SHM_LIM ~ %<:
?C: This symbol holds the default upper bound address limit if shared
?C: memory is attached HIGH.  If zero, there is no upper limit.
?C:.
?H:?%<:#ifdef
 SERVE_SHM
?H:?%<:#define S_SHM_FOR "$shm_for"
?H:?%<:#define S_SHM_ATT "$shm_att"
?H:?%<:#define S_SHM_LIM "$shm_lim"
?H:?%<:#endif
?H:.
?W:%<:S_SHM_FOR S_SHM_ATT S_SHM_LIM
: see how to attach shared memory
echo " "
echo "Deciding how to attach shared memory..." >&4

case "$ipc" in
shm)
 shm_for='Default case'
 shm_att='HIGH'
 shm_lim='0x0'
 if ./Cppsym tower32 tower32_600; then
```

```
 echo "NCR Towers are usually normal..."
 : echo "Oh, an NCR Tower."
 : This works for the 600
 shm_for='NCR Tower 32'
 shm_att='LOW'
else
 case "$uname" in
 */uname)
  case "`uname -m`" in
  ACS??68*)
   echo "Oh, an Altos 3068."
   shm_for='Altos 3068:'
   shm_lim='0x800000'
   ;;
   esac
   ;;
 *)
  echo "Looks normal to me..."
  ;;
 esac
fi

dflt="$shm_for"
rp='Description of shared memory configuration?'
. ./myread
shm_for="$ans"

dflt="$shm_att"
rp='Where should shared memory be attached?'
. ./myread
shm_att="$ans"

case "$shm_att" in
HIGH)
 dflt="$shm_lim"
 rp='What is
the upper address limit for shared memory?'
 . ./myread
 shm_lim="$ans"
 ;;
*)
 shm_lim="
 ;;
esac
;;

*)
 echo "but you aren't using shared memory so I won't bother." >&4
```

```
 shm_for='NOT CONFIGURED'
 shm_att='NONE'
 shm_lim='-1'
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/shm_for.U
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```
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?RCS:
?MAKE:d_socks5_init: Inlibc
?MAKE: -pick add $@ %<
?S:d_socks5_init:
?S: This variable conditionally defines the HAS_SOCKS5_INIT symbol, which
?S: indicates to the C program that the socks5_init() routine is available.
?S:.
?C:HAS_SOCKS5_INIT:
?C: This symbol, if defined, indicates that the socks5_init routine is
?C: available to initialize SOCKS 5.
?C:.
?H:#$d_socks5_init HAS_SOCKS5_INIT  /**/
?H:.
?LINT:set d_socks5_init
: see if socks5_init exists
set socks5_init d_socks5_init
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_socks5_init.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can be doted in order to extract
?X: .SH files with variable substitutions.
?X:
?X: When running Configure from a remote directory ($src
 is not '.'),
?X: then the files will be created in that directory, so beware!
?X:
?MAKE:Extract: Mkdirp src
?MAKE: -pick add $@ %<
?F:./extract
?T:CONFIG SRC dir file
: script used to extract .SH files with variable substitutions
cat >extract <<EOS
CONFIG=true
SRC="$src"
EOS
cat >>extract <<'EOS'
echo "Doing variable substitutions on .SH files..."
if test -f "$SRC/MANIFEST"; then
 set x `awk '{print $1}' <$SRC/MANIFEST | grep '\.SH'`
else
 echo "(Looking for .SH files under the source directory.)"
 set x `(cd "$SRC"; find . -name "*.SH" -print)`
fi
shift
case $# in
0) set x `(cd "$SRC"; echo *.SH)`; shift;;
esac
if test ! -f "$SRC/$1"; then
 shift
fi
for file in $*; do
 case "$SRC" in
 ".")
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
```

```
   file=`expr X$file : 'X.*/\(.*\)'`
   (cd $dir && . ./$file)
   ;;
  *)
   . ./$file
   ;;
  esac
  ;;
 *)
?X:
?X: When running Configure remotely ($src is not '.'), we cannot source
?X: the files directly, since that would wrongly cause
 the extraction
?X: where the source lie instead of withing the current directory. Therefore,
?X: we need to 'sh <file' then, which is okay since they will source the
?X: existing config.sh file. It's not possible to use:
?X:  ../src/Configure -S -O -Dsomething
?X: unfortunately since no new config.sh with the -Dsomething override
?X: will be created before running the .SH files. A minor buglet.
?X:
?X: Note that we must create the directory hierarchy ourselves if it does
?X: not exist already, and that is done through a shell emulation of the
?X: 'mkdir -p' command. We don't want to use the $installdir metaconfig
?X: symbol here since that would require too much to be configured for
?X: this simple extraction task that may happen quickly with 'Configure -S'.
?X:  -- RAM, 18/03/96
?X:
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   ./mkdirp $dir
   sh <"$SRC/$dir/$file"
   ;;
  *)
   sh <"$SRC/$file"
   ;;
  esac
  ;;
 esac
done
if
 test -f "$SRC/config_h.SH"; then
 if test ! -f config.h; then
?X: oops, they left it out of MANIFEST, probably, so do it anyway.
  sh <"$SRC/config_h.SH"
 fi
fi
```

```
EOS

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Extract.U
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:st_dev_size st_dev_sign: cat echo i_stdlib Setvar Compile run rm_try
?MAKE: -pick add $@ %<
?S:st_dev_sign:
?S: This variable contains the signedness of struct stat's st_dev.
?S: 1 for unsigned, -1 for signed.
?S:.
?S:st_dev_size:
?S: This variable contains the size of struct stat's st_dev in bytes.
?S:.
?C:ST_DEV_SIZE:
?C: This variable contains the size of struct stat's st_dev in bytes.
?C:.
?C:ST_DEV_SIGN:
?C: This symbol holds the signedness of struct stat's st_dev.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define ST_DEV_SIGN
 $st_dev_sign /* st_dev sign */
?H:#define ST_DEV_SIZE $st_dev_size /* st_dev size */
?H:.
?F:!try
: Check the size of st_dev
$echo " "
$echo "Checking the size of st_dev..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   struct stat st;
   printf("%d\n", (int)sizeof(st.st_dev));
```

```
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 val=`$run ./try`
 case "$val" in
 ") st_dev_size=4
  $echo "(I can't execute the test program--guessing $st_dev_size.)" >&4
  ;;
 *) st_dev_size=$val
  $echo "Your st_dev is $st_dev_size bytes long."
  ;;
 esac
else
 st_dev_size=4
 $echo "(I can't compile the test program--guessing $st_dev_size.)" >&4
fi
$rm_try

: Check if st_dev is signed
$echo " "
$echo "Checking the sign of st_dev..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
int main() {
 struct stat foo;
       foo.st_dev = -1;
 if (foo.st_dev < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set
 try
if eval $compile; then
 val=`$run ./try`
 case "$val" in
 ") st_dev_sign=1
  $echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) st_dev_sign=$val
  case "$st_dev_sign" in
   1) $echo "Your st_dev is unsigned." ;;
  -1) $echo "Your st_dev is signed."   ;;
  esac
```

```
  ;;
 esac
else
 st_dev_sign=1
 $echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/st_dev_def.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_math.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_math.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:59  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_math: Inhdr
?MAKE: -pick add $@ %<
?X: Are there really systems that *DON'T* have math.h?
?S:i_math:
?S: This variable conditionally defines the I_MATH symbol, and indicates
?S: whether a C program may include <math.h>.
?S:.
?C:I_MATH:
?C: This symbol, if defined, indicates
 to the C program that it should
?C: include <math.h>.
?C:.
?H:#$i_math I_MATH  /**/
?H:.
?LINT:set i_math
: see if this is a math.h system
set math.h i_math
eval $inhdr
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_math.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ffs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ffs.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ffs d_ffsl: Inlibc
?MAKE: -pick add $@ %<
?S:d_ffs:
?S: This variable conditionally defines the HAS_FFS symbol, which
?S: indicates to the C program that the ffs() routine is available
?S: to find the first bit which is set in its integer argument.
?S:.
?S:d_ffsl:
?S: This variable conditionally defines the HAS_FFSL symbol, which
?S: indicates
 to the C program that the ffsl() routine is available
?S: to find the first bit which is set in its long integer argument.
?S:.
?C:HAS_FFS:
?C: This symbol, if defined, indicates that the ffs routine is available
?C: to find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
?C:HAS_FFSL:
?C: This symbol, if defined, indicates that the ffsl routine is available
?C: to find the first bit set in its argument.  If it's not available,
?C: roll your own.
?C:.
?H:#$d_ffs HAS_FFS  /**/
?H:#$d_ffsl HAS_FFSL  /**/
?H:.
?LINT:set d_ffs d_ffsl
: see if ffs exists
set ffs d_ffs
eval $inlibc
: see if ffsl exists
```

```
set ffsl d_ffsl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ffs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cf_email.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:05:06  ram
?RCS: patch16: created
?RCS:
?RCS:
?MAKE:cf_email: cat cf_by test myhostname mydomain Oldconfig Myread
?MAKE: -pick add $@ %<
?S:cf_email:
?S: Electronic mail address of the person who ran Configure. This can be
?S: used by units that require the user's e-mail, like MailList.U.
?S:.
?T:cont maildomain
?LINT:extern MAILDOMAIN
: determine the e-mail address of the user who is running us
$cat <<EOM

I need to get your e-mail address
 in Internet format if possible, i.e.
something like user@host.domain. Please answer accurately since I have
no easy means to double check it. The default value provided below
is most probably close to reality but may not be valid from outside
your organization...

EOM
cont=x
while test "$cont"; do
 case "$MAILDOMAIN" in
 ")
  if $test -s /etc/mailname; then
   maildomain=`$cat /etc/mailname`
  else
```

```
  maildomain="$myhostname$mydomain"
  fi
  ;;
 *)  maildomain="$MAILDOMAIN";;
 esac
 case "$cf_email" in
 ") dflt="$cf_by@$maildomain";;
 *)  dflt="$cf_email";;
 esac
 rp='What is your e-mail address?'
 . ./myread
 cf_email="$ans"
 case "$cf_email" in
 *@*.*) cont=" ;;
 *)
  rp='Address does not look like an Internet one.  Use it anyway?'
  case "$fastread" in
  yes) dflt=y ;;
  *) dflt=n ;;
  esac
  . ./myread
  case "$ans" in
  y*) cont=" ;;
  *) echo " " ;;
  esac
  ;;
 esac
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_email.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_chown.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:14  ram
?RCS: patch32: created by ADO
```

```
?RCS:
?MAKE:d_chown: Inlibc
?MAKE: -pick add $@ %<
?S:d_chown:
?S: This variable conditionally defines the HAS_CHOWN symbol, which
?S: indicates to the C program that the chown() routine is available.
?S:.
?C:HAS_CHOWN :
?C: This symbol, if defined, indicates that the chown routine is
?C: available.
?C:.
?H:#$d_chown
 HAS_CHOWN  /**/
?H:.
?LINT:set d_chown
: see if chown exists
set chown d_chown
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bcmp.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:47:52  ram
?RCS: patch12: added magic support for bcmp()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:00:44  ram
?RCS: patch10: now only defines HAS_BCMP, no macro remap on memcmp (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bcmp: Inlibc
?MAKE: -pick add $@ %<
?S:d_bcmp:
?S: This variable conditionally defines the HAS_BCMP symbol
```

```
 if
?S: the bcmp() routine is available to compare strings.
?S:.
?C:HAS_BCMP:
?C: This symbol is defined if the bcmp() routine is available to
?C: compare blocks of memory.
?C:.
?H:#$d_bcmp HAS_BCMP /**/
?H:.
?M:bcmp: HAS_BCMP
?M:#ifndef HAS_BCMP
?M:#ifndef bcmp
?M:#define bcmp(s,d,l) memcmp((s),(d),(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bcmp
: see if bcmp exists
set bcmp d_bcmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysvfs.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysvfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysvfs:
?S: This variable conditionally defines the I_SYSVFS symbol,
?S: and indicates whether a C program should include <sys/vfs.h>.
?S:.
?C:I_SYS_VFS:
?C: This symbol, if defined, indicates that <sys/vfs.h> exists and
?C: should be included.
?C:.
?H:#$i_sysvfs I_SYS_VFS  /**/
?H:.
?LINT:set i_sysvfs
: see if this is a sys/vfs.h system
set sys/vfs.h i_sysvfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysvfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: usrinc.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:27:12  ram
?RCS: patch61: don't ask for the include path unless they are on a MIPS
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:24:36  ram
?RCS: patch54: ensure that ./mips always exists (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:18:31  ram
?RCS: patch23: ensure usrinc value is preserved across sessions (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usrinc incpath mips_type:
 test cat echo n c Getfile Guess \
 Oldconfig eunicefix contains rm
?MAKE: -pick add $@ %<
?S:usrinc:
?S: This variable holds the path of the include files, which is
?S: usually /usr/include. It is mainly used by other Configure units.
?S:.
?S:incpath:
?S: This variable must preceed the normal include path to get hte
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
?S:.
?S:mips_type:
?S: This variable holds the environment type for the mips system.
?S: Possible values are "BSD 4.3" and "System V".
?S:.
?D:usrinc='/usr/include'
?LINT:create mips
?T:xxx_prompt
```

```
?F:./mips
: What should the include directory be ?
echo " "
$echo $n "Hmm...  $c"
dflt='/usr/include'
incpath=''
?X: mips_type is used later, to add -DSYSTYPE_BSD43 to cppflags if needed.
mips_type=''
?X:
?X: Cannot put the following in Guess, or we get a circular dependency.
?X:
if $test -f /bin/mips && /bin/mips; then
 echo "Looks like a MIPS system..."
 $cat >usr.c
 <<'EOCP'
#ifdef SYSTYPE_BSD43
/bsd43
#endif
EOCP
 if cc -E usr.c > usr.out && $contains / usr.out >/dev/null 2>&1; then
  dflt='/bsd43/usr/include'
  incpath='/bsd43'
  mips_type='BSD 4.3'
 else
  mips_type='System V'
 fi
 $rm -f usr.c usr.out
 echo "and you're compiling with the $mips_type compiler and libraries."
 xxx_prompt=y
 echo "exit 0" >mips
else
 echo "Doesn't look like a MIPS system."
 xxx_prompt=n
 echo "exit 1" >mips
fi
chmod +x mips
$eunicefix mips
case "$usrinc" in
'') ;;
*) dflt="$usrinc";;
esac
case "$xxx_prompt" in
y) fn=d/
 echo " "
 rp='Where are the include files you want to use?'
 . ./getfile
 usrinc="$ans"
 ;;
```

```
*) usrinc="$dflt"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usrinc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_htonl.U,v $
?RCS: Revision 3.0.1.2  1994/08/29  16:09:25  ram
?RCS: patch32: now properly handles htonl() and friends when macros (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:45:00  ram
?RCS: patch23: now also check for htonl() macro (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:22  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_htonl: Inlibc Setvar i_niin i_sysin cat rm contains \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_htonl:
?S: This variable conditionally
 defines HAS_HTONL if htonl() and its
?S: friends are available to do network order byte swapping.
?S:.
?C:HAS_HTONL (HTONL):
?C: This symbol, if defined, indicates that the htonl() routine (and
?C: friends htons() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_HTONS (HTONS):
?C: This symbol, if defined, indicates that the htons() routine (and
?C: friends htonl() ntohl() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHL (NTOHL):
?C: This symbol, if defined, indicates that the ntohl() routine (and
```

```
?C: friends htonl() htons() ntohs()) are available to do network
?C: order byte swapping.
?C:.
?C:HAS_NTOHS (NTOHS):
?C: This symbol, if defined, indicates that the ntohs() routine (and
?C: friends htonl() htons() ntohl()) are available to do network
?C: order byte swapping.
?C:.
?H:#$d_htonl HAS_HTONL  /**/
?H:#$d_htonl HAS_HTONS  /**/
?H:#$d_htonl HAS_NTOHL  /**/
?H:#$d_htonl HAS_NTOHS  /**/
?H:.
?F:!htonl.c
?LINT:set d_htonl
:
 see if htonl --and friends-- exists
val=''
set htonl val
eval $inlibc

: Maybe they are macros.
case "$val" in
$undef)
 $cat >htonl.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#$i_niin I_NETINET_IN
#$i_sysin I_SYS_IN
#ifdef I_NETINET_IN
#include <netinet/in.h>
#endif
#ifdef I_SYS_IN
#include <sys/in.h>
#endif
#ifdef htonl
printf("Defined as a macro.");
#endif
EOM
 $cppstdin $cppflags $cppminus < htonl.c >htonl.E 2>/dev/null
 if $contains 'Defined as a macro' htonl.E >/dev/null 2>&1; then
  val="$define"
  echo "But it seems to be defined as a macro." >&4
 fi
 $rm -f htonl.?
 ;;
esac
set d_htonl
```

```
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_htonl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fchmod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fchmod.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:59  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fchmod: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchmod:
?S: This variable conditionally defines the HAS_FCHMOD symbol, which
?S: indicates to the C program that the fchmod() routine is available
?S: to change mode of opened files.
?S:.
?C:HAS_FCHMOD (FCHMOD):
?C: This symbol, if defined, indicates that the fchmod routine is available
?C: to
 change mode of opened files.  If unavailable, use chmod().
?C:.
?H:#$d_fchmod HAS_FCHMOD  /**/
?H:.
?LINT:set d_fchmod
: see if fchmod exists
set fchmod d_fchmod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fchmod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Setprefixvar.U,v 3.0 2006/04/01 17:25:29 hmbrand $
?RCS:
?RCS: Copyright (c) 2006-2006, H.Merijn Brand & Nicholas Clark
?RCS:
?RCS: This file is included with or a derivative work of a file included
```

```
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:   You may distribute under the terms of either the GNU General Public
?RCS:   License or the Artistic License, as specified in the README file.
?RCS:
?X:
?X: This unit sets up the scripts installprefix and setprefixvar, so code
?X: in other parts can be more simple and maintainable
?X:
?MAKE:Setprefixvar: Myread Getfile startsh eunicefix test \
 prefix prefixexp installprefix installprefixexp
?MAKE: -pick add $@ %<
?LINT:extern prefixvar
?X: metalint still sees "`\$${prefixvar}exp`" as variable :(
?T:prefixvarexp
?F:./setprefixvar
?F:./installprefix
: Perform
 the prefixexp/installprefixexp correction if necessary
cat <<EOS >installprefix
$startsh
EOS
cat <<'EOSC' >>installprefix
: Change installation prefix, if necessary.
if $test X"$prefix" != X"$installprefix"; then
   eval "install${prefixvar}=\`echo \$${prefixvar}exp | sed \"s#^\$prefixexp#\$installprefixexp#\"\`"
else
   eval "install${prefixvar}=\"\$${prefixvar}exp\""
fi
EOSC
chmod +x installprefix
$eunicefix installprefix

: Set variables such as privlib and privlibexp from the output of ./getfile
: performing the prefixexp/installprefixexp correction if necessary.
cat <<EOS >setprefixvar
$startsh
EOS
cat <<'EOSC' >>setprefixvar
eval "${prefixvar}=\"\$ans\""
eval "${prefixvar}exp=\"\$ansexp\""
. ./installprefix
EOSC
chmod +x setprefixvar
$eunicefix setprefixvar
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/Setprefixvar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgrp.U,v 3.0.1.1 1997/02/28 15:34:28 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpgrp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:34:28  ram
?RCS: patch61: new USE_BSD_GETPGRP to detect the getpgrp() flavor
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp d_bsdgetpgrp: Guess Inlibc Setvar cat rm_try \
 +cc +ccflags +ldflags +libs i_unistd i_stdlib run
?MAKE: -pick add $@ %<
?S:d_getpgrp:
?S: This variable conditionally defines HAS_GETPGRP if getpgrp() is
?S: available
 to get the current process group.
?S:.
?S:d_bsdgetpgrp:
?S: This variable conditionally defines USE_BSD_GETPGRP if
?S: getpgrp needs one arguments whereas USG one needs none.
?S:.
?C:HAS_GETPGRP (GETPGRP):
?C: This symbol, if defined, indicates that the getpgrp routine is
?C: available to get the current process group.
?C:.
?C:USE_BSD_GETPGRP:
?C: This symbol, if defined, indicates that getpgrp needs one
?C: arguments whereas USG one needs none.
?C:.
?H:#$d_getpgrp HAS_GETPGRP  /**/
?H:#$d_bsdgetpgrp USE_BSD_GETPGRP /**/
?H:.
?T:xxx
?F:!try
?LINT:set d_getpgrp d_bsdgetpgrp
: see if getpgrp exists
set getpgrp d_getpgrp
```

```
eval $inlibc

@if USE_BSD_GETPGRP || d_bsdgetpgrp
case "$d_getpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of getpgrp is in use..."
 $cat >try.c <<EOP
#include <stdio.h>
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
 if (getuid()
 == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (getpgrp(1) == 0)
  exit(0);
#else
 if (getpgrp() > 0)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -o try -DTRY_BSD_PGRP $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo "You have to use getpgrp(pid) instead of getpgrp()." >&4
  val="$define"
 elif $cc -o try $ccflags $ldflags try.c $libs >/dev/null 2>&1 && $run ./try; then
  echo "You have to use getpgrp() instead of getpgrp(pid)." >&4
  val="$undef"
 else
  echo "I can't seem to compile and run the test program."
  if ./usg; then
   xxx="a USG one, i.e. you use getpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
```

```
  $undef)
   xxx="a BSD one, i.e. you use getpgrp(pid)."
   val="$define"
   ;;
  $define)
   xxx="probably a USG one, i.e. you use getpgrp()."
   val="$undef"
   ;;
  esac
 fi
 echo "Assuming your getpgrp is $xxx" >&4
fi
;;
*) val="$undef";;
esac
set
 d_bsdgetpgrp
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_casti32.U,v 3.0.1.3 1995/05/12 12:10:45 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_casti32.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:10:45  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:09:37  ram
?RCS: patch36: declare signal handler correctly (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:06  ram
?RCS: patch32: created by ADO
?RCS:
?X:
```

```
?X: Can the compiler cast large floats to
 32-bit integers?
?X:
?MAKE:d_casti32: cat Compile rm_try intsize Setvar test signal_t run i_stdlib
?MAKE: -pick add $@ %<
?S:d_casti32:
?S: This variable conditionally defines CASTI32, which indicates
?S: whether the C compiler can cast large floats to 32-bit ints.
?S:.
?C:CASTI32:
?C: This symbol is defined if the C compiler can cast negative
?C: or large floating point numbers to 32-bit ints.
?C:.
?H:#$d_casti32 CASTI32  /**/
?H:.
?T:xxx yyy
?F:!try
?LINT:set d_casti32
: check for ability to cast large floats to 32-bit ints.
echo " "
echo 'Checking whether your C compiler can cast large floats to int32.' >&4
if $test "$intsize" -ge 4; then
 xxx=int
else
 xxx=long
fi
$cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
$signal_t blech(int s) { exit(3); }
int main()
{
 $xxx i32;
 double f, g;
 int result = 0;
 char str[16];
 signal(SIGFPE, blech);

 /* Don't let compiler optimize the test away.
  Store the number
    in a writable string for gcc to pass to sscanf under HP-UX.
 */
 sprintf(str, "2147483647");
```

```
 sscanf(str, "%lf", &f); /* f = (double) 0x7fffffff; */
 g = 10 * f;
 i32  = ($xxx) g;

 /* x86 processors will probably give 0x8000 0000, which is a
    sign change.  We don't want that.  We want to mimic SPARC
    behavior here, which is to preserve the sign and give
    back 0x7fff ffff.
 */
 if (i32 != ($xxx) f)
  result |= 1;
 exit(result);
}
EOCP
set try
if eval $compile_ok; then
 $run ./try 2>/dev/null
 yyy=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 yyy=1
fi
case "$yyy" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_casti32
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_casti32.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: groupstype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: groupstype.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:18:08  ram
?RCS: patch36: no longer uses Setvar to set 'groupstype' (ADO)
?RCS: patch36: typo fix in the word 'argument' (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:00:18  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:groupstype: gidtype d_getgrps Myread Oldconfig Findhdr cat d_setgrps
?MAKE: -pick add $@ %<
?INIT:groupstype=''
?S:groupstype:
?S: This
 variable defines Groups_t to be something like gid_t, int,
?S: ushort, or whatever type is used for the second argument to
?S: getgroups() and setgroups().  Usually, this is the same as
?S: gidtype (gid_t), but sometimes it isn't.
?S:.
?C:Groups_t (GROUPSTYPE):
?C: This symbol holds the type used for the second argument to
?C: getgroups() and setgroups().  Usually, this is the same as
?C: gidtype (gid_t) , but sometimes it isn't.
?C: It can be int, ushort, gid_t, etc...
?C: It may be necessary to include <sys/types.h> to get any
?C: typedef'ed information.  This is only required if you have
?C: getgroups() or setgroups()..
?C:.
?H:?%<:#if defined(HAS_GETGROUPS) || defined(HAS_SETGROUPS)
?H:?%<:#define Groups_t $groupstype /* Type for 2nd arg to [sg]etgroups() */
?H:?%<:#endif
?H:.
?W:%<:getgroups HAS_GETGROUPS setgroups HAS_SETGROUPS
: Find type of 2nd arg to 'getgroups()' and 'setgroups()'
echo " "
case "$d_getgrps$d_setgrps" in
*define*)
 case
 "$groupstype" in
 ") dflt="$gidtype" ;;
 *)  dflt="$groupstype" ;;
 esac
 $cat <<EOM
What type of pointer is the second argument to getgroups() and setgroups()?
Usually this is the same as group ids, $gidtype, but not always.

EOM
```

```
 rp='What type pointer is the second argument to getgroups() and setgroups()?'
 . ./myread
 groupstype="$ans"
 ;;
*)  groupstype="$gidtype";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/groupstype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: sizetype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:32:10  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:sizetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:sizetype:
?S: This variable defines sizetype to be something like size_t,
?S: unsigned long, or whatever type is used to declare length
?S: parameters for string functions.
?S:.
?C:Size_t:
?C: This symbol holds the type used to declare length parameters
?C: for string
 functions.  It is usually size_t, but may be
?C: unsigned long, int, etc.  It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Size_t $sizetype  /* length paramater for string functions */
?H:.
: see what type is used for size_t
set size_t sizetype 'unsigned int' stdio.h sys/types.h
eval $typedef
dflt="$sizetype"
echo " "
```

```
rp="What type is used for the length parameter for string functions?"
. ./myread
sizetype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpent:
?S: This variable conditionally defines HAS_SETPROTOENT if setprotoent() is
?S: available.
?S:.
?C:HAS_SETPROTOENT:
?C: This symbol, if defined, indicates that the setprotoent() routine is
?C: available.
?C:.
?H:#$d_setpent HAS_SETPROTOENT  /**/
?H:.
?LINT:set d_setpent
: see if setprotoent
 exists
set setprotoent d_setpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_mmap.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:12  ram
?RCS: patch15: created
?RCS:
?MAKE:d_mmap: Inlibc
?MAKE: -pick add $@ %<
?S:d_mmap:
?S: This variable conditionally defines HAS_MMAP if mmap() is
?S: available to map a file into memory.
?S:.
?C:HAS_MMAP:
?C: This symbol, if defined, indicates that the mmap system call is
?C: available to map a file into memory.
?C:.
?H:#$d_mmap HAS_MMAP  /**/
?H:.
?LINT:set d_mmap
: see if mmap exists
set mmap d_mmap
eval $inlibc
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_mmap.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setsid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setsid.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:06:49  ram
?RCS: patch16: created
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_setsid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setsid:
?S: This variable conditionally defines HAS_SETSID if setsid() is
?S: available to set the process group ID.
?S:.
?C:HAS_SETSID:
?C: This symbol, if defined, indicates that the setsid routine is
?C: available
 to set the process group ID.
?C:.
?H:#$d_setsid HAS_SETSID /**/
?H:.
?LINT:set d_setsid
: see if setsid exists
set setsid d_setsid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setsid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lrint: Inlibc
?MAKE: -pick add $@ %<
?S:d_lrint:
?S: This variable conditionally defines the HAS_LRINT symbol, which
?S: indicates to the C program that the lrint() routine is available
?S: to return the integral value closest to a double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LRINT:
?C: This symbol, if defined, indicates that the lrint routine is
?C: available to return the integral value closest to a double
?C: (according to the current rounding mode).
?C:.
?H:#$d_lrint HAS_LRINT  /**/
?H:.
?LINT:set d_lrint
: see if lrint exists
set lrint d_lrint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lrint.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extractall.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extractall.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:00:43  ram
?RCS: patch61: created
?RCS:
?X:
?X: If extraction has been requested, load the configuration file, perform
?X: the extraction and exit.
?X:
?X: This unit was originally a part of Options.U. It had to be removed from
?X: it to prevent a dependency cycle: Extract -> src -> Options -> Extract
?X: The Begin.U unit now requires us before beginning to do anything
?X: interesting, to ensure
 proper semantics. -- RAM, 15/03/96
?X:
?MAKE:Extractall: Extract Options
?MAKE: -pick wipe $@ %<
: extract files and exit if asked to do so
case "$extractsh" in
true)
?X: Undo the forced silent=true when -S was supplied, by probing realsilent
?X: which was set iff -s was also given. See Options.U for details.
 case "$realsilent" in
 true) ;;
 *) exec 1>&4;;
 esac
 case "$config_sh" in
 '') config_sh='config.sh';;
 esac
 echo " "
 echo "Fetching answers from $config_sh..."
 cd ..
 . $config_sh
?X: extract has to be run from the top directory, not within UU.
 . UU/optdef.sh
 echo " "
?X: extract has to be run from the top directory, not within UU.
```

```
 . UU/extract
 rm -rf UU
 echo "Extraction done."
 exit 0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Extractall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ttyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_ttyname_r ttyname_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_unistd extern_C
?MAKE: -pick add $@ %<
?S:d_ttyname_r:
?S: This variable conditionally defines the HAS_TTYNAME_R symbol,
?S: which indicates to the C program that the ttyname_r()
?S: routine is available.
?S:.
?S:ttyname_r_proto:
?S: This variable encodes the prototype of ttyname_r.
?S: It is zero if d_ttyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ttyname_r
?S: is defined.
?S:.
?C:HAS_TTYNAME_R:
?C: This symbol, if defined, indicates that the ttyname_r routine
?C: is available to ttyname re-entrantly.
?C:.
?C:TTYNAME_R_PROTO:
?C: This
 symbol encodes the prototype of ttyname_r.
?C: It is zero if d_ttyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_ttyname_r
?C: is defined.
?C:.
?H:#$d_ttyname_r HAS_TTYNAME_R /**/
?H:#define TTYNAME_R_PROTO $ttyname_r_proto /**/
?H:.
?T:try hdrs d_ttyname_r_proto
```

```
: see if ttyname_r exists
set ttyname_r d_ttyname_r
eval $inlibc
case "$d_ttyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_unistd unistd.h"
 case "$d_ttyname_r_proto:$usethreads" in
 ":define") d_ttyname_r_proto=define
  set d_ttyname_r_proto ttyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_ttyname_r_proto" in
 define)
 case "$ttyname_r_proto" in
 "|0) try='int ttyname_r(int, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && ttyname_r_proto=I_IBW ;;
 esac
 case "$ttyname_r_proto" in
 "|0) try='int ttyname_r(int, char*, int);'
 ./protochk "$extern_C $try" $hdrs && ttyname_r_proto=I_IBI ;;
 esac
 case "$ttyname_r_proto"
 in
 "|0) try='char* ttyname_r(int, char*, int);'
 ./protochk "$extern_C $try" $hdrs && ttyname_r_proto=B_IBI ;;
 esac
 case "$ttyname_r_proto" in
 "|0) d_ttyname_r=undef
  ttyname_r_proto=0
  echo "Disabling ttyname_r, cannot determine prototype." >&4 ;;
 * ) case "$ttyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) ttyname_r_proto="REENTRANT_PROTO_$ttyname_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "ttyname_r has no prototype, not using it." >&4 ;;
  esac
  d_ttyname_r=undef
  ttyname_r_proto=0
  ;;
 esac
 ;;
*) ttyname_r_proto=0
 ;;
```

```
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_ttyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usethreads.U,v $
?RCS:
?RCS: Copyright (c) 1998-2000 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usethreads.U,v $
?RCS:
?MAKE:usethreads useithreads d_oldpthreads usereentrant: \
 Myread Oldconfig Setvar test cat
?MAKE: -pick add $@ %<
?Y:TOP
?S:usethreads:
?S: This variable conditionally defines the USE_THREADS symbol,
?S: and indicates that Perl should be built to use threads.
?S:.
?S:useithreads:
?S: This variable conditionally defines the USE_ITHREADS symbol,
?S: and indicates that Perl should be built to use the interpreter-based
?S: threading implementation.
?S:.
?X: I'm putting old_pthreads in this unit because it might eventually
?X: be part of an automatic determination to see if we can use threads
?X: at all.
?S:d_oldpthreads:
?S: This variable conditionally
 defines the OLD_PTHREADS_API symbol,
?S: and indicates that Perl should be built to use the old
?S: draft POSIX threads API.  This is only potentially meaningful if
?S: usethreads is set.
?S:.
?S:usereentrant:
?S: This variable conditionally defines the USE_REENTRANT_API symbol,
?S: which indicates that the thread code may try to use the various
?S: _r versions of library functions.  This is only potentially
?S: meaningful if usethreads is set and is very experimental, it is
?S: not even prompted for.
?S:.
?C:USE_ITHREADS:
?C: This symbol, if defined, indicates that Perl should be built to
?C: use the interpreter-based threading implementation.
```

```
?C:.
?C:USE_THREADS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use threads.  At present, it is a synonym for
?C: and USE_ITHREADS, but eventually the source ought to be
?C: changed to use this to mean _any_ threading implementation.
?C:.
?C:OLD_PTHREADS_API:
?C: This symbol, if defined, indicates that Perl should
?C: be
 built to use the old draft POSIX threads API.
?C:.
?C:USE_REENTRANT_API:
?C: This symbol, if defined, indicates that Perl should
?C: try to use the various _r versions of library functions.
?C: This is extremely experimental.
?C:.
?H:#$useithreads USE_ITHREADS  /**/
?H:#$usethreads  USE_THREADS  /**/
?H:#$d_oldpthreads OLD_PTHREADS_API  /**/
?H:#$usereentrant USE_REENTRANT_API /**/
?H:.
?LINT:set usethreads d_oldpthreads
?INIT:: set usethreads on the Configure command line to enable threads.
?INIT:usereentrant='undef'
?F:!usethreads.cbu
: Do we want threads support and if so, what type
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
case "$usethreads" in
$define|true|[yY]*)     dflt='y';;
*)     # Catch case where user specified ithreads but
     # forgot -Dusethreads (A.D. 4/2002)
     case "$useithreads" in
     *$define*) dflt='y';;
     *)  dflt='n';;
     esac
     ;;
esac
cat <<EOM

Perl can be built to
 offer a form of threading support on some systems
To do so, Configure can be run with -Dusethreads.

Note that Perl built with threading support runs slightly slower
and uses slightly more memory than plain Perl.
```

```
If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Build a threading Perl?'
. ./myread
case "$ans" in
y|Y)    val="$define" ;;
*)      val="$undef" ;;
esac
set usethreads
eval $setvar

useithreads="$usethreads"

?X: Check out what kind of threads API we have
case "$d_oldpthreads" in
") : Configure tests would be welcome here.  For now, assume undef.
 val="$undef" ;;
*) val="$d_oldpthreads" ;;
esac
set d_oldpthreads
eval $setvar

?X: In general, -lpthread needs to come before -lc but after other
?X: libraries such as -lgdbm and such like. We assume here that -lc
?X: is present in libswanted. If that fails to be true, then this
?X: can be changed to add pthread to the very end of libswanted.

: Look for a hint-file generated 'call-back-unit'.  If the
:
 user has specified that a threading perl is to be built,
: we may need to set or change some other defaults.
if $test -f usethreads.cbu; then
   echo "Your platform has some specific hints regarding threaded builds, using them..."
   . ./usethreads.cbu
else
   case "$usethreads" in
 "$define"|true|[yY]*)
  $cat <<EOM
(Your platform does not have any specific hints for threaded builds.
Assuming POSIX threads, then.)
EOM
 ;;
   esac
fi

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/usethreads.U
```

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```
?RCS: $Id: i_regex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Sidney C. Smith <scsmith@cbda9.apgea.army.mil>
?RCS:
?RCS: $Log: i_regex.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:35:45  ram
?RCS: patch49: created
?RCS:
?RCS:
?MAKE:i_regex: Inhdr
?MAKE: -pick add $@ %<
?S:i_regex:
?S: This variable conditionally defines the I_REGEX symbol, which
?S: indicates to the C program that <regex.h> exists and should
?S: be included.
?S:.
?C:I_REGEX:
?C: This symbol, if defined, indicates that <regex.h> exists
 and should
?C: be included.
?C:.
?H:#$i_regex I_REGEX /**/
?H:.
?LINT:set i_regex
: see if regex is available
set regex.h i_regex
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_regex.U
No license file was found, but licenses were detected in source scan.

```
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: gidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:21:44  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS: patch32: removed useless usage of Setvar (for now)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:21:07  ram
?RCS: patch27: added lint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:01:51  ram
?RCS: patch23: protected gidtype setting via setvar (ADO)
?RCS: patch23: made Gid_t comment more explicit (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:11  ram
?RCS:
 Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:gidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:gidtype:
?S: This variable defines Gid_t to be something like gid_t, int,
?S: ushort, or whatever type is used to declare the return type
?S: of getgid().  Typically, it is the type of group ids in the kernel.
?S:.
?C:Gid_t (GIDTYPE):
?C: This symbol holds the return type of getgid() and the type of
?C: argument to setrgid() and related functions.  Typically,
?C: it is the type of group ids in the kernel. It can be int, ushort,
?C: uid_t, etc... It may be necessary to include <sys/types.h> to get
?C: any typedef'ed information.
?C:.
?H:#define Gid_t $gidtype  /* Type for getgid(), etc... */
?H:.
?T:xxx
: see what type gids are declared as in the kernel
set gid_t gidtype xxx stdio.h sys/types.h
eval $typedef
case "$gidtype" in
xxx)
 xxx=`./findhdr sys/user.h`
 set `grep 'groups\[NGROUPS\];' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1"
```

```
 ;;
 esac
 ;;
*) dflt="$gidtype";;
esac
echo " "
rp="What is the type for group ids returned by getgid()?"
. ./myread
gidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/gidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: archlib.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:23:38  ram
?RCS: patch61: skip existence checks for archlib
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:18  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/02/15  14:14:14  ram
?RCS: patch51: architecture name is now computed by a separate unit
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:32:22  ram
?RCS:
 patch49: archname is now systematically recomputed
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:36  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_archlib archlib archlibexp installarchlib: archname afs spackage \
 cat Getfile Loc Oldconfig prefixexp privlib test Prefixit Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
```

```
?S:d_archlib:
?S: This variable conditionally defines ARCHLIB to hold the pathname
?S: of architecture-dependent library files for $package.  If
?S: $archlib is the same as $privlib, then this is set to undef.
?S:.
?S:archlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put architecture-dependent public library files for $package.
?S: It is most often a local directory such as /usr/local/lib.
?S: Programs using this variable must be prepared to deal
?S: with filename expansion.
?S:.
?S:archlibexp:
?S: This variable is the same as the archlib variable, but is
?S: filename
 expanded at configuration time, for convenient use.
?S:.
?S:installarchlib:
?S: This variable is really the same as archlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:ARCHLIB:
?C: This variable, if defined, holds the name of the directory in
?C: which the user wants to put architecture-dependent public
?C: library files for $package.  It is most often a local directory
?C: such as /usr/local/lib.  Programs using this variable must be
?C: prepared to deal with filename expansion.  If ARCHLIB is the
?C: same as PRIVLIB, it is not defined, since presumably the
?C: program already searches PRIVLIB.
?C:.
?C:ARCHLIB_EXP:
?C: This symbol contains the ~name expanded version of ARCHLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_archlib ARCHLIB "$archlib"  /**/
?H:#$d_archlib ARCHLIB_EXP "$archlibexp"  /**/
?H:.
: determine where public architecture
 dependent libraries go
set archlib archlib
eval $prefixit
case "$archlib" in
")
 case "$privlib" in
 ")
  dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
  set dflt
```

```
  eval $prefixup
  ;;
 *)  dflt="$privlib/$archname";;
 esac
 ;;
*) dflt="$archlib";;
esac
cat <<EOM

$spackage contains architecture-dependent library files.  If you are
sharing libraries in a heterogeneous environment, you might store
these files in a separate location.  Otherwise, you can just include
them with the rest of the public library files.

EOM
fn=d+~
rp='Where do you want to put the public architecture-dependent libraries?'
. ./getfile
archlib="$ans"
archlibexp="$ansexp"

if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installarchlib" in
 '') dflt=`echo $archlibexp | sed 's#^/afs/#/afs/.#'`;;
 *)
 dflt="$installarchlib";;
 esac
 fn=de~
 rp='Where will architecture-dependent library files be installed?'
 . ./getfile
 installarchlib="$ans"
else
 installarchlib="$archlibexp"
fi
if $test X"$archlib" = X"$privlib"; then
 d_archlib="$undef"
else
 d_archlib="$define"
fi

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/archlib.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:uidsign: Myread Typedef uidtype Compile run
?MAKE: -pick add $@ %<
?S:uidsign:
?S: This variable contains the signedness of a uidtype.
?S: 1 for unsigned, -1 for signed.
?S:.
?C:Uid_t_sign:
?C: This symbol holds the signedness of a Uid_t.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define Uid_t_sign $uidsign  /* UID sign */
?H:.
?T:yyy zzz
?F:!try
: Check if UID is signed
echo " "
case "$uidtype" in
*_t) zzz="$uidtype" ;;
*)   zzz="uid"  ;;
esac
echo "Checking the sign of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include
 <stdio.h>
int main() {
 $uidtype foo = -1;
 if (foo < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set try
if eval $compile; then
 yyy=`$run ./try`
```

```
 case "$yyy" in
 ") uidsign=1
  echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) uidsign=$yyy
  case "$uidsign" in
   1) echo "Your $zzz is unsigned." ;;
  -1) echo "Your $zzz is signed."   ;;
  esac
  ;;
 esac
else
 uidsign=1
 echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidsign.U
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```
?RCS: $Id: d_brokstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_brokstat.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:30:53  ram
?RCS: patch61: created
?RCS:
?MAKE:d_brokstat: cat contains cppstdin cppminus +cppflags rm Setvar
?MAKE: -pick add $@ %<
?S:d_brokstat:
?S: This variable conditionally defines STAT_MACROS_BROKEN if some
?S: of the S_IS*() macros from <sys/stat.h> give false positive on
?S: regular files.
?S:.
?C:STAT_MACROS_BROKEN:
?C: This symbol, if defined, indicates that the S_IS*() stat macros
?C: such
 as S_ISBLK() give false positive and are thus unusable.
?C: Your best bet is then to supply your own set.
?C:.
?H:#$d_brokstat STAT_MACROS_BROKEN  /**/
```

```
?H:.
?F:!try.c !try
?LINT:set d_brokstat
?LINT:usefile try
?X: This test inspired by autoconf -- RAM, 28/02/97
: are stat macros sane?
echo " "
echo "Checking whether your stat() macros are broken..."
$cat >try.c <<'EOC'
#include <sys/types.h>
#include <sys/stat.h>

#if defined(S_ISBLK) && defined(S_IFDIR)
#if S_ISBLK(S_IFDIR)
Broken
#endif
#endif

#if defined(S_ISBLK) && defined(S_IFCHR)
#if S_ISBLK(S_IFCHR)
Broken
#endif
#endif

#if defined(S_ISLNK) && defined(S_IFREG)
#if S_ISLNK(S_IFREG)
Broken.
#endif
#endif

#if defined(S_ISSOCK) && defined(S_IFREG)
#if S_ISSOCK(S_IFREG)
Broken.
#endif
#endif
EOC
$cppstdin $cppflags $cppminus <try.c 2>/dev/null >try
if $contains Broken try >/dev/null 2>&1; then
 echo "Alas, they are.  I'll use my own macro set then." >&4
 val="$define"
else
 echo "Nope, working just fine." >&4
 val="$undef"
fi
$rm
 -f try try.c
set d_brokstat
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_brokstat.U
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```
?RCS: $Id: i_socks.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_socks: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_socks:
?S: This variable conditionally defines the I_SOCKS symbol, and indicates
?S: whether a C program should include <socks.h>.
?S:.
?C:I_SOCKS:
?C: This symbol, if defined, indicates that <socks.h> exists and
?C: should be included.
?C:.
?H:#$i_socks I_SOCKS  /**/
?H:.
?LINT:set i_socks
: see if this is a socks.h system
set socks.h i_socks
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_socks.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: bitpbyte.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:54  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:27  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bitpbyte: cat rm Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:bitpbyte:
?S: This variable contains the value of the BITS_PER_BYTE symbol, which
?S: indicates to the C program how many bits there are in a byte.
?S:.
?C:BITS_PER_BYTE:
?C: This symbol contains the number
 of bits in a byte, so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define BITS_PER_BYTE $bitpbyte  /**/
?H:.
?F:!try
: check for length of byte
echo " "
case "$bitpbyte" in
")
 echo "Checking to see how many bits there are in a byte..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
?X: Standard C requires a macro CHAR_BIT in <limits.h>
#ifdef __STDC__
#include <limits.h>
#ifndef CHAR_BIT
#define CHAR_BIT 8
#endif
#ifndef BITSPERBYTE
#define BITSPERBYTE CHAR_BIT
#endif
#else
?X: On non standard C, try with <values.h>
#include <values.h>
#ifndef BITSPERBYTE
#define BITSPERBYTE 8
#endif
#endif
int main()
{
 printf("%d\n", BITSPERBYTE);
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='8'
```

```
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$bitpbyte"
 ;;
esac
rp="What is the length of a byte (in bits)?"
. ./myread
bitpbyte="$ans"
$rm -f try.c try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/bitpbyte.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_uwait.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_uwait.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:10:49  ram
?RCS: patch16: added knowledge about wait3()
?RCS: patch16: revised 'union wait' look-up algorithm
?RCS: patch16: fixed make dependency line accordingly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_uwait d_uwait3: cat contains cppstdin cppminus +cppflags rm \
 Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_uwait:
?S: This symbol
 conditionally defines UNION_WAIT which indicates to the C
?S: program that argument for the wait() system call should be declared as
?S: 'union wait status' instead of 'int status'.
?S:.
?S:d_uwait3:
?S: This symbol conditionally defines UNION_WAIT3 which indicates to the C
?S: program that the first argument for the wait3() system call should be
?S: declared as 'union wait status' instead of 'int status'.
```

```
?S:.
?C:UNION_WAIT:
?C: This symbol if defined indicates to the C program that the argument
?C: for the wait() system call should be declared as 'union wait status'
?C: instead of 'int status'. You probably need to include <sys/wait.h>
?C: in the former case (see I_SYSWAIT).
?C:.
?C:UNION_WAIT3:
?C: This symbol if defined indicates to the C program that the first argument
?C: for the wait3() system call should be declared as 'union wait status'
?C: instead of 'int status'. You probably need to include <sys/wait.h>
?C: in the former case (see I_SYSWAIT). It seems safe to assume that
 the
?C: same rule applies to the second parameter of wait4().
?C:.
?H:#$d_uwait UNION_WAIT  /**/
?H:#$d_uwait3 UNION_WAIT3 /**/
?H:.
?T:val2 flags f also
?LINT:set d_uwait d_uwait3
: see if union wait is available
echo " "
?X:
?X: Unfortunately, we can't just grep <sys/wait.h> for "union wait" because
?X: some weird systems (did I hear HP-UX?) define union wait only when _BSD
?X: is defined. The same thing happens on OSF/1, who is pushing weirdness to
?X: its limits by requiring wait() to use (int *) but wait3() to use
?X: (union wait *), unless _BSD is defined and -lbsd is used, in which case
?X: wait() also expects (union wait *). Aaargh!!--RAM
?X:
set X $cppflags
shift
flags=''
also=''
for f in $*; do
 case "$f" in
 *NO_PROTO*) ;;
 *) flags="$flags $f";;
 esac
done
$cat `./findhdr sys/wait.h` /dev/null | \
 $cppstdin $flags $cppminus >wait.out 2>/dev/null
if $contains 'union.*wait.*{' wait.out >/dev/null 2>&1 ; then
 echo "Looks like your <sys/wait.h> knows about 'union wait'..."
 >&4
 val="$define"
@if UNION_WAIT
 also='also '
```

```
 if $contains 'extern.*wait[  ]*([  ]*int' wait.out >/dev/null 2>&1
 then
  echo "But wait() seems to expect an 'int' pointer (POSIX way)." >&4
  val="$undef"
  also="
 elif $contains 'extern.*wait[  ]*([  ]*union' wait.out >/dev/null 2>&1
 then
  echo "And indeed wait() expects an 'union wait' pointer (BSD way)." >&4
 else
  echo "So we'll use that for wait()." >&4
 fi
@end
@if UNION_WAIT3 || d_uwait3
 val2="$define"
@end
@if UNION_WAIT3
 if $contains 'extern.*wait3[  ]*([  ]*int' wait.out >/dev/null 2>&1
 then
  echo "However wait3() seems to expect an 'int' pointer, weird." >&4
  val2="$undef"
 elif $contains 'extern.*wait3[  ]*([  ]*union' wait.out >/dev/null 2>&1
 then
  echo "And wait3() ${also}expects an 'union wait' pointer, fine." >&4
 else
  echo "As expected, wait3() ${also}uses an 'union wait' pointer." >&4
 fi
@end
else
 echo "No trace of 'union wait' in <sys/wait.h>..." >&4
 val="$undef"
@if UNION_WAIT && UNION_WAIT3
 echo
 "Both wait() and wait3() will use a plain 'int' pointer then." >&4
@elsif UNION_WAIT
 echo "Your wait() should be happy with a plain 'int' pointer." >&4
@elsif UNION_WAIT3
 echo "Your wait3() should be happy with a plain 'int' pointer." >&4
@end
fi
set d_uwait
eval $setvar
@if UNION_WAIT3 || d_uwait3
val="$val2"; set d_uwait3
eval $setvar
@end
$rm -f wait.out
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_uwait.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpwent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpwent: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_getpwent:
?S: This variable conditionally defines the HAS_GETPWENT symbol, which
?S: indicates to the C program that it should use the getpwent()
?S: routine instead of the getpw() routine.
?S:.
?C:HAS_GETPWENT (GETPWENT):
?C: This symbol, if defined, indicates that the getpwent() routine
?C: should be used instead of the getpw()
 routine.
?C:.
?H:#$d_getpwent HAS_GETPWENT /**/
?H:.
?LINT:set d_getpwent
: see if there is a getpwent
echo " "
if set getpwent val -f d_getpwent; eval $csym; $val; then
 echo "getpwent() found." >&4
 val="$define"
else
 echo "No getpwent() found -- will use getpw() instead." >&4
 val="$undef"
fi
set d_getpwent
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mkdep.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mkdep.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:13:07  ram
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  16:25:02  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:12  ram
?RCS: patch16: cppflags is now an optional dependency
?RCS:
?RCS: Revision 3.0.1.1  1993/12/15  08:22:39  ram
?RCS: patch15: force zero exit status in all mkdep scripts
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit generates the script 'mkdep' in the top-level directory.
?X: It is up to the makefile to use it for automatic dependencies
?X: generation (usage: 'mkdep [cppflags] -- *.c').
?X:
?MAKE:mkdep: spitshell startsh cpp +cppflags grep contains rm sed sort uniq \
 Getfile Oldconfig eunicefix cat +cc cppminus test pkgsrc _o
?MAKE: -pick add $@ %<
?S:mkdep:
?S: This variable holds the name of a command to generate makefile
?S: dependencies on the standard output. It is the pathname of the
?S: generated mkdep script.
?S:.
?F:mkdep
?T:IFS arg flags takeflags srcfile toplev filebase inc dir files file dep c
: find out how to generate dependencies
echo " "
echo "Checking how to generate makefile dependencies on your machine..." >&4
?X: We are in the UU directory
toplev=`cd ..;pwd`
$cat >dep.c <<'EOCP'
```

```
#include "dep.h"
EOCP
?X: Empty dep.h causes RIOS to barf
$cat >dep.h <<'EOCP'

EOCP
takeflags='flags=""
case
 "$@" in
*--*)
 for arg
 do
  shift
  case "$arg" in
  --) break;;
  *) flags="$flags $arg";;
  esac
 done;;
esac'
case "$mkdep" in
")
 ;;
*)
 if test -f "$mkdep" &&
  $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "$mkdep works."
?X: If they copied a config.sh from some other place, they'll have a working
?X: mkdep script probably, but not located at the top of the sources.  And
?X: the Makefiles generated by jmake expect an mkdep script in the top dir.
  case "$mkdep" in
  "$pkgsrc/mkdep");;
  *) echo "(copying it to $pkgsrc)"
   cp $mkdep $pkgsrc/mkdep 2>/dev/null
     if $pkgsrc/mkdep dep.c >dep.out 2>/dev/null &&
    $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1; then
    mkdep=$pkgsrc/mkdep
   else
    echo "Hmm... The copy failed or something... Guessing again..."
    mkdep=
   fi
   ;;
  esac
 else
  mkdep=
 fi
esac
```

```
case "$mkdep" in
")
?X: have to figure something out: Try cpp
?X: have
 to pass source names one by one to cpp...
 $spitshell > ../mkdep <<EOM
$startsh
$takeflags
for srcfile
do
 $cpp -M $cppflags \$flags \$srcfile 2>/dev/null
done
exit 0
EOM
 mkdep=$toplev/mkdep
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "Looks like we can use $cpp -M."
 else
  mkdep=
 fi
 ;;
esac

case "$mkdep" in
")
?X: have to figure something out: on NeXT, use cc -MM
?X: have to pass source names one by one to cc...
 $spitshell > ../mkdep <<EOM
$startsh
$takeflags
for srcfile
do
 $cc -MM $cppflags \$flags \$srcfile 2>/dev/null
done
exit 0
EOM
 mkdep=$toplev/mkdep
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o: dep.h" dep.out >/dev/null 2>&1
 then
  echo "Looks like we can use $cc -MM."
```

```
 else
  mkdep=
 fi
 ;;
esac

case "$mkdep" in
")
?X: still no luck -- try something fancier.
 $spitshell >../mkdep <<EOS
$startsh
$takeflags
for srcfile
do
 case
 "\$srcfile" in
 *.c) c='.c';;
 *.y) c='.y';;
 *.l) c='.l';;
 esac
 filebase=\`basename \$srcfile \$c\`
 <\$srcfile $cpp $cppminus $cppflags \$flags 2>/dev/null | \\
 $sed -e '/^# *[0-9]/!d' \\
  -e 's/^.*"\(.*\)".*\$/"\$filebase'$_o: \1/' \\
  -e 's|: \./|: |' \\
  -e 's|: *$|: '\$srcfile'|' | \\
 $grep -v '^#' | $sort | $uniq
done
exit 0
EOS
 mkdep=$toplev/mkdep
 chmod +x $mkdep
 $eunicefix $mkdep
 if $mkdep dep.c >dep.out 2>/dev/null &&
  $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
 then
  echo "A shell script using $cpp does the trick."
 else
  echo "$cpp doesn't seem to be any use at all."
  $spitshell >../mkdep <<EOS
$startsh
$takeflags
files="\$@"
set X \$flags
shift
inc='.'
while test \$# -gt 0
do
```

```
 case "\$1" in
 -I)
  shift
  inc="\$inc:\$1"
  ;;
 -I*)
  dir=\`echo \$1 | sed -e 's/^-I//'\`
  inc="\$inc:\$dir"
  ;;
 esac
 shift
done
set X \$files
shift
trap "$rm -f /tmp/mkdep\$\$; exit 1" 1 2 3 15
for srcfile
do
 case "\$srcfile" in
 *.c) c='.c';;
 *.y) c='.y';;
 *.l)
 c='.l';;
 esac
 filebase=\`basename \$srcfile \$c\`
 echo \$filebase$_o: \$srcfile
 $grep '^#[  ]*include' \$srcfile /dev/null | \
 $sed -n -e 's/#[   ]*include[  ]*//' \\
  -e '/<\(.*\)>/ d' \\
  -e 's/:[^"]*"\([^"]*\)".*/: \1/' \\
  -e "s/\\.c:/$_o:/p" > /tmp/mkdep\$\$
?X: Deal with directories specified via -I requests to locate files
 IFS=': '
 while read file dep; do
  for dir in \$inc; do
   if $test -f "\$dir/\$dep"; then
    dep="\$dir/\$dep"
    break
   fi
  done
  echo "\$file: \$dep" | $sed -e 's,: \./,: ,'
 done </tmp/mkdep\$\$
 IFS=' '
 $rm -f /tmp/mkdep\$\$
done
exit 0
EOS
  mkdep=$toplev/mkdep
  chmod +x $mkdep
```

```
  $eunicefix $mkdep
  if $mkdep dep.c >dep.out 2>/dev/null &&
   $contains "dep$_o:.*dep\.h" dep.out >/dev/null 2>&1
  then
   cat << EOM

I can use a script with grep instead, but it will make some incorrect
dependencies, since it doesn't understand about conditional compilation.
Moreover, some dependencies may be missing, because scanning won't be
a
 recursive process.
If you have a program which generates makefile dependencies, you may want
to use it.  If not, you can use the script and edit the Makefile by hand
if you need to.
EOM
  else
   mkdep=
   cat << EOM

I can't seem to generate makefile dependencies at all!  Perhaps you have a
program that does?  If you don't, you might look at the mkdep script to
see if you can create one which works.
EOM
  fi
 fi
esac
echo " "
dflt="$mkdep"
fn=f~/
rp="Name of program to make makefile dependencies?"
. ./getfile
mkdep="$ans"
$rm -f dep.c dep.h dep$_o dep.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mkdep.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: modetype.U,v 3.0.1.1 1994/10/29 16:25:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: modetype.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:25:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:modetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:modetype:
?S: This variable defines modetype to be something like mode_t,
?S: int, unsigned short, or whatever type is used to declare file
?S: modes for system calls.
?S:.
?C:Mode_t:
?C: This symbol holds the type used to declare
 file modes
?C: for systems calls.  It is usually mode_t, but may be
?C: int or unsigned short.  It may be necessary to include <sys/types.h>
?C: to get any typedef'ed information.
?C:.
?H:#define Mode_t $modetype  /* file mode parameter for system calls */
?H:.
?LINT:set modetype
: see what type is used for mode_t
rp="What is the type used for file modes for system calls (e.g. fchmod())?"
set mode_t modetype int stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/modetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_srand48_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_srand48_r srand48_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_stdlib extern_C
?MAKE: -pick add $@ %<
?S:d_srand48_r:
?S: This variable conditionally defines the HAS_SRAND48_R symbol,
?S: which indicates to the C program that the srand48_r()
?S: routine is available.
?S:.
```

```
?S:srand48_r_proto:
?S: This variable encodes the prototype of srand48_r.
?S: It is zero if d_srand48_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srand48_r
?S: is defined.
?S:.
?C:HAS_SRAND48_R:
?C: This symbol, if defined, indicates that the srand48_r routine
?C: is available to srand48 re-entrantly.
?C:.
?C:SRAND48_R_PROTO:
?C: This
 symbol encodes the prototype of srand48_r.
?C: It is zero if d_srand48_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_srand48_r
?C: is defined.
?C:.
?H:#$d_srand48_r HAS_SRAND48_R /**/
?H:#define SRAND48_R_PROTO $srand48_r_proto /**/
?H:.
?T:try hdrs d_srand48_r_proto
: see if srand48_r exists
set srand48_r d_srand48_r
eval $inlibc
case "$d_srand48_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_stdlib stdlib.h"
 case "$d_srand48_r_proto:$usethreads" in
 ":define") d_srand48_r_proto=define
  set d_srand48_r_proto srand48_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_srand48_r_proto" in
 define)
 case "$srand48_r_proto" in
 "|0) try='int srand48_r(long, struct drand48_data*);'
 ./protochk "$extern_C $try" $hdrs && srand48_r_proto=I_LS ;;
 esac
 case "$srand48_r_proto" in
 "|0) d_srand48_r=undef
  srand48_r_proto=0
  echo "Disabling srand48_r, cannot determine prototype." >&4 ;;
 * ) case
 "$srand48_r_proto" in
  REENTRANT_PROTO*) ;;
  *) srand48_r_proto="REENTRANT_PROTO_$srand48_r_proto" ;;
  esac
```

```
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "srand48_r has no prototype, not using it." >&4 ;;
  esac
  d_srand48_r=undef
  srand48_r_proto=0
  ;;
 esac
 ;;
*) srand48_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_srand48_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_log2: Inlibc
?MAKE: -pick add $@ %<
?S:d_log2:
?S: This variable conditionally defines the HAS_LOG2 symbol, which
?S: indicates to the C program that the log2() routine is available
?S: to compute log base two.
?S:.
?C:HAS_LOG2:
?C: This symbol, if defined, indicates that the log2 routine is
?C: available to do the log2 function.
?C:.
?H:#$d_log2 HAS_LOG2  /**/
?H:.
?LINT:set d_log2
: see if log2 exists
set log2 d_log2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_log2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getprotoent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getprotoent_r getprotoent_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_getprotoent_r:
?S: This variable conditionally defines the HAS_GETPROTOENT_R symbol,
?S: which indicates to the C program that the getprotoent_r()
?S: routine is available.
?S:.
?S:getprotoent_r_proto:
?S: This variable encodes the prototype of getprotoent_r.
?S: It is zero if d_getprotoent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotoent_r
?S: is defined.
?S:.
?C:HAS_GETPROTOENT_R:
?C: This symbol, if defined, indicates that the getprotoent_r
 routine
?C: is available to getprotoent re-entrantly.
?C:.
?C:GETPROTOENT_R_PROTO:
?C: This symbol encodes the prototype of getprotoent_r.
?C: It is zero if d_getprotoent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getprotoent_r
?C: is defined.
?C:.
?H:#$d_getprotoent_r HAS_GETPROTOENT_R /**/
?H:#define GETPROTOENT_R_PROTO $getprotoent_r_proto /**/
?H:.
?T:try hdrs d_getprotoent_r_proto
: see if getprotoent_r exists
set getprotoent_r d_getprotoent_r
eval $inlibc
case "$d_getprotoent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_getprotoent_r_proto:$usethreads" in
 ":define") d_getprotoent_r_proto=define
  set d_getprotoent_r_proto getprotoent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_getprotoent_r_proto" in
 define)
 case "$getprotoent_r_proto" in
```

```
"|0) try='int getprotoent_r(struct protoent*, char*, size_t, struct protoent**);'
./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SBWR
;;
esac
case "$getprotoent_r_proto" in
"|0) try='int getprotoent_r(struct protoent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SBI ;;
esac
case "$getprotoent_r_proto" in
"|0) try='struct protoent* getprotoent_r(struct protoent*, char*, int);'
./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=S_SBI ;;
esac
case "$getprotoent_r_proto" in
"|0) try='int getprotoent_r(struct protoent*, struct protoent_data*);'
./protochk "$extern_C $try" $hdrs && getprotoent_r_proto=I_SD ;;
esac
case "$getprotoent_r_proto" in
"|0) d_getprotoent_r=undef
 getprotoent_r_proto=0
 echo "Disabling getprotoent_r, cannot determine prototype." >&4 ;;
* ) case "$getprotoent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getprotoent_r_proto="REENTRANT_PROTO_$getprotoent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getprotoent_r has no prototype, not using it." >&4 ;;
 esac
 d_getprotoent_r=undef
 getprotoent_r_proto=0
 ;;
esac
;;
*) getprotoent_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getprotoent_r.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: siteprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: siteprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:siteprefix siteprefixexp +oldsiteprefix: Getfile Loc Oldconfig cat package prefix
?MAKE: -pick add $@ %<
?S:siteprefix:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install add-on packages.
?S: See INSTALL for usage and examples.
?S:.
?S:siteprefixexp:
?S: This variable holds the full absolute path of the
 directory below
?S: which the user will install add-on packages.  Derived from siteprefix.
?S:.
?S:oldsiteprefix:
?S: This variable is set non-null if the siteprefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
: Set the siteprefix variables
$cat <<EOM

After $package is installed, you may wish to install various
add-on modules and utilities.  Typically, these add-ons will
be installed under $prefix with the rest
of this package.  However, you may wish to install such add-ons
elsewhere under a different prefix.

If you do not wish to put everything under a single prefix, that's
ok.  You will be prompted for the individual locations; this siteprefix
is only used to suggest the defaults.

The default should be fine for most people.

EOM
fn=d~+
rp='Installation prefix to use for add-on modules and utilities?'
: XXX Here might be another good place for an installstyle setting.
case "$siteprefix" in
") dflt=$prefix ;;
*)  dflt=$siteprefix
```

```
 ;;
esac
. ./getfile
: XXX Prefixit unit does not yet support siteprefix and vendorprefix
oldsiteprefix=''
case "$siteprefix" in
'') ;;
*) case "$ans" in
 "$prefix") ;;
 *) oldsiteprefix="$prefix";;
 esac
 ;;
esac
siteprefix="$ans"
siteprefixexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteprefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nis.U,v 3.0.1.3 1997/02/28 16:17:38 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: nis.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:17:38  ram
?RCS: patch61: ensure suitable defaults for hostcat and friends
?RCS:
?RCS: Revision 3.0.1.2  1995/03/21  08:48:34  ram
?RCS: patch52: continued fix for NeXT NIS/NetInfo handling
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:16:23  ram
?RCS: patch51: now correctly handles NeXT using NIS rather than NetInfo
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:passcat
 groupcat hostcat: Myread Oldconfig test contains
?MAKE: -pick add $@ %<
?S:passcat:
?S: This variable contains a command that produces the text of the
```

```
?S: /etc/passwd file.  This is normally "cat /etc/passwd", but can be
?S: "ypcat passwd" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
?S:groupcat:
?S: This variable contains a command that produces the text of the
?S: /etc/group file.  This is normally "cat /etc/group", but can be
?S: "ypcat group" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
?S:hostcat:
?S: This variable contains a command that produces the text of the
?S: /etc/hosts file.  This is normally "cat /etc/hosts", but can be
?S: "ypcat hosts" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
:
 see if we have to deal with yellow pages, now NIS.
?X: NeXT gives us some fun here, as always, by having both NIS (former YP)
?X: and NetInfo. But since it has both, it's ok to put the test inside the if.
?X: Contributed by Thomas Neumann <tom@smart.bo.open.de>.
if $test -d /usr/etc/yp || $test -d /etc/yp || $test -d /usr/lib/yp; then
@if passcat || groupcat
 case "$passcat" in
 nidump*) ;;
 *)
  case "$passcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the passwd file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) passcat='ypcat passwd'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='ypcat group'
@end
   ;;
```

```
  *) passcat='cat /etc/passwd'
@if groupcat
   echo "(Assuming /etc/group is also local.)"
   groupcat='cat /etc/group'
@end
   ;;
  esac
  ;;
 esac
@end
@if hostcat
 case "$hostcat" in
 nidump*) ;;
 *)
  case
 "$hostcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the hosts file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) hostcat='ypcat hosts';;
  *) hostcat='cat /etc/hosts';;
  esac
  ;;
 esac
@end
fi
?X: Ensure suitable default -- Manoj Srivastava
case "$hostcat" in
") test -f /etc/hosts && hostcat='cat /etc/hosts';;
esac
case "$groupcat" in
") test -f /etc/group && groupcat='cat /etc/group';;
esac
case "$passcat" in
") test -f /etc/passwd && passcat='cat /etc/passwd';;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/nis.U

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```
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?RCS:
?MAKE:d_nl_langinfo_l d_thread_safe_nl_langinfo_l: Compile cat rm_try Oldconfig \
 i_pthread i_stdlib i_langinfo i_locale  \
 usethreads run
?MAKE: -pick add $@ %<
?S:d_nl_langinfo_l:
?S: This variable contains the eventual value of the
?S: HAS_NL_LANGINFO_L symbol, which indicates if the
?S: nl_langinfo_l() function exists.
?S:.
?S:d_thread_safe_nl_langinfo_l:
?S: This variable contains the eventual value of the
?S: HAS_THREAD_SAFE_NL_LANGINFO_L symbol, which indicates if the
?S: nl_langinfo_l() function exists and is thread-safe.
?S:.
?C:HAS_NL_LANGINFO_L:
?C: This symbol, when defined, indicates presence of the nl_langinfo_l()
?C: function
?C:.
?C:HAS_THREAD_SAFE_NL_LANGINFO_L:
?C: This symbol, when defined,
 indicates presence of the nl_langinfo_l()
?C: function, and that it is thread-safe.
?C:.
?H:#$d_nl_langinfo_l HAS_NL_LANGINFO_L /**/
?H:#$d_thread_safe_nl_langinfo_l HAS_THREAD_SAFE_NL_LANGINFO_L /**/
?H:.
?F:!try
: check for nl_langinfo_l item
$cat <<EOM

Checking to see if you have nl_langinfo_l(), and that it is thread-safe
EOM
?X: Despite claiming that nl_langinfo_l() is thread-safe, the POSIX 2008
?X: standard allows for a non-safe implementation:
?X:
?X:    "nl_langinfo_l() uses an internal per-thread buffer, and nl_langinfo()
?X: uses (in all threads) the same buffer that nl_langinfo_l() uses in the
?X: initial thread. There can be interactions, but only when
?X: nl_langinfo_l() is called in the initial thread"
```

```
?X:
?X: This program calls nl_langinfo_l(), then creates a thread, calling plain
?X: nl_langinfo() from within it, then sees if the buffer in the original
?X: thread was changed.
$cat >try.c <<EOCP
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#include
 <string.h>
#$i_langinfo I_LANGINFO
#ifdef I_LANGINFO
#  include <langinfo.h>
#endif
#$i_pthread I_PTHREAD
#ifdef I_PTHREAD
#  include <pthread.h>
#endif
#$i_locale I_LOCALE
#ifdef I_LOCALE
#  include <locale.h>
#endif

void *
thread_start(void * arg)
{
   nl_langinfo(RADIXCHAR);
}

int main() {
   char * main_buffer;
   char save_main_buffer[1000];
   pthread_t subthread;
   pthread_attr_t attr;

   main_buffer = nl_langinfo_l(CODESET, newlocale(LC_ALL_MASK, "C", 0));

   /* If too large for our generous allowance, just assume we don't have
    * it. */
   if (strlen(main_buffer) >= sizeof(save_main_buffer)) {
       exit(1);
   }

   strcpy(save_main_buffer, main_buffer);

   if (pthread_attr_init(&attr) != 0) {
       exit(1);
```

```
  }

  if (pthread_create(&subthread, &attr, thread_start, NULL) != 0) {
      exit(1);
  }

  if (pthread_join(subthread, NULL) != 0) {
      exit(1);
  }

  exit(! (strcmp(main_buffer, save_main_buffer) == 0));
}
EOCP
case
 "$usethreads" in
  define)
      set try
      if eval $compile; then
          echo "Your system has nl_langinfo_l()..." >&4
          d_nl_langinfo_l="$define"
          echo "$d_nl_langinfo_l" >&4
          if $run ./try; then
              echo "and it is thread-safe (just as I'd hoped)." >&4
              d_thread_safe_nl_langinfo_l="$define"
              echo "$d_thread_safe_nl_langinfo_l" >&4
          else
              echo "but it isn't thread-safe." >&4
          fi
      else
          echo "your system does not have nl_langinfo_l()" >&4
      fi
      ;;
  *) echo "Since threads aren't selected, we won't bother looking for nl_langinfo_l()" >&4
esac
if test X"$d_nl_langinfo_l" = X; then
 d_nl_langinfo_l="$undef"
fi
if test X"$d_thread_safe_nl_langinfo_l" = X; then
 d_thread_safe_nl_langinfo_l="$undef"
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_nl_langinfo_l.U
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?RCS:
?RCS: $Log: d_msg.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msg: test d_msgctl d_msgget d_msgsnd d_msgrcv Setvar Findhdr osname
?MAKE: -pick add $@ %<
?S:d_msg:
?S: This variable conditionally defines the HAS_MSG symbol, which
?S: indicates that the entire msg*(2) library is present.
?S:.
?C:HAS_MSG:
?C: This symbol, if defined, indicates that the entire msg*(2) library is
?C: supported (IPC mechanism based on message queues).
?C:.
?H:#$d_msg
 HAS_MSG  /**/
?H:.
?T:h_msg
?LINT:set d_msg
: see how much of the 'msg*(2)' library is present.
h_msg=true
echo " "
case "$d_msgctl$d_msgget$d_msgsnd$d_msgrcv" in
*"$undef"*) h_msg=false;;
esac
case "$osname" in
freebsd)
   case "`ipcs 2>&1`" in
   "SVID messages"*"not configured"*)
 echo "Your $osname does not have the msg*(2) configured." >&4
       h_msg=false
 val="$undef"
 set msgctl d_msgctl
 eval $setvar
 set msgget d_msgget
 eval $setvar
 set msgsnd d_msgsnd
 eval $setvar
 set msgrcv d_msgrcv
 eval $setvar
```

```
 ;;
   esac
   ;;
esac
: we could also check for sys/ipc.h ...
if $h_msg && $test `./findhdr sys/msg.h`; then
 echo "You have the full msg*(2) library." >&4
 val="$define"
else
 echo "You don't have the full msg*(2) library." >&4
 val="$undef"
fi
set d_msg
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msg.U
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```
?RCS: $Id: i_locale.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
?RCS: $Log: i_locale.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:23  ram
?RCS: patch61: created
?RCS:
?MAKE:i_locale: Inhdr
?MAKE: -pick add $@ %<
?S:i_locale:
?S: This variable conditionally defines the I_LOCALE symbol,
?S: and indicates whether a C program should include <locale.h>.
?S:.
?C:I_LOCALE:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <locale.h>.
?C:.
?H:#$i_locale I_LOCALE  /**/
?H:.
?LINT:set
```

```
 i_locale
: see if locale.h is available
set locale.h i_locale
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_locale.U
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```
?RCS: $Id: d_sigsetjmp.U,v 3.0.1.1 1997/02/28 15:44:33 ram Exp $
?RCS:
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?RCS:
?RCS: $Log: d_sigsetjmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:33  ram
?RCS: patch61: created
?RCS:
?MAKE:d_sigsetjmp: Compile Setvar cat rm_try run i_stdlib
?MAKE: -pick add $@ %<
?S:d_sigsetjmp:
?S: This variable conditionally defines the HAS_SIGSETJMP symbol,
?S: which
 indicates that the sigsetjmp() routine is available to
?S: call setjmp() and optionally save the process's signal mask.
?S:.
?C:HAS_SIGSETJMP:
?C: This variable indicates to the C program that the sigsetjmp()
?C: routine is available to save the calling process's registers
?C: and stack environment for later use by siglongjmp(), and
?C: to optionally save the process's signal mask.  See
?C: Sigjmp_buf, Sigsetjmp, and Siglongjmp.
?C:.
?C:Sigjmp_buf:
?C: This is the buffer type to be used with Sigsetjmp and Siglongjmp.
?C:.
?C:Sigsetjmp:
?C: This macro is used in the same way as sigsetjmp(), but will invoke
?C: traditional setjmp() if sigsetjmp isn't available.
```

```
?C: See HAS_SIGSETJMP.
?C:.
?C:Siglongjmp:
?C: This macro is used in the same way as siglongjmp(), but will invoke
?C: traditional longjmp() if siglongjmp isn't available.
?C: See HAS_SIGSETJMP.
?C:.
?H:?%<:#$d_sigsetjmp HAS_SIGSETJMP /**/
?H:?%<:#ifdef HAS_SIGSETJMP
?H:?%<:#define Sigjmp_buf sigjmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask)
 sigsetjmp((buf),(save_mask))
?H:?%<:#define Siglongjmp(buf,retval) siglongjmp((buf),(retval))
?H:?%<:#else
?H:?%<:#define Sigjmp_buf jmp_buf
?H:?%<:#define Sigsetjmp(buf,save_mask) setjmp((buf))
?H:?%<:#define Siglongjmp(buf,retval) longjmp((buf),(retval))
?H:?%<:#endif
?H:.
?W:%<:Sigjmp_buf Sigsetjmp Siglongjmp
?F:!try
?LINT:set d_sigsetjmp
: see if sigsetjmp exists
?X: We can't check for these symbols with Inlibc because sigsetjmp
?X: is (sometimes? always?) a macro under GCC
echo " "
case "$d_sigsetjmp" in
")
 $cat >try.c <<EOP
#include <setjmp.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
sigjmp_buf env;
int set = 1;
int main()
{
 if (sigsetjmp(env,1))
  exit(set);
 set = 0;
 siglongjmp(env, 1);
 exit(1);
}
EOP
 set try
 if eval $compile; then
  if $run ./try >/dev/null 2>&1; then
```

```
   echo "POSIX sigsetjmp found." >&4
   val="$define"
  else
   $cat >&4 <<EOM
Uh-Oh! You have POSIX sigsetjmp and siglongjmp, but they do not work properly!!
I'll
 ignore them.
EOM
   val="$undef"
  fi
 else
  echo "sigsetjmp not found." >&4
  val="$undef"
 fi
 ;;
*) val="$d_sigsetjmp"
 case "$d_sigsetjmp" in
 $define) echo "POSIX sigsetjmp found." >&4;;
 $undef) echo "sigsetjmp not found." >&4;;
 esac
 ;;
esac
set d_sigsetjmp
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sigsetjmp.U
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```
/*
* $Id: getopt.C,v 3.0.1.1 1994/01/24 13:58:40 ram Exp ram $
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*  of the source tree for dist 4.0.
*
* Original Author: unknown, got this off net.sources
*
* $Log: getopt.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:40  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/getopt.C
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```
?RCS: $Id: lex.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: lex.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:22:50  ram
?RCS: patch36: spurious single quote could cause Configure to crash
?RCS: patch36: (reported by Xavier Le Vourch <xavierl@eiffel.com>.)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:27:09  ram
?RCS: patch32: added lexflags variable for lex flags setting
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:06:01  ram
?RCS: patch23: added
 trailing blank line for metalint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lex lexflags: Guess Myread Oldconfig flex test
?MAKE: -pick add $@ %<
?S:lex:
?S: This variable holds the name of the lexical analyser generator we
?S: want to use in the Makefile. It can be lex or flex.
?S:.
?S:lexflags:
?S: This variable holds any flags that should be passed to the lexical
?S: analyzer.  It is up to the Makefile to use it.
?S:.
: determine lexical analyser generator
case "$lex" in
")
 dflt=lex;;
*)
 dflt="$lex";;
```

```
esac
echo " "
if $test -f "$flex"; then
 rp='Which lexical analyser generator (lex or flex) shall I use?'
else
 rp='Which lexical analyser generator shall I use?'
fi
. ./myread
lex="$ans"

@if lexflags
: if using lex this will normally be useless, but flex frequently takes args
echo " "
case "$lexflags" in
") dflt='none';;
*) dflt="$lexflags";;
esac
rp="What flags should be given to $lex?"
. ./myread
case "$ans"
 in
none) lexflags=";;
*) lexflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lex.U
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```
?RCS: $Id: d_readdir64_r.U,v 0RCS:
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?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_readdir64_r readdir64_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_dirent extern_C
?MAKE: -pick add $@ %<
?S:d_readdir64_r:
?S: This variable conditionally defines the HAS_READDIR64_R symbol,
?S: which indicates to the C program that the readdir64_r()
?S: routine is available.
?S:.
?S:readdir64_r_proto:
```

```
?S: This variable encodes the prototype of readdir64_r.
?S: It is zero if d_readdir64_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir64_r
?S: is defined.
?S:.
?C:HAS_READDIR64_R:
?C: This symbol, if defined, indicates that the readdir64_r routine
?C: is
 available to readdir64 re-entrantly.
?C:.
?C:READDIR64_R_PROTO:
?C: This symbol encodes the prototype of readdir64_r.
?C: It is zero if d_readdir64_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir64_r
?C: is defined.
?C:.
?H:#$d_readdir64_r HAS_READDIR64_R /**/
?H:#define READDIR64_R_PROTO $readdir64_r_proto /**/
?H:.
?T:try hdrs d_readdir64_r_proto
: see if readdir64_r exists
set readdir64_r d_readdir64_r
eval $inlibc
case "$d_readdir64_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_dirent dirent.h"
 case "$d_readdir64_r_proto:$usethreads" in
 ":define") d_readdir64_r_proto=define
  set d_readdir64_r_proto readdir64_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_readdir64_r_proto" in
 define)
 case "$readdir64_r_proto" in
 "|0) try='int readdir64_r(DIR*, struct dirent64*, struct dirent64**);'
 ./protochk "$extern_C $try" $hdrs && readdir64_r_proto=I_TSR ;;
 esac
 case "$readdir64_r_proto" in
 "|0) try='int readdir64_r(DIR*,
 struct dirent64*);'
 ./protochk "$extern_C $try" $hdrs && readdir64_r_proto=I_TS ;;
 esac
 case "$readdir64_r_proto" in
 "|0) d_readdir64_r=undef
  readdir64_r_proto=0
  echo "Disabling readdir64_r, cannot determine prototype." >&4 ;;
 * ) case "$readdir64_r_proto" in
```

```
  REENTRANT_PROTO*) ;;
  *) readdir64_r_proto="REENTRANT_PROTO_$readdir64_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "readdir64_r has no prototype, not using it." >&4 ;;
  esac
  d_readdir64_r=undef
  readdir64_r_proto=0
  ;;
 esac
 ;;
*) readdir64_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_readdir64_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_safebcpy.U,v 3.0.1.4 1997/02/28 15:40:58 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_safebcpy.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  15:40:58  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.3  1995/07/25  13:58:40  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.2  1995/01/11  15:29:23  ram
?RCS: patch45: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS:
 Revision 3.0.1.1  1994/05/06  14:49:03  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safebcpy: cat d_bcopy Compile rm_try run \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safebcpy:
?S: This variable conditionally defines the HAS_SAFE_BCOPY symbol if
?S: the bcopy() routine can do overlapping copies.  Normally, you
?S: should probably use memmove().
?S:.
?C:HAS_SAFE_BCOPY (SAFE_BCOPY):
?C: This symbol, if defined, indicates that the bcopy routine is available
?C: to copy potentially overlapping memory blocks. Normally, you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
?H:#$d_safebcpy HAS_SAFE_BCOPY /**/
?H:.
?F:!try
?LINT: set d_safebcpy
: can bcopy handle overlapping blocks?
echo " "
?X: assume the worst.
val="$undef"
case "$d_memmove" in
"$define")
 echo "I'll use memmove() instead of bcopy() for overlapping copies." ;;
*) case "$d_bcopy" in
 "$define")
  echo "Checking to see if bcopy() can do overlapping copies..." >&4
  $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
```

```
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
bcopy("abcdefghijklmnopqrstuvwxyz0123456789", abc, 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  bcopy(abc, b, len);
  for (off = 1; off <= len; off++) {
   bcopy(b, b+off, len);
   bcopy(b+off,
 b, len);
   if (bcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
  set try
  if eval $compile_ok; then
   if $run ./try 2>/dev/null; then
    echo "Yes, it can."
    val="$define"
   else
    echo "It can't, sorry."
   fi
  else
   echo "(I can't compile the test program, so we'll assume not...)"
  fi
  ;;
 esac
 $rm_try
 ;;
```

```
esac
set d_safebcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_safebcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_castneg.U,v 3.0.1.2 1995/05/12 12:11:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_castneg.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:11:21  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS: patch54: added improved test case for Interactive Unix
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:10:50  ram
?RCS: patch36: don't forget to tell user about compilation failures (ADO)
?RCS: patch36: declare signal handler correctly using 'signal_t' (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:47  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?X:
?X: Can the compiler cast negative / odd floats to unsigned values.
?X:
?MAKE:d_castneg castflags: cat Compile rm_try Setvar signal_t run i_stdlib
?MAKE: -pick add $@ %<
?S:d_castneg:
?S: This variable conditionally defines CASTNEG, which indicates
?S: whether the C compiler can cast negative float to unsigned.
?S:.
?S:castflags:
?S: This variable contains a flag that precise difficulties the
?S: compiler has casting odd floating values to unsigned long:
?S:  0 = ok
?S:  1 = couldn't cast < 0
?S:  2 = couldn't cast >= 0x80000000
?S:  4 = couldn't cast in argument expression list
?S:.
```

```
?C:CASTNEGFLOAT:
?C: This symbol is defined if the C compiler can cast negative
?C: numbers to unsigned longs, ints and shorts.
?C:.
?C:CASTFLAGS:
?C: This symbol contains flags that say what difficulties the compiler
?C: has casting odd floating values to unsigned long:
?C:  0 = ok
?C:  1 = couldn't cast < 0
?C:  2 = couldn't cast >= 0x80000000
?C:  4 = couldn't
 cast in argument expression list
?C:.
?H:#$d_castneg CASTNEGFLOAT  /**/
?H:#define CASTFLAGS $castflags  /**/
?H:.
?F:!try
?LINT:set d_castneg
: check for ability to cast negative floats to unsigned
echo " "
echo 'Checking whether your C compiler can cast negative float to unsigned.' >&4
$cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <sys/types.h>
#include <signal.h>
$signal_t blech(int s) { exit(7); }
$signal_t blech_in_list(int s) { exit(4); }
unsigned long dummy_long(unsigned long p) { return p; }
unsigned int dummy_int(unsigned int p) { return p; }
unsigned short dummy_short(unsigned short p) { return p; }
int main()
{
 double f;
 unsigned long along;
 unsigned int aint;
 unsigned short ashort;
 int result = 0;
 char str[16];

 /* Frustrate gcc-2.7.2's optimizer which failed this test with
    a direct f = -123. assignment.  gcc-2.8.0 reportedly
    optimized the whole file away
 */
 /* Store the number in a writable
```

```
 string for gcc to pass to
   sscanf under HP-UX.
 */
 sprintf(str, "-123");
 sscanf(str, "%lf", &f);  /* f = -123.; */

 signal(SIGFPE, blech);
 along = (unsigned long)f;
 aint = (unsigned int)f;
 ashort = (unsigned short)f;
 if (along != (unsigned long)-123)
  result |= 1;
 if (aint != (unsigned int)-123)
  result |= 1;
 if (ashort != (unsigned short)-123)
  result |= 1;
 sprintf(str, "1073741824.");
 sscanf(str, "%lf", &f); /* f = (double)0x40000000; */
 f = f + f;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x80000000)
  result |= 2;
 f -= 1.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x7fffffff)
  result |= 1;
 f += 2.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x80000001)
  result |= 2;
 if (result)
  exit(result);
?X:
?X: The following is a test for Interactive Unix Version 4.1, which
?X: has an 'improved' compiler which can correctly cast negative
?X: floats in expression lists, but apparently not in argument lists.
?X: Contributed by Winfried Koenig
 <win@incom.rhein-main.de>
?X:
 signal(SIGFPE, blech_in_list);
 sprintf(str, "123.");
 sscanf(str, "%lf", &f);  /* f = 123.; */
 along = dummy_long((unsigned long)f);
 aint = dummy_int((unsigned int)f);
 ashort = dummy_short((unsigned short)f);
```

```
 if (along != (unsigned long)123)
  result |= 4;
 if (aint != (unsigned int)123)
  result |= 4;
 if (ashort != (unsigned short)123)
  result |= 4;
 exit(result);

}
EOCP
set try
if eval $compile_ok; then
 $run ./try 2>/dev/null
 castflags=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
 castflags=7
fi
case "$castflags" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_castneg
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_castneg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syswait.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_syswait.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?X:
?X: This unit looks wether <sys/wait.h> is available or not
?X:
?MAKE:i_syswait: Inhdr
?MAKE: -pick add $@ %<
?S:i_syswait:
?S: This variable conditionally defines I_SYS_WAIT, which indicates
?S: to the C program that it should include <sys/wait.h>.
?S:.
?C:I_SYS_WAIT (I_SYSWAIT):
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <sys/wait.h>.
?C:.
?H:#$i_syswait I_SYS_WAIT /**/
?H:.
?LINT:set i_syswait
: see if this is a syswait system
set sys/wait.h i_syswait
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syswait.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extensions.U,v$
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: Extensions.U,v $
?RCS:
?MAKE:known_extensions extensions dynamic_ext static_ext nonxs_ext \
 useposix useopcode uselanginfo : \
 Myread hint usedl d_sem d_socket i_db i_dbm i_rpcsvcdbm i_gdbm \
 d_ndbm package test cat rsrc \
 d_msg d_shm osname use64bitint \
 libs d_cplusplus sed ls rm contains trnl sort
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:known_extensions:
?S: This variable holds a list of all extensions (both XS and non-xs)
?S: included in the package source distribution.  This information is
?S: only really of use during the Perl build, as the list makes no
?S: distinction between extensions which were build and installed, and
?S: those which where not.  See "extensions"
```

```
 for the list of extensions
?S: actually built and available.
?S:.
?S:dynamic_ext:
?S: This variable holds a list of XS extension files we want to
?S: link dynamically into the package.  It is used by Makefile.
?S:.
?S:static_ext:
?S: This variable holds a list of XS extension files we want to
?S: link statically into the package.  It is used by Makefile.
?S:.
?S:nonxs_ext:
?S: This variable holds a list of all non-xs extensions built and
?S: installed by the package.  By default, all non-xs extensions
?S: distributed will be built, with the exception of platform-specific
?S: extensions (currently only one VMS specific extension).
?S:.
?S:extensions:
?S: This variable holds a list of all extension files (both XS and
?S: non-xs) installed with the package.  It is propagated to Config.pm
?S: and is typically used to test whether a particular extension
?S: is available.
?S:.
?S:useposix:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the POSIX extension should
 be used.  The sole
?S: use for this currently is to allow an easy mechanism
?S: for hints files to indicate that POSIX will not compile
?S: on a particular system.
?S:.
?S:useopcode:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the Opcode extension should be used.  The sole
?S: use for this currently is to allow an easy mechanism
?S: for users to skip the Opcode extension from the Configure
?S: command line.
?S:.
?S:uselanginfo:
?S: This variable holds either 'true' or 'false' to indicate
?S: whether the I18N::Langinfo extension should be used.  The sole
?S: use for this currently is to allow an easy mechanism for users to skip
?S: this extension from the Configure command line.
?S:.
?T:xxx avail_ext this_ext tdir xs_extensions nonxs_extensions find_extensions
?INIT:: set useposix=false in your hint file to disable the POSIX extension.
?INIT:useposix=true
?INIT:: set useopcode=false in your hint file to disable the Opcode extension.
```

```
?INIT:useopcode=true
?INIT::
 set uselanginfo=false in your hint file to disable the I18N::Langinfo extension.
?INIT:uselanginfo=true
?LINT:extern noextensions
?LINT:extern onlyextensions
?T:keepextensions i
: Check extensions
echo " "
echo "Looking for extensions..." >&4
: If we are using the old config.sh, nonxs_extensions and xs_extensions may
: contain old or inaccurate or duplicate values.
nonxs_extensions="
xs_extensions="
: We do not use find because it might not be available.
: We do not just use MANIFEST because the user may have dropped
: some additional extensions into the source tree and expect them
: to be built.

: Function to recursively find available extensions, ignoring DynaLoader
: NOTE: recursion limit of 10 to prevent runaway in case of symlink madness
: In 5.10.1 and later, extensions are stored in directories
: like File-Glob instead of the older File/Glob/.
find_extensions='
   for xxx in *; do
 case "$xxx" in
     DynaLoader|dynaload) ;;
     *)
     this_ext=`echo "$xxx" | $sed -e s/-/\\\/g`;

    case "$this_ext" in
  Scalar/List/Utils) this_ext="List/Util" ;;
  PathTools)         this_ext="Cwd" ;;
     esac;
     echo " $xs_extensions $nonxs_extensions" > "$tdir/$$.tmp";
     if $contains " $this_ext " "$tdir/$$.tmp"; then
  echo >&4;
  echo "Duplicate directories detected for extension $xxx" >&4;
  echo "Configure cannot correctly recover from this - shall I abort?" >&4;
  case "$knowitall" in
  "") dflt=y;;
  *) dflt=n;;
  esac;
  . ../UU/myread;
  case "$ans" in
  n*|N*) ;;
  *) echo >&4;
      echo "Ok.  Stopping Configure." >&4;
```

```
      echo "Please remove the duplicate directory (e.g. using git clean) and then re-run Configure" >&4;
      exit 1;;
  esac;
  echo "Ok.  You will need to correct config.sh before running make." >&4;
     fi;
     $ls -1 "$xxx" > "$tdir/$$.tmp";
     if   $contains "\.xs$" "$tdir/$$.tmp" > /dev/null 2>&1; then
  xs_extensions="$xs_extensions $this_ext";
     elif $contains "\.c$"  "$tdir/$$.tmp" > /dev/null 2>&1; then
  xs_extensions="$xs_extensions
 $this_ext";
     elif $test -d "$xxx"; then
  nonxs_extensions="$nonxs_extensions $this_ext";
     fi;
     $rm -f "$tdir/$$.tmp";
     ;;
 esac;
   done'
tdir=`pwd`
cd "$rsrc/cpan"
set X
shift
eval $find_extensions
cd "$rsrc/dist"
set X
shift
eval $find_extensions
cd "$rsrc/ext"
set X
shift
eval $find_extensions
set X $xs_extensions
shift
xs_extensions=`echo "$*" | tr ' ' $trnl | $sort | tr $trnl ' '`
set X $nonxs_extensions
shift
nonxs_extensions=`echo "$*" | tr ' ' $trnl | $sort | tr $trnl ' '`
cd "$tdir"
known_extensions=`echo $nonxs_extensions $xs_extensions  | tr ' ' $trnl | $sort | tr $trnl ' '`

: Now see which are supported on this system.
?X: avail_ext lists available XS extensions.
avail_ext="
for xxx in $xs_extensions ; do
 case "$xxx" in
?X: Handle possible DOS 8.3 filename and case alterations
 Amiga*)
  case "$osname" in
```

```
 amigaos) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
DB_File|db_file)
 case "$i_db" in
 $define) avail_ext="$avail_ext $xxx"
;;
 esac
 ;;
GDBM_File|gdbm_fil)
 case "$i_gdbm" in
 $define) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
IPC/SysV|ipc/sysv)
 : XXX Do we need a useipcsysv variable here
 case "${d_msg}${d_sem}${d_shm}" in
 *"${define}"*) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
NDBM_File|ndbm_fil)
 case "$d_ndbm" in
 $define)
    case "$osname-$use64bitint" in
    hpux-define)
  case "$libs" in
  *-lndbm*) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
    *) avail_ext="$avail_ext $xxx" ;;
    esac
    ;;
 esac
 ;;
ODBM_File|odbm_fil)
 case "${i_dbm}${i_rpcsvcdbm}" in
 *"${define}"*)
    case "$d_cplusplus" in
    define) ;; # delete as a function name will not work
    *)  case "$osname-$use64bitint" in
  hpux-define)
     case "$libs" in
     *-ldbm*) avail_ext="$avail_ext $xxx" ;;
     esac
     ;;
  *) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
```

```
    esac
    ;;
 esac
 ;;
Opcode|opcode)
 case "$useopcode" in
 true|define|y) avail_ext="$avail_ext
$xxx" ;;
 esac
 ;;
POSIX|posix)
 case "$useposix" in
 true|define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
Socket|socket)
 case "$d_socket" in
 true|$define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
I18N/Langinfo|langinfo)
 case "$uselanginfo" in
 true|define|y) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
Sys/Syslog|sys/syslog)
 case $osname in
  amigaos) ;; # not really very useful on AmigaOS
  *)
  : XXX syslog requires socket
  case "$d_socket" in
  true|$define|y) avail_ext="$avail_ext $xxx" ;;
  esac
  ;;
 esac
 ;;
threads|threads/shared)
 # threads and threads::shared are special cases.
 # To stop people from asking "Perl 5.8.0 was supposed
 # to have this new fancy threads implementation but my
 # perl doesn't have it" and from people trying to
 # (re)install the threads module using CPAN.pm and
 # CPAN.pm then offering to reinstall Perl 5.8.0,
 # the threads.pm and threads/shared.pm will always be
 # there, croaking informatively ("you
need to rebuild
 # all of Perl with threads, sorry") when threads haven't
 # been compiled in.
```

```
 # --jhi
 avail_ext="$avail_ext $xxx"
 ;;
VMS*)
 ;;
Win32*)
 case "$osname" in
 cygwin) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
XS/APItest|xs/apitest)
 # This is just for testing.  Skip it unless we have dynamic loading.

 case "$usedl" in
 $define) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
XS/Typemap|xs/typemap)
 # This is just for testing.  Skip it unless we have dynamic loading.
 case "$usedl" in
 $define) avail_ext="$avail_ext $xxx" ;;
 esac
 ;;
*) avail_ext="$avail_ext $xxx"
 ;;
esac
done

set X $avail_ext
shift
avail_ext="$*"

case "$onlyextensions" in
") ;;
*)  keepextensions="
  echo "You have requested that only certain extensions be included..." >&4
  for i in $onlyextensions; do
     case " $avail_ext " in
     *" $i "*)
        echo "Keeping extension $i."
        keepextensions="$keepextensions $i"
        ;;
     *) echo "Ignoring
extension $i." ;;
     esac
  done
  avail_ext="$keepextensions"
  ;;
```

```
esac

case "$noextensions" in
") ;;
*)  keepextensions="
   echo "You have requested that certain extensions be ignored..." >&4
   for i in $avail_ext; do
       case " $noextensions " in
       *" $i "*) echo "Ignoring extension $i." ;;
       *) echo "Keeping extension $i.";
          keepextensions="$keepextensions $i"
          ;;
       esac
   done
   avail_ext="$keepextensions"
   ;;
esac

: Now see which nonxs extensions are supported on this system.
: For now assume all are.
nonxs_ext="
for xxx in $nonxs_extensions ; do
 case "$xxx" in
 VMS*)
  ;;
 *) nonxs_ext="$nonxs_ext $xxx"
  ;;
 esac
done

set X $nonxs_ext
shift
nonxs_ext="$*"

case $usedl in
$define)
 $cat <<EOM
A number of extensions are supplied with $package.  You may choose to
compile these extensions for dynamic loading (the default), compile
them into the $package executable (static loading), or not include
them at all.
  Answer "none" to include no extensions.
Note that DynaLoader is always built and need not be mentioned here.

EOM
 case "$dynamic_ext" in
 ")
  : Exclude those listed in static_ext
```

```
  dflt=''
  for xxx in $avail_ext; do
   case " $static_ext " in
   *" $xxx "*) ;;
   *) dflt="$dflt $xxx" ;;
   esac
  done
  set X $dflt
  shift
  dflt="$*"
  ;;
 *) dflt="$dynamic_ext"
  # Perhaps we are reusing an old out-of-date config.sh.
  case "$hint" in
  previous)
   if test X"$dynamic_ext" != X"$avail_ext"; then
    $cat <<EOM
NOTICE:  Your previous config.sh list may be incorrect.
The extensions now available to you are
 ${avail_ext}
but the default list from your previous config.sh is
 ${dynamic_ext}

EOM
   fi
   ;;
  esac
  ;;
 esac
 case "$dflt" in
 '') dflt=none;;
 esac
 rp="What extensions do you wish to load dynamically?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
 none) dynamic_ext=' ' ;;
 *) dynamic_ext="$ans" ;;
 esac

 case "$static_ext"
 in
 '')
  : Exclude those already listed in dynamic linking
  dflt=''
  for xxx in $avail_ext; do
   case " $dynamic_ext " in
   *" $xxx "*) ;;
```

```
  *) dflt="$dflt $xxx" ;;
  esac
 done
 set X $dflt
 shift
 dflt="$*"
 ;;
*)  dflt="$static_ext"
 ;;
esac

case "$dflt" in
") dflt=none;;
esac
rp="What extensions do you wish to load statically?"
. ./myread
case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
none) static_ext=' ' ;;
*) static_ext="$ans" ;;
esac
;;
*)
$cat <<EOM
A number of extensions are supplied with $package.  Answer "none"
to include no extensions.
Note that DynaLoader is always built and need not be mentioned here.

EOM
case "$static_ext" in
") dflt="$avail_ext" ;;
*) dflt="$static_ext"
 # Perhaps we are reusing an old out-of-date config.sh.
 case "$hint" in
 previous)
  if test X"$static_ext" != X"$avail_ext"; then
   $cat <<EOM
NOTICE:  Your previous config.sh list may be incorrect.
The extensions now available
to you are
${avail_ext}
but the default list from your previous config.sh is
${static_ext}

EOM
  fi
  ;;
 esac
```

```
  ;;
 esac
 : Exclude those that are not xs extensions
 case "$dflt" in
 ") dflt=none;;
 esac
 rp="What extensions do you wish to include?"
 . ./myread
 case "$ans" in
?X: Use ' ' so a subsequent Configure will preserve that value.
 none) static_ext=' ' ;;
 *) static_ext="$ans" ;;
 esac
 ;;
esac
#
# Encode is a special case.  If we are building Encode as a static
# extension, we need to explicitly list its subextensions as well.
# For other nested extensions, this is handled automatically by
# the appropriate Makefile.PL.
case " $static_ext " in
 *" Encode "*) # Add the subextensions of Encode
 cd "$rsrc/cpan"
 for xxx in `ls Encode/*/Makefile.PL|awk -F/ '{print $2}'`; do
  static_ext="$static_ext Encode/$xxx"
  known_extensions="$known_extensions Encode/$xxx"
 done
 cd "$tdir"
 ;;
esac

set X $dynamic_ext $static_ext $nonxs_ext
shift
extensions="$*"

# Sanity check:
  We require an extension suitable for use with
# AnyDBM_File, as well as Fcntl and IO.  (Failure to have these
# should show up as failures in the test suite, but it's helpful to
# catch them now.) The 'extensions' list is normally sorted
# alphabetically, so we need to accept either
#    DB_File ... Fcntl ... IO  ....
# or something like
#    Fcntl ... NDBM_File ... IO  ....
case " $extensions"  in
*"_File "*" Fcntl "*" IO "*) ;; # DB_File
*" Fcntl "*"_File "*" IO "*) ;; # GDBM_File
*" Fcntl "*" IO "*"_File "*) ;; # NDBM_File
```

```
*) echo "WARNING: Extensions DB_File or *DBM_File, Fcntl, and IO not configured." >&4
  echo "WARNING: The Perl you are building will be quite crippled." >& 4
  ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Extensions.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ctermid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ctermid.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ctermid: Inlibc
?MAKE: -pick add $@ %<
?S:d_ctermid:
?S: This variable conditionally defines CTERMID if ctermid() is
?S: available to generate filename for terminal.
?S:.
?C:HAS_CTERMID (CTERMID):
?C: This symbol, if defined, indicates that the ctermid routine is
?C: available to generate filename for terminal.
?C:.
?H:#$d_ctermid
 HAS_CTERMID  /**/
?H:.
?LINT:set d_ctermid
: see if ctermid exists
set ctermid d_ctermid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ctermid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_cmsghdr_s: Hasstruct i_systypes d_socket i_sysuio Setvar
?MAKE: -pick add $@ %<
?S:d_cmsghdr_s:
?S: This variable conditionally defines the HAS_STRUCT_CMSGHDR symbol,
?S: which indicates that the struct cmsghdr is supported.
?S:.
?C:HAS_STRUCT_CMSGHDR:
?C: This symbol, if defined, indicates that the struct cmsghdr
?C: is supported.
?C:.
?H:#$d_cmsghdr_s HAS_STRUCT_CMSGHDR /**/
?H:.
?LINT:set d_cmsghdr_s
: Check for cmsghdr support
echo " "
echo "Checking to see if your system supports struct cmsghdr..." >&4
set d_cmsghdr_s cmsghdr $i_systypes sys/types.h $d_socket sys/socket.h $i_sysuio sys/uio.h
eval $hasstruct
case "$d_cmsghdr_s" in
"$define")      echo "Yes, it does."   ;;
*)              echo
 "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_cmsghdr_s.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: modetype.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:25:07  ram
?RCS: patch36: created by ADO
?RCS:
```

```
?MAKE:modetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:modetype:
?S: This variable defines modetype to be something like mode_t,
?S: int, unsigned short, or whatever type is used to declare file
?S: modes for system calls.
?S:.
?C:Mode_t:
?C: This symbol holds the type used to declare file modes
?C: for systems calls.
  It is usually mode_t, but may be
?C: int or unsigned short.  It may be necessary to include <sys/types.h>
?C: to get any typedef'ed information.
?C:.
?H:#define Mode_t $modetype  /* file mode parameter for system calls */
?H:.
: see what type is used for mode_t
set mode_t modetype int stdio.h sys/types.h
eval $typedef
dflt="$modetype"
echo " "
rp="What type is used for file modes?"
. ./myread
modetype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/modetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sizesize: Myread Typedef sizetype Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:sizesize:
?S: This variable contains the size of a sizetype in bytes.
?S:.
?C:Size_t_size:
?C: This symbol holds the size of a Size_t in bytes.
?C:.
?H:#define Size_t_size $sizesize  /**/
?H:.
```

```
?T:yyy zzz
?F:!try
: Check size of size
echo " "
case "$sizetype" in
*_t) zzz="$sizetype" ;;
*)   zzz="filesize" ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($sizetype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") sizesize=4
  echo "(I can't execute the test program--guessing $sizesize.)" >&4
  ;;
 *) sizesize=$yyy
  echo "Your $zzz size is $sizesize bytes."
  ;;
 esac
else
 sizesize=4
 echo "(I can't compile the test program--guessing $sizesize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/sizesize.U
No license file was found, but licenses were detected in source scan.

```
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```

```
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?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_isascii.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:13:39  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:32  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_isascii: cc cat ccflags ldflags rm libs Setvar
?MAKE: -pick add $@ %<
?S:d_isascii:
?S: This variable conditionally defines the HAS_ISASCII constant,
?S: which indicates to the C program that isascii()
 is available.
?S:.
?C:HAS_ISASCII:
?C: This manifest constant lets the C program know that isascii
?C: is available.
?C:.
?H:#$d_isascii HAS_ISASCII  /**/
?H:.
?LINT:set d_isascii
?X: Can't use Inlibc because isascii() might be a macro.
: Look for isascii
echo " "
$cat >isascii.c <<'EOCP'
#include <stdio.h>
#include <ctype.h>
int main() {
 int c = 'A';
 if (isascii(c))
  exit(0);
 else
  exit(1);
}
EOCP
if $cc $ccflags $ldflags -o isascii isascii.c $libs >/dev/null 2>&1 ; then
 echo "isascii() found." >&4
 val="$define"
else
 echo "isascii() NOT found." >&4
 val="$undef"
fi
```

```
set d_isascii
eval $setvar
$rm -f isascii*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_isascii.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2008 H.Merijn Brand
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ctime64 d_localtime64 d_gmtime64 d_mktime64 d_difftime64 d_asctime64: Inlibc
?MAKE: -pick add $@ %<
?S:d_ctime64:
?S: This variable conditionally defines the HAS_CTIME64 symbol, which
?S: indicates to the C program that the ctime64 () routine is available.
?S:.
?S:d_localtime64:
?S: This variable conditionally defines the HAS_LOCALTIME64 symbol, which
?S: indicates to the C program that the localtime64 () routine is available.
?S:.
?S:d_gmtime64:
?S: This variable conditionally defines the HAS_GMTIME64 symbol, which
?S: indicates to the C program that the gmtime64 () routine is available.
?S:.
?S:d_mktime64:
?S: This variable conditionally defines the HAS_MKTIME64 symbol, which
?S: indicates to the
 C program that the mktime64 () routine is available.
?S:.
?S:d_difftime64:
?S: This variable conditionally defines the HAS_DIFFTIME64 symbol, which
?S: indicates to the C program that the difftime64 () routine is available.
?S:.
?S:d_asctime64:
?S: This variable conditionally defines the HAS_ASCTIME64 symbol, which
?S: indicates to the C program that the asctime64 () routine is available.
?S:.
?C:HAS_CTIME64:
?C: This symbol, if defined, indicates that the ctime64 () routine is
?C: available to do the 64bit variant of ctime ()
?C:.
?C:HAS_LOCALTIME64:
?C: This symbol, if defined, indicates that the localtime64 () routine is
```

```
?C: available to do the 64bit variant of localtime ()
?C:.
?C:HAS_GMTIME64:
?C: This symbol, if defined, indicates that the gmtime64 () routine is
?C: available to do the 64bit variant of gmtime ()
?C:.
?C:HAS_MKTIME64:
?C: This symbol, if defined, indicates that the mktime64 () routine is
?C: available to do the 64bit variant of mktime ()
?C:.
?C:HAS_DIFFTIME64:
?C: This
 symbol, if defined, indicates that the difftime64 () routine is
?C: available to do the 64bit variant of difftime ()
?C:.
?C:HAS_ASCTIME64:
?C: This symbol, if defined, indicates that the asctime64 () routine is
?C: available to do the 64bit variant of asctime ()
?C:.
?H:#$d_ctime64 HAS_CTIME64  /**/
?H:#$d_localtime64 HAS_LOCALTIME64  /**/
?H:#$d_gmtime64 HAS_GMTIME64  /**/
?H:#$d_mktime64 HAS_MKTIME64  /**/
?H:#$d_difftime64 HAS_DIFFTIME64  /**/
?H:#$d_asctime64 HAS_ASCTIME64  /**/
?H:.
?LINT:set d_ctime64 d_localtime64 d_gmtime64 d_mktime64 d_difftime64 d_asctime64
: see if 64bit time functions exists

set ctime64 d_ctime64
eval $inlibc

set localtime64 d_localtime64
eval $inlibc

set gmtime64 d_gmtime64
eval $inlibc

set mktime64 d_mktime64
eval $inlibc

set difftime64 d_difftime64
eval $inlibc

set asctime64 d_asctime64
eval $inlibc

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_timefuncs64.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getespwnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getespwnam:
?S: This variable conditionally defines HAS_GETESPWNAM if getespwnam() is
?S: available to retrieve enhanced (shadow) password entries by name.
?S:.
?C:HAS_GETESPWNAM:
?C: This symbol, if defined, indicates that the getespwnam system call is
?C: available to retrieve enhanced (shadow) password entries by name.
?C:.
?H:#$d_getespwnam HAS_GETESPWNAM  /**/
?H:.
?LINT:set d_getespwnam
: see if getespwnam exists
set getespwnam d_getespwnam
eval $inlibc
```

Found in
 path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getespwnam.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dlfcn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_dlfcn.U,v $
```

```
?RCS: Revision 3.0.1.1  1994/08/29  16:21:53  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_dlfcn: Inhdr
?MAKE: -pick add $@ %<
?S:i_dlfcn:
?S: This variable conditionally defines the I_DLFCN symbol, which
?S: indicates to the C program that <dlfcn.h> exists and should
?S: be included.
?S:.
?C:I_DLFCN:
?C: This symbol, if defined, indicates that <dlfcn.h> exists
 and should
?C: be included.
?C:.
?H:#$i_dlfcn I_DLFCN  /**/
?H:.
?LINT:set i_dlfcn
: see if dlfcn is available
set dlfcn.h i_dlfcn
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dlfcn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strccmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strccmp.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  14:54:34  ram
?RCS: patch23: fixed a typo (WED)
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:04:39  ram
?RCS: patch10: created (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strccmp: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_strccmp:
?S: This variable conditionally defines the HAS_STRCASECMP symbol, which
?S: indicates to the C program
 that the strcasecmp() routine is available
?S: for case-insensitive string compares.
?S:.
?C:HAS_STRCASECMP:
?C: This symbol, if defined, indicates that the strcasecmp() routine is
?C: available for case-insensitive string compares.
?C:.
?H:#$d_strccmp HAS_STRCASECMP /**/
?H:.
?LINT:set d_strccmp
: see if strcasecmp exists
set strcasecmp d_strccmp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strccmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cf_who.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:28:50  ram
?RCS: patch61: new computation method avoiding use of temporary file
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:42:34  ram
?RCS: patch23: login name now computed the hard way
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Oldconfig dependency is there to ensure computation occurs after old values
?X: from config.sh have been loaded, so that we can supersede them.
?X:
?MAKE:cf_time
 cf_by: date Oldconfig
?MAKE: -pick add $@ %<
```

```
?S:cf_time:
?S: Holds the output of the "date" command when the configuration file was
?S: produced. This is used to tag both config.sh and config_h.SH.
?S:.
?S:cf_by:
?S: Login name of the person who ran the Configure script and answered the
?S: questions. This is used to tag both config.sh and config_h.SH.
?S:.
?LINT:change LC_ALL LANGUAGE
: who configured the system
?X: Ensure English date -- Jarkko Hietaniemi
cf_time=`LC_ALL=C; LANGUAGE=C; export LC_ALL; export LANGUAGE; $date 2>&1`
?X:
?X: Leave a white space between first two '(' for ksh. The sub-shell is needed
?X: on some machines to avoid the error message when logname is not found; e.g.
?X: on SUN-OS 3.2, (logname || whoami) would not execute whoami if logname was
?X: not found. Sigh!
?X:
?X: Convex had a broken logname executable which returned a non-zero status,
?X: and that broke the previous:
?X:   cf_by=`( (logname) 2>/dev/null || whoami) 2>&1`
?X: Switch to emergency
 mode... -- RAM, 19/04/94
?X:
?X: Parentheses needed to avoid error message if the program does not exist.
?X: Uses case instead of $test so it can be put before $test is defined.
?X: Don't redirect to a file because on Ultrix (under script?) logname
?X: outputs a blank line first.  This method will apparently work.
case "$cf_by" in
"")
 cf_by=`(logname) 2>/dev/null`
 case "$cf_by" in
 "")
  cf_by=`(whoami) 2>/dev/null`
  case "$cf_by" in
  "") cf_by=unknown ;;
  esac ;;
 esac ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cf_who.U
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```
?RCS: $Id: d_difftime.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_difftime.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:31  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_difftime: Inlibc
?MAKE: -pick add $@ %<
?S:d_difftime:
?S: This variable conditionally defines the HAS_DIFFTIME symbol, which
?S: indicates to the C program that the difftime() routine is available.
?S:.
?C:HAS_DIFFTIME :
?C: This symbol, if defined, indicates that
 the difftime routine is
?C: available.
?C:.
?H:#$d_difftime HAS_DIFFTIME  /**/
?H:.
?LINT:set d_difftime
: see if difftime exists
set difftime d_difftime
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_difftime.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: End.U,v 3.0 1993/08/18 12:04:51 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: End.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?X:
?X: This unit serves as the goal which forces make to choose all the units that
?X: ask questions.  The $W on the ?MAKE: line is the list of all symbols wanted.
?X: To force any unit to be included, copy this unit to your private U directory
?X: and add the name of the unit desired to the ?MAKE: dependency line.
?X:
?MAKE:End perllibs: $W cppstdin gzip zip
 libs usedl osname osvers
?MAKE: -pick add $@ %<
?S:perllibs:
?S: The list of libraries needed by Perl only (any libraries needed
?S: by extensions only will by dropped, if using dynamic loading).
?S:.
?INIT:perllibs=''
?LINT:use $W
?LINT:use gzip zip
?LINT:change cppstdin
: Remove libraries needed only for extensions
: The appropriate ext/Foo/Makefile.PL will add them back in, if necessary.
: The exception is SunOS 4.x, which needs them.
case "${osname}X${osvers}" in
sunos*X4*)
   perllibs="$libs"
   ;;
*) case "$usedl" in
   $define|true|[yY]*)
     set X `echo " $libs " | sed -e 's@ -lndbm @ @' -e 's@ -lgdbm @ @' -e 's@ -lgdbm_compat @ @' -e 's@ -ldbm @
@' -e 's@ -ldb @ @'`
     shift
     perllibs="$*"
     ;;
   *) perllibs="$libs"
     ;;
   esac
   ;;
esac

?X: If the user has the cppstdin wrapper, perl.c will try to call
?X: CPPSTDIN, but that will point to a location in the build
?X: directory, not the installed version!.  Here, we'll just strip the
?X: name down to 'cppstdin',
 and rely on the fact that perl.c will
?X: then call SCRIPTDIR/cppstdin, but local things like 'make depend'
?X: will continue to work.
: Remove build directory name from cppstdin so it can be used from
: either the present location or the final installed location.
echo " "
: Get out of the UU directory to get correct path name.
```

```
cd ..
case "$cppstdin" in
`pwd`/cppstdin)
 echo "Stripping down cppstdin path name"
 cppstdin=cppstdin
 ;;
esac
cd UU

: end of configuration questions
echo " "
echo "End of configuration questions."
echo " "
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/End.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lgamma_r: Inlibc
?MAKE: -pick add $@ %<
?S:d_lgamma_r:
?S: This variable conditionally defines the HAS_LGAMMA_R symbol, which
?S: indicates to the C program that the lgamma_r() routine is available
?S: for the log gamma function, without using the global signgam variable.
?S:.
?C:HAS_LGAMMA_R:
?C: This symbol, if defined, indicates that the lgamma_r routine is
?C: available to do the log gamma function without using the global
?C: signgam variable.
?C:.
?H:#$d_lgamma_r HAS_LGAMMA_R  /**/
?H:.
?LINT:set d_lgamma_r
: see if lgamma_r exists
set lgamma_r d_lgamma_r
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lgamma_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Chk_MANI.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Chk_MANI.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:57:25  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/31  09:33:14  ram
?RCS: patch44: now lists Begin instead of Myinit in its dependencies
?RCS: patch44: leading comment now explains how this unit is included
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks the package by making sure
 every file listed in MANIFEST
?X: is present. It is systematically "included" via the Finish unit (which
?X: is always present in every Configure script), although it may result in
?X: an empty inclusion when no MANIFEST is present.
?X:
?MAKE:Chk_MANI: Begin c n rsrc
?MAKE: -pick wipe $@ %<
?T:filelist ans tmppwd
?X: This check happens at metaconfig-time, so it's ok to hard-code the path.
@if {test -f ../MANIFEST}
: Now test for existence of everything in MANIFEST
echo " "
if test -f "$rsrc/MANIFEST"; then
 echo "First let's make sure your kit is complete.  Checking..." >&4
?X:
?X: Files spelled uppercased and beginning with PACK are produced by the
?X: shell archive builder and may be removed by the user. Usually, they are
?X: not listed in the MANIFEST file, but you never know...
?X:
?X: "split -l" is the new way of running a split, but we also try the older way
?X:
 awk '$1 !~ /PACK[A-Z]+/ {print $1}' "$rsrc/MANIFEST" | \
  (split -l 50 2>/dev/null || split -50)
 rm -f missing
 tmppwd=`pwd`
 for
 filelist in x??; do
  (cd "$rsrc"; ls `cat "$tmppwd/$filelist"` \
   >/dev/null 2>>"$tmppwd/missing")
```

```
 done
 if test -s missing; then
  cat missing >&4
  cat >&4 <<'EOM'

THIS PACKAGE SEEMS TO BE INCOMPLETE.

You have the option of continuing the configuration process, despite the
distinct possibility that your kit is damaged, by typing 'y'es.  If you
do, don't blame me if something goes wrong.  I advise you to type 'n'o
and contact the author (<MAINTLOC>).

EOM
?X: Can't use $echo at this early stage
  echo $n "Continue? [n] $c" >&4
  read ans
  case "$ans" in
  y*)
   echo "Continuing..." >&4
   rm -f missing
   ;;
  *)
?X:
?X: Use kill and not exit, so that the trap gets executed to clean up
?X:
   echo "ABORTING..." >&4
   kill $$
   ;;
  esac
 else
  echo "Looks good..."
 fi
else
 echo "There is no MANIFEST file.  I hope your kit is complete !"
fi
rm -f missing x??

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Chk_MANI.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shm.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_shm: test d_shmctl d_shmget d_shmat d_shmdt Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_shm:
?S: This variable conditionally defines the HAS_SHM symbol, which
?S: indicates that the entire shm*(2) library is present.
?S:.
?C:HAS_SHM:
?C: This symbol, if defined, indicates that the entire shm*(2) library is
?C: supported.
?C:.
?H:#$d_shm HAS_SHM  /**/
?H:.
?T:h_shm
?LINT:set d_shm
:
 see how much of the 'shm*(2)' library is present.
h_shm=true
echo " "
case "$d_shmctl$d_shmget$d_shmat$d_shmdt" in
*"$undef"*) h_shm=false;;
esac
: we could also check for sys/ipc.h ...
if $h_shm && $test `./findhdr sys/shm.h`; then
 echo "You have the full shm*(2) library." >&4
 val="$define"
else
 echo "You don't have the full shm*(2) library." >&4
 val="$undef"
fi
set d_shm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: etc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: etc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:etc etcexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:etc:
?S: This variable holds the name of the directory in which the user wants
?S: to put "administrative" executable images for the package in question.
?S: It is most often a local directory such as /usr/local/etc. Programs
?S: relying on this variable must be prepared to deal with
 ~name
?S: substitutions.
?S:.
?S:etcexp:
?S: This is the same as the etc variable, but is filename expanded at
?S: configuration time, for convenient use in makefiles.
?S:.
: determine where administrative executables go
case "$etc" in
")
 dflt=`./loc . /local/etc /usr/local/etc /local/etc /usr/etc /etc`
 ;;
*)
 dflt="$etc"
 ;;
esac
fn=d~
rp='Where should the administrative executables go?'
. ./getfile
etc="$ans"
etcexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/etc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Obsol_h.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Obsol_h.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file is prepended to .MT/Obsol_h if that file is not empty. That file
?X: contains the necessary mappings of new symbols to obsolete ones.
?X:
?MAKE:Obsol_h:
?MAKE: -pick prepend $@ ./Obsol_h
?LINT:nocomment
/*
* The following symbols are obsolete. They are mapped to the new
* symbols only to ease the transition process. The sources
 should be
* updated so as to use the new symbols only, as the support for these
* obsolete symbols may end without notice.
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Obsol_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtouq: Inlibc cat Compile run
?MAKE: -pick add $@ %<
?S:d_strtouq:
?S: This variable conditionally defines the HAS_STRTOUQ symbol, which
?S: indicates to the C program that the strtouq() routine is available.
?S:.
?C:HAS_STRTOUQ:
?C: This symbol, if defined, indicates that the strtouq routine is
?C: available to convert strings to unsigned long longs (quads).
?C:.
?H:#$d_strtouq HAS_STRTOUQ  /**/
?H:.
```

```
?F:!try
: see if strtouq exists
set strtouq d_strtouq
eval $inlibc

case "$d_strtouq" in
"$define")
 $cat <<EOM
Checking whether your strtouq() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#include <stdio.h>
static int bad = 0;
void check(const char *s, unsigned
 long long eull, int een) {
 unsigned long long gull;
 errno = 0;
 gull = strtouq(s, 0, 10);
 if (!((gull == eull) && (errno == een)))
  bad++;
}
int main() {
 check(" 1",                                  1LL, 0);
 check(" 0",                                  0LL, 0);
 check("18446744073709551615",  18446744073709551615ULL, 0);
 check("18446744073709551616",  18446744073709551615ULL, ERANGE);
#if 0 /* strtouq() for /^-/ strings is undefined. */
 check("-1",                  18446744073709551615ULL, 0);
 check("-18446744073709551614",                   2LL, 0);
 check("-18446744073709551615",                   1LL, 0);
 check("-18446744073709551616", 18446744073709551615ULL, ERANGE);
 check("-18446744073709551617", 18446744073709551615ULL, ERANGE);
#endif
 if (!bad)
  printf("ok\n");
 return 0;
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
  ok) echo "Your strtouq() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtouq() doesn't seem to be working
 okay.
EOM
```

```
    d_strtouq="$undef"
    ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  d_strtouq="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtouq.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nexttoward: Inlibc
?MAKE: -pick add $@ %<
?S:d_nexttoward:
?S: This variable conditionally defines HAS_NEXTTOWARD if nexttoward()
?S: is available to return the next machine representable long double from
?S: x in direction y.
?S:.
?C:HAS_NEXTTOWARD:
?C: This symbol, if defined, indicates that the nexttoward routine is
?C: available to return the next machine representable long double from
?C: x in direction y.
?C:.
?H:#$d_nexttoward HAS_NEXTTOWARD  /**/
?H:.
?LINT:set d_nexttoward
: see if nexttoward exists
set nexttoward d_nexttoward
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nexttoward.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: so.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:30:04  ram
?RCS: patch36: now tells user how he can suppress shared lib lookup (ADO)
?RCS: patch36: removed echo at the top, since it's now in the here-doc (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:07:02  ram
?RCS: patch30: created
?RCS:
?X:
?X: This unit computes the shared-object / shared-lib extension
?X:
?MAKE:so: test libpth Loc Myread Oldconfig cat
?MAKE: -pick add $@ %<
?S:so:
?S: This variable holds the extension used to identify
 shared libraries
?S: (also known as shared objects) on the system. Usually set to 'so'.
?S:.
?T: xxx
: compute shared library extension
case "$so" in
")
 if xxx=`./loc libc.sl X $libpth`; $test -f "$xxx"; then
  dflt='sl'
 else
  dflt='so'
 fi
 ;;
*) dflt="$so";;
esac
$cat <<EOM

On some systems, shared libraries may be available.  Answer 'none' if
you want to suppress searching of shared libraries for the remainder
of this configuration.

EOM
rp='What is the file extension used for shared libraries?'
. ./myread
so="$ans"

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/so.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
```

```
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtod_l: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtod_l:
?S: This variable conditionally defines the HAS_STRTOD_L symbol, which
?S: indicates to the C program that the strtod_l() routine is available.
?S:.
?C:HAS_STRTOD_L:
?C: This symbol, if defined, indicates that the strtod_l routine is
?C: available to convert strings to long doubles.
?C:.
?H:#$d_strtod_l HAS_STRTOD_L  /**/
?H:.
?LINT:set d_strtod_l
: see if strtod_l exists
set strtod_l d_strtod_l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strtod_l.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_statblks.U,v 3.0 1993/08/18 12:07:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_statblks.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:29  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_statblks: Hasfield i_sysstat
?MAKE: -pick add $@ %<
?S:d_statblks:
?S: This variable conditionally defines USE_STAT_BLOCKS
?S: if this system has a stat structure declaring
?S: st_blksize and st_blocks.
?S:.
```

```
?C:USE_STAT_BLOCKS (STATBLOCKS):
?C: This symbol is defined if this system has a stat structure declaring
?C: st_blksize and st_blocks.
?C:.
?H:?%<:#ifndef
 USE_STAT_BLOCKS
?H:?%<:#$d_statblks USE_STAT_BLOCKS /**/
?H:?%<:#endif
?H:.
?LINT:set d_statblks
: see if stat knows about block sizes
echo " "
echo "Checking to see if your struct stat has st_blocks field..." >&4
set d_statblks stat st_blocks $i_sysstat sys/stat.h
eval $hasfield
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_statblks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: man3dir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:10:34  ram
?RCS: patch61: created
?RCS:
?X:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man3 used instead of man everywhere.
?X: I then added various tests because perl5 has *lots* of man3
?X: pages with long file names. -- ADO
?X:
?MAKE:man3dir
 man3direxp man3ext installman3dir: afs cat nroff Loc Oldconfig \
 sed man1dir spackage package Getfile prefix Prefixit Prefixup \
 d_flexfnam privlib Myread
?MAKE: -pick add $@ %<
```

```
?Y:TOP
?S:man3dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:man3direxp:
?S: This variable is the same as the man3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installman3dir:
?S: This variable is really the same as man3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man3ext:
?S: This variable contains the extension that the manual
 page should
?S: have: one of 'n', 'l', or '3'.  The Makefile must supply the '.'.
?S: See man3dir.
?S:.
: determine where library module manual pages go
set man3dir man3dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages for many of the library modules.
EOM

case "$nroff" in
nroff)
 $cat <<'EOM'
However, you don't have nroff, so they're probably useless to you.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

case "$d_flexfnam" in
undef)
 $cat <<'EOM'
However, your system can't handle the long file names like File::Basename.3.
EOM
 case "$man3dir" in
 ") man3dir="none";;
```

```
 esac;;
esac

echo "If you don't want the manual sources installed, answer 'none'."
?X: We dont use /usr/local/man/man3 because some man programs will
?X: only show the /usr/local/man/man3 contents, and not the system ones,
?X: thus man less will show the perl module less.pm, but not the system
?X: less command.  We might also conflict with TCL man pages.
?X: However, something like /opt/perl/man/man3
 is fine.
case "$man3dir" in
") case "$prefix" in
 *$package*) dflt=`echo $man1dir |
   $sed -e 's/man1/man3/g' -e 's/man\.1/man\.3/g'` ;;
 *) dflt="$privlib/man/man3" ;;
 esac
 ;;
' ') dflt=none;;
*) dflt="$man3dir" ;;
esac
echo " "

fn=dn+~
rp="Where do the $package library man pages (source) go?"
. ./getfile
if test "X$man3direxp" != "X$ansexp"; then
 installman3dir="
fi

man3dir="$ans"
man3direxp="$ansexp"
case "$man3dir" in
") man3dir=' '
 installman3dir=";;
esac
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installman3dir" in
 ") dflt=`echo $man3direxp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installman3dir";;
 esac
 fn=de~
```

```
 rp='Where will man pages be installed?'
 . ./getfile
 installman3dir="$ans"
else
 installman3dir="$man3direxp"
fi

: What suffix
 to use on installed man pages

case "$man3dir" in
' ')
 man3ext='0'
 ;;
*)
 rp="What suffix should be used for the $package library man pages?"
 case "$man3ext" in
 ") case "$man3dir" in
  *3)  dflt=3 ;;
  *3p) dflt=3p ;;
  *3pm) dflt=3pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L3) dflt=L3;;
  *) dflt=3;;
  esac
  ;;
 *) dflt="$man3ext";;
 esac
 . ./myread
 man3ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/man3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Chk_whoami.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Chk_whoami.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit makes sure we don't try to include whoami.h if uname() exists.
?X:
?MAKE:Chk_whoami: d_uname i_whoami
?MAKE: -pick add $@ %<
?LINT:change i_whoami
: weed out incompatibilities
case "$d_uname" in
 "$define") i_whoami="$undef" ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Chk_whoami.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_aintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_aintl:
?S: This variable conditionally defines the HAS_AINTL symbol, which
?S: indicates to the C program that the aintl() routine is available.
?S: If copysignl is also present we can emulate modfl.
?S:.
?C:HAS_AINTL:
?C: This symbol, if defined, indicates that the aintl routine is
?C: available.  If copysignl is also present we can emulate modfl.
?C:.
?H:#$d_aintl HAS_AINTL  /**/
?H:.
?LINT:set d_aintl
: see if aintl exists
set aintl d_aintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_aintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rdchk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rdchk.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_rdchk: Inlibc
?MAKE: -pick add $@ %<
?S:d_rdchk:
?S: This variable conditionally defines the HAS_RDCHK symbol, which
?S: indicates to the C program that the rdchk() routine is available
?S: to find out if there is input pending on an IO channel.
?S:.
?C:HAS_RDCHK (RDCHK):
?C: This symbol, if defined, indicates that the rdchk routine
 is available
?C: to find out if there is input pending on an IO channel.  Generally
?C: the routine is used only if FIONREAD and O_NDELAY aren't available.
?C:.
?H:#$d_rdchk HAS_RDCHK  /**/
?H:.
?LINT:set d_rdchk
: see if rdchk exists
set rdchk d_rdchk
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rdchk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_killpg.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_killpg.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_killpg: Inlibc
?MAKE: -pick add $@ %<
?S:d_killpg:
?S: This variable conditionally defines the HAS_KILLPG symbol, which
?S: indicates to the C program that the killpg() routine is available
?S: to kill process groups.
?S:.
?C:HAS_KILLPG (KILLPG):
?C: This symbol, if defined, indicates that the killpg routine is available
?C: to kill
 process groups.  If unavailable, you probably should use kill
?C: with a negative process number.
?C:.
?H:#$d_killpg HAS_KILLPG /**/
?H:.
?LINT:set d_killpg
: see if killpg exists
set killpg d_killpg
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_killpg.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: pidtype.U,v 3.0.1.1 1994/08/29 16:31:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: pidtype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:31:27  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:33  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:pidtype: Myread Typedef
?MAKE: -pick add $@ %<
?S:pidtype:
?S: This variable defines PIDTYPE to be something like pid_t, int,
?S: ushort, or whatever type is used to declare process ids in the kernel.
?S:.
?C:Pid_t (PIDTYPE):
?C: This
 symbol holds the type used to declare process ids in the kernel.
?C: It can be int, uint, pid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Pid_t $pidtype  /* PID type */
?H:.
?LINT: set pidtype
: see what type pids are declared as in the kernel
rp="What is the type of process ids on this system?"
set pid_t pidtype int stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/pidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_lc_monetary_2008: cat Compile rm_try d_locconv
?MAKE: -pick add $@ %<
?S:d_lc_monetary_2008:
?S: This variable conditionally defines HAS_LC_MONETARY_2008 if libc
?S: has the international currency locale rules from POSIX
?S: 1003.1-2008.
?S:.
?C:HAS_LC_MONETARY_2008:
?C: This symbol, if defined, indicates that the localeconv routine is
?C: available and has the additional members added in POSIX 1003.1-2008.
?C:.
?H:#$d_lc_monetary_2008 HAS_LC_MONETARY_2008  /**/
?H:.
: see if libc has the POSIX.1-2008 currency locale rules
case "$d_locconv:$d_lc_monetary_2008" in
$define:)
 $cat
```

```
 >try.c <<EOCP
#include <locale.h>
int main() {
 struct lconv *lc = localeconv();
 char int_p_cs_precedes = lc->int_p_cs_precedes;
 return 0;
}
EOCP
 set try
 if eval $compile; then
  d_lc_monetary_2008="$define"
 else
  d_lc_monetary_2008="$undef"
 fi;
 $rm_try
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lc_monetary_2008.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoull: Inlibc d_longlong Compile cat run
?MAKE: -pick add $@ %<
?S:d_strtoull:
?S: This variable conditionally defines the HAS_STRTOULL symbol, which
?S: indicates to the C program that the strtoull() routine is available.
?S:.
?C:HAS_STRTOULL:
?C: This symbol, if defined, indicates that the strtoull routine is
?C: available to convert strings to unsigned long longs.
?C:.
?H:#$d_strtoull HAS_STRTOULL  /**/
?H:.
?F:!try
: see if strtoull exists
set strtoull d_strtoull
eval $inlibc

case "$d_longlong-$d_strtoull" in
"$define-$define")
```

```
 $cat <<EOM
Checking whether your strtoull() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#ifdef __hpux
#define strtoull __strtoull
#endif
#include
 <stdio.h>
static int bad = 0;
void check(const char *s, long long eull, int een) {
 long long gull;
 errno = 0;
 gull = strtoull(s, 0, 10);
 if (!((gull == eull) && (errno == een)))
  bad++;
}
int main() {
 check(" 1",                                  1LL, 0);
 check(" 0",                                  0LL, 0);
 check("18446744073709551615",  18446744073709551615ULL, 0);
 check("18446744073709551616",  18446744073709551615ULL, ERANGE);
#if 0 /* strtoull() for /^-/ strings is undefined. */
 check("-1",                  18446744073709551615ULL, 0);
 check("-18446744073709551614",                   2LL, 0);
 check("-18446744073709551615",                   1LL, 0);
 check("-18446744073709551616", 18446744073709551615ULL, ERANGE);
 check("-18446744073709551617", 18446744073709551615ULL, ERANGE);
#endif
 if (!bad)
  printf("ok\n");
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
  ok) echo "Your strtoull() seems to be working okay."
 ;;
  *) cat <<EOM >&4
Your strtoull() doesn't seem to be working okay.
EOM
     d_strtoull="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
```

```
  d_strtoull="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoull.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sgndchr.U,v 3.0.1.2 1997/02/28 15:44:25 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sgndchr.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:44:25  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:00:24  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sgndchr: cat rm Compile Setvar run
?MAKE: -pick add $@ %<
?S:d_sgndchr:
?S: This variable conditionally defines the SIGNEDCHAR
 symbol, which
?S: indicates to the C program that signed characters are available.
?S:.
?C:SIGNEDCHAR:
?C: This symbol, if defined, indicates that characters are a signed type.
?C: If not defined, things declared as signed characters (and that make
?C: use of negative values) should probably be declared as shorts instead.
?C:.
?H:#$d_sgndchr SIGNEDCHAR /**/
?H:.
?F:!try
?LINT:set d_sgndchr
: check for signed chars
echo " "
echo "Checking to see if your C compiler can do signed chars..." >&4
```

```
$cat >try.c <<'EOCP'
int main()
{
 char c = 0;

 c--;
 exit(c >= 0);
}
EOCP
set try
if eval $compile && $run ./try; then
if $run ./try; then
 val="$define"
 echo "It certainly can."
else
 val="$undef"
 echo "It can't.  I'll have to make some things type short."
fi
set d_sgndchr
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sgndchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: orgname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: orgname.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:10:25  ram
?RCS: patch10: added support for /local/src to the search (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orgname: sed cat Myread Loc Oldconfig
?MAKE: -pick add $@ %<
?S:orgname:
?S: This variable contains the eventual value of the ORGNAME symbol,
?S: which contains either the organizaton name or the full pathname
```

```
?S: of
 a file containing the organization name.
?S:.
?C:ORGNAME:
?C: This symbol contains either the organizaton name or the full pathname
?C: of a file containing the organization name, which the program must
?C: be prepared to open and substitute the contents of.
?C:.
?H:#define ORGNAME "$orgname"  /**/
?H:.
?T:longshots xxx
: get organization name
longshots='/local/src /usr/src/new /usr/src/local /usr/local/src'
case "$orgname" in
") if xxx=`./loc news/src/defs.h x $longshots`; then
  dflt=`$sed -n 's/^.*MYORG[  ]*"\(.*\)".*$/\1/p' $xxx`
 else
  dflt=''
 fi
 ;;
*)  dflt="$orgname";;
esac
$cat << 'EOH'

Please type the name of your organization as you want it to appear on the
Organization line of outgoing articles.  (It's nice if this also specifies
your location.  Your city name is probably sufficient if well known.)
For example:

   University of Southern North Dakota, Hoople

You may also put the name of a file, as long as it begins with a slash.
For example:

   /etc/organization

EOH
orgname=""
while
 test "X$orgname" = "X"; do
 rp='Organization:'
 . ./myread
 orgname="$ans"
done

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/orgname.U
```

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: uidtype.U,v 3.0.1.3 1994/08/29 16:33:25 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: uidtype.U,v $
?RCS: Revision 3.0.1.3  1994/08/29  16:33:25  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:09:36  ram
?RCS: patch30: comment for uidtype referred to the obsoleted symbol
?RCS:
?RCS: Revision 3.0.1.1  1994/05/13  15:28:27  ram
?RCS: patch27: made conformant to its gidtype.U companion
?RCS: patch27: question now explicitly mentions getuid()
?RCS:
?RCS: Revision 3.0  1993/08/18
  12:09:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:uidtype: Myread Typedef Findhdr
?MAKE: -pick add $@ %<
?S:uidtype:
?S: This variable defines Uid_t to be something like uid_t, int,
?S: ushort, or whatever type is used to declare user ids in the kernel.
?S:.
?C:Uid_t (UIDTYPE):
?C: This symbol holds the type used to declare user ids in the kernel.
?C: It can be int, ushort, uid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Uid_t $uidtype  /* UID type */
?H:.
?T:xxx
: see what type uids are declared as in the kernel
echo " "
echo "Looking for the type for user ids returned by getuid()."
set uid_t uidtype xxx stdio.h sys/types.h
eval $typedef
case "$uidtype" in
xxx)
```

```
 xxx=`./findhdr sys/user.h`
 set `grep '_ruid;' "$xxx" 2>/dev/null` unsigned short
 case $1 in
 unsigned) dflt="$1 $2" ;;
 *) dflt="$1" ;;
 esac
 ;;
*) dflt="$uidtype";;
esac
case "$uidtype" in
uid_t) echo "uid_t found." ;;
*) rp="What
 is the type for user ids returned by getuid()?"
 . ./myread
 uidtype="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: pidtype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:31:27  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:pidtype: Myread Typedef
?MAKE: -pick add $@ %<
?S:pidtype:
?S: This variable defines PIDTYPE to be something like pid_t, int,
?S: ushort, or whatever type is used to declare process ids in the kernel.
?S:.
?C:Pid_t (PIDTYPE):
?C: This symbol holds the type
```

```
 used to declare process ids in the kernel.
?C: It can be int, uint, pid_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Pid_t $pidtype  /* PID type */
?H:.
: see what type pids are declared as in the kernel
set pid_t pidtype int stdio.h sys/types.h
eval $typedef
dflt="$pidtype"
echo " "
rp="What type are process ids on this system declared as?"
. ./myread
pidtype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/pidtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Myread.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myread.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  15:05:39  ram
?RCS: patch61: myread script now starts with a "startsh"
?RCS: patch61: miscellaneous fixes
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:14:22  ram
?RCS: patch45: added & escape allowing user to turn on -d from the prompt
?RCS:
?RCS: Revision 3.0.1.4  1994/10/31  09:48:04  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29
  15:56:20  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:59  ram
?RCS: patch8: added new visible 'nostick' symbol, mainly for Finish.U
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:39:20  ram
```

```
?RCS: patch7: now sticks to the question when no default and empty answer
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a read.  It allows for shell escapes, default assignment and
?X: parameter evaluation.
?X:
?X: To use this unit, $rp and $dflt must hold the question and the
?X: default answer. The question will be printed by the script itself.
?X: Neither $rp nor $dflt is altered by the script.
?X:
?X: The myread script will stick to the question if no default is proposed
?X: and the user answer is empty, which prevents mistakes. However, at the
?X: end of Configure, there is an exception
 to this rule (Finish.U) where we
?X: set nostick to a non-empty value to allow the Return key to play its role!
?X:
?MAKE:Myread: Options startsh n c trnl
?MAKE: -pick add $@ %<
?V:ans:dflt rp nostick
?F:./myread
?T:COLUMNS xxxm rp dflt answ aok myecho
?LINT:change fastread
?X: Some shells (Ultrix) do not understand ${COLUMNS:-80}, sigh!
: compute the number of columns on the terminal for proper question formatting
case "$COLUMNS" in
") COLUMNS='80';;
esac

: set up the echo used in my read
?X:
?X: This variable is intended to be eval'ed. It will echo the two
?X: variables $rp and $dflt (provided this latter has a non null value).
?X: It is mainly used by the myread script to echo the questions.
?X:
?X: The $n and $c below are substituted before Loc does its silly echo check
?X: so don't put a $ on the echo below so we get builtin, even if $echo is
?X: pointing to /bin/echo.
?X:
myecho="case \"\$xxxm\" in
") echo $n \"\$rp $c\" >&4;;
*) case \"\$rp\" in
 ") echo $n \"[\$xxxm] $c\";;
 *)
  if
```

```
 test \`echo \"\$rp [\$xxxm]  \" | wc -c\` -ge $COLUMNS; then
   echo \"\$rp\" >&4
   echo $n \"[\$xxxm] $c\" >&4
  else
   echo $n \"\$rp [\$xxxm] $c\" >&4
  fi
  ;;
 esac;;
esac"

: now set up to do reads with possible shell escape and default assignment
cat <<EOSC >myread
$startsh
?X:
?X: Save value of default -- do not alter original in case of eval
?X:
xxxm=\$dflt
$myecho
?X:
?X: If there is no default, then stop, regardless of the value in fastread.
?X: In silent mode, no new-line is to be echoed if the question is empty,
?X: since this is used to wait for the "return" key.
?X:
ans='!'
case "\$fastread" in
yes) case "\$dflt" in
 ") ;;
 *) ans=";
  case "\$silent-\$rp" in
  true-) ;;
  *) echo " " >&4;;
  esac;;
 esac;;
*) case "\$silent" in
 true) case "\$rp" in
  ") ans=";;
  esac;;
 esac;;
esac
while expr "X\$ans" : "X!" >/dev/null; do
 read answ
?X:
?X: Run 'eval' on the answer, in order to do variable substitution, in case
?X: the user types $HOME or $WHATEVER.
 Variables must be evaluated now.
?X: Typing '\$HOME' won't currently prevent from substitution -- use '\\$HOME'
?X: The $1 .. $9 and $*, as well as $@, are available to refer to the
?X: default value.
```

```
?X:
 set x \$xxxm
 shift
 aok=''; eval "ans=\\"\$answ\\"" && aok=y
 case  "\$answ" in
?X:
?X: Use "!" and not a plain ! because of a bug in BSD 4.4 shell
?X: (reported by Wayne Davison)
?X: We must handle the shell escapes before dealing with possible variable
?X: substitution, since the shell we're launching in that case will be able
?X: to do it as well as we can -- RAM, 15/03/96
?X
 "!")
  sh 1>&4
  echo " "
  $myecho
  ;;
 !*)
  set x \`expr "X\$ans" : "X!\(.*\)\$"\`
  shift
  sh 1>&4 -c "\$*"
  echo " "
  $myecho
  ;;
 "\$ans")
  case "\$ans" in
?X:
?X: Answers starting with & are hooks allowing to dynamically turn on/off
?X: some Configure options. That's for the future. -- RAM, 09/01/95
?X: Today, we only recognize '& -d' to mean 'go on as if Configure -d, which
?X: is a hardwired
 behaviour compatible with our general scheme.
?X:
  \\&*)
   set x \`expr "X\$ans" : "X&\(.*\)\$"\`
   shift
   case "\$1" in
   -d)
    fastread=yes
    echo "(OK, I'll run with -d after this question.)" >&4
    ;;
   -*)
    echo "*** Sorry, \$1 not supported yet." >&4
    ;;
   esac
   $myecho
   ans=!
   ;;
```

```
  esac;;
 *)
  case "\$aok" in
  y)
   echo "*** Substitution done -- please confirm."
   xxxm="\$ans"
   ans=\`echo $n "\$ans$c" | tr '$trnl' ' '\`
   xxxm="\$ans"
   ans=!
   ;;
  *)
   echo "*** Error -- try again."
   ans=!
   ;;
  esac
  $myecho
  ;;
 esac
?X: Stick in myread if no default answer and nothing was answered
 case "\$ans\$xxxm\$nostick" in
 ")
  ans=!
  $myecho
  ;;
 esac
done
case "\$ans" in
") ans="\$xxxm";;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Myread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Config_h.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  14:57:43  ram
?RCS: patch61: added support for src.U
```

```
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:10:49  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:25:39  ram
?RCS: patch49: typo fixes in leading config.h comment (WED)
?RCS:
?RCS: Revision 3.0.1.2  1993/08/24  12:13:20  ram
?RCS: patch3: added TOP as a local shell temporary variable
?RCS:
?RCS: Revision 3.0.1.1  1993/08/19  06:42:20
  ram
?RCS: patch1: leading config.sh searching was not aborting properly
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file ends up producing the config_h.SH script, which is run to produce
?X: the config.h file.  The file ./.Config_h below contains all the ?H: lines
?X: extracted out of all the units.  Metaconfig itself adds the !GROK!THIS!.
?X: Note that this code isn't included into Configure, but must be shipped with.
?X:
?X: For those who wish to know why the file is config_h.SH instead of the more
?X: natural config.h.SH, well... it is to support systems like MS-DOG. Only one
?X: 'dot' is allowed within the file name, as it is part of the "extension" of
?X: the file. MS-DOG will not let you have two 'dots' because that would mean
?X: two "extensions".
?X:
?MAKE:Config_h: Id End Config_sh Obsol_h myuname cf_time cf_by package src
?MAKE: -pick c_h_weed $@ %<
?MAKE: -pick c_h_weed $@ ./Config_h
?MAKE: -pick
 c_h_weed $@ ./Obsol_h
?T:CONFIG TOP
?LINT:unclosed !GROK!THIS!
?LINT:extern CONFIG_H CONFIG_SH
?LINT:change CONFIG_H CONFIG_SH
?LINT:nocomment
case "$CONFIG_SH" in
") CONFIG_SH=config.sh;;
esac
case "$CONFIG_H" in
") CONFIG_H=config.h;;
esac
case $CONFIG in
")
 if test -f $CONFIG_SH; then TOP=.;
```

```
 elif test -f ../$CONFIG_SH; then TOP=..;
 elif test -f ../../$CONFIG_SH; then TOP=../..;
 elif test -f ../../../$CONFIG_SH; then TOP=../../..;
 elif test -f ../../../../$CONFIG_SH; then TOP=../../../..;
 else
  echo "Can't find $CONFIG_SH."; exit 1
 fi
 . $TOP/$CONFIG_SH
 ;;
esac
?X: Make sure we are in the directory where the .SH file is located.
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
echo "Extracting $CONFIG_H (with variable substitutions)"
?X:
?X: Since we unconditionally translate leading #undef into /*#define, we're
?X: stuck when we really want to have a #undef in config.h. That's why there
?X: is provision here for #un-def, which is translated back into #undef after
?X:
 all original #undef have been processed.
?X:
?X: Previously, we changed all
?X:  #undef FOO /**/
?X: into
?X:  /*#define FOO /**/
?X: The xlc compiler (available on IBM's AIX) complains that this is
?X: an illegal attempt to write a nested comment, and warns against it.
?X: There's apparently no way to shut the compiler up, either.
?X: This sed command from Hallvard B Furuseth <h.b.furuseth@usit.uio.no>
?X: changes it to
?X:  /*#define FOO / **/
sed <<!GROK!THIS! >$CONFIG_H -e 's!^#undef\(.*/\)\*!/\*#define\1 \*!' -e 's!^#un-def!#undef!'
/*
* This file was produced by running the config_h.SH script, which
* gets its values from $CONFIG_SH, which is generally produced by
* running Configure.
*
* Feel free to modify any of this as the need arises.  Note, however,
* that running config_h.SH again will wipe out any changes you've made.
* For a more permanent change edit $CONFIG_SH and rerun config_h.SH.
*
* \$Id: Config_h.U 1 2006-08-24 12:32:52Z rmanfredi $
*/

/*
* Package name
```

```
     : $package
* Source directory  : $src
* Configuration time: $cf_time
* Configured by     : $cf_by
* Target system     : $myuname
*/

#ifndef _config_h_
#define _config_h_
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Config_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_syssock.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_syssock.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:36  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_syssock: Inhdr
?MAKE: -pick add $@ %<
?S:i_syssock:
?S: This variable conditionally defines the I_SYS_SOCKET symbol, and indicates
?S: whether a C program should include <sys/socket.h> before performing socket
?S: operations.
?S:.
?C:I_SYS_SOCKET:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
 <sys/socket.h> before performing socket calls.
?C:.
?H:#$i_syssock I_SYS_SOCKET  /**/
?H:.
?LINT:set i_syssock
: see if this is a sys/socket.h system
set sys/socket.h i_syssock
eval $inhdr
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_syssock.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sitehtml3dir sitehtml3direxp installsitehtml3dir: Getfile \
 Setprefixvar prefix siteprefix html3dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitehtml3dir=''
?S:sitehtml3dir:
?S: This variable contains the name of the directory in which site-specific
?S: library html source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After
 perl has been installed, users may install their own local
?S: library html pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitehtml3direxp=''
?S:sitehtml3direxp:
?S: This variable is the same as the sitehtml3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsitehtml3dir=''
?S:installsitehtml3dir:
?S: This variable is really the same as sitehtml3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: html3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsitehtml3dir
?LINT:set sitehtml3dir
?LINT:set sitehtml3direxp
: determine where add-on library html pages go
: There is no standard location, so try to copy the previously-selected
```

```
: directory structure for the core html pages.
case
 "$sitehtml3dir" in
")    dflt=`echo "$html3dir" | $sed "s#^$prefix#$siteprefix#"` ;;
*)     dflt=$sitehtml3dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname where the site-specific library html pages should be installed?'
. ./getfile
prefixvar=sitehtml3dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitehtml3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_flockproto: Hasproto i_sysfile
?MAKE: -pick add $@ %<
?S:d_flockproto:
?S: This variable conditionally defines the HAS_FLOCK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the flock() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_FLOCK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the flock() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess is
?C:  extern int flock(int,
 int);
?C:.
?H:#$d_flockproto HAS_FLOCK_PROTO /**/
?H:.
?LINT:set d_flockproto
: see if prototype for flock is available
```

```
echo " "
set d_flockproto flock $i_sysfile sys/file.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_flockproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strcoll.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_strcoll.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:01  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strcoll: Inlibc
?MAKE: -pick add $@ %<
?S:d_strcoll:
?S: This variable conditionally defines HAS_STRCOLL if strcoll() is
?S: available to compare strings using collating information.
?S:.
?C:HAS_STRCOLL:
?C: This symbol, if defined, indicates that the strcoll routine
 is
?C: available to compare strings using collating information.
?C:.
?H:#$d_strcoll HAS_STRCOLL /**/
?H:.
?LINT:set d_strcoll
: see if strcoll exists
set strcoll d_strcoll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strcoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: End.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit serves as the goal which forces make to choose all the units that
?X: ask questions.  The $W on the ?MAKE: line is the list of all symbols wanted.
?X: To force any unit to be included, copy this unit to your private U directory
?X: and add the name of the unit desired to the ?MAKE: dependency line.
?X:
?MAKE:End: $W
?MAKE: -pick add $@ %<
?LINT:use $W
: end of configuration
 questions
echo " "
echo "End of configuration questions."
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/End.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llround: Inlibc
?MAKE: -pick add $@ %<
?S:d_llround:
?S: This variable conditionally defines the HAS_LLROUND symbol, which
?S: indicates to the C program that the llround() routine is available
?S: to return the long long value nearest to x.
?S:.
?C:HAS_LLROUND:
?C: This symbol, if defined, indicates that the llround routine is
?C: available to return the nearest long long value.
?C:.
?H:#$d_llround HAS_LLROUND  /**/
?H:.
?LINT:set d_llround
: see if llround exists
```

```
set llround d_llround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msync.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msync.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:19:17  ram
?RCS: patch15: created
?RCS:
?MAKE:d_msync: Inlibc
?MAKE: -pick add $@ %<
?S:d_msync:
?S: This variable conditionally defines HAS_MSYNC if msync() is
?S: available to synchronize a mapped file.
?S:.
?C:HAS_MSYNC:
?C: This symbol, if defined, indicates that the msync system call is
?C: available to synchronize a mapped file.
?C:.
?H:#$d_msync HAS_MSYNC  /**/
?H:.
?LINT:set d_msync
: see if
 msync exists
set msync d_msync
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msync.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: dup2.C,v 3.0.1.1 1994/01/24 13:58:37 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
```

```
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* Original Author: Larry Wall <lwall@netlabs.com>
*
* $Log: dup2.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:37  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/dup2.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: n.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: n.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:n c: contains
?MAKE: -pick add $@ %<
?S:n:
?S: This variable contains the -n flag if that is what causes the echo
?S: command to suppress newline.  Otherwise it is null.  Correct usage is
?S:     $echo $n "prompt for a question: $c".
?S:.
?S:c:
?S: This variable contains the \c string if that is what causes the echo
?S: command to suppress newline.
  Otherwise it is null.  Correct usage is
?S:     $echo $n "prompt for a question: $c".
?S:.
: first determine how to suppress newline on echo command
echo " "
echo "Checking echo to see how to suppress newlines..."
```

```
(echo "hi there\c" ; echo " ") >.echotmp
if $contains c .echotmp >/dev/null 2>&1 ; then
 echo "...using -n."
 n='-n'
 c=''
else
 cat <<'EOM'
...using \c
EOM
 n=''
 c='\c'
fi
echo $n "The star should be here-->$c"
echo '*'
rm -f .echotmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/n.U
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```
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS:
?MAKE:i_stdint: Inhdr
?MAKE: -pick add $@ %<
?S:i_stdint:
?S: This variable conditionally defines the I_STDINT symbol, which
?S: indicates to the C program that <stdint.h> exists and should
?S: be included.
?S:.
?C:I_STDINT:
?C: This symbol, if defined, indicates that <stdint.h> exists and
?C: should be included.
?C:.
?H:#$i_stdint I_STDINT  /**/
?H:.
?LINT:set i_stdint
: see if stdint is available
set stdint.h i_stdint
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_stdint.U
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```
?RCS: $Id: Warn_v7ND.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Warn_v7ND.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:01:46  ram
?RCS: patch36: call ./v7 explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit warns V7 sites that they may not have a non-blocking read.
?X: This unit needs to be mentioned in End.U to get included.
?X:
?MAKE:Warn_v7ND: package Guess
?MAKE: -pick add $@ %<
: Warnings
if ./v7; then
 cat
 <<EOM

NOTE: many V7 systems do not have a way to do a non-blocking read.  If you
don't have any of FIONREAD, O_NDELAY, or rdchk(), the $package package
may not work as well as it might.  It might not work at all.
EOM
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn_v7ND.U
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```
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?RCS:
?MAKE:perladmin: cf_email Oldconfig Myread cat
?MAKE: -pick add $@ %<
?Y:TOP
?S:perladmin:
?S: Electronic mail address of the perl5 administrator.
?S:.
: Ask e-mail of administrator
$cat <<EOM
```

```
If you or somebody else will be maintaining perl at your site, please
fill in the correct e-mail address here so that they may be contacted
if necessary. You may enter "none" for no administrator.

EOM
case "$perladmin" in
") dflt="$cf_email";;
*) dflt="$perladmin";;
esac
rp='Perl administrator e-mail address'
. ./myread
perladmin="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/perladmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sockatmarkproto: Hasproto d_socket
?MAKE: -pick add $@ %<
?S:d_sockatmarkproto:
?S: This variable conditionally defines the HAS_SOCKATMARK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the sockatmark() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SOCKATMARK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the sockatmark() function.  Otherwise, it is up
?C: to the program to supply one.  A good
 guess is
?C:  extern int sockatmark(int);
?C:.
?H:#$d_sockatmarkproto HAS_SOCKATMARK_PROTO /**/
?H:.
?LINT:set d_sockatmarkproto
: see if prototype for sockatmark is available
echo " "
```

```
set d_sockatmarkproto sockatmark $d_socket sys/socket.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sockatmarkproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_rmdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_rmdir.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_rmdir: Inlibc
?MAKE: -pick add $@ %<
?S:d_rmdir:
?S: This variable conditionally defines HAS_RMDIR if rmdir() is
?S: available to remove directories.
?S:.
?C:HAS_RMDIR (RMDIR):
?C: This symbol, if defined, indicates that the rmdir routine is
?C: available to remove directories. Otherwise you should fork off a
?C: new process to exec
 /bin/rmdir.
?C:.
?H:#$d_rmdir HAS_RMDIR  /**/
?H:.
?LINT:set d_rmdir
: see if rmdir exists
set rmdir d_rmdir
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_rmdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: man3dir.U,v 3.1 1999/07/08 20:52:19 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996-1999, Andy Dougherty
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```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: man3dir.U,v $
?RCS: Revision 3.1  1999/07/08 20:52:19  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:10:34  ram
?RCS: patch61: created
?RCS:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man3 used instead
 of man everywhere.
?X: I then added various tests because perl5 has *lots* of man3
?X: pages with long file names. -- ADO
?X:
?MAKE:man3dir man3direxp man3ext installman3dir: cat nroff Loc Oldconfig \
 sed man1dir spackage package Getfile Setprefixvar Prefixit Prefixup \
 d_flexfnam privlib Myread test
?MAKE: -pick add $@ %<
?Y:TOP
?D:man3dir=''
?S:man3dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?D:man3direxp=''
?S:man3direxp:
?S: This variable is the same as the man3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installman3dir=''
?S:installman3dir:
?S: This variable is really the same as man3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only
 points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man3ext:
```

```
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '3'.  The Makefile must supply the '.'.
?S: See man3dir.
?S:.
?T:prog tdflt
?LINT:change prefixvar
?LINT:set man3direxp
: determine where library module manual pages go
set man3dir man3dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages for many of the library modules.
EOM

case "$nroff" in
nroff)
 $cat <<'EOM'
However, you don't have nroff, so they're probably useless to you.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

case "$d_flexfnam" in
undef)
 $cat <<'EOM'
However, your system can't handle the long file names like File::Basename.3.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

echo "If you don't want the manual sources installed, answer 'none'."
?X: In 5.005_57 and earlier, I had the following notes:
?X:
 We do not use /usr/local/man/man3 because some man programs will
?X: only show the /usr/local/man/man3 contents, and not the system ones,
?X: thus man less will show the perl module less.pm, but not the system
?X: less command.  We might also conflict with Tcl man pages.
?X: However, something like /opt/perl/man/man3 is fine.
?X:
?X: However, opinion seems to be shifting such that 'man POSIX' ought
?X: to just work.  -- Andy Dougherty  July 8, 1999
?X:
?X: remove any trailing -3.0 or other version indication from $package
```

```
prog=`echo $package | $sed 's/-*[0-9.]*$//'`
case "$man3dir" in
") dflt=`echo "$man1dir" | $sed -e 's/man1/man3/g' -e 's/man\.1/man\.3/g'`
 if $test -d "$privlib/man/man3"; then
  cat <<EOM >&4

WARNING:  Previous versions of perl installed man3 pages into
$privlib/man/man3.  This version will suggest a
new default of $dflt.
EOM
  tdflt=$dflt
  dflt='n'
  rp='Do you wish to preserve the old behavior?(y/n)'
  . ./myread
  case "$ans" in
  y*) dflt="$privlib/man/man3"
 ;;
  *)  dflt=$tdflt ;;
  esac
   fi
 ;;
*) dflt="$man3dir" ;;
esac
case "$dflt" in
' ') dflt=none ;;
esac
echo " "
fn=dn+~
rp="Where do the $package library man pages (source) go?"
. ./getfile
prefixvar=man3dir
. ./setprefixvar

case "$man3dir" in
") man3dir=' '
 installman3dir=";;
esac

: What suffix to use on installed man pages
case "$man3dir" in
' ')
 man3ext='0'
 ;;
*)
 rp="What suffix should be used for the $package library man pages?"
 case "$man3ext" in
 ") case "$man3dir" in
  *3)  dflt=3 ;;
```

```
  *3p) dflt=3p ;;
  *3pm) dflt=3pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L3) dflt=L3;;
  *) dflt=3;;
  esac
  ;;
 *) dflt="$man3ext";;
 esac
 . ./myread
 man3ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/man3dir.U
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```
?RCS: $Id: d_endhent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endhent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endhent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endhent:
?S: This variable conditionally defines HAS_ENDHOSTENT if endhostent() is
?S: available to close whatever was being used for host queries.
?S:.
?C:HAS_ENDHOSTENT:
?C: This symbol, if defined, indicates that the endhostent() routine is
?C: available to close whatever was being used for host
 queries.
?C:.
```

```
?H:#$d_endhent HAS_ENDHOSTENT  /**/
?H:.
?LINT:set d_endhent
: see if endhostent exists
set endhostent d_endhent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endhent.U
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```
?RCS: $Id: d_psignal.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_psignal.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_psignal: Inlibc
?MAKE: -pick add $@ %<
?S:d_psignal:
?S: This variable conditionally defines the HAS_PSIGNAL symbol, which
?S: indicates that the psignal() routine exists.  The psignal() routine
?S: prints a description of a signal on the standard error output.
?S:.
?C:HAS_PSIGNAL (PSIGNAL):
?C: This symbol, if defined, indicates
 that the psignal() routine exists.
?C:.
?H:#$d_psignal HAS_PSIGNAL  /**/
?H:.
?LINT:set d_psignal
: see if psignal exists
set psignal d_psignal
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_psignal.U
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```
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```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isnormal: cat Compile Setvar rm_try
?MAKE: -pick add $@ %<
?S:d_isnormal:
?S: This variable conditionally defines the HAS_ISNORMAL symbol, which
?S: indicates to the C program that the isnormal() routine is available.
?S:.
?C:HAS_ISNORMAL:
?C: This symbol, if defined, indicates that the isnormal routine is
?C: available to check whether a double is normal (non-zero normalized).
?C:.
?H:#$d_isnormal HAS_ISNORMAL  /**/
?H:.
?LINT:set d_isnormal
: check for isnormal
echo "Checking to see if you have isnormal..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isnormal(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isnormal."
else
 val="$undef"
 echo "You do not have isnormal."
fi
$rm_try
set d_isnormal
eval $setvar
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnormal.U
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```
?RCS: $Id: d_semop.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: d_semop.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semop: Inlibc
?MAKE: -pick add $@ %<
?S:d_semop:
?S: This variable conditionally defines the HAS_SEMOP symbol, which
?S: indicates to the C program that the semop() routine is available.
?S:.
?C:HAS_SEMOP:
?C: This symbol, if defined, indicates that the semop() routine is
?C: available to execute semaphore operations.
?C:.
?H:#$d_semop
 HAS_SEMOP  /**/
?H:.
?LINT:set d_semop
: see if semop exists
set semop d_semop
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semop.U
No license file was found, but licenses were detected in source scan.

```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_quad quadtype uquadtype quadkind: \
 longsize intsize d_longlong longlongsize d_int64_t \
 Inhdr Setvar
?MAKE: -pick add $@ %<
?S:d_quad:
?S: This variable, if defined, tells that there's a 64-bit integer type,
?S: quadtype.
?S:.
?S:quadtype:
?S: This variable defines Quad_t to be something like long, int,
?S: long long, int64_t, or whatever type is used for 64-bit integers.
?S:.
?S:quadkind:
?S: This variable, if defined, encodes the type of a quad:
?S: 1 = int, 2 = long, 3 = long long, 4 = int64_t.
```

```
?S:.
?S:uquadtype:
?S: This variable defines Uquad_t to be something like unsigned long,
?S: unsigned int, unsigned long long, uint64_t, or whatever type is
?S: used for 64-bit integers.
?S:.
?C:HAS_QUAD:
?C: This
 symbol, if defined, tells that there's a 64-bit integer type,
?C: Quad_t, and its unsigned counterpart, Uquad_t. QUADKIND will be one
?C: of QUAD_IS_INT, QUAD_IS_LONG, QUAD_IS_LONG_LONG, QUAD_IS_INT64_T,
?C: or QUAD_IS___INT64.
?C:.
?H:#$d_quad HAS_QUAD /**/
?H:?%<:#ifdef HAS_QUAD
?H:?%<:#   define Quad_t $quadtype /**/
?H:?%<:#   define Uquad_t $uquadtype /**/
?H:?%<:#   define QUADKIND $quadkind /**/
?H:?%<:#   define QUAD_IS_INT 1
?H:?%<:#   define QUAD_IS_LONG 2
?H:?%<:#   define QUAD_IS_LONG_LONG 3
?H:?%<:#   define QUAD_IS_INT64_T 4
?H:?%<:#   define QUAD_IS___INT64 5
?H:?%<:#endif
?H:.
?LINT:set quadtype
?LINT:set uquadtype
: Check if 64bit ints have a quad type
echo " "
echo "Checking which 64-bit integer type we could use..." >&4
?X: We prefer quad types in order of int, long, long long, int64_t.

case "$intsize" in
8) val=int
  set quadtype
  eval $setvar
  val='"unsigned int"'
  set uquadtype
  eval $setvar
  quadkind=1
  ;;
*) case "$longsize" in
  8)
 val=long
    set quadtype
    eval $setvar
    val='"unsigned long"'
    set uquadtype
```

```
    eval $setvar
    quadkind=2
    ;;
  *) case "$d_longlong:$longlongsize" in
    define:8)
      val="'long long'"
      set quadtype
      eval $setvar
      val="'unsigned long long'"
      set uquadtype
      eval $setvar
      quadkind=3
      ;;
    *) case "$d_int64_t" in
       define)
         val=int64_t
         set quadtype
         eval $setvar
         val=uint64_t
         set uquadtype
         eval $setvar
         quadkind=4
         ;;
       esac
       ;;
    esac
    ;;
  esac
  ;;
esac

case "$quadtype" in
") echo "Alas, no 64-bit integer types in sight." >&4
 d_quad="$undef"
 ;;
*) echo "We could use '$quadtype' for 64-bit integers." >&4
 d_quad="$define"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/quadtype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_atoll: Inlibc
?MAKE: -pick add $@ %<
?S:d_atoll:
?S: This variable conditionally defines the HAS_ATOLL symbol, which
?S: indicates to the C program that the atoll() routine is available.
?S:.
?C:HAS_ATOLL:
?C: This symbol, if defined, indicates that the atoll routine is
?C: available to convert strings into long longs.
?C:.
?H:#$d_atoll HAS_ATOLL  /**/
?H:.
?LINT:set d_atoll
: see if atoll exists
set atoll d_atoll
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/atoll.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2014 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ptrdiff_t: Inlibc Setvar Compile rm_try cat
?MAKE: -pick add $@ %<
?S:d_ptrdiff_t:
?S: This symbol will be defined if the C compiler supports ptrdiff_t.
?S:.
?C:HAS_PTRDIFF_T:
?C: This symbol will be defined if the C compiler supports ptrdiff_t.
?C:.
?H:#$d_ptrdiff_t HAS_PTRDIFF_T  /**/
?H:.
?LINT:set d_ptrdiff_t
: check for ptrdiff_t
echo " "
echo "Checking to see if you have ptrdiff_t..." >&4
$cat >try.c <<EOCP
#include <stddef.h>
int main() { ptrdiff_t x = 7; }
```

```
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have ptrdiff_t."
else
 val="$undef"
 echo "You do not have ptrdiff_t."
fi
$rm_try
set d_ptrdiff_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ptrdiff_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isless: cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isless:
?S: This variable conditionally defines the HAS_ISLESS symbol, which
?S: indicates to the C program that the isless() routine is available.
?S:.
?C:HAS_ISLESS:
?C: This symbol, if defined, indicates that the isless routine is
?C: available to do the isless function.
?C:.
?H:#$d_isless HAS_ISLESS  /**/
?H:.
?LINT:set d_isless
: check for isless
echo "Checking to see if you have isless..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isless(2.0, 1.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isless."
else
 val="$undef"
 echo "You do not have isless."
fi
$rm_try
```

```
set d_isless
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isless.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_times.U,v 3.0.1.2 1995/07/25 14:07:50 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_times.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:50  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:14:00  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: What is the type returned by times() ?
?X:
?X: Force inclusion of <sys/types.h>
?X:INC: i_systypes
?MAKE:d_times clocktype:
 Csym Myread Typedef i_systimes
?MAKE: -pick add $@ %<
?S:d_times:
?S: This variable conditionally defines the HAS_TIMES symbol, which indicates
?S: that the times() routine exists.  The times() routine is normally
?S: provided on UNIX systems. You may have to include <sys/times.h>.
?S:.
?S:clocktype:
?S: This variable holds the type returned by times(). It can be long,
?S: or clock_t on BSD sites (in which case <sys/types.h> should be
?S: included).
?S:.
?C:HAS_TIMES (TIMES):
?C: This symbol, if defined, indicates that the times() routine exists.
?C: Note that this became obsolete on some systems (SUNOS), which now
```

```
?C: use getrusage(). It may be necessary to include <sys/times.h>.
?C:.
?C:Clock_t (CLOCKTYPE):
?C: This symbol holds the type returned by times(). It can be long,
?C: or clock_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_times HAS_TIMES  /**/
?H:#define Clock_t $clocktype /* Clock time */
?H:.
?T:val inc
: see if times exists
echo "
 "
if set times val -f d_times; eval $csym; $val; then
 echo 'times() found.' >&4
 d_times="$define"
 inc=''
 case "$i_systimes" in
 "$define") inc='sys/times.h';;
 esac
 rp="What is the type returned by times() on this system?"
 set clock_t clocktype long stdio.h sys/types.h $inc
 eval $typedef_ask
else
 echo 'times() NOT found, hope that will do.' >&4
 d_times="$undef"
?X: The following is needed for typedef (won't like an empty variable)
 clocktype='int'
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/d_times.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usrinc.U,v 1.1 2000/06/27 00:20:28 jhi Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: usrinc.U,v $
?RCS: Revision 1.1  2000/06/27 00:20:28  jhi
?RCS: Initial revision
```

```
?RCS:
?RCS: Revision 3.0.1.3  1997/02/28  16:27:12  ram
?RCS: patch61: don't ask for the include path unless they are on a MIPS
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:24:36  ram
?RCS: patch54: ensure that ./mips always exists (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:18:31  ram
?RCS: patch23: ensure usrinc value is preserved across sessions (WED)
?RCS:
?RCS: Revision
 3.0  1993/08/18  12:09:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usrinc incpath mips_type: test cat echo n c Getfile Guess \
 Oldconfig eunicefix contains rm sysroot cc
?MAKE: -pick add $@ %<
?S:usrinc:
?S: This variable holds the path of the include files, which is
?S: usually /usr/include. It is mainly used by other Configure units.
?S:.
?S:incpath:
?S: This variable must precede the normal include path to get the
?S: right one, as in "$incpath/usr/include" or "$incpath/usr/lib".
?S: Value can be "" or "/bsd43" on mips.
?S:.
?S:mips_type:
?S: This variable holds the environment type for the mips system.
?S: Possible values are "BSD 4.3" and "System V".
?S:.
?D:usrinc='/usr/include'
?LINT:extern cppflags
?LINT:create mips
?T:xxx_prompt
?F:./mips
: What should the include directory be ?
: Use sysroot if set, so findhdr looks in the right place.
echo " "
$echo $n "Hmm...  $c"
dflt="$sysroot/usr/include"
incpath=''
?X: mips_type is used later, to add -DSYSTYPE_BSD43
 to cppflags if needed.
mips_type=''
?X:
?X: Cannot put the following in Guess, or we get a circular dependency.
?X:
if $test -f /bin/mips && /bin/mips; then
```

```
 echo "Looks like a MIPS system..."
 $cat >usr.c <<'EOCP'
#ifdef SYSTYPE_BSD43
/bsd43
#endif
EOCP
 if $cc $cppflags -E usr.c > usr.out && $contains / usr.out >/dev/null 2>&1; then
  dflt='/bsd43/usr/include'
  incpath='/bsd43'
  mips_type='BSD 4.3'
 else
  mips_type='System V'
 fi
 $rm -f usr.c usr.out
 echo "and you're compiling with the $mips_type compiler and libraries."
 xxx_prompt=y
 echo "exit 0" >mips
else
 echo "Doesn't look like a MIPS system."
 xxx_prompt=n
 echo "exit 1" >mips
fi
chmod +x mips
$eunicefix mips
case "$usrinc" in
") ;;
*) dflt="$usrinc";;
esac
case "$xxx_prompt" in
y) fn=d/
 echo " "
 rp='Where are the include files you want to use?'
 . ./getfile
 usrinc="$ans"
 ;;
*) usrinc="$dflt"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/usrinc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sfio.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sfio.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:27  ram
?RCS: patch61: created
?RCS:
?MAKE:i_sfio: Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_sfio:
?S: This variable conditionally defines the I_SFIO symbol,
?S: and indicates whether a C program should include <sfio.h>.
?S:.
?C:I_SFIO:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sfio.h>.
?C:.
?H:#$i_sfio I_SFIO  /**/
?H:.
?LINT:set
 i_sfio
: see if sfio.h is available
set sfio.h i_sfio
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sfio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isfinite: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isfinite:
?S: This variable conditionally defines the HAS_ISFINITE symbol, which
?S: indicates to the C program that the isfinite() routine is available.
?S:.
?C:HAS_ISFINITE:
?C: This symbol, if defined, indicates that the isfinite routine is
?C: available to check whether a double is finite (non-infinity non-NaN).
```

```
?C:.
?LINT:set d_isfinite
?H:#$d_isfinite HAS_ISFINITE  /**/
?H:.
: check for isfinite
echo "Checking to see if you have isfinite..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isfinite(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isfinite."
else
 val="$undef"
 echo
 "You do not have isfinite."
fi
$rm_try
set d_isfinite
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isfinite.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: warnflags.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: warnflags.U,v $
?RCS: Revision 3.0  1993/08/18  12:10:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:warnflags: cat cc contains Myread Guess Oldconfig Findhdr
?MAKE: -pick add $@ %<
?S:warnflags:
?S: This variable contains any additional C compiler flags to generate
?S: warnings from the compiler. It is up to the Makefile to use this.
```

```
?S:.
: offer additional
 warning flags for compilation
$cat <<EOH

You may wish to compile with extra compiler warnings enabled.
Note that doing so enhances your chance of receiving your free set of steak
knives, particularly if you find any bugs and report them.
If you don't want extra warnings, answer "none".

EOH
case "$warnflags" in
") case "$cc" in
 *gcc*)
  dflt="-Wall -Wno-comment"
  if $contains 'fprintf' `./findhdr stdio.h` >/dev/null 2>&1; then
   :
  else
   dflt="$dflt -Wno-implicit"
  fi
  ;;
 *) dflt="none";;
 esac
 ;;
' ') dflt="none";;
*) dflt="$warnflags";;
esac

rp="Any $cc flags to enable warnings?"
. ./myread
case "$ans" in
none) warnflags=' ';;
*) warnflags="$ans";;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/warnflags.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_strxfrm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_strxfrm.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:04  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_strxfrm: Inlibc
?MAKE: -pick add $@ %<
?S:d_strxfrm:
?S: This variable conditionally defines HAS_STRXFRM if strxfrm() is
?S: available to transform strings.
?S:.
?C:HAS_STRXFRM:
?C: This symbol, if defined, indicates that the strxfrm() routine is
?C: available to transform
 strings.
?C:.
?H:#$d_strxfrm HAS_STRXFRM /**/
?H:.
?LINT:set d_strxfrm
: see if strxfrm exists
set strxfrm d_strxfrm
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strxfrm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_system.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_system.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_system: Inlibc
?MAKE: -pick add $@ %<
?S:d_system:
?S: This variable conditionally defines HAS_SYSTEM if system() is
?S: available to issue a shell command.
```

```
?S:.
?C:HAS_SYSTEM (SYSTEM):
?C: This symbol, if defined, indicates that the system routine is
?C: available to issue a shell command.
?C:.
?H:#$d_system HAS_SYSTEM /**/
?H:.
?LINT:set
 d_system
: see if system exists
set system d_system
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_system.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: html3dir.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: html3dir.U,v $
?RCS:
?MAKE:html3dir html3direxp installhtml3dir: cat sed Loc Myread \
 spackage test Getfile Setprefixvar Prefixit Prefixup html1dir
?MAKE: -pick add $@ %<
?Y:TOP
?D:html3dir=''
?S:html3dir:
?S: This variable contains the name of the directory in which html
?S: source pages are to be put.  This directory is for pages
?S: that describe libraries or modules.  It is intended to
?S: correspond roughly to section 3 of the Unix manuals.
?S:.
?D:html3direxp=''
?S:html3direxp:
?S: This variable
 is the same as the html3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installhtml3dir=''
?S:installhtml3dir:
```

```
?S: This variable is really the same as html3direxp, unless you are
?S: using a different installprefix.  For extra portability, you
?S: should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set html3direxp
?LINT:set installhtml3dir
: determine where html pages for libraries and modules go
set html3dir html3dir none
eval $prefixit
$cat <<EOM

If you wish to install html files for modules associated with $spackage,
indicate the appropriate directory here.  To skip installing html files,
answer "none".
EOM
: There is no obvious default.  If they have specified html1dir, then
: try to key off that, possibly changing .../html1 into .../html3.
case "$html3dir" in
") html3dir=`echo "$html1dir" | $sed 's/1$/3$/'` ;;
*) dflt=$html3dir ;;
esac
fn=dn+~
rp="Directory for the $spackage module
 html pages?"
. ./getfile
prefixvar=html3dir
. ./setprefixvar
: Use ' ' for none so value is preserved next time through Configure
$test X"$html3dir" = "X" && html3dir=' '

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/html3dir.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: i_ndbm.U,v 3.0.1.1 1995/05/12 12:16:53 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_ndbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:53  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
```

```
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_ndbm i_gdbmndbm i_gdbm_ndbm d_ndbm d_ndbm_h_uses_prototypes \
 d_gdbmndbm_h_uses_prototypes d_gdbm_ndbm_h_uses_prototypes: \
    Inhdr Inlibc Setvar test d_cplusplus extern_C echo Protochk
?MAKE: -pick add $@ %<
?S:i_ndbm:
?S: This
 variable conditionally defines the I_NDBM symbol, which
?S: indicates to the C program that <ndbm.h> exists and should
?S: be included.
?S:.
?C:I_NDBM:
?C: This symbol, if defined, indicates that <ndbm.h> exists and should
?C: be included.
?C:.
?S:i_gdbmndbm:
?S: This variable conditionally defines the I_GDBMNDBM symbol, which
?S: indicates to the C program that <gdbm/ndbm.h> exists and should
?S: be included.  This was the location of the ndbm.h compatibility file
?S: in RedHat 7.1.
?S:.
?C:I_GDBMNDBM:
?C: This symbol, if defined, indicates that <gdbm/ndbm.h> exists and should
?C: be included.  This was the location of the ndbm.h compatibility file
?C: in RedHat 7.1.
?C:.
?S:i_gdbm_ndbm:
?S: This variable conditionally defines the I_GDBM_NDBM symbol, which
?S: indicates to the C program that <gdbm-ndbm.h> exists and should
?S: be included.  This is the location of the ndbm.h compatibility file
?S: in Debian 4.0.
?S:.
?C:I_GDBM_NDBM:
?C: This symbol, if defined, indicates
 that <gdbm-ndbm.h> exists and should
?C: be included.  This is the location of the ndbm.h compatibility file
?C: in Debian 4.0.
?C:.
?S:d_ndbm:
?S: This variable conditionally defines the HAS_NDBM symbol, which
?S: indicates that both the ndbm.h include file and an appropriate ndbm
?S: library exist.  Consult the different i_*ndbm variables
?S: to find out the actual include location.  Sometimes, a system has the
?S: header file but not the library.  This variable will only be set if
?S: the system has both.
```

```
?S:.
?C:HAS_NDBM:
?C: This symbol, if defined, indicates that some form of ndbm.h or compatibility
?C: include exists, along with the appropriate library.
?C:.
?S:d_ndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling
 when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative ndbm.h include files.
?S:.
?C:NDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <ndbm.h> uses real ANSI C
?C: prototypes instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?S:d_gdbmndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the gdbm/ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative
 ndbm.h include files.
?S:.
?C:GDBMNDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <gdbm/ndbm.h> uses real ANSI C
?C: prototypes instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?S:d_gdbm_ndbm_h_uses_prototypes:
?S: This variable conditionally defines the NDBM_H_USES_PROTOTYPES symbol,
?S: which indicates that the gdbm-ndbm.h include file uses real ANSI C
?S: prototypes instead of K&R style function declarations. K&R style
?S: declarations are unsupported in C++, so the include file requires
?S: special handling when using a C++ compiler and this variable is
?S: undefined. Consult the different d_*ndbm_h_uses_prototypes variables
?S: to get the same information for alternative ndbm.h include files.
?S:.
?C:GDBM_NDBM_H_USES_PROTOTYPES:
?C: This symbol, if defined, indicates that <gdbm-ndbm.h> uses real ANSI C
```

```
?C: prototypes
 instead of K&R style function declarations without any
?C: parameter information. While ANSI C prototypes are supported in C++,
?C: K&R style function declarations will yield errors.
?C:.
?H:#$i_ndbm I_NDBM /**/
?H:#$i_gdbmndbm I_GDBMNDBM /**/
?H:#$i_gdbm_ndbm I_GDBM_NDBM /**/
?H:#$d_ndbm HAS_NDBM /**/
?H:#$d_ndbm_h_uses_prototypes NDBM_H_USES_PROTOTYPES /**/
?H:#$d_gdbmndbm_h_uses_prototypes GDBMNDBM_H_USES_PROTOTYPES /**/
?H:#$d_gdbm_ndbm_h_uses_prototypes GDBM_NDBM_H_USES_PROTOTYPES /**/
?H:.
?T:d_dbm_open name hdr ihdr ndbm_hdr_protochk
?LINT:set d_ndbm d_gdbmndbm_h_uses_prototypes d_gdbm_ndbm_h_uses_prototypes
d_ndbm_h_uses_prototypes
: see if ndbm.h is available
set ndbm.h i_ndbm
eval $inhdr
: Compatibility location for RedHat 7.1
set gdbm/ndbm.h i_gdbmndbm
eval $inhdr
: Compatibility location for Debian 4.0
set gdbm-ndbm.h i_gdbm_ndbm
eval $inhdr

val="$undef"
if $test "$i_ndbm" = "$define" -o "$i_gdbmndbm" = "$define" -o "$i_gdbm_ndbm" = "$define"; then
 : see if dbm_open exists
 set
 dbm_open d_dbm_open
 eval $inlibc
 case "$d_dbm_open" in
 $undef)
  i_ndbm="$undef"
  i_gdbmndbm="$undef"
  i_gdbm_ndbm="$undef"
  echo "We won't be including <ndbm.h>"
  val="$undef"
  ;;
 *) val="$define"
    ;;
 esac
fi
set d_ndbm
eval $setvar

ndbm_hdr_protochk='name=$1; hdr=$2;
```

```
eval "ihdr=\$""i_$name";
val="$undef";
if $test "$ihdr" = "$define"; then
 $echo "Checking if your <$hdr> uses prototypes..." >&4;
 case "$d_cplusplus" in
 $define) ./protochk "$extern_C void dbm_close(DBM *);" literal "extern \"C\" {" $ihdr $hdr literal "}" &&
val="$define" ;;
 *) ./protochk "$extern_C void dbm_close(int, int);" $ihdr $hdr || val="$define" ;;
 esac;
 case "$val" in
 $define) $echo "Your <$hdr> seems to have prototypes";;
 *) $echo "Your <$hdr> does not seem to have prototypes";;
 esac;
fi;
set "d_${name}_h_uses_prototypes";
eval $setvar'

set ndbm ndbm.h
eval $ndbm_hdr_protochk
set gdbmndbm gdbm/ndbm.h
eval $ndbm_hdr_protochk
set gdbm_ndbm gdbm-ndbm.h
eval $ndbm_hdr_protochk

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_ndbm.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_atanh: Inlibc
?MAKE: -pick add $@ %<
?S:d_atanh:
?S: This variable conditionally defines the HAS_ATANH symbol, which
?S: indicates to the C program that the atanh() routine is available.
?S:.
?C:HAS_ATANH:
?C: This symbol, if defined, indicates that the atanh routine is
?C: available to do the inverse hyperbolic tangent function.
?C:.
?H:#$d_atanh HAS_ATANH  /**/
?H:.
?LINT:set d_atanh
: see if atanh exists
set atanh d_atanh
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_atanh.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_off64_t: \
 Inlibc Setvar Compile rm_try cat lseeksize
?MAKE: -pick add $@ %<
?S:d_off64_t:
?S: This symbol will be defined if the C compiler supports off64_t.
?S:.
?C:HAS_OFF64_T:
?C: This symbol will be defined if the C compiler supports off64_t.
?C:.
?H:#$d_off64_t HAS_OFF64_T  /**/
?H:.
?LINT:set d_off64_t
: check for off64_t
echo " "
echo "Checking to see if you have off64_t..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <unistd.h>
int main() { off64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have off64_t."
else
 val="$undef"
 echo "You do not have off64_t."
 case "$lseeksize" in
 8) echo "(Your off_t is 64 bits, so you could use that.)" ;;
 esac
fi
$rm_try
set
 d_off64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_off64_t.U
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```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_dup3: Inlibc
?MAKE: -pick add $@ %<
?S:d_dup3:
?S: This variable conditionally defines HAS_DUP3 if dup3() is
?S: available to duplicate file descriptors.
?S:.
?C:HAS_DUP3:
?C: This symbol, if defined, indicates that the dup3 routine is
?C: available to duplicate file descriptors.
?C:.
?H:#$d_dup3 HAS_DUP3 /**/
?H:.
?LINT:set d_dup3
: see if dup3 exists
set dup3 d_dup3
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dup3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tminsys.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tminsys.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_tminsys: contains Setvar Findhdr
```

```
?MAKE: -pick add $@ %<
?S:d_tminsys:
?S: This variable conditionally defines TM_IN_SYS if this system
?S: declares "struct tm" in <sys/time.h> rather than <time.h>.
?S:.
?C:TM_IN_SYS (TMINSYS):
?C: This symbol is defined if this system declares "struct tm" in
?C: <sys/time.h> rather than <time.h>.
  We can't just say
?C: -I/usr/include/sys because some systems have both time files, and
?C: the -I trick gets the wrong one.
?C:.
?H:#$d_tminsys TM_IN_SYS  /**/
?H:.
?LINT:set d_tminsys
: see if struct tm is defined in sys/time.h
echo " "
if $contains 'struct tm' `./findhdr time.h` >/dev/null 2>&1 ; then
 echo "You have struct tm defined in <time.h> rather than <sys/time.h>." >&4
 val="$undef"
else
 echo "You have struct tm defined in <sys/time.h> rather than <time.h>." >&4
 val="$define"
fi
set d_tminsys
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tminsys.U
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```
?RCS: $Id: d_internet.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_internet.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:04  ram
?RCS: patch10: most mailers support Internet addresses nowadays (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_internet: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_internet:
?S: This variable conditionally defines the INTERNET symbol, which
?S: indicates to the C program that there is a mailer available
 which
?S: supports internet-style addresses (user@site.domain).
?S:.
?C:INTERNET:
?C: This symbol, if defined, indicates that there is a mailer available
?C: which supports internet-style addresses (user@site.domain).
?C:.
?H:#$d_internet INTERNET /**/
?H:.
?LINT:set d_internet
: check for internet mailer
dflt=y
case "$d_internet" in
"$undef") dflt=n;;
esac
cat <<EOM

Most mailers can deliver mail to addresses of the INTERNET persuasion,
such as user@host.edu.  Some older mailers, however, require the complete
path to the destination to be specified in the address.

EOM
rp="Does your mailer understand INTERNET addresses?"
. ./myread
case "$ans" in
y*) val="$define";;
*)  val="$undef";;
esac
set d_internet
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_internet.U
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_gconvert.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:38  ram
?RCS: patch61: integrated new unit from perl5
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:55:59  ram
?RCS: patch56: improved comments about the Gconvert macro (ADO)
?RCS: patch56: force compile-link test since it may exist but be unusable (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:51  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_Gconvert:
 cat cc ccflags ldflags libs rm_try _o
?MAKE: -pick add $@ %<
?S:d_Gconvert:
?S: This variable holds what Gconvert is defined as to convert
?S: floating point numbers into strings. It could be 'gconvert'
?S: or a more complex macro emulating gconvert with gcvt() or sprintf.
?S:.
?C:Gconvert:
?C: This preprocessor macro is defined to convert a floating point
?C: number to a string without a trailing decimal point.  This
?C: emulates the behavior of sprintf("%g"), but is sometimes much more
?C: efficient.  If gconvert() is not available, but gcvt() drops the
?C: trailing decimal point, then gcvt() is used.  If all else fails,
?C: a macro using sprintf("%g") is used. Arguments for the Gconvert
?C: macro are: value, number of digits, whether trailing zeros should
?C: be retained, and the output buffer.
?C: Possible values are:
?C:  d_Gconvert='gconvert((x),(n),(t),(b))'
?C:  d_Gconvert='gcvt((x),(n),(b))'
?C:  d_Gconvert='sprintf((b),"%.*g",(n),(x))'
?C: The last two assume trailing zeros should
 not be kept.
?C:.
?H:#define Gconvert(x,n,t,b) $d_Gconvert
?H:.
?T: xxx_list xxx_convert
?F:!try
?X:
: Check how to convert floats to strings.
echo " "
echo "Checking for an efficient way to convert floats to strings."
?X: We want to be sure to drop trailing decimal points (perl5
```

```
?X: needs this).
$cat >try.c <<'EOP'
#ifdef TRY_gconvert
#define Gconvert(x,n,t,b) gconvert((x),(n),(t),(b))
char *myname = "gconvert";
#endif
#ifdef TRY_gcvt
#define Gconvert(x,n,t,b) gcvt((x),(n),(b))
char *myname = "gcvt";
#endif
#ifdef TRY_sprintf
#define Gconvert(x,n,t,b) sprintf((b),"%.*g",(n),(x))
char *myname = "sprintf";
#endif

#include <stdio.h>

int
checkit(expect, got)
char *expect;
char *got;
{
   if (strcmp(expect, got)) {
  printf("%s oddity:  Expected %s, got %s\n",
   myname, expect, got);
  exit(1);
 }
}

int
int main()
{
 char buf[64];
 buf[63] = '\0';

 /* This must be 1st test on (which?) platform */
 /* Alan Burlison <AlanBurlsin@unn.unisys.com> */
 Gconvert(0.1, 8, 0, buf);
 checkit("0.1",
 buf);

 Gconvert(1.0, 8, 0, buf);
 checkit("1", buf);

 Gconvert(0.0, 8, 0, buf);
 checkit("0", buf);

 Gconvert(-1.0, 8, 0, buf);
```

```
 checkit("-1", buf);

 /* Some Linux gcvt's give 1.e+5 here. */
 Gconvert(100000.0, 8, 0, buf);
 checkit("100000", buf);

 /* Some Linux gcvt's give -1.e+5 here. */
 Gconvert(-100000.0, 8, 0, buf);
 checkit("-100000", buf);

 exit(0);
}
EOP
?X: List of order in which to search for functions.
?X: Usual order of efficiency is gconvert gcvt sprintf
?X: Respect a previous or hinted value.
case "$d_Gconvert" in
gconvert*) xxx_list='gconvert gcvt sprintf' ;;
gcvt*) xxx_list='gcvt gconvert sprintf' ;;
sprintf*) xxx_list='sprintf gconvert gcvt' ;;
*) xxx_list='gconvert gcvt sprintf' ;;
esac

for xxx_convert in $xxx_list; do
 echo "Trying $xxx_convert"
 $rm_try
 if $cc $ccflags -DTRY_$xxx_convert $ldflags -o try \
  try.c $libs > /dev/null 2>&1 ; then
  echo "$xxx_convert" found. >&4
  if ./try; then
   echo "I'll use $xxx_convert to convert floats
 into a string." >&4
   break;
  else
   echo "...But $xxx_convert didn't work as I expected."
  fi
 else
  echo "$xxx_convert NOT found." >&4
 fi
done

case "$xxx_convert" in
gconvert) d_Gconvert='gconvert((x),(n),(t),(b))' ;;
gcvt) d_Gconvert='gcvt((x),(n),(b))' ;;
*) d_Gconvert='sprintf((b),"%.*g",(n),(x))' ;;
esac

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gconvert.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpagsz.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:10  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpagsz pagesize: Oldconfig Myread Inlibc cat contains +cc +ccflags \
 libs rm Findhdr
?MAKE: -pick add $@ %<
?S:d_getpagsz:
?S: This variable conditionally defines HAS_GETPAGESIZE if getpagesize()
?S: is available to get the system page size.
?S:.
?S:pagesize (pagsize):
?S: This
 variable holds the size in bytes of a system page.
?S:.
?C:HAS_GETPAGESIZE (GETPAGESIZE):
?C: This symbol, if defined, indicates that the getpagesize system call
?C: is available to get system page size, which is the granularity of
?C: many memory management calls.
?C:.
?X: Don't name it PAGESIZE, this is sometimes used by <sys/param.h>
?C:PAGESIZE_VALUE (PAGSIZE):
?C: This symbol holds the size in bytes of a system page (obtained via
?C: the getpagesize() system call at configuration time or asked to the
?C: user if the system call is not available).
?C:.
?H:#$d_getpagsz HAS_GETPAGESIZE  /**/
?H:#define PAGESIZE_VALUE $pagesize /* System page size, in bytes */
?H:.
?F:!page
?T:guess
?LINT:set d_getpagsz
```

```
: see if getpagesize exists
set getpagesize d_getpagsz
eval $inlibc

@if pagesize || PAGESIZE_VALUE
: determine the system page size
echo " "
guess=' (OK to guess)'
case "$pagesize" in
")
 $cat >page.c <<EOP
extern int getpagesize();
int main()
{
 printf("%d\n", getpagesize());
}
EOP
 echo
 "Computing the granularity of memory management calls..." >&4
 dflt='4096'
 case "$d_getpagsz" in
 "$define")
  if $cc $ccflags -o page page.c $libs >/dev/null 2>&1; then
   dflt=`./page`
   guess=''
  else
   echo "(I can't seem to compile the test program--guessing)"
  fi
  ;;
 *)
  if $cc $ccflags -o page page.c $libs -lPW >/dev/null 2>&1; then
   dflt=`./page`
   guess=''
   echo "(For your eyes only: I used the getpagesize() from -lPW.)"
  else
   if $contains PAGESIZE `./findhdr sys/param.h` >/dev/null 2>&1; then
    $cat >page.c <<EOP
#include <sys/param.h>
int main()
{
 printf("%d\n", PAGESIZE);
}
EOP
    if $cc $ccflags -o page page.c $libs >/dev/null 2>&1; then
     dflt=`./page`
     guess=''
     echo "(Using value of PAGESIZE found in <sys/param.h>.)"
    fi
```

```
   fi
  fi
  ;;
 esac
 ;;
*) dflt="$pagesize"; guess=";;
esac
rp="What is the system page size, in bytes$guess?"
. ./myread
pagesize=$ans
$rm -f page.c page

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpagsz.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getitimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_getitimer:
?S: This variable conditionally defines the HAS_GETITIMER symbol, which
?S: indicates to the C program that the getitimer() routine is available.
?S:.
?C:HAS_GETITIMER:
?C: This symbol, if defined, indicates that the getitimer routine is
?C: available to return interval timers.
?C:.
?H:#$d_getitimer HAS_GETITIMER  /**/
?H:.
?LINT:set d_getitimer
: see if getitimer exists
set getitimer d_getitimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getitimer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:siteman1dir siteman1direxp installsiteman1dir: Getfile \
 Setprefixvar prefix siteprefix man1dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:siteman1dir=''
?S:siteman1dir:
?S: This variable contains the name of the directory in which site-specific
?S: manual source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After perl
 has been installed, users may install their own local
?S: man1 pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:siteman1direxp=''
?S:siteman1direxp:
?S: This variable is the same as the siteman1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsiteman1dir=''
?S:installsiteman1dir:
?S: This variable is really the same as siteman1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsiteman1dir
?LINT:set siteman1dir
?LINT:set siteman1direxp
: determine where add-on manual pages go
case "$siteman1dir" in
'') dflt=`echo $man1dir | $sed "s#^$prefix#$siteprefix#"` ;;
*) dflt=$siteman1dir ;;
esac
case "$dflt" in
'|' ') dflt=none ;;
```

```
esac
fn=dn+~
rp='Pathname
 where the site-specific manual pages should be installed?'
. ./getfile
prefixvar=siteman1dir
. ./setprefixvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/siteman1dir.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_castneg.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:11:21  ram
?RCS: patch54: made sure cc and ccflags are conditional dependencies
?RCS: patch54: added improved test case for Interactive Unix
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:10:50  ram
?RCS: patch36: don't forget to tell user about compilation failures (ADO)
?RCS: patch36: declare signal handler correctly using 'signal_t' (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Can
 the compiler cast negative / odd floats to unsigned values.
?X:
?MAKE:d_castneg castflags: cat +cc +ccflags rm_try Setvar signal_t
?MAKE: -pick add $@ %<
?S:d_castneg:
?S: This variable conditionally defines CASTNEG, which indicates
?S: wether the C compiler can cast negative float to unsigned.
?S:.
?S:castflags:
?S: This variable contains a flag that precise difficulties the
?S: compiler has casting odd floating values to unsigned long:
?S:  0 = ok
```

```
?S:  1 = couldn't cast < 0
?S:  2 = couldn't cast >= 0x80000000
?S:  4 = couldn't cast in argument expression list
?S:.
?C:CASTNEGFLOAT:
?C: This symbol is defined if the C compiler can cast negative
?C: numbers to unsigned longs, ints and shorts.
?C:.
?C:CASTFLAGS:
?C: This symbol contains flags that say what difficulties the compiler
?C: has casting odd floating values to unsigned long:
?C:  0 = ok
?C:  1 = couldn't cast < 0
?C:  2 = couldn't cast >= 0x80000000
?C:  4 = couldn't cast in argument expression list
?C:.
?H:#$d_castneg CASTNEGFLOAT  /**/
?H:#define
 CASTFLAGS $castflags  /**/
?H:.
?F:!try
?LINT:set d_castneg
: check for ability to cast negative floats to unsigned
echo " "
echo 'Checking whether your C compiler can cast negative float to unsigned.' >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#include <signal.h>
$signal_t blech() { exit(7); }
$signal_t blech_in_list() { exit(4); }
unsigned long dummy_long(p) unsigned long p; { return p; }
unsigned int dummy_int(p) unsigned int p; { return p; }
unsigned short dummy_short(p) unsigned short p; { return p; }
int main()
{
 double f = -123.;
 unsigned long along;
 unsigned int aint;
 unsigned short ashort;
 int result = 0;

 signal(SIGFPE, blech);
 along = (unsigned long)f;
 aint = (unsigned int)f;
 ashort = (unsigned short)f;
 if (along != (unsigned long)-123)
  result |= 1;
 if (aint != (unsigned int)-123)
```

```
  result |= 1;
 if (ashort != (unsigned short)-123)
  result |= 1;
 f = (double)0x40000000;
 f = f + f;
 along = 0;
 along = (unsigned long)f;
 if
 (along != 0x80000000)
  result |= 2;
 f -= 1.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x7fffffff)
  result |= 1;
 f += 2.;
 along = 0;
 along = (unsigned long)f;
 if (along != 0x80000001)
  result |= 2;
 if (result)
  exit(result);
?X:
?X: The following is a test for Interactive Unix Version 4.1, which
?X: has an 'improved' compiler which can correctly cast negative
?X: floats in expression lists, but apparently not in argument lists.
?X: Contributed by Winfried Koenig <win@incom.rhein-main.de>
?X:
 signal(SIGFPE, blech_in_list);
 f = 123.;
 along = dummy_long((unsigned long)f);
 aint = dummy_int((unsigned int)f);
 ashort = dummy_short((unsigned short)f);
 if (along != (unsigned long)123)
  result |= 4;
 if (aint != (unsigned int)123)
  result |= 4;
 if (ashort != (unsigned short)123)
  result |= 4;
 exit(result);

}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 ./try
 castflags=$?
else
 echo "(I can't seem to compile the test program--assuming it can't)"
```

```
 castflags=7
fi
case
 "$castflags" in
0) val="$define"
 echo "Yup, it can."
 ;;
*) val="$undef"
 echo "Nope, it can't."
 ;;
esac
set d_castneg
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_castneg.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getmnt: Inlibc
?MAKE: -pick add $@ %<
?S:d_getmnt:
?S: This variable conditionally defines the HAS_GETMNT symbol, which
?S: indicates to the C program that the getmnt() routine is available
?S: to retrieve one or more mount info blocks by filename.
?S:.
?C:HAS_GETMNT:
?C: This symbol, if defined, indicates that the getmnt routine is
?C: available to get filesystem mount info by filename.
?C:.
?H:#$d_getmnt HAS_GETMNT  /**/
?H:.
?LINT:set d_getmnt
: see if getmnt exists
set getmnt d_getmnt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getmnt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libnlist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libnlist.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:08:02  ram
?RCS: patch61: added usrinc and mips on the dependency line
?RCS: patch61: make sure we call ./mips
?RCS: patch61: added a ?LINT: hint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libnlist: Loc libpth Guess usrinc _a
?MAKE: -pick add $@ %<
?S:libnlist (libmld):
?S: This variable contains the name of the library required to
 get the
?S: definition of the nlist() function.  On a MIPS RISC/OS box, it is -lmld.
?S: Under Sys Vr4, it is -lelf.  Otherwise, its value is empty.
?S:.
?T:xxx
?LINT:use usrinc
: see if we need a special library for 'nlist()'
echo " "
: How about doing this if nlist is not in libc...
if ./mips ; then
 libnlist='-lmld'
else
 xxx=`./loc libelf$_a x $libpth`
 case "$xxx" in
 x)  ;;
 *)
  libnlist="$xxx"
  ;;
 esac
fi
case "$libnlist" in
") echo "No special library for nlist() seems necessary." >&4
 ;;
*)  echo "nlist() can be found in $libnlist." >&4
 ;;
```

```
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libnlist.U
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:uselongdouble: Myread Oldconfig Setvar cat test usemorebits
?MAKE: -pick add $@ %<
?Y:TOP
?S:uselongdouble:
?S: This variable conditionally defines the USE_LONG_DOUBLE symbol,
?S: and indicates that long doubles should be used when available.
?S:.
?C:USE_LONG_DOUBLE:
?C: This symbol, if defined, indicates that long doubles should
?C: be used when available.
?C:.
?H:?%<:#ifndef USE_LONG_DOUBLE
?H:?%<:#$uselongdouble USE_LONG_DOUBLE  /**/
?H:?%<:#endif
?H:.
?LINT:extern ccflags
?LINT:use usemorebits
?F:!uselongdouble.cbu
: Check for uselongdouble support
case "$ccflags" in
*-DUSE_LONG_DOUBLE*|*-DUSE_MORE_BITS*) uselongdouble="$define" ;;
esac

case "$uselongdouble" in
$define|true|[yY]*) dflt='y';;
*)
 dflt='n';;
esac
cat <<EOM

Perl can be built to take advantage of long doubles which
(if available) may give more accuracy and range for floating point numbers.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
```

```
rp='Try to use long doubles if available?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set uselongdouble
eval $setvar

case "$uselongdouble" in
true|[yY]*) uselongdouble="$define" ;;
esac

: Look for a hint-file generated 'call-back-unit'.  If the
: user has specified that long doubles should be used,
: we may need to set or change some other defaults.
if $test -f uselongdouble.cbu; then
   echo "Your platform has some specific hints regarding long doubles, using them..."
   . ./uselongdouble.cbu
else
   case "$uselongdouble" in
 $define)
  $cat <<EOM
(Your platform does not have any specific hints for long doubles.)
EOM
 ;;
   esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/uselongdbl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_SHM_MAC.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_SHM_MAC.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_SHM_MAC d_SHM_PRM d_SHM_SEG d_SHM_IMMU: cat d_shm test rm +cc +ccflags
```

```
?MAKE: -pick add $@ %<
?S:d_SHM_MAC:
?S: Sometimes, the SHMLBA manifest needs sys/sysmacros.h, usually for
?S: the ctob() macro.
?S:.
?S:d_SHM_PRM:
?S: Sometimes, the SHMLBA manifest needs sys/param.h, usually for the
?S: NBPC constant.
?S:.
?S:d_SHM_SEG:
?S: Sometimes,
 the SHMLBA manifest needs sys/seg.h, usually for the
?S: SNUMSHFT constant.
?S:.
?S:d_SHM_IMMU:
?S: Sometimes, the SHMLBA manifest needs sys/immu.h, usually for the
?S: stob() macro.
?S:.
?C:SHMLBA_WANTS_SYSMACROS:
?C: This value tells us to include <sys/sysmacros.h> because SHMLBA
?C: needs something from there, probably the ctob() macro.
?C:.
?C:SHMLBA_WANTS_PARAM:
?C: This value tells us to include <sys/param.h> because SHMLBA needs
?C: something from there, probably the NBPC constant.
?C:.
?C:SHMLBA_WANTS_SEG:
?C: This value tells us to include <sys/seg.h> because SHMLBA needs
?C: something from there, probably the SNUMSHFT constant.
?C:.
?C:SHMLBA_WANTS_IMMU:
?C: This value tells us to include <sys/immu.h> because SHMLBA needs
?C: something from there, probably the stob() macro.  (tower_600 only?)
?C:.
?H:#$d_SHM_MAC SHMLBA_WANTS_SYSMACROS /* SHMLBA wants ctob()? */
?H:#$d_SHM_PRM SHMLBA_WANTS_PARAM /* SHMLBA wants NBPC? */
?H:#$d_SHM_SEG SHMLBA_WANTS_SEG /* SHMLBA wants
 SNUMSHFT? */
?H:#$d_SHM_IMMU SHMLBA_WANTS_IMMU /* SHMLBA wants stob()? */
?H:.
?T:flags D_sys_immu D_sys_seg D_sys_sysmacros D_sys_param
: check for SHMLBA braindamage
d_SHM_MAC="$undef"
d_SHM_PRM="$undef"
d_SHM_SEG="$undef"
d_SHM_IMMU="$undef"
if $test "$d_shm" = "$define" ; then
 echo " "
```

```
 $cat >&4 <<EOM
Checking to see if SHMLBA needs additional headers.
The headers I'll be checking are:

   sys/macros.h (for the ctob() macro)
   sys/param.h  (for NBPC)
   sys/seg.h    (for SNUMSHFT)
   sys/immu.h  (for the stob() macro)

EOM
 $cat >shm_mac.c <<'EOCP'
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/shm.h>
#ifdef I_SYS_IMMU
#include <sys/immu.h>
#endif
#ifdef I_SYS_SYSMACROS
#include <sys/sysmacros.h>
#endif
#ifdef I_SYS_PARAM
#include <sys/param.h>
#endif
#ifdef I_SYS_SEG
#include <sys/seg.h>
#endif

int main() {
 int foo = SHMLBA ;
 }
EOCP
 flags='xxx'
 for D_sys_immu in " '-DI_SYS_IMMU'; do
 for D_sys_seg in " '-DI_SYS_SEG'; do
 for D_sys_sysmacros in " '-DI_SYS_SYSMACROS';
 do
 for D_sys_param in " '-DI_SYS_PARAM'; do
  case "$flags" in
  'xxx')
   case "$D_sys_immu$D_sys_param$D_sys_sysmacros$D_sys_seg" in
   ")
    echo "Trying it normally..."
    ;;
   *)
   echo "Trying $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg"
   ;;
   esac
   if $cc $ccflags \
```

```
  $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg \
  -o shm_mac shm_mac.c >/dev/null 2>&1 ; then
   set X $D_sys_immu $D_sys_param $D_sys_sysmacros $D_sys_seg
   shift
   flags="$*"
   echo "Succeeded with $flags"
  fi
  ;;
 esac
done
done
done
done
case "$flags" in
xxx)
 echo "I don't know how to keep SHMLBA happy.  Good luck!"
 ;;
esac
case "$flags" in
*I_SYS_PARAM*) d_SHM_PRM="$define";;
esac
case "$flags" in
*I_SYS_SYSMACROS*) d_SHM_MAC="$define";;
esac
case "$flags" in
*I_SYS_SEG*) d_SHM_SEG="$define";;
esac
case "$flags" in
*I_SYS_IMMU*) d_SHM_IMMU="$define";;
esac
fi
$rm -f shm_mac*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_SHM_MAC.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getnent.U,v $
```

```
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnent:
?S: This variable conditionally defines HAS_GETNETENT if getnetent() is
?S: available to look up network names in some data base or another.
?S:.
?C:HAS_GETNETENT:
?C: This symbol, if defined, indicates that the getnetent() routine is
?C: available to look up network names in some data base
 or another.
?C:.
?H:#$d_getnent HAS_GETNETENT  /**/
?H:.
?LINT:set d_getnent
: see if getnetent exists
set getnetent d_getnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getnent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bzero.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bzero.U,v $
?RCS: Revision 3.0.1.2  1993/10/16  13:48:15  ram
?RCS: patch12: added magic support for bzero()
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:01:33  ram
?RCS: patch10: now only defines HAS_BZERO, no macro remap on memset (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bzero: Inlibc
?MAKE: -pick add $@ %<
?S:d_bzero:
```

```
?S: This variable conditionally defines the HAS_BZERO
 symbol if
?S: the bzero() routine is available to set memory to 0.
?S:.
?C:HAS_BZERO:
?C: This symbol is defined if the bzero() routine is available to
?C: set a memory block to 0.
?C:.
?H:#$d_bzero HAS_BZERO /**/
?H:.
?M:bzero: HAS_BZERO
?M:#ifndef HAS_BZERO
?M:#ifndef bzero
?M:#define bzero(s,l) memset((s),0,(l))
?M:#endif
?M:#endif
?M:.
?LINT:set d_bzero
: see if bzero exists
set bzero d_bzero
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bzero.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethbyad.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_gethbyaddr: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbyaddr:
?S: This variable conditionally defines the HAS_GETHOSTBYADDR symbol, which
?S: indicates to the C program that the gethostbyaddr() routine is available
?S: to look up hosts by their IP addresses.
?S:.
?C:HAS_GETHOSTBYADDR:
?C: This symbol, if defined, indicates that the gethostbyaddr() routine is
?C: available to look up hosts by their IP addresses.
?C:.
?H:#$d_gethbyaddr HAS_GETHOSTBYADDR  /**/
?H:.
?LINT:set d_gethbyaddr
: see if gethostbyaddr exists
```

```
set gethostbyaddr d_gethbyaddr
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethbyad.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_termio.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:54  ram
?RCS: patch36: call ./usg and ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1994/08/29  16:26:38  ram
?RCS: patch32: don't include all three I_* symbols in config.h
?RCS: patch32: (had forgotten to undo this part last time)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:25:03  ram
?RCS: patch27: undone ADO's fix in previous patch since it was useless
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:05:23
 ram
?RCS: patch23: now include all three defines in config.h (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_termio i_sgtty i_termios: test Inlibc Cppsym Guess Setvar Findhdr Warn
?MAKE: -pick add $@ %<
?S:i_termio:
?S: This variable conditionally defines the I_TERMIO symbol, which
?S: indicates to the C program that it should include <termio.h> rather
?S: than <sgtty.h>.
?S:.
?S:i_termios:
?S: This variable conditionally defines the I_TERMIOS symbol, which
?S: indicates to the C program that the POSIX <termios.h> file is
?S: to be included.
?S:.
?S:i_sgtty:
```

```
?S: This variable conditionally defines the I_SGTTY symbol, which
?S: indicates to the C program that it should include <sgtty.h> rather
?S: than <termio.h>.
?S:.
?C:I_TERMIO:
?C: This symbol, if defined, indicates that the program should include
?C: <termio.h> rather than <sgtty.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of
 this symbol.
?C:.
?C:I_TERMIOS:
?C: This symbol, if defined, indicates that the program should include
?C: the POSIX termios.h rather than sgtty.h or termio.h.
?C: There are also differences in the ioctl() calls that depend on the
?C: value of this symbol.
?C:.
?C:I_SGTTY:
?C: This symbol, if defined, indicates that the program should include
?C: <sgtty.h> rather than <termio.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of this symbol.
?C:.
?H:#$i_termio I_TERMIO  /**/
?H:#$i_termios I_TERMIOS  /**/
?H:#$i_sgtty I_SGTTY  /**/
?H:.
?T:val2 val3
?LINT:set i_termio i_sgtty i_termios
: see if this is a termio system
val="$undef"
val2="$undef"
val3="$undef"
?X: Prefer POSIX-approved termios.h over all else
if $test `./findhdr termios.h`; then
 set tcsetattr i_termios
 eval $inlibc
 val3="$i_termios"
fi
echo " "
case "$val3" in
"$define") echo "You have POSIX termios.h... good!" >&4;;
*) if ./Cppsym pyr; then
  case "`/bin/universe`" in
  ucb) if $test `./findhdr
 sgtty.h`; then
    val2="$define"
    echo "<sgtty.h> found." >&4
   else
    echo "System is pyramid with BSD universe."
```

```
    ./warn "<sgtty.h> not found--you could have problems."
   fi;;
  *) if $test `./findhdr termio.h`; then
    val="$define"
    echo "<termio.h> found." >&4
   else
    echo "System is pyramid with USG universe."
    ./warn "<termio.h> not found--you could have problems."
   fi;;
  esac
?X: Start with USG to avoid problems if both usg/bsd was guessed
 elif ./usg; then
  if $test `./findhdr termio.h`; then
   echo "<termio.h> found." >&4
   val="$define"
  elif $test `./findhdr sgtty.h`; then
   echo "<sgtty.h> found." >&4
   val2="$define"
  else
   ./warn "Neither <termio.h> nor <sgtty.h> found--cross fingers!"
  fi
 else
  if $test `./findhdr sgtty.h`; then
   echo "<sgtty.h> found." >&4
   val2="$define"
  elif $test `./findhdr termio.h`; then
   echo "<termio.h> found." >&4
   val="$define"
  else
   ./warn "Neither <sgtty.h> nor <termio.h> found--cross
 fingers!"
  fi
 fi;;
esac
set i_termio; eval $setvar
val=$val2; set i_sgtty; eval $setvar
val=$val3; set i_termios; eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_termio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myinit.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:47:29  ram
?RCS: patch44: leading comment states this unit comes before option processing
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: If you want to initialize any default values, copy this unit to your
?X: personal U directory and add the assignments to the end.  This file
?X: is included after variables are initialized but before any old
?X: config.sh file is read in and before
 any Configure switch processing.
?X:
?MAKE:Myinit: Init
?MAKE: -pick add $@ %<
?LINT: nocomment
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Myinit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_pthread_attr_setscope: Inlibc
?MAKE: -pick add $@ %<
?S:d_pthread_attr_setscope:
?S: This variable conditionally defines HAS_PTHREAD_ATTR_SETSCOPE if
?S: pthread_attr_setscope() is available to set the contention scope
?S: attribute of a thread attribute object.
?S:.
?C:HAS_PTHREAD_ATTR_SETSCOPE:
?C: This symbol, if defined, indicates that the pthread_attr_setscope
?C: system call is available to set the contention scope attribute of
?C: a thread attribute object.
?C:.
```

```
?H:#$d_pthread_attr_setscope HAS_PTHREAD_ATTR_SETSCOPE  /**/
?H:.
?LINT:set
 d_pthread_attr_setscope
: see if pthread_attr_setscope exists
set pthread_attr_setscope d_pthread_attr_setscope
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_pthread_attr_ss.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chsize.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_chsize.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_chsize: Inlibc
?MAKE: -pick add $@ %<
?S:d_chsize:
?S: This variable conditionally defines the CHSIZE symbol, which
?S: indicates to the C program that the chsize() routine is available
?S: to truncate files.  You might need a -lx to get this routine.
?S:.
?C:HAS_CHSIZE (CHSIZE):
?C: This symbol, if defined, indicates that the chsize
 routine is available
?C: to truncate files.  You might need a -lx to get this routine.
?C:.
?H:#$d_chsize HAS_CHSIZE  /**/
?H:.
?LINT:set d_chsize
: see if chsize exists
set chsize d_chsize
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chsize.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mboxchar.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mboxchar.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:13:12  ram
?RCS: patch56: ensure ctrl-A characters are visible in prompt (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:11:22  ram
?RCS: patch23: added support for MMDF mailboxes (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mboxchar: cat package shsharp Myread Oldconfig
?MAKE: -pick add $@ %<
?S:mboxchar:
?S: This variable
 contains the eventual value of the MBOXCHAR symbol,
?S: which is how a C program can identify a file as a mailbox.
?S:.
?C:MBOXCHAR:
?C: This symbol contains a character which will match the beginning
?C: of a mailbox file.
?C:.
?H:#define MBOXCHAR '$mboxchar'  /**/
?H:.
?T:CTRLA
?INIT:CTRLA=`echo a | tr a '\001'`
: determine how to determine when a file is a mailbox
case "$mboxchar" in
") dflt=F;;
?X: The following ^A is two-chars to ensure it will print out -- WED
"$CTRLA") dflt='^A';;
*)  dflt="$mboxchar";;
esac
$cat <<EOM

In saving articles, $package wants to differentiate between saving to
mailbox format files and normal files.  It does this by examining the
```

```
first character of the file in question.  On most systems the first line
starts with "From ...", so the first character is an F.  Other systems
use magic cookies like control codes between articles, so one of those
would be first.  For example, MMDF messages are separated with lines of
four control-A's (you may specify one
 as ^A, i.e. caret A).

EOM
rp="What's the first character of a mailbox file?"
. ./myread
mboxchar="$ans"
case "$mboxchar" in
'F') ;;
"$CTRLA") ;;
'^A'|'^a') mboxchar="$CTRLA";;
*)  cat <<'EOM'

You will need to edit the shell script mbox.saver to properly append an
article to a mailbox.  The arguments to the script are documented in
EOM
 case "$shsharp" in
 false) echo "comments in mbox.saver.std.";;
 true) echo "comments in the shell script itself.";;
 esac
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mboxchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setvbuf.U,v 3.0.1.1 1994/08/29 16:11:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_setvbuf.U,v $
?RCS:
?MAKE:d_setvbuf: Inlibc
?MAKE: -pick add $@ %<
?S:d_setvbuf:
?S: This variable conditionally defines the HAS_SETVBUF symbol, which
?S: indicates to the C program that the setvbuf() routine is available
?S: to change buffering on an open stdio stream.
?S:.
```

```
?C:HAS_SETVBUF :
?C: This symbol, if defined, indicates that the setvbuf routine is
?C: available to change buffering on an open stdio stream.
?C: to a line-buffered mode.
?C:.
?H:#$d_setvbuf HAS_SETVBUF  /**/
?H:.
?LINT:set d_setvbuf
: see if setvbuf exists
set setvbuf d_setvbuf
eval $inlibc

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setvbuf.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: instubperl.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:installusrbinperl: installbin cat bin Myread Setvar test Devel
?MAKE: -pick add $@ %<
?LINT:set installusrbinperl
?Y:TOP
?S:installusrbinperl:
?S: This variable tells whether Perl should be installed also as
?S: /usr/bin/perl in addition to
?S: $installbin/perl
?S:.
?C:INSTALL_USR_BIN_PERL:
?C: This symbol, if defined, indicates that Perl is to be installed
?C: also as /usr/bin/perl.
?C:.
?H:#$installusrbinperl INSTALL_USR_BIN_PERL /**/
?H:.
: determine
 whether to install perl also as /usr/bin/perl

echo " "
if $test -d /usr/bin -a "X$installbin" != X/usr/bin; then
 $cat <<EOM
```

```
Many scripts expect perl to be installed as /usr/bin/perl.

If you want to, I can install the perl you are about to compile
as /usr/bin/perl (in addition to $bin/perl).
EOM
 if test -f /usr/bin/perl; then
    $cat <<EOM

However, please note that because you already have a /usr/bin/perl,
overwriting that with a new Perl would very probably cause problems.
Therefore I'm assuming you don't want to do that (unless you insist).

EOM
    case "$installusrbinperl" in
    "$define"|[yY]*) dflt='y';;
    *)   dflt='n';;
    esac
 else
    $cat <<EOM

Since you don't have a /usr/bin/perl I'm assuming creating one is okay.

EOM
    case "$installusrbinperl" in
    "$undef"|[nN]*) dflt='n';;
    *)   dflt='y';;
    esac
 fi
 rp="Do you want to install perl as /usr/bin/perl?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef" ;;
 esac
else
 val="$undef"
fi
set
 installusrbinperl
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/instubperl.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
```

```
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?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sitearch.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:21:30  ram
?RCS: patch61: created
?RCS:
?MAKE:sitearch sitearchexp installsitearch: afs cat Getfile \
 Oldconfig Prefixit prefix test archname sitelib
?MAKE: -pick add $@ %<
?Y:TOP
?S:sitearch:
?S: This variable contains the eventual value of the SITEARCH symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this
 directory while performing installation (with ~ substitution).
?S:.
?S:sitearchexp:
?S: This variable is the ~name expanded version of sitearch, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installsitearch:
?S: This variable is really the same as sitearchexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:SITEARCH:
?C: This symbol contains the name of the private library for this package.
?C: The library is private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C: The standard distribution will put nothing in this directory.
?C: Individual sites may place their own extensions and modules in
?C: this directory.
?C:.
?C:SITEARCH_EXP:
?C: This symbol contains the ~name expanded version of SITEARCH, to be used
?C: in programs that are not prepared to deal
 with ~ expansion at run-time.
?C:.
?H:#define SITEARCH "$sitearch"  /**/
?H:#define SITEARCH_EXP "$sitearchexp"  /**/
```

```
?H:.
?T:xxx
: determine where site specific architecture-dependent libraries go.
xxx=`echo $sitelib/$archname | sed 's!^$prefix!!'`
: xxx is usually lib/site_perl/archname.
set sitearch sitearch none
eval $prefixit
case "$sitearch" in
") dflt="$sitelib/$archname" ;;
*) dflt="$sitearch" ;;
esac
$cat <<EOM

The installation process will also create a directory for
architecture-dependent site-specific extensions and modules.

EOM
fn=nd~+
rp='Pathname for the site-specific architecture-dependent library files?'
. ./getfile
if $test "X$sitearchexp" != "X$ansexp"; then
 installsitearch=''
fi
sitearch="$ans"
sitearchexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case
 "$installsitearch" in
 ") dflt=`echo $sitearchexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installsitearch";;
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installsitearch="$ans"
else
 installsitearch="$sitearchexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sitearch.U

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```
?RCS: $Id: Unix.U,v 3.0.1.1 1997/02/28 15:20:06 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Unix.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:06  ram
?RCS: patch61: created
?RCS:
?X:
?X: The purpose of this unit is to define things that are common across all
?X: known UNIX platforms. If Configure is ported/used on a non-UNIX
?X: environment, then some of the following variables can be redefined in hint
?X: files.
?X:
?MAKE:Unix _exe _a _o exe_ext lib_ext obj_ext path_sep \
 firstmakefile archobjs rm_try: Oldconfig rm
?MAKE: -pick add $@ %<
?S:_exe:
?S: This
 variable defines the extension used for executable files.
?S: DJGPP, Cygwin and OS/2 use '.exe'.  Stratus VOS uses '.pm'.
?S: On operating systems which do not require a specific extension
?S: for executable files, this variable is empty.
?S:.
?S:_a:
?S: This variable defines the extension used for ordinary library files.
?S: For unix, it is '.a'.  The '.' is included.  Other possible
?S: values include '.lib'.
?S:.
?S:_o:
?S: This variable defines the extension used for object files.
?S: For unix, it is '.o'.  The '.' is included.  Other possible
?S: values include '.obj'.
?S:.
?S:firstmakefile:
?S: This variable defines the first file searched by make.  On unix,
?S: it is makefile (then Makefile).  On case-insensitive systems,
?S: it might be something else.  This is only used to deal with
?S: convoluted make depend tricks.
?S:.
```

```
?S:archobjs:
?S: This variable defines any additional objects that must be linked
?S: in with the program on this architecture.  On unix, it is usually
?S: empty.
  It is typically used to include emulations of unix calls
?S: or other facilities.  For perl on OS/2, for example, this would
?S: include os2/os2.obj.
?S:.
?X: Metaconfig's Obsolete symbol stuff is too over-eager.  In the
?X: perl sources, it picks up things like "P" and "FLOCK" that are
?X: not used in the way Metaconfig thinks they are.  Thus I can't
?X: just declare these obsolete and then run metaconfig -o.
?X: Instead, I'll just handle them here.
?X: Sadly, history has conspired to give us a web of definitions;
?X: this could have been much simpler.
?S:lib_ext:
?S: This is an old synonym for _a.
?S:.
?S:exe_ext:
?S: This is an old synonym for _exe.
?S:.
?S:obj_ext:
?S: This is an old synonym for _o.
?S:.
?S:path_sep:
?S: This is an old synonym for p_ in Head.U, the character
?S: used to separate elements in the command shell search PATH.
?S:.
?S:rm_try:
?S: This is a cleanup variable for try test programs.
?S: Internal Configure use only.
?S:.
?LINT: change p_
?INIT::
 Trailing extension.  Override this in a hint file, if needed.
?INIT:: Extra object files, if any, needed on this platform.
?INIT:archobjs="
: Define several unixisms.
: Hints files or command line option can be used to override them.
: The convoluted testing is in case hints files set either the old
: or the new name.
case "$_exe" in
") case "$exe_ext" in
 ") ;;
 *) _exe="$exe_ext" ;;
 esac
 ;;
esac
```

```
case "$_a" in
") case "$lib_ext" in
   ") _a='.a';;
 *) _a="$lib_ext" ;;
 esac
 ;;
esac
case "$_o" in
") case "$obj_ext" in
 ") _o='.o';;
 *) _o="$obj_ext";;
 esac
 ;;
esac
case "$p_" in
") case "$path_sep" in
 ") p_=':';;
 *) p_="$path_sep";;
 esac
 ;;
esac
exe_ext=$_exe
lib_ext=$_a
obj_ext=$_o
path_sep=$p_

rm_try="$rm -f try try$_exe a.out .out try.[cho] try.$_o core core.try* try.core*"

@if firstmakefile
: Which makefile gets called first.  This is used by make depend.
case "$firstmakefile" in
") firstmakefile='makefile';;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Unix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_msgctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_msgctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_msgctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_msgctl:
?S: This variable conditionally defines the HAS_MSGCTL symbol, which
?S: indicates to the C program that the msgctl() routine is available.
?S:.
?C:HAS_MSGCTL:
?C: This symbol, if defined, indicates that the msgctl() routine is
?C: available to perform message control operations.
?C:.
?H:#$d_msgctl
 HAS_MSGCTL  /**/
?H:.
?LINT:set d_msgctl
: see if msgctl exists
set msgctl d_msgctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_msgctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_stdlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_stdlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_stdlib: Nothing
?MAKE: -pick add $@ %<
?S:i_stdlib:
?S: This variable unconditionally defines the I_STDLIB symbol.
?S:.
?C:I_STDLIB:
```

```
?C: This symbol is always defined, indicating that <stdlib.h> exists
?C: and should be included.
?C:.
?H:#define I_STDLIB  /**/
?H:.
: stub, used only to satisfy other units
i_stdlib='define'
```

Found in
 path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_stdlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the WRITEME file.
?RCS:
?MAKE:d_writev: Inlibc
?MAKE: -pick add $@ %<
?S:d_writev:
?S: This variable conditionally defines the HAS_WRITEV symbol, which
?S: indicates to the C program that the writev() routine is available.
?S:.
?C:HAS_WRITEV:
?C: This symbol, if defined, indicates that the writev routine is
?C: available to do scatter writes.
?C:.
?H:#$d_writev HAS_WRITEV  /**/
?H:.
?LINT:set d_writev
: see if writev exists
set writev d_writev
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_writev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strerror_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
```

```
?RCS:
?MAKE:d_strerror_r strerror_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads extern_C
?MAKE: -pick add $@ %<
?S:d_strerror_r:
?S: This variable conditionally defines the HAS_STRERROR_R symbol,
?S: which indicates to the C program that the strerror_r()
?S: routine is available.
?S:.
?S:strerror_r_proto:
?S: This variable encodes the prototype of strerror_r.
?S: It is zero if d_strerror_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_strerror_r
?S: is defined.
?S:.
?C:HAS_STRERROR_R:
?C: This symbol, if defined, indicates that the strerror_r routine
?C: is available to strerror
 re-entrantly.
?C:.
?C:STRERROR_R_PROTO:
?C: This symbol encodes the prototype of strerror_r.
?C: It is zero if d_strerror_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_strerror_r
?C: is defined.
?C:.
?H:#$d_strerror_r HAS_STRERROR_R /**/
?H:#define STRERROR_R_PROTO $strerror_r_proto /**/
?H:.
?T:try hdrs d_strerror_r_proto
: see if strerror_r exists
set strerror_r d_strerror_r
eval $inlibc
case "$d_strerror_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h define string.h"
 case "$d_strerror_r_proto:$usethreads" in
 ":define") d_strerror_r_proto=define
  set d_strerror_r_proto strerror_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_strerror_r_proto" in
 define)
 case "$strerror_r_proto" in
 "|0) try='int strerror_r(int, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && strerror_r_proto=I_IBW ;;
 esac
```

```
 case "$strerror_r_proto" in
 "|0) try='int strerror_r(int, char*, int);'
 ./protochk "$extern_C $try" $hdrs && strerror_r_proto=I_IBI
 ;;
 esac
 case "$strerror_r_proto" in
 "|0) try='char* strerror_r(int, char*, size_t);'
 ./protochk "$extern_C $try" $hdrs && strerror_r_proto=B_IBW ;;
 esac
 case "$strerror_r_proto" in
 "|0) d_strerror_r=undef
  strerror_r_proto=0
  echo "Disabling strerror_r, cannot determine prototype." >&4 ;;
 * ) case "$strerror_r_proto" in
  REENTRANT_PROTO*) ;;
  *) strerror_r_proto="REENTRANT_PROTO_$strerror_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "strerror_r has no prototype, not using it." >&4 ;;
  esac
  d_strerror_r=undef
  strerror_r_proto=0
  ;;
 esac
 ;;
*) strerror_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_strerror_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sysman.U,v 3.0.1.2 1994/06/20 07:08:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sysman.U,v $
?RCS: Revision 3.0.1.2  1994/06/20  07:08:43  ram
```

```
?RCS: patch30: now explicitly states that /usr/man/man1 is the default
?RCS: patch30: added /usr/local/man/man1 to the search list
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:13:50  ram
?RCS: patch10: added support for /local/man/man1 (WAD)
?RCS: patch10: added temporary syspath variable to cut down on line length
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:55  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:sysman: test Loc Oldconfig
?MAKE: -pick add $@ %<
?S:sysman:
?S: This variable holds the place where the manual is located on this
?S: system. It is not the place where the user wants to put his manual
?S: pages. Rather it is the place where Configure may look to find manual
?S: for unix commands (section 1 of the manual usually). See mansrc.
?S:.
?T:syspath
: determine where manual pages are on this system
echo " "
case "$sysman" in
")
 syspath='/usr/share/man/man1 /usr/man/man1'
 syspath="$syspath /usr/man/mann /usr/man/manl /usr/man/local/man1"
 syspath="$syspath /usr/man/u_man/man1"
 syspath="$syspath /usr/catman/u_man/man1 /usr/man/l_man/man1"
 syspath="$syspath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 syspath="$syspath /usr/man/man.L /local/man/man1 /usr/local/man/man1"
 sysman=`./loc . /usr/man/man1 $syspath`
 ;;
esac
if $test -d "$sysman"; then
 echo "System manual is in $sysman." >&4
else
 echo "Could not find manual pages in source form."
 >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/sysman.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scannl.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:27  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:59:12  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Does the scanf routine read "\n" correctly ? This is was not
?X: the case on AIX...
?X:
?MAKE:d_scannl: cat +cc +ccflags rm Setvar
?MAKE: -pick add $@ %<
?S:d_scannl:
?S: This
 variable conditionally defines SCAN_NL, which indicates
?S: wether the C library routines scanf() and friends can deal with
?S: a '\n' in the input correctly. They do most of the time.
?S:.
?C:SCAN_NL:
?C: This symbol is defined if the C library routines scanf() and friends
?C: can deal with a '\n' in the input correctly, so that you can say
?C: scanf("%d\n"); instead of scanf("%d"); getc(c); to handle the '\n'.
?C:.
?H:#$d_scannl SCAN_NL  /* scanf("%d\n") works */
?H:.
?F:!try
?LINT:set d_scannl
: does scanf handle "\n" correctly ?
echo " "
val="$define"
?X: I really want to say "\n" instead of '\n', because I am referring
?X: to the string given as argument to scanf().
echo 'Let""""s see if scanf() handles "\\n" correctly...' >&4
$cat >try.c <<'EOCP'
int main()
{
 int i = 0, j = 0;
 scanf("%d\n%d", &i, &j);
```

```
 if (j != 3)
  exit(1);
 exit(0);
}
EOCP
if $cc $ccflags -o try try.c >/dev/null 2>&1; then
 if ./try <<'EOD'
2
3
EOD
 then
  echo "Yes, it does."
 else
  echo "No, it doesn't."
  val="$undef"
 fi
else
 echo
 "(I can't seem to compile the test program. Assuming it does.)"
fi
set d_scannl
eval $setvar
$rm -f try.* try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scannl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_NOFILE.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:08:38  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:nofile d_gettblsz tablesize: Myread Guess cat +cc +ccflags +libs \
 test rm Csym
?MAKE: -pick add $@ %<
```

```
?S:nofile:
?S: This variable contains the number of file descriptors available to the
?S: process.
?S:.
?S:d_gettblsz:
?S: This variable conditionally handles remapping
 of the getdtablesize()
?S: subroutine to ulimit(4,0), or the NOFILE manifest constant.
?S:.
?S:tablesize:
?S: This variable contains either the 'NOFILE' constant or 'ulimit(4, 0L)'
?S: and is used as the remapped value for the getdtablesize() macro.
?S:.
?C:getdtablesize:
?C: This catches use of the getdtablesize() subroutine, and remaps it
?C: to either ulimit(4,0) or NOFILE, if getdtablesize() isn't available.
?C:.
?C:VAL_NOFILE:
?C: This symbol contains the number of file descriptors available to the
?C: process, as determined at configuration time. Unless a static constant
?C: is needed, you should rely on getdtablesize() to obtain that number.
?C:.
?H:#$d_gettblsz getdtablesize() $tablesize /**/
?H:#define VAL_NOFILE $nofile /* Number of file descriptors */
?H:.
?F:!nofile
?T:d_ulimit4 val
: see if getdtablesize exists
echo " "
?X: Revert logical value (d_gettblsz is undef iff getdtablesize is present)
case "$d_gettblsz" in
$define) d_gettblsz="$undef";;
$undef) d_gettblsz="$define";;
esac
if
 set getdtablesize val -f d_gettblsz; eval $csym; $val; then
 echo 'getdtablesize() found.' >&4
 d_gettblsz="$undef"
 tablesize=''
@if VAL_NOFILE || nofile
 $cat >nofile.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", getdtablesize());
}
EOCP
 nofile=''
```

```
 if $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1; then
  nofile=`./nofile 2>/dev/null`
 fi
 if $test "$nofile"; then
  echo "(You have $nofile file descriptors available per process.)"
 else
  nofile='20'
  if ./bsd; then
   nofile='64'
  fi
 echo "(Hmm... Let's say you have $nofile file descriptors available.)"
 fi
@end
else
 echo 'getdtablesize() NOT found...' >&4
 if set ulimit val -f; eval $csym; $val; then
  echo 'Maybe ulimit(4,0) will work...'
  $cat >nofile.c <<'EOCP'
#include <stdio.h>
#ifdef GETPARAM_H
#include <sys/param.h>
#endif
int main()
{
 printf("%d %d\n",
#ifdef NOFILE
  NOFILE,
#else
  0,
#endif
  ulimit(4,0));
  exit(0);
}
EOCP
  if $cc $ccflags -DGETPARAM_H -o nofile nofile.c $libs
 >/dev/null 2>&1 \
   || $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1 ; then
   set `./nofile`
   d_gettblsz=$1
   d_ulimit4=$2
   if $test "$d_ulimit4" -lt 0; then
    echo "Your ulimit() call doesn't tell me what I want to know."
    echo "We'll just use NOFILE in this case."
    nofile=$d_gettblsz
    d_gettblsz="$define"
    tablesize='NOFILE'
   else
    if $test "$d_gettblsz" -gt 0; then
```

```
    echo "Your system defines NOFILE to be $d_gettblsz, and" >&4
    else
    echo "I had trouble getting NOFILE from your system, but" >&4
    fi
echo "ulimit returns $d_ulimit4 as the number of available file descriptors." >&4
    dflt='y';
    echo " "
 rp='Should I use ulimit to get the number of available file descriptors?'
    . ./myread
    case "$ans" in
    y*)
     nofile=$d_ulimit4
     d_gettblsz="$define"
     tablesize='ulimit(4, 0L)'
     echo "Using ulimit(4,0)."
     ;;
    *)
     nofile=$d_gettblsz
     d_gettblsz="$define"
     tablesize='NOFILE'
     echo "Using NOFILE."
     ;;
    esac
   fi
  else
   echo
 "Strange, I couldn't get my test program to compile."
   echo "We'll just use NOFILE in this case."
   d_gettblsz="$define"
   tablesize='NOFILE'
   nofile=''
  fi
 else
  echo 'Using NOFILE instead.'
  d_gettblsz="$define"
  tablesize='NOFILE'
  nofile=''
 fi
fi
@if VAL_NOFILE || nofile
case "$nofile" in
'')
 $cat >nofile.c <<'EOCP'
#include <stdio.h>
#ifdef GETPARAM_H
#include <sys/param.h>
#endif
int main()
```

```
{
 printf("%d\n",
#ifdef NOFILE
  NOFILE,
#else
  0,
#endif
  );
  exit(0);
}
EOCP
 if $cc $ccflags -DGETPARAM_H -o nofile nofile.c $libs >/dev/null 2>&1 \
  || $cc $ccflags -o nofile nofile.c $libs >/dev/null 2>&1 ; then
  nofile=`./nofile 2>/dev/null`
 fi
 if $test "$nofile"; then
  echo "(You have $nofile file descriptors available per process.)"
 else
  nofile='20'
  if ./bsd; then
   nofile='64'
  fi
 echo "(Hmm... Let's say you have $nofile file descriptors available.)"
 fi
 ;;
esac
@end
$rm -f nofile*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_NOFILE.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: newsspool.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: newsspool.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:newsspool newsspoolexp: Getfile Oldconfig
```

```
?MAKE: -pick add $@ %<
?S:newsspool:
?S: This variable contains the eventual value of the NEWSSPOOL symbol,
?S: which is the directory name where news articles are spooled.  It
?S: may have a ~ on the front of it.
?S:.
?S:newsspoolexp:
?S: This is the same as the newsspool variable, but is
 filename expanded
?S: at configuration time, for programs not wanting to deal with it at
?S: run-time.
?S:.
?C:NEWSSPOOL:
?C: This symbol contains the directory name where news articles are
?C: spooled.  The program must be prepared to do ~ expansion on it.
?C:.
?C:NEWSSPOOL_EXP:
?C: This is the same as NEWSSPOOL, but is filename expanded at
?C: configuration time, for use in programs not willing to do so
?C: at run-time.
?C:.
?H:#define NEWSSPOOL "$newsspool" /**/
?H:#define NEWSSPOOL_EXP "$newsspoolexp" /**/
?H:.
: locate news spool directory
case "$newsspool" in
")
 dflt=/usr/spool/news
 ;;
*) dflt="$newsspool";;
esac
echo " "
fn=d~
rp='Where are news spooled?'
. ./getfile
newsspool="$ans"
newsspoolexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/newsspool.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_newsadm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_newsadm.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:36:53  ram
?RCS: patch61: added Guess dependency
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:14:33  ram
?RCS: patch36: call ./eunice explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_newsadm newsadmin: cat contains Guess Setvar Myread Oldconfig
?MAKE: -pick add $@ %<
?S:d_newsadm:
?S: This variable
 conditionally defines the NEWS_ADMIN symbol, which
?S: indicates to the C program that there is a user who is in charge
?S: of news administration.
?S:.
?S:newsadmin:
?S: This variable holds the login name of the news administrator, if any.
?S:.
?C:NEWS_ADMIN (NEWSADMIN):
?C: This symbol, if defined, contains the login name of the news
?C: administrator.
?C:.
?H:#$d_newsadm NEWS_ADMIN "$newsadmin"  /**/
?H:.
?LINT:set d_newsadm
: get news administrator name
case "$newsadmin" in
")
 if $contains "^news:" /etc/passwd >/dev/null 2>&1 ; then
  dflt=news
 elif $contains "^usenet:" /etc/passwd >/dev/null 2>&1 ; then
  dflt=usenet
 elif ./eunice; then
  dflt=system
 else
  dflt=root
 fi
 ;;
*)
 dflt="$newsadmin"
 ;;
```

```
esac
$cat <<'EOM'

Many systems keep their news in a private directory, or have a non-superuser
in charge of administering news.  (If you don't have such a user, take the
default answer.)  I need the login name (not directory) which is used for
news administration.

EOM
rp="News
 admin login?"
. ./myread
newsadmin="$ans"
case "$newsadmin" in
root) val="$undef" ;;
*) val="$define" ;;
esac
set d_newsadm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_newsadm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_itimer.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_itimer.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_itimer: Inlibc
?MAKE: -pick add $@ %<
?S:d_itimer:
?S: This variable conditionally defines the HAS_ITIMER symbol, which
?S: indicates that the setitimer() routine exists.  The setitimer()
?S: routine supports sub-second accuracy for one real-time and two
?S: cpu clocks.
?S:.
?C:HAS_ITIMER (ITIMER):
?C: This symbol, if defined, indicates
```

```
 that the setitimer() routine exists.
?C:.
?H:#$d_itimer HAS_ITIMER /**/
?H:.
?LINT:set d_itimer
: see if setitimer exists
set setitimer d_itimer
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_itimer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_time.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:07:43  ram
?RCS: patch56: typo fix, sytem -> system
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:16:38  ram
?RCS: patch36: now uses new Typedef unit to compute type information (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X: Maybe <sys/types.h> should be included?
?X:INC: i_systypes
?MAKE:d_time timetype: Csym Setvar Findhdr Myread Typedef
?MAKE: -pick add $@ %<
?S:d_time:
?S: This
 variable conditionally defines the HAS_TIME symbol, which indicates
?S: that the time() routine exists.  The time() routine is normally
?S: provided on UNIX systems.
?S:.
?S:timetype:
?S: This variable holds the type returned by time(). It can be long,
?S: or time_t on BSD sites (in which case <sys/types.h> should be
?S: included). Anyway, the type Time_t should be used.
?S:.
```

```
?C:HAS_TIME (TIMER):
?C: This symbol, if defined, indicates that the time() routine exists.
?C:.
?C:Time_t (TIMETYPE):
?C: This symbol holds the type returned by time(). It can be long,
?C: or time_t on BSD sites (in which case <sys/types.h> should be
?C: included).
?C:.
?H:#$d_time HAS_TIME  /**/
?H:#define Time_t $timetype  /* Time type */
?H:.
?LINT:set d_time
: see if time exists
echo " "
if set time val -f d_time; eval $csym; $val; then
 echo 'time() found.' >&4
 val="$define"
 set time_t timetype long stdio.h sys/types.h
 eval $typedef
 dflt="$timetype"
 echo " "
 rp="What type is returned by time() on this
 system?"
 . ./myread
 timetype="$ans"
else
 echo 'time() not found, hope that will do.' >&4
 val="$undef"
 timetype='int';
fi
set d_time
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_time.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:st_ino_size st_ino_sign: cat echo i_stdlib Setvar Compile run rm_try
?MAKE: -pick add $@ %<
?S:st_ino_sign:
```

```
?S: This variable contains the signedness of struct stat's st_ino.
?S: 1 for unsigned, -1 for signed.
?S:.
?S:st_ino_size:
?S: This variable contains the size of struct stat's st_ino in bytes.
?S:.
?C:ST_INO_SIZE:
?C: This variable contains the size of struct stat's st_ino in bytes.
?C:.
?C:ST_INO_SIGN:
?C: This symbol holds the signedness of struct stat's st_ino.
?C: 1 for unsigned, -1 for signed.
?C:.
?H:#define ST_INO_SIGN
 $st_ino_sign /* st_ino sign */
?H:#define ST_INO_SIZE $st_ino_size /* st_ino size */
?H:.
?F:!try
: Check the size of st_ino
$echo " "
$echo "Checking the size of st_ino..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main() {
   struct stat st;
   printf("%d\n", (int)sizeof(st.st_ino));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 val=`$run ./try`
 case "$val" in
 ") st_ino_size=4
  $echo "(I can't execute the test program--guessing $st_ino_size.)" >&4
  ;;
 *) st_ino_size=$val
  $echo "Your st_ino is $st_ino_size bytes long."
  ;;
 esac
else
 st_ino_size=4
 $echo "(I can't compile the test program--guessing $st_ino_size.)" >&4
```

```
fi
$rm_try

: Check if st_ino is signed
$echo " "
$echo "Checking the sign of st_ino..." >&4
$cat > try.c <<EOCP
#include <sys/stat.h>
#include <stdio.h>
int main() {
 struct stat foo;
       foo.st_ino = -1;
 if (foo.st_ino < 0)
  printf("-1\n");
 else
  printf("1\n");
}
EOCP
set
 try
if eval $compile; then
 val=`$run ./try`
 case "$val" in
 ") st_ino_sign=1
  $echo "(I can't execute the test program--guessing unsigned.)" >&4
  ;;
 *) st_ino_sign=$val
  case "$st_ino_sign" in
   1) $echo "Your st_ino is unsigned." ;;
  -1) $echo "Your st_ino is signed."   ;;
  esac
  ;;
 esac
else
 st_ino_sign=1
 $echo "(I can't compile the test program--guessing unsigned.)" >&4
fi
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/st_ino_def.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_ldbl_dig: Myread contains cat rm Setvar \
 cppstdin cppflags cppminus
?MAKE: -pick add $@ %<
?S:d_ldbl_dig:
?S: This variable conditionally defines d_ldbl_dig if this system's
?S: header files provide LDBL_DIG, which is the number of significant
?S: digits in a long double precision number.
?S:.
?C:HAS_LDBL_DIG:
?C: This symbol, if defined, indicates that this system's <float.h>
?C: or <limits.h> defines the symbol LDBL_DIG, which is the number
?C: of significant digits in a long double precision number. Unlike
?C: for
 DBL_DIG, there's no good guess for LDBL_DIG if it is undefined.
?C:.
?H:#$d_ldbl_dig HAS_LDBL_DIG /* */
?H:.
?F:!ldbl_dig.c
?LINT:set d_ldbl_dig
: See if number of significant digits in a double precision number is known
echo " "
$cat >ldbl_dig.c <<EOM
#include <limits.h>
#include <float.h>
#ifdef LDBL_DIG
printf("Contains LDBL_DIG");
#endif
EOM
$cppstdin $cppflags $cppminus < ldbl_dig.c >ldbl_dig.E 2>/dev/null
if $contains 'LDBL_DIG' ldbl_dig.E >/dev/null 2>&1; then
 echo "LDBL_DIG found." >&4
 val="$define"
else
 echo "LDBL_DIG NOT found." >&4
 val="$undef"
fi
$rm -f ldbl_dig.?
set d_ldbl_dig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ldbl_dig.U

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```
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?RCS:
?MAKE:d_siginfo_si_errno d_siginfo_si_pid d_siginfo_si_uid d_siginfo_si_addr d_siginfo_si_status
d_siginfo_si_band d_siginfo_si_value d_siginfo_si_fd: d_sigaction pidtype uidtype Hasfield_t
?MAKE: -pick add $@ %<
?S:d_siginfo_si_errno:
?S: This variable conditionally defines the HAS_SIGINFO_SI_ERRNO symbol,
?S: which indicates that the siginfo_t struct has the si_errno member.
?S:.
?S:d_siginfo_si_pid:
?S: This variable conditionally defines the HAS_SIGINFO_SI_PID symbol,
?S: which indicates that the siginfo_t struct has the si_pid member.
?S:.
?S:d_siginfo_si_uid:
?S: This variable conditionally defines the HAS_SIGINFO_SI_UID symbol,
?S: which indicates that the siginfo_t struct has the si_uid member.
?S:.
?S:d_siginfo_si_addr:
?S: This
 variable conditionally defines the HAS_SIGINFO_SI_ADDR symbol,
?S: which indicates that the siginfo_t struct has the si_addr member.
?S:.
?S:d_siginfo_si_status:
?S: This variable conditionally defines the HAS_SIGINFO_SI_STATUS symbol,
?S: which indicates that the siginfo_t struct has the si_status member.
?S:.
?S:d_siginfo_si_band:
?S: This variable conditionally defines the HAS_SIGINFO_SI_BAND symbol,
?S: which indicates that the siginfo_t struct has the si_band member.
?S:.
?S:d_siginfo_si_value:
?S: This variable conditionally defines the HAS_SIGINFO_SI_VALUE symbol,
?S: which indicates that the siginfo_t struct has the si_value member.
?S:.
?S:d_siginfo_si_fd:
?S: This variable conditionally defines the HAS_SIGINFO_SI_FD symbol,
?S: which indicates that the siginfo_t struct has the si_fd member.
?S:.
?C:HAS_SIGINFO_SI_ERRNO:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_errno member
?C:.
?C:HAS_SIGINFO_SI_PID:
```

```
?C: This
 symbol, if defined, indicates that siginfo_t has the
?C: si_pid member
?C:.
?C:HAS_SIGINFO_SI_UID:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_uid member
?C:.
?C:HAS_SIGINFO_SI_ADDR:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_addr member
?C:.
?C:HAS_SIGINFO_SI_STATUS:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_status member
?C:.
?C:HAS_SIGINFO_SI_BAND:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_band member
?C:.
?C:HAS_SIGINFO_SI_VALUE:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_value member
?C:.
?C:HAS_SIGINFO_SI_FD:
?C: This symbol, if defined, indicates that siginfo_t has the
?C: si_fd member
?C:.
?H:#$d_siginfo_si_errno HAS_SIGINFO_SI_ERRNO /**/
?H:#$d_siginfo_si_pid HAS_SIGINFO_SI_PID /**/
?H:#$d_siginfo_si_uid HAS_SIGINFO_SI_UID /**/
?H:#$d_siginfo_si_addr HAS_SIGINFO_SI_ADDR /**/
?H:#$d_siginfo_si_status HAS_SIGINFO_SI_STATUS /**/
?H:#$d_siginfo_si_band HAS_SIGINFO_SI_BAND /**/
?H:#$d_siginfo_si_value HAS_SIGINFO_SI_VALUE /**/
?H:#$d_siginfo_si_fd HAS_SIGINFO_SI_FD /**/
?H:.
:
 see what siginfo fields we have
case "$d_sigaction" in
"$define")
 echo "Checking if your siginfo_t has si_errno field..."">&4
 set d_siginfo_si_errno siginfo_t int si_errno $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_pid field..."">&4
 set d_siginfo_si_pid siginfo_t $pidtype si_pid $d_sigaction signal.h
 eval $hasfield_t;
```

```
 echo "Checking if your siginfo_t has si_uid field...">&4
 set d_siginfo_si_uid siginfo_t $uidtype si_uid $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_addr field...">&4
 set d_siginfo_si_addr siginfo_t "void *" si_addr $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_status field...">&4
 set d_siginfo_si_status siginfo_t int si_status $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_band field...">&4
 set
 d_siginfo_si_band siginfo_t long si_band $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_value field...">&4
 set d_siginfo_si_value siginfo_t "union sigval" si_value $d_sigaction signal.h
 eval $hasfield_t;

 echo "Checking if your siginfo_t has si_fd field...">&4
 set d_siginfo_si_fd siginfo_t int si_fd $d_sigaction signal.h
 eval $hasfield_t;

 ;;
*)
 d_siginfo_si_errno="$undef"
 d_siginfo_si_pid="$undef"
 d_siginfo_si_uid="$undef"
 d_siginfo_si_addr="$undef"
 d_siginfo_si_status="$undef"
 d_siginfo_si_band="$undef"
 d_siginfo_si_value="$undef"
 d_siginfo_si_fd="$undef"
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_siginfo_si.U
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```
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_ndbm.U,v $
?RCS: Revision 3.0.1.1  1995/05/12  12:16:53  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_ndbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_ndbm (d_ndbm):
?S: This variable conditionally defines the I_NDBM symbol, which
?S: indicates to the C program that <ndbm.h> exists and should
?S: be included.
?S:.
?C:I_NDBM (HAS_NDBM NDBM):
?C: This
 symbol, if defined, indicates that <ndbm.h> exists and should
?C: be included.
?C:.
?H:#$i_ndbm I_NDBM /**/
?H:.
?T:t_ndbm d_dbm_open
?LINT:set i_ndbm
: see if ndbm.h is available
?X: t_ndbm is a tentative check.  We might just have the .h, not the lib -- ADO
set ndbm.h t_ndbm
eval $inhdr
case "$t_ndbm" in
$define)
 : see if dbm_open exists
 set dbm_open d_dbm_open
 eval $inlibc
 case "$d_dbm_open" in
 $undef)
  t_ndbm="$undef"
  echo "We won't be including <ndbm.h>"
  ;;
 esac
 ;;
esac
val="$t_ndbm"
set i_ndbm
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_ndbm.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: package.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:27:21  ram
?RCS: patch36: beware of non-ascii character sets when translating case
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:37:02  ram
?RCS: patch14: skip definition of spackage if not otherwise used
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:10  ram
?RCS: patch10: added spackage, suitable for starting sentences
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:package spackage:
 Nothing
?MAKE: -pick wipe $@ %<
?S:package:
?S: This variable contains the name of the package being constructed.
?S: It is primarily intended for the use of later Configure units.
?S:.
?S:spackage:
?S: This variable contains the name of the package being constructed,
?S: with the first letter uppercased, i.e. suitable for starting
?S: sentences.
?S:.
?C:PACKAGE:
?C: This variable contains the name of the package being built.
?C:.
?H:#define PACKAGE "$package"
?H:.
?T:first last
: set package name
package='<PACKAGENAME>'
```

```
@if spackage
first=`echo $package | sed -e 's/^\(.\).*/\1/'`
last=`echo $package | sed -e 's/^.\(.*\)/\1/'`
?X:
?X: So early in the Configure script, we don't have ./tr set up and can't
?X: include Tr in our dependency or that would create a cycle. Therefore,
?X: we have to somehow duplicate the work done in Tr. That's life.
?X:
case "`echo AbyZ | tr '[:lower:]' '[:upper:]' 2>/dev/null`" in
ABYZ) spackage=`echo $first | tr '[:lower:]' '[:upper:]'`$last;;
*) spackage=`echo
 $first | tr '[a-z]' '[A-Z]'`$last;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/package.U
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```
?RCS: $Id: i_sysstat.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysstat.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:30  ram
?RCS: patch61: created
?RCS:
?MAKE:i_sysstat: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysstat:
?S: This variable conditionally defines the I_SYS_STAT symbol,
?S: and indicates whether a C program should include <sys/stat.h>.
?S:.
?C:I_SYS_STAT (I_SYSSTAT):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/stat.h>.
?C:.
?H:#$i_sysstat I_SYS_STAT  /**/
?H:.
?LINT:set
```

```
 i_sysstat
: see if sys/stat.h is available
set sys/stat.h i_sysstat
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysstat.U
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_getprpwnam: Inlibc
?MAKE: -pick add $@ %<
?S:d_getprpwnam:
?S: This variable conditionally defines HAS_GETPRPWNAM if getprpwnam() is
?S: available to retrieve protected (shadow) password entries by name.
?S:.
?C:HAS_GETPRPWNAM:
?C: This symbol, if defined, indicates that the getprpwnam system call is
?C: available to retrieve protected (shadow) password entries by name.
?C:.
?H:#$d_getprpwnam HAS_GETPRPWNAM  /**/
?H:.
?LINT:set d_getprpwnam
: see if getprpwnam exists
set getprpwnam d_getprpwnam
eval $inlibc
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getprpwnam.U
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```
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?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_statfs_f_flags: \
 Hasfield i_sysparam i_sysmount i_systypes \
 i_sysvfs i_sysstatfs Setvar d_statfs_s
?MAKE: -pick add $@ %<
?S:d_statfs_f_flags:
?S: This variable conditionally defines the HAS_STRUCT_STATFS_F_FLAGS
?S: symbol, which indicates to struct statfs from has f_flags member.
?S: This kind of struct statfs is coming from sys/mount.h (BSD),
?S: not from sys/statfs.h (SYSV).
?S:.
?C:HAS_STRUCT_STATFS_F_FLAGS:
?C: This symbol, if defined, indicates that the struct statfs
?C: does have the f_flags member containing the mount flags of
?C: the filesystem containing the file.
?C: This kind of struct statfs is coming from <sys/mount.h> (BSD 4.3),
?C: not from <sys/statfs.h> (SYSV).  Older BSDs
 (like Ultrix) do not
?C: have statfs() and struct statfs, they have ustat() and getmnt()
?C: with struct ustat and struct fs_data.
?C:.
?H:#$d_statfs_f_flags HAS_STRUCT_STATFS_F_FLAGS  /**/
?H:.
?LINT:set d_statfs_f_flags
: see if struct statfs knows about f_flags
case "$d_statfs_s" in
define)
 echo " "
 echo "Checking to see if your struct statfs has f_flags field..." >&4
 set d_statfs_f_flags statfs f_flags $i_systypes sys/types.h $i_sysparam sys/param.h $i_sysmount sys/mount.h
$i_sysvfs sys/vfs.h $i_sysstatfs sys/statfs.h
 eval $hasfield
 ;;
*) val="$undef"
 set d_statfs_f_flags
 eval $setvar
 ;;
esac
case "$d_statfs_f_flags" in
"$define")      echo "Yes, it does."   ;;
*)              echo "No, it doesn't." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statfs_f_flags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
```

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?RCS:
?MAKE:d_mkstemps: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkstemps:
?S: This variable conditionally defines the HAS_MKSTEMPS symbol, which
?S: indicates to the C program that the mkstemps() routine is available
?S: to exclusively create and open a uniquely named (with a suffix)
?S: temporary file.
?S:.
?C:HAS_MKSTEMPS :
?C: This symbol, if defined, indicates that the mkstemps routine is
?C: available to exclusively create and open a uniquely named
?C: (with a suffix) temporary file.
?C:.
?H:#$d_mkstemps HAS_MKSTEMPS  /**/
?H:.
?LINT:set d_mkstemps
: see if mkstemps exists
set mkstemps d_mkstemps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkstemps.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Prefixup.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Prefixup.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:30:40  ram
?RCS: patch49: created
?RCS:
?X:
?X: Used as: "set dflt; eval $prefixup" to set $dflt to be $prefix/dir
?X: instead of $prefixexp/dir, in case portability was involved somehow
?X: and $prefix uses ~name expansion.
?X:
```

```
?MAKE:Prefixup: prefix prefixexp
?MAKE: -pick add $@ %<
?LINT:define prefixup
?S:prefixup:
?S: This shell variable is used internally by Configure to reset
?S: the leading
 installation prefix correctly when $prefix uses
?S: ~name expansion.
?S:  set dflt
?S:  eval $prefixup
?S: That will set $dflt to $prefix/dir if it was $prefixexp/dir and
?S: $prefix differs from $prefixexp.
?S:.
?V:prefixup
: set the prefixup variable, to restore leading tilda escape
prefixup='case "$prefixexp" in
"$prefix") ;;
*) eval "$1=\`echo \$$1 | sed \"s,^$prefixexp,$prefix,\"\`";;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Prefixup.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_memcpy.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memcpy.U,v $
?RCS: Revision 3.0.1.1  1993/09/13  16:02:58  ram
?RCS: patch10: removed text recommending bcopy over memcpy (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:34  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memcpy: Inlibc
?MAKE: -pick add $@ %<
?S:d_memcpy:
?S: This variable conditionally defines the HAS_MEMCPY symbol, which
?S: indicates to the C program that the memcpy() routine is available
?S: to copy blocks of
```

```
 memory.
?S:.
?C:HAS_MEMCPY (MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy blocks of memory.
?C:.
?H:#$d_memcpy HAS_MEMCPY /**/
?H:.
?LINT:set d_memcpy
: see if memcpy exists
set memcpy d_memcpy
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_lockf.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_lockf.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:36  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_lockf: Inlibc
?MAKE: -pick add $@ %<
?S:d_lockf:
?S: This variable conditionally defines HAS_LOCKF if lockf() is
?S: available to do file locking.
?S:.
?C:HAS_LOCKF (LOCKF):
?C: This symbol, if defined, indicates that the lockf routine is
?C: available to do file locking.
?C:.
?H:#$d_lockf
 HAS_LOCKF  /**/
?H:.
?LINT:set d_lockf
: see if lockf exists
```

```
set lockf d_lockf
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_lockf.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lns.U,v 3.0.1.1 1994/06/20 07:05:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?X:
?X: This unit checks whether symbolic links are really supported.
?X: We can't rely on d_symlink because that may be listed in the
?X: C library but unimplemented.
?X:
?MAKE:lns: ln rm touch
?MAKE: -pick add $@ %<
?S:lns:
?S: This variable holds the name of the command to make
?S: symbolic
 links (if they are supported).  It can be used
?S: in the Makefile. It is either 'ln -s' or 'ln'
?S:.
: determine whether symbolic links are supported
echo " "
$touch blurfl
if $ln -s blurfl sym > /dev/null 2>&1 ; then
 echo "Symbolic links are supported." >&4
 lns="$ln -s"
else
 echo "Symbolic links are NOT supported." >&4
 lns="$ln"
fi
$rm -f blurfl sym
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/lns.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: ssizetype.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:24:21  ram
?RCS: patch61: integrated perl5 concerns for mis-configured sfio
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:30:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:33:06  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:ssizetype: Myread Typedef
 sizetype cat rm \
 +cc +optimize +ccflags +ldflags +libs _o
?MAKE: -pick add $@ %<
?S:ssizetype:
?S: This variable defines ssizetype to be something like ssize_t,
?S: long or int.  It is used by functions that return a count
?S: of bytes or an error condition.  It must be a signed type.
?S: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?S:.
?C:SSize_t:
?C: This symbol holds the type used by functions that return
?C: a count of bytes or an error condition.  It must be a signed type.
?C: It is usually ssize_t, but may be long or int, etc.
?C: It may be necessary to include <sys/types.h> or <unistd.h>
?C: to get any typedef'ed information.
?C: We will pick a type such that sizeof(SSize_t) == sizeof(Size_t).
?C:.
?H:#define SSize_t $ssizetype  /* signed count of bytes */
?H:.
?F:!ssize.out !ssize
```

```
: see what type is used for signed size_t
set ssize_t ssizetype int stdio.h sys/types.h
eval $typedef
dflt="$ssizetype"
?X: Now check out whether sizeof(SSize_t) == sizeof(Size_t)
$cat
 > ssize.c <<EOM
#include <stdio.h>
#include <sys/types.h>
#define Size_t $sizetype
#define SSize_t $dflt
int main()
{
 if (sizeof(Size_t) == sizeof(SSize_t))
  printf("$dflt\n");
 else if (sizeof(Size_t) == sizeof(int))
  printf("int\n");
 else
  printf("long\n");
 fflush(stdout);
 exit(0);
}
EOM
echo " "
?X: If $libs contains -lsfio, and sfio is mis-configured, then it
?X: sometimes (apparently) runs and exits with a 0 status, but with no
?X: output!.  Thus we check with test -s whether we actually got any
?X: output.  I think it has to do with sfio's use of _exit vs. exit,
?X: but I don't know for sure.  --Andy Dougherty  1/27/97.
if $cc $optimize $ccflags $ldflags -o ssize ssize.c $libs > /dev/null 2>&1  &&
  ./ssize > ssize.out 2>/dev/null && test -s ssize.out ; then
 ssizetype=`$cat ssize.out`
 echo "I'll be using $ssizetype for functions returning a byte count." >&4
else
 $cat >&4 <<EOM
Help! I can't compile and run the ssize_t test program: please enlighten me!
(This
 is probably a misconfiguration in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)

I need a type that is the same size as $sizetype, but is guaranteed to
be signed.  Common values are ssize_t, int and long.

EOM
 rp="What signed type is the same size as $sizetype?"
 . ./myread
 ssizetype="$ans"
fi
```

```
$rm -f ssize ssize$_o ssize.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ssizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2017-2018, H.Merijn Brand
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_mkostemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkostemp:
?S: This variable conditionally defines HAS_MKOSTEMP if mkostemp() is
?S: available to exclusively create and open a uniquely named (with a
?S: suffix) temporary file.
?S:.
?C:HAS_MKOSTEMP:
?C: This symbol, if defined, indicates that the mkostemp routine is
?C: available to exclusively create and open a uniquely named (with a
?C: suffix) temporary file.
?C:.
?H:#$d_mkostemp HAS_MKOSTEMP /**/
?H:.
?LINT:set d_mkostemp
: see if mkostemp exists
set mkostemp d_mkostemp
eval $inlibc
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mkostemp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_logb: Inlibc
?MAKE: -pick add $@ %<
?S:d_logb:
?S: This variable conditionally defines the HAS_LOGB symbol, which
?S: indicates to the C program that the logb() routine is available
?S: to extract the exponent of x.
?S:.
```

```
?C:HAS_LOGB:
?C: This symbol, if defined, indicates that the logb routine is
?C: available to do the logb function.
?C:.
?H:#$d_logb HAS_LOGB  /**/
?H:.
?LINT:set d_logb
: see if logb exists
set logb d_logb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_logb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2014-2014, Karl Williamson & H.Merijn Brand
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_wcscmp: Compile cat rm_try run Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_wcscmp:
?S: This variable conditionally defines the HAS_WCSCMP symbol if the
?S: wcscmp() routine is available and can be used to compare wide
?S: character strings.
?S:.
?C:HAS_WCSCMP:
?C: This symbol, if defined, indicates that the wcscmp routine is
?C: available to compare two wide character strings.
?C:.
?H:#$d_wcscmp HAS_WCSCMP /**/
?H:.
?F:!try
?LINT: set d_wcscmp
: look for wcscmp
echo " "
$cat >try.c <<'EOCP'
#include <stdio.h>
#include
 <wchar.h>
int main ()
{
   wchar_t *s = L" ";
   return (wcscmp (s, s) ? 1 : 0);
```

```
   }
EOCP
set try
?X: if $cc $ccflags $ldflags -o try try.c $libs >/dev/null 2>&1 ; then
val="$undef"
if eval $compile; then
   `$run ./try`
   case "$?" in
 0)  echo "A working wcscmp() found." >&4
     val="$define" ;;
 *)  echo "wcscmp() found, but it doesn't work" >&4
     ;;
 esac
else
   echo "wcscmp() NOT found." >&4
   fi
set d_wcscmp
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_wcscmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysutsname.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysutsname: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysutsname:
?S: This variable conditionally defines the I_SYSUTSNAME symbol,
?S: and indicates whether a C program should include <sys/utsname.h>.
?S:.
?C:I_SYSUTSNAME:
?C: This symbol, if defined, indicates that <sys/utsname.h> exists and
?C: should be included.
?C:.
?H:#$i_sysutsname I_SYSUTSNAME  /**/
?H:.
?LINT:set i_sysutsname
: see if this is a sys/utsname.h system
set sys/utsname.h i_sysutsname
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysutsname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorhtml1dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorhtml1dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorhtml1dir vendorhtml1direxp installvendorhtml1dir: html1dir Getfile \
 Setprefixvar Oldconfig Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorhtml1dir:
?S: This variable contains the name of the directory for html
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this
 directory.
?S: Vendors who distribute perl may wish to place their own
?S: html pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorhtml1direxp:
?S: This variable is the ~name expanded version of vendorhtml1dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorhtml1dir="
?S:installvendorhtml1dir:
?S: This variable is really the same as vendorhtml1direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorhtml1dir
: Set the vendorhtml1dir variables
case "$vendorprefix" in
") vendorhtml1dir="
 vendorhtml1direxp="
```

```
 ;;
*) : determine where vendor-supplied html pages go.
 : There is no standard location, so try to copy the previously-selected
 : directory structure for the core html pages.
 : XXX Better default suggestions would be welcome.
 case "$vendorhtml1dir"
 in
 ") dflt=`echo "$html1dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorhtml1dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=dn+~
 rp='Pathname for the vendor-supplied html pages?'
 . ./getfile
 vendorhtml1dir="$ans"
 vendorhtml1direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorhtml1dir" = "X" && vendorhtml1dir=' '
prefixvar=vendorhtml1dir
. ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorhtml1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: spitshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: spitshell.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:22:12  ram
?RCS: patch61: removed useless chatter as this is now done very early
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:37:01  ram
?RCS: patch45: use 'test -f' instead of 'test -r' for exec-only cat progs (WED)
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:33:00  ram
```

```
?RCS: patch32: don't create spitshell under the UU directory
?RCS:
 patch32: allow for cat in /bin or /usr/bin
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:58  ram
?RCS: patch10: made #!-failure message more friendly (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:spitshell shsharp sharpbang: eunicefix sh Head
?MAKE: -pick add $@ %<
?S:spitshell:
?S: This variable contains the command necessary to spit out a runnable
?S: shell on this system.  It is either cat or a grep -v for # comments.
?S:.
?S:shsharp:
?S: This variable tells further Configure units whether your sh can
?S: handle # comments.
?S:.
?S:sharpbang:
?S: This variable contains the string #! if this system supports that
?S: construct.
?S:.
?F:!sharp
?T:xcat p
?X: "paths" comes from Head
?LINT:extern paths _exe
: see if sh knows # comments
?X: This is loaded up early, so avoid being chatty.
?X: echo " "
?X: echo "Checking your $sh to see if it knows about # comments..." >&2
if `$sh -c '#' >/dev/null 2>&1`; then
?X: echo
 "Your $sh handles # comments correctly."
 shsharp=true
 spitshell=cat
?X: echo " "
?X: echo "Okay, let's see if #! works on this system..."
 xcat=/bin/cat
 test -f $xcat$_exe || xcat=/usr/bin/cat
 if test ! -f $xcat$_exe; then
  for p in `echo $PATH | sed -e "s/$p_/ /g"` $paths; do
   if test -f $p/cat$_exe; then
    xcat=$p/cat
    break
   fi
  done
```

```
  if test ! -f $xcat$_exe; then
   echo "Can't find cat anywhere!"
   exit 1
  fi
 fi
 echo "#!$xcat" >sharp
 $eunicefix sharp
 chmod +x sharp
 ./sharp > today 2>/dev/null
 if test -s today; then
?X:  echo "It does."
  sharpbang='#!'
 else
  echo "#! $xcat" > sharp
  $eunicefix sharp
  chmod +x sharp
  ./sharp > today 2>/dev/null
  if test -s today; then
?X:   echo "It does."
   sharpbang='#! '
  else
?X:   echo "Okay, let's see if #! works on this system..."
?X:   echo "It's just a comment."
   sharpbang=': use '
  fi
 fi
else
 echo " "
 echo "Your $sh doesn't grok # comments--I will strip them later on."
 shsharp=false
?X: The
 spitshell script will be perused, so leave it out the UU directory
 cd ..
 echo "exec grep -v '^[  ]*#'" >spitshell
 chmod +x spitshell
 $eunicefix spitshell
 spitshell=`pwd`/spitshell
 cd UU
 echo "I presume that if # doesn't work, #! won't work either!"
 sharpbang=': use '
fi
rm -f sharp today
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/spitshell.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sbrksmart.U,v $
?RCS: Revision 3.0.1.2  1995/01/11  15:35:41  ram
?RCS: patch45: now sets sbrksmart to undef explicitly when lacking sbrk()
?RCS: patch45: forgot a cast when using return value from sbrk()
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:16:45  ram
?RCS: patch16: created
?RCS:
?MAKE:sbrksmart: cat d_sbrk +cc +ccflags +libs rm
?MAKE: -pick add $@ %<
?S:sbrksmart:
?S: This variable conditionally defines HAS_SMART_SBRK if the sbrk()
?S: routine honors a negative argument to lower the break
 value.
?S:.
?C:HAS_SMART_SBRK:
?C: This symbol is defined when the sbrk() system call may be used with
?C: a negative argument to lower the break value, therefore releasing
?C: core to the system. If not, you'd probably be better off using the
?C: mmap() system call.
?C:.
?H:#$sbrksmart HAS_SMART_SBRK /**/
?H:.
?T:dumb
?F:!sbrk
: see whether sbrk can release core to the kernel
echo " "
case "$d_sbrk" in
"$define")
 echo "Let's see if your sbrk() is smart enough to release core..." >&4
 $cat > sbrk.c <<EOC
#define INC 256  /* Small enough to be less than a page size */

int main()
{
 char *obrk = (char *) sbrk(0);
 char *nbrk;

 nbrk = (char *) sbrk(INC);
```

```
 if (nbrk == (char *) -1)
  exit(1); /* Not enough memory */
 if (nbrk != obrk)
  exit(2); /* Unreliable sbrk() */
 nbrk = (char *) sbrk(-INC);
 if (nbrk == (char *) -1)
  exit(3); /* May have understood negative arg as huge positive */
 if (obrk != (char *) sbrk(0))
  exit(4); /* Not smart, definitely */

 exit(0);  /* Ok */
}
EOC
 sbrksmart="$undef"
 dumb='--
 assuming dumb sbrk().'
 if $cc $ccflags -o sbrk sbrk.c $libs >/dev/null 2>&1; then
  ./sbrk >/dev/null 2>&1
  case $? in
  0) sbrksmart="$define"
   echo "Yes, it can be used with negative values." ;;
  1) echo "Sorry, not enough memory $dumb" ;;
  2) echo "No it's not, and besides it seems to be buggy..." ;;
  3) echo "No, it fails with negative values." ;;
  4) echo "Nope, your sbrk() is too dumb." ;;
  *) echo "Err... Unexpected result $dumb" ;;
  esac
 else
  echo "(Could not compile test program $dumb)"
 fi
 ;;
*)
 echo "Since you don't have sbrk(), let's forget about the smart test!"
 sbrksmart="$undef"
 ;;
esac
$rm -f sbrk sbrk.* core
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sbrksmart.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysstatfs.U,v $
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?MAKE:i_sysstatfs: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sysstatfs:
?S: This variable conditionally defines the I_SYSSTATFS symbol,
?S: and indicates whether a C program should include <sys/statfs.h>.
?S:.
?C:I_SYS_STATFS:
?C: This symbol, if defined, indicates that <sys/statfs.h> exists.
?C:.
?H:#$i_sysstatfs I_SYS_STATFS  /**/
?H:.
?LINT:set i_sysstatfs
: see if this is a sys/statfs.h system
set sys/statfs.h i_sysstatfs
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sysstatfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sethent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_sethent:
?S: This variable conditionally defines HAS_SETHOSTENT if sethostent() is
?S: available.
?S:.
?C:HAS_SETHOSTENT:
?C: This symbol, if defined, indicates that the sethostent() routine is
?C: available.
?C:.
?H:#$d_sethent HAS_SETHOSTENT  /**/
?H:.
?LINT:set d_sethent
```

```
: see if sethostent exists
set
 sethostent d_sethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_sethent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:full_ar: ar
?MAKE: -pick add $@ %<
?S:full_ar:
?S: This variable contains the full pathname to 'ar', whether or
?S: not the user has specified 'portability'.  This is only used
?S: in the Makefile.SH.
?S:.
: Store the full pathname to the ar program for use in the C program
: Respect a hint or command line value for full_ar.
case "$full_ar" in
") full_ar=$ar ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/Loc_ar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_su_chown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_su_chown.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:40  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_su_chown: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_su_chown (d_rootchown):
?S: This variable conditionally defines the SU_CHOWN symbol, which
?S: indicates to the C program that only root can chown() the owner
?S: of a file.
?S:.
?C:SU_CHOWN (ROOT_CHOWN):
?C: This symbol, if defined, indicates that the system allows only root
?C: can
 change the owner of a file with chown().
?C:.
?H:#$d_su_chown SU_CHOWN /**/
?H:.
?LINT:set d_su_chown
: see if 'chown()' is restricted.
: but not too hard, as it is late and I am tired. -- HMS
echo " "
if set setreuid val -f d_su_chown; eval $csym; $val; then
 echo 'It looks like only root can chown() the owner of a file.' >&4
 val="$define"
else
 echo 'It looks like root or the owner can chown() a file away.' >&4
 val="$undef"
fi
set d_su_chown
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_su_chown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_execinfo.U 34 2010-11-27 11:55:39Z rmanfredi $
?RCS:
?RCS: Copyright (c) 2011, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:i_execinfo: Inhdr
?MAKE: -pick add $@ %<
?S:i_execinfo:
?S: This variable conditionally defines the I_EXECINFO symbol, and indicates
```

```
?S: whether a C program may include <execinfo.h>, for backtrace() support.
?S:.
?C:I_EXECINFO:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <execinfo.h> for backtrace() support.
?C:.
?H:#$i_execinfo I_EXECINFO  /**/
?H:.
?LINT:set i_execinfo
: see if this is an execinfo.h system
set execinfo.h i_execinfo
eval
 $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_execinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_bsdjmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_bsdjmp.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:31:10  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:09:09  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_bsdjmp: Guess Setvar cat +cc libs rm
?MAKE: -pick add $@ %<
?S:d_bsdjmp:
?S: This variable conditionally defines USE_BSDJMP
 if BSD _setjmp and
?S: _longjmp routines are available to do non-local gotos without saving
?S: or restoring the signal mask flag.
?S:.
?C:USE_BSDJMP (BSDJMP):
?C: This symbol, if defined, indicates that the BSD _setjmp and _longjmp
```

```
?C: routines are available to do non-local gotos wihtout saving or restoring
?C: the signal mask flag.
?C:.
?H:#$d_bsdjmp USE_BSDJMP  /**/
?H:.
?F:!set
?LINT:set d_bsdjmp
: see if _setjmp and _longjmp exists
?X: We can't check for these symbols with Inlibc because of the leading "_"
echo " "
case "$d_bsdjmp" in
")
 $cat >set.c <<EOP
#include <setjmp.h>
jmp_buf env;
int set = 1;
int main()
{
 if (_setjmp(env))
  exit(set);
 set = 0;
 _longjmp(env, 1);
 exit(1);
}
EOP
 if $cc -o set set.c $libs >/dev/null 2>&1; then
  if ./set >/dev/null 2>&1; then
   echo "Good! You have BSD _setjmp and _longjmp routines." >&4
   val="$define"
  else
   $cat <<EOM
Uh-Oh! You have BSD _setjmp and _longjmp, but they do not work properly!!
EOM
   val="$undef"
  fi
 else
  if
 ./usg; then
   echo "You do not have _setjmp and _longjmp, but that's fine." >&4
  else
   cat <<EOM
It sounds strange for a BSD system to miss _setjmp and _longjmp, but that's ok.
EOM
  fi
  val="$undef"
 fi
 ;;
*) val="$d_bsdjmp"
```

```
 case "$d_bsdjmp" in
 $define) echo "Good! You have BSD _setjmp and _longjmp routines." >&4;;
 $undef) echo "You do not have _setjmp and _longjmp, but that's fine." >&4;;
 esac
 ;;
esac
set d_bsdjmp
eval $setvar
$rm -f set.c set
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_bsdjmp.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_memchr.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_memchr: Inlibc
?MAKE: -pick add $@ %<
?S:d_memchr:
?S: This variable conditionally defines the HAS_MEMCHR symbol, which
?S: indicates to the C program that the memchr() routine is available
?S: to scan a block of memory for a character.
?S:.
?C:HAS_MEMCHR:
?C: This symbol, if defined, indicates that the memchr routine is available
?C: to scan a block of memory for a character.
  If undefined, roll your own.
?C:.
?H:#$d_memchr HAS_MEMCHR  /**/
?H:.
?LINT:set d_memchr
: see if memchr exists
set memchr d_memchr
eval $inlibc
```

Found in path(s):

```
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_memchr.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_setlocale_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_setlocale_r setlocale_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_locale extern_C
?MAKE: -pick add $@ %<
?S:d_setlocale_r:
?S: This variable conditionally defines the HAS_SETLOCALE_R symbol,
?S: which indicates to the C program that the setlocale_r()
?S: routine is available.
?S:.
?S:setlocale_r_proto:
?S: This variable encodes the prototype of setlocale_r.
?S: It is zero if d_setlocale_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setlocale_r
?S: is defined.
?S:.
?C:HAS_SETLOCALE_R:
?C: This symbol, if defined, indicates that the setlocale_r routine
?C: is
 available to setlocale re-entrantly.
?C:.
?C:SETLOCALE_R_PROTO:
?C: This symbol encodes the prototype of setlocale_r.
?C: It is zero if d_setlocale_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_setlocale_r
?C: is defined.
?C:.
?H:#$d_setlocale_r HAS_SETLOCALE_R /**/
?H:#define SETLOCALE_R_PROTO $setlocale_r_proto /**/
?H:.
?T:try hdrs d_setlocale_r_proto
: see if setlocale_r exists
set setlocale_r d_setlocale_r
eval $inlibc
case "$d_setlocale_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_locale locale.h"
 case "$d_setlocale_r_proto:$usethreads" in
 ":define") d_setlocale_r_proto=define
```

```
 set d_setlocale_r_proto setlocale_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_setlocale_r_proto" in
define)
case "$setlocale_r_proto" in
"|0) try='int setlocale_r(int, const char*, char*, int);'
./protochk "$extern_C $try" $hdrs && setlocale_r_proto=I_ICBI ;;
esac
case "$setlocale_r_proto" in
"|0) d_setlocale_r=undef
 setlocale_r_proto=0
 echo
"Disabling setlocale_r, cannot determine prototype." >&4 ;;
* ) case "$setlocale_r_proto" in
 REENTRANT_PROTO*) ;;
 *) setlocale_r_proto="REENTRANT_PROTO_$setlocale_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "setlocale_r has no prototype, not using it." >&4 ;;
 esac
 d_setlocale_r=undef
 setlocale_r_proto=0
 ;;
esac
;;
*) setlocale_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_setlocale_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isinfl: Inlibc
?MAKE: -pick add $@ %<
?S:d_isinfl:
```

```
?S: This variable conditionally defines the HAS_ISINFL symbol, which
?S: indicates to the C program that the isinfl() routine is available.
?S:.
?C:HAS_ISINFL:
?C: This symbol, if defined, indicates that the isinfl routine is
?C: available to check whether a long double is an infinity.
?C:.
?H:#$d_isinfl HAS_ISINFL  /**/
?H:.
?LINT:set d_isinfl
: see if isinfl exists
set isinfl d_isinfl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isinfl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: privlib.U,v $
?RCS: Revision 3.0.1.4  1995/09/25  09:17:09  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:44:23  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:31:52  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:34  ram
?RCS: patch10: added support for /local/lib (WED)
?RCS: patch10: prompt phrasing made
 more explicit (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:privlib privlibexp installprivlib: afs package cat Getfile \
 Oldconfig Prefixit test
```

```
?MAKE: -pick add $@ %<
?Y:TOP
?S:privlib:
?S: This variable contains the eventual value of the PRIVLIB symbol,
?S: which is the name of the private library for this package.  It may
?S: have a ~ on the front. It is up to the makefile to eventually create
?S: this directory while performing installation (with ~ substitution).
?S:.
?S:privlibexp:
?S: This variable is the ~name expanded version of privlib, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?S:installprivlib:
?S: This variable is really the same as privlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:PRIVLIB:
?C: This symbol contains the name of the private library for this package.
?C: The library is
 private in the sense that it needn't be in anyone's
?C: execution path, but it should be accessible by the world.  The program
?C: should be prepared to do ~ expansion.
?C:.
?C:PRIVLIB_EXP:
?C: This symbol contains the ~name expanded version of PRIVLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#define PRIVLIB "$privlib"  /**/
?H:#define PRIVLIB_EXP "$privlibexp"  /**/
?H:.
: determine where private executables go
set dflt privlib lib/$package
eval $prefixit
$cat <<EOM

There are some auxiliary files for $package that need to be put into a
private library directory that is accessible by everyone.

EOM
fn=d~+
rp='Pathname where the private library files will reside?'
. ./getfile
if $test "X$privlibexp" != "X$ansexp"; then
 installprivlib="
fi
privlib="$ans"
privlibexp="$ansexp"
```

```
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
private files reside from the directory in which they are installed
 (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installprivlib" in
 ") dflt=`echo $privlibexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installprivlib";;
 esac
 fn=de~
 rp='Where will private files be installed?'
 . ./getfile
 installprivlib="$ans"
else
 installprivlib="$privlibexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/privlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dup2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_dup2.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_dup2: Inlibc
?MAKE: -pick add $@ %<
?S:d_dup2:
?S: This variable conditionally defines HAS_DUP2 if dup2() is
?S: available to duplicate file descriptors.
?S:.
?C:HAS_DUP2 (DUP2):
?C: This symbol, if defined, indicates that the dup2 routine is
?C: available to duplicate file descriptors.
```

```
?C:.
?H:#$d_dup2 HAS_DUP2 /**/
?H:.
?LINT:set d_dup2
:
 see if dup2 exists
set dup2 d_dup2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dup2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: randfunc.U,v 3.0 1993/08/18 12:09:39 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: randfunc.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:39  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is the new unit that should be used when random
?X: functions are to be used. It thus makes randbits.U obsolete.
?X:
?X: This unit gives a simple #define for Drand01, which produces
?X: doubles in the range [0,1) using the "best" random number
?X: generator available.  The source should just call Drand01
?X: and not worry about the underlying
 implementation.
?X:     Andy Dougherty  July 1998
?X:
?MAKE:randfunc drand01 seedfunc randbits randseedtype: \
 Compile Myread Csym ccflags
?MAKE: -pick add $@ %<
?S:randfunc:
?S: Indicates the name of the random number function to use.
?S: Values include drand48, random, and rand. In C programs,
?S: the 'Drand01' macro is defined to generate uniformly distributed
?S: random numbers over the range [0., 1.[ (see drand01 and nrand).
?S:.
?S:drand01:
```

```
?S: Indicates the macro to be used to generate normalized
?S: random numbers.  Uses randfunc, often divided by
?S: (double) (((unsigned long) 1 << randbits)) in order to
?S: normalize the result.
?S: In C programs, the macro 'Drand01' is mapped to drand01.
?S:.
?S:randseedtype:
?S: Indicates the type of the argument of the seedfunc.
?S:.
?S:seedfunc:
?S: Indicates the random number generating seed function.
?S: Values include srand48, srandom, and srand.
?S:.
?S:randbits:
?S: Indicates how many bits are produced by the function used to
?S: generate
 normalized random numbers.
?S:.
?C:RANDFUNC:
?C: This symbol defines the random function used to define Drand01().
?C:.
?C:Drand01:
?C: This macro is to be used to generate uniformly distributed
?C: random numbers over the range [0., 1.[.  You may have to supply
?C: an 'extern double drand48();' in your program since SunOS 4.1.3
?C: doesn't provide you with anything relevant in its headers.
?C: See HAS_DRAND48_PROTO.
?C:.
?C:Rand_seed_t:
?C: This symbol defines the type of the argument of the
?C: random seed function.
?C:.
?C:seedDrand01:
?C: This symbol defines the macro to be used in seeding the
?C: random number generator (see Drand01).
?C:.
?C:RANDBITS:
?C: This symbol indicates how many bits are produced by the
?C: function used to generate normalized random numbers.
?C: Values include 15, 16, 31, and 48.
?C:.
?H:#define RANDFUNC  $randfunc  /**/
?H:#define Drand01()  $drand01  /**/
?H:#define Rand_seed_t  $randseedtype  /**/
?H:#define seedDrand01(x) $seedfunc((Rand_seed_t)x) /**/
?H:#define
 RANDBITS  $randbits  /**/
?H:.
```

```
?LINT:change ccflags
?LINT:unclosed $randbits))"
: How can we generate normalized random numbers ?
echo " "
echo "Using our internal random number implementation..." >&4

case "$ccflags" in
*-Dmy_rand=*|*-Dmy_srand=*)
 echo "Removing obsolete -Dmy_rand, -Dmy_srand, and -Drandbits from ccflags." >&4
 ccflags="`echo $ccflags | sed -e 's/-Dmy_rand=random/ /'`"
 ccflags="`echo $ccflags | sed -e 's/-Dmy_srand=srandom/ /'`"
 ccflags="`echo $ccflags | sed -e 's/-Drandbits=[0-9][0-9]*/ /'`"
 ;;
esac

randfunc=Perl_drand48
drand01="Perl_drand48()"
seedfunc="Perl_drand48_init"
randbits=48
randseedtype=U32

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/randfunc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_strcspn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strcspn.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:33  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_strcspn: Inlibc
?MAKE: -pick add $@ %<
?S:d_strcspn:
?S: This variable conditionally defines the HAS_STRCSPN symbol, which
?S: indicates to the C program that the strcspn() routine is available
?S: to scan strings.
?S:.
?C:HAS_STRCSPN (STRCSPN):
?C: This symbol, if defined, indicates that the strcspn routine is
```

```
?C: available to scan
 strings.
?C:.
?H:#$d_strcspn HAS_STRCSPN  /**/
?H:.
?LINT:set d_strcspn
: see if strcspn exists
set strcspn d_strcspn
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strcspn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fdclose: Inlibc
?MAKE: -pick add $@ %<
?S:d_fdclose:
?S: This variable conditionally defines the HAS_FDCLOSE symbol, which
?S: indicates to the C program that the fdclose() routine is available.
?S:.
?C:HAS_FDCLOSE:
?C: This symbol, if defined, indicates that the fdclose routine is
?C: available to free a FILE structure without closing the underlying
?C: file descriptor.  This function appeared in FreeBSD 10.2.
?C:.
?H:#$d_fdclose HAS_FDCLOSE  /**/
?H:.
?LINT:set d_fdclose
: see if fdclose exists
set fdclose d_fdclose
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fdclose.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtoul.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:43  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_strtoul: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtoul:
?S: This variable conditionally defines the HAS_STRTOUL symbol, which
?S: indicates to the C program that the strtoul() routine is available
?S: to provide conversion of strings to unsigned long.
?S:.
?C:HAS_STRTOUL (STRTOUL):
?C: This symbol, if defined, indicates that the strtoul routine is
?C: available
 to provide conversion of strings to unsigned long.
?C:.
?H:#$d_strtoul HAS_STRTOUL /**/
?H:.
?LINT:set d_strtoul
: see if strtoul exists
set strtoul d_strtoul
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtoul.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_readdir_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_readdir_r readdir_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_dirent extern_C
?MAKE: -pick add $@ %<
?S:d_readdir_r:
?S: This variable conditionally defines the HAS_READDIR_R symbol,
?S: which indicates to the C program that the readdir_r()
?S: routine is available.
?S:.
?S:readdir_r_proto:
?S: This variable encodes the prototype of readdir_r.
```

```
?S: It is zero if d_readdir_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir_r
?S: is defined.
?S:.
?C:HAS_READDIR_R:
?C: This symbol, if defined, indicates that the readdir_r routine
?C: is available to readdir re-entrantly.
?C:.
?C:READDIR_R_PROTO:
?C: This
 symbol encodes the prototype of readdir_r.
?C: It is zero if d_readdir_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_readdir_r
?C: is defined.
?C:.
?H:#$d_readdir_r HAS_READDIR_R /**/
?H:#define READDIR_R_PROTO $readdir_r_proto /**/
?H:.
?T:try hdrs d_readdir_r_proto
: see if readdir_r exists
set readdir_r d_readdir_r
eval $inlibc
case "$d_readdir_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_dirent dirent.h"
 case "$d_readdir_r_proto:$usethreads" in
 ":define") d_readdir_r_proto=define
  set d_readdir_r_proto readdir_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_readdir_r_proto" in
 define)
 case "$readdir_r_proto" in
 "|0) try='int readdir_r(DIR*, struct dirent*, struct dirent**);'
 ./protochk "$extern_C $try" $hdrs && readdir_r_proto=I_TSR ;;
 esac
 case "$readdir_r_proto" in
 "|0) try='int readdir_r(DIR*, struct dirent*);'
 ./protochk "$extern_C $try" $hdrs && readdir_r_proto=I_TS
 ;;
 esac
 case "$readdir_r_proto" in
 "|0) d_readdir_r=undef
  readdir_r_proto=0
  echo "Disabling readdir_r, cannot determine prototype." >&4 ;;
 * ) case "$readdir_r_proto" in
  REENTRANT_PROTO*) ;;
```

```
  *) readdir_r_proto="REENTRANT_PROTO_$readdir_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "readdir_r has no prototype, not using it." >&4 ;;
  esac
  d_readdir_r=undef
  readdir_r_proto=0
  ;;
 esac
 ;;
*) readdir_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_readdir_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: install.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: install.U,v $
?RCS: Revision 3.0.1.2  1995/09/25  09:16:37  ram
?RCS: patch59: all possible install programs are now looked for
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:30:41  ram
?RCS: patch45: created
?RCS:
?MAKE:install installdir: Loc Oldconfig Getfile cat test startsh rm +cc \
 eunicefix package contains mkdir echo n c
?MAKE: -pick add $@ %<
?S:install:
?S: This variable contains the name of an install program that can accept
?S: BSD-style arguments.
 It must correctly support -c, -s, and -m at least.
?S: It is a fully qualified pathname when found. If you have a local
?S: install.SH file at the root directory of your package, it is assumed to
?S: be the default script emulating a BSD install and the variable will be
```

```
?S: set to ./install. Otherwise, it is set to plain 'install', relying on
?S: the user's PATH to perform miracles.
?S:.
?S:installdir:
?S: This variable contains the name of a program that can install nested
?S: directories. Often set to 'mkdir -p', it can also be 'install -d' if
?S: you have such a beast and lack the former. If you have an install.SH
?S: file at the root directory of your package, it will be used in last
?S: resort, setting the variable to './install -d'. Otherwise, it is set to
?S: plain 'mkdir', and cross your fingers!
?S:.
?T:dir file tryit prog creatdir either
?F:!tryinst
: locate a BSD compatible install program
echo " "
echo "Looking for a BSD-compatible install program..." >&4
@if installdir
creatdir=''
@end
case
 "$install" in
'')
 tryit=''
 for dir in $pth; do
  for file in ginstall installbsd scoinst install; do
   if $test -f $dir/$file; then
    tryit="$tryit $dir/$file"
   fi
  done
 done
 $cat >try.c <<EOC
int main()
{
 printf("OK\n");
 exit(0);
}
EOC
 if $cc -o try try.c >/dev/null 2>&1; then
  cp try try.ns
  strip try >/dev/null 2>&1
 else
  echo "(I can't seem to compile a trivial C program -- bypassing.)"
  echo "try" >try
  cp try try.ns
 fi
 $cat >tryinst <<EOS
$startsh
$rm -rf foo d
```

```
@if installdir
\$1 -d foo/bar
@end
$mkdir d
\$1 -c -m 764 try.ns d
\$1 -c -s -m 642 try.ns d/try
EOS
 chmod +x tryinst
 $eunicefix tryinst
 dflt=''
 either=''
 for prog in $tryit; do
  $echo $n "Checking $prog... $c"
  ./tryinst $prog >/dev/null 2>&1
@if installdir
  if $test -d foo/bar; then
   creatdir="$prog -d"
  fi
@end
  (ls -l d/try >try.ls; ls -l d/try.ns >tryno.ls) 2>/dev/null
  if (cmp -s d/try try && cmp -s d/try.ns try.ns && \
   $contains 'rwxrw-r--' tryno.ls &&
 \
   $contains 'rw-r---w-' try.ls) >/dev/null 2>&1
  then
   dflt="$prog"
   echo "ok, that will do."
   break
  fi
  echo "not good$either."
  either=' either'
  $rm -f try*.ls
 done
 $rm -rf foo d tryinst try try*.ls try.*
 case "$dflt" in
 '')
@if {test -f ../install.SH}
  echo "Hopefully, $package comes with its own install script!"
  dflt='./install'
@else
  dflt='install'
@end
  ;;
 esac
 ;;
*) dflt="$install";;
esac
$cat <<EOM
```

```
I will be requiring a BSD-compatible install program (one that allows
options like -s to strip executables or -m to specify a file mode) to
install $package.

If the question below contains a fully qualified default path, then it
is probably ok. If it is an unqualified name such as 'install', then it
means I was unable to find out a good install program I could use. If
@if {test -f ../install.SH}
you know of one, please tell me about it. If the default is './install',
then I shall be using the install script supplied with $package.
@else
you know of one,
 please tell me about it.
@end

EOM
@if {test -f ../install.SH}
fn='/fe~(install,./install)'
@else
fn='/fe~(install)'
@end
rp='Which install program shall I use?'
. ./getfile
install="$ans"

@if installdir
: how can we create nested directories?
echo " "
echo "Ok, let's see how we can create nested directories..." >&4
case "$installdir" in
")
?X: First time, maybe we already found out a working one in $creatdir above...
?X: Prefer "mkdir -p" because of bugs in GNU install when not running as root
 $mkdir -p foo/bar >/dev/null 2>&1
 if $test -d foo/bar; then
  echo "Great, we can build them using 'mkdir -p'."
  creatdir='mkdir -p'
 else
  case "$creatdir" in
  ")
   if eval "$install -d foo/bar"; $test -d foo/bar; then
    creatdir="install -d"
    echo "It looks like '$creatdir' will do it for us."
   fi
   ;;
  *)
   eval "$creatdir foo/bar" >/dev/null 2>&1
```

```
   if $test -d foo/bar; then
    echo "Ah! We can use '$creatdir' to do just that."
   else
    creatdir=''
   fi
   ;;
  esac
 fi
 $rm
 -rf foo
 case "$creatdir" in
 '')
  echo "Heck! Another ancient system lacking the comfort of modern ones!"
@if {test -f ../install.SH}
  echo "You can thank $package for bringing you its own install script!"
  installdir='./install -d'
@else
  echo "We have no choice but to use plain old 'mkdir' -- wish me luck!"
  installdir=mkdir
@end
  ;;
 *) installdir="$creatdir";;
 esac
 ;;
*) echo "As you already told me, '$installdir' should work.";;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/install.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_pthread_atfork: Inlibc cat Compile usethreads Setvar
?MAKE: -pick add $@ %<
?S:d_pthread_atfork:
?S: This variable conditionally defines the HAS_PTHREAD_ATFORK symbol,
?S: which indicates to the C program that the pthread_atfork()
?S: routine is available.
?S:.
?C:HAS_PTHREAD_ATFORK:
```

```
?C: This symbol, if defined, indicates that the pthread_atfork routine
?C: is available to setup fork handlers.
?C:.
?H:#$d_pthread_atfork HAS_PTHREAD_ATFORK  /**/
?H:.
?LINT:set d_pthread_atfork
: see whether the pthread_atfork exists
$cat >try.c <<EOP
#include <pthread.h>
#include <stdio.h>
int main() {
#ifdef  PTHREAD_ATFORK
	pthread_atfork(NULL,NULL,NULL);
#endif
}
EOP

: see if pthread_atfork exists
set
 try -DPTHREAD_ATFORK
if eval $compile; then
   val="$define"
else
   val="$undef"
fi
case "$usethreads" in
$define)
	case "$val" in
	$define) echo 'pthread_atfork found.' >&4	;;
	*)	echo 'pthread_atfork NOT found.' >&4	;;
	esac
esac
set d_pthread_atfork
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthread_atfork.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: h_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: h_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:h_fcntl: Nothing
?MAKE: -pick add $@ %<
?S:h_fcntl:
?S: This is variable gets set in various places to tell i_fcntl that
?S: <fcntl.h> should be included.
?S:.
: Initialize h_fcntl
h_fcntl=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/h_fcntl.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: rename.C,v 3.0.1.1 1994/01/24 13:58:42 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: rename.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:42  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/rename.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_getgrent.U,v $
?RCS:
```

```
?MAKE:d_getgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getgrent:
?S: This variable conditionally defines the HAS_GETGRENT symbol, which
?S: indicates to the C program that the getgrent() routine is available
?S: for sequential access of the group database.
?S:.
?C:HAS_GETGRENT:
?C: This symbol, if defined, indicates that the getgrent routine is
?C: available for sequential access of the group database.
?C:.
?H:#$d_getgrent HAS_GETGRENT  /**/
?H:.
?LINT:set d_getgrent
: see if getgrent exists
set getgrent d_getgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_getgrent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wifstat.U,v 3.0.1.3 1997/02/28 15:47:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_wifstat.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:47:43  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:09:10  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1995/03/21  08:47:46  ram
?RCS: patch52: created
?RCS:
?MAKE:d_wifstat: Compile d_uwait Oldconfig cat rm
?MAKE: -pick add $@ %<
?S:d_wifstat:
?S: This symbol conditionally defines USE_WIFSTAT
 if the C program can
?S: safely use the WIFxxx macros with the kind of wait() parameter
```

```
?S: declared in the program (see UNION_WAIT), or if it can't. Should
?S: only matter on HP-UX, where the macros are incorrectly written and
?S: therefore cause programs using them with an 'union wait' variable
?S: to not compile properly.
?S:.
?C:USE_WIFSTAT:
?C: This symbol, if defined, indicates to the C program that the argument
?C: for the WIFxxx set of macros such as WIFSIGNALED or WIFEXITED can
?C: be of the same kind as the one used to hold the wait() status. Should
?C: only matter on HP-UX, where the macros are incorrectly written and
?C: therefore cause programs using them with an 'union wait' variable
?C: to not compile properly. See also UNION_WAIT.
?C:.
?H:#$d_wifstat USE_WIFSTAT  /**/
?H:.
?T:type
?F:!foo
: see if we can use WIFxxx macros
echo " "
case "$d_wifstat" in
"$define") echo "As before, you can safely use WIFEXITED and friends!" >&4;;
"$undef") echo "You still can't use WIFEXITED
 and friends!" >&4;;
*)
 echo "Let's see whether you can use the WIFEXITED(status) macro and its"
 case "$d_uwait" in
 "$define") type='union wait';;
 *) type='int';;
 esac
 echo "friends with status declared as '$type status'..."
 $cat >foo.c <<EOCP
#include <sys/types.h>
#include <sys/wait.h>

int main()
{
 $type status;
 int e = 0;

#ifdef WIFEXITED
 if (WIFEXITED(status))
  printf("\n");
 exit(0);
#else
 exit(2);
#endif
}
EOCP
```

```
 d_wifstat="$undef"
 set foo
 if eval $compile; then
  if ./foo >/dev/null; then
   echo "Great! Looks like we can use the WIFxxx macros." >&4
   d_wifstat="$define"
  else
   echo "You don't seem to have WIFxxx macros, but that's ok." >&4
  fi
 else
  echo "Apparently you can't use WIFxxx macros properly." >&4
 fi
 $rm -f foo.* foo core
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_wifstat.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethent: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethent:
?S: This variable conditionally defines HAS_GETHOSTENT if gethostent() is
?S: available to dup file descriptors.
?S:.
?C:HAS_GETHOSTENT (GETHOSTENT):
?C: This symbol, if defined, indicates that the gethostent routine is
?C: available to lookup host names in some data base or other.
?C:.
?H:#$d_gethent HAS_GETHOSTENT  /**/
?H:.
?LINT:set
```

```
 d_gethent
: see if gethostent exists
set gethostent d_gethent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_gethent.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:Assert: cat
?MAKE: -pick add $@ %<
?F:./static_assert.h
: static assertion checking include file
?X:
?X: C programs can include this file to perform STATIC_ASSERT() checks
?X: which are done at compile-time and cause the compilation to fail when
?X: the expression is false.
?X:
?X: It is sufficient to compile with: $cc -c $ccflags try.c
?X: There is no need to link the file to spot the assertion failure.
?X:
$cat >static_assert.h <<'EOC'
#define STATIC_ASSERT(expr) \
 do { switch (0) { case ((expr) ? 1 : 0): case 0: break; } }
 while(0)
EOC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Assert.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sighold.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sighold.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sighold: Inlibc
?MAKE: -pick add $@ %<
?S:d_sighold:
?S: This variable conditionally defines HAS_SIGHOLD if sighold() is
?S: available to hold signals.
?S:.
?C:HAS_SIGHOLD:
?C: This symbol, if defined, indicates that the sighold routine is
?C: available to hold signals.
?C:.
?H:#$d_sighold HAS_SIGHOLD /**/
?H:.
?LINT:set d_sighold
:
 see if sighold exists
set sighold d_sighold
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sighold.U
No license file was found, but licenses were detected in source scan.

```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_nl_langinfo: Inlibc i_langinfo
?MAKE: -pick add $@ %<
?S:d_nl_langinfo:
?S: This variable conditionally defines the HAS_NL_LANGINFO symbol, which
?S: indicates to the C program that the nl_langinfo() routine is available.
?S:.
?C:HAS_NL_LANGINFO:
?C: This symbol, if defined, indicates that the nl_langinfo routine is
?C: available to return local data.  You will also need <langinfo.h>
?C: and therefore I_LANGINFO.
?C:.
?H:#$d_nl_langinfo HAS_NL_LANGINFO  /**/
?H:.
```

```
?LINT:set d_nl_langinfo
?LINT:use i_langinfo
: see if nl_langinfo exists
set nl_langinfo d_nl_langinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_nl_langinfo.U
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```
?RCS: $Id: d_seteuid.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_seteuid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_seteuid: Inlibc
?MAKE: -pick add $@ %<
?S:d_seteuid:
?S: This variable conditionally defines the HAS_SETEUID symbol, which
?S: indicates to the C program that the seteuid() routine is available
?S: to change the effective uid of the current program.
?S:.
?C:HAS_SETEUID (SETEUID):
?C: This symbol, if defined, indicates that the seteuid
 routine is available
?C: to change the effective uid of the current program.
?C:.
?H:#$d_seteuid HAS_SETEUID  /**/
?H:.
?LINT:set d_seteuid
: see if seteuid exists
set seteuid d_seteuid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_seteuid.U
No license file was found, but licenses were detected in source scan.

```
?RCS:
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:uidsize: Myread Typedef uidtype Compile run i_stdlib
?MAKE: -pick add $@ %<
?S:uidsize:
?S: This variable contains the size of a uidtype in bytes.
?S:.
?C:Uid_t_size:
?C: This symbol holds the size of a Uid_t in bytes.
?C:.
?H:#define Uid_t_size $uidsize  /* UID size */
?H:.
?T:yyy zzz
?F:!try
: Check size of UID
echo " "
case "$uidtype" in
*_t) zzz="$uidtype" ;;
*)   zzz="uid"  ;;
esac
echo "Checking the size of $zzz..." >&4
cat > try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include
 <stdlib.h>
#endif
int main() {
   printf("%d\n", (int)sizeof($uidtype));
   exit(0);
}
EOCP
set try
if eval $compile_ok; then
 yyy=`$run ./try`
 case "$yyy" in
 ") uidsize=4
  echo "(I can't execute the test program--guessing $uidsize.)" >&4
  ;;
 *) uidsize=$yyy
```

```
  echo "Your $zzz is $uidsize bytes long."
  ;;
 esac
else
 uidsize=4
 echo "(I can't compile the test program--guessing $uidsize.)" >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/uidsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sunmath.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sunmath: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_sunmath:
?S: This variable conditionally defines the I_SUNMATH symbol, and indicates
?S: whether a C program should include <sunmath.h>.
?S:.
?C:I_SUNMATH:
?C: This symbol, if defined, indicates that <sunmath.h> exists and
?C: should be included.
?C:.
?H:#$i_sunmath I_SUNMATH  /**/
?H:.
?LINT:set i_sunmath
: see if this is a sunmath.h system
set sunmath.h i_sunmath
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_sunmath.U
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```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fd_set.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:33:16  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  06:57:23  ram
?RCS: patch30: extended scope for fd_set checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:27  ram
?RCS: patch16: comments for HAS_FD_* symbols were not consistent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fd_set d_fd_macros d_fds_bits: cat +cc +ccflags rm Oldconfig
 \
 d_socket i_systime i_sysselct i_syssock
?MAKE: -pick add $@ %<
?S:d_fd_set:
?S: This variable contains the eventual value of the HAS_FD_SET symbol,
?S: which indicates if your C compiler knows about the fd_set typedef.
?S:.
?S:d_fd_macros:
?S: This variable contains the eventual value of the HAS_FD_MACROS symbol,
?S: which indicates if your C compiler knows about the macros which
?S: manipulate an fd_set.
?S:.
?S:d_fds_bits:
?S: This variable contains the eventual value of the HAS_FDS_BITS symbol,
?S: which indicates if your fd_set typedef contains the fds_bits member.
?S: If you have an fd_set typedef, but the dweebs who installed it did
?S: a half-fast job and neglected to provide the macros to manipulate
?S: an fd_set, HAS_FDS_BITS will let us know how to fix the gaffe.
?S:.
?C:HAS_FD_SET:
?C: This symbol, when defined, indicates presence of the fd_set typedef
?C: in <sys/types.h>
?C:.
?C:HAS_FD_MACROS:
?C: This symbol, when defined,  indicates presence of the macros used
 to
?C: manipulate an fd_set.
?C:.
?C:HAS_FDS_BITS:
?C: This symbol, when defined, indicates presence of the fds_bits member in
?C: fd_set.  This knowledge is useful if fd_set is available but the macros
?C: aren't.
```

```
?C:.
?H:#$d_fd_set HAS_FD_SET /**/
?H:#$d_fd_macros HAS_FD_MACROS /**/
?H:#$d_fds_bits HAS_FDS_BITS /**/
?H:.
?F:!fd_set
: check for fd_set items
$cat <<EOM

Checking to see how well your C compiler handles fd_set and friends ...
EOM
?X: The FD_SET macros can be in strange places.  On some SysV-based
?X: systems, they are in <sys/bsdtypes.h>, which is included (perhaps)
?X: by <sys/socket.h>.  We won't force people to include
?X: <sys/bsdtypes.h> because it might introduce other
?X: incompatibilities.
$cat >fd_set.c <<EOCP
#$i_systime I_SYS_TIME
#$i_sysselct I_SYS_SELECT
#$d_socket HAS_SOCKET
#$i_syssock I_SYS_SOCKET
#include <sys/types.h>
#ifdef HAS_SOCKET
#ifdef I_SYS_SOCKET
#include <sys/socket.h> /* Might include <sys/bsdtypes.h> */
#endif
#endif
#ifdef I_SYS_TIME
#include
 <sys/time.h>
#endif
#ifdef I_SYS_SELECT
#include <sys/select.h>
#endif
int main() {
 fd_set fds;

#ifdef TRYBITS
 if(fds.fds_bits);
#endif

#if defined(FD_SET) && defined(FD_CLR) && defined(FD_ISSET) && defined(FD_ZERO)
 exit(0);
#else
 exit(1);
#endif
}
EOCP
```

```
if $cc $ccflags -DTRYBITS -o fd_set fd_set.c >fd_set.out 2>&1 ; then
 d_fds_bits="$define"
 d_fd_set="$define"
 echo "Well, your system knows about the normal fd_set typedef..." >&4
 if ./fd_set; then
  echo "and you have the normal fd_set macros (just as I'd expect)." >&4
  d_fd_macros="$define"
 else
  $cat >&4 <<'EOM'
but not the normal fd_set macros!  Gaaack!  I'll have to cover for you.
EOM
  d_fd_macros="$undef"
 fi
else
 $cat <<'EOM'
Hmm, your compiler has some difficulty with fd_set.  Checking further...
EOM
 if $cc $ccflags -o fd_set fd_set.c >fd_set.out 2>&1 ; then
  d_fds_bits="$undef"
  d_fd_set="$define"
  echo "Well, your system has some sort of fd_set available..." >&4
  if ./fd_set; then
   echo "and you have the
 normal fd_set macros." >&4
   d_fd_macros="$define"
  else
   $cat <<'EOM'
but not the normal fd_set macros!  Gross!  More work for me...
EOM
   d_fd_macros="$undef"
  fi
 else
 echo "Well, you got zip.  That's OK, I can roll my own fd_set stuff." >&4
  d_fd_set="$undef"
  d_fds_bits="$undef"
  d_fd_macros="$undef"
 fi
fi
$rm -f fd_set*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fd_set.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_safemcpy.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:41:12  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  13:58:46  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.3  1995/03/21  08:47:26  ram
?RCS: patch52: swapped two first arguments of memcpy() calls
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:15:10
  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:53:12  ram
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safemcpy: cat d_memcpy +cc +optimize +ccflags +libs +ldflags rm \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safemcpy:
?S: This variable conditionally defines the HAS_SAFE_MEMCPY symbol if
?S: the memcpy() routine can do overlapping copies.
?S:.
?C:HAS_SAFE_MEMCPY (SAFE_MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy potentially overlapping memory blocks. Otherwise you should
?C: probably use memmove() or memcpy(). If neither is defined, roll your
?C: own version.
?C:.
?H:#$d_safemcpy HAS_SAFE_MEMCPY /**/
?H:.
?F:!safemcpy
?LINT: set d_safemcpy
: can memcpy handle overlapping blocks?
?X:
```

```
 assume the worst
val="$undef"
case "$d_memcpy" in
"$define")
 echo " "
 echo "Checking to see if your memcpy() can do overlapping copies..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
memcpy(abc, "abcdefghijklmnopqrstuvwxyz0123456789", 36);

for (align = 7; align >= 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  memcpy(b, abc, len);
  for (off = 1; off <= len; off++) {
   memcpy(b+off, b, len);
   memcpy(b, b+off, len);
   if (memcmp(b, abc, len))
```

```
    exit(1);
  }
 }
}
exit(0);
}
EOCP
 if
 $cc $optimize $ccflags $ldflags \
      -o safemcpy foo.c $libs >/dev/null 2>&1; then
  if ./safemcpy 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "It can't, sorry."
   case "$d_memmove" in
   "$define") echo "But that's Ok since you have memmove()." ;;
   esac
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
  case "$d_memmove" in
  "$define") echo "But that's Ok since you have memmove()." ;;
  esac
 fi
 ;;
esac
$rm -f foo.* safemcpy core
set d_safemcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_safemcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_dbm.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:48:20  ram
?RCS: patch61: added I_RPCSVC_DBM check
```

```
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:16:05  ram
?RCS: patch54: made more robust by checking both header and lib (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_dbm i_rpcsvcdbm: Inhdr Inlibc Setvar
?MAKE: -pick add $@ %<
?S:i_dbm (d_odbm):
?S: This variable conditionally defines
 the I_DBM symbol, which
?S: indicates to the C program that <dbm.h> exists and should
?S: be included.
?S:.
?S:i_rpcsvcdbm:
?S: This variable conditionally defines the I_RPCSVC_DBM symbol, which
?S: indicates to the C program that <rpcsvc/dbm.h> exists and should
?S: be included.  Some System V systems might need this instead of <dbm.h>.
?S:.
?C:I_DBM (HAS_ODBM ODBM):
?C: This symbol, if defined, indicates that <dbm.h> exists and should
?C: be included.
?C:.
?C:I_RPCSVC_DBM:
?C: This symbol, if defined, indicates that <rpcsvc/dbm.h> exists and
?C: should be included.
?C:.
?H:#$i_dbm I_DBM /**/
?H:#$i_rpcsvcdbm I_RPCSVC_DBM /**/
?H:.
?T:d_dbmclose
?LINT:set i_dbm i_rpcsvcdbm
: see if dbm.h is available
?X: We might just have the header, not the library.
?X: We look for dbmclose() rather than dbminit() because
?X: some versions of SCO Unix have -ldbm, but are missing dbmclose(). -- ADO
?X: Some System V systems have <rpcsvc/dbm.h> instead of <dbm.h>.
: see if dbmclose exists
set dbmclose
 d_dbmclose
eval $inlibc

case "$d_dbmclose" in
$define)
 set dbm.h i_dbm
 eval $inhdr
 case "$i_dbm" in
```

```
 $define)
  val="$undef"
  set i_rpcsvcdbm
  eval $setvar
  ;;
 *) set rpcsvc/dbm.h i_rpcsvcdbm
  eval $inhdr
  ;;
 esac
 ;;
*) echo "We won't be including <dbm.h>"
 val="$undef"
 set i_dbm
 eval $setvar
 val="$undef"
 set i_rpcsvcdbm
 eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_csh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:32:18  ram
?RCS: patch61: added full_csh to preserve the full path even when portable
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_csh full_csh: csh Setvar
?MAKE: -pick add $@ %<
?S:d_csh:
?S: This variable conditionally defines the CSH symbol, which
?S: indicates to the C program that the C-shell exists.
?S:.
?S:full_csh:
```

```
?S: This variable contains the full pathname to 'csh', whether
 or
?S: not the user has specified 'portability'.  This is only used
?S: in the compiled C program, and we assume that all systems which
?S: can share this executable will have the same full pathname to
?S: 'csh.'
?S:.
?C:HAS_CSH:
?C: This symbol, if defined, indicates that the C-shell exists.
?C:.
?C:CSH:
?C: This symbol, if defined, contains the full pathname of csh.
?C:.
?X: Previously, I just did $d_csh CSH "$full_csh", but that caused
?X: problems on VMS where the config.sh extraction program changes
?X: $undef to a real cpp undef, and they then had  #undef CSH ""
?X: which the compiler didn't like.  It's easy to work around this,
?X: so I did.  --AD  3/1998.
?X: And we don't want to define CSH if !HAS_CSH, but we don't want
?X: those lines in config.h if they don't need CSH, so protect with ?CSH
?X: and not ?%<. --RAM, 15/02/2004
?H:?%<:#$d_csh HAS_CSH  /**/
?H:?CSH:#ifdef HAS_CSH
?H:?CSH:#define CSH "$full_csh" /**/
?H:?CSH:#endif
?H:.
?LINT:set d_csh
: get csh whereabouts
case
 "$csh" in
'csh') val="$undef" ;;
*) val="$define" ;;
esac
set d_csh
eval $setvar
: Respect a hint or command line value for full_csh.
case "$full_csh" in
") full_csh=$csh ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_csh.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: installprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: installprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:installprefix installprefixexp: Getfile Loc \
 Oldconfig afs cat package prefix
?MAKE: -pick add $@ %<
?S:installprefix:
?S: This variable holds the name of the directory below which
?S: "make install" will install the package.  For most users, this
?S: is the same
 as prefix.  However, it is useful for
?S: installing the software into a different (usually temporary)
?S: location after which it can be bundled up and moved somehow
?S: to the final location specified by prefix.
?S:.
?S:installprefixexp:
?S: This variable holds the full absolute path of installprefix
?S: with all ~-expansion done.
?S:.
: determine installation prefix for where package is to be installed.
if $afs; then
$cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
files will reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installprefix" in
 '') dflt=`echo $prefix | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installprefix";;
 esac
else
$cat <<EOM

In some special cases, particularly when building $package for distribution,
it is convenient to distinguish the directory in which files should be
installed from the directory ($prefix) in which they will
```

```
eventually
 reside.  For most users, these two directories are the same.

EOM
 case "$installprefix" in
 ") dflt=$prefix ;;
 *) dflt=$installprefix;;
 esac
fi
fn=d~
rp='What installation prefix should I use for installing files?'
. ./getfile
installprefix="$ans"
installprefixexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/installprefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systimeb.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systimeb.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <sys/timeb.h> should be included
?X: or not when using ftime() (for struct timeb definition).
?X:
?X: Force looking for <sys/time.h> for struct timeb.
?X:INC: i_systime
?MAKE:i_systimeb: test contains Loc Setvar Findhdr
?MAKE: -pick add $@ %<
?S:i_systimeb:
?S: This variable conditionally defines I_SYS_TIMEB,
 which indicates
?S: to the C program that it should include <sys/timeb.h>.
?S:.
?C:I_SYS_TIMEB (I_SYSTIMEB):
?C: This symbol, if defined, indicates to the C program that it should
```

```
?C: include <sys/timeb.h>, in order to define struct timeb (some systems
?C: define this in <sys/time.h>). This is useful when using ftime().
?C: You should include <sys/time.h> if I_SYS_TIMEB is not defined,
?C: nor is I_SYS_TIME.
?C:.
?H:#$i_systimeb I_SYS_TIMEB  /**/
?H:.
?T:xxx
?LINT:set i_systimeb
: see where struct timeb is defined
echo " "
xxx=`./findhdr sys/timeb.h`
if $test "$xxx"; then
 if $contains 'struct timeb' $xxx >/dev/null 2>&1; then
  val="$define"
  echo "You have struct timeb defined in <sys/timeb.h>." >&4
 else
  val="$undef"
  echo "Assuming struct timeb is defined in <sys/time.h>." >&4
 fi
else
 val="$undef"
echo "No <sys/timeb.h> -- Assuming struct timeb is defined in <sys/time.h>." >&4
fi
set i_systimeb
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systimeb.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_neterrno.U,v 3.0.1.3 1994/10/29 16:20:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_neterrno.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:20:29  ram
?RCS: patch36: forgot to initialize 'val' to an empty value (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:22:10  ram
```

```
?RCS: patch32: removed spurious echo
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:02:05  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:i_neterrno: Inhdr +cc +ccflags rm_try Setvar
?MAKE: -pick
 add $@ %<
?S:i_neterrno:
?S: This variable conditionally defines the I_NET_ERRNO symbol, which
?S: indicates to the C program that <net/errno.h> exists and should
?S: be included.
?S:.
?C:I_NET_ERRNO:
?C: This symbol, if defined, indicates that <net/errno.h> exists and
?C: should be included.
?C:.
?H:#$i_neterrno I_NET_ERRNO  /**/
?H:.
?LINT:set i_neterrno
: see if net/errno.h is available
val=''
set net/errno.h val
eval $inhdr

: Unfortunately, it causes problems on some systems.  Arrgh.
case "$val" in
$define)
 cat > try.c <<'EOM'
#include <stdio.h>
#include <errno.h>
#include <net/errno.h>
int func()
{
 return ENOTSOCK;
}
EOM
 if $cc $ccflags -c try.c >/dev/null 2>&1; then
  echo "We'll be including <net/errno.h>." >&4
 else
  echo "We won't be including <net/errno.h>." >&4
  val="$undef"
 fi
 $rm_try
 ;;
esac
set i_neterrno
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_neterrno.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2015 Jarkko Hietaniemi, H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:longdblmantbits doublemantbits nvmantbits: Inlibc cat Compile run \
 rm_try Setvar echo i_sunmath usequadmath \
 d_longdbl longdblkind nvsize doublesize longdblsize
?MAKE: -pick add $@ %<
?S:doublemantbits:
?S: This symbol, if defined, tells how many mantissa bits
?S: there are in double precision floating point format.
?S: Note that this is usually DBL_MANT_DIG minus one, since
?S: with the standard IEEE 754 formats DBL_MANT_DIG includes
?S: the implicit bit which doesn't really exist.
?S:.
?S:longdblmantbits:
?S: This symbol, if defined, tells how many mantissa bits
?S: there are in long double precision floating point format.
?S: Note that this can be LDBL_MANT_DIG minus one,
?S: since
 LDBL_MANT_DIG can include the IEEE 754 implicit bit.
?S: The common x86-style 80-bit long double does not have
?S: an implicit bit.
?S:.
?S:nvmantbits:
?S: This variable tells how many bits the mantissa of a Perl NV has,
?S: not including the possible implicit bit.
?S:.
?C:DOUBLEMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: there are in double precision floating point format.
?C: Note that this is usually DBL_MANT_DIG minus one, since
?C: with the standard IEEE 754 formats DBL_MANT_DIG includes
?C: the implicit bit, which doesn't really exist.
?C:.
?C:LONGDBLMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: there are in long double precision floating point format.
?C: Note that this can be LDBL_MANT_DIG minus one,
?C: since LDBL_MANT_DIG can include the IEEE 754 implicit bit.
```

```
?C: The common x86-style 80-bit long double does not have
?C: an implicit bit.
?C:.
?C:NVMANTBITS:
?C: This symbol, if defined, tells how many mantissa bits
?C: (not
 including implicit bit) there are in a Perl NV.
?C: This depends on which floating point type was chosen.
?C:.
?H:#define DOUBLEMANTBITS  $doublemantbits
?H:#define LONGDBLMANTBITS $longdblmantbits
?H:#define NVMANTBITS      $nvmantbits
?H:.
?F:!try
: Check the length of the double mantissa
$echo "Checking how many mantissa bits your doubles have..." >&4
$cat >try.c <<EOP
#$i_sunmath I_SUNMATH
#include <float.h>
#ifdef I_SUNMATH
# include <sunmath.h>
#endif
#ifdef DBL_MANT_DIG
# define BITS (DBL_MANT_DIG - 1) /* the implicit bit does not count */
#endif
#include <stdio.h>
int main(int argc, char *argv[]) {
#ifdef BITS
 printf("%d\n", BITS);
#endif
 return 0;
}
EOP
set try
if eval $compile; then
   doublemantbits=`$run ./try`
else
   doublemantbits="$undef"
fi
$rm_try

: Check the length of the longdouble mantissa
$echo "Checking how many mantissa bits your long doubles have..." >&4
$cat >try.c <<EOP
#$i_sunmath I_SUNMATH
#include <float.h>
#ifdef I_SUNMATH
# include <sunmath.h>
```

```
#endif
#$d_longdbl
 HAS_LONG_DOUBLE
#if defined(HAS_LONG_DOUBLE) && defined(LDBL_MANT_DIG)
# if ($longdblkind == 3) || ($longdblkind == 4) /* 80-bit extended precision */
/* This format has no implicit bit.  Beware, however, that for
* this format the bare LDBL_MANT_DIG is misleading for inf/nan:
* the top three bits are used for inf (100) / qnan (11x) / snan (101),
* and the top bit must have been one since 387, zero is plain invalid.
* For normal fp values, the LDBL_MANT_DIG is fine, though. */
#  define BITS LDBL_MANT_DIG
# elif ($longdblkind == 5 || $longdblkind == 6 || $longdblkind == 7 || $longdblkind == 8) /* double double */
/* LDBL_MANT_DIG of 106 (twice 53) would be logical, but for some
* reason e.g. Irix thinks 107.  But in any case, we want only
* the number of real bits, the implicit bits are of no interest.  */
#  define BITS 2 * (DBL_MANT_DIG - 1)
# else
#  define BITS (LDBL_MANT_DIG - 1) /* the implicit bit does not count */
# endif
#endif
#include <stdio.h>
int
 main(int argc, char *argv[]) {
#ifdef BITS
 printf("%d\n", BITS);
#endif
 return 0;
}
EOP
set try
if eval $compile; then
   longdblmantbits=`$run ./try`
else
   longdblmantbits="$undef"
fi
$rm_try

: Check the length of the NV mantissa
$echo "Checking how many mantissa bits your NVs have..." >&4
if test "X$usequadmath" = "X$define"; then
 nvmantbits=112 # 128-1-15
else
 if test "X$nvsize" = "X$doublesize"; then
   nvmantbits="$doublemantbits"
 else
    if test "X$nvsize" = "X$longdblsize"; then
      nvmantbits="$longdblmantbits"
    else
```

```
    nvmantbits="$undef"
   fi
 fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/mantbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_niin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_niin.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks wether <netinet/in.h> is available or not
?X:
?MAKE:i_niin i_sysin: Inhdr
?MAKE: -pick add $@ %<
?S:i_niin:
?S: This variable conditionally defines I_NETINET_IN, which indicates
?S: to the C program that it should include <netinet/in.h>. Otherwise,
?S: you may try <sys/in.h>.
?S:.
?S:i_sysin:
?S: This variable conditionally
 defines I_SYS_IN, which indicates
?S: to the C program that it should include <sys/in.h> instead of
?S: <netinet/in.h>.
?S:.
?C:I_NETINET_IN:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <netinet/in.h>. Otherwise, you may try <sys/in.h>.
?C:.
?C:I_SYS_IN (I_SYSIN):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/in.h> instead of <netinet/in.h>.
?C:.
?H:#$i_niin I_NETINET_IN /**/
```

```
?H:#$i_sysin I_SYS_IN  /**/
?H:.
?LINT:set i_niin i_sysin
: see if this is a netinet/in.h or sys/in.h system
set netinet/in.h i_niin sys/in.h i_sysin
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_niin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: abortsig.U,v 3.0.1.1 1994/10/29 16:02:19 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: abortsig.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:19  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:abortsig: Myread Oldconfig Guess cat Compile rm
?MAKE: -pick add $@ %<
?S:abortsig:
?S: This variable holds the name of the signal used by the abort() call.
?S:.
?C:ABORTSIG:
?C: This symbol holds the signal number (symbol)
 used by the abort() call. To
?C: actually define the signal symbol, <signal.h> should be included.
?C:.
?H:#define ABORTSIG $abortsig  /**/
?H:.
?T:signal
: which signal is sent by abort ?
echo " "
case "$abortsig" in
")
 echo "Checking to see which signal is sent to the process by abort()..." >&4
 echo "abort" > abort.sh
 chmod +x abort.sh
```

```
?X: SIGABRT should replace SIGIOT on USG machines in a near future (1991).
 for signal in SIGIOT SIGILL SIGABRT; do
  case "$abortsig" in
  ") $cat >abort.c <<EOP
#include <signal.h>
caught() { exit(0); }
int main()
{
#ifdef $signal
 signal($signal, caught);
#endif
 if (-1 == abort())
  exit(1);
 exit(1);
}
EOP
?X: We have to use the abort.sh script otherwise sh behaves strangely on AIX.
   set abort
   if eval $compile; then
    (./abort.sh) >/dev/null 2>&1
    case $? in
    0) abortsig="$signal";;
    esac
   fi
   ;;
  esac
 done
 ;;
esac
case "$abortsig" in
") echo "(I wasn't able to compute the signal name--guessing)"
 if ./usg; then
  dflt="SIGIOT"
 else
  dflt="SIGILL"
 fi;;
*)
  dflt="$abortsig"
 ;;
esac
rp="Which signal does abort() send to the process (signal name)?"
. ./myread
abortsig="$ans"
$rm -f core abort.sh abort abort.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/abortsig.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_sysfile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:11:36  ram
?RCS: patch56: removed <> characters from comment, per metalint suggestion
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:01:23  ram
?RCS: patch6: added default for i_sysfile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_sysfile: h_sysfile Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_sysfile:
?S: This variable conditionally defines
 the I_SYS_FILE symbol, and indicates
?S: whether a C program should include <sys/file.h> to get R_OK and friends.
?S:.
?C:I_SYS_FILE (I_SYSFILE):
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/file.h> to get definition of R_OK and friends.
?C:.
?H:#$i_sysfile I_SYS_FILE  /**/
?H:.
?T:val
?D:i_sysfile=''
?LINT:change h_sysfile
?LINT:set i_sysfile
: see if this is a sys/file.h system
val=''
set sys/file.h val
eval $inhdr

: do we need to include sys/file.h ?
case "$val" in
"$define")
 echo " "
```

```
 if $h_sysfile; then
  val="$define"
  echo "We'll be including <sys/file.h>." >&4
 else
  val="$undef"
  echo "We won't be including <sys/file.h>." >&4
 fi
 ;;
*)
 h_sysfile=false
 ;;
esac
set i_sysfile
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_sysfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nblock_io.U,v 3.0.1.2 1997/02/28 16:17:14 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: nblock_io.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:17:14  ram
?RCS: patch61: simplify here document for shells that can't handle them well
?RCS: patch61: force use of "startsh" at the head of the generated script
?RCS: patch61: added new files to the ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:13:22  ram
?RCS: patch56: created
?RCS:
?X:
?X: Simplify here document for shells that can't handle them well.
?X: (Problem reported on FreeBSD;
 it's unclear if this helps.)  --AD
?X:
?MAKE:o_nonblock eagain rd_nodata d_eofnblk: cat rm_try Compile run \
 d_open3 h_sysfile h_fcntl signal_t hint Oldconfig Setvar \
 startsh i_unistd i_fcntl i_stdlib d_fork d_pipe d_alarm
?MAKE: -pick add $@ %<
?S:o_nonblock:
```

```
?S: This variable bears the symbol value to be used during open() or fcntl()
?S: to turn on non-blocking I/O for a file descriptor. If you wish to switch
?S: between blocking and non-blocking, you may try ioctl(FIOSNBIO) instead,
?S: but that is only supported by some devices.
?S:.
?S:eagain:
?S: This variable bears the symbolic errno code set by read() when no
?S: data is present on the file and non-blocking I/O was enabled (otherwise,
?S: read() blocks naturally).
?S:.
?S:rd_nodata:
?S: This variable holds the return code from read() when no data is
?S: present. It should be -1, but some systems return 0 when O_NDELAY is
?S: used, which is a shame because you cannot make the difference between
?S: no data and an EOF.. Sigh!
?S:.
?S:d_eofnblk:
?S: This
 variable conditionally defines EOF_NONBLOCK if EOF can be seen
?S: when reading from a non-blocking I/O source.
?S:.
?C:VAL_O_NONBLOCK:
?C: This symbol is to be used during open() or fcntl(F_SETFL) to turn on
?C: non-blocking I/O for the file descriptor. Note that there is no way
?C: back, i.e. you cannot turn it blocking again this way. If you wish to
?C: alternatively switch between blocking and non-blocking, use the
?C: ioctl(FIOSNBIO) call instead, but that is not supported by all devices.
?C:.
?C:VAL_EAGAIN:
?C: This symbol holds the errno error code set by read() when no data was
?C: present on the non-blocking file descriptor.
?C:.
?C:RD_NODATA:
?C: This symbol holds the return code from read() when no data is present
?C: on the non-blocking file descriptor. Be careful! If EOF_NONBLOCK is
?C: not defined, then you can't distinguish between no data and EOF by
?C: issuing a read(). You'll have to find another way to tell for sure!
?C:.
?C:EOF_NONBLOCK:
?C: This
 symbol, if defined, indicates to the C program that a read() on
?C: a non-blocking file descriptor will return 0 on EOF, and not the value
?C: held in RD_NODATA (-1 usually, in that case!).
?C:.
?H:#define VAL_O_NONBLOCK $o_nonblock
?H:#define VAL_EAGAIN $eagain
?H:#define RD_NODATA $rd_nodata
?H:#$d_eofnblk EOF_NONBLOCK
```

```
?H:.
?T:status
?F:!try.out !try.ret !try.err !try !mtry
?LINT:use d_open3
: check for non-blocking I/O stuff
case "$h_sysfile" in
true) echo "#include <sys/file.h>" > head.c;;
*)
	case "$h_fcntl" in
	true) echo "#include <fcntl.h>" > head.c;;
	*) echo "#include <sys/fcntl.h>" > head.c;;
	esac
	;;
esac
echo " "
echo "Figuring out the flag used by open() for non-blocking I/O..." >&4
case "$o_nonblock" in
")
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_fcntl I_FCNTL
#ifdef I_FCNTL
#include <fcntl.h>
#endif
int main() {
#ifdef O_NONBLOCK
 printf("O_NONBLOCK\n");
 exit(0);
#endif
#ifdef
 O_NDELAY
 printf("O_NDELAY\n");
 exit(0);
#endif
?X: Stevens "Advanced Programming in the UNIX Environment" page 364 mentions
?X: the FNDELAY symbol, used in 4.3BSD (source: Paul Marquess).
#ifdef FNDELAY
 printf("FNDELAY\n");
 exit(0);
#endif
 exit(0);
}
EOCP
```

```
 set try
 if eval $compile_ok; then
  o_nonblock=`$run ./try`
  case "$o_nonblock" in
  ") echo "I can't figure it out, assuming O_NONBLOCK will do.";;
  *) echo "Seems like we can use $o_nonblock.";;
  esac
 else
  echo "(I can't compile the test program; pray O_NONBLOCK is right!)"
 fi
 ;;
*) echo "Using $hint value $o_nonblock.";;
esac
$rm_try

echo " "
echo "Let's see what value errno gets from read() on a $o_nonblock file..." >&4
case "$eagain" in
")
 case "$d_fork:$d_pipe:$d_alarm" in
 define:define:define)
 $cat head.c > try.c
 $cat >>try.c <<EOCP
#include <errno.h>
#include <sys/types.h>
#include <signal.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_fcntl
 I_FCNTL
#ifdef I_FCNTL
#include <fcntl.h>
#endif
#define MY_O_NONBLOCK $o_nonblock
#ifndef errno  /* XXX need better Configure test */
extern int errno;
#endif
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#include <unistd.h>
#endif
#include <string.h>
$signal_t blech(int x) { exit(3); }
EOCP
 $cat >> try.c <<'EOCP'
```

```
int main()
{
 int pd[2];
 int pu[2];
 char buf[1];
 char string[100];
 int ret;

 ret = pipe(pd); /* Down: child -> parent */
 if (ret != 0)
  exit(3);
 ret = pipe(pu); /* Up: parent -> child */
 if (ret != 0)
  exit(3);
 if (0 != fork()) {
  close(pd[1]); /* Parent reads from pd[0] */
  close(pu[0]); /* Parent writes (blocking) to pu[1] */
#ifdef F_SETFL
  if (-1 == fcntl(pd[0], F_SETFL, MY_O_NONBLOCK))
   exit(1);
#else
  exit(4);
#endif
  signal(SIGALRM, blech);
  alarm(5);
  if ((ret = read(pd[0], buf, 1)) > 0) /* Nothing to read! */
   exit(2);
  sprintf(string, "%d\n", ret);
  ret = write(2, string, strlen(string));
  if (ret != strlen(string))
   exit(3);
  alarm(0);
#ifdef
 EAGAIN
  if (errno == EAGAIN) {
   printf("EAGAIN\n");
   goto ok;
  }
#endif
#ifdef EWOULDBLOCK
  if (errno == EWOULDBLOCK)
   printf("EWOULDBLOCK\n");
#endif
 ok:
  ret = write(pu[1], buf, 1); /* Unblocks child, tell it to close our pipe */
  if (ret != 1)
   exit(3);
  sleep(2);    /* Give it time to close our pipe */
```

```
 alarm(5);
 ret = read(pd[0], buf, 1); /* Should read EOF */
 alarm(0);
 sprintf(string, "%d\n", ret);
 ret = write(4, string, strlen(string));
 if (ret != strlen(string))
  exit(3);
 exit(0);
 }

 close(pd[0]);   /* We write to pd[1] */
 close(pu[1]);   /* We read from pu[0] */
 ret = read(pu[0], buf, 1); /* Wait for parent to signal us we may continue */
 if (ret != 1)
  exit(3);
 close(pd[1]);   /* Pipe pd is now fully closed! */
 exit(0);    /* Bye bye, thank you for playing! */
}
EOCP
 set try
 if eval $compile_ok; then
?X: Use script to avoid the possible 'alarm call' message
  echo "$startsh" >mtry
  echo "$run ./try >try.out 2>try.ret 4>try.err
 || exit 4" >>mtry
  chmod +x mtry
  $run ./mtry >/dev/null 2>&1
  case $? in
  0) eagain=`$cat try.out`;;
  1) echo "Could not perform non-blocking setting!";;
  2) echo "I did a successful read() for something that was not there!";;
  3) echo "Hmm... non-blocking I/O does not seem to be working!";;
  4) echo "Could not find F_SETFL!";;
  *) echo "Something terribly wrong happened during testing.";;
  esac
  rd_nodata=`$cat try.ret`
  echo "A read() system call with no data present returns $rd_nodata."
  case "$rd_nodata" in
  0|-1) ;;
  *)
   echo "(That's peculiar, fixing that to be -1.)"
   rd_nodata=-1
   ;;
  esac
  case "$eagain" in
  ")
   echo "Forcing errno EAGAIN on read() with no data available."
   eagain=EAGAIN
```

```
  ;;
 *)
  echo "Your read() sets errno to $eagain when no data is available."
  ;;
 esac
 status=`$cat try.err`
 case "$status" in
 0) echo "And it correctly returns 0 to signal EOF.";;
 -1) echo "But it also returns -1 to signal EOF, so be careful!";;
 *)
echo "However, your read() returns '$status' on EOF??";;
 esac
 val="$define"
 if test "$status" = "$rd_nodata"; then
  echo "WARNING: you can't distinguish between EOF and no data!"
  val="$undef"
 fi
else
 echo "I can't compile the test program--assuming errno EAGAIN will do."
 eagain=EAGAIN
fi
;;
*) echo "Can't figure out how to test this--assuming errno EAGAIN will do."
 eagain=EAGAIN
 val="$define"
 ;;
esac
set d_eofnblk
eval $setvar
;;
*)
echo "Using $hint value $eagain."
echo "Your read() returns $rd_nodata when no data is present."
case "$d_eofnblk" in
"$define") echo "And you can see EOF because read() returns 0.";;
"$undef") echo "But you can't see EOF status from read() returned value.";;
*)
?X: Should not happen, but if it does, assume the worst!
 echo "(Assuming you can't see EOF status from read anyway.)"
 d_eofnblk=$undef
 ;;
esac
;;
esac
$rm_try head.c mtry
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/nblock_io.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: socksizetype.U,v $
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:socksizetype: \
 Protochk Oldconfig Myread cat d_socket d_socklen_t sizetype \
 usesocks i_socks i_systypes extern_C
?MAKE: -pick add $@ %<
?S:socksizetype:
?S: This variable holds the type used for the size argument
?S: for various socket calls like accept.  Usual values include
?S: socklen_t, size_t, and int.
?S:.
?C:Sock_size_t:
?C: This symbol holds the type used for the size argument of
?C: various socket calls (just the base type, not the pointer-to).
?C:.
?H:#define Sock_size_t  $socksizetype /**/
?H:.
?T:xxx yyy try
@if Sock_size_t
: check for type of the size argument to socket calls
case "$d_socket" in
"$define")
 $cat <<EOM

Checking to see what type is the last argument
 of accept().
EOM
 yyy=''
 case "$d_socklen_t" in
 "$define") yyy="$yyy socklen_t"
 esac
 yyy="$yyy $sizetype int long unsigned"
 for xxx in $yyy; do
  case "$socksizetype" in
  '') try="$extern_C int accept(int, struct sockaddr *, $xxx *);"
   case "$usesocks" in
   "$define")
    if ./protochk "$try" $i_systypes sys/types.h $d_socket sys/socket.h literal '#define INCLUDE_PROTOTYPES'
$i_socks socks.h.; then
     echo "Your system accepts '$xxx *' for the last argument of accept()."
     socksizetype="$xxx"
```

```
    fi
    ;;
   *) if ./protochk "$try"  $i_systypes sys/types.h $d_socket sys/socket.h; then
     echo "Your system accepts '$xxx *' for the last argument of accept()."
     socksizetype="$xxx"
    fi
    ;;
   esac
   ;;
  esac
 done
: In case none of those worked, prompt the user.
 case "$socksizetype" in
 ") rp='What is the type for socket address structure sizes?'
  dflt='int'
  . ./myread
  socksizetype=$ans
  ;;
 esac
 ;;
*) : no sockets, so pick relatively harmless default
 socksizetype='int'
 ;;
esac
@end
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/socksizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_cuserid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_cuserid.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:25  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_cuserid: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_cuserid:
?S: This variable conditionally defines the HAS_CUSERID symbol, which
?S: indicates to the C program that the cuserid() routine is available
?S: to get character login names.
?S:.
?C:HAS_CUSERID :
?C: This symbol,
 if defined, indicates that the cuserid routine is
?C: available to get character login names.
?C:.
?H:#$d_cuserid HAS_CUSERID  /**/
?H:.
?LINT:set d_cuserid
: see if cuserid exists
set cuserid d_cuserid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_cuserid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2021 Nicholas Clark & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_thread_local perl_thread_local: cat echo Setvar Compile run rm_try hint
?MAKE: -pick add $@ %<
?S:d_thread_local:
?S: This variable conditionally defines the PERL_THREAD_LOCAL symbol. In
?S: turn that gives a linkage specification for thread-local storage.
?S:.
?S:perl_thread_local:
?S: This variable gives the value for the PERL_THREAD_LOCAL symbol (when
?S: defined), which gives a linkage specification for thread-local storage.
?S:.
?C:PERL_THREAD_LOCAL:
?C: This symbol, if defined, gives a linkage specification for thread-local
?C: storage. For example, for a C11 compiler this will be _Thread_local.
?C: Beware, some compilers are sensitive to the C language standard they are
?C: told
 to parse. For example, suncc defaults to C11, so our probe will
?C: report that _Thread_local can be used. However, if the -std=c99 is later
?C: added to the compiler flags, then _Thread_local will become a syntax
?C: error. Hence it is important for these flags to be consistent between
```

```
?C: probing and use.
?C:.
?H:#$d_thread_local PERL_THREAD_LOCAL $perl_thread_local /**/
?H:.
?T:thread_local
?F:!try
?LINT:set d_thread_local
: see what flavor, if any, of thread local storage is supported
echo " "
echo "Checking to see if your system supports C11 thread local storage..."
$cat > try.c <<'EOCP'
#include <stdio.h>
#include <stdlib.h>
#include <pthread.h>

static int plus_one = 1;
static int minus_one = -1;

PROBE_MACRO int *minion;

int callback (const void *a, const void *b) {
  int val_a = *minion * *(const int *)a;
  int val_b = *minion * *(const int *)b;
  return val_a < val_b ? -1 : val_a > val_b;
}

#define SIZE 8

void *thread_function(void *arg) {
  /* thread local variables
 should start zeroed in each thread. */
  if (minion != NULL) {
      fprintf(stderr, "__thread variable started with %p, should be NULL\n",
              minion);
      exit(2);
  }
  minion = &minus_one;

  int array[SIZE];
  unsigned int i;
  for (i = 0; i < SIZE; ++i) {
      /* "Hash randomisation" - this array isn't in sorted order: */
      array[i ^ 5] = i * i;
  }

  qsort(array, SIZE, sizeof(int), callback);

  int bad = 0;
```

```
  for (i = 0; i < SIZE; ++i) {
      int want = (SIZE - 1 - i) * (SIZE - 1 - i);
      int have = array[i];
      if (want != have) {
          ++bad;
          fprintf(stderr, "array[%u] - want %i, have %i\n", i, want, have);
      }
  }
  if (bad)
      exit(3);

  return NULL;
}

int main(int argc, char **argv) {
  if (minion != NULL) {
      fprintf(stderr, "__thread variable started with %p, should be NULL\n",
              minion);
      exit(4);
  }

  minion = &plus_one;

  pthread_t
 tid;
  int result = pthread_create(&tid, NULL, thread_function, NULL);
  if (result) {
      fprintf(stderr, "pthread_create failed (%d)\n", result);
      exit(5);
  }

  result = pthread_join(tid, NULL);
  if (result) {
      fprintf(stderr, "pthread_join failed (%d)\n", result);
      exit(6);
  }

  if (minion == NULL) {
      fprintf(stderr, "__thread variable should not be NULL\n");
      exit(7);
  }
  if (!(minion == &plus_one && *minion == 1)) {
      fprintf(stderr, "__thread variable should be %d @ %p, not %d @ %p\n",
              1, &plus_one, *minion, minion);
      exit(8);
  }

  return 0;
```

```
}
EOCP

# Respect a hint (or previous) value for perl_thread_local, if there is one.
case "$perl_thread_local" in
") # Check the various possibilities, and break out on success.
 for thread_local in _Thread_local __thread; do
  set try -DPROBE_MACRO=$thread_local
  if eval $compile && $run ./try; then
   $echo "Your compiler supports $thread_local."
 >&4
   val=$define
   perl_thread_local="$thread_local";
   break;
  fi
  $echo "Your compiler does NOT support $thread_local." >&4
  val="$undef"
 done
 ;;
*thread*|*Thread*) # Some variant of thread local exists.
 echo "Keeping your $hint value of $perl_thread_local."
 val=$define
 ;;
*)  # Unrecognized previous value -- blindly trust the supplied
 # value and hope it makes sense.  Use old value for
 # d_thread_local, if there is one.
 echo "Keeping your $hint value of $perl_thread_local."
 case "$d_thread_local" in
  ") val=$define ;;
  *)  val=$d_thread_local ;;
 esac
 ;;
esac
set d_thread_local
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_thread_local.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016 Tony Cook
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:dtraceobject dtracexnolibs: usedtrace dtrace cc ccflags optimize \
  Compile cat rm_try
```

```
?MAKE: -pick add $@ %<
?S:dtraceobject:
?S: Whether we need to build an object file with the dtrace tool.
?S:.
?S:dtracexnolibs:
?S: Whether dtrace accepts -xnolibs.  If available we call dtrace -h
?S: and dtrace -G with -xnolibs to allow dtrace to run in a jail on
?S: FreeBSD.
?S:.
?F: !perldtrace.h
?T:xnolibs
: Probe whether dtrace builds an object, as newer Illumos requires an input
: object file that uses at least one of the probes defined in the .d file
case "$usedtrace" in
$define)
  case "$dtracexnolibs" in
  $define|true|[yY]*)
      dtracexnolibs=$define
 $dtrace -h -xnolibs -s ../perldtrace.d -o perldtrace.h
 ;;
  ' '|'')
       if $dtrace -h -xnolibs -s ../perldtrace.d -o perldtrace.h 2>&1 ; then
     dtracexnolibs=$define
     echo "Your dtrace accepts -xnolibs"
 elif $dtrace -h -s ../perldtrace.d -o perldtrace.h 2>&1 ; then
     dtracexnolibs=$undef
     echo "Your dtrace doesn't accept -xnolibs"
 else
          echo "Your dtrace doesn't work at all, try building without dtrace support" >&4
     exit 1
 fi
 ;;
  *)
      dtracexnolibs=$undef
 $dtrace -h -s ../perldtrace.d -o perldtrace.h
 ;;
  esac
  case $dtracexnolibs in
  $define) xnolibs=-xnolibs ;;
  *) xnolibs= ;;
  esac

  case "$dtraceobject" in
  $define|true|[yY]*)
      dtraceobject=$define
      ;;
  ' '|'')
      $cat >try.c <<EOM
```

```
#include "perldtrace.h"
int main(void) {
  PERL_LOADED_FILE("dummy");
  return 0;
}
EOM
      dtraceobject=$undef
      if $cc -c -o try.o $optimize $ccflags try.c \
              && $dtrace -G $xnolibs -s ../perldtrace.d try.o >/dev/null 2>&1; then

        dtraceobject=$define
          echo "Your dtrace builds an object file"
      fi
      ;;
  *) dtraceobject=$undef ;;
  esac
  $rm_try perldtrace.o perldtrace.h
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/dtraceobject.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: alignbytes.U,v 3.0.1.2 1994/10/29 16:02:28 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: alignbytes.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:02:28  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:25:20  ram
?RCS: patch23: avoid ALIGNBYTES, since it conflicts on NetBSD
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:alignbytes: Myread Compile cat rm_try multiarch run test nvtype
?MAKE: -pick add $@ %<
?S:alignbytes:
?S: This
```

```
 variable holds the number of bytes required to align a
?S: double-- or a long double when applicable. Usual values are
?S: 2, 4 and 8.  The default is eight, for safety.
?S:.
?X: This used to be called ALIGNBYTES, but that conflicts with
?X: <machines/param.h> in NetBSD.
?C:MEM_ALIGNBYTES (ALIGNBYTES):
?C: This symbol contains the number of bytes required to align a
?C: double, or a long double when applicable. Usual values are 2,
?C: 4 and 8. The default is eight, for safety.  For cross-compiling
?C: or multiarch support, Configure will set a minimum of 8.
?C:.
?H:?%<:#define MEM_ALIGNBYTES $alignbytes
?H:.
?F:!try
: check for alignment requirements
echo " "
case "$alignbytes" in
   ") echo "Checking alignment constraints..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
struct foobar {
   char foo;
   $nvtype bar;
} try_algn;
int main()
{
   printf("%d\n", (int)((char *)&try_algn.bar - (char *)&try_algn.foo));
   return(0);
}
EOCP
 set try
 if eval $compile_ok; then
     dflt=`$run
 ./try`
 else
     dflt='8'
     echo "(I can't seem to compile the test program...)"
 fi
 case "$multiarch" in
     *$define*)
  : The usual safe value is 8, but Darwin with -Duselongdouble
  : needs 16.  Hence, we will take 8 as a minimum, but allow
  : Configure to pick a larger value if needed.
  if $test "$dflt" -lt 8; then
      dflt='8'
      echo "Setting alignment to 8 for multiarch support."">&4
  fi
```

```
  ;;
 esac
 ;;
   *) dflt="$alignbytes"
 ;;
esac
rp="Doubles must be aligned on a how-many-byte boundary?"
. ./myread
alignbytes="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/alignbytes.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Prefixit.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Prefixit.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:29:22  ram
?RCS: patch49: created
?RCS:
?X:
?X: Used as: "set dflt var dir; eval $prefixit" to set $dflt to be
?X: $prefix/dir by default, or the previous $var depending on certain
?X: conditions:
?X: - If the $oldprefix variable is empty, then $prefix holds the same
?X:   value as on previous runs. Therefore, reuse $var if set, otherwise
?X:   set $dflt to $prefix/dir.
?X: - If $oldprefix is not
 empty, then set $dflt to $prefix/dir if $var
?X:   is empty (first run). Otherwise, if $var is $oldprefix/dir, then
?X:   change it to $prefix/dir. If none of the above, reuse the old $var.
?X:
?X: When dir is omitted, the dflt variable is set to $var if prefix did not
?X: change, to an empty value otherwise. If dir=none, then a single space
?X: in var is kept as-is, even if the prefix changes.
?X:
?MAKE:Prefixit: prefix oldprefix
?MAKE: -pick add $@ %<
?LINT:define prefixit
```

```
?S:prefixit:
?S: This shell variable is used internally by Configure to reset
?S: the leading installation prefix correctly when it is changed.
?S:  set dflt var [dir]
?S:  eval $prefixit
?S: That will set $dflt to $var or $prefix/dir depending on the
?S: value of $var and $oldprefix.
?S:.
?V:prefixit
?T:tp
: set the prefixit variable, to compute a suitable default value
prefixit='case "$3" in
""|none)
 case "$oldprefix" in
 "") eval "$1=\"\$$2\"";;
 *)
  case "$3" in
  "") eval "$1=";;
  none)
   eval "tp=\"\$$2\"";
   case
 "$tp" in
   ""|" "|none) eval "$1=\"\$$2\"";;
   *) eval "$1=";;
   esac;;
  esac;;
 esac;;
*)
 eval "tp=\"$oldprefix-\$$2-\""; eval "tp=\"$tp\"";
 case "$tp" in
 --|/*--|\~*--) eval "$1=\"$prefix/$3\"";;
 /*-$oldprefix/*|\~*-$oldprefix/*)
  eval "$1=\`echo \$$2 | sed \"s,^$oldprefix,$prefix,\"\`";;
 *) eval "$1=\"\$$2\"";;
 esac;;
esac'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Prefixit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tcgtpgrp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_tcgtpgrp.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:12:08  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_tcgetpgrp: Inlibc
?MAKE: -pick add $@ %<
?S:d_tcgetpgrp:
?S: This variable conditionally defines the HAS_TCGETPGRP symbol, which
?S: indicates to the C program that the tcgetpgrp() routine is available.
?S: to get foreground process group ID.
?S:.
?C:HAS_TCGETPGRP
 :
?C: This symbol, if defined, indicates that the tcgetpgrp routine is
?C: available to get foreground process group ID.
?C:.
?H:#$d_tcgetpgrp HAS_TCGETPGRP  /**/
?H:.
?LINT:set d_tcgetpgrp
: see if tcgetpgrp exists
set tcgetpgrp d_tcgetpgrp
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tcgtpgrp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn_v7EXT.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Warn_v7EXT.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:01:42  ram
?RCS: patch36: call ./v7 explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:17  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?X:
?X: This unit issues warnings to V7 sites that they are living dangerously.
?X: This unit needs to get mentioned in End.U to get included.
?X:
?MAKE:Warn_v7EXT: package Guess
?MAKE: -pick add $@ %<
: Warnings
if ./v7;
 then
 cat <<EOM

NOTE: the V7 compiler may ignore some #undefs that $package uses.  If so,
you may get messages about redefining EXT.  Some V7 compilers also have
difficulties with #defines near buffer boundaries, so beware.  You may have
to play with the spacing in some .h files, believe it or not.
EOM
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Warn_v7EXT.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mallocsrc.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:10:26  ram
?RCS: patch61: added support for Free_t, the type of free()
?RCS: patch61: replaced .o with $_o all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:10:46  ram
?RCS: patch23: added support for MYMALLOC, mainly  for perl5 (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mallocsrc mallocobj usemymalloc malloctype d_mymalloc \
 freetype: Myread \
 Oldconfig
```

```
 package Guess Setvar rm cat +cc +ccflags Findhdr \
 i_malloc i_stdlib sed libs _o ptrsize
?MAKE: -pick add $@ %<
?X: Put near top so that other tests don't erroneously include
?X: -lmalloc.  --AD  22 June 1998
?Y:TOP
?S:usemymalloc:
?S: This variable contains y if the malloc that comes with this package
?S: is desired over the system's version of malloc.  People often include
?S: special versions of malloc for effiency, but such versions are often
?S: less portable.  See also mallocsrc and mallocobj.
?S: If this is 'y', then -lmalloc is removed from $libs.
?S:.
?S:mallocsrc:
?S: This variable contains the name of the malloc.c that comes with
?S: the package, if that malloc.c is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.
?S:.
?S:d_mymalloc:
?S: This variable conditionally defines MYMALLOC in case other parts
?S: of the source want to take special action if MYMALLOC is used.
?S: This may include different sorts
 of profiling or error detection.
?S:.
?S:mallocobj:
?S: This variable contains the name of the malloc.o that this package
?S: generates, if that malloc.o is preferred over the system malloc.
?S: Otherwise the value is null.  This variable is intended for generating
?S: Makefiles.  See mallocsrc.
?S:.
?S:freetype:
?S: This variable contains the return type of free().  It is usually
?S: void, but occasionally int.
?S:.
?S:malloctype:
?S: This variable contains the kind of ptr returned by malloc and realloc.
?S:.
?C:Free_t:
?C: This variable contains the return type of free().  It is usually
?C: void, but occasionally int.
?C:.
?C:Malloc_t (MALLOCPTRTYPE):
?C: This symbol is the type of pointer returned by malloc and realloc.
?C:.
?H:#define Malloc_t $malloctype   /**/
?H:#define Free_t $freetype   /**/
?H:.
```

```
?C:MYMALLOC:
?C: This symbol, if defined, indicates that we're using our own malloc.
?C:.
?H:#$d_mymalloc MYMALLOC   /**/
?H:.
?LINT:change libs
?X: Cannot test for mallocsrc; it
 is the unit's name and there is a bug in
?X: the interpreter which defines all the names, even though they are not used.
@if mallocobj
: determine which malloc to compile in
echo " "
case "$usemymalloc" in
[yY]*|true|$define) dflt='y' ;;
[nN]*|false|$undef) dflt='n' ;;
*)
 case "$ptrsize" in
 4) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
esac
rp="Do you wish to attempt to use the malloc that comes with $package?"
. ./myread
usemymalloc="$ans"
case "$ans" in
y*|true)
 usemymalloc='y'
 mallocsrc='malloc.c'
 mallocobj="malloc$_o"
 d_mymalloc="$define"
?X: Maybe libs.U should be dependent on mallocsrc.U, but then
?X: most packages that use dist probably don't supply their own
?X: malloc, so this is probably an o.k. comprpomise
 case "$libs" in
 *-lmalloc*)
  : Remove malloc from list of libraries to use
  echo "Removing unneeded -lmalloc from library list" >&4
  set `echo X $libs | $sed -e 's/-lmalloc / /' -e 's/-lmalloc$//'`
  shift
  libs="$*"
  echo "libs = $libs" >&4
  ;;
 esac
 ;;
*)
 usemymalloc='n'
 mallocsrc="
```

```
 mallocobj="
 d_mymalloc="$undef"
 ;;
esac

@end
@if
 MALLOCPTRTYPE || Malloc_t || Free_t
: compute the return types of malloc and free
echo " "
$cat >malloc.c <<END
#$i_malloc I_MALLOC
#$i_stdlib I_STDLIB
#include <stdio.h>
#include <sys/types.h>
#ifdef I_MALLOC
#include <malloc.h>
#endif
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#ifdef TRY_MALLOC
void *malloc();
#endif
#ifdef TRY_FREE
void free();
#endif
END
@if MALLOCPTRTYPE || Malloc_t
case "$malloctype" in
")
 if $cc $ccflags -c -DTRY_MALLOC malloc.c >/dev/null 2>&1; then
  malloctype='void *'
 else
  malloctype='char *'
 fi
 ;;
esac
echo "Your system wants malloc to return '$malloctype', it would seem." >&4
@end

@if Free_t
case "$freetype" in
")
 if $cc $ccflags -c -DTRY_FREE malloc.c >/dev/null 2>&1; then
  freetype='void'
 else
  freetype='int'
```

```
 fi
 ;;
esac
echo "Your system uses $freetype free(), it would seem." >&4
@end
$rm -f malloc.[co]
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mallocsrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strtoul.U,v 3.0.1.1 1997/02/28 15:46:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_strtoul.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:43  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_strtoul: Inlibc cat longsize Compile run
?MAKE: -pick add $@ %<
?S:d_strtoul:
?S: This variable conditionally defines the HAS_STRTOUL symbol, which
?S: indicates to the C program that the strtoul() routine is available
?S: to provide conversion of strings to unsigned long.
?S:.
?C:HAS_STRTOUL (STRTOUL):
?C: This
 symbol, if defined, indicates that the strtoul routine is
?C: available to provide conversion of strings to unsigned long.
?C:.
?H:#$d_strtoul HAS_STRTOUL /**/
?H:.
?F:!try
: see if strtoul exists
set strtoul d_strtoul
eval $inlibc

case "$d_strtoul" in
```

```
"$define")
 $cat <<EOM
Checking whether your strtoul() works okay...
EOM
 $cat >try.c <<'EOCP'
#include <stdlib.h>
#include <errno.h>
#include <stdio.h>
static int bad = 0;
void check(const char *s, unsigned long eul, int een) {
 unsigned long gul;
 errno = 0;
 gul = strtoul(s, 0, 10);
 if (!((gul == eul) && (errno == een)))
  bad++;
}
int main() {
 check(" 1", 1L, 0);
 check(" 0", 0L, 0);
EOCP
 case "$longsize" in
 8)
    $cat >>try.c <<'EOCP'
 check("18446744073709551615", 18446744073709551615UL, 0);
 check("18446744073709551616", 18446744073709551615UL, ERANGE);
#if 0 /* strtoul() for /^-/ strings is undefined. */
 check("-1", 18446744073709551615UL, 0);
 check("-18446744073709551614", 2, 0);
 check("-18446744073709551615", 1,
 0);
 check("-18446744073709551616", 18446744073709551615UL, ERANGE);
 check("-18446744073709551617", 18446744073709551615UL, ERANGE);
#endif
EOCP
  ;;
 4)
     $cat >>try.c <<'EOCP'
 check("4294967295", 4294967295UL, 0);
 check("4294967296", 4294967295UL, ERANGE);
#if 0 /* strtoul() for /^-/ strings is undefined. */
 check("-1", 4294967295UL, 0);
 check("-4294967294", 2, 0);
 check("-4294967295", 1, 0);
 check("-4294967296", 4294967295UL, ERANGE);
 check("-4294967297", 4294967295UL, ERANGE);
#endif
EOCP
  ;;
```

```
 *)
: Should we write these tests to be more portable by sprintf-ing
: ~0 and then manipulating that char string as input for strtol?
  ;;
 esac
 $cat >>try.c <<'EOCP'
 if (!bad)
  printf("ok\n");
 return 0;
}
EOCP
 set try
 if eval $compile; then
  case "`$run ./try`" in
  ok) echo "Your strtoul() seems to be working okay." ;;
  *) cat <<EOM >&4
Your strtoul() doesn't seem to be working okay.
EOM
     d_strtoul="$undef"
     ;;
  esac
 else
  echo "(I can't seem to compile the test
 program--assuming it doesn't)"
  d_strtoul="$undef"
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_strtoul.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strerror.U,v $
?RCS: Revision 3.0.1.3  1994/05/13  15:20:27  ram
?RCS: patch27: now uses new macro support for cleaner Strerror def
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  14:58:26  ram
```

```
?RCS: patch23: renamed strerror into Strerror to protect name space (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:56  ram
?RCS: patch16: protected code looking for sys_errnolist[] with @if
?RCS: patch16: added default value for d_sysernlst
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:35  ram
?RCS: Baseline
 for dist 3.0 netwide release.
?RCS:
?MAKE:d_strerror d_syserrlst d_sysernlst d_strerrm: contains Csym Findhdr
?MAKE: -pick add $@ %<
?S:d_strerror:
?S: This variable conditionally defines HAS_STRERROR if strerror() is
?S: available to translate error numbers to strings.
?S:.
?S:d_syserrlst:
?S: This variable conditionally defines HAS_SYS_ERRLIST if sys_errlist[] is
?S: available to translate error numbers to strings.
?S:.
?S:d_sysernlst:
?S: This variable conditionally defines HAS_SYS_ERRNOLIST if sys_errnolist[]
?S: is available to translate error numbers to the symbolic name.
?S:.
?S:d_strerrm:
?S: This variable holds what Strerrr is defined as to translate an error
?S: code condition into an error message string. It could be 'strerror'
?S: or a more complex macro emulating strrror with sys_errlist[], or the
?S: "unknown" string when both strerror and sys_errlist are missing.
?S:.
?C:HAS_STRERROR (STRERROR):
?C: This symbol, if defined, indicates that the strerror routine is
?C: available
 to translate error numbers to strings. See the writeup
?C: of Strerror() in this file before you try to define your own.
?C:.
?C:HAS_SYS_ERRLIST (SYSERRLIST):
?C: This symbol, if defined, indicates that the sys_errlist array is
?C: available to translate error numbers to strings. The extern int
?C: sys_nerr gives the size of that table.
?C:.
?C:HAS_SYS_ERRNOLIST (SYSERRNOLIST):
?C: This symbol, if defined, indicates that the sys_errnolist array is
?C: available to translate an errno code into its symbolic name (e.g.
?C: ENOENT). The extern int sys_nerrno gives the size of that table.
?C:.
?C:Strerror:
?C: This preprocessor symbol is defined as a macro if strerror() is
```

```
?C: not available to translate error numbers to strings but sys_errlist[]
?C: array is there.
?C:.
?H:#$d_strerror HAS_STRERROR  /**/
?H:#$d_syserrlst HAS_SYS_ERRLIST /**/
?H:#$d_sysernlst HAS_SYS_ERRNOLIST /**/
?H:#define Strerror(e) $d_strerrm
?H:.
?D:d_sysernlst=''
?T:xxx val
: see if strerror and/or sys_errlist[]
 exist
echo " "
if set strerror val -f d_strerror; eval $csym; $val; then
 echo 'strerror() found.' >&4
 d_strerror="$define"
 d_strerrm='strerror(e)'
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "(You also have sys_errlist[], so we could roll our own strerror.)"
  d_syserrlst="$define"
 else
 echo "(Since you don't have sys_errlist[], sterror() is welcome.)"
  d_syserrlst="$undef"
 fi
elif xxx=`./findhdr string.h`; test "$xxx" || xxx=`./findhdr strings.h`; \
 $contains '#[  ]*define.*strerror' "$xxx" >/dev/null 2>&1; then
 echo 'strerror() found in string header.' >&4
 d_strerror="$define"
 d_strerrm='strerror(e)'
 if set sys_errlist val -a d_syserrlst; eval $csym; $val; then
  echo "(Most probably, strerror() uses sys_errlist[] for descriptions.)"
  d_syserrlst="$define"
 else
  echo "(You don't appear to have any sys_errlist[], how can this be?)"
  d_syserrlst="$undef"
 fi
elif set sys_errlist val -a d_syserrlst; eval $csym; $val; then
echo "strerror()
 not found, but you have sys_errlist[] so we'll use that." >&4
 d_strerror="$undef"
 d_syserrlst="$define"
 d_strerrm='((e)<0||(e)>=sys_nerr?"unknown":sys_errlist[e])'
else
 echo 'strerror() and sys_errlist[] NOT found.' >&4
 d_strerror="$undef"
 d_syserrlst="$undef"
 d_strerrm='"unknown"'
fi
```

```
@if d_sysernlst || HAS_SYS_ERRNOLIST
if set sys_errnolist val -a d_sysernlst; eval $csym; $val; then
 echo "(Symbolic error codes can be fetched via the sys_errnolist[] array.)"
 d_sysernlst="$define"
else
 echo "(However, I can't extract the symbolic error code out of errno.)"
 d_sysernlst="$undef"
fi
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strerror.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_strtoq: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtoq:
?S: This variable conditionally defines the HAS_STRTOQ symbol, which
?S: indicates to the C program that the strtoq() routine is available.
?S:.
?C:HAS_STRTOQ:
?C: This symbol, if defined, indicates that the strtoq routine is
?C: available to convert strings to long longs (quads).
?C:.
?H:#$d_strtoq HAS_STRTOQ  /**/
?H:.
?LINT:set d_strtoq
: see if strtoq exists
set strtoq d_strtoq
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_strtoq.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_termio.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_termio.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:54  ram
?RCS: patch36: call ./usg and ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.3  1994/08/29  16:26:38  ram
?RCS: patch32: don't include all threee I_* symbols in config.h
?RCS: patch32: (had forgotten to undo this part last time)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:25:03  ram
?RCS: patch27: undone ADO's fix in previous patch since it was useless
?RCS:
?RCS:
 Revision 3.0.1.1  1994/05/06  15:05:23  ram
?RCS: patch23: now include all three defines in config.h (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_termio i_sgtty i_termios: test Inlibc Cppsym Guess Setvar Findhdr Warn run
?MAKE: -pick add $@ %<
?S:i_termio:
?S: This variable conditionally defines the I_TERMIO symbol, which
?S: indicates to the C program that it should include <termio.h> rather
?S: than <sgtty.h>.
?S:.
?S:i_termios:
?S: This variable conditionally defines the I_TERMIOS symbol, which
?S: indicates to the C program that the POSIX <termios.h> file is
?S: to be included.
?S:.
?S:i_sgtty:
?S: This variable conditionally defines the I_SGTTY symbol, which
?S: indicates to the C program that it should include <sgtty.h> rather
?S: than <termio.h>.
?S:.
?C:I_TERMIO:
?C: This symbol, if defined, indicates that the program should include
?C: <termio.h> rather than <sgtty.h>.  There are also differences in
?C: the
 ioctl() calls that depend on the value of this symbol.
?C:.
?C:I_TERMIOS:
?C: This symbol, if defined, indicates that the program should include
?C: the POSIX termios.h rather than sgtty.h or termio.h.
```

```
?C: There are also differences in the ioctl() calls that depend on the
?C: value of this symbol.
?C:.
?C:I_SGTTY:
?C: This symbol, if defined, indicates that the program should include
?C: <sgtty.h> rather than <termio.h>.  There are also differences in
?C: the ioctl() calls that depend on the value of this symbol.
?C:.
?H:#$i_termio I_TERMIO  /**/
?H:#$i_termios I_TERMIOS  /**/
?H:#$i_sgtty I_SGTTY  /**/
?H:.
?T:val2 val3
?LINT:set i_termio i_sgtty i_termios
: see if this is a termio system
val="$undef"
val2="$undef"
val3="$undef"
?X: Prefer POSIX-approved termios.h over all else
if $test `./findhdr termios.h`; then
   set tcsetattr i_termios
   eval $inlibc
   val3="$i_termios"
fi
echo " "
case "$val3" in
   "$define") echo "You have POSIX termios.h... good!" >&4;;
   *)
  if ./Cppsym pyr; then
     case "`$run /bin/universe`" in
  ucb) if $test `./findhdr sgtty.h`; then
   val2="$define"
   echo "<sgtty.h> found." >&4
      else
   echo "System is pyramid with BSD universe."
   ./warn "<sgtty.h> not found--you could have problems."
      fi;;
  *)  if $test `./findhdr termio.h`; then
   val="$define"
   echo "<termio.h> found." >&4
      else
   echo "System is pyramid with USG universe."
   ./warn "<termio.h> not found--you could have problems."
      fi;;
     esac
?X: Start with USG to avoid problems if both usg/bsd was guessed
 elif ./usg; then
     if $test `./findhdr termio.h`; then
```

```
  echo "<termio.h> found." >&4
  val="$define"
     elif $test `./findhdr sgtty.h`; then
  echo "<sgtty.h> found." >&4
  val2="$define"
     else
  ./warn "Neither <termio.h> nor <sgtty.h> found--cross fingers!"
     fi
 else
     if $test `./findhdr sgtty.h`; then
  echo "<sgtty.h> found." >&4
  val2="$define"
     elif $test `./findhdr termio.h`; then
  echo "<termio.h>
 found." >&4
  val="$define"
     else
  ./warn "Neither <sgtty.h> nor <termio.h> found--cross fingers!"
     fi
 fi;;
esac
set i_termio; eval $setvar
val=$val2; set i_sgtty; eval $setvar
val=$val3; set i_termios; eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_termio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endsent:
?S: This variable conditionally defines HAS_ENDSERVENT if endservent() is
?S: available to close whatever was being used for service queries.
```

```
?S:.
?C:HAS_ENDSERVENT:
?C: This symbol, if defined, indicates that the endservent() routine is
?C: available to close whatever was being used for
 service queries.
?C:.
?H:#$d_endsent HAS_ENDSERVENT  /**/
?H:.
?LINT:set d_endsent
: see if endservent exists
set endservent d_endsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_db.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:10:22  ram
?RCS: patch56: conditionally use const in test programs (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:14:42  ram
?RCS: patch54: extended for more intimate DB probing (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:21:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_db db_hashtype db_prefixtype: Inhdr +cc +ccflags rm_try contains cat \
  d_const
?MAKE: -pick
 add $@ %<
?S:i_db:
?S: This variable conditionally defines the I_DB symbol, and indicates
?S: whether a C program may include Berkeley's DB include file <db.h>.
?S:.
?S:db_hashtype:
```

```
?S: This variable contains the type of the hash structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is u_int32_t.
?S:.
?S:db_prefixtype:
?S: This variable contains the type of the prefix structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is size_t.
?S:.
?C:I_DB:
?C: This symbol, if defined, indicates to the C program that it should
?C: include Berkeley's DB include file <db.h>.
?C:.
?C:DB_Prefix_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is u_int32_t.
?C:.
?C:DB_Hash_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header
 file.  In older versions of DB, it was
?C: int, while in newer ones it is size_t.
?C:.
?H:#$i_db I_DB  /**/
?H:#define DB_Hash_t $db_hashtype  /**/
?H:#define DB_Prefix_t $db_prefixtype   /**/
?H:.
?LINT:set i_db
: see if this is a db.h system
set db.h i_db
eval $inhdr

@if DB_Hash_t
case "$i_db" in
define)
 : Check the return type needed for hash
 echo " "
 echo "Checking return type needed for hash for Berkeley DB ..." >&4
 $cat >try.c <<EOCP
#$d_const HASCONST
#ifndef HASCONST
#define const
#endif
#include <sys/types.h>
#include <db.h>
u_int32_t hash_cb (ptr, size)
const void *ptr;
```

```
size_t size;
{
}
HASHINFO info;
int main()
{
 info.hash = hash_cb;
}
EOCP
 if $cc $ccflags -c try.c >try.out 2>&1 ; then
  if $contains warning try.out >>/dev/null 2>&1 ; then
   db_hashtype='int'
  else
   db_hashtype='u_int32_t'
  fi
 else
  echo "I can't seem to compile the test program." >&4
  db_hashtype=int
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_hashtype for hash."
 ;;
*) db_hashtype=int
 ;;
esac

@end
@if
 DB_Prefix_t
case "$i_db" in
define)
 : Check the return type needed for prefix
 echo " "
 echo "Checking return type needed for prefix for Berkeley DB ..." >&4
 cat >try.c <<EOCP
#$d_const HASCONST
#ifndef HASCONST
#define const
#endif
#include <sys/types.h>
#include <db.h>
size_t prefix_cb (key1, key2)
const DBT *key1;
const DBT *key2;
{
}
BTREEINFO info;
int main()
```

```
{
 info.prefix = prefix_cb;
}
EOCP
 if $cc $ccflags -c try.c  >try.out 2>&1 ; then
  if $contains warning try.out >>/dev/null 2>&1 ; then
   db_prefixtype='int'
  else
   db_prefixtype='size_t'
  fi
 else
  echo "I can't seem to compile the test program." >&4
  db_prefixtype='int'
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_prefixtype for prefix."
 ;;
*) db_prefixtype='int'
 ;;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_db.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pthrattrj.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_old_pthread_create_joinable old_pthread_create_joinable: \
 cat Compile rm_try Setvar usethreads i_pthread
?MAKE: -pick add $@ %<
?S:d_old_pthread_create_joinable:
?S: This variable conditionally defines pthread_create_joinable.
?S: undef if pthread.h defines PTHREAD_CREATE_JOINABLE.
?S:.
?S:old_pthread_create_joinable:
?S: This variable defines the constant to use for creating joinable
?S: (aka undetached) pthreads.  Unused if pthread.h defines
?S: PTHREAD_CREATE_JOINABLE.  If used, possible values are
?S: PTHREAD_CREATE_UNDETACHED and __UNDETACHED.
?S:.
?C:OLD_PTHREAD_CREATE_JOINABLE:
```

```
?C: This symbol, if defined, indicates how to create pthread
?C: in joinable (aka undetached)
 state.  NOTE: not defined
?C: if pthread.h already has defined PTHREAD_CREATE_JOINABLE
?C: (the new version of the constant).
?C: If defined, known values are PTHREAD_CREATE_UNDETACHED
?C: and __UNDETACHED.
?C:.
?H:#$d_old_pthread_create_joinable OLD_PTHREAD_CREATE_JOINABLE $old_pthread_create_joinable /**/
?H:.
: how to create joinable pthreads
if test "X$usethreads" = "X$define" -a "X$i_pthread" = "X$define"; then
 echo " "
 echo "Checking what constant to use for creating joinable pthreads..." >&4
 $cat >try.c <<'EOCP'
#include <pthread.h>
int main() {
   int detachstate = JOINABLE;
}
EOCP
 set try -DJOINABLE=PTHREAD_CREATE_JOINABLE
 if eval $compile; then
  echo "You seem to use PTHREAD_CREATE_JOINABLE." >&4
  val="$undef" # Yes, undef.
  set d_old_pthread_create_joinable
  eval $setvar
  val=""
  set old_pthread_create_joinable
  eval $setvar
 else
  set try -DJOINABLE=PTHREAD_CREATE_UNDETACHED
  if eval $compile; then
   echo "You seem to use PTHREAD_CREATE_UNDETACHED." >&4
   val="$define"
   set
 d_old_pthread_create_joinable
   eval $setvar
   val=PTHREAD_CREATE_UNDETACHED
   set old_pthread_create_joinable
   eval $setvar
  else
   set try -DJOINABLE=__UNDETACHED
   if eval $compile; then
    echo "You seem to use __UNDETACHED." >&4
    val="$define"
    set d_old_pthread_create_joinable
    eval $setvar
    val=__UNDETACHED
```

```
    set old_pthread_create_joinable
    eval $setvar
   else
    echo "Egads, nothing obvious found.  Guessing that you use 0." >&4
    val="$define"
    set d_old_pthread_create_joinable
    eval $setvar
    val=0
    set old_pthread_create_joinable
    eval $setvar
   fi
  fi
 fi
 $rm_try
else
   d_old_pthread_create_joinable="$undef"
   old_pthread_create_joinable=""
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthrattrj.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: archname.U,v 3.0.1.3 1997/02/28 15:24:32 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: archname.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:24:32  ram
?RCS: patch61: changed the way the archname is mangled from uname
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:05:24  ram
?RCS: patch54: protect against spaces in "uname -m" output (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:14:21  ram
?RCS: patch51: created
?RCS:
?MAKE:archname myarchname useversionedarchname: sed Loc Myread Oldconfig \
 osname test rm usethreads usemultiplicity use64bitint
 use64bitall \
 archname64 uselongdouble longdblsize doublesize targetarch Setvar \
 api_versionstring usequadmath
```

```
?MAKE: -pick add $@ %<
?S:archname:
?S: This variable is a short name to characterize the current
?S: architecture.  It is used mainly to construct the default archlib.
?S:.
?S:myarchname:
?S: This variable holds the architecture name computed by Configure in
?S: a previous run. It is not intended to be perused by any user and
?S: should never be set in a hint file.
?S:.
?S:useversionedarchname:
?S: This variable indicates whether to include the $api_versionstring
?S: as a component of the $archname.
?S:.
?C:ARCHNAME:
?C: This symbol holds a string representing the architecture name.
?C: It may be used to construct an architecture-dependant pathname
?C: where library files may be held under a private library, for
?C: instance.
?C:.
?H:#define ARCHNAME "$archname"  /**/
?H:.
?T:xxx tarch
?F:!archname.cbu
?INIT:archname="
: determine the architecture name
echo " "
?X:
 We always recompute archname in case osname changes. However, we need
?X: to be careful since, as ADO rightfully pointed out, some systems pick
?X: silly architecture names (0001307135000-aix on AIX or 9000/715-ux under
?X: HP-UX). Therefore, we allow hint files to superseed our guess and ask
?X: the user for confirmation.
if xxx=`./loc arch blurfl $pth`; $test -f "$xxx"; then
 tarch=`arch`"-$osname"
elif xxx=`./loc uname blurfl $pth`; $test -f "$xxx" ; then
 if uname -m > tmparch 2>&1 ; then
  tarch=`$sed -e 's/ *$//' -e 's/ /_/g' \
   -e 's/$/'"-$osname/" tmparch`
 else
  tarch="$osname"
 fi
 $rm -f tmparch
else
 tarch="$osname"
fi
case "$myarchname" in
"|"$tarch") ;;
```

```
*)
 echo "(Your architecture name used to be $myarchname.)"
 archname=''
 ;;
esac
case "$targetarch" in
'') ;;
?X: Very GCCian.
*)  archname=`echo $targetarch|sed 's,^[^-]*-,,'` ;;
esac
myarchname="$tarch"
case "$archname" in
'') dflt="$tarch";;
*) dflt="$archname";;
esac
rp='What is your architecture name'
. ./myread
archname="$ans"

:
 optionally add API version to the architecture for versioned archlibs
case "$useversionedarchname" in
$define|true|[yY]*) dflt='y';;
*)                  dflt='n';;
esac
rp='Add the Perl API version to your archname?'
. ./myread
case "$ans" in
y|Y) useversionedarchname="$define" ;;
*)      useversionedarchname="$undef" ;;
esac
case "$useversionedarchname" in
$define)
 case "$archname" in
 *-$api_versionstring)
  echo "...and architecture name already has -$api_versionstring" >&4
  ;;
 *)
  archname="$archname-$api_versionstring"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac

@if usethreads
case "$usethreads" in
$define)
```

```
 echo "Threads selected." >&4
 case "$archname" in
 *-thread*) echo "...and architecture name already has -thread." >&4
  ;;
 *)      archname="$archname-thread"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
@if usemultiplicity
case "$usemultiplicity" in
$define)
 echo "Multiplicity selected."
 >&4
 case "$archname" in
 *-multi*) echo "...and architecture name already has -multi." >&4
  ;;
 *)      archname="$archname-multi"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
@if use64bitint
case "$use64bitint$use64bitall" in
*"$define"*)
 case "$archname64" in
 ")
  echo "This architecture is naturally 64-bit, not changing architecture name." >&4
  ;;
 *)
  case "$use64bitint" in
  "$define") echo "64 bit integers selected." >&4 ;;
  esac
  case "$use64bitall" in
  "$define") echo "Maximal 64 bitness selected." >&4 ;;
  esac
  case "$archname" in
  *-$archname64*) echo "...and architecture name already has $archname64." >&4
   ;;
  *)      archname="$archname-$archname64"
   echo "...setting architecture name to $archname." >&4
   ;;
  esac
  ;;
```

```
 esac
esac
@end
@if uselongdouble
case "$uselongdouble" in
$define)
 echo "Long doubles selected." >&4
 case "$longdblsize" in
 $doublesize)
  echo "...but long doubles are equal to doubles, not
 changing architecture name." >&4
  ;;
 *)
  case "$archname" in
  *-ld*) echo "...and architecture name already has -ld." >&4
   ;;
  *)      archname="$archname-ld"
   echo "...setting architecture name to $archname." >&4
   ;;
  esac
  ;;
 esac
 ;;
esac
@end
@if usequadmath
case "$usequadmath" in
$define)
 echo "quadmath selected." >&4
 case "$archname" in
 *-quadmath*) echo "...and architecture name already has -quadmath." >&4
  ;;
 *)      archname="$archname-quadmath"
  echo "...setting architecture name to $archname." >&4
  ;;
 esac
 ;;
esac
@end
if $test -f archname.cbu; then
 echo "Your platform has some specific hints for architecture name, using them..."
 . ./archname.cbu
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/archname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_float.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_float.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:21:57  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_float: Inhdr
?MAKE: -pick add $@ %<
?S:i_float:
?S: This variable conditionally defines the I_FLOAT symbol, and indicates
?S: whether a C program may include <float.h> to get symbols like DBL_MAX
?S: or DBL_MIN, i.e. machine dependent floating point values.
?S:.
?C:I_FLOAT:
?C: This
 symbol, if defined, indicates to the C program that it should
?C: include <float.h> to get definition of symbols like DBL_MAX or
?C: DBL_MIN, i.e. machine dependent floating point values.
?C:.
?H:#$i_float I_FLOAT  /**/
?H:.
?LINT:set i_float
: see if this is a float.h system
set float.h i_float
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_float.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_setproctitle: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_setproctitle:
?S: This variable conditionally defines the HAS_SETPROCTITLE symbol,
?S: which indicates to the C program that the setproctitle() routine
?S: is available.
?S:.
?C:HAS_SETPROCTITLE:
?C: This symbol, if defined, indicates that the setproctitle routine is
?C: available to set process title.
?C:.
?H:#$d_setproctitle HAS_SETPROCTITLE  /**/
?H:.
?LINT:set d_setproctitle
: see if setproctitle exists
set setproctitle d_setproctitle
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_setproctitle.U
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```
?RCS: $Id$
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sig_name.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:21:25  ram
?RCS: patch61: brand new algorithm for sig_name and (new!) sig_num
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  14:14:54  ram
?RCS: patch56: added <asm/signal.h> lookup for linux
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:24:11  ram
?RCS: patch54: now looks for <linux/signal.h> too (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/06/20  07:06:57  ram
?RCS: patch30: final echo was missing to close awk-printed string
?RCS:
?RCS: Revision 3.0.1.1
  1994/05/06  15:17:55  ram
?RCS: patch23: signal list now formatted to avoid scroll-ups (ADO)
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:09:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sig_name sig_name_init sig_num sig_num_init sig_count sig_size: \
 awk Signal Oldconfig rm
?MAKE: -pick add $@ %<
?S:sig_name:
?S: This variable holds the signal names, space separated. The leading
?S: SIG in signal name is removed.  A ZERO is prepended to the
?S: list.  This is currently not used.
?S:.
?S:sig_name_init:
?S: This variable holds the signal names, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NAME definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.  The leading SIG in signal names
?S: is removed. See sig_num.
?S:.
?S:sig_num:
?S: This variable holds the signal numbers, space separated. A ZERO is
?S: prepended to the list (corresponding to the fake SIGZERO), and
?S: the list is terminated
 with a 0.  Those numbers correspond to
?S: the value of the signal listed in the same place within the
?S: sig_name list.
?S:.
?S:sig_num_init:
?S: This variable holds the signal numbers, enclosed in double quotes and
?S: separated by commas, suitable for use in the SIG_NUM definition
?S: below.  A "ZERO" is prepended to the list, and the list is
?S: terminated with a plain 0.
?S:.
?S:sig_count (sig_name.U):
?S:  This variable holds a number larger than the largest valid
?S:  signal number.  This is usually the same as the NSIG macro.
?S:.
?S:sig_size:
?S:  This variable contains the number of elements of the sig_name
?S:  and sig_num arrays, excluding the final NULL entry.
?S:.
?C:SIG_NAME:
?C: This symbol contains a list of signal names in order of
?C: signal number. This is intended
?C: to be used as a static array initialization, like this:
?C:  char *sig_name[] = { SIG_NAME };
?C: The signals in the list are separated with commas, and each signal
?C: is surrounded by double
```

```
 quotes. There is no leading SIG in the signal
?C: name, i.e. SIGQUIT is known as "QUIT".
?C: Gaps in the signal numbers (up to NSIG) are filled in with NUMnn,
?C: etc., where nn is the actual signal number (e.g. NUM37).
?C: The signal number for sig_name[i] is stored in sig_num[i].
?C: The last element is 0 to terminate the list with a NULL.  This
?C: corresponds to the 0 at the end of the sig_num list.
?C:.
?C:SIG_NUM:
?C: This symbol contains a list of signal numbers, in the same order as the
?C: SIG_NAME list. It is suitable for static array initialization, as in:
?C:  int sig_num[] = { SIG_NUM };
?C: The signals in the list are separated with commas, and the indices
?C: within that list and the SIG_NAME list match, so it's easy to compute
?C: the signal name from a number or vice versa at the price of a small
?C: dynamic linear lookup.
?C: Duplicates are allowed, but are moved to the end of the list.
?C: The signal number corresponding to sig_name[i] is sig_number[i].
?C: if (i
 < NSIG) then sig_number[i] == i.
?C: The last element is 0, corresponding to the 0 at the end of
?C: the sig_name list.
?C:.
?C:SIG_COUNT:
?C: This variable contains a number larger than the largest
?C: signal number.  This is usually the same as the NSIG macro.
?C:.
?C:SIG_SIZE:
?C: This variable contains the number of elements of the sig_name
?C: and sig_num arrays, excluding the final NULL entry.
?C:.
?H:#define SIG_NAME $sig_name_init  /**/
?H:#define SIG_NUM  $sig_num_init  /**/
?H:#define SIG_COUNT $sig_count   /**/
?H:#define SIG_SIZE $sig_size   /**/
?H:.
?T:i doinit
?F:!= !signal_cmd
?X: signal.cmd creates a file  signal.lst which has two columns:
?X: NAME  number, e.g.
?X:  HUP 1
?X: The list is sorted on signal number, with duplicates moved to
?X: the end..
: generate list of signal names
echo " "
case "$sig_name_init" in
") doinit=yes ;;
*)  case "$sig_num_init" in
```

```
   "|*,*) doinit=yes ;;
   esac ;;
esac
case "$doinit" in
yes)
 echo "Generating a list of signal names and
 numbers..." >&4
 . ./signal_cmd
 sig_count=`$awk '/^NSIG/ { printf "%d", $2 }' signal.lst`
 sig_name=`$awk 'BEGIN { printf "ZERO " }
   !/^NSIG/ { printf "%s ", $1 }' signal.lst`
 sig_num=`$awk  'BEGIN { printf "0 " }
   !/^NSIG/ { printf "%d ", $2 }' signal.lst`
 sig_name_init=`$awk 'BEGIN { printf "\"ZERO\", " }
        !/^NSIG/ { printf "\"%s\", ", $1 }
        END { printf "0\n" }' signal.lst`
 sig_num_init=`$awk  'BEGIN { printf "0, " }
        !/^NSIG/ { printf "%d, ", $2}
        END { printf "0\n"}' signal.lst`
 ;;
esac
echo "The following $sig_count signals are available:"
echo " "
echo $sig_name | $awk \
'BEGIN { linelen = 0 }
{
 for (i = 1; i <= NF; i++) {
  name = "SIG" $i " "
  linelen = linelen + length(name)
  if (linelen > 70) {
   printf "\n"
   linelen = length(name)
  }
  printf "%s", name
 }
 printf "\n"
}'
sig_size=`echo $sig_name | awk '{print NF}'`
$rm -f signal signal.c signal.awk signal.lst signal_cmd
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sig_name.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getnameinfo: Inlibc
?MAKE: -pick add $@ %<
?S:d_getnameinfo:
?S: This variable conditionally defines the HAS_GETNAMEINFO symbol,
?S: which indicates to the C program that the getnameinfo() function
?S: is available.
?S:.
?C:HAS_GETNAMEINFO:
?C: This symbol, if defined, indicates that the getnameinfo() function
?C: is available for use.
?C:.
?H:#$d_getnameinfo HAS_GETNAMEINFO  /**/
?H:.
?LINT:set d_getnameinfo
: see if getnameinfo exists
set getnameinfo d_getnameinfo
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getnameinfo.U
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```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS:
?MAKE:d_dirfd: Compile cat rm Setvar i_dirent i_sysdir i_sysndir i_systypes i_stdlib
?MAKE: -pick add $@ %<
?S:d_dirfd:
?S: This variable conditionally defines the HAS_DIRFD constant,
?S: which indicates to the C program that dirfd() is available
?S: to return the file descriptor of a directory stream.
?S:.
?C:HAS_DIRFD:
?C: This manifest constant lets the C program know that dirfd
?C: is available.
?C:.
?H:#$d_dirfd HAS_DIRFD  /**/
```

```
?H:.
?LINT:set d_dirfd
?X: Can't use Inlibc because dirfd() might be a macro.
: Look
 for dirfd
echo " "
$cat >dirfd.c <<EOM
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/
#$i_systypes I_SYS_TYPES /**/
#if defined(I_SYS_TYPES)
#include <sys/types.h>
#endif
#if defined(I_DIRENT)
#include <dirent.h>
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#include <sys/dir.h>
#endif
#endif
#endif
int main() {
 DIR *dirp = opendir(".");
 if (dirfd(dirp) >= 0)
  exit(0);
 else
  exit(1);
}
EOM
val=$undef
set dirfd
if eval $compile; then
 val="$define"
fi
case "$val" in
$define) echo "dirfd() found." >&4 ;;
*)  echo "dirfd() NOT found." >&4 ;;
esac
set d_dirfd
```

```
eval $setvar
$rm -f dirfd*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dirfd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_grp.U,v 3.0 1993/08/18 12:08:20 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: GRPASSWD detection added by Andy Dougherty  July 14, 1998.
?RCS:
?RCS: $Log: i_grp.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_grp d_grpasswd: \
 contains rm cppstdin cppflags cppminus Inhdr Findhdr Setvar
?MAKE: -pick add $@ %<
?S:i_grp:
?S: This variable conditionally defines the I_GRP symbol, and indicates
?S: whether a C program should include <grp.h>.
?S:.
?S:d_grpasswd:
?S: This variable conditionally
 defines GRPASSWD, which indicates
?S: that struct group in <grp.h> contains gr_passwd.
?S:.
?C:I_GRP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <grp.h>.
?C:.
?C:GRPASSWD:
?C: This symbol, if defined, indicates to the C program that struct group
?C: in <grp.h> contains gr_passwd.
?C:.
?H:#$i_grp I_GRP  /**/
?H:#$d_grpasswd GRPASSWD /**/
?H:.
?LINT:set i_grp d_grpasswd
?T: xxx
```

```
: see if this is an grp system
set grp.h i_grp
eval $inhdr

case "$i_grp" in
$define)
 xxx=`./findhdr grp.h`
 $cppstdin $cppflags $cppminus < $xxx >$$.h

 if $contains 'gr_passwd' $$.h >/dev/null 2>&1; then
  val="$define"
 else
  val="$undef"
 fi
 set d_grpasswd
 eval $setvar

 $rm -f $$.h
 ;;
*)
 val="$undef";
 set d_grpasswd; eval $setvar
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_grp.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: voidflags.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:27:58  ram
?RCS: patch61: don't prompt them if the void support is high enough for us
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:37:44  ram
?RCS: patch45: cosmetic change to avoid spurious blank lines when using -s
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:01  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:voidflags defvoidused: cat sed rm rm_try contains +cc +ccflags package \
 Oldconfig Myread
?MAKE: -pick add $@ %<
?S:voidflags:
?S: This
 variable contains the eventual value of the VOIDFLAGS symbol,
?S: which indicates how much support of the void type is given by this
?S: compiler.  See VOIDFLAGS for more info.
?S:.
?S:defvoidused:
?S: This variable contains the default value of the VOIDUSED symbol (15).
?S:.
?X: Exceptionally, we have to explicitly alias the symbol name for
?X: config_h.SH, otherwise the comment would not appear.
?C:VOIDFLAGS ~ %<:
?C: This symbol indicates how much support of the void type is given by this
?C: compiler.  What various bits mean:
?C:
?C:     1 = supports declaration of void
?C:     2 = supports arrays of pointers to functions returning void
?C:     4 = supports comparisons between pointers to void functions and
?C:      addresses of void functions
?C:     8 = suports declaration of generic void pointers
?C:
?C: The package designer should define VOIDUSED to indicate the requirements
?C: of the package.  This can be done either by #defining VOIDUSED before
?C: including
 config.h, or by defining defvoidused in Myinit.U.  If the
?C: latter approach is taken, only those flags will be tested.  If the
?C: level of void support necessary is not present, defines void to int.
?C:.
?H:?%<:#ifndef VOIDUSED
?H:?%<:#define VOIDUSED $defvoidused
?H:?%<:#endif
?H:?%<:#define VOIDFLAGS $voidflags
?H:?%<:#if (VOIDFLAGS & VOIDUSED) != VOIDUSED
?H:?%<:#define void int  /* is void to be avoided? */
?H:?%<:#define M_VOID   /* Xenix strikes again */
?H:?%<:#endif
?H:.
?W:%<:void
?F:!.out !try.c !flags
?LINT:usefile .out flags try.c
?INIT:: full support for void wanted by default
?INIT:defvoidused=15
?INIT:
?LINT:known void M_VOID VOIDUSED
```

```
: check for void type
echo " "
echo "Checking to see how well your C compiler groks the void type..." >&4
$cat >flags <<EOM

 Support flag bits are:
   1: basic void declarations.
   2: arrays of pointers to functions returning void.
   4: operations between pointers to and addresses of void functions.
   8: generic void pointers.

EOM
case
 "$voidflags" in
")
 $cat >try.c <<'EOCP'
#if TRY & 1
void sub() {
#else
sub() {
#endif
 extern void moo(); /* function returning void */
 void (*goo)();  /* ptr to func returning void */
#if TRY & 8
 void *hue;  /* generic ptr */
#endif
#if TRY & 2
 void (*foo[10])();
#endif

#if TRY & 4
 if(goo == moo) {
  exit(0);
 }
#endif
 exit(0);
}
int main() { sub(); }
EOCP
?X: This unit used to use cc -S in those tests to try to speed up things, but
?X: unfortunately, AIX 3.2 does not support this option.
 if $cc $ccflags -c -DTRY=$defvoidused try.c >.out 2>&1 ; then
  voidflags=$defvoidused
  echo "Good.  It appears to support void to the level $package wants."
  if $contains warning .out >/dev/null 2>&1; then
   echo "However, you might get some warnings that look like this:"
   $sed -e 's/^/ /' .out
  fi
```

```
 else
echo "Hmm, your compiler has some difficulty with void. Checking further..." >&4
  $cat >&4 flags
  $rm -f flags
  if $cc $ccflags -c -DTRY=1 try.c >/dev/null 2>&1; then
   echo
 "It supports 1..."
   if $cc $ccflags -c -DTRY=3 try.c >/dev/null 2>&1; then
    echo "It also supports 2..."
    if $cc $ccflags -c -DTRY=7 try.c >/dev/null 2>&1; then
     voidflags=7
     echo "And it supports 4 but not 8 definitely."
    else
     echo "It doesn't support 4..."
     if $cc $ccflags -c -DTRY=11 try.c >/dev/null 2>&1; then
      voidflags=11
      echo "But it supports 8."
     else
      voidflags=3
      echo "Neither does it support 8."
     fi
    fi
   else
    echo "It does not support 2..."
    if $cc $ccflags -c -DTRY=13 try.c >/dev/null 2>&1; then
     voidflags=13
     echo "But it supports 4 and 8."
    else
     if $cc $ccflags -c -DTRY=5 try.c >/dev/null 2>&1; then
      voidflags=5
      echo "And it supports 4 but has not heard about 8."
     else
      echo "However it supports 8 but not 4."
     fi
    fi
   fi
  else
   echo "There is no support at all for void."
   voidflags=0
  fi
 fi
esac
?X: Only prompt user if support does not match the
 level we want
case "$voidflags" in
"$defvoidused")
 echo "Good.  I already know it supports void to the level $package wants."
 ;;
```

```
*)
 dflt="$voidflags";
 test -f flags && $cat flags
 rp="Your void support flags add up to what?"
 . ./myread
 voidflags="$ans"
 ;;
esac
$rm_try flags
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/voidflags.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: models.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:13:17  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:39  ram
?RCS: patch6: added default for large
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:models split small medium large huge: test cat Myread sysman Oldconfig \
 Loc Warn contains rm
?MAKE: -pick add $@ %<
?S:models:
?S: This variable contains the list of memory models supported by
 this
?S: system.  Possible component values are none, split, unsplit, small,
?S: medium, large, and huge.  The component values are space separated.
?S:.
?S:split:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program that will run in separate I and D space, for those
?S: machines that support separation of instruction and data space.  It is
?S: up to the Makefile to use this.
```

```
?S:.
?S:small:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a small memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:medium:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a medium memory model.  If the
?S: medium model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?S:large:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to
 produce a program running with a large memory model.  It is up to
?S: the Makefile to use this.
?S:.
?S:huge:
?S: This variable contains a flag which will tell the C compiler and loader
?S: to produce a program running with a huge memory model.  If the
?S: huge model is not supported, contains the flag to produce large
?S: model programs.  It is up to the Makefile to use this.
?S:.
?T:unsplit tans modelcc
?F:!pdp11
?D:large=''
?LINT:extern cc
: see what memory models we can support
case "$models" in
'')
?X: We may not use Cppsym or we get a circular dependency through cc.
?X: But this should work regardless of which cc we eventually use.
 $cat >pdp11.c <<'EOP'
int main() {
#ifdef pdp11
 exit(0);
#else
 exit(1);
#endif
}
EOP
?X: Run cc in a subshell in case they don't have a 'cc' command.
?X: Presumably they do have gcc or something.
 case "$cc" in
 '') modelcc="$cc" ;;
 *) modelcc="cc" ;;
 esac
```

```
 ( $modelcc -o pdp11 pdp11.c ) >/dev/null 2>&1
 if $test -f pdp11 && ./pdp11 2>/dev/null;
 then
  dflt='unsplit split'
 else
  tans=`./loc . X /lib/small /lib/large /usr/lib/small /usr/lib/large /lib/medium /usr/lib/medium /lib/huge`
  case "$tans" in
  X) dflt='none';;
  *) if $test -d /lib/small || $test -d /usr/lib/small; then
    dflt='small'
   else
    dflt=''
   fi
   if $test -d /lib/medium || $test -d /usr/lib/medium; then
    dflt="$dflt medium"
   fi
   if $test -d /lib/large || $test -d /usr/lib/large; then
    dflt="$dflt large"
   fi
   if $test -d /lib/huge || $test -d /usr/lib/huge; then
    dflt="$dflt huge"
   fi
  esac
 fi;;
*) dflt="$models";;
esac
$cat <<EOM

Some systems have different model sizes.  On most systems they are called
small, medium, large, and huge.  On the PDP11 they are called unsplit and
split.  If your system doesn't support different memory models, say "none".
If you wish to force everything to one memory model, say "none" here and
put the appropriate flags later when it asks you for other cc and ld flags.
Venix systems may wish
 to put "none" and let the compiler figure things out.
(In the following question multiple model names should be space separated.)

The default for most systems is "none".

EOM
rp="Which memory models are supported?"
. ./myread
models="$ans"

case "$models" in
none)
 small=''
 medium=''
```

```
 large=''
 huge=''
 unsplit=''
 split=''
 ;;
*split)
 case "$split" in
 '') if $contains '\-i' $sysman/ld.1 >/dev/null 2>&1 || \
    $contains '\-i' $sysman/cc.1 >/dev/null 2>&1; then
   dflt='-i'
  else
   dflt='none'
  fi;;
 *) dflt="$split";;
 esac
 rp="What flag indicates separate I and D space?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans='';;
 esac
 split="$tans"
 unsplit='';;
*large*|*small*|*medium*|*huge*)
 case "$models" in
 *large*)
  case "$large" in
  '') dflt='-Ml';;
  *) dflt="$large";;
  esac
 rp="What flag indicates large model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans='';
 esac
 large="$tans";;
 *) large='';;
 esac
 case "$models" in
 *huge*) case "$huge" in
  '')
 dflt='-Mh';;
  *) dflt="$huge";;
  esac
  rp="What flag indicates huge model?"
  . ./myread
  tans="$ans"
```

```
 case "$tans" in
 none) tans=";
 esac
 huge="$tans";;
*) huge="$large";;
esac
case "$models" in
*medium*) case "$medium" in
 ") dflt='-Mm';;
 *) dflt="$medium";;
 esac
 rp="What flag indicates medium model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 medium="$tans";;
*) medium="$large";;
esac
case "$models" in
*small*) case "$small" in
 ") dflt='none';;
 *) dflt="$small";;
 esac
 rp="What flag indicates small model?"
 . ./myread
 tans="$ans"
 case "$tans" in
 none) tans=";
 esac
 small="$tans";;
*) small=";;
esac
;;
*)
./warn "Unrecognized memory models--you may have to edit Makefile.SH"
;;
esac
$rm -f pdp11.* pdp11
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/models.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_poll.U,v $
?RCS:
?RCS: Copyright (c) 2001 Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_langinfo: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_langinfo:
?S: This variable conditionally defines the I_LANGINFO symbol,
?S: and indicates whether a C program should include <langinfo.h>.
?S:.
?C:I_LANGINFO:
?C: This symbol, if defined, indicates that <langinfo.h> exists and
?C: should be included.
?C:.
?H:#$i_langinfo I_LANGINFO  /**/
?H:.
?LINT:set i_langinfo
: see if this is a langinfo.h system
set langinfo.h i_langinfo
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_langinfo.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_chroot.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_chroot.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:17  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_chroot: Inlibc
?MAKE: -pick add $@ %<
?S:d_chroot:
?S: This variable conditionally defines the HAS_CHROOT symbol, which
?S: indicates to the C program that the chroot() routine is available.
?S:.
?C:HAS_CHROOT :
```

```
?C: This symbol, if defined, indicates that the chroot routine
 is
?C: available.
?C:.
?H:#$d_chroot HAS_CHROOT  /**/
?H:.
?LINT:set d_chroot
: see if chroot exists
set chroot d_chroot
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_chroot.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: registers.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: registers.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  16:19:41  ram
?RCS: patch61: removed empty ?LINT lines
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:28:33  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:registers reg1 reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11 \
 reg12 reg13 reg14 reg15 reg16: awk rm Cppsym
 Myread Oldconfig
?MAKE: -pick add $@ %<
?S:registers:
?S: This variable contains the number of register declarations paid
?S: attention to by the C compiler.
?S:.
?S:reg1:
?S: This variable, along with reg2, reg3, etc. contains the eventual
?S: value for the symbols register1, register2, register3, etc.  It has
?S: either the value "register" or is null.
?S:.
```

```
?C:register1:
?C: This symbol, along with register2, register3, etc. is either the word
?C: "register" or null, depending on whether the C compiler pays attention
?C: to this many register declarations.  The intent is that you don't have
?C: to order your register declarations in the order of importance, so you
?C: can freely declare register variables in sub-blocks of code and as
?C: function parameters.  Do not use register<n> more than once per routine.
?C:.
?LINT:describe reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11
?LINT:describe reg12 reg13 reg14 reg15 reg16
?LINT:known register2 register3 register4 register5 register6
 register7
?LINT:known register8 register9 register10 register11 register12 register13
?LINT:known register14 register15 register16
?H:#define register1 $reg1  /**/
?H:#define register2 $reg2  /**/
?H:#define register3 $reg3  /**/
?H:#define register4 $reg4  /**/
?H:#define register5 $reg5  /**/
?H:#define register6 $reg6  /**/
?H:#define register7 $reg7  /**/
?H:#define register8 $reg8  /**/
?H:#define register9 $reg9  /**/
?H:#define register10 $reg10 /**/
?H:#define register11 $reg11 /**/
?H:#define register12 $reg12 /**/
?H:#define register13 $reg13 /**/
?H:#define register14 $reg14 /**/
?H:#define register15 $reg15 /**/
?H:#define register16 $reg16 /**/
?H:.
?F:!.foo
: see how many register declarations we want to use
case "$registers" in
")
 if ./Cppsym vax; then
  dflt=6
 elif ./Cppsym sun mc68000 mips; then
  dflt=10
 elif ./Cppsym pyr; then
  dflt=14
 elif ./Cppsym ns32000 ns16000; then
  dflt=5
 elif ./Cppsym $smallmach; then
  dflt=3
 else
  : if you have any other numbers
```

```
 for me, please send them in
  dflt=6
 fi;;
*) dflt=$registers ;;
esac
?LINT:set reg2 reg3 reg4 reg5 reg6 reg7 reg8 reg9 reg10 reg11
?LINT:set reg12 reg13 reg14 reg15 reg16
cat <<EOM

Different C compilers on different machines pay attention to different numbers
of register declarations.  About how many register declarations in each routine
does your C compiler pay attention to?  (OK to guess)

EOM
rp="Maximum register declarations?"
. ./myread
registers=$ans
reg1=''
$awk "BEGIN { for (i=1; i<=16; i++) printf \"reg%d=''\n\", i}" \
 </dev/null >.foo
. ./.foo
$awk "BEGIN { for (i=1; i<=$registers; i++) printf \"reg%d=register\n\", i}" \
 </dev/null >.foo
. ./.foo
$rm -f .foo

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/registers.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_longdbl.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_longdbl.U,v $
?RCS:
?MAKE:d_longdbl longdblsize d_ldexpl longdblkind \
 d_long_double_style_ieee d_long_double_style_ieee_doubledouble \
 d_long_double_style_ieee_extended d_long_double_style_ieee_std \
 d_long_double_style_vax: Compile Setvar Myread \
 Inlibc run echo cat rm_try test doublesize i_stdlib
?MAKE: -pick add $@ %<
?S:d_longdbl:
?S: This variable conditionally defines HAS_LONG_DOUBLE if
?S: the long double type is supported.
```

```
?S:.
?S:d_ldexpl:
?S: This variable conditionally defines the HAS_LDEXPL symbol, which
?S: indicates to the C program that the ldexpl() routine is available.
?S:.
?S:longdblsize:
?S: This variable contains the value of the LONG_DOUBLESIZE symbol,
 which
?S: indicates to the C program how many bytes there are in a long double,
?S: if this system supports long doubles.  Note that this is
?S: sizeof(long double), which may include unused bytes.
?S:.
?S:longdblkind:
?S: This variable, if defined, encodes the type of a long double:
?S:  0 = double,
?S:  1 = IEEE 754 128-bit little endian,
?S:  2 = IEEE 754 128-bit big endian,
?S:  3 = x86 80-bit little endian,
?S:  4 = x86 80-bit big endian,
?S:  5 = double-double 128-bit little endian,
?S:  6 = double-double 128-bit big endian,
?S:  7 = 128-bit mixed-endian double-double (64-bit LEs in BE),
?S:  8 = 128-bit mixed-endian double-double (64-bit BEs in LE),
?S:  9 = 128-bit PDP-style mixed-endian long doubles,
?S: -1 = unknown format.
?S:.
?S:d_long_double_style_ieee:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE
?S: if the long double is any of the IEEE 754 style long doubles:
?S: LONG_DOUBLE_STYLE_IEEE_STD, LONG_DOUBLE_STYLE_IEEE_EXTENDED,
?S: LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE.
?S:.
?S:d_long_double_style_ieee_doubledouble:
?S: This
 variable conditionally defines LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE
?S: if the long double is the 128-bit IEEE 754 double-double.
?S:.
?S:d_long_double_style_ieee_extended:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE_EXTENDED
?S: if the long double is the 80-bit IEEE 754 extended precision.
?S: Note that despite the 'extended' this is less than the 'std',
?S: since this is an extension of the double precision.
?S:.
?S:d_long_double_style_ieee_std:
?S: This variable conditionally defines LONG_DOUBLE_STYLE_IEEE_STD
?S: if the long double is the 128-bit IEEE 754.
?S:.
?S:d_long_double_style_vax:
```

?S: This variable conditionally defines LONG_DOUBLE_STYLE_VAX
?S: if the long double is the 128-bit VAX format H.
?S:.
?C:HAS_LONG_DOUBLE:
?C: This symbol will be defined if the C compiler supports long
?C: doubles.
?C:.
?C:LONG_DOUBLESIZE:
?C: This symbol contains the size of a long double, so that the
?C: C
 preprocessor can make decisions based on it. It is only
?C: defined if the system supports long doubles. Note that this
?C: is sizeof(long double), which may include unused bytes.
?C:.
?C:HAS_LDEXPL:
?C: This symbol, if defined, indicates that the ldexpl routine is
?C: available to shift a long double floating-point number
?C: by an integral power of 2.
?C:.
?C:LONG_DOUBLEKIND:
?C: LONG_DOUBLEKIND will be one of
?C: LONG_DOUBLE_IS_DOUBLE
?C: LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
?C: LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
?C: LONG_DOUBLE_IS_VAX_H_FLOAT
?C: LONG_DOUBLE_IS_UNKNOWN_FORMAT
?C: It is only defined
 if the system supports long doubles.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE:
?C: This symbol, if defined, indicates that the long double
?C: is any of the IEEE 754 style long doubles:
?C: LONG_DOUBLE_STYLE_IEEE_STD, LONG_DOUBLE_STYLE_IEEE_EXTENDED,
?C: LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit double-double.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_EXTENDED:

```
?C: This symbol, if defined, indicates that the long double is
?C: the 80-bit IEEE 754. Note that despite the 'extended' this
?C: is less than the 'std', since this is an extension of
?C: the double precision.
?C:.
?C:LONG_DOUBLE_STYLE_IEEE_STD:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit IEEE 754.
?C:.
?C:LONG_DOUBLE_STYLE_VAX:
?C: This symbol, if defined, indicates that the long double is
?C: the 128-bit VAX format H.
?C:.
?H:#$d_ldexpl  HAS_LDEXPL  /**/
?H:#$d_longdbl HAS_LONG_DOUBLE  /**/
?H:?LONG_DOUBLESIZE:#ifdef
 HAS_LONG_DOUBLE
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLESIZE $longdblsize  /**/
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLEKIND $longdblkind  /**/
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLE    0
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN 1
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN 2
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN  3
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN  4
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE 5
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE 6
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE 7
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE 8
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_VAX_H_FLOAT   9
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_UNKNOWN_FORMAT   -1
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
 /* back-compat */
?H:?LONG_DOUBLESIZE:#define LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE /* back-compat */
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee LONG_DOUBLE_STYLE_IEEE
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_doubledouble
LONG_DOUBLE_STYLE_IEEE_DOUBLEDOUBLE
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_extended
LONG_DOUBLE_STYLE_IEEE_EXTENDED
?H:?LONG_DOUBLESIZE:#$d_long_double_style_ieee_std LONG_DOUBLE_STYLE_IEEE_STD
?H:?LONG_DOUBLESIZE:#$d_long_double_style_vax LONG_DOUBLE_STYLE_VAX
?H:?LONG_DOUBLESIZE:#endif
?H:.
?F:!try
?LINT:known LONG_DOUBLE_IS_DOUBLE LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN
```

```
?LINT:known LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN
LONG_DOUBLE_IS_UNKNOWN_FORMAT
?LINT:known
 LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE
?LINT:known LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE
?LINT:known LONG_DOUBLE_IS_VAX_H_FLOAT
?LINT:set d_longdbl
?LINT:set d_ldexpl
: check for long doubles
echo " " >&4
echo "Checking to see if you have long double..." >&4
echo 'int main() { long double x = 7.0; }' > try.c
set try
if eval $compile; then
 val="$define"
 echo "You have long double." >&4
else
 val="$undef"
 echo "You do not have long double." >&4
fi
$rm_try
set d_longdbl
eval $setvar

: see if ldexpl exists
set ldexpl d_ldexpl
eval $inlibc

@if LONG_DOUBLESIZE || longdblsize
: check for length of long double
?X:  Check only if d_longdbl and if longdblsize is not already set.
case "${d_longdbl}${longdblsize}" in
$define)
 echo " " >&4
 echo "Checking to see how big your long doubles are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(long
 double));
}
EOCP
 set try
```

```
?X: Don't use compile_ok because some compilers warn you that they have
?X: 'long double' as just 'double'.
 set try
 if eval $compile; then
  longdblsize=`$run ./try`
  echo "Your long doubles are $longdblsize bytes long." >&4
 else
  dflt='8'
  echo " " >&4
  echo "(I can't seem to compile the test program.  Guessing...)" >&4
  rp="What is the size of a long double (in bytes)?"
  . ./myread
  longdblsize="$ans"
 fi
 if $test "X$doublesize" = "X$longdblsize"; then
  echo "That isn't any different from an ordinary double." >&4
  echo "I'll keep your setting anyway, but you may see some" >&4
  echo "harmless compilation warnings." >&4
 fi
 ;;
esac
$rm_try
@end

$echo "Checking the kind of long doubles you have..." >&4
case "$d_longdbl" in
define)
$cat <<EOP >try.c
#$i_stdlib I_STDLIB
#define LONGDBLSIZE $longdblsize
#define DOUBLESIZE $doublesize
#include <float.h>
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
static const long double
 d = -0.1L;
int main() {
 unsigned const char* b = (unsigned const char*)(&d);
#if DOUBLESIZE == LONGDBLSIZE
 printf("0\n"); /* if it floats like double */
 exit(0);
#endif
#if (LDBL_MANT_DIG == 113 || FLT128_MANT_DIG == 113) && LONGDBLSIZE == 16
 if (b[0] == 0x9A && b[1] == 0x99 && b[15] == 0xBF) {
   /* IEEE 754 128-bit little-endian */
   printf("1\n");
```

```
  exit(0);
 }
 if (b[0] == 0xBF && b[14] == 0x99 && b[15] == 0x9A) {
  /* IEEE 128-bit big-endian, e.g. solaris sparc */
  printf("2\n");
  exit(0);
 }
#endif
/* For alignment 32-bit platforms have the 80 bits in 12 bytes,
* while 64-bits platforms have it in 16 bytes.  The trailing bytes
* cannot be trusted. */
#if LDBL_MANT_DIG == 64 && (LONGDBLSIZE == 16 || LONGDBLSIZE == 12)
 if (b[0] == 0xCD && b[9] == 0xBF) {
  /* x86 80-bit little-endian, sizeof 12 (ILP32, Solaris x86)
   * or 16 (LP64, Linux and OS X), 4 or 6 bytes of padding.
   * Also known as "extended precision". */
  printf("3\n");
  exit(0);
 }
 if (b[0] == 0xBF && b[9] == 0xCD) {
  /* Is there ever big-endian 80-bit, really?
   *
   * The Motorola 68881 had another "extended precision" format:
   * sign:1 exp:15 zero:16 integer:1 mantissa:63
   * for total of 96 bits of bytes.  The zero bits were unused.
   * See "M68000 FAMILY PROGRAMMER'S REFERENCE MANUAL" for more details.
   * If it ever becomes relevant, this format should be allocated a
   * new doublekind code since it is quite different from the Intel x87.
   */
  printf("4\n");
  exit(0);
 }
#endif
#if (LDBL_MANT_DIG == 106 || LDBL_MANT_DIG == 107) && LONGDBLSIZE == 16
 /* software "double double", the 106 is 53+53.
  * but irix thinks it is 107. */
 if (b[0] == 0x9A && b[7] == 0x3C && b[8] == 0x9A && b[15] == 0xBF) {
  /* double double 128-bit fully little-endian,
   * little-endian doubles in little-endian order,
   * 9a 99 99 99 99 99 59 3c 9a 99 99 99 99 99 b9 bf */
  printf("5\n");
  exit(0);
 }
 if (b[0] == 0xBF && b[7]
 == 0x9A && b[8] == 0x3C && b[15] == 0x9A) {
  /* double double 128-bit fully big-endian,
   * big-endian doubles in big-endian order,
   * e.g. PPC/Power and MIPS:
```

```
    * bf b9 99 99 99 99 99 9a 3c 59 99 99 99 99 99 9a */
   printf("6\n");
   exit(0);
 }
 if (b[0] == 0x9A && b[7] == 0xBF && b[8] == 0x9A && b[15] == 0x3C) {
   /* double double 128-bit mixed endian.
    * little-endian doubles in big-endian order,
    * e.g. ppc64el,
    * 9a 99 99 99 99 99 b9 bf 9a 99 99 99 99 99 59 3c */
   printf("7\n");
   exit(0);
 }
 if (b[0] == 0x3C && b[7] == 0x9A && b[8] == 0xBF && b[15] == 0x9A) {
   /* double double 128-bit mixed endian,
    * big-endian doubles in little-endian order,
    * 3c 59 99 99 99 99 99 9a bf b9 99 99 99 99 99 9a */
   printf("8\n");
   exit(0);
 }
#endif
/* We are largely making this up because it may well be
* that the VAX format H was never made available to C,
* only to Fortran. */
#if LONGDBLSIZE == 16 && defined(__vax__)
 if (b[0]
 == 0xFD && b[15] == 0x99) {
   /* VAX format H, PDP-11 mixed endian. */
   printf("9\n");
   exit(0);
 }
#endif
 printf("-1\n"); /* unknown */
 exit(0);
}
EOP
set try
if eval $compile; then
   longdblkind=`$run ./try`
else
   longdblkind=-1
fi
;;
*) longdblkind=0 ;;
esac
case "$longdblkind" in
0) echo "Your long doubles are doubles." >&4 ;;
1) echo "You have IEEE 754 128-bit little endian long doubles." >&4 ;;
2) echo "You have IEEE 754 128-bit big endian long doubles." >&4 ;;
```

```
3) echo "You have x86 80-bit little endian long doubles." >&4 ;;
4) echo "You have x86 80-bit big endian long doubles." >&4 ;;
5) echo "You have 128-bit fully little-endian double-double long doubles (64-bit LEs in LE)." >&4 ;;
6) echo "You have 128-bit fully big-endian double-double long doubles (64-bit BEs in BE)." >&4 ;;
7) echo "You have 128-bit mixed-endian double-double long doubles (64-bit LEs in BE)." >&4 ;;
8) echo "You have 128-bit mixed-endian double-double long doubles (64-bit BEs in LE)." >&4
 ;;
9) echo "You have 128-bit PDP-style mixed-endian long doubles (VAX format H)." >&4 ;;
*) echo "Cannot figure out your long double." >&4 ;;
esac
d_long_double_style_ieee=$undef
d_long_double_style_ieee_std=$undef
d_long_double_style_ieee_extended=$undef
d_long_double_style_ieee_doubledouble=$undef
d_long_double_style_vax=$undef
case "$longdblkind" in
1|2|3|4|5|6|7|8) d_long_double_style_ieee=$define ;;
esac
case "$longdblkind" in
1|2) d_long_double_style_ieee_std=$define ;;
esac
case "$longdblkind" in
3|4) d_long_double_style_ieee_extended=$define ;;
esac
case "$longdblkind" in
5|6|7|8) d_long_double_style_ieee_doubledouble=$define ;;
esac
case "$longdblkind" in
9) d_long_double_style_vax=$define ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_longdbl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitescript.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitescript.U,v $
?RCS:
```

```
?MAKE:sitescript sitescriptexp installsitescript : Getfile Oldconfig test \
 Setprefixvar sitebin siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitescript=''
?S:sitescript:
?S: This variable holds the name of the directory in which the user wants
?S: to put add-on publicly executable files for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S: The standard
 distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: scripts in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitescriptexp=''
?S:sitescriptexp:
?S: This is the same as the sitescript variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installsitescript=''
?S:installsitescript:
?S: This variable is usually the same as sitescriptexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?LINT:change prefixvar
?LINT:set installsitescript
?LINT:set sitescript
?LINT:set sitescriptexp
: determine where add-on public executable scripts go
case "$sitescript" in
'') dflt=$siteprefix/script
 $test -d $dflt || dflt=$sitebin ;;
*)  dflt="$sitescript" ;;
esac
fn=d~+
rp='Pathname where add-on public executable scripts
 should be installed?'
. ./getfile
prefixvar=sitescript
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitescript.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_speedopt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_speedopt.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:15:51  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_speedopt: Myread Cppsym Oldconfig cat models Setvar
?MAKE: -pick add $@ %<
?S:d_speedopt:
?S: This variable conditionally defines the SPEED_OVER_MEM symbol, which
?S: indicates to the C program that it can
 burn memory in order to save
?S: CPU time.
?S:.
?C:SPEED_OVER_MEM (SPEEDOVERMEM):
?C: This symbol, if defined, indicates that the program can use more
?C: memory in order to reduce CPU time.  The symbol doesn't say whether
?C: we are more interested in saving text space or data space.
?C:.
?H:#$d_speedopt SPEED_OVER_MEM /**/
?H:.
?LINT:set d_speedopt
: do we want speed at the expense of memory
$cat <<'EOM'

I can try to optimize this package for either speed or memory.  If you have
limited address space you may wish to optimize for memory.  Otherwise you
should probably optimize for speed.

EOM
case "$d_speedopt" in
") if ./Cppsym $smallmach; then
 case "$models" in
  *large*|*huge*) dflt=speed;;
  *) dflt=memory;;
```

```
  esac
 else
  dflt=speed
 fi
 ;;
*define*) dflt=speed;;
*) dflt=memory;;
esac
rp="What to optimize for?"
. ./myread
case "$ans" in
mem*) val="$undef";;
*) val="$define";;
esac
set d_speedopt
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_speedopt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_voidsig.U,v $
?RCS: Revision 3.0.1.3  1995/05/12  12:12:46  ram
?RCS: patch54: made cppflags dependency optional
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:20:35  ram
?RCS: patch32: now sets signal_t only once d_voidsig is known (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:54  ram
?RCS: patch30: now properly sets signal_t when re-using previous value
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_voidsig signal_t: rm contains
 cppstdin cppminus +cppflags test Myread \
 Oldconfig Setvar Findhdr
?MAKE: -pick add $@ %<
```

```
?S:d_voidsig:
?S: This variable conditionally defines VOIDSIG if this system
?S: declares "void (*signal(...))()" in signal.h.  The old way was to
?S: declare it as "int (*signal(...))()".
?S:.
?S:signal_t:
?S: This variable holds the type of the signal handler (void or int).
?S:.
?C:VOIDSIG:
?C: This symbol is defined if this system declares "void (*signal(...))()" in
?C: signal.h.  The old way was to declare it as "int (*signal(...))()".  It
?C: is up to the package author to declare things correctly based on the
?C: symbol.
?C:.
?C:Signal_t (SIGNAL_T):
?C: This symbol's value is either "void" or "int", corresponding to the
?C: appropriate return type of a signal handler.  Thus, you can declare
?C: a signal handler using "Signal_t (*handler)()", and define the
?C: handler using "Signal_t handler(sig)".
?C:.
?H:#$d_voidsig VOIDSIG  /**/
?H:#define Signal_t $signal_t /* Signal handler's return
 type */
?H:.
?T:xxx
?LINT:set d_voidsig
: see if signal is declared as pointer to function returning int or void
echo " "
xxx=`./findhdr signal.h`
$test "$xxx" && $cppstdin $cppminus $cppflags < $xxx >$$.tmp 2>/dev/null
if $contains 'int.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
elif $contains 'void.*\*[  ]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have void (*signal())() instead of int." >&4
 val="$define"
elif $contains 'extern[  ]*[(\*]*signal' $$.tmp >/dev/null 2>&1 ; then
 echo "You have int (*signal())() instead of void." >&4
 val="$undef"
else
 case "$d_voidsig" in
 ")
 echo "I can't determine whether signal handler returns void or int..." >&4
  dflt=void
  rp="What type does your signal handler return?"
  . ./myread
  case "$ans" in
  v*) val="$define";;
```

```
  *) val="$undef";;
  esac;;
 "$define")
  echo "As you already told me, signal handler returns void." >&4;;
 *)
  echo "As you already told
 me, signal handler returns int." >&4;;
 esac
fi
set d_voidsig
eval $setvar
case "$d_voidsig" in
"$define") signal_t="void";;
*) signal_t="int";;
esac
$rm -f $$.tmp
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_voidsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_safemcpy.U,v 3.0.1.5 1997/02/28 15:41:12 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_safemcpy.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:41:12  ram
?RCS: patch61: improved overlapping copy check
?RCS: patch61: comfort them if they have memmove
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.4  1995/07/25  13:58:46  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.3  1995/03/21  08:47:26  ram
?RCS: patch52: swapped two first arguments of memcpy() calls
?RCS:
?RCS:
 Revision 3.0.1.2  1994/10/29  16:15:10  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:53:12  ram
```

```
?RCS: patch23: ensure string is not optimized in read-only memory (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_safemcpy: Compile cat d_memcpy rm_try run \
 d_memmove i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_safemcpy:
?S: This variable conditionally defines the HAS_SAFE_MEMCPY symbol if
?S: the memcpy() routine can do overlapping copies.
?S: For overlapping copies, memmove() should be used, if available.
?S:.
?C:HAS_SAFE_MEMCPY (SAFE_MEMCPY):
?C: This symbol, if defined, indicates that the memcpy routine is available
?C: to copy potentially overlapping memory blocks.  If you need to
?C: copy overlapping memory blocks, you should check HAS_MEMMOVE and
?C: use memmove() instead, if available.
?C:.
?H:#$d_safemcpy HAS_SAFE_MEMCPY /**/
?H:.
?F:!try
?LINT:
 set d_safemcpy
: can memcpy handle overlapping blocks?
echo " "
?X: assume the worst
val="$undef"
case "$d_memmove" in
"$define") echo "I'll use memmove() instead of memcpy() for overlapping copies." ;;
*) case "$d_memcpy" in
 "$define")
  echo "Checking to see if memcpy() can do overlapping copies..." >&4
  $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
```

```
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char buf[128], abc[128];
char *b;
int len;
int off;
int align;

/* Copy "abcde..." string to char abc[] so that gcc doesn't
  try to store the string in read-only memory. */
memcpy(abc, "abcdefghijklmnopqrstuvwxyz0123456789", 36);

for (align = 7; align >=
 0; align--) {
 for (len = 36; len; len--) {
  b = buf+align;
  memcpy(b, abc, len);
  for (off = 1; off <= len; off++) {
   memcpy(b+off, b, len);
   memcpy(b, b+off, len);
   if (memcmp(b, abc, len))
    exit(1);
  }
 }
}
exit(0);
}
EOCP
  set try
  if eval $compile_ok; then
   if $run ./try 2>/dev/null; then
    echo "Yes, it can."
    val="$define"
   else
    echo "It can't, sorry."
   fi
  else
   echo "(I can't compile the test program, so we'll assume not...)"
  fi
  ;;
 esac
```

```
 $rm_try
 ;;
esac
set d_safemcpy
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_safemcpy.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: otherlibdirs.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999-2000, Andy Dougherty
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: otherlibdirs.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS: Revision 1.1  1999/07/08 18:20:26  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:otherlibdirs d_perl_otherlibdirs: Myread cat sitelib sitearch \
 vendorarch vendorlib Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:otherlibdirs:
?S: This variable contains a colon-separated set of paths for the perl
?S: binary to search for additional library files
 or modules.
?S: These directories will be tacked to the end of @INC.
?S: Perl will automatically search below each path for version-
?S: and architecture-specific directories.  See inc_version_list
?S: for more details.
?S: A value of ' ' means 'none' and is used to preserve this value
?S: for the next run through Configure.
?S:.
?S:d_perl_otherlibdirs:
?S: This variable conditionally defines PERL_OTHERLIBDIRS, which
?S: contains a colon-separated set of paths for the perl binary to
?S: include in @INC.  See also otherlibdirs.
?S:.
```

```
?C:PERL_OTHERLIBDIRS:
?C: This variable contains a colon-separated set of paths for the perl
?C: binary to search for additional library files or modules.
?C: These directories will be tacked to the end of @INC.
?C: Perl will automatically search below each path for version-
?C: and architecture-specific directories.  See PERL_INC_VERSION_LIST
?C: for more details.
?C:.
?H:#$d_perl_otherlibdirs PERL_OTHERLIBDIRS "$otherlibdirs"  /**/
?H:.
?LINT: set d_perl_otherlibdirs
:
 Final catch-all directories to search
$cat <<EOM

Lastly, you can have perl look in other directories for extensions and
modules in addition to those already specified.
These directories will be searched after
 $sitearch
 $sitelib
EOM
test X"$vendorlib" != "X" && echo ' ' $vendorlib
test X"$vendorarch" != "X" && echo ' ' $vendorarch
echo ' '
case "$otherlibdirs" in
"|' ') dflt='none' ;;
*) dflt="$otherlibdirs" ;;
esac
$cat <<EOM
Enter a colon-separated set of extra paths to include in perl's @INC
search path, or enter 'none' for no extra paths.

EOM

rp='Colon-separated list of additional directories for perl to search?'
. ./myread
case "$ans" in
' '|''|none) otherlibdirs=' ' ;;
*) otherlibdirs="$ans" ;;
esac
case "$otherlibdirs" in
' ') val=$undef ;;
*) val=$define ;;
esac
set d_perl_otherlibdirs
eval $setvar

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/otherlibdirs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpwnam_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_getpwnam_r getpwnam_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_pwd extern_C
?MAKE: -pick add $@ %<
?S:d_getpwnam_r:
?S: This variable conditionally defines the HAS_GETPWNAM_R symbol,
?S: which indicates to the C program that the getpwnam_r()
?S: routine is available.
?S:.
?S:getpwnam_r_proto:
?S: This variable encodes the prototype of getpwnam_r.
?S: It is zero if d_getpwnam_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwnam_r
?S: is defined.
?S:.
?C:HAS_GETPWNAM_R:
?C: This symbol, if defined, indicates that the getpwnam_r routine
?C: is available to
 getpwnam re-entrantly.
?C:.
?C:GETPWNAM_R_PROTO:
?C: This symbol encodes the prototype of getpwnam_r.
?C: It is zero if d_getpwnam_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_getpwnam_r
?C: is defined.
?C:.
?H:#$d_getpwnam_r HAS_GETPWNAM_R /**/
?H:#define GETPWNAM_R_PROTO $getpwnam_r_proto /**/
?H:.
?T:try hdrs d_getpwnam_r_proto
: see if getpwnam_r exists
set getpwnam_r d_getpwnam_r
eval $inlibc
case "$d_getpwnam_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_pwd pwd.h"
 case "$d_getpwnam_r_proto:$usethreads" in
 ":define") d_getpwnam_r_proto=define
```

```
 set d_getpwnam_r_proto getpwnam_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_getpwnam_r_proto" in
define)
case "$getpwnam_r_proto" in
"|0) try='int getpwnam_r(const char*, struct passwd*, char*, size_t, struct passwd**);'
./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBWR ;;
esac
case "$getpwnam_r_proto" in
"|0) try='int getpwnam_r(const char*, struct passwd*,
char*, int, struct passwd**);'
./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBIR ;;
esac
case "$getpwnam_r_proto" in
"|0) try='struct passwd* getpwnam_r(const char*, struct passwd*, char*, int);'
./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=S_CSBI ;;
esac
case "$getpwnam_r_proto" in
"|0) try='int getpwnam_r(const char*, struct passwd*, char*, int);'
./protochk "$extern_C $try" $hdrs && getpwnam_r_proto=I_CSBI ;;
esac
case "$getpwnam_r_proto" in
"|0) d_getpwnam_r=undef
 getpwnam_r_proto=0
 echo "Disabling getpwnam_r, cannot determine prototype." >&4 ;;
* ) case "$getpwnam_r_proto" in
 REENTRANT_PROTO*) ;;
 *) getpwnam_r_proto="REENTRANT_PROTO_$getpwnam_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "getpwnam_r has no prototype, not using it." >&4 ;;
 esac
 d_getpwnam_r=undef
 getpwnam_r_proto=0
 ;;
esac
;;
*) getpwnam_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_getpwnam_r.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getgrps.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getgrps.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getgrps: Inlibc
?MAKE: -pick add $@ %<
?S:d_getgrps:
?S: This variable conditionally defines the HAS_GETGROUPS symbol, which
?S: indicates to the C program that the getgroups() routine is available
?S: to get the list of process groups.
?S:.
?C:HAS_GETGROUPS (GETGROUPS):
?C: This symbol, if defined, indicates that the getgroups()
 routine is
?C: available to get the list of process groups.  If unavailable, multiple
?C: groups are probably not supported.
?C:.
?H:#$d_getgrps HAS_GETGROUPS  /**/
?H:.
?LINT:set d_getgrps
: see if getgroups exists
set getgroups d_getgrps
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getgrps.U
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```
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```
?RCS: that same Artistic License; a copy of which may be found at the root
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?RCS:
?RCS: $Log: man1dir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:10:29  ram
?RCS: patch61: created
?RCS:
?X:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man1 used instead of man everywhere.
?X:
?MAKE:man1dir man1direxp man1ext installman1dir: afs cat nroff Loc Oldconfig \
 spackage test Getfile Prefixit prefixexp
 Prefixup sysman Myread
?MAKE: -pick add $@ %<
?Y:TOP
?S:man1dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:man1direxp:
?S: This variable is the same as the man1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installman1dir:
?S: This variable is really the same as man1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man1ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See man1dir.
?S:.
?T:lookpath
: determine
 where manual pages go
set man1dir man1dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages available in source form.
EOM
```

```
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$man1dir" in
 '') man1dir="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$man1dir" in
' ') dflt=none
 ;;
'')
 lookpath="$prefixexp/man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath $prefixexp/man/p_man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1"
 lookpath="$lookpath $prefixexp/man/man.1"
?X: Experience has shown people expect man1dir to be under prefix,
?X: so we now always put it there.  Users who want other behavior
?X: can answer interactively or use a command line option.
?X: Does user have System V-style man paths.
 case "$sysman" in
 */?_man*) dflt=`./loc . $prefixexp/l_man/man1 $lookpath` ;;
 *) dflt=`./loc . $prefixexp/man/man1 $lookpath` ;;
 esac
 set dflt
 eval $prefixup
 ;;
*)
  dflt="$man1dir"
 ;;
esac
echo " "
fn=dn+~
rp="Where do the main $spackage manual pages (source) go?"
. ./getfile
if $test "X$man1direxp" != "X$ansexp"; then
 installman1dir=''
fi
man1dir="$ans"
man1direxp="$ansexp"
case "$man1dir" in
'') man1dir=' '
 installman1dir='';;
esac
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
```

```
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installman1dir" in
 ") dflt=`echo $man1direxp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installman1dir";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installman1dir="$ans"
else
 installman1dir="$man1direxp"
fi

: What suffix to use on installed man pages

case "$man1dir" in
' ')
 man1ext='0'
 ;;
*)
 rp="What suffix should be used for the main $spackage man pages?"
 case "$man1ext" in
 ") case "$man1dir" in
  *1)  dflt=1 ;;
  *1p)
 dflt=1p ;;
  *1pm) dflt=1pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L1) dflt=L1;;
  *) dflt=1;;
  esac
  ;;
 *) dflt="$man1ext";;
 esac
 . ./myread
 man1ext="$ans"
 ;;
esac

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/man1dir.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: orderlib.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:18:18  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS: patch61: now uses the ar located by Loc.U
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:33:04  ram
?RCS: patch45: allows hint files to specify their own value for 'ranlib'
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:26:48  ram
?RCS: patch36: now performs a real small compile for accurate checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1
  1994/08/29  16:31:17  ram
?RCS: patch32: use cc variable instead of hardwired 'cc' in 1st compile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orderlib ranlib: Loc ar cat test rm +cc +ccflags +ldflags +libs _a _o
?MAKE: -pick add $@ %<
?S:orderlib:
?S: This variable is "true" if the components of libraries must be ordered
?S: (with `lorder $* | tsort`) before placing them in an archive.  Set to
?S: "false" if ranlib or ar can generate random libraries.
?S:.
?S:ranlib:
?S: This variable is set to the pathname of the ranlib program, if it is
?S: needed to generate random libraries.  Set to ":" if ar can generate
?S: random libraries or if random libraries are not supported
?S:.
?F:!foobar
: see if ar generates random libraries by itself
echo " "
echo "Checking how to generate random libraries on your machine..." >&4
```

```
?X: Some systems (like MIPS) complain when running ar... Others like Ultrix
?X: need an explicit 'ar ts'
 to add the table of contents.
?X: Still others like Linux run ar ts successfully, but still need ranlib.
?X: This set of tests seems the minimum necessary to check out Linux.
?X: We need to explicitly put the entries in out-of-order so that Sun's ld
?X: will fail.  (Otherwise it complains, but gives an exit status of 0.)
echo 'int bar1() { return bar2(); }' > bar1.c
echo 'int bar2() { return 2; }' > bar2.c
$cat > foo.c <<'EOP'
int main() { printf("%d\n", bar1()); exit(0); }
EOP
$cc $ccflags -c bar1.c >/dev/null 2>&1
$cc $ccflags -c bar2.c >/dev/null 2>&1
$cc $ccflags -c foo.c >/dev/null 2>&1
$ar rc bar$_a bar2$_o bar1$_o >/dev/null 2>&1
if $cc $ccflags $ldflags -o foobar foo$_o bar$_a $libs > /dev/null 2>&1 &&
 ./foobar >/dev/null 2>&1; then
 echo "ar appears to generate random libraries itself."
 orderlib=false
 ranlib=":"
elif $ar ts bar$_a >/dev/null 2>&1 &&
 $cc $ccflags $ldflags -o foobar foo$_o bar$_a $libs > /dev/null 2>&1 &&
 ./foobar >/dev/null 2>&1; then
  echo "a table of contents
 needs to be added with 'ar ts'."
  orderlib=false
  ranlib="$ar ts"
else
?X: Allow hints to specify their own ranlib "script". For instance, on
?X: some NeXT machines, the timestamp put by ranlib is not correct, and this
?X: may raise tedious recompiles for nothing. Therefore, NeXT may add the
?X: ranlib='sleep 5; /bin/ranlib' line in their hints to "fix" that.
?X: (reported by Andreas Koenig <k@franz.ww.tu-berlin.de>)
 case "$ranlib" in
 :) ranlib=";;
 ")
  ranlib=`./loc ranlib X /usr/bin /bin /usr/local/bin`
  $test -f $ranlib || ranlib="
  ;;
 esac
 if $test -n "$ranlib"; then
  echo "your system has '$ranlib'; we'll use that."
  orderlib=false
 else
  echo "your system doesn't seem to support random libraries"
  echo "so we'll use lorder and tsort to order the libraries."
  orderlib=true
```

```
  ranlib=":"
 fi
fi
$rm -f foo* bar*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/orderlib.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_keepsig.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:57:56  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:26:25  ram
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:13:59  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0.1.1  1993/10/16  13:48:47  ram
?RCS: patch12: comment for SIGNALS_KEPT was the other way round
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:06:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_keepsig: cat Compile rm Guess contains echo n c Setvar run
?MAKE: -pick add $@ %<
?S:d_keepsig:
?S: This variable contains the eventual value of the SIGNALS_KEPT symbol,
?S: which indicates to the C program if signal handlers need not reinstated
?S: after receipt of a signal.
?S:.
?C:SIGNALS_KEPT (PERSISTENT_SIGNAL):
?C: This symbol is defined if signal handlers needn't be reinstated after
?C: receipt of a signal.
?C:.
?H:#$d_keepsig SIGNALS_KEPT /**/
```

```
?H:.
?F:!try !try.out
?LINT:set d_keepsig
: see if signals are kept
val="$undef";
echo " "
echo "Checking to see if signal handlers stick around..." >&4
$cat >try.c <<'EOCP'
foo() {}

int main()
{
 signal(2, foo);
 kill(getpid(), 2);
 kill(getpid(), 2);
 printf("abc\n");
}
EOCP
set try
if eval $compile_ok; then
?X: On AIX a single ./try will not work (with ksh)
?X: Backquotes required on Linux and SGI (prevents "ambiguous output redirect")
?X:
 (reported by Xavier LeVourch <xavierl@eiffel.com>)
 `sh -c $run ./try >try.out 2>/dev/null`
 if $contains abc try.out >/dev/null 2>&1; then
  echo "Yes, they do."
  val="$define";
 else
  echo "No, they don't."
 fi
else
 $echo $n "(I can't seem to compile the test program. Assuming $c"
 if ./bsd; then
  echo "they do.)"
  val="$define"
 else
  echo "they don't.)"
 fi
fi
set d_keepsig
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_keepsig.U
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```
?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:compiler_warning: contains grep osname
?MAKE: -pick add $@ %<
?S:compiler_warning:
?S: This variable holds the command to check if the file specified as a
?S: parameter contains a compiler warning
?S:.
: See if a file contains compiler warnings
: See if a file contains compiler warnings
case "$osname" in
 'aix')
 cat >compiler_warning <<EOSS
# Sample for aix ('.5' indicates the column number in the line):
#    "op.h", line 203.5: 1506-159 (E) Bit field
 type specified for op_type
# Since the word 'warning' isn't present, use a fairly rigorous match of what
# warning messages look like
#           "    o       p       .  h   ", line    203     .   5       :   1506     -    159      (  E  )
$grep -E "^\\"[A-Za-z][A-Za-z0-9_]*\.[ch]\\", line [1-9][0-9]*[.][1-9][0-9]*: [1-9][0-9]*-[1-9][0-9]* \([EW][)] "
"\$1"
EOSS
      compiler_warning=./compiler_warning
      chmod +x $compiler_warning
   ;;
    # Maybe a colon after the 'warning' would be appropriate
 *) compiler_warning="$contains -i warning"
   ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/compiler_warning.U
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```
?RCS: $Id: Oldsym.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldsym.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:06:58  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit follows the creation of the config.sh file. It adds some
?X: special symbols: defines from patchlevel.h file if any and PERL_CONFIG_SH,
?X: which is set to true. Then, we try to keep all the new symbols that
?X: may come from a hint
 file or a previous config.sh file.
?X:
?MAKE:Oldsym: Config_sh cat test hint src sed sort uniq perl_patchlevel
?MAKE: -pick add $@ %<
?T:PERL_CONFIG_SH PERL_PATCHLEVEL sym tmp
?F:!UU
: add special variables
$test -f $src/patchlevel.h && \
awk '/^#define[  ]+PERL_/ {printf "%s=%s\n",$2,$3}' $src/patchlevel.h >>config.sh
echo "PERL_PATCHLEVEL='$perl_patchlevel'" >>config.sh
echo "PERL_CONFIG_SH=true" >>config.sh

: propagate old symbols
if $test -f UU/config.sh; then
?X: Make sure each symbol is unique in oldconfig.sh
 <UU/config.sh $sort | $uniq >UU/oldconfig.sh
?X:
?X: All the symbols that appear twice come only from config.sh (hence the
?X: two config.sh in the command line). These symbols will be removed by
?X: the uniq -u command. The oldsyms file thus contains all the symbols
?X: that did not appear in the produced config.sh (Larry Wall).
?X:
?X: Do not touch the -u flag of uniq.  This means you too, Jarkko.
?X:
 $sed -n 's/^\([a-zA-Z_0-9]*\)=.*/\1/p' \
  config.sh config.sh UU/oldconfig.sh
 |\
  $sort | $uniq -u >UU/oldsyms
 set X `$cat UU/oldsyms`
 shift
 case $# in
 0) ;;
```

```
 *)
  $cat <<EOM
Hmm...You had some extra variables I don't know about...I'll try to keep 'em...
EOM
  echo ": Variables propagated from previous config.sh file." >>config.sh
  for sym in `$cat UU/oldsyms`; do
   echo "    Propagating $hint variable '"$'"$sym..."
   eval 'tmp="$'"${sym}"'"'
   echo "$tmp" | \
    sed -e "s/'/'\''\''/g" -e "s/^/$sym='/" -e "s/$/'/" >>config.sh
  done
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Oldsym.U
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?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in order
?X: to make quick check on whether the current C compiler is working.
?X:
?MAKE:Checkcc ccname ccversion: Myread Warn startsh cat contains test
?MAKE: -pick add $@ %<
?S:ccname:
?S: This can set either by hints files or by Configure.  If using
?S: gcc, this is gcc, and if not, usually equal to cc, unimpressive, no?
?S: Some platforms, however, make good use of this by storing the
?S: flavor
 of the C compiler being used here.  For example if using
?S: the Sun WorkShop suite, ccname will be 'workshop'.
?S:.
?S:ccversion:
?S: This can set either by hints files or by Configure.  If using
?S: a (non-gcc) vendor cc, this variable may contain a version for
```

```
?S: the compiler.
?S:.
?F:./checkcc ./trygcc !checktmp
?V:despair
?T:trygcc
?LINT:extern cc rm ccflags ldflags
?LINT:change cc ccflags
?LINT:usefile checktmp
?INIT:ccname=''
?INIT:ccversion=''
: generate the trygcc script for later perusal
cat <<EOS >trygcc
$startsh
EOS
cat <<'EOSC' >>trygcc
case "$cc" in
'') ;;
*)  $rm -f try try.*
   $cat >try.c <<EOM
int main(int argc, char *argv[]) {
 (void) argc;
 (void) argv;
 return 0;
}
EOM
   if $cc -o try $ccflags $ldflags try.c; then
      :
   else
       echo "Uh-oh, the C compiler '$cc' doesn't seem to be working." >&4
       despair=yes
       trygcc=yes
       case "$cc" in
       *gcc*) trygcc=no ;;
       esac
       case "`$cc -v -c try.c 2>&1`" in

      *gcc*) trygcc=no ;;
       esac
       if $test X"$trygcc" = Xyes; then
           if gcc -o try -c try.c; then
               echo " "
               echo "You seem to have a working gcc, though." >&4
               rp="Would you like to use it?"
               dflt=y
               if $test -f myread; then
                   . ./myread
               else
                   if $test -f UU/myread; then
```

```
                . ./UU/myread
            else
                echo "Cannot find myread, sorry.  Aborting." >&2
                exit 1
            fi
        fi
        case "$ans" in
        [yY]*) cc=gcc; ccname=gcc; ccflags=''; despair=no;
?X: Look whether we have 'call-back units' generated by hints that would
?X: seemingly affect the compiling environment.
                $cat *.cbu >checktmp 2>/dev/null
                if $contains ccflags checktmp >/dev/null; then

    ./warn <<EOM
Any previous setting of the C compiler flags has been lost.
It may be necessary to pass -Dcc=gcc to Configure right away.
EOM
                fi;;
        esac
      fi
    fi
  fi
  $rm -f try try.*
  ;;
esac
EOSC

: generate the checkcc script for later perusal
cat <<EOS >checkcc
$startsh
EOS
cat <<'EOSC' >>checkcc
case "$cc" in
'') ;;
*)  $rm -f try try.*
  $cat >try.c <<EOM
int main(int argc, char *argv[]) {
 (void) argc;
 (void) argv;
 return 0;
}
EOM
  if $cc -o try $ccflags $ldflags try.c; then
    :
  else
    if $test X"$despair" = Xyes; then
      echo "Uh-oh, the C compiler '$cc' doesn't seem to be working." >&4
    fi
```

```
      $cat >&4 <<EOM
You need to find a working C compiler.
Either (purchase and) install the C compiler supplied by your OS vendor,
or for a free C compiler try http://gcc.gnu.org/
I cannot continue any further, aborting.
EOM
      exit 1
   fi

 $rm -f try try.*
   ;;
esac
EOSC
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Checkcc.U
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_int64_t: Inhdr cat rm_try Setvar Compile i_inttypes
?MAKE: -pick add $@ %<
?S:d_int64_t:
?S: This symbol will be defined if the C compiler supports int64_t.
?S:.
?C:HAS_INT64_T:
?C: This symbol will defined if the C compiler supports int64_t.
?C: Usually the <inttypes.h> needs to be included, but sometimes
?C: <sys/types.h> is enough.
?C:.
?H:#$d_int64_t     HAS_INT64_T              /**/
?H:.
?LINT:set d_int64_t
: check for int64_t
echo " "
echo "Checking to see if you have int64_t..." >&4
$cat >try.c <<EOCP
#include
 <sys/types.h>
#$i_inttypes I_INTTYPES
```

```
#ifdef I_INTTYPES
#include <inttypes.h>
#endif
int main() { int64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have int64_t."
else
 val="$undef"
 echo "You do not have int64_t."
fi
$rm_try
set d_int64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_int64_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_systable.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_systable.U,v $
?RCS: Revision 3.0.1.1  1993/10/16  13:50:20  ram
?RCS: patch12: created
?RCS:
?RCS:
?MAKE:i_systable: Inhdr
?MAKE: -pick add $@ %<
?S:i_systable:
?S: This variable conditionally defines the I_SYS_TABLE symbol, and
?S: indicates whether a C program should include <sys/table.h>.
?S:.
?C:I_SYS_TABLE:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <sys/table.h> for the OSF/1 table() system call.
?C:.
?H:#$i_systable
```

```
 I_SYS_TABLE  /**/
?H:.
?LINT:set i_systable
: see if this is an OSF sys/table system
set sys/table.h i_systable
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_systable.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_normsig.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_normsig.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:03  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:14:48  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_normsig jobslib: test Setvar Guess _a
?MAKE: -pick add $@ %<
?S:d_normsig:
?S: This variable conditionally
 defines the NORMSIG symbol, which
?S: indicates to the C program that the normal signal handling routines
?S: should be used, as opposed to the ones in 4.1bsd (sigset, etc.).
?S:.
?S:jobslib:
?S: This variable holds the argument to be passed to the loader to include
?S: the strange signal handling routines from 4.1bsd.  On systems that
?S: have NORMSIG defined this variable is null.
?S:.
?C:NORMSIG:
?C: This symbol, if defined, indicates that normal signal handling routines
?C: should be used, as opposed to the ones in 4.1bsd (sigset, etc.).
?C:.
```

```
?H:#$d_normsig NORMSIG  /**/
?H:.
?LINT:set d_normsig
: see if we need -ljobs and if we have sigset, etc.
echo " "
if $test -r /usr/lib/libjobs$_a || $test -r /usr/local/lib/libjobs$_a ; then
 echo "Jobs library found." >&4
 val="$undef"
 jobslib='-ljobs'
else
 if ./bsd; then
  echo "No jobs library found. (I suppose this is at least 4.2...)" >&4
 else
  echo "No jobs library found. (That's okay, we all have our faults.)" >&4
 fi
 val="$define"
 jobslib=''
fi
set
 d_normsig
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_normsig.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perl5.U,v $
?RCS:
?RCS: Copyright (c) 2000 Andrew Dougherty
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: perl5.U,v $
?RCS:
?X:
?X: The purpose of this unit is to locate a previously installed
?X: version of perl5 suitable for running inc_version_list.U.
?X: We check for 5.005 and later because inc_version_list is
?X: irrelevant for earlier versions.
?X:
?MAKE:perl5: path_sep binexp test sed exe_ext
?MAKE: -pick add $@ %<
?Y:TOP
?S:perl5:
?S: This variable contains the full path (if any) to a previously
?S: installed perl5.005 or later suitable for running the script
?S: to determine inc_version_list.
```

```
?S:.
?T: tdir
: Find perl5.005 or later.
echo "Looking for a previously installed perl5.005 or later... "
case "$perl5" in
") for tdir in `echo "$binexp$path_sep$PATH" | $sed "s/$path_sep/
 /g"`; do
  : Check if this perl is recent and can load a simple module
  if $test -x $tdir/perl$exe_ext && $tdir/perl -Mless -e 'use 5.005;' >/dev/null 2>&1; then
   perl5=$tdir/perl
   break;
  elif $test -x $tdir/perl5$exe_ext && $tdir/perl5 -Mless -e 'use 5.005;' >/dev/null 2>&1; then
   perl5=$tdir/perl5
   break;
  fi
 done
 ;;
*) perl5="$perl5"
 ;;
esac
case "$perl5" in
") echo "None found.  That's ok.";;
*) echo "Using $perl5." ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/perl5.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setregid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setregid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setregid d_setresgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setregid:
?S: This variable conditionally defines HAS_SETREGID if setregid() is
?S: available to change the real and effective gid of the current
```

```
?S: process.
?S:.
?S:d_setresgid:
?S: This variable conditionally defines HAS_SETRESGID if setresgid() is
?S: available to change
 the real, effective and saved gid of the current
?S: process.
?S:.
?C:HAS_SETREGID (SETREGID):
?C: This symbol, if defined, indicates that the setregid routine is
?C: available to change the real and effective gid of the current
?C: process.
?C:.
?C:HAS_SETRESGID (SETRESGID):
?C: This symbol, if defined, indicates that the setresgid routine is
?C: available to change the real, effective and saved gid of the current
?C: process.
?C:.
?H:#$d_setregid HAS_SETREGID  /**/
?H:#$d_setresgid HAS_SETRESGID  /**/
?H:.
?LINT: set d_setregid d_setresgid
: see if setregid exists
set setregid d_setregid
eval $inlibc
set setresgid d_setresgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setregid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_regcmp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_regcmp.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:34:45  ram
?RCS: patch49: now looks for POSIX regcomp() routine
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:53  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:d_regcmp d_re_comp d_regcomp: Csym cat
?MAKE: -pick add $@ %<
?S:d_regcomp:
?S: This variable conditionally defines the HAS_REGCOMP symbol, which
?S: indicates to the C program that the regcomp() routine is available
?S: for regular
 pattern matching (usually on POSIX.2 conforming systems).
?S:.
?S:d_regcmp:
?S: This variable conditionally defines the HAS_REGCMP symbol, which
?S: indicates to the C program that the regcmp() routine is available
?S: for regular pattern matching (usually on System V).
?S:.
?S:d_re_comp:
?S: This variable conditionally defines the HAS_RECOMP symbol, which
?S: indicates to the C program that the re_comp() routine is available
?S: for regular pattern matching (usually on BSD). If so, it is likely that
?S: re_exec() exists.
?S:.
?C:HAS_REGCOMP (REGCOMP):
?C: This symbol, if defined, indicates that the regcomp() routine is
?C: available to do some regular pattern matching (usually on POSIX.2
?C: conforming systems).
?C:.
?C:HAS_REGCMP (REGCMP):
?C: This symbol, if defined, indicates that the regcmp() routine is
?C: available to do some regular pattern matching (usually on System V).
?C:.
?C:HAS_RECOMP (RECOMP):
?C: This symbol, if defined, indicates that the re_comp() routine is
?C: available
 to do some regular pattern matching (usually on BSD). If so,
?C: it is likely that re_exec() be available.
?C:.
?H:#$d_regcomp HAS_REGCOMP  /* POSIX.2 */
?H:#$d_regcmp HAS_REGCMP  /* sysV */
?H:#$d_re_comp HAS_RECOMP  /* BSD */
?H:.
?T:val
: see if regcomp, regcmp, or re_comp exist, for regular pattern matching
echo " "
if set regcomp val -f d_regcomp; eval $csym; $val; then
 echo 'regcomp() found.' >&4
 d_regcomp="$define"
 d_regcmp="$undef"
 d_re_comp="$undef"
elif set regcmp val -f d_regcmp; eval $csym; $val; then
```

```
 echo 'regcmp() found.' >&4
 d_regcmp="$define"
 d_regcomp="$undef"
 d_re_comp="$undef"
elif set re_comp val -f d_re_comp; eval $csym; $val; then
 echo 're_comp() found, assuming re_exec() also exists.' >&4
 d_re_comp="$define"
 d_regcomp="$undef"
 d_regcmp="$undef"
else
 $cat >&4 <<EOM
No regcomp(), regcmp() nor re_comp() found !! No regular pattern matching.
EOM
 d_regcmp="$undef"
 d_re_comp="$undef"
 d_regcomp="$undef"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_regcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: intsize.U,v 3.0.1.2 1997/02/28 15:55:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: intsize.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:55:26  ram
?RCS: patch61: avoid prompting the user if the test runs ok
?RCS: patch61: moved code from longsize.U into there
?RCS: patch61: new tests for shortsize as well
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:21:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:intsize longsize
 shortsize: Compile Myread cat run i_stdlib rm_try
?MAKE: -pick add $@ %<
?S:intsize:
```

```
?S: This variable contains the value of the INTSIZE symbol, which
?S: indicates to the C program how many bytes there are in an int.
?S:.
?S:longsize:
?S: This variable contains the value of the LONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long.
?S:.
?S:shortsize:
?S: This variable contains the value of the SHORTSIZE symbol which
?S: indicates to the C program how many bytes there are in a short.
?S:.
?C:INTSIZE:
?C: This symbol contains the value of sizeof(int) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:LONGSIZE:
?C: This symbol contains the value of sizeof(long) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?C:SHORTSIZE:
?C: This symbol contains the value of sizeof(short) so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define INTSIZE $intsize  /**/
?H:#define LONGSIZE $longsize  /**/
?H:#define
 SHORTSIZE $shortsize  /**/
?H:.
?F:!try
: check for lengths of integral types
echo " "
case "$intsize" in
")
 echo "Checking to see how big your integers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
@if INTSIZE || intsize
 printf("intsize=%d;\n", (int)sizeof(int));
@end
@if LONGSIZE || longsize
 printf("longsize=%d;\n", (int)sizeof(long));
@end
```

```
@if SHORTSIZE || shortsize
 printf("shortsize=%d;\n", (int)sizeof(short));
@end
 exit(0);
}
EOCP
 set try
 if eval $compile_ok && $run ./try > /dev/null; then
  eval `$run ./try`
@if INTSIZE || intsize
  echo "Your integers are $intsize bytes long."
@end
@if LONGSIZE || longsize
  echo "Your long integers are $longsize bytes long."
@end
@if SHORTSIZE || shortsize
  echo "Your short integers are $shortsize bytes long."
@end
 else
  $cat >&4 <<EOM
!
Help! I can't compile and run the intsize test program: please enlighten me!
(This is probably a misconfiguration
 in your system or libraries, and
you really ought to fix it.  Still, I'll try anyway.)
!
EOM
@if INTSIZE || intsize
  dflt=4
  rp="What is the size of an integer (in bytes)?"
  . ./myread
  intsize="$ans"
@end
@if LONGSIZE || longsize
  dflt=$intsize
  rp="What is the size of a long integer (in bytes)?"
  . ./myread
  longsize="$ans"
@end
@if SHORTSIZE || shortsize
  dflt=2
  rp="What is the size of a short integer (in bytes)?"
  . ./myread
  shortsize="$ans"
@end
 fi
 ;;
esac
```

```
$rm_try

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/a_dvisory/intsize.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_gethostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostent_r gethostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostent_r:
?S: This variable conditionally defines the HAS_GETHOSTENT_R symbol,
?S: which indicates to the C program that the gethostent_r()
?S: routine is available.
?S:.
?S:gethostent_r_proto:
?S: This variable encodes the prototype of gethostent_r.
?S: It is zero if d_gethostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostent_r
?S: is defined.
?S:.
?C:HAS_GETHOSTENT_R:
?C: This symbol, if defined, indicates that the gethostent_r routine
?C: is
 available to gethostent re-entrantly.
?C:.
?C:GETHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of gethostent_r.
?C: It is zero if d_gethostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostent_r
?C: is defined.
?C:.
?H:#$d_gethostent_r HAS_GETHOSTENT_R /**/
?H:#define GETHOSTENT_R_PROTO $gethostent_r_proto /**/
?H:.
?T:try hdrs d_gethostent_r_proto
: see if gethostent_r exists
set gethostent_r d_gethostent_r
eval $inlibc
case "$d_gethostent_r" in
"$define")
```

```
hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
case "$d_gethostent_r_proto:$usethreads" in
":define") d_gethostent_r_proto=define
 set d_gethostent_r_proto gethostent_r $hdrs
 eval $hasproto ;;
*) ;;
esac
case "$d_gethostent_r_proto" in
define)
case "$gethostent_r_proto" in
"|0) try='int gethostent_r(struct hostent*, char*, size_t, struct hostent**, int*);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBWRE ;;
esac
case "$gethostent_r_proto"
in
"|0) try='int gethostent_r(struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBIE ;;
esac
case "$gethostent_r_proto" in
"|0) try='struct hostent* gethostent_r(struct hostent*, char*, int, int*);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=S_SBIE ;;
esac
case "$gethostent_r_proto" in
"|0) try='struct hostent* gethostent_r(struct hostent*, char*, int);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=S_SBI ;;
esac
case "$gethostent_r_proto" in
"|0) try='int gethostent_r(struct hostent*, char*, int);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SBI ;;
esac
case "$gethostent_r_proto" in
"|0) try='int gethostent_r(struct hostent*, struct hostent_data*);'
./protochk "$extern_C $try" $hdrs && gethostent_r_proto=I_SD ;;
esac
case "$gethostent_r_proto" in
"|0) d_gethostent_r=undef
 gethostent_r_proto=0
 echo "Disabling gethostent_r, cannot determine prototype." >&4 ;;
* ) case
"$gethostent_r_proto" in
 REENTRANT_PROTO*) ;;
 *) gethostent_r_proto="REENTRANT_PROTO_$gethostent_r_proto" ;;
 esac
 echo "Prototype: $try" ;;
esac
;;
*) case "$usethreads" in
 define) echo "gethostent_r has no prototype, not using it." >&4 ;;
```

```
  esac
  d_gethostent_r=undef
  gethostent_r_proto=0
  ;;
 esac
 ;;
*) gethostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostent_r.U
No license file was found, but licenses were detected in source scan.

```
;###########################################################################
;# Jmake rules for building libraries, programs, scripts, and data files
;# $Id: Jmake.rules 18 2006-12-27 10:35:09Z rmanfredi $

/*
*     MACHINE-INDEPENDENT RULES -- DO NOT MODIFY
*/

/* $Id: Jmake.rules 18 2006-12-27 10:35:09Z rmanfredi $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: Jmake.rules,v $
* Revision 3.0.1.7  2004/08/22 08:28:58  ram
* patch71: random cleanup
*
* Revision 3.0.1.6  1997/02/28  14:56:01  ram
* patch61: now handles USRINC for dependencies
* patch61: smarter about dependencies
 computation
*
* Revision 3.0.1.5  1995/09/25  09:07:19  ram
* patch59: smarter sed command to strip /usr/include dependencies
*
* Revision 3.0.1.4  1995/07/25  13:33:59  ram
* patch56: install of script man pages can now cope with missing files
* patch56: the clobber target now removes the .config directory as well
*
```

```
* Revision 3.0.1.3  1995/03/21  08:35:28  ram
* patch52: suppressed extra argument to NormalProgramTarget call
*
* Revision 3.0.1.2  1995/01/11  14:49:55  ram
* patch45: new macros ShellScriptTargetExt and SimpleShellScriptTargetExt
* patch45: directory installation is now made via INSTALLDIR (Configure)
*
* Revision 3.0.1.1  1994/10/29  15:46:30  ram
* patch36: added RemoteDependency rule
*
* Revision 3.0  1993/08/18  12:04:14  ram
* Baseline for dist 3.0 netwide release.
*
*/

/* Please, edit only with tabstops = 4 (":set ts=4" under vi) */

/*
* AddedByConfigure:
* Gives name of the files generated by Configure that can safely
* be removed
 when a "make clobber" is issued. Not that it is useless
* to name config.h or config.sh because these are already taken care
* of by jmake.
*/
#define AddedByConfigure(files) @!\
local_clobber::   @@\
 $(RM) files

/*
* AddSuffix:
* Adds a sufix to the .SUFFIXES: list.
*/
#define AddSuffix(ext) @!\
|suffix ext


/*
* AllTarget:
* Generate rules to build necessary things during make all.
*/
#define AllTarget(depends) @!\
all:: depends    @!\
      @!\
local_realclean::   @@\
 $(RM) depends

/*
```

```
* RemoveTargetProgram:
* This is used in some other macros in order to remove the target
* before starting its building (saves disk space).  There should be
* no '@!' at the end of the '#define' line, because this macro is
* used *inside* building rules.
*/
#define RemoveTargetProgram(program) \
 $(RM) program @@\
 if test -f program^^^$(_EXE); then \ @@\
  $(MV) program^^^$(_EXE) program^^~^^^$(_EXE); fi

/*
* NormalProgramTarget:
* Generate rules to compile and link the
 indicated program; since
* it does not use any default object files, it may be used for
* multiple programs in the same Jmakefile.
*/
#define NormalProgramTarget(program,sources,objects) @!\
++OBJECTS objects @!\
++SOURCES sources @!\
NormalObjectRule()    @!\
AllTarget(program)    @!\
       @!\
program: objects    @@\
 RemoveTargetProgram($@)  @@\
 $(CC) -o $@ objects $(JLDFLAGS) $(LIBS) @!\


/*
* SingleProgramTarget:
* Obsolete version of NormalProgramTarget that doesn't have
* deplibs.
*/
#define SingleProgramTarget(program,objects,libs)  \
NormalProgramTarget(program,objects,libs)

/*
* SimpleProgramTarget:
* Generate rules for compiling and linking programs that only have
* one C source file.  It should only be used in Jmakefiles that
* describe a single program.
*/
#define SimpleProgramTarget(program) @!\
NormalProgramTarget(program,program.c,program.o)
```

```
/*
* ComplexProgramTarget:
* Generate rules for compiling and linking the program specified by
* $(OBJS) and
 $(SRCS), installing the program and its man page, and
* generating dependencies.  It should only be used in Jmakefiles
* that describe a single program.
*/
#define ComplexProgramTarget(program) @!\
++OBJECTS $(OBJS) @!\
++SOURCES $(SRCS) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC)) @!\
DependTarget()      @!\
LintTarget()


/*
* ComplexProgramTarget_1:
* Generate rules for compiling and linking the program specified by
* $(OBJS1) and $(SRCS1), installing the program and its man page,
* and generating dependencies for it and any programs described by
* $(SRCS2) and $(SRCS3).  It should be used to build the primary
* program in Jmakefiles that describe multiple programs.
*/
#define ComplexProgramTarget_1(program) @!\
++OBJECTS $(OBJS1) @!\
++SOURCES $(SRCS1) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program:
 $(OBJS1)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS1) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC)) @!\
        @!\
DependTarget()      @!\
LintTarget()
```

```
/*
* ComplexProgramTarget_2:
* Generate rules for compiling and linking the program specified by
* $(OBJS2) and $(SRCS2) and installing the program and man page.
* It should be used to build the second program in Jmakefiles
* describing more than one program.
*/
#define ComplexProgramTarget_2(program) @!\
++OBJECTS $(OBJS2) @!\
++SOURCES $(SRCS2) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS2)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS2) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC))


/*
* ComplexProgramTarget_3:
* Generate rules for compiling and linking the
 program specified by
* $(OBJS3) and $(SRCS3) and installing the program and man page.  It
* should be used to build the third program in Jmakefiles describing
* more than one program.
*/
#define ComplexProgramTarget_3(program) @!\
++OBJECTS $(OBJS3) @!\
++SOURCES $(SRCS3) @!\
NormalObjectRule()     @!\
AllTarget(program)     @!\
        @!\
program: $(OBJS3)     @@\
 RemoveTargetProgram($@)   @@\
 $(CC) -o $@ $(OBJS3) $(JLDFLAGS) $(LIBS) @!\
        @!\
InstallProgram(program,$(BINDIR)) @!\
InstallManPage(program,$(MANSRC))


/*
* ComplexShellManualTarget:
* Builds manual pages that are to be extracted from .SH files into
```

```
* .$manext files.
*/
#define ComplexShellManualTarget(manpages) @!\
++MANPAGE manpages @!\
|once _ShellManualRule_  @!\
|rule:.SH.$manext:   @!\
|rule: /bin/sh $<   @!\
|rule:      @!\
-once      @!\
AddSuffix(.SH)    @!\
AddSuffix(.$manext)   @!\
AllTarget(manpages)   @!\
      @!\
local_install.man::   @@\
 _MakeInstallDirIgnore($(MANSRC)) \     @@\
 for
 file in manpages; do \  @@\
  (set -x; $(INSTALL) -c -m 444 $$file \ @@\
   $(INSTALL_PREFIX)$(MANSRC)) || exit 1; \ @@\
 done     @!\
      @!\
local_deinstall.man::  @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for file in manpages; do \  @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(MANSRC)/$$file); \ @@\
 done


/*
* Initialize:
* Puts the line symbol = value in the initialization section of
* Makefile.SH (the one that is subject to parameter substitutions).
*/
#define Initialize(symbol,value) @!\
+symbol = value


/*
* InstallLibrary:
* Generate rules to install the indicated library.
*/
#define InstallLibrary(libname,dest) @!\
local_install:: lib^^libname.a  @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 644 lib^^libname.a $(INSTALL_PREFIX)^^^dest  @@\
 $(RANLIB) dest/lib^^libname.a @@\
 chmod 444 dest/lib^^libnane.a @!\
        @!\
```

```
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.a


/*
* InstallSharedLibrary:
* Generate rules to install
 the shared library.
*/
#define InstallSharedLibrary(libname,rev,dest) @!\
local_install:: lib^^libname.so.rev  @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 lib^^libname.so.rev $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::      @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.so.rev


/*
* InstallSharedLibraryData:
* Generate rules to install the shared library data
*/
#define InstallSharedLibraryData(libname,rev,dest) @!\
local_install:: lib^^libname.sa.rev  @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 lib^^libname.sa.rev $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/lib^^libname.sa.rev


/*
* InstallLibraryAlias:
* Generate rules to create a link from one library name to another
* for the purposes of aliasing.
*/
#define InstallLibraryAlias(libname,alias,dest) @!\
local_install:: lib^^libname.a @@\
 $(RM) lib^^alias.a  @@\
 -(cd dest; $(LN) lib^^libname.a lib^^alias.a)
 @!\
       @!\
local_deinstall::   @@\
 $(RM) dest/lib^^alias.a


/*
* InstallLintLibrary:
```

```
* Generate rules to install the indicated lint library.
*/
#define InstallLintLibrary(libname,dest) @!\
install.ln:: llib-l^^libname.ln   @@\
 _MakeInstallDirIgnore(dest) \  @@\
 $(INSTALL) -c -m 444 llib-l^^libname.ln $(INSTALL_PREFIX)^^^dest @!\
      @!\
deinstall.ln::    @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/llib-l^^libname.ln


/*
* InstallManPageLong:
* Generate rules to install the indicated manual page, giving it an
* alternate name.  This is used for installing man pages whose base
* name without the .man suffix would normally be longer than 8
* characters (the limit for using source code control systems on
* files systems with short file names).
*/
#define InstallManPageLong(file,destdir,dest) @!\
local_install.man:: file.man   @@\
 _MakeInstallDirIgnore(destdir) \ @@\
 $(INSTALL) -c -m 444 file.man $(INSTALL_PREFIX)^^^destdir/dest.$(L) @!\
         @!\
local_deinstall.man::     @@\
 $(RM)
 $(INSTALL_PREFIX)^^^destdir/dest.$(L)  @!\


/*
* InstallManPage:
* Generate rules to install the indicated manual page.
*/
#define InstallManPage(file,dest) @!\
InstallManPageLong(file,dest,file)


/*
* InstallNonExec:
* Generate rules to install a data file using any special
*  install flags.
*/
#define InstallNonExec(file,dest) @!\
local_install:: file    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 444 file $(INSTALL_PREFIX)^^^dest @!\
         @!\
local_deinstall::     @@\
```

```
 $(RM) $(INSTALL_PREFIX)^^^dest/file


/*
* InstallProgramWithFlags:
* Generate rules to install an executable program using given
* install flags.
*/
#define InstallProgramWithFlags(program,dest,flags) @!\
local_install:: program    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -s -m 555 flags program^^^$(_EXE) $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/program^^^$(_EXE)


/*
* InstallProgramNoStripWithFlags:
 * Generate rules to install an executable program using given
* install flags.
*/
#define InstallProgramNoStripWithFlags(program,dest,flags) @!\
local_install:: program    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 555 flags program^^^$(_EXE) $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/program^^^$(_EXE)


/*
* InstallProgram:
* Generate rules to install an executable program using any special
* install flags set in $(INSTALLFLAGS).
*/
#define InstallProgram(program,dest) @!\
InstallProgramWithFlags(program,dest,^^)


/*
* InstallProgramNoStrip:
* Generate rules to install an executable program using any special
* install flags set in $(INSTALLFLAGS), but without stripping the
* executable from debugging symbols.
*/
#define InstallProgramNoStrip(program,dest) @!\
InstallProgramNoStripWithFlags(program,dest,^^)
```

```
/*
* InstallScriptWithFlags:
* Generate rules to install an executable script using given
* install
 flags.
*/
#define InstallScriptWithFlags(script,dest,flags) @!\
local_install:: script    @@\
 _MakeInstallDirIgnore(dest) \ @@\
 $(INSTALL) -c -m 555 flags script $(INSTALL_PREFIX)^^^dest @!\
        @!\
local_deinstall::     @@\
 $(RM) $(INSTALL_PREFIX)^^^dest/script


/*
* InstallScript:
* Generate rules to install an executable script using any special
* install flags set in $(INSTALLFLAGS).
*/
#define InstallScript(script,dest) @!\
InstallScriptWithFlags(script,dest,^^)


/*
* InstallScripts:
* Generate rules to install all the scripts listed in the generated
*  $(SCRIPTS) and $(LSCRIPTS) macros.
*/
#define InstallScripts() @!\
|once _InstallScripts_  @!\
local_install:: $(SCRIPTS) $(LSCRIPTS)    @@\
 _MakeInstallDirIgnore($(SCRIPTDIR)) \  @@\
 for file in $(SCRIPTS) $(LSCRIPTS); do \ @@\
  (set -x; \ @@\
  $(INSTALL) -c -m 555 $$file $(INSTALL_PREFIX)$(SCRIPTDIR)) || \ @@\
  exit 1; \ @@\
 done     @!\
       @!\
local_deinstall::   @@\
 @for file in $(SCRIPTS)
 $(LSCRIPTS); do \ @@\
  case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(SCRIPTDIR)/$$file); \ @@\
 done     @!\
-once
```

```
/*
* InstallManScripts:
* Generate rule to install/deinstall manual pages for scripts listed
* in the automatically generated $(SCRIPTS) macro.
*/
#define InstallManScripts() @!\
|once _InstallManScripts_ @!\
?NOMAN:|skip    @!\
local_install.man::   @@\
 _MakeInstallDirIgnore($(MANSRC)) \  @@\
 for file in $(SCRIPTS); do \   @@\
  if test -f $$file.man; then \  @@\
   (set -x; \      @@\
   $(INSTALL) -c -m 444 $$file.man \ @@\
    $(INSTALL_PREFIX)$(MANSRC)/$$file.$(L)) || \ @@\
    exit 1; \ @@\
  fi; \    @@\
 done     @!\
       @!\
local_deinstall.man::  @@\
 case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for file in $(SCRIPTS); do \ @@\
  (set -x; $(RM) $(INSTALL_PREFIX)$(MANSRC)/$$file.$(L)); \ @@\
 done     @!\
       @!\
-skip      @!\
-once



/*
* LinkFileList:
* Link a list of list of files from one place to another
 */
#define LinkFileList(step,list,dir,sub) @!\
step:: list       @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 echo " cd" dir; cd dir; for i in list; do (set -x; $(LN) sub/$$i .); done


/*
* InstallMultipleDestFlags:
* Generate rules to install multiple files at once during a particular
* step in the build using a specific set of install flags.
*/
#define InstallMultipleDestFlags(step,list,dest,flags) @!\
step:: list       @@\
```

```
 _MakeInstallDirIgnore(dest) \ @@\
 for i in list; do \    @@\
  (set -x; $(INSTALL) -c flags \ @@\
   $$i $(INSTALL_PREFIX)^^^dest) || exit 1;\ @@\
 done

/*
* DeinstallMultipleDest:
* Generate rules to deinstall multiple files at once during a particular
* step in the build.
*/
#define DeinstallMultipleDest(step,list,dest) @!\
step::        @@\
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for i in list; do \    @@\
  (set -x; $(RM) $(INSTALL_PREFIX)^^^dest/$$i); \ @@\
 done

/*
* InstallMultiple:
* Generate rules to install multiple
 files at once during the install
* step of the build using any install flags set in $(INSTALLFLAGS)
* and deinstall them.
*/
#define InstallMultiple(list,dest) @!\
InstallMultipleDestFlags(local_install,list,dest,$(INSTALLFLAGS)) @!\
DeinstallMultipleDest(local_deinstall,list,dest)


/*
* InstallMultipleFlags:
* Generate rules to install multiple files at once during the
* install step of the build using the given install flags.
*/
#define InstallMultipleFlags(list,dest,flags) @!\
InstallMultipleDestFlags(local_install,list,dest,flags) @!\
DeinstallMultipleDest(local_deinstall,list,dest)


/*
* InstallMultipleMan:
* Generate rules to install a variety of manual pages
* during the install.man step of the build.
*/
#define InstallMultipleMan(list,dest) @!\
InstallMultipleDestFlags(local_install.man,list,dest,$(INSTALLFLAGS)) @!\
DeinstallMultipleDest(local_deinstall.man,list,dest)
```

```
/*
* DependDependency:
* Generate rules to build the makedepend program.
*/
#define DependDependency()
    @!\
depend:: TOPDIR/mkdep    @!\
        @!\
TOPDIR/mkdep:      @!\
?TOP: @echo "You have to run Configure first."; exit 1 @!\
%TOP: @echo "You have to run Configure in $(TOP) first."; exit 1


/*
* DependTarget:
* Generate rules to compute dependencies for all files listed
* in $(SOURCES) (automatically generated macro).
*/
#define DependTarget()    @!\
+USRINC = $usrinc @!\
|once _DependTarget_    @!\
DependDependency()     @!\
        @!\
depend::       @@\
 ($(SED) '/^# DO NOT DELETE/q' Makefile && \ @@\
 $(MKDEP) $(SOURCES) | \   @@\
 $(SED) -e 's:/usr/lib[^ ]*::g; s:$(USRINC)[^ ]*::g; ' \ @@\
  -e '/: / b print' -e '$$ b print' -e 'H; d; n; : print' \ @@\
  -e 'x; s/\\$$//; s/\\\n//g; s/ ^^ */ /g; s/ :/:/;' -e '/: *$$/d' \ @@\
 ) > Makefile.new    @@\
 cp Makefile Makefile.bak  @@\
 cp Makefile.new Makefile  @@\
 $(RM) Makefile.new    @!\
        @!\
-once


/*
* CleanTarget:
* Generate rules to remove any garbage files.
*/
#define CleanTarget()    @!\
?SUBDIRS:clean:
 sub_clean local_clean    @!\
%SUBDIRS:clean: local_clean       @!\
?SUBDIRS:realclean: sub_realclean local_realclean @!\
```

```
%SUBDIRS:realclean: local_realclean     @!\
?SUBDIRS:clobber: sub_clobber local_clobber   @!\
%SUBDIRS:clobber: local_clobber      @!\
        @!\
local_clean::       @@\
 if test -f core; then $(RM) core; fi @@\
 $(RM) *~ *.o     @!\
        @!\
local_realclean:: local_clean  @!\
?TOP: $(RM) -r UU     @!\
        @!\
local_clobber:: local_realclean  @!\
%TOP: $(RM) Makefile config.sh  @!\
?TOP: $(RM) config.sh config.h  @!\
?TOP: $(RM) -r .config    @!\
?TOP: $(RM) Makefile    @!\


/*
* InstallTarget:
* Generate rules to recursively install files
*/
#define InstallTarget()           @!\
?SUBDIRS:install:: local_install sub_install     @!\
%SUBDIRS:install:: local_install        @!\
?SUBDIRS:install.man:: maybe_install.man sub_install.man  @!\
%SUBDIRS:install.man:: maybe_install.man      @!\
?SUBDIRS:deinstall:: sub_deinstall local_deinstall    @!\
%SUBDIRS:deinstall::
 local_deinstall       @!\
?SUBDIRS:deinstall.man:: sub_deinstall.man maybe_deinstall.man @!\
%SUBDIRS:deinstall.man:: maybe_deinstall.man     @!\
                @!\
?MANSRC:install.man-yes: local_install.man      @!\
install.man-no:             @!\
?MANSRC:deinstall.man-yes: local_deinstall.man     @!\
deinstall.man-no:            @!\


/*
* TagsTarget:
* Generate rules to compute tags files for C source code.
*/
#define TagsTarget()    @!\
tags::        @@\
 $(CTAGS) -w *.[ch]    @@\
 $(CTAGS) -xw *.[ch] > tags  @!\
        @!\
```

```
local_clobber::      @@\
 $(RM) tags



/*
* BuildMakefileSH:
* Generate rules to build a Makefile.SH from an Jmakefile and any
* special jmake flags.  This is generally done automatically by the
* template or by any special Jmakefiles.
* This function will simply touch Makefile.SH if no $(TOP)/.package
* exists, assuming the Jmakefile is not in a production environment.
*/
#define BuildMakefileSH(jmakeflags) @!\
Makefile.SH:
 Jmakefile     @@\
 -@if test -f $(TOP)/.package; then \ @@\
  if test -f Makefile.SH; then \ @@\
   echo " $(RM) Makefile.SH~; $(MV) Makefile.SH Makefile.SH~"; \ @@\
   $(RM) Makefile.SH~; $(MV) Makefile.SH Makefile.SH~; \ @@\
  fi; \      @@\
  echo " $(JMAKE) -DTOPDIR=$(TOP) -DCURDIR=$(CURRENT)" jmakeflags; \ @@\
  $(JMAKE) -DTOPDIR=$(TOP) -DCURDIR=$(CURRENT) jmakeflags; \ @@\
 else touch $@; fi


/*
* BuildMakefile:
* Generate rules to build a Makefile from a Makefile.SH.
*/
#define BuildMakefile() @!\
Makefile: Makefile.SH    @@\
 /bin/sh Makefile.SH


/*
* MakefileTarget:
* Generate rules to build a normal Makefile.
*/
#define MakefileTarget()  @!\
BuildMakefileSH(^^)    @!\
BuildMakefile()


/*
* NormalObjectRule:
* Generate make rule to build usual object files.
*/
```

```
#define NormalObjectRule()   @!\
|once _ObjectRule_     @!\
|rule:.c.o:       @!\
|rule: $(CC) -c $(JCFLAGS) $<  @!\
|rule:        @!\
-once

/*
* NormalLibraryObjectRule:
* Generate make rules to build
 "normal" objects.
*/
#define NormalLibraryObjectRule() @!\
|once _ObjectRule_     @!\
|rule:.c.o:       @!\
|rule: $(RM) $@      @!\
|rule: $(CC) -c $(JCFLAGS) $<  @!\
|rule:        @!\
-once

/*
* ProfiledLibraryObjectRule:
* Generate make rules to build both profiled and "normal" objects.
*/
#define ProfiledLibraryObjectRule() @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @!\
        @!\
|rule:.c.o:       @!\
|rule: $(RM) $@ profiled/$@   @!\
|rule: $(CC) -pg -c $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o profiled/$*.o  @!\
|rule: $(CC) -c $(JCFLAGS) $*.c  @!\
|rule:        @!\
local_clean::       @@\
 -@if [ -d profiled ]; then echo " $(RM) profiled/?*.o"; \ @@\
  $(RM) profiled/?*.o; fi


/*
* DebuggedLibraryObjectRule:
* Generate make rules to build both debuggable and "normal"
* objects.
*/
#define DebuggedLibraryObjectRule()     @!\
all::        @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
        @!\
```

```
|rule:.c.o:       @!\
|rule: $(RM) $@
 debugger/$@   @!\
|rule: $(CC) -g -c $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o debugger/$*.o  @!\
|rule: $(CC) -c $(JCFLAGS) $*.c  @!\
|rule:        @!\
local_clean::      @@\
 -@if [ -d debugger ]; then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi


/*
* DebuggedAndProfiledLibraryOjbectRule:
* Generate make rules to build debuggable, profiled, and "normal"
* objects.
*/
#define DebuggedAndProfiledLibraryObjectRule() @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
         @!\
|rule:.c.o:        @!\
|rule: $(RM) $@ profiled/$@ debugger/$@ @!\
|rule: $(CC) -pg -c $(JCFLAGS) $*.c  @!\
|rule: $(MV) $*.o profiled/$*.o   @!\
|rule: $(CC) -g -c $(JCFLAGS) $*.c  @!\
|rule: $(MV) $*.o debugger/$*.o   @!\
|rule: $(CC) -c $(JCFLAGS) $*.c   @!\
|rule:         @!\
local_clean::       @@\
 -@if [ -d profiled ]; then echo " $(RM) profiled/?*.o"; \ @@\
  $(RM) profiled/?*.o; fi   @@\
 -@if [ -d debugger ];
 then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi


/*
* SharedLibraryObjectRule:
* Generate make rules to build shared and "normal" object files.
*/
#define SharedLibraryObjectRule()     @!\
all::        @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @!\
         @!\
|rule:.c.o:       @!\
|rule: $(RM) $@ shared/$@   @!\
```

```
|rule: $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o shared/$*.o  @!\
|rule: $(CC) -c $(SHLIBDEF) $(JCFLAGS) $*.c    @!\
|rule:       @!\
local_clean::      @@\
 -@if [ -d shared ]; then echo " $(RM) shared/?*.o"; \  @@\
  $(RM) shared/?*.o; fi

/*
* SharedAndDebuggedLibraryObjectRule:
* Generate make rules to build shared, debuggable, and "normal"
* object files.
*/
#define SharedAndDebuggedLibraryObjectRule() @!\
all::         @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
          @!\
|rule:.c.o:        @!\
|rule: $(RM) $@ shared/$@ debugger/$@  @!\
|rule:
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o shared/$*.o    @!\
|rule: $(CC) -g -c $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule: $(MV) $*.o debugger/$*.o    @!\
|rule: $(CC) -c $(SHLIBDEF) $(JCFLAGS) $*.c @!\
|rule:         @!\
local_clean::        @@\
 -@if [ -d shared ]; then echo " $(RM) shared/?*.o"; \  @@\
  $(RM) shared/?*.o; fi    @@\
 -@if [ -d debugger ]; then echo " $(RM) debugger/?*.o"; \ @@\
  $(RM) debugger/?*.o; fi

/*
* SpecialSharedAndDebuggedObjectRule:
* Generate rules to compile a file with special flags and to make
* shared and debuggable versions.
*/
#define SpecialSharedAndDebuggedObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
         @!\
objs: depends       @@\
 $(RM) $@ shared/$@ debugger/$@  @@\
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) options $*.c @@\
 $(MV) $*.o shared/$*.o    @@\
 $(CC)
```

```
 -g -c $(SHLIBDEF) $(JCFLAGS) options $*.c   @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(SHLIBDEF) $(JCFLAGS) options $*.c

/*
* SpecialSharedObjectRule:
* Generate rules to compile a file with special flags and to make
* shared and debuggable versions.
*/
#define SpecialSharedObjectRule(objs,depends,options)  @!\
all::        @@\
 @if [ ! -d shared ]; then mkdir shared; fi  @!\
        @!\
objs: depends       @@\
 $(RM) $@ shared/$@      @@\
 $(CC) -pic -c $(SHAREDCODEDEF) $(SHLIBDEF) $(JCFLAGS) options $*.c @@\
 $(MV) $*.o shared/$*.o    @@\
 $(CC) -c $(SHLIBDEF) $(JCFLAGS) options $*.c


/*
* SpecialObjectRule:
* Generate rules to compile a file with special flags.
*/
#define SpecialObjectRule(objs,depends,options)  @!\
objs: depends       @@\
 $(RM) $@       @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* SpecialProfiledObjectRule:
* Generate rules to compile a file with special flags and to make a
* profiled version.
*/
#define SpecialProfiledObjectRule(objs,depends,options)   @!\
all::        @@\
 @if
 [ ! -d profiled ]; then mkdir profiled; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ profiled/$@    @@\
 $(CC) -pg -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o profiled/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
```

```
* SpecialDebuggedObjectRule:
* Generate rules to compile a file with special flags and to make a
* debuggable version.
*/
#define SpecialDebuggedObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d debugger ]; then mkdir debugger; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ debugger/$@    @@\
 $(CC) -g -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* SpecialDebuggedAndProfiledObjectRule:
* Generate rules to compile a file with special flags and to make
* debuggable and profiled versions.
*/
#define SpecialDebuggedAndProfiledObjectRule(objs,depends,options) @!\
all::        @@\
 @if [ ! -d profiled ]; then mkdir profiled; fi @@\
 @if [ ! -d
 debugger ]; then mkdir debugger; fi @!\
        @!\
objs: depends       @@\
 $(RM) $@ profiled/$@ debugger/$@ @@\
 $(CC) -pg -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o profiled/$*.o   @@\
 $(CC) -g -c $(JCFLAGS) options $*.c @@\
 $(MV) $*.o debugger/$*.o   @@\
 $(CC) -c $(JCFLAGS) options $*.c


/*
* NormalLibraryTarget:
* Generate rules to create a library. The 'srclist' and 'objlist'
* parameters are added to SOURCES and OBJECTS macros. The 'srclist'
* is not otherwise used by this rule, but is necessary for make depend.
*/
#define NormalLibraryTarget(libname,srclist,objlist) @!\
++OBJECTS objlist @!\
++SOURCES srclist @!\
NormalLibraryObjectRule()  @!\
AllTarget(lib^^libname.a)  @!\
       @!\
lib^^libname.a: objlist   @@\
```

```
 $(RM) $@     @@\
 $(AR) $@ objlist   @@\
 $(RANLIB) $@


/*
* NormalSharedLibraryTarget:
* Generate rules to create a shared library; build it into a
* different name so that the we don't hose people by having the
* library gone for long periods.
*/
#define
 NormalSharedLibraryTarget(libname,rev,solist) @!\
AllTarget(lib^^libname.so.rev) @!\
        @!\
lib^^libname.so.rev:  solist  @@\
 $(RM) $@~      @@\
 (cd shared; $(LD) -o ../$@~ -assert pure-text solist)  @@\
 $(RM) $@       @@\
 $(MV) $@~ $@

/*
* NormalSharedLibraryDataTarget:
* Generate rules to create shlib data file; build it into a
* different name so that the we don't hose people by having the
* library gone for long periods.
*/
#define NormalSharedLibraryDataTarget(libname,rev,salist) @!\
AllTarget(lib^^libname.sa.rev) @!\
        @!\
lib^^libname.sa.rev:  salist  @@\
 $(RM) $@      @@\
 $(AR) $@ salist     @@\
 $(RANLIB) $@


/*
* NormalLibraryTarget2:
* Generate rules to create a library in two steps.  This is used to
* create libraries with large numbers of files.
*/
#define NormalLibraryTarget2(libname,srclist,objlist1,objlist2) @!\
++SOURCES srclist @!\
++OBJECTS objlist1 @!\
++OBJECTS objlist2 @!\
NormalLibraryObjectRule()   @!\
AllTarget(lib^^libname.a)   @!\
        @!\
```

```
lib^^libname.a:
 objlist1 objlist2 @@\
 $(RM) $@      @@\
 $(AR) $@ objlist1    @@\
 $(AR) $@ objlist2    @@\
 $(RANLIB) $@


/*
* ProfiledLibraryTarget:
* Generate rules to create a profiled library.
*/
#define ProfiledLibraryTarget(libname,srclist,objlist) @!\
++SOURCES srclist @!\
++OBJECTS objlist @!\
AllTarget(lib^^libname^^_p.a)  @!\
        @!\
lib^^libname^^_p.a: objlist   @@\
 $(RM) $@      @@\
 cd profiled; $(AR) ../$@ objlist @@\
 $(RANLIB) $@


/*
* DebuggedLibraryTarget:
* Generate rules to create a debuggable library.
*/
#define DebuggedLibraryTarget(libname,srclist,objlist) @!\
++SOURCES srclist @!\
++OBJECTS objlist @!\
AllTarget(lib^^libname^^_d.a)  @!\
        @!\
lib^^libname^^_d.a: objlist   @@\
 $(RM) $@       @@\
 cd debugger; $(AR) ../$@ objlist @@\
 $(RANLIB) $@


/*
* AliasedLibraryTarget:
* Generate rules to link one library to another.
*/
#define AliasedLibraryTarget(libname,alias) @!\
AllTarget(lib^^alias.a)   @!\
       @!\
lib^^alias.a:
 lib^^libname.a @@\
 $(RM) $@     @@\
```

```
 $(LN) lib^^libname.a $@


/*
* PrelinkedRelocatableTarget:
* Generate rules to produce a relocatable object file instead of a
* library.
*/
#define PrelinkedRelocatableTarget(objname,objlist,libs) @!\
AllTarget(objname.o)    @!\
        @!\
objname.o: objlist     @@\
 $(RM) $@      @@\
 $(LD) $(JLDFLAGS) -r objlist -o $@ libs


/*
* NormalObjectTarget:
* Generate rules to produce a single object file.o from a file.c.
*/
#define NormalObjectTarget(file) @!\
++SOURCES file^^.c     @!\
AllTarget(file^^.o)     @!\
NormalObjectRule()

/*
* NormalRelocatableTarget:
* Generate rules to produce a relocatable object file instead of a
* library.
*/
#define NormalRelocatableTarget(objname,objlist) @!\
AllTarget(objname.o)    @!\
        @!\
objname.o: objlist     @@\
 $(RM) $@      @@\
 $(LD) $(JLDFLAGS) -r objlist -o $@


/*
* ProfiledRelocatableTarget:
* Generate rules to produce a profiled relocatable object file
* instead
 of a library.
*/
#define ProfiledRelocatableTarget(objname,objlist) @!\
AllTarget(objname^^_p.o)  @!\
       @!\
objname^^_p.o: objlist   @@\
```

```
 $(RM) $@     @@\
 $(LD) -X -r objlist -o $@


/*
* DebuggedRelocatableTarget:
* Generate rules to produce a debuggable relocatable object file
* instead of a library.
*/
#define DebuggedRelocatableTarget(objname,objlist) @!\
AllTarget(objname^^_d.o)  @!\
        @!\
objname^^_d.o: objlist   @@\
 $(RM) $@     @@\
 $(LD) -X -r objlist -o $@

/*
* LintLibraryTarget:
* Generate rules to create a lint library.  Note that the lint
* library is always forced to be newer than the library itself.
*/
#define LintLibraryTarget(libname,srclist) @!\
lintlib:: llib-l^^libname.ln @!\
        @!\
llib-l^^libname.ln: srclist  @@\
 $(RM) $@     @@\
 $(LINT) $(LINTLIBFLAG)^^libname $(LINTFLAGS) srclist


/*
* NormalLintTarget:
* Generate rules to lint a set of sources.
*/
#define NormalLintTarget(srclist) @!\
lint:        @@\
 $(LINT) $(LINTFLAGS) srclist
 $(LINTLIBS)


/*
* LintTarget:
* Generate rules to lint $(SOURCES) (automatically generated)
*/
#define LintTarget()   @!\
|once _LintTarget_    @!\
NormalLintTarget($(SOURCES)) @!\
-once
```

```
/*
* LinkSourceFile:
* Snag source file from some other directory
*/
#define LinkSourceFile(src,dir)  @!\
src:  dir/src   @@\
 $(RM) $@   @@\
 $(LN) $? $@   @!\


/*
* MakeSubincludesForBuild:
* Make includes in sub directories.
*/
#define MakeSubincludesForBuild(step,dir,srclist) @!\
step::  dir srclist        @@\
 @-(list=`echo srclist | sed -e 's/[^ ]*\//g'`; \  @@\
  set -x; cd dir; $(RM) $$list)   @@\
 @for i in srclist; do \      @@\
  (set -x; cd dir; $(LN) ../$$i .) || exit 1; \  @@\
 done          @!\
            @!\
MakeDirectories(dir,dir)      @!\
            @!\
local_realclean::         @@\
 @-(if [ -d dir ]; then \     @@\
  list=`echo srclist | sed -e 's/[^ ]*\//g'`; \  @@\
  set -x; cd dir; $(RM) $$list; fi)


/*
* CommonSubdirsRule:
* Rule for making $(TARGET) in
 every subdirectory, with $(VERB) as
* verbose message and $(FLAGS) as additional flags.
*/
#define CommonSubdirsRule(dirs) @!\
subdirs:       @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \   @@\
 for i in dirs ;\     @@\
 do \        @@\
  (cd $$i ; echo $(VERB) "in $(DIR)$$i..."; \  @@\
   $(MAKE) $(MFLAGS) $(FLAGS) $(TARGET)) || exit 1; \ @@\
 done


/*
```

```
* NamedTargetSubdirsRule:
* Recursively make a series of steps in the specified directories.
*/
#define NamedTargetSubdirsRule(dirs,name,verb,flags) @!\
name::        @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \  @@\
 for i in dirs ;\     @@\
 do \        @@\
  (cd $$i ; echo verb "in $(DIR)$$i..."; \ @@\
   $(MAKE) $(MFLAGS) flags name) || exit 1; \ @@\
 done


/*
* NamedTargetSubdirs:
* Recursively make a series of steps.
*/
#define NamedTargetSubdirs(name,verb,flags)  @!\
name::          @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags


/*
* NamedSubTargetSubdirs:
* Recursively make a series of steps,
 like NamedTargetSubdirs.
* However, the supplied "name" has "sub_" prefixed to it.
*/
#define NamedSubTargetSubdirs(name,verb,flags) @!\
sub_^^^name::          @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags

/*
* NamedDepthTargetSubdirs:
* Recursively make a series of steps. We first enter the
* subdirectories, then perform the local entries.
* The supplied "name" has "sub_" prefixed to it.
*/
#define NamedDepthTargetSubdirs(name,verb,flags)  @!\
sub_^^^name::      @@\
 @$(MAKE) subdirs TARGET=name VERB=verb FLAGS=flags @@\
 @echo "Back to $(CURRENT) for "name^^...


/*
* MakeSubdirs:
* Generate rules to do makes in the given subdirectories.
*/
```

```
#define MakeSubdirs() \
NamedTargetSubdirs(all,"Making all",^^)


/*
* DependDirs:
* Generate rules to recursively compute dependencies as part of the
* make depend step.
*/
#define DependDirs(dirs) \
NamedTargetSubdirsRule(dirs,depend,"Depending",^^)


/*
* DependSubdirs:
* Generate rules to recursively compute dependencies
 as part of the
* make depend step.
*/
#define DependSubdirs() \
DependDirs($(SUBDIRS))


/*
* InstallSubdirs:
* Generate rules to recursively install and deinstall programs and
* files.
*/
#define InstallSubdirs() \
NamedSubTargetSubdirs(install,"Installing",^^) @!\
NamedDepthTargetSubdirs(deinstall,"Deinstalling",^^)


/*
* InstallManSubdirs:
* Generate rules to recursively install and deinstall manual pages.
*/
#define InstallManSubdirs() \
NamedSubTargetSubdirs(install.man,"Installing man pages",^^) @!\
NamedDepthTargetSubdirs(deinstall.man,"Deinstalling man pages",^^)


/*
* IncludesSubdirs:
* Generate rules to recursively put include files in build
*/
#define IncludesSubdirs() \
NamedTargetSubdirs(includes,including,^^)
```

```
/*
* CleanSubdirs:
* Generate rules to recursively clean out garbage files.
*/
#define CleanSubdirs() \
NamedDepthTargetSubdirs(clean,"Cleaning",^^) @!\
NamedDepthTargetSubdirs(realclean,"Real cleaning",^^) @!\
NamedDepthTargetSubdirs(clobber,"Clobbering",^^)


/*
 * TagSubdirs:
* Generate rules to recursively create tags files.
*/
#define TagSubdirs(dirs) \
NamedTargetSubdirsRule(dirs,tag,"Tagging",^^)

/*
* MakeLintSubdirs:
* Generate rules to recursively lint directories as part of the
* named step.
*/
#define MakeLintSubdirs(dirs,target) \
NamedTargetSubdirsRule(dirs,target,"Linting",^^)


/*
* LintDirs:
* Generate rules to recursively lint directories as part of the
* make lint step.
*/
#define LintDirs(dirs) \
MakeLintSubdirs(dirs,lint)


/*
* LintSubdirs:
* Generate rules to recursively lint directories as part of the
* make lint step.
*/
#define LintSubdirs() \
LintDirs($(SUBDIRS))


/*
* MakeDirs:
```

```
* Creates a set of directories, even if some directories in the path
* do not already exist. There should be no '@!' at the end of the
* '#define' line, because this macro is used *inside* building rules.
*/
#define MakeDirs(dirs) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \   @@\
 for dir in dirs;
 do \         @@\
  (set -x; test -d $$dir || $(INSTALLDIR) $$dir) || \ @@\
  exit 1; \  @@\
 done

/*
* _MakeInstallDirs:
* Creates a set of intall directories, even if some directories in the path
* do not already exist. There should be no '@!' at the end of the
* '#define' line, because this macro is used *inside* building rules.
*/
#define _MakeInstallDirs(dirs) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for dir in dirs; do \       @@\
  _MakeInstallDir($$dir) \     @@\
 done

/*
* _MakeInstallDir:
* Internal macro to create a missing install directory.
*/
#define _MakeInstallDir(dir) \
 (set -x; test -d $(INSTALL_PREFIX)^^^dir || \ @@\
  $(INSTALLDIR) $(INSTALL_PREFIX)^^^dir);

/*
* _MakeInstallDirIgnore:
* Same as _MakeInstallDir but handles "make -i" as well.
*/
#define _MakeInstallDirIgnore(dir) \
 @case '${MFLAGS}' in *[i]*) set +e;; esac;  \ @@\
 _MakeInstallDir(dir)

/*
* _RmInstallDirs:
* Removes a set of intall directories.
* There should be no '@!'
 at the end of the '#define' line, because this
* macro is used *inside* building rules.
*/
#define _RmInstallDirs(dirs) \
```

```
 @case '${MFLAGS}' in *[i]*) set +e;; esac; \ @@\
 for dir in dirs; do \       @@\
  (set -x; test -d $$dir && $(RM) -r $(INSTALL_PREFIX)$$dir); \ @@\
 done

/*
* MakeDirectories:
* Generate rules to create a hierarchy of directories.
*/
#define MakeDirectories(step,dirs)  @!\
step::        @@\
 MakeDirs(dirs)


/*
* MakeInstallDirectories:
* Generate a rule to create a set of directories at installation
* time (removed by deinstall).
*/
#define MakeInstallDirectories(dirs) @!\
local_install::    @@\
 _MakeInstallDirs(dirs) @!\
      @!\
local_deinstall::   @@\
 _RmInstallDirs(dirs)


/*
* MakeLintLibSubdirs:
* Generate rules to recursively create lint libraries.
*/
#define MakeLintLibSubdirs(dirs) @!\
MakeLintSubdirs(dirs,lintlib)


/*
* MakeMakeSubdirs:
* Generate rules to recursively recreate target as part of the
* specified step in the build.
  This assumes Makefile.SH has
* already been built (which is the case for a delivery), but does
* not rely on the existence of a Makefile.
*/
#define MakeMakeSubdirs(target) @!\
target::        @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \ @@\
 for i in $(SUBDIRS);\    @@\
 do \        @@\
```

```
  echo "Making "target" in $(DIR)$$i..."; \ @@\
  (cd $$i || exit 1; \   @@\
  if test ! -f Makefile; then /bin/sh Makefile.SH; fi; \ @@\
  $(MAKE) $(MFLAGS) target) || exit 1;\ @@\
 done


/*
* MakeMakefilesSH:
* Generate rules to recursively recreate target as part of the
* specified step in the build.  If $(TOP) is set to an absolute
* path, don't prepend the ../ prefix.  This makes running things
* outside of the source tree to be much easier.
*/
#define MakeMakefilesSH()  @!\
Makefiles.SH:: Makefile.SH    @@\
 @case '${MFLAGS}' in *[ik]*) set +e;; esac; \ @@\
 for i in $(SUBDIRS);\     @@\
 do \        @@\
  case "$(DIR)$$i/" in \        @@\
  ^^*^^/^^*^^/^^*^^/^^*^^/) newtop=../../../..;;
 \ @@\
  ^^*^^/^^*^^/^^*^^/) newtop=../../..;; \    @@\
  ^^*^^/^^*^^/) newtop=../..;; \      @@\
  *^^/) newtop=..;; \         @@\
  esac; \            @@\
  case "$(TOP)" in \    @@\
  /^^*) newtop="$(TOP)" ;; \  @@\
  esac; \       @@\
  echo "Making Makefiles.SH in $(DIR)$$i..."; \ @@\
  (cd $$i || exit 1; \   @@\
   if test -f Jmakefile; then \ @@\
    $(MAKE) $(MFLAGS) -f ../Makefile \ @@\
     Makefile TOP=$$newtop CURRENT=$(DIR)$$i && \  @@\
    $(MAKE) $(MFLAGS) Makefiles.SH; \ @@\
   fi; \      @@\
  ) || exit 1; \ @@\
 done


/*
* MakefileSubdirs:
* Generate rules to create Makefiles.
*/
#define MakefileSubdirs()  @!\
MakeMakeSubdirs(Makefiles)  @!\
MakeMakefilesSH()
```

```
/*
* CppScriptTarget:
* Generate rules to create a shell script by running the input
* through cpp.
*/
#define CppScriptTarget(dst,src,defs,deplist) @!\
dst::  src deplist      @@\
 $(RM) $@       @@\
 $(CPP) defs <src | \    @@\
  sed -e '/^#  *[0-9][0-9]*  *.*$$/d' >$@  @@\
 chmod a+x $@


/*
 * MakeScriptFromCpp:
* Generate rules to create a script from a file with a
* .cpp suffix.
*/
#define MakeScriptFromCpp(name,defs) @!\
CppScriptTarget(name,name.cpp,defs,^^)


/*
* ShellScriptTargetExt:
* Generate rules to create and install a set of scripts from
* ext files (.sh and .SH are the most common examples). Man pages
* derived from the name of the scripts are also installed unless
* NoManPages() is specified.
*/
#define ShellScriptTargetExt(scripts,ext) @!\
++SCRIPTS scripts @!\
SimpleShellScriptTargetExt(scripts,ext)  @!\
InstallScripts()       @!\
InstallManScripts()


/*
* ShellScriptTarget:
* Generate rules to create and install a set of scripts from
* .SH files. Man pages derived from the name of the scripts are
* also installed unless NoManPages() is specified.
*/
#define ShellScriptTarget(scripts) @!\
ShellScriptTargetExt(scripts,.SH)


/*
```

```
* SimpleShellScriptTargetExt:
* Generate rules to create a set of scripts from ext files where
* ext is usually
 something like .sh or .SH, or whatever file
* extension you like..
*/
#define SimpleShellScriptTargetExt(scripts,ext) @!\
AllTarget(scripts)   @!\
       @!\
|expand s!scripts!   @!\
!s: !s^^ext     @@\
 /bin/sh !s^^ext   @!\
       @!\
-expand


/*
* SimpleShellScriptTarget:
* Generate rules to create a set of scripts from .SH files.
*/
#define SimpleShellScriptTarget(scripts) @!\
SimpleShellScriptTargetExt(scripts,.SH)


/*
* ShellScriptLongTarget:
* Generate rules to create a set of scripts from .SH files where
* the name of the generated file is different from the basename of
* the .SH file (when, for instance, the total length with the .SH
* extension would not leave enough space for RCS ,v extension).
*/
#define ShellScriptLongTarget(basename,scriptname) @!\
++LSCRIPTS scriptname @!\
AllTarget(scriptname)  @!\
       @!\
scriptname: basename^^.SH @@\
 /bin/sh basename^^.SH @!\
       @!\
InstallScripts()   @!\
?NOMAN:|skip    @!\
InstallManPageLong(basename,$(MANSRC),scriptname) @!\
-skip


/*
 * ForceTarget:
* The force target will force reconstruction of all the other
* targets which include .FORCE in their own dependencies.
```

```
*/
#define ForceTarget() @!\
|once _force_   @!\
.FORCE:     @!\
      @!\
-once


/*
* RemoteTargetDependency:
* A local target may rely on a remote dependency (e.g. a library)
* made in a separate directory. This rule explicits the dependency
* and forces a make of that dependency in the remote directory.
*/
#define RemoteTargetDependency(target,directory,dependency) @!\
RemoteDependency(directory,dependency) @!\
target: directory/^^^dependency @!\


/*
* RemoteDependency:
* Specify rules for making a remote dependency.
*/
#define RemoteDependency(directory,dependency) @!\
ForceTarget()       @!\
|once =directory/^^^dependency=   @!\
directory/^^^dependency: .FORCE   @@\
 @echo "Checking "^^^dependency" in "^^^directory"..." @@\
 cd ^^^directory; $(MAKE) ^^^dependency @@\
 @echo "Continuing in $(CURRENT)..." @!\
     @!\
-once

/*
 * SetSubdirs:
* Actually forces the definition of SUBDIRS, and lets the user
* specify what the sub-directories are.  This will be added to the
* customization part.
*/
#define SetSubdirs(subdirs) @!\
>SUBDIRS @!\
+SUBDIRS = subdirs


/*
* NoManPages:
* Actually forces the definition of NOMAN, which tells the jmake
* program to not generate rules for installing manual pages.
```

```
*/
#define NoManPages() @!\
>NOMAN


/*
* Expand:
* This powerful macro expands the `rule' given a `pattern'. It
* relies on a built-in command in jmake. The expansion is
* documented in the short notes file that comes with jmake and
* gives some insights on the internal syntax.
*/
#define Expand(rule, pattern) @!\
|expand pattern @!\
rule @!\
-expand


/*
* Lex and yacc stuff.
*/

/*
* YaccRule:
* This is the rule which is used to build a .c file from a .y file.
*/
#define YaccRule() @!\
AddSuffix(.y)     @!\
|once _YaccRule_    @!\
|rule:.y.c:      @!\
|rule: $(YACC) $(JYFLAGS)
 $< @!\
|rule: $(MV) y.tab.c $@   @!\
|rule:       @!\
-once

/*
* SimpleYaccTarget:
* Declare a yacc base.y file to be used in the building of the
* specified target program. The source file must be given without
* its final .y extension. The name of the .c and .o will be
* derived from the source file basename provided.
*/
#define SimpleYaccTarget(program,base) @!\
++SOURCES base.y @!\
++OBJECTS base.o @!\
YaccRule()    @!\
program: base.c   @!\
```

```
     @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* ComplexYaccTarget:
* Declare a yacc base.y file to be used in the building of the
* specified target program. The source file must be given without
* its final .y extension. The name of the .c and .o will be
* derived from the source file basename provided.
* The difference with SimpleYaccTarget is the identifying process
* where all the 'yy' are replaced by the specified prefix.
*/
#define ComplexYaccTarget(program,base,prefix) @!\
++SOURCES base.y @!\
++OBJECTS base.o
 @!\
program: base.c   @!\
     @!\
base.c: base.y     @@\
 $(YACC) $(JYFLAGS) base.y @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.c > base.c @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h @@\
 $(RM) y.tab.c y.tab.h @!\
      @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* SimpleYaccInclude:
* Declare that program will need an include file produced by
* the output of yacc on base.y, which typically produces a file
* named y.tab.h, which will be renamed as base.h.
* The only problem is that the dependencies towards base.h have
* to be manually given in the Jmakefile.
*/
#define SimpleYaccInclude(base) @!\
base.h: base.c  @@\
 @if test -f y.tab.h; then \ @@\
  echo " $(MV) y.tab.h $@"; \ @@\
  $(MV) y.tab.h $@; \  @@\
 fi       @!\
       @!\
local_realclean::    @@\
 $(RM) base.h
```

```
/*
* ComplexYaccInclude:
* Declare that program will need an include file produced by
* the output of yacc on base.y, which typically produces a file
* named y.tab.h, which will
 be renamed as base.h.
* The difference with SimpleYaccInclude is the identifying process
* of the y.tab.h file where all 'yy' are renamed to prefix.
* The only problem is that the dependencies towards base.h have
* to be manually given in the Jmakefile.
*/
#define ComplexYaccInclude(base,prefix) @!\
base.h: base.c  @@\
 @if test -f y.tab.h; then \ @@\
  echo " $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h"; \ @@\
  $(SED) -e 's/yy\(.\)/prefix\1/g' < y.tab.h > base.h; \ @@\
  echo " $(RM) y.tab.h"; \ @@\
  $(RM) y.tab.h; \  @@\
 elif test -f base.h; then \ @@\
  echo " $(CP) base.h base.ht"; \ @@\
  $(CP) base.h base.ht; \ @@\
  echo " $(SED) -e 's/yy\(.\)/prefix\1/g' < base.ht > base.h"; \ @@\
  $(SED) -e 's/yy\(.\)/prefix\1/g' < base.ht > base.h; \ @@\
  echo " $(RM) base.ht"; \ @@\
  $(RM) base.ht; \  @@\
 fi       @!\
       @!\
local_realclean::    @@\
 $(RM) base.h


/*
* NormalYaccTarget:
* Declare a yacc base.y file which should produce a base.c and
* base.h file
 as derived from the output of yacc, to be used by
* the specified program.
*/
#define NormalYaccTarget(program,base) @!\
SimpleYaccTarget(program,base) @!\
SimpleYaccInclude(base)


/*
* IdentifiedYaccTarget:
* Declare a yacc base.y file which should produce a base.c and
* base.h file as derived from the output of yacc, to be used by
* the specified program. The specified prefix is used to remplace
```

```
* all the 'yy' in the generated file, for use when more than a
* single parser is needed in one executable.
*/
#define IdentifiedYaccTarget(program,base,prefix) @!\
ComplexYaccTarget(program,base,prefix) @!\
ComplexYaccInclude(base,prefix)


/*
* SimpleLexTarget:
* This declares a lex base.l file which is to be ran through
* lex to produce a base.c file.
*/
#define SimpleLexTarget(program,base) @!\
++SOURCES base.l @!\
++OBJECTS base.o @!\
|once _LexRule_     @!\
|rule:.l.c:      @!\
|rule: $(LEX) $(JLFLAGS) $<  @!\
|rule: $(MV) lex.yy.c $@  @!\
|rule:       @!\
-once       @!\
AddSuffix(.l)   @!\
program:
 base.c   @!\
      @!\
local_realclean::  @@\
 $(RM) base.c  @!\


/*
* IdentifiedLexTarget:
* This declares a lex base.l file which is to be ran through
* lex to produce a base.c file. The prefix is used to replace
* the 'yy', so that the lexical analyzer may be identified.
*/
#define IdentifiedLexTarget(program,base,prefix) @!\
++SOURCES base.l @!\
++OBJECTS base.o @!\
program: base.c   @!\
      @!\
base.c: base.l     @@\
 $(LEX) $(JLFLAGS) base.l @@\
 $(SED) -e 's/yy\(.\)/prefix\1/g' < lex.yy.c > base.c @@\
 $(RM) lex.yy.c    @!\
      @!\
local_realclean::  @@\
 $(RM) base.c  @!\
```

```
/*
* NormalLexDependTarget:
* Declare that program will need an include file produced by
* the output of lex on base.l, which typically produces a file
* named lex.yy.c which will be renamed as base.c. Besides, the
* lexical analyzer needs the file parser.h produced by running
* parser.y through yacc and renaming y.tab.h as parser.h.
*/
#define NormalLexDependTarget(program,base,parser)
 @!\
base.o: parser.h @!\
    @!\
SimpleLexTarget(program,base)


/*
* IdentifiedLexDependTarget:
* Declare that program will need an include file produced by
* the output of lex on base.l, which typically produces a file
* named lex.yy.c which will be renamed as base.c. Besides, the
* lexical analyzer needs the file parser.h produced by running
* parser.y through yacc and renaming y.tab.h as parser.h.
* The lexical analyzer is identified with the supplied prefix,
* which replaces the regular 'yy' prefix in the symbol names.
*/
#define IdentifiedLexDependTarget(program,base,parser,prefix) @!\
base.o: parser.h @!\
    @!\
IdentifiedLexTarget(program,base,prefix)


/*
* NormalParserTarget:
* Specify that program is using the lex/yacc combination to
* produce a parser. The lexic and parser parameters are the
* base name of the .l and .y file, respectively.
*/
#define NormalParserTarget(program,lexic,parser) @!\
NormalLexDependTarget(program,lexic,parser)
 @!\
NormalYaccTarget(program,parser)


/*
* IdentifiedParserTarget:
* Specify that program is using the lex/yacc combination to
```

```
* produce a parser. The lexic and parser parameters are the
* base name of the .l and .y file, respectively. The parser
* produced is identified via its prefix, which replaces all
* the normally supplied 'yy' prefix, hence making it possible
* to have multiple parsers in a single executable.
*/
#define IdentifiedParserTarget(program,lexic,parser,prefix) @!\
IdentifiedLexDependTarget(program,lexic,parser,prefix) @!\
IdentifiedYaccTarget(program,parser,prefix)
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/files/Jmake.rules
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2009 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_inetntop: Inlibc
?MAKE: -pick add $@ %<
?S:d_inetntop:
?S: This variable conditionally defines the HAS_INETNTOP symbol,
?S: which indicates to the C program that the inet_ntop() function
?S: is available.
?S:.
?C:HAS_INETNTOP:
?C: This symbol, if defined, indicates that the inet_ntop() function
?C: is available to parse IPv4 and IPv6 strings.
?C:.
?H:#$d_inetntop HAS_INETNTOP  /**/
?H:.
?LINT:set d_inetntop
: see if inet_ntop exists
set inet_ntop d_inetntop
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_inetntop.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_volatile.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  14:08:49  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0.1.1  1993/09/09  11:49:51  ram
?RCS: patch9: volatile definition was swapped over with undef
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_volatile: cat +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_volatile:
?S: This variable conditionally defines the HASVOLATILE symbol, which
?S: indicates
 to the C program that this C compiler knows about the
?S: volatile declaration.
?S:.
?C:HASVOLATILE ~ %<:
?C: This symbol, if defined, indicates that this C compiler knows about
?C: the volatile declaration.
?C:.
?H:?%<:#$d_volatile HASVOLATILE /**/
?H:?%<:#ifndef HASVOLATILE
?H:?%<:#define volatile
?H:?%<:#endif
?H:.
?W:%<:volatile
?LINT:set d_volatile
?LINT:known volatile
: check for volatile keyword
echo " "
echo 'Checking to see if your C compiler knows about "volatile"...' >&4
$cat >try.c <<'EOCP'
int main()
{
?X:
?X: The following seven lines added by Bill Campbell <billc@sierra.com>
?X: detect that MIPS compilers do not handle volatile in all situations.
?X:
 typedef struct _goo_struct goo_struct;
 goo_struct * volatile goo = ((goo_struct *)0);
 struct _goo_struct {
```

```
  long long_int;
  int reg_int;
  char char_var;
 };
 typedef unsigned short foo_t;
 char *volatile foo;
 volatile int bar;
 volatile foo_t blech;
 foo = foo;
}
EOCP
if $cc -c $ccflags try.c >/dev/null
 2>&1 ; then
 val="$define"
 echo "Yup, it does."
else
 val="$undef"
 echo "Nope, it doesn't."
fi
set d_volatile
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_volatile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_getmntent: Inlibc
?MAKE: -pick add $@ %<
?S:d_getmntent:
?S: This variable conditionally defines the HAS_GETMNTENT symbol, which
?S: indicates to the C program that the getmntent() routine is available
?S: to iterate through mounted files to get their mount info.
?S:.
?C:HAS_GETMNTENT:
?C: This symbol, if defined, indicates that the getmntent routine is
?C: available to iterate through mounted file systems to get their info.
?C:.
?H:#$d_getmntent HAS_GETMNTENT  /**/
?H:.
?LINT:set d_getmntent
```

```
: see if getmntent exists
set getmntent d_getmntent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_getmntent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_sysuio.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_sysuio: Inhdr
?MAKE: -pick add $@ %<
?S:i_sysuio:
?S: This variable conditionally defines the I_SYSUIO symbol, and indicates
?S: whether a C program should include <sys/uio.h>.
?S:.
?C:I_SYSUIO:
?C: This symbol, if defined, indicates that <sys/uio.h> exists and
?C: should be included.
?C:.
?H:#$i_sysuio I_SYSUIO  /**/
?H:.
?LINT:set i_sysuio
: see if this is a sys/uio.h system
set sys/uio.h i_sysuio
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_sysuio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_strtok.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtok.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:38  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The strtok routine now appears to be a standard one, but it was
?X: missing in early BSD systems.
?X:
?MAKE:d_strtok: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtok:
?S: This variable conditionally defines HAS_STRTOK if strtok() is
?S: available to scan strings for tokens.
?S:.
?C:HAS_STRTOK (STRTOK):
?C: This symbol, if defined, indicates
 that the strtok routine is
?C: available to scan strings for tokens.
?C:.
?H:#$d_strtok HAS_STRTOK /**/
?H:.
?LINT:set d_strtok
: see if strtok exists
set strtok d_strtok
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtok.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: manfmt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: manfmt.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:11:57  ram
?RCS: patch61: don't ask for AFS when they choose to not install pages
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:16:52  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:39:20  ram
?RCS: patch49: new installmanfmt and AFS-lookup for formatted man pages
?RCS: patch49: can now handle installation prefix changes (from WED)
```

```
?RCS:
?RCS:
 Revision 3.0.1.2  1994/08/29  16:30:31  ram
?RCS: patch32: now uses installation prefix for default setting
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:09:22  ram
?RCS: patch10: allows for L1 man page extension (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:manfmt manfmtexp installmanfmt: Getfile Loc Oldconfig cat manext \
 spackage Prefixit prefixexp Prefixup afs test
?MAKE: -pick add $@ %<
?Y:TOP
?S:manfmt:
?S: This variable contains the name of the directory in which formatted
?S: manual pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command. Note
?S: that you may have to do ~name substitution. Use manfmtexp otherwise.
?S:.
?S:manfmtexp:
?S: This is the same as the manfmt variable, but is filename expanded
?S: at configuration time, for programs not willing to deal with it at
?S: run-time.
?S:.
?S:installmanfmt:
?S: This variable is really
 the same as manfmtexp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: mansrcexp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change manext
?T:lookpath
: determine where manual pages go
set manfmt manfmt
eval $prefixit
$cat <<EOM

$spackage has pre-formatted manual pages.  If you don't want these installed,
answer 'none' to the next question.

EOM
case "$manfmt" in
")
 lookpath="$prefixexp/catman/man1 $prefixexp/man/cat1"
 lookpath="$lookpath $prefixexp/catman/u_man/man1"
```

```
 lookpath="$lookpath $prefixexp/catman/l_man/man1"
 lookpath="$lookpath $prefixexp/catman/cat1 /usr/catman/local/man1"
 lookpath="$lookpath /usr/catman/manl /usr/man/cat1"
 lookpath="$lookpath /usr/catman/mann /usr/catman/l_man/man1"
 lookpath="$lookpath /usr/catman/u_man/man1 /usr/catman/man1"
 dflt=`./loc . none $lookpath`
 set dflt
 eval $prefixup
 ;;
*)  dflt="$manfmt"
 ;;
esac
fn=dn~
rp='Where
 do pre-formatted manual pages go?'
. ./getfile
if test "X$manfmtexp" != "X$ansexp"; then
 installmanfmt=''
fi
manfmt="$ans"
manfmtexp="$ansexp"
if $afs && $test "$manfmt"; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installmanfmt" in
 '') dflt=`echo $manfmtexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installmanfmt";;
 esac
 fn=de~
 rp='Where will pre-formatted man pages be installed?'
 . ./getfile
 installmanfmt="$ans"
else
 installmanfmt="$manfmtexp"
fi

case "$manfmt" in
'') manext='0';;
*l) manext=l;;
*n) manext=n;;
*o) manext=l;;
*p) manext=n;;
*C) manext=C;;
```

```
*L) manext=L;;
*L1) manext=L1;;
*) manext=1;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/manfmt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: bitpbyte.U,v 3.0.1.1 1994/10/29 16:02:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: bitpbyte.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:54  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:27  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:bitpbyte: cat rm Myread Compile run
?MAKE: -pick add $@ %<
?S:bitpbyte:
?S: This variable contains the value of the BITS_PER_BYTE symbol, which
?S: indicates to the C program how many bits there are in a byte.
?S:.
?C:BITS_PER_BYTE:
?C: This
 symbol contains the number of bits in a byte, so that the C
?C: preprocessor can make decisions based on it.
?C:.
?H:#define BITS_PER_BYTE $bitpbyte  /**/
?H:.
?F:!try
: check for length of byte
echo " "
case "$bitpbyte" in
")
 echo "Checking to see how many bits there are in a byte..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
?X: Standard C requires a macro CHAR_BIT in <limits.h>
```

```
#ifdef __STDC__
#include <limits.h>
#ifndef CHAR_BIT
#define CHAR_BIT 8
#endif
#ifndef BITSPERBYTE
#define BITSPERBYTE CHAR_BIT
#endif
#else
?X: On non standard C, try with <values.h>
#include <values.h>
#ifndef BITSPERBYTE
#define BITSPERBYTE 8
#endif
#endif
int main()
{
 printf("%d\n", BITSPERBYTE);
}
EOCP
 set try
 if eval $compile_ok; then
  dflt=`$run ./try`
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$bitpbyte"
 ;;
esac
rp="What is the length of a byte (in bits)?"
. ./myread
bitpbyte="$ans"
$rm -f try.c try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/bitpbyte.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_union_semun.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
```

```
?RCS:
?RCS: $Log: d_union_semun.U,v $
?RCS:
?MAKE:d_union_semun d_semctl_semun d_semctl_semid_ds: Compile Setvar Myread run \
 cat rm_try d_sem
?MAKE: -pick add $@ %<
?S:d_union_semun:
?S: This variable conditionally defines HAS_UNION_SEMUN if the
?S: union semun is defined by including <sys/sem.h>.
?S:.
?S:d_semctl_semun:
?S: This variable conditionally defines USE_SEMCTL_SEMUN, which
?S: indicates that union semun is to be used for semctl IPC_STAT.
?S:.
?S:d_semctl_semid_ds:
?S: This variable conditionally defines USE_SEMCTL_SEMID_DS, which
?S: indicates that struct semid_ds * is to be used for semctl IPC_STAT.
?S:.
?C:HAS_UNION_SEMUN:
?C: This symbol, if defined, indicates that the union semun
 is
?C: defined by including <sys/sem.h>.  If not, the user code
?C: probably needs to define it as:
?C:  union semun {
?C:     int val;
?C:     struct semid_ds *buf;
?C:     unsigned short *array;
?C:  }
?C:.
?C:USE_SEMCTL_SEMUN:
?C: This symbol, if defined, indicates that union semun is
?C: used for semctl IPC_STAT.
?C:.
?C:USE_SEMCTL_SEMID_DS:
?C: This symbol, if defined, indicates that struct semid_ds * is
?C: used for semctl IPC_STAT.
?C:.
?H:#$d_union_semun HAS_UNION_SEMUN /**/
?H:#$d_semctl_semun USE_SEMCTL_SEMUN /**/
?H:#$d_semctl_semid_ds USE_SEMCTL_SEMID_DS /**/
?H:.
?T:xxx also
?F:!try !tryh.h
?LINT: set d_union_semun d_semctl_semun d_semctl_semid_ds
: see whether sys/sem.h defines union semun
echo " "
$cat > try.c <<'END'
#include <sys/types.h>
```

```
#include <sys/ipc.h>
#include <sys/sem.h>
int main () { union semun semun; semun.buf = 0; }
END
set try
if eval $compile; then
   echo "You have union semun in <sys/sem.h>." >&4
   val="$define"
else
   echo "You do not have union
 semun in <sys/sem.h>." >&4
   val="$undef"
fi
$rm_try
set d_union_semun
eval $setvar

: see how to do semctl IPC_STAT
case "$d_sem" in
$define)
   echo " "
?X: use tryh.h instead of try.h because $rm_try cleans up try.*
   $cat > tryh.h <<END
#ifndef S_IRUSR
#   ifdef S_IREAD
# define S_IRUSR S_IREAD
# define S_IWUSR S_IWRITE
# define S_IXUSR S_IEXEC
#   else
# define S_IRUSR 0400
# define S_IWUSR 0200
# define S_IXUSR 0100
#   endif
#   define S_IRGRP (S_IRUSR>>3)
#   define S_IWGRP (S_IWUSR>>3)
#   define S_IXGRP (S_IXUSR>>3)
#   define S_IROTH (S_IRUSR>>6)
#   define S_IWOTH (S_IWUSR>>6)
#   define S_IXOTH (S_IXUSR>>6)
#endif
#ifndef S_IRWXU
#   define S_IRWXU (S_IRUSR|S_IWUSR|S_IXUSR)
#   define S_IRWXG (S_IRGRP|S_IWGRP|S_IXGRP)
#   define S_IRWXO (S_IROTH|S_IWOTH|S_IXOTH)
#endif
END
   : see whether semctl IPC_STAT can use union semun
   case "$d_semctl_semun" in
```

```
   ")
     val="$undef"
     $cat > try.c <<END
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#include
 <sys/stat.h>
#include <stdio.h>
#include <errno.h>
#include "tryh.h"
#ifndef errno
extern int errno;
#endif
#$d_union_semun HAS_UNION_SEMUN
int main() {
   union semun
#ifndef HAS_UNION_SEMUN
   {
 int val;
 struct semid_ds *buf;
 unsigned short *array;
   }
#endif
   arg;
   int sem, st;

#if defined(IPC_PRIVATE) && defined(S_IRWXU) && defined(S_IRWXG) && defined(S_IRWXO) &&
defined(IPC_CREAT)
   sem = semget(IPC_PRIVATE, 1, S_IRWXU|S_IRWXG|S_IRWXO|IPC_CREAT);
   if (sem > -1) {
 struct semid_ds argbuf;
 arg.buf = &argbuf;
# ifdef IPC_STAT
 st = semctl(sem, 0, IPC_STAT, arg);
 if (st == 0)
     printf("semun\n");
 else
# endif /* IPC_STAT */
     printf("semctl IPC_STAT failed: errno = %d\n", errno);
# ifdef IPC_RMID
 if (semctl(sem, 0, IPC_RMID, arg) != 0)
# endif /* IPC_RMID */
     printf("semctl IPC_RMID failed: errno = %d\n", errno);
   } else
#endif /* IPC_PRIVATE && ... */
 printf("semget failed: errno = %d\n", errno);
 return 0;
```

```
}
END
    set try

    if eval $compile; then
  xxx=`$run ./try`
        case "$xxx" in
        semun) val="$define" ;;
        esac
    fi
    $rm_try
    set d_semctl_semun
    eval $setvar
    ;;
  esac
  case "$d_semctl_semun" in
  $define)
      echo "You can use union semun for semctl IPC_STAT." >&4
 also='also'
      ;;
  *)  echo "You cannot use union semun for semctl IPC_STAT." >&4
 also=''
      ;;
  esac

  : see whether semctl IPC_STAT can use struct semid_ds pointer
  case "$d_semctl_semid_ds" in
  '')
    val="$undef"
    $cat > try.c <<'END'
#include <sys/types.h>
#include <sys/ipc.h>
#include <sys/sem.h>
#include <sys/stat.h>
#include "tryh.h"
#include <stdio.h>
#include <errno.h>
#ifndef errno
extern int errno;
#endif
int main() {
  union semun
#ifndef HAS_UNION_SEMUN
  {
 int val;
 struct semid_ds *buf;
 unsigned short *array;
  }
```

```
#endif
   arg;
   struct semid_ds argbuf;
   int sem, st;

#if defined(IPC_PRIVATE) && defined(S_IRWXU) &&
 defined(S_IRWXG) &&  defined(S_IRWXO) && defined(IPC_CREAT)
   sem = semget(IPC_PRIVATE, 1, S_IRWXU|S_IRWXG|S_IRWXO|IPC_CREAT);
   if (sem > -1) {
 arg.buf = &argbuf;
# ifdef IPC_STAT
 st = semctl(sem, 0, IPC_STAT, arg);
 if (st == 0)
     printf("semid_ds\n");
 else
# endif /* IPC_STAT */
     printf("semctl IPC_STAT failed: errno = %d\n", errno);
# ifdef IPC_RMID
 if (semctl(sem, 0, IPC_RMID, arg) != 0)
# endif /* IPC_RMID */
     printf("semctl IPC_RMID failed: errno = %d\n", errno);
   } else
#endif /* IPC_PRIVATE && ... */
 printf("semget failed: errno = %d\n", errno);

   return 0;
}
END
     set try
     if eval $compile; then
         xxx=`$run ./try`
         case "$xxx" in
         semid_ds) val="$define" ;;
         esac
     fi
     $rm_try
     set d_semctl_semid_ds
     eval $setvar
     ;;
   esac
   case "$d_semctl_semid_ds" in
   $define)
       echo "You can $also use struct semid_ds* for semctl IPC_STAT." >&4
       ;;
   *)  echo "You cannot use
 struct semid_ds* for semctl IPC_STAT." >&4
       ;;
   esac
```

```
  ;;
*)  val="$undef"

  # We do not have the full sem*(2) library, so assume we can not
  # use either.

  set d_semctl_semun
  eval $setvar

  set d_semctl_semid_ds
  eval $setvar
  ;;
esac
$rm_try tryh.h
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_union_semun.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_semctl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_semctl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_semctl: Inlibc
?MAKE: -pick add $@ %<
?S:d_semctl:
?S: This variable conditionally defines the HAS_SEMCTL symbol, which
?S: indicates to the C program that the semctl() routine is available.
?S:.
?C:HAS_SEMCTL:
?C: This symbol, if defined, indicates that the semctl() routine is
?C: available to perform semaphore control operations.
?C:.
?H:#$d_semctl
 HAS_SEMCTL /**/
?H:.
?LINT:set d_semctl
: see if semctl exists
```

```
set semctl d_semctl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_semctl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_scorfl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_scorfl.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_scorfl: cat Myread Oldconfig nametype Setvar
?MAKE: -pick add $@ %<
?S:d_scorfl:
?S: This variable conditionally defines the SCOREFULL symbol, which
?S: indicates to the C program that any scoreboard kept by the program
?S: should be kept on the basis of the user's full name as opposed to
?S: the user's login name.
?S:.
?C:SCOREFULL:
?C: This
 symbol, if defined, indicates that any scoreboard kept by the
?C: program should be kept on the basis of the user's full name as opposed
?C: to the user's login name.  If the user can change his full name he
?C: can enter multiple scores if this is defined.
?C:.
?H:#$d_scorfl SCOREFULL /**/
?H:.
?LINT:set d_scorfl
: see how they want the scoreboard kept
case "$d_scorfl" in
"$define") dflt=y ;;
*) dflt=n ;;
esac
case "$nametype" in
other) val="$undef" ;;
*)
 $cat <<'EOM'
```

```
The scoreboard can be kept with one score per login name, or one score per full
name.  If users can change their full name, or if there is more than one person
on your system with the same full name, you should keep the score by login name
(the full name is still printed).

EOM
 rp='Do you want the scoreboard kept by full name?'
 . ./myread
 case "$ans" in
 y*) val="$define" ;;
 *) val="$undef" ;;
 esac
 ;;
esac
set d_scorfl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_scorfl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_closedir.U,v 3.0.1.3 1997/02/28 15:31:26 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_closedir.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:31:26  ram
?RCS: patch61: added ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:11:18  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:21  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_closedir d_void_closedir: Inlibc i_dirent i_sysdir i_sysndir
 \
 i_systypes Compile Setvar rm_try run
?MAKE: -pick add $@ %<
```

```
?S:d_closedir:
?S: This variable conditionally defines HAS_CLOSEDIR if closedir() is
?S: available.
?S:.
?C:HAS_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine is
?C: available.
?C:.
?H:#$d_closedir HAS_CLOSEDIR  /**/
?H:.
?S:d_void_closedir:
?S: This variable conditionally defines VOID_CLOSEDIR if closedir()
?S: does not return a value.
?S:.
?C:VOID_CLOSEDIR:
?C: This symbol, if defined, indicates that the closedir() routine
?C: does not return a value.
?C:.
?H:#$d_void_closedir VOID_CLOSEDIR  /**/
?H:.
?F:!try
?LINT:set d_closedir d_void_closedir
: see if closedir exists
set closedir d_closedir
eval $inlibc

@if VOID_CLOSEDIR || d_void_closedir
?X: The following contortions are designed so we can call closedir()
?X: and check whether it returns a value.  The contortions are designed
?X: to portably pick up the correct directory header, for those
?X: systems that support various mutually incompatible
 directory functions.
?X: This is from perl5's perl.h
case "$d_closedir" in
"$define")
 echo " "
 echo "Checking whether closedir() returns a status..." >&4
 cat > try.c <<EOM
#$i_dirent I_DIRENT  /**/
#$i_sysdir I_SYS_DIR  /**/
#$i_sysndir I_SYS_NDIR  /**/
#$i_systypes I_SYS_TYPES /**/

#if defined(I_SYS_TYPES)
#include <sys/types.h>
#endif
#if defined(I_DIRENT)
#include <dirent.h>
```

```
#else
#ifdef I_SYS_NDIR
#include <sys/ndir.h>
#else
#ifdef I_SYS_DIR
#include <sys/dir.h>
#endif
#endif
#endif
int main() { return closedir(opendir(".")); }
EOM
 set try
 if eval $compile_ok; then
  if $run ./try > /dev/null 2>&1 ; then
   echo "Yes, it does."
   val="$undef"
  else
   echo "No, it doesn't."
   val="$define"
  fi
 else
  echo "(I can't seem to compile the test program--assuming it doesn't)"
  val="$define"
 fi
 ;;
*)
 val="$undef";
 ;;
esac
set d_void_closedir
eval $setvar
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_closedir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_j0 d_j0l: Inlibc
?MAKE: -pick add $@ %<
?S:d_j0:
?S: This variable conditionally defines the HAS_J0 symbol, which
?S: indicates to the C program that the j0() routine is available.
?S:.
?S:d_j0l:
```

```
?S: This variable conditionally defines the HAS_J0L symbol, which
?S: indicates to the C program that the j0l() routine is available.
?S:.
?C:HAS_J0:
?C: This symbol, if defined, indicates to the C program that the
?C: j0() function is available for Bessel functions of the first
?C: kind of the order zero, for doubles.
?C:.
?C:HAS_J0L:
?C: This symbol, if defined, indicates to the C program that the
?C: j0l() function is available for Bessel functions of the first
?C: kind of the order zero, for long doubles.
?C:.
?H:#$d_j0 HAS_J0  /**/
?H:#$d_j0l HAS_J0L  /**/
?H:.
?LINT:set
 d_j0
?LINT:set d_j0l
: see if j0 exists
set j0 d_j0
eval $inlibc

: see if j0l exists
set j0l d_j0l
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_j0.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_syscall.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_syscall.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:42  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_syscall: Inlibc
?MAKE: -pick add $@ %<
?S:d_syscall:
```

```
?S: This variable conditionally defines HAS_SYSCALL if syscall() is
?S: available call arbitrary system calls.
?S:.
?C:HAS_SYSCALL (SYSCALL):
?C: This symbol, if defined, indicates that the syscall routine is
?C: available to call arbitrary system calls. If undefined, that's tough.
?C:.
?H:#$d_syscall
 HAS_SYSCALL /**/
?H:.
?LINT:set d_syscall
: see if syscall exists
set syscall d_syscall
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_syscall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_fchown.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_fchown.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_fchown: Inlibc
?MAKE: -pick add $@ %<
?S:d_fchown:
?S: This variable conditionally defines the HAS_FCHOWN symbol, which
?S: indicates to the C program that the fchown() routine is available
?S: to change ownership of opened files.
?S:.
?C:HAS_FCHOWN (FCHOWN):
?C: This symbol, if defined, indicates that the fchown routine is available
?C: to
 change ownership of opened files.  If unavailable, use chown().
?C:.
?H:#$d_fchown HAS_FCHOWN  /**/
?H:.
?LINT:set d_fchown
```

```
: see if fchown exists
set fchown d_fchown
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_fchown.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethname.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethname.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:00  ram
?RCS: patch36: call ./xenix explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:11  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethname d_uname d_phostname aphostname: phostname cat \
 myhostname package d_portable Loc echo n c +i_whoami +usrinc \
 Myread Guess Oldconfig Csym
?MAKE: -pick add $@ %<
?S:d_gethname:
?S: This variable conditionally
 defines the HAS_GETHOSTNAME symbol, which
?S: indicates to the C program that the gethostname() routine may be
?S: used to derive the host name.
?S:.
?S:d_uname:
?S: This variable conditionally defines the HAS_UNAME symbol, which
?S: indicates to the C program that the uname() routine may be
?S: used to derive the host name.
?S:.
?S:d_phostname:
?S: This variable conditionally defines the HAS_PHOSTNAME symbol, which
?S: contains the shell command which, when fed to popen(), may be
?S: used to derive the host name.
?S:.
?S:aphostname:
?S: This variable contains the command which can be used to compute the
?S: host name. The command is fully qualified by its absolute path, to make
```

```
?S: it safe when used by a process with super-user privileges.
?S:.
?C:HAS_GETHOSTNAME (GETHOSTNAME):
?C: This symbol, if defined, indicates that the C program may use the
?C: gethostname() routine to derive the host name.  See also HAS_UNAME
?C: and PHOSTNAME.
?C:.
?C:HAS_UNAME (UNAME):
?C: This symbol,
 if defined, indicates that the C program may use the
?C: uname() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and PHOSTNAME.
?C:.
?C:PHOSTNAME:
?C: This symbol, if defined, indicates the command to feed to the
?C: popen() routine to derive the host name.  See also HAS_GETHOSTNAME
?C: and HAS_UNAME. Note that the command uses a fully qualified path,
?C: so that it is safe even if used by a process with super-user
?C: privileges.
?C:.
?C:HAS_PHOSTNAME:
?C: This symbol, if defined, indicates that the C program may use the
?C: contents of PHOSTNAME as a command to feed to the popen() routine
?C: to derive the host name.
?C:.
?H:?%<:#$d_gethname HAS_GETHOSTNAME /**/
?H:?%<:#$d_uname HAS_UNAME  /**/
?H:?%<:#$d_phostname HAS_PHOSTNAME /**/
?H:?%<:#ifdef HAS_PHOSTNAME
?H:?%<:#define PHOSTNAME "$aphostname" /* How to get the host name */
?H:?%<:#endif
?H:.
?T:file val call
?LINT:change i_whoami
: see how we will look up host name
echo " "
call=''
@if HAS_GETHOSTNAME
if
 set gethostname val -f d_gethname; eval $csym; $val; then
 echo 'gethostname() found.' >&4
 d_gethname="$define"
 call=gethostname
fi
@end
@if HAS_UNAME
if set uname val -f d_uname; eval $csym; $val; then
 if ./xenix; then
```

```
  $cat <<'EOM'
uname() was found, but you're running xenix, and older versions of xenix
have a broken uname(). If you don't really know whether your xenix is old
enough to have a broken system call, use the default answer.

EOM
  dflt=y
  case "$d_uname" in
  "$define") dflt=n;;
  esac
  rp='Is your uname() broken?'
  . ./myread
  case "$ans" in
  n*) d_uname="$define"; call=uname;;
  esac
 else
  echo 'uname() found.' >&4
  d_uname="$define"
  case "$call" in
  ") call=uname ;;
  esac
 fi
fi
@end
case "$d_gethname" in
") d_gethname="$undef";;
esac
case "$d_uname" in
") d_uname="$undef";;
esac
@if PHOSTNAME || MYHOSTNAME
case "$d_uname$d_gethname" in
*define*)
 dflt=n
 cat <<EOM

Every now and then someone has a $call() that lies about the hostname
but can't be fixed
 for political or economic reasons.  If you wish, I can
@if MYHOSTNAME && PHOSTNAME
pretend $call() isn't there and maybe compile in the hostname or
compute it from the '$phostname' command at run-time.
@elsif MYHOSTNAME
pretend $call() isn't there and maybe compile in the hostname.
@elsif PHOSTNAME
pretend $call() isn't there and maybe compute hostname at run-time
thanks to the '$phostname' command.
@elsif WHOAMI
```

```
get the hostname from whomai.h (provided you have one).
@else
simply ignore your host name and use someting like "noname" instead.
@end

EOM
 rp="Shall I ignore $call() from now on?"
 . ./myread
 case "$ans" in
 y*) d_uname="$undef" d_gethname="$undef"; $echo $n "Okay...$c";;
 esac;;
esac
@end
@if PHOSTNAME || aphostname
?X: Compute the full path name for the command
case "$phostname" in
") aphostname=";;
*) case "$aphostname" in
 /*) ;;
 *) set X $phostname
  shift
  file=$1
  shift
  file=`./loc $file $file $pth`
  aphostname=`echo $file $*`
  ;;
 esac
 ;;
esac
@end
@if
 PHOSTNAME && MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ") ;;
 *)
  $cat <<EOT

There is no gethostname() or uname() on this system.  You have two
possibilities at this point:

1)  You can have your host name ($myhostname) compiled into $package, which
   lets $package start up faster, but makes your binaries non-portable, or
2)  you can have $package use a

 popen("$aphostname","r")
```

```
   which will start slower but be more portable.

@ if WHOAMI
Option 1 will give you the option of using whoami.h if you have one.
@ end
If you want option 2 but with a different command, you can edit config.sh at
the end of this shell script.

EOT
  case "$d_phostname" in
  "$define") dflt=n;;
  "$undef")  dflt=y;;
  ")
   case "$d_portable" in
   "$define") dflt=n ;;
   *) dflt=y ;;
   esac;;
  esac
  rp="Do you want your host name compiled in?"
  . ./myread
  case "$ans" in
  n*) d_phostname="$define" ;;
  *) aphostname=''; d_phostname="$undef";;
  esac;;
 esac
 case
 "$aphostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   dflt=y
   $cat <<EOM

No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
   rp="Use whoami.h to get hostname?"
   . ./myread
   case "$ans" in
   n*) i_whoami="$undef";;
   esac
   ;;
  "$undef")
```

```
   $cat <<EOM
No hostname function and no whoami.h -- hardwiring "$myhostname".
EOM
   ;;
  esac;;
@ else
  echo 'No hostname function -- hardwiring '"$myhostname"'.' >&4;;
@ end
 esac;;
esac
@elsif PHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
 case "$phostname" in
 ")
@ if WHOAMI
  case "$i_whoami" in
  "$define")
   $cat <<EOM

No hostname function--we'll use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

EOM
   ;;
  *) echo "There will be no way for $package to get your hostname." >&4;;
  esac;;
@ else
  echo "There will be no way
 for $package to get your hostname." >&4;;
@ end
 *)
 echo "I'll use 'popen('''$aphostname''', "r")'" to get your hostname." >&4
  ;;
 esac;;
esac
@elsif MYHOSTNAME
case "$d_uname$d_gethname" in
*define*) ;;
*)
@ if WHOAMI
 case "$i_whoami" in
 "$define")
  dflt=y
  $cat <<EOM
```

```
No hostname function--you can either use the whoami.h file, which has this line:

 `grep sysname $usrinc/whoami.h`

or you can have the name we came up with earlier ($myhostname) hardwired in.
EOM
  rp="Use whoami.h to get hostname?"
  . ./myread
  case "$ans" in
  n*) i_whoami="$undef";;
  esac
  ;;
 "$undef")
  echo 'No whoami.h--hardwiring '"$myhostname"'.' >&4;;
 esac;;
@ else
 echo 'Hardwiring '"$myhostname"'.' >&4;;
@ end
esac
@end
case "$d_phostname" in
") d_phostname="$undef";;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethname.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Protochk.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a ./protochk script that is used internally
?X: by Configure to check if this system will accept a particular
?X: prototype.
?X:
?X: To use it, say something like:
?X: hdrs="$define sys/types.h
?X:  $i_systime sys/time.h
?X:  $i_sysselct sys/select.h
?X:  $d_socket sys/socket.h"
?X: $xxx='fd_set *'
?X: try='extern int select _((int, $xxx, $xxx, $xxx, struct timeval *'));'
?X: if ./protochk "$try" $hdrs; then
?X:  echo "Your system accepts $xxx for the arguments to select."
```

```
?X: fi
?X:  (Of course select is harder, since the first arg can be int,
?X: size_t, or unsigned long, and the last arg may or may not have a
?X: 'const' before the 'struct timeval' :-(.  Also SunOS
 4.1.3 doesn't
?X: provide a select prototype so the compiler accepts anything :-).
?X:
?X: The C compiler on QNX warns about invalid pointer types, but
?X: still exits with a 0 exit status, so it's not much help here.
?X: (It does correctly detect incorrect non-pointer arguments).
?X: Still, since QNX is a POSIX-ish system, just make your first
?X: a POSIX-ish one, and QNX will probably accept it.
?X:
?X: For determining argument types, your compiler must support
?X: prototypes, and the header files must use them.  Determining
?X: return types, however, is easier.  Just give an ridiculous
?X: return type, something like
?X: ./protochk 'extern int atof _((void));' $i_stdlib stdlib.h
?X: that should surely fail if atof() is defined in <stdlib.h>
?X:
?X: There is also an 'escape' hatch built in.  If you have a pair
?X: of args   'literal 'stuff' then 'stuff' gets included literally
?X: into the test program.  This could be useful for doing something
?X: like
?X: hdrs="$define stdio.h
?X:  $define
 sys/types.h"
?X: ./protochk 'extern int fsetpos(FILE *, Fpos_t);' $args \
?X:   'literal' '#define Fpos_t long long'
?X: but you have to be really careful about the spaces in "literal".
?X:
?X:  Andy Dougherty   Feb. 1998
?MAKE:Protochk: cat rm_try startsh eunicefix +cc +optimize +ccflags \
 i_pthread usethreads
?MAKE: -pick add $@ %<
?F:./protochk
?X: Comfort metalint.  All these are actually used in the protochk script.
?T:foo status pthread_h_done
?LINT: change cc optimize ccflags define rm_try
?LINT: extern pthread_h_first
?LINT: change pthread_h_first
?LINT: change usethreads
?LINT: change i_pthread
: define a function to check prototypes
$cat > protochk <<EOSH
$startsh
cc="$cc"
optimize="$optimize"
```

```
ccflags="$ccflags"
define="$define"
rm_try="$rm_try"
usethreads=$usethreads
i_pthread=$i_pthread
pthread_h_first=$pthread_h_first
EOSH

$cat >> protochk <<'EOSH'

$rm_try
foo="$1"
shift
while test $# -ge 2; do
 case "$1" in
  $define) echo "#include <$2>" >> try.c ;;
  literal)
 echo "$2" >> try.c ;;
 esac
   # Extra magic for the benefit of systems that need pthread.h
   # to be included early to correctly detect threadsafe functions.
   # Such functions must guarantee themselves, though, that the usethreads
   # and i_pthread have been defined, before calling protochk.
   if test "$usethreads" = "$define" -a "$i_pthread" = "$define" -a "$pthread_h_first" = "$define" -a
"$pthread_h_done" = ""; then
 echo "#include <pthread.h>" >> try.c
 pthread_h_done=yes
   fi
   shift 2
done
cat >> try.c <<'EOCP'
#define _(args) args
EOCP
echo "$foo" >> try.c
?X: Just so we have something to compile.
echo 'int no_real_function_has_this_name _((void)) { return 0; }' >> try.c
$cc $optimize $ccflags -c try.c > /dev/null 2>&1
status=$?
$rm_try
exit $status
EOSH
chmod +x protochk
$eunicefix protochk
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Protochk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: installstyle.U,v 1.2 1999/07/13 14:56:06 doughera Exp $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: installstyle.U,v $
?RCS: Revision 1.2  1999/07/13 14:56:06  doughera
?RCS: Fix dependencies.  Add more comments.
?RCS:
?RCS: Revision 1.1  1999/07/12 17:30:41  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:installstyle: prefix Myread
?MAKE: -pick add $@ %<
?X: Myread dependence is for dflt.
?S:installstyle:
?S: This variable describes the "style" of the perl installation.
?S: This is intended to be useful for tools that need to
?S: manipulate entire perl
 distributions.  Perl itself doesn't use
?S: this to find its libraries -- the library directories are
?S: stored directly in Config.pm.  Currently, there are only two
?S: styles:  "lib" and "lib/perl5".  The default library locations
?S: (e.g. privlib, sitelib) are either $prefix/lib or
?S: $prefix/lib/perl5.  The former is useful if $prefix is a
?S: directory dedicated to perl (e.g. /opt/perl), while the latter
?S: is useful if $prefix is shared by many packages, e.g. if
?S: $prefix=/usr/local.
?S:
?S: Unfortunately, while this "style" variable is used to set
?S: defaults for all three directory hierarchies (core, vendor, and
?S: site), there is no guarantee that the same style is actually
?S: appropriate for all those directories.  For example, $prefix
?S: might be /opt/perl, but $siteprefix might be /usr/local.
?S: (Perhaps, in retrospect, the "lib" style should never have been
?S: supported, but it did seem like a nice idea at the time.)
?S:
?S: The situation is even less clear for
 tools such as MakeMaker
?S: that can be used to install additional modules into
?S: non-standard places.  For example, if a user intends to install
?S: a module into a private directory (perhaps by setting PREFIX on
```

```
?S: the Makefile.PL command line), then there is no reason to
?S: assume that the Configure-time $installstyle setting will be
?S: relevant for that PREFIX.
?S:
?S: This may later be extended to include other information, so
?S: be careful with pattern-matching on the results.
?S:
?S: For compatibility with perl5.005 and earlier, the default
?S: setting is based on whether or not $prefix contains the string
?S: "perl".
?S:.
: determine installation style
: For now, try to deduce it from prefix unless it is already set.
: Reproduce behavior of 5.005 and earlier, maybe drop that in 5.7.
case "$installstyle" in
") case "$prefix" in
  *perl*) dflt='lib';;
  *) dflt='lib/perl5' ;;
 esac
 ;;
*) dflt="$installstyle" ;;
esac
: Probably not worth prompting for this since we prompt
 for all
: the directories individually, and the prompt would be too long and
: confusing anyway.
installstyle=$dflt
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/installstyle.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: scandir.C,v 3.0.1.1 1994/01/24 13:58:45 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: scandir.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:45  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/C/fake/scandir.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_nice.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_nice.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:09:48  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_nice: Inlibc
?MAKE: -pick add $@ %<
?S:d_nice:
?S: This variable conditionally defines the HAS_NICE symbol, which
?S: indicates to the C program that the nice() routine is available.
?S:.
?C:HAS_NICE :
?C: This symbol, if defined, indicates that the nice routine is
?C: available.
?C:.
?H:#$d_nice
 HAS_NICE  /**/
?H:.
?LINT:set d_nice
: see if nice exists
set nice d_nice
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_nice.U
No license file was found, but licenses were detected in source scan.

```
# $Id: errnolist.sh,v 3.0.1.1 1994/01/24 14:00:00 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
```

```
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Harlan Stenn <harlan@mumps.pfcs.com>
#
# $Log: errnolist.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:00  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:36  ram
# Baseline for dist 3.0 netwide release.
#

case $CONFIG in
")
 if test -f config.sh; then TOP=.;
 elif test -f ../config.sh; then TOP=..;
 elif test -f ../../config.sh; then TOP=../..;
 elif test -f ../../../config.sh; then TOP=../../..;
 elif
 test -f ../../../../config.sh; then TOP=../../../..;
 else
  echo "Can't find config.sh."; exit 1
 fi
 . $TOP/config.sh
 ;;
esac
case "$0" in
*/*) cd `expr X$0 : 'X\(.*\)/'` ;;
esac
case "$errnolistc" in
") ;;
*)
 echo "Making $errnolistc ..."
 awk -f errnolist.a < /usr/include/sys/errno.h > $errnolistc
 echo "It would be a good idea to make sure that $errnolistc is correct."
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/lib/errnolist.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2019 Karl Williamson
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_towlower: Inlibc
?MAKE: -pick add $@ %<
?S:d_towlower:
?S: This variable conditionally defines the HAS_TOWLOWER symbol, which
?S: indicates to the C program that the towlower() routine is available.
?S:.
?C:HAS_TOWLOWER:
?C: This symbol, if defined, indicates that the towlower () routine is
?C: available to do case conversion.
?C:.
?H:#$d_towlower HAS_TOWLOWER  /**/
?H:.
?LINT:set d_towlower
: see if towlower exists
set towlower d_towlower
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_towlower.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mansrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mansrc.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  16:12:03  ram
?RCS: patch61: don't ask for AFS when they choose to not install pages
?RCS:
?RCS: Revision 3.0.1.8  1995/09/25  09:16:58  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:15:31  ram
?RCS: patch51: was mistakenly duplicating /usr/local/man/man1 (ADO)
?RCS: patch51: added /opt/man/man1 to the lookpath (ADO)
?RCS:
?RCS: Revision
 3.0.1.6  1995/01/30  14:39:34  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
```

```
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:32:25  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:30:38  ram
?RCS: patch32: now uses installation prefix for default setting
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  15:11:10  ram
?RCS: patch23: added lint hint, assuring that nroff is used
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:14:39  ram
?RCS: patch16: now uses _nroff in case user asked for portability
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:09:31  ram
?RCS: patch10: allows for L1 man page extension (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mansrc mansrcexp manext installmansrc: afs cat nroff Loc Oldconfig \
 sysman spackage test Getfile Prefixit prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:mansrc:
?S: This variable
 contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:mansrcexp:
?S: This variable is the same as the mansrc variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installmansrc:
?S: This variable is really the same as mansrcexp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: mansrcexp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:manext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See mansrc.
?S:.
?T:lookpath
: determine where manual pages go
set mansrc mansrc none
```

```
eval $prefixit
$cat <<EOM

$spackage has manual
 pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$mansrc" in
 ") mansrc="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$mansrc" in
")
 lookpath="$prefixexp/share/man/man1 $prefixexp/man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath /usr/local/man/man1 /opt/man/man1 /usr/man/manl"
 lookpath="$lookpath /usr/share/man/man1 /usr/local/share/man/man1"
 lookpath="$lookpath /usr/man/local/man1 /usr/man/l_man/man1"
 lookpath="$lookpath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 lookpath="$lookpath /usr/man/man.L"
 mansrc=`./loc . $prefixexp/man/man1 $lookpath`
 if $test -d "$mansrc"; then
  dflt="$mansrc"
 else
  dflt="$sysman"
 fi
 set dflt
 eval $prefixup
 ;;
' ') dflt=none;;
*)  dflt="$mansrc"
 ;;
esac
echo " "
fn=dn~
rp='Where do the manual pages (source) go?'
. ./getfile
if test
 "X$mansrcexp" != "X$ansexp"; then
 installmansrc="
fi
mansrc="$ans"
mansrcexp="$ansexp"
case "$mansrc" in
") mansrc=' '
```

```
 installmansrc=";;
esac
if $afs && $test "$mansrc"; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installmansrc" in
 ") dflt=`echo $mansrcexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installmansrc";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installmansrc="$ans"
else
 installmansrc="$mansrcexp"
fi

case "$mansrc" in
' ') manext='0';;
*l) manext=l;;
*n) manext=n;;
*o) manext=l;;
*p) manext=n;;
*C) manext=C;;
*L) manext=L;;
*L1) manext=L1;;
*) manext=1;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/mansrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?MAKE:usesocks: Myread Oldconfig Setvar spackage package
?MAKE: -pick add $@ %<
?Y:TOP
?S:usesocks:
?S: This variable conditionally defines the USE_SOCKS symbol,
?S: and indicates that Perl should be built to use SOCKS.
?S:.
?C:USE_SOCKS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use socks.
?C:.
?H:?%<:#$usesocks USE_SOCKS  /**/
?H:.
?D:usesocks="
?LINT:set usesocks
: check for requested SOCKS support
case "$usesocks" in
$define|true|[yY]*) dflt='y';;
*)
 dflt='n';;
esac
cat <<EOM

$spackage can be built to use the SOCKS proxy protocol library.
If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp="Build $package for SOCKS?"
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usesocks
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/usesocks.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: archlib.U,v 3.1 1999/07/08 18:32:29 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
```

```
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: archlib.U,v $
?RCS: Revision 3.1  1999/07/08 18:32:29  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:15:18  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/02/15  14:14:14  ram
?RCS: patch51: architecture name is now
 computed by a separate unit
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:32:22  ram
?RCS: patch49: archname is now systematically recomputed
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:36  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_archlib archlib archlibexp installarchlib: \
 cat Getfile Setprefixvar Loc Oldconfig archname spackage  \
 privlib sed test Prefixit Prefixup binexp
?MAKE: -pick add $@ %<
?Y:TOP
?S:d_archlib:
?S: This variable conditionally defines ARCHLIB to hold the pathname
?S: of architecture-dependent library files for $package.  If
?S: $archlib is the same as $privlib, then this is set to undef.
?S:.
?D:archlib=''
?S:archlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put architecture-dependent public library files for $package.
?S: It is most often a local directory such as /usr/local/lib.
?S: Programs using this variable must be prepared to deal
?S: with
 filename expansion.
?S:.
?D:archlibexp=''
?S:archlibexp:
?S: This variable is the same as the archlib variable, but is
?S: filename expanded at configuration time, for convenient use.
```

```
?S:.
?D:installarchlib="
?S:installarchlib:
?S: This variable is really the same as archlibexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?C:ARCHLIB:
?C: This variable, if defined, holds the name of the directory in
?C: which the user wants to put architecture-dependent public
?C: library files for $package.  It is most often a local directory
?C: such as /usr/local/lib.  Programs using this variable must be
?C: prepared to deal with filename expansion.  If ARCHLIB is the
?C: same as PRIVLIB, it is not defined, since presumably the
?C: program already searches PRIVLIB.
?C:.
?C:ARCHLIB_EXP:
?C: This symbol contains the ~name expanded version of ARCHLIB, to be used
?C: in programs that are not prepared to deal with ~ expansion
 at run-time.
?C:.
?H:#$d_archlib ARCHLIB "$archlib"  /**/
?H:#$d_archlib ARCHLIB_EXP "$archlibexp"  /**/
?H:.
?T: tdflt
?LINT:change prefixvar
?LINT:set archlib
?LINT:set archlibexp
?LINT:set installarchlib
: determine where public architecture dependent libraries go
set archlib archlib
eval $prefixit
: privlib default is /usr/local/lib/$package/$version
: archlib default is /usr/local/lib/$package/$version/$archname
: privlib may have an optional trailing /share.
tdflt=`echo $privlib | $sed 's,/share$,,'`
tdflt=$tdflt/$archname
case "$archlib" in
") dflt=$tdflt
 ;;
*) dflt="$archlib"
   ;;
esac
$cat <<EOM

$spackage contains architecture-dependent library files.  If you are
sharing libraries in a heterogeneous environment, you might store
these files in a separate location.  Otherwise, you can just include
```

```
them with the rest of the public library files.

EOM
?X: Force dependency on bin.U
fn=$binexp
fn=d+~
rp='Where do you want to put the public architecture-dependent libraries?'
.
 ./getfile
prefixvar=archlib
. ./setprefixvar
if $test X"$archlib" = X"$privlib"; then
 d_archlib="$undef"
else
 d_archlib="$define"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/archlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ebcdic.U,v 3.0.1.3 1994/05/06 15:11:49 doughera Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:ebcdic: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:ebcdic:
?S: This variable conditionally defines EBCDIC if this
?S: system uses EBCDIC encoding.
?S:.
?C:EBCDIC:
?C: This symbol, if defined, indicates that this system uses
?C: EBCDIC encoding.
?C:.
?H:#$ebcdic EBCDIC  /**/
?H:.
?F:!try
?LINT:set ebcdic
: Determine if this is an EBCDIC system
echo " "
echo "Determining whether or not we are on an EBCDIC system..." >&4
```

```
$cat >try.c <<'EOM'
int main()
{
 if ('M'==0xd4) return 0;
 return 1;
}
EOM

val=$undef
set try
if eval
 $compile_ok; then
 if $run ./try; then
  echo "You seem to speak EBCDIC." >&4
  val="$define"
 else
  echo "Nope, no EBCDIC, probably ASCII or some ISO Latin. Or UTF-8." >&4
 fi
else
 echo "I'm unable to compile the test program." >&4
 echo "I'll assume ASCII or some ISO Latin. Or UTF8." >&4
fi
$rm_try
set ebcdic
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/ebcdic/ebcdic.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigsetmk.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sigsetmk.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:23  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sigsetmk: Csym Setvar
?MAKE: -pick add $@ %<
?S:d_sigsetmk:
?S: This variable conditionally defines the HAS_SIGSETMASK symbol, which
```

```
?S: indicates to the C program that the sigsetmask() routine is available
?S: to set current signal mask.
?S:.
?C:HAS_SIGSETMASK (SIGSETMASK):
?C: This symbol, if defined, indicates that the sigsetmask()
 routine is
?C: available to set current signal mask. Otherwise, you should probably
?C: emulate this by using signal(), but fear race conditions...
?C:.
?H:#$d_sigsetmk HAS_SIGSETMASK  /**/
?H:.
?LINT:set d_sigsetmk
: see if sigsetmask exists
echo " "
if set sigsetmask val -f d_sigsetmk; eval $csym; $val; then
 echo 'sigsetmask() found.' >&4
 val="$define"
else
 echo "sigsetmask() not found -- We'll use signal()." >&4
 val="$undef"
fi
set d_sigsetmk
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sigsetmk.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: doublesize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:17:06  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:doublesize: cat rm_try Myread +cc +ccflags
?MAKE: -pick add $@ %<
?S:doublesize:
```

```
?S: This variable contains the value of the DOUBLESIZE symbol, which
?S: indicates to the C program how many bytes there are in a double.
?S:.
?C:DOUBLESIZE:
?C: This symbol contains the
 size of a double, so that the C preprocessor
?C: can make decisions based on it.
?C:.
?H:#define DOUBLESIZE $doublesize  /**/
?H:.
?F:!try
: check for length of double
echo " "
case "$doublesize" in
")
 echo "Checking to see how big your double precision numbers are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 printf("%d\n", sizeof(double));
}
EOCP
 if $cc $ccflags -o try try.c >/dev/null 2>&1 ; then
  dflt=`./try`
 else
  dflt='8'
  echo "(I can't seem to compile the test program.  Guessing...)"
 fi
 ;;
*)
 dflt="$doublesize"
 ;;
esac
rp="What is the size of a double precision number (in bytes)?"
. ./myread
doublesize="$ans"
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/doublesize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
```

```
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_telldirproto: Hasproto i_systypes i_dirent
?MAKE: -pick add $@ %<
?S:d_telldirproto:
?S: This variable conditionally defines the HAS_TELLDIR_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the telldir() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_TELLDIR_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the telldir() function.  Otherwise, it is up
?C: to the program to supply one.  A good guess
 is
?C:  extern long telldir(DIR*);
?C:.
?H:#$d_telldirproto HAS_TELLDIR_PROTO /**/
?H:.
?LINT:set d_telldirproto
: see if prototype for telldir is available
echo " "
set d_telldirproto telldir $i_systypes sys/types.h $i_dirent dirent.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_telldirproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_frexpl: Inlibc
?MAKE: -pick add $@ %<
?S:d_frexpl:
?S: This variable conditionally defines the HAS_FREXPL symbol, which
?S: indicates to the C program that the frexpl() routine is available.
?S:.
?C:HAS_FREXPL:
?C: This symbol, if defined, indicates that the frexpl routine is
?C: available to break a long double floating-point number into
```

```
?C: a normalized fraction and an integral power of 2.
?C:.
?H:#$d_frexpl HAS_FREXPL  /**/
?H:.
?LINT:set d_frexpl
: see if frexpl exists
set frexpl d_frexpl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_frexpl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usesocks: Myread Oldconfig Setvar
?MAKE: -pick add $@ %<
?Y:TOP
?S:usesocks:
?S: This variable conditionally defines the USE_SOCKS symbol,
?S: and indicates that Perl should be built to use SOCKS.
?S:.
?C:USE_SOCKS:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use socks.
?C:.
?H:?%<:#ifndef USE_SOCKS
?H:?%<:#$usesocks USE_SOCKS  /**/
?H:?%<:#endif
?H:.
?LINT:set usesocks
?INIT:: set usesocks on the Configure command line to enable socks.
: Check is we will use socks
?X: We should really have some explanatory text here, and some
?X: automatic setting of sensible defaults.
case "$usesocks" in
$define|true|[yY]*) dflt='y';;
*) dflt='n';;
esac
cat <<EOM

Perl can be built to
```

```
 use the SOCKS proxy protocol library.  To do so,
Configure must be run with -Dusesocks.  If you use SOCKS you also need
to use the PerlIO abstraction layer, this will be implicitly selected.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Build Perl for SOCKS?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usesocks
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usesocks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_sbrkproto: Hasproto i_unistd
?MAKE: -pick add $@ %<
?S:d_sbrkproto:
?S: This variable conditionally defines the HAS_SBRK_PROTO symbol,
?S: which indicates to the C program that the system provides
?S: a prototype for the sbrk() function.  Otherwise, it is
?S: up to the program to supply one.
?S:.
?C:HAS_SBRK_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the sbrk() function.  Otherwise, it is up
?C: to the program to supply one.  Good guesses are
?C:  extern void* sbrk(int);
?C:  extern
 void* sbrk(size_t);
?C:.
?H:#$d_sbrkproto HAS_SBRK_PROTO /**/
?H:.
?LINT:set d_sbrkproto
```

```
: see if prototype for sbrk is available
echo " "
set d_sbrkproto sbrk $i_unistd unistd.h
eval $hasproto
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_sbrkproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:i_netinettcp: Inhdr
?MAKE: -pick add $@ %<
?S:i_netinettcp:
?S: This variable conditionally defines the I_NETINET_TCP symbol,
?S: and indicates whether a C program should include <netinet/tcp.h>.
?S:.
?C:I_NETINET_TCP:
?C: This symbol, if defined, indicates to the C program that it should
?C: include <netinet/tcp.h>.
?C:.
?H:#$i_netinettcp   I_NETINET_TCP               /**/
?H:.
?LINT:set i_netinettcp
: see if netinet/tcp.h is available
set netinet/tcp.h i_netinettcp
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_netinettcp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pthread_y.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_pthread_yield sched_yield d_sched_yield: \
```

```
 Compile Setvar cat rm_try usethreads
?MAKE: -pick add $@ %<
?S:d_pthread_yield:
?S: This variable conditionally defines the HAS_PTHREAD_YIELD
?S: symbol if the pthread_yield routine is available to yield
?S: the execution of the current thread.
?S:.
?S:sched_yield:
?S: This variable defines the way to yield the execution
?S: of the current thread.
?S:.
?S:d_sched_yield:
?S: This variable conditionally defines the HAS_SCHED_YIELD
?S: symbol if the sched_yield routine is available to yield
?S: the execution of the current thread.
?S:.
?C:HAS_PTHREAD_YIELD:
?C: This symbol, if defined, indicates that the pthread_yield
?C: routine is available
 to yield the execution of the current
?C: thread.  sched_yield is preferable to pthread_yield.
?C:.
?C:SCHED_YIELD:
?C: This symbol defines the way to yield the execution of
?C: the current thread.  Known ways are sched_yield,
?C: pthread_yield, and pthread_yield with NULL.
?C:.
?C:HAS_SCHED_YIELD:
?C: This symbol, if defined, indicates that the sched_yield
?C: routine is available to yield the execution of the current
?C: thread.  sched_yield is preferable to pthread_yield.
?C:.
?H:#$d_pthread_yield HAS_PTHREAD_YIELD /**/
?H:#define SCHED_YIELD $sched_yield /**/
?H:#$d_sched_yield HAS_SCHED_YIELD /**/
?H:.
?LINT: set d_pthread_yield d_sched_yield
: see whether the various POSIXish _yields exist
$cat >try.c <<EOP
#include <pthread.h>
#include <stdio.h>
int main() {
#ifdef SCHED_YIELD
 sched_yield();
#else
#ifdef PTHREAD_YIELD
 pthread_yield();
#else
```

```
#ifdef PTHREAD_YIELD_NULL
 pthread_yield(NULL);
#endif
#endif
#endif
}
EOP
: see if sched_yield exists
set try -DSCHED_YIELD
if eval $compile;
 then
   val="$define"
   sched_yield='sched_yield()'
else
   val="$undef"
fi
case "$usethreads" in
$define)
 case "$val" in
 $define) echo 'sched_yield() found.' >&4 ;;
 *)  echo 'sched_yield() NOT found.' >&4 ;;
 esac
esac
set d_sched_yield
eval $setvar

: see if pthread_yield exists
set try -DPTHREAD_YIELD
if eval $compile; then
   val="$define"
   case "$sched_yield" in
   ") sched_yield='pthread_yield()' ;;
   esac
else
   set try -DPTHREAD_YIELD_NULL
   if eval $compile; then
 val="$define"
 case "$sched_yield" in
 ") sched_yield='pthread_yield(NULL)' ;;
 esac
   else
 val="$undef"
   fi
fi
case "$usethreads" in
$define)
 case "$val" in
 $define) echo 'pthread_yield() found.' >&4 ;;
```

```
 *)  echo 'pthread_yield() NOT found.' >&4 ;;
 esac
 ;;
esac
set d_pthread_yield
eval $setvar
case "$sched_yield" in
") sched_yield=undef ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_pthread_y.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usedefaultstrict: Setvar Myread
?MAKE: -pick add $@ %<
?LINT:set usedefaultstrict
?S:usedefaultstrict:
?S: This setting provides a mechanism for perl developers to enable
?S: strict by default. These defaults do not apply when perl is run
?S: via -e or -E.
?S:.
?C:USE_STRICT_BY_DEFAULT:
?C: This symbol, if defined, enables additional defaults.
?C: At this time it only enables implicit strict by default.
?C:.
?H:#$usedefaultstrict USE_STRICT_BY_DEFAULT /* use strict by default */
?H:.
: Ask about strict by default.
case "$usedefaultstrict" in
  $define|true|[Yy]*)
    dflt="y"
    ;;
  *)
    dflt="n"
    ;;
  esac

cat <<EOM

EXPERIMENTAL: Perl can now be built with strict on by default when not
invoked with -e or -E. This is a diagnostic tool
 for development.
```

```
Unless you are familiar with this feature, you should probably answer 'no'.

EOM

rp='Would you like to build perl with strict enabled by default?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)   val="$undef"  ;;
esac
set usedefaultstrict
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usedefaultstrict.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: MailList.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: MailList.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:01:49  ram
?RCS: patch16: created
?RCS:
?RCS:
?X:
?X: This unit offers the user the option of subscribing to the mailing
?X: list. To force inclusion of this unit, you must add it's name to the
?X: dependancies on the MAKE line in your private copy of End.U.
?X: The address of the mailing list server must be set via a "list_request=..."
?X:
 entry in the .package file. This is usually done by running packinit and
?X: answering the proper questions.
?X:
?MAKE:MailList: cat mailer package Myread cf_name cf_email
?MAKE: -pick wipe $@ %<
?T:list_request list_sub list_unsub list_name
?X:
?X: The cf_name dependency is used through list_sub when the mailing list
```

```
?X: manager happens to be listserv, whereas cf_email is used whith majordomo
?X: or when the mailing list request address is scanned by a human. Since
?X: they do not appear within the unit itself, we need a lint hint.
?X:
?LINT:use cf_name cf_email
: offer to join the mailing list
list_request='<$list_request>'
list_sub="<$list_sub>"
list_unsub="<$list_unsub>"
list_name="<$list_name>"
$cat <<EOM

There is a mailing list for discussion about $package and related issues.
This is the preferred place to ask questions about the program and discuss
modifications and additions with the author and other users.  If you are able
to send mail to the Internet, you
 are encouraged to subscribe.  You need only
ever subscribe once, and you can unsubscribe automatically at any time in the
future.  If you have already subscribed and you wish to unsubscribe now, you
may do so by answering "unsubscribe".  Answer "subscribe" to subscribe to the
list.

EOM
rp="Subscribe to or unsubscribe from the $list_name mailing list?"
dflt=neither
. ./myread
case "$ans" in
[sS]*) $cat <<EOM

You will be sent a message from the list server to let you know when your
subscription has been successful and telling you how to submit articles and
how to unsubscribe again when necessary. You may also unsubscribe by running
this script again and asking it to do so for you.

EOM
 echo "Sending mail to subscribe you to the $list_name list..." >&4
 $mailer $list_request <<EOM >/dev/null 2>&1
Precedence: junk
To: $list_request

$list_sub
EOM
 ;;
[uU]*) echo "Sending mail to unsubscribe you from the $list_name list..." >&4
 $mailer $list_request <<EOM >/dev/null 2>&1
Precedence: junk
To:
```

```
 $list_request

$list_unsub
EOM
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/MailList.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: stdchar.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:stdchar: contains Findhdr cppstdin cppminus rm
?MAKE: -pick add $@ %<
?S:stdchar:
?S: This variable conditionally defines STDCHAR to be the type of char
?S: used in stdio.h.  It has the values "unsigned char" or "char".
?S:.
?C:STDCHAR:
?C: This symbol is defined to be the type of char used in stdio.h.
?C: It has the values "unsigned char" or "char".
?C:.
?H:#define STDCHAR $stdchar /**/
?H:.
?F:!stdioh
:
 see what type of char stdio uses.
echo " "
?X: untangle the #include nest
echo '#include <stdio.h>' | $cppstdin $cppminus > stdioh
if $contains 'unsigned.*char.*_ptr;' stdioh >/dev/null 2>&1 ; then
 echo "Your stdio uses unsigned chars." >&4
 stdchar="unsigned char"
else
 echo "Your stdio uses signed chars." >&4
```

```
 stdchar="char"
fi
$rm -f stdioh
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/stdchar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: scriptdir.U,v 3.1 1999/07/09 18:20:13 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: scriptdir.U,v $
?RCS: Revision 3.1  1999/07/09 18:20:13  doughera
?RCS: Updated for installprefix
?RCS:
?RCS: Revision 3.0.1.3  1995/09/25  09:17:15  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:46:13  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:32:04  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:scriptdir scriptdirexp installscript: cat test Getfile Loc \
 Oldconfig +bin Prefixit Setprefixvar prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?D:scriptdir="
?S:scriptdir:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly scripts for the package in question.  It is either
?S: the same directory as for binaries, or a special one that can be
?S: mounted across different architectures, like /usr/share. Programs
?S: must be prepared to deal with ~name expansion.
?S:.
?D:scriptdirexp="
```

```
?S:scriptdirexp:
?S: This variable is the same as scriptdir, but is filename expanded
?S: at configuration time, for programs not wanting to bother with it.
?S:.
?S:installscript:
?S: This variable is usually the same as scriptdirexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable
 within your makefiles for portability.
?S:.
?C:SCRIPTDIR:
?C: This symbol holds the name of the directory in which the user wants
?C: to put publicly executable scripts for the package in question.  It
?C: is often a directory that is mounted across diverse architectures.
?C: Programs must be prepared to deal with ~name expansion.
?C:.
?C:SCRIPTDIR_EXP:
?C: This is the same as SCRIPTDIR, but is filename expanded at
?C: configuration time, for use in programs not prepared to do
?C: ~name substitutions at run-time.
?C:.
?H:#define SCRIPTDIR "$scriptdir" /**/
?H:#define SCRIPTDIR_EXP "$scriptdirexp" /**/
?H:.
?T:installscriptdir
?LINT:change prefixvar
?LINT:set scriptdir
?LINT:set scriptdirexp
: determine where public executable scripts go
set scriptdir scriptdir
eval $prefixit
case "$scriptdir" in
")
 dflt="$bin"
 : guess some guesses
 $test -d /usr/share/scripts && dflt=/usr/share/scripts
 $test -d /usr/share/bin     && dflt=/usr/share/bin
 $test -d /usr/local/script  && dflt=/usr/local/script
 $test
 -d /usr/local/scripts && dflt=/usr/local/scripts
 $test -d $prefixexp/script  && dflt=$prefixexp/script
 set dflt
 eval $prefixup
 ;;
*)  dflt="$scriptdir"
 ;;
esac
$cat <<EOM
```

```
Some installations have a separate directory just for executable scripts so
that they can mount it across multiple architectures but keep the scripts in
one spot.  You might, for example, have a subdirectory of /usr/share for this.
Or you might just lump your scripts in with all your other executables.

EOM
fn=d~
rp='Where do you keep publicly executable scripts?'
. ./getfile
if $test "X$ansexp" != "X$scriptdirexp"; then
 installscript=''
fi
installscriptdir=''
prefixvar=scriptdir
. ./setprefixvar
: A little fix up for an irregularly named variable.
installscript="$installscriptdir"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/scriptdir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_asctime_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_asctime_r asctime_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_time i_systime extern_C
?MAKE: -pick add $@ %<
?S:d_asctime_r:
?S: This variable conditionally defines the HAS_ASCTIME_R symbol,
?S: which indicates to the C program that the asctime_r()
?S: routine is available.
?S:.
?S:asctime_r_proto:
?S: This variable encodes the prototype of asctime_r.
?S: It is zero if d_asctime_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_asctime_r
?S: is defined.
?S:.
?C:HAS_ASCTIME_R:
?C: This symbol, if defined, indicates that the asctime_r routine
?C: is available to asctime
```

```
 re-entrantly.
?C:.
?C:ASCTIME_R_PROTO:
?C: This symbol encodes the prototype of asctime_r.
?C: It is zero if d_asctime_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_asctime_r
?C: is defined.
?C:.
?H:#$d_asctime_r HAS_ASCTIME_R /**/
?H:#define ASCTIME_R_PROTO $asctime_r_proto /**/
?H:.
?T:try hdrs d_asctime_r_proto
: see if asctime_r exists
set asctime_r d_asctime_r
eval $inlibc
case "$d_asctime_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_time time.h $i_systime sys/time.h"
 case "$d_asctime_r_proto:$usethreads" in
 ":define") d_asctime_r_proto=define
  set d_asctime_r_proto asctime_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_asctime_r_proto" in
 define)
 case "$asctime_r_proto" in
 "|0) try='char* asctime_r(const struct tm*, char*);'
 ./protochk "$extern_C $try" $hdrs && asctime_r_proto=B_SB ;;
 esac
 case "$asctime_r_proto" in
 "|0) try='char* asctime_r(const struct tm*, char*, int);'
 ./protochk "$extern_C $try" $hdrs
 && asctime_r_proto=B_SBI ;;
 esac
 case "$asctime_r_proto" in
 "|0) try='int asctime_r(const struct tm*, char*);'
 ./protochk "$extern_C $try" $hdrs && asctime_r_proto=I_SB ;;
 esac
 case "$asctime_r_proto" in
 "|0) try='int asctime_r(const struct tm*, char*, int);'
 ./protochk "$extern_C $try" $hdrs && asctime_r_proto=I_SBI ;;
 esac
 case "$asctime_r_proto" in
 "|0) d_asctime_r=undef
  asctime_r_proto=0
  echo "Disabling asctime_r, cannot determine prototype." >&4 ;;
 * ) case "$asctime_r_proto" in
```

```
  REENTRANT_PROTO*) ;;
  *) asctime_r_proto="REENTRANT_PROTO_$asctime_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "asctime_r has no prototype, not using it." >&4 ;;
  esac
  d_asctime_r=undef
  asctime_r_proto=0
  ;;
 esac
 ;;
*) asctime_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_asctime_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethbynm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_gethbynm.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_gethbyname: Inlibc
?MAKE: -pick add $@ %<
?S:d_gethbyname (d_gethbynm d_gethhstby):
?S: This variable conditionally defines the HAS_GETHOSTBYNAME symbol, which
?S: indicates to the C program that the gethostbyname() routine is available
?S: to look up host names in some data base or other.
?S:.
?C:HAS_GETHOSTBYNAME (GETHOSTBYNAME):
?C: This
 symbol, if defined, indicates that the gethostbyname() routine is
?C: available to look up host names in some data base or other.
?C:.
```

```
?H:#$d_gethbyname HAS_GETHOSTBYNAME  /**/
?H:.
?LINT:set d_gethbyname
: see if gethostbyname exists
set gethostbyname d_gethbyname
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_gethbynm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_flexfnam.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_flexfnam: cat rm test Setvar
?MAKE: -pick add $@ %<
?S:d_flexfnam:
?S: This variable conditionally defines the FLEXFILENAMES symbol, which
?S: indicates that the system supports filenames longer than 14 characters.
?S:.
?C:FLEXFILENAMES:
?C: This symbol, if defined, indicates that the system supports filenames
?C: longer than 14 characters.
?C:.
?H:#$d_flexfnam FLEXFILENAMES  /**/
?H:.
?T:first
 second
?LINT:set d_flexfnam
: see if we can have long filenames
echo " "
?X:
?X: We have to test in both /tmp and . because of NFS (remote server may allow
?X: long filenames while the local filesystem cannot support them). If at least
?X: one of those file systems cannot support long filenames, then we assume the
?X: whole system can't.
?X:
```

```
rmlist="$rmlist /tmp/cf$$"
$test -d /tmp/cf$$ || mkdir /tmp/cf$$
first=123456789abcdef
second=/tmp/cf$$/$first
$rm -f $first $second
if (echo hi >$first) 2>/dev/null; then
 if $test -f 123456789abcde; then
  echo 'You cannot have filenames longer than 14 characters.  Sigh.' >&4
  val="$undef"
 else
  if (echo hi >$second) 2>/dev/null; then
   if $test -f /tmp/cf$$/123456789abcde; then
    $cat <<'EOM'
That's peculiar... You can have filenames longer than 14 characters, but only
on some of the filesystems.  Maybe you are using NFS.  Anyway, to avoid problems
I shall consider your system cannot support long filenames at all.
EOM
    val="$undef"
   else
    echo
 'You can have filenames longer than 14 characters.' >&4
    val="$define"
   fi
  else
   $cat <<'EOM'
How confusing! Some of your filesystems are sane enough to allow filenames
longer than 14 characters but some others like /tmp can't even think about them.
So, for now on, I shall assume your kernel does not allow them at all.
EOM
   val="$undef"
  fi
 fi
else
 $cat <<'EOM'
You can't have filenames longer than 14 chars.  You can't even think about them!
EOM
 val="$undef"
fi
set d_flexfnam
eval $setvar
$rm -rf /tmp/cf$$ 123456789abcde*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_flexfnam.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_setsent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_setsent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setsent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setsent:
?S: This variable conditionally defines HAS_SETSERVENT if setservent() is
?S: available.
?S:.
?C:HAS_SETSERVENT:
?C: This symbol, if defined, indicates that the setservent() routine is
?C: available.
?C:.
?H:#$d_setsent HAS_SETSERVENT  /**/
?H:.
?LINT:set d_setsent
: see if setservent exists
set
 setservent d_setsent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setsent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sethostent_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_sethostent_r sethostent_r_proto: Inlibc Protochk Hasproto i_systypes \
 usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_sethostent_r:
?S: This variable conditionally defines the HAS_SETHOSTENT_R symbol,
?S: which indicates to the C program that the sethostent_r()
```

```
?S: routine is available.
?S:.
?S:sethostent_r_proto:
?S: This variable encodes the prototype of sethostent_r.
?S: It is zero if d_sethostent_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_sethostent_r
?S: is defined.
?S:.
?C:HAS_SETHOSTENT_R:
?C: This symbol, if defined, indicates that the sethostent_r routine
?C: is
 available to sethostent re-entrantly.
?C:.
?C:SETHOSTENT_R_PROTO:
?C: This symbol encodes the prototype of sethostent_r.
?C: It is zero if d_sethostent_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_sethostent_r
?C: is defined.
?C:.
?H:#$d_sethostent_r HAS_SETHOSTENT_R /**/
?H:#define SETHOSTENT_R_PROTO $sethostent_r_proto /**/
?H:.
?T:try hdrs d_sethostent_r_proto
: see if sethostent_r exists
set sethostent_r d_sethostent_r
eval $inlibc
case "$d_sethostent_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_sethostent_r_proto:$usethreads" in
 ":define") d_sethostent_r_proto=define
  set d_sethostent_r_proto sethostent_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_sethostent_r_proto" in
 define)
 case "$sethostent_r_proto" in
 "|0) try='int sethostent_r(int, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && sethostent_r_proto=I_ID ;;
 esac
 case "$sethostent_r_proto" in
 "|0) try='void
 sethostent_r(int, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && sethostent_r_proto=V_ID ;;
 esac
 case "$sethostent_r_proto" in
 "|0) d_sethostent_r=undef
```

```
  sethostent_r_proto=0
  echo "Disabling sethostent_r, cannot determine prototype." >&4 ;;
 * ) case "$sethostent_r_proto" in
  REENTRANT_PROTO*) ;;
  *) sethostent_r_proto="REENTRANT_PROTO_$sethostent_r_proto" ;;
  esac
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "sethostent_r has no prototype, not using it." >&4 ;;
  esac
  d_sethostent_r=undef
  sethostent_r_proto=0
  ;;
 esac
 ;;
*) sethostent_r_proto=0
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_sethostent_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_dirent.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:20:01  ram
?RCS: patch36: failed scanning for 'd_namlen' with missing <dirent.h> (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:01:25  ram
?RCS: patch30: added direntrytype for hints, merely for NeXT (ADO)
?RCS: patch30: now checks for both struct dirent and direct (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:22:37  ram
?RCS: patch27: new variable direntrytype for proper type setting (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24
```

```
 14:11:15  ram
?RCS: patch16: added new Direntry_t pseudo-type for directory entries
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit looks whether there is a dirent system or not
?X:
?MAKE:i_dirent d_dirnamlen direntrytype: test contains Setvar \
 Myread Findhdr cppstdin cppflags cppminus rm_try
?MAKE: -pick add $@ %<
?S:i_dirent:
?S: This variable conditionally defines I_DIRENT, which indicates
?S: to the C program that it should include <dirent.h>.
?S:.
?S:d_dirnamlen:
?S: This variable conditionally defines DIRNAMLEN, which indicates
?S: to the C program that the length of directory entry names is
?S: provided by a d_namelen field.
?S:.
?S:direntrytype:
?S: This symbol is set to 'struct direct' or 'struct dirent' depending on
?S: whether dirent is available or not. You should use this pseudo type to
?S: portably declare your directory entries.
?S:.
?C:I_DIRENT:
?C: This symbol, if defined, indicates to the C program
 that it should
?C: include <dirent.h>. Using this symbol also triggers the definition
?C: of the Direntry_t define which ends up being 'struct dirent' or
?C: 'struct direct' depending on the availability of <dirent.h>.
?C:.
?C:DIRNAMLEN:
?C: This symbol, if defined, indicates to the C program that the length
?C: of directory entry names is provided by a d_namlen field.  Otherwise
?C: you need to do strlen() on the d_name field.
?C:.
?C:Direntry_t:
?C: This symbol is set to 'struct direct' or 'struct dirent' depending on
?C: whether dirent is available or not. You should use this pseudo type to
?C: portably declare your directory entries.
?C:.
?H:#$i_dirent I_DIRENT  /**/
?H:#$d_dirnamlen DIRNAMLEN /**/
?H:?%<:@if I_DIRENT && Direntry_t
?H:?%<:#define Direntry_t $direntrytype
?H:?%<:@end
```

```
?H:.
?T:xinc guess1 guess2
?LINT:set i_dirent d_dirnamlen
: see if this is a dirent system
echo " "
if xinc=`./findhdr dirent.h`; $test "$xinc"; then
 val="$define"
 echo "<dirent.h> found." >&4
else
 val="$undef"
 if
 xinc=`./findhdr sys/dir.h`; $test "$xinc"; then
  echo "<sys/dir.h> found." >&4
  echo " "
 else
  xinc=`./findhdr sys/ndir.h`
 fi
 echo "<dirent.h> NOT found." >&4
fi
set i_dirent
eval $setvar

?X: Use struct dirent or struct direct?   If we're using dirent.h,
?X: it's probably struct dirent, but apparently not always.
?X: Assume $xinc still contains the name of the header file we're using.
@if direntrytype || Direntry_t
: Look for type of directory structure.
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c

case "$direntrytype" in
"|' ')
 case "$i_dirent" in
 $define) guess1='struct dirent' ;;
 *) guess1='struct direct'  ;;
 esac
 ;;
*) guess1="$direntrytype"
 ;;
esac

case "$guess1" in
'struct dirent') guess2='struct direct' ;;
*) guess2='struct dirent' ;;
esac

if $contains "$guess1" try.c >/dev/null 2>&1; then
 direntrytype="$guess1"
```

```
 echo "Your directory entries are $direntrytype." >&4
elif $contains "$guess2" try.c >/dev/null 2>&1; then
 direntrytype="$guess2"
 echo
 "Your directory entries seem to be $direntrytype." >&4
else
 echo "I don't recognize your system's directory entries." >&4
 rp="What type is used for directory entries on this system?"
 dflt="$guess1"
 . ./myread
 direntrytype="$ans"
fi
$rm_try

@end

@if d_dirnamlen || DIRNAMLEN
: see if the directory entry stores field length
echo " "
$cppstdin $cppflags $cppminus < "$xinc" > try.c
if $contains 'd_namlen' try.c >/dev/null 2>&1; then
 echo "Good, your directory entry keeps length information in d_namlen." >&4
 val="$define"
else
 echo "Your directory entry does not know about the d_namlen field." >&4
 val="$undef"
fi
set d_dirnamlen
eval $setvar
$rm_try

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dirent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: fpostype.U,v $
```

```
?RCS: Revision 3.0.1.2  1994/08/29  16:20:52  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:59:59  ram
?RCS: patch30: created
?RCS:
?MAKE:fpostype: Myread Typedef
?MAKE: -pick add $@ %<
?S:fpostype:
?S: This variable defines Fpos_t to be something like fpost_t, long,
?S: uint, or whatever type is used to declare file positions in libc.
?S:.
?C:Fpos_t:
?C: This symbol holds the type used to declare file positions
 in libc.
?C: It can be fpos_t, long, uint, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Fpos_t $fpostype  /* File position type */
?H:.
: see what type file positions are declared as in the library
set fpos_t fpostype long stdio.h sys/types.h
eval $typedef
echo " "
dflt="$fpostype"
rp="What is the type for file position used by fsetpos()?"
. ./myread
fpostype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/fpostype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_byacc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_byacc.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:31:14  ram
?RCS: patch61: created
?RCS:
```

```
?MAKE:d_byacc: byacc Setvar
?MAKE: -pick add $@ %<
?S:d_byacc:
?S: This variable indicates whether byacc is available.
?S: If the user has specified 'portability', then Makefile.SH
?S: sees $byacc='byacc' whether or not the user actually has
?S: byacc.  This variable allows us to determine in a makefile
?S: if we really
 have byacc.
?S:.
?LINT:set d_byacc
: Check if we really have byacc
case "$byacc" in
"|'byacc') val="$undef" ;;
*) val="$define" ;;
esac
set d_byacc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_byacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_stdstdio.U,v 3.0.1.3 1997/02/28 15:46:32 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Tye McQueen <tye@metronet.com>
?RCS:
?RCS: $Log: d_stdstdio.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:46:32  ram
?RCS: patch61: merged with perl5's unit
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  14:06:54  ram
?RCS: patch56: typo fix on ?C: line for FILE_bufsiz
?RCS: patch56: fixed unbalanced parenthesis (ADO)
?RCS: patch56: check whether FILE_cnt and FILE_ptr can be assigned to (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1995/05/12  12:12:11  ram
?RCS:
 patch54: complete rewrite by Tye McQueen to fit modern systems
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:07:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_stdstdio d_stdiobase stdio_ptr stdio_cnt \
 d_stdio_ptr_lval_sets_cnt d_stdio_ptr_lval_nochange_cnt stdio_base \
 stdio_bufsiz d_stdio_cnt_lval d_stdio_ptr_lval stdio_filbuf: cat \
 Compile contains rm_try d_gnulibc gnulibc_version i_stdlib \
 Setvar Findhdr Oldconfig run to
?MAKE: -pick weed $@ %<
?S:d_stdstdio:
?S: This variable conditionally defines USE_STDIO_PTR if this system
?S: has a FILE structure declaring usable _ptr and _cnt fields (or
?S: equivalent) in stdio.h.
?S:.
?S:stdio_ptr:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _ptr field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_ptr(fp).
?S:.
?S:d_stdio_ptr_lval:
?S: This variable conditionally defines STDIO_PTR_LVALUE if the
?S: FILE_ptr macro can be used as an lvalue.
?S:.
?S:stdio_cnt:
?S: This
 variable defines how, given a FILE pointer, fp, to access the
?S: _cnt field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_cnt(fp).
?S:.
?S:d_stdio_cnt_lval:
?S: This variable conditionally defines STDIO_CNT_LVALUE if the
?S: FILE_cnt macro can be used as an lvalue.
?S:.
?S:d_stdio_ptr_lval_sets_cnt:
?S: This symbol is defined if using the FILE_ptr macro as an lvalue
?S: to increase the pointer by n has the side effect of decreasing the
?S: value of File_cnt(fp) by n.
?S:.
?S:d_stdio_ptr_lval_nochange_cnt:
?S: This symbol is defined if using the FILE_ptr macro as an lvalue
?S: to increase the pointer by n leaves File_cnt(fp) unchanged.
?S:.
?S:stdio_filbuf:
?S: This variable defines how, given a FILE pointer, fp, to tell
?S: stdio to refill its internal buffers (?).  This will
?S: be used to define the macro FILE_filbuf(fp).
?S:.
?S:d_stdiobase:
```

```
?S: This variable conditionally defines USE_STDIO_BASE if this system
?S: has
 a FILE structure declaring a usable _base field (or equivalent)
?S: in stdio.h.
?S:.
?S:stdio_base:
?S: This variable defines how, given a FILE pointer, fp, to access the
?S: _base field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_base(fp).
?S:.
?S:stdio_bufsiz:
?S: This variable defines how, given a FILE pointer, fp, to determine
?S: the number of bytes store in the I/O buffer pointer to by the
?S: _base field (or equivalent) of stdio.h's FILE structure.  This will
?S: be used to define the macro FILE_bufsiz(fp).
?S:.
?C:USE_STDIO_PTR ~ d_stdstdio (USE_STD_STDIO STDSTDIO):
?C: This symbol is defined if the _ptr and _cnt fields (or similar)
?C: of the stdio FILE structure can be used to access the stdio buffer
?C: for a file handle.  If this is defined, then the FILE_ptr(fp)
?C: and FILE_cnt(fp) macros will also be defined and should be used
?C: to access these fields.
?C:.
?C:FILE_ptr:
?C: This macro is used to access the _ptr
 field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_PTR_LVALUE:
?C: This symbol is defined if the FILE_ptr macro can be used as an
?C: lvalue.
?C:.
?C:FILE_cnt:
?C: This macro is used to access the _cnt field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_PTR is defined.
?C:.
?C:STDIO_CNT_LVALUE:
?C: This symbol is defined if the FILE_cnt macro can be used as an
?C: lvalue.
?C:.
?C:STDIO_PTR_LVAL_SETS_CNT:
?C: This symbol is defined if using the FILE_ptr macro as an lvalue
?C: to increase the pointer by n has the side effect of decreasing the
?C: value of File_cnt(fp) by n.
?C:.
?C:STDIO_PTR_LVAL_NOCHANGE_CNT:
```

```
?C: This symbol is defined if using the FILE_ptr macro as an lvalue
?C: to increase the pointer by n leaves File_cnt(fp) unchanged.
?C:.
?C:FILE_filbuf:
?C: This macro is used to access the internal stdio
 _filbuf function
?C: (or equivalent), if STDIO_CNT_LVALUE and STDIO_PTR_LVALUE
?C: are defined.  It is typically either _filbuf or __filbuf.
?C: This macro will only be defined if both STDIO_CNT_LVALUE and
?C: STDIO_PTR_LVALUE are defined.
?C:.
?H:?d_stdstdio:#$d_stdstdio USE_STDIO_PTR /**/
?H:?d_stdstdio:#ifdef USE_STDIO_PTR
?H:#define FILE_ptr(fp) $stdio_ptr
?H:#$d_stdio_ptr_lval STDIO_PTR_LVALUE  /**/
?H:#define FILE_cnt(fp) $stdio_cnt
?H:#$d_stdio_cnt_lval STDIO_CNT_LVALUE  /**/
?H:#$d_stdio_ptr_lval_sets_cnt STDIO_PTR_LVAL_SETS_CNT /**/
?H:#$d_stdio_ptr_lval_nochange_cnt STDIO_PTR_LVAL_NOCHANGE_CNT /**/
?H:?FILE_filbuf:#if defined(STDIO_PTR_LVALUE) && defined(STDIO_CNT_LVALUE)
?H:?FILE_filbuf:#define FILE_filbuf(fp) $stdio_filbuf  /**/
?H:?FILE_filbuf:#endif
?H:?d_stdstdio:#endif
?H:.
?W:d_stdstdio:FILE_ptr FILE_cnt FILE_filbuf
?C:USE_STDIO_BASE ~ d_stdiobase:
?C: This symbol is defined if the _base field (or similar) of the
?C: stdio FILE structure can be used to access the
 stdio buffer for
?C: a file handle.  If this is defined, then the FILE_base(fp) macro
?C: will also be defined and should be used to access this field.
?C: Also, the FILE_bufsiz(fp) macro will be defined and should be used
?C: to determine the number of bytes in the buffer.  USE_STDIO_BASE
?C: will never be defined unless USE_STDIO_PTR is.
?C:.
?C:FILE_base:
?C: This macro is used to access the _base field (or equivalent) of the
?C: FILE structure pointed to by its argument. This macro will always be
?C: defined if USE_STDIO_BASE is defined.
?C:.
?C:FILE_bufsiz:
?C: This macro is used to determine the number of bytes in the I/O
?C: buffer pointed to by _base field (or equivalent) of the FILE
?C: structure pointed to its argument. This macro will always be defined
?C: if USE_STDIO_BASE is defined.
?C:.
?H:?d_stdiobase:#$d_stdiobase USE_STDIO_BASE /**/
?H:?d_stdiobase:#ifdef USE_STDIO_BASE
```

```
?H:#define FILE_base(fp) $stdio_base
?H:#define FILE_bufsiz(fp) $stdio_bufsiz
?H:?d_stdiobase:#endif
?H:.
?W:d_stdiobase:FILE_base
 FILE_bufsiz
?T:ptr_lval cnt_lval filbuf xxx
?F:!try
?LINT:set d_stdstdio d_stdiobase
: see if _ptr and _cnt from stdio act std
echo " "

if $contains '_lbfsize' `./findhdr stdio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from BSD.)"
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_p)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 ") stdio_cnt='((fp)->_r)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_ub._base ? (fp)->_ub._base : (fp)->_bf._base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_ub._base ? (fp)->_ub._size : (fp)->_bf._size)';;
 esac
elif $contains '_IO_fpos_t' `./findhdr stdio.h` `./findhdr libio.h` >/dev/null 2>&1 ; then
 echo "(Looks like you have stdio.h from Linux.)"
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_IO_read_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt"
 in
 ") stdio_cnt='((fp)->_IO_read_end - (fp)->_IO_read_ptr)'
  cnt_lval=$undef
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
```

```
 ") stdio_base='((fp)->_IO_read_base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_IO_read_end - (fp)->_IO_read_base)';;
 esac
else
 case "$stdio_ptr" in
 ") stdio_ptr='((fp)->_ptr)'
  ptr_lval=$define
  ;;
 *) ptr_lval=$d_stdio_ptr_lval;;
 esac
 case "$stdio_cnt" in
 ") stdio_cnt='((fp)->_cnt)'
  cnt_lval=$define
  ;;
 *) cnt_lval=$d_stdio_cnt_lval;;
 esac
 case "$stdio_base" in
 ") stdio_base='((fp)->_base)';;
 esac
 case "$stdio_bufsiz" in
 ") stdio_bufsiz='((fp)->_cnt + (fp)->_ptr - (fp)->_base)';;
 esac
fi

: test whether _ptr and _cnt really work
echo "Checking how std your stdio is..." >&4
$cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if
 (
  18 <= FILE_cnt(fp) &&
  strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
 )
  exit(0);
 exit(1);
}
EOP
```

```
val="$undef"
set try
if eval $compile && $to try.c; then
 if $run ./try; then
  echo "Your stdio acts pretty std."
  val="$define"
 else
  echo "Your stdio isn't very std."
 fi
else
 echo "Your stdio doesn't appear very std."
fi
$rm_try

# glibc 2.2.90 and above apparently change stdio streams so Perl's
# direct buffer manipulation no longer works.  The Configure tests
# should be changed to correctly detect this, but until then,
# the following check should at least let perl compile and run.
# (This quick fix should be updated before 5.8.1.)
# To be defensive, reject all unknown versions, and all versions  > 2.2.9.
# A. Dougherty, June 3, 2002.
case "$d_gnulibc" in
$define)
 case "$gnulibc_version" in
 2.[01]*)  ;;
 2.2) ;;
 2.2.[0-9]) ;;
 *)  echo "But I will not snoop inside glibc $gnulibc_version stdio buffers."
  val="$undef"
  ;;
 esac
 ;;
esac
set d_stdstdio
eval
 $setvar

@if STDIO_PTR_LVALUE || d_stdio_ptr_lval
: Can _ptr be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$ptr_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_ptr_lval
eval $setvar
@end
```

```
@if STDIO_CNT_LVALUE || d_stdio_cnt_lval
: Can _cnt be used as an lvalue?
?X: Only makes sense if we have a known stdio implementation.
case "$d_stdstdio$cnt_lval" in
$define$define) val=$define ;;
*) val=$undef ;;
esac
set d_stdio_cnt_lval
eval $setvar
@end

@if FILE_filbuf
: How to access the stdio _filbuf or __filbuf function.
: If this fails, check how the getc macro in stdio.h works.
case "${d_stdio_ptr_lval}${d_stdio_cnt_lval}" in
${define}${define})
 : Try $hint value, if any, then _filbuf, __filbuf, _fill, then punt.
 : _fill is for os/2.
 xxx='notok'
 for filbuf in $stdio_filbuf '_filbuf(fp)' '__filbuf(fp) ' '_fill(fp)' ; do
  $cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define
 FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#define FILE_filbuf(fp) $filbuf
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 c = getc(fp);
 c = FILE_filbuf(fp);  /* Just looking for linker errors.*/
 exit(0);
}
EOP
  set try
  if eval $compile && $to try.c && $run ./try; then
   echo "Your stdio appears to use $filbuf"
   stdio_filbuf="$filbuf"
   xxx='ok'
   break
  else
   echo "Hmm.  $filbuf doesn't seem to work."
  fi
  $rm_try
```

```
 done
 case "$xxx" in
 notok) echo "I can't figure out how to access _filbuf"
   echo "I'll just have to work around it."
   d_stdio_ptr_lval="$undef"
   d_stdio_cnt_lval="$undef"
   ;;
 esac
 ;;
esac
@end

@if STDIO_PTR_LVALUE
: test whether setting _ptr sets _cnt as a side effect
d_stdio_ptr_lval_sets_cnt="$undef"
d_stdio_ptr_lval_nochange_cnt="$undef"
case "$d_stdio_ptr_lval$d_stdstdio" in
$define$define)
 echo "Checking to see what happens if we set the stdio ptr..." >&4
$cat >try.c <<EOP
#include <stdio.h>
/* Can
 we scream? */
/* Eat dust sed :-) */
/* In the buffer space, no one can hear you scream. */
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_ptr(fp) $stdio_ptr
#define FILE_cnt(fp) $stdio_cnt
#include <sys/types.h>
int main() {
 FILE *fp = fopen("try.c", "r");
 int c;
 char *ptr;
 size_t cnt;
 if (!fp) {
     puts("Fail even to read");
     exit(1);
 }
 c = getc(fp); /* Read away the first # */
 if (c == EOF) {
     puts("Fail even to read");
     exit(1);
 }
 if (!(
  18 <= FILE_cnt(fp) &&
```

```
 strncmp(FILE_ptr(fp), "include <stdio.h>\n", 18) == 0
)) {
 puts("Fail even to read");
 exit (1);
}
ptr = (char*) FILE_ptr(fp);
cnt = (size_t)FILE_cnt(fp);

FILE_ptr(fp) += 42;

if ((char*)FILE_ptr(fp) != (ptr + 42)) {
 printf("Fail ptr check %p != %p", FILE_ptr(fp), (ptr + 42));
 exit (1);
}
if (FILE_cnt(fp) <= 20) {
 printf ("Fail (<20 chars to test)");
 exit (1);
}
if (strncmp(FILE_ptr(fp), "Eat dust sed :-) */\n", 20) != 0) {
 puts("Fail compare");
 exit
(1);
}
if (cnt == FILE_cnt(fp)) {
 puts("Pass_unchanged");
 exit (0);
}
if (FILE_cnt(fp) == (cnt - 42)) {
 puts("Pass_changed");
 exit (0);
}
printf("Fail count was %d now %d\n", cnt, FILE_cnt(fp));
return 1;

}
EOP
set try
if eval $compile && $to try.c; then
 case `$run ./try` in
 Pass_changed)
  echo "Increasing ptr in your stdio decreases cnt by the same amount.  Good." >&4
  d_stdio_ptr_lval_sets_cnt="$define" ;;
 Pass_unchanged)
  echo "Increasing ptr in your stdio leaves cnt unchanged.  Good." >&4
  d_stdio_ptr_lval_nochange_cnt="$define" ;;
 Fail*)
  echo "Increasing ptr in your stdio didn't do exactly what I expected.  We'll not be doing that then." >&4 ;;
 *)
```

```
  echo "It appears attempting to set ptr in your stdio is a bad plan." >&4 ;;
 esac
 else
  echo "It seems we can't set ptr in your stdio.  Nevermind." >&4
 fi
 $rm_try
 ;;
esac
@end

@if d_stdiobase || USE_STDIO_BASE || FILE_base || FILE_bufsiz
: see if _base is also standard
val="$undef"
case
 "$d_stdstdio" in
$define)
 $cat >try.c <<EOP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#define FILE_base(fp) $stdio_base
#define FILE_bufsiz(fp) $stdio_bufsiz
int main() {
 FILE *fp = fopen("try.c", "r");
 char c = getc(fp);
 if (
  19 <= FILE_bufsiz(fp) &&
  strncmp(FILE_base(fp), "#include <stdio.h>\n", 19) == 0
 )
  exit(0);
 exit(1);
}
EOP
 set try
 if eval $compile && $to try.c; then
  if $run ./try; then
   echo "And its _base field acts std."
   val="$define"
  else
   echo "But its _base field isn't std."
  fi
 else
  echo "However, it seems to be lacking the _base field."
 fi
 $rm_try
 ;;
```

```
esac
set d_stdiobase
eval $setvar

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_stdstdio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lgamma: Inlibc
?MAKE: -pick add $@ %<
?S:d_lgamma:
?S: This variable conditionally defines the HAS_LGAMMA symbol, which
?S: indicates to the C program that the lgamma() routine is available
?S: for the log gamma function.  See also d_tgamma and d_lgamma_r.
?S:.
?C:HAS_LGAMMA:
?C: This symbol, if defined, indicates that the lgamma routine is
?C: available to do the log gamma function.  See also HAS_TGAMMA and
?C: HAS_LGAMMA_R.
?C:.
?H:#$d_lgamma HAS_LGAMMA  /**/
?H:.
?LINT:set d_lgamma
: see if lgamma exists
set lgamma d_lgamma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lgamma.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setpgid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:49  ram
```

```
?RCS: patch61: reworded symbol comments
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:06:40  ram
?RCS: patch16: created
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpgid:
?S: This variable conditionally defines the HAS_SETPGID symbol if the
?S: setpgid(pid, gpid) function is
 available to set process group ID.
?S:.
?C:HAS_SETPGID:
?C: This symbol, if defined, indicates that the setpgid(pid, gpid)
?C: routine is available to set process group ID.
?C:.
?H:#$d_setpgid HAS_SETPGID /**/
?H:.
?LINT:set d_setpgid
: see if setpgid exists
set setpgid d_setpgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgid.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpgrp2.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_getpgrp2.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpgrp2: Inlibc
?MAKE: -pick add $@ %<
?S:d_getpgrp2:
?S: This variable conditionally defines the HAS_GETPGRP2 symbol, which
```

```
?S: indicates to the C program that the getpgrp2() (as in DG/UX) routine
?S: is available to get the current process group.
?S:.
?C:HAS_GETPGRP2 (GETPGRP2):
?C: This symbol, if defined, indicates that the
 getpgrp2() (as in DG/UX)
?C: routine is available to get the current process group.
?C:.
?H:#$d_getpgrp2 HAS_GETPGRP2  /**/
?H:.
?LINT:set d_getpgrp2
: see if getpgrp2 exists
set getpgrp2 d_getpgrp2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getpgrp2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_socklen_t: Inhdr cat rm_try Setvar Compile d_socket sizetype
?MAKE: -pick add $@ %<
?S:d_socklen_t:
?S: This symbol will be defined if the C compiler supports socklen_t.
?S:.
?C:HAS_SOCKLEN_T:
?C: This symbol will defined if the C compiler supports socklen_t.
?C: Usually the <sys/socket.h> needs to be included.
?C:.
?H:#$d_socklen_t     HAS_SOCKLEN_T              /**/
?H:.
?LINT:set d_socklen_t
: check for socklen_t
echo " "
echo "Checking to see if you have socklen_t..." >&4
$cat >try.c <<EOCP
#include <sys/types.h>
#$d_socket
```

```
 HAS_SOCKET
#ifdef HAS_SOCKET
#include <sys/socket.h>
#endif
int main() { socklen_t x = 16; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have socklen_t."
else
 val="$undef"
 echo "You do not have socklen_t."
 case "$sizetype" in
 size_t) echo "(You do have size_t, that might work. Some people are happy with just an int.)" ;;
 esac
fi
$rm_try
set d_socklen_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_socklen_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: locdist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: locdist.U,v $
?RCS: Revision 3.0.1.1  1994/05/06  15:09:20  ram
?RCS: patch23: added support for multi-state regions (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:locdist orgdist citydist statedist multistatedist cntrydist contdist: \
 test newslibexp cat Myread Oldconfig
?MAKE: -pick add $@ %<
?S:locdist:
?S: This variable contains the eventual value of the LOCDIST symbol,
?S: which
```

is the local organization's distribution name for news.
?S:.
?S:orgdist:
?S: This variable contains the eventual value of the ORGDIST symbol,
?S: which is the organization's distribution name for news.
?S:.
?S:citydist:
?S: This variable contains the eventual value of the CITYDIST symbol,
?S: which is the city's distribution name for news.
?S:.
?S:statedist:
?S: This variable contains the eventual value of the STATEDIST symbol,
?S: which is the state's or province's distribution name for news.
?S:.
?S:multistatedist:
?S: This variable contains the eventual value of the MULTISTATEDIST symbol,
?S: which is the news distribution code for multi-state region.
?S:.
?S:cntrydist:
?S: This variable contains the eventual value of the CNTRYDIST symbol,
?S: which is the country's distribution name for news.
?S:.
?S:contdist:
?S: This variable contains the eventual value of the CONTDIST symbol,
?S: which is the continent's distribution name for news.
?S:.
?C:LOCDIST:
?C: This symbol contains the
distribution name for the news system that
?C: restricts article distribution to the local organization.
?C:.
?C:ORGDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the organization.
?C:.
?C:CITYDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the city.
?C:.
?C:STATEDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the state or province.
?C:.
?C:MULTISTATEDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to a multi-state region.
?C:.
?C:CNTRYDIST:

```
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the country.
?C:.
?C:CONTDIST:
?C: This symbol contains the distribution name for the news system that
?C: restricts article distribution to the continent.
?C:.
?H:#define LOCDIST
 "$locdist"  /**/
?H:#define ORGDIST "$orgdist"  /**/
?H:#define CITYDIST "$citydist"  /**/
?H:#define MULTISTATEDIST "$multistatedist" /**/
?H:#define STATEDIST "$statedist"  /**/
?H:#define CNTRYDIST "$cntrydist"  /**/
?H:#define CONTDIST "$contdist"  /**/
?H:.
: get the local distributions
$cat <<'EOH'

Distribution groups are the things you use on the Distribution line to limit
where an article will go to.  You are likely to be a member of several
distribution groups, such as organization, city, state, province, country,
continent, etc.  For example, Los Angeles has the distribution code "la",
New Jersey has the code "nj", and Europe has the code "eunet".

The categories you will be asked are:

local organization (Could be just one machine or a cluster or an office)
organization  att, dec, kgb, ...
city   la, ny, mosc, ...
state/province  ca, nj, bc, ...
multi-state region pnw, ne, ...
country   usa, can, rok, whatever
continent  na (North America), asia, etc.

EOH
if $test
 -f $newslibexp/distributions; then
 case "$silent" in
 true) ;;
 *) dflt='Hit return to continue'
  rp=''
  . ./myread
  ;;
 esac
 echo "Here is your distributions file:" >&4
 echo " " >&4
 $cat >&4 $newslibexp/distributions
```

```
 echo " " >&4
fi
echo "Use 'none' for any distributions you don't have."
echo " "
case "$locdist" in
") dflt="none";;
*)  dflt="$locdist";;
esac
rp="What is the distribution code for your local organization?"
. ./myread
locdist="$ans"
case "$orgdist" in
") dflt="none";;
*)  dflt="$orgdist";;
esac
rp="What is the distribution code for your organization?"
. ./myread
orgdist="$ans"
case "$citydist" in
") dflt="none";;
*)  dflt="$citydist";;
esac
rp="What is the distribution code for your city?"
. ./myread
citydist="$ans"
case "$statedist" in
") dflt="none";;
*)  dflt="$statedist";;
esac
rp="What is the distribution code for your state/province?"
. ./myread
statedist="$ans"
case "$multistatedist" in
") dflt="none";;
*) dflt="$multistatedist";;
esac
rp="What is the
 distribution code for your multi-state region?"
. ./myread
multistatedist="$ans"
case "$cntrydist" in
") dflt="none";;
*)  dflt="$cntrydist";;
esac
rp="What is the distribution code for your country?"
. ./myread
cntrydist="$ans"
case "$contdist" in
```

```
") dflt="none";;
*)  dflt="$contdist";;
esac
rp="What is the distribution code for your continent?"
. ./myread
contdist="$ans"
$cat <<'EOM'

If you have any other distribution groups you will need to edit Pnews
and newsetup to add them.
EOM
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/locdist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_ilogbl: Inlibc
?MAKE: -pick add $@ %<
?S:d_ilogbl:
?S: This variable conditionally defines the HAS_ILOGBL symbol, which
?S: indicates to the C program that the ilogbl() routine is available
?S: for extracting the exponent of long double x as a signed integer.
?S: If scalbnl is also present we can emulate frexpl.
?S:.
?C:HAS_ILOGBL:
?C: This symbol, if defined, indicates that the ilogbl routine is
?C: available.  If scalbnl is also present we can emulate frexpl.
?C:.
?H:#$d_ilogbl HAS_ILOGBL  /**/
?H:.
?LINT:set d_ilogbl
: see if ilogbl exists
set ilogbl d_ilogbl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_ilogbl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usedtrace.U,v $
?RCS:
```

```
?RCS: Copyright (c) 2008 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: usedtrace.U,v $
?RCS:
?MAKE:usedtrace dtrace: Myread Oldconfig Setvar Getfile test
?MAKE: -pick add $@ %<
?Y:TOP
?S:usedtrace:
?S: This variable indicates whether we are compiling with dtrace
?S: support. See also dtrace.
?S:.
?S:dtrace:
?S: This variable holds the location of the dtrace executable.
?S:.
?C:USE_DTRACE:
?C: This symbol, if defined, indicates that Perl should
?C: be built with support for DTrace.
?C:.
?H:#$usedtrace USE_DTRACE  /**/
?H:.
?T:dflt_dtrace
?LINT:set usedtrace
?LINT:set dtrace
: DTrace support
dflt_dtrace='/usr/sbin/dtrace'
$test -x /usr/bin/dtrace && dflt_dtrace='/usr/bin/dtrace'

cat <<EOM

Perl can be built to support DTrace on platforms that support
 it.
DTrace is a diagnosis and performance analysis tool from Sun.

If this doesn't make any sense to you, just accept the default.
EOM

while $test 1 ; do
 case "$usedtrace" in
 $define|true|[yY]*)
  dflt='y'
  ;;
 $undef|false|[nN]*)
  dflt='n'
  dflt_dtrace=""
  ;;
```

```
?*)
 dflt='y'
 dflt_dtrace=$usedtrace
 ;;
*)
 dflt='n'
 ;;
esac

rp='Support DTrace if available?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usedtrace
eval $setvar

test "X$usedtrace" != "X$define" && break

echo " "
rp='Where is the dtrace executable?'
dflt=$dflt_dtrace
. ./getfile
val="$ans"
set dtrace
eval $setvar

if $test -f $dtrace
then
 if $dtrace -h -s ../perldtrace.d \
  -o perldtrace.tmp >/dev/null 2>&1 \
  && rm -f perldtrace.tmp
 then
  echo " "
  echo "Good: your $dtrace knows about the -h flag."
 else
  cat >&2 <<EOM

*** $me:  Fatal Error:  $dtrace doesn't support -h flag
***
*** Your installed dtrace doesn't support the -h switch to
 compile a D
*** program into a C header. Can't continue.

EOM
  exit 1
 fi
```

```
  break;
 fi

 case "$fastread" in
 yes)
  cat >&2 <<EOM

*** $me:  Fatal Error:  $dtrace not found.
*** Can't continue.

EOM
  exit 1
  ;;
 *)
  echo "*** $dtrace was not found."
  echo " "
  ;;
 esac
done
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usedtrace.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sitehtml1dir sitehtml1direxp installsitehtml1dir: Getfile \
 Setprefixvar prefix siteprefix html1dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitehtml1dir=''
?S:sitehtml1dir:
?S: This variable contains the name of the directory in which site-specific
?S: html source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After perl
 has been installed, users may install their own local
?S: html pages in this directory with
```

```
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitehtml1direxp=''
?S:sitehtml1direxp:
?S: This variable is the same as the sitehtml1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsitehtml1dir=''
?S:installsitehtml1dir:
?S: This variable is really the same as sitehtml1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: html1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsitehtml1dir
?LINT:set sitehtml1dir
?LINT:set sitehtml1direxp
: determine where add-on html pages go
: There is no standard location, so try to copy the previously-selected
: directory structure for the core html pages.
case "$sitehtml1dir" in
'')
   dflt=`echo "$html1dir" | $sed "s#^$prefix#$siteprefix#"` ;;
*)     dflt=$sitehtml1dir ;;
esac
case "$dflt" in
'|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname where the site-specific html pages should be installed?'
. ./getfile
prefixvar=sitehtml1dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/sitehtml1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Tr.U,v 3.0.1.2 1994/10/29 18:00:54 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Tr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  18:00:54  ram
?RCS: patch43: forgot to quote $@ to protect against "evil" characters
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:58:35  ram
?RCS: patch36: created
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a character translation. It catches translations to uppercase or
?X: to lowercase, and then invokes the real tr to perform the job.
?X:
?X: This unit is necessary
 on HP machines (HP strikes again!) with non-ascii
?X: ROMAN8-charset, where normal letters are not arranged in a row, so a-z
?X: covers not the whole alphabet but lots of special chars. This was reported
?X: by Andreas Sahlbach <a.sahlbach@tu-bs.de>.
?X:
?X: Units performing a tr '[A-Z]' '[a-z]' or the other way round should include
?X: us in their dependency and use ./tr instead.
?X:
?MAKE:Tr: startsh tr eunicefix
?MAKE: -pick add $@ %<
?F:./tr
?T:up low
: see whether [:lower:] and [:upper:] are supported character classes
echo " "
case "`echo AbyZ | $tr '[:lower:]' '[:upper:]' 2>/dev/null`"-"`echo AbyZ | $tr '[:upper:]' '[:lower:]' 2>/dev/null`" in
ABYZ-abyz)
 echo "Good, your tr supports [:lower:] and [:upper:] to convert case." >&4
 up='[:upper:]'
 low='[:lower:]'
 ;;
*) # There is a discontinuity in EBCDIC between 'R' and 'S'
 # (0xd9 and 0xe2), therefore that is a nice testing point.
 if test "X$up" = X -o "X$low" = X; then
    case "`echo RS | $tr '[R-S]' '[r-s]' 2>/dev/null`"
 in
    rs) up='[A-Z]'
  low='[a-z]'
  ;;
    esac
 fi
 if test "X$up" = X -o "X$low" = X; then
    case "`echo RS | $tr R-S r-s 2>/dev/null`" in
    rs) up='A-Z'
```

```
  low='a-z'
  ;;
     esac
 fi
 if test "X$up" = X -o "X$low" = X; then
     case "`echo RS | od -x 2>/dev/null`" in
     *D9E2*|*d9e2*)
  echo "Hey, this might be EBCDIC." >&4
  if test "X$up" = X -o "X$low" = X; then
      case "`echo RS | $tr '[A-IJ-RS-Z]' '[a-ij-rs-z]' 2>/dev/null`" in
      rs) up='[A-IJ-RS-Z]'
   low='[a-ij-rs-z]'
   ;;
      esac
  fi
  if test "X$up" = X -o "X$low" = X; then
      case "`echo RS | $tr A-IJ-RS-Z a-ij-rs-z 2>/dev/null`" in
      rs) up='A-IJ-RS-Z'
   low='a-ij-rs-z'
   ;;
      esac
  fi
  ;;
     esac
 fi
esac
case "`echo RS | $tr \"$up\" \"$low\" 2>/dev/null`" in
rs)
   echo "Using $up and $low to convert case." >&4
   ;;
*)
   echo "I don't know how to translate letters from upper to lower case." >&4
   echo "Your tr is not acting any way I know of." >&4
   exit 1
   ;;
esac
:
 set up the translation script tr, must be called with ./tr of course
cat >tr <<EOSC
$startsh
case "\$1\$2" in
'[A-Z][a-z]') exec $tr '$up' '$low';;
'[a-z][A-Z]') exec $tr '$low' '$up';;
esac
exec $tr "\$@"
EOSC
chmod +x tr
$eunicefix tr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Tr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sjis2jis.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sjis2jis.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:25  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sjis2jis: Inlibc
?MAKE: -pick add $@ %<
?S:d_sjis2jis:
?S: This variable conditionally defines the HAS_SJIS2JIS symbol, which
?S: indicates to the C program that the sjis2jis() routine is available
?S: to convert SJIS to JIS.
?S:.
?C:HAS_SJIS2JIS:
?C: This symbol, if defined, indicates that the sjis2jis routine is
?C: available
 to convert SJIS to JIS.
?C:.
?H:#$d_sjis2jis HAS_SJIS2JIS  /**/
?H:.
?LINT:set d_sjis2jis
: see if sjis2jis exists
set sjis2jis d_sjis2jis
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sjis2jis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Instruct.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:02:55  ram
?RCS: patch61: logname / whoami sequence rewritten to use case
?RCS:
?RCS: Revision 3.0.1.2  1995/02/15  14:11:34  ram
?RCS: patch51: author name now appears at the end of the paragraph (WED)
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:12:05  ram
?RCS: patch45: now documents the & escape to turn -d on at the read prompt
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X:
 This unit spew out the directions that we want everyone to read.  I try to
?X: keep the first "pagefull" much less than a page since they don't know it
?X: isn't going to go shooting off the top of the screen, and we don't want
?X: to panic them yet.
?X:
?MAKE:Instruct: Begin Myread Configdir contains
?MAKE: -pick wipe $@ %<
?T:user needman firsttime
: general instructions
needman=true
firsttime=true
user=`(logname) 2>/dev/null`
case "$user" in
") user=`whoami 2>&1`;;
esac
if $contains "^$user\$" ../.config/instruct >/dev/null 2>&1; then
 firsttime=false
 echo " "
 rp='Would you like to see the instructions?'
 dflt=n
 . ./myread
 case "$ans" in
 [yY]*) ;;
 *) needman=false;;
 esac
fi
if $needman; then
 cat <<EOH
```

```
This installation shell script will examine your system and ask you questions
to determine how the <PACKAGENAME> package should be installed. If you get
stuck on a question, you may use a ! shell escape to start a subshell or
execute a command.  Many of the questions will have
 default answers in square
brackets; typing carriage return will give you the default.

On some of the questions which ask for file or directory names you are allowed
to use the ~name construct to specify the login directory belonging to "name",
even if you don't have a shell which knows about that.  Questions where this is
allowed will be marked "(~name ok)".

EOH
 rp="
 dflt='Type carriage return to continue'
 . ./myread
 cat <<'EOH'

The prompter used in this script allows you to use shell variables and
backticks in your answers.  You may use $1, $2, etc...  to refer to the words
in the default answer, as if the default line was a set of arguments given to a
script shell.  This means you may also use $* to repeat the whole default line,
so you do not have to re-type everything to add something to the default.

Everytime there is a substitution, you will have to confirm.  If there is an
error (e.g. an unmatched backtick), the default answer will remain unchanged
and you will be prompted
 again.

If you are in a hurry, you may run 'Configure -d'.  This will bypass nearly all
the questions and use the computed defaults (or the previous answers if there
was already a config.sh file). Type 'Configure -h' for a list of options.
You may also start interactively and then answer '& -d' at any prompt to turn
on the non-interactive behaviour for the remainder of the execution.

EOH
 . ./myread
 cat <<EOH

Much effort has been expended to ensure that this shell script will run on any
Unix system.  If despite that it blows up on yours, your best bet is to edit
Configure and run it again.  If you can't run Configure for some reason,
you'll have to generate a config.sh file by hand.  Whatever problems you
have, let me (<MAINTLOC>) know how I blew it.

This installation script affects things in two ways:

1) it may do direct variable substitutions on some of the files included
```

```
  in this kit.
2) it builds a config.h file for inclusion in C programs.  You may edit
  any of these
 files as the need arises after running this script.

If you make a mistake on a question, there is no easy way to back up to it
currently.  The easiest thing to do is to edit config.sh and rerun all the SH
files.  Configure will offer to let you do this before it runs the SH files.

EOH
?X: In case they played with the prompter...
 dflt='Type carriage return to continue'
 . ./myread
 case "$firsttime" in
 true) echo $user >>../.config/instruct;;
 esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Instruct.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_db.U,v 3.0.1.3 1995/07/25 14:10:22 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_db.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  14:10:22  ram
?RCS: patch56: conditionally use const in test programs (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1995/05/12  12:14:42  ram
?RCS: patch54: extended for more intimate DB probing (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:21:50  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:i_db db_hashtype db_prefixtype \
 db_version_major
 db_version_minor db_version_patch : \
 Inhdr +cc +ccflags rm_try compiler_warning cat \
```

```
 Compile libs sed run i_stdlib
?MAKE: -pick add $@ %<
?S:i_db:
?S: This variable conditionally defines the I_DB symbol, and indicates
?S: whether a C program may include Berkeley's DB include file <db.h>.
?S:.
?S:db_hashtype:
?S: This variable contains the type of the hash structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is u_int32_t.
?S:.
?S:db_prefixtype:
?S: This variable contains the type of the prefix structure element
?S: in the <db.h> header file.  In older versions of DB, it was
?S: int, while in newer ones it is size_t.
?S:.
?S:db_version_major:
?S: This variable contains the major version number of
?S: Berkeley DB found in the <db.h> header file.
?S:.
?S:db_version_minor:
?S: This variable contains the minor version number of
?S: Berkeley DB found in the <db.h> header file.
?S: For DB version 1 this is always 0.
?S:.
?S:db_version_patch:
?S: This
 variable contains the patch version number of
?S: Berkeley DB found in the <db.h> header file.
?S: For DB version 1 this is always 0.
?S:.
?C:I_DB:
?C: This symbol, if defined, indicates to the C program that it should
?C: include Berkeley's DB include file <db.h>.
?C:.
?C:DB_Prefix_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is u_int32_t.
?C:.
?C:DB_Hash_t:
?C: This symbol contains the type of the prefix structure element
?C: in the <db.h> header file.  In older versions of DB, it was
?C: int, while in newer ones it is size_t.
?C:.
?C:DB_VERSION_MAJOR_CFG:
?C: This symbol, if defined, defines the major version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
```

```
?C:.
?C:DB_VERSION_MINOR_CFG:
?C: This symbol, if defined, defines the minor version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
?C: For
 DB version 1 this is always 0.
?C:.
?C:DB_VERSION_PATCH_CFG:
?C: This symbol, if defined, defines the patch version number of
?C: Berkeley DB found in the <db.h> header when Perl was configured.
?C: For DB version 1 this is always 0.
?C:.
?H:#$i_db I_DB  /**/
?H:#define DB_Hash_t $db_hashtype  /**/
?H:#define DB_Prefix_t $db_prefixtype  /**/
?H:#define DB_VERSION_MAJOR_CFG $db_version_major /**/
?H:#define DB_VERSION_MINOR_CFG $db_version_minor /**/
?H:#define DB_VERSION_PATCH_CFG $db_version_patch /**/
?H:.
?F:!try
?LINT:change libs
: see if this is a db.h system
set db.h i_db
eval $inhdr

case "$i_db" in
$define)
 : Check db version.
 echo " "
 echo "Checking Berkeley DB version ..." >&4
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <db.h>
int main(int argc, char *argv[])
{
#ifdef DB_VERSION_MAJOR /* DB version >= 2 */
   int Major, Minor, Patch ;
   unsigned long Version ;
   (void)db_version(&Major,
 &Minor, &Patch) ;
   if (argc == 2) {
       printf("%d %d %d %d %d %d\n",
             DB_VERSION_MAJOR, DB_VERSION_MINOR, DB_VERSION_PATCH,
```

```
            Major, Minor, Patch);
        exit(0);
    }
    printf("You have Berkeley DB Version 2 or greater.\n");

    printf("db.h is from Berkeley DB Version %d.%d.%d\n",
   DB_VERSION_MAJOR, DB_VERSION_MINOR, DB_VERSION_PATCH);
    printf("libdb is from Berkeley DB Version %d.%d.%d\n",
   Major, Minor, Patch) ;

    /* check that db.h & libdb are compatible */
    if (DB_VERSION_MAJOR != Major || DB_VERSION_MINOR != Minor || DB_VERSION_PATCH != Patch) {
  printf("db.h and libdb are incompatible.\n") ;
        exit(3);
    }

    printf("db.h and libdb are compatible.\n") ;

    Version = DB_VERSION_MAJOR * 1000000 + DB_VERSION_MINOR * 1000
   + DB_VERSION_PATCH ;

    /* needs to be >= 2.3.4 */
    if (Version < 2003004) {
    /* if (DB_VERSION_MAJOR == 2 && DB_VERSION_MINOR == 0 && DB_VERSION_PATCH < 5) { */
  printf("Perl
  needs Berkeley DB 2.3.4 or greater.\n") ;
        exit(2);
    }

    exit(0);
#else
#if defined(_DB_H_) && defined(BTREEMAGIC) && defined(HASHMAGIC)
    if (argc == 2) {
        printf("1 0 0\n");
        exit(0);
    }
    printf("You have Berkeley DB Version 1.\n");
    exit(0); /* DB version < 2: the coast is clear. */
#else
    exit(1); /* <db.h> not Berkeley DB? */
#endif
#endif
}
EOCP
 set try
 if eval $compile_ok && $run ./try; then
  echo 'Looks OK.' >&4
  set `$run ./try 1`
```

```
  db_version_major=$1
  db_version_minor=$2
  db_version_patch=$3
 else
  echo "I can't use Berkeley DB with your <db.h>.  I'll disable Berkeley DB." >&4
  i_db=$undef
  case " $libs " in
  *"-ldb "*)
   : Remove db from list of libraries to use
   echo "Removing unusable -ldb from library list" >&4
   set `echo X $libs | $sed -e 's/-ldb / /' -e 's/-ldb$//'`
   shift
   libs="$*"
   echo "libs = $libs" >&4
   ;;
  esac
 fi
 $rm_try
 ;;
esac

@if DB_Hash_t
case "$i_db" in
define)
 : Check the return
 type needed for hash
 echo " "
 echo "Checking return type needed for hash for Berkeley DB ..." >&4
 $cat >try.c <<EOCP
#include <sys/types.h>
#include <db.h>

#ifndef DB_VERSION_MAJOR
u_int32_t hash_cb (const void* ptr, size_t size)
{
 return 0;
}
HASHINFO info;
int main()
{
 info.hash = hash_cb;
}
#endif
EOCP
 if $cc $ccflags -c try.c >try.out 2>&1 ; then
  if $compiler_warning try.out >>/dev/null 2>&1 ; then
   db_hashtype='int'
  else
```

```
   db_hashtype='u_int32_t'
  fi
 else
  : XXX Maybe we should just give up here.
  db_hashtype=u_int32_t
  $cat try.out >&4
  echo "Help:  I can't seem to compile the db test program." >&4
  echo "Something's wrong, but I'll assume you use $db_hashtype." >&4
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_hashtype for hash."
 ;;
*) db_hashtype=u_int32_t
 ;;
esac
@end
@if DB_Prefix_t
case "$i_db" in
define)
 : Check the return type needed for prefix
 echo " "
 echo "Checking return type needed for prefix for Berkeley DB ..." >&4
 cat >try.c <<EOCP
#include
 <sys/types.h>
#include <db.h>

#ifndef DB_VERSION_MAJOR
size_t prefix_cb (const DBT *key1, const DBT *key2)
{
 return 0;
}
BTREEINFO info;
int main()
{
 info.prefix = prefix_cb;
}
#endif
EOCP
 if $cc $ccflags -c try.c  >try.out 2>&1 ; then
  if $compiler_warning try.out >>/dev/null 2>&1 ; then
   db_prefixtype='int'
  else
   db_prefixtype='size_t'
  fi
 else
  db_prefixtype='size_t'
  : XXX Maybe we should just give up here.
```

```
  $cat try.out >&4
  echo "Help:  I can't seem to compile the db test program." >&4
  echo "Something's wrong, but I'll assume you use $db_prefixtype." >&4
 fi
 $rm_try
 echo "Your version of Berkeley DB uses $db_prefixtype for prefix."
 ;;
*) db_prefixtype='size_t'
 ;;
esac
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_db.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_neterrno.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:20:29  ram
?RCS: patch36: forgot to initialize 'val' to an empty value (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:22:10  ram
?RCS: patch32: removed spurious echo
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:02:05  ram
?RCS: patch30: created by ADO
?RCS:
?MAKE:i_neterrno: Inhdr +cc +ccflags rm_try Setvar
?MAKE: -pick add $@ %<
?S:i_neterrno:
?S: This variable
 conditionally defines the I_NET_ERRNO symbol, which
?S: indicates to the C program that <net/errno.h> exists and should
?S: be included.
?S:.
?C:I_NET_ERRNO:
?C: This symbol, if defined, indicates that <net/errno.h> exists and
```

```
?C: should be included.
?C:.
?H:#$i_neterrno I_NET_ERRNO  /**/
?H:.
?LINT:set i_neterrno
: see if net/errno.h is available
val="
set net/errno.h val
eval $inhdr

: Unfortunately, it causes problems on some systems.  Arrgh.
case "$val" in
$define)
 cat > try.c <<'EOM'
#include <stdio.h>
#include <errno.h>
#include <net/errno.h>
int func()
{
 return ENOTSOCK;
}
EOM
 if $cc $ccflags -c try.c >/dev/null 2>&1; then
  echo "We'll be including <net/errno.h>." >&4
 else
  echo "We won't be including <net/errno.h>." >&4
  val="$undef"
 fi
 $rm_try
 ;;
esac
set i_neterrno
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_neterrno.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sigaction.U,v 3.0.1.1 1997/02/28 15:44:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?RCS: $Log: d_sigaction.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:44:29  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sigaction: Csym Compile Setvar cat rm_try i_stdlib
?MAKE: -pick add $@ %<
?S:d_sigaction:
?S: This variable conditionally defines the HAS_SIGACTION symbol, which
?S: indicates that the Vr4 sigaction() routine is available.
?S:.
?C:HAS_SIGACTION:
?C: This symbol, if defined, indicates that Vr4's sigaction() routine
?C: is available.
?C:.
?H:#$d_sigaction
 HAS_SIGACTION /**/
?H:.
?T:val
?LINT:set d_sigaction
: see if we have sigaction
echo " "
if set sigaction val -f d_sigaction; eval $csym; $val; then
 echo 'sigaction() found.' >&4
?X:
?X: Solaris 2.5_x86 with SunWorks Pro C 3.0.1 doesn't have a complete
?X: sigaction structure if compiled with cc -Xc.  This compile test
?X: will fail then.  <doughera@lafcol.lafayette.edu>
?X:
 $cat > try.c <<EOP
#include <stdio.h>
#include <sys/types.h>
#include <signal.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
{
   struct sigaction act, oact;
   act.sa_flags = 0;
   oact.sa_handler = 0;
   /* so that act and oact are used */
   exit(act.sa_flags == 0 &&  oact.sa_handler == 0);
}
EOP
 set try
 if eval $compile_ok; then
```

```
  val="$define"
 else
  echo "But you don't seem to have a usable struct sigaction." >&4
  val="$undef"
 fi
else
 echo 'sigaction NOT found.' >&4
 val="$undef"
fi
set d_sigaction; eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sigaction.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:trnl: Nothing
?MAKE: -pick add $@ %<
?S:trnl:
?S: This variable contains the value to be passed to the tr(1)
?S: command to transliterate a newline.  Typical values are
?S: '\012' and '\n'.  This is needed for EBCDIC systems where
?S: newline is not necessarily '\012'.
?S:.
?T: DJGPP
: Find the appropriate value for a newline for tr
?X: We can't
 use $tr since that would cause a circular dependency via Myread
?X: dos djgpp uses '\015\012', but reportedly is happy with '\012' in the
?X: tr command.  I don't know why it passes the '\n' test but later
?X: refuses to work correctly with it.  --AD  6/14/98
if test -n "$DJGPP"; then
    trnl='\012'
```

```
fi
if test X"$trnl" = X; then
 case "`echo foo | tr '\n' x 2>/dev/null`" in
 foox) trnl='\n' ;;
 esac
fi
if test X"$trnl" = X; then
 case "`echo foo | tr '\012' x 2>/dev/null`" in
 foox) trnl='\012' ;;
 esac
fi
if test X"$trnl" = X; then
	case "`echo foo | tr '\r\n' xy 2>/dev/null`" in
	fooxy) trnl='\n\r' ;;
	esac
fi
if test X"$trnl" = X; then
 cat <<EOM >&2

$me: Fatal Error: cannot figure out how to translate newlines with 'tr'.

EOM
 exit 1
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/trnl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_fp.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_fp: Inhdr
?MAKE: -pick add $@ %<
?S:i_fp:
?S: This variable conditionally defines the I_FP symbol, and indicates
?S: whether a C program should include <fp.h>.
?S:.
?C:I_FP:
?C: This symbol, if defined, indicates that <fp.h> exists and
?C: should be included.
?C:.
?H:#$i_fp I_FP  /**/
?H:.
```

```
?LINT:set i_fp
: see if this is a fp.h system
set fp.h i_fp
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_fp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sbrktype.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sbrktype.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:43  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:sbrktype: Myread Oldconfig Loc contains Findhdr
?MAKE: -pick add $@ %<
?S:sbrktype:
?S: This variable defines sbrktype to be something like caddr_t, char *,
?S: or whatever type is used to declare sbrk() in the kernel.
?S:.
?C:Caddr_t (SBRKTYPE):
?C: This symbol holds the type of a core address. It is inteded to be used
?C: to safely
 declare the return type of system calls like sbrk(). It might
?C: be necessary to include <sys/types.h> as well.
?C:.
?H:#define Caddr_t $sbrktype /* <core address> type */
?H:.
: see what type sbrk is declared as in the kernel
case "$sbrktype" in
")
 if $contains 'caddr_t;' `./findhdr sys/types.h` >/dev/null 2>&1 ; then
  dflt='caddr_t';
 else
  dflt='char *';
 fi
 ;;
*)  dflt="$sbrktype"
 ;;
```

```
esac
echo " "
rp="What is the return type of sbrk() on this system?"
. ./myread
sbrktype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/sbrktype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_preadv.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_preadv.U,v $
?RCS:
?MAKE:d_preadv: Inlibc
?MAKE: -pick add $@ %<
?S:d_preadv:
?S: This variable conditionally defines the HAS_PREADV symbol, which
?S: indicates to the C program that the preadv() routine is available.
?S:.
?C:HAS_PREADV :
?C: This symbol, if defined, indicates that the preadv routine is
?C: available to perform vectored reads on a file descriptor at a
?C: given offset.
?C:.
?H:#$d_preadv HAS_PREADV  /**/
?H:.
?LINT:set d_preadv
:
 see if preadv exists
set preadv d_preadv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_preadv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_pipe.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_pipe.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:11:44  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_pipe: Inlibc
?MAKE: -pick add $@ %<
?S:d_pipe:
?S: This variable conditionally defines the HAS_PIPE symbol, which
?S: indicates to the C program that the pipe() routine is available
?S: to create an inter-process channel.
?S:.
?C:HAS_PIPE :
?C: This symbol, if defined, indicates
 that the pipe routine is
?C: available to create an inter-process channel.
?C:.
?H:#$d_pipe HAS_PIPE  /**/
?H:.
?LINT:set d_pipe
: see if pipe exists
set pipe d_pipe
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_pipe.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fpos64_t: \
 Inlibc Setvar Compile rm_try cat fpossize
?MAKE: -pick add $@ %<
?S:d_fpos64_t:
?S: This symbol will be defined if the C compiler supports fpos64_t.
```

```
?S:.
?C:HAS_FPOS64_T:
?C: This symbol will be defined if the C compiler supports fpos64_t.
?C:.
?H:#$d_fpos64_t HAS_FPOS64_T /**/
?H:.
?LINT:set d_fpos64_t
: check for fpos64_t
echo " "
echo "Checking to see if you have fpos64_t..." >&4
$cat >try.c <<EOCP
#include <stdio.h>
int main() { fpos64_t x = 7; }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have fpos64_t."
else
 val="$undef"
 echo "You do not have fpos64_t."
 case "$fpossize" in
 8) echo "(Your fpos_t is 64 bits, so you could use that.)" ;;
 esac
fi
$rm_try
set
 d_fpos64_t
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fpos64_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorscript.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorscript.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
```

```
?MAKE:d_vendorscript vendorscript vendorscriptexp installvendorscript: Getfile \
 vendorbin cat Setprefixvar Oldconfig Prefixit test vendorprefix
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorscript:
?S: This variable contains the eventual value of the VENDORSCRIPT symbol.
?S: It may have a ~ on the front.
?S: The standard distribution will put nothing in this
 directory.
?S: Vendors who distribute perl may wish to place additional
?S: executable scripts in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorscriptexp:
?S: This variable is the ~name expanded version of vendorscript, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorscript="
?S:installvendorscript:
?S: This variable is really the same as vendorscriptexp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?S:d_vendorscript:
?S: This variable conditionally defines PERL_VENDORSCRIPT.
?S:.
?C:PERL_VENDORSCRIPT:
?C: If defined, this symbol contains the name of a directory
?C: for holding vendor-supplied executable scripts.
?C: It may have a ~ on the front.
?C: The standard distribution will put nothing in this directory.
?C: Vendors who distribute perl may wish to place additional
?C: executable
 scripts in this directory with
?C:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?C: or equivalent.  See INSTALL for details.
?C:.
?C:PERL_VENDORSCRIPT_EXP:
?C: This symbol contains the ~name expanded version of VENDORSCRIPT, to be used
?C: in programs that are not prepared to deal with ~ expansion at run-time.
?C:.
?H:#$d_vendorscript PERL_VENDORSCRIPT "$vendorscript"  /**/
?H:#$d_vendorscript PERL_VENDORSCRIPT_EXP "$vendorscriptexp"  /**/
?H:.
?LINT:change prefixvar
?LINT:set installvendorscript
: Set the vendorscript variables
```

```
case "$vendorprefix" in
") d_vendorscript="$undef"
 vendorscript="
 vendorscriptexp="
 ;;
*) d_vendorscript="$define"
 : determine where vendor-supplied scripts go.
 case "$vendorscript" in
 ") dflt=$vendorprefix/script
  $test -d $dflt || dflt=$vendorbin ;;
 *)  dflt="$vendorscript" ;;
 esac
 $cat <<EOM

The installation process will create a directory for
vendor-supplied scripts.

EOM
 fn=d~+
 rp='Pathname for the vendor-supplied scripts directory?'
 . ./getfile
 vendorscript="$ans"
 vendorscriptexp="$ansexp"
 ;;
esac
prefixvar=vendorscript
.
 ./installprefix
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/installdirs/vendorscript.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
```

```
?MAKE:ebcdic: Compile Setvar cat rm_try run
?MAKE: -pick add $@ %<
?S:ebcdic:
?S: This variable conditionally defines EBCDIC if this
?S: system uses EBCDIC encoding.  Among other things, this
?S: means that the character ranges are not contiguous.
?S: See trnl.U
?S:.
?C:EBCDIC:
?C:     This symbol, if defined, indicates that this system uses
?C: EBCDIC
 encoding.
?C:.
?H:#$ebcdic EBCDIC   /**/
?H:.
?F:!try
?LINT:set ebcdic
: look whether system uses EBCDIC
echo " "
echo "Determining whether or not we are on an EBCDIC system..." >&4
$cat >try.c <<'EOM'
int main()
{
 if ('M'==0xd4) return 0;
 return 1;
}
EOM
val=$undef
set try
if eval $compile_ok; then
 if $run ./try; then
  echo "You seem to speak EBCDIC." >&4
  val="$define"
 else
  echo "Nope, no EBCDIC, probably ASCII or some ISO Latin. Or UTF-8." >&4
 fi
else
 echo "I'm unable to compile the test program." >&4
 echo "I'll assume ASCII or some ISO Latin. Or UTF8." >&4
fi
$rm_try
set ebcdic
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/ebcdic.U
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```
?RCS: $Id: i_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_fcntl: h_fcntl h_sysfile +i_sysfile Inhdr Setvar
?MAKE: -pick add $@ %<
?S:i_fcntl:
?S: This variable controls the value of I_FCNTL (which tells
?S: the C program to include <fcntl.h>).
?S:.
?C:I_FCNTL (HDR_O_STUFF FCNTL):
?C: This manifest constant tells the C program to include <fcntl.h>.
?C:.
?H:#$i_fcntl I_FCNTL /**/
?H:.
?T:val
?X:
 Make line lists +i_sysfile to ensure tests for <sys/file.h> will be
?X: conducted prior tests for <fcntl.h>, hece making sure the h_sysfile
?X: variable is correctly set when we reach that unit.
?LINT:set i_fcntl
?LINT:use i_sysfile
?LINT:change h_fcntl
: see if fcntl.h is there
val=''
set fcntl.h val
eval $inhdr

: see if we can include fcntl.h
case "$val" in
"$define")
 echo " "
 if $h_fcntl; then
  val="$define"
  echo "We'll be including <fcntl.h>." >&4
 else
  val="$undef"
  if $h_sysfile; then
```

```
 echo "We don't need to include <fcntl.h> if we include <sys/file.h>." >&4
  else
   echo "We won't be including <fcntl.h>." >&4
  fi
 fi
 ;;
*)
 h_fcntl=false
 val="$undef"
 ;;
esac
set i_fcntl
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_fcntl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lseektype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:30:10  ram
?RCS: patch32: now uses new Typedef unit to compute type information
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lseektype: Myread Typedef
?MAKE: -pick add $@ %<
?S:lseektype:
?S: This variable defines lseektype to be something like off_t, long,
?S: or whatever type is used to declare lseek offset's type in the
?S: kernel (which also appears to be lseek's return type).
?S:.
?C:Off_t
 (LSEEKTYPE):
?C: This symbol holds the type used to declare offsets in the kernel.
?C: It can be int, long, off_t, etc... It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
```

```
?H:#define Off_t $lseektype  /* <offset> type */
?H:.
: see what type lseek is declared as in the kernel
set off_t lseektype long stdio.h sys/types.h
eval $typedef
echo " "
dflt="$lseektype"
rp="What type is lseek's offset on this system declared as?"
. ./myread
lseektype="$ans"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lseektype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sanemcmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:41:19  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sanemcmp: cat d_memcmp +cc +optimize +ccflags +libs +ldflags rm \
 i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_sanemcmp:
?S: This variable conditionally defines the HAS_SANE_MEMCMP symbol if
?S: the memcpy() routine is available and can be used to compare relative
?S: magnitudes of chars with their high bits set.
?S:.
?C:HAS_SANE_MEMCMP:
?C: This symbol,
 if defined, indicates that the memcmp routine is available
?C: and can be used to compare relative magnitudes of chars with their high
?C: bits set.  If it is not defined, roll your own version.
?C:.
?H:#$d_sanemcmp HAS_SANE_MEMCMP /**/
?H:.
?F:!sanemcmp
?LINT: set d_sanemcmp
```

```
: can memcmp be trusted to compare relative magnitude?
?X: assume the worst
val="$undef"
case "$d_memcmp" in
"$define")
 echo " "
 echo \
   "Checking to see if your memcmp() can compare relative magnitude..." >&4
 $cat >foo.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
 $cat >>foo.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char a = -1;
char b = 0;
if ((a < b) && memcmp(&a, &b, 1) < 0)
 exit(1);
exit(0);
}
EOCP
 if $cc $optimize $ccflags
 $ldflags \
      -o sanemcmp foo.c $libs >/dev/null 2>&1; then
  if ./sanemcmp 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "No, it can't (it uses signed chars)."
  fi
```

```
 else
  echo "(I can't compile the test program, so we'll assume not...)"
 fi
 ;;
esac
$rm -f foo.* sanemcmp core
set d_sanemcmp
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sanemcmp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_isnanl: Inlibc
?MAKE: -pick add $@ %<
?S:d_isnanl:
?S: This variable conditionally defines the HAS_ISNANL symbol, which
?S: indicates to the C program that the isnanl() routine is available.
?S:.
?C:HAS_ISNANL:
?C: This symbol, if defined, indicates that the isnanl routine is
?C: available to check whether a long double is a NaN.
?C:.
?H:#$d_isnanl HAS_ISNANL  /**/
?H:.
?LINT:set d_isnanl
: see if isnanl exists
set isnanl d_isnanl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnanl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2005 H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
```

```
?MAKE:d_unsetenv: Inlibc
?MAKE: -pick add $@ %<
?S:d_unsetenv:
?S: This variable conditionally defines the HAS_UNSETENV symbol, which
?S: indicates to the C program that the unsetenv () routine is available.
?S:.
?C:HAS_UNSETENV:
?C: This symbol, if defined, indicates that the unsetenv () routine is
?C: available for use.
?C:.
?H:#$d_unsetenv HAS_UNSETENV  /**/
?H:.
?LINT:set d_unsetenv
: see if unsetenv exists
set unsetenv d_unsetenv
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_unsetenv.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_dlopen.U,v $
?RCS: Revision 3.0.1.2  1995/07/25  13:52:56  ram
?RCS: patch56: force compile-link test since symbol might lie in crt0.o (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:07:34  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_dlopen: Inlibc runnm
?MAKE: -pick add $@ %<
?S:d_dlopen:
?S: This variable conditionally defines the HAS_DLOPEN symbol, which
?S: indicates to the C program that the dlopen() routine
 is available.
?S:.
?C:HAS_DLOPEN :
```

```
?C: This symbol, if defined, indicates that the dlopen routine is
?C: available.
?C:.
?H:#$d_dlopen HAS_DLOPEN  /**/
?H:.
?T: xxx_runnm
?LINT:set d_dlopen
?X: We don't permanently change runnm, but we do temporarily.
?LINT: change runnm
: see if dlopen exists
?X: On NetBSD and FreeBSD, dlopen is available, but it is in
?X: /usr/lib/crt0.o, not in any of the libraries.  Therefore, do not
?X: use the nm extraction, but use a real compile and link test instead.
xxx_runnm="$runnm"
runnm=false
set dlopen d_dlopen
eval $inlibc
runnm="$xxx_runnm"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_dlopen.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extract.U,v 3.0.1.2 1997/02/28 14:58:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can be doted in order to extract
?X: .SH files with variable substitutions.
?X:
?X: When running
```

```
 Configure from a remote directory ($src is not '.'),
?X: then the files will be created in that directory, so beware!
?X:
?MAKE:Extract: src
?MAKE: -pick add $@ %<
?F:./extract
?T:PERL_CONFIG_SH dir file name create mkdir_p
: script used to extract .SH files with variable substitutions
cat >extract <<'EOS'
PERL_CONFIG_SH=true
echo "Doing variable substitutions on .SH files..."
if test -f MANIFEST; then
 set x `awk '{print $1}' < MANIFEST | grep '\.SH$'`
else
 echo "(Looking for .SH files under the source directory.)"
 set x `(cd "$src"; find . -name "*.SH" -print)`
fi
shift
case $# in
0) set x `(cd "$src"; echo *.SH)`; shift;;
esac
if test ! -f "$src/$1"; then
 shift
fi
?X: script to emulate mkdir -p
mkdir_p='
name=$1;
create="";
while test $name; do
 if test ! -d "$name"; then
  create="$name $create";
  name=`echo $name | sed -e "s|^[^/]*$||"`;
  name=`echo $name | sed -e "s|\(.*\)/.*|\1|"`;
 else
  name="";
 fi;
done;
for file in $create; do
 mkdir $file;
done
'
for file in $*;
 do
 case "$src" in
 ".")
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
```

```
   file=`expr X$file : 'X.*/\(.*\)'`
   (cd "$dir" && . ./$file)
   ;;
  *)
   . ./$file
   ;;
  esac
  ;;
 *)
?X:
?X: When running Configure remotely ($src is not '.'), we cannot source
?X: the files directly, since that would wrongly cause the extraction
?X: where the source lie instead of withing the current directory. Therefore,
?X: we need to 'sh <file' then, which is okay since they will source the
?X: existing config.sh file. It's not possible to use:
?X:  ../src/Configure -S -O -Dsomething
?X: unfortunately since no new config.sh with the -Dsomething override
?X: will be created before running the .SH files. A minor buglet.
?X:
?X: Note that we must create the directory hierarchy ourselves if it does
?X: not exist already, and that is done through a shell emulation of the
?X: 'mkdir -p' command. We don't want to use the $installdir metaconfig
?X: symbol here since that would require too much to
 be configured for
?X: this simple extraction task that may happen quickly with 'Configure -S'.
?X:  -- RAM, 18/03/96
?X:
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (set x $dir; shift; eval $mkdir_p)
   sh <"$src/$dir/$file"
   ;;
  *)
   sh <"$src/$file"
   ;;
  esac
  ;;
 esac
done
if test -f "$src/config_h.SH"; then
 if test ! -f config.h; then
 : oops, they left it out of MANIFEST, probably, so do it anyway.
 . "$src/config_h.SH"
 fi
fi
EOS
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Extract.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_shadow.U,v $
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_shadow: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_shadow:
?S: This variable conditionally defines the I_SHADOW symbol, and indicates
?S: whether a C program should include <shadow.h>.
?S:.
?C:I_SHADOW:
?C: This symbol, if defined, indicates that <shadow.h> exists and
?C: should be included.
?C:.
?H:#$i_shadow I_SHADOW  /**/
?H:.
?LINT:set i_shadow
: see if this is a shadow.h system
set shadow.h i_shadow
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_shadow.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_accessx: Inlibc
?MAKE: -pick add $@ %<
?S:d_accessx:
?S: This variable conditionally defines the HAS_ACCESSX symbol, which
?S: indicates to the C program that the accessx() routine is available.
?S:.
?C:HAS_ACCESSX :
?C: This symbol, if defined, indicates that the accessx routine is
```

```
?C: available to do extended access checks.
?C:.
?H:#$d_accessx HAS_ACCESSX  /**/
?H:.
?LINT:set d_accessx
: see if accessx exists
set accessx d_accessx
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/acl/d_accessx.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_popen.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_popen.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:47  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_popen: Inlibc
?MAKE: -pick add $@ %<
?S:d_popen:
?S: This variable conditionally defines HAS_POPEN if popen() is
?S: available to open a pipe from a process.
?S:.
?C:HAS_POPEN (POPEN):
?C: This symbol, if defined, indicates that the popen routine is
?C: available to open a pipe from a process.
?C:.
?H:#$d_popen HAS_POPEN  /**/
?H:.
?LINT:set
 d_popen
: see if popen exists
set popen d_popen
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_popen.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: ptrsize.U,v 3.0.1.1 1994/10/29 16:28:19 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: ptrsize.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:28:19  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:ptrsize: cat rm_try Myread Compile run use64bitall i_stdlib d_quad
?MAKE: -pick add $@ %<
?S:ptrsize:
?S: This variable contains the value of the PTRSIZE symbol, which
?S: indicates to the C program how many bytes there are in a pointer.
?S:.
?C:PTRSIZE:
?C: This
 symbol contains the size of a pointer, so that the C preprocessor
?C: can make decisions based on it.  It will be sizeof(void *) if
?C: the compiler supports (void *); otherwise it will be
?C: sizeof(char *).
?C:.
?H:#define PTRSIZE $ptrsize  /**/
?H:.
?F:!try
?LINT:extern use64bitint
: check for length of pointer
echo " "
case "$ptrsize" in
")
 echo "Checking to see how big your pointers are..." >&4
 $cat >try.c <<EOCP
#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
int main()
```

```
{
   printf("%d\n", (int)sizeof(void *));
   exit(0);
}
EOCP
 set try
 if eval $compile_ok; then
  ptrsize=`$run ./try`
  echo "Your pointers are $ptrsize bytes long."
 else
  dflt='4'
  echo "(I can't seem to compile the test program.  Guessing...)" >&4
  rp="What is the size of a pointer (in bytes)?"
  . ./myread
  ptrsize="$ans"
 fi
 ;;
esac
$rm_try
case "$use64bitall" in
"$define"|true|[yY]*)
 case "$ptrsize" in
 4) cat <<EOM >&4

*** You
 have chosen a maximally 64-bit build,
*** but your pointers are only 4 bytes wide.
*** Please rerun Configure without -Duse64bitall.
EOM
  case "$d_quad" in
  define)
   cat <<EOM >&4
*** Since you have quads, you could possibly try with -Duse64bitint.
EOM
   ;;
  esac
  cat <<EOM >&4
*** Cannot continue, aborting.

EOM

  exit 1
  ;;
 esac
 ;;
esac
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/ptrsize.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2012-2012, H.Merijn Brand
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: H.Merijn Brand
?RCS:
?MAKE:d_isblank: cc cat ccflags ldflags rm libs Setvar
?MAKE: -pick add $@ %<
?S:d_isblank:
?S: This variable conditionally defines the HAS_ISBLANK constant,
?S: which indicates to the C program that isblank() is available.
?S:.
?C:HAS_ISBLANK:
?C: This manifest constant lets the C program know that isblank
?C: is available.
?C:.
?H:#$d_isblank HAS_ISBLANK  /**/
?H:.
?LINT:set d_isblank
?X: Can't use Inlibc because isblank() might be a macro.
: Look for isblank
echo " "
$cat >isblank.c <<'EOCP'
#include
 <stdio.h>
#include <ctype.h>
int main() {
 int c = ' ';
 if (isblank(c))
  return 0 ;
 else
  return 1 ;
}
EOCP
if $cc $ccflags $ldflags -o isblank isblank.c $libs >/dev/null 2>&1 ; then
 echo "isblank() found." >&4
 val="$define"
else
 echo "isblank() NOT found." >&4
 val="$undef"
fi
```

```
set d_isblank
eval $setvar
$rm -f isblank*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isblank.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_wait3.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_wait3.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_wait3: Inlibc
?MAKE: -pick add $@ %<
?S:d_wait3:
?S: This variable conditionally defines the HAS_WAIT3 symbol, which
?S: indicates to the C program that the wait3() subroutine exists.
?S:.
?C:HAS_WAIT3:
?C: This symbol, if defined, indicates that the wait3() subroutine
?C: exists.
?C:.
?H:#$d_wait3 HAS_WAIT3 /**/
?H:.
?LINT:set d_wait3
:
 see if 'wait3()' exists
set wait3 d_wait3
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wait3.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
```

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasfield string that is used internally
?X: by Configure to check if this system has a field for a
?X: particular struct (of if this system has a particular struct!)
?X:
?X: To use it, say something like:
?X:  set d_statblocks stat st_blocks i_sysstat sys/stat.h
?X:  eval $hasfield
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/foo.h
?X:  $i_sysbar sys/bar.h
?X:  $i_syszot sys/zot.h
?X:  $i_zappa zappa.h"
?X: set d_statblocks stat st_blocks $hdrs
?X: eval $hasfield
?X:
?MAKE:Hasfield: Setvar rm_try test Compile
?MAKE: -pick add $@ %<
?T:varname struct field
?V:hasfield
: Define hasfield macro for Configure internal use
hasfield='varname=$1;
 struct=$2; field=$3; shift; shift; shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 esac ;
   shift 2;
done > try.c;
echo "int main () { struct $struct foo; char* bar; bar = (char*)foo.$field; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/protos/Hasfield.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: MailAuthor.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: MailAuthor.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:04:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:05:09  ram
?RCS: patch32: avoid message sending if they said no previously
?RCS:
?RCS: Revision 3.0.1.3  1993/10/16  13:47:30  ram
?RCS: patch12: now makes sure user-specified address is in Internet format
?RCS:
?RCS: Revision
 3.0.1.2  1993/09/13  15:48:49  ram
?RCS: patch10: reverted to original intent by the Author himself
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:38  ram
?RCS: patch7: now prompts user for its e-mail address
?RCS: patch7: no longer silent when mail has been sent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?RCS:
?X:
?X: This unit asks the user to please send a message to the author.
?X: To force inclusion of this unit, you must add it's name to the
?X: dependancies on the MAKE line in your private copy of End.U.
?X: This allows a smart mailagent program to automatically let users know
?X: when their package is out of date, and to allow users to be notified of
?X: any future patches.
?X:
?MAKE:MailAuthor mailpatches notifypatches usermail: test cat mailer \
 package Myread patchlevel baserev rm rsrc Oldconfig Configdir
?MAKE: -pick wipe $@ %<
?S:mailpatches:
?S: Indicates whether the user would like future patches to be mailed
?S: directly
 to them.
?S:.
```

```
?S:notifypatches:
?S: Indicates whether the user would like notification of future patches
?S: mailed to them.
?S:.
?S:usermail:
?S: This variable is used internally by Configure to keep track of the
?S: user e-mail address, where notifications or patches should be sent.
?S: A '-' value means the return address will be extracted by parsing
?S: the mail headers.
?S:.
?T:opt mailpatches notifypatches atsh status
: notify author that his package is used
if $test -f ../.config/mailauthor &&
 cmp $rsrc/patchlevel.h ../.config/mailauthor >/dev/null 2>&1
then
 status="say that you're using $package";
 case "$mailpatches" in
 true) status='have patches mailed to you as they are issued';;
 esac
 case "$notifypatches" in
 true) status='be notified when new patches are issued';;
 esac
 $cat <<EOM

You have already sent the author of $package (<MAINTLOC>) mail to
$status. If you wish, you may modify
your previous request by sending a new mail with different options.

EOM
 rp='Should
 I send a status update to <MAINTLOC>?'
 dflt=n
else
 $cat <<EOM

If you are able to send mail to the Internet, the author of $package would
really appreciate you letting me send off a quick note, just to say that you've
tried it. The author is more likely to spend time maintaining $package if it's
known that many people are using it, and you can even ask to get sent new
patches automagically this way if you wish. To protect your privacy, all I'll
say in the mail is the version of $package that you're using.

EOM
 rp='Should I send mail to <MAINTLOC>?'
 dflt=y
?X: Ensure default is 'n' if question has been asked already, in case they
?X: run Configure -d next time and answered 'n' the first time. Therefore,
?X: an empty nomail will be created later on even if no mail is sent.
```

```
 $test -f ../.config/nomail && dflt=n
fi
. ./myread
case "$ans" in
[yY]*)
 echo " "
 echo "Great! Your cooperation is really appreciated."
 $cat <<EOM

Some braindead sites do not set a proper return
 address in the From: header of
their outgoing mail, making it impossible to reply to mail they generate.
If your site is broken in this way, write to your system administrator and get
it fixed!!! In the mean time, you can manually specify the Internet e-mail
address by which the author can get back to you, should there be a need to do
so. If manually specified, it should be something like "user@domain.top".
If your mail system generates addresses correctly, specify "none".

EOM
 case "$usermail" in
 '-'|'') dflt=none;;
 *) dflt="$usermail";;
 esac
 rp='Manually specify a return address to use:'
 . ./myread
 case "$ans" in
 none|*@*.*)
  case "$ans" in
  none) usermail='-';;
  *) usermail="$ans";;
  esac
  ;;
 *)
  echo "(Address does not look like an Internet one -- ignoring it.)"
?X:
?X: If we can't trust their mailer or their return address, it's highly
?X: suggested that they only register and don't ask to get anything from
?X: the author, since it's likely to bounce in null-land --
 RAM.
?X:
  usermail='-'
  mailpatches=false
  notifypatches=false
  ;;
 esac
 echo " "
 opt=''
 rp='Would you like to have new patches automatically mailed to you?'
```

```
 case "$mailpatches" in
 true) dflt=y;;
 *) dflt=n;;
 esac
 . ./myread
 case "$ans" in
 [yY]*) opt=' mailpatches'; mailpatches=true;;
 *)
  mailpatches=false
  echo " "
  rp='Ok, would you like to simply be notified of new patches?'
  case "$notifypatches" in
  false) dflt=n;;
  *) dflt=y;;
  esac
  . ./myread
  echo " "
  case "$ans" in
  [yY]*) opt=' notifypatches'; notifypatches=true;;
  *)
   echo "Fine, I'll simply say that you've tried it then."
   notifypatches=false
   ;;
  esac
  ;;
 esac
 echo "Sending mail to <MAINTLOC>..." >&4
?X: Bizarre hack here. We can't just put @SH in the hereis lines below, because
?X: metaconfig will interpret it as a command, and there's no quoting mechanism.
?X: Do it via a variable instead.
 atsh='@SH'
 $mailer <MAINTLOC> <<EOM >/dev/null 2>&1
Subject: Command
Precedence: junk
To: <MAINTLOC>

$atsh
 package $usermail $package $baserev $patchlevel$opt
EOM
 $rm -f ../.config/mailauthor ../.config/nomail
 cp $rsrc/patchlevel.h ../.config/mailauthor
 ;;
*)
 case "$dflt" in
 "y")
  echo "Oh well, maybe next time."
  cp /dev/null ../.config/nomail
  ;;
```

```
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/MailAuthor.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_crypt.U,v $
?RCS:
?RCS: Copyright (c) 2002 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:i_crypt: Inhdr Hasfield
?MAKE: -pick add $@ %<
?S:i_crypt:
?S: This variable conditionally defines the I_CRYPT symbol, and indicates
?S: whether a C program should include <crypt.h>.
?S:.
?C:I_CRYPT:
?C: This symbol, if defined, indicates that <crypt.h> exists and
?C: should be included.
?C:.
?H:#$i_crypt I_CRYPT  /**/
?H:.
?LINT:set i_crypt
: see if this is a crypt.h system
set crypt.h i_crypt
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/i_crypt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_socket.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:46:00  ram
```

```
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:08:04  ram
?RCS: patch16: can now safely declare private nm_extract in dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_socket d_oldsock d_sockpair socketlib sockethdr: contains libc \
 echo n c nm_opt nm_extract Inlibc Csym _a
?MAKE: -pick add $@ %<
?S:d_socket:
?S: This
 variable conditionally defines HAS_SOCKET, which indicates
?S: that the BSD socket interface is supported.
?S:.
?S:d_sockpair:
?S: This variable conditionally defines the HAS_SOCKETPAIR symbol, which
?S: indicates that the BSD socketpair() is supported.
?S:.
?S:d_oldsock:
?S: This variable conditionally defines the OLDSOCKET symbol, which
?S: indicates that the BSD socket interface is based on 4.1c and not 4.2.
?S:.
?S:socketlib:
?S: This variable has the names of any libraries needed for socket support.
?S:.
?S:sockethdr:
?S: This variable has any cpp -I flags needed for socket support.
?S:.
?C:HAS_SOCKET (SOCKET):
?C: This symbol, if defined, indicates that the BSD socket interface is
?C: supported.
?C:.
?C:HAS_SOCKETPAIR (SOCKETPAIR):
?C: This symbol, if defined, indicates that the BSD socketpair() call is
?C: supported.
?C:.
?C:USE_OLDSOCKET (OLDSOCKET):
?C: This symbol, if defined, indicates that the 4.1c BSD socket interface
?C: is supported instead of the 4.2/4.3 BSD
 socket interface. For instance,
?C: there is no setsockopt() call.
?C:.
?H:#$d_socket HAS_SOCKET  /**/
?H:#$d_sockpair HAS_SOCKETPAIR /**/
?H:#$d_oldsock USE_OLDSOCKET /**/
?H:.
```

```
?T:val
?LINT:use libc
?LINT:set d_sockpair
: see whether socket exists
socketlib=''
sockethdr=''
echo " "
$echo $n "Hmm... $c" >&4
if set socket val -f d_socket; eval $csym; $val; then
 echo "Looks like you have Berkeley networking support." >&4
 d_socket="$define"
?X: now check for advanced features
 if set setsockopt val -f; eval $csym; $val; then
  d_oldsock="$undef"
 else
  echo "...but it uses the old 4.1c interface, rather than 4.2" >&4
  d_oldsock="$define"
 fi
else
?X: HP-UX, for one, puts all the socket stuff in socklib.o. Note that if we
?X: come here on HP-UX, then we must have used nm to get symbols, or we really
?X: don't have sockets anyway...
 if $contains socklib libc.list >/dev/null 2>&1; then
  echo "Looks like you have Berkeley networking support." >&4
  d_socket="$define"
  : we will have
 to assume that it supports the 4.2 BSD interface
  d_oldsock="$undef"
 else
  echo "You don't have Berkeley networking in libc$_a..." >&4
?X: look for an optional networking library
  if test -f /usr/lib/libnet$_a; then
?X: space between two  '(' needed for ksh
   ( (nm $nm_opt /usr/lib/libnet$_a | eval $nm_extract) ||  \
   ar t /usr/lib/libnet$_a) 2>/dev/null >> libc.list
   if $contains socket libc.list >/dev/null 2>&1; then
   echo "...but the Wollongong group seems to have hacked it in." >&4
    socketlib="-lnet"
    sockethdr="-I/usr/netinclude"
    d_socket="$define"
?X: now check for advanced features
    if $contains setsockopt libc.list >/dev/null 2>&1; then
     d_oldsock="$undef"
    else
     echo "...using the old 4.1c interface, rather than 4.2" >&4
     d_oldsock="$define"
    fi
   else
```

```
    echo "or even in libnet$_a, which is peculiar." >&4
    d_socket="$undef"
    d_oldsock="$undef"
   fi
  else
   echo "or anywhere else I see." >&4
   d_socket="$undef"
   d_oldsock="$undef"
  fi
 fi
fi

@if
 HAS_SOCKETPAIR || d_sockpair
: see if socketpair exists
set socketpair d_sockpair
eval $inlibc

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_socket.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_gethostbyname_r.U,v 0RCS:
?RCS: Copyright (c) 2002,2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Generated by the reentr.pl from the Perl 5.8 distribution.
?RCS:
?MAKE:d_gethostbyname_r gethostbyname_r_proto: Inlibc Protochk Hasproto \
 i_systypes usethreads i_netdb extern_C
?MAKE: -pick add $@ %<
?S:d_gethostbyname_r:
?S: This variable conditionally defines the HAS_GETHOSTBYNAME_R symbol,
?S: which indicates to the C program that the gethostbyname_r()
?S: routine is available.
?S:.
?S:gethostbyname_r_proto:
?S: This variable encodes the prototype of gethostbyname_r.
?S: It is zero if d_gethostbyname_r is undef, and one of the
?S: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyname_r
?S: is defined.
?S:.
?C:HAS_GETHOSTBYNAME_R:
?C: This symbol, if defined, indicates
```

```
 that the gethostbyname_r routine
?C: is available to gethostbyname re-entrantly.
?C:.
?C:GETHOSTBYNAME_R_PROTO:
?C: This symbol encodes the prototype of gethostbyname_r.
?C: It is zero if d_gethostbyname_r is undef, and one of the
?C: REENTRANT_PROTO_T_ABC macros of reentr.h if d_gethostbyname_r
?C: is defined.
?C:.
?H:#$d_gethostbyname_r HAS_GETHOSTBYNAME_R /**/
?H:#define GETHOSTBYNAME_R_PROTO $gethostbyname_r_proto /**/
?H:.
?T:try hdrs d_gethostbyname_r_proto
: see if gethostbyname_r exists
set gethostbyname_r d_gethostbyname_r
eval $inlibc
case "$d_gethostbyname_r" in
"$define")
 hdrs="$i_systypes sys/types.h define stdio.h $i_netdb netdb.h"
 case "$d_gethostbyname_r_proto:$usethreads" in
 ":define") d_gethostbyname_r_proto=define
  set d_gethostbyname_r_proto gethostbyname_r $hdrs
  eval $hasproto ;;
 *) ;;
 esac
 case "$d_gethostbyname_r_proto" in
 define)
 case "$gethostbyname_r_proto" in
 "|0) try='int gethostbyname_r(const char*, struct hostent*, char*, size_t, struct
 hostent**, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=I_CSBWRE ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) try='struct hostent* gethostbyname_r(const char*, struct hostent*, char*, int, int*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=S_CSBIE ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) try='int gethostbyname_r(const char*, struct hostent*, struct hostent_data*);'
 ./protochk "$extern_C $try" $hdrs && gethostbyname_r_proto=I_CSD ;;
 esac
 case "$gethostbyname_r_proto" in
 "|0) d_gethostbyname_r=undef
  gethostbyname_r_proto=0
  echo "Disabling gethostbyname_r, cannot determine prototype." >&4 ;;
 * ) case "$gethostbyname_r_proto" in
  REENTRANT_PROTO*) ;;
  *) gethostbyname_r_proto="REENTRANT_PROTO_$gethostbyname_r_proto" ;;
  esac
```

```
  echo "Prototype: $try" ;;
 esac
 ;;
 *) case "$usethreads" in
  define) echo "gethostbyname_r has no prototype, not using it." >&4 ;;
  esac
  d_gethostbyname_r=undef
  gethostbyname_r_proto=0
  ;;
 esac
 ;;
*) gethostbyname_r_proto=0
 ;;
esac
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/threads/d_gethostbyname_r.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lrintl: Inlibc
?MAKE: -pick add $@ %<
?S:d_lrintl:
?S: This variable conditionally defines the HAS_LRINTL symbol, which
?S: indicates to the C program that the lrintl() routine is available
?S: to return the integral value closest to a long double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LRINTL:
?C: This symbol, if defined, indicates that the lrintl routine is
?C: available to return the integral value closest to a long double
?C: (according to the current rounding mode).
?C:.
?H:#$d_lrintl HAS_LRINTL  /**/
?H:.
?LINT:set d_lrintl
: see if lrintl exists
set lrintl d_lrintl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lrintl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sizetype.U,v 3.0.1.1 1994/08/29 16:32:10 ram Exp $
```

```
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: sizetype.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:32:10  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:sizetype: Myread Typedef
?MAKE: -pick add $@ %<
?S:sizetype:
?S: This variable defines sizetype to be something like size_t,
?S: unsigned long, or whatever type is used to declare length
?S: parameters for string functions.
?S:.
?C:Size_t:
?C: This symbol holds the type used
 to declare length parameters
?C: for string functions.  It is usually size_t, but may be
?C: unsigned long, int, etc.  It may be necessary to include
?C: <sys/types.h> to get any typedef'ed information.
?C:.
?H:#define Size_t $sizetype  /* length parameter for string functions */
?H:.
?LINT: set sizetype
: see what type is used for size_t
rp="What is the type used for the length parameter for string functions?"
set size_t sizetype 'unsigned int' stdio.h sys/types.h
eval $typedef_ask
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/typedefs/sizetype.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_passwd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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```

```
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_passwd.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:21  ram
?RCS: patch61: useless unit dropped.
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:51  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Useless unit dropped.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_passwd.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: afs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: afs.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:23:06  ram
?RCS: patch61: can now explicitly tell Configure whether AFS is running
?RCS:
?RCS: Revision 3.0.1.1  1993/08/24  12:24:43  ram
?RCS: patch3: created
?RCS:
?MAKE:afs afsroot: test
?MAKE: -pick add $@ %<
?S:afs:
?S: This variable is set to 'true' if AFS (Andrew File System) is used
?S: on the system, 'false' otherwise.  It is possible to override this
?S: with a hint value or command line option,
 but you'd better know
?S: what you are doing.
?S:.
?S:afsroot:
```

```
?S: This variable is by default set to '/afs'. In the unlikely case
?S: this is not the correct root, it is possible to override this with
?S: a hint value or command line option.  This will be used in subsequent
?S: tests for AFSness in the configure and test process.
?S:.
: allow them to override the AFS root
case "$afsroot" in
") afsroot=/afs ;;
*) afsroot=$afsroot ;;
esac

: is AFS running?
echo " "
case "$afs" in
$define|true) afs=true ;;
$undef|false) afs=false ;;
*) if $test -d $afsroot; then
  afs=true
 else
  afs=false
 fi
 ;;
esac
if $afs; then
 echo "AFS may be running... I'll be extra cautious then..." >&4
else
 echo "AFS does not seem to be running..." >&4
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/afs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dlsymun.U,v $
?RCS:
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_dlsymun.U,v $
?RCS:
?RCS:
?MAKE:d_dlsymun: cat cc ccflags ldflags ld rm Setvar dlsrc i_dlfcn i_stdlib \
 cccdlflags ccdlflags lddlflags libs dlext _o run to
?MAKE: -pick add $@ %<
?X: This is specific to perl5.
?S:d_dlsymun:
```

```
?S: This variable conditionally defines DLSYM_NEEDS_UNDERSCORE, which
?S: indicates that we need to prepend an underscore to the symbol
?S: name before calling dlsym().
?S:.
?C:DLSYM_NEEDS_UNDERSCORE:
?C: This symbol, if defined, indicates that we need to prepend an
?C: underscore to the symbol name before calling dlsym().  This only
?C: makes sense if you *have* dlsym, which we will presume is the
?C: case if you're using dl_dlopen.xs.
?C:.
?H:#$d_dlsymun DLSYM_NEEDS_UNDERSCORE /**/
?H:.
?LINT:set
 d_dlsymun
?T: xxx
?F:!fred
: Check if dlsym need a leading underscore
echo " "
val="$undef"

case "$dlsrc" in
dl_dlopen.xs)
 echo "Checking whether your dlsym() needs a leading underscore ..." >&4
 $cat >dyna.c <<'EOM'
fred () { }
EOM

$cat >fred.c<<EOM

#include <stdio.h>
#$i_stdlib I_STDLIB
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#$i_dlfcn I_DLFCN
#ifdef I_DLFCN
#include <dlfcn.h>      /* the dynamic linker include file for SunOS/Solaris */
#else
#include <sys/types.h>
#include <nlist.h>
#include <link.h>
#endif

extern int fred() ;

int main()
{
   void * handle ;
```

```
   void * symbol ;
#ifndef RTLD_LAZY
   int mode = 1 ;
#else
   int mode = RTLD_LAZY ;
#endif
   handle = dlopen("./dyna.$dlext", mode) ;
   if (handle == NULL) {
 printf ("1\n") ;
 fflush (stdout) ;
 exit(0);
   }
   symbol = dlsym(handle, "fred") ;
   if (symbol == NULL) {
 /* try putting a leading underscore */
 symbol = dlsym(handle, "_fred") ;
 if (symbol ==
 NULL) {
     printf ("2\n") ;
     fflush (stdout) ;
     exit(0);
 }
 printf ("3\n") ;
   }
   else
 printf ("4\n") ;
   fflush (stdout) ;
   exit(0);
}
EOM
 : Call the object file tmp-dyna.o in case dlext=o.
 if $cc $ccflags $cccdlflags -c dyna.c > /dev/null 2>&1 &&
  mv dyna${_o} tmp-dyna${_o} > /dev/null 2>&1 &&
  $ld -o dyna.$dlext $ldflags $lddlflags tmp-dyna${_o} > /dev/null 2>&1 &&
  $cc -o fred $ccflags $ldflags $cccdlflags $ccdlflags fred.c $libs > /dev/null 2>&1 && $to dyna.$dlext; then
  xxx=`$run ./fred`
  case $xxx in
  1) echo "Test program failed using dlopen." >&4
   echo "Perhaps you should not use dynamic loading." >&4;;
  2) echo "Test program failed using dlsym." >&4
   echo "Perhaps you should not use dynamic loading." >&4;;
  3) echo "dlsym needs a leading underscore" >&4
   val="$define" ;;
  4) echo "dlsym doesn't need a leading underscore." >&4;;
  esac
 else
  echo "I can't compile and run the test program." >&4
              echo "I'm guessing that dlsym
```

```
 doesn't need a leading underscore." >&4
 fi
 ;;
esac

$rm -f fred fred.* dyna.$dlext dyna.* tmp-dyna.*

set d_dlsymun
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_dlsymun.U
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```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Unix.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:06  ram
?RCS: patch61: created
?RCS:
?X:
?X: The purpose of this unit is to define things that are common across all
?X: known UNIX platforms. If Configure is ported/used on a non-UNIX
?X: environment, then some of the following variables can be redefined in hint
?X: files.
?X:
?MAKE:Unix _a _o firstmakefile archobjs: Oldconfig
?MAKE: -pick add $@ %<
?S:_a (lib_ext):
?S: This variable defines the extension
 used for ordinary libraries.
?S: For unix, it is '.a'.  The '.' is included.  Other possible
?S: values include '.lib'.
?S:.
?S:_o (obj_ext):
?S: This variable defines the extension used for object files.
?S: For unix, it is '.o'.  The '.' is included.  Other possible
?S: values include '.obj'.
?S:.
```

```
?S:firstmakefile:
?S: This variable defines the first file searched by make.  On unix,
?S: it is makefile (then Makefile).  On case-insensitive systems,
?S: it might be something else.  This is only used to deal with
?S: convoluted make depend tricks.
?S:.
?S:archobjs:
?S: This variable defines any additional objects that must be linked
?S: in with the program on this architecture.  On unix, it is usually
?S: empty.  It is typically used to include emulations of unix calls
?S: or other facilities.  For perl on OS/2, for example, this would
?S: include os2/os2.obj.
?S:.
?INIT:: Extra object files, if any, needed on this platform.
?INIT:archobjs=''
: Define several unixisms.
: Hints files
 or command line option can be used to override them.
case "$_a" in
'') _a='.a';;
esac
case "$_o" in
'') _o='.o';;
esac

@if firstmakefile
: Which makefile gets called first.  This is used by make depend.
case "$firstmakefile" in
'') firstmakefile='makefile';;
esac

@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Unix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2003 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:usefaststdio: Myread Oldconfig Setvar rsrc
?MAKE: -pick add $@ %<
?Y:TOP
?S:usefaststdio:
```

```
?S: This variable conditionally defines the USE_FAST_STDIO symbol,
?S: and indicates that Perl should be built to use 'fast stdio'.
?S: Defaults to define in Perls 5.8 and earlier, to undef later.
?S:.
?C:USE_FAST_STDIO:
?C: This symbol, if defined, indicates that Perl should
?C: be built to use 'fast stdio'.
?C: Defaults to define in Perls 5.8 and earlier, to undef later.
?C:.
?H:?%<:#ifndef USE_FAST_STDIO
?H:?%<:#$usefaststdio USE_FAST_STDIO  /**/
?H:?%<:#endif
?H:.
?T:xversion
?LINT:set usefaststdio
: Check if faststdio is requested and available
case "$usefaststdio" in
$define|true|[yY]*|")
 xversion=`awk
 '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
 case "$xversion" in
 [68]) dflt='y' ;;
 *) dflt='n' ;;
 esac
 ;;
*) dflt='n';;
esac
cat <<EOM

Perl can be built to use 'fast stdio', which means using the stdio
library but also directly manipulating the stdio buffers to enable
faster I/O.  Using stdio is better for backward compatibility (especially
for Perl extensions), but on the other hand since Perl 5.8 the 'perlio'
interface has been preferred instead of stdio.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Use the "fast stdio" if available?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)      val="$undef" ;;
esac
set usefaststdio
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/usefaststdio.U

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```
?RCS: $Id: d_strtod.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_strtod.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:46:36  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_strtod: Inlibc
?MAKE: -pick add $@ %<
?S:d_strtod:
?S: This variable conditionally defines the HAS_STRTOD symbol, which
?S: indicates to the C program that the strtod() routine is available
?S: to provide better numeric string conversion than atof().
?S:.
?C:HAS_STRTOD (STRTOD):
?C: This symbol, if defined,
 indicates that the strtod routine is
?C: available to provide better numeric string conversion than atof().
?C:.
?H:#$d_strtod HAS_STRTOD /**/
?H:.
?LINT:set d_strtod
: see if strtod exists
set strtod d_strtod
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_strtod.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_values.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: i_values.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:48:34  ram
?RCS: patch61: created
?RCS:
?MAKE:i_values: Inhdr
?MAKE: -pick add $@ %<
?S:i_values:
?S: This variable conditionally defines the I_VALUES symbol, and indicates
?S: whether a C program may include <values.h> to get symbols like MAXLONG
?S: and friends.
?S:.
?C:I_VALUES:
?C: This symbol, if defined, indicates to the C program that it should
?C: include
 <values.h> to get definition of symbols like MINFLOAT or
?C: MAXLONG, i.e. machine dependant limitations.  Probably, you
?C: should use <limits.h> instead, if it is available.
?C:.
?H:#$i_values I_VALUES  /**/
?H:.
?LINT:set i_values
: see if this is a values.h system
set values.h i_values
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_values.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_drem.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_drem.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:12:14  ram
?RCS: patch36: created by ADO
```

```
?RCS:
?MAKE:d_drem: Inlibc
?MAKE: -pick add $@ %<
?S:d_drem:
?S: This variable conditionally defines the HAS_DREM symbol, which
?S: indicates to the C program that the drem() routine is available.
?S:.
?C:HAS_DREM :
?C: This symbol, if defined, indicates that the drem routine is
?C: available.
  This routine is roughly the same as fmod, i.e. it
?C: computes the remainder r=x-n*y, where n=rint(x/y), whereas fmod
?C: uses n=trunc(x/y).
?C:.
?H:#$d_drem HAS_DREM  /**/
?H:.
?LINT:set d_drem
: see if drem exists
set drem d_drem
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_drem.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cppfilecom.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: cppfilecom.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:37  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppfilecom cppstdinflags d_cppignhdrs d_cppcanstdin: \
 contains package test Myread Oldconfig Loc Setvar cpp cc cat rm
?MAKE: -pick add $@ %<
?S:cppfilecom:
?S: This variable contains the first part of the string which will invoke
?S: the C preprocessor a file
```

```
 and produce to standard output, preserving
?S: comments. Typical value of "cc -E -C" or "/lib/cpp -C".
?S:.
?S:cppstdinflags:
?S: This variable contains any flags necessary to get cppfilecom to read
?S: from the standard input.
?S:.
?S:d_cppignhdrs:
?S: This symbol conditionally defines CPP_IGN_HDRS if CPP_FILE_COM ignores
?S: *.h files.
?S:.
?S:d_cppcanstdin:
?S: This symbol conditionally defines CPP_CAN_STDIN if CPP_FILE_COM can
?S: read standard input directly.
?S:.
?C:CPP_FILE_COM (CPPFILECOM):
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor a file and produce to standard output, preserving
?C: comments. Typical value of "cc -E -C" or "/lib/cpp -C".
?C:.
?C:CPP_STDIN_FLAGS (CPPSTDINFLAGS):
?C: This variable contains any flags necessary to get CPP_FILE_COM to
?C: read from the standard input.
?C:.
?C:CPP_IGN_HDRS (CPPIGNHDRS):
?C: This symbol is defined if CPP_FILE_COM ignores *.h files.
?C:.
?C:CPP_CAN_STDIN (CPPCANSTDIN):
?C: This
 symbol is defined if CPP_FILE_COM can read standard input
?C: directly.
?C:.
?H:#define CPP_FILE_COM "$cppfilecom"
?H:#define CPP_STDIN_FLAGS "$cppstdinflags"
?H:#$d_cppignhdrs CPP_IGN_HDRS  /* does CPP ignore .h files? */
?H:#$d_cppcanstdin CPP_CAN_STDIN  /* can CPP read stdin directly? */
?H:.
?T:cont
?F:!testcpp.c !testcpp.h !testcpp.out
?LINT:set d_cppcanstdin d_cppignhdrs
?LINT:usefile testcpp.c testcpp.out
: see how we invoke the C preprocessor
$cat <<EOM

$package needs to be able to preprocess its input files in a mode which
preserves comments, which is often not the default behaviour.  It should run
the C preprocessor you will use when compiling your own source code, which
should be ISO/ANSI C compliant if you want $package to handle the latest
```

```
standard C.  I will try to guess, but I might guess wrongly because it is not
necessarily the same preprocessor used to build $package.

EOM
$cat <<'EOT' >testcpp.c
#define ABC abc
#define XYZ xyz
ABC.XYZ
/* comment */
EOT
:
if $test "X$cppfilecom"
 != "X" && \
 $cppfilecom testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "You used to use $cppfilecom so we'll use that again."
elif echo 'Maybe "'$cc' -E -C" will work...' && \
 $cc -E -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "It works!"
 cppfilecom="$cc -E -C"
elif echo 'Nope...maybe """$cc"' -P -C" will work...' && \
 $cc -P -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Yup, that does."
 cppfilecom="$cc -P -C"
elif echo 'No such luck, maybe """$cpp"' -C" will work...' && \
 $cpp -C testcpp.c </dev/null >testcpp.out 2>/dev/null && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out
 >/dev/null 2>&1
then
 echo "Yup, it does."
 cppfilecom="$cpp -C"
else
 cppfilecom="
 $cat <<'EOM'
I can't find a C preprocessor that will preserve comments. Please name one.
EOM
fi
:
dflt="$cppfilecom"
```

```
cont=true
while $test "$cont" ; do
 echo " "
 rp="How should $package run your preprocessor preserving comments?"
 . ./myread
 cppfilecom="$ans"
 $cppfilecom testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
  $contains comment testcpp.out >/dev/null 2>&1
 then
  echo "OK, that will do."
  cont=''
 else
  echo "Sorry, I can't get that to work."
 fi
done

@if CPP_IGN_HDRS || d_cppignhdrs
: Now see if it ignores header files.
cp testcpp.c testcpp.h
$cppfilecom testcpp.h >testcpp.out 2>&1
if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Terrific; it processes .h files passed on the command line too."
 val="$undef"
else
 echo "It ignores .h files on the command line; pity."
 val="$define"
fi
set
 d_cppignhdrs
eval $setvar

@end
@if CPP_STDIN_FLAGS || CPP_CAN_STDIN || cppstdinflags || d_cppcanstdin
: Now see how to send stdin to it.
echo " "
cp testcpp.c testcpp.h
$cppfilecom <testcpp.h >testcpp.out 2>&1
if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
 $contains comment testcpp.out >/dev/null 2>&1
then
 echo "Great; and it will read stdin if passed no arguments."
 val="$define"
 cppstdinflags=''
else
 $cppfilecom - <testcpp.h >testcpp.out 2>&1
```

```
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
  $contains comment testcpp.out >/dev/null 2>&1
 then
  echo "Great; and it can read stdin by passing it '-'."
  val="$define"
  cppstdinflags='-'
 else
  $cat <<FOO
Unfortunately, I can't find an easy way to get that preprocessor to read from
standard input. Do you know any flags I can pass it to get it to do so?
If that preprocessor can't read directly form standard input, answer 'none'.

FOO
 val='dunno'
 while $test "$val" = "dunno"; do
  rp='Flags to get preprocessor
 to read stdin?'
  dflt='none'
  . ./myread
  if $test $ans = 'none'; then
   echo "Oh well, if $package wants it done, it will do it for itself."
   val="$undef"
  else
   $cppfilecom $ans <testcpp.h >testcpp.out 2>&1
   if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 && \
    $contains comment testcpp.out >/dev/null 2>&1
   then
    echo "Good; that works fine."
    val="$define"
    cppstdinflags="$ans"
   else
    echo "Sorry, I couldn't get that to work."
   fi
  fi
 done
 fi
fi
set d_cppcanstdin
eval $setvar

@end
: cleanup cpp test files anyway
$rm -f testcpp.*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cppfilecom.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: rcs_branch.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: rcs_branch.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:rcs_branch: Myread contains Loc
?MAKE: -pick add $@ %<
?S:rcs_branch:
?S: This variable will hold "true" if rcs can take the -b<revision>
?S: option, which can make Life Easier on those folks who like to run
?S: rcsdiff manually.
?S:.
?T:xxx
: Tra la la la la
echo " "
echo "Checking to see if RCS understands the -b switch..." >&4
xxx=`./loc
 rcs " $pth`
case "$xxx" in
")
 rcs_branch=false
 echo "Oh.  You don't seem to have RCS here."
 ;;
*)
 rcs > rcsbranch.out 2>&1
 if $contains 'b\[rev\]' rcsbranch.out  >/dev/null 2>&1 ; then
  rcs_branch=true
  echo "Nice!  Your RCS is spiffy!"
 else
  rcs_branch=false
 echo "Well, at least you have RCS.  You know, a newer version is available."
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/rcs_branch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999-2016 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_PRIfldbl sPRIfldbl d_PRIgldbl d_PRIFUldbl sPRIGUldbl d_PRIEUldbl \
 sPRIgldbl d_PRIeldbl sPRIeldbl sPRIFUldbl d_PRIGUldbl sPRIEUldbl \
 d_SCNfldbl  d_double_style_vax d_double_style_ieee \
 d_double_style_ibm d_double_style_cray d_double_has_subnormals \
 d_double_has_inf d_double_has_nan d_double_has_negative_zero \
 sSCNfldbl doublekind: \
 d_longdbl longdblsize doublesize uselongdouble test echo cat rm_try \
 Setvar Compile run i_stdlib osname gccversion ccflags
?MAKE: -pick add $@ %<
?S:doublekind:
?S: This variable, if defined, encodes the type of a double:
?S:  1 = IEEE 754 32-bit little endian,
?S:  2 = IEEE 754 32-bit big endian,
?S:  3 = IEEE 754 64-bit little endian,
?S:  4 = IEEE
 754 64-bit big endian,
?S:  5 = IEEE 754 128-bit little endian,
?S:  6 = IEEE 754 128-bit big endian,
?S:  7 = IEEE 754 64-bit mixed endian le-be,
?S:  8 = IEEE 754 64-bit mixed endian be-le,
?S:  9 = VAX 32bit little endian F float format
?S: 10 = VAX 64bit little endian D float format
?S: 11 = VAX 64bit little endian G float format
?S: 12 = IBM 32bit format
?S: 13 = IBM 64bit format
?S: 14 = Cray 64bit format
?S: -1 = unknown format.
?S:.
?S:d_PRIfldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIgldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIeldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S:.
?S:d_PRIFUldbl:
```

?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates
 that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIfldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_PRIGUldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIgldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_PRIEUldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to print long doubles.
?S: The 'U' in the name is to separate this from d_PRIeldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:d_SCNfldbl:
?S: This variable conditionally defines the PERL_PRIfldbl symbol, which
?S: indicates that stdio has a symbol to scan long doubles.
?S:.
?S:sPRIfldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'f') for
 output.
?S:.
?S:sPRIgldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'g') for output.
?S:.
?S:sPRIeldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'e') for output.
?S:.
?S:sPRIFUldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'F') for output.
?S: The 'U' in the name is to separate this from sPRIfldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRIGUldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'G') for output.
?S: The 'U' in the name is to separate this from sPRIgldbl so that even
?S: case-blind systems can see the difference.
?S:.
?S:sPRIEUldbl:

?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'E') for output.
?S: The 'U' in the name is to separate this from sPRIeldbl so that even
?S: case-blind
 systems can see the difference.
?S:.
?S:sSCNfldbl:
?S: This variable, if defined, contains the string used by stdio to
?S: format long doubles (format 'f') for input.
?S:.
?S:d_double_has_inf:
?S: This variable conditionally defines the symbol DOUBLE_HAS_INF
?S: which indicates that the double type has an infinity.
?S:.
?S:d_double_has_nan:
?S: This variable conditionally defines the symbol DOUBLE_HAS_NAN
?S: which indicates that the double type has a not-a-number.
?S:.
?S:d_double_has_negative_zero:
?S: This variable conditionally defines the symbol DOUBLE_HAS_NEGATIVE_ZERO
?S: which indicates that the double type has a negative zero.
?S:.
?S:d_double_has_subnormals:
?S: This variable conditionally defines the symbol DOUBLE_HAS_SUBNORMALS
?S: which indicates that the double type has subnormals (denormals).
?S:.
?S:d_double_style_cray:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_CRAY
?S: which indicates that the double is the 64-bit CRAY mainframe
 format.
?S:.
?S:d_double_style_ibm:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_IBM,
?S: which indicates that the double is the 64-bit IBM mainframe format.
?S:.
?S:d_double_style_ieee:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_IEEE,
?S: which indicates that the double is the 64-bit IEEE 754.
?S:.
?S:d_double_style_vax:
?S: This variable conditionally defines the symbol DOUBLE_STYLE_VAX,
?S: which indicates that the double is the 64-bit VAX format D or G.
?S:.
?C:PERL_PRIfldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'f') for output.
?C:.
?C:PERL_PRIgldbl:

?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'g') for output.
?C:.
?C:PERL_PRIeldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'e') for output.
?C:.
?C:PERL_PRIFldbl:
?C: This symbol, if defined, contains the string used by stdio
to
?C: format long doubles (format 'f') for output.
?C:.
?C:PERL_PRIGldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'g') for output.
?C:.
?C:PERL_PRIEldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'e') for output.
?C:.
?C:PERL_SCNfldbl:
?C: This symbol, if defined, contains the string used by stdio to
?C: format long doubles (format 'f') for input.
?C:.
?C:DOUBLEKIND:
?C: DOUBLEKIND will be one of
?C: DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?C: DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?C: DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE
?C: DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE
?C: DOUBLE_IS_VAX_F_FLOAT
?C: DOUBLE_IS_VAX_D_FLOAT
?C: DOUBLE_IS_VAX_G_FLOAT
?C: DOUBLE_IS_IBM_SINGLE_32_BIT
?C: DOUBLE_IS_IBM_DOUBLE_64_BIT
?C: DOUBLE_IS_CRAY_SINGLE_64_BIT
?C: DOUBLE_IS_UNKNOWN_FORMAT
?C:.
?C:DOUBLE_HAS_INF:
?C: This
symbol, if defined, indicates that the double has
?C: the infinity.
?C:.
?C:DOUBLE_HAS_NAN:

```
?C: This symbol, if defined, indicates that the double has
?C: the not-a-number.
?C:.
?C:DOUBLE_HAS_NEGATIVE_ZERO:
?C: This symbol, if defined, indicates that the double has
?C: the negative_zero.
?C:.
?C:DOUBLE_HAS_SUBNORMALS:
?C: This symbol, if defined, indicates that the double has
?C: the subnormals (denormals).
?C:.
?C:DOUBLE_STYLE_CRAY:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit CRAY mainframe format.
?C:.
?C:DOUBLE_STYLE_IBM:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit IBM mainframe format.
?C:.
?C:DOUBLE_STYLE_IEEE:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit IEEE 754.
?C:.
?C:DOUBLE_STYLE_VAX:
?C: This symbol, if defined, indicates that the double is
?C: the 64-bit VAX format D or G.
?C:.
?LINT:known
 DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE
?LINT:known DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE
?LINT:known DOUBLE_IS_VAX_F_FLOAT
?LINT:known DOUBLE_IS_VAX_D_FLOAT
?LINT:known DOUBLE_IS_VAX_G_FLOAT
?LINT:known DOUBLE_IS_IBM_SINGLE_32_BIT
?LINT:known DOUBLE_IS_IBM_DOUBLE_64_BIT
?LINT:known DOUBLE_IS_CRAY_SINGLE_64_BIT
?LINT:known DOUBLE_IS_UNKNOWN_FORMAT
?H:#define DOUBLEKIND $doublekind  /**/
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN 1
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN 2
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN 3
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN 4
```

```
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN 5
?H:?DOUBLEKIND:#define
 DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN 6
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE 7
?H:?DOUBLEKIND:#define DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE 8
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_F_FLOAT 9
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_D_FLOAT 10
?H:?DOUBLEKIND:#define DOUBLE_IS_VAX_G_FLOAT 11
?H:?DOUBLEKIND:#define DOUBLE_IS_IBM_SINGLE_32_BIT 12
?H:?DOUBLEKIND:#define DOUBLE_IS_IBM_DOUBLE_64_BIT 13
?H:?DOUBLEKIND:#define DOUBLE_IS_CRAY_SINGLE_64_BIT 14
?H:?DOUBLEKIND:#define DOUBLE_IS_UNKNOWN_FORMAT  -1
?H:#$d_PRIfldbl PERL_PRIfldbl $sPRIfldbl /**/
?H:#$d_PRIgldbl PERL_PRIgldbl $sPRIgldbl /**/
?H:#$d_PRIeldbl PERL_PRIeldbl $sPRIeldbl /**/
?H:#$d_PRIFUldbl PERL_PRIFldbl $sPRIFUldbl /**/
?H:#$d_PRIGUldbl PERL_PRIGldbl $sPRIGUldbl /**/
?H:#$d_PRIEUldbl PERL_PRIEldbl $sPRIEUldbl /**/
?H:#$d_SCNfldbl PERL_SCNfldbl $sSCNfldbl /**/
?H:#$d_double_has_inf DOUBLE_HAS_INF
?H:#$d_double_has_nan DOUBLE_HAS_NAN
?H:#$d_double_has_negative_zero
 DOUBLE_HAS_NEGATIVE_ZERO
?H:#$d_double_has_subnormals DOUBLE_HAS_SUBNORMALS
?H:#$d_double_style_cray DOUBLE_STYLE_CRAY
?H:#$d_double_style_ibm DOUBLE_STYLE_IBM
?H:#$d_double_style_ieee DOUBLE_STYLE_IEEE
?H:#$d_double_style_vax DOUBLE_STYLE_VAX
?H:.
?T:yyy message saveccflags
?F:!try
?LINT:change ccflags
?LINT:change uselongdouble
: Check what kind of doubles your system has
$echo "Checking the kind of doubles you have..." >&4
$cat >try.c <<EOP
#$i_stdlib I_STDLIB
#define DOUBLESIZE $doublesize
#ifdef I_STDLIB
#include <stdlib.h>
#endif
#include <stdio.h>
static const double d = -0.1;
int main() {
 unsigned const char* b = (unsigned const char*)(&d);
#if DOUBLESIZE == 4
 if (b[0] == 0xCD && b[3] == 0xBD) {
   /* IEEE 754 32-bit little-endian */
```

```
  printf("1\n");
  exit(0);
 }
 if (b[0] == 0xBD && b[3] == 0xCD) {
  /* IEEE 754 32-bit big-endian */
  printf("2\n");
  exit(0);
 }
 if (b[0] == 0xCC && b[3] == 0xCC) {
  /* VAX format F, 32-bit
 PDP-style mixed endian. */
  printf("9\n");
  exit(0);
 }
 if (b[0] == 0xC0 && b[3] == 0x9A) {
  /* IBM single 32-bit */
  printf("12\n");
  exit(0);
 }
#endif
#if DOUBLESIZE == 8
 if (b[0] == 0x9A && b[7] == 0xBF) {
  /* IEEE 754 64-bit little-endian */
  printf("3\n");
  exit(0);
 }
 if (b[0] == 0xBF && b[7] == 0x9A) {
  /* IEEE 754 64-bit big-endian */
  printf("4\n");
  exit(0);
 }
 if (b[0] == 0x99 && b[3] == 0xBF && b[4] == 0x9A && b[7] == 0x99) {
  /* ARM mixed endian: two little-endian 32-bit floats, in big endian order:
   * 4 5 6 7 0 1 2 3 (MSB = 7, LSB = 0)
   * 99 99 b9 bf 9a 99 99 99 */
  printf("7\n");
  exit(0);
 }
 if (b[0] == 0x99 && b[3] == 0x9A && b[4] == 0xBF && b[7] == 0x99) {
  /* The opposite of case 7, mixed endian: two big-endian 32-bit floats,
   * in little endian order: 3 2 1 0 7 6 5 4 (MSB = 7, LSB = 0)
   * 99 99 99 9a bf b9 99 99 */
  printf("8\n");
  exit(0);
 }
 if (b[0] == 0xCC && b[7] == 0xCC) {
  /* VAX
```

```
 format D, 64-bit PDP-style mixed endian. */
   printf("10\n");
   exit(0);
 }
 if (b[0] == 0xD9 && b[7] == 0x99) {
  /* VAX format G, 64-bit PDP-style mixed endian. */
   printf("11\n");
   exit(0);
 }
 if (b[0] == 0xC0 && b[7] == 0x9A) {
   /* IBM double 64-bit */
   printf("13\n");
   exit(0);
 }
 if (b[0] == 0xBF && b[7] == 0xCD) {
   /* CRAY single 64-bit */
   printf("14\n");
   exit(0);
 }
#endif
#if DOUBLESIZE == 16
 if (b[0] == 0x9A && b[15] == 0xBF) {
   /* IEEE 754 128-bit little-endian */
   printf("5\n");
   exit(0);
 }
 if (b[0] == 0xBF && b[15] == 0x9A) {
   /* IEEE 754 128-bit big-endian */
   printf("6\n");
   exit(0);
 }
#endif
 /* Then there are old mainframe/miniframe formats like IBM and CRAY.
  * Whether those environments can still build Perl is debatable. */
 printf("-1\n"); /* unknown */
 exit(0);
}
EOP
set try
if eval $compile; then
   doublekind=`$run ./try`
else
   doublekind=-1
fi
case "$doublekind" in
1) echo "You have IEEE
 754 32-bit little endian doubles." >&4 ;;
2) echo "You have IEEE 754 32-bit big endian doubles." >&4 ;;
```

```
3) echo "You have IEEE 754 64-bit little endian doubles." >&4 ;;
4) echo "You have IEEE 754 64-bit big endian doubles." >&4 ;;
5) echo "You have IEEE 754 128-bit little endian doubles." >&4 ;;
6) echo "You have IEEE 754 128-bit big endian doubles." >&4 ;;
7) echo "You have IEEE 754 64-bit mixed endian doubles (32-bit LEs in BE)." >&4 ;;
8) echo "You have IEEE 754 64-bit mixed endian doubles (32-bit BEs in LE)." >&4 ;;
9) echo "You have VAX format F 32-bit PDP-style mixed endian doubles." >&4 ;;
10) echo "You have VAX format D 64-bit PDP-style mixed endian doubles." >&4 ;;
11) echo "You have VAX format G 64-bit PDP-style mixed endian doubles." >&4 ;;
12) echo "You have IBM short 32-bit doubles." >&4 ;;
13) echo "You have IBM long 64-bit doubles." >&4 ;;
14) echo "You have Cray single 64-bit doubles." >&4 ;;
*) echo "Cannot figure out your double.  You Cyber, or something?" >&4 ;;
esac
d_double_style_ieee=$undef
d_double_style_vax=$undef
d_double_style_ibm=$undef
d_double_style_cray=$undef
case
 "$doublekind" in
1|2|3|4|5|6|7|8) d_double_style_ieee=$define ;;
9|10|11) d_double_style_vax=$define ;;
12|13) d_double_style_ibm=$define ;;
14) d_double_style_cray=$define ;;
esac
case "$d_double_style_ieee" in
$define)
   d_double_has_inf=$define
   d_double_has_nan=$define
   d_double_has_negative_zero=$define
   d_double_has_subnormals=$define
   ;;
*)
   d_double_has_inf=$undef
   d_double_has_nan=$undef
   d_double_has_negative_zero=$undef
   d_double_has_subnormals=$undef
   ;;
esac
$rm_try

: Check print/scan long double stuff
echo " "

if $test X"$d_longdbl" = X"$define"; then

echo "Checking how to print long doubles..." >&4
```

```
if $test X"$sPRIfldbl" = X -a X"$doublesize" = X"$longdblsize"; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 double d = 123.456;
 printf("%.3f\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run
 ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"f"'; sPRIgldbl='"g"'; sPRIeldbl='"e"';
   sPRIFUldbl='"F"'; sPRIGUldbl='"G"'; sPRIEUldbl='"E"';
   echo "We will use %f."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3Lf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"Lf"'; sPRIgldbl='"Lg"'; sPRIeldbl='"Le"';
   sPRIFUldbl='"LF"'; sPRIGUldbl='"LG"'; sPRIEUldbl='"LE"';
   echo "We will use %Lf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
```

```
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3llf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"llf"'; sPRIgldbl='"llg"'; sPRIeldbl='"lle"';
   sPRIFUldbl='"llF"'; sPRIGUldbl='"llG"'; sPRIEUldbl='"llE"';
   echo "We
 will use %llf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 $cat >try.c <<'EOCP'
#include <sys/types.h>
#include <stdio.h>
int main() {
 long double d = 123.456;
 printf("%.3lf\n", d);
}
EOCP
 set try
 if eval $compile; then
  yyy=`$run ./try`
  case "$yyy" in
  123.456)
   sPRIfldbl='"lf"'; sPRIgldbl='"lg"'; sPRIeldbl='"le"';
   sPRIFUldbl='"lF"'; sPRIGUldbl='"lG"'; sPRIEUldbl='"lE"';
   echo "We will use %lf."
   ;;
  esac
 fi
fi

if $test X"$sPRIfldbl" = X; then
 echo "Cannot figure out how to print long doubles." >&4
else
 sSCNfldbl=$sPRIfldbl # expect consistency
fi
```

```
$rm_try

fi # d_longdbl

case "$sPRIfldbl" in
") d_PRIfldbl="$undef"; d_PRIgldbl="$undef"; d_PRIeldbl="$undef";
 d_PRIFUldbl="$undef"; d_PRIGUldbl="$undef"; d_PRIEUldbl="$undef";
 d_SCNfldbl="$undef";
 ;;
*) d_PRIfldbl="$define"; d_PRIgldbl="$define"; d_PRIeldbl="$define";
 d_PRIFUldbl="$define"; d_PRIGUldbl="$define"; d_PRIEUldbl="$define";
 d_SCNfldbl="$define";
 ;;
esac

: Before committing on uselongdouble,
 see whether that looks sane.
if $test "$uselongdouble" = "$define"; then
   message=""
   echo " "
   echo "Checking if your long double math functions work right..." >&4
   $cat > try.c <<EOF
#include <math.h>
#include <stdio.h>
int main() {
 printf("%"$sPRIgldbl"\n", sqrtl(logl(expl(cosl(sinl(0.0L))))+powl(2.0L, 3.0L)));
}
EOF
   case "$osname:$gccversion" in
   aix:) saveccflags="$ccflags"
  ccflags="$ccflags -qlongdouble" ;; # to avoid core dump
   esac
   set try
   if eval $compile_ok; then
     yyy=`$run ./try`
   fi
   case "$yyy" in
   3) echo "Your long double math functions are working correctly." >&4 ;;
   *) echo "Your long double math functions are broken, not using long doubles." >&4
      uselongdouble=$undef
      ;;
   esac
   $rm_try
   case "$osname:$gccversion" in
   aix:) ccflags="$saveccflags" ;; # restore
   esac
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/longdblfio.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getpagsz.U,v 3.0.1.1 1994/10/29 16:13:10 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_getpagsz.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:13:10  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_getpagsz: Compile Oldconfig Myread Inlibc Findhdr
?MAKE: -pick add $@ %<
?S:d_getpagsz:
?S: This variable conditionally defines HAS_GETPAGESIZE if getpagesize()
?S: is available to get the system page size.
?S:.
?C:HAS_GETPAGESIZE
 (GETPAGESIZE):
?C: This symbol, if defined, indicates that the getpagesize system call
?C: is available to get system page size, which is the granularity of
?C: many memory management calls.
?C:.
?H:#$d_getpagsz HAS_GETPAGESIZE  /**/
?H:.
?LINT:set d_getpagsz
: see if getpagesize exists
set getpagesize d_getpagsz
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_getpagsz.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setrgid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setrgid.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setrgid: Inlibc
?MAKE: -pick add $@ %<
?S:d_setrgid:
?S: This variable conditionally defines the HAS_SETRGID symbol, which
?S: indicates to the C program that the setrgid() routine is available
?S: to change the real gid of the current program.
?S:.
?C:HAS_SETRGID (SETRGID):
?C: This symbol, if defined, indicates that the setrgid
 routine is available
?C: to change the real gid of the current program.
?C:.
?H:#$d_setrgid HAS_SETRGID  /**/
?H:.
?LINT:set d_setrgid
: see if setrgid exists
set setrgid d_setrgid
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setrgid.U
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```
?RCS: $Id: d_endpent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
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?RCS:
?RCS: $Log: d_endpent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_endpent: Inlibc
```

```
?MAKE: -pick add $@ %<
?S:d_endpent:
?S: This variable conditionally defines HAS_ENDPROTOENT if endprotoent() is
?S: available to close whatever was being used for protocol queries.
?S:.
?C:HAS_ENDPROTOENT:
?C: This symbol, if defined, indicates that the endprotoent() routine is
?C: available to close whatever was being used
 for protocol queries.
?C:.
?H:#$d_endpent HAS_ENDPROTOENT  /**/
?H:.
?LINT:set d_endpent
: see if endprotoent exists
set endprotoent d_endpent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endpent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_mkstemp.U,v 3.0.1.1 1994/08/29 16:11:57 ram Exp $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_mkstemp.U,v $
?RCS:
?MAKE:d_mkstemp: Inlibc
?MAKE: -pick add $@ %<
?S:d_mkstemp:
?S: This variable conditionally defines the HAS_MKSTEMP symbol, which
?S: indicates to the C program that the mkstemp() routine is available
?S: to exclusively create and open a uniquely named temporary file.
?S:.
?C:HAS_MKSTEMP :
?C: This symbol, if defined, indicates that the mkstemp routine is
?C: available to exclusively create and open a uniquely named
?C: temporary file.
?C:.
?H:#$d_mkstemp HAS_MKSTEMP  /**/
?H:.
?LINT:set d_mkstemp
: see if mkstemp exists
```

```
set mkstemp d_mkstemp
eval
 $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_mkstemp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_havetlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_havetlib.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:36:31  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:44:06  ram
?RCS: patch23: added AIX support to accept shared lib stub as termlib (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:06:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_havetlib termlib: cat contains Myread Loc
 Filexp Oldconfig libpth \
 test uname _a _o
?MAKE: -pick add $@ %<
?S:d_havetlib:
?S: This variable conditionally defines the HAS_TERMLIB symbol, which
?S: indicates to the C program that termlib-style routines are available.
?S:.
?S:termlib:
?S: This variable contains the argument to pass to the loader to get
?S: termlib-style routines.  It is up to the Makefile.SH to make sure
?S: the value gets to the right command.  Note that on many systems the
?S: termlib routines are emulated by the curses or terminfo library.
?S:.
?C:HAS_TERMLIB (HAVETERMLIB):
?C: This symbol, when defined, indicates that termlib-style routines
?C: are available.  There is nothing to include.
?C:.
?H:#$d_havetlib HAS_TERMLIB /**/
```

```
?H:.
?T:xxx
: where do we get termlib routines from
echo " "
xxx=`./loc libcurses$_a x $libpth`
case "$xxx" in
/*)
 ar t $xxx >grimble
 if $contains tputs$_o grimble >/dev/null 2>&1; then
  termlib='-lcurses'
  d_havetlib="$define"
  echo "Terminfo library found." >&4
 elif $test "x`$uname
 2>/dev/null`" = xAIX; then
  # Ok, do the AIX shr.o fun thing
  /usr/ccs/bin/nm -en $xxx 2>/dev/null >grimble
  if $contains '^tputs .*|extern|' grimble >/dev/null 2>&1; then
   termlib='-lcurses'
   d_havetlib="$define"
   echo "AIX Terminfo library found." >&4
  else
   xxx=x
  fi
 else
  xxx=x
 fi
 rm -f grimble
 ;;
esac
case "$xxx" in
x)
 xxx=`./loc libtermlib$_a x $libpth`
 case "$xxx" in
 /usr/lib*|/lib*)
  termlib='-ltermlib'
  d_havetlib="$define"
  echo "Termlib library found." >&4
  ;;
 /*)
  termlib="$xxx"
  d_havetlib="$define"
  echo "Termlib library found." >&4
  ;;
 *)
  xxx=`./loc libtermcap$_a x $libpth`
  case "$xxx" in
  /usr/lib*|/lib*)
   termlib='-ltermcap'
```

```
  d_havetlib="$define"
  echo "Termcap library found." >&4
  ;;
 /*)
  termlib="$xxx"
  d_havetlib="$define"
  echo "Termcap library found." >&4
  ;;
 *)
  case "$termlib" in
  ")
   dflt=y
rp="Your system appears to NOT have termlib-style routines. Is this true?"
   . ./myread
   case "$ans"
 in
   n*|f*) d_havetlib="$define"
    $cat <<'EOM'
Then where are the termlib-style routines kept? Specify either -llibname
or a full pathname (~name ok).

EOM
    dflt="
    rp='Specify termlib path:'
    . ./myread
    termlib=`./filexp $ans`
    ;;
   *)
    d_havetlib="$undef"
    termlib="
    echo "You will have to play around with term.c then." >&4
    ;;
   esac
  echo " ";;
  *)  echo "You said termlib was $termlib before." >&4;;
  esac;;
 esac;;
esac
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_havetlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_ckeypad.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_ckeypad.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_ckeypad: cat cc termlib Setvar
?MAKE: -pick add $@ %<
?S:d_ckeypad:
?S: This variable controls the definition of HAS_CURSES_KEYPAD,
?S: which tells the application that the keypad() curses function
?S: is available.
?S:.
?C:HAS_CURSES_KEYPAD:
?C: This symbol indicates the availability of the keypad() function
?C: of the curses library.
?C:.
?H:#$d_ckeypad
 HAS_CURSES_KEYPAD /**/
?H:.
?LINT:set d_ckeypad
: check for the "keypad()" function in the curses library
echo " "
case "$termlib" in
")
 echo "You don't have a curses library, so I won't waste time looking" >&4
 echo "to see if has the keypad() function." >&4
*)
echo "Checking the curses library ($termlib) for the keypad() function..." >&4
 $cat >c_keypad.c <<'EOCP'
#include <curses.h>
int main() {
 keypad(stdscr, TRUE);
 exit(0);
}
EOCP
 if $cc c_keypad.c >c_keypad.out 2>&1 ; then
  val=$define
  echo "It appears to have the keypad() function."
 else
  val=$undef
  echo "Your curses library doesn't appear to have the keypad() function."
 fi
esac
```

```
set d_ckeypad
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_ckeypad.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_malloc.U,v 3.1 2003/01/21 18:51:51 merijn Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.1  2003/01/21  18:51:51  merijn
?RCS: Moved to modified: Ihdr replaced with Compile
?RCS:
?RCS: $Log: i_malloc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:21  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:i_malloc: cat rm_try Compile Setvar i_mallocmalloc
?MAKE: -pick add $@ %<
?S:i_malloc:
?S: This variable conditionally defines the I_MALLOC symbol, and indicates
?S: whether a C program should include <malloc.h>.
?S:.
?C:I_MALLOC:
?C: This
 symbol, if defined, indicates to the C program that it should
?C: include <malloc.h>.
?C:.
?H:#$i_malloc I_MALLOC  /**/
?H:.
?LINT:set i_malloc
: see if this is a malloc.h system
: we want a real compile instead of Inhdr because some systems have a
: malloc.h that just gives a compile error saying to use stdlib.h instead
echo " "
$cat >try.c <<EOCP
#include <stdlib.h>
#include <malloc.h>
#$i_mallocmalloc I_MALLOCMALLOC
#ifdef I_MALLOCMALLOC
```

```
# include <malloc/malloc.h>
#endif

int main () { return 0; }
EOCP
set try
if eval $compile; then
   echo "<malloc.h> found." >&4
   val="$define"
else
   echo "<malloc.h> NOT found." >&4
   val="$undef"
fi
$rm_try
set i_malloc
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/i_malloc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lib.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:16:47  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:38:08  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:27:40  ram
?RCS: patch32: now uses installation prefix to set the default
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lib libexp: Getfile
 Loc Oldconfig Prefixit Prefixup prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
```

```
?S:lib:
?S: This variable holds the name of the directory in which the user wants
?S: to put public library files for the package in question.  It is most
?S: often a local directory such as /usr/local/lib. Programs using this
?S: variable must be prepared to deal with filename expansion.
?S:.
?S:libexp:
?S: This variable is the same as the lib variable, but is filename expanded
?S: at configuration time, for convenient use in your makefiles.
?S:.
: determine where public libraries go
set lib lib
eval $prefixit
case "$lib" in
")
 dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
 set dflt
 eval $prefixup
 ;;
*)  dflt="$lib";;
esac
echo " "
fn=d~
rp='Where do you want to put the public libraries?'
. ./getfile
lib="$ans"
libexp="$ansexp"
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/lib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_cbrt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_cbrt.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:48  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_cbrt: Inlibc
?MAKE: -pick add $@ %<
```

```
?S:d_cbrt:
?S: This variable conditionally defines the HAS_CBRT symbol, which
?S: indicates to the C program that the cbrt() (cube root) function
?S: is available.
?S:.
?C:HAS_CBRT (CBRT):
?C: This symbol, if defined, indicates that the cbrt() (cube root)
?C: function is available.
?C:.
?H:#$d_cbrt HAS_CBRT /**/
?H:.
?LINT:set
 d_cbrt
: see if cbrt exists
set cbrt d_cbrt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_cbrt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2015 Jarkko Hietaniemi, H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:longdblinfbytes longdblnanbytes doubleinfbytes doublenanbytes: Inlibc \
 cat Compile run rm_try Setvar echo d_longdbl \
 doublekind doublesize longdblkind longdblsize
?MAKE: -pick add $@ %<
?S:longdblinfbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the long double precision infinity.
?S:.
?S:longdblnanbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the long double precision not-a-number.
?S:.
?S:doubleinfbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for the double precision infinity.
?S:.
?S:doublenanbytes:
?S: This variable contains comma-separated list of hexadecimal bytes
?S: for
```

```
 the double precision not-a-number.
?S:.
?C:DOUBLEINFBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes for the double precision infinity.
?C:.
?C:DOUBLENANBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes (0xHH) for the double precision not-a-number.
?C:.
?C:LONGDBLINFBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes for the long double precision infinity.
?C:.
?C:LONGDBLNANBYTES:
?C: This symbol, if defined, is a comma-separated list of
?C: hexadecimal bytes (0xHH) for the long double precision not-a-number.
?C:.
?H:#define DOUBLEINFBYTES  $doubleinfbytes  /**/
?H:#define DOUBLENANBYTES  $doublenanbytes  /**/
?H:#define LONGDBLINFBYTES $longdblinfbytes  /**/
?H:#define LONGDBLNANBYTES $longdblnanbytes  /**/
?H:.
?F:!try
: Check what kind of inf/nan your system has
$echo "Checking the kind of infinities and nans you have..." >&4
$echo "(The following tests may crash.  That's
 okay.)" >&4
$cat >try.c <<EOP
#define DOUBLESIZE $doublesize
#$d_longdbl HAS_LONG_DOUBLE
#ifdef HAS_LONG_DOUBLE
#define LONG_DOUBLESIZE $longdblsize
#define LONG_DOUBLEKIND $longdblkind
#endif
#include <math.h>
#include <string.h>
#include <stdio.h>
/* Note that whether the sign bit is on or off
* for NaN depends on the CPU/FPU, and possibly
* can be affected by the build toolchain.
*
* For example for older MIPS and HP-PA 2.0 the quiet NaN is:
* 0x7f, 0xf7, 0xff, 0xff, 0xff, 0xff, 0xff, 0xff
* 0x7f, 0xf4, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00
* (respectively) as opposed to the more usual
* 0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00
*
```

```
* Pre-IEEE-754 floating point format do not even have inf/nan support
* at all.  They might have a "max" value (DBL_MAX), which may be deadly
* to even mention, causing immediate SIGFPE or equivalent: this is
* the case with VAX floating point, for example.
*/
static void bytes(void *v, unsigned int n) {
 unsigned char *p = (unsigned
 char *)v;
 int i;
 for (i = 0; i < n; i++) {
   printf("0x%02x%s", p[i], i < n - 1 ? ", " : "\n");
 }
}
int main(int argc, char *argv[]) {
  /* We cannot use 1.0/0.0 and 0.0/0.0 (with L suffixes for long double)
   * because some compilers are 'smart' and not only warn but refuse to
   * compile such 'illegal' values. */
  double dinf = exp(1e9);
  double dnan = sqrt(-1.0);
#ifdef HAS_LONG_DOUBLE
  long double ldinf = (long double)exp(1e9);
  long double ldnan = (long double)sqrt(-1.0);
# if LONG_DOUBLEKIND == 3 || LONG_DOUBLEKIND == 4
/* the 80-bit long doubles might have garbage in their excess bytes */
   memset((char *)&ldinf + 10, '\0', LONG_DOUBLESIZE - 10);
   memset((char *)&ldnan + 10, '\0', LONG_DOUBLESIZE - 10);
# endif
#endif
 if (argc == 2) {
   switch (argv[1][0]) {
   case '1': bytes(&dinf, sizeof(dinf)); break;
   case '2': bytes(&dnan, sizeof(dnan)); break;
#ifdef HAS_LONG_DOUBLE
   case '3': bytes(&ldinf, sizeof(ldinf)); break;
   case '4': bytes(&ldnan,
 sizeof(ldnan)); break;
#endif
   }
 }
 return 0;
}
EOP
set try
if eval $compile; then
   doubleinfbytes=`$run ./try 1`
   doublenanbytes=`$run ./try 2`
   case "$d_longdbl" in
   $define)
```

```
    longdblinfbytes=`$run ./try 3`
    longdblnanbytes=`$run ./try 4`
    ;;
  esac
else
  # Defaults in case the above test program failed.
  case "$doublekind" in
  1) # IEEE 754 32-bit LE
    doubleinfbytes='0x00, 0x00, 0xf0, 0x7f'
    doublenanbytes='0x00, 0x00, 0xf8, 0x7f'
    ;;
  2) # IEEE 754 32-bit BE
    doubleinfbytes='0x7f, 0xf0, 0x00, 0x00'
    doublenanbytes='0x7f, 0xf8, 0x00, 0x00'
    ;;
  3) # IEEE 754 64-bit LE
    doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0, 0x7f'
    doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8, 0x7f'
    ;;
  4) # IEEE 754 64-bit BE
    doubleinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
    doublenanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'

 ;;
  5) # IEEE 754 128-bit LE
    doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0,
0x7f'
    doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8,
0x7f'
    ;;
  6) # IEEE 754 128-bit BE
    doubleinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    doublenanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  7) # IEEE 754 64-bit mixed: 32-bit LEs in BE
    doubleinfbytes='0x00, 0x00, 0xf0, 0x7f, 0x00, 0x00, 0x00, 0x00'
    doublenanbytes='0x00, 0x00, 0xf8, 0x7f, 0x00, 0x00, 0x00, 0x00'
    ;;
  8) # IEEE 754 64-bit mixed: 32-bit BEs in LE
    doubleinfbytes='0x00, 0x00, 0x00, 0x00, 0x7f, 0xf0, 0x00, 0x00'
    doublenanbytes='0x00, 0x00, 0x00, 0x00, 0x7f, 0xf8, 0x00, 0x00'
    ;;
  9|10|11|12|13|14) # VAX/Cray/IBM floating
 point formats, no inf/nan.
    doubleinfbytes=$undef
    doublenanbytes=$undef
```

```
    ;;
  *) # No idea.
    doubleinfbytes=$undef
    doublenanbytes=$undef
    ;;
  esac
  case "$longdblkind" in
  1) # IEEE 754 128-bit LE
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xff,
0x7f'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff,
0x7f'
    ;;
  2) # IEEE 754 128-bit BE
    longdblinfbytes='0x7f, 0xff, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  3) # IEEE 754 80-bit LE, 12 or 16 bytes (x86)
    case "$longdblsize" in
    12) # x86 32-bit (96 bits, or 4 x 32, or 12 x 8)
      longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff, 0x7f,
 0x00, 0x00'
      longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xc0, 0xff, 0x7f, 0x00, 0x00'
      ;;
    16) # x86_64
      longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x80, 0xff, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
      longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xc0, 0xff, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
      ;;
    *)  # No idea.
      longdblinfbytes=$undef
      longdblnanbytes=$undef
    ;;
    esac
    ;;
  4) # IEEE 754 80-bit BE, 12 or 16 bytes
    case "$longdblsize" in
    12) # 32-bit system
      longdblinfbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
      longdblnanbytes='0x7f, 0xff, 0xc0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00'
      ;;
    16) # 64-bit system
      longdblinfbytes='0x7f, 0xff, 0x80, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
```

```
        longdblnanbytes='0x7f, 0xff, 0xc0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
        ;;
    *)  # No idea.
        longdblinfbytes=$undef
        longdblnanbytes=$undef
    ;;
    esac
    ;;
  5) # 128-bit LE-LE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0,
0x7f'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8,
0x7f'
    ;;
  6) # 128-bit BE-BE "double double"
    longdblinfbytes='0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  7) # 128-bit LE-BE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf0, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'

    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0xf8, 0x7f, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  8) # 128-bit BE-LE "double double"
    longdblinfbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x7f, 0xf0, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    longdblnanbytes='0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x7f, 0xf8, 0x00, 0x00, 0x00, 0x00, 0x00,
0x00'
    ;;
  9|10|11|12|13|14) # VAX/Cray/IBM floating point formats, no inf/nan.
    longdblinfbytes=$undef
    longdblnanbytes=$undef
    ;;
  *) # No idea.
    longdblinfbytes=$undef
    longdblnanbytes=$undef
    ;;
  esac
fi
# In case the program crashed the values are empty, turn them undef.
case "$doubleinfbytes" in
") doubleinfbytes=$undef ;;
esac
```

```
case "$doublenanbytes" in
") doublenanbytes=$undef ;;
esac
case "$longdblinfbytes" in
") longdblinfbytes=$undef ;;
esac
case "$longdblnanbytes" in
") longdblnanbytes=$undef ;;
esac
$rm_try
```

Found in path(s):
*
 /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/infnan.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_getlogin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_getlogin.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:41  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_getlogin: Inlibc
?MAKE: -pick add $@ %<
?S:d_getlogin:
?S: This variable conditionally defines the HAS_GETLOGIN symbol, which
?S: indicates to the C program that the getlogin() routine is available
?S: to get the login name.
?S:.
?C:HAS_GETLOGIN :
?C: This symbol,
 if defined, indicates that the getlogin routine is
?C: available to get the login name.
?C:.
?H:#$d_getlogin HAS_GETLOGIN  /**/
?H:.
?LINT:set d_getlogin
: see if getlogin exists
```

```
set getlogin d_getlogin
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_getlogin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cppstdin.U,v $
?RCS: Revision 3.0.1.4  1994/10/29  16:08:34  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:05:38  ram
?RCS: patch16: comment for CPPLAST was missing
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:18:58  ram
?RCS: patch15: new variables cpprun and cpplast, guaranteed wrapper-free
?RCS: patch15: cppstdin now tries to use cc, even at the cost of a wrapper
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:53  ram
?RCS: patch6:
 remove wrapper when not actually used
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:38  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cppstdin cppminus cpprun cpplast: contains test Myread Oldconfig Loc \
 cpp +cc rm hint osname gccversion startsh eunicefix
?MAKE: -pick add $@ %<
?S:cppstdin:
?S: This variable contains the command which will invoke the C
?S: preprocessor on standard input and put the output to stdout.
?S: It is primarily used by other Configure units that ask about
?S: preprocessor symbols.
?S:.
?S:cppminus:
?S: This variable contains the second part of the string which will invoke
?S: the C preprocessor on the standard input and produce to standard
?S: output.  This variable will have the value "-" if cppstdin needs
```

```
?S: a minus to specify standard input, otherwise the value is "".
?S:.
?S:cpprun:
?S: This variable contains the command which will invoke a C preprocessor
?S: on standard input and put the output to stdout. It is guaranteed not
?S: to be a wrapper
 and may be a null string if no preprocessor can be
?S: made directly available. This preprocessor might be different from the
?S: one used by the C compiler. Don't forget to append cpplast after the
?S: preprocessor options.
?S:.
?S:cpplast:
?S: This variable has the same functionality as cppminus, only it applies to
?S: cpprun and not cppstdin.
?S:.
?C:CPPSTDIN:
?C: This symbol contains the first part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  Typical value of "cc -E" or "/lib/cpp", but it can also
?C: call a wrapper. See CPPRUN.
?C:.
?C:CPPMINUS:
?C: This symbol contains the second part of the string which will invoke
?C: the C preprocessor on the standard input and produce to standard
?C: output.  This symbol will have the value "-" if CPPSTDIN needs a minus
?C: to specify standard input, otherwise the value is "".
?C:.
?C:CPPRUN:
?C: This symbol contains the string which will invoke a C preprocessor on
?C: the
 standard input and produce to standard output. It needs to end
?C: with CPPLAST, after all other preprocessor flags have been specified.
?C: The main difference with CPPSTDIN is that this program will never be a
?C: pointer to a shell wrapper, i.e. it will be empty if no preprocessor is
?C: available directly to the user. Note that it may well be different from
?C: the preprocessor used to compile the C program.
?C:.
?C:CPPLAST:
?C: This symbol is intended to be used along with CPPRUN in the same manner
?C: symbol CPPMINUS is used with CPPSTDIN. It contains either "-" or "".
?C:.
?H:#define CPPSTDIN "$cppstdin"
?H:#define CPPMINUS "$cppminus"
?H:#define CPPRUN "$cpprun"
?H:#define CPPLAST "$cpplast"
?H:.
?F:cppstdin !testcpp.out !testcpp.c
?T:wrapper x_cpp x_minus ok
```

```
: see how we invoke the C preprocessor
echo " "
echo "Now, how can we feed standard input to your C preprocessor..." >&4
cat <<'EOT' >testcpp.c
#define ABC abc
#define XYZ xyz
ABC.XYZ
EOT
cd ..
if $test ! -f cppstdin;
 then
 echo "$startsh" >cppstdin
if $test "X$osname" = "Xaix" -a "X$gccversion" = X; then
?X: AIX cc -E doesn't show the absolute headerfile
?X: locations but we'll cheat by using the -M flag.
 echo 'cat >.$$.c; rm -f .$$.u; '"$cc" ${1+"$@"} -M -c .$$.c 2>/dev/null; \
 test -s .$$.u && \
 awk '"""$2 ~ /\.h$/ { print "# 0 \""$2"\"" }"""' .$$.u; \
 rm -f .$$.o .$$.u; '"$cc" -E ${1+"$@"} .$$.c; rm .$$.c' >> cppstdin
else
 echo 'cat >.$$.c; '"$cc" -E ${1+"$@"} .$$.c; rm .$$.c' >>cppstdin
fi; else
 echo "Keeping your $hint cppstdin wrapper."
fi
chmod 755 cppstdin
$eunicefix cppstdin
wrapper=`pwd`/cppstdin
ok='false'
cd UU

?X:
?X: We'll run the cpp tests again if we don't have any valid C preprocessor
?X: yet or don't know how to proceed without a wrapper (in which case cpprun
?X: is empty and that's really annoying...)
?X:
if $test "X$cppstdin" != "X" && \
 $cppstdin $cppminus <testcpp.c >testcpp.out 2>&1 && \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
then
 echo "You used to use
 $cppstdin $cppminus so we'll use that again."
 case "$cpprun" in
 ") echo "But let's see if we can live without a wrapper..." ;;
 *)
  if $cpprun $cpplast <testcpp.c >testcpp.out 2>&1 && \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
   echo "(And we'll use $cpprun $cpplast to preprocess directly.)"
```

```
   ok='true'
  else
   echo "(However, $cpprun $cpplast does not work, let's see...)"
  fi
  ;;
 esac
else
 case "$cppstdin" in
 '') ;;
 *)
  echo "Good old $cppstdin $cppminus does not seem to be of any help..."
  ;;
 esac
fi

if $ok; then
 : nothing
elif echo 'Maybe """$cc"' -E" will work...'; \
 $cc -E <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc -E"
 x_minus='';
elif echo 'Nope...maybe """$cc"' -E -" will work...'; \
 $cc -E - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yup, it does."
 x_cpp="$cc -E"
 x_minus='-';
elif echo 'Nope...maybe """$cc"'
 -P" will work...'; \
 $cc -P <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Yipee, that works!"
 x_cpp="$cc -P"
 x_minus='';
elif echo 'Nope...maybe """$cc"' -P -" will work...'; \
 $cc -P - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "At long last!"
 x_cpp="$cc -P"
 x_minus='-';
elif echo 'No such luck, maybe "$cpp" will work...'; \
 $cpp <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "It works!"
 x_cpp="$cpp"
 x_minus='';
```

```
elif echo 'Nixed again...maybe "'$cpp' -" will work...'; \
 $cpp - <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 echo "Hooray, it works!  I was beginning to wonder."
 x_cpp="$cpp"
 x_minus='-';
elif echo 'Uh-uh.  Time to get fancy.  Trying a wrapper...'; \
 $wrapper <testcpp.c >testcpp.out 2>&1; \
 $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
 x_cpp="$wrapper"
 x_minus=''
 echo
 "Eureka!"
else
 dflt=''
 rp="No dice.  I can't find a C preprocessor.  Name one:"
 . ./myread
 x_cpp="$ans"
 x_minus=''
 $x_cpp <testcpp.c >testcpp.out 2>&1
 if $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1 ; then
  echo "OK, that will do." >&4
 else
echo "Sorry, I can't get that to work.  Go find one and rerun Configure." >&4
  exit 1
 fi
fi

case "$ok" in
false)
 cppstdin="$x_cpp"
 cppminus="$x_minus"
 cpprun="$x_cpp"
 cpplast="$x_minus"
?X:
?X: If /lib/cpp is used, try using a wrapper to increase our chances to have
?X: the C compiler and our $cppstdin agree on the same symbols... However,
?X: since cpprun is guaranteed not to be a wrapper, we must clear it if the
?X: only preprocessor we found was a wrapper, with all our luck...
?X:
 set X $x_cpp
 shift
 case "$1" in
 "$cpp")
  echo "Perhaps can we force $cc -E using a wrapper..."
  if $wrapper <testcpp.c >testcpp.out 2>&1; \
   $contains 'abc.*xyz' testcpp.out >/dev/null 2>&1
  then
```

```
  echo "Yup, we can."
  cppstdin="$wrapper"
  cppminus=";
 else
  echo
"Nope, we'll have to live without it..."
 fi
 ;;
esac
case "$cpprun" in
"$wrapper")
 cpprun="
 cpplast="
 ;;
esac
;;
esac

case "$cppstdin" in
"$wrapper"|'cppstdin') ;;
*) $rm -f $wrapper;;
esac
$rm -f testcpp.c testcpp.out
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/cppstdin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_fdim: Inlibc
?MAKE: -pick add $@ %<
?S:d_fdim:
?S: This variable conditionally defines the HAS_FDIM symbol, which
?S: indicates to the C program that the fdim() routine is available.
?S:.
?C:HAS_FDIM:
?C: This symbol, if defined, indicates that the fdim routine is
?C: available to do the positive difference function.
?C:.
?H:#$d_fdim HAS_FDIM  /**/
?H:.
?LINT:set d_fdim
: see if fdim exists
set fdim d_fdim
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fdim.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: h_sysfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: h_sysfile.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:h_sysfile: Nothing
?MAKE: -pick add $@ %<
?S:h_sysfile:
?S: This is variable gets set in various places to tell i_sys_file that
?S: <sys/file.h> should be included.
?S:.
: Initialize h_sysfile
h_sysfile=false
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/h_sysfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: i_dld.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: i_dld.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:20:07  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:i_dld: Inhdr
```

```
?MAKE: -pick add $@ %<
?S:i_dld:
?S: This variable conditionally defines the I_DLD symbol, which
?S: indicates to the C program that <dld.h> (GNU dynamic loading)
?S: exists and should be included.
?S:.
?C:I_DLD:
?C: This symbol, if defined, indicates that <dld.h>
 exists and should
?C: be included before using GNU dynamic loading features.
?C:.
?H:#$i_dld I_DLD /**/
?H:.
?LINT:set i_dld
: see if dld is available
set dld.h i_dld
eval $inhdr
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/i_dld.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Begin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Begin.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:56:35  ram
?RCS: patch61: added Extractall dependency
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:25:08  ram
?RCS: patch49: avoid an empty rmlist: systems might choke on it (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/31  09:32:20  ram
?RCS: patch44: created
?RCS:
?X:
?X: This file comes after option processing had been done and after all
?X: the default values have been set up. It marks the beginning
 of questions.
?X: It is important that Options be listed *after* Myinit to ensure that the
?X: default initializations performed by Init and Myinit will not clobber
```

```
?X: any setting done on the command line via -D or -U.
?X:
?MAKE:Begin: Myinit Options package Extractall
?MAKE: -pick add $@ %<
: Eunice requires " " instead of "", can you believe it
echo " "
: Here we go...
echo "Beginning of configuration questions for $package."

?X: Make sure the rm below is given a non-empty list for some systems.
?X: This is run only when within the UU directory, hence we can safely
?X: attempt to rm a non-existent 'X' file...
trap 'echo " "; test -d ../UU && rm -rf X $rmlist; exit 1' 1 2 3 15
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Begin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_sgndchr.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:44:25  ram
?RCS: patch61: added a ?F: metalint hint
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  14:00:24  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_sgndchr: cat rm +cc +ccflags Setvar
?MAKE: -pick add $@ %<
?S:d_sgndchr:
?S: This variable conditionally defines the SIGNEDCHAR symbol, which
?S: indicates to the C program
 that signed characters are available.
?S:.
?C:SIGNEDCHAR:
?C: This symbol, if defined, indicates that characters are a signed type.
?C: If not defined, things declared as signed characters (and that make
```

```
?C: use of negative values) should probably be declared as shorts instead.
?C:.
?H:#$d_sgndchr SIGNEDCHAR /**/
?H:.
?F:!try
?LINT:set d_sgndchr
: check for signed chars
echo " "
echo "Checking to see if your C compiler can do signed chars..." >&4
$cat >try.c <<'EOCP'
int main()
{
 char c = 0;

 c--;
 exit(c >= 0);
}
EOCP
$cc $ccflags -o try try.c
if ./try; then
 val="$define"
 echo "It certainly can."
else
 val="$undef"
 echo "It can't.  I'll have to make some things type short."
fi
set d_sgndchr
eval $setvar
$rm -f try*
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_sgndchr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_endnent.U,v 3.0 1993/08/18 12:06:09 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_endnent.U,v $
?RCS: Revision 3.0  1993/08/18  12:06:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_endnent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endnent:
?S: This variable conditionally defines HAS_ENDNETENT if endnetent() is
?S: available to close whatever was being used for network queries.
?S:.
?C:HAS_ENDNETENT:
?C: This symbol, if defined, indicates that the endnetent() routine is
?C: available to close whatever was being used for network
 queries.
?C:.
?H:#$d_endnent HAS_ENDNETENT  /**/
?H:.
?LINT:set d_endnent
: see if endnetent exists
set endnetent d_endnent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endnent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_llrint: Inlibc
?MAKE: -pick add $@ %<
?S:d_llrint:
?S: This variable conditionally defines the HAS_LLRINT symbol, which
?S: indicates to the C program that the llrint() routine is available
?S: to return the long long value closest to a double (according
?S: to the current rounding mode).
?S:.
?C:HAS_LLRINT:
?C: This symbol, if defined, indicates that the llrint routine is
?C: available to return the long long value closest to a double
?C: (according to the current rounding mode).
?C:.
?H:#$d_llrint HAS_LLRINT  /**/
?H:.
?LINT:set d_llrint
: see if llrint exists
set llrint d_llrint
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llrint.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_dosuid.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Tye McQueen <tye@metronet.com> added safe setuid script checks.
?RCS:
?RCS: $Log: d_dosuid.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:33:03  ram
?RCS: patch61: moved unit to TOP via a ?Y: layout directive
?RCS: patch61: tell them /dev/fd is not about floppy disks
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:12:08  ram
?RCS: patch36: added checks for secure setuid scripts (Tye McQueen)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:55  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?MAKE:d_dosuid d_suidsafe: cat contains ls rm test Myread Setvar \
 Oldconfig Guess package hint patchlevel
?MAKE: -pick add $@ %<
?S:d_suidsafe:
?S: This variable conditionally defines SETUID_SCRIPTS_ARE_SECURE_NOW
?S: if setuid scripts can be secure.  This test looks in /dev/fd/.
?S:.
?S:d_dosuid:
?S: This variable conditionally defines the symbol DOSUID, which
?S: tells the C program that it should insert setuid emulation code
?S: on hosts which have setuid #! scripts disabled.
?S:.
?C:SETUID_SCRIPTS_ARE_SECURE_NOW:
?C: This symbol, if defined, indicates that the bug that prevents
?C: setuid scripts from being secure is not present in this kernel.
?C:.
?C:DOSUID:
?C: This symbol, if defined, indicates that the C program should
?C: check the script that it is executing for setuid/setgid bits, and
?C: attempt to emulate setuid/setgid on systems that have disabled
?C: setuid #! scripts because the kernel can't do it securely.
?C: It is up to the package
```

```
 designer to make sure that this emulation
?C: is done securely.  Among other things, it should do an fstat on
?C: the script it just opened to make sure it really is a setuid/setgid
?C: script, it should make sure the arguments passed correspond exactly
?C: to the argument on the #! line, and it should not trust any
?C: subprocesses to which it must pass the filename rather than the
?C: file descriptor of the script to be executed.
?C:.
?H:#$d_suidsafe SETUID_SCRIPTS_ARE_SECURE_NOW /**/
?H:#$d_dosuid DOSUID  /**/
?H:.
?Y:TOP
?F:!reflect
?LINT: set d_suidsafe
: see if setuid scripts can be secure
$cat <<EOM

Some kernels have a bug that prevents setuid #! scripts from being
secure.  Some sites have disabled setuid #! scripts because of this.

First let's decide if your kernel supports secure setuid #! scripts.
(If setuid #! scripts would be secure but have been disabled anyway,
don't say that they are secure if asked.)

EOM

val="$undef"
if $test -d /dev/fd; then
 echo "#!$ls" >reflect
 chmod
 +x,u+s reflect
 ./reflect >flect 2>&1
 if $contains "/dev/fd" flect >/dev/null; then
  echo "Congratulations, your kernel has secure setuid scripts!" >&4
  val="$define"
 else
  $cat <<EOM
If you are not sure if they are secure, I can check but I'll need a
username and password different from the one you are using right now.
If you don't have such a username or don't want me to test, simply
enter 'none'.

EOM
  rp='Other username to test security of setuid scripts with?'
  dflt='none'
  . ./myread
  case "$ans" in
  n|none)
```

```
  case "$d_suidsafe" in
  ") echo "I'll assume setuid scripts are *not* secure." >&4
   dflt=n;;
  "$undef")
   echo "Well, the $hint value is *not* secure." >&4
   dflt=n;;
  *) echo "Well, the $hint value *is* secure." >&4
   dflt=y;;
  esac
  ;;
 *)
  $rm -f reflect flect
  echo "#!$ls" >reflect
  chmod +x,u+s reflect
  echo >flect
  chmod a+w flect
  echo "'su" will (probably) prompt you for "'$ans's password."
  su $ans -c './reflect
>flect'
  if $contains "/dev/fd" flect >/dev/null; then
   echo "Okay, it looks like setuid scripts are secure." >&4
   dflt=y
  else
   echo "I don't think setuid scripts are secure." >&4
   dflt=n
  fi
  ;;
 esac
 rp='Does your kernel have *secure* setuid scripts?'
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
fi
else
 echo "I don't think setuid scripts are secure (no /dev/fd directory)." >&4
 echo "(That's for file descriptors, not floppy disks.)"
 val="$undef"
fi
set d_suidsafe
eval $setvar

$rm -f reflect flect

: now see if they want to do setuid emulation
if $test $patchlevel -lt 11; then
echo " "
```

```
val="$undef"
case "$d_suidsafe" in
"$define")
 val="$undef"
 echo "No need to emulate SUID scripts since they are secure here." >&4
 ;;
*)
 $cat <<EOM
Some systems have disabled setuid scripts, especially systems where
setuid scripts cannot be secure.  On systems where setuid scripts have
been disabled, the setuid/setgid bits on scripts are
 currently
useless.  It is possible for $package to detect those bits and emulate
setuid/setgid in a secure fashion.  This emulation will only work if
setuid scripts have been disabled in your kernel.

EOM
 case "$d_dosuid" in
 "$define") dflt=y ;;
 *) dflt=n ;;
 esac
 rp="Do you want to do setuid/setgid emulation?"
 . ./myread
 case "$ans" in
 [yY]*) val="$define";;
 *) val="$undef";;
 esac
 ;;
esac
set d_dosuid
eval $setvar
else
   case "$d_dosuid" in
 "$define")
 cat >&4 <<EOH

SUID emulation has been removed for 5.12
Please re-run Configure without -Dd_dosuid

EOH
 exit 1;
 ;;
   esac
   d_dosuid=undef
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_dosuid.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_sanemcmp.U,v 3.0.1.1 1997/02/28 15:41:19 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_sanemcmp.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:41:19  ram
?RCS: patch61: created
?RCS:
?RCS:
?MAKE:d_sanemcmp: Compile cat d_memcmp rm_try run \
 i_memory i_stdlib i_string i_unistd Oldconfig Setvar
?MAKE: -pick add $@ %<
?S:d_sanemcmp:
?S: This variable conditionally defines the HAS_SANE_MEMCMP symbol if
?S: the memcpy() routine is available and can be used to compare relative
?S: magnitudes of chars with their high bits set.
?S:.
?C:HAS_SANE_MEMCMP:
?C: This
 symbol, if defined, indicates that the memcmp routine is available
?C: and can be used to compare relative magnitudes of chars with their high
?C: bits set.  If it is not defined, roll your own version.
?C:.
?H:#$d_sanemcmp HAS_SANE_MEMCMP /**/
?H:.
?F:!try
?LINT: set d_sanemcmp
: can memcmp be trusted to compare relative magnitude?
?X: assume the worst
val="$undef"
case "$d_memcmp" in
"$define")
 echo " "
 echo "Checking if your memcmp() can compare relative magnitude..." >&4
 $cat >try.c <<EOCP
#$i_memory I_MEMORY
#$i_stdlib I_STDLIB
#$i_string I_STRING
#$i_unistd I_UNISTD
EOCP
```

```
 $cat >>try.c <<'EOCP'
#include <stdio.h>
#ifdef I_MEMORY
#  include <memory.h>
#endif
#ifdef I_STDLIB
#  include <stdlib.h>
#endif
#ifdef I_STRING
#  include <string.h>
#else
#  include <strings.h>
#endif
#ifdef I_UNISTD
#  include <unistd.h>  /* Needed for NetBSD */
#endif
int main()
{
char a = -1;
char b = 0;
if ((a < b) && memcmp(&a, &b, 1) < 0)
 exit(1);
exit(0);
}
EOCP
 set try
 if eval
 $compile_ok; then
  if $run ./try 2>/dev/null; then
   echo "Yes, it can."
   val="$define"
  else
   echo "No, it can't (it uses signed chars)."
  fi
 else
  echo "(I can't compile the test program, so we'll assume not...)"
 fi
 ;;
esac
$rm_try
set d_sanemcmp
eval $setvar
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_sanemcmp.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_erfc: Inlibc
?MAKE: -pick add $@ %<
?S:d_erfc:
?S: This variable conditionally defines the HAS_ERFC symbol, which
?S: indicates to the C program that the erfc() routine is available.
?S:.
?C:HAS_ERFC:
?C: This symbol, if defined, indicates that the erfc routine is
?C: available to do the complementary error function.
?C:.
?H:#$d_erfc HAS_ERFC  /**/
?H:.
?LINT:set d_erfc
: see if erfc exists
set erfc d_erfc
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_erfc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_tzmin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_tzmin.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:16:58  ram
?RCS: patch36: call ./bsd explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_tzmin: contains cppstdin cppminus timeincl rm Setvar Guess
?MAKE: -pick add $@ %<
?S:d_tzmin:
?S: This symbol conditionally defines TZ_MINUTESWEST if the system uses
?S: tz_minuteswest in time header instead of timezone.
?S:.
?C:TZ_MINUTESWEST:
?C: This
```

```
 symbol is defined if this system uses tz_minuteswest
?C: in time header instead of timezone.
?C: If not defined, you may have to use struct timeb and ftime() rather
?C: than the new gettimeofday() system call.
?C:.
?H:#$d_tzmin TZ_MINUTESWEST  /**/
?H:.
?LINT:set d_tzmin
: see if tz_minuteswest is defined in time header
echo " "
val="$undef"
$cppstdin $cppminus < $timeincl > try 2>&1
if $contains 'tz_minuteswest' try >/dev/null 2>&1; then
echo "You have tz_minuteswest defined in $timeincl rather than timezone." >&4
 val="$define"
elif $contains 'timezone' try >/dev/null 2>&1; then
echo "You have timezone defined in $timeincl rather than tz_minuteswest." >&4
else
 echo "Your $timeincl file looks strange." >&4
fi
if ./bsd; then
 case "$d_tzmin" in
 "$undef") echo "(Maybe your system is an USG one after all?)";;
 esac
fi
set d_tzmin
eval $setvar
$rm -f try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_tzmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_setpwent.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_setpwent.U,v $
?RCS:
?MAKE:d_setpwent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setpwent:
?S: This variable conditionally defines the HAS_SETPWENT symbol, which
?S: indicates to the C program that the setpwent() routine is available
?S: for initializing sequential access to the passwd database.
```

```
?S:.
?C:HAS_SETPWENT:
?C: This symbol, if defined, indicates that the setpwent routine is
?C: available for initializing sequential access of the passwd database.
?C:.
?H:#$d_setpwent HAS_SETPWENT  /**/
?H:.
?LINT:set d_setpwent
: see if setpwent exists
set setpwent d_setpwent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setpwent.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:d_mprotect: Inlibc
?MAKE: -pick add $@ %<
?S:d_mprotect:
?S: This variable conditionally defines HAS_MPROTECT if mprotect() is
?S: available to modify the access protection of a memory mapped file.
?S:.
?C:HAS_MPROTECT:
?C: This symbol, if defined, indicates that the mprotect system call is
?C: available to modify the access protection of a memory mapped file.
?C:.
?H:#$d_mprotect HAS_MPROTECT  /**/
?H:.
?LINT:set d_mprotect
: see if mprotect exists
set mprotect d_mprotect
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_mprotect.U
No license file was found, but licenses were detected in source scan.

```
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_lround: Inlibc
?MAKE: -pick add $@ %<
?S:d_lround:
?S: This variable conditionally defines the HAS_LROUND symbol, which
?S: indicates to the C program that the lround() routine is available
?S: to return the integral value nearest to x.
?S:.
?C:HAS_LROUND:
?C: This symbol, if defined, indicates that the lround routine is
?C: available to return the nearest integral value.
?C:.
?H:#$d_lround HAS_LROUND  /**/
?H:.
?LINT:set d_lround
: see if lround exists
set lround d_lround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_lround.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Loc.U 14 2006-08-28 16:51:14Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Loc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:04:16  ram
?RCS: patch61: allow users to specify paths on the command line
?RCS: patch61: will now substitute cp for ln if not supported
?RCS:
?RCS: Revision 3.0.1.9  1995/09/25  09:11:24  ram
?RCS: patch59: commented the purpose of the #un-def directive
?RCS: patch59: abort Configure run when mandatory command is missing
?RCS:
?RCS: Revision 3.0.1.8  1995/07/25  13:40:40  ram
?RCS: patch56: now knows about
 OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.7  1995/01/11  15:13:37  ram
```

```
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS: patch45: added path lookup for the 'comm' program
?RCS:
?RCS: Revision 3.0.1.6  1994/10/29  15:56:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: be careful and guard against wildcard searching (ADO)
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  06:54:55  ram
?RCS: patch30: now locates find
?RCS:
?RCS: Revision 3.0.1.4  1994/05/13  15:18:15  ram
?RCS: patch27: added byacc to the trylist (ADO)
?RCS: patch27: lint lines reformatted (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:01:44  ram
?RCS: patch16: added metalint hint on changed PATH variable
?RCS:
?RCS: Revision 3.0.1.2  1993/12/15  08:16:52  ram
?RCS: patch15: now set _test variable when test is built-in
?RCS: patch15: fixed rare cases where echo is not needed
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  15:47:13  ram
?RCS: patch10: test program not always
 in /bin/test (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script "loc" which can be used to find out
?X: where in a list of directories something is.  It then uses loc to
?X: determine the location of commonly used programs.  It leaves loc sitting
?X: around for other Configure units to use, but arranges for its demise
?X: at the end of Configure.
?X:
?X: To add a new program to find, add it both to the ?MAKE: line and to either
?X: the loclist or trylist variable.
?X:
?X: I put startsh at the end of the dependency list, in order to avoid the
?X: loading of the spitshell unit before the instructions.
?X:
?MAKE:Loc awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort
 submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip: eunicefix n c startsh Instruct sysroot
```

```
?MAKE: -pick weed $@ %<
?LINT:describe awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo egrep emacs expr find flex \
 gmake gzip grep inews ksh less line lint ln lp lpr ls mail mailx \
 make mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee test touch tr troff \
 uname uniq uuname vi zcat zip
?V::pth loclist trylist
?F:./loc test_h
?T:thisthing thing xxx dir file say _test DJGPP
?LINT:change PATH _egrep _ln _make _less
?LINT:extern _exe
: find out where common programs are
echo " "
echo "Locating common programs..." >&4
cat <<EOSC >loc
$startsh
case \$# in
0) exit 1;;
esac
thing=\$1
shift
dflt=\$1
shift
for dir in \$*; do
 case "\$thing" in
 .)
 if test -d \$dir/\$thing; then
  echo \$dir
  exit 0
 fi
 ;;
 *)
?X: Be careful in case thing includes wildcards that might expand
 to multiple
?X: files.  Choose the last one.  This happens when searching for shared
?X: libraries with version numbers.  How to choose which one we want is
?X: probably an insoluble problem, in general.
?X: Some folks leave things like libc.so.orig around w/o read
?X: permission.  A -r test would handle that, but since ./loc is
?X: also used to find executables (which are installed w/o read
?X: permission on SCO ODT 3.0, we can't include the -r test.
?X: If you need to use an _exe that is different from .exe
?X: you need to set it in Head.U.
 for thisthing in \$dir/\$thing; do
  : just loop through to pick last item
 done
 if test -f \$thisthing; then
```

```
  echo \$thisthing
  exit 0
 elif test "X$_exe" != X -a -f \$thisthing$_exe; then
  echo \$thisthing
  exit 0
 elif test -f \$dir/\$thing.exe; then
  if test -n "$DJGPP"; then
   echo \$dir/\$thing.exe
  elif test "$eunicefix" != ":"; then
   : on Eunice apparently
   echo \$dir/\$thing
  fi
  exit 0
 fi
 ;;
 esac
done
echo \$dflt
exit
 1
EOSC
chmod +x loc
$eunicefix loc
loclist="
?awk:awk
?cat:cat
?chgrp:chgrp
?chmod:chmod
?chown:chown
?comm:comm
?cp:cp
?echo:echo
?expr:expr
?find:find
?grep:grep
?ls:ls
?mkdir:mkdir
?mv:mv
?rm:rm
?sed:sed
?sleep:sleep
?sort:sort
?tail:tail
?touch:touch
?tr:tr
?uniq:uniq
"
trylist="
```

?Mcc:Mcc
?ar:ar
?bash:bash
?bison:bison
?byacc:byacc
?compress:compress
?cpio:cpio
?cpp:cpp
?csh:csh
?date:date
?egrep:egrep
?emacs:emacs
?flex:flex
?gmake:gmake
?gzip:gzip
?inews:inews
?ksh:ksh
?less:less
?line:line
?lint:lint
?ln:ln
?lp:lp
?lpr:lpr
?mail:mail
?mailx:mailx
?make:make
?more:more
?nm:nm
?nroff:nroff
?perl:perl
?pg:pg
?pmake:pmake
?pr:pr
?rmail:rmail
?sendmail:sendmail
?shar:shar
?smail:smail
?submit:submit
?tar:tar
?tbl:tbl
?tee:tee
?test:test
?troff:troff
?uname:uname
?uuname:uuname
?vi:vi
?zcat:zcat
?zip:zip

```
"
?LINT:set awk ar bash bison byacc cat chgrp chmod chown \
 comm compress cp cpio cpp csh date echo emacs expr find flex \
 gmake gzip grep inews ksh line lint lp lpr ls mail mailx
 \
 mkdir more mv nm nroff perl pg pmake pr rm rmail sed sendmail \
 shar sleep smail sort submit tail tar tbl tee touch tr troff \
 uname uniq uuname vi zcat zip
pth=`echo $PATH | sed -e "s/$p_/ /g"`
pth="$pth $sysroot/lib $sysroot/usr/lib"
for file in $loclist; do
?X:
?X: Allow them to -Dmake=pmake on the command line for instance...
?X: If the file is not fully qualified, as in -Dmake=pmake, then we
?X: look the for the specified command (pmake here). If they say
?X: -Dmake=/sbin/make for instance, then we make sure the file
?X: exists, or we die...
?X:
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   echo "WARNING: no $xxx -- ignoring your setting for $file." >&4
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo
 "I don't know where '$file' is, and my life depends on it." >&4
  echo "Go find a public domain implementation or fix your PATH setting!" >&4
  exit 1
  ;;
 esac
```

```
done
echo " "
echo "Don't worry if any of the following aren't found..."
say=offhand
for file in $trylist; do
?X: Allow them to -Dmake=pmake on the command line for instance (see above)
 eval xxx=\$$file
 case "$xxx" in
 /*|?:[\\/]*)
  if test -f "$xxx"; then
   : ok
  else
   echo "WARNING: no $xxx -- ignoring your setting for $file." >&4
   xxx=`./loc $file $file $pth`
  fi
  ;;
 ") xxx=`./loc $file $file $pth`;;
 *) xxx=`./loc $xxx $xxx $pth`;;
 esac
 eval $file=$xxx$_exe
 eval _$file=$xxx
 case "$xxx" in
 /*)
  echo $file is in $xxx.
  ;;
?X: Under OS/2, we have PC-like paths
 ?:[\\/]*)
  echo $file is in $xxx.
  ;;
 *)
  echo "I don't see $file out there, $say."
  say=either
  ;;
 esac
done
case "$egrep" in
egrep)
 echo "Substituting grep for egrep."
 egrep=$grep
 _egrep=$grep
 ;;
esac
@if less
case "$less"
 in
") ;;
*) if $less -R </dev/null >/dev/null 2>&1; then
        echo "Substituting less -R for less."
```

```
        less="$less -R"
        _less=$less
 fi
 ;;
esac
@end
@if ln
case "$ln" in
ln)
 echo "Substituting cp for ln."
 ln=$cp
 _ln=$cp
 ;;
esac
@end
@if make || gmake
case "$make" in
make)
 case "$gmake" in
 gmake)
 echo "I can't find make or gmake, and my life depends on it." >&4
 echo "Go find a public domain implementation or fix your PATH setting!" >&4
 exit 1
 ;;
 esac
 ;;
esac
case "$gmake" in
gmake) ;;
*) # We can't have osname yet.
 if test -f "/system/gnu_library/bin/ar.pm"; then # Stratus VOS
  # Assume that gmake, if found, is definitely GNU make
  # and prefer it over the system make.
  echo "Substituting gmake for make."
  make=$gmake
  _make=$gmake
 fi
 ;;
esac
@end
case "$test" in
test)
 echo "Hopefully test is built into your sh."
 ;;
*)
 if `sh -c "PATH= test true" >/dev/null 2>&1`; then
  echo "Using the test built into your sh."
?X:
```

```
?X: We need to set both test
 and _test, since Oldconfig.U will use the _test
?X: value to systematically restore computed paths, which may be wrong if
?X: we choose to load an old config.sh generated on another platform.
?X:
  test=test
  _test=test
 fi
 ;;
esac
?LINT:change n c
case "$echo" in
echo)
 echo "Hopefully echo is built into your sh."
 ;;
?X: For those rare cases where we don't need $echo...
") ;;
*)
 echo " "
echo "Checking compatibility between $echo and builtin echo (if any)..." >&4
 $echo $n "hi there$c" >foo1
 echo $n "hi there$c" >foo2
 if cmp foo1 foo2 >/dev/null 2>&1; then
  echo "They are compatible.  In fact, they may be identical."
 else
  case "$n" in
  '-n') n=" c='\c';;
  *) n='-n' c=";;
  esac
  cat <<FOO
They are not compatible!  You are probably running ksh on a non-USG system.
I'll have to use $echo instead of the builtin, since Bourne shell doesn't
have echo built in and we may have to run some Bourne shell scripts.  That
means I'll have to use '$n$c' to suppress newlines now.
  Life is ridiculous.

FOO
  $echo $n "The star should be here-->$c"
  $echo "*"
 fi
 $rm -f foo1 foo2
 ;;
esac

?X: The next part is irrelevant to the real process
# This question was auctioned at YAPC::Europe-2007 in Vienna
# I never promised you could answer it. I only auctioned the question.
cat <<FOO
```

```
The following message is sponsored by

 Dresden.pm<--The stars should be here.

Dear Perl user, system administrator or package
maintainer, the Perl community sends greetings to
you. Do you (emblematical) greet back [Y/n]? n

FOO

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/Loc.U
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?RCS: $Id$
?RCS:
?RCS: Copyright (c) 2000 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_modfl d_modflproto: Inlibc Compile Hasproto cat \
 test ccflags uselongdouble \
 d_sqrtl d_aintl d_copysignl d_ilogbl d_scalbnl d_frexpl d_ldexpl \
 d_truncl
?MAKE: -pick add $@ %<
?S:d_modfl:
?S: This variable conditionally defines the HAS_MODFL symbol, which
?S: indicates to the C program that the modfl() routine is available.
?S:.
?S:d_modflproto:
?S: This symbol, if defined, indicates that the system provides
?S: a prototype for the modfl() function.  Otherwise, it is up
?S: to the program to supply one.  C99 says it should be
?S:  long double modfl(long double, long double *);
?S:.
?C:HAS_MODFL:
?C: This symbol, if defined, indicates that the modfl routine is
?C: available to split a long double
 x into a fractional part f and
?C: an integer part i such that |f| < 1.0 and (f + i) = x.
?C:.
?C:HAS_MODFL_PROTO:
?C: This symbol, if defined, indicates that the system provides
?C: a prototype for the modfl() function.  Otherwise, it is up
?C: to the program to supply one.
?C:.
?H:#$d_modfl HAS_MODFL  /**/
```

```
?H:#$d_modflproto HAS_MODFL_PROTO  /**/
?H:.
?T:message
?LINT:set d_modfl
?LINT:set d_modflproto
?LINT:change ccflags
: see if modfl exists
set modfl d_modfl
eval $inlibc

: see if prototype for modfl is available
echo " "
set d_modflproto modfl define math.h
eval $hasproto

if $test "$uselongdouble" = "$define"; then
  message=""
  if $test "$d_sqrtl" != "$define"; then
 message="$message sqrtl"
  fi
  if $test "$d_modfl" != "$define"; then
 if $test "$d_truncl:$d_copysignl" = "$define:$define"; then
    echo "You have both truncl and copysignl, so I can emulate modfl."
 else
    if $test "$d_aintl:$d_copysignl" = "$define:$define"; then
  echo "You have both aintl
 and copysignl, so I can emulate modfl."
    else
  message="$message modfl"
    fi
 fi
  fi
  if $test "$d_frexpl" != "$define"; then
 if $test "$d_ilogbl:$d_scalbnl" = "$define:$define"; then
    echo "You have both ilogbl and scalbnl, so I can emulate frexpl."
 else
    message="$message frexpl"
 fi
  fi
  if $test "$d_ldexpl" != "$define"; then
 message="$message ldexpl"
  fi

  if $test "$message" != ""; then
 $cat <<EOM >&4

*** You requested the use of long doubles but you do not seem to have
*** the following mathematical functions needed for long double support:
```

```
***    $message
*** Please rerun Configure without -Duselongdouble and/or -Dusemorebits.
*** Cannot continue, aborting.

EOM

 exit 1
   fi
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_modfl.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:byteorder: cat Myread Oldconfig Loc +cc +ccflags rm_try
?MAKE: -pick add $@ %<
?S:byteorder:
?S: This variable holds the byte order. In the following, larger digits
?S: indicate more significance.  The variable byteorder is either 4321
?S: on a big-endian machine, or 1234 on a little-endian, or 87654321
?S: on a Cray ... or 3412 with weird order !
?S:.
?C:BYTEORDER:
?C: This symbol hold the hexadecimal constant defined in byteorder,
?C: i.e. 0x1234 or 0x4321, etc...
?C:.
?H:#define BYTEORDER 0x$byteorder /*
 large digits for MSB */
?H:.
?T:xxx_prompt
?F:!try
: check for ordering of bytes in a long
case "$byteorder" in
")
 $cat <<'EOM'

In the following, larger digits indicate more significance.  A big-endian
machine like a Pyramid or a Motorola 680?0 chip will come out to 4321. A
little-endian machine like a Vax or an Intel 80?86 chip would be 1234. Other
```

```
machines may have weird orders like 3412.  A Cray will report 87654321. If
the test program works the default is probably right.
I'm now running the test program...
EOM
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
 int i;
 union {
  unsigned long l;
  char c[sizeof(long)];
 } u;

 if (sizeof(long) > 4)
  u.l = (0x08070605L << 32) | 0x04030201L;
 else
  u.l = 0x04030201L;
 for (i = 0; i < sizeof(long); i++)
  printf("%c", u.c[i]+'0');
 printf("\n");
 exit(0);
}
EOCP
 xxx_prompt=y
 if $cc $ccflags -o try try.c >/dev/null 2>&1 && ./try > /dev/null; then
  dflt=`./try`
  case "$dflt" in
  [1-4][1-4][1-4][1-4]|12345678|87654321)
   echo
 "(The test program ran ok.)"
   echo "byteorder=$dflt"
   xxx_prompt=n
   ;;
  ????|????????) echo "(The test program ran ok.)" ;;
  *) echo "(The test program didn't run right for some reason.)" ;;
  esac
 else
  dflt='4321'
  cat <<'EOM'
(I can't seem to compile the test program.  Guessing big-endian...)
EOM
 fi
 case "$xxx_prompt" in
 y)
  rp="What is the order of bytes in a long?"
  . ./myread
  byteorder="$ans"
```

```
  ;;
 *) byteorder=$dflt
  ;;
 esac
 ;;
esac
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/byteorder.U
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```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: abortsig.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:02:19  ram
?RCS: patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:20  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:abortsig: Myread Oldconfig Guess cat +cc ccflags rm
?MAKE: -pick add $@ %<
?S:abortsig:
?S: This variable holds the name of the signal used by the abort() call.
?S:.
?C:ABORTSIG:
?C: This symbol holds the signal number (symbol) used by the abort() call. To
?C: actually
 define the signal symbol, <signal.h> should be included.
?C:.
?H:#define ABORTSIG $abortsig  /**/
?H:.
?T:signal
: which signal is sent by abort ?
echo " "
case "$abortsig" in
")
 echo "Checking to see which signal is sent to the process by abort()..." >&4
 echo "abort" > abort.sh
```

```
 chmod +x abort.sh
?X: SIGABRT should replace SIGIOT on USG machines in a near future (1991).
 for signal in SIGIOT SIGILL SIGABRT; do
  case "$abortsig" in
  ") $cat >abort.c <<EOP
/* FIXME: Missing #include <stdlib.h>*/
#include <signal.h>
caught() { exit(0); } /* FIXME: Use _exit() or _Exit() in signal handler  */
int main()
{
#ifdef $signal
 signal($signal, caught);
#endif
 if (-1 == abort())
  exit(1);
 exit(1);
}
EOP
?X: We have to use the abort.sh script otherwise sh behaves strangely on AIX.
   if $cc $ccflags -o abort abort.c >/dev/null 2>&1; then
    (./abort.sh) >/dev/null 2>&1
    case $? in
    0) abortsig="$signal";;
    esac
   fi
   ;;
  esac
 done
 ;;
esac
case "$abortsig" in
") echo
 "(I wasn't able to compute the signal name--guessing)"
 if ./usg; then
  dflt="SIGIOT"
 else
  dflt="SIGILL"
 fi;;
*)  dflt="$abortsig"
 ;;
esac
rp="Which signal does abort() send to the process (signal name)?"
. ./myread
abortsig="$ans"
$rm -f core abort.sh abort abort.c
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/abortsig.U

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```
?RCS: You may distribute under the terms of either the GNU General Public
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?RCS:
?MAKE:d_fegetround: Inlibc
?MAKE: -pick add $@ %<
?S:d_fegetround:
?S: This variable conditionally defines HAS_FEGETROUND if fegetround() is
?S: available to get the floating point rounding mode.
?S:.
?C:HAS_FEGETROUND:
?C: This symbol, if defined, indicates that the fegetround routine is
?C: available to return the macro corresponding to the current rounding
?C: mode.
?C:.
?H:#$d_fegetround HAS_FEGETROUND /**/
?H:.
?LINT:set d_fegetround
: see if fegetround exists
set fegetround d_fegetround
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fegetround.U
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```
?RCS: $Id: d_linuxstd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_linuxstd.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:14:05  ram
?RCS: patch36: created by ADO
?RCS:
?MAKE:d_linuxstd: d_stdstdio cppstdin cppflags cppminus \
 contains rm Setvar Findhdr
?MAKE: -pick add $@ %<
?S:d_linuxstd:
?S: This variable conditionally defines USE_LINUX_STDIO if this system
```

```
?S: has a FILE structure declaring _IO_read_base, _IO_read_ptr,
?S: and _IO_read_end
 in stdio.h.
?S:.
?C:USE_LINUX_STDIO:
?C: This symbol is defined if this system has a FILE structure declaring
?C: _IO_read_base, _IO_read_ptr, and _IO_read_end in stdio.h.
?C:.
?H:#$d_linuxstd USE_LINUX_STDIO  /**/
?H:.
?T:xxx
?LINT:set d_linuxstd
: see if stdio is like that in linux
case "$d_stdstdio" in
"$undef")
 echo " "
 xxx=`./findhdr stdio.h`
 $cppstdin $cppflags $cppminus < "$xxx" > stdio.E
 if $contains 'char.*_IO_read_base' stdio.E >/dev/null 2>&1 && \
  $contains '_IO_read_ptr' stdio.E >/dev/null 2>&1 && \
  $contains '_IO_read_end' stdio.E >/dev/null 2>&1 ; then
   echo "Your stdio looks like linux." >&4
   val="$define"
 else
  echo "You don't have linux stdio, either." >&4
  val="$undef"
 fi
 $rm -f stdio.E
 ;;
*) val="$undef" ;;
esac

set d_linuxstd
eval $setvar

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_linuxstd.U
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?RCS: $Id$
?RCS:
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?RCS:
?MAKE:d_signbit: nvtype Compile Setvar cat run rm_try echo n c i_sunmath
?MAKE: -pick add $@ %<
?S:d_signbit:
?S: This variable conditionally defines the HAS_SIGNBIT symbol, which
```

```
?S: indicates to the C program that the signbit() routine is available
?S: and safe to use with perl's intern NV type.
?S:.
?C:HAS_SIGNBIT:
?C: This symbol, if defined, indicates that the signbit routine is
?C: available to check if the given number has the sign bit set.
?C: This should include correct testing of -0.0.  This will only be set
?C: if the signbit() routine is safe to use with the NV type used internally
?C: in perl.  Users should call Perl_signbit(), which will be #defined to
?C: the system's signbit() function or macro if this symbol is defined.
?C:.
?H:#$d_signbit
 HAS_SIGNBIT  /**/
?H:.
?F:!try
?LINT:set d_signbit
: see if signbit exists
$echo $n "Checking to see if you have signbit() available to work on $nvtype... $c" >&4
$cat >try.c <<EOCP
#$i_sunmath I_SUNMATH
#include <math.h>
#ifdef I_SUNMATH  /* Solaris special math library */
#  include <sunmath.h>
#endif
#define NV $nvtype
int main(int argc, char **argv)
{
   NV x = 0.0;
   NV y = -1.0;
   if ((signbit(x) == 0) && (signbit(y) != 0))
 return 0;
   else
 return 1;
}
EOCP
val="$undef"
set try
if eval $compile; then
   if $run ./try; then
       $echo "Yes." >&4
 val="$define"
   else
       $echo "Signbit seems to be available, but doesn't work as I expected."
       $echo "I won't use it." >&4
 val="$undef"
   fi
else
   $echo "Nope." >&4
```

```
   dflt="$undef"
fi
set d_signbit
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_signbit.U
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```
?RCS: $Id: Configdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Configdir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  14:58:36  ram
?RCS: patch61: have README explicitly mention the package name
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Configdir: package
?MAKE: -pick add $@ %<
: create .config dir to save info across Configure sessions
test -d ../.config || mkdir ../.config
cat >../.config/README <<EOF
This directory created by Configure to save
 information that should
persist across sessions for $package.

You may safely delete it if you wish.
EOF
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Configdir.U
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```
?RCS: $Id: d_wctomb.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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```

```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_wctomb.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:20:43  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_wctomb: Inlibc
?MAKE: -pick add $@ %<
?S:d_wctomb:
?S: This variable conditionally defines the HAS_WCTOMB symbol, which
?S: indicates to the C program that the wctomb() routine is available
?S: to convert a wide character to a multibyte.
?S:.
?C:HAS_WCTOMB (WCTOMB):
?C: This
 symbol, if defined, indicates that the wctomb routine is available
?C: to convert a wide character to a multibyte.
?C:.
?H:#$d_wctomb HAS_WCTOMB  /**/
?H:.
?LINT:set d_wctomb
: see if wctomb exists
set wctomb d_wctomb
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_wctomb.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: scriptdir.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:17:15  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
```

```
?RCS: Revision 3.0.1.2  1995/01/30  14:46:13  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:32:04  ram
?RCS: patch32: now uses installation prefix
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:scriptdir scriptdirexp installscript:
 afs cat test Getfile Loc \
 Oldconfig +bin Prefixit prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:scriptdir:
?S: This variable holds the name of the directory in which the user wants
?S: to put publicly scripts for the package in question.  It is either
?S: the same directory as for binaries, or a special one that can be
?S: mounted across different architectures, like /usr/share. Programs
?S: must be prepared to deal with ~name expansion.
?S:.
?S:scriptdirexp:
?S: This variable is the same as scriptdir, but is filename expanded
?S: at configuration time, for programs not wanting to bother with it.
?S:.
?S:installscript:
?S: This variable is usually the same as scriptdirexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?C:SCRIPTDIR:
?C: This symbol holds the name of the directory in which the user wants
?C: to put publicly executable scripts for the
 package in question.  It
?C: is often a directory that is mounted across diverse architectures.
?C: Programs must be prepared to deal with ~name expansion.
?C:.
?C:SCRIPTDIR_EXP:
?C: This is the same as SCRIPTDIR, but is filename expanded at
?C: configuration time, for use in programs not prepared to do
?C: ~name substitutions at run-time.
?C:.
?H:#define SCRIPTDIR "$scriptdir" /**/
?H:#define SCRIPTDIR_EXP "$scriptdirexp" /**/
?H:.
: determine where public executable scripts go
set scriptdir scriptdir
eval $prefixit
```

```
case "$scriptdir" in
")
 dflt="$bin"
 : guess some guesses
 $test -d /usr/share/scripts && dflt=/usr/share/scripts
 $test -d /usr/share/bin && dflt=/usr/share/bin
 $test -d /usr/local/script && dflt=/usr/local/script
 $test -d $prefixexp/script && dflt=$prefixexp/script
 set dflt
 eval $prefixup
 ;;
*)  dflt="$scriptdir"
 ;;
esac
$cat <<EOM

Some installations have a separate directory just for executable scripts so
that they can mount it across multiple architectures but
 keep the scripts in
one spot.  You might, for example, have a subdirectory of /usr/share for this.
Or you might just lump your scripts in with all your other executables.

EOM
fn=d~
rp='Where do you keep publicly executable scripts?'
. ./getfile
if $test "X$ansexp" != "X$scriptdirexp"; then
 installscript=''
fi
scriptdir="$ans"
scriptdirexp="$ansexp"
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
scripts reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installscript" in
 '') dflt=`echo $scriptdirexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installscript";;
 esac
 fn=de~
 rp='Where will public scripts be installed?'
 . ./getfile
 installscript="$ans"
else
```

```
 installscript="$scriptdirexp"
fi
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/scriptdir.U
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```
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:d_pipe2: Inlibc
?MAKE: -pick add $@ %<
?S:d_pipe2:
?S: This variable conditionally defines the HAS_PIPE2 symbol, which
?S: indicates to the C program that the pipe2() routine is available
?S: to create an inter-process channel.
?S:.
?C:HAS_PIPE2:
?C: This symbol, if defined, indicates that the pipe2 routine is
?C: available to create an inter-process channel.
?C:.
?H:#$d_pipe2 HAS_PIPE2  /**/
?H:.
?LINT:set d_pipe2
: see if pipe2 exists
set pipe2 d_pipe2
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_pipe2.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_longlong.U,v $
?RCS:
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: d_longlong.U,v $
?RCS:
?MAKE:d_longlong longlongsize: Compile Setvar Myread run \
 cat rm_try test longsize
```

```
?MAKE: -pick add $@ %<
?S:d_longlong:
?S: This variable conditionally defines HAS_LONG_LONG if
?S: the long long type is supported.
?S:.
?S:longlongsize:
?S: This variable contains the value of the LONGLONGSIZE symbol, which
?S: indicates to the C program how many bytes there are in a long long,
?S: if this system supports long long.
?S:.
?C:HAS_LONG_LONG:
?C: This symbol will be defined if the C compiler supports long long.
?C:.
?C:LONGLONGSIZE:
?C: This symbol contains the size of a long long, so that the
?C: C preprocessor can make decisions based on it.  It is only
?C: defined
 if the system supports long long.
?C:.
?H:#$d_longlong HAS_LONG_LONG  /**/
?H:?LONGLONGSIZE:#ifdef HAS_LONG_LONG
?H:?LONGLONGSIZE:#define LONGLONGSIZE $longlongsize  /**/
?H:?LONGLONGSIZE:#endif
?H:.
?F:!try
?LINT:set d_longlong
: check for long long
echo " "
echo "Checking to see if you have long long..." >&4
echo 'int main() { long long x = 7; return 0; }' > try.c
set try
if eval $compile; then
 val="$define"
 echo "You have long long."
else
 val="$undef"
 echo "You do not have long long."
fi
$rm_try
set d_longlong
eval $setvar

@if LONGLONGSIZE || longlongsize
: check for length of long long
?X:  Check only if d_longlong and if longlongsize is not already set.
case "${d_longlong}${longlongsize}" in
$define)
 echo " "
```

```
 echo "Checking to see how big your long longs are..." >&4
 $cat >try.c <<'EOCP'
#include <stdio.h>
int main()
{
   printf("%d\n", (int)sizeof(long long));
   return(0);
}
EOCP
 set try
 if eval $compile_ok; then
  longlongsize=`$run ./try`
  echo "Your long
 longs are $longlongsize bytes long."
 else
  dflt='8'
  echo " "
  echo "(I can't seem to compile the test program.  Guessing...)"
  rp="What is the size of a long long (in bytes)?"
  . ./myread
  longlongsize="$ans"
 fi
 if $test "X$longsize" = "X$longlongsize"; then
  echo "(That isn't any different from an ordinary long.)"
 fi
 ;;
esac
$rm_try
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_longlong.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_shmdt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_shmdt.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:d_shmdt: Inlibc
?MAKE: -pick add $@ %<
?S:d_shmdt:
?S: This variable conditionally defines the HAS_SHMDT symbol, which
?S: indicates to the C program that the shmdt() routine is available.
?S:.
?C:HAS_SHMDT:
?C: This symbol, if defined, indicates that the shmdt() routine is
?C: available to detach a shared memory segment from the process
 space.
?C:.
?H:#$d_shmdt HAS_SHMDT  /**/
?H:.
?LINT:set d_shmdt
: see if shmdt exists
set shmdt d_shmdt
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_shmdt.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libs.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:09:11  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.5  1995/07/25  14:12:05  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  16:24:22  ram
?RCS: patch36: removed old broken thislib/thatlib processing (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:05:44  ram
?RCS: patch30: code cleanup with if/elif by ADO and RAM
?RCS: patch30: undone patch23 for libswanted default
 setting
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:08:45  ram
```

```
?RCS: patch23: now includes ordered default libswanted variable (ADO)
?RCS: patch23: major cleanup for library lookups (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:31  ram
?RCS: patch6: added default for libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libs libsfound libsfiles libsdirs libspath libscheck: \
 test cat Myread Oldconfig Loc libpth package xlibpth so _a \
 +usesocks sed +cc +ccflags +ldflags rm
?MAKE: -pick add $@ %<
?S:libs:
?S: This variable holds the additional libraries we want to use.
?S: It is up to the Makefile to deal with it.  The list can be empty.
?S:.
?S:libsfound:
?S: This variable holds the full pathnames of the libraries
?S: we found and accepted.
?S:.
?S:libsfiles:
?S: This variable holds the filenames aka basenames of the libraries
?S: we found and accepted.
?S:.
?S:libsdirs:
?S: This variable holds the directory
 names aka dirnames of the libraries
?S: we found and accepted, duplicates are removed.
?S:.
?S:libspath:
?S: This variable holds the directory names probed for libraries.
?S:.
?S:libscheck:
?S: This variable is intended to be set by hint files, if needed.
?S: It should contain shell code that will be eval'ed with $xxx holding
?S: some library file.  It may change $xxx if needed.
?S: For instance, on an Irix platform, you may make sure the right
?S: library file is used depending on the cc command line, so that the
?S: correct library is used depending on the selected ABI (for 32 and
?S: 64-bit compilations).
?S:
?S: Here is an example of code that could be found in a hint file on Irix
?S: when the selected compiler was for 32-bit -- that code is put in the
?S: cc.cbu call-back unit to be invoked AFTER the C compiler and its
?S: flags have been chosen:
?S:
?S:  libscheck='case "$xxx" in
```

```
?S:  *.a) /bin/ar p $xxx `/bin/ar t $xxx | sed q` >$$.o;
?S:   case "`/usr/bin/file $$.o`" in
?S:   *N32*)
 rm -f $$.o ;;
?S:   *) rm -f $$.o; xxx=/no/n32$xxx ;;
?S:   esac ;;
?S:  *) case "`/usr/bin/file $xxx`" in
?S:   *N32*) ;;
?S:   *) xxx=/no/n32$xxx ;;
?S:   esac ;;
?S:  esac'
?S:.
?D:libs="
?LINT:extern libswanted
?LINT:change libswanted
?INIT:: default library list
?INIT:libswanted="
?X: This order is chosen so that libraries  -lndir, -ldir, -lucb, -lbsd,
?X: -lBSD, -lPW, and -lx only get used if there are unresolved
?X: routines at link time.  Usually, these are backwards compatability
?X: libraries, and may not be as reliable as the standard c library.
?X:
?X: The -lsocket -linet -lnsl order has been reported to be necessary
?X: for at least one SVR4 implementation.
?X: -lc must proceed -lucb or -lbsd for most Solaris applications.
?X: -lc_s proceeds -lc so we pick up the shared library version, if
?X: it is available.
?X:
?X: The ordering of c, posix, and cposix is a guess and almost
?X: certainly wrong on about half of all systems.
?X:
?X: Set proper libswanted in your private
 Myinit.U if needed.
?X:
?X:: default ordered library list
?X:libswanted='net socket inet bind nsl nm sdbm gdbm ndbm dbm malloc dl'
?X:libswanted="$libswanted dld sun m c_s c posix cposix ndir dir ucb"
?X:libswanted="$libswanted bsd BSD PW x"
?X:
?INIT:: should be set by hint files if needed
?INIT:libscheck="
?T:xxx yyy thislib thisdir libstyle linkmsg
?F:lt.c lt
: Looking for optional libraries
echo " "
echo "Checking for optional libraries..." >&4
case "$libs" in
' '|'') dflt='';;
```

```
*) dflt="$libs";;
esac
case "$libswanted" in
") libswanted='c_s';;
esac
?X: libsocks has nasty naming scheme.
?X: This does not work if somebody wants SOCKS 4.
case "$usesocks" in
"$define") libswanted="$libswanted socks5 socks5_sh" ;;
esac
?X: Used later for link checks
echo "extern char printf(); int main() { printf(); return 0; }" > lt.c
libsfound="
libsfiles="
libsdirs="
libspath="
for thisdir in $libpth $xlibpth; do
 test -d $thisdir && libspath="$libspath $thisdir"
done
for thislib in $libswanted;
 do
 for thisdir in $libspath; do
    xxx="
    if $test ! -f "$xxx" ; then
   xxx=`ls $thisdir/lib$thislib.$so.[0-9]* 2>/dev/null | $sed -n '1p'`
   $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/lib$thislib.$so
   $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/lib$thislib$_a
        $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/$thislib$_a
        $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/lib${thislib}_s$_a
        $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=static
   $test -f "$xxx" && thislib=${thislib}_s
```

```
    fi
    if test ! -f "$xxx"; then
  xxx=$thisdir/Slib$thislib$_a
        $test -f "$xxx" && eval $libscheck
  $test
 -f "$xxx" && libstyle=static
    fi
    if $test -f "$xxx"; then
?X:
?X: It is not sufficient to find a .so on the disk.  We must make sure
?X: that we can indeed supply the -lfoo line on the cc line to link against
?X: that library.  On Linux for instance, a versionned .so will not be
?X: implicitly linked against, whereas it will work fine on Solaris 2.6.
?X:  --RAM, 10/10/2003
?X:
  if $cc -o lt $ccflags $ldflags lt.c -l$thislib >/dev/null 2>&1;
  then
   linkmsg=""
  else
   linkmsg=" but I can't link against it"
  fi
  case "$libstyle" in
  shared) echo "Found -l$thislib (shared)$linkmsg." ;;
  static) echo "Found -l$thislib$linkmsg." ;;
  *)      echo "Found -l$thislib ($libstyle)$linkmsg." ;;
  esac
  case " $dflt " in
  *"-l$thislib "*) ;;
  *)
   case "$linkmsg" in
   ")
    dflt="$dflt -l$thislib"
    libsfound="$libsfound $xxx"
    yyy=`basename $xxx`
    libsfiles="$libsfiles $yyy"
    yyy=`echo $xxx|$sed -e "s%/$yyy\\$%%"`
    case " $libsdirs
 " in
    *" $yyy "*) ;;
    *) libsdirs="$libsdirs $yyy" ;;
    esac
      ;;
   esac
   ;;
  esac
  break
    fi
 done
```

```
 if $test ! -f "$xxx"; then
     echo "No -l$thislib."
 fi
done
set X $dflt
shift
dflt="$*"
case "$libs" in
") dflt="$dflt";;
*) dflt="$libs";;
esac
case "$dflt" in
' '|") dflt='none';;
esac
$rm -f lt.c lt

$cat <<EOM

In order to compile $package on your machine, a number of libraries
are usually needed.  Include any other special libraries here as well.
Say "none" for none.  The default list is almost always right.
EOM

echo " "
rp="Which libraries to use?"
. ./myread
case "$ans" in
none) libs=' ';;
*) libs="$ans";;
esac

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/libs.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: d_scannl.U,v 3.0.1.2 1997/02/28 15:41:27 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: d_scannl.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:41:27  ram
?RCS: patch61: added ?F: metalint hint
```

```
?RCS:
?RCS: Revision 3.0.1.1  1995/07/25  13:59:12  ram
?RCS: patch56: made cc and ccflags optional dependencies
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Does the scanf routine read "\n" correctly ? This is was not
?X: the case on AIX...
?X:
?MAKE:d_scannl: cat rm Setvar Compile run
?MAKE: -pick
 add $@ %<
?S:d_scannl:
?S: This variable conditionally defines SCAN_NL, which indicates
?S: whether the C library routines scanf() and friends can deal with
?S: a '\n' in the input correctly. They do most of the time.
?S:.
?C:SCAN_NL:
?C: This symbol is defined if the C library routines scanf() and friends
?C: can deal with a '\n' in the input correctly, so that you can say
?C: scanf("%d\n"); instead of scanf("%d"); getc(c); to handle the '\n'.
?C:.
?H:#$d_scannl SCAN_NL  /* scanf("%d\n") works */
?H:.
?F:!try
?LINT:set d_scannl
: does scanf handle "\n" correctly ?
echo " "
val="$define"
?X: I really want to say "\n" instead of '\n', because I am referring
?X: to the string given as argument to scanf().
echo 'Let""""s see if scanf() handles "\\n" correctly...' >&4
$cat >try.c <<'EOCP'
int main()
{
 int i = 0, j = 0;
 scanf("%d\n%d", &i, &j);
 if (j != 3)
  exit(1);
 exit(0);
}
EOCP
set try
if eval $compile_ok; then
 if $run ./try <<'EOD'
2
```

```
3
EOD
 then
  echo "Yes, it does."
 else
  echo
 "No, it doesn't."
  val="$undef"
 fi
else
 echo "(I can't seem to compile the test program. Assuming it does.)"
fi
set d_scannl
eval $setvar
$rm -f try.* try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_scannl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:d_statvfs d_fstatvfs: Inlibc
?MAKE: -pick add $@ %<
?S:d_statvfs:
?S: This variable conditionally defines the HAS_STATVFS symbol, which
?S: indicates to the C program that the statvfs() routine is available.
?S:.
?S:d_fstatvfs:
?S: This variable conditionally defines the HAS_FSTATVFS symbol, which
?S: indicates to the C program that the fstatvfs() routine is available.
?S:.
?C:HAS_STATVFS:
?C: This symbol, if defined, indicates that the statvfs routine is
?C: available to stat filesystems by filenames.
?C:.
?C:HAS_FSTATVFS:
?C: This symbol, if defined, indicates that the fstatvfs routine is
?C: available to stat filesystems by file descriptors.
?C:.
?H:#$d_statvfs HAS_STATVFS  /**/
?H:#$d_fstatvfs
```

```
 HAS_FSTATVFS  /**/
?H:.
?LINT:set d_statvfs
?LINT:set d_fstatvfs
: see if statvfs exists
set statvfs d_statvfs
eval $inlibc

: see if fstatvfs exists
set fstatvfs d_fstatvfs
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_statvfs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_setpgrp.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:44:16  ram
?RCS: patch61: obsoleted USE_BSDGRP in favor of USE_BSD_SETPGRP
?RCS: patch61: another unit now also defines a USE_BSD_GETPGRP
?RCS: patch61: fallback for test program failure improved
?RCS:
?RCS: Revision 3.0.1.2  1995/07/25  13:59:30  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:15:37  ram
?RCS: patch36: added 'ldflags' to the test compile line (ADO)
?RCS:
 patch36: call ./usg explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:07:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_setpgrp d_bsdsetpgrp: cat rm +cc +libs +ccflags \
 +ldflags Inlibc Guess Setvar i_unistd
?MAKE: -pick add $@ %<
?S:d_setpgrp:
?S: This variable conditionally defines HAS_SETPGRP if setpgrp() is
```

```
?S: available to set the current process group.
?S:.
?S:d_bsdsetpgrp (d_bsdpgrp):
?S: This variable conditionally defines USE_BSD_SETPGRP if
?S: setpgrp needs two arguments whereas USG one needs none.
?S: See also d_setpgid for a POSIX interface.
?S:.
?C:HAS_SETPGRP (SETPGRP):
?C: This symbol, if defined, indicates that the setpgrp routine is
?C: available to set the current process group.
?C:.
?C:USE_BSD_SETPGRP (USE_BSDPGRP BSDPGRP):
?C: This symbol, if defined, indicates that setpgrp needs two
?C: arguments whereas USG one needs none.  See also HAS_SETPGID
?C: for a POSIX interface.
?C:.
?H:#$d_setpgrp HAS_SETPGRP  /**/
?H:#$d_bsdsetpgrp
 USE_BSD_SETPGRP /**/
?H:.
?F:!set.c !set
?T:xxx
?LINT:set d_setpgrp d_bsdsetpgrp
: see if setpgrp exists
set setpgrp d_setpgrp
eval $inlibc

@if USE_BSD_SETPGRP || d_bsdsetpgrp
case "$d_setpgrp" in
"$define")
 echo " "
 echo "Checking to see which flavor of setpgrp is in use..."
 $cat >set.c <<EOP
#$i_unistd I_UNISTD
#include <sys/types.h>
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main()
{
 if (getuid() == 0) {
  printf("(I see you are running Configure as super-user...)\n");
  setuid(1);
 }
#ifdef TRY_BSD_PGRP
 if (-1 == setpgrp(1, 1))
  exit(0);
#else
```

```
 if (setpgrp() != -1)
  exit(0);
#endif
 exit(1);
}
EOP
 if $cc -DTRY_BSD_PGRP $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo 'You have to use setpgrp(pid,pgrp) instead of setpgrp().' >&4
  val="$define"
 elif $cc $ccflags $ldflags -o set set.c $libs >/dev/null 2>&1 && ./set; then
  echo 'You have to use setpgrp() instead of setpgrp(pid,pgrp).' >&4
  val="$undef"
 else
  echo "(I can't
 seem to compile and run the test program.)"
  if ./usg; then
   xxx="a USG one, i.e. you use setpgrp()."
  else
   # SVR4 systems can appear rather BSD-ish.
   case "$i_unistd" in
   $undef)
    xxx="a BSD one, i.e. you use setpgrp(pid,pgrp)."
    val="$define"
    ;;
   $define)
    xxx="probably a USG one, i.e. you use setpgrp()."
    val="$undef"
    ;;
   esac
  fi
  echo "Assuming your setpgrp is $xxx" >&4
 fi
 ;;
*) val="$undef";;
esac
set d_bsdsetpgrp
eval $setvar
$rm -f set set.c
@end
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_setpgrp.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:
?RCS: Copyright (c) 1996, Cygnus Support
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Tom Tromey <tromey@cygnus.com>
?RCS:
?RCS: $Log: src.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:23:54  ram
?RCS: patch61: created
?RCS:
?MAKE:src +rsrc: Options package contains
?MAKE: -pick add $@ %<
?Y:TOP
?S:src (srcdir):
?S: This variable holds the (possibly relative) path of the package source.
?S: It is up to the Makefile to use this variable and set VPATH accordingly
?S: to find the sources remotely.  Use $pkgsrc to have an absolute path.
?S:.
?S:rsrc
 (relsrcdir):
?S: This variable holds a potentially relative path to the package
?S: source.  The contents are correct for the configuration environment,
?S: i.e. there might be an extra .. prepended to get out of the UU dir.
?S: Configure units should use this, not the src variable.
?S:.
: Find the path to the source tree
case "$src" in
") case "$0" in
   */*) src=`echo $0 | sed -e 's%/[^/][^/]*$%%'`
        case "$src" in
  /*) ;;
  .) ;;
        *) src=`cd ../$src && pwd` ;;
  esac
        ;;
   *)   src='.';;
   esac;;
esac
case "$src" in
") src=/
 rsrc=/
 ;;
/*) rsrc="$src";;
*) rsrc="../$src";;
esac
```

```
?X:
?X: Now check whether we have found the right source tree (i.e. the one for the
?X: package we're about to configure). The original unit from Tom Tromey forced
?X: the user to pick a unique file from his distribution, and we were merely
?X: checking the existence of that file. I prefer to rely on Configure (which
?X: we know *is* present since this unit is
 part of it!) and look for the
?X: definition of the package variable, making sure it's the same as ours.
?X: If it matches, we know we found the right source tree. -- RAM, 15/03/96
?X:
if test -f $rsrc/Configure && \
 $contains "^package='$package'\$" $rsrc/Configure >/dev/null 2>&1
then
  : found it, so we are ok.
else
?X: Otherwise try "." and up to 4 parent directories...
?X: Note that we prepend a ".." to get out of the configuration environment.
 rsrc=''
 for src in . .. ../.. ../../.. ../../../..; do
  if test -f ../$src/Configure && \
   $contains "^package=$package$" ../$src/Configure >/dev/null 2>&1
  then
   rsrc=../$src
   break
  fi
 done
fi
case "$rsrc" in
'')
 cat <<EOM >&4

Sorry, I can't seem to locate the source dir for $package.  Please start
Configure with an explicit path -- i.e. /some/path/Configure.

EOM
 exit 1
 ;;
?X: Don't echo anything if the sources are in . -- they should know already ;-)
?X: In that case, rsrc is ../. since we lookup from within UU
../.) rsrc='..';;
*)
 echo
 " "
 echo "Sources for $package found in \"$src\"." >&4
 ;;
esac

Found in path(s):
```

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/src.U
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```
?RCS: $Id: d_lchown.U,v 3.0.1.1 1994/08/29 16:07:14 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_lchown.U,v $
?RCS: Revision 3.0.1.1  1994/08/29  16:07:14  ram
?RCS: patch32: created by ADO
?RCS:
?MAKE:d_lchown: Compile Setvar cat echo i_unistd rm_try
?MAKE: -pick add $@ %<
?S:d_lchown:
?S: This variable conditionally defines the HAS_LCHOWN symbol, which
?S: indicates to the C program that the lchown() routine is available
?S: to operate on a symbolic link (instead of following
 the link).
?S:.
?C:HAS_LCHOWN :
?C: This symbol, if defined, indicates that the lchown routine is
?C: available to operate on a symbolic link (instead of following the
?C: link).
?C:.
?H:#$d_lchown HAS_LCHOWN  /**/
?H:.
?F:!try
?LINT:set d_lchown
: see if lchown exists
echo " "
?X: Some functions (such as lchown()) are present in libc, but are
?X: unimplemented.  That is, they always fail and set errno=ENOSYS.
?X:
?X: Thomas Bushnell provided the following sample code and the explanation
?X: that follows.
?X:
?X: The choice of <assert.h> is essentially arbitrary.  The GNU libc
?X: macros are found in <gnu/stubs.h>.  You can include that file instead
?X: of <assert.h> (which itself includes <gnu/stubs.h>) if you test for
?X: its existence first.  <assert.h> is assumed to exist on every system,
```

```
?X: which is why it's used here.  Any GNU libc header file will include
?X: the stubs macros.  If either __stub_NAME or __stub___NAME is defined,
?X: then the function doesn't actually exist.
  Tests using <assert.h> work
?X: on every system around.
?X:
?X: The declaration of FOO is there to override builtin prototypes for
?X: ANSI C functions.
?X:
?X:  I really ought to enhance the inlibc test to check for this, but
?X:  I don't have time now.  --A.D.  5/1998
?X:
?X: Unfortunately, this trick fails under clang++-7.  Apparently to
?X: cover both the stub issue and clang's requirements, we need to do
?X: a compile and run test. -- A.D. 8/2019
?X:
$cat > try.c <<EOCP
#include <pwd.h>
#include <stdio.h>
#include <stdlib.h>
#$i_unistd I_UNISTD
#ifdef I_UNISTD
#  include <unistd.h>
#endif
int main(int argc, char *argv[])
{
  if (lchown("./try.c", -1, getgid()) == -1) {
      exit(EXIT_FAILURE);
  }
  exit(EXIT_SUCCESS);
}
EOCP
set try
if eval $compile && ./try; then
   $echo "lchown() found." >&4
   val="$define"
else
   $echo "lchown() NOT found." >&4
   val="$undef"
fi
set d_lchown
eval $setvar
$rm_try
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/compline/d_lchown.U
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```
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?RCS:
?MAKE:d_isnan: Inlibc cat Compile rm_try Setvar
?MAKE: -pick add $@ %<
?S:d_isnan:
?S: This variable conditionally defines the HAS_ISNAN symbol, which
?S: indicates to the C program that the isnan() routine is available.
?S:.
?C:HAS_ISNAN:
?C: This symbol, if defined, indicates that the isnan routine is
?C: available to check whether a double is a NaN.
?C:.
?H:#$d_isnan HAS_ISNAN  /**/
?H:.
?LINT:set d_isnan
: check for isnan
echo "Checking to see if you have isnan..." >&4
$cat >try.c <<EOCP
#include <math.h>
int main() { return isnan(0.0); }
EOCP
set try
if eval $compile; then
 val="$define"
 echo "You have isnan."
else
 val="$undef"
 echo "You do not have isnan."
fi
$rm_try
set d_isnan
eval $setvar
```

Found
 in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_isnan.U
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```
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```

```
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Whoa.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:21:21  ram
?RCS: patch61: whoa script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:01  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to warn the user in case a change into a variable is noticed.
?X:
?X: To use this
 unit, $was must hold the old value that has changed. Upon
?X: exit, the two variables $td and $tu are set to the correct value for
?X: respectively defining or undefining a variable. For instance, if $vas was
?X: $undef, but now $var is $define, after calling . whoa, you should use
?X: eval "$var=\$tu" to finally set $var to the correct value. See unit Inlibc.
?X:
?MAKE:Whoa: Myread startsh hint
?MAKE: -pick add $@ %<
?F:./whoa
?T:var was
?LINT:change td tu
: set up the script used to warn in case of inconsistency
cat <<EOS >whoa
$startsh
EOS
cat <<'EOSC' >>whoa
dflt=y
echo " "
echo "*** WHOA THERE!!! ***" >&4
echo "    The $hint value for \$$var on this machine was \"$was\"!" >&4
rp="    Keep the $hint value?"
. ./myread
case "$ans" in
y) td=$was; tu=$was;;
esac
EOSC
```

Found in path(s):

* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/Whoa.U
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```
?RCS: $Id: d_setgrent.U,v $
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?RCS:
?RCS: $Log: d_setgrent.U,v $
?RCS:
?MAKE:d_setgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_setgrent:
?S: This variable conditionally defines the HAS_SETGRENT symbol, which
?S: indicates to the C program that the setgrent() routine is available
?S: for initializing sequential access to the group database.
?S:.
?C:HAS_SETGRENT:
?C: This symbol, if defined, indicates that the setgrent routine is
?C: available for initializing sequential access of the group database.
?C:.
?H:#$d_setgrent HAS_SETGRENT  /**/
?H:.
?LINT:set d_setgrent
: see if setgrent exists
set setgrent d_setgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_setgrent.U
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```
?RCS: $Id: d_endgrent.U,v $
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?RCS:
?RCS: $Log: d_endgrent.U,v $
?RCS:
?MAKE:d_endgrent: Inlibc
?MAKE: -pick add $@ %<
?S:d_endgrent:
?S: This variable conditionally defines the HAS_ENDGRENT symbol, which
?S: indicates to the C program that the endgrent() routine is available
```

```
?S: for sequential access of the group database.
?S:.
?C:HAS_ENDGRENT:
?C: This symbol, if defined, indicates that the getgrent routine is
?C: available for finalizing sequential access of the group database.
?C:.
?H:#$d_endgrent HAS_ENDGRENT  /**/
?H:.
?LINT:set d_endgrent
: see if endgrent exists
set endgrent d_endgrent
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/modified/d_endgrent.U
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```
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?RCS:
?MAKE:d_fma: Inlibc
?MAKE: -pick add $@ %<
?S:d_fma:
?S: This variable conditionally defines the HAS_FMA symbol, which
?S: indicates to the C program that the fma() routine is available.
?S:.
?C:HAS_FMA:
?C: This symbol, if defined, indicates that the fma routine is
?C: available to do the multiply-add function.
?C:.
?H:#$d_fma HAS_FMA  /**/
?H:.
?LINT:set d_fma
: see if fma exists
set fma d_fma
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_fma.U
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```
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?RCS:
?MAKE:d_llroundl: Inlibc
?MAKE: -pick add $@ %<
?S:d_llroundl:
?S: This variable conditionally defines the HAS_LLROUNDL symbol, which
```

```
?S: indicates to the C program that the llroundl() routine is available
?S: to return the long long value nearest to x away from zero.
?S:.
?C:HAS_LLROUNDL:
?C: This symbol, if defined, indicates that the llroundl routine is
?C: available to return the nearest long long value away from zero of
?C: the long double argument value.
?C:.
?H:#$d_llroundl HAS_LLROUNDL  /**/
?H:.
?LINT:set d_llroundl
: see if llroundl exists
set llroundl d_llroundl
eval $inlibc
```

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/U/perl/d_llroundl.U
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```
?RCS: $Id: d_symlink.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS:
?RCS: $Log: d_symlink.U,v $
?RCS: Revision 3.0  1993/08/18  12:07:41  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:d_symlink: Inlibc
?MAKE: -pick add $@ %<
?S:d_symlink:
?S: This variable conditionally defines the HAS_SYMLINK symbol, which
?S: indicates to the C program that the symlink() routine is available
?S: to create symbolic links.
?S:.
?C:HAS_SYMLINK (SYMLINK):
?C: This symbol, if defined, indicates that the symlink routine is available
?C: to
 create symbolic links.
?C:.
?H:#$d_symlink HAS_SYMLINK /**/
?H:.
?LINT:set d_symlink
```

: see if symlink exists
set symlink d_symlink
eval $inlibc

Found in path(s):
* /perl-5-36-0-orig-regen-configure-1-tar-xz/metaconfig-5.36.0/dist/U/d_symlink.U

1.1211 go-sysconf 0.3.13

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1.1212 numcpus 0.7.0

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1.1213 prometheus-client-model 0.4.0

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1.1215 prometheus-client 1.16.0

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1.1223 yaml-cpp 0.8.0-r0

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1.1224 github.com/armon/go-proxyproto 0.1.0

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1.1225 armon-go-proxyproto 0.1.0

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1.1226 metrics 4.2.23

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==========
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It is currently developed by a community of developers.

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1.1241 jackson 2.16.1

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1.1242 ansible 8.7.0

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---
- name: Get License information.
 ansible.builtin.uri:
   url: "https://{{ hostname }}/redfish/v1/LicenseService/Licenses?$expand=*($levels=1)"
   validate_certs: "{{ validate_certs }}"
   ca_path: "{{ ca_path | default(omit) }}"
   method: "{{ uri_method }}"
   user: "{{ username }}"
   password: "{{ password }}"
   headers: "{{ uri_headers }}"
   body_format: "{{ uri_body_format }}"
   status_code: "{{ uri_status_code }}"
   return_content: "{{ uri_return_content }}"
 register: license_result
 delegate_to: "{{ lookup('ansible.builtin.env', 'RUNON', default='localhost') }}"
 no_log: true

- name: Set License facts
 ansible.builtin.set_fact:
   license: "{{ license_result.json.Members | ansible.utils.remove_keys(target=['@odata.context', '@odata.id', '@odata.type']) }}"
{
   "include_symlinks": false,
   "output": "path-message"
}
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```
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- name: Add a vCenter evaluation license
 vcenter_license: &vcenter_lic_data
   hostname: "{{ vcenter_hostname }}"
   username: "{{ vcenter_username }}"
   password: "{{ vcenter_password }}"
   validate_certs: false
   license: 00000-00000-00000-00000-00000
   state: present

- name: Remove an (unused) vCenter evaluation license
 vcenter_license:
   <<: *vcenter_lic_data
   state: absent
```

```
- name: Add an invalid vCenter license
 vcenter_license:
   <<: *vcenter_lic_data
   license: 00000-00000-00000-00000-00001
   state: present
 register: vcenter_license_output
 failed_when: '"is not existing or can not be added" not in vcenter_license_output.msg'
```

cloud/vcenter

zuul/vmware/vcenter_only

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```
---
scenario:
 test_sequence:
   - dependency
   - lint
   - cleanup
   - destroy
   - syntax
   - create
   - converge
   - destroy
```

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c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and

only if you received the object code with such an offer, in accord
with subsection 6b.

d) Convey the object code by offering access from a designated
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the same way through the same place at no
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may be on a different server (operated by you or a third party)
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```
- name: Get license information.
 ansible.builtin.uri:
   url: "https://{{ hostname }}/redfish/v1/LicenseService/Licenses/{{ license_data.Id }}"
   validate_certs: "{{ validate_certs }}"
   ca_path: "{{ ca_path | default(omit) }}"
   method: "{{ uri_method }}"
   user: "{{ username }}"
   password: "{{ password }}"
   headers: "{{ uri_headers }}"
   body_format: "{{ uri_body_format }}"
   status_code: "{{ uri_status_code }}"
   return_content: "{{ uri_return_content }}"
 register: license_result
 no_log: true

- name: Set license facts
 ansible.builtin.set_fact:
   api_response: "{{ license_result.json | ansible.utils.remove_keys(
     target=['@odata.context', '@odata.id', '@odata.type']) }}"

- name: Set the keys diff
 ansible.builtin.set_fact:
   diff_keys: "{{ license_data.keys() | list | symmetric_difference((api_response.keys() | list)) }}"

- name: Set a diff of dict
 ansible.builtin.set_fact:
   diff_data: "{{ diff_data | combine({item: license_data[item]}) }}"
  loop: "{{ license_data.keys() }}"
 when:
   - diff_keys | length == 0
   - license_data[item] != api_response[item]
   - item not in exclude_keys

- name: Assert the difference in Keys
 ansible.builtin.assert:
   that:
     - "{{ (diff_keys | length) == 0 }}"
     - "{{ (diff_data | length) == 0 }}"
   fail_msg: "The response from the role does not match | Diff Keys : {{ diff_keys }} Diff Data : {{ diff_data }}"
   success_msg: "The response from the role matches |  Diff Keys : {{ diff_keys }} Diff Data : {{ diff_data }}"
```

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```
---
- name: Converge idrac_gather_facts for License
 hosts: all
 gather_facts: false
 vars:
   hostname: "{{ lookup('env', 'hostname') }}"
   username: "{{ lookup('env', 'username') }}"
   password: "{{ lookup('env', 'password') }}"
   validate_certs: false
   target:
     - License
   uri_method: "GET"
   uri_headers:
     Accept: "application/json"
```

```
    Content-Type: "application/json"
    OData-Version: "4.0"
  uri_body_format: "json"
  uri_status_code:
    - 200
    - 400
    - 401
    - 404
    - -1
  uri_return_content: true
  diff_data: {}
  exclude_keys: []

 tasks:
  - name: Gather Facts for the License component
    ansible.builtin.include_role:
      name: "idrac_gather_facts"

  - name: Assert license dict for length
    ansible.builtin.assert:
      that:
        - "{{ license | length > 0 }}"

  - name: Call assertion
    ansible.builtin.include_tasks: license_assert.yml
    with_items: "{{ license }}"
    loop_control:
      loop_var: license_data
    when: license | length > 0
```

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28
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abadger
abondis
acozine
adamchainz
adq
Akasurde
Alexander198961
alustenberg
aminvakil
amitk79
amree
Andersson007
andrewhowdencom

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anthonyxpalermo
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aquach
arcmop
asad-at-srt
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Berbe
bizmate
bjne
bmalynovytch
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E-M
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Ernest0x
esamattis
Everspace
F21
faitno
felixfontein
flatrocks
fourjay
fraff
g00fy-
geerlingguy
georgeOsdDev
ghjm
ghost
giacmir
giorgio-v
gkoller
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int32bit
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iredmail
ivandigiusto
jadbaz
jaikdean
jamescassell
janosmiko
jarnold-timeout
JaSafieddine

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jctanner
jean-christophe-manciot
Jean-Daniel
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jhagg
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jirib
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Jmainguy
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JoelFeiner
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Jorge-Rodriguez
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samccann
samdoran
sayap
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sedrubal
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thomasliddledba
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timorunge
Tomasthanes
tomdymond
Tronde
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tyll
UncertaintyP
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vanne
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1.1244 joda-time 2.12.6

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1.1245 logback-core 1.2.13

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```
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1.1248 lsof 4.93.2+dfsg-1.1build2

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Notes for the distribution of lsof version 4

```
*********************************************************************
| The latest release of lsof is always available from
| https://github.com/lsof-org/lsof/releases
|
| From 4.92.1, git is introduced to manage changes.
| You can consult the details of changes with git.
*********************************************************************
```

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Dialects Supported
==========

Lsof (for LiSt Open Files) lists files opened by processes on selected Unix systems. Version 4 is a source reorganization of version 3, itself a major revision of version 2. Version 4 has been tested on:

Apple Darwin 9 and Mac OS X 10.[567]
FreeBSD 10.3, 11.0 and 12.0 for AMD64-based systems
Solaris 9

(The pub/tools/unix/lsof/contrib directory on lsof.itap.purdue.edu contains information on other ports.)

If your favorite Unix dialect is not in the list, or if your version of it is more recent than the ones listed, please contact me at <abe@purdue.edu>.

Version 3 of lsof was tested on:

AIX 3.2.5, 4.1[.[1234]], and 4.2
BSDI BSD/OS 2.0, 2.0.1, and 2.1 for x86-based systems
DC/OSx 1.1 for Pyramid systems
Digital UNIX (DEC OSF/1) 2.0, 3.0, 3.2, and 4.0
EP/IX 2.1.1 for
the CDC 4680
FreeBSD 1.1.5.1, 2.0, 2.0.5, 2.1, 2.1.5 for x86-based
systems
HP-UX 8.x, 9.x, 10.01, 10.10, and 10.20
IRIX 5.2, 5.3, 6.0, 6.0.1, and 6.[124]
Linux through 2.0.27 for x86-based systems
NetBSD 1.0, 1.1, and 1.2 for x86 and SPARC-based
systems
NEXTSTEP 2.1 and 3.[0123]
OpenBSD 1.2 and 2.0 for x86-based systems
Reliant UNIX 5.43 for Pyramid systems
RISC/os 4.52 for MIPS R2000-based systems
SCO OpenServer Release 1.1, 3.0, and 5.0.x for x86-based
systems
SCO UnixWare 2.1 and 2.1.1 for x86-based systems
Sequent PTX 2.1.[1569], 4.0.[23], 4.1.[024], 4.2[.1],
and 4.3
Solaris 2.[12345], 2.5.1, and 2.6-Beta
SunOS 4.1.x
Ultrix 4.2, 4.3, 4.4, and 4.5

Version 3 and its predecessor, version 2, may be found at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/OLD

How Lsof Works

Using available kernel data access methods -- getproc(), getuser(), kvm_*(), nlist(), pstat(), read(), readx(), /proc -- lsof reads process table entries, task table entries, user areas and file pointers to reach the underlying structures that describe files opened by processes.

Lsof interprets most file node structures -- advfsnodes, autonodes, cnodes, cdrnodes, devnodes, fifonodes, gnodes, hsnodes, inodes, mfsnodes, pcnodes, procnodes, rnodes, snodes, specnodes, s5inodes, tmpnodes. It understands NFS connections. It recognizes FIFOs, multiplexed files, Unix and Internet sockets. It knows about streams. It understands /proc file systems for some dialects. On many dialects it recognizes execution text and library references. It knows about AFS on some Unix dialects.

Lsof Output

The lsof output describes:

* the identification number of the process (PID) that has opened the file;

* the process group identification number (PGID) of the process (optional);

* the process identification number of the parent process (PPID) (optional);

* the command the process is executing;

* the owner of the process;

* for all files in use by the process, including the executing text file and the shared libraries it is using:

* the file descriptor number of the file, if applicable;

* the file's access mode;

* the file's lock status;

* the file's device numbers;

* the file's inode number;

* the file's size or offset;

* the name of the file system containing the file;

* any available components of the file's path name;

* the names of the file's stream components;

* the file's local and remote network addresses;

* the TLI network (typically UDP) state of the file;

* the TCP state, read queue length, and write queue length of the file;

* the file's TCP window read and write lengths (Solaris only);

* other file or dialect-specific values.

Getting Started Quickly

If you want to get started using lsof quickly, or see some examples of how lsof can be used, consult the 00QUICKSTART file of the lsof distribution.

The 00QUICKSTART file won't help you build or install lsof, but it will cut through the density of the lsof man page, giving you more readily an idea of what you can do with lsof.

For information on building and installing lsof, consult the 00README file of the lsof distribution.

Limiting, Filtering, and Selecting Lsof Output

Lsof accepts options to limit, filter, and select its output.
These are the possible criteria:

* Process ID (PID) number -- to list the open files for a given process;

* Process Group ID (PGID) -- to list the open files for all the processes of a given process group;

* User ID number or login name -- to list the open files for all the processes of a given user;

* Internet address -- to list the open files using a given Internet address (host name), protocol, or port (number or name); or to list all open Internet files;

* command name;

* file descriptor name or number;

* list all open NFS files;

* list all open Unix domain socket files;

* list all uses of a specific file;

* list all open files on a file system.

Selection options are normally ORed -- i.e., an open file meeting any of the criteria is listed. The selection options may be ANDed so that an open file will be listed only if it meets all the criteria.

In the absence of any selection criteria, lsof lists files open to all processes.

Parsing Lsof Output with Another Program

The lsof -F option directs it to produce "field" output that can easily be parsed by another program. The lsof distribution contains sample awk, perl 4, and perl 5 scripts in its scripts subdirectory that show how to post-process field output.

Repeat Mode

==========

Lsof can be directed to produce output, delay for a specified time, then repeat the output, cycling until stopped by an interrupt or quit signal. This mode is useful for monitoring the status of some file operation -- e.g., an ftp transfer or a tape backup operation.

Repeat mode is more efficient when combined with lsof's selection options, since they limit lsof overhead.

It's possible to use lsof's field output options to supply repeat mode output to another process for its manipulation. The scripts subdirectory of the lsof distribution has sample Perl scripts showing how to consume lsof repeat mode output from a pipe.

Distribution Restrictions

==========

Lsof may be used and distributed freely, subject to these limitations:

1. Neither the author nor Purdue University is responsible for any consequences of the use of this software.

2. The origin of this software must not be misrepresented, either by explicit claim or by omission. Credit to the author and Purdue University must appear in documentation and sources.

3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software.

4. This notice may not be removed from or altered in the lsof source files.

Cautions

========

Lsof is a tool that is closely tied to the Unix operating system version. It uses header files that describe kernel structures and reads kernel structures that typically change from OS version to OS version.

DON'T TRY TO USE AN LSOF BINARY, COMPILED FOR ONE UNIX OS VERSION, ON ANOTHER.

On some Unix dialects, notably SunOS and Solaris, lsof versions may be even more restricted by architecture type. An lsof binary, compiled for SunOS 4.1.3 on a sun4c machine, for example, won't work on a sun4m machine.

AN LSOF BINARY, COMPILED FOR ONE SOLARIS 1.X ARCHITECTURE, ISN'T GUARANTEED TO WORK ON A DIFFERENT SOLARIS 1.X ARCHITECTURE.

Distribution Contents
==========

The lsof distribution is checked for completeness when it is constructed and by the Inventory script when you run the Configure script. (See The Inventory Script section of the 00README file of this distribution.)

Lsof is organized in these parts:

* The main lsof directory, containing common sources, configuration and setup scripts and three subdirectories: dialects/, lib/, and scripts/.

  Lsof is compiled in the main lsof directory after configuration. The selected dialect sources are copied or linked from the specified subdirectory. (Symbolic linking is the standard method.)

  Common lsof definitions may be found in lsof.h; common function prototypes, proto.h; and common storage, store.c.

* The dialects/ subdirectory contains subdirectories with sources specific to UNIX dialect implementations -- e.g., the dialects/sun/ subdirectory contains sources for the SunOS (Solaris 1.x) and Solaris (2.x) implementations of lsof. The dialects subdirectories also contain Makefiles and scripts for assisting dialect source configuration.

  Dialect configuration definitions may be found in dlsof.h; other dialect definitions, dlsof.h; dialect prototypes, dproto.h; and dialect storage, dstore.c.

* The lib/ subdirectory contains sources for common lsof functions. Not all dialects use the functions -- some have their own versions of them. The lib/ functions are enabled and customized with #define's in the dialect machine.h header

files.

* The scripts/ subdirectory contains sample scripts for processing lsof field (-F) output. The scripts are written in AWK, Perl 4, and Perl 5.

The 00PORTING file of the lsof distribution has more information on lsof components, configuration, and construction.

Warranty

Lsof is provided as-is without any warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The entire risk as to the quality and performance of lsof is with you. Should lsof prove defective, you assume the cost of all necessary servicing, repair, or correction.

Bug Reports

Now that the obligatory disclaimer is out of the way, let me hasten to add that I accept lsof bug reports and try hard to respond to them. I will also consider and discuss requests for new features, ports to new dialects, or ports to new OS versions.

PLEASE DON'T SEND A BUG REPORT ABOUT LSOF TO THE UNIX DIALECT VENDOR.

At worst such a bug report will confuse the vendor; at best, the vendor will forward the bug report to me.

Please send all bug reports, requests, etc. to me via email at <abe@purdue.edu>.

The lsof-l Mailing List

Information about lsof, including notices about the availability of new revisions, may be found in mailings of the lsof-l listserv. For more information about it, including instructions on how to subscribe, read the 00LSOF-L file of the lsof distribution.

Version 3 Release Notes
==========

See
 00DIST in the last lsof 3 revision 3.88, for its complete
set of release notes. Lsof revision 3.88 may be found at:

 ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/OLD

3.0 May 24, 1994
  This is the first official release of lsof 3.

...

3.88 February 17, 1997

```
  +=====================================+
  | This is the last version 3 revision. |
  +=====================================+
```

  Added documentation files -- 00.README.FIRST[_<version>]
  and 00RELEASE.SUMMARY_<version> -- to the distribution.

What's new in Version 4
==========

The main goal of version 4 was to eliminate the confusing common/
fragment source file technique. Changing the version number also
provided an opportunity to restart the numbering, which at 3.88
had risen to a large value.

The sources that appeared in the dialects/common subdirectory of
version 3 in fragment files have been incorporated into the version
4 liblsof.a library as *.c files. This results in significant
changes
 to many source files, scripts, and Makefiles of all dialect
versions. It allows elimination of some source files -- ddev.c,
dfile.c, dmnt.c -- for dialects now obtaining functions from
liblsof.a that formerly came from making dialect source files by
combining fragment files.

The version 4 liblsof.a sources are stored in the lib/ subdirectory
of the main lsof directory. The liblsof.a functions are activated
and conditioned in their source files by values #define'd in the
dialect dlsof.h and machine.h header files.

Dialects that provide a private version of a library function refrain
from #define'ing the symbol that would activate the library function
code.

Version 4 Release Notes
==========

4.0 February 24, 1997

```
+=====================================+
| This is the first lsof 4 revision. |
+=====================================+
```

Reorganized sources: eliminated code fragment files
and created a library in their place. Modified or
deleted
many dialect source and header files.
Changed documentation accordingly.

Added a warning to sgi/Makefile and 00FAQ that advises
against using the IRIX C compiler -n32 option when
compiling lsof. Thanks go to Peter Ilieve
<peter@memex.co.uk> for bringing this to my attention.

Dropped IRIX 5.2 in mid-stream, because my 5.2 test
system was upgraded to 5.3.

4.01 March 3, 1997
Added TFS support for Pyramid dialects.

Added test to Configure and to the IRIX dnode.c
for the different cnode struct that appears in
<cachefs/cachefs_fs.h> on the 6.2 IMPACT distribution.
Heddy Boubaker <boubaker@amfou.cenatls.cena.dgac.fr>
alerted me to the cnode change and helped test this
lsof adjustment.

Shut down the lsof child process before doing a -r
sleep(). A comment from Dan Mercer <dam@mmm.com>
prompted this.

4.02 March 21, 1997

Based on a report from Pasi Kaara <Pasi.Kaara@atk.tpo.fi>,
disabled HP-UX CCIT support in lsof for HP-UX
versions 10 and above.

Pasi's report also led to
changes in the HP-UX machine.h to support use of
gcc to compile lsof for HP-UX 10.20 and warnings
against using `cc -Aa` or `gcc -ansi` to compile
lsof under HP-UX 10.x.

With help from Richard Allen <ra@hp.is> taught
HP-UX 10.x lsof to name file systems better by
using the virtual file system device number. Elias
Halldor Agustsson <elias@rhi.hi.is> provided a test
system.

Changed NEXTSTEP and UNIXWARE Makefiles to use
safer quoting when generating version.h. The change
was suggested by Bob Farmer <ucs_brf@unx1.shsu.edu>.

Added SHELL=/bin/sh string to all Makefiles.

Added support for Linux 2.1.28 on a test system,
kindly provided by Jonathan Sergent <sergent@purdue.edu>.
Configure tests the Linux 2.1.x's C library lseek()
function for proper handling of kernel offsets.
If lseek() appears suspect, Configure activates
the use of a private lseek() function. Changed
the private nlist() function to nlist_private()
and
taught it to use the query_module() syscall in
place of the deprecated get_kernel_syms() one.
Added rudimentary AX.25 support for Pierfrancesco
Caci <ik5pvx@infogroup.it> who helped test it.
Updated the old get_kernel_syms() code to recognize
and skip module name entries.

Prompted by Marty Leisner <leisner@sdsp.mc.xerox.com>,
eased the requirement that service name lookup for
the -i option be accompanied by a protocol name. The
name is not needed if both TCP and UDP names yield the
same port number.

Added xusers.awk script from Dan Mercer <damercer@mmm.com>
to the distribution scripts/ subdirectory.

Changed Configure script to use LSOF_VERS for all
UNIX dialect version numbers and to pass LSOF_VERS
to the dialect Mksrc functions. Also added the
ability for a dialect stanza to declare a different
dialect Makefile source. Modified dialect Mksrc
files -- e.g., linux and sun -- accordingly.

Added support for BSD/OS 3.0 with help from Jim
Reid
<jim@mpn.cp.philips.com>. Terry Kennedy
<TERRY@spcvxa.spc.edu> kindly provided a test
system. During the port corrected a bug that
prevented proper handling of revoked files.

4.03 April 7, 1997
At the suggestion of Dan Mercer <damercer@mmm.com>,
made HP-UX building of lsof aware of differences
between the HP-UX bundled and unbundled C compilers.

Added the ability for the lsof builder to define the
default warning message issuance state. By default the
issuance of warning messages is disabled; defining
WARNINGSTATE in machine.h disables it. The Customize
script was updated to handle WARNINGSTATE. Dan Mercer
suggested this.

Eliminated compiler complaint about improperly cast
get_Nl_value() argument in ncache_load() in lib/rnch.c.

Corrected zeromem() argument error in SCO dproc.c.
Sped up parent directory cache lookup slightly.

Updated for PTX 4.4, including additional VxFS (EFS)
file system support.

4.04 April 17, 1997
At the suggestion
of Bela Lubkin <belal@sco.COM>
changed device cache handling to be more tolerant
of a device cache file whose [cm]times are older
than the ones on /dev or /devices. The change
required adding information to Solaris device cache
file clone lines, so the first time lsof 4.04 is
run under Solaris it will complain about a bad
cached clone device in a previous device cache
file, then regenerate it.

Added boot file path detection for SCO OSR 5 and
above, based on information supplied by Bela.

Fixed two bugs in DEC OSF/1 lsof -- an error in
reporting locks and a missing continue statement
in readdev() after a failure to open a directory.
Jan Ole Suhr <josuhr@informatik.tu-clausthal.de>

reported the second bug and supplied a fix.

Fixed XFS problems with IRIX 6.2 by abandoning the idea that SGI will distribute XFS header files and defining an lsof-private xfs_inode structure. John Paul Morrison <John.Paul.Morrison@MultiActive.com> helped develop
and test the 5.3 definition. John R. Vanderpool <fish@daacdev1.gsfc.nasa.gov> helped develop and test the 6.2 definition.

Remove obsolete comments about common/*.frag files.

Updated Linux lsof for Linux version 2.1.35.

4.04 April 18, 1997
Supplement Regenerated the 4.04 distribution to correct a non-device-cache #define misplacement in the Solaris and SunOS dlsof.h. Alexandre Oliva <oliva@dcc.unicamp.br> reported the problem.

4.05 April 24, 1997
Corrected an error in 00DCACHE.

Made sure SCO /etc/ps/booted.systems is closed.

Based on an observation by Bela Lubkin <belal@sco.COM> that the lsof child had needless file descriptors open, closed all but the open pipes between the lsof parent and child.

Decommissioned CDC EP/IX support; I no longer have a test system.

Based on a suggestion from Patrick Connor <connor@phreak.csd.sgi.com>, added -xansi to CFLAGS for IRIX 5.3 and 6.[234].

Also at Patrick's suggestion changed Configure to propagate
exact SunOS 4.1.x version to the main and library Makefiles. This allowed the sunos413 and sunos413cc Configure abbreviations to be shortened to sunos and sunoscc.

Updated obsolete argument uses (-H changed to -n) in count_pf.perl* and watch_a_file.perl scripts.

Adjusted Solaris 2.6 lsof for Beta_Update with tips
from Casper Dik <casper@holland.Sun.COM>.

Fixed a Solaris 2.4 TCP address reporting bug.

4.06 April 30, 1997
Added a step to the Makefile clean rules that does
a make clean in the lib subdirectory; suggested by
Casper Dik <casper@holland.Sun.COM>. (Configure's
-clean argument already did this.)

Fixed an incorrect awk argument in the sunos*)
Configure stanza, reported by Alexandre Oliva
<oliva@dcc.unicamp.br>.

Added CD9660 (aka ISO) file system support to
FreeBSD, NetBSD, and OpenBSD with mods and help
from Kenneth Stailey <kstailey@disclosure.com>.
(BSDI already had CD9660 support.) While at it,
added file descriptor system
support to BSDI and
FreeBSD.

Added /kern file system support to OpenBSD. The
support wasn't extended to BSDI, FreeBSD, or NetBSD,
because it requires Kenneth Stailey's changes to
/sys/miscfs/kernfs/kernfs.h.

Updated IRIX 6.3 support after getting access to
a test system, provided by John Paul Morrison
<John.Paul.Morrison@MultiActive.com>. Improved
the handling of IRIX 5.1 and greater FIFOs.

4.07 May 12, 1997
Based on AIX problem reports from David Capshaw
<David.Capshaw@SEMATECH.Org>, changed the aix*
Configure script stanza to avoid -bnolibpath for
gcc (which the GNU loader doesn't grok) and AIX
below 4.1.4 (where -bnolibpath hasn't been tested
or is known to be unimplemented), and to refuse to
use gcc for compiling lsof in AIX versions below
4.1 (because of possible structure alignment
problems). Updated 00FAQ appropriately.

Added OpenBSD support for EXT2FS. This support
has yet to be tested.

Tested lsof under OpenBSD 2.1.

Activated
/kern file system support for NetBSD when
Configure senses that /sys/miscfs/kernfs/kernfs.h
defines the kern_target structure. This support
has not been tested under NetBSD, although it has
been tested under OpenBSD.

Made some simple changes to the BSDI machine.h,
suggested by Jeffrey C. Honig <jch@bsdi.com>.

Improved handling of alternate dialect Configure
abbreviations -- aix and aixgcc, hpux and hpuxgcc,
solaris and solariscc, and sunos and sunoscc.

4.08 May 23, 1997
Cleaned up dialect Makefile's, staring with a suggestion
from Christopher Schanzle <chris@cam.nist.gov>.

Improved Configure's -clean processing.

Corrected bugs in Solaris lock reporting.

Changed NetBSD Configure stanza to put -I/usr/include
before -I/sys.

4.09 June 1, 1997
Adjusted for latest FreeBSD 3.0 release. This
required adding a new kernel name cache module for
reading BSD-form hashed kernel name cache entries,
rnmh.c, to the lsof library, and adding a #define
to
each machine.h to select it.

Activated rnmh.c for BSDI 2.1, BSDI 3.0, NetBSD
1.2, and OpenBSD 2.1.

4.10 June 8, 1997
Adjusted for Linux 2.1.x (x > 35) kernels with
hashed task structure pointers. Marty Leisner
<leisner@sdsp.mc.xerox.com> and Jonathan Sergent
<sergent@io.com> tested the adjustment.

Replaced readdev() stat() calls with lstat() to
reduce device table and cache entries with the same
device number and inode values. Added code to
remove all remaining duplicates. This fixes a
Linux problem reported by Jonathan Sergent and

makes device node name output predictable.

Corrected a bug in UnixWare stream file handling
that prevented searching for the stream file by
its associated character device name.

Added Pyramid code to determine Reliant UNIX clone
major device number differently from that of DC/OSx.

4.11 June 12, 1997
Changed Configure to sense that the PTX inp_[fl]addr
members of the inpcb structure of <netinet/in_pcb.h>
have
a struct type and set HASINADDRSTR for use in
PTX dnode.c and dsock.c tests.

Changed PTX version 4.1.4 tests to use 4.1.3 instead.
Carson Wilson <carson@mcs.com> reported the need
to do this and tested the change.

Fixed a block device table indexing bug in lib/rdev.c,
reported by Carson Wilson. The same bug was squashed
in pyramid/ddev.c.

Added code to the Pyramid Reliant UNIX kread()
function to compensate for an address boundary
error in the kernel's /dev/kmem driver.

Verified that lsof compiles and works under AIX
4.2.1. Added an AIX test for the presence of NFS
header files, defined HAS_NFS and adjusted AIX
dialect sources accordingly.

Based on a suggestion from Gaylord Holder
<holder@phy.ucsf.EDU>, added DEC OSF/1 code to
auto-detect the booted file, whence kernel symbol
addresses are obtained.

4.12 June 24, 1997
Corrected a device number sign extension problem
in the reading and writing of device cache file.
The problem
was reported by Bela Lubkin <belal@sco.com>
and he suggested a fix.

Fixed an SCO stream device lookup problem. The
report and solution came from Bela Lubkin

Enhanced the Configure script to enable cross-
configuration of lsof, based on suggestions from
Marty Leisner <leisner@sdsp.mc.xerox.com>. A new
documentation file, 00XCONFIG, describes the process.

Made Pyramid OBJFS support conditional on the
presence of supporting header files. Corrected
the Pyramid MkKernOpts script so it generates the
necessary -D's for the Nile/Jolt architecture.
Richard Coley <rcoley@pyra.co.uk> helped.

Added another IRIX xfs_inode variant for 6.2, 32
bits, no XFS rollup patch.

Tested under UnixWare 2.1.2.

4.13 July 9, 1997
Taught Pyramid lsof to grok ttyfs vnodes with help
from Richard Coley <rcoley@pyra.co.uk>. Fixed some
minor bugs in Pyramid FIFO reporting. Eliminated
use of the Pyramid UCB compatibility library at
Richard's suggestion.

Eliminated
reporting of "strange" inode numbers
for SCO OSR 3.2v5.0.x HPPS files with help from
Bela Lubkin <belal@sco.com>

Modified port to service name lookup to use a small
number of getservbyport() calls before reading the
entire map with getservent(). Changed port reporting
to represent a zero as `*' to be consistent with
other prt number reporting tools like netstat.
Casper Dik <casper@holland.Sun.COM> suggested these
changes -- the getserv*() one to improve performance
for large NIS service name maps.

Changed all readdev() functions to make the absence
of block devices a warning instead of a fatal error
after Brian Redman <ber@ms.com> reported his IRIX
6.4 system had no block devices. (It really did
have block devices, but readdev()'s lstat() use
caused it to miss them in a directory symbolically
linked from /dev/dsk->/hw/disk.) Fixed Brian's
real problem by changing the IRIX readdev() to use
stat() on /dev nodes if a Configure test shows /hw
is

readable. Extended the potential to do the same
to all readdev() functions.

For consistency and convenience changed some
Configure abbreviations and dialect subdirectory
names: "decosf" abbreviation and "osf" dialect
subdirectory name to "du"; "netbsd" dialect
subdirectory name to "n+obsd"; "next3" abbreviation
and "next" dialect subdirectory name to "ns"; "sco"
abbreviation and dialect subdirectory name to "osr";
"sgi" dialect subdirectory name to "irix"; and
"unixware" abbreviation and dialect subdirectory
name to "uw".

Added #if/#endif clauses to the AIX rmdupdev()
function to avoid clone processing for AIX versions
less than 4.1.4. The problem was reported by Toralf
Foerster <toralf.foerster@io-warnemuende.de>, who
supplied corrective code.

Added support for new style NetBSD inode with i_ffs
and i_e2fs union members.

Improved Configure and 00FAQ information on Digital
UNIX configuration subdirectory with suggestions
from Brad Krebs
<brad@EECS.Berkeley.EDU>.

4.14 July 22, 1997
Reorganized the Solaris handling of the inode
structure header file, ufs_inode.h, to eliminate
VxFS structure definition conflicts for Solaris
2.4, based on information from Greg Earle
<earle@netbsd4me.jpl.nasa.gov>.

Cleaned up some typos and confusion in Configure's
help output, based on comments from Bela Lubkin
<belal@sco.com>

Added a 00DIALECTS file, containing UNIX dialect
version numbers, that can be used by Configure and
the man page.

4.15 August 15, 1997
Aligned `Configure -help` output better. Removed
Configure's 2.6 Beta test adjustments.

Added improved Solaris VxFS configuration and

handling, based on information from Greg Earle
<earle@netbsd4me.jpl.nasa.gov>.

Added socket state -- TCO or TPI -- for socket
files at the suggestion of Ian Fitchet
<I.D.Fitchet@ftel.co.uk>.

4.16 September 25, 1997
Added reporting of TCP/TPI queue lengths and window
sizes ala netstat to NAME column.
Added -T option
to select or de-select TCP/TPI info reporting.
(Window sizes are only reported for Solaris.)
Fixed anomalies along the way in SIZE/OFF processing
for some dialects.

Fixed service name argument processor to allow
minus signs as part of the name. Consequently this
disallows names with embedded minus signs from
being specified as the start of a range.

Added 00FAQ entries explaining why lsof won't find
a file being edited with vi, why window sizes aren't
reported for all dialects, and what the "no more
information" message means.

Forced Pyramid CC to be /usr/ccs/bin/cc to avoid
accidental use of the BSD variant in /usr/ucb/cc.

Added support for Linux glibc2, including a Configure
test; cross-Configure support (00XCONFIG); and much
unfortunate and risky sleight-of-hand in lsof Linux
dialect header and source files, forced upon lsof
by incompatibilities between Linux kernel and glibc2
header files.

Included in scripts/identd.perl5
a Perl 5 implementation
of an identd server, using lsof, provided by Kapil
Chowksey <kchowksey@hss.hns.com>.

Updated IRIX 6.4 xfs_inode guess.

4.17 October 14, 1997
Added -V option for verbose search result reporting.
Verbose reports are prepared for failure to locate
file names, command names, Internet addresses or
files, login names, NFS files, PIDs, PGIDs, and UIDs.

Augmented Linux NFS file test to cope with kernels
whose NFS code is in a loadable module. Need for
the test was pointed out by Jonathan Sergent
<sergent@csociety.ecn.purdue.edu>. The change
required that Linux have private dmnt.c source,

Completed a Linux 2.1.57 port on a system provided
by Jonathan Sergent.

4.18 October 25, 1997
Eliminated memory leaks in alloc_lfile(), lkup_port(),
and NEXTSTEP's process_text() function.

Added recognition of OpenBSD 2.2 in Configure,
supplied by Kenneth Stailey <kstailey@disclosure.com>.

Consolidated print_file() functions to use the
one
in lib/prtf.c. Made it configurable and changed
it to size print columns dynamically.

!!! WARNING !!!

WITH DYNAMICALLY SIZED PRINT COLUMNS LSOF 4.18
PRODUCES OUTPUT SIGNIFICANTLY DIFFERENT FROM THAT
OF PREVIOUS REVISIONS. LINES ARE GENERALLY SHORTER
AND THERE IS GENERALLY LESS BLANK SPACE BETWEEN
COLUMNS AND THE ITEMS IN THEM. THERE ARE NO LONGER
ANY SPACES BETWEEN DEVICE NUMBER ELEMENTS, ONLY
COMMAS.

!!! WARNING !!!

Added special types and print specification modifiers
for file size and offset to handle UNIX dialects
with 64 bit sizes and offsets. Paul Eggert
<eggert@twinsun.com> reported the need for this
addition.

With Paul Eggert's help picked lint from the lsof
library, the main level lsof sources, and the Sun
dialect sources.

Added documentation, including the file 00LSOF-L,
about the lsof-l LISTSERV.

Added support for Reliant UNIX on the RM600. Bob

Passarella <rmpassar@pyramid.com> supplied the changes. Kevin Smith <kevin@pyramid.com> helped arrange test systems. While incorporating Bob's changes, modified lib/rnch.c to handle kernel ncache structs whose name is accessed via a char *, rather than in a char array.

Changed #include order of <sys/socketvar.h> for Solaris 2.x. W. Richard Stevens <rstevens@kohala.com> pointed out the need to do this.

4.19 October 30, 1997

Changed Pyramid Reliant RM600 proc scan to skip SSYS (p_flag) processes, since they don't seem to have a readable u_cdir vnode.

Enabled Pyramid Reliant UNIX kread() work-around for DC/OSx, too, since its read(/dev/kmem) kernel driver seems to share the page boundary bug this work-around circumvents.

Changed SzOffFtm_d and SzOffFtm_dv (new formats at 4.18 to print size and offset) from signed to unsigned. Setting them signed at 4.18 was an oversight.

Plugged a memory leak that caused the loss of 130 bytes per repeat-mode pass. Fixed it with a simple work-around in main(). Lionel Cons <Lionel.Cons@cern.ch> reported the leak.

4.20 November 11, 1997

Tested under BSDI 3.1.

Added support for Reliant UNIX Mesh IPC files with help from Billy Ho <bho@pyramid.com>.

Added support to Digital UNIX lsof that uses the libmsfs tag_to_path() function (when it exists) to look up AdvFS path names. The idea and sample code came from Dean Brock <brock@cs.unca.edu>. Converted Dean's code into more general purpose support for private name cache lookups via the HASPRIVNMCACHE #define in the dialect machine.h file and code conditional on it in the printname() function.

Taught Digital UNIX lsof to recognize NFS3 file systems. Corrected Digital UNIX lsof DEVICE column alignment.

4.21 December 1, 1997

Squashed bug, introduced at revision 4.18, that resulted in double reporting of each selected PID when terse mode (-t) was specified.

Corrected minor bug, also introduced at 4.18, that might cause an extra print_proc() pass when one PID has been specified.

Added -R to lsof options in scripts/idrlogin.perl*. The option should have been there -- it was supposed to be mandatory for PGID reporting -- but a bug, corrected in revision 4.18, previously made -R unnecessary.

Enabled configuring for BSDI BSD/OS 4.0 per a suggestion from Jeff Honig <jch@bsdi.com>.

Enabled replacement of scoff_t with off64_t (scoff_t is used to type r_size and r_localsize in the rnode struct) for IRIX 5.3 systems that have the NFS kernel rollup patch (1477). This compensates for SGI's failure to distribute an updated <sys/fs/rnode.h> with their patch.

Validated under Linux 2.0.3[12], Linux 2.1.64, and NetBSD 1.3.

Added FreeBSD root directory reporting, courtesy of Dan Nelson <dnelson@emsphone.com>.

4.22 December 15, 1997

Made adjustments for Linux 2.1.7[02].

Improved NAME information for Linux UNIX domain sockets.

Added option +|-M to control the reporting of portmapper registration information in square brackets after the TCP or UDP port or service name. Kenneth Stailey <kstailey@disclosure.com> suggested the feature and provided sample code from OpenBSD.

Reporting is disabled by default in the distribution
and may be enabled with +M; if lsof is compiled
with HASPMAPENABLED (e.g., from machine.h), reporting
will be enabled by default and can be disabled with
-M.

Changed the -w option to +|-w to match the syntax
of the +|-M option and to eliminate any options
that flip meaning when a symbol is defined at
compile time. For both +|-M and +|-w, specifying
`-' when the default state is disabled or specifying
`+' when the default state is enabled causes no
problems.

!!!WARNING The -w option has changed in lsof 4.22. WARNING!!!

Made the +|- prefix legal for most options, but
didn't document it in the man page or help panel.
Most options that disable something -- e.g., -b,
-C, -n, -P -- now disable when the prefix is `-'
and enable when
it is `+'. Since the states these
options disable are enabled by default, I chose to
avoid documentation complexity and confusion by
not mentioning that they can be used with the `+'
prefix.

Condensed the help panel.

Made sure Digital UNIX Configure stanza puts normal
include path (e.g., /usr/include) before system
include paths.

Added IPX socket information reporting to Linux
with help from Jonathan Sergent <sergent@purdue.edu>.

4.23 January 16, 1998
Fixed conflict arising from the quondam replacement
of the Sun Solaris <netdb.h> with a BIND/BSD version.

With help from Jonathan Sergent <sergent@purdue.edu>
developed a /proc file system based Linux lsof.
It needs some Linux 2.1.x release to work -- I'm
not sure which, but I tested under 2.1.72, 2.1.76,
and 2.1.79. The Configure script selects special
sources for this lsof, so the full lsof distribution
now contains both /dev/kmem and /proc based sources
for Linux lsof. An optional kernel

mod, written
by Jonathan, enhances the /proc-based lsof ability
to recognize IPX socket files. Reorganized and
augmented the Linux sections in 00FAQ to explain
the two types of Linux lsof.

Defined DOSTAT_FUNCTION for dostat() in misc.c to
select the function, stat() or lstat(), it will use.
DOSTAT_FUNCTION is normally undefined, defaults to
lstat(), and is only defined for the /proc-based
Linux lsof in its dlsof.h.

Made conditional on the presence of IRIX 6.4 XFS
rollup patch #6 an XFS node change introduced in
revision 4.16. Identified the patch with help
from John R. Vanderpool <fish@daacdev1.gsfc.nasa.gov>.

Added NFS node compensation for NetBSD 1.3. The
code and suggestion for it was supplied by Jean-Luc
Richier <richier@imag.fr>.

Added diagnostic messages to the /dev/kmem-based
Linux Mksrc script to report errors during the
construction of the kernel name cache header file,
kncache.h. Added 00FAQ information on kncache.h.

Added
a new Linux test host, running 2.0.33 and
GlibC, provided by Steve Logue <stevel@mail.cdsnet.net>.

Ported to PTX 4.1.3 and 4.4.2. Adjusted lib/rnch.c
for 4.4.2 to allow customization f additional ncache
struct element names.

4.24 January 28, 1998
Changed /proc-based Linux lsof offset test to use "/"
instead of "/etc/passwd".

To assist Jim Mintha <jim@geog.ubc.ca> with the
packaging of lsof for Debian Linux, added a
DEBIAN_LINUX_LSOF #define to trigger the activation
of special system map file location code in the
/dev/kmem-based dproc.c.

Applied modification to dialects/bsdi/dlsof.h from
Ingimar Robertson <iar@skyrr.is>, enabling lsof to
compile for BSDI BSD/OS 2.0.

Corrected a documentation error in 00DCACHE, pointed
out by Thomas Anders <anders@hmi.de>. The error was
created when the -V option was added at lsof 4.17.

Made IRIX 5.3 through 6.3 lsof aware of IRIX SCSI
tape devices (e.g., /dev/tape). Dave Olson of SGI
and Randolph J.
Herber of FNAL provided valuable
advice, and Igor Schein <ischein@air-boston.com>
helped test.

Added a machine.h symbol (NEVER_HASDCACHE) that
prevents Customize from offering to change HASDCACHE.
The symbol may appear anywhere in machine.h --
e.g., in a comment. Included the symbol in a
comment of the HASDCACHE section of the /proc-based
Linux lsof machine.h, and accompanied it with
warnings against #define'ing HASDCACHE. Did the
same thing for WARNDEVACCESS (NEVER_WARNDEVACCESS
is the suppressant.)

4.25 February 7, 1998
Corrected an IRIX mis-cast of file offset (position).
Igor Schein <ischein@air-boston.com> reported the
problem. This was offered as a patch to 4.24.
Picked some lint Igor pointed out.

At Igor's suggestion added an optional decimal
digit size argument to the -o option. This argument
specifies how many file offset decimal digits can
follow "0t" before lsof switches to a "0x..." form.
The argument size specification doesn't
count the
two characters of the "0t". A size of 0 means
unlimited. The default is OFFDECDIG (8), preserving
compatibility with existing lsof output; it can be
changed by the lsof builder. When size is specified
with -o it does not force offset display; -o without
a size still must be used to do that.

Added an IRIX 6.2, 32 bit system, XFS node patch,
courtesy of Ulrich Bernhard <rzubu@rzu.unizh.ch>.

For my own convenience enabled Configure to use
/usr/local/bin/gcc for NEXTSTEP. This allows
circumvention of a gcc 2.8.0 ranlib problem on
my test 3.1 `040 cube.

Added flags recommended by the RISC/os and Ultrix
compilers for the updated (and longer) main.c.

Updated FreeBSD cd9660_node.h Configure test.

4.26 February 17, 1998
Added shared process group processing for IRIX 5.3,
and IRIX 6.1 and above, based on investigation of
a bug report from Igor Schein <ischein@air-boston.com>.
Igor helped test this addition.

Improved handling of file
system name arguments.
It's now done in a manner similar to fuser. The
-f argument forces path names to be considered as
simple files, rather than as file system names.
The +f flag forces them to be considered as file
system names. Normally path arguments are considered
file system names when they match a mounted-on
directory in the system's mount table, or when they
match a mounted file system's block device. Igor
Schein helped test this change.

Igor also suggests that the proper compilation of
the IRIX 6.4 proc structure after patch 2536 has
been installed may need -DPIOMEMOPS. So lsof's
MkKernOpts script was updated to propagate that
option from CCOPTS in /var/sysgen/system/irix.sm,
even though patch 2536 doesn't add -DPIOMEMOPS to
it. Added a 00FAQ item on this patch.

Added a fatal warning message about names forced
to be file system names (with +f) that have no
match in the mount table.

Improved the -V message for files and file systems
for
which no open files were found. Added reporting
of /proc file and file system search failures.

Did some code reorganization to combine the multiple
ck_file_arg() functions into one. Moved the new
function from the library to the top level and put
it in arg.c; moved the usage function from arg.c
to a new top-level source file, usage.c, to balance
top-level source file size. The new usage.c depends
on version.h; arg.c no longer does.

Added flag recommended by the DU compiler for the
updated (and longer) main.c.

4.27 March 6, 1998
At the request of Igor Schein <ischein@air-boston.com>
added a conditional repeat mode option, using the
`+' prefix to the `r' option. +r operates as does
-r with the exception that it exits the first time
no open files have been listed during a cycle.
The exit code will be zero when any open files have
been listed; one, if none were ever listed.

Ported lsof to HP-UX 11.0 with the help of Richard
Allen. This
port hasn't been tested on a 64 bit
kernel; I'm sure it won't work there without more
mods. It may not work on PA 2 architectures; I've
only tested it under PA 1 and a separate, busy
tester reported PA 2 problems that I've been unable
to investigate.

In anticipation of getting access to a 64 bit HP-UX
kernel and the pending start of the Solaris 2.7
Beta test (It will have 64 bit kernel addressing.),
started adding support for 64 bit kernel pointers.
This includes: ubiquitous use of the KA_T cast
for kernel pointers; a format to print them,
KA_T_FMT_X; a function to print them, print_kptr();
and modifications to most kernel-related functions
-- e.g., process_file(), process_node(),
process_socket(), readvfs() -- to process kernel
addresses as KA_T types.

Fixed minor bug in handling path name arguments
that end with a `/'.

Removed support for RISC/os; its test system is no
longer available.

Made modifications to insure that lsof output
doesn't
contain non-printable characters. All such
characters are now printed in the printf form
"\x%02x". Several new common functions were
installed in misc.c to support "safe" printing.
This second major modification in 4.27 to common
and dialect code could have introduced bugs not
yet detected.

4.28 March 10, 1998

Refined unprintable format to use \b, \f, \r, \n, \t, and ^* (for CTRL) forms. Corrected omission of safestrprt() use for field output command name. These changes were offered as patches to 4.27.

Made space an unprintable character (\x20) in the COMMAND column; printable elsewhere, including the NAME column, field output, and error messages.

Made sure FD column is parseable as a single entity -- i.e., has no embedded space. Thus, if the access mode is unknown but there is a known lock mode, (a very rare case) the access mode will be printed as `-'.

Picked lint with gcc 2.8.0 under Solaris 2.6.

With the help of Dave Olson of SGI identified a proc struct element that should have been added to <sys/proc.h> by IRIX 6.4 patch 2536. Added a work-around for it to the lsof Configure script. Igor Schein <ischein@air-boston.com> identified that the patch caused a proc structure length complaint from lsof. Removed an obsolete 00FAQ item on the patch, installed at lsof 4.26, explaining that no solution was yet available.

Added a 00FAQ item on how BIND installs its own header files, including <netdb.h>, which may cause the rpcent struct definition to vanish. Solaris has an automatic lsof work-around, but that hasn't been (and probably can't be) propagated to all dialects supported by lsof. The 00FAQ item recommends re-installation of the vendor header files that BIND has replaced. (Others include <rpcent.h>, <sys/bitypes.h>, and <sys/ctypes.h>.)

Made AIX AFS fixes.

4.29 March 26, 1998

Corrected bug in Internet address matching. The matching formerly stopped if the foreign address matched, thus failing to check the local address for a match. That led to a possible false "Internet

address not located" warning (i.e., in response to
-V) about the local address, when both foreign and
local addresses were specified with -i. This
correction was offered as a patch to 4.28.

Changed readmnt() usage in an attempt to defer
mount readlink() and stat() delays until they are
necessary.

Corrected two bugs in the Digital UNIX readdev()
function. Made the correction available as a patch
to 4.28 and regenerated the 4.28 DU binaries.

Added a missing argument to a print-kptr() call in
the HP-UX dsock.c. The missing argument causes a
fatal gcc error. The problem was reported by Eyal
Shaynis <eyal.shaynis@telrad.co.il>. The fix was
offered as a 4.28 patch.

Adjusted for Digital UNIX 4.0D; the spec_node
structure is now defined in <sys/specdev.h>. Kris
Chandrasekhar <Kris.Chandrasekhar@digital.com>
identified the need
for the adjustment.

Incorporated a bug fix from Brian McAllister
<mcallister@mit.edu> to the DU readmnt() function.
This fix was offered as a patch to 4.28.

Added "safe" printing to a SunOS clone device error
message.

Corrected bug in tabling of Linux /proc-based lock
info.

Corrected bug in handling of SunOS TLI streams.
Dan Farmer <zen@trouble.org> reported the problem.

Added a Solaris 2.6 work-around to keep the BIND
<sys/bitypes.h> from colliding with the Solaris
<sys/int_types.h>.

Strengthened the Configure test for /proc-based
Linux lsof, based on a report from Marty Leisner
<leisner@sdsp.mc.xerox.com>.

Tested on OpenBSD 2.3.

Made AIX changes that allow use with 3.2.5. The
changes were suggested and tested by Brett Hogden
<hogden@rge.com>.

Added Solaris 2.6 AFS support. Disabled reporting
of some node numbers for Solaris 2.5 and above open
AFS files. The node number computation algorithms
used for SunOS 4.1.x and Solaris less
than 2.5 no
longer always work under Solaris 2.5 and above.

4.30 April 9, 1998
Corrected a pid structure member naming error for
UnixWare < 2.1.2. The problem was reported by
Richard van Meurs <vanmeurs.anva@atriserv.nl>. He
supplied the correction. This was offered as a
patch to 4.29.

Had a report from Igor Schein <ischein@air-boston.com>
that IRIX 6.4 patch 2839 is another SGI kernel
patch, along with 2536, that changes the size of
the proc structure in the kernel without changing
the proc structure in <sys/proc.h>. Upon further
investigation found that the effect of these patches
on the proc structure is not consistent. Therefore,
dropped the Configure patch test for IRIX 6.4 and
made the code in irix/dproc.c slightly more tolerant
of proc structure size differences for IRIX 6.4.
Igor help test the change.

Corrected Solaris >= 2.5 AFS inode number generation.
Craig Everhart <Craig_Everhart@transarc.com> helped
find the cause of the
problem. This was offered as
a patch to 4.29.

Refined the Linux /dev/kmem-based glibc evasion
for the timeval structure to make it work with
glibc version 2.0.7. This required defining a new
global symbol, TIMEVAL_LSOF, default timeval, that
the /dev/kmem-based Linux lsof can set to its
private glibc timeval name, distinct from the kernel
timeval name.

Added support for Alpha to the /dev/kmem-based
Linux lsof. Alexandre Oliva <oliva@dcc.unicamp.br>
provided a test system. Added an item to 00FAQ
about lsof, the Alpha processor, and Linux.

Added a 00FAQ item about lsof year 2000 compliance.
Basically it says lsof is probably compliant,
because its only date or time computations are done
with time_t values, but I haven't done any specific
Y2K validation. I don't have plans to do any.

Added support for UnixWare 7. Chris Daniels
<chrisd@dlpco.com> provided a test system and Don
Draper <dond@sco.COM> provided technical information.
Added BFS
and SFS file system support to lsof for
UW 2.1.[12] and 7.

Updated Solaris VxFS support for VxFS 3.2.1. Greg
Earle <earle@netbsd4me.jpl.nasa.gov> reported the
need for the update. Greg and Roger Klorese
<rogerk@veritas.com> provided technical information.
Scott McClung <mcclung@primenet.com> tested.

Changed IRIX XFS patch detection in anticipation of
learning there are multiple XFS patches for IRIX 6.4
that require different versions of the lsof-invented
xfs_inode structure.

4.31 April 21, 1998
Added a VxFS #if/#endif wrap to a section of the
HP-UX dnode.c that wasn't properly protected. The
problem was reported by Peter Klosky <PKlosky@bdm.com>.
This was offered as a patch to 4.30.

Added support for Solaris 2.7 (first Beta release).
Mike Sullivan <Mike.Sullivan@Eng.Sun.COM> provided
technical advice and helped test. Charles Stephens
<cfs@jurassic.eng.Sun.COM> also helped test.

Fixed bug in /proc-based Linux that caused it to
access
/proc/mounts excessively. Marty Leisner
<leisner@sdsp.mc.xerox.com> provided a syscall
trace that identified the bug. The fix was offered
as a patch to 4.30.

Adjusted the IRIX 6.4 private structure definition
for the XFS node to accommodate patch 2970. Igor
Schein <ischein@air-boston.com> identified the
patch and the required adjustment.

4.32 May 11, 1998

Corrected Solaris 2.7 code for reporting PCFS (floppy disk) node numbers. Casper Dik <casper@holland.sun.com> supplied the fix. The fix was offered as a patch to 4.31.

Corrected a bug in conditional repeat mode handling pointed out by Igor Schein <ischein@air-boston.com>. This was offered as a patch to 4.31.

Improved reporting of AIX open(/dev/memory device) errors.

Corrected a Solaris < 2.5 KA_T declaration error, pointed out by Robert Kiessling <robert@easynet.de>. Changed KA_T from a #define to a typedef for all dialects to prevent future problems of this kind.

Changed the sample Perl 5 script big_brother.perl5 to report a four digit year from localtime().

Added support for AIX 4.3[.1]. Bill Pemberton <wfp5p@tigger.itc.virginia.edu> provided a test system. Andrew Kephart <akephart@austin.ibm.com> and Tom Weaver <tvweaver@austin.ibm.com> provided technical assistance. Niklas Edmundsson <nikke@ing.umu.se> did 4.3.1 testing.

Added -qmaxmem option to CFLAGs for an AIX compilation with an xlc version 4.x compiler.

Adjusted Linux socket handling for changes in the AX25 members of the sock struct. Richard Green <rtg@tir.com> pointed out the problem. Tested /dev/kmem-based lsof under Linux 2.0.34.

4.33 May 22, 1998

Added generic IPv6 support to common lsof sources and specific IPv6 support to AIX sources. Andrew Kephart <akephart@austin.ibm.com> supplied the additions and helped with testing. Bill Pemberton <wfp5p@tigger.itc.virginia.edu> provided a test system. The modification affected sources for every dialect, whether it supports IPv6 or not, by changing the interfaces to the common Internet address function ent_inaddr().

Added support for the NetBSD UVM virtual memory
system. Paul Kranenburg <pk@cs.few.eur.nl> supplied
technical details.

Bracketed HP-UX 11 use of <sys/spinlock.h> with
#if/#endif _KERNEL.

Corrected printing of PCB address in DEVICE column
for IRIX.

4.34 June 26, 1998

Updated 00FAQ to discuss TCP and UDP ports private
to the AIX kernel and 00README to describe how ACLs
can be used to give lsof permission to read the
kernel memory devices. Add information to 00FAQ
and 00README about other OpenBSD architectures
where lsof is reported to compile and run. Added
section to 00FAQ discussing how an incorrect loader
path environment variable value can prevent lsof
from loading correctly.

Improved Solaris namefs and doorfs support so that
it is now possible to search for an open VDOOR file
by the path name of its fattached file system
object.
Igor Schein <igor@txc.com> requested the
ability to do such a search. Even with the change,
lsof can't always identify path names for open
VDOOR files.

Also at Igor's request, improved reporting of
information on open Solaris VCHR files that share
a common vnode, and Solaris UNIX domain socket
files.

Corrected print_kptr() argument error in PTX dnode.c,
reported by Mark Price <mprice@sequent.com>.
Compensated for ncache element naming differences,
introduced at PTX 4.4.2; Kurtis D. Rader
<krader@sequent.com> reported the problem.

Changed output column title from INODE to NODE to
better reflect the column's contents of node IDs
for more than just inodes.

Improved Configuration and processing for Solaris
AFS. Corrected AIX AFS 3.4 afs_rwlock_t simulation.

Corrected a cast problem with two AIX knlist()
calls, thus quieting an AIX 4.2.1 compiler argument
type warning. Jon Champlin <champlin@us.ibm.com>
reported the problem.

Added
support to most dialect versions (exception:
/proc-based Linux) to warn when the identity of
the kernel where lsof was compiled doesn't match
the running identity. The warning can be suppressed
with -w. Note: determining AIX state requires
calling oslevel, a potentially slow operation.
Jon Champlin <champlin@us.ibm.com> suggested this
addition.

!!!! WARNING !!!! !!!! WARNING !!!! !!!! WARNING !!!!

Those using the lsof cross-configuration capability
(see 00XCONFIG), should be aware that the kernel
identity test feature introduces two new basic
cross configuration environment variables, LSOF_ARCH
and LSOF_VSTR.

!!!! WARNING !!!! !!!! WARNING !!!! !!!! WARNING !!!!

Identified a situation where a Solaris UNIX domain
socket name is known and can be searched for by
name; added the necessary code.

4.35 July 17, 1998
Made the kernel identity check an option with the
HASKERNIDCK #define in machine.h. Enabled altering
of HASKERNIDCK
with the Customize script. Added
a clause to the help output that indicates the
build-time HASKERNIDCK status.

Added more information to the NAME column for
Solaris UNIX domain sockets. Made them searchable
by their clone device path name. Igor Schein
<igor@txc.com> requested this.

Completed the HP-UX 11 port with support for its
optional 64 bit kernel. Rich Rauenzahn
<rrauenza@cup.hp.com> provided a test system.
Corrected errors with HP-UX 11 lock reporting and
private kernel structure and type definitions.

Added support for HP-UX NFS3 files.

Limited mount table warnings -- e.g., when -b is used -- to one set per mount point.

Fixed some mount table scanning and usage bugs, including one in Solaris, reported by Kjetil Torgrim Homme <kjetilho@ifi.uio.no>.

4.36 August 4, 1998

Made corrections and additions to IPv6 support and to AF_ROUTE socket handling, supplied by Jean-Luc Richier <Jean-Luc.Richier@imag.fr>. Jean-Luc's additions provide IPv6 support for the Inria IPv6 implementations on FreeBSD and NetBSD.

Fixed two Solaris 2.5, 2.5.1, 2.6 and 2.7 TCP and UDP host name or IP address reporting bugs, reported by James Mathiesen <James-Mathiesen@deshaw.com>. This fix was offered as a patch to 4.35.

Updated the Customize script to cause ENTER to use all defaults. Amir J. Katz <amir@ndsoft.com> suggested this and helped test the changes.

Updated Solaris ICMP and IP stream handling, based on a report from Igor Schein <igor@txc.com>.

Fixed a bug in the Digital UNIX mount table handling, reported by Bob Ward <bward@thehartford.com>. While working on the bug, found and updated some obsolete AdvFS code. This fix was offered as a patch to 4.35.

4.37 September 15, 1998

Deactivated SGI IRIX support and archived revision 4.36 sources and binaries in pub/tools/unix/lsof/OLD.

Improved performance of FD searching. This was offered as a patch to 4.36.

Amir J. Katz <amir@ndsoft.com> pointed out that ranlib isn't needed for AIX or Solaris. Made appropriate Configure script changes.

Fixed a file offset reporting bug for HP-UX VCHR

and VBLK device nodes located on a VxFS root. Doug Siebert <douglas-siebert@iowa.edu> reported the bug. The fix was offered as a patch to 4.36.

Resolved an HP-UX root device name reporting bug, partly caused by an out-dated local copy of the <sys/mount.h> mount structure, by generating a local header file with the structure that can be compiled without needing _KERNEL defined. Doug Siebert also reported this bug.

Changed some dialect source code -- Digital UNIX, Solaris, SunOS, and UnixWare -- to make more consistent with ps the user ID lsof reports in the USER column. Added a 00FAQ entry about it. Igor Schein <igor@txc.com> reported the Solaris and SunOS lsof inconsistencies with what ps(1) reports.

Ported lsof to Pyramid ReliantUNIX 5.44.

Added brackets as comments to case, do, done,
else,
endif, esac, if, and while statements in Configure to assist in navigating its clauses.

Added more Linux 2.0.x glibc work-arounds.

Added support for UnixWare 7.0.1.

Ralph Forsythe <ralph@contact-paging.com> provided a new FreeBSD test system.

4.38 November 25, 1998

Added support for recent FreeBSD 3.0 distributions. A 3.0 test system was provided by David O'Brien <obrien@NUXI.com>. This was offered as a patch to 4.37.

Updated the scripts/idrlogin.perl* files to look for sshd processes in addition to rlogind and telnetd ones.

Added support for DU 5.0 Beta. Berkley Shands <berkley@cs.wustl.edu> provided a test system.

Added support for OpenBSD 2.4 with changes supplied by Kenneth Stailey <kstailey@disclosure.com>.

Changed the Solaris 2.7 tests and documentation to
Solaris 7.

Made some changes to the header files for NEXTSTEP
3.3 and added support for OPENSTEP 4.x with help
from Michael A. Hovan III <mhovan@BLaCKSMITH.com>
and
Carl Lindberg <Carl_Lindberg@BLaCKSMITH.com>.
The combined dialect subdirectory is named n+os.
One of Carl's changes propagates RC_CFLAGS to the
library Makefile. Timothy J. Luoma <luomat@peak.org>
helped test under NEXTSTEP 3.3 and OPENSTEP 4.2.

Made UW 7.x version sensitive to the presence of
ptf7038. Added peer PCB address to Unix domain
socket Name column, even when a path name has been
located. Information for these changes was supplied
by Francis Le Bourse <flebourse@intelcom.fr>. Lee
Penn <lee@dlpco.com> provided a test system.

Tested lsof under OSR 5.0.5 on a test system also
provided by Lee Penn.

Made path name argument processing more tolerant
of errors per a suggestion from Julian Gordon
<julian@cadence.com>.

Acquired a new UnixWare 2.x test system, generously
provided by Computer Classroom, Inc. -- Matthew
Thurmaier <matt@compclass.com>, Ken Laing
<ken@compclass.com>, and Andrew Merril
<andrew@compclass.com>. Updated Configure
to accept
a UnixWare version of 2.1.3.

Updated kmem-based lsof for Linux 2.0.36.

Updated NetBSD sources for a change in a UVM virtual
mapping header file.

Corrected a cache allocation bug in Sun format
kernel name cache handling. The bug only shows up
when the kernel name cache is inaccessible.

4.39 December 29, 1998
Corrected problems with large device number handling
for 64 bit Solaris 7. The problems were reported
by Steve Bellenot <bellenot@math.fsu.edu>. Steve

helped test the fixes. The fixes were offered as
two patches to lsof 4.38.

Improved FreeBSD Configure operations for header
files that must be obtained from the kernel source
tree, based on a suggestion from David O'Brien
<obrien@NUXI.com>.

For Bela Lubkin <filbo@deepthought.armory.com> made
optional with +f[cfn] the display of file structure
address, shared use count, and node structure
address. /proc-based Linux doesn't implement this
feature, because it doesn't read
kernel structures
from kernel memory. Modified the PTX -X option to
take advantage of the new file structure display
option. Added shared.perl5 to the scripts/
subdirectory to provide an example of how +f[fn]
might be used to track shared file descriptors and
files.

Added more /dev/kmem-based Linux glibc evasions,
provided by Jeff Johnson <jbj@redhat.com> and Maciej
Lesniewski <nimir@kis.p.lodz.pl>. Jeff helped test
them on various Linux architectures.

Tested on AIX 4.3.2; no changes were required.
Doug Crabill <dgc@purdue.edu> provided a test
system.

Fixed -c option to detect missing command name when
following option begins with `+'.

4.40 January 25, 1999
Added support for using the CDS compiler for Reliant
Unix 5.44 and above. Made Reliant Unix MIPC support
optional, dependent on the presence of <sys/mipc.h>.

Based on a report from Michael Schmitz <MSchmitz@lbl.gov>
that /dev/kmem-based lsof misbehaves on a Linux
2.0.x m68k kernel
without module support, made the
absence of query_module() or get_kernel_syms()
Linux kernel support a fatal error. Updated relevant
sections of 00FAQ to reflect the change.

Added the ability to force the Linux Configure
stanza to use the /proc or /dev/kmem source base

via a LINUX_BASE environment variable specification.
This is a cross-configuration assist.

Added "+D <dir>" and "+d <dir>" options for directory
searching. +D searches the entire tree, starting
at <dir>, including <dir>, its contents, and its
subdirectory branches; +d searches only <dir> and
its contents, but not its subdirectory branches.
Improved lsof's searching of the specified name
list to compensate for anticipated long lists from
+d and +D.

Made an egrep in the Solaris Configure stanza usable
by the standard and XPG4 egrep's. Kenneth Stailey
<kstailey@disclosure.com> pointed out the improvement.

Fixed bugs in /dev/kmem-based Linux and UnixWare
Unix domain socket name
searching.

Changed a Linux Alpha #include to be conditional
on the presence of its named header file, so that
lsof will compile on Red Hat 5.1 and 5.2 (Linux
kernel 2.0.35) where the header file is absent.
The problem was reported by Alexandre Oliva
<oliva@dcc.unicamp.br>.

Fixed an AIX 4.3+ bug in procinfo struct space
allocation, reported by Jeff Stewart <jws@purdue.edu>.
This was offered as a patch to 4.39.

Added an lstatsafely() function to offer the same
isolation for lstat() calls that statsafely() offers
for stat() calls. This made DOSTAT_FUNCTION no
longer necessary, so deleted it.

With help from Laurent P. Montaron <lpm@sequent.com>
ported lsof to PTX 4.4.4. Laurent did a monumental
job of identifying TCP/IP changes by their TCP
version, rather than by their PTX (With mix 'n
match PTX and TCP/IP versions, the PTX version
often has no bearing on the TCP/IP version.), and
changed the Configure script and pre-processor
#if/#else/#endif
blocks to match. He also updated
Unix domain socket handling for PTX TCP/IP versions
4.5 and above.

Updated CLIENT handle acquisition of fill_portmap()
in print.c to use the more modern RPC function
clnt_create() in place of clnttcp_create() where
possible. PTX 4.4.4 requires clnt_create().

4.41 February 27, 1999
Added FreeBSD 3.1 and and 4.0 support with help
from Sheldon Hearn <axl@iafrica.com>, David O'Brien
<obrien@NUXI.com>, and John Polstra <jdp@polstra.com>.

Corrected bungled AIX 4.3+ patch that went into
lsof 4.40.

Reorganized the Configure script to improve Makefile
construction. A specific impetus for this was to
allow FreeBSD system-wide make flags to be propagated
to the lsof Makefiles, but other goals were to make
sure that the DEBUG= make entry can over-ride
standard CFLAGS values, and to better manage the
identification of compilers and their versions.
Two compiler-related values may now be supplied in
environment variables:
1) the compiler path in
LSOF_CC; and 2) the compiler version in LSOF_CCV.
00XCONFIG documents them.

Added support for Pyramid Reliant Unix bsdsfs,
msockfs, and sockfs file systems.

Added an optional LSOF_CINFO string to Configure,
producing a CINFO string in selected Makefiles,
producing a #define LSOF_CINFO in selected version.h
header files. The purpose of this is to allow
Configure the option to propagate information to
the lsof -v output. It is now used for Linux to
identify the code base, and for HP-UX 10.30 and
11.0 and Solaris 7 to identify the kernel bit size.

Added system information to NEXTSTEP and OPENSTEP
-v output, from the second line of hostinfo's
output.

Fixed a login name buffer overflow problem in the
processing of -u option values. This was offered
as a patch to 4.40. !!!THIS IS A SERIOUS STACK
OVERFLOW BUG; A LINUX EXPLOIT EXISTS FOR IT THAT
OPENS A BASH SHELL WITH LSOF'S AUTHORITY -- E.G,
SETGID(KMEM) POWER!!!

Improved
the Solaris mount table filter so the
volume manager's fake mount point, "/vol", is
ignored and doesn't supplant "/" in NAME column
path assemblies. Igor Schein <igor@txc.com> reported
this bug and provided important help in finding
it. This was offered as a patch to 4.40.

Changed the Linux /dev/kmem-based lock ownership
test to answer a problem reported by Tom Christiansen
<tchrist@jhereg.perl.com>. This was offered as a
patch to 4.40.

Installed an HP-UX 11 patch, suggested by Kevin
Vajk <kvajk@cup.hp.com>, that adjusts a private
lsof kernel header file, derived via Q4, to correspond
to an HP-UX patch bundle.

Made NetBSD 1.3I sockproto structure adjustment.

4.42 March 30, 1999
Fixed a typo in the HP-UX dfile.c that caused +fF
and +fN output controls to swap effect.

Enabled for OpenBSD 2.5 per notice from Kenneth
Stailey <kstailey@kstailey.tzo.com>

Made more VM accommodations for FreeBSD 4.0.

Improved file system search
reporting to include
path name components when they're available, instead
of mindlessly reporting the file system name in
the NAME column. Guy Dallaire <gdallair@geocities.com>
brought the need for this change to my attention.

Updated Solaris 2.6 VxFS for Veritas Oracle Database
Edition 2.0, VxFS version 3.3, and VxVm version
2.5.4, based on a report from Chris Kordish
<chris.kordish@East.Sun.COM>. Chris kindly provided
a test system.

Improved HP-UX ipc_s patch detection in Configure,
response in .../dialects/hpux/hpux11/ipc_s.h, and
documentation in 00FAQ, Kevin Vajk <kvajk@cup.hp.com>
helped test.

Added to Customize the option to suppress HASKERNIDCK
selection for specified dialects. Suppressed it
for /proc-based Linux lsof, and removed its test
and code from there. Tin Le <tin@netimages.com>
alerted me to the need for this update.

Ported to official Digital UNIX 5.0 release.

Changed DU lsof to use the knlist(3) function when
no kernel
file has been specified with -k. This
change was suggested by Erich Wimmer
<Erich.Wimmer@digital.com>.

Updated Configure for latest NetBSD (1.3I?) with
UVM support the default.

4.43 May 11, 1999
Corrected a typo in the Solaris gcc discussion in
00FAQ. Made changes to the Solaris 2.5[.1] private
tcp_s structure. Both changes were done in response
to reports from Igor Schein <igor@txc.com>, who
tested the Solaris 2.5 change.

Made more IPv6 adjustments to lsof for Tru64 UNIX
(Digital UNIX) 5.0, based on information obtained
from Compaq by Berkley Shands <berkley@cs.wustl.edu>.

Corrected HP-UX error message about HP-UX 11 q4 usage.
Amir Katz <amir@ndsoft.com> reported the correction.

Fixed a GlibC 2.1 conflict in /proc-based Linux lsof.

Fixed a man page typo reported by Vlad Harchev
<hvv@hippo.ru>.

Changed some Solaris 2.7 references to Solaris 7
in Configure and 00XPORTING.

Added a Solaris example to the echo statements that
are the
install rule in the SunOS/Solaris Makefile.

Added a field to the file structure output --
FILE-FLAG (file structure open flags, f_flag[s],
and process file flags, typically u_pofile)) --
enabled with +f[gG]. Its field output character
is 'G'.

Figured out another piece of the HP-UX 11 patched
ipc_s structure puzzle with the help of Keith Kalet
<KEITH_KALET@HP-USA-om41.om.hp.com>.

Fixed a PTX real vnode to real inode interpretation
bug.

Added link count to lsof output. Eric Dumazet
<dumazet@risgw.ris.fr> requested and helped test
it. The new +L option enables and filters it.
Its field output character is `k'.

Updated Configure script to recognize NetBSD 1.4.

Updated AFSConfig to handle default answers to
questions.

Incorporated patch from Jonathan Sergent <sergent@io.com>
that enables /proc-based Linux lsof to run on both
32 and 64 bit kernels.

Updated Configure script with a patch from David
O'Brien <obrien@NUXI.com> that recognizes
FreeBSD 3.2.

4.44 June 24, 1999
Corrected use of nlink member of hsnode for SunOS
4.1.x High Sierra File System files. John Dzubera
<zube@tlaloc.stat.colostate.edu> reported the
problem and helped test the fix. Also fixed a
SunOS segmentation fault bug. These fixes were
offered as a patch to 4.43.

Improved handling of /proc-based Linux UNIX PCB
address.

Fixed a NEXTSTEP and OPENSTEP bug that made repeat
option (-r) processing malfunction. This fix was
offered as a patch to 4.43.

Fixed Configure so it doesn't use -O in the Cflags
for the bundled HP-UX C compiler. Jim Ankenbrandt
<jankenbrandt@penton.com> reported the problem.

Corrected output ordering of parent PID and process
group ID when both -R and -g are specified.

Enhanced the pdev.c and pdvn.c library modules for
wider use. These dialect versions use the new
library modules: DEC OSF/1, Digital UNIX, and Tru64
UNIX; Pyramid DC/OSx and Reliant UNIX; SCO OSR and
UnixWare; and
Sequent PTX.

Added basic clone device support to /dev/kmem-based
HP-UX lsof for HP-UX 10.30 and higher.

Added raw socket support to /proc-based Linux lsof.

Changed NODE-ADDR column title to NODE-ID in
anticipation of using more general identification
information in the column.

Ported to UnixWare 7.1, using a test system kindly
provided by Matt Thurmaier <matt@compclass.com>
and Don Draper <dond@sco.com>.

Updated for NetBSD 1.4C VM changes, and a new
current and root working directory structure.

Made minor adjustment for latest Tru64 UNIX 5.0
Beta release.

4.45 July 30, 1999
Fixed quoting problem in DEC OSF/1, Digital Unix,
and Tru64 UNIX Makefile's install rule. The problem
was reported by Berkley Shands <berkley@cs.wustl.edu>.
Fixed bug in Tru64 UNIX 4 lsof that caused FDs to
be skipped. These fixes were offered in a patch
to 4.44.

Fixed a repeat-mode /proc-based Linux lsof bug,
reported by Sami Farin <sfarin@ratol.fi>. This
was
offered as a patch to 4.44.

Picked lint, some reported by Sami Farin.

Corrected a 00DCACHE documentation error in a sample
shell script. The problem was reported by Chad R.
Larson <chad@larsons.org>. Changed commented-out
entries in machine.h files so they require more
thought and work when the comments are removed,
based on a remark by Chad.

Compensated for the practice of Solaris 7 and above
to record the dev= value in /etc/mnttab in 32 bit
mode, even on 64 bit systems. This was offered as
a patch to 4.44.

Added a C library test for /proc-based Linux lsof,
so that the #include files can be adjusted for a
non-GlibC environment. The need for this was
reported by Andrew Hill <andrewh@tirin.openworld.co.uk>.
This was offered as a patch to 4.44.

Added support for Auspex LFS 1.8.1 and 1.9.2 to
SunOS 4.1.4 lsof. The support was requested by
Quentin Fennessy <quentin@dvorak.amd.com>, who
provided information and did testing.

Enabled IPv6 support
code for NetBSD and OpenBSD,
conditional on Configure script tests. Wolfgang
Rupprecht <wolfgang@wsrcc.com> supplied the NetBSD
code and tested it. The OpenBSD code I constructed
has been compiled but not tested.

Updated the identd Perl 5 script, based on a report
from Wendy Lin <af5@taiyang.cc.purdue.edu> that
the space in its response line in front of the user
name violates RFC 1413.

Added IPv6 support to /proc-based Linux lsof.
Jonathan Sergent <sergent@ETLA.NET> and Andrew
Thomas Sydelko <sydelko@ecn.purdue.edu> kindly
provided a test system.

Updated man page description of AIX multiplexed
files to indicate that they might be /dev/ptc or
/dev/pts, depending on the AIX version. The
correction was suggested by Onno van der Linden
<onno@simplex.nl>.

Sylvain Robitaille <syl@alcor.concordia.ca> reports
lsof passes his Y2K tests.

4.46 October 23, 1999
Corrected /proc-based Linux lsof to detect that an
IPv6 address is a mapped IPv4
address. The problem
was reported and analyzed by Arkadiusz Miskiewicz
<misiek@misiek.eu.org>, who also tested the fix.

Added a libc5 library /dev/kmem-based Linux lsof
circumvention, supplied by Jason Lingohr
<lingman@lucid.net.au>.

Corrected a bug in -t (terse) AIX output, reported
by Wendy Lin <af5@taiyang.cc.purdue.edu>. I
introduced the bug at revision 4.43 when adding
FILE_FLAG reporting. This was offered as a patch
to 4.45.

Added a work-around for a problem in the OpenBSD
2.3 <sys/pipe.h> header file. Volker Borchert
<bt@teknon.de> provided and tested it.

Improved description of cross-building lsof for a
64 bit Solaris 7 system on a 32 bit system with
suggestions from Phillip Edwards
<Philip.Edwards@sn.wpafb.af.mil>.

Fixed a gawk POSIX-mode pattern error in the Linux
/dev/kmem-based Mksrc script, based on a tip from
Ambrose C. Li <acli@mingpaoxpress.com>.

Fixed a bug in the Tru64 UNIX IPv6 handling, courtesy
of a report from
Casper Dik <casper@holland.sun.com>.

Enabled support for OpenBSD 2.6.

Enabled support for BSDI BSD/OS 4.1, based on a
report from Jeffrey C Honig <jch@bsdi.com> that
only a Configure script change is necessary.

Enabled Configure script to use gcc for building
lsof for a 64 bit Solaris 7 and 8 kernels, if the
gcc version is 2.95 or above.

Improved -i option handling for systems with IPv6
support so that it will search for a host name in
both IPv4 and IPv6 families, when that is possible.
As a companion modification, changed -V processing
to report a single error when a multiple host name
match is requested. Casper Dik <casper@holland.Sun.COM>
helped test.

Fixed a DEC OSF/1, Digital UNIX, Tru64 UNIX repeat
mode bug, reported by Mayer Ilovitz <mayer@cooper.edu>.

Mayer helped test the fix. The fix was offered as a patch to 4.45.

Changed Solaris socket file recognition scheme, so it is (nearly) the same through Solaris 8, where the previous
clone device scheme no longer works.

With significant assistance from Casper Dik, added support for Solaris 8 Beta and Beta refresh. The IPv6 support in Solaris 8 is still in some flux, so there are temporary compensations for the differences between Beta IPv6 support and Beta refresh IPv6 support. Casper and I hope those differences disappear by FCS.

Improved the delivery of information on Solaris 2.5.1, 2.6, 7, and 8 door files.

Fixed a repeat mode bug that surfaces when /etc/passwd changes between cycles. The bug report and diagnostic help were supplied by Igor Schein <igor@txc.com>. The fix was offered as a patch to 4.45.

Added support for INRIA IPv6 to NetBSD. Jean-Luc Richier <Jean-Luc.Richier@imag.fr> provided patches and a test system on which to verify them.

Added support for AIX 4.3.3. Jeff W. Stewart <jws@anaconda.cc.purdue.edu> provided a test system.

Made adjustments for FreeBSD 4.0-current.

Improved reporting of information
for AIX sockets that
lack protocol control blocks.

4.47 November 29, 1999

Based on a query from Jean-Pierre Radley <jpr@jpr.com>, changed the lsof top-level Makefile to propagate CFGF to the library Makefile. (DEBUG was already being propagated.) Added osrgcc and scogcc Configure abbreviations (to use gcc) for Jean-Pierre.

In response to a query from Igor Schein <igor@txc.com>, improved the Configure script test for Solaris 7 and 8 that decides if the compiler can produce 64 bit executables.

Made an ugly hack, based on making a private rnode
structure definition from q4 output, to compensate
for HP-UX 10.20 and lower recent NFS3 patches. HP
didn't supply an updated <nfs/rnode.h> with the
patches. The problem was reported by Will Partain
<partain@mekb2.sps.mot.com>. Elias Halldor Agustsson
<elias@hi.is> helped identify the patches as
PHNE_18173, PHNE_19426, PHNE_19937, and PHNE_20091,
and provided a test system.

Switched BSDI test system
from 2.1 and 3.1 to 4.0.1,
courtesy of Terry Kennedy <terry@tmk.com>.

Added some more dev_t hacks for Alpha FreeBSD 4.0.

Added support for IPv6 on BSD 4.x. The support hasn't
yet been tested, just compiled.

Added support for the mnt file system (mntfs or
/etc/mnttab) on Solaris 8. Tested on Solaris 8
BETA-Refresh.

Made selection of optional fields (e.g., PPID with
-FR) in a field output specification select the
optional field, too, so that the option selector
for the field (e.g., -R) isn't also required. This
change was made in response to an inquiry from John
DuBois <spcecdt@armory.com>. This may require some
revision to scripts that parse all field output;
two scripts in the lsof distribution's scripts/
subdirectory had to be updated.

Corrected handling of Linux IPv4 addresses mapped
in IPv6 addresses.

Tested under OpenBSD 2.6.

4.48 January 14, 2000
Modified -i argument processing of colon-separated
IPv6 addresses to recognize
an IPv4 address mapped
in an IPv6 address and handle it as an IPv4 address.
This was offered as a patch to 4.47.

Added a defined symbol (NOWARNBLKDEV) to control
(inhibit) the issuance of a warning when no block

devices are found. This was done anticipating its
need in FreeBSD 4.x, but that dialect version no
longer has any block devices, so HASBLKDEV was
disabled for it instead. NOWARNBLKDEV was left in
place for possible use in the future.

Enabled KAME IPv6 Configure support for FreeBSD
when <netinet6/in6.h> is found.

Disabled use of gcc to compile lsof for 64 bit
HP-UX 11.

Updated Configure to recognized FreeBSD 3.4.

Based on suggestions from Bernt Christandl
<beb@MPA-Garching.MPG.DE> improved AFS configuration
for AIX and Solaris, and updated AIX AFS 3.5 support.
Johannes Tax <tax@bluedog.oit.unc.edu>, Hung T.
Pham <hung_pham@unc.edu>, and Curt Freeland
<curt@grumpy.cse.nd.edu> provided test systems.

Updated lsof's private rnode
definition for AIX
4.3.3, since IBM still doesn't ship the
<oncplus/nfs/rnode.h> header file and the rnode
structure definition in <nfs/rnode.h> doesn't match
what the kernel uses. This was offered as a patch
to 4.47.

Weakened the test in the Linux /proc-based lsof of
the field count of data lines in /proc/net/{tcp,udp}.
It appears that recent 2.3.x Linux kernels have
added untitled fields to these files. The bug
report came from Gabor Liptak <gaborliptak@usa.net>.

Adjusted for a FreeBSD 4.0 change in the definition
of [_]KERNEL. David O'Brien <obrien@NUXI.com> reported
the problem and provided a test system.

Removed the HASPPID bracket from Fppid (the -R
option state variable) so that the field select
table will compile even when HASPPID is not defined.
This problem was introduced at revision 4.47 with
code that causes some field output characters to
set option states. The problem was reported by
David Bacon <bacon@birch.eecs.lehigh.edu>.

4.49 April

3, 2000
Made clearer in man page that "Lxx" FDs are AIX
loader table references. Also updated the 00FAQ
discussion of the Stale Segment ID bug to include
AIX 4.3.x.

Modified support for NetBSD 1.4Q to include the
<sys/buf.h> header file to cope with an MFS change.

Added support for OpenBSD UVM virtual memory.

Added support for AIX systems with > 2GB of memory.
Chris Sylvain <csylvain@itg.ummc.umaryland.edu>
reported the problem and provided the solution.
Chris also supplied some minor code cleanup. This
was offered as a patch to 4.48.

Based on new information from Igor Schein <igor@txc.com>
made additional compensation in Configure script
for 64 bit Solaris 7 and 8 gcc.

Added some 00FAQ info on the effect ordering of
the +fg and -FG options has on output format.

Improved NetBSD IPv6 configuration, based on a
suggestion from Thomas Klausner
<wiz@danbala.ifoer.tuwien.ac.at>. Added code to
convert IPv4-mapped-in-IPv6 addresses
to IPv4
addresses.

Updated the information in 00FAQ and the HP-UX 11
binary directory README files on the HP-UX 11 ipis_s
patch with new information supplied by Eric McWhorter
<emcwhorter@xsis.xerox.com>.

Added documentation on changes to HASFSTYPE and
HASNCACHE, and the new HASPRIVPRIPP.

Adjusted Configure for FreeBSD 5.0. Made additional,
necessary changes to Configure and the BSDI sources
to eliminate load errors.

Added KAME IPv6 support to FreeBSD at the request
of Ollivier Robert <roberto@eurocontrol.fr>, who
provided a test system.

Corrected the script that generates the CHECKSUMS

files for binaries to correctly name the detached
PGP certificate. The documentation bug was reported
by Michael Hennecke <hennecke@rz.uni-karlsruhe.de>.

4.50 June 29, 2000
Added a NetBSD alpha test host, courtesy of Ray
Phillips <r.phillips@mailbox.uq.edu.au>. An lsof
4.49 binary, built on Ray's 1.4.1 system was made
available prior to the 3.50 release.

Upgraded
the system map file tests in /dev/kmem-based
Linux lsof, making the use of DEBIAN_LINUX_LSOF
unnecessary. Tested the changes on a system made
available by Vincent Kujala <kujala@geog.ubc.ca>
and Jim Mintha <jim@ic.uva.nl>.

Forced AIX to use the large-file-enabled versions
of lstat (lstat64) and stat (stat64) if <sys/stat.h>
contains stat64. This should allow lsof to stat()
AIX files > 2GB even when the builder has not
defined the "large file enabled programming
environment." Configure tests <sys/stat.h> and
puts -DHASSTAT64 in the Makefile's CFLAGS to make
this happen. Fernando A.B. Whitaker
<whitaker@cenapad.unicamp.br> reported the problem.
This was offered as a patch to 4.48.

Enabled Configure script to handle OpenBSD 2.7.
Angelos D. Keromytis <angelos@dsl.cis.upenn.edu>
reported the availability of OpenBSD 2.7 and supplied
the Configure script patch.

Improved handling of DOOR and fattach()'d files in
Solaris.

Changed
message about missing kernel symbol file
from "not yet determined" to "none found".

Updated FreeBSD, NetBSD, NEXTSTEP, OpenBSD, and
OPENSTEP support to report "no PCB" and the values
of the SO_CANTSENDMORE and SO_CANTRCVMORE state
flags when a socket structure has no inpcb pointer.
This modification was made to AIX lsof at revision
4.46. Added an entry to 00FAQ about sockets that
have no inpcb pointer.

Upgraded support for FreeBSD 5.0-CURRENT. Ben
Smithurst <ben@scientia.demon.co.uk> supplied
patches and did testing. David O'Brien <obrien@NUXI.com>
supplied a test system. The update included dropping
the Fctty part of file descriptor file system
support, conditional on a Configure script test.
I propagated those changes to BSDI, NetBSD, and
OpenBSD in anticipation of their having the
modification in the future. David also arranged
with Michael Haro <mharo@area51.fremont.ca.us> for
a FreeBSD 3.4 test system.

In response to an lsof 3.72
bug report from Jim Mewes
<jim@corp.phone.com>, added more kernel address
filtering to the lsof function, kread(), that reads
Solaris kernel data.

In response to a report from Marc Duponcheel
<marc@offline.be>, added tests to the /proc-based
Linux lsof to ignore file systems of types "autofs"
and "pipfs".

Based on a report and information supplied by Casper
Dik <casper@holland.Sun.COM>, updated the ncache_load()
function in lib/rnch.c with new code that deals
with a post Solaris 8 change in kernel name cache
(DNLC) handling. Casper tested the update, which
should be invisible to Solaris versions without
the new DNLC code.

Added support for Solaris VxFS QIO files, based on
a report from Kieran Broadfoot <kieran.broadfoot@gs.com>.
Kieran help test the support.

Added support for PTX 4.4.6 and 4.5[.1] with help
from the usual cast of good people at Sequent.

Added support for 64 bit file sizes and offsets on
BSDI, FreeBSD, NetBSD, and OpenBSD,
based on a
report from Dan Nelson <dnelson@emsphone.com>.
Dan supplied a patch and did FreeBSD testing.

Added Configure script recognition of NetBSD 1.5,
based on a report from Andrew Brown <atatat@atatdot.net>.
Thomas Klausner <wiz@danbala.ifoer.tuwien.ac.at> updated
the NetBSD port package to use a pre-release of this

addition.

At the last minute saw a notice via deja.com's UseNet search service that FreeBSD 3.5 had been released and lsof didn't grok it. Added recognition of 3.5 to lsof's Configure script, but didn't have the opportunity to test lsof on 3.5.

4.51 August 21, 2000

Added Configure script support for the upcoming Solaris 9 release based on suggestions from Casper Dik <Casper.Dik@holland.sun.com>.

Changed sample Perl scripts to assume that /usr/local/bin/perl is Perl 5 and Perl 4 may be found in /usr/local/bin/perl4.

Updated Configure to recognize FreeBSD 4.1 and made a FreeBSD pre-release distribution available.

Bela Lubkin <belal@sco.COM> tested lsof on the upcoming SCO OSR 5.0.6 release and reports that lsof appears to work properly.

Updated the AIX compiler test in Configure to recognize its version 5.

Updated AIX 4.3.3 support with automatic recognition of the proper rnode structure, based on machine bit width. Also added code to detect when processing the -X option that lsof has been compiled with the "other" AIX 4.3.3 user structure and to apply compensations. When a compensation method works, it's applied during subsequent -X processing; when none works, further -X processing is disabled.

Added Tru64 UNIX 5.1 support. Updated Tru64 UNIX library text file support to recognize new kernel support for AdvFS library files. Berkley Shands <berkley@cs.wustl.edu> and Klaus Saggerer USG [saggerer@zk3.dec.com> helped put me in contact with Chang Song <song@zk3.dec.com>, the developer of 5.1's new kernel name cache and he helped me develop new code in lsof to access it.

Corrected reporting of PTX fattach()'d address.

Changed Configure and dlsof.h for NetBSD and OpenBSD
to use /usr/include/uvm header files when available.
Andrew Brown <atatat@atatdot.net>, Thomas Klausner
<wiz@danbala.ifoer.tuwien.ac.at>, and Wolfgang
Rupprecht <wolfgang@wsrcc.com> pointed out the need
to do this for NetBSD. Andrew provided access to
a NetBSD 1.5 system for verifying the changes.

Installed snprintf() support, including a private
version in the lsof library for those UNIX dialects
without the function. Changed all sources to use
it instead of sprintf() and strcpy().

Fixed a memory leak in the readvfs() functions of
BSDI, DEC/OSF1, Digital UNIX, FreeBSD, NetBSD,
OpenBSD, and Tru64 UNIX.

Tested on Linux 2.4.

Modified the Pyramid MkKernOpts script to compensate
for `uname -s` configuration alternatives. Robert
Dahlem <Robert.Dahlem@ffm2.siemens.de> supplied
the modification.

Obtained access to an FCS Solaris 8
64 bit system
and built lsof on it, using Sun Workshop C 5.0 and
gcc 2.96 20000814 (experimental). Both compilers
produce a working lsof.

4.52 November 8, 2000
Completed work on an HP-UX 11.11 port that uses a
pstat(2) interface provided by HP. To distinguish
it from its predecessors for HP-UX, this lsof
version is called PSTAT-based and the predecessor
versions are now called /dev/kmem-based. I am
indebted to the far-sightedness and support of
these good people at HP for making PSTAT-based lsof
possible: Carl Davidson, Louis Huemiller, Rich
Rauenzahn, and Sailu Yallapragada. The PSTAT-based
sources are in lsof_4.52/dialects/hpux/pstat, the
/dev/kmem-based ones in lsof_4.52/dialects/hpux/kmem.

Ported to IBM Monterey for Merced|Itanium, aka AIX
5L. It configures via the Configure script's "aix"
abbreviation and has been tested on AIX 5L Beta 3.

Jay Beck, Steve Dibbell, Loc Le, Nasser Momtaheni,
and Malcom Zung of IBM provided generous support.
Since
AIX 5L is still in Beta testing, this port
can't be considered complete.

Added Configure support for OpenBSD 2.8. David
Mazieres <dm@cs.nyu.edu> provided a test system.

Based on a report from Marc Christensen
<marc@mecworks.com> added sockfs to the mount scan
exemption list for /proc-based Linux lsof.

Added large file, CDFS, and DOSFS for UnixWare 7.x.
Added UnixWare device memory mapping support. All
UnixWare changes were supplied by Eric Dumazet
<edumazet@cosmosbay.com> Eric also supplied some
miscellaneous bug fixes.

Deferred name cache loading until printname() needs
to use the name cache.

Terminated Pyramid, SunOS 4.1.x, and Ultrix support,
because test systems are no longer available.
Final Pyramid and Ultrix source code distributions
for lsof revision 4.51 may be found on lsof.itap.purdue.edu
in pub/tools/unix/lsof/OLD/src. The no longer
supported SunOS 4.1.x source code is still distributed
with the Solaris source code.

Added
code to set Solaris node address to real vnode
address, when applicable.

John Speno <speno@lopan.isc-net.upenn.edu> provided
information that enabled me to update the Tru64
AdvFS (MSFS) node definition for AdvFS version 5.

Added Tru64 5.x CFS support with help from Kris
Chandrasekhar <Kris.Chandrasekhar@compaq.com>,
Diane Lebel <lebel@zk3.dec.com>, and John Speno.
The support only provides information about cached
file attributes.

Installed a Configure patch for HP-UX 11 supplied by
Kenneth Stailey <kstailey@disclosure.com> that adds
another command to q4 input.

Tested on FreeBSD 4.2.

Will Day <willday@rom.oit.gatech.edu> and Frank Winkler <frank.winkler@germany.sun.com> graciously supplied Solaris 8 binaries.

Added Solaris 9 text file support, supplied by Casper Dik <Casper.Dik@holland.sun.com>.

4.53 December 6, 2000

Added the AIX 5L j2_lock.h to the distribution with a Configure script step to use it when it's missing from
/usr/include/j2.

Removed SunOS 4.1.x support.

Removed Linux 2.0.x /dev/kmem support.

Fixed VBLK and VCHR special device file reporting to handle /dev information more accurately.

Added a Apple Darwin / Mac OS X 1.2 port, provided by Allan Nathanson <ajn@apple.com>. Allan also arranged for a test system so I can maintain this port. An additional test system was provided by Dale Talcott.

Dropped claims of support for all UnixWare versions except 7.1.0, since that is the only version on which I can test lsof. Even though lsof 4.53 is deprecated for UnixWare 2.1.3, installed a patch for it with testing done by A. Channing Clark <clark.channing@heb.com>.

Dropped claims of support for all SCO OpenServer versions except 5.0.5, since that is the only version on which I can test lsof.

4.54 January 19, 2001

Added compensation for a change that made the FreeBSD mount structure invisible. I can only test back to 3.2 and the compensation works
there, so
it's been #ifdef'd for 3.2 and above. David O'Brien <obrien@FreeBSD.org> provided the necessary clue.

Based on a report from Valdis Kletnieks

<Valdis.Kletnieks@vt.edu>, changed all IPv6 support
to report a TYPE of IPv6 for sockets with IPv4
addresses mapped in IPv6 addresses. The previous
lsof behavior was to report their TYPE as IPv4.

Restored the Linux GlibC test to Configure, removed
at revision 4.53, based on a report from John Dzubera
<zube@cs.colostate.edu>, that RedHat Linux 6.0 still
needs the test.

Made setting of link count for Solaris more selective.

Limited Readlink() recursion to MAXSYMLINKS. The bug
was reported by Jan Dvorak <johnydog@go.cz>.

Dropped the *claim* that lsof runs on Solaris 2.5.1.
It may well do so, but I no longer have access to a
test system.

Fixed an #endif comment typo, reported by Igor Schein.

Fixed a typo in a cast for a Tru64 UNIX 5.1 function
and updated Configure for Tru64 UNIX 5.0 and 5.1
with
information from Jesse Perry <jesse.perry@compaq.com>.

Corrected non-fatal typos in the AdvFS support in
dnode.c for Tru64 UNIX.

Added msdos file system support for NetBSD and OpenBSD.
Andrew Brown <atatat@atatdot.net> requested and helped
test it.

4.55 February 15, 2001
Based on a report from Bernd Eckenfels <ecki@lina.inka.de>
added support in lsof for files in /proc/<PID>/maps
that have been deleted.

Changed PGRP output title to PGID, conforming to
the most common current abbreviation for Process
Group ID (PGID). While some systems continue to
use *pgrp for internal kernel variable names, most
systems that support the display of PGID via ps(1)
now title it PGID. The lsof -g and -Fg options
operations are unchanged in function; only titles
and descriptions have changed. Also changed internal
variable names from *PGRP and *pgrp to *PGID and
*pgid where possible.

Dropped the *claim* that lsof runs on HP-UX 9.x.
It may well do so,
but I no longer have access to
a test system.

In response to a suggestion from Jeff Howie
<jeff.howie@federated.ca> added support for command
name selection by regular expression. A new form
of the -c option value is use to identify and
specify a regular expression.

Restore the *claim* that lsof works on UnixWare
7.0, since I re-acquired a test system.

4.56 May 3, 2001
Corrected some problems Amir Katz <Amir_Katz@bmc.com>
found with Insure++, one in lib/dvch.c, the rest
in Solaris sources. Amir's report also helped me
find an error in an snpf() call that caused (the
unsupported) Solaris 2.5.1 lsof to crash. Wally
Winzer, Jr. <wally.winzer@ChampUSA.COM> helped test.

Added support for UnixWare 7.1.1 and above in-kernel
UNIX sockets. John Hughes <john@Calva.COM> kindly
provided code and access to a test system. John
also provided a test system and advice for adding
UnixWare 7.1.1 NonStop Cluster and CFS support.
More help with that effort
came from Kurt Gollhardt
(SCO), Barbara Howe (SCO), Bela Lubkin (SCO), and
Dewan Rashid <Dewan.Rashid@ir.com>.

Archived a set of compilation hints (patches) from
Bill Melvin <Bill.Melvin@esc.edu> that make it
possible to compile the old, unsupported lsof 3.08
sources on UnixWare 1.x without NFS or CDFS support.

Installed support supplied by Allan Nathanson
<ajn@apple.com> for the Darwin "Gold Master" release,
Mac OS X 10.0 (aka Darwin 1.3 in its public source
version). Added Allan's CVS repository suggestions
to the script that gets additional header files
from an open source repository.

Tested an HP-UX 11.11 kernel patch from Sailu
Yallapragada that enables reporting of TCP/IP
information for telnetd processes that use the

telnet multiplexor. I don't yet know the kernel
patch ID.

Made the Solaris inclusion of <inet/mi.h> conditional
on the Solaris version. (It's apparently not needed
at 2.6 and above.) Bill Watson <bill.watson@uk.sun.com>
brought
this to my attention.

Added alternate Linux 2.4.x lock extent test, supplied
by Jim Mintha <jim@ic.uva.nl>.

Rearranged the lines and pre-processor tests in
regex.h, lib/regex.c, and lib/snpf.c so that unifdef
can be used to eliminate copyright and GPL statements
when the files aren't being used for a particular
dialect. (USE_LIB_* definitions in a dialect's
machine.h header file determine if one or more of
those three files are to be used.)

Added preliminary support for Solaris 8 with VxFS
3.4. This support will be refined as I get
information from Veritas about how they will
distribute the kernel header files lsof needs.
Those header files were omitted from the standard
VxFS 3.4 distribution. Technical assistance and
testing were provided by Calle Dybedahl <cdy@algonet.se>,
Gary Millen <gary.millen@veritas.com>, Rainer Orth
<ro@TechFak.Uni-Bielefeld.DE>, Peter C. Vernam
<pvernam@draper.com>, and Donna Yobs
<Donna.Yobs@veritas.com>

Tested
on FreeBSD 4.3-STABLE.

Dropped the *claim* that lsof works on UNIX dialects
where I no longer have test systems: BSDI 2.1,
3.[01] and 4.0; DEC OSF/1, Digital UNIX and True
64 UNIX 2.0 and 3.2; FreeBSD 2.1.[67], 2.2[.x],
3.[012345] and 4.[01]; HP-UX 10.20; NetBSD 1.[234];
SCO OpenServer 5.0.5; and SCO UnixWare 7.0

Tested on Solaris 9 BETA, s81_36.

4.57 July 19, 2001
Help (-h) and version (-v) output now have URLs
for the newly created and timeliest lsof FAQ
(00FAQ in the lsof distribution) at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/FAQ

and the man page for the current lsof distribution
at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/lsof_man

Based on a report from Steve Laubscher
<slaubs@woodward.com>, modified dlsof.h for PTX
4.6[.1] to avoid a temporary dnlc_t definition
needed at PTX 4.5.1.

Corrected test for old Linux kernels in Configure.
Henri Karrenbeld <ishtar@cal044202.student.utwente.nl>
brought
the error to my attention. Limited Linux
claims to 2.1.72 and above in the documentation.

Improved HP-UX 11 Configure stanza and stream socket
handling.

Constructed a work-around for the HP-UX 11 optional
OnlineJFS package. The work-around sadly requires
lsof to have a private version of the vx_inode
structure, since the OnlineJFS package doesn't
update <sys/fs/vx_inode.h>. Troyan Krastev
<Troyan.Krastev@ricoh-usa.com> brought the bug to
my attention and Michael Bracewell
<michael@ra.TSS.PeachNet.EDU> provided a test system
where I developed the work-around.

Added locale support to lsof's isprint() test,
based on a suggestion from Dan Mercer <damercer@mmm.com>.
Lsof will use setlocale(), when that function and
its supporting <locale.h> header file are available.

Added OpenBSD 2.9 support.

Based on a report from Aaron Rhodes <arhodes@psionic.com>
and with testing help from Aaron, made the lsof
4.56 revision compile and work on OpenBSD 2.6.
While
that OpenBSD version is no longer supported,
Aaron's report exposed a Configure script bug
affecting OpenBSD versions lsof does support.

Updated for FreeBSD 5.0-CURRENT. Szilveszter Adam

<sziszi@petra.hos.u-szeged.hu> help test. The lsof
FreeBSD ports packager, David O'Brien <obrien@FreeBSD.org>,
assisted.

Tested on AIX 5.1. Loc Le and Nasser Momtaheni of
IBM provided test systems.

4.58 September 13, 2001
Added options to safestrprt() and safestrprtn() to
surround the string with "" and to suppress the
printing of an ending '\n'. Use of these functions
in device cache file error message reporting answers
a suggestion for better error reporting from John
Jackson <jrj@purdue.edu>.

Fixed a Solaris 2.6 and above problem related to
searching for "large" (O_LARGEFILE) files by name;
lsof was using the wrong version of [l]stat(2).
The bug was reported by Daniel Trinkle
<trinkle@cs.purdue.edu>.

Added AIX 4.1.4 and above XTI socket support.

Added
OSR Xenix Shared Data and Semaphore file type
support with modifications supplied by Bela Lubkin.

Updated OPENSTEP support with modifications from Carl
E. Lindberg <lindberg@clindberg.org>. The changes
enable the correct reporting of executable and
library open files ("txt" type).

Limited claims of OpenServer support to the versions
where I currently test, 5.0.4 and 5.0.6. (Lsof
probably works on 5.0.5.)

Enabled processing of -C option for PSTAT-based HP-UX
lsof.

Enabled and tested on FreeBSD 4.4.

Corrected a file system test example in 00QUICKSTART,
based on a report from Jun Biao WANG <wangjunb@cn.ibm.com>.

Made available for re-distribution a user-contributed
port of lsof 4.51 to Reliant UNIX 5.45. Thomas
Mauterer <Thomas.Mauterer@philosys.de> contributed
the port.

4.59 October 20, 2001

With the closing of the Sequent Synergy Links Lab by IBM, terminated lsof support for PTX. The last tested PTX lsof revision, 4.58, is available on lsof.itap.purdue.edu in .../lsof/OLD/src.

Adjusted for FreeBSD 5.0-CURRENT NFS header file changes, based on a report from Jos Backus <josb@cncdsl.com>.

Corrected a bug in the way Linux lsof identifies the owner of a process. Lionel Cons <lionel.cons@cern.ch> reported the problem and tested the fix. Added code to avoid stat(2) calls on regular Linux files whenever possible. Lionel reported the need to do this (AFS files) and tested the new code.

Added new output field for raw device number in hex. The field is identified with 'r'. This field is NOT selected when -F or -F0 is specified so that its appearance won't disturb existing scripts that process field output.

Added support for OpenUNIX 8. A test system was provided by Larry Rosenman <ler@lerctr.org>. Matthew Thurmaier <matt@compclass.com> and many people from Caldera provided technical assistance.

Added an additional UVM test to the NetBSD Configure stanza. Andrew Brown <atatat@atatdot.net> supplied the test; it recognizes NetBSD 1.5Y UVM changes to the vnode structure recently committed by Chuck Silvers.

Applied Configure and get-xnu-headers.sh script changes suppled by Allan Nathanson <ajn@apple.com> for Darwin 1.4.

Added for Bela Lubkin <belal@mammoth.ca.caldera.com> OSR-specific environment variables to supply values to the Configure script. The variables are described in 00XCONFIG.

Added an IP version selector to the -i option parameters.

4.60 November 9, 2001

Added special handling to and corrected bugs in the matching of IPv4 in IPv6 addresses to -i6:<...> selectors.

Made 00FAQ corrections and updates, based on discussions with Igor Schein <igor@txc.com>.

Modified Configure script to detect a 64 bit capable gcc compiler and permit it to be used to build 64 bit (PA-RISC 2) lsof for HP-UX 11.00. Tested with HP's gcc package, which Rich Rauenzahn of HP kindly installed on a test system at HP. Stefan Marquardt <stefan.marquardt@hagebau.de> helped test.

Made lsof's method of killing its child process more robust, based on a suggestion from Bela Lubkin <belal@caldera.com>.

Modified all dialect Makefile segments to accept select -v #define's from the environment -- a builder's comment, host, logname, system information and user name. This was done for Bela Lubkin, so he can "tune" the -v output when he packages lsof in the upcoming Caldera OSR 5.0.7 release.

Changed Perl scripts in scripts/ to put the lsof path consistently in $LSOF. Also added a fix from Bela Lubkin to scripts/big_brother.perl5 that allows it to tolerate SCO OSR "ago" clauses in open UDP file information. Strengthened emphasis in scripts/00README that the scripts are examples that shouldn't be expected to run on all UNIX dialects without modification.

At Bela Lubkin's suggestion changed the device cache file format examples in 00DCACHE and 00FAQ to avoid "%U%". That's an SCCS escape sequence.

Added support for OpenBSD 3.0.

Added +DAportable to CFLAGS for 32 bit HP-UX 11. Amir Katz <Amir_Katz@bmc.com> suggested the addition.

4.61 January 22, 2002

Updated field output example Perl scripts in the
scripts/ subdirectory to discover the lsof path,
starting at .. and proceeding through the PATH
environment variable's directories.

Added minor OSR Configure script fixes, provided
by Bela Lubkin <belal@caldera.com>.

In response to a report from Joshua Wright
<Joshua.Wright@jwu.edu> modified NetBSD and OpenBSD
Configure stanzas and sources so that lsof can be
built when there is no system source tree (e.g.,
/usr/src/sys).

In response to a report from Peter Valchev
<pvalchev@openbsd.org> improved the UVM test in
the OpenBSD Configure stanza.

Updated Configure script to recognize FreeBSD 4.5.
Updated for FreeBSD 5.0 procfs and pseudofs changes.

Updated HP-UX stanza to see if the compiler named
in
the LSOF_CC environment variable is the bundled
compiler. If it is, "-O" is omitted from the
compiler flags.

Updated Digital UNIX 4.x and Tru64 UNIX error message
related to kernel name list failures. Added an FAQ
section about how a kloadsrv daemon failure can cause
knlist(3) to fail. The condition was reported by
Douglas B. Jones <douglas@gpc.peachnet.edu>

Based on a report from Mark W. Eichin <eichin@thok.org>
made Linux lsof capable of handling and reporting
file sizes greater than 32 bits.

Tested on Solaris 9 BETA-Refresh.

Corrected a bug in the matching of IPv4 addresses,
mapped in IPv6 addresses, to an IPv4 parameter to
an -i option.

Ported to 64 bit Power AIX 5.1 kernel with advice
from David Clissold <cliss@austin.ibm.com> and Marc
Stephenson <marc@austin.ibm.com>, and on a test
system provided by Loc Le <lple@us.ibm.com>.

4.62 March 7, 2002

Updated 00README to reflect the usefulness of gcc for building AIX lsof. Documented a report from Brian L. Gentry <BGentry@nationsrent.com> of success on AIX 4.3.3. I documented my success on 32 bit Power AIX 5.1 and my lack of success on ia64 AIX 5.1 and 64 bit Power AIX 5.1.

Improved UnixWare >=7.1.1 reporting of UNIX socket NAME field information for NonStop Cluster systems with a patch provided by John Hughes <john@Calva.COM>. Offered John's improvement as a patch to lsof 4.61.

Corrected bugs in handling of open files on block devices by OSR lsof. The bugs were reported by Bela Lubkin <filbo@deepthought.armory.com>.

Fixed bug in writing >32 bit device numbers for block devices to the device cache file.

Added support for reporting block special nodes not in /dev (or /devices). That required "like device special" be changed to "like block special" and "like character special". (00FAQ was updated.)

Based on a report from Peter Valchev <pvalchev@openbsd.org> improved the definition of the source for NetBSD and OpenBSD kernel symbols (the nlist() source file). NetBSD now defaults to getbootfile(3) if it is available, /netbsd otherwise. OpenBSD now defaults to /dev/ksyms if it is available, /bsd otherwise.

Made possible compilation under BSD/OS (BSDI) 5.0 with changes to Configure, dialects/bsdi/dlsof, dialects/bsdi/dproc.c and lib/rnmh.c. The changes were suggested by Steven Hinkle <hinkle@bsdi.com>. Note that these changes do not substantiate a claim that lsof works on BSDI 5.0, because I haven't tested it there.

Updated OpenUNIX private <sys/fs/memfs_mnode.h>, based on a report from Larry Rosenman <ler@lerctr.org> that it had been updated by Caldera patch OU800PK3. Unfortunately the patch only corrects some of the problems with the header file, so it is still

necessary to distribute a private patched version
of it with the lsof sources.

Applied a man page correction reported by Frederic
Delanoy <max_ok@yahoo.com>.

Corrected cast bugs related to using the
HP-UX
bundled C compiler on HP-UX 11.11.

4.63 April 23, 2002
Added HPUX_BOOTFILE environment variable for use
by the Configure script in determining HP-UX kernel
configuration information -- e.g., the state of
the ipis_s structure in the HP-UX 11 kernel. The
change was suggested by Marc Bejarano <beej@alum.mit.edu>.
Marc also suggested some changes to the HP-UX
section in 00FAQ that discusses Configure's use of
q4 for HP-UX 11.

Fixed a bug in the Solaris lsof file system matching
code. It was not reporting that VCHR files in
/devices were in / when /devices was in /, too.

Corrected bugs in device number, file size, file
offset, and raw device number field output generation.

Added recognition of OpenBSD 3.1 to the Configure
script with a suggestion from Peter Valchev
<pvalchev@sightly.net>. Note that this change does
not constitute a claim that lsof works on OpenBSD
3.1, because I haven't tested it there.

Built an automated test suite.
(See 00TEST and
the tests/ sub-directory of the lsof main directory).
Bela Lubkin requested it. Dale Talcott, John
Hughes, and Larry Rosenman helped me validate it
on their systems.

During the development of the test suite I discovered
the following lsof bugs or missing features, and
corrected or supplied them.

* Corrected the reporting of locks for:
  o Digital UNIX 4.0d and Tru64 Unix 5.[01];
  o HP-UX 10.30 and 11.00;
  o OpenUNIX 8;

o UnixWare 7.1.1.

* Enabled HP-UX 10.30 and 11.00 to report open NFS
file link counts.

* Corrected the reporting of UNIX domain socket
names for Apple Darwin, FreeBSD 4.5 and above,
NetBSD 1.4.1 and above, and for OpenBSD 3.0 and
above.

* Enabled HP-UX 11.11 to stat(2) large files.

* Fixed handling of combination 32 and 64 bit
device numbers in AIX 64 bit architectures.

Updated the AIX 4.3.3 NFS rnode recognition code,
first installed at revision 4.51. It looks like
some IBM update has
restored a single rnode structure
independent of the machine bit width.

Updated the NetBSD and OpenBSD sources so NetBSD
can process DTYPE_PIPE files, as OpenBSD was already
able to do.

Updated Darwin get-xnu-headers.sh script to reflect
information about a recent reorganization of the
Darwin CVS hierarchy, supplied by Allan Nathanson
<ajn@apple.com>.

Added defense against the standard I/O descriptor
attack.

4.64 June 26, 2002
Corrected some FreeBSD pre-processor directives.
David O'Brien <obrien@NUXI.com> pointed them out.

Updated lsof's main() function to: 1) close all
open file descriptors above 2 before starting; and
2) to set a non-interfering umask. Moved GET_MAX_FD
test from misc.c to proto.h, so that main() could
use it. Added multiple-include protection to
proto.h.

Moved FAQ's test suite Q's & A's to a more appropriate
section. Added a Q&A on HASSECURITY option and
its affect on searching for open files. (That was
already

in the man page.)

Updated hpux/kmem/dnode.c for HP-UX < 11 compilation
with information from John Dzubera <Zube@CS.ColoState.EDU>.
While lsof doesn't support HP-UX < 11 any more, I
try to avoid disabling it there when possible, and
a locking fix for HP-UX >= 11 in lsof 4.63
inadvertently disabled compilation of lsof for
HP-UX < 11. Fixed long-standing bug in HP-UX 10.20
lock reporting.

Removed language from the test suite programs that
requires an ANSI-C compiler. This allowed the test
suite to be validated with cc and gcc on the un-
supported HP-UX 10.20.

At the suggestion of Manuel Bouyer <bouyer@antioche.eu.org>
switched NetBSD and OpenBSD lsof from using nlist()
to using kvm_nlist(). Made the same change for
BSDI, Darwin, and FreeBSD.

Validated test suite on OPENSTEP 4.2.

In response to a suggestion from Jeff Stoner
<jstoner@blackboard.com> enhanced support for the
FD list of the -d option to allow it to be either
an exclusion or
inclusion list, using the '^' prefix
to denote exclusions.

Made adjustments for FreeBSD 4.6 and 5.0-CURRENT.
Fixed a FreeBSD /etc/make.conf CFLAGS extraction
bug, reported by Kris Kennaway <kris@obsecurity.org>,
and new a bug in the fix, reported by Eric Cronin
<ecronin@eecs.umich.edu>

Added nullfs support for FreeBSD, NetBSD, and OpenBSD
at the request of Andrew Brown <atatat@atatdot.net>.

Modified all readmnt() functions to ignore mounted-on
directory names that don't begin with '/'.

Tested on NetBSD 1.6A and OpenBSD 3.1.

Upgraded to Solaris 9 FCS with two changes to the
BETA-Refresh support: 1) an adjustment to dnode.c
for a change in the so_so (sonode) structure; and
2) addition of Solaris 9 FCS specific DNLC code.

David Comay <David.Comay@Eng.Sun.COM> sent me the
dnode.c change and Casper Dik <Casper.Dik@sun.com>
helped with the new DNLC support code.

Applied OpenUNIX changes that permit lsof to compile
and run on the upcoming 8.0.1 release.
The changes
were supplied by Robert Lipe <robertl@caldera.com>.
Larry Rosenman <ler@lerctr.org> provided a test
system.

Added Solaris fd file system support.

4.65 October 10, 2002
Adjusted for change in FreeBSD 5.0-CURRENT inode
structure, reported by David O'Brien <obrien@NUXI.com>.
Adjusted for changes in FreeBSD 5.0-CURRENT <sys/vnode.h>.
One change was reported by Anders Nordby
<anders@FreeBSD.org>. Adjusted for FreeBSD 5.0-CURRENT
on sparc64 architecture.

Enhanced the error reporting of Solaris lsof when
it detects a kvm_open() failure, and added a 00FAQ
entry on the cause, based on a report from Peter
J. Bertoncini <pjb@anl.gov>.

Enabled compiling of lsof for NetBSD 1.5 with the
NULL file system, using a patch from Andrew Brown
<atatat@atatdot.net>.

Removed a hack in the LTbigf test program that was
once needed when it was compiled on Solaris 9 BETA-
Refresh with gcc. The hack isn't needed on Solaris
9 FCS. Janet Hempstead
<jan@library.carleton.ca>
brought the need for this change to my attention.

Applied a patch, supplied by Andrew Brown
<atatat@atatdot.net>, that updates lsof for NetBSD
version 1.6F. Corrected handling of the NetBSD
nullfs.

Updated to BSDI BSD/OS 4.3 on a test system kindly
provided by Terry Kennedy <terry@tmk.com>.

Updated to FreeBSD 4.7.

Updated to Apple Darwin 1.5, 5.x and 6.x with

patches supplied by Allan Nathanson <ajn@apple.com>.
The patches include IPv6 support.

Updated Configure to use the -bnolibpath loader
option when building lsof on a PowerPC, running
AIX 5 or greater. Valdis Kletnieks
<Valdis.Kletnieks@vt.edu> informed me this was
needed. Lsof for AIX 5.x was initially developed
on the IA64, where -bnolibpath can't be used and
I didn't think to restore it to PowerPC loads when
AIX 5.x became available for that architecture.

Updated to UnixWare 7.1.3 on a test system provided
by Larry Rosenman <ler@lerctr.org>. Removed
claims
that lsof works on OpenUNIX 8.0.1, because UnixWare
7.1.3 is the release name of OpenUNIX 8.0.1.

Based on a comment that his e-mail address was
wrong in the lsof distribution from Kenneth Stailey
<kstailey@disclosure.com>, removed all e-mail
addresses from lsof documentation files except this
one, 00DIST. The addresses in 00DIST are used to
send revision release notices to those who contributed
to a revision, but the addresses in this file for
previous revisions and in other documentation files
sometimes grow stale and are never validated.

4.66 December 22, 2002
Acquired Solaris 7 and 8 test systems, courtesy of
John Dzubera <Zube@CS.ColoState.EDU>. Updated
00TEST and tests/TestDB accordingly.

Clarified FreeBSD 5.0 architecture claims at the
suggestion of David O'Brien <obrien@NUXI.com>.
Also implemented David's suggestion to change
Intel to x86.

Installed changes to DNLC handling in OSR lsof in
preparation for handling changes in
the OSR 5.0.7
DNLC cache. Information about the changes and
patches to handle them were supplied by Bela Lubkin
<filbo@deepthought.armory.com>.

Upgraded True 64 UNIX support to the 5.1B release
on a test system provided by Berkley Shands
<berkley@cse.wustl.edu> Had to used relaxed ANSI

compilation because of an error in a system header
file and other lsof source usages.

Implemented the HASNOSOCKSECURITY compile-time
option. When it and HASSECURITY are defined, lsof
will be built to list only the user's open files,
but will also list anyone else's open socket files,
provided the "-i" option selects their listing.
Updated the Customize script to ask about setting
HASNOSOCKSECURITY. Left it undefined in all dialect
machine.h header files. This change was requested
by Kenneth Stailey <kstailey@speakeasy.net> for
use with ntop.

Added support for OpenBSD 3.2 and its kernel trace
file.

Improved lsof help (-h) and version (-v) information
reporting.

Fixed
a FreeBSD 4.7 and above off-by-two UNIX domain
socket path termination bug, reported by Ken Stailey
<kstailey@speakeasy.net>

4.67 March 27, 2003
Began the transition of the lsof ftp server host
name from vic.cc.purdue.edu to lsof.itap.purdue.edu.
That reflects Purdue organizational changes. This
first step makes the new name an alias to the old
one. The old name, vic.cc.purdue.edu, will remain
usable for an extended period.

Corrected a revision number reference in section
17.17 of 00FAQ on the appearance of Solaris negative
DNLC caching handing.

Updated 00FAQ discussion of compilers for 64 bit
Solaris.

Validated test suite for 64 bit Solaris 8 and gcc.

At the request of Alek O. Komarnitsky <alek@komar.org>
added the "+c <width>" option to enable optional
changing of the COMMAND column output maximum width
from the default to <width>. The default maximum
width remains CMDL, as defined in lsof.h.

Fixed three AIX kernel
bit size detection bugs,
one in the AIX Configure script stanza, the second
and third in the AIX dproc.c get_kernel_access()
function. The bugs were reported by Pierre-Yves
Fontaniere <pyf@cc.in2p3.fr>, who tested the fixes.

Added kernel event queue file support for FreeBSD,
NetBSD and OpenBSD. Andrew Brown <atatat@atatdot.net>
supplied the code.

Updated to AIX 5.2 on a test system provided by
Dale Talcott <dtalcott@purdue.edu>. Had to build
work-arounds for two missing AIX 5.2 header files,
<j2/j2_snapshot> and <proc/proc_public.h>. Corrected
an off-by-one UNIX socket addressing bug. Taught
AIX lsof to handle both jfs and jfs2 files at the
same time. Adjusted for an IBM mistake in the
sizing of the fdsinfo structure in <procinfo.h>
Toshiya Nakamura <TOSHIYAN@jp.ibm.com> helped test,

Updated to FreeBSD 4.8. Corrected another bug in
FreeBSD UNIX domain socket name handling.

Corrected gcc build problems on HP-UX 11i, reported
by Yuliy Minchev
<yuliy@mobiltel.bg>.

Updated BSDI BSD/OS support to 4.3.1.

Augmented a lock ID test on NetBSD to check if the
ID is an LWP pointer.

4.68 June 18, 2003
Enhanced Configure script's cleanup operations.

Added support for OpenBSD 3.3, based on a report
from Peter Valchev <pvalchev@sightly.net>.

Improved the description of the detached PGP
signature certificate file in the main lsof README
file, based on a suggestion from Diana Stockdale
<diana@mpl.ucsd.edu>.

Installed a work-around for FreeBSD 5.0-CURRENT on
Alpha to avoid a compiler register use complaint.

Corrected a 'c' option error message. Gnele

<blaadeleng@yahoo.com> reported the problem.

Upgraded EXT2FS and UFS support for NetBSD and
OpenBSD to handle new inode information, and the
fast UFS1 and UFS2 file systems.

With the help of Andrew Brown <atatat@atatdot.net>
determined the NetBSD snapshot (1.6F) at which
<sys/mount.h> could be included under _KERNEL, thus
eliminating
the lsof netexport.h hack. The same
change applies to OpenBSD versions 3.3 and above.

Applied a patch from Armin Gruner <ag@muc.de> that
corrects the use of the HASPROCFS definition in the
FreeBSD dialect sources.

Corrected spelling errors in 00FAQ and in the
generated 00.README.FIRST_<version> file of the
distribution archive. John Jackson <jrj@purdue.edu>
and Ray Phillips <r.phillips@jkmrc.uq.edu.au>
spotted and reported the errors.

Corrected a spelling error in a comment and incorrect
use of an alarm function in the LTsock test program.

At the suggestion of Stuart Anderson <sba@srl.caltech.edu>
added preliminary (and incomplete) SAM-FS file system
support to Solaris lsof. Completion awaits availability
of SAM-FS internals.

Fixed a Solaris device name printing bug, reported by
Ric Anderson <ric@tick.Telcom.Arizona.EDU>, only
visible when HASDCACHE is not defined. Ric helped
test the fix.

Fixed an AIX kernel bit size handling bug related
to
the NFS node (rnode) structure.

Corrected a print_kptr() function call error in the AIX
AFS code, reported by David Steiner
<david.r.steiner@Dartmouth.EDU>. Upon further reflection
and because I no longer have appropriate AIX AFS test
systems, disabled AIX AFS support in the Configure script
for AIX versions above 4.3.3.0 or AIX AFS versions above 3.5.

Added support for FreeBSD 5.1.

With advice from Allan Nathanson <ajn@apple.com> adjusted
the Darwin get-xnu-headers.sh script to access the kernel
header files needed by lsof from a new form of the Apple
open source repository.

Installed Linux and lsof library bug fixes and
improvements, supplied by Marian Jancar <mjancar@suse.cz>.
One Linux improvement handles mount strings that
have octal escapes in them, eg., \040 for embedded
blanks. Marian tested the changes.

4.69 October 16, 2003
Received and applied an OpenBSD patch from Peter Valchev
<pvalchev@sightly.net> that replaces a ctob()
call with
a sysconf() call. Peter claims sysconf() is needed for
OpenBSD on SPARC. (It is not needed for NetBSD on SPARC.)

With the upgrade of my only Solaris 7 test system
to, Solaris 8, dropped the *claim* that lsof works
on Solaris 7. That doesn't mean it won't work
there, so those who want lsof for Solaris 7 probably
should be able to build it there and it probably
will work there.

Revised lsof's DNLC handling for BSD derivatives,
including: BSDI; Darwin, DEC OSF/1, Digital UNIX
and Tru64 UNIX; FreeBSD; NetBSD; and OpenBSD. The
latest NetBSD distribution's dropping of the vnode
capability ID (v_id) required the revision.

Adjusted to the latest FreeBSD 5.1-CURRENT.

Added NetBSD support for using kvm_getproc2().

Added a patch from Andrew Brown <atatat@atatdot.net>
to handle NetBSD enum conflicts and changes in the
<miscfs/kernfs/kernfs.h> and <miscfs/procfs/procfs.h>
header files.

Added a "#define _KERNEL" to the AIX dnode2.c source
file
for compatibility with a new <j2/j2_inode.h>
AIX 5.2 header file version. The addition was
supplied by Dick Dunbar <Dick.Dunbar@Siebel.com>
and was offered as a patch to lsof 4.68/

Added support for a second type of Solaris SAMFS.
Stuart Anderson <sba@srl.caltech.edu> provided the
support. SAMFS support in lsof SOLARIS remains
scanty, because Sun won't release any details on
its kernel structures.

Dropped the *claim* that lsof works on AIX 4.3.3,
because I was unable to test it there. That doesn't
mean it won't work there, so those who want lsof
for AIX 4.3.3 probably should be able to build it
there and it probably will work there.

Updated for Solaris 10 on test systems provided by
Mike Miscevic <miscevic@hotpop.com>. Casper Dik
<casper@holland.sun.com> provided significant help.
During the Solaris 10 port found and fixed an lofs
handling bug that prevented reporting of open lofs
file lock status.

Updated the DNLC test, LTdnlc, to
provide a possible
explanation about file systems on which the test
might fail.

Modified the procedure for obtaining missing Darwin
XNU kernel header files. The new one requires more
manual intervention, but is the best that can be
done with the way Apple open sources are now
organized. 00FAQ explains the new procedures for
those not used to downloading Apple open source
files.

Added support for Apple Darwin 7.0 (Mac OS X 10.3)
with patches supplied by Allan Nathanson <ajn@apple.com>.
Dropped the *claim* that lsof builds and works on
Apple Darwin below 6.0.

Validated lsof on FreeBSD 4.9, using a test system
provided by Ben Lewis <bl@purdue.edu>.

Validated lsof on FreeBSD 5.1-CURRENT for Amd64.
David O'Brien <obrien@FreeBSD.org> provided a test
system.

Changed the NetBSD Configure stanza to do header
file searches in /usr/include by default. The
LSOF_INCLUDE and NETBSD_SYS environment variables
may still be used to specify other search

paths.
Discussions with Andrew Brown and Wolfgang S. Rupprecht <wolfgang@wsrcc.com> led to the change.

4.70 January 16, 2004
Improved shell-portability of the linux stanza of the Configure script with a patch from Paul Jarc <prj@po.cwru.edu>.

Added a "silent" rule to tests/Makefile for Paul.
Updated, extended and clarified the test suite documentation in 00FAQ and 00TEST.

Fixed Solaris 10 dlsof.h typo, reported by Mike Miscevic <miscevic@hotpop.com>. The typo prevents lsof from loading cleanly in Solaris 10 builds past 40.

Fixed a Solaris HSFS node number reporting bug and added a structure definition work-around for Solaris 10.

Converted PGP signing to GPG. My previous PGP key can be used, but the gpg "--allow-non-selfsigned-uid" option may have to be used when it is imported into a GPG key ring.

Added bz2 compression.

Updated for OpenBSD 3.4.

Added a work-around for a missing header file in the s10_44 Solaris 10 build.

Added support for FreeBSD 5.2-BETA and 5.2-CURRENT.

Updated Linux AX25 support with modifications supplied by Lutz Poetschulat <dl9cu@db0zwi.de>.

Added raw IPv6 support to Linux lsof.

Improved handling of parameters after "-i@".

Improved file name test in LTdnlc.c.

Added loop count controls to the reading of Solaris lock chains. The change was implemented as a result of a report from Steve Gonczi <steve@relicore.com>.

Based on a report from John Jackson <jrj@purdue.edu>,
enabled a Solaris 10 <sys/lgrp.h> work-around for
Solaris 9, too. (Patch 112233 installs an lgrp.h on
Solaris 9 that needs the work-around.)

With help from Andrew Brown <atatat@atatdot.net> and
John Heasley <heas@netbsd.org> added log-structured
file system (LFS) support for NetBSD and OpenBSD.

Added AMD64 to the list of FreeBSD 5.x-CURRENT
supported architectures. FreeBSD.org provides a test
system, courtesy of (I believe) David O'Brien
<obrien@FreeBSD.org>.

Added a cast
to lseek() in the HP-UX /dev/kmem-based
kread() function to make it work properly with the
bundled HP C compiler.

4.71 March 11, 2004
Added text file support to Apple Darwin lsof and
enabled the lsof executable portion of the LTbasic
test. Added support for Darwin kernel queue, POSIX
semaphore and POSIX shared memory files. Tested on
Darwin 7.2 (aka Mac OS 10.3.2).

Added process_kqueue() function prototypes for FreeBSD,
NetBSD and OpenBSD.

Picked some lint in AIX sources, lib/rnmh.c and
tests/LTsock.c.

Added "-x [fl]" cross-over option, which enables +d and
+D processing to cross over symbolic links and|or file
system mount points. Discussion with Johan Lindquist
<johan@smilfinken.net> and Eric Williams (aka The Ghost
In The Machine) <ewill3@earthlink.net> on Linux news
groups revealed the need for the option.

Updated support for UnixWare 7.1.4.

Added support for the optional reporting of socket
options, socket states and TCP flags for
most currently
supported dialects. John Smith <lbalbalba@hotmail.com>
and Tristan Nefzger <tn@bhtrader.com> requested the
information. The dialects and their versions for which

this feature has become available include:

AIX 4.3.2 and 5.[12]
Apple Darwin 7.2
BSDI BSD/OS 4.3.1
Digital UNIX and Tru64 UNIX 4.0
FreeBSD 4.9 and 5.2
HP-UX 11 and 11.11 (aka 11i)
NetBSD 1.6ZH
OpenBSD 3.4
OPENSTEP 4.2
OpenUNIX 8
SCO OpenServer Release 5.0.6
Solaris 2.6, 8, 9 and 10
UnixWare 7.1.[134]

Modified the Configure stanza for HP-UX 11 with better
q4 detection. Steve Bonds <3vhmxxm02@sneakemail.com>
supplied the modification.

Applied a patch from Mike Miscevic <miscevic@hotpop.com>
to enable lsof to compile with the zone support in the
Solaris 10 s10_b51 release. Added information on lsof
zone behavior to 00FAQ.

Added a "-z [z]" option to Solaris 10 lsof. It enables
the listing of zone name and
can also be used to select
the listing of processes and their files from specified
zones.

4.72 July 13, 2004
Corrected Solaris 10 ZONE column title display bug with
a patch from Joep Vesseur <Joep.Vesseur@Sun.COM>. Joep's
fix was offered as a patch to 4.71.

Based on a report from Jean-Pierre Radley <jpr@jpr.com>
about an unexpected GNU uname Configure interaction on
OSR, and working from information received from Bela
Lubkin, changed the OSR Configure stanza to use
/bin/uname instead of uname. Added an FAQ entry about
Configure version detection problems.

Added the +m and "+m m" options in response to a dialog
with Robert T. Brown <rbrown@netmentor.com>. The
options allow the creation of a mount table supplement
file which can be used on selected dialects to get
device numbers when stat(2) and lstat(2) can't deliver

them. (That's generally the result of an inaccessible
NFS server.) Currently the new options are supported
only on Linux.

Made
cpumask_t typedef _KERNEL compensation for FreeBSD
5.2-CURRENT. Refined it for 5.2.1-RELEASE with testing
help from Scott Ellentuch <tuc@ttsg.com>.

Added support for FreeBSD 4.10. Larry Rosenman
<ler@lerctr.org> kindly provided a test system.

Added support for NetBSD 2.0 with patches supplied by
Andrew Brown <atatat@atatdot.net>. Andrew also
provided two test systems.

Made handling of Linux maps file more robust, based on
a report from Jan Blunck <J.Blunck@tu-harburg.de>. As
a side benefit, made handling of generated stat(2)
information more flexible.

As a result of a discussion with Jason Fortezzo
<fortezza@mechanicalism.net>, adjusted lsof for Solaris
to obtain the maximum user name length from ut_name of
the utmpx structure, if <utmpx.h> exists.

Tested under OpenBSD 3.5.

Updated 00README information about using gcc (via the
Configure aixgcc abbrevisiation) to compile lsof on
AIX. Ann Janssen <ajanssen@nebook.com> made me aware
the
information was out of date.

Added an AIX SIGDANGER handler and some 00FAQ sections
on lsof memory usage after a discussion with Tom Qin
<tom.qin@citigroup.com> about lsof memory usage.

Added scripts/sort_res.perl5, contributed by Fabian
Frederick <fabian.frederick@gmx.fr>. The script
displays lsof output sorted by size and path name.

Improved handling of files on Linux NFS mount points
that use the root_squash option, based on discussions
with Paul Szabo <psz@maths.usyd.edu.au>.

Updated FreeBSD 5.2-CURRENT support, based on a problem
report from Filippo Natali <filippo@widestore.net>.

Corrected improper FreeeBSD 5.x-CURRENT #if condition,
reported by Kim Culhan <kimc@kim.net>.

Added a Configure script work-around for AIX 5.2 lsof
with JFS2, compiled by gcc >= 3.3. The work-around
was supplied by Florian M. Weps <fmw@hactrn.ch>.

4.73 October 21, 2004
Added an __XPG4_CHAR_CLASS__ #define before
#include'ing <ctype.h> on Solaris to restore
lsof's
ability to display special characters such as acute-e.

Added wide-character (e.g., UTF-8) support where
possible, prompted by a request from Kyungjoon Lee
<kjoonlee@gmail.com>. Some older dialects -- e.g.,
NetBSD 1.4.1 -- don't support wide characters, so the
wide character support is enabled by definitions in
each dialect's machine.h. Dialects with wide-
character support are listed in 00FAQ.

Make a FreeBSD 5.2-CURRENT adjustment for <sys/pipe.h>,
supplied by Sergey A. Osokin <osa@FreeBSD.ORG>.

Implemented a Linux feature request made by Jakub
Jelinek <jakub@redhat.com> that enhances lsof's ability
to locate UNIX domain sockets whose paths are named as
arguments. Jakub supplied suggested code.

Dropped *claims* that lsof works on AIX below 5.1, SCO
Dropped *claims* that lsof works on AIX below 5.1, SCO
Openserver 5.0.4, Tru64 UNIX 5.0, and UnixWare below
7.1.4. Lsof will probably build and work on those UNIX
dialect versions, but I
no longer have any way to test
lsof on them.

Added support for FreeBSD 5.3 and 6.0. The FreeBSD
5.3 support hasn't been tested.

Added FD test code that will allow dialect versions to
test FD option selections. Used the new code in the
PSTAT-based HP-UX lsof to enable it to avoid scanning
the mount table when its information is not needed.
The addition was made in response to a query from
Harvey Garner <Harvey.Garner@championusa.com> about
lsof performance in a busy NFS environment.

Upgraded lsof's AIX support level to AIX 5.3, based on
a report from Dick Dunbar <Dick.Dunbar@Siebel.com>. (I
have not tested lsof under AIX 5.3.) Based on Dick's
recommendation and local testing changed the C for AIX
version 6 and higher -qmaxmem option value to -1.

Made LSOF_AR environment variable more useful and
documented it in 00XCONFIG.

Corrected the use of sum(1) to generate signatures for
the lsof distribution and binaries to match the
documentation
that claims it is sum -r output. Jin
Guojun <jin@george.lbl.gov> noticed and reported the
problem.

Tested under OpenBSD 3.6.

Added checksum and GPG certificate files for the bz2,
gz and Z lsof distribution archives. The new files
reside with the distribution archives and supplement
the signature information already inside the archives.

Validated on Solaris 10, i8xpc, build s10_63.

4.74 January 17, 2005
Fixed a Solaris segment fault bug on systems that lack
a /dev/allkmem device. Offered the fix as a patch to
lsof 4.73. The bug was reported by Donald Zoch
<donald.zoch@amd.com>.

Updated lsof for FreeBSD 6.0 and higher for a change in
<sys/vnode.h>, based on a report from Sergey A. Osokin
<osa@FreeBSD.ORG>. Made the update available in a 4.74
'A' edition pre-release.

Filed an HP bug report about missing pstat(2) CWD info
for LOFS on HP-UX 11.11 and higher. The missing CWD
info was noticed by Ermin Borovac <e.borovac@bom.gov.au>.
Added info
to 00FAQ about the problem, which can cause
the lsof test suite's LTbasic test to fail.

Updated the q4-generated tcp_s.h in the lsof
distribution and added socket option support for HP-UX
11.00. Erwin Reyns <ereyns@europarl.eu.int> helped
test.

Updated for Solaris 10, build s10_69, with a patch
supplied by Mike Miscevic <miscevic@hotpop.com>.

Added v_path support to Solaris 10 lsof. That relieves
it of having to read and decode the kernel DNLC, and
delivers full paths more reliably.

Added specialized NFS4 support to Solaris 10 lsof.

Applied Solaris 10 patches to lsof supplied by Casper
Dik <casper@holland.sun.com>.

Updated lsof for NetBSD 2.99.10 and tested it on a
system provided by Andrew Brown <atatat@atatdot.net>.

Added support for the FreeBSD 6.0-CURRENT f_vnode
pointer in the file structure.

Added BSDI, FreeBSD, NetBSD and OpenBSD support for the
*effnlink member of the inode structure. This makes
the lsof LTnlink test run faster
on all modified
dialects and correctly on OpenBSD.

Added ptyfs support for NetBSD, using modifications
provided by Andrew Brown.

Changed the netbsd Configure stanza to look by default
for system header files in both /usr/include and
/usr/src. (The NETBSD_SYS environment variable can
still be used to select an alternate for /usr/src.)

Corrects two FreeBSD 4.10 RPC/XDR type definitions.

Added an FAQ Q&A about setuid and setgid restrictions
in HP-UX 11.11. The information in the answer was
supplied by Frank Sanders <frank.sanders@siemens.com>.

Added abbreviations for AXI FCIO and FSNAPSHOT file
flags. Holger VanKoll <Holger.VanKoll@swisscom.com>
reported the missing FCIO.

Adjusted lsof's private AIX 64 bit rnode structure for
64 bit AIX 5.2 systems. (IBM doesn't distribute a
correct <nfs/rnode.h> for it.)

Corrected a Linux socket inode printing bug reported by

Igor Schein <igor@txc.com>.

Updated for FreeBSD 4.11. The support compiles
but
hasn't been tested.

Back-ported a FreeBSD 6.0-CURRENT fix to FreeBSD
5.3-RELEASE-p1. That was done to solve a compilation
problem reported by Radko Keves <rado@daemon.sk>.

4.75 May 16, 2005
Dropped the *claim* that lsof works on DEC OSF/1 and
Digital UNIX, since my last 4.0 test system has been
removed. The last tested distribution of lsof on DEC OSF/1
and Digital UNIX was revision 4.74. It has been archived
on lsof.itap.purdue.edu in pub/tools/unix/lsof/OLD/src.

Added negation forms to the values in the -g (PGID) and
-p (PID) lists. Negated PGID and PID values, like
negated UID or login name values, are applied without
ORing or ANDing and take effect before any other
selection criteria are applied.

At the request of Marcin Gozdalik <gozdal@gmail.com>
added a -X option for Linux. The option inhibits the
reading of the /proc/net/tcp* and /proc/net/udp*
files.

Based on a report from David Gutierrez
<davegu1@hotmail.com> changed
DEC OSF/1 process table
allocation to request memory in smaller increments.

Based on a report from jayjwa <jayjwa@atr2.ath.cx>
updated the Customize script to use "tail -n 1" where
possible.

Enabled support for FreeBSD 5.4.

Improved the BSDI, FreeBSD, NetBSD, OpenBSD and Solaris
kvm_open() and kvm_openfiles() error messages.

Enabled support for NetBSD 2.99.12.

Improved HP-UX Configure stanza with help from Piet
Starreveld <pstarrev@csc.com>. Picked some lint Piet
found.

Enabled IPv6 support for HP-UX > 11. Piet Starreveld helped test it on 11.23, among others.

Updated for HP-UX 11.23 on the ia64 architecture.

Updated to latest FreeBSD 6.0-CURRENT, using a test system provided by Andrzej Tobola <ato@iem.pw.edu.pl>.

Added support for SCO OSR 6.0.0 and UnixWare 7.1.4 with help from Richard at SCO.

Corrected a Linux bug in NFS handling, reported by Karel Zak <kzak@redhat.com>. Karel supplied a patch.

Improved the code for accessing an AIX 3.2 and higher sockaddr_un structure, thus eliminating a segmentation fault possibility.

Updated for AIX 5.3.

Added preliminary (DEBUG) support for the AIX SANFS file system.

Fixed a bug in the Solaris 10 processing of the vnode's v_path pointer with code supplied by Edward Jajko <ejajko@portal.com>. The fix was offered as a patch to 4.74.

Dropped support for OpenUNIX 8, since a test system is no longer available. Archived an OpenUNIX-only distribution of the last revision (4.74) tested on OpenUNIX in pub/tools/unix/lsof/OLD/src.

Tested under Openbsd 3.7.

Tested under Darwin 7.7.0.

Enabled building on amd64 Solaris 10 with hints from Marc Aurele La France <tsi@ualberta.ca>. Marc provided a test system.

Supplied a missing quote in the FreeBSD Configure stanza. Carl Cook <Info@quantum-sci.com> reported the problem.

Removed "-O" option from tests/Makefile so that the HP-UX bundled compiler won't complain.

4.76 August 30, 2005

Corrected
an example and spelling errors in man page.

Updated for Apple Darwin 8.x with changes supplied by
Allan Nathanson <ajn@apple.com>. Allan also provided a
test system.

Completed documentation of CLRLFILEADD in all machine.h
files.

At the request of Chris Markle <cmarkle@sendmail.com>
added partial listen queue length to socket options
displayed when -Tf is specified. Partial queue length
is not reported for all dialects. (00FAQ lists the
ones where it is reported.)

Updated for FreeBSD 7.0 with information supplied by
Andrzej Tobola <ato@iem.pw.edu.pl>.

Updated Solaris VxFS support for VxFS versions 4 and
above with technical advice from Craig Harmer
<craig_harmer@symantec.com>, Gary Millen
<gary_millen@symantec.com> and Chuck Silvers
<charles_silvers@symantec.com>. Testing help was
provided by Michael Antlitz <mantlitz@prophasys.com>,
Steve Ginsberg <steve@dhapdigital.com> and Kenneth
Stailey <kstailey@yahoo.com>.

Fixed a
Solaris address space map processing bug.
Janardhan Molumuri <mjanardhan@gmail.com> reported the
bug and help me identify it. Made the fix available as
a patch to 4.75.

Added support for Solaris 10 port and CTFS files. The
CTFS support is imcomplete, because I don't know how
to get inode number, size and link count. (There's
a new 00FAQ entry about that.)

Investigated a report from Christopher J Warweg
<warwegc@GAO.GOV> that the CHECKSUMS for the lsof 4.75
binary for 64 bit Solaris 8 was incorrect. It was my
packaging error. I rebuilt and repackaged the binary.

Enabled support for Linux map file names with embedded
spaces.

4.77 April 10, 2006

Added -X option support for Solaris 10 and above. When -X is specified lsof will report cached v_node path names for unlinked files, followed by "(deleted)". Improved cached vnode path name handling by adding "(?)" to the end of path names of questionable accuracy. Updated 00FAQ to reflect these changes.

Updated for FreeBSD 7.0-CURRENT.

Fixed name addition spacing bug, reported by Stuart Anderson <anderson@ligo.caltech.edu>. Also updated Solaris 10 SAMFS support at Stuart's request.

Added missing "break;" and another HASSTATVFS test to the NetBSD and OpenBSD dnode.c. Bill Behr <bbehr@networkstoragecorp.com> reported those needs.

Fixed an HP-UX 11 file descriptor "chunk" size problem, reported by Per Allansson <per@appgate.com>. Per helped devise the fix and tested it. This fix was offered as a patch to lsof 4.76.

Updated for FreeBSD 6.0-STABLE and FreeBSD 6.1-PRERELEASE.

Updated scripts/sort_res.perl5 with changes supplied by Frederick Fabian <fabian.frederick@skynet.be>, the author of the script.

Corrected +|-M man page documentation error, reported by Roger Cornelius <rac@tenzing.org>.

Improved FreeBSD user device random seed generation in response to a problem report from Danny Braniss <danny@cs.huji.ac.il>.

Eliminated three syntax error bugs and other compiler complaints from the PSTAT-based lsof. H. Merijn Brand <h.m.brand@xs4all.nl> reported the problems and tested the fixes.

Eliminated compiler complaints in the test suite.

Investigated problems with the building of lsof on

PA-RISC HP-UX 11.23, based on a report from John
Orndorff <John.Orndorff@sungard.com>. Found that
neither the HP bundled C compiler nor gcc would build
lsof, but the the HP unbundled ANSI C compiler would.
Concluded that HP bundled C compiler can't handle
<gssapi/gssapi.h>. Devised a work-around to gcc's
omission of the rpcent structure definition of
<netdb.h> that allows it to compile lsof's print.c, but
the resulting binary doesn't run reliably. Documented
the situation in 00FAQ.

Changed reporting of unknown file types. The number of
an unknown type is now reported as four octets. The
change was made in response to a Linux lsof bug report
from Karel Zak <kzak@redhat.com>.

Dropped
the *claim* that lsof works on BSDI BSD/OS
since my last test system has been removed. The last
tested distribution of lsof for BSDI BSD/OS was
revision 4.76. It has been archived on
lsof.itap.purdue.edu in pub/tools/unix/lsof/OLD/src.

As a result of discussing the lsof source tar's MD5
checksum with Andrew Bell <andrew.bell.ia@gmail.com>,
changed the description of a suitable MD5 tool in the
lsof distribution's documentation to name the openssl
"dgst" command.

Enabled compilation on Solaris 10 1/06 with a fix sent
by Jason Fortezzo <fortezza@mechanicalism.net>. Made
the fix available as a patch to 4.76.

Adjusted to FreeBSD 5.5-PRERELEASE.

Corrected a bug in the lsof library's process_file()
function to enable the locating of AIX XTI sockets by
their TCP/IP address values. The bug was reported by
Michel Dubois <Dubois@sears.ca>.

Based on a bug report from Karel Zak <kzak@redhat.com>
added command name length checking to as many dialects
as
possible (Linux for Karel) for the "-c c" option.

Updated for OpenBSD 3.[89]. Tested the 3.9 update on a
system provided by David Mazieres. I have not tested
on OpenBSD 3.8, but David reports lsof 4.76 worked

there.

Ended regression testing of lsof on 32 bit Solaris 8
with the ending of access to a test system. Lsof
continues to be tested on 64 bit Solaris 8.

4.78 April 24, 2007
Added more information to the lsof FAQ about missing
link counts and sizes on Linux files.

Simplified Linux stat() and lstat() usage.

Relocated #define's that prevent OpenBSD compilation on
systems without a /proc file system. Pieter Bowman
<bowman@math.utah.edu> reported the problem.

Added code to avoid processing Linux /proc/<PID>/maps
file entries with zero device and node numbers. Some
such entries now have names associated with them that
are not path names -- e.g., "[heap]", "[stack]" or
"[vdso]". Scott Worley <sworley@chkno.net> reported
lsof's mishandling
of such entries.

Added SELinux security context support, provided by
James Antill <james.antill@redhat.com>. I have not
tested this, but James and Karel Zak <kzak@redhat.com>
have.

Added the #include of <sys/types.h> to Solaris lsof to
enabled compilation on Solaris 10 6/06. Peter Harvey
Peter.Harvey@Sun.COM diagnosed the problem and supplied
a patch.

Added better support for JFS2 on AIX 5.2 and 5.3, based
on bug reports and help from Thomas Braunbeck
<BRAUNBEC@de.ibm.com> and Tom Whitty <TWHITTY@cerner.com>.

Documented that lsof supports AIX 5.3 only up through
maintenance level 1 (ML1).

Enabled Solaris lsof to locate the AFS vnode operation
address for OpenAFS 1.4.1. The fix was supplied by
Robert Jelinek <Robert.Jelinek@MorganStanley.com>.

Enabled support for Solaris 10 ZFS. If the necessary
ZFS header files aren't found, lsof offers the option
to drop ZFS support, to use internal, possibly

inaccurate structure definitions,
or to supply a path
to the missing header files. Horst Scheuermann
<Horst.Scheuermann@uni-trier.de> provided a development
system and helped test the support.

Corrected a typo in the man page, reported by Eric S.
Raymond <esr@thyrsus.com>.

Changed the spelling of macroes to macros in lsof
source and documentations files, based on a suggestion
from Josh Soref <timeless@gmail.com> and verification
with the OED.

The following dialects are no longer supported: 32 bit
AIX 5.2, HP-UX 11, OpenStep 4.2, Solaris 2.6, Solaris
8, True Unix 64 and UnixWare 7.1.4. Lsof may work on
them, but I no longer have test systems for them.
Support for OpenBSD ends at its version 3.9 for lack of
interest in the port.

4.79 April 15, 2008

```
**************** IMPORTANT NOTE ******************
*                                    *
* Lsof support has been reduced to the following *
* dialects: AIX, FreeBSD, Linux and Solaris, and *
* only in selected versions
of those dialects.   *
* The selected versions are listed in this file  *
* and in other lsof documentation.              *
*                                    *
* I have made this move because of retirement    *
* and because I no longer have many test systems *
* available to me.                          *
*                                    *
* Vic Abell                              *
*                                    *
**************************************************
```

Fixed a Solaris VXFS permission problem when accessing
the VXFS inode offsets. The bug was reported by
Gregory A. Ivanov <ivga@mts.ru>. Gregory tested the
fix.

Moved an #include <string.h> later in FreeBSD dlsof.h
to enable compilation on recent FreeBSD releases. The
change was supplied by Roy Marples <uberlord@gentoo.org>.

Improved Linux /proc file stream reading speed by applying
an expanded version of a patch from
Eric Dumazet
<dada1@cosmosbay.com> that allocates a page size buffer
to each stream. Improved TCP, TCP6, UDP and UDP6 hashing
by determining the hash bucket count from the /proc/net
sockstat and sockstat6 files. The improvement was
suggested by Eric and he provided sample code. Eric also
tested both improvements.

Modified Configure script to build lsof on FreeBSD
6.2. Tested it on a system provided by Larry Rosenman
<ler@lerctr.org>.

Fixed a Linux maps file processing bug that prevented path
names from having an embedded colon. James Lingard
<jchl@arastra.com> reported the bug and helped with its
fix.

Based on reports from Eric Dumazet and Samuel Thibault
<samuel.thibault@ens-lyon.org> added support for the
Linux 2.6.22 kernel's /proc/<PID>/fdinfo files -- i.e.,
file offset and flags. Samuel Thibault provided a test
system.

Fixed a Linux UNIX socket memory leak, reported by
Philip Shin <pshin@xceedium.com>. Phillip supplied the
fix.

With
generous assistance from HP added support for an HP-UX
11.23 patch that makes TLI/XTI socket address information
available.

Fixed a header file problem for FreeBSD 6.2 on the Alpha
architecture. The problem was reported by Pekka Honkanen
<phonkane@cc.hut.fi>. Pekka tested the fix.

Based on a report and using suggested fixes from Karel Zak
<kzak@redhat.com>, made these changes to Linux lsof: corrected
a getpidcon() error message; insured that inode numbers are
handled correctly for their unsigned long long type; and
improved SELinux handling. At the request of Alon Bar-Lev
<alonbl@gentoo.org> added the LINUX_HASSELINUX environment
variable to enable or inhibit SElinux support unconditionally.

Updated Configure for FreeBSD 8.0-CURRENT and tested lsof on

AMD64 there.

Added a patch provided by Oles Hnatkevych
<don_oles@able.com.ua> for FreeBSD systems where the root
file system is on a CD9660 device.

Added compensation for the disappearance
of FMARK and FDEFER
from the FreeBSD 8.0-CURRENT <sys/file.h>.

Updated FreeBSD lsof with ZFS support. Larry Rosenman
<ler@lerctr.org>, Erwin Lansing <erwin@FreeBSD.org>, Wesley
Shields <wxs@atarininja.org> and Dmitry Morozovsky
<marck@rinet.ru> provided test systems.

Fixed a socket file identification problem reported by
Pavol Rusnak <stick@gk2.sk>. Pavol also reported the
cause of the problem.

Added the ability to format the repeat mode marker line
with strftime(3), where the dialect supports the
localtime(3) and strftime(3) C library functions. The
addition was suggested by Mike Depot <mdepot@comcast.net>,
who also tested it. The addition required creating a new
main lsof source module, util.c, that contains functions
whose compilation conflicts with the general header file
tree defined by lsof.h and dlsof.h.

Based on reports from Andrei V. Lavreniyuk
<andy.lavr@reactor-xg.kiev.ua> and Pav Lucistnik
<pav@FreeBSD.org> updated the FreeBSD
7.0 and above
file lock handling to use new locking structures. The
update requires a terrible hack to get a definition for
the lock owner structure from a kernel source module
into a local lsof header file.

4.80 May 12, 2008
Updated for a FreeBSD 7.0 and above byte level locking
change. The problem was reported by Conrad J. Sabatier
<conrads@cox.net>, who helped test the update. Wesley
Shields <wxs@FreeBSD.org> provided an 8.0-CURRENT test
system.

Propagated the FreeBSD 7.0 and above locking changes to
FreeBSD 6.x, based on a report from Edwin Groothuis
<edwin@FreeBSD.org>.

Added warnings for unsupported dialects or versions.

Added Linux support for the UDPLITE protocol. Eric Dumazet <dada1@cosmosbay.com> supplied a patch.

Added a missing quote to the Configure script's FreeBSD stanza.

Added a usage.o rule to the HP-UX PSTAT-based Makefile. I mistakenly deleted the rule at revision 4.79. The missing rule was reported by Kawaljeet Kaur <kawaljeet.malviya@gmail.com> who tested the corrected Makefile.

4.81 October 21, 2008

Updated the Darwin libproc sources with changes from Allan Nathanson <ajn@apple.com>. Tested them on a iMac mini, provided by Apple Inc.

Changed dummy declarations in library source files to eliminate complaints about unused variables and empty object files. This change may not work on dialects I can no longer test; it has been tested on some versions of AIX, Darwin, FreeBSD, Linux and Solaris.

At the request of Hal Brooks <hal@uga.edu> added support for Linux /proc/net/packet files. Hal tested it.

Added socket file only performance enhancements to Linux and PSTAT-based HPUX lsof.

Added htonl call around improper usage of INADDR_LOOPBACK; report from an Apple engineer forwarded by Allan Nathanson <ajn@apple.com>.

Adjusted for FreeBSD-8.0 change in device number handling. The adjustment should work for FreeBSD 5 and above, should the 8.0 change be propagated downward. The problem was reported by Pav Lucistnik <pav@FreeBSD.org>. An updated test system was provided by Erwin Lansing <erwin@FreeBSD.org>.

Reduced AIX support to version 5.3, since test systems with older versions are no longer available to me.

At the request of Marjo F. Mercado <mmercado@xceedium.com> and Phil Shin <pshin@xceedium.com> applied some speed

improvements to lsof, particularly when the files of
interest are /Internet files -- i.e., selected with lsof's
"-i" option. Added a two new options to assist the
improvements: 1) "-c^<command>" to tell lsof to exclude the
named command(s); and 2) "-stcp|ud>:[^]state' to tell lsof
to include in its reporting or exclude ('^') from its
reporting Internet files in the named states (e.g., LISTEN,
^CLOSE_WAIT, IDLE, etc.) For the most part these changes
apply only to AIX, Darwin, FreeBSD, PSTAT-based HP-UX, Linux
and Solaris, since those are the only places I could test
them. They
are controlled by the HASTCPUDPSTATE definition
in each dialect's machine.h header file. Marjo and Phil
provided HP-UX 11.23 and 11.31 test systems.

Fixed a stat(2) problem on HP-UX 11.31 while testing the
speed improvements.

Adjusted for kernel header file changes in FreeBSD
8.0-CURRENT. Larry Rosenman <ler@lerctr.org> provided
a test system.

Added a warning for Solaris systems where VxFS node info
can't be obtained from the VxFS utility library. The
warning was requested by Tom Matthews <Tom.MATTHEWS@rbs.com>.

Corrected mishandling of file system path name arguments
that have trailing slashes, except, of course, the root
file system, "/". Allan Nathanson <ajn@apple.com> reported
the bug.

4.82 March 25, 2009
Corrected an over-zealous exclusion test that caused
lsof to report nothing when it was given no arguments
and built with HASSECURITY and HASNOSOCKSECURITY enabled.
Joshua Kinard <kumba@gentoo.org> reported the bug and
supplied information
for reproducing it.

Based on a report from Dan Trinkle <trinkle@cs.purdue.edu>
corrected use of <sys/utsname.h> for 32 bit Solaris 10
and above compilations. Simultaneously eliminated a
casting complaint in arg.c and updated Configure to use
the appropriate 64 bit compilation option (-xarch=v9 or
-m64) with the Solaris Sun C compiler.

Updated for FreeBSD 7.1-PRERELEASE with information
supplied by Larry Rosenman <ler@lerctr.org>.

Updated the Darwin libproc sources with changes from
Allan Nathanson <ajn@apple.com>. Tested them on a iMac
mini, provided by Apple Inc. Allan also provided man
page corrections.

Updated the FreeBSD Makefile to use the ${MAKE} variable
for ZFS dnode2.c module compilation, based on a suggestion
from Alexis Ballier <aballier@gentoo.org>.

Improved the Solaris VxFS library location test, based on a
suggestion from Jason Fortezzo <fortezza@mechanicalism.net>.
Jason tested the change.

Updated Solaris 10 ZFS support
for ZFS version 4 and ZFS
pool version 10, using a test system kindly provided by
Vladislav Nespor <vladislav.nespor@id.ethz.ch>. Renata
Maria Dart <renata@slac.stanford.edu> tested on ZFS
version 4, verifying that the update works there, too.
(ZFS pool version 10 is apparently the ZFS version shipped
with the 10/08 update to Solaris. The original ZFS
support targeted ZFS version 3.)

I still consider ZFS support in Solaris lsof a hack,
because it depends on a znode structure definition that
I developed using dbx. Sun is remiss in not distributing
the ZFS header files used to build the distributed kernel.

Because of the znode structure definition hack, I can't
guarantee that lsof ZFS support will work for any other
versions of ZFS.

Solaris 10: adjusted to a change in the way devices are
stored in the kernel; fixed a problem in zone handling;
and added rudimentary sharedfs support. Carson Gaspar
<carson@taltos.org> reported the device number
problem,
provided a test system, and tested the changes. Peter
Vines <psv2b@eservices.virginia.edu> reported the zone
handling problem and tested the fix.

Adapted to FreeBSD 8.0-CURRENT changes in device number
computation. Problem was reported by Erwin Lansing
<erwin@FreeBSD.org>. Larry Rosenman <ler@lerctr.org>
provided a test system.

Corrected Solaris Configure test for appropriate VxFS

library when using gcc to compile lsof.

Updated for loss of KAME IPv6 FreeBSD accommodations.

Adapted to FreeBSD 7.2. Made Configure script recognized FreeBSD 6.3.

4.83 January 18, 2010

Converted Solaris 10 and above ZFS support to use the CTF debugger library, libctf. Code was supplied by Robert Byrnes <Robert.Byrnes@deshaw.com>.

Corrected a typo in the testing of the LINUX_HASSELINUX environment variable in the Configure script. The error was reported by Mike Frysinger <vapier@gentoo.org>. At Mike's request made Configure script accept LSOF_RANLIB (ranlib command), LSOF_CFGF (additional configuration flags) and LSOF_CFGL (additional library specifications) from the environment.

Enabled complilation of Solaris 10 lsof after a recent Sun patch which changed the PC file system's structure. Peter Vernam <pvernam@draper.com> reported the problem and helped with the fix.

Made the sort of configuration CFLAGS in the CkTestDB script impervious to locale settings.

Ported to Solaris 11, using a test system kindly provided by David Day <dday76@gmail.com>.

Adjusted to the disappearance of <nfs/rpcv2.h> in FreeBSD 8.0-BETA1.

Changed Solaris node type lookup to a hashed method and added some ability for it to handle duplicate vnodeop names in /dev/ksyms.

Updated for FreeBSD 9.0-CURRENT. Andrzej Tobola <ato@iem.pw.edu.pl> provided a test system. Extends the fix to FreeBSD 6.0 and above via a Configure test and a compile-time definition. The need for the extension was reported by Erik Trulsson <ertr1013@student.uu.se>>

Made corrections to FAQ typographical errors, suggested by Josh Soref <timeless@gmail.com>.

Added __UCLIBC__ test to Linux dlsof.h so lsof would compile
on an Intel ARM XScale processor. The addition was provided
by Doug Kehn <rdkehn@yahoo.com>.

Added test for <utmpx.h> to FreeBSD configuration. Improved
its use in lsof.h. The changes were supplied by Martin Wilke
<miwi@FreeBSD.org>.

4.84 July 29, 2010
Fixed a man page nroff command error with a correction
supplied by Josh Soref <timeless@gmail.com>.

Made Configure script recognize FreeBSD 7.3. Larry Rosenman
<ler@lerctr.org> provided a test system.

Improved task support, initially for Linux only, with help
provided by Jerome Marchand <jmarchan@redhat.com> and
Miklos Szeredi <mszeredi@suse.cz>. The support includes a
new compile-time definition, HASTASKS, and a new run time
option, "-K" to select task reporting.

While adding help output support for "-K", reorganized
the
printing of help columns to make it much easier to add a new
option description.

Updated the Solaris PC file system structure patch in
revision 4.83 so it will compile with gcc.

Disabled the Solaris lgrp_root work-around in the Solaris
machine.h so it won't cause compilation problems on Solaris
11. It no longer causes compilation problems on my Solaris
9 and 10 test systems, but some older Solaris 9 and 10
versions may still need it, so the work-around was left in
the Sun machine.h and a FAQ entry was created about it.

Updated for Solaris 11 b134, using a test system kindly
provided by Carson Gaspar <carson@taltos.org>. Made
provisions for the next ZFS version. Added info about
the failure of the LTnlink test on ZFS file systems.

Corrected typo in Configure script, reported by Dmitry
Berezin <dmitryb@oit.rutgers.edu>.

4.85 September 27, 2011
John Dzubera <Zube@CS.ColoState.EDU> kindly provided a patched
Solaris 9 test system with

the lgrp_root conflict and I was
able to devise an automatic work-around for the conflict. The
special note in .../dialects/sun/machine.h was removed and
the 17.28.1 FAQ entry was modified to reflect the update.

Added a Solaris 11 work-around for a typedef problem with
<sys/mutex.h>. Carson Gaspar <carson@taltos.org> reported
the problem and supplied the work-around.

Added support for FreeBSD 7.4 and 8.2; tested on systems
provided by Larry Rosenman <ler@lerctr.org>.

Added support for 32 bit Solaris 11 lsof with mods supplied
by Jan Wortelboer <J.H.P.Wortelboer@uva.nl>.

Added Solaris 11 support for using an alternate genunix
location. Bill Goodridge <bill@its.brooklyn.cuny.edu>
reported the alternate location.

Added further Linux cross configuration support to lsof's
Configure script. The additional support was supplied by
Grant Erickson <erick205@umn.edu>. See the descriptions of
the LINUX_* environmen variables in 00XCONFIG for more
information.
Tested lsof on Linux kernel 2.6.32 and picked
some lint that surfaced during the test.

Added fixes and changes for Apple Mac OS X 10.6, provided by
Allan Nathanson <ajn@apple.com>. Allan also provided a test
system.

Tested on FreeBSD 6.4 i386, using a test system provided by
Terry Kennedy <TERRY@tmk.com>. Updated for recent FreeBSD ZFS
changes on an 8.2 amd64 test system also provided by Terry.

Changed documentation to indicate FreeBSD 7.x is no longer
supported, since I no longer have a test system.

Made some changes to the lsof man page, suggested by Navid
<evi1m4chine@googlemail.com>.

Added compensation for Solaris 10 systems that have patch
144488-10. The patch requires that the new header file
<sys/socket_proto.h> be included while _KERNEL is defined.
Brett Bartick <Brett.bartick@nomura.com> reported the problem
first, followed by Stuart Anderson <anderson@ligo.caltech.edu>.
Michael Hocke <michael.hocke@nyu.edu> suggested a work-around
which

I refined to limit it to the specific Solaris 10 instance
and then tested on a system provided by Charles Stephens
<cfs@cowlabs.com>

Added the +|-e option for Linux. It exempts file systems
named by path from function calls that might block in the
kernel -- i.e., stat(2) and lstat(2), and when the +e form
is used, readlink (2). The new packager of lsof for the
Linux Fedora and RHEL distributions, Peter Schiffer
<pschiffe@redhat.com>, asked for the feature so it could
be used with Clearcase file systems, whose implementation
can block stat(2) calls. I consider this feature very risky
and easy to misuse -- e.g., specifying the file system as
'/' would exempt all file systems. I don't intend to
propagate this option to any other UNIX dialect that lsof
currently supports.

Made FreeBSD 9 adjustment.

Fixed a Linux bug that prevented the display of paths for
abstact UNIX sockets. Masatake Yamato <yamato@redhat.com>
reported the bug
and supplied a patch.

Added compensation for the removal of RPC header files from
GlibC 2.14 for Linux. Marek Behun <kabel@blackhole.sk>
reported the problem and supplied a patch.

Added support for Linux Netlink protocol. Masatake Yamato
requested the support and supplied a patch. Peter Schiffer
<pschiffe@redhat.com> provided a test system.

Corrected Linux UDP6-lite path. The error was reported by
Masatake Yamato and he also supplied a patch.

4.86 April 10, 2012
Lsof for AIX is no longer supported on any versions of that
operating system.

Added information about the clang compiler for FreeBSD to the
FAQ.

Corrected an arg.c bug in the accumulation of +|-e option
values, reported by Peter Schiffer <pschiffe@redhat.com>.
This correction was supplied as a patch to revision 4.85.

Enabled FreeBSD 10 support and tested it there on a system
provided by Larry Rosenman <ler@lerctr.org>.

Updated for latest Solaris 11 with patches supplied by
Carson
Gaspar <carson@taltos.org>. Carson supplied a test
system.

Adjusted Linux file system search method to compensate for
NFS mounts that have duplicate device numbers. The problem
was reported by Peter Schiffer <pschiffe@redhat.com>, who
provided a test system.

At the request of Peter Schiffer <pschiffe@redhat.com>, added
support for Linux SCTP socket files. Peter provided a test
system. Applied a warning patch supplied by Peter.

Added support for Mac OS X 10.7 (Lion), provided by Allan
Nathanson <ajn@apple.com>. Allan also supplied a test
system.

Enabled FreeBSD 8.3 support and tested it there on a system
provided by Larry Rosenman <ler@lerctr.org>.

Corrected the FAQ information on ZFS with Solaris 10 after
Steven Blackmon <stblackm@cisco.com> and Prasad Jampala
<jampalp@cisco.com> pointed out that it was incorrect --
i.e., outdated by the libctf changes at revision 4.83.

Added code to handle a Linux NFS-mounted root. Jia He
<hejianet@linux.vnet.ibm.com>
reported the need for this.

4.87 January 2, 2013
Added an entry to 00FAQ about lsof behavior when the
HASSECURITY and HASNOSOCKSECURITY options are defined.
Carson Gaspar <carson@taltos.org> pointed out the need
for this clarification.

Added a work-around for a missing definition of mach_port_t
in Darwin 9 (Mac OS/X 10.5.8). The work-around was supplied
by Jim Reid <jim@rfc1035.com>.

Added support for Linux anon_inodefs, provided by Masatake
YAMATO <yamato@redhat.com>.

Documented a Solaris 9 and 10 portmap reporting problem
(+M) in 00FAQ. The problem was reported by Clint
Roberts <Clint.Roberts@ttius.com>. I have no solution
to the problem, but discuss a possible work-around in

the answer to this 00FAQ question: "Why doesn't lsof
report portmap registrations for some Solaris versions?"

Added FreeBSD support for the oldnfs and newnfs file system
types. Daniel Braniss <danny@cs.huji.ac.il> reported the
need for the addition.

Added
ICMP socket support for Linux with code provided by
Masatake YAMATO <yamato@redhat.com>.

Corrected the reporting of process group ID for libproc
versions of Mac OS X with a patch from Jeff Trawick
<trawick@gmail.com>. The patch has not been applied to
Darwin kmem versions, because of little call for them
and inadequate test system access. The patch has been
tested on Mac OS X 10.8 (Mountain Lion), courtesy of a
test system provided by Allan Nathanson <ajn@apple.com>.

Added thread support to those FreeBSD versions that have
ki_numthreads in their kinfo_proc structure. This also
activates the -K option for those FreeBSD versions. Jeff
Trawick reported problems with FreeBSD lsof when threads
are present and this addition solves those problems.

Made changes to 00FAQ and the distribution, suggested by
Warren Young <warren@etr-usa.com>. The 00FAQ changes
center on sections that discuss the -s option. The changes
to the distribution include
a ChangeLog file that is either
a pointer to or a copy of 00DIST, the distribution notes.

Added support to FreeBSD for using the clang compiler.

Added Linux support for using the getxattr() call to obtain
socket protocol identification when it is can't be obtained
from the /proc/net files that lsof examines. Masatake YAMATO
<yamato@redhat.com> developed the kernel patch to getxattr()
and supplied the lsof patch.

4.88 October 13, 2014
Reduced to 50 the number of open file descriptors lsof
attempts to close while trying to protect itself from a
file descriptor exec() attack. This limits the overhead
lsof incurs on systems that have large file descriptor
limits, yet provides sufficient open descriptors for the
library functions lsof calls.

Updated for changes in FreeBSD 10 with advice from Eygene
Ryabinkin <rea@freebsd.org>. Taught Configure to recognize
FreeBSD 8.4.

Herein am noting that lsof for Solaris 10 or 11 is no longer
supported. I
no longer have test systems. Some support is
still available from Casper Dik <Casper.Dik@oracle.com> and a
Solaris 11 patch he provided is included in this revision.

Initialized local variables in the Linux process_id() function.
Jia He <jiakernel@gmail.com> reported the problem.

Added support for FreeBSD 11.

Updated FreeBSD ZFS Configure stanza to supply a dummy
opt_kdtrace.h when needed.

Added tmpfs file system support for FreeBSD.

Since a test system is no longer available, dropped the
claim of FreeBSD 4.9 support.

Added the +|-E options for Linux. -E displays endpoint info;
+E displays endpoint info and endpopint files. Masatake YAMATO
<yamato@redhat.com> requested this support and suggested code
to implement it.

Fixed a Linux bug handling processes whose command includes a
non-printing character, particularly a NEWLINE character, and
clarified printing of single '\\' characters in command and
file names. Stephane Chazelas <stephane.chazelas@gmail.com>
reported
the problem.

Added support for Linux RDMA and CRYPTO protocal names and UNIX
socket type with code from Masatake YAMATO <yamato@redhat.com>.

Fixed field output to insure that the field descriptor field is
always selected, since it identifies the file set. The bug was
reported by Gary Plewa <gary.m.plewa-1@lowes.com>.

4.89 July 7, 2015
Applied correction from Casper Dik <Casper.Dik@oracle.com> to
his patch for Solaris 11 that I applied incorrectly in revision
4.88.

Updated for latest version of FreeBSD 11.0-CURRENT.

Compensated for a missing FreeBSD 10.0 typedef of bool on the i386 architecture. Allen Hewes <rallenh@hotmail.com> provided a test system. Andrey Chernov <ache@freebsd.org> provided useful advice.

Improved tests/Add2TestDB script with a patch from Peter Schiffer <pschiffe@redhat.com>. Added patches from Peter to eliminate Linux gcc warnings. Updated Lsof.8 with improvements supplied by Bjarni Ingi Gislason <bjarniig@rhi.hi.is>.

Changed FreeBSD global CFLAGS extraction per Terry Kennedy <TERRY@tmk.com>. Also made sure -DNEEDS_BOOL_TYPEDEF is #define'd when the resulting CFLAGS doesn't contain it. Terry reported that need.

Improved Linux test for tcp.h in response to a report from Cato Auestad <cato@cato.ninja>. Cato did the testing.

Fixed Linux UNIX socket search by name bug reported by Stephane Chazelas <stephane.chazelas@gmail.com>.

Added Linux display of UNIX socket endpoint information with code provided by Masatake YAMATO <yamato@redhat.com>. Peter Schiffer <pschiffe@redhat.com> provided a test system.

Insured that type definitions from <vm/vm.h> were again made visible to lsof on FreeBSD 11 after a system header file change hid them.

4.90 February 14, 2018

```
!!!NOTE!!!
```

Taught the Configure script to create a dummy opt_random.h
for FreeBSD systems whose <sys/random.h> includes it.

Added support for the FreeBSD ZFUSE file system.

Corrected the quoting in a Darwin putchar() statement in the
dfile.c source file. Andrew Janke <floss@apjanke.net> reported
my error.

Added support
for the FreeBSD DTYPE_PTS file descriptor and
for unknown descriptors that reference the kernel's badfileops
operation switch. Enabled FreeBSD 12.0 support. Tested the
changes on systems provided by Larry Rosenman <ler@lerctr.org>.

Enhanced -K option with the form "-K i" to direct lsof to
(i)gnore tasks. A query from Rachel Kroll <rkroll@fb.com>
suggested this option. Linux task reports now include both
process and task command names, making lsof's "-c <name>"
option work correctly.

Added a patch to prevent NFS blocking in Linux supplied by
Kristyna Streitova <kstreitova@suse.com>.

Installed a FreeBSD patch that prevents examining a TCP state
structure during a race condition. The patch was supplied by
Bryan Drewery <bdrewery@FreeBSD.org>.

Updated FreeBSD for new UFS inode structure that lacks an i_dev
member in the most recent 12.0-CURRENT. Larry Rosenman
<ler@lerctr.org> reported the problem and provided a test
system.

Added "#define KLD_MODULE"
to dlsof.h and dnode2.c to prevent
<machine/cpuconf.h> from generating an "ARM_NARCH is 0" error.
This is needed so lsof can access kernel structures. Larry
Rosenman supplied the addition.

Added recognition of the FreeBSD 11 file system name "nullfs".
Jamie Landeg-Jones <jamie@catflap.org> supplied the fix.

Added a patch from Larry Rosenman <ler@lerctr.org> that is
needed on FreeBSD 12 so the lsof compilation can obtain the
inpcb and tcpcb structures from their respective header files.

Updated FreeBSD dmnt.c for the ino64 changes.

Inserted a patch for Solaris 12.x to avoid compilation errors from <sys/aio_req.h>, based on information provided by Jorn Clausen <joern.clausen@uni-bielefeld.de>. Jorn tested the patch.

Added performance enhancement that uses the FreeBSD closefrom() and dup2() C library functions when available. The enhancement was supplied by Conrad Meyer <cem@freebsd.org>.

Corrected FreeBSD lsof's gathering of ZFS file device numbers.

Updated lsof test library for FreeBSD.

Updated socket optons information collection from the socket structure per changes supplied by Gleb Smirnoff <glebius@FreeBSD.org>.

Added patch to dlsof.h that avoids a _KERNEL conflict with bzero. Mateusz Guzik <mjguzik@gmail.com> supplied the patch.

Corrected test library to handle 64 bit FreeBSD device numbers.

Added #defines for FreeBSD 12, src r324225, from Gleb Smirnoff <glebius@FreeBSD.org>.

Incorporated Linux pseudoterminal endpoint processing (+|-E) provided by Masatake YAMATO <yamato@redhat.com> with access to test systems provided by Peter Schiffer <pschiffe@redhat.com>.

Corrected Linux command extraction for commands that include parentheses -- e.g., "(sd-pam)".

4.91 March 26, 2018

A bug has been reported in the PTY endpoint processing of Linux lsof 4.90 by Peter Wu <peter@lekensteyn.nl>, making it necessary for me to release another revision of lsof.

This revision applies two fixes that correct the Linux PTY endpoint processing bug. Masatake YAMATO <yamato@redhat.com> supplied the fixes.

4.92 July 14, 2018

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Fixes Configure script section that creates the FreeBSD
lockf_owner.h header file; fixes <string.h> conflicts with
FreeBSD kernel header files. Mateusz Gusik supplied part of
the fix.

Released lsof to GitHub with Purdue releases documented in
support/GitHub-release.

Vic Abell <abe@purdue.edu>
July 14, 2018

4.92.1 May 6, 2019

```
!!!NOTE!!!
```

May 8, 2019

Found in path(s):
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/00DIST
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/OLD/print.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/print.c
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/usage.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/NEW/usage.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/ckkv.c
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*/
/*
* GetOpt() -- Local get option
*
* Liberally adapted from the public domain AT&T getopt() source,
* distributed at the 1985 UNIFORM conference in Dallas
*
* The modifications allow `?' to be an option character and allow
* the caller to decide that an option that may be followed by a
* value doesn't have one -- e.g., has a default instead.
*/
```

Found in path(s):
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/main.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/OLD/main.c
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* @(#)cdefs.h 8.2 (Berkeley) 10/4/93
*/

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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/scripts/shared.perl5
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/scripts/idrlogin.perl5
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/scripts/idrlogin.perl
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/scripts/list_NULf.perl5
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/scripts/list_fields.perl
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*
* $Id: pfsnode.h,v 1.1 1993/12/12 12:26:39 davidg Exp $
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/linux/dsock.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/prfp.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/linux/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/rnmh.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/linux/dnode.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/linux/machine.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/linux/dmnt.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/rnch.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/lkud.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/linux/dproto.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/linux/dlsof.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/linux/dproc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/cvfs.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/linux/dfile.c
*
 /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/dnode2.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/fino.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/isfn.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/rnam.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/rmnt.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/pdvn.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/lib/ptti.c
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* @(#)netdb.h 5.15 (Berkeley) 4/3/91
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* 4. This notice may not be removed or altered.
*/
```

Found in path(s):
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/libproc/dfile.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/libproc/dlsof.h
No license file was found, but licenses were detected in source scan.

```
/*
* Copyright 1996 Purdue Research Foundation, West Lafayette, Indiana
* 47907.  All rights reserved.
*
* Written by Victor A. Abell
*
* This software is not subject to any license of the American Telephone
* and Telegraph Company or the Regents of the University of California.
*
* Permission is granted to anyone to use this software for any purpose on
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* to the following restrictions:
*
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*    consequences of the use of this software.
*
* 2. The origin of this software must not be misrepresented, either by
*    explicit claim or by omission.  Credit to the authors and Purdue
*    University must appear in documentation and sources.
*
* 3. Altered versions must be plainly marked as such, and must not be
*    misrepresented as being the original software.
 *
* 4. This notice may not be removed or altered.
*/
```

Found in path(s):
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/kmem/dnode2.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/aix/dnode1.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/dnode1.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+os/dnode1.c
No license file was found, but licenses were detected in source scan.

Frequently Asked Questions about lsof

```
************************************************************************
| The latest release of lsof is always available via anonymous ftp   |
| from lsof.itap.purdue.edu.  Look in pub/lsof.README for its        |
| location.                                                          |
************************************************************************
```

This file contains frequently asked questions about lsof and answers
to them.

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October 13, 2014

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17.22 Why does lsof on Solaris 7, 8, or 9 report a kvm_open() failure?
17.23 Solaris and SAM-FS
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17.24 Lsof and Solaris 10 zones
17.24.1 How can I make lsof list the Solaris zone?
17.24.2 Why doesn't lsof work in a Solaris 10 zone?
17.24.3 Why does lsof complain it can't stat() Solaris 10 zone file systems?
17.25 Solaris 10 problems
17.25.1 Why does Solaris 10 lsof sometimes report the wrong path name?
17.25.2 Why does Solaris 10 lsof sometimes report only the mounted-on directory and device?
17.25.3 What does "(deleted)" mean in the NAME column of a Solaris 10 open file?
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17.26 Solaris contract file problems
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17.27 Solaris 10 and above ZFS probblems
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17.28 Problems
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18.0 Lsof Features
18.1 Why doesn't lsof doesn't report on /proc entries on my
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it's behavior?
18.2.1 What's the risk with a perverted device cache file?
18.2.2 How do I put the full host name in a personal device cache file
path?
18.2.3 How do I put the personal device cache file in /tmp?
18.3 Why doesn't lsof know about AFS files on my favorite dialect?
18.3.1 Why doesn't lsof report node numbers for all AFS volume files,
or how do I reveal dynamic module addresses to lsof?

1.0 General Concepts

1.1 Lsof -- what is it?

Lsof is a UNIX-specific tool. Its name stands for LiSt Open Files, and it does just that. It lists information about files that are open by the processes running on a UNIX system.

See the lsof man page, the 00DIST file, the 00QUICKSTART file, and the 00README file of the lsof distribution for more information.

1.2 Where do I get lsof?

Lsof is available via anonymous ftp from lsof.itap.purdue.edu. Look in the pub/tools/unix/lsof sub-directory.

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof

Bzip2'd, compressed and gzip'd tar files with GPG certificates are available.

1.2.1 Are there mirror sites?

On March 21, 2013 these sites appeared to have the lastest lsof revision:

ftp://ftp.fu-berlin.de/pub/unix/tools/lsof
ftp://sunsite.ualberta.ca/pub/Mirror/lsof
http://www.mirrorservice.org/sites/lsof.itap.purdue.edu/pub/tools/unix/lsof/
ftp://ftp.mirrorservice.org/sites/lsof.itap.purdue.edu/pub/tools/unix/lsof/
rsync://rsync.mirrorservice.org/lsof.itap.purdue.edu/pub/tools/unix/lsof/

1.2.2 Are lsof executables available?

Some lsof executables are available in the subdirectory
tree pub/tools/unix/lsof/binaries These are neither guaranteed
to be current nor cover
every dialect and machine architecture.

I don't recommend you use pre-compiled lsof binaries; I
recommend you obtain the sources and build your own binary.
Even if you're a Sun user without a Sun C compiler, you
can use gcc to compile lsof.

If you must use a binary file, please be conscious of the
security and configuration implications in using an executable
of unknown or different origin. The lsof binaries are
accompanied by GPG certificates. Please use them!

Three additional cautions apply to executables:

1. Don't try to use an lsof executable, compiled for one
   version of a UNIX dialect, on another. Patches can
   make the dialect version different.

2. If you want to use an lsof binary on multiple systems,
   they must be running the same dialect OS version and
   have the same patches and feature support.

1.2.3 How do I check the validity of an lsof distribution?

There are two ways to check the validity of an lsof
distribution:

1. Follow the
instructions in the CHECKSUMS_<revision>
   file found with the lsof distribution.

   Checking with GPG is the best method.

2. Follow the instructions in the "Security" section of the
   README.lsof_<revision> file found inside the lsof
   distribution.

Again, checking with GPG is the best method.

1.2.4 Why can't I get the sum(1) result reported in
README.lsof_<revision>?

The "Security" section of the README.lsof_<revision> file found
inside the lsof distribution gives md5, sum, and GPG certificate
information.

The simplest, the sum(1) signature, seems to be the trickiest.
That's because there are different sum(1) methods, BSD systems
usually have cksum(1) instead of sum(1), and different systems
compute the block size value differently.

First, the lsof sum results are computed with the old,
"alternate" algorithm. On newer systems, you can use sum's
"-r" option to get that computation result.

Second, on BSD systems you usually must use cksum(1) instead
of
sum(1), because they have no sum(1). To tell cksum(1)
to use the old, "alternate" algorithm, use its "-o1" option.

Third, the second value that sum reports, the block count, may
be computed differently on different systems -- usually block
size is considered to be 512 or 1,024. The lsof block counts
were computed on a system with a sum(1) option that considers
block size to be 512. The BSD system cksum(1) -o1 option
considers block size to be 1,024. If your sum(1) or cksum(1)
doesn't report a block count that matches the sum(1) signature
given in README.lsof_<revision>, check its man page to see what
block size it uses, then adjust its reported block count
appropriately.

1.2.5 Why won't gpg accept the lsof-signing PGP public key?

An older PGP key that once signed lsof distributions is
included in lsof revisions prior to 4.70. The PGP key is
indeed my key, but is incompatible with GPG. It was created
about ten years ago and is still acceptable to PGP versions
2.6.2
through 6.5.2.

Lsof revisions 4.70 and above are signed with a copy of my PGP
key that has been made acceptable for use with GPG by importing
it under GPG's "--allow-non-selfsigned-uid" option.

You can find my GPG compatible key in lsof revisions 4.70 and above and at:

ftp://lsof.itap.purdue.edu/pub/Victor_A_Abell.gpg

If you have an older lsof revision with my PGP key, there are two possible ways to use it:

* Use it with a PGP version from 2.6.2 through 6.5.2.

* Use GPG's "--allow-non-selfsigned-uid" option when you import my PGP key into your GPG key ring.

```
$ gpg --allow-non-selfsigned-uid --import Victor_A_Abell.pgp
```

1.3 Where can I get more lsof documentation?

A significant set of documentation may be found in the lsof distribution (See "Where can I get lsof?). There is a manual page, copious documentation in files whose names begin with 00, and a copy of this FAQ in the file 00FAQ (perhaps slightly less recent than this file if you're reading
it via a web browser.)

Two URLs provide some documentation that appears in the lsof distribution:

FAQ: ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/FAQ

man page: ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/lsof_man

1.4 How do I report an lsof bug?

If you believe you have discovered a bug in lsof, you can report it via e-mail to <abe@purdue.edu>. Do NOT report lsof bugs to the UNIX dialect vendor. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

Before you send me a bug report, please read the "Bug Reports" section of the 00README file of the lsof distribution. It lists the steps you should take before and when reporting a suspected bug.

1.5 Where can I get the lsof FAQ?

This lsof FAQ is available in the file 00FAQ in the lsof

distribution and at the URL:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/FAQ

1.5.1 How timely is the on-line FAQ?

The on-line FAQ is sometimes too timely. :-)

I
update it as soon as new information is available. That may
include information about support that won't appear in the lsof
source distribution until the next revision. If you encounter
something like that, please send me e-mail at <abe@purdue.edu>. I
may be able to point you at a pre-release distribution that contains
the support of interest. Make sure "lsof" appears in the "Subject:"
line so my e-mail filter won't classify your letter as Spam.

1.6 Is there a test suite?

Yes, as of lsof revision 4.63 there's an automated lsof
test suite in the tests/ sub-directory of the lsof top-level
directory.

More information on using the test suite, what it does,
how to use it and how to configure it may be found in the
00TEST file of the lsof distribution. That file also
explains where the test suite has been tested.

Frequently asked questions about the test suite will be
asked and answered here in the FAQ. (See "Test Suite
Problems.")

After lsof has been configured
with the Configure script,
lsof can be made and tested with:

```
$ make
$ cd tests
$ make
```

Under normal conditions -- i.e., unless the lsof tree has
been cleaned or purged severely -- all tests or individual
tests may be run by:

```
$ cd test
$ make
```
or
```
$ <run a single test> (See 00TEST.)
```

1.7 Is lsof vulnerable to the standard I/O descriptor attack?

Lsof revisions 4.63 and above are not vulnerable.

Lsof revisions 4.62 and below are vulnerable, but no damage scenarios have so far been demonstrated.

The standard I/O descriptor attack is a local programmed assault on setuid and setgid programs that tricks them into opening a sensitive file with write access on a standard descriptor, usually stderr (2), and writing error messages to stderr. If the attacker can control the content of the error message, the attacker may gain elevated privileges.

The attack was first described in Pine Internet Advisory PINE-CERT-20020401, available at:

http://www.pine.nl/advisories/pine-cert-20020401.txt

If you are using an lsof revision below 4.63, you should remove any setuid or setgid permissions you might have given its executable. Then you should upgrade to lsof revision 4.63.

1.8 Can I alter lsof's make(1) behavior?

Yes. There are at least two ways to do that.

You can put replacements for lsof Makefile strings in your environment. If you specify the -e make option, make will give environment variable values precedence over strings from the Makefile. For example, to change the compiler string CC from the environment, you might do this with the Bourne shell:

```
$ CC=foobar; export CC
$ make -e
```

You can also replace lsof Makefile strings in the make command invocation. Here's the previous example done that way:

```
$ make CC=foobar
```

Changing the CFGF, CFGL, and DEBUG strings used in lsof Makefiles, either from the environment or from the make

invocation, can significantly alter lsof make(1) behavior.
I
commonly use DEBUG to change the -O option to -g so I
can build an lsof executable for debugging -- e.g.,

```
$ make DEBUG=-g
```

(Look for DEBUG in this FAQ for other examples of its use.)

Consult the Makefiles to see what CFGL, CFGL, and other
lsof Makefile strings contain, and to see what influence
their alteration might have on lsof make(1) behavior.

1.9 Is there an lsof license?

No.

The only restriction on the use or redistribution of lsof
is contained in this copyright statement, found in every
lsof source file. (The copyright year in or format of the
notice may vary slightly.)

```
/*
 * Copyright 2002 Purdue Research Foundation, West Lafayette,
 * Indiana 47907.  All rights reserved.
 *
 * Written by Victor A. Abell
 *
 * This software is not subject to any license of the American
 * Telephone and Telegraph Company or the Regents of the
 * University of California.
 *
 * Permission is granted to anyone to use this software for
 * any purpose on
any computer system, and to alter it and
 * redistribute it freely, subject to the following
 * restrictions:
 *
 * 1. Neither the authors nor Purdue University are responsible
 *    for any consequences of the use of this software.
 *
 * 2. The origin of this software must not be misrepresented,
 *    either by explicit claim or by omission.  Credit to the
 *    authors and Purdue University must appear in documentation
 *    and sources.
 *
 * 3. Altered versions must be plainly marked as such, and must
 *    not be misrepresented as being the original software.
```

```
 *
 * 4. This notice may not be removed or altered.
 */
```

1.10 Language locale support

1.10.1 Does lsof support language locales? How do I use the support?

Most UNIX dialect versions of lsof support 8 bit language locale characters -- e.g., the ability to print 8 bit characters that have accents and other marks over them.

See the answer to the "Does lsof support wide characters in language locales?" question for information on when lsof's language locale support covers characters wider than 8 bits.

To see if lsof supports language locales for your dialect, look in the dialect's machine.h header file for the HASSETLOCALE definition. If it is present and not disabled, then lsof has language locale support for the dialect.

To enable lsof's language locale support, you must specify in a locale environment variable (e.g., LANG) a language locale known to your system that supports the printing of marked characters -- e.g, en_US. (On some dialects locale(1) may be used to list the known language locales.)

Note that LANG=C and LANG=POSIX are NOT language locales that support the printing of marked characters.

If the language locale doesn't support the printing of marked characters, lsof's OUTPUT of them follows the rules for non-printable characters described in the OUTPUT section of lsof(8).

Consult your dialect's setlocale(3) man page for the names of environment variables other than LANG -- e.g., LC_ALL, LC_TYPE, etc. -- which may be used to define language locales.

1.10.2 Does lsof support wide characters in language locales?

When lsof's language locale support is enabled with the HASSETLOCALE definition, for selected dialects lsof will also print wide characters (e.g., from UTF-8) when iswprint(3) reports them to be printable.

Wide character support is available when HASWIDECHAR is defined in a dialect's machine.h header file. As of this writing on July 22, 2004, the following dialect versions have wide character support:

AIX >= 4.3.2
Apple Darwin >= 7.3.0
FreeBSD >= 5.2
HP-UX >= 11.00
/proc-based Linux
NetBSD >= 1.6
SCO OpenServer >= 5.0.6
Solaris >= 2.6
Tru64 UNIX 5.1

1.11 Are any files in the lsof distribution copyrighted?

Yes. Most files carry the copyright of the Purdue Research Foundation and may be redistributed under the terms that accompany the copyright notice. Those terms may also be found in the answer to the question, "Is there an lsof license?")

A few files carry other copyright notices. Some are BSD notices and they explain the terms under which they are included in the lsof distribution.

Those that carry vendor copyright notices have been reproduced in their original or modified forms with permission from the copyright owners. That permission is indicated in the README files that accompany the files.

1.12 Are there other lsof-related resources?

There are other resources available, connected to lsof. Among them are FreeBSD and Linux packages whose products use lsof and two particularly interesting resources.

The two interesting resources are a Gnome Tool Kit (GTK) GUI for lsof and a Perl wrapper module.

The GTK GUI is called Glsof and was developed by Gnele. It can be found at:

http://www.sourceforge.net

The Perl wrapper module by Marc Beyer can be found at:

http://search.cpan.org/dist/Unix-Lsof/

1.13 What
does the "WARNING: unsupported dialect or version" mean?

The lsof configure script issues that message for UNIX dialects
or their versions where I have been unable to test the current
revision of lsof. The message doesn't mean that lsof won't
work, just that I have no direct evidence that it will.

If the COnfigure script succeeds, except for the warning, try
compiling) lsof. If that succeeds, try the lsof test suite.

2.0 Lsof Ports

2.1 What ports exist?

The pub/lsof.README file carries the latest port information:

AIX 5.[23] and 5.3
FreeBSD 4.9 and 6.4 for x86-based systems
FreeBSD 8.[234], 9.0, 10.0 and 11.0 for AMD64-based systems
Linux 2.1.72 and above for x86-based systems
Solaris 9, 10 and 11

In the above list the only UNIX dialects present are ones for
which I test the current lsof revision. Lsof may still support
unlisted dialect versions -- e.g., HP-UX 10.20, Solaris 7, etc.
-- but I don't have access to systems where I could
test lsof
on them, so I can't claim lsof works on them. If your dialect
isn't in the list, you should try building lsof on it anyway.

Lsof version 4 predecessors, versions 2 and 3, may support older
version of some dialects. Contact me via e-mail at <abe@purdue.edu>
if you're interested in their distributions. Make sure "lsof"
appears in the "Subject:" line so my e-mail filter won't classify
your letter as Spam.

2.2 What about a new port?

The 00PORTING file in the distribution gives hints on doing
a port. I will consider doing a port in exchange for
permanent access to a test host. I require permanent access
so I can test new lsof revisions, because I will not offer
distributions of dialect ports I cannot upgrade and test.

2.2.1 User-contributed Ports

Sometimes I receive contributions of ports of lsof to systems where I can't test future revisions of lsof. Hence, I don't incorporate these contributions into my lsof distribution.

However, I do make descriptions of these contributions available. You can find them in the 00INDEX and README files at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/contrib

Consult the 00INDEX file in the contrib/ directory for a list of the available contributions and consult README there for information on how to obtain them.

2.3 Why isn't there an AT&T SVR4 port?

I haven't produced an AT&T SVR4 port because I haven't seen a UNIX dialect that is strictly limited to the AT&T System V, Release 4 source code. Every one I have seen is a derivative with vendor additions.

The vendor additions are significant to lsof because they affect the internal kernel structures with which lsof does business. While some vendor derivatives of SVR4 are similar, each one I have encounted so far has been different enough from its siblings to require special source code.

If you're interested in an SVR4 version of lsof, here are some existing ports you might consider:

DC/OSx (This obsolete port is only available upon special request.)
Reliant UNIX (This obsolete port is only available upon special request.)
SCO|Caldera UnixWare (This is the most likely choice.)
Solaris

2.4 Why isn't there an SGI IRIX port?

Lsof support for IRIX was terminated at lsof revision 4.36, because it had become increasingly difficult for me to obtain information on the IRIX kernel structures lsof needs to access.

At IRIX 6.5 I decided the obstacles were too large for me to overcome, and I stopped supporting lsof on IRIX. I have sources to the last revision of lsof (4.36) for IRIX, but that version of lsof does not work on IRIX 6.5 and is vulnerable to the standard I/O descriptor attack. (See the "Is lsof vulnerable to the standard I/O descriptor attack?" Q&A for more information.) Contact me to discuss obtaining those sources.

If you wish to pursue the issue, don't contact me, contact SGI. This case was opened with SGI on the subject:

Case ID: 0982584

Category: Unix
Priority: 30-Moderate Impact

Problem Summary:
kernel structure header files needed for continued lsof support

Problem Description:
Email In 07/17/98 19:09:23

2.5 Why does lsof's Configure script report "WARNING: unsupported dialect or version"?

Lsof's Configure script issues this message when it encounters a dialect or its version that lsof once supported, but no longer does. Usually I drop support for a dialect or version when I can no longer test lsof on it.

However, it's worth trying to compile and use lsof. Be sure to run the test suite. (See the answer to the "Is there a test suite? question for information on the test suite.)

If you have problems with an unsupported dialect or version, contact me via e-mail at <abe@purdue.edu> and I may be able to help. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

3.0 Lsof Problems

3.1 Configuration Problems

3.1.1 Why

can't Configure determine the UNIX dialect version?

The lsof Configure script uses UNIX shell commands, often in a command pipeline, to determine the UNIX dialect version. (Consult the dialect stanza in Configure to determine which commands are used.) If Configure can't determine the dialect version, probably one of the commands is not behaving as Configure expects.

Symptoms of the failure include Configure warning messages and incorrect version definitions in the Makefile CFLAGS.

If you suspect that the lsof Configure script is failing to determine the dialect version correctly, try running the commands from Configure stanza one at a time. That will usually reveal the source of the problem. Be particularly mindful that the PATH environment variable can cause commands to be executed from non-standard directories.

If you can't determine the source of the problem, there is a work-around. You can supply the UNIX dialect version in the LSOF_VSTR environment
variable. Use Configure as a guide to
forming what it expects in LSOF_VSTR. There is also some information on LSOF_VSTR in the 00XCONFIG documentation file of the lsof distribution.

3.2 Compilation Problems

3.2.1 Why does the compiler complain about missing header files?

When you use make to build lsof, the compiler may complain that it can't find header files -- e.g.,

```
$ make
(cd lib; make DEBUG="-O" CFGF="-DAIXA=0 -DAIXV=4330 \
-DLSOF_VSTR=\"4.3.3.0\"")
gcc  -DAIXA=0 -DAIXV=4330 -DLSOF_VSTR="4.3.3.0" -O \
-c ckkv.c
In file included from ckkv.c:33: ../machine.h:70: \
sys/types.h: A file or directory in the path name \
does not exist. \
```

That type of complaint doesn't represent an lsof problem. It represents a problem with a missing system header file that probably should be found in /usr/include or in the system source tree.

As a first step try using find(1) to locate the problem
header file.
If it's a system header file and can't be
found, here are some possible causes:

1. The file set, RPM or package containing the header files
has not been installed. Instructions for doing that
are specific to the UNIX dialect and beyond the scope
of this document.

2. If the compiler is gcc, the private gcc header files:

* May not have been installed;

* May have been installed incorrectly;

* May not have been updated properly after the last
compiler or system update;

* Ones from a previous installation may not have been
removed.

A path leading to the gcc private header files can be
found with `gcc -v`. Consult the gcc documentation for
instructions on proper installation of the private gcc
header files.

3. On some dialects -- e.g., FreeBSD, NetBSD, OpenBSD --
lsof may need to use header files that are located in
the system source tree -- /sys or /usr/src/sys, for
example. Make sure
the system source tree has been
installed.

3.2.2 Why does gcc complain about the contents of header files
distributed by the system's vendor?

When you use make to build lsof and gcc to compile it, gcc
may complain that it finds errors in system header files
-- e.g.,

```
$ make
(cd lib; make DEBUG="-O" CFGF="-Dsolaris=80000 \
 -DHASPR_GWINDOWS -m64 -DHASIPv6 -DHAS_VSOCK \
 -DLSOF_VSTR=\"5.8\"")
 gcc -Dsolaris=80000  -DHASPR_GWINDOWS -m64 -DHASIPv6 \
 -DHAS_VSOCK -DLSOF_VSTR="5.8"  -O  -c  dvch.c
In file included from /usr/include/sys/proc.h:31, \
```

```
        from /homes/abe/gnu/gcc-3.2.1/lib/gcc-lib/sparcv9-sun-solaris2/ \
    3.2.1/include/sys/user.h:267, from /usr/include/kvm.h:13, \
    from ../dlsof.h:53, from ../lsof.h:172, from dvch.c:43: \
    /homes/abe/gnu/gcc-3.2.1/lib/gcc-lib/sparcv9-sun-solaris2/\
     3.2.1/include/sys/task.h:59: parse error before "uint_t"
```

Errors like the above are most likely not problems in the system's header files, but in the private copies of them that were created when gcc was made or installed. Note the presense of ".../gcc-3.2.1/lib/gcc-lib/sparcv9-sun-solaris2/3.2.1/include/..." in the paths for user.h and task.h. It indicates both header files are gcc-specific.

To solve errors like this requires comparing the header files in the vendor's /usr/include tree to the gcc-specific ones in gcc's private gcc-lib/.../include tree. It may be necessary to regenerate gcc-specific header files, correct them or remove them. See the gcc distribution for the appropriate tools.

A possible temporary work-around is to direct gcc to use the vendor's header files instead of its temporary ones by declaring -I/usr/include in the compilation flags.

3.2.3 Other header file problems

Don't overlook any vendor tools that might validate the vendor header files installed on the system -- e.g., the Solaris pkgchk tool can be used to check the header files that were installed from the SUNWhea package.

For other header file problems contact me at <abe@purdue.edu>. Please follow the reporting guidelines in the "How do I report an lsof bug?" section of this FAQ.

3.3 Why doesn't lsof report full path names?

Lsof reports the full path name when it is specified as a search argument for open files that match the argument. However, if the argument is a file system mounted-on directory, and lsof finds additional path name components from the kernel name cache, it will report them.

Lsof reports path name for file system types that have path name lookup features -- e.g., some versions of AdvFS for

Digital and Tru64 UNIX. The Linux /proc-based lsof reports full path names, because the Linux /proc file system provides them. Lsof on recent builds of Solaris 10 also report full path names, because those Solaris kernels record the full path name in the vnode structure.

Otherwise, lsof uses the kernel name cache, where it exists and can be accessed,
and reports some or all path name
components (e.g., the sys and proc.h components of /usr/include/sys/proc.h) for these dialects:

Apple Darwin
DC/OSx
FreeBSD
HP-UX, /dev/kmem and PSTAT based
Linux, /dev/kmem-based
NetBSD
NEXTSTEP
OpenBSD
OPENSTEP
Reliant UNIX
SCO OpenServer
SCO|Caldera UnixWare
Solaris 2.x, 7, 8 and 9 (except for some VxFS versions;
see the "Why doesn't Solaris
lsof report VxFS path name
components?" section for more
information)
Solaris 10 (early builds) Tru64 UNIX

As far as I can determine, AFS path lookups don't share in kernel name cache operations, so lsof can't identify open AFS path name components. Apparently Solaris VxFS versions 4 and above don't share in kernel name cache operations, either, so lsof can't display path name components for those open files.

Since the size of the kernel name cache is limited and the cache is in constant flux, it does not always contain the names of all components
in an open file's path; sometimes it contains
none of them.

Lsof reports the file system directory name and whatever components of the file's path it finds in the cache, starting with the last component and working backwards through the directories that contain it. If lsof finds no path
components, lsof reports the file system device name instead.

When lsof does report some path components in the NAME
column, it prefixes them with the file system directory
name, followed by " -- ", followed by the components --
e.g., /usr -- sys/path.h for /usr/include/sys/path.h. The
" -- " is omitted when lsof finds all the path name components
of a file's name.

The PSTAT-based HP-UX lsof relies on kernel name cache
contents, too, even though its information comes to lsof
via pstat() function calls. Consequently, PSTAT-based
HP-UX lsof won't always report full paths, but may use the
" -- " partial path name notation, or may occasionally
report no path name at all but just
the file system mounted-on
directory and device names.

Lsof can't obtain path name components from the kernel name
caches of the following dialects:

AIX

Only the Linux kernel records full path names in the
structures it maintains about open files; instead, most
kernels convert path names to device and node number doublets
and use them for subsequent file references once files have
been opened.

To convert the device and node number doublet into a
complete path name, lsof would have to start at the root
node (root directory) of the file system on which the node
resides, and search every branch for the node, building
possible path names along the way. That would be a time
consuming operation and require access to the raw disk
device (usually implying setuid-root permission).

If the prospect of all that local disk activity doesn't
concern you, think about the cost when the device is
NFS-mounted.

Try using the file system mount point and node number lsof
reports
as parameters to find -- e.g.,

```
$ find <mount_point> -inum <node_number> -print
```

and you may get an appreciation of what a file system
directory tree search would cost.

3.3.1 Why do lsof -r reports show different path names?

When you run lsof with its repeat (``-r'') option, you may notice that the extent to which it reports path names for the same files may vary from cycle to cycle. That happens because other processes are making kernel calls affecting the cache and causing entries to be removed from and added to it.

3.3.2 Why does lsof report the wrong path names?

Under some circumstances lsof may report an incorrect path name component, especially for files in a rapidly changing directory like /tmp.

In a rapidly changing directory, like /tmp, if the kernel doesn't clear the cache entry when it removes a file, a new file may be given the same keys and lead lsof to believe that the old cache entry with the same keys belongs to the new file.

Lsof tries
to avoid this error by purging duplicate entries
from its copy of the kernel name cache when they have the same device and inode number, but different names.

This error is less likely to occur in UNIX dialects where the keys to the name cache are node address and possibly a capability ID. The Apple Darwin, Digital UNIX, FreeBSD, HP-UX, NEXTSTEP, OPENSTEP, Solaris, Tru64 UNIX, and UnixWare dialects use node address. Apple Darwin, FreeBSD, NetBSD, OpenBSD, Tru64 UNIX, and also use a capability ID to further identify name cache entries.

3.3.3 Why doesn't lsof report path names for unlinked (rm'd) files?

When lsof gets path name components from the kernel's name cache, it does not report the path names of a file that has been unlinked from its parent directory -- e.g., deleted via rm, or the unlink() system call -- even when some process may still hold the file open; lsof reports only the file system's mounted-on directory and device. That's because path name components
are removed from the kernel name cache when the file is unlinked.

Unlinked open files are sometimes used by applications for

temporary, but invisible storage (i.e., ls won't show them, and no other process can open them.) However, they may occasionally consume disk space to excess and cause concern for a system administrator, who will be unable to locate them with find, ls, du, or other tools that rely on finding files by examining the directory tree.

By using lsof's +L option you can see the link count of open files -- in the NLINK column. An unlinked file will have an NLINK value of zero. By using the option +L1 you can tell lsof to display only files whose link count is less than one (i.e., zero).

There are some UNIX dialect-specific exceptions to lsof's inability to report unlinked path names. They are described in the answer to the "When will lsof report path names for deleted files?" question.

3.3.4 Why doesn't lsof report the "correct" hard linked file path name?

When lsof reports a rightmost path name component for a file with hard links, the component may come from the kernel's name cache. Since the key which connects an open file to the kernel name cache may be the same for each differently named hard link, lsof may report only one name for all open hard-linked files. Sometimes that will be "correct" in the eye of the beholder; sometimes it will not. Remember, the file identification keys significant to the kernel are the device and node numbers, and they're the same for all the hard linked names.

3.3.5 When will lsof report path names for deleted files?

Lsof will report path names for deleted files for two dialects: Linux and later builds of Solaris 10.

Deleted Linux path names are reported by default and have "(deleted)" at their ends.

The display of Solaris 10 deleted path names may be selected with the -X option. When selected they are also reported with "(deleted)" at their ends.

3.4 Why is lsof so slow?

Lsof may appear to be slow if network address to host name
resolution is slow. This can happen, for example, when the
name server is unreachable, or when a Solaris PPP cache daemon
is malfunctioning.

To see if name lookup is causing lsof to be slow, turn it off
with the ``-n'' option.

Port service name lookup or portmap registration lookup may
also be causes of slow-down. To suppress port service name
lookup, specify the ``-P'' option.

Lsof doesn't usually make direct portmap calls -- only when +M
is specified, or when HASPMAPENABLED is defined during lsof
construction. (The lsof help panel, produced with `lsof -h`
will display the default portmap registration reporting
state.) The quickest first step in checking if lsof is slow
because of the portmapper is to use lsof's ``-M'' option.

Lsof may be slow if UID to login name lookups are slow.
Suppress them with ``-l''.

On dialects where lsof uses the kernel name cache, try
disabling its use with ``-C''.
 (You can tell if lsof uses the
kernel name cache by looking for ``-C'' in lsof's ``-h''
output.) Of course, disabling kernel name cache use will mean
that lsof won't report full or partial path names, just file
system and character device names.

If you're just interested in the open files of one process, try
using the ``-p <Process-ID>'' option to limit lsof to that
process. (The ``-p'' option may also be followed with a list
of Process-IDs.)

If you're interested in including or excluding certain
commands, try lsof's "-c[^]cmd" option.

If you're interested in certain Internet TCP and UDP states
(e.g., ESTABLISHED) or in excluding some (e.g., CLOSE_WAIT),
try lsof's "-s p:s" option, available where shown on the lsof
help output, obtained with -h or -?. More information on it
may be found in the answer to the "How are protocol state name
exclusion and inclusion used?" question.

Your UNIX dialect may not support "-s p:s" and its associated
performance improvments

to Internet-only file processing. You
can find more information on those topics in the answer to the
"Why doesn't my dialect support state name exclusion and
inclusion?" question.

Older AIX lsof may be slow to start because of its oslevel
identity comparison. (Newer AIX lsof uses uname(2).) See the
"Why does AIX lsof start so slowly?" and "Why does lsof warn
"compiled for x ... y; this is z.?" sections for more
information.

3.5 Why doesn't lsof's setgid or setuid permission work?

If you install lsof on an NFS file system that has been
mounted with the nosuid option, lsof may not be able to
use the setgid or setuid permission you give it, complaining
it can't open the kernel memory device -- e.g., /dev/kmem.

The only solution is to install lsof on a file system that
doesn't inhibit setgid or setuid permission.

3.6 Does lsof have security problems?

I don't think so. However, lsof does usually start with
setgid permission, and sometimes with setuid-root permission.
Any
program that has setgid or setuid-root permission,
should always be regarded with suspicion.

Lsof drops setgid power, holding it only while it opens
access to kernel memory devices (e.g., /dev/kmem, /dev/mem,
/dev/swap). That allows lsof to bypass the weaker security
of access(2) in favor of the stronger checks the kernel
makes when it examines the right of the lsof process to
open files declared with -k and -m. Lsof also restricts
some device cache file naming options when it senses the
process has setuid-root power.

On a few dialects lsof requires setuid-root permission
during its full execution in order to access files in the
/proc file system. These dialects include:

DC/OSx 1.1 for Pyramid systems
Reliant UNIX 5.4[34] for Pyramid systems

When lsof runs with setuid-root permission it severely
restricts all file accesses it might be asked to make with
its options.

The device cache file (typically .lsof_hostname in the home directory
of the real user ID that executes lsof) has 0600
modes. (The suffix, hostname, is the first component of
the host's name returned by gethostname(2).) However, even
when lsof runs setuid-root, it makes sure the file's
ownerships are changed to that of the real user and group.
In addition, lsof checks the file carefully before using
it (See the question "How do I disable the device cache
file feature or alter it's behavior?" for a description of
the checks.); discards the file if it fails the scrutiny;
complains about the condition of the file; then rebuilds
the file.

See the 00DCACHE file of the lsof distribution for more
information about device cache file handling and the risks
associated with the file.

3.7 Will lsof show remote hosts using files via NFS?

No. Remember, lsof displays open files for the processes
of the host on which it runs. If the host on which lsof
is running is an NFS server, the remote NFS client processes
that are accessing files on the server
leave no process
records on the server for lsof to examine.

3.8 Why doesn't lsof report locks held on NFS files?

Generally lock information held by local processes on remote
NFS files is not recorded by the UNIX dialect kernel. Hence,
lsof can't report it.

One exception is some patch levels of Solaris 2.3, and all
versions of Solaris 2.4 and above. Lsof for those dialects
does report on locks held by local processes on remotely
mounted NFS files.

3.8.1 Why does lsof report a one byte lock on byte zero as a full
file lock?

When a process has a lock of length one, starting at byte
zero, lsof can't distinguish it from a full file lock.
That's because most UNIX dialects represent both locks the
same way in their file lock (flock or eflock) structures.

3.9 Why does lsof report different values for open files on the

same file system (the automounter phenomenon)?

On UNIX dialects where file systems may be mounted by an automounter with the ``direct'' type, lsof may sometimes report difference DEVICE, SIZE/OFF, INODE and NAME values when asked to report files open on the file system.

This happens because some files open on the file system -- e.g., the current directory of a shell that changed its directory to the file system as the file system's first reference -- may be characterized in the kernel with temporary automounter node information. The cd doesn't cause the file system to be mounted.

A subsequent reference to the file system -- e.g., an ls of any place in it -- will cause the file system to be mounted. Processes with files open to the mounted file system are characterized in the kernel with data that reflects the mounted file system's parameters.

Unfortunately some kernels (e.g., some versions of Solaris 2.x) don't revisit the process that did only a change-directory for the purpose of updating the data associated with the open directory file. The file continues to be characterized with temporary automounter information until it does another directory change, even a trivial ``cd .''.

Lsof will report on both reference types, when supplied the file system name as an argument, but the data lsof reports will reflect what it finds in the kernel. For the different types lsof will display different data, including different major and minor device numbers in the DEVICE column, different lengths in the SIZE/OFF column, different node numbers in the INODE column, and slightly different file system names in the NAME column.

In contrast, fuser, where available, can only report on one reference type when supplied the file system name as an argument. Usually it will report on the one that is associated with the mounted file system information. If the only reference type is the temporary automounter one, fuser will often be silent about it.

3.10 Why don't lsof and netstat output match?

Lsof and netstat output don't match because lsof reports

the network information it finds in open
file system objects
-- e.g., socket files -- while netstat often gets its
information from separate kernel tables.

The information available to netstat may describe network
activities never or no longer associated with open files,
but necessary for proper network state machine operation.

For example, a TCP connection in the FIN_WAIT_[12] state
may no longer have an associated open file, because the
connection has been closed at the application layer and is
now being closed at the TCP/IP protocol layer.

3.10.1 Why can't lsof find accesses to some TCP and UDP ports?

Lsof stands for LiSt Open Files. If there is no open file
connected to a TCP or UDP port, lsof won't find it. That's
the most common reason why lsof doesn't find a port netstat
might report open.

One reason I've found on some UNIX dialects is that their
kernels set aside TCP and UDP ports for communicating with
support activities, running in application layer servers
-- the automounter daemons, and the
NFS biod and nfsd
daemons are examples. Netstat may report the ports are in
use, but lsof doesn't.

Another reason is that netstat may also be able to report
a port is open on a particular dialect, because it uses a
source of data different from what lsof uses -- e.g.,
netstat might examine kernel tables or use streams messages
to MIB2, while lsof relies on the information it finds in
open file structures and their descendants.

Sometimes it's possible to search the data netstat and lsof
use. For example, on Linux /proc/tcp and /proc/udp can be
examined. There might an entry there for a particular
protocol and port, but if the line on which the port appears
doesn't have an inode number that matches an inode number
of an open file, lsof won't be able to identify the process
using the port.

This is a tough question to which there is no easy answer.

3.11 Why does lsof update the device cache file?

At the end of the lsof output you may see the message:

```
    lsof:
WARNING: /Homes/abe/.lsof_vic was updated.
```

In this message /Homes/abe/.lsof_vic is the path to the private device cache file for login abe. (See 00DCACHE.)

Lsof issues this message when it finds it necessary to recheck the system device directory (e.g., /dev or /devices) and rebuild the device cache file during the open file scan. Lsof may need to do these things it finds that a device directory node has changed, or if it cannot find a device in the cache.

3.12 Why doesn't lsof report state for UDP socket files?

Lsof reports UDP TPI connection state -- TS_IDLE (Idle), TS_BOUND (Bound), etc. -- for some, but not all dialects. TPI state is stream-based TCP/IP information that isn't available in many dialects.

A fairly weak general rule is if netstat(1) reports UDP TPI state, lsof may be able to report it, too. But don't be surprised if lsof fails to report UDP TPI state for your dialect. Other factors influence lsof's ability to report UDP TPI state, including the
availability of state number
data in kernel structures, and state number to state name conversion data.

3.13 I am editing a file with vi; why doesn't lsof find the file?

Classic implementations of vi usually don't keep open the file being edited. (Newer ones may do so in order to maintain an advisory lock.) Instead classic vi opens the file, makes a temporary copy (usually in /tmp or /usr/tmp), and does its work in that file. When you save the file being edited from a classic vi implementation, it reopens and rewrites the file.

During a classic vi session, except for the brief periods when vi is reading or rewriting the file, lsof won't find an open reference to the file from the vi process, because there is none.

3.14 Why doesn't lsof report TCP/TPI window and queue sizes for my dialect?

Lsof only reports TCP/TPI window sizes for Solaris, because only its netstat reports them. The intent of providing TCP/TPI information in lsof NAME column output is to make it
easier to match netstat output to lsof output.

In general lsof only reports queue sizes for both TCP and UDP (TPI) connections on BSD-derived UNIX dialects, where both sets of values appear in kernel socket queue structures. SYSV-derived UNIX dialects whose TCP/IP implementations are based on streams generally provide only TCP queue sizes, not UDP (TPI) ones.

While you may find that netstat on some SYSV-derived UNIX dialects with streams TCP/IP may report UDP (TPI) queue sizes, you will probably also find that the sizes are always zero -- netstat supplies a constant zero for UDP (TPI) queue sizes to make its headers align the same for TCP and UDP (TPI) connections. Solaris seems to get it right -- i.e., its netstat does not report UDP (TPI) queue sizes.

When in doubt, I chose to avoid reporting UDP (TPI) queue sizes for UNIX dialects whose netstat-reported values I knew to be a constant zero or whose origin I couldn't determine. OSR is a dialect in this category.

3.14.1 Why
doesn't lsof report socket options, socket states, and TCP flags and values for my dialect?

The lsof -T argument, 'f', that selects the reporting of socket options, socket states and TCP flags was implemented at lsof revision 4.71 for the following UNIX dialects, providing the indicated information:

AIX 4.3.2 and 5.1 and above
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
Apple Darwin 7.2 and above
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
Digital UNIX and Tru64 UNIX 4.0
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
FreeBSD 4.9 and above
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
HP-UX 11.00 (/dev/kmem-based lsof)

All socket options and values are reported. No socket states
are reported. Only the TF_NODELAY TCP flag and the TF_MSS value are reported.

HP-UX 11.11 and iiiv2 (PSTAT-based lsof)
All socket options and values, and socket states are reported. No TCP flags or values are reported.

Linux
No socket options and values, socket states, or TCP flags and values are reported. The support for "-Tf" could not be added to Linux, because socket options, socket states, and TCP flags and values are not available via the /proc file system.

NetBSD 1.6G and above
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.

OpenBSD 3.4 and above
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.

OPENSTEP 4.2
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.

OpenUNIX 8
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.

SCO OpenServer Release 5.0.6
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.

Solaris 2.6, 8 and above
The socket option display is limited to BROADCAST, DEBUG, DGRAM_ERRIND, DONTROUTE and OOBINLINE. Socket values are limited to KEEPALIVE and LINGER. No socket states are reported. The TCP DELACK, NODELAY and SENTFIN flags are reported. The TCP MSS value is reported.

UnixWare 7.1.[134]
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.

3.14.2 Why doesn't lsof report the partial listen queue connection count for my dialect?

The reporting of partial listen queue connections was added to -Tf processing at lsof revision 4.76. Currently it is reported for these dialects:

AIX 4.3.2

This dialect is no longer supported, so no attempt
was made to add partial listen queue length support
for it.
AIX 5.1
and above
Partial listen queue information is available.
Apple Darwin 7.2 and above
Partial listen queue information is available.
Digital UNIX 4.0
This dialect is no longer supported, so no attempt
was made to add partial listen queue length support
for it.
FreeBSD 4.9 and above
Partial listen queue information is available.
HP-UX 11.00 (/dev/kmem-based lsof)
No partial listen queue information is available.
HP-UX 11.11 and iiiv2 (PSTAT-based lsof)
No partial listen queue information is available.
Linux
No partial listen queue information is available.
NetBSD 1.6G and above
Partial listen queue information is available.
OpenBSD 3.4 and above
Partial listen queue information is available.
OPENSTEP 4.2
Partial listen queue information is available.
OpenUNIX 8
This dialect is no longer supported, so no attempt
was made to add partial listen queue length support
for it.
SCO OpenServer Release 5.0.6
No
partial listen queue information is available.
Solaris 2.6, 8 and above
Partial listen queue information is available.
Tru64 UNIX 5.0
This dialect is no longer supported, so no attempt
was made to add partial listen queue length support
for it.
Tru64 UNIX 5.1
Partial listen queue information is available.
UnixWare 7.1.[134]
Partial listen queue information is available.

3.15 What does "no more information" in the NAME column mean?

When lsof can find no successor structures -- a gnode,

inode, socket, or vnode -- connected to the file structure
of an open descriptor of a process, it reports "no more
information" in the NAME column. The TYPE, DEVICE, SIZE/OFF,
and INODE columns will be blank.

Because the file structure is supposed to contain a pointer
to the next structure of a file's processing support, if
the pointer is NUL, lsof can go no further.

Some UNIX dialects have file structures for system processes
-- e.g., the sched process --
that have no successor
structure pointers. The "no more information" NAME will
commonly appear for these processes in lsof output.

It may also be the case that lsof has read the file structure
while it is being assembled and before a successor structure
pointer value has been set. The "no more information" NAME
will again result.

Unless lsof output is filled with "no more information"
NAME column messages, the appearance of a few should be no
cause for alarm.

3.16 Why doesn't lsof find a process that ps finds?

If lsof fails to display open files for a process that ps
indicates exists, there may be several reasons for the
difference.

The process may be a "zombie" for which ps displays the
"(defunct)" state. In that case, the process has exited
and has no open file information lsof can display. It does
still have a process structure, sufficient for the needs
of ps.

Another possible explanation is that kernel tables and
structures may have been changing when
lsof looked for the
process, making lsof unable to find all relevant process
structures. Try repeating the lsof request.

3.17 Why doesn't -V report a search failure?

The usual reason that -V won't report a search failure is
that lsof located the search item, but was prevented from
listing it by an option that doesn't participate in search
failure reporting.

For example, this lsof invocation:

```
$ lsof -V -i TCP@foobar -a -d 999
```

won't report it can't find the Internet address TCP@foobar,
even if there is an open file connected to that address,
unless the open file also has a file descriptor number of
999 (the ``-a -d 999'' options).

Compile-time options can also affect -V results in much the
same way. For example, if HASSECURITY and HASNOSOCKSECURITY
are defined at compile time, this lsof invocation, run by a
non-root user:

```
$ lsof -V -c inetd
```

won't report that it can't find the inetd command, even if
there is a process running the inetd command, because
the
HASSECURITY and HASNOSOCKSECURITY options prevent the
listing of all but the socket files of another user, and
no socket file selector (e.g., "-i") was specified.

3.18 Portmap problems

3.18.1 Why isn't a name displayed for the portmap registration?

When portmap registration reporting is enabled, any time
there is a registration for a local TCP or UDP port, lsof
displays it in square brackets, following the port number
or service name -- e.g., ``:1234[name]'' or ``:name[100083]''.

The TCP or UDP port number or service number (what follows
the `:') is displayed under the control of the lsof -P
option. The registration identity is held by the portmapper
and may be a name or a number, depending on how the
registration's owner declared it. Lsof reports what the
port map holds and cannot derive a registration name from
a registration number.

Lsof can be compiled with registration reporting enabled
or disabled by default, under the control of the HASPMAPENABLED
#define
(usually in machine.h). The lsof help panel (`lsof
-h`) will show the default. Lsof is distributed with
reporting disabled by default.

3.18.2 How can I display only portmap registrations?

Lsof doesn't have an option that will display only TCP or UDP ports with portmap registrations. The +M option only enables the reporting of registration information when Internet socket files are displayed; +M doesn't select the displaying of Internet socket files -- the -i option does that.

This simple lsof pipe to grep will do the job:

```
$ lsof -i +M | grep "\["
```

This works because -i selects Internet socket files, +M enables portmap registration reporting, and only output lines with opening square brackets will have registrations.

When portmap registration reporting is enabled by default, because the lsof builder constructed it that way, +M is not necessary. (The lsof help panel, produced with `lsof -h` will display the default portmapper registration reporting state.)
However, specifying +M when reporting is already enabled is acceptable, as is specifying -M when reporting is already disabled.

Digression: lsof will accept `+' or `-' as a prefix to most options. (That isn't documented in the man page or help panel to reduce confusion and complexity.) The -i option is as acceptable as +i, so the above example could be written a little more tersely as:

```
$ lsof +Mi | grep "\["
```

But be careful to use the ``Mi'' ordering, since ``iM'' implies M is an address argument to `i'.

3.18.3 Why doesn't lsof report portmap registrations for some ports?

Lsof reports portmap registrations for local TCP and UDP ports only. It identifies local ports this way:

* The port appears in the local address section of the kernel structure that contains it.

* The port appears in the foreign address section of a kernel structure whose local and foreign Internet

addresses are the same.

* The port appears in the foreign address section of a
  kernel address structure whose Internet address is
  INADDR_LOOPBACK (127.0.0.1).

Following these rules, lsof ignores foreign portmapped ports. That's done for reasons of efficiency and possible security prohibitions. Contacting all remote portmappers could take a long time and be blocked by network difficulties (i.e., be inefficient). Many firewalls block portmapper access for security reasons.

Lsof may occasionally ignore portmap registration information for a legitimate local port by virtue of its local port rules. This can happen when a port appears in the foreign part of its kernel structure and the local and foreign Internet addresses don't match (perhaps because they're on different interfaces), and the foreign Internet address isn't INADDR_LOOPBACK (127.0.0.1).

3.18.4 Why doesn't lsof report portmap registrations for some Solaris versions?

In some versions of Solaris -- 9 and 10 are known to exhibit this problem -- lsof is unable to display portmap registrations.

This portmap registration reporting failure occurs when the Solaris netconfig field (in /etc or etc/inet) has its first two non-comment lines enabling tcp6 and udp6. When netconfig is configured in that fashion, lsof's attempt to read the portmap via an RPC function fails.

I don't have an explanation for the failure, but this comment in the netconfig(4) man page appears to have some bearing on the problem:

```
# The following two entries starting with udp6 and tcp6 are
# meant to be used for IPv6. If you have Ipv6 enabled on your
# machine then you can uncomment these two lines to enable
# RPC and NFS to use the Ipv6 stack.
...
#udp6  tpi_clts      v  inet6  udp  /dev/udp6  -
#tcp6  tpi_cots_ord  v  inet6  tcp  /dev/tcp6  - "
```

My interpretation of that comment is that there is a different

RPC interface to the portmap when IPv6 is enabled. However, I can't find any documentation on it in the RPC man pages. If anyone has
information on it, please send it to me at <abe@purdue> and put "lsof Solaris portmap" in the subject line.

A work-around may be to move the ucp6 and tcp6 lines after the udp and tcxp lines in netconfig. I don't know if that change has any unacceptable consequences, but it works for me on my Solaris 9 test system, and I have a report that it also works on Solaris 10.

3.19 Why is `lsof | wc` bigger than my system's open file limit?

There is a strong temptation to count open files by piping lsof output to wc. If your purpose is to compare the number you get to some Unix system parameter that defines the number of open files your system can have, resist the temptation.

One reason is that lsof reports a number of "files" that don't occupy Unix file table space -- current working directories, root directories, jail directories, text files, library files, memory mapped files are some. Another reason is that lsof can report a file shared by more than one process that
itself occupies only one file table slot.

If you want to know the number of open files that occupy file table slots, use the +ff option and process the lsof output's FILE_ADDR column information with standard Unix tools like cut, grep, sed, and sort.

You might also consider using use lsof's field output with +ff, selecting the file struct address with -FF, and processing the output with an AWK or Perl script. See the list_fields.awk, list_fields.perl, and shared.perl5 scripts in the scripts/ subdirectory of the lsof distribution for hints on file struct post-processing filters.

3.20 Why doesn't lsof report file offset (position)?

Lsof won't report a file offset (position) value if the -s option (without parameters) has been specified, or if the dialect doesn't support the displaying of file offset (position). (Note that on selected dialects the help output,

obtained with -h or -?, may show that the -s option can also be
supplied the "p:s" parameters; for more
information on that
addition, see the answer to the "How are protocol state name
exclusion and inclusion used?" question.)

That lsof is reporting only file size is indicated by the
fact that the appropriate column header says SIZE instead
of SIZE/OFF.

If lsof doesn't support the displaying of file offset
(position) -- e.g., for Linux /proc-based lsof -- the -h
or -? output panel won't list the -o option.

Sometimes the availability of file offset information
depends on the dialect's kernel. This is particularly true
for socket file offsets.

Maintenance of offsets for pseudo-terminal devices varies
by UNIX dialect and is related to how the dialect kernel
implements pseudo-terminal support. Kernels like AIX, for
example, that short-circuit the transfer of data between
socket and pseudo devices to reduce TCP/IP daemon interrupt
rates won't advance offsets in the TCP/IP daemon socket
files. Instead they will advance offsets in the open
standard I/O files of the shell
child precess where the
pseudo-terminal devices are used.

When in doubt about the behavior of lsof in reporting file
offset information, do some carefully measured experiments,
consult the lsof sources, or contact me at <abe@purdue.edu>
to discuss the matter. Please follow the reporting guidelines
in the "How do I report an lsof bug?" section of this FAQ.

3.20.1 What does lsof report for size when the file doesn't really have
one?

When a file has no true size -- e.g., it's a socket, a
FIFO, or a pipe -- lsof tries to report the information it
finds in the kernel that describes the contents of associated
kernel buffers.

Thus, for example, size for most TCP/IP files is socket
buffer size. The size of the socket read buffer is reported
for read-only files; the size of the write buffer for
write-only files; and the sum of the buffers sizes for
read-write files.

3.21 Problems with path name arguments

3.21.1 How do I ask lsof to search a file system?

You can ask
lsof to search for all open files on a file
system by specifying its mounted path name as an lsof
argument -- e.g.,

```
$ lsof /
```

Output of the mount command will show file system mounted
path names. It will also show the mounted-on device path
for the file system.

If the mounted-on device is a block device (the permission
field in output of `ls -l <device>` starts with a `b/),
you can specify it's name, too -- e.g.,

```
$ lsof /dev/sd0a
```

If the mounted-on device isn't a block device -- for example,
some UNIX dialects call a CD-ROM device a character device
(ls output starts with a `c') -- you can force lsof to
assume that the specified device names a file system with
the +f option -- e.g.,

```
$ lsof +f -- /dev/sd0a
```

(Note: you must use ``--" after +f or -f if a file name
follows immediately, because +f and -f can be followed by
characters that specify flag output selections.)

When you use +f and lsof can't match the device to a file
system, lsof will issue
a complaint.

The +f option may be used in some dialects to ask lsof to
search for an NFS file system by its server name and server
mount point. If the mount application reports an NFS file
system mounted-on value that way, then this sample lsof
request should work.

```
$ lsof +f -- fleet:/home/fleet/u5
```

Finally, you can use -f if you don't want a mounted file
system path name to be considered a request to report all

open files on the file system. This is useful when you
want to know if anyone is using the file system's mounted
path name. This example directs lsof to report on open
access to the `/' directory, including when it's being used
as a current working or root directory.

```
$ lsof -f -- /
```

The lsof -f option performs the same function as -f does
in some fuser implementations. However, since the lsof -c
option was chosen for another purpose before the `f' option
was added to lsof, +f was selected as the analogue to the
fuser -c option. (Sorry for
the potential confusion.)

3.21.2 Why doesn't lsof find all the open files in a file system?

Lsof may not find all the open files in a file system for
several reasons.

First, some processes with files open on the file system
may have been changing status when lsof examined the process
table, and lsof "missed" them. Remember, the kernel changes
much faster than lsof can respond to the changes.

Second, be sure you have specified the file system correctly.
Perhaps you specified a file instead. You can use lsof's
-V option to have lsof report in detail on what it couldn't
find. Make sure the report for the file system you specified
says "file system." Here's some -V output:

```
$ /lsof -V /tmp ./lsof.h ./lsof
COMMAND  PID USER   FD   TYPE DEVICE SIZE/OFF  INODE NAME
lsof    2688  abe  txt   VREG 18,1,7  1428583 226641 ./lsof
lsof    2689  abe  txt   VREG 18,1,7  1428583 226641 ./lsof
lsof: no file use located: ./lsof.h
```

You can also use lsof's +f option
to force it to consider
a path name as a file system. If lsof can't find a file
system by the specified name, it will issue a complaint --
e.g.,

```
$ lsof +f -- /usr
lsof: not a file system: /usr
```

(/usr is a directory in the / file system.)

3.21.3 Why does the lsof exit code report it didn't find open files when some files were listed?

Sometimes lsof will list some open files, yet return a non-zero exit code, suggesting it hasn't found all the specified files.

The first thing you should when you suspect lsof is incorrect is to repeat the request, adding the -V option. In the resulting report you may find that your file system specification really wasn't a file system specification, just a file specification.

Finally, if you specify two files or two file systems twice, lsof will credit all matches to the first of the two and believe that there were no matches for the second. It's possible to specify a single file system twice with different path names
by using both its mounted directory path name and mounted-one device name.

```
$ lsof +f -V spcuna:/sysprog /sysprog
COMMAND   PID USER   FD   TYPE DEVICE SIZE/OFF  INODE NAME
ksh     11092  abe  cwd   VDIR 39,0,1     1536 226562 /sysprog
(spcuna:/sysprog)
...
lsof: no file system use located: spcuna:/sysprog
```

All matches were credited to /sysprog; none to spcuna:/sysprog.

3.21.4 Why won't lsof find all the open files in a directory?

When you give lsof a simple directory path name argument (not a file system mounted-on name), you are asking it to search for processes that have the directory open as a file, or as a process-specific directory -- e.g., root or current working directory.

If you want to list instances of open files inside the directory, you need to specify the individual path names of those files, or use the lsof +D and +d options.

See the answer to the question "Why are the +D and +d options so slow?" before you use +D or +d casually.

See the answer to the question "Why do the +D and +d options produce warning messages?" for an explanation of some

process authority limitations of +D and +d.

3.21.5 Why are the +D and +d options so slow?

The +D and +d options cause lsof to build a path name search list for a specified directory. +D causes lsof to descend the directory to its furthest subdirectory, while +d restricts it to the top level. In both cases, the specified directory itself is included in the search list. In both symbolic links are ignored.

Building such a search list can take considerable time, especially when the specified directory contains many files and subdirectories -- lsof must call the system readlink() and stat() functions for each file and directory. Storing the search list can cause lsof to use more than its normal amount of dynamic memory -- each file recorded in the search list consumes dynamic memory for its path name, characteristics, and search linkages. Using the list means lsof must search it for every open file in the system.

Building the search list for a directory specified on some file systems can be slow -- e.g., for an NFS directory with many files. Some file systems have special logging features that can introduce additional delays to the building of the search list -- e.g., NFS logging, or logging on a Solaris UFS file system. The bottom line is that slow search list construction may not be so much an lsof problem as a file system problem. (Hint: if you're using Solaris UFS logging, consider specifying the "logging,noatime" option pair to reduce the number of atime writes to the UFS logging queue and disk.)

A somewhat risky way to speed up lsof's building of the search list is to use lsof's ``-O'' option. It forces lsof to do all system calls needed to build the search list directly, rather than in a child process. While direct system calls are much faster, they can block in the kernel -- e.g., when an NFS server stops responding -- stopping lsof until the kernel operation unblocks.

As an example of the load +D can impose, consider that an `lsof +D /` on a lightly loaded NeXT '040 cube with a 1GB root file system disk took 4+ minutes of real time. It also generated several hundred error messages about files and directories the lsof process didn't have permission to

access with stat(2).

The bottom line is that +D and +d should be used cautiously.
+D is more costly than +d for deeply nested directory trees,
because of the full directory descent it causes. So use
+d where possible. And you might need to consider the
performance of the file system that holds the directory
you name with +d or +D.

In view of these warnings, when is it appropriate to use
+D or +d? Probably the most appropriate time is when you
would specify the directory's contents to lsof with a shell
globbing construct -- e.g., `lsof *`. If that's what you
need to do, `lsof +d .` is probably more
efficient than
having the shell produce a directory list, form it into an
argument vector, and pass the vector to lsof for it to
unravel.

See the answer to the question "Why do the +D and +d options
produce warning messages?" for an explanation of some
process authority limitations of +D and +d.

3.21.6 Why do the +D and +d options produce warning messages?

+D and +d option processing is limited by the authority of
the lsof process -- i.e., lsof can only examine (with
lstat(2) and stat(2)) files the owner of the process can
access.

If the ownership, group membership, or permissions of the
specified directory, file within it, or directory within
it prevents the owner of the lsof process from using lstat(2)
or stat(2) on it, lsof will issue a warning message, naming
the path and giving the system's (lstat(2's or stat(2)'s)
reason (errno explanation text) for refusing access.

As an example, assume user abc has a subdirectory in /tmp,
owned by abc and readable, writable
and searchable by only
its owner. If user def asks lsof to search for all /tmp
references with +D or +d, lsof will be unable to lstat(2)
or stat(2) anything in abc's private subdirectory, and will
issue an appropriate warning.

Lsof warnings can usually be suppressed with the -w option.
However, using -w with +D or +d means that there will be
no indication why lsof couldn't find an open reference to

a restricted directory or something contained in it.

Hint: if you need to use +D or +d and avoid authority warnings, and if you have super-user power, su and use lsof with +D or +d as root.

3.22 Why can't my C compiler find the rpcent structure definition?

When you try to compile lsof your compiler may complain that the rpcent structure is undefined. The complaints may look like this:

```
>print.c: In function `fill_portmap':
>print.c:213: dereferencing pointer to incomplete type
>...
```

The most likely cause is that someone has allowed a BIND installation
to update /usr/include/netdb.h (or perhaps /usr/include/rpc/netdb.h), removing the rpcent structure definition that lsof expects to find there.

Only Solaris has an automatic work-around. (See dlsof.h in dialects/sun.). The Solaris work-around succeeds because there is another header file, <rpc/rpcent.h>, with the rpcent structure definition, and there is a Solaris C pre-processor test that can tell when the BIND <netdb.h> is in place and hence <rpc/rpcent.h> must be included.

Doubtlessly there are similar work-arounds possible in other UNIX dialects whose header files have been "touched" by BIND, but in general I recommend restoration of the vendor's <netdb.h> and any other header files BIND might have replaced. (I think BIND replaces <resolv.h>, <sys/bitypes.h>, <sys/cdefs.h> -- and maybe others.)

3.23 Why doesn't lsof report fully on file "foo" on UNIX dialect "bar?"

Lsof sometimes won't report much information on a given file, or may even report an error message
in its NAME
column. That's usually because the file is of a special type -- e.g., in a file system specific to the UNIX dialect -- and I haven't used a system where the file appeared during my testing.

If you encounter such a situation, send me e-mail at

<abe@purdue.edu> and we may be able to devise an addition to lsof that will report on the file in question. Please follow the reporting guidelines in the "How do I report an lsof bug?" section of this FAQ. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

3.24 Why do I get a complaint when I execute lsof that some library file can't be found?

On systems where the LIBPATH (or the equivalent) environment variable is used to record the library search path in executable files when they are built, an incorrect value may make it impossible for the system to find the shared libraries needed to load lsof for execution.

This may be particularly true on systems like
AIX >= 4.1.4,
where the lsof Makefile takes the precautionary step of using the -bnolibpath loader flag to insure that the path to the private static lsof library is not recorded in the lsof binary. Should LIBPATH be invalid when lsof is built, it will be recorded in the lsof binary as the default library path search order and lead to an inability to find libraries when lsof is executed.

So, if you get missing library complaints when you try to execute lsof, check LIBPATH, or whatever environment variable is used on your system to define library search order in executable files. Use the tools at your disposal to look at the library paths recorded in the lsof binary -- e.g., chatr on HP-UX, dump on AIX, ldd on Solaris.

Make sure, too, that when the correct library search path has been recorded in the executable file, the required library files exist at one or more of the search paths.

3.25 Why does lsof complain it can't open files?

When lsof begins execution,
unless it has been asked to
report only help or version information, typically it will attempt to access kernel memory and symbol files -- e.g., /unix, /dev/kmem. Even though lsof needs only permission to open these files for reading, read access to them might be restricted by ownerships and permission modes.

So the first step to diagnosing lsof problems with opening files is to use ls(1) to examine the ownerships and permission modes of the files that lsof wants to open. You may find that lsof needs to be installed with some type of special ownership or permission modes to enable it to open the necessary files for reading. See the "Installing Lsof" section of 00README for more information.

3.26 Why does lsof warn "compiled for x ... y; this is z."?

Unless warnings are suppressed (with -w) or the kernel identity check symbol (HASKERNIDCK) definition has been deleted, all but one lsof dialect version (exception: /proc-based Linux lsof) compare the identity of the running
kernel to that of the one for which lsof was constructed. If the identities don't match, lsof issues a warning like this:

```
lsof: WARNING: compiled for Solaris release 5.7; this is 5.6.
```

Two kernel identity differences can generate this warning -- the version number and the release number.

Build and running identity differences are usually significant, because they usually indicate kernels whose structures are different -- kernel structures commonly change at dialect version releases. Since lsof reads data from the kernel in the form of structures, it is sensitive to changes in them. The general rule is that an lsof compiled for one UNIX dialect version will not work correctly when run on a different version.

There are three work-arounds: 1) use -w to suppress the warning -- and risk missing other warnings; 2) permanently disable the identity check by deleting the definition of HASKERNIDCK in the dialect's machine.h header file -- with the same risk;
or 3) rebuild lsof on the system where it is to be run. (Deleting HASKERNIDCK can be done with the Customize script or by editing machine.h.)

Generally checking kernel identity is a quick operation for lsof. However, it is potentially slow under AIX, where lsof must run /usr/bin/oslevel. To speed up lsof, use -w to suppress the /usr/bin/oslevel test. See "Why does AIX lsof start so slowly?" for more information.

3.27 How can I disable the kernel identity check?

The kernel identity check is controlled by the HASKERNIDCK definition. When it is defined, most dialects (exclusion: /proc-based Linux lsof) will compare the build-time kernel identity with the run-time one.

To disable the kernel identity check, disable the HASKERNIDCK definition in the dialect's machine.h header file. The Customize script can be used to do that in its section about the kernel identity check.

Caution: while disabling the kernel identity check may result in smaller lsof startup overhead, it comes with the risk of executing an lsof that may produce warning messages, error messages, incorrect output, or no output at all.

3.28 Why don't ps(1) and lsof agree on the owner of a process?

Generally the user ID lsof reports in its USER column is the process effective user ID, as found in the process structure. Sometimes that may not agree with what ps(1) reports for the same process.

There are sundry reasons for the difference. Sometimes ps(1) uses a different source for process information, e.g., the /proc file system or the psinfo structure. Sometimes the kernel is lax or confused (e.g., Solaris 2.5.1) about what ID to report as the effective user ID. Sometimes the system carries only one user ID in its process structure (some BSD derivatives), leaving lsof no choice.

The differences between lsof and ps(1) user identifications should be small and normally it will be apparent that the confusion is over a process whose application has changed to an effective user ID different from the real one.

3.29 Why doesn't lsof find an open socket file whose connection state is past CLOSE_WAIT?

TCP/IP connections in states past CLOSE_WAIT -- e.g., FIN_WAIT_1, CLOSING, LAST_ACK, FIN_WAIT_2, and TIME_WAIT -- don't always have open files associated with them. When they don't, lsof can't identify them. When the connection state advances from CLOSE_WAIT, sometimes the open file associated with the connection is deleted.

3.30 Why don't machine.h definitions work when the surrounding comments are removed?

The machine.h header files in dialect subdirectories have some commented-out definitions like:

```
/* #define HASSYSDC "/your/choice/of/path */
```

You can't simply remove the comments and expect the definition to work. That's intended to make you think about what value you are assigning to the symbol. The assigned value might have a system-specific convention. HASSYSDC, for example, might be /var/db/lsof.dc for FreeBSD, but it might
be /var/adm/lsof.dc for Solaris.

Symbols defined in the lsof documentation are described in 00PORTING, other machine.h comments, and other lsof documentation files. HASSYSDC, for example, is discussed in 00DCACHE. When comments and documentation don't suffice, consult the source code for hints on how the symbol is used.

3.31 What do "can't read inpcb at 0x...", "no protocol control block", "no PCB, CANTSENDMORE, CANTRCVMORE", etc. mean?

Sometimes lsof will report "can't read inpcb at 0x00000000", "no protocol control block", "no PCB, CANTSENDMORE, CANTRCVMORE" or a similar message in the NAME column for open TCP socket files. These messages mean the file's socket structure lacks a pointer to the INternet Protocol Control Block (inpcb) where lsof expects to find connection addresses -- local and foreign ports, local and foreign IP addresses. The socket file has probably been submitted to the shutdown(2) function for processing.

In some implementations lsof issues the "no PCB, CANTSENDMORE, CANTRCVMORE" message, which tries to explain the absence of a protocol control block by showing the socket state settings that have been made by the shutdown(2) function.

If a non-zero address follows the "0x" in the "can't read inpcb" message, it means lsof couldn't read inpcb contents from the indicated address in kernel memory.

3.32 What do the "unknown file system type" warnings mean?

Lsof may report a message similar to"

```
unknown file system type, v_op: 0x10472f10
```

in the NAME column for some files.

This means that lsof has encountered a vnode for the file whose operation switch address (from v_op) references a file system type for which there is no support in lsof. After lsof identifies the file system type, it uses pre-compiled code to locate the file system specific node for the file where lsof finds information like file size, device number, node number, etc.

To get some idea of what the file system type might be, use
nm on your kernel symbol file to locate the symbol name that corresponds to the v_op address -- e.g., on Solaris do:

```
$ nm -x /dev/ksyms | grep 0x10472f10
0x10472f10 ... |file_system_name_vnodeops
```

Where "file_system_name" is the clue to the unsupported file system.

Lsof doesn't use the v_op address to identify file system types on all dialects. Sometimes it uses an index number it finds in the vnode. It will translate that symbol to a short name in the warning message -- e.g., "nfs3" -- if possible.

3.33 Installation

3.33.1 How do I install lsof?

There is no "standard" way to install lsof. Too much depends on local conditions for me to be able to provide working install rules in the lsof make files. (The skeleton install rules you will find just give "hints.") See the "Installing Lsof" section of 00README for a fuller explanation.

To install lsof you will need to consider these questions:

* Who should be able to use lsof? (See HASSECURITY and

HASNOSOCKSECURITY in the "Security" section of 00README.)

* Where should lsof be installed? This is a decision mostly dictated by local conditions. Somewhere in /usr/local -- etc/ or sbin/ -- is a common choice.

* What permissions should I give the lsof executable? The answer to this varies by dialect. The make files have install rules that give hints. The "Installing Lsof" section of 00README gives information, too.

* What if I want to install lsof in a shared file system for machines that require different lsof configurations? See the next question and answer, "How do I install a common lsof when I have machines that need differently constructed lsof binaries?"

3.33.2 How do I install a common lsof when I have machines that need differently constructed lsof binaries?

A dilemma that faces some system administrators when they install lsof in a shared file system -- e.g., NFS -- is that they must have different lsof executables for different systems.

The answer is to build an lsof wrapper script that is executed in place of lsof. The script can use system commands to determine which lsof binary should be executed.

Consider this example. You have HP-UX machines with 32 and 64 bit kernels that share the /usr/local/sbin directory where you want to install lsof. Consequently, on each system you must use a different lsof executable, built for the system's bit size. (That's because lsof reads kernel structures, sized by the kernel's bit size.)

One answer is to install three things in /usr/local/sbin: 1) a 32 bit lsof as lsof32; 2) a 64 bit lsof as lsof64; and 3) an lsof script. The script might look like this one, based on work by Amir J. Katz:

```
#!/bin/sh
x=`/usr/bin/getconf KERNEL_BITS`  # returns 32 or 64
if /usr/bin/test "X$x" = "X32"
then
  lsof32 $*
else
```

```
      if /usr/bin/test "X$x" = "X64"
      then
 lsof64 $*
      else
 echo "Can't determine which
lsof executable to use;"
 echo "getconf KERNEL_BITS says: $x"
 exit 1
      fi
    fi
```

Solaris users should consult "How do I install lsof for Solaris 7, 8 or 9?" for information on a similar trick using the Solaris isaexec command.

Users of other dialects might be able to use a command like uname(1) that can identify a distinguishing feature of the system to be incorporated in pre-installed lsof executable names. For example, use `uname -r` and install binaries with suffixes that match `uname -r` output.

3.34 Why do lsof 4.53 and above reject device cache files built by earlier lsof revisions?

When lsof revisions 4.53 run and encounter a device cache file built by an earlier revision, it will reject the file and build a new one. The rejection will be advertised with these messages:

```
    lsof: WARNING: no /dev device in <name>: 2 sections
    ...
    lsof: WARNING: created device cache file: <name>
```

This happens because the header line of the device cache file
was changed at revision 4.53 to contain the number of the device on which the device directory resides. The old device cache file header line -- the "2 sections" line in the above warning message, node reads "2 sections, dev=600".

This is not a serious problem, since lsof automatically rebuilds the device cache file with the correct header line.

3.35 What do "like block special" and "like character special" mean in the NAME column?

When lsof comes across an open block or character file

whose device, raw device and inode place it somewhere other than /dev (or /devices), lsof doesn't report the /dev (or /devices) name in the NAME column. Instead lsof reports the file system name and device or path name in the NAME column and parenthetically adds "like block special <path>" or "like character special <path>".

The value for <path> will point to a block or character device in /dev (or /devices) whose raw device number matches that of the open file being reported, but
whose device
number or node number (or both) don't match.

Such an open file is connected to a device node that has been created in a directory other than /dev (or /devices.) See mknod(8) for information on how such nodes are created. (Generally one needs root power to create device nodes with mknod.)

3.36 Why does an lsof make fail because of undefined symbols?

When lsof is compiled via the `make` step and the final load step fails because of missing symbols, the problem may not be lsof. The problem may be that ld, called by the compiler as part of the `make` step, can't find some library that lsof needs.

First check the last compiler line of the make operation -- e.g., the last line with cc or gcc in it before the undefined symbol report -- for loader arguments, i.e., ones beginning with "-l". Except for "-llsof" the rest name system libraries. ("-L./lib" precedes "-llsof" to tell the loader its location.)

Check that all the named system libraries exist. Look
in
/lib and /usr/lib as a start, but that may not be the only place system libraries live. Consult your dialect's documentation, e.g., the compiler and loader man pages, for other possible locations.

If some system library doesn't exist, that may mean it was never installed or was removed. You'll have to re-install the missing library.

You may find that all the system libraries lsof uses exist. Your next step might be to use nm and grep to see if any of them contain the undefined symbols.

```
$ nm library | grep symbol
```

If the undefined symbol exists in some library named by the lsof make step, then you might have a problem with some environment variable that controls the load step. The most common is LD_LIBRARY_PATH. It may have a setting that causes ld to ignore a directory containing a library lsof names. If this is the case, try unsetting LD_LIBRARY_PATH in the environment of the ld process -- e.g., do:

```
$ unset LD_LIBRARY_PATH
```

or

```
% unsetenv
LD_LIBRARY_PATH
```

Consult your ld man page for other environment variables that might affect library searching -- e.g., LIBPATH, LPATH, SHLIB_PATH, etc.

If the undefined function doesn't exist in any libraries lsof names, check other libraries. See if the function has a man page that names its library. If the latter is true, please let me know, because that is an lsof problem I need to fix.

If none of these solutions work for you, send me some documentation via e-mail at <abe@purdue.edu>. Include `uname -a` output, the output of the lsof `Configure ...` and `make` steps, and the contents of the environment in force when the `make` step was executed -- e.g., `env` or `printenv` output. If you've located the libraries lsof names, send me that information, too. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

3.37 Command Regular Expressions (REs)

3.37.1 What are basic and extended regular expressions?

Lsof's ``-c'' option allows the specification of regular expressions (REs), enclosed in two slash ('/') characters and followed by these modifiers:

b the RE is a basic RE.
i ignore case.
x the RE is an extended RE (the default).

Note: the characters of the regular expression may need to
be quoted to prevent their expansion by the shell.

Example: this RE is an extended RE that matches exactly
four characters, whose third may be an upper ('O') or lower
case ('o') oh:

```
-c /^..o.$/i
```

For simplicity's sake, an RE that is acceptable to egrep(1)
is usually called an extended RE.

REs suitable for the old line editor, ed(1), are often
called basic REs (and sometimes also called obsolete).

These are some ways basic REs usually differ from extended
REs. (There are other differences.)

* `|', `+', `?', '{', and '}' are ordinary characters.

* `^' is an ordinary character except at the beginning of
  the RE.

* `$' is an ordinary character except at the end
of the
  RE.

* `*' is an ordinary character if it appears at the
  beginning of the RE.

For more information on REs and the distinction between
basic and extended REs, consult your dialect's man pages
for ed(1), egrep(1), sed(1), and possibly regex(5) or
regex(7).

3.37.2 Why can't I put a slash in a command regular expression?

Since a UNIX command name is the last part of a path to
the command's executable, the lsof command regular expression
(RE) syntax uses slash ('/') to mark the beginning and end
of an RE. Slash may not appear in the RE and the `\'
back-slash escape is ineffective for "hiding" it.

More likely than not, if you try to put a slash in an lsof
command RE, you'll get this response:

```
$ lsof -s/.\// ...
lsof: invalid regexp modifier: /
```

Lsof is complaining the the first character it found after
the second slash isn't an lsof command RE modifier -- 'b',
'i', or 'x'.

3.37.3 Why does lsof say my command regular expression wasn't found?

When
you use both forms of lsof's -c option --
``-c <command>" and ``-c /RE/[m]" -- and ask that lsof
do a verbose search (``-V"), you may be surprised that
lsof will say that the regular expression wasn't found.

This can happen if the ``-c <command>" form matches first,
because then the ``-c/RE/[m]" test will never have been
applied. For example:

```
$ ./lsof -clsof -c/^..o.$/ -V -adcwd
COMMAND  PID USER   FD   TYPE DEVICE SIZE/OFF  NODE NAME
lsof    7850  abe  cwd   VDIR    6,0     2048 96442 / (/dev/sd0a)
lsof: no command found for regex: ^..o.$
```

The ``-clsof" option matched first, so the ``-c/^..o.$/
option wasn't tested.

3.38 Why doesn't lsof report on shared memory segments?

Lsof reports on shared memory segments only if they're
associated with an open file. That's consistent with lsof's
mission -- to LiSt Open Files. Shared memory segments with
no file associations aren't open files.

That's not to say that a report on shared memory segments
and
their associated processes wouldn't be useful. But it
calls for a new tool, not more baggage for lsof.

3.39 Why does lsof report two instances of itself?

When you ask lsof to report all open files and it has
permission to do so, you may see two lsof processes in the
output. The processes are connected via pipes -- e.g.,
here's an HP-UX 11 example.

```
COMMAND     PID USER   FD   TYPE     DEVICE ...
...
lsof      29450  abe    7w  PIPE 0x48732408 ...
lsof      29450  abe    8r  PIPE 0x48970808 ...
```

```
...
lsof     29451  abe    6r  PIPE 0x48732408 ...
lsof     29451  abe    9w  PIPE 0x48970808 ...
```

The first process will usually be the lsof you initiated;
the second, an lsof child process that is used to isolate
its parent process from kernel functions that can block --
e.g., readlink() or stat().

Information to and from the kernel functions is exchanged
via the two pipes. When the parent process detects that
the child process has
become blocked, it attempts to kill
the child. Depending on the UNIX dialect that may succeed
or fail, but the parent won't be blocked in any event.

See the "BLOCKS AND TIMEOUTS" and "AVOIDING KERNEL BLOCKS"
sections of the lsof man page for more information on why
the child process is used and how you can specify lsof
options to avoid it. (Caution: that may be risky.)

3.40 Why does lsof report '\n' in device cache file error messages?

Lsof revisions prior to 4.58 may report '\n' in error
messages it delivers about problems in the device cache
file -- e.g.,

```
lsof: WARNING: no ...: 4 sections\n
```

That's deliberately done to show the exact contents of the
device cache file line about which lsof is complaining,
including its terminating NL (New Line) '\n' character.
In the above example the line in the device cache file
causing the lsof complaint contains "4 sections" and ends
with a '\n'.

At revision 4.58 and above, device cache error messages
like the one in
the above example have been changed to
read:

```
lsof: WARNING: no ...: line "4 sections"
```

The terminal '\n' is no longer reported, the line contents
are enclosed in double quote marks ("""), and the word
"line" has been added as a prefix to denote that what
follows is a line from the device cache file.

3.41 Kernel Symbol and Address Problems

3.41.1 What does "lsof: WARNING: name cache hash size length error: 0" mean?

When run on some systems, lsof may issue this warning:

```
lsof: WARNING: name cache hash size length error: 0
```

That is an example from a FreeBSD system where lsof reads the kernel's _nchash variable and finds its value is zero.

Similar warnings include:

```
WARNING: kernel name cache size:
WARNING: can't read kernel's name cache:
WARNING: no name cache address
WARNING: name cache hash size length error:
WARNING: unusable name cache size:
```

These warnings are issued when lsof is attempting to read the kernel's name cache information.
They are usually the
result of a mis-match between the addresses for kernel symbols lsof gets via nlist(2) and the addresses in use by the kernel.

Lsof usually gets kernel symbol addresses from what it believes to be the kernel boot file. In FreeBSD, for example, that's the path returned by getbootfile(3), usually /kernel. The boot file can have other names in other UNIX dialects -- /unix, /vmunix, /bsd, /netbsd, /mach, /stand/vmunix, etc.

Lsof will get incorrect (mismatched) addresses from the boot file if it has been replaced by a newer one which hasn't yet been booted -- e.g., if this is done in FreeBSD:

```
# mv /kernel /kernel.OLD
# mv /kernel.NEW /kernel
```

Until the FreeBSD system is rebooted, the booted kernel is /kernel.OLD, but getbootfile() says it is /kernel. If symbol addresses important to lsof in /kernel.OLD and /kernel don't match, the lsof WARNING messages result.

3.41.2 Why does lsof produce "garbage" output?

Kernel name cache warnings
may not be the only sign that
lsof is using incorrect symbol addresses to read kernel
values. If there's no reasonable test lsof can make on
what it reads from the kernel, it may issue other warnings
or even report nonsensical results.

The warnings may appear on STDERR, such as:

```
lsof: can't read proc table info
```

Or the warnings may appear in the NAME column as messages
saying lsof can't read or interpret some kernel structure --
e.g.,

```
... NAME
... can't read file struct from 0x12345
```

One possible work-around is to point lsof's kernel symbol
address gathering at the proper boot file. That can be
done with lsof's -k option -- e.g.,

```
$ lsof -k /kernel.OLD
```

The best work-around is to make sure the standard boot file
is properly sited -- e.g., if you've moved a new /kernel
in place, boot it.

3.42 Why does lsof report open files when run as super user that
it doesn't report when run with lesser privileges?

The most likely cause is that the HASSECURITY
option was
selected when the lsof executable was built.

If HASSECURITY is defined when lsof is built, and lsof is
run with the privileges of a non-ROOT user, it will only
list open files belonging to the user. The same lsof
executable, when run with root user privileges, will list
all open files.

However, if HASSECURITY and HASNOSOCKSECURITY are both
defined when lsof is built, lsof will list open files
belonging to the user and will also list anyone else's open
socket files, provided their listing is selected with the
"-i" option.

So first ask yourself if the process whose open files lsof

won't list belong to a user other than the one under which
you're running lsof, and are not open socket files. If
either is true, use lsof's help (-h or -?) option and look
for a line near the bottom of the help panel that says:

```
... can list all files...
```

If the leading "..." says "Only root" then HASSECURITY was
defined when lsof was built. If the trailing "..."
says
", but anyone can list socket files" then HASNOSOCKSECURITY
was also defined.

Should you want an lsof not built with HASSECURITY defined,
rerun the lsof Configure script. If you let Configure do
customization, make sure you answer 'n' when it asks if
you want to enable HASSECURITY and HASNOSOCKSECURITY. If
you don't need to do customization, you can rebuild lsof
with the "-n" option to Configure. Here's an example of
such a rebuild sequence:

```
$ Configure -clean
$ Configure -n <dialect-abbreviation>
$ make
```

More information on the HASSECURITY and HASNOSOCKSECURITY
options may be found in the "Security" section of the
00README file of the lsof distribution.

3.43 Test Suite Problems

3.43.1 Errors all tests can report:

3.43.1.1 Why do tests complain "ERROR!!! can't execute ../lsof"?

All tests in the test suite expect an executable lsof file
to exist in the tests parent directory, ../lsof.

If there's none there, the tests/Makefile has a rule
to
make it, but there are probably circumstances where that
rule may fail.

The work-around is to re-Configure and re-make lsof, then
run the test suite.

3.43.1.2 Why do tests complain "ERROR!!! can't find ..." a file?

Many tests create (or use from a supplied environment variable path) a test file and use lsof to find it. When lsof can't file the file, the tests report the error with messages of the form:

```
   ERROR!!!  can't find ... : <some file path>
 or
   ERROR!!!  lsof couldn't find ...
```

These type of error messages mean that the lsof field output delivered to the test didn't contain a file that the test could identify as the one it intended lsof to find. It might also mean that the process information -- command name, PID or parent PID -- didn't match what the test expected.

This could imply a bug in the test or a bug in lsof. Try using lsof to find a known file that is open. For example, while in the tests sub-directory, do this:

```
   $ sleep 30 <
Makefile
   $ ../lsof Makefile
```

If lsof doesn't report that Makefile is open, then the fault may be with lsof. If lsof reports the file is open, search further in the test code for the failure cause.

3.43.1.3 Why do some tests fail to compile?

If a test suite program fails to compile, it may be because I've never had an opportunity to compile the test on the particular UNIX version you are using.

See Appendix B in 00TEST for a list of the UNIX dialects where the test suite has been validate.

3.43.1.4 Why do some tests always fail?

There are several tests in the optional group that have conflicting or special requirements:

LTbigf needs a dialect and file system that support large files.

LTlock won't work if the tests/ sub-directory is on an NFS file system.

LTnfs won't work if the tests/ sub-directory is
not on an NFS file system.

So for two tests in particular, LTlock and LTnfs, one will
generally fail.

Some failing tests
can be run successfully by supplying to
them a path to the appropriate type of file system with
the -p option.

3.43.1.5 Why does the test suite say it hasn't been validated on
my dialect?

When you use the default rule of the test suite's Makefile,
it may issue this complaint:

```
$ cd tests
$ make
!!!WARNING!!!

This dialect or its particular version may not have
been validated with the lsof test suite.  Consequently
some tests may fail or may not even compile.

!!!WARNING!!!
```

You are then given the opportunity to answer 'y' to have
the test suite operation continue.

This message means that the tests/TestDB file in the tests
sub-directory doesn't show that the test suite has been
run with the combination of compiler flags found in
tests/config.cflags. The tests might nor run; they may
encounter compiler failures.

See 00TEST for more information on the UNIX dialects where
the test suite has been validated and on the workings of
TestDB
and its supporting scripts.

When the tests/Makefile "auto" rule is used, the message
is more terse and the condition is fatal.

```
This suite has not been validated on:

<dialect_description>
```

No opportunity to continue is offered.

The tests/Makefile "silent" rule will skip checking for
the validation footprint.

3.43.1.6 Why do the tests complain they can't stat() or open()
/dev/mem or /dev/kmem?

When the tests detect that lsof for the dialect reads its
information from kernel memory (i.e., the LT_KMEM definition
is present in tests/config.cflags), and when the lsof
executable path is ../lsof, the tests make sure they can
stat() and open() for read access the relevant kernel memory
devices, /dev/kmem and possibly /dev/mem.

If those stat() or open() operations fail, the tests issue
an error message and quit. The message explains why the
system rejected the operation in terms of system "errno"
symbols and messages. More often than not the explanation
will
be that the process lacks permission to access the
indicated device node.

One work-around is to give the lsof executable being tested
the necessary permission -- e.g., via chgrp, chmod, etc.
-- and set its path in the LT_LSOF_PATH environment variable.
(See 00TEST.)

Another work-around is to make sure the process that runs
the tests has the necessary permissions -- e.g., run it as
root, or enable the process login to access the resources.
For example, I can run the tests on my personal work-station
because /dev/kmem and /dev/mem are readable by the "kmem"
group and my login is in that group.

3.43.2 LTbigf test issues

3.43.2.1 Why does the LTbigf test say that the dialect doesn't
support large files?

Large file support is defined dialect by dialect in the
lsof source files and Configure script. If large file
support isn't defined there, it isn't defined in the LTbigf
test.

If you think that's wrong for a particular dialect, contact me
via e-mail at <abe@purdue.edu>.

Make sure "lsof" appears in the
"Subject:" line so my e-mail filter won't classify your letter
as Spam.

3.43.2.2 Why does LTbigf complain about operations on its config.LTbigf*
file?

The LTbigf must be able to write a large file test (size
> 32 bits) and seek within it and the process file ulimit
size must permit the operation. If the default location
for the test file, tests/, isn't on a file system enabled
for large file operations or if the process ulimit file
block size is too small, lsof will get file operation
errors, particularly when seeking

There may be a work-around. Specify the path to a file
LTbigf can write in a file system enabled for large file
operations a the -poption. Make sure that the ulimit file
block size permits writing a large file. For example,
presuming /scratch23 is large-file-enabled, and presuming
you have permission to raise the ulimit file block size,
this shell commands will allow the LTbigf test to run on
AIX:

```
$
./LTbigf -p /scratch23/abe/bigfile
```

(Note: syntax for the ulimit command varies by dialect and
by shell. Discovering the proper variant is left to the
reader.)

More information on this subject can be found in the LTbigf
description in the 00TEST file. If course, the LTbigf.c
source file in tests/ is the ultimate source of information,

3.43.2.3 Why does LTbigf warn that lsof doesn't return file offsets?

On some dialects (e.g., Linux) lsof can't report file
offsets, because the data access method underlying lsof
doesn't provide them. If LTbigf knows that lsof can't
report file offsets for the dialect, it issues this warning:

```
LTbigf ... WARNING!!! lsof can't return file offsets
for this dialect, so offset tests have
been disabled.
```

LTbigf then performs the size test and skips the offset
tests.

For more information see 00TEST and the "Why doesn't /proc-based lsof report file offsets (positions)?" Q&A of this file.

3.43.3 Why does the LTbasic test complain "ERROR!!! lsof this ..." and "ERROR!!! lsof that ..."?

The LTbasic test program uses lsof to examine a running lsof process. It looks for the lsof current working directory, executable (if possible), and kernel memory file (if applicable).

Failures to find those things result in the LTbasic error messages. More information on how LTbasic produces the error messages may be found in the LTbasic.c source file.

On HP-UX 11.11 and higher, for example, if the test's current working directory is on a loopback (LOFS) file system, LTbasic won't be able to find the current working directory of the lsof process because of a bug in the HP-UX kernel.

The solution for that HP-UX problem is to install an HP-UX patch. See the answer to the "Why doesn't PSTAT-based lsof report a CWD that is on a loopback (LOFS) file system?" question for more information on the patch.

3.43.4 NFS test issues

3.43.4.1 Why does the LTnfs test complain "couldn't find NFS file ..."?

The LTnfs test must work with an NFS test file. After it opens the file it asks lsof to find it on an NFS file system. If the file isn't on an NFS file system, lsof won't find it, and the NFS test script complains and fails.

The work-around is to use -p option to supply a path to a regular NFS file (not a directory) that is on an NFS file system that LTnfs can read. Presuming /share/bin/file is such a file and can be opened for reading by the LTnfs test, this sample shell command could be used to run the LTnfs test successfully:

```
$ ./LTnfs -p /share/bin/file
```

(If the NFS file system is enabled for large files, the

NFS test will produce the error message described in the following Q&A.)

3.43.5 LTnlink test issues

3.43.5.1 Why does the LTnlink test complain that its test file is on an NFS file system?

The LTnlink test may complain:

```
LTnlink ... WARNING!!!  test file <path> is NFS mounted.
```

and then issue an explanation and a hint about using the -p option.

The LTnlist test does this because of the way NFS file links are managed when an NFS file is unlinked and the unlinking process still has the file open. Unlike with files on a local file system, when an NFS file that is still open is unlinked, its link count is not reduced.

The file name is changed to a name of the form .nfsxxxx and the link count is left unchanged until the process holding the file open closes it. That's done by NFS so it can keep proper track of the file on NFS clients and servers.

Since the link count isn't reduced when the LTnlink test program closes the NFS test file it still has open, lsof won't find it for LTnlink with a link count of zero. Consequently, LTnlink disables that test section and issues its warning.

The warning suggests that the unlink test section can be run by giving LTnlink a path to a test file with the -p option. That path must name a file LTnlink can write and unlink. Presuming /scratch23/abe/nlinkfile is on a local file system and the LTnlink test can write to it and unlink it, this sample shell command can be used to run the complete LTnlink test successfully:

```
$ LTnlink -p /scratch23/abe/nlinkfile
```

3.43.5.2 Why does LTnlink delay and report "waiting for link count update: ..."?

On some UNIX dialects and file system combinations the

updating of link count after a file has been unlinked can be delayed. Consequently, lsof won't be able to report the updated link count to LTnlink for a while.

When lsof doesn't report the proper link count to LTnlink, it sleeps and repeats the lsof call, using the "waiting for link count update: ..." message as a signal that it is waiting for the expected lsof response. The wait cycle duration is limited to approximately one minute.

3.43.5.3 Why does LTnlink fail because of an unlink error?

LTnlink may fail with an error similar to:

```
LTnlink ... ERROR!! unlink(<name>) failed: (Permission denied).
```

That message will be followed by a short explanation.

The error means that the kernel support for the file system on which the file <name> resides does not allow a process to unlink a file while it has the file open. (When LTnlink is run without the "-p path" option, it creates a <name> that begins with "./config.LTnlink" and ends with the LTnlink process ID number.)

An unlink failure of this type runs counter to original UNIX file system behavior, but it has been observed on some file system types, especially on the ZFS file system.

The work-around is to run LTnlink on a file system that allows a process to unlink a file it has open. Usually /tmp has that support. So, try running LTnlink this way:

```
$ ./LTnlink -p /tmp/<name>
```

where <name> is a unique name in /tmp of your choosing. To be safe, create a subdirectory in /tmp, named by your login:

```
$ rm -f /tmp/<login>
$ mkdir /tmp/<login>
$ ./LTnlink -p /tmp/<login>/<name>
```

3.43.6 LTdnlc test issues

3.43.6.1 Why won't the LTdnlc test run?

Lsof

is unable to access the DNLC cache on AIX, because the
kernel symbols for the DNLC aren't exported. Contact IBM
to learn why that decision was made.

The LTdnlc test won't work on Apple Darwin because lsof
can't obtain reliable DNLC information.

The LTdnlc test may fail on other dialects. Failure causes
include: a busy system with a DNLC that is changing rapidly;
path name components too large for the DNLC; a file system
-- e.g., NFS, /tmp, loopback -- which doesn't fully
participate in the DNLC; or DNLC limitations (Many DNLC
implementations will only store path name components if
they are 31 characters or less.)

If you suspect the file system doesn't fully participate
in kernel DNLC processing, as a work-around rebuild and
test lsof on one that does.

3.43.6.2 What does the LTdnlc test mean by "... <path> found: 100.00%"?

Even when it succeeds the LTdnlc test will report:

```
LTdnlc ... /export/home/abe/src/lsof4/tests found: 100.00%
```

This message means that
the LTdnlc test asked lsof to find
the file at the indicated path five times and lsof found
the full path name in the indicated percentage of calls.
The LTdnlc test considers it a failure if the percentage
falls below 50.0%

3.43.6.3 Why does the DNLC test fail?

The DNLC test may fail when some component of the lsof
tests/ sub-directory can't be cached by the kernel DNLC.
Some kernels have a limit on the length of individual
components (typically) 32.

3.43.7 Why hasn't the test suite been qualified for 64 bit HP-UX
11 when lsof is compiled with gcc?

When I attempted to qualify lsof for HP-UX 11, compiled
with gcc 3.0, the LTsock test failed. I traced the failure
to a gcc compilation error. Because LTsock is an important
test, I didn't feel that the test suite was qualified if
it failed.

LTsock compiles and runs correctly on 64 bit HP-UX 11 when compiled with HP's ANSI-C.

3.43.8 LTszoff test issues

3.43.8.1 Why does LTszoff warn that lsof doesn't return file offsets?

On some dialects (e.g., Linux) lsof can't report file offsets, because the data access method underlying lsof doesn't provide them. If LTszoff knows that lsof can't report file offsets for the dialect, it issues this warning:

```
LTszoff ... WARNING!!!  lsof can't return file offsets
for this dialect, so offset tests have
been disabled.
```

LTszoff then performs the size test and skips the offset tests.

For more information see 00TEST and the "Why doesn't /proc-based lsof report file offsets (positions)?" Q&A of this file.

3.43.9 LTlock test issues

3.44 File descriptor list (the ``-d'' option) problems

3.44.1 Why does lsof reject a ``-d'' FD list?

Lsof rejects ``-d'' FD lists that contain both exclusions and inclusions with messages like:

```
lsof: exclude in an include list: ^1
lsof: include in an exclude list: 2
```

That's because ``-d'' FD lists are processed as ORed lists, so it makes no sense for them to contain both exclusions and inclusions.

I.e.,, if a ``-d'' FD list were to contain ``^cwd,1'', the ``^cwd'' member is useless, because the ``1'' member dominates by saying "include only FD 1". That effectively excludes ``cwd'' FD.

Note that lists may have multiple members of the same type, exclude or include. They are processed as an ORed set.

If an FD isn't excluded by any member of an exclude list, it is selected. If an FD is included by any member of an include list, it is selected.

3.44.2 Why are file descriptors other than those in my FD list reported?

The FD list that follows ``-d'' excludes or includes file descriptors, but unless the ``-a'' (AND) option is specified, the FD list selections are ORed to the other selections.

For example, the following lsof command will cause all file descriptors to be listed for the lsof command, and all but the cwd descriptor for all other commands, probably not what was intended.

```
$ lsof -clsof -d^cwd
```

Hint: use ``-a'' -- e.g.,

```
$ lsof -clsof
-a -d^cwd
```

3.45 How can I supply device numbers for inaccessible NFS file systems?

When lsof can't get device numbers for inaccessible NFS file systems via stat(2) or lstat(2), it attempts to get them from the mount table's dev=xxx options. Successes are reported with a warning message that indicates the source of the device number and that output might be incomplete as a consequence of the warnings.

Some system mount tables -- e.g., Linux /proc/mounts -- don't have a dev=xxx option. In that case, and provided lsof for the dialect supports them, you can use the +m option to create a mount table supplement file and the "+m m" option to use it.

First check the lsof -h (help) output to see if the +m and "+m m" options are supported. If they are, use +m to create a mount table supplement file when all mounted file systems are accessible. Use "+m m" later to make the supplement available when some mounted file systems might not be available.

Here's an example that
creates a mount supplement file in
$HOME/mnt-sup and later makes it available to lsof.

```
$ rm -f $HOME/mnt-sup
$ lsof +m > $HOME/mnt-sup
...
$ lsof +m $HOME/mnt-sup <other lsof options>
```

If lsof has to get the device number from the supplement, it will issue an informative warning message. The warning can be suppressed with lsof's -w option.

Caution! Since the mount table supplement file is static, it is its supplier's responsibility to update it as file system mounts change.

For more information, consult the lsof man page. The "ALTERNATE DEVICE NUMBERS" section has useful information on how lsof acquires device numbers when stat(2) or lstat(2) fail.

3.46 Why won't lsof find open files on over-mounted file systems?

When a file system, /xyz for example, is mounted on the same mount point as another file system, /abc for example, running lsof with an argument of the path of the first file system's mount point -- the over-mounted one, /abc -- probably will not
reveal any files open on /abc.

That's because lsof looks for open files on a file system by looking for files with the file system's device number. The two file systems usually have different device numbers and lsof determines the device number search key from the supplied name of the second file system.

A general work-around exists only for Linux. On that UNIX dialect, when you know the over-mounted file system's mount point path, you can ask lsof to report on all open files and grep that output for the path of the over-mounted file system mount point.

3.47 What can be done when lsof reports no more space?

Many lsof methods cache information in memory, using the dialects malloc() library function. When malloc() can't allocate the requested amount of memory, lsof exits with warning messages similar to this AIX message:

```
lsof: no more dev-ch space at pid 2257750: 0x82a8e600
```

Lsof then exits immediately and produces no more output.

A possible work-around
is to increase the memory foot print
of the shell that runs lsof. That is often done with the
ulimit(1) shell command.

3.48 What if the lsof build encounters ar and ld problems?

The lsof main and library Makefiles use the library archiver,
ar, and the system loader, ld, applications. Improperly
located, installed or configured versions of them may cause the
lsof build to encounter errors with them.

The application producing the error should identify itself in
its error messages.

The first thing to check the path of the application that is
being used. Try `which ar` or `which ld` to see if perhaps the
PATH used during the build might be causing the wrong archiver
or loader to be used.

If the problem is with the use of the wrong archiver, and it's
not possible to correct the PATH to it, try using the LSOF_AR
environment variable to specify the path to and arguments for
the correct archiver. See 00XCONFIG for more information and
note that LSOF_AR must
specify the path to the archive
application and the arguments for it, less the terminating
library and module name arguments.

If the problem is with the loader, there is no lsof work-
around. That's because lsof calls the loader via the C
compiler, so the problem must be fixed at the compiler (system)
level.

3.49 Why does lsof -i report an open socket file for a process, but
lsof -p on that process' ID report nothing?

The lsof in use was probably built with the HASSECURITY and
HASNOSOCKSECURITY options and the process in question does not
belong to the user of lsof.

The HASSECURITY option limits lsof output to processes owned
by the user invoking lsof and the HASNOSOCKSECURITY option
weakens that slightly to allow output of open socket file
information for all processes.

For example, if process PID 12345 is owned by some user other than the one invoking lsof, and lsof has been compiled with the HASSECURITY and HASNOSOCKSECURITY options, the following lsof command
will display the open socket files of process 12345:

```
$ lsof -p 12345 -a -i
```

This security restriction is described in the lsof(8) manual page.

4.0 AIX Problems

4.1 What is the Stale Segment ID bug and why is -X needed?

Kevin Ruderman reports that he has been informed by IBM that processes using the AIX 3.2.x, 4.1[.12345]], 4.2[.1], and 4.3.x kernel's readx() function can cause other AIX processes to hang because of what appears to be file system corruption.

This failure, known as the Stale Segment ID bug, is caused by an error in the AIX kernel's journaled segment memory handler that causes the kernel's dir_search() function erroneously to believe directory entries contain zeroes. The process using the readx() call need not be doing anything wrong. Usually the system must be under such heavy load that the segment ID being used in the readx() call has been freed and then reallocated to another process since it was obtained from kernel memory.

Lsof uses the readx() function to access library entry structures, based on the segment ID it finds in the proc structure of a process. Since IBM probably will never fix the kernel bug, I've added an AIX-specific option to lsof that controls its use of the readx() function.

By default lsof readx() use is disabled; specifying the ``-X'' option enables readx() use.

If you want to change the default readx() behavior of AIX lsof, change the HASXOPT, HASXOPT_ROOT, and HASXOPT_VALUE definitions in dialects/aix/machine.h. You can also use these definitions to enable or disable readx() -- consult the comments in machine.h. You may want to disable readx() use permanently if you plan to make lsof publicly executable.

When HASXOPT_ROOT is defined, lsof will restrict use of
the -X option to processes whose real UID is root; if
HASXOPT_ROOT isn't defined, any user may specify the -X
option. The Customize script offers the option to change
HASXOPT_ROOT when HASXOPT is defined and HASXOPT_ROOT
is
named in any dialect's machine.h header file.

I have never seen lsof cause a problem with its use of
readx(), but I believe there is some chance it could, given
the right circumstances.

4.1.1 Stale Segment ID APAR

Here are the details of the Stale Segment ID bug and IBM's
response, provided by Kevin Ruderman.

```
AIX V3
  APAR=ix49183
     user process hangs forever in kernel due to file
     system corruption
  STAT=closed prs  TID=tx2527 ISEV=2 SEV=2
      (A "closed prs" is one closed with a Permanent
      ReStriction.)
  RCOMP=575603001 aix v3 for rs/6 RREL=r320

AIX V4  (internal defect, no apar #)
  prefix       p
  name         175671
  abstract     KERMP: loop for ever in dir_search()
```

Problem description:

1. Some user application -- e.g., lsof -- gets the segment
   ID (SID) for the process private segment of a target
   process from the process table.

2. The target process exits, deleting the process private
   segment.

3. The SID is
reallocated for use as a persistent segment.

4. The user application runs again and tries to read the
   user area structure from /dev/mem, using the SID it read
   from the process table.

5. The loads done by the driver for /dev/mem cause faults in the directory; new blocks are allocated; the size changed; and zero pages created.

6. The next application that looks for a file in the affected directory hangs in the kernel's dir_search() function because of the zero pages. This occurs because the kernel's dir_search() function loops through the variable length entries one at a time, moving from one to the next by adding the length of the current entry to its address to get the address of the next entry. This process should end when the current pointer passes the end of the known directory length.

However, while the directory length has increased, the entry length data has not, so when dir_search() reaches the zero pages, it loops forever, adding a length of zero to the current pointer, never passing the end of the directory length. The application process is hung; it can't be killed or stopped.

IBM closed the problem with a PRS code (Permanent ReStriction) under AIX Version 3 and had targeted a fix for AIX 4.2. They have recently (I became aware of it September 10, 1996) cancelled the defect report altogether and have indicated they are not going to fix the defect.

4.2 Gcc Work-around for AIX 4.1x

When gcc is used to compile lsof for AIX 4.1x, it doesn't align one element of the user structure correctly. Xlc sees the U_irss element as a type "long long" and aligns it on an 8 byte boundary. That's because the default mode of xlc is -qlonglong; when -qlonglong is enabled, the _LONG_LONG symbol is also defined.

Gcc sees U_irss as a two element array of type long, because _LONG_LONG isn't defined. Hence gcc aligns the U_irss element array on a 4 byte boundary, rather than an 8 byte one, making the gcc incantation of the user structure 4 bytes shorter than xlc's.

When the length of gcc's user structure is supplied as argument 4 to the undocumented getuser() function of the AIX kernel, getuser() rejects it as an incorrect size and returns EINVAL.

Lsof has a work-around for this problem. It involves a special test in the Configure script when the "aixgcc" Configure abbreviation is used -- e.g.,

```
$ Configure -n aixgcc
```

The test is to compile a small program with gcc and check the alignment of U_irss. If it's not aligned on an 8 byte boundary, the Configure script makes a special copy of <sys/user.h> in ./dialects/aix/aix<AIX_version> whose U_irss will align properly, and generates compile time options to use it.

While I have tested this work-around only with 4.1.4, it should work with earlier versions of AIX 4.1. It does not work for AIX 4.2; a different work-around is employed there. (See the next section.)

If you want to use this technique to compile other AIX 4.1x programs with gcc for using getuser(), check the Configure script.

Stuart D. Gathman identified this gcc AIX alignment problem.

4.3 Gcc and AIX 4.2[.1]

Alignment problems with gcc and AIX 4.2[.1] inside the user structure are more severe, because there are some new 64 bit types in AIX that gcc doesn't yet (as of 2.7.x) support. The <sys/user.h> U_irss element problem, discussed in 4.3 above, doesn't exist in 4.2[.1].

The AIX lsof machine.h header file has a work-around, provided by Henry Grebler, that bypasses gcc alignment problems. Later versions of gcc (e.g., 2.8.x) will probably bypass the problems as well.

4.4 Why won't lsof's Configure allow the use of gcc for AIX below 4.1?

Gcc can't reliably be used to compile lsof for AIX versions below AIX 4.1 because of possible kernel structure element alignment differences between it and xlc.

4.5 What is an AIX SMT file type?

When you run AIX X clients with the DISPLAY environment variable
set to ``:0.0'' they communicate with the AIX X
server via files whose kernel file structure has an undefined
type (f_type == 0xf) -- at least there's no definition for
it in <sys/file.h>.

These are Shared Memory Transport (SMT) sockets, an artifact
of AIXWindows, designed for more efficient data transfers
between the X server and its clients.

Henry Grebler and David J. Wilson alerted me to the existence
of these files. Mike Feldman and others helped me identify
them as SMT sockets.

The curious reader can find more about SMT sockets in
/usr/lpp/X11/README.SMT.

4.6 Why does AIX lsof start so slowly?

When AIX lsof starts it compares the running kernel's
identity to the one for which it was built, using
/usr/bin/oslevel. That comparison can sometimes take a
long time to complete, depending on the system's maintenance
level and how recently it was examined with oslevel.

AIX revisions 4.67 and above for AIX 5 and above don't use
oslevel to determine
the kernel identity. They use uname(2)
instead, and it is much faster.

You can skip the oslevel test by suppressing warning messages
with lsof's -w option. Doing that carries with it the risk
of missing other warning messages, however.

You can also disable the kernel identity check by disabling
the definition of the HASKERNIDCK symbol by editing AIX
machine.h header file or by using the Customize script to
disable it.

See the "Why does lsof warn "compiled for x ... y; this is
z.?" section for more information.

4.7 Why does exec complain it can't find libc.a[shr.o]?

When you try to execute lsof you may get this complaint:

exec(): 0509-036 Cannot load program ./lsof because of

the following errors:
0509-022 Cannot load library libc.a[shr.o].
0509-026 System error: A file or directory in
the path name does not exist.

This is probably the result of making lsof when the LIBPATH environment variable contained a directory path that doesn't contain
libc.a. You can see what LIBPATH contained when lsof was made by using the dump application on lsof. For example, if LIBPATH contained /foo/bar when lsof was made, you will see this (partial) dump output:

```
$ dump -H lsof
...
***Import File Strings***
INDEX  PATH                    BASE        ...
0      /foo/bar
```

To correct the problem, revisit the lsof source directory and remake lsof this way:

```
$ unset LIBPATH; make  (sh or ksh)
```
or
```
% unsetenv LIBPATH; make  (csh or tcsh)
```

4.8 What does lsof mean when it says, "no PCB, CANTSENDMORE, CANTRCVMORE" in a socket file's NAME column?

When an AIX application calls shutdown(2) on an open socket file, but hasn't called close(2) on the file, the file will remain visible to lsof as an open socket file without any extended protocol information.

Lsof reports that state in the NAME column by saying that there is "no PCB" (Protocol Control Block) for the protocol (e.g., TCP in the NODE
column). If the open socket file
has the state variables SO_CANTSENDMORE and SO_CANTRCVMORE set -- i.e., from the shutdown(2) call -- lsof reports them with the CANTSENDMORE and CANTRCVMORE notes in the NAME column.

4.9 When the -X option is used on AIX 4.3.3, why does lsof disable it, saying "WARNING: user struct mismatch; -X option disabled?"

The -X option causes lsof to read the loader information of the user structure from virtual memory via the readx()

system call. It does that with the user structure definition
from <sys/user.h> that was compiled into the lsof executable.

On AIX 4.3.3 there are two different user structure
definitions in two separate <sys/user.h> header files,
distributed at different times by IBM. If lsof was compiled
with one and the kernel on which lsof is being run was
compiled with the other, lsof normally won't get correct
loader information when it calls readx().

In an attempt to compensate for that difference, lsof makes
an independent
check of the loader information by getting
the user structure's open file count via readx() and
comparing it to the open file count obtained independently
via getprocs(). When the two counts don't match, lsof
tries to read the count (and re-read the loader information)
with two offsets, based on observed differences between
the two user structures.

When one of the three attempts produces a correct open file
count, lsof uses its corresponding offset on subsequent
readings of the loader information.

When none of the three attempts produces a correct open
file count, lsof issues the WARNING message and disables
-X processing.

To eliminate this problem, obtain an lsof binary that
matches the kernel of the AIX 4.3.3 system where you want
to run lsof. Compiling lsof on the target system is the
preferred way to get a matching binary.

4.10 Why doesn't the -X option work on my AIX 5L or 5.[123] system?

If your AIX 5L or 5.[123] system uses the ia64 architecture,
lsof
needs setuid-root permission to be able to do the
processing that -X requires.

Check the output of `uname -a` to determine the architecture
type.

The work-around is to give lsof setuid-root permission.

4.11 Why doesn't /usr/bin/oslevel report the correct AIX version?

The oslevel man page says, "The oslevel command reports

the level of the operating system using a subset of all
filesets installed on your system."

You can see which fileset is below the expected level with
oslevel's -l option. For example, if you believe your
system is at AIX level 4.3.3, but oslevel reports 4.3.2,
use this oslevel command to find the filesets below 4.3.3:

```
$ /usr/bin/oslevel -l 4.3.3.0
```

If you don't know what level argument to supply to oslevel's
-l option, use oslevel's -q option first.

4.11.1 Why doesn't /usr/bin/oslevel report the correct AIX version
on AIX 5.1?

The subset list for oslevel on AIX 5.1 seems to include at
least two filesets, xlsmp.msg.en_US.rte and xlsmp.rte,
that
do not install from AIX 5.1 media with a 5.1.0.0 level.
Hence, oslevel reports 5.0.0.0 instead of the expected
5.1.0.0.

If either xlsmp.msg.en_US.rte or xlsmp.rte is installed,
lsof's Configure script and run-time tests will identify
the AIX version incorrectly. The run-time test will
issue a complaint message of this form:

```
lsof: WARNING: compiled for AIX version xxx; this is yyy.
```

You can correct the Configure test by pre-defining the
oslevel value, setting the correct value in the LSOF_VSTR
environment variable before running the Configure script
-- e.g., to pre-define AIX 5.1 when using ksh, do this:

```
$ LSOF_VSTR=5.1.0.0 Configure -n aix
```

You can't affect oslevel output without uninstalling
xlsmp.msg.en_US.rte and xlsmp.rte. If you can't do that,
you'll have to put up with the run-time complaint.

4.12 Why does lsof for AIX 5.1 or above Power architecture
complain about kernel bit size?

When you run an lsof binary on an AIX 5.1 or above Power
system,
it might complain:

```
    lsof: FATAL: compiled for a 32 bit kernel.
   The bit size of this kernel is 64.
or
    exec: 0509-036 Cannot load program ./lsof because of
     the following errors:
          0509-032 Cannot run a 64-bit program on a 32-bit
     machine.
```

Starting at lsof revision 4.61, lsof binaries for Power architecture systems running AIX 5.1 or above are closely tied to the kernel bit size. Lsof must do that so it can read and understand kernel structures.

Lsof's Configure script tunes the lsof configuration so that the binary built in the make(1) step is adjusted to the kernel bit size.

An lsof binary knows the bit size for which it was constructed, tests the bit size of the kernel under which it is running, and objects if the two sizes don't match. To see the bit size for which lsof was constructed, run it with its -v option and look for these lines in the output:

```
    configuration info: 32 bit kernel
 or
    configuration info:
64 bit kernel
```

(Note: these lines will appear only in -v output for AIX 5.1 and above lsof binaries, built for Power architecture.)

You can see the kernel bit size test method in the aix stanza of the lsof Configure script and in the get_kernel_access() function of the lsof .../dialects/aix/dproc.c source file.

There is more information on pre-defining the kernel bit size when building lsof in Configure, 00PORTING, and 00XCONFIG.

The only work-around is to use an lsof binary built to match the running kernel bit size.

4.13 What can't gcc be used to compile lsof on the ia64 architecture for AIX 5 and above?

Gcc can't be used to compile lsof on the ia64 architecture for AIX 5 and above because I haven't had access to a system that has a working gcc compiler. The gcc compiler on my

one and only ia64 AIX 5.1 test system, provided by IBM,
didn't work at all.

4.14 Why does lsof get a segmentation fault when compiled with gcc
for a 64 bit Power architecture AIX 5.1 kernel?

When
lsof is configured with the lsof "aixgcc" Configure
abbreviation, the resulting lsof executable may cause a
segmentation violation when it is run. I've observed this
with gcc version 2.9-aix43-010414-7.

As far as I have been able to tell, the segmentation fault
is the result of a gcc compilation, loading, or library
error. Watching lsof run with gcc's companion debugger,
gdb, shows no error in the lsof source code that might
explain the fault.

The only work-around I know is to use the IBM C compiler
in place of gcc -- i.e., use the "aix" lsof Configure
abbreviation.

4.15 Why does lsof ignore AFS on my AIX system?

The lsof Configure script quits on AIX when AFS is present,
the AIX version is greater than 4.3.3.0 or the AFS version
is greater than 3.5. That's because I have no test systems
available for those AIX and AFS version combinations.

When the lsof Configure script detects an AIX and AFS
version combination that is unsupported, it will report:

```
!!!FATAL: Lsof does not support AFS on this combination of
    AIX and AFS versions.  To disable AFS, set the
    value of the AIX_HAS_AFS environment variable to
    "no".
```

The only work-around is to set the AIX_HAS_AFS environment
variable as explained in the error message:

```
$ AIX_HAS_NSF=no; export AIX_HAS_NFS
$ ./Configure -n aix
```

4.16 Why does lsof report "system paging space is low" and exit?

When AIX paging space runs low, the AIX kernel sends a SIGDANGER
signal to processes, warning them that they should reduce their

memory usage.

When lsof receives that signal, it issues the following fatal error message and exits:

```
lsof: FATAL: system paging space is low.
```

A possible work-around is to limit the amount of information lsof must cache in its process memory with the "-c", "-g", "-l" and "-p" options.

Also see the answer to the "What can be done when lsof reports no more space?" question.

4.17 Why does lsof have a compilation problem on AIX 5.3 above maintenance level 1?

On some AIX 5.3 systems with maintenance levels 2 and higher installed, lsof 4.77 and below may not compile properly. The compiler complains the snapshotObject structure definition, needed by <j2/j2_inode.h>, is missing.

That problem is fixed in the 4.78 revision.

5.0 Apple Darwin Problems

5.1 What do /dev/kmem-based and libproc-based mean?

Lsof for Apple Darwin currently uses /dev/kmem to read kernel data structures from which it gathers and reports open file information. That version of lsof is called /dev/kmem-based lsof.

At an upcoming release lsof will use a library called libproc to obtain information about open files. That version of lsof wil be called libproc-based lsof.

The /dev/kmem-based lsof sources may be found in the kmem subdirectory of the dialects/darwin branch of the lsof source tree. When the supporting version of Apple Darwin is released, the libproc-based lsof sources will be found in .../dialects/darwin/libproc.

5.2 /dev/kmem-based Apple Darwin Questions

5.2.1 Why does Configure ask for a path to the Darwin XNU kernel header files?

When lsof was ported to Apple Darwin by Allan Nathanson at revision 4.53, some kernel header files needed by lsof weren't being exported by the developers. (That's still true at lsof revision 4.76.)

At first a shell script that Allan provided would get the missing header files by checking them out from the CVS root. Although the script was updated from time to time, eventually the re-organization of Darwin sources has made it impossible to update the script to do an automatic download of the missing header files.

At lsof revision 4.69 and above it is necessary for the Darwin lsof builder to download the Darwin XNU kernel headers before attempting to build lsof. The download my be done via a web browser, starting at this URL:

```
http://www.opensource.apple.com/darwinsource/index.html
```

Once there, select the link to the Mac OS X version that matches the one on the system where lsof is to be built.

Follow that link's "[Source]" link. Once there, select the tar.gz link of the xnu* entry near the bottom of the page. That entry should have a name that matches the xnu* name shown by `uname -a` -- e.g., if uname reports:

```
$ uname -a
... root:xnu/xnu-517.7.21 ...
```

Then the appropriate xnu* entry is xnu-517.7.21. Clicking its link should lead to an "Apple Open Source" page requesting an Apple ID and password.

Enter them if they're available. If an Apple ID and password are not available, get them by following the instructions on the page -- i.e., follow the signin.apple.com link.

Once a valid Apple ID and its password have been entered, the download will begin. Select the saving of the downloaded xnu*.tar.gz file in an appropriate place on the Mac OS X system.

Once the download completes, install it. Use gunzip to

decompress the download and tar to extract the archive -- e.g.,

```
$ gunzip -c xnu-517.7.21.tar.gz | tar xf -
```

Remember the absolute path to the extracted archive. That is its installed place. E.g., if the xnu-517.7.21.tar archive was extracted to the lsof builder's home directory, its full installation path will be something like:

```
~/xnu-517.7.21
```

Now run the lsof Configure script. When it asks for the path to the installed Darwin XNU kernel header files, supply the path to the gunzip'd and extracted xnu* archive -- e.g., ~/xnu-517.7.21.

The path to the Darwin XNU kernel headers may also be supplied to the Configure script in the DARWIN_XNUDIR environment variable, eliminating the need to enter it interactively -- e.g.,

```
$ DARWIN_XNUDIR=~/xnu-344.49 ./Configure -n darwin
```

5.2.1.1 Why does Configure complain that Darwin XNU kernel header files are missing?

These are some reasons why the lsof Configure script might claim that Darwin XNU header files are missing:

* The wrong path to them was specified.

* The files and directories in the path are not readable and searchable -- i.e., check the modes and ownerships.

* The downloaded archive doesn't match the Mac OS X version of the system.

If in doubt, revisit the Darwin XNU kernel header file download instructions in the answer to the question "Why does Configure ask for a path to the Darwin XNU kernel header files?"

If Configure still can't find Darwin XNU kernel header files, contact me via e-mail at <abe@purdue.edu> for help. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

5.2.2 Why doesn't Apple Darwin lsof report text file information?

At the first port of lsof to Apple Darwin, revision 4.53, insufficient information was available -- logic and header files -- to permit the installation of VM space scanning for text files. As of lsof 4.70 it is sill not available.

Text file support will be added to Apple Darwin lsof after the necessary information becomes available.

5.2.3 Why doesn't Apple Darwin lsof support IPv6?

At the first port of lsof to Apple Darwin, revision 4.53, Apple Darwin lacked IPv6 support. IPv6 became available in Apple Darwin version 1.5 and support for it was added to lsof then.

5.2.4 Why does lsof complain about a mismatch between the release for which lsof was compiled and the booted Mac OS X release?

When lsof is started on the "Gold Master" Darwin release (aka Mac OS X), it complains:

```
lsof: compiled for 1.0 release; this is 1.3.2.
```

This happens because the lsof binary released with Mac OS X was built on a system whose release number (1.0) doesn't match that of the released system -- usually 1.3.x Lsof makes this check because UNIX dialect OS changes are often accompanied by header file changes that affect lsof.

In this specific case, this error can be ignored. If you don't want to do that, get the lsof distribution and build lsof so its built-on and running-on Mac OS X release numbers match.

5.2.5 Why does lsof for Apple Darwin 8 and higher report "stat(...): ..." in the NAME column?

Lsof for Apple Darwin 8 may report messages like these in the NAME column:

```
stat(/private/var/run/asl_prune): No such file or directory
or
stat(/private/var/db/netinfo/local.nidb/Config): Permission denied
```

Those messages indicate that lsof was unable to collect open file information for the paths enclosed in "stat(...)" with the stat(2) function, because the function encountered the reported error.

A work-around for the "Permission denied" error is to run lsof with elevated privileges -- e.g., when logged on as the super user.

If the stat(2) error message is "No such file or directory", the file probably has been unlinked (removed) and there is no lsof work-around.

5.2.6 What are the limitations of Apple Darwin lsof link count reporting?

Lsof for Apple Darwin cannot report link count information reliably.

For Apple Darwin below 8 link
count information is not always
available in the kernel node structures available to lsof.
When link count information is available, however, it includes link counts of zero. Thus, using lsof's +L1 option may result in the finding of some files whose link counts are zero.

Lsof can report only some link count information for Apple Darwin 8 and above. Link count information is only available for files where lsof can assemble the full file path and has permission to apply stat(2) to it. (See the answer to the "Why does lsof for Apple Darwin 8 and higher report "stat(...): ..." in the NAME column?" question for more information on stat(2) failures.)

Apple Darwin 8 and above files that have been unlinked and thus have a link count of zero cannot be found by stat(2) -- i.e., stat(2) returns a "No such file or directory" error. As a result lsof never displays link counts of zero and the use of lsof's +L1 option to find them always fails.

5.2.7 Why does Apple Darwin report
process group IDs incorrectly?"

The kmem version of lsof for Apple Darwin does not report process group IDs correctly when requested to do so with its ``-g" option. This is a bug that surfaced after the libproc version was released and access to kmem test systems has

prevented patching the bug.

If you are using the kmem version and would like a fix for this problem, please send e-mail to me <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

5.3 Libproc-based Apple Darwin Questions

6.0 BSD/OS BSDI Problems

6.0.5 Statement of deprecation

As of lsof revision 4.76 support for BSDI BSD/OS has been dropped. The 4.76 distribution of lsof for BSDI BSD/OS may be found on lsof.itap.purdue.edu in pub/tools/unix/lsof/OLD/src.

7.0 DEC OSF/1, Digital UNIX, and Tru64 UNIX Problems

7.1 Why does lsof complain about non-existent /dev/fd entries?

When you run lsof for Digital UNIX 3.2, lsof may complain:

```
lsof: can't lstat /dev/fd/xxx: No such file or directory
lsof: can't lstat /dev/fd/yyy: No such file or directory
```

(Or it may warn about other missing /dev/fd paths.) When you do an ``ls /dev/fd'' none of the missing paths are listed.

This is caused by a bug in the DEC library function getdirentries(). For some reason, when /dev/fd is a file system mount point, getdirentries() returns an incorrect size for it to readdir(). (Lsof calls readdir() in its ddev.c readdev() function.) Because of the incorrect size, readdir() goes past the end of the /dev/fd directory buffer, encounters random paths and returns them to lsof. Lsof then attempts to lstat(2) the random paths, gets error replies from lstat(2), and complains about the paths.

Duncan McEwan discovered this error and has reported it to DEC. Duncan also supplied an alternate readdir() function as a work-around. I've incorporated his readdir() in dialects/osf/ddev.c (as the static ReadDir() function) with
some slight modifications, and enabled its use when the

USELOCALREADDIR symbol is defined.

The Configure script defines USELOCALREADDIR for Digital UNIX version and 3.2. If you don't want to use Duncan's local readdir() function, edit the Makefile and remove -DUSELOCALREADDIR from the CFGF string. When DEC releases a corrected getdirentries() function, I'll modify the Configure script to stop defining USELOCALREADDIR.

7.2 Why does the Digital UNIX V3.2 ld complain about Ots* symbols?

When you compile lsof on your Digital UNIX V3.2 system, ld may complain:

```
ld:
Unresolved:
knlist
_OtsRemainder32Unsigned
_OtsDivide64Unsigned
_OtsRemainder64Unsigned
_OtsDivide32Unsigned
_OtsMove
_OtsDivide32
_OtsRemainder32
*** Exit 1
```

Chris Eleveld reports this happens on Digital UNIX V3.2 systems after the Fortran compiler has been installed.

The best work-around seems to be to remove -lmld from the CFGL string in the Makefile produced by Configure -- i.e., change:

```
CFGL=    -lmld
```

to

```
CFGL=
```

According to the V3.2 man page for nlist(3), this shouldn't work, but my testing shows that it does. Although I haven't been able to test this second work-around, you might try adding -lots to CFGL, rather than removing -lmld -- i.e., change:

```
CFGL=    -lmld
```

to

```
CFGL=    -lmld -lots
```

WARNING: my testing also shows that the V2.0 nlist(3) man page means what it says when it calls for -lmld -- lsof loaded without -mld under V2.0 can't locate the proc (process) table address.

DON'T REMOVE -lmld FROM THE DIGITAL UNIX V2.0 MAKEFILE.

If you run into this problem, please let me know what problem you encountered and how you solved it.

7.3 Why can't lsof locate named pipes (FIFOs) under V3.2?

While lsof for V3.2 can report on named pipes (FIFOs), it can't find them by name. That appears to happen because of the way the V3.2 kernel lstat(2) function reports named pipe device numbers.

The V3.2 kernel reports the device number as 0xffffffff, while the kernel structures for named pipes that lsof examines contain the device number of the file system on which the named pipe resides.

Consequently, lsof can't match the device and inode number pair it receives from applying lstat(2) to the named pipe with any device and inode number pair it finds when scanning kernel structures.

I don't have a work-around. You can, of course, ask for full lsof output and use a post-processing filer (e.g., grep) to locate the named pipe of interest.

This problem doesn't exist under V2.0.

7.4 Why does lsof use the wrong configuration header files? For example, why can't the lsof compilation find cpus.h?

DEC OSF/1, Digital UNIX, and Tru64 UNIX configuration header files describe the hardware and software environment for which your kernel boot file was constructed. For example, /sys/<name>/cpus.h defines the number of CPUs in its NCPUS #define.

Lsof searches for the configuration header file subdirectory in /sys (/usr/sys for Digital UNIX version 4.0 and Tru64 UNIX) by converting the first host name component to capital letters -- e.g., TOMIS is derived from tomis.bio.purdue.edu.

If that subdirectory exists, lsof uses header files from it. (Configure reports what subdirectory is being used.)

If Configure doesn't find a host-name derived subdirectory, it prompts you for the entry of a subdirectory name. If you can't find one, quit Configure and run the kernel generation process to create a proper configuration subdirectory. If you don't identify a proper configuration subdirectory and you try to compile lsof, the compiler will complain about missing header files -- e.g., a missing cpus.h.

Once you have located or generated a proper configuration subdirectory, rerun Configure. If you have generated a configuration subdirectory whose name is derived from the host name, Configure will find and use it. If not, you will
have to specify its name to Configure.

7.5 Why does lsof indicate incomplete paths with " -- " for Tru64 UNIX 5.1 files?

When lsof can't find a component of a path in the kernel's name cache (aka DNLC), or can't determine that the left-most component has as its parent the file system root, it uses an "incomplete path" notation. That notation begins with the file system root name, followed by " -- ", followed by the consecutive path name components lsof was able to find in the DNLC -- e.g., "/ -- init".

Because the DNLC was significantly redesigned in Tru64 UNIX 5.1, lsof's handling of the cache had to be completely redone. As part of the DNLC redesign a name cache entry parameter lsof formerly used to locate the file system root of a path was removed. With help from Chang Song I've been able to implement an alternate method for detecting the root of these file system types: AdvFS (MSFS), CDFS, DVDFS, FDFS, NFS, NFS3, and UFS.

When lsof doesn't know how to identify
the root for a file
system type, it will resort to the " -- " incomplete path notation.

7.6 Why doesn't lsof report link count, node number, and size for some Tru64 5.x CFS files?

Lsof reports link count, node number, and size for open

CFS files as recorded in their kernel node structure's cached attributes. Sometimes not all attributes are cached on the system where lsof runs, so lsof cannot report them.

7.7 Why does lsof say it can't read the kernel name list or proc table on Digital UNIX 4.x or Tru64 UNIX?

By default on Digital UNIX 4 and Tru64 UNIX lsof reads the addresses for kernel symbols with the knlist(3) function. That function can fail, for example, when the kloadsrv daemon isn't running or is malfunctioning. When that happens, lsof may abort with one of these error messages:

```
  lsof: can't read kernel name list from knlist(3): ...
or
  lsof: can't read proc table info
```

The first message suggests a complete knlist(3) or kloadsrv failure;
the second, a partial one.

If you know the name of the file from which the running system was booted, e.g., /vmunix, you can use lsof's -k option to direct it to read kernel symbol addresses from the name list of that file --

```
  $ lsof -k /vmunix ...
```

If that works, then knlist(3) is malfunctioning and you need to fix it.

8.0 FreeBSD Problems

8.1 Why doesn't lsof report on open kernfs files?

Lsof doesn't report on open FreeBSD kernfs files because the structures lsof needs aren't defined in the kernfs.h header file in /sys/misc/kernfs.

8.2 Why doesn't lsof work on my FreeBSD system?

If lsof doesn't work on your FreeBSD system, first make sure you have the latest lsof revision. See the answer to the "Where do I get lsof?" question for information on how to get the latest lsof revision.

Once you have gotten the latest lsof revision, Configure

and make it. If Configure fails -- e.g., it complains
about an unknown FreeBSD version -- then lsof probably
hasn't
been ported to your FreeBSD version yet, and there's
no need to go any further. Follow the answer to the "How
do I report an lsof bug" to report the Configure complaint
to me.

If you are able to Configure and make lsof, run its test
suite. (See the answer to the "Is there a test suite?"
question for more information on how to use lsof's test
suite.)

If lsof still fails, make sure your kernel sources, kernel
header files, kernel boot file, standard header files and
libraries are synchronized. They should all be built from the
same CVS refresh. (Don't forget to do a "make buildworld"
followed by a "make installworld".) If they aren't, then the
KVM library or lsof may be using kernel structure definitions
that don't match the booted kernel; or lsof may fail to compile
properly because of header files in /usr/src/sys/sys and
/usr/include/sys that don't match.

If you have synchronized your kernel, header files and
libraries, and still can't get lsof to work, follow
the
steps in the answer to the "How do I report an lsof bug"
question to report the problem to me.

8.3 Why doesn't lsof work on the RELEASE version of CURRENT?

Lsof tracks the CURRENT release of the current leading edge
FreeBSD version, because my access to leading edge FreeBSD is
limited to FreeBDSD.org reference systems, all running the
CURRENT release.

Sometimes that tracking leads to changes in lsof that won't
work on an earlier RELEASE version of the current leading edge
version.

When that happens, please send e-mail to me <abe@purdue.edu>.
Make sure "lsof" appears in the "Subject:" line so my e-mail
filter won't classify your letter as Spam.

8.4 Why does kvm_open() complain it can't find some file?

If lsof issues this complaint:

```
lsof: kvm_open(execfile=/boot/kernel/kernel,
corefile=/dev/mem: No such file or directory
```

Your FreeBSD system might not have a /dev/mem device. If not, create one -- e.g., as root do:

```
# mknod /dev/mem c <major> 0

# chmod 440 /dev/mem
# chgrp kmem /dev/mem
```

For <major> use /dev/kmem's major device number.

You may have to run kldload, too -- again as root do:

```
# kldload mem
```

8.5 FreeBSD ZFS Problems

8.5.1 Why does FreeBSD lsof report "WARNING: no ZFS support has been defined."?

Lsof issues that message when it detects a file on a ZFS file system, but has not been built with support for ZFS. Lsof's Configure script detects support can be added for ZFS when it finds this file:

/usr/src/sys/contrib/opensolaris/uts/common/fs/zfs/sys/zfs_znode.h

That header file and others in the OpenSolaris files in /usr/src enable lsof to extract information about ZFS files from the kernel structures associated with them.

8.6 Why can't Configure create lsof_owner.h for FreeBSD 6 and above?

Lsof may report:

```
Creating ./lockf_owner.h from /usr/src/sys/kern/kern_lockf.c
FATAL ERROR: can't read /usr/src/sys/kern/kern_lockf.c
FATAL ERROR: ./lockf_owner.h creation failed (see
00FAQ)
```

or

```
Creating ./lockf_owner.h from /usr/src/sys/kern/kern_lockf.c
FATAL ERROR: ./lockf_owner.h creation failed (see 00FAQ)
```

Those messages mean that lsof's Configure script failed to create a local header file, ./lockf_owner.h, needed to use the new kernel file locking code of some versions of FreeBSD 6 and

above.

The changes that implement that new locking code alter the lockf structure in <sys/lockf.h> and introduce a new structure, lockf_entry, to that header file. When Configure detects the presence of the lockf_entry definition in <sys/lockf.h>, it tries to construct the local header file, ./lockf_owner.h.

Configure has to do that because an unfortunate side effect of the new kernel file locking code is that <sys/lockf.h> doesn't contain the lockf_owner structure definition referenced in its own lockf structure. Lsof needs to access elements of that lockf_owner structure to determine if a lock belongs to the process that has a file open.

The
missing lockf_owner structure definition is in the kernel source file, typically /usr/src/sys/kern/kern_lockf.c. Configure tries to extract the lockf_owner structure definition from kern_lockf.c into lsof's local header file, ./lockf_owner.h. If Configure can't do that, it reports:

```
FATAL ERROR: ./lockf_owner.h creation failed
```

If Configure can't even read kern_lockf.c, it first reports:

```
FATAL ERROR: can't read /usr/src/sys/kern/kern_lockf.c
```

The work-around for this problem is to update the FreeBSD kernel /usr/src tree (e.g., do a CVSup or csup) on the system where lsof is to be built and then do a "make buildworld" followed by a "make installworld".

8.6.1 Why are there lockf structure compiler errors for FreeBSD 6.0 and higher lsof?

If, when compiling lsof, the compiler complains with error messages like:

```
dnode.c: In function 'get_lock_state':
dnode.c:113: error: 'struct lockf' has no member named 'lf_flags'
dnode.c:115: error: 'struct lockf'
has no member named 'lf_id'
...
```

Then lsof is being built on a system that has new kernel file locking code and lsof's Configure script failed to build a local lockf_owner.h header file with a structure definition

lsof needs.

See the "Why can't Configure create lsof_owner.h for FreeBSD 6 and above?" section for more information and a work-around.

8.6.2 Why don't /usr/src/sys/sys/lockf.h and /usr/include/sys/lockf.h match?

This mismatch can cause the errors explained in the answer to the "Why are there lockf structure compiler errors for FreeBSD 6.0 and higher lsof?" question.

If /usr/src/sys/sys/lockf.h has been updated with a CVSup or csup, the new lockf.h won't be propagated to /usr/include/sys until the "make buildworld" and "make installworld" steps have been completed.

8.7 FreeBSD and clang

As of lsof revision 4.87, lsof may be compiled with clang.

8.7.1 Why does clang complain about VOP_FSYNC?

There is an error in the Solaris ZFS compatibility
vnode.h
header file with use of VOP_FSYNC before it is defined. No work-around is possible that will eliminate the clang compile-time warning message about the invalid declaration of the VOP_FSYNC function.

9.0 HP-UX Problems

9.1 What do /dev/kmem-based and PSTAT-based mean?

Lsof for HP-UX 11.0 and below uses /dev/kmem to read kernel data structures from which it gathers and reports open file information. That version of lsof is called /dev/kmem-based lsof.

Starting with HP-UX 10.10, finding definitions for the necessary kernel structures became more difficult as HP no longer distributed header files in /usr/include that defined all kernel structures. So I started "inventing" structure definitions by using Q4 to display them.

By HP-UX 11, the process of invention became extremely intensive to support. Following a patch to the ipc_s

structure in early 1999, my invented definition of that
structure became incorrect. Although I was able to devise
a work-around
test for the patch with Q4, it was clear that
my inventions were bound to cause more problems.

Discussion with HP about the patch led to my proposing that
an lsof API in the HP-UX kernel was the proper solution.
Much to my surprise, HP agreed. I believe Carl Davidson
was the prime mover behind that decision, but I know others
participated, among them Louis Huemiller, Rich Rauenzahn,
and Sailu Yallapragada. I am indebted to these folks and
HP for their willingness to do this work.

The API was added to the PSTAT interface in a project named
PEGL, Pstat Enhancements for Glance and Lsof. Louis and
Sailu did the bulk of the design and implementation work
and testing began in March, 2000

HP-UX 11.11 is the first version that provides PSTAT support
for lsof. HP-UX versions in between 11.0 and 11.11 -- all
Beta versions as far as I can determine -- have no lsof
support.

See the "PSTAT-based HP-UX lsof Questions" section for
questions and answers specific to PSTAT-based
HP-UX lsof.
The next section, "Why doesn't a /dev/kmem-based HP-UX lsof
compilation use -O?" covers /dev/kmem-based HP-UX lsof.

The /dev/kmem-based lsof sources may be found in the kmem
subdirectory of the dialects/hpux branch of the lsof source
tree. The PSTAT-based lsof sources may be found in
.../dialects/hpux/pstat.

9.2 /dev/kmem-based HP-UX lsof Questions

The sources for /dev/kmem-based lsof for HP-UX may be found
in lsof_<revision>/dialects/hpux/kmem.

Lsof's Configure shell script decides to use these sources
when it finds that the /usr/include/sys/pstat subdirectory
doesn't exist.

Lsof can be forced to use the /dev/kmem sources by setting
"/dev/kmem" in the HPUX_BASE environment variable. Consult
the Configure shell script and 00XPORTING for more information.

9.2.1 Why doesn't a /dev/kmem-based HP-UX lsof compilation use -O?

If you only have the standard (bundled) HP-UX C compiler
and haven't purchased and installed the optional one, then
you can't use
cc's -O option. The HP-UX cc(1) man page
says this:

"Options
Note that in the following list, the cc and c89 options
-A , -G , -g , -O , -p , -v , -y , +z , and +Z are
not supported by the C compiler provided as part of
the standard HP-UX operating system. They are supported
by the C compiler sold as an optional separate product."

Lsof's Configure script tries to detect what C compiler
product you have installed by examining your compiler. If
that examination reveals a standard (bundled) compiler,
lsof avoids using -O.

If the Configure compiler test fails, the C compiler will
complain that it doesn't support -O. You can suppress that
complaint with this make invocation:

```
$ make DEBUG=""
```

9.2.2 Why doesn't the /dev/kmem-based CCITT support work under 10.x?

Pasi Kaara, who originally provided the HP-UX CCITT support,
reports that it no longer works under HP-UX 10.x.
Consequently, at lsof revision 4.02 it has been disabled.

9.2.3 Why
can't /dev/kmem-based lsof be compiled with `cc -Aa` or
`gcc -ansi` under HP-UX 10.x?

Some HP-UX 10.x header files, needed by lsof, can't be
compiled properly in ANSI_C mode; structure element definition
and alignment problems result. The f_offset member of the
file structure, for example, is incorrect.

This ANSI-C obstacle extends to using the -Aa option of
the HP C compiler and the -ansi option of gcc.

9.2.4 Why does /dev/kmem-based lsof complain about no C compiler?

Lsof's Configure script looks in /bin and /usr/ccs/bin for
an HP C compiler, because it needs to know if the compiler

is the standard (bundled) one or the optional separate
product. If it finds no compiler in either place, Configure
quits after complaining:

```
No executable cc in /bin or /usr/ccs/bin
```

If you don't have a C compiler in either of these standard
places, you should consider installing it. If you have
gcc installed, you can use it by declaring the ``hpuxgcc''
abbreviation to lsof's
Configure script.

If you have a C compiler in a non-standard location, you
can use the HPUX_CCDIR[12] environment variables to name
the path to it. Consult the 00XCONFIG file of the lsof
distribution for more information.

9.2.5 Why does Configure complain about q4 for /dev/kmem-based lsof
for HP-UX 11?

When you run Configure on an HP-UX 11 system, it may complain:

```
!!!ERROR!!!    !!!ERROR!!!    !!!ERROR!!!    !!!ERROR!!!
Configure can't use /usr/contrib/bin/q4 to examine the ipis_s
structure.  You must do that yourself, report the result in
the HPUX_IPC_S_PATCH environment variable, then repeat the
Configure step.  Consult the Configure script's use of
/usr/contrib/bin/q4 and the 00XCONFIG file for information
on ipis_s testing and the setting of HPUX_IPC_S_PATCH.
!!!ERROR!!!    !!!ERROR!!!    !!!ERROR!!!    !!!ERROR!!!
```

This message states that Configure cannot use q4 from
/usr/contrib/bin to examine the kernel's boot image for
the ipis_s
structure. Maybe q4 hasn't been installed, or
perhaps Configure can't execute it.

Lsof needs to gather information about ipis_s to determine
if the ipis_s structure is defined in the kernel boot image,
if the ipis_s structure of the kernel boot image has an
ipis_msgsqueued member, and if the ipc_s structure of the
kernel boot image uses has an ipc_ipis member.

The ipis_s structure isn't described in any header file
HP-UX releases with HP-UX 11. It appears in the private
lsof header file .../dialects/hpux/kmem/hpux11/ipc_s.h.
Lsof gets local and remote connection addresses (IP and
port numbers) from ipc_s, so an incorrect ipc_s definition

may cause incorrect reporting of TCP/IP connection addresses.
It definitely will cause incorrect reporting on 32 bit
kernels. In any case lsof should be compiled with a correct
ipc_s definition no matter the kernel bit size, so the
Configure script always tests for it when the HP-UX version
is 11.

For lsof's Configure script
to gather the necessary ipis_s
information q4 needs to be installed in /usr/contrib/bin
and the kernel boot image, /stand/vmunix, needs to have
been processed with pxdb. If either is untrue, lsof issues
the above error message, perhaps preceded by q4 messages.
(Note: lsof's use of q4 may also fail if q4 can't execute
nm -- e.g., it can't find /usr/bin/nm, or there is a
conflicting, private version of nm earlier in the path.)

If /stand/vmunix hasn't been processed by pxdb, the q4
messages will include:

```
   q4: (error) vmunix not pxdb'd
or
   q4: (warning) /stand/vmunix has not been processed by pxdb.
```

It's possible to make a suitable private copy of /stand/vmunix
for configuring lsof. That requires /opt/langtools/bin/pxdb
or the q4 version of pxdb from /usr/contrib/bin/q4pxdb.
The path to the result is supplied to the lsof Configure
script in the HPUX_BOOTFILE environment variable. Configure
still requires /usr/contrib/bin/q4.

The following sample Bourne shell
commands make a private
copy of /stand/vmunix in /tmp, process it with pxdb or
q4pxdb, and supply its path to lsof's Configure script in
HPUX_BOOTFILE.

```
   $ cp /stand/vmunix /tmp/vmunix.lsof

   $ /opt/langtools/bin/pxdb /tmp/vmunix.lsof
  or
   $ /usr/contrib/bin/q4pxdb /tmp/vmunix.lsof

   ... pxdb messages ...
   $ HPUX_BOOTFILE=/tmp/vmunix.lsof Configure -n hpux
```

It may also be necessary to use q4 outside the lsof Configure
script. In that case q4 can be to determine the state of

ipis_s and ipc_s with these q4 commands:

```
$ /usr/contrib/bin/q4 /stand/vmunix
...
q4> fields -c struct ipc_s
...
q4> fields -c struct ipis_s
```

Look in the q4 output for the ipc_ipis member of the ipc_s structure, and look in the q4 output for the ipis_s structure for the ipis_msgsqueued member. If ipc_s has ipc_ipis but ipis_s lacks ipis_msgsqueued, set HPUX_IPC_S_PATCH environment variable to "1". If ipc_s has ipc_ipis and ipis_s has ipis_msgsqueued, set HPUX_IPC_S_PATCH to "2" -- e.g.,

```
$ HPUX_IPC_S_PATCH=1 Configure -n hpux
```

or

```
$ HPUX_IPC_S_PATCH=2 Configure -n hpux
```

If ipc_s has no ipc_ipis member, set HPUX_IPC_S_PATCH to "N" -- e.g., use this Configure step:

```
$ HPUX_IPC_S_PATCH=N Configure -n hpux
```

9.2.6 When compiling /dev/kmem-based lsof for HP-UX 11 what do the "aCC runtime: ERROR..." messages mean?

When the lsof Makefile asks the HP-UX unbundled compiler to load lsof, it may complain:

```
/bin/cc -o lsof  -DHPUXV=1100 -DHASVXFS -DHPUXKERNBITS=64 \
-I/home/abe/src/lsof4/dialects/hpux/kmem/hpux11 +DD64 \
-DHAS_IPC_S_PATCH=2 -I/home/abe/src/lsof4/dialects/hpux/kmem \
-DLSOF_VSTR=\"B.11.00\"  -g dfile.o dmnt.o dnode.o dnode1.o \
dnode2.o dproc.o dsock.o  dstore.o  arg.o main.o misc.o \
node.o print.o proc.o store.o usage.o -L./lib -llsof  -lelf \
-lnsl
aCC runtime: ERROR: Unexpected use of shared libraries
aCC runtime: ERROR: Read aCC manpage, +A option
/usr/lib/nls/loc/locales.1//is_IS.iso88591
```

This is a bug in the HP-UX national language support. (Notice the last message with "locales" in it?) Complain to HP -- then use this work-around before executing make:

```
$ unset LANG
```

```
$ make
```

9.2.7 Why doesn't /dev/kmem-based lsof for HP-UX 11 report VxFS file link counts, node numbers, and sizes correctly?

This is usually the result of running an lsof binary whose revision number is less than 4.57 on a system that has OnlineJFS support installed. It can also happen with lsof 4.57 binaries when the OnlineJFS support with which they were built doesn't match the OnlineJFS status of the system on which they are run.

The OnlineJFS status of lsof 4.57 and higher binaries can be determined by running:

```
$ lsof -v 2>&1 | grep HASONLINEJFS
```

If that shell pipe produces output, lsof was compiled with OnlineJFS support enabled; no output, disabled.

If OnlineJFS is installed on an HP-UX 11 system the /sbin/fs/vxfs/subtype executable exists and outputs
"vxfs3.3"
when run.

The problem occurs because the optional OnlineJFS support installation doesn't update <sys/fs/vx_inode.h>. Consequently lsof can be compiled with an incorrect definition of the vx_inode structure and look for for link counts, node numbers, and sizes in the wrong places in the structure.

The current response I have gotten from HP is that no <sys/fs/vx_inode.h> update will be provided for OnlineJFS.

I've addressed this problem temporarily with a work-around (hack) in lsof revision 4.57.

9.2.8 Why can't /dev/kmem-based lsof be built with gcc for 64 bit HP-UX 11?

When Configure is given the "hpuxgcc" abbreviation, the HP-UX version is 11, and the kernel bit size is 64, the lsof Configure script may abort with the messages:

```
!!!!!!!!!!!!!!!! FATAL ERROR !!!!!!!!!!!!!!!!!!

APPARENTLY GCC CANNOT BUILD 64 BIT EXECUTABLES.
A COMPILER MUST BE USED THAT CAN.  SEE 00FAQ
```

FOR MORE INFORMATION.

(This is the "more information" in 00FAQ.)

This
means the Configure script compiled a test program
with gcc the result wasn't an ELF-64 binary. Lsof tries
two gcc modes, one with no options and another with the
-mlp64 option, before it concludes gcc can't be used.

See the "How can I acquire a gcc for building lsof for 64
bit HP-UX 11?" answer for information on where you might
be able to get a gcc for HP-UX 11 that can produce ELF-64
executables.

9.2.8.1 How can I acquire a gcc for building lsof for 64 bit HP-UX 11?

Check this HP URL:

http://h21007.www2.hp.com/dspp/tech/tech_TechSoftwareDetailPage_IDX/1,1703,547,00.html

(That's one very long link; be careful you cut 'n paste it
all.)

In November 2001 that URL led to a web page whose title
was "gcc for hp-ux 11." The page offered a link for
downloading a 64 bit gcc 3.0 compiler for HP-UX 11.0 and
11i. Rich Rauenzahn of HP installed that compiler on an
HP test system he allows me to use and I successfully built
a 64 bit lsof with it.

The HP package
may install the 64 bit capable gcc in
/usr/local/pa20_64/bin/gcc, so you may have to adjust your
path or set the LSOF_CC environment variable to compensate.

9.2.9 Why does /dev/kmem-based lsof for HP-UX 11 report "unknown file
system type" for some open files?

The lsof binary being used probably doesn't have support for
the VxFS file system.

To confirm that, check `lsof -v` output for "-DHASVXFS". If
it's not present, lsof doesn't have VxFS support.

You also need to establish that lsof really is complaining
about VxFS files by checking the kernel boot file for the
symbol associated with the hexadecimal address reported in the

"unknown file system type" message -- e.g., "v_op: 0x8711c8."
Use nm(1) to do that:

```
$ nm -x /stand/vmunix | grep 8711c8
```

If nm reports the symbol associated with the address is
vx_vnodeops, then lsof is complaining about an open VxFS file.

The solution in that case is to build lsof yourself (The
bundled C compiler will do it.),
making sure that lsof's
Configure script detects the presence of VxFS. Configure does
that by finding these two header files:

```
/usr/include/sys/fs/vx_hpux.h
/usr/include/sys/fs/vx_inode.h
```

If the system where you are building lsof doesn't have those
header files, but does have VxFS, you might be able to install
the header files by installing the HP JournalFS package from
the CoreOS CD -- in particular the file set JournalFS.VXFS-PRG
and its associated patch, PHKL_18543. (My thanks to Steve
Bonds for that information.)

Finally, if you find that lsof isn't complaining about VxFS
when it complains about an unknown file system type, send
e-mail to me <abe@purdue.edu> for further assistance. Make
sure "lsof" appears in the "Subject:" line so my e-mail filter
won't classify your letter as Spam.

9.2.10 Why does the ANSI-C compiler complain about comments in HP-UX
11 header files?

When compiling lsof on HP-UX 11, the HP ANSI-C compiler's
pre-processor, cpp, may
complain about comments in HP-UX header
files -- e.g.,

```
cpp: "/usr/include/sys/cdfs.h", line 232: warning 2028:
Found comment inside comment started on line 232.
cpp: "/usr/include/sys/cdnode.h", line 196: warning 2028:
Found comment inside comment started on line 196.
cpp: "/usr/include/nfs/snode.h", line 30: warning 2028:
Found comment inside comment started on line 30
```

This is not a problem with lsof. It is a problem with the
HP-UX header files; they have non-compliant ANSI-C comment
sequences in them -- e.g.,

<sys/cdfs.h>: 232
/* struct cdfs *cdfs_link; /* linked list of file systems */

The initial "/*" is not terminated by an ending "*/" before the appearance of a second "/*".

9.2.11 Why does dnode1.c cause the HP-UX 11 compiler to complain that <sys/fs/vx_inode.h> is missing or incorrect?

If CFLAGS in the lsof Makefile for an HP-UX 11 compilation includes HASONLINEJFS, indicating the system has OnlineJFS support, lsof needs the <sys/fs/vx_inode.h> header file.
Sometimes it is missing from /usr/include/sys/fs.

<sys/fs/vx_inode.h> is a header file that must be obtained from Veritas. If that proves impossible, please contact me via e-mail at <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

9.3 PSTAT-based HP-UX lsof Questions

The sources for PSTAT-based lsof for HP-UX may be found in lsof_<revision>/dialects/hpux/pstat.

Lsof's Configure shell script decides to use these sources when it finds that the /usr/include/sys/pstat subdirectory exists.

Lsof can be forced to use the PSTAT-based sources by setting "pstat" in the HPUX_BASE environment variable. Consult the Configure shell script and 00XPORTING for more information.

9.3.1 Why does PSTAT-based lsof complain about pst_static and other PSTAT structures?

When lsof starts it may issue one of these fatal error messages:

lsof: FATAL: can't determine PSTAT static size

lsof: FATAL: can't read <n> bytes of pst_static
lsof: FATAL: pst_static doesn't contain <name>_size
lsof: FATAL: <name>_size should be <n>

These messages indicate that lsof's tests for the proper level of PSTAT support have failed. The structure names, given in <name>, and sizes, given in <n>, identify the support deficiency more precisely.

You may need to upgrade the PSTAT support in your kernel to be able to use PSTAT-based lsof.

9.3.2 Why does PSTAT-based lsof complain it can't read pst_* structures?

Lsof may put messages like the following in the NAME column of its output.

```
can't read cwd pst_filedetails: Permission denied
can't read mem pst_filedetails: Permission denied
can't read rtd pst_filedetails: Permission denied
can't read txt pst_filedetails: Permission denied
can't read pst_filedetails: Permission denied
can't read 3 stream structures: Permission denied
can't read pst_socket: Permission denied
```

These messages indicate that the lsof binary lacks the authority to read the name structures for processes other than ones belonging to the UID under which lsof is running. Authority to read the structures of other processes is limited to root processes -- i.e., lsof must have setuid-root permission if it is to list open files for arbitrary processes.

If you want to eliminate these errors, you must run lsof as root or install it with setuid-root permission.

9.3.3 Why does PSTAT-based lsof rebuild the device cache file after each reboot?

After each HP-UX rebuild, the first time a user runs lsof it will report:

```
lsof: WARNING: device cache mismatch: /dev/tun...
lsof: WARNING: created device cache file: /<user_path>
```

This happens because the device numbers on /dev/tun* device nodes are recalculated at each reboot. When lsof detects a change in the device number of a /dev/tun* file, it rebuilds its local device cache file.

9.3.4 Why doesn't PSTAT-based lsof report TCP addresses for telnetd's open socket files?

When lsof can't report TCP addresses for telnetd's open socket files it is because an unpatched PSTAT kernel interface doesn't report the addresses to lsof.

This has been addressed in PSTAT kernel patch PHKL_24047. It is available from the HP IT Resource Center at:

http://itrc.hp.com

In the page's "maintenance / support" box select the "individual patches" link. Once at its page, select the "hp-ux" link. On that page select the "Series 800" or "Series 700" radio button and select "11.11" from the pull-down list to the right of the button. Under "search or browse the path list" select "Search by Patch IDs" from the pull down list, enter PHKL_24047 in the following text box, and select search. That should lead to information about PHKL_24047 and a link for downloading it. (You may have to log in first and you may have to create a login identity by registering before you can log in.)

Some time in March 2006 the PHKL_24047 patch was "lost" by the HP-UX networking lab. It has been "found" again in August 2006 and will be re-released as a GRO patch "some time." I don't yet know when that will be. You must contact HP to learn about the availability of the GRO patch.

9.3.5 Why does PSTAT-based lsof cause an HP-UX 11.11 kernel panic?

When PSTAT-based lsof runs on some HP-UX 11.11 kernels, the kernel may panic. Symptoms include:

```
Console message:
  0xFBE000301100EF00 00000000 0000EF00 -
  type 31 = legacy PA HEX chassis-code

/var/adm/syslog:
  ... vmunix: Trap Type 15 (Data page fault)
  ... vmunix:   Instruction Address (pcsq.pcoq) = 0x...
```

The panic is caused by a bug in the way PSTAT's pstat_getstream() function obtains module names from streams managed by the

otsam stream driver (part of OSI Transport Services). Lsof calls pstat_getstream() when it encounters an open otsam stream file. An HP-UX 11.11 system uses otsam if otsam appears in /stand/system.

HP-UX
11.11 patch PHKL_24507 (available some time after July 15, 2001) fixes the pstat_getstream() bug. See the information in the answer to the "Why doesn't PSTAT-based lsof report TCP addresses for telnetd's open socket files?" question for information on how to obtain the patch.

9.3.6 Why doesn't PSTAT-based lsof report a CWD that is on a loopback (LOFS) file system?

When PSTAT-based lsof reports on processes whose current working directory (CWD) is on a loopback file system, lsof can't report the open CWD file. The reason is that the HP-UX 11.11 and above kernel's loopback file system code is not passing the CWD file ID to the kernel's pstat(2) code. Hence lsof is given no information on the lofs CWD.

The problem was first reported to me by Ermin Borovac and an internal bug report was filed with the HP-UX file system group on October 26, 2004. That report has now been answered by the patch PHKL_33200 -- s700_800 11.11 lofs cumulative patch. The HP IT Resource
Center (http://itrc.hp.com) is a source for the patch.

9.3.7 Why do some swinstall packages for PSTAT-based HP-UX 11.11 packages complain about setgid and setuid bits?

First, let me explain that I do not provide lsof swinstall packages for lsof. Others provide them and they should be contacted about problems with their packages.

However, I have become aware of a problem with one package about which I have some information I can share. The problem shows up in these swinstall messages:

```
ERROR:   Unknown owner and/or group for file
  "/usr/local/bin/lsof". SUID and/or SGID bit was
  not set.
ERROR:   Failed installing fileset "lsof.lsof-RUN,r=4.73".
  Check the above output for details.
```

The swpackage SUID/SGID functionality was restricted by changes

for POSIX compliance, breaking backward compatibility. The patch PHCO_27671 allows SUID/SGID for uid/gid of 0 only, as a compromise between backward compatibility and POSIX conformance.

If the setuid bit is to be set on the executable, the UID and GID of the executable must be 0 (zero).

9.3.8 Why won't the bundled C compiler build PSTAT-based lsof for PA-RISC HP-UX 11.23?

A PA-RISC HP-UX 11.23 bundled C compiler dated May 2005 or later will not build PSTAT-based lsof. It will deliver error messages related to the system's <gssapi/gssapi.h> header file.

There is nothing wrong with that header file or lsof. The problem is that the bundled C compiler can't cope with the gssapi.h header file.

The work-around is to use the HP ANSI C compiler. Using gcc is not a satisfactory work-around. See the answer to the "Why won't gcc build PSTAT-based lsof for PA-RISC HP-UX 11.23?" question for more information.

9.3.9 Why won't gcc build PSTAT-based lsof for PA-RISC HP-UX 11.23?

Gcc will not even compile PSTAT-based lsof revisions below 4.77 for PA-RISC HP-UX 11.23 dated May 2005 or later. It reports errors in lsof's print.c fill_portmap() function about missing members of the rpcent structure. That happens because gcc defines _XOPEN_SOURCE_EXTENDED which disables the definition of the rpcent structure in <netdb.h>.

Using the HP bundled C compiler is not a viable work-around. That is explained in the answer to the "Why won't the bundled C compiler build PSTAT-based lsof for PA-RISC HP-UX 11.23?"

While an lsof revision 4.77 or higher can be compiled with gcc, the results are unreliable. Lsof will compile, but it occasionally produces segment faults when it runs. I have not been able to reproduce the failure reliably or locate a debugger that will work with the gcc-compiled lsof.

The only reliable work-around is to use the HP ANSI C compiler.

9.3.10 Why does PSTAT-based lsof complain, "FATAL: pst_stream_size should be: 672; is 72" on HP-UX 11.11 and above?

This message indicates a mismatch between the PSTAT header files used to build lsof (<sys/pstat.h> and those in the /usr/include/sys/pstat subdirectory), and those that built the running kernel.

Unfortunately the June 2008 patch set for HP-UX 11.23 creates this inconsistency, because it does not contain all the patches needed to match the kernel with the PSTAT header files. Even more serious is that the missing patches update the kernel's PSTAT support to provide TCP/UDP endpoint information to lsof from TCP/TLI streams.

The patch inconsistency comes about because, while the following patch is installed,

PHKL_36577 1.0 PM-PSTAT section 2 manpage changes

other kernel patches are not.

The PHKL_36577 patch updates the PSTAT header files and manual pages to match kernel changes that other patches with the following numbers (or patches that contain or supersede them) contain:

PHNE_36575 1.0 Cumulative STREAMS Patch
PHNE_37670 1.0 cumulative ARPA Transport patch
PHNE_37851 1.0 NFS cumulative patch

Those patches implement the kernel changes that support the delivery of information promised in patch PHKL_36577.

The work-around is to install the missing patches.

9.4 Why won't the HP-UX depot install?

I don't distribute lsof depots, so I can't support them.

From time to time depots prepared by various sites -- e.g., usually HP-UX software collection sites -- will contain errors that cause installation of the depot to fail.

Do not contact me when this happens. Instead, contact the administrator of the site that prepared the depot.

As should be clear from the bulk of the lsof documentation, I do not recommend you use pre-built lsof binaries in any form. Instead, I recommend you obtain the lsof source distribution and build lsof yourself.

10.0 Linux

10.1 What do /dev/kmem-based and /proc-based lsof mean?

At approximately Linux 2.1.72 and exactly at lsof revision 4.23 support for Linux forks. The first fork, containing the oldest lsof form is based on access to kernel memory structures, and is called /dev/kmem-based lsof. A /dev/kmem-based lsof is heavily intertwined with the Linux kernel version, its header files, and its system map file. Typically a /dev/kmem-based lsof needs only setgid permission to local all open file information.

After approximately Linux 2.1.72 and at revision 4.23 lsof obtains all its information from the /proc file system. That lsof is called the /proc-based lsof. A /proc-based lsof does not read kernel memory, needs neither kernel header files nor the system map file, and is less likely to be affected by Linux kernel changes. However, it does require setuid-root permission to list all open files, and it can't report file offsets (positions).

After revision 4.52 the /dev/kmem-based Linux sources for lsof are no longer distributed. Information about them may be found in the 00INDEX and README files at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/OLD/src

10.2 /proc-based Linux lsof Questions

10.2.1 Why doesn't /proc-based lsof report file offsets (positions)?

/proc-based lsof revisions 4.79 and above can only report file offsets (positions) for the files of Linux kernels 2.6.22 and above.

During its initialization /proc-based lsof tests to see if offset information can be obtained. If it cannot, lsof disables offset reporting. If the -o option was selected, lsof

also issues this warning:

```
lsof: WARNING: can't report offset; disregarding -o.
```

10.2.2 Why does /proc-based lsof report "can't identify protocol" for some socket files?

/proc-based lsof may report:

```
COMMAND PID ... TYPE ... NODE NAME
pump    226 ... sock ...  309 can't identify protocol
```

This means that it can't identify the protocol (i.e., the AF_* designation) being used by the open socket file. Lsof identifies protocols by matching the node number associated with the /proc/<PID>/fd entry to the node numbers found in selected files of the /proc/net sub-directory. Currently /proc-based lsof examines these protocol files:

```
/proc/net/ax25  (untested)
/proc/net/icmp

/proc/net/ipx  (needs kernel patch)
/proc/net/netlink
/proc/net/packet
/proc/net/raw
/proc/net/raw6
/proc/net/sctp/assocs
/proc/net/sctp/eps
/proc/net/sockstat
/proc/net/sockstat6
/proc/net/tcp
/proc/net/tcp6
/proc/net/udp
/proc/net/udp6
/proc/net/udplite
/proc/net/udplite6
/proc/net/unix
```

If /proc-based lsof says it can't identify the protocol for an open socket file, you may be able to identify the protocol yourself by using grep to look for the specific node number in the files of /proc/net -- e.g.,

```
$ grep <node_number> /proc/net/*
```

You may not be able to find the desired node number, because

not all kernel protocol modules fully support /proc/net
information.

If you find a matching node number in a /proc/net file that is
not currently being processed by lsof, contact me via e-mail at
<abe@purdue.edu>. I'll discuss adding support to /proc-based
lsof for the protocol of the /proc/net file
with you. Make
sure "lsof" appears in the "Subject:" line so my e-mail filter
won't classify your letter as Spam.

The code that matches node numbers of open IPX protocol
socket files to those in /proc/net/ipx requires Jonathan
Sergent's Linux 2.1.79 patch to /usr/src/linux/net/ipx/af_ipx.c.
The patch, suitable for input to Larry Wall's patch program,
may be found in the lsof distribution file:

.../dialects/linux/proc/patches/net_ipx_af_ipx.c.patch

10.2.3 Why does /proc-based lsof warn about unsupported formats?

Lsof may issue the following warning:

lsof: WARNING: unsupported format: /proc/net/<file>

if the header line of the indicated <file> in /proc/net --
ax25, ipx, raw, tcp, udp, or unix -- doesn't match what
lsof expects to find.

When the header line of a /proc/net file isn't what lsof
expects, lsof probably can't parse the rest of the file
correctly and doesn't try. As a result, lsof can't report
any NAME column information (e.g., local and remote
addresses)
for socket files bound to the indicated network protocol.

If you get this warning, please send me e-mail at <abe@purdue.edu>.
Include the contents of the file lsof claims has an unsupported
format. Make sure "lsof" appears in the "Subject:" line so my
e-mail filter won't classify your letter as Spam.

10.2.4 Why does /proc-based lsof report "(deleted)" after a path name?

The "(deleted)" notation following a path name in /proc-based
lsof's NAME column comes from the /proc/<PID>/fd/<FD> entry
for the open file. It's the Linux kernel's way of indicating
the file is open but has been unlinked (rm'd).

10.2.5 Why doesn't /proc-based lsof report full open file information for all processes?

/proc-based lsof can only report on processes whose /proc files it has permission to read. /proc normally grants permission to read all its files only to root or to the owning user ID.

Without permission to read most /proc files, lsof can only report full information for processes belonging to the user who is running lsof. /proc-based lsof may be able to report some information for all processes, depending on the permissions of their associated /proc files, but usually /proc-based lsof won't be able to access the files in /proc/<PID>/fd/ that describe regular open files.

If you want /proc-based lsof to report on all processes, you must install it with setuid-root permission.

10.2.6 Why won't Customize offer to change HASDCACHE or WARNDEVACCESS for /proc-based lsof?

/proc-based lsof doesn't read device information from /dev or the device cache file, so it makes no sense to change the state of device cache processing or /dev node accessibility warnings.

10.2.7 /proc-based lsof Linux NFS questions

10.2.7.1 Why can't lsof find files on an accessible NFS file system?

On occasion lsof may be unable to identify that an open file is on an NFS file system. This is most likely the result of a bug in the way the Linux kernel supplies information to the reader of /proc/mounts (lsof) -- sometimes that pseudo-file is truncated by the kernel.

One way to see if this is the case is to search for the NFS file system in /proc/mounts -- e.g.,

```
$ grep <NFS_file_system_mount_point> /proc/mounts
```

If you get no output or the third word of the output isn't "nfs", then lsof won't consider the file system an NFS file system.

A second test is to look at the end of /proc/mounts --
e.g.,

```
$ tail /proc/mounts
```

If tail reports "# truncated" then /proc/mounts is incomplete
because of a Linux kernel bug. The bug is documented at:

http://www.xss.co.at/sysinfo/mounts.html

The bug is fixed in Linux kernel 2.4.18, and possibly in
some earlier Linux kernel versions.

10.2.7.2 Why can't lsof find files on an inaccessible NFS file system?

If lsof issues this message about a Linux file system,
mounted from an NFS server:

```
lsof: WARNING: can't stat() nfs file system /xxx/yyy
```

Then lsof won't be able to find
any open files on the file
system.

That's because of an inadequacy in the Linux /proc file
system. Its /proc/mounts file doesn't give the device
doublet (major and minor numbers) of the file system as do
many UNIX systems (e.g., Solaris). The only way lsof can
get the device doublet for a Linux file system is to call
stat(2) on the file system path, which fails if the NFS
server isn't accessible.

When lsof doesn't know the device doublet of a file system,
it can't find open files on the inaccessible file system,
because it can't match the doublets of open files to the
doublet of the inaccessible file system.

This topic is covered extensively in lsof(8) it its ALTERNATE
DEVICE NUMBERS and BLOCKS AND TIMEOUTS sections.

10.2.8 Why doesn't /proc-based Linux lsof report socket options and
values, socket state flags, and TCP options and values?

The Linux /proc file system doesn't report socket options
and values, socket states, and TCP options and values to
lsof.

10.2.9 Does

/proc-based Linux lsof use a device cache?

No. The Linux /proc/<PID>/fd/* entries provide device names to lsof via readlink(2). It is not necessary to enable device cache processing for /proc-based Linux lsof via the Customize script or modifications to the Linux machine.h header file.

10.2.10 Why doesn't /proc-based Linux lsof report any or all file structure values for its +fcfgGn option?

/proc-based lsof revisions 4.79 and above can only report some file structure values for Linux kernels below 2.6.22.

When running on Linux kernels at 2.6.22 and above lsof 4.79 can report some file flag values -- i.e., in response to the +fg or +fG options. The flag values are obtained from the /proc/<PID>/fdinfo/ files introduced at Linux kernel 2.6.22.

/proc-based Linux lsof tests its availability to obtain file flag values at initialization. If values are not available, lsof disables file flag reporting. If the flags were requested with +fg or +fG, lsof displays
this warning:

```
lsof: WARNING: can't report file flags; disregarding +f.
```

As a special note, when Linux lsof can report flag bits, it will not report 'R' for a read-only file. There is no read-only flag bit O_* symbol in <fcntl.h> (or <bits/fcntl.h>) and lsof reports only bits that are set. The absence of O_RDWR and O_WRONLY flag bits implies the file is read-only.

10.3 Special Linux file types

10.3.1 Why is ``DEL'' reported as a Linux file type?

Lsof usually reports entries from the Linux /proc/<PID>/maps file with ``mem'' in the TYPE column. However, when lsof can't stat(2) a path in the process' ``maps'' file and the ``maps'' file entry contains ``(deleted)'', indicating the file was deleted after it had been opened, lsof reports the file type as ``DEL''.

10.3.2 Why is ``unknown'' reported as a Linux file type?

Lsof may report a Linux file's type as ``unknown'' in the TYPE column when lsof can't obtain complete stat(2) results for the file.

Usually the NAME
column will contain a ``(stat: xxx)'' error
message, but that could have been suppressed with the lsof
``-w'' option.

10.4 Linux ``mem'' Entry Problems

10.4.1 What do ``path dev=xxx'' and ``path inode=yyy'' mean in the NAME column of Linux ``mem'' file types?

When the device or inode number in the process' ``maps'' file
entry doesn't match the stat(2) results from the file path,
lsof reports the inconsistent information from the stat(2) of
the path parenthetically after the path in the NAME column
in one of these forms:

(path dev=xxx) only the device number,
``xxx'', from a stat(2) of the
``maps'' file entry path
differs from the ``maps'' file
entry value reported in the
DEVICE column.

(path inode=yyy) only the inode number,
``yyy'', from a stat(2) of the
``maps'' file entry path
differs from the ``maps'' file
entry value reported in the
NODE column.

(path dev=xxx inode=yyy) Both device
and inode numbers
differ.

Lsof reports the ``maps'' file device number in the DEVICE
column and the inode number in the NODE column.

When device and inode mismatches occur, lsof suppresses the
reporting of link count and size. See the answer to the "Why
is neither link count nor size reported for some Linux ``DEL''
and ``mem'' file types?" question for more information.

Device and inode inconsistencies can occur when a file at a
``maps'' path is replaced after the process has started, or
when a different file system with similar path names is mounted
on top of the original file system.

The device inconsistency parenthetical messages can be suppressed with lsof's ``-w'' option.

10.4.2 Why is neither link count nor size reported for some Linux ``DEL'' and ``mem'' file types?

Link count and size are not reported for some entries from the process' ``maps'' file because a stat(2) of the entry file path failed or stat(2) delivered device or inode numbers that don't match
the ones in the ``maps'' entry.

When the stat(2) device or inode numbers don't match those in the ``maps'' file entry, it is likely that the stat(2) results don't apply to the file that was originally mapped by the process and whose path appears in the ``maps'' file entry, so lsof tries to avoid reporting possibly incorrect information.

See the answer to the "What do ``path dev=xxx'' and ``path inode=yyy'' mean in the NAME column of Linux ``mem'' file types?" for more information on how mismatched stat(2) device and inode numbers are reported.

10.5 Special Linux NAME column messages

10.5.1 What does ``(stat: xxx)'' mean in the NAME column of Linux files?

When lsof tried to stat(2) the path in the NAME column, the stat(2) system call failed and produced an error message of ``xxx''.

This situation usually occurs if the lsof process lacks permission to stat(2) the path -- e.g., the lsof executable lacks root permission, or lsof is attempting to stat(2) a path
on an NFS device mounted with the root_squash option.

The message can be suppressed with lsof's ``-w'' option.

10.5.2 What does ``(readlink: xxx)'' mean in the NAME column of Linux files?

When lsof tried to convert the /proc/<PID>/fd path, reported in the NAME column, to its full and more meaningful path, the readlink(2) system call used to do the conversion failed. The readlink(2) failure message is ``xxx''.

This situation usually occurs if the lsof process lacks permission to readlink(2) some part of the path -- e.g., the lsof executable lacks root permission, or lsof is attempting to stat(2) a path on an NFS device mounted with the root_squash option.

The message can be suppressed with lsof's ``-w'' option.

10.6 Why is ``NOFD'' reported as a Linux file type?

When lsof lacks permission to use opendir() on the fd/ subdirectory of a process' /proc/<PID> directory, it reports a single file of the type ``NOFD'' (for no file descriptors).

Lsof reports the the /proc/<PID>/path in the NAME column, followed by "(opendir: xxx)", where ``xxx'' is the error message returned by opendir().

The ``NOFD'' entry can be suppressed with lsof's ``-w'' option.

10.7 Why does Linux lsof report a NAME column value that begins with ``/proc''?

When lsof has problems processing a ``/proc/<PID>'' entry -- e.g., it can't convert the entry to a full and more meaningful path name, or it can't access the /proc/<PID>/fd subdirectory with opendir() -- it will report the /proc/<PID> path in the NAME column.

10.8 Linux /proc/net/tcp* and /proc/net/udp* issues

10.8.1 Why use the Linux -X option?

If you're not interested in TCP/IP socket information for a particular use of lsof, adding the -X option will make lsof run more quickly, because -X inhibits the reading of the /proc/net/tcp* and /proc/net/udp* files. For example, you may only be interested in knowing what process has a particular file open.

When the Linux system has a large number of open TCP/IP socket files, the time savings provided by -X can be significant.

10.8.2 Why does lsof say ``-i is useless when -X is specified''?

If -X is specified, lsof can't report much information on open

TCP/IP socket files. However, lsof's -i option requests that information. Hence, the two options conflict and can't be used together.

10.8.3 Why does lsof say ``can't identify protocol (-X specified)''?

If the Linux lsof -X option is specified and an open socket file can't be identified without accessing the /proc/net/tcp* and /proc/net/udp* files, lsof will report that it can't identify the socket's protocol and that the failure may be caused by the -X specification

11.0 NetBSD Problems

11.1 Why doesn't lsof report on open kernfs files?

Lsof doesn't report on open NetBSD kernfs files because the structures lsof needs aren't defined in the kernfs.h header file in /sys/misc/kernfs.

11.2 Why doesn't lsof report on open files on: file descriptor file systems; /proc
file systems; 9660 (CD-ROM) file systems;
MS-DOS (floppy disk) file systems; or kernel file systems?

Lsof is not able to report on open files on certain file system if /usr/src/sys/msdosfs didn't exist when the lsof Configure script ran and lsof was made. /usr/src/sys/msdosfs contains header files lsof needs for collecting data on certain file system files.

You can tell if an lsof executable above) lacks support for a file system if the following test of `lsof -v` produces nothing:

```
$ lsof -v 2>&1 | grep <support_enabled_definition>
```

The <support-enabled_definition> will be:

```
File System Type Definition Note
---------------- ---------- ----
File descriptor HASFDESCFS
/proc  HASPROCFS
9660  HAS9660FS
MS-DOS  HASMSDOSFS (lsof 4.61 and above)
Kernel  HASKERNFS
```

The work-around is to install /usr/src/sys, rerun the lsof Configure script, and remake lsof.

11.3 Why does lsof produce confusing results for nullfs file systems?

Consider this report from /sbin/mount:

```
/usr/home on /home type null (local)
```

(According to /sbin/mount /usr/home is the mounted-on device and /home is the mounted-on directory.)

When lsof is asked to report on open files on /home, it will report them as files on /usr/home instead. That's an artifact of the NetBSD kernel's dynamic name lookup cache (DNLC) and the way the kernel handles nullfs mounted-on directories.

While lsof will report all open files on /home when given /home as a file system directory argument, even though reporting them as located on /usr/home, lsof will not find the same files when asked to report on all open files on /usr/home when given /usr/home as a file system device argument. That's because from the mount perspective /usr/home is equivalent to a device, but from the device perspective it is still a directory.

So, what this lsof command reports:

```
$ lsof /home
... NAME
... /usr/home/...
```

Won't be duplicated by this lsof command:

```
$ lsof /usr/home
```

Another way to look at this confusing /home and /usr/home example is to consider what stat(2) reports. For /home stat(2) reports a device doublet that matches what lsof finds in open file node structures, while the device doublet stat(2) reports for /usr/home won't match what lsof finds. Nor does the mode reported by stat(2) indicate a block devices, as is the expected case.

There is no simple answer to this confusion, nor is there even a simple explanation. Simply be aware that when supplying file system arguments to lsof on NetBSD, use the mounted-on directory name for a nullfs as the lsof argument, and don't be surprised when the NAME column reports the mounted-on device name.

11.4 NetBSD header file problems

11.4.1 Why can't the compiler find some NetBSD header files?

If the compiler's pre-processor complains it can't find some header files when it compiles lsof source files, /usr/include and /usr/src may not have all the header files lsof needs.

As a work-around use the NETBSD_SYS environment variable to specify to lsof the location of the additional header files -- e.g.,

```
% setenv NETBSD_SYS /my_source
% ./Configure -n netbsd
```

or

```
$ NETBSD_SYS=/mys_source ./Configure -n netbsd
```

Caution: using this work-around may cause the lsof Configure script to activate or omit different features, depending on where it finds the header files that determine the state of the features.

11.4.2 Why does NetBSD lsof produce incorrect output?

If the NetBSD system's kernel was built from header files that don't match those in /usr/include -- e.g., //usr/src has the ones from which the kernel was built -- lsof may build, but won't produce correct output.

As a possible work-around, try directing the C compiler to select header files from /usr/src before it selects them from /usr/include. That can be done with the DEBUG make string -- e.g.,

```
$ make DEBUG="-I/usr/src -I/usr/include"
```

If that work-around fails, try using the LSOF_INCLUDE and NETBSD_SYS environment variables to swap /usr/include and

/usr/src when running the Configure script, then use the make DEBUG string when running make -- e.g.,

```
$ LSOF_INCLUDE=/usr/src; export LSOF_INCLUDE
$ NETBSD_SYS=/usr/include; export NETBSD_SYS
$ ./Configure -n netbsd
$ make DEBUG="-I/usr/src -I/usr/include"
```

11.5 Why isn't lsof feature xxx enabled for NetBSD?

Lsof's Configure script enables NetBSD features by locating and examining header files associated with the features, and based on what it finds, setting compile-time definitions in Makefiles. (See 00PORTING for a list of the definitions.)

When Configure doesn't find header files or doesn't find appropriate values in header files, that may mean the header file tree lsof is searching is incomplete or out of date.

Lsof normally looks for NetBSD header files in /usr/include. It can also be directed to look in other directories -- e.g.,
/sys -- if told to do so with the contents of the LSOF_INCLUDE and NETBSD_SYS environment variables.

To determine what header file enables a missing feature, check the NetBSD stanza in the Configure script. Then check the locations it checks for the indicated header files and contents.

See 00XCONFIG for more information on LSOF_INCLUDE and and NETBSD_SYS.

12.0 NEXTSTEP and OPENSTEP Problems

12.1 Why can't lsof report on 3.1 lockf() or fcntl(F_SETLK) locks?

Lsof has code to test for locks defined with lockf() or fcntl(F_SETLK) under NEXTSTEP 3.1, but that code has never been tested. I couldn't test it, because my NEXTSTEP 3.1 lockf() and fcntl(F_SETLK) functions return "Invalid argument" every way I have tried to invoke them.

If your NEXTSTEP 3.1 system does allow you to use lockf() and fcntl(F_SETLK) and lsof doesn't report locks set with them, then the code in .../dialects/next/dnode.c probably

isn't correct. Please contact me via e-mail at <abe@purdue.edu>
and
tell me how you got your lockf() and fcntl(F_SETLK) system
calls to work. Make sure "lsof" appears in the "Subject:" line
so my e-mail filter won't classify your letter as Spam.

12.2 Why doesn't lsof compile for NEXTSTEP with AFS?

I no longer have a NEXTSTEP test system that has AFS.
Changes to lsof since I once had a test system have caused
me to change the AFS code in NEXTSTEP without being able
to test the changes.

If you need AFS support for NEXTSTEP and can't get it to
compile, please contact me. Perhaps we can jointly fix
the problems.

13.0 OpenBSD Problems

13.1 Why doesn't lsof support kernfs on my OpenBSD system?

Lsof supports the kernel file system on OpenBSD versions
whose /sys/miscfs/kernfs/kernfs.h (or <miscfs/kernfs/kernfs.h>
header file correctly defines the kern_target structure.
The lsof Configure script's openbsd stanza checks for the
presence of the structure's kt_name element and activates
kernfs support for the CFLAGS -DHASKERNFS definition
only
when it finds kt_name.

The kernfs.h header file is scheduled to be updated in the
OpenBSD 2.1 release, according to Kenneth Stailey, who
authored its changes.

13.2 Will lsof work on OpenBSD on non-x86-based architectures?

I've not tested lsof on an OpenBSD system that uses a
non-x86-based architecture, but I've had one report that
lsof 4.33 compiles and works on OpenBSD for the pmax
architecture (decstation 3100).

13.3 <sys/pipe.h> problems

13.3.1 Why does the compiler claim nbpg isn't defined?

When compiling lsof on some (older) OpenBSD SPARC versions,
the compiler may complain:

```
In file included from ../dlsof.h:191,
    from ../lsof.h:166,
    from fino.c:52:
/usr/include/sys/pipe.h:83: `nbpg' undeclared here
(not in a function)
/usr/include/sys/pipe.h:83: size of array `ms' has
non-integer type
```

This happens because <sys/pipe.h> uses NBPG from <machine/param.h> to size the `ms' array, and some OpenBSD systems define
NBPG in terms of a kernel integer variable,
nbpg.

Lsof revisions 4.46 and above have a hack to dlsof.h, developed by Volker Borchert that avoids the compiler problem for SPARC OpenBSD 2.3. The hack might work for other OpenBSD SPARC versions, but hasn't been tested there.

If you want to enable the hack for your OpenBSD SPARC version, modify this code in .../dialects/n+obsd/dlsof.h:

```
# if    defined(OPENBSDV)
#  if   OPENBSDV==2030 && defined(__sparc__)
#   if  defined(nbpg)
#undef  nbpg
#   endif       /* defined(nbpg) */
#define nbpg    4096            /* WARNING!!!  ... */
#  endif        /* OPENBSDV==2030 && defined(__sparc__) */
#include <sys/pipe.h>
#endif  /* defined(OPENBSDV) */
```

You will probably want to change the second #if test to match your OpenBSD version. You may also want to change what value is assigned to nbpg. See the next section, "What value should I assign to nbpg?"

13.3.2 What value should I assign to nbpg?

If you need to enable the nbpg hack, described in "Why does the compiler claim nbpg isn't defined?", you may also need to assign a value other than 4096 to nbpg. 4096 works for the sun4c processor and should work for sun4m, but 8192 may be needed for sun4.

Check <machine/param.h> and other OpenBSD documentation to

determine the correct nbpg assignment.

13.4 Why doesn't lsof report on open MS-DOS file system (floppy disk) files?

Lsof is not able to report on open MS-DOS file system files if /usr/src/sys/msdosfs didn't exist when the lsof Configure script ran and lsof was made. /usr/src/sys/msdosfs contains header files lsof needs for collecting data on MS-DOS file system files.

You can tell if an lsof executable (revisions 4.61 and above) lacks MS-DOS file system support if the following command reports nothing:

```
$ lsof -v 2>&1 | grep HASMSDOSFS
```

The work-around is to install /usr/src/sys, rerun the lsof Configure script, and remake lsof.

13.5 Why isn't lsof feature xxx enabled for OpenBSD?

Lsof's Configure script enables OpenBSD features by locating and examining header files associated with the features, and based on what if finds, setting compile-time definitions in Makefiles. (See 00PORTING for a list of the definitions.)

When Configure doesn't find header files or doesn't find appropriate values in header files, that may mean the header file tree lsof is searching is incomplete or out of date.

Lsof normally looks for OpenBSD header files in /usr/include and /sys. It can also be directed to look in other directories if told to do so with the contents of the LSOF_INCLUDE and NETBSD_SYS environment variables.

To determine what header file enables a missing feature, check the OpenBSD stanza in the Configure script. Then check the locations it checks for the indicated header files and contents.

See 00XCONFIG for more information on LSOF_INCLUDE and and NETBSD_SYS.

14.0 Output Problems

14.1 Why do the lsof
column sizes change?

Lsof dynamically sizes its output columns each time it runs to make sure that each column takes the minimum space. Column parsing -- e.g., with awk -- is possible, because each column is guaranteed to be separated from the preceding one by at lease one space, and no column except the last (NAME) contains embedded spaces.

14.2 Why does the offset have ``0t' and ``0x" prefixes?

The offset value that appears in the SIZE/OFF column has ``0t' and ``0x" prefixes to distinguish it from size values that may appear in the same column.

Normally if the offset value is less than 100,000,000 (8 digits), it appears in decimal with a ``0t' prefix; over 99,999,999, in hexadecimal with a ``0x" prefix.

A decimal offset is handy, for example, when tracking the progress of an outbound ftp transfer. When lsof reports on the ftp process, it will report the size of the file being sent with its open descriptor; it will report the progress of the transfer via the
offset of the outbound
open ftp data socket descriptor.

The ``-o [n]" option may be used to specify the maximum number of decimal digits to be printed after ``0t" before lsof switches to the hexadecimal digits after `0x". As already noted, the default decimal digit count is 8.

14.3 What are the values printed in the FILE_FLAG column and why is 0x<value> sometimes included?

The two comma separated lists, separated by a semicolon, printed in the FILE-FLAG column (when the "+fg" option is specified), are short-hand names or hexadecimal values for the bits lsof finds in the f_flag or f_flags member of file structures for files (the first list, the one before the semicolon), and process open files flags found in various kernel structures, often named "pofile" (the second list, the one after the semicolon).

Lsof determines the short-hand names from symbols in the <fcntl.h>, <linux/fs.h>, <sys/fcntl.h>, <sys/fcntlcom.h>, o<sys/file.h>, and <sys/user.h> header files.

See
the discussion of FILE-FLAG in the OUTPUT section of
the lsof man page, and the FF_* and POF_* symbols in lsof.h
for a list of the names.

Bits with no names defined for them are represented by an
0x<value> member of the comma-separated list -- a hexadecimal
integer. When "+fG" is specified (instead of "+fg"), lsof
will list all flag values as two hexadecimal integers,
separated by a semicolon.

When "-FG" is specified to get the flags in an output field,
the format defaults to hexadecimal. You can get names
instead by following "-FG" with "+fg" -- e.g.,

```
$ lsof -FG +fg ...
```

However, when you precede "-FG" with "+fg" -- e.g.,

```
$ lsof +fg -FG
```

the format will be hexadecimal; order is important.

14.3.1 Why doesn't lsof display FILE_FLAG values for my dialect?

All versions of lsof except the /proc-based Linux lsof
report FILE-FLAG values. Lsof can't obtain FILE-FLAG
information from the Linux /proc interface.

14.4 Network Addresses

14.4.1 Why
does lsof's -n option cause IPv4 addresses, mapped to
IPv6, to be displayed in IPv6 notation?

When you use the -n option to tell lsof to display numeric
network addresses, and an IPv4 address has been mapped to
IPv6, lsof displays the address in IPv6 format and puts
"ipv4" in the TYPE column. That combination indicates the
IPv4 address has been mapped to IPv6.

For example, the IPv4 address 1.2.3.4, when mapped to an
IPv6 address, will be displayed by lsof as:

```
[::ffff:1.2.3.4]
```

The enclosing brackets are lsof's signal that this is an

IPv6 address. Inside the brackets is a standard IPv6 address, reported by inet_ntop(). The first two colons, signifying zeroes in the first 64 bits of the IPv6 address, and the hexadecimal ffff in the next 32 bits, indicate that the last 32 bits contains a mapped IPv4 address, which is then displayed in IPv4 dot notation.

14.5 Why does lsof output \x, ^x, or \xnn for characters sometimes?

Lsof displays only printable ASCII characters.
Lsof
considers a character printable if isprint(3) says it is. If isprint(3) says a character isn't printable, the lsof may page explains:

> "... Non-printable characters are printed in one of three forms: the C ``\[bfrnt]" form; the control character `^' form (e.g., ``^@"); or hexadecimal leading ``\x" form (e.g., ``\xab"). Space is non-printable in the COMMAND column (``\x20") and printable elsewhere."

14.5.1 Why is space considered a non-printable character in command names?

Space is considered an unprintable character in command names because it is sometimes possible to hide the full command name from scripts that parse ps(1) output by embedding a space in the name.

14.6 Why doesn't lsof print all the characters of a command name?

By default lsof prints the first nine characters of the names of commands associated with processes. If more characters are required, the "w" value of the "+c w" option may be used to specify
a larger width.

If "w" is zero ('0') lsof will print all characters of all command names up to the limit of the number of characters supplied by the particular UNIX dialect. When reporting command names, lsof replaces non-printable characters as discussed in the answer to " Why does lsof output \x, ^x, or \xnn for characters sometimes?"

See the answer to the "Why is space considered a non-printable character in command names?" question for an explanation of why

spaces are replaced by the ``\x20" representation in command
names.

The number of command name characters supplied to lsof by UNIX
dialects in files and structures varies by dialect. For
example, Linux 2.4.27 supplies lsof the first 15 characters of
command names and Solaris 9 supplies 16. Thus, even if "w" is
zero ('0'), lsof can't report more characters for command names
on those two UNIX dialects than they provide lsof.

14.7 Why does lsof reject some -c command names, saying their lengths
are "> what
system provides (nn)"?

The command name length that a specific system provides varies
from dialect to dialect. As noted in the answer to the "Why
doesn't lsof print all the characters of a command name?"
question, Linux and Solaris provide a limited number of command
name characters.

When more characters are specified in the parameter to the -c
option, lsof considers it an error and issues a fatal error
message -- e.g.,

lsof: "-c xxxxyyyy" length (8) > what system provides (7)

The only work-around is to specify no more characters to -c
that the system provides to lsof.

14.8 Why does lsof sometimes print TYPE numbers instead of names?

When lsof can't convert a type number to a name for printing in
the TYPE column, it will report the number as four octets.

14.9 Marker line format problems

14.9.1 Why won't lsof accept a marker line format?

Lsof's Configure script must find the localtime(3) and
strftime(3) functions in the dialect's C library in order to
enable
support for marker line formats.

Check the output of lsof's -v option for the presence of
-DHAS_STRFTIME in the compiler flags. If it isn't there,
Configure didn't find the necessary two C library functions.

If you think lsof should have found the functions, make a copy

of the C test program in the Configure script that it uses to find the functions. Then use the copy, or a more informative modification of it, to learn why Configure can't find the functions. You can find that program by searching for strftime.

14.9.2 Why does lsof reject the NL (%n) marker line format?

When repeat mode and field output (with -F) have both been specified, lsof won't allow new line (NL) formats to be specified with ``%n''. That's because the marker line is always guaranteed to be a single line.

There is no work-around to this restriction.

14.10 How are protocol state name exclusion and inclusion used?

Protocol state name inclusion and exclusion with the ``-s p:s'' option and
its arguments have some issues to consider. Note:
the ``-s p:s'' option is only available when the help output, obtained with -h or -?, shows it; it was a recent addition to lsof and is supported only on dialects where it could be tested.

First, there is the problem of determining what state names, if any, the dialect produces. Try running this lsof command to find them:

```
$ lsof -i
```

Knowing the state names of interest, the next problem is to decide on the lsof options and their parameters that will produce the desired output. Here some examples are probably the most useful.

To list only TCP socket files in LISTEN and CLOSE_WAIT states, use:

```
$ lsof -itcp -stcp:listen,close_wait
```
or
```
$ lsof -iTCP -sTCP:LISTEN,CLOSE_WAIT
```

Case isn't important to lsof in protocol and state names.

To exclude TCP socket files in CLOSE_WAIT state, use:

```
$ lsof -itcp -stcp:^close_wait
```

Note the `^' preceding close_wait; it selects exclusion. You can mix included and excluded names in a comma separated list, but you may not include and exclude the same name for the same protocol.

To list TCP files in LISTEN state and UDP files in Idle state, use:

```
$ lsof -i -stcp:listen -sudp:idle
```

Note: if you don't accompany the ``-s p:s" list option and argguments with the -i option, lsof will list all other regular files, while applying the specified inclusion and exclusion specifications to network files. Generally, then, you want to use -i with -s.

14.10.1 Why doesn't my dialect support state name exclusion and inclusion?

When state name inclusion and exclusion was added, I had access to test systems for AIX, Darwin, FreeBSD, Linux, PSTAT-based HP-UX and Solaris.

Therefore, I was unable to add and test the support to any other UNIX dialects.

If a dialect has the support, then the HASTCPUDPSTATE definition in its machine.h header file will be active; if not, it will be absent or commented out.

If your dialect doesn't have the support and you want it added, you will have to provide me Internet access to a test host, where I can compile lsof and have the credentials to test the changes the support requires. If that's possible for you, please contact me via e-mail at <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

15.0 Pyramid Version Problems

15.0.5 Statement of deprecation

As of lsof revision 4.52 support for all Pyramid versions has been dropped. Contact me via e-mail at <abe@purdue.edu> if you are interested in obtaining the last lsof Pyramid distribution.

Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

16.0 SCO Problems

16.1 SCO OpenServer Problems

16.1.1 How can I avoid segmentation faults when compiling lsof?

If you have an older SCO OpenServer compiler, it may get a segmentation fault when compiling some lsof modules. That appears to happen because of the -Ox optimization action requested in the lsof Makefile.

Try changing -Ox to -O with this make invocation:

```
$ make DEBUG=-O
```

Bela Lubkin supplied this tip and Steve Williams verified it.

16.1.2 Where is libsocket.a?

If you compile lsof and the loader says it can't find the socket library, libsocket.a, called by the -lsocket option in the lsof compile flags, you probably are running an SCO OpenServer release earlier than 5.0 and don't have the TCP/IP Development System package installed.

You may have the necessary header files, because you have the TCP/IP run-time package installed, but if you don't have the TCP/IP Development System package installed, you won't have libsocket.a.

Your choices are to install the TCP/IP Development System package or upgrade to OpenServer Release 5.0. You will find libsocket.a in 5.0 -- you'll find all the libraries and header files there, in fact -- and you can use gcc to compile lsof if you don't want to install the 5.0 Development System package.

16.1.3 Why do I get "warning C4200" messages when I compile lsof?

When you compile lsof under OSR 3.2v4.2 (and perhaps under earlier versions as well), you may get many compiler warning

messages of the form:

```
node.c(183) : warning C4200: previous declarator is not
compatible with default argument promotion
```

In my opinion this is a bug in the OSR compiler. Because the compiler cannot handle full ANSI-C prototypes, it assumes default types for function parameters as it encounters untyped in a function prototype -- e.g., in this function declaration from node.c,

```
    readrnode(ra, r)
 KA_T ra;
 struct rnode *r;
    {
    ...
```

the compiler assigns default int types to the ra and r arguments.

Then, when the compiler encounters the fully typed parameters after the function skeleton and sees parameters with types that don't match the assumptions it previously made, it whines about its own assumptions.

You can ignore these messages.

16.2 SCO|Caldera UnixWare Problems

16.2.1 Why doesn't lsof compile on my UnixWare 7.1.1 or above system?

When you Configure lsof with the "uw" abbreviation and try to compile it for UnixWare 7.1.1, you may get compiler error messages like this:

```
    UX:acomp: ERROR: "dproc.c", line 98:
 undefined struct/union member: p_pgidp
```

This suggest that you probably have a non-stop cluster UnixWare 7.1.1 system. Its <sys/proc.h> header file differs from the one on the system where I did the lsof port to UnixWare 7.1.1. I currently don't have access to a non-stop cluster system to be able to develop changes to lsof that would make it compile and work there.

If you have a non-stop cluster UnixWare 7.1.1 system, want lsof

for it, and can offer me a test account on the system, please contact me via e-mail at <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

If you have a system with nsc_cfs and can offer me a test account on it, please contact me via e-mail at <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

16.2.2 Why does lsof complain about node_self() on my UnixWare 7.1.1 or above system?

If lsof exits immediately after issuing this message:

```
can't identify process NSC node; node_self(): <message>
```

It means that lsof has been built to run on a NonStop Cluster (NSC) UnixWare 7.1.1 or higher system and can't get the number of the node on which it is running. Lsof uses the node number to determine the path to the kernel boot file.

You can tell if lsof has been built for NSC by looking for "-DHAS_UW_NSC" in lsof's "-v" option output.

If the system on which you're trying to run lsof isn't running an NSC kernel, you will need to build a non-NSC lsof.

16.2.3 Why does UnixWare 7.1.1 or above complain about -lcluster, node_self(), or libcluster.so?

When you build, compile, and load lsof for UnixWare 7.1.1 and above, ld may complain that it can't find the -lcluster library or that the node_self symbol is undefined. When you try to run an existing lsof binary it may complain that libcluster.so can't be found.

These messages mean the tests made by Configure on your system led it to believe your system is running a NonStop Cluster (NSC) kernel, or the lsof binary you're trying to use was built on a NonStop Cluster system. If an lsof binary was built for NSC, this shell command produces output:

```
$ strings <lsof_binary> | grep HAS_UW_NSC
```

If that's not the case, and you can rebuild lsof, set the UW_HAS_NSC environment variable to "N" and do this:

```
$ Configure -n clean
$ UW_HAS_NSC=N
$ export UW_HAS_NSC
$ Configure -n uw
$ make
```

You can also edit Makefile and lib/Makefile. Remove -DHAS_UW_NSC from the CFGF strings. Remove -lcluster from the CFGL strings. Then run make again.

If you have an existing NSC lsof binary and you want one for a non-NSC system, you will have to build lsof yourself on the system where you want to use it. (That's always a good idea anyway.)

16.2.4 Why does UnixWare 7.1.1 or above lsof complain it can't read the kernel name list?

If lsof complains:

```
can't read kernel name list from <path>
```

It means that lsof can't find the booted kernel image file at <path>. On NonStop Cluster (NSC) UnixWare 7.1.1 or higher systems lsof determines the booted file path by examining this file:

```
/stand/`node_self`/boot
```

If examining that file doesn't lead to an NSC path, lsof uses:

```
/stand/1/unix
```

On non-NSC systems lsof expects the booted kernel image to be in /stand/unix.

If your booted kernel image is in a different place, use lsof's "-k <path>" option to specify its path.

16.2.5 Why doesn't lsof report link count, node number, and size

for some UnixWare 7.1.1 or above CFS files?

Lsof reports link count, node number, and size for open
CFS files as recorded
in their kernel node structure's
cached attributes. Sometimes not all attributes are cached
on the node where lsof runs, so lsof cannot report them.

16.2.6 Why doesn't lsof report open files on all UnixWare 7.1.1
NonStop Cluster (NSC) nodes?

Lsof can only report on files open on the node on which it
runs, because the information lsof reports comes from the
private kernel memory of the node. This may mean that
asking lsof to find a specific open file, or use of a
specific Internet address or port, may not report all open
instances on nodes other than the one used to run lsof.

You can use the NSC onnode(1) command to run lsof on specific
nodes, or the onall(1) command to run lsof on all nodes --
e.g.,

```
   $ onall lsof [options] 2>&1 | less
 or
   $ onnode node-number lsof [options] 2>&1 | less
```

Note that, when lsof is run all nodes, the path name
component assembly results it reports in its NAME column
may vary, because the dynamic name cache from which lsof
gets
the components is private to the kernel of each node.

Also note the use of shell redirection in the examples to
merge the standard error file information from onnode and
onall with lsof's standard output file output. That will
put the onnode and onall node announcements in proper
sequence with lsof's output.

16.2.7 Why doesn't lsof report the UnixWare 7.1.1 NonStop Cluster
(NSC) node a process is using?

To induce lsof to report the node on which a process runs
would be a significant, non-standard modification to lsof.
It has much wider implications than merely the printing of
a number in an output column. I'm not currently (April
2001) prepared to undertake such a modification.

If you want node-specific NSC information about open files,

run lsof under the control of onall(1) or onnode(1).

```
$ onall lsof [options] 2>&1 | less
```
or
```
$ onnode node-number lsof [options] 2>&1 | less
```

16.2.8 Why does the compiler complain about missing UnixWare 2.1[.x] header
files?

SCO|Caldera didn't ship the following header files with UnixWare 2.1 through 2.1.3:

```
<fs/proc/prdata.h>
<fs/procfs/prdata.h>
<sys/fs/fifonode.h>
<sys/fs/namenode.h>
```

Lsof needs those header files for its compilation. Contact SCO|Caldera to get copies of those header files.

If you can't get the header files from SCO|Caldera, please contact me via e-mail at <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

17.0 Sun Problems

17.0.5 Statement of deprecation

Lsof support for SunOS 4.1.x was last tested at revision 4.51. Contact me via e-mail at <abe@purdue.edu> if you're interested in obtaining it. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

17.1 My Sun gcc-compiled lsof doesn't work -- why?

Gcc can be used to build lsof successfully. However, an improperly installed Sun gcc compiler will usually not produce
a working lsof.

If your Sun gcc-compiled lsof doesn't report anything, or reports ``can't read proc table,'' or gcc refuses to compile lsof without error, check that the gcc step that "fixes" Sun header files was run on the system where you're using gcc to compile lsof. As an alternative, if you have the

SunPro C 5.0 compiler or later available, use it to compile
lsof -- e.g., use the solariscc Configure abbreviations.

17.2 How can I make lsof compile with gcc under Solaris 2.[456],
2.5.1, 7, 8 or 9?

Presuming your gcc-specific header files are wrong for
Solaris, edit the lsof Configure-generated Makefile and
lib/Makefile and make this change:

```
 CFGF=   -Dsolaris=20400 ...
to
 CFGF=   -Dsolaris=20400 -D__STDC__=0 -I/usr/include ...
```

or change:

```
 CFGF=   -Dsolaris=20500 ...
to
 CFGF=   -Dsolaris=20500 -D__STDC__=0 -I/usr/include ...
```

or change:

```
 CFGF=   -Dsolaris=20501 ...
to
 CFGF=   -Dsolaris=20501 -D__STDC__=0 -I/usr/include ...
```

This is only a temporary
work-around. You really should
instruct gcc to to update your gcc-specific header files
or install a recent gcc (e.g., 3.2), which has no need for
private copies of Solaris include files.

17.3 Why does Solaris Sun C complain about system header files?

You're probably trying to use /usr/ucb/cc if you get compiler
complaints like:

```
cc -O -Dsun -Dsolaris=20300 ...
"/usr/include/sys/machsig.h", line 81: macro BUS_OBJERR
redefines previous macro at "/usr/ucbinclude/sys/signal.h",
line 444
```

Note the reference to "/usr/ucbinclude/sys/signal.h". It
reveals that the BSD Compatibility Package C compiler is
in use. Lsof requires the ANSI C version of the Solaris
C compiler, usually found in /usr/opt/bin/cc or
/opt/SUNWspro/bin/cc.

Try adding a CC string to the lsof Makefile that points to
the Sun ANSI C version of the Sun C compiler -- e.g.,

```
    CC= /usr/opt/bin/cc
or
    CC= /opt/SUNWspro/bin/cc.
```

17.4 Why doesn't lsof work under my Solaris 2.4 system?

If
lsof doesn't work under your Solaris 2.4 system -- e.g.,
it produces no output, little output, or the output is
missing command names or file descriptors -- you may have
a pair of conflicting Sun patches installed.

Solaris patch 101945-32 installs a kernel that was built
with a <sys/auxv.h> header file whose NUM_*_VECTORS
definitions don't match the ones in the <sys/auxv.h> updated
by Solaris patch 102303-02.

NUM_*_VECTORS in the kernel of patch 101945-32 are smaller
than the ones in the <sys/auxv.h> of patch 102303-02. The
consequence is that when lsof is compiled with the <sys/auxv.h>
whose NUM_*_VECTORS definitions are larger than the ones
used to compile the patched kernel, lsof's user structure
does not align with the one that the kernel employs.

If you have these two patches installed, contact Sun and
complain about the mis-match.

You may be able to work around the problem by editing
/usr/include/sys/auxv.h to have the following NUM_*_VECTORS
definitions:

```
   #define NUM_GEN_VECTORS 4
     #define NUM_SUN_VECTORS 8
```

The Configure script issues a prominent WARNING that you should
try the work-around.

I thank Leif Hedstrom for identifying the offending patches.

17.5 Where are the Solaris header files?

If you try to compile lsof under Solaris and get a compiler
complaint that it can't find system header files, perhaps
you forgot to add the header file package, SUNWhea.

17.6 Where is the Solaris /usr/src/uts/<architecture>/sys/machparam.h?

When you try to Configure lsof for Solaris 2.[23456], 2.5.1, and 7 -- e.g., on a `uname -m` == sun4m system -- Configure complains:

```
  grep: /usr/src/uts/sun4m/sys/machparam.h:
No such file or directory
  grep: /usr/src/uts/sun4m/sys/machparam.h:
No such file or directory
```

And when you try to compile the configured lsof, cc or gcc complains:

```
  dproc.c:530: `KERNELBASE' undeclared (first use this function)
```

The explanation is that somehow your Solaris system doesn't have
the header files in /usr/src/uts it should have. Perhaps someone removed the directory to save space. Perhaps you're using a gcc installation, copied from another system. In any event, you will have to load the header files from the SUNWhea package of your Solaris distribution.

KERNELBASE is an important symbol to lsof -- it keeps lsof from sending an illegal kernel value to kvm_read() where a segmentation violation might result (a bug in the kvm library). Lsof can get illegal kernel values because it reads kernel values slowly with kvm_read() calls that the kernel is changing rapidly.

Lsof doesn't need KERNELBASE at Solaris 2.5 and above, because it has a KERNELBASE value whose address lsof can find with /dev/ksyms and whose value it can read with kvm_read(). Under Solaris 2.5 /usr/src/uts has moved to /usr/platform.

17.7 Why does Solaris lsof say ``can't read proc table''?

When lsof collects data on processes, using the kvm_*() functions to scan the
kernel's proc structure table, it
checks to make sure it has identified a reasonable number of them -- a minimum of three. When lsof can't identify three processes during a scan, it repeats the scan.

When five scans fail to yield three processes, lsof issues

the fatal message:

lsof: can't read proc table

and exits.

Usually lsof fails to identify three processes during a scan because its idea of the form of the proc structure differs from that being used by the kernel. Since the proc structure is defined in <sys/proc.h> and other /usr/include header files, the root cause of a proc structure discrepancy usually can be found in the composition of /usr/include.

One common way that /usr/include header files can be incorrect is that gcc was used to compile lsof, gcc used its special (i.e., "fixed") header files instead of the ones in /usr/include, and the special gcc header files weren't updated when Solaris was. Answers to these questions:

My Sun gcc-compiled lsof doesn't work -- why?

How can I make lsof compile with gcc under Solaris 2.[456], 2.5.1, 7, 8 or 9?

Why does Solaris Sun C complain about system header files?

discuss the gcc header file problem and offer suggestions on how to fix it or work around it.

It may also be that you are trying to run a version of lsof that was compiled on an older version of Solaris. For example, an lsof executable, compiled for Solaris 2.4, will produce the ``can't read proc table'' message if you try to run it under Solaris 2.5. If you have compiled lsof under Solaris 2.5 and it still won't work, see if the header files in /usr/include have been updated to 2.5, or still represent a previous version of Solaris.

Another source of header file discrepancies to consider is the Solaris patch level and whether a binary kernel patch was not matched with a corresponding header file update. See the "Why doesn't lsof work under my Solaris 2.4 system?" question for an example of one in Solaris 2.4 -- there may be other such patch conflicts I don't know about.

17.8 Why does Solaris lsof complain about a bad cached clone device?

When lsof revisions below 4.04 have been run on a Solaris system and have been allowed to create a device cache file, the running of revisions 4.04 and above on the same systems may produce this complaint:

```
lsof: bad cached clone device: ...
lsof: WARNING: created device cache file: ...
```

This is the result of a change in the device cache file that took place at lsof revision 4.04. The change introduced a node number into the clone device lines of the device cache file and was done in such a way that lsof could detect device cache files whose clone lines don't have node numbers (lines created by previous lsof revisions) and recognize the need to regenerate the device cache file.

17.9 Why doesn't Solaris make generate .o files?

Solaris /usr/ccs/bin/make won't generate .o files from .c files if /usr/share/lib/make/make.rules is missing. It may be found in and installed from the SUNWsport package.

17.10 Why does lsof report some Solaris 2.3 and 2.4 lock types as `N'?

For Solaris 2.3 with patch P101318 installed at level 45 or above, and for all versions of Solaris 2.4, NFS locks are represented by a NFS-specific kernel lock structure that sometimes lacks a read or write lock type indicator. When lsof encounters such a lock structure, it reports the lock type as `N'.

17.11 Why does lsof Configure say "WARNING: no cc in ..."?

When lsof's Configure script is executed with the solariscc abbreviation it tries to make sure it's using the Sun C compiler and not the UCB substitute from /usr/ucb/cc. Thus, it looks for cc in the "standard" Sun compiler location, /opt/SUNWspro/bin.

If Configure can't find cc there, it issues the warning:

```
lsof: WARNING: no cc in /opt/SUNWspro/bin;
using cc without path.
```

and uses cc for the compiler name, letting the shell find cc with

its PATH environment variable.

You can tell Configure where to find your cc with the
SOLARIS_CCDIR cross-configuration environment variable.
(See 00XCONFIG for more information on SOLARIS_CCDIR).
For example, use this Configure shell command:

```
SOLARIS_CCDIR=/usr/special/bin Configure -n solariscc
```

(SOLARIS_CCDIR should be the full path to the directory
containing your cc.)

17.12 Solaris 7, 8 and 9 Problems

17.12.1 Why does lsof say the compiler isn't adequate for Solaris 7, 8 or 9?

Solaris 7, 8 and 9 kernels come in two flavors, 32 and 64
bit. 64 bit kernels run on machines that support the SPARC
v9 instruction set architecture. Separate executables for
some programs, -- e.g., ones using libkvm like lsof -- must
be built for 32 and 64 bit kernels.

Previous Sun (e.g., SC4.0) and earlier gcc compilers will
build lsof for 32 bit kernels, but they won't build it for
64 bit kernels. Compilers that will build lsof for 64 bit
Solaris 7, 8 and 9 kernels are the Sun
WorkShop Compilers
C 5.0 and above, and recent gcc versions, e.g., 3.2.

When given the ``-xarch=v9" flag, the C 5.0 compiler and
above, and associated loader and 64 bit libraries will
build a 64 bit lsof executable; when given the "-m64" or
"-mcpu=v9" (deprecated) flags, an appropriate gcc compiler
will build a 64 bit lsof executable.

When the lsof Configure script detects a 64 bit kernel is
in use (e.g., by executing `/bin/isainfo -kv`), and when
it finds that the specified compiler is inappropriate,
it complains with these messages:

For gcc:

```
"!!!WARNING!!!=========!!!WARNING!!!=========!!!WARNING!!!"
"!                                                       !"
"! LSOF NEEDS TO BE CONFIGURED FOR A 64 BIT KERNEL, BUT  !"
"! THIS GCC DOESN'T SUPPORT THE BUILDING OF 64 BIT       !"
"! SOLARIS EXECUTABLES.  LSOF WILL BE CONFIGURED FOR A   !"
```

```
"! 32 BIT echo KERNEL.                              !"
"!                                                  !"
"!!!WARNING!!!=========!!!WARNING!!!=========!!!WARNING!!!"
```

For Sun C:

```
!!!WARNING!!!==========!!!WARNING!!!==========!!!WARNING!!!
!                                                  !
! LSOF NEEDS TO BE CONFIGURED FOR A 64 BIT KERNEL, BUT    |
! THE VERSION OF SUN C AVAILABLE DOESN'T SUPPORT THE      !
! -xarch=v9 FLAG.  LSOF WILL BE CONFIGURED FOR A 32 BIT   !
! KERNEL.                                            !
!                                                  !
!!!WARNING!!!==========!!!WARNING!!!==========!!!WARNING!!!
```

17.12.2 Why does Solaris 7, 8 or 9 lsof say "FATAL: lsof was compiled for..."?

Solaris 7, 8 or 9 lsof may say:

```
lsof: FATAL: lsof was compiled for a xx bit kernel,
but this machine has booted a yy bit kernel.

Where: xx = 32 or 64
yy = 64 or 32

(xx and yy won't match.)
```

This message indicates that lsof was compiled for one size kernel and is being asked to execute on a different size one. That's not possible for programs like lsof that use libkvm.

Depending on the instruction sets for which you need Solaris 7, 8 or 9 lsof, you may need two or more versions of lsof, compiled for each kernel size, installed for use with /usr/lib/isaexec. See the "How do I install lsof for Solaris 7, 8 or 9?" section of this document for more information on that.

17.12.3 How do I build lsof for a 64 bit Solaris kernel under a 32 bit Solaris kernel?

If your Solaris system has an appropriate compiler (e.g., WorkShop Compilers C 5.0 and above, or a recent gcc like 3.2) and the 64 bit libraries have been installed, you can

force lsof's Configure script to build a 64 bit version of
lsof with:

```
$ SOLARIS_KERNBITS=64 Configure -n solariscc
```

The SOLARIS_KERNBITS environment variable is part of the
lsof cross-configuration support, described in the 00XCONFIG
file of the lsof distribution.

17.12.4 How do I install lsof for Solaris 7, 8 or
9?

If you are installing lsof where it will be used only under
the bit size kernel for which it was built, no special
installation is required.

If, however, you are installing different versions of lsof
for different bit sizes -- e.g., for use on a 64 bit NFS
server and from its 32 bit clients -- you should read the
man page for isaexec(3C) and install lsof according to its
instructions.

The executable at the directory where lsof is to be found
should be a hard link to /usr/lib/isaexec or a copy of it.
In the directory there must be instruction architecture
subdirectories -- e.g., .../sparc/ and .../sparcv9/. The
lsof for 64 bit size kernels is installed in the .../sparcv9/
subdirectory; the one for 32 bit size kernels, in .../sparc/.

For example, if you're installing 32 and 64 bit lsof
executables in /usr/local/etc, you would:

```
 # cd /usr/local/etc
 # ln /usr/lib/isaexec lsof
 # mkdir sparc sparcv9
 # install the 32 bit lsof as sparc/lsof
 # install the 64
bit lsof as sparcv9/lsof
 # chmod, chown, and chgrp sparc/lsof and
   sparcv9/lsof appropriately
```

Lsof permissions and ownerships are the same whether one
or more lsof executables are being installed, with or
without the /usr/lib/isaexec hard link.

17.12.5 Why does my Solaris 7, 8 or 9 system say it cannot execute
lsof?

When you attempt to execute lsof, your Solaris 7, 8 or 9
shell may complain:

```
ksh: ./lsof: cannot execute
```

If the lsof executable exists and has the proper execution
permissions, this error may be the result of trying to
execute an lsof, built for a 64 bit kernel, on a 32 bit
kernel.

This will tell you about the lsof executable:

```
$ file lsof
lsof: ELF 64-bit MSB executable SPARCV9 Version 1,
dynamically linked, not stripped
```

The "64-bit" notation indicates the binary was built for
a 64 bit kernel. To see the running kernel bit size, use
this command:

```
$ isainfo -kv
32-bit sparc kernel modules
```

The "32-bit" notation indicates
a 32 bit kernel has been
booted.

The only work-around is to obtain, or Configure and make,
an lsof for the appropriate kernel bit size. If you
Configure and make lsof on the kernel where you wish to
run it the proper compiler, the lsof Configure step will
generate Makefiles that can be used with make to build an
appropriate lsof executable.

To compile a 64 bit lsof, you must have an appropriate
compiler -- i.e., Sun WorkShop Compilers C 5.0 or higher
or a recent gcc like 3.2.

17.12.6 What gcc will produce 64 bit Solaris 7, 8 and 9 executables?
8 and 9 executables?

Properly built and installed recent gcc versions -- e.g.,
3.2 -- will build lsof for 64 bit Solaris kernels.

If you update your gcc version to 3.2 or later, make sure
the private gcc header files become current -- i.e., clear
out any private header files from a previous gcc or Solaris
installation before installing the new ones, or build to

a new --prefix root and replace the old root with it after
the
build and installation are complete.

17.12.7 Why does lsof on my Solaris 7, 8 or 9 system say, "can't
read namelist from /dev/ksyms?"

You're probably trying to use an lsof executable built for
an earlier Solaris release on a 64 bit Solaris 7, 8 or 9
kernel. The output from `lsof -v` will tell you the build
environment of your lsof executable. You should also have
gotten a warning message that lsof is compiled for a
different Solaris version than the one under which it is
running -- something like this:

```
lsof: WARNING: compiled for Solaris release X; this is Y
```

You need to build lsof on the system where you want to use
it. For 64 bit Solaris 7, 8 and 9 you need a compiler that
can generate 64 bit Solaris executables -- e.g., the Sun
Workshop 5 C compiler or later, or a recent gcc version
like 3.2. See the "Why does lsof say the compiler isn't
adequate for Solaris 7, 8 or 9?" section and the ones
following it for a discussion of building lsof for 64 bit
Solaris
7, 8 or 9.

17.13 Solaris and COMMON

17.13.1 What does COMMON mean in the NAME column for a Solaris VCHR
file?

When lsof puts COMMON or (COMMON) in the NAME column of a
Solaris VCHR file, it means that the file is handled by
the special file system functions of the kernel through a
common vnode.

17.13.2 Why does a COMMON Solaris VCHR file sometimes seem to have an
incorrect minor device number?

When lsof reports on an open file in a Solaris special file
system that uses a COMMON vnode, and the file is a VCHR
file, lsof tries to locate the associated device node by
looking for matches on the major and minor device numbers
first.

If no major and minor match results, lsof then looks for
a match on pseudo and clone device files. (See /devices/pseudo.)

Those device nodes are matched specially by either their
major or minor device numbers, but not both. Hence, when
lsof finds a match under those special conditions, it may
report a value in its output DEVICE column
that differs
from one of the major and minor numbers of the device node.

Here's an example from a sun4m Solaris 7 system:

```
$ ls -li /devices/pseudo/pm@0:pm
151261 crw-rw-rw-   1 root     sys      117,  0 ...
$ lsof /devices/pseudo/pm@0:pm
COMMAND ... DEVICE ...   NODE NAME
powerd       117,1 ... 151261 /devices/pseudo/pm@0:pm (COMMON)
Xsun    ...  117,0 ... 151261 /devices/pseudo/pm@0:pm
```

Note that the DEVICE value for the file with (COMMON) in
its name field has a different minor device number (1) from
what ls reports (0), while the DEVICE value for the file
without (COMMON) matches the ls output exactly. Both match
on the major device number, 117. The minor device number
mis-match is a result of the way the Solaris kernel handles
special file system common vnodes, and it's the reason lsof
puts (COMMON) after the name to signal that a mis-match is
possible.

17.14 Why don't lsof and Solaris pfiles reports always match?

/usr/proc/bin/pfiles
for Solaris 2.6, 7, 8, and 9 also
reports information on open files for processes. Sometimes
the information it reports differs from what lsof reports.

There are several reasons why this might be true. First,
because pfiles is a Sun product, based on Sun kernel
features, its developers have a better chance of knowing
exactly how open file information is organized. I sometimes
have to guess at how kernel file structure linkages are
constructed by gleaning hints from header files.

Second, lsof is aimed at providing information, specifically
device and node numbers, that can be used to identify named
file system objects -- i.e., path names. Thus, lsof tries
to make sure its device and node numbers match those reported
by stat(2). Pfiles doesn't always report numbers that
match stat(2) -- e.g., for files using clone and pseudo
devices via common vnodes like the nlist() /dev/ksyms usage.

Here's the Solaris 7 COMMON VCHR example again with additional pfiles output:

```
$ ls -li /devices/pseudo/pm@0:pm
151261 crw-rw-rw-   1 root     sys      117,  0 ...
$ lsof /devices/pseudo/pm@0:pm
vic1: 10 = lsof /dev/pm
COMMAND ... DEVICE ...   NODE NAME
powerd  ...  117,1 ... 151261 /devices/pseudo/pm@0:pm (COMMON)
Xsun    ...  117,0 ... 151261 /devices/pseudo/pm@0:pm
$ pfiles ...
0: S_IFCHR ... dev:32,24 ino:61945 ... rdev:117,1
...
14: S_IFCHR ... dev:32,24 ino:151261 ... rdev:117,0
```

Note that the NODE number, reported by lsof, matches what ls(1) and stat(2) report, while the ino value pfiles reports doesn't. Lsof also indicates with the (COMMON) notation that the DEVICE number is a pseudo one, derived from the character device's value. The lsof DEVICE value matches the pfiles rdev value, correct behavior for a character device, but pfiles gives no sign that it's not possible to find that character device number in /devices with ls(1) or stat(2).

17.15 Why does lsof say, "kvm_open(namelist=default, core=default):
Permission denied?"

Lsof needs permission to read from the /dev/kmem and /dev/mem memory devices. Access to them is opened via a call to the kvm_open() library function and it reports the indicated message.

You must give lsof permission to read the memory devices. The super user can almost always do that, but other lsof users can do it if some group -- e.g., sys -- has permission to read the memory devices, and the lsof binary is installed with the group's ownership and with the setgid permission bit enabled.

17.16 Why is lsof slow on my busy Solaris UFS file system?

Lsof may be slow on a busy Solaris UFS file system when UFS logging has been enabled with the "logging" mount option. That option can significantly increase disk operations under certain conditions -- e.g., when a lot of

files are accessed quickly.

When only the "logging" option is specified to mount, all file accesses (atime updates) are logged to the UFS logging queue.
Each atime update requires two writes to the disk to complete it.

If you want to do UFS logging -- and there are reliability advantages to it -- consider using the "logging,noatime" mount options instead. That will shift atime updates from the logging queue to fewer and independent asynchronous operations, consequently making the UFS logging queue a smaller bottleneck.

Consult mount_ufs(1M) for more information on the logging and noatime options.

(My thanks to Casper Dik for this tip on improving the performance of UFS logging.)

17.17 Why is lsof so slow on my Solaris 8 or 9 system?

Solaris 8 has a post-release feature upgrade modifying kernel name cache (DNLC) handling that can slow lsof throughput dramatically. The feature, sometimes called negative DNLC caching, is standard in Solaris 9.

As best I can tell, when you install the Solaris 8 MU1 package, you get negative DNLC caching. If this pipe produces any output, your system has negative DNLC caching.

```
$ nm /dev/ksyms | grep negative_cache_vnode
```

The reason negative DNLC caching perturbs lsof is that a single vnode address (found in the negative_cache_vnode kernel variable) is used to mark entries in the DNLC that are not (the negative part) found on disk.

Since a single vnode address (the DNLC key lsof uses) can represent many (I've seen upwards of 30,000.) DNLC entries, their presence overloads lsof's internal DNLC hashing function. An overloaded hash function is a slow hash function, and lsof's slows to a crawl when it encounters thousands of keys that produce the same value when the lsof DNLC hash function is applied to them.

The solution is simple -- ignore negative DNLC cache keys.
They don't represent path name components lsof can use.
Lsof revisions 4.50 and above have an addition that ignores
them and the performance of those lsof revisions improves
significantly when presented with negative DNLC cache keys.

If you don't have an lsof revision at 4.51
or later, there's
a work-around. Use lsof's ``-C'' option. It disables
lsof's DNLC caching. Of course, that also inhibits the
reporting of any path name components from the kernel DNLC.
When ``-c'' is used, lsof will continue to report file
system and character device paths.

17.18 Solaris and VxFS

17.18.1 Why doesn't lsof support VxFS 3.4 on Solaris 2.6, and above?

Lsof will not support VxFS version 3.4 on Solaris 2.6 and above
unless some files from VxFS Update 2 have been installed. VxFS
3.4 FCS and VxFS 3.4 update 1 lack the header files lsof
normally uses to obtain information from the VxFS 3.4 kernel
node structure, vx_inode. VxFS 3.4 Update 2 provides a method
whereby lsof can obtain the necessary vx_inode information from
the vxfsu_get_ioffsets() function in Veritas utility
libraries.

The utility libraries (32 bit and 64 bit versions) may be
found in /opt/VRTSvxfs/lib. An ancillary header file may
be found in /opt/VRTSvxfs/include/sys/fs/vx_libutil.h.
Documentation
of the vxfsu_get_ioffsets(3) function may be
found in /opt/VRTS/man/man3/vxfsu_get_ioffsets.3.

Those files of VxFS 3.4 Update 2 may be downloaded from:

ftp://ftp.veritas.com/pub/support/vxfs_34.i64243.tar

The vxfs_34.i64243.tar archive will unpack into an i64243
directory containing these files:

```
$ ls i64243
README
libvxfsutil.sol26.sums
libvxfsutil.sol26.tar.Z
libvxfsutil.sol27.sums
libvxfsutil.sol27.tar.Z
libvxfsutil.sol28.sums
```

```
libvxfsutil.sol28.tar.Z
```

Read README. Select the *.tar.Z file appropriate for your Solaris version. Its contents will unpack into /opt/VRTS and /opt/VRTSvxfs, so you will need sufficient permission -- e.g., do it as root -- to unpack the uncompressed archive. Once you've done that, it's a good idea to compare the checksums of the archive you unpacked with the ones recorded in the appropriate *.sums file. Use `sum -r` to verify the checksums.

For example, if you want the Solaris 8 version, uncompress and unpack libvxfsutil.sol28.tar.Z -- e.g.,

```
$ su
...
# cd i6423
# zcat libvxfsutil.sol28.tar.Z | tar xf -
```

That should create these new files and subdirectories with the indicated checksums:

```
File or subdirectory   sum -r

/opt/VRTSvxfs/include/vxfsutil.h  03938
/opt/VRTSvxfs/lib/libvxfsutil.a  51794
/opt/VRTSvxfs/lib/sparcv9/
/opt/VRTSvxfs/lib/sparcv9/libvxfsutil.a 07420
/opt/VRTS/man/man3/
/opt/VRTS/man/man3/vxfsu_get_ioffsets.3 62480
```

Once these files are in place, run lsof's Configure script for the solaris or solariscc abbreviation. Configure will locate the appropriate VxFS 3.4 Update 2 files and set up for the making of an lsof that will properly display open VxFS 3.4 file information.

17.18.2 Why does lsof report "vx_inode: vxfsu_get_ioffsets error" for open Solaris 2.6 and above VxFS 3.4 and above files?

Even when lsof supports VxFS 3.4 and above on Solaris 2.6 and above, it may report "vx_inode: vxfsu_get_ioffsets error" in the NAME column for all VxFS files.

The usual cause is that lsof doesn't have permission to read the file at the end of the /dev/vxportal symbolic

link. If, for example, lsof has been installed setgid(sys), then the /dev/vxportal symbolic link destination should be owned by the sys group and readable by it.

Update 2 for VxFS 3.4 sets the modes of the /dev/vxportal symbolic link destination to 0640 and the group ownership to sys. But I have had a report that the modes are wrong in a VxFS 4.0 installation.

Another cause may be that the system has more than one version of VxFS installed (Only one can be active.), and lsof's Configure script did not choose the header files and libraries for the active VxFS version. Configure opts for VxFS 4.0 and above header files and libraries (in /opt/VRTS) in preference to those for VxFS below 4.0 (in /opt/VRTSvxfs).

Look for the directories /opt/VRTS and /opt/VRTSvxfs. If you have /opt/VRTS,
make sure its header and library symbolic links
point to those of the active VxFS version.

If you have both directories, look at the CFLAGS that Configure constructed for making lsof and see which directory path follows a -I option. If that doesn't match the directory path of the active VxFS version, try pointing Configure at the correct directory with the SOLARIS_VXFSINCL environment variable -- e.g.,

```
$ SOLARIS_VXFSINCL=/opt/.../include ./Configure -n solaris
```

17.18.3 Why does Solaris Configure claim there is no VxFS library?

The lsof Configure script, when configuring for Solaris, may report:

```
FATAL: no VxFS .../libvxfsutil.a
```

That fatal error message indicates lsof has found the VxFS utility library's header files, but can't find the library itself in the expected location adjacent to the header files.

One possible cause is an incorrect symbolic link from /opt/VRTS/lib/sparcv9/libvxfsutil.a to the library's real location. (Some VxFS distributions
declared the link
incorrectly.) Use `ls -lL` on that path to see if it exists.
If it doesn't exist, the link may be missing an additional leading "../" component.

If the problem is a missing "../" from the library's link, you can correct the link or check with Veritas/Symantec for the patch that corrects it.

If the problem is not a missing "../", and you know the libvxfsutil.a location, you can define its path in the SOLARIS_VXFSLIB environment variable before running the lsof Configure script. (See 00XCONFIG for information about using the SOLARIS_VXFSLIB environment variable.)

If you have no libvxfsutil.a, you must obtain it from Veritas/Symantec or find it in your VxFS installation package.

17.18.4 Why doesn't Solaris lsof report VxFS path name components?

Solaris lsof will report path name components for VxFS versions that use the common Solaris Dynamic Name Lookup Cache (DNLC) or on some file systems of VxFS versions that support the VxFS Reverse Name Lookup
(RNL) facility.

VxFS versions 3.3 (approximately) and below use the common Solaris DNLC. (I haven't been able to determine exactly when VxFS stopped using the DNLC.) For versions above that boundary, but below 4.0, lsof can't report path name components.

At VxFS 4.0 and above, lsof can be compiled to use the VxFS RNL facility for reporting path names. If "-DHASVXFSRNL" appears in the compiler flags section of lsof "-v" option output, then the lsof Configure script detected the VxFS RNL facility and lsof has been compiled to use it.

Lsof's use of the RNL facility can fail when the VxFS file system disk layout version is below 6. In that case, lsof can report no path name components. For more information, see the vxfs_inotopath(3) manual page. any of the following commands will show the disk layout version for a VxFS file system, when supplied the block device or mount point on which the file system is mounted.

```
   fstyp -v <block_device>
 or
   mkfs -m
<block_device>
 or
   vxupgrade <mount_point>
```

You must have permission to read the block device -- e.g., be the root user.

You may also be able to upgrade an older disk layout to one that will work with the RNL. See the vxupgrade(1M) man page for more information on that.

When lsof can't report VxFS path name components, it reports the file system mount point and the path name of device on which it is mounted. The device path name is enclosed in parentheses.

17.18.5 Why does Solaris 10 lsof report scrambled VxFS paths?

Solaris 10 lsof may report a bogus, scrambled path for an open VxFS file, when lsof obtains the path from a vnode's cached path. Veritas/Symantec reports that their Solaris 10 implementation has bugs in the way it handles the Solaris 10 vnode cached path and those bugs will be fixed in an upcoming patch some time after August 15, 2005.

When Solaris 10 lsof reports a path for an open VxFs file obtained via the VxFS Reverse Name Lookup facility,
the path
will be correct.

Also see the answers to the questions "Why does Solaris 10 lsof sometimes report the wrong path name?" and "Why doesn't Solaris lsof report VxFS path name components?"

17.19 Large file problems

17.19.1 Why does lsof complain it can't stat(2) a Solaris 2.5.1 large file?

When given an argument that is the path to a Solaris 2.5.1 file, enable for large file operations with the O_LARGEFILE open(2) option, lsof complains that it can't stat(2) the file. That's because lsof isn't using a stat(2) call and associated structure enabled for large files.

This error has been fixed, starting at lsof revision 4.58 for Solaris 2.6 and above. That fix won't work on Solaris 2.5.1 and I no longer have access to a Solaris 2.5.1 test system to develop a separate fix.

The work-around is to avoid specifying a O_LARGEFILE path as an argument to lsof on Solaris 2.5.1. Instead use a

combination of lsof and grep to achieve the same results, albeit more clumsily.

17.20
Why does lsof get a segmentation fault on 64 bit Solaris 8 using NIS+?

I have received a report from Gary Craig that lsof produces a segmentation fault on his 64 bit Solaris 8 system using NIS+. Via an independent test program we have exonerated lsof and tracked the fault to the NIS+ __nis_server_name() function in the C name server library, -lnsl.

Lsof causes the __nis_server_name() NIS+ function to be called by calling getservent() to read entries of the port number to service name map.

The only Sun bug ID that appears to describe the problem is 4304244, although its text is unclear enough to leave room for doubt.

Until Sun eliminates the __nis_server_name() segmentation fault cause, a work-around for lsof is to use its "-P" option, causing lsof to avoid port to service name lookups.

17.21 Will lsof crash the Solaris kernel?

I've received and investigated one report that it has when the Sun hardware (a QME interface) was faulty. Today (May 23,
2002) I've learned that Sun has reports of kernel crashes caused by adb, lsof, and mdb.

The Sun investigation pinpointed a problem in the /dev/kmem kernel driver and there is a Sun bug report, 4344513, about the problem. There is a fix in Solaris 9, and patches for Solaris 7 and 8 (SPARC and x86).

To see if your Solaris system is fixed, look for a /devices/pseudo/*allkmem node.

Extensive address filtering was added to lsof revision 4.50 to forestall what I then (July 2001) believed to be only the possibility that lsof might crash Solaris. However, the filtering isn't perfect, since a filtered address might become invalid after lsof has filtered it but before lsof has delivered it to /dev/kmem. That filtering work is described in .../dialects/sun/solaris_kaddr_filters, also

available at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/solaris_kaddr_filters

The best and safest work-around is to upgrade to Solaris
9 or install an appropriate patch or its equivalent
from
this list:

```
Solaris SPARC  x86
Version Patch  Patch
======= =====  =====
  7 106541-20 106542-20
  8 108528-14 108529-14
```

17.22 Why does lsof on Solaris 7, 8, or 9 report a kvm_open() failure?

When lsof is started on some Solaris 7, 8, and 9 systems
it may report:

```
lsof: kvm_open(namelist=default, corefile=default): \
No such file or directory
```

Lsof revisions 4.65 and later will first report:

```
lsof: cannot stat /dev/allkmem
```

The second message, not delivered in lsof revisions below
4.65, explains the cause of the kvm_open() failure; it
can't find /dev/allkmem.

/dev/allkmem is a device added to Solaris 7 and 8 in patches
and in the Solaris 9 FCS. See the preceding "Will lsof
crash the Solaris kernel?" section for more information on
/dev/allkmem and the patches.

The kvm_open(3KVM) function in the KVM library of patched
Solaris 7 and 8 systems and in Solaris 9 expects to find
/dev/allkmem and exits on error when it does
not.

If you have installed the patch that updated your KVM
library to a version that expects /dev/allkmem to be present
and it is not, you may need to reconfigure your system's
devices with devfsadm(1M) or enter "boot -r" to the OpenBoot
monitor's prompt (usually "ok").

17.23 Solaris and SAM-FS

17.23.1 Why does Solaris lsof report "(limited SAM-FS info)"?

Lsof 4.68 and above report "(limited SAM-FS info)" on Solaris in the NAME column after the path or file system name for all files it finds on SAM-FS file systems.

That's because no more information is known about the composition of the nodes that follow SAM-FS vnodes. If you can provide that information, please contact me via e-mail at <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

17.23.2 Why can't lsof locate named SAM-GS files?

Solaris lsof 4.68 and above can't locate files on SAM-FS file systems when the files are named as lsof arguments because
lsof doesn't know how to locate open SAM-FS file device and node number information. (See also 'Why does Solaris lsof report "(limited SAM-FS info)?')

17.24 Lsof and Solaris 10 zones

17.24.1 How can I make lsof list the Solaris zone?

Use the lsof "-z [z]" option.

17.24.2 Why doesn't lsof work in a Solaris 10 zone?

When run from within a Solaris 10 zone, lsof will usually report:

```
lsof: can't stat(/devices): No such file or directory
```

That's because a Solaris zone usually has no /devices subdirectory, a restriction of the zone implementation intended to limit the ability of zone processes to control global system resources, including physical devices.

While a zone may have a /dev subdirectory, that subdirectory usually lacks the /dev/allkmem, /dev/mem and /dev/kmem devices lsof and the KVM library it uses require.

The work-around is to run lsof in the global zone. When it is run in a global zone lsof will be able to report on processes

running
in any zone, including the global zone.

17.24.3 Why does lsof complain it can't stat() Solaris 10 zone file systems?

When run from the global zone on Solaris 10 lsof may complain:

```
lsof: WARNING: can't stat() 15 zone file systems;
 using dev= options
```

The warning message means lsof found the reported number of file system entries in the mount table for which it didn't have permission to get stat(2) results, but which had "zone=" and "dev=" mount table options.

That is a normal restriction of Solaris 10 zones. Since the lsof warning message indicates it was able to find "dev=" options for the file systems, lsof will probably work correctly.

One work-around is to relax the restrictions on zone mount points, so that lsof can stat() them. While that may be possible by changing directory modes or group ownerships, it is probably not a good idea, because it weakens the restrictions zones are intended to provide.

Another work-around is to suppress the warning message with
lsof's "-w" option. The down side of that is that it causes the suppression of all warning messages, leading to the possibility that some non-stat() warning messages will be suppressed.

17.25 Solaris 10 problems

17.25.1 Why does Solaris 10 lsof sometimes report the wrong path name?

When a path name component is renamed -- e.g., with mv(1) -- Solaris 10 lsof may report the old component for an open file that used the component in its path before the rename. That's because Solaris 10 lsof reports the path name cached in the open file's vnode and the Solaris 10 kernel doesn't update the open vnode's cached path name when a component of it is changed.

When an open file is deleted -- e.g., with rm(1) -- the path name by which it was opened remains cached in the vnode. Lsof can be instructed to display that path name with the -X option.

The path name might be incorrect because of the rename problem described above. See the answer to the 'What does "(deleted)" mean
in the NAME column of a Solaris 10 open file?' question for more information.

Lsof is sometimes able to detect that cached path name is incorrect. In that case lsof may report only the mounted-on directory and device of the file system or it may report that the path name is of questionable accuracy by appending a trailing "(?)" to it in the NAME column.

See the answer to the "Why does Solaris 10 lsof sometimes report only the mounted-on directory and device?" and 'What does "(?)" mean in the NAME column of a Solaris 10 open file?' questions for more information.

17.25.2 Why does Solaris 10 lsof sometimes report only the mounted-on directory and device?

For some regular open files lsof may report only the mounted-on directory and device of the file system on which the file resides. That's because lsof was able to determine that the path name cached in the open file's vnode is incorrect.

Lsof detects the cached path name is incorrect by applying stat(2)
to it, provided that no error was detected when stat(2) was applied to the file system mounted-on directory during lsof setup. If a mounted-on directory stat(2) error was detected during setup, lsof does no cached path name analysis and simply reports it.

When the application of stat(2) to the cached path name returns a no-entry reply (the ENOENT error number), lsof concludes the path no longer exists (i.e., has been unlinked) and reports the mounted-on directory and device of the file system. That behavior can be modified with the -X option in lsof revisions 4.77 and above. See the answer to the 'What does "(deleted)" mean in the NAME column of a Solaris 10 open file?' for more information.

When the application of stat(2) to the cached path name returns a permission error reply (the EACCES or EPERM error numbers), lsof reports the cached path name and adds a trailing "(?)" to indicate the reported path name is of questionable accuracy. See the answer to the question

'What does "(?)" mean in the
NAME column of a Solaris 10 open file?' for more information.

If the application of stat(2) to the cached path name yields
any other error reply, lsof reports the mounted-on directory
and device of the file system.

When the application of stat(2) to the cached path name
succeeds, lsof compares the reported device and node numbers to
what it has obtained for the open file from kernel structures.
If they match, lsof reports the cached path name. If they
don't match, lsof instead reports the mounted-on directory and
device of the file system.

A work-around that allows lsof to apply stat(2) successfully to
cached path names is to give lsof sufficient permission to do
it -- i.e., run lsof as the root user.

17.25.3 What does "(deleted)" mean in the NAME column of a Solaris 10
open file?

When the -X option is specified to Solaris 10 lsof, it will
report in its NAME column the path name cached for a deleted
file in its vnode. The path
name will be followed by
"(deleted)".

Note that the path name cached in a file's vnode is the path
name by which the file was opened. It is not updated by the
Solaris kernel when any path name component is changed. Hence,
it may not represent the final path name the open file had.

See the answer to the "Why does Solaris 10 lsof sometimes
report the wrong path name?" question for more information on
how changing a path name component affects the correctness of a
what lsof reports.

17.25.4 What does "(?)" mean in the NAME column of a Solaris 10 open
file?

When lsof encounters a path name cached in the open file's
vnode that stat(2) reports lsof lacks permission to access,
lsof adds "(?)" to the path name reported in the NAME column to
indicate the path name is of questionable accuracy.

See the answers to the "Why does Solaris 10 lsof sometimes
report the wrong path name?" and "Why does Solaris 10 lsof
sometimes report only the mounted-on directory and device?"

questions
for more information on why lsof may report a path
name of questionable accuracy.

A work-around that allows lsof to apply stat(2) successfully to
cached path names is to give lsof sufficient permission to do
it -- i.e., run lsof as the root user.

17.26 Solaris contract file problems

17.26.1 Why doesn't lsof report size, link count and node number for Solaris 10 contract files?

Lsof doesn't report size, link count or node number for Solaris
10 contract files because I don't know how to obtain them from
contract file kernel structures.

17.26.2 Why can't lsof locate a Solaris 10 contract file by path name?

Because lsof can't find the node number of Solaris contract
files, it can't match the device and node numbers it gets from
applying stat(2) to the contract file path name with what it
finds in kernel data.

17.27 Solaris 10 and above ZFS probblems

17.27.1 Why does Configure warn that ZFS support is not enabled?

To provide ZFS support it is necessary that lsof
have access to
the definitions of ZFS structures used by the kernel. Those
definitions are made available to lsof when it runs by the
libctl library.

If lsof's Configure script finds that ZFS is indicated by the
presence of the <sys/fs/zfs.h> header file, but the libctl
library is not indicated via the <libctl.h> header file, the
script concludes that ZFS support is not possible and issues
the following warning:

```
WARNING: ZFS support not enabled; libctf.h missing.
```

Install libctf support to remedy this problem.

17.28 Problems with Solaris 9 and above

17.28.1 Why does the compiler complain about lgrp_root on Solaris 9

and above?

When compiling lsof 4.84 on later Solaris 9 and 10 systems, the compiler may report the following error:

```
/usr/include/sys/lgrp.h", line ...: identifier redeclared: lgrp_root
```

This error results from a conflict between usage of lgrp_root in both <sys/lgrp.h> and <sys/lgrp_user.h> when _KMEMUSER or _KERNEL is #define'd before <sys/lgrp.h> is #include'd. This problem is noted in Sunsolve bug ID 5064229.

The work-around is to use lsof revision 4.85 sources.

18.0 Lsof Features

18.1 Why doesn't lsof doesn't report on /proc entries on my system?

/proc file system support is generally available only for BSD, SYSV R4 dialects, and Tru64 UNIX (Digital UNIX, DEC OSF/1). It's also available for Linux, and Pyramid DC/OSx and Reliant UNIX.

Even on some SYSV R4 dialects I encountered many problems while trying to incorporate /proc file system support. The chief problem is that some vendors don't distribute the header file that describes the /proc file system node -- usually called prdata.h.

18.2 How do I disable the device cache file feature or alter it's behavior?

To disable the device cache file feature for a dialect, remove the HASDCACHE definition from the machine.h file of the dialect's machine.h header file. You can also use HASDCACHE to change the default prefix (``.lsof'') of the device cache file.

Be sure you consider disabling the device cache file feature carefully. Having a device cache file significantly reduces lsof startup overhead by eliminating a full scan of /dev (or /devices) once the device cache file has been created. That full scan also overloads the kernel's name cache with the names of the /dev (or /devices) nodes, reducing the

opportunity for lsof to find path name components of open files.

If you're worried about the presence of mode 0600 device cache files in the home directories of the real user IDs that execute lsof, consider these checks that lsof makes on the file before using it:

1. To read the device cache file, lsof must gain permission from access(2).

2. The device cache file's modes must be 0600 (0644 if lsof is reading a system-wide device cache file) and its size non-zero.

3. There must be a correctly formatted section count line at the beginning of the file.

4. Each section must have a header line with a count that properly numbers the lines in the section. Legal sections are device, clone, pseudo-device, and CRC.

5. The lines of a section must have the proper format.

6. All lines are included in a 16 bit CRC, and it is recorded in a non-checksummed section line at the end of the file.

7. The checksum computed when the file is read must match the checksum recorded when the file was written.

8. The checksum section line must be followed by end-of-information.

9. Lsof must be able to get matching results from stat(2) on a randomly chosen entry of the device section.

For more information on the device cache file, read the 00DCACHE file of the lsof distribution.

18.2.1 What's the risk with a perverted device cache file?

Even with the checks that lsof makes on the device cache file, it's conceivable that an intruder could modify it so

it would pass lsof's tests.

The only serious consequence I know of this
change is the
removal of a file whose major device number identifies a
socket from some user ID's device cache file. When such
a device has been removed from the device cache file, and
when lsof doesn't detect the removal, lsof may not be able
to identify socket files when executed by the affected user
ID. Only certain dialects are at risk to this attack --
e.g., SCO OpenServer and Solaris 2.x, 7, 8, and 9.

If you're tracking a network intruder with lsof, that could
be important to you. If you suspect that someone has
corrupted the device cache file you're using, I recommend
you use lsof's -Di option to tell it to ignore it and use
the contents of /dev (or /devices) instead; or remove the
device cache file (usually .lsof_hostname, where hostname
is the first component of the host's name returned by
gethostname(2)) from the user ID's home directory and let
lsof create a new one for you.

18.2.2 How do I put the full host name in a personal device cache file
path?

Lsof
constructs the personal device cache file path name
from a format specified in the HASPERSDC #define in the
dialect's machine.h header file. As distributed HASPERSDC
declares the path to be ``.lsof_'' plus the first component
of the host name with the format ``.lsof_%L''.

If you want to change the way lsof constructs the personal
device cache file path name, you can change the HASPERSDC
#define and recompile lsof. If, for example, you #define
HASPERSDC to be ``.lsof_%l'' (note the lower case `l'),
Configure and remake lsof, then the personal device cache
file path will be ``.lsof_'' plus the host name returned
by gethostname(2).

See the 00DCACHE file of the lsof distribution for more
information on the formation of the personal device cache
file path and the use of the HASPERSDC #define.

18.2.3 How do I put the personal device cache file in /tmp?

Change the HASPERSDC definition in your dialect's machine.h
header file.

When you redefine HASPERSDC, make sure
you put at least
one user identification conversion in it to keep separate
the device cache files for each user of lsof. Also give
some thought to including the ``%0'' conversion to define
an alternate path for setuid-root and root processes.

Here's a definition that puts a personal device cache file
in /tmp with the name ``.lsof_login_hostname_pers''.

```
#define HASPERSDC "/tmp/.lsof_%u_%l_pers"
```

Thus the /tmp personal device cache file path for login
"abe" on host "lsof.itap.purdue.edu" would be:

```
/tmp/.lsof_abe_lsof.itap.purdue.edu_pers
```

You can add the User ID (UID) with the "%U" conversion and
the first host name component with the ``%L'' conversion.

CAUTION: be careful using absolute paths like /tmp lest
lsof processes that are setuid-root or whose real UID is
root be used to exploit some security weakness via /tmp.
Elect instead to add an alternate path for those processes
with the ``%0'' conversion. Here's an extension of the
previous HASPERSDC format
for /tmp that declares an alternate
path:

```
#define HASPERSDC "/tmp/.lsof_%u_%l_pers%0%h/.lsof_%L"
```

When the lsof process is setuid-root or its real UID is
root, presuming root's home directory is `/' and the host's
name is ``lsof.itap.purdue.edu'', the extended format yields:

```
/.lsof_vic
```

18.3 Why doesn't lsof know about AFS files on my favorite dialect?

Lsof currently supports AFS for these dialects:

AIX 4.1.4 (AFS 3.4a)
Linux 1.2.13 (AFS 3.3)
NEXTSTEP 3.2 (AFS 3.3)
Solaris 2.[56] (AFS 3.4a)

It may recognize AFS files on other versions of these

dialects, but I have no way to test that. Lsof may report correct information for AFS files on other dialects, but I can't test that either.

AFS support must be custom crafted for each UNIX dialect and then tested. If lsof supports your favorite dialect, but doesn't recognize its AFS files, probably I don't have access to a test system. If you want AFS support badly for your dialect, consider helping me do the development and testing.

18.3.1 Why doesn't lsof report node numbers for all AFS volume files, or how do I reveal dynamic module addresses to lsof?

When AFS is implemented via dynamic kernel modules -- e.g., in NEXTSTEP -- lsof can't obtain the addresses of AFS variables in the kernel that it uses to identify AFS vnodes. It can guess that a vnode is assigned to an AFS file and it can obtain other information about AFS files, but it has trouble computing AFS volume node numbers.

To determine node numbers for AFS volumes other than the root volume, /afs, lsof needs access to a hashed volume structure pointer table. When it can't find the address of that table, because AFS support is implemented via dynamic kernel modules, lsof will return blanks in the INODE column for AFS volume files. Lsof can identify the root volume's node number (0), and can compute the node numbers for all other AFS files.

If you have a name list file that contains the addresses of
the AFS dynamic modules -- e.g., you saved module symbols when you created a loadable module kernel with modload(8) by specifying -sym -- lsof may be able to find the kernel addresses it needs in that file.

Lsof looks up AFS dynamic kernel addresses for these dialects at these default paths:

NEXTSTEP 3.2 /usr/vice/etc/afs_loadable

A different path to a name list file with AFS dynamic kernel addresses may be specified with the -A option, when the -A option description appears in lsof's -h or -? (help) output.

If any addresses appear in the -A name list file that also

appear in the regular kernel name list file -- e.g., /vmunix
-- they must match, or lsof will silently ignore the -A
addresses on the presumption that they are out of date.

Found in path(s):
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/00FAQ
No license file was found, but licenses were detected in source scan.

```
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*/
```

Found in path(s):
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/tests/LsofTest.h
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```
# This program/include file is free software; you can redistribute it and/or
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# useful, but WITHOUT ANY WARRANTY; without even the implied warranty
# of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
# GNU General Public License for more details.
# You should have received a copy of the GNU General Public License
# along with this program (in the main directory of the Linux-NTFS
```

Found in path(s):
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/scripts/sort_res.perl5
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*/
/* Definitions for data structures and routines for the regular
  expression library, version 0.12.
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Boston, MA 02111-1307, USA. */

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Found in path(s):
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/freebsd/dzfs.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/util.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/freebsd/dnode2.c
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Found in path(s):
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/tests/LTnlink.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/tests/LTdnlc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/tests/LTlock.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/tests/LTszoff.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/tests/LTbigf.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/tests/LTsock.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/tests/LTunix.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/tests/LTnfs.c
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/pstat/dproc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/pstat/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/pstat/dproto.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/pstat/machine.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/pstat/dfile.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/pstat/dlsof.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/pstat/dsock.c
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/libproc/machine.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/libproc/dmnt.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/libproc/ddev.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/libproc/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/libproc/dsock.c
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From: Sandel, Ken L. <sandel@purdue.edu>
Sent: Tuesday, July 10, 2018 14:28
To: Victor Abell
Subject: RE: One more question regarding GitHub release

Vic,

For clarity I approved the release.

Ken

Ken L. Sandel
Senior Director, Sponsored Program Services
Senior Intellectual Property Officer
Purdue University
610 Purdue Mall
Hovde Hall Room 328
West Lafayette, IN 47907
sandel@purdue.edu
(765) 494-1063 (office)
(765) 426-2530 (cell)

From: Kasper, Joseph R. <JRKasper@prf.org>
Sent: Tuesday, July 10, 2018 11:23 AM
To: Victor Abell <vabell@lsof.comcastbiz.net>
Cc: Sandel, Ken L. <sandel@purdue.edu>
Subject: RE: One more question regarding GitHub release

Hi Vic,

My apologies for not following up. Mr. Sandel approves the release on GitHub under the copyright notice text currently in use.

Best,
Joe

Joseph R. Kasper, Ph.D.
Senior Business Development Manager & Director of Marketing
Office of Technology Commercialization

765-588-3486
jrkasper@prf.org
Purdue Technology Center Aerospace
1801 Newman Road
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From: Victor Abell <vabell@lsof.comcastbiz.net>
Sent: Monday, July 9, 2018 8:26 PM
To: Kasper, Joseph R. <JRKasper@prf.org>
Subject: RE: One more question regarding GitHub release

Joe,

Has there been any word from Ken about the release
of lsof to GitHub?

Vic

From: Kasper, Joseph R. [mailto:JRKasper@prf.org]
Sent: Thursday, June 28, 2018 1:15 PM
To: Victor Abell
Subject: RE: One more question
regarding GitHub release

Hi Vic,

One more request. Ken would like a copy of the email from Gerry. If for any reason you arent

comfortable sending it to me, please contact Ken directly (765-494-1063, sandel@purdue.edu).

If this last piece of information is satisfactory to Ken, I expect to get his approval.

Thanks for your cooperation throughout this process.

Best,
Joe

From: Victor Abell <vabell@lsof.comcastbiz.net>
Sent: Thursday, June 28, 2018 7:43 AM
To: Kasper, Joseph R. <JRKasper@prf.org>
Subject: RE: One more question regarding GitHub release

Joe,

I sent e-mail to Gerry McCartney and in his answer he
says he has no objection.

Vic

From: Kasper, Joseph R. [mailto:JRKasper@prf.org]
Sent: Tuesday, June 26, 2018 4:03 PM
To: Victor Abell
Subject: RE: One more question regarding GitHub release

Hi Vic,

Thanks for the extra detail. I think it would put Kens mind at ease if you have Gerrys blessing. Let me know if youll reach out to him.

Best,
Joe

From: Victor Abell
<vabell@lsof.comcastbiz.net>
Sent: Tuesday, June 26, 2018 3:57 PM
To: Kasper, Joseph R. <JRKasper@prf.org>
Subject: RE: One more question regarding GitHub release

Joe,

I have had no communication with ITaP about the move to GitHub.
The extent of their involvement with lsof has been minimal the
Visiting Scholar appointment and the maintenance of a distribution
system.

I know Gerry McCartney well. Would it be helpful if I contacted

him about the GitHub move?

Vic

From: Kasper, Joseph R. [mailto:JRKasper@prf.org]
Sent: Tuesday, June 26, 2018 3:44 PM
To: Vic Abell; Victor Abell
Subject: One more question regarding GitHub release

Hi Vic,

Ken Sandel, Senior IP Officer, just got back to me. He wants to know if the leadership of ITaP supports the contribution to Github. Please let me know. If you have any communication to this effect that you can forward to me, it would be helpful.

Best,
Joe

Joseph R. Kasper, Ph.D.
Business Development Manager
Purdue Research Foundation
Office
of Technology Commercialization
765-588-3486
jrkasper@prf.org
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/support/GitHub-release/Purdue
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Notes for the distribution of lsof version 3

****
| The latest release of lsof is always available via anonymous ftp |
| from vic.cc.purdue.edu. Look in pub/tools/unix/lsof. |

****

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3.86, January 30, 1997
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3.88, February 17, 1997

Dialects Supported
==========

Lsof (for LiSt Open Files) lists files opened
by processes on
selected Unix systems. It's a major revision of lsof version 2,
and has been tested on:

AIX 3.2.5, 4.1[.[1234]], the IBM RISC/System 6000
and 4.2
BSDI BSD/OS 2.0, 2.0.1, Intel-based systems
and 2.1
DC/OSx 1.1 Pyramid systems
EP/IX 2.1.1 the CDC 4680
FreeBSD 1.1.5.1, 2.0, Intel-based systems
2.0.5, 2.1, 2.1.5,
2.2, and 3.0
HP-UX 8.x, 9.x, 10.01, HP systems (some combinations)
10.10, and 10.20
IRIX 5.2, 5.3, 6.0, 6.0.1, SGI systems
and 6.[1234]
Linux through 2.0 Intel-based systems
NetBSD 1.0, 1.1, and 1.2 Intel and SPARC-based systems
NEXTSTEP 2.1 and 3.[0123] all NEXTSTEP architectures
OpenBSD 1.2 and 2.0 Intel-based systems
OSF/1 2.0, 3.0, 3.2, and the DEC Alpha
4.0-BETA
Reliant UNIX 5.43 Pyramid systems
RISC/os 4.52 MIPS R2000-based systems
SCO OpenServer 1.1, 3.0, Intel-based systems
and 5.[024]
SCO UnixWare 2.1 and 2.1.1 Intel-based systems
Sequent PTX 2.1.[1569], Sequent systems

4.0.[23],
4.1.[024],
4.2[.1], and 4.3
Solaris 2.[123456], 2.5.1, Sun 4 and i86pc systems
and 2.6-Beta
SunOS 4.1.[1234] Sun 3 and 4
Ultrix 4.2, 4.3, 4.4, DEC RISC and VAX
and 4.5

(The pub/tools/unix/lsof/contrib directory on vic.cc.purdue.edu
contains information on other ports.)

If your favorite Unix dialect is not in the list, or if your version
of it is more recent than the ones listed, please contact me at
<abe@vic.cc.purdue.edu>.

How Lsof Works

Using available kernel data access methods -- getproc(), getuser(),
kvm_*(), nlist(), pstat(), read(), readx(), /proc -- lsof reads
process table entries, user areas and file pointers to reach the
underlying structures that describe files opened by processes.

Lsof interprets most file node structures -- advfsnodes, autonodes,
cnodes, cdrnodes, devnodes, fifonodes, gnodes, hsnodes, inodes,
mfsnodes, pcnodes, procnodes, rnodes, snodes, specnodes, s5inodes,
tmpnodes. It understands NFS connections. It
recognizes FIFOs,
multiplexed files, Unix and Internet sockets. It knows about
streams. It understands /proc file systems for some dialects. On
many dialects it recognizes execution text and library references.
It knows about AFS on some Unix dialects.

Lsof Output

The lsof output describes:

* the identification number of the process (PID) that has opened
  the file;

* the process group identification number (PGRP) of the process
  (optional);

* the process identification number of the parent process (PPID)

(optional);

* the command the process is executing;

* the owner of the process;

* for all files in use by the process, including the executing
  text file and the shared libraries it is using:

  * the file descriptor number of the file, if applicable;

  * the file's access mode;

  * the file's lock status;

  * the file's device numbers;

  * the file's inode number;

  * the file's size or
offset;

  * the name of the file system containing the file;

  * any available components of the file's path name;

  * the names of the file's stream components;

  * the file's local and remote network addresses;

  * other file or dialect-specific values.

Getting Started Quickly

If you want to get started using lsof quickly, or see some examples of how lsof can be used, consult the 00QUICKSTART file of the lsof distribution.

The 00QUICKSTART file won't help you build or install lsof, but it will cut through the density of the lsof man page, giving you more readily an idea of what you can do with lsof.

For information on building and installing lsof, consult the 00README file of the lsof distribution.

Limiting, Filtering, and Selecting Lsof Output

Lsof accepts options to limit, filter, and select its output.
These are the possible criteria:

* Process ID (PID) number -- to list the open files for a given process;

* Process Group ID (PGRP) -- to list the open files for all the processes of a given process group;

* User ID number or login name -- to list the open files for all the processes of a given user;

* Internet address -- to list the open files using a given Internet address (host name), protocol, or port (number or name); or to list all open Internet files;

* command name;

* file descriptor name or number;

* list all open NFS files;

* list all open Unix domain socket files;

* list all uses of a specific file;

* list all open files on a file system.

Selection options are normally ORed -- i.e., an open file meeting any of the criteria is listed. The selection options may be ANDed so that an open file will be listed only if it meets all the criteria.

In the absence of any selection criteria, lsof lists files open to all processes.

Parsing Lsof Output with Another Program

The lsof -F option directs it to produce "field" output that can easily be parsed by another program. The lsof distribution contains sample awk, perl 4, and perl 5 scripts in its scripts subdirectory

that show how to post-process field output.

Repeat Mode

Lsof can be directed to produce output, delay for a specified time, then repeat the output, cycling until stopped by an interrupt or quit signal. This mode is useful for monitoring the status of some file operation -- e.g., an ftp transfer or a tape backup operation.

Repeat mode is more efficient when combined with lsof's selection options, since they limit lsof overhead.

It's possible to use lsof's field output options to supply repeat mode output to another process for its manipulation. The scripts subdirectory of the lsof distribution has sample Perl scripts showing how to consume lsof repeat mode output from a pipe.

Distribution Restrictions

Lsof may
be used and distributed freely, subject to these limitations:

1. Neither the author nor Purdue University is responsible for any consequences of the use of this software.

2. The origin of this software must not be misrepresented, either by explicit claim or by omission. Credit to the author and Purdue University must appear in documentation and sources.

3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software.

4. This notice may not be removed from or altered in the lsof source files.

Cautions

Lsof is a tool that is closely tied to the Unix operating system version. It uses header files that describe kernel structures and reads kernel structures that typically change from OS version to OS version.

DON'T TRY TO USE AN LSOF BINARY, COMPILED FOR ONE UNIX OS VERSION, ON ANOTHER.

On some Unix dialects, notably SunOS and Solaris, lsof versions may be even more restricted by architecture type. An lsof binary, compiled for SunOS 4.1.3 on a sun4c machine, for example, won't work on a sun4m machine. Although I have no evidence that they exist, the potential for similar restrictions exists in Solaris versions of lsof.

AN LSOF BINARY, COMPILED FOR ONE SOLARIS ARCHITECTURE, ISN'T GUARANTEED TO WORK ON A DIFFERENT SOLARIS ARCHITECTURE.

Distribution Contents
==========

The lsof distribution is checked for completeness when it is constructed and by the Inventory script when you run the Configure script. (See The Inventory Script section of the 00README file of this distribution.)

If you're worried you don't have everything, run the Inventory script. Here's aan approximate picture of what you should have:

lsof_<version>:

```
00CREDITS    00PORTING     Customize  lsof_fields.h  proc.c
00DCACHE     00QUICKSTART  Inventory  main.c         proto.h
00DIST       00README      arg.c      misc.c         scripts/
00FAQ        AFSConfig     dialects/  node.c         store.c
00MANIFEST   Configure     lsof.h     print.c        version
```

lsof_<version>/dialects:

```
aix/       epix/      linux/     osf/       riscos/  sun/
bsdi/      freebsd/   netbsd/    ptx/       sco/     ultrix/
common/    hpux/      next/      pyramid/   sgi/     unixware/
```

lsof_<version>/dialects/common:

```
00Manifest  dvch.frag   lkud.frag   prtf.frag   rnam.frag
ckfa.frag   fchi.frag   pcdn.frag   rdev.frag   rnch.frag
cvfs.frag   isfn.frag   prfp.frag   rmnt.frag   rvfs.frag
```

Specific dialects sub-directories may differ slightly, depending on the needs of the dialect, but they should all contain:

lsof_<version>/dialects/next:

```
Makefile  ddev.c   dlsof.h  dnode.c  dproto.h  dstore.c
Mksrc*    dfile.c  dmnt.c   dproc.c  dsock.c   machine.h
```

lsof_<version>/scripts:

```
00MANIFEST        count_pf.perl*      list_fields.awk
00README          count_pf.perl5*     list_fields.perl*
big_brother.perl5 list_NULf.perl5*    watch_a_file.perl*
```

Warranty

Lsof
is provided as-is without any warranty of any kind, either
expressed or implied, including, but not limited to, the implied
warranties of merchantability and fitness for a particular purpose.
The entire risk as to the quality and performance of lsof is with
you. Should lsof prove defective, you assume the cost of all
necessary servicing, repair, or correction.

Bug Reports

Now that the obligatory disclaimer is out of the way, let me hasten
to add that I accept lsof bug reports and try hard to respond to
them. I will also consider and discuss requests for new features,
ports to new dialects, or ports to new OS versions.

PLEASE DON'T SEND A BUG REPORT ABOUT LSOF TO THE UNIX DIALECT
VENDOR.

At worst such a bug report will confuse the vendor; at best, the
vendor will forward the bug report to me.

Please send all bug reports, requests, etc. to me via email at
<abe@purdue.edu>.

What's new in Version 3

I had three goals in mind for version 3:

1. Make it faster.

Lsof 3 defers as many lookup operations -- /dev scan, mount table scan, /etc/services scan -- until they're needed.

I used prof on lsof and used its information to reduce lsof's overhead.

2. Make it easier to maintain and port to other systems, and eliminate complicated nestings of #if/#else/#endif pre-processor statements.

3. Add a few features:

o ANDing of options;

o Sorting of output by Process ID;

o Searching for Unix domain sockets by name -- to a limited extent.

o Process group ID support. (This was a late addition.)

As a result of goal 2, the organization of lsof version 3 differs greatly from version 2. The main directory contains totally common functions, a dialect subdirectory contains subdirectories of code specific to each Unix dialect that is supported. There is also a dialects/common subdirectory that contains code fragments that are used by more than one, but not all dialects.

A top-level Configure script constructs
the complete set of sources
for a given dialect and the Makefile at the top-level. Configure is self-documenting. When it is finished, Configure calls a second script, Customize, that assists with the modification of a few important compile-time options.

Version 3 Release Notes
==========

3.0 May 24, 1994
This is the first official release of lsof 3.

3.01 May 27, 1994
Corrected the #ifdef condition for HASPWSTAYOPEN
under Sequent Dynix 3.0.12.

Fixed bug that prevented the display of current working and root directory path names under SunOS 4.1.x, even when the user area contained pointers to them.

Changed the strategy for allocating space to the local proc table in EP/IX, NEXTSTEP, Solaris, and SunOS.

Closed the distance between reading the Solaris proc structure and its companion pid structure in an effort to avoid using a stale pid structure pointer. A stale pid structure pointer sometimes causes a segmentation violation in kvm_read().

Added code to the SunOS kread() function to filter out non-kernel addresses that might lead kvm_read() to a segmentation violation. The Configure script was updated to create a header file, kernelbase.h, with the necessary kernel memory boundary value; and to remove the header file when the -clean option is specified. The Configure script now passes the target name to the Mksrc shell script. It's used by sun/Mksrc to determine the source for kernelbase.h.

3.02 June 2, 1994

Added #if's to of kernelbase.h for Solaris and SunOS. This eliminates a redeclaration complaint from old versions of SunOS.

Added code to process_file() in all dialects to display "no more information" when f_count in the file structure is zero.

3.03 July 8, 1994

Added support for displaying process group IDs. This includes two new options: -j to select PGRP display; and -g<list> to specify a list of PGRPs whose files are to be displayed. (-j was chosen to match a similar option in some ps(1)'s.)

Philippe-Andre Prindeville <philipp@res.enst.fr> suggested this addition.

3.04 July 15, 1994

Corrected handling of port name component of -i
option on systems where htons() is required.

Corrected casting of UID arguments -- needed when
UID is a short and the compiler wants the minimum
argument size to be larger.

3.05 July 26, 1994
Added printing of DECnet socket information for
the Ultrix 4.2 and 4.3 dialects. John Beacom
<beacom@wisnud.physics.wisc.edu> kindly provided
the test system. A new Configure abbreviation,
ultrix42dn, must be used to activate the DECnet
support.

3.06 September 2, 1994
The major news in this revision are the V/88 R32V3
and R40V4.2 ports for Motorola M88K systems. Chance
Neale <cneale@panix.com> kindly provided test systems
and Mike Feldman <feldman@charm.urbana.mcd.mot.com>
provided technical assistance.

Version 3.06 contains other, minor modifications:

* The Configure
script has been isolated from the
environment, thanks to a report of a CC=xlc
problem from Johnny Tolliver <jxt@ca04.cad.ornl.gov>.
Johnny also suggested a better form for the install
commands in the Makefile's install rule. This
change affected all the dialect Mksrc scripts.

A new HP-UX abbreviation (hpuxx25) was added
for systems that have the /etc/conf/x25 include
files. The old HP-UX abbreviation (hpux) no
longer references /etc/conf or defines HPUX_CCITT.

* The command "lsof `tty`" now works most places (maybe
not always for SGI IRIX, but I tried) thanks to a bug
report from Casper Dik <casper@fwi.uva.nl>.

* A mode has been added to disable forking when
debugging. The V/88 R40V4.2 debugger needed that.

* Printing of stream NAMEs was standardized (IRIX
was different) and an attempt was made to avoid
stream NAMEs like /dev/ttyx4->/dev/ttyx4.

* A new documentation file, 00FAQ, accompanies the distribution. It contains frequently asked questions about lsof, and the best answers I can manage to give.

* I have a new HP-UX test system, courtesy of Dave Curry <davy@ecn.purdue.edu> and George Goble <ghg@ecn.purdue.edu> of Purdue's Engineering Computer Network. I want to thank J. Nelson Howell <nelson@zeus.mgmt.purdue.edu> of Purdue's School of Management for his prior support of lsof development under HP-UX.

3.07 September 8, 1994

This revision contains a small security enhancement. Tim Ramsey <tar@ksu.ksu.edu> pointed out that lsof's setgid or setuid power might allow it's user to read an alternate kernel name list or memory file via the -c and -k options that the real UID might not have authority to read. In revision 3.07 lsof uses access(2) to check the real UID's authority to read files named with -c and -k.

3.08 September 23, 1994

This revision contains support for Novell's UnixWare, versions 1.1, 1.1.1, and 1.1.2. Peter Lord <plord@novell.co.uk> made this possible by providing a copy of UnixWare and supplying technical advice. Binaries and sources for this version will be available from Novell sources. See the Novell UnixWare section of the distribution's 00README file for details.

This version adds /proc file system support to the dialects derived from SYSV R4 (except EP/IX 2.1.1): FreeBSD, IRIX 5.2, Solaris, UnixWare, and V/88 R40V4.2.

This version compiles under IRIX 4.0.5 again, correcting a problem introduced at version 3.06 in the "lsof `tty`" fix.

HP-UX now skips file systems whose mount type is "ignore". The presence of the -c option is now controlled by the HASCOPT definition in machine.h. The HASSWAPPORT option is now documented and

implemented correctly. Hans Petter Christiansen
<hpchr@dxcern.cern.ch> suggested these changes.

3.09 October 18, 1994
This revision recognizes the DEC Alpha OSF/1 V3.0,
IBM AIX 4.1, and
Solaris 2.4 dialects. It has
support for the SunOS 4.1.3 PC file system and two
bug fixes: an IRIX, V/88, and Solaris file argument
processing bug; and a V/88 include error.

Alex Kreis <akreis@us.oracle.com> made the initial
request for DEC OSF/1 V3.0 support and provided
help with testing. Ron Young <ron@screamer.nevada.edu>
graciously provided a test host. James Woodward
<woodward@zk3.dec.com> provided invaluable clues
to V3.0 kernel organization. Others who read the
alpha-osf-managers mailing list made generous offers
of test facilities, and I thank them, too. The
decosf3 abbreviation was added to the Configure
script, and the script was modified to request the
name of the system configuration subdirectory of
/sys where the configuration-specific header files
reside for the decosf1, decosf2, and decosf3
configuration abbreviations.

Mark Peek <mark_peek@taligent.com> provided and
tested the AIX 4.1 changes.

Casper Dik <casper@fwi.uva.nl>
provided and tested
the Solaris 2.4 changes.

Friedel Loinger <friedel@wise.tau.ac.il> suggested
the addition of support for the SunOS 4.1.3 PC file
system ("pcfs").

Andreas Stolcke <stolcke@ICSI.Berkeley.EDU> supplied
a fix to a file argument processing bug that causes
lsof to crash when supplied the path of an NFS
mounted file. The bug affects lsof versions for
Motorola V/88 R40V4.2, SGI IRIX 5.2, and Solaris
2.[123].

Corrected an error in the path to include prdata.h
in dlsof.h for Motorola V/88 R40V4.2.

3.10 October 21, 1994

This revision adds support for the cache and PC file systems to Solaris. It fixes these bugs: a problem with the display of Motorola V/88 R40V4.2 device numbers; and a failure of Readlink() to resolve symbolic links completely in all cases.

Some major internal restructuring was necessary to be able to display negative inode numbers for SunOS PC file system nodes, while displaying them as unsigned numbers for Solaris, hence all dialect versions were affected.

3.11 October 28, 1994

This revision adds support for Linux version 1.0.9. Tim Korb <jtk@arthur.cs.purdue.edu> kindly provided a development system in the Computer Science Department at Purdue. It is likely that the Linux revision will have to be adjusted for each installation, and it is probable that this revision will not run under later versions of Linux. See the 00FAQ and 00REAME files for more information on Linux tuning.

3.12 October 29, 1994

This revision supports Linux version 1.1.47 -- the Yggdrasil Plug-and-Play Linux Fall '94 release. Both Linux versions now obtain kernel symbol addresses from the /zSystem.map file.

November 4, 1994

Hendrik G. Seliger <hank@Blimp.automat.uni-essen.de> reports that lsof compiles and seems to work under Linux 1.1.61. He used the linux1147 Configure abbreviation. Marty Leisner <leisner@sdsp.mc.xerox.com> reports that the linux1147 Configure abbreviation produces a working lsof for Linux 1.1.64, too.

3.13 November 11, 1994

This revision contains Pyramid DC/OSx support, provided by Anthony Shortland <Anthony.Shortland@FMR.com>.

Marty Leisner <leisner@sdsp.mc.xerox.com> reported a segmentation violation failure in Linux lsof. In response I changed its task structure access to use /dev/kmem instead of mmap'ing kernel memory. This avoids a possible segmentation violation when bad pointers are obtained from kernel memory. I

also enabled the setting of Linux INET and Unix
select flags so that the -n and -U options work --
I forgot to do that when I did the Linux port.

Marty Leisner reports that the lunix1147 Configure
abbreviation produces a working lsof for Linux
1.1.64, too.

Francois Pindard <pinard@iro.umontreal.ca> provided
a correction to the Linux install rule.

3.14 November 16, 1994
This revision adjusts the Configure script stanzas
for DEC OSF/1, Motorola V/88, Pyramid DC/OSx, and
Ultrix.
It also contains additional support for
DC/OSx and Ultrix.

Bruce Beare <bjb@pyramid.com> and Robert Vernon
<bob@pyramid.com.au> helped me understand Pyramid
nomenclature. Robert Vernon provided DC/OSx support
for the RxFS file system and added machine series
auto-detection to the Configure script. Alex Podlecki
<a.podlecki@att.com> helped test the updated DC/OSx
distribution.

Chris Timmons <skynyrd@tahoma.cwu.edu> provided
information on RISC and VAX Ultrix 4.4 that led to
correct prefixing of nlist() names. I updated the
Configure script to detect Ultrix version, machine
hardware type, and the presence of DECnet support.

I also updated the OSF/1 and V/88 Configure scripts
to determine configuration parameters automatically.

3.15 November 25, 1994
Corrected DEC OSF/1 V2.0 support of the ADVFS file
system.

Bernt Christandl <beb@mpe-garching.mpg.de> and Alex
Kreis <akreis@us.oracle.com> helped test. No OSF/1
V1.x system with ADVFS
was available for testing.

3.16 December 2, 1994
Fixed some device number handling bugs in DEC OSF/1
V2.0 and V3.0 support.

3.17 January 25, 1994

lsof now supports SGI IRIX 5.3, thanks to changes supplied by Dave Olson <olson@anchor.engr.sgi.com>; and SCO OpenDesktop or OpenServer releases 1.1 and 3.0, thanks to support from Dion Johnson <dionj@sco.com>, Bela Lubkin <belal@sco.com>, and Nathan Peterson <nathanp@sco.com>.

Dave Olson pointed out an IRIX stream handling bug in sgi/dnode.c. When I investigated it, I found that it had implications wider than SGI IRIX. The eventual fix provided the display of inode numbers for character devices when the inode number must be obtained from /dev. IRIX, Solaris, and SunOS benefit from the fix.

I added version detection to the Configure script, so there is now just one Configure abbreviation for IRIX versions 4.05, 5.2, and 5.3 -- ``irix''. (The Configure abbreviation for the SCO dialect ``sco''.)

Ian Darrow <ian@sq.com> pointed out that lsof wouldn't Configure or work properly under Solaris on an i86pc. Sorting out the difficulties made clear that the HASSWAPPORT definition should be removed from every machine.h file and that ntohs() should be used in every dsock.c on every port supplied to printinaddr().

Andreas Stolcke <stolcke@ICSI.Berkeley.EDU> pointed out a method that sometimes allows lsof to report on files open to a crashed or unavailable remote NFS server. This led to the addition of code, where possible, to estimate the device number of mount points that cannot be stat()'d. The alternate device number can come from /etc/mtab or /etc/mnttab, or from the dialect's version of them. On systems that use /etc/mtab or /etc/mnttab, it is sometimes possible to add the device number manually to the mount options field in the form ``dev=xxxx''. Some internal changes in the way lsof handles device numbers were necessary to prevent ones whose dev_t typedef is a signed short from causing sign extension when promoted to integers as function arguments.

David Addison <addy@meiko.co.uk> and Robert Ehrlich
<Robert.Ehrlich@inria.fr> pointed out that lsof
errs when reporting device numbers and other node
information for some special Sun files. I rewrote
most of sun/dnode.c to correct the problem; Robert
rewrote it again; and I rewrote it once more.
David and Robert helped me test it under Solaris
2.[34] and SunOs 4.1.[23].

While using code from the Motorola V/88 port for
the SCO port, I found and fixed some NFS bugs in
the V/88 port.

3.18 January 31, 1995
I added the -b and -w options. The -b option causes
lsof to avoid the functions lstat(2), readlink(2),
and stat(2) that might block in the kernel -- e.g.,
when they reference an inaccessible NFS file system.
Instead it uses alternate device numbers obtained
from the mount table, where possible.

The -w option causes lsof to suppress
warning
messages -- e.g., when the -b option has been
specified. The suppression of warning messages
was formerly bundled into the -t option. The -t
option now selects -w.

I figured out how to make alternate AIX 3.2.5 device
numbers from the kernel mount structure. The new
-b option therefore works under AIX 3.2.5.

With the help of Chance Neale <cneale@panix.com>
I fixed bugs in the Motorola V/88 R32V3 NFS support.

I added a solariscc Configure abbreviation for those
who want to use Sun's C compiler.

3.19 February 10, 1995
Robert Ehrlich <Robert.Ehrlich@inria.fr> pointed out
that lsof might be able to gather more complete path
name information from the kernel's name cache. Name
cache access may be inhibited with the new -C option.
Revision 3.19 implements name cache access for:

DEC OSF/1 [23].0
Dynix (Purdue 3.0.12)
EP/IX 2.1.1

FreeBSD 1.1.5.1
HP-UX 9.01
Motorola V/88 R40V4.2
NEXTSTEP 3.1

SGI IRIX 5.3
Solaris 2.[34]
SunOS 4.1.x
Ultrix 2.2 and 4.2

Revision 3.19 does NOT implement name cache access for:
===

AIX The knlist() function won't
return cache addresses --
some IBM wisdom to "protect"
their customers.

Linux My only access is to 1.0.9,
and it doesn't seem to have
a kernel name cache.

Motorola V/88 It doesn't have a unified
R32V3 name cache.

Novell UnixWare I don't have a test system.

Pyramid DC/OSx I don't have a test system.

SCO OpenDesktop It doesn't have a unified
OpenServer name cache.

SGI IRIX 4.0.5H I saw no unified name cache
in the header files before
my 4.05H system was converted
to 5.2.

SGI IRIX 5.2 I don't have a test system.

Another Robert Ehrlich suggestion led to the
establishment of a device cache file feature. The
new -D option gives control of it. This feature
speeds lsof dramatically
on some dialects after
lsof has been called once and the cache has been
built. (Calling stat(2) on several hundred or
thousand /dev nodes can take a long time.) The
feature can be disabled or modified in the machine.h

header file and the dialects/*/ddev.c source file
when lsof is built.

3.20 February 23, 1995
Upgraded Linux socket handling for versions 1.1.75
or greater with help from Marty Leisner
<leisner@sdsp.mc.xerox.com> and Linus Torvalds
<Linus.Torvalds@cs.Helsinki.FI>. There is now a
single Configure script abbreviation for linux.

Updated for Motorola V/88 R40V4.3 with help from
Mike Feldman feldman@charm.urbana.mcd.mot.com>
and Chance Neale <cneale@panix.com>.

Updated for SGI IRIX 6.0 with help from Przemek
Klosowski <przemek@rrdjazz.nist.gov and Dave Olson
<olson@anchor.engr.sgi.com>.

Corrected access of device cache file that needs
to be updated so that someone other than the file
owner can rewrite it. Deleted the chmod() failure
warning.

Updated
Configure and the Sun Makefile to specify
absolute paths to the Sun install program.

3.21 March 3, 1995
Removed BSDI BSD/386 support, because I no longer
have a test system, and I needed to have separate
sources for two of the three dialects (FreeBSD,
and NetBSD) once served by the BSDI BSD/386 sources.
FreeBSD sources are now in the freebsd subdirectory;
NetBSD, in netbsd.

With the help of Greg Earle <earle@isolar.Tujunga.CA.US>
and Paul Kranenburg <pk@cs.few.eur.nl> installed
new NetBSD support for versions 1.0 and 1.0A. The
NetBSD 0.9 support was removed. The 1.0A support has
been tested on Intel and SPARC-based systems.

3.22 March 9, 1995
Fixed a bug in name cache handling that occasionally
caused lsof to cause a segmentation violation on
FreeBSD. Although the bug didn't do that anywhere
else, recreated the binaries of all dialect versions
that use the affected code from rnam.frag and rnch.frag.

3.23 March 24,
1995
Removed forgotten HASSWAPPORT reference from HP-UX
machine.h and inserted ntohs() calls in the printinaddr()
calls of dsock.c for HP-UX and NEXTSTEP.

Added support for NEXTSTEP 3.3, courtesy of Allan
Nathanson <ajn@NeXT.com>

3.24 March 31, 1995
Changed Configure script to handle DEC OSF/1 V3.2.
Removed leading zero from DEC OSF/1 and ADVFS
version values. Added dialects/osf/dec_a/3.2 header
file directory, courtesy of Dave Morrison
<dmorriso@us.oracle.com>, who also tested the 3.24
DEC/OSF1 V3.2 lsof.

3.25 April 5, 1995
Ported to RISC/os on a R2030 (R2000-based) system,
provided by Zdenko Tomasic <zdenko@harvey.cam.rice.edu>.

Tightened security on the device cache file; lsof
always tries to change its ownerships to the effective
IDs after creating it. This was suggested by Stefan
Kelm <kelm@cert.dfn.de>.

Ported to FreeBSD 2.0, starting with work done by
Kurt Jaeger <pi@complx.stgt.sub.org> on lsof revision
3.16. Ade Barkah <mbarkah@hemi.com>
and William
McVey <wam@cs.purdue.edu> provided test systems.

3.26 April 20, 1995
Ported to SCO OpenDesktop or OpenServer 5.0 (aka
Everest and 3.2v5.0.0). Hugh Dickins <hughd@sco.COM>,
Bela Lubkin <belal@sco.COM>, Craig B. Olofson
<craigo@sco.COM>, and Nathan Peterson <nathan@sco.com>,
provided me an early-release version of 3.2v5.0.0
and gave technical advice.

Added length checking of the Namech buffer to the
printinaddr() function.

3.27 May 2, 1995
Corrected typo in AIX install rule, courtesy of a
report from John Colgrave <colgrave@hursley.ibm.com>.

At the suggestion of Greg Earle

<earle@isolar.Tujunga.CA.US> added a function to
print the name of the unknown protocol (the AF_*
symbol), when there is no specific processing for
it in dsock.c. This change affected most dialects:
exceptions are DC/OSx, Linux, Motorola V/88, and
UnixWare.

3.28 May 26, 1995
Added support for Sequent PTX 2 and PTX 4. The
PTX 2.1.6 and PTX 4.0.2 test
systems and technical
advice were provided by Gerrit Huizenga
<gerrit@sequent.com>, Peter Jordan <petej@sequent.com>,
Kevin Smallwood <kcs@sequent.com>, and Mike Spitzer
<mks@sequent.com>. (Thomas A. Endo) <tendo@netcom.com>
and (David Putz). <PutzDW@PO1.LMB.unisys.com> tested
under PTX 2.1.5. Bob Foertsch <foertsch@uiuc.edu>
tested under PTX 4. Kevin Smallwood tested under
2.1.1. Others who helped include Shane Kenney
<shane@sequent.com>, Stephan Rossi <rossi@mtu.edu>,
Douglas R. Smith <drsmith@us.oracle.com>, and Joel
White <jdwhite@netcom.com>.

Changed the local dev structure's name to l_dev to
avoid conflicts with the PTX dev structure. Added
a common/rdev1.frag -- a variant of rdev.frag. It's
used by EP/IX, PTX, RISC/os, and V/88.

Changed printname() to check Namech first and print
it if it contains something. This eliminates some
hacks in the handling of names for streams, but
generates some duplicate device name look-up code
in
the dnode.c files of some dialects.

3.29 June 2, 1995
Added clone device support to Motorola V/88 R40V4.3.

Added a generic ``-X" option for dialect-specific
use. Used it in AIX to allow use of readx(). Lsof
no longer uses readx() by default, because its use
can cause an AIX 3.2.x and 4.1.x kernel error to
appear. Kevin Ruderman <rudi@acs.bu.edu> reported
this bug to me and the possibility that lsof might
trigger it.

The error, known as the Stale Segment ID bug, hangs
the kernel in its dir_search() function, thus

hanging the application process that called it so
tightly that the application process can neither
be killed nor stopped. The bug does not directly
affect lsof, but may cause the hang when the kernel
is searching directories for other processes.
00FAQ and 00README describe the Stale Segment ID
bug in more detail. Consult dialects/aix/machine.h
for options on enabling or disabling readx() by
default, or permanently enabling or disabling
it
with the HASXOPT and HASXOPT_VALUE definitions.

When not using readx(), AIX lsof may not report
fully on all text and loader references. Changes
to the kernel getuser() function in AIX 4.1.1 appear
to have eliminated the text file and loader file
reference information that once led lsof to use
readx(); of course, without that information, lsof
can no longer report on the executing text file or
shared libraries in 4.1.1.

Changed the Configure script to use a single
abbreviation, aix, for AIX. Configure now uses
/usr/bin/oslevel to determine the AIX version; in
the absence of /usr/bin/oslevel, Configure issues
a warning and assumes the version is 3.2.0. Source
code changes were made to dialects/aix/*.[ch] to
accommodate the new form of the _AIXV value.

3.30 June 8, 1995
Added -c to the installation of the man page in
the Ultrix Makefile's install rule. Thanks go to
Jules van Weerden <Jules.vanWeerden@let.ruu.nl>
for noticing this
omission.

Made FreeBSD 2.0 changes: 1) added automatic sensing
of the FreeBSD 2.0 boot file path, using the
getbootfile(3) function (suggested by Ade Barkah);
2) changed kvm_getprocs(3) function call to use
KERN_PROC_ALL symbol from <sys/sysctl.h>, thus
eliminating incorrect use of the <sys/kinfo.h> and
<sys/kinfo_proc.h> header files; and 3) removed
<sys/kinfo.h> and <sys/kinfo_proc.h> header files
from the dialects/freebsd/include/2/sys subdirectory
of distribution.

Tested under AIX 4.1.2.

3.31 June 16, 1995

Added the NOUSAGEONERR definition to allow lsof to be compiled with the displaying of usage information after option error messages disabled. Lsof is distributed without the NOUSAGEONERR definition -- i.e., usage output is displayed after option error messages.

Worked on documentation in the 00* files and the man page, adding tables of contents, making usage more consistent, trying to insure proper dialect titles, and inserting some notes about distribution restrictions (few) and warranty (none).

Fixed Motorola V88 R32V3 bug in handling Internet files. This bug was introduced some time ago, but I have only recently been able to test under R32V3 again.

3.32 June 23, 1995

Added the ability to the Linux nlist() function to automatically detect that the kernel binary is COFF or ELF form. Also corrected the UID_ARG cast from int to u_int. These changes were suggested by Michael Shields <shields@tembel.org>. Joseph J. Nuspl Jr. <nuspl@nvwls.cc.purdue.edu> provided a test system.

Updated lsof for HP-UX 10. Richard Allen <ra@rhi.hi.is> provided a test system. The hpux stanza in the HP-UX configure script was updated to sense the HP-UX version automatically, and to sense the availability of CCITT header files in /etc/conf/x25.

3.33 June 28, 1994

Added options to select "field" output that can be parsed by a subsequent program. (The -f, -F, and -0 options form the selection set.) Provided sample awk and Perl scripts for parsing and displaying field output. This feature was suggested by Dan Bernstein <djb@silverton.berkeley.edu>.

Tested under PTX 4.0.3.

3.34 June 30, 1995

Changed display of file offset to decimal in the
form "0t12345678" if it is less than 100,000,000.
The offset is displayed in hexadecimal in the form
"0x12abcdef" if it is larger than 99,999,999.

Changed inode field output from signed to unsigned
decimal. Updated the list_fields.{awk,perl} and
list_NULf.perl5 scripts.

Documented the truncated inode output form (leading
`*' and 5 digits) for inodes that are too large
for the output field; thanks go to Leonard Sitongia
<sitongia@zia.hao.ucar.edu> for pointing out that
this wasn't documented.

3.35 July 9, 1995
Added loopback file system support to Solaris with
advice from Casper Dik <casper@Holland.Sun.COM>.

Removed the NOUSAGEONERR compile option in favor of
producing a shortened
usage message when option
errors are detected.

Marty Leisner <leisner@sdsp.mc.xerox.com> provided
code to validate the Linux system map file (/System.map
or /zSystem.map). If lsof detects that the system
map file doesn't match the booted kernel, it
complains and quits.

Updated host name cache to include dot forms -- e.g.,
when the host name can't be obtained via gethostbydddr().
This prevents subsequent lookup delays for the same address.

3.36 July 20, 1995
Updated kernel name cache handling to assume a default
size for pointer-linked caches (DEC OSF/1, FreeBSD,
NetBSD, and SGI IRIX 5.3) when the kernel's cache size
variable has a value of zero. A warning is issued,
but lsof proceeds to read and use the name cache.

Folded rdev1.frag into rdev.frag by supporting a
HASDNAMLEN #define for those dialects whose DIRTYPE
structure has a d_namlen definition.

Updated Linux distribution to avoid using d_namlen
from struct dirent if the Linux version

is 1.2.10 or
greater. This avoidance might work on earlier
version of Linux, too, but I have no way of telling.

Added support for FreeBSD 2.0.5. Ade Barkah
<mbarkah@hemi.com> provided a test system.

Added WARNDEVACCESS definition to machine.h control
the default issuance of device directory and
subdirectory access errors.

Changed options:

-m (mount warning) option deleted
-c (core file) option changed to -m
-c option redesignated as command selector
-d (device warning) option deleted
-d option redesignated as file descriptor selector
-O (order) option changed to less-overhead option
-r option added to enable repeat mode

Added a repeat mode in which lsof will display
output, sleep for the number of seconds defined by
the repeat-mode option, -r <seconds>, and then
display output again, doing this repetitively until
it receives an interrupt or quit signal. This
option is much more efficient for monitoring a file
than calling
lsof repeatedly from a shell script,
since it entails only one set of lsof startup
operations.

The CANDOCHILD compile-time option has been removed.
The -O run-time option will do the same thing.

3.37 July 27, 1995
Fixed incorrect setting of low-overhead flag from -O
option.

Marty Leisner reports that d_namlen is not needed
under Linux 1.2.8. Changed the #if test that sets
HASDNAMLEN accordingly.

Made more changes to option processing: combined
-f, -F, and -0 into -F (-0 becomes a field identifier
value for -F); now allow -F, -g, -r, and -S to have
an optional value; made -F? (help) and -F0 (all
fields plus NUL terminator) special forms of -F;

and added support for --. These option processing changes are handled with a local getopt() function (named GetOpt() to avoid confusion).

Made yet another attempt to create "standard" install and deinstall SunOS/Solaris Makefile rules.

Corrected improper use of examine_lproc() when in repeat
mode.

3.38 August 3, 1995
Modified Linux and PTX to show TCP's "send next" sequence number as the offset for TCP socket files.

Added some version tests for Linux 1.3.0, provided by Roman Gollent <roman@portal.stwing.upenn.edu>.

Added some more PTX tests around code that shouldn't be active when the NFS layered product is unavailable. Mark Vasoll <vasoll@a.cs.okstate.edu> provided them.

3.39 August 10, 1995
Added generic support for dialect-specific elements in the lfile structure. The HASLFILEADD and SETLFILEADD macroes are used in lsof.h to define the elements and in proc.c to preset them. Field identifiers `1' through `9' are allocated to dialect-specific files. The HASFIELDAP<x> strings define the -F? help text for the FieldSel[] table of store.c, and LISTLFILEAP<x> are macroes, used in the print_proc() function of proc.c, to list fields. (<x> is the field identifier.) Other private element and field processing should be done in dialect-specific
modules.

Used {HAS,SET}LFILEADD, HASFIELDAP[12], and LISTLFILEAP[12] to define and list link count and inode address lfile elements under PTX. Used the -X option to control when the values are displayed.

3.40 August 25, 1995
Added support for Solaris 2.5-BETA, including rudimentary support for door files and extensive support for fattach'ed files with the help of Henry Katz <hkatz@panix.com>, Joseph Kowalski <jek3@jurassic.Eng.Sun.COM>, and Mike Tracy

<mtrac@jurassic-45.Eng.Sun.COM>.

Changed most dialects to use slightly safer fchown() on the device cache file. Changed dvch.frag to avoid creating a device cache file that is owned by root. Cleared caches when reading of device cache file fails and removed extra NL from device cache error messages.

After receiving yet another complaint about Makefile install rules, I decided to remove all install and deinstall rules from the distribution Makefiles. The Makefiles now contain a set of comments (echo commands) that describe what the install rule might be. The lsof user is now free to construct install and deinstall rules that meet local conventions and preferences.

3.41 September 5, 1995

Changed Linux kernel symbol handling to avoid the stripping of leading `_' characters that was installed in revision 3.32. (Recent Linux kernels have some symbols that are the same except for the leading `_'.)

The Linux kernel loader format is now determined by testing for "_system_utsname" (COFF) and "system_utsname" (ELF) in the symbols returned by the get_kernel_syms() syscall. If neither or both symbols are present, a warning is issued and COFF format is assumed. If the loader format is COFF, then kernel symbols important to lsof are assumed to have a leading `_'.

Because recent Linux releases add a parameter hashing suffix to kernel symbols, lsof removes it before comparing kernel symbol names and addresses to those in /[z]System.map.

Marty Leisner, Keith Parks <emkxp01@mtcc.demon.co.uk>, and Michael Shields helped me with the Linux changes.

After much discussion of the security of the device cache file on the bugtraq mailing list, I adopted a suggestion from Dave Sill <de5@sws5.CTD.ORNL.GOV>. His suggestion removes the world-writable device

cache file from /tmp and creates instead a mode
0600 device cache file in the home directory of
the real user ID that is executing lsof. Lsof
issues a warning message when it does this. (The
warning can be suppressed with -w.) The HASDCACHE
definition becomes a relative path. When lsof is
run from root, it will create a device cache file
in root's home directory, e.g., / or /root, but
the file will be readable and writable only by
root. This should make the device cache file much
more secure.

Added support for SGI IRIX 6.1. Dave Olson provided
technical support and Przemek Klosowski supplied
a test system. Since Przemek's
system formerly
supported my testing of lsof for IRIX 6.0, its
update to 6.1 means I have not tested lsof under
IRIX 6.0 since revision 3.39.

Changed name list structure element initialization
for V/88 to make gcc happy. Albert Chin-A-Young
<china@cig.mot.com> suggested this.

3.42 September 7, 1995
Changed device cache file naming process to add a
suffix formed of an underscore, followed by the
first component of the host name returned by
gethostname(2). This allows lsof to create separate
device cache files for each host from which it is
run for the same UID when the UID's home directory
is shared by the hosts via NFS.

3.43 September 12, 1995
Enabled SCO searching for stream files and Release
5.0 Unix domain socket files by name.

Defined HASDOPTPATH for dialects that can supply
a path with -Db, -Dr, and -Du. Defined it for all
but DC/OSx, UnixWare, and V/88. Used it in the
ctrl_dcache() function of arg.c to enable and
disable -Db,
-Dr, and -Du.

Used is_readable() in dvch.frag when opening the
device cache file for reading.

3.44 September 19, 1995

Added test for setuid-root state so that some
security-sensitive code now disabled by #define's
can by dynamically disabled.

Enhanced, extended, improved, secured, and documented
formation and use of the device cache file path.
More options, more carefully controlled are now
available. A separate documentation file, 00DCACHE,
accompanies the distribution to explain the device
cache file path handling.

Where possible, lsof now drops setgid permission
as soon as possible. Two exceptions are the Solaris
and SunOS versions of lsof which need to close and
re-open kvm access. Setuid-root lsof implementations
must retain that permission to access files in /proc.

Improved the README.lsof_<revision> file that
appears in the lsof wrapper tar file with help from
Jon A. Tankersley <tank@amoco.com>.

Added Veritas file system support
to the HP-UX
dialect port.

Albert Chin-A-Young tested lsof under Motorola V/88
R40V4.1 and provided #if/#else/#endif changes.

3.45 September 20, 1995
Enabled setgid permission surrender for Solaris
and SunOS dialects.

3.46 October 5, 1995
Added more conversions to HASPERSDC, based on
suggestions from John Gardiner Myers <jgm+@CMU.EDU>.
They make it possible to locate the personal device
cache file in /tmp, for example. A new -D function,
`?', reports device cache file name formation
information.

Gained access to AIX 4.1.3, compiled lsof there, and
found that it seems to work.

Tested lsof under FreeBSD 2.1.0-950726-SNAP. John
Clear <jac@dragonfly.vet.purdue.edu> kindly provided
a test system.

Added a Customize script that helps with the job
of modifying some important (e.g., security-related)
compile-time options. Configure calls Customize,
but can be told not to with the -n|-nocust options.

Fixed over-sensitivity to unexpected kernel
file
structure pointer values in HP-UX version that led
to premature exit. Lionel Cons <cons@dxcern.cern.ch>
pointed out the problem.

With the help of Leif Hedstrom <leif@infoseek.com>
identified a pair of conflicting Solaris 2.4 patches
that prevent lsof from working. A work-around is
described in section 00FAQ.

3.47 October 16, 1995
Enabled suppression of an HP-UX pstat() warning
message. Added big_brother.perl5 to field output
scripts/ subdirectory. Both changes are courtesy
of Lionel Cons <Lionel.Cons@cern.ch>.

Added a test for automount detritus in the SCO mount
table.

Added kernel name cache support to SCO dialect.
Modified most name cache support to report full
path names without the intervening `` -- '' when
possible.

Added an Inventory script to check the contents of
the distribution, using a new file, 00MANIFEST.
The Configure script normally calls Inventory.
Changed the -n option to Configure to avoid calling
the Customize
and Inventory scripts and dropped
the -nocust option. The presence of .neverCust
suppresses the calling of Customize; .neverInv,
Inventory. The Inventory script creates .ck00MAN
when it completes, so that subsequent calls to
Inventory won't check the inventory again -- although
the caller is given the opportunity to have the
inventory rechecked.

Added PTX 4.1.0 support, courtesy of a test system
supplied by Kevin Smallwood <kcs@sequent.com>.

Picked lint for gcc in the V/88 dproc.c from hints

provided by Albert Chin-A-Young <chinay@cig.mot.com>.

3.48 October 20, 1995

Improved root directory detection during name cache lookup.

Remove the Novell UnixWare and Pyramid DC/OSx ports from the distribution, because I have not been able to test them for 40 or more revisions. Their pieces may now be found on vic.cc.purdue.edu in pub/tools/unix/lsof/OLD/{binaries,dialects}.

Corrected an error in Customize that caused it to incorrectly redefine HASSYSDC to HASSYSDCPATH. This was reported by Michael Beirne <beirne@dcdsv0.fnal.gov>.

Made sure that lsof will compile when HASDCACHE is undefined. A problem with a reference to the DChelp symbol was reported by Vasco Pedro <vp@fct.unl.pt> and resolved by always defining DChelp.

Corrected handling of -c and -m options.

Corrected the reading of the SCO /etc/mnttab. Bela Lubkin <belal@sco.com> helped me understand its special multi-line format. The "nothing/nowhere" lines are continuations of the file system directory and device names when either are > 31 characters.

Corrected SCO version list in Configure help output.

Update special SCO name cache code to make it more robust.

Add support for IRIX 6.0.1 with the help of Eberhard Mater <system@grzap1.rz.go.dlr.de>.

3.49 October 25, 1995

Removed need for dialects/sgi/irix601hdr subdirectory, replacing it with one created by dialects/sgi/Mksrc and composed of symbolic links to dialects/sgi/irix6hdr. Eberhard Mater did the testing.

Added file system inode number to the local file structures of the DEC OSF/1, DYNIX, EP/IX, HP-UX, NeXT, PTX, RISCos, SGI, Sun, and V/88 dialects.

Added code to name cache, node, and VFS functions
to set the file system inode number and use it for
faster recognition of files on the file system
mount point.

Added kernel name cache support to Linux. This
has been tested only under release 1.2.13.

3.50 October 31, 1995
Updated 00FAQ: reorganized and renumbered sections;
added some DEC OSF/1 sections; section about the
Solaris and SunOS Sun KERNELBASE.

Added an alternative readdir() function, called
ReadDir(), to dialects/osf/ddev.c This function
was supplied by Duncan McEwan <duncan@comp.vuw.ac.nz>,
who discovered that the getdirentries() function
in DEC OSF/1 versions 3.[02] returns an incorrect
length for the /dev/fd directory when it is a file
system mount point. Modified the Configure script
to
define USELOCALREADDIR for 3.[02] to enable
using this local function.

Modified the Solaris/SunOS Mksrc to create a dummy
(empty) kernelbase.h for Solaris 2.5 (5.5).

3.51 November 8, 1995
Modified the Configure script to declare the kernel
state definitions appropriate to IRIX 6.1 on IP21
and IP26 platforms. News of the need for this came
from Kate Fissell <Kate.Fissell@IUS4.IUS.CS.CMU.EDU>
and Dave Olson <olson@anchor.engr.sgi.com>.

Modified the SGI IRIX dproc.c to provide more
information when the kernel's idea of the size of
a proc structure doesn't match sizeof(struct proc).
This mismatch can occur if the wrong kernel state
definitions are used to condition the header files
(e.g., <sys/proc.h>) included when compiling dproc.c.

Made the -i option with no arguments equivalent to
the -n option -- i.e., they both select the listing
of all open Internet files.

Supplied a missing "you" in the Customize script
introduction. John Jackson <jrj@cc.purdue.edu>
noticed

the omission.

Modified the Customize script to put long messages in here documents rather than echo statements, so that changing and reformatting them is easier. John Jackson offered this helpful suggestion.

Fixed a port number cast bug in Solaris 2.[45], courtesy of information and code supplied by Allan Black <allan@scotnet.co.uk>.

Automated the detection of Solaris 2.4 patches 101945-32 and 102303-02 that cause the installed kernel's user structure to differ from the one defined by <sys/user.h> because of a patch to <sys/auxv.h> that wasn't applied when the kernel was built. The Configure script invokes an alternate auxv.h file and warns that it is doing so.

Fixed a problem with Inventory script that shows up on systems where echo is not an sh built-in. The bug was reported by Scott Ballew <smb@cc.purdue.edu>.

3.52 November 27, 1995

Added support for Linux versions 1.3.22 and above, courtesy of changes supplied by Keith Parks <emkxp01@mtcc.demon.co.uk>.

Changed -d option processing to allow specification of a comma-separated list of file descriptors.

Modified SCO support to allow NFS code to be optional at the request of Dave Gilbert <agere!dgilbert%peapod.com@zool.interaccess.com>.

Enabled HP-UX 10.x version to display device and inode numbers for FIFOs. The problem was reported by Jeff Earickson <jaearick@colby.edu>.

3.53 December 8, 1995

Enhanced NeXTSTEP FIFO reporting.

Fixed a formatting problem in the man page, reported by Angel Li <angel@flipper.rsmas.miami.edu>.

Added support for DEC OSF/1 4.0-BETA. Angel Li provided the test system.

Added a -v option to display lsof version information.
Marty Leisner <leisner@sdsp.mc.xerox.com> suggested
this.

Replaced touch with echo in Inventory script to avoid
DEC OSF/1 4.0 complaint.

Tested under PTX 4.1.2.

3.54 December 15, 1995
Added support for IRIX 6.2-BETA. The support for
older IRIX
versions changed considerably in the
process. Revision 3.54 has been tested under these
older IRIX versions: 5.3 and 6.1. Angel Li
<angel@flipper.rsmas.miami.edu> provided a test
system and Jim Brown <jim@guanabana.rsmas.miami.edu>
helped.

Tested under AIX 4.1.4.

Decommissioned the DYNIX port -- I no longer have
access to a test system.

Added the HASXOPT_ROOT define to allow the lsof
builder to restrict the use of the dialect-specific
X option (AIX and PTX currently) to processes whose
real user ID is root. Updated the Customize script
to provide an easy mechanism to change HASXOPT_ROOT.
AIX uses HASXOPT_ROOT; PTX does not. This change
was suggested by R. Lindsay Todd <toddr@rpi.edu>.

3.55 December 22, 1995
Eliminated need for modified DEC OSF/1 headers by
using #undef and #define statements. Chip Stettler
<STETTLERC@wlmpo1.wilm.ge.com> helped test.

Added quick start documentation file, 00QUICKSTART,
containing examples and explanations
of lsof use.

Verified that lsof works under the released Solaris
2.5.

3.56 January 2, 1996
Corrected lock reporting for Solaris 2.[345].

Corrected Linux malloc() kernel symbol handling bug,
reported by Keith Parks <emkxp01@mtcc.demon.co.uk>.

Corrected AIX loader text file selection bug; it
caused all process IDs to be listed when the -t
option and one file system name was specified.
The bug was reported by Christopher C. Evert
<cevert@waii.com>.

Made sure Solaris Kb variable is zeroed before
first use.

3.57 January 12, 1996

Updated SunOS port to obtain lock information from
v_filocks and the lock_list struct to which it
points.

Changed -H to -n. The function formerly performed
by -n can be done by using -i with no address.

Updated Linux FIFO support so that the display for FIFOs
contains device number, inode number, and NAME. Johannes
Kroeger <jkroeger@squirrel.owl.de> reported the lack of
these items in the Linux FIFO display.

Added
RCS identification to header files, Makefiles,
and common fragments.

Added BSDI BSD/OS support for 2.0, 2.0.1, and 2.1-BETA.
Terry Kennedy <terry@spcvxa.spc.edu> kindly provided a
2.1-BETA test system and did the 2.0.1 testing.

Modified the Inventory script to compensate for dialects
that have an expr that doesn't set its exit code when
string matches fail.

Converted internal representations of file offset and
size to unsigned long.

Corrected bug in NetBSD lock handling.

Corrected bug in FreeBSD file system type name handling.

Keith Parks <emkxp01@mtcc.demon.co.uk> reports lsof
3.57 compiles and runs under Linux 1.3.56.

3.58 February 7, 1996

Changed Solaris 2.3 configuration to pass the level of patch 101318 to the source code. This allows a Solaris 2.3 lock handling difference to be accommodated.

Updated 00QUICKSTART to reflect -n and -H changes made in revision 3.57. (Ooops!)

Changed Configure script to compile lsof for SCO versions
beyond 3.2v5.0.0 as it is compiled for 3.2v5.0.0. Bill Campbell <bill@celestial.com> reported he has done this successfully.

Added information to 00FAQ about a Linux kernel symbol problem (section 3.7.6) and included a <linux/random.h> patch to work around it. The patch was supplied by Keith Parks <emkxp01@mtcc.demon.co.uk>.

3.59 February 21, 1996

In response to a query from Louis Rayman <lou@asahi.ps.quotron.com>, added special support for Solaris "sockmod" streams, used for Unix domain sockets, that allows their file system device type and inode number to be displayed. It also allows lsof to search for them by name or type (-U).

Added range handling to -d argument.

Added the display of CDFS file size to DEC OSF/1 output.

Added an include of <rpc/xdr.h> to keep gcc on HP-UX 10 happy. Blair Zajac <blair@olympia.gps.caltech.edu> suggested it.

Added Ultrix 4.5 to support list, courtesy of a notification from Gregory Neil Shapiro <gshapiro@WPI.EDU>.

Added AFS support for Solaris 2.4 at the request of Michael L. Lewis <mlewis@morgan.com> and Phillip Moore <wpm@morgan.com>. Phillip helped me locate a test host, generously provided by Heidi Hornstein <heidi@cmf.nrl.navy.mil> with support from Chaskiel Moses Grundman <cg2v+@andrew.cmu.edu> and Sushila R. Subramanian <sushi@cmf.nrl.navy.mil>. Lsof is configured for AFS with a new script, AFSConfig.

Used a SunOS 4.1.4 test system, provided by Chaskiel, to extend Solaris AFS support to cover SunOS. Used another test system, provided by Chaskiel, to extend AFS support to NEXTSTEP 3.2.

Tested lsof under AFS on yet another Chaskiel-provided system, running Linux 1.2.13 and AFS 3.3, and found that lsof needed no changes to recognize its AFS files.

Used a test system, provided by Curt Freeland <curt@grumpy.cse.nd.edu> and Terry McCoy <terry@anubis.cc.nd.edu> to extend Solaris AFS support to Solaris 2.5 with AFS 3.4-Alpha.

Added the [-A A] option for specifying the name list file that contains dynamic kernel module addresses. This is defined for the NEXTSTEP, SunOS, and Solaris implementations.

Added stty isig handling (where appropriate) to the Customize and Inventory scripts.

Added support to Solaris for the nfs3 file system type. Its absence was reported by Patrick D. Sullivan <pds@snt.bellsouth.com>.

In response to a report from Tigran Aivazian <bs_s641@ceres.king.ac.uk)> corrected bug in Linux local nlist() function and based the default kernel loader format on a Configure test for CONFIG_KERNEL_ELF in /usr/src/linux/include/linux/autoconf.h.

Fixed a bug in name cache exploration for BSD-derived dialects -- e.g., FreeBSD.

Updated for NetBSD 1.1.

3.60 February 27, 1996

Improved Unix domain socket reporting for Solaris. Louis Rayman <lou@asahi.ps.quotron.com> helped test.

Added warning messages about absence of Linux CONFIG_MODULES definition in autoconf.h, leading to lack of get_kernel_syms() support. Tigran Aivazian <bs_s641@ceres.king.ac.uk)> supplied the information.

3.61 March 8, 1996
Added AFS support for AIX and HP-UX and verified
that the lsof Ultrix version needs no additions
for AFS. Chaskiel Moses Grundman <cg2v+@andrew.cmu.edu>
provided the HP-UX and Ultrix test systems. Jan
Tax <jan_tax@unc.edu> provided an AIX 4.1.4 test
system. Bob Cook <bobcook@SLAC.Stanford.EDU> provided
3.2.5 and 4.1.4 test systems.

Fixed minor problems and made improvements to
NEXTSTEP, Solaris, and SunOS AFS support. Changed
the AFSConfig script to ask for AFS version.

During the Hp-UX AFS work, added the hpuxgcc
abbreviation to the Configure script for configuring
lsof to be compiled with gcc under lsof.

Fixed a NetBSD mount structure array referencing
bug, reported by Peter Svensson <petersv@df.lth.se>.

Dropped support for Motorola V/88, because I no
longer have access to test systems.

Added rudimentary
support for the IRIX XFS file
system type, pending more information.

3.61 March 12, 1996
Corrected misuse of the LSOF_DINC shell variable
in the Configure script for HP-UX and Solaris.
Larry Rogers <lrr@cert.org> pointed out this problem.
Also removed an obsolete irix52 abbreviation from
Configure.

I didn't consider this change sufficient to warrant
a new version number, but just rebuilt the 3.61
distribution.

3.62 March 26, 1996
Updated AFS comments in 00README.

Supplied missing break statement in a N_VXFS case
clause in the HP-UX dnode.c.

Added Veritas file support to PTX, courtesy of code
supplied by Laurent Montaron <lpm@sequent.com> and
help from Kevin Smallwood <kcs@sequent.com>.

Created two new source modules (dnode[12].c) to
separate PTX header file node definitions and thus
eliminate symbol conflicts. Laurent did most of
the testing.

Added tests to BSDI, FreeBSD, HP-UX, IRIX, NetBSD,
NEXTSTEP, PTX, Solaris and SunOS lsof
versions that
allow them to report on unknown file system types.

Added IRIX 6.0.1 #if/#else/#endif support in response
to a report and suggested modifications from Scott
Presnell <srp@zgi.com>.

With the help of Dave Olson <olson@anchor.engr.sgi.com>
improved the IRIX 6.2-BETA XFS support.

3.62 March 27, 1996
Corrected SunOS incompatibility with last-minute
addition of Solaris MVFS support. The problem was
reported by Larry W. Virden <lvirden@cas.org>.

I didn't consider this change sufficient to warrant
a new version number, but just rebuilt the 3.62
distribution.

3.63 April 11, 1996
Upgraded Solaris MVFS support. In the process,
enlarged Solaris and SunOS DEVICE output column.

Changed SunOS 4.1.x Configure to make -DNOCONST
Makefile definition dependent on SC version.

At the suggestion of John DiMarco <jdd@cdf.toronto.edu>
suppressed two warning messages: the device cache
file creation warning when -Db has been specified;
and the one
issued when -D? is used with a non-writable
system-wide device cache file and there is no other
writable path. Also at John's suggestion redid
the manner in which child processes are used to
avoid kernel calls that might block; the net effect
of the change is that normally one child process
is required, rather than one per kernel call.

Refined the NetBSD test for <nfs/nfsproto.h> with
a Configure script change.

Modified Configure script to compute AIX version
with ``uname -rv'' when /usr/bin/oslevel can't be
executed. Stephen C. Woods <scw@seas.ucla.edu>
suggested this.

Disabled conflicting prototype definitions in the
local netdb.h used when the SCO 3.0 netdb.h is
missing. Disabled #include of <strings.h> unless
the SCO version is 5.0 or above. Don Kirouac
<dkirouac@minicom.com> pointed out these problems.

3.63 April 15, 1996
Improved Configure's SunOS 4.1.x CC test for compiler
support of the const keyword and avoided Configure's
``test
-f {Customize,Inventory}'' (because the
Ultrix test doesn't grok -x) in response to a report
from Larry Schwimmer <rosebud@cyclone.Stanford.EDU>.

I didn't consider this change sufficient to warrant
a new version number, but just rebuilt the 3.63
distribution.

3.64 April 26, 1996
Added a negate option for entries of the -u list.
Kurt Hillig <khillig@Chem.LSA.umich.edu> suggested
it.

Added a check for legal protocols in the -i option.

Adjusted the Configure and SGI MkKernOpts scripts
to handle more IRIX situations per instructions
from Dave Olson <olson@anchor.engr.sgi.com>.

Added support for HP-UX 10.10, courtesy of a test
system provided by Mark Bixby <markb@cccd.edu>.

3.65 May 20, 1995
Corrected errors, reported by Arne H. Juul
<arnej@pvv.unit.no>, in use of IRIX stat structure.

Added support for the IRIX 6.2 cachefs, following
a report from Peter Van Epp <vanepp@sfu.ca>.

Added clone support for AIX 4.1.4 and above.

Adjusted the

IRIX configuration to work properly
for 64 bit IRIX 6.2 systems. Richard Chycoski
<richard@sfu.ca> and Peter Van Epp <vanepp@sfu.ca>
provided a test system.

3.66 June 19, 1996
Improved the HP-UX VXFS test in the Configure
script, based on a report from Robert Hall
<rjh6810@misty.ca.boeing.com>.

Added SCO information to 00FAQ. Added information
about lsof slowness and nameserver.

Added an untested Configure abbreviation for Solaris
2.5.1.

Ambrose Li <ambrose@www.mingpaoxpress.com> supplied
a Linux change that avoids a conflict with the
d_namlen definition in versions 1.99.8 and above.

Added compiler version identification to the
Configure script for AIX and Solaris cc.

Added support for FreeBSD 2.2-960612-SNAP. Ade
Barkah <mbarkah@hemi.com> provided a test system.

3.67 Jult 1, 1996
Made miscellanous documentation corrections.

Added support for gcc under AIX 4.1 and above,
including an aixgcc Configure abbreviation, and a
work-around
for an long long alignment problem.
Stuart D. Gathman <stuart@bmsi.com> and Waldemar
Zurowski <bilbo@pwr.wroc.pl> helped me to understand
the gcc problem and devise the work-around.

3.68 July 17, 1996
Malgorzata Roos <groos@rzusun.unizh.ch>: pointed
out the AIX lsof didn't report the inode number
for named pipes (FIFOs) and wouldn't locate them
by name; _and_ supplied a fix. (Now _that's_ the
kind of bug report I like. :-)

Update Configure script to clean out aix41*
subdirectories created by the AIX gcc work-around.

Taught IRIX lsof how to report the correct device

number, inode number, and size for named NFS pipes.

Taught HP-UX 9.x lsof how to report size/offset
and inode number for named NFS pipes. (HP-UX 10.x
already knows.)

Taught DEC OSF/1 (errr, Digital Unix) lsof to report
device and inode numbers correctly for named pipes.
Because stat(2) under DEC OSF/1 V3.2 doesn't report
the device number correctly for named pipes, lsof
can't
locate them by name, but it can do that under
DEC OSF/1 V2.0.

Taught EP/IX 2.1.1 lsof to report device and inode
numbers correctly for named pipes.

Taught versions of lsof for PTX 2.1.6 and 4.1.2 to
report device and inode numbers correctly for named
pipes.

Taught RISC/os 4.52 lsof to report device and inode
numbers correctly for named pipes.

Taught versions of lsof for Ultrix 4.2 and above
to report inode numbers and file systems names
correctly for named pipes (FIFOs).

Added safety check when trying to get a sockaddr_un
structure from a BSDI, FreeBSD, or NetBSD mbuf.

Improved documentation on install permissions in
00README at the suggestion of Paul Wickman
<Paul.Wickman@amd.com>.

Installed support for the DTYPE_PIPE file structure
in FreeBSD 2.2. Changed the FreeBSD version symbol
from _FREEBSDV to FREEBSDV.

Added support for NetBSD 1.2.

3.69 July 30, 1996
Added block device name caching and reporting for
all dialects.

Improved
(I think) IRIX 6.2 64 bit configuration.

Eliminated C name space pollution by removing the leading `_' from all dialect version symbols that had it: _AIXV, _BSDIV, _OSF1V, _ADVFSV, _EPIXV, _HPUXV, _IRIXV, _PTXV, _RISCOSV, and _SCOV.

Changed decosf stanza in Configure script to automatically detect the subdirectory of /sys (or /usr/sys) that contain's the configuration header files for the machine. Added a 00FAQ entry about this.

3.70 August 9, 1996

Set the execute bits on scripts/big_brother.perl5. Changed -H in scripts/watch_a_file.perl to -n. Retained all the command name characters that are available in the proc or user struct for field output. Improved sample install rules for BSDI and HP-UX. Strengthened HP-UX CCITT test in the Configure script. Gildas Perrot <perrot@francenet.fr> suggested these changes.

Improved Solaris local TCP address reporting, based on a bug report from John Caruso <jcaruso@csg.com>.

Improved HP-UX VFS handling, and corrected a bug in VFS handling, based on bug reports from David Capshaw <David.Capshaw@SEMATECH.Org>.

Added support to -i argument handling to allow port lists and ranges, and service name lists to be specified. John DuBois <spcecdt@armory.com> suggested this.

Dropped support for IRIX 4.0.5H. Revived support for IRIX 5.2, courtesy of a test system from Dan Trinkle <trinkle@cs.purdue.edu>.

3.71 August 15, 1996

Improved handling of port ranges specified with the -i option. Improved performance when the only option is -i.

3.72 August 28, 1996

Fixed bugs and typos in SCO mount table handling.

Added support for OpenBSD (only the i386 architecture type has been tested), using the NetBSD dialect

sources. David Mazieres <dm@amsterdam.lcs.mit.edu>
provided a test system.

Added fdesc file system support to FreeBSD, NetBSD
and OpenBSD. Changed the way proc file system
support is activated with additions to the Configure
script and
changes to the dialect machine.h files.
Dropped the distribution of the Freebsd <procfs/procfs.h>
header file.

Added support for PTX 4.1.4.

3.73 September 5, 1996
Added information to 00FAQ for missing CCITT HP-UX
header file x25L3.h. Pasi Kaara <ppk@atk.tpo.fi>
provided the information.

Changed AIX header file #include pattern to prevent
gcc's loader from complaining about multiply defined
etherbroadcastaddr[], fddi_broadcastaddr[], and
ie5_broadcastaddr[] CONST u_char arrays from
<net/net_globals.h>. (The AIX loader doesn't
complain.) David Capshaw <David.Capshaw@SEMATECH.Org>
reported this problem.

Removed the HASPWSTAYOPEN definition; it was only
used for two dialects that are no longer supported.

Corrected a bug in UID cacheing that appeared during
long repeat-mode (-r) operations. The bug was
reported by Peter Van Epp <vanepp@sfu.ca>. When
in repeat mode the UID cache will be cleared when
/etc/passwd changes.

Fixed a bug in
FreeBSD support that causes a
segmentation fault on VBAD vnodes.

Deleted ultrix22 from Configure and RHF from Ultrix
source files. Dropped 2.2 from support list.

3.74 September 6, 1996
Corrected a bug in FreeBSD's proc table handling,
reported by David O'Brien <obrien@Nuxi.cs.ucdavis.edu>.

3.75 September 9, 1996
Added FreeBSD proc table handling fix from revision

3.74 to BSDI, NetBSD, and OpenBSD dialects.

Improved Solaris VFS handling.

Added pipe handling to OpenBSD. Changed Configure
script to define OPENBSDV for OpenBSD and used that
definition to include the pipe support in the NetBSD
sources. The Configure script defines NETBSDV for
NetBSD. So far neither dialect has any #if/#else/#endif
blocks that depend on version number.

Added support for AIX 4.2.

3.76 September 21, 1996
Plugged a memory leak in command handling, introduced
in revision 3.70. The bug was reported by Peter
Van Epp <vanepp@sfu.ca>.

Fixed a bug in the reporting
of size for IRIX 5.3
EFS files, introduced in revision 3.69 by the name
space pollution abatement. The _IRIXV definition
was used in the IRIX 5.x private efs_inode.h header
file to configure the inode stricture for IRIX 5.3,
so I changed the tests to use IRIXV.

Changed information on the AIX Stale Segment ID bug
to reflect the fact that IBM now says they won't
fix it. They have closed the APAR.

Disabled the AIX gcc long long alignment hack under
AIX 4.2, because it doesn't work there. Installed
a fatal error message in Configure that gcc can't
be used to compile lsof under AIX 4.2 until a work-
around can be developed.

Upgraded BSDI, FreeBSD (2.0 and above), NetBSD
(1.1B and above), and OpenBSD lock reporting.
David Mazieres <dm@amsterdam.lcs.mit.edu> reported
the need for the upgrade.

Made similar lock reporting upgrades to (versions
tested are in parentheses): AIX (4.1.4 and 4.2);
DEC OSF/1 (2.0 and 3.2d); EP/IX (2.1.1); HP-UX (9.x
and
10.10); IRIX (5.2, 5.3, and 6.2); Linux; NEXTSTEP
(3.1); PTX (2.1.6 and 4.2); RISCos; SCO (releases
3.0 and 5.0); Solaris (2.5); SunOS (4.1.3); and

Ultrix (4.2).

Updated man page and 00FAQ with more information on lock reporting.

Updated PTX lsof for 4.2. Upgraded HP-UX lsof for 10.20. Used a test system, provided by Richard Allen <ra@rhi.hi.is>, and received testing assistance from Marc Winkler <marc@healthchex.com>.

Changed handling of Internet addresses to avoid DNS lookup operations when the address has clearly not been selected. John DuBois <johnd@sco.COM> suggested this.

3.77 October 2, 1996

Changed SCO Configure stanza to call nm by its full path, thus avoiding possible confusion. The change was suggested by Jean-Pierre Radley <jpr@jpr.com>.

Added changes to allow lsof to be compiled by gcc under AIX 4.2 -- enabled some gcc-specific typedef's in the AIX machine.h and disabled the Configure script's rejection of aixgcc for AIX 4.2. The typdef's were supplied by Henry Grebler <henryg@optimation.com.au>.

Based on information supplied by Henry and David J. Wilson <davidw@optimation.com.au>, invented a description and processing for an unknown file struct that is established by AIX 4.2 (at least) for X processes when DISPLAY=:0.0. For convenience I gave its type the DTYPE_PIPE definition, but that may be incorrect.

Fixed some Solaris 2.[34] errors in locking code, added at 3.76, that I couldn't test. Rainer Orth <ro@TechFak.Uni-Bielefeld.DE> reported the problem and supplied the fixes.

Made Configure script supply NeXTSTEP 3.x version in Makefile so that the shadow vnode locking code, introduced in 3.76, would be disabled for NeXTSTEP 3.0. Rainer Orth discovered this problem, too.

Added reporting of UNIX domain socket inode numbers for Linux version 2.0 and above. The addition was

supplied by Matthew Burt <BurtM@poole.siemens.co.uk>.

Enhanced file searching to
report all instances of
references to automounted file systems, even when
they're direct mounts not yet realized. Enhanced
Solaris 2.5 lsof to grok autofs nodes. Victoria
H. Lau <vlau@msmail2.hac.com> pointed out the need
for these enhancements and helped test them.

Changed AIX lock length test so it will work with
gcc under AIX 4.2.

Changed PTX HAS_VXFS symbol, indicating presence
of VxFS, to HASVXFS for consistency with the HP-UX
form of the symbol.

3.78 October 14, 1996
Changed strtol() call in private Linux nlist()
function to strtoul(). Linux kernel addresses at
2.1.0 have their top bit set and appear to be
negative to strtol(). This information was provided
by Marty Leisner <leisner@sdsp.mc.xerox.com>.
Marty also notes that other, unknown-as-of-yet
problems prevent lsof from working under 2.1. He
is investigating, since I don't have access to a
2.1 system.

Added definitions to machine.h for a private file
struct type (HASPRIVFILETYPE
and PRIVFILETYPE) that
can be accommodated without changing prfp.frag,
much as HASPIPEFN works for PIPE file struct types.

Used the new private file struct type support to
support the AIX f_type=0xf that DISPLAY=:0.0 causes.
Changed its output TYPE from PIPE to SMT; displayed
file size as buffer size less free bytes in buffer;
enabled recognizion under AIX 4.1.4. Mike Feldman
<feldman@charm.urbana.mcd.mot.com> and others helped
me identify this file as a Shared Memory Transport
(SMT) socket.

Corrected a function prototype in the HP-UX dnode.c
for HP-UX 10 and greater; gcc objected; HP's cc did
not. Christian Krackowizer <kra1@technodat.co.at>
reported the problem.

Made AFSConfig script more capable of locating the
cell's root directory. Updated AFS documentation
in 00FAQ and 00README. Both were suggested by
Timothy Miller <tsm@cs.brown.edu>.

Installed update to big_brother.perl5 script from
Lionel Cons <Lionel.Cons@cern.ch>.

3.79 October
29, 1996
Added support for IRIX 6.4, courtesy of a test
system provided by Angel Li <angel@rrsl.rsmas.miami.edu>.
Fixed FIFO and NFS3 bugs in IRIX 6.2 lsof in the
process. Lsof has not been tested under IRIX 6.3,
but the Configure script has a stanza for it.

Changed device functions to use stat() instead of
lstat(). Used WARNDEVACCESS to suppress stat(2)
failure messages.

Tested under OpenBSD 2.0.

3.80 November 8, 1996
Corrected comments in 00README about using the
sunos413 and sunos413cc Configure abbreviations.

Made some Configure and Customize script changes,
suggested by Bruce Jerrick <bruce@cse.ogi.edu>.

Added missing elements to definition of local
Solaris 2.3 lock_descriptor structure so that
dnode.c will compile and work properly under it.
Corrected a bug in Solaris 2.[34] lock descriptor
handling.

3.81 November 14, 1996
Corrected error in the "invented" HP-UX 10.20 proc
struct. The erroneous struct definition named the
set-UID
member as the UID member, resulting in
occasional incorrect UID attributions in lsof
output.

At the suggestion of Larry Schwimmer
<schwim@cyclone.stanford.edu>, changed AFSConfig
to use awk to get the cell name from
/usr/etc/vice/ThisCell, thus avoiding a problem
when the cell name line has more than one word.

Added -DSWASH to IRIX 6.2 options propagated from
the kernel build CCOPTS to lsof's Makefile. Randolph
J. Herber <herber@dcdrjh.fnal.gov> did the detective
work that revealed the need for this. IRIX 6.2 patch
1488 added -DSWASH and its effects.

3.82 December 11, 1996
Updated Configure script for FreeBSD 3.0 and SCO
OpenServer 5.0.[24]. FreeBSD Configure script
change was supplied by David E. O'Brien
<obrien@NUXI.com> and SCO Configure script change
was supplied by Bela Lubkin <belal@sco.COM>.

Tested lsof under FreeBSD 3.0, courtesy of a test
system provided by Ade Barkah <mbarkah@hemi.com>.

Added changes to support SCO OpenServer
5.0.4
(Comet), supplied by Bela Lubkin <belal@sco.COM>.

Added support for UnixWare 2.1. D. Chris Daniels
<chrisd@dlpco.com> provided a test system and Bela
Lubkin provided technical assistance.

Added support for Pyramid DC/OSx 1.1 and Reliant
UNIX 5.43. Bruce Beare <bjb@pyramid.com> and Kevin
Smith <kevin@pyramid.com> provided test systems
and technical assistance. This dialect version
must run setuid-root, since it accesses proc and
user structures vic the /proc file system.

Tested under PTX 2.1.9 and added support for PTX
4.2.1.

At Bela Lubkin's suggestion added a commercial to
the lsof man page, -h option, and -v option output,
telling where to get the latest revision. This
entailed large scale rearrangement of the -h output
to keep it as short as possible. It also involved
shortening the -X explanation for PTX.

Made sure that address segment access errors didn't
incorrectly force the listing of a process. This
fix was needed
by the Sun, Pyramid, and UnixWare
ports.

Corrected bug in the way the local device table is
sorted.

3.83 December 30, 1996
Added support for Solaris 2.6 (Beta) with help from
Casper Dik <casper@holland.Sun.COM>, May Jackson
<methalya.jackson@eng.sun.com>, Joseph Kowalski
<jek3@Eng.Sun.COM>, and the Solaris 2.6 Beta test
program.

Fixed an inode file system type processing bug in
SCO OpenServ 5.0 and greater, reported by Robert
Lipe <robertl@arnet.com>.

Fixed bugs in SCO kernel name cache probing, courtesy
of code and suggestions from Bela Lubkin <belal@sco.COM>.

Revised kernel name list handling to remove the need
for changing two files (dlsof.h and dstore.c) when
altering, removing, or adding name list symbols.
All dialects were affected.

Added support for SCO OpenServer event "clones."
Robert Lipe need for their support and Bela Lubkin
provided technical assistance in identifying them.

Added display of bound name to Solaris UNIX
domain
socket file handling.

Correct bug in SunOS address space ("txt" file)
handling.

Tested under UnixWare 2.1.1.

Changed SGI IRIX lsof to use the kernel's proc
struct size when striding through its proc table
(IRIX versions below 6.4). The proc struct size
difference warning is still issued, and lsof still
uses the proc struct size and proc struct from
<sys/proc.h> to read and process proc table
information. Added a note to 00FAQ about this.

Deferred Internet host and port name lookups to
print time, thus avoiding lookups for files that
are not listed.

3.84 January 13, 1997

Updated the Pyramid private configuration script,
MkKernOpts, to propagate the R4000 definition for
DC/OSx systems so equipped. Anthony Shortland
<anthony.shortland@FMR.COM> pointed out the need
for this and Kevin Smith <kevin@pyramid.com> provided
access to a test system.

Added information to 00FAQ about UDP ports for
which lsof can't find users, because the
ports are
reserved to the kernel and aren't associated with
open files.

3.85 January 17, 1987
The DEC OSF/1 kernel name cache can be processed
as a simple table, rather than a linked list, so
changed the interface to rnam.frag accordingly.

Added a new optional output field, parent process
ID (PPID). The -R option (for paRent) selects it,
and the `R' field identifier labels it. Updated
some scripts to handle it and developed two new
scripts, idrlogin.perl and idrlogin.perl5, to
use it in locating nework (rlogind and telnetd)
source addresses for shell processes. Added some
information about the new scripts to 00QUICKSTART.

3.86 January 30, 1997
Add explanation of why device warning messages
disappear when the device cache file is used.

Changed Linux Configure stanza to check more
places for the [z]System.map file and warn if
the one located differs in date from /vmlinuz.
Bjorn S. Nilsson <NILSSON@nbivms.nbi.dk> suggested
this for easier configuration
at Linux 2.0.28.

Changed Linux Confifgure stanza to check for the
presence of fl_fd, fl_file, and fl_whence in the
file_lock structure of <linux.fs.h> and define
symbols appropriately.

Changed Linux lock testing to test task structure
pointer (fl_owner) from file_lock struct as well
as (possibly) the file struct pointer (fl_file) or
file decriptor number (fl_fd) to identify the lock
owner, depending on what HAS_FL_* symbols were

defined by Configure's file_lock structure examination.
Added section to Linux Problems in 00FAQ about this.

Corrected 00FAQ reference in Configure's Solaris
2.4 stanza.

3.87 February 11, 1997
Corrected setting of VxFS device number for HP-UX
and PTX.

Added VM map flag test #if/#else/#endif for recent
versions of FreeBSD 3.0, supplied by Chris Timmons
<skynyrd@opus.cts.cwu.edu>.

Added a #define that removes a conflict between a
signal() prototype in the IRIX 6.4 <sys/systm.h>
and one in its <sys/signal.h>,
exposed when cachefs
support is enabled. Wolfgang Hecht
<hecht@zedat.fu-berlin.de> identified the need for
this addition and helped test it. Refined IRIX
proc struct size test, warning, and use.

Revised Linux system map file handling (yet again)
to search for the file at execution time, rather
than in the Configure script. Marty Leisner
<leisner@sdsp.mc.xerox.com> suggested this.

Added VxFS support to Solaris lsof with help from
Peter Radig <radig@DresdnerBank.de>. Philip Kizer
<pckizer@tamu.edu> helped test.

Added support for PTX 4.3, thanks to access provided
by Peter Jordan <petej@sequent.com>.

3.87 February 11, 1997
supplement Updated FreeBSD kernel name list handling.

3.88 February 17, 1997
Added documentation files -- 00.README.FIRST[_<version>]
and 00RELEASE.SUMMARY_<version> -- to the distribution.

Vic Abell <abe@purdue.edu>
Purdue University Computing Center
February 17, 1997

Found in path(s):

* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/OLD/lsof3_00DIST
No license file was found, but licenses were detected in source scan.

```
/*
* Copyright 2000 Purdue Research Foundation, West Lafayette, Indiana
* 47907.  All rights reserved.
*
* Written by Victor A. Abell
*
* This software is not subject to any license of the American Telephone
* and Telegraph Company or the Regents of the University of California.
*
* This software has been adapted from snprintf.c in sendmail 8.9.3.  It
* is subject to the sendmail copyright statements listed below, and the
* sendmail licensing terms stated in the sendmail LICENSE file comment
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/freebsd/dnode1.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+obsd/dnode1.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/osr/dfile.c
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/osr/dstore.c
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/osr/machine.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/osr/dmnt.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/osr/dsock.c
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```
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```
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*/
/*
* GetOpt() -- Local get option
*
* Borrowed from lsof's main.c source file.
*
* Liberally adapted from the public domain AT&T getopt() source,
* distributed at the 1985 UNIFORM conference in Dallas
*
* The modifications allow `?' to be an option character and allow
* the caller to decide that an option that may be followed by a
* value doesn't have one -- e.g., has a default instead.
*/
```

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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/freebsd/dmnt.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+obsd/dproto.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/freebsd/dnode.c
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/kmem/dproto.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/freebsd/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/aix/machine.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/dlsof.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/kmem/dnode.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/kmem/dproto.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/du/dproto.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+obsd/machine.h
*
/lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/aix/dproto.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/du/dproc.c
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/store.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+os/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+os/dproc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/kmem/dmnt.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+obsd/dproc.c
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/du/dmnt.c
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+os/dsock.c
*
/lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/du/dlsof.h
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/misc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/aix/ddev.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/OLD/main.c.old
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/OLD/proc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+os/dproto.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/kmem/machine.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/ddev.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/proto.h
*

/lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/du/dfile.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/kmem/dsock.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/dproto.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/kmem/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+obsd/dnode.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/kmem/dlsof.h
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/du/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/machine.h
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* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/aix/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+os/dlsof.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/du/dnode.c
*
/lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/freebsd/dsock.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+obsd/dsock.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/kmem/dproc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/node.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/aix/dproc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+obsd/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/aix/dnode.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/kmem/dnode.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/du/dsock.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/dfile.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/dsock.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/kmem/dstore.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/kmem/ddev.c
*
/lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/kmem/dproc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/n+obsd/dlsof.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/dproc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/darwin/kmem/dlsof.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/freebsd/dproto.h
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/OLD/misc.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/sun/dmnt.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/hpux/kmem/dmnt.c
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/dialects/aix/dmnt.c
No license file was found, but licenses were detected in source scan.

Making and Installing lsof 4

```
**********************************************************************
| The latest release of lsof is always available via anonymous ftp |
| from lsof.itap.purdue.edu.  Look in pub/tools/unix/lsof.         |
**********************************************************************
```

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==========
Pre-built Lsof Binaries
==========

Avoid using pre-built lsof binaries if you can; build your own instead.

I do not support lsof binaries built and packaged by third parties nor lsof binaries built from anything but the latest lsof revision. (See the Bug Reports section for more information on the details of lsof support.)

One important reasone for those support restrictions is that when lsof is built its Configure script tunes lsof to the features available on the building system, often embodied in supporting header files and libraries. If the building system doesn't have support for a particular feature, lsof won't be built to support the feature on any system.

The Veritas VxFS file system is a good example of a feature that requires build-time support.

UNIX dialect version differences -- Solaris 8 versus 9, AIX 4.3.3 vesus 5.2, etc. -- can also render a pre-built lsof binary useless on a different version. So can kernel bit size.

There are so many potential pitfalls to using an lsof binary improperly that I strongly recommend lsof be used only where it is built.

==========
Making Lsof
==========

```
$ cd <lsof source directory>
```

```
$ ./Configure <your dialect's abbreviation>
$ make
```

(Consult the 00FAQ and 00XCONFIG files of the lsof distribution for information about using make command invocations and environment variables to override lsof default Makefile strings.)

This lsof distribution can be used with many UNIX dialects. However, it must be configured specifically for each dialect. Configuration is done in three ways: 1) by changing definitions in the machine.h header file of the UNIX dialect of interest; 2) by defining environment variable values prior to calling Configure (see the 00XCONFIG file, the Environment Variabls and Environment Variables Affecting the Configure Script sections of this file); and 3) by running the Configure shell script found in the top level of the distribution directory.

You may not need to change any machine.h definitions, but you might want to look at them anyway. Pay particular attention to the definitions that are discussed in the Security section of this file. Please read that section.

The Configure script calls three other scripts in the lsof distribution: AFSConfig; Inventory; and Customize. The AFSConfig script is called for selected dialects (AIX, HP-UX, NEXTSTEP, and Solaris) to locate AFS header files and determine the AFS version. See The AFSConfig Script section of this file for more information.

The Inventory script checks the completeness of the lsof distribution. Configure calls Inventory after it has accepted the dialect abbreviation, but before it configures the top-level directory for the dialect. See The Inventory Script section of this file for more information.

Configure calls the Customize script after it has configured the top-level lsof directory for the declared dialect. Customize helps you modify some of the important compile-time definitions of machine.h. See the The Customize Script section.

You should also think about where you will install lsof and its man page, and whom you will let execute lsof. Please read the Installing Lsof section of this file for information on installation considerations.

Once you have inspected the machine.h file for the

dialect for
which you want to build lsof, and made any changes you need, run
the Configure script, supplying it with the abbreviation for the
dialect. (See the following table.) Configure selects the
appropriate options for the dialect and runs the Mksrc shell script
in the dialect sub-directory to construct the appropriate source
files in the top-level distribution directory.

Configure may also run the MkKernOpts script in the dialect
sub-directory to propagate kernel build options to the dialect
Makefile. This is done for only a few dialects -- e.g., DC/OSx,
and Reliant UNIX.

Configure creates a dialect-specific Makefile. You may want to
inspect or edit this Makefile to make it conform to local conventions.
If you want the Makefile to install lsof and its man page, you will
have to create an appropriate install rule.

Lsof may be configured using UNIX dialect abbreviations from the
following table. Alternative abbreviations are indicated by a
separating `|'. For example, for
SCO OpenServer you can use either
the ``osr'' or the ``sco'' abbreviation:

```
$ Configure osr
  or
$ Configure sco
```

```
Abbreviations  UNIX Dialect
-------------  ------------

  aix   IBM AIX 5.[23] and 5.3-ML1 using IBM's C Compiler
  aixgcc  IBM AIX 5.[12] and 5.3-ML1 using gcc
  darwin  Apple Darwin 7.x and 8.x for Power Macintosh systems
  decosf  DEC OSF/1, Digital UNIX, Tru64 UNIX 4.0 and 5.1
  digital_unix Digital UNIX, DEC OSF/1, Tru64 UNIX 4.0 and 5.1
  du   Digital UNIX, DEC OSF/1, Tru64 UNIX 4.0 and 5.1
  freebsd  FreeBSD 4.x, 4.1x, 5.x and [67].x
  hpux  HP-UX 11.00, 11.11 and 11.23, using HP's C
  Compiler, both /dev/kmem-based and PSTAT-based
  hpuxgcc  HP-UX 11.00, 11.11 and 11.23, using gcc, both
  /dev/kmem-based and PSTAT-based
  linux  Linux 2.1.72 and above for x86-based systems
  netbsd  NetBSD 1.[456], 2.x and 3.x
  next  NEXTSTEP 3.[13]
  nextstep  NEXTSTEP 3.[13]
  ns   NEXTSTEP 3.[13]
  nxt   NEXTSTEP 3.[13]
```

openbsd OpenBSD
2.[89] and 3.[0-9]
openstep OPENSTEP 4.x
os OPENSTEP 4.x
osr SCO OpenServer Release 5.0.6, using the C compiler
from the SCO developer's kit
osrgcc SCO OpenServer Release 5.0.6, using gcc
osr6 SCO Openserver 6.0.0, using the SCO C compiler
sco SCO OpenServer Release 5.0.6, using the C compiler
from the SCO developer's kit
scogcc SCO OpenServer Release 5.0.6, using gcc
solaris Solaris 2.x, 7, 8, 9 and 10 using gcc
solariscc Solaris 2.x, 7, 8, 9 and 10 using Sun's cc
tru64 Tru64 UNIX, DEC OSF/1, Digital UNIX 4.0 and 5.1
unixware SCO|Caldera UnixWare 7.1.4
uw SCO|Caldera UnixWare 7.1.4

If you have an earlier version of a dialect not named in the above list, lsof may still work on your system. I have no way of testing that myself. Try configuring for the named dialect -- e.g., if you're using Solaris 2.1, try configuring for Solaris 2.5.1.

After you have configured lsof for your UNIX dialect and have selected options
via the Customize script (See the The Customize Script section.) , use the make command to build lsof -- e.g.,

```
$ make
```

Other Configure Script Options
==========

There are three other useful options to the Configure script besides the dialect abbreviation:

-clean may be specified to remove all traces of
a dialect configuration, including the
Makefile, symbolic links, and library files.

-h may be specified to obtain a list of
-help Configure options, including dialect
abbreviations.

-n may be specified to stop the Configure
script from calling the Customize and
Inventory scripts.

Caution: -n also suppresses the AFSConfig
step.

Environment Variables

Lsof configuration, building, and execution may be affected by environment variable settings. See the Definitions That Affect Compilation section in the 00PORTING file, the General Environment Variables section in the 00XCONFIG file, the Dialect-Specific Environment Variables section in the 00XCONFIG file, and the Environment Variables Affecting the Configure Script section of this file for more information.

Note in the General Environment Variables section of the 00XCONFIG file that there are five environment variables that can be used to pre-define values in lsof's -v output: LSOF_BLDCMT, LSOF_HOST, LSOF_LOGNAME, LSOF_SYSINFO, and LSOF_USER.

Security

If the symbol HASSECURITY is defined, a security mode is enabled, and lsof will allow only the root user to list all open files. Non-root users may list only open files whose processes have the same user ID as the real user ID of the lsof process (the one that its user logged on with).

However, if HASNOSOCKSECURITY is also defined, anyone may list anyone else's open socket files, provided their listing is enabled with the "-i" option.

Lsof is distributed with the security mode disabled -- HASSECURITY is not defined. (When HASSECURITY is not defined, the definition of HASNOSOCKSECURITY has no meaning.) You can enable the security mode by defining HASSECURITY in the Makefile or in the machine.h header file for the specific dialect you're using -- e.g. dialects/aix/machine.h.

The Customize script, run by Configure when it has finished its work, gives you the opportunity to define HASSECURITY and HASNOSOCKSECURITY. (See the The Customize Script section.)

The lsof -h output indicates the state HASSECURITY and HASNOSOCKSECURITY had when lsof was built, reporting:

"Only root can list all files;"
if HASSECURITY was defined and HASNOSOCKSECURITY wasn't defined;

"Only root can list all files, but anyone can list socket files."
if HASSECURITY and HASNOSOCKSECURITY were both defined;

"Anyone can list all files;"
if HASSECURITY wasn't defined. (The definition of HASNOSOCKSECURITY doesn't matter when HASSECURITY isn't defined.)

You should carefully consider the implications of using the default security mode.
When lsof is compiled in the absence of the HASSECURITY definition, anyone who can execute lsof may be able to see the presence of all open files. This may allow the lsof user to observe open files -- e.g., log files used to track intrusions -- whose presence you would rather not disclose.

As distributed, lsof writes a user-readable and user-writable device cache file in the home directory of the real user ID executing lsof. There are other options for constructing the device cache file path, and they each have security implications.

The 00DCACHE file in the lsof distribution discusses device cache file path construction in great detail. It tells how to disable the various device cache file path options, or how to disable the entire device cache file feature by removing the HASDCACHE definition from the dialect's machine.h file. There is also information on the device cache file feature in the 00FAQ file. (The 00DCACHE and 00FAQ files are part of the lsof distribution package.)

The
Customize script, run by Configure after it has finished its work, gives you the opportunity to change the compile-time options related to the device cache file. (See The Customize Script section.)

Since lsof may need setgid or setuid-root permission (See the Setgid Lsof Dialects and Setuid-root Lsof Dialects sections.), its security should always be viewed with skepticism. Lest the setgid and setuid-root permissions allow lsof to read kernel name list or memory files, declared with the -k and -m options, that the lsof user can't normally access, lsof uses access(2) to establish its

real user's authority to read such files when it can't surrender
its power before opening them. This change was added at the
suggestion of Tim Ramsey.

Lsof surrenders setgid permission on most dialects when it has
gained access to the kernel's memory devices. There are exceptions
to this rule, and some lsof implementations need to run setuid-root.
(The Setgid Lsof Dialects and Setuid-root Lsof
Dialects sections
contains a list of lsof implementations and the permissions
recommended in the distribution's Makefiles.)

The surrendering of setgid permission is controlled by the WILLDROPGID
definition in the dialect machine.h header files.

In the end you must judge for yourself and your installation the
risks that lsof presents and restrict access to it according to
your circumstances and judgement.

Run-time Warnings

Lsof can issue warning messages when it runs -- e.g., about the
state of the device cache file, about an inability to access an
NFS file system, etc. Issuance of warnings are enabled by default
in the lsof distribution.

Issuance or warnings may be disabled by default by defining
WARNINGSTATE in the dialect's machine.h. The Customize script may
also be used to change the default warning message issuance state.
(See The Customize Script section.)

The ``-w'' option description of the ``-h'' option (help) output
will indicate the default warning
issuance state. Whatever the
state may be, it can be reversed with ``-w''.

Device Access Warnings

When lsof encounters a /dev (or /devices) directory, one of its
sub-directories, or one of their files that it cannot access with
opendir(3) or stat(2), it issues a warning message and continues.
Lsof will be more likely to issue such a warning when it has been
installed with setgid(<some group name>) permission; it won't have
trouble if it has been installed with setuid(root) permission or

is being run under the root login.

The lsof caller can inhibit or enable the warning with the -w
option, depending on the issuance state of run-time warnings. (See
the Run-time Warnings section.)

The warning messages do not appear when lsof obtains device
information from a device cache file that it has built and believes
to be current or when warning message issuance is disabled by
default. (See the "Caches -- Name and Device" section for more
information on the device
cache file.)

The lsof builder can inhibit the warning by disabling the definition
of WARNDEVACCESS in the dialect's machine.h or disable all warnings
by defining WARNINGSTATE. WARNDEVACCESS is defined by default for
most dialects. However, some dialects have some device directory
elements that are private -- e.g., HP-UX -- and it is more convenient
for the lsof user if warning messages about them are inhibited.

Output from lsof's -h option indicates the status of WARNDEVACCESS.
If it was defined when lsof was compiled, this message will appear:

```
/dev warnings = enabled
```

If WARNDEVACCESS was not defined when lsof was compiled, this
message will appear instead:

```
/dev warnings = disabled
```

The Customize script, run by Configure after it has finished its
work, gives you the opportunity to change the WARNDEVACCESS
definition. (See The Customize Script section.)

NFS Blocks

==========

Lsof is susceptible to NFS blocks when it tries to lstat() mounted
file systems and when it does
further processing -- lstat() and
readlink() -- on its optional file and file system arguments.

Lsof tries to avoid being stopped completely by NFS blocks by doing
the lstat() and readlink() functions in a child process, which
returns the function response via a pipe. The lsof parent limits
the wait for data to arrive in the pipe with a SIGALRM, and, if
the alarm trips, terminates the child process with a SIGINT and a

SIGKILL.

This is as reliable and portable a method for breaking NFS deadlocks as I have found, although it still fails under some combinations of NFS version, UNIX dialect, and NFS file system mount options. It generally succeeds when the "intr" or "soft" mount options are used; it generally fails when the "hard" mount option is used.

When lsof cannot kill the child process, a second timeout causes it to stop waiting for the killed child to complete. While the second timeout allows lsof to complete, it may leave behind a hung child process. Unless warnings are inhibited by default or with the -w option, lsof reports the possible hung child.

NFS block handling was updated with suggestions made by Andreas Stolcke. Andreas suggested using the alternate device numbers that appear in the mount tables of some dialects when it is not possible to stat(2) the mount points.

The -b option was added to direct lsof to avoid the stat(2) and readlink(2) calls that might block on NFS mount points and always use the alternate device numbers. If warning message issuance is enabled and you don't want warning messages about what lsof is doing, use the -w option, too.

The -O option directs lsof to avoid doing the potentially blocking operations in child processes. Instead, when -O is specified, lsof does them directly. While this consumes far less system overhead, it can cause lsof to hang, so I advise you to use -O sparingly.

Caches -- Name and Device

Robert Ehrlich suggested that lsof obtain path name components for open files from the kernel's name cache. Where possible, lsof dialect implementations do that. The -C option inhibits kernel name cache examination.

Since AFS apparently does not use the kernel's name cache, where lsof supports AFS it is unable to identify AFS files with path name components.

Robert also suggested that lsof cache the information it obtains via stat(2) for nodes in /dev (or /devices) to reduce subsequent running time. Lsof does that, too.

In the default distribution the device cache file is stored in .lsof_hostname, mode 0600, in the home directory of the login of the user ID that executes lsof. The suffix, hostname, is the first component of the host's name returned by gethostname(2). If lsof is executed by a user ID whose home directory is NFS-mounted from several hosts, the user ID's home directory may collect several device cache files, one for each host from which it was executed.

Lsof senses accidental or malicious damage to the device cache file with extensive integrity
checks, including the use of a 16 bit CRC.
It also tries to sense changes in /dev (or /devices) that indicate the device cache file is out of date.

There are other options for forming the device cache file path. Methods the lsof builder can use to control and employ them are documented in the separate 00DCACHE file of the lsof distribution.

Raw Sockets

On many UNIX systems raw sockets use a separate network control block structure. Display of files for applications using raw sockets -- ping, using ICMP, for example -- need special support for displaying their information. This support is so dialect-specific and information to provide it so difficult to find that not all dialect revisions of lsof handle raw sockets completely.

Other Compile-time Definitions

The machine.h and dlsof.h header files for each dialect contains definitions that affect the compilation of lsof. Check the Definitions That Affect Compilation section of the
00PORTING file
of the lsof distribution for their descriptions. (Also see The Customize Script section.)

The AFSConfig Script

Lsof supports AFS on some combinations of UNIX dialect and AFS version. See the AFS section of this document for a list of supported combinations.

When configuring for dialects where AFS is supported, the Configure script calls the AFSConfig script to determine the location of AFS header files and the AFS version. Configure will not call AFSConfig, even for the selected dialects, unless the file /usr/vice/etc/ThisCell exists.

The AFS header file location is recorded in the AFSHeaders file; version, AFSVersion. Once these values have been recorded, Configure can be told to skip the calling of AFSConfig by specifying its (Configure's) -n option.

The Inventory Script

The lsof distribution contains a script, called Inventory, that checks the distribution for completeness. It uses the file 00MANIFEST in the distribution
as a reference point.

After the Configure script has accepted the dialect abbreviation, it normally calls the Inventory script to make sure the distribution is complete.

After Inventory has run, it creates the file ".ck00MAN" in the top-level directory to record for itself the fact that the inventory has been check. Should Inventory be called again, it senses this file and asks the caller if another check is in order, or if the check should be skipped.

The -n option may be supplied to Configure to make it bypass the calling of the Inventory script. (The option also causes Configure to avoid calling the Customize script.)

The lsof power user may want to define (touch) the file ".neverInv". Configure avoids calling the Inventory script when ".neverInv" exists.

The Customize Script

Normally when the Configure script has finished its work, it calls another shell script in the lsof distribution called Customize. (You can tell Configure to bypass Customize
with its -n option.)

Customize leads you through the specification of these important compile-time definitions for the dialect's machine.h header file:

HASDCACHE device cache file control
HASENVDC device cache file environment variable name
HASPERSDC personal device cache file path format
HASPERSDCPATH name of environment variable that provides an additional component of the personal device cache file path
HASSYSDC system-wide device cache file path
HASKERNIDCK the build-time to run-time kernel identity check
HASSECURITY the security option
HASNOSOCKSECURITY the open socket listing option whe HASSECURITY is defined
WARNDEVACCESS /dev (or /devices) warning message control
WARNINGSTATE warning message issuance state

The Customize script accompanies its prompting for entry of new values for these definitions with brief descriptions of each of them. More information on these definitions may be found in this file or
in the 00DCACHE and 00FAQ files of the lsof distribution.

You don't need to run Customize after Configure. You can run it later or you can edit machine.h directly.

The -n option may be supplied to Configure to make it bypass the calling of the Customize script. (The option also causes Configure to avoid calling the Inventory script.)

The lsof power user may want to define (touch) the file ".neverCust". Configure avoids calling the Customize script when ".neverCust" exists.

Customize CAUTION: the Customize script works best when it is applied to a newly configured lsof source base -- i.e., the machine.h header file has not been previously modified by the Customize script. If you have previously configured lsof, and want to rerun the Customize script, I recommend you clean out the previous configuration and create a new one:

```
$ Configure -clean
$ Configure <dialect_abbreviation>
```

...
Customize in response to the Customize script prompts.

Cautions
========

Lsof is a tool that
is closely tied to the UNIX operating system
version. It uses header files that describe kernel structures and
reads kernel structures that typically change from OS version to
OS version, and even within a version as vendor patches are applied.

DON'T TRY TO USE AN LSOF BINARY, COMPILED FOR ONE UNIX OS VERSION,
ON ANOTHER. VENDOR PATCHES INFLUENCE THE VERSION IDENTITY.

On some UNIX dialects lsof versions may be even more restricted by
architecture type.

The bottom line is use lsof where you built it. If you intend to
use a common lsof binary on multiple systems, make sure all systems
run exactly the same OS version and have exactly the same patches.

Warranty
========

Lsof is provided as-is without any warranty of any kind, either
expressed or implied, including, but not limited to, the implied
warranties of merchantability and fitness for a particular purpose.
The entire risk as to the quality and performance of lsof is with
you. Should lsof prove defective, you assume the cost
of all
necessary servicing, repair, or correction.

License
=======

Lsof has no license. Its use and distribution are subject to these
terms and conditions, found in each lsof source file. (The copyright
year in or format of the notice may vary slightly.)

```
/*
 * Copyright 2002 Purdue Research Foundation, West Lafayette,
 * Indiana 47907.  All rights reserved.
 *
 * Written by Victor A. Abell
```

```
 *
 * This software is not subject to any license of the American
 * Telephone and Telegraph Company or the Regents of the
 * University of California.
 *
 * Permission is granted to anyone to use this software for
 * any purpose on any computer system, and to alter it and
 * redistribute it freely, subject to the following
 * restrictions:
 *
 * 1. Neither the authors nor Purdue University are responsible
 *    for any consequences of the use of this software.
 *
 * 2. The origin of this software must not be misrepresented,
 *    either by explicit claim or by omission.  Credit to the
 *    authors and Purdue University must appear in documentation
 *    and sources.
 *
 * 3. Altered versions must be plainly marked as such, and must
 *    not be misrepresented as being the original software.
 *
 * 4. This notice may not be removed or altered.
 */
```

Bug Reports
==========

Now that the obligatory disclaimer is out of the way, let me hasten to add that I accept lsof bug reports and try hard to respond to them. I will also consider and discuss requests for new features, ports to new dialects, or ports to new OS versions.

PLEASE DON'T SEND BUG REPORTS ABOUT LSOF TO THE UNIX DIALECT OR DIALECT OPTION VENDOR.

At worst such bug reports will confuse the vendor; at best, the vendor will forward the bug report to me.

PLEASE DON'T SEND BUG REPORTS ABOUT LSOF BINARIES BUILT OR DISTRIBUTED BY SOMEONE ELSE, BECAUSE I CAN'T SUPPORT THEM.

Before you send me a bug report,
please do these things:

* Make sure you try the latest lsof revision.

  + Download the latest revision from:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof

+ Verify the signatures of what you have downloaded;

+ While connected to lsof.itap.purdue.edu, check for patches:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/patches

+ If patches exist, install them in the latest revision
you just downloaded. Then build the latest revision and
see if it fixes your bug.

* If you're having trouble compiling lsof with gcc, try the
UNIX dialect vendor's compiler. I don't have access to gcc on
all test systems, so my support for it is hit-and-miss, and so
is my ability to respond to gcc compilation problem reports.

* Check the lsof frequently asked questions file, 00FAQ,
to see if there's a question and answer relevant to your
problem.

* Make sure you're running the lsof you think you are
by
checking the path to it with which(1). When in doubt, use an
absolute path to lsof. Make sure that lsof binary has
sufficient permissions to do what you ask, including internal
permissions given it (e.g., restrictions on what files lsof may
report for whom) during its build.

When you send a bug report, make sure you include output from your
running of lsof's Configure script. If you were able to compile a
running lsof, please also include:

* Output from which(1) that shows the absolute path to the
lsof binary in question;

* Output from running lsof with its -h and -v options at
lsof's absolute path;

* Output from "ls -l" directed to lsof's absolute path.

If you weren't able to compile a running lsof, please send me: the
compiler error output; identification of the lsof revision you're using
(contents of the lsof version.c file); identification of your system
(full uname output or output from whatever other tool
identifies the
system); and compiler identification (e.g., gcc -v output).

Either set of output will help me understand how lsof was configured
and what UNIX dialect and lsof revision is involved.

Please send all bug reports, requests, etc. to me via e-mail at
<abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so
my e-mail filter won't classify your letter as Spam.

The 00FAQ File

The lsof distribution contains an extensive frequently asked
questions file on lsof features and problems. I recommend you
consult it before sending me e-mail. Use your favorite editor or
pager to search 00FAQ -- e.g., supplying as a search argument some
fixed text from an lsof error message.

The lsof-l Mailing List

Information about lsof, including notices about the availability
of new revisions, may be found in mailings of the lsof-l listserv.
For more information about it, including instructions on how to
subscribe, read the 00LSOF-L file of
the lsof distribution.

Field Output Example Scripts

Example AWK and Perl 4 or 5 scripts for post-processing lsof field
output are locate in the scripts sub-directory of the lsof distribution.
The scripts sub-directory contains a 00README file with information
about the scripts.

Field Output C Library

The lsof test suite (See "Testing Lsof."), checks basic lsof
operations using field output. The test suite has its own library
of C functions for common test program operations, including
processing of field output. The library or selections of its
functions could be adapted for use by C programs that want to
process lsof field output. See the library in the file LTlib.c
in the tests/ sub-directory

Testing Lsof
==========

Lsof has an automated test suite in the tests/ sub-directory that can be used to test some basic lsof features -- once lsof has been configured and made. Tests are arranged in three groups: basic tests that should run on all dialects; standard tests that should run on all dialects; and optional tests that may not run on all dialects or may need special resources to run. See 00TEST for more information.)

CAUTION!!! Before you attempt to use the test suite make sure that the lsof you want to test can access the necessary kernel resources -- e.g., /dev/mem, /dev/kmem, /proc, etc. Usually you want to test the lsof you just built, so this is an important check. (See 00TEST.)

To run the basic and standard tests, using the lsof in the parent directory of tests/, do this:

```
 $ cd tests
 $ make test
   or $ make std
   or $ make standard
```

The basic and standard tests may be run as silently as possible, using the lsof in the parent directory of tests/, with:

```
 $ cd tests
 $ make auto
```

This is the "automatic" test mode, designed for use by scripts that build lsof. The caller is expected to test the make exit code to determine if the tests succeeded. The caller should divert standard output and standard error to /dev/null to suppress make's error exit message.

The optional tests may be run, using the lsof in the parent directory of tests/, with:

```
 $ cd tests
 $ make opt
   or $ make optional
```

It's possible to excute individual tests, too. See the 00TEST file
of this distribution for more informaiton on the tests, what they
do, and how to run and possibly customize each test.

It's possible to run the tests, using an lsof other than the one
in the parent directory of /tests, too. See 00TEST for information
about using the LT_LSOF_PATH environment variable to do that.

==========
Dialect Notes
==========

AFS
===

Lsof recognizes AFS files on the following combinations of UNIX
dialect and AFS versions:

 AIX 4.1.4 (AFS 3.4a)
 Linux 1.2.13 (AFS 3.3)
 NEXTSTEP 3.2 (AFS 3.3) (untested on recent lsof revisions)
 Solaris 2.6 (AFS 3.4a)
 Ultrix 4.2 RISC (AFS 3.2b) (no longer available)

Lsof has not been tested under other combinations -- e.g. HP-UX
10.10 and AFS 3.4a
 -- and probably won't even compile there. Often
when a UNIX dialect version or AFS version changes, the new header
files come into conflict, causing compiler objections.

AIX
===

Specify the aix Configure abbreviation for AIX 4.1.[45], 4.2[.1],
4.3[.123], 5L, and 5.[123].

Specify aixgcc on AIX above 4.1 to use the gcc compiler. (Gcc can't be
used to compile lsof on AIX 4.1 and below because of kernel structure
alignment differences between it and xlc.) Gcc results sometimes
depend on the version of the gcc compiler that is used.

Compilation of lsof with gcc on AIX 4.3[.123], 5L, and 5.[123] has been
sparsely tested with varying degrees of success: it has been reported
to succeed on AIX 4.3.3 and 32 bit Power AIX 5.1; to fail on ia64 AIX
5.1 and 64 bit Power AIX 5.1; and to succeed on 32 and 64 bit Power AIX

5.2. Lsof compilation with gcc hasn't been tested on AIX 5.3.

At revision 4.61 and above lsof is configured and built to match the bit size of the kernel of Power architecture AIX 5.1 systems. Lsof binaries built for 32 and 64 bit kernels are not interchangeable. See 00FAQ for more information.

The Configure script uses /usr/bin/oslevel to determine the AIX version for AIX less than 5 and ``uname -rv'' for AIX 5 and higher. If /usr/bin/oslevel isn't executable on AIX less than 5, the Configure script issues a warning message and uses ``uname -rv'' to determine the AIX version.

When Configure must use ``uname -rv'' on AIX less than 5 to determine the AIX version, the result will lack a correct third component -- e.g., the `4' of ``4.1.4''. If your AIX less than 5 system lacks lacks an executable oslevel, I suggest you edit the Configure-produced Makefile and complete the _AIXV definition in the CFGF string.

By default lsof avoids using the kernel's readx() function, causing it to be unable to report information on some text and library file references. The ``-X'' option allows the lsof user to ask for the information readx() supplies.

Lsof avoids readx() to avoid the possibility of triggering a kernel problem, known as the Stale Segment ID kernel bug. Kevin Ruderman reported this bug to me. The bug shows up when the kernel's dir_search() function hangs, hanging the application process that called it so completely that the application process can neither be killed nor stopped. The hang is the consequence of another process (perhaps lsof) making legitimate use of the kernel's readx() function to access the kernel memory that dir_search() is examining. IBM has indicated they have no plans to fix the bug.

A fuller discussion of this bug may be found in the 00FAQ file of the lsof distribution. There you will find a description of the Stale Segment ID bug, the APAR on it, and a discussion of the sequence of events that exposes it.

I added the ``-X'' function so you can tell lsof to use readx(), but if you use ``-X'', you should be alert to its possibly serious side effects. Although readx() is normally disabled, its state is controlled with the HASXOPT, HASXOPT_ROOT, and HASXOPT_VALUE definitions in dialects/aix/machine.h, and you can change its default state by changing those definitions. You can also change

HASXOPT_ROOT via the Customize script.

You can also compile lsof with readx() use permanently enabled or disabled -- see the comments about the definitions in the dialects/aix/machine.h header file. You may want to permanently disable lsof's use of readx() if you plan to make lsof publicly executable. You can also restrict -X to processes whose real UID is root by defining HASXOPT_ROOT.

I have never seen lsof cause the Stale Segment ID bug to occur and haven't had a report that it has, but I believe there is a possibility it could.

AFS support for AIX was added with help help from Bob Cook and Jan Tax who provided test systems.

Henry Grebler and David J. Wilson helped with lsof for AIX 4.2.

Bill Pemberton provided an AIX 4.3 test system. Andrew Kephart and Tom Weaver provided AIX 4.3 technical assistance. Niklas Edmundsson did 4.3.1 testing. Doug Crabill provided an AIX 4.3.2 test system. Jeff W. Stewart provided an AIX 4.3.3 test system.

The SMT file type for AIX 4.1.[45], 4.2[.1], and 4.3[.12] is my fabrication. See the 00FAQ file more information on it.

Loc Le and Nasser Momtaheni of IBM provided test systems for AIX 5L and 5.1. Lsof for AIX 5L and 5.1 needs setuid-root permission to process the -X option on systems whose architecture type is ia64.

Dale Talcott of Purdue provided AIX 5.1 and 5.2 test systems. Dale and John Jackson of Purdue provided an AIX 5.3 test system.

Apple Darwin

The Apple Darwin port was provided by Allan Nathanson for version 1.2. Allan also arranged for access to a test system for maintenance and regression testing. Dale Talcott provided a test system, too.

Allan supplied patches for updates to 1.4, 5.x, 6.x, 7.x and 8.x.

BSDI BSD/OS

As of lsof revision 4.77 support for BSDI BSD/OS has been discontinued.

Lsof revision 4.76 with BSDI BSD/OS support may be found on lsof.itap.purdue.edu in pub/tools/unix/lsof/src.

DEC OSF/1, Digital UNIX, Tru64 UNIX

Robert Benites, Dean Brock, Angel Li, Dwight McKay, Berkley Shands, Ron Young and Steve Wilson have kindly provided test systems. Jeffrey Mogul has provided technical assistance. Dave Morrison and Lawrence MacIntyre did Digital UNIX V3.2 testing.

Lsof supports the ADVFS/MSFS layered file system product. Lsof can locate all the open files of an ADVFS/MSFS file system when its path is specified, provided the file system is listed in /etc/fstab with an ``advfs'' type. (This /etc/fstab caveat applies only to Digital UNIX 2.0.) At Digital UNIX 4.0 and Tru64 UNIX, using code provided by David Brock, lsof 4.20 and above can locate ADVFS file paths.

Testing of lsof on DEC OSF/1 and Digital UNIX 4.0 ended with lsof revision 4.74. Hence, the lsof documentation has dropped the claim that it works there.

For a distribution of lsof 4.74 that was tested on DEC OSF/1 and Digital UNIX 4.0, check pub/tools/unix/lsof/OLD/src on the lsof ftp home, lsof.itap.purdue.edu.

Lsof revisions past 4.74 have only been tested on Tru64 UNIX 5.1.

FreeBSD

Bill Bormann of Purdue University provided access to several FreeBSD test systems. Ade Barkah, John Clear, Ralph Forsythe, Michael Haro, Kurt Jaeger, and William McVey have also provided FreeBSD test systems.

The FreeBSD distribution header files are augmented by header files in the dialects/freebsd/include directory.

Larry Rosenman maintains the lsof FreeBSD port package.

HP-UX

Lsof has two HP-UX bases: /dev/kmem for HP-UX 11.0 and earlier;
and PSTAT for HP-UX 11.11 and later. The lsof Configure script
will pick the appropriate base.

To use the CCITT x.25 socket support for HP-UX, you must have the
x.25 header files in /etc/conf/x25

Pasi Kaara helped with the HP-UX port, especially with its CCITT
x.25 socket support.

Richard
Allen provided HP-UX 10.x and 11.x test systems, as did
Mark Bixby, and Elias Halldor Agustsson. Marc Winkler helped test
the 10.20 port. Richard J. Rauenzahn provided a 64 bit HP-UX 11
test system and an HP-UX 11.11 development system.

AFS support for HP-UX was added thanks to help from Chaskiel Moses
Grundman, who provided a test system.

The /dev/kmem-based HP-UX 11.00 support is extremely fragile. It
depends on privately developed kernel structure definitions. (See
.../dialects/hpux/hpux11 for the header files making the definitions.)
Those header files and their definitions will not be updated by
HP-UX 11.00 patches, making it likely that any patch changing a
kernel structure critical to lsof will break lsof in some way.

It's possible to build a 64 bit lsof for 64 bit HP-UX 11.00 with
gcc, but you must have a gcc compiler capable of producing 64 bit
executables. See the 00FAQ file for more information.

The PSTAT-based lsof for HP-UX 11.11 and later is much more solid.
I
am indebted to the vision of HP for providing an lsof kernel API
through the PSTAT implementation. Specifically I appreciate the
help of HP staff members Carl Davidson, Louis Huemiller, Rich
Rauenzahn, and Sailu Yallapragada that made PSTAT-based HP-UX lsof
possible.

IPv6
====

Lsof has IPv6 support that has been tested for these UNIX dialects:
AIX 4.3.x; Apple Darwin 5.[12] and 6.0; the INRIA and KAME FreeBSD IPv6
implementations; PSTAT-based HP-UX; /proc-based Linux; the INRIA and
KAME NetBSD implementations; and Solaris 8 and 9. Lsof has IPv6
support that hasn't been tested for: OpenBSD (KAME); OpenUNIX 8; Tru64

Unix 5.[01]; and UnixWare 7.1.[34].

Please let me know if your UNIX dialect has IPv6 support and I'll
see if it can be supported by lsof.

Linux

Tim Korb, Steve Logue, Joseph J. Nuspl Jr., and Jonathan Sergent
have provided Linux test systems.

Michael Shields helped add and test automatic handling of ELF/COFF
form names in /System.map, Marty Leisner and Keith
Parks have helped
test many lsof revisions. Marty has provided valuable suggestions,
Linux hints, and code, too.

The 00FAQ file gives some Linux tips, including information on
coping with system map file problems.

To determine the state of the Linux 2.1.x C library lseek() function,
the lsof Configure script runs a test program that must have
permission to read /dev/kmem. The test determines if the lseek()
function properly handles kernel offsets, which appear to be negative
because their high order bit is set. If the lseek() test reveals
a faulty lseek(), Configure activates the use of a private lseek()
function for kernel offset positioning. See the Linux problems
section of the 00FAQ file of the lsof distribution for more
information.

NetBSD

Greg Earle and Paul Kranenburg have assisted with the NetBSD ports.
Paul has provided test systems. Ray Phillips provided a NetBSA
Alpha test system. Andrew Brown also provided a test system.

The NetBSD dialect version of lsof
is compiled using the dialect
sources it shares with OpenBSD in the n+obsd dialect sub-directory.

NEXTSTEP and OPENSTEP

Virtual memory header files that allow lsof to display text references

were derived from the contents of /usr/include/vm of NEXTSTEP 2.0.
NeXT did not ship the virtual memory header files with other NEXTSTEP
or OPENSTEP versions.

You may use the RC_FLAGS environment variable to declare compiler
options outside the Makefile. A common use of this variable is to
define the architecture types to be included in a "fat" executable.
See the comments in dialects/next/Makefile for an example.

OpenBSD

David Mazieres has provided OpenBSD test systems. The OpenBSD
dialect version of lsof is compiled using the dialect sources it
shares with NetBSD in the n+obsd dialect sub-directory.

Kenneth Stailey has provided OpenBSD testing and advice.

John Dzubera (Zube) reports, "lsof 4.33 compiles and runs on OpenBSD
2.3 for the pmax architecture
 (decstation 3100)."

I have not tested lsof on OpenBSD 3.8, but David Mazieres reports
revision 4.76 worked on OpenBSD 3.8.

Pyramid DC/OSx and Reliant UNIX

As of lsof revision 4.52 support for all Pyramid dialects has been
discontinued. Lsof revision 4.51 with Pyramid support may be
obtained upon request. Send the request to abe@purdue.edu.

These two UNIX dialects are very similar and share dialect-specific
source files from the pyramid sub-directory.

The Reliant Unix Pyramid C compiler issues warning messages that
I haven't found a convenient way to suppress. You can ignore
warning messages about casts and conversions that lose bits. The
message "warning: undefining __STDC__" is intentionally caused by
the lsof MkKernOpts configuration script to suppress warning messages
about cast and conversion problems in standard system header files,
such as <stdio.h> and <string.h>.

Bruce Beare and Kevin Smith provided test systems.

Caldera OpenUNIX
==========

Larry
Rosenman provided an OpenUNIX 8 test system. Matthew Thurmaier provided technical assistance, along with these people from Caldera: Jack Craig, Robert Lipe, and Bela Lubkin.

Robert Lipe supplied changes to lsof for OpenUNIX 8.0.1. Those changes were also incorporated in UnixWare 7.1.3 when it became the release name for OpenUNIX 8.0.1.

Support for lsof on OpenUNIX ended at lsof revision 4.74. The last lsof revision, 4.74, tested on OpenUNIX, may be found at the lsof "home" ftp site, lsof.itap.purdue.edu, in pub/tools/unix/lsof/OLD/src.

SCO OpenServer
==========

Dion Johnson, Bela Lubkin, and Nathan Peterson of SCO gave me copies of SCO OpenServer and the SCO OpenServer Development System 3.0 and provided technical advice for the lsof port.

Hugh Dickins, Bela Lubkin, Craig B. Olofson, and Nathan Peterson provided version 5.0 and gave technical advice for porting lsof to it. Bela provided the 5.0.4 changes. D. Chris Daniels provided a 5.0.4 test system,
Lee Penn provided one for 5.0.5, and John
Dubois for 5.0.6.

The <netdb.h> header file was accidentally omitted from some SCO OpenServer Development System releases. The Configure script will sense its absence and substitute an equivalent from the BSD distribution. The BSD <netdb.h> and the <sys/cdefs.h> header file it includes are located in the dialects/os/include sub-directory tree.

To compile lsof from its distribution sources you must have the TCP/IP and NSF headers in /usr/include. While those are optional OpenServer packages, I have access to no system that doesn't have them, so I'm unable to build lsof for such a configuration. However, it should be possible to modify the lsof Configure script and sources so lsof would compile and work without those optional packages.

If you have an OpenServer system configured without the TCP/IP and NFS packages, and want to tackle the job of building lsof for it,

contact me via e-mail at <abe@purdue.edu>. I'll identify the
Configure
script, header file, and source file changes you will
need to make. (Caution: this is not a simple task, or I would have
already done it.)

The optional osrgcc and scogcc Configure abbreviations construct
Makefiles for compiling lsof with gcc.

The UnixWare 7.1.4 sources are used for OpenServer Release 6.0.0.
Hence there is a separate Configure abbreviation for it, "osr6".
Richard of SCO provided a test system and technical assistance.

SCO|Caldera UnixWare
==========

D. Chris Daniels, John Hughes, Ken Laing, Andrew Merril, Lee Penn, and
Matthew Thurmaier provided test systems. Bela Lubkin provided
technical assistance. Larry Rosenman provided 7.1.[34] test systems.

Solaris 2.x, 7, 8, 9 and 10
==========

SEE THE CAUTIONS SECTION OF THIS DOCUMENT.

The latest Solaris revision of lsof 4 might work under Solaris
2.[1-4] and 2.5[.1] and 7 but hasn't been tested there. I have no
test systems for those Solaris versions.

Lsof will compile with gcc and the Sun C compiler
under Solaris.
If you want to use the Sun compiler, use the solariscc Configure
abbreviation. If you use a gcc version less than 2.8 on Solaris,
make sure the gcc-specific includes have been updated for your
version of Solaris -- i.e., run the gcc fixincludes script.

Solaris 7, 8, 9 and 10 support for 64 bit kernels depends on a Sun
WorkShop or Forte C compiler version that supports the "-xarch=v9"
flag -- usually 5.0 or greater. Gcc versions 2.95 and above *may*
be configured and built for 64 bit support, but it takes some extra
work, the resulting compiler may be fragile, and the gcc developers
discourage it. I've built 64 bit capable gcc compilers for Solaris
7, 8 and 9 from gcc versions 2.95 through 3.0.1 and produced working
lsof executables with them. More information on 64 bit gcc for
Solaris may be found in the 00FAQ file.

Solaris 10 ZFS support is questionable, because Sun does not distribute the ZFS kernel structure definition header files. The lsof Configure script
and source code use some risky work-arounds. ZFS file system support was made possible with help from Horst Scheuermann.

Dave Curry and Steve Kirsch provided resources for Solaris 2.x ports. Casper Dik and Gerry Singleton consulted and provided valuable assistance.

Henry Katz, Joseph Kowalski, Charles Stephens, Mike Sullivan, and Mike Tracy provided technical assistance.

AFS support was added to Solaris lsof with help from Curt Freeland, Heidi Hornstein, Michael L. Lewis, Terry McCoy, Phillip Moore, and Sushila R. Subramanian.

Casper Dik provided valuable assistance for the Solaris 8 support.

Sun has graciously provided me access to BETA versions of Solaris 2.5, 2.6, 7, 8, and 9.

John Dzubera provided Solaris 7 and 8 test systems.

Mike Miscevic provided Solaris 10 test systems.

Ultrix

As of lsof revision 4.52 support for Ultrix is no longer available, because I no longer have an Ultrix test system.

Terry Friedrichsen, Dwight McKay, and Jeffrey Mogul helped me with
this port.

DECnet support was added to Ultrix lsof with the help of John Beacom, who kindly provided a test system. The Configure script decides that DECnet support is available if /usr/lib/libdnet.a and /usr/include/netdnet/dn.h exist and are readable.

Veritas VxFS and VxVM

Lsof supports some versions of Veritas VxFS and VxVM on some UNIX dialects. Consult the lsof Configure script for the specific

dialect, and consult the lsof dialect-specific source files for the UNIX dialect of interest. Veritas support will usually be found in a source file named dnode[1-9].c.

Since Veritas rarely has a version number that can be extracted with shell commands, lsof doesn't use it. Instead, when lsof supports Veritas, the Configure script will form compile-time definitions starting with HASVXFS. Check the lsof 00PORTING documentation file for more information.

Lsof Veritas support requires that the supporting Veritas header files be installed -- e.g., in /usr/include/sys/fs.
(The location
will depend in the dialect's header file conventions.)

Some information on lsof support for Veritas extensions may be found in the lsof 00DIST file. (The ChangeLog file points to 00DIST.)

Chris Kordish and Andy Thomas have provided Solaris VxFS test systems.

==========
User-contributed Dialect Support
==========

There are some user-contributed dialect versions of lsof; more information on them can be found at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/contrib

Check the 00INDEX file there for details.

==========
Dialects No Longer Supported
==========

Because I don't have access to test systems, these UNIX dialects are no longer supported by lsof:

CDC EP/IX
/dev/kmem-based Linux
MIPS RISC/os
Motorola V/88
Pyramid DC/OSx
Pyramid Reliant UNIX

Sequent DYNIX
SGI IRIX
SunOS 4.x
Ultrix
UnixWare below 7.0

Remnants of the support lsof once provided for these
dialects may
be found in:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/OLD/dialects

==========
Installing Lsof
==========

The distributed Makefiles do not have actions that will install lsof. I've come to the conclusion there is no standard for installing lsof or its man page, so I no longer distribute make rules for installing them. You should adjust the Makefile for your local preferences.

The Makefile does have an install rule that will cause lsof to compile by virtue of its dependency clause. Some Makefiles also have a dependency that causes the production of a man page that is ready to install. However, the actions of the install rule will not cause the lsof executable or its man page to be installed in any UNIX system-wide directory.

Instead, after the compilation and optional man page production are completed, the install rule will produce a brief description of what actions you might add to the install rule. The description will suggest the possible
modes, ownerships, permissions, and
destinations your install rule might employ to install the lsof executable and man page.

As you form your install rule, keep in mind that lsof usually needs some type of special permission to do its job. That may be permission to read memory devices such as /dev/kmem, /dev/mem, or /dev/swap, or it may be authorization to read entries in the /proc file system.

Memory device access can usually be provided by setting the modes of the lsof executable so that it's effective group identifier when it runs is the same as the group that has permission to read the memory devices -- i.e., it is setgid-group. The privileged group is usually kmem, sys, or system.

Don't overlook using ACLs -- e.g., on AIX or Solaris 8 -- to give lsof permission to access memory devices. ACLs, coupled to a separate group like kmem, can be safer than giving lsof setgid authorization to a commonly used system group.

When lsof needs to read /proc file system entries, it must be installed
with modes that make its effective user identifier root when it runs -- i.e., it must be setuid-root. If lsof must be installed setuid-root (only the AIX 5L, PSTAT-based HPUX, and /proc-based Linux, ports need such power.), then access to memory devices is automatic (or not needed in the case of /proc-based Linux).

Your choice of permissions for lsof may also be affected by your desire to allow anyone to use it or your need to restrict its usage to specific individuals. You will have to be guided by local policy and convention in this case.

The next two sections, Setgid Lsof Dialect Versions and Setuid-root Lsof Dialect Versions, list recommended install permissions.

The system directory where you install the lsof executable is also open to choice. A traditional place for a tool like lsof is /usr/local/etc, but recent changes in directory structure organization suggest that somewhere in /opt may be more suitable.

Bear one other factor in mind when choosing a location for the lsof
executable -- it usually is a shared executable, requiring access to shared libraries. Thus, locations like /sbin or /usr/sbin are probably unsuitable.

Once you've chosen a location for the executable you may find that the location for the man page follows -- e.g., if the executable goes in /usr/local/etc, then the man page goes in /usr/local/man. If the executable location doesn't imply a location for the man page, you'll have to let local custom guide you.

Setuid-root Lsof Dialect Versions

These dialect versions should be installed with setuid-root permission -- i.e., the lsof binary should be owned by root and its setuid execution bit (04000) should be set.

AIX 5L and above for full use of the -X option
Apple Darwin 8.x for Power Macintosh systems
PSTAT-based HP-UX 11.11 and 11.23
/proc-based Linux (generally 2.1.72 and above)

Setgid Lsof Dialect Versions
==========

These dialect versions should be installed
with setgid permission,
owned by the group that can read kernel memory devices such as
/dev/drum, /dev/kmem, /dev/ksyms, /dev/mem, /dev/swap. ACLs may
be another mechanism (e.g., under AIX or Solaris 8) you can use to
grant read permission to the kernel memory devices.

AIX 4.1.[45], 4.2[.1], and 4.3[.123]
Apple Darwin 7.x for Power Macintosh systems
DEC OSF/1, Digital UNIX, Tru64 UNIX 2.0, 3.2, 4.0, and 5.[01]
FreeBSD 2.1.6, 2.2[.x], 3.x, 4.x, 5.x, [6789].x and 1[012].x
NetBSD 1.[456], 2.x and 3.x
NEXTSTEP 3.[13]
OpenBSD 2.[89] and 3.[0-9]
OPENSTEP 4.x
Caldera OpenUNIX 8
SCO OpenServer 5.0.[46]
SCO UnixWare 7.0 and 7.1.[0134]
Solaris 2.6, 8, 9 and 10
Ultrix 4.2 (no longer available)

==========
Porting lsof 4 to a New UNIX Dialect
==========

If you're brave enough to consider this, look at the 00PORTING
file. Please contact me before you start. I might be able to help
you or even do the port myself.

Don't overlook
the contrib/ directory in pub/tools/unix/lsof on my
ftp server, lsof.itap.purdue.edu. It contains user-contributed ports
of lsof to dialects I don't distribute, because I can't test new
revisions of lsof on them.

==========
Quick Start to Using lsof
==========

For information on how to get started quickly using lsof, consult
the 00QUICKSTART file of the lsof distribution. It cuts past the
formal density of the lsof man page to provide quick examples of
using lsof to solve common open file display problems.

==========
Cross-configuring Lsof
==========

Using environment variables it is possible to Configure (and possibly
build) lsof for one UNIX dialect on a different one -- e.g., you
are running Configure on a Linux 2.3 system and you want to Configure
and build lsof for Linux 2.4.

See the 00XCONFIG file of the lsof distribution for a discussion
of how to do this.

==========
Environment
 Variables Affecting the Configure Script
==========

Configure script actions can be modified by introducing values to
the script via environment variables. In many cases the environment
variable values take the place of test operations the Configure
script makes.

For more information on environment variables that can affect
Configure, consult the 00XCONFIG file of the lsof distribution.
See the General Environment Variables sections for descriptions of
ones that affect all dialects. Consult the Dialect-Specific
Environment Variables section for ones that might affect the dialect
you are trying to configure.

Vic Abell <abe@purdue.edu>
February 14, 2018

Found in path(s):
* /lsof-4-93-2-dfsg-orig-1-tar-xz/lsof-4.93.2/00README

1.1249 zcrypto 0.0.0-20230310154051-c8b263fd8300

1.1249.1 Available under license :

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```
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package pq

import (
 "context"
 "database/sql/driver"
)

// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
 return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
 c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
 on it.
type NoticeHandlerConnector struct {
 driver.Connector
 noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
 c, err := n.Connector.Connect(ctx)
 if err == nil {
  SetNoticeHandler(c, n.noticeHandler)
 }
```

```
 return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  return c.noticeHandler
 }
 return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
 setting the notice
// handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  c.noticeHandler = handler
  return c
 }
 return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
```

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github.com/pelletier/go-toml:

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localtime.go, localtime_test.go:

Originals:
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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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//go:build go1.10
// +build go1.10

package pq

import (
 "context"
 "database/sql/driver"
)

// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
 return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
 c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
 on it.
type NoticeHandlerConnector struct {
 driver.Connector
 noticeHandler func(*Error)
```

```
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
 c, err := n.Connector.Connect(ctx)
 if err == nil {
  SetNoticeHandler(c, n.noticeHandler)
 }
 return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  return c.noticeHandler
 }
 return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
 setting the notice
// handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  c.noticeHandler = handler
  return c
 }
 return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
```

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github.com/pelletier/go-toml:

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localtime.go, localtime_test.go:

Originals:
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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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1.1252 libtimedate-perl 2.3300-2

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=encoding utf8

=head1 NAME

Date::Language::Bulgarian - localization for Date::Format

=head1 DESCRIPTION

This is Bulgarian localization for Date::Format.
It is important to note that this module source code is in utf8.
All strings which it outputs are in utf8, so it is safe to use it
currently only with English. You are left alone to try and convert
the output when using different Date::Language::* in the same application.
This should be addresed in the future.

=head1 SYNOPSIS

```
  use strict;
  use warnings;
  use Date::Language;
  local $\=$/;
  my $template ='%a %b %e %T %Y (%Y-%m-%d %H:%M:%S)';
  my $time=1290883821; #or just use time();
  my @lt = localtime($time);
  my %languages = qw(English GMT German EEST Bulgarian EET);
  binmode(select,':utf8');

  foreach my $l(keys %languages){
     my $lang = Date::Language->new($l);
     my $zone = $languages{$l};
     print $/. "$l
 $zone";
     print $lang->time2str($template, $time);
     print $lang->time2str($template, $time, $zone);

     print $lang->strftime($template, \@lt);
  }
```

=head1 AUTHOR

Krasimir Berov (berov@cpan.org)

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```
---
abstract: unknown
author:
 - 'Graham Barr <gbarr@pobox.com>'
build_requires:
 ExtUtils::MakeMaker: '0'
configure_requires:
 ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.44, CPAN::Meta::Converter version 2.150010'
license: perl
meta-spec:
 url: http://module-build.sourceforge.net/META-spec-v1.4.html
 version: '1.4'
name: TimeDate
no_index:
 directory:
   - t
   - inc
resources:
 bugtracker: https://github.com/atoomic/perl-TimeDate/issues
 repository: https://github.com/atoomic/perl-TimeDate
version: '2.33'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'
```

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This is the perl5 TimeDate distribution. It requires perl version 5.003
or later

This distribution replaces my earlier GetDate distribution, which was
only a date parser. The date parser contained in this distribution is
far superior to the yacc based parser, and a *lot* fatser.

The parser contained here will only parse absolute dates, if you want a
date parser that can parse relative dates then take a look at the Time

modules by David Muir on CPAN.

You install the library by running these commands:

```
perl Makefile.PL
make
make test
make install
```

Please report any bugs/suggestions to <gbarr@pobox.com>

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=head1 NAME

Date::Language::Hungarian - Magyar format for Date::Format

=head1 SYNOPSIS

```
my $lang = Date::Language->new('Hungarian');
print $lang->time2str("%a %b %e %T %Y", time);

@lt = localtime(time);
print $lang->time2str($template, time);
print $lang->strftime($template, @lt);

print $lang->time2str($template, time, $zone);
print $lang->strftime($template, @lt, $zone);

print $lang->ctime(time);
print $lang->asctime(@lt);

print $lang->ctime(time, $zone);
print $lang->asctime(@lt, $zone);
```

See L<Date::Format>.

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Paula Goddard (paula -at- paulacska -dot- com)

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1.1253 libisoburn 1.5.4-2

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1.1258 lazr-uri 1.0.6-3

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1.1259 grafana-saml 0.4.15-0.20231025143828-a6c0e9b86a4c

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1.1262 go-colorable v0.1.13

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1.1265 grpc-go 1.59.0

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1.1275 govalidator 0.0.0-20230301143203-a9d515a09cc2

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1.1276 logr 1.3.0

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* /logr-1-3-0-4-zip/logr-1.3.0/docs/bootstrap-toc.js
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Package: logr
Title: Creates Log Files

```
Version: 1.3.0
Authors@R: c(
  person(given = "David",
         family = "Bosak",
         role = c("aut", "cre"),
         email = "dbosak01@gmail.com"),
  person("Rikard", "Isaksson", role = "ctb"))
Description: Contains functions to help create log files.  The
  package aims to overcome the difficulty of the base R sink() command.  The
  log_print() function will print to both the console and the file log,
  without interfering in other write operations.
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URL: https://logr.r-sassy.org
BugReports: https://github.com/dbosak01/logr/issues
Depends: R (>= 3.4.0)
Suggests:
  knitr,
  rmarkdown,
  testthat,
  tidylog,
  dplyr,
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1.1277 azure-sdk-for-go 68.0.0+incompatible

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1.1278 golang-lru 2.0.7

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1.1279 zlib 1.2.11

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1.1280 zlib 1.2.5

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/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.5, April 19th, 2010

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Jean-loup Gailly Mark Adler
jloup@gzip.org madler@alumni.caltech.edu

The data format used by the zlib library is described by RFCs (Request for
Comments) 1950 to 1952 in the files http://www.ietf.org/rfc/rfc1950.txt

(zlib format), rfc1951.txt (deflate format) and rfc1952.txt (gzip format).
*/

1.1281 mergo 0.3.16

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import: ../../../../fossene/db/schema/thing.yml
fields:
  site: string
  author: root

1.1282 mitchellh-mapstructure 1.5.1-0.20220423185008-bf980b35cac4

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1.1283 zlib 1.2.7

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1.1284 github.com/tklauser/numcpus 0.7.0

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1.1285 github.com/tklauser/go-sysconf 0.3.13

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1.1286 klog 2.120.1

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1.1289 kubernetes-apimachinery 0.27.4

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Jean-loup Gailly Mark Adler
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/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.3.1, January 22nd, 2024

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The data format used by the zlib library is described by RFCs (Request for
Comments) 1950 to 1952 in the files http://tools.ietf.org/html/rfc1950
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*/

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1.1296 networkd-dispatcher 2.2.4-1

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1.1299 container-storage-interface-spec 1.9.0

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1.1300 gorilla-handlers 1.5.2

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Version 3, 29 June 2007

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1.1303 google-uuid 1.4.0

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1.1304 color 1.16.0

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1.1305 autotools-dev 20220109.1

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1.1306 pytz 2024.1

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1.1307 icu 74.2-r0

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layout: default
title: Legalities

parent: Release & Milestone Tasks
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nav_order: 70

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for
 an example; there should be only two files to update.
-*-makefile-*-
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GEN_DEPS.c= $(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc= $(CXX) -E -MM $(DEFS) $(CPPFLAGS)

Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE= -Wl,-rpath,

Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic

Shared object suffix
SO = so
Non-shared intermediate object suffix
STATIC_O = ao

Compilation
 rules
%.$(STATIC_O): $(srcdir)/%.c
 $(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
 $(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

```
%.$(STATIC_O): $(srcdir)/%.cpp
 $(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
 $(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<


## Dependency rules
%.d: $(srcdir)/%.c
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.c) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

%.d: $(srcdir)/%.cpp
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.cc) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

## Versioned libraries rules

%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)
 $(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)
 $(RM) $@ && ln -s ${*F}.$(SO).$(SO_TARGET_VERSION) $@

##  Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

## End BSD-specific setup
```

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File: aclocal.m4 (only for ICU4C)
Section: pkg.m4 - Macros to locate and utilise pkg-config.

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Commands to generate dependency files
GEN_DEPS.c= $(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc= $(CXX) -E -MM $(DEFS) $(CPPFLAGS)

```
## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE= -Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic

## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation
 rules
%.$(STATIC_O): $(srcdir)/%.c
 $(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
 $(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
 $(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
 $(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<


## Dependency rules
%.d: $(srcdir)/%.c
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.c) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

%.d: $(srcdir)/%.cpp
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.cc) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
```

```
  [ -s $@ ] || rm -f $@'

## Versioned libraries rules

%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)
 $(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)
 $(RM) $@ && ln -s ${*F}.$(SO).$(SO_TARGET_VERSION) $@

##  Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

## End BSD-specific setup
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File: aclocal.m4 (only for ICU4C)
Section: pkg.m4 - Macros to locate and utilise pkg-config.

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## Commands to generate dependency files
GEN_DEPS.c= $(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc= $(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE= -Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
```

```
LD_SOOPTIONS= -Wl,-Bsymbolic

## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation
 rules
%.$(STATIC_O): $(srcdir)/%.c
 $(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
 $(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
 $(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
 $(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<


## Dependency rules
%.d: $(srcdir)/%.c
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.c) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

%.d: $(srcdir)/%.cpp
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.cc) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

## Versioned libraries rules

%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)
 $(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)
 $(RM) $@ && ln -s ${*F}.$(SO).$(SO_TARGET_VERSION) $@

##  Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=
```

Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

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Section: pkg.m4 - Macros to locate and utilise pkg-config.

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1.1310 metrics 4.2.25

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics
Build-Jdk-Spec: 17

Bundle-Description: Metrics is a Java library which gives you unparall
eled insight into what your code does in production. Metrics p
rovides a powerful toolkit of ways to measure the behavior of critica
l components in your production environment.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Core
Bundle-SymbolicName: io.dropwizard.metrics.core
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics;uses:="org.slf4j";version="4.2.25
"
Implementation-Title: Metrics Core
Implementation-Version: 4.2.25
Import-Package: org.slf4j;version="[1.6.0,2.0.0)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-core-4-2-25-jar/META-INF/MANIFEST.MF

1.1311 openssl 3.0.13

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/openssl-3-0-13-tar-1-gz/openssl-3.0.13.tar[1]: binary file matches

Found in path(s):
* /bin/grep

1.1312 has-tostringtag 1.0.2

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1.1313 metrics-httpclient 4.2.23

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.httpclient
Build-Jdk-Spec: 17
Bundle-Description: An Apache HttpClient wrapper providing Metrics ins
trumentation of connection pools, request        durations and rates,
 and other useful information.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Apache HttpClient
Bundle-SymbolicName: io.dropwizard.metrics.httpclient
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.httpclient;uses:="com.codahale.me
trics,org.apache.http,org.apache.http.config,org.apache.http.conn,org
.apache.http.conn.routing,org.apache.http.conn.socket,org.apache.http
.impl.client,org.apache.http.impl.conn,org.apache.http.protocol";vers
ion="4.2.23"
Implementation-Title: Metrics Integration for Apache HttpClient
Implementation-Version: 4.2.23
Import-Package:
 com.codahale.metrics;version="[4.2,5)",org.apache.http
,org.apache.http.client,org.apache.http.client.methods,org.apache.htt
p.client.utils,org.apache.http.config,org.apache.http.conn,org.apache
.http.conn.routing,org.apache.http.conn.socket,org.apache.http.conn.s
sl,org.apache.http.impl.client,org.apache.http.impl.conn,org.apache.h
ttp.pool,org.apache.http.protocol
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316
```

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* /metrics-httpclient-4-2-23-jar/META-INF/MANIFEST.MF

1.1314 python-dateutil 2.8.1-6

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1.1315 olefile 0.46-3

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Please contact me if I forgot to mention your name.

A big thank you to all of them:

- Niko Ehrenfeuchter (@ehrenfeu): added support for Jython
- Niko Ehrenfeuchter, Martijn Berger and Dave Jones: helped fix 4K sector support
- Martin Panter: conversion to Python 3.x/2.6+
- mete0r_kr (@mete0r): added support for file-like objects
- chuckleberryfinn: fixed bug in getproperties
- Martijn, Ben G.: bug report for 64 bits platforms
- Hugo (@hugovk): added support for Travis CI

- Jon Dufresne (@jdufresne): improved isOleFile
- Alex Clark (@aclark4life)
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- Philippe Lagadec: main author and maintainer since 2005
- and of course Fredrik Lundh: original author of OleFileIO from 1995 to 2005

See also the list of contributors on GitHub:
https://github.com/decalage2/olefile/graphs/contributors

1.1316 netns 0.0.0-20210104183010-2eb08e3e575f

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1.1317 joda-time 2.12.7

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1.1318 metrics-jmx 4.2.23

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jmx
Build-Jdk-Spec: 17
Bundle-Description: A set of classes which allow you to report metrics
 via JMX.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration with JMX
Bundle-SymbolicName: io.dropwizard.metrics.jmx
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.jmx;uses:="com.codahale.metrics,j
avax.management";version="4.2.23"
Implementation-Title: Metrics Integration with JMX
Implementation-Version: 4.2.23
Import-Package: org.slf4j;version="[1.6.0,2.0.0)",com.codahale.metrics
;version="[4.2,5)",javax.management
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316
```

Found in path(s):
* /metrics-jmx-4-2-23-jar/META-INF/MANIFEST.MF

1.1319 pierrec-lz4 4.1.21

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* Source:
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procfs provides functions to retrieve system, kernel and process metrics from the pseudo-filesystem proc.

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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1.1332 metrics-graphite 4.2.25

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.graphite
Build-Jdk-Spec: 17
Bundle-Description: A reporter for Metrics which announces measurement
s to a Graphite server.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Graphite Integration for Metrics
Bundle-SymbolicName: io.dropwizard.metrics.graphite
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.graphite;uses:="com.codahale.metr
ics,com.rabbitmq.client,javax.net";version="4.2.25"

Implementation-Title: Graphite Integration for Metrics
Implementation-Version: 4.2.25
Import-Package: org.slf4j;version="[1.6.0,2.0.0)",com.codahale.metrics
;version="[4.2,5)",com.rabbitmq.client;version="[5.20,6)",javax.net
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-graphite-4-2-25-jar/META-INF/MANIFEST.MF

1.1333 cryptsetup 2.7.0

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1.1335 spdx-exceptions 2.5.0

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1.1336 unsafe-assume-no-moving-gc 0.0.0-20231121144256-b99613f794b6

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1.1337 unzip 6.0-26ubuntu3.2

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- -

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Jim Luther's Mac OS File Manager interface code; and Christopher Evans' MacBinaryIII coding code (for the MacOS port).. These copyrights are discussed in more detail below.

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There are no known patents on any of the code in UnZip. Unisys claims a patent on LZW encoding and on LZW decoding _in an apparatus that performs LZW encoding_, but the patent appears to exempt a stand-alone decoder (as in UnZip's unshrink.c). Unisys has publicly claimed otherwise, but the issue has never been tested in court. Since this point is unclear, unshrinking is not enabled by default. It is the responsibility of the user to make his or her peace with Unisys and its licensing requirements. (unshrink.c may be removed from future releases altogether.)

The original unzip source code has been extensively modified and
almost entirely rewritten (changes include random zipfile access
rather than sequential; replacement of unimplode() with explode();
replacement of old unshrink() with new (unrelated) unshrink(); re-
placement of output routines; addition of inflate(), wildcards,
filename-mapping, text translation, ...; etc.). As far as we can
tell, only the core code of the unreduce method remained substantially
similar to Mr. Smith's original source. As of UnZip
5.42, the complete
core code is now covered by the Info-ZIP Licence. Therefore, support
for the reduce method has been removed.
The drop of the reduce method should only affect some test archives,
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For pathologic cases where support for reduced archive entries is
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The following copyright applies to the Mac OS File Manager interface code
(macos/source/macstuff.[ch]), distributed with UnZip 5.4 and later:

```
  * MoreFiles
  *
  * A collection of File Manager and related routines
  *
  * by Jim Luther (Apple Macintosh Developer Technical Support Emeritus)
  * with significant code contributions by Nitin Ganatra
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```
 *  MacBinaryIII.h
 *
 *  Copyright 1997 Christopher Evans (cevans@poppybank.com)
 *
 *  Basic encoding and decoding of Macintosh files to the
 *  MacBinary III spec.
 * ---------------------------------------------------------------------
 * This source is copyrighted by Christopher Evans (cevans@poppybank.com)
 * (available at ftp://ftp.lazerware.com/MacBinaryIII_src_C.sit
 * homepage of Leonard Rosenthol  leonardr@netcom.com)
```

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```
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```

Regarding the first stipulation, Mr. Smith was tracked down in southern
California some years back [Samuel H. Smith, The Tool Shop; as of mid-
May 1994, (213) 851-9969 (voice), (213) 887-2127(?) (subscription BBS),
71150.2731@compuserve.com]:

"He says that he thought that whoever contacted him understood that
he has no objection to the Info-ZIP group's inclusion of his code.
His primary concern is that it remain freely distributable, he said."

Despite the fact that our "normal" code has been entirely rewritten

and by default
no longer contains any of Mr. Smith's code, Info-ZIP
remains indebted and grateful to him. We hope he finds our contributions as useful as we have his.

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```

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Kai Uwe Rommel (OS/2), John Bush and Paul Kienitz (Amiga), Antoine
Verheijen (Macintosh), Hunter Goatley (more VMS), Mike White (Windows
DLLs), Christian Spieler (overall logic, optimization, VMS, etc.) and
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The decompression core code for the deflate method (inflate.[ch],
explode.c) was originally written by Mark Adler who submitted it
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1.1338 golang-lru 1.0.2

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1.1343 uniseg 0.4.7

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1.1344 go.etcd.io/etcd/client/v3 3.5.12

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1.1345 github.com/rivo/uniseg 0.4.7

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1.1348 google-uuid 1.6.0

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1.1349 zap 1.27.0

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1.1353 smartpqi 2.1.26-030

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BSON library for Go

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1.1361 go4.org/unsafe/assume-no-moving-gc 0.0.0-20231121144256-b99613f794b6

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1.1362 libuv 1.43.0-1ubuntu0.1

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1.1363 google-api-go-client 0.160.0

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1.1364 metrics-annotation 4.2.23

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.annotation
Build-Jdk-Spec: 17
Bundle-Description: A dependency-less package of just the annotations
used by other Metrics modules.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Annotations for Metrics
Bundle-SymbolicName: io.dropwizard.metrics.annotation
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.annotation;version="4.2.23"
Implementation-Title: Annotations for Metrics
Implementation-Version: 4.2.23
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-annotation-4-2-23-jar/META-INF/MANIFEST.MF

1.1365 metrics-health-checks 4.2.23

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.health
Build-Jdk-Spec: 17
Bundle-Description: An addition to Metrics which provides the ability
to run application-specific health checks,        allowing you to che
ck your application's heath in production.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Health Checks
Bundle-SymbolicName: io.dropwizard.metrics.healthchecks
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.health;uses:="com.codahale.metric
s";version="4.2.23",com.codahale.metrics.health.annotation;version="4
.2.23",com.codahale.metrics.health.jvm;uses:="com.codahale.metrics.he
alth,com.codahale.metrics.jvm";version="4.2.23"
Implementation-Title: Metrics Health Checks
Implementation-Version: 4.2.23
Import-Package: org.slf4j;version="[1.6.0,2.0.0)",com.codahale.metrics
 ;version="[4.2,5)",com.codahale.metrics.health,com.codahale.metrics.h
ealth.annotation,com.codahale.metrics.jvm;version="[4.2,5)";resolutio
n:=optional
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316
```

Found in path(s):
* /metrics-healthchecks-4-2-23-jar/META-INF/MANIFEST.MF

1.1366 metrics-jvm 4.2.23

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jvm
Build-Jdk-Spec: 17
Bundle-Description: A set of classes which allow you to monitor critic
al aspects of your Java Virtual Machine        using Metrics.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: JVM Integration for Metrics
Bundle-SymbolicName: io.dropwizard.metrics.jvm
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9
```

Export-Package: com.codahale.metrics.jvm;uses:="com.codahale.metrics,j
avax.management";version="4.2.23"
Implementation-Title: JVM Integration for Metrics
Implementation-Version: 4.2.23
Import-Package: org.slf4j;version="[1.6.0,2.0.0)",com.sun.management;r
esolution:=optional,com.codahale.metrics;version="[4.2,5)",javax.mana
gement
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-jvm-4-2-23-jar/META-INF/MANIFEST.MF

1.1367 metrics-graphite 4.2.23

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.graphite
Build-Jdk-Spec: 17
Bundle-Description: A reporter for Metrics which announces measurement
s to a Graphite server.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Graphite Integration for Metrics
Bundle-SymbolicName: io.dropwizard.metrics.graphite
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.graphite;uses:="com.codahale.metr
ics,com.rabbitmq.client,javax.net";version="4.2.23"
Implementation-Title: Graphite Integration for Metrics
Implementation-Version: 4.2.23
Import-Package: org.slf4j;version="[1.6.0,2.0.0)",com.codahale.metrics
;version="[4.2,5)",com.rabbitmq.client;version="[5.20,6)",javax.net
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-graphite-4-2-23-jar/META-INF/MANIFEST.MF

1.1368 metrics-jmx 4.2.25

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1.1369 startpar 0.65-1+b1

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1.1370 insserv 1.24.0-1

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<one line to give the program's name and a brief idea of what it does.>
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<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

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1.1371 libtext-glob-perl 0.11-3

1.1371.1 Available under license :

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---
abstract: 'match globbing patterns against text'
author:
- 'Richard Clamp <richardc@unixbeard.net>'
build_requires:
ExtUtils::MakeMaker: '0'
Test::More: '0'
configure_requires:
ExtUtils::MakeMaker: '0'
dynamic_config: 0
generated_by: 'ExtUtils::MakeMaker version 7.24, CPAN::Meta::Converter version 2.143240'
license: perl
meta-spec:
url: http://module-build.sourceforge.net/META-spec-v1.4.html
version: '1.4'

```
name: Text-Glob
no_index:
 directory:
   - t
   - inc
requires:
 Exporter: '0'
 constant: '0'
 perl: '5.00503'
resources: {}
version: '0.11'
```

Found in path(s):
* /libtext-glob-perl-0-11-orig-1-tar-gz/Text-Glob-0.11/META.yml
No license file was found, but licenses were detected in source scan.

=head1 NAME

Text::Glob - match globbing patterns against text

=head1 SYNOPSIS

```
use Text::Glob qw( match_glob glob_to_regex );

print "matched\n" if match_glob( "foo.*", "foo.bar" );

# prints foo.bar and foo.baz
my $regex = glob_to_regex( "foo.*" );
for ( qw( foo.bar foo.baz foo bar ) ) {
    print "matched: $_\n" if /$regex/;
}
```

=head1 DESCRIPTION

Text::Glob implements glob(3) style matching that can be used to match
against text, rather than fetching names from a filesystem. If you
want to do full file globbing use the File::Glob module instead.

=head2 Routines

=over

=item match_glob($glob, @things_to_test)

Returns the list of things which match the glob from the source list.

=item glob_to_regex($glob)

Returns a compiled regex which is the equivalent of the globbing
pattern.

=item glob_to_regex_string($glob)

Returns a regex string which is the equivalent of the globbing
pattern.

=back

=head1
SYNTAX

The following metacharacters and rules are respected.

=over

=item C<*> - match zero or more characters

C<a*> matches C<a>, C<aa>, C<aaaa> and many many more.

=item C<?> - match exactly one character

C<a?> matches C<aa>, but not C<a>, or C<aaa>

=item Character sets/ranges

C<example.[ch]> matches C<example.c> and C<example.h>

C<demo.[a-c]> matches C<demo.a>, C<demo.b>, and C<demo.c>

=item alternation

C<example.{foo,bar,baz}> matches C<example.foo>, C<example.bar>, and
C<example.baz>

=item leading . must be explicitly matched

C<*.foo> does not match C<.bar.foo>. For this you must either specify
the leading . in the glob pattern (C<.*.foo>), or set
C<$Text::Glob::strict_leading_dot> to a false value while compiling
the regex.

=item C<*> and C<?> do not match the seperator (i.e. do not match C</>)

C<*.foo> does not match C<bar/baz.foo>. For this you must either
explicitly match the / in the glob (C<*/*.foo>), or set
C<$Text::Glob::strict_wildcard_slash> to a false

value while compiling
the regex, or change the seperator that Text::Glob uses by setting
C<$Text::Glob::seperator> to an alternative value while compiling the
the regex.

=back

=head1 BUGS

The code uses qr// to produce compiled regexes, therefore this module
requires perl version 5.005_03 or newer.

=head1 AUTHOR

Richard Clamp <richardc@unixbeard.net>

=head1 COPYRIGHT

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=head1 SEE ALSO

L<File::Glob>, glob(3)

=cut

Found in path(s):
* /libtext-glob-perl-0-11-orig-1-tar-gz/Text-Glob-0.11/lib/Text/Glob.pm

1.1372 libnumber-compare-perl 0.03-3

1.1372.1 Available under license :

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license:	unknown

Found in path(s):
* /libnumber-compare-perl-0-03-orig-1-tar-gz/Number-Compare-0.03/META.yml
No license file was found, but licenses were detected in source scan.

=head1 NAME

Number::Compare - numeric comparisons

=head1 SYNOPSIS

```
Number::Compare->new(">1Ki")->test(1025); # is 1025 > 1024

my $c = Number::Compare->new(">1M");
$c->(1_200_000);                    # slightly terser invocation
```

=head1 DESCRIPTION

Number::Compare compiles a simple comparison to an anonymous subroutine, which you can call with a value to be tested again.

Now this would be very pointless, if Number::Compare didn't understand magnitudes.

The target value may use magnitudes of kilobytes (C<k>, C<ki>), megabytes (C<m>, C<mi>), or gigabytes (C<g>, C<gi>). Those suffixed with an C<i> use the appropriate 2**n version in accordance with the IEC standard: http://physics.nist.gov/cuu/Units/binary.html

=head1 METHODS

=head2 ->new($test)

Returns a new object that compares the specified test.

=head2 ->test($value)

A longhanded version of $compare->($value). Predates blessed subroutine reference
implementation.

=head2 ->parse_to_perl($test)

Returns a perl code fragment equivalent to the test.

=head1 AUTHOR

Richard Clamp <richardc@unixbeard.net>

=head1 COPYRIGHT

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=head1 SEE ALSO

http://physics.nist.gov/cuu/Units/binary.html

=cut

Found in path(s):
* /libnumber-compare-perl-0-03-orig-1-tar-gz/Number-Compare-0.03/lib/Number/Compare.pm

1.1373 libfile-find-rule-perl 0.34-3

1.1373.1 Available under license :

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```
---
abstract: unknown
author:
 - unknown
build_requires:
 ExtUtils::MakeMaker: 0
configure_requires:
 ExtUtils::MakeMaker: 0
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 6.66, CPAN::Meta::Converter version 2.133380'
license: unknown
meta-spec:
 url: http://module-build.sourceforge.net/META-spec-v1.4.html
 version: 1.4
name: File-Find-Rule
no_index:
 directory:
   - t
   - inc
requires:
 File::Find: 0
 File::Spec: 0
 Number::Compare: 0
 Test::More: 0
 Text::Glob: 0.07
version: 0.34
```

Found in path(s):
* /libfile-find-rule-perl-0-34-orig-1-tar-gz/File-Find-Rule-0.34/META.yml
No license file was found, but licenses were detected in source scan.

```
#!perl -w
use strict;
use File::Find::Rule;
```

```
use File::Spec::Functions qw(catdir);

# bootstrap extensions
for (@INC) {
   my $dir = catdir($_, qw( File Find Rule ) );
   next unless -d $dir;
   my @pm = find( name => '*.pm', maxdepth => 1,
                  exec => sub { (my $name = $_) =~ s/\.pm$//;
                                eval "require File::Find::Rule::$name"; },
                  in => $dir );
}

# what directories are we searching in?
my @where;
while (@ARGV) {
   local $_ = shift @ARGV;
   if (/^-/) {
       unshift @ARGV, $_;
       last;
   }
   push @where, $_;
}

# parse arguments, build a rule object
my $rule = new File::Find::Rule;
while (@ARGV) {
   my $clause = shift @ARGV;

   unless ( $clause =~ s/^-// && $rule->can( $clause ) ) {
       # not a known rule - complain about this
       die "unknown option '$clause'\n"
   }

   # it was the last switch
   unless (@ARGV) {

     $rule->$clause();
       next;
   }

   # consume the parameters
   my $param = shift @ARGV;

   if ($param =~ /^-/) {
       # it's the next switch - put it back, and add one with no params
       unshift @ARGV, $param;
       $rule->$clause();
       next;
```

```
    }

    if ($param eq '(') {
        # multiple values - just look for the closing parenthesis
        my @p;
        while (@ARGV) {
            my $val = shift @ARGV;
            last if $val eq ')';
            push @p, $val;
        }
        $rule->$clause( @p );
        next;
    }

    # a single argument
    $rule->$clause( $param );
}

# add a print rule so things happen faster
$rule->exec( sub { print "$_[2]\n"; return; } );

# profit
$rule->in( @where ? @where : '.' );
exit 0;

__END__

=head1 NAME

findrule - command line wrapper to File::Find::Rule

=head1 USAGE

 findrule [path...] [expression]

=head1 DESCRIPTION

C<findrule> mostly borrows the interface from GNU find(1) to provide a
command-line interface
 onto the File::Find::Rule heirarchy of modules.

The syntax for expressions is the rule name, preceded by a dash,
followed by an optional argument.  If the argument is an opening
parenthesis it is taken as a list of arguments, terminated by a
closing parenthesis.

Some examples:
```

find -file -name (foo bar)

files named C<foo> or C<bar>, below the current directory.

find -file -name foo -bar

files named C<foo>, that have pubs (for this is what our ficticious
C<bar> clause specifies), below the current directory.

find -file -name (-bar)

files named C<-bar>, below the current directory. In this case if
we'd have omitted the parenthesis it would have parsed as a call to
name with no arguments, followed by a call to -bar.

=head2 Supported switches

I'm very slack. Please consult the File::Find::Rule manpage for now,
and prepend - to the commands that you want.

=head2 Extra bonus switches

findrule automatically loads all of your installed File::Find::Rule::*
extension
 modules, so check the documentation to see what those would be.

=head1 AUTHOR

Richard Clamp <richardc@unixbeard.net> from a suggestion by Tatsuhiko Miyagawa

=head1 COPYRIGHT

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=head1 SEE ALSO

L<File::Find::Rule>

=cut

Found in path(s):
* /libfile-find-rule-perl-0-34-orig-1-tar-gz/File-Find-Rule-0.34/findrule
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=head1 NAME

File::Find::Rule::Procedural - File::Find::Rule's procedural interface

=head1 SYNOPSIS

```
 use File::Find::Rule;

 # find all .pm files, procedurally
 my @files = find(file => name => '*.pm', in => \@INC);
```

=head1 DESCRIPTION

In addition to the regular object-oriented interface,
L<File::Find::Rule> provides two subroutines for you to use.

=over

=item C<find(@clauses)>

=item C<rule(@clauses)>

C<find> and C<rule> can be used to invoke any methods available to the
OO version. C<rule> is a synonym for C<find>

=back

Passing more than one value to a clause is done with an anonymous
array:

```
my $finder = find( name => [ '*.mp3', '*.ogg' ] );
```

C<find> and C<rule> both return a File::Find::Rule instance, unless
one of the arguments is C<in>, in which case it returns a list of
things that match the rule.

```
my @files = find( name => [ '*.mp3', '*.ogg' ], in => $ENV{HOME} );
```

Please note that C<in> will
 be the last clause evaluated, and so this
code will search for mp3s regardless of size.

```
my @files = find( name => '*.mp3', in => $ENV{HOME}, size => '<2k' );
                                    ^
                                    |
            Clause processing stopped here ------/
```

It is also possible to invert a single rule by prefixing it with C<!>
like so:

```
# large files that aren't videos
my @files = find( file    =>
                '!name' => [ '*.avi', '*.mov' ],
                size    => '>20M',
                in      => $ENV{HOME} );


=head1 AUTHOR

Richard Clamp <richardc@unixbeard.net>

=head1 COPYRIGHT

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=head1 SEE ALSO

L<File::Find::Rule>

=cut
```

Found in path(s):
* /libfile-find-rule-perl-0-34-orig-1-tar-gz/File-Find-Rule-0.34/lib/File/Find/Rule/Procedural.pod
No license file was found, but licenses were detected in source scan.

```
=back

=head2 Extensions

Extension modules are available from CPAN in the File::Find::Rule
namespace.  In order to use these extensions either use them directly:

use File::Find::Rule::ImageSize;
use File::Find::Rule::MMagic;

# now your rules can use the clauses supplied by the ImageSize and
# MMagic extension

or, specify that File::Find::Rule should load them for you:

use File::Find::Rule qw( :ImageSize :MMagic );

For notes on implementing your own extensions, consult
L<File::Find::Rule::Extending>
```

```
=head2 Further examples

=over

=item Finding perl scripts

my $finder = File::Find::Rule->or
 (
  File::Find::Rule->name( '*.pl' ),
  File::Find::Rule->exec(
                    sub {
                       if (open my $fh, $_) {
                          my $shebang = <$fh>;
                          close $fh;
                          return $shebang =~ /^#!.*\bperl/;
                        }
                       return 0;
                    } ),
 );

Based upon this message http://use.perl.org/comments.pl?sid=7052&cid=10842

=item ignore CVS directories

my $rule = File::Find::Rule->new;
$rule->or($rule->new
            ->directory
            ->name('CVS')
            ->prune
            ->discard,
         $rule->new);

Note here the use of a null rule.  Null rules match anything they see,
so the effect is to match (and discard) directories called 'CVS' or to
match anything.

=back

=head1 TWO FOR THE PRICE OF ONE

File::Find::Rule also gives you a procedural interface.  This is
documented in L<File::Find::Rule::Procedural>

=head1 EXPORTS

L</find>, L</rule>
```

=head1 TAINT MODE INTERACTION

As of 0.32 File::Find::Rule doesn't capture the current working directory in
a taint-unsafe manner. File::Find itself still does operations that the taint
system will flag as insecure but you can use the L</extras>
 feature to ask
L<File::Find> to internally C<untaint> file paths with a regex like so:

```
   my $rule = File::Find::Rule->extras({ untaint => 1 });
```

Please consult L<File::Find>'s documentation for C<untaint>,
C<untaint_pattern>, and C<untaint_skip> for more information.

=head1 BUGS

The code makes use of the C<our> keyword and as such requires perl version
5.6.0 or newer.

Currently it isn't possible to remove a clause from a rule object. If
this becomes a significant issue it will be addressed.

=head1 AUTHOR

Richard Clamp <richardc@unixbeard.net> with input gained from this
use.perl discussion: http://use.perl.org/~richardc/journal/6467

Additional proofreading and input provided by Kake, Greg McCarroll,
and Andy Lester andy@petdance.com.

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=head1 SEE ALSO

L<File::Find>,
 L<Text::Glob>, L<Number::Compare>, find(1)

If you want to know about the procedural interface, see
L<File::Find::Rule::Procedural>, and if you have an idea for a neat
extension L<File::Find::Rule::Extending>

=cut

Implementation notes:

$self->rules is an array of hashrefs. it may be a code fragment or a call
to a subroutine.

Anonymous subroutines are stored in the $self->subs hashref keyed on the
stringfied version of the coderef.

When one File::Find::Rule object is combined with another, such as in the any
and not operations, this entire hash is merged.

The _compile method walks the rules element and simply glues the code
fragments together so they can be compiled into an anyonymous File::Find
match sub for speed

[*] There's probably a win to be made with the current model in making
stat calls use C<_>. For

```
 find( file => size => "> 20M" => size => "< 400M" );
```

up to 3 stats will happen for each candidate. Adding a priming _
would be a bit blind if the first operation
 was C< name => 'foo' >,
since that can be tested by a single regex. Simply checking what the
next type of operation doesn't work since any arbritary exec sub may
or may not stat. Potentially worse, they could stat something else
like so:

```
 # extract from the worlds stupidest make(1)
 find( exec => sub { my $f = $_; $f =~ s/\.c$/.o/ && !-e $f } );
```

Maybe the best way is to treat C<_> as invalid after calling an exec,
and doc that C<_> will only be meaningful after stat and -X tests if
they're wanted in exec blocks.

Found in path(s):
* /libfile-find-rule-perl-0-34-orig-1-tar-gz/File-Find-Rule-0.34/lib/File/Find/Rule.pm
No license file was found, but licenses were detected in source scan.

=head1 NAME

File::Find::Rule::Extending - the mini-guide to extending File::Find::Rule

=head1 SYNOPSIS

```
package File::Find::Rule::Random;
use strict;
```

```
# take useful things from File::Find::Rule
use base 'File::Find::Rule';

# and force our crack into the main namespace
sub File::Find::Rule::random () {
   my $self = shift()->_force_object;
   $self->exec( sub { rand > 0.5 } );
}

1;
```

=head1 DESCRIPTION

File::Find::Rule went down so well with the buying public that
everyone wanted to add extra features. With the 0.07 release this
became a possibility, using the following conventions.

=head2 Declare your package

```
package File::Find::Rule::Random;
use strict;
```

=head2 Inherit methods from File::Find::Rule

```
# take useful things from File::Find::Rule
use base 'File::Find::Rule';
```

=head3 Force your madness into the main package

```
# and force our crack into the main namespace
sub File::Find::Rule::random
 () {
   my $self = shift()->_force_object;
   $self->exec( sub { rand > 0.5 } );
}
```

Yes, we're being very cavalier here and defining things into the main
File::Find::Rule namespace. This is due to lack of imaginiation on my
part - I simply can't find a way for the functional and oo interface
to work without doing this or some kind of inheritance, and
inheritance stops you using two File::Find::Rule::Foo modules
together.

For this reason try and pick distinct names for your extensions. If
this becomes a problem then I may institute a semi-official registry
of taken names.

=head2 Taking no arguments.

Note the null prototype on random. This is a cheat for the procedural
interface to know that your sub takes no arguments, and so allows this
to happen:

find(random => in => '.');

If you hadn't declared C<random> with a null prototype it would have
consumed C<in> as a parameter to it, then got all confused as it
doesn't know about a C<'.'> rule.

=head1 AUTHOR

Richard
 Clamp <richardc@unixbeard.net>

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under the same terms as Perl itself.

=head1 SEE ALSO

L<File::Find::Rule>

L<File::Find::Rule::MMagic> was the first extension module, so maybe
check that out.

=cut

Found in path(s):
* /libfile-find-rule-perl-0-34-orig-1-tar-gz/File-Find-Rule-0.34/lib/File/Find/Rule/Extending.pod

1.1374 sysv-rc 3.06-4

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1.1376 zap 1.21.0

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1.1377 btree 1.1.2

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1.1378 mnuralp-fileutils 0.5.1

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1.1379 go-restful 3.10.1

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1.1380 kubernetes-client 0.26.2

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1.1382 kubernetes-model-flowcontrol 6.5.1

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1.1383 kubernetes-model-common 6.5.1

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* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/Plural.java

* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/Generated.java
* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/ShortNames.java
* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/util/Helper.java
*
 /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/Scope.java
* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/StatusReplicas.java
* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/Singular.java
* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/Kind.java
* /kubernetes-model-common-6-5-1-sources-1-
jar/io/fabric8/kubernetes/model/jackson/BeanPropertyWriterDelegate.java
* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/PrinterColumn.java
* /kubernetes-model-common-6-5-1-sources-1-
jar/io/fabric8/kubernetes/model/jackson/SettableBeanPropertyDelegate.java
* /kubernetes-model-common-6-5-1-sources-1-
jar/io/fabric8/kubernetes/model/jackson/UnmatchedFieldTypeModule.java
* /kubernetes-model-common-6-5-1-sources-1-
jar/io/fabric8/kubernetes/model/jackson/JsonUnwrappedDeserializer.java
*
 /kubernetes-model-common-6-5-1-sources-1-
jar/io/fabric8/kubernetes/model/jackson/UnwrappedTypeResolverBuilder.java
* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/LabelSelector.java
* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/Group.java
* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/Version.java
* /kubernetes-model-common-6-5-1-sources-1-jar/io/fabric8/kubernetes/model/annotation/SpecReplicas.java

1.1384 kubernetes-httpclient-okhttp 6.5.1

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#

io.fabric8.kubernetes.client.okhttp.OkHttpClientFactory

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1.1385 kubernetes-model-resource 6.5.1

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1.1386 kubernetes-model-node 6.5.1

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* /kubernetes-model-node-6-5-1-2-jar/META-INF/maven/io.fabric8/kubernetes-model-node/pom.xml
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Manifest-Version: 1.0
Build-Jdk-Spec: 1.8
Bundle-Description: Java client for Kubernetes and OpenShift
Bundle-DocURL: http://redhat.com
Bundle-License: http://www.apache.org/licenses/LICENSE-2.0.txt
Bundle-ManifestVersion: 2
Bundle-Name: Fabric8 :: Kubernetes Model :: Node
Bundle-SymbolicName: io.fabric8.kubernetes-model-node
Bundle-Vendor: Red Hat
Bundle-Version: 6.5.1
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: io.fabric8.kubernetes.api.model.node.v1;uses:="com.fas
terxml.jackson.annotation,com.fasterxml.jackson.databind,com.fasterxm
l.jackson.databind.annotation,io.fabric8.kubernetes.api.builder,io.fa
bric8.kubernetes.api.model,io.fabric8.kubernetes.model.annotation";ve
rsion="6.5.1",io.fabric8.kubernetes.api.model.node.v1alpha1;uses:="co
m.fasterxml.jackson.annotation,com.fasterxml.jackson.databind,com.fas
terxml.jackson.databind.annotation,io.fabric8.kubernetes.api.builder,
io.fabric8.kubernetes.api.model,io.fabric8.kubernetes.model.annotatio
 n";version="6.5.1",io.fabric8.kubernetes.api.model.node.v1beta1;uses:
="com.fasterxml.jackson.annotation,com.fasterxml.jackson.databind,com
.fasterxml.jackson.databind.annotation,io.fabric8.kubernetes.api.buil

der,io.fabric8.kubernetes.api.model,io.fabric8.kubernetes.model.annot
ation";version="6.5.1"
Implementation-URL: http://fabric8.io/kubernetes-model-generator/kuber
netes-model-node/
Import-Package: com.fasterxml.jackson.annotation;version="[2.14,3)",co
m.fasterxml.jackson.databind;version="[2.14,3)",com.fasterxml.jackson
.databind.annotation;version="[2.14,3)",io.fabric8.kubernetes.api.bui
lder;version="[6.5,7)",io.fabric8.kubernetes.api.model,io.fabric8.kub
ernetes.model.annotation;version="[6.5,7)"
Include-Resource: META-INF/services/io.fabric8.kubernetes.api.model.Ku
bernetesResource=target/classes/META-INF/services/io.fabric8.kubernet
es.api.model.KubernetesResource,schema/kube-schema.json=src/main/reso
urces/schema/kube-schema.json,schema/validation-schema.json=src/main/
 resources/schema/validation-schema.json,manifest.vm=src/main/resource
s/manifest.vm,/META-INF/jandex.idx=target/classes/META-INF/jandex.idx
Private-Package: schema
Provide-Capability: osgi.serviceloader;osgi.serviceloader="io.fabric8.
kubernetes.api.model.KubernetesResource"
Require-Capability: osgi.extender;filter:="(osgi.extender=osgi.service
loader.registrar)",osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Scm-Connection: scm:git:git@github.com:fabric8io/kubernetes-client.git
/kubernetes-model-generator/kubernetes-model-node
Scm-Revision: ${buildNumber}
Scm-Url: http://github.com/fabric8io/kubernetes-client/kubernetes-mode
l-generator/kubernetes-model-node/
Specification-Title: Fabric8 :: Kubernetes Model :: Node
Specification-Vendor: Red Hat
Specification-Version: 6.5
Tool: Bnd-6.3.1.202206071316

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1.1387 simpleclient-dropwizard 0.16.0

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INF/maven/io.prometheus/simpleclient_dropwizard/pom.xml

1.1388 kubernetes-model 6.5.1

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1.1389 bboreham-go-loser 0.0.0-20230920113527-fcc2c21820a3

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Bundle-ManifestVersion: 2
Bundle-Name: Fabric8 :: Kubernetes Model :: Sigs :: Gateway API
Bundle-SymbolicName: io.fabric8.kubernetes-model-gatewayapi
Bundle-Vendor: Red Hat
Bundle-Version: 6.5.1
Created-By: Apache Maven Bundle Plugin 5.1.8
Export-Package: io.fabric8.kubernetes.api.model.gatewayapi.v1alpha2;us
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.databind.annotation;version="[2.14,3)",io.fabric8.kubernetes.api.bui
lder;version="[6.5,7)",io.fabric8.kubernetes.api.model,io.fabric8.kub
ernetes.api.model.gatewayapi.v1beta1,io.fabric8.kubernetes.model.anno
tation;version="[6.5,7)"
Include-Resource: META-INF/services/io.fabric8.kubernetes.api.model.Ku
bernetesResource=target/classes/META-INF/services/io.fabric8.kubernet
es.api.model.KubernetesResource,schema/kube-schema.json=src/main/reso
urces/schema/kube-schema.json,schema/validation-schema.json=src/main/
resources/schema/validation-schema.json,manifest.vm=src/main/resource
 s/manifest.vm,/META-INF/jandex.idx=target/classes/META-INF/jandex.idx
Private-Package: schema
Provide-Capability: osgi.serviceloader;osgi.serviceloader="io.fabric8.
kubernetes.api.model.KubernetesResource"
Require-Capability: osgi.extender;filter:="(osgi.extender=osgi.service
loader.registrar)",osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Scm-Connection: scm:git:git@github.com:fabric8io/kubernetes-client.git
/kubernetes-model-generator/kubernetes-model-gatewayapi
Scm-Revision: ${buildNumber}
Scm-Url: http://github.com/fabric8io/kubernetes-client/kubernetes-mode
l-generator/kubernetes-model-gatewayapi/
Specification-Title: Fabric8 :: Kubernetes Model :: Sigs :: Gateway AP
I
Specification-Vendor: Red Hat
Specification-Version: 6.5
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /kubernetes-model-gatewayapi-6-5-1-2-jar/META-INF/MANIFEST.MF
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* /kubernetes-model-gatewayapi-6-5-1-2-jar/META-INF/maven/io.fabric8/kubernetes-model-gatewayapi/pom.xml
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Found in path(s):
* /kubernetes-model-gatewayapi-6-5-1-2-jar/manifest.vm

1.1393 kubernetes-client-api 6.5.1

1.1393.1 Available under license :

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Found in path(s):
* /kubernetes-client-api-6-5-1-2-jar/META-INF/maven/io.fabric8/kubernetes-client-api/pom.xml

1.1394 metrics-json 4.2.25

1.1394.1 Available under license :

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.json
Build-Jdk-Spec: 17
Bundle-Description: A set of Jackson modules which provide serializers
 for most Metrics classes.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Jackson Integration for Metrics
Bundle-SymbolicName: io.dropwizard.metrics.json
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.json;uses:="com.codahale.metrics,
com.fasterxml.jackson.core,com.fasterxml.jackson.databind";version="4
.2.25"
Implementation-Title: Jackson Integration for Metrics
Implementation-Version: 4.2.25
Import-Package: com.codahale.metrics;version="[4.2,5)",com.codahale.me
trics.health;version="[4.2,5)";resolution:=optional,com.fasterxml.jac
kson.core;version="[2.12,3)",com.fasterxml.jackson.databind;version="
[2.12,3)",com.fasterxml.jackson.databind.module;version="[2.12,3)",co
 m.fasterxml.jackson.databind.ser;version="[2.12,3)",com.fasterxml.jac
kson.databind.ser.std;version="[2.12,3)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316
```

Found in path(s):
* /metrics-json-4-2-25-jar/META-INF/MANIFEST.MF

1.1395 metrics-health-checks 4.2.25

1.1395.1 Available under license :

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.health
Build-Jdk-Spec: 17
Bundle-Description: An addition to Metrics which provides the ability
to run application-specific health checks,       allowing you to che
```

ck your application's heath in production.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Health Checks
Bundle-SymbolicName: io.dropwizard.metrics.healthchecks
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.health;uses:="com.codahale.metric
s";version="4.2.25",com.codahale.metrics.health.annotation;version="4
.2.25",com.codahale.metrics.health.jvm;uses:="com.codahale.metrics.he
alth,com.codahale.metrics.jvm";version="4.2.25"
Implementation-Title: Metrics Health Checks
Implementation-Version: 4.2.25
Import-Package: org.slf4j;version="[1.6.0,2.0.0)",com.codahale.metrics
 ;version="[4.2,5)",com.codahale.metrics.health,com.codahale.metrics.h
ealth.annotation,com.codahale.metrics.jvm;version="[4.2,5)";resolutio
n:=optional
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-healthchecks-4-2-25-jar/META-INF/MANIFEST.MF

1.1396 metrics-jvm 4.2.25

1.1396.1 Available under license :

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jvm
Build-Jdk-Spec: 17
Bundle-Description: A set of classes which allow you to monitor critic
al aspects of your Java Virtual Machine using Metrics.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: JVM Integration for Metrics
Bundle-SymbolicName: io.dropwizard.metrics.jvm
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.jvm;uses:="com.codahale.metrics,j
avax.management";version="4.2.25"
Implementation-Title: JVM Integration for Metrics
Implementation-Version: 4.2.25
Import-Package: org.slf4j;version="[1.6.0,2.0.0)",com.sun.management;r
esolution:=optional,com.codahale.metrics;version="[4.2,5)",javax.mana
gement
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"

Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-jvm-4-2-25-jar/META-INF/MANIFEST.MF

1.1397 metrics-logback 4.2.25

1.1397.1 Available under license :

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.logback
Build-Jdk-Spec: 17
Bundle-Description: An instrumented appender for Logback.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Logback
Bundle-SymbolicName: io.dropwizard.metrics.logback
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.logback;uses:="ch.qos.logback.cla
ssic.spi,ch.qos.logback.core,com.codahale.metrics";version="4.2.25"
Implementation-Title: Metrics Integration for Logback
Implementation-Version: 4.2.25
Import-Package: ch.qos.logback.classic;version="[1.2,2)",ch.qos.logbac
k.classic.spi;version="[1.2,2)",ch.qos.logback.core;version="[1.2,2)"
,com.codahale.metrics;version="[4.2,5)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
*
/metrics-logback-4-2-25-jar/META-INF/MANIFEST.MF

1.1398 metrics-annotation 4.2.25

1.1398.1 Available under license :

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.annotation
Build-Jdk-Spec: 17
Bundle-Description: A dependency-less package of just the annotations
used by other Metrics modules.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2

Bundle-Name: Annotations for Metrics
Bundle-SymbolicName: io.dropwizard.metrics.annotation
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.annotation;version="4.2.25"
Implementation-Title: Annotations for Metrics
Implementation-Version: 4.2.25
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-annotation-4-2-25-jar/META-INF/MANIFEST.MF

1.1399 stretchr-testify 1.9.0

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Found in path(s):
* /testify-38-tar/testify.txt

1.1400 go-jose-go-jose 2.6.3

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1.1401 go-uber-org-zap 1.27.0

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1.1402 metrics-jersey2 4.2.25

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jersey2
Build-Jdk-Spec: 17
Bundle-Description: A set of class providing Metrics integration for J
ersey, the reference JAX-RS implementation.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Jersey 2.x
Bundle-SymbolicName: io.dropwizard.metrics.jersey2
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.jersey2;uses:="com.codahale.metri
cs,javax.ws.rs.core,javax.ws.rs.ext,org.glassfish.jersey.server.model
,org.glassfish.jersey.server.monitoring";version="4.2.25"

Implementation-Title: Metrics Integration for Jersey 2.x
Implementation-Version: 4.2.25
Import-Package: com.codahale.metrics;version="[4.2,5)",com.codahale.me
trics.annotation;version="[4.2,5)",javax.ws.rs.core;version="[2.1,3)"
,javax.ws.rs.ext;version="[2.1,3)",org.glassfish.jersey.server;versio
 n="[2.41,3)",org.glassfish.jersey.server.model;version="[2.41,3)",org
.glassfish.jersey.server.monitoring;version="[2.41,3)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-jersey2-4-2-25-jar/META-INF/MANIFEST.MF

1.1403 metrics-caffeine 4.2.25

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.caffeine
Build-Jdk-Spec: 17
Bundle-Description: Metrics Integration for Caffeine 2.x.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Caffeine 2.x
Bundle-SymbolicName: io.dropwizard.metrics.caffeine
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.caffeine;uses:="com.codahale.metr
ics,com.github.benmanes.caffeine.cache,com.github.benmanes.caffeine.c
ache.stats,org.checkerframework.checker.index.qual";version="4.2.25"
Implementation-Title: Metrics Integration for Caffeine 2.x
Implementation-Version: 4.2.25
Import-Package: com.codahale.metrics;version="[4.2,5)",com.github.benm
anes.caffeine.cache;version="[2.9,3)",com.github.benmanes.caffeine.ca
che.stats;version="[2.9,3)",org.checkerframework.checker.index.qual;v
ersion="[3.42,4)"
Require-Capability:
 osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-caffeine-4-2-25-jar/META-INF/MANIFEST.MF

1.1404 githubcomgolangprotobuf 1.5.4

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1.1405 testify 1.9.0

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procfs provides functions to retrieve system, kernel and process
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// +build go1.10

```
package pq

import (
 "context"
 "database/sql/driver"
)

// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
 return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
 c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
 on it.
type NoticeHandlerConnector struct {
 driver.Connector
 noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
 c, err := n.Connector.Connect(ctx)
```

```
 if err == nil {
  SetNoticeHandler(c, n.noticeHandler)
 }
 return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  return c.noticeHandler
 }
 return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
 setting the notice
// handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  c.noticeHandler = handler
  return c
 }
 return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
```

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localtime.go, localtime_test.go:

Originals:
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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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1.1410 uniseg 0.4.6

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1.1415 @tufjs/canonical-json 2.0.0

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1.1418 jsondiff 0.0.0-20230430225905-43f6cf3098c1

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1.1419 github.com/azure/azure-sdk-for-go/sdk/resourcemanager/network/armnetwork/v4 4.3.0

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1.1420 github.com/bboreham/go-loser 0.0.0-20230920113527-fcc2c21820a3

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* /javassist-3-30-2-ga-sources-1-jar/javassist/bytecode/StackMapTable.java
* /javassist-3-30-2-ga-sources-1-jar/javassist/bytecode/StackMap.java
*
 /javassist-3-30-2-ga-sources-1-jar/javassist/expr/ExprEditor.java
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1.1424 benbjohnson-clock 1.3.5

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1.1425 go-connections 0.5.0

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1.1430 go-openapi-jsonpointer 0.21.0

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1.1439 chromedp-cdproto 0.0.0-20230802225258-3cf4e6d46a89

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1.1440 mithrandie-ternary 1.1.1

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1.1441 spyzhov-ajson 0.9.0

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1.1442 mithrandie-go-text 1.5.4

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1.1443 mithrandie-go-file 2.1.0

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1.1444 grafana-grafana-azure-sdk-go 1.12.0

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1.1445 grafana-sqlds 3.2.0

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1.1446 grafana-prometheus-alertmanager 0.25.1-0.20240208102907-e82436ce63e6

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* /prometheus-alertmanager-22-tar/prometheus-alertmanager.txt

1.1447 mithrandie-csvq 1.17.10

1.1447.1 Available under license :

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1.1448 grafana-dskit 0.0.0-20240104111617-ea101a3b86eb

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1.1449 mithrandie-csvq-driver 1.6.8

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1.1450 httpfs 0.0.0-20230704072500-f1e31cf0ba5c

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1.1451 sqlite 3.45.2

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```
/*
** CAPI3REF: Configuration Options
** KEYWORDS: {configuration option}
**
** These constants are the available integer configuration options that
** can be passed as the first argument to the [sqlite3_config()] interface.
**
** Most of the configuration options for sqlite3_config()
** will only work if invoked prior to [sqlite3_initialize()] or after
** [sqlite3_shutdown()].  The few exceptions to this rule are called
** "anytime configuration options".
** ^Calling [sqlite3_config()] with a first argument that is not an
** anytime configuration option in between calls to [sqlite3_initialize()] and
```

```
** [sqlite3_shutdown()] is a no-op that returns SQLITE_MISUSE.
**
** The set of anytime configuration options can change (by insertions
** and/or deletions) from one release of SQLite to the next.
** As of SQLite version 3.42.0, the complete set of anytime configuration
** options is:
** <ul>
** <li> SQLITE_CONFIG_LOG
**
 <li> SQLITE_CONFIG_PCACHE_HDRSZ
** </ul>
**
** New configuration options may be added in future releases of SQLite.
** Existing configuration options might be discontinued.  Applications
** should check the return code from [sqlite3_config()] to make sure that
** the call worked.  The [sqlite3_config()] interface will return a
** non-zero [error code] if a discontinued or unsupported configuration option
** is invoked.
**
** <dl>
** [[SQLITE_CONFIG_SINGLETHREAD]] <dt>SQLITE_CONFIG_SINGLETHREAD</dt>
** <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Single-thread.  In other words, it disables
** all mutexing and puts SQLite into a mode where it can only be used
** by a single thread.   ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to change the [threading mode] from its default
** value of Single-thread and so [sqlite3_config()] will return
** [SQLITE_ERROR] if called
 with the SQLITE_CONFIG_SINGLETHREAD
** configuration option.</dd>
**
** [[SQLITE_CONFIG_MULTITHREAD]] <dt>SQLITE_CONFIG_MULTITHREAD</dt>
** <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Multi-thread.  In other words, it disables
** mutexing on [database connection] and [prepared statement] objects.
** The application is responsible for serializing access to
** [database connections] and [prepared statements].  But other mutexes
** are enabled so that SQLite will be safe to use in a multi-threaded
** environment as long as no two threads attempt to use the same
** [database connection] at the same time.  ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to set the Multi-thread [threading mode] and
** [sqlite3_config()] will return [SQLITE_ERROR] if called with the
** SQLITE_CONFIG_MULTITHREAD configuration option.</dd>
**
** [[SQLITE_CONFIG_SERIALIZED]] <dt>SQLITE_CONFIG_SERIALIZED</dt>
**
```

```
 <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Serialized. In other words, this option enables
** all mutexes including the recursive
** mutexes on [database connection] and [prepared statement] objects.
** In this mode (which is the default when SQLite is compiled with
** [SQLITE_THREADSAFE=1]) the SQLite library will itself serialize access
** to [database connections] and [prepared statements] so that the
** application is free to use the same [database connection] or the
** same [prepared statement] in different threads at the same time.
** ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to set the Serialized [threading mode] and
** [sqlite3_config()] will return [SQLITE_ERROR] if called with the
** SQLITE_CONFIG_SERIALIZED configuration option.</dd>
**
** [[SQLITE_CONFIG_MALLOC]] <dt>SQLITE_CONFIG_MALLOC</dt>
** <dd> ^(The SQLITE_CONFIG_MALLOC option
 takes a single argument which is
** a pointer to an instance of the [sqlite3_mem_methods] structure.
** The argument specifies
** alternative low-level memory allocation routines to be used in place of
** the memory allocation routines built into SQLite.)^ ^SQLite makes
** its own private copy of the content of the [sqlite3_mem_methods] structure
** before the [sqlite3_config()] call returns.</dd>
**
** [[SQLITE_CONFIG_GETMALLOC]] <dt>SQLITE_CONFIG_GETMALLOC</dt>
** <dd> ^(The SQLITE_CONFIG_GETMALLOC option takes a single argument which
** is a pointer to an instance of the [sqlite3_mem_methods] structure.
** The [sqlite3_mem_methods]
** structure is filled with the currently defined memory allocation routines.)^
** This option can be used to overload the default memory allocation
** routines with a wrapper that simulations memory allocation failure or
** tracks memory usage, for example. </dd>
**
** [[SQLITE_CONFIG_SMALL_MALLOC]] <dt>SQLITE_CONFIG_SMALL_MALLOC</dt>
** <dd> ^The SQLITE_CONFIG_SMALL_MALLOC
 option takes single argument of
** type int, interpreted as a boolean, which if true provides a hint to
** SQLite that it should avoid large memory allocations if possible.
** SQLite will run faster if it is free to make large memory allocations,
** but some application might prefer to run slower in exchange for
** guarantees about memory fragmentation that are possible if large
** allocations are avoided.  This hint is normally off.
** </dd>
**
** [[SQLITE_CONFIG_MEMSTATUS]] <dt>SQLITE_CONFIG_MEMSTATUS</dt>
** <dd> ^The SQLITE_CONFIG_MEMSTATUS option takes single argument of type int,
** interpreted as a boolean, which enables or disables the collection of
```

```
** memory allocation statistics. ^(When memory allocation statistics are
** disabled, the following SQLite interfaces become non-operational:
**   <ul>
**   <li> [sqlite3_hard_heap_limit64()]
**   <li> [sqlite3_memory_used()]
**   <li> [sqlite3_memory_highwater()]
**   <li> [sqlite3_soft_heap_limit64()]
**
   <li> [sqlite3_status64()]
**   </ul>)^
** ^Memory allocation statistics are enabled by default unless SQLite is
** compiled with [SQLITE_DEFAULT_MEMSTATUS]=0 in which case memory
** allocation statistics are disabled by default.
** </dd>
**
** [[SQLITE_CONFIG_SCRATCH]] <dt>SQLITE_CONFIG_SCRATCH</dt>
** <dd> The SQLITE_CONFIG_SCRATCH option is no longer used.
** </dd>
**
** [[SQLITE_CONFIG_PAGECACHE]] <dt>SQLITE_CONFIG_PAGECACHE</dt>
** <dd> ^The SQLITE_CONFIG_PAGECACHE option specifies a memory pool
** that SQLite can use for the database page cache with the default page
** cache implementation.
** This configuration option is a no-op if an application-defined page
** cache implementation is loaded using the [SQLITE_CONFIG_PCACHE2].
** ^There are three arguments to SQLITE_CONFIG_PAGECACHE: A pointer to
** 8-byte aligned memory (pMem), the size of each page cache line (sz),
** and the number of cache lines (N).
** The sz argument should be the size of the largest database page
** (a power
 of two between 512 and 65536) plus some extra bytes for each
** page header.  ^The number of extra bytes needed by the page header
** can be determined using [SQLITE_CONFIG_PCACHE_HDRSZ].
** ^It is harmless, apart from the wasted memory,
** for the sz parameter to be larger than necessary.  The pMem
** argument must be either a NULL pointer or a pointer to an 8-byte
** aligned block of memory of at least sz*N bytes, otherwise
** subsequent behavior is undefined.
** ^When pMem is not NULL, SQLite will strive to use the memory provided
** to satisfy page cache needs, falling back to [sqlite3_malloc()] if
** a page cache line is larger than sz bytes or if all of the pMem buffer
** is exhausted.
** ^If pMem is NULL and N is non-zero, then each database connection
** does an initial bulk allocation for page cache memory
** from [sqlite3_malloc()] sufficient for N cache lines if N is positive or
** of -1024*N bytes if N is negative, . ^If additional
** page cache memory is needed beyond
```

```
 what is provided by the initial
** allocation, then SQLite goes to [sqlite3_malloc()] separately for each
** additional cache line. </dd>
**
** [[SQLITE_CONFIG_HEAP]] <dt>SQLITE_CONFIG_HEAP</dt>
** <dd> ^The SQLITE_CONFIG_HEAP option specifies a static memory buffer
** that SQLite will use for all of its dynamic memory allocation needs
** beyond those provided for by [SQLITE_CONFIG_PAGECACHE].
** ^The SQLITE_CONFIG_HEAP option is only available if SQLite is compiled
** with either [SQLITE_ENABLE_MEMSYS3] or [SQLITE_ENABLE_MEMSYS5] and returns
** [SQLITE_ERROR] if invoked otherwise.
** ^There are three arguments to SQLITE_CONFIG_HEAP:
** An 8-byte aligned pointer to the memory,
** the number of bytes in the memory buffer, and the minimum allocation size.
** ^If the first pointer (the memory pointer) is NULL, then SQLite reverts
** to using its default memory allocator (the system malloc() implementation),
** undoing any prior invocation of [SQLITE_CONFIG_MALLOC].  ^If the
** memory pointer
 is not NULL then the alternative memory
** allocator is engaged to handle all of SQLites memory allocation needs.
** The first pointer (the memory pointer) must be aligned to an 8-byte
** boundary or subsequent behavior of SQLite will be undefined.
** The minimum allocation size is capped at 2**12. Reasonable values
** for the minimum allocation size are 2**5 through 2**8.</dd>
**
** [[SQLITE_CONFIG_MUTEX]] <dt>SQLITE_CONFIG_MUTEX</dt>
** <dd> ^(The SQLITE_CONFIG_MUTEX option takes a single argument which is a
** pointer to an instance of the [sqlite3_mutex_methods] structure.
** The argument specifies alternative low-level mutex routines to be used
** in place the mutex routines built into SQLite.)^  ^SQLite makes a copy of
** the content of the [sqlite3_mutex_methods] structure before the call to
** [sqlite3_config()] returns. ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** the entire mutexing subsystem is omitted from the
 build and hence calls to
** [sqlite3_config()] with the SQLITE_CONFIG_MUTEX configuration option will
** return [SQLITE_ERROR].</dd>
**
** [[SQLITE_CONFIG_GETMUTEX]] <dt>SQLITE_CONFIG_GETMUTEX</dt>
** <dd> ^(The SQLITE_CONFIG_GETMUTEX option takes a single argument which
** is a pointer to an instance of the [sqlite3_mutex_methods] structure.  The
** [sqlite3_mutex_methods]
** structure is filled with the currently defined mutex routines.)^
** This option can be used to overload the default mutex allocation
** routines with a wrapper used to track mutex usage for performance
** profiling or testing, for example.   ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** the entire mutexing subsystem is omitted from the build and hence calls to
```

```
** [sqlite3_config()] with the SQLITE_CONFIG_GETMUTEX configuration option will
** return [SQLITE_ERROR].</dd>
**
** [[SQLITE_CONFIG_LOOKASIDE]] <dt>SQLITE_CONFIG_LOOKASIDE</dt>
** <dd> ^(The SQLITE_CONFIG_LOOKASIDE
 option takes two arguments that determine
** the default size of lookaside memory on each [database connection].
** The first argument is the
** size of each lookaside buffer slot and the second is the number of
** slots allocated to each database connection.)^  ^(SQLITE_CONFIG_LOOKASIDE
** sets the <i>default</i> lookaside size. The [SQLITE_DBCONFIG_LOOKASIDE]
** option to [sqlite3_db_config()] can be used to change the lookaside
** configuration on individual connections.)^ </dd>
**
** [[SQLITE_CONFIG_PCACHE2]] <dt>SQLITE_CONFIG_PCACHE2</dt>
** <dd> ^(The SQLITE_CONFIG_PCACHE2 option takes a single argument which is
** a pointer to an [sqlite3_pcache_methods2] object.  This object specifies
** the interface to a custom page cache implementation.)^
** ^SQLite makes a copy of the [sqlite3_pcache_methods2] object.</dd>
**
** [[SQLITE_CONFIG_GETPCACHE2]] <dt>SQLITE_CONFIG_GETPCACHE2</dt>
** <dd> ^(The SQLITE_CONFIG_GETPCACHE2 option takes a single argument which
** is
 a pointer to an [sqlite3_pcache_methods2] object.  SQLite copies of
** the current page cache implementation into that object.)^ </dd>
**
** [[SQLITE_CONFIG_LOG]] <dt>SQLITE_CONFIG_LOG</dt>
** <dd> The SQLITE_CONFIG_LOG option is used to configure the SQLite
** global [error log].
** (^The SQLITE_CONFIG_LOG option takes two arguments: a pointer to a
** function with a call signature of void(*)(void*,int,const char*),
** and a pointer to void. ^If the function pointer is not NULL, it is
** invoked by [sqlite3_log()] to process each logging event.  ^If the
** function pointer is NULL, the [sqlite3_log()] interface becomes a no-op.
** ^The void pointer that is the second argument to SQLITE_CONFIG_LOG is
** passed through as the first parameter to the application-defined logger
** function whenever that function is invoked.  ^The second parameter to
** the logger function is a copy of the first parameter to the corresponding
** [sqlite3_log()] call and is intended to be a [result code] or
 an
** [extended result code].  ^The third parameter passed to the logger is
** log message after formatting via [sqlite3_snprintf()].
** The SQLite logging interface is not reentrant; the logger function
** supplied by the application must not invoke any SQLite interface.
** In a multi-threaded application, the application-defined logger
** function must be threadsafe. </dd>
**
** [[SQLITE_CONFIG_URI]] <dt>SQLITE_CONFIG_URI
```

```
** <dd>^(The SQLITE_CONFIG_URI option takes a single argument of type int.
** If non-zero, then URI handling is globally enabled. If the parameter is zero,
** then URI handling is globally disabled.)^ ^If URI handling is globally
** enabled, all filenames passed to [sqlite3_open()], [sqlite3_open_v2()],
** [sqlite3_open16()] or
** specified as part of [ATTACH] commands are interpreted as URIs, regardless
** of whether or not the [SQLITE_OPEN_URI] flag is set when the database
** connection is opened. ^If it is globally disabled, filenames are
** only interpreted as
 URIs if the SQLITE_OPEN_URI flag is set when the
** database connection is opened. ^(By default, URI handling is globally
** disabled. The default value may be changed by compiling with the
** [SQLITE_USE_URI] symbol defined.)^
**
** [[SQLITE_CONFIG_COVERING_INDEX_SCAN]] <dt>SQLITE_CONFIG_COVERING_INDEX_SCAN
** <dd>^The SQLITE_CONFIG_COVERING_INDEX_SCAN option takes a single integer
** argument which is interpreted as a boolean in order to enable or disable
** the use of covering indices for full table scans in the query optimizer.
** ^The default setting is determined
** by the [SQLITE_ALLOW_COVERING_INDEX_SCAN] compile-time option, or is "on"
** if that compile-time option is omitted.
** The ability to disable the use of covering indices for full table scans
** is because some incorrectly coded legacy applications might malfunction
** when the optimization is enabled.  Providing the ability to
** disable the optimization allows the older, buggy application code to work
** without change
 even with newer versions of SQLite.
**
** [[SQLITE_CONFIG_PCACHE]] [[SQLITE_CONFIG_GETPCACHE]]
** <dt>SQLITE_CONFIG_PCACHE and SQLITE_CONFIG_GETPCACHE
** <dd> These options are obsolete and should not be used by new code.
** They are retained for backwards compatibility but are now no-ops.
** </dd>
**
** [[SQLITE_CONFIG_SQLLOG]]
** <dt>SQLITE_CONFIG_SQLLOG
** <dd>This option is only available if sqlite is compiled with the
** [SQLITE_ENABLE_SQLLOG] pre-processor macro defined. The first argument should
** be a pointer to a function of type void(*)(void*,sqlite3*,const char*, int).
** The second should be of type (void*). The callback is invoked by the library
** in three separate circumstances, identified by the value passed as the
** fourth parameter. If the fourth parameter is 0, then the database connection
** passed as the second argument has just been opened. The third argument
** points to a buffer containing the name of the main database file. If the
** fourth parameter is 1,
 then the SQL statement that the third parameter
** points to has just been executed. Or, if the fourth parameter is 2, then
** the connection being passed as the second parameter is being closed. The
```

```
** third parameter is passed NULL In this case.  An example of using this
** configuration option can be seen in the "test_sqllog.c" source file in
** the canonical SQLite source tree.</dd>
**
** [[SQLITE_CONFIG_MMAP_SIZE]]
** <dt>SQLITE_CONFIG_MMAP_SIZE
** <dd>^SQLITE_CONFIG_MMAP_SIZE takes two 64-bit integer (sqlite3_int64) values
** that are the default mmap size limit (the default setting for
** [PRAGMA mmap_size]) and the maximum allowed mmap size limit.
** ^The default setting can be overridden by each database connection using
** either the [PRAGMA mmap_size] command, or by using the
** [SQLITE_FCNTL_MMAP_SIZE] file control.  ^(The maximum allowed mmap size
** will be silently truncated if necessary so that it does not exceed the
** compile-time maximum mmap size set by the
** [SQLITE_MAX_MMAP_SIZE]
 compile-time option.)^
** ^If either argument to this option is negative, then that argument is
** changed to its compile-time default.
**
** [[SQLITE_CONFIG_WIN32_HEAPSIZE]]
** <dt>SQLITE_CONFIG_WIN32_HEAPSIZE
** <dd>^The SQLITE_CONFIG_WIN32_HEAPSIZE option is only available if SQLite is
** compiled for Windows with the [SQLITE_WIN32_MALLOC] pre-processor macro
** defined. ^SQLITE_CONFIG_WIN32_HEAPSIZE takes a 32-bit unsigned integer value
** that specifies the maximum size of the created heap.
**
** [[SQLITE_CONFIG_PCACHE_HDRSZ]]
** <dt>SQLITE_CONFIG_PCACHE_HDRSZ
** <dd>^The SQLITE_CONFIG_PCACHE_HDRSZ option takes a single parameter which
** is a pointer to an integer and writes into that integer the number of extra
** bytes per page required for each page in [SQLITE_CONFIG_PAGECACHE].
** The amount of extra space required can change depending on the compiler,
** target platform, and SQLite version.
**
** [[SQLITE_CONFIG_PMASZ]]
** <dt>SQLITE_CONFIG_PMASZ
** <dd>^The
 SQLITE_CONFIG_PMASZ option takes a single parameter which
** is an unsigned integer and sets the "Minimum PMA Size" for the multithreaded
** sorter to that integer.  The default minimum PMA Size is set by the
** [SQLITE_SORTER_PMASZ] compile-time option.  New threads are launched
** to help with sort operations when multithreaded sorting
** is enabled (using the [PRAGMA threads] command) and the amount of content
** to be sorted exceeds the page size times the minimum of the
** [PRAGMA cache_size] setting and this value.
**
** [[SQLITE_CONFIG_STMTJRNL_SPILL]]
** <dt>SQLITE_CONFIG_STMTJRNL_SPILL
```

** <dd>^The SQLITE_CONFIG_STMTJRNL_SPILL option takes a single parameter which
** becomes the [statement journal] spill-to-disk threshold.
** [Statement journals] are held in memory until their size (in bytes)
** exceeds this threshold, at which point they are written to disk.
** Or if the threshold is -1, statement journals are always held
** exclusively in memory.
** Since many statement journals
 never become large, setting the spill
** threshold to a value such as 64KiB can greatly reduce the amount of
** I/O required to support statement rollback.
** The default value for this setting is controlled by the
** [SQLITE_STMTJRNL_SPILL] compile-time option.
**
** [[SQLITE_CONFIG_SORTERREF_SIZE]]
** <dt>SQLITE_CONFIG_SORTERREF_SIZE
** <dd>The SQLITE_CONFIG_SORTERREF_SIZE option accepts a single parameter
** of type (int) - the new value of the sorter-reference size threshold.
** Usually, when SQLite uses an external sort to order records according
** to an ORDER BY clause, all fields required by the caller are present in the
** sorted records. However, if SQLite determines based on the declared type
** of a table column that its values are likely to be very large - larger
** than the configured sorter-reference size threshold - then a reference
** is stored in each sorted record and the required column values loaded
** from the database as records are returned in sorted order.
 The default
** value for this option is to never use this optimization. Specifying a
** negative value for this option restores the default behavior.
** This option is only available if SQLite is compiled with the
** [SQLITE_ENABLE_SORTER_REFERENCES] compile-time option.
**
** [[SQLITE_CONFIG_MEMDB_MAXSIZE]]
** <dt>SQLITE_CONFIG_MEMDB_MAXSIZE
** <dd>The SQLITE_CONFIG_MEMDB_MAXSIZE option accepts a single parameter
** [sqlite3_int64] parameter which is the default maximum size for an in-memory
** database created using [sqlite3_deserialize()]. This default maximum
** size can be adjusted up or down for individual databases using the
** [SQLITE_FCNTL_SIZE_LIMIT] [sqlite3_file_control|file-control]. If this
** configuration setting is never used, then the default maximum is determined
** by the [SQLITE_MEMDB_DEFAULT_MAXSIZE] compile-time option. If that
** compile-time option is not set, then the default maximum is 1073741824.
** </dl>
*/

Found in path(s):
* /sqlite-amalgamation-3450200-zip/sqlite-amalgamation-3450200/sqlite3.h
No license file was found, but licenses were detected in source scan.

/*

```
** 2022-11-18
**
** The author disclaims copyright to this source code.  In place of
** a legal notice, here is a blessing:
**
**    May you do good and not evil.
**    May you find forgiveness for yourself and forgive others.
**    May you share freely, never taking more than you give.
**
***************************************************************************
**
** This is a SQLite extension for converting in either direction
** between a (binary) blob and base64 text. Base64 can transit a
** sane USASCII channel unmolested. It also plays nicely in CSV or
** written as TCL brace-enclosed literals or SQL string literals,
** and can be used unmodified in XML-like documents.
**
** This is an independent implementation of conversions specified in
** RFC 4648, done on the above date by the author (Larry Brasfield)
** who thereby has the right to put this into the public domain.
**
** The conversions meet RFC 4648 requirements,
 provided that this
** C source specifies that line-feeds are included in the encoded
** data to limit visible line lengths to 72 characters and to
** terminate any encoded blob having non-zero length.
**
** Length limitations are not imposed except that the runtime
** SQLite string or blob length limits are respected. Otherwise,
** any length binary sequence can be represented and recovered.
** Generated base64 sequences, with their line-feeds included,
** can be concatenated; the result converted back to binary will
** be the concatenation of the represented binary sequences.
**
** This SQLite3 extension creates a function, base64(x), which
** either: converts text x containing base64 to a returned blob;
** or converts a blob x to returned text containing base64. An
** error will be thrown for other input argument types.
**
** This code relies on UTF-8 encoding only with respect to the
** meaning of the first 128 (7-bit) codes matching that of USASCII.
** It will fail miserably
 if somehow made to try to convert EBCDIC.
** Because it is table-driven, it could be enhanced to handle that,
** but the world and SQLite have moved on from that anachronism.
**
** To build the extension:
** Set shell variable SQDIR=<your favorite SQLite checkout directory>
```

```
** *Nix: gcc -O2 -shared -I$SQDIR -fPIC -o base64.so base64.c
** OSX: gcc -O2 -dynamiclib -fPIC -I$SQDIR -o base64.dylib base64.c
** Win32: gcc -O2 -shared -I%SQDIR% -o base64.dll base64.c
** Win32: cl /Os -I%SQDIR% base64.c -link -dll -out:base64.dll
*/
/*
** 2022-11-16
**
** The author disclaims copyright to this source code.  In place of
** a legal notice, here is a blessing:
**
**    May you do good and not evil.
**    May you find forgiveness for yourself and forgive others.
**    May you share freely, never taking more than you give.
**
*****************************************************************************
**
** This is a utility for converting binary to base85 or vice-versa.
** It can be built as a standalone
 program or an SQLite3 extension.
**
** Much like base64 representations, base85 can be sent through a
** sane USASCII channel unmolested. It also plays nicely in CSV or
** written as TCL brace-enclosed literals or SQL string literals.
** It is not suited for unmodified use in XML-like documents.
**
** The encoding used resembles Ascii85, but was devised by the author
** (Larry Brasfield) before Mozilla, Adobe, ZMODEM or other Ascii85
** variant sources existed, in the 1984 timeframe on a VAX mainframe.
** Further, this is an independent implementation of a base85 system.
** Hence, the author has rightfully put this into the public domain.
**
** Base85 numerals are taken from the set of 7-bit USASCII codes,
** excluding control characters and Space ! " ' ( ) { | } ~ Del
** in code order representing digit values 0 to 84 (base 10.)
**
** Groups of 4 bytes, interpreted as big-endian 32-bit values,
** are represented as 5-digit base85 numbers with MS to LS digit
** order. Groups
 of 1-3 bytes are represented with 2-4 digits,
** still big-endian but 8-24 bit values. (Using big-endian yields
** the simplest transition to byte groups smaller than 4 bytes.
** These byte groups can also be considered base-256 numbers.)
** Groups of 0 bytes are represented with 0 digits and vice-versa.
** No pad characters are used; Encoded base85 numeral sequence
** (aka "group") length maps 1-to-1 to the decoded binary length.
**
** Any character not in the base85 numeral set delimits groups.
```

```
** When base85 is streamed or stored in containers of indefinite
** size, newline is used to separate it into sub-sequences of no
** more than 80 digits so that fgets() can be used to read it.
**
** Length limitations are not imposed except that the runtime
** SQLite string or blob length limits are respected. Otherwise,
** any length binary sequence can be represented and recovered.
** Base85 sequences can be concatenated by separating them with
** a non-base85 character; the conversion to binary
 will then
** be the concatenation of the represented binary sequences.

** The standalone program either converts base85 on stdin to create
** a binary file or converts a binary file to base85 on stdout.
** Read or make it blurt its help for invocation details.
**
** The SQLite3 extension creates a function, base85(x), which will
** either convert text base85 to a blob or a blob to text base85
** and return the result (or throw an error for other types.)
** Unless built with OMIT_BASE85_CHECKER defined, it also creates a
** function, is_base85(t), which returns 1 iff the text t contains
** nothing other than base85 numerals and whitespace, or 0 otherwise.
**
** To build the extension:
** Set shell variable SQDIR=<your favorite SQLite checkout directory>
** and variable OPTS to -DOMIT_BASE85_CHECKER if is_base85() unwanted.
** *Nix: gcc -O2 -shared -I$SQDIR $OPTS -fPIC -o base85.so base85.c
** OSX: gcc -O2 -dynamiclib -fPIC -I$SQDIR $OPTS -o base85.dylib base85.c
** Win32: gcc -O2
 -shared -I%SQDIR% %OPTS% -o base85.dll base85.c
** Win32: cl /Os -I%SQDIR% %OPTS% base85.c -link -dll -out:base85.dll
**
** To build the standalone program, define PP symbol BASE85_STANDALONE. Eg.
** *Nix or OSX: gcc -O2 -DBASE85_STANDALONE base85.c -o base85
** Win32: gcc -O2 -DBASE85_STANDALONE -o base85.exe base85.c
** Win32: cl /Os /MD -DBASE85_STANDALONE base85.c
*/
/* This will be more informative in a later version. */
```

Found in path(s):
* /sqlite-amalgamation-3450200-zip/sqlite-amalgamation-3450200/shell.c
No license file was found, but licenses were detected in source scan.

```
/*
** CAPI3REF: Configuration Options
** KEYWORDS: {configuration option}
**
** These constants are the available integer configuration options that
```

```
** can be passed as the first argument to the [sqlite3_config()] interface.
**
** Most of the configuration options for sqlite3_config()
** will only work if invoked prior to [sqlite3_initialize()] or after
** [sqlite3_shutdown()].  The few exceptions to this rule are called
** "anytime configuration options".
** ^Calling [sqlite3_config()] with a first argument that is not an
** anytime configuration option in between calls to [sqlite3_initialize()] and
** [sqlite3_shutdown()] is a no-op that returns SQLITE_MISUSE.
**
** The set of anytime configuration options can change (by insertions
** and/or deletions) from one release of SQLite to the next.
** As of SQLite version 3.42.0, the complete set of anytime configuration
** options is:
** <ul>
** <li> SQLITE_CONFIG_LOG
**
 <li> SQLITE_CONFIG_PCACHE_HDRSZ
** </ul>
**
** New configuration options may be added in future releases of SQLite.
** Existing configuration options might be discontinued.  Applications
** should check the return code from [sqlite3_config()] to make sure that
** the call worked.  The [sqlite3_config()] interface will return a
** non-zero [error code] if a discontinued or unsupported configuration option
** is invoked.
**
** <dl>
** [[SQLITE_CONFIG_SINGLETHREAD]] <dt>SQLITE_CONFIG_SINGLETHREAD</dt>
** <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Single-thread.  In other words, it disables
** all mutexing and puts SQLite into a mode where it can only be used
** by a single thread.   ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to change the [threading mode] from its default
** value of Single-thread and so [sqlite3_config()] will return
** [SQLITE_ERROR] if called
 with the SQLITE_CONFIG_SINGLETHREAD
** configuration option.</dd>
**
** [[SQLITE_CONFIG_MULTITHREAD]] <dt>SQLITE_CONFIG_MULTITHREAD</dt>
** <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Multi-thread.  In other words, it disables
** mutexing on [database connection] and [prepared statement] objects.
** The application is responsible for serializing access to
** [database connections] and [prepared statements].  But other mutexes
** are enabled so that SQLite will be safe to use in a multi-threaded
** environment as long as no two threads attempt to use the same
```

```
** [database connection] at the same time.  ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to set the Multi-thread [threading mode] and
** [sqlite3_config()] will return [SQLITE_ERROR] if called with the
** SQLITE_CONFIG_MULTITHREAD configuration option.</dd>
**
** [[SQLITE_CONFIG_SERIALIZED]] <dt>SQLITE_CONFIG_SERIALIZED</dt>
**
 <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Serialized. In other words, this option enables
** all mutexes including the recursive
** mutexes on [database connection] and [prepared statement] objects.
** In this mode (which is the default when SQLite is compiled with
** [SQLITE_THREADSAFE=1]) the SQLite library will itself serialize access
** to [database connections] and [prepared statements] so that the
** application is free to use the same [database connection] or the
** same [prepared statement] in different threads at the same time.
** ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to set the Serialized [threading mode] and
** [sqlite3_config()] will return [SQLITE_ERROR] if called with the
** SQLITE_CONFIG_SERIALIZED configuration option.</dd>
**
** [[SQLITE_CONFIG_MALLOC]] <dt>SQLITE_CONFIG_MALLOC</dt>
** <dd> ^(The SQLITE_CONFIG_MALLOC option
 takes a single argument which is
** a pointer to an instance of the [sqlite3_mem_methods] structure.
** The argument specifies
** alternative low-level memory allocation routines to be used in place of
** the memory allocation routines built into SQLite.)^ ^SQLite makes
** its own private copy of the content of the [sqlite3_mem_methods] structure
** before the [sqlite3_config()] call returns.</dd>
**
** [[SQLITE_CONFIG_GETMALLOC]] <dt>SQLITE_CONFIG_GETMALLOC</dt>
** <dd> ^(The SQLITE_CONFIG_GETMALLOC option takes a single argument which
** is a pointer to an instance of the [sqlite3_mem_methods] structure.
** The [sqlite3_mem_methods]
** structure is filled with the currently defined memory allocation routines.)^
** This option can be used to overload the default memory allocation
** routines with a wrapper that simulations memory allocation failure or
** tracks memory usage, for example. </dd>
**
** [[SQLITE_CONFIG_SMALL_MALLOC]] <dt>SQLITE_CONFIG_SMALL_MALLOC</dt>
** <dd> ^The SQLITE_CONFIG_SMALL_MALLOC
 option takes single argument of
** type int, interpreted as a boolean, which if true provides a hint to
** SQLite that it should avoid large memory allocations if possible.
** SQLite will run faster if it is free to make large memory allocations,
```

```
** but some application might prefer to run slower in exchange for
** guarantees about memory fragmentation that are possible if large
** allocations are avoided.  This hint is normally off.
** </dd>
**
** [[SQLITE_CONFIG_MEMSTATUS]] <dt>SQLITE_CONFIG_MEMSTATUS</dt>
** <dd> ^The SQLITE_CONFIG_MEMSTATUS option takes single argument of type int,
** interpreted as a boolean, which enables or disables the collection of
** memory allocation statistics. ^(When memory allocation statistics are
** disabled, the following SQLite interfaces become non-operational:
**   <ul>
**   <li> [sqlite3_hard_heap_limit64()]
**   <li> [sqlite3_memory_used()]
**   <li> [sqlite3_memory_highwater()]
**   <li> [sqlite3_soft_heap_limit64()]
**
   <li> [sqlite3_status64()]
**   </ul>)^
** ^Memory allocation statistics are enabled by default unless SQLite is
** compiled with [SQLITE_DEFAULT_MEMSTATUS]=0 in which case memory
** allocation statistics are disabled by default.
** </dd>
**
** [[SQLITE_CONFIG_SCRATCH]] <dt>SQLITE_CONFIG_SCRATCH</dt>
** <dd> The SQLITE_CONFIG_SCRATCH option is no longer used.
** </dd>
**
** [[SQLITE_CONFIG_PAGECACHE]] <dt>SQLITE_CONFIG_PAGECACHE</dt>
** <dd> ^The SQLITE_CONFIG_PAGECACHE option specifies a memory pool
** that SQLite can use for the database page cache with the default page
** cache implementation.
** This configuration option is a no-op if an application-defined page
** cache implementation is loaded using the [SQLITE_CONFIG_PCACHE2].
** ^There are three arguments to SQLITE_CONFIG_PAGECACHE: A pointer to
** 8-byte aligned memory (pMem), the size of each page cache line (sz),
** and the number of cache lines (N).
** The sz argument should be the size of the largest database page
** (a power
 of two between 512 and 65536) plus some extra bytes for each
** page header.  ^The number of extra bytes needed by the page header
** can be determined using [SQLITE_CONFIG_PCACHE_HDRSZ].
** ^It is harmless, apart from the wasted memory,
** for the sz parameter to be larger than necessary.  The pMem
** argument must be either a NULL pointer or a pointer to an 8-byte
** aligned block of memory of at least sz*N bytes, otherwise
** subsequent behavior is undefined.
** ^When pMem is not NULL, SQLite will strive to use the memory provided
** to satisfy page cache needs, falling back to [sqlite3_malloc()] if
```

** a page cache line is larger than sz bytes or if all of the pMem buffer
** is exhausted.
** ^If pMem is NULL and N is non-zero, then each database connection
** does an initial bulk allocation for page cache memory
** from [sqlite3_malloc()] sufficient for N cache lines if N is positive or
** of -1024*N bytes if N is negative, . ^If additional
** page cache memory is needed beyond
 what is provided by the initial
** allocation, then SQLite goes to [sqlite3_malloc()] separately for each
** additional cache line. </dd>
**
** [[SQLITE_CONFIG_HEAP]] <dt>SQLITE_CONFIG_HEAP</dt>
** <dd> ^The SQLITE_CONFIG_HEAP option specifies a static memory buffer
** that SQLite will use for all of its dynamic memory allocation needs
** beyond those provided for by [SQLITE_CONFIG_PAGECACHE].
** ^The SQLITE_CONFIG_HEAP option is only available if SQLite is compiled
** with either [SQLITE_ENABLE_MEMSYS3] or [SQLITE_ENABLE_MEMSYS5] and returns
** [SQLITE_ERROR] if invoked otherwise.
** ^There are three arguments to SQLITE_CONFIG_HEAP:
** An 8-byte aligned pointer to the memory,
** the number of bytes in the memory buffer, and the minimum allocation size.
** ^If the first pointer (the memory pointer) is NULL, then SQLite reverts
** to using its default memory allocator (the system malloc() implementation),
** undoing any prior invocation of [SQLITE_CONFIG_MALLOC]. ^If the
** memory pointer
 is not NULL then the alternative memory
** allocator is engaged to handle all of SQLites memory allocation needs.
** The first pointer (the memory pointer) must be aligned to an 8-byte
** boundary or subsequent behavior of SQLite will be undefined.
** The minimum allocation size is capped at 2**12. Reasonable values
** for the minimum allocation size are 2**5 through 2**8.</dd>
**
** [[SQLITE_CONFIG_MUTEX]] <dt>SQLITE_CONFIG_MUTEX</dt>
** <dd> ^(The SQLITE_CONFIG_MUTEX option takes a single argument which is a
** pointer to an instance of the [sqlite3_mutex_methods] structure.
** The argument specifies alternative low-level mutex routines to be used
** in place the mutex routines built into SQLite.)^ ^SQLite makes a copy of
** the content of the [sqlite3_mutex_methods] structure before the call to
** [sqlite3_config()] returns. ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** the entire mutexing subsystem is omitted from the
 build and hence calls to
** [sqlite3_config()] with the SQLITE_CONFIG_MUTEX configuration option will
** return [SQLITE_ERROR].</dd>
**
** [[SQLITE_CONFIG_GETMUTEX]] <dt>SQLITE_CONFIG_GETMUTEX</dt>
** <dd> ^(The SQLITE_CONFIG_GETMUTEX option takes a single argument which
** is a pointer to an instance of the [sqlite3_mutex_methods] structure. The

```
** [sqlite3_mutex_methods]
** structure is filled with the currently defined mutex routines.)^
** This option can be used to overload the default mutex allocation
** routines with a wrapper used to track mutex usage for performance
** profiling or testing, for example.   ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** the entire mutexing subsystem is omitted from the build and hence calls to
** [sqlite3_config()] with the SQLITE_CONFIG_GETMUTEX configuration option will
** return [SQLITE_ERROR].</dd>
**
** [[SQLITE_CONFIG_LOOKASIDE]] <dt>SQLITE_CONFIG_LOOKASIDE</dt>
** <dd> ^(The SQLITE_CONFIG_LOOKASIDE
 option takes two arguments that determine
** the default size of lookaside memory on each [database connection].
** The first argument is the
** size of each lookaside buffer slot and the second is the number of
** slots allocated to each database connection.)^  ^(SQLITE_CONFIG_LOOKASIDE
** sets the <i>default</i> lookaside size. The [SQLITE_DBCONFIG_LOOKASIDE]
** option to [sqlite3_db_config()] can be used to change the lookaside
** configuration on individual connections.)^ </dd>
**
** [[SQLITE_CONFIG_PCACHE2]] <dt>SQLITE_CONFIG_PCACHE2</dt>
** <dd> ^(The SQLITE_CONFIG_PCACHE2 option takes a single argument which is
** a pointer to an [sqlite3_pcache_methods2] object.  This object specifies
** the interface to a custom page cache implementation.)^
** ^SQLite makes a copy of the [sqlite3_pcache_methods2] object.</dd>
**
** [[SQLITE_CONFIG_GETPCACHE2]] <dt>SQLITE_CONFIG_GETPCACHE2</dt>
** <dd> ^(The SQLITE_CONFIG_GETPCACHE2 option takes a single argument which
** is
 a pointer to an [sqlite3_pcache_methods2] object.  SQLite copies of
** the current page cache implementation into that object.)^ </dd>
**
** [[SQLITE_CONFIG_LOG]] <dt>SQLITE_CONFIG_LOG</dt>
** <dd> The SQLITE_CONFIG_LOG option is used to configure the SQLite
** global [error log].
** (^The SQLITE_CONFIG_LOG option takes two arguments: a pointer to a
** function with a call signature of void(*)(void*,int,const char*),
** and a pointer to void. ^If the function pointer is not NULL, it is
** invoked by [sqlite3_log()] to process each logging event.  ^If the
** function pointer is NULL, the [sqlite3_log()] interface becomes a no-op.
** ^The void pointer that is the second argument to SQLITE_CONFIG_LOG is
** passed through as the first parameter to the application-defined logger
** function whenever that function is invoked.  ^The second parameter to
** the logger function is a copy of the first parameter to the corresponding
** [sqlite3_log()] call and is intended to be a [result code] or
 an
** [extended result code].  ^The third parameter passed to the logger is
```

```
** log message after formatting via [sqlite3_snprintf()].
** The SQLite logging interface is not reentrant; the logger function
** supplied by the application must not invoke any SQLite interface.
** In a multi-threaded application, the application-defined logger
** function must be threadsafe. </dd>
**
** [[SQLITE_CONFIG_URI]] <dt>SQLITE_CONFIG_URI
** <dd>^(The SQLITE_CONFIG_URI option takes a single argument of type int.
** If non-zero, then URI handling is globally enabled. If the parameter is zero,
** then URI handling is globally disabled.)^ ^If URI handling is globally
** enabled, all filenames passed to [sqlite3_open()], [sqlite3_open_v2()],
** [sqlite3_open16()] or
** specified as part of [ATTACH] commands are interpreted as URIs, regardless
** of whether or not the [SQLITE_OPEN_URI] flag is set when the database
** connection is opened. ^If it is globally disabled, filenames are
** only interpreted as
 URIs if the SQLITE_OPEN_URI flag is set when the
** database connection is opened. ^(By default, URI handling is globally
** disabled. The default value may be changed by compiling with the
** [SQLITE_USE_URI] symbol defined.)^
**
** [[SQLITE_CONFIG_COVERING_INDEX_SCAN]] <dt>SQLITE_CONFIG_COVERING_INDEX_SCAN
** <dd>^The SQLITE_CONFIG_COVERING_INDEX_SCAN option takes a single integer
** argument which is interpreted as a boolean in order to enable or disable
** the use of covering indices for full table scans in the query optimizer.
** ^The default setting is determined
** by the [SQLITE_ALLOW_COVERING_INDEX_SCAN] compile-time option, or is "on"
** if that compile-time option is omitted.
** The ability to disable the use of covering indices for full table scans
** is because some incorrectly coded legacy applications might malfunction
** when the optimization is enabled.  Providing the ability to
** disable the optimization allows the older, buggy application code to work
** without change
 even with newer versions of SQLite.
**
** [[SQLITE_CONFIG_PCACHE]] [[SQLITE_CONFIG_GETPCACHE]]
** <dt>SQLITE_CONFIG_PCACHE and SQLITE_CONFIG_GETPCACHE
** <dd> These options are obsolete and should not be used by new code.
** They are retained for backwards compatibility but are now no-ops.
** </dd>
**
** [[SQLITE_CONFIG_SQLLOG]]
** <dt>SQLITE_CONFIG_SQLLOG
** <dd>This option is only available if sqlite is compiled with the
** [SQLITE_ENABLE_SQLLOG] pre-processor macro defined. The first argument should
** be a pointer to a function of type void(*)(void*,sqlite3*,const char*, int).
** The second should be of type (void*). The callback is invoked by the library
** in three separate circumstances, identified by the value passed as the
```

** fourth parameter. If the fourth parameter is 0, then the database connection
** passed as the second argument has just been opened. The third argument
** points to a buffer containing the name of the main database file. If the
** fourth parameter is 1,
 then the SQL statement that the third parameter
** points to has just been executed. Or, if the fourth parameter is 2, then
** the connection being passed as the second parameter is being closed. The
** third parameter is passed NULL In this case. An example of using this
** configuration option can be seen in the "test_sqllog.c" source file in
** the canonical SQLite source tree.</dd>
**
** [[SQLITE_CONFIG_MMAP_SIZE]]
** <dt>SQLITE_CONFIG_MMAP_SIZE
** <dd>^SQLITE_CONFIG_MMAP_SIZE takes two 64-bit integer (sqlite3_int64) values
** that are the default mmap size limit (the default setting for
** [PRAGMA mmap_size]) and the maximum allowed mmap size limit.
** ^The default setting can be overridden by each database connection using
** either the [PRAGMA mmap_size] command, or by using the
** [SQLITE_FCNTL_MMAP_SIZE] file control. ^(The maximum allowed mmap size
** will be silently truncated if necessary so that it does not exceed the
** compile-time maximum mmap size set by the
** [SQLITE_MAX_MMAP_SIZE]
 compile-time option.)^
** ^If either argument to this option is negative, then that argument is
** changed to its compile-time default.
**
** [[SQLITE_CONFIG_WIN32_HEAPSIZE]]
** <dt>SQLITE_CONFIG_WIN32_HEAPSIZE
** <dd>^The SQLITE_CONFIG_WIN32_HEAPSIZE option is only available if SQLite is
** compiled for Windows with the [SQLITE_WIN32_MALLOC] pre-processor macro
** defined. ^SQLITE_CONFIG_WIN32_HEAPSIZE takes a 32-bit unsigned integer value
** that specifies the maximum size of the created heap.
**
** [[SQLITE_CONFIG_PCACHE_HDRSZ]]
** <dt>SQLITE_CONFIG_PCACHE_HDRSZ
** <dd>^The SQLITE_CONFIG_PCACHE_HDRSZ option takes a single parameter which
** is a pointer to an integer and writes into that integer the number of extra
** bytes per page required for each page in [SQLITE_CONFIG_PAGECACHE].
** The amount of extra space required can change depending on the compiler,
** target platform, and SQLite version.
**
** [[SQLITE_CONFIG_PMASZ]]
** <dt>SQLITE_CONFIG_PMASZ
** <dd>^The
 SQLITE_CONFIG_PMASZ option takes a single parameter which
** is an unsigned integer and sets the "Minimum PMA Size" for the multithreaded
** sorter to that integer. The default minimum PMA Size is set by the
** [SQLITE_SORTER_PMASZ] compile-time option. New threads are launched

```
** to help with sort operations when multithreaded sorting
** is enabled (using the [PRAGMA threads] command) and the amount of content
** to be sorted exceeds the page size times the minimum of the
** [PRAGMA cache_size] setting and this value.
**
** [[SQLITE_CONFIG_STMTJRNL_SPILL]]
** <dt>SQLITE_CONFIG_STMTJRNL_SPILL
** <dd>^The SQLITE_CONFIG_STMTJRNL_SPILL option takes a single parameter which
** becomes the [statement journal] spill-to-disk threshold.
** [Statement journals] are held in memory until their size (in bytes)
** exceeds this threshold, at which point they are written to disk.
** Or if the threshold is -1, statement journals are always held
** exclusively in memory.
** Since many statement journals
 never become large, setting the spill
** threshold to a value such as 64KiB can greatly reduce the amount of
** I/O required to support statement rollback.
** The default value for this setting is controlled by the
** [SQLITE_STMTJRNL_SPILL] compile-time option.
**
** [[SQLITE_CONFIG_SORTERREF_SIZE]]
** <dt>SQLITE_CONFIG_SORTERREF_SIZE
** <dd>The SQLITE_CONFIG_SORTERREF_SIZE option accepts a single parameter
** of type (int) - the new value of the sorter-reference size threshold.
** Usually, when SQLite uses an external sort to order records according
** to an ORDER BY clause, all fields required by the caller are present in the
** sorted records. However, if SQLite determines based on the declared type
** of a table column that its values are likely to be very large - larger
** than the configured sorter-reference size threshold - then a reference
** is stored in each sorted record and the required column values loaded
** from the database as records are returned in sorted order.
 The default
** value for this option is to never use this optimization. Specifying a
** negative value for this option restores the default behavior.
** This option is only available if SQLite is compiled with the
** [SQLITE_ENABLE_SORTER_REFERENCES] compile-time option.
**
** [[SQLITE_CONFIG_MEMDB_MAXSIZE]]
** <dt>SQLITE_CONFIG_MEMDB_MAXSIZE
** <dd>The SQLITE_CONFIG_MEMDB_MAXSIZE option accepts a single parameter
** [sqlite3_int64] parameter which is the default maximum size for an in-memory
** database created using [sqlite3_deserialize()].  This default maximum
** size can be adjusted up or down for individual databases using the
** [SQLITE_FCNTL_SIZE_LIMIT] [sqlite3_file_control|file-control].  If this
** configuration setting is never used, then the default maximum is determined
** by the [SQLITE_MEMDB_DEFAULT_MAXSIZE] compile-time option.  If that
** compile-time option is not set, then the default maximum is 1073741824.
** </dl>
```

```
*/
/*
** The "printf" code that follows dates
 from the 1980's.  It is in
** the public domain.
**
**********************************************************************
**
** This file contains code for a set of "printf"-like routines.  These
** routines format strings much like the printf() from the standard C
** library, though the implementation here has enhancements to support
** SQLite.
*/
/*
** 2004 May 22
**
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** a legal notice, here is a blessing:
**
**    May you do good and not evil.
**    May you find forgiveness for yourself and forgive others.
**    May you share freely, never taking more than you give.
**
***********************************************************************
**
** This file contains the VFS implementation for unix-like operating systems
** include Linux, MacOSX, *BSD, QNX, VxWorks, AIX, HPUX, and others.
**
** There are actually several different VFS implementations in this file.
** The differences are in the way that file
 locking is done.  The default
** implementation uses Posix Advisory Locks.  Alternative implementations
** use flock(), dot-files, various proprietary locking schemas, or simply
** skip locking all together.
**
** This source file is organized into divisions where the logic for various
** subfunctions is contained within the appropriate division.  PLEASE
** KEEP THE STRUCTURE OF THIS FILE INTACT.  New code should be placed
** in the correct division and should be clearly labelled.
**
** The layout of divisions is as follows:
**
**   *  General-purpose declarations and utility functions.
**   *  Unique file ID logic used by VxWorks.
**   *  Various locking primitive implementations (all except proxy locking):
**      + for Posix Advisory Locks
**      + for no-op locks
**      + for dot-file locks
```

```
**      + for flock() locking
**      + for named semaphore locks (VxWorks only)
**      + for AFP filesystem locks (MacOSX only)
**   *  sqlite3_file methods not associated with locking.
**
  *  Definitions of sqlite3_io_methods objects for all locking
**      methods plus "finder" functions for each locking method.
**   *  sqlite3_vfs method implementations.
**   *  Locking primitives for the proxy uber-locking-method. (MacOSX only)
**   *  Definitions of sqlite3_vfs objects for all locking methods
**      plus implementations of sqlite3_os_init() and sqlite3_os_end().
*/
/*
** Return a pointer to the "temporary page" buffer held internally
** by the pager.  This is a buffer that is big enough to hold the
** entire content of a database page.  This buffer is used internally
** during rollback and will be overwritten whenever a rollback
** occurs.  But other modules are free to use it too, as long as
** no rollbacks are happening.
*/
```

Found in path(s):
* /sqlite-amalgamation-3450200-zip/sqlite-amalgamation-3450200/sqlite3.c

1.1452 libuv 1.43.0-1ubuntu0.1

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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
# This source code was written by the Go contributors.
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package spec

import "testing"

func TestIntegrationLicense(t *testing.T) {
 license := License{Name: "the name", URL: "the url"}
 const licenseJSON = `{"name":"the name","url":"the url"}`
 const licenseYAML = "name: the name\nurl: the url\n"

 assertSerializeJSON(t, license, licenseJSON)
 assertParsesJSON(t, licenseJSON, license)
}
```

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1.1460 go-openapi-errors 0.22.0

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1.1461 cristalhq-hedgedhttp 0.9.1

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1.1462 github.com/hashicorp/go-msgpack/v2 2.1.1

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1.1463 cloudflare-cfssl 1.6.5

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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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1.1468 go-openapi 0.28.0

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1.1469 githubcomgoopenapispec 0.21.0

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import (
 "encoding/json"

 "github.com/go-openapi/swag"
)

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 LicenseProps
 VendorExtensible
}

// LicenseProps holds the properties of a License object
type LicenseProps struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}

// UnmarshalJSON
```

```
 hydrates License from json
func (l *License) UnmarshalJSON(data []byte) error {
 if err := json.Unmarshal(data, &l.LicenseProps); err != nil {
  return err
 }
 return json.Unmarshal(data, &l.VendorExtensible)
}

// MarshalJSON produces License as json
func (l License) MarshalJSON() ([]byte, error) {
 b1, err := json.Marshal(l.LicenseProps)
 if err != nil {
  return nil, err
 }
 b2, err := json.Marshal(l.VendorExtensible)
 if err != nil {
  return nil, err
 }
 return swag.ConcatJSON(b1, b2), nil
}
```

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import (
 "encoding/json"
 "testing"

 "github.com/stretchr/testify/assert"
 "github.com/stretchr/testify/require"
)

var license = License{
 LicenseProps:     LicenseProps{Name: "the name", URL: "the url"},
 VendorExtensible: VendorExtensible{Extensions: map[string]interface{}{"x-license": "custom term"}}}

const licenseJSON = `{
 "name": "the name",
 "url": "the url",
 "x-license": "custom
 term"
}`

func TestIntegrationLicense(t *testing.T) {

 // const licenseYAML = "name: the name\nurl: the url\n"

 b, err := json.MarshalIndent(license, "", "\t")
 require.NoError(t, err)
 assert.Equal(t, licenseJSON, string(b))

 actual := License{}
 err = json.Unmarshal([]byte(licenseJSON), &actual)
 require.NoError(t, err)
 assert.EqualValues(t, license, actual)
}
```

1.1470 githubcomgoopenapistrfmt 0.23.0

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1.1477 ptyprocess 0.7.0

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1.1478 python-dateutil 2.9.0.post0

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1.1479 libuuid 2.37.2-4ubuntu3.4

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NR START END SECTORS SIZE NAME UUID
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2 7680 16383 8704 4.3M 8f8378c0-02
5 7936 12799 4864 2.4M
6 12544 16127 3584 1.8M

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NR START END SECTORS SIZE NAME UUID
1 32 7679 7648 3.7M 8f8378c0-01
2 7680 16383 8704 4.3M 8f8378c0-02
5 7936 12799 4864 2.4M
6 12544 16127 3584 1.8M

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NR START END SECTORS SIZE NAME UUID
1 32 7679 7648 3.7M 8f8378c0-01
2 7680 16383 8704 4.3M 8f8378c0-02
5 7936 12799 4864 2.4M
6 12544 16127 3584 1.8M
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fields:
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1.1483 kubernetes-apiserver 0.26.2

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1.1486 metrics-httpclient 4.2.25

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.httpclient
Build-Jdk-Spec: 17
Bundle-Description: An Apache HttpClient wrapper providing Metrics ins
trumentation of connection pools, request durations and rates,
 and other useful information.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Apache HttpClient
Bundle-SymbolicName: io.dropwizard.metrics.httpclient
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.httpclient;uses:="com.codahale.me
trics,org.apache.http,org.apache.http.config,org.apache.http.conn,org
.apache.http.conn.routing,org.apache.http.conn.socket,org.apache.http
.impl.client,org.apache.http.impl.conn,org.apache.http.protocol";vers
ion="4.2.25"
Implementation-Title: Metrics Integration for Apache HttpClient
Implementation-Version: 4.2.25
Import-Package:
 com.codahale.metrics;version="[4.2,5)",org.apache.http
,org.apache.http.client,org.apache.http.client.methods,org.apache.htt
p.client.utils,org.apache.http.config,org.apache.http.conn,org.apache
.http.conn.routing,org.apache.http.conn.socket,org.apache.http.conn.s
sl,org.apache.http.impl.client,org.apache.http.impl.conn,org.apache.h
ttp.pool,org.apache.http.protocol
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-httpclient-4-2-25-jar/META-INF/MANIFEST.MF

1.1487 brotli 1.1.0-r2

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1.1488 jsonpatch 5.9.0+incompatible

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1.1489 google.golang.org/genproto/googleapis/rpc 0.0.0-20240401170217-c3f982113cda

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1.1490 nginx 1.25.5

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1.1491 xxhash 2.3.0

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1.1492 armon-go-metrics 0.4.1

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1.1494 jackson-annotations 2.16.1

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Jackson JSON processor

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It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has
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It is currently developed by a community of developers.

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1.1495 classmate 1.7.0

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1.1496 jaraco-functools 4.0.1

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1.1498 githubcommattngocolorable 0.1.13

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1.1499 locales 0.14.1

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1.1500 universal-translator 0.18.1

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1.1501 google-golang-org-grpc 1.63.2

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1.1503 stretchr-objx 0.5.2

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1.1504 python27-jmespath 1.0.1-1

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1.1505 go-hclog 1.6.3

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1.1506 twmb-franz-go-plugin-kprom 1.1.0

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ISC

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1.1513 githubcomgolangprotobuf 1.5.3

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fields:
  site: string
  author: root

1.1515 githubcomfsnotifyfsnotify 1.6.0

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1.1532 go-autorest 0.2.1

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1.1533 go-uber-org-zap 1.26.0

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1.1534 github.com/coreos/go-systemd/v22 22.5.0

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1.1535 github.com/xhit/go-str2duration/v2 2.1.0

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1.1536 github.com/vultr/govultr/v2 2.17.2

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1.1537 github.com/hashicorp/cronexpr 1.1.2

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1.1538 go-querystring 1.1.0

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1.1539 github.com/kolo/xmlrpc 0.0.0-20220921171641-a4b6fa1dd06b

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1.1540 github.com/dennwc/varint 1.0.0

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1.1541 coreos-go-semver 0.3.1

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1.1546 github.com/godbus/dbus/v5 5.1.0

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1.1547 githubcomgooglebtree 1.1.2

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1.1548 github.com/jackc/pgtype 1.14.0

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1.1549 emirpasic/gods 1.18.1

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1.1550 go.opentelemetry.io/otel/trace 1.21.0

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1.1551 github.com/jackc/pgconn 1.14.3

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1.1553 go.uber.org/atomi 1.11.0

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1.1554 githubcommitchellhmapstructure 1.5.1-0.20220423185008-bf980b35cac4

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1.1555 github.com/fatih/camelcase 1.0.0

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1.1556 gopkgin 0.9.1

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1.1557 github.com/mdlayher/socket 0.4.1

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1.1558 gopkg.in/ini.v1 1.67.0

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1.1559 gopkg.in/warnings 0.1.2

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1.1560 status 1.1.1

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1.1561 json iterator go 1.1.12

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1.1562 go-grpc 0.0.0-20210225150812-73cb765af46e

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1.1563 go-stdlib 1.0.0

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1.1564 mux 1.8.0

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1.1566 spaolacci-murmur3 1.1.0

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1.1567 liblzma 5.4.1-0.2

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1.1568 sirupsen-logrus 1.9.3

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1.1569 rcrowley-gometrics 0.0.0-20201227073835-cf1acfcdf475

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1.1570 pq 1.10.9

1.1570.1 Available under license :

```
//go:build go1.10
// +build go1.10

package pq

import (
 "context"
 "database/sql/driver"
)

// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
 return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
 c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
 on it.
type NoticeHandlerConnector struct {
 driver.Connector
 noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
 c, err := n.Connector.Connect(ctx)
 if err == nil {
```

```
  SetNoticeHandler(c, n.noticeHandler)
 }
 return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  return c.noticeHandler
 }
 return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
 setting the notice
// handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  c.noticeHandler = handler
  return c
 }
 return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
```

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1.1571 yaml 3.0.1

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```

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* /groovy-yaml-3-0-1-sources-jar/groovy/yaml/YamlBuilder.java
*
/groovy-yaml-3-0-1-sources-jar/groovy/yaml/YamlSlurper.java
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1.1572 websocket 1.5.0

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1.1573 sigs.k8s.io/json 0.0.0-20221116044647-bc3834ca7abd

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1.1574 natsort 0.0.0-20181210072756-2cd4dd1e2dcb

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1.1576 github.com/alecthomas/kingpin/v2 2.4.0

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1.1577 serf 0.10.1

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1.1591 datasize 0.0.0-20200112174442-28bbd4740fee

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1.1592 github.com/google/renameio/v2 2.0.0

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1.1593 perf-utils 0.7.0

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1.1595 typing-extensions 4.10.0

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see https://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see https://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same

year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All Python releases are Open Source (see https://opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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1.1652 masterminds-goutils 1.1.1

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1.1653 opentracing-go 1.2.0

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1.1654 logr 1.2.3

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1.1657 fastest-levenshtein 1.0.16

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1.1660 github.com/jackc/pgx/v4 4.18.2

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* Version 1.1 1 Aug 2013 Mark Adler
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at revision 3a0bb77429bd3a61596f5e8a3172445844342120

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---
src/rdxxhash.[ch] src/lz4*.[ch]: git@github.com:lz4/lz4.git e2827775ee80d2ef985858727575df31fc60f1f3

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1.1663 metrics-servlets 4.2.25

1.1663.1 Available under license :

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.servlets
Build-Jdk-Spec: 17
Bundle-Description: A set of utility servlets for Metrics, allowing yo
u to expose valuable information about       your production environ
ment.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Utility Servlets
Bundle-SymbolicName: io.dropwizard.metrics.servlets
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.servlets;uses:="com.codahale.metr
ics,com.codahale.metrics.health,com.fasterxml.jackson.databind,javax.
servlet,javax.servlet.http";version="4.2.25"
Implementation-Title: Metrics Utility Servlets
Implementation-Version: 4.2.25
Import-Package: javax.servlet;version="[2.5.0,4.0.0)",javax.servlet.ht
tp;version="[2.5.0,4.0.0)",com.codahale.metrics;version="[4.2,5)",com
.codahale.metrics.health;version="[4.2,5)",com.codahale.metrics.json;
 version="[4.2,5)",com.codahale.metrics.jvm;version="[4.2,5)",com.fast
erxml.jackson.databind;version="[2.12,3)",com.fasterxml.jackson.datab
ind.util;version="[2.12,3)",com.papertrail.profiler;version="[1.1,2)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316
```

Found in path(s):
* /metrics-servlets-4-2-25-jar/META-INF/MANIFEST.MF

1.1664 sqlx 1.4.0

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1.1665 cpio 2.13+dfsg-7ubuntu0.1

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1.1671 code-hex-go-generics-cache 1.5.1

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1.1673 path-scurry 1.11.1

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Version 1.0.0

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1.1674 gopkg.in/evanphx/json-patch.v4 4.12.0

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1.1675 github.com/azure/azure-sdk-for-go/sdk/storage/azblob 1.3.2

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// +build go1.18

```
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// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
```

```
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]():
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]():
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]():
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]():
  beginUpdate:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]():
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]():
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                    *LicensesServer
```

```
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
```

```
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
```

```
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
```

```
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
```

```
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
```

```
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
```

```
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
```

```
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 body,
err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginValidateLicense = &respr
 l.beginValidateLicense.add(req, beginValidateLicense)
}

resp, err := server.PollerResponderNext(beginValidateLicense, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK}, resp.StatusCode) {
 l.beginValidateLicense.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginValidateLicense) {
 l.beginValidateLicense.remove(req)
}

return resp, nil
}
```

azwebpubsub

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```
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// +build go1.18

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package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
```

```
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
```

```
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
```

```
 return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
```

```
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
```

```
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
```

```
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
```

```
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
```

```
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2023-06-20-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
```

```
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
```

```
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
```

```
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
```

```
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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```
//go:build go1.18
// +build go1.18

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// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
```

```
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
```

```
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//
   State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
```

```
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
```

```
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Get.json
```

```
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

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specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
```

```
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
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manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
```

```
 //  Value: []*armhybridcompute.License{
 //   {
 //    Name: to.Ptr("{licenseName}"),
 //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
```

```
 for _, v := range page.Value {
  // You could use page here. We use blank identifier for just demo purposes.
  _ = v
 }
 // If the HTTP response code is 200 as defined in example definition, your page structure would look as
follows. Please pay attention that all the values in the output are fake values for just demo purposes.
 // page.LicensesListResult = armhybridcompute.LicensesListResult{
 //  Value: []*armhybridcompute.License{
 //   {
 //    Name: to.Ptr("{licenseName}"),
 //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
    },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

1.1676 libmaxminddb-libs 1.9.1-r0

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1.1680 python-idna 3.3-1ubuntu0.1

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END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

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Intellectual Property Rights (IPR) Policy

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1. INTRODUCTION

The OASIS Intellectual Property Rights (IPR) Policy governs the treatment of intellectual property in the production of deliverables by OASIS Open (hereafter referred to as OASIS).

This Policy applies to all members of OASIS and their Affiliates (as defined below). The OASIS Board of Directors may amend this Policy at any time in its sole discretion. In the event of such change to this Policy, the Board will provide instructions for transition of membership and Technical Committees to the new Policy; however, no amendment to this Policy will be effective in less than
60 calendar days from the date that written notice of such amendment is given to the Member at its address of record with OASIS.

2. DEFINITIONS

Each capitalized term within this document shall have the meaning provided below:

Affiliate any entity that directly or indirectly controls, is controlled by, or is under common control with, another entity, so long as such control exists. In the event that such control ceases to exist, such Affiliate will be deemed to have withdrawn from OASIS pursuant to the terms set forth in the withdrawal provisions in Section 11. For purposes of this definition, with respect to a business entity, control means direct or indirect beneficial ownership of or the right to exercise (i) greater than fifty percent (50%) of the voting stock or equity in an entity; or (ii) greater than fifty percent (50%) of the ownership interest representing the right to make the decisions for the subject entity in the event that there is no voting stock or equity.

Beneficiary
any organization, including its Affiliates as defined in this Policy, or individual who benefits from the OASIS Non-Assertion Covenant with respect to Essential Claims from Obligated Parties for a particular OASIS Standards Final Deliverable. A Beneficiary need not be an OASIS member.

Continuing Licensing or Non-Assertion Obligation a licensing or non-assertion obligation, of the types defined by Section 9 of this Policy, which survives a TC Partys withdrawal from an OASIS Technical Committee.
Contribution any material submitted to an OASIS Technical Committee by a TC Member in writing or electronically, whether in an in-person meeting or in any electronic conference or mailing list maintained by OASIS for the OASIS Technical Committee and which is or was proposed for inclusion in an OASIS Deliverable.
Contribution Obligation a licensing or non-assertion requirement, as described in Section 10 that results from making a Contribution as described in Section 9.1.
Contributor a TC
Party on whose behalf a Contribution is made by the TC Partys TC Member.
Covered Product includes only those specific portions of a product (hardware, software or combinations thereof) that (a) implement and are compliant with all Normative Portions of an OASIS Standards Final Deliverable produced by a Non-Assertion Mode TC that must be implemented to comply with such deliverable, and (b) to the extent that the product implements one or more optional portions of such deliverable, those portions that implement and are compliant with all Normative Portions that must be implemented to comply with such optional portions of the deliverable.
Eligible Person one of a class of individuals that include: persons holding individual memberships in OASIS, employees or designees of organizational members of OASIS, and such other persons as may be designated by the OASIS Board of Directors.
Essential Claims those claims in any patent or patent application in any jurisdiction in the world that would
necessarily be infringed by an implementation of those portions of a particular OASIS Standards Final Deliverable created within the scope of the TC charter in effect at the time such deliverable was developed. A claim is necessarily infringed hereunder only when it is not possible to avoid infringing it because there is no non-infringing alternative for implementing the Normative Portions of that particular OASIS Standards Final Deliverable. Existence of a non-infringing alternative shall be judged based on the state of the art at the time the OASIS Standards Final Deliverable is approved.
Feedback any written or electronic input provided to an OASIS Technical Committee by individuals who are not TC Members and which is proposed for inclusion in an OASIS Deliverable. All such Feedback must be made under the terms of the Feedback License (Appendix A).
Final Maintenance Deliverable Any OASIS Standards Final Deliverable that results entirely from Maintenance Activity.
IPR Mode an element
of an OASIS TC charter, which specifies the type of licenses or non-assertion covenants required for any Essential Claims associated with the output produced by a given Technical Committee. This is further described in Section 4.
Licensed Products include only those specific portions of a Licensees products (hardware, software or combinations thereof) that (a) implement and are compliant with all Normative Portions of an OASIS Standards Final Deliverable that must be implemented to comply with such deliverable, and (b) to the extent that the Licensees products implement one or more optional portions of such deliverable, those portions of Licensees products that implement and are compliant with all Normative Portions that must be implemented to comply with such optional portions of the deliverable.
Licensee any organization, including its Affiliates as defined in this Policy, or individual that licenses Essential Claims from Obligated Parties for a particular OASIS Standards Final
Deliverable. Licensees need not be OASIS members.
Maintenance Activity Any drafting or development work to modify an OASIS Standards Final Deliverable that (a) constitutes only error corrections, bug fixes or editorial formatting changes to the OASIS Standards Final Deliverable; and (b) does not add any feature; and (c) is within the scope of the TC that approved the OASIS Standards Final Deliverable (whether or not the work is conducted by the same TC).
Normative Portion a portion of an OASIS Standards Final Deliverable that must be implemented to comply with such deliverable. If such deliverable defines optional parts, Normative Portions include those portions of the

optional part that must be implemented if the implementation is to comply with such optional part. Examples and/or reference implementations and other specifications or standards that were developed outside the TC and which are referenced in the body of a particular OASIS Standards Final Deliverable that may be included in such deliverable are not Normative Portions.

Non-Assertion Mode TC an OASIS TC that is chartered under the Non-Assertion IPR Mode described in Section 4.

OASIS Deliverable a work product developed by a Technical Committee within the scope of its charter which is enumerated in and developed in accordance with the OASIS Technical Committee Process.

OASIS Standards Draft Deliverable an OASIS Deliverable that has been designated and approved by a Technical Committee as an OASIS Standards Draft Deliverable and which is enumerated in and developed in accordance with the OASIS Technical Committee Process.

OASIS Standards Final Deliverable an OASIS Deliverable that has been designated and approved by a Technical Committee as an OASIS Standards Final Deliverable and which is enumerated in and developed in accordance with the OASIS Technical Committee Process.

OASIS Party a member of OASIS (i.e., an entity that has executed an OASIS Membership Agreement) and its Affiliates.

OASIS TC Administrator the person(s) appointed to represent OASIS in administrative matters relating to TCs as provided by the OASIS Technical Committee Process.

OASIS Technical Committee (TC) a group of Eligible Persons formed, and whose actions are conducted, according to the provisions of the OASIS Technical Committee Process.

OASIS Technical Committee Process the OASIS OPEN TECHNICAL COMMITTEE PROCESS, as from time to time amended, which describes the operation of Technical Committees at OASIS.

Obligated Party a TC Party that incurs a licensing or non-assertion obligation for its Essential Claims by either a Contribution Obligation or a Participation Obligation.

Participation Obligation a licensing or non-assertion requirement, as described in Section 10, that arises from membership in an OASIS Technical Committee, as described in Section 9.2.

RAND Mode TC an OASIS TC that is chartered under the RAND IPR Mode described in Section 4.

RF Mode TC an OASIS TC that is chartered under one of the RF IPR Modes described in Section 4.

TC Member an Eligible Person who has completed the requirements to join a TC during the period in which s/he maintains his or her membership as described by the OASIS Technical Committee Process. A TC Member may represent the interests of a TC Party in the TC.

TC Party an OASIS Party that is, or is represented by, a TC Member in the relevant Technical Committee.

3. CONFIDENTIALITY

Neither Contributions nor Feedback that are subject to any requirement of confidentiality may be considered in any part of the OASIS Technical Committee Process. All Contributions and Feedback will therefore be deemed to have been submitted on a non-confidential basis, notwithstanding any markings or representations to the contrary, and OASIS shall have no obligation to treat any such material as confidential.

4. TC FORMATION

At the time a TC is chartered, the proposal to form the TC must specify the IPR Mode under which the Technical Committee will operate.

This Policy describes the following IPR Modes:

RAND requires all Obligated Parties to license their Essential Claims using the RAND licensing elements described in Section 10.1.

RF on RAND Terms requires all Obligated Parties to license their Essential Claims using the RF licensing elements described in Sections 10.2.1 and 10.2.2.
RF on Limited Terms requires all Obligated Parties to license their Essential Claims using the RF licensing elements described in Sections 10.2.1 and 10.2.3.
Non-Assertion requires all Obligated Parties to provide an OASIS Non-Assertion Covenant as described in Section 10.3.
A TC may not change its IPR Mode without closing and submitting a new charter.

5. CONTRIBUTIONS

5.1 General

At the time of submission of a Contribution for consideration by an OASIS Technical Committee, each named co-Contributor (and its respective Affiliates) is deemed to agree to the following terms and conditions and to make the following representations (based on the actual knowledge
of the TC Member(s) making the Contribution, with respect to items 3 5 below, inclusive):

OASIS has no duty to publish or otherwise use or disseminate any Contribution.
OASIS may reference the name(s) of the Contributor(s) for the purpose of acknowledging and publishing the Contribution.
The Contribution properly identifies any holders of copyright interests in the Contribution.
No information in the Contribution is confidential, and OASIS may freely disclose any information in the Contribution.
There are no limits to the Contributors ability to make the grants, acknowledgments, and agreements required by this Policy with respect to such Contribution.
5.2 Copyright Licenses

To the extent that a Contributor holds a copyright interest in its Contribution, such Contributor grants to OASIS a perpetual, irrevocable, non-exclusive, royalty-free, worldwide copyright license, with the right to directly and indirectly sublicense, to copy, publish, and distribute the Contribution in any
way, and to prepare derivative works that are based on or incorporate all or part of the Contribution solely for the purpose of developing and promoting the OASIS Deliverable and enabling (subject to the rights of the owners of any Essential Claims) the implementation of the same by Licensees or Beneficiaries.
To the extent that a Contribution is subject to copyright by parties that are not Contributors, the submitter(s) must provide OASIS with a signed Copyright License Grant (Appendix B) from each such copyright owner whose permission would be required to permit OASIS to exercise the rights described in Appendix B.
5.3 Trademarks

Trademarks or service marks that are not owned by OASIS shall not be used by OASIS, except as approved by the OASIS Board of Directors, to refer to work conducted at OASIS, including the use in the name of an OASIS TC, an OASIS Deliverable, or incorporated into such work.
No OASIS Party may use an OASIS trademark or service mark in connection with an OASIS
Deliverable or otherwise, except in compliance with such license and usage guidelines as OASIS may from time to time require.
6. LIMITED PATENT COVENANT FOR DELIVERABLE DEVELOPMENT

To permit TC Members and their TC Parties to develop implementations of OASIS Standards Draft Deliverables being developed by a TC, each TC Party represented by a TC Member in a TC, at such time that the TC Member

joins the TC, grants to each other TC Party in that TC automatically and without further action on its part, and on an ongoing basis, a limited covenant not to assert any Essential Claims required to implement such OASIS Standards Draft Deliverable and covering making or using (but not selling or otherwise distributing) an implementation of such OASIS Standards Draft Deliverable, solely for the purpose of testing and developing such deliverable and only until either the OASIS Standards Draft Deliverable is approved as an OASIS Standards Final Deliverable or the Technical Committee is closed.

7.
FEEDBACK

OASIS encourages Feedback to OASIS Deliverables from both OASIS Parties who are not TC Parties and the public at large. Feedback will be accepted only under the Feedback License (Appendix A).
OASIS will require that submitters of Feedback agree to the terms of the Feedback License before transmitting submitted Feedback to the Technical Committee.
8. DISCLOSURE

Disclosure Obligations Each TC Party shall disclose to OASIS in writing the existence of all patents and/or patent applications owned or claimed by such TC Party that are actually known to the TC Member directly participating in the TC, and which such TC Member believes may contain any Essential Claims or claims that might become Essential Claims upon approval of an OASIS Standards Final Deliverable as such document then exists (collectively, Disclosed Claims).
Disclosure of Third Party Patent Claims Each TC Party whose TC Members become aware of patents or patent applications owned or claimed by a third party that
contain claims that might become Essential Claims upon approval of an OASIS Standards Final Deliverable should disclose them, provided that such disclosure is not prohibited by any confidentiality obligation binding upon them. It is understood that any TC Party that discloses third party patent claims to OASIS does not take a position on the essentiality or relevance of the third party claims to the OASIS Standards Final Deliverable in its then-current form. In both cases (Sections 8.1 and 8.2), it is understood and agreed that such TC Party(s) TC Member(s) do not represent that they know of all potentially pertinent claims of patents and patent applications owned or claimed by the TC Party or any third parties. For the avoidance of doubt, while the disclosure obligation under Sections 8.1 and 8.2 applies directly to all TC Parties, this obligation is triggered based on the actual knowledge of the TC Partys TC Members regarding the TC Partys patents or patent applications that may contain
Essential Claims.

Disclosure Requests Disclosure requests will be included as described in Section 12 with all public review copies of OASIS Standards Final Deliverables. All OASIS Parties are encouraged to review such OASIS Standards Final Deliverables and make appropriate disclosures.
Limitations A disclosure request and the obligation to disclose set forth above do not imply any obligations on the recipients of disclosure requests (collectively or individually) or on any OASIS Party to perform or conduct patent searches. Nothing in this Policy nor the act of receiving a disclosure request for an OASIS Standards Final Deliverable, regardless of whether it is responded to, shall be construed or otherwise interpreted as any kind of express or implied representation with respect to the existence or non-existence of patents or patent applications which contain Essential Claims, other than that such TC Party has acted in good faith with respect to its disclosure obligations.
Information
Any disclosure of Disclosed Claims shall include (a) in the case of issued patents and published patent applications, the patent or patent application publication number, the associated country and, as reasonably practicable, the relevant portions of the applicable OASIS Standards Final Deliverable; and (b) in the case of

unpublished patent applications, the existence of the unpublished application and, as reasonably practicable, the relevant portions of the applicable OASIS Standards Final Deliverable.

9. TYPES OF OBLIGATIONS

9.1 Contribution Obligation

A TC Party has a Contribution Obligation, which arises at the time the Contribution is submitted to a TC, to license or provide under non-assertion covenants as appropriate for the IPR mode described in Section 10, any claims under its patents or patent applications that become Essential Claims when such Contribution is incorporated (either in whole or in part) into (a) the OASIS Standards Final Deliverable produced by the TC that received the Contribution, or (b) any Final Maintenance Deliverable with respect to that OASIS Standards Final Deliverable.

9.2 Participation Obligation

A TC Party has a Participation Obligation to license or provide under non-assertion covenant as appropriate for the IPR mode, as described in Section 10, any claims under its patents or patent applications that would be Essential Claims in the then current OASIS Standards Draft Deliverable, if that draft subsequently becomes an OASIS Standards Final Deliverable, even if the TC Party is not a Contributor, when all of the following conditions are met:

An OASIS Standards Final Deliverable is finally approved that incorporates such OASIS Standards Draft Deliverable, either in whole or in part;

The TC Party has been on, or has been represented by TC Member(s) on such TC for a total of sixty (60) calendar days, which need not be continuous;

The TC Party is on, or is represented by TC Member(s) on such TC after a period of seven (7) calendar days after the ballot to approve such OASIS Standards Draft Deliverable has elapsed.

Once the foregoing conditions are met, that TC Partys Participation Obligation so to license or provide a non-assertion covenant continues with respect to that OASIS Standards Final Deliverable, and any Final Maintenance Deliverable subsequently approved with respect to that OASIS Standards Final Deliverable.

For organizational TC Parties, the membership threshold is met by one or more employees or organizational designees of such Parties having been a TC Member on any 60 calendar days, although any given calendar day is only one day of membership, regardless of the number of participants on that day.

Each time a new OASIS Standards Draft Deliverable is approved by the TC, the Participation Obligation adjusts to encompass the material in the latest OASIS Standards Draft Deliverable seven days after such draft has been approved for publication.

10. LICENSING REQUIREMENTS

10.1 RAND Mode TC Requirements

For an OASIS Standards Final Deliverable developed by a RAND Mode TC, except where a Licensee has a separate, signed agreement under which the Essential Claims are licensed to such Licensee on more favorable terms and conditions than set forth in this section (in which case such separate signed agreement shall supersede this Limited Patent License), each Obligated Party in such TC hereby covenants that, upon request and subject to Section 11, it will grant to any OASIS Party or third party: a nonexclusive, worldwide, non-sublicensable, perpetual patent license

(or an equivalent non-assertion covenant) under its Essential Claims covered by its Contribution Obligations or Participation Obligations on fair, reasonable, and non-discriminatory terms to make, have made, use, market, import, offer to sell, and sell, and to otherwise directly or indirectly distribute (a) Licensed Products that implement such OASIS Standards Final Deliverable, and (b) Licensed Products that implement any Final Maintenance Deliverable with respect to that OASIS Standards Final Deliverable. Such license need not extend to features of a Licensed Product that are not required to comply with the Normative Portions of such OASIS Standards Final Deliverable or Final Maintenance Deliverable. For the sake of clarity, the rights set forth above include the right to directly or indirectly authorize a third party to make unmodified copies of the Licensees Licensed Products and to license (optionally under the third partys license) the Licensees Licensed Products within the scope of, and subject to the terms of, the Obligated Partys license.

At the election of the Obligated Party, such license may include a term requiring the Licensee to grant a reciprocal license to its Essential Claims (if any) covering the same OASIS Standards Final Deliverable and any such Final Maintenance Deliverable. Such term may require the Licensee to grant licenses to all implementers of such deliverable. The Obligated Party may also include a term providing that such license may be suspended with respect to the Licensee if that Licensee first sues the Obligated Party for infringement by the Obligated Party of any of the Licensees Essential Claims covering the same OASIS Standards Final Deliverable or any such Final Maintenance Deliverable.

License terms that are fair, reasonable, and non-discriminatory beyond those specifically mentioned above are left to the Licensees and Obligated Parties involved.

10.2 RF Mode TC Requirements

10.2.1 Common

For an OASIS Standards Final Deliverable developed by an RF Mode TC, except where a Licensee has a separate, signed agreement under which the Essential Claims are licensed to such Licensee on more favorable terms and conditions than set forth in this section (in which case such separate signed agreement shall supersede this Limited Patent License), each Obligated Party in such TC hereby covenants that, upon request and subject to Section 11, it will grant to any OASIS Party or third party: a nonexclusive, worldwide, non-sublicensable, perpetual patent license (or an equivalent non-assertion covenant) under its Essential Claims covered by its Contribution Obligations or Participation Obligations without payment of royalties or fees, and subject to the applicable Section 10.2.2 or 10.2.3, to make, have made, use, market, import, offer to sell, and sell, and to otherwise directly or indirectly distribute (a) Licensed Products that implement such OASIS Standards Final Deliverable, and (b) Licensed Products that implement any Final Maintenance Deliverable with respect to that OASIS Standards Final Deliverable. Such license need not extend to features of a Licensed Product that are not required to comply with the Normative Portions of such OASIS Standards Final Deliverable or Final Maintenance Deliverable. For the sake of clarity, the rights set forth above include the right to directly or indirectly authorize a third party to make unmodified copies of the Licensees Licensed Products and to license (optionally under the third partys license) the Licensees Licensed Products, within the scope of, and subject to the terms of, the Obligated Partys license.

At the election of the Obligated Party, such license may include a term requiring the Licensee to grant a reciprocal license to its Essential Claims (if any) covering the same OASIS Standards Final Deliverable and any such Final Maintenance Deliverable. Such term may require the Licensee to grant licenses to all implementers of such deliverable. The Obligated Party may also include a term providing that such license may be suspended with respect to the Licensee if that Licensee first sues the Obligated Party for infringement by the Obligated Party of any of the

Licensees Essential Claims covering the same OASIS Standards Final Deliverable and any such Final Maintenance Deliverable.

10.2.2 RF on RAND Terms

With TCs operating under the RF on RAND Terms IPR Mode, license terms that are fair, reasonable, and non-discriminatory beyond those specifically mentioned in Section 10.2.1 may also be included, and such additional RAND terms are left to the Licensees and Obligated Parties involved.

10.2.3 RF on Limited Terms

With TCs operating under the RF on Limited Terms IPR Mode, Obligated Parties may not impose any further conditions or restrictions beyond those specifically mentioned in Section 10.2.1 on the use of any technology or intellectual property rights, or other restrictions on behavior of the Licensee, but may include reasonable, customary terms relating to operation or maintenance of the license relationship, including the following: choice of law and dispute resolution.

10.3. Non-Assertion Mode TC Requirements

10.3.1. For an OASIS Standards Final Deliverable developed by a Non-Assertion Mode TC, and any Final Maintenance Deliverable with respect to that OASIS Standards Final Deliverable, each Obligated Party in such TC hereby makes the following world-wide OASIS Non-Assertion Covenant.

Each Obligated Party in a Non-Assertion Mode TC irrevocably covenants that, subject to Section 10.3.2 and Section 11 of the OASIS IPR Policy, it will not assert any of its Essential Claims covered by its Contribution Obligations or Participation Obligations against any OASIS Party or third party for making, having made, using, marketing, importing, offering to sell, selling, and otherwise distributing Covered Products that implement an OASIS Standards Final Deliverable developed by that TC and Covered Products that implement any Final Maintenance Deliverable with respect to that OASIS Standards Final Deliverable.

10.3.2. The covenant described in Section 10.3.1 may be suspended or revoked by the Obligated Party with respect to any OASIS Party or third party if that OASIS Party or third party asserts an Essential Claim in a suit first brought against, or attempts in writing to assert an Essential Claim against, a Beneficiary with respect to a Covered Product that implements the same OASIS Standards Final Deliverable or any such Final Maintenance Deliverable.

11. WITHDRAWAL AND TERMINATION

A TC Party may withdraw from a TC at any time by notifying the OASIS TC Administrator in writing of such decision to withdraw. Withdrawal shall be deemed effective when such written notice is sent.

11.1 Withdrawal from a Technical Committee

A TC Party that withdraws from an OASIS Technical Committee shall have Continuing Licensing or Non-Assertion Obligations based on its Contribution Obligations and Participation Obligations as follows:

A TC Party that has incurred neither a Contribution Obligation nor a Participation Obligation prior to withdrawal

has no licensing or non-assertion obligations for OASIS Standards Final Deliverable(s) originating from that OASIS TC.
A TC Party that has incurred a Contribution Obligation prior to withdrawal continues to be subject to its Contribution Obligation.
A TC Party that has incurred a Participation
Obligation prior to withdrawal continues to be subject to its Participation Obligation but only with respect to OASIS Standards Draft Deliverable(s) approved more than seven (7) calendar days prior to its withdrawal.
11.2 Termination of an OASIS Membership

An OASIS Party that terminates its OASIS membership (voluntarily or involuntarily) is deemed to withdraw from all TCs in which that OASIS Party has TC Member(s) representing it, and such OASIS Party remains subject to Continuing Licensing or Non-Assertion Obligations for each such TC based on its Obligated Party status in that TC on the date that its membership termination becomes effective.

12. LIMITATIONS OF LIABILITY

All OASIS Deliverables are provided as is, without warranty of any kind, express or implied, and OASIS, as well as all OASIS Parties and TC Members, expressly disclaim any warranty of merchantability, fitness for a particular or intended purpose, accuracy, completeness, non-infringement of third party rights,
or any other warranty.

In no event shall OASIS or any of its constituent parts (including, but not limited to, the OASIS Board of Directors), be liable to any other person or entity for any loss of profits, loss of use, direct, indirect, incidental, consequential, punitive, or special damages, whether under contract, tort, warranty, or otherwise, arising in any way out of this Policy, whether or not such party had advance notice of the possibility of such damages.

In addition, except for grossly negligent or intentionally fraudulent acts, OASIS Parties and TC Members (or their representatives), shall not be liable to any other person or entity for any loss of profits, loss of use, direct, indirect, incidental, consequential, punitive, or special damages, whether under contract, tort, warranty, or otherwise, arising in any way out of this Policy, whether or not such party had advance notice of the possibility of such damages.

OASIS assumes no responsibility to compile, confirm,
update or make public any assertions of Essential Claims or other intellectual property rights that might be infringed by an implementation of an OASIS Deliverable.

If OASIS at any time refers to any such assertions by any owner of such claims, OASIS takes no position as to the validity or invalidity of such assertions, or that all such assertions that have or may be made have been referred to.

13. GENERAL

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1.1687 braces 3.0.3

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1.1689 github.com/stefanberger/go-pkcs11uri 0.0.0-20230803200340-78284954bff6

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1.1692 go-md2man 2.0.4

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1.1693 units 0.0.0-20231202071711-9a357b53e9c9

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1.1694 prometheus-client-model 0.6.1

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1.1695 pierrec-lz4 4.1.21

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* cpp/src/arrow/util/cpu-info.cc has a polyfill for mingw-w64 < 5

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* Mark Wiebe
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1.1703 sqlite 3.45.2

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```
/*
** CAPI3REF: Configuration Options
** KEYWORDS: {configuration option}
**
** These constants are the available integer configuration options that
** can be passed as the first argument to the [sqlite3_config()] interface.
**
** Most of the configuration options for sqlite3_config()
** will only work if invoked prior to [sqlite3_initialize()] or after
** [sqlite3_shutdown()].  The few exceptions to this rule are called
** "anytime configuration options".
** ^Calling [sqlite3_config()] with a first argument that is not an
** anytime configuration option in between calls to [sqlite3_initialize()] and
** [sqlite3_shutdown()] is a no-op that returns SQLITE_MISUSE.
**
** The set of anytime configuration options can change (by insertions
** and/or deletions) from one release of SQLite to the next.
** As of SQLite version 3.42.0, the complete set of anytime configuration
** options is:
** <ul>
** <li> SQLITE_CONFIG_LOG
**
 <li> SQLITE_CONFIG_PCACHE_HDRSZ
** </ul>
**
** New configuration options may be added in future releases of SQLite.
** Existing configuration options might be discontinued.  Applications
** should check the return code from [sqlite3_config()] to make sure that
** the call worked.  The [sqlite3_config()] interface will return a
** non-zero [error code] if a discontinued or unsupported configuration option
** is invoked.
**
** <dl>
** [[SQLITE_CONFIG_SINGLETHREAD]] <dt>SQLITE_CONFIG_SINGLETHREAD</dt>
```

```
** <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Single-thread.  In other words, it disables
** all mutexing and puts SQLite into a mode where it can only be used
** by a single thread.   ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to change the [threading mode] from its default
** value of Single-thread and so [sqlite3_config()] will return
** [SQLITE_ERROR] if called
 with the SQLITE_CONFIG_SINGLETHREAD
** configuration option.</dd>
**
** [[SQLITE_CONFIG_MULTITHREAD]] <dt>SQLITE_CONFIG_MULTITHREAD</dt>
** <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Multi-thread.  In other words, it disables
** mutexing on [database connection] and [prepared statement] objects.
** The application is responsible for serializing access to
** [database connections] and [prepared statements].  But other mutexes
** are enabled so that SQLite will be safe to use in a multi-threaded
** environment as long as no two threads attempt to use the same
** [database connection] at the same time.  ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to set the Multi-thread [threading mode] and
** [sqlite3_config()] will return [SQLITE_ERROR] if called with the
** SQLITE_CONFIG_MULTITHREAD configuration option.</dd>
**
** [[SQLITE_CONFIG_SERIALIZED]] <dt>SQLITE_CONFIG_SERIALIZED</dt>
**
 <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Serialized. In other words, this option enables
** all mutexes including the recursive
** mutexes on [database connection] and [prepared statement] objects.
** In this mode (which is the default when SQLite is compiled with
** [SQLITE_THREADSAFE=1]) the SQLite library will itself serialize access
** to [database connections] and [prepared statements] so that the
** application is free to use the same [database connection] or the
** same [prepared statement] in different threads at the same time.
** ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to set the Serialized [threading mode] and
** [sqlite3_config()] will return [SQLITE_ERROR] if called with the
** SQLITE_CONFIG_SERIALIZED configuration option.</dd>
**
** [[SQLITE_CONFIG_MALLOC]] <dt>SQLITE_CONFIG_MALLOC</dt>
** <dd> ^(The SQLITE_CONFIG_MALLOC option
 takes a single argument which is
** a pointer to an instance of the [sqlite3_mem_methods] structure.
** The argument specifies
** alternative low-level memory allocation routines to be used in place of
```

```
** the memory allocation routines built into SQLite.)^ ^SQLite makes
** its own private copy of the content of the [sqlite3_mem_methods] structure
** before the [sqlite3_config()] call returns.</dd>
**
** [[SQLITE_CONFIG_GETMALLOC]] <dt>SQLITE_CONFIG_GETMALLOC</dt>
** <dd> ^(The SQLITE_CONFIG_GETMALLOC option takes a single argument which
** is a pointer to an instance of the [sqlite3_mem_methods] structure.
** The [sqlite3_mem_methods]
** structure is filled with the currently defined memory allocation routines.)^
** This option can be used to overload the default memory allocation
** routines with a wrapper that simulations memory allocation failure or
** tracks memory usage, for example. </dd>
**
** [[SQLITE_CONFIG_SMALL_MALLOC]] <dt>SQLITE_CONFIG_SMALL_MALLOC</dt>
** <dd> ^The SQLITE_CONFIG_SMALL_MALLOC
 option takes single argument of
** type int, interpreted as a boolean, which if true provides a hint to
** SQLite that it should avoid large memory allocations if possible.
** SQLite will run faster if it is free to make large memory allocations,
** but some application might prefer to run slower in exchange for
** guarantees about memory fragmentation that are possible if large
** allocations are avoided.  This hint is normally off.
** </dd>
**
** [[SQLITE_CONFIG_MEMSTATUS]] <dt>SQLITE_CONFIG_MEMSTATUS</dt>
** <dd> ^The SQLITE_CONFIG_MEMSTATUS option takes single argument of type int,
** interpreted as a boolean, which enables or disables the collection of
** memory allocation statistics. ^(When memory allocation statistics are
** disabled, the following SQLite interfaces become non-operational:
**   <ul>
**   <li> [sqlite3_hard_heap_limit64()]
**   <li> [sqlite3_memory_used()]
**   <li> [sqlite3_memory_highwater()]
**   <li> [sqlite3_soft_heap_limit64()]
**
   <li> [sqlite3_status64()]
**   </ul>)^
** ^Memory allocation statistics are enabled by default unless SQLite is
** compiled with [SQLITE_DEFAULT_MEMSTATUS]=0 in which case memory
** allocation statistics are disabled by default.
** </dd>
**
** [[SQLITE_CONFIG_SCRATCH]] <dt>SQLITE_CONFIG_SCRATCH</dt>
** <dd> The SQLITE_CONFIG_SCRATCH option is no longer used.
** </dd>
**
** [[SQLITE_CONFIG_PAGECACHE]] <dt>SQLITE_CONFIG_PAGECACHE</dt>
** <dd> ^The SQLITE_CONFIG_PAGECACHE option specifies a memory pool
```

```
** that SQLite can use for the database page cache with the default page
** cache implementation.
** This configuration option is a no-op if an application-defined page
** cache implementation is loaded using the [SQLITE_CONFIG_PCACHE2].
** ^There are three arguments to SQLITE_CONFIG_PAGECACHE: A pointer to
** 8-byte aligned memory (pMem), the size of each page cache line (sz),
** and the number of cache lines (N).
** The sz argument should be the size of the largest database page
** (a power
 of two between 512 and 65536) plus some extra bytes for each
** page header.  ^The number of extra bytes needed by the page header
** can be determined using [SQLITE_CONFIG_PCACHE_HDRSZ].
** ^It is harmless, apart from the wasted memory,
** for the sz parameter to be larger than necessary.  The pMem
** argument must be either a NULL pointer or a pointer to an 8-byte
** aligned block of memory of at least sz*N bytes, otherwise
** subsequent behavior is undefined.
** ^When pMem is not NULL, SQLite will strive to use the memory provided
** to satisfy page cache needs, falling back to [sqlite3_malloc()] if
** a page cache line is larger than sz bytes or if all of the pMem buffer
** is exhausted.
** ^If pMem is NULL and N is non-zero, then each database connection
** does an initial bulk allocation for page cache memory
** from [sqlite3_malloc()] sufficient for N cache lines if N is positive or
** of -1024*N bytes if N is negative, . ^If additional
** page cache memory is needed beyond
 what is provided by the initial
** allocation, then SQLite goes to [sqlite3_malloc()] separately for each
** additional cache line. </dd>
**
** [[SQLITE_CONFIG_HEAP]] <dt>SQLITE_CONFIG_HEAP</dt>
** <dd> ^The SQLITE_CONFIG_HEAP option specifies a static memory buffer
** that SQLite will use for all of its dynamic memory allocation needs
** beyond those provided for by [SQLITE_CONFIG_PAGECACHE].
** ^The SQLITE_CONFIG_HEAP option is only available if SQLite is compiled
** with either [SQLITE_ENABLE_MEMSYS3] or [SQLITE_ENABLE_MEMSYS5] and returns
** [SQLITE_ERROR] if invoked otherwise.
** ^There are three arguments to SQLITE_CONFIG_HEAP:
** An 8-byte aligned pointer to the memory,
** the number of bytes in the memory buffer, and the minimum allocation size.
** ^If the first pointer (the memory pointer) is NULL, then SQLite reverts
** to using its default memory allocator (the system malloc() implementation),
** undoing any prior invocation of [SQLITE_CONFIG_MALLOC].  ^If the
** memory pointer
 is not NULL then the alternative memory
** allocator is engaged to handle all of SQLites memory allocation needs.
** The first pointer (the memory pointer) must be aligned to an 8-byte
** boundary or subsequent behavior of SQLite will be undefined.
```

```
** The minimum allocation size is capped at 2**12. Reasonable values
** for the minimum allocation size are 2**5 through 2**8.</dd>
**
** [[SQLITE_CONFIG_MUTEX]] <dt>SQLITE_CONFIG_MUTEX</dt>
** <dd> ^(The SQLITE_CONFIG_MUTEX option takes a single argument which is a
** pointer to an instance of the [sqlite3_mutex_methods] structure.
** The argument specifies alternative low-level mutex routines to be used
** in place the mutex routines built into SQLite.)^  ^SQLite makes a copy of
** the content of the [sqlite3_mutex_methods] structure before the call to
** [sqlite3_config()] returns. ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** the entire mutexing subsystem is omitted from the
 build and hence calls to
** [sqlite3_config()] with the SQLITE_CONFIG_MUTEX configuration option will
** return [SQLITE_ERROR].</dd>
**
** [[SQLITE_CONFIG_GETMUTEX]] <dt>SQLITE_CONFIG_GETMUTEX</dt>
** <dd> ^(The SQLITE_CONFIG_GETMUTEX option takes a single argument which
** is a pointer to an instance of the [sqlite3_mutex_methods] structure.  The
** [sqlite3_mutex_methods]
** structure is filled with the currently defined mutex routines.)^
** This option can be used to overload the default mutex allocation
** routines with a wrapper used to track mutex usage for performance
** profiling or testing, for example.   ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** the entire mutexing subsystem is omitted from the build and hence calls to
** [sqlite3_config()] with the SQLITE_CONFIG_GETMUTEX configuration option will
** return [SQLITE_ERROR].</dd>
**
** [[SQLITE_CONFIG_LOOKASIDE]] <dt>SQLITE_CONFIG_LOOKASIDE</dt>
** <dd> ^(The SQLITE_CONFIG_LOOKASIDE
 option takes two arguments that determine
** the default size of lookaside memory on each [database connection].
** The first argument is the
** size of each lookaside buffer slot and the second is the number of
** slots allocated to each database connection.)^  ^(SQLITE_CONFIG_LOOKASIDE
** sets the <i>default</i> lookaside size. The [SQLITE_DBCONFIG_LOOKASIDE]
** option to [sqlite3_db_config()] can be used to change the lookaside
** configuration on individual connections.)^ </dd>
**
** [[SQLITE_CONFIG_PCACHE2]] <dt>SQLITE_CONFIG_PCACHE2</dt>
** <dd> ^(The SQLITE_CONFIG_PCACHE2 option takes a single argument which is
** a pointer to an [sqlite3_pcache_methods2] object.  This object specifies
** the interface to a custom page cache implementation.)^
** ^SQLite makes a copy of the [sqlite3_pcache_methods2] object.</dd>
**
** [[SQLITE_CONFIG_GETPCACHE2]] <dt>SQLITE_CONFIG_GETPCACHE2</dt>
** <dd> ^(The SQLITE_CONFIG_GETPCACHE2 option takes a single argument which
```

```
** is
 a pointer to an [sqlite3_pcache_methods2] object.  SQLite copies of
** the current page cache implementation into that object.)^ </dd>
**
** [[SQLITE_CONFIG_LOG]] <dt>SQLITE_CONFIG_LOG</dt>
** <dd> The SQLITE_CONFIG_LOG option is used to configure the SQLite
** global [error log].
** (^The SQLITE_CONFIG_LOG option takes two arguments: a pointer to a
** function with a call signature of void(*)(void*,int,const char*),
** and a pointer to void. ^If the function pointer is not NULL, it is
** invoked by [sqlite3_log()] to process each logging event.  ^If the
** function pointer is NULL, the [sqlite3_log()] interface becomes a no-op.
** ^The void pointer that is the second argument to SQLITE_CONFIG_LOG is
** passed through as the first parameter to the application-defined logger
** function whenever that function is invoked.  ^The second parameter to
** the logger function is a copy of the first parameter to the corresponding
** [sqlite3_log()] call and is intended to be a [result code] or
 an
** [extended result code].  ^The third parameter passed to the logger is
** log message after formatting via [sqlite3_snprintf()].
** The SQLite logging interface is not reentrant; the logger function
** supplied by the application must not invoke any SQLite interface.
** In a multi-threaded application, the application-defined logger
** function must be threadsafe. </dd>
**
** [[SQLITE_CONFIG_URI]] <dt>SQLITE_CONFIG_URI
** <dd>^(The SQLITE_CONFIG_URI option takes a single argument of type int.
** If non-zero, then URI handling is globally enabled. If the parameter is zero,
** then URI handling is globally disabled.)^ ^If URI handling is globally
** enabled, all filenames passed to [sqlite3_open()], [sqlite3_open_v2()],
** [sqlite3_open16()] or
** specified as part of [ATTACH] commands are interpreted as URIs, regardless
** of whether or not the [SQLITE_OPEN_URI] flag is set when the database
** connection is opened. ^If it is globally disabled, filenames are
** only interpreted as
 URIs if the SQLITE_OPEN_URI flag is set when the
** database connection is opened. ^(By default, URI handling is globally
** disabled. The default value may be changed by compiling with the
** [SQLITE_USE_URI] symbol defined.)^
**
** [[SQLITE_CONFIG_COVERING_INDEX_SCAN]] <dt>SQLITE_CONFIG_COVERING_INDEX_SCAN
** <dd>^The SQLITE_CONFIG_COVERING_INDEX_SCAN option takes a single integer
** argument which is interpreted as a boolean in order to enable or disable
** the use of covering indices for full table scans in the query optimizer.
** ^The default setting is determined
** by the [SQLITE_ALLOW_COVERING_INDEX_SCAN] compile-time option, or is "on"
** if that compile-time option is omitted.
** The ability to disable the use of covering indices for full table scans
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** is because some incorrectly coded legacy applications might malfunction
** when the optimization is enabled.  Providing the ability to
** disable the optimization allows the older, buggy application code to work
** without change
 even with newer versions of SQLite.
**
** [[SQLITE_CONFIG_PCACHE]] [[SQLITE_CONFIG_GETPCACHE]]
** <dt>SQLITE_CONFIG_PCACHE and SQLITE_CONFIG_GETPCACHE
** <dd> These options are obsolete and should not be used by new code.
** They are retained for backwards compatibility but are now no-ops.
** </dd>
**
** [[SQLITE_CONFIG_SQLLOG]]
** <dt>SQLITE_CONFIG_SQLLOG
** <dd>This option is only available if sqlite is compiled with the
** [SQLITE_ENABLE_SQLLOG] pre-processor macro defined. The first argument should
** be a pointer to a function of type void(*)(void*,sqlite3*,const char*, int).
** The second should be of type (void*). The callback is invoked by the library
** in three separate circumstances, identified by the value passed as the
** fourth parameter. If the fourth parameter is 0, then the database connection
** passed as the second argument has just been opened. The third argument
** points to a buffer containing the name of the main database file. If the
** fourth parameter is 1,
 then the SQL statement that the third parameter
** points to has just been executed. Or, if the fourth parameter is 2, then
** the connection being passed as the second parameter is being closed. The
** third parameter is passed NULL In this case.  An example of using this
** configuration option can be seen in the "test_sqllog.c" source file in
** the canonical SQLite source tree.</dd>
**
** [[SQLITE_CONFIG_MMAP_SIZE]]
** <dt>SQLITE_CONFIG_MMAP_SIZE
** <dd>^SQLITE_CONFIG_MMAP_SIZE takes two 64-bit integer (sqlite3_int64) values
** that are the default mmap size limit (the default setting for
** [PRAGMA mmap_size]) and the maximum allowed mmap size limit.
** ^The default setting can be overridden by each database connection using
** either the [PRAGMA mmap_size] command, or by using the
** [SQLITE_FCNTL_MMAP_SIZE] file control.  ^(The maximum allowed mmap size
** will be silently truncated if necessary so that it does not exceed the
** compile-time maximum mmap size set by the
** [SQLITE_MAX_MMAP_SIZE]
 compile-time option.)^
** ^If either argument to this option is negative, then that argument is
** changed to its compile-time default.
**
** [[SQLITE_CONFIG_WIN32_HEAPSIZE]]
** <dt>SQLITE_CONFIG_WIN32_HEAPSIZE
** <dd>^The SQLITE_CONFIG_WIN32_HEAPSIZE option is only available if SQLite is
```

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** compiled for Windows with the [SQLITE_WIN32_MALLOC] pre-processor macro
** defined. ^SQLITE_CONFIG_WIN32_HEAPSIZE takes a 32-bit unsigned integer value
** that specifies the maximum size of the created heap.
**
** [[SQLITE_CONFIG_PCACHE_HDRSZ]]
** <dt>SQLITE_CONFIG_PCACHE_HDRSZ
** <dd>^The SQLITE_CONFIG_PCACHE_HDRSZ option takes a single parameter which
** is a pointer to an integer and writes into that integer the number of extra
** bytes per page required for each page in [SQLITE_CONFIG_PAGECACHE].
** The amount of extra space required can change depending on the compiler,
** target platform, and SQLite version.
**
** [[SQLITE_CONFIG_PMASZ]]
** <dt>SQLITE_CONFIG_PMASZ
** <dd>^The
 SQLITE_CONFIG_PMASZ option takes a single parameter which
** is an unsigned integer and sets the "Minimum PMA Size" for the multithreaded
** sorter to that integer.  The default minimum PMA Size is set by the
** [SQLITE_SORTER_PMASZ] compile-time option.  New threads are launched
** to help with sort operations when multithreaded sorting
** is enabled (using the [PRAGMA threads] command) and the amount of content
** to be sorted exceeds the page size times the minimum of the
** [PRAGMA cache_size] setting and this value.
**
** [[SQLITE_CONFIG_STMTJRNL_SPILL]]
** <dt>SQLITE_CONFIG_STMTJRNL_SPILL
** <dd>^The SQLITE_CONFIG_STMTJRNL_SPILL option takes a single parameter which
** becomes the [statement journal] spill-to-disk threshold.
** [Statement journals] are held in memory until their size (in bytes)
** exceeds this threshold, at which point they are written to disk.
** Or if the threshold is -1, statement journals are always held
** exclusively in memory.
** Since many statement journals
 never become large, setting the spill
** threshold to a value such as 64KiB can greatly reduce the amount of
** I/O required to support statement rollback.
** The default value for this setting is controlled by the
** [SQLITE_STMTJRNL_SPILL] compile-time option.
**
** [[SQLITE_CONFIG_SORTERREF_SIZE]]
** <dt>SQLITE_CONFIG_SORTERREF_SIZE
** <dd>The SQLITE_CONFIG_SORTERREF_SIZE option accepts a single parameter
** of type (int) - the new value of the sorter-reference size threshold.
** Usually, when SQLite uses an external sort to order records according
** to an ORDER BY clause, all fields required by the caller are present in the
** sorted records. However, if SQLite determines based on the declared type
** of a table column that its values are likely to be very large - larger
** than the configured sorter-reference size threshold - then a reference
```

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** is stored in each sorted record and the required column values loaded
** from the database as records are returned in sorted order.
 The default
** value for this option is to never use this optimization. Specifying a
** negative value for this option restores the default behavior.
** This option is only available if SQLite is compiled with the
** [SQLITE_ENABLE_SORTER_REFERENCES] compile-time option.
**
** [[SQLITE_CONFIG_MEMDB_MAXSIZE]]
** <dt>SQLITE_CONFIG_MEMDB_MAXSIZE
** <dd>The SQLITE_CONFIG_MEMDB_MAXSIZE option accepts a single parameter
** [sqlite3_int64] parameter which is the default maximum size for an in-memory
** database created using [sqlite3_deserialize()].  This default maximum
** size can be adjusted up or down for individual databases using the
** [SQLITE_FCNTL_SIZE_LIMIT] [sqlite3_file_control|file-control].  If this
** configuration setting is never used, then the default maximum is determined
** by the [SQLITE_MEMDB_DEFAULT_MAXSIZE] compile-time option.  If that
** compile-time option is not set, then the default maximum is 1073741824.
** </dl>
*/
```

Found in path(s):
* /sqlite-amalgamation-3450200-zip/sqlite-amalgamation-3450200/sqlite3.h
No license file was found, but licenses were detected in source scan.

```
/*
** 2022-11-18
**
** The author disclaims copyright to this source code.  In place of
** a legal notice, here is a blessing:
**
**    May you do good and not evil.
**    May you find forgiveness for yourself and forgive others.
**    May you share freely, never taking more than you give.
**
***************************************************************************
**
** This is a SQLite extension for converting in either direction
** between a (binary) blob and base64 text. Base64 can transit a
** sane USASCII channel unmolested. It also plays nicely in CSV or
** written as TCL brace-enclosed literals or SQL string literals,
** and can be used unmodified in XML-like documents.
**
** This is an independent implementation of conversions specified in
** RFC 4648, done on the above date by the author (Larry Brasfield)
** who thereby has the right to put this into the public domain.
**
** The conversions meet RFC 4648 requirements,
```

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 provided that this
** C source specifies that line-feeds are included in the encoded
** data to limit visible line lengths to 72 characters and to
** terminate any encoded blob having non-zero length.
**
** Length limitations are not imposed except that the runtime
** SQLite string or blob length limits are respected. Otherwise,
** any length binary sequence can be represented and recovered.
** Generated base64 sequences, with their line-feeds included,
** can be concatenated; the result converted back to binary will
** be the concatenation of the represented binary sequences.
**
** This SQLite3 extension creates a function, base64(x), which
** either: converts text x containing base64 to a returned blob;
** or converts a blob x to returned text containing base64. An
** error will be thrown for other input argument types.
**
** This code relies on UTF-8 encoding only with respect to the
** meaning of the first 128 (7-bit) codes matching that of USASCII.
** It will fail miserably
 if somehow made to try to convert EBCDIC.
** Because it is table-driven, it could be enhanced to handle that,
** but the world and SQLite have moved on from that anachronism.
**
** To build the extension:
** Set shell variable SQDIR=<your favorite SQLite checkout directory>
** *Nix: gcc -O2 -shared -I$SQDIR -fPIC -o base64.so base64.c
** OSX: gcc -O2 -dynamiclib -fPIC -I$SQDIR -o base64.dylib base64.c
** Win32: gcc -O2 -shared -I%SQDIR% -o base64.dll base64.c
** Win32: cl /Os -I%SQDIR% base64.c -link -dll -out:base64.dll
*/
/*
** 2022-11-16
**
** The author disclaims copyright to this source code.  In place of
** a legal notice, here is a blessing:
**
**    May you do good and not evil.
**    May you find forgiveness for yourself and forgive others.
**    May you share freely, never taking more than you give.
**
***************************************************************************
**
** This is a utility for converting binary to base85 or vice-versa.
** It can be built as a standalone
 program or an SQLite3 extension.
**
** Much like base64 representations, base85 can be sent through a
```

```
** sane USASCII channel unmolested. It also plays nicely in CSV or
** written as TCL brace-enclosed literals or SQL string literals.
** It is not suited for unmodified use in XML-like documents.
**
** The encoding used resembles Ascii85, but was devised by the author
** (Larry Brasfield) before Mozilla, Adobe, ZMODEM or other Ascii85
** variant sources existed, in the 1984 timeframe on a VAX mainframe.
** Further, this is an independent implementation of a base85 system.
** Hence, the author has rightfully put this into the public domain.
**
** Base85 numerals are taken from the set of 7-bit USASCII codes,
** excluding control characters and Space ! " ' ( ) { | } ~ Del
** in code order representing digit values 0 to 84 (base 10.)
**
** Groups of 4 bytes, interpreted as big-endian 32-bit values,
** are represented as 5-digit base85 numbers with MS to LS digit
** order. Groups
 of 1-3 bytes are represented with 2-4 digits,
** still big-endian but 8-24 bit values. (Using big-endian yields
** the simplest transition to byte groups smaller than 4 bytes.
** These byte groups can also be considered base-256 numbers.)
** Groups of 0 bytes are represented with 0 digits and vice-versa.
** No pad characters are used; Encoded base85 numeral sequence
** (aka "group") length maps 1-to-1 to the decoded binary length.
**
** Any character not in the base85 numeral set delimits groups.
** When base85 is streamed or stored in containers of indefinite
** size, newline is used to separate it into sub-sequences of no
** more than 80 digits so that fgets() can be used to read it.
**
** Length limitations are not imposed except that the runtime
** SQLite string or blob length limits are respected. Otherwise,
** any length binary sequence can be represented and recovered.
** Base85 sequences can be concatenated by separating them with
** a non-base85 character; the conversion to binary
 will then
** be the concatenation of the represented binary sequences.

** The standalone program either converts base85 on stdin to create
** a binary file or converts a binary file to base85 on stdout.
** Read or make it blurt its help for invocation details.
**
** The SQLite3 extension creates a function, base85(x), which will
** either convert text base85 to a blob or a blob to text base85
** and return the result (or throw an error for other types.)
** Unless built with OMIT_BASE85_CHECKER defined, it also creates a
** function, is_base85(t), which returns 1 iff the text t contains
** nothing other than base85 numerals and whitespace, or 0 otherwise.
```

```
**
** To build the extension:
** Set shell variable SQDIR=<your favorite SQLite checkout directory>
** and variable OPTS to -DOMIT_BASE85_CHECKER if is_base85() unwanted.
** *Nix: gcc -O2 -shared -I$SQDIR $OPTS -fPIC -o base85.so base85.c
** OSX: gcc -O2 -dynamiclib -fPIC -I$SQDIR $OPTS -o base85.dylib base85.c
** Win32: gcc -O2
 -shared -I%SQDIR% %OPTS% -o base85.dll base85.c
** Win32: cl /Os -I%SQDIR% %OPTS% base85.c -link -dll -out:base85.dll
**
** To build the standalone program, define PP symbol BASE85_STANDALONE. Eg.
** *Nix or OSX: gcc -O2 -DBASE85_STANDALONE base85.c -o base85
** Win32: gcc -O2 -DBASE85_STANDALONE -o base85.exe base85.c
** Win32: cl /Os /MD -DBASE85_STANDALONE base85.c
*/
/* This will be more informative in a later version. */
```

Found in path(s):
* /sqlite-amalgamation-3450200-zip/sqlite-amalgamation-3450200/shell.c
No license file was found, but licenses were detected in source scan.

```
/*
** CAPI3REF: Configuration Options
** KEYWORDS: {configuration option}
**
** These constants are the available integer configuration options that
** can be passed as the first argument to the [sqlite3_config()] interface.
**
** Most of the configuration options for sqlite3_config()
** will only work if invoked prior to [sqlite3_initialize()] or after
** [sqlite3_shutdown()].  The few exceptions to this rule are called
** "anytime configuration options".
** ^Calling [sqlite3_config()] with a first argument that is not an
** anytime configuration option in between calls to [sqlite3_initialize()] and
** [sqlite3_shutdown()] is a no-op that returns SQLITE_MISUSE.
**
** The set of anytime configuration options can change (by insertions
** and/or deletions) from one release of SQLite to the next.
** As of SQLite version 3.42.0, the complete set of anytime configuration
** options is:
** <ul>
** <li> SQLITE_CONFIG_LOG
**
 <li> SQLITE_CONFIG_PCACHE_HDRSZ
** </ul>
**
** New configuration options may be added in future releases of SQLite.
** Existing configuration options might be discontinued.  Applications
```

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** should check the return code from [sqlite3_config()] to make sure that
** the call worked.  The [sqlite3_config()] interface will return a
** non-zero [error code] if a discontinued or unsupported configuration option
** is invoked.
**
** <dl>
** [[SQLITE_CONFIG_SINGLETHREAD]] <dt>SQLITE_CONFIG_SINGLETHREAD</dt>
** <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Single-thread.  In other words, it disables
** all mutexing and puts SQLite into a mode where it can only be used
** by a single thread.   ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to change the [threading mode] from its default
** value of Single-thread and so [sqlite3_config()] will return
** [SQLITE_ERROR] if called
 with the SQLITE_CONFIG_SINGLETHREAD
** configuration option.</dd>
**
** [[SQLITE_CONFIG_MULTITHREAD]] <dt>SQLITE_CONFIG_MULTITHREAD</dt>
** <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Multi-thread.  In other words, it disables
** mutexing on [database connection] and [prepared statement] objects.
** The application is responsible for serializing access to
** [database connections] and [prepared statements].  But other mutexes
** are enabled so that SQLite will be safe to use in a multi-threaded
** environment as long as no two threads attempt to use the same
** [database connection] at the same time.  ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to set the Multi-thread [threading mode] and
** [sqlite3_config()] will return [SQLITE_ERROR] if called with the
** SQLITE_CONFIG_MULTITHREAD configuration option.</dd>
**
** [[SQLITE_CONFIG_SERIALIZED]] <dt>SQLITE_CONFIG_SERIALIZED</dt>
**
 <dd>There are no arguments to this option.  ^This option sets the
** [threading mode] to Serialized. In other words, this option enables
** all mutexes including the recursive
** mutexes on [database connection] and [prepared statement] objects.
** In this mode (which is the default when SQLite is compiled with
** [SQLITE_THREADSAFE=1]) the SQLite library will itself serialize access
** to [database connections] and [prepared statements] so that the
** application is free to use the same [database connection] or the
** same [prepared statement] in different threads at the same time.
** ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** it is not possible to set the Serialized [threading mode] and
** [sqlite3_config()] will return [SQLITE_ERROR] if called with the
** SQLITE_CONFIG_SERIALIZED configuration option.</dd>
```

```
**
** [[SQLITE_CONFIG_MALLOC]] <dt>SQLITE_CONFIG_MALLOC</dt>
** <dd> ^(The SQLITE_CONFIG_MALLOC option
 takes a single argument which is
** a pointer to an instance of the [sqlite3_mem_methods] structure.
** The argument specifies
** alternative low-level memory allocation routines to be used in place of
** the memory allocation routines built into SQLite.)^ ^SQLite makes
** its own private copy of the content of the [sqlite3_mem_methods] structure
** before the [sqlite3_config()] call returns.</dd>
**
** [[SQLITE_CONFIG_GETMALLOC]] <dt>SQLITE_CONFIG_GETMALLOC</dt>
** <dd> ^(The SQLITE_CONFIG_GETMALLOC option takes a single argument which
** is a pointer to an instance of the [sqlite3_mem_methods] structure.
** The [sqlite3_mem_methods]
** structure is filled with the currently defined memory allocation routines.)^
** This option can be used to overload the default memory allocation
** routines with a wrapper that simulations memory allocation failure or
** tracks memory usage, for example. </dd>
**
** [[SQLITE_CONFIG_SMALL_MALLOC]] <dt>SQLITE_CONFIG_SMALL_MALLOC</dt>
** <dd> ^The SQLITE_CONFIG_SMALL_MALLOC
 option takes single argument of
** type int, interpreted as a boolean, which if true provides a hint to
** SQLite that it should avoid large memory allocations if possible.
** SQLite will run faster if it is free to make large memory allocations,
** but some application might prefer to run slower in exchange for
** guarantees about memory fragmentation that are possible if large
** allocations are avoided.  This hint is normally off.
** </dd>
**
** [[SQLITE_CONFIG_MEMSTATUS]] <dt>SQLITE_CONFIG_MEMSTATUS</dt>
** <dd> ^The SQLITE_CONFIG_MEMSTATUS option takes single argument of type int,
** interpreted as a boolean, which enables or disables the collection of
** memory allocation statistics. ^(When memory allocation statistics are
** disabled, the following SQLite interfaces become non-operational:
**   <ul>
**   <li> [sqlite3_hard_heap_limit64()]
**   <li> [sqlite3_memory_used()]
**   <li> [sqlite3_memory_highwater()]
**   <li> [sqlite3_soft_heap_limit64()]
**
   <li> [sqlite3_status64()]
**   </ul>)^
** ^Memory allocation statistics are enabled by default unless SQLite is
** compiled with [SQLITE_DEFAULT_MEMSTATUS]=0 in which case memory
** allocation statistics are disabled by default.
** </dd>
```

```
**
** [[SQLITE_CONFIG_SCRATCH]] <dt>SQLITE_CONFIG_SCRATCH</dt>
** <dd> The SQLITE_CONFIG_SCRATCH option is no longer used.
** </dd>
**
** [[SQLITE_CONFIG_PAGECACHE]] <dt>SQLITE_CONFIG_PAGECACHE</dt>
** <dd> ^The SQLITE_CONFIG_PAGECACHE option specifies a memory pool
** that SQLite can use for the database page cache with the default page
** cache implementation.
** This configuration option is a no-op if an application-defined page
** cache implementation is loaded using the [SQLITE_CONFIG_PCACHE2].
** ^There are three arguments to SQLITE_CONFIG_PAGECACHE: A pointer to
** 8-byte aligned memory (pMem), the size of each page cache line (sz),
** and the number of cache lines (N).
** The sz argument should be the size of the largest database page
** (a power
 of two between 512 and 65536) plus some extra bytes for each
** page header.  ^The number of extra bytes needed by the page header
** can be determined using [SQLITE_CONFIG_PCACHE_HDRSZ].
** ^It is harmless, apart from the wasted memory,
** for the sz parameter to be larger than necessary.  The pMem
** argument must be either a NULL pointer or a pointer to an 8-byte
** aligned block of memory of at least sz*N bytes, otherwise
** subsequent behavior is undefined.
** ^When pMem is not NULL, SQLite will strive to use the memory provided
** to satisfy page cache needs, falling back to [sqlite3_malloc()] if
** a page cache line is larger than sz bytes or if all of the pMem buffer
** is exhausted.
** ^If pMem is NULL and N is non-zero, then each database connection
** does an initial bulk allocation for page cache memory
** from [sqlite3_malloc()] sufficient for N cache lines if N is positive or
** of -1024*N bytes if N is negative, . ^If additional
** page cache memory is needed beyond
 what is provided by the initial
** allocation, then SQLite goes to [sqlite3_malloc()] separately for each
** additional cache line. </dd>
**
** [[SQLITE_CONFIG_HEAP]] <dt>SQLITE_CONFIG_HEAP</dt>
** <dd> ^The SQLITE_CONFIG_HEAP option specifies a static memory buffer
** that SQLite will use for all of its dynamic memory allocation needs
** beyond those provided for by [SQLITE_CONFIG_PAGECACHE].
** ^The SQLITE_CONFIG_HEAP option is only available if SQLite is compiled
** with either [SQLITE_ENABLE_MEMSYS3] or [SQLITE_ENABLE_MEMSYS5] and returns
** [SQLITE_ERROR] if invoked otherwise.
** ^There are three arguments to SQLITE_CONFIG_HEAP:
** An 8-byte aligned pointer to the memory,
** the number of bytes in the memory buffer, and the minimum allocation size.
** ^If the first pointer (the memory pointer) is NULL, then SQLite reverts
```

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** to using its default memory allocator (the system malloc() implementation),
** undoing any prior invocation of [SQLITE_CONFIG_MALLOC].  ^If the
** memory pointer
 is not NULL then the alternative memory
** allocator is engaged to handle all of SQLites memory allocation needs.
** The first pointer (the memory pointer) must be aligned to an 8-byte
** boundary or subsequent behavior of SQLite will be undefined.
** The minimum allocation size is capped at 2**12. Reasonable values
** for the minimum allocation size are 2**5 through 2**8.</dd>
**
** [[SQLITE_CONFIG_MUTEX]] <dt>SQLITE_CONFIG_MUTEX</dt>
** <dd> ^(The SQLITE_CONFIG_MUTEX option takes a single argument which is a
** pointer to an instance of the [sqlite3_mutex_methods] structure.
** The argument specifies alternative low-level mutex routines to be used
** in place the mutex routines built into SQLite.)^  ^SQLite makes a copy of
** the content of the [sqlite3_mutex_methods] structure before the call to
** [sqlite3_config()] returns. ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** the entire mutexing subsystem is omitted from the
 build and hence calls to
** [sqlite3_config()] with the SQLITE_CONFIG_MUTEX configuration option will
** return [SQLITE_ERROR].</dd>
**
** [[SQLITE_CONFIG_GETMUTEX]] <dt>SQLITE_CONFIG_GETMUTEX</dt>
** <dd> ^(The SQLITE_CONFIG_GETMUTEX option takes a single argument which
** is a pointer to an instance of the [sqlite3_mutex_methods] structure.  The
** [sqlite3_mutex_methods]
** structure is filled with the currently defined mutex routines.)^
** This option can be used to overload the default mutex allocation
** routines with a wrapper used to track mutex usage for performance
** profiling or testing, for example.   ^If SQLite is compiled with
** the [SQLITE_THREADSAFE | SQLITE_THREADSAFE=0] compile-time option then
** the entire mutexing subsystem is omitted from the build and hence calls to
** [sqlite3_config()] with the SQLITE_CONFIG_GETMUTEX configuration option will
** return [SQLITE_ERROR].</dd>
**
** [[SQLITE_CONFIG_LOOKASIDE]] <dt>SQLITE_CONFIG_LOOKASIDE</dt>
** <dd> ^(The SQLITE_CONFIG_LOOKASIDE
 option takes two arguments that determine
** the default size of lookaside memory on each [database connection].
** The first argument is the
** size of each lookaside buffer slot and the second is the number of
** slots allocated to each database connection.)^  ^(SQLITE_CONFIG_LOOKASIDE
** sets the <i>default</i> lookaside size. The [SQLITE_DBCONFIG_LOOKASIDE]
** option to [sqlite3_db_config()] can be used to change the lookaside
** configuration on individual connections.)^ </dd>
**
** [[SQLITE_CONFIG_PCACHE2]] <dt>SQLITE_CONFIG_PCACHE2</dt>
```

```
** <dd> ^(The SQLITE_CONFIG_PCACHE2 option takes a single argument which is
** a pointer to an [sqlite3_pcache_methods2] object.  This object specifies
** the interface to a custom page cache implementation.)^
** ^SQLite makes a copy of the [sqlite3_pcache_methods2] object.</dd>
**
** [[SQLITE_CONFIG_GETPCACHE2]] <dt>SQLITE_CONFIG_GETPCACHE2</dt>
** <dd> ^(The SQLITE_CONFIG_GETPCACHE2 option takes a single argument which
** is
 a pointer to an [sqlite3_pcache_methods2] object.  SQLite copies of
** the current page cache implementation into that object.)^ </dd>
**
** [[SQLITE_CONFIG_LOG]] <dt>SQLITE_CONFIG_LOG</dt>
** <dd> The SQLITE_CONFIG_LOG option is used to configure the SQLite
** global [error log].
** (^The SQLITE_CONFIG_LOG option takes two arguments: a pointer to a
** function with a call signature of void(*)(void*,int,const char*),
** and a pointer to void. ^If the function pointer is not NULL, it is
** invoked by [sqlite3_log()] to process each logging event.  ^If the
** function pointer is NULL, the [sqlite3_log()] interface becomes a no-op.
** ^The void pointer that is the second argument to SQLITE_CONFIG_LOG is
** passed through as the first parameter to the application-defined logger
** function whenever that function is invoked.  ^The second parameter to
** the logger function is a copy of the first parameter to the corresponding
** [sqlite3_log()] call and is intended to be a [result code] or
 an
** [extended result code].  ^The third parameter passed to the logger is
** log message after formatting via [sqlite3_snprintf()].
** The SQLite logging interface is not reentrant; the logger function
** supplied by the application must not invoke any SQLite interface.
** In a multi-threaded application, the application-defined logger
** function must be threadsafe. </dd>
**
** [[SQLITE_CONFIG_URI]] <dt>SQLITE_CONFIG_URI
** <dd>^(The SQLITE_CONFIG_URI option takes a single argument of type int.
** If non-zero, then URI handling is globally enabled. If the parameter is zero,
** then URI handling is globally disabled.)^ ^If URI handling is globally
** enabled, all filenames passed to [sqlite3_open()], [sqlite3_open_v2()],
** [sqlite3_open16()] or
** specified as part of [ATTACH] commands are interpreted as URIs, regardless
** of whether or not the [SQLITE_OPEN_URI] flag is set when the database
** connection is opened. ^If it is globally disabled, filenames are
** only interpreted as
 URIs if the SQLITE_OPEN_URI flag is set when the
** database connection is opened. ^(By default, URI handling is globally
** disabled. The default value may be changed by compiling with the
** [SQLITE_USE_URI] symbol defined.)^
**
** [[SQLITE_CONFIG_COVERING_INDEX_SCAN]] <dt>SQLITE_CONFIG_COVERING_INDEX_SCAN
```

```
** <dd>^The SQLITE_CONFIG_COVERING_INDEX_SCAN option takes a single integer
** argument which is interpreted as a boolean in order to enable or disable
** the use of covering indices for full table scans in the query optimizer.
** ^The default setting is determined
** by the [SQLITE_ALLOW_COVERING_INDEX_SCAN] compile-time option, or is "on"
** if that compile-time option is omitted.
** The ability to disable the use of covering indices for full table scans
** is because some incorrectly coded legacy applications might malfunction
** when the optimization is enabled.  Providing the ability to
** disable the optimization allows the older, buggy application code to work
** without change
 even with newer versions of SQLite.
**
** [[SQLITE_CONFIG_PCACHE]] [[SQLITE_CONFIG_GETPCACHE]]
** <dt>SQLITE_CONFIG_PCACHE and SQLITE_CONFIG_GETPCACHE
** <dd> These options are obsolete and should not be used by new code.
** They are retained for backwards compatibility but are now no-ops.
** </dd>
**
** [[SQLITE_CONFIG_SQLLOG]]
** <dt>SQLITE_CONFIG_SQLLOG
** <dd>This option is only available if sqlite is compiled with the
** [SQLITE_ENABLE_SQLLOG] pre-processor macro defined. The first argument should
** be a pointer to a function of type void(*)(void*,sqlite3*,const char*, int).
** The second should be of type (void*). The callback is invoked by the library
** in three separate circumstances, identified by the value passed as the
** fourth parameter. If the fourth parameter is 0, then the database connection
** passed as the second argument has just been opened. The third argument
** points to a buffer containing the name of the main database file. If the
** fourth parameter is 1,
 then the SQL statement that the third parameter
** points to has just been executed. Or, if the fourth parameter is 2, then
** the connection being passed as the second parameter is being closed. The
** third parameter is passed NULL In this case.  An example of using this
** configuration option can be seen in the "test_sqllog.c" source file in
** the canonical SQLite source tree.</dd>
**
** [[SQLITE_CONFIG_MMAP_SIZE]]
** <dt>SQLITE_CONFIG_MMAP_SIZE
** <dd>^SQLITE_CONFIG_MMAP_SIZE takes two 64-bit integer (sqlite3_int64) values
** that are the default mmap size limit (the default setting for
** [PRAGMA mmap_size]) and the maximum allowed mmap size limit.
** ^The default setting can be overridden by each database connection using
** either the [PRAGMA mmap_size] command, or by using the
** [SQLITE_FCNTL_MMAP_SIZE] file control.  ^(The maximum allowed mmap size
** will be silently truncated if necessary so that it does not exceed the
** compile-time maximum mmap size set by the
** [SQLITE_MAX_MMAP_SIZE]
```

```
 compile-time option.)^
** ^If either argument to this option is negative, then that argument is
** changed to its compile-time default.
**
** [[SQLITE_CONFIG_WIN32_HEAPSIZE]]
** <dt>SQLITE_CONFIG_WIN32_HEAPSIZE
** <dd>^The SQLITE_CONFIG_WIN32_HEAPSIZE option is only available if SQLite is
** compiled for Windows with the [SQLITE_WIN32_MALLOC] pre-processor macro
** defined. ^SQLITE_CONFIG_WIN32_HEAPSIZE takes a 32-bit unsigned integer value
** that specifies the maximum size of the created heap.
**
** [[SQLITE_CONFIG_PCACHE_HDRSZ]]
** <dt>SQLITE_CONFIG_PCACHE_HDRSZ
** <dd>^The SQLITE_CONFIG_PCACHE_HDRSZ option takes a single parameter which
** is a pointer to an integer and writes into that integer the number of extra
** bytes per page required for each page in [SQLITE_CONFIG_PAGECACHE].
** The amount of extra space required can change depending on the compiler,
** target platform, and SQLite version.
**
** [[SQLITE_CONFIG_PMASZ]]
** <dt>SQLITE_CONFIG_PMASZ
** <dd>^The
 SQLITE_CONFIG_PMASZ option takes a single parameter which
** is an unsigned integer and sets the "Minimum PMA Size" for the multithreaded
** sorter to that integer.  The default minimum PMA Size is set by the
** [SQLITE_SORTER_PMASZ] compile-time option.  New threads are launched
** to help with sort operations when multithreaded sorting
** is enabled (using the [PRAGMA threads] command) and the amount of content
** to be sorted exceeds the page size times the minimum of the
** [PRAGMA cache_size] setting and this value.
**
** [[SQLITE_CONFIG_STMTJRNL_SPILL]]
** <dt>SQLITE_CONFIG_STMTJRNL_SPILL
** <dd>^The SQLITE_CONFIG_STMTJRNL_SPILL option takes a single parameter which
** becomes the [statement journal] spill-to-disk threshold.
** [Statement journals] are held in memory until their size (in bytes)
** exceeds this threshold, at which point they are written to disk.
** Or if the threshold is -1, statement journals are always held
** exclusively in memory.
** Since many statement journals
 never become large, setting the spill
** threshold to a value such as 64KiB can greatly reduce the amount of
** I/O required to support statement rollback.
** The default value for this setting is controlled by the
** [SQLITE_STMTJRNL_SPILL] compile-time option.
**
** [[SQLITE_CONFIG_SORTERREF_SIZE]]
** <dt>SQLITE_CONFIG_SORTERREF_SIZE
```

```
** <dd>The SQLITE_CONFIG_SORTERREF_SIZE option accepts a single parameter
** of type (int) - the new value of the sorter-reference size threshold.
** Usually, when SQLite uses an external sort to order records according
** to an ORDER BY clause, all fields required by the caller are present in the
** sorted records. However, if SQLite determines based on the declared type
** of a table column that its values are likely to be very large - larger
** than the configured sorter-reference size threshold - then a reference
** is stored in each sorted record and the required column values loaded
** from the database as records are returned in sorted order.
 The default
** value for this option is to never use this optimization. Specifying a
** negative value for this option restores the default behavior.
** This option is only available if SQLite is compiled with the
** [SQLITE_ENABLE_SORTER_REFERENCES] compile-time option.
**
** [[SQLITE_CONFIG_MEMDB_MAXSIZE]]
** <dt>SQLITE_CONFIG_MEMDB_MAXSIZE
** <dd>The SQLITE_CONFIG_MEMDB_MAXSIZE option accepts a single parameter
** [sqlite3_int64] parameter which is the default maximum size for an in-memory
** database created using [sqlite3_deserialize()].  This default maximum
** size can be adjusted up or down for individual databases using the
** [SQLITE_FCNTL_SIZE_LIMIT] [sqlite3_file_control|file-control].  If this
** configuration setting is never used, then the default maximum is determined
** by the [SQLITE_MEMDB_DEFAULT_MAXSIZE] compile-time option.  If that
** compile-time option is not set, then the default maximum is 1073741824.
** </dl>
*/
/*
** The "printf" code that follows dates
 from the 1980's.  It is in
** the public domain.
**
**************************************************************************
**
** This file contains code for a set of "printf"-like routines.  These
** routines format strings much like the printf() from the standard C
** library, though the implementation here has enhancements to support
** SQLite.
*/
/*
** 2004 May 22
**
** The author disclaims copyright to this source code.  In place of
** a legal notice, here is a blessing:
**
**    May you do good and not evil.
**    May you find forgiveness for yourself and forgive others.
**    May you share freely, never taking more than you give.
```

```
**
*****************************************************************************
**
** This file contains the VFS implementation for unix-like operating systems
** include Linux, MacOSX, *BSD, QNX, VxWorks, AIX, HPUX, and others.
**
** There are actually several different VFS implementations in this file.
** The differences are in the way that file
 locking is done.  The default
** implementation uses Posix Advisory Locks.  Alternative implementations
** use flock(), dot-files, various proprietary locking schemas, or simply
** skip locking all together.
**
** This source file is organized into divisions where the logic for various
** subfunctions is contained within the appropriate division.  PLEASE
** KEEP THE STRUCTURE OF THIS FILE INTACT.  New code should be placed
** in the correct division and should be clearly labelled.
**
** The layout of divisions is as follows:
**
**   *  General-purpose declarations and utility functions.
**   *  Unique file ID logic used by VxWorks.
**   *  Various locking primitive implementations (all except proxy locking):
**      + for Posix Advisory Locks
**      + for no-op locks
**      + for dot-file locks
**      + for flock() locking
**      + for named semaphore locks (VxWorks only)
**      + for AFP filesystem locks (MacOSX only)
**   *  sqlite3_file methods not associated with locking.
**
  *  Definitions of sqlite3_io_methods objects for all locking
**      methods plus "finder" functions for each locking method.
**   *  sqlite3_vfs method implementations.
**   *  Locking primitives for the proxy uber-locking-method. (MacOSX only)
**   *  Definitions of sqlite3_vfs objects for all locking methods
**      plus implementations of sqlite3_os_init() and sqlite3_os_end().
*/
/*
** Return a pointer to the "temporary page" buffer held internally
** by the pager.  This is a buffer that is big enough to hold the
** entire content of a database page.  This buffer is used internally
** during rollback and will be overwritten whenever a rollback
** occurs.  But other modules are free to use it too, as long as
** no rollbacks are happening.
*/
```

Found in path(s):

* /sqlite-amalgamation-3450200-zip/sqlite-amalgamation-3450200/sqlite3.c

1.1704 networkplumbing-go-nft 0.4.0

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1.1708 metrics-jetty 4.2.25

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jetty9
Build-Jdk-Spec: 17
Bundle-Description: A set of extensions for Jetty 9.3 and higher which
 provide instrumentation of thread pools, connector metrics, a
nd application latency and utilization.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Jetty 9.3 and higher
Bundle-SymbolicName: io.dropwizard.metrics.jetty9
Bundle-Version: 4.2.25
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.jetty9;uses:="com.codahale.metric
s,com.codahale.metrics.annotation,javax.servlet,javax.servlet.http,or
g.eclipse.jetty.io,org.eclipse.jetty.server,org.eclipse.jetty.server.
```

handler,org.eclipse.jetty.util.annotation,org.eclipse.jetty.util.comp
onent,org.eclipse.jetty.util.thread";version="4.2.25"
Implementation-Title: Metrics Integration for Jetty
 9.3 and higher
Implementation-Version: 4.2.25
Import-Package: javax.servlet;version="[2.5.0,4.0.0)",javax.servlet.ht
tp;version="[2.5.0,4.0.0)",com.codahale.metrics;version="[4.2,5)",com
.codahale.metrics.annotation;version="[4.2,5)",org.eclipse.jetty.http
;version="[9.4,10)",org.eclipse.jetty.io;version="[9.4,10)",org.eclip
se.jetty.server;version="[9.4,10)",org.eclipse.jetty.server.handler;v
ersion="[9.4,10)",org.eclipse.jetty.util.annotation;version="[9.4,10)
",org.eclipse.jetty.util.component;version="[9.4,10)",org.eclipse.jet
ty.util.thread;version="[9.4,10)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-jetty9-4-2-25-jar/META-INF/MANIFEST.MF

1.1709 logback-throttling-appender 1.1.11

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1.1710 jersey-bean-validation 2.41

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1.1711 github.com/go-ldap/ldap/v3 3.4.8

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1.1712 github.com/go-asn1-ber/asn1-ber 1.5.6

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1.1713 procfs 0.15.1

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metrics from the pseudo-filesystem proc.

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1.1714 viper 1.19.0

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1.1715 go-restful 3.12.1

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1.1716 logr 1.4.2

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1.1717 ulikunitz-xz 0.5.12

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```
package main

import (
 "bufio"
 "bytes"
 "flag"
 "fmt"
 "io"
 "log"
 "os"
 "path/filepath"
 "strings"
)

const crUsageString = `xb copyright [options] <path>....
```

```
The xb copyright command adds a copyright remark to all go files below path.

 -h  prints this message and exits
`


func crUsage(w io.Writer) {
 fmt.Fprint(w, crUsageString)
}

const copyrightText = `
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`


func goComment(text string) string {
 buf := new(bytes.Buffer)
 scanner := bufio.NewScanner(strings.NewReader(text))
 var err error
 for scanner.Scan() {
  s := strings.TrimSpace(scanner.Text())
  if len(s) == 0 {
   continue
  }
  if _, err = fmt.Fprintln(buf, "//", s); err != nil {
   panic(err)
  }
 }
 if err
 = scanner.Err(); err != nil {
  panic(err)
 }
 if _, err = fmt.Fprintln(buf); err != nil {
  panic(err)
 }
 return buf.String()
}

var goCopyright = goComment(copyrightText)

func addCopyright(path string) (err error) {
 log.Printf("adding copyright to %s", path)
 src, err := os.Open(path)
 if err != nil {
  return err
 }
 defer func() {
```

```
 cerr := src.Close()
 if cerr != nil && err == nil {
  err = cerr
 }
}()
newPath := path + ".new"
dst, err := os.Create(newPath)
if err != nil {
 return err
}
defer func() {
 cerr := dst.Close()
 if cerr != nil && err == nil {
  err = cerr
 }
}()
out := bufio.NewWriter(dst)
fmt.Fprint(out, goCopyright)
scanner := bufio.NewScanner(src)
line := 0
del := false
for scanner.Scan() {
 line++
 txt := scanner.Text()
 if line == 1 && strings.Contains(txt, "Copyright") {
  del = true
  continue
 }
 if del {
  s := strings.TrimSpace(txt)
  if len(s) == 0 {
   del = false
  }
  continue
 }
 fmt.Fprintln(out, txt)
}
if err = scanner.Err();
err != nil {
 return err
}
if err = out.Flush(); err != nil {
 return
}
err = os.Rename(newPath, path)
return
}
```

```
func walkCopyrights(path string, info os.FileInfo, err error) error {
 if err != nil {
  return err
 }
 if info.IsDir() {
  return nil
 }
 if !strings.HasSuffix(info.Name(), ".go") {
  return nil
 }
 return addCopyright(path)
}

func copyright() {
 cmdName := os.Args[0]
 log.SetPrefix(fmt.Sprintf("%s: ", cmdName))
 log.SetFlags(0)

 flag.CommandLine = flag.NewFlagSet(cmdName, flag.ExitOnError)
 flag.Usage = func() { crUsage(os.Stderr); os.Exit(1) }

 help := flag.Bool("h", false, "")

 flag.Parse()

 if *help {
  crUsage(os.Stdout)
  os.Exit(0)
 }

 for _, path := range flag.Args() {
  fi, err := os.Stat(path)
  if err != nil {
   log.Print(err)
   continue
  }
  if !fi.IsDir() {
   log.Printf("%s is not a directory", path)
   continue
  }
  if err = filepath.Walk(path, walkCopyrights); err != nil {
   log.Fatalf("%s error %s", path, err)
  }
 }
}
```

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1.1718 cpio 2.13+dfsg-7ubuntu0.1

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1.1723 libmpdec3 2.5.1-2build2

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1.1725 libmaxminddb0 1.5.2-1build2

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Argon2 reference source code package - reference C implementations

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```
package migration

import "fmt"

// Notice is a migration warning
type Notice struct {
 Plugin     string
 Option     string
 Severity   string // 'deprecated', 'removed', or 'unsupported'
 ReplacedBy string
 Additional string
```

```
 Version    string
}

func (n *Notice) ToString() string {
 s := ""
 if n.Option == "" {
  s += fmt.Sprintf(`Plugin "%v" `, n.Plugin)
 } else {
  s += fmt.Sprintf(`Option "%v" in plugin "%v" `, n.Option, n.Plugin)
 }
 if n.Severity == SevUnsupported {
  s += "is unsupported by this migration tool in " + n.Version + "."
 } else if n.Severity == SevNewDefault {
  s += "is added as a default in " + n.Version + "."
 } else {
  s += "is " + n.Severity + " in " + n.Version + "."
 }
 if n.ReplacedBy != "" {
  s += fmt.Sprintf(` It is replaced by "%v".`, n.ReplacedBy)
 }
 if n.Additional != "" {
  s += " " + n.Additional
 }
 return s
}

const (
 // The following statuses are used to indicate the state of support/deprecation in a given release.
 SevDeprecated  = "deprecated"
  // deprecated, but still completely functional
 SevIgnored     = "ignored"     // if included in the corefile, it will be ignored by CoreDNS
 SevRemoved     = "removed"     // completely removed from CoreDNS, and would cause CoreDNS to exit if present
in the Corefile
 SevNewDefault  = "newdefault"  // added to the default corefile.  CoreDNS may not function properly if it is not
present in the corefile.
 SevUnsupported = "unsupported" // the plugin/option is not supported by the migration tool

 // The following statuses are used for selecting/filtering notifications
 SevAll = "all" // show all statuses
)
```

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==========
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Protocol Buffers for Go with Gadgets

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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The common/types/pb/equal.go modification of proto.Equal logic
==========
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package migration

import "fmt"

// Notice is a migration warning
type Notice struct {
 Plugin     string
 Option     string
 Severity   string // 'deprecated', 'removed', or 'unsupported'
 ReplacedBy string
 Additional string
 Version    string
}

func (n *Notice) ToString() string {
 s := ""
 if n.Option == "" {
  s += fmt.Sprintf(`Plugin "%v" `, n.Plugin)
 } else {
  s += fmt.Sprintf(`Option "%v" in plugin "%v" `, n.Option, n.Plugin)
 }
 if n.Severity == SevUnsupported {
  s += "is unsupported by this migration tool in " + n.Version + "."
 } else if n.Severity == SevNewDefault {
  s += "is added as a default in " + n.Version + "."
 } else {
  s += "is " + n.Severity + " in " + n.Version + "."
 }
 if n.ReplacedBy != "" {
  s += fmt.Sprintf(` It is replaced by "%v".`, n.ReplacedBy)
 }
 if n.Additional != "" {
  s += " " + n.Additional
 }
 return s
}

const (
 // The following statuses are used to indicate the state of support/deprecation in a given release.
 SevDeprecated  = "deprecated"
```

```
  // deprecated, but still completely functional
 SevIgnored     = "ignored"     // if included in the corefile, it will be ignored by CoreDNS
 SevRemoved     = "removed"     // completely removed from CoreDNS, and would cause CoreDNS to exit if present
in the Corefile
 SevNewDefault  = "newdefault"  // added to the default corefile.  CoreDNS may not function properly if it is not
present in the corefile.
 SevUnsupported = "unsupported" // the plugin/option is not supported by the migration tool

 // The following statuses are used for selecting/filtering notifications
 SevAll = "all" // show all statuses
)
```

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==========
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//
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 Name string `json:"name,omitempty"`
 URL string `json:"url,omitempty"`

}
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Protocol Buffers for Go with Gadgets

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procfs provides functions to retrieve system, kernel and process
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==========
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= vendor/github.com/golang/groupcache/LICENSE 19cbd64715b51267a47bf3750cc6a8a5

1.1731 zlib 1.3.1

1.1731.1 Available under license :

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1.1732 consul-api 1.12.0

1.1732.1 Available under license :

```
---
layout: docs
page_title: Consul-Terraform-Sync Enterprise License
description: >-
 Consul-Terraform-Sync Enterprise License
---

# Consul-Terraform-Sync Enterprise License

<EnterpriseAlert>
 Licenses are only required for Consul-Terraform-Sync Enterprise
</EnterpriseAlert>

Consul-Terraform-Sync Enterprise binaries require a [Consul Enterprise license](/docs/enterprise/license/overview)
to run. There is no Consul-Terraform-Sync Enterprise specific license. As a result, Consul-Terraform-Sync
Enterprise's licensing is very similar to Consul Enterprise.

All Consul-Terraform-Sync Enterprise features are available with a valid Consul Enterprise license, regardless of
your Consul Enterprise packaging or pricing model.

To get a trial license for Consul-Terraform-Sync Enterprise, you can sign-up for the [trial license for Consul
Enterprise](/docs/enterprise/license/faq#q-where-can-users-get-a-trial-license-for-consul-enterprise).

## Setting the License

Choose one of the following methods
 (in order of precedence) to set the license:

1. Set the `CONSUL_LICENSE` environment variable to the license string.

  ```shell-session
```
```

```
export CONSUL_LICENSE=<LICENSE_VALUE>
```

1. Set the `CONSUL_LICENSE_PATH` environment variable to the path of the file containing the license.

```shell-session
export CONSUL_LICENSE_PATH=<PATH>/<TO>/<FILE>
```

1. Configure the [`license_path`](/docs/nia/configuration#license_path) option in the configuration file to point to the file containing the license.

```hcl
license_path = "<PATH>/<TO>/<FILE>"
```

~> **Note**: the [options to set the license and the order of precedence](/docs/enterprise/license/overview#binaries-without-built-in-licenses) are the same as Consul Enterprise server agents.
Visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise) for detailed steps on how to install the license key.

Updating the License

The previous
section describes options for [setting the license](#setting-the-license) needed to start running Consul-Terraform-Sync Enterprise. Use the following procedure to update the license when it expires or is near the expiration date:

1. Update the license environment variable or configuration with the new license value or path to the new license file
1. Stop and restart Consul-Terraform-Sync Enterprise

Once Consul-Terraform-Sync Enterprise starts again, it will pick up the new license and run the tasks with any changes that may have occurred between the stop and restart period.

Notification and Termination Behavior

Licenses have an expiration date and a termination date. The termination date is a time at or after the license expires. Consul-Terraform-Sync Enterprise will cease to function once the termination date has passed.

The time between the expiration and termination dates is a grace period. Grace periods are generally 24-hours, but you should refer to your license agreement
for complete terms of your grace period.

When approaching expiration and termination, Consul-Terraform-Sync Enterprise will provide notifications in the system logs:

| Time period | Behavior |

| ---------- | ---------- |
30 days before expiration	Warning-level log every 24-hours
7 days before expiration	Warning-level log every 1 hour
1 hour before expiration	Warning-level log every 1 minute
1 day before expiration	Warning-level log every 5 minutes
At or after expiration (before termination)	Error-level log every 1 minute
At or after termination	Error-level log and exit

~> **Note**: Notification frequency and [grace period](/docs/enterprise/license/faq#q-is-there-a-grace-period-when-licenses-expire) behavior is the same as
 Consul Enterprise.

```
<div
 ...attributes
 class="consul-intention-permission-header-form"
>
 <FormGroup
   @name={{name}}
 as |group|>

   {{yield (hash
     submit=(action 'submit' changeset)
     reset=(action 'reset' changeset)

     isDirty=(and changeset.isValid changeset.isDirty)
     changeset=changeset
   )}}

   <fieldset>
     <div>
       <group.Element
         @name="HeaderType"
         @type="select"
       as |el|>
         <el.Label>Header type</el.Label>
         <PowerSelect
           @options={{headerTypes}}
           @selected={{headerType}}
           @onChange={{action 'change' 'HeaderType' changeset}} as |Type|>
             {{get headerLabels Type}}
         </PowerSelect>
       </group.Element>


       <group.Element
         @name="Name"
         @error={{changeset-get changeset 'error.Name'}}
       as |el|>
         <el.Label>Header name</el.Label>
```

```
        <el.Text
          @value={{changeset-get changeset 'Name'}}
          oninput={{action
 'change' 'Name' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Name.validation'}}
          </el.Error>
        </State>
      </group.Element>

 {{#if shouldShowValueField}}
      <group.Element
        @name="Value"
        @error={{changeset-get changeset 'error.Value'}}
      as |el|>
        <el.Label>Header {{lowercase (get headerLabels headerType)}}</el.Label>
        <el.Text
          @value={{changeset-get changeset 'Value'}}
          oninput={{action 'change' 'Value' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Value.validation'}}
          </el.Error>
        </State>
      </group.Element>
 {{/if}}

     </div>
   </fieldset>
 </FormGroup>
</div>
---
layout: api
page_title: License - Operator - HTTP API
description: |-
 The /operator/license endpoint allows for retrieving the Consul
 Enterprise License.
---

# License - Operator HTTP API

<EnterpriseAlert />

The licensing functionality described here is available only in
[Consul Enterprise](https://www.hashicorp.com/products/consul/) version 1.1.0 and later.
```

Getting the Consul License

This endpoint gets information about the current license.

Method	Path	Produces
`GET`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/api/features/blocking),
[consistency modes](/api/features/consistency),
[agent caching](/api/features/caching), and
[required ACLs](/api#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`all`	`none`	`none`

Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be retrieved.
 This will default to the datacenter of the agent serving the HTTP request.
 This is specified as a URL query parameter.

Sample Request

```shell-session
$ curl \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
```

```
  },
  "features": [
    "Automated Backups",
    "Automated Upgrades",
    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation"
   ],
  "temporary": false
 },
 "Warnings": []
}
```

Updating the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with the ability to manage the cluster's license via the API.

This endpoint updates the Consul license and returns some of the license contents as well as any warning messages regarding its validity.

Method	Path	Produces
`PUT`	`/operator/license`	`application/json`

The table below shows this endpoint's support for [blocking queries](/api/features/blocking), [consistency modes](/api/features/consistency), [agent caching](/api/features/caching), and [required ACLs](/api#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated. This will default to the datacenter of the agent serving the HTTP request. This is specified as a URL query parameter.

Sample Payload

The payload is the raw license blob.

Sample Request

```shell-session
$ curl \
  --request PUT \
  --data @consul.license \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
      "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

Resetting the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint resets the Consul license to the license included in the Enterprise binary. If the included license is not valid, the replace will fail.

| Method | Path | Produces |

| -------- | ---------- | ---------- |
| `DELETE` | `/operator/license` | `application/json` |

The table below shows this endpoint's support for
[blocking queries](/api/features/blocking),
[consistency modes](/api/features/consistency),
[agent caching](/api/features/caching), and
[required ACLs](/api#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.
 This is specified as a URL query parameter.

Sample Request

```shell-session
$ curl \
  --request DELETE \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
```

"Network Segments",
"Redundancy Zone",
"Advanced Network Federation"

],
"temporary": false
},
"Warnings": []
}
```

---
layout: docs
page_title: Consul Enterprise License
description: Consul Enterprise License Overview.
---

# Consul Enterprise License

## Licensing

All Consul Enterprise agents must be licensed when they are started. Where that license comes from will depend on which binary is in use, whether the agent is a server, client or snapshot agent and whether ACLs have been enabled for the cluster.

-> ** Consul Enterprise 1.10.0 removed temporary licensing.** In previous versions Consul Enterprise agents could start without a license and then have a license applied to them later on via the CLI or API. That functionality has been removed and replaced with the ability to load licenses from the agent's configuration or environment. Also prior to 1.10.0 server agents would automatically propagate the license between themselves. This no longer occurs and the license must be present on each server when they are started.

-> Visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise)
 for detailed steps on how to install the license key.

### Binaries with Built In Licenses

If you are downloading Consul from Amazon S3, then the license is included
in the binary and you do not need to take further action. This is the
most common use case.

In the S3 bucket you will find three Enterprise zip packages. The packages with `+pro` and
`+prem` in the name, are the binaries that include the license. The package
with `+ent` in the name does not include the license.

When using these binaries no further action is necessary to configure the license.

### Binaries Without Built In Licenses
```

For Consul Enterprise 1.10.0 or greater, binaries that do not include built in licenses a license must be available at the time the agent starts.
For server agents this means that they must either have the [`license_path`](/docs/agent/options#license_path) configuration set or have a license configured in the servers environment
with the `CONSUL_LICENSE` or
`CONSUL_LICENSE_PATH` environment variables. Both the configuration item and the
`CONSUL_LICENSE_PATH`
environment variable point to a file containing the license whereas the `CONSUL_LICENSE` environment variable should contain the license as the value. If multiple of these are set the order of precedence is:

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Both client agents and the snapshot agent may also be licensed in the very same manner. However to prevent the need to configure the license on many client agents and snapshot agents those agents have the capability to retrieve the license automatically under specific circumstances.

Client Agent License Retrieval

When a client agent starts without a license in its configuration or environment, it will try to retrieve the license from the servers via RPCs. That RPC always requires a valid non-anonymous ACL token to authorize
the
request but the token doesn't need any particular permissions. As the license is required before the client actually joins the cluster, where to make those RPC requests to is inferred from the
[`start_join`](/docs/agent/options#start_join)
or [`retry_join`](/docs/agent/options#retry_join) configurations. If those are both unset or no
[`agent` token](/docs/agent/options#acl_tokens_agent) is set then the client agent will immediately shut itself down.

If all preliminary checks pass the client agent will attempt to reach out to any server on its RPC port to request the license. These requests will be retried for up to 5 minutes and if it is unable to retrieve a license within that time frame it will shut itself down.

If ACLs are disabled then the license must be provided to the client agent through one of the three methods listed below.
Failure in providing the client agent with a licence will prevent the client agent from joining the cluster.

1. `CONSUL_LICENSE` environment variable
2.
`CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Snapshot Agent License Retrieval

The snapshot agent has similar functionality to the client agent for automatically retrieving the license. However, instead of requiring a server agent to talk to, the snapshot agent can request the license from the server or client agent it would use for all other operations. It still requires an ACL token to authorize the request. Also

like client agents, the snapshot agent will shut itself down after being unable to retrieve the license for 5 minutes.

```
<div
 ...attributes
 class="consul-intention-permission-form"
>
<FormGroup
 @name={{name}}
as |group|>

 {{yield (hash
   submit=(action 'submit' changeset)
   reset=(action 'reset' changeset)

   isDirty=(and changeset.isValid)
   changeset=changeset
 )}}

 <fieldset>
   <div data-property="action">
     <span class="label">
       Should this permission allow the source connect to the destination?
     </span>
     <div role="radiogroup" class={{if changeset.error.Action ' has-error'}}>
       {{#each intents as |intent|}}
         <label>
           <span>{{capitalize intent}}</span>
           <input
             type="radio"
             name="Action"
             value={{intent}}
             checked={{if (eq changeset.Action intent) 'checked'}}
             onchange={{action (changeset-set changeset 'Action') value="target.value"}}
           />
         </label>
       {{/each}}
     </div>
   </div>
 </fieldset>

 <fieldset>
   <header>
     <h2>Path</h2>
    </header>
   <div>
       <group.Element
         @name="PathType"
         @type="select"
```

```
      as |el|>
        <el.Label>
          Path type
        </el.Label>
        <PowerSelect
          @options={{pathTypes}}
          @selected={{pathType}}
          @onChange={{action 'change' 'HTTP.PathType' changeset}} as |Type|>
            {{get pathLabels Type}}
        </PowerSelect>
      </group.Element>

{{#if shouldShowPathField}}
      <group.Element
        @name="Path"
        @error={{changeset-get changeset 'error.HTTP.Path'}}
      as |el|>
        <el.Label>
          {{get pathLabels pathType}}
        </el.Label>
        <el.Text
          @value={{changeset-get changeset 'HTTP.Path'}}
          oninput={{action 'change' 'HTTP.Path' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{#if (eq (changeset-get changeset 'HTTP.Path') 'Regex')}}

          Path Regex should not be blank
            {{else}}
              Path should begin with a '/'
            {{/if}}
          </el.Error>
        </State>
      </group.Element>
{{/if}}

  </div>
 </fieldset>

 <fieldset>
  <h2>Methods</h2>
  <div class="type-toggle">
    <span>All methods are applied by default unless specified</span>
    <group.Element
      @name="allMethods"
    as |el|>
      <el.Checkbox
```

```
        checked={{if allMethods 'checked'}}
        onchange={{action 'change' 'allMethods' changeset}}
      />
      <el.Label>
        All Methods
      </el.Label>
    </group.Element>
  </div>

{{#if shouldShowMethods}}
  <div class="checkbox-group" role="group">
    {{#each methods as |method|}}
      <label class="type-checkbox">
        <input
          type="checkbox"
          name="method"
          value={{method}}
          checked={{if (contains method changeset.HTTP.Methods) 'checked'}}

    onchange={{action 'change' 'method' changeset}}
        />
        <span>{{method}}</span>
      </label>
    {{/each}}
  </div>
{{/if}}
 </fieldset>

 <fieldset>
  <h2>Headers</h2>

  <Consul::Intention::Permission::Header::List
    @items={{changeset-get changeset 'HTTP.Header'}}
    @ondelete={{action 'delete' 'HTTP.Header' changeset}}
  as |headerList|>

  </Consul::Intention::Permission::Header::List>

  <Consul::Intention::Permission::Header::Form
    @onsubmit={{action 'add' 'HTTP.Header' changeset}}
  as |headerForm|>
    <Ref @target={{this}} @name="headerForm" @value={{headerForm}} />
  </Consul::Intention::Permission::Header::Form>

  <button
    data-test-add-header
    type="button"
    class="type-submit"
```

```
    disabled={{if (not this.headerForm.isDirty) 'disabled'}}
    onclick={{action this.headerForm.submit}}
  >
    Add{{#if (gt (get (changeset-get changeset 'HTTP.Header') 'length') 0)}} another{{/if}} header
  </button>
   <button
    type="button"
    class="type-cancel"
    onclick={{action this.headerForm.reset}}
  >
    Cancel
  </button>

 </fieldset>
 </FormGroup>
</div>
.consul-intention-permission-form {
 h2 {
   padding-top: 1.4em;
   margin-top: 0.2em;
   margin-bottom: 0.6em;
 }
 .consul-intention-permission-header-form {
   margin-top: 10px;
 }
 fieldset:nth-child(2) > div,
 .consul-intention-permission-header-form fieldset > div {
   display: grid;
   grid-template-columns: repeat(auto-fit, minmax(160px, 1fr));
   grid-gap: 12px;
 }
 fieldset:nth-child(2) > div label:last-child {
   grid-column: span 2;
 }
 .ember-basic-dropdown-trigger {
   padding: 5px;
 }
 .checkbox-group {
   flex-direction: column;
 }
}
.consul-intention-permission-form {
 h2 {
   border-top: 1px solid rgb(var(--tone-blue-500));
   @extend %h200;
 }
 button.type-submit {
   @extend %frame-blue-300;
```

```
 }
 button.type-submit:hover:not(:disabled),
 button.type-submit:focus:not(:disabled) {
   @extend %frame-blue-500;
 }
 button.type-submit:disabled {
   @extend %frame-blue-200;
 }
}
<Notice
 @type="info"
as |notice|>
 <notice.Body>
   <p>
     {{t "components.consul.intention.notice.permissions.body"}}
   </p>
 </notice.Body>
 <notice.Footer>
   <p>
     <a href="{{env 'CONSUL_DOCS_URL'}}/connect/intentions" target="_blank" rel="noopener noreferrer">
       {{t "components.consul.intention.notice.permissions.footer"}}
     </a>
   </p>
 </notice.Footer>
</Notice>
```

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```
.consul-intention-permission-header-list {
 max-height: 200px;
 overflow: auto;
}
@import './skin';
@import './layout';
.consul-intention-permission-header-list {
 > ul > li {
   @extend %list-row-200;
 }
}
@import './skin';
@import './layout';
.consul-intention-permission-list > ul > li {
 @extend %list-row-200;
}
.consul-intention-permission-list:not(.readonly) > ul > li {
 @extend %with-composite-row-intent;
}
.consul-intention-permission-list strong {
 @extend %pill-500;
}
.consul-intention-permission-list .intent-allow {
 @extend %pill-allow;
}
.consul-intention-permission-list .intent-deny {
```

```
 @extend %pill-deny;
}
<div
 class="notice {{or @type 'info'}}"
 ...attributes
>
{{yield (hash
 Header=(component 'anonymous' tagName="header")
 Body=(component 'anonymous')
 Footer=(component 'anonymous' tagName="footer")
)}}
</div>
---
layout: commands
page_title: 'Commands: License'
description: >
 The license command provides a datacenter-level view of the Consul
 Enterprise license.
---

# Consul License

Command: `consul license`

<EnterpriseAlert />

The `license` command provides a datacenter-level view of the Consul Enterprise license. This was added
in Consul 1.1.0 but Consul 1.10.0 removed the ability to set and reset the license using the CLI.
See the [licensing documentation](/docs/enterprise/license/overview) for more information about
Consul Enterprise license management.

If ACLs are enabled then a token with operator privileges may be required in
order to use this command. Requests are forwarded internally to the leader
if required, so this can be run from any Consul node in a cluster. See the
[ACL Guide](https://learn.hashicorp.com/consul/security-networking/production-acls) for more information.

```text
Usage: consul license <subcommand> [options] [args]

 This command has subcommands for managing
 the Consul Enterprise license
 Here are some simple examples, and more detailed examples are
 available in the subcommands or the documentation.

 Install a new license from a file:

    $ consul license put @consul.license
```
```

Install a new license from stdin:

$ consul license put -

Install a new license from a string:

$ consul license put "<license blob>"

Retrieve the current license:

$ consul license get

Inspect a license:

$ consul license inspect "<path to license file>"

Reset the current license:

$ consul license reset

For more examples, ask for subcommand help or view the documentation.

Subcommands:
  get Get the active license
  inspect Inspect a signed license
  put Puts a new license in the datacenter
  reset Resets the license in the datacenter

```

## inspect

This command inspects and validates a license. Just like a Consul agent it
can load the license from a file on disk or
from the `CONSUL_LICENSE` and
`CONSUL_LICENSE_PATH` environment variables.

Usage: `consul license inspect [<options>] [<license file>]`

Inspect a license contained in a file:

```
$ consul license inspect consul.hclic
```

Inspect a license loaded from the environment:

```

$ consul license inspect
```

This will look at the CONSUL_LICENSE environment variable first
and if not present then we will look for the file specified
by the CONSUL_LICENSE_PATH environment variable.

The output looks like this:

```
Source: /consul/config/consul.hclic (path from the CONSUL_LICENSE_PATH environment variable)
Product: consul
License ID: 6089174b-a713-74cf-4c8d-856b86f1ce50
Customer ID: 7c020610-60a2-7ccb-c210-20d899e5f3b4
Installation ID: *
Issue Time: 2020-09-14 19:45:56.212195875 +0000 UTC
Start Time: 2020-09-14 00:00:00 +0000 UTC
Expiration Time: 2021-09-14 23:59:59.999 +0000 UTC
Termination Time: 2021-09-14 23:59:59.999 +0000 UTC
Modules:
    Global Visibility, Routing and Scale

  Governance and Policy
Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
    Namespaces
    SSO
    Audit Logging
    Admin Partitions

License is valid

```
## put

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

This command sets the Consul Enterprise license.

Usage: `consul license put [options] LICENSE`
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
	Automated
 Backups
	Automated Upgrades
	Enhanced Read Scalability
	Network Segments
	Redundancy Zone
	Advanced Network Federation
```

get

This command gets the Consul Enterprise license.

Usage: `consul license get [options]`

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
	Automated Backups
```

```
      Automated Upgrades
      Enhanced Read Scalability
      Network Segments
      Redundancy Zone
      Advanced Network Federation
```

reset

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in
 a future release.

Resets license for the datacenter to the one builtin in Consul binary, if it is still valid.
If the builtin license is invalid, the current one stays active.

Usage: `consul license reset [options]`

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
      Automated Backups
      Automated Upgrades
      Enhanced Read Scalability
      Network Segments
      Redundancy Zone
      Advanced Network Federation
```

```
.consul-intention-permission-list {
 .detail > div {
   display: flex;
   width: 100%;
 }
 strong {
```

```
  margin-right: 8px;
 }
}
.consul-intention-permission-header-list {
 dt::before {
  @extend %with-glyph-icon;
  content: 'H';
 }
}
<Notice
 class="topology-metrics-notice"
 ...attributes
 @type={{@type}}
as |notice|>
  <notice.Header>
  <h3>
    {{t (concat "components.consul.topology-metrics.notice." @for ".header")}}
  </h3>
 </notice.Header>
 <notice.Body>
  <p>
   {{t (concat "components.consul.topology-metrics.notice." @for ".body")}}
  </p>
 </notice.Body>
{{#if @action}}
 <notice.Footer>
  <p>
    {{#if @internal}}
      <Action @href={{href-to (t (concat "components.consul.topology-metrics.notice." @for ".footer.URL"))}}>
        {{t (concat "components.consul.topology-metrics.notice." @for ".footer.name")}}
      </Action>
    {{else}}
      <Action @href={{@link}} @external={{true}}>
        {{t (concat "components.consul.topology-metrics.notice." @for ".footer")}}
      </Action>
    {{/if}}
  </p>
 </notice.Footer>
{{/if}}
</Notice>
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---
layout: docs
page_title: Consul Enterprise License FAQ
description: Frequently Asked Questions pertaining to Consul Enterprise Licensing.

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Consul Enterprise version 1.10.0.
Consul Enterprise automatically loads Consul licenses when the server agent starts.

Q: Can I get a quick summary of the Consul changes?

Starting with Consul Enterprise 1.10.0, the license enablement process is different.

HashiCorp Enterprise servers will no longer start without a license. Servers require licenses to be provided from either an environment variable or file.
If the license is missing, invalid, or expired, the server will immediately exit.
This check is part of the server boot-up process.

In previous versions of HashiCorp enterprise products, one server could distribute a license to other servers via the Raft protocol.
This will no longer work since each server must be able to find a valid license during
the startup process.

Q: What are the upgrade requirements?

All customers on Consul Enterprise 1.8/1.9 must first upgrade their client and server agents to the latest patch release.
During the upgrade the license file must also be configured on client agents in an environment variable or file path, otherwise the Consul agents will fail to retrieve the license with a valid agent token.
The upgrade process varies if ACLs are enabled or disabled in the cluster.
Refer to the instructions on [upgrading to 1.10.x](/docs/upgrading/instructions/upgrade-to-1-10-x) for details.

Q: Is there a tutorial available for the license configuration steps?

Please visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise).

Q: What resources are available?

The list below is a great starting point for learning more about the license changes introduced in Consul Enterprise 1.10.0+ent.

- [Consul Enterprise Upgrade Documentation](https://www.consul.io/docs/enterprise/upgrades)

-
[Consul License Documentation](/docs/enterprise/license)

- [License configuration values documentation](/docs/enterprise/license/overview#binaries-without-built-in-licenses)

- [Install a HashiCorp Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise)

Q: Do these changes impact all customers/licenses?

The license changes introduced in 1.10.0 only affect Consul Enterprise.
This impacts customers that have an enterprise binary (evaluation or non-evaluation licenses) downloaded from https://releases.hashicorp.com.
The license changes do not impact customers with the baked-in licensed binaries. In a later release of Consul Enterprise, baked-in binaries will be deprecated.

Q: What is the product behavior change introduced by the licensing changes?

Starting with Consul Enterprise 1.10.0, a valid license is required on-disk (auto-loading) or as an environment variable for Consul Enterprise to successfully boot-up.
The in-storage license feature will not be supported starting with Consul Enterprise 1.10.0+ent. All Consul Enterprise clusters using 1.10.0+ent must ensure that there is a valid license on-disk (auto-loaded) or as an environment variable.

Q: What is the impact on evaluation licenses due to this change?

The 6-hour trial period for evaluation licenses will be deprecated as of Consul Enterprise 1.10.0.
This means that any clusters deployed with Consul 1.10.0+ent binaries will need to have a valid license on the disk (auto-loaded) or as an environment variable.
Failure to provide a valid license key will result in the Consul server agent not starting.

Q: Is there a grace period when licenses expire?

A license includes an `expiration_date` and a `termination_date`. An enterprise binary will cease to function once the `termination_date` has passed.
Licenses will now have a 24 hrs grace period. The grace period is the time between license expiry until the time it terminates.
As Consul Enterprise approaches the expiration date, warnings will be issued in the system logs.

Q: Does this affect client agents?

There are upgrade requirements that affect Consul Enterprise clients.
Please review the [upgrade requirements](faq#q-what-are-the-upgrade-requirements) documentation.

Q: Does this affect snapshot agents?

Same behavior as Consul clients. See answer for [Does this affect client agents?](faq#q-does-this-affect-client-agents)

Q: What is the behavior if the license is missing?

Consul server agents will detect the absence of the license and immediately exit.

Consul client agents will attempt to retrieve the license from servers if certain conditions are met:

- ACLs are enabled.
- An ACL token is provided to the client agent.
- The client agents configuration contains `start_join/retry_join` addresses.
- The start/retry join addresses are addresses of the Consul servers.

Consul snapshot agents will attempt to retrieve the license from servers if certain conditions are met: ACLs are enabled, a ACL token is provided to the client agent, the client agents configuration contains `start_join/retry_join` addresses, the start/retry

join addresses are addresses of the Consul servers.

Q: Where can users get a trial license for Consul Enterprise?

Visit https://www.consul.io/trial for a free 30-day trial license.

Q: Are the license files locked to a specific cluster?

The license files are not locked to a specific cluster or cluster node. The above changes apply to all nodes in a cluster.

Q: Will this impact HCP Consul?

This will not impact HCP Consul.

Q: Does this need to happen every time a node restarts, or is this a one-time check?

Consul Enterprise binaries starting with 1.10.0+ent, will be subject to EULA check. Release 1.10.0+ent introduces the EULA check for evaluation licenses (non-evaluation licenses already go through EULA check during contractual agreement).

The
agreement to a EULA happens only once (when the user gets their license), Consul Enterprise **will check for the presence of a valid license every time a node restarts**.

When a customer upgrades existing clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be auto-loaded.

When a customer deploys new clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be on-disk (auto-loaded).

Q: What are the scenarios that a customer must plan for because of these changes?

New Consul cluster deployments using 1.10.0+ent will need to have a valid license on servers to successfully deploy.
This valid license must be on-disk (auto-loaded) or as an environment variable.
Please see the [upgrade requirements](faq#q-what-are-the-upgrade-requirements).

Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI
flow to the license on disk flow?

VM

1. Run [`consul license get -signed`](/commands/license#get) to extract the license from their running cluster. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have access to the required license. This could be via the client agent configuration file or an environment variable.

1. Visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise) for detailed steps on how to install the license key.
1. Follow the Consul upgrade [documentation](/docs/upgrading).

Kubernetes

NOTE: If you are not upgrading Consul or your Helm chart version then no action is required.

1. In order to use Consul Enterprise 1.10.0 or greater on Kubernetes you must use version 0.32.0 or greater of the Helm chart.
1. You should already have a Consul Enterprise license set as a Kubernetes secret. If you do not, then if you are an existing HashiCorp enterprise customer you may contact your organization's customer success manager (CSM) or email support-softwaredelivery@hashicorp.com for information on how to get your organization's enterprise license. Once you have the license then create a Kubernetes secret containing the license as described in [Kubernetes - Consul Enterprise](/docs/k8s/installation/deployment-configurations/consul-enterprise).
1. Follow the [Kubernetes Upgrade Docs](/docs/k8s/upgrade) to upgrade. No changes to your `values.yaml` file are needed to enable enterprise autoloading since this support is built in to consul-helm 0.32.0 and greater.

~> **WARNING:** If you are upgrading the Helm chart but **not** upgrading the Consul version, you must set `server.enterpriseLicense.enableLicenseAutoload: false`. See [Kubernetes - Consul Enterprise](/docs/k8s/installation/deployment-configurations/consul-enterprise) for more details.

Q: What is the migration path for customers who want to migrate from their existing perpetually-licensed binaries to the license on disk flow?

VM

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's customer success manager (CSM) or email support-softwaredelivery@hashicorp.com for information on how to get your organization's enterprise license.
1. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise) for detailed steps on how to install the license key.
1. Follow the Consul upgrade [documentation](/docs/upgrading).

Kubernetes

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's customer success manager (CSM) or email support-softwaredelivery@hashicorp.com for information on how to get your organization's enterprise license.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](https://learn.hashicorp.com/tutorials/nomad/hashicorp-enterprise-license?in=consul/enterprise) for detailed steps on how to install the license key.
1. Proceed with the `helm` [upgrade instructions](/docs/k8s/upgrade)

Q: Will Consul downgrades/rollbacks work?

When downgrading to a version of Consul before 1.10.0+ent, customers will need to follow the previous process for applying an enterprise licenses to Consul Enterprise.

Q: Are there potential pitfalls when downgrading or upgrading Consul server instances?

~> Verify that you meet the [upgrade requirements](faq#q-what-are-the-upgrade-requirements).

Assume
 a scenario where there are three Consul server nodes:

- Node A: v1.9.5
- Node B: v1.10.0 [Leader]
- Node C: v1.9.5

The command `consul license put` is issued from Node A. This will result in an error due to how Consul routes calls to the server node, Node B in this example.
Because Node A is a follower when the call `consul license put` is issued, the call will be redirected to Node B (leader).
The `consul license put` operation will fail due to being removed from 1.10.0.
This is a scenario that could occur if a customer downgrades from 1.10.0+ and the Consul leadership has not transferred back over to a node not running 1.10.0+.
This also has the potential of occurring when upgrading if scheduled license updates or autoscaling groups recoveries are in place.

Q: Any impacts to Consul Kubernetes?

If you are using a Consul Enterprise version prior to 1.10.0 and decide to upgrade the Helm chart to version 0.32.0 or newer,
 but not the Consul version.
You will need to add the following configuration.

```
server:
 enterpriseLicense:
   enableLicenseAutoload: false
```

```
.consul-intention-permission-list {
 dt::before {
   @extend %with-glyph-icon;
 }
 dl.permission-methods dt::before {
   content: 'M';
 }
 dl.permission-path dt::before {
   content: 'P';
 }
```

```
 dl.permission-header dt::before {
   content: 'H';
 }
}
{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-header-list"
 @items={{items}}
 @scroll="native"
 @cellHeight={{42}}
as |item|>
 <BlockSlot @name="details">
   <dl>
     <dt>
       <Tooltip>
         Header
       </Tooltip>
     </dt>
     <dd>
       {{item.Name}} {{route-match item}}
     </dd>
   </dl>
 </BlockSlot>
 <BlockSlot @name="actions" as |Actions|>
   <Actions as |Action|>
     <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
       <BlockSlot @name="label">
         Delete
       </BlockSlot>
       <BlockSlot @name="confirmation" as |Confirmation|>
         <Confirmation class="warning">
           <BlockSlot @name="header">
             Confirm delete
           </BlockSlot>
           <BlockSlot @name="body">
             <p>
               Are you sure you want to delete this header?
             </p>
           </BlockSlot>
           <BlockSlot @name="confirm" as |Confirm|>
             <Confirm>Delete</Confirm>
           </BlockSlot>
         </Confirmation>
       </BlockSlot>
     </Action>
   </Actions>
 </BlockSlot>
</ListCollection>
```

```
{{/if}}
Mozilla Public License 2.0 (MPLv2.0)
package api

import (
 "io/ioutil"
 "strings"
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`

 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // The product the license is valid for
 Product string `json:"product"`

 // License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list
 of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}
```

```
type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := ioutil.ReadAll(resp.Body)
 if err != nil {
  return "", err
 }

 return string(data), nil
}

// LicenseReset will reset the license to the builtin one if it is still valid.
// If
 the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
```

```
 return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r
 := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-list{{if (not onclick) ' readonly'}}"
 @scroll="native"
 @items={{items}}
 @partial={{5}}
as |item|>
 <BlockSlot @name="details">
   <div onclick={{action (optional onclick) item}}>
     <strong class={{concat 'intent-' item.Action}}>{{capitalize item.Action}}</strong>
{{#if (gt item.HTTP.Methods.length 0)}}
```

```
      <dl class="permission-methods">
        <dt>
          <Tooltip>
            Methods
          </Tooltip>
        </dt>
        <dd>
{{#each item.HTTP.Methods as |item|}}
          {{item}}
{{/each}}
        </dd>
      </dl>
{{/if}}
{{#if item.HTTP.Path}}
      <dl class="permission-path">
        <dt>
          <Tooltip>
            {{item.HTTP.PathType}}
          </Tooltip>
        </dt>
        <dd>
          {{item.HTTP.Path}}
        </dd>
      </dl>
{{/if}}
{{#each item.HTTP.Header as |item|}}
      <dl class="permission-header">
        <dt>
           <Tooltip>
            Header
          </Tooltip>
        </dt>
        <dd>
          {{item.Name}} {{route-match item}}
        </dd>
      </dl>
{{/each}}
  </div>
 </BlockSlot>
{{#if onclick}}
 <BlockSlot @name="actions" as |Actions|>
  <Actions as |Action|>
    <Action data-test-edit-action @onclick={{action (optional onclick) item}} @close={{true}}>
      <BlockSlot @name="label">
        Edit
      </BlockSlot>
    </Action>
    <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
```

```
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you want to delete this permission?
            </p>
          </BlockSlot>
           <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
{{/if}}
</ListCollection>
{{/if}}
%notice {
 position: relative;
 padding: 0.8rem;
}
%notice header {
 margin-bottom: 0.1rem;
}
%notice header > * {
 margin-bottom: 0;
}
%notice p {
 margin-bottom: 0.3rem;
 line-height: 1.4;
}
/* this is probably skin */
%notice {
 padding-left: calc(0.8rem + 1.4rem);
}
%notice::before {
 position: absolute;
 top: 0.8rem;
 left: 0.6rem;
 font-size: 1rem;
}
```

Notice

Presentational component for informational/warning/error banners/notices.

```hbs preview-template
<Notice
 @type={{this.type}}
as |notice|>
 <notice.Header>
   <h3>Header</h3>
 </notice.Header>
 <notice.Body>
   <p>
     Body
   </p>
 </notice.Body>
 <notice.Footer>
   <p>
     <a href="">Footer link</a>
   </p>
 </notice.Footer>
</Notice>

<figure>
 <figcaption>Provide a widget to change the <code>@type</code></figcaption>

 <select
   onchange={{action (mut this.type) value="target.value"}}
 >
   <option>info</option>
   <option>success</option>
   <option>warning</option>
   <option>error</option>
 </select>

</figure>
```

Arguments

Argument/Attribute	Type	Default	Description
`type`	`String`	`info`	Type of notice [info|warning|error]

See

- [Template Source Code](./index.hbs)

```
---
@import './skin';
@import './layout';
Copyright  2014-2018 HashiCorp, Inc.

This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this project, you can obtain one at http://mozilla.org/MPL/2.0/.
<Notice
 class="consul-intention-notice-custom-resource crd"
 ...attributes
 @type={{or @type "info"}}
as |notice|>
 <notice.Header>
   <h3>
     Intention Custom Resource
   </h3>
 </notice.Header>
 <notice.Body>
   <p>
     Some of your intentions are being managed through an Intention Custom Resource in your Kubernetes cluster. Those managed intentions will be view only in the UI. Any intentions created in the UI will work but will not be synced to the Custom Resource Definition (CRD) datastore.
   </p>
 </notice.Body>
 <notice.Footer>
   <p>
     <a href="{{env 'CONSUL_DOCS_URL'}}/k8s/crds" target="_blank" rel="noopener noreferrer">Learn more about CRDs</a>
   </p>
 </notice.Footer>
</Notice>
@import './skin';
@import './layout';

%notice {
 margin: 1em 0;
}
/**/
.notice.success {
 @extend %notice-success;
}
.notice.warning {
 @extend %notice-warning;
}
.notice.error {
 @extend %notice-error;
}
```

```
.notice.info {
 @extend %notice-info;
}
.notice.highlight {
 @extend %notice-highlight;
}
.notice.policy-management {
 @extend %notice-highlight;
}
.notice.crd::before {
 -webkit-mask-image: none;
 mask-image: none;
 background-color: transparent;
 @extend %with-logo-kubernetes-color-icon;
}
%notice {
 border-radius: var(--decor-radius-100);
 border: var(--decor-border-100);
 color: rgb(var(--tone-gray-999));
}
%notice::before {
 @extend %as-pseudo;
}
%notice header > * {
 @extend %h300;
}
%notice footer * {
 @extend %p3;
 font-weight: var(--typo-weight-bold);
}
%notice-success,
%notice-info,
%notice-highlight,
%notice-error,
%notice-warning {
 @extend %notice;
}
%notice-success {
 background-color: rgb(var(--tone-green-050));
 border-color: rgb(var(--tone-green-500));
}
%notice-success header * {
 color: rgb(var(--tone-green-800));
}
%notice-info {
 border-color: rgb(var(--tone-blue-100));
 background-color: rgb(var(--tone-blue-010));
}
```

```
%notice-info header * {
 color: rgb(var(--tone-blue-700));
}
%notice-highlight {
 background-color: rgb(var(--tone-gray-050));
 border-color: rgb(var(--tone-gray-300));
}
%notice-info header * {
 color: rgb(var(--tone-blue-700));
}
%notice-warning {
 border-color: rgb(var(--tone-yellow-100));
 background-color: rgb(var(--tone-yellow-050));
}
%notice-warning
 header * {
 color: rgb(var(--tone-yellow-800));
}
%notice-error {
 background-color: rgb(var(--tone-red-050));
 border-color: rgb(var(--tone-red-500));
}
%notice-error header * {
 color: rgb(var(--tone-red-500));
}
%notice-success::before {
 @extend %with-check-circle-fill-mask;
 color: rgb(var(--tone-green-500));
}
%notice-info::before {
 @extend %with-info-circle-fill-mask;
 color: rgb(var(--tone-blue-500));
}
%notice-highlight::before {
 @extend %with-star-fill-mask;
 color: rgb(var(--tone-yellow-500));
}
%notice-warning::before {
 @extend %with-alert-triangle-mask;
 color: rgb(var(--tone-orange-500));
}
%notice-error::before {
 @extend %with-cancel-square-fill-mask;
 color: rgb(var(--tone-red-500));
}
```

1.1733 kubernetes-klog 2.130.1

1.1733.1 Available under license :

Apache License
Version 2.0, January 2004
http://www.apache.org/licenses/

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1.1734 alexflint-go-filemutex 1.3.0

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1.1735 github.com/go-redsync/redsync/v4 4.13.0

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1.1736 jbig-kit 2.1

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NR START END SECTORS SIZE NAME UUID
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5 7936 12799 4864 2.4M
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With Secondary Licenses, as defined by
the Mozilla Public License, v. 2.0.

```
<div
 ...attributes
 class="consul-intention-permission-form"
>
<FormGroup
 @name={{name}}
as |group|>

 {{yield (hash
   submit=(action 'submit' changeset)
   reset=(action 'reset' changeset)
```

```
  isDirty=(and changeset.isValid)
  changeset=changeset
)}}

<fieldset>
  <div data-property="action">
    <span class="label">
      Should this permission allow the source connect to the destination?
    </span>
    <div role="radiogroup" class={{if changeset.error.Action ' has-error'}}>
      {{#each intents as |intent|}}
        <label>
          <span>{{capitalize intent}}</span>
          <input
            type="radio"
            name="Action"
            value={{intent}}
            checked={{if (eq changeset.Action intent) 'checked'}}
            onchange={{action (changeset-set changeset 'Action') value="target.value"}}
          />
        </label>
      {{/each}}
    </div>
  </div>
</fieldset>

<fieldset>
  <header>
    <h2>Path</h2>
   </header>
  <div>
      <group.Element
        @name="PathType"
        @type="select"
      as |el|>
        <el.Label>
          Path type
        </el.Label>
        <PowerSelect
          @options={{pathTypes}}
          @selected={{pathType}}
          @onChange={{action 'change' 'HTTP.PathType' changeset}} as |Type|>
            {{get pathLabels Type}}
        </PowerSelect>
      </group.Element>

{{#if shouldShowPathField}}
      <group.Element
```

```
        @name="Path"
        @error={{changeset-get changeset 'error.HTTP.Path'}}
      as |el|>
        <el.Label>
          {{get pathLabels pathType}}
        </el.Label>
        <el.Text
          @value={{changeset-get changeset 'HTTP.Path'}}
          oninput={{action 'change' 'HTTP.Path' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{#if (eq (changeset-get changeset 'HTTP.Path') 'Regex')}}

          Path Regex should not be blank
            {{else}}
              Path should begin with a '/'
            {{/if}}
          </el.Error>
        </State>
      </group.Element>
{{/if}}

  </div>
 </fieldset>

 <fieldset>
  <h2>Methods</h2>
  <div class="type-toggle">
    <span>All methods are applied by default unless specified</span>
    <group.Element
      @name="allMethods"
    as |el|>
      <el.Checkbox
        checked={{if allMethods 'checked'}}
        onchange={{action 'change' 'allMethods' changeset}}
      />
      <el.Label>
        All Methods
      </el.Label>
    </group.Element>
  </div>

{{#if shouldShowMethods}}
  <div class="checkbox-group" role="group">
    {{#each methods as |method|}}
      <label class="type-checkbox">
        <input
```

```
          type="checkbox"
          name="method"
          value={{method}}
          checked={{if (includes method changeset.HTTP.Methods) 'checked'}}

      onchange={{action 'change' 'method' changeset}}
        />
        <span>{{method}}</span>
      </label>
    {{/each}}
  </div>
{{/if}}
 </fieldset>

 <fieldset>
  <h2>Headers</h2>

  <Consul::Intention::Permission::Header::List
    @items={{changeset-get changeset 'HTTP.Header'}}
    @ondelete={{action 'delete' 'HTTP.Header' changeset}}
  as |headerList|>

  </Consul::Intention::Permission::Header::List>

  <Consul::Intention::Permission::Header::Form
    @onsubmit={{action 'add' 'HTTP.Header' changeset}}
  as |headerForm|>
    <Ref @target={{this}} @name="headerForm" @value={{headerForm}} />
  </Consul::Intention::Permission::Header::Form>

  <button
    data-test-add-header
    type="button"
    class="type-submit"
    disabled={{if (not this.headerForm.isDirty) 'disabled'}}
    onclick={{action this.headerForm.submit}}
  >
    Add{{#if (gt (get (changeset-get changeset 'HTTP.Header') 'length') 0)}} another{{/if}} header
  </button>
   <button
    type="button"
    class="type-cancel"
    onclick={{action this.headerForm.reset}}
  >
    Cancel
  </button>

 </fieldset>
```

```
 </FormGroup>
</div>
<div
 ...attributes
 class="consul-intention-permission-header-form"
>
 <FormGroup
   @name={{name}}
 as |group|>

   {{yield (hash
     submit=(action 'submit' changeset)
     reset=(action 'reset' changeset)

     isDirty=(and changeset.isValid changeset.isDirty)
     changeset=changeset
   )}}

   <fieldset>
     <div>
       <group.Element
         @name="HeaderType"
         @type="select"
       as |el|>
         <el.Label>Header type</el.Label>
         <PowerSelect
           @options={{headerTypes}}
           @selected={{headerType}}
           @onChange={{action 'change' 'HeaderType' changeset}} as |Type|>
             {{get headerLabels Type}}
         </PowerSelect>
       </group.Element>


       <group.Element
         @name="Name"
         @error={{changeset-get changeset 'error.Name'}}
       as |el|>
         <el.Label>Header name</el.Label>
         <el.Text
           @value={{changeset-get changeset 'Name'}}
           oninput={{action
 'change' 'Name' changeset}}
         />
         <State @state={{el.state}} @matches="error">
           <el.Error>
             {{changeset-get changeset 'error.Name.validation'}}
           </el.Error>
```

```
        </State>
      </group.Element>

 {{#if shouldShowValueField}}
      <group.Element
        @name="Value"
        @error={{changeset-get changeset 'error.Value'}}
      as |el|>
        <el.Label>Header {{lowercase (get headerLabels headerType)}}</el.Label>
        <el.Text
          @value={{changeset-get changeset 'Value'}}
          oninput={{action 'change' 'Value' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Value.validation'}}
          </el.Error>
        </State>
      </group.Element>
 {{/if}}

    </div>
  </fieldset>
 </FormGroup>
</div>
---
layout: api
page_title: License - Operator - HTTP API
description: |-
 The /operator/license endpoint allows for retrieving the Consul
 Enterprise License.
---

# License - Operator HTTP API

<EnterpriseAlert />

The licensing functionality described here is available only in
[Consul Enterprise](https://www.hashicorp.com/products/consul/) version 1.1.0 and later.

## Getting the Consul License

This endpoint gets information about the current license.

| Method | Path                | Produces           |
| ------ | ------------------- | ------------------ |
| `GET`  | `/operator/license` | `application/json` |
```

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

| Blocking Queries | Consistency Modes | Agent Caching | ACL Required |
| ----------------
 | ---------- | ---------- | ---------- |
| `NO` | `all` | `none` | `none` |

The corresponding CLI command is [`consul license get`](/consul/commands/license#get).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be retrieved.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
   http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",

     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
```

```
    "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```

Updating the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint updates the Consul license and returns some of the
license contents as well as any warning messages regarding its validity.

Method	Path	Produces
`PUT`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license put`](/consul/commands/license#put).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Payload

The payload is the raw license blob.

Sample Request

```shell-session
$ curl \
  --request PUT \
  --data @consul.license \
```

http://127.0.0.1:8500/v1/operator/license
```

### Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product":
 "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
     "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

Resetting the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint resets the Consul license to the license included in the Enterprise binary. If the included license is not valid, the replace will fail.

Method	Path	Produces
`DELETE`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
```

[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching),
 and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license reset`](/consul/commands/license#reset).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
  --request DELETE \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
  "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
  "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
  "installation_id": "*",
  "issue_time": "2018-05-21T20:03:35.911567355Z",
  "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
  "product": "consul",
  "flags": {
    "package": "premium"
  },
  "features": [
    "Automated Backups",
    "Automated Upgrades",
    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation"
  ],
```

```
  "temporary": false
 },
 "Warnings": []
}
```
```
.consul-intention-permission-form {
 h2 {
   padding-top: 1.4em;
   margin-top: 0.2em;
   margin-bottom: 0.6em;
 }
 .consul-intention-permission-header-form {
   margin-top: 10px;
 }
 fieldset:nth-child(2) > div,
 .consul-intention-permission-header-form fieldset > div {
   display: grid;
   grid-template-columns: repeat(auto-fit, minmax(160px, 1fr));
   grid-gap: 12px;
 }
 fieldset:nth-child(2) > div label:last-child {
   grid-column: span 2;
 }
 .ember-basic-dropdown-trigger {
   padding: 5px;
 }
 .checkbox-group {
   flex-direction: column;
 }
}
<Notice
 @type="info"
as |notice|>
 <notice.Body>
   <p>
     {{t "components.consul.intention.notice.permissions.body"}}
   </p>
 </notice.Body>
 <notice.Footer>
   <p>
     <a href="{{env 'CONSUL_DOCS_URL'}}/connect/intentions" target="_blank" rel="noopener noreferrer">
       {{t "components.consul.intention.notice.permissions.footer"}}
     </a>
   </p>
 </notice.Footer>
</Notice>
---
layout: docs
```

page_title: Storing the Enterprise License in Vault
description: >-
 Configuring the Consul Helm chart to use an enterprise license stored in Vault.

Storing the Enterprise License in Vault

This topic describes how to configure the Consul Helm chart to use an enterprise license stored in Vault.
Overview
Complete the steps outlined in the [Data Integration](/consul/docs/k8s/deployment-configurations/vault/data-integration) section to use an enterprise license stored in Vault.

Complete the following steps once:
 1. Store the secret in Vault.
 1. Create a Vault policy that authorizes the desired level of access to the secret.

Repeat the following steps for each datacenter in the cluster:
 1. Create Vault Kubernetes auth roles that link the policy to each Consul on Kubernetes service account that requires access.
 1. Update the Consul on Kubernetes helm chart.

Prerequisites
Prior to setting up the data integration between Vault and Consul on Kubernetes,
 you will need to have:
1. Read and completed the steps in the [Systems Integration](/consul/docs/k8s/deployment-configurations/vault/systems-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).
2. Read the [Data Integration Overview](/consul/docs/k8s/deployment-configurations/vault/data-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).

Store the Secret in Vault

First, store the enterprise license in Vault:

```shell-session
$ vault kv put secret/consul/license key="<enterprise license>"
```

Create Vault policy

Next, you will need to create a policy that allows read access to this secret.

The path to the secret referenced in the `path` resource is the same value that you will configure in the `global.enterpriseLicense.secretName` Helm configuration (refer to [Update Consul on Kubernetes Helm chart](#update-consul-on-kubernetes-helm-chart)).

<CodeBlockConfig filename="license-policy.hcl">

```HCL
path
 "secret/data/consul/license" {
 capabilities = ["read"]
}
```

</CodeBlockConfig>

Apply the Vault policy by issuing the `vault policy write` CLI command:

```shell-session
$ vault policy write license-policy license-policy.hcl
```

Create Vault Authorization Roles for Consul

Next, you will create Kubernetes auth roles for the Consul server and client:

```shell-session
$ vault write auth/kubernetes/role/consul-server \
   bound_service_account_names=<Consul server service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

```shell-session
$ vault write auth/kubernetes/role/consul-client \
   bound_service_account_names=<Consul client service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

To find out the service account names of the Consul server and client,
you can run the following `helm
 template` commands with your Consul on Kubernetes values file:

- Generate Consul server service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/server-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

- Generate Consul client service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/client-serviceaccount.yaml hashicorp/consul -f
 ```

values.yaml
```

## Update Consul on Kubernetes Helm chart.

Now that you have configured Vault, you can configure the Consul Helm chart to
use the enterprise enterprise license in Vault:

<CodeBlockConfig filename="values.yaml">

```yaml
global:
 image: hashicorp/consul-enterprise:1.12.0-ent
 secretsBackend:
   vault:
     enabled: true
     consulServerRole: consul-server
     consulClientRole: consul-client
 enterpriseLicense:
   secretName: secret/data/consul/enterpriselicense
   secretKey: key
```

</CodeBlockConfig>

Note that `global.enterpriseLicense.secretName`
 is the path of the secret in Vault.
This should be the same path as the one you included in your Vault policy.
`global.enterpriseLicense.secretKey` is the key inside the secret data. This should be the same
as the key you passed when creating the enterprise license secret in Vault.
The MIT License (MIT)

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```

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 OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
.consul-intention-permission-header-list {
 max-height: 200px;
 overflow: auto;
}
@import './skin';
@import './layout';
.consul-intention-permission-header-list {
 > ul > li {
   @extend %list-row-200;
 }
}
---
layout: docs
page_title: Consul-Terraform-Sync Enterprise License
description: >-
 Consul-Terraform-Sync Enterprise License

Consul-Terraform-Sync Enterprise License

<EnterpriseAlert>
 Licenses are only required for Consul-Terraform-Sync (CTS) Enterprise

</EnterpriseAlert>

CTS Enterprise binaries require a [Consul Enterprise license](/consul/docs/enterprise/license/overview) to run. There is no CTS Enterprise specific license. As a result, CTS Enterprise's licensing is very similar to Consul Enterprise.

All CTS Enterprise features are available with a valid Consul Enterprise license, regardless of your Consul Enterprise packaging or pricing model.

To get a trial license for CTS, you can sign-up for the [trial license for Consul Enterprise](/consul/docs/enterprise/license/faq#q-where-can-users-get-a-trial-license-for-consul-enterprise).

Automatic License Retrieval

CTS automatically retrieves a license from Consul on startup and then attempts to retrieve a new license once a day. If the current license is reaching its expiration date, CTS attempts to retrieve a license with increased frequency, as defined by the [License Expiration Date Handling](/consul/docs/nia/enterprise/license#license-expiration-handling).

~> Enabling automatic license retrieval is recommended when using HCP Consul, as HCP Consul licenses expire more frequently than Consul Enterprise licenses. Without auto-retrieval enabled, you have to restart CTS every time you load a new license.

Setting the License Manually

If a license needs to be manually set, choose one of the following methods (in order of precedence) to set the license:

1. Set the `CONSUL_LICENSE` environment variable to the license string.

```shell-session
export CONSUL_LICENSE=<LICENSE_VALUE>
```

1. Set the `CONSUL_LICENSE_PATH` environment variable to the path of the file containing the license.

```shell-session
export CONSUL_LICENSE_PATH=<PATH>/<TO>/<FILE>
```

1. To point to the file containing the license, in the configuration file, configure the [`license`](/consul/docs/nia/configuration#license) path option.

```hcl
license {
  path = "<PATH>/<TO>/<FILE>"
}
```

1. To point to the file containing the license, in the configuration file, configure the [`license_path`](/consul/docs/nia/configuration#license_path) option i. **Deprecated in CTS 0.6.0 and will be removed in a future release. Use [license block](/consul/docs/nia/configuration#license) instead.**

```hcl
license_path = "<PATH>/<TO>/<FILE>"
```

~> **Note**: the [options to set the license and the order of precedence](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses) are the same as Consul Enterprise server agents.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Updating the License Manually
To update the license when it expires or is
near the expiration date and automatic license retrieval is disabled:

1. Update the license environment variable or configuration with the new license value or path to the new license file
1. Stop and restart CTS Enterprise

Once CTS Enterprise starts again, it will pick up the new license and run the tasks with any changes that may have occurred between the stop and restart period.

License Expiration Handling

Licenses have an expiration date and a termination date. The termination date is a time at or after the license expires. CTS Enterprise will cease to function once the termination date has passed.

The time between the expiration and termination dates is a grace period. Grace periods are generally 24-hours, but you should refer to your license agreement for complete terms of your grace period.

When approaching expiration and termination, by default, CTS Enterprise will attempt to retrieve a new license. If auto-retrieval is disabled, CTS Enterprise will provide notifications
in the system logs:

Time period	Behavior - auto-retrieval enabled (default)	Behavior - auto-retrieval disabled
30 days before expiration	License retrieval attempt every 24-hours	Warning-level log every 24-hours
7 days before expiration	License retrieval attempt every 1 hour	Warning-level log every 1 hour
1 day before expiration	License retrieval attempt every 5 minutes	Warning-level log every 5 minutes
1 hour before expiration	License retrieval attempt every 1 minute	Warning-level log every 1 minute
At or after expiration (before termination)	License retrieval attempt every 1 minute	Error-level log every 1 minute

```
| At or after termination                    | Error-level log
 and exit                    | Error-level log and exit          |

~> **Note**: Notification frequency and [grace period](/consul/docs/enterprise/license/faq#q-is-there-a-grace-period-when-licenses-expire) behavior is the same as Consul Enterprise.
@import './skin';
@import './layout';
.consul-intention-permission-list > ul > li {
 @extend %list-row-200;
}
.consul-intention-permission-list:not(.readonly) > ul > li {
 @extend %with-composite-row-intent;
}
.consul-intention-permission-list strong {
 @extend %pill-500;
}
.consul-intention-permission-list .intent-allow {
 @extend %pill-allow;
}
.consul-intention-permission-list .intent-deny {
 @extend %pill-deny;
}
<div
 class="notice {{or @type 'info'}}"
 ...attributes
>
{{yield (hash
 Header=(component 'anonymous' tagName="header")
 Body=(component 'anonymous')
 Footer=(component 'anonymous' tagName="footer")
)}}
</div>
<Route
 @name={{routeName}}
as |route|>
 <DataLoader
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition=route.params.partition
       nspace=route.params.nspace
       dc=route.params.dc
     )
   }}
 as |loader|>

{{#let
 loader.data
```

```
as |item|}}
  <BlockSlot @name="error">
    <ErrorState
      @error={{loader.error}}
      @login={{route.model.app.login.open}}
    />
  </BlockSlot>

  <BlockSlot @name="disconnected" as |after|>
    {{#if (eq loader.error.status "404")}}
      <Notice
        {{notification
          sticky=true
        }}
        class="notification-update"
        @type="warning"
      as |notice|>
        <notice.Header>
          <strong>Warning!</strong>
        </notice.Header>
        <notice.Body>
          <p>
            This service has been deregistered and no longer exists in the catalog.
          </p>
        </notice.Body>
      </Notice>
    {{else if (eq
 loader.error.status "403")}}
      <Notice
        {{notification
          sticky=true
        }}
        class="notification-update"
        @type="error"
      as |notice|>
        <notice.Header>
          <strong>Error!</strong>
        </notice.Header>
        <notice.Body>
          <p>
            You no longer have access to this service
          </p>
        </notice.Body>
      </Notice>
    {{else}}
      <Notice
        {{notification
          sticky=true
```

```
      }}
      class="notification-update"
      @type="warning"
    as |notice|>
      <notice.Header>
        <strong>Warning!</strong>
      </notice.Header>
      <notice.Body>
        <p>
          An error was returned whilst loading this data, refresh to try again.
        </p>
      </notice.Body>
    </Notice>
  {{/if}}
</BlockSlot>

<BlockSlot @name="loaded">
  <div class="tab-section">
    <section
      class={{class-map
        'validity'
        (array 'valid' item.Valid)
      }}
    >
      <header>
        <h2>
          {{compute (fn route.t 'expiry.header')}}
        </h2>
      </header>

      <p>
        {{compute (fn route.t 'expiry.${type}.body'
          (hash
            type=(if item.Valid 'valid' 'expired')
            date=(format-time item.License.expiration_time
              year='numeric'
              month='long'
              day='numeric'
            )
            time=(format-time item.License.expiration_time
              hour12=true
              hour='numeric'
              hourCycle='h12'
              minute='numeric'
              second='numeric'
              timeZoneName='short'
            )
            htmlSafe=true
```

```
            )
          )}}
        </p>

        <dl>
          <dt class={{class-map
              (array
 'valid' item.Valid)
              (array 'expired' (not item.Valid))
              (array 'warning' (temporal-within item.License.expiration_time 2629800000))
            }}
          >
            {{compute (fn route.t 'expiry.${type}.header'
              (hash
                type=(if item.Valid 'valid' 'expired')
              )
            )}}
          </dt>
          <dd>
            {{temporal-format item.License.expiration_time}}
          </dd>
        </dl>

        <aside>
          <header>
            <h3>
              {{compute (fn route.t 'documentation.title')}}
            </h3>
          </header>
          {{compute (fn route.t 'documentation.body'
            (hash
              htmlSafe=true
            )
          )}}
        </aside>

      </section>
    </div>
  </BlockSlot>
{{/let}}
 </DataLoader>
</Route>
.consul-intention-permission-list {
 .detail > div {
   display: flex;
   width: 100%;
 }
 strong {
```

```
  margin-right: 8px;
 }
}
{
 "Valid": true,
 "License": {
  "license_id": "${fake.random.uuid()}",
  "customer_id": "${fake.random.uuid()}",
  "installation_id": "*",
  "issue_time": "2021-01-13T15:25:19.052900132Z",
  "start_time": "2021-01-13T00:00:00Z",
  "expiration_time": "${env('CONSUL_LICENSE_EXPIRATION', '2022-05-02T23:59:59.999Z')}",
  "termination_time": "${env('CONSUL_LICENSE_TERMINATION', '2022-01-13T23:59:59.999Z')}",
  "product": "consul",
  "flags": {
    "modules": [
      "global-visibility-routing-scale",
      "governance-policy"
    ]
  },
  "modules": [
    "Global Visibility, Routing and Scale",
    "Governance and Policy"
  ],
  "features": [
    "Automated Backups",
    "Automated Upgrades",
    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation",
    "Namespaces",
    "SSO",
    "Audit Logging",
    "Admin Partitions"
  ]
 },
 "Warnings": [
 ]
}
.consul-intention-permission-header-list {
 dt::before {
  @extend %with-glyph-icon;
  content: 'H';
 }
}
package api
```

```
import (
 "io"
 "strings"
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`

 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // Whether the license will ignore termination
 IgnoreTermination bool `json:"ignore_termination"`

 // The product the license is valid for
 Product string `json:"product"`

 //
 License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}

type LicenseReply struct {
```

```
 Valid    bool
 License  *License
 Warnings []string
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := io.ReadAll(resp.Body)
 if err != nil {
  return "", err
 }

 return string(data), nil
}

//
 LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
```

```
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator)
 LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
```

Proprietary License

This license is temporary while a more official one is drafted. However,
this should make it clear:

The text contents of this website are MPL 2.0 licensed.

The design contents of this website are proprietary and may not be reproduced
or reused in any way other than to run the website locally. The license for
the design is owned solely by HashiCorp, Inc.

License

```hbs preview-template
<figure>
 <figcaption>URI: <code>/:partition/:nspace/:dc/license</code></figcaption>
 <DataSource
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition='partition'
       nspace='ns'
       dc='dc-1'
     )
   }}
   @onchange={{action (mut data) value="data"}}
 />
 <pre><code>{{json-stringify data null 4}}</code></pre>
</figure>
```
.agentless-node-notice header {
 display: flex;
 justify-content: space-between;
}
---
layout: commands
page_title: 'Commands: License'
description: >
 The license command provides a datacenter-level view of the Consul
 Enterprise license.

Consul License

Command: `consul license`

<EnterpriseAlert />

The `license` command provides a list of all datacenters that use the Consul Enterprise license applied to the current datacenter.

~> **Warning**: Consul 1.10.0 removed the ability to set and reset the license using the CLI.
See the [licensing documentation](/consul/docs/enterprise/license/overview) for more information about
Consul Enterprise license management.

If ACLs are enabled then a token with operator privileges may be required in
order to use this command. Requests are forwarded internally to the leader
if required, so this can be run from any Consul node in a cluster. See the
[ACL Guide](/consul/tutorials/security/access-control-setup-production) for more information.

```text
```

Usage: consul license <subcommand> [options] [args]

This command has subcommands
for managing the Consul Enterprise license
Here are some simple examples, and more detailed examples are
available in the subcommands or the documentation.

Install a new license from a file:

$ consul license put @consul.license

Install a new license from stdin:

$ consul license put -

Install a new license from a string:

$ consul license put "<license blob>"

Retrieve the current license:

$ consul license get

Inspect a license:

$ consul license inspect "<path to license file>"

Reset the current license:

$ consul license reset

For more examples, ask for subcommand help or view the documentation.

Subcommands:
get Get the active license
inspect Inspect a signed license
put Puts a new license in the datacenter
reset Resets the license in the datacenter

```

## inspect

This command inspects and validates a license. Just like a Consul agent it
can load the license from a file
on disk or from the `CONSUL_LICENSE` and
`CONSUL_LICENSE_PATH` environment variables.
```

Usage: `consul license inspect [<options>] [<license file>]`

Inspect a license contained in a file:

```
$ consul license inspect consul.hclic
```

Inspect a license loaded from the environment:

```
$ consul license inspect
```

This will look at the CONSUL_LICENSE environment variable first
and if not present then we will look for the file specified
by the CONSUL_LICENSE_PATH environment variable.

The output looks like this:

```
Source: /consul/config/consul.hclic (path from the CONSUL_LICENSE_PATH environment variable)
Product: consul
License ID: 6089174b-a713-74cf-4c8d-856b86f1ce50
Customer ID: 7c020610-60a2-7ccb-c210-20d899e5f3b4
Installation ID: *
Issue Time: 2020-09-14 19:45:56.212195875 +0000 UTC
Start Time: 2020-09-14 00:00:00 +0000 UTC
Expiration Time: 2021-09-14 23:59:59.999 +0000 UTC
Termination Time: 2021-09-14 23:59:59.999 +0000 UTC
Modules:
    Global Visibility, Routing and Scale
     Governance and Policy
Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
    Namespaces
    SSO
    Audit Logging
    Admin Partitions

License is valid

```

put

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[PUT\] /v1/operator/license](/consul/api-docs/operator/license#updating-the-consul-license)

This command sets the Consul Enterprise license.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be
 from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license put [options] LICENSE`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

get

Corresponding HTTP API Endpoint: [\[GET\] /v1/operator/license](/consul/api-docs/operator/license#getting-the-consul-license)

This command gets the Consul Enterprise license.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking)
 and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`none`

Usage: `consul license get [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

reset

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed

in a future release.

Corresponding HTTP API Endpoint: [\[DELETE\] /v1/operator/license](/consul/api-docs/operator/license#resetting-the-consul-license)

Resets license for the datacenter to the one builtin in Consul binary, if it is still valid.
If the builtin license is invalid, the current one stays active.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license reset [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
	Automated Backups
	 Automated Upgrades
	Enhanced Read Scalability
	Network Segments
	Redundancy Zone
	Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'
.consul-intention-permission-list {
 dt::before {
   @extend %with-glyph-icon;
 }
 dl.permission-methods dt::before {
   content: 'M';

```
 }
 dl.permission-path dt::before {
   content: 'P';
 }
 dl.permission-header dt::before {
   content: 'H';
 }
}
{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-header-list"
 @items={{items}}
 @scroll="native"
 @cellHeight={{42}}
as |item|>
 <BlockSlot @name="details">
   <dl>
     <dt>
       <Tooltip>
         Header
       </Tooltip>
     </dt>
     <dd>
       {{item.Name}} {{route-match item}}
     </dd>
   </dl>
 </BlockSlot>
 <BlockSlot @name="actions" as |Actions|>
   <Actions as |Action|>
     <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
       <BlockSlot @name="label">
         Delete
       </BlockSlot>
       <BlockSlot @name="confirmation" as |Confirmation|>
         <Confirmation class="warning">
           <BlockSlot @name="header">
             Confirm delete
           </BlockSlot>
           <BlockSlot @name="body">
             <p>
               Are you sure you want to delete this header?
             </p>
           </BlockSlot>
           <BlockSlot @name="confirm" as |Confirm|>
             <Confirm>Delete</Confirm>
           </BlockSlot>
         </Confirmation>
       </BlockSlot>
```

```
    </Action>
   </Actions>
 </BlockSlot>
</ListCollection>
{{/if}}
```

Mozilla Public License 2.0 (MPLv2.0)

```
---
layout: docs
page_title: Enterprise License FAQ
description: >-
 Review frequently asked questions (FAQs) about Consul Enterprise licenses to learn more about how licenses work, what happens when they expire, and how to get a trial license.
---
```

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Consul Enterprise version 1.10.0.
Consul Enterprise automatically loads Consul licenses when the server agent starts.

Q: Can I get a quick summary of the Consul changes?

Starting with Consul Enterprise 1.10.0, the license enablement process is different.

HashiCorp Enterprise servers will no longer start without a license. Servers require licenses to be provided from either an environment variable or file.
If the license is missing, invalid, or expired, the server will immediately exit.
This check is part of the server boot-up process.

In previous versions of HashiCorp enterprise products, one server could distribute a license to other servers via the Raft protocol.
This will no longer work since each server must be able to find a valid license during the startup process.

Q: What are the upgrade requirements?

All customers on Consul Enterprise 1.8/1.9 must first upgrade their client and server agents to the latest patch release.
During the upgrade the license file must also be configured on client agents in an environment variable or file path, otherwise the Consul agents will fail to retrieve the license with a valid agent token.
The upgrade process varies if ACLs are enabled or disabled in the cluster.
Refer to the instructions on [upgrading to 1.10.x](/consul/docs/upgrading/instructions/upgrade-to-1-10-x) for details.

Q: Is there a tutorial available for the license configuration steps?

Please visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs).

Q: What resources are available?

The list below is a great starting point for learning more about the license
changes introduced in Consul Enterprise 1.10.0+ent.

- [Consul Enterprise Upgrade Documentation](/consul/docs/enterprise/upgrades)

- [Consul License Documentation](/consul/docs/enterprise/license/overview)

- [License configuration values documentation](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses)

- [Install a HashiCorp Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs)

Q: Do these changes impact all customers/licenses?

The license changes introduced in 1.10.0 only affect Consul Enterprise.
This impacts customers that have an enterprise binary (trial or non-trial licenses) downloaded from https://releases.hashicorp.com.
The license changes do not impact customers with the baked-in licensed binaries. In a later release of Consul Enterprise, baked-in binaries will be deprecated.

Q: What is the product behavior change introduced by the licensing changes?

Starting with Consul Enterprise 1.10.0,
a valid license is required on-disk (auto-loading) or as an environment variable for Consul Enterprise to successfully boot-up.
The in-storage license feature will not be supported starting with Consul Enterprise 1.10.0+ent. All Consul Enterprise clusters using 1.10.0+ent must ensure that there is a valid license on-disk (auto-loaded) or as an environment variable.

Q: What is the impact on trial licenses due to this change? ((#q-what-is-the-impact-on-evaluation-licenses-due-to-this-change))

Consul Enterprise 1.10.0+ server agents require a valid license to start.
The license can be provided on disk (auto-loaded) or as an environment variable.
There is no longer a 6-hour trial period in which Consul Enterprise server agents
can operate without a license.

Q: Is there a grace period when licenses expire?

YesConsul will continue normal operation and can be restarted after license *expiration* as defined in [`expiration_time`](/consul/api-docs/operator/license#getting-the-consul-license).
As
license expiration is approached or passed, Consul will issue warnings in the system logs.

Consul will only cease operation after license *termination*, which occurs 10 years
after license expiration and is defined in
[`termination_time`](/consul/api-docs/operator/license#getting-the-consul-license).

~> **Starting with Consul 1.14, and patch releases 1.13.3 and 1.12.6, Consul will support non-terminating licenses**:
  Please contact your support representative for more details on non-terminating licenses.
  An expired license will not allow Consul versions released after the expiration date to run.
  It will not be possible to upgrade to a new version of Consul released after license expiration.

Q: Does this affect client agents?

There are upgrade requirements that affect Consul Enterprise clients.
Please review the [upgrade requirements](#q-what-are-the-upgrade-requirements) documentation.

Q: Does this affect snapshot agents?

Same behavior as Consul clients.
 See answer for [Does this affect client agents?](#q-does-this-affect-client-agents)

Q: What is the behavior if the license is missing?

Consul server agents will detect the absence of the license and immediately exit.

Consul client agents will attempt to retrieve the license from servers if certain conditions are met:

- ACLs are enabled.
- An ACL token is provided to the client agent.
- The client agents configuration contains `retry_join` addresses.
- The retry join addresses are addresses of the Consul servers.

Consul snapshot agents will attempt to retrieve the license from servers if certain conditions are met: ACLs are enabled, a ACL token is provided to the client agent, the client agents configuration contains `retry_join` addresses, the retry join addresses are addresses of the Consul servers.

Q: Where can users get a trial license for Consul Enterprise?

Contact your [HashiCorp Support contact](https://support.hashicorp.com/) for a development license.

~> **Trial
 install will cease operation 24 hours after 30-day license expiration**:
  Trial licenses are not meant to be used in production.
  This is unlike non-trial licenses which provide a 10 year grace period as described in
  the answer for [Q: Is there a grace period when licenses expire?](#q-is-there-a-grace-period-when-licenses-expire).

Q: How can I renew a license?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: I'm an existing enterprise customer but don't have my license, how can I get it?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: Are the license files locked to a specific cluster?

The license files are not locked to a specific cluster or cluster node. The above changes apply to all nodes in a cluster.

Q: Will this
 impact HCP Consul?

This will not impact HCP Consul.

Q: Does this need to happen every time a node restarts, or is this a one-time check?

Consul Enterprise binaries starting with 1.10.0+ent, will be subject to EULA check. Release 1.10.0+ent introduces the EULA check for trial licenses (non-trial licenses already go through EULA check during contractual agreement).

The agreement to a EULA happens only once (when the user gets their license), Consul Enterprise **will check for the presence of a valid license every time a node restarts**.

When a customer upgrades existing clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be auto-loaded.

When a customer deploys new clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be on-disk (auto-loaded).

Q: What are the scenarios that a customer must plan for because of these changes?

New Consul cluster deployments
 using 1.10.0+ent will need to have a valid license on servers to successfully deploy.
This valid license must be on-disk (auto-loaded) or as an environment variable.
Please see the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?

VM

1. Run [`consul license get -signed`](/consul/commands/license#get) to extract the license from their running cluster. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have access to the required license. This could be via the client agent configuration file or an environment variable.
1. Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Follow the

Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

NOTE: If you are not upgrading Consul or your Helm chart version then no action is required.

1. In order to use Consul Enterprise 1.10.0 or greater on Kubernetes you must use version 0.32.0 or greater of the Helm chart.
1. You should already have a Consul Enterprise license set as a Kubernetes secret. If you do not, refer to [how to obtain a copy of your license](/consul/docs/enterprise/license/faq#q-i-m-an-existing-enterprise-customer-but-don-t-have-my-license-how-can-i-get-it).
Once you have the license then create a Kubernetes secret containing the license as described in [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise).
1. Follow the [Kubernetes Upgrade Docs](/consul/docs/k8s/upgrade) to upgrade. No changes to your `values.yaml` file are needed to enable enterprise autoloading since this support is built in to consul-helm 0.32.0 and greater.

!> **Warning:**
If you are upgrading the Helm chart but **not** upgrading the Consul version, you must set `server.enterpriseLicense.enableLicenseAutoload: false`. See [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise) for more details.

Q: What is the migration path for customers who want to migrate from their existing perpetually-licensed binaries to the license on disk flow?

VM

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Proceed with the `helm` [upgrade instructions](/consul/docs/k8s/upgrade)

Q: Will Consul downgrades/rollbacks work?

When downgrading to a version
 of Consul before 1.10.0+ent, customers will need to follow the previous process for applying an enterprise licenses to Consul Enterprise.

Q: Are there potential pitfalls when downgrading or upgrading Consul server instances?

~> Verify that you meet the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Assume a scenario where there are three Consul server nodes:

- Node A: v1.9.5
- Node B: v1.10.0 [Leader]
- Node C: v1.9.5

The command `consul license put` is issued from Node A. This will result in an error due to how Consul routes calls to the server node, Node B in this example.
Because Node A is a follower when the call `consul license put` is issued, the call will be redirected to Node B (leader).
The `consul license put` operation will fail due to being removed from 1.10.0.
This is a scenario that could occur if a customer downgrades from 1.10.0+ and the Consul leadership has not transferred back over to a node not running 1.10.0+.
This
 also has the potential of occurring when upgrading if scheduled license updates or autoscaling groups recoveries are in place.

Q: Any impacts to Consul Kubernetes?

If you are using a Consul Enterprise version prior to 1.10.0 and decide to upgrade the Helm chart to version 0.32.0 or newer, but not the Consul version.
You will need to add the following configuration.

```
server:
 enterpriseLicense:
   enableLicenseAutoload: false
```
---
layout: docs
page_title: Enterprise Licenses
description: >-
 Consul Enterprise server, client, and snapshot agents require a license on startup in order to use Enterprise features. Learn how to apply licenses using environment variables or configuration files.

Consul Enterprise License

Licensing Overview

All Consul Enterprise agents must be licensed when they are started. Where that license comes from will depend on which binary is in use, whether the agent is a server, client or snapshot agent, and whether ACLs have been enabled for the cluster.

-> ** Consul Enterprise 1.10.0 removed temporary licensing.** Prior to 1.10.0, Consul Enterprise agents could start without a license and then have a license applied to them later on via the CLI or API. That functionality has been removed and replaced with the ability to load licenses from the agent's configuration or environment. Also, prior to 1.10.0, server agents would automatically propagate the license between themselves.
This no longer occurs and the license must be present on each server agent when it is started.

Consul Enterprise 1.14.0, when running on Kubernetes, removed client agents and replaced these with virtual agents.
Virtual agents are nodes that Consul service mesh services run on. HashiCorp uses virtual agents to determine license entitlements for customers on per-node licensing and pricing agreements.

-> Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Applying a License

For Consul Enterprise 1.10.0 or greater, a license must be available at the time the agent starts.
For server agents this means that they must either have the [`license_path`](/consul/docs/agent/config/config-files#license_path)
configuration set or have a license configured in the servers environment with the `CONSUL_LICENSE` or `CONSUL_LICENSE_PATH` environment variables. Both the configuration
item and the `CONSUL_LICENSE_PATH`
environment variable point to a file containing the license whereas the `CONSUL_LICENSE` environment variable should contain the license as the value. If multiple variables are set,
the following order of precedence applies:

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Client agents and [snapshot agents](/consul/docs/enterprise/backups)
may also be licensed in the very same manner.
However, to avoid the need to configure the license on many client agents and snapshot agents,
those agents have the capability to retrieve the license automatically under the conditions described below.

Virtual agents do not need the license to run.

Updating the license for an agent depends on the method you used to apply the license.
- **If you used the `CONSUL_LICENSE`
environment variable**: After updating the environment variable, restart the affected agents.

- **If you used the
`CONSUL_LICENSE_PATH`
 environment variable**: Update the license file first. Then, restart the affected agents.
- **If you used the `license_path` configuration item**: Update the license file first. Then, run [`consul reload`](/consul/commands/reload) for the affected agents.

Client Agent License Retrieval

When a client agent starts without a license in its configuration or environment, it will try to retrieve the license from the servers via RPCs. That RPC always requires a valid non-anonymous ACL token to authorize the request but the token doesn't need any particular permissions. As the license is required before the client actually joins the cluster, where to make those RPC requests to is inferred from the [`retry_join`](/consul/docs/agent/config/config-files#retry_join) configuration. If `retry_join` is unset or no [`agent` token](/consul/docs/agent/config/config-files#acl_tokens_agent) is set then the client agent will immediately shut itself down.

If all preliminary checks
 pass the client agent will attempt to reach out to any server on its RPC port to
request the license. These requests will be retried for up to 5 minutes and if it is unable to retrieve a license within that time frame it will shut itself down.

If ACLs are disabled then the license must be provided to the client agent through one of the three methods listed below.
Failure in providing the client agent with a licence will prevent the client agent from joining the cluster.

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Snapshot Agent License Retrieval

The snapshot agent has similar functionality to the client agent for automatically retrieving the license. However, instead of requiring a server agent to talk to, the snapshot agent can request the license from the server or client agent it would use for all other operations. It still requires an ACL token to authorize the request. Also like client agents,
 the snapshot agent will shut itself down after being unable to retrieve the license for 5
minutes.

```
{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-list{{if (not onclick) ' readonly'}}"
 @scroll="native"
 @items={{items}}
 @partial={{5}}
as |item|>
 <BlockSlot @name="details">
   <div onclick={{action (optional onclick) item}}>
     <strong class={{concat 'intent-' item.Action}}>{{capitalize item.Action}}</strong>
{{#if (gt item.HTTP.Methods.length 0)}}
```

```
      <dl class="permission-methods">
        <dt>
          <Tooltip>
            Methods
          </Tooltip>
        </dt>
        <dd>
{{#each item.HTTP.Methods as |item|}}
          {{item}}
{{/each}}
        </dd>
      </dl>
{{/if}}
{{#if item.HTTP.Path}}
      <dl class="permission-path">
        <dt>
          <Tooltip>
            {{item.HTTP.PathType}}
          </Tooltip>
        </dt>
        <dd>
          {{item.HTTP.Path}}
        </dd>
      </dl>
{{/if}}
{{#each item.HTTP.Header as |item|}}
      <dl class="permission-header">
        <dt>
          <Tooltip>
            Header
          </Tooltip>
        </dt>
        <dd>
          {{item.Name}} {{route-match item}}
        </dd>
      </dl>
{{/each}}
  </div>
 </BlockSlot>
{{#if onclick}}
 <BlockSlot @name="actions" as |Actions|>
   <Actions as |Action|>
     <Action data-test-edit-action @onclick={{action (optional onclick) item}} @close={{true}}>
       <BlockSlot @name="label">
         Edit
       </BlockSlot>
     </Action>
     <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
```

```
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you want to delete this permission?
            </p>
          </BlockSlot>
           <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
{{/if}}
</ListCollection>
{{/if}}
%notice {
 position: relative;
 padding: 0.8rem;
}
%notice header {
 margin-bottom: 0.1rem;
}
%notice header > * {
 margin-bottom: 0;
}
%notice p {
 margin-bottom: 0.3rem;
 line-height: 1.4;
}
/* this is probably skin */
%notice {
 padding-left: calc(0.8rem + 1.4rem);
}
%notice::before {
 position: absolute;
 top: 0.8rem;
 left: 0.6rem;
 font-size: 1rem;
}
```

Notice

Presentational component for informational/warning/error banners/notices.

```hbs preview-template
<Notice
 @type={{this.type}}
as |notice|>
 <notice.Header>
   <h3>Header</h3>
 </notice.Header>
 <notice.Body>
   <p>
     Body
   </p>
 </notice.Body>
 <notice.Footer>
   <p>
     <a href="">Footer link</a>
   </p>
 </notice.Footer>
</Notice>

<figure>
 <figcaption>Provide a widget to change the <code>@type</code></figcaption>

 <select
   onchange={{action (mut this.type) value="target.value"}}
 >
   <option>info</option>
   <option>success</option>
   <option>warning</option>
   <option>error</option>
 </select>

</figure>
```

Arguments

Argument/Attribute	Type	Default	Description
`type`	`String`	`info`	Type of notice [info|warning|error]

See

- [Template Source Code](./index.hbs)

```
---
@import './skin';
@import './layout';
section[data-route='dc.show.license'] {
 @extend %license-route;
}
%license-route .validity {
 @extend %license-validity;
}
%license-route aside {
 @extend %license-route-learn-more;
}

%license-route h2 {
 @extend %h200;
}

%license-validity p {
 color: rgb(var(--tone-gray-700));
}
%license-validity dl {
 @extend %horizontal-kv-list;
 font-size: var(--typo-size-400);
}
%license-validity dl .expired + dd {
 @extend %visually-hidden;
}
%license-validity dl dt::before {
 content: '';
 margin-right: 0.25rem; /* 4px */
}
%license-validity dl .expired::before {
 --icon-name: icon-x-circle;
 --icon-color: rgb(var(--red-500));
}
%license-validity dl .warning::before {
 --icon-name: icon-alert-circle;
 --icon-color: rgb(var(--orange-500));
}
%license-validity dl .valid:not(.warning)::before {
 --icon-name: icon-check-circle;
 --icon-color: rgb(var(--green-500));
}

%license-route-learn-more {
 @extend %panel;
 box-shadow: var(--decor-elevation-000);
```

```
 padding: var(--padding-y)
 var(--padding-x);
 width: 40%;
 min-width: 413px;
 margin-top: 1rem; /* 16px */
}
%license-route-learn-more header > :first-child {
 @extend %h300;
}
%license-route-learn-more header {
 margin-bottom: 1rem; /* 16px */
}
%license-route-learn-more li {
 margin-bottom: 0.25rem; /* 4px */
}
%license-route-learn-more a::before {
 --icon-name: icon-docs-link;
 content: '';
 margin-right: 0.375rem; /* 6px */
}
```

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```
<Notice
 class="consul-intention-notice-custom-resource crd"
 ...attributes
 @type={{or @type "info"}}
as |notice|>
 <notice.Header>
   <h3>
     Intention Custom Resource
   </h3>
 </notice.Header>
 <notice.Body>
   <p>
     Some of your intentions are being managed through an Intention Custom Resource in your Kubernetes cluster. Those managed intentions will be view only in the UI. Any intentions created in the UI will work but will not be synced to the Custom Resource Definition (CRD) datastore.
   </p>
 </notice.Body>
 <notice.Footer>
   <p>
     <a href="{{env 'CONSUL_DOCS_URL'}}/k8s/crds" target="_blank" rel="noopener noreferrer">Learn more about CRDs</a>
   </p>
 </notice.Footer>
</Notice>
```

```
.consul-intention-permission-form {
 h2 {
   border-top: 1px solid rgb(var(--tone-blue-500));
   @extend %h200;
 }
 button.type-submit {
   @extend %frame-blue-300;
 }
 button.type-submit:hover:not(:disabled),
 button.type-submit:focus:not(:disabled) {
   @extend %frame-blue-500;
 }
 button.type-submit:disabled {
   @extend %frame-blue-200;
 }
}

.consul-intention-view {
 h2 {
   @extend %h200;
 }
}
@import './skin';
@import './layout';

%notice {
 margin: 1em 0;
}
/**/
.notice.success {
 @extend %notice-success;
}
.notice.warning {
 @extend %notice-warning;
}
.notice.error {
 @extend %notice-error;
}
.notice.info {
 @extend %notice-info;
}
.notice.highlight {
 @extend %notice-highlight;
}
.notice.policy-management {
 @extend %notice-highlight;
}
.notice.crd::before {
```

```
 -webkit-mask-image: none;
 mask-image: none;
 background-color: transparent;
 @extend %with-logo-kubernetes-color-icon;
}
%notice {
 border-radius: var(--decor-radius-100);
 border: var(--decor-border-100);
 color: rgb(var(--tone-gray-999));
}
%notice::before {
 @extend %as-pseudo;
}
%notice header > * {
 @extend %h300;
}
%notice footer * {
 @extend %p3;
 font-weight: var(--typo-weight-bold);
}
%notice-success,
%notice-info,
%notice-highlight,
%notice-error,
%notice-warning {
 @extend %notice;
}
%notice-success {
 background-color: rgb(var(--tone-green-050));
 border-color: rgb(var(--tone-green-500));
}
%notice-success header * {
 color: rgb(var(--tone-green-800));
}
%notice-info {
 border-color: rgb(var(--tone-blue-100));
 background-color: rgb(var(--tone-blue-010));
}
%notice-info header * {
 color: rgb(var(--tone-blue-700));
}
%notice-highlight {
 background-color: rgb(var(--tone-gray-050));
 border-color: rgb(var(--tone-gray-300));
}
%notice-info header * {
 color: rgb(var(--tone-blue-700));
}
```

```
%notice-warning {
 border-color: rgb(var(--tone-yellow-100));
 background-color: rgb(var(--tone-yellow-050));
}
%notice-warning
 header * {
 color: rgb(var(--tone-yellow-800));
}
%notice-error {
 background-color: rgb(var(--tone-red-050));
 border-color: rgb(var(--tone-red-500));
}
%notice-error header * {
 color: rgb(var(--tone-red-500));
}
%notice-success::before {
 @extend %with-check-circle-fill-mask;
 color: rgb(var(--tone-green-500));
}
%notice-info::before {
 @extend %with-info-circle-fill-mask;
 color: rgb(var(--tone-blue-500));
}
%notice-highlight::before {
 @extend %with-star-fill-mask;
 color: rgb(var(--tone-yellow-500));
}
%notice-warning::before {
 @extend %with-alert-triangle-mask;
 color: rgb(var(--tone-orange-500));
}
%notice-error::before {
 @extend %with-cancel-square-fill-mask;
 color: rgb(var(--tone-red-500));
}
{{#if isVisible}}
 <Notice data-test-node-agentless-notice @type='info' class='agentless-node-notice' as |notice|>
   <notice.Header>
     <h3>
       {{t 'routes.dc.nodes.index.agentless.notice.header'}}
     </h3>
     <button type='button' aria-label='Dismiss notice' {{on 'click' this.dismissAgentlessNotice}}>
       <FlightIcon @name='x' />
     </button>
   </notice.Header>
   <notice.Body>
     <p>
       {{t 'routes.dc.nodes.index.agentless.notice.body'}}
```

```
    </p>
  </notice.Body>
  <notice.Footer>
    <p class='docs-link'>
      <a
        href='{{env "CONSUL_DOCS_DEVELOPER_URL"}}/connect/dataplane'
        target='_blank'
        rel='noopener noreferrer'
      >
        {{t 'routes.dc.nodes.index.agentless.notice.footer'}}
      </a>
    </p>
  </notice.Footer>
</Notice>
{{/if}}
```

1.1739 cobra 1.8.1

1.1739.1 Available under license :

Apache License
Version 2.0, January 2004
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1.1740 yajl 2.1.0-r9

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1.1741 spf13-cobra 1.8.1

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lib/erl/src/Makefile.am

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For the aclocal/ax_boost_base.m4 and contrib/fb303/aclocal/ax_boost_base.m4
components:

```
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```

For the lib/nodejs/lib/thrift/json_parse.js:

```
/*
```

```
   json_parse.js
   2015-05-02
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*/
(By Douglas Crockford <douglas@crockford.com>)
```

For lib/cpp/src/thrift/windows/SocketPair.cpp

```
/* socketpair.c
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*/
```

For lib/py/compat/win32/stdint.h

```
// ISO C9x  compliant stdint.h for Microsoft Visual Studio
// Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124
//
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//
//

Codegen template
 in t_html_generator.h

* Bootstrap v2.0.3
*
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*
* Designed and built with all the love in the world @twitter by @mdo and @fat.

For t_cl_generator.cc

* Copyright (c) 2008- Patrick Collison <patrick@collison.ie>
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1.1747 xz 0.5.12

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package main

import (
 "bufio"
 "bytes"
 "flag"
 "fmt"
 "io"
 "log"

```
 "os"
 "path/filepath"
 "strings"
)

const crUsageString = `xb copyright [options] <path>....

The xb copyright command adds a copyright remark to all go files below path.

 -h  prints this message and exits
`

func crUsage(w io.Writer) {
 fmt.Fprint(w, crUsageString)
}

const copyrightText = `
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license that can be found in the LICENSE file.
`

func goComment(text string) string {
 buf := new(bytes.Buffer)
 scanner := bufio.NewScanner(strings.NewReader(text))
 var err error
 for scanner.Scan() {
  s := strings.TrimSpace(scanner.Text())
  if len(s) == 0 {
   continue
  }
  if _, err = fmt.Fprintln(buf, "//", s); err != nil {
   panic(err)
  }
 }
 if err
 = scanner.Err(); err != nil {
  panic(err)
 }
 if _, err = fmt.Fprintln(buf); err != nil {
  panic(err)
 }
 return buf.String()
}

var goCopyright = goComment(copyrightText)

func addCopyright(path string) (err error) {
```

```
log.Printf("adding copyright to %s", path)
src, err := os.Open(path)
if err != nil {
 return err
}
defer func() {
 cerr := src.Close()
 if cerr != nil && err == nil {
  err = cerr
 }
}()
newPath := path + ".new"
dst, err := os.Create(newPath)
if err != nil {
 return err
}
defer func() {
 cerr := dst.Close()
 if cerr != nil && err == nil {
  err = cerr
 }
}()
out := bufio.NewWriter(dst)
fmt.Fprint(out, goCopyright)
scanner := bufio.NewScanner(src)
line := 0
del := false
for scanner.Scan() {
 line++
 txt := scanner.Text()
 if line == 1 && strings.Contains(txt, "Copyright") {
  del = true
  continue
 }
 if del {
  s := strings.TrimSpace(txt)
  if len(s) == 0 {
   del = false
  }
  continue
 }
 fmt.Fprintln(out, txt)
}
if err = scanner.Err();
err != nil {
 return err
}
if err = out.Flush(); err != nil {
```

```
 return
 }
 err = os.Rename(newPath, path)
 return
}

func walkCopyrights(path string, info os.FileInfo, err error) error {
 if err != nil {
  return err
 }
 if info.IsDir() {
  return nil
 }
 if !strings.HasSuffix(info.Name(), ".go") {
  return nil
 }
 return addCopyright(path)
}

func copyright() {
 cmdName := os.Args[0]
 log.SetPrefix(fmt.Sprintf("%s: ", cmdName))
 log.SetFlags(0)

 flag.CommandLine = flag.NewFlagSet(cmdName, flag.ExitOnError)
 flag.Usage = func() { crUsage(os.Stderr); os.Exit(1) }

 help := flag.Bool("h", false, "")

 flag.Parse()

 if *help {
  crUsage(os.Stdout)
  os.Exit(0)
 }

 for _, path := range flag.Args() {
  fi, err := os.Stat(path)
  if err != nil {
   log.Print(err)
   continue
  }
  if !fi.IsDir() {
   log.Printf("%s is not a directory", path)
   continue
  }
  if err = filepath.Walk(path, walkCopyrights); err != nil {
   log.Fatalf("%s error %s", path, err)
```

```
  }
 }
}
```

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`

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`

1.1748 gnutls 3.7.9-2+deb12u3

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version 0.1
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1.1751 minimatch 9.0.5

1.1751.1 Available under license :

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1.1752 github.com/grafana/regexp 0.0.0-20240518133315-a468a5bfb3bc

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1.1753 github.com/azure/azure-sdk-for-go/sdk/resourcemanager/compute/armcompute/v5 5.7.0

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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
```

```
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)
```

```
 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                        srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                        *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
```

```
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
```

```
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
```

```
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
```

```
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
```

```
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
```

```
  page.NextLink = to.Ptr(createLink())
 })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
```

```
  return nil, respErr
 }
 beginUpdate = &respr
 l.beginUpdate.add(req, beginUpdate)
}

resp, err := server.PollerResponderNext(beginUpdate, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK},
resp.StatusCode) {
 l.beginUpdate.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginUpdate) {
 l.beginUpdate.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
if l.srv.BeginValidateLicense == nil {
 return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
}
beginValidateLicense := l.beginValidateLicense.get(req)
if beginValidateLicense == nil {
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
 regex := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 1 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 body,
err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginValidateLicense = &respr
 l.beginValidateLicense.add(req, beginValidateLicense)
```

```
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
```

azwebpubsub

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```
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// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}
```

```
// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
```

```
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
```

```
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
```

```
 err = runtime.NewResponseError(httpResp)
 return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
```

```
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
```

```
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
```

```
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2023-06-20-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
```

```
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
```

```
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
```

```
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
```

```
//
// Generated from API version 2023-06-20-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
```

```
 err = runtime.NewResponseError(httpResp)
 return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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```
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// +build go1.18

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package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
```

```
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err !=
nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//
   State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
```

```
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
```

```
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
```

```
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
```

Please pay attention that all the values in the output are fake values for just demo purposes.

```
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}
```

```
// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
```

```
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
```

```
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
    },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

1.1754 github.com/code-hex/go-generics-cache 1.5.1

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1.1755 netplan-io 0.106.1-7ubuntu0.22.04.4

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1.1756 kerberos 1.20.1-2+deb12u2

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The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in "src/lib/gssapi", including the following files:

lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c

lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
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lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c

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lib/libgss/gssd_pname_to_uid.c
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lib/gssapi/mechglue/g_acquire_cred.c

lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mgluePP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c

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cmd/krb5/kadmin/server/ipropd_svc.c
cmd/krb5/kproplog/kproplog.c
cmd/krb5/slave/kpropd_rpc.c
lib/gss_mechs/mech_krb5/et/kdb5_err.c
lib/gss_mechs/mech_spnego/mech/gssapiP_spnego.h
lib/gss_mechs/mech_spnego/mech/spnego_mech.c
lib/krb5/kadm5/kadm_host_srv_names.c
lib/krb5/kdb/kdb_convert.c
lib/krb5/kdb/kdb_hdr.h
lib/krb5/kdb/kdb_log.c
lib/krb5/kdb/kdb_log.h
lib/libgss/g_accept_sec_context.c
lib/libgss/g_acquire_cred.c
lib/libgss/g_canon_name.c
lib/libgss/g_compare_name.c
lib/libgss/g_context_time.c
lib/libgss/g_delete_sec_context.c
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lib/libgss/g_imp_sec_context.c
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lib/libgss/g_initialize.c
lib/libgss/g_inquire_context.c
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lib/libgss/g_inquire_names.c
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lib/libgss/g_rel_buffer.c
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lib/libgss/g_sign.c
lib/libgss/g_store_cred.c
lib/libgss/g_unseal.c
lib/libgss/g_userok.c
lib/libgss/g_utils.c
lib/libgss/g_verify.c
lib/libgss/gssd_pname_to_uid.c
uts/common/gssapi/include/gssapi_err_generic.h
uts/common/gssapi/include/mechglueP.h

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lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c

lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including
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include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
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lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including

the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c

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The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in "src/lib/gssapi", including the following files:

lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c

lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mgluePh
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including
the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c

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1.1771 ssl-cert 1.1.2ubuntu1

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1.1772 cpuid 2.2.8

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1.1773 go-autorest 0.9.24

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1.1774 go-ieproxy 0.0.12

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1.1775 github.com/leodido/ragel-machinery 0.0.0-20190525184631-5f46317e436b

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1.1776 github.com/expr-lang/expr 1.16.9

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1.1777 ethtool 0.4.1

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5. [6]Michael Barone <michael,barone@lmco.com> GPSVME fixes
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15. [16]Sven Dietrich <sven_dietrich@trimble.com> Palisade reference clock driver, NT adj. residuals, integrated Greg's Winnt port.
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46. [50]Wilfredo Snchez <wsanchez@apple.com> added support for NetInfo
47. [51]Nick Sayer <mrapple@quack.kfu.com> SunOS streams modules
48. [52]Jack Sasportas <jack@innovativeinternet.com> Saved a Lot of space on the stuff in the html/pic/ subdirectory
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51. [55]Jeff Steinman <jss@pebbles.jpl.nasa.gov> Datum PTS clock driver
52. [56]Harlan Stenn <harlan@pfcs.com> GNU automake/autoconfigure makeover, various other bits (see the ChangeLog)
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1.1780 luajit 2.1.1710398010

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1.1781 libsepol 3.5-2build1

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Whether that is true depends on what the Program does.

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independent and separate works in
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Thus, it is not the intent of this section to claim rights or contest

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3. You may copy and distribute the Program (or a work based on it,
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a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or
executable form with such
an offer, in accord with Subsection b above.)

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1.1783 iconv 2.39

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When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative

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entire combination fits its criteria of freedom. The Lesser General
Public License permits more lax criteria for linking other code with
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We call this license the @dfn{Lesser} General Public License because it
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of an advantage over competing non-free programs. These disadvantages
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libraries. However, the Lesser license provides advantages in certain
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For example, on rare occasions, there may be a special need to
encourage the widest possible use of a certain library, so that it becomes
a de-facto standard. To achieve this, non-free programs must be
allowed to use the library. A more frequent case is that a free
library does the
same job as widely used non-free libraries. In this
case, there is little to gain by limiting the free library to free
software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free
programs enables a greater number of people to use a large body of
free software. For example, permission to use the GNU C Library in
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operating system, as well as its variant, the GNU/Linux operating
system.

Although the Lesser General Public License is Less protective of the
users' freedom, it does ensure that the user of a program that is
linked with the Library has the freedom and the wherewithal to run
that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and
modification follow. Pay close attention to the difference between a
``work based on the library'' and a ``work that uses the library''. The
former
contains code derived from the library, whereas the latter must
be combined with the library in order to run.

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A ``library'' means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The ``Library'', below, refers to any such software library or work which has been distributed under these terms. A ``work based on the Library'' means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it,
either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term ``modification''.)

``Source code'' for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

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above, provided that you also meet all of these conditions:

@enumerate a
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The modified work must itself be a software library.

@item
You must cause the files modified to carry prominent notices
stating that you changed the files and the date of any change.

@item
You must
 cause the whole of the work to be licensed at no
charge to all third parties under the terms of this License.

@item
If a facility in the modified Library refers to a function or a
table of data to be supplied by an application program that uses
the facility, other than as an argument passed when the facility
is invoked, then you must make a good faith effort to ensure that,
in the event an application does not supply such function or
table, the facility still operates, and performs whatever part of
its purpose remains meaningful.

(For example, a function in a library to compute square roots has
a purpose that is entirely well-defined independent of the
application. Therefore, Subsection 2d requires that any
application-supplied function or table used by this function must
be optional: if the application does not supply it, the square
root function must still compute square roots.)
@end enumerate

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entire whole, and thus to each and every part regardless of who wrote
it.

Thus, it is not the intent of this section to claim rights or contest
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In addition, mere aggregation of another work not based on the Library
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that copy, so the ordinary GNU General Public License applies to all
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This option is useful when you wish to copy part of the code of
the Library into a program that is not a library.

@item
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2 above provided that you accompany
it with the complete corresponding machine-readable source code, which
must be distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not
compelled to copy the source along with the object code.

@item
A program that contains no derivative of any portion of the
Library, but is designed to work with the Library by being compiled or
linked with it, is called a ``work that uses the Library''. Such a
work, in isolation, is not a derivative work of the Library, and
therefore falls outside the scope of this License.

However, linking a ``work that uses the Library'' with the Library

creates an executable that is a derivative of the Library (because
it
contains portions of the Library), rather than a ``work that uses the
library''. The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a ``work that uses the Library'' uses material from a header file
that is part of the Library, the object code for the work may be a
derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be
linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
file is unrestricted, regardless of whether it is legally a derivative
work. (Executables containing this object code plus portions of the
Library will still fall under Section 6.)

Otherwise,
if the work is a derivative of the Library, you may
distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

@item
As an exception to the Sections above, you may also combine or
link a ``work that uses the Library'' with the Library to produce a
work containing portions of the Library, and distribute that work
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modification of the work for the customer's own use and reverse
engineering for debugging such modifications.

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during execution displays copyright notices, you must include the
copyright notice for the Library among them, as well as a reference
directing the user to the copy of
this License. Also, you must do one
of these things:

@enumerate a
@item
Accompany the work with the complete corresponding
machine-readable source code for the Library including whatever
changes were used in the work (which must be distributed under

Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable ``work that
uses the Library'', as object code and/or source code, so that the
user can modify the Library and then relink to produce a modified
executable containing the modified Library. (It is understood
that the user who changes the contents of definitions files in the
Library will not necessarily be able to recompile the application
to use the modified definitions.)

@item
Use a suitable shared library mechanism for linking with the Library. A
suitable mechanism is one that (1) uses at run time a copy of the
library already present on the user's computer system, rather than
copying library functions into the executable,
and (2) will operate
properly with a modified version of the library, if the user installs
one, as long as the modified version is interface-compatible with the
version that the work was made with.

@item
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specified in Subsection 6a, above, for a charge no more
than the cost of performing this distribution.

@item
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@item
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@end enumerate

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Library'' must include any data and utility programs needed for
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@item
Give prominent notice with the combined library of the fact
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where to find the accompanying uncombined form of the same work.
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b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

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Appendix: How to Apply These Terms to Your New Programs

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To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
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when it starts in an interactive mode:

```
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Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show
w' and `show c' should show the appropriate
parts of the General Public License. Of course, the commands you use may
be called something other than `show w' and `show c'; they could even be
mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your
school, if any, to sign a "copyright disclaimer" for the program, if
necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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Version 2.1, February 1999

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only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

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in the event an application does not supply such function or
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its purpose remains meaningful.

(For example, a function in a library to compute square roots has
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application. Therefore, Subsection 2d requires that any
application-supplied function or table used by this function must
be optional: if the application does not supply it, the square
root function must still compute square roots.)

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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covered by this License.
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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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b) Use a suitable shared library mechanism for linking with the
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if
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interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
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d) If distribution of the work is made by offering access to copy
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e) Verify that the user has already received a copy of these
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For an executable, the required form of the "work that uses the
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1.1787 berkeley-db 5.3.28+dfsg2-7

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hostname -- set the host name or show the host/domain name

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1.1791 cyrus-sasl 2.1.28+dfsg1-5ubuntu3

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* Rob Earhart
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1.1792 debianutils 5.17build1

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1.1797 findutils 4.9.0-5build1

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1.1801 libsemanage-common 3.5-1build5

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1.1808 ubuntu-keyring 2023.11.28.1

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1.1809 ncurses 6.4+20240113-1ubuntu2

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1.1810 bash 5.2.21-2ubuntu4

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1.1815 libssh 0.10.6-2build2

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1.1817 pam 1.5.3-5ubuntu5.1

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1.1818 libassuan 2.5.6-1build1

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1.1824 object-inspect 1.13.2

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1.1825 commons-lang3 3.13.0

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1.1826 sqlx 1.4.0

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1.1827 google-golang-org-genproto-googleapis-api 0.0.0-20240701130421-f6361c86f094

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1.1828 libffi8 3.4.6-1build1

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1.1835 libsepol2 3.5-2build1

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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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Version 3.1, 31 March 2009

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```

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```
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This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

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1.1837 jaraco.text 3.12.1

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1.1838 fdisk 2.39.3

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```
NR START   END SECTORS SIZE NAME UUID
1    32  7679    7648 3.7M      8f8378c0-01
2  7680 16383    8704 4.3M      8f8378c0-02
5  7936 12799    4864 2.4M
6 12544 16127    3584 1.8M
```

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1.1839 docker-credential-helpers 0.8.2

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1.1840 logback-access 1.2.13

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```
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* Logback: the reliable, generic, fast and flexible logging framework.
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*
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*
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*/
```

Found in path(s):
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/ElapsedSecondsConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/SessionIDConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/QueryStringConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/ThreadNameConverter.java

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```
-- Logback: the reliable, generic, fast and flexible logging framework.
-- Copyright (C) 1999-2010, QOS.ch. All rights reserved.
--
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-- conditions.

-- This SQL script creates the required tables by ch.qos.logback.access.db.DBAppender
--
-- It is intended for Oracle databases.


CREATE SEQUENCE access_event_id_seq MINVALUE 1 START WITH 1;


CREATE TABLE access_event
 (
   timestmp         NUMBER(20) NOT NULL,
   requestURI    VARCHAR(254),
   requestURL       VARCHAR(254),
   remoteHost       VARCHAR(254),
   remoteUser       VARCHAR(254),
```

```
  remoteAddr       VARCHAR(254),
  protocol         VARCHAR(254),
  method           VARCHAR(254),
  serverName       VARCHAR(254),
  postContent      VARCHAR(254),
  event_id         NUMBER(20) PRIMARY KEY
 );

-- the / suffix may or may not be needed depending on your SQL Client
--
 Some SQL Clients, e.g. SQuirrel SQL has trouble with the following
-- trigger creation command, while SQLPlus (the basic SQL Client which
-- ships with Oracle) has no trouble at all.

CREATE TRIGGER access_event_id_seq_trig
 BEFORE INSERT ON access_event
 FOR EACH ROW
 BEGIN
  SELECT access_event_id_seq.NEXTVAL
  INTO   :NEW.event_id
  FROM   DUAL;
 END access_event_id_seq_trig;
/

CREATE TABLE access_event_header
 (
  event_id       NUMBER(20) NOT NULL,
  header_key       VARCHAR2(254) NOT NULL,
  header_value      VARCHAR2(1024),
  PRIMARY KEY(event_id, header_key),
  FOREIGN KEY (event_id) REFERENCES access_event(event_id)
 );
```

Found in path(s):
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/db/script/oracle.sql
No license file was found, but licenses were detected in source scan.

```
/**
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*/

Found in path(s):
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/jetty/JettyModernServerAdapter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/net/SSLSocketAppender.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/sift/AccessEventDiscriminator.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/LocalIPAddressConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/spi/Util.java
*
 /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/jetty/RequestLogRegistry.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/net/SimpleSocketServer.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/sift/AppenderFactoryUsingJoran.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/filter/StatsByDay.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/filter/StatsByHour.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/PatternLayoutEncoder.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RequestURIConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/spi/ServerAdapter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/servlet/TeeServletOutputStream.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/FullResponseConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RemoteHostConverter.java
*
 /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/sift/SiftingAppender.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/html/HTMLLayout.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/net/AccessEventPreSerializationTransformer.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/ElapsedTimeConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/net/SocketAppender.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/filter/PeriodicStats.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/filter/CountingFilter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/spi/AccessEvent.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/sift/SiftAction.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/tomcat/TomcatServerAdapter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/EnsureLineSeparation.java
*
 /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/NAConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RemoteUserConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/spi/IAccessEvent.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/joran/action/EvaluatorAction.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/html/DefaultCssBuilder.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/jetty/RequestLogImpl.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/jetty/JettyServerAdapter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/joran/JoranConfigurator.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/ContentLengthConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/net/server/SSLServerSocketAppender.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/filter/StatisticalViewImpl.java
*
 /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RemoteIPAddressConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RequestCookieConverter.java

* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RequestParameterConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/html/UrlCssBuilder.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/servlet/TeeHttpServletResponse.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/ServerNameConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/joran/action/ConfigurationAction.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/filter/StatsByWeek.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/net/URLEvaluator.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/ViewStatusMessagesServlet.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/net/SMTPAppender.java
*
 /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/StatusCodeConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RequestMethodConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RequestProtocolConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/ResponseHeaderConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/FullRequestConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/servlet/TeeServletInputStream.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/PatternLayout.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/filter/StatsByMonth.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/AccessConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/AccessConstants.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/ResponseContentConverter.java
*
 /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/LineSeparatorConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/filter/StatsByMinute.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/boolex/JaninoEventEvaluator.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/servlet/TeeHttpServletRequest.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/servlet/TeeFilter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/net/SocketNode.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/DateConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/servlet/Util.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RequestContentConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RequestHeaderConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/spi/AccessContext.java
*
 /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/tomcat/LogbackValve.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RequestAttributeConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/LocalPortConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/filter/StatisticalView.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/net/server/ServerSocketAppender.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/pattern/RequestURLConverter.java
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/sift/SiftingJoranConfigurator.java
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```
-- This SQL script creates the required tables by ch.qos.logback.access.db.DBAppender
--

DROP TABLE access_event_header
DROP TABLE access_event

CREATE TABLE access_event
 (
   timestmp          BIGINT NOT NULL,
   requestURI        VARCHAR(254),
   requestURL        VARCHAR(254),
   remoteHost        VARCHAR(254),
   remoteUser        VARCHAR(254),
   remoteAddr        VARCHAR(254),
   protocol          VARCHAR(254),
   method            VARCHAR(254),
   serverName        VARCHAR(254),
   postContent       VARCHAR(254),
   event_id          INT NOT NULL identity,
   PRIMARY KEY(event_id)
 )

CREATE TABLE access_event_header
 (
   event_id          INT NOT NULL,
   header_key
       VARCHAR(254) NOT NULL,
   header_value      VARCHAR(1024),
   PRIMARY KEY(event_id, header_key),
   FOREIGN KEY (event_id) REFERENCES access_event(event_id)
 )
```

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* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/db/script/hsqldb.sql
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/db/script/postgresql.sql
* /logback-access-1-2-13-sources-1-jar/ch/qos/logback/access/db/script/db2.sql

1.1841 go-retryablehttp 0.7.7

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1.1843 fill-range 7.1.1

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1.1844 github.com/oneofone/xxhash 1.2.8

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1.1845 github.com/masterminds/sprig 2.22.0+incompatible

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1.1846 klog 2.130.1

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1.1847 protobuf 1.34.2

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1.1848 clientmodel 0.6.1

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1.1849 dolthub-swiss 0.2.1

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1.1854 github.com/fxamacker/cbor/v2 2.7.0

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1.1855 github.com/moby/sys/mountinfo 0.7.2

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1.1856 sys-mountinfo 0.7.2

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[This is the first released version of the library GPL. It is
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1.1860 jessevdk-go-flags 1.6.1

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1.1861 go-flags 1.6.1

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1.1862 spdx-tools-golang 0.5.5

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==========

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package reader

import (

```
 "errors"
 "fmt"
 "strings"

 gordfParser "github.com/spdx/gordf/rdfloader/parser"
 "github.com/spdx/gordf/rdfwriter"
)

// AnyLicense is a baseClass for all the licenses
// All the types of licenses is a sub-type of AnyLicense,
// either directly or indirectly.
// This function acts as a mux for all the licenses. Based on the input, it
// decides which type of license it is and passes control to that type of
// license parser to parse the given input.
func (parser *rdfParser2_2) getAnyLicenseFromNode(node *gordfParser.Node) (AnyLicenseInfo, error) {

 currState := parser.cache[node.ID]
 if currState == nil {
  // there is no entry about the state of current package node.
  // this is the first time we're seeing this node.
  parser.cache[node.ID] = &nodeState{
   object: nil, // not storing the object as we won't retrieve it later.
   Color:  WHITE,
  }
 } else if currState.Color == GREY {
  // we have
 already started parsing this license node.
  // We have a cyclic dependency!
  return nil, errors.New("Couldn't parse license: found a cyclic dependency on " + node.ID)
 }

 // setting color of the state to grey to indicate that we've started to
 // parse this node once.
 parser.cache[node.ID].Color = GREY

 // setting state color to black when we're done parsing this node.
 defer func() { parser.cache[node.ID].Color = BLACK }()

 associatedTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 if len(associatedTriples) == 0 {
  // just a license uri string was found.
  return parser.getSpecialLicenseFromNode(node)
 }

 // we have some attributes associated with the license node.
 nodeType, err := getNodeTypeFromTriples(associatedTriples, node)
 if err != nil {
  return nil, fmt.Errorf("error parsing license triple: %v", err)
```

```
 }
 switch nodeType {
 case SPDX_DISJUNCTIVE_LICENSE_SET:
  return parser.getDisjunctiveLicenseSetFromNode(node)
 case SPDX_CONJUNCTIVE_LICENSE_SET:
  return
 parser.getConjunctiveLicenseSetFromNode(node)
 case SPDX_EXTRACTED_LICENSING_INFO:
  return parser.getExtractedLicensingInfoFromNode(node)
 case SPDX_LISTED_LICENSE, SPDX_LICENSE:
  return parser.getLicenseFromNode(node)
 case SPDX_WITH_EXCEPTION_OPERATOR:
  return parser.getWithExceptionOperatorFromNode(node)
 case SPDX_OR_LATER_OPERATOR:
  return parser.getOrLaterOperatorFromNode(node)
 case SPDX_SIMPLE_LICENSING_INFO:
  return parser.getSimpleLicensingInfoFromNode(node)
 }
 return nil, fmt.Errorf("Unknown subTag (%s) found while parsing AnyLicense", nodeType)
}

func (parser *rdfParser2_2) getLicenseExceptionFromNode(node *gordfParser.Node) (exception LicenseException,
err error) {
 associatedTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 for _, triple := range associatedTriples {
  value := triple.Object.ID
  switch triple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_LICENSE_EXCEPTION_ID:
   exception.licenseExceptionId
 = value
  case SPDX_LICENSE_EXCEPTION_TEXT:
   exception.licenseExceptionText = value
  case RDFS_SEE_ALSO:
   if !isUriValid(value) {
    return exception, fmt.Errorf("invalid uri (%s) for seeAlso attribute of LicenseException", value)
   }
   exception.seeAlso = value
  case SPDX_NAME:
   exception.name = value
  case SPDX_EXAMPLE:
   exception.example = value
  case RDFS_COMMENT:
   exception.comment = value
  default:
   return exception, fmt.Errorf("invalid predicate(%s) for LicenseException", triple.Predicate)
  }
```

```
 }
 return exception, nil
}

func (parser *rdfParser2_2) getSimpleLicensingInfoFromNode(node *gordfParser.Node) (SimpleLicensingInfo,
error) {
 simpleLicensingTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 return parser.getSimpleLicensingInfoFromTriples(simpleLicensingTriples)
}

func (parser *rdfParser2_2) getWithExceptionOperatorFromNode(node *gordfParser.Node) (operator
WithExceptionOperator, err error) {
 associatedTriples
 := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 var memberFound bool
 for _, triple := range associatedTriples {
  switch triple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_MEMBER:
   if memberFound {
    return operator,
     fmt.Errorf("more than one member found in the WithExceptionOperator (expected only 1)")
   }
   memberFound = true
   member, err := parser.getSimpleLicensingInfoFromNode(triple.Object)
   if err != nil {
    return operator, fmt.Errorf("error parsing member of a WithExceptionOperator: %v", err)
   }
   operator.member = member
  case SPDX_LICENSE_EXCEPTION:
   operator.licenseException, err = parser.getLicenseExceptionFromNode(triple.Object)
   if err != nil {
    return operator, fmt.Errorf("error parsing licenseException of WithExceptionOperator: %v", err)
   }
  default:
   return operator, fmt.Errorf("unknown predicate (%s) for a WithExceptionOperator", triple.Predicate.ID)
  }
 }
 return operator, nil
}

func
 (parser *rdfParser2_2) getOrLaterOperatorFromNode(node *gordfParser.Node) (operator OrLaterOperator, err
error) {
 associatedTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 n := len(associatedTriples)
 if n != 2 {
```

```
 return operator, fmt.Errorf("orLaterOperator must be associated with exactly one tag. found %v triples", n-1)
 }
 for _, triple := range associatedTriples {
  switch triple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_MEMBER:
   operator.member, err = parser.getSimpleLicensingInfoFromNode(triple.Object)
   if err != nil {
    return operator, fmt.Errorf("error parsing simpleLicensingInfo of OrLaterOperator: %v", err)
   }
  default:
   return operator, fmt.Errorf("unknown predicate %s", triple.Predicate.ID)
  }
 }
 return operator, nil
}

// SpecialLicense is a type of license which is not defined in any of the
// spdx documents, it is a type of license defined for the sake of brevity.
// It can be [NONE|NOASSERTION|LicenseRef-<string>]
func
 (parser *rdfParser2_2) getSpecialLicenseFromNode(node *gordfParser.Node) (lic SpecialLicense, err error) {
 uri := strings.TrimSpace(node.ID)
 switch uri {
 case SPDX_NONE_CAPS, SPDX_NONE_SMALL:
  return SpecialLicense{
   value: NONE,
  }, nil
 case SPDX_NOASSERTION_SMALL, SPDX_NOASSERTION_CAPS:
  return SpecialLicense{
   value: NOASSERTION,
  }, nil
 }

 // the license is neither NONE nor NOASSERTION
 // checking if the license is among the standardLicenses
 licenseAbbreviation := getLastPartOfURI(uri)
 for _, stdLicense := range AllStandardLicenseIDS() {
  if licenseAbbreviation == stdLicense {
   return SpecialLicense{
    value: SpecialLicenseValue(stdLicense),
   }, nil
  }
 }
 return lic, fmt.Errorf("found a custom license uri (%s) without any associated fields", uri)
}
```

```
func (parser *rdfParser2_2) getDisjunctiveLicenseSetFromNode(node *gordfParser.Node) (DisjunctiveLicenseSet,
error) {
 licenseSet := DisjunctiveLicenseSet{
  members: []AnyLicenseInfo{},
 }
 for
 _, triple := range parser.nodeToTriples(node) {
  switch triple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_MEMBER:
   member, err := parser.getAnyLicenseFromNode(triple.Object)
   if err != nil {
    return licenseSet, fmt.Errorf("error parsing disjunctive license set: %v", err)
   }
   licenseSet.members = append(licenseSet.members, member)
  }
 }
 return licenseSet, nil
}

func (parser *rdfParser2_2) getConjunctiveLicenseSetFromNode(node *gordfParser.Node) (ConjunctiveLicenseSet,
error) {
 licenseSet := ConjunctiveLicenseSet{
  members: []AnyLicenseInfo{},
 }
 for _, triple := range parser.nodeToTriples(node) {
  switch triple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_MEMBER:
   member, err := parser.getAnyLicenseFromNode(triple.Object)
   if err != nil {
    return licenseSet, fmt.Errorf("error parsing conjunctive license set: %v", err)
   }
   licenseSet.members = append(licenseSet.members, member)
  default:
   return licenseSet, fmt.Errorf("unknown
 subTag for ConjunctiveLicenseSet: %s", triple.Predicate.ID)
  }
 }
 return licenseSet, nil
}

func (parser *rdfParser2_2) getSimpleLicensingInfoFromTriples(triples []*gordfParser.Triple) (lic
SimpleLicensingInfo, err error) {
 for _, triple := range triples {
  switch triple.Predicate.ID {
```

```
 case RDFS_COMMENT:
  lic.comment = triple.Object.ID
 case SPDX_LICENSE_ID:
  lic.licenseID = triple.Object.ID
 case SPDX_NAME:
  lic.name = triple.Object.ID
 case RDFS_SEE_ALSO:
  if !isUriValid(triple.Object.ID) {
   return lic, fmt.Errorf("%s is not a valid uri for seeAlso attribute of a License", triple.Object.ID)
  }
  lic.seeAlso = append(lic.seeAlso, triple.Object.ID)
 case SPDX_EXAMPLE:
  lic.example = triple.Object.ID
 case RDF_TYPE:
  continue
 default:
  return lic, fmt.Errorf("unknown predicate(%s) for simple licensing info", triple.Predicate)
 }
}
return lic, nil
}

func (parser *rdfParser2_2) getLicenseFromNode(node *gordfParser.Node) (lic License, err error)
{
associatedTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
var restTriples []*gordfParser.Triple
for _, triple := range associatedTriples {
 value := triple.Object.ID
 switch triple.Predicate.ID {
 case SPDX_IS_OSI_APPROVED:
  lic.isOsiApproved, err = boolFromString(value)
  if err != nil {
   return lic, fmt.Errorf("error parsing isOsiApproved attribute of a License: %v", err)
  }
 case SPDX_LICENSE_TEXT:
  lic.licenseText = value
 case SPDX_STANDARD_LICENSE_HEADER:
  lic.standardLicenseHeader = value
 case SPDX_STANDARD_LICENSE_TEMPLATE:
  lic.standardLicenseTemplate = value
 case SPDX_STANDARD_LICENSE_HEADER_TEMPLATE:
  lic.standardLicenseHeaderTemplate = value
 case SPDX_IS_DEPRECATED_LICENSE_ID:
  lic.isDeprecatedLicenseID, err = boolFromString(value)
  if err != nil {
   return lic, fmt.Errorf("error parsing isDeprecatedLicenseId attribute of a License: %v", err)
  }
 case SPDX_IS_FSF_LIBRE:
```

```
  lic.isFsfLibre, err =
 boolFromString(value)
  if err != nil {
   return lic, fmt.Errorf("error parsing isFsfLibre attribute of a License: %v", err)
  }
 default:
  restTriples = append(restTriples, triple)
 }
}
lic.SimpleLicensingInfo, err = parser.getSimpleLicensingInfoFromTriples(restTriples)
if err != nil {
 return lic, fmt.Errorf("error setting simple licensing information of a License: %s", err)
}
return lic, nil
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package writer

import (
 "fmt"
 "io"

 spdx "github.com/spdx/tools-golang/spdx/v2/v2_1"
)

func renderOtherLicense(ol *spdx.OtherLicense, w io.Writer) error {
 if ol.LicenseIdentifier != "" {
  fmt.Fprintf(w, "LicenseID: %s\n", ol.LicenseIdentifier)
 }
 if ol.ExtractedText != "" {
  fmt.Fprintf(w, "ExtractedText: %s\n", textify(ol.ExtractedText))
 }
 if ol.LicenseName != "" {
  fmt.Fprintf(w, "LicenseName: %s\n", ol.LicenseName)
 }
 for _, s := range ol.LicenseCrossReferences {
  fmt.Fprintf(w, "LicenseCrossReference: %s\n", s)
 }
 if ol.LicenseComment != "" {
  fmt.Fprintf(w, "LicenseComment: %s\n", textify(ol.LicenseComment))
 }

 fmt.Fprintf(w, "\n")

 return nil
}
```

```
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package writer

import (
 "bytes"
 "testing"

 spdx "github.com/spdx/tools-golang/spdx/v2/v2_2"
)

// ===== Other License section Saver tests =====
func TestSaverOtherLicenseSavesText(t *testing.T) {
 ol := &spdx.OtherLicense{
  LicenseIdentifier: "LicenseRef-1",
  ExtractedText: `License 1 text
blah blah blah
blah blah blah blah`,
  LicenseName: "License 1",
  LicenseCrossReferences: []string{
   "http://example.com/License1/",
   "http://example.com/License1AnotherURL/",
  },
  LicenseComment: "this is a license comment",
 }

 // what we want to get, as a buffer of bytes
 want := bytes.NewBufferString(`LicenseID: LicenseRef-1
ExtractedText: <text>License 1 text
blah blah blah
blah blah blah blah</text>
LicenseName: License 1
LicenseCrossReference: http://example.com/License1/
LicenseCrossReference: http://example.com/License1AnotherURL/
LicenseComment: this is a license comment

`)

 // render as buffer of bytes
 var got bytes.Buffer
 err
 := renderOtherLicense(ol, &got)
 if err != nil {
  t.Errorf("Expected nil error, got %v", err)
 }

 // check that they match
 c := bytes.Compare(want.Bytes(), got.Bytes())
```

```
 if c != 0 {
  t.Errorf("Expected %v, got %v", want.String(), got.String())
 }
}

func TestSaverOtherLicenseOmitsOptionalFieldsIfEmpty(t *testing.T) {
 ol := &spdx.OtherLicense{
  LicenseIdentifier: "LicenseRef-1",
  ExtractedText: `License 1 text
blah blah blah
blah blah blah blah`,
  LicenseName: "License 1",
 }

 // what we want to get, as a buffer of bytes
 want := bytes.NewBufferString(`LicenseID: LicenseRef-1
ExtractedText: <text>License 1 text
blah blah blah
blah blah blah blah</text>
LicenseName: License 1

`)

 // render as buffer of bytes
 var got bytes.Buffer
 err := renderOtherLicense(ol, &got)
 if err != nil {
  t.Errorf("Expected nil error, got %v", err)
 }

 // check that they match
 c := bytes.Compare(want.Bytes(), got.Bytes())
 if c != 0 {
  t.Errorf("Expected %v, got %v", want.String(),
 got.String())
 }
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later
package reader

import (
 "testing"

 "github.com/spdx/tools-golang/spdx/v2/v2_2"
)

// ===== Parser other license section state change tests =====
func TestParserOLStartsNewOtherLicenseAfterParsingLicenseIDTag(t *testing.T) {
```

```
// create the first other license
olid1 := "LicenseRef-Lic11"
olname1 := "License 11"

parser := tvParser{
 doc:  &v2_2.Document{Packages: []*v2_2.Package{}},
 st:   psOtherLicense,
 pkg:  &v2_2.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_2.File{}},
 file: &v2_2.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
 otherLic: &v2_2.OtherLicense{
  LicenseIdentifier: olid1,
  LicenseName:       olname1,
 },
}
olic1 := parser.otherLic
parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
parser.pkg.Files = append(parser.pkg.Files, parser.file)
parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

// the Document's OtherLicenses should
have this one only
if parser.doc.OtherLicenses[0] != olic1 {
 t.Errorf("Expected other license %v in OtherLicenses[0], got %v", olic1, parser.doc.OtherLicenses[0])
}
if parser.doc.OtherLicenses[0].LicenseName != olname1 {
 t.Errorf("expected other license name %s in OtherLicenses[0], got %s", olname1,
parser.doc.OtherLicenses[0].LicenseName)
}

// now add a new other license
olid2 := "LicenseRef-22"
olname2 := "License 22"
err := parser.parsePair("LicenseID", olid2)
if err != nil {
 t.Errorf("got error when calling parsePair: %v", err)
}
// state should be correct
if parser.st != psOtherLicense {
 t.Errorf("expected state to be %v, got %v", psOtherLicense, parser.st)
}
// and an other license should be created
if parser.otherLic == nil {
 t.Fatalf("parser didn't create new other license")
}
// also parse the new license's name
err = parser.parsePair("LicenseName", olname2)
if err != nil {
 t.Errorf("got error when calling parsePair: %v", err)
```

```
 }
 // state should
 still be correct
 if parser.st != psOtherLicense {
  t.Errorf("expected state to be %v, got %v", psOtherLicense, parser.st)
 }
 // and the other license name should be as expected
 if parser.otherLic.LicenseName != olname2 {
  t.Errorf("expected other license name %s, got %s", olname2, parser.otherLic.LicenseName)
 }
 // and the Document's Other Licenses should be of size 2 and have these two
 if len(parser.doc.OtherLicenses) != 2 {
  t.Fatalf("Expected OtherLicenses to have len 2, got %d", len(parser.doc.OtherLicenses))
 }
 if parser.doc.OtherLicenses[0] != olic1 {
  t.Errorf("Expected other license %v in OtherLicenses[0], got %v", olic1, parser.doc.OtherLicenses[0])
 }
 if parser.doc.OtherLicenses[0].LicenseIdentifier != olid1 {
  t.Errorf("expected other license ID %s in OtherLicenses[0], got %s", olid1,
parser.doc.OtherLicenses[0].LicenseIdentifier)
 }
 if parser.doc.OtherLicenses[0].LicenseName != olname1 {
  t.Errorf("expected other license name %s in OtherLicenses[0], got %s",
 olname1, parser.doc.OtherLicenses[0].LicenseName)
 }
 if parser.doc.OtherLicenses[1] != parser.otherLic {
  t.Errorf("Expected other license %v in OtherLicenses[1], got %v", parser.otherLic, parser.doc.OtherLicenses[1])
 }
 if parser.doc.OtherLicenses[1].LicenseIdentifier != olid2 {
  t.Errorf("expected other license ID %s in OtherLicenses[1], got %s", olid2,
parser.doc.OtherLicenses[1].LicenseIdentifier)
 }
 if parser.doc.OtherLicenses[1].LicenseName != olname2 {
  t.Errorf("expected other license name %s in OtherLicenses[1], got %s", olname2,
parser.doc.OtherLicenses[1].LicenseName)
 }
}

func TestParserOLMovesToReviewAfterParsingReviewerTag(t *testing.T) {
 parser := tvParser{
  doc:  &v2_2.Document{Packages: []*v2_2.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_2.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_2.File{}},
  file: &v2_2.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files
```

```
 = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 err := parser.parsePair("Reviewer", "Person: John Doe")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psReview {
  t.Errorf("expected state to be %v, got %v", psReview, parser.st)
 }
}

func TestParserOtherLicenseStaysAfterParsingRelationshipTags(t *testing.T) {
 parser := tvParser{
  doc:  &v2_2.Document{Packages: []*v2_2.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_2.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_2.File{}},
  file: &v2_2.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
  otherLic: &v2_2.OtherLicense{
   LicenseIdentifier: "LicenseRef-whatever",
   LicenseName:       "the whatever license",
  },
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses,
 parser.otherLic)

 err := parser.parsePair("Relationship", "SPDXRef-blah CONTAINS SPDXRef-blah-else")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 // state should remain unchanged
 if parser.st != psOtherLicense {
  t.Errorf("expected state to be %v, got %v", psOtherLicense, parser.st)
 }
 // and the relationship should be in the Document's Relationships
 if len(parser.doc.Relationships) != 1 {
  t.Fatalf("expected doc.Relationships to have len 1, got %d", len(parser.doc.Relationships))
 }
 deID := parser.doc.Relationships[0].RefA
 if deID.DocumentRefID != "" || deID.ElementRefID != "blah" {
  t.Errorf("expected RefA to be %s, got %s", "blah", parser.doc.Relationships[0].RefA)
 }

 err = parser.parsePair("RelationshipComment", "blah")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
```

```
 }
 // state should still remain unchanged
 if parser.st != psOtherLicense {
  t.Errorf("expected state to be %v, got %v", psOtherLicense,
 parser.st)
 }
}

func TestParserOtherLicenseStaysAfterParsingAnnotationTags(t *testing.T) {
 parser := tvParser{
  doc:  &v2_2.Document{Packages: []*v2_2.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_2.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_2.File{}},
  file: &v2_2.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
  otherLic: &v2_2.OtherLicense{
   LicenseIdentifier: "LicenseRef-whatever",
   LicenseName:       "the whatever license",
  },
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 err := parser.parsePair("Annotator", "Person: John Doe ()")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 err = parser.parsePair("AnnotationDate", "2018-09-15T00:36:00Z")
 if
 err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 err = parser.parsePair("AnnotationType", "REVIEW")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }
```

```
 err = parser.parsePair("SPDXREF", "SPDXRef-45")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 err = parser.parsePair("AnnotationComment", "i guess i had something to say about this particular file")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 // and the annotation
 should be in the Document's Annotations
 if len(parser.doc.Annotations) != 1 {
  t.Fatalf("expected doc.Annotations to have len 1, got %d", len(parser.doc.Annotations))
 }
 if parser.doc.Annotations[0].Annotator.Annotator != "John Doe ()" {
  t.Errorf("expected Annotator to be %s, got %s", "John Doe ()", parser.doc.Annotations[0].Annotator)
 }
}

func TestParserOLFailsAfterParsingOtherSectionTags(t *testing.T) {
 parser := tvParser{
  doc:  &v2_2.Document{Packages: []*v2_2.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_2.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_2.File{}},
  file: &v2_2.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
  otherLic: &v2_2.OtherLicense{
   LicenseIdentifier: "LicenseRef-Lic11",
   LicenseName:       "License 11",
  },
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 //
 can't go back to old sections
 err := parser.parsePair("SPDXVersion", "SPDX-2.2")
 if err == nil {
  t.Errorf("expected error when calling parsePair, got nil")
 }
 err = parser.parsePair("PackageName", "whatever")
```

```
 if err == nil {
  t.Errorf("expected error when calling parsePair, got nil")
 }
 err = parser.parsePair("FileName", "whatever")
 if err == nil {
  t.Errorf("expected error when calling parsePair, got nil")
 }
}

// ===== Other License data section tests =====
func TestParserCanParseOtherLicenseTags(t *testing.T) {
 parser := tvParser{
  doc:  &v2_2.Document{Packages: []*v2_2.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_2.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_2.File{}},
  file: &v2_2.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 //
 License Identifier
 err := parser.parsePairFromOtherLicense("LicenseID", "LicenseRef-Lic11")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.LicenseIdentifier != "LicenseRef-Lic11" {
  t.Errorf("got %v for LicenseID", parser.otherLic.LicenseIdentifier)
 }

 // Extracted Text
 err = parser.parsePairFromOtherLicense("ExtractedText", "You are permitted to do anything with the software,
hooray!")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.ExtractedText != "You are permitted to do anything with the software, hooray!" {
  t.Errorf("got %v for ExtractedText", parser.otherLic.ExtractedText)
 }

 // License Name
 err = parser.parsePairFromOtherLicense("LicenseName", "License 11")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.LicenseName != "License 11" {
  t.Errorf("got %v for LicenseName", parser.otherLic.LicenseName)
```

```
 }

 // License Cross Reference
 crossRefs := []string{
  "https://example.com/1",
  "https://example.com/2",
  "https://example.com/3",
 }
 for
 _, cr := range crossRefs {
  err = parser.parsePairFromOtherLicense("LicenseCrossReference", cr)
  if err != nil {
   t.Errorf("expected nil error, got %v", err)
  }
 }
 for _, refWant := range crossRefs {
  flagFound := false
  for _, refCheck := range parser.otherLic.LicenseCrossReferences {
   if refWant == refCheck {
    flagFound = true
   }
  }
  if flagFound == false {
   t.Errorf("didn't find %s in LicenseCrossReferences", refWant)
  }
 }
 if len(crossRefs) != len(parser.otherLic.LicenseCrossReferences) {
  t.Errorf("expected %d types in LicenseCrossReferences, got %d", len(crossRefs),
   len(parser.otherLic.LicenseCrossReferences))
 }

 // License Comment
 err = parser.parsePairFromOtherLicense("LicenseComment", "this is a comment")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.LicenseComment != "this is a comment" {
  t.Errorf("got %v for LicenseComment",
 parser.otherLic.LicenseComment)
 }
}

func TestParserOLUnknownTagFails(t *testing.T) {
 parser := tvParser{
  doc:  &v2_2.Document{Packages: []*v2_2.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_2.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_2.File{}},
  file: &v2_2.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
```

```
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 err := parser.parsePairFromOtherLicense("blah", "something")
 if err == nil {
  t.Errorf("expected error from parsing unknown tag")
 }
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "fmt"

 spdx "github.com/spdx/tools-golang/spdx/v2/v2_3"
)

func (parser *tvParser) parsePairFromOtherLicense(tag string, value string) error {
 switch tag {
 // tag for creating new other license section
 case "LicenseID":
  parser.otherLic = &spdx.OtherLicense{}
  parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)
  parser.otherLic.LicenseIdentifier = value
 case "ExtractedText":
  parser.otherLic.ExtractedText = value
 case "LicenseName":
  parser.otherLic.LicenseName = value
 case "LicenseCrossReference":
  parser.otherLic.LicenseCrossReferences = append(parser.otherLic.LicenseCrossReferences, value)
 case "LicenseComment":
  parser.otherLic.LicenseComment = value
 // for relationship tags, pass along but don't change state
 case "Relationship":
  parser.rln = &spdx.Relationship{}
  parser.doc.Relationships = append(parser.doc.Relationships, parser.rln)
  return parser.parsePairForRelationship(tag,
 value)
 case "RelationshipComment":
  return parser.parsePairForRelationship(tag, value)
 // for annotation tags, pass along but don't change state
 case "Annotator":
  parser.ann = &spdx.Annotation{}
  parser.doc.Annotations = append(parser.doc.Annotations, parser.ann)
  return parser.parsePairForAnnotation(tag, value)
```

```
 case "AnnotationDate":
  return parser.parsePairForAnnotation(tag, value)
 case "AnnotationType":
  return parser.parsePairForAnnotation(tag, value)
 case "SPDXREF":
  return parser.parsePairForAnnotation(tag, value)
 case "AnnotationComment":
  return parser.parsePairForAnnotation(tag, value)
 // tag for going on to review section (DEPRECATED)
 case "Reviewer":
  parser.st = psReview
  return parser.parsePairFromReview(tag, value)
 default:
  return fmt.Errorf("received unknown tag %v in OtherLicense section", tag)
 }

 return nil
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "fmt"

 "github.com/spdx/tools-golang/spdx/v2/v2_1"
)

func (parser *tvParser) parsePairFromOtherLicense(tag string, value string) error {
 switch tag {
 // tag for creating new other license section
 case "LicenseID":
  parser.otherLic = &v2_1.OtherLicense{}
  parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)
  parser.otherLic.LicenseIdentifier = value
 case "ExtractedText":
  parser.otherLic.ExtractedText = value
 case "LicenseName":
  parser.otherLic.LicenseName = value
 case "LicenseCrossReference":
  parser.otherLic.LicenseCrossReferences = append(parser.otherLic.LicenseCrossReferences, value)
 case "LicenseComment":
  parser.otherLic.LicenseComment = value
 // for relationship tags, pass along but don't change state
 case "Relationship":
  parser.rln = &v2_1.Relationship{}
  parser.doc.Relationships = append(parser.doc.Relationships, parser.rln)
  return parser.parsePairForRelationship(tag,
```

```
 value)
 case "RelationshipComment":
  return parser.parsePairForRelationship(tag, value)
 // for annotation tags, pass along but don't change state
 case "Annotator":
  parser.ann = &v2_1.Annotation{}
  parser.doc.Annotations = append(parser.doc.Annotations, parser.ann)
  return parser.parsePairForAnnotation(tag, value)
 case "AnnotationDate":
  return parser.parsePairForAnnotation(tag, value)
 case "AnnotationType":
  return parser.parsePairForAnnotation(tag, value)
 case "SPDXREF":
  return parser.parsePairForAnnotation(tag, value)
 case "AnnotationComment":
  return parser.parsePairForAnnotation(tag, value)
 // tag for going on to review section (DEPRECATED)
 case "Reviewer":
  parser.st = psReview
  return parser.parsePairFromReview(tag, value)
 default:
  return fmt.Errorf("received unknown tag %v in OtherLicense section", tag)
 }

 return nil
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "reflect"
 "sort"
 "testing"

 gordfParser "github.com/spdx/gordf/rdfloader/parser"
)

func Test_rdfParser2_3_getAnyLicenseFromNode(t *testing.T) {
 // since this function is a mux, we just have to make sure that with each
 // type of input, it is able to redirect the request to an appropriate
 // license getter.

 // TestCase 1: input node is just a node string without any associated
 //      triple (either a NONE|NOASSERTION) because for other case,
 //      the license should've been associated with other triples
 parser, _ := parserFromBodyContent(``)
 inputNode := &gordfParser.Node{
```

```
 NodeType: gordfParser.IRI,
 ID:       NS_SPDX + "NONE",
}
lic, err := parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a SpecialLicense
switch lic.(type) {
case SpecialLicense:
default:
 t.Errorf("expected
license to be of type SpecialLicense, found %v", reflect.TypeOf(lic))
}

// TestCase 2: DisjunctiveLicenseSet:
parser, _ = parserFromBodyContent(`
 <spdx:DisjunctiveLicenseSet>
  <spdx:member rdf:resource="http://spdx.org/licenses/Nokia"/>
  <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
 </spdx:DisjunctiveLicenseSet>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a DisjunctiveLicenseSet
switch lic.(type) {
case DisjunctiveLicenseSet:
default:
 t.Errorf("expected license to be of type DisjunctiveLicenseSet, found %v", reflect.TypeOf(lic))
}

// TestCase 3: ConjunctiveLicenseSet:
parser, _ = parserFromBodyContent(`
 <spdx:ConjunctiveLicenseSet>
  <spdx:member rdf:resource="http://spdx.org/licenses/Nokia"/>
  <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
 </spdx:ConjunctiveLicenseSet>
`)
inputNode
= parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a ConjunctiveLicenseSet
```

```
switch lic.(type) {
case ConjunctiveLicenseSet:
default:
 t.Errorf("expected license to be of type ConjunctiveLicenseSet, found %v", reflect.TypeOf(lic))
}

// TestCase 4: ExtractedLicensingInfo
parser, _ = parserFromBodyContent(`
 <spdx:ExtractedLicensingInfo rdf:about="http://spdx.dev/spdx.rdf#LicenseRef-Freeware">
  <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
  <spdx:name>freeware</spdx:name>
  <spdx:extractedText><![CDATA[...]]></spdx:extractedText>
   </spdx:ExtractedLicensingInfo>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return
type is a ExtractedLicensingInfo
switch lic.(type) {
case ExtractedLicensingInfo:
default:
 t.Errorf("expected license to be of type ExtractedLicensingInfo, found %v", reflect.TypeOf(lic))
}

// TestCase 4: ExtractedLicensingInfo
parser, _ = parserFromBodyContent(`
 <spdx:ExtractedLicensingInfo rdf:about="http://spdx.dev/spdx.rdf#LicenseRef-Freeware">
  <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
  <spdx:name>freeware</spdx:name>
  <spdx:extractedText><![CDATA[...]]></spdx:extractedText>
   </spdx:ExtractedLicensingInfo>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a ExtractedLicensingInfo
switch lic.(type) {
case ExtractedLicensingInfo:
default:
 t.Errorf("expected license to be of type ExtractedLicensingInfo, found %v", reflect.TypeOf(lic))
}

// TestCase 5: License
```

parser, _ = parserFromBodyContent(`
<spdx:License
rdf:about="http://spdx.org/licenses/Apache-2.0">
<spdx:standardLicenseTemplate><> Apache License Version 2.0, January 2004 http://www.apache.org/licenses/<><> TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION<> <> Definitions. "License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document. "Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License. "Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership
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```
distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS
OF ANY KIND, either express or implied. See the License for the specific language governing permissions and
limitations under the License.&lt;&gt;</spdx:standardLicenseTemplate>
  <rdfs:seeAlso>http://www.apache.org/licenses/LICENSE-2.0</rdfs:seeAlso>
  <spdx:name>Apache License 2.0</spdx:name>
  <spdx:licenseId>Apache-2.0</spdx:licenseId>
  <spdx:isOsiApproved>true</spdx:isOsiApproved>
  <rdfs:seeAlso>http://www.opensource.org/licenses/Apache-2.0</rdfs:seeAlso>
  <spdx:licenseText>...</spdx:licenseText>
  <spdx:standardLicenseHeader>...</spdx:standardLicenseHeader>
  </spdx:License>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if
err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a License
switch lic.(type) {
case License:
default:
 t.Errorf("expected license to be of type License, found %v", reflect.TypeOf(lic))
}

// TestCase 5: WithExceptionOperator
parser, _ = parserFromBodyContent(`
 <spdx:WithExceptionOperator>
  <spdx:licenseException>
   <spdx:LicenseException rdf:nodeID="A1">
    <spdx:example></spdx:example>
    <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
    <rdfs:comment></rdfs:comment>
   </spdx:LicenseException>
  </spdx:licenseException>
  <spdx:member rdf:resource="http://spdx.org/licenses/GPL-2.0-or-later"/>
 </spdx:WithExceptionOperator>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a WithExceptionOperator
switch
lic.(type) {
case WithExceptionOperator:
default:
```

```
 t.Errorf("expected license to be of type WithExceptionOperator, found %v", reflect.TypeOf(lic))
}

// TestCase 6: OrLaterOperator
parser, _ = parserFromBodyContent(`
 <spdx:OrLaterOperator>
  <spdx:member>
   <spdx:SimpleLicensingInfo>
    <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
    <spdx:name>freeware</spdx:name>
   </spdx:SimpleLicensingInfo>
  </spdx:member>
 </spdx:OrLaterOperator>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a OrLaterOperator
switch lic.(type) {
case OrLaterOperator:
default:
 t.Errorf("expected license to be of type OrLaterOperator, found %v", reflect.TypeOf(lic))
}

// TestCase 7: checking if an unknown license raises an error.
parser, _ = parserFromBodyContent(`
 <spdx:UnknownLicense>
  <spdx:unknownTag
/>
 </spdx:UnknownLicense>
`)
node := parser.gordfParserObj.Triples[0].Subject
_, err = parser.getAnyLicenseFromNode(node)
t.Log(err)
if err == nil {
 t.Errorf("should've raised an error for invalid input")
}

// TestCase 8: cyclic dependent license must raise an error.
parser, _ = parserFromBodyContent(`
 <spdx:ConjunctiveLicenseSet rdf:about="#SPDXRef-RecursiveLicense">
  <spdx:member rdf:resource="http://spdx.org/licenses/GPL-2.0-or-later"/>
  <spdx:member>
   <spdx:ConjunctiveLicenseSet rdf:about="#SPDXRef-RecursiveLicense">
    <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
    <spdx:member rdf:resource="http://spdx.org/spdxdocs/spdx-example-444504E0-4F89-41D3-9A0C-
```

```
0305E82C3301#SPDXRef-RecursiveLicense"/>
    </spdx:ConjunctiveLicenseSet>
   </spdx:member>
  </spdx:ConjunctiveLicenseSet>
 `)
 node = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getAnyLicenseFromNode(node)
 if err == nil {
  t.Errorf("expected an error due to cyclic
 dependent license. found %v", err)
 }
}

func Test_rdfParser2_3_getConjunctiveLicenseSetFromNode(t *testing.T) {
 var parser *rdfParser2_3
 var err error
 var licenseNode *gordfParser.Node
 var license ConjunctiveLicenseSet

 // TestCase 1: invalid license member
 parser, _ = parserFromBodyContent(`
  <spdx:ConjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/Unknown"/>
   <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
  </spdx:ConjunctiveLicenseSet>
 `)
 licenseNode = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getConjunctiveLicenseSetFromNode(licenseNode)
 if err == nil {
  t.Errorf("expected an error saying invalid license member, found <nil>")
 }

 // TestCase 2: invalid predicate in the licenseSet.
 parser, _ = parserFromBodyContent(`
  <spdx:ConjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/CC0-1.0"/>
   <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
   <spdx:unknownTag />
  </spdx:ConjunctiveLicenseSet>
 `)
 licenseNode
 = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getConjunctiveLicenseSetFromNode(licenseNode)
 if err == nil {
  t.Errorf("expected an error saying invalid predicate found")
 }

 // TestCase 3: valid example.
```

```
 parser, _ = parserFromBodyContent(`
  <spdx:ConjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/Nokia"/>
   <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
  </spdx:ConjunctiveLicenseSet>
 `)
 licenseNode = parser.gordfParserObj.Triples[0].Subject
 license, err = parser.getConjunctiveLicenseSetFromNode(licenseNode)
 if err != nil {
  t.Errorf("unexpected error parsing licenseSet: %v", err)
 }
 nMembers := len(license.members)
 if nMembers != 2 {
  t.Errorf("expected licenseSet to have 2 members, found %d", nMembers)
 }
 licenseMembers := mapLicensesToStrings(license.members)
 expectedLicenseMembers := []string{"LGPL-2.0", "Nokia"}
 sort.Strings(licenseMembers)
 if !reflect.DeepEqual(licenseMembers,
 expectedLicenseMembers) {
  t.Errorf("expected %v, found %v", expectedLicenseMembers, licenseMembers)
 }
}

func Test_rdfParser2_3_getDisjunctiveLicenseSetFromNode(t *testing.T) {
 var parser *rdfParser2_3
 var err error
 var licenseNode *gordfParser.Node
 var license DisjunctiveLicenseSet

 // TestCase 1: invalid license member
 parser, _ = parserFromBodyContent(`
  <spdx:DisjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/Unknown"/>
   <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
  </spdx:DisjunctiveLicenseSet>
 `)
 licenseNode = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getDisjunctiveLicenseSetFromNode(licenseNode)
 if err == nil {
  t.Errorf("expected an error saying invalid license member, found <nil>")
 }

 // TestCase 2: invalid predicate in the licenseSet.
 parser, _ = parserFromBodyContent(`
  <spdx:DisjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/Unknown"/>
   <spdx:member
```

```
rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
  <spdx:unknownTag />
 </spdx:DisjunctiveLicenseSet>
`)
licenseNode = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getDisjunctiveLicenseSetFromNode(licenseNode)
if err == nil {
 t.Errorf("expected an error saying invalid predicate found")
}

// TestCase 3: valid example.
parser, _ = parserFromBodyContent(`
 <spdx:DisjunctiveLicenseSet>
  <spdx:member rdf:resource="http://spdx.org/licenses/Nokia"/>
  <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
 </spdx:DisjunctiveLicenseSet>
`)
licenseNode = parser.gordfParserObj.Triples[0].Subject
license, err = parser.getDisjunctiveLicenseSetFromNode(licenseNode)
if err != nil {
 t.Errorf("unexpected error parsing licenseSet: %v", err)
}
nMembers := len(license.members)
if nMembers != 2 {
 t.Errorf("expected licenseSet to have 2 members, found %d", nMembers)
}
licenseMembers := mapLicensesToStrings(license.members)
expectedLicenseMembers := []string{"LGPL-2.0",
"Nokia"}
sort.Strings(licenseMembers)
if !reflect.DeepEqual(licenseMembers, expectedLicenseMembers) {
 t.Errorf("expected %v, found %v", expectedLicenseMembers, licenseMembers)
}
}

func Test_rdfParser2_3_getLicenseExceptionFromNode(t *testing.T) {
 var licenseException LicenseException
 var err error
 var node *gordfParser.Node
 var parser *rdfParser2_3

 // TestCase 1: invalid value for rdf:seeAlso
 parser, _ = parserFromBodyContent(`
  <spdx:LicenseException>
   <rdfs:seeAlso>see-also</rdfs:seeAlso>
   <spdx:example></spdx:example>
   <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
   <rdfs:comment></rdfs:comment>
```

```
 </spdx:LicenseException>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getLicenseExceptionFromNode(node)
if err == nil {
 t.Errorf("should've raised an error due to invalid uri for rdfs:seeAlso")
}

// TestCase 2: invalid predicate for licenseException
// TestCase 1: invalid value for rdf:seeAlso
parser,
_ = parserFromBodyContent(`
 <spdx:LicenseException>
  <spdx:example></spdx:example>
  <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
  <rdfs:unknown></rdfs:unknown>
 </spdx:LicenseException>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getLicenseExceptionFromNode(node)
if err == nil {
 t.Errorf("should've raised an error due to invalid predicate")
}

// TestCase 3: everything valid
// TestCase 1: invalid value for rdf:seeAlso
parser, _ = parserFromBodyContent(`
 <spdx:LicenseException>
  <rdfs:seeAlso rdf:resource="http://www.opensource.org/licenses/GPL-3.0"/>
  <spdx:example>no example</spdx:example>
  <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
  <rdfs:comment>no comments</rdfs:comment>
  <spdx:licenseExceptionText>text</spdx:licenseExceptionText>
  <spdx:name>name</spdx:name>
 </spdx:LicenseException>
`)
node = parser.gordfParserObj.Triples[0].Subject
licenseException, err = parser.getLicenseExceptionFromNode(node)
if
err != nil {
 t.Fatalf("unexpected error while parsing a valid licenseException")
}
expectedCrossReference := "http://www.opensource.org/licenses/GPL-3.0"
if licenseException.seeAlso != expectedCrossReference {
 t.Errorf("expected: %s, found: %s", expectedCrossReference, licenseException.seeAlso)
}
expectedExample := "no example"
if licenseException.example != expectedExample {
```

```
 t.Errorf("expected: %s, got: %s", expectedExample, licenseException.example)
 }
 if licenseException.licenseExceptionId != "Libtool-exception" {
  t.Errorf("expected: %s, got: %s", "Libtool-exception", licenseException.licenseExceptionId)
 }
 if licenseException.comment != "no comments" {
  t.Errorf("expected: %s, got: %s", "no comments", licenseException.comment)
 }
 if licenseException.licenseExceptionText != "text" {
  t.Errorf("expected: '%s', got: '%s'", "text", licenseException.licenseExceptionText)
 }
 if licenseException.name != "name" {
  t.Errorf("expected:
 '%s', got: '%s'", "name", licenseException.name)
 }
}

func Test_rdfParser2_3_getLicenseFromNode(t *testing.T) {
 var parser *rdfParser2_3
 var node *gordfParser.Node
 var license License
 var err error

 // TestCase 1: isOsiApproved is not a valid boolean
 parser, _ = parserFromBodyContent(`
  <spdx:License>
   <spdx:isOsiApproved>no</spdx:isOsiApproved>
  </spdx:License>
 `)
 node = parser.gordfParserObj.Triples[0].Subject
 license, err = parser.getLicenseFromNode(node)
 if err == nil {
  t.Errorf("expected function to raise an error stating isOsiApproved should be a valid boolean type")
 }

 // TestCase 2: rdf:seeAlso not a valid uri must raise an error
 parser, _ = parserFromBodyContent(`
  <spdx:License>
   <rdfs:seeAlso>uri</rdfs:seeAlso>
  </spdx:License>
 `)
 node = parser.gordfParserObj.Triples[0].Subject
 license, err = parser.getLicenseFromNode(node)
 if err == nil {
  t.Errorf("expected function to raise an error stating invalid uri for rdfs:seeAlso")
 }

 // TestCase 3:
```

```
isDeprecatedLicenseId is not a valid boolean
parser, _ = parserFromBodyContent(`
 <spdx:License>
  <spdx:isDeprecatedLicenseId>yes</spdx:isDeprecatedLicenseId>
 </spdx:License>
`)
node = parser.gordfParserObj.Triples[0].Subject
license, err = parser.getLicenseFromNode(node)
if err == nil {
 t.Errorf("expected function to raise an error stating isDeprecatedLicenseId should be a valid boolean type")
}

// TestCase 4: isFsfLibre is not a valid boolean
parser, _ = parserFromBodyContent(`
 <spdx:License>
  <spdx:isFsfLibre>no</spdx:isFsfLibre>
 </spdx:License>
`)
node = parser.gordfParserObj.Triples[0].Subject
license, err = parser.getLicenseFromNode(node)
if err == nil {
 t.Errorf("expected function to raise an error stating isFsfLibre should be a valid boolean type")
}

// TestCase 5: invalid triple for License:
parser, _ = parserFromBodyContent(`
 <spdx:License>
  <spdx:unknown />
 </spdx:License>
`)
node = parser.gordfParserObj.Triples[0].Subject
license,
err = parser.getLicenseFromNode(node)
if err == nil {
 t.Errorf("invalid predicate should've raised an error, got <nil>")
}

// TestCase 5: everything valid:
parser, _ = parserFromBodyContent(`
 <spdx:License rdf:about="http://spdx.org/licenses/GPL-3.0-or-later">
  <rdfs:seeAlso>http://www.opensource.org/licenses/GPL-3.0</rdfs:seeAlso>
  <spdx:isOsiApproved>true</spdx:isOsiApproved>
  <spdx:licenseText>GNU GENERAL PUBLIC LICENSE Version 3, 29 June 2007</spdx:licenseText>
  <spdx:name>GNU General Public License v3.0 or later</spdx:name>
  <spdx:standardLicenseHeaderTemplate>...</spdx:standardLicenseHeaderTemplate>
  <spdx:licenseId>GPL-3.0-or-later</spdx:licenseId>
  <rdfs:comment>This license was released: 29 June 2007</rdfs:comment>
  <spdx:isFsfLibre>true</spdx:isFsfLibre>
```

```
  <spdx:standardLicenseHeader>...</spdx:standardLicenseHeader>
  <spdx:standardLicenseTemplate>....</spdx:standardLicenseTemplate>
 </spdx:License>
`)
node = parser.gordfParserObj.Triples[0].Subject
license,
err = parser.getLicenseFromNode(node)
if err != nil {
 t.Errorf("error parsing a valid input: %v", err)
}
expectedSeeAlso := "http://www.opensource.org/licenses/GPL-3.0"
if len(license.seeAlso) != 1 {
 t.Fatalf("expected seeAlso to have 1 element, got %d", len(license.seeAlso))
}
if license.seeAlso[len(license.seeAlso)-1] != expectedSeeAlso {
 t.Errorf("expected %s, got %s", expectedSeeAlso, license.seeAlso)
}
if license.isOsiApproved != true {
 t.Errorf("expected %t, got %t", true, license.isOsiApproved)
}
expectedLicenseText := "GNU GENERAL PUBLIC LICENSE Version 3, 29 June 2007"
if license.licenseText != expectedLicenseText {
 t.Errorf("expected %s, got %s", expectedSeeAlso, license.licenseText)
}
expectedName := "GNU General Public License v3.0 or later"
if license.name != expectedName {
 t.Errorf("expected %s, got %s", expectedName, license.name)
}
expectedstdLicHeader := "..."
if license.standardLicenseHeader != expectedstdLicHeader {
 t.Errorf("expected
%s, got %s", expectedstdLicHeader, license.standardLicenseHeader)
}
expectedLicenseId := "GPL-3.0-or-later"
if expectedLicenseId != license.licenseID {
 t.Errorf("expected %s, got %s", expectedLicenseId, license.licenseID)
}
expectedLicenseComment := "This license was released: 29 June 2007"
if expectedLicenseComment != license.comment {
 t.Errorf("expected %s, got %s", expectedLicenseComment, license.comment)
}
expectedstdLicTemplate := "..."
if license.standardLicenseHeader != expectedstdLicTemplate {
 t.Errorf("expected %s, got %s", expectedstdLicTemplate, license.standardLicenseTemplate)
}
expectedstdLicHeaderTemplate := "..."
if license.standardLicenseHeaderTemplate != expectedstdLicHeaderTemplate {
 t.Errorf("expected %s, got %s", expectedstdLicHeaderTemplate, license.standardLicenseHeaderTemplate)
```

```
 }
 if license.isFsfLibre != true {
  t.Errorf("expected %t, got %t", true, license.isFsfLibre)
 }
}

func Test_rdfParser2_3_getOrLaterOperatorFromNode(t *testing.T)
 {
 var parser *rdfParser2_3
 var node *gordfParser.Node
 var err error

 // TestCase 1: more than one member in the OrLaterOperator tag must raise an error
 parser, _ = parserFromBodyContent(`
  <spdx:OrLaterOperator>
   <spdx:member>
    <spdx:SimpleLicensingInfo>
     <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
     <spdx:name>freeware</spdx:name>
    </spdx:SimpleLicensingInfo>
   </spdx:member>
   <spdx:member rdf:resource="http://spdx.org/licenses/Nokia"/>
  </spdx:OrLaterOperator>
 `)
 node = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getOrLaterOperatorFromNode(node)
 if err == nil {
  t.Error("expected an error due to more than one members, got <nil>")
 }

 // TestCase 2: Invalid predicate must raise an error
 parser, _ = parserFromBodyContent(`
  <spdx:OrLaterOperator>
   <spdx:members>
    <spdx:SimpleLicensingInfo>
     <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
     <spdx:name>freeware</spdx:name>
    </spdx:SimpleLicensingInfo>
   </spdx:members>
  </spdx:OrLaterOperator>
 `)
 node
 = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getOrLaterOperatorFromNode(node)
 if err == nil {
  t.Error("expected an error due to invalid predicate, got <nil>")
 }
```

```
 // TestCase 5: invalid member
 parser, _ = parserFromBodyContent(`
  <spdx:OrLaterOperator>
   <spdx:member>
    <spdx:SimpleLicensingInfo>
     <spdx:invalidTag />
     <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
     <spdx:name>freeware</spdx:name>
    </spdx:SimpleLicensingInfo>
   </spdx:member>
  </spdx:OrLaterOperator>
 `)
 node = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getOrLaterOperatorFromNode(node)
 if err == nil {
  t.Errorf("expected an error parsing invalid license member, got %v", err)
 }

 // TestCase 4: valid input
 parser, _ = parserFromBodyContent(`
  <spdx:OrLaterOperator>
   <spdx:member>
    <spdx:SimpleLicensingInfo>
     <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
     <spdx:name>freeware</spdx:name>
    </spdx:SimpleLicensingInfo>
   </spdx:member>
  </spdx:OrLaterOperator>
 `)
 node
 = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getOrLaterOperatorFromNode(node)
 if err != nil {
  t.Errorf("unexpected error parsing a valid input: %v", err)
 }
}

func Test_rdfParser2_3_getSimpleLicensingInfoFromNode(t *testing.T) {
 // nothing to test. The just provides an interface to call function that
 // uses triples to render a SimpleLicensingInfo.
 parser, _ := parserFromBodyContent(`
  <spdx:SimpleLicensingInfo>
   <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
   <spdx:name>freeware</spdx:name>
  </spdx:SimpleLicensingInfo>
 `)
 node := parser.gordfParserObj.Triples[0].Subject
 _, err := parser.getSimpleLicensingInfoFromNode(node)
```

```
 if err != nil {
  t.Errorf("error parsing a valid input: %v", err)
 }
}

func Test_rdfParser2_3_getSimpleLicensingInfoFromTriples(t *testing.T) {
 var parser *rdfParser2_3
 var err error
 var license SimpleLicensingInfo

 // TestCase 1: invalid
 rdf:seeAlso attribute
 parser, _ = parserFromBodyContent(`
  <spdx:SimpleLicensingInfo>
   <rdfs:seeAlso>an invalid uri</rdfs:seeAlso>
  </spdx:SimpleLicensingInfo>
   `)
 _, err = parser.getSimpleLicensingInfoFromTriples(parser.gordfParserObj.Triples)
 if err == nil {
  t.Error("expected an error reporting invalid uri for rdf:seeAlso, got <nil>")
 }

 // TestCase 2: invalid predicate must raise an error
 parser, _ = parserFromBodyContent(`
  <spdx:SimpleLicensingInfo>
   <rdfs:invalidPredicate />
  </spdx:SimpleLicensingInfo>
   `)
 _, err = parser.getSimpleLicensingInfoFromTriples(parser.gordfParserObj.Triples)
 if err == nil {
  t.Error("expected an error reporting invalid predicate, got <nil>")
 }

 // TestCase 3: valid example
 parser, _ = parserFromBodyContent(`
  <spdx:SimpleLicensingInfo>
   <rdfs:comment>comment</rdfs:comment>
   <spdx:licenseId>lid</spdx:licenseId>
   <spdx:name>name</spdx:name>
   <rdfs:seeAlso>https://opensource.org/licenses/MPL-1.0</rdfs:seeAlso>
   <spdx:example>example</spdx:example>
  </spdx:SimpleLicensingInfo>
    `)
 license, err = parser.getSimpleLicensingInfoFromTriples(parser.gordfParserObj.Triples)
 if err != nil {
  t.Fatalf("unexpected error: %v", err)
 }
 expectedComment := "comment"
```

```
 expectedLicenseId := "lid"
 expectedName := "name"
 expectedSeeAlso := "https://opensource.org/licenses/MPL-1.0"
 expectedExample := "example"
 if expectedComment != license.comment {
  t.Errorf("expected %v, got %v", expectedComment, license.comment)
 }
 if expectedLicenseId != license.licenseID {
  t.Errorf("expected %v, got %v", expectedLicenseId, license.licenseID)
 }
 if expectedName != license.name {
  t.Errorf("expected %v, got %v", expectedName, license.name)
 }
 if len(license.seeAlso) != 1 {
  t.Fatalf("expected seeAlso to have 1 element, found %d", len(license.seeAlso))
 }
 if license.seeAlso[0] != expectedSeeAlso {
  t.Errorf("expected %v, got %v", expectedSeeAlso, license.seeAlso[0])
 }
 if license.example != expectedExample
 {
  t.Errorf("expected %v, got %v", expectedExample, license.example)
 }
}

func Test_rdfParser2_3_getSpecialLicenseFromNode(t *testing.T) {
 var parser *rdfParser2_3
 var node *gordfParser.Node
 var license SpecialLicense

 // TestCase 1: NONE
 parser, _ = parserFromBodyContent(``)
 node = &gordfParser.Node{
  NodeType: gordfParser.IRI,
  ID:       NS_SPDX + "NONE",
 }
 license, err := parser.getSpecialLicenseFromNode(node)
 if err != nil {
  t.Errorf("error parsing a valid node: %v", err)
 }
 if license.value != "NONE" {
  t.Errorf("expected %s, got %s", "NONE", license.value)
 }

 // TestCase 2: NOASSERTION
 parser, _ = parserFromBodyContent(``)
 node = &gordfParser.Node{
  NodeType: gordfParser.IRI,
```

```
 ID:       NS_SPDX + "NOASSERTION",
}
license, err = parser.getSpecialLicenseFromNode(node)
if err != nil {
 t.Errorf("error parsing a valid node: %v", err)
}
if license.value != "NOASSERTION" {
 t.Errorf("expected %s, got %s", "NOASSERTION", license.value)
}

// TestCase 4:
undefined standard license
parser, _ = parserFromBodyContent(``)
node = &gordfParser.Node{
 NodeType: gordfParser.IRI,
 ID:       "https://opensource.org/licenses/unknown",
}
_, err = parser.getSpecialLicenseFromNode(node)
if err == nil {
 t.Errorf("expected an error saying invalid license")
}

// TestCase 4: valid standard license
parser, _ = parserFromBodyContent(``)
node = &gordfParser.Node{
 NodeType: gordfParser.IRI,
 ID:       "https://opensource.org/licenses/MPL-1.0",
}
license, err = parser.getSpecialLicenseFromNode(node)
if err != nil {
 t.Errorf("error parsing a valid node: %v", err)
}
if license.value != "MPL-1.0" {
 t.Errorf("expected %s, got %s", "MPL-1.0", license.value)
}
}

func Test_rdfParser2_3_getWithExceptionOperatorFromNode(t *testing.T) {
 var parser *rdfParser2_3
 var node *gordfParser.Node
 var err error

 // TestCase 1: more than one member in the OrLaterOperator tag must raise an error
 parser, _ = parserFromBodyContent(`
  <spdx:WithExceptionOperator>
   <spdx:member>
    <spdx:SimpleLicensingInfo>
     <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
```

```
    <spdx:name>freeware</spdx:name>
   </spdx:SimpleLicensingInfo>
  </spdx:member>
  <spdx:member
rdf:resource="http://spdx.org/licenses/Nokia"/>
 </spdx:WithExceptionOperator>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getWithExceptionOperatorFromNode(node)
if err == nil {
 t.Error("expected an error due to more than one members, got <nil>")
}

// TestCase 2: Invalid predicate must raise an error
parser, _ = parserFromBodyContent(`
 <spdx:WithExceptionOperator>
  <spdx:members>
   <spdx:SimpleLicensingInfo>
    <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
    <spdx:name>freeware</spdx:name>
   </spdx:SimpleLicensingInfo>
  </spdx:members>
 </spdx:WithExceptionOperator>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getWithExceptionOperatorFromNode(node)
if err == nil {
 t.Error("expected
an error due to invalid predicate, got <nil>")
}

// TestCase 3: Invalid member
parser, _ = parserFromBodyContent(`
 <spdx:WithExceptionOperator>
  <spdx:member>
   <spdx:License rdf:about="http://spdx.org/licenses/GPL-2.0-or-later">
    <spdx:unknownTag />
   </spdx:License>
  </spdx:member>
 </spdx:WithExceptionOperator>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getWithExceptionOperatorFromNode(node)
if err == nil {
 t.Error("expected an error due to error parsing a member, got <nil>")
}

// TestCase 4: Invalid licenseException
```

```
parser, _ = parserFromBodyContent(`
 <spdx:WithExceptionOperator>
  <spdx:member>
   <spdx:License rdf:about="http://spdx.org/licenses/GPL-2.0-or-later"/>
  </spdx:member>
  <spdx:licenseException>
   <spdx:LicenseException>
    <spdx:invalidTag />
    <spdx:example>example</spdx:example>
    <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
    <rdfs:comment>comment</rdfs:comment>
   </spdx:LicenseException>
  </spdx:licenseException>
 </spdx:WithExceptionOperator>
`)
node
= parser.gordfParserObj.Triples[0].Subject
_, err = parser.getWithExceptionOperatorFromNode(node)
if err == nil {
 t.Error("expected an error due to invalid licenseException, got <nil>")
}

// TestCase 5: valid input
parser, _ = parserFromBodyContent(`
 <spdx:WithExceptionOperator>
  <spdx:member>
   <spdx:License rdf:about="http://spdx.org/licenses/GPL-2.0-or-later"/>
  </spdx:member>
  <spdx:licenseException>
   <spdx:LicenseException>
    <spdx:example>example</spdx:example>
    <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
    <rdfs:comment>comment</rdfs:comment>
   </spdx:LicenseException>
  </spdx:licenseException>
 </spdx:WithExceptionOperator>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getWithExceptionOperatorFromNode(node)
if err != nil {
 t.Errorf("error parsing a valid input: %v", err)
}
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
```

```
 "errors"
 "fmt"
 "strings"

 gordfParser "github.com/spdx/gordf/rdfloader/parser"
 "github.com/spdx/gordf/rdfwriter"
)

// AnyLicense is a baseClass for all the licenses
// All the types of licenses is a sub-type of AnyLicense,
// either directly or indirectly.
// This function acts as a mux for all the licenses. Based on the input, it
// decides which type of license it is and passes control to that type of
// license parser to parse the given input.
func (parser *rdfParser2_3) getAnyLicenseFromNode(node *gordfParser.Node) (AnyLicenseInfo, error) {

 currState := parser.cache[node.ID]
 if currState == nil {
  // there is no entry about the state of current package node.
  // this is the first time we're seeing this node.
  parser.cache[node.ID] = &nodeState{
   object: nil, // not storing the object as we won't retrieve it later.
   Color:  WHITE,
  }
 } else if currState.Color == GREY {
  // we have
 already started parsing this license node.
  // We have a cyclic dependency!
  return nil, errors.New("Couldn't parse license: found a cyclic dependency on " + node.ID)
 }

 // setting color of the state to grey to indicate that we've started to
 // parse this node once.
 parser.cache[node.ID].Color = GREY

 // setting state color to black when we're done parsing this node.
 defer func() { parser.cache[node.ID].Color = BLACK }()

 associatedTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 if len(associatedTriples) == 0 {
  // just a license uri string was found.
  return parser.getSpecialLicenseFromNode(node)
 }

 // we have some attributes associated with the license node.
 nodeType, err := getNodeTypeFromTriples(associatedTriples, node)
 if err != nil {
  return nil, fmt.Errorf("error parsing license triple: %v", err)
```

```
 }
 switch nodeType {
 case SPDX_DISJUNCTIVE_LICENSE_SET:
  return parser.getDisjunctiveLicenseSetFromNode(node)
 case SPDX_CONJUNCTIVE_LICENSE_SET:
  return
 parser.getConjunctiveLicenseSetFromNode(node)
 case SPDX_EXTRACTED_LICENSING_INFO:
  return parser.getExtractedLicensingInfoFromNode(node)
 case SPDX_LISTED_LICENSE, SPDX_LICENSE:
  return parser.getLicenseFromNode(node)
 case SPDX_WITH_EXCEPTION_OPERATOR:
  return parser.getWithExceptionOperatorFromNode(node)
 case SPDX_OR_LATER_OPERATOR:
  return parser.getOrLaterOperatorFromNode(node)
 case SPDX_SIMPLE_LICENSING_INFO:
  return parser.getSimpleLicensingInfoFromNode(node)
 }
 return nil, fmt.Errorf("Unknown subTag (%s) found while parsing AnyLicense", nodeType)
}

func (parser *rdfParser2_3) getLicenseExceptionFromNode(node *gordfParser.Node) (exception LicenseException,
err error) {
 associatedTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 for _, triple := range associatedTriples {
  value := triple.Object.ID
  switch triple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_LICENSE_EXCEPTION_ID:
   exception.licenseExceptionId
 = value
  case SPDX_LICENSE_EXCEPTION_TEXT:
   exception.licenseExceptionText = value
  case RDFS_SEE_ALSO:
   if !isUriValid(value) {
    return exception, fmt.Errorf("invalid uri (%s) for seeAlso attribute of LicenseException", value)
   }
   exception.seeAlso = value
  case SPDX_NAME:
   exception.name = value
  case SPDX_EXAMPLE:
   exception.example = value
  case RDFS_COMMENT:
   exception.comment = value
  default:
   return exception, fmt.Errorf("invalid predicate(%s) for LicenseException", triple.Predicate)
  }
```

```
 }
 return exception, nil
}

func (parser *rdfParser2_3) getSimpleLicensingInfoFromNode(node *gordfParser.Node) (SimpleLicensingInfo,
error) {
 simpleLicensingTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 return parser.getSimpleLicensingInfoFromTriples(simpleLicensingTriples)
}

func (parser *rdfParser2_3) getWithExceptionOperatorFromNode(node *gordfParser.Node) (operator
WithExceptionOperator, err error) {
 associatedTriples
 := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 var memberFound bool
 for _, triple := range associatedTriples {
  switch triple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_MEMBER:
   if memberFound {
    return operator,
     fmt.Errorf("more than one member found in the WithExceptionOperator (expected only 1)")
   }
   memberFound = true
   member, err := parser.getSimpleLicensingInfoFromNode(triple.Object)
   if err != nil {
    return operator, fmt.Errorf("error parsing member of a WithExceptionOperator: %v", err)
   }
   operator.member = member
  case SPDX_LICENSE_EXCEPTION:
   operator.licenseException, err = parser.getLicenseExceptionFromNode(triple.Object)
   if err != nil {
    return operator, fmt.Errorf("error parsing licenseException of WithExceptionOperator: %v", err)
   }
  default:
   return operator, fmt.Errorf("unknown predicate (%s) for a WithExceptionOperator", triple.Predicate.ID)
  }
 }
 return operator, nil
}

func
 (parser *rdfParser2_3) getOrLaterOperatorFromNode(node *gordfParser.Node) (operator OrLaterOperator, err
error) {
 associatedTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 n := len(associatedTriples)
 if n != 2 {
```

```
 return operator, fmt.Errorf("orLaterOperator must be associated with exactly one tag. found %v triples", n-1)
 }
 for _, triple := range associatedTriples {
  switch triple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_MEMBER:
   operator.member, err = parser.getSimpleLicensingInfoFromNode(triple.Object)
   if err != nil {
    return operator, fmt.Errorf("error parsing simpleLicensingInfo of OrLaterOperator: %v", err)
   }
  default:
   return operator, fmt.Errorf("unknown predicate %s", triple.Predicate.ID)
  }
 }
 return operator, nil
}

// SpecialLicense is a type of license which is not defined in any of the
// spdx documents, it is a type of license defined for the sake of brevity.
// It can be [NONE|NOASSERTION|LicenseRef-<string>]
func
 (parser *rdfParser2_3) getSpecialLicenseFromNode(node *gordfParser.Node) (lic SpecialLicense, err error) {
 uri := strings.TrimSpace(node.ID)
 switch uri {
 case SPDX_NONE_CAPS, SPDX_NONE_SMALL:
  return SpecialLicense{
   value: NONE,
  }, nil
 case SPDX_NOASSERTION_SMALL, SPDX_NOASSERTION_CAPS:
  return SpecialLicense{
   value: NOASSERTION,
  }, nil
 }

 // the license is neither NONE nor NOASSERTION
 // checking if the license is among the standardLicenses
 licenseAbbreviation := getLastPartOfURI(uri)
 for _, stdLicense := range AllStandardLicenseIDS() {
  if licenseAbbreviation == stdLicense {
   return SpecialLicense{
    value: SpecialLicenseValue(stdLicense),
   }, nil
  }
 }
 return lic, fmt.Errorf("found a custom license uri (%s) without any associated fields", uri)
}
```

```
func (parser *rdfParser2_3) getDisjunctiveLicenseSetFromNode(node *gordfParser.Node) (DisjunctiveLicenseSet,
error) {
 licenseSet := DisjunctiveLicenseSet{
  members: []AnyLicenseInfo{},
 }
 for
 _, triple := range parser.nodeToTriples(node) {
  switch triple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_MEMBER:
   member, err := parser.getAnyLicenseFromNode(triple.Object)
   if err != nil {
    return licenseSet, fmt.Errorf("error parsing disjunctive license set: %v", err)
   }
   licenseSet.members = append(licenseSet.members, member)
  }
 }
 return licenseSet, nil
}

func (parser *rdfParser2_3) getConjunctiveLicenseSetFromNode(node *gordfParser.Node) (ConjunctiveLicenseSet,
error) {
 licenseSet := ConjunctiveLicenseSet{
  members: []AnyLicenseInfo{},
 }
 for _, triple := range parser.nodeToTriples(node) {
  switch triple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_MEMBER:
   member, err := parser.getAnyLicenseFromNode(triple.Object)
   if err != nil {
    return licenseSet, fmt.Errorf("error parsing conjunctive license set: %v", err)
   }
   licenseSet.members = append(licenseSet.members, member)
  default:
   return licenseSet, fmt.Errorf("unknown
 subTag for ConjunctiveLicenseSet: %s", triple.Predicate.ID)
  }
 }
 return licenseSet, nil
}

func (parser *rdfParser2_3) getSimpleLicensingInfoFromTriples(triples []*gordfParser.Triple) (lic
SimpleLicensingInfo, err error) {
 for _, triple := range triples {
  switch triple.Predicate.ID {
```

```
 case RDFS_COMMENT:
  lic.comment = triple.Object.ID
 case SPDX_LICENSE_ID:
  lic.licenseID = triple.Object.ID
 case SPDX_NAME:
  lic.name = triple.Object.ID
 case RDFS_SEE_ALSO:
  if !isUriValid(triple.Object.ID) {
   return lic, fmt.Errorf("%s is not a valid uri for seeAlso attribute of a License", triple.Object.ID)
  }
  lic.seeAlso = append(lic.seeAlso, triple.Object.ID)
 case SPDX_EXAMPLE:
  lic.example = triple.Object.ID
 case RDF_TYPE:
  continue
 default:
  return lic, fmt.Errorf("unknown predicate(%s) for simple licensing info", triple.Predicate)
 }
}
return lic, nil
}

func (parser *rdfParser2_3) getLicenseFromNode(node *gordfParser.Node) (lic License, err error)
{
associatedTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
var restTriples []*gordfParser.Triple
for _, triple := range associatedTriples {
 value := triple.Object.ID
 switch triple.Predicate.ID {
 case SPDX_IS_OSI_APPROVED:
  lic.isOsiApproved, err = boolFromString(value)
  if err != nil {
   return lic, fmt.Errorf("error parsing isOsiApproved attribute of a License: %v", err)
  }
 case SPDX_LICENSE_TEXT:
  lic.licenseText = value
 case SPDX_STANDARD_LICENSE_HEADER:
  lic.standardLicenseHeader = value
 case SPDX_STANDARD_LICENSE_TEMPLATE:
  lic.standardLicenseTemplate = value
 case SPDX_STANDARD_LICENSE_HEADER_TEMPLATE:
  lic.standardLicenseHeaderTemplate = value
 case SPDX_IS_DEPRECATED_LICENSE_ID:
  lic.isDeprecatedLicenseID, err = boolFromString(value)
  if err != nil {
   return lic, fmt.Errorf("error parsing isDeprecatedLicenseId attribute of a License: %v", err)
  }
 case SPDX_IS_FSF_LIBRE:
```

```
  lic.isFsfLibre, err =
 boolFromString(value)
  if err != nil {
   return lic, fmt.Errorf("error parsing isFsfLibre attribute of a License: %v", err)
  }
 default:
  restTriples = append(restTriples, triple)
 }
}
lic.SimpleLicensingInfo, err = parser.getSimpleLicensingInfoFromTriples(restTriples)
if err != nil {
 return lic, fmt.Errorf("error setting simple licensing information of a License: %s", err)
}
return lic, nil
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "reflect"
 "testing"

 gordfParser "github.com/spdx/gordf/rdfloader/parser"
)

func Test_rdfParser2_2_getExtractedLicensingInfoFromNode(t *testing.T) {
 var parser *rdfParser2_2
 var err error
 var node *gordfParser.Node

 // TestCase 1: invalid predicate must raise an error
 parser, _ = parserFromBodyContent(`
  <spdx:ExtractedLicensingInfo rdf:about="http://anupam-VirtualBox/repo/SPDX2_time-1.9.tar.gz_1535120734-
spdx.rdf#LicenseRef-Freeware">
   <spdx:licenseID>LicenseRef-Freeware</spdx:licenseID>
   <spdx:name>freeware</spdx:name>
   <spdx:extractedText><![CDATA[Software classified as freeware is licensed at no cost and is either fully functional
for an unlimited time; or has only basic functions enabled with a fully functional version available commercially or
as shareware.[8] In contrast to free software, the author usually restricts one or more rights of the user, including the
rights to use, copy,
 distribute, modify and make derivative works of the software or extract the source code.[1][2][9][10] The software
license may impose various additional restrictions on the type of use, e.g. only for personal use, private use,
individual use, non-profit use, non-commercial use, academic use, educational use, use in charity or humanitarian
organizations, non-military use, use by public authorities or various other combinations of these type of
restrictions.[11] For instance, the license may be "free for private, non-commercial use". The software license may
also impose various other restrictions, such as restricted use over a network, restricted use on a server, restricted use
in a combination with some types of other software or with some hardware devices, prohibited distribution over the
```

```
Internet other than linking to author's website, restricted distribution without author's consent, restricted number of copies, etc.]]></spdx:extractedText>
  </spdx:ExtractedLicensingInfo>
 `)
 node
 = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getExtractedLicensingInfoFromNode(node)
 if err == nil {
  t.Errorf("expected an error saying invalid predicate, got <nil>")
 }

 // TestCase 2: valid input
 parser, _ = parserFromBodyContent(`
  <spdx:ExtractedLicensingInfo rdf:about="http://anupam-VirtualBox/repo/SPDX2_time-1.9.tar.gz_1535120734-spdx.rdf#LicenseRef-Freeware">
   <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
   <spdx:name>freeware</spdx:name>
   <spdx:extractedText><![CDATA[Software classified as freeware is licensed at no cost and is either fully functional for an unlimited time; or has only basic functions enabled with a fully functional version available commercially or as shareware.[8] In contrast to free software, the author usually restricts one or more rights of the user, including the rights to use, copy, distribute, modify and make derivative works of the software or extract the source code.[1][2][9][10] The software license may impose various
 additional restrictions on the type of use, e.g. only for personal use, private use, individual use, non-profit use, non-commercial use, academic use, educational use, use in charity or humanitarian organizations, non-military use, use by public authorities or various other combinations of these type of restrictions.[11] For instance, the license may be "free for private, non-commercial use". The software license may also impose various other restrictions, such as restricted use over a network, restricted use on a server, restricted use in a combination with some types of other software or with some hardware devices, prohibited distribution over the Internet other than linking to author's website, restricted distribution without author's consent, restricted number of copies, etc.]]></spdx:extractedText>
  </spdx:ExtractedLicensingInfo>
 `)
 node = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getExtractedLicensingInfoFromNode(node)
 if err != nil {
  t.Errorf("unexpected
 error: %v", err)
 }
}

func Test_rdfParser2_2_extractedLicenseToOtherLicense(t *testing.T) {
 // nothing to test for this function.
 parser, _ := parserFromBodyContent(`
  <spdx:ExtractedLicensingInfo rdf:about="http://anupam-VirtualBox/repo/SPDX2_time-1.9.tar.gz_1535120734-spdx.rdf#LicenseRef-Freeware">
   <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
   <spdx:name>freeware</spdx:name>
   <spdx:extractedText><![CDATA[Software classified as freeware is licensed at no cost and is either fully functional for an unlimited time; or has only basic functions enabled with a fully functional version available commercially or
```

```
as shareware.[8] In contrast to free software, the author usually restricts one or more rights of the user, including the rights to use, copy, distribute, modify and make derivative works of the software or extract the source code.[1][2][9][10] The software license may impose various additional restrictions on the type of use, e.g. only for personal use, private use,
 individual use, non-profit use, non-commercial use, academic use, educational use, use in charity or humanitarian organizations, non-military use, use by public authorities or various other combinations of these type of restrictions.[11] For instance, the license may be "free for private, non-commercial use". The software license may also impose various other restrictions, such as restricted use over a network, restricted use on a server, restricted use in a combination with some types of other software or with some hardware devices, prohibited distribution over the Internet other than linking to author's website, restricted distribution without author's consent, restricted number of copies, etc.]]></spdx:extractedText>
  </spdx:ExtractedLicensingInfo>
 `)
 node := parser.gordfParserObj.Triples[0].Subject
 extLicense, _ := parser.getExtractedLicensingInfoFromNode(node)
 othLic := parser.extractedLicenseToOtherLicense(extLicense)

 if othLic.LicenseIdentifier != extLicense.licenseID
 {
  t.Errorf("expected %v, got %v", othLic.LicenseIdentifier, extLicense.licenseID)
 }
 if othLic.ExtractedText != extLicense.extractedText {
  t.Errorf("expected %v, got %v", othLic.ExtractedText, extLicense.extractedText)
 }
 if othLic.LicenseComment != extLicense.comment {
  t.Errorf("expected %v, got %v", othLic.LicenseComment, extLicense.comment)
 }
 if !reflect.DeepEqual(othLic.LicenseCrossReferences, extLicense.seeAlso) {
  t.Errorf("expected %v, got %v", othLic.LicenseCrossReferences, extLicense.seeAlso)
 }
 if othLic.LicenseName != extLicense.name {
  t.Errorf("expected %v, got %v", othLic.LicenseName, extLicense.name)
 }
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package writer

import (
 "bytes"
 "testing"

 spdx "github.com/spdx/tools-golang/spdx/v2/v2_3"
)

// ===== Other License section Saver tests =====
func TestSaverOtherLicenseSavesText(t *testing.T) {
 ol := &spdx.OtherLicense{
```

```
  LicenseIdentifier: "LicenseRef-1",
  ExtractedText: `License 1 text
blah blah blah
blah blah blah blah`,
  LicenseName: "License 1",
  LicenseCrossReferences: []string{
   "http://example.com/License1/",
   "http://example.com/License1AnotherURL/",
  },
  LicenseComment: "this is a license comment",
 }

 // what we want to get, as a buffer of bytes
 want := bytes.NewBufferString(`LicenseID: LicenseRef-1
ExtractedText: <text>License 1 text
blah blah blah
blah blah blah blah</text>
LicenseName: License 1
LicenseCrossReference: http://example.com/License1/
LicenseCrossReference: http://example.com/License1AnotherURL/
LicenseComment: this is a license comment

`)

 // render as buffer of bytes
 var got bytes.Buffer
 err
 := renderOtherLicense(ol, &got)
 if err != nil {
  t.Errorf("Expected nil error, got %v", err)
 }

 // check that they match
 c := bytes.Compare(want.Bytes(), got.Bytes())
 if c != 0 {
  t.Errorf("Expected %v, got %v", want.String(), got.String())
 }
}

func TestSaverOtherLicenseOmitsOptionalFieldsIfEmpty(t *testing.T) {
 ol := &spdx.OtherLicense{
  LicenseIdentifier: "LicenseRef-1",
  ExtractedText: `License 1 text
blah blah blah
blah blah blah blah`,
  LicenseName: "License 1",
 }
```

```
 // what we want to get, as a buffer of bytes
 want := bytes.NewBufferString(`LicenseID: LicenseRef-1
ExtractedText: <text>License 1 text
blah blah blah
blah blah blah blah</text>
LicenseName: License 1

`)

 // render as buffer of bytes
 var got bytes.Buffer
 err := renderOtherLicense(ol, &got)
 if err != nil {
  t.Errorf("Expected nil error, got %v", err)
 }

 // check that they match
 c := bytes.Compare(want.Bytes(), got.Bytes())
 if c != 0 {
  t.Errorf("Expected %v, got %v", want.String(),
 got.String())
 }
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "fmt"
 "strings"

 gordfParser "github.com/spdx/gordf/rdfloader/parser"
 "github.com/spdx/tools-golang/spdx/v2/common"
)

/* util methods for licenses and checksums below:*/

// Given the license URI, returns the name of the license defined
// in the last part of the uri.
// This function is susceptible to false-positives.
func getLicenseStringFromURI(uri string) string {
 licenseEnd := strings.TrimSpace(getLastPartOfURI(uri))
 lower := strings.ToLower(licenseEnd)
 if lower == "none" || lower == "noassertion" {
  return strings.ToUpper(licenseEnd)
 }
 return licenseEnd
}
```

```
// returns the checksum algorithm and it's value
// In the newer versions, these two strings will be bound to a single checksum struct
// whose pointer will be returned.
func (parser *rdfParser2_2) getChecksumFromNode(checksumNode *gordfParser.Node) (algorithm
common.ChecksumAlgorithm, value string, err error) {
 var checksumValue, checksumAlgorithm
 string
 for _, checksumTriple := range parser.nodeToTriples(checksumNode) {
  switch checksumTriple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_CHECKSUM_VALUE:
   // cardinality: exactly 1
   checksumValue = strings.TrimSpace(checksumTriple.Object.ID)
  case SPDX_ALGORITHM:
   // cardinality: exactly 1
   checksumAlgorithm, err = getAlgorithmFromURI(checksumTriple.Object.ID)
   if err != nil {
    return
   }
  default:
   err = fmt.Errorf("unknown predicate '%s' while parsing checksum node", checksumTriple.Predicate.ID)
   return
  }
 }
 return common.ChecksumAlgorithm(checksumAlgorithm), checksumValue, nil
}

func getAlgorithmFromURI(algorithmURI string) (checksumAlgorithm string, err error) {
 fragment := getLastPartOfURI(algorithmURI)
 if !strings.HasPrefix(fragment, "checksumAlgorithm_") {
  return "", fmt.Errorf("checksum algorithm uri must begin with checksumAlgorithm_. found %s", fragment)
 }
 algorithm := strings.TrimPrefix(fragment, "checksumAlgorithm_")
 algorithm
 = strings.ToLower(strings.TrimSpace(algorithm))
 switch algorithm {
 case "md2", "md4", "md5", "md6":
  checksumAlgorithm = strings.ToUpper(algorithm)
 case "sha1", "sha224", "sha256", "sha384", "sha512":
  checksumAlgorithm = strings.ToUpper(algorithm)
 default:
  return "", fmt.Errorf("unknown checksum algorithm %s", algorithm)
 }
 return
}
```

```
// from a list of licenses, it returns a
// list of string representation of those licenses.
func mapLicensesToStrings(licences []AnyLicenseInfo) []string {
 res := make([]string, len(licences))
 for i, lic := range licences {
  res[i] = lic.ToLicenseString()
 }
 return res
}

/****** Type Functions ******/

// TODO: should probably add brackets while linearizing a nested license.
func (lic ConjunctiveLicenseSet) ToLicenseString() string {
 return strings.Join(mapLicensesToStrings(lic.members), " AND ")
}

// TODO: should probably add brackets while linearizing a nested license.
func (lic DisjunctiveLicenseSet) ToLicenseString()
 string {
 return strings.Join(mapLicensesToStrings(lic.members), " OR ")
}

func (lic ExtractedLicensingInfo) ToLicenseString() string {
 return lic.licenseID
}

func (operator OrLaterOperator) ToLicenseString() string {
 return operator.member.ToLicenseString()
}

func (lic License) ToLicenseString() string {
 return lic.licenseID
}

func (lic ListedLicense) ToLicenseString() string {
 return lic.licenseID
}

func (lic WithExceptionOperator) ToLicenseString() string {
 return lic.member.ToLicenseString()
}

func (lic SpecialLicense) ToLicenseString() string {
 return string(lic.value)
}

func (lic SimpleLicensingInfo) ToLicenseString() string {
```

```
 return lic.licenseID
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "fmt"
 "strings"

 gordfParser "github.com/spdx/gordf/rdfloader/parser"
 "github.com/spdx/tools-golang/spdx/v2/common"
)

/* util methods for licenses and checksums below:*/

// Given the license URI, returns the name of the license defined
// in the last part of the uri.
// This function is susceptible to false-positives.
func getLicenseStringFromURI(uri string) string {
 licenseEnd := strings.TrimSpace(getLastPartOfURI(uri))
 lower := strings.ToLower(licenseEnd)
 if lower == "none" || lower == "noassertion" {
  return strings.ToUpper(licenseEnd)
 }
 return licenseEnd
}

// returns the checksum algorithm and it's value
// In the newer versions, these two strings will be bound to a single checksum struct
// whose pointer will be returned.
func (parser *rdfParser2_3) getChecksumFromNode(checksumNode *gordfParser.Node) (algorithm
common.ChecksumAlgorithm, value string, err error) {
 var checksumValue, checksumAlgorithm
 string
 for _, checksumTriple := range parser.nodeToTriples(checksumNode) {
  switch checksumTriple.Predicate.ID {
  case RDF_TYPE:
   continue
  case SPDX_CHECKSUM_VALUE:
   // cardinality: exactly 1
   checksumValue = strings.TrimSpace(checksumTriple.Object.ID)
  case SPDX_ALGORITHM:
   // cardinality: exactly 1
   checksumAlgorithm, err = getAlgorithmFromURI(checksumTriple.Object.ID)
   if err != nil {
    return
   }
```

```
  default:
   err = fmt.Errorf("unknown predicate '%s' while parsing checksum node", checksumTriple.Predicate.ID)
   return
  }
 }
 return common.ChecksumAlgorithm(checksumAlgorithm), checksumValue, nil
}

func getAlgorithmFromURI(algorithmURI string) (checksumAlgorithm string, err error) {
 fragment := getLastPartOfURI(algorithmURI)
 if !strings.HasPrefix(fragment, "checksumAlgorithm_") {
  return "", fmt.Errorf("checksum algorithm uri must begin with checksumAlgorithm_. found %s", fragment)
 }
 algorithm := strings.TrimPrefix(fragment, "checksumAlgorithm_")
 algorithm
 = strings.ToLower(strings.TrimSpace(algorithm))
 switch algorithm {
 case "md2", "md4", "md5", "md6":
  checksumAlgorithm = strings.ToUpper(algorithm)
 case "sha1", "sha224", "sha256", "sha384", "sha512":
  checksumAlgorithm = strings.ToUpper(algorithm)
 default:
  return "", fmt.Errorf("unknown checksum algorithm %s", algorithm)
 }
 return
}

// from a list of licenses, it returns a
// list of string representation of those licenses.
func mapLicensesToStrings(licences []AnyLicenseInfo) []string {
 res := make([]string, len(licences))
 for i, lic := range licences {
  res[i] = lic.ToLicenseString()
 }
 return res
}

/****** Type Functions ******/

// TODO: should probably add brackets while linearizing a nested license.
func (lic ConjunctiveLicenseSet) ToLicenseString() string {
 return strings.Join(mapLicensesToStrings(lic.members), " AND ")
}

// TODO: should probably add brackets while linearizing a nested license.
func (lic DisjunctiveLicenseSet) ToLicenseString()
 string {
 return strings.Join(mapLicensesToStrings(lic.members), " OR ")
```

```
}

func (lic ExtractedLicensingInfo) ToLicenseString() string {
 return lic.licenseID
}

func (operator OrLaterOperator) ToLicenseString() string {
 return operator.member.ToLicenseString()
}

func (lic License) ToLicenseString() string {
 return lic.licenseID
}

func (lic ListedLicense) ToLicenseString() string {
 return lic.licenseID
}

func (lic WithExceptionOperator) ToLicenseString() string {
 return lic.member.ToLicenseString()
}

func (lic SpecialLicense) ToLicenseString() string {
 return string(lic.value)
}

func (lic SimpleLicensingInfo) ToLicenseString() string {
 return lic.licenseID
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "fmt"

 gordfParser "github.com/spdx/gordf/rdfloader/parser"
 "github.com/spdx/gordf/rdfwriter"
 spdx "github.com/spdx/tools-golang/spdx/v2/v2_3"
)

func (parser *rdfParser2_3) getExtractedLicensingInfoFromNode(node *gordfParser.Node) (lic
ExtractedLicensingInfo, err error) {
 associatedTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 var restTriples []*gordfParser.Triple
 for _, triple := range associatedTriples {
  switch triple.Predicate.ID {
  case SPDX_EXTRACTED_TEXT:
```

```
  lic.extractedText = triple.Object.ID
 default:
  restTriples = append(restTriples, triple)
 }
}
lic.SimpleLicensingInfo, err = parser.getSimpleLicensingInfoFromTriples(restTriples)
if err != nil {
 return lic, fmt.Errorf("error setting simple licensing information of extracted licensing info: %s", err)
}
return lic, nil
}

func (parser *rdfParser2_3) extractedLicenseToOtherLicense(extLicense
 ExtractedLicensingInfo) (othLic spdx.OtherLicense) {
 othLic.LicenseIdentifier = extLicense.licenseID
 othLic.ExtractedText = extLicense.extractedText
 othLic.LicenseComment = extLicense.comment
 othLic.LicenseCrossReferences = extLicense.seeAlso
 othLic.LicenseName = extLicense.name
 return othLic
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package v2_3

// OtherLicense is an Other License Information section of an SPDX Document
type OtherLicense struct {
 // 10.1: License Identifier: "LicenseRef-[idstring]"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseIdentifier string `json:"licenseId"`

 // 10.2: Extracted Text
 // Cardinality: conditional (mandatory, one) if there is a
 //              License Identifier assigned
 ExtractedText string `json:"extractedText"`

 // 10.3: License Name: single line of text or "NOASSERTION"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseName string `json:"name,omitempty"`

 // 10.4: License Cross Reference
 // Cardinality: conditional (optional, one or many) if license
 //              is not on SPDX License List
 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 // 10.5: License Comment
```

```
 // Cardinality:
 optional, one
 LicenseComment string `json:"comment,omitempty"`
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package writer

import (
 "fmt"
 "io"

 spdx "github.com/spdx/tools-golang/spdx/v2/v2_2"
)

func renderOtherLicense(ol *spdx.OtherLicense, w io.Writer) error {
 if ol.LicenseIdentifier != "" {
  fmt.Fprintf(w, "LicenseID: %s\n", ol.LicenseIdentifier)
 }
 if ol.ExtractedText != "" {
  fmt.Fprintf(w, "ExtractedText: %s\n", textify(ol.ExtractedText))
 }
 if ol.LicenseName != "" {
  fmt.Fprintf(w, "LicenseName: %s\n", ol.LicenseName)
 }
 for _, s := range ol.LicenseCrossReferences {
  fmt.Fprintf(w, "LicenseCrossReference: %s\n", s)
 }
 if ol.LicenseComment != "" {
  fmt.Fprintf(w, "LicenseComment: %s\n", textify(ol.LicenseComment))
 }

 fmt.Fprintf(w, "\n")

 return nil
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "reflect"
 "testing"
)

func Test_getLicenseStringFromURI(t *testing.T) {
 // TestCase 1: NONE license
 input := SPDX_NONE_CAPS
```

```
 output := getLicenseStringFromURI(input)
 expectedOutput := "NONE"
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", expectedOutput, output)
 }

 // TestCase 2: NOASSERTION license
 input = SPDX_NOASSERTION_SMALL
 output = getLicenseStringFromURI(input)
 expectedOutput = "NOASSERTION"
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", expectedOutput, output)
 }

 // TestCase 3: Other license
 input = NS_SPDX + "LicenseRef-1"
 output = getLicenseStringFromURI(input)
 expectedOutput = "LicenseRef-1"
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", expectedOutput, output)
 }
}

func Test_rdfParser2_3_getChecksumFromNode(t *testing.T) {
 var parser *rdfParser2_3
 var err error
 // TestCase 1: invalid checksum algorithm
 parser,
 _ = parserFromBodyContent(`
  <spdx:Checksum>
   <spdx:checksumValue>2fd4e1c67a2d28fced849ee1bb76e7391b93eb12</spdx:checksumValue>
   <spdx:algorithm rdf:resource="http://spdx.org/rdf/terms#checksumAlgorithm_sha999"/>
  </spdx:Checksum>
 `)
 checksumNode := parser.gordfParserObj.Triples[0].Subject
 _, _, err = parser.getChecksumFromNode(checksumNode)
 if err == nil {
  t.Errorf("expected an error saying invalid checksum algorithm")
 }

 // TestCase 2: invalid predicate
 parser, _ = parserFromBodyContent(`
  <spdx:Checksum>
   <spdx:checksumValue>2fd4e1c67a2d28fced849ee1bb76e7391b93eb12</spdx:checksumValue>
   <spdx:algorithm rdf:resource="http://spdx.org/rdf/terms#checksumAlgorithm_sha1"/>
   <spdx:invalidPredicate />
  </spdx:Checksum>
 `)
```

```
 checksumNode = parser.gordfParserObj.Triples[0].Subject
 _, _, err = parser.getChecksumFromNode(checksumNode)
 if err == nil {
  t.Errorf("expected an error saying invalid predicate")
 }

 // TestCase 3: valid input
 parser, _ = parserFromBodyContent(`
  <spdx:Checksum>
   <spdx:checksumValue>2fd4e1c67a2d28fced849ee1bb76e7391b93eb12</spdx:checksumValue>
   <spdx:algorithm
 rdf:resource="http://spdx.org/rdf/terms#checksumAlgorithm_sha1"/>
  </spdx:Checksum>
 `)
 checksumNode = parser.gordfParserObj.Triples[0].Subject
 algorithm, value, err := parser.getChecksumFromNode(checksumNode)
 if err != nil {
  t.Errorf("unexpected error: %v", err)
 }
 if algorithm != "SHA1" {
  t.Errorf("expected checksum algorithm to be sha1, found %s", algorithm)
 }
 expectedValue := "2fd4e1c67a2d28fced849ee1bb76e7391b93eb12"
 if value != expectedValue {
  t.Errorf("expected checksumValue to be %s, found %s", expectedValue, value)
 }
}

func Test_rdfParser2_3_getAlgorithmFromURI(t *testing.T) {
 var algorithmURI string
 var err error

 // TestCase 1: checksumAlgorithm uri doesn't start with checksumAlgorithm_
 algorithmURI = NS_SPDX + "sha1"
 _, err = getAlgorithmFromURI(algorithmURI)
 if err == nil {
  t.Errorf("should've raised an error for algorithmURI
 that doesn't start with checksumAlgorithm_")
 }

 // TestCase 2: unknown checksum algorithm
 algorithmURI = NS_SPDX + "checksumAlgorithm_sha999"
 _, err = getAlgorithmFromURI(algorithmURI)
 if err == nil {
  t.Errorf("should've raised an error for invalid algorithm")
 }

 // TestCase 3: valid input
```

```
 algorithmURI = NS_SPDX + "checksumAlgorithm_sha256"
 algorithm, err := getAlgorithmFromURI(algorithmURI)
 if err != nil {
  t.Errorf("unexpected error: %v", err)
 }
 if algorithm != "SHA256" {
  t.Errorf("expected: SHA256, found: %s", algorithm)
 }
}

func Test_mapLicensesToStrings(t *testing.T) {
 // nothing much to test here.
 // just a dummy dry run.
 licenses := []AnyLicenseInfo{
  SpecialLicense{
   value: NONE,
  },
  SpecialLicense{
   value: NOASSERTION,
  },
 }
 licenseStrings := mapLicensesToStrings(licenses)
 expectedLicenseStrings := []string{"NONE", "NOASSERTION"}
 if !reflect.DeepEqual(licenseStrings, expectedLicenseStrings) {
  t.Errorf("expected: %+v\nfound %+v", expectedLicenseStrings,
 licenseStrings)
 }
}

func TestConjunctiveLicenseSet_ToLicenseString(t *testing.T) {
 var lic ConjunctiveLicenseSet
 var output, expectedOutput string

 // TestCase 1: no license in the set
 lic = ConjunctiveLicenseSet{
  members: nil,
 }
 output = lic.ToLicenseString()
 expectedOutput = ""
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", output, expectedOutput)
 }

 // TestCase 2: single license in the set
 lic = ConjunctiveLicenseSet{
  members: []AnyLicenseInfo{
   SpecialLicense{value: NOASSERTION},
  },
```

```
 }
 output = lic.ToLicenseString()
 expectedOutput = "NOASSERTION"
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", output, expectedOutput)
 }

 // TestCase 3: more than one license in the set.
 lic = ConjunctiveLicenseSet{
  members: []AnyLicenseInfo{
   SpecialLicense{value: NOASSERTION},
   SpecialLicense{value: NONE},
  },
 }
 output = lic.ToLicenseString()
 expectedOutput = "NOASSERTION AND NONE"
 if output != expectedOutput
 {
  t.Errorf("expected: %s, found %s", output, expectedOutput)
 }

 // TestCase 4: nested conjunctive license.
 lic = ConjunctiveLicenseSet{
  members: []AnyLicenseInfo{
   SpecialLicense{value: NOASSERTION},
   ConjunctiveLicenseSet{
    members: []AnyLicenseInfo{
     SpecialLicense{value: "LicenseRef-1"},
     SpecialLicense{value: NONE},
    },
   },
  },
 }
 output = lic.ToLicenseString()
 expectedOutput = "NOASSERTION AND LicenseRef-1 AND NONE"
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", output, expectedOutput)
 }
}

func TestDisjunctiveLicenseSet_ToLicenseString(t *testing.T) {
 var lic DisjunctiveLicenseSet
 var output, expectedOutput string

 // TestCase 1: no license in the set
 lic = DisjunctiveLicenseSet{
  members: nil,
 }
```

```
output = lic.ToLicenseString()
expectedOutput = ""
if output != expectedOutput {
 t.Errorf("expected: %s, found %s", output, expectedOutput)
}

// TestCase 2: single license in the set
lic = DisjunctiveLicenseSet{
 members:
[]AnyLicenseInfo{
  SpecialLicense{value: NOASSERTION},
 },
}
output = lic.ToLicenseString()
expectedOutput = "NOASSERTION"
if output != expectedOutput {
 t.Errorf("expected: %s, found %s", output, expectedOutput)
}

// TestCase 3: more than one license in the set.
lic = DisjunctiveLicenseSet{
 members: []AnyLicenseInfo{
  SpecialLicense{value: NOASSERTION},
  SpecialLicense{value: NONE},
 },
}
output = lic.ToLicenseString()
expectedOutput = "NOASSERTION OR NONE"
if output != expectedOutput {
 t.Errorf("expected: %s, found %s", output, expectedOutput)
}

// TestCase 4: nested conjunctive license.
lic = DisjunctiveLicenseSet{
 members: []AnyLicenseInfo{
  SpecialLicense{value: NOASSERTION},
  DisjunctiveLicenseSet{
   members: []AnyLicenseInfo{
    SpecialLicense{value: "LicenseRef-1"},
    SpecialLicense{value: NONE},
   },
  },
 },
}
output = lic.ToLicenseString()
expectedOutput = "NOASSERTION OR LicenseRef-1 OR NONE"
if output != expectedOutput
```

```
 {
  t.Errorf("expected: %s, found %s", output, expectedOutput)
 }
}

func TestExtractedLicensingInfo_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 extractedLicense := ExtractedLicensingInfo{
  SimpleLicensingInfo: SimpleLicensingInfo{
   licenseID: "license",
  },
  extractedText: "extracted Text",
 }
 expectedOutput := "license"
 output := extractedLicense.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}

func TestOrLaterOperator_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 orLater := OrLaterOperator{
  member: SimpleLicensingInfo{
   licenseID: "license",
  },
 }
 expectedOutput := "license"
 output := orLater.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}

func TestLicense_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 license := License{
  SimpleLicensingInfo: SimpleLicensingInfo{
   licenseID:
 "license",
  },
 }
 expectedOutput := "license"
 output := license.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}
```

```
func TestListedLicense_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 ll := ListedLicense{License{
  SimpleLicensingInfo: SimpleLicensingInfo{
   licenseID: "license",
  },
 },
 }
 expectedOutput := "license"
 output := ll.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}

func TestWithExceptionOperator_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 withException := WithExceptionOperator{
  member: SimpleLicensingInfo{
   licenseID: "license",
  },
  licenseException: LicenseException{},
 }
 expectedOutput := "license"
 output := withException.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}

func TestSpecialLicense_ToLicenseString(t
 *testing.T) {
 // nothing to test (just a dry run)
 specialLicense := SpecialLicense{
  value: "license",
 }
 expectedOutput := "license"
 output := specialLicense.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}

func TestSimpleLicensingInfo_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 sli := SimpleLicensingInfo{
  licenseID: "license",
```

```
 }
 expectedOutput := "license"
 output := sli.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "reflect"
 "testing"
)

func Test_getLicenseStringFromURI(t *testing.T) {
 // TestCase 1: NONE license
 input := SPDX_NONE_CAPS
 output := getLicenseStringFromURI(input)
 expectedOutput := "NONE"
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", expectedOutput, output)
 }

 // TestCase 2: NOASSERTION license
 input = SPDX_NOASSERTION_SMALL
 output = getLicenseStringFromURI(input)
 expectedOutput = "NOASSERTION"
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", expectedOutput, output)
 }

 // TestCase 3: Other license
 input = NS_SPDX + "LicenseRef-1"
 output = getLicenseStringFromURI(input)
 expectedOutput = "LicenseRef-1"
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", expectedOutput, output)
 }
}

func Test_rdfParser2_2_getChecksumFromNode(t *testing.T) {
 var parser *rdfParser2_2
 var err error
 // TestCase 1: invalid checksum algorithm
 parser,
```

```
_ = parserFromBodyContent(`
 <spdx:Checksum>
  <spdx:checksumValue>2fd4e1c67a2d28fced849ee1bb76e7391b93eb12</spdx:checksumValue>
  <spdx:algorithm rdf:resource="http://spdx.org/rdf/terms#checksumAlgorithm_sha999"/>
 </spdx:Checksum>
`)
checksumNode := parser.gordfParserObj.Triples[0].Subject
_, _, err = parser.getChecksumFromNode(checksumNode)
if err == nil {
 t.Errorf("expected an error saying invalid checksum algorithm")
}

// TestCase 2: invalid predicate
parser, _ = parserFromBodyContent(`
 <spdx:Checksum>
  <spdx:checksumValue>2fd4e1c67a2d28fced849ee1bb76e7391b93eb12</spdx:checksumValue>
  <spdx:algorithm rdf:resource="http://spdx.org/rdf/terms#checksumAlgorithm_sha1"/>
  <spdx:invalidPredicate />
 </spdx:Checksum>
`)
checksumNode = parser.gordfParserObj.Triples[0].Subject
_, _, err = parser.getChecksumFromNode(checksumNode)
if err == nil {
 t.Errorf("expected an error saying invalid predicate")
}

// TestCase 3: valid input
parser, _ = parserFromBodyContent(`
 <spdx:Checksum>
  <spdx:checksumValue>2fd4e1c67a2d28fced849ee1bb76e7391b93eb12</spdx:checksumValue>
  <spdx:algorithm
rdf:resource="http://spdx.org/rdf/terms#checksumAlgorithm_sha1"/>
 </spdx:Checksum>
`)
checksumNode = parser.gordfParserObj.Triples[0].Subject
algorithm, value, err := parser.getChecksumFromNode(checksumNode)
if err != nil {
 t.Errorf("unexpected error: %v", err)
}
if algorithm != "SHA1" {
 t.Errorf("expected checksum algorithm to be sha1, found %s", algorithm)
}
expectedValue := "2fd4e1c67a2d28fced849ee1bb76e7391b93eb12"
if value != expectedValue {
 t.Errorf("expected checksumValue to be %s, found %s", expectedValue, value)
}
}
```

```
func Test_rdfParser2_2_getAlgorithmFromURI(t *testing.T) {
 var algorithmURI string
 var err error

 // TestCase 1: checksumAlgorithm uri doesn't start with checksumAlgorithm_
 algorithmURI = NS_SPDX + "sha1"
 _, err = getAlgorithmFromURI(algorithmURI)
 if err == nil {
  t.Errorf("should've raised an error for algorithmURI
 that doesn't start with checksumAlgorithm_")
 }

 // TestCase 2: unknown checksum algorithm
 algorithmURI = NS_SPDX + "checksumAlgorithm_sha999"
 _, err = getAlgorithmFromURI(algorithmURI)
 if err == nil {
  t.Errorf("should've raised an error for invalid algorithm")
 }

 // TestCase 3: valid input
 algorithmURI = NS_SPDX + "checksumAlgorithm_sha256"
 algorithm, err := getAlgorithmFromURI(algorithmURI)
 if err != nil {
  t.Errorf("unexpected error: %v", err)
 }
 if algorithm != "SHA256" {
  t.Errorf("expected: SHA256, found: %s", algorithm)
 }
}

func Test_mapLicensesToStrings(t *testing.T) {
 // nothing much to test here.
 // just a dummy dry run.
 licenses := []AnyLicenseInfo{
  SpecialLicense{
   value: NONE,
  },
  SpecialLicense{
   value: NOASSERTION,
  },
 }
 licenseStrings := mapLicensesToStrings(licenses)
 expectedLicenseStrings := []string{"NONE", "NOASSERTION"}
 if !reflect.DeepEqual(licenseStrings, expectedLicenseStrings) {
  t.Errorf("expected: %+v\nfound %+v", expectedLicenseStrings,
 licenseStrings)
 }
}
```

```
func TestConjunctiveLicenseSet_ToLicenseString(t *testing.T) {
 var lic ConjunctiveLicenseSet
 var output, expectedOutput string

 // TestCase 1: no license in the set
 lic = ConjunctiveLicenseSet{
  members: nil,
 }
 output = lic.ToLicenseString()
 expectedOutput = ""
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", output, expectedOutput)
 }

 // TestCase 2: single license in the set
 lic = ConjunctiveLicenseSet{
  members: []AnyLicenseInfo{
   SpecialLicense{value: NOASSERTION},
  },
 }
 output = lic.ToLicenseString()
 expectedOutput = "NOASSERTION"
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", output, expectedOutput)
 }

 // TestCase 3: more than one license in the set.
 lic = ConjunctiveLicenseSet{
  members: []AnyLicenseInfo{
   SpecialLicense{value: NOASSERTION},
   SpecialLicense{value: NONE},
  },
 }
 output = lic.ToLicenseString()
 expectedOutput = "NOASSERTION AND NONE"
 if output != expectedOutput
 {
  t.Errorf("expected: %s, found %s", output, expectedOutput)
 }

 // TestCase 4: nested conjunctive license.
 lic = ConjunctiveLicenseSet{
  members: []AnyLicenseInfo{
   SpecialLicense{value: NOASSERTION},
   ConjunctiveLicenseSet{
    members: []AnyLicenseInfo{
     SpecialLicense{value: "LicenseRef-1"},
```

```
    SpecialLicense{value: NONE},
   },
  },
 },
}
output = lic.ToLicenseString()
expectedOutput = "NOASSERTION AND LicenseRef-1 AND NONE"
if output != expectedOutput {
 t.Errorf("expected: %s, found %s", output, expectedOutput)
}
}

func TestDisjunctiveLicenseSet_ToLicenseString(t *testing.T) {
var lic DisjunctiveLicenseSet
var output, expectedOutput string

// TestCase 1: no license in the set
lic = DisjunctiveLicenseSet{
 members: nil,
}
output = lic.ToLicenseString()
expectedOutput = ""
if output != expectedOutput {
 t.Errorf("expected: %s, found %s", output, expectedOutput)
}

// TestCase 2: single license in the set
lic = DisjunctiveLicenseSet{
 members:
[]AnyLicenseInfo{
  SpecialLicense{value: NOASSERTION},
 },
}
output = lic.ToLicenseString()
expectedOutput = "NOASSERTION"
if output != expectedOutput {
 t.Errorf("expected: %s, found %s", output, expectedOutput)
}

// TestCase 3: more than one license in the set.
lic = DisjunctiveLicenseSet{
 members: []AnyLicenseInfo{
  SpecialLicense{value: NOASSERTION},
  SpecialLicense{value: NONE},
 },
}
output = lic.ToLicenseString()
expectedOutput = "NOASSERTION OR NONE"
```

```
 if output != expectedOutput {
  t.Errorf("expected: %s, found %s", output, expectedOutput)
 }

 // TestCase 4: nested conjunctive license.
 lic = DisjunctiveLicenseSet{
  members: []AnyLicenseInfo{
   SpecialLicense{value: NOASSERTION},
   DisjunctiveLicenseSet{
    members: []AnyLicenseInfo{
     SpecialLicense{value: "LicenseRef-1"},
     SpecialLicense{value: NONE},
    },
   },
  },
 }
 output = lic.ToLicenseString()
 expectedOutput = "NOASSERTION OR LicenseRef-1 OR NONE"
 if output != expectedOutput
 {
  t.Errorf("expected: %s, found %s", output, expectedOutput)
 }
}

func TestExtractedLicensingInfo_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 extractedLicense := ExtractedLicensingInfo{
  SimpleLicensingInfo: SimpleLicensingInfo{
   licenseID: "license",
  },
  extractedText: "extracted Text",
 }
 expectedOutput := "license"
 output := extractedLicense.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}

func TestOrLaterOperator_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 orLater := OrLaterOperator{
  member: SimpleLicensingInfo{
   licenseID: "license",
  },
 }
 expectedOutput := "license"
 output := orLater.ToLicenseString()
```

```
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}

func TestLicense_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 license := License{
  SimpleLicensingInfo: SimpleLicensingInfo{
   licenseID:
 "license",
  },
 }
 expectedOutput := "license"
 output := license.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}

func TestListedLicense_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 ll := ListedLicense{License{
  SimpleLicensingInfo: SimpleLicensingInfo{
   licenseID: "license",
  },
 },
 }
 expectedOutput := "license"
 output := ll.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}

func TestWithExceptionOperator_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 withException := WithExceptionOperator{
  member: SimpleLicensingInfo{
   licenseID: "license",
  },
  licenseException: LicenseException{},
 }
 expectedOutput := "license"
 output := withException.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
```

```
}

func TestSpecialLicense_ToLicenseString(t
 *testing.T) {
 // nothing to test (just a dry run)
 specialLicense := SpecialLicense{
  value: "license",
 }
 expectedOutput := "license"
 output := specialLicense.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}

func TestSimpleLicensingInfo_ToLicenseString(t *testing.T) {
 // nothing to test (just a dry run)
 sli := SimpleLicensingInfo{
  licenseID: "license",
 }
 expectedOutput := "license"
 output := sli.ToLicenseString()
 if output != expectedOutput {
  t.Errorf("expected: %s, found: %s", expectedOutput, output)
 }
}
```

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package v2_2

// OtherLicense is an Other License Information section of an
// SPDX Document for version 2.2 of the spec.
type OtherLicense struct {
 // 10.1: License Identifier: "LicenseRef-[idstring]"
 // Cardinality: conditional (mandatory, one) if license is not
 //   on SPDX License List
 LicenseIdentifier string `json:"licenseId"`

 // 10.2: Extracted Text
 // Cardinality: conditional (mandatory, one) if there is a
 //   License Identifier assigned
 ExtractedText string `json:"extractedText"`

 // 10.3: License Name: single line of text or "NOASSERTION"

```
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseName string `json:"name,omitempty"`

 // 10.4: License Cross Reference
 // Cardinality: conditional (optional, one or many) if license
 //              is not on SPDX License List
 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 //
 10.5: License Comment
 // Cardinality: optional, one
 LicenseComment string `json:"comment,omitempty"`
}
```

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package writer

import (
 "bytes"
 "testing"

 spdx "github.com/spdx/tools-golang/spdx/v2/v2_1"
)

// ===== Other License section Saver tests =====
```

```
func TestSaverOtherLicenseSavesText(t *testing.T) {
 ol := &spdx.OtherLicense{
  LicenseIdentifier: "LicenseRef-1",
  ExtractedText: `License 1 text
blah blah blah
blah blah blah blah`,
  LicenseName: "License 1",
  LicenseCrossReferences: []string{
   "http://example.com/License1/",
   "http://example.com/License1AnotherURL/",
  },
  LicenseComment: "this is a license comment",
 }

 // what we want to get, as a buffer of bytes
 want := bytes.NewBufferString(`LicenseID: LicenseRef-1
ExtractedText: <text>License 1 text
blah blah blah
blah blah blah blah</text>
LicenseName: License 1
LicenseCrossReference: http://example.com/License1/
LicenseCrossReference: http://example.com/License1AnotherURL/
LicenseComment: this is a license comment

`)

 // render as buffer of bytes
 var got bytes.Buffer
 err
 := renderOtherLicense(ol, &got)
 if err != nil {
  t.Errorf("Expected nil error, got %v", err)
 }

 // check that they match
 c := bytes.Compare(want.Bytes(), got.Bytes())
 if c != 0 {
  t.Errorf("Expected %v, got %v", want.String(), got.String())
 }
}

func TestSaverOtherLicenseOmitsOptionalFieldsIfEmpty(t *testing.T) {
 ol := &spdx.OtherLicense{
  LicenseIdentifier: "LicenseRef-1",
  ExtractedText: `License 1 text
blah blah blah
blah blah blah blah`,
  LicenseName: "License 1",
```

```
 }

 // what we want to get, as a buffer of bytes
 want := bytes.NewBufferString(`LicenseID: LicenseRef-1
ExtractedText: <text>License 1 text
blah blah blah
blah blah blah blah</text>
LicenseName: License 1

`)

 // render as buffer of bytes
 var got bytes.Buffer
 err := renderOtherLicense(ol, &got)
 if err != nil {
  t.Errorf("Expected nil error, got %v", err)
 }

 // check that they match
 c := bytes.Compare(want.Bytes(), got.Bytes())
 if c != 0 {
  t.Errorf("Expected %v, got %v", want.String(),
 got.String())
 }
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "reflect"
 "testing"

 gordfParser "github.com/spdx/gordf/rdfloader/parser"
)

func Test_rdfParser2_3_getExtractedLicensingInfoFromNode(t *testing.T) {
 var parser *rdfParser2_3
 var err error
 var node *gordfParser.Node

 // TestCase 1: invalid predicate must raise an error
 parser, _ = parserFromBodyContent(`
  <spdx:ExtractedLicensingInfo rdf:about="http://anupam-VirtualBox/repo/SPDX2_time-1.9.tar.gz_1535120734-
spdx.rdf#LicenseRef-Freeware">
   <spdx:licenseID>LicenseRef-Freeware</spdx:licenseID>
   <spdx:name>freeware</spdx:name>
   <spdx:extractedText><![CDATA[Software classified as freeware is licensed at no cost and is either fully functional
```

```
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  </spdx:ExtractedLicensingInfo>
 `)
 node
 = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getExtractedLicensingInfoFromNode(node)
 if err == nil {
  t.Errorf("expected an error saying invalid predicate, got <nil>")
 }

 // TestCase 2: valid input
 parser, _ = parserFromBodyContent(`
  <spdx:ExtractedLicensingInfo rdf:about="http://anupam-VirtualBox/repo/SPDX2_time-1.9.tar.gz_1535120734-spdx.rdf#LicenseRef-Freeware">
   <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
   <spdx:name>freeware</spdx:name>
   <spdx:extractedText><![CDATA[Software classified as freeware is licensed at no cost and is either fully functional for an unlimited time; or has only basic functions enabled with a fully functional version available commercially or as shareware.[8] In contrast to free software, the author usually restricts one or more rights of the user, including the rights to use, copy, distribute, modify and make derivative works of the software or extract the source code.[1][2][9][10] The software license may impose various
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  </spdx:ExtractedLicensingInfo>
 `)
 node = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getExtractedLicensingInfoFromNode(node)
 if err != nil {
  t.Errorf("unexpected
 error: %v", err)
 }
}
```

```
func Test_rdfParser2_3_extractedLicenseToOtherLicense(t *testing.T) {
 // nothing to test for this function.
 parser, _ := parserFromBodyContent(`
  <spdx:ExtractedLicensingInfo rdf:about="http://anupam-VirtualBox/repo/SPDX2_time-1.9.tar.gz_1535120734-spdx.rdf#LicenseRef-Freeware">
   <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
   <spdx:name>freeware</spdx:name>
   <spdx:extractedText><![CDATA[Software classified as freeware is licensed at no cost and is either fully functional for an unlimited time; or has only basic functions enabled with a fully functional version available commercially or as shareware.[8] In contrast to free software, the author usually restricts one or more rights of the user, including the rights to use, copy, distribute, modify and make derivative works of the software or extract the source code.[1][2][9][10] The software license may impose various additional restrictions on the type of use, e.g. only for personal use, private use,
 individual use, non-profit use, non-commercial use, academic use, educational use, use in charity or humanitarian organizations, non-military use, use by public authorities or various other combinations of these type of restrictions.[11] For instance, the license may be "free for private, non-commercial use". The software license may also impose various other restrictions, such as restricted use over a network, restricted use on a server, restricted use in a combination with some types of other software or with some hardware devices, prohibited distribution over the Internet other than linking to author's website, restricted distribution without author's consent, restricted number of copies, etc.]]></spdx:extractedText>
  </spdx:ExtractedLicensingInfo>
 `)
 node := parser.gordfParserObj.Triples[0].Subject
 extLicense, _ := parser.getExtractedLicensingInfoFromNode(node)
 othLic := parser.extractedLicenseToOtherLicense(extLicense)

 if othLic.LicenseIdentifier != extLicense.licenseID
 {
  t.Errorf("expected %v, got %v", othLic.LicenseIdentifier, extLicense.licenseID)
 }
 if othLic.ExtractedText != extLicense.extractedText {
  t.Errorf("expected %v, got %v", othLic.ExtractedText, extLicense.extractedText)
 }
 if othLic.LicenseComment != extLicense.comment {
  t.Errorf("expected %v, got %v", othLic.LicenseComment, extLicense.comment)
 }
 if !reflect.DeepEqual(othLic.LicenseCrossReferences, extLicense.seeAlso) {
  t.Errorf("expected %v, got %v", othLic.LicenseCrossReferences, extLicense.seeAlso)
 }
 if othLic.LicenseName != extLicense.name {
  t.Errorf("expected %v, got %v", othLic.LicenseName, extLicense.name)
 }
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader
```

```
import (
 "fmt"

 gordfParser "github.com/spdx/gordf/rdfloader/parser"
 "github.com/spdx/gordf/rdfwriter"
 "github.com/spdx/tools-golang/spdx/v2/v2_2"
)

func (parser *rdfParser2_2) getExtractedLicensingInfoFromNode(node *gordfParser.Node) (lic
ExtractedLicensingInfo, err error) {
 associatedTriples := rdfwriter.FilterTriples(parser.gordfParserObj.Triples, &node.ID, nil, nil)
 var restTriples []*gordfParser.Triple
 for _, triple := range associatedTriples {
  switch triple.Predicate.ID {
  case SPDX_EXTRACTED_TEXT:
   lic.extractedText = triple.Object.ID
  default:
   restTriples = append(restTriples, triple)
  }
 }
 lic.SimpleLicensingInfo, err = parser.getSimpleLicensingInfoFromTriples(restTriples)
 if err != nil {
  return lic, fmt.Errorf("error setting simple licensing information of extracted licensing info: %s", err)
 }
 return lic, nil
}

func (parser *rdfParser2_2) extractedLicenseToOtherLicense(extLicense
 ExtractedLicensingInfo) (othLic v2_2.OtherLicense) {
 othLic.LicenseIdentifier = extLicense.licenseID
 othLic.ExtractedText = extLicense.extractedText
 othLic.LicenseComment = extLicense.comment
 othLic.LicenseCrossReferences = extLicense.seeAlso
 othLic.LicenseName = extLicense.name
 return othLic
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later
package reader

import (
 "testing"

 spdx "github.com/spdx/tools-golang/spdx/v2/v2_3"
)

// ===== Parser other license section state change tests =====
func TestParserOLStartsNewOtherLicenseAfterParsingLicenseIDTag(t *testing.T) {
 // create the first other license
```

```
olid1 := "LicenseRef-Lic11"
olname1 := "License 11"

parser := tvParser{
 doc:  &spdx.Document{Packages: []*spdx.Package{}},
 st:   psOtherLicense,
 pkg:  &spdx.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*spdx.File{}},
 file: &spdx.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
 otherLic: &spdx.OtherLicense{
  LicenseIdentifier: olid1,
  LicenseName:       olname1,
 },
}
olic1 := parser.otherLic
parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
parser.pkg.Files = append(parser.pkg.Files, parser.file)
parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

// the Document's OtherLicenses
should have this one only
if parser.doc.OtherLicenses[0] != olic1 {
 t.Errorf("Expected other license %v in OtherLicenses[0], got %v", olic1, parser.doc.OtherLicenses[0])
}
if parser.doc.OtherLicenses[0].LicenseName != olname1 {
 t.Errorf("expected other license name %s in OtherLicenses[0], got %s", olname1,
parser.doc.OtherLicenses[0].LicenseName)
}

// now add a new other license
olid2 := "LicenseRef-22"
olname2 := "License 22"
err := parser.parsePair("LicenseID", olid2)
if err != nil {
 t.Errorf("got error when calling parsePair: %v", err)
}
// state should be correct
if parser.st != psOtherLicense {
 t.Errorf("expected state to be %v, got %v", psOtherLicense, parser.st)
}
// and an other license should be created
if parser.otherLic == nil {
 t.Fatalf("parser didn't create new other license")
}
// also parse the new license's name
err = parser.parsePair("LicenseName", olname2)
if err != nil {
 t.Errorf("got error when calling parsePair: %v", err)
}
```

```
 // state
 should still be correct
 if parser.st != psOtherLicense {
  t.Errorf("expected state to be %v, got %v", psOtherLicense, parser.st)
 }
 // and the other license name should be as expected
 if parser.otherLic.LicenseName != olname2 {
  t.Errorf("expected other license name %s, got %s", olname2, parser.otherLic.LicenseName)
 }
 // and the Document's Other Licenses should be of size 2 and have these two
 if len(parser.doc.OtherLicenses) != 2 {
  t.Fatalf("Expected OtherLicenses to have len 2, got %d", len(parser.doc.OtherLicenses))
 }
 if parser.doc.OtherLicenses[0] != olic1 {
  t.Errorf("Expected other license %v in OtherLicenses[0], got %v", olic1, parser.doc.OtherLicenses[0])
 }
 if parser.doc.OtherLicenses[0].LicenseIdentifier != olid1 {
  t.Errorf("expected other license ID %s in OtherLicenses[0], got %s", olid1,
parser.doc.OtherLicenses[0].LicenseIdentifier)
 }
 if parser.doc.OtherLicenses[0].LicenseName != olname1 {
  t.Errorf("expected other license name %s in OtherLicenses[0],
 got %s", olname1, parser.doc.OtherLicenses[0].LicenseName)
 }
 if parser.doc.OtherLicenses[1] != parser.otherLic {
  t.Errorf("Expected other license %v in OtherLicenses[1], got %v", parser.otherLic, parser.doc.OtherLicenses[1])
 }
 if parser.doc.OtherLicenses[1].LicenseIdentifier != olid2 {
  t.Errorf("expected other license ID %s in OtherLicenses[1], got %s", olid2,
parser.doc.OtherLicenses[1].LicenseIdentifier)
 }
 if parser.doc.OtherLicenses[1].LicenseName != olname2 {
  t.Errorf("expected other license name %s in OtherLicenses[1], got %s", olname2,
parser.doc.OtherLicenses[1].LicenseName)
 }
}

func TestParserOLMovesToReviewAfterParsingReviewerTag(t *testing.T) {
 parser := tvParser{
  doc:  &spdx.Document{Packages: []*spdx.Package{}},
  st:   psOtherLicense,
  pkg:  &spdx.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*spdx.File{}},
  file: &spdx.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files
 = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)
```

```
 err := parser.parsePair("Reviewer", "Person: John Doe")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psReview {
  t.Errorf("expected state to be %v, got %v", psReview, parser.st)
 }
}

func TestParserOtherLicenseStaysAfterParsingRelationshipTags(t *testing.T) {
 parser := tvParser{
  doc:  &spdx.Document{Packages: []*spdx.Package{}},
  st:   psOtherLicense,
  pkg:  &spdx.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*spdx.File{}},
  file: &spdx.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
  otherLic: &spdx.OtherLicense{
   LicenseIdentifier: "LicenseRef-whatever",
   LicenseName:       "the whatever license",
  },
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses,
 parser.otherLic)

 err := parser.parsePair("Relationship", "SPDXRef-blah CONTAINS SPDXRef-blah-else")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 // state should remain unchanged
 if parser.st != psOtherLicense {
  t.Errorf("expected state to be %v, got %v", psOtherLicense, parser.st)
 }
 // and the relationship should be in the Document's Relationships
 if len(parser.doc.Relationships) != 1 {
  t.Fatalf("expected doc.Relationships to have len 1, got %d", len(parser.doc.Relationships))
 }
 deID := parser.doc.Relationships[0].RefA
 if deID.DocumentRefID != "" || deID.ElementRefID != "blah" {
  t.Errorf("expected RefA to be %s, got %s", "blah", parser.doc.Relationships[0].RefA)
 }

 err = parser.parsePair("RelationshipComment", "blah")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 // state should still remain unchanged
```

```
 if parser.st != psOtherLicense {
  t.Errorf("expected state to be %v, got %v",
 psOtherLicense, parser.st)
 }
}

func TestParserOtherLicenseStaysAfterParsingAnnotationTags(t *testing.T) {
 parser := tvParser{
  doc:  &spdx.Document{Packages: []*spdx.Package{}},
  st:   psOtherLicense,
  pkg:  &spdx.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*spdx.File{}},
  file: &spdx.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
  otherLic: &spdx.OtherLicense{
   LicenseIdentifier: "LicenseRef-whatever",
   LicenseName:       "the whatever license",
  },
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 err := parser.parsePair("Annotator", "Person: John Doe ()")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 err = parser.parsePair("AnnotationDate", "2018-09-15T00:36:00Z")
 if
 err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 err = parser.parsePair("AnnotationType", "REVIEW")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 err = parser.parsePair("SPDXREF", "SPDXRef-45")
 if err != nil {
```

```
 t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 err = parser.parsePair("AnnotationComment", "i guess i had something to say about this particular file")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 // and the annotation
 should be in the Document's Annotations
 if len(parser.doc.Annotations) != 1 {
  t.Fatalf("expected doc.Annotations to have len 1, got %d", len(parser.doc.Annotations))
 }
 if parser.doc.Annotations[0].Annotator.Annotator != "John Doe ()" {
  t.Errorf("expected Annotator to be %s, got %s", "John Doe ()", parser.doc.Annotations[0].Annotator)
 }
}

func TestParserOLFailsAfterParsingOtherSectionTags(t *testing.T) {
 parser := tvParser{
  doc:  &spdx.Document{Packages: []*spdx.Package{}},
  st:   psOtherLicense,
  pkg:  &spdx.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*spdx.File{}},
  file: &spdx.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
  otherLic: &spdx.OtherLicense{
   LicenseIdentifier: "LicenseRef-Lic11",
   LicenseName:       "License 11",
  },
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 //
 can't go back to old sections
 err := parser.parsePair("SPDXVersion", spdx.Version)
 if err == nil {
  t.Errorf("expected error when calling parsePair, got nil")
 }
 err = parser.parsePair("PackageName", "whatever")
 if err == nil {
  t.Errorf("expected error when calling parsePair, got nil")
```

```
 }
 err = parser.parsePair("FileName", "whatever")
 if err == nil {
  t.Errorf("expected error when calling parsePair, got nil")
 }
}

// ===== Other License data section tests =====
func TestParserCanParseOtherLicenseTags(t *testing.T) {
 parser := tvParser{
  doc:  &spdx.Document{Packages: []*spdx.Package{}},
  st:   psOtherLicense,
  pkg:  &spdx.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*spdx.File{}},
  file: &spdx.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 //
 License Identifier
 err := parser.parsePairFromOtherLicense("LicenseID", "LicenseRef-Lic11")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.LicenseIdentifier != "LicenseRef-Lic11" {
  t.Errorf("got %v for LicenseID", parser.otherLic.LicenseIdentifier)
 }

 // Extracted Text
 err = parser.parsePairFromOtherLicense("ExtractedText", "You are permitted to do anything with the software,
hooray!")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.ExtractedText != "You are permitted to do anything with the software, hooray!" {
  t.Errorf("got %v for ExtractedText", parser.otherLic.ExtractedText)
 }

 // License Name
 err = parser.parsePairFromOtherLicense("LicenseName", "License 11")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.LicenseName != "License 11" {
  t.Errorf("got %v for LicenseName", parser.otherLic.LicenseName)
 }
```

```
 // License Cross Reference
 crossRefs :=
 []string{
  "https://example.com/1",
  "https://example.com/2",
  "https://example.com/3",
 }
 for _, cr := range crossRefs {
  err = parser.parsePairFromOtherLicense("LicenseCrossReference", cr)
  if err != nil {
   t.Errorf("expected nil error, got %v", err)
  }
 }
 for _, refWant := range crossRefs {
  flagFound := false
  for _, refCheck := range parser.otherLic.LicenseCrossReferences {
   if refWant == refCheck {
    flagFound = true
   }
  }
  if flagFound == false {
   t.Errorf("didn't find %s in LicenseCrossReferences", refWant)
  }
 }
 if len(crossRefs) != len(parser.otherLic.LicenseCrossReferences) {
  t.Errorf("expected %d types in LicenseCrossReferences, got %d", len(crossRefs),
   len(parser.otherLic.LicenseCrossReferences))
 }

 // License Comment
 err = parser.parsePairFromOtherLicense("LicenseComment", "this is a comment")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.LicenseComment != "this is a comment" {
  t.Errorf("got %v for
 LicenseComment", parser.otherLic.LicenseComment)
 }
}

func TestParserOLUnknownTagFails(t *testing.T) {
 parser := tvParser{
  doc:  &spdx.Document{Packages: []*spdx.Package{}},
  st:   psOtherLicense,
  pkg:  &spdx.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*spdx.File{}},
  file: &spdx.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
```

```
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 err := parser.parsePairFromOtherLicense("blah", "something")
 if err == nil {
  t.Errorf("expected error from parsing unknown tag")
 }
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later
package reader

import (
 "testing"

 "github.com/spdx/tools-golang/spdx/v2/v2_1"
)

// ===== Parser other license section state change tests =====
func TestParserOLStartsNewOtherLicenseAfterParsingLicenseIDTag(t *testing.T) {
 // create the first other license
 olid1 := "LicenseRef-Lic11"
 olname1 := "License 11"

 parser := tvParser{
  doc:  &v2_1.Document{Packages: []*v2_1.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_1.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_1.File{}},
  file: &v2_1.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
  otherLic: &v2_1.OtherLicense{
   LicenseIdentifier: olid1,
   LicenseName:       olname1,
  },
 }
 olic1 := parser.otherLic
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 // the Document's OtherLicenses should
 have this one only
 if parser.doc.OtherLicenses[0] != olic1 {
  t.Errorf("Expected other license %v in OtherLicenses[0], got %v", olic1, parser.doc.OtherLicenses[0])
 }
 if parser.doc.OtherLicenses[0].LicenseName != olname1 {
  t.Errorf("expected other license name %s in OtherLicenses[0], got %s", olname1,
parser.doc.OtherLicenses[0].LicenseName)
 }
```

```
// now add a new other license
olid2 := "LicenseRef-22"
olname2 := "License 22"
err := parser.parsePair("LicenseID", olid2)
if err != nil {
 t.Errorf("got error when calling parsePair: %v", err)
}
// state should be correct
if parser.st != psOtherLicense {
 t.Errorf("expected state to be %v, got %v", psOtherLicense, parser.st)
}
// and an other license should be created
if parser.otherLic == nil {
 t.Fatalf("parser didn't create new other license")
}
// also parse the new license's name
err = parser.parsePair("LicenseName", olname2)
if err != nil {
 t.Errorf("got error when calling parsePair: %v", err)
}
// state should
still be correct
if parser.st != psOtherLicense {
 t.Errorf("expected state to be %v, got %v", psOtherLicense, parser.st)
}
// and the other license name should be as expected
if parser.otherLic.LicenseName != olname2 {
 t.Errorf("expected other license name %s, got %s", olname2, parser.otherLic.LicenseName)
}
// and the Document's Other Licenses should be of size 2 and have these two
if len(parser.doc.OtherLicenses) != 2 {
 t.Fatalf("Expected OtherLicenses to have len 2, got %d", len(parser.doc.OtherLicenses))
}
if parser.doc.OtherLicenses[0] != olic1 {
 t.Errorf("Expected other license %v in OtherLicenses[0], got %v", olic1, parser.doc.OtherLicenses[0])
}
if parser.doc.OtherLicenses[0].LicenseIdentifier != olid1 {
 t.Errorf("expected other license ID %s in OtherLicenses[0], got %s", olid1,
parser.doc.OtherLicenses[0].LicenseIdentifier)
}
if parser.doc.OtherLicenses[0].LicenseName != olname1 {
 t.Errorf("expected other license name %s in OtherLicenses[0], got %s",
olname1, parser.doc.OtherLicenses[0].LicenseName)
}
if parser.doc.OtherLicenses[1] != parser.otherLic {
 t.Errorf("Expected other license %v in OtherLicenses[1], got %v", parser.otherLic, parser.doc.OtherLicenses[1])
}
if parser.doc.OtherLicenses[1].LicenseIdentifier != olid2 {
```

```
  t.Errorf("expected other license ID %s in OtherLicenses[1], got %s", olid2,
parser.doc.OtherLicenses[1].LicenseIdentifier)
 }
 if parser.doc.OtherLicenses[1].LicenseName != olname2 {
  t.Errorf("expected other license name %s in OtherLicenses[1], got %s", olname2,
parser.doc.OtherLicenses[1].LicenseName)
 }
}

func TestParserOLMovesToReviewAfterParsingReviewerTag(t *testing.T) {
 parser := tvParser{
  doc:  &v2_1.Document{Packages: []*v2_1.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_1.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_1.File{}},
  file: &v2_1.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files
 = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 err := parser.parsePair("Reviewer", "Person: John Doe")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psReview {
  t.Errorf("expected state to be %v, got %v", psReview, parser.st)
 }
}

func TestParserOtherLicenseStaysAfterParsingRelationshipTags(t *testing.T) {
 parser := tvParser{
  doc:  &v2_1.Document{Packages: []*v2_1.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_1.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_1.File{}},
  file: &v2_1.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
  otherLic: &v2_1.OtherLicense{
   LicenseIdentifier: "LicenseRef-whatever",
   LicenseName:       "the whatever license",
  },
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses,
 parser.otherLic)

 err := parser.parsePair("Relationship", "SPDXRef-blah CONTAINS SPDXRef-blah-else")
 if err != nil {
```

```
 t.Errorf("got error when calling parsePair: %v", err)
 }
 // state should remain unchanged
 if parser.st != psOtherLicense {
  t.Errorf("expected state to be %v, got %v", psOtherLicense, parser.st)
 }
 // and the relationship should be in the Document's Relationships
 if len(parser.doc.Relationships) != 1 {
  t.Fatalf("expected doc.Relationships to have len 1, got %d", len(parser.doc.Relationships))
 }
 deID := parser.doc.Relationships[0].RefA
 if deID.DocumentRefID != "" || deID.ElementRefID != "blah" {
  t.Errorf("expected RefA to be %s, got %s", "blah", parser.doc.Relationships[0].RefA)
 }

 err = parser.parsePair("RelationshipComment", "blah")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 // state should still remain unchanged
 if parser.st != psOtherLicense {
  t.Errorf("expected state to be %v, got %v", psOtherLicense,
 parser.st)
 }
}

func TestParserOtherLicenseStaysAfterParsingAnnotationTags(t *testing.T) {
 parser := tvParser{
  doc:  &v2_1.Document{Packages: []*v2_1.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_1.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_1.File{}},
  file: &v2_1.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
  otherLic: &v2_1.OtherLicense{
   LicenseIdentifier: "LicenseRef-whatever",
   LicenseName:       "the whatever license",
  },
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 err := parser.parsePair("Annotator", "Person: John Doe ()")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }
```

```
 err = parser.parsePair("AnnotationDate", "2018-09-15T00:36:00Z")
 if
 err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 err = parser.parsePair("AnnotationType", "REVIEW")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 err = parser.parsePair("SPDXREF", "SPDXRef-45")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 err = parser.parsePair("AnnotationComment", "i guess i had something to say about this particular file")
 if err != nil {
  t.Errorf("got error when calling parsePair: %v", err)
 }
 if parser.st != psOtherLicense {
  t.Errorf("parser is in state %v, expected %v", parser.st, psOtherLicense)
 }

 // and the annotation
 should be in the Document's Annotations
 if len(parser.doc.Annotations) != 1 {
  t.Fatalf("expected doc.Annotations to have len 1, got %d", len(parser.doc.Annotations))
 }
 if parser.doc.Annotations[0].Annotator.Annotator != "John Doe ()" {
  t.Errorf("expected Annotator to be %s, got %s", "John Doe ()", parser.doc.Annotations[0].Annotator)
 }
}

func TestParserOLFailsAfterParsingOtherSectionTags(t *testing.T) {
 parser := tvParser{
  doc:  &v2_1.Document{Packages: []*v2_1.Package{}},
  st:   psOtherLicense,
```

```
 pkg:  &v2_1.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_1.File{}},
 file: &v2_1.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
 otherLic: &v2_1.OtherLicense{
  LicenseIdentifier: "LicenseRef-Lic11",
  LicenseName:       "License 11",
 },
}
parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
parser.pkg.Files = append(parser.pkg.Files, parser.file)
parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

//
can't go back to old sections
err := parser.parsePair("SPDXVersion", "SPDX-2.1")
if err == nil {
 t.Errorf("expected error when calling parsePair, got nil")
}
err = parser.parsePair("PackageName", "whatever")
if err == nil {
 t.Errorf("expected error when calling parsePair, got nil")
}
err = parser.parsePair("FileName", "whatever")
if err == nil {
 t.Errorf("expected error when calling parsePair, got nil")
}
}

// ===== Other License data section tests =====
func TestParserCanParseOtherLicenseTags(t *testing.T) {
parser := tvParser{
 doc:  &v2_1.Document{Packages: []*v2_1.Package{}},
 st:   psOtherLicense,
 pkg:  &v2_1.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_1.File{}},
 file: &v2_1.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
}
parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
parser.pkg.Files = append(parser.pkg.Files, parser.file)
parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

//
License Identifier
err := parser.parsePairFromOtherLicense("LicenseID", "LicenseRef-Lic11")
if err != nil {
 t.Errorf("expected nil error, got %v", err)
}
if parser.otherLic.LicenseIdentifier != "LicenseRef-Lic11" {
 t.Errorf("got %v for LicenseID", parser.otherLic.LicenseIdentifier)
}
```

```
 // Extracted Text
 err = parser.parsePairFromOtherLicense("ExtractedText", "You are permitted to do anything with the software,
hooray!")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.ExtractedText != "You are permitted to do anything with the software, hooray!" {
  t.Errorf("got %v for ExtractedText", parser.otherLic.ExtractedText)
 }

 // License Name
 err = parser.parsePairFromOtherLicense("LicenseName", "License 11")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.LicenseName != "License 11" {
  t.Errorf("got %v for LicenseName", parser.otherLic.LicenseName)
 }

 // License Cross Reference
 crossRefs := []string{
  "https://example.com/1",
  "https://example.com/2",
  "https://example.com/3",
 }
 for
 _, cr := range crossRefs {
  err = parser.parsePairFromOtherLicense("LicenseCrossReference", cr)
  if err != nil {
   t.Errorf("expected nil error, got %v", err)
  }
 }
 for _, refWant := range crossRefs {
  flagFound := false
  for _, refCheck := range parser.otherLic.LicenseCrossReferences {
   if refWant == refCheck {
    flagFound = true
   }
  }
  if flagFound == false {
   t.Errorf("didn't find %s in LicenseCrossReferences", refWant)
  }
 }
 if len(crossRefs) != len(parser.otherLic.LicenseCrossReferences) {
  t.Errorf("expected %d types in LicenseCrossReferences, got %d", len(crossRefs),
   len(parser.otherLic.LicenseCrossReferences))
 }
```

```
 // License Comment
 err = parser.parsePairFromOtherLicense("LicenseComment", "this is a comment")
 if err != nil {
  t.Errorf("expected nil error, got %v", err)
 }
 if parser.otherLic.LicenseComment != "this is a comment" {
  t.Errorf("got %v for LicenseComment",
 parser.otherLic.LicenseComment)
 }
}

func TestParserOLUnknownTagFails(t *testing.T) {
 parser := tvParser{
  doc:  &v2_1.Document{Packages: []*v2_1.Package{}},
  st:   psOtherLicense,
  pkg:  &v2_1.Package{PackageName: "test", PackageSPDXIdentifier: "test", Files: []*v2_1.File{}},
  file: &v2_1.File{FileName: "f1.txt", FileSPDXIdentifier: "f1"},
 }
 parser.doc.Packages = append(parser.doc.Packages, parser.pkg)
 parser.pkg.Files = append(parser.pkg.Files, parser.file)
 parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)

 err := parser.parsePairFromOtherLicense("blah", "something")
 if err == nil {
  t.Errorf("expected error from parsing unknown tag")
 }
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package writer

import (
 "fmt"
 "io"

 spdx "github.com/spdx/tools-golang/spdx/v2/v2_3"
)

func renderOtherLicense(ol *spdx.OtherLicense, w io.Writer) error {
 if ol.LicenseIdentifier != "" {
  fmt.Fprintf(w, "LicenseID: %s\n", ol.LicenseIdentifier)
 }
 if ol.ExtractedText != "" {
  fmt.Fprintf(w, "ExtractedText: %s\n", textify(ol.ExtractedText))
 }
 if ol.LicenseName != "" {
  fmt.Fprintf(w, "LicenseName: %s\n", ol.LicenseName)
```

```
 }
 for _, s := range ol.LicenseCrossReferences {
  fmt.Fprintf(w, "LicenseCrossReference: %s\n", s)
 }
 if ol.LicenseComment != "" {
  fmt.Fprintf(w, "LicenseComment: %s\n", textify(ol.LicenseComment))
 }

 fmt.Fprintf(w, "\n")

 return nil
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "fmt"

 "github.com/spdx/tools-golang/spdx/v2/v2_2"
)

func (parser *tvParser) parsePairFromOtherLicense(tag string, value string) error {
 switch tag {
 // tag for creating new other license section
 case "LicenseID":
  parser.otherLic = &v2_2.OtherLicense{}
  parser.doc.OtherLicenses = append(parser.doc.OtherLicenses, parser.otherLic)
  parser.otherLic.LicenseIdentifier = value
 case "ExtractedText":
  parser.otherLic.ExtractedText = value
 case "LicenseName":
  parser.otherLic.LicenseName = value
 case "LicenseCrossReference":
  parser.otherLic.LicenseCrossReferences = append(parser.otherLic.LicenseCrossReferences, value)
 case "LicenseComment":
  parser.otherLic.LicenseComment = value
 // for relationship tags, pass along but don't change state
 case "Relationship":
  parser.rln = &v2_2.Relationship{}
  parser.doc.Relationships = append(parser.doc.Relationships, parser.rln)
  return parser.parsePairForRelationship(tag,
 value)
 case "RelationshipComment":
  return parser.parsePairForRelationship(tag, value)
 // for annotation tags, pass along but don't change state
 case "Annotator":
  parser.ann = &v2_2.Annotation{}
```

```
 parser.doc.Annotations = append(parser.doc.Annotations, parser.ann)
 return parser.parsePairForAnnotation(tag, value)
case "AnnotationDate":
 return parser.parsePairForAnnotation(tag, value)
case "AnnotationType":
 return parser.parsePairForAnnotation(tag, value)
case "SPDXREF":
 return parser.parsePairForAnnotation(tag, value)
case "AnnotationComment":
 return parser.parsePairForAnnotation(tag, value)
// tag for going on to review section (DEPRECATED)
case "Reviewer":
 parser.st = psReview
 return parser.parsePairFromReview(tag, value)
default:
 return fmt.Errorf("received unknown tag %v in OtherLicense section", tag)
}

return nil
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package reader

import (
 "reflect"
 "sort"
 "testing"

 gordfParser "github.com/spdx/gordf/rdfloader/parser"
)

func Test_rdfParser2_2_getAnyLicenseFromNode(t *testing.T) {
 // since this function is a mux, we just have to make sure that with each
 // type of input, it is able to redirect the request to an appropriate
 // license getter.

 // TestCase 1: input node is just a node string without any associated
 //      triple (either a NONE|NOASSERTION) because for other case,
 //      the license should've been associated with other triples
 parser, _ := parserFromBodyContent(``)
 inputNode := &gordfParser.Node{
  NodeType: gordfParser.IRI,
  ID:       NS_SPDX + "NONE",
 }
 lic, err := parser.getAnyLicenseFromNode(inputNode)
 if err != nil {
  t.Errorf("error parsing a valid license input: %v", err)
```

```
}
// checking if the return type is a SpecialLicense
switch lic.(type) {
case SpecialLicense:
default:
 t.Errorf("expected
license to be of type SpecialLicense, found %v", reflect.TypeOf(lic))
}

// TestCase 2: DisjunctiveLicenseSet:
parser, _ = parserFromBodyContent(`
 <spdx:DisjunctiveLicenseSet>
  <spdx:member rdf:resource="http://spdx.org/licenses/Nokia"/>
  <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
 </spdx:DisjunctiveLicenseSet>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a DisjunctiveLicenseSet
switch lic.(type) {
case DisjunctiveLicenseSet:
default:
 t.Errorf("expected license to be of type DisjunctiveLicenseSet, found %v", reflect.TypeOf(lic))
}

// TestCase 3: ConjunctiveLicenseSet:
parser, _ = parserFromBodyContent(`
 <spdx:ConjunctiveLicenseSet>
  <spdx:member rdf:resource="http://spdx.org/licenses/Nokia"/>
  <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
 </spdx:ConjunctiveLicenseSet>
`)
inputNode
= parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a ConjunctiveLicenseSet
switch lic.(type) {
case ConjunctiveLicenseSet:
default:
 t.Errorf("expected license to be of type ConjunctiveLicenseSet, found %v", reflect.TypeOf(lic))
}
```

```
// TestCase 4: ExtractedLicensingInfo
parser, _ = parserFromBodyContent(`
 <spdx:ExtractedLicensingInfo rdf:about="http://spdx.dev/spdx.rdf#LicenseRef-Freeware">
  <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
  <spdx:name>freeware</spdx:name>
  <spdx:extractedText><![CDATA[...]]></spdx:extractedText>
   </spdx:ExtractedLicensingInfo>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return
type is a ExtractedLicensingInfo
switch lic.(type) {
case ExtractedLicensingInfo:
default:
 t.Errorf("expected license to be of type ExtractedLicensingInfo, found %v", reflect.TypeOf(lic))
}

// TestCase 4: ExtractedLicensingInfo
parser, _ = parserFromBodyContent(`
 <spdx:ExtractedLicensingInfo rdf:about="http://spdx.dev/spdx.rdf#LicenseRef-Freeware">
  <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
  <spdx:name>freeware</spdx:name>
  <spdx:extractedText><![CDATA[...]]></spdx:extractedText>
   </spdx:ExtractedLicensingInfo>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a ExtractedLicensingInfo
switch lic.(type) {
case ExtractedLicensingInfo:
default:
 t.Errorf("expected license to be of type ExtractedLicensingInfo, found %v", reflect.TypeOf(lic))
}

// TestCase 5: License
parser, _ = parserFromBodyContent(`
 <spdx:License
rdf:about="http://spdx.org/licenses/Apache-2.0">
  <spdx:standardLicenseTemplate>&lt;&gt; Apache License Version 2.0, January 2004
http://www.apache.org/licenses/&lt;&gt;&lt;&gt; TERMS AND CONDITIONS FOR USE, REPRODUCTION,
AND DISTRIBUTION&lt;&gt; &lt;&gt; Definitions. "License" shall mean the terms and conditions for use,
```

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http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.<></spdx:standardLicenseTemplate>
<rdfs:seeAlso>http://www.apache.org/licenses/LICENSE-2.0</rdfs:seeAlso>
<spdx:name>Apache License 2.0</spdx:name>
<spdx:licenseId>Apache-2.0</spdx:licenseId>

```
  <spdx:isOsiApproved>true</spdx:isOsiApproved>
  <rdfs:seeAlso>http://www.opensource.org/licenses/Apache-2.0</rdfs:seeAlso>
  <spdx:licenseText>...</spdx:licenseText>
  <spdx:standardLicenseHeader>...</spdx:standardLicenseHeader>
  </spdx:License>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if
err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a License
switch lic.(type) {
case License:
default:
 t.Errorf("expected license to be of type License, found %v", reflect.TypeOf(lic))
}

// TestCase 5: WithExceptionOperator
parser, _ = parserFromBodyContent(`
 <spdx:WithExceptionOperator>
  <spdx:licenseException>
   <spdx:LicenseException rdf:nodeID="A1">
    <spdx:example></spdx:example>
    <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
    <rdfs:comment></rdfs:comment>
   </spdx:LicenseException>
  </spdx:licenseException>
  <spdx:member rdf:resource="http://spdx.org/licenses/GPL-2.0-or-later"/>
 </spdx:WithExceptionOperator>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a WithExceptionOperator
switch
lic.(type) {
case WithExceptionOperator:
default:
 t.Errorf("expected license to be of type WithExceptionOperator, found %v", reflect.TypeOf(lic))
}

// TestCase 6: OrLaterOperator
parser, _ = parserFromBodyContent(`
 <spdx:OrLaterOperator>
```

```
  <spdx:member>
   <spdx:SimpleLicensingInfo>
    <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
    <spdx:name>freeware</spdx:name>
   </spdx:SimpleLicensingInfo>
  </spdx:member>
 </spdx:OrLaterOperator>
`)
inputNode = parser.gordfParserObj.Triples[0].Subject
lic, err = parser.getAnyLicenseFromNode(inputNode)
if err != nil {
 t.Errorf("error parsing a valid license input: %v", err)
}
// checking if the return type is a OrLaterOperator
switch lic.(type) {
case OrLaterOperator:
default:
 t.Errorf("expected license to be of type OrLaterOperator, found %v", reflect.TypeOf(lic))
}

// TestCase 7: checking if an unknown license raises an error.
parser, _ = parserFromBodyContent(`
 <spdx:UnknownLicense>
  <spdx:unknownTag
/>
 </spdx:UnknownLicense>
`)
node := parser.gordfParserObj.Triples[0].Subject
_, err = parser.getAnyLicenseFromNode(node)
t.Log(err)
if err == nil {
 t.Errorf("should've raised an error for invalid input")
}

// TestCase 8: cyclic dependent license must raise an error.
parser, _ = parserFromBodyContent(`
 <spdx:ConjunctiveLicenseSet rdf:about="#SPDXRef-RecursiveLicense">
  <spdx:member rdf:resource="http://spdx.org/licenses/GPL-2.0-or-later"/>
  <spdx:member>
   <spdx:ConjunctiveLicenseSet rdf:about="#SPDXRef-RecursiveLicense">
    <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
    <spdx:member rdf:resource="http://spdx.org/spdxdocs/spdx-example-444504E0-4F89-41D3-9A0C-
0305E82C3301#SPDXRef-RecursiveLicense"/>
   </spdx:ConjunctiveLicenseSet>
  </spdx:member>
 </spdx:ConjunctiveLicenseSet>
`)
node = parser.gordfParserObj.Triples[0].Subject
```

```
 _, err = parser.getAnyLicenseFromNode(node)
 if err == nil {
  t.Errorf("expected an error due to cyclic
 dependent license. found %v", err)
 }
}

func Test_rdfParser2_2_getConjunctiveLicenseSetFromNode(t *testing.T) {
 var parser *rdfParser2_2
 var err error
 var licenseNode *gordfParser.Node
 var license ConjunctiveLicenseSet

 // TestCase 1: invalid license member
 parser, _ = parserFromBodyContent(`
  <spdx:ConjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/Unknown"/>
   <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
  </spdx:ConjunctiveLicenseSet>
 `)
 licenseNode = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getConjunctiveLicenseSetFromNode(licenseNode)
 if err == nil {
  t.Errorf("expected an error saying invalid license member, found <nil>")
 }

 // TestCase 2: invalid predicate in the licenseSet.
 parser, _ = parserFromBodyContent(`
  <spdx:ConjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/CC0-1.0"/>
   <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
   <spdx:unknownTag />
  </spdx:ConjunctiveLicenseSet>
 `)
 licenseNode
 = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getConjunctiveLicenseSetFromNode(licenseNode)
 if err == nil {
  t.Errorf("expected an error saying invalid predicate found")
 }

 // TestCase 3: valid example.
 parser, _ = parserFromBodyContent(`
  <spdx:ConjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/Nokia"/>
   <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
  </spdx:ConjunctiveLicenseSet>
 `)
```

```
 licenseNode = parser.gordfParserObj.Triples[0].Subject
 license, err = parser.getConjunctiveLicenseSetFromNode(licenseNode)
 if err != nil {
  t.Errorf("unexpected error parsing licenseSet: %v", err)
 }
 nMembers := len(license.members)
 if nMembers != 2 {
  t.Errorf("expected licenseSet to have 2 members, found %d", nMembers)
 }
 licenseMembers := mapLicensesToStrings(license.members)
 expectedLicenseMembers := []string{"LGPL-2.0", "Nokia"}
 sort.Strings(licenseMembers)
 if !reflect.DeepEqual(licenseMembers,
 expectedLicenseMembers) {
  t.Errorf("expected %v, found %v", expectedLicenseMembers, licenseMembers)
 }
}

func Test_rdfParser2_2_getDisjunctiveLicenseSetFromNode(t *testing.T) {
 var parser *rdfParser2_2
 var err error
 var licenseNode *gordfParser.Node
 var license DisjunctiveLicenseSet

 // TestCase 1: invalid license member
 parser, _ = parserFromBodyContent(`
  <spdx:DisjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/Unknown"/>
   <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
  </spdx:DisjunctiveLicenseSet>
 `)
 licenseNode = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getDisjunctiveLicenseSetFromNode(licenseNode)
 if err == nil {
  t.Errorf("expected an error saying invalid license member, found <nil>")
 }

 // TestCase 2: invalid predicate in the licenseSet.
 parser, _ = parserFromBodyContent(`
  <spdx:DisjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/Unknown"/>
   <spdx:member
 rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
   <spdx:unknownTag />
  </spdx:DisjunctiveLicenseSet>
 `)
 licenseNode = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getDisjunctiveLicenseSetFromNode(licenseNode)
```

```
 if err == nil {
  t.Errorf("expected an error saying invalid predicate found")
 }

 // TestCase 3: valid example.
 parser, _ = parserFromBodyContent(`
  <spdx:DisjunctiveLicenseSet>
   <spdx:member rdf:resource="http://spdx.org/licenses/Nokia"/>
   <spdx:member rdf:resource="http://spdx.org/licenses/LGPL-2.0"/>
  </spdx:DisjunctiveLicenseSet>
 `)
 licenseNode = parser.gordfParserObj.Triples[0].Subject
 license, err = parser.getDisjunctiveLicenseSetFromNode(licenseNode)
 if err != nil {
  t.Errorf("unexpected error parsing licenseSet: %v", err)
 }
 nMembers := len(license.members)
 if nMembers != 2 {
  t.Errorf("expected licenseSet to have 2 members, found %d", nMembers)
 }
 licenseMembers := mapLicensesToStrings(license.members)
 expectedLicenseMembers := []string{"LGPL-2.0",
 "Nokia"}
 sort.Strings(licenseMembers)
 if !reflect.DeepEqual(licenseMembers, expectedLicenseMembers) {
  t.Errorf("expected %v, found %v", expectedLicenseMembers, licenseMembers)
 }
}

func Test_rdfParser2_2_getLicenseExceptionFromNode(t *testing.T) {
 var licenseException LicenseException
 var err error
 var node *gordfParser.Node
 var parser *rdfParser2_2

 // TestCase 1: invalid value for rdf:seeAlso
 parser, _ = parserFromBodyContent(`
  <spdx:LicenseException>
   <rdfs:seeAlso>see-also</rdfs:seeAlso>
   <spdx:example></spdx:example>
   <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
   <rdfs:comment></rdfs:comment>
  </spdx:LicenseException>
 `)
 node = parser.gordfParserObj.Triples[0].Subject
 _, err = parser.getLicenseExceptionFromNode(node)
 if err == nil {
  t.Errorf("should've raised an error due to invalid uri for rdfs:seeAlso")
```

```
}

// TestCase 2: invalid predicate for licenseException
// TestCase 1: invalid value for rdf:seeAlso
parser,
_ = parserFromBodyContent(`
 <spdx:LicenseException>
  <spdx:example></spdx:example>
  <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
  <rdfs:unknown></rdfs:unknown>
 </spdx:LicenseException>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getLicenseExceptionFromNode(node)
if err == nil {
 t.Errorf("should've raised an error due to invalid predicate")
}

// TestCase 3: everything valid
// TestCase 1: invalid value for rdf:seeAlso
parser, _ = parserFromBodyContent(`
 <spdx:LicenseException>
  <rdfs:seeAlso rdf:resource="http://www.opensource.org/licenses/GPL-3.0"/>
  <spdx:example>no example</spdx:example>
  <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
  <rdfs:comment>no comments</rdfs:comment>
  <spdx:licenseExceptionText>text</spdx:licenseExceptionText>
  <spdx:name>name</spdx:name>
 </spdx:LicenseException>
`)
node = parser.gordfParserObj.Triples[0].Subject
licenseException, err = parser.getLicenseExceptionFromNode(node)
if
err != nil {
 t.Fatalf("unexpected error while parsing a valid licenseException")
}
expectedCrossReference := "http://www.opensource.org/licenses/GPL-3.0"
if licenseException.seeAlso != expectedCrossReference {
 t.Errorf("expected: %s, found: %s", expectedCrossReference, licenseException.seeAlso)
}
expectedExample := "no example"
if licenseException.example != expectedExample {
 t.Errorf("expected: %s, got: %s", expectedExample, licenseException.example)
}
if licenseException.licenseExceptionId != "Libtool-exception" {
 t.Errorf("expected: %s, got: %s", "Libtool-exception", licenseException.licenseExceptionId)
}
if licenseException.comment != "no comments" {
```

```
 t.Errorf("expected: %s, got: %s", "no comments", licenseException.comment)
 }
 if licenseException.licenseExceptionText != "text" {
  t.Errorf("expected: '%s', got: '%s'", "text", licenseException.licenseExceptionText)
 }
 if licenseException.name != "name" {
  t.Errorf("expected:
 '%s', got: '%s'", "name", licenseException.name)
 }
}

func Test_rdfParser2_2_getLicenseFromNode(t *testing.T) {
 var parser *rdfParser2_2
 var node *gordfParser.Node
 var license License
 var err error

 // TestCase 1: isOsiApproved is not a valid boolean
 parser, _ = parserFromBodyContent(`
  <spdx:License>
   <spdx:isOsiApproved>no</spdx:isOsiApproved>
  </spdx:License>
 `)
 node = parser.gordfParserObj.Triples[0].Subject
 license, err = parser.getLicenseFromNode(node)
 if err == nil {
  t.Errorf("expected function to raise an error stating isOsiApproved should be a valid boolean type")
 }

 // TestCase 2: rdf:seeAlso not a valid uri must raise an error
 parser, _ = parserFromBodyContent(`
  <spdx:License>
   <rdfs:seeAlso>uri</rdfs:seeAlso>
  </spdx:License>
 `)
 node = parser.gordfParserObj.Triples[0].Subject
 license, err = parser.getLicenseFromNode(node)
 if err == nil {
  t.Errorf("expected function to raise an error stating invalid uri for rdfs:seeAlso")
 }

 // TestCase 3:
 isDeprecatedLicenseId is not a valid boolean
 parser, _ = parserFromBodyContent(`
  <spdx:License>
   <spdx:isDeprecatedLicenseId>yes</spdx:isDeprecatedLicenseId>
  </spdx:License>
 `)
```

```
node = parser.gordfParserObj.Triples[0].Subject
license, err = parser.getLicenseFromNode(node)
if err == nil {
 t.Errorf("expected function to raise an error stating isDeprecatedLicenseId should be a valid boolean type")
}

// TestCase 4: isFsfLibre is not a valid boolean
parser, _ = parserFromBodyContent(`
 <spdx:License>
  <spdx:isFsfLibre>no</spdx:isFsfLibre>
 </spdx:License>
`)
node = parser.gordfParserObj.Triples[0].Subject
license, err = parser.getLicenseFromNode(node)
if err == nil {
 t.Errorf("expected function to raise an error stating isFsfLibre should be a valid boolean type")
}

// TestCase 5: invalid triple for License:
parser, _ = parserFromBodyContent(`
 <spdx:License>
  <spdx:unknown />
 </spdx:License>
`)
node = parser.gordfParserObj.Triples[0].Subject
license,
err = parser.getLicenseFromNode(node)
if err == nil {
 t.Errorf("invalid predicate should've raised an error, got <nil>")
}

// TestCase 5: everything valid:
parser, _ = parserFromBodyContent(`
 <spdx:License rdf:about="http://spdx.org/licenses/GPL-3.0-or-later">
  <rdfs:seeAlso>http://www.opensource.org/licenses/GPL-3.0</rdfs:seeAlso>
  <spdx:isOsiApproved>true</spdx:isOsiApproved>
  <spdx:licenseText>GNU GENERAL PUBLIC LICENSE Version 3, 29 June 2007</spdx:licenseText>
  <spdx:name>GNU General Public License v3.0 or later</spdx:name>
  <spdx:standardLicenseHeaderTemplate>...</spdx:standardLicenseHeaderTemplate>
  <spdx:licenseId>GPL-3.0-or-later</spdx:licenseId>
  <rdfs:comment>This license was released: 29 June 2007</rdfs:comment>
  <spdx:isFsfLibre>true</spdx:isFsfLibre>
  <spdx:standardLicenseHeader>...</spdx:standardLicenseHeader>
  <spdx:standardLicenseTemplate>....</spdx:standardLicenseTemplate>
 </spdx:License>
`)
node = parser.gordfParserObj.Triples[0].Subject
license,
```

```
err = parser.getLicenseFromNode(node)
if err != nil {
 t.Errorf("error parsing a valid input: %v", err)
}
expectedSeeAlso := "http://www.opensource.org/licenses/GPL-3.0"
if len(license.seeAlso) != 1 {
 t.Fatalf("expected seeAlso to have 1 element, got %d", len(license.seeAlso))
}
if license.seeAlso[len(license.seeAlso)-1] != expectedSeeAlso {
 t.Errorf("expected %s, got %s", expectedSeeAlso, license.seeAlso)
}
if license.isOsiApproved != true {
 t.Errorf("expected %t, got %t", true, license.isOsiApproved)
}
expectedLicenseText := "GNU GENERAL PUBLIC LICENSE Version 3, 29 June 2007"
if license.licenseText != expectedLicenseText {
 t.Errorf("expected %s, got %s", expectedSeeAlso, license.licenseText)
}
expectedName := "GNU General Public License v3.0 or later"
if license.name != expectedName {
 t.Errorf("expected %s, got %s", expectedName, license.name)
}
expectedstdLicHeader := "..."
if license.standardLicenseHeader != expectedstdLicHeader {
 t.Errorf("expected
%s, got %s", expectedstdLicHeader, license.standardLicenseHeader)
}
expectedLicenseId := "GPL-3.0-or-later"
if expectedLicenseId != license.licenseID {
 t.Errorf("expected %s, got %s", expectedLicenseId, license.licenseID)
}
expectedLicenseComment := "This license was released: 29 June 2007"
if expectedLicenseComment != license.comment {
 t.Errorf("expected %s, got %s", expectedLicenseComment, license.comment)
}
expectedstdLicTemplate := "..."
if license.standardLicenseHeader != expectedstdLicTemplate {
 t.Errorf("expected %s, got %s", expectedstdLicTemplate, license.standardLicenseTemplate)
}
expectedstdLicHeaderTemplate := "..."
if license.standardLicenseHeaderTemplate != expectedstdLicHeaderTemplate {
 t.Errorf("expected %s, got %s", expectedstdLicHeaderTemplate, license.standardLicenseHeaderTemplate)
}
if license.isFsfLibre != true {
 t.Errorf("expected %t, got %t", true, license.isFsfLibre)
}
}
```

```
func Test_rdfParser2_2_getOrLaterOperatorFromNode(t *testing.T)
{
var parser *rdfParser2_2
var node *gordfParser.Node
var err error

// TestCase 1: more than one member in the OrLaterOperator tag must raise an error
parser, _ = parserFromBodyContent(`
 <spdx:OrLaterOperator>
  <spdx:member>
   <spdx:SimpleLicensingInfo>
    <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
    <spdx:name>freeware</spdx:name>
   </spdx:SimpleLicensingInfo>
  </spdx:member>
  <spdx:member rdf:resource="http://spdx.org/licenses/Nokia"/>
 </spdx:OrLaterOperator>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getOrLaterOperatorFromNode(node)
if err == nil {
 t.Error("expected an error due to more than one members, got <nil>")
}

// TestCase 2: Invalid predicate must raise an error
parser, _ = parserFromBodyContent(`
 <spdx:OrLaterOperator>
  <spdx:members>
   <spdx:SimpleLicensingInfo>
    <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
    <spdx:name>freeware</spdx:name>
   </spdx:SimpleLicensingInfo>
  </spdx:members>
 </spdx:OrLaterOperator>
`)
node
= parser.gordfParserObj.Triples[0].Subject
_, err = parser.getOrLaterOperatorFromNode(node)
if err == nil {
 t.Error("expected an error due to invalid predicate, got <nil>")
}

// TestCase 5: invalid member
parser, _ = parserFromBodyContent(`
 <spdx:OrLaterOperator>
  <spdx:member>
   <spdx:SimpleLicensingInfo>
    <spdx:invalidTag />
```

```
    <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
    <spdx:name>freeware</spdx:name>
   </spdx:SimpleLicensingInfo>
  </spdx:member>
 </spdx:OrLaterOperator>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getOrLaterOperatorFromNode(node)
if err == nil {
 t.Errorf("expected an error parsing invalid license member, got %v", err)
}

// TestCase 4: valid input
parser, _ = parserFromBodyContent(`
 <spdx:OrLaterOperator>
  <spdx:member>
   <spdx:SimpleLicensingInfo>
    <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
    <spdx:name>freeware</spdx:name>
   </spdx:SimpleLicensingInfo>
  </spdx:member>
 </spdx:OrLaterOperator>
`)
node
= parser.gordfParserObj.Triples[0].Subject
_, err = parser.getOrLaterOperatorFromNode(node)
if err != nil {
 t.Errorf("unexpected error parsing a valid input: %v", err)
}
}

func Test_rdfParser2_2_getSimpleLicensingInfoFromNode(t *testing.T) {
// nothing to test. The just provides an interface to call function that
// uses triples to render a SimpleLicensingInfo.
parser, _ := parserFromBodyContent(`
 <spdx:SimpleLicensingInfo>
  <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
  <spdx:name>freeware</spdx:name>
 </spdx:SimpleLicensingInfo>
`)
node := parser.gordfParserObj.Triples[0].Subject
_, err := parser.getSimpleLicensingInfoFromNode(node)
if err != nil {
 t.Errorf("error parsing a valid input: %v", err)
}
}

func Test_rdfParser2_2_getSimpleLicensingInfoFromTriples(t *testing.T) {
```

```
var parser *rdfParser2_2
var err error
var license SimpleLicensingInfo

// TestCase 1: invalid
rdf:seeAlso attribute
parser, _ = parserFromBodyContent(`
 <spdx:SimpleLicensingInfo>
  <rdfs:seeAlso>an invalid uri</rdfs:seeAlso>
 </spdx:SimpleLicensingInfo>
  `)
_, err = parser.getSimpleLicensingInfoFromTriples(parser.gordfParserObj.Triples)
if err == nil {
 t.Error("expected an error reporting invalid uri for rdf:seeAlso, got <nil>")
}

// TestCase 2: invalid predicate must raise an error
parser, _ = parserFromBodyContent(`
 <spdx:SimpleLicensingInfo>
  <rdfs:invalidPredicate />
 </spdx:SimpleLicensingInfo>
  `)
_, err = parser.getSimpleLicensingInfoFromTriples(parser.gordfParserObj.Triples)
if err == nil {
 t.Error("expected an error reporting invalid predicate, got <nil>")
}

// TestCase 3: valid example
parser, _ = parserFromBodyContent(`
 <spdx:SimpleLicensingInfo>
  <rdfs:comment>comment</rdfs:comment>
  <spdx:licenseId>lid</spdx:licenseId>
  <spdx:name>name</spdx:name>
  <rdfs:seeAlso>https://opensource.org/licenses/MPL-1.0</rdfs:seeAlso>
  <spdx:example>example</spdx:example>
 </spdx:SimpleLicensingInfo>
   `)
license, err = parser.getSimpleLicensingInfoFromTriples(parser.gordfParserObj.Triples)
if err != nil {
 t.Fatalf("unexpected error: %v", err)
}
expectedComment := "comment"
expectedLicenseId := "lid"
expectedName := "name"
expectedSeeAlso := "https://opensource.org/licenses/MPL-1.0"
expectedExample := "example"
if expectedComment != license.comment {
 t.Errorf("expected %v, got %v", expectedComment, license.comment)
```

```
 }
 if expectedLicenseId != license.licenseID {
  t.Errorf("expected %v, got %v", expectedLicenseId, license.licenseID)
 }
 if expectedName != license.name {
  t.Errorf("expected %v, got %v", expectedName, license.name)
 }
 if len(license.seeAlso) != 1 {
  t.Fatalf("expected seeAlso to have 1 element, found %d", len(license.seeAlso))
 }
 if license.seeAlso[0] != expectedSeeAlso {
  t.Errorf("expected %v, got %v", expectedSeeAlso, license.seeAlso[0])
 }
 if license.example != expectedExample
 {
  t.Errorf("expected %v, got %v", expectedExample, license.example)
 }
}

func Test_rdfParser2_2_getSpecialLicenseFromNode(t *testing.T) {
 var parser *rdfParser2_2
 var node *gordfParser.Node
 var license SpecialLicense

 // TestCase 1: NONE
 parser, _ = parserFromBodyContent(``)
 node = &gordfParser.Node{
  NodeType: gordfParser.IRI,
  ID:       NS_SPDX + "NONE",
 }
 license, err := parser.getSpecialLicenseFromNode(node)
 if err != nil {
  t.Errorf("error parsing a valid node: %v", err)
 }
 if license.value != "NONE" {
  t.Errorf("expected %s, got %s", "NONE", license.value)
 }

 // TestCase 2: NOASSERTION
 parser, _ = parserFromBodyContent(``)
 node = &gordfParser.Node{
  NodeType: gordfParser.IRI,
  ID:       NS_SPDX + "NOASSERTION",
 }
 license, err = parser.getSpecialLicenseFromNode(node)
 if err != nil {
  t.Errorf("error parsing a valid node: %v", err)
 }
```

```
 if license.value != "NOASSERTION" {
  t.Errorf("expected %s, got %s", "NOASSERTION", license.value)
 }

 // TestCase 4:
 undefined standard license
 parser, _ = parserFromBodyContent(``)
 node = &gordfParser.Node{
  NodeType: gordfParser.IRI,
  ID:       "https://opensource.org/licenses/unknown",
 }
 _, err = parser.getSpecialLicenseFromNode(node)
 if err == nil {
  t.Errorf("expected an error saying invalid license")
 }

 // TestCase 4: valid standard license
 parser, _ = parserFromBodyContent(``)
 node = &gordfParser.Node{
  NodeType: gordfParser.IRI,
  ID:       "https://opensource.org/licenses/MPL-1.0",
 }
 license, err = parser.getSpecialLicenseFromNode(node)
 if err != nil {
  t.Errorf("error parsing a valid node: %v", err)
 }
 if license.value != "MPL-1.0" {
  t.Errorf("expected %s, got %s", "MPL-1.0", license.value)
 }
}

func Test_rdfParser2_2_getWithExceptionOperatorFromNode(t *testing.T) {
 var parser *rdfParser2_2
 var node *gordfParser.Node
 var err error

 // TestCase 1: more than one member in the OrLaterOperator tag must raise an error
 parser, _ = parserFromBodyContent(`
  <spdx:WithExceptionOperator>
   <spdx:member>
    <spdx:SimpleLicensingInfo>
     <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
     <spdx:name>freeware</spdx:name>
    </spdx:SimpleLicensingInfo>
   </spdx:member>
   <spdx:member
 rdf:resource="http://spdx.org/licenses/Nokia"/>
  </spdx:WithExceptionOperator>
```

```
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getWithExceptionOperatorFromNode(node)
if err == nil {
 t.Error("expected an error due to more than one members, got <nil>")
}

// TestCase 2: Invalid predicate must raise an error
parser, _ = parserFromBodyContent(`
 <spdx:WithExceptionOperator>
  <spdx:members>
   <spdx:SimpleLicensingInfo>
    <spdx:licenseId>LicenseRef-Freeware</spdx:licenseId>
    <spdx:name>freeware</spdx:name>
   </spdx:SimpleLicensingInfo>
  </spdx:members>
 </spdx:WithExceptionOperator>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getWithExceptionOperatorFromNode(node)
if err == nil {
 t.Error("expected
an error due to invalid predicate, got <nil>")
}

// TestCase 3: Invalid member
parser, _ = parserFromBodyContent(`
 <spdx:WithExceptionOperator>
  <spdx:member>
   <spdx:License rdf:about="http://spdx.org/licenses/GPL-2.0-or-later">
    <spdx:unknownTag />
   </spdx:License>
  </spdx:member>
 </spdx:WithExceptionOperator>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getWithExceptionOperatorFromNode(node)
if err == nil {
 t.Error("expected an error due to error parsing a member, got <nil>")
}

// TestCase 4: Invalid licenseException
parser, _ = parserFromBodyContent(`
 <spdx:WithExceptionOperator>
  <spdx:member>
   <spdx:License rdf:about="http://spdx.org/licenses/GPL-2.0-or-later"/>
  </spdx:member>
  <spdx:licenseException>
```

```
   <spdx:LicenseException>
    <spdx:invalidTag />
    <spdx:example>example</spdx:example>
    <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
    <rdfs:comment>comment</rdfs:comment>
   </spdx:LicenseException>
  </spdx:licenseException>
 </spdx:WithExceptionOperator>
`)
node
= parser.gordfParserObj.Triples[0].Subject
_, err = parser.getWithExceptionOperatorFromNode(node)
if err == nil {
 t.Error("expected an error due to invalid licenseException, got <nil>")
}

// TestCase 5: valid input
parser, _ = parserFromBodyContent(`
 <spdx:WithExceptionOperator>
  <spdx:member>
   <spdx:License rdf:about="http://spdx.org/licenses/GPL-2.0-or-later"/>
  </spdx:member>
  <spdx:licenseException>
   <spdx:LicenseException>
    <spdx:example>example</spdx:example>
    <spdx:licenseExceptionId>Libtool-exception</spdx:licenseExceptionId>
    <rdfs:comment>comment</rdfs:comment>
   </spdx:LicenseException>
  </spdx:licenseException>
 </spdx:WithExceptionOperator>
`)
node = parser.gordfParserObj.Triples[0].Subject
_, err = parser.getWithExceptionOperatorFromNode(node)
if err != nil {
 t.Errorf("error parsing a valid input: %v", err)
}
}
// SPDX-License-Identifier: Apache-2.0 OR GPL-2.0-or-later

package v2_1

// OtherLicense is an Other License Information section of an
// SPDX Document for version 2.1 of the spec.
type OtherLicense struct {
 // 6.1: License Identifier: "LicenseRef-[idstring]"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseIdentifier string `json:"licenseId"`
```

```
// 6.2: Extracted Text
// Cardinality: conditional (mandatory, one) if there is a
//             License Identifier assigned
ExtractedText string `json:"extractedText"`

// 6.3: License Name: single line of text or "NOASSERTION"
// Cardinality: conditional (mandatory, one) if license is not
//             on SPDX License List
LicenseName string `json:"name,omitempty"`

// 6.4: License Cross Reference
// Cardinality: conditional (optional, one or many) if license
//             is not on SPDX License List
LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

// 6.5:
License Comment
// Cardinality: optional, one
LicenseComment string `json:"comment,omitempty"`
}
```

1.1863 speakeasy 0.2.0

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1.1864 chai 4.5.0

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1.1866 go-openapi 0.28.0

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1.1867 go-sockaddr 1.0.6

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1.1868 qs 6.13.0

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1.1869 go-jose-go-jose 4.0.4

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1.1870 go-auth-oauth2adapt 0.2.3

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically
generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.34.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)
```

```
// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32
```

```
const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
```

```
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
```

```
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
```

```
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67,
 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
```

```
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64,
 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func
 file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v any, i int) any {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
    return &v.sizeCache
   case 2:
    return &v.unknownFields
   default:
    return nil
   }
  }
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
```

```
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:
        file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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//     https://www.apache.org/licenses/LICENSE-2.0
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"
```

```
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
```

```
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
```

```
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}
```

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

```
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC
```

```
 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
```

```
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license",
url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf,
```

```
 err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()),
 "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err
 := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
```

```
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and
 context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp);
 err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId",
 fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
```

```
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err !=
nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}
```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

func (c *licensesRESTClient)

```
List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
it := &LicenseIterator{}
req = proto.Clone(req).(*computepb.ListLicensesRequest)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
  req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
  req.MaxResults = proto.Uint32(math.MaxInt32)
 } else if pageSize != 0 {
  req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults",
fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
```

```
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return
err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
```

```
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only
 by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
```

```
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on
 the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return
 nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.1871 pkcs8 0.0.0-20240726163527-a2c0da244d78

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1.1872 github.com/go-zookeeper/zk 1.0.4

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1.1873 santhosh-tekuri-jsonschema 6.0.1

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1.1874 ca-certificates 20240203

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1.1878 jaraco-text 3.12.1

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1.1879 libsodium 1.0.18-1build3

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1.1880 fuse3 3.14.0-5build1

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$Id: INSTALL,v 2.5 1994/01/15 20:43:43 vixie Exp $

Read the comments at the top of the Makefile, then edit the area marked
'configurable
 stuff'.

Edit config.h. The stuff I expect you to change is down a bit from the
top of the file, but it's clearly marked. Also look at pathnames.h.

You don't have to create the /var/cron or /var/cron/tabs directories, since
both the daemon and the `crontab' program will do this the first time they
run if they don't exist. You do need to have a /var, though -- just "mkdir

/var" if you don't have one, or you can "mkdir /usr/var; ln -s /usr/var /var"
if you expect your /var to have a lot of stuff in it.

You will also need /usr/local/etc and /usr/local/bin directories unless you
change the Makefile. These will have to be created by hand, but if you are
a long-time Usenet user you probably have them already. /usr/local/man is
where I keep my man pages, but I have the source for `man' and you probably
do not. Therefore you may have to put the man pages into /usr/man/manl,
which will be hard since there will be name collisions. (Note that the man
command was originally written by
Bill Joy before he left Berkeley, and it
contains no AT&T code, so it is in UUNET's archive of freely-distributable
BSD code.)

LINUX note: /usr/include/paths.h on some linux systems shows _PATH_SENDMAIL
to be /usr/bin/sendmail even though sendmail is installed in /usr/lib.
you should check this out.

say:
make all

su and say:
make install

Note that if I can get you to "su and say" something just by asking, you have
a very serious security problem on your system and you should look into it.

Edit your /usr/lib/crontab file into little pieces -- see the CONVERSION file
for help on this.

Use the `crontab' command to install all the little pieces you just created.
Some examples (see below before trying any of these!)

```
crontab -u uucp -r /usr/lib/uucp/crontab.src
crontab -u news -r /usr/lib/news/crontab.src
crontab -u root -r /usr/adm/crontab.src
```

Notes on above examples: (1) the .src files are copied at the time the
command is issued; changing the source files later will have
no effect until
they are reinstalled with another `crontab -r' command. (2) The crontab
command will affect the crontab of the person using the command unless `-u
USER' is given; `-u' only works for root. When using most `su' commands
under most BSD's, `crontab' will still think of you as yourself even though
you may think of yourself as root -- so use `-u' liberally. (3) the `-r'
option stands for `replace'; check the man page for crontab(1) for other
possibilities.

Kill your existing cron daemon -- do `ps aux' and look for /etc/cron.

Edit your /etc/rc or /etc/rc.local, looking for the line that starts up
/etc/cron. Comment it out and add a line to start the new cron daemon
-- usually /usr/local/etc/cron, unless you changed it in the Makefile.

Start up this cron daemon yourself as root. Just type /usr/local/etc/cron
(or whatever); no '&' is needed since the daemon forks itself and the
process you executed returns immediately.

ATT notes: for those people unfortunate enough to
 be stuck on a AT&T UNIX,
you will need the public-domain "libndir", found in the B News source and in
any comp.sources.unix archive. You will also need to hack the code some.

Found in path(s):
* /cron-3-0pl1-orig-1-tar-gz/cron-3.0pl1.orig/INSTALL
No license file was found, but licenses were detected in source scan.

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* user.
*
* Send bug reports, bug fixes, enhancements, requests, flames, etc., and
* I'll try to keep a version up to date. I can be reached as follows:
* Paul Vixie <paul@vix.com> uunet!decwrl!vixie!paul
*/

Vixie Cron V3.0
December 27, 1993
[V2.2 was some time in 1992]
[V2.1 was May 29, 1991]
[V2.0 was July 5, 1990]
[V2.0-beta
 was December 9, 1988]
[V1.0 was May 6, 1987]
Paul Vixie

This is a version of 'cron' that is known to run on BSD 4.[23] systems. It
is functionally based on the SysV cron, which means that each user can have

their own crontab file (all crontab files are stored in a read-protected
directory, usually /var/cron/tabs). No direct support is provided for
'at'; you can continue to run 'atrun' from the crontab as you have been
doing. If you don't have atrun (i.e., System V) you are in trouble.

A messages is logged each time a command is executed; also, the files
"allow" and "deny" in /var/cron can be used to control access to the
"crontab" command (which installs crontabs). It hasn't been tested on
SysV, although some effort has gone into making the port an easy one.

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rediculously
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please, don't flame me for wanting my work to see a wider distribution.

To use this: Sorry, folks, there is no cutesy 'Configure' script. You'll
have to go edit a couple of files... So, here's the checklist:

```
 Read all the FEATURES, INSTALL, and CONVERSION files
 Edit config.h
 Edit Makefile
  (both of these files have instructions inside; note that
   some things in config.h are definable in Makefile and are
   therefore surrounded by #ifndef...#endif)
 'make'
 'su' and 'make install'
  (you may have to install the man pages by hand)
 kill your existing cron process
  (actually you can run your existing cron if you want, but why?)
 build new crontabs using /usr/lib/{crontab,crontab.local}
  (either put them all in "root"'s crontab, or divide it up
   and rip out all the 'su' commands, collapse the lengthy
   lists into
 ranges with steps -- basically, this step is
   as much work as you want to make it)
 start up the new cron
  (must be done as root)
 watch it. test it with 'crontab -r' and watch the daemon track your
  changes.
 if you like it, change your /etc/{rc,rc.local} to use it instead of
  the old one.
```

$Id: README,v 2.3 1993/12/28 08:34:43 vixie Exp $

Found in path(s):

* /cron-3-0pl1-orig-1-tar-gz/cron-3.0pl1.orig/README

1.1882 netifaces 0.11.0-2build3

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1.1883 graphite 1.3.14-2build1

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1.1884 efivar 38-3.1build1

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<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

1.1888 liblocale-gettext-perl 1.07-6ubuntu5

1.1888.1 Available under license :

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Locale::gettext
version 1.07

This is a perl5 module quickly written to gain access to
the C library functions for internatialization. They
work just like the C versions.

As of version 1.04, an object oriented interface more
suitable to native Perl programs is available.

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specified in the Perl README file.

Changes

1.07 Fix test failures caused by $LANGUAGE being set

1.06 Bugfix: #104667 Makefile.PL libaries need to be listed after .o files
Bugfix: #104668 ensure availability of locale API, correct typo in documentation
Add META.yml (Fixes #91921)

1.05 Bugfix: [cpan #13042] useless #ifdef should be #if
Bugfix: [cpan #13044] make test fails when using POSIX locale

1.04 Add several

functions provided by the GNU gettext library
Create object oriented interface

1.03 Fix error in README file

1.02 Include a License

1.01 Changed from "gettext" to "Locale::gettext" (i.e.
moved under Locale::) on the advice of several
people

Small "lint" fix from schwern@starmedia.net

1.00 Initial version

TODO

A TIEHASH interface

Here's a quick tutorial.

Note that your vendor's implementation of these functions
may be a bit different, but I think that in general these
are quite standard POSIX functions.

Kim Vandry <vandry@TZoNE.ORG>
Mlink Internet <http://www.Mlink.NET>
July 1996

INTERNATIONALIZING YOUR PROGRAM

Step 1

If you've already written your code, you need to
wrap the gettext() function around all of the
text strings. Needless to say, this is much easier if
you do it while you write.

```
# create object for oo interface
my $d = Locale::gettext->domain("my_program");

print "Welcome to my program\n";

# oo
print $d->get("Welcome
```

```
 to my program"), "\n";

# traditional
print gettext("Welcome to my program"), "\n";
```

Note that you probably don't want to include that newline
in the gettext() call, nor any formatting codes such as
HTML tags. The argument to gettext() is the text string
in the default language or locale. This is known as the
C locale and should probably be usually English.

Step 2

Do the apropriate initializations at the beginning of your
program:

```
#
use POSIX;     # for setlocale()
use Locale::gettext;
#
# The following statement initializes the locale handling
# code in the C library. Normally, it causes it to read
# in the environment variables that determine the current
# locale.
#
# The first parameter is the category you would
# like to initialize locale information for. You can use
# LC_ALL for this, which will set locale information for
# all categories, including LC_CTYPE, LC_TIME, LC_NUMERIC,
# etc..
#
# I recommend that you set only LC_MESSAGES (text strings)
# or LC_CTYPE (character
 sets) and LC_TIME (time
# conventions) too at most. You may find that if you set
# LC_NUMERIC or some other categories, you will start
# outputting decimal numbers with strange thousand separators
# and decimal points and they will be unparseable in
# other countries.
#
# The second parameter is the locale name. If it is an
# empty string, then this information will be fetched from
# environment variables.
#
# Note that setlocale() will cause every part of your
# program to start operating in the new, non default (C)
# locale, including C library functions. So don't be
```

```
# surprised if POSIX::ctime returns "Montag, 22. Juli 1996,
# 12:08:25 Uhr EDT" instead of "Mon Jul 22 12:08:25 EDT 1996"
# If you set LC_TIME or LC_ALL using setlocale().
#
setlocale(LC_MESSAGES, "");
#
# Decide on a unique identifier that will distinguish your
# program's text strings in the LC_MESSAGES database. This
# would usually be the name of your program
#
# By default, locale information is found in OS dependant
#
 system directories such as /usr/lib/locale, or any directory
# found in the $PATH-like environment variable $NLSPATH.
# I recommend that you do _not_ install files in /usr. If
# your program is installed in a directory tree such as
# /opt/my_package_name/{bin,man,lib,etc}, then you could
# use /opt/my_package_name/locale to store locale information
# specific to your program, or you could put in somewhere
# in /usr/local/lib.
#
# Wherever you put it, if it is not one of the default
# directories, you will need to call bindtextdomain() to
# tell the library where to find your files. The first
# parameter is your database's identifier that you chose
# above.
#
# oo interface:

my $d = Locale::gettext->domain("my_domain");
$d->dir("/opt/my_package_name/locale");

# traditional interface:
bindtextdomain("my_domain", "/opt/my_package_name/locale");
textdomain("my_domain");

# That's it for the initializations
```

Step 3

Test to see if your program still works after all these
 mods :-)

Step 4

TRANSLATE!

Read msgfmt(1) for details on this. Basically, for each locale
other than the default, you need to create a file like this:
(Note: I do not speak German, I'm making an attempt here :-)
Call this file with the .po extension.

```
--BEGIN
domain "my_domain"

msgid  "Welcome to my program"
msgstr "Willkommen in mein Program"

msgid  "Help"
msgstr "Hilfe"
--END
```

The "msgid" parameter must match exactly the argument to the
gettext() function, and "msgstr" is the corresponding translation.

You can use the xgettext(1) utility to initially construct this
file from all of the gettext() calls in your source code. It was
designed for C but it works OK with perl.

Step 5

Compile the .po file

```
$ msgfmt my_file.po
```

This will create a file called my_domain.mo (default messages.mo)
which you should place in the <locale>/LC_MESSAGES/my_domain.mo
subdirectory of either a system default directory, a directory
in $NLSPATH, or the directory argument to bindtextdomain().
Replace
 <locale> with the name of the locale for which this file
is created.

For example:

```
$ mkdir -p /opt/my_package/locale/de/LC_MESSAGES
$ mkdir -p /opt/my_package/locale/fr/LC_MESSAGES
$ cd /path/to/my/source/code
$ cd de
$ msgfmt my_domain.po
$ mv my_domain.mo /opt/my_package/locale/de/LC_MESSAGES
$ cd ../fr
$ msgfmt my_domain.po
```

$ mv my_domain.mo /opt/my_package/locale/fr/LC_MESSAGES

Step 6

Test it out

$ my_program
Welcome to my program
$ LANG=fr my_program
Bienvenue à mon programme
$ LANG=de my_program
Willkommen in mein Program

(Or, set only the messages category instead of the whole locale)

$ LC_MESSAGES=fr
$ export LC_MESSAGES
$ my_program
Bienvenue à mon programme

Found in path(s):
* /liblocale-gettext-perl-1-07-orig-1-tar-gz/Locale-gettext-1.07/README
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---
abstract: 'Perl bindings for POSIX i18n gettext functions'
author:
 - 'Kim Vandry <vandry.ORG>'
build_requires:
 ExtUtils::MakeMaker: 0
configure_requires:
 ExtUtils::MakeMaker: 0
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 6.66, CPAN::Meta::Converter version 2.120921'
license: perl
meta-spec:
 url: http://module-build.sourceforge.net/META-spec-v1.4.html
 version: 1.4
name: Locale-gettext
no_index:
 directory:
   - t
   - inc
requires: {}
resources:
 license: http://dev.perl.org/licenses/
 repository: https://github.com/vandry/Perl-Locale-gettext

version: 1.07

Found in path(s):
* /liblocale-gettext-perl-1-07-orig-1-tar-gz/Locale-gettext-1.07/META.yml

1.1889 libxml-parser-perl 2.47-1build3

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1.1892 libnet-ssleay-perl 1.94-1build4

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1.1893 gawk 5.2.1-2build3

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* Mark M. Hoffman
 Many improvements to the libsensors configuration file scanner.
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 New libsensors API, and migration of sensors and sensord thereto.
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1.1898 cracklib 2.9.6-5.1build2

1.1898.1 Available under license :

This is the Debian GNU/Linux prepackaged version of the GNU compiler collection, containing Ada, C, C++, D, Fortran 95, Go, Objective-C, Objective-C++, and Modula-2 compilers, documentation, and support libraries. In addition, Debian provides the gm2 compiler, either in the same source package, or built from a separate same source package. Packaging is done by the Debian GCC Maintainers <debian-gcc@lists.debian.org>, with sources obtained from:

ftp://gcc.gnu.org/pub/gcc/releases/ (for full releases)
svn://gcc.gnu.org/svn/gcc/ (for prereleases)
ftp://sourceware.org/pub/newlib/ (for newlib)
git://git.savannah.gnu.org/gm2.git (for Modula-2)

The current gcc-13 source package is taken from the git gcc-13-branch.

Changes: See changelog.Debian.gz

Debian splits the GNU Compiler Collection into packages for each language, library, and documentation as follows:

Language	Compiler package	Library package	Documentation
Ada	gnat-13	libgnat-13	gnat-13-doc
C	gcc-13		gcc-13-doc
C++	g++-13	libstdc++6	libstdc++6-13-doc
D	gdc-13		
Fortran 95	gfortran-13	libgfortran5	gfortran-13-doc
Go	gccgo-13	libgo0	
Objective C	gobjc-13	libobjc4	
Objective C++	gobjc++-13		
Modula-2	gm2-13	libgm2	

For some language run-time libraries, Debian provides source files, development files, debugging symbols and libraries containing position-independent code in separate packages:

Language	Sources	Development	Debugging	Position-Independent
C++			libstdc++6-13-dbg	libstdc++6-13-pic
D		libphobos-13-dev		

Additional packages include:

All languages:

libgcc1, libgcc2, libgcc4	GCC intrinsics (platform-dependent)
gcc-13-base	Base files common to all compilers
gcc-13-soft-float	Software floating point (ARM only)
gcc-13-source	The sources with patches

Ada:

libgnat-util13-dev, libgnat-util13	GNAT version library

C:

cpp-13, cpp-13-doc	GNU C Preprocessor
libssp0-dev, libssp0	GCC stack smashing protection library
libquadmath0	Math routines for the __float128 type
fixincludes	Fix non-ANSI header files

C, C++ and Fortran 95:

libgomp1-dev, libgomp1 GCC OpenMP (GOMP) support library
libitm1-dev, libitm1 GNU Transactional Memory Library

Biarch support: On some 64-bit platforms which can also run 32-bit code, Debian provides additional packages containing 32-bit versions of some libraries. These packages have names beginning with 'lib32' instead of 'lib', for example lib32stdc++6. Similarly, on some 32-bit platforms which can also run 64-bit code, Debian provides additional packages with names beginning with 'lib64' instead of 'lib'. These packages contain 64-bit versions of the libraries. (At this time, not all platforms and not all libraries support biarch.) The license terms for these lib32 or lib64 packages are identical to the ones for the lib packages.

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gcc/emults.c, gcc/gbl-ctors.h, gcc/gcov-io.h, gcc/libgcov.c,
gcc/tsystem.h, gcc/typeclass.h).
- libatomic
- libdecnumber
- libgomp
- libitm
- libssp
- libstdc++-v3
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copysignq.c, coshq.c, cosq.c, erfq.c, fabsq.c, finiteq.c, floorq.c,
fmodq.c, frexpq.c, hypotq.c, ilogbq.c, isnanq.c, jnq.c, ldexpq.c,
logbq.c, modfq.c, nearbyintq.c,
nextafterq.c, powq.c, remainderq.c,
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D:
gdc-13 GNU D Compiler
libphobos-13-dev D standard runtime library

The D source package is made up of the following components.

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- d/*

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The Zlib data compression library:
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The Phobos standard runtime library:
- d/phobos/*

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iconv (Charset Conversion Library) v2.0

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1.1905 avahi 0.8-13ubuntu6

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Version 3, 29 June 2007

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1.1909 lshw 02.19.git.2021.06.19.996aaad9c7-2build3

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1.1910 libio-socket-ssl-perl 2.085-1

1.1910.1 Available under license :

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```
=head1 NAME

IO::Socket::SSL - SSL sockets with IO::Socket interface

=head1 SYNOPSIS

  use strict;
  use IO::Socket::SSL;

  # simple client
  my $cl = IO::Socket::SSL->new('www.google.com:443');
  print $cl "GET / HTTP/1.0\r\n\r\n";
  print <$cl>;

  # simple server
  my $srv = IO::Socket::SSL->new(
 LocalAddr => '0.0.0.0:1234',
 Listen => 10,
 SSL_cert_file => 'server-cert.pem',
 SSL_key_file => 'server-key.pem',
  );
  $srv->accept;

=head1 DESCRIPTION

IO::Socket::SSL makes using SSL/TLS much easier by wrapping the necessary
functionality into the familiar L<IO::Socket> interface and providing secure
defaults whenever possible.
This way, existing applications can be made SSL-aware without much effort, at
least if you do blocking I/O and don't use select or poll.

But, under the hood, SSL is a complex beast.
So there are lots of methods to make it do what you need if the default
behavior is not
 adequate.
Because it is easy to inadvertently introduce critical security bugs or just
hard to debug problems, I would recommend studying the following
documentation carefully.

The documentation consists of the following parts:

=over 4

=item * L</"Essential Information About SSL/TLS">
```

=item * L</"Basic SSL Client">

=item * L</"Basic SSL Server">

=item * L</"Common Usage Errors">

=item * L</"Common Problems with SSL">

=item * L</"Using Non-Blocking Sockets">

=item * L</"Advanced Usage">

=item * L</"Integration Into Own Modules">

=item * L</"Description Of Methods">

=back

Additional documentation can be found in

=over 4

=item * L<IO::Socket::SSL::Intercept> - Doing Man-In-The-Middle with SSL

=item * L<IO::Socket::SSL::Utils> - Useful functions for certificates etc

=back

=head1 Essential Information About SSL/TLS

SSL (Secure Socket Layer) or its successor TLS (Transport Layer Security) are
protocols to facilitate end-to-end security. These protocols are used when
accessing
web sites (https), delivering or retrieving email, and in lots of other
use cases.
In the following documentation we will refer to both SSL and TLS as simply 'SSL'.

SSL enables end-to-end security by providing two essential functions:

=over 4

=item Encryption

This part encrypts the data for transit between the communicating parties, so
that nobody in between can read them. It also provides tamper resistance so that
nobody in between can manipulate the data.

=item Identification

This part makes sure that you talk to the right peer.
If the identification is done incorrectly it is easy to mount man-in-the-middle attacks, e.g. if Alice wants to talk to Bob it would be possible for Mallory to put itself in the middle, so that Alice talks to Mallory and Mallory to Bob.
All the data would still be encrypted, but not end-to-end between Alice and Bob, but only between Alice and Mallory and then between Mallory and Bob.
Thus Mallory would be able to read and modify all traffic between Alice and Bob.

=back

Identification is the part which is the hardest to understand and the easiest to get wrong.

With SSL, the Identification is usually done with B<certificates> inside a B<PKI> (Public Key Infrastructure).
These Certificates are comparable to an identity card, which contains information about the owner of the card. The card then is somehow B<signed> by the B<issuer> of the card, the B<CA> (Certificate Agency).

To verify the identity of the peer the following must be done inside SSL:

=over 4

=item *

Get the certificate from the peer.
If the peer does not present a certificate we cannot verify it.

=item *

Check if we trust the certificate, e.g. make sure it's not a forgery.

We believe that a certificate is not a fake if we either know the certificate already or if we B<trust> the issuer (the CA) and can verify the issuers signature on the certificate.
In reality there is often a hierarchy of certificate agencies and we only directly trust the root of this hierarchy.
In this case the peer not only sends his own certificate, but also all B<intermediate certificates>.
Verification will be done by building a B<trust path> from the trusted root up to the peers certificate and checking in each step if the we can verify the issuer's signature.

This step often causes problems because the client does not know the necessary

trusted root certificates. These are usually stored in a system dependent
CA store, but often the browsers have their own CA store.

=item *

Check if the certificate is still valid.
Each certificate has a lifetime and should not be used after that time because
it might be compromised or the underlying cryptography got broken in the mean
time.

=item *

Check if the subject of the certificate matches the peer.
This is like comparing the picture on the identity card against the person
representing the identity card.

When connecting to a server this is usually done by comparing the hostname used
for connecting against the names
represented in the certificate.
A certificate might contain multiple names or wildcards, so that it can be used
for multiple hosts (e.g. *.example.com and *.example.org).

Although nobody sane would accept an identity card where the picture does not
match the person we see, it is a common implementation error with SSL to omit
this check or get it wrong.

=item *

Check if the certificate was revoked by the issuer.
This might be the case if the certificate was compromised somehow and now
somebody else might use it to claim the wrong identity.
Such revocations happened a lot after the heartbleed attack.

For SSL there are two ways to verify a revocation, CRL and OCSP.
With CRLs (Certificate Revocation List) the CA provides a list of serial numbers
for revoked certificates. The client somehow has to download the list
(which can be huge) and keep it up to date.
With OCSP (Online Certificate Status Protocol) the client can check a single
certificate directly by asking the issuer.

Revocation
is the hardest part of the verification and none of today's browsers
get it fully correct. But, they are still better than most other implementations
which don't implement revocation checks or leave the hard parts to the
developer.

=back

When accessing a web site with SSL or delivering mail in a secure way the identity is usually only checked one way, e.g. the client wants to make sure it talks to the right server, but the server usually does not care which client it talks to.
But, sometimes the server wants to identify the client too and will request a certificate from the client which the server must verify in a similar way.

=head1 Basic SSL Client

A basic SSL client is simple:

```
  my $client = IO::Socket::SSL->new('www.example.com:443')
 or die "error=$!, ssl_error=$SSL_ERROR";
```

This will take the OpenSSL default CA store as the store for the trusted CA. This usually works on UNIX systems.
If there are no certificates in the store it will try use L<Mozilla::CA> which provides
 the default CAs of Firefox.

In the default settings, L<IO::Socket::SSL> will use a safer cipher set and SSL version, do a proper hostname check against the certificate, and use SNI (server name indication) to send the hostname inside the SSL handshake. This is necessary to work with servers which have different certificates behind the same IP address.
It will also check the revocation of the certificate with OCSP, but currently only if the server provides OCSP stapling (for deeper checks see C<ocsp_resolver> method).

Lots of options can be used to change ciphers, SSL version, location of CA and much more. See documentation of methods for details.

With protocols like SMTP it is necessary to upgrade an existing socket to SSL. This can be done like this:

```
  my $client = IO::Socket::INET->new('mx.example.com:25') or die $!;
  # .. read greeting from server
  # .. send EHLO and read response
  # .. send STARTTLS command and read response
  # .. if response was successful we
 can upgrade the socket to SSL now:
  IO::Socket::SSL->start_SSL($client,
 # explicitly set hostname we should use for SNI
 SSL_hostname => 'mx.example.com'
  ) or die $SSL_ERROR;
```

A more complete example for a simple HTTP client:

```
  my $client = IO::Socket::SSL->new(
# where to connect
PeerHost => "www.example.com",
PeerPort => "https",

# certificate verification - VERIFY_PEER is default
SSL_verify_mode => SSL_VERIFY_PEER,

# location of CA store
# need only be given if default store should not be used
SSL_ca_path => '/etc/ssl/certs', # typical CA path on Linux
SSL_ca_file => '/etc/ssl/cert.pem', # typical CA file on BSD

# or just use default path on system:
IO::Socket::SSL::default_ca(), # either explicitly
# or implicitly by not giving SSL_ca_*

# easy hostname verification
# It will use PeerHost as default name a verification
# scheme as default, which is safe enough for most purposes.
SSL_verifycn_name => 'foo.bar',
SSL_verifycn_scheme => 'http',

# SNI
support - defaults to PeerHost
SSL_hostname => 'foo.bar',

  ) or die "failed connect or ssl handshake: $!,$SSL_ERROR";

  # send and receive over SSL connection
  print $client "GET / HTTP/1.0\r\n\r\n";
  print <$client>;
```

And to do revocation checks with OCSP (only available with OpenSSL 1.0.0 or higher and L<Net::SSLeay> 1.59 or higher):

```
  # default will try OCSP stapling and check only leaf certificate
  my $client = IO::Socket::SSL->new($dst);

  # better yet: require checking of full chain
  my $client = IO::Socket::SSL->new(
PeerAddr => $dst,
SSL_ocsp_mode => SSL_OCSP_FULL_CHAIN,
  );

  # even better: make OCSP errors fatal
  # (this will probably fail with lots of sites because of bad OCSP setups)
```

```
  # also use common OCSP response cache
  my $ocsp_cache = IO::Socket::SSL::OCSP_Cache->new;
  my $client = IO::Socket::SSL->new(
PeerAddr => $dst,
SSL_ocsp_mode => SSL_OCSP_FULL_CHAIN|SSL_OCSP_FAIL_HARD,
SSL_ocsp_cache => $ocsp_cache,
  );

  #
disable OCSP stapling in case server has problems with it
  my $client = IO::Socket::SSL->new(
PeerAddr => $dst,
SSL_ocsp_mode => SSL_OCSP_NO_STAPLE,
  );

  # check any certificates which are not yet checked by OCSP stapling or
  # where we have already cached results. For your own resolving combine
  # $ocsp->requests with $ocsp->add_response(uri,response).
  my $ocsp = $client->ocsp_resolver();
  my $errors = $ocsp->resolve_blocking();
  if ($errors) {
warn "OCSP verification failed: $errors";
close($client);
  }
```

=head1 Basic SSL Server

A basic SSL server looks similar to other L<IO::Socket> servers, only that it also contains settings for certificate and key:

```
  # simple server
  my $server = IO::Socket::SSL->new(
# where to listen
LocalAddr => '127.0.0.1',
LocalPort => 8080,
Listen => 10,

# which certificate to offer
# with SNI support there can be different certificates per hostname
SSL_cert_file => 'cert.pem',
SSL_key_file => 'key.pem',

) or die "failed to listen: $!";

  # accept client
  my $client = $server->accept or die
"failed to accept or ssl handshake: $!,$SSL_ERROR";
```

This will automatically use a secure set of ciphers and SSL version and also supports Forward Secrecy with (Elliptic-Curve) Diffie-Hellmann Key Exchange.

If you are doing a forking or threading server, we recommend that you do the SSL handshake inside the new process/thread so that the master is free for new connections.
We recommend this because a client with improper or slow SSL handshake could make the server block in the handshake which would be bad to do on the listening socket:

```
  # inet server
  my $server = IO::Socket::INET->new(
# where to listen
LocalAddr => '127.0.0.1',
LocalPort => 8080,
Listen => 10,
  );

  # accept client
  my $client = $server->accept or die;

  # SSL upgrade client (in new process/thread)
  IO::Socket::SSL->start_SSL($client,
SSL_server => 1,
SSL_cert_file => 'cert.pem',
SSL_key_file =>
'key.pem',
  ) or die "failed to ssl handshake: $SSL_ERROR";
```

Like with normal sockets, neither forking nor threading servers scale well.
It is recommended to use non-blocking sockets instead, see
L</"Using Non-Blocking Sockets">

=head1 Common Usage Errors

This is a list of typical errors seen with the use of L<IO::Socket::SSL>:

=over 4

=item *

Disabling verification with C<SSL_verify_mode>.

As described in L</"Essential Information About SSL/TLS">, a proper identification of the peer is essential and failing to verify makes Man-In-The-Middle attacks possible.

Nevertheless, lots of scripts and even public modules or applications disable

verification, because it is probably the easiest way to make the thing work
and usually nobody notices any security problems anyway.

If the verification does not succeed with the default settings, one can do the
following:

=over 8

=item *

Make sure the needed CAs are in the store, maybe use C<SSL_ca_file> or
C<SSL_ca_path> to specify a different
 CA store.

=item *

If the validation fails because the certificate is self-signed and that's what
you expect, you can use the C<SSL_fingerprint> option to accept specific
leaf certificates by their certificate or pubkey fingerprint.

=item *

If the validation failed because the hostname does not match and you cannot
access the host with the name given in the certificate, you can use
C<SSL_verifycn_name> to specify the hostname you expect in the certificate.

=back

A common error pattern is also to disable verification if they found no CA
store (different modules look at different "default" places).
Because L<IO::Socket::SSL> is now able to provide a usable CA store on most
platforms (UNIX, Mac OSX and Windows) it is better to use the defaults provided
by L<IO::Socket::SSL>.
If necessary these can be checked with the C<default_ca> method.

=item *

Polling of SSL sockets (e.g. select, poll and other event loops).

If you sysread one byte on a normal socket it will result in a
 syscall to read
one byte. Thus, if more than one byte is available on the socket it will be kept
in the network stack of your OS and the next select or poll call will return the
socket as readable.
But, with SSL you don't deliver single bytes. Multiple data bytes are packaged
and encrypted together in an SSL frame. Decryption can only be done on the whole
frame, so a sysread for one byte actually reads the complete SSL frame from the
socket, decrypts it and returns the first decrypted byte. Further sysreads will

return more bytes from the same frame until all bytes are returned and the next SSL frame will be read from the socket.

Thus, in order to decide if you can read more data (e.g. if sysread will block) you must check if there are still data in the current SSL frame by calling C<pending> and if there are no data pending you might check the underlying socket with select or poll.
Another way might be if you try to sysread at least 16kByte all the time. 16kByte is the maximum size
 of an SSL frame and because sysread returns data
from only a single SSL frame you can guarantee that there are no pending data.

Additionally, contrary to plain sockets the data delivered on the socket are not necessarily application payload.
It might be a TLS handshake, it might just be the beginning of a TLS record or it might be TLS session tickets which are send after the TLS handshake in TLS 1.3.
In such situations select will return that data are available for read since it only looks at the plain socket.
A sysread on the IO::Socket::SSL socket will not return any data though since it is an abstraction which only returns application data.
This causes the sysread to hang in case the socket was blocking or to return an error with EAGAIN on non-blocking sockets.
Applications using select or similar should therefore set the socket to non-blocking and also expect that the sysread might temporarily fail with EAGAIN.

See also L</"Using Non-Blocking Sockets">.

=item *

Expecting exactly
 the same behavior as plain sockets.

IO::Socket::SSL tries to emulate the usual socket behavior as good as possible, but full emulation can not be done. Specifically a read on the SSL socket might also result in a write on the TCP socket or a write on the SSL socket might result in a read on the TCP socket. Also C<accept> and B<close> on the SSL socket will result in writing and reading data to the TCP socket too.

Especially the hidden writes might result in a connection reset if the underlying TCP socket is already closed by the peer. Unless signal PIPE is explicitly handled by the application this will usually result in the application crashing. It is thus recommended to explicitly IGNORE signal PIPE so that the errors get propagated as EPIPE instead of causing a crash of the application.

=item *

Set 'SSL_version' or 'SSL_cipher_list' to a "better" value.

L<IO::Socket::SSL> tries to set these values to reasonable, secure values which
are compatible with the rest of the world.
But,
there are some scripts or modules out there which tried to be smart and
get more secure or compatible settings.
Unfortunately, they did this years ago and never updated these values, so they
are still forced to do only 'TLSv1' (instead of also using TLSv12 or TLSv11).
Or they set 'HIGH' as the cipher list and thought they were secure, but did not
notice that 'HIGH' includes anonymous ciphers, e.g. without identification of
the peer.

So it is recommended to leave the settings at the secure defaults which
L<IO::Socket::SSL> sets and which get updated from time to time to
better fit the real world.

=item *

Make SSL settings inaccessible by the user, together with bad builtin settings.

Some modules use L<IO::Socket::SSL>, but don't make the SSL settings available
to the user. This is often combined with bad builtin settings or defaults (like
switching verification off).

Thus the user needs to hack around these restrictions by using
C<set_args_filter_hack> or similar.

=item *

Use
of constants as strings.

Constants like C<SSL_VERIFY_PEER> or C<SSL_WANT_READ> should be used as
constants and not be put inside quotes, because they represent numerical values.

=item *

Forking and handling the socket in parent and child.

A B<fork> of the process will duplicate the internal user space SSL state of the
socket. If both master and child interact with the socket by using their own SSL
state strange error messages will happen. Such interaction includes explicit or
implicit B<close> of the SSL socket. To avoid this the socket should be explicitly
closed with B<SSL_no_shutdown>.

=item *

Forking and executing a new process.

Since the SSL state is stored in user space it will be duplicated by a B<fork> but
it will be lost when doing B<exec>. This means it is not possible to simply
redirect stdin and stdout for the new process to the SSL socket by duplicating
the relevant file handles. Instead explicitly exchanging plain data between
child-process and SSL socket are needed.

=back

=head1
Common Problems with SSL

SSL is a complex protocol with multiple implementations and each of these has
their own quirks. While most of these implementations work together, it often
gets problematic with older versions, minimal versions in load balancers, or plain
wrong setups.

Unfortunately these problems are hard to debug.
Helpful for debugging are a knowledge of SSL internals, wireshark and the use of
the debug settings of L<IO::Socket::SSL> and L<Net::SSLeay>, which can both be
set with C<$IO::Socket::SSL::DEBUG>.
The following debugs levels are defined, but used not in any consistent way:

=over 4

=item *

0 - No debugging (default).

=item *

1 - Print out errors from L<IO::Socket::SSL> and ciphers from L<Net::SSLeay>.

=item *

2 - Print also information about call flow from L<IO::Socket::SSL>, progress
information from L<Net::SSLeay> and state information from OpenSSL.

=item *

3 - Print also some data dumps from L<IO::Socket::SSL> and from L<Net::SSLeay>.

=back

Also,
C<analyze-ssl.pl> from the ssl-tools repository at
L<https://github.com/noxxi/p5-ssl-tools> might be a helpful tool when debugging SSL problems, as do the C<openssl> command line tool and a check with a different SSL implementation (e.g. a web browser).

The following problems are not uncommon:

=over 4

=item *

Bad server setup: missing intermediate certificates.

It is a regular problem that administrators fail to include all necessary certificates into their server setup, e.g. everything needed to build the trust chain from the trusted root.
If they check the setup with the browser everything looks ok, because browsers work around these problems by caching any intermediate certificates and apply them to new connections if certificates are missing.

But, fresh browser profiles which have never seen these intermediates cannot fill in the missing certificates and fail to verify; the same is true with L<IO::Socket::SSL>.

=item *

Old versions of servers or load balancers
which do not understand specific TLS
versions or croak on specific data.

From time to time one encounters an SSL peer, which just closes the connection inside the SSL handshake. This can usually be worked around by downgrading the SSL version, e.g. by setting C<SSL_version>. Modern Browsers usually deal with such servers by automatically downgrading the SSL version and repeat the connection attempt until they succeed.

Worse servers do not close the underlying TCP connection but instead just drop the relevant packet. This is harder to detect because it looks like a stalled connection. But downgrading the SSL version often works here too.

A cause of such problems are often load balancers or security devices, which have hardware acceleration and only a minimal (and less robust) SSL stack. They can often be detected because they support much fewer ciphers than other implementations.

=item *

Bad or old OpenSSL versions.

L<IO::Socket::SSL> uses OpenSSL with the help of the L<Net::SSLeay>
library. It
is recommend to have a recent version of this library, because it has more
features and usually fewer known bugs.

=item *

Validation of client certificates fail.

Make sure that the purpose of the certificate allows use as ssl client (check
with C<< openssl x509 -purpose >>, that the necessary root certificate is in the
path specified by C<SSL_ca*> (or the default path) and that any intermediate
certificates needed to build the trust chain are sent by the client.

=item *

Validation of self-signed certificate fails even if it is given with
C<SSL_ca*> argument.

The C<SSL_ca*> arguments do not give a general trust store for arbitrary
certificates but only specify a store for CA certificates which then can be used
to verify other certificates. This especially means that certificates which are
not a CA get simply ignored, notably self-signed certificates which do not also
have the CA-flag set.

This behavior of OpenSSL differs from the more general trust-store concept
which
can be found in browsers and where it is possible to simply added arbitrary
certificates (CA or not) as trusted.

=back

=head1 Using Non-Blocking Sockets

If you have a non-blocking socket, the expected behavior on read, write, accept
or connect is to set C<$!> to EWOULDBLOCK if the operation cannot be completed
immediately. Note that EWOULDBLOCK is the same as EAGAIN on UNIX systems, but
is different on Windows.

With SSL, handshakes might occur at any time, even within an established
connection. In these cases it is necessary to finish the handshake before
you can read or write data. This might result in situations where you want to

read but must first finish the write of a handshake or where you want to write
but must first finish a read.
In these cases C<$!> is set to EAGAIN like expected, and additionally
C<$SSL_ERROR> is set to either SSL_WANT_READ or SSL_WANT_WRITE.
Thus if you get EWOULDBLOCK on a SSL socket you must check C<$SSL_ERROR> for
SSL_WANT_* and adapt
your event mask accordingly.

Using readline on non-blocking sockets does not make much sense and I would
advise against using it.
And, while the behavior is not documented for other L<IO::Socket> classes, it
will try to emulate the behavior seen there, e.g. to return the received data
instead of blocking, even if the line is not complete. If an unrecoverable error
occurs it will return nothing, even if it already received some data.

Also, I would advise against using C<accept> with a non-blocking SSL object
because it might block and this is not what most would expect. The reason for
this is that C<accept> on a non-blocking TCP socket (e.g. L<IO::Socket::IP>,
L<IO::Socket::INET>..) results in a new TCP socket which does not inherit the
non-blocking behavior of the master socket. And thus, the initial SSL handshake
on the new socket inside C<IO::Socket::SSL::accept> will be done in a blocking
way. To work around this you are safer by doing a TCP accept and later upgrade the
TCP socket
in a non-blocking way with C<start_SSL> and C<accept_SSL>.

```
  my $cl = IO::Socket::SSL->new($dst);
  $cl->blocking(0);
  my $sel = IO::Select->new($cl);
  while (1) {
# with SSL a call for reading n bytes does not result in reading of n
# bytes from the socket, but instead it must read at least one full SSL
# frame. If the socket has no new bytes, but there are unprocessed data
# from the SSL frame can_read will block!

# wait for data on socket
$sel->can_read();

# new data on socket or eof
READ:
# this does not read only 1 byte from socket, but reads the complete SSL
# frame and then just returns one byte. On subsequent calls it than
# returns more byte of the same SSL frame until it needs to read the
# next frame.
my $n = sysread( $cl,my $buf,1);
if ( ! defined $n ) {
    die $! if not $!{EWOULDBLOCK};
    next if $SSL_ERROR == SSL_WANT_READ;
    if ( $SSL_ERROR == SSL_WANT_WRITE ) {
```

```
 # need to write data on renegotiation
 $sel->can_write;
 next;
    }

   die "something went wrong: $SSL_ERROR";
 } elsif ( ! $n ) {
    last; # eof
 } else {
    # read next bytes
    # we might have still data within the current SSL frame
    # thus first process these data instead of waiting on the underlying
    # socket object
    goto READ if $cl->pending;    # goto sysread
    next;                         # goto $sel->can_read
 }
   }
```

Additionally there are differences to plain sockets when using select, poll, kqueue or similar technologies to get notified if data are available.
Relying only on these calls is not sufficient in all cases since unread data might be internally buffered in the SSL stack. To detect such buffering B<pending()> need to be used. Alternatively the buffering can be avoided by using B<sysread> with the maximum size of an SSL frame. See L</"Common Usage Errors"> for details.

=head1 Advanced Usage

=head2 SNI Support

Newer extensions to SSL can distinguish between multiple hostnames on the same IP address using
 Server Name Indication (SNI).

Support for SNI on the client side was added somewhere in the OpenSSL 0.9.8 series, but with 1.0 a bug was fixed when the server could not decide about its hostname. Therefore client side SNI is only supported with OpenSSL 1.0 or higher in L<IO::Socket::SSL>.
With a supported version, SNI is used automatically on the client side, if it can determine the hostname from C<PeerAddr> or C<PeerHost> (which are synonyms in the underlying IO::Socket:: classes and thus should never be set both or at least not to different values).
On unsupported OpenSSL versions it will silently not use SNI.
The hostname can also be given explicitly given with C<SSL_hostname>, but in this case it will throw in error, if SNI is not supported.
To check for support you might call C<< IO::Socket::SSL->can_client_sni() >>.

On the server side, earlier versions of OpenSSL are supported, but only together with L<Net::SSLeay> version >= 1.50.
To check for support you might call C<< IO::Socket::SSL->can_server_sni() >>.
If server side SNI is supported, you might specify different certificates per host with C<SSL_cert*> and C<SSL_key*>, and check the requested name using C<get_servername>.

=head2 Talk Plain and SSL With The Same Socket

It is often required to first exchange some plain data and then upgrade the socket to SSL after some kind of STARTTLS command. Protocols like FTPS even need a way to downgrade the socket again back to plain.

The common way to do this would be to create a normal socket and use C<start_SSL> to upgrade and stop_SSL to downgrade:

```
  my $sock = IO::Socket::INET->new(...) or die $!;
  ... exchange plain data on $sock until starttls command ...
  IO::Socket::SSL->start_SSL($sock,%sslargs) or die $SSL_ERROR;
  ... now $sock is an IO::Socket::SSL object ...
  ... exchange data with SSL on $sock until stoptls command ...
  $sock->stop_SSL or die $SSL_ERROR;
  ... now $sock is again an IO::Socket::INET object ...
```

But, lots of modules just derive directly from L<IO::Socket::INET>.
While this base class can be replaced with L<IO::Socket::SSL>, these modules cannot easily support different base classes for SSL and plain data and switch between these classes on a starttls command.

To help in this case, L<IO::Socket::SSL> can be reduced to a plain socket on startup, and connect_SSL/accept_SSL/start_SSL can be used to enable SSL and C<stop_SSL> to talk plain again:

```
  my $sock = IO::Socket::SSL->new(
 PeerAddr => ...
 SSL_startHandshake => 0,
 %sslargs
  ) or die $!;
  ... exchange plain data on $sock until starttls command ...
  $sock->connect_SSL or die $SSL_ERROR;
  ... now $sock is an IO::Socket::SSL object ...
  ... exchange data with SSL on $sock until stoptls command ...
  $sock->stop_SSL or die $SSL_ERROR;
  ... $sock is still an IO::Socket::SSL object ...
  ... but data exchanged again in plain ...
```

=head1 Integration Into Own Modules

L<IO::Socket::SSL> behaves similarly to other L<IO::Socket>
modules and thus could
be integrated in the same way, but you have to take special care when using
non-blocking I/O (like for handling timeouts) or using select or poll.
Please study the documentation on how to deal with these differences.

Also, it is recommended to not set or touch most of the C<SSL_*> options, so
that they keep their secure defaults. It is also recommended to let the user
override these SSL specific settings without the need of global settings or hacks
like C<set_args_filter_hack>.

The notable exception is C<SSL_verifycn_scheme>.
This should be set to the hostname verification scheme required by the module or
protocol.

=head1 Description Of Methods

L<IO::Socket::SSL> inherits from another L<IO::Socket> module.
The choice of the super class depends on the installed modules:

=over 4

=item *

If L<IO::Socket::IP> with at least version 0.20 is installed it will use this
module as super class, transparently providing IPv6 and IPv4 support.

=item *

If L<IO::Socket::INET6>
is installed it will use this module as super class,
transparently providing IPv6 and IPv4 support.

=item *

Otherwise it will fall back to L<IO::Socket::INET>, which is a perl core module.
With L<IO::Socket::INET> you only get IPv4 support.

=back

Please be aware that with the IPv6 capable super classes, it will look first
for the IPv6 address of a given hostname. If the resolver provides an IPv6

address, but the host cannot be reached by IPv6, there will be no automatic
fallback to IPv4.
To avoid these problems you can enforce IPv4 for a specific socket by
using the C<Domain> or C<Family> option with the value AF_INET as described in
L<IO::Socket::IP>. Alternatively you can enforce IPv4 globally by loading
L<IO::Socket::SSL> with the option 'inet4', in which case it will use the IPv4
only class L<IO::Socket::INET> as the super class.

L<IO::Socket::SSL> will provide all of the methods of its super class, but
sometimes it will override them to match the behavior expected
from SSL or to
provide additional arguments.

The new or changed methods are described below, but please also read the
section about SSL specific error handling.

=over 4

=item Error Handling

If an SSL specific error occurs, the global variable C<$SSL_ERROR> will be set.
If the error occurred on an existing SSL socket, the method C<errstr> will
give access to the latest socket specific error.
Both C<$SSL_ERROR> and the C<errstr> method give a dualvar similar to C<$!>, e.g.
providing an error number in numeric context or an error description in string
context.

=item B<new(...)>

Creates a new L<IO::Socket::SSL> object. You may use all the friendly options
that came bundled with the super class (e.g. L<IO::Socket::IP>,
L<IO::Socket::INET>, ...) plus (optionally) the ones described below.
If you don't specify any SSL related options it will do its best in using
secure defaults, e.g. choosing good ciphers, enabling proper verification, etc.

=over 2

=item SSL_server

Set this option
to a true value if the socket should be used as a server.
If this is not explicitly set it is assumed if the C<Listen> parameter is given
when creating the socket.

=item SSL_hostname

This can be given to specify the hostname used for SNI, which is needed if you

have multiple SSL hostnames on the same IP address. If not given it will try to determine the hostname from C<PeerAddr>, which will fail if only an IP was given or if this argument is used within C<start_SSL>.

If you want to disable SNI, set this argument to ".

Currently only supported for the client side and will be ignored for the server side.

See section "SNI Support" for details of SNI the support.

=item SSL_startHandshake

If this option is set to false (defaults to true) it will not start the SSL handshake yet. This has to be done later with C<accept_SSL> or C<connect_SSL>. Before the handshake is started read/write/etc. can be used to exchange plain data.

=item SSL_keepSocketOnError

If this option is set to
true (defaults to false) it will not close the
underlying TCP socket on errors. In most cases there is no real use for this behavior since both sides of the TCP connection will probably have a different idea of the current state of the connection.

=item SSL_ca | SSL_ca_file | SSL_ca_path

Usually you want to verify that the peer certificate has been signed by a trusted certificate authority. In this case you should use this option to specify the file (C<SSL_ca_file>) or directory (C<SSL_ca_path>) containing the certificateZ<>(s) of the trusted certificate authorities.

C<SSL_ca_path> can also be an array or a string containing multiple path, where the path are separated by the platform specific separator. This separator is C<;> on DOS, Windows, Netware, C<,> on VMS and C<:> for all the other systems. If multiple path are given at least one of these must be accessible.

You can also give a list of X509* certificate handles (like you get from L<Net::SSLeay> or L<IO::Socket::SSL::Utils::PEM_xxx2cert>)
with C<SSL_ca>. These
will be added to the CA store before path and file and thus take precedence. If neither SSL_ca, nor SSL_ca_file or SSL_ca_path are set it will use C<default_ca()> to determine the user-set or system defaults.
If you really don't want to set a CA set SSL_ca_file or SSL_ca_path to C<\undef> or SSL_ca to an empty list. (unfortunately C<''> is used by some modules using L<IO::Socket::SSL> when CA is not explicitly given).

=item SSL_client_ca | SSL_client_ca_file

If verify_mode is VERIFY_PEER on the server side these options can be used to set the list of acceptable CAs for the client. This way the client can select they required certificate from a list of certificates.
The value for these options is similar to C<SSL_ca> and C<SSL_ca_file>.

=item SSL_fingerprint

Sometimes you have a self-signed certificate or a certificate issued by an unknown CA and you really want to accept it, but don't want to disable verification at all. In this case you can specify the fingerprint of the certificate as C<'algo$hex_fingerprint'>. C<algo> is a fingerprint algorithm supported by OpenSSL, e.g. 'sha1','sha256'... and C<hex_fingerprint> is the hexadecimal representation of the binary fingerprint. Any colons inside the hex string will be ignored.

If you want to use the fingerprint of the pubkey inside the certificate instead of the certificate use the syntax C<'algopubhex_fingerprint'> instead.
To get the fingerprint of an established connection you can use C<get_fingerprint>.

It is also possible to skip C<algo$>, i.e. only specify the fingerprint. In this case the likely algorithms will be automatically detected based on the length of the digest string.

You can specify a list of fingerprints in case you have several acceptable certificates.
If a fingerprint matches the topmost (i.e. leaf) certificate no additional validations can make the verification fail.

=item SSL_cert_file | SSL_cert | SSL_key_file | SSL_key

If you create a server you usually need to specify a server certificate which should be verified by the client. Same is true for client certificates, which should be verified by the server.
The certificate can be given as a file with SSL_cert_file or as an internal representation of an X509* object (like you get from L<Net::SSLeay> or L<IO::Socket::SSL::Utils::PEM_xxx2cert>) with SSL_cert.
If given as a file it will automatically detect the format.
Supported file formats are PEM, DER and PKCS#12, where PEM and PKCS#12 can contain the certificate and the chain to use, while DER can only contain a single certificate.

If given as a list of X509* please note, that the all the chain certificates (e.g. all except the first) will be "consumed" by openssl and will be freed

if the SSL context gets destroyed - so you should never free them yourself. But
the servers certificate (e.g. the first) will not be consumed by openssl and
thus must be freed by the application.

For each certificate a key is need, which can either be
given as a file with
SSL_key_file or as an internal representation of an EVP_PKEY* object with
SSL_key (like you get from L<Net::SSLeay> or
L<IO::Socket::SSL::Utils::PEM_xxx2key>).
If a key was already given within the PKCS#12 file specified by SSL_cert_file
it will ignore any SSL_key or SSL_key_file.
If no SSL_key or SSL_key_file was given it will try to use the PEM file given
with SSL_cert_file again, maybe it contains the key too.

If your SSL server should be able to use different certificates on the same IP
address, depending on the name given by SNI, you can use a hash reference
instead of a file with C<<hostname => cert_file>>.

If your SSL server should be able to use both RSA and ECDSA certificates for the
same domain/IP a similar hash reference like with SNI is given. The
domain names used to specify the additional certificates should be
C<hostname%whatever>, i.e. C<hostname%ecc> or similar. This needs at least
OpenSSL 1.0.2. To let the server pick the certificate based on
the clients
cipher preference C<SSL_honor_cipher_order> should be set to false.

In case certs and keys are needed but not given it might fall back to builtin
defaults, see "Defaults for Cert, Key and CA".

Examples:

```
SSL_cert_file => 'mycert.pem',
SSL_key_file => 'mykey.pem',

SSL_cert_file => {
   "foo.example.org" => 'foo-cert.pem',
   "foo.example.org%ecc" => 'foo-ecc-cert.pem',
   "bar.example.org" => 'bar-cert.pem',
   # used when nothing matches or client does not support SNI
   " => 'default-cert.pem',
   '%ecc' => 'default-ecc-cert.pem',
},
SSL_key_file => {
   "foo.example.org" => 'foo-key.pem',
   "foo.example.org%ecc" => 'foo-ecc-key.pem',
   "bar.example.org" => 'bar-key.pem',
   # used when nothing matches or client does not support SNI
   " => 'default-key.pem',
```

```
   '%ecc' => 'default-ecc-key.pem',
}
```

=item SSL_passwd_cb

If your private key is encrypted, you might not want the default password prompt
from Net::SSLeay. This option takes a reference to
 a subroutine that should
return the password required to decrypt your private key.

=item SSL_use_cert

If this is true, it forces IO::Socket::SSL to use a certificate and key, even if
you are setting up an SSL client. If this is set to 0 (the default), then you
will only need a certificate and key if you are setting up a server.

SSL_use_cert will implicitly be set if SSL_server is set.
For convenience it is also set if it was not given but a cert was given for use
(SSL_cert_file or similar).

=item SSL_version

Sets the version of the SSL protocol used to transmit data.
'SSLv23' uses a handshake compatible with SSL2.0, SSL3.0 and TLS1.x, while
'SSLv2', 'SSLv3', 'TLSv1', 'TLSv1_1', 'TLSv1_2', or 'TLSv1_3' restrict
handshake and protocol to the specified version.
All values are case-insensitive. Instead of 'TLSv1_1', 'TLSv1_2', and
'TLSv1_3' one can also use 'TLSv11', 'TLSv12', and 'TLSv13'. Which protocol
versions are actually supported depend on the versions of OpenSSL and
Net::SSLeay
 installed, but modern protocols like TLS 1.3 are supported by these
for many years now.

Independent from the handshake format you can limit to set of accepted SSL
versions by adding !version separated by ':'.

The default SSL_version is 'SSLv23:!TLSv1:!TLSv1_1:!SSLv3:!SSLv2'. This means,
that the handshake format is compatible to SSL2.0 and higher, but that the
successful handshake is limited to TLS1.2 and higher, that is no SSL2.0, SSL3.0,
TLS 1.0 or TLS 1.1 because these versions have serious security issues and
should not be used anymore.

You can also use !TLSv1_1 and !TLSv1_2 to disable TLS versions 1.1 and 1.2 while
still allowing TLS version 1.0.
Setting the version instead to 'TLSv1' might break interaction with very old or
broken clients, which expect a SSL2.0 compatible handshake. On the other
side some broken clients just close the connection when they receive a TLS

version 1.1 request. In this case setting the version to
'SSLv23:!SSLv2:!SSLv3:!TLSv1_1:!TLSv1_2' might
help.

=item SSL_cipher_list

If this option is set the cipher list for the connection will be set to the
given value, e.g. something like 'ALL:!LOW:!EXP:!aNULL'. This will only affect
ciphers for TLS 1.2 and lower. See the OpenSSL documentation
(L<https://www.openssl.org/docs/manmaster/man1/openssl-ciphers.html#CIPHER-STRINGS>)
for more details.

Unless you fail to contact your peer because of no shared ciphers it is
recommended to leave this option at the default setting, which uses the system
default but disables some insecure ciphers which might still be enabled on older
systems.

In case different cipher lists are needed for different SNI hosts a hash can be
given with the host as key and the cipher suite as value, similar to
B<SSL_cert*>.

=item SSL_ciphersuites

If this option is set the TLS 1.3 ciphersuites for the connection will be
set to the given value. This is similar to SSL_cipher_list, but only for TLS 1.3
ciphers. See argument C<-ciphersuites> in the OpenSSL documentation
(L<https://www.openssl.org/docs/manmaster/man1/openssl-ciphers.html>)
for
details.

Unless you fail to contact your peer because of no shared ciphers it is
recommended to leave this option at the default setting, which uses the system
default.

In case different cipher lists are needed for different SNI hosts a hash can be
given with the host as key and the cipher suite as value, similar to
B<SSL_cert*>.

=item SSL_honor_cipher_order

If this option is true the cipher order the server specified is used instead
of the order proposed by the client. This option defaults to true to make use of
our secure cipher list setting.

=item SSL_dh_file

To create a server which provides forward secrecy you need to either give the DH
parameters or (better, because faster) the ECDH curve. This setting cares

about DH parameters.

To support non-elliptic Diffie-Hellman key exchange a suitable file needs to
be given here or the SSL_dh should be used with an appropriate value.
See dhparam command in
openssl for more information.

If neither C<SSL_dh_file> nor C<SSL_dh> are set a builtin DH parameter with a
length of 2048 bit is used to offer DH key exchange by default. If you don't
want this (e.g. disable DH key exchange) explicitly set this or the C<SSL_dh>
parameter to undef.

=item SSL_dh

Like SSL_dh_file, but instead of giving a file you use a preloaded or generated
DH*.

=item SSL_ecdh_curve

To create a server which provides forward secrecy you need to either give the DH
parameters or (better, because faster) the ECDH curve. This setting cares
about the ECDH curve(s).

To support Elliptic Curve Diffie-Hellmann key exchange the OID or NID of at
least one suitable curve needs to be provided here.

With OpenSSL 1.1.0+ this parameter defaults to C<auto>, which means that it
lets OpenSSL pick the best settings. If support for CTX_set_ecdh_auto is
implemented in Net::SSLeay (needs at least version 1.86) it will use this to
implement the same default. Otherwise it will default
to C<prime256v1>
(builtin of OpenSSL) in order to offer ECDH key exchange by default.

If setting groups or curves is supported by Net::SSLeay (needs at least
version 1.86) then multiple curves can be given here in the order of the
preference, i.e. C<P-521:P-384:P-256>. When used at the client side this
will include the supported curves as extension in the TLS handshake.

If you don't want to have ECDH key exchange this could be set to undef or
set C<SSL_ciphers> to exclude all of these ciphers.

You can check if ECDH support is available by calling
C<< IO::Socket::SSL->can_ecdh >>.

=item SSL_verify_mode

This option sets the verification mode for the peer certificate.
You may combine SSL_VERIFY_PEER (verify_peer), SSL_VERIFY_FAIL_IF_NO_PEER_CERT

(fail verification if no peer certificate exists; ignored for clients),
SSL_VERIFY_CLIENT_ONCE (verify client once; ignored for clients).
See OpenSSL man page for SSL_CTX_set_verify for more information.

The default is SSL_VERIFY_NONE for server
(e.g. no check for client
certificate) and SSL_VERIFY_PEER for client (check server certificate).

=item SSL_verify_callback

If you want to verify certificates yourself, you can pass a sub reference along
with this parameter to do so. When the callback is called, it will be passed:

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=item 1.
a true/false value that indicates what OpenSSL thinks of the certificate,

=item 2.
a C-style memory address of the certificate store,

=item 3.
a string containing the certificate's issuer attributes and owner attributes,
and

=item 4.
a string containing any errors encountered (0 if no errors).

=item 5.
a C-style memory address of the peer's own certificate (convertible to
PEM form with Net::SSLeay::PEM_get_string_X509()).

=item 6.
The depth of the certificate in the chain. Depth 0 is the leaf certificate.

=back

The function should return 1 or 0, depending on whether it thinks the
certificate is valid or invalid. The default is to let OpenSSL do all of the
busy work.

The callback
will be called for each element in the certificate chain.

See the OpenSSL documentation for SSL_CTX_set_verify for more information.

=item SSL_verifycn_scheme

The scheme is used to correctly verify the identity inside the certificate
by using the hostname of the peer.
See the information about the verification schemes in B<verify_hostname>.

If you don't specify a scheme it will use 'default', but only complain loudly if
the name verification fails instead of letting the whole certificate
verification fail. THIS WILL CHANGE, e.g. it will let the certificate
verification fail in the future if the hostname does not match the certificate
!!!! To override the name used in verification use B<SSL_verifycn_name>.

The scheme 'default' is a superset of the usual schemes, which will accept the
hostname in common name and subjectAltName and allow wildcards everywhere.
While using this scheme is way more secure than no name verification at all you
better should use the scheme specific
 to your application protocol, e.g. 'http',
'ftp'...

If you are really sure, that you don't want to verify the identity using the
hostname you can use 'none' as a scheme. In this case you'd better have
alternative forms of verification, like a certificate fingerprint or do a manual
verification later by calling B<verify_hostname> yourself.

=item SSL_verifycn_publicsuffix

This option is used to specify the behavior when checking wildcards certificates
for public suffixes, e.g. no wildcard certificates for *.com or *.co.uk should
be accepted, while *.example.com or *.example.co.uk is ok.

If not specified it will simply use the builtin default of
L<IO::Socket::SSL::PublicSuffix>, you can create another object with
from_string or from_file of this module.

To disable verification of public suffix set this option to C<">.

=item SSL_verifycn_name

Set the name which is used in verification of hostname. If SSL_verifycn_scheme
is set and no SSL_verifycn_name is given it will try to use
 SSL_hostname or
PeerHost and PeerAddr settings and fail if no name can be determined.
If SSL_verifycn_scheme is not set it will use a default scheme and warn if it
cannot determine a hostname, but it will not fail.

Using PeerHost or PeerAddr works only if you create the connection directly
with C<< IO::Socket::SSL->new >>, if an IO::Socket::INET object is upgraded
with B<start_SSL> the name has to be given in B<SSL_verifycn_name> or
B<SSL_hostname>.

=item SSL_check_crl

If you want to verify that the peer certificate has not been revoked
by the signing authority, set this value to true. OpenSSL will search
for the CRL in your SSL_ca_path, or use the file specified by
SSL_crl_file. See the Net::SSLeay documentation for more details.
Note that this functionality appears to be broken with OpenSSL <
v0.9.7b, so its use with lower versions will result in an error.

=item SSL_crl_file

If you want to specify the CRL file to be used, set this value to the
pathname to be used. This must be
 used in addition to setting
SSL_check_crl.

=item SSL_ocsp_mode

Defines how certificate revocation is done using OCSP (Online Status Revocation
Protocol). The default is to send a request for OCSP stapling to the server and
if the server sends an OCSP response back the result will be used.

Any other OCSP checking needs to be done manually with C<ocsp_resolver>.

The following flags can be combined with C<|>:

=over 8

=item SSL_OCSP_NO_STAPLE

Don't ask for OCSP stapling.
This is the default if SSL_verify_mode is VERIFY_NONE.

=item SSL_OCSP_TRY_STAPLE

Try OCSP stapling, but don't complain if it gets no stapled response back.
This is the default if SSL_verify_mode is VERIFY_PEER (the default).

=item SSL_OCSP_MUST_STAPLE

Consider it a hard error, if the server does not send a stapled OCSP response
back. Most servers currently send no stapled OCSP response back.

=item SSL_OCSP_FAIL_HARD

Fail hard on response errors, default is to fail soft like the browsers do.
Soft errors mean,

that the OCSP response is not usable, e.g. no response,
error response, no valid signature etc.
Certificate revocations inside a verified response are considered hard errors
in any case.

Soft errors inside a stapled response are never considered hard, e.g. it is
expected that in this case an OCSP request will be send to the responsible
OCSP responder.

=item SSL_OCSP_FULL_CHAIN

This will set up the C<ocsp_resolver> so that all certificates from the peer
chain will be checked, otherwise only the leaf certificate will be checked
against revocation.

=back

=item SSL_ocsp_staple_callback

If this callback is defined, it will be called with the SSL object and the OCSP
response handle obtained from the peer, e.g. C<<$cb->($ssl,$resp)>>.
If the peer did not provide a stapled OCSP response the function will be called
with C<$resp=undef>.
Because the OCSP response handle is no longer valid after leaving this function
it should not by copied or freed. If access to the response is necessary after
leaving
this function it can be serialized with
C<Net::SSLeay::i2d_OCSP_RESPONSE>.

If no such callback is provided, it will use the default one, which verifies the
response and uses it to check if the certificate(s) of the connection got
revoked.

=item SSL_ocsp_cache

With this option a cache can be given for caching OCSP responses, which could
be shared between different SSL contexts. If not given a cache specific to the
SSL context only will be used.

You can either create a new cache with
C<< IO::Socket::SSL::OCSP_Cache->new([size]) >> or implement your own cache,
which needs to have methods C<put($key,\%entry)> and C<get($key)> (returning
C<\%entry>) where entry is the hash representation of the OCSP response with
fields like C<nextUpdate>. The default implementation of the cache will consider
responses valid as long as C<nextUpdate> is less then the current time.

=item SSL_reuse_ctx

If you have already set the above options for a previous instance of
IO::Socket::SSL, then
you can reuse the SSL context of that instance by passing
it as the value for the SSL_reuse_ctx parameter. You may also create a
new instance of the IO::Socket::SSL::SSL_Context class, using any context
options that you desire without specifying connection options, and pass that
here instead.

If you use this option, all other context-related options that you pass
in the same call to new() will be ignored unless the context supplied was
invalid. Note that, contrary to versions of IO::Socket::SSL below v0.90, a
global SSL context will not be implicitly used unless you use the
set_default_context() function.

=item SSL_create_ctx_callback

With this callback you can make individual settings to the context after it
got created and the default setup was done.
The callback will be called with the CTX object from Net::SSLeay as the single
argument.

Example for limiting the server session cache size:

```
 SSL_create_ctx_callback => sub {
    my $ctx = shift;
    Net::SSLeay::CTX_sess_set_cache_size($ctx,128);
  }
```

=item SSL_session_cache_size

If you make repeated connections to the same host/port and the SSL renegotiation
time is an issue, you can turn on client-side session caching with this option
by specifying a positive cache size. For successive connections, pass the
SSL_reuse_ctx option to the new() calls (or use set_default_context()) to make
use of the cached sessions. The session cache size refers to the number of
unique host/port pairs that can be stored at one time; the oldest sessions in
the cache will be removed if new ones are added.

This option does not effect the session cache a server has for it's clients,
e.g. it does not affect SSL objects with SSL_server set.

Note that session caching with TLS 1.3 needs at least Net::SSLeay 1.86.

=item SSL_session_cache

Specifies session cache object which should be used instead of creating a new.
Overrules SSL_session_cache_size.
This option is useful if you want to reuse the cache, but not the rest of

the
context.

A session cache object can be created using
C<< IO::Socket::SSL::Session_Cache->new(cachesize) >>.

Use set_default_session_cache() to set a global cache object.

=item SSL_session_key

Specifies a key to use for lookups and inserts into client-side session cache.
Per default ip:port of destination will be used, but sometimes you want to
share the same session over multiple ports on the same server (like with FTPS).

=item SSL_session_id_context

This gives an id for the servers session cache. It's necessary if you want
clients to connect with a client certificate. If not given but SSL_verify_mode
specifies the need for client certificate a context unique id will be picked.

=item SSL_error_trap

When using the accept() or connect() methods, it may be the case that the
actual socket connection works but the SSL negotiation fails, as in the case of
an HTTP client connecting to an HTTPS server. Passing a subroutine ref attached
to this parameter allows you to gain control of
the orphaned socket instead of
having it be closed forcibly.
The subroutine, if called, will be passed two parameters:
a reference to the socket on which the SSL negotiation failed and the full
text of the error message.

=item SSL_npn_protocols

If used on the server side it specifies list of protocols advertised by SSL
server as an array ref, e.g. ['spdy/2','http1.1'].
On the client side it specifies the protocols offered by the client for NPN
as an array ref.
See also method C<next_proto_negotiated>.

Next Protocol Negotiation (NPN) is available with Net::SSLeay 1.46+ and
openssl-1.0.1+. NPN is unavailable in TLSv1.3 protocol.
To check support you might call C<< IO::Socket::SSL->can_npn() >>.
If you use this option with an unsupported Net::SSLeay/OpenSSL it will
throw an error.

=item SSL_alpn_protocols

If used on the server side it specifies list of protocols supported by the SSL
server as an array ref, e.g. ['http/2.0', 'spdy/3.1','http/1.1'].
On the client side it specifies the
protocols advertised by the client for ALPN
as an array ref.
See also method C<alpn_selected>.

Application-Layer Protocol Negotiation (ALPN) is available with Net::SSLeay
1.56+ and openssl-1.0.2+. More details about the extension are in RFC7301. To
check support you might call C<< IO::Socket::SSL->can_alpn() >>. If you use
this option with an unsupported Net::SSLeay/OpenSSL it will throw an error.

Note that some client implementations may encounter problems if both NPN and
ALPN are specified. Since ALPN is intended as a replacement for NPN, try
providing ALPN protocols then fall back to NPN if that fails.

=item SSL_ticket_keycb => [$sub,$data] | $sub

This is a callback used for stateless session reuse (Session Tickets, RFC 5077).

This callback will be called as C<< $sub->($data,[$key_name]) >> where C<$data>
is the argument given to SSL_ticket_keycb (or undef) and C<$key_name> depends
on the mode:

=over 8

=item encrypt ticket

If a ticket needs to be encrypted the callback will
be called without
C<$key_name>. In this case it should return C<($current_key,$current_key_name>)
where C<$current_key> is the current key (32 byte random data) and
C<$current_key_name> the name associated with this key (exactly 16 byte). This
C<$current_key_name> will be incorporated into the ticket.

=item decrypt ticket

If a ticket needs to be decrypted the callback will be called with C<$key_name>
as found in the ticket. It should return C<($key,$current_key_name>) where
C<$key> is the key associated with the given C<$key_name> and
C<$current_key_name> the name associated with the currently active key.
If C<$current_key_name> is different from the given C<$key_name> the callback
will be called again to re-encrypt the ticket with the currently active key.

If no key can be found which matches the given C<$key_name> then this function
should return nothing (empty list).

This mechanism should be used to limit the life time for each key encrypting the

ticket. Compromise of a ticket
encryption key might lead to decryption of SSL
sessions which used session tickets protected by this key.

=back

Example:

```
  Net::SSLeay::RAND_bytes(my $oldkey,32);
  Net::SSLeay::RAND_bytes(my $newkey,32);
  my $oldkey_name = pack("a16",'oldsecret');
  my $newkey_name = pack("a16",'newsecret');

  my @keys = (
    [ $newkey_name, $newkey ], # current active key
    [ $oldkey_name, $oldkey ], # already expired
  );

  my $keycb = [ sub {
    my ($mykeys,$name) = @_;

    # return (current_key, current_key_name) if no name given
    return ($mykeys->[0][1],$mykeys->[0][0]) if ! $name;

    # return (matching_key, current_key_name) if we find a key matching
    # the given name
    for(my $i = 0; $i<@$mykeys; $i++) {
   next if $name ne $mykeys->[$i][0];
   return ($mykeys->[$i][1],$mykeys->[0][0]);
    }

    # no matching key found
    return;
  },\@keys ];

  my $srv = IO::Socket::SSL->new(..., SSL_ticket_keycb => $keycb);
```

=item SSL_mode_release_buffers
1|0

This enables or disables the SSL_MODE_RELEASE_BUFFERS option on the SSL object.
With this option the read buffer will be released after each SSL_read but will
need to be reallocated for each new SSL_read. If memory usage is a concern this
might save lots of memory in the mean time though, about 34k per idle SSL
connection according to the documentation in SSL_CTX_set_mode(3ssl).

=back

=item B<accept>

This behaves similar to the accept function of the underlying socket class, but additionally does the initial SSL handshake. But because the underlying socket class does return a blocking file handle even when accept is called on a non-blocking socket, the SSL handshake on the new file object will be done in a blocking way. Please see the section about non-blocking I/O for details.
If you don't like this behavior you should do accept on the TCP socket and then upgrade it with C<start_SSL> later.

=item B<connect(...)>

This behaves similar to the connect function
but also does an SSL handshake.
Because you cannot give SSL specific arguments to this function, you should better either use C<new> to create a connect SSL socket or C<start_SSL> to upgrade an established TCP socket to SSL.

=item B<close(...)>

Contrary to a close for a simple INET socket a close in SSL also mandates a proper shutdown of the SSL part. This is done by sending a close notify message by both peers.

A naive implementation would thus wait until it receives the
close notify message from the peer - which conflicts with the commonly expected semantic that a close will not block. The default behavior is thus to only send a close notify but not wait for the close notify of the peer. If this is required C<SSL_fast_shutdown> need to be explicitly set to false.

There are also cases where a SSL shutdown should not be done at all. This is true for example when forking to let a child deal with the socket and closing the socket in the parent process. A naive explicit C<close>
or an implicit close
when destroying the socket in the parent would send a close notify to the peer which would make the SSL socket in the client process unusable. In this case an explicit C<close> with C<SSL_no_shutdown> set to true should be done in the parent process.

For more details and other arguments see C<stop_SSL> which gets called from C<close> to shutdown the SSL state of the socket.

=item B<sysread(BUF, LEN, [OFFSET])>

This function behaves from the outside the same as B<sysread> in other L<IO::Socket> objects, e.g. it returns at most LEN bytes of data.
But in reality it reads not only LEN bytes from the underlying socket, but at a single SSL frame. It then returns up to LEN bytes it decrypted from this SSL

frame. If the frame contained more data than requested it will return only LEN data, buffer the rest and return it on further read calls.
This means, that it might be possible to read data, even if the underlying socket is not readable, so using poll or select might not be sufficient.

sysread will only return data from a single SSL frame, e.g. either the pending data from the already buffered frame or it will read a frame from the underlying socket and return the decrypted data. It will not return data spanning several SSL frames in a single call.

Also, calls to sysread might fail, because it must first finish an SSL handshake.

To understand these behaviors is essential, if you write applications which use event loops and/or non-blocking sockets. Please read the specific sections in this documentation.

=item B<syswrite(BUF, [LEN, [OFFSET]])>

This functions behaves from the outside the same as B<syswrite> in other L<IO::Socket> objects, e.g. it will write at most LEN bytes to the socket, but there is no guarantee, that all LEN bytes are written. It will return the number of bytes written.
Because it basically just calls SSL_write from OpenSSL syswrite will write at most a single SSL frame. This means, that no more than 16.384 bytes, which is the maximum size of an SSL frame, will be written at once.

For non-blocking sockets SSL specific behavior applies.
Pease read the specific section in this documentation.

=item B<peek(BUF, LEN, [OFFSET])>

This function has exactly the same syntax as B<sysread>, and performs nearly the same task but will not advance the read position so that successive calls to peek() with the same arguments will return the same results. This function requires OpenSSL 0.9.6a or later to work.

=item B<pending()>

This function gives you the number of bytes available without reading from the underlying socket object. This function is essential if you work with event loops, please see the section about polling SSL sockets.

=item B<get_fingerprint([algo,certificate,pubkey])>

This methods returns the fingerprint of the given certificate in the form

C<algo$digest_hex>, where C<algo> is the used algorithm, default 'sha256'.
If no certificate is given the peer certificate of the connection is
used.
If C<pubkey> is true it will not return the fingerprint of the certificate but
instead the fingerprint of the pubkey inside the certificate as
C<algopubdigest_hex>.

=item B<get_fingerprint_bin([algo,certificate,pubkey])>

This methods returns the binary fingerprint of the given certificate by using
the algorithm C<algo>, default 'sha256'.
If no certificate is given the peer certificate of the connection is used.
If C<pubkey> is true it will not return the fingerprint of the certificate but
instead the fingerprint of the pubkey inside the certificate.

=item B<get_cipher()>

Returns the string form of the cipher that the IO::Socket::SSL object is using.

=item B<get_sslversion()>

Returns the string representation of the SSL version of an established
connection.

=item B<get_sslversion_int()>

Returns the integer representation of the SSL version of an established
connection.

=item B<get_session_reused()>

This returns true if the session got reused and false otherwise. Note that
with
a reused session no certificates are send within the handshake and no ciphers
are offered and thus functions which rely on this might not work.

=item B<dump_peer_certificate()>

Returns a parsable string with select fields from the peer SSL certificate.
This method directly returns the result of the dump_peer_certificate() method of
Net::SSLeay.

=item B<peer_certificate($field;[$refresh])>

If a peer certificate exists, this function can retrieve values from it.
If no field is given the internal representation of certificate from Net::SSLeay
is returned.
If refresh is true it will not used a cached version, but check again in case

the certificate of the connection has changed due to renegotiation.

The following fields can be queried:

=over 8

=item authority (alias issuer)

The certificate authority which signed the certificate.

=item owner (alias subject)

The owner of the certificate.

=item commonName (alias cn) - only for Net::SSLeay version >=1.30

The common name, usually
 the server name for SSL certificates.

=item subjectAltNames - only for Net::SSLeay version >=1.33

Alternative names for the subject, usually different names for the same
server, like example.org, example.com, *.example.com.

It returns a list of (typ,value) with typ GEN_DNS, GEN_IPADD etc (these
constants are exported from IO::Socket::SSL).
See Net::SSLeay::X509_get_subjectAltNames.

=back

=item B<sock_certificate($field)>

This is similar to C<peer_certificate> but will return the sites own
certificate. The same arguments for B<$field> can be used.
If no B<$field> is given the certificate handle from the underlying OpenSSL will
be returned. This handle will only be valid as long as the SSL connection exists
and if used afterwards it might result in strange crashes of the application.

=item B<peer_certificates>

This returns all the certificates send by the peer, e.g. first the peers own
certificate and then the rest of the chain. You might use B<CERT_asHash> from
L<IO::Socket::SSL::Utils>
 to inspect each of the certificates.

This function depends on a version of Net::SSLeay >= 1.58 .

=item B<get_servername>

This gives the name requested by the client if Server Name Indication
(SNI) was used.

=item B<verify_hostname($hostname,$scheme,$publicsuffix)>

This verifies the given hostname against the peer certificate using the
given scheme. Hostname is usually what you specify within the PeerAddr.
See the C<SSL_verifycn_publicsuffix> parameter for an explanation of suffix
checking and for the possible values.

Verification of hostname against a certificate is different between various
applications and RFCs. Some scheme allow wildcards for hostnames, some only
in subjectAltNames, and even their different wildcard schemes are possible.
RFC 6125 provides a good overview.

To ease the verification the following schemes are predefined (both protocol
name and rfcXXXX name can be used):

=over 8

=item rfc2818, xmpp (rfc3920), ftp (rfc4217)

Extended wildcards in
subjectAltNames and common name are possible, e.g.
.example.org or even www.example.org. The common
name will be only checked if no DNS names are given in subjectAltNames.

=item http (alias www)

While name checking is defined in rfc2818 the current browsers usually accept
also an IP address (w/o wildcards) within the common name as long as no
subjectAltNames are defined. Thus this is rfc2818 extended with this feature.

=item smtp (rfc2595), imap, pop3, acap (rfc4642), netconf (rfc5538), syslog (rfc5425), snmp (rfc5953)

Simple wildcards in subjectAltNames are possible, e.g. *.example.org matches
www.example.org but not lala.www.example.org. If nothing from subjectAltNames
match it checks against the common name, where wildcards are also allowed to
match the full leftmost label.

=item ldap (rfc4513)

Simple wildcards are allowed in subjectAltNames, but not in common name.
Common name will be checked even if subjectAltNames exist.

=item sip (rfc5922)

No wildcards are allowed and
common name is checked even if subjectAltNames
exist.

=item gist (rfc5971)

Simple wildcards are allowed in subjectAltNames and common name, but common name
will only be checked if there are no DNS names in subjectAltNames.

=item default

This is a superset of all the rules and is automatically used if no scheme is
given but a hostname (instead of IP) is known.
Extended wildcards are allowed in subjectAltNames and common name and common
name is checked always.

=item none

No verification will be done.
Actually is does not make any sense to call verify_hostname in this case.

=back

The scheme can be given either by specifying the name for one of the above
predefined schemes, or by using a hash which can have the following keys and
values:

=over 8

=item check_cn: 0|'always'|'when_only'

Determines if the common name gets checked. If 'always' it will always be
checked (like in ldap), if 'when_only' it will only be checked if no names are
given in subjectAltNames (like in http), for
any other values the common name
will not be checked.

=item wildcards_in_alt: 0|'full_label'|'anywhere'

Determines if and where wildcards in subjectAltNames are possible. If
'full_label' only cases like *.example.org will be possible (like in ldap), for
'anywhere' www*.example.org is possible too (like http), dangerous things like
but www.*.org or even '*' will not be allowed.
For compatibility with older versions 'leftmost' can be given instead of
'full_label'.

=item wildcards_in_cn: 0|'full_label'|'anywhere'

Similar to wildcards_in_alt, but checks the common name. There is no predefined scheme which allows wildcards in common names.

=item ip_in_cn: 0|1|4|6

Determines if an IP address is allowed in the common name (no wildcards are allowed). If set to 4 or 6 it only allows IPv4 or IPv6 addresses, any other true value allows both.

=item callback: \&coderef

If you give a subroutine for verification it will be called with the arguments ($hostname,$commonName,@subjectAltNames), where
 hostname is the name given for
verification, commonName is the result from peer_certificate('cn') and subjectAltNames is the result from peer_certificate('subjectAltNames').

All other arguments for the verification scheme will be ignored in this case.

=back

=item B<next_proto_negotiated()>

This method returns the name of negotiated protocol - e.g. 'http/1.1'. It works for both client and server side of SSL connection.

NPN support is available with Net::SSLeay 1.46+ and openssl-1.0.1+.
To check support you might call C<< IO::Socket::SSL->can_npn() >>.

=item B<alpn_selected()>

Returns the protocol negotiated via ALPN as a string, e.g. 'http/1.1', 'http/2.0' or 'spdy/3.1'.

ALPN support is available with Net::SSLeay 1.56+ and openssl-1.0.2+.
To check support, use C<< IO::Socket::SSL->can_alpn() >>.

=item B<errstr()>

Returns the last error (in string form) that occurred. If you do not have a real object to perform this method on, call IO::Socket::SSL::errstr() instead.

For read
 and write errors on non-blocking sockets, this method may include the string C<SSL wants a read first!> or C<SSL wants a write first!> meaning that the other side is expecting to read from or write to the socket and wants to be satisfied before you get to do anything. But with version 0.98 you are better comparing the global exported variable $SSL_ERROR against the exported symbols

SSL_WANT_READ and SSL_WANT_WRITE.

=item B<opened()>

This returns false if the socket could not be opened, 1 if the socket could be opened and the SSL handshake was successful done and -1 if the underlying IO::Handle is open, but the SSL handshake failed.

=item B<< IO::Socket::SSL->start_SSL($socket, ...) >>

This will convert a glob reference or a socket that you provide to an IO::Socket::SSL object. You may also pass parameters to specify context or connection options as with a call to new(). If you are using this function on an accept()ed socket, you must set the parameter "SSL_server" to 1, i.e. IO::Socket::SSL->start_SSL($socket,
SSL_server => 1). If you have a class that
inherits from IO::Socket::SSL and you want the $socket to be blessed into your own class instead, use MyClass->start_SSL($socket) to achieve the desired effect.

Note that if start_SSL() fails in SSL negotiation, $socket will remain blessed in its original class. For non-blocking sockets you better just upgrade the socket to IO::Socket::SSL and call accept_SSL or connect_SSL and the upgraded object. To just upgrade the socket set B<SSL_startHandshake> explicitly to 0. If you call start_SSL w/o this parameter it will revert to blocking behavior for accept_SSL and connect_SSL.

If given the parameter "Timeout" it will stop if after the timeout no SSL connection was established. This parameter is only used for blocking sockets, if it is not given the default Timeout from the underlying IO::Socket will be used.

=item B<stop_SSL(...)>

This is the opposite of start_SSL(), connect_SSL() and accept_SSL(), e.g.
it
will shutdown the SSL connection and return to the class before start_SSL(). It gets the same arguments as close(), in fact close() calls stop_SSL() (but without downgrading the class).

Will return true if it succeeded and undef if failed. This might be the case for non-blocking sockets. In this case $! is set to EWOULDBLOCK and the ssl error to SSL_WANT_READ or SSL_WANT_WRITE. In this case the call should be retried again with the same arguments once the socket is ready.

For calling from C<stop_SSL> C<SSL_fast_shutdown> default to false, e.g. it waits for the close_notify of the peer. This is necessary in case you want to downgrade the socket and continue to use it as a plain socket.

After stop_SSL the socket can again be used to exchange plain data.

=item B<connect_SSL>, B<accept_SSL>

These functions should be used to do the relevant handshake, if the socket got created with C<new> or upgraded with C<start_SSL> and C<SSL_startHandshake> was set to false.
They will return undef
 until the handshake succeeded or an error got thrown.
As long as the function returns undef and $! is set to EWOULDBLOCK one could retry the call after the socket got readable (SSL_WANT_READ) or writeable (SSL_WANT_WRITE).

=item B<set_msg_callback>

This will add/remove a user defined callback for each message, internally using openssl SSL_set_msg_callback API. To make sure that the callback is active before the handshake starts, combine it with C<< SSL_startHandshake => 0 >> in the preceding setup of the SSL object. To remove callback explicitly call it with an empty callback function.

Example:

```
  $sock = IO::Socket::SSL->new( .... , SSL_startHandshake => 0);
  # set callback
  $sock->set_msg_callback(\&cb, $cbarg1, $cbarg2);
  $sock->connect_SSL();

  sub cb {
 my ($sock,
    # see SSL_set_msg_callback for the following args
    $direction, $ssl_ver, $content_type, $buf, $len, $ssl,
    $cbarg1, $cbarg2)
    = @_;
 ...
 if (no_longer_need_cb) {
    # disable callback

   $sock->set_msg_callback(undef);
 }
  }
```

=item B<ocsp_resolver>

This will create an OCSP resolver object, which can be used to create OCSP requests for the certificates of the SSL connection. Which certificates are verified depends on the setting of C<SSL_ocsp_mode>: by default only the leaf

certificate will be checked, but with SSL_OCSP_FULL_CHAIN all chain
certificates will be checked.

Because to create an OCSP request the certificate and its issuer certificate
need to be known it is not possible to check certificates when the trust chain
is incomplete or if the certificate is self-signed.

The OCSP resolver gets created by calling C<< $ssl->ocsp_resolver >> and
provides the following methods:

=over 8

=item hard_error

This returns the hard error when checking the OCSP response.
Hard errors are certificate revocations. With the C<SSL_ocsp_mode> of
SSL_OCSP_FAIL_HARD any soft error (e.g. failures to get signed information
about the certificates) will be considered a hard
error too.

The OCSP resolving will stop on the first hard error.

The method will return undef as long as no hard errors occurred and still
requests to be resolved. If all requests got resolved and no hard errors
occurred the method will return C<">.

=item soft_error

This returns the soft error(s) which occurred when asking the OCSP responders.

=item requests

This will return a hash consisting of C<(url,request)>-tuples, e.g. which
contain the OCSP request string and the URL where it should be sent too. The
usual way to send such a request is as HTTP POST request with a content-type
of C<application/ocsp-request> or as a GET request with the base64 and
url-encoded request is added to the path of the URL.

After you've handled all these requests and added the response with
C<add_response> you should better call this method again to make sure, that no
more requests are outstanding. IO::Socket::SSL will combine multiple OCSP
requests for the same server inside a single request, but
some server don't
give a response to all these requests, so that one has to ask again with the
remaining requests.

=item add_response($uri,$response)

This method takes the HTTP body of the response which got received when sending the OCSP request to C<$uri>. If no response was received or an error occurred one should either retry or consider C<$response> as empty which will trigger a soft error.

The method returns the current value of C<hard_error>, e.g. a defined value when no more requests need to be done.

=item resolve_blocking(%args)

This combines C<requests> and C<add_response> which L<HTTP::Tiny> to do all necessary requests in a blocking way. C<%args> will be given to L<HTTP::Tiny> so that you can put proxy settings etc here. L<HTTP::Tiny> will be called with C<verify_SSL> of false, because the OCSP responses have their own signatures so no extra SSL verification is needed.

If you don't want to use blocking requests you need to roll your own user agent with C<requests> and
C<add_response>.

=back

=item B<< IO::Socket::SSL->new_from_fd($fd, [mode], %sslargs) >>

This will convert a socket identified via a file descriptor into an SSL socket.
Note that the argument list does not include a "MODE" argument; if you supply one, it will be thoughtfully ignored (for compatibility with IO::Socket::INET).
Instead, a mode of '+<' is assumed, and the file descriptor passed must be able to handle such I/O because the initial SSL handshake requires bidirectional communication.

Internally the given $fd will be upgraded to a socket object using the C<new_from_fd> method of the super class (L<IO::Socket::INET> or similar) and then C<start_SSL> will be called using the given C<%sslargs>.
If C<$fd> is already an IO::Socket object you should better call C<start_SSL> directly.

=item B<IO::Socket::SSL::default_ca([path|dir| SSL_ca_file => ..., SSL_ca_path => ...])>

Determines or sets the default CA path.
If existing path or dir or a hash is given it will set the default
CA path to
this value and never try to detect it automatically.
If C<undef> is given it will forget any stored defaults and continue with detection of system defaults.
If no arguments are given it will start detection of system defaults, unless it has already stored user-set or previously detected values.

The detection of system defaults works similar to OpenSSL, e.g. it will check
the directory specified in environment variable SSL_CERT_DIR or the path
OPENSSLDIR/certs (SSLCERTS: on VMS) and the file specified in environment
variable SSL_CERT_FILE or the path OPENSSLDIR/cert.pem (SSLCERTS:cert.pem on
VMS). Contrary to OpenSSL it will check if the SSL_ca_path contains PEM files
with the hash as file name and if the SSL_ca_file looks like PEM.
If no usable system default can be found it will try to load and use
L<Mozilla::CA> and if not available give up detection.
The result of the detection will be saved to speed up future calls.

The function returns the saved default CA as hash with
SSL_ca_file and
SSL_ca_path.

=item B<IO::Socket::SSL::set_default_context(...)>

You may use this to make IO::Socket::SSL automatically re-use a given context
(unless specifically overridden in a call to new()).
It accepts one argument, which should be either an IO::Socket::SSL object or an
IO::Socket::SSL::SSL_Context object.
See the SSL_reuse_ctx option of new() for more details.
Note that this sets the default context globally, so use with caution (esp. in
mod_perl scripts).

=item B<IO::Socket::SSL::set_default_session_cache(...)>

You may use this to make IO::Socket::SSL automatically re-use a given session
cache (unless specifically overridden in a call to new()).
It accepts one argument, which should be an IO::Socket::SSL::Session_Cache
object or similar (e.g. something which implements get_session, add_session and
del_session like IO::Socket::SSL::Session_Cache does).
See the SSL_session_cache option of new() for more details.
Note that this sets the default cache globally,
so use with caution.

=item B<IO::Socket::SSL::set_defaults(%args)>

With this function one can set defaults for all SSL_* parameter used for
creation of the context, like the SSL_verify* parameter. Any SSL_* parameter can
be given or the following short versions:

=over 8

=item mode - SSL_verify_mode

=item callback - SSL_verify_callback

=item scheme - SSL_verifycn_scheme

=item name - SSL_verifycn_name

=back

=item B<IO::Socket::SSL::set_client_defaults(%args)>

Similar to C<set_defaults>, but only sets the defaults for client mode.

=item B<IO::Socket::SSL::set_server_defaults(%args)>

Similar to C<set_defaults>, but only sets the defaults for server mode.

=item B<IO::Socket::SSL::set_args_filter_hack(\&code|'use_defaults')>

Sometimes one has to use code which uses unwanted or invalid arguments for SSL,
typically disabling SSL verification or setting wrong ciphers or SSL versions.
With this hack it is possible to override these settings and restore sanity.
Example:

```
  IO::Socket::SSL::set_args_filter_hack(
 sub {
 my ($is_server,$args) = @_;
 if ( ! $is_server ) {
    # client settings - enable verification with default CA
    # and fallback hostname verification etc
    delete @{$args}{qw(
  SSL_verify_mode
  SSL_ca_file
  SSL_ca_path
  SSL_verifycn_scheme
  SSL_version
    )};
    # and add some fingerprints for known certs which are signed by
    # unknown CAs or are self-signed
    $args->{SSL_fingerprint} = ...
 }
  });
```

With the short setting C<set_args_filter_hack('use_defaults')> it will prefer
the default settings in all cases. These default settings can be modified with
C<set_defaults>, C<set_client_defaults> and C<set_server_defaults>.

=back

The following methods are unsupported (not to mention futile!) and
IO::Socket::SSL will emit a large CROAK() if you are silly enough to use them:

=over 4

=item truncate

=item stat

=item ungetc

=item setbuf

=item setvbuf

=item fdopen

=item send/recv

Note that send() and recv() cannot be reliably
 trapped by a tied filehandle
(such as that used by IO::Socket::SSL) and so may send unencrypted data over the
socket. Object-oriented calls to these functions will fail, telling you to use
the print/printf/syswrite and read/sysread families instead.

=back

=head1 DEPRECATIONS

The following functions are deprecated and are only retained for compatibility:

=over 2

=item context_init()

use the SSL_reuse_ctx option if you want to re-use a context

=item socketToSSL() and socket_to_SSL()

use IO::Socket::SSL->start_SSL() instead

=item kill_socket()

use close() instead

=item get_peer_certificate()

use the peer_certificate() function instead.
Used to return X509_Certificate with methods subject_name and issuer_name.
Now simply returns $self which has these methods (although deprecated).

=item issuer_name()

use peer_certificate('issuer') instead

=item subject_name()

use peer_certificate('subject') instead

=back

=head1 EXAMPLES

See the 'example' directory, the tests
 in 't' and also the tools in 'util'.

=head1 BUGS

If you use IO::Socket::SSL together with threads you should load it (e.g. use or
require) inside the main thread before creating any other threads which use it.
This way it is much faster because it will be initialized only once. Also there
are reports that it might crash the other way.

Creating an IO::Socket::SSL object in one thread and closing it in another
thread will not work.

IO::Socket::SSL does not work together with Storable::fd_retrieve/fd_store.
See BUGS file for more information and how to work around the problem.

Non-blocking and timeouts (which are based on non-blocking) are not
supported on Win32, because the underlying IO::Socket::INET does not support
non-blocking on this platform.

If you have a server and it looks like you have a memory leak you might
check the size of your session cache. Default for Net::SSLeay seems to be
20480, see the example for SSL_create_ctx_callback for how to limit it.

TLS 1.3 support
 regarding session reuse is incomplete.

=head1 SEE ALSO

IO::Socket::INET, IO::Socket::INET6, IO::Socket::IP, Net::SSLeay.

=head1 THANKS

Many thanks to all who added patches or reported bugs or helped IO::Socket::SSL
another way. Please keep reporting bugs and help with patches, even if they just
fix the documentation.

Special thanks to the team of Net::SSLeay for the good cooperation.

=head1 AUTHORS

Steffen Ullrich, <sullr at cpan.org> is the current maintainer.

Peter Behroozi, <behrooz at fas.harvard.edu> (Note the lack of an "i" at the end of "behrooz")

Marko Asplund, <marko.asplund at kronodoc.fi>, was the original author of IO::Socket::SSL.

Patches incorporated from various people, see file Changes.

=head1 COPYRIGHT

The original versions of this module are Copyright (C) 1999-2002 Marko Asplund.

The rewrite of this module is Copyright (C) 2002-2005 Peter Behroozi.

Versions 0.98 and newer are Copyright (C) 2006-2014 Steffen Ullrich.

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Found in path(s):
* /libio-socket-ssl-perl-2-085-orig-1-tar-gz/IO-Socket-SSL-2.085/lib/IO/Socket/SSL.pod
No license file was found, but licenses were detected in source scan.

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---
abstract: 'Nearly transparent SSL encapsulation for IO::Socket::INET.'
author:
 - 'Steffen Ullrich <sullr@cpan.org>, Peter Behroozi, Marko Asplund'
build_requires:
 ExtUtils::MakeMaker: '0'
configure_requires:
 ExtUtils::MakeMaker: '0'
 Net::SSLeay: '1.46'

```
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.62, CPAN::Meta::Converter version 2.150010'
license: perl
meta-spec:
 url: http://module-build.sourceforge.net/META-spec-v1.4.html
 version: '1.4'
name: IO-Socket-SSL
no_index:
 directory:
   - t
   - inc
requires:
 Mozilla::CA: '0'
 Net::SSLeay: '1.46'
 Scalar::Util: '0'
resources:
 bugtracker: https://github.com/noxxi/p5-io-socket-ssl/issues
 homepage: https://github.com/noxxi/p5-io-socket-ssl
 license: http://dev.perl.org/licenses/
 repository: https://github.com/noxxi/p5-io-socket-ssl
version: '2.085'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'
```

Found in path(s):
*
 /libio-socket-ssl-perl-2-085-orig-1-tar-gz/IO-Socket-SSL-2.085/META.yml

1.1911 fontconfig 2.15.0-1.1ubuntu2

1.1911.1 Available under license :

fontconfig/COPYING

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fontconfig/fc-case/CaseFolding.txt

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---
fontconfig/src/fcatomic.h

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* Mutex operations. Originally copied from HarfBuzz.
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*/

---

fontconfig/src/fcfoundry.h

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*/

---

fontconfig/src/fcmd5.h

/*
* This code implements the MD5 message-digest algorithm.
* The algorithm is due to Ron Rivest. This code was
* written by Colin Plumb in 1993, no copyright is claimed.
* This code is in the public domain; do with it what you wish.
*
* Equivalent code is available from RSA Data Security, Inc.
* This code has been tested against that, and is equivalent,
* except that you don't need to include two pages of legalese

```
* with every copy.
*
* To compute the message digest of a chunk of bytes, declare an
* MD5Context structure, pass it to MD5Init, call MD5Update
 as
* needed on buffers full of bytes, and then call MD5Final, which
* will fill a supplied 16-byte array with the digest.
*/
```

---

fontconfig/src/fcmutex.h

```
/*
* Atomic int and pointer operations.  Originally copied from HarfBuzz.
*
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*/
```

---

fontconfig/src/ftglue.[ch]

```
/* ftglue.c: Glue code for compiling the OpenType code from
*          FreeType 1 using only the public API of FreeType 2
*
* By David Turner, The FreeType Project (www.freetype.org)
*
* This code is explicitely put in the public domain
*
* ============================================================================
*
* the OpenType
 parser codes was originally written as an extension to
* FreeType 1.x. As such, its source code was embedded within the library,
* and used many internal FreeType functions to deal with memory and
* stream i/o.
*
* When it was 'salvaged' for Pango and Qt, the code was "ported" to FreeType 2,
* which basically means that some macro tricks were performed in order to
* directly access FT2 _internal_ functions.
*
* these functions were never part of FT2 public API, and _did_ change between
* various releases. This created chaos for many users: when they upgraded the
* FreeType library on their system, they couldn't run Gnome anymore since
* Pango refused to link.
*
* Very fortunately, it's possible to completely avoid this problem because
* the FT_StreamRec and FT_MemoryRec structure types, which describe how
* memory and stream implementations interface with the rest of the font
* library, have always been part of the public API, and never changed.
*
* What we do
 thus is re-implement, within the OpenType parser, the few
* functions that depend on them. This only adds one or two kilobytes of
* code, and ensures that the parser can work with _any_ version
* of FreeType installed on your system. How sweet... !
*
* Note that we assume that Pango doesn't use any other internal functions
* from FreeType. It used to in old versions, but this should no longer
* be the case. (crossing my fingers).
*
*  - David Turner
*  - The FreeType Project  (www.freetype.org)
*
* PS: This "glue" code is explicitely put in the public domain
*/
```

1.1912 sbsigntool 0.9.4-3.1ubuntu7

1.1912.1 Available under license :

sbsigntool - utilities for signing UEFI binaries for use with secure boot.

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1.1913 pinentry 1.2.1-3ubuntu5

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1.1915 tcpdump 4.99.4-3ubuntu4

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```
# -*- perl -*-

$testlist = [
  # This specific test fails on OpenBSD because the .pcap file uses DLT_RAW,
  # which OpenBSD treats as DLT_LOOP.
  {
     config_unset => 'IS_OPENBSD',
     name => 'heap-overflow-1',
     input => 'heap-overflow-1.pcap',
     output => 'heap-overflow-1.out',
     args   => '-v'
  },
];

1;
```

1.1916 libxdmcp 1.1.3-0ubuntu6

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1.1918 shared-mime-info 2.4-4

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[2227][2244]CANAL DE NOTICIAS
[2253][2291]La semana pasada,|Steven Johnson, de 28 aos...
[2291][2318]y Stephanie Tramer, de 30 aos...
[2318][2335]fueron encontrados apaleados|en un bosque local.
[2338][2376]El principal sospechoso y residente|local de Dunwich, Jack Cain,
[2376][2408]a quien la Polica arrest 24 horas|despus del descubrimiento...
[2408][2434]de los cuerpos, se encuentra|actualmente en la Corte.
[2434][2465]Asistiendo a una audiencia de|preparacin para el juicio.
[2465][2482]S espera que la audiencia...
[2482][2498]que sea una especie de formalidad...
[2498][2517]donde se presentaran los hechos clave...
[2517][2541]y el acusado se declarar culpable.
[2543][2573]En caso de que esa declaracin|no sea culpable, como se espera,
[2573][2596]se fijar una fecha para el juicio.
[2609][2656]De ests 16 pualadas,|5 por s solas...
[2656][2674]hubieran sido fatales.
[2683][2697]Steve Johnson...
[2704][2749]recibi 13 pualadas,|principalmente
en el pecho.
[2759][2793]Sin embargo, hubo varias abrasiones|en las palmas...

[2793][2845]de sus manos...|Lo que sugiere heridas defensivas.
[2854][2895]El golpe fatal fue una|pualada en la aorta,
[2896][2931]el vaso sanguneo grande|que sale del corazn.
[2948][2954]Su Seora...
[2962][2994]debido a la naturaleza|atroz de este crimen,
[3003][3046]y las pruebas circunstanciales|contra el seor Cain...
[3053][3079]y su falta de coartada,
[3087][3123]hay suficientes|pruebas para enjuiciar.
[3129][3145]Algo ms que aadir?
[3149][3171]No, eso es todo, Su Seora.
[3242][3254]Seor Cain.
[3265][3302]Antes de proceder, debo informarle...
[3304][3345]por segunda vez que,|dados los gravsimos cargos...
[3345][3387]lo mejor para usted es|contratar a un asesor legal...
[3387][3399]en este asunto.
[3426][3441]Me representar a m mismo,|Su Seora.
[3441][3455]No tengo nada que ocultar.
[3468][3480]Como desee.
[3492][3513]Antes de que pasemos|a una declaracin...
[3532][3557]tiene alguna
prueba|que desee presentar?
[3561][3601]Qu contradiga lo que la|Fiscala ha presentado?
[3718][3731]No en este momento.
[3741][3765]Me gustara declararme inocente.
[3796][3808]Como desee.
[3919][3956]Podran ambos abogados|acercarse al estrado, por favor?
[4111][4148]La gravedad de este|crimen es evidente.
[4182][4206]Toda la evidencia recolectada...
[4206][4268]en contra del seor Cain se obtuvo|despus de un arresto ilegal.
[4312][4325]Orden en la sala!
[4359][4394]No tengo ms remedio que pedir|que se desestime el caso.
[4404][4433]Su Seora,|no puede dejar ir a este hombre.
[4439][4456]Es un peligro para todos nosotros.
[4461][4488]Entonces, quizs la Polica|debera haberle ledo sus derechos...
[4488][4503]cuando lo arrestaron.
[4525][4563]El registro del auto del seor Cain,|su casa, las entrevistas,
[4568][4601]todo esto es ahora|inadmisible como prueba.
[4604][4623]Este caso est desestimado.
[4624][4641]- Culpable!|- Ordeno que el acusado...
[4642][4656]sea liberado de forma inmediata.
[4656][4675]Asesino!
Asesinaste a mi hijo!
[4815][4837]No le leste sus derechos.
[4838][4857]Qu cojones es esto,|la hora del aficionado?
[4857][4886]Lo persegu.|Tenamos a la Polica armada afuera.
[4888][4924]En toda la conmocin slo|comet un error, de acuerdo?
[4925][4945]Claro que cometiste un error.
[4952][4989]Y mi hijo y la hermana de este|pobre chico no vern justicia.

[4991][5022]Escoria como Cain no mantendr|su nariz limpia por mucho tiempo.
[5022][5055]Cuando se pase de la raya,|yo estar ah para derribarlo.
[5062][5079]Crees que volver a matar?
[5087][5116]No lo s, pero es capaz de hacerlo.
[5119][5136]Bueno,|ahora todos estamos en peligro.
[5145][5163]Miren,|mantendr esta ciudad a salvo.
[5174][5184]S.
[5188][5209]Como el buen trabajo que|hiciste la primera vez.
[5209][5232]- Ahora vete a la mierda, Joe.|- Escucha!
[5235][5276]Si esa basura lastima a|alguien ms, rodarn cabezas.
[5276][5292]- Mira hombre...|- Cometiste...
[5292][5319]el mayor error de tu carrera aqu,|simple y llanamente.
[5319][5342]-
Quieres mi renuncia?|- La ofreces?
[5342][5371]- Tengo otra opcin?|- Siempre hay opciones, Frank.
[5374][5395]Hacer tu trabajo es una opcin.
[5408][5431]Cul es tu trabajo, Frank?|Puedes decirme eso?
[5451][5473]Respetar la ley,|mantener la ciudad a salvo.
[5473][5497]Mantn esta ciudad a salvo,|precisamente.
[5503][5524]Todos queramos|justicia en este caso.
[5524][5542]La ley no nos ha dado eso.
[5546][5575]Significa eso que el|deber de proteger a Dunwich...
[5575][5591]se va por la ventana?
[5601][5613]No.
[5625][5654]Johnny, dime hijo,|qu significa la justicia para ti?
[5685][5724]Quiero ver a Cain sufrir por|lo que le hizo a mi hermana.
[5739][5752]Qu hay de ti, Joe?
[5752][5787]Ningn padre debera|enterrar a su propio hijo.
[5797][5809]No es natural.
[5813][5847]Y ese pedazo de mierda merece|morir por lo que ha hecho!
[5871][5883]Estoy de acuerdo.
[5934][5948]Qu ests diciendo, hombre?
[5949][5977]Bueno, todos nosotros nos conocemos|desde hace mucho tiempo, Frank.
[5978][6008]Podr
ser el Alcalde de esta ciudad,|pero tambin soy tu amigo.
[6012][6032]Los amigos deberan ayudarse|mutuamente, no crees?
[6061][6072]Si.
[6084][6116]As que, voy a ayudarte a|salvar tu trabajo, Frank.
[6124][6141]Joe, Johnny...
[6159][6173]vamos a conseguirles justicia.
[6203][6228]Y cmo te propones hacer eso?
[6303][6315]Zombis.
[6331][6343]S.
[6347][6363]Son mis sirvientes.
[6394][6419]Este asesino del alma|se lleva a los hombres...
[6419][6434]de sus tumbas...
[6444][6462]para ser sus esclavos.
[6512][6536]Son instrumentos de terror...

[6536][6558]y ahora este demonio conspira...
[6559][6579]para poseer a una mujer.
[6639][6652]S, amo?
[6687][6711]Este asesino del alma|se lleva a los hombres...
[6711][6759]de sus tumbas...|Para ser sus esclavos...
[6838][6869]y ahora este demonio conspira|para poseer a una mujer.
[6913][6927]Qu bestial.
[7233][7255]Qu cojones es esto,|una
fiesta de Noche de Brujas?
[7268][7288]Es hora de pagar por|lo que hiciste, Cain.
[7323][7336]Tienes algo que decir?
[7355][7393]Despreciame y vers a un tonto.
[7398][7423]Resptame y vers a un Dios.
[7423][7461]Mrame directamente y|te vers a ti mismo.
[7483][7495]No soy como t.
[7503][7516]Ninguno de nosotros lo es.
[7521][7539]Aprieta el gatillo y|te vuelves culpable...
[7539][7554]de lo que me acusas.
[7559][7583]La pregunta que|tienen que hacerse es,
[7587][7609]pueden vivir con quitar una vida?
[7622][7637]No slo vivir con ello,
[7643][7671]me despertar sonriendo|todos los malditos das...
[7671][7683]sabiendo que te has ido.
[7691][7707]Eso traer a tu hijo de vuelta?
[7718][7723]Vete a la mierda!
[7882][7903]Tratan de humillarme?
[7922][7934]No.
[7944][7957]Estoy tratando de matarte.
[8003][8032]Hazlo, Johnny.|Hazlo por tu hermana.
[8038][8056]Hazlo!
[8337][8356]Traigan las palas.
[8554][8583]Esto no hace falta decirlo,|pero lo voy a decir de todos modos.
[8591][8619]Nunca hablaremos
de esto con nadie,|nunca.
[8632][8661]Si alguien pregunta,|Cain se fue de la ciudad.
[8670][8685]Todos estamos de acuerdo en eso?
[8702][8714]Si.
[8721][8733]Johnny?
[8774][8786]Qu?
[8809][8834]Nunca hablaremos de esto...
[8839][8858]a nadie en la vida.
[8868][8888]De acuerdo?
[8944][8956]De acuerdo.
[9034][9051]Has estado muy callado, Frank.
[9097][9127]Promteme que nunca le|dirs a nadie sobre esto.
[9133][9147]Mientras vivas.
[9165][9179]Quiero orte decirlo.
[9265][9277]Bien.

[9281][9296]Prometo no decirle a nadie...
[9296][9325]sobre esto,|durante el resto de mi vida.
[9471][9518]UN AO MS TARDE
[9699][9717]Ya hemos pasado un|minuto de la medianoche.
[9717][9736]Y es oficialmente el|da en que el velo...
[9736][9763]entre los vivos y los muertos|est en su punto ms bajo.
[9766][9801]Aqu WKB Dunwich y yo soy|Jennifer Hollister despidindose,
[9801][9822]queridos oyentes,|con esta clsica.
[9831][9845]Feliz Noche de Brujas.
[10493][10506]Cabrn.
[10522][10536]Maldito cabrn.
[10584][10605]Mentiste,
pedazo de mierda.
[10634][10653]No pude vivir con ello.
[11177][11225]La vida es slo un|sueo para los muertos.
[11348][11372]- Hola, pap.|- Buenos das.
[11373][11385]Te ves como el demonio.
[11394][11404]Gracias, lo necesitaba.
[11412][11444]- Te cuesta dormir?|- S, qu hay de nuevo?
[11448][11466]Quieres que te|prepare algo de comer?
[11472][11498]No, estar bien.|Tomar algo de camino al trabajo.
[11505][11512]Comida rpida?
[11518][11537]Vamos, pap, te preparar unos huevos.
[11549][11568]Eres demasiado buena conmigo,|lo sabas?
[11586][11594]Pens que lo habas dejado.
[11597][11609]Lo estoy intentando.
[11612][11639]No muy en serio|por lo que parece.
[11644][11666]Supongo va de la mano con|el estrs del trabajo.
[11678][11704]Vas a ir a la fiesta|de Noche de Brujas esta noche?
[11713][11727]No creo.
[11731][11742]Tal vez deberas hacerlo.
[11751][11769]Podra ayudarte a|desestresarte un poco.
[11775][11784]Trabajars esta noche?
[11794][11806]Estoy libre.
[11814][11833]Estaba
pensando que|podra ir a la fiesta.
[11844][11856]Podra ser divertido.
[11863][11875]Recuerdas esa palabra?
[11891][11903]Diversin?
[11906][11931]Supongo que no he tenido mucho|tiempo para eso ltimamente.
[12037][12049]Hollister.
[12052][12064]Sip.
[12072][12086]Cristo.
[12093][12107]Voy enseguida.
[12125][12141]Lo siento, cario, tengo que irme.
[12146][12162]Trabajo.
[12354][12379]POLICA - NO CRUZAR
[12436][12478]- Qu ha pasado?|- Johnny Tramer, suicidio.

[12478][12496]- Jess.|- Disparo en la cabeza.
[12531][12545]Qu est pasando all?
[12559][12575]Es algo realmente extrao.
[12585][12599]Cav el hoyo?
[12603][12616]No haba seales de|una pala alrededor.
[12616][12646]As que si lo hizo,|no estoy seguro de cmo.
[12645][12663]- Sus manos?|- Lo he comprobado.
[12666][12687]Las uas estn limpias.
[12681][12704]- Extrao.|- Se vuelve an ms extrao.
[12713][12723]Qu quieres decir?
[12727][12743]Mira las huellas de las manos.
[12746][12771]No parece que alguien|fue enterrado vivo aqu...
[12771][12782]y
cavara para salir?
[12788][12819]Entrando en el espritu|de Noche de Brujas, Brodie?
[12818][12828]No!
[12829][12855]Es slo, slo lo que parece.
[12863][12889]Me parece que alguien acaba|de cavar un hoyo en un campo.
[12889][12905]Por qu, no lo s.
[12917][12938]Parece que hubo algo de|lluvia aqu, sin embargo.
[12939][12961]Manos grandes tambin,|definitivamente un hombre.
[12965][12993]Puso sus manos sobre el|lodo para salir de all.
[12997][13026]Entonces, Johnny se meti en|el hoyo para seguir cavando...
[13026][13045]luego, cuando termin,|se sac a s mismo.
[13045][13062]No...|Vers, eso pens.
[13063][13094]Pero tengo a mis hombres midiendo la|enpolladura de las manos de Johnny,
[13095][13117]y son la mitad del tamao|de esas huellas de manos.
[13125][13153]Entonces, qu ests diciendo, que alguien|ms estuvo aqu tambin?
[13156][13191]Bueno, no hay seales de una pala,|dos juegos de huellas de manos.
[13202][13223]Tal vez alguien lo mat y tena|la intencin de enterrar el cuerpo...
[13223][13247]pero,
lo interrumpieron y huyo.
[13263][13294]Tendremos que ver qu dice el informe|de balstica. Llamaste al forense?
[13296][13323]S, va a tener mucho trabajo|que hacer en este caso.
[13333][13355]- Qu quieres decir?|- Mira el cuerpo.
[13417][13442]Dios! Cunto tiempo lleva aqu?
[13454][13471]Bueno, estuvo en el trabajo ayer.
[13471][13494]As que no ms de 24 horas.
[13504][13522]Nunca he visto un|cuerpo descomponerse...
[13522][13535]en tan poco tiempo.
[13612][13624]Frank?
[13645][13657]Frank.
[13661][13673]Qu?
[13681][13705]- Ests bien?|- S, estoy bien.
[13717][13743]Ser mejor que vaya a|ver a Edie Tramer. Dios!
[13747][13767]Primero su hija el ao pasado|y ahora su hijo.
[13778][13805]- Vas a estar bien aqu?|- S, djamelo a m.
[14021][14035]Hola.

[14042][14054]Ellie.
[14059][14071]Esto se ve muy bien.
[14079][14096]Si que se han superado este ao.
[14096][14108]Gracias.
[14124][14159]As que, vas a ayudar o slo|vas a estar dando vueltas...
[14159][14178]hasta que traigamos
la ponchera?
[14196][14208]Disclpame un momento.
[14287][14306]Cmo te va, Joe?
[14304][14316]No es bueno.
[14317][14338]Johnny Tramer se suicid anoche.
[14354][14378]Dios! Qu ha pasado?
[14381][14406]Fue al lugar, ya sabes...
[14407][14424]dnde est el paquete.
[14432][14457]De todos modos,|el chico se dispar en la cabeza.
[14462][14472]l est muerto.
[14481][14493]Buen Dios.
[14498][14511]Esto est jodido.
[14512][14534]Si la Polica empieza|a husmear en esa zona,
[14534][14556]van a encontrar ms|de lo que esperaban.
[14563][14573]- Muy bien.|- Por qu ese dbil...
[14573][14586]mierdecilla tuvo que hacerlo all?
[14586][14613]Tranquilo, hablar con Frank.|Lo arreglaremos.
[14713][14742]S que este es un momento|desgarrador para ti, Edie...
[14755][14791]pero, hay algo que Johnny|haya dicho o hecho...
[14804][14822]para indicar que era un suicida?
[14835][14858]No ha sido el mismo desde|que Stephanie fue asesinada.
[14866][14881]Ninguno de nosotros lo ha hecho.
[14893][14918]Dijo algo sobre
todo ese asunto,
[14918][14937]ya sabes, Jack Cain?
[14956][14971]Saba que lo quera muerto.
[14982][14994]Todos lo queramos.
[15004][15029]Tus hombres estn ms cerca|de encontrar a esa basura?
[15052][15065]En realidad, no.
[15074][15103]Se fue de la ciudad el ao pasado.|Pudo haber ido a cualquier parte.
[15108][15124]Maldito seas por dejarlo ir.
[15127][15157]No lo dej ir, comet un error.
[15173][15191]Tengo que vivir con|ello todos los das.
[15206][15221]Pobre de ti.
[15236][15261]Tengo que vivir con perder|a Stephanie todos los das.
[15268][15284]Y ahora a mi hijo tambin.
[15297][15309]Tienes razn.
[15313][15329]No quise ser insensible.
[15342][15358]Necesito volver a la estacin.
[15358][15379]Va a venir alguien?
[15379][15398]Puedo enviar a alguien|a ofrecer apoyo.
[15398][15413]Slo quiero que me dejen en paz.

[15436][15449]Entiendo.
[15461][15474]Lo siento, Edie.
[15484][15496]De verdad que lo hago.
[15739][15759]- Hola?|- Hola, mejillas dulces.
[15765][15788]Ya sabes, los aos
'50 llamaron.
[15789][15797]Quieren que le devuelvas|el nombre de su mascota.
[15797][15814]Slo trato de ser carioso.
[15815][15833]Lo s, slo estoy bromeando.
[15839][15851]Cmo van las cosas?
[15851][15872]Bueno, encontramos a|Johnny Tramer esta maana.
[15872][15884]Se suicid.
[15894][15911]Dios, eso es horrible.
[15927][15951]Su hermana tambin muri el ao pasado.|Su madre debe estar hecha pedazos.
[15951][15968]S, tu padre est all ahora mismo.
[15968][15984]Contndole las noticias.
[15993][16007]Dios, eso es horrible.
[16023][16036]No los conoca tan bien.
[16036][16064]Pero pap sola salir|con su padre hace aos.
[16082][16101]Hablando de tu padre, no le dijiste...
[16101][16117]sobre nosotros, verdad?
[16117][16137]Brodie, eres un marica,|lo sabas?
[16137][16156]- No soy un marica.|- Lo eres.
[16171][16192]Por qu demonios ests|tan asustado de mi padre?
[16203][16221]Es el tipo ms dulce del mundo.
[16222][16252]S, en casa tal vez,|pero en el trabajo es mi jefe.
[16252][16277]Y
sabes lo incmodo que es que|te atrapen con la hija del jefe?
[16277][16294]Vamos, admtelo.
[16297][16318]El riesgo es parte de la emocin.
[16335][16371]Entonces, dime. Qu llevas puesto?
[16381][16406]Un jersey de lana grueso y|una redecilla para el cabello.
[16409][16427]Vamos Jen, en serio?
[16427][16454]- De verdad quieres hacer esto ahora?|- S, slo un minuto.
[16459][16479]Llama a uno de esos programas|de chicas de la tele...
[16479][16502]donde las chicas mueven|el culo arriba y abajo.
[16504][16528]S, cuestan cinco dlares|el minuto, esto es gratis.
[16534][16558]Eres una mierda tan descarada,|lo sabas?
[16584][16599]Vamos, dime. Qu llevas puesto?
[16609][16622]Con quin ests hablando?
[16636][16654]No es nadie.
[16661][16674]Hablando solo?
[16678][16695]Es una chica que conozco.
[16702][16718]De acuerdo, bueno, no tardes mucho.
[16718][16744]Tenemos cosas ms importantes|de las que ocuparnos hoy.
[16748][16765]Estar en mi oficina.
[16767][16779]Seor.
[16827][16848]-

Hola?|- Marica.
[16965][16979]- Dios mo!|- Qu?
[16979][16999]Bien, bien, mira esto.
[17007][17033]- Joder, qu diablos es eso?|- Es muy divertido.
[17037][17061]Una verdadera falta de estndares,|los de tu generacin.
[17063][17086]Dios mo, tenemos un chorreador.
[17087][17111]Muy bien, apgalo.|Este es un lugar de negocios.
[17119][17131]Muy bien.
[17131][17146]Tranquilo, abuelo.
[17149][17164]Sabes, cuando tena tu edad...
[17164][17183]no tenamos acceso a nada de eso.
[17188][17219]Lo que tenamos eran revistas.|Ni siquiera podamos costernoslas.
[17227][17239]Pero siempre encontrbamos,|cmo, grandes montones de ellas...
[17239][17253]en el bosque por alguna razn.
[17258][17286]Esto aade un nuevo significado|al trmino naturista.
[17289][17304]Entonces,|cul es el maldito problema?
[17304][17323]Es lo que hacen los chicos.
[17326][17339]Lo es?
[17339][17358]Dios, no me estoy perdiendo mucho.
[17358][17378]S, todo se trata de las bromas.
[17382][17407]Escucho esa palabra todo el tiempo,|bromas.
[17413][17425]Qu
significa eso?
[17426][17448]Bueno, es slo que, ya sabes,|nos necesitamos el uno al otro.
[17448][17461]Para divertirse y eso.
[17464][17489]Y t siempre ests bromeando|con tus amiguitos, no?
[17489][17504]S, s, lo hacemos.
[17513][17553]Aunque s,|a veces puede ir demasiado lejos.
[17551][17568]- S?|- S.
[17578][17606]Mira, alguna vez te he hablado|de mis vacaciones de la escuela...
[17606][17623]donde unos amigos y yo|nos fuimos a Mxico?
[17623][17635]No.
[17641][17652]Cierto.
[17658][17687]As que hay un chico llamado James,|ya sabes,
[17687][17728]y es muy credo,|demasiado confiado, arrogante.
[17722][17754]As que una noche|sale y se emborracha.
[17754][17783]Luego regresa a la villa|y se desmaya en el sof.
[17788][17805]As que tengo una idea, ya sabes,
[17810][17827]voy a bajarle los humos.
[17833][17858]As que lo que hago es|tomar un condn y lo pongo...
[17858][17877]al final de un lpiz y...
[17886][17914]se lo pongo en el chocolate|mientras est desmayado.
[17926][17941]Cmo
chocolate?
[17945][17972]S, el nudo de tu globo.
[18008][18032]Tu bolso de prisin,|tu estrella de mar de chocolate.
[18049][18062]Raja del culo.
[18063][18081]Entonces, por qu no|dijiste eso para empezar?

[18081][18106]De acuerdo, me asegurar|de mantener mi lenguaje...
[18106][18127]ms adecuado para los|pensionados en el futuro.
[18131][18156]De todos modos,|James se despierta al da siguiente...
[18156][18179]y no tiene recuerdos|de la noche anterior.
[18181][18198]Estaba tan borracho.
[18198][18218]Todo lo que sabe es que|ahora tiene un condn...
[18218][18235]colgando de su culo.
[18237][18266]Y nos pregunta: "Qu pas anoche?"
[18268][18281]Y as que se lo decimos.
[18287][18317]Yo digo: "Bueno, amigo, te vimos|charlando con este chico...
[18317][18351]en el bar y lo siguiente que|sabemos es que te has ido con l".
[18356][18385]As que James,|empez a enloquecer porque piensa...
[18385][18413]que la espada de cerdo de|un extrao se lo ha clavado.
[18432][18458]- La espada
de cerdo significa polla.|- S, s, lo s.
[18458][18477]La descripcin me dio un poco|de informacin sobre eso.
[18478][18523]Est bien, est bien. James,|est llorando y llama a su novia,
[18526][18552]y confiesa su primera|experiencia gay...
[18552][18577]y toma el siguiente|vuelo de vuelta a casa.
[18577][18611]Y no le dije la verdad|hasta seis meses despus.
[18641][18688]As que tcnicamente el nico|que hizo algo gay fuiste t.
[18694][18707]Por qu dices eso?
[18709][18742]- Le metiste un lpiz en el culo.|- S, pero eso no es gay.
[18759][18777]- Es un poco gay.|- Bueno, no, cllate.
[18783][18803]S, tienes razn,|las bromas son divertidas.
[18817][18834]De todos modos,|tengo trabajo que hacer.
[18843][18859]Muy bien, vuelvo en cinco minutos.
[18869][18885]Tengo que ir a echar una cagada.
[18914][18956]ESTACIN DE POLICA
[18966][18993]Entonces, el chico,|por qu lo hizo?
[19003][19017]Bueno, considerando dnde lo hizo.
[19017][19038]Supongo que no poda|vivir con lo que pas.
[19049][19078]-
Hablaste con su madre?|- Est destrozada.
[19087][19114]Le dijo lo que le pas a Cain?
[19115][19134]No creo que ella sepa nada.
[19154][19166]De acuerdo.
[19172][19193]Bueno, djame preguntarte|a ti, Frank.
[19199][19211]Qu hay de ti?
[19222][19234]Qu hay de m?
[19236][19271]Ya no te veo en ninguna|de estas noches sociales.
[19275][19298]Se siente como si nos|estuvieras evitando estos das.
[19298][19323]Realmente pensaste que las cosas|seguiran igual entre nosotros?
[19323][19355]Mierda como esa cambia a la gente.|Ciertamente me cambi a m.
[19369][19395]Piensas demasiado en todo,|ese es tu problema.
[19396][19428]Hicimos lo correcto.|Se hizo justicia.
[19436][19452]Lo que t digas, Milton.
[19461][19474]Ahora, si no te importa,

[19474][19492]tengo mucho papeleo que hacer.
[19753][19769]Mike, tienes la llave inglesa?
[19796][19802]Mike.
[19811][19826]Ests sordo o qu?
[20202][20214]Qu opinas?
[20255][20267]No lo s.
[20285][20304]No he visto nada como esto|desde los asesinatos de Cain.
[20325][20338]Cmo
quieres manejarlo?
[20372][20397]Esta es una semiautomtica.
[20415][20446]Slo amartilla el martillo,|inserta el cartucho...
[20446][20479]en la cmara y la|pistola estar lista...
[20479][20491]para su prximo disparo.
[20507][20531]Los cartuchos se alimentan a|travs de un cargador...
[20532][20556]que se introduce en el mango.
[20562][20584]Si quieres esta, te puedo dar...
[20584][20603]cinco cajas de cargadores,|que tienen 15 cartuchos.
[20603][20619]Que vienen en doble columna.
[20623][20652]Es una mquina muy, muy poderosa.
[20654][20672]Rpida y fcil de recargar tambin.
[20702][20749]Este es el revlver .38.
[20752][20772]El cilindro tiene capacidad|para siete cargas.
[20776][20799]Tanto las semiautomticas|como los revlveres,
[20803][20821]tienen dos estilos de|accin principales.
[20834][20846]Accin simple y doble.
[20857][20878]Esta perrita, es doble.
[20886][20918]Es pequea, lo que la hace|perfecta para ocultarla.
[20929][20952]Pero an as tiene un gran golpe.
[20972][20984]Maldita
pistola ingeniosa.
[20988][21019]Este hijo de puta es mi favorito.
[21052][21099]Esta fina arma goza|de la reputacin...
[21099][21124]de ser el estndar de oro|de la potencia de frenado.
[21141][21183]Es un tapn de un slo|disparo extremadamente fiable.
[21183][21219]No es buena para ocultar,|pero puedes hacer un agujero...
[21219][21246]a travs de un maldito oso,|con una de estas cosas.
[21257][21273]Me encanta esta pistola.
[21296][21315]De acuerdo.
[21325][21333]A algunos cerditos...
[21344][21359]les gusta ir al mercado.
[21361][21379]Algunos cerditos se quedan en casa.
[21387][21418]A algunos les gusta comer|mucha carne asada...
[21436][21452]pero t, cerdito...
[21456][21474]has venido a comprar|algunas armas dudosas.
[21474][21487]Entonces, cul vas a escoger?
[21494][21507]Vamos,|no tengo todo el maldito da.
[21531][21543]Todas ellas.
[21584][21605]Eres un cerdito codicioso, no?

[21616][21648]Siento mucho lo de Johnny.
[21649][21661]Cuando me enter,|tena que venir a
verte.
[21668][21682]Gracias.
[21691][21712]Tienes a alguien aqu|que pueda ayudarte?
[21723][21746]Mi hermano llega esta noche.
[21756][21764]Es todo lo que me queda ahora.
[21797][21808]S que esto es difcil para ti,|Edie,
[21808][21824]pero tengo que preguntar,
[21831][21858]Johnny te dijo algo|sobre Jack Cain?
[21863][21899]- Cmo dnde desapareci?|- No me dijo nada.
[21913][21925]De acuerdo.
[22079][22111]No quiero ser molesto,|pero, tienes galletas?
[22135][22147]Galletas?
[22154][22166]Si.
[22198][22209]S, creo que s.
[22216][22228]En la cocina.
[22246][22272]- Ir a buscarlas.|- Me encantara.
[22275][22288]Gracias.
[23496][23527]Muere, maldita puta!
[23553][23565]Muere!
[23652][23662]Joder.
[23691][23704]Dnde estn las galletas?
[23943][23963]Amigo, un dulce por Noche de Brujas.
[24214][24225]Hola, querido.
[24229][24241]Qu ests haciendo?
[24245][24264]Slo estoy haciendo|todas las decoraciones.
[24269][24288]Pero deberan haberse|hecho esta maana.
[24296][24313]Bueno, yo he...
[24319][24342]He
estado muy ocupada con|todos los pasteles tambin.
[24345][24372]Algunos de ellos estn un|poco quemados, as que...
[24375][24388]Qu quieres decir?
[24391][24413]Bueno...
[24428][24435]No has terminado la decoracin,
[24435][24462]has quemado la comida.|Qu has estado haciendo?
[24467][24479]Hazlos de nuevo!
[24484][24501]- Qu, ahora?|- S, hazlo!
[24505][24519]De acuerdo.
[24732][24749]Siempre tiene que ser as?
[24756][24778]Mira, me disculpo por|perder los estribos,
[24778][24793]pero esto tiene que hacerse.
[24819][24831]De acuerdo.
[25099][25154]Slo una pequea cantidad|en una copa de vino.
[25166][25182]O quizs una flor.
[25223][25239]Qudese con l, Monsieur.
[25284][25297]Qudeselo.
[25312][25338]Puede cambiar de opinin.

[25342][25357]No est muerta?
[25367][25379]Ests loco?
[25387][25394]La v morir.
[25397][25416]El doctor firm el certificado.
[25416][25428]Los v enterrarla.
[25441][25456]Cautiva en el lmite...
[25456][25478]entre
la vida y la muerte.
[25489][25518]Su cerebro se despoj|de la chispa de la vida.
[25545][25591]El zombi blanco obedece|las rdenes impas...
[25591][25609]de su amo demonio.
[25711][25748]Como criaturas sin sentido llevan|a cabo su maldita sea a voluntad...
[25808][25821]Zombis!
[26387][26402]Emergencia, emergencia.
[26928][26949]Adelante, Frank. Adelante.
[26987][26993]Si?
[26994][27012]Ven a la casa de los|Boggs en la calle Oak.
[27024][27038]Es malo, Frank.
[27044][27058]Es realmente jodidamente malo.
[27583][27614]NOCHE DE BRUJAS
[28094][28128]Parece que tenemos a un|maniaco suelto.
[28189][28201]Ests bien, Frank?
[28223][28232]Frank?
[28249][28273]S, s.
[28307][28315]Te voy a decir algo...
[28323][28343]que nunca se lo he contado a nadie.
[28347][28367]S,|algo que he estado llevando conmigo...
[28367][28384]desde hace un ao.
[28401][28413]De acuerdo.
[28417][28429]Jack Cain.
[28447][28459]Hace
un ao,
[28467][28495]yo, Boggs...
[28501][28516]Joe, y Johnny...
[28526][28542]fuimos a su cabaa.
[28557][28573]Lo llevamos al campo,
[28577][28601]el mismo en el que Johnny|fue encontrado esta maana...
[28621][28634]y lo matamos.
[28649][28667]Le disparamos a quemarropa...
[28679][28692]y luego lo enterramos.
[28711][28724]Hablas en serio, Frank?
[28731][28752]Sent que era lo correcto.
[28766][28795]Pero, me ha perseguido|desde entonces.
[28862][28893]As que estos asesinatos,|ahora hay un vnculo claro...
[28893][28906]entre las vctimas.
[28922][28953]Todo hombre involucrado en el asesinato|de Jack Cain est ahora muerto.
[28966][28987]Todos menos uno.
[28992][29018]Sabes lo que eso significa,|verdad?

[29028][29048]- Eres el siguiente.|- As es.
[29071][29091]Hay algo ms que deberas saber,|tambin.
[29094][29106]Qu sera eso?
[29129][29142]Hay un tipo...
[29151][29173]en la penitenciara de Edenfield,
[29175][29189]alguien llamado Charlie Edgar.
[29199][29226]Est cumpliendo cadena perpetua|por
el asesinato de una joven.
[29236][29252]Hace unos meses me lleg la noticia...
[29253][29276]del psiquiatra, que Edgar...
[29276][29296]haba confesado los|asesinatos de Cain.
[29303][29314]Lo entrevistaste?
[29321][29333]Lo hice, s.
[29347][29386]Y tengo que decirte, cuando|Edgar me cont cmo fue todo,
[29391][29403]le cre.
[29412][29429]Saba muchos detalles|sobre los asesinatos...
[29429][29447]que mantuvimos fuera|de los peridicos.
[29452][29465]Entonces, qu hiciste?
[29486][29499]Escrib un informe.
[29527][29541]Y luego lo enterr.
[29555][29571]Nunca se lo ense a nadie.
[29577][29601]Ya fue bastante difcil|lidiar con la idea...
[29601][29618]de matar a un supuesto culpable.
[29627][29634]Cielos, Frank.
[29642][29667]Me avergenzo de lo que he hecho.
[29687][29724]Alguien ms sabe...|Que mataste a Cain?
[29742][29768]Es posible que uno|de los otros tipos...
[29768][29783]haya hablado con alguien,|de acuerdo.
[29784][29813]Pero por qu alguien|se estara vengando...
[29813][29828]en
nombre de Jack Cain?
[29828][29845]Toda la ciudad viva|con miedo de l.
[29845][29859]Todos lo queran muerto.
[29863][29887]Podra ser un amigo de Cain,|alguien vinculado a l.
[29889][29907]S, esa es la explicacin racional.
[29915][29929]Pero hay otra teora.
[29942][29957]No es tan racional.
[29962][29974]Y esa es?
[29979][29997]Jack Cain ha vuelto de la muerte.
[30021][30032]Te sientes bien?
[30036][30061]Sabes, este es un momento|estresante y todo eso, Frank.
[30061][30081]- Ya sabes, pero...|- Y ese agujero en el suelo,
[30086][30125]dijiste que pareca que alguien haba|sacado las manos y se haba impulsado.
[30123][30135]Si.
[30143][30167]Ah es exactamente|donde enterramos a Cain.
[30176][30193]Su cuerpo ha desaparecido.
[30203][30221]Tal vez alguien que|sabe lo que pas...
[30221][30246]lo rob y quiere que pienses|que ha vuelto de la muerte.

[30248][30269]Hay un montn de cosas que|estn pasando ahora mismo...
[30269][30286]que no se pueden|explicar fcilmente.
[30289][30307]Tenemos que
ser abiertos de mente.
[30326][30346]Entonces, cul es nuestro|prximo movimiento?
[30358][30379]Tengo una llamada|importante en la estacin.
[30386][30406]Mi hija est en el Ayuntamiento...
[30406][30421]en la fiesta de Noche de Brujas.
[30427][30461]Ve a buscarla y|trela a la estacin.
[30472][30509]Bien, ya que estamos en ese tema...
[30519][30544]dado que me dijiste la verdad,|creo que es lo correcto...
[30544][30570]que yo tambin te diga la verdad.
[30615][30622]Qu es?
[30672][30684]Jennifer,
[30694][30704]nos hemos estado viendo.
[30714][30733]- Por cunto tiempo?|- Cuatro meses.
[30733][30751]Mira, siento no haber dicho nada,
[30752][30775]es slo que no quera|decir demasiado...
[30771][30787]antes de que las cosas se desarrollaran,|de lo contrario,
[30787][30798]las cosas se habran puesto incmodas.
[30798][30818]- Vas en serio con ella?|- Mucho.
[30823][30857]La amo y...|Creo que ella tambin me ama a m.
[30983][30995]Toma esto...
[31005][31032]para proteccin,|y ve a buscar a Jennifer...
[31047][31062]y
llvala a la estacin.
[31066][31078]Lo tengo.
[31242][31267]As que acordamos encontrarnos|en este bar al principio,
[31275][31302]y tom como siete gin tonics...
[31302][31321]en el espacio de una hora.
[31322][31336]El bar tender me avis...
[31336][31352]mientras el tipo estaba en el bao.
[31357][31384]Pero an as termin|yendo a otro bar con l.
[31387][31416]Pidi guacamole y se neg|a compartirlo conmigo,
[31422][31437]mientras afirmaba que iba a...
[31438][31462]lanzar a todos los|hpsters a la calle.
[31468][31484]Qu idiota.
[31496][31522]Al final fuimos a esta|cafetera toda la noche,
[31524][31551]en parte para que se pusiera sobrio,|y en parte porque...
[31551][31573]haba olvidado su nombre, y pens...
[31573][31588]que lo escribiran en su vaso.
[31597][31622]As que supongo que no hubo|una segunda cita, entonces.
[31622][31634]No.
[31638][31663]Creo que le dar un descanso|a las citas por un tiempo.
[31676][31692]Cmo van las cosas con Brodie?
[31709][31725]Todava no se
lo he|dicho a mi padre.
[31726][31742]No estoy segura de|cmo reaccionar.

[31751][31766]Estoy segura de que estar bien.
[31772][31783]No contratara a Brodie...
[31783][31803]si no creyera que es|un tipo responsable.
[31814][31826]Cierto.
[31843][31877]Le has dicho a Brodie|que ests embarazada?
[31885][31897]Qu?
[31907][31927]Cmo lo supiste?
[31925][31952]Estamos en una fiesta|y t bebes agua.
[31953][31972]Esa no es la Jennifer que conozco.
[31974][31993]Me hice la prueba hoy mismo.
[32001][32014]Enhorabuena.
[32021][32039]- Cmo te sientes?|- Slo...
[32049][32063]nerviosa, ahora mismo.
[32066][32081]No s si estoy lista.
[32081][32112]No tengo ni idea de|cmo se sentir Brodie.
[32114][32132]Es un gran paso.
[32141][32163]No te preocupes, te adora.
[32168][32181]Estar encantado.
[32181][32203]Va a ser un golpe|doble para mi padre.
[32205][32233]Descubrir que estoy viendo a|alguien que trabaja para l...
[32233][32245]y va a ser abuelo?
[32257][32269]Ya est bastante estresado.
[32269][32298]Oye,|no
hay nada de qu preocuparse.
[32309][32335]Una vez que el polvo se asiente,|estar contento.
[32356][32375]S lo difcil que fue para los dos...
[32375][32398]cuando tu madre muri.
[32406][32439]No hay otra manera de ver esto|que como un evento feliz.
[32457][32471]Gracias, Ellie.
[32522][32543]John, ese nmero de telfono,
[32548][32571]al que Cain llam cuando fue|arrestado por primera vez.
[32574][32589]Ya tienes una direccin?
[32657][32669]Si.
[32691][32702]Si.
[32728][32745]Gracias, John.
[33277][33291]Buenas noches.
[33307][33337]Sabe, un hombre que lleva un arma|no me parece tan seguro de s.
[33343][33381]De hecho,|veo a un hombre asustado ante m.
[33382][33396]Vincent Crowley?
[33401][33414]Quin quiere saber?
[33431][33443]Me llamo Hollister.
[33451][33465]Soy un Oficial de Polica.
[33469][33487]Quiero hablarte de Jack Cain.
[33505][33522]Siempre estoy abierto a conversar.
[33531][33547]Pero encuentro que es|mucho ms agradable...
[33547][33563]sin un arma apuntndome.
[33663][33675]Sintate.
[33787][33812]Qu

es lo que le gustara|saber sobre Jack Cain?
[33837][33853]Cuando fue arrestado,
[33854][33876]fuiste la primera persona|a la que llam. Por qu?
[33891][33903]Soy su amigo.
[33915][33927]Jack no tena muchos.
[33989][34011]Veo que compartes un|inters por lo oculto.
[34032][34054]Tomo lo "oculto",|como usted lo llama...
[34054][34079]como lo que es percibido negativamente|en su mundo.
[34093][34109]Si se usa para hacer|dao a la gente.
[34136][34159]Lo oculto es simplemente un|estudio de lo desconocido.
[34164][34191]Explora los lmites de|nuestras percepciones,
[34192][34215]nuestras verdades,|nuestros potenciales.
[34221][34237]No es ni bueno, ni malo.
[34261][34285]Por lo que encontramos en su casa,
[34292][34308]s que Jack Cain lo estaba usando.
[34326][34351]Jack siempre estuvo interesado|en explorar los lmites...
[34351][34375]entre la vida y la muerte.
[34374][34388]Consider la posibilidad de...
[34388][34408]que el mundo|que se nos presenta...
[34408][34426]puede
que no sea todo lo que hay.
[34436][34448]Es eso un crimen?
[34452][34464]No.
[34471][34486]Pero asesinar a dos|personas s lo es.
[34521][34548]- Crees que el asesinato es gracioso?|- No, seor Hollister.
[34548][34573]Lo que me divierte es cmo una mentira|contada durante el tiempo suficiente...
[34573][34597]puede convertirse en una verdad en|las mentes de los hombres comunes.
[34597][34609]Crees que es inocente?
[34618][34646]La noche que esos chicos fueron|asesinados, Jack estaba conmigo.
[34649][34669]Fuimos bienvenidos en|el solsticio de verano...
[34669][34695]en Sacramento Bay con|un grupo de amigos.
[34711][34731]No volvimos a casa|hasta despus de que...
[34731][34747]esos cuerpos fueran descubiertos.
[34753][34773]T y esos amigos que mencionas...
[34790][34811]por qu no hicieron una|declaracin en su defensa?
[34816][34842]No era necesario, como sabe.
[34852][34877]Pero considere esto, seor Hollister.
[34877][34897]Su sistema realmente|habra aceptado la palabra...
[34897][34905]de
gente como nosotros?
[34922][34947]Somos los parias de su sociedad.
[34952][34977]Somos los perros que dejan|a un lado de la carretera.
[34977][34997]No encajamos en sus convenciones,
[34997][35027]por lo tanto somos|excluidos y perseguidos.
[35042][35063]Bueno, no quiero entrar|en un debate sobre esto.
[35075][35089]Slo quiero saber una cosa.
[35095][35107]Estas...
[35118][35133]prcticas.

[35152][35166]Pueden hacer que|una persona sea capaz...
[35166][35196]de desafiar las leyes de, no s...
[35206][35218]la fsica?
[35226][35243]Una pregunta intrigante.
[35258][35274]Parece que su mente|se est abriendo...
[35274][35318]a las posibilidades ms all del|pensamiento convencional terrenal.
[35331][35348]Slo dime en qu crea Jack Cain.
[35361][35373]Aydame a entender.
[35389][35408]Qu es lo que quiere entender,|seor Hollister?
[35417][35448]Qu pas antes de que lo mataran,|o despus?
[35481][35526]No soy una amenaza para usted,|seor Hollister. Por favor, reljese.
[35621][35649]A lo
nico que le teme|un hombre, es a la verdad.
[35663][35681]As que si voy a|ofrecerle la verdad,
[35691][35718]- est listo para aceptarla?|- S.
[35767][35788]La ocupacin romana de|Gran Bretaa dur entre...
[35788][35816]el ao 43 d.C. y|alrededor del ao 400 d.C.
[35823][35857]Antes de que los Romanos invadieran,|el sacerdocio Druida...
[35851][35874]eran el poder|indiscutible de la tierra.
[35881][35904]La historia est escrita|por los vencedores.
[35918][35933]Cuando los Romanos|conquistaron a los Celtas...
[35933][35963]dieron descripciones poco|halagadoras de los Druidas.
[35972][36001]Algunos los describieron como|brbaros sedientos de sangre.
[36001][36022]Que ofrecan sacrificios humanos.
[36036][36076]Otros sostienen que los Druidas|eran gentiles y pacficos.
[36087][36128]Y mantuvieron su autoridad al estar|en contacto con la naturaleza.
[36149][36174]La verdad est en|algn punto intermedio.
[36183][36214]Los Druidas si hicieron|sacrificios humanos,
[36214][36237]pero eran autosacrificios.
[36252][36291]Durante
el Samhain,|especialmente el 31,
[36301][36324]cuando el velo entre|los vivos y los muertos...
[36324][36357]estaba en su punto ms delgado,|algunos de los Druidas...
[36359][36386]sacrificaron sus|vidas voluntariamente.
[36406][36422]Crean que su sangre de sacrificio...
[36423][36456]filtrada por el suelo podra|incluso tener el poder...
[36457][36474]de... Levantar a los muertos.
[36519][36525]Jack Cain lo crea?
[36549][36562]Su mente estaba abierta.
[36568][36584]- Y la suya?|- Qu quieres decir?
[36607][36625]Se cometi una injusticia.
[36635][36658]El pueblo se volvi|contra un hombre inocente...
[36658][36665]y fue ejecutado,
[36669][36689]y ahora ha vuelto para vengarse.
[36692][36726]Y con cada alma que l...|Absorbe...
[36726][36762]se vuelve ms y ms poderoso.
[36772][36796]Por supuesto que hay otra|explicacin para todo esto.
[36798][36825]- Cul es?|- T eres el que ha vuelto para vengarse.

[36841][36857]Ay, seor Hollister!
[36864][36901]Se acerc tanto a una|forma
superior de comprensin.
[36909][36925]Pero se asust...
[36932][36967]as que ha vuelto a su|perspectiva convencional terrenal.
[36971][37003]En el trabajo policial normalmente|la explicacin ms simple...
[37003][37015]suele ser la correcta.
[37019][37042]Y ahora qu? Me arrestar?
[37043][37063]Parece el siguiente paso lgico.
[37073][37085]No, seor Hollister.
[37086][37106]El siguiente paso lgico|sera pasar pgina...
[37106][37132]del libro de los Druidas|y hacer un autosacrificio...
[37132][37144]para salvar a su ciudad.
[37155][37178]Jack Cain ya no es humano.
[37181][37204]Se est volviendo ms que humano.
[37208][37238]l es su Dios ahora,|y es un Dios vengativo.
[37238][37263]Buscando castigar a los|que lo persiguieron.
[37269][37294]Slo un autosacrificio|lo apaciguar.
[37675][37701]- Es el verdadero McCoy.|- S.
[37763][37777]El padre de tu beb est aqu.
[37777][37799]Dios mo, odio esa expresin.
[37801][37834]Mejor que te acostumbres.|Tengo que ir al bao.
[37837][37854]Los dejo solos.
[37886][37907]Puedo
hablar contigo|en privado un momento?
[37987][37999]Qu sucede?
[38011][38041]- Mi padre est bien?|- Est bien, ms o menos.
[38043][38055]Qu quieres decir?
[38056][38075]Me ha pedido que te|lleve a la estacin.
[38075][38086]Por qu?
[38087][38103]Sabes que mencion que|Johnny Tramer se suicid?
[38106][38118]- S?|- Encontramos otros cuatro cuerpos.
[38127][38132]- Dios mo!|- Joe Johnson,
[38134][38153]Mike Anderson,|Milton Boggs y Vernica.
[38153][38179]- Qu pas?|- Todos asesinados.
[38186][38206]Dios mo!|Han averiguado quin lo hizo?
[38206][38218]No, todava no.
[38218][38239]Tenemos a nuestros chicos|patrullando las calles.
[38241][38257]Tu padre me ha pedido|que venga a buscarte.
[38257][38272]No deberamos quedarnos aqu?
[38272][38291]Quiero decir,|hay mucha gente alrededor.
[38297][38324]Quienquiera que haya matado a|esa gente, no va a venir aqu.
[39737][39755]Qu es lo que pasa?
[39774][39794]Dulce o truco.
[39983][39999]Vayan por ah, vayan por ah.
[40051][40063]Aljense
de l!
[40124][40155]No, por favor, no.|Qu cojones eres?

[40427][40441]Aljate de m!
[40626][40638]Oye, t!
[40678][40693]Ven y toma un poco de esto.
[40714][40726]Vamos.
[41041][41061]- No, no lo hagas.|- Est bien.
[41242][41252]No hay pulso.
[41294][41306]No est respirando.
[41404][41418]Ayuda!
[41544][41556]Ven aqu.
[41559][41571]Qu est pasando?
[41573][41591]Ven aqu, ven aqu,|ven aqu, ven aqu.
[41637][41649]Oye.
[41655][41688]Comet un terrible error,|pero voy a compensarlo.
[41724][41736]Ay, Dios mo!
[41739][41756]Pens que estabas muerto.
[41763][41775]Est bien.
[41787][41804]No, no, estoy preocupada.
[41814][41826]Brodie.
[41837][41856]Llvate a mi hija y vyanse|de aqu.
[41856][41875]Qu vas a hacer t?
[41885][41909]Slo cuida de ella.
[41966][41978]Lo har.
[42038][42057]No, pap, t vienes con nosotros.
[42061][42084]No tengo tiempo para discutir.|Vete.
[42091][42117]Pap, no me ir de aqu sin ti.
[42184][42197]De acuerdo.
[42204][42217]Vamos.
[42381][42405]No, pap!|Qu ests haciendo?
[42405][42438]No,
no!
[42433][42445]Pap!
[42565][42601]Es hora de pagar por lo|que hiciste, Hollister.
[42626][42649]Por primera vez t y|yo estamos de acuerdo.
[42662][42676]Esto termina aqu y ahora.
[42754][42776]Tal vez t y yo|encontremos la redencin.
[42787][42807]Entonces, nos veremos en el Cielo.
[42837][42858]A quin estoy engaando?
[42892][42905]Te ver en el Infierno.
[43243][43276]El 31 de octubre es|normalmente el momento...
[43276][43285]para un susto seguro.
[43288][43308]El momento en que los|nios van a pedir dulces...
[43309][43326]y los adultos ven|pelculas de terror,
[43329][43354]pero anoche los|residentes de Dunwich...
[43355][43376]experimentaron un|horror de la vida real,
[43376][43407]mientras una fiesta de Noche de Brujas|se transform en una pesadilla.
[43416][43443]El Ayuntamiento qued|envuelto en llamas...
[43444][43473]y se cree que una docena|de personas han muerto.
[43474][43497]Varias

personas estn|heridas de gravedad...
[43497][43525]y se espera que el nmero|de muertos aumente.
[43531][43559]El Departamento de Bomberos local,|an no ha confirmado...
[43559][43584]la causa del incendio,|pero varios testigos...
[43584][43611]han afirmado que|antes de la explosin...
[43612][43648]un hombre enmascarado|no identificado entr en el edificio.
[43648][43688]Con un arma, hiriendo y|matando a varios asistentes.
[43691][43717]El Departamento de Polica|se ha negado a comentar...
[43717][43733]sobre estos reportes.
[43803][43862]UN AO MS TARDE
[44043][44087]Esto es WKB y yo soy|Jennifer Hollister, despidindome.
[44093][44112]Estimados oyentes...
[44124][44144]feliz Noche de Brujas!
[44926][44975]FRANK HOLLISTER|1976 - 2018
[45423][45472]JACK CAIN|1978 - 2018
[45646][45726]The Legend of Halloween Jack (2018)|Una traduccin de|TaMaBin
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1.1919 pyrsistent 0.20.0-1build2

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1.1920 iucode-tool 2.3.1-3build1

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1.1921 python-jsonschema 4.10.3-2ubuntu1

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1.1922 configobj 5.0.8-3

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1.1923 squashfs-tools 4.6.1-1build1

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That's all there is to it!
Mathieu Desnoyers
May 13th, 2009

IBM Corporation allowed LGPLv2.1+ licensing of their contribution to the
userspace RCU library in a patch submitted on May 8, 2009 from Paul E.
McKenney and reviewed by Steven L. Bennett:

https://lists.lttng.org/pipermail/lttng-dev/2009-May/012835.html

I (Mathieu Desnoyers) re-implemented ACCESS_ONCE(), likely(), unlikely() and
barrier() from scratch without reference to the original code.

commit id : 2dc5fa0f7cfbfb0a64a7a67b39626650e863f16a

Bert Wesarg <bert.wesarg@googlemail.com> approved LGPL relicensing of his
patch in an email dated May 13, 2009 :

http://lkml.org/lkml/2009/5/13/16

xchg() primitives has been rewritten from a MIT-licensed cmpxchg for Intel

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This cmpxchg code was obtained from the atomic_ops project:

http://www.hpl.hp.com/research/linux/atomic_ops/

I (Mathieu Desnoyers) wrote the remainder of the code.

The license for the library files in this project
was therefore changed to
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1.1926 efibootmgr 18-1build2

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1.1927 vixie-cron 3.0pl1-184ubuntu2

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```

$Id: INSTALL,v 2.5 1994/01/15 20:43:43 vixie Exp $

Read the comments at the top of the Makefile, then edit the area marked
'configurable
 stuff'.

Edit config.h. The stuff I expect you to change is down a bit from the
top of the file, but it's clearly marked. Also look at pathnames.h.

You don't have to create the /var/cron or /var/cron/tabs directories, since
both the daemon and the `crontab' program will do this the first time they
run if they don't exist. You do need to have a /var, though -- just "mkdir
/var" if you don't have one, or you can "mkdir /usr/var; ln -s /usr/var /var"
if you expect your /var to have a lot of stuff in it.

You will also need /usr/local/etc and /usr/local/bin directories unless you
change the Makefile. These will have to be created by hand, but if you are
a long-time Usenet user you probably have them already. /usr/local/man is
where I keep my man pages, but I have the source for `man' and you probably
do not. Therefore you may have to put the man pages into /usr/man/manl,
which will be hard since there will be name collisions. (Note that the man
command was originally written by
 Bill Joy before he left Berkeley, and it
contains no AT&T code, so it is in UUNET's archive of freely-distributable
BSD code.)

LINUX note: /usr/include/paths.h on some linux systems shows _PATH_SENDMAIL
 to be /usr/bin/sendmail even though sendmail is installed in /usr/lib.
 you should check this out.

say:
 make all

su and say:

```
 make install

Note that if I can get you to "su and say" something just by asking, you have
a very serious security problem on your system and you should look into it.

Edit your /usr/lib/crontab file into little pieces -- see the CONVERSION file
for help on this.

Use the `crontab' command to install all the little pieces you just created.
Some examples (see below before trying any of these!)

 crontab -u uucp -r /usr/lib/uucp/crontab.src
 crontab -u news -r /usr/lib/news/crontab.src
 crontab -u root -r /usr/adm/crontab.src

Notes on above examples: (1) the .src files are copied at the time the
command is issued; changing the source files later will have
 no effect until
they are reinstalled with another `crontab -r' command.  (2) The crontab
command will affect the crontab of the person using the command unless `-u
USER' is given; `-u' only works for root.  When using most `su' commands
under most BSD's, `crontab' will still think of you as yourself even though
you may think of yourself as root -- so use `-u' liberally.  (3) the `-r'
option stands for `replace'; check the man page for crontab(1) for other
possibilities.

Kill your existing cron daemon -- do `ps aux' and look for /etc/cron.

Edit your /etc/rc or /etc/rc.local, looking for the line that starts up
/etc/cron.  Comment it out and add a line to start the new cron daemon
-- usually /usr/local/etc/cron, unless you changed it in the Makefile.

Start up this cron daemon yourself as root.  Just type /usr/local/etc/cron
(or whatever); no '&' is needed since the daemon forks itself and the
process you executed returns immediately.

ATT notes: for those people unfortunate enough to
 be stuck on a AT&T UNIX,
you will need the public-domain "libndir", found in the B News source and in
any comp.sources.unix archive.  You will also need to hack the code some.
```

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*/

Found in path(s):
* /cron-3-0pl1-orig-tar/cron-3.0pl1.orig/externs.h
* /cron-3-0pl1-orig-tar/cron-3.0pl1.orig/compat.h
* /cron-3-0pl1-orig-tar/cron-3.0pl1.orig/pathnames.h
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```
# */

Vixie Cron V3.0
December 27, 1993
[V2.2 was some time in 1992]
[V2.1 was May 29, 1991]
[V2.0 was July 5, 1990]
[V2.0-beta
 was December 9, 1988]
[V1.0 was May 6, 1987]
Paul Vixie

This is a version of 'cron' that is known to run on BSD 4.[23] systems.  It
is functionally based on the SysV cron, which means that each user can have
their own crontab file (all crontab files are stored in a read-protected
directory, usually /var/cron/tabs).  No direct support is provided for
'at'; you can continue to run 'atrun' from the crontab as you have been
doing.  If you don't have atrun (i.e., System V) you are in trouble.

A messages is logged each time a command is executed; also, the files
"allow" and "deny" in /var/cron can be used to control access to the
"crontab" command (which installs crontabs).  It hasn't been tested on
SysV, although some effort has gone into making the port an easy one.

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To use this: Sorry, folks, there is no cutesy 'Configure' script.  You'll
have to go edit a couple of files... So, here's the checklist:

 Read all the FEATURES, INSTALL, and CONVERSION files
 Edit config.h
 Edit Makefile
  (both of these files have instructions inside; note that
   some things in config.h are definable in Makefile and are
   therefore surrounded by #ifndef...#endif)
 'make'
 'su' and 'make install'
  (you may have to install the man pages by hand)
 kill your existing cron process
  (actually you can run your existing cron if you want, but why?)
 build new crontabs using /usr/lib/{crontab,crontab.local}
  (either put them all in "root"'s crontab, or divide it up
```

and rip out all the 'su' commands, collapse the lengthy
lists into
ranges with steps -- basically, this step is
as much work as you want to make it)
start up the new cron
(must be done as root)
watch it. test it with 'crontab -r' and watch the daemon track your
changes.
if you like it, change your /etc/{rc,rc.local} to use it instead of
the old one.

$Id: README,v 2.3 1993/12/28 08:34:43 vixie Exp $

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1.1928 kexec-tools 2.0.28-0ubuntu3

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the facility still operates, and performs whatever part of its
purpose remains meaningful.

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has a purpose that is entirely well-defined independent of
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If such an object file uses only numerical parameters, data structure
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1.1938 libmspack 0.11-1.1build1

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1.1939 perl-openssl-defaults 7build3

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1.1940 libusb 1.0.27-1

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1.1941 lsof 4.95.0-1build3

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```

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* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/tests/LTsock.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/tests/LTunix.c

* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/tests/LTlock.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/tests/LTnlink.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/tests/LTbigf.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/tests/LTnfs.c
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#!/usr/bin/perl
#
idrlogin.pl   -- sample Perl 5 script to identify the network source of a
network (remote) login via rlogind, sshd, or telnetd

IMPORTANT DEFINITIONS
======================
#
1. Set the interpreter line of this script to the local path of the
Perl 5 executable.

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#
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# Initialize variables.

$dev = $faddr = $tty = "";     # fd variables
$pidst = 0;       # process state
$cmd = $login = $pgrp = $pid = $ppid = "";   # process var.

# Set path to lsof.

if (($LSOF = &isexec("../lsof")) eq "") { # Try .. first
   if (($LSOF = &isexec("lsof")) eq "") { # Then try . and $PATH
 print "can't execute $LSOF\n"; exit 1
   }
}

# Open a pipe from lsof

if (! -x "$LSOF") { die "Can't execute $LSOF\n"; }
open (P, "$LSOF -R -FcDfLpPRn0|") || die "Can't pipe from $LSOF\n";

# Process the lsof output a line at a time

while (<P>) {
   chop;
   @F = split('\0', $_, 999);
   if ($F[0] =~ /^p/) {

# A process set begins with a PID field
 whose ID character is `p'.

 if ($pidst) { &save_proc }
 foreach $i (0 .. ($#F - 1)) {

     PROC: {
  if ($F[$i] =~ /^c(.*)/) { $cmd = $1; last PROC }
  if ($F[$i] =~ /^p(.*)/) { $pid = $1; last PROC }
  if ($F[$i] =~ /^R(.*)/) { $ppid = $1; last PROC }
  if ($F[$i] =~ /^L(.*)/) { $login = $1; last PROC }
     }
 }
```

```
 $pidst = 1;
 next;
   }

# A file descriptor set begins with a file descriptor field whose ID
# character is `f'.

   if ($F[0] =~ /^f/) {
 if ($faddr ne "") { next; }
 $proto = $name = "";
 foreach $i (0 .. ($#F - 1)) {

     FD: {
  if ($F[$i] =~ /^P(.*)/) { $proto = $1; last FD; }
  if ($F[$i] =~ /^n(.*)/) { $name = $1; last FD; }
  if ($F[$i] =~ /^D(.*)/) { $dev = $1; last FD; }
     }
 }
 if ($proto eq "TCP"
 &&  $faddr eq ""
 &&  (($cmd =~ /rlogind/) || ($cmd =~ /sshd/) || ($cmd =~ /telnetd/))) {
     if (($name =~ /[^:]*:[^-]*->([^:]*):.*/)) {
  $faddr = $1;
     }
 } elsif ($tty eq "" && ($cmd =~ /.*sh$/)) {
     if (($name =~ m#/dev.*ty.*#)) {
  ($tty) = ($name
 =~ m#/dev.*/(.*)#);
     } elsif (($name =~ m#/dev/(pts/\d+)#)) {
  $tty = $1;
     } elsif (($name =~ m#/dev.*pts.*#)) {
  $d = oct($dev);
  $tty = sprintf("pts/%d", $d & 0xffff);
     }
 }
 next;
   }
}

# Flush any stored file or process output.

if ($pidst) { &save_proc }

# List the shell processes that have rlogind/sshd/telnetd parents.

$hdr = 0;
foreach $pid (sort keys(%shcmd)) {
   $p = $pid;
```

```
  if (!defined($raddr{$pid})) {
      for ($ff = 0; !$ff && defined($Ppid{$p}); ) {
    $p = $Ppid{$p};
    if ($p < 2 || defined($raddr{$p})) { $ff = 1; }
      }
  } else { $ff = 2; }
  if ($ff && defined($raddr{$p})) {
 if (!$hdr) {
    printf "%-8.8s %-8.8s %6s %-10.10s %6s %-10.10s %s\n",
  "Login", "Shell", "PID", "Via", "PID", "TTY", "From";
    $hdr = 1;
 }
 printf "%-8.8s %-8.8s %6d %-10.10s %6s %-10.10s %s\n",
    $shlogin{$pid}, $shcmd{$pid}, $pid,
    ($ff == 2) ? "(direct)" : $rcmd{$p},
    ($ff == 2) ? "" : $p,
    ($shtty{$pid} eq "") ? "(unknown)" : $shtty{$pid},

   $raddr{$p};
  }
}
exit(0);



# save_proc -- save process information
#       Values are stored inelegantly in global variables.

sub save_proc {
  if (!defined($Ppid{$pid})) { $Ppid{$pid} = $ppid; }
  if ($faddr ne "") {
 $raddr{$pid} = $faddr;
 if (($cmd =~ /.*sh$/)) {
    $shcmd{$pid} = $cmd;
    $shlogin{$pid} = $login;
 } else { $rcmd{$pid} = $cmd; }
  }
  if ($tty ne "") {
 $shcmd{$pid} = $cmd;
 $shtty{$pid} = $tty;
 $shlogin{$pid} = $login;
  }

# Clear variables.

  $cmd = $dev = $faddr = $pgrp = $pid = $ppid = $tty = "";
  $pidst = 0;
}
```

```
## isexec($path) -- is $path executable
#
# $path   = absolute or relative path to file to test for executabiity.
#     Paths that begin with neither '/' nor '.' that arent't found as
#     simple references are also tested with the path prefixes of the
#     PATH environment variable.

sub
isexec {
   my ($path) = @_;
   my ($i, @P, $PATH);

   $path =~ s/^\s+|\s+$//g;
   if ($path eq "") { return(""); }
    if (($path =~ m#^[\/\.]#)) {
 if (-x $path) { return($path); }
 return("");
   }
   $PATH = $ENV{PATH};
   @P = split(":", $PATH);
   for ($i = 0; $i <= $#P; $i++) {
 if (-x "$P[$i]/$path") { return("$P[$i]/$path"); }
   }
   return("");
}
```

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* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/scripts/idrlogin.pl
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Making and Installing lsof 4

```
*********************************************************************
| The latest release of lsof is always available via anonymous ftp |
| from lsof.itap.purdue.edu.  Look in pub/tools/unix/lsof.         |
*********************************************************************
```

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Cross-configuring Lsof
Environment Variables Affecting the Configure Script

==========
Pre-built Lsof Binaries
==========

Avoid using pre-built lsof binaries if you can; build your own
instead.

I do not support lsof binaries built and packaged by third parties nor
lsof binaries built from anything but the latest lsof revision. (See
the Bug Reports section for more information on
the details of lsof
support.)

One important reasone for those support restrictions is that when lsof
is built its Configure script tunes lsof to the features available on
the building system, often embodied in supporting header files and
libraries. If the building system doesn't have support for a
particular feature, lsof won't be built to support the feature on any
system.

The Veritas VxFS file system is a good example of a feature that
requires build-time support.

UNIX dialect version differences -- Solaris 8 versus 9, AIX 4.3.3
vesus 5.2, etc. -- can also render a pre-built lsof binary useless
on a different version. So can kernel bit size.

There are so many potential pitfalls to using an lsof binary
improperly that I strongly recommend lsof be used only where it is
built.

==========
Making Lsof
==========

```
$ cd <lsof source directory>
$ ./Configure <your dialect's abbreviation>
$ make
```

(Consult the 00FAQ and 00XCONFIG files of the lsof distribution
for information about
using make command invocations and environment
variables to override lsof default Makefile strings.)

This lsof distribution can be used with many UNIX dialects. However,
it must be configured specifically for each dialect. Configuration
is done in three ways: 1) by changing definitions in the machine.h

header file of the UNIX dialect of interest; 2) by defining environment variable values prior to calling Configure (see the 00XCONFIG file, the Environment Variabls and Environment Variables Affecting the Configure Script sections of this file); and 3) by running the Configure shell script found in the top level of the distribution directory.

You may not need to change any machine.h definitions, but you might want to look at them anyway. Pay particular attention to the definitions that are discussed in the Security section of this file. Please read that section.

The Configure script calls three other scripts in the lsof distribution: AFSConfig; Inventory; and Customize. The AFSConfig script is called for selected dialects (AIX, HP-UX, NEXTSTEP, and Solaris) to locate AFS header files and determine the AFS version. See The AFSConfig Script section of this file for more information.

The Inventory script checks the completeness of the lsof distribution. Configure calls Inventory after it has accepted the dialect abbreviation, but before it configures the top-level directory for the dialect. See The Inventory Script section of this file for more information.

Configure calls the Customize script after it has configured the top-level lsof directory for the declared dialect. Customize helps you modify some of the important compile-time definitions of machine.h. See the The Customize Script section.

You should also think about where you will install lsof and its man page, and whom you will let execute lsof. Please read the Installing Lsof section of this file for information on installation considerations.

Once you have inspected the machine.h file for the dialect for which you want to build lsof, and made any changes you need, run the Configure script, supplying it with the abbreviation for the dialect. (See the following table.) Configure selects the appropriate options for the dialect and runs the Mksrc shell script in the dialect sub-directory to construct the appropriate source files in the top-level distribution directory.

Configure may also run the MkKernOpts script in the dialect sub-directory to propagate kernel build options to the dialect Makefile. This is done for only a few dialects -- e.g., DC/OSx, and Reliant UNIX.

Configure creates a dialect-specific Makefile. You may want to inspect or edit this Makefile to make it conform to local conventions. If you want the Makefile to install lsof and its man page, you will have to create an appropriate install rule.

Lsof may be configured using UNIX dialect abbreviations from the following table. Alternative abbreviations are indicated by a separating `|'. For example, for SCO OpenServer you can use either the ``osr'' or the ``sco'' abbreviation:

```
$ Configure osr
  or
$ Configure sco
```

```
Abbreviations  UNIX Dialect
-------------  ------------

  aix   IBM AIX 5.[23] and 5.3-ML1 using IBM's C Compiler
  aixgcc  IBM AIX 5.[12] and 5.3-ML1 using gcc
  darwin  Apple Darwin 7.x and 8.x for Power Macintosh systems
  decosf  DEC OSF/1, Digital UNIX, Tru64 UNIX 4.0 and 5.1
  digital_unix Digital UNIX, DEC OSF/1, Tru64 UNIX 4.0 and 5.1
  du   Digital UNIX, DEC OSF/1, Tru64 UNIX 4.0 and 5.1
  freebsd  FreeBSD 4.x, 4.1x, 5.x and [67].x
  hpux  HP-UX 11.00, 11.11 and 11.23, using HP's C
  Compiler, both /dev/kmem-based and PSTAT-based
  hpuxgcc  HP-UX 11.00, 11.11 and 11.23, using gcc, both
  /dev/kmem-based and PSTAT-based
  linux  Linux 2.1.72 and above for x86-based systems
  netbsd  NetBSD 1.[456], 2.x and 3.x
  next  NEXTSTEP 3.[13]
  nextstep  NEXTSTEP 3.[13]
  ns   NEXTSTEP 3.[13]
  nxt   NEXTSTEP 3.[13]
  openbsd  OpenBSD
 2.[89] and 3.[0-9]
  openstep  OPENSTEP 4.x
  os   OPENSTEP 4.x
  osr   SCO OpenServer Release 5.0.6, using the C compiler
  from the SCO developer's kit
  osrgcc  SCO OpenServer Release 5.0.6, using gcc
  osr6  SCO Openserver 6.0.0, using the SCO C compiler
  sco   SCO OpenServer Release 5.0.6, using the C compiler
  from the SCO developer's kit
  scogcc  SCO OpenServer Release 5.0.6, using gcc
  solaris  Solaris 2.x, 7, 8, 9 and 10 using gcc
```

solariscc Solaris 2.x, 7, 8, 9 and 10 using Sun's cc
tru64 Tru64 UNIX, DEC OSF/1, Digital UNIX 4.0 and 5.1
unixware SCO|Caldera UnixWare 7.1.4
uw SCO|Caldera UnixWare 7.1.4

If you have an earlier version of a dialect not named in the above list, lsof may still work on your system. I have no way of testing that myself. Try configuring for the named dialect -- e.g., if you're using Solaris 2.1, try configuring for Solaris 2.5.1.

After you have configured lsof for your UNIX dialect and have selected options
via the Customize script (See the The Customize Script section.) , use the make command to build lsof -- e.g.,

```
$ make
```

Other Configure Script Options

There are three other useful options to the Configure script besides the dialect abbreviation:

-clean may be specified to remove all traces of a dialect configuration, including the Makefile, symbolic links, and library files.

-h may be specified to obtain a list of
-help Configure options, including dialect abbreviations.

-n may be specified to stop the Configure script from calling the Customize and Inventory scripts.

Caution: -n also suppresses the AFSConfig step.

Environment Variables

Lsof configuration, building, and execution may be affected by environment variable settings. See the Definitions That Affect Compilation section in the 00PORTING file, the General Environment Variables section in the 00XCONFIG

file, the Dialect-Specific
Environment Variables section in the 00XCONFIG file, and the
Environment Variables Affecting the Configure Script section of
this file for more information.

Note in the General Environment Variables section of the 00XCONFIG
file that there are five environment variables that can be used to
pre-define values in lsof's -v output: LSOF_BLDCMT, LSOF_HOST,
LSOF_LOGNAME, LSOF_SYSINFO, and LSOF_USER.

Security
========

If the symbol HASSECURITY is defined, a security mode is enabled,
and lsof will allow only the root user to list all open files.
Non-root users may list only open files whose processes have the
same user ID as the real user ID of the lsof process (the one that
its user logged on with).

However, if HASNOSOCKSECURITY is also defined, anyone may list
anyone else's open socket files, provided their listing is enabled
with the "-i" option.

Lsof is distributed with the security mode disabled -- HASSECURITY
is not defined. (When HASSECURITY is not
defined, the definition
of HASNOSOCKSECURITY has no meaning.) You can enable the security
mode by defining HASSECURITY in the Makefile or in the machine.h
header file for the specific dialect you're using -- e.g.
dialects/aix/machine.h.

The Customize script, run by Configure when it has finished its
work, gives you the opportunity to define HASSECURITY and
HASNOSOCKSECURITY. (See the The Customize Script section.)

The lsof -h output indicates the state HASSECURITY and HASNOSOCKSECURITY
had when lsof was built, reporting:

"Only root can list all files;"
if HASSECURITY was defined and HASNOSOCKSECURITY wasn't
defined;

"Only root can list all files, but anyone can list socket files."
if HASSECURITY and HASNOSOCKSECURITY were both defined;

"Anyone can list all files;"
if HASSECURITY wasn't defined. (The definition of

HASNOSOCKSECURITY doesn't matter when HASSECURITY isn't defined.)

You should carefully consider the implications of using the default security mode.

When lsof is compiled in the absence of the HASSECURITY definition, anyone who can execute lsof may be able to see the presence of all open files. This may allow the lsof user to observe open files -- e.g., log files used to track intrusions -- whose presence you would rather not disclose.

As distributed, lsof writes a user-readable and user-writable device cache file in the home directory of the real user ID executing lsof. There are other options for constructing the device cache file path, and they each have security implications.

The 00DCACHE file in the lsof distribution discusses device cache file path construction in great detail. It tells how to disable the various device cache file path options, or how to disable the entire device cache file feature by removing the HASDCACHE definition from the dialect's machine.h file. There is also information on the device cache file feature in the 00FAQ file. (The 00DCACHE and 00FAQ files are part of the lsof distribution package.)

The Customize script, run by Configure after it has finished its work, gives you the opportunity to change the compile-time options related to the device cache file. (See The Customize Script section.)

Since lsof may need setgid or setuid-root permission (See the Setgid Lsof Dialects and Setuid-root Lsof Dialects sections.), its security should always be viewed with skepticism. Lest the setgid and setuid-root permissions allow lsof to read kernel name list or memory files, declared with the -k and -m options, that the lsof user can't normally access, lsof uses access(2) to establish its real user's authority to read such files when it can't surrender its power before opening them. This change was added at the suggestion of Tim Ramsey.

Lsof surrenders setgid permission on most dialects when it has gained access to the kernel's memory devices. There are exceptions to this rule, and some lsof implementations need to run setuid-root. (The Setgid Lsof Dialects and Setuid-root Lsof Dialects sections contains a list of lsof implementations and the permissions recommended in the distribution's Makefiles.)

The surrendering of setgid permission is controlled by the WILLDROPGID definition in the dialect machine.h header files.

In the end you must judge for yourself and your installation the risks that lsof presents and restrict access to it according to your circumstances and judgement.

Run-time Warnings

Lsof can issue warning messages when it runs -- e.g., about the state of the device cache file, about an inability to access an NFS file system, etc. Issuance of warnings are enabled by default in the lsof distribution.

Issuance or warnings may be disabled by default by defining WARNINGSTATE in the dialect's machine.h. The Customize script may also be used to change the default warning message issuance state. (See The Customize Script section.)

The ``-w" option description of the ``-h" option (help) output will indicate the default warning issuance state. Whatever the state may be, it can be reversed with ``-w".

Device Access Warnings

When lsof encounters a /dev (or /devices) directory, one of its sub-directories, or one of their files that it cannot access with opendir(3) or stat(2), it issues a warning message and continues. Lsof will be more likely to issue such a warning when it has been installed with setgid(<some group name>) permission; it won't have trouble if it has been installed with setuid(root) permission or is being run under the root login.

The lsof caller can inhibit or enable the warning with the -w option, depending on the issuance state of run-time warnings. (See the Run-time Warnings section.)

The warning messages do not appear when lsof obtains device information from a device cache file that it has built and believes to be current or when warning message issuance is disabled by default. (See the "Caches -- Name and Device" section for more information on the device

cache file.)

The lsof builder can inhibit the warning by disabling the definition of WARNDEVACCESS in the dialect's machine.h or disable all warnings by defining WARNINGSTATE. WARNDEVACCESS is defined by default for most dialects. However, some dialects have some device directory elements that are private -- e.g., HP-UX -- and it is more convenient for the lsof user if warning messages about them are inhibited.

Output from lsof's -h option indicates the status of WARNDEVACCESS. If it was defined when lsof was compiled, this message will appear:

```
/dev warnings = enabled
```

If WARNDEVACCESS was not defined when lsof was compiled, this message will appear instead:

```
/dev warnings = disabled
```

The Customize script, run by Configure after it has finished its work, gives you the opportunity to change the WARNDEVACCESS definition. (See The Customize Script section.)

NFS Blocks

Lsof is susceptible to NFS blocks when it tries to lstat() mounted file systems and when it does further processing -- lstat() and readlink() -- on its optional file and file system arguments.

Lsof tries to avoid being stopped completely by NFS blocks by doing the lstat() and readlink() functions in a child process, which returns the function response via a pipe. The lsof parent limits the wait for data to arrive in the pipe with a SIGALRM, and, if the alarm trips, terminates the child process with a SIGINT and a SIGKILL.

This is as reliable and portable a method for breaking NFS deadlocks as I have found, although it still fails under some combinations of NFS version, UNIX dialect, and NFS file system mount options. It generally succeeds when the "intr" or "soft" mount options are used; it generally fails when the "hard" mount option is used.

When lsof cannot kill the child process, a second timeout causes it to stop waiting for the killed child to complete. While the second timeout allows lsof to complete, it may leave behind a hung

child process. Unless warnings are inhibited
by default or with
the -w option, lsof reports the possible hung child.

NFS block handling was updated with suggestions made by Andreas Stolcke. Andreas suggested using the alternate device numbers that appear in the mount tables of some dialects when it is not possible to stat(2) the mount points.

The -b option was added to direct lsof to avoid the stat(2) and readlink(2) calls that might block on NFS mount points and always use the alternate device numbers. If warning message issuance is enabled and you don't want warning messages about what lsof is doing, use the -w option, too.

The -O option directs lsof to avoid doing the potentially blocking operations in child processes. Instead, when -O is specified, lsof does them directly. While this consumes far less system overhead, it can cause lsof to hang, so I advise you to use -O sparingly.

Caches -- Name and Device
==========

Robert Ehrlich suggested that lsof obtain path name components for open files
from the kernel's name cache. Where possible, lsof
dialect implementations do that. The -C option inhibits kernel name cache examination.

Since AFS apparently does not use the kernel's name cache, where lsof supports AFS it is unable to identify AFS files with path name components.

Robert also suggested that lsof cache the information it obtains via stat(2) for nodes in /dev (or /devices) to reduce subsequent running time. Lsof does that, too.

In the default distribution the device cache file is stored in .lsof_hostname, mode 0600, in the home directory of the login of the user ID that executes lsof. The suffix, hostname, is the first component of the host's name returned by gethostname(2). If lsof is executed by a user ID whose home directory is NFS-mounted from several hosts, the user ID's home directory may collect several device cache files, one for each host from which it was executed.

Lsof senses accidental or malicious damage to the device cache file with extensive integrity

checks, including the use of a 16 bit CRC.
It also tries to sense changes in /dev (or /devices) that indicate
the device cache file is out of date.

There are other options for forming the device cache file path.
Methods the lsof builder can use to control and employ them are
documented in the separate 00DCACHE file of the lsof distribution.

Raw Sockets

On many UNIX systems raw sockets use a separate network control
block structure. Display of files for applications using raw
sockets -- ping, using ICMP, for example -- need special support
for displaying their information. This support is so dialect-specific
and information to provide it so difficult to find that not all
dialect revisions of lsof handle raw sockets completely.

Other Compile-time Definitions

The machine.h and dlsof.h header files for each dialect contains
definitions that affect the compilation of lsof. Check the
Definitions That Affect Compilation section of the
00PORTING file
of the lsof distribution for their descriptions. (Also see The
Customize Script section.)

The AFSConfig Script

Lsof supports AFS on some combinations of UNIX dialect and AFS
version. See the AFS section of this document for a list of
supported combinations.

When configuring for dialects where AFS is supported, the Configure
script calls the AFSConfig script to determine the location of AFS
header files and the AFS version. Configure will not call AFSConfig,
even for the selected dialects, unless the file /usr/vice/etc/ThisCell
exists.

The AFS header file location is recorded in the AFSHeaders file;
version, AFSVersion. Once these values have been recorded, Configure
can be told to skip the calling of AFSConfig by specifying its
(Configure's) -n option.

The Inventory Script

The lsof distribution contains a script, called Inventory, that checks the distribution for completeness. It uses the file 00MANIFEST in the distribution as a reference point.

After the Configure script has accepted the dialect abbreviation, it normally calls the Inventory script to make sure the distribution is complete.

After Inventory has run, it creates the file ".ck00MAN" in the top-level directory to record for itself the fact that the inventory has been check. Should Inventory be called again, it senses this file and asks the caller if another check is in order, or if the check should be skipped.

The -n option may be supplied to Configure to make it bypass the calling of the Inventory script. (The option also causes Configure to avoid calling the Customize script.)

The lsof power user may want to define (touch) the file ".neverInv". Configure avoids calling the Inventory script when ".neverInv" exists.

The Customize Script

Normally when the Configure script has finished its work, it calls another shell script in the lsof distribution called Customize. (You can tell Configure to bypass Customize with its -n option.)

Customize leads you through the specification of these important compile-time definitions for the dialect's machine.h header file:

HASDCACHE device cache file control
HASENVDC device cache file environment variable name
HASPERSDC personal device cache file path format
HASPERSDCPATH name of environment variable that provides an additional component of the personal device cache file

path
HASSYSDC system-wide device cache file path
HASKERNIDCK the build-time to run-time kernel
identity check
HASSECURITY the security option
HASNOSOCKSECURITY the open socket listing option whe
HASSECURITY is defined
WARNDEVACCESS /dev (or /devices) warning message
control
WARNINGSTATE warning message issuance state

The Customize script accompanies its prompting for entry of new values for these definitions with brief descriptions of each of them. More information on these definitions may be found in this file or
in the 00DCACHE and 00FAQ files of the lsof distribution.

You don't need to run Customize after Configure. You can run it later or you can edit machine.h directly.

The -n option may be supplied to Configure to make it bypass the calling of the Customize script. (The option also causes Configure to avoid calling the Inventory script.)

The lsof power user may want to define (touch) the file ".neverCust". Configure avoids calling the Customize script when ".neverCust" exists.

Customize CAUTION: the Customize script works best when it is applied to a newly configured lsof source base -- i.e., the machine.h header file has not been previously modified by the Customize script. If you have previously configured lsof, and want to rerun the Customize script, I recommend you clean out the previous configuration and create a new one:

```
$ Configure -clean
$ Configure <dialect_abbreviation>
...
Customize in response to the Customize script prompts.
```

Cautions
========

Lsof is a tool that
is closely tied to the UNIX operating system
version. It uses header files that describe kernel structures and reads kernel structures that typically change from OS version to

OS version, and even within a version as vendor patches are applied.

DON'T TRY TO USE AN LSOF BINARY, COMPILED FOR ONE UNIX OS VERSION, ON ANOTHER. VENDOR PATCHES INFLUENCE THE VERSION IDENTITY.

On some UNIX dialects lsof versions may be even more restricted by architecture type.

The bottom line is use lsof where you built it. If you intend to use a common lsof binary on multiple systems, make sure all systems run exactly the same OS version and have exactly the same patches.

Warranty
========

Lsof is provided as-is without any warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The entire risk as to the quality and performance of lsof is with you. Should lsof prove defective, you assume the cost of all necessary servicing, repair, or correction.

License
=======

Lsof has no license. Its use and distribution are subject to these terms and conditions, found in each lsof source file. (The copyright year in or format of the notice may vary slightly.)

```
/*
 * Copyright 2002 Purdue Research Foundation, West Lafayette,
 * Indiana 47907.  All rights reserved.
 *
 * Written by Victor A. Abell
 *
 * This software is not subject to any license of the American
 * Telephone and Telegraph Company or the Regents of the
 * University of California.
 *
 * Permission is granted to anyone to use this software for
 * any purpose on any computer system, and to alter it and
 * redistribute it freely, subject to the following
 * restrictions:
 *
 * 1. Neither the authors nor Purdue University are responsible
```

```
 *    for any consequences of the use of this software.
 *
 * 2. The origin of this software must not be misrepresented,
 *    either by explicit claim or by omission.  Credit to the
 *    authors and Purdue University must appear in documentation
 *    and sources.
 *
 * 3. Altered versions must be plainly marked as such, and must
 *    not be misrepresented as being the original software.
 *
 * 4. This notice may not be removed or altered.
 */
```

Bug Reports
==========

Now that the obligatory disclaimer is out of the way, let me hasten to add that I accept lsof bug reports and try hard to respond to them. I will also consider and discuss requests for new features, ports to new dialects, or ports to new OS versions.

PLEASE DON'T SEND BUG REPORTS ABOUT LSOF TO THE UNIX DIALECT OR DIALECT OPTION VENDOR.

At worst such bug reports will confuse the vendor; at best, the vendor will forward the bug report to me.

PLEASE DON'T SEND BUG REPORTS ABOUT LSOF BINARIES BUILT OR DISTRIBUTED BY SOMEONE ELSE, BECAUSE I CAN'T SUPPORT THEM.

Before you send me a bug report,
please do these things:

* Make sure you try the latest lsof revision.

  + Download the latest revision from:

  ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof

  + Verify the signatures of what you have downloaded;

  + While connected to lsof.itap.purdue.edu, check for patches:

  ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/patches

  + If patches exist, install them in the latest revision
  you just downloaded. Then build the latest revision and

see if it fixes your bug.

* If you're having trouble compiling lsof with gcc, try the UNIX dialect vendor's compiler. I don't have access to gcc on all test systems, so my support for it is hit-and-miss, and so is my ability to respond to gcc compilation problem reports.

* Check the lsof frequently asked questions file, 00FAQ, to see if there's a question and answer relevant to your problem.

* Make sure you're running the lsof you think you are by checking the path to it with which(1). When in doubt, use an absolute path to lsof. Make sure that lsof binary has sufficient permissions to do what you ask, including internal permissions given it (e.g., restrictions on what files lsof may report for whom) during its build.

When you send a bug report, make sure you include output from your running of lsof's Configure script. If you were able to compile a running lsof, please also include:

* Output from which(1) that shows the absolute path to the lsof binary in question;

* Output from running lsof with its -h and -v options at lsof's absolute path;

* Output from "ls -l" directed to lsof's absolute path.

If you weren't able to compile a running lsof, please send me: the compiler error output; identification of the lsof revision you're using (contents of the lsof version.c file); identification of your system (full uname output or output from whatever other tool identifies the system); and compiler identification (e.g., gcc -v output).

Either set of output will help me understand how lsof was configured and what UNIX dialect and lsof revision is involved.

Please send all bug reports, requests, etc. to me via e-mail at <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

The 00FAQ File
==========

The lsof distribution contains an extensive frequently asked questions file on lsof features and problems. I recommend you consult it before sending me e-mail. Use your favorite editor or pager to search 00FAQ -- e.g., supplying as a search argument some fixed text from an lsof error message.

The lsof-l Mailing List

Information about lsof, including notices about the availability of new revisions, may be found in mailings of the lsof-l listserv. For more information about it, including instructions on how to subscribe, read the 00LSOF-L file of the lsof distribution.

Field Output Example Scripts

Example AWK and Perl 4 or 5 scripts for post-processing lsof field output are locate in the scripts sub-directory of the lsof distribution. The scripts sub-directory contains a 00README file with information about the scripts.

Field Output C Library

The lsof test suite (See "Testing Lsof."), checks basic lsof operations using field output. The test suite has its own library of C functions for common test program operations, including processing of field output. The library or selections of its functions could be adapted for use by C programs that want to process lsof field output. See the library in the file LTlib.c in the tests/ sub-directory

Testing Lsof

Lsof has an automated test suite in the tests/ sub-directory that can be used to test some basic lsof features -- once lsof has been configured and made. Tests are arranged in three groups: basic tests that should run on all dialects; standard tests that should run on all dialects; and optional tests that may not run on all

dialects or may need special resources to run. See 00TEST for more information.)

CAUTION!!! Before you attempt to use the test suite make sure that the lsof you want to test can access the necessary kernel resources -- e.g., /dev/mem, /dev/kmem, /proc, etc. Usually you want to test the lsof you just built, so this is an important check. (See 00TEST.)

To run the basic and standard tests, using the lsof in the parent directory of tests/, do this:

```
 $ cd tests
 $ make test
   or $ make std
   or $ make standard
```

The basic and standard tests may be run as silently as possible, using the lsof in the parent directory of tests/, with:

```
 $ cd tests
 $ make auto
```

This is the "automatic" test mode, designed for use by scripts that build lsof. The caller is expected to test the make exit code to determine if the tests succeeded. The caller should divert standard output
 and standard error to /dev/null to suppress make's error exit message.

The optional tests may be run, using the lsof in the parent directory of tests/, with:

```
 $ cd tests
 $ make opt
   or $ make optional
```

It's possible to excute individual tests, too. See the 00TEST file of this distribution for more informaiton on the tests, what they do, and how to run and possibly customize each test.

It's possible to run the tests, using an lsof other than the one in the parent directory of /tests, too. See 00TEST for information about using the LT_LSOF_PATH environment variable to do that.

==========
Dialect Notes

==========

AFS
===

Lsof recognizes AFS files on the following combinations of UNIX
dialect and AFS versions:

AIX 4.1.4 (AFS 3.4a)
Linux 1.2.13 (AFS 3.3)
NEXTSTEP 3.2 (AFS 3.3) (untested on recent lsof revisions)
Solaris 2.6 (AFS 3.4a)
Ultrix 4.2 RISC (AFS 3.2b) (no longer available)

Lsof has not been tested under other combinations -- e.g. HP-UX
10.10 and AFS 3.4a
-- and probably won't even compile there. Often
when a UNIX dialect version or AFS version changes, the new header
files come into conflict, causing compiler objections.

AIX
===

Specify the aix Configure abbreviation for AIX 4.1.[45], 4.2[.1],
4.3[.123], 5L, and 5.[123].

Specify aixgcc on AIX above 4.1 to use the gcc compiler. (Gcc can't be
used to compile lsof on AIX 4.1 and below because of kernel structure
alignment differences between it and xlc.) Gcc results sometimes
depend on the version of the gcc compiler that is used.

Compilation of lsof with gcc on AIX 4.3[.123], 5L, and 5.[123] has been
sparsely tested with varying degrees of success: it has been reported
to succeed on AIX 4.3.3 and 32 bit Power AIX 5.1; to fail on ia64 AIX
5.1 and 64 bit Power AIX 5.1; and to succeed on 32 and 64 bit Power AIX
5.2. Lsof compilation with gcc hasn't been tested on AIX 5.3.

At revision 4.61 and above lsof is configured and built to match the
bit size of the kernel of Power architecture
AIX 5.1 systems. Lsof
binaries built for 32 and 64 bit kernels are not interchangeable. See
00FAQ for more information.

The Configure script uses /usr/bin/oslevel to determine the AIX version
for AIX less than 5 and ``uname -rv'' for AIX 5 and higher. If
/usr/bin/oslevel isn't executable on AIX less than 5, the Configure

script issues a warning message and uses ``uname -rv'' to determine the AIX version.

When Configure must use ``uname -rv'' on AIX less than 5 to determine the AIX version, the result will lack a correct third component -- e.g., the `4' of ``4.1.4''. If your AIX less than 5 system lacks lacks an executable oslevel, I suggest you edit the Configure-produced Makefile and complete the _AIXV definition in the CFGF string.

By default lsof avoids using the kernel's readx() function, causing it to be unable to report information on some text and library file references. The ``-X'' option allows the lsof user to ask for the information readx() supplies.

Lsof avoids readx() to avoid the possibility of triggering a kernel problem, known as the Stale Segment ID kernel bug. Kevin Ruderman reported this bug to me. The bug shows up when the kernel's dir_search() function hangs, hanging the application process that called it so completely that the application process can neither be killed nor stopped. The hang is the consequence of another process (perhaps lsof) making legitimate use of the kernel's readx() function to access the kernel memory that dir_search() is examining. IBM has indicated they have no plans to fix the bug.

A fuller discussion of this bug may be found in the 00FAQ file of the lsof distribution. There you will find a description of the Stale Segment ID bug, the APAR on it, and a discussion of the sequence of events that exposes it.

I added the ``-X'' function so you can tell lsof to use readx(), but if you use ``-X'', you should be alert to its possibly serious side effects. Although readx() is normally disabled, its state is controlled with the HASXOPT, HASXOPT_ROOT, and HASXOPT_VALUE definitions in dialects/aix/machine.h, and you can change its default state by changing those definitions. You can also change HASXOPT_ROOT via the Customize script.

You can also compile lsof with readx() use permanently enabled or disabled -- see the comments about the definitions in the dialects/aix/machine.h header file. You may want to permanently disable lsof's use of readx() if you plan to make lsof publicly executable. You can also restrict -X to processes whose real UID is root by defining HASXOPT_ROOT.

I have never seen lsof cause the Stale Segment ID bug to occur and haven't had a report that it has, but I believe there is a possibility

it could.

AFS support for AIX was added with help help from Bob Cook and Jan Tax who provided test systems.

Henry Grebler and David J. Wilson helped with lsof for AIX 4.2.

Bill Pemberton provided an AIX 4.3 test system. Andrew Kephart and Tom Weaver provided AIX 4.3 technical assistance. Niklas Edmundsson did 4.3.1 testing. Doug Crabill provided an AIX 4.3.2 test system. Jeff W. Stewart provided an AIX 4.3.3 test system.

The SMT file type for AIX 4.1.[45], 4.2[.1], and 4.3[.12] is my fabrication. See the 00FAQ file more information on it.

Loc Le and Nasser Momtaheni of IBM provided test systems for AIX 5L and 5.1. Lsof for AIX 5L and 5.1 needs setuid-root permission to process the -X option on systems whose architecture type is ia64.

Dale Talcott of Purdue provided AIX 5.1 and 5.2 test systems. Dale and John Jackson of Purdue provided an AIX 5.3 test system.

Apple Darwin

The Apple Darwin port was provided by Allan Nathanson for version 1.2. Allan also arranged for access to a test system for maintenance and regression testing. Dale Talcott provided a test system, too.

Allan supplied patches for updates to 1.4, 5.x, 6.x, 7.x and 8.x.

BSDI BSD/OS

As of lsof revision 4.77 support for BSDI BSD/OS has been discontinued.
Lsof revision 4.76 with BSDI BSD/OS support may be found on lsof.itap.purdue.edu in pub/tools/unix/lsof/src.

DEC OSF/1, Digital UNIX, Tru64 UNIX

Robert Benites, Dean Brock, Angel Li, Dwight McKay, Berkley Shands, Ron Young and Steve Wilson have kindly provided test systems.

Jeffrey Mogul has provided technical assistance. Dave Morrison and Lawrence MacIntyre did Digital UNIX V3.2 testing.

Lsof supports the ADVFS/MSFS layered file system product. Lsof can locate all the open files of an ADVFS/MSFS file system when its path is specified, provided the file system is listed in /etc/fstab with an ``advfs'' type. (This /etc/fstab caveat applies only to Digital UNIX 2.0.) At Digital UNIX 4.0 and Tru64 UNIX, using code provided by David Brock, lsof 4.20 and above can locate ADVFS file paths.

Testing of lsof on DEC OSF/1 and Digital UNIX 4.0 ended with lsof revision 4.74. Hence, the lsof documentation has dropped the claim that it works there.
For a distribution of lsof 4.74 that was tested on DEC OSF/1 and Digital UNIX 4.0, check pub/tools/unix/lsof/OLD/src on the lsof ftp home, lsof.itap.purdue.edu.

Lsof revisions past 4.74 have only been tested on Tru64 UNIX 5.1.

FreeBSD

Bill Bormann of Purdue University provided access to several FreeBSD test systems. Ade Barkah, John Clear, Ralph Forsythe, Michael Haro, Kurt Jaeger, and William McVey have also provided FreeBSD test systems.

The FreeBSD distribution header files are augmented by header files in the dialects/freebsd/include directory.

Larry Rosenman maintains the lsof FreeBSD port package.

HP-UX

Lsof has two HP-UX bases: /dev/kmem for HP-UX 11.0 and earlier; and PSTAT for HP-UX 11.11 and later. The lsof Configure script will pick the appropriate base.

To use the CCITT x.25 socket support for HP-UX, you must have the x.25 header files in /etc/conf/x25

Pasi Kaara helped with the HP-UX port, especially with its CCITT x.25 socket support.

Richard
Allen provided HP-UX 10.x and 11.x test systems, as did
Mark Bixby, and Elias Halldor Agustsson. Marc Winkler helped test
the 10.20 port. Richard J. Rauenzahn provided a 64 bit HP-UX 11
test system and an HP-UX 11.11 development system.

AFS support for HP-UX was added thanks to help from Chaskiel Moses
Grundman, who provided a test system.

The /dev/kmem-based HP-UX 11.00 support is extremely fragile. It
depends on privately developed kernel structure definitions. (See
.../dialects/hpux/hpux11 for the header files making the definitions.)
Those header files and their definitions will not be updated by
HP-UX 11.00 patches, making it likely that any patch changing a
kernel structure critical to lsof will break lsof in some way.

It's possible to build a 64 bit lsof for 64 bit HP-UX 11.00 with
gcc, but you must have a gcc compiler capable of producing 64 bit
executables. See the 00FAQ file for more information.

The PSTAT-based lsof for HP-UX 11.11 and later is much more solid.
I
am indebted to the vision of HP for providing an lsof kernel API
through the PSTAT implementation. Specifically I appreciate the
help of HP staff members Carl Davidson, Louis Huemiller, Rich
Rauenzahn, and Sailu Yallapragada that made PSTAT-based HP-UX lsof
possible.

IPv6
====

Lsof has IPv6 support that has been tested for these UNIX dialects:
AIX 4.3.x; Apple Darwin 5.[12] and 6.0; the INRIA and KAME FreeBSD IPv6
implementations; PSTAT-based HP-UX; /proc-based Linux; the INRIA and
KAME NetBSD implementations; and Solaris 8 and 9. Lsof has IPv6
support that hasn't been tested for: OpenBSD (KAME); OpenUNIX 8; Tru64
Unix 5.[01]; and UnixWare 7.1.[34].

Please let me know if your UNIX dialect has IPv6 support and I'll
see if it can be supported by lsof.

Linux
=====

Tim Korb, Steve Logue, Joseph J. Nuspl Jr., and Jonathan Sergent
have provided Linux test systems.

Michael Shields helped add and test automatic handling of ELF/COFF form names in /System.map, Marty Leisner and Keith Parks have helped test many lsof revisions. Marty has provided valuable suggestions, Linux hints, and code, too.

The 00FAQ file gives some Linux tips, including information on coping with system map file problems.

To determine the state of the Linux 2.1.x C library lseek() function, the lsof Configure script runs a test program that must have permission to read /dev/kmem. The test determines if the lseek() function properly handles kernel offsets, which appear to be negative because their high order bit is set. If the lseek() test reveals a faulty lseek(), Configure activates the use of a private lseek() function for kernel offset positioning. See the Linux problems section of the 00FAQ file of the lsof distribution for more information.

NetBSD

Greg Earle and Paul Kranenburg have assisted with the NetBSD ports. Paul has provided test systems. Ray Phillips provided a NetBSA Alpha test system. Andrew Brown also provided a test system.

The NetBSD dialect version of lsof is compiled using the dialect sources it shares with OpenBSD in the n+obsd dialect sub-directory.

NEXTSTEP and OPENSTEP

Virtual memory header files that allow lsof to display text references were derived from the contents of /usr/include/vm of NEXTSTEP 2.0. NeXT did not ship the virtual memory header files with other NEXTSTEP or OPENSTEP versions.

You may use the RC_FLAGS environment variable to declare compiler options outside the Makefile. A common use of this variable is to define the architecture types to be included in a "fat" executable. See the comments in dialects/next/Makefile for an example.

OpenBSD

=======

David Mazieres has provided OpenBSD test systems. The OpenBSD dialect version of lsof is compiled using the dialect sources it shares with NetBSD in the n+obsd dialect sub-directory.

Kenneth Stailey has provided OpenBSD testing and advice.

John Dzubera (Zube) reports, "lsof 4.33 compiles and runs on OpenBSD 2.3 for the pmax architecture
(decstation 3100)."

I have not tested lsof on OpenBSD 3.8, but David Mazieres reports revision 4.76 worked on OpenBSD 3.8.

Pyramid DC/OSx and Reliant UNIX
==========

As of lsof revision 4.52 support for all Pyramid dialects has been discontinued. Lsof revision 4.51 with Pyramid support may be obtained upon request. Send the request to abe@purdue.edu.

These two UNIX dialects are very similar and share dialect-specific source files from the pyramid sub-directory.

The Reliant Unix Pyramid C compiler issues warning messages that I haven't found a convenient way to suppress. You can ignore warning messages about casts and conversions that lose bits. The message "warning: undefining __STDC__" is intentionally caused by the lsof MkKernOpts configuration script to suppress warning messages about cast and conversion problems in standard system header files, such as <stdio.h> and <string.h>.

Bruce Beare and Kevin Smith provided test systems.

Caldera OpenUNIX
==========

Larry
Rosenman provided an OpenUNIX 8 test system. Matthew Thurmaier provided technical assistance, along with these people from Caldera: Jack Craig, Robert Lipe, and Bela Lubkin.

Robert Lipe supplied changes to lsof for OpenUNIX 8.0.1. Those changes were also incorporated in UnixWare 7.1.3 when it became the release name for OpenUNIX 8.0.1.

Support for lsof on OpenUNIX ended at lsof revision 4.74. The last lsof revision, 4.74, tested on OpenUNIX, may be found at the lsof "home" ftp site, lsof.itap.purdue.edu, in pub/tools/unix/lsof/OLD/src.

SCO OpenServer

Dion Johnson, Bela Lubkin, and Nathan Peterson of SCO gave me copies of SCO OpenServer and the SCO OpenServer Development System 3.0 and provided technical advice for the lsof port.

Hugh Dickins, Bela Lubkin, Craig B. Olofson, and Nathan Peterson provided version 5.0 and gave technical advice for porting lsof to it. Bela provided the 5.0.4 changes. D. Chris Daniels provided a 5.0.4 test system, Lee Penn provided one for 5.0.5, and John Dubois for 5.0.6.

The <netdb.h> header file was accidentally omitted from some SCO OpenServer Development System releases. The Configure script will sense its absence and substitute an equivalent from the BSD distribution. The BSD <netdb.h> and the <sys/cdefs.h> header file it includes are located in the dialects/os/include sub-directory tree.

To compile lsof from its distribution sources you must have the TCP/IP and NSF headers in /usr/include. While those are optional OpenServer packages, I have access to no system that doesn't have them, so I'm unable to build lsof for such a configuration. However, it should be possible to modify the lsof Configure script and sources so lsof would compile and work without those optional packages.

If you have an OpenServer system configured without the TCP/IP and NFS packages, and want to tackle the job of building lsof for it, contact me via e-mail at <abe@purdue.edu>. I'll identify the Configure script, header file, and source file changes you will need to make. (Caution: this is not a simple task, or I would have already done it.)

The optional osrgcc and scogcc Configure abbreviations construct Makefiles for compiling lsof with gcc.

The UnixWare 7.1.4 sources are used for OpenServer Release 6.0.0. Hence there is a separate Configure abbreviation for it, "osr6".

Richard of SCO provided a test system and technical assistance.

SCO|Caldera UnixWare
==========

D. Chris Daniels, John Hughes, Ken Laing, Andrew Merril, Lee Penn, and
Matthew Thurmaier provided test systems. Bela Lubkin provided
technical assistance. Larry Rosenman provided 7.1.[34] test systems.

Solaris 2.x, 7, 8, 9 and 10
==========

SEE THE CAUTIONS SECTION OF THIS DOCUMENT.

The latest Solaris revision of lsof 4 might work under Solaris
2.[1-4] and 2.5[.1] and 7 but hasn't been tested there. I have no
test systems for those Solaris versions.

Lsof will compile with gcc and the Sun C compiler
under Solaris.
If you want to use the Sun compiler, use the solariscc Configure
abbreviation. If you use a gcc version less than 2.8 on Solaris,
make sure the gcc-specific includes have been updated for your
version of Solaris -- i.e., run the gcc fixincludes script.

Solaris 7, 8, 9 and 10 support for 64 bit kernels depends on a Sun
WorkShop or Forte C compiler version that supports the "-xarch=v9"
flag -- usually 5.0 or greater. Gcc versions 2.95 and above *may*
be configured and built for 64 bit support, but it takes some extra
work, the resulting compiler may be fragile, and the gcc developers
discourage it. I've built 64 bit capable gcc compilers for Solaris
7, 8 and 9 from gcc versions 2.95 through 3.0.1 and produced working
lsof executables with them. More information on 64 bit gcc for
Solaris may be found in the 00FAQ file.

Solaris 10 ZFS support is questionable, because Sun does not distribute
the ZFS kernel structure definition header files. The lsof Configure
script
and source code use some risky work-arounds. ZFS file system
support was made possible with help from Horst Scheuermann.

Dave Curry and Steve Kirsch provided resources for Solaris 2.x
ports. Casper Dik and Gerry Singleton consulted and provided
valuable assistance.

Henry Katz, Joseph Kowalski, Charles Stephens, Mike Sullivan, and

Mike Tracy provided technical assistance.

AFS support was added to Solaris lsof with help from Curt Freeland, Heidi Hornstein, Michael L. Lewis, Terry McCoy, Phillip Moore, and Sushila R. Subramanian.

Casper Dik provided valuable assistance for the Solaris 8 support.

Sun has graciously provided me access to BETA versions of Solaris 2.5, 2.6, 7, 8, and 9.

John Dzubera provided Solaris 7 and 8 test systems.

Mike Miscevic provided Solaris 10 test systems.

Ultrix

As of lsof revision 4.52 support for Ultrix is no longer available, because I no longer have an Ultrix test system.

Terry Friedrichsen, Dwight McKay, and Jeffrey Mogul helped me with this port.

DECnet support was added to Ultrix lsof with the help of John Beacom, who kindly provided a test system. The Configure script decides that DECnet support is available if /usr/lib/libdnet.a and /usr/include/netdnet/dn.h exist and are readable.

Veritas VxFS and VxVM

Lsof supports some versions of Veritas VxFS and VxVM on some UNIX dialects. Consult the lsof Configure script for the specific dialect, and consult the lsof dialect-specific source files for the UNIX dialect of interest. Veritas support will usually be found in a source file named dnode[1-9].c.

Since Veritas rarely has a version number that can be extracted with shell commands, lsof doesn't use it. Instead, when lsof supports Veritas, the Configure script will form compile-time definitions starting with HASVXFS. Check the lsof 00PORTING documentation file for more information.

Lsof Veritas support requires that the supporting Veritas header

files be installed -- e.g., in /usr/include/sys/fs.
(The location
will depend in the dialect's header file conventions.)

Some information on lsof support for Veritas extensions may be found in the lsof 00DIST file. (The ChangeLog file points to 00DIST.)

Chris Kordish and Andy Thomas have provided Solaris VxFS test systems.

==========
User-contributed Dialect Support
==========

There are some user-contributed dialect versions of lsof; more information on them can be found at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/contrib

Check the 00INDEX file there for details.

==========
Dialects No Longer Supported
==========

Because I don't have access to test systems, these UNIX dialects are no longer supported by lsof:

CDC EP/IX
/dev/kmem-based Linux
MIPS RISC/os
Motorola V/88
Pyramid DC/OSx
Pyramid Reliant UNIX
Sequent DYNIX
SGI IRIX
SunOS 4.x
Ultrix
UnixWare below 7.0

Remnants of the support lsof once provided for these
dialects may
be found in:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/OLD/dialects

==========
Installing Lsof
==========

The distributed Makefiles do not have actions that will install lsof. I've come to the conclusion there is no standard for installing lsof or its man page, so I no longer distribute make rules for installing them. You should adjust the Makefile for your local preferences.

The Makefile does have an install rule that will cause lsof to compile by virtue of its dependency clause. Some Makefiles also have a dependency that causes the production of a man page that is ready to install. However, the actions of the install rule will not cause the lsof executable or its man page to be installed in any UNIX system-wide directory.

Instead, after the compilation and optional man page production are completed, the install rule will produce a brief description of what actions you might add to the install rule. The description will suggest the possible
modes, ownerships, permissions, and
destinations your install rule might employ to install the lsof executable and man page.

As you form your install rule, keep in mind that lsof usually needs some type of special permission to do its job. That may be permission to read memory devices such as /dev/kmem, /dev/mem, or /dev/swap, or it may be authorization to read entries in the /proc file system.

Memory device access can usually be provided by setting the modes of the lsof executable so that it's effective group identifier when it runs is the same as the group that has permission to read the memory devices -- i.e., it is setgid-group. The privileged group is usually kmem, sys, or system.

Don't overlook using ACLs -- e.g., on AIX or Solaris 8 -- to give lsof permission to access memory devices. ACLs, coupled to a separate group like kmem, can be safer than giving lsof setgid authorization to a commonly used system group.

When lsof needs to read /proc file system entries, it must be installed
with modes that make its effective user identifier root
when it runs -- i.e., it must be setuid-root. If lsof must be installed setuid-root (only the AIX 5L, PSTAT-based HPUX, and

/proc-based Linux, ports need such power.), then access to memory devices is automatic (or not needed in the case of /proc-based Linux).

Your choice of permissions for lsof may also be affected by your desire to allow anyone to use it or your need to restrict its usage to specific individuals. You will have to be guided by local policy and convention in this case.

The next two sections, Setgid Lsof Dialect Versions and Setuid-root Lsof Dialect Versions, list recommended install permissions.

The system directory where you install the lsof executable is also open to choice. A traditional place for a tool like lsof is /usr/local/etc, but recent changes in directory structure organization suggest that somewhere in /opt may be more suitable.

Bear one other factor in mind when choosing a location for the lsof executable -- it usually is a shared executable, requiring access to shared libraries. Thus, locations like /sbin or /usr/sbin are probably unsuitable.

Once you've chosen a location for the executable you may find that the location for the man page follows -- e.g., if the executable goes in /usr/local/etc, then the man page goes in /usr/local/man. If the executable location doesn't imply a location for the man page, you'll have to let local custom guide you.

Setuid-root Lsof Dialect Versions

These dialect versions should be installed with setuid-root permission -- i.e., the lsof binary should be owned by root and its setuid execution bit (04000) should be set.

AIX 5L and above for full use of the -X option
Apple Darwin 8.x for Power Macintosh systems
PSTAT-based HP-UX 11.11 and 11.23
/proc-based Linux (generally 2.1.72 and above)

Setgid Lsof Dialect Versions

These dialect versions should be installed

with setgid permission,
owned by the group that can read kernel memory devices such as
/dev/drum, /dev/kmem, /dev/ksyms, /dev/mem, /dev/swap. ACLs may
be another mechanism (e.g., under AIX or Solaris 8) you can use to
grant read permission to the kernel memory devices.

AIX 4.1.[45], 4.2[.1], and 4.3[.123]
Apple Darwin 7.x for Power Macintosh systems
DEC OSF/1, Digital UNIX, Tru64 UNIX 2.0, 3.2, 4.0, and 5.[01]
FreeBSD 2.1.6, 2.2[.x], 3.x, 4.x, 5.x, [6789].x and 1[012].x
NetBSD 1.[456], 2.x and 3.x
NEXTSTEP 3.[13]
OpenBSD 2.[89] and 3.[0-9]
OPENSTEP 4.x
Caldera OpenUNIX 8
SCO OpenServer 5.0.[46]
SCO UnixWare 7.0 and 7.1.[0134]
Solaris 2.6, 8, 9 and 10
Ultrix 4.2 (no longer available)

==========
Porting lsof 4 to a New UNIX Dialect
==========

If you're brave enough to consider this, look at the 00PORTING
file. Please contact me before you start. I might be able to help
you or even do the port myself.

Don't overlook
the contrib/ directory in pub/tools/unix/lsof on my
ftp server, lsof.itap.purdue.edu. It contains user-contributed ports
of lsof to dialects I don't distribute, because I can't test new
revisions of lsof on them.

==========
Quick Start to Using lsof
==========

For information on how to get started quickly using lsof, consult
the 00QUICKSTART file of the lsof distribution. It cuts past the
formal density of the lsof man page to provide quick examples of
using lsof to solve common open file display problems.

==========
Cross-configuring Lsof
==========

Using environment variables it is possible to Configure (and possibly
build) lsof for one UNIX dialect on a different one -- e.g., you
are running Configure on a Linux 2.3 system and you want to Configure
and build lsof for Linux 2.4.

See the 00XCONFIG file of the lsof distribution for a discussion
of how to do this.

==========
Environment
 Variables Affecting the Configure Script
==========

Configure script actions can be modified by introducing values to
the script via environment variables. In many cases the environment
variable values take the place of test operations the Configure
script makes.

For more information on environment variables that can affect
Configure, consult the 00XCONFIG file of the lsof distribution.
See the General Environment Variables sections for descriptions of
ones that affect all dialects. Consult the Dialect-Specific
Environment Variables section for ones that might affect the dialect
you are trying to configure.

Vic Abell <abe@purdue.edu>
February 14, 2018

Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/00README
No license file was found, but licenses were detected in source scan.

```
/*
* Copyright 1994 Purdue Research Foundation, West Lafayette, Indiana
* 47907.  All rights reserved.
*
* Written by Victor A. Abell
*
* This software is not subject to any license of the American Telephone
* and Telegraph Company or the Regents of the University of California.
*
* Permission is granted to anyone to use this software for any purpose on
* any computer system, and to alter it and redistribute it freely, subject
* to the following restrictions:
*
```

```
* 1. Neither the authors nor Purdue University are responsible for any
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*
* 2. The origin of this software must not be misrepresented, either by
*    explicit claim or by omission.  Credit to the authors and Purdue
*    University must appear in documentation and sources.
*
* 3. Altered versions must be plainly marked as such, and must not be
*    misrepresented as being the original software.
 *
* 4. This notice may not be removed or altered.
*/
/*
* Copyright (c) 1983, 1988, 1993
*      The Regents of the University of California.  All rights reserved.
*
* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:
* 1. Redistributions of source code must retain the above copyright
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* 2. Redistributions in binary form must reproduce the above copyright
*    notice, this list of conditions and the following disclaimer in the
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* 3. All advertising materials mentioning features or use of this software
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*      This product includes software developed by the University of
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* 4. Neither the name of the University nor the names of its contributors
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* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
* SUCH DAMAGE.
*/
```

Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/print.c

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright 2000 Purdue Research Foundation, West Lafayette, Indiana
* 47907.  All rights reserved.
*
* Written by Victor A. Abell
*
* This software is not subject to any license of the American Telephone
* and Telegraph Company or the Regents of the University of California.
*
* This software has been adapted from snprintf.c in sendmail 8.9.3.  It
* is subject to the sendmail copyright statements listed below, and the
* sendmail licensing terms stated in the sendmail LICENSE file comment
* section of this file.
*
* Permission is granted to anyone to use this software for any purpose on
* any computer system, and to alter it and redistribute it freely, subject
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*
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* 2. The origin of this software must not be misrepresented, either by
*    explicit
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*    University must appear in documentation and sources.
*
* 3. Altered versions must be plainly marked as such, and must not be
*    misrepresented as being the original software.
*
* 4. This notice may not be removed or altered.
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```
#!/usr/bin/perl
#
# list_fields.pl   -- sample Perl script to list lsof full field output
#        (i.e., -F output without -0)
#
# This script has been tested under perl versions 4.036 and 5.001e.
#
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# Initialize variables.

$fhdr = 0;       # fd hdr. flag
$fdst = 0;       # fd state
$access = $devch = $devn = $fd = $inode = $lock = $name = ""; # | file descr.
$offset = $proto = $size = $state = $stream = $type = ""; # | variables
$pidst = 0;       # process state
$cmd = $login = $pgrp = $pid = $ppid = $uid = "";  # process var.

# Process the ``lsof -F'' output a line at a time, gathering
# the variables for a process together before printing them;
# then gathering the variables for each file descriptor
# together before printing them.

while (<>) {
   chop;
```

```
  if (/^p(.*)/) {

# A process set begins with a PID field whose ID character is `p'.

 $tpid = $1;
 if ($pidst) { &list_proc }
 $pidst = 1;
 $pid = $tpid;
 if ($fdst) { &list_fd; $fdst = 0; }
 next;
   }

# Save process-related values.

  if (/^g(.*)/) { $pgrp = $1; next; }
  if (/^c(.*)/) { $cmd = $1; next; }
  if (/^u(.*)/) { $uid = $1; next; }
  if (/^L(.*)/) { $login = $1; next; }
  if (/^R(.*)/) { $ppid = $1; next; }

# A file descriptor set begins with a file descriptor field whose ID
# character is `f'.

  if (/^f(.*)/) {
 $tfd = $1;
 if ($pidst) { &list_proc }
 if ($fdst) { &list_fd }
 $fd = $tfd;
 $fdst = 1;
 next;
  }

# Save file set information.

  if (/^a(.*)/) { $access = $1; next; }
  if (/^C(.*)/) { next; }
  if (/^d(.*)/) { $devch = $1; next; }
  if (/^D(.*)/) { $devn = $1; next; }
  if (/^F(.*)/) { next; }
  if (/^G(.*)/) { next; }
  if (/^i(.*)/) { $inode = $1; next; }
  if (/^k(.*)/) { next; }
  if (/^l(.*)/) { $lock = $1; next; }
  if (/^N(.*)/) { next; }
  if (/^o(.*)/) { $offset = $1; next; }
  if (/^P(.*)/) { $proto = $1; next; }
  if (/^s(.*)/) { $size = $1; next; }
  if (/^S(.*)/) { $stream = $1; next; }
```

```
  if (/^t(.*)/)
 { $type = $1; next; }
  if (/^T(.*)/) {
 if ($state eq "") { $state = "(" . $1; }
 else { $state = $state . " " . $1; }
 next;
  }
  if (/^n(.*)/) { $name = $1; next; }
  print "ERROR: unrecognized: \"$_\"\n";
}

# Flush any stored file or process output.

if ($fdst) { &list_fd }
if ($pidst) { &list_proc }
exit(0);


## list_fd -- list file descriptor information
#       Values are stored inelegantly in global variables.

sub list_fd {
  if ( ! $fhdr) {

  # Print header once.

 print "     FD   TYPE     DEVICE   SIZE/OFF     INODE  NAME\n";
 $fhdr = 1;
  }
  printf "    %4s%1.1s%1.1s %4.4s", $fd, $access, $lock, $type;
  $tmp = $devn; if ($devch ne "") { $tmp = $devch }
  printf "  %10.10s", $tmp;
  $tmp = $size; if ($offset ne "") { $tmp = $offset }
  printf " %10.10s", $tmp;
  $tmp = $inode; if ($proto ne "") { $tmp = $proto }
  printf " %10.10s", $tmp;
  $tmp = $stream; if ($name ne "") { $tmp = $name }
  print "  ", $tmp;
  if ($state
 ne "") { printf " %s)\n", $state; } else { print "\n"; }

# Clear variables.

  $access = $devch = $devn = $fd = $inode = $lock = $name = "";
  $offset = $proto = $size = $state = $stream = $type = "";
}
```

```
# list_proc -- list process information
#       Values are stored inelegantly in global variables.

sub list_proc {
   print "COMMAND       PID    PGRP    PPID  USER\n";
   $tmp = $uid; if ($login ne "") {$tmp = $login }
   printf "%-9.9s  %6d  %6d  %6d  %s\n", $cmd, $pid, $pgrp, $ppid, $tmp;

# Clear variables.

   $cmd = $login = $pgrp = $pid = $uid = "";
   $fhdr = $pidst = 0;
}
```

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Frequently Asked Questions about lsof

```
**************************************************************************
| The latest release of lsof is always available via anonymous ftp   |
| from lsof.itap.purdue.edu.  Look in pub/lsof.README for its        |
| location.                                                          |
**************************************************************************
```

This file contains frequently asked questions about lsof and answers
to them.

Vic Abell <abe@purdue.edu>
October 13, 2014

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18.3.1 Why doesn't lsof report node numbers for all AFS volume files, or how do I reveal dynamic module addresses to lsof?

1.0 General Concepts

1.1 Lsof -- what is it?

Lsof is a UNIX-specific tool. Its name stands for LiSt Open Files, and it does just that. It lists information about files that are open by the processes running on a UNIX system.

See the lsof man
page, the 00DIST file, the 00QUICKSTART
file, and the 00README file of the lsof distribution for
more information.

1.2 Where do I get lsof?

Lsof is available via anonymous ftp from lsof.itap.purdue.edu.
Look in the pub/tools/unix/lsof sub-directory.

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof

Bzip2'd, compressed and gzip'd tar files with GPG certificates
are available.

1.2.1 Are there mirror sites?

On March 21, 2013 these sites appeared to have the lastest
lsof revision:

ftp://ftp.fu-berlin.de/pub/unix/tools/lsof
ftp://sunsite.ualberta.ca/pub/Mirror/lsof
http://www.mirrorservice.org/sites/lsof.itap.purdue.edu/pub/tools/unix/lsof/
ftp://ftp.mirrorservice.org/sites/lsof.itap.purdue.edu/pub/tools/unix/lsof/
rsync://rsync.mirrorservice.org/lsof.itap.purdue.edu/pub/tools/unix/lsof/

1.2.2 Are lsof executables available?

Some lsof executables are available in the subdirectory
tree pub/tools/unix/lsof/binaries These are neither guaranteed
to be current nor cover
every dialect and machine architecture.

I don't recommend you use pre-compiled lsof binaries; I
recommend you obtain the sources and build your own binary.
Even if you're a Sun user without a Sun C compiler, you
can use gcc to compile lsof.

If you must use a binary file, please be conscious of the
security and configuration implications in using an executable
of unknown or different origin. The lsof binaries are
accompanied by GPG certificates. Please use them!

Three additional cautions apply to executables:

1. Don't try to use an lsof executable, compiled for one
   version of a UNIX dialect, on another. Patches can
   make the dialect version different.

2. If you want to use an lsof binary on multiple systems, they must be running the same dialect OS version and have the same patches and feature support.

1.2.3 How do I check the validity of an lsof distribution?

There are two ways to check the validity of an lsof distribution:

1. Follow the instructions in the CHECKSUMS_<revision> file found with the lsof distribution.

   Checking with GPG is the best method.

2. Follow the instructions in the "Security" section of the README.lsof_<revision> file found inside the lsof distribution.

   Again, checking with GPG is the best method.

1.2.4 Why can't I get the sum(1) result reported in README.lsof_<revision>?

The "Security" section of the README.lsof_<revision> file found inside the lsof distribution gives md5, sum, and GPG certificate information.

The simplest, the sum(1) signature, seems to be the trickiest. That's because there are different sum(1) methods, BSD systems usually have cksum(1) instead of sum(1), and different systems compute the block size value differently.

First, the lsof sum results are computed with the old, "alternate" algorithm. On newer systems, you can use sum's "-r" option to get that computation result.

Second, on BSD systems you usually must use cksum(1) instead of sum(1), because they have no sum(1). To tell cksum(1) to use the old, "alternate" algorithm, use its "-o1" option.

Third, the second value that sum reports, the block count, may be computed differently on different systems -- usually block size is considered to be 512 or 1,024. The lsof block counts were computed on a system with a sum(1) option that considers block size to be 512. The BSD system cksum(1) -o1 option

considers block size to be 1,024. If your sum(1) or cksum(1) doesn't report a block count that matches the sum(1) signature given in README.lsof_<revision>, check its man page to see what block size it uses, then adjust its reported block count appropriately.

1.2.5 Why won't gpg accept the lsof-signing PGP public key?

An older PGP key that once signed lsof distributions is included in lsof revisions prior to 4.70. The PGP key is indeed my key, but is incompatible with GPG. It was created about ten years ago and is still acceptable to PGP versions 2.6.2 through 6.5.2.

Lsof revisions 4.70 and above are signed with a copy of my PGP key that has been made acceptable for use with GPG by importing it under GPG's "--allow-non-selfsigned-uid" option.

You can find my GPG compatible key in lsof revisions 4.70 and above and at:

ftp://lsof.itap.purdue.edu/pub/Victor_A_Abell.gpg

If you have an older lsof revision with my PGP key, there are two possible ways to use it:

* Use it with a PGP version from 2.6.2 through 6.5.2.

* Use GPG's "--allow-non-selfsigned-uid" option when you import my PGP key into your GPG key ring.

```
$ gpg --allow-non-selfsigned-uid --import Victor_A_Abell.pgp
```

1.3 Where can I get more lsof documentation?

A significant set of documentation may be found in the lsof distribution (See "Where can I get lsof?). There is a manual page, copious documentation in files whose names begin with 00, and a copy of this FAQ in the file 00FAQ (perhaps slightly less recent than this file if you're reading it via a web browser.)

Two URLs provide some documentation that appears in the lsof distribution:

FAQ: ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/FAQ

man page: ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/lsof_man

1.4 How do I report an lsof bug?

If you believe you have discovered a bug in lsof, you can report it via e-mail to <abe@purdue.edu>. Do NOT report lsof bugs to the UNIX dialect vendor. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

Before you send me a bug report, please read the "Bug Reports" section of the 00README file of the lsof distribution. It lists the steps you should take before and when reporting a suspected bug.

1.5 Where can I get the lsof FAQ?

This lsof FAQ is available in the file 00FAQ in the lsof distribution and at the URL:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/FAQ

1.5.1 How timely is the on-line FAQ?

The on-line FAQ is sometimes too timely. :-)

I update it as soon as new information is available. That may include information about support that won't appear in the lsof source distribution until the next revision. If you encounter something like that, please send me e-mail at <abe@purdue.edu>. I may be able to point you at a pre-release distribution that contains the support of interest. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

1.6 Is there a test suite?

Yes, as of lsof revision 4.63 there's an automated lsof test suite in the tests/ sub-directory of the lsof top-level directory.

More information on using the test suite, what it does, how to use it and how to configure it may be found in the 00TEST file of the lsof distribution. That file also explains where the test suite has been tested.

Frequently asked questions about the test suite will be

asked and answered here in the FAQ. (See "Test Suite Problems.")

After lsof has been configured
with the Configure script,
lsof can be made and tested with:

```
$ make
$ cd tests
$ make
```

Under normal conditions -- i.e., unless the lsof tree has been cleaned or purged severely -- all tests or individual tests may be run by:

```
$ cd test
$ make
```

or

$ <run a single test> (See 00TEST.)

1.7 Is lsof vulnerable to the standard I/O descriptor attack?

Lsof revisions 4.63 and above are not vulnerable.

Lsof revisions 4.62 and below are vulnerable, but no damage scenarios have so far been demonstrated.

The standard I/O descriptor attack is a local programmed assault on setuid and setgid programs that tricks them into opening a sensitive file with write access on a standard descriptor, usually stderr (2), and writing error messages to stderr. If the attacker can control the content of the error message, the attacker may gain elevated privileges.

The attack was first described in Pine Internet Advisory PINE-CERT-20020401, available at:

http://www.pine.nl/advisories/pine-cert-20020401.txt

If you are using an lsof revision below 4.63, you should remove any setuid or setgid permissions you might have given its executable. Then you should upgrade to lsof revision 4.63.

1.8 Can I alter lsof's make(1) behavior?

Yes. There are at least two ways to do that.

You can put replacements for lsof Makefile strings in your environment. If you specify the -e make option, make will give environment variable values precedence over strings from the Makefile. For example, to change the compiler string CC from the environment, you might do this with the Bourne shell:

```
$ CC=foobar; export CC
$ make -e
```

You can also replace lsof Makefile strings in the make command invocation. Here's the previous example done that way:

```
$ make CC=foobar
```

Changing the CFGF, CFGL, and DEBUG strings used in lsof Makefiles, either from the environment or from the make invocation, can significantly alter lsof make(1) behavior.
I
commonly use DEBUG to change the -O option to -g so I can build an lsof executable for debugging -- e.g.,

```
$ make DEBUG=-g
```

(Look for DEBUG in this FAQ for other examples of its use.)

Consult the Makefiles to see what CFGL, CFGL, and other lsof Makefile strings contain, and to see what influence their alteration might have on lsof make(1) behavior.

1.9 Is there an lsof license?

No.

The only restriction on the use or redistribution of lsof is contained in this copyright statement, found in every lsof source file. (The copyright year in or format of the notice may vary slightly.)

```
/*
 * Copyright 2002 Purdue Research Foundation, West Lafayette,
 * Indiana 47907.  All rights reserved.
 *
 * Written by Victor A. Abell
 *
 * This software is not subject to any license of the American
```

```
 * Telephone and Telegraph Company or the Regents of the
 * University of California.
 *
 * Permission is granted to anyone to use this software for
 * any purpose on any
computer system, and to alter it and
 * redistribute it freely, subject to the following
 * restrictions:
 *
 * 1. Neither the authors nor Purdue University are responsible
 *    for any consequences of the use of this software.
 *
 * 2. The origin of this software must not be misrepresented,
 *    either by explicit claim or by omission.  Credit to the
 *    authors and Purdue University must appear in documentation
 *    and sources.
 *
 * 3. Altered versions must be plainly marked as such, and must
 *    not be misrepresented as being the original software.
 *
 * 4. This notice may not be removed or altered.
 */
```

1.10 Language locale support

1.10.1 Does lsof support language locales? How do I use the support?

Most UNIX dialect versions of lsof support 8 bit language
locale characters -- e.g., the ability to print 8 bit
characters that have accents and other marks over them.

See the answer to the "Does lsof support wide characters in
language locales?" question
for information on when lsof's
language locale support covers characters wider than 8 bits.

To see if lsof supports language locales for your dialect, look
in the dialect's machine.h header file for the HASSETLOCALE
definition. If it is present and not disabled, then lsof has
language locale support for the dialect.

To enable lsof's language locale support, you must specify in a
locale environment variable (e.g., LANG) a language locale
known to your system that supports the printing of marked
characters -- e.g, en_US. (On some dialects locale(1) may be
used to list the known language locales.)

Note that LANG=C and LANG=POSIX are NOT language locales that

support the printing of marked characters.

If the language locale doesn't support the printing of marked characters, lsof's OUTPUT of them follows the rules for non-printable characters described in the OUTPUT section of lsof(8).

Consult your dialect's setlocale(3) man page for the names of environment variables
other than LANG -- e.g., LC_ALL,
LC_TYPE, etc. -- which may be used to define language locales.

1.10.2 Does lsof support wide characters in language locales?

When lsof's language locale support is enabled with the HASSETLOCALE definition, for selected dialects lsof will also print wide characters (e.g., from UTF-8) when iswprint(3) reports them to be printable.

Wide character support is available when HASWIDECHAR is defined in a dialect's machine.h header file. As of this writing on July 22, 2004, the following dialect versions have wide character support:

AIX >= 4.3.2
Apple Darwin >= 7.3.0
FreeBSD >= 5.2
HP-UX >= 11.00
/proc-based Linux
NetBSD >= 1.6
SCO OpenServer >= 5.0.6
Solaris >= 2.6
Tru64 UNIX 5.1

1.11 Are any files in the lsof distribution copyrighted?

Yes. Most files carry the copyright of the Purdue Research Foundation and may be redistributed under the terms that accompany the copyright notice. Those
terms may also be found
in the answer to the question, "Is there an lsof license?")

A few files carry other copyright notices. Some are BSD notices and they explain the terms under which they are included in the lsof distribution.

Those that carry vendor copyright notices have been reproduced in their original or modified forms with permission from the

copyright owners. That permission is indicated in the README files that accompany the files.

1.12 Are there other lsof-related resources?

There are other resources available, connected to lsof. Among them are FreeBSD and Linux packages whose products use lsof and two particularly interesting resources.

The two interesting resources are a Gnome Tool Kit (GTK) GUI for lsof and a Perl wrapper module.

The GTK GUI is called Glsof and was developed by Gnele. It can be found at:

http://www.sourceforge.net

The Perl wrapper module by Marc Beyer can be found at:

http://search.cpan.org/dist/Unix-Lsof/

1.13 What does the "WARNING: unsupported dialect or version" mean?

The lsof configure script issues that message for UNIX dialects or their versions where I have been unable to test the current revision of lsof. The message doesn't mean that lsof won't work, just that I have no direct evidence that it will.

If the COnfigure script succeeds, except for the warning, try compiling) lsof. If that succeeds, try the lsof test suite.

2.0 Lsof Ports

2.1 What ports exist?

The pub/lsof.README file carries the latest port information:

AIX 5.[23] and 5.3
FreeBSD 4.9 and 6.4 for x86-based systems
FreeBSD 8.[234], 9.0, 10.0 and 11.0 for AMD64-based systems
Linux 2.1.72 and above for x86-based systems
Solaris 9, 10 and 11

In the above list the only UNIX dialects present are ones for which I test the current lsof revision. Lsof may still support unlisted dialect versions -- e.g., HP-UX 10.20, Solaris 7, etc. -- but I don't have access to systems where I could test

lsof
on them, so I can't claim lsof works on them. If your dialect
isn't in the list, you should try building lsof on it anyway.

Lsof version 4 predecessors, versions 2 and 3, may support older
version of some dialects. Contact me via e-mail at <abe@purdue.edu>
if you're interested in their distributions. Make sure "lsof"
appears in the "Subject:" line so my e-mail filter won't classify
your letter as Spam.

2.2 What about a new port?

The 00PORTING file in the distribution gives hints on doing
a port. I will consider doing a port in exchange for
permanent access to a test host. I require permanent access
so I can test new lsof revisions, because I will not offer
distributions of dialect ports I cannot upgrade and test.

2.2.1 User-contributed Ports

Sometimes I receive contributions of ports of lsof to
systems where I can't test future revisions of lsof. Hence,
I don't incorporate these contributions into my lsof
distribution.

However, I do make descriptions
of these contributions
available. You can find them in the 00INDEX and README
files at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/contrib

Consult the 00INDEX file in the contrib/ directory for a
list of the available contributions and consult README
there for information on how to obtain them.

2.3 Why isn't there an AT&T SVR4 port?

I haven't produced an AT&T SVR4 port because I haven't seen
a UNIX dialect that is strictly limited to the AT&T System
V, Release 4 source code. Every one I have seen is a
derivative with vendor additions.

The vendor additions are significant to lsof because they
affect the internal kernel structures with which lsof does
business. While some vendor derivatives of SVR4 are similar,
each one I have encounted so far has been different enough
from its siblings to require special source code.

If you're interested in an SVR4 version of lsof, here are
some existing ports you might consider:

DC/OSx (This obsolete port is only
available upon
special request.)
Reliant UNIX (This obsolete port is only available
upon special request.)
SCO|Caldera UnixWare (This is the most likely choice.)
Solaris

2.4 Why isn't there an SGI IRIX port?

Lsof support for IRIX was terminated at lsof revision 4.36,
because it had become increasingly difficult for me to
obtain information on the IRIX kernel structures lsof needs
to access.

At IRIX 6.5 I decided the obstacles were too large for me
to overcome, and I stopped supporting lsof on IRIX. I have
sources to the last revision of lsof (4.36) for IRIX, but
that version of lsof does not work on IRIX 6.5 and is
vulnerable to the standard I/O descriptor attack. (See
the "Is lsof vulnerable to the standard I/O descriptor
attack?" Q&A for more information.) Contact me to discuss
obtaining those sources.

If you wish to pursue the issue, don't contact me, contact
SGI. This case was opened with SGI on the subject:

Case ID: 0982584

Category: Unix
Priority: 30-Moderate Impact

Problem Summary:
kernel structure header files needed for continued lsof
support

Problem Description:
Email In 07/17/98 19:09:23

2.5 Why does lsof's Configure script report "WARNING: unsupported
dialect or version"?

Lsof's Configure script issues this message when it encounters
a dialect or its version that lsof once supported, but no

longer does. Usually I drop support for a dialect or version when I can no longer test lsof on it.

However, it's worth trying to compile and use lsof. Be sure to run the test suite. (See the answer to the "Is there a test suite? question for information on the test suite.)

If you have problems with an unsupported dialect or version, contact me via e-mail at <abe@purdue.edu> and I may be able to help. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

3.0 Lsof Problems

3.1 Configuration Problems

3.1.1 Why can't Configure determine the UNIX dialect version?

The lsof Configure script uses UNIX shell commands, often in a command pipeline, to determine the UNIX dialect version. (Consult the dialect stanza in Configure to determine which commands are used.) If Configure can't determine the dialect version, probably one of the commands is not behaving as Configure expects.

Symptoms of the failure include Configure warning messages and incorrect version definitions in the Makefile CFLAGS.

If you suspect that the lsof Configure script is failing to determine the dialect version correctly, try running the commands from Configure stanza one at a time. That will usually reveal the source of the problem. Be particularly mindful that the PATH environment variable can cause commands to be executed from non-standard directories.

If you can't determine the source of the problem, there is a work-around. You can supply the UNIX dialect version in the LSOF_VSTR environment variable.
Use Configure as a guide to forming what it expects in LSOF_VSTR. There is also some information on LSOF_VSTR in the 00XCONFIG documentation file of the lsof distribution.

3.2 Compilation Problems

3.2.1 Why does the compiler complain about missing header files?

When you use make to build lsof, the compiler may complain
that it can't find header files -- e.g.,

```
$ make
(cd lib; make DEBUG="-O" CFGF="-DAIXA=0 -DAIXV=4330 \
-DLSOF_VSTR=\"4.3.3.0\"")
gcc  -DAIXA=0 -DAIXV=4330 -DLSOF_VSTR="4.3.3.0" -O \
-c ckkv.c
In file included from ckkv.c:33: ../machine.h:70: \
sys/types.h: A file or directory in the path name \
does not exist. \
```

That type of complaint doesn't represent an lsof problem.
It represents a problem with a missing system header file
that probably should be found in /usr/include or in the
system source tree.

As a first step try using find(1) to locate the problem
header file. If
it's a system header file and can't be
found, here are some possible causes:

1. The file set, RPM or package containing the header files
   has not been installed. Instructions for doing that
   are specific to the UNIX dialect and beyond the scope
   of this document.

2. If the compiler is gcc, the private gcc header files:

   * May not have been installed;

   * May have been installed incorrectly;

   * May not have been updated properly after the last
     compiler or system update;

   * Ones from a previous installation may not have been
     removed.

   A path leading to the gcc private header files can be
   found with `gcc -v`. Consult the gcc documentation for
   instructions on proper installation of the private gcc
   header files.

3. On some dialects -- e.g., FreeBSD, NetBSD, OpenBSD --
   lsof may need to use header files that are located in
   the system source tree -- /sys or /usr/src/sys, for

example. Make sure the system source tree has been installed.

3.2.2 Why does gcc complain about the contents of header files distributed by the system's vendor?

When you use make to build lsof and gcc to compile it, gcc may complain that it finds errors in system header files -- e.g.,

```
$ make
(cd lib; make DEBUG="-O" CFGF="-Dsolaris=80000 \
 -DHASPR_GWINDOWS -m64 -DHASIPv6 -DHAS_VSOCK \
 -DLSOF_VSTR=\"5.8\"")
 gcc -Dsolaris=80000  -DHASPR_GWINDOWS -m64 -DHASIPv6 \
 -DHAS_VSOCK -DLSOF_VSTR="5.8"  -O  -c  dvch.c
In file included from /usr/include/sys/proc.h:31, \
      from /homes/abe/gnu/gcc-3.2.1/lib/gcc-lib/sparcv9-sun-solaris2/ \
 3.2.1/include/sys/user.h:267, from /usr/include/kvm.h:13, \
 from ../dlsof.h:53, from ../lsof.h:172, from dvch.c:43: \
 /homes/abe/gnu/gcc-3.2.1/lib/gcc-lib/sparcv9-sun-solaris2/\
  3.2.1/include/sys/task.h:59: parse error before "uint_t"
```

Errors like the above are most likely not problems in the system's header files, but in the private copies of them that were created when gcc was made or installed. Note the presense of ".../gcc-3.2.1/lib/gcc-lib/sparcv9-sun-solaris2/3.2.1/include/..." in the paths for user.h and task.h. It indicates both header files are gcc-specific.

To solve errors like this requires comparing the header files in the vendor's /usr/include tree to the gcc-specific ones in gcc's private gcc-lib/.../include tree. It may be necessary to regenerate gcc-specific header files, correct them or remove them. See the gcc distribution for the appropriate tools.

A possible temporary work-around is to direct gcc to use the vendor's header files instead of its temporary ones by declaring -I/usr/include in the compilation flags.

3.2.3 Other header file problems

Don't overlook any vendor tools that might validate the vendor header files installed on the system -- e.g., the

Solaris pkgchk tool can be used to check the header files
that were installed from the SUNWhea package.

For
other header file problems contact me at <abe@purdue.edu>.
Please follow the reporting guidelines in the "How do I
report an lsof bug?" section of this FAQ.

3.3 Why doesn't lsof report full path names?

Lsof reports the full path name when it is specified as a
search argument for open files that match the argument.
However, if the argument is a file system mounted-on
directory, and lsof finds additional path name components
from the kernel name cache, it will report them.

Lsof reports path name for file system types that have path
name lookup features -- e.g., some versions of AdvFS for
Digital and Tru64 UNIX. The Linux /proc-based lsof reports
full path names, because the Linux /proc file system provides
them. Lsof on recent builds of Solaris 10 also report full
path names, because those Solaris kernels record the full path
name in the vnode structure.

Otherwise, lsof uses the kernel name cache, where it exists
and can be accessed, and reports some or
all path name
components (e.g., the sys and proc.h components of
/usr/include/sys/proc.h) for these dialects:

Apple Darwin
DC/OSx
FreeBSD
HP-UX, /dev/kmem and PSTAT based
Linux, /dev/kmem-based
NetBSD
NEXTSTEP
OpenBSD
OPENSTEP
Reliant UNIX
SCO OpenServer
SCO|Caldera UnixWare
Solaris 2.x, 7, 8 and 9 (except for some VxFS versions;
see the "Why doesn't Solaris
lsof report VxFS path name
components?" section for more
information)
Solaris 10 (early builds) Tru64 UNIX

As far as I can determine, AFS path lookups don't share in kernel name cache operations, so lsof can't identify open AFS path name components. Apparently Solaris VxFS versions 4 and above don't share in kernel name cache operations, either, so lsof can't display path name components for those open files.

Since the size of the kernel name cache is limited and the cache is in constant flux, it does not always contain the names of all components in an open file's path; sometimes it contains none of them.

Lsof reports the file system directory name and whatever components of the file's path it finds in the cache, starting with the last component and working backwards through the directories that contain it. If lsof finds no path components, lsof reports the file system device name instead.

When lsof does report some path components in the NAME column, it prefixes them with the file system directory name, followed by " -- ", followed by the components -- e.g., /usr -- sys/path.h for /usr/include/sys/path.h. The " -- " is omitted when lsof finds all the path name components of a file's name.

The PSTAT-based HP-UX lsof relies on kernel name cache contents, too, even though its information comes to lsof via pstat() function calls. Consequently, PSTAT-based HP-UX lsof won't always report full paths, but may use the " -- " partial path name notation, or may occasionally report no path name at all but just the file system mounted-on directory and device names.

Lsof can't obtain path name components from the kernel name caches of the following dialects:

AIX

Only the Linux kernel records full path names in the structures it maintains about open files; instead, most kernels convert path names to device and node number doublets and use them for subsequent file references once files have been opened.

To convert the device and node number doublet into a complete path name, lsof would have to start at the root

node (root directory) of the file system on which the node resides, and search every branch for the node, building possible path names along the way. That would be a time consuming operation and require access to the raw disk device (usually implying setuid-root permission).

If the prospect of all that local disk activity doesn't concern you, think about the cost when the device is NFS-mounted.

Try using the file system mount point and node number lsof reports as parameters to find
-- e.g.,

```
$ find <mount_point> -inum <node_number> -print
```

and you may get an appreciation of what a file system directory tree search would cost.

3.3.1 Why do lsof -r reports show different path names?

When you run lsof with its repeat (``-r'') option, you may notice that the extent to which it reports path names for the same files may vary from cycle to cycle. That happens because other processes are making kernel calls affecting the cache and causing entries to be removed from and added to it.

3.3.2 Why does lsof report the wrong path names?

Under some circumstances lsof may report an incorrect path name component, especially for files in a rapidly changing directory like /tmp.

In a rapidly changing directory, like /tmp, if the kernel doesn't clear the cache entry when it removes a file, a new file may be given the same keys and lead lsof to believe that the old cache entry with the same keys belongs to the new file.

Lsof tries to avoid this error by
purging duplicate entries
from its copy of the kernel name cache when they have the same device and inode number, but different names.

This error is less likely to occur in UNIX dialects where the keys to the name cache are node address and possibly a capability ID. The Apple Darwin, Digital UNIX, FreeBSD, HP-UX,

NEXTSTEP, OPENSTEP, Solaris, Tru64 UNIX, and UnixWare dialects use node address. Apple Darwin, FreeBSD, NetBSD, OpenBSD, Tru64 UNIX, and also use a capability ID to further identify name cache entries.

3.3.3 Why doesn't lsof report path names for unlinked (rm'd) files?

When lsof gets path name components from the kernel's name cache, it does not report the path names of a file that has been unlinked from its parent directory -- e.g., deleted via rm, or the unlink() system call -- even when some process may still hold the file open; lsof reports only the file system's mounted-on directory and device. That's because path name components are removed from the kernel name cache when the file is unlinked.

Unlinked open files are sometimes used by applications for temporary, but invisible storage (i.e., ls won't show them, and no other process can open them.) However, they may occasionally consume disk space to excess and cause concern for a system administrator, who will be unable to locate them with find, ls, du, or other tools that rely on finding files by examining the directory tree.

By using lsof's +L option you can see the link count of open files -- in the NLINK column. An unlinked file will have an NLINK value of zero. By using the option +L1 you can tell lsof to display only files whose link count is less than one (i.e., zero).

There are some UNIX dialect-specific exceptions to lsof's inability to report unlinked path names. They are described in the answer to the "When will lsof report path names for deleted files?" question.

3.3.4 Why doesn't lsof report the "correct" hard linked file path name?

When lsof reports a rightmost path name component for a file with hard links, the component may come from the kernel's name cache. Since the key which connects an open file to the kernel name cache may be the same for each differently named hard link, lsof may report only one name for all open hard-linked files. Sometimes that will be "correct" in the eye of the beholder; sometimes it will not. Remember, the file identification keys significant

to the kernel are the device and node numbers, and they're
the same for all the hard linked names.

3.3.5 When will lsof report path names for deleted files?

Lsof will report path names for deleted files for two
dialects: Linux and later builds of Solaris 10.

Deleted Linux path names are reported by default and have
"(deleted)" at their ends.

The display of Solaris 10 deleted path names may be selected
with the -X option. When selected they are also reported with
"(deleted)" at their ends.

3.4 Why is lsof so slow?

Lsof may
appear to be slow if network address to host name
resolution is slow. This can happen, for example, when the
name server is unreachable, or when a Solaris PPP cache daemon
is malfunctioning.

To see if name lookup is causing lsof to be slow, turn it off
with the ``-n'' option.

Port service name lookup or portmap registration lookup may
also be causes of slow-down. To suppress port service name
lookup, specify the ``-P'' option.

Lsof doesn't usually make direct portmap calls -- only when +M
is specified, or when HASPMAPENABLED is defined during lsof
construction. (The lsof help panel, produced with `lsof -h`
will display the default portmap registration reporting
state.) The quickest first step in checking if lsof is slow
because of the portmapper is to use lsof's ``-M'' option.

Lsof may be slow if UID to login name lookups are slow.
Suppress them with ``-l''.

On dialects where lsof uses the kernel name cache, try
disabling its use with ``-C''. (You can tell if
lsof uses the
kernel name cache by looking for ``-C'' in lsof's ``-h''
output.) Of course, disabling kernel name cache use will mean
that lsof won't report full or partial path names, just file
system and character device names.

If you're just interested in the open files of one process, try using the ``-p <Process-ID>" option to limit lsof to that process. (The ``-p" option may also be followed with a list of Process-IDs.)

If you're interested in including or excluding certain commands, try lsof's "-c[^]cmd" option.

If you're interested in certain Internet TCP and UDP states (e.g., ESTABLISHED) or in excluding some (e.g., CLOSE_WAIT), try lsof's "-s p:s" option, available where shown on the lsof help output, obtained with -h or -?. More information on it may be found in the answer to the "How are protocol state name exclusion and inclusion used?" question.

Your UNIX dialect may not support "-s p:s" and its associated performance improvments to Internet-only file processing. You can find more information on those topics in the answer to the "Why doesn't my dialect support state name exclusion and inclusion?" question.

Older AIX lsof may be slow to start because of its oslevel identity comparison. (Newer AIX lsof uses uname(2).) See the "Why does AIX lsof start so slowly?" and "Why does lsof warn "compiled for x ... y; this is z.?" sections for more information.

3.5 Why doesn't lsof's setgid or setuid permission work?

If you install lsof on an NFS file system that has been mounted with the nosuid option, lsof may not be able to use the setgid or setuid permission you give it, complaining it can't open the kernel memory device -- e.g., /dev/kmem.

The only solution is to install lsof on a file system that doesn't inhibit setgid or setuid permission.

3.6 Does lsof have security problems?

I don't think so. However, lsof does usually start with setgid permission, and sometimes with setuid-root permission. Any program that has setgid or setuid-root permission, should always be regarded with suspicion.

Lsof drops setgid power, holding it only while it opens access to kernel memory devices (e.g., /dev/kmem, /dev/mem,

/dev/swap). That allows lsof to bypass the weaker security of access(2) in favor of the stronger checks the kernel makes when it examines the right of the lsof process to open files declared with -k and -m. Lsof also restricts some device cache file naming options when it senses the process has setuid-root power.

On a few dialects lsof requires setuid-root permission during its full execution in order to access files in the /proc file system. These dialects include:

DC/OSx 1.1 for Pyramid systems
Reliant UNIX 5.4[34] for Pyramid systems

When lsof runs with setuid-root permission it severely restricts all file accesses it might be asked to make with its options.

The device cache file (typically .lsof_hostname in the home directory of the real user ID that
executes lsof) has 0600
modes. (The suffix, hostname, is the first component of the host's name returned by gethostname(2).) However, even when lsof runs setuid-root, it makes sure the file's ownerships are changed to that of the real user and group. In addition, lsof checks the file carefully before using it (See the question "How do I disable the device cache file feature or alter it's behavior?" for a description of the checks.); discards the file if it fails the scrutiny; complains about the condition of the file; then rebuilds the file.

See the 00DCACHE file of the lsof distribution for more information about device cache file handling and the risks associated with the file.

3.7 Will lsof show remote hosts using files via NFS?

No. Remember, lsof displays open files for the processes of the host on which it runs. If the host on which lsof is running is an NFS server, the remote NFS client processes that are accessing files on the server leave no process records
on the server for lsof to examine.

3.8 Why doesn't lsof report locks held on NFS files?

Generally lock information held by local processes on remote

NFS files is not recorded by the UNIX dialect kernel. Hence, lsof can't report it.

One exception is some patch levels of Solaris 2.3, and all versions of Solaris 2.4 and above. Lsof for those dialects does report on locks held by local processes on remotely mounted NFS files.

3.8.1 Why does lsof report a one byte lock on byte zero as a full file lock?

When a process has a lock of length one, starting at byte zero, lsof can't distinguish it from a full file lock.
That's because most UNIX dialects represent both locks the same way in their file lock (flock or eflock) structures.

3.9 Why does lsof report different values for open files on the same file system (the automounter phenomenon)?

On UNIX dialects where file systems may be mounted by an automounter with the ``direct'' type, lsof may sometimes report difference
DEVICE, SIZE/OFF, INODE and NAME values
when asked to report files open on the file system.

This happens because some files open on the file system -- e.g., the current directory of a shell that changed its directory to the file system as the file system's first reference -- may be characterized in the kernel with temporary automounter node information. The cd doesn't cause the file system to be mounted.

A subsequent reference to the file system -- e.g., an ls of any place in it -- will cause the file system to be mounted. Processes with files open to the mounted file system are characterized in the kernel with data that reflects the mounted file system's parameters.

Unfortunately some kernels (e.g., some versions of Solaris 2.x) don't revisit the process that did only a change-directory for the purpose of updating the data associated with the open directory file. The file continues to be characterized with temporary automounter information until it does another
directory change, even a trivial ``cd .''.

Lsof will report on both reference types, when supplied the file system name as an argument, but the data lsof

reports will reflect what it finds in the kernel. For the different types lsof will display different data, including different major and minor device numbers in the DEVICE column, different lengths in the SIZE/OFF column, different node numbers in the INODE column, and slightly different file system names in the NAME column.

In contrast, fuser, where available, can only report on one reference type when supplied the file system name as an argument. Usually it will report on the one that is associated with the mounted file system information. If the only reference type is the temporary automounter one, fuser will often be silent about it.

3.10 Why don't lsof and netstat output match?

Lsof and netstat output don't match because lsof reports the network information it finds in open file system objects --
e.g., socket files -- while netstat often gets its information from separate kernel tables.

The information available to netstat may describe network activities never or no longer associated with open files, but necessary for proper network state machine operation.

For example, a TCP connection in the FIN_WAIT_[12] state may no longer have an associated open file, because the connection has been closed at the application layer and is now being closed at the TCP/IP protocol layer.

3.10.1 Why can't lsof find accesses to some TCP and UDP ports?

Lsof stands for LiSt Open Files. If there is no open file connected to a TCP or UDP port, lsof won't find it. That's the most common reason why lsof doesn't find a port netstat might report open.

One reason I've found on some UNIX dialects is that their kernels set aside TCP and UDP ports for communicating with support activities, running in application layer servers
-- the automounter daemons, and the NFS biod and nfsd daemons
are examples. Netstat may report the ports are in use, but lsof doesn't.

Another reason is that netstat may also be able to report a port is open on a particular dialect, because it uses a

source of data different from what lsof uses -- e.g., netstat might examine kernel tables or use streams messages to MIB2, while lsof relies on the information it finds in open file structures and their descendants.

Sometimes it's possible to search the data netstat and lsof use. For example, on Linux /proc/tcp and /proc/udp can be examined. There might an entry there for a particular protocol and port, but if the line on which the port appears doesn't have an inode number that matches an inode number of an open file, lsof won't be able to identify the process using the port.

This is a tough question to which there is no easy answer.

3.11 Why does lsof update the device cache file?

At the end of the lsof output you may see the message:

lsof: WARNING: /Homes/abe/.lsof_vic
was updated.

In this message /Homes/abe/.lsof_vic is the path to the private device cache file for login abe. (See 00DCACHE.)

Lsof issues this message when it finds it necessary to recheck the system device directory (e.g., /dev or /devices) and rebuild the device cache file during the open file scan. Lsof may need to do these things it finds that a device directory node has changed, or if it cannot find a device in the cache.

3.12 Why doesn't lsof report state for UDP socket files?

Lsof reports UDP TPI connection state -- TS_IDLE (Idle), TS_BOUND (Bound), etc. -- for some, but not all dialects. TPI state is stream-based TCP/IP information that isn't available in many dialects.

A fairly weak general rule is if netstat(1) reports UDP TPI state, lsof may be able to report it, too. But don't be surprised if lsof fails to report UDP TPI state for your dialect. Other factors influence lsof's ability to report UDP TPI state, including the availability of state number
data in kernel structures, and state number to state name conversion data.

3.13 I am editing a file with vi; why doesn't lsof find the file?

Classic implementations of vi usually don't keep open the file being edited. (Newer ones may do so in order to maintain an advisory lock.) Instead classic vi opens the file, makes a temporary copy (usually in /tmp or /usr/tmp), and does its work in that file. When you save the file being edited from a classic vi implementation, it reopens and rewrites the file.

During a classic vi session, except for the brief periods when vi is reading or rewriting the file, lsof won't find an open reference to the file from the vi process, because there is none.

3.14 Why doesn't lsof report TCP/TPI window and queue sizes for my dialect?

Lsof only reports TCP/TPI window sizes for Solaris, because only its netstat reports them. The intent of providing TCP/TPI information in lsof NAME column output is to make it easier to match netstat
output to lsof output.

In general lsof only reports queue sizes for both TCP and UDP (TPI) connections on BSD-derived UNIX dialects, where both sets of values appear in kernel socket queue structures. SYSV-derived UNIX dialects whose TCP/IP implementations are based on streams generally provide only TCP queue sizes, not UDP (TPI) ones.

While you may find that netstat on some SYSV-derived UNIX dialects with streams TCP/IP may report UDP (TPI) queue sizes, you will probably also find that the sizes are always zero -- netstat supplies a constant zero for UDP (TPI) queue sizes to make its headers align the same for TCP and UDP (TPI) connections. Solaris seems to get it right -- i.e., its netstat does not report UDP (TPI) queue sizes.

When in doubt, I chose to avoid reporting UDP (TPI) queue sizes for UNIX dialects whose netstat-reported values I knew to be a constant zero or whose origin I couldn't determine. OSR is a dialect in this category.

3.14.1 Why doesn't
lsof report socket options, socket states, and TCP flags and values for my dialect?

The lsof -T argument, 'f', that selects the reporting of socket

options, socket states and TCP flags was implemented at lsof revision 4.71 for the following UNIX dialects, providing the indicated information:

AIX 4.3.2 and 5.1 and above
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
Apple Darwin 7.2 and above
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
Digital UNIX and Tru64 UNIX 4.0
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
FreeBSD 4.9 and above
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
HP-UX 11.00 (/dev/kmem-based lsof)
All socket options and values are reported. No socket states are reported. Only the
TF_NODELAY TCP flag and
the TF_MSS value are reported.
HP-UX 11.11 and iiiv2 (PSTAT-based lsof)
All socket options and values, and socket states are reported. No TCP flags or values are reported.
Linux
No socket options and values, socket states, or TCP flags and values are reported. The support for "-Tf" could not be added to Linux, because socket options, socket states, and TCP flags and values are not available via the /proc file system.
NetBSD 1.6G and above
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
OpenBSD 3.4 and above
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
OPENSTEP 4.2
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
OpenUNIX 8
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.

SCO OpenServer Release 5.0.6
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.
Solaris 2.6, 8 and above
The socket option display is limited to BROADCAST,

DEBUG, DGRAM_ERRIND, DONTROUTE and OOBINLINE. Socket values are limited to KEEPALIVE and LINGER. No socket states are reported. The TCP DELACK, NODELAY and SENTFIN flags are reported. The TCP MSS value is reported.

UnixWare 7.1.[134]
All socket options and values, socket states, and TCP flags and values described in lsof(8) are reported.

3.14.2 Why doesn't lsof report the partial listen queue connection count for my dialect?

The reporting of partial listen queue connections was added to -Tf processing at lsof revision 4.76. Currently it is reported for these dialects:

AIX 4.3.2
This dialect is no longer supported, so no attempt was made to add partial listen queue length support for it.

AIX 5.1 and above
Partial listen queue information is available.

Apple Darwin 7.2 and above
Partial listen queue information is available.

Digital UNIX 4.0
This dialect is no longer supported, so no attempt was made to add partial listen queue length support for it.

FreeBSD 4.9 and above
Partial listen queue information is available.

HP-UX 11.00 (/dev/kmem-based lsof)
No partial listen queue information is available.

HP-UX 11.11 and iiiv2 (PSTAT-based lsof)
No partial listen queue information is available.

Linux
No partial listen queue information is available.

NetBSD 1.6G and above
Partial listen queue information is available.

OpenBSD 3.4 and above
Partial listen queue information is available.

OPENSTEP 4.2
Partial listen queue information is available.

OpenUNIX 8
This dialect is no longer supported, so no attempt was made to add partial listen queue length support for it.

SCO OpenServer Release 5.0.6

No partial listen queue information
is available.

Solaris 2.6, 8 and above

Partial listen queue information is available.

Tru64 UNIX 5.0

This dialect is no longer supported, so no attempt
was made to add partial listen queue length support
for it.

Tru64 UNIX 5.1

Partial listen queue information is available.

UnixWare 7.1.[134]

Partial listen queue information is available.

3.15 What does "no more information" in the NAME column mean?

When lsof can find no successor structures -- a gnode,
inode, socket, or vnode -- connected to the file structure
of an open descriptor of a process, it reports "no more
information" in the NAME column. The TYPE, DEVICE, SIZE/OFF,
and INODE columns will be blank.

Because the file structure is supposed to contain a pointer
to the next structure of a file's processing support, if
the pointer is NUL, lsof can go no further.

Some UNIX dialects have file structures for system processes
-- e.g., the sched process -- that have no successor
structure
pointers. The "no more information" NAME will
commonly appear for these processes in lsof output.

It may also be the case that lsof has read the file structure
while it is being assembled and before a successor structure
pointer value has been set. The "no more information" NAME
will again result.

Unless lsof output is filled with "no more information"
NAME column messages, the appearance of a few should be no
cause for alarm.

3.16 Why doesn't lsof find a process that ps finds?

If lsof fails to display open files for a process that ps
indicates exists, there may be several reasons for the
difference.

The process may be a "zombie" for which ps displays the

"(defunct)" state. In that case, the process has exited
and has no open file information lsof can display. It does
still have a process structure, sufficient for the needs
of ps.

Another possible explanation is that kernel tables and
structures may have been changing when lsof looked for the
process,
making lsof unable to find all relevant process
structures. Try repeating the lsof request.

3.17 Why doesn't -V report a search failure?

The usual reason that -V won't report a search failure is
that lsof located the search item, but was prevented from
listing it by an option that doesn't participate in search
failure reporting.

For example, this lsof invocation:

```
$ lsof -V -i TCP@foobar -a -d 999
```

won't report it can't find the Internet address TCP@foobar,
even if there is an open file connected to that address,
unless the open file also has a file descriptor number of
999 (the ``-a -d 999'' options).

Compile-time options can also affect -V results in much the
same way. For example, if HASSECURITY and HASNOSOCKSECURITY
are defined at compile time, this lsof invocation, run by a
non-root user:

```
$ lsof -V -c inetd
```

won't report that it can't find the inetd command, even if
there is a process running the inetd command, because the
HASSECURITY and HASNOSOCKSECURITY
options prevent the
listing of all but the socket files of another user, and
no socket file selector (e.g., "-i") was specified.

3.18 Portmap problems

3.18.1 Why isn't a name displayed for the portmap registration?

When portmap registration reporting is enabled, any time
there is a registration for a local TCP or UDP port, lsof

displays it in square brackets, following the port number
or service name -- e.g., ``:1234[name]'' or ``:name[100083]''.

The TCP or UDP port number or service number (what follows
the `:') is displayed under the control of the lsof -P
option. The registration identity is held by the portmapper
and may be a name or a number, depending on how the
registration's owner declared it. Lsof reports what the
port map holds and cannot derive a registration name from
a registration number.

Lsof can be compiled with registration reporting enabled
or disabled by default, under the control of the HASPMAPENABLED
#define (usually in machine.h).
The lsof help panel (`lsof
-h`) will show the default. Lsof is distributed with
reporting disabled by default.

3.18.2 How can I display only portmap registrations?

Lsof doesn't have an option that will display only TCP or
UDP ports with portmap registrations. The +M option only
enables the reporting of registration information when
Internet socket files are displayed; +M doesn't select
the displaying of Internet socket files -- the -i option
does that.

This simple lsof pipe to grep will do the job:

```
$ lsof -i +M | grep "\["
```

This works because -i selects Internet socket files, +M
enables portmap registration reporting, and only output
lines with opening square brackets will have registrations.

When portmap registration reporting is enabled by default,
because the lsof builder constructed it that way, +M is
not necessary. (The lsof help panel, produced with `lsof
-h` will display the default portmapper registration
reporting state.) However, specifying
+M when reporting
is already enabled is acceptable, as is specifying -M when
reporting is already disabled.

Digression: lsof will accept `+' or `-' as a prefix to most
options. (That isn't documented in the man page or help
panel to reduce confusion and complexity.) The -i option
is as acceptable as +i, so the above example could be

written a little more tersely as:

```
$ lsof +Mi | grep "\["
```

But be careful to use the ``Mi'' ordering, since ``iM'' implies M is an address argument to `i'.

3.18.3 Why doesn't lsof report portmap registrations for some ports?

Lsof reports portmap registrations for local TCP and UDP ports only. It identifies local ports this way:

* The port appears in the local address section of the kernel structure that contains it.

* The port appears in the foreign address section of a kernel structure whose local and foreign Internet addresses are the same.

* The port appears in the foreign address section of a kernel address structure whose Internet address is INADDR_LOOPBACK (127.0.0.1).

Following these rules, lsof ignores foreign portmapped ports. That's done for reasons of efficiency and possible security prohibitions. Contacting all remote portmappers could take a long time and be blocked by network difficulties (i.e., be inefficient). Many firewalls block portmapper access for security reasons.

Lsof may occasionally ignore portmap registration information for a legitimate local port by virtue of its local port rules. This can happen when a port appears in the foreign part of its kernel structure and the local and foreign Internet addresses don't match (perhaps because they're on different interfaces), and the foreign Internet address isn't INADDR_LOOPBACK (127.0.0.1).

3.18.4 Why doesn't lsof report portmap registrations for some Solaris versions?

In some versions of Solaris -- 9 and 10 are known to exhibit this problem -- lsof is unable to display portmap registrations.

This portmap registration reporting failure occurs when the Solaris netconfig field (in /etc or etc/inet) has its first two

non-comment lines enabling tcp6 and udp6. When netconfig is configured in that fashion, lsof's attempt to read the portmap via an RPC function fails.

I don't have an explanation for the failure, but this comment in the netconfig(4) man page appears to have some bearing on the problem:

```
# The following two entries starting with udp6 and tcp6 are
# meant to be used for IPv6. If you have Ipv6 enabled on your
# machine then you can uncomment these two lines to enable
# RPC and NFS to use the Ipv6 stack.
...
#udp6  tpi_clts      v  inet6  udp  /dev/udp6  -
#tcp6  tpi_cots_ord  v  inet6  tcp  /dev/tcp6  - "
```

My interpretation of that comment is that there is a different RPC interface to the portmap when IPv6 is enabled. However, I can't find any documentation on it in the RPC man pages. If anyone has information on it, please
send it to me at
<abe@purdue> and put "lsof Solaris portmap" in the subject line.

A work-around may be to move the ucp6 and tcp6 lines after the udp and tcxp lines in netconfig. I don't know if that change has any unacceptable consequences, but it works for me on my Solaris 9 test system, and I have a report that it also works on Solaris 10.

3.19 Why is `lsof | wc` bigger than my system's open file limit?

There is a strong temptation to count open files by piping lsof output to wc. If your purpose is to compare the number you get to some Unix system parameter that defines the number of open files your system can have, resist the temptation.

One reason is that lsof reports a number of "files" that don't occupy Unix file table space -- current working directories, root directories, jail directories, text files, library files, memory mapped files are some. Another reason is that lsof can report a file shared by more than one process that itself occupies only
one file table slot.

If you want to know the number of open files that occupy

file table slots, use the +ff option and process the lsof output's FILE_ADDR column information with standard Unix tools like cut, grep, sed, and sort.

You might also consider using use lsof's field output with +ff, selecting the file struct address with -FF, and processing the output with an AWK or Perl script. See the list_fields.awk, list_fields.perl, and shared.perl5 scripts in the scripts/ subdirectory of the lsof distribution for hints on file struct post-processing filters.

3.20 Why doesn't lsof report file offset (position)?

Lsof won't report a file offset (position) value if the -s option (without parameters) has been specified, or if the dialect doesn't support the displaying of file offset (position). (Note that on selected dialects the help output, obtained with -h or -?, may show that the -s option can also be supplied the "p:s" parameters; for more information on that addition,
see the answer to the "How are protocol state name exclusion and inclusion used?" question.)

That lsof is reporting only file size is indicated by the fact that the appropriate column header says SIZE instead of SIZE/OFF.

If lsof doesn't support the displaying of file offset (position) -- e.g., for Linux /proc-based lsof -- the -h or -? output panel won't list the -o option.

Sometimes the availability of file offset information depends on the dialect's kernel. This is particularly true for socket file offsets.

Maintenance of offsets for pseudo-terminal devices varies by UNIX dialect and is related to how the dialect kernel implements pseudo-terminal support. Kernels like AIX, for example, that short-circuit the transfer of data between socket and pseudo devices to reduce TCP/IP daemon interrupt rates won't advance offsets in the TCP/IP daemon socket files. Instead they will advance offsets in the open standard I/O files of the shell child precess where the pseudo-terminal
devices are used.

When in doubt about the behavior of lsof in reporting file offset information, do some carefully measured experiments,

consult the lsof sources, or contact me at <abe@purdue.edu>
to discuss the matter. Please follow the reporting guidelines
in the "How do I report an lsof bug?" section of this FAQ.

3.20.1 What does lsof report for size when the file doesn't really have one?

When a file has no true size -- e.g., it's a socket, a
FIFO, or a pipe -- lsof tries to report the information it
finds in the kernel that describes the contents of associated
kernel buffers.

Thus, for example, size for most TCP/IP files is socket
buffer size. The size of the socket read buffer is reported
for read-only files; the size of the write buffer for
write-only files; and the sum of the buffers sizes for
read-write files.

3.21 Problems with path name arguments

3.21.1 How do I ask lsof to search a file system?

You can ask lsof to search for all open
files on a file
system by specifying its mounted path name as an lsof
argument -- e.g.,

```
$ lsof /
```

Output of the mount command will show file system mounted
path names. It will also show the mounted-on device path
for the file system.

If the mounted-on device is a block device (the permission
field in output of `ls -l <device>` starts with a `b/),
you can specify it's name, too -- e.g.,

```
$ lsof /dev/sd0a
```

If the mounted-on device isn't a block device -- for example,
some UNIX dialects call a CD-ROM device a character device
(ls output starts with a `c') -- you can force lsof to
assume that the specified device names a file system with
the +f option -- e.g.,

```
$ lsof +f -- /dev/sd0a
```

(Note: you must use ``--" after +f or -f if a file name

follows immediately, because +f and -f can be followed by characters that specify flag output selections.)

When you use +f and lsof can't match the device to a file system, lsof will issue a complaint.

The +f option may be used in some dialects to ask lsof to search for an NFS file system by its server name and server mount point. If the mount application reports an NFS file system mounted-on value that way, then this sample lsof request should work.

```
$ lsof +f -- fleet:/home/fleet/u5
```

Finally, you can use -f if you don't want a mounted file system path name to be considered a request to report all open files on the file system. This is useful when you want to know if anyone is using the file system's mounted path name. This example directs lsof to report on open access to the `/' directory, including when it's being used as a current working or root directory.

```
$ lsof -f -- /
```

The lsof -f option performs the same function as -f does in some fuser implementations. However, since the lsof -c option was chosen for another purpose before the `f' option was added to lsof, +f was selected as the analogue to the fuser -c option. (Sorry for the potential confusion.)

3.21.2 Why doesn't lsof find all the open files in a file system?

Lsof may not find all the open files in a file system for several reasons.

First, some processes with files open on the file system may have been changing status when lsof examined the process table, and lsof "missed" them. Remember, the kernel changes much faster than lsof can respond to the changes.

Second, be sure you have specified the file system correctly. Perhaps you specified a file instead. You can use lsof's -V option to have lsof report in detail on what it couldn't find. Make sure the report for the file system you specified says "file system." Here's some -V output:

```
$ /lsof -V /tmp ./lsof.h ./lsof
COMMAND  PID USER   FD   TYPE DEVICE SIZE/OFF  INODE NAME
lsof    2688  abe  txt   VREG 18,1,7  1428583 226641 ./lsof
lsof    2689  abe  txt   VREG 18,1,7  1428583 226641 ./lsof
lsof: no file use located: ./lsof.h
```

You can also use lsof's +f option to force it to consider
a
path name as a file system. If lsof can't find a file
system by the specified name, it will issue a complaint --
e.g.,

```
$ lsof +f -- /usr
lsof: not a file system: /usr
```

(/usr is a directory in the / file system.)

3.21.3 Why does the lsof exit code report it didn't find open files
when some files were listed?

Sometimes lsof will list some open files, yet return a
non-zero exit code, suggesting it hasn't found all the
specified files.

The first thing you should when you suspect lsof is incorrect
is to repeat the request, adding the -V option. In the
resulting report you may find that your file system
specification really wasn't a file system specification,
just a file specification.

Finally, if you specify two files or two file systems twice,
lsof will credit all matches to the first of the two and
believe that there were no matches for the second. It's
possible to specify a single file system twice with different
path names by using both its mounted
directory path name
and mounted-one device name.

```
$ lsof +f -V spcuna:/sysprog /sysprog
COMMAND   PID USER   FD   TYPE DEVICE SIZE/OFF  INODE NAME
ksh     11092  abe  cwd   VDIR 39,0,1     1536 226562 /sysprog
(spcuna:/sysprog)
...
lsof: no file system use located: spcuna:/sysprog
```

All matches were credited to /sysprog; none to spcuna:/sysprog.

3.21.4 Why won't lsof find all the open files in a directory?

When you give lsof a simple directory path name argument
(not a file system mounted-on name), you are asking it to
search for processes that have the directory open as a
file, or as a process-specific directory -- e.g., root or
current working directory.

If you want to list instances of open files inside the
directory, you need to specify the individual path names
of those files, or use the lsof +D and +d options.

See the answer to the question "Why are the +D and +d
options so slow?" before you use +D or +d casually.

See the answer to
the question "Why do the +D and +d options
produce warning messages?" for an explanation of some
process authority limitations of +D and +d.

3.21.5 Why are the +D and +d options so slow?

The +D and +d options cause lsof to build a path name search
list for a specified directory. +D causes lsof to descend
the directory to its furthest subdirectory, while +d
restricts it to the top level. In both cases, the specified
directory itself is included in the search list. In both
symbolic links are ignored.

Building such a search list can take considerable time,
especially when the specified directory contains many files
and subdirectories -- lsof must call the system readlink()
and stat() functions for each file and directory. Storing
the search list can cause lsof to use more than its normal
amount of dynamic memory -- each file recorded in the search
list consumes dynamic memory for its path name, characteristics,
and search linkages. Using the list means lsof must search
it
for every open file in the system.

Building the search list for a directory specified on some
file systems can be slow -- e.g., for an NFS directory with
many files. Some file systems have special logging features
that can introduce additional delays to the building of
the search list -- e.g., NFS logging, or logging on a
Solaris UFS file system. The bottom line is that slow
search list construction may not be so much an lsof problem
as a file system problem. (Hint: if you're using Solaris
UFS logging, consider specifying the "logging,noatime"

option pair to reduce the number of atime writes to the
UFS logging queue and disk.)

A somewhat risky way to speed up lsof's building of the
search list is to use lsof's ``-O'' option. It forces lsof
to do all system calls needed to build the search list
directly, rather than in a child process. While direct
system calls are much faster, they can block in the kernel
-- e.g., when an NFS server stops responding --
stopping
lsof until the kernel operation unblocks.

As an example of the load +D can impose, consider that an
`lsof +D /` on a lightly loaded NeXT '040 cube with a 1GB
root file system disk took 4+ minutes of real time. It
also generated several hundred error messages about files
and directories the lsof process didn't have permission to
access with stat(2).

The bottom line is that +D and +d should be used cautiously.
+D is more costly than +d for deeply nested directory trees,
because of the full directory descent it causes. So use
+d where possible. And you might need to consider the
performance of the file system that holds the directory
you name with +d or +D.

In view of these warnings, when is it appropriate to use
+D or +d? Probably the most appropriate time is when you
would specify the directory's contents to lsof with a shell
globbing construct -- e.g., `lsof *`. If that's what you
need to do, `lsof +d .` is probably more efficient than
having the shell
produce a directory list, form it into an
argument vector, and pass the vector to lsof for it to
unravel.

See the answer to the question "Why do the +D and +d options
produce warning messages?" for an explanation of some
process authority limitations of +D and +d.

3.21.6 Why do the +D and +d options produce warning messages?

+D and +d option processing is limited by the authority of
the lsof process -- i.e., lsof can only examine (with
lstat(2) and stat(2)) files the owner of the process can
access.

If the ownership, group membership, or permissions of the

specified directory, file within it, or directory within
it prevents the owner of the lsof process from using lstat(2)
or stat(2) on it, lsof will issue a warning message, naming
the path and giving the system's (lstat(2's or stat(2)'s)
reason (errno explanation text) for refusing access.

As an example, assume user abc has a subdirectory in /tmp,
owned by abc and readable, writable and searchable by only
its
owner. If user def asks lsof to search for all /tmp
references with +D or +d, lsof will be unable to lstat(2)
or stat(2) anything in abc's private subdirectory, and will
issue an appropriate warning.

Lsof warnings can usually be suppressed with the -w option.
However, using -w with +D or +d means that there will be
no indication why lsof couldn't find an open reference to
a restricted directory or something contained in it.

Hint: if you need to use +D or +d and avoid authority
warnings, and if you have super-user power, su and use lsof
with +D or +d as root.

3.22 Why can't my C compiler find the rpcent structure definition?

When you try to compile lsof your compiler may complain
that the rpcent structure is undefined. The complaints
may look like this:

```
>print.c: In function `fill_portmap':
>print.c:213: dereferencing pointer to incomplete type
>...
```

The most likely cause is that someone has allowed a BIND
installation to update /usr/include/netdb.h
(or perhaps
/usr/include/rpc/netdb.h), removing the rpcent structure
definition that lsof expects to find there.

Only Solaris has an automatic work-around. (See dlsof.h
in dialects/sun.). The Solaris work-around succeeds because
there is another header file, <rpc/rpcent.h>, with the rpcent
structure definition, and there is a Solaris C pre-processor
test that can tell when the BIND <netdb.h> is in place and
hence <rpc/rpcent.h> must be included.

Doubtlessly there are similar work-arounds possible in
other UNIX dialects whose header files have been "touched"

by BIND, but in general I recommend restoration of the vendor's <netdb.h> and any other header files BIND might have replaced. (I think BIND replaces <resolv.h>, <sys/bitypes.h>, <sys/cdefs.h> -- and maybe others.)

3.23 Why doesn't lsof report fully on file "foo" on UNIX dialect "bar?"

Lsof sometimes won't report much information on a given file, or may even report an error message in its NAME column. That's usually because the file is of a special type -- e.g., in a file system specific to the UNIX dialect -- and I haven't used a system where the file appeared during my testing.

If you encounter such a situation, send me e-mail at <abe@purdue.edu> and we may be able to devise an addition to lsof that will report on the file in question. Please follow the reporting guidelines in the "How do I report an lsof bug?" section of this FAQ. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

3.24 Why do I get a complaint when I execute lsof that some library file can't be found?

On systems where the LIBPATH (or the equivalent) environment variable is used to record the library search path in executable files when they are built, an incorrect value may make it impossible for the system to find the shared libraries needed to load lsof for execution.

This may be particularly true on systems like AIX >= 4.1.4, where the lsof Makefile takes the precautionary step of using the -bnolibpath loader flag to insure that the path to the private static lsof library is not recorded in the lsof binary. Should LIBPATH be invalid when lsof is built, it will be recorded in the lsof binary as the default library path search order and lead to an inability to find libraries when lsof is executed.

So, if you get missing library complaints when you try to execute lsof, check LIBPATH, or whatever environment variable is used on your system to define library search order in executable files. Use the tools at your disposal to look at the library paths recorded in the lsof binary -- e.g.,

chatr on HP-UX, dump on AIX, ldd on Solaris.

Make sure, too, that when the correct library search path has been recorded in the executable file, the required library files exist at one or more of the search paths.

3.25 Why does lsof complain it can't open files?

When lsof begins execution, unless it has been asked to report
only help or version information, typically it will attempt to access kernel memory and symbol files -- e.g., /unix, /dev/kmem. Even though lsof needs only permission to open these files for reading, read access to them might be restricted by ownerships and permission modes.

So the first step to diagnosing lsof problems with opening files is to use ls(1) to examine the ownerships and permission modes of the files that lsof wants to open. You may find that lsof needs to be installed with some type of special ownership or permission modes to enable it to open the necessary files for reading. See the "Installing Lsof" section of 00README for more information.

3.26 Why does lsof warn "compiled for x ... y; this is z."?

Unless warnings are suppressed (with -w) or the kernel identity check symbol (HASKERNIDCK) definition has been deleted, all but one lsof dialect version (exception: /proc-based Linux lsof) compare the identity of the running kernel to that of the
one for which lsof was constructed.
If the identities don't match, lsof issues a warning like this:

```
lsof: WARNING: compiled for Solaris release 5.7; this is 5.6.
```

Two kernel identity differences can generate this warning -- the version number and the release number.

Build and running identity differences are usually significant, because they usually indicate kernels whose structures are different -- kernel structures commonly change at dialect version releases. Since lsof reads data from the kernel in the form of structures, it is sensitive to changes in them. The general rule is that an lsof compiled for one UNIX dialect version will not work correctly when run on

a different version.

There are three work-arounds: 1) use -w to suppress the warning -- and risk missing other warnings; 2) permanently disable the identity check by deleting the definition of HASKERNIDCK in the dialect's machine.h header file -- with the same risk; or 3) rebuild lsof on the system where it is to be run. (Deleting HASKERNIDCK can be done with the Customize script or by editing machine.h.)

Generally checking kernel identity is a quick operation for lsof. However, it is potentially slow under AIX, where lsof must run /usr/bin/oslevel. To speed up lsof, use -w to suppress the /usr/bin/oslevel test. See "Why does AIX lsof start so slowly?" for more information.

3.27 How can I disable the kernel identity check?

The kernel identity check is controlled by the HASKERNIDCK definition. When it is defined, most dialects (exclusion: /proc-based Linux lsof) will compare the build-time kernel identity with the run-time one.

To disable the kernel identity check, disable the HASKERNIDCK definition in the dialect's machine.h header file. The Customize script can be used to do that in its section about the kernel identity check.

Caution: while disabling the kernel identity check may result in smaller lsof startup overhead, it comes with the risk of executing an lsof that may produce warning messages, error messages, incorrect output, or no output at all.

3.28 Why don't ps(1) and lsof agree on the owner of a process?

Generally the user ID lsof reports in its USER column is the process effective user ID, as found in the process structure. Sometimes that may not agree with what ps(1) reports for the same process.

There are sundry reasons for the difference. Sometimes ps(1) uses a different source for process information, e.g., the /proc file system or the psinfo structure. Sometimes the kernel is lax or confused (e.g., Solaris 2.5.1) about what ID to report as the effective user ID. Sometimes the system carries only one user ID in its process

structure (some BSD derivatives), leaving lsof no choice.

The differences between lsof and ps(1) user identifications should be small and normally it will be apparent that the confusion is over a process whose application has changed to an effective user ID different from the real one.

3.29 Why doesn't lsof find an open socket file whose connection state is past CLOSE_WAIT?

TCP/IP connections in states past CLOSE_WAIT -- e.g., FIN_WAIT_1, CLOSING, LAST_ACK, FIN_WAIT_2, and TIME_WAIT -- don't always have open files associated with them. When they don't, lsof can't identify them. When the connection state advances from CLOSE_WAIT, sometimes the open file associated with the connection is deleted.

3.30 Why don't machine.h definitions work when the surrounding comments are removed?

The machine.h header files in dialect subdirectories have some commented-out definitions like:

```
/* #define HASSYSDC "/your/choice/of/path */
```

You can't simply remove the comments and expect the definition to work. That's intended to make you think about what value you are assigning to the symbol. The assigned value might have a system-specific convention. HASSYSDC, for example, might be /var/db/lsof.dc for FreeBSD, but it might be /var/adm/lsof.dc for Solaris.

Symbols defined in the lsof documentation are described in 00PORTING, other machine.h comments, and other lsof documentation files. HASSYSDC, for example, is discussed in 00DCACHE. When comments and documentation don't suffice, consult the source code for hints on how the symbol is used.

3.31 What do "can't read inpcb at 0x...", "no protocol control block", "no PCB, CANTSENDMORE, CANTRCVMORE", etc. mean?

Sometimes lsof will report "can't read inpcb at 0x00000000", "no protocol control block", "no PCB, CANTSENDMORE, CANTRCVMORE" or a similar message in the NAME column for open TCP socket files. These messages mean the file's socket

structure lacks a pointer to the INternet Protocol Control
Block (inpcb) where lsof expects to find connection addresses
-- local and foreign ports, local and foreign IP addresses.
The socket file has probably been submitted to the shutdown(2)
function for processing.

In some implementations lsof issues the "no PCB, CANTSENDMORE,
CANTRCVMORE"
message, which tries to explain the absence
of a protocol control block by showing the socket state
settings that have been made by the shutdown(2) function.

If a non-zero address follows the "0x" in the "can't read
inpcb" message, it means lsof couldn't read inpcb contents
from the indicated address in kernel memory.

3.32 What do the "unknown file system type" warnings mean?

Lsof may report a message similar to"

```
unknown file system type, v_op: 0x10472f10
```

in the NAME column for some files.

This means that lsof has encountered a vnode for the file
whose operation switch address (from v_op) references a
file system type for which there is no support in lsof.
After lsof identifies the file system type, it uses
pre-compiled code to locate the file system specific node
for the file where lsof finds information like file size,
device number, node number, etc.

To get some idea of what the file system type might be,
use nm on your kernel symbol file
to locate the symbol name
that corresponds to the v_op address -- e.g., on Solaris
do:

```
$ nm -x /dev/ksyms | grep 0x10472f10
0x10472f10 ... |file_system_name_vnodeops
```

Where "file_system_name" is the clue to the unsupported
file system.

Lsof doesn't use the v_op address to identify file system
types on all dialects. Sometimes it uses an index number
it finds in the vnode. It will translate that symbol to
a short name in the warning message -- e.g., "nfs3" -- if

possible.

3.33 Installation

3.33.1 How do I install lsof?

There is no "standard" way to install lsof. Too much depends on local conditions for me to be able to provide working install rules in the lsof make files. (The skeleton install rules you will find just give "hints.") See the "Installing Lsof" section of 00README for a fuller explanation.

To install lsof you will need to consider these questions:

* Who should be able to use lsof? (See HASSECURITY and HASNOSOCKSECURITY in the "Security" section of 00README.)

* Where should lsof be installed? This is a decision mostly dictated by local conditions. Somewhere in /usr/local -- etc/ or sbin/ -- is a common choice.

* What permissions should I give the lsof executable? The answer to this varies by dialect. The make files have install rules that give hints. The "Installing Lsof" section of 00README gives information, too.

* What if I want to install lsof in a shared file system for machines that require different lsof configurations? See the next question and answer, "How do I install a common lsof when I have machines that need differently constructed lsof binaries?"

3.33.2 How do I install a common lsof when I have machines that need differently constructed lsof binaries?

A dilemma that faces some system administrators when they install lsof in a shared file system -- e.g., NFS -- is that they must have different lsof executables for different systems.

The answer is to build an lsof wrapper script that is executed in place of lsof. The script can use system commands to determine which lsof binary should be executed.

Consider this example. You have HP-UX machines with 32 and 64 bit kernels that share the /usr/local/sbin directory

where you want to install lsof. Consequently, on each system you must use a different lsof executable, built for the system's bit size. (That's because lsof reads kernel structures, sized by the kernel's bit size.)

One answer is to install three things in /usr/local/sbin: 1) a 32 bit lsof as lsof32; 2) a 64 bit lsof as lsof64; and 3) an lsof script. The script might look like this one, based on work by Amir J. Katz:

```
   #!/bin/sh
   x=`/usr/bin/getconf KERNEL_BITS`  # returns 32 or 64
   if /usr/bin/test "X$x" = "X32"
   then
     lsof32 $*
   else
     if /usr/bin/test "X$x" = "X64"
     then
 lsof64 $*
     else
 echo "Can't determine which lsof executable to use;"
 echo
"getconf KERNEL_BITS says: $x"
 exit 1
     fi
   fi
```

Solaris users should consult "How do I install lsof for Solaris 7, 8 or 9?" for information on a similar trick using the Solaris isaexec command.

Users of other dialects might be able to use a command like uname(1) that can identify a distinguishing feature of the system to be incorporated in pre-installed lsof executable names. For example, use `uname -r` and install binaries with suffixes that match `uname -r` output.

3.34 Why do lsof 4.53 and above reject device cache files built by earlier lsof revisions?

When lsof revisions 4.53 run and encounter a device cache file built by an earlier revision, it will reject the file and build a new one. The rejection will be advertised with these messages:

```
   lsof: WARNING: no /dev device in <name>: 2 sections
   ...
   lsof: WARNING: created device cache file: <name>
```

This happens because the header line of the device cache
file was changed at revision 4.53
to contain the number of
the device on which the device directory resides. The old
device cache file header line -- the "2 sections" line in
the above warning message, node reads "2 sections, dev=600".

This is not a serious problem, since lsof automatically
rebuilds the device cache file with the correct header
line.

3.35 What do "like block special" and "like character special" mean
in the NAME column?

When lsof comes across an open block or character file
whose device, raw device and inode place it somewhere other
than /dev (or /devices), lsof doesn't report the /dev (or
/devices) name in the NAME column. Instead lsof reports
the file system name and device or path name in the NAME
column and parenthetically adds "like block special <path>"
or "like character special <path>".

The value for <path> will point to a block or character
device in /dev (or /devices) whose raw device number matches
that of the open file being reported, but whose device
number or node
number (or both) don't match.

Such an open file is connected to a device node that has
been created in a directory other than /dev (or /devices.)
See mknod(8) for information on how such nodes are created.
(Generally one needs root power to create device nodes with
mknod.)

3.36 Why does an lsof make fail because of undefined symbols?

When lsof is compiled via the `make` step and the final
load step fails because of missing symbols, the problem
may not be lsof. The problem may be that ld, called by
the compiler as part of the `make` step, can't find some
library that lsof needs.

First check the last compiler line of the make operation
-- e.g., the last line with cc or gcc in it before the
undefined symbol report -- for loader arguments, i.e.,
ones beginning with "-l". Except for "-llsof" the rest
name system libraries. ("-L./lib" precedes "-llsof" to

tell the loader its location.)

Check that all the named system libraries exist. Look in
/lib and /usr/lib as a
start, but that may not be the only
place system libraries live. Consult your dialect's
documentation, e.g., the compiler and loader man pages,
for other possible locations.

If some system library doesn't exist, that may mean it was
never installed or was removed. You'll have to re-install
the missing library.

You may find that all the system libraries lsof uses exist.
Your next step might be to use nm and grep to see if any
of them contain the undefined symbols.

```
$ nm library | grep symbol
```

If the undefined symbol exists in some library named by
the lsof make step, then you might have a problem with some
environment variable that controls the load step. The most
common is LD_LIBRARY_PATH. It may have a setting that
causes ld to ignore a directory containing a library lsof
names. If this is the case, try unsetting LD_LIBRARY_PATH
in the environment of the ld process -- e.g., do:

```
$ unset LD_LIBRARY_PATH
```
or
```
% unsetenv LD_LIBRARY_PATH
```

Consult your
ld man page for other environment variables
that might affect library searching -- e.g., LIBPATH, LPATH,
SHLIB_PATH, etc.

If the undefined function doesn't exist in any libraries
lsof names, check other libraries. See if the function
has a man page that names its library. If the latter is
true, please let me know, because that is an lsof problem
I need to fix.

If none of these solutions work for you, send me some
documentation via e-mail at <abe@purdue.edu>. Include `uname
-a` output, the output of the lsof `Configure ...` and `make`
steps, and the contents of the environment in force when the
`make` step was executed -- e.g., `env` or `printenv` output.
If you've located the libraries lsof names, send me that

information, too. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

3.37 Command Regular Expressions (REs)

3.37.1 What are basic and extended regular expressions?

Lsof's ``-c'' option allows the specification of regular expressions (REs), enclosed in two slash ('/') characters and followed by these modifiers:

b the RE is a basic RE.
i ignore case.
x the RE is an extended RE (the default).

Note: the characters of the regular expression may need to be quoted to prevent their expansion by the shell.

Example: this RE is an extended RE that matches exactly four characters, whose third may be an upper ('O') or lower case ('o') oh:

```
-c /^..o.$/i
```

For simplicity's sake, an RE that is acceptable to egrep(1) is usually called an extended RE.

REs suitable for the old line editor, ed(1), are often called basic REs (and sometimes also called obsolete).

These are some ways basic REs usually differ from extended REs. (There are other differences.)

* `|', `+', `?', '{', and '}' are ordinary characters.

* `^' is an ordinary character except at the beginning of the RE.

* `$' is an ordinary character except at the end of the RE.

* `*' is an ordinary character if it appears at the beginning of the RE.

For more information on REs and the distinction between basic and extended REs, consult your dialect's man pages

for ed(1), egrep(1), sed(1), and possibly regex(5) or
regex(7).

3.37.2 Why can't I put a slash in a command regular expression?

Since a UNIX command name is the last part of a path to
the command's executable, the lsof command regular expression
(RE) syntax uses slash ('/') to mark the beginning and end
of an RE. Slash may not appear in the RE and the `\'
back-slash escape is ineffective for "hiding" it.

More likely than not, if you try to put a slash in an lsof
command RE, you'll get this response:

```
$ lsof -s/.\// ...
lsof: invalid regexp modifier: /
```

Lsof is complaining the the first character it found after
the second slash isn't an lsof command RE modifier -- 'b',
'i', or 'x'.

3.37.3 Why does lsof say my command regular expression wasn't found?

When you use both forms of lsof's
-c option --
``-c <command>" and ``-c /RE/[m]" -- and ask that lsof
do a verbose search (``-V"), you may be surprised that
lsof will say that the regular expression wasn't found.

This can happen if the ``-c <command>" form matches first,
because then the ``-c/RE/[m]" test will never have been
applied. For example:

```
$ ./lsof -clsof -c/^..o.$/ -V -adcwd
COMMAND  PID USER   FD   TYPE DEVICE SIZE/OFF  NODE NAME
lsof    7850  abe  cwd   VDIR    6,0     2048 96442 / (/dev/sd0a)
lsof: no command found for regex: ^..o.$
```

The ``-clsof" option matched first, so the ``-c/^..o.$/
option wasn't tested.

3.38 Why doesn't lsof report on shared memory segments?

Lsof reports on shared memory segments only if they're
associated with an open file. That's consistent with lsof's
mission -- to LiSt Open Files. Shared memory segments with
no file associations aren't open files.

That's not to say that a report on shared memory segments
and their associated processes
wouldn't be useful. But it
calls for a new tool, not more baggage for lsof.

3.39 Why does lsof report two instances of itself?

When you ask lsof to report all open files and it has
permission to do so, you may see two lsof processes in the
output. The processes are connected via pipes -- e.g.,
here's an HP-UX 11 example.

```
COMMAND     PID USER   FD   TYPE     DEVICE ...
...
lsof      29450  abe    7w  PIPE 0x48732408 ...
lsof      29450  abe    8r  PIPE 0x48970808 ...
...
lsof      29451  abe    6r  PIPE 0x48732408 ...
lsof      29451  abe    9w  PIPE 0x48970808 ...
```

The first process will usually be the lsof you initiated;
the second, an lsof child process that is used to isolate
its parent process from kernel functions that can block --
e.g., readlink() or stat().

Information to and from the kernel functions is exchanged
via the two pipes. When the parent process detects that
the child process has become blocked, it attempts to
kill
the child. Depending on the UNIX dialect that may succeed
or fail, but the parent won't be blocked in any event.

See the "BLOCKS AND TIMEOUTS" and "AVOIDING KERNEL BLOCKS"
sections of the lsof man page for more information on why
the child process is used and how you can specify lsof
options to avoid it. (Caution: that may be risky.)

3.40 Why does lsof report '\n' in device cache file error messages?

Lsof revisions prior to 4.58 may report '\n' in error
messages it delivers about problems in the device cache
file -- e.g.,

```
lsof: WARNING: no ...: 4 sections\n
```

That's deliberately done to show the exact contents of the
device cache file line about which lsof is complaining,
including its terminating NL (New Line) '\n' character.

In the above example the line in the device cache file
causing the lsof complaint contains "4 sections" and ends
with a '\n'.

At revision 4.58 and above, device cache error messages
like the one in the above example have been changed
to
read:

```
lsof: WARNING: no ...: line "4 sections"
```

The terminal '\n' is no longer reported, the line contents
are enclosed in double quote marks ("'"), and the word
"line" has been added as a prefix to denote that what
follows is a line from the device cache file.

3.41 Kernel Symbol and Address Problems

3.41.1 What does "lsof: WARNING: name cache hash size length error: 0" mean?

When run on some systems, lsof may issue this warning:

```
lsof: WARNING: name cache hash size length error: 0
```

That is an example from a FreeBSD system where lsof reads
the kernel's _nchash variable and finds its value is zero.

Similar warnings include:

```
WARNING: kernel name cache size:
WARNING: can't read kernel's name cache:
WARNING: no name cache address
WARNING: name cache hash size length error:
WARNING: unusable name cache size:
```

These warnings are issued when lsof is attempting to read
the kernel's name cache information. They are usually the
result
of a mis-match between the addresses for kernel
symbols lsof gets via nlist(2) and the addresses in use by
the kernel.

Lsof usually gets kernel symbol addresses from what it
believes to be the kernel boot file. In FreeBSD, for
example, that's the path returned by getbootfile(3), usually
/kernel. The boot file can have other names in other UNIX
dialects -- /unix, /vmunix, /bsd, /netbsd, /mach, /stand/vmunix,

etc.

Lsof will get incorrect (mismatched) addresses from the boot file if it has been replaced by a newer one which hasn't yet been booted -- e.g., if this is done in FreeBSD:

```
# mv /kernel /kernel.OLD
# mv /kernel.NEW /kernel
```

Until the FreeBSD system is rebooted, the booted kernel is /kernel.OLD, but getbootfile() says it is /kernel. If symbol addresses important to lsof in /kernel.OLD and /kernel don't match, the lsof WARNING messages result.

3.41.2 Why does lsof produce "garbage" output?

Kernel name cache warnings may not be the only sign that lsof
is using incorrect symbol addresses to read kernel values. If there's no reasonable test lsof can make on what it reads from the kernel, it may issue other warnings or even report nonsensical results.

The warnings may appear on STDERR, such as:

```
lsof: can't read proc table info
```

Or the warnings may appear in the NAME column as messages saying lsof can't read or interpret some kernel structure -- e.g.,

```
... NAME
... can't read file struct from 0x12345
```

One possible work-around is to point lsof's kernel symbol address gathering at the proper boot file. That can be done with lsof's -k option -- e.g.,

```
$ lsof -k /kernel.OLD
```

The best work-around is to make sure the standard boot file is properly sited -- e.g., if you've moved a new /kernel in place, boot it.

3.42 Why does lsof report open files when run as super user that it doesn't report when run with lesser privileges?

The most likely cause is that the HASSECURITY option was

selected when
the lsof executable was built.

If HASSECURITY is defined when lsof is built, and lsof is
run with the privileges of a non-ROOT user, it will only
list open files belonging to the user. The same lsof
executable, when run with root user privileges, will list
all open files.

However, if HASSECURITY and HASNOSOCKSECURITY are both
defined when lsof is built, lsof will list open files
belonging to the user and will also list anyone else's open
socket files, provided their listing is selected with the
"-i" option.

So first ask yourself if the process whose open files lsof
won't list belong to a user other than the one under which
you're running lsof, and are not open socket files. If
either is true, use lsof's help (-h or -?) option and look
for a line near the bottom of the help panel that says:

```
"... can list all files..."
```

If the leading "..." says "Only root" then HASSECURITY was
defined when lsof was built. If the trailing "..." says
", but anyone can list
socket files" then HASNOSOCKSECURITY
was also defined.

Should you want an lsof not built with HASSECURITY defined,
rerun the lsof Configure script. If you let Configure do
customization, make sure you answer 'n' when it asks if
you want to enable HASSECURITY and HASNOSOCKSECURITY. If
you don't need to do customization, you can rebuild lsof
with the "-n" option to Configure. Here's an example of
such a rebuild sequence:

```
$ Configure -clean
$ Configure -n <dialect-abbreviation>
$ make
```

More information on the HASSECURITY and HASNOSOCKSECURITY
options may be found in the "Security" section of the
00README file of the lsof distribution.

3.43 Test Suite Problems

3.43.1 Errors all tests can report:

3.43.1.1 Why do tests complain "ERROR!!! can't execute ../lsof"?

All tests in the test suite expect an executable lsof file
to exist in the tests parent directory, ../lsof.

If there's none there, the tests/Makefile has a rule to
make it, but there are probably
circumstances where that
rule may fail.

The work-around is to re-Configure and re-make lsof, then
run the test suite.

3.43.1.2 Why do tests complain "ERROR!!! can't find ..." a file?

Many tests create (or use from a supplied environment
variable path) a test file and use lsof to find it. When
lsof can't file the file, the tests report the error with
messages of the form:

```
   ERROR!!!  can't find ... : <some file path>
 or
   ERROR!!!  lsof couldn't find ...
```

These type of error messages mean that the lsof field output
delivered to the test didn't contain a file that the test
could identify as the one it intended lsof to find. It
might also mean that the process information -- command
name, PID or parent PID -- didn't match what the test
expected.

This could imply a bug in the test or a bug in lsof. Try
using lsof to find a known file that is open. For example,
while in the tests sub-directory, do this:

```
   $ sleep 30 < Makefile
   $ ../lsof Makefile
```

If
lsof doesn't report that Makefile is open, then the
fault may be with lsof. If lsof reports the file is open,
search further in the test code for the failure cause.

3.43.1.3 Why do some tests fail to compile?

If a test suite program fails to compile, it may be because
I've never had an opportunity to compile the test on the

particular UNIX version you are using.

See Appendix B in 00TEST for a list of the UNIX dialects where the test suite has been validate.

3.43.1.4 Why do some tests always fail?

There are several tests in the optional group that have conflicting or special requirements:

LTbigf needs a dialect and file system that support large files.

LTlock won't work if the tests/ sub-directory is on an NFS file system.

LTnfs won't work if the tests/ sub-directory is not on an NFS file system.

So for two tests in particular, LTlock and LTnfs, one will generally fail.

Some failing tests can be run successfully by supplying to them a path to the appropriate type of file system with the -p option.

3.43.1.5 Why does the test suite say it hasn't been validated on my dialect?

When you use the default rule of the test suite's Makefile, it may issue this complaint:

```
$ cd tests
$ make
!!!WARNING!!!

This dialect or its particular version may not have
been validated with the lsof test suite.  Consequently
some tests may fail or may not even compile.

!!!WARNING!!!
```

You are then given the opportunity to answer 'y' to have the test suite operation continue.

This message means that the tests/TestDB file in the tests sub-directory doesn't show that the test suite has been

run with the combination of compiler flags found in
tests/config.cflags. The tests might nor run; they may
encounter compiler failures.

See 00TEST for more information on the UNIX dialects where
the test suite has been validated and on the workings of
TestDB and its supporting scripts.

When
the tests/Makefile "auto" rule is used, the message
is more terse and the condition is fatal.

This suite has not been validated on:

<dialect_description>

No opportunity to continue is offered.

The tests/Makefile "silent" rule will skip checking for
the validation footprint.

3.43.1.6 Why do the tests complain they can't stat() or open()
/dev/mem or /dev/kmem?

When the tests detect that lsof for the dialect reads its
information from kernel memory (i.e., the LT_KMEM definition
is present in tests/config.cflags), and when the lsof
executable path is ../lsof, the tests make sure they can
stat() and open() for read access the relevant kernel memory
devices, /dev/kmem and possibly /dev/mem.

If those stat() or open() operations fail, the tests issue
an error message and quit. The message explains why the
system rejected the operation in terms of system "errno"
symbols and messages. More often than not the explanation
will be that the process lacks permission
to access the
indicated device node.

One work-around is to give the lsof executable being tested
the necessary permission -- e.g., via chgrp, chmod, etc.
-- and set its path in the LT_LSOF_PATH environment variable.
(See 00TEST.)

Another work-around is to make sure the process that runs
the tests has the necessary permissions -- e.g., run it as
root, or enable the process login to access the resources.
For example, I can run the tests on my personal work-station

because /dev/kmem and /dev/mem are readable by the "kmem"
group and my login is in that group.

3.43.2 LTbigf test issues

3.43.2.1 Why does the LTbigf test say that the dialect doesn't support large files?

Large file support is defined dialect by dialect in the
lsof source files and Configure script. If large file
support isn't defined there, it isn't defined in the LTbigf
test.

If you think that's wrong for a particular dialect, contact me
via e-mail at <abe@purdue.edu>. Make sure "lsof" appears
in the
"Subject:" line so my e-mail filter won't classify your letter
as Spam.

3.43.2.2 Why does LTbigf complain about operations on its config.LTbigf* file?

The LTbigf must be able to write a large file test (size
> 32 bits) and seek within it and the process file ulimit
size must permit the operation. If the default location
for the test file, tests/, isn't on a file system enabled
for large file operations or if the process ulimit file
block size is too small, lsof will get file operation
errors, particularly when seeking

There may be a work-around. Specify the path to a file
LTbigf can write in a file system enabled for large file
operations a the -poption. Make sure that the ulimit file
block size permits writing a large file. For example,
presuming /scratch23 is large-file-enabled, and presuming
you have permission to raise the ulimit file block size,
this shell commands will allow the LTbigf test to run on
AIX:

```
$ ./LTbigf -p /scratch23/abe/bigfile
```

(Note:
syntax for the ulimit command varies by dialect and
by shell. Discovering the proper variant is left to the
reader.)

More information on this subject can be found in the LTbigf

description in the 00TEST file. If course, the LTbigf.c source file in tests/ is the ultimate source of information,

3.43.2.3 Why does LTbigf warn that lsof doesn't return file offsets?

On some dialects (e.g., Linux) lsof can't report file offsets, because the data access method underlying lsof doesn't provide them. If LTbigf knows that lsof can't report file offsets for the dialect, it issues this warning:

```
LTbigf ... WARNING!!! lsof can't return file offsets
for this dialect, so offset tests have
been disabled.
```

LTbigf then performs the size test and skips the offset tests.

For more information see 00TEST and the "Why doesn't /proc-based lsof report file offsets (positions)?" Q&A of this file.

3.43.3 Why does the LTbasic test complain "ERROR!!! lsof this ..." and "ERROR!!! lsof that ..."?

The LTbasic test program uses lsof to examine a running lsof process. It looks for the lsof current working directory, executable (if possible), and kernel memory file (if applicable).

Failures to find those things result in the LTbasic error messages. More information on how LTbasic produces the error messages may be found in the LTbasic.c source file.

On HP-UX 11.11 and higher, for example, if the test's current working directory is on a loopback (LOFS) file system, LTbasic won't be able to find the current working directory of the lsof process because of a bug in the HP-UX kernel.

The solution for that HP-UX problem is to install an HP-UX patch. See the answer to the "Why doesn't PSTAT-based lsof report a CWD that is on a loopback (LOFS) file system?" question for more information on the patch.

3.43.4 NFS test issues

3.43.4.1 Why does the LTnfs test complain "couldn't find NFS file ..."?

The LTnfs test must work with an NFS test file.
After it
opens the file it asks lsof to find it on an NFS file system.
If the file isn't on an NFS file system, lsof won't find it,
and the NFS test script complains and fails.

The work-around is to use -p option to supply a path to a
regular NFS file (not a directory) that is on an NFS file
system that LTnfs can read. Presuming /share/bin/file is
such a file and can be opened for reading by the LTnfs
test, this sample shell command could be used to run the
LTnfs test successfully:

```
$ ./LTnfs -p /share/bin/file
```

(If the NFS file system is enabled for large files, the
NFS test will produce the error message described in the
following Q&A.)

3.43.5 LTnlink test issues

3.43.5.1 Why does the LTnlink test complain that its test file is on an NFS file system?

The LTnlink test may complain:

```
LTnlink ... WARNING!!! test file <path> is NFS mounted.
```

and then issue an explanation and a hint about using the
-p option.

The LTnlist test does this because of the
way NFS file
links are managed when an NFS file is unlinked and the
unlinking process still has the file open. Unlike with
files on a local file system, when an NFS file that is
still open is unlinked, its link count is not reduced.

The file name is changed to a name of the form .nfsxxxx
and the link count is left unchanged until the process
holding the file open closes it. That's done by NFS so it
can keep proper track of the file on NFS clients and servers.

Since the link count isn't reduced when the LTnlink test
program closes the NFS test file it still has open, lsof
won't find it for LTnlink with a link count of zero.
Consequently, LTnlink disables that test section and issues
its warning.

The warning suggests that the unlink test section can be
run by giving LTnlink a path to a test file with the -p
option. That path must name a file LTnlink can write and
unlink. Presuming /scratch23/abe/nlinkfile is on a local
file system and the LTnlink test can write
to it and unlink
it, this sample shell command can be used to run the complete
LTnlink test successfully:

```
$ LTnlink -p /scratch23/abe/nlinkfile
```

3.43.5.2 Why does LTnlink delay and report "waiting for link count update: ..."?

On some UNIX dialects and file system combinations the
updating of link count after a file has been unlinked can
be delayed. Consequently, lsof won't be able to report
the updated link count to LTnlink for a while.

When lsof doesn't report the proper link count to LTnlink,
it sleeps and repeats the lsof call, using the "waiting
for link count update: ..." message as a signal that it is
waiting for the expected lsof response. The wait cycle
duration is limited to approximately one minute.

3.43.5.3 Why does LTnlink fail because of an unlink error?

LTnlink may fail with an error similar to:

```
LTnlink ... ERROR!! unlink(<name>) failed: (Permission denied).
```

That message will be followed by a short explanation.

The error means that the
kernel support for the file system on
which the file <name> resides does not allow a process to
unlink a file while it has the file open. (When LTnlink is run
without the "-p path" option, it creates a <name> that begins
with "./config.LTnlink" and ends with the LTnlink process ID
number.)

An unlink failure of this type runs counter to original UNIX
file system behavior, but it has been observed on some file
system types, especially on the ZFS file system.

The work-around is to run LTnlink on a file system that allows
a process to unlink a file it has open. Usually /tmp has that

support. So, try running LTnlink this way:

```
$ ./LTnlink -p /tmp/<name>
```

where <name> is a unique name in /tmp of your choosing. To be safe, create a subdirectory in /tmp, named by your login:

```
$ rm -f /tmp/<login>
$ mkdir /tmp/<login>
$ ./LTnlink -p /tmp/<login>/<name>
```

3.43.6 LTdnlc test issues

3.43.6.1 Why won't the LTdnlc test run?

Lsof is unable to access the DNLC cache on AIX, because the kernel symbols for the DNLC aren't exported. Contact IBM to learn why that decision was made.

The LTdnlc test won't work on Apple Darwin because lsof can't obtain reliable DNLC information.

The LTdnlc test may fail on other dialects. Failure causes include: a busy system with a DNLC that is changing rapidly; path name components too large for the DNLC; a file system -- e.g., NFS, /tmp, loopback -- which doesn't fully participate in the DNLC; or DNLC limitations (Many DNLC implementations will only store path name components if they are 31 characters or less.)

If you suspect the file system doesn't fully participate in kernel DNLC processing, as a work-around rebuild and test lsof on one that does.

3.43.6.2 What does the LTdnlc test mean by "... <path> found: 100.00%"?

Even when it succeeds the LTdnlc test will report:

```
LTdnlc ... /export/home/abe/src/lsof4/tests found: 100.00%
```

This message means that the LTdnlc test asked lsof to find the file at the indicated path five times and lsof found the full path name in the indicated percentage of calls. The LTdnlc test considers it a failure if the percentage falls below 50.0%

3.43.6.3 Why does the DNLC test fail?

The DNLC test may fail when some component of the lsof tests/ sub-directory can't be cached by the kernel DNLC. Some kernels have a limit on the length of individual components (typically) 32.

3.43.7 Why hasn't the test suite been qualified for 64 bit HP-UX 11 when lsof is compiled with gcc?

When I attempted to qualify lsof for HP-UX 11, compiled with gcc 3.0, the LTsock test failed. I traced the failure to a gcc compilation error. Because LTsock is an important test, I didn't feel that the test suite was qualified if it failed.

LTsock compiles and runs correctly on 64 bit HP-UX 11 when compiled with HP's ANSI-C.

3.43.8 LTszoff test issues

3.43.8.1 Why does LTszoff warn that lsof doesn't return file offsets?

On some dialects (e.g., Linux) lsof can't report file offsets, because the data access method underlying lsof doesn't provide them. If LTszoff knows that lsof can't report file offsets for the dialect, it issues this warning:

```
LTszoff ... WARNING!!!  lsof can't return file offsets
for this dialect, so offset tests have
been disabled.
```

LTszoff then performs the size test and skips the offset tests.

For more information see 00TEST and the "Why doesn't /proc-based lsof report file offsets (positions)?" Q&A of this file.

3.43.9 LTlock test issues

3.44 File descriptor list (the ``-d'' option) problems

3.44.1 Why does lsof reject a ``-d'' FD list?

Lsof rejects ``-d'' FD lists that contain both exclusions and inclusions with messages like:

```
lsof: exclude in an include list: ^1
lsof: include in an exclude list: 2
```

That's because ``-d'' FD lists are processed as ORed lists, so it makes no sense for them to contain both exclusions and inclusions.

I.e.,, if a ``-d'' FD list were to contain ``^cwd,1'', the ``^cwd'' member is useless, because the ``1'' member dominates by saying "include only FD 1". That effectively excludes ``cwd'' FD.

Note that lists may have multiple members of the same type, exclude or include. They are processed as an ORed set. If an FD isn't excluded by any member of an exclude list, it is selected. If an FD is included by any member of an include list, it is selected.

3.44.2 Why are file descriptors other than those in my FD list reported?

The FD list that follows ``-d'' excludes or includes file descriptors, but unless the ``-a'' (AND) option is specified, the FD list selections are ORed to the other selections.

For example, the following lsof command will cause all file descriptors to be listed for the lsof command, and all but the cwd descriptor for all other commands, probably not what was intended.

```
$ lsof -clsof -d^cwd
```

Hint: use ``-a'' -- e.g.,

```
$ lsof -clsof -a -d^cwd
```

3.45 How can I supply device numbers for inaccessible NFS file systems?

When lsof can't get device numbers for inaccessible NFS file systems via stat(2) or lstat(2), it attempts to get them from the mount table's dev=xxx options. Successes are reported with a warning message that indicates the source of the device number and that output might be incomplete as a consequence of the warnings.

Some system mount tables -- e.g., Linux /proc/mounts -- don't have a dev=xxx option. In that case, and provided lsof for the dialect supports them, you can use the +m option to create a mount table supplement file and the "+m m" option to use it.

First check the lsof -h (help) output to see if the +m and "+m m" options are supported. If they are, use +m to create a mount table supplement file when all mounted file systems are accessible. Use "+m m" later to make the supplement available when some mounted file systems might not be available.

Here's an example that creates a mount supplement file in $HOME/mnt-sup
and later makes it available to lsof.

```
$ rm -f $HOME/mnt-sup
$ lsof +m > $HOME/mnt-sup
...
$ lsof +m $HOME/mnt-sup <other lsof options>
```

If lsof has to get the device number from the supplement, it will issue an informative warning message. The warning can be suppressed with lsof's -w option.

Caution! Since the mount table supplement file is static, it is its supplier's responsibility to update it as file system mounts change.

For more information, consult the lsof man page. The "ALTERNATE DEVICE NUMBERS" section has useful information on how lsof acquires device numbers when stat(2) or lstat(2) fail.

3.46 Why won't lsof find open files on over-mounted file systems?

When a file system, /xyz for example, is mounted on the same mount point as another file system, /abc for example, running lsof with an argument of the path of the first file system's mount point -- the over-mounted one, /abc -- probably will not reveal any files open
on /abc.

That's because lsof looks for open files on a file system by looking for files with the file system's device number. The two file systems usually have different device numbers and lsof determines the device number search key from the supplied name of the second file system.

A general work-around exists only for Linux. On that UNIX dialect, when you know the over-mounted file system's mount point path, you can ask lsof to report on all open files and grep that output for the path of the over-mounted file system mount point.

3.47 What can be done when lsof reports no more space?

Many lsof methods cache information in memory, using the dialects malloc() library function. When malloc() can't allocate the requested amount of memory, lsof exits with warning messages similar to this AIX message:

```
lsof: no more dev-ch space at pid 2257750: 0x82a8e600
```

Lsof then exits immediately and produces no more output.

A possible work-around is to increase the memory foot print of the shell that runs lsof. That is often done with the ulimit(1) shell command.

3.48 What if the lsof build encounters ar and ld problems?

The lsof main and library Makefiles use the library archiver, ar, and the system loader, ld, applications. Improperly located, installed or configured versions of them may cause the lsof build to encounter errors with them.

The application producing the error should identify itself in its error messages.

The first thing to check the path of the application that is being used. Try `which ar` or `which ld` to see if perhaps the PATH used during the build might be causing the wrong archiver or loader to be used.

If the problem is with the use of the wrong archiver, and it's not possible to correct the PATH to it, try using the LSOF_AR environment variable to specify the path to and arguments for the correct archiver. See 00XCONFIG for more information and note that LSOF_AR must specify the path to the archive application and the arguments for it, less the terminating library and module name arguments.

If the problem is with the loader, there is no lsof work-

around. That's because lsof calls the loader via the C compiler, so the problem must be fixed at the compiler (system) level.

3.49 Why does lsof -i report an open socket file for a process, but lsof -p on that process' ID report nothing?

The lsof in use was probably built with the HASSECURITY and HASNOSOCKSECURITY options and the process in question does not belong to the user of lsof.

The HASSECURITY option limits lsof output to processes owned by the user invoking lsof and the HASNOSOCKSECURITY option weakens that slightly to allow output of open socket file information for all processes.

For example, if process PID 12345 is owned by some user other than the one invoking lsof, and lsof has been compiled with the HASSECURITY and HASNOSOCKSECURITY options, the following lsof command will display the open socket files of process 12345:

```
$ lsof -p 12345 -a -i
```

This security restriction is described in the lsof(8) manual page.

4.0 AIX Problems

4.1 What is the Stale Segment ID bug and why is -X needed?

Kevin Ruderman reports that he has been informed by IBM that processes using the AIX 3.2.x, 4.1[.12345]], 4.2[.1], and 4.3.x kernel's readx() function can cause other AIX processes to hang because of what appears to be file system corruption.

This failure, known as the Stale Segment ID bug, is caused by an error in the AIX kernel's journaled segment memory handler that causes the kernel's dir_search() function erroneously to believe directory entries contain zeroes. The process using the readx() call need not be doing anything wrong. Usually the system must be under such heavy load that the segment ID being used in the readx() call has been freed and then reallocated to another process since it was obtained from kernel memory.

Lsof uses the readx() function to access library entry structures,
based on the segment ID it finds in the proc structure of a process. Since IBM probably will never fix the kernel bug, I've added an AIX-specific option to lsof that controls its use of the readx() function.

By default lsof readx() use is disabled; specifying the ``-X'' option enables readx() use.

If you want to change the default readx() behavior of AIX lsof, change the HASXOPT, HASXOPT_ROOT, and HASXOPT_VALUE definitions in dialects/aix/machine.h. You can also use these definitions to enable or disable readx() -- consult the comments in machine.h. You may want to disable readx() use permanently if you plan to make lsof publicly executable.

When HASXOPT_ROOT is defined, lsof will restrict use of the -X option to processes whose real UID is root; if HASXOPT_ROOT isn't defined, any user may specify the -X option. The Customize script offers the option to change HASXOPT_ROOT when HASXOPT is defined and HASXOPT_ROOT is named in any dialect's machine.h
header file.

I have never seen lsof cause a problem with its use of readx(), but I believe there is some chance it could, given the right circumstances.

4.1.1 Stale Segment ID APAR

Here are the details of the Stale Segment ID bug and IBM's response, provided by Kevin Ruderman.

```
AIX V3
  APAR=ix49183
     user process hangs forever in kernel due to file
     system corruption
  STAT=closed prs  TID=tx2527 ISEV=2 SEV=2
      (A "closed prs" is one closed with a Permanent
      ReStriction.)
  RCOMP=575603001 aix v3 for rs/6 RREL=r320

AIX V4  (internal defect, no apar #)
  prefix       p
  name         175671
  abstract     KERMP: loop for ever in dir_search()
```

Problem description:

1. Some user application -- e.g., lsof -- gets the segment ID (SID) for the process private segment of a target process from the process table.

2. The target process exits, deleting the process private segment.

3. The SID is reallocated for use as a persistent segment.

4. The user application runs again and tries to read the user area structure from /dev/mem, using the SID it read from the process table.

5. The loads done by the driver for /dev/mem cause faults in the directory; new blocks are allocated; the size changed; and zero pages created.

6. The next application that looks for a file in the affected directory hangs in the kernel's dir_search() function because of the zero pages. This occurs because the kernel's dir_search() function loops through the variable length entries one at a time, moving from one to the next by adding the length of the current entry to its address to get the address of the next entry. This process should end when the current pointer passes the end of the known directory length.

However, while the directory length has increased, the entry length data has not, so when dir_search() reaches the zero pages, it loops forever, adding a length of

zero to the current pointer, never passing the end of the directory length. The application process is hung; it can't be killed or stopped.

IBM closed the problem with a PRS code (Permanent ReStriction) under AIX Version 3 and had targeted a fix for AIX 4.2. They have recently (I became aware of it September 10, 1996) cancelled the defect report altogether and have indicated they are not going to fix the defect.

4.2 Gcc Work-around for AIX 4.1x

When gcc is used to compile lsof for AIX 4.1x, it doesn't align one element of the user structure correctly. Xlc

sees the U_irss element as a type "long long" and aligns
it on an 8 byte boundary. That's because the default mode
of xlc is -qlonglong; when -qlonglong is enabled, the
_LONG_LONG symbol is also defined.

Gcc sees U_irss as a two element array of type long, because
_LONG_LONG isn't defined. Hence gcc aligns the U_irss
element array on a 4 byte boundary, rather than an 8 byte
one, making the gcc incantation
of the user structure 4
bytes shorter than xlc's.

When the length of gcc's user structure is supplied as
argument 4 to the undocumented getuser() function of the
AIX kernel, getuser() rejects it as an incorrect size and
returns EINVAL.

Lsof has a work-around for this problem. It involves a
special test in the Configure script when the "aixgcc"
Configure abbreviation is used -- e.g.,

```
$ Configure -n aixgcc
```

The test is to compile a small program with gcc and check
the alignment of U_irss. If it's not aligned on an 8 byte
boundary, the Configure script makes a special copy of
<sys/user.h> in ./dialects/aix/aix<AIX_version> whose
U_irss will align properly, and generates compile time
options to use it.

While I have tested this work-around only with 4.1.4, it
should work with earlier versions of AIX 4.1. It does not
work for AIX 4.2; a different work-around is employed there.
(See the next section.)

If you want to use this technique to compile other AIX
4.1x
programs with gcc for using getuser(), check the
Configure script.

Stuart D. Gathman identified this gcc AIX alignment problem.

4.3 Gcc and AIX 4.2[.1]

Alignment problems with gcc and AIX 4.2[.1] inside the user
structure are more severe, because there are some new 64
bit types in AIX that gcc doesn't yet (as of 2.7.x) support.
The <sys/user.h> U_irss element problem, discussed in 4.3

above, doesn't exist in 4.2[.1].

The AIX lsof machine.h header file has a work-around, provided by Henry Grebler, that bypasses gcc alignment problems. Later versions of gcc (e.g., 2.8.x) will probably bypass the problems as well.

4.4 Why won't lsof's Configure allow the use of gcc for AIX below 4.1?

Gcc can't reliably be used to compile lsof for AIX versions below AIX 4.1 because of possible kernel structure element alignment differences between it and xlc.

4.5 What is an AIX SMT file type?

When you run AIX X clients with the DISPLAY environment variable set to ``:0.0'' they communicate
with the AIX X
server via files whose kernel file structure has an undefined type (f_type == 0xf) -- at least there's no definition for it in <sys/file.h>.

These are Shared Memory Transport (SMT) sockets, an artifact of AIXWindows, designed for more efficient data transfers between the X server and its clients.

Henry Grebler and David J. Wilson alerted me to the existence of these files. Mike Feldman and others helped me identify them as SMT sockets.

The curious reader can find more about SMT sockets in /usr/lpp/X11/README.SMT.

4.6 Why does AIX lsof start so slowly?

When AIX lsof starts it compares the running kernel's identity to the one for which it was built, using /usr/bin/oslevel. That comparison can sometimes take a long time to complete, depending on the system's maintenance level and how recently it was examined with oslevel.

AIX revisions 4.67 and above for AIX 5 and above don't use oslevel to determine the kernel identity. They use uname(2) instead,
and it is much faster.

You can skip the oslevel test by suppressing warning messages

with lsof's -w option. Doing that carries with it the risk
of missing other warning messages, however.

You can also disable the kernel identity check by disabling
the definition of the HASKERNIDCK symbol by editing AIX
machine.h header file or by using the Customize script to
disable it.

See the "Why does lsof warn "compiled for x ... y; this is
z.?" section for more information.

4.7 Why does exec complain it can't find libc.a[shr.o]?

When you try to execute lsof you may get this complaint:

```
    exec(): 0509-036 Cannot load program ./lsof because of
        the following errors:
     0509-022 Cannot load library libc.a[shr.o].
     0509-026 System error: A file or directory in
  the path name does not exist.
```

This is probably the result of making lsof when the LIBPATH
environment variable contained a directory path that doesn't
contain libc.a. You can see what LIBPATH
contained when
lsof was made by using the dump application on lsof. For
example, if LIBPATH contained /foo/bar when lsof was made,
you will see this (partial) dump output:

```
    $ dump -H lsof
    ...
  ***Import File Strings***
    INDEX  PATH                    BASE        ...
    0      /foo/bar
```

To correct the problem, revisit the lsof source directory
and remake lsof this way:

```
    $ unset LIBPATH; make  (sh or ksh)
or
    % unsetenv LIBPATH; make  (csh or tcsh)
```

4.8 What does lsof mean when it says, "no PCB, CANTSENDMORE,
CANTRCVMORE" in a socket file's NAME column?

When an AIX application calls shutdown(2) on an open socket
file, but hasn't called close(2) on the file, the file will
remain visible to lsof as an open socket file without any

extended protocol information.

Lsof reports that state in the NAME column by saying that there is "no PCB" (Protocol Control Block) for the protocol (e.g., TCP in the NODE column). If the open socket file has
the state variables SO_CANTSENDMORE and SO_CANTRCVMORE set -- i.e., from the shutdown(2) call -- lsof reports them with the CANTSENDMORE and CANTRCVMORE notes in the NAME column.

4.9 When the -X option is used on AIX 4.3.3, why does lsof disable it, saying "WARNING: user struct mismatch; -X option disabled?"

The -X option causes lsof to read the loader information of the user structure from virtual memory via the readx() system call. It does that with the user structure definition from <sys/user.h> that was compiled into the lsof executable.

On AIX 4.3.3 there are two different user structure definitions in two separate <sys/user.h> header files, distributed at different times by IBM. If lsof was compiled with one and the kernel on which lsof is being run was compiled with the other, lsof normally won't get correct loader information when it calls readx().

In an attempt to compensate for that difference, lsof makes an independent check of the loader information by getting
the user structure's open file count via readx() and comparing it to the open file count obtained independently via getprocs(). When the two counts don't match, lsof tries to read the count (and re-read the loader information) with two offsets, based on observed differences between the two user structures.

When one of the three attempts produces a correct open file count, lsof uses its corresponding offset on subsequent readings of the loader information.

When none of the three attempts produces a correct open file count, lsof issues the WARNING message and disables -X processing.

To eliminate this problem, obtain an lsof binary that matches the kernel of the AIX 4.3.3 system where you want to run lsof. Compiling lsof on the target system is the preferred way to get a matching binary.

4.10 Why doesn't the -X option work on my AIX 5L or 5.[123] system?

If your AIX 5L or 5.[123] system uses the ia64 architecture,
lsof needs setuid-root permission to be
able to do the
processing that -X requires.

Check the output of `uname -a` to determine the architecture
type.

The work-around is to give lsof setuid-root permission.

4.11 Why doesn't /usr/bin/oslevel report the correct AIX version?

The oslevel man page says, "The oslevel command reports
the level of the operating system using a subset of all
filesets installed on your system."

You can see which fileset is below the expected level with
oslevel's -l option. For example, if you believe your
system is at AIX level 4.3.3, but oslevel reports 4.3.2,
use this oslevel command to find the filesets below 4.3.3:

```
$ /usr/bin/oslevel -l 4.3.3.0
```

If you don't know what level argument to supply to oslevel's
-l option, use oslevel's -q option first.

4.11.1 Why doesn't /usr/bin/oslevel report the correct AIX version
on AIX 5.1?

The subset list for oslevel on AIX 5.1 seems to include at
least two filesets, xlsmp.msg.en_US.rte and xlsmp.rte, that
do not install from AIX 5.1
media with a 5.1.0.0 level.
Hence, oslevel reports 5.0.0.0 instead of the expected
5.1.0.0.

If either xlsmp.msg.en_US.rte or xlsmp.rte is installed,
lsof's Configure script and run-time tests will identify
the AIX version incorrectly. The run-time test will
issue a complaint message of this form:

```
lsof: WARNING: compiled for AIX version xxx; this is yyy.
```

You can correct the Configure test by pre-defining the
oslevel value, setting the correct value in the LSOF_VSTR

environment variable before running the Configure script
-- e.g., to pre-define AIX 5.1 when using ksh, do this:

```
$ LSOF_VSTR=5.1.0.0 Configure -n aix
```

You can't affect oslevel output without uninstalling
xlsmp.msg.en_US.rte and xlsmp.rte. If you can't do that,
you'll have to put up with the run-time complaint.

4.12 Why does lsof for AIX 5.1 or above Power architecture
complain about kernel bit size?

When you run an lsof binary on an AIX 5.1 or above Power
system, it might complain:

```
lsof: FATAL: compiled for a 32 bit kernel.
  The bit size of this kernel is 64.
```

or

```
   exec: 0509-036 Cannot load program ./lsof because of
    the following errors:
        0509-032 Cannot run a 64-bit program on a 32-bit
    machine.
```

Starting at lsof revision 4.61, lsof binaries for Power
architecture systems running AIX 5.1 or above are closely
tied to the kernel bit size. Lsof must do that so it can
read and understand kernel structures.

Lsof's Configure script tunes the lsof configuration so
that the binary built in the make(1) step is adjusted to
the kernel bit size.

An lsof binary knows the bit size for which it was constructed,
tests the bit size of the kernel under which it is running,
and objects if the two sizes don't match. To see the bit
size for which lsof was constructed, run it with its -v
option and look for these lines in the output:

```
   configuration info: 32 bit kernel
```

or

```
   configuration info: 64 bit kernel
```

(Note: these lines will
appear only in -v output for AIX
5.1 and above lsof binaries, built for Power architecture.)

You can see the kernel bit size test method in the aix

stanza of the lsof Configure script and in the get_kernel_access() function of the lsof .../dialects/aix/dproc.c source file.

There is more information on pre-defining the kernel bit size when building lsof in Configure, 00PORTING, and 00XCONFIG.

The only work-around is to use an lsof binary built to match the running kernel bit size.

4.13 What can't gcc be used to compile lsof on the ia64 architecture for AIX 5 and above?

Gcc can't be used to compile lsof on the ia64 architecture for AIX 5 and above because I haven't had access to a system that has a working gcc compiler. The gcc compiler on my one and only ia64 AIX 5.1 test system, provided by IBM, didn't work at all.

4.14 Why does lsof get a segmentation fault when compiled with gcc for a 64 bit Power architecture AIX 5.1 kernel?

When lsof is configured with the lsof "aixgcc" Configure abbreviation, the resulting lsof executable may cause a segmentation violation when it is run. I've observed this with gcc version 2.9-aix43-010414-7.

As far as I have been able to tell, the segmentation fault is the result of a gcc compilation, loading, or library error. Watching lsof run with gcc's companion debugger, gdb, shows no error in the lsof source code that might explain the fault.

The only work-around I know is to use the IBM C compiler in place of gcc -- i.e., use the "aix" lsof Configure abbreviation.

4.15 Why does lsof ignore AFS on my AIX system?

The lsof Configure script quits on AIX when AFS is present, the AIX version is greater than 4.3.3.0 or the AFS version is greater than 3.5. That's because I have no test systems available for those AIX and AFS version combinations.

When the lsof Configure script detects an AIX and AFS version combination that is unsupported, it will report:

```
!!!FATAL: Lsof does not support
AFS on this combination of
    AIX and AFS versions.  To disable AFS, set the
    value of the AIX_HAS_AFS environment variable to
    "no".
```

The only work-around is to set the AIX_HAS_AFS environment variable as explained in the error message:

```
$ AIX_HAS_NSF=no; export AIX_HAS_NFS
$ ./Configure -n aix
```

4.16 Why does lsof report "system paging space is low" and exit?

When AIX paging space runs low, the AIX kernel sends a SIGDANGER signal to processes, warning them that they should reduce their memory usage.

When lsof receives that signal, it issues the following fatal error message and exits:

```
lsof: FATAL: system paging space is low.
```

A possible work-around is to limit the amount of information lsof must cache in its process memory with the "-c", "-g", "-l" and "-p" options.

Also see the answer to the "What can be done when lsof reports no more space?" question.

4.17 Why does lsof have a compilation problem on AIX 5.3 above maintenance level 1?

On some AIX 5.3 systems with maintenance levels 2 and higher installed, lsof 4.77 and below may not compile properly. The compiler complains the snapshotObject structure definition, needed by <j2/j2_inode.h>, is missing.

That problem is fixed in the 4.78 revision.

5.0 Apple Darwin Problems

5.1 What do /dev/kmem-based and libproc-based mean?

Lsof for Apple Darwin currently uses /dev/kmem to read kernel data structures from which it gathers and reports open file

information. That version of lsof is called /dev/kmem-based
lsof.

At an upcoming release lsof will use a library called libproc
to obtain information about open files. That version of lsof
wil be called libproc-based lsof.

The /dev/kmem-based lsof sources may be found in the kmem
subdirectory of the dialects/darwin branch of the lsof source
tree. When the supporting version of Apple Darwin is released,
the libproc-based lsof sources will be found in
.../dialects/darwin/libproc.

5.2 /dev/kmem-based Apple Darwin Questions

5.2.1 Why does Configure ask for a path to the Darwin XNU kernel header files?

When lsof was ported to Apple Darwin by Allan Nathanson at
revision 4.53, some kernel header files needed by lsof
weren't being exported by the developers. (That's still
true at lsof revision 4.76.)

At first a shell script that Allan provided would get the
missing header files by checking them out from the CVS
root. Although the script was updated from time to time,
eventually the re-organization of Darwin sources has made
it impossible to update the script to do an automatic
download of the missing header files.

At lsof revision 4.69 and above it is necessary for the Darwin
lsof builder to download the Darwin XNU kernel headers before
attempting to build lsof. The download my be done via a web
browser, starting at this URL:

    http://www.opensource.apple.com/darwinsource/index.html

Once there, select the link to the Mac OS X version that
matches the one on the
system where lsof is to be built.

Follow that link's "[Source]" link. Once there, select the
tar.gz link of the xnu* entry near the bottom of the page.
That entry should have a name that matches the xnu* name shown
by `uname -a` -- e.g., if uname reports:

```
$ uname -a
```

... root:xnu/xnu-517.7.21 ...

Then the appropriate xnu* entry is xnu-517.7.21. Clicking its link should lead to an "Apple Open Source" page requesting an Apple ID and password.

Enter them if they're available. If an Apple ID and password are not available, get them by following the instructions on the page -- i.e., follow the signin.apple.com link.

Once a valid Apple ID and its password have been entered, the download will begin. Select the saving of the downloaded xnu*.tar.gz file in an appropriate place on the Mac OS X system.

Once the download completes, install it. Use gunzip to decompress the download and tar to extract the archive -- e.g.,

```
$ gunzip -c xnu-517.7.21.tar.gz
| tar xf -
```

Remember the absolute path to the extracted archive. That is its installed place. E.g., if the xnu-517.7.21.tar archive was extracted to the lsof builder's home directory, its full installation path will be something like:

```
~/xnu-517.7.21
```

Now run the lsof Configure script. When it asks for the path to the installed Darwin XNU kernel header files, supply the path to the gunzip'd and extracted xnu* archive -- e.g., ~/xnu-517.7.21.

The path to the Darwin XNU kernel headers may also be supplied to the Configure script in the DARWIN_XNUDIR environment variable, eliminating the need to enter it interactively -- e.g.,

```
$ DARWIN_XNUDIR=~/xnu-344.49 ./Configure -n darwin
```

5.2.1.1 Why does Configure complain that Darwin XNU kernel header files are missing?

These are some reasons why the lsof Configure script might claim that Darwin XNU header files are missing:

* The wrong path to them was specified.

* The files and directories in the path are
not readable
and searchable -- i.e., check the modes and ownerships.

* The downloaded archive doesn't match the Mac OS X
version of the system.

If in doubt, revisit the Darwin XNU kernel header file
download instructions in the answer to the question "Why
does Configure ask for a path to the Darwin XNU kernel
header files?"

If Configure still can't find Darwin XNU kernel header
files, contact me via e-mail at <abe@purdue.edu> for help.
Make sure "lsof" appears in the "Subject:" line so my e-mail
filter won't classify your letter as Spam.

5.2.2 Why doesn't Apple Darwin lsof report text file information?

At the first port of lsof to Apple Darwin, revision 4.53,
insufficient information was available -- logic and header
files -- to permit the installation of VM space scanning
for text files. As of lsof 4.70 it is sill not available.

Text file support will be added to Apple Darwin lsof after
the necessary information becomes available.

5.2.3 Why
doesn't Apple Darwin lsof support IPv6?

At the first port of lsof to Apple Darwin, revision 4.53,
Apple Darwin lacked IPv6 support. IPv6 became available
in Apple Darwin version 1.5 and support for it was added
to lsof then.

5.2.4 Why does lsof complain about a mismatch between the release
for which lsof was compiled and the booted Mac OS X release?

When lsof is started on the "Gold Master" Darwin release
(aka Mac OS X), it complains:

lsof: compiled for 1.0 release; this is 1.3.2.

This happens because the lsof binary released with Mac OS
X was built on a system whose release number (1.0) doesn't
match that of the released system -- usually 1.3.x Lsof
makes this check because UNIX dialect OS changes are often
accompanied by header file changes that affect lsof.

In this specific case, this error can be ignored. If you
don't want to do that, get the lsof distribution and build
lsof so its built-on and running-on Mac OS X release numbers
match.

5.2.5 Why does
lsof for Apple Darwin 8 and higher report
"stat(...): ..." in the NAME column?

Lsof for Apple Darwin 8 may report messages like these in the
NAME column:

```
   stat(/private/var/run/asl_prune): No such file or directory
 or
   stat(/private/var/db/netinfo/local.nidb/Config): Permission denied
```

Those messages indicate that lsof was unable to collect open
file information for the paths enclosed in "stat(...)" with the
stat(2) function, because the function encountered the reported
error.

A work-around for the "Permission denied" error is to run lsof
with elevated privileges -- e.g., when logged on as the super
user.

If the stat(2) error message is "No such file or directory",
the file probably has been unlinked (removed) and there is no
lsof work-around.

5.2.6 What are the limitations of Apple Darwin lsof link count
reporting?

Lsof for Apple Darwin cannot report link count information
reliably.

For Apple Darwin below 8 link count information is not always
available
in the kernel node structures available to lsof.
When link count information is available, however, it includes
link counts of zero. Thus, using lsof's +L1 option may result
in the finding of some files whose link counts are zero.

Lsof can report only some link count information for Apple
Darwin 8 and above. Link count information is only available
for files where lsof can assemble the full file path and has
permission to apply stat(2) to it. (See the answer to the "Why
does lsof for Apple Darwin 8 and higher report "stat(...): ..."

in the NAME column?" question for more information on stat(2) failures.)

Apple Darwin 8 and above files that have been unlinked and thus have a link count of zero cannot be found by stat(2) -- i.e., stat(2) returns a "No such file or directory" error. As a result lsof never displays link counts of zero and the use of lsof's +L1 option to find them always fails.

5.2.7 Why does Apple Darwin report process group IDs incorrectly?"

The kmem version of lsof for Apple Darwin does not report process group IDs correctly when requested to do so with its ``-g" option. This is a bug that surfaced after the libproc version was released and access to kmem test systems has prevented patching the bug.

If you are using the kmem version and would like a fix for this problem, please send e-mail to me <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

5.3 Libproc-based Apple Darwin Questions

6.0 BSD/OS BSDI Problems

6.0.5 Statement of deprecation

As of lsof revision 4.76 support for BSDI BSD/OS has been dropped. The 4.76 distribution of lsof for BSDI BSD/OS may be found on lsof.itap.purdue.edu in pub/tools/unix/lsof/OLD/src.

7.0 DEC OSF/1, Digital UNIX, and Tru64 UNIX Problems

7.1 Why does lsof complain about non-existent /dev/fd entries?

When you run lsof for Digital UNIX 3.2, lsof may complain:

```
    lsof: can't lstat /dev/fd/xxx:
No such file or directory
    lsof: can't lstat /dev/fd/yyy: No such file or directory
```

(Or it may warn about other missing /dev/fd paths.) When you do an ``ls /dev/fd" none of the missing paths are listed.

This is caused by a bug in the DEC library function getdirentries(). For some reason, when /dev/fd is a file system mount point, getdirentries() returns an incorrect size for it to readdir(). (Lsof calls readdir() in its ddev.c readdev() function.) Because of the incorrect size, readdir() goes past the end of the /dev/fd directory buffer, encounters random paths and returns them to lsof. Lsof then attempts to lstat(2) the random paths, gets error replies from lstat(2), and complains about the paths.

Duncan McEwan discovered this error and has reported it to DEC. Duncan also supplied an alternate readdir() function as a work-around. I've incorporated his readdir() in dialects/osf/ddev.c (as the static ReadDir() function) with some slight modifications, and enabled its use when the USELOCALREADDIR symbol is defined.

The Configure script defines USELOCALREADDIR for Digital UNIX version and 3.2. If you don't want to use Duncan's local readdir() function, edit the Makefile and remove -DUSELOCALREADDIR from the CFGF string. When DEC releases a corrected getdirentries() function, I'll modify the Configure script to stop defining USELOCALREADDIR.

7.2 Why does the Digital UNIX V3.2 ld complain about Ots* symbols?

When you compile lsof on your Digital UNIX V3.2 system, ld may complain:

```
ld:
Unresolved:
knlist
_OtsRemainder32Unsigned
_OtsDivide64Unsigned
_OtsRemainder64Unsigned
_OtsDivide32Unsigned
_OtsMove
_OtsDivide32
_OtsRemainder32
*** Exit 1
```

Chris Eleveld reports this happens on Digital UNIX V3.2 systems after the Fortran compiler has been installed.

The best work-around seems to be to remove -lmld from the CFGL string in the Makefile produced by Configure -- i.e., change:

```
   CFGL=    -lmld
to
   CFGL=
```

According to the V3.2 man page for nlist(3), this shouldn't work, but my testing shows that it does. Although I haven't been able to test this second work-around, you might try adding -lots to CFGL, rather than removing -lmld -- i.e., change:

```
   CFGL=    -lmld
to
   CFGL=    -lmld -lots
```

WARNING: my testing also shows that the V2.0 nlist(3) man page means what it says when it calls for -lmld -- lsof loaded without -mld under V2.0 can't locate the proc (process) table address.

DON'T REMOVE -lmld FROM THE DIGITAL UNIX V2.0 MAKEFILE.

If you run into this problem, please let me know what problem you encountered and how you solved it.

7.3 Why can't lsof locate named pipes (FIFOs) under V3.2?

While lsof for V3.2 can report on named pipes (FIFOs), it can't find them by name. That appears to happen because of the way the V3.2 kernel lstat(2) function reports named pipe device numbers.

The V3.2 kernel reports the device number as 0xffffffff, while the kernel structures for named pipes that lsof examines contain the device number of the file system on which the named pipe resides.

Consequently, lsof can't match the device and inode number pair it receives from applying lstat(2) to the named pipe with any device and inode number pair it finds when scanning kernel structures.

I don't have a work-around. You can, of course, ask for full lsof output and use a post-processing filer (e.g., grep) to locate the named pipe of interest.

This problem doesn't exist under V2.0.

7.4 Why does lsof use the wrong configuration header files?
For example, why can't the lsof compilation find cpus.h?

DEC OSF/1, Digital UNIX, and Tru64 UNIX configuration header files describe the hardware and software environment for which your kernel boot file was constructed. For example, /sys/<name>/cpus.h defines the number of CPUs in its NCPUS #define.

Lsof searches for the configuration header file subdirectory in
/sys (/usr/sys for Digital UNIX version 4.0 and Tru64 UNIX) by converting the first host name component to capital letters -- e.g., TOMIS is derived from tomis.bio.purdue.edu. If that subdirectory exists, lsof uses header files from it. (Configure reports what subdirectory is being used.)

If Configure doesn't find a host-name derived subdirectory, it prompts you for the entry of a subdirectory name. If you can't find one, quit Configure and run the kernel generation process to create a proper configuration sub-directory. If you don't identify a proper configuration subdirectory and you try to compile lsof, the compiler will complain about missing header files -- e.g., a missing cpus.h.

Once you have located or generated a proper configuration subdirectory, rerun Configure. If you have generated a configuration subdirectory whose name is derived from the host name, Configure will find and use it. If not, you will have to specify its name to Configure.

7.5 Why
does lsof indicate incomplete paths with " -- " for Tru64 UNIX 5.1 files?

When lsof can't find a component of a path in the kernel's name cache (aka DNLC), or can't determine that the left-most component has as its parent the file system root, it uses an "incomplete path" notation. That notation begins with the file system root name, followed by " -- ", followed by the consecutive path name components lsof was able to find in the DNLC -- e.g., "/ -- init".

Because the DNLC was significantly redesigned in Tru64 UNIX 5.1, lsof's handling of the cache had to be completely

redone. As part of the DNLC redesign a name cache entry parameter lsof formerly used to locate the file system root of a path was removed. With help from Chang Song I've been able to implement an alternate method for detecting the root of these file system types: AdvFS (MSFS), CDFS, DVDFS, FDFS, NFS, NFS3, and UFS.

When lsof doesn't know how to identify the root for a file system type, it will resort to the " -- " incomplete path notation.

7.6 Why doesn't lsof report link count, node number, and size for some Tru64 5.x CFS files?

Lsof reports link count, node number, and size for open CFS files as recorded in their kernel node structure's cached attributes. Sometimes not all attributes are cached on the system where lsof runs, so lsof cannot report them.

7.7 Why does lsof say it can't read the kernel name list or proc table on Digital UNIX 4.x or Tru64 UNIX?

By default on Digital UNIX 4 and Tru64 UNIX lsof reads the addresses for kernel symbols with the knlist(3) function. That function can fail, for example, when the kloadsrv daemon isn't running or is malfunctioning. When that happens, lsof may abort with one of these error messages:

```
lsof: can't read kernel name list from knlist(3): ...
or
lsof: can't read proc table info
```

The first message suggests a complete knlist(3) or kloadsrv failure; the second, a partial one.

If you know the name of the file from which the running system was booted, e.g., /vmunix, you can use lsof's -k option to direct it to read kernel symbol addresses from the name list of that file --

```
$ lsof -k /vmunix ...
```

If that works, then knlist(3) is malfunctioning and you need to fix it.

8.0 FreeBSD Problems

8.1 Why doesn't lsof report on open kernfs files?

Lsof doesn't report on open FreeBSD kernfs files because the structures lsof needs aren't defined in the kernfs.h header file in /sys/misc/kernfs.

8.2 Why doesn't lsof work on my FreeBSD system?

If lsof doesn't work on your FreeBSD system, first make sure you have the latest lsof revision. See the answer to the "Where do I get lsof?" question for information on how to get the latest lsof revision.

Once you have gotten the latest lsof revision, Configure and make it. If Configure fails -- e.g., it complains about an unknown FreeBSD version -- then lsof probably hasn't been ported to your FreeBSD version yet, and there's
no need to go any further. Follow the answer to the "How do I report an lsof bug" to report the Configure complaint to me.

If you are able to Configure and make lsof, run its test suite. (See the answer to the "Is there a test suite?" question for more information on how to use lsof's test suite.)

If lsof still fails, make sure your kernel sources, kernel header files, kernel boot file, standard header files and libraries are synchronized. They should all be built from the same CVS refresh. (Don't forget to do a "make buildworld" followed by a "make installworld".) If they aren't, then the KVM library or lsof may be using kernel structure definitions that don't match the booted kernel; or lsof may fail to compile properly because of header files in /usr/src/sys/sys and /usr/include/sys that don't match.

If you have synchronized your kernel, header files and libraries, and still can't get lsof to work, follow the steps in the answer to the "How do
I report an lsof bug"
question to report the problem to me.

8.3 Why doesn't lsof work on the RELEASE version of CURRENT?

Lsof tracks the CURRENT release of the current leading edge

FreeBSD version, because my access to leading edge FreeBSD is limited to FreeBDSD.org reference systems, all running the CURRENT release.

Sometimes that tracking leads to changes in lsof that won't work on an earlier RELEASE version of the current leading edge version.

When that happens, please send e-mail to me <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

8.4 Why does kvm_open() complain it can't find some file?

If lsof issues this complaint:

```
lsof: kvm_open(execfile=/boot/kernel/kernel,
corefile=/dev/mem: No such file or directory
```

Your FreeBSD system might not have a /dev/mem device. If not, create one -- e.g., as root do:

```
# mknod /dev/mem c <major> 0
# chmod 440 /dev/mem
# chgrp kmem
/dev/mem
```

For <major> use /dev/kmem's major device number.

You may have to run kldload, too -- again as root do:

```
# kldload mem
```

8.5 FreeBSD ZFS Problems

8.5.1 Why does FreeBSD lsof report "WARNING: no ZFS support has been defined."?

Lsof issues that message when it detects a file on a ZFS file system, but has not been built with support for ZFS. Lsof's Configure script detects support can be added for ZFS when it finds this file:

/usr/src/sys/contrib/opensolaris/uts/common/fs/zfs/sys/zfs_znode.h

That header file and others in the OpenSolaris files in /usr/src enable lsof to extract information about ZFS files from the kernel structures associated with them.

8.6 Why can't Configure create lsof_owner.h for FreeBSD 6 and above?

Lsof may report:

```
   Creating ./lockf_owner.h from /usr/src/sys/kern/kern_lockf.c
   FATAL ERROR: can't read /usr/src/sys/kern/kern_lockf.c
   FATAL ERROR: ./lockf_owner.h creation failed (see 00FAQ)
or
   Creating ./lockf_owner.h
from /usr/src/sys/kern/kern_lockf.c
   FATAL ERROR: ./lockf_owner.h creation failed (see 00FAQ)
```

Those messages mean that lsof's Configure script failed to create a local header file, ./lockf_owner.h, needed to use the new kernel file locking code of some versions of FreeBSD 6 and above.

The changes that implement that new locking code alter the lockf structure in <sys/lockf.h> and introduce a new structure, lockf_entry, to that header file. When Configure detects the presence of the lockf_entry definition in <sys/lockf.h>, it tries to construct the local header file, ./lockf_owner.h.

Configure has to do that because an unfortunate side effect of the new kernel file locking code is that <sys/lockf.h> doesn't contain the lockf_owner structure definition referenced in its own lockf structure. Lsof needs to access elements of that lockf_owner structure to determine if a lock belongs to the process that has a file open.

The missing lockf_owner structure definition
is in the kernel
source file, typically /usr/src/sys/kern/kern_lockf.c.
Configure tries to extract the lockf_owner structure definition
from kern_lockf.c into lsof's local header file, ./lockf_owner.h.
If Configure can't do that, it reports:

```
   FATAL ERROR: ./lockf_owner.h creation failed
```

If Configure can't even read kern_lockf.c, it first reports:

```
   FATAL ERROR: can't read /usr/src/sys/kern/kern_lockf.c
```

The work-around for this problem is to update the FreeBSD kernel /usr/src tree (e.g., do a CVSup or csup) on the system where lsof is to be built and then do a "make buildworld" followed by a "make installworld".

8.6.1 Why are there lockf structure compiler errors for FreeBSD 6.0 and higher lsof?

If, when compiling lsof, the compiler complains with error messages like:

```
dnode.c: In function 'get_lock_state':
dnode.c:113: error: 'struct lockf' has no member named 'lf_flags'
dnode.c:115: error: 'struct lockf' has no member named 'lf_id'
...
```

Then
lsof is being built on a system that has new kernel file locking code and lsof's Configure script failed to build a local lockf_owner.h header file with a structure definition lsof needs.

See the "Why can't Configure create lsof_owner.h for FreeBSD 6 and above?" section for more information and a work-around.

8.6.2 Why don't /usr/src/sys/sys/lockf.h and /usr/include/sys/lockf.h match?

This mismatch can cause the errors explained in the answer to the "Why are there lockf structure compiler errors for FreeBSD 6.0 and higher lsof?" question.

If /usr/src/sys/sys/lockf.h has been updated with a CVSup or csup, the new lockf.h won't be propagated to /usr/include/sys until the "make buildworld" and "make installworld" steps have been completed.

8.7 FreeBSD and clang

As of lsof revision 4.87, lsof may be compiled with clang.

8.7.1 Why does clang complain about VOP_FSYNC?

There is an error in the Solaris ZFS compatibility vnode.h header file with use of VOP_FSYNC before
it is defined. No
work-around is possible that will eliminate the clang compile-time warning message about the invalid declaration of the VOP_FSYNC function.

9.0 HP-UX Problems

9.1 What do /dev/kmem-based and PSTAT-based mean?

Lsof for HP-UX 11.0 and below uses /dev/kmem to read kernel data structures from which it gathers and reports open file information. That version of lsof is called /dev/kmem-based lsof.

Starting with HP-UX 10.10, finding definitions for the necessary kernel structures became more difficult as HP no longer distributed header files in /usr/include that defined all kernel structures. So I started "inventing" structure definitions by using Q4 to display them.

By HP-UX 11, the process of invention became extremely intensive to support. Following a patch to the ipc_s structure in early 1999, my invented definition of that structure became incorrect. Although I was able to devise a work-around test for the patch with Q4, it was clear that my
inventions were bound to cause more problems.

Discussion with HP about the patch led to my proposing that an lsof API in the HP-UX kernel was the proper solution. Much to my surprise, HP agreed. I believe Carl Davidson was the prime mover behind that decision, but I know others participated, among them Louis Huemiller, Rich Rauenzahn, and Sailu Yallapragada. I am indebted to these folks and HP for their willingness to do this work.

The API was added to the PSTAT interface in a project named PEGL, Pstat Enhancements for Glance and Lsof. Louis and Sailu did the bulk of the design and implementation work and testing began in March, 2000

HP-UX 11.11 is the first version that provides PSTAT support for lsof. HP-UX versions in between 11.0 and 11.11 -- all Beta versions as far as I can determine -- have no lsof support.

See the "PSTAT-based HP-UX lsof Questions" section for questions and answers specific to PSTAT-based HP-UX lsof. The next section, "Why doesn't
a /dev/kmem-based HP-UX lsof
compilation use -O?" covers /dev/kmem-based HP-UX lsof.

The /dev/kmem-based lsof sources may be found in the kmem subdirectory of the dialects/hpux branch of the lsof source

tree. The PSTAT-based lsof sources may be found in
.../dialects/hpux/pstat.

9.2 /dev/kmem-based HP-UX lsof Questions

The sources for /dev/kmem-based lsof for HP-UX may be found
in lsof_<revision>/dialects/hpux/kmem.

Lsof's Configure shell script decides to use these sources
when it finds that the /usr/include/sys/pstat subdirectory
doesn't exist.

Lsof can be forced to use the /dev/kmem sources by setting
"/dev/kmem" in the HPUX_BASE environment variable. Consult
the Configure shell script and 00XPORTING for more information.

9.2.1 Why doesn't a /dev/kmem-based HP-UX lsof compilation use -O?

If you only have the standard (bundled) HP-UX C compiler
and haven't purchased and installed the optional one, then
you can't use cc's -O option. The HP-UX cc(1) man page
says
this:

"Options
Note that in the following list, the cc and c89 options
-A , -G , -g , -O , -p , -v , -y , +z , and +Z are
not supported by the C compiler provided as part of
the standard HP-UX operating system. They are supported
by the C compiler sold as an optional separate product."

Lsof's Configure script tries to detect what C compiler
product you have installed by examining your compiler. If
that examination reveals a standard (bundled) compiler,
lsof avoids using -O.

If the Configure compiler test fails, the C compiler will
complain that it doesn't support -O. You can suppress that
complaint with this make invocation:

```
$ make DEBUG=""
```

9.2.2 Why doesn't the /dev/kmem-based CCITT support work under 10.x?

Pasi Kaara, who originally provided the HP-UX CCITT support,
reports that it no longer works under HP-UX 10.x.
Consequently, at lsof revision 4.02 it has been disabled.

9.2.3 Why can't /dev/kmem-based lsof be compiled with
`cc -Aa` or
`gcc -ansi` under HP-UX 10.x?

Some HP-UX 10.x header files, needed by lsof, can't be compiled properly in ANSI_C mode; structure element definition and alignment problems result. The f_offset member of the file structure, for example, is incorrect.

This ANSI-C obstacle extends to using the -Aa option of the HP C compiler and the -ansi option of gcc.

9.2.4 Why does /dev/kmem-based lsof complain about no C compiler?

Lsof's Configure script looks in /bin and /usr/ccs/bin for an HP C compiler, because it needs to know if the compiler is the standard (bundled) one or the optional separate product. If it finds no compiler in either place, Configure quits after complaining:

```
No executable cc in /bin or /usr/ccs/bin
```

If you don't have a C compiler in either of these standard places, you should consider installing it. If you have gcc installed, you can use it by declaring the ``hpuxgcc'' abbreviation to lsof's Configure script.

If you have a C compiler in a non-standard location, you can use the HPUX_CCDIR[12] environment variables to name the path to it. Consult the 00XCONFIG file of the lsof distribution for more information.

9.2.5 Why does Configure complain about q4 for /dev/kmem-based lsof for HP-UX 11?

When you run Configure on an HP-UX 11 system, it may complain:

```
!!!ERROR!!!     !!!ERROR!!!     !!!ERROR!!!     !!!ERROR!!!
Configure can't use /usr/contrib/bin/q4 to examine the ipis_s
structure.  You must do that yourself, report the result in
the HPUX_IPC_S_PATCH environment variable, then repeat the
Configure step.  Consult the Configure script's use of
/usr/contrib/bin/q4 and the 00XCONFIG file for information
on ipis_s testing and the setting of HPUX_IPC_S_PATCH.
!!!ERROR!!!     !!!ERROR!!!     !!!ERROR!!!     !!!ERROR!!!
```

This message states that Configure cannot use q4 from

/usr/contrib/bin to examine the kernel's boot image for
the ipis_s structure. Maybe q4 hasn't been installed,
or
perhaps Configure can't execute it.

Lsof needs to gather information about ipis_s to determine
if the ipis_s structure is defined in the kernel boot image,
if the ipis_s structure of the kernel boot image has an
ipis_msgsqueued member, and if the ipc_s structure of the
kernel boot image uses has an ipc_ipis member.

The ipis_s structure isn't described in any header file
HP-UX releases with HP-UX 11. It appears in the private
lsof header file .../dialects/hpux/kmem/hpux11/ipc_s.h.
Lsof gets local and remote connection addresses (IP and
port numbers) from ipc_s, so an incorrect ipc_s definition
may cause incorrect reporting of TCP/IP connection addresses.
It definitely will cause incorrect reporting on 32 bit
kernels. In any case lsof should be compiled with a correct
ipc_s definition no matter the kernel bit size, so the
Configure script always tests for it when the HP-UX version
is 11.

For lsof's Configure script to gather the necessary ipis_s
information q4
needs to be installed in /usr/contrib/bin
and the kernel boot image, /stand/vmunix, needs to have
been processed with pxdb. If either is untrue, lsof issues
the above error message, perhaps preceded by q4 messages.
(Note: lsof's use of q4 may also fail if q4 can't execute
nm -- e.g., it can't find /usr/bin/nm, or there is a
conflicting, private version of nm earlier in the path.)

If /stand/vmunix hasn't been processed by pxdb, the q4
messages will include:

    q4: (error) vmunix not pxdb'd
or
    q4: (warning) /stand/vmunix has not been processed by pxdb.

It's possible to make a suitable private copy of /stand/vmunix
for configuring lsof. That requires /opt/langtools/bin/pxdb
or the q4 version of pxdb from /usr/contrib/bin/q4pxdb.
The path to the result is supplied to the lsof Configure
script in the HPUX_BOOTFILE environment variable. Configure
still requires /usr/contrib/bin/q4.

The following sample Bourne shell commands make a private

copy of /stand/vmunix
in /tmp, process it with pxdb or
q4pxdb, and supply its path to lsof's Configure script in
HPUX_BOOTFILE.

```
$ cp /stand/vmunix /tmp/vmunix.lsof

$ /opt/langtools/bin/pxdb /tmp/vmunix.lsof
or
$ /usr/contrib/bin/q4pxdb /tmp/vmunix.lsof

... pxdb messages ...
$ HPUX_BOOTFILE=/tmp/vmunix.lsof Configure -n hpux
```

It may also be necessary to use q4 outside the lsof Configure
script. In that case q4 can be to determine the state of
ipis_s and ipc_s with these q4 commands:

```
$ /usr/contrib/bin/q4 /stand/vmunix
...
q4> fields -c struct ipc_s
...
q4> fields -c struct ipis_s
```

Look in the q4 output for the ipc_ipis member of the ipc_s
structure, and look in the q4 output for the ipis_s structure
for the ipis_msgsqueued member. If ipc_s has ipc_ipis but
ipis_s lacks ipis_msgsqueued, set HPUX_IPC_S_PATCH environment
variable to "1". If ipc_s has ipc_ipis and ipis_s has
ipis_msgsqueued, set HPUX_IPC_S_PATCH to "2" -- e.g.,

```
$ HPUX_IPC_S_PATCH=1
Configure -n hpux
or
$ HPUX_IPC_S_PATCH=2 Configure -n hpux
```

If ipc_s has no ipc_ipis member, set HPUX_IPC_S_PATCH to
"N" -- e.g., use this Configure step:

```
$ HPUX_IPC_S_PATCH=N Configure -n hpux
```

9.2.6 When compiling /dev/kmem-based lsof for HP-UX 11 what do the
"aCC runtime: ERROR..." messages mean?

When the lsof Makefile asks the HP-UX unbundled compiler
to load lsof, it may complain:

```
/bin/cc -o lsof  -DHPUXV=1100 -DHASVXFS -DHPUXKERNBITS=64 \
```

```
-I/home/abe/src/lsof4/dialects/hpux/kmem/hpux11 +DD64 \
-DHAS_IPC_S_PATCH=2 -I/home/abe/src/lsof4/dialects/hpux/kmem \
-DLSOF_VSTR=\"B.11.00\"  -g dfile.o dmnt.o dnode.o dnode1.o \
dnode2.o dproc.o dsock.o  dstore.o  arg.o main.o misc.o \
node.o print.o proc.o store.o usage.o -L./lib -llsof  -lelf \
-lnsl
   aCC runtime: ERROR: Unexpected use of shared libraries
   aCC runtime: ERROR: Read aCC manpage, +A option
   /usr/lib/nls/loc/locales.1//is_IS.iso88591
```

This is a bug in the HP-UX national
language support.
(Notice the last message with "locales" in it?) Complain
to HP -- then use this work-around before executing make:

```
$ unset LANG
$ make
```

9.2.7 Why doesn't /dev/kmem-based lsof for HP-UX 11 report VxFS file link counts, node numbers, and sizes correctly?

This is usually the result of running an lsof binary whose
revision number is less than 4.57 on a system that has
OnlineJFS support installed. It can also happen with lsof
4.57 binaries when the OnlineJFS support with which they
were built doesn't match the OnlineJFS status of the system
on which they are run.

The OnlineJFS status of lsof 4.57 and higher binaries can
be determined by running:

```
$ lsof -v 2>&1 | grep HASONLINEJFS
```

If that shell pipe produces output, lsof was compiled with
OnlineJFS support enabled; no output, disabled.

If OnlineJFS is installed on an HP-UX 11 system the
/sbin/fs/vxfs/subtype executable exists and outputs "vxfs3.3"
when run.

The problem occurs
because the optional OnlineJFS support
installation doesn't update <sys/fs/vx_inode.h>. Consequently
lsof can be compiled with an incorrect definition of the
vx_inode structure and look for for link counts, node
numbers, and sizes in the wrong places in the structure.

The current response I have gotten from HP is that no

<sys/fs/vx_inode.h> update will be provided for OnlineJFS.

I've addressed this problem temporarily with a work-around (hack) in lsof revision 4.57.

9.2.8 Why can't /dev/kmem-based lsof be built with gcc for 64 bit HP-UX 11?

When Configure is given the "hpuxgcc" abbreviation, the HP-UX version is 11, and the kernel bit size is 64, the lsof Configure script may abort with the messages:

```
!!!!!!!!!!!!!!!! FATAL ERROR !!!!!!!!!!!!!!!!!!

APPARENTLY GCC CANNOT BUILD 64 BIT EXECUTABLES.
A COMPILER MUST BE USED THAT CAN.  SEE 00FAQ
FOR MORE INFORMATION.
```

(This is the "more information" in 00FAQ.)

This means the Configure script compiled a test program with gcc the result wasn't an ELF-64 binary. Lsof tries two gcc modes, one with no options and another with the -mlp64 option, before it concludes gcc can't be used.

See the "How can I acquire a gcc for building lsof for 64 bit HP-UX 11?" answer for information on where you might be able to get a gcc for HP-UX 11 that can produce ELF-64 executables.

9.2.8.1 How can I acquire a gcc for building lsof for 64 bit HP-UX 11?

Check this HP URL:

http://h21007.www2.hp.com/dspp/tech/tech_TechSoftwareDetailPage_IDX/1,1703,547,00.html

(That's one very long link; be careful you cut 'n paste it all.)

In November 2001 that URL led to a web page whose title was "gcc for hp-ux 11." The page offered a link for downloading a 64 bit gcc 3.0 compiler for HP-UX 11.0 and 11i. Rich Rauenzahn of HP installed that compiler on an HP test system he allows me to use and I successfully built a 64 bit lsof with it.

The HP package may install the 64 bit capable gcc in

/usr/local/pa20_64/bin/gcc,
so you may have to adjust your
path or set the LSOF_CC environment variable to compensate.

9.2.9 Why does /dev/kmem-based lsof for HP-UX 11 report "unknown file system type" for some open files?

The lsof binary being used probably doesn't have support for the VxFS file system.

To confirm that, check `lsof -v` output for "-DHASVXFS". If it's not present, lsof doesn't have VxFS support.

You also need to establish that lsof really is complaining about VxFS files by checking the kernel boot file for the symbol associated with the hexadecimal address reported in the "unknown file system type" message -- e.g., "v_op: 0x8711c8." Use nm(1) to do that:

```
$ nm -x /stand/vmunix | grep 8711c8
```

If nm reports the symbol associated with the address is vx_vnodeops, then lsof is complaining about an open VxFS file.

The solution in that case is to build lsof yourself (The bundled C compiler will do it.), making sure that lsof's Configure script detects
the presence of VxFS. Configure does
that by finding these two header files:

```
/usr/include/sys/fs/vx_hpux.h
/usr/include/sys/fs/vx_inode.h
```

If the system where you are building lsof doesn't have those header files, but does have VxFS, you might be able to install the header files by installing the HP JournalFS package from the CoreOS CD -- in particular the file set JournalFS.VXFS-PRG and its associated patch, PHKL_18543. (My thanks to Steve Bonds for that information.)

Finally, if you find that lsof isn't complaining about VxFS when it complains about an unknown file system type, send e-mail to me <abe@purdue.edu> for further assistance. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

9.2.10 Why does the ANSI-C compiler complain about comments in HP-UX 11 header files?

When compiling lsof on HP-UX 11, the HP ANSI-C compiler's pre-processor, cpp, may complain about comments in HP-UX header files
-- e.g.,

```
    cpp: "/usr/include/sys/cdfs.h", line 232: warning 2028:
 Found comment inside comment started on line 232.
    cpp: "/usr/include/sys/cdnode.h", line 196: warning 2028:
 Found comment inside comment started on line 196.
    cpp: "/usr/include/nfs/snode.h", line 30: warning 2028:
 Found comment inside comment started on line 30
```

This is not a problem with lsof. It is a problem with the HP-UX header files; they have non-compliant ANSI-C comment sequences in them -- e.g.,

```
    <sys/cdfs.h>: 232
 /* struct  cdfs *cdfs_link;  /* linked list of file systems */
```

The initial "/*" is not terminated by an ending "*/" before the appearance of a second "/*".

9.2.11 Why does dnode1.c cause the HP-UX 11 compiler to complain that <sys/fs/vx_inode.h> is missing or incorrect?

If CFLAGS in the lsof Makefile for an HP-UX 11 compilation includes HASONLINEJFS, indicating the system has OnlineJFS support, lsof needs the <sys/fs/vx_inode.h> header file. Sometimes it is missing from /usr/include/sys/fs.

<sys/fs/vx_inode.h> is a header file that must be obtained from Veritas. If that proves impossible, please contact me via e-mail at <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

9.3 PSTAT-based HP-UX lsof Questions

The sources for PSTAT-based lsof for HP-UX may be found in lsof_<revision>/dialects/hpux/pstat.

Lsof's Configure shell script decides to use these sources when it finds that the /usr/include/sys/pstat subdirectory exists.

Lsof can be forced to use the PSTAT-based sources by setting "pstat" in the HPUX_BASE environment variable. Consult the Configure shell script and 00XPORTING for more information.

9.3.1 Why does PSTAT-based lsof complain about pst_static and other PSTAT structures?

When lsof starts it may issue one of these fatal error messages:

```
lsof: FATAL: can't determine PSTAT static size
lsof: FATAL: can't read <n> bytes of pst_static

lsof: FATAL: pst_static doesn't contain <name>_size
lsof: FATAL: <name>_size should be <n>
```

These messages indicate that lsof's tests for the proper level of PSTAT support have failed. The structure names, given in <name>, and sizes, given in <n>, identify the support deficiency more precisely.

You may need to upgrade the PSTAT support in your kernel to be able to use PSTAT-based lsof.

9.3.2 Why does PSTAT-based lsof complain it can't read pst_* structures?

Lsof may put messages like the following in the NAME column of its output.

```
can't read cwd pst_filedetails: Permission denied
can't read mem pst_filedetails: Permission denied
can't read rtd pst_filedetails: Permission denied
can't read txt pst_filedetails: Permission denied
can't read pst_filedetails: Permission denied
can't read 3 stream structures: Permission denied
can't read pst_socket: Permission denied
```

These messages indicate that the lsof binary lacks the authority
to read the name structures for processes other than ones belonging to the UID under which lsof is running. Authority to read the structures of other processes is limited to root processes -- i.e., lsof must have setuid-root permission if it is to list open files for arbitrary processes.

If you want to eliminate these errors, you must run lsof

as root or install it with setuid-root permission.

9.3.3 Why does PSTAT-based lsof rebuild the device cache file after each reboot?

After each HP-UX rebuild, the first time a user runs lsof it will report:

```
lsof: WARNING: device cache mismatch: /dev/tun...
lsof: WARNING: created device cache file: /<user_path>
```

This happens because the device numbers on /dev/tun* device nodes are recalculated at each reboot. When lsof detects a change in the device number of a /dev/tun* file, it rebuilds its local device cache file.

9.3.4 Why doesn't PSTAT-based lsof report TCP addresses for telnetd's open socket files?

When lsof can't report TCP addresses for telnetd's open socket files it is because an unpatched PSTAT kernel interface doesn't report the addresses to lsof.

This has been addressed in PSTAT kernel patch PHKL_24047. It is available from the HP IT Resource Center at:

http://itrc.hp.com

In the page's "maintenance / support" box select the "individual patches" link. Once at its page, select the "hp-ux" link. On that page select the "Series 800" or "Series 700" radio button and select "11.11" from the pull-down list to the right of the button. Under "search or browse the path list" select "Search by Patch IDs" from the pull down list, enter PHKL_24047 in the following text box, and select search. That should lead to information about PHKL_24047 and a link for downloading it. (You may have to log in first and you may have to create a login identity by registering before you can log in.)

Some time in March 2006 the PHKL_24047 patch was "lost" by the HP-UX networking lab. It has been "found" again in August 2006 and will be re-released as a GRO patch "some time." I don't yet know when that will be. You must contact HP to learn about the availability of the GRO patch.

9.3.5 Why does PSTAT-based lsof cause an HP-UX 11.11 kernel panic?

When PSTAT-based lsof runs on some HP-UX 11.11 kernels, the kernel may panic. Symptoms include:

```
Console message:
  0xFBE000301100EF00 00000000 0000EF00 -
  type 31 = legacy PA HEX chassis-code

/var/adm/syslog:
  ... vmunix: Trap Type 15 (Data page fault)
  ... vmunix:   Instruction Address (pcsq.pcoq) = 0x...
```

The panic is caused by a bug in the way PSTAT's pstat_getstream() function obtains module names from streams managed by the otsam stream driver (part of OSI Transport Services). Lsof calls pstat_getstream() when it encounters an open otsam stream file. An HP-UX 11.11 system uses otsam if otsam appears in /stand/system.

HP-UX 11.11 patch PHKL_24507 (available some time after July
15, 2001) fixes the pstat_getstream() bug. See the information in the answer to the "Why doesn't PSTAT-based lsof report TCP addresses for telnetd's open socket files?" question for information on how to obtain the patch.

9.3.6 Why doesn't PSTAT-based lsof report a CWD that is on a loopback (LOFS) file system?

When PSTAT-based lsof reports on processes whose current working directory (CWD) is on a loopback file system, lsof can't report the open CWD file. The reason is that the HP-UX 11.11 and above kernel's loopback file system code is not passing the CWD file ID to the kernel's pstat(2) code. Hence lsof is given no information on the lofs CWD.

The problem was first reported to me by Ermin Borovac and an internal bug report was filed with the HP-UX file system group on October 26, 2004. That report has now been answered by the patch PHKL_33200 -- s700_800 11.11 lofs cumulative patch. The HP IT Resource Center (http://itrc.hp.com) is a source for the patch.

9.3.7 Why do some swinstall packages for PSTAT-based HP-UX 11.11 packages complain about setgid and setuid bits?

First, let me explain that I do not provide lsof swinstall packages for lsof. Others provide them and they should be contacted about problems with their packages.

However, I have become aware of a problem with one package about which I have some information I can share. The problem shows up in these swinstall messages:

```
ERROR:   Unknown owner and/or group for file
  "/usr/local/bin/lsof". SUID and/or SGID bit was
  not set.
ERROR:   Failed installing fileset "lsof.lsof-RUN,r=4.73".
  Check the above output for details.
```

The swpackage SUID/SGID functionality was restricted by changes for POSIX compliance, breaking backward compatibility. The patch PHCO_27671 allows SUID/SGID for uid/gid of 0 only, as a compromise between backward compatibility and POSIX conformance.

If the setuid bit is to be set on the executable, the UID
and
GID of the executable must be 0 (zero).

9.3.8 Why won't the bundled C compiler build PSTAT-based lsof for PA-RISC HP-UX 11.23?

A PA-RISC HP-UX 11.23 bundled C compiler dated May 2005 or later will not build PSTAT-based lsof. It will deliver error messages related to the system's <gssapi/gssapi.h> header file.

There is nothing wrong with that header file or lsof. The problem is that the bundled C compiler can't cope with the gssapi.h header file.

The work-around is to use the HP ANSI C compiler. Using gcc is not a satisfactory work-around. See the answer to the "Why won't gcc build PSTAT-based lsof for PA-RISC HP-UX 11.23?" question for more information.

9.3.9 Why won't gcc build PSTAT-based lsof for PA-RISC HP-UX 11.23?

Gcc will not even compile PSTAT-based lsof revisions below 4.77 for PA-RISC HP-UX 11.23 dated May 2005 or later. It reports errors in lsof's print.c fill_portmap() function about missing members of the rpcent structure. That happens because

gcc
defines _XOPEN_SOURCE_EXTENDED which disables the definition of
the rpcent structure in <netdb.h>.

Using the HP bundled C compiler is not a viable work-around.
That is explained in the answer to the "Why won't the bundled C
compiler build PSTAT-based lsof for PA-RISC HP-UX 11.23?"

While an lsof revision 4.77 or higher can be compiled with gcc,
the results are unreliable. Lsof will compile, but it
occasionally produces segment faults when it runs. I have not
been able to reproduce the failure reliably or locate a
debugger that will work with the gcc-compiled lsof.

The only reliable work-around is to use the HP ANSI C
compiler.

9.3.10 Why does PSTAT-based lsof complain, "FATAL: pst_stream_size
should be: 672; is 72" on HP-UX 11.11 and above?

This message indicates a mismatch between the PSTAT header
files used to build lsof (<sys/pstat.h> and those in the
/usr/include/sys/pstat subdirectory), and those that built the
running kernel.

Unfortunately the June
2008 patch set for HP-UX 11.23 creates
this inconsistency, because it does not contain all the patches
needed to match the kernel with the PSTAT header files. Even
more serious is that the missing patches update the kernel's
PSTAT support to provide TCP/UDP endpoint information to lsof
from TCP/TLI streams.

The patch inconsistency comes about because, while the following
patch is installed,

PHKL_36577 1.0 PM-PSTAT section 2 manpage changes

other kernel patches are not.

The PHKL_36577 patch updates the PSTAT header files and manual
pages to match kernel changes that other patches with the
following numbers (or patches that contain or supersede them)
contain:

PHNE_36575 1.0 Cumulative STREAMS Patch
PHNE_37670 1.0 cumulative ARPA Transport patch
PHNE_37851 1.0 NFS cumulative patch

Those patches implement the kernel changes that support the delivery of information promised in patch PHKL_36577.

The work-around is to install the missing patches.

9.4 Why won't the HP-UX depot install?

I don't distribute lsof depots, so I can't support them.

From time to time depots prepared by various sites -- e.g., usually HP-UX software collection sites -- will contain errors that cause installation of the depot to fail.

Do not contact me when this happens. Instead, contact the administrator of the site that prepared the depot.

As should be clear from the bulk of the lsof documentation, I do not recommend you use pre-built lsof binaries in any form. Instead, I recommend you obtain the lsof source distribution and build lsof yourself.

10.0 Linux

10.1 What do /dev/kmem-based and /proc-based lsof mean?

At approximately Linux 2.1.72 and exactly at lsof revision 4.23 support for Linux forks. The first fork, containing the oldest lsof form is based on access to kernel memory structures, and is called /dev/kmem-based lsof. A /dev/kmem-based lsof is heavily intertwined with the Linux kernel version, its header files,
and its system map file.
Typically a /dev/kmem-based lsof needs only setgid permission to local all open file information.

After approximately Linux 2.1.72 and at revision 4.23 lsof obtains all its information from the /proc file system. That lsof is called the /proc-based lsof. A /proc-based lsof does not read kernel memory, needs neither kernel header files nor the system map file, and is less likely to be affected by Linux kernel changes. However, it does require setuid-root permission to list all open files, and it can't report file offsets (positions).

After revision 4.52 the /dev/kmem-based Linux sources for

lsof are no longer distributed. Information about them may be found in the 00INDEX and README files at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/OLD/src

10.2 /proc-based Linux lsof Questions

10.2.1 Why doesn't /proc-based lsof report file offsets (positions)?

/proc-based lsof revisions 4.79 and above can only report file offsets (positions) for the files of Linux kernels 2.6.22 and above.

During its initialization /proc-based lsof tests to see if offset information can be obtained. If it cannot, lsof disables offset reporting. If the -o option was selected, lsof also issues this warning:

```
lsof: WARNING: can't report offset; disregarding -o.
```

10.2.2 Why does /proc-based lsof report "can't identify protocol" for some socket files?

/proc-based lsof may report:

```
COMMAND PID ... TYPE ... NODE NAME
pump    226 ... sock ...  309 can't identify protocol
```

This means that it can't identify the protocol (i.e., the AF_* designation) being used by the open socket file. Lsof identifies protocols by matching the node number associated with the /proc/<PID>/fd entry to the node numbers found in selected files of the /proc/net sub-directory. Currently /proc-based lsof examines these protocol files:

```
/proc/net/ax25  (untested)
/proc/net/icmp
/proc/net/ipx  (needs kernel patch)
/proc/net/netlink

/proc/net/packet
/proc/net/raw
/proc/net/raw6
/proc/net/sctp/assocs
/proc/net/sctp/eps
/proc/net/sockstat
```

/proc/net/sockstat6
/proc/net/tcp
/proc/net/tcp6
/proc/net/udp
/proc/net/udp6
/proc/net/udplite
/proc/net/udplite6
/proc/net/unix

If /proc-based lsof says it can't identify the protocol for an open socket file, you may be able to identify the protocol yourself by using grep to look for the specific node number in the files of /proc/net -- e.g.,

```
$ grep <node_number> /proc/net/*
```

You may not be able to find the desired node number, because not all kernel protocol modules fully support /proc/net information.

If you find a matching node number in a /proc/net file that is not currently being processed by lsof, contact me via e-mail at <abe@purdue.edu>. I'll discuss adding support to /proc-based lsof for the protocol of the /proc/net file with you. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

The code that matches node numbers of open IPX protocol socket files to those in /proc/net/ipx requires Jonathan Sergent's Linux 2.1.79 patch to /usr/src/linux/net/ipx/af_ipx.c. The patch, suitable for input to Larry Wall's patch program, may be found in the lsof distribution file:

.../dialects/linux/proc/patches/net_ipx_af_ipx.c.patch

10.2.3 Why does /proc-based lsof warn about unsupported formats?

Lsof may issue the following warning:

```
lsof: WARNING: unsupported format: /proc/net/<file>
```

if the header line of the indicated <file> in /proc/net -- ax25, ipx, raw, tcp, udp, or unix -- doesn't match what lsof expects to find.

When the header line of a /proc/net file isn't what lsof expects, lsof probably can't parse the rest of the file

correctly and doesn't try. As a result, lsof can't report
any NAME column information (e.g., local and remote addresses)
for socket files bound to the indicated
network protocol.

If you get this warning, please send me e-mail at <abe@purdue.edu>.
Include the contents of the file lsof claims has an unsupported
format. Make sure "lsof" appears in the "Subject:" line so my
e-mail filter won't classify your letter as Spam.

10.2.4 Why does /proc-based lsof report "(deleted)" after a path name?

The "(deleted)" notation following a path name in /proc-based
lsof's NAME column comes from the /proc/<PID>/fd/<FD> entry
for the open file. It's the Linux kernel's way of indicating
the file is open but has been unlinked (rm'd).

10.2.5 Why doesn't /proc-based lsof report full open file information
for all processes?

/proc-based lsof can only report on processes whose /proc
files it has permission to read. /proc normally grants
permission to read all its files only to root or to the
owning user ID.

Without permission to read most /proc files, lsof can only
report full information for processes belonging to the user
who is running
lsof. /proc-based lsof may be able to report
some information for all processes, depending on the
permissions of their associated /proc files, but usually
/proc-based lsof won't be able to access the files in
/proc/<PID>/fd/ that describe regular open files.

If you want /proc-based lsof to report on all processes, you
must install it with setuid-root permission.

10.2.6 Why won't Customize offer to change HASDCACHE or WARNDEVACCESS
for /proc-based lsof?

/proc-based lsof doesn't read device information from /dev
or the device cache file, so it makes no sense to change
the state of device cache processing or /dev node accessibility
warnings.

10.2.7 /proc-based lsof Linux NFS questions

10.2.7.1 Why can't lsof find files on an accessible NFS file system?

On occasion lsof may be unable to identify that an open file is on an NFS file system. This is most likely the result of a bug in the way the Linux kernel supplies information to the reader of /proc/mounts (lsof) -- sometimes
that pseudo-file is truncated by the kernel.

One way to see if this is the case is to search for the NFS file system in /proc/mounts -- e.g.,

```
$ grep <NFS_file_system_mount_point> /proc/mounts
```

If you get no output or the third word of the output isn't "nfs", then lsof won't consider the file system an NFS file system.

A second test is to look at the end of /proc/mounts -- e.g.,

```
$ tail /proc/mounts
```

If tail reports "# truncated" then /proc/mounts is incomplete because of a Linux kernel bug. The bug is documented at:

http://www.xss.co.at/sysinfo/mounts.html

The bug is fixed in Linux kernel 2.4.18, and possibly in some earlier Linux kernel versions.

10.2.7.2 Why can't lsof find files on an inaccessible NFS file system?

If lsof issues this message about a Linux file system, mounted from an NFS server:

```
lsof: WARNING: can't stat() nfs file system /xxx/yyy
```

Then lsof won't be able to find any open files on the file system.

That's because
of an inadequacy in the Linux /proc file
system. Its /proc/mounts file doesn't give the device doublet (major and minor numbers) of the file system as do many UNIX systems (e.g., Solaris). The only way lsof can get the device doublet for a Linux file system is to call stat(2) on the file system path, which fails if the NFS server isn't accessible.

When lsof doesn't know the device doublet of a file system,
it can't find open files on the inaccessible file system,
because it can't match the doublets of open files to the
doublet of the inaccessible file system.

This topic is covered extensively in lsof(8) it its ALTERNATE
DEVICE NUMBERS and BLOCKS AND TIMEOUTS sections.

10.2.8 Why doesn't /proc-based Linux lsof report socket options and values, socket state flags, and TCP options and values?

The Linux /proc file system doesn't report socket options
and values, socket states, and TCP options and values to
lsof.

10.2.9 Does /proc-based Linux lsof use a device cache?

No.
The Linux /proc/<PID>/fd/* entries provide device names to
lsof via readlink(2). It is not necessary to enable device
cache processing for /proc-based Linux lsof via the Customize
script or modifications to the Linux machine.h header file.

10.2.10 Why doesn't /proc-based Linux lsof report any or all file structure values for its +fcfgGn option?

/proc-based lsof revisions 4.79 and above can only report some
file structure values for Linux kernels below 2.6.22.

When running on Linux kernels at 2.6.22 and above lsof 4.79 can
report some file flag values -- i.e., in response to the +fg or
+fG options. The flag values are obtained from the
/proc/<PID>/fdinfo/ files introduced at Linux kernel 2.6.22.

/proc-based Linux lsof tests its availability to obtain file
flag values at initialization. If values are not available,
lsof disables file flag reporting. If the flags were requested
with +fg or +fG, lsof displays this warning:

```
    lsof: WARNING: can't report
file flags; disregarding +f.
```

As a special note, when Linux lsof can report flag bits, it
will not report 'R' for a read-only file. There is no
read-only flag bit O_* symbol in <fcntl.h> (or <bits/fcntl.h>)
and lsof reports only bits that are set. The absence of O_RDWR
and O_WRONLY flag bits implies the file is read-only.

10.3 Special Linux file types

10.3.1 Why is ``DEL'' reported as a Linux file type?

Lsof usually reports entries from the Linux /proc/<PID>/maps file with ``mem'' in the TYPE column. However, when lsof can't stat(2) a path in the process' ``maps'' file and the ``maps'' file entry contains ``(deleted)'', indicating the file was deleted after it had been opened, lsof reports the file type as ``DEL''.

10.3.2 Why is ``unknown'' reported as a Linux file type?

Lsof may report a Linux file's type as ``unknown'' in the TYPE column when lsof can't obtain complete stat(2) results for the file.

Usually the NAME column will contain a ``(stat: xxx)'' error message,
but that could have been suppressed with the lsof ``-w'' option.

10.4 Linux ``mem'' Entry Problems

10.4.1 What do ``path dev=xxx'' and ``path inode=yyy'' mean in the NAME column of Linux ``mem'' file types?

When the device or inode number in the process' ``maps'' file entry doesn't match the stat(2) results from the file path, lsof reports the inconsistent information from the stat(2) of the path parenthetically after the path in the NAME column in one of these forms:

(path dev=xxx) only the device number, ``xxx'', from a stat(2) of the ``maps'' file entry path differs from the ``maps'' file entry value reported in the DEVICE column.

(path inode=yyy) only the inode number, ``yyy'', from a stat(2) of the ``maps'' file entry path differs from the ``maps'' file entry value reported in the NODE column.

(path dev=xxx inode=yyy) Both device and inode numbers differ.

Lsof reports the ``maps'' file device number in the DEVICE column and the inode number in the NODE column.

When device and inode mismatches occur, lsof suppresses the reporting of link count and size. See the answer to the "Why is neither link count nor size reported for some Linux ``DEL'' and ``mem'' file types?" question for more information.

Device and inode inconsistencies can occur when a file at a ``maps'' path is replaced after the process has started, or when a different file system with similar path names is mounted on top of the original file system.

The device inconsistency parenthetical messages can be suppressed with lsof's ``-w'' option.

10.4.2 Why is neither link count nor size reported for some Linux ``DEL'' and ``mem'' file types?

Link count and size are not reported for some entries from the process' ``maps'' file because a stat(2) of the entry file path failed or stat(2) delivered device or inode numbers that don't match the ones in the ``maps'' entry.

When the stat(2) device or inode numbers don't match those in the ``maps'' file entry, it is likely that the stat(2) results don't apply to the file that was originally mapped by the process and whose path appears in the ``maps'' file entry, so lsof tries to avoid reporting possibly incorrect information.

See the answer to the "What do ``path dev=xxx'' and ``path inode=yyy'' mean in the NAME column of Linux ``mem'' file types?" for more information on how mismatched stat(2) device and inode numbers are reported.

10.5 Special Linux NAME column messages

10.5.1 What does ``(stat: xxx)'' mean in the NAME column of Linux files?

When lsof tried to stat(2) the path in the NAME column, the stat(2) system call failed and produced an error message of ``xxx''.

This situation usually occurs if the lsof process lacks permission to stat(2) the path -- e.g., the lsof executable lacks root permission, or lsof is attempting to stat(2) a path on an NFS device mounted with the root_squash option.

The message can be suppressed with lsof's ``-w'' option.

10.5.2 What does ``(readlink: xxx)'' mean in the NAME column of Linux files?

When lsof tried to convert the /proc/<PID>/fd path, reported in the NAME column, to its full and more meaningful path, the readlink(2) system call used to do the conversion failed. The readlink(2) failure message is ``xxx''.

This situation usually occurs if the lsof process lacks permission to readlink(2) some part of the path -- e.g., the lsof executable lacks root permission, or lsof is attempting to stat(2) a path on an NFS device mounted with the root_squash option.

The message can be suppressed with lsof's ``-w'' option.

10.6 Why is ``NOFD'' reported as a Linux file type?

When lsof lacks permission to use opendir() on the fd/ subdirectory of a process' /proc/<PID> directory, it reports a single file of the type ``NOFD'' (for no file descriptors).

Lsof reports the the /proc/<PID>/path in the NAME column, followed
by "(opendir: xxx)", where ``xxx'' is the error message returned by opendir().

The ``NOFD'' entry can be suppressed with lsof's ``-w'' option.

10.7 Why does Linux lsof report a NAME column value that begins with ``/proc''?

When lsof has problems processing a ``/proc/<PID>'' entry -- e.g., it can't convert the entry to a full and more meaningful path name, or it can't access the /proc/<PID>/fd subdirectory with opendir() -- it will report the /proc/<PID> path in the NAME column.

10.8 Linux /proc/net/tcp* and /proc/net/udp* issues

10.8.1 Why use the Linux -X option?

If you're not interested in TCP/IP socket information for a particular use of lsof, adding the -X option will make lsof run more quickly, because -X inhibits the reading of the /proc/net/tcp* and /proc/net/udp* files. For example, you may only be interested in knowing what process has a particular file open.

When the Linux system has a large number of open TCP/IP socket files, the time savings provided
by -X can be significant.

10.8.2 Why does lsof say ``-i is useless when -X is specified''?

If -X is specified, lsof can't report much information on open TCP/IP socket files. However, lsof's -i option requests that information. Hence, the two options conflict and can't be used together.

10.8.3 Why does lsof say ``can't identify protocol (-X specified)''?

If the Linux lsof -X option is specified and an open socket file can't be identified without accessing the /proc/net/tcp* and /proc/net/udp* files, lsof will report that it can't identify the socket's protocol and that the failure may be caused by the -X specification

11.0 NetBSD Problems

11.1 Why doesn't lsof report on open kernfs files?

Lsof doesn't report on open NetBSD kernfs files because the structures lsof needs aren't defined in the kernfs.h header file in /sys/misc/kernfs.

11.2 Why doesn't lsof report on open files on: file descriptor file systems; /proc file systems; 9660 (CD-ROM) file systems; MS-DOS
(floppy disk) file systems; or kernel file systems?

Lsof is not able to report on open files on certain file system if /usr/src/sys/msdosfs didn't exist when the lsof Configure script ran and lsof was made. /usr/src/sys/msdosfs contains header files lsof needs for collecting data on certain file system files.

You can tell if an lsof executable above) lacks support
for a file system if the following test of `lsof -v` produces
nothing:

```
$ lsof -v 2>&1 | grep <support_enabled_definition>
```

The <support-enabled_definition> will be:

```
File System Type Definition Note
---------------- ---------- ----
File descriptor HASFDESCFS
/proc  HASPROCFS
9660  HAS9660FS
MS-DOS  HASMSDOSFS (lsof 4.61 and above)
Kernel  HASKERNFS
```

The work-around is to install /usr/src/sys, rerun the lsof
Configure script, and remake lsof.

11.3 Why does lsof produce confusing results for nullfs file
systems?

Consider this report from /sbin/mount:

```
/usr/home
on /home type null (local)
```

(According to /sbin/mount /usr/home is the mounted-on device
and /home is the mounted-on directory.)

When lsof is asked to report on open files on /home, it
will report them as files on /usr/home instead. That's an
artifact of the NetBSD kernel's dynamic name lookup cache
(DNLC) and the way the kernel handles nullfs mounted-on
directories.

While lsof will report all open files on /home when given
/home as a file system directory argument, even though
reporting them as located on /usr/home, lsof will not find
the same files when asked to report on all open files on
/usr/home when given /usr/home as a file system device
argument. That's because from the mount perspective
/usr/home is equivalent to a device, but from the device
perspective it is still a directory.

So, what this lsof command reports:

```
$ lsof /home
... NAME
... /usr/home/...
```

Won't be duplicated by this lsof command:

```
$ lsof /usr/home
```

Another way
to look at this confusing /home and /usr/home
example is to consider what stat(2) reports. For /home
stat(2) reports a device doublet that matches what lsof
finds in open file node structures, while the device doublet
stat(2) reports for /usr/home won't match what lsof finds.
Nor does the mode reported by stat(2) indicate a block
devices, as is the expected case.

There is no simple answer to this confusion, nor is there
even a simple explanation. Simply be aware that when
supplying file system arguments to lsof on NetBSD, use the
mounted-on directory name for a nullfs as the lsof argument,
and don't be surprised when the NAME column reports the
mounted-on device name.

11.4 NetBSD header file problems

11.4.1 Why can't the compiler find some NetBSD header files?

If the compiler's pre-processor complains it can't find some
header files when it compiles lsof source files, /usr/include
and /usr/src may not have all the header files lsof needs.

As a work-around use the
NETBSD_SYS environment variable
to specify to lsof the location of the additional header
files -- e.g.,

```
% setenv NETBSD_SYS /my_source
% ./Configure -n netbsd
```

or

```
$ NETBSD_SYS=/mys_source ./Configure -n netbsd
```

Caution: using this work-around may cause the lsof Configure
script to activate or omit different features, depending
on where it finds the header files that determine the state
of the features.

11.4.2 Why does NetBSD lsof produce incorrect output?

If the NetBSD system's kernel was built from header files that don't match those in /usr/include -- e.g., //usr/src has the ones from which the kernel was built -- lsof may build, but won't produce correct output.

As a possible work-around, try directing the C compiler to select header files from /usr/src before it selects them from /usr/include. That can be done with the DEBUG make string -- e.g.,

```
$ make DEBUG="-I/usr/src -I/usr/include"
```

If that work-around fails, try using the LSOF_INCLUDE and NETBSD_SYS environment variables to swap /usr/include and /usr/src when running the Configure script, then use the make DEBUG string when running make -- e.g.,

```
$ LSOF_INCLUDE=/usr/src; export LSOF_INCLUDE
$ NETBSD_SYS=/usr/include; export NETBSD_SYS
$ ./Configure -n netbsd
$ make DEBUG="-I/usr/src -I/usr/include"
```

11.5 Why isn't lsof feature xxx enabled for NetBSD?

Lsof's Configure script enables NetBSD features by locating and examining header files associated with the features, and based on what it finds, setting compile-time definitions in Makefiles. (See 00PORTING for a list of the definitions.)

When Configure doesn't find header files or doesn't find appropriate values in header files, that may mean the header file tree lsof is searching is incomplete or out of date.

Lsof normally looks for NetBSD header files in /usr/include. It can also be directed to look in other directories -- e.g., /sys -- if told to do so with the contents of the LSOF_INCLUDE and NETBSD_SYS environment variables.

To determine what header file enables a missing feature, check the NetBSD stanza in the Configure script. Then check the locations it checks for the indicated header files and contents.

See 00XCONFIG for more information on LSOF_INCLUDE and

and NETBSD_SYS.

12.0 NEXTSTEP and OPENSTEP Problems

12.1 Why can't lsof report on 3.1 lockf() or fcntl(F_SETLK) locks?

Lsof has code to test for locks defined with lockf() or fcntl(F_SETLK) under NEXTSTEP 3.1, but that code has never been tested. I couldn't test it, because my NEXTSTEP 3.1 lockf() and fcntl(F_SETLK) functions return "Invalid argument" every way I have tried to invoke them.

If your NEXTSTEP 3.1 system does allow you to use lockf() and fcntl(F_SETLK) and lsof doesn't report locks set with them, then the code in .../dialects/next/dnode.c probably isn't correct. Please contact me via e-mail at <abe@purdue.edu> and tell me how you got your lockf() and fcntl(F_SETLK) system
calls to work. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

12.2 Why doesn't lsof compile for NEXTSTEP with AFS?

I no longer have a NEXTSTEP test system that has AFS. Changes to lsof since I once had a test system have caused me to change the AFS code in NEXTSTEP without being able to test the changes.

If you need AFS support for NEXTSTEP and can't get it to compile, please contact me. Perhaps we can jointly fix the problems.

13.0 OpenBSD Problems

13.1 Why doesn't lsof support kernfs on my OpenBSD system?

Lsof supports the kernel file system on OpenBSD versions whose /sys/miscfs/kernfs/kernfs.h (or <miscfs/kernfs/kernfs.h> header file correctly defines the kern_target structure.
The lsof Configure script's openbsd stanza checks for the presence of the structure's kt_name element and activates kernfs support for the CFLAGS -DHASKERNFS definition only when it finds kt_name.

The kernfs.h header

file is scheduled to be updated in the
OpenBSD 2.1 release, according to Kenneth Stailey, who
authored its changes.

13.2 Will lsof work on OpenBSD on non-x86-based architectures?

I've not tested lsof on an OpenBSD system that uses a
non-x86-based architecture, but I've had one report that
lsof 4.33 compiles and works on OpenBSD for the pmax
architecture (decstation 3100).

13.3 <sys/pipe.h> problems

13.3.1 Why does the compiler claim nbpg isn't defined?

When compiling lsof on some (older) OpenBSD SPARC versions,
the compiler may complain:

```
In file included from ../dlsof.h:191,
    from ../lsof.h:166,
    from fino.c:52:
/usr/include/sys/pipe.h:83: `nbpg' undeclared here
(not in a function)
/usr/include/sys/pipe.h:83: size of array `ms' has
non-integer type
```

This happens because <sys/pipe.h> uses NBPG from
<machine/param.h> to size the `ms' array, and some OpenBSD
systems define NBPG in terms of a kernel integer variable,
nbpg.

Lsof
revisions 4.46 and above have a hack to dlsof.h,
developed by Volker Borchert that avoids the compiler
problem for SPARC OpenBSD 2.3. The hack might work for
other OpenBSD SPARC versions, but hasn't been tested there.

If you want to enable the hack for your OpenBSD SPARC
version, modify this code in .../dialects/n+obsd/dlsof.h:

```
# if    defined(OPENBSDV)
#  if   OPENBSDV==2030 && defined(__sparc__)
#   if  defined(nbpg)
#undef  nbpg
#   endif       /* defined(nbpg) */
#define nbpg    4096            /* WARNING!!!  ... */
#  endif        /* OPENBSDV==2030 && defined(__sparc__) */
#include <sys/pipe.h>
```

```
#endif  /* defined(OPENBSDV) */
```

You will probably want to change the second #if test to match your OpenBSD version. You may also want to change what value is assigned to nbpg. See the next section, "What value should I assign to nbpg?"

13.3.2 What value should I assign to nbpg?

If you need to enable the nbpg hack, described in "Why does the compiler claim nbpg isn't defined?", you may also need to assign a value other than 4096 to nbpg. 4096 works for the sun4c processor and should work for sun4m, but 8192 may be needed for sun4.

Check <machine/param.h> and other OpenBSD documentation to determine the correct nbpg assignment.

13.4 Why doesn't lsof report on open MS-DOS file system (floppy disk) files?

Lsof is not able to report on open MS-DOS file system files if /usr/src/sys/msdosfs didn't exist when the lsof Configure script ran and lsof was made. /usr/src/sys/msdosfs contains header files lsof needs for collecting data on MS-DOS file system files.

You can tell if an lsof executable (revisions 4.61 and above) lacks MS-DOS file system support if the following command reports nothing:

```
$ lsof -v 2>&1 | grep HASMSDOSFS
```

The work-around is to install /usr/src/sys, rerun the lsof Configure script, and remake lsof.

13.5 Why isn't lsof feature xxx enabled for OpenBSD?

Lsof's Configure script enables OpenBSD features by locating and examining header files associated with the features, and based on what if finds, setting compile-time definitions in Makefiles. (See 00PORTING for a list of the definitions.)

When Configure doesn't find header files or doesn't find appropriate values in header files, that may mean the header file tree lsof is searching is incomplete or out of date.

Lsof normally looks for OpenBSD header files in /usr/include and /sys. It can also be directed to look in other directories if told to do so with the contents of the LSOF_INCLUDE and NETBSD_SYS environment variables.

To determine what header file enables a missing feature, check the OpenBSD stanza in the Configure script. Then check the locations it checks for the indicated header files and contents.

See 00XCONFIG for more information on LSOF_INCLUDE and and NETBSD_SYS.

14.0 Output Problems

14.1 Why do the lsof column sizes change?

Lsof dynamically sizes its output columns each time it runs to make sure that each column takes the minimum space. Column parsing -- e.g., with awk -- is possible, because each column is guaranteed to be separated from the preceding one by at lease one space, and no column except the last (NAME) contains embedded spaces.

14.2 Why does the offset have ``0t' and ``0x" prefixes?

The offset value that appears in the SIZE/OFF column has ``0t' and ``0x" prefixes to distinguish it from size values that may appear in the same column.

Normally if the offset value is less than 100,000,000 (8 digits), it appears in decimal with a ``0t' prefix; over 99,999,999, in hexadecimal with a ``0x" prefix.

A decimal offset is handy, for example, when tracking the progress of an outbound ftp transfer. When lsof reports on the ftp process, it will report the size of the file being sent with its open descriptor; it will report the progress of the transfer via the offset of the outbound open ftp data socket descriptor.

The ``-o [n]" option may be used to specify the maximum number of decimal digits to be printed after ``0t" before lsof switches to the hexadecimal digits after `0x". As

already noted, the default decimal digit count is 8.

14.3 What are the values printed in the FILE_FLAG column
and why is 0x<value> sometimes included?

The two comma separated lists, separated by a semicolon,
printed in the FILE-FLAG column (when the "+fg" option is
specified), are short-hand names or hexadecimal values for
the bits lsof finds in the f_flag or f_flags member of file
structures for files (the first list, the one before the
semicolon), and process open files flags found in various
kernel structures, often named "pofile" (the second list,
the one after the semicolon).

Lsof determines the short-hand names from symbols in the
<fcntl.h>, <linux/fs.h>, <sys/fcntl.h>, <sys/fcntlcom.h>,
o<sys/file.h>, and <sys/user.h> header files.

See the discussion of FILE-FLAG in the OUTPUT section
of
the lsof man page, and the FF_* and POF_* symbols in lsof.h
for a list of the names.

Bits with no names defined for them are represented by an
0x<value> member of the comma-separated list -- a hexadecimal
integer. When "+fG" is specified (instead of "+fg"), lsof
will list all flag values as two hexadecimal integers,
separated by a semicolon.

When "-FG" is specified to get the flags in an output field,
the format defaults to hexadecimal. You can get names
instead by following "-FG" with "+fg" -- e.g.,

```
$ lsof -FG +fg ...
```

However, when you precede "-FG" with "+fg" -- e.g.,

```
$ lsof +fg -FG
```

the format will be hexadecimal; order is important.

14.3.1 Why doesn't lsof display FILE_FLAG values for my dialect?

All versions of lsof except the /proc-based Linux lsof
report FILE-FLAG values. Lsof can't obtain FILE-FLAG
information from the Linux /proc interface.

14.4 Network Addresses

14.4.1 Why does lsof's -n option cause IPv4 addresses, mapped to IPv6,
to be displayed in IPv6 notation?

When you use the -n option to tell lsof to display numeric network addresses, and an IPv4 address has been mapped to IPv6, lsof displays the address in IPv6 format and puts "ipv4" in the TYPE column. That combination indicates the IPv4 address has been mapped to IPv6.

For example, the IPv4 address 1.2.3.4, when mapped to an IPv6 address, will be displayed by lsof as:

[::ffff:1.2.3.4]

The enclosing brackets are lsof's signal that this is an IPv6 address. Inside the brackets is a standard IPv6 address, reported by inet_ntop(). The first two colons, signifying zeroes in the first 64 bits of the IPv6 address, and the hexadecimal ffff in the next 32 bits, indicate that the last 32 bits contains a mapped IPv4 address, which is then displayed in IPv4 dot notation.

14.5 Why does lsof output \x, ^x, or \xnn for characters sometimes?

Lsof displays only printable ASCII characters. Lsof considers a character printable if isprint(3) says it
is. If isprint(3) says a character isn't printable, the lsof may page explains:

"... Non-printable characters are printed in one of three forms: the C ``\[bfrnt]" form; the control character `^' form (e.g., ``^@"); or hexadecimal leading ``\x" form (e.g., ``\xab"). Space is non-printable in the COMMAND column (``\x20") and printable elsewhere."

14.5.1 Why is space considered a non-printable character in command names?

Space is considered an unprintable character in command names because it is sometimes possible to hide the full command name from scripts that parse ps(1) output by embedding a space in the name.

14.6 Why doesn't lsof print all the characters of a command name?

By default lsof prints the first nine characters of the names of commands associated with processes. If more characters are required, the "w" value of the "+c w" option may be used to specify a larger width.

If "w" is zero ('0') lsof will print all characters of all command names up to the limit of the number of characters supplied by the particular UNIX dialect. When reporting command names, lsof replaces non-printable characters as discussed in the answer to " Why does lsof output \x, ^x, or \xnn for characters sometimes?"

See the answer to the "Why is space considered a non-printable character in command names?" question for an explanation of why spaces are replaced by the ``\x20" representation in command names.

The number of command name characters supplied to lsof by UNIX dialects in files and structures varies by dialect. For example, Linux 2.4.27 supplies lsof the first 15 characters of command names and Solaris 9 supplies 16. Thus, even if "w" is zero ('0'), lsof can't report more characters for command names on those two UNIX dialects than they provide lsof.

14.7 Why does lsof reject some -c command names, saying their lengths are "> what system provides (nn)"?

The command name length that a specific system provides varies from dialect to dialect. As noted in the answer to the "Why doesn't lsof print all the characters of a command name?" question, Linux and Solaris provide a limited number of command name characters.

When more characters are specified in the parameter to the -c option, lsof considers it an error and issues a fatal error message -- e.g.,

```
lsof: "-c xxxxyyyy" length (8) > what system provides (7)
```

The only work-around is to specify no more characters to -c that the system provides to lsof.

14.8 Why does lsof sometimes print TYPE numbers instead of names?

When lsof can't convert a type number to a name for printing in the TYPE column, it will report the number as four octets.

14.9 Marker line format problems

14.9.1 Why won't lsof accept a marker line format?

Lsof's Configure script must find the localtime(3) and strftime(3) functions in the dialect's C library in order to enable support for marker line formats.

Check the output of lsof's
-v option for the presence of
-DHAS_STRFTIME in the compiler flags. If it isn't there, Configure didn't find the necessary two C library functions.

If you think lsof should have found the functions, make a copy of the C test program in the Configure script that it uses to find the functions. Then use the copy, or a more informative modification of it, to learn why Configure can't find the functions. You can find that program by searching for strftime.

14.9.2 Why does lsof reject the NL (%n) marker line format?

When repeat mode and field output (with -F) have both been specified, lsof won't allow new line (NL) formats to be specified with ``%n''. That's because the marker line is always guaranteed to be a single line.

There is no work-around to this restriction.

14.10 How are protocol state name exclusion and inclusion used?

Protocol state name inclusion and exclusion with the ``-s p:s'' option and its arguments have some issues to consider. Note: the ``-s
p:s'' option is only available when the help output, obtained with -h or -?, shows it; it was a recent addition to lsof and is supported only on dialects where it could be tested.

First, there is the problem of determining what state names, if any, the dialect produces. Try running this lsof command to find them:

```
$ lsof -i
```

Knowing the state names of interest, the next problem is to decide on the lsof options and their parameters that will produce the desired output. Here some examples are probably the most useful.

To list only TCP socket files in LISTEN and CLOSE_WAIT states, use:

```
$ lsof -itcp -stcp:listen,close_wait
```

or

```
$ lsof -iTCP -sTCP:LISTEN,CLOSE_WAIT
```

Case isn't important to lsof in protocol and state names.

To exclude TCP socket files in CLOSE_WAIT state, use:

```
$ lsof -itcp -stcp:^close_wait
```

Note the `^' preceding close_wait; it selects exclusion. You can mix included and excluded names in a comma separated list, but you may not include and exclude the same name for the same protocol.

To list TCP files in LISTEN state and UDP files in Idle state, use:

```
$ lsof -i -stcp:listen -sudp:idle
```

Note: if you don't accompany the ``-s p:s" list option and argguments with the -i option, lsof will list all other regular files, while applying the specified inclusion and exclusion specifications to network files. Generally, then, you want to use -i with -s.

14.10.1 Why doesn't my dialect support state name exclusion and inclusion?

When state name inclusion and exclusion was added, I had access to test systems for AIX, Darwin, FreeBSD, Linux, PSTAT-based HP-UX and Solaris.

Therefore, I was unable to add and test the support to any other UNIX dialects.

If a dialect has the support, then the HASTCPUDPSTATE definition in its machine.h header file will be active; if not, it will be absent or commented out.

If your dialect doesn't have the support and you want it added, you will have to provide me Internet access to a test host, where I can compile lsof and have the credentials to test the changes the support requires. If that's possible for you, please contact me via e-mail at <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

15.0 Pyramid Version Problems

15.0.5 Statement of deprecation

As of lsof revision 4.52 support for all Pyramid versions has been dropped. Contact me via e-mail at <abe@purdue.edu> if you are interested in obtaining the last lsof Pyramid distribution. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

16.0 SCO Problems

16.1 SCO OpenServer Problems

16.1.1 How can I avoid segmentation faults when compiling lsof?

If you have an older SCO OpenServer compiler, it may get a segmentation fault when compiling some lsof modules. That appears to happen because of the -Ox optimization action requested in the lsof Makefile.

Try changing -Ox to -O with this make invocation:

```
$ make DEBUG=-O
```

Bela Lubkin supplied this tip and Steve Williams verified it.

16.1.2 Where is libsocket.a?

If you compile lsof and the loader says it can't find the socket library, libsocket.a, called by the -lsocket option in the lsof compile flags, you probably are running an SCO OpenServer release earlier than 5.0 and don't have the TCP/IP Development System package installed.

You may have the necessary header files, because you have the TCP/IP run-time package installed, but if you don't have the TCP/IP Development System package installed, you won't have libsocket.a.

Your choices are to install the TCP/IP Development System package or upgrade to OpenServer Release 5.0. You will find libsocket.a in 5.0 -- you'll find all the libraries and header files there, in fact -- and you can use gcc to compile lsof if you don't want to install the 5.0 Development System package.

16.1.3 Why do I get "warning C4200" messages when I compile lsof?

When you compile lsof under OSR 3.2v4.2 (and perhaps under earlier versions as well), you may get many compiler warning messages of the form:

```
node.c(183) : warning C4200: previous declarator is not
compatible with default argument promotion
```

In my opinion this is a bug in the OSR compiler. Because the compiler cannot handle full ANSI-C prototypes, it assumes default types for function parameters as it encounters untyped in a function prototype -- e.g., in this function declaration from node.c,

```
   readrnode(ra, r)
 KA_T ra;
 struct rnode *r;
   {
   ...
```

the compiler assigns default int types to the ra and r arguments.

Then, when the compiler encounters the fully typed parameters after the function skeleton and sees parameters with types that don't match the assumptions it previously made, it whines about its own assumptions.

You can ignore these messages.

16.2 SCO|Caldera UnixWare Problems

16.2.1 Why doesn't lsof

compile on my UnixWare 7.1.1 or above
system?

When you Configure lsof with the "uw" abbreviation and try
to compile it for UnixWare 7.1.1, you may get compiler
error messages like this:

```
    UX:acomp: ERROR: "dproc.c", line 98:
 undefined struct/union member: p_pgidp
```

This suggest that you probably have a non-stop cluster
UnixWare 7.1.1 system. Its <sys/proc.h> header file differs
from the one on the system where I did the lsof port to
UnixWare 7.1.1. I currently don't have access to a non-stop
cluster system to be able to develop changes to lsof that
would make it compile and work there.

If you have a non-stop cluster UnixWare 7.1.1 system, want lsof
for it, and can offer me a test account on the system, please
contact me via e-mail at <abe@purdue.edu>. Make sure "lsof"
appears in the "Subject:" line so my e-mail filter won't
classify your letter as Spam.

If you have a system with nsc_cfs and can offer me a test
account on it, please contact me via e-mail
at <abe@purdue.edu>.
Make sure "lsof" appears in the "Subject:" line so my e-mail
filter won't classify your letter as Spam.

16.2.2 Why does lsof complain about node_self() on my UnixWare
7.1.1 or above system?

If lsof exits immediately after issuing this message:

```
    can't identify process NSC node; node_self(): <message>
```

It means that lsof has been built to run on a NonStop
Cluster (NSC) UnixWare 7.1.1 or higher system and can't
get the number of the node on which it is running. Lsof
uses the node number to determine the path to the kernel
boot file.

You can tell if lsof has been built for NSC by looking for
"-DHAS_UW_NSC" in lsof's "-v" option output.

If the system on which you're trying to run lsof isn't
running an NSC kernel, you will need to build a non-NSC
lsof.

16.2.3 Why does UnixWare 7.1.1 or above complain about -lcluster, node_self(), or libcluster.so?

When you build, compile, and load lsof for UnixWare 7.1.1 and above, ld may complain that it can't find the -lcluster library or that the node_self symbol is undefined. When you try to run an existing lsof binary it may complain that libcluster.so can't be found.

These messages mean the tests made by Configure on your system led it to believe your system is running a NonStop Cluster (NSC) kernel, or the lsof binary you're trying to use was built on a NonStop Cluster system. If an lsof binary was built for NSC, this shell command produces output:

```
$ strings <lsof_binary> | grep HAS_UW_NSC
```

If that's not the case, and you can rebuild lsof, set the UW_HAS_NSC environment variable to "N" and do this:

```
$ Configure -n clean
$ UW_HAS_NSC=N
$ export UW_HAS_NSC
$ Configure -n uw
$ make
```

You can also edit Makefile and lib/Makefile. Remove -DHAS_UW_NSC from the CFGF strings. Remove -lcluster from the CFGL strings. Then run make again.

If you have an existing NSC lsof binary and you want one for a non-NSC system, you will have to build lsof yourself on the system where you want to use it. (That's always a good idea anyway.)

16.2.4 Why does UnixWare 7.1.1 or above lsof complain it can't read the kernel name list?

If lsof complains:

```
can't read kernel name list from <path>
```

It means that lsof can't find the booted kernel image file

at <path>. On NonStop Cluster (NSC) UnixWare 7.1.1 or higher systems lsof determines the booted file path by examining this file:

```
/stand/`node_self`/boot
```

If examining that file doesn't lead to an NSC path, lsof uses:

```
/stand/1/unix
```

On non-NSC systems lsof expects the booted kernel image to be in /stand/unix.

If your booted kernel image is in a different place, use lsof's "-k <path>" option to specify its path.

16.2.5 Why doesn't lsof report link count, node number, and size for some UnixWare 7.1.1 or above CFS files?

Lsof reports link count, node number, and size for open CFS files as recorded in their kernel node structure's cached attributes. Sometimes not all attributes are cached on the node where lsof runs, so lsof cannot report them.

16.2.6 Why doesn't lsof report open files on all UnixWare 7.1.1 NonStop Cluster (NSC) nodes?

Lsof can only report on files open on the node on which it runs, because the information lsof reports comes from the private kernel memory of the node. This may mean that asking lsof to find a specific open file, or use of a specific Internet address or port, may not report all open instances on nodes other than the one used to run lsof.

You can use the NSC onnode(1) command to run lsof on specific nodes, or the onall(1) command to run lsof on all nodes -- e.g.,

```
$ onall lsof [options] 2>&1 | less
```

or

```
$ onnode node-number lsof [options] 2>&1 | less
```

Note that, when lsof is run all nodes, the path name component assembly results it reports in its NAME column may vary, because the dynamic name cache from which lsof gets the components is private to the kernel of each node.

Also
note the use of shell redirection in the examples to
merge the standard error file information from onnode and
onall with lsof's standard output file output. That will
put the onnode and onall node announcements in proper
sequence with lsof's output.

16.2.7 Why doesn't lsof report the UnixWare 7.1.1 NonStop Cluster
(NSC) node a process is using?

To induce lsof to report the node on which a process runs
would be a significant, non-standard modification to lsof.
It has much wider implications than merely the printing of
a number in an output column. I'm not currently (April
2001) prepared to undertake such a modification.

If you want node-specific NSC information about open files,
run lsof under the control of onall(1) or onnode(1).

```
$ onall lsof [options] 2>&1 | less
```
or
```
$ onnode node-number lsof [options] 2>&1 | less
```

16.2.8 Why does the compiler complain about missing UnixWare 2.1[.x]
header files?

SCO|Caldera didn't ship the following header files
with
UnixWare 2.1 through 2.1.3:

```
<fs/proc/prdata.h>
<fs/procfs/prdata.h>
<sys/fs/fifonode.h>
<sys/fs/namenode.h>
```

Lsof needs those header files for its compilation. Contact
SCO|Caldera to get copies of those header files.

If you can't get the header files from SCO|Caldera, please
contact me via e-mail at <abe@purdue.edu>. Make sure "lsof"
appears in the "Subject:" line so my e-mail filter won't
classify your letter as Spam.

17.0 Sun Problems

17.0.5 Statement of deprecation

Lsof support for SunOS 4.1.x was last tested at revision 4.51.
Contact me via e-mail at <abe@purdue.edu> if you're interested in
obtaining it. Make sure "lsof" appears in the "Subject:" line so
my e-mail filter won't classify your letter as Spam.

17.1 My Sun gcc-compiled lsof doesn't work -- why?

Gcc can be used to build lsof successfully. However, an
improperly installed Sun gcc compiler will usually not
produce a working lsof.

If your Sun gcc-compiled lsof doesn't report
anything, or
reports ``can't read proc table," or gcc refuses to compile
lsof without error, check that the gcc step that "fixes"
Sun header files was run on the system where you're using
gcc to compile lsof. As an alternative, if you have the
SunPro C 5.0 compiler or later available, use it to compile
lsof -- e.g., use the solariscc Configure abbreviations.

17.2 How can I make lsof compile with gcc under Solaris 2.[456],
2.5.1, 7, 8 or 9?

Presuming your gcc-specific header files are wrong for
Solaris, edit the lsof Configure-generated Makefile and
lib/Makefile and make this change:

```
 CFGF=   -Dsolaris=20400 ...
to
 CFGF=   -Dsolaris=20400 -D__STDC__=0 -I/usr/include ...
```

or change:

```
 CFGF=   -Dsolaris=20500 ...
to
 CFGF=   -Dsolaris=20500 -D__STDC__=0 -I/usr/include ...
```

or change:

```
 CFGF=   -Dsolaris=20501 ...
to
 CFGF=   -Dsolaris=20501 -D__STDC__=0 -I/usr/include ...
```

This is only a temporary work-around. You really should
instruct gcc to to update your
gcc-specific header files
or install a recent gcc (e.g., 3.2), which has no need for

private copies of Solaris include files.

17.3 Why does Solaris Sun C complain about system header files?

You're probably trying to use /usr/ucb/cc if you get compiler complaints like:

```
cc -O -Dsun -Dsolaris=20300 ...
"/usr/include/sys/machsig.h", line 81: macro BUS_OBJERR
redefines previous macro at "/usr/ucbinclude/sys/signal.h",
line 444
```

Note the reference to "/usr/ucbinclude/sys/signal.h". It reveals that the BSD Compatibility Package C compiler is in use. Lsof requires the ANSI C version of the Solaris C compiler, usually found in /usr/opt/bin/cc or /opt/SUNWspro/bin/cc.

Try adding a CC string to the lsof Makefile that points to the Sun ANSI C version of the Sun C compiler -- e.g.,

```
CC= /usr/opt/bin/cc
```

or

```
CC= /opt/SUNWspro/bin/cc.
```

17.4 Why doesn't lsof work under my Solaris 2.4 system?

If lsof doesn't work under your Solaris 2.4 system -- e.g., it
produces no output, little output, or the output is missing command names or file descriptors -- you may have a pair of conflicting Sun patches installed.

Solaris patch 101945-32 installs a kernel that was built with a <sys/auxv.h> header file whose NUM_*_VECTORS definitions don't match the ones in the <sys/auxv.h> updated by Solaris patch 102303-02.

NUM_*_VECTORS in the kernel of patch 101945-32 are smaller than the ones in the <sys/auxv.h> of patch 102303-02. The consequence is that when lsof is compiled with the <sys/auxv.h> whose NUM_*_VECTORS definitions are larger than the ones used to compile the patched kernel, lsof's user structure does not align with the one that the kernel employs.

If you have these two patches installed, contact Sun and complain about the mis-match.

You may be able to work around the problem by editing
/usr/include/sys/auxv.h to have the following NUM_*_VECTORS
definitions:

```
    #define NUM_GEN_VECTORS 4
    #define NUM_SUN_VECTORS
8
```

The Configure script issues a prominent WARNING that you should
try the work-around.

I thank Leif Hedstrom for identifying the offending patches.

17.5 Where are the Solaris header files?

If you try to compile lsof under Solaris and get a compiler
complaint that it can't find system header files, perhaps
you forgot to add the header file package, SUNWhea.

17.6 Where is the Solaris /usr/src/uts/<architecture>/sys/machparam.h?

When you try to Configure lsof for Solaris 2.[23456], 2.5.1,
and 7 -- e.g., on a `uname -m` == sun4m system -- Configure
complains:

```
    grep: /usr/src/uts/sun4m/sys/machparam.h:
  No such file or directory
    grep: /usr/src/uts/sun4m/sys/machparam.h:
  No such file or directory
```

And when you try to compile the configured lsof, cc or gcc
complains:

```
    dproc.c:530: `KERNELBASE' undeclared (first use this function)
```

The explanation is that somehow your Solaris system doesn't
have the header files in /usr/src/uts it should have. Perhaps
someone
removed the directory to save space. Perhaps you're
using a gcc installation, copied from another system. In any
event, you will have to load the header files from the SUNWhea
package of your Solaris distribution.

KERNELBASE is an important symbol to lsof -- it keeps lsof
from sending an illegal kernel value to kvm_read() where
a segmentation violation might result (a bug in the kvm
library). Lsof can get illegal kernel values because it
reads kernel values slowly with kvm_read() calls that the

kernel is changing rapidly.

Lsof doesn't need KERNELBASE at Solaris 2.5 and above, because it has a KERNELBASE value whose address lsof can find with /dev/ksyms and whose value it can read with kvm_read(). Under Solaris 2.5 /usr/src/uts has moved to /usr/platform.

17.7 Why does Solaris lsof say ``can't read proc table''?

When lsof collects data on processes, using the kvm_*() functions to scan the kernel's proc structure table, it checks to make sure it has identified a reasonable number of them -- a minimum of three. When lsof can't identify three processes during a scan, it repeats the scan.

When five scans fail to yield three processes, lsof issues the fatal message:

```
lsof: can't read proc table
```

and exits.

Usually lsof fails to identify three processes during a scan because its idea of the form of the proc structure differs from that being used by the kernel. Since the proc structure is defined in <sys/proc.h> and other /usr/include header files, the root cause of a proc structure discrepancy usually can be found in the composition of /usr/include.

One common way that /usr/include header files can be incorrect is that gcc was used to compile lsof, gcc used its special (i.e., "fixed") header files instead of the ones in /usr/include, and the special gcc header files weren't updated when Solaris was. Answers to these questions:

My Sun gcc-compiled lsof doesn't work -- why?

How can I make lsof compile with gcc under Solaris 2.[456], 2.5.1, 7, 8 or 9?

Why does Solaris Sun C complain about system header files?

discuss the gcc header file problem and offer suggestions on how to fix it or work around it.

It may also be that you are trying to run a version of lsof that was compiled on an older version of Solaris. For example, an lsof executable, compiled for Solaris 2.4, will produce the ``can't read proc table'' message if you try to run it under Solaris 2.5. If you have compiled lsof under Solaris 2.5 and it still won't work, see if the header files in /usr/include have been updated to 2.5, or still represent a previous version of Solaris.

Another source of header file discrepancies to consider is the Solaris patch level and whether a binary kernel patch was not matched with a corresponding header file update. See the "Why doesn't lsof work under my Solaris 2.4 system?" question for an example of one in Solaris 2.4 -- there may be other such patch conflicts
I don't know about.

17.8 Why does Solaris lsof complain about a bad cached clone device?

When lsof revisions below 4.04 have been run on a Solaris system and have been allowed to create a device cache file, the running of revisions 4.04 and above on the same systems may produce this complaint:

```
lsof: bad cached clone device: ...
lsof: WARNING: created device cache file: ...
```

This is the result of a change in the device cache file that took place at lsof revision 4.04. The change introduced a node number into the clone device lines of the device cache file and was done in such a way that lsof could detect device cache files whose clone lines don't have node numbers (lines created by previous lsof revisions) and recognize the need to regenerate the device cache file.

17.9 Why doesn't Solaris make generate .o files?

Solaris /usr/ccs/bin/make won't generate .o files from .c files if /usr/share/lib/make/make.rules is missing. It may be found in and installed
from the SUNWsport package.

17.10 Why does lsof report some Solaris 2.3 and 2.4 lock types as `N'?

For Solaris 2.3 with patch P101318 installed at level 45 or above, and for all versions of Solaris 2.4, NFS locks are represented by a NFS-specific kernel lock structure that sometimes lacks a read or write lock type indicator.

When lsof encounters such a lock structure, it reports the lock type as `N'.

17.11 Why does lsof Configure say "WARNING: no cc in ..."?

When lsof's Configure script is executed with the solariscc abbreviation it tries to make sure it's using the Sun C compiler and not the UCB substitute from /usr/ucb/cc. Thus, it looks for cc in the "standard" Sun compiler location, /opt/SUNWspro/bin.

If Configure can't find cc there, it issues the warning:

```
lsof: WARNING: no cc in /opt/SUNWspro/bin;
using cc without path.
```

and uses cc for the compiler name, letting the shell find cc with its PATH environment variable.

You can tell Configure where to find your cc with the SOLARIS_CCDIR cross-configuration environment variable. (See 00XCONFIG for more information on SOLARIS_CCDIR). For example, use this Configure shell command:

```
SOLARIS_CCDIR=/usr/special/bin Configure -n solariscc
```

(SOLARIS_CCDIR should be the full path to the directory containing your cc.)

17.12 Solaris 7, 8 and 9 Problems

17.12.1 Why does lsof say the compiler isn't adequate for Solaris 7, 8 or 9?

Solaris 7, 8 and 9 kernels come in two flavors, 32 and 64 bit. 64 bit kernels run on machines that support the SPARC v9 instruction set architecture. Separate executables for some programs, -- e.g., ones using libkvm like lsof -- must be built for 32 and 64 bit kernels.

Previous Sun (e.g., SC4.0) and earlier gcc compilers will build lsof for 32 bit kernels, but they won't build it for 64 bit kernels. Compilers that will build lsof for 64 bit Solaris 7, 8 and 9 kernels are the Sun WorkShop Compilers C 5.0 and above, and recent gcc versions, e.g., 3.2.

When given the ``-xarch=v9" flag, the C 5.0 compiler and above, and associated loader and 64 bit libraries will build a 64 bit lsof executable; when given the "-m64" or "-mcpu=v9" (deprecated) flags, an appropriate gcc compiler will build a 64 bit lsof executable.

When the lsof Configure script detects a 64 bit kernel is in use (e.g., by executing `/bin/isainfo -kv`), and when it finds that the specified compiler is inappropriate, it complains with these messages:

For gcc:

```
"!!!WARNING!!!=========!!!WARNING!!!=========!!!WARNING!!!"
"!                                            !"
"! LSOF NEEDS TO BE CONFIGURED FOR A 64 BIT KERNEL, BUT  !"
"! THIS GCC DOESN'T SUPPORT THE BUILDING OF 64 BIT       !"
"! SOLARIS EXECUTABLES.  LSOF WILL BE CONFIGURED FOR A   !"
"! 32 BIT echo KERNEL.                                   !"
"!                                            !"
"!!!WARNING!!!=========!!!WARNING!!!=========!!!WARNING!!!"
```

For
Sun C:

```
!!!WARNING!!!==========!!!WARNING!!!==========!!!WARNING!!!
!                                            !
! LSOF NEEDS TO BE CONFIGURED FOR A 64 BIT KERNEL, BUT    |
! THE VERSION OF SUN C AVAILABLE DOESN'T SUPPORT THE      !
! -xarch=v9 FLAG.  LSOF WILL BE CONFIGURED FOR A 32 BIT   !
! KERNEL.                                                 !
!                                            !
!!!WARNING!!!==========!!!WARNING!!!==========!!!WARNING!!!
```

17.12.2 Why does Solaris 7, 8 or 9 lsof say "FATAL: lsof was compiled for..."?

Solaris 7, 8 or 9 lsof may say:

```
lsof: FATAL: lsof was compiled for a xx bit kernel,
but this machine has booted a yy bit kernel.

Where: xx = 32 or 64
yy = 64 or 32

(xx and yy won't match.)
```

This message indicates that lsof was compiled for one size

kernel and is being asked to execute on a different size
one. That's not possible for programs
like lsof that use
libkvm.

Depending on the instruction sets for which you need Solaris
7, 8 or 9 lsof, you may need two or more versions of lsof,
compiled for each kernel size, installed for use with
/usr/lib/isaexec. See the "How do I install lsof for
Solaris 7, 8 or 9?" section of this document for more
information on that.

17.12.3 How do I build lsof for a 64 bit Solaris kernel under a 32
bit Solaris kernel?

If your Solaris system has an appropriate compiler (e.g.,
WorkShop Compilers C 5.0 and above, or a recent gcc like
3.2) and the 64 bit libraries have been installed, you can
force lsof's Configure script to build a 64 bit version of
lsof with:

```
$ SOLARIS_KERNBITS=64 Configure -n solariscc
```

The SOLARIS_KERNBITS environment variable is part of the
lsof cross-configuration support, described in the 00XCONFIG
file of the lsof distribution.

17.12.4 How do I install lsof for Solaris 7, 8 or 9?

If you are installing lsof where it will be used only under
the
bit size kernel for which it was built, no special
installation is required.

If, however, you are installing different versions of lsof
for different bit sizes -- e.g., for use on a 64 bit NFS
server and from its 32 bit clients -- you should read the
man page for isaexec(3C) and install lsof according to its
instructions.

The executable at the directory where lsof is to be found
should be a hard link to /usr/lib/isaexec or a copy of it.
In the directory there must be instruction architecture
subdirectories -- e.g., .../sparc/ and .../sparcv9/. The
lsof for 64 bit size kernels is installed in the .../sparcv9/
subdirectory; the one for 32 bit size kernels, in .../sparc/.

For example, if you're installing 32 and 64 bit lsof

executables in /usr/local/etc, you would:

```
# cd /usr/local/etc
# ln /usr/lib/isaexec lsof
# mkdir sparc sparcv9
# install the 32 bit lsof as sparc/lsof
# install the 64 bit lsof as sparcv9/lsof
# chmod, chown, and chgrp sparc/lsof and

sparcv9/lsof appropriately
```

Lsof permissions and ownerships are the same whether one or more lsof executables are being installed, with or without the /usr/lib/isaexec hard link.

17.12.5 Why does my Solaris 7, 8 or 9 system say it cannot execute lsof?

When you attempt to execute lsof, your Solaris 7, 8 or 9 shell may complain:

```
ksh: ./lsof: cannot execute
```

If the lsof executable exists and has the proper execution permissions, this error may be the result of trying to execute an lsof, built for a 64 bit kernel, on a 32 bit kernel.

This will tell you about the lsof executable:

```
$ file lsof
lsof: ELF 64-bit MSB executable SPARCV9 Version 1,
dynamically linked, not stripped
```

The "64-bit" notation indicates the binary was built for a 64 bit kernel. To see the running kernel bit size, use this command:

```
$ isainfo -kv
32-bit sparc kernel modules
```

The "32-bit" notation indicates a 32 bit kernel has been booted.

The only work-around is to obtain, or Configure and make, an lsof for the appropriate kernel bit size. If you Configure and make lsof on the kernel where you wish to

run it the proper compiler, the lsof Configure step will generate Makefiles that can be used with make to build an appropriate lsof executable.

To compile a 64 bit lsof, you must have an appropriate compiler -- i.e., Sun WorkShop Compilers C 5.0 or higher or a recent gcc like 3.2.

17.12.6 What gcc will produce 64 bit Solaris 7, 8 and 9 executables?
8 and 9 executables?

Properly built and installed recent gcc versions -- e.g., 3.2 -- will build lsof for 64 bit Solaris kernels.

If you update your gcc version to 3.2 or later, make sure the private gcc header files become current -- i.e., clear out any private header files from a previous gcc or Solaris installation before installing the new ones, or build to a new --prefix root and replace the old root with it after the build and installation are complete.

17.12.7 Why does lsof on
my Solaris 7, 8 or 9 system say, "can't
read namelist from /dev/ksyms?"

You're probably trying to use an lsof executable built for an earlier Solaris release on a 64 bit Solaris 7, 8 or 9 kernel. The output from `lsof -v` will tell you the build environment of your lsof executable. You should also have gotten a warning message that lsof is compiled for a different Solaris version than the one under which it is running -- something like this:

```
lsof: WARNING: compiled for Solaris release X; this is Y
```

You need to build lsof on the system where you want to use it. For 64 bit Solaris 7, 8 and 9 you need a compiler that can generate 64 bit Solaris executables -- e.g., the Sun Workshop 5 C compiler or later, or a recent gcc version like 3.2. See the "Why does lsof say the compiler isn't adequate for Solaris 7, 8 or 9?" section and the ones following it for a discussion of building lsof for 64 bit Solaris 7, 8 or 9.

17.13 Solaris and COMMON

17.13.1 What does COMMON

mean in the NAME column for a Solaris VCHR
file?

When lsof puts COMMON or (COMMON) in the NAME column of a
Solaris VCHR file, it means that the file is handled by
the special file system functions of the kernel through a
common vnode.

17.13.2 Why does a COMMON Solaris VCHR file sometimes seem to have an
incorrect minor device number?

When lsof reports on an open file in a Solaris special file
system that uses a COMMON vnode, and the file is a VCHR
file, lsof tries to locate the associated device node by
looking for matches on the major and minor device numbers
first.

If no major and minor match results, lsof then looks for
a match on pseudo and clone device files. (See /devices/pseudo.)
Those device nodes are matched specially by either their
major or minor device numbers, but not both. Hence, when
lsof finds a match under those special conditions, it may
report a value in its output DEVICE column that differs
from one of the major and minor numbers of the device
node.

Here's an example from a sun4m Solaris 7 system:

```
$ ls -li /devices/pseudo/pm@0:pm
151261 crw-rw-rw-   1 root     sys      117,  0 ...
$ lsof /devices/pseudo/pm@0:pm
COMMAND ... DEVICE ...   NODE NAME
powerd       117,1 ... 151261 /devices/pseudo/pm@0:pm (COMMON)
Xsun    ...  117,0 ... 151261 /devices/pseudo/pm@0:pm
```

Note that the DEVICE value for the file with (COMMON) in
its name field has a different minor device number (1) from
what ls reports (0), while the DEVICE value for the file
without (COMMON) matches the ls output exactly. Both match
on the major device number, 117. The minor device number
mis-match is a result of the way the Solaris kernel handles
special file system common vnodes, and it's the reason lsof
puts (COMMON) after the name to signal that a mis-match is
possible.

17.14 Why don't lsof and Solaris pfiles reports always match?

/usr/proc/bin/pfiles for Solaris 2.6, 7, 8, and 9 also

reports information on open
files for processes. Sometimes
the information it reports differs from what lsof reports.

There are several reasons why this might be true. First,
because pfiles is a Sun product, based on Sun kernel
features, its developers have a better chance of knowing
exactly how open file information is organized. I sometimes
have to guess at how kernel file structure linkages are
constructed by gleaning hints from header files.

Second, lsof is aimed at providing information, specifically
device and node numbers, that can be used to identify named
file system objects -- i.e., path names. Thus, lsof tries
to make sure its device and node numbers match those reported
by stat(2). Pfiles doesn't always report numbers that
match stat(2) -- e.g., for files using clone and pseudo
devices via common vnodes like the nlist() /dev/ksyms usage.

Here's the Solaris 7 COMMON VCHR example again with additional
pfiles output:

```
   $ ls -li /devices/pseudo/pm@0:pm
   151261 crw-rw-rw-
 1 root     sys      117,  0 ...
   $ lsof /devices/pseudo/pm@0:pm
   vic1: 10 = lsof /dev/pm
   COMMAND ... DEVICE ...   NODE NAME
   powerd  ...  117,1 ... 151261 /devices/pseudo/pm@0:pm (COMMON)
   Xsun    ...  117,0 ... 151261 /devices/pseudo/pm@0:pm
   $ pfiles ...
   0: S_IFCHR ... dev:32,24 ino:61945 ... rdev:117,1
   ...
   14: S_IFCHR ... dev:32,24 ino:151261 ... rdev:117,0
```

Note that the NODE number, reported by lsof, matches what
ls(1) and stat(2) report, while the ino value pfiles reports
doesn't. Lsof also indicates with the (COMMON) notation
that the DEVICE number is a pseudo one, derived from the
character device's value. The lsof DEVICE value matches
the pfiles rdev value, correct behavior for a character
device, but pfiles gives no sign that it's not possible to
find that character device number in /devices with ls(1)
or stat(2).

17.15 Why does lsof say, "kvm_open(namelist=default, core=default):
Permission denied?"

Lsof needs permission
to read from the /dev/kmem and /dev/mem
memory devices. Access to them is opened via a call to
the kvm_open() library function and it reports the indicated
message.

You must give lsof permission to read the memory devices.
The super user can almost always do that, but other lsof
users can do it if some group -- e.g., sys -- has permission
to read the memory devices, and the lsof binary is installed
with the group's ownership and with the setgid permission
bit enabled.

17.16 Why is lsof slow on my busy Solaris UFS file system?

Lsof may be slow on a busy Solaris UFS file system when
UFS logging has been enabled with the "logging" mount
option. That option can significantly increase disk
operations under certain conditions -- e.g., when a lot of
files are accessed quickly.

When only the "logging" option is specified to mount, all
file accesses (atime updates) are logged to the UFS logging
queue. Each atime update requires two writes to the disk
to complete it.

If
you want to do UFS logging -- and there are reliability
advantages to it -- consider using the "logging,noatime"
mount options instead. That will shift atime updates from
the logging queue to fewer and independent asynchronous
operations, consequently making the UFS logging queue a
smaller bottleneck.

Consult mount_ufs(1M) for more information on the logging
and noatime options.

(My thanks to Casper Dik for this tip on improving the
performance of UFS logging.)

17.17 Why is lsof so slow on my Solaris 8 or 9 system?

Solaris 8 has a post-release feature upgrade modifying
kernel name cache (DNLC) handling that can slow lsof
throughput dramatically. The feature, sometimes called
negative DNLC caching, is standard in Solaris 9.

As best I can tell, when you install the Solaris 8 MU1

package, you get negative DNLC caching. If this pipe
produces any output, your system has negative DNLC caching.

```
$ nm /dev/ksyms | grep negative_cache_vnode
```

The reason negative
DNLC caching perturbs lsof is that a
single vnode address (found in the negative_cache_vnode
kernel variable) is used to mark entries in the DNLC that
are not (the negative part) found on disk.

Since a single vnode address (the DNLC key lsof uses) can
represent many (I've seen upwards of 30,000.) DNLC entries,
their presence overloads lsof's internal DNLC hashing
function. An overloaded hash function is a slow hash
function, and lsof's slows to a crawl when it encounters
thousands of keys that produce the same value when the lsof
DNLC hash function is applied to them.

The solution is simple -- ignore negative DNLC cache keys.
They don't represent path name components lsof can use.
Lsof revisions 4.50 and above have an addition that ignores
them and the performance of those lsof revisions improves
significantly when presented with negative DNLC cache keys.

If you don't have an lsof revision at 4.51 or later, there's
a work-around. Use lsof's ``-C'' option. It disables
lsof's
DNLC caching. Of course, that also inhibits the
reporting of any path name components from the kernel DNLC.
When ``-c'' is used, lsof will continue to report file
system and character device paths.

17.18 Solaris and VxFS

17.18.1 Why doesn't lsof support VxFS 3.4 on Solaris 2.6, and above?

Lsof will not support VxFS version 3.4 on Solaris 2.6 and above
unless some files from VxFS Update 2 have been installed. VxFS
3.4 FCS and VxFS 3.4 update 1 lack the header files lsof
normally uses to obtain information from the VxFS 3.4 kernel
node structure, vx_inode. VxFS 3.4 Update 2 provides a method
whereby lsof can obtain the necessary vx_inode information from
the vxfsu_get_ioffsets() function in Veritas utility
libraries.

The utility libraries (32 bit and 64 bit versions) may be
found in /opt/VRTSvxfs/lib. An ancillary header file may

be found in /opt/VRTSvxfs/include/sys/fs/vx_libutil.h.
Documentation of the vxfsu_get_ioffsets(3) function may be
found in
/opt/VRTS/man/man3/vxfsu_get_ioffsets.3.

Those files of VxFS 3.4 Update 2 may be downloaded from:

ftp://ftp.veritas.com/pub/support/vxfs_34.i64243.tar

The vxfs_34.i64243.tar archive will unpack into an i64243
directory containing these files:

```
$ ls i64243
README
libvxfsutil.sol26.sums
libvxfsutil.sol26.tar.Z
libvxfsutil.sol27.sums
libvxfsutil.sol27.tar.Z
libvxfsutil.sol28.sums
libvxfsutil.sol28.tar.Z
```

Read README. Select the *.tar.Z file appropriate for your
Solaris version. Its contents will unpack into /opt/VRTS
and /opt/VRTSvxfs, so you will need sufficient permission
-- e.g., do it as root -- to unpack the uncompressed archive.
Once you've done that, it's a good idea to compare the
checksums of the archive you unpacked with the ones recorded
in the appropriate *.sums file. Use `sum -r` to verify
the checksums.

For example, if you want the Solaris 8 version, uncompress
and unpack libvxfsutil.sol28.tar.Z -- e.g.,

```
$ su
...
# cd i6423
# zcat libvxfsutil.sol28.tar.Z | tar xf -
```

That should create these new files and subdirectories with
the indicated checksums:

```
File or subdirectory   sum -r

/opt/VRTSvxfs/include/vxfsutil.h  03938
/opt/VRTSvxfs/lib/libvxfsutil.a  51794
/opt/VRTSvxfs/lib/sparcv9/
/opt/VRTSvxfs/lib/sparcv9/libvxfsutil.a 07420
```

/opt/VRTS/man/man3/
/opt/VRTS/man/man3/vxfsu_get_ioffsets.3 62480

Once these files are in place, run lsof's Configure script for the solaris or solariscc abbreviation. Configure will locate the appropriate VxFS 3.4 Update 2 files and set up for the making of an lsof that will properly display open VxFS 3.4 file information.

17.18.2 Why does lsof report "vx_inode: vxfsu_get_ioffsets error" for open Solaris 2.6 and above VxFS 3.4 and above files?

Even when lsof supports VxFS 3.4 and above on Solaris 2.6 and above, it may report "vx_inode: vxfsu_get_ioffsets error" in the NAME column for all VxFS files.

The
usual cause is that lsof doesn't have permission to read the file at the end of the /dev/vxportal symbolic link. If, for example, lsof has been installed setgid(sys), then the /dev/vxportal symbolic link destination should be owned by the sys group and readable by it.

Update 2 for VxFS 3.4 sets the modes of the /dev/vxportal symbolic link destination to 0640 and the group ownership to sys. But I have had a report that the modes are wrong in a VxFS 4.0 installation.

Another cause may be that the system has more than one version of VxFS installed (Only one can be active.), and lsof's Configure script did not choose the header files and libraries for the active VxFS version. Configure opts for VxFS 4.0 and above header files and libraries (in /opt/VRTS) in preference to those for VxFS below 4.0 (in /opt/VRTSvxfs).

Look for the directories /opt/VRTS and /opt/VRTSvxfs. If you have /opt/VRTS, make sure its header and library symbolic links point to those of
the active VxFS version.

If you have both directories, look at the CFLAGS that Configure constructed for making lsof and see which directory path follows a -I option. If that doesn't match the directory path of the active VxFS version, try pointing Configure at the correct directory with the SOLARIS_VXFSINCL environment variable -- e.g.,

```
$ SOLARIS_VXFSINCL=/opt/.../include ./Configure -n solaris
```

17.18.3 Why does Solaris Configure claim there is no VxFS library?

The lsof Configure script, when configuring for Solaris, may report:

```
FATAL: no VxFS .../libvxfsutil.a
```

That fatal error message indicates lsof has found the VxFS utility library's header files, but can't find the library itself in the expected location adjacent to the header files.

One possible cause is an incorrect symbolic link from /opt/VRTS/lib/sparcv9/libvxfsutil.a to the library's real location. (Some VxFS distributions declared the link incorrectly.) Use `ls -lL` on that path to see if it exists.
If it doesn't exist, the link may be missing an additional leading "../" component.

If the problem is a missing "../" from the library's link, you can correct the link or check with Veritas/Symantec for the patch that corrects it.

If the problem is not a missing "../", and you know the libvxfsutil.a location, you can define its path in the SOLARIS_VXFSLIB environment variable before running the lsof Configure script. (See 00XCONFIG for information about using the SOLARIS_VXFSLIB environment variable.)

If you have no libvxfsutil.a, you must obtain it from Veritas/Symantec or find it in your VxFS installation package.

17.18.4 Why doesn't Solaris lsof report VxFS path name components?

Solaris lsof will report path name components for VxFS versions that use the common Solaris Dynamic Name Lookup Cache (DNLC) or on some file systems of VxFS versions that support the VxFS Reverse Name Lookup (RNL) facility.

VxFS versions 3.3 (approximately) and below use the common
Solaris DNLC. (I haven't been able to determine exactly when VxFS stopped using the DNLC.) For versions above that boundary, but below 4.0, lsof can't report path name components.

At VxFS 4.0 and above, lsof can be compiled to use the VxFS RNL facility for reporting path names. If "-DHASVXFSRNL" appears

in the compiler flags section of lsof "-v" option output, then the lsof Configure script detected the VxFS RNL facility and lsof has been compiled to use it.

Lsof's use of the RNL facility can fail when the VxFS file system disk layout version is below 6. In that case, lsof can report no path name components. For more information, see the vxfs_inotopath(3) manual page. any of the following commands will show the disk layout version for a VxFS file system, when supplied the block device or mount point on which the file system is mounted.

```
   fstyp -v <block_device>
 or
   mkfs -m <block_device>
 or
   vxupgrade <mount_point>
```

You must have permission to read the block device -- e.g., be the root user.

You may also be able to upgrade an older disk layout to one that will work with the RNL. See the vxupgrade(1M) man page for more information on that.

When lsof can't report VxFS path name components, it reports the file system mount point and the path name of device on which it is mounted. The device path name is enclosed in parentheses.

17.18.5 Why does Solaris 10 lsof report scrambled VxFS paths?

Solaris 10 lsof may report a bogus, scrambled path for an open VxFS file, when lsof obtains the path from a vnode's cached path. Veritas/Symantec reports that their Solaris 10 implementation has bugs in the way it handles the Solaris 10 vnode cached path and those bugs will be fixed in an upcoming patch some time after August 15, 2005.

When Solaris 10 lsof reports a path for an open VxFs file obtained via the VxFS Reverse Name Lookup facility, the path will be correct.

Also see the answers to the questions "Why does Solaris 10 lsof sometimes report the wrong path name?" and "Why doesn't Solaris lsof report VxFS path name components?"

17.19 Large file problems

17.19.1 Why does lsof complain it can't stat(2) a Solaris 2.5.1 large file?

When given an argument that is the path to a Solaris 2.5.1 file, enable for large file operations with the O_LARGEFILE open(2) option, lsof complains that it can't stat(2) the file. That's because lsof isn't using a stat(2) call and associated structure enabled for large files.

This error has been fixed, starting at lsof revision 4.58 for Solaris 2.6 and above. That fix won't work on Solaris 2.5.1 and I no longer have access to a Solaris 2.5.1 test system to develop a separate fix.

The work-around is to avoid specifying a O_LARGEFILE path as an argument to lsof on Solaris 2.5.1. Instead use a combination of lsof and grep to achieve the same results, albeit more clumsily.

17.20 Why does lsof get a segmentation fault on 64 bit Solaris 8 using NIS+?

I have received a report from Gary Craig that lsof produces a segmentation fault on his 64 bit Solaris 8 system using NIS+. Via an independent test program we have exonerated lsof and tracked the fault to the NIS+ __nis_server_name() function in the C name server library, -lnsl.

Lsof causes the __nis_server_name() NIS+ function to be called by calling getservent() to read entries of the port number to service name map.

The only Sun bug ID that appears to describe the problem is 4304244, although its text is unclear enough to leave room for doubt.

Until Sun eliminates the __nis_server_name() segmentation fault cause, a work-around for lsof is to use its "-P" option, causing lsof to avoid port to service name lookups.

17.21 Will lsof crash the Solaris kernel?

I've received and investigated one report that it has when the Sun hardware (a QME interface) was faulty. Today (May

23, 2002) I've learned that Sun has reports of kernel
crashes caused by adb,
lsof, and mdb.

The Sun investigation pinpointed a problem in the /dev/kmem
kernel driver and there is a Sun bug report, 4344513, about
the problem. There is a fix in Solaris 9, and patches for
Solaris 7 and 8 (SPARC and x86).

To see if your Solaris system is fixed, look for a
/devices/pseudo/*allkmem node.

Extensive address filtering was added to lsof revision 4.50
to forestall what I then (July 2001) believed to be only
the possibility that lsof might crash Solaris. However,
the filtering isn't perfect, since a filtered address might
become invalid after lsof has filtered it but before lsof
has delivered it to /dev/kmem. That filtering work is
described in .../dialects/sun/solaris_kaddr_filters, also
available at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/solaris_kaddr_filters

The best and safest work-around is to upgrade to Solaris
9 or install an appropriate patch or its equivalent from
this list:

```
Solaris SPARC  x86
Version Patch  Patch

======= =====  =====
   7 106541-20 106542-20
   8 108528-14 108529-14
```

17.22 Why does lsof on Solaris 7, 8, or 9 report a kvm_open()
failure?

When lsof is started on some Solaris 7, 8, and 9 systems
it may report:

```
lsof: kvm_open(namelist=default, corefile=default): \
No such file or directory
```

Lsof revisions 4.65 and later will first report:

```
lsof: cannot stat /dev/allkmem
```

The second message, not delivered in lsof revisions below

4.65, explains the cause of the kvm_open() failure; it can't find /dev/allkmem.

/dev/allkmem is a device added to Solaris 7 and 8 in patches and in the Solaris 9 FCS. See the preceding "Will lsof crash the Solaris kernel?" section for more information on /dev/allkmem and the patches.

The kvm_open(3KVM) function in the KVM library of patched Solaris 7 and 8 systems and in Solaris 9 expects to find /dev/allkmem and exits on error when it does not.

If you have installed the patch that updated your KVM library to
a version that expects /dev/allkmem to be present and it is not, you may need to reconfigure your system's devices with devfsadm(1M) or enter "boot -r" to the OpenBoot monitor's prompt (usually "ok").

17.23 Solaris and SAM-FS

17.23.1 Why does Solaris lsof report "(limited SAM-FS info)"?

Lsof 4.68 and above report "(limited SAM-FS info)" on Solaris in the NAME column after the path or file system name for all files it finds on SAM-FS file systems.

That's because no more information is known about the composition of the nodes that follow SAM-FS vnodes. If you can provide that information, please contact me via e-mail at <abe@purdue.edu>. Make sure "lsof" appears in the "Subject:" line so my e-mail filter won't classify your letter as Spam.

17.23.2 Why can't lsof locate named SAM-GS files?

Solaris lsof 4.68 and above can't locate files on SAM-FS file systems when the files are named as lsof arguments because lsof doesn't know how to locate open SAM-FS file device
and node number information. (See also 'Why does Solaris lsof report "(limited SAM-FS info)?')

17.24 Lsof and Solaris 10 zones

17.24.1 How can I make lsof list the Solaris zone?

Use the lsof "-z [z]" option.

17.24.2 Why doesn't lsof work in a Solaris 10 zone?

When run from within a Solaris 10 zone, lsof will usually report:

```
lsof: can't stat(/devices): No such file or directory
```

That's because a Solaris zone usually has no /devices subdirectory, a restriction of the zone implementation intended to limit the ability of zone processes to control global system resources, including physical devices.

While a zone may have a /dev subdirectory, that subdirectory usually lacks the /dev/allkmem, /dev/mem and /dev/kmem devices lsof and the KVM library it uses require.

The work-around is to run lsof in the global zone. When it is run in a global zone lsof will be able to report on processes running in any zone, including the global zone.

17.24.3 Why does lsof complain it can't stat() Solaris 10 zone file systems?

When run from the global zone on Solaris 10 lsof may complain:

```
lsof: WARNING: can't stat() 15 zone file systems;
 using dev= options
```

The warning message means lsof found the reported number of file system entries in the mount table for which it didn't have permission to get stat(2) results, but which had "zone=" and "dev=" mount table options.

That is a normal restriction of Solaris 10 zones. Since the lsof warning message indicates it was able to find "dev=" options for the file systems, lsof will probably work correctly.

One work-around is to relax the restrictions on zone mount points, so that lsof can stat() them. While that may be possible by changing directory modes or group ownerships, it is probably not a good idea, because it weakens the restrictions zones are intended to provide.

Another work-around is to suppress the warning message with lsof's "-w" option. The down side of that is that it causes

the
suppression of all warning messages, leading to the
possibility that some non-stat() warning messages will be
suppressed.

17.25 Solaris 10 problems

17.25.1 Why does Solaris 10 lsof sometimes report the wrong path name?

When a path name component is renamed -- e.g., with mv(1) --
Solaris 10 lsof may report the old component for an open file
that used the component in its path before the rename. That's
because Solaris 10 lsof reports the path name cached in the
open file's vnode and the Solaris 10 kernel doesn't update the
open vnode's cached path name when a component of it is changed.

When an open file is deleted -- e.g., with rm(1) -- the path
name by which it was opened remains cached in the vnode. Lsof
can be instructed to display that path name with the -X option.
The path name might be incorrect because of the rename problem
described above. See the answer to the 'What does "(deleted)"
mean in the NAME column of a Solaris 10 open file?' question
for
more information.

Lsof is sometimes able to detect that cached path name is
incorrect. In that case lsof may report only the mounted-on
directory and device of the file system or it may report that
the path name is of questionable accuracy by appending a
trailing "(?)" to it in the NAME column.

See the answer to the "Why does Solaris 10 lsof sometimes
report only the mounted-on directory and device?" and 'What
does "(?)" mean in the NAME column of a Solaris 10 open file?'
questions for more information.

17.25.2 Why does Solaris 10 lsof sometimes report only the mounted-on directory and device?

For some regular open files lsof may report only the mounted-on
directory and device of the file system on which the file
resides. That's because lsof was able to determine that the
path name cached in the open file's vnode is incorrect.

Lsof detects the cached path name is incorrect by applying
stat(2) to it, provided that no error was detected when stat(2)
was applied to

the file system mounted-on directory during lsof
setup. If a mounted-on directory stat(2) error was detected
during setup, lsof does no cached path name analysis and simply
reports it.

When the application of stat(2) to the cached path name returns
a no-entry reply (the ENOENT error number), lsof concludes the
path no longer exists (i.e., has been unlinked) and reports the
mounted-on directory and device of the file system. That
behavior can be modified with the -X option in lsof revisions
4.77 and above. See the answer to the 'What does "(deleted)"
mean in the NAME column of a Solaris 10 open file?' for more
information.

When the application of stat(2) to the cached path name returns
a permission error reply (the EACCES or EPERM error numbers),
lsof reports the cached path name and adds a trailing "(?)" to
indicate the reported path name is of questionable accuracy.
See the answer to the question 'What does "(?)" mean in the
NAME column of a Solaris 10 open file?'
for more information.

If the application of stat(2) to the cached path name yields
any other error reply, lsof reports the mounted-on directory
and device of the file system.

When the application of stat(2) to the cached path name
succeeds, lsof compares the reported device and node numbers to
what it has obtained for the open file from kernel structures.
If they match, lsof reports the cached path name. If they
don't match, lsof instead reports the mounted-on directory and
device of the file system.

A work-around that allows lsof to apply stat(2) successfully to
cached path names is to give lsof sufficient permission to do
it -- i.e., run lsof as the root user.

17.25.3 What does "(deleted)" mean in the NAME column of a Solaris 10
open file?

When the -X option is specified to Solaris 10 lsof, it will
report in its NAME column the path name cached for a deleted
file in its vnode. The path name will be followed by
"(deleted)".

Note that the path name cached
in a file's vnode is the path
name by which the file was opened. It is not updated by the

Solaris kernel when any path name component is changed. Hence, it may not represent the final path name the open file had.

See the answer to the "Why does Solaris 10 lsof sometimes report the wrong path name?" question for more information on how changing a path name component affects the correctness of a what lsof reports.

17.25.4 What does "(?)" mean in the NAME column of a Solaris 10 open file?

When lsof encounters a path name cached in the open file's vnode that stat(2) reports lsof lacks permission to access, lsof adds "(?)" to the path name reported in the NAME column to indicate the path name is of questionable accuracy.

See the answers to the "Why does Solaris 10 lsof sometimes report the wrong path name?" and "Why does Solaris 10 lsof sometimes report only the mounted-on directory and device?" questions for more information on why lsof may report a path name of questionable
accuracy.

A work-around that allows lsof to apply stat(2) successfully to cached path names is to give lsof sufficient permission to do it -- i.e., run lsof as the root user.

17.26 Solaris contract file problems

17.26.1 Why doesn't lsof report size, link count and node number for Solaris 10 contract files?

Lsof doesn't report size, link count or node number for Solaris 10 contract files because I don't know how to obtain them from contract file kernel structures.

17.26.2 Why can't lsof locate a Solaris 10 contract file by path name?

Because lsof can't find the node number of Solaris contract files, it can't match the device and node numbers it gets from applying stat(2) to the contract file path name with what it finds in kernel data.

17.27 Solaris 10 and above ZFS probblems

17.27.1 Why does Configure warn that ZFS support is not enabled?

To provide ZFS support it is necessary that lsof have access to

the definitions of ZFS structures used by the kernel.
Those
definitions are made available to lsof when it runs by the
libctl library.

If lsof's Configure script finds that ZFS is indicated by the
presence of the <sys/fs/zfs.h> header file, but the libctl
library is not indicated via the <libctl.h> header file, the
script concludes that ZFS support is not possible and issues
the following warning:

```
WARNING: ZFS support not enabled; libctf.h missing.
```

Install libctf support to remedy this problem.

17.28 Problems with Solaris 9 and above

17.28.1 Why does the compiler complain about lgrp_root on Solaris 9 and above?

When compiling lsof 4.84 on later Solaris 9 and 10 systems, the
compiler may report the following error:

```
/usr/include/sys/lgrp.h", line ...: identifier redeclared: lgrp_root
```

This error results from a conflict between usage of lgrp_root
in both <sys/lgrp.h> and <sys/lgrp_user.h> when _KMEMUSER or
_KERNEL is #define'd before <sys/lgrp.h> is #include'd. This
problem is noted in Sunsolve bug ID 5064229.

The
work-around is to use lsof revision 4.85 sources.

18.0 Lsof Features

18.1 Why doesn't lsof doesn't report on /proc entries on my system?

/proc file system support is generally available only for
BSD, SYSV R4 dialects, and Tru64 UNIX (Digital UNIX, DEC
OSF/1). It's also available for Linux, and Pyramid DC/OSx
and Reliant UNIX.

Even on some SYSV R4 dialects I encountered many problems
while trying to incorporate /proc file system support.
The chief problem is that some vendors don't distribute

the header file that describes the /proc file system node
-- usually called prdata.h.

18.2 How do I disable the device cache file feature or alter
it's behavior?

To disable the device cache file feature for a dialect,
remove the HASDCACHE definition from the machine.h file of
the dialect's machine.h header file. You can also use
HASDCACHE to change the default prefix (``.lsof'') of the
device cache file.

Be sure you consider disabling the device cache file feature
carefully.
Having a device cache file significantly reduces
lsof startup overhead by eliminating a full scan of /dev
(or /devices) once the device cache file has been created.
That full scan also overloads the kernel's name cache with
the names of the /dev (or /devices) nodes, reducing the
opportunity for lsof to find path name components of open
files.

If you're worried about the presence of mode 0600 device
cache files in the home directories of the real user IDs
that execute lsof, consider these checks that lsof makes
on the file before using it:

1. To read the device cache file, lsof must gain
permission from access(2).

2. The device cache file's modes must be 0600 (0644
if lsof is reading a system-wide device cache file)
and its size non-zero.

3. There must be a correctly formatted section count
line at the beginning of the file.

4. Each section must have a header line with a count
that properly numbers the lines in the section.
Legal
sections are device, clone, pseudo-device,
and CRC.

5. The lines of a section must have the proper format.

6. All lines are included in a 16 bit CRC, and it is
recorded in a non-checksummed section line at the
end of the file.

7. The checksum computed when the file is read must match the checksum recorded when the file was written.

8. The checksum section line must be followed by end-of-information.

9. Lsof must be able to get matching results from stat(2) on a randomly chosen entry of the device section.

For more information on the device cache file, read the 00DCACHE file of the lsof distribution.

18.2.1 What's the risk with a perverted device cache file?

Even with the checks that lsof makes on the device cache file, it's conceivable that an intruder could modify it so it would pass lsof's tests.

The only serious consequence I know of this change is the removal of a file whose major device number identifies a socket
from some user ID's device cache file. When such a device has been removed from the device cache file, and when lsof doesn't detect the removal, lsof may not be able to identify socket files when executed by the affected user ID. Only certain dialects are at risk to this attack -- e.g., SCO OpenServer and Solaris 2.x, 7, 8, and 9.

If you're tracking a network intruder with lsof, that could be important to you. If you suspect that someone has corrupted the device cache file you're using, I recommend you use lsof's -Di option to tell it to ignore it and use the contents of /dev (or /devices) instead; or remove the device cache file (usually .lsof_hostname, where hostname is the first component of the host's name returned by gethostname(2)) from the user ID's home directory and let lsof create a new one for you.

18.2.2 How do I put the full host name in a personal device cache file path?

Lsof constructs the personal device cache file path name from a format
specified in the HASPERSDC #define in the dialect's machine.h header file. As distributed HASPERSDC

declares the path to be ``.lsof_" plus the first component
of the host name with the format ``.lsof_%L".

If you want to change the way lsof constructs the personal
device cache file path name, you can change the HASPERSDC
#define and recompile lsof. If, for example, you #define
HASPERSDC to be ``.lsof_%l" (note the lower case `l'),
Configure and remake lsof, then the personal device cache
file path will be ``.lsof_" plus the host name returned
by gethostname(2).

See the 00DCACHE file of the lsof distribution for more
information on the formation of the personal device cache
file path and the use of the HASPERSDC #define.

18.2.3 How do I put the personal device cache file in /tmp?

Change the HASPERSDC definition in your dialect's machine.h
header file.

When you redefine HASPERSDC, make sure you put at least
one user identification conversion in it to keep separate
the
device cache files for each user of lsof. Also give
some thought to including the ``%0" conversion to define
an alternate path for setuid-root and root processes.

Here's a definition that puts a personal device cache file
in /tmp with the name ``.lsof_login_hostname_pers".

```
#define HASPERSDC "/tmp/.lsof_%u_%l_pers"
```

Thus the /tmp personal device cache file path for login
"abe" on host "lsof.itap.purdue.edu" would be:

```
/tmp/.lsof_abe_lsof.itap.purdue.edu_pers
```

You can add the User ID (UID) with the "%U" conversion and
the first host name component with the ``%L" conversion.

CAUTION: be careful using absolute paths like /tmp lest
lsof processes that are setuid-root or whose real UID is
root be used to exploit some security weakness via /tmp.
Elect instead to add an alternate path for those processes
with the ``%0" conversion. Here's an extension of the
previous HASPERSDC format for /tmp that declares an alternate
path:

```
#define HASPERSDC "/tmp/.lsof_%u_%l_pers%0%h/.lsof_%L"
```

When
the lsof process is setuid-root or its real UID is
root, presuming root's home directory is `/' and the host's
name is ``lsof.itap.purdue.edu'', the extended format yields:

```
/.lsof_vic
```

18.3 Why doesn't lsof know about AFS files on my favorite dialect?

Lsof currently supports AFS for these dialects:

AIX 4.1.4 (AFS 3.4a)
Linux 1.2.13 (AFS 3.3)
NEXTSTEP 3.2 (AFS 3.3)
Solaris 2.[56] (AFS 3.4a)

It may recognize AFS files on other versions of these
dialects, but I have no way to test that. Lsof may report
correct information for AFS files on other dialects, but
I can't test that either.

AFS support must be custom crafted for each UNIX dialect
and then tested. If lsof supports your favorite dialect,
but doesn't recognize its AFS files, probably I don't have
access to a test system. If you want AFS support badly
for your dialect, consider helping me do the development
and testing.

18.3.1 Why doesn't lsof report node numbers for all AFS volume files, or how do I reveal dynamic module addresses to lsof?

When AFS is implemented via dynamic kernel modules -- e.g.,
in NEXTSTEP -- lsof can't obtain the addresses of AFS
variables in the kernel that it uses to identify AFS vnodes.
It can guess that a vnode is assigned to an AFS file and
it can obtain other information about AFS files, but it
has trouble computing AFS volume node numbers.

To determine node numbers for AFS volumes other than the
root volume, /afs, lsof needs access to a hashed volume
structure pointer table. When it can't find the address
of that table, because AFS support is implemented via
dynamic kernel modules, lsof will return blanks in the
INODE column for AFS volume files. Lsof can identify the
root volume's node number (0), and can compute the node

numbers for all other AFS files.

If you have a name list file that contains the addresses
of the AFS dynamic modules -- e.g., you saved module symbols
when
you created a loadable module kernel with modload(8)
by specifying -sym -- lsof may be able to find the kernel
addresses it needs in that file.

Lsof looks up AFS dynamic kernel addresses for these dialects
at these default paths:

NEXTSTEP 3.2 /usr/vice/etc/afs_loadable

A different path to a name list file with AFS dynamic kernel
addresses may be specified with the -A option, when the -A
option description appears in lsof's -h or -? (help) output.

If any addresses appear in the -A name list file that also
appear in the regular kernel name list file -- e.g., /vmunix
-- they must match, or lsof will silently ignore the -A
addresses on the presumption that they are out of date.

Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/00FAQ
No license file was found, but licenses were detected in source scan.

```
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```

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 *
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Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/proto.h
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/arg.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/node.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lsof_fields.h
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/misc.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lsof.h
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/proc.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/store.c
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Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/ptti.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/rnam.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/dialects/linux/dmnt.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/rnmh.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/rdev.c

* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/dialects/linux/dfile.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/dvch.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/dialects/linux/dnode.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/cvfs.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/fino.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/dialects/linux/dstore.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/pdvn.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/dialects/linux/dlsof.h
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/rnch.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/lkud.c
*
 /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/prfp.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/isfn.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/dialects/linux/dsock.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/dialects/linux/machine.h
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/dialects/linux/dproto.h
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/dialects/linux/dproc.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/rmnt.c
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```
#!/usr/bin/perl
# sort_res.pl - Script to group & sort lsof output by resource
#
# Copyright (c) 2004, 2005 - Fabian Frederick <fabian.frederick@gmx.fr>
#
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# distribution in the file COPYING); if not, write to the Free Software
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 MA  02111-1307  USA
#
# Note :
# -This script uses lsof released by Victor A. Abell
# -lsof path recovery comes from standard perl scripts in there.
#
# Usage :
# perl sort_res.pl -> display used resources + size
# or perl sort_res.pl <program name>
```

```
#
# 12/2005 (FabF)
# -size reset in loop (script was broken in 4.76)
# -isexec looking in .. (like other scripts)
# -display for one or all processes
# -removing unuseful line number arg.
# -display global size

my @args = @_;

# Set path to lsof.
if (($LSOF = &isexec("../lsof")) eq "") {    # Some distros use lsof
         # out of $PATH
   if (($LSOF = &isexec("lsof")) eq "") {     # Then try . and $PATH
 if (($LSOF = &isexec("../lsof")) eq "") {    # Then try ..
     print "can't execute $LSOF\n"; exit 1
 }
   }
}

if ($ARGV[0] ne ""){
   $cmd="$LSOF -nPl -Fcns -c".$ARGV[0]."|";
}else{
   $cmd="$LSOF -nPl -Fcns|";
}

#Parse lsof output to gather command, resource name, pid and size
#Some extradata stand to keep script genericity
$i=0;
if
 (open(FILE, $cmd)){
   while (defined ($line=<FILE>)){
 $cline=$line;
 $cline =~ s"^(.)"";
 $cline =~ s/^\s+|\s+$//g;
 if($line=~m/^p/){
     $pid=$cline;
 }else{
     if($line=~/^s/){
  $size = $cline;
     }else{
  if($line=~/^c/){
      $command = $cline;
  }else{
      if($line=~/^n/){
   $name = $cline;
   $data{$i} = { command => $command, name => $name,
         pid => $pid , size => $size};
```

```
   $size=0;
   $i = $i+1;
      }
  }
     }
 }
   }
}

#Resource name sorting
sub byresname { $data{$a}{name} cmp $data{$b}{name}}
@ks=sort byresname (keys %data);

#Resource grouping
$i=0;
$cname="a";
foreach $k (@ks){
   if ($data{$k}{name} ne $cname){
 $dgroup{$i} = { name => $data{$k}{name}, size => $data{$k}{size}};
 $cname = $data{$k}{name};
 $i++;
   }
}

#Size sort on resource hash
sub bysize { $dgroup{$a}{size} <=> $dgroup{$b}{size} }
@ks=sort bysize (keys %dgroup);
$gsize=0;
printf("  -- KB --  -- Resource --\n", );
foreach $k (@ks){
 printf("%10d  %s\n", $dgroup{$k}{size}/1024,
 $dgroup{$k}{name});
 $gsize+=$dgroup{$k}{size};
}

printf("Total KB : %10d\n", $gsize/1024);
## isexec($path) -- is $path executable
#
# $path   = absolute or relative path to file to test for executabiity.
#     Paths that begin with neither '/' nor '.' that arent't found as
#     simple references are also tested with the path prefixes of the
#     PATH environment variable.

sub
isexec {
   my ($path) = @_;
   my ($i, @P, $PATH);
```

```
  $path =~ s/^\s+|\s+$//g;
  if ($path eq "") { return(""); }
  if (($path =~ m#^[\/\.]#)) {
 if (-x $path) { return($path); }
 return("");
  }
  $PATH = $ENV{PATH};
  @P = split(":", $PATH);
  for ($i = 0; $i <= $#P; $i++) {
 if (-x "$P[$i]/$path") { return("$P[$i]/$path"); }
  }
  return("");
}
```

Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/scripts/sort_res.pl
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*/
```

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* to the following restrictions:
*
* 1. Neither the authors nor Purdue University are responsible for any
*    consequences of the use of this software.
*
* 2. The origin of this software must not be misrepresented, either by
*    explicit claim or by omission.  Credit to the authors and Purdue
*    University must appear in documentation and sources.
*
* 3. Altered versions must be plainly marked as such, and must not be
*    misrepresented as being the original software.
*
*
 4. This notice may not be removed or altered.
*/
/*
* GetOpt() -- Local get option
*
* Borrowed from lsof's main.c source file.
*
* Liberally adapted from the public domain AT&T getopt() source,
* distributed at the 1985 UNIFORM conference in Dallas
*
* The modifications allow `?' to be an option character and allow
* the caller to decide that an option that may be followed by a
* value doesn't have one -- e.g., has a default instead.
*/
```

Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/tests/LTlib.c
No license file was found, but licenses were detected in source scan.

```
/*
* Copyright 1998 Purdue Research Foundation, West Lafayette, Indiana
* 47907.  All rights reserved.
*
* Written by Victor A. Abell
```

```
*
* This software is not subject to any license of the American Telephone
* and Telegraph Company or the Regents of the University of California.
*
* Permission is granted to anyone to use this software for any purpose on
* any computer system, and to alter it and redistribute it freely, subject
* to the following restrictions:
*
* 1. Neither the authors nor Purdue University are responsible for any
*    consequences of the use of this software.
*
* 2. The origin of this software must not be misrepresented, either by
*    explicit claim or by omission.  Credit to the authors and Purdue
*    University must appear in documentation and sources.
*
* 3. Altered versions must be plainly marked as such, and must not be
*    misrepresented as being the original software.
 *
* 4. This notice may not be removed or altered.
*/
```

Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/lib/ckkv.c
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/usage.c
No license file was found, but licenses were detected in source scan.

Notes for the distribution of lsof version 4

```
**********************************************************************
| The latest release of lsof is always available from
| https://github.com/lsof-org/lsof/releases
|
| From 4.92.1, git is introduced to manage changes.
| You can consult the details of changes with git.
**********************************************************************
```

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4.93.1 May 7, 2019
4.93.2 May 8, 2019
4.94.0 November 11, 2020

Dialects Supported
==========

Lsof (for LiSt Open Files) lists files opened by processes on selected Unix systems. Version 4 is a source reorganization of version 3, itself a major revision of version 2. Version 4 has been tested on:

Apple Darwin 9 and Mac OS X 10.[567]
FreeBSD 10.3, 11.0, 12.0 and 13.0 for AMD64-based systems
Solaris 9

(The pub/tools/unix/lsof/contrib directory on lsof.itap.purdue.edu contains information on other ports.)

If your favorite Unix dialect is not in the list, or if your version of it is more recent than the ones listed, please contact me at <abe@purdue.edu>.

Version 3 of lsof was tested on:

AIX 3.2.5, 4.1[.[1234]], and 4.2
BSDI BSD/OS 2.0, 2.0.1, and 2.1 for x86-based systems
DC/OSx
1.1 for Pyramid systems
Digital UNIX (DEC OSF/1) 2.0, 3.0, 3.2, and 4.0
EP/IX 2.1.1 for the CDC 4680
FreeBSD 1.1.5.1, 2.0, 2.0.5, 2.1, 2.1.5 for x86-based
systems
HP-UX 8.x, 9.x, 10.01, 10.10, and 10.20
IRIX 5.2, 5.3, 6.0, 6.0.1, and 6.[124]

Linux through 2.0.27 for x86-based systems
NetBSD 1.0, 1.1, and 1.2 for x86 and SPARC-based
systems
NEXTSTEP 2.1 and 3.[0123]
OpenBSD 1.2 and 2.0 for x86-based systems
Reliant UNIX 5.43 for Pyramid systems
RISC/os 4.52 for MIPS R2000-based systems
SCO OpenServer Release 1.1, 3.0, and 5.0.x for x86-based
systems
SCO UnixWare 2.1 and 2.1.1 for x86-based systems
Sequent PTX 2.1.[1569], 4.0.[23], 4.1.[024], 4.2[.1],
and 4.3
Solaris 2.[12345], 2.5.1, and 2.6-Beta
SunOS 4.1.x
Ultrix 4.2, 4.3, 4.4, and 4.5

Version 3 and its predecessor, version 2, may be found at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/OLD

How Lsof Works
==========

Using available kernel data access methods -- getproc(), getuser(),
kvm_*(),
nlist(), pstat(), read(), readx(), /proc -- lsof reads
process table entries, task table entries, user areas and file
pointers to reach the underlying structures that describe files
opened by processes.

Lsof interprets most file node structures -- advfsnodes, autonodes,
cnodes, cdrnodes, devnodes, fifonodes, gnodes, hsnodes, inodes,
mfsnodes, pcnodes, procnodes, rnodes, snodes, specnodes, s5inodes,
tmpnodes. It understands NFS connections. It recognizes FIFOs,
multiplexed files, Unix and Internet sockets. It knows about
streams. It understands /proc file systems for some dialects. On
many dialects it recognizes execution text and library references.
It knows about AFS on some Unix dialects.

Lsof Output
==========

The lsof output describes:

* the identification number of the process (PID) that has opened
the file;

* the process group identification number (PGID) of the process
  (optional);

* the process identification number of the parent process
(PPID)
  (optional);

* the command the process is executing;

* the owner of the process;

* for all files in use by the process, including the executing
  text file and the shared libraries it is using:

  * the file descriptor number of the file, if applicable;

  * the file's access mode;

  * the file's lock status;

  * the file's device numbers;

  * the file's inode number;

  * the file's size or offset;

  * the name of the file system containing the file;

  * any available components of the file's path name;

  * the names of the file's stream components;

  * the file's local and remote network addresses;

  * the TLI network (typically UDP) state of the file;

  * the TCP state, read queue length, and write queue length
of the file;

  * the file's TCP window read and write lengths (Solaris
only);

  * other file or dialect-specific values.

Getting Started Quickly
==========

If
you want to get started using lsof quickly, or see some examples
of how lsof can be used, consult the 00QUICKSTART file of the lsof
distribution.

The 00QUICKSTART file won't help you build or install lsof, but it
will cut through the density of the lsof man page, giving you more
readily an idea of what you can do with lsof.

For information on building and installing lsof, consult the 00README
file of the lsof distribution.

Limiting, Filtering, and Selecting Lsof Output

Lsof accepts options to limit, filter, and select its output.
These are the possible criteria:

* Process ID (PID) number -- to list the open files for a given
  process;

* Process Group ID (PGID) -- to list the open files for all
  the processes of a given process group;

* User ID number or login name -- to list the open files for
  all the processes of a given user;

* Internet address -- to list the open files using a given
  Internet
address (host name), protocol, or port (number or
  name); or to list all open Internet files;

* command name;

* file descriptor name or number;

* list all open NFS files;

* list all open Unix domain socket files;

* list all uses of a specific file;

* list all open files on a file system.

Selection options are normally ORed -- i.e., an open file meeting
any of the criteria is listed. The selection options may be ANDed

so that an open file will be listed only if it meets all the
criteria.

In the absence of any selection criteria, lsof lists files open to
all processes.

Parsing Lsof Output with Another Program

The lsof -F option directs it to produce "field" output that can
easily be parsed by another program. The lsof distribution contains
sample awk, perl 4, and perl 5 scripts in its scripts subdirectory
that show how to post-process field output.

Repeat Mode

Lsof can be directed to produce
output, delay for a specified time,
then repeat the output, cycling until stopped by an interrupt or
quit signal. This mode is useful for monitoring the status of some
file operation -- e.g., an ftp transfer or a tape backup operation.

Repeat mode is more efficient when combined with lsof's selection
options, since they limit lsof overhead.

It's possible to use lsof's field output options to supply repeat
mode output to another process for its manipulation. The scripts
subdirectory of the lsof distribution has sample Perl scripts
showing how to consume lsof repeat mode output from a pipe.

Distribution Restrictions

Lsof may be used and distributed freely, subject to these limitations:

1. Neither the author nor Purdue University is responsible for
   any consequences of the use of this software.

2. The origin of this software must not be misrepresented, either
   by explicit claim or by omission. Credit to the author and
   Purdue University must appear
   in documentation and sources.

3. Altered versions must be plainly marked as such, and must not

be misrepresented as being the original software.

4. This notice may not be removed from or altered in the lsof source files.

Cautions

Lsof is a tool that is closely tied to the Unix operating system version. It uses header files that describe kernel structures and reads kernel structures that typically change from OS version to OS version.

DON'T TRY TO USE AN LSOF BINARY, COMPILED FOR ONE UNIX OS VERSION, ON ANOTHER.

On some Unix dialects, notably SunOS and Solaris, lsof versions may be even more restricted by architecture type. An lsof binary, compiled for SunOS 4.1.3 on a sun4c machine, for example, won't work on a sun4m machine.

AN LSOF BINARY, COMPILED FOR ONE SOLARIS 1.X ARCHITECTURE, ISN'T GUARANTEED TO WORK ON A DIFFERENT SOLARIS 1.X ARCHITECTURE.

Distribution Contents

The lsof distribution is checked for completeness when it is constructed
and by the Inventory script when you run the Configure script. (See The Inventory Script section of the 00README file of this distribution.)

Lsof is organized in these parts:

* The main lsof directory, containing common sources, configuration and setup scripts and three subdirectories: dialects/, lib/, and scripts/.

  Lsof is compiled in the main lsof directory after configuration. The selected dialect sources are copied or linked from the specified subdirectory. (Symbolic linking is the standard method.)

  Common lsof definitions may be found in lsof.h; common function prototypes, proto.h; and common storage, store.c.

* The dialects/ subdirectory contains subdirectories with sources specific to UNIX dialect implementations -- e.g., the dialects/sun/ subdirectory contains sources for the SunOS (Solaris 1.x) and Solaris (2.x) implementations of lsof. The dialects subdirectories also contain Makefiles and scripts for assisting dialect source configuration.

  Dialect configuration definitions may be found in dlsof.h; other dialect definitions, dlsof.h; dialect prototypes, dproto.h; and dialect storage, dstore.c.

* The lib/ subdirectory contains sources for common lsof functions. Not all dialects use the functions -- some have their own versions of them. The lib/ functions are enabled and customized with #define's in the dialect machine.h header files.

* The scripts/ subdirectory contains sample scripts for processing lsof field (-F) output. The scripts are written in AWK, Perl 4, and Perl 5.

The 00PORTING file of the lsof distribution has more information on lsof components, configuration, and construction.

Warranty

Lsof is provided as-is without any warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.
The entire risk as to the quality and performance of lsof is with you. Should lsof prove defective, you assume the cost of all necessary servicing, repair, or correction.

Bug Reports

Now that the obligatory disclaimer is out of the way, let me hasten to add that I accept lsof bug reports and try hard to respond to them. I will also consider and discuss requests for new features, ports to new dialects, or ports to new OS versions.

PLEASE DON'T SEND A BUG REPORT ABOUT LSOF TO THE UNIX DIALECT

VENDOR.

At worst such a bug report will confuse the vendor; at best, the
vendor will forward the bug report to me.

Please send all bug reports, requests, etc. to me via email at
<abe@purdue.edu>.

The lsof-l Mailing List

Information about lsof, including notices about the availability
of new revisions, may be found in mailings of the lsof-l listserv.
For more information about it, including instructions on how
 to
subscribe, read the 00LSOF-L file of the lsof distribution.

Version 3 Release Notes

See 00DIST in the last lsof 3 revision 3.88, for its complete
set of release notes. Lsof revision 3.88 may be found at:

 ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/OLD

3.0 May 24, 1994
  This is the first official release of lsof 3.

...

3.88 February 17, 1997

```
+=====================================+
| This is the last version 3 revision. |
+=====================================+
```

  Added documentation files -- 00.README.FIRST[_<version>]
  and 00RELEASE.SUMMARY_<version> -- to the distribution.

What's new in Version 4

The main goal of version 4 was to eliminate the confusing common/
fragment source file technique. Changing the version number also
provided an opportunity to restart the numbering, which at 3.88

had risen to a large value.

The sources that appeared in the dialects/common subdirectory of version 3 in fragment files
have been incorporated into the version
4 liblsof.a library as *.c files. This results in significant changes to many source files, scripts, and Makefiles of all dialect versions. It allows elimination of some source files -- ddev.c, dfile.c, dmnt.c -- for dialects now obtaining functions from liblsof.a that formerly came from making dialect source files by combining fragment files.

The version 4 liblsof.a sources are stored in the lib/ subdirectory of the main lsof directory. The liblsof.a functions are activated and conditioned in their source files by values #define'd in the dialect dlsof.h and machine.h header files.

Dialects that provide a private version of a library function refrain from #define'ing the symbol that would activate the library function code.

Version 4 Release Notes
==========

4.0 February 24, 1997

```
+=====================================+
| This is the first lsof 4 revision. |
+=====================================+
```

Reorganized sources:
eliminated code fragment files
and created a library in their place. Modified or
deleted many dialect source and header files.
Changed documentation accordingly.

Added a warning to sgi/Makefile and 00FAQ that advises
against using the IRIX C compiler -n32 option when
compiling lsof. Thanks go to Peter Ilieve
<peter@memex.co.uk> for bringing this to my attention.

Dropped IRIX 5.2 in mid-stream, because my 5.2 test
system was upgraded to 5.3.

4.01 March 3, 1997
Added TFS support for Pyramid dialects.

Added test to Configure and to the IRIX dnode.c
for the different cnode struct that appears in
<cachefs/cachefs_fs.h> on the 6.2 IMPACT distribution.
Heddy Boubaker <boubaker@amfou.cenatls.cena.dgac.fr>
alerted me to the cnode change and helped test this
lsof adjustment.

Shut down the lsof child process before doing a -r
sleep(). A comment from Dan Mercer <dam@mmm.com>
prompted this.

4.02 March 21, 1997

Based on a report from Pasi Kaara
<Pasi.Kaara@atk.tpo.fi>,
disabled HP-UX CCIT support in lsof for HP-UX
versions 10 and above. Pasi's report also led to
changes in the HP-UX machine.h to support use of
gcc to compile lsof for HP-UX 10.20 and warnings
against using `cc -Aa` or `gcc -ansi` to compile
lsof under HP-UX 10.x.

With help from Richard Allen <ra@hp.is> taught
HP-UX 10.x lsof to name file systems better by
using the virtual file system device number. Elias
Halldor Agustsson <elias@rhi.hi.is> provided a test
system.

Changed NEXTSTEP and UNIXWARE Makefiles to use
safer quoting when generating version.h. The change
was suggested by Bob Farmer <ucs_brf@unx1.shsu.edu>.

Added SHELL=/bin/sh string to all Makefiles.

Added support for Linux 2.1.28 on a test system,
kindly provided by Jonathan Sergent <sergent@purdue.edu>.
Configure tests the Linux 2.1.x's C library lseek()
function for proper handling of kernel offsets.
If lseek() appears suspect, Configure activates
the
use of a private lseek() function. Changed
the private nlist() function to nlist_private()
and taught it to use the query_module() syscall in
place of the deprecated get_kernel_syms() one.
Added rudimentary AX.25 support for Pierfrancesco
Caci <ik5pvx@infogroup.it> who helped test it.
Updated the old get_kernel_syms() code to recognize
and skip module name entries.

Prompted by Marty Leisner <leisner@sdsp.mc.xerox.com>,
eased the requirement that service name lookup for
the -i option be accompanied by a protocol name. The
name is not needed if both TCP and UDP names yield the
same port number.

Added xusers.awk script from Dan Mercer <damercer@mmm.com>
to the distribution scripts/ subdirectory.

Changed Configure script to use LSOF_VERS for all
UNIX dialect version numbers and to pass LSOF_VERS
to the dialect Mksrc functions. Also added the
ability for a dialect stanza to declare a different
dialect Makefile source. Modified dialect Mksrc
files
-- e.g., linux and sun -- accordingly.

Added support for BSD/OS 3.0 with help from Jim
Reid <jim@mpn.cp.philips.com>. Terry Kennedy
<TERRY@spcvxa.spc.edu> kindly provided a test
system. During the port corrected a bug that
prevented proper handling of revoked files.

4.03 April 7, 1997
At the suggestion of Dan Mercer <damercer@mmm.com>,
made HP-UX building of lsof aware of differences
between the HP-UX bundled and unbundled C compilers.

Added the ability for the lsof builder to define the
default warning message issuance state. By default the
issuance of warning messages is disabled; defining
WARNINGSTATE in machine.h disables it. The Customize
script was updated to handle WARNINGSTATE. Dan Mercer
suggested this.

Eliminated compiler complaint about improperly cast
get_Nl_value() argument in ncache_load() in lib/rnch.c.

Corrected zeromem() argument error in SCO dproc.c.
Sped up parent directory cache lookup slightly.

Updated for PTX 4.4,
including additional VxFS (EFS)
file system support.

4.04 April 17, 1997
At the suggestion of Bela Lubkin <belal@sco.COM>

changed device cache handling to be more tolerant
of a device cache file whose [cm]times are older
than the ones on /dev or /devices. The change
required adding information to Solaris device cache
file clone lines, so the first time lsof 4.04 is
run under Solaris it will complain about a bad
cached clone device in a previous device cache
file, then regenerate it.

Added boot file path detection for SCO OSR 5 and
above, based on information supplied by Bela.

Fixed two bugs in DEC OSF/1 lsof -- an error in
reporting locks and a missing continue statement
in readdev() after a failure to open a directory.
Jan Ole Suhr <josuhr@informatik.tu-clausthal.de>
reported the second bug and supplied a fix.

Fixed XFS problems with IRIX 6.2 by abandoning the
idea that SGI will distribute XFS header files and
defining an lsof-private xfs_inode
structure. John
Paul Morrison <John.Paul.Morrison@MultiActive.com>
helped develop and test the 5.3 definition. John
R. Vanderpool <fish@daacdev1.gsfc.nasa.gov> helped
develop and test the 6.2 definition.

Remove obsolete comments about common/*.frag files.

Updated Linux lsof for Linux version 2.1.35.

4.04 April 18, 1997
Supplement Regenerated the 4.04 distribution to correct a non-
device-cache #define misplacement in the Solaris and
SunOS dlsof.h. Alexandre Oliva <oliva@dcc.unicamp.br>
reported the problem.

4.05 April 24, 1997
Corrected an error in 00DCACHE.

Made sure SCO /etc/ps/booted.systems is closed.

Based on an observation by Bela Lubkin <belal@sco.COM>
that the lsof child had needless file descriptors
open, closed all but the open pipes between the
lsof parent and child.

Decommissioned CDC EP/IX support; I no longer have a

test system.

Based on a suggestion from Patrick Connor
<connor@phreak.csd.sgi.com>, added -xansi to
CFLAGS
for IRIX 5.3 and 6.[234].

Also at Patrick's suggestion changed Configure to
propagate exact SunOS 4.1.x version to the main
and library Makefiles. This allowed the sunos413
and sunos413cc Configure abbreviations to be
shortened to sunos and sunoscc.

Updated obsolete argument uses (-H changed to -n)
in count_pf.perl* and watch_a_file.perl scripts.

Adjusted Solaris 2.6 lsof for Beta_Update with tips
from Casper Dik <casper@holland.Sun.COM>.

Fixed a Solaris 2.4 TCP address reporting bug.

4.06 April 30, 1997
Added a step to the Makefile clean rules that does
a make clean in the lib subdirectory; suggested by
Casper Dik <casper@holland.Sun.COM>. (Configure's
-clean argument already did this.)

Fixed an incorrect awk argument in the sunos*)
Configure stanza, reported by Alexandre Oliva
<oliva@dcc.unicamp.br>.

Added CD9660 (aka ISO) file system support to
FreeBSD, NetBSD, and OpenBSD with mods and help
from Kenneth Stailey <kstailey@disclosure.com>.
(BSDI
already had CD9660 support.) While at it,
added file descriptor system support to BSDI and
FreeBSD.

Added /kern file system support to OpenBSD. The
support wasn't extended to BSDI, FreeBSD, or NetBSD,
because it requires Kenneth Stailey's changes to
/sys/miscfs/kernfs/kernfs.h.

Updated IRIX 6.3 support after getting access to
a test system, provided by John Paul Morrison
<John.Paul.Morrison@MultiActive.com>. Improved
the handling of IRIX 5.1 and greater FIFOs.

4.07 May 12, 1997

Based on AIX problem reports from David Capshaw <David.Capshaw@SEMATECH.Org>, changed the aix* Configure script stanza to avoid -bnolibpath for gcc (which the GNU loader doesn't grok) and AIX below 4.1.4 (where -bnolibpath hasn't been tested or is known to be unimplemented), and to refuse to use gcc for compiling lsof in AIX versions below 4.1 (because of possible structure alignment problems). Updated 00FAQ appropriately.

Added OpenBSD support for EXT2FS. This support has yet to be tested.

Tested lsof under OpenBSD 2.1.

Activated /kern file system support for NetBSD when Configure senses that /sys/miscfs/kernfs/kernfs.h defines the kern_target structure. This support has not been tested under NetBSD, although it has been tested under OpenBSD.

Made some simple changes to the BSDI machine.h, suggested by Jeffrey C. Honig <jch@bsdi.com>.

Improved handling of alternate dialect Configure abbreviations -- aix and aixgcc, hpux and hpuxgcc, solaris and solariscc, and sunos and sunoscc.

4.08 May 23, 1997

Cleaned up dialect Makefile's, staring with a suggestion from Christopher Schanzle <chris@cam.nist.gov>.

Improved Configure's -clean processing.

Corrected bugs in Solaris lock reporting.

Changed NetBSD Configure stanza to put -I/usr/include before -I/sys.

4.09 June 1, 1997

Adjusted for latest FreeBSD 3.0 release. This required adding a new kernel name cache module for reading BSD-form hashed kernel name cache entries, rnmh.c, to the lsof library, and adding a #define

to each machine.h to select it.

Activated rnmh.c for BSDI 2.1, BSDI 3.0, NetBSD 1.2, and OpenBSD 2.1.

4.10 June 8, 1997

Adjusted for Linux 2.1.x (x > 35) kernels with hashed task structure pointers. Marty Leisner <leisner@sdsp.mc.xerox.com> and Jonathan Sergent <sergent@io.com> tested the adjustment.

Replaced readdev() stat() calls with lstat() to reduce device table and cache entries with the same device number and inode values. Added code to remove all remaining duplicates. This fixes a Linux problem reported by Jonathan Sergent and makes device node name output predictable.

Corrected a bug in UnixWare stream file handling that prevented searching for the stream file by its associated character device name.

Added Pyramid code to determine Reliant UNIX clone major device number differently from that of DC/OSx.

4.11 June 12, 1997

Changed Configure to sense that the PTX inp_[fl]addr members of the inpcb structure of <netinet/in_pcb.h> have a struct type and set HASINADDRSTR for use in PTX dnode.c and dsock.c tests.

Changed PTX version 4.1.4 tests to use 4.1.3 instead. Carson Wilson <carson@mcs.com> reported the need to do this and tested the change.

Fixed a block device table indexing bug in lib/rdev.c, reported by Carson Wilson. The same bug was squashed in pyramid/ddev.c.

Added code to the Pyramid Reliant UNIX kread() function to compensate for an address boundary error in the kernel's /dev/kmem driver.

Verified that lsof compiles and works under AIX 4.2.1. Added an AIX test for the presence of NFS header files, defined HAS_NFS and adjusted AIX dialect sources accordingly.

Based on a suggestion from Gaylord Holder
<holder@phy.ucsf.EDU>, added DEC OSF/1 code to
auto-detect the booted file, whence kernel symbol
addresses are obtained.

4.12 June 24, 1997
Corrected a device
number sign extension problem
in the reading and writing of device cache file.
The problem was reported by Bela Lubkin <belal@sco.com>
and he suggested a fix.

Fixed an SCO stream device lookup problem. The
report and solution came from Bela Lubkin

Enhanced the Configure script to enable cross-
configuration of lsof, based on suggestions from
Marty Leisner <leisner@sdsp.mc.xerox.com>. A new
documentation file, 00XCONFIG, describes the process.

Made Pyramid OBJFS support conditional on the
presence of supporting header files. Corrected
the Pyramid MkKernOpts script so it generates the
necessary -D's for the Nile/Jolt architecture.
Richard Coley <rcoley@pyra.co.uk> helped.

Added another IRIX xfs_inode variant for 6.2, 32
bits, no XFS rollup patch.

Tested under UnixWare 2.1.2.

4.13 July 9, 1997
Taught Pyramid lsof to grok ttyfs vnodes with help
from Richard Coley <rcoley@pyra.co.uk>. Fixed some
minor bugs in Pyramid FIFO reporting. Eliminated
use
of the Pyramid UCB compatibility library at
Richard's suggestion.

Eliminated reporting of "strange" inode numbers
for SCO OSR 3.2v5.0.x HPPS files with help from
Bela Lubkin <belal@sco.com>

Modified port to service name lookup to use a small
number of getservbyport() calls before reading the
entire map with getservent(). Changed port reporting
to represent a zero as `*' to be consistent with

other prt number reporting tools like netstat.
Casper Dik <casper@holland.Sun.COM> suggested these
changes -- the getserv*() one to improve performance
for large NIS service name maps.

Changed all readdev() functions to make the absence
of block devices a warning instead of a fatal error
after Brian Redman <ber@ms.com> reported his IRIX
6.4 system had no block devices. (It really did
have block devices, but readdev()'s lstat() use
caused it to miss them in a directory symbolically
linked from /dev/dsk->/hw/disk.) Fixed Brian's
real problem by
changing the IRIX readdev() to use
stat() on /dev nodes if a Configure test shows /hw
is readable. Extended the potential to do the same
to all readdev() functions.

For consistency and convenience changed some
Configure abbreviations and dialect subdirectory
names: "decosf" abbreviation and "osf" dialect
subdirectory name to "du"; "netbsd" dialect
subdirectory name to "n+obsd"; "next3" abbreviation
and "next" dialect subdirectory name to "ns"; "sco"
abbreviation and dialect subdirectory name to "osr";
"sgi" dialect subdirectory name to "irix"; and
"unixware" abbreviation and dialect subdirectory
name to "uw".

Added #if/#endif clauses to the AIX rmdupdev()
function to avoid clone processing for AIX versions
less than 4.1.4. The problem was reported by Toralf
Foerster <toralf.foerster@io-warnemuende.de>, who
supplied corrective code.

Added support for new style NetBSD inode with i_ffs
and i_e2fs union members.

Improved Configure and 00FAQ
information on Digital
UNIX configuration subdirectory with suggestions
from Brad Krebs <brad@EECS.Berkeley.EDU>.

4.14 July 22, 1997
Reorganized the Solaris handling of the inode
structure header file, ufs_inode.h, to eliminate
VxFS structure definition conflicts for Solaris
2.4, based on information from Greg Earle

<earle@netbsd4me.jpl.nasa.gov>.

Cleaned up some typos and confusion in Configure's help output, based on comments from Bela Lubkin <belal@sco.com>

Added a 00DIALECTS file, containing UNIX dialect version numbers, that can be used by Configure and the man page.

4.15 August 15, 1997

Aligned `Configure -help` output better. Removed Configure's 2.6 Beta test adjustments.

Added improved Solaris VxFS configuration and handling, based on information from Greg Earle <earle@netbsd4me.jpl.nasa.gov>.

Added socket state -- TCO or TPI -- for socket files at the suggestion of Ian Fitchet <I.D.Fitchet@ftel.co.uk>.

4.16 September 25, 1997

Added reporting of TCP/TPI queue lengths and window sizes ala netstat to NAME column. Added -T option to select or de-select TCP/TPI info reporting. (Window sizes are only reported for Solaris.) Fixed anomalies along the way in SIZE/OFF processing for some dialects.

Fixed service name argument processor to allow minus signs as part of the name. Consequently this disallows names with embedded minus signs from being specified as the start of a range.

Added 00FAQ entries explaining why lsof won't find a file being edited with vi, why window sizes aren't reported for all dialects, and what the "no more information" message means.

Forced Pyramid CC to be /usr/ccs/bin/cc to avoid accidental use of the BSD variant in /usr/ucb/cc.

Added support for Linux glibc2, including a Configure test; cross-Configure support (00XCONFIG); and much unfortunate and risky sleight-of-hand in lsof Linux dialect header and source files, forced upon lsof

by incompatibilities
between Linux kernel and glibc2
header files.

Included in scripts/identd.perl5 a Perl 5 implementation
of an identd server, using lsof, provided by Kapil
Chowksey <kchowksey@hss.hns.com>.

Updated IRIX 6.4 xfs_inode guess.

4.17 October 14, 1997
Added -V option for verbose search result reporting.
Verbose reports are prepared for failure to locate
file names, command names, Internet addresses or
files, login names, NFS files, PIDs, PGIDs, and UIDs.

Augmented Linux NFS file test to cope with kernels
whose NFS code is in a loadable module. Need for
the test was pointed out by Jonathan Sergent
<sergent@csociety.ecn.purdue.edu>. The change
required that Linux have private dmnt.c source,

Completed a Linux 2.1.57 port on a system provided
by Jonathan Sergent.

4.18 October 25, 1997
Eliminated memory leaks in alloc_lfile(), lkup_port(),
and NEXTSTEP's process_text() function.

Added recognition of OpenBSD 2.2 in Configure,
supplied
by Kenneth Stailey <kstailey@disclosure.com>.

Consolidated print_file() functions to use the one
in lib/prtf.c. Made it configurable and changed
it to size print columns dynamically.

!!! WARNING !!!

WITH DYNAMICALLY SIZED PRINT COLUMNS LSOF 4.18
PRODUCES OUTPUT SIGNIFICANTLY DIFFERENT FROM THAT
OF PREVIOUS REVISIONS. LINES ARE GENERALLY SHORTER
AND THERE IS GENERALLY LESS BLANK SPACE BETWEEN
COLUMNS AND THE ITEMS IN THEM. THERE ARE NO LONGER
ANY SPACES BETWEEN DEVICE NUMBER ELEMENTS, ONLY
COMMAS.

!!! WARNING !!!

Added special types and print specification modifiers
for file size and offset to handle UNIX dialects
with 64 bit sizes and offsets. Paul Eggert
<eggert@twinsun.com> reported the need for this
addition.

With Paul Eggert's help picked lint from the lsof
library, the main level lsof sources, and the Sun
dialect sources.

Added documentation, including the file 00LSOF-L,
about the lsof-l LISTSERV.

Added support for Reliant
UNIX on the RM600. Bob
Passarella <rmpassar@pyramid.com> supplied the
changes. Kevin Smith <kevin@pyramid.com> helped
arrange test systems. While incorporating Bob's
changes, modified lib/rnch.c to handle kernel ncache
structs whose name is accessed via a char *, rather
than in a char array.

Changed #include order of <sys/socketvar.h> for
Solaris 2.x. W. Richard Stevens <rstevens@kohala.com>
pointed out the need to do this.

4.19 October 30, 1997
Changed Pyramid Reliant RM600 proc scan to skip
SSYS (p_flag) processes, since they don't seem to
have a readable u_cdir vnode.

Enabled Pyramid Reliant UNIX kread() work-around
for DC/OSx, too, since its read(/dev/kmem) kernel
driver seems to share the page boundary bug this
work-around circumvents.

Changed SzOffFtm_d and SzOffFtm_dv (new formats at
4.18 to print size and offset) from signed to
unsigned. Setting them signed at 4.18 was an
oversight.

Plugged a memory leak that caused the loss
of 130
bytes per repeat-mode pass. Fixed it with a simple
work-around in main(). Lionel Cons <Lionel.Cons@cern.ch>
reported the leak.

4.20 November 11, 1997
Tested under BSDI 3.1.

Added support for Reliant UNIX Mesh IPC files with
help from Billy Ho <bho@pyramid.com>.

Added support to Digital UNIX lsof that uses the
libmsfs tag_to_path() function (when it exists) to
look up AdvFS path names. The idea and sample code
came from Dean Brock <brock@cs.unca.edu>. Converted
Dean's code into more general purpose support for
private name cache lookups via the HASPRIVNMCACHE
#define in the dialect machine.h file and code
conditional on it in the printname() function.

Taught Digital UNIX lsof to recognize NFS3 file
systems. Corrected Digital UNIX lsof DEVICE column
alignment.

4.21 December 1, 1997
Squashed bug, introduced at revision 4.18, that
resulted in double reporting of each selected PID
when terse mode (-t) was specified.

Corrected minor
bug, also introduced at 4.18, that
might cause an extra print_proc() pass when one
PID has been specified.

Added -R to lsof options in scripts/idrlogin.perl*.
The option should have been there -- it was supposed
to be mandatory for PGID reporting -- but a bug,
corrected in revision 4.18, previously made -R
unnecessary.

Enabled configuring for BSDI BSD/OS 4.0 per a
suggestion from Jeff Honig <jch@bsdi.com>.

Enabled replacement of scoff_t with off64_t (scoff_t
is used to type r_size and r_localsize in the rnode
struct) for IRIX 5.3 systems that have the NFS
kernel rollup patch (1477). This compensates for
SGI's failure to distribute an updated <sys/fs/rnode.h>
with their patch.

Validated under Linux 2.0.3[12], Linux 2.1.64, and
NetBSD 1.3.

Added FreeBSD root directory reporting, courtesy
of Dan Nelson <dnelson@emsphone.com>.

4.22 December 15, 1997
Made adjustments for Linux 2.1.7[02].

Improved NAME information for Linux UNIX domain
sockets.

Added
option +|-M to control the reporting of
portmapper registration information in square
brackets after the TCP or UDP port or service name.
Kenneth Stailey <kstailey@disclosure.com> suggested
the feature and provided sample code from OpenBSD.
Reporting is disabled by default in the distribution
and may be enabled with +M; if lsof is compiled
with HASPMAPENABLED (e.g., from machine.h), reporting
will be enabled by default and can be disabled with
-M.

Changed the -w option to +|-w to match the syntax
of the +|-M option and to eliminate any options
that flip meaning when a symbol is defined at
compile time. For both +|-M and +|-w, specifying
`-' when the default state is disabled or specifying
`+' when the default state is enabled causes no
problems.

!!!WARNING The -w option has changed in lsof 4.22. WARNING!!!

Made the +|- prefix legal for most options, but
didn't document it in the man page or help panel.
Most options that disable
something -- e.g., -b,
-C, -n, -P -- now disable when the prefix is `-'
and enable when it is `+'. Since the states these
options disable are enabled by default, I chose to
avoid documentation complexity and confusion by
not mentioning that they can be used with the `+'
prefix.

Condensed the help panel.

Made sure Digital UNIX Configure stanza puts normal
include path (e.g., /usr/include) before system
include paths.

Added IPX socket information reporting to Linux
with help from Jonathan Sergent <sergent@purdue.edu>.

4.23 January 16, 1998
Fixed conflict arising from the quondam replacement
of the Sun Solaris <netdb.h> with a BIND/BSD version.

With help from Jonathan Sergent <sergent@purdue.edu>
developed a /proc file system based Linux lsof.
It needs some Linux 2.1.x release to work -- I'm
not sure which, but I tested under 2.1.72, 2.1.76,
and 2.1.79. The Configure script selects special
sources for this lsof, so the full lsof distribution
now
contains both /dev/kmem and /proc based sources
for Linux lsof. An optional kernel mod, written
by Jonathan, enhances the /proc-based lsof ability
to recognize IPX socket files. Reorganized and
augmented the Linux sections in 00FAQ to explain
the two types of Linux lsof.

Defined DOSTAT_FUNCTION for dostat() in misc.c to
select the function, stat() or lstat(), it will use.
DOSTAT_FUNCTION is normally undefined, defaults to
lstat(), and is only defined for the /proc-based
Linux lsof in its dlsof.h.

Made conditional on the presence of IRIX 6.4 XFS
rollup patch #6 an XFS node change introduced in
revision 4.16. Identified the patch with help
from John R. Vanderpool <fish@daacdev1.gsfc.nasa.gov>.

Added NFS node compensation for NetBSD 1.3. The
code and suggestion for it was supplied by Jean-Luc
Richier <richier@imag.fr>.

Added diagnostic messages to the /dev/kmem-based
Linux Mksrc script to report errors during the
construction of
the kernel name cache header file,
kncache.h. Added 00FAQ information on kncache.h.

Added a new Linux test host, running 2.0.33 and
GlibC, provided by Steve Logue <stevel@mail.cdsnet.net>.

Ported to PTX 4.1.3 and 4.4.2. Adjusted lib/rnch.c
for 4.4.2 to allow customization f additional ncache
struct element names.

4.24 January 28, 1998
Changed /proc-based Linux lsof offset test to use "/"
instead of "/etc/passwd".

To assist Jim Mintha <jim@geog.ubc.ca> with the
packaging of lsof for Debian Linux, added a
DEBIAN_LINUX_LSOF #define to trigger the activation
of special system map file location code in the
/dev/kmem-based dproc.c.

Applied modification to dialects/bsdi/dlsof.h from
Ingimar Robertson <iar@skyrr.is>, enabling lsof to
compile for BSDI BSD/OS 2.0.

Corrected a documentation error in 00DCACHE, pointed
out by Thomas Anders <anders@hmi.de>. The error was
created when the -V option was added at lsof 4.17.

Made IRIX 5.3 through 6.3 lsof
aware of IRIX SCSI
tape devices (e.g., /dev/tape). Dave Olson of SGI
and Randolph J. Herber of FNAL provided valuable
advice, and Igor Schein <ischein@air-boston.com>
helped test.

Added a machine.h symbol (NEVER_HASDCACHE) that
prevents Customize from offering to change HASDCACHE.
The symbol may appear anywhere in machine.h --
e.g., in a comment. Included the symbol in a
comment of the HASDCACHE section of the /proc-based
Linux lsof machine.h, and accompanied it with
warnings against #define'ing HASDCACHE. Did the
same thing for WARNDEVACCESS (NEVER_WARNDEVACCESS
is the suppressant.)

4.25 February 7, 1998
Corrected an IRIX mis-cast of file offset (position).
Igor Schein <ischein@air-boston.com> reported the
problem. This was offered as a patch to 4.24.
Picked some lint Igor pointed out.

At Igor's suggestion added an optional decimal
digit size argument to the -o option. This argument
specifies how many file offset decimal digits can
follow
"0t" before lsof switches to a "0x..." form.
The argument size specification doesn't count the

two characters of the "0t". A size of 0 means
unlimited. The default is OFFDECDIG (8), preserving
compatibility with existing lsof output; it can be
changed by the lsof builder. When size is specified
with -o it does not force offset display; -o without
a size still must be used to do that.

Added an IRIX 6.2, 32 bit system, XFS node patch,
courtesy of Ulrich Bernhard <rzubu@rzu.unizh.ch>.

For my own convenience enabled Configure to use
/usr/local/bin/gcc for NEXTSTEP. This allows
circumvention of a gcc 2.8.0 ranlib problem on
my test 3.1 `040 cube.

Added flags recommended by the RISC/os and Ultrix
compilers for the updated (and longer) main.c.

Updated FreeBSD cd9660_node.h Configure test.

4.26 February 17, 1998
Added shared process group processing for IRIX 5.3,
and IRIX 6.1 and above, based on investigation of
a bug report from Igor Schein
<ischein@air-boston.com>.
Igor helped test this addition.

Improved handling of file system name arguments.
It's now done in a manner similar to fuser. The
-f argument forces path names to be considered as
simple files, rather than as file system names.
The +f flag forces them to be considered as file
system names. Normally path arguments are considered
file system names when they match a mounted-on
directory in the system's mount table, or when they
match a mounted file system's block device. Igor
Schein helped test this change.

Igor also suggests that the proper compilation of
the IRIX 6.4 proc structure after patch 2536 has
been installed may need -DPIOMEMOPS. So lsof's
MkKernOpts script was updated to propagate that
option from CCOPTS in /var/sysgen/system/irix.sm,
even though patch 2536 doesn't add -DPIOMEMOPS to
it. Added a 00FAQ item on this patch.

Added a fatal warning message about names forced
to be file system names (with +f)

that have no
match in the mount table.

Improved the -V message for files and file systems
for which no open files were found. Added reporting
of /proc file and file system search failures.

Did some code reorganization to combine the multiple
ck_file_arg() functions into one. Moved the new
function from the library to the top level and put
it in arg.c; moved the usage function from arg.c
to a new top-level source file, usage.c, to balance
top-level source file size. The new usage.c depends
on version.h; arg.c no longer does.

Added flag recommended by the DU compiler for the
updated (and longer) main.c.

4.27 March 6, 1998
At the request of Igor Schein <ischein@air-boston.com>
added a conditional repeat mode option, using the
`+' prefix to the `r' option. +r operates as does
-r with the exception that it exits the first time
no open files have been listed during a cycle.
The exit code will be zero when any open files have
been listed; one,
if none were ever listed.

Ported lsof to HP-UX 11.0 with the help of Richard
Allen. This port hasn't been tested on a 64 bit
kernel; I'm sure it won't work there without more
mods. It may not work on PA 2 architectures; I've
only tested it under PA 1 and a separate, busy
tester reported PA 2 problems that I've been unable
to investigate.

In anticipation of getting access to a 64 bit HP-UX
kernel and the pending start of the Solaris 2.7
Beta test (It will have 64 bit kernel addressing.),
started adding support for 64 bit kernel pointers.
This includes: ubiquitous use of the KA_T cast
for kernel pointers; a format to print them,
KA_T_FMT_X; a function to print them, print_kptr();
and modifications to most kernel-related functions
-- e.g., process_file(), process_node(),
process_socket(), readvfs() -- to process kernel
addresses as KA_T types.

Fixed minor bug in handling path name arguments
that end with a `/'.

Removed support for RISC/os;
its test system is no
longer available.

Made modifications to insure that lsof output
doesn't contain non-printable characters. All such
characters are now printed in the printf form
"\x%02x". Several new common functions were
installed in misc.c to support "safe" printing.
This second major modification in 4.27 to common
and dialect code could have introduced bugs not
yet detected.

4.28 March 10, 1998
Refined unprintable format to use \b, \f, \r, \n,
\t, and ^* (for CTRL) forms. Corrected omission
of safestrprt() use for field output command name.
These changes were offered as patches to 4.27.

Made space an unprintable character (\x20) in the
COMMAND column; printable elsewhere, including the
NAME column, field output, and error messages.

Made sure FD column is parseable as a single entity
-- i.e., has no embedded space. Thus, if the access
mode is unknown but there is a known lock mode, (a
very rare case) the access mode will be printed
as
`-'.

Picked lint with gcc 2.8.0 under Solaris 2.6.

With the help of Dave Olson of SGI identified a
proc struct element that should have been added to
<sys/proc.h> by IRIX 6.4 patch 2536. Added a
work-around for it to the lsof Configure script.
Igor Schein <ischein@air-boston.com> identified
that the patch caused a proc structure length
complaint from lsof. Removed an obsolete 00FAQ
item on the patch, installed at lsof 4.26, explaining
that no solution was yet available.

Added a 00FAQ item on how BIND installs its own
header files, including <netdb.h>, which may cause
the rpcent struct definition to vanish. Solaris

has an automatic lsof work-around, but that hasn't been (and probably can't be) propagated to all dialects supported by lsof. The 00FAQ item recommends re-installation of the vendor header files that BIND has replaced. (Others include <rpcent.h>, <sys/bitypes.h>, and <sys/ctypes.h>.)

Made AIX AFS fixes.

4.29 March 26, 1998

Corrected bug in Internet address matching. The matching formerly stopped if the foreign address matched, thus failing to check the local address for a match. That led to a possible false "Internet address not located" warning (i.e., in response to -V) about the local address, when both foreign and local addresses were specified with -i. This correction was offered as a patch to 4.28.

Changed readmnt() usage in an attempt to defer mount readlink() and stat() delays until they are necessary.

Corrected two bugs in the Digital UNIX readdev() function. Made the correction available as a patch to 4.28 and regenerated the 4.28 DU binaries.

Added a missing argument to a print-kptr() call in the HP-UX dsock.c. The missing argument causes a fatal gcc error. The problem was reported by Eyal Shaynis <eyal.shaynis@telrad.co.il>. The fix was offered as a 4.28 patch.

Adjusted for Digital UNIX 4.0D; the spec_node structure is now defined in <sys/specdev.h>. Kris Chandrasekhar <Kris.Chandrasekhar@digital.com> identified the need for the adjustment.

Incorporated a bug fix from Brian McAllister <mcallister@mit.edu> to the DU readmnt() function. This fix was offered as a patch to 4.28.

Added "safe" printing to a SunOS clone device error message.

Corrected bug in tabling of Linux /proc-based lock

info.

Corrected bug in handling of SunOS TLI streams.
Dan Farmer <zen@trouble.org> reported the problem.

Added a Solaris 2.6 work-around to keep the BIND
<sys/bitypes.h> from colliding with the Solaris
<sys/int_types.h>.

Strengthened the Configure test for /proc-based
Linux lsof, based on a report from Marty Leisner
<leisner@sdsp.mc.xerox.com>.

Tested on OpenBSD 2.3.

Made AIX changes that allow use with 3.2.5. The
changes were suggested and tested by Brett Hogden
<hogden@rge.com>.

Added Solaris 2.6 AFS support. Disabled reporting
of some node numbers for Solaris 2.5 and above open
AFS
files. The node number computation algorithms
used for SunOS 4.1.x and Solaris less than 2.5 no
longer always work under Solaris 2.5 and above.

4.30 April 9, 1998
Corrected a pid structure member naming error for
UnixWare < 2.1.2. The problem was reported by
Richard van Meurs <vanmeurs.anva@atriserv.nl>. He
supplied the correction. This was offered as a
patch to 4.29.

Had a report from Igor Schein <ischein@air-boston.com>
that IRIX 6.4 patch 2839 is another SGI kernel
patch, along with 2536, that changes the size of
the proc structure in the kernel without changing
the proc structure in <sys/proc.h>. Upon further
investigation found that the effect of these patches
on the proc structure is not consistent. Therefore,
dropped the Configure patch test for IRIX 6.4 and
made the code in irix/dproc.c slightly more tolerant
of proc structure size differences for IRIX 6.4.
Igor help test the change.

Corrected Solaris >= 2.5 AFS inode number
generation.
Craig Everhart <Craig_Everhart@transarc.com> helped

find the cause of the problem. This was offered as
a patch to 4.29.

Refined the Linux /dev/kmem-based glibc evasion
for the timeval structure to make it work with
glibc version 2.0.7. This required defining a new
global symbol, TIMEVAL_LSOF, default timeval, that
the /dev/kmem-based Linux lsof can set to its
private glibc timeval name, distinct from the kernel
timeval name.

Added support for Alpha to the /dev/kmem-based
Linux lsof. Alexandre Oliva <oliva@dcc.unicamp.br>
provided a test system. Added an item to 00FAQ
about lsof, the Alpha processor, and Linux.

Added a 00FAQ item about lsof year 2000 compliance.
Basically it says lsof is probably compliant,
because its only date or time computations are done
with time_t values, but I haven't done any specific
Y2K validation. I don't have plans to do any.

Added support for UnixWare 7. Chris Daniels
<chrisd@dlpco.com> provided
a test system and Don
Draper <dond@sco.COM> provided technical information.
Added BFS and SFS file system support to lsof for
UW 2.1.[12] and 7.

Updated Solaris VxFS support for VxFS 3.2.1. Greg
Earle <earle@netbsd4me.jpl.nasa.gov> reported the
need for the update. Greg and Roger Klorese
<rogerk@veritas.com> provided technical information.
Scott McClung <mcclung@primenet.com> tested.

Changed IRIX XFS patch detection in anticipation of
learning there are multiple XFS patches for IRIX 6.4
that require different versions of the lsof-invented
xfs_inode structure.

4.31 April 21, 1998
Added a VxFS #if/#endif wrap to a section of the
HP-UX dnode.c that wasn't properly protected. The
problem was reported by Peter Klosky <PKlosky@bdm.com>.
This was offered as a patch to 4.30.

Added support for Solaris 2.7 (first Beta release).
Mike Sullivan <Mike.Sullivan@Eng.Sun.COM> provided

technical advice and helped test. Charles Stephens
<cfs@jurassic.eng.Sun.COM>
also helped test.

Fixed bug in /proc-based Linux that caused it to
access /proc/mounts excessively. Marty Leisner
<leisner@sdsp.mc.xerox.com> provided a syscall
trace that identified the bug. The fix was offered
as a patch to 4.30.

Adjusted the IRIX 6.4 private structure definition
for the XFS node to accommodate patch 2970. Igor
Schein <ischein@air-boston.com> identified the
patch and the required adjustment.

4.32 May 11, 1998
Corrected Solaris 2.7 code for reporting PCFS
(floppy disk) node numbers. Casper Dik
<casper@holland.sun.com> supplied the fix. The
fix was offered as a patch to 4.31.

Corrected a bug in conditional repeat mode handling
pointed out by Igor Schein <ischein@air-boston.com>.
This was offered as a patch to 4.31.

Improved reporting of AIX open(/dev/memory device)
errors.

Corrected a Solaris < 2.5 KA_T declaration error,
pointed out by Robert Kiessling <robert@easynet.de>.
Changed KA_T from a #define
to a typedef for all
dialects to prevent future problems of this kind.

Changed the sample Perl 5 script big_brother.perl5
to report a four digit year from localtime().

Added support for AIX 4.3[.1]. Bill Pemberton
<wfp5p@tigger.itc.virginia.edu> provided a test
system. Andrew Kephart <akephart@austin.ibm.com>
and Tom Weaver <tvweaver@austin.ibm.com> provided
technical assistance. Niklas Edmundsson
<nikke@ing.umu.se> did 4.3.1 testing.

Added -qmaxmem option to CFLAGs for an AIX compilation
with an xlc version 4.x compiler.

Adjusted Linux socket handling for changes in the

AX25 members of the sock struct. Richard Green
<rtg@tir.com> pointed out the problem. Tested
/dev/kmem-based lsof under Linux 2.0.34.

4.33 May 22, 1998
Added generic IPv6 support to common lsof sources
and specific IPv6 support to AIX sources. Andrew
Kephart <akephart@austin.ibm.com> supplied the
additions and helped with testing. Bill Pemberton
<wfp5p@tigger.itc.virginia.edu>
provided a test
system. The modification affected sources for
every dialect, whether it supports IPv6 or not, by
changing the interfaces to the common Internet
address function ent_inaddr().

Added support for the NetBSD UVM virtual memory
system. Paul Kranenburg <pk@cs.few.eur.nl> supplied
technical details.

Bracketed HP-UX 11 use of <sys/spinlock.h> with
#if/#endif _KERNEL.

Corrected printing of PCB address in DEVICE column
for IRIX.

4.34 June 26, 1998
Updated 00FAQ to discuss TCP and UDP ports private
to the AIX kernel and 00README to describe how ACLs
can be used to give lsof permission to read the
kernel memory devices. Add information to 00FAQ
and 00README about other OpenBSD architectures
where lsof is reported to compile and run. Added
section to 00FAQ discussing how an incorrect loader
path environment variable value can prevent lsof
from loading correctly.

Improved Solaris namefs and doorfs support so that
it
is now possible to search for an open VDOOR file
by the path name of its fattached file system
object. Igor Schein <igor@txc.com> requested the
ability to do such a search. Even with the change,
lsof can't always identify path names for open
VDOOR files.

Also at Igor's request, improved reporting of
information on open Solaris VCHR files that share

a common vnode, and Solaris UNIX domain socket
files.

Corrected print_kptr() argument error in PTX dnode.c,
reported by Mark Price <mprice@sequent.com>.
Compensated for ncache element naming differences,
introduced at PTX 4.4.2; Kurtis D. Rader
<krader@sequent.com> reported the problem.

Changed output column title from INODE to NODE to
better reflect the column's contents of node IDs
for more than just inodes.

Improved Configuration and processing for Solaris
AFS. Corrected AIX AFS 3.4 afs_rwlock_t simulation.

Corrected a cast problem with two AIX knlist()
calls, thus quieting an AIX 4.2.1 compiler
argument
type warning. Jon Champlin <champlin@us.ibm.com>
reported the problem.

Added support to most dialect versions (exception:
/proc-based Linux) to warn when the identity of
the kernel where lsof was compiled doesn't match
the running identity. The warning can be suppressed
with -w. Note: determining AIX state requires
calling oslevel, a potentially slow operation.
Jon Champlin <champlin@us.ibm.com> suggested this
addition.

!!!! WARNING !!!! !!!! WARNING !!!! !!!! WARNING !!!!

Those using the lsof cross-configuration capability
(see 00XCONFIG), should be aware that the kernel
identity test feature introduces two new basic
cross configuration environment variables, LSOF_ARCH
and LSOF_VSTR.

!!!! WARNING !!!! !!!! WARNING !!!! !!!! WARNING !!!!

Identified a situation where a Solaris UNIX domain
socket name is known and can be searched for by
name; added the necessary code.

4.35 July 17, 1998
Made the kernel identity

check an option with the
HASKERNIDCK #define in machine.h. Enabled altering
of HASKERNIDCK with the Customize script. Added
a clause to the help output that indicates the
build-time HASKERNIDCK status.

Added more information to the NAME column for
Solaris UNIX domain sockets. Made them searchable
by their clone device path name. Igor Schein
<igor@txc.com> requested this.

Completed the HP-UX 11 port with support for its
optional 64 bit kernel. Rich Rauenzahn
<rrauenza@cup.hp.com> provided a test system.
Corrected errors with HP-UX 11 lock reporting and
private kernel structure and type definitions.
Added support for HP-UX NFS3 files.

Limited mount table warnings -- e.g., when -b is
used -- to one set per mount point.

Fixed some mount table scanning and usage bugs,
including one in Solaris, reported by Kjetil Torgrim
Homme <kjetilho@ifi.uio.no>.

4.36 August 4, 1998
Made corrections and additions to IPv6 support and
to AF_ROUTE socket
handling, supplied by Jean-Luc
Richier <Jean-Luc.Richier@imag.fr>. Jean-Luc's
additions provide IPv6 support for the Inria IPv6
implementations on FreeBSD and NetBSD.

Fixed two Solaris 2.5, 2.5.1, 2.6 and 2.7 TCP and
UDP host name or IP address reporting bugs, reported
by James Mathiesen <James-Mathiesen@deshaw.com>.
This fix was offered as a patch to 4.35.

Updated the Customize script to cause ENTER to use
all defaults. Amir J. Katz <amir@ndsoft.com>
suggested this and helped test the changes.

Updated Solaris ICMP and IP stream handling, based
on a report from Igor Schein <igor@txc.com>.

Fixed a bug in the Digital UNIX mount table handling,
reported by Bob Ward <bward@thehartford.com>.
While working on the bug, found and updated some

obsolete AdvFS code. This fix was offered as a
patch to 4.35.

4.37 September 15, 1998
Deactivated SGI IRIX support and archived revision
4.36 sources and binaries in pub/tools/unix/lsof/OLD.

Improved performance
of FD searching. This was
offered as a patch to 4.36.

Amir J. Katz <amir@ndsoft.com> pointed out that
ranlib isn't needed for AIX or Solaris. Made
appropriate Configure script changes.

Fixed a file offset reporting bug for HP-UX VCHR
and VBLK device nodes located on a VxFS root. Doug
Siebert <douglas-siebert@iowa.edu> reported the
bug. The fix was offered as a patch to 4.36.

Resolved an HP-UX root device name reporting bug,
partly caused by an out-dated local copy of the
<sys/mount.h> mount structure, by generating a
local header file with the structure that can be
compiled without needing _KERNEL defined. Doug
Siebert also reported this bug.

Changed some dialect source code -- Digital UNIX,
Solaris, SunOS, and UnixWare -- to make more
consistent with ps the user ID lsof reports in the
USER column. Added a 00FAQ entry about it. Igor
Schein <igor@txc.com> reported the Solaris and
SunOS lsof inconsistencies with what ps(1) reports.

Ported
lsof to Pyramid ReliantUNIX 5.44.

Added brackets as comments to case, do, done, else,
endif, esac, if, and while statements in Configure
to assist in navigating its clauses.

Added more Linux 2.0.x glibc work-arounds.

Added support for UnixWare 7.0.1.

Ralph Forsythe <ralph@contact-paging.com> provided
a new FreeBSD test system.

4.38 November 25, 1998

Added support for recent FreeBSD 3.0 distributions. A 3.0 test system was provided by David O'Brien <obrien@NUXI.com>. This was offered as a patch to 4.37.

Updated the scripts/idrlogin.perl* files to look for sshd processes in addition to rlogind and telnetd ones.

Added support for DU 5.0 Beta. Berkley Shands <berkley@cs.wustl.edu> provided a test system.

Added support for OpenBSD 2.4 with changes supplied by Kenneth Stailey <kstailey@disclosure.com>.

Changed the Solaris 2.7 tests and documentation to Solaris 7.

Made some changes to the header files for NEXTSTEP 3.3 and added support for OPENSTEP 4.x with help from Michael A. Hovan III <mhovan@BLaCKSMITH.com> and Carl Lindberg <Carl_Lindberg@BLaCKSMITH.com>. The combined dialect subdirectory is named n+os. One of Carl's changes propagates RC_CFLAGS to the library Makefile. Timothy J. Luoma <luomat@peak.org> helped test under NEXTSTEP 3.3 and OPENSTEP 4.2.

Made UW 7.x version sensitive to the presence of ptf7038. Added peer PCB address to Unix domain socket Name column, even when a path name has been located. Information for these changes was supplied by Francis Le Bourse <flebourse@intelcom.fr>. Lee Penn <lee@dlpco.com> provided a test system.

Tested lsof under OSR 5.0.5 on a test system also provided by Lee Penn.

Made path name argument processing more tolerant of errors per a suggestion from Julian Gordon <julian@cadence.com>.

Acquired a new UnixWare 2.x test system, generously provided by Computer Classroom, Inc. -- Matthew Thurmaier <matt@compclass.com>, Ken Laing <ken@compclass.com>, and Andrew Merril

<andrew@compclass.com>. Updated Configure to accept
a UnixWare version of 2.1.3.

Updated kmem-based lsof for Linux 2.0.36.

Updated NetBSD sources for a change in a UVM virtual
mapping header file.

Corrected a cache allocation bug in Sun format
kernel name cache handling. The bug only shows up
when the kernel name cache is inaccessible.

4.39 December 29, 1998
Corrected problems with large device number handling
for 64 bit Solaris 7. The problems were reported
by Steve Bellenot <bellenot@math.fsu.edu>. Steve
helped test the fixes. The fixes were offered as
two patches to lsof 4.38.

Improved FreeBSD Configure operations for header
files that must be obtained from the kernel source
tree, based on a suggestion from David O'Brien
<obrien@NUXI.com>.

For Bela Lubkin <filbo@deepthought.armory.com> made
optional with +f[cfn] the display of file structure
address, shared use count, and node structure
address.
/proc-based Linux doesn't implement this
feature, because it doesn't read kernel structures
from kernel memory. Modified the PTX -X option to
take advantage of the new file structure display
option. Added shared.perl5 to the scripts/
subdirectory to provide an example of how +f[fn]
might be used to track shared file descriptors and
files.

Added more /dev/kmem-based Linux glibc evasions,
provided by Jeff Johnson <jbj@redhat.com> and Maciej
Lesniewski <nimir@kis.p.lodz.pl>. Jeff helped test
them on various Linux architectures.

Tested on AIX 4.3.2; no changes were required.
Doug Crabill <dgc@purdue.edu> provided a test
system.

Fixed -c option to detect missing command name when
following option begins with `+'.

4.40 January 25, 1999

Added support for using the CDS compiler for Reliant Unix 5.44 and above. Made Reliant Unix MIPC support optional, dependent on the presence of <sys/mipc.h>.

Based on a report from Michael Schmitz <MSchmitz@lbl.gov> that /dev/kmem-based lsof misbehaves on a Linux 2.0.x m68k kernel without module support, made the absence of query_module() or get_kernel_syms() Linux kernel support a fatal error. Updated relevant sections of 00FAQ to reflect the change.

Added the ability to force the Linux Configure stanza to use the /proc or /dev/kmem source base via a LINUX_BASE environment variable specification. This is a cross-configuration assist.

Added "+D <dir>" and "+d <dir>" options for directory searching. +D searches the entire tree, starting at <dir>, including <dir>, its contents, and its subdirectory branches; +d searches only <dir> and its contents, but not its subdirectory branches. Improved lsof's searching of the specified name list to compensate for anticipated long lists from +d and +D.

Made an egrep in the Solaris Configure stanza usable by the standard and XPG4 egrep's. Kenneth Stailey <kstailey@disclosure.com> pointed out the improvement.

Fixed bugs in /dev/kmem-based Linux and UnixWare Unix domain socket name searching.

Changed a Linux Alpha #include to be conditional on the presence of its named header file, so that lsof will compile on Red Hat 5.1 and 5.2 (Linux kernel 2.0.35) where the header file is absent. The problem was reported by Alexandre Oliva <oliva@dcc.unicamp.br>.

Fixed an AIX 4.3+ bug in procinfo struct space allocation, reported by Jeff Stewart <jws@purdue.edu>. This was offered as a patch to 4.39.

Added an lstatsafely() function to offer the same

isolation for lstat() calls that statsafely() offers
for stat() calls. This made DOSTAT_FUNCTION no
longer necessary, so deleted it.

With help from Laurent P. Montaron <lpm@sequent.com>
ported lsof to PTX 4.4.4. Laurent did a monumental
job of identifying TCP/IP changes by their TCP
version, rather than by their PTX (With mix 'n
match PTX and TCP/IP versions, the PTX version
often has no bearing
on the TCP/IP version.), and
changed the Configure script and pre-processor
#if/#else/#endif blocks to match. He also updated
Unix domain socket handling for PTX TCP/IP versions
4.5 and above.

Updated CLIENT handle acquisition of fill_portmap()
in print.c to use the more modern RPC function
clnt_create() in place of clnttcp_create() where
possible. PTX 4.4.4 requires clnt_create().

4.41 February 27, 1999
Added FreeBSD 3.1 and and 4.0 support with help
from Sheldon Hearn <axl@iafrica.com>, David O'Brien
<obrien@NUXI.com>, and John Polstra <jdp@polstra.com>.

Corrected bungled AIX 4.3+ patch that went into
lsof 4.40.

Reorganized the Configure script to improve Makefile
construction. A specific impetus for this was to
allow FreeBSD system-wide make flags to be propagated
to the lsof Makefiles, but other goals were to make
sure that the DEBUG= make entry can over-ride
standard CFLAGS values, and to better manage the
identification of compilers
and their versions.
Two compiler-related values may now be supplied in
environment variables: 1) the compiler path in
LSOF_CC; and 2) the compiler version in LSOF_CCV.
00XCONFIG documents them.

Added support for Pyramid Reliant Unix bsdsfs,
msockfs, and sockfs file systems.

Added an optional LSOF_CINFO string to Configure,
producing a CINFO string in selected Makefiles,
producing a #define LSOF_CINFO in selected version.h

header files. The purpose of this is to allow
Configure the option to propagate information to
the lsof -v output. It is now used for Linux to
identify the code base, and for HP-UX 10.30 and
11.0 and Solaris 7 to identify the kernel bit size.

Added system information to NEXTSTEP and OPENSTEP
-v output, from the second line of hostinfo's
output.

Fixed a login name buffer overflow problem in the
processing of -u option values. This was offered
as a patch to 4.40. !!!THIS IS A SERIOUS STACK
OVERFLOW BUG; A LINUX EXPLOIT
EXISTS FOR IT THAT
OPENS A BASH SHELL WITH LSOF'S AUTHORITY -- E.G,
SETGID(KMEM) POWER!!!

Improved the Solaris mount table filter so the
volume manager's fake mount point, "/vol", is
ignored and doesn't supplant "/" in NAME column
path assemblies. Igor Schein <igor@txc.com> reported
this bug and provided important help in finding
it. This was offered as a patch to 4.40.

Changed the Linux /dev/kmem-based lock ownership
test to answer a problem reported by Tom Christiansen
<tchrist@jhereg.perl.com>. This was offered as a
patch to 4.40.

Installed an HP-UX 11 patch, suggested by Kevin
Vajk <kvajk@cup.hp.com>, that adjusts a private
lsof kernel header file, derived via Q4, to correspond
to an HP-UX patch bundle.

Made NetBSD 1.3I sockproto structure adjustment.

4.42 March 30, 1999
Fixed a typo in the HP-UX dfile.c that caused +fF
and +fN output controls to swap effect.

Enabled for OpenBSD 2.5 per notice from Kenneth
Stailey <kstailey@kstailey.tzo.com>

Made
more VM accommodations for FreeBSD 4.0.

Improved file system search reporting to include

path name components when they're available, instead
of mindlessly reporting the file system name in
the NAME column. Guy Dallaire <gdallair@geocities.com>
brought the need for this change to my attention.

Updated Solaris 2.6 VxFS for Veritas Oracle Database
Edition 2.0, VxFS version 3.3, and VxVm version
2.5.4, based on a report from Chris Kordish
<chris.kordish@East.Sun.COM>. Chris kindly provided
a test system.

Improved HP-UX ipc_s patch detection in Configure,
response in .../dialects/hpux/hpux11/ipc_s.h, and
documentation in 00FAQ, Kevin Vajk <kvajk@cup.hp.com>
helped test.

Added to Customize the option to suppress HASKERNIDCK
selection for specified dialects. Suppressed it
for /proc-based Linux lsof, and removed its test
and code from there. Tin Le <tin@netimages.com>
alerted me to the need for this update.

Ported to official
Digital UNIX 5.0 release.

Changed DU lsof to use the knlist(3) function when
no kernel file has been specified with -k. This
change was suggested by Erich Wimmer
<Erich.Wimmer@digital.com>.

Updated Configure for latest NetBSD (1.3I?) with
UVM support the default.

4.43 May 11, 1999
Corrected a typo in the Solaris gcc discussion in
00FAQ. Made changes to the Solaris 2.5[.1] private
tcp_s structure. Both changes were done in response
to reports from Igor Schein <igor@txc.com>, who
tested the Solaris 2.5 change.

Made more IPv6 adjustments to lsof for Tru64 UNIX
(Digital UNIX) 5.0, based on information obtained
from Compaq by Berkley Shands <berkley@cs.wustl.edu>.

Corrected HP-UX error message about HP-UX 11 q4 usage.
Amir Katz <amir@ndsoft.com> reported the correction.

Fixed a GlibC 2.1 conflict in /proc-based Linux lsof.

Fixed a man page typo reported by Vlad Harchev
<hvv@hippo.ru>.

Changed some Solaris 2.7 references to Solaris 7
in
Configure and 00XPORTING.

Added a Solaris example to the echo statements that
are the install rule in the SunOS/Solaris Makefile.

Added a field to the file structure output --
FILE-FLAG (file structure open flags, f_flag[s],
and process file flags, typically u_pofile)) --
enabled with +f[gG]. Its field output character
is 'G'.

Figured out another piece of the HP-UX 11 patched
ipc_s structure puzzle with the help of Keith Kalet
<KEITH_KALET@HP-USA-om41.om.hp.com>.

Fixed a PTX real vnode to real inode interpretation
bug.

Added link count to lsof output. Eric Dumazet
<dumazet@risgw.ris.fr> requested and helped test
it. The new +L option enables and filters it.
Its field output character is `k'.

Updated Configure script to recognize NetBSD 1.4.

Updated AFSConfig to handle default answers to
questions.

Incorporated patch from Jonathan Sergent <sergent@io.com>
that enables /proc-based Linux lsof to run on both
32 and 64 bit kernels.

Updated
Configure script with a patch from David
O'Brien <obrien@NUXI.com> that recognizes FreeBSD 3.2.

4.44 June 24, 1999
Corrected use of nlink member of hsnode for SunOS
4.1.x High Sierra File System files. John Dzubera
<zube@tlaloc.stat.colostate.edu> reported the
problem and helped test the fix. Also fixed a
SunOS segmentation fault bug. These fixes were

offered as a patch to 4.43.

Improved handling of /proc-based Linux UNIX PCB
address.

Fixed a NEXTSTEP and OPENSTEP bug that made repeat
option (-r) processing malfunction. This fix was
offered as a patch to 4.43.

Fixed Configure so it doesn't use -O in the Cflags
for the bundled HP-UX C compiler. Jim Ankenbrandt
<jankenbrandt@penton.com> reported the problem.

Corrected output ordering of parent PID and process
group ID when both -R and -g are specified.

Enhanced the pdev.c and pdvn.c library modules for
wider use. These dialect versions use the new
library modules: DEC OSF/1,
Digital UNIX, and Tru64
UNIX; Pyramid DC/OSx and Reliant UNIX; SCO OSR and
UnixWare; and Sequent PTX.

Added basic clone device support to /dev/kmem-based
HP-UX lsof for HP-UX 10.30 and higher.

Added raw socket support to /proc-based Linux lsof.

Changed NODE-ADDR column title to NODE-ID in
anticipation of using more general identification
information in the column.

Ported to UnixWare 7.1, using a test system kindly
provided by Matt Thurmaier <matt@compclass.com>
and Don Draper <dond@sco.com>.

Updated for NetBSD 1.4C VM changes, and a new
current and root working directory structure.

Made minor adjustment for latest Tru64 UNIX 5.0
Beta release.

4.45 July 30, 1999
Fixed quoting problem in DEC OSF/1, Digital Unix,
and Tru64 UNIX Makefile's install rule. The problem
was reported by Berkley Shands <berkley@cs.wustl.edu>.
Fixed bug in Tru64 UNIX 4 lsof that caused FDs to
be skipped. These fixes were offered in a patch

to 4.44.

Fixed a repeat-mode
/proc-based Linux lsof bug,
reported by Sami Farin <sfarin@ratol.fi>. This
was offered as a patch to 4.44.

Picked lint, some reported by Sami Farin.

Corrected a 00DCACHE documentation error in a sample
shell script. The problem was reported by Chad R.
Larson <chad@larsons.org>. Changed commented-out
entries in machine.h files so they require more
thought and work when the comments are removed,
based on a remark by Chad.

Compensated for the practice of Solaris 7 and above
to record the dev= value in /etc/mnttab in 32 bit
mode, even on 64 bit systems. This was offered as
a patch to 4.44.

Added a C library test for /proc-based Linux lsof,
so that the #include files can be adjusted for a
non-GlibC environment. The need for this was
reported by Andrew Hill <andrewh@tirin.openworld.co.uk>.
This was offered as a patch to 4.44.

Added support for Auspex LFS 1.8.1 and 1.9.2 to
SunOS 4.1.4 lsof. The support was requested by
Quentin Fennessy
<quentin@dvorak.amd.com>, who
provided information and did testing.

Enabled IPv6 support code for NetBSD and OpenBSD,
conditional on Configure script tests. Wolfgang
Rupprecht <wolfgang@wsrcc.com> supplied the NetBSD
code and tested it. The OpenBSD code I constructed
has been compiled but not tested.

Updated the identd Perl 5 script, based on a report
from Wendy Lin <af5@taiyang.cc.purdue.edu> that
the space in its response line in front of the user
name violates RFC 1413.

Added IPv6 support to /proc-based Linux lsof.
Jonathan Sergent <sergent@ETLA.NET> and Andrew
Thomas Sydelko <sydelko@ecn.purdue.edu> kindly
provided a test system.

Updated man page description of AIX multiplexed files to indicate that they might be /dev/ptc or /dev/pts, depending on the AIX version. The correction was suggested by Onno van der Linden <onno@simplex.nl>.

Sylvain Robitaille <syl@alcor.concordia.ca> reports lsof passes his Y2K tests.

4.46 October 23, 1999

Corrected /proc-based Linux lsof to detect that an IPv6 address is a mapped IPv4 address. The problem was reported and analyzed by Arkadiusz Miskiewicz <misiek@misiek.eu.org>, who also tested the fix.

Added a libc5 library /dev/kmem-based Linux lsof circumvention, supplied by Jason Lingohr <lingman@lucid.net.au>.

Corrected a bug in -t (terse) AIX output, reported by Wendy Lin <af5@taiyang.cc.purdue.edu>. I introduced the bug at revision 4.43 when adding FILE_FLAG reporting. This was offered as a patch to 4.45.

Added a work-around for a problem in the OpenBSD 2.3 <sys/pipe.h> header file. Volker Borchert <bt@teknon.de> provided and tested it.

Improved description of cross-building lsof for a 64 bit Solaris 7 system on a 32 bit system with suggestions from Phillip Edwards <Philip.Edwards@sn.wpafb.af.mil>.

Fixed a gawk POSIX-mode pattern error in the Linux /dev/kmem-based Mksrc script, based on a tip from Ambrose C. Li <acli@mingpaoxpress.com>.

Fixed a bug in the Tru64 UNIX IPv6 handling, courtesy of a report from Casper Dik <casper@holland.sun.com>.

Enabled support for OpenBSD 2.6.

Enabled support for BSDI BSD/OS 4.1, based on a report from Jeffrey C Honig <jch@bsdi.com> that

only a Configure script change is necessary.

Enabled Configure script to use gcc for building
lsof for a 64 bit Solaris 7 and 8 kernels, if the
gcc version is 2.95 or above.

Improved -i option handling for systems with IPv6
support so that it will search for a host name in
both IPv4 and IPv6 families, when that is possible.
As a companion modification, changed -V processing
to report a single error when a multiple host name
match is requested. Casper Dik <casper@holland.Sun.COM>
helped test.

Fixed a DEC OSF/1, Digital UNIX, Tru64 UNIX repeat
mode bug, reported by Mayer Ilovitz <mayer@cooper.edu>.
Mayer helped test the fix. The fix was offered as a
patch to 4.45.

Changed Solaris socket
file recognition scheme, so it
is (nearly) the same through Solaris 8, where the
previous clone device scheme no longer works.

With significant assistance from Casper Dik, added
support for Solaris 8 Beta and Beta refresh. The
IPv6 support in Solaris 8 is still in some flux,
so there are temporary compensations for the
differences between Beta IPv6 support and Beta
refresh IPv6 support. Casper and I hope those
differences disappear by FCS.

Improved the delivery of information on Solaris
2.5.1, 2.6, 7, and 8 door files.

Fixed a repeat mode bug that surfaces when /etc/passwd
changes between cycles. The bug report and diagnostic
help were supplied by Igor Schein <igor@txc.com>.
The fix was offered as a patch to 4.45.

Added support for INRIA IPv6 to NetBSD. Jean-Luc
Richier <Jean-Luc.Richier@imag.fr> provided patches
and a test system on which to verify them.

Added support for AIX 4.3.3. Jeff W. Stewart
<jws@anaconda.cc.purdue.edu> provided
a test system.

Made adjustments for FreeBSD 4.0-current.

Improved reporting of information for AIX sockets that lack protocol control blocks.

4.47 November 29, 1999

Based on a query from Jean-Pierre Radley <jpr@jpr.com>, changed the lsof top-level Makefile to propagate CFGF to the library Makefile. (DEBUG was already being propagated.) Added osrgcc and scogcc Configure abbreviations (to use gcc) for Jean-Pierre.

In response to a query from Igor Schein <igor@txc.com>, improved the Configure script test for Solaris 7 and 8 that decides if the compiler can produce 64 bit executables.

Made an ugly hack, based on making a private rnode structure definition from q4 output, to compensate for HP-UX 10.20 and lower recent NFS3 patches. HP didn't supply an updated <nfs/rnode.h> with the patches. The problem was reported by Will Partain <partain@mekb2.sps.mot.com>. Elias Halldor Agustsson <elias@hi.is> helped identify the patches as PHNE_18173,
PHNE_19426, PHNE_19937, and PHNE_20091, and provided a test system.

Switched BSDI test system from 2.1 and 3.1 to 4.0.1, courtesy of Terry Kennedy <terry@tmk.com>.

Added some more dev_t hacks for Alpha FreeBSD 4.0.

Added support for IPv6 on BSD 4.x. The support hasn't yet been tested, just compiled.

Added support for the mnt file system (mntfs or /etc/mnttab) on Solaris 8. Tested on Solaris 8 BETA-Refresh.

Made selection of optional fields (e.g., PPID with -FR) in a field output specification select the optional field, too, so that the option selector for the field (e.g., -R) isn't also required. This change was made in response to an inquiry from John DuBois <spcecdt@armory.com>. This may require some revision to scripts that parse all field output; two scripts in the lsof distribution's scripts/

subdirectory had to be updated.

Corrected handling of Linux IPv4 addresses mapped
in IPv6 addresses.

Tested under OpenBSD 2.6.

4.48 January
14, 2000
Modified -i argument processing of colon-separated
IPv6 addresses to recognize an IPv4 address mapped
in an IPv6 address and handle it as an IPv4 address.
This was offered as a patch to 4.47.

Added a defined symbol (NOWARNBLKDEV) to control
(inhibit) the issuance of a warning when no block
devices are found. This was done anticipating its
need in FreeBSD 4.x, but that dialect version no
longer has any block devices, so HASBLKDEV was
disabled for it instead. NOWARNBLKDEV was left in
place for possible use in the future.

Enabled KAME IPv6 Configure support for FreeBSD
when <netinet6/in6.h> is found.

Disabled use of gcc to compile lsof for 64 bit
HP-UX 11.

Updated Configure to recognized FreeBSD 3.4.

Based on suggestions from Bernt Christandl
<beb@MPA-Garching.MPG.DE> improved AFS configuration
for AIX and Solaris, and updated AIX AFS 3.5 support.
Johannes Tax <tax@bluedog.oit.unc.edu>, Hung T.
Pham <hung_pham@unc.edu>, and Curt
Freeland
<curt@grumpy.cse.nd.edu> provided test systems.

Updated lsof's private rnode definition for AIX
4.3.3, since IBM still doesn't ship the
<oncplus/nfs/rnode.h> header file and the rnode
structure definition in <nfs/rnode.h> doesn't match
what the kernel uses. This was offered as a patch
to 4.47.

Weakened the test in the Linux /proc-based lsof of
the field count of data lines in /proc/net/{tcp,udp}.
It appears that recent 2.3.x Linux kernels have

added untitled fields to these files. The bug
report came from Gabor Liptak <gaborliptak@usa.net>.

Adjusted for a FreeBSD 4.0 change in the definition
of [_]KERNEL. David O'Brien <obrien@NUXI.com> reported
the problem and provided a test system.

Removed the HASPPID bracket from Fppid (the -R
option state variable) so that the field select
table will compile even when HASPPID is not defined.
This problem was introduced at revision 4.47 with
code that causes some field output characters to
set
option states. The problem was reported by
David Bacon <bacon@birch.eecs.lehigh.edu>.

4.49 April 3, 2000
Made clearer in man page that "Lxx" FDs are AIX
loader table references. Also updated the 00FAQ
discussion of the Stale Segment ID bug to include
AIX 4.3.x.

Modified support for NetBSD 1.4Q to include the
<sys/buf.h> header file to cope with an MFS change.

Added support for OpenBSD UVM virtual memory.

Added support for AIX systems with > 2GB of memory.
Chris Sylvain <csylvain@itg.ummc.umaryland.edu>
reported the problem and provided the solution.
Chris also supplied some minor code cleanup. This
was offered as a patch to 4.48.

Based on new information from Igor Schein <igor@txc.com>
made additional compensation in Configure script
for 64 bit Solaris 7 and 8 gcc.

Added some 00FAQ info on the effect ordering of
the +fg and -FG options has on output format.

Improved NetBSD IPv6 configuration, based on a
suggestion from Thomas Klausner
<wiz@danbala.ifoer.tuwien.ac.at>.
Added code to
convert IPv4-mapped-in-IPv6 addresses to IPv4
addresses.

Updated the information in 00FAQ and the HP-UX 11

binary directory README files on the HP-UX 11 ipis_s
patch with new information supplied by Eric McWhorter
<emcwhorter@xsis.xerox.com>.

Added documentation on changes to HASFSTYPE and
HASNCACHE, and the new HASPRIVPRIPP.

Adjusted Configure for FreeBSD 5.0. Made additional,
necessary changes to Configure and the BSDI sources
to eliminate load errors.

Added KAME IPv6 support to FreeBSD at the request
of Ollivier Robert <roberto@eurocontrol.fr>, who
provided a test system.

Corrected the script that generates the CHECKSUMS
files for binaries to correctly name the detached
PGP certificate. The documentation bug was reported
by Michael Hennecke <hennecke@rz.uni-karlsruhe.de>.

4.50 June 29, 2000
Added a NetBSD alpha test host, courtesy of Ray
Phillips <r.phillips@mailbox.uq.edu.au>.
An lsof
4.49 binary, built on Ray's 1.4.1 system was made
available prior to the 3.50 release.

Upgraded the system map file tests in /dev/kmem-based
Linux lsof, making the use of DEBIAN_LINUX_LSOF
unnecessary. Tested the changes on a system made
available by Vincent Kujala <kujala@geog.ubc.ca>
and Jim Mintha <jim@ic.uva.nl>.

Forced AIX to use the large-file-enabled versions
of lstat (lstat64) and stat (stat64) if <sys/stat.h>
contains stat64. This should allow lsof to stat()
AIX files > 2GB even when the builder has not
defined the "large file enabled programming
environment." Configure tests <sys/stat.h> and
puts -DHASSTAT64 in the Makefile's CFLAGS to make
this happen. Fernando A.B. Whitaker
<whitaker@cenapad.unicamp.br> reported the problem.
This was offered as a patch to 4.48.

Enabled Configure script to handle OpenBSD 2.7.
Angelos D. Keromytis <angelos@dsl.cis.upenn.edu>
reported the availability of OpenBSD 2.7 and supplied
the Configure

script patch.

Improved handling of DOOR and fattach()'d files in
Solaris.

Changed message about missing kernel symbol file
from "not yet determined" to "none found".

Updated FreeBSD, NetBSD, NEXTSTEP, OpenBSD, and
OPENSTEP support to report "no PCB" and the values
of the SO_CANTSENDMORE and SO_CANTRCVMORE state
flags when a socket structure has no inpcb pointer.
This modification was made to AIX lsof at revision
4.46. Added an entry to 00FAQ about sockets that
have no inpcb pointer.

Upgraded support for FreeBSD 5.0-CURRENT. Ben
Smithurst <ben@scientia.demon.co.uk> supplied
patches and did testing. David O'Brien <obrien@NUXI.com>
supplied a test system. The update included dropping
the Fctty part of file descriptor file system
support, conditional on a Configure script test.
I propagated those changes to BSDI, NetBSD, and
OpenBSD in anticipation of their having the
modification in the future. David also arranged
with Michael Haro
<mharo@area51.fremont.ca.us> for
a FreeBSD 3.4 test system.

In response to an lsof 3.72 bug report from Jim Mewes
<jim@corp.phone.com>, added more kernel address
filtering to the lsof function, kread(), that reads
Solaris kernel data.

In response to a report from Marc Duponcheel
<marc@offline.be>, added tests to the /proc-based
Linux lsof to ignore file systems of types "autofs"
and "pipfs".

Based on a report and information supplied by Casper
Dik <casper@holland.Sun.COM>, updated the ncache_load()
function in lib/rnch.c with new code that deals
with a post Solaris 8 change in kernel name cache
(DNLC) handling. Casper tested the update, which
should be invisible to Solaris versions without
the new DNLC code.

Added support for Solaris VxFS QIO files, based on

a report from Kieran Broadfoot <kieran.broadfoot@gs.com>.
Kieran help test the support.

Added support for PTX 4.4.6 and 4.5[.1] with help
from the usual cast of good people at Sequent.

Added
support for 64 bit file sizes and offsets on
BSDI, FreeBSD, NetBSD, and OpenBSD, based on a
report from Dan Nelson <dnelson@emsphone.com>.
Dan supplied a patch and did FreeBSD testing.

Added Configure script recognition of NetBSD 1.5,
based on a report from Andrew Brown <atatat@atatdot.net>.
Thomas Klausner <wiz@danbala.ifoer.tuwien.ac.at> updated
the NetBSD port package to use a pre-release of this
addition.

At the last minute saw a notice via deja.com's
UseNet search service that FreeBSD 3.5 had been
released and lsof didn't grok it. Added recognition
of 3.5 to lsof's Configure script, but didn't have
the opportunity to test lsof on 3.5.

4.51 August 21, 2000
Added Configure script support for the upcoming
Solaris 9 release based on suggestions from Casper
Dik <Casper.Dik@holland.sun.com>.

Changed sample Perl scripts to assume that
/usr/local/bin/perl is Perl 5 and Perl 4 may be
found in /usr/local/bin/perl4.

Updated Configure
to recognize FreeBSD 4.1 and made
a FreeBSD pre-release distribution available.

Bela Lubkin <belal@sco.COM> tested lsof on the
upcoming SCO OSR 5.0.6 release and reports that
lsof appears to work properly.

Updated the AIX compiler test in Configure to
recognize its version 5.

Updated AIX 4.3.3 support with automatic recognition
of the proper rnode structure, based on machine
bit width. Also added code to detect when processing
the -X option that lsof has been compiled with the

"other" AIX 4.3.3 user structure and to apply
compensations. When a compensation method works,
it's applied during subsequent -X processing; when
none works, further -X processing is disabled.

Added Tru64 UNIX 5.1 support. Updated Tru64 UNIX
library text file support to recognize new kernel
support for AdvFS library files. Berkley Shands
<berkley@cs.wustl.edu> and Klaus Saggerer USG
[saggerer@zk3.dec.com> helped put me in contact
with Chang Song <song@zk3.dec.com>,
the developer
of 5.1's new kernel name cache and he helped me
develop new code in lsof to access it.

Corrected reporting of PTX fattach()'d address.

Changed Configure and dlsof.h for NetBSD and OpenBSD
to use /usr/include/uvm header files when available.
Andrew Brown <atatat@atatdot.net>, Thomas Klausner
<wiz@danbala.ifoer.tuwien.ac.at>, and Wolfgang
Rupprecht <wolfgang@wsrcc.com> pointed out the need
to do this for NetBSD. Andrew provided access to
a NetBSD 1.5 system for verifying the changes.

Installed snprintf() support, including a private
version in the lsof library for those UNIX dialects
without the function. Changed all sources to use
it instead of sprintf() and strcpy().

Fixed a memory leak in the readvfs() functions of
BSDI, DEC/OSF1, Digital UNIX, FreeBSD, NetBSD,
OpenBSD, and Tru64 UNIX.

Tested on Linux 2.4.

Modified the Pyramid MkKernOpts script to compensate
for `uname -s` configuration alternatives. Robert
Dahlem <Robert.Dahlem@ffm2.siemens.de>
supplied
the modification.

Obtained access to an FCS Solaris 8 64 bit system
and built lsof on it, using Sun Workshop C 5.0 and
gcc 2.96 20000814 (experimental). Both compilers
produce a working lsof.

4.52 November 8, 2000

Completed work on an HP-UX 11.11 port that uses a pstat(2) interface provided by HP. To distinguish it from its predecessors for HP-UX, this lsof version is called PSTAT-based and the predecessor versions are now called /dev/kmem-based. I am indebted to the far-sightedness and support of these good people at HP for making PSTAT-based lsof possible: Carl Davidson, Louis Huemiller, Rich Rauenzahn, and Sailu Yallapragada. The PSTAT-based sources are in lsof_4.52/dialects/hpux/pstat, the /dev/kmem-based ones in lsof_4.52/dialects/hpux/kmem.

Ported to IBM Monterey for Merced|Itanium, aka AIX 5L. It configures via the Configure script's "aix" abbreviation and has been tested on AIX 5L Beta 3. Jay Beck,
Steve Dibbell, Loc Le, Nasser Momtaheni,
and Malcom Zung of IBM provided generous support. Since AIX 5L is still in Beta testing, this port can't be considered complete.

Added Configure support for OpenBSD 2.8. David Mazieres <dm@cs.nyu.edu> provided a test system.

Based on a report from Marc Christensen <marc@mecworks.com> added sockfs to the mount scan exemption list for /proc-based Linux lsof.

Added large file, CDFS, and DOSFS for UnixWare 7.x. Added UnixWare device memory mapping support. All UnixWare changes were supplied by Eric Dumazet <edumazet@cosmosbay.com> Eric also supplied some miscellaneous bug fixes.

Deferred name cache loading until printname() needs to use the name cache.

Terminated Pyramid, SunOS 4.1.x, and Ultrix support, because test systems are no longer available. Final Pyramid and Ultrix source code distributions for lsof revision 4.51 may be found on lsof.itap.purdue.edu in pub/tools/unix/lsof/OLD/src. The no
longer
supported SunOS 4.1.x source code is still distributed with the Solaris source code.

Added code to set Solaris node address to real vnode

address, when applicable.

John Speno <speno@lopan.isc-net.upenn.edu> provided
information that enabled me to update the Tru64
AdvFS (MSFS) node definition for AdvFS version 5.

Added Tru64 5.x CFS support with help from Kris
Chandrasekhar <Kris.Chandrasekhar@compaq.com>,
Diane Lebel <lebel@zk3.dec.com>, and John Speno.
The support only provides information about cached
file attributes.

Installed a Configure patch for HP-UX 11 supplied by
Kenneth Stailey <kstailey@disclosure.com> that adds
another command to q4 input.

Tested on FreeBSD 4.2.

Will Day <willday@rom.oit.gatech.edu> and Frank
Winkler <frank.winkler@germany.sun.com> graciously
supplied Solaris 8 binaries.

Added Solaris 9 text file support, supplied by
Casper Dik <Casper.Dik@holland.sun.com>.

4.53 December 6, 2000
Added the AIX 5L j2_lock.h
to the distribution with
a Configure script step to use it when it's missing
from /usr/include/j2.

Removed SunOS 4.1.x support.

Removed Linux 2.0.x /dev/kmem support.

Fixed VBLK and VCHR special device file reporting
to handle /dev information more accurately.

Added a Apple Darwin / Mac OS X 1.2 port, provided
by Allan Nathanson <ajn@apple.com>. Allan also
arranged for a test system so I can maintain this
port. An additional test system was provided by
Dale Talcott.

Dropped claims of support for all UnixWare versions
except 7.1.0, since that is the only version on
which I can test lsof. Even though lsof 4.53 is
deprecated for UnixWare 2.1.3, installed a patch

for it with testing done by A. Channing Clark
<clark.channing@heb.com>.

Dropped claims of support for all SCO OpenServer
versions except 5.0.5, since that is the only
version on which I can test lsof.

4.54 January 19, 2001
Added compensation for a change that made the
FreeBSD
mount structure invisible. I can only test
back to 3.2 and the compensation works there, so
it's been #ifdef'd for 3.2 and above. David O'Brien
<obrien@FreeBSD.org> provided the necessary clue.

Based on a report from Valdis Kletnieks
<Valdis.Kletnieks@vt.edu>, changed all IPv6 support
to report a TYPE of IPv6 for sockets with IPv4
addresses mapped in IPv6 addresses. The previous
lsof behavior was to report their TYPE as IPv4.

Restored the Linux GlibC test to Configure, removed
at revision 4.53, based on a report from John Dzubera
<zube@cs.colostate.edu>, that RedHat Linux 6.0 still
needs the test.

Made setting of link count for Solaris more selective.

Limited Readlink() recursion to MAXSYMLINKS. The bug
was reported by Jan Dvorak <johnydog@go.cz>.

Dropped the *claim* that lsof runs on Solaris 2.5.1.
It may well do so, but I no longer have access to a
test system.

Fixed an #endif comment typo, reported by Igor Schein.

Fixed a typo
in a cast for a Tru64 UNIX 5.1 function
and updated Configure for Tru64 UNIX 5.0 and 5.1 with
information from Jesse Perry <jesse.perry@compaq.com>.

Corrected non-fatal typos in the AdvFS support in
dnode.c for Tru64 UNIX.

Added msdos file system support for NetBSD and OpenBSD.
Andrew Brown <atatat@atatdot.net> requested and helped
test it.

4.55 February 15, 2001

Based on a report from Bernd Eckenfels <ecki@lina.inka.de> added support in lsof for files in /proc/<PID>/maps that have been deleted.

Changed PGRP output title to PGID, conforming to the most common current abbreviation for Process Group ID (PGID). While some systems continue to use *pgrp for internal kernel variable names, most systems that support the display of PGID via ps(1) now title it PGID. The lsof -g and -Fg options operations are unchanged in function; only titles and descriptions have changed. Also changed internal variable names from *PGRP and *pgrp to *PGID and *pgid where possible.

Dropped the *claim* that lsof runs on HP-UX 9.x. It may well do so, but I no longer have access to a test system.

In response to a suggestion from Jeff Howie <jeff.howie@federated.ca> added support for command name selection by regular expression. A new form of the -c option value is use to identify and specify a regular expression.

Restore the *claim* that lsof works on UnixWare 7.0, since I re-acquired a test system.

4.56 May 3, 2001

Corrected some problems Amir Katz <Amir_Katz@bmc.com> found with Insure++, one in lib/dvch.c, the rest in Solaris sources. Amir's report also helped me find an error in an snpf() call that caused (the unsupported) Solaris 2.5.1 lsof to crash. Wally Winzer, Jr. <wally.winzer@ChampUSA.COM> helped test.

Added support for UnixWare 7.1.1 and above in-kernel UNIX sockets. John Hughes <john@Calva.COM> kindly provided code and access to a test system. John also provided a test system and advice for adding UnixWare 7.1.1 NonStop Cluster and CFS support. More help with that effort came from Kurt Gollhardt (SCO), Barbara Howe (SCO), Bela Lubkin (SCO), and Dewan Rashid <Dewan.Rashid@ir.com>.

Archived a set of compilation hints (patches) from
Bill Melvin <Bill.Melvin@esc.edu> that make it
possible to compile the old, unsupported lsof 3.08
sources on UnixWare 1.x without NFS or CDFS support.

Installed support supplied by Allan Nathanson
<ajn@apple.com> for the Darwin "Gold Master" release,
Mac OS X 10.0 (aka Darwin 1.3 in its public source
version). Added Allan's CVS repository suggestions
to the script that gets additional header files
from an open source repository.

Tested an HP-UX 11.11 kernel patch from Sailu
Yallapragada that enables reporting of TCP/IP
information for telnetd processes that use the
telnet multiplexor. I don't yet know the kernel
patch ID.

Made the Solaris inclusion of <inet/mi.h> conditional
on the Solaris
version. (It's apparently not needed
at 2.6 and above.) Bill Watson <bill.watson@uk.sun.com>
brought this to my attention.

Added alternate Linux 2.4.x lock extent test, supplied
by Jim Mintha <jim@ic.uva.nl>.

Rearranged the lines and pre-processor tests in
regex.h, lib/regex.c, and lib/snpf.c so that unifdef
can be used to eliminate copyright and GPL statements
when the files aren't being used for a particular
dialect. (USE_LIB_* definitions in a dialect's
machine.h header file determine if one or more of
those three files are to be used.)

Added preliminary support for Solaris 8 with VxFS
3.4. This support will be refined as I get
information from Veritas about how they will
distribute the kernel header files lsof needs.
Those header files were omitted from the standard
VxFS 3.4 distribution. Technical assistance and
testing were provided by Calle Dybedahl <cdy@algonet.se>,
Gary Millen <gary.millen@veritas.com>, Rainer Orth
<ro@TechFak.Uni-Bielefeld.DE>,
Peter C. Vernam
<pvernam@draper.com>, and Donna Yobs
<Donna.Yobs@veritas.com>

Tested on FreeBSD 4.3-STABLE.

Dropped the *claim* that lsof works on UNIX dialects where I no longer have test systems: BSDI 2.1, 3.[01] and 4.0; DEC OSF/1, Digital UNIX and True 64 UNIX 2.0 and 3.2; FreeBSD 2.1.[67], 2.2[.x], 3.[012345] and 4.[01]; HP-UX 10.20; NetBSD 1.[234]; SCO OpenServer 5.0.5; and SCO UnixWare 7.0

Tested on Solaris 9 BETA, s81_36.

4.57 July 19, 2001

Help (-h) and version (-v) output now have URLs for the newly created and timeliest lsof FAQ (00FAQ in the lsof distribution) at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/FAQ

and the man page for the current lsof distribution at:

ftp://lsof.itap.purdue.edu/pub/tools/unix/lsof/lsof_man

Based on a report from Steve Laubscher <slaubs@woodward.com>, modified dlsof.h for PTX 4.6[.1] to avoid a temporary dnlc_t definition needed at PTX 4.5.1.

Corrected test for old Linux kernels in Configure. Henri Karrenbeld <ishtar@cal044202.student.utwente.nl> brought the error to my attention. Limited Linux claims to 2.1.72 and above in the documentation.

Improved HP-UX 11 Configure stanza and stream socket handling.

Constructed a work-around for the HP-UX 11 optional OnlineJFS package. The work-around sadly requires lsof to have a private version of the vx_inode structure, since the OnlineJFS package doesn't update <sys/fs/vx_inode.h>. Troyan Krastev <Troyan.Krastev@ricoh-usa.com> brought the bug to my attention and Michael Bracewell <michael@ra.TSS.PeachNet.EDU> provided a test system where I developed the work-around.

Added locale support to lsof's isprint() test,
based on a suggestion from Dan Mercer <damercer@mmm.com>.
Lsof will use setlocale(), when that function and
its supporting <locale.h> header file are available.

Added OpenBSD 2.9 support.

Based on a report from Aaron Rhodes <arhodes@psionic.com>
and
with testing help from Aaron, made the lsof
4.56 revision compile and work on OpenBSD 2.6.
While that OpenBSD version is no longer supported,
Aaron's report exposed a Configure script bug
affecting OpenBSD versions lsof does support.

Updated for FreeBSD 5.0-CURRENT. Szilveszter Adam
<sziszi@petra.hos.u-szeged.hu> help test. The lsof
FreeBSD ports packager, David O'Brien <obrien@FreeBSD.org>,
assisted.

Tested on AIX 5.1. Loc Le and Nasser Momtaheni of
IBM provided test systems.

4.58 September 13, 2001
Added options to safestrprt() and safestrprtn() to
surround the string with "" and to suppress the
printing of an ending '\n'. Use of these functions
in device cache file error message reporting answers
a suggestion for better error reporting from John
Jackson <jrj@purdue.edu>.

Fixed a Solaris 2.6 and above problem related to
searching for "large" (O_LARGEFILE) files by name;
lsof was using the wrong version of [l]stat(2).
The bug was reported
by Daniel Trinkle
<trinkle@cs.purdue.edu>.

Added AIX 4.1.4 and above XTI socket support.

Added OSR Xenix Shared Data and Semaphore file type
support with modifications supplied by Bela Lubkin.

Updated OPENSTEP support with modifications from Carl
E. Lindberg <lindberg@clindberg.org>. The changes
enable the correct reporting of executable and
library open files ("txt" type).

Limited claims of OpenServer support to the versions where I currently test, 5.0.4 and 5.0.6. (Lsof probably works on 5.0.5.)

Enabled processing of -C option for PSTAT-based HP-UX lsof.

Enabled and tested on FreeBSD 4.4.

Corrected a file system test example in 00QUICKSTART, based on a report from Jun Biao WANG <wangjunb@cn.ibm.com>.

Made available for re-distribution a user-contributed port of lsof 4.51 to Reliant UNIX 5.45. Thomas Mauterer <Thomas.Mauterer@philosys.de> contributed the port.

4.59 October 20, 2001

With the closing of the Sequent Synergy Links Lab by IBM, terminated lsof support for PTX. The last tested PTX lsof revision, 4.58, is available on lsof.itap.purdue.edu in .../lsof/OLD/src.

Adjusted for FreeBSD 5.0-CURRENT NFS header file changes, based on a report from Jos Backus <josb@cncdsl.com>.

Corrected a bug in the way Linux lsof identifies the owner of a process. Lionel Cons <lionel.cons@cern.ch> reported the problem and tested the fix. Added code to avoid stat(2) calls on regular Linux files whenever possible. Lionel reported the need to do this (AFS files) and tested the new code.

Added new output field for raw device number in hex. The field is identified with 'r'. This field is NOT selected when -F or -F0 is specified so that its appearance won't disturb existing scripts that process field output.

Added support for OpenUNIX 8. A test system was provided by Larry Rosenman <ler@lerctr.org>. Matthew Thurmaier <matt@compclass.com> and many people from Caldera provided technical assistance.

Added an additional UVM test to the NetBSD Configure

stanza. Andrew Brown <atatat@atatdot.net> supplied
the test; it recognizes NetBSD 1.5Y UVM changes to
the vnode structure recently committed by Chuck
Silvers.

Applied Configure and get-xnu-headers.sh script
changes suppled by Allan Nathanson <ajn@apple.com>
for Darwin 1.4.

Added for Bela Lubkin <belal@mammoth.ca.caldera.com>
OSR-specific environment variables to supply values
to the Configure script. The variables are described
in 00XCONFIG.

Added an IP version selector to the -i option
parameters.

4.60 November 9, 2001
Added special handling to and corrected bugs in
the matching of IPv4 in IPv6 addresses to -i6:<...>
selectors.

Made 00FAQ corrections and updates, based on
discussions with Igor Schein <igor@txc.com>.

Modified Configure script to detect a 64 bit capable
gcc compiler and permit it to be used to build 64
bit (PA-RISC 2) lsof for HP-UX 11.00. Tested
with
HP's gcc package, which Rich Rauenzahn of HP kindly
installed on a test system at HP. Stefan Marquardt
<stefan.marquardt@hagebau.de> helped test.

Made lsof's method of killing its child process
more robust, based on a suggestion from Bela Lubkin
<belal@caldera.com>.

Modified all dialect Makefile segments to accept
select -v #define's from the environment -- a
builder's comment, host, logname, system information
and user name. This was done for Bela Lubkin, so
he can "tune" the -v output when he packages lsof
in the upcoming Caldera OSR 5.0.7 release.

Changed Perl scripts in scripts/ to put the lsof
path consistently in $LSOF. Also added a fix from
Bela Lubkin to scripts/big_brother.perl5 that allows
it to tolerate SCO OSR "ago" clauses in open UDP

file information. Strengthened emphasis in
scripts/00README that the scripts are examples that
shouldn't be expected to run on all UNIX dialects
without modification.

At Bela Lubkin's
suggestion changed the device
cache file format examples in 00DCACHE and 00FAQ
to avoid "%U%". That's an SCCS escape sequence.

Added support for OpenBSD 3.0.

Added +DAportable to CFLAGS for 32 bit HP-UX 11.
Amir Katz <Amir_Katz@bmc.com> suggested the addition.

4.61 January 22, 2002
Updated field output example Perl scripts in the
scripts/ subdirectory to discover the lsof path,
starting at .. and proceeding through the PATH
environment variable's directories.

Added minor OSR Configure script fixes, provided
by Bela Lubkin <belal@caldera.com>.

In response to a report from Joshua Wright
<Joshua.Wright@jwu.edu> modified NetBSD and OpenBSD
Configure stanzas and sources so that lsof can be
built when there is no system source tree (e.g.,
/usr/src/sys).

In response to a report from Peter Valchev
<pvalchev@openbsd.org> improved the UVM test in
the OpenBSD Configure stanza.

Updated Configure script to recognize FreeBSD 4.5.
Updated for FreeBSD
5.0 procfs and pseudofs changes.

Updated HP-UX stanza to see if the compiler named
in the LSOF_CC environment variable is the bundled
compiler. If it is, "-O" is omitted from the
compiler flags.

Updated Digital UNIX 4.x and Tru64 UNIX error message
related to kernel name list failures. Added an FAQ
section about how a kloadsrv daemon failure can cause
knlist(3) to fail. The condition was reported by
Douglas B. Jones <douglas@gpc.peachnet.edu>

Based on a report from Mark W. Eichin <eichin@thok.org>
made Linux lsof capable of handling and reporting
file sizes greater than 32 bits.

Tested on Solaris 9 BETA-Refresh.

Corrected a bug in the matching of IPv4 addresses,
mapped in IPv6 addresses, to an IPv4 parameter to
an -i option.

Ported to 64 bit Power AIX 5.1 kernel with advice
from David Clissold <cliss@austin.ibm.com> and Marc
Stephenson <marc@austin.ibm.com>, and on a test
system provided by Loc Le <lple@us.ibm.com>.

4.62 March 7, 2002
Updated
00README to reflect the usefulness of gcc
for building AIX lsof. Documented a report from
Brian L. Gentry <BGentry@nationsrent.com> of success
on AIX 4.3.3. I documented my success on 32 bit
Power AIX 5.1 and my lack of success on ia64 AIX
5.1 and 64 bit Power AIX 5.1.

Improved UnixWare >=7.1.1 reporting of UNIX socket
NAME field information for NonStop Cluster systems
with a patch provided by John Hughes <john@Calva.COM>.
Offered John's improvement as a patch to lsof 4.61.

Corrected bugs in handling of open files on block
devices by OSR lsof. The bugs were reported by
Bela Lubkin <filbo@deepthought.armory.com>.

Fixed bug in writing >32 bit device numbers for
block devices to the device cache file.

Added support for reporting block special nodes
not in /dev (or /devices). That required "like
device special" be changed to "like block special"
and "like character special". (00FAQ was updated.)

Based on a report from Peter Valchev
<pvalchev@openbsd.org>
improved the definition of the source for NetBSD
and OpenBSD kernel symbols (the nlist() source
file). NetBSD now defaults to getbootfile(3) if
it is available, /netbsd otherwise. OpenBSD now

defaults to /dev/ksyms if it is available, /bsd
otherwise.

Made possible compilation under BSD/OS (BSDI) 5.0
with changes to Configure, dialects/bsdi/dlsof,
dialects/bsdi/dproc.c and lib/rnmh.c. The changes
were suggested by Steven Hinkle <hinkle@bsdi.com>.
Note that these changes do not substantiate a claim
that lsof works on BSDI 5.0, because I haven't
tested it there.

Updated OpenUNIX private <sys/fs/memfs_mnode.h>,
based on a report from Larry Rosenman <ler@lerctr.org>
that it had been updated by Caldera patch OU800PK3.
Unfortunately the patch only corrects some of the
problems with the header file, so it is still
necessary to distribute a private patched version
of it with the lsof sources.

Applied a man page correction
reported by Frederic
Delanoy <max_ok@yahoo.com>.

Corrected cast bugs related to using the HP-UX
bundled C compiler on HP-UX 11.11.

4.63 April 23, 2002
Added HPUX_BOOTFILE environment variable for use
by the Configure script in determining HP-UX kernel
configuration information -- e.g., the state of
the ipis_s structure in the HP-UX 11 kernel. The
change was suggested by Marc Bejarano <beej@alum.mit.edu>.
Marc also suggested some changes to the HP-UX
section in 00FAQ that discusses Configure's use of
q4 for HP-UX 11.

Fixed a bug in the Solaris lsof file system matching
code. It was not reporting that VCHR files in
/devices were in / when /devices was in /, too.

Corrected bugs in device number, file size, file
offset, and raw device number field output generation.

Added recognition of OpenBSD 3.1 to the Configure
script with a suggestion from Peter Valchev
<pvalchev@sightly.net>. Note that this change does
not constitute a claim that lsof

works on OpenBSD
3.1, because I haven't tested it there.

Built an automated test suite. (See 00TEST and
the tests/ sub-directory of the lsof main directory).
Bela Lubkin requested it. Dale Talcott, John
Hughes, and Larry Rosenman helped me validate it
on their systems.

During the development of the test suite I discovered
the following lsof bugs or missing features, and
corrected or supplied them.

* Corrected the reporting of locks for:
  o Digital UNIX 4.0d and Tru64 Unix 5.[01];
  o HP-UX 10.30 and 11.00;
  o OpenUNIX 8;
  o UnixWare 7.1.1.

* Enabled HP-UX 10.30 and 11.00 to report open NFS
  file link counts.

* Corrected the reporting of UNIX domain socket
  names for Apple Darwin, FreeBSD 4.5 and above,
  NetBSD 1.4.1 and above, and for OpenBSD 3.0 and
  above.

* Enabled HP-UX 11.11 to stat(2) large files.

* Fixed handling of combination 32 and 64 bit
  device numbers in AIX 64 bit architectures.

Updated the AIX 4.3.3 NFS rnode
recognition code,
first installed at revision 4.51. It looks like
some IBM update has restored a single rnode structure
independent of the machine bit width.

Updated the NetBSD and OpenBSD sources so NetBSD
can process DTYPE_PIPE files, as OpenBSD was already
able to do.

Updated Darwin get-xnu-headers.sh script to reflect
information about a recent reorganization of the
Darwin CVS hierarchy, supplied by Allan Nathanson
<ajn@apple.com>.

Added defense against the standard I/O descriptor

attack.

4.64 June 26, 2002
Corrected some FreeBSD pre-processor directives.
David O'Brien <obrien@NUXI.com> pointed them out.

Updated lsof's main() function to: 1) close all
open file descriptors above 2 before starting; and
2) to set a non-interfering umask. Moved GET_MAX_FD
test from misc.c to proto.h, so that main() could
use it. Added multiple-include protection to
proto.h.

Moved FAQ's test suite Q's & A's to a more appropriate
section. Added
a Q&A on HASSECURITY option and
its affect on searching for open files. (That was
already in the man page.)

Updated hpux/kmem/dnode.c for HP-UX < 11 compilation
with information from John Dzubera <Zube@CS.ColoState.EDU>.
While lsof doesn't support HP-UX < 11 any more, I
try to avoid disabling it there when possible, and
a locking fix for HP-UX >= 11 in lsof 4.63
inadvertently disabled compilation of lsof for
HP-UX < 11. Fixed long-standing bug in HP-UX 10.20
lock reporting.

Removed language from the test suite programs that
requires an ANSI-C compiler. This allowed the test
suite to be validated with cc and gcc on the un-
supported HP-UX 10.20.

At the suggestion of Manuel Bouyer <bouyer@antioche.eu.org>
switched NetBSD and OpenBSD lsof from using nlist()
to using kvm_nlist(). Made the same change for
BSDI, Darwin, and FreeBSD.

Validated test suite on OPENSTEP 4.2.

In response to a suggestion from Jeff Stoner
<jstoner@blackboard.com> enhanced
support for the
FD list of the -d option to allow it to be either
an exclusion or inclusion list, using the '^' prefix
to denote exclusions.

Made adjustments for FreeBSD 4.6 and 5.0-CURRENT.

Fixed a FreeBSD /etc/make.conf CFLAGS extraction
bug, reported by Kris Kennaway <kris@obsecurity.org>,
and new a bug in the fix, reported by Eric Cronin
<ecronin@eecs.umich.edu>

Added nullfs support for FreeBSD, NetBSD, and OpenBSD
at the request of Andrew Brown <atatat@atatdot.net>.

Modified all readmnt() functions to ignore mounted-on
directory names that don't begin with '/'.

Tested on NetBSD 1.6A and OpenBSD 3.1.

Upgraded to Solaris 9 FCS with two changes to the
BETA-Refresh support: 1) an adjustment to dnode.c
for a change in the so_so (sonode) structure; and
2) addition of Solaris 9 FCS specific DNLC code.
David Comay <David.Comay@Eng.Sun.COM> sent me the
dnode.c change and Casper Dik <Casper.Dik@sun.com>
helped with the new DNLC support code.

Applied
OpenUNIX changes that permit lsof to compile
and run on the upcoming 8.0.1 release. The changes
were supplied by Robert Lipe <robertl@caldera.com>.
Larry Rosenman <ler@lerctr.org> provided a test
system.

Added Solaris fd file system support.

4.65 October 10, 2002
Adjusted for change in FreeBSD 5.0-CURRENT inode
structure, reported by David O'Brien <obrien@NUXI.com>.
Adjusted for changes in FreeBSD 5.0-CURRENT <sys/vnode.h>.
One change was reported by Anders Nordby
<anders@FreeBSD.org>. Adjusted for FreeBSD 5.0-CURRENT
on sparc64 architecture.

Enhanced the error reporting of Solaris lsof when
it detects a kvm_open() failure, and added a 00FAQ
entry on the cause, based on a report from Peter
J. Bertoncini <pjb@anl.gov>.

Enabled compiling of lsof for NetBSD 1.5 with the
NULL file system, using a patch from Andrew Brown
<atatat@atatdot.net>.

Removed a hack in the LTbigf test program that was

once needed when it was compiled on
Solaris 9 BETA-
Refresh with gcc. The hack isn't needed on Solaris
9 FCS. Janet Hempstead <jan@library.carleton.ca>
brought the need for this change to my attention.

Applied a patch, supplied by Andrew Brown
<atatat@atatdot.net>, that updates lsof for NetBSD
version 1.6F. Corrected handling of the NetBSD
nullfs.

Updated to BSDI BSD/OS 4.3 on a test system kindly
provided by Terry Kennedy <terry@tmk.com>.

Updated to FreeBSD 4.7.

Updated to Apple Darwin 1.5, 5.x and 6.x with
patches supplied by Allan Nathanson <ajn@apple.com>.
The patches include IPv6 support.

Updated Configure to use the -bnolibpath loader
option when building lsof on a PowerPC, running
AIX 5 or greater. Valdis Kletnieks
<Valdis.Kletnieks@vt.edu> informed me this was
needed. Lsof for AIX 5.x was initially developed
on the IA64, where -bnolibpath can't be used and
I didn't think to restore it to PowerPC loads when
AIX 5.x became available for that architecture.

Updated
to UnixWare 7.1.3 on a test system provided
by Larry Rosenman <ler@lerctr.org>. Removed claims
that lsof works on OpenUNIX 8.0.1, because UnixWare
7.1.3 is the release name of OpenUNIX 8.0.1.

Based on a comment that his e-mail address was
wrong in the lsof distribution from Kenneth Stailey
<kstailey@disclosure.com>, removed all e-mail
addresses from lsof documentation files except this
one, 00DIST. The addresses in 00DIST are used to
send revision release notices to those who contributed
to a revision, but the addresses in this file for
previous revisions and in other documentation files
sometimes grow stale and are never validated.

4.66 December 22, 2002
Acquired Solaris 7 and 8 test systems, courtesy of
John Dzubera <Zube@CS.ColoState.EDU>. Updated

00TEST and tests/TestDB accordingly.

Clarified FreeBSD 5.0 architecture claims at the
suggestion of David O'Brien <obrien@NUXI.com>.
Also implemented David's suggestion to change
Intel to x86.

Installed
changes to DNLC handling in OSR lsof in
preparation for handling changes in the OSR 5.0.7
DNLC cache. Information about the changes and
patches to handle them were supplied by Bela Lubkin
<filbo@deepthought.armory.com>.

Upgraded True 64 UNIX support to the 5.1B release
on a test system provided by Berkley Shands
<berkley@cse.wustl.edu> Had to used relaxed ANSI
compilation because of an error in a system header
file and other lsof source usages.

Implemented the HASNOSOCKSECURITY compile-time
option. When it and HASSECURITY are defined, lsof
will be built to list only the user's open files,
but will also list anyone else's open socket files,
provided the "-i" option selects their listing.
Updated the Customize script to ask about setting
HASNOSOCKSECURITY. Left it undefined in all dialect
machine.h header files. This change was requested
by Kenneth Stailey <kstailey@speakeasy.net> for
use with ntop.

Added support for OpenBSD
3.2 and its kernel trace
file.

Improved lsof help (-h) and version (-v) information
reporting.

Fixed a FreeBSD 4.7 and above off-by-two UNIX domain
socket path termination bug, reported by Ken Stailey
<kstailey@speakeasy.net>

4.67 March 27, 2003
Began the transition of the lsof ftp server host
name from vic.cc.purdue.edu to lsof.itap.purdue.edu.
That reflects Purdue organizational changes. This
first step makes the new name an alias to the old
one. The old name, vic.cc.purdue.edu, will remain

usable for an extended period.

Corrected a revision number reference in section
17.17 of 00FAQ on the appearance of Solaris negative
DNLC caching handing.

Updated 00FAQ discussion of compilers for 64 bit
Solaris.

Validated test suite for 64 bit Solaris 8 and gcc.

At the request of Alek O. Komarnitsky <alek@komar.org>
added the "+c <width>" option to enable optional
changing of the COMMAND column output maximum width
from the default to <width>.
The default maximum
width remains CMDL, as defined in lsof.h.

Fixed three AIX kernel bit size detection bugs,
one in the AIX Configure script stanza, the second
and third in the AIX dproc.c get_kernel_access()
function. The bugs were reported by Pierre-Yves
Fontaniere <pyf@cc.in2p3.fr>, who tested the fixes.

Added kernel event queue file support for FreeBSD,
NetBSD and OpenBSD. Andrew Brown <atatat@atatdot.net>
supplied the code.

Updated to AIX 5.2 on a test system provided by
Dale Talcott <dtalcott@purdue.edu>. Had to build
work-arounds for two missing AIX 5.2 header files,
<j2/j2_snapshot> and <proc/proc_public.h>. Corrected
an off-by-one UNIX socket addressing bug. Taught
AIX lsof to handle both jfs and jfs2 files at the
same time. Adjusted for an IBM mistake in the
sizing of the fdsinfo structure in <procinfo.h>
Toshiya Nakamura <TOSHIYAN@jp.ibm.com> helped test,

Updated to FreeBSD 4.8. Corrected another bug in
FreeBSD UNIX domain
socket name handling.

Corrected gcc build problems on HP-UX 11i, reported
by Yuliy Minchev <yuliy@mobiltel.bg>.

Updated BSDI BSD/OS support to 4.3.1.

Augmented a lock ID test on NetBSD to check if the

ID is an LWP pointer.

4.68 June 18, 2003

Enhanced Configure script's cleanup operations.

Added support for OpenBSD 3.3, based on a report from Peter Valchev <pvalchev@sightly.net>.

Improved the description of the detached PGP signature certificate file in the main lsof README file, based on a suggestion from Diana Stockdale <diana@mpl.ucsd.edu>.

Installed a work-around for FreeBSD 5.0-CURRENT on Alpha to avoid a compiler register use complaint.

Corrected a 'c' option error message. Gnele <blaadeleng@yahoo.com> reported the problem.

Upgraded EXT2FS and UFS support for NetBSD and OpenBSD to handle new inode information, and the fast UFS1 and UFS2 file systems.

With the help of Andrew Brown <atatat@atatdot.net> determined the NetBSD snapshot (1.6F) at which <sys/mount.h> could be included under _KERNEL, thus eliminating the lsof netexport.h hack. The same change applies to OpenBSD versions 3.3 and above.

Applied a patch from Armin Gruner <ag@muc.de> that corrects the use of the HASPROCFS definition in the FreeBSD dialect sources.

Corrected spelling errors in 00FAQ and in the generated 00.README.FIRST_<version> file of the distribution archive. John Jackson <jrj@purdue.edu> and Ray Phillips <r.phillips@jkmrc.uq.edu.au> spotted and reported the errors.

Corrected a spelling error in a comment and incorrect use of an alarm function in the LTsock test program.

At the suggestion of Stuart Anderson <sba@srl.caltech.edu> added preliminary (and incomplete) SAM-FS file system support to Solaris lsof. Completion awaits availability of SAM-FS internals.

Fixed a Solaris device name printing bug, reported by
Ric Anderson <ric@tick.Telcom.Arizona.EDU>, only
visible when HASDCACHE is
not defined. Ric helped
test the fix.

Fixed an AIX kernel bit size handling bug related
to the NFS node (rnode) structure.

Corrected a print_kptr() function call error in the AIX
AFS code, reported by David Steiner
<david.r.steiner@Dartmouth.EDU>. Upon further reflection
and because I no longer have appropriate AIX AFS test
systems, disabled AIX AFS support in the Configure script
for AIX versions above 4.3.3.0 or AIX AFS versions above 3.5.

Added support for FreeBSD 5.1.

With advice from Allan Nathanson <ajn@apple.com> adjusted
the Darwin get-xnu-headers.sh script to access the kernel
header files needed by lsof from a new form of the Apple
open source repository.

Installed Linux and lsof library bug fixes and
improvements, supplied by Marian Jancar <mjancar@suse.cz>.
One Linux improvement handles mount strings that
have octal escapes in them, eg., \040 for embedded
blanks. Marian tested the changes.

4.69 October 16, 2003
Received and
applied an OpenBSD patch from Peter Valchev
<pvalchev@sightly.net> that replaces a ctob() call with
a sysconf() call. Peter claims sysconf() is needed for
OpenBSD on SPARC. (It is not needed for NetBSD on SPARC.)

With the upgrade of my only Solaris 7 test system
to, Solaris 8, dropped the *claim* that lsof works
on Solaris 7. That doesn't mean it won't work
there, so those who want lsof for Solaris 7 probably
should be able to build it there and it probably
will work there.

Revised lsof's DNLC handling for BSD derivatives,
including: BSDI; Darwin, DEC OSF/1, Digital UNIX
and Tru64 UNIX; FreeBSD; NetBSD; and OpenBSD. The
latest NetBSD distribution's dropping of the vnode
capability ID (v_id) required the revision.

Adjusted to the latest FreeBSD 5.1-CURRENT.

Added NetBSD support for using kvm_getproc2().

Added a patch from Andrew Brown <atatat@atatdot.net>
to handle NetBSD enum conflicts and changes in the
<miscfs/kernfs/kernfs.h> and <miscfs/procfs/procfs.h>
header
files.

Added a "#define _KERNEL" to the AIX dnode2.c source
file for compatibility with a new <j2/j2_inode.h>
AIX 5.2 header file version. The addition was
supplied by Dick Dunbar <Dick.Dunbar@Siebel.com>
and was offered as a patch to lsof 4.68/

Added support for a second type of Solaris SAMFS.
Stuart Anderson <sba@srl.caltech.edu> provided the
support. SAMFS support in lsof SOLARIS remains
scanty, because Sun won't release any details on
its kernel structures.

Dropped the *claim* that lsof works on AIX 4.3.3,
because I was unable to test it there. That doesn't
mean it won't work there, so those who want lsof
for AIX 4.3.3 probably should be able to build it
there and it probably will work there.

Updated for Solaris 10 on test systems provided by
Mike Miscevic <miscevic@hotpop.com>. Casper Dik
<casper@holland.sun.com> provided significant help.
During the Solaris 10 port found and fixed an lofs
handling bug that
prevented reporting of open lofs
file lock status.

Updated the DNLC test, LTdnlc, to provide a possible
explanation about file systems on which the test
might fail.

Modified the procedure for obtaining missing Darwin
XNU kernel header files. The new one requires more
manual intervention, but is the best that can be
done with the way Apple open sources are now
organized. 00FAQ explains the new procedures for
those not used to downloading Apple open source
files.

Added support for Apple Darwin 7.0 (Mac OS X 10.3)
with patches supplied by Allan Nathanson <ajn@apple.com>.
Dropped the *claim* that lsof builds and works on
Apple Darwin below 6.0.

Validated lsof on FreeBSD 4.9, using a test system
provided by Ben Lewis <bl@purdue.edu>.

Validated lsof on FreeBSD 5.1-CURRENT for Amd64.
David O'Brien <obrien@FreeBSD.org> provided a test
system.

Changed the NetBSD Configure stanza to do header
file searches in /usr/include by default. The
LSOF_INCLUDE
and NETBSD_SYS environment variables
may still be used to specify other search paths.
Discussions with Andrew Brown and Wolfgang S.
Rupprecht <wolfgang@wsrcc.com> led to the change.

4.70 January 16, 2004
Improved shell-portability of the linux stanza of
the Configure script with a patch from Paul Jarc
<prj@po.cwru.edu>.

Added a "silent" rule to tests/Makefile for Paul.
Updated, extended and clarified the test suite
documentation in 00FAQ and 00TEST.

Fixed Solaris 10 dlsof.h typo, reported by Mike
Miscevic <miscevic@hotpop.com>. The typo prevents lsof
from loading cleanly in Solaris 10 builds past 40.

Fixed a Solaris HSFS node number reporting bug and
added a structure definition work-around for Solaris
10.

Converted PGP signing to GPG. My previous PGP key can
be used, but the gpg "--allow-non-selfsigned-uid"
option may have to be used when it is imported into a
GPG key ring.

Added bz2 compression.

Updated for OpenBSD 3.4.

Added

a work-around for a missing header file in the
s10_44 Solaris 10 build.

Added support for FreeBSD 5.2-BETA and 5.2-CURRENT.

Updated Linux AX25 support with modifications supplied
by Lutz Poetschulat <dl9cu@db0zwi.de>.

Added raw IPv6 support to Linux lsof.

Improved handling of parameters after "-i@".

Improved file name test in LTdnlc.c.

Added loop count controls to the reading of Solaris
lock chains. The change was implemented as a result of
a report from Steve Gonczi <steve@relicore.com>.

Based on a report from John Jackson <jrj@purdue.edu>,
enabled a Solaris 10 <sys/lgrp.h> work-around for
Solaris 9, too. (Patch 112233 installs an lgrp.h on
Solaris 9 that needs the work-around.)

With help from Andrew Brown <atatat@atatdot.net> and
John Heasley <heas@netbsd.org> added log-structured
file system (LFS) support for NetBSD and OpenBSD.

Added AMD64 to the list of FreeBSD 5.x-CURRENT
supported architectures. FreeBSD.org provides a test
system,
courtesy of (I believe) David O'Brien
<obrien@FreeBSD.org>.

Added a cast to lseek() in the HP-UX /dev/kmem-based
kread() function to make it work properly with the
bundled HP C compiler.

4.71 March 11, 2004
Added text file support to Apple Darwin lsof and
enabled the lsof executable portion of the LTbasic
test. Added support for Darwin kernel queue, POSIX
semaphore and POSIX shared memory files. Tested on
Darwin 7.2 (aka Mac OS 10.3.2).

Added process_kqueue() function prototypes for FreeBSD,
NetBSD and OpenBSD.

Picked some lint in AIX sources, lib/rnmh.c and

tests/LTsock.c.

Added "-x [fl]" cross-over option, which enables +d and +D processing to cross over symbolic links and|or file system mount points. Discussion with Johan Lindquist <johan@smilfinken.net> and Eric Williams (aka The Ghost In The Machine) <ewill3@earthlink.net> on Linux news groups revealed the need for the option.

Updated support for UnixWare 7.1.4.

Added support for the optional reporting of socket options, socket states and TCP flags for most currently supported dialects. John Smith <lbalbalba@hotmail.com> and Tristan Nefzger <tn@bhtrader.com> requested the information. The dialects and their versions for which this feature has become available include:

AIX 4.3.2 and 5.[12]
Apple Darwin 7.2
BSDI BSD/OS 4.3.1
Digital UNIX and Tru64 UNIX 4.0
FreeBSD 4.9 and 5.2
HP-UX 11 and 11.11 (aka 11i)
NetBSD 1.6ZH
OpenBSD 3.4
OPENSTEP 4.2
OpenUNIX 8
SCO OpenServer Release 5.0.6
Solaris 2.6, 8, 9 and 10
UnixWare 7.1.[134]

Modified the Configure stanza for HP-UX 11 with better q4 detection. Steve Bonds <3vhmxxm02@sneakemail.com> supplied the modification.

Applied a patch from Mike Miscevic <miscevic@hotpop.com> to enable lsof to compile with the zone support in the Solaris 10 s10_b51 release. Added information on lsof zone behavior to 00FAQ.

Added a "-z [z]" option to Solaris 10 lsof. It enables the listing of zone name and can also be used to select the listing of processes and their files from specified zones.

4.72 July 13, 2004

Corrected Solaris 10 ZONE column title display bug with a patch from Joep Vesseur <Joep.Vesseur@Sun.COM>. Joep's fix was offered as a patch to 4.71.

Based on a report from Jean-Pierre Radley <jpr@jpr.com> about an unexpected GNU uname Configure interaction on OSR, and working from information received from Bela Lubkin, changed the OSR Configure stanza to use /bin/uname instead of uname. Added an FAQ entry about Configure version detection problems.

Added the +m and "+m m" options in response to a dialog with Robert T. Brown <rbrown@netmentor.com>. The options allow the creation of a mount table supplement file which can be used on selected dialects to get device numbers when stat(2) and lstat(2) can't deliver them. (That's generally the result of an inaccessible NFS server.) Currently the new options are supported only on Linux.

Made cpumask_t typedef _KERNEL compensation for FreeBSD 5.2-CURRENT. Refined it for 5.2.1-RELEASE with testing help from Scott Ellentuch <tuc@ttsg.com>.

Added support for FreeBSD 4.10. Larry Rosenman <ler@lerctr.org> kindly provided a test system.

Added support for NetBSD 2.0 with patches supplied by Andrew Brown <atatat@atatdot.net>. Andrew also provided two test systems.

Made handling of Linux maps file more robust, based on a report from Jan Blunck <J.Blunck@tu-harburg.de>. As a side benefit, made handling of generated stat(2) information more flexible.

As a result of a discussion with Jason Fortezzo <fortezza@mechanicalism.net>, adjusted lsof for Solaris to obtain the maximum user name length from ut_name of the utmpx structure, if <utmpx.h> exists.

Tested under OpenBSD 3.5.

Updated 00README information about using gcc (via the Configure aixgcc abbrevisiation)

to compile lsof on
AIX. Ann Janssen <ajanssen@nebook.com> made me aware
the information was out of date.

Added an AIX SIGDANGER handler and some 00FAQ sections
on lsof memory usage after a discussion with Tom Qin
<tom.qin@citigroup.com> about lsof memory usage.

Added scripts/sort_res.perl5, contributed by Fabian
Frederick <fabian.frederick@gmx.fr>. The script
displays lsof output sorted by size and path name.

Improved handling of files on Linux NFS mount points
that use the root_squash option, based on discussions
with Paul Szabo <psz@maths.usyd.edu.au>.

Updated FreeBSD 5.2-CURRENT support, based on a problem
report from Filippo Natali <filippo@widestore.net>.

Corrected improper FreeeBSD 5.x-CURRENT #if condition,
reported by Kim Culhan <kimc@kim.net>.

Added a Configure script work-around for AIX 5.2 lsof
with JFS2, compiled by gcc >= 3.3. The work-around
was supplied by Florian M. Weps <fmw@hactrn.ch>.

4.73 October 21, 2004
Added
an __XPG4_CHAR_CLASS__ #define before
#include'ing <ctype.h> on Solaris to restore lsof's
ability to display special characters such as acute-e.

Added wide-character (e.g., UTF-8) support where
possible, prompted by a request from Kyungjoon Lee
<kjoonlee@gmail.com>. Some older dialects -- e.g.,
NetBSD 1.4.1 -- don't support wide characters, so the
wide character support is enabled by definitions in
each dialect's machine.h. Dialects with wide-
character support are listed in 00FAQ.

Make a FreeBSD 5.2-CURRENT adjustment for <sys/pipe.h>,
supplied by Sergey A. Osokin <osa@FreeBSD.ORG>.

Implemented a Linux feature request made by Jakub
Jelinek <jakub@redhat.com> that enhances lsof's ability
to locate UNIX domain sockets whose paths are named as
arguments. Jakub supplied suggested code.

Dropped *claims* that lsof works on AIX below 5.1, SCO
Dropped *claims* that lsof works on AIX below 5.1, SCO
Openserver 5.0.4, Tru64 UNIX 5.0, and UnixWare
below
7.1.4. Lsof will probably build and work on those UNIX
dialect versions, but I no longer have any way to test
lsof on them.

Added support for FreeBSD 5.3 and 6.0. The FreeBSD
5.3 support hasn't been tested.

Added FD test code that will allow dialect versions to
test FD option selections. Used the new code in the
PSTAT-based HP-UX lsof to enable it to avoid scanning
the mount table when its information is not needed.
The addition was made in response to a query from
Harvey Garner <Harvey.Garner@championusa.com> about
lsof performance in a busy NFS environment.

Upgraded lsof's AIX support level to AIX 5.3, based on
a report from Dick Dunbar <Dick.Dunbar@Siebel.com>. (I
have not tested lsof under AIX 5.3.) Based on Dick's
recommendation and local testing changed the C for AIX
version 6 and higher -qmaxmem option value to -1.

Made LSOF_AR environment variable more useful and
documented it in 00XCONFIG.

Corrected the use of sum(1) to
generate signatures for
the lsof distribution and binaries to match the
documentation that claims it is sum -r output. Jin
Guojun <jin@george.lbl.gov> noticed and reported the
problem.

Tested under OpenBSD 3.6.

Added checksum and GPG certificate files for the bz2,
gz and Z lsof distribution archives. The new files
reside with the distribution archives and supplement
the signature information already inside the archives.

Validated on Solaris 10, i8xpc, build s10_63.

4.74 January 17, 2005
Fixed a Solaris segment fault bug on systems that lack
a /dev/allkmem device. Offered the fix as a patch to
lsof 4.73. The bug was reported by Donald Zoch

<donald.zoch@amd.com>.

Updated lsof for FreeBSD 6.0 and higher for a change in
<sys/vnode.h>, based on a report from Sergey A. Osokin
<osa@FreeBSD.ORG>. Made the update available in a 4.74
'A' edition pre-release.

Filed an HP bug report about missing pstat(2) CWD info
for LOFS on HP-UX 11.11 and higher.
The missing CWD
info was noticed by Ermin Borovac <e.borovac@bom.gov.au>.
Added info to 00FAQ about the problem, which can cause
the lsof test suite's LTbasic test to fail.

Updated the q4-generated tcp_s.h in the lsof
distribution and added socket option support for HP-UX
11.00. Erwin Reyns <ereyns@europarl.eu.int> helped
test.

Updated for Solaris 10, build s10_69, with a patch
supplied by Mike Miscevic <miscevic@hotpop.com>.

Added v_path support to Solaris 10 lsof. That relieves
it of having to read and decode the kernel DNLC, and
delivers full paths more reliably.

Added specialized NFS4 support to Solaris 10 lsof.

Applied Solaris 10 patches to lsof supplied by Casper
Dik <casper@holland.sun.com>.

Updated lsof for NetBSD 2.99.10 and tested it on a
system provided by Andrew Brown <atatat@atatdot.net>.

Added support for the FreeBSD 6.0-CURRENT f_vnode
pointer in the file structure.

Added BSDI, FreeBSD, NetBSD and OpenBSD support for
the
*effnlink member of the inode structure. This makes
the lsof LTnlink test run faster on all modified
dialects and correctly on OpenBSD.

Added ptyfs support for NetBSD, using modifications
provided by Andrew Brown.

Changed the netbsd Configure stanza to look by default
for system header files in both /usr/include and

/usr/src. (The NETBSD_SYS environment variable can
still be used to select an alternate for /usr/src.)

Corrects two FreeBSD 4.10 RPC/XDR type definitions.

Added an FAQ Q&A about setuid and setgid restrictions
in HP-UX 11.11. The information in the answer was
supplied by Frank Sanders <frank.sanders@siemens.com>.

Added abbreviations for AXI FCIO and FSNAPSHOT file
flags. Holger VanKoll <Holger.VanKoll@swisscom.com>
reported the missing FCIO.

Adjusted lsof's private AIX 64 bit rnode structure for
64 bit AIX 5.2 systems. (IBM doesn't distribute a
correct <nfs/rnode.h> for it.)

Corrected a Linux socket inode printing bug
reported by
Igor Schein <igor@txc.com>.

Updated for FreeBSD 4.11. The support compiles but
hasn't been tested.

Back-ported a FreeBSD 6.0-CURRENT fix to FreeBSD
5.3-RELEASE-p1. That was done to solve a compilation
problem reported by Radko Keves <rado@daemon.sk>.

4.75 May 16, 2005
Dropped the *claim* that lsof works on DEC OSF/1 and
Digital UNIX, since my last 4.0 test system has been
removed. The last tested distribution of lsof on DEC OSF/1
and Digital UNIX was revision 4.74. It has been archived
on lsof.itap.purdue.edu in pub/tools/unix/lsof/OLD/src.

Added negation forms to the values in the -g (PGID) and
-p (PID) lists. Negated PGID and PID values, like
negated UID or login name values, are applied without
ORing or ANDing and take effect before any other
selection criteria are applied.

At the request of Marcin Gozdalik <gozdal@gmail.com>
added a -X option for Linux. The option inhibits the
reading of the /proc/net/tcp* and /proc/net/udp*
files.

Based

on a report from David Gutierrez
<davegu1@hotmail.com> changed DEC OSF/1 process table
allocation to request memory in smaller increments.

Based on a report from jayjwa <jayjwa@atr2.ath.cx>
updated the Customize script to use "tail -n 1" where
possible.

Enabled support for FreeBSD 5.4.

Improved the BSDI, FreeBSD, NetBSD, OpenBSD and Solaris
kvm_open() and kvm_openfiles() error messages.

Enabled support for NetBSD 2.99.12.

Improved HP-UX Configure stanza with help from Piet
Starreveld <pstarrev@csc.com>. Picked some lint Piet
found.

Enabled IPv6 support for HP-UX > 11. Piet Starreveld
helped test it on 11.23, among others.

Updated for HP-UX 11.23 on the ia64 architecture.

Updated to latest FreeBSD 6.0-CURRENT, using a test
system provided by Andrzej Tobola <ato@iem.pw.edu.pl>.

Added support for SCO OSR 6.0.0 and UnixWare 7.1.4 with
help from Richard at SCO.

Corrected a Linux bug in NFS handling, reported by Karel
Zak
<kzak@redhat.com>. Karel supplied a patch.

Improved the code for accessing an AIX 3.2 and higher
sockaddr_un structure, thus eliminating a segmentation
fault possibility.

Updated for AIX 5.3.

Added preliminary (DEBUG) support for the AIX SANFS
file system.

Fixed a bug in the Solaris 10 processing of the vnode's
v_path pointer with code supplied by Edward Jajko
<ejajko@portal.com>. The fix was offered as a patch to
4.74.

Dropped support for OpenUNIX 8, since a test system is
no longer available. Archived an OpenUNIX-only
distribution of the last revision (4.74) tested on
OpenUNIX in pub/tools/unix/lsof/OLD/src.

Tested under Openbsd 3.7.

Tested under Darwin 7.7.0.

Enabled building on amd64 Solaris 10 with hints from
Marc Aurele La France <tsi@ualberta.ca>. Marc provided
a test system.

Supplied a missing quote in the FreeBSD Configure
stanza. Carl Cook <Info@quantum-sci.com> reported the
problem.

Removed "-O" option from
tests/Makefile so that the
HP-UX bundled compiler won't complain.

4.76 August 30, 2005
Corrected an example and spelling errors in man page.

Updated for Apple Darwin 8.x with changes supplied by
Allan Nathanson <ajn@apple.com>. Allan also provided a
test system.

Completed documentation of CLRLFILEADD in all machine.h
files.

At the request of Chris Markle <cmarkle@sendmail.com>
added partial listen queue length to socket options
displayed when -Tf is specified. Partial queue length
is not reported for all dialects. (00FAQ lists the
ones where it is reported.)

Updated for FreeBSD 7.0 with information supplied by
Andrzej Tobola <ato@iem.pw.edu.pl>.

Updated Solaris VxFS support for VxFS versions 4 and
above with technical advice from Craig Harmer
<craig_harmer@symantec.com>, Gary Millen
<gary_millen@symantec.com> and Chuck Silvers
<charles_silvers@symantec.com>. Testing help was
provided by Michael Antlitz <mantlitz@prophasys.com>,
Steve

Ginsberg <steve@dhapdigital.com> and Kenneth
Stailey <kstailey@yahoo.com>.

Fixed a Solaris address space map processing bug.
Janardhan Molumuri <mjanardhan@gmail.com> reported the
bug and help me identify it. Made the fix available as
a patch to 4.75.

Added support for Solaris 10 port and CTFS files. The
CTFS support is imcomplete, because I don't know how
to get inode number, size and link count. (There's
a new 00FAQ entry about that.)

Investigated a report from Christopher J Warweg
<warwegc@GAO.GOV> that the CHECKSUMS for the lsof 4.75
binary for 64 bit Solaris 8 was incorrect. It was my
packaging error. I rebuilt and repackaged the binary.

Enabled support for Linux map file names with embedded
spaces.

4.77 April 10, 2006
Added -X option support for Solaris 10 and above. When
-X is specified lsof will report cached v_node path
names for unlinked files, followed by "(deleted)".
Improved cached vnode path name handling by adding
"(?)"
to the end of path names of questionable accuracy.
Updated 00FAQ to reflect these changes.

Updated for FreeBSD 7.0-CURRENT.

Fixed name addition spacing bug, reported by Stuart
Anderson <anderson@ligo.caltech.edu>. Also updated
Solaris 10 SAMFS support at Stuart's request.

Added missing "break;" and another HASSTATVFS test to
the NetBSD and OpenBSD dnode.c. Bill Behr
<bbehr@networkstoragecorp.com> reported those needs.

Fixed an HP-UX 11 file descriptor "chunk" size problem,
reported by Per Allansson <per@appgate.com>. Per helped
devise the fix and tested it. This fix was offered as
a patch to lsof 4.76.

Updated for FreeBSD 6.0-STABLE and FreeBSD
6.1-PRERELEASE.

Updated scripts/sort_res.perl5 with changes supplied by
Frederick Fabian <fabian.frederick@skynet.be>, the
author of the script.

Corrected +|-M man page documentation error, reported
by Roger Cornelius <rac@tenzing.org>.

Improved FreeBSD user device random seed generation in
response
to a problem report from Danny Braniss
<danny@cs.huji.ac.il>.

Eliminated three syntax error bugs and other compiler
complaints from the PSTAT-based lsof. H. Merijn Brand
<h.m.brand@xs4all.nl> reported the problems and tested
the fixes.

Eliminated compiler complaints in the test suite.

Investigated problems with the building of lsof on
PA-RISC HP-UX 11.23, based on a report from John
Orndorff <John.Orndorff@sungard.com>. Found that
neither the HP bundled C compiler nor gcc would build
lsof, but the the HP unbundled ANSI C compiler would.
Concluded that HP bundled C compiler can't handle
<gssapi/gssapi.h>. Devised a work-around to gcc's
omission of the rpcent structure definition of
<netdb.h> that allows it to compile lsof's print.c, but
the resulting binary doesn't run reliably. Documented
the situation in 00FAQ.

Changed reporting of unknown file types. The number of
an unknown type is now reported as four octets. The
change was
made in response to a Linux lsof bug report
from Karel Zak <kzak@redhat.com>.

Dropped the *claim* that lsof works on BSDI BSD/OS
since my last test system has been removed. The last
tested distribution of lsof for BSDI BSD/OS was
revision 4.76. It has been archived on
lsof.itap.purdue.edu in pub/tools/unix/lsof/OLD/src.

As a result of discussing the lsof source tar's MD5
checksum with Andrew Bell <andrew.bell.ia@gmail.com>,
changed the description of a suitable MD5 tool in the
lsof distribution's documentation to name the openssl
"dgst" command.

Enabled compilation on Solaris 10 1/06 with a fix sent by Jason Fortezzo <fortezza@mechanicalism.net>. Made the fix available as a patch to 4.76.

Adjusted to FreeBSD 5.5-PRERELEASE.

Corrected a bug in the lsof library's process_file() function to enable the locating of AIX XTI sockets by their TCP/IP address values. The bug was reported by Michel Dubois <Dubois@sears.ca>.

Based on a bug report
from Karel Zak <kzak@redhat.com>
added command name length checking to as many dialects as possible (Linux for Karel) for the "-c c" option.

Updated for OpenBSD 3.[89]. Tested the 3.9 update on a system provided by David Mazieres. I have not tested on OpenBSD 3.8, but David reports lsof 4.76 worked there.

Ended regression testing of lsof on 32 bit Solaris 8 with the ending of access to a test system. Lsof continues to be tested on 64 bit Solaris 8.

4.78 April 24, 2007
Added more information to the lsof FAQ about missing link counts and sizes on Linux files.

Simplified Linux stat() and lstat() usage.

Relocated #define's that prevent OpenBSD compilation on systems without a /proc file system. Pieter Bowman <bowman@math.utah.edu> reported the problem.

Added code to avoid processing Linux /proc/<PID>/maps file entries with zero device and node numbers. Some such entries now have names associated with them that are not path names -- e.g.,
"[heap]", "[stack]" or
"[vdso]". Scott Worley <sworley@chkno.net> reported lsof's mishandling of such entries.

Added SELinux security context support, provided by James Antill <james.antill@redhat.com>. I have not tested this, but James and Karel Zak <kzak@redhat.com> have.

Added the #include of <sys/types.h> to Solaris lsof to
enabled compilation on Solaris 10 6/06. Peter Harvey
Peter.Harvey@Sun.COM diagnosed the problem and supplied
a patch.

Added better support for JFS2 on AIX 5.2 and 5.3, based
on bug reports and help from Thomas Braunbeck
<BRAUNBEC@de.ibm.com> and Tom Whitty <TWHITTY@cerner.com>.

Documented that lsof supports AIX 5.3 only up through
maintenance level 1 (ML1).

Enabled Solaris lsof to locate the AFS vnode operation
address for OpenAFS 1.4.1. The fix was supplied by
Robert Jelinek <Robert.Jelinek@MorganStanley.com>.

Enabled support for Solaris 10 ZFS. If the necessary
ZFS header files aren't found, lsof offers the option
to
drop ZFS support, to use internal, possibly
inaccurate structure definitions, or to supply a path
to the missing header files. Horst Scheuermann
<Horst.Scheuermann@uni-trier.de> provided a development
system and helped test the support.

Corrected a typo in the man page, reported by Eric S.
Raymond <esr@thyrsus.com>.

Changed the spelling of macroes to macros in lsof
source and documentations files, based on a suggestion
from Josh Soref <timeless@gmail.com> and verification
with the OED.

The following dialects are no longer supported: 32 bit
AIX 5.2, HP-UX 11, OpenStep 4.2, Solaris 2.6, Solaris
8, True Unix 64 and UnixWare 7.1.4. Lsof may work on
them, but I no longer have test systems for them.
Support for OpenBSD ends at its version 3.9 for lack of
interest in the port.

4.79 April 15, 2008

********** IMPORTANT NOTE **********
* *
* Lsof support has been reduced to the following
*
* dialects: AIX, FreeBSD, Linux and Solaris, and *

```
* only in selected versions of those dialects.   *
* The selected versions are listed in this file  *
* and in other lsof documentation.               *
*                                                *
* I have made this move because of retirement    *
* and because I no longer have many test systems *
* available to me.                               *
*                                                *
* Vic Abell                                      *
*                                                *
**************************************************
```

Fixed a Solaris VXFS permission problem when accessing the VXFS inode offsets. The bug was reported by Gregory A. Ivanov <ivga@mts.ru>. Gregory tested the fix.

Moved an #include <string.h> later in FreeBSD dlsof.h to enable compilation on recent FreeBSD releases. The change was supplied by Roy Marples <uberlord@gentoo.org>.

Improved Linux /proc file stream reading speed by applying an expanded version of a patch from Eric Dumazet <dada1@cosmosbay.com> that allocates a page size buffer to each stream. Improved TCP, TCP6, UDP and UDP6 hashing by determining the hash bucket count from the /proc/net sockstat and sockstat6 files. The improvement was suggested by Eric and he provided sample code. Eric also tested both improvements.

Modified Configure script to build lsof on FreeBSD 6.2. Tested it on a system provided by Larry Rosenman <ler@lerctr.org>.

Fixed a Linux maps file processing bug that prevented path names from having an embedded colon. James Lingard <jchl@arastra.com> reported the bug and helped with its fix.

Based on reports from Eric Dumazet and Samuel Thibault <samuel.thibault@ens-lyon.org> added support for the Linux 2.6.22 kernel's /proc/<PID>/fdinfo files -- i.e., file offset and flags. Samuel Thibault provided a test system.

Fixed a Linux UNIX socket

memory leak, reported by
Philip Shin <pshin@xceedium.com>. Phillip supplied the
fix.

With generous assistance from HP added support for an HP-UX
11.23 patch that makes TLI/XTI socket address information
available.

Fixed a header file problem for FreeBSD 6.2 on the Alpha
architecture. The problem was reported by Pekka Honkanen
<phonkane@cc.hut.fi>. Pekka tested the fix.

Based on a report and using suggested fixes from Karel Zak
<kzak@redhat.com>, made these changes to Linux lsof: corrected
a getpidcon() error message; insured that inode numbers are
handled correctly for their unsigned long long type; and
improved SELinux handling. At the request of Alon Bar-Lev
<alonbl@gentoo.org> added the LINUX_HASSELINUX environment
variable to enable or inhibit SElinux support unconditionally.

Updated Configure for FreeBSD 8.0-CURRENT and tested lsof on
AMD64 there.

Added a patch provided by Oles Hnatkevych
<don_oles@able.com.ua> for FreeBSD systems where
the root
file system is on a CD9660 device.

Added compensation for the disappearance of FMARK and FDEFER
from the FreeBSD 8.0-CURRENT <sys/file.h>.

Updated FreeBSD lsof with ZFS support. Larry Rosenman
<ler@lerctr.org>, Erwin Lansing <erwin@FreeBSD.org>, Wesley
Shields <wxs@atarininja.org> and Dmitry Morozovsky
<marck@rinet.ru> provided test systems.

Fixed a socket file identification problem reported by
Pavol Rusnak <stick@gk2.sk>. Pavol also reported the
cause of the problem.

Added the ability to format the repeat mode marker line
with strftime(3), where the dialect supports the
localtime(3) and strftime(3) C library functions. The
addition was suggested by Mike Depot <mdepot@comcast.net>,
who also tested it. The addition required creating a new
main lsof source module, util.c, that contains functions
whose compilation conflicts with the general header file
tree defined by lsof.h and dlsof.h.

Based on reports from Andrei V. Lavreniyuk
<andy.lavr@reactor-xg.kiev.ua>
and Pav Lucistnik
<pav@FreeBSD.org> updated the FreeBSD 7.0 and above
file lock handling to use new locking structures. The
update requires a terrible hack to get a definition for
the lock owner structure from a kernel source module
into a local lsof header file.

4.80 May 12, 2008
Updated for a FreeBSD 7.0 and above byte level locking
change. The problem was reported by Conrad J. Sabatier
<conrads@cox.net>, who helped test the update. Wesley
Shields <wxs@FreeBSD.org> provided an 8.0-CURRENT test
system.

Propagated the FreeBSD 7.0 and above locking changes to
FreeBSD 6.x, based on a report from Edwin Groothuis
<edwin@FreeBSD.org>.

Added warnings for unsupported dialects or versions.

Added Linux support for the UDPLITE protocol. Eric
Dumazet <dada1@cosmosbay.com> supplied a patch.

Added a missing quote to the Configure script's
FreeBSD stanza.

Added a usage.o rule to the HP-UX PSTAT-based
Makefile. I mistakenly
deleted the rule at revision
4.79. The missing rule was reported by Kawaljeet Kaur
<kawaljeet.malviya@gmail.com> who tested the corrected
Makefile.

4.81 October 21, 2008
Updated the Darwin libproc sources with changes from
Allan Nathanson <ajn@apple.com>. Tested them on a iMac
mini, provided by Apple Inc.

Changed dummy declarations in library source files to
eliminate complaints about unused variables and empty
object files. This change may not work on dialects I
can no longer test; it has been tested on some versions
of AIX, Darwin, FreeBSD, Linux and Solaris.

At the request of Hal Brooks <hal@uga.edu> added support

for Linux /proc/net/packet files. Hal tested it.

Added socket file only performance enhancements to Linux
and PSTAT-based HPUX lsof.

Added htonl call around improper usage of INADDR_LOOPBACK;
report from an Apple engineer forwarded by Allan Nathanson
<ajn@apple.com>.

Adjusted for FreeBSD-8.0 change in device number
handling.
The adjustment should work for FreeBSD 5 and above, should
the 8.0 change be propagated downward. The problem was
reported by Pav Lucistnik <pav@FreeBSD.org>. An updated
test system was provided by Erwin Lansing <erwin@FreeBSD.org>.

Reduced AIX support to version 5.3, since test systems with
older versions are no longer available to me.

At the request of Marjo F. Mercado <mmercado@xceedium.com>
and Phil Shin <pshin@xceedium.com> applied some speed
improvements to lsof, particularly when the files of
interest are /Internet files -- i.e., selected with lsof's
"-i" option. Added a two new options to assist the
improvements: 1) "-c^<command>" to tell lsof to exclude the
named command(s); and 2) "-stcp|ud>:[^]state' to tell lsof
to include in its reporting or exclude ('^') from its
reporting Internet files in the named states (e.g., LISTEN,
^CLOSE_WAIT, IDLE, etc.) For the most part these changes
apply only to AIX, Darwin, FreeBSD, PSTAT-based
HP-UX, Linux
and Solaris, since those are the only places I could test
them. They are controlled by the HASTCPUDPSTATE definition
in each dialect's machine.h header file. Marjo and Phil
provided HP-UX 11.23 and 11.31 test systems.

Fixed a stat(2) problem on HP-UX 11.31 while testing the
speed improvements.

Adjusted for kernel header file changes in FreeBSD
8.0-CURRENT. Larry Rosenman <ler@lerctr.org> provided
a test system.

Added a warning for Solaris systems where VxFS node info
can't be obtained from the VxFS utility library. The
warning was requested by Tom Matthews <Tom.MATTHEWS@rbs.com>.

Corrected mishandling of file system path name arguments

that have trailing slashes, except, of course, the root
file system, "/". Allan Nathanson <ajn@apple.com> reported
the bug.

4.82 March 25, 2009
Corrected an over-zealous exclusion test that caused
lsof to report nothing when it was given no arguments
and built with HASSECURITY and HASNOSOCKSECURITY
enabled.
Joshua Kinard <kumba@gentoo.org> reported the bug and
supplied information for reproducing it.

Based on a report from Dan Trinkle <trinkle@cs.purdue.edu>
corrected use of <sys/utsname.h> for 32 bit Solaris 10
and above compilations. Simultaneously eliminated a
casting complaint in arg.c and updated Configure to use
the appropriate 64 bit compilation option (-xarch=v9 or
-m64) with the Solaris Sun C compiler.

Updated for FreeBSD 7.1-PRERELEASE with information
supplied by Larry Rosenman <ler@lerctr.org>.

Updated the Darwin libproc sources with changes from
Allan Nathanson <ajn@apple.com>. Tested them on a iMac
mini, provided by Apple Inc. Allan also provided man
page corrections.

Updated the FreeBSD Makefile to use the ${MAKE} variable
for ZFS dnode2.c module compilation, based on a suggestion
from Alexis Ballier <aballier@gentoo.org>.

Improved the Solaris VxFS library location test, based on a
suggestion from Jason Fortezzo
<fortezza@mechanicalism.net>.
Jason tested the change.

Updated Solaris 10 ZFS support for ZFS version 4 and ZFS
pool version 10, using a test system kindly provided by
Vladislav Nespor <vladislav.nespor@id.ethz.ch>. Renata
Maria Dart <renata@slac.stanford.edu> tested on ZFS
version 4, verifying that the update works there, too.
(ZFS pool version 10 is apparently the ZFS version shipped
with the 10/08 update to Solaris. The original ZFS
support targeted ZFS version 3.)

I still consider ZFS support in Solaris lsof a hack,
because it depends on a znode structure definition that
I developed using dbx. Sun is remiss in not distributing

the ZFS header files used to build the distributed kernel.

Because of the znode structure definition hack, I can't guarantee that lsof ZFS support will work for any other versions of ZFS.

Solaris 10: adjusted to a change in the way devices are stored in the kernel; fixed a problem in zone handling; and added rudimentary sharedfs support. Carson Gaspar <carson@taltos.org> reported the device number problem, provided a test system, and tested the changes. Peter Vines <psv2b@eservices.virginia.edu> reported the zone handling problem and tested the fix.

Adapted to FreeBSD 8.0-CURRENT changes in device number computation. Problem was reported by Erwin Lansing <erwin@FreeBSD.org>. Larry Rosenman <ler@lerctr.org> provided a test system.

Corrected Solaris Configure test for appropriate VxFS library when using gcc to compile lsof.

Updated for loss of KAME IPv6 FreeBSD accommodations.

Adapted to FreeBSD 7.2. Made Configure script recognized FreeBSD 6.3.

4.83 January 18, 2010

Converted Solaris 10 and above ZFS support to use the CTF debugger library, libctf. Code was supplied by Robert Byrnes <Robert.Byrnes@deshaw.com>.

Corrected a typo in the testing of the LINUX_HASSELINUX environment variable in the Configure script. The error was reported by Mike Frysinger <vapier@gentoo.org>.

At Mike's request made Configure script accept LSOF_RANLIB (ranlib command), LSOF_CFGF (additional configuration flags) and LSOF_CFGL (additional library specifications) from the environment.

Enabled complilation of Solaris 10 lsof after a recent Sun patch which changed the PC file system's structure. Peter Vernam <pvernam@draper.com> reported the problem and helped with the fix.

Made the sort of configuration CFLAGS in the CkTestDB

script impervious to locale settings.

Ported to Solaris 11, using a test system kindly provided
by David Day <dday76@gmail.com>.

Adjusted to the disappearance of <nfs/rpcv2.h> in FreeBSD
8.0-BETA1.

Changed Solaris node type lookup to a hashed method and
added some ability for it to handle duplicate vnodeop names
in /dev/ksyms.

Updated for FreeBSD 9.0-CURRENT. Andrzej Tobola
<ato@iem.pw.edu.pl> provided a test system. Extends the
fix to FreeBSD 6.0 and above via a Configure test and
a
compile-time definition. The need for the extension was
reported by Erik Trulsson <ertr1013@student.uu.se>>

Made corrections to FAQ typographical errors, suggested
by Josh Soref <timeless@gmail.com>.

Added __UCLIBC__ test to Linux dlsof.h so lsof would compile
on an Intel ARM XScale processor. The addition was provided
by Doug Kehn <rdkehn@yahoo.com>.

Added test for <utmpx.h> to FreeBSD configuration. Improved
its use in lsof.h. The changes were supplied by Martin Wilke
<miwi@FreeBSD.org>.

4.84 July 29, 2010
Fixed a man page nroff command error with a correction
supplied by Josh Soref <timeless@gmail.com>.

Made Configure script recognize FreeBSD 7.3. Larry Rosenman
<ler@lerctr.org> provided a test system.

Improved task support, initially for Linux only, with help
provided by Jerome Marchand <jmarchan@redhat.com> and
Miklos Szeredi <mszeredi@suse.cz>. The support includes a
new compile-time definition, HASTASKS, and a new run time
option,
"-K" to select task reporting.

While adding help output support for "-K", reorganized the
printing of help columns to make it much easier to add a new
option description.

Updated the Solaris PC file system structure patch in revision 4.83 so it will compile with gcc.

Disabled the Solaris lgrp_root work-around in the Solaris machine.h so it won't cause compilation problems on Solaris 11. It no longer causes compilation problems on my Solaris 9 and 10 test systems, but some older Solaris 9 and 10 versions may still need it, so the work-around was left in the Sun machine.h and a FAQ entry was created about it.

Updated for Solaris 11 b134, using a test system kindly provided by Carson Gaspar <carson@taltos.org>. Made provisions for the next ZFS version. Added info about the failure of the LTnlink test on ZFS file systems.

Corrected typo in Configure script, reported by Dmitry Berezin <dmitryb@oit.rutgers.edu>.

4.85 September 27, 2011

John Dzubera <Zube@CS.ColoState.EDU> kindly provided a patched Solaris 9 test system with the lgrp_root conflict and I was able to devise an automatic work-around for the conflict. The special note in .../dialects/sun/machine.h was removed and the 17.28.1 FAQ entry was modified to reflect the update.

Added a Solaris 11 work-around for a typedef problem with <sys/mutex.h>. Carson Gaspar <carson@taltos.org> reported the problem and supplied the work-around.

Added support for FreeBSD 7.4 and 8.2; tested on systems provided by Larry Rosenman <ler@lerctr.org>.

Added support for 32 bit Solaris 11 lsof with mods supplied by Jan Wortelboer <J.H.P.Wortelboer@uva.nl>.

Added Solaris 11 support for using an alternate genunix location. Bill Goodridge <bill@its.brooklyn.cuny.edu> reported the alternate location.

Added further Linux cross configuration support to lsof's Configure script. The additional support was supplied by Grant Erickson <erick205@umn.edu>.
See the descriptions of the LINUX_* environmen variables in 00XCONFIG for more information. Tested lsof on Linux kernel 2.6.32 and picked some lint that surfaced during the test.

Added fixes and changes for Apple Mac OS X 10.6, provided by
Allan Nathanson <ajn@apple.com>. Allan also provided a test
system.

Tested on FreeBSD 6.4 i386, using a test system provided by
Terry Kennedy <TERRY@tmk.com>. Updated for recent FreeBSD ZFS
changes on an 8.2 amd64 test system also provided by Terry.

Changed documentation to indicate FreeBSD 7.x is no longer
supported, since I no longer have a test system.

Made some changes to the lsof man page, suggested by Navid
<evi1m4chine@googlemail.com>.

Added compensation for Solaris 10 systems that have patch
144488-10. The patch requires that the new header file
<sys/socket_proto.h> be included while _KERNEL is defined.
Brett Bartick <Brett.bartick@nomura.com> reported the problem
first, followed by Stuart Anderson
<anderson@ligo.caltech.edu>.
Michael Hocke <michael.hocke@nyu.edu> suggested a work-around
which I refined to limit it to the specific Solaris 10 instance
and then tested on a system provided by Charles Stephens
<cfs@cowlabs.com>

Added the +|-e option for Linux. It exempts file systems
named by path from function calls that might block in the
kernel -- i.e., stat(2) and lstat(2), and when the +e form
is used, readlink (2). The new packager of lsof for the
Linux Fedora and RHEL distributions, Peter Schiffer
<pschiffe@redhat.com>, asked for the feature so it could
be used with Clearcase file systems, whose implementation
can block stat(2) calls. I consider this feature very risky
and easy to misuse -- e.g., specifying the file system as
'/' would exempt all file systems. I don't intend to
propagate this option to any other UNIX dialect that lsof
currently supports.

Made FreeBSD 9 adjustment.

Fixed a Linux bug that prevented the display of paths
for
abstact UNIX sockets. Masatake Yamato <yamato@redhat.com>
reported the bug and supplied a patch.

Added compensation for the removal of RPC header files from
GlibC 2.14 for Linux. Marek Behun <kabel@blackhole.sk>
reported the problem and supplied a patch.

Added support for Linux Netlink protocol. Masatake Yamato requested the support and supplied a patch. Peter Schiffer <pschiffe@redhat.com> provided a test system.

Corrected Linux UDP6-lite path. The error was reported by Masatake Yamato and he also supplied a patch.

4.86 April 10, 2012

Lsof for AIX is no longer supported on any versions of that operating system.

Added information about the clang compiler for FreeBSD to the FAQ.

Corrected an arg.c bug in the accumulation of +|-e option values, reported by Peter Schiffer <pschiffe@redhat.com>. This correction was supplied as a patch to revision 4.85.

Enabled FreeBSD 10 support and tested it there on a system provided by Larry Rosenman <ler@lerctr.org>.

Updated for latest Solaris 11 with patches supplied by Carson Gaspar <carson@taltos.org>. Carson supplied a test system.

Adjusted Linux file system search method to compensate for NFS mounts that have duplicate device numbers. The problem was reported by Peter Schiffer <pschiffe@redhat.com>, who provided a test system.

At the request of Peter Schiffer <pschiffe@redhat.com>, added support for Linux SCTP socket files. Peter provided a test system. Applied a warning patch supplied by Peter.

Added support for Mac OS X 10.7 (Lion), provided by Allan Nathanson <ajn@apple.com>. Allan also supplied a test system.

Enabled FreeBSD 8.3 support and tested it there on a system provided by Larry Rosenman <ler@lerctr.org>.

Corrected the FAQ information on ZFS with Solaris 10 after Steven Blackmon <stblackm@cisco.com> and Prasad Jampala <jampalp@cisco.com> pointed out that it was incorrect -- i.e., outdated by the libctf changes at

revision 4.83.

Added code to handle a Linux NFS-mounted root. Jia He <hejianet@linux.vnet.ibm.com> reported the need for this.

4.87 January 2, 2013

Added an entry to 00FAQ about lsof behavior when the HASSECURITY and HASNOSOCKSECURITY options are defined. Carson Gaspar <carson@taltos.org> pointed out the need for this clarification.

Added a work-around for a missing definition of mach_port_t in Darwin 9 (Mac OS/X 10.5.8). The work-around was supplied by Jim Reid <jim@rfc1035.com>.

Added support for Linux anon_inodefs, provided by Masatake YAMATO <yamato@redhat.com>.

Documented a Solaris 9 and 10 portmap reporting problem (+M) in 00FAQ. The problem was reported by Clint Roberts <Clint.Roberts@ttius.com>. I have no solution to the problem, but discuss a possible work-around in the answer to this 00FAQ question: "Why doesn't lsof report portmap registrations for some Solaris versions?"

Added FreeBSD support for the oldnfs and newnfs file system types.
Daniel Braniss <danny@cs.huji.ac.il> reported the need for the addition.

Added ICMP socket support for Linux with code provided by Masatake YAMATO <yamato@redhat.com>.

Corrected the reporting of process group ID for libproc versions of Mac OS X with a patch from Jeff Trawick <trawick@gmail.com>. The patch has not been applied to Darwin kmem versions, because of little call for them and inadequate test system access. The patch has been tested on Mac OS X 10.8 (Mountain Lion), courtesy of a test system provided by Allan Nathanson <ajn@apple.com>.

Added thread support to those FreeBSD versions that have ki_numthreads in their kinfo_proc structure. This also activates the -K option for those FreeBSD versions. Jeff Trawick reported problems with FreeBSD lsof when threads are present and this addition solves those problems.

Made changes to 00FAQ and the distribution, suggested by

Warren Young <warren@etr-usa.com>. The 00FAQ changes
center
on sections that discuss the -s option. The changes
to the distribution include a ChangeLog file that is either
a pointer to or a copy of 00DIST, the distribution notes.

Added support to FreeBSD for using the clang compiler.

Added Linux support for using the getxattr() call to obtain
socket protocol identification when it is can't be obtained
from the /proc/net files that lsof examines. Masatake YAMATO
<yamato@redhat.com> developed the kernel patch to getxattr()
and supplied the lsof patch.

4.88 October 13, 2014
Reduced to 50 the number of open file descriptors lsof
attempts to close while trying to protect itself from a
file descriptor exec() attack. This limits the overhead
lsof incurs on systems that have large file descriptor
limits, yet provides sufficient open descriptors for the
library functions lsof calls.

Updated for changes in FreeBSD 10 with advice from Eygene
Ryabinkin <rea@freebsd.org>. Taught Configure to recognize
FreeBSD
8.4.

Herein am noting that lsof for Solaris 10 or 11 is no longer
supported. I no longer have test systems. Some support is
still available from Casper Dik <Casper.Dik@oracle.com> and a
Solaris 11 patch he provided is included in this revision.

Initialized local variables in the Linux process_id() function.
Jia He <jiakernel@gmail.com> reported the problem.

Added support for FreeBSD 11.

Updated FreeBSD ZFS Configure stanza to supply a dummy
opt_kdtrace.h when needed.

Added tmpfs file system support for FreeBSD.

Since a test system is no longer available, dropped the
claim of FreeBSD 4.9 support.

Added the +|-E options for Linux. -E displays endpoint info;
+E displays endpoint info and endpopint files. Masatake YAMATO
<yamato@redhat.com> requested this support and suggested code

to implement it.

Fixed a Linux bug handling processes whose command includes a non-printing character, particularly a NEWLINE character, and clarified printing
of single '\\' characters in command and
file names. Stephane Chazelas <stephane.chazelas@gmail.com> reported the problem.

Added support for Linux RDMA and CRYPTO protocal names and UNIX socket type with code from Masatake YAMATO <yamato@redhat.com>.

Fixed field output to insure that the field descriptor field is always selected, since it identifies the file set. The bug was reported by Gary Plewa <gary.m.plewa-1@lowes.com>.

4.89 July 7, 2015

Applied correction from Casper Dik <Casper.Dik@oracle.com> to his patch for Solaris 11 that I applied incorrectly in revision 4.88.

Updated for latest version of FreeBSD 11.0-CURRENT.

Compensated for a missing FreeBSD 10.0 typedef of bool on the i386 architecture. Allen Hewes <rallenh@hotmail.com> provided a test system. Andrey Chernov <ache@freebsd.org> provided useful advice.

Improved tests/Add2TestDB script with a patch from Peter Schiffer <pschiffe@redhat.com>. Added patches from Peter to eliminate
Linux gcc warnings. Updated Lsof.8 with improvements supplied by Bjarni Ingi Gislason <bjarniig@rhi.hi.is>.

Changed FreeBSD global CFLAGS extraction per Terry Kennedy <TERRY@tmk.com>. Also made sure -DNEEDS_BOOL_TYPEDEF is #define'd when the resulting CFLAGS doesn't contain it. Terry reported that need.

Improved Linux test for tcp.h in response to a report from Cato Auestad <cato@cato.ninja>. Cato did the testing.

Fixed Linux UNIX socket search by name bug reported by Stephane Chazelas <stephane.chazelas@gmail.com>.

Added Linux display of UNIX socket endpoint information with code provided by Masatake YAMATO <yamato@redhat.com>. Peter Schiffer <pschiffe@redhat.com> provided a test system.

Insured that type definitions from <vm/vm.h> were again made
visible to lsof on FreeBSD 11 after a system header file change
hid them.

4.90 February 14, 2018

```
!!!NOTE!!!
```

structure during a race condition. The patch was supplied by
Bryan Drewery <bdrewery@FreeBSD.org>.

Updated FreeBSD for new UFS inode structure that lacks an i_dev
member in the most recent 12.0-CURRENT. Larry Rosenman
<ler@lerctr.org>
reported the problem and provided a test
system.

Added "#define KLD_MODULE" to dlsof.h and dnode2.c to prevent
<machine/cpuconf.h> from generating an "ARM_NARCH is 0" error.
This is needed so lsof can access kernel structures. Larry
Rosenman supplied the addition.

Added recognition of the FreeBSD 11 file system name "nullfs".
Jamie Landeg-Jones <jamie@catflap.org> supplied the fix.

Added a patch from Larry Rosenman <ler@lerctr.org> that is
needed on FreeBSD 12 so the lsof compilation can obtain the
inpcb and tcpcb structures from their respective header files.

Updated FreeBSD dmnt.c for the ino64 changes.

Inserted a patch for Solaris 12.x to avoid compilation errors
from <sys/aio_req.h>, based on information provided by Jorn
Clausen <joern.clausen@uni-bielefeld.de>. Jorn tested the
patch.

Added performance enhancement that uses the FreeBSD closefrom()
and dup2() C library functions when available. The enhancement
was supplied by
Conrad Meyer <cem@freebsd.org>.

Corrected FreeBSD lsof's gathering of ZFS file device numbers.

Updated lsof test library for FreeBSD.

Updated socket optons information collection from the socket
structure per changes supplied by Gleb Smirnoff
<glebius@FreeBSD.org>.

Added patch to dlsof.h that avoids a _KERNEL conflict with
bzero. Mateusz Guzik <mjguzik@gmail.com> supplied the patch.

Corrected test library to handle 64 bit FreeBSD device numbers.

Added #defines for FreeBSD 12, src r324225, from Gleb Smirnoff
<glebius@FreeBSD.org>.

Incorporated Linux pseudoterminal endpoint processing (+|-E)
provided by Masatake YAMATO <yamato@redhat.com> with access to
test systems provided by Peter Schiffer <pschiffe@redhat.com>.

Corrected Linux command extraction for commands that include
parentheses -- e.g., "(sd-pam)".

4.91 March 26, 2018

A bug has been reported in the PTY endpoint processing of
Linux lsof 4.90 by Peter Wu <peter@lekensteyn.nl>, making it
necessary
for me to release another revision of lsof.

This revision applies two fixes that correct the Linux PTY
endpoint processing bug. Masatake YAMATO <yamato@redhat.com>
supplied the fixes.

4.92 July 14, 2018
THIS IS A FREEBSD-ONLY DISTRIBUTION!

Fixes Configure script section that creates the FreeBSD
lockf_owner.h header file; fixes <string.h> conflicts with
FreeBSD kernel header files. Mateusz Gusik supplied part of
the fix.

Released lsof to GitHub with Purdue releases documented in
support/GitHub-release.

Vic Abell <abe@purdue.edu>
July 14, 2018

4.92.1 May 6, 2019

```
!!!NOTE!!!
```

URLs in -v output and -h output are updated.

4.93.0 May 7, 2019

[freebsd] Made FreeBSD 13 adjustment.
[darwin] Fix a typo causing a build error.
Fix a potential memory leak.
[linux] use tirpc for rpc if libc doesn't provide rpc.h.
Fix a typo in man page.
[linux] fix memory leaks detected by valgrind about unix
endpoint information.
Update the description about -fg and -fG options on linux.

4.93.1 May 7, 2019

Fix a broken symbolic link.

4.93.2 May 8, 2019

Update the version number embedded in lsof executable.

4.94.0 November 11, 2020

(All changes in this version are ported from
lsof-org/lsof-linux repository at GitHub).

Introduced a new test harness. The harness can run
test cases specific to a dialect. It is designed for
running test cases on CI
environment like Travis-CI.
However, it is runnable locally with following command
line:
$ ./check.sh DIALECT
after making lsof executable.

[linux] Fixed a bug +|-E options output for pipe.
If two processes use the same fd number for a pipe
connecting them, the option didn't print the
information about it.

[linux] Fixed a bug +|-E options output for PTY.
If two processes use the same fd number for a PTY
connecting them, the option didn't print the
information about it.

[linux] Fixed a bug +|-E options output for PTY.
The code for detecting a slave device was incorrect.

[linux] Fixed a potential bug +|-E options output for
PTY. A structure field for the feature was not
initialized.

[linux] Added a code for decoding O_PATH flag in +fg
option.

[linux] Added a code for decoding O_CLOEXEC flag as CX
in +fg option.

[linux] Added a code for decoding O_TMPFILE flag as
TMPF in +fg option.

[linux] Added Linux display of INET socket
endpoint
information with +|-E option. The option handles
INET sockets using IPC.

[linux] Added support for POSIX MQ of Linux
implementation. A POSIX message queue (MQ) is
represented in a fd on Linux. lsof reported it as a
regular file. lsof with this change reports it as a
file with PSXMQ type if mqueue file system is mounted.

[linux] Added Linux display of POSIX message queue
endpoint information with +|-E option. mqueue file system
must be mounted to display the information.

[linux] Added Linux display of INET6 socket endpoint
information with +|-E option. The option handles
INET6 sockets using IPC.

[FreeBSD] update to include <sys/_lock.h> on recent -CURRENT
since it is no longer implicitly included via header pollution.

[linux] Added Linux display of eventfd endpoint information
with +|-E option. The option handles eventfd using IPC.

[FreeBSD] include <stdbool.h> for recent change requiring
refcount(9).

Enhanced -r option.
With `c<N>' specifier, lsof can stop itself
when the number of iterations reaches at <N>.

[linux] Fixed accessing an uninitialized local variable.
Detected by valgrind.

[linux] fix a crash when printing the endpoint for unaccepted
unix socket with +E option.
This closes the github issue #74 reported by @jolmg.

[linux] abort execution when failing in memory allocation for
socket private data.

[linux] decode the name of DCCP socket type.

[linux] decode more netlink protocol numbers (RDMA, CRYPTO, and
SMC).

[linux] print the connection state of unix domain socket
Lsof can print the state of TCP socket like:

```
  nc      22247 yamato    3u  IPv4 471409      0t0        TCP localhost:38802->localhost:9999 (ESTABLISHED)
```

This change exnteds this feature to support unix domain sockets.
LISTEN, UNCONNECTED, CONNECTING, CONNECTED, DISCONNECTING,
and UNKNOWN can be taken as a state.
An example of output:

```
  evince    17333  yamato    1u  unix 0x0000000054183795
    0t0  89141 type=STREAM (CONNECTED)
```

This feature is enabled by default.
To turn off printing state information, use -T option.

Don't display command usage even when a file (or directory) listed
in command line doesn't exist.
This closes the github issue #90 reported by @rowlap.

[FreeBSD] merge all the FreeBSD specific fixes from the FreeBSD sysutils/lsof port

[linux] allow reproducible builds
In a reproducible build all varied information is removed. This
change does so, by checking if the standard SOURCE_DATE_EPOCH
variable is set. If it is, we are attempting a reproducible build
and will strip varying information.
About the standard, see https://reproducible-builds.org/specs/source-date-epoch/
Provided in github pull request #93 by @T4cC0re.

[freebsd] update for r363214
- no user visible changes

Added the way to include (or exclude) all numbered file descriptors
in -d option. "fd" is a pseudo file descriptor name for the
purpose.
See the following output on Linux; lsof doesn't print cwd, rtd, txt,
and mem files.

```
# ./lsof -p $$ -a -d fd
COMMAND    PID USER   FD   TYPE DEVICE SIZE/OFF NODE NAME
bash    866421 root    0u   CHR  136,1      0t0    4 /dev/pts/1
bash    866421 root    1u   CHR  136,1      0t0    4 /dev/pts/1
bash    866421 root    2u   CHR  136,1      0t0    4 /dev/pts/1
bash    866421 root  255u   CHR  136,1      0t0    4 /dev/pts/1
```

docs: fixed minor grammatical error in instructions in Customize file
The change is provided by @hardikpnsp.

man page: improve phrasing and add examples
The change is provided by Martin D Kealey.

man page: improve explanation of -t implying -w
The change is provided by Martin D Kealey.

test cases, [linux]: fix tests for large inode-numbers (i >= 2^32)
The change is provided by Henry Peteet.

[linux] handle ffff:ffff in ipv6 addr correctly
The listen address and port of an AF_INET6 socket were not display
if
the socket listened at an ipv6 address including ffff:ffff.

Here is a command session demonstrating the bug:

```
# ip -6 addr add abcd:ef10:ffff:ffff:ffff:ffff:ffff:ff62 dev lo
# nc -6      -l  abcd:ef10:ffff:ffff:ffff:ffff:ffff:ff62 8888 &
[1] 6762
# ./lsof -p 6762 -a -d fd -P -n
COMMAND  PID   USER   FD   TYPE DEVICE SIZE/OFF    NODE NAME
nc      6762 yamato    0u   CHR  136,6      0t0       9 /dev/pts/6
nc      6762 yamato    1u   CHR  136,6      0t0       9 /dev/pts/6
nc      6762 yamato    2u   CHR  136,6      0t0       9 /dev/pts/6
nc      6762 yamato    3u  sock    0,9      0t0 5833594 protocol: TCPv6
```

The last line should be:

```
nc      6762 yamato    3u  IPv6 5833594      0t0  TCP [abcd:ef10:ffff:ffff:ffff:ffff:ffff:ff62]:8888 (LISTEN)
```

The original code decoding an ipv6 address uses UINT32_MAX constant
incorrect way.

@zhrf2020 reported this bug in #102.
@zhrf2020 provided the initial version of fix, #109.

man
page,[linux]: enumerate abbreviated flags printed with '+f g' option

Make -Fo option work
-Fo option is for printing file offset. For regular files,
the option didn't work.

Here is a command session demonstrating the fix:

```
# ./lsof -Fo -o0| grep ^o | sort | uniq -c
90586 o0t0
   87 o0t101
   84 o0t103
```

...
@JustAnotherArchivist reported this bug in #118.

man page: fix definition of the `o` field on programmatic output
The change is provided by @JustAnotherArchivist who reported
the original issue in #118.

[linux]: show the pid monitored by a pidfd
With this change, lsof prints pidfd in the following form:

```
[pidfd:%d]
```

where %d represents the pid monitored by the pidfd.

Example output:

```
# ./lsof -p 12573 -p 12710 | grep pidfd
dbus-brok 12573  jet   11u  a_inode          0,13       0    13312 [pidfd:12575]
dbus-brok 12710  jet   10u  a_inode          0,13       0    13312 [pidfd:12711]
```

fd
11 of pid 12573 monitors pid 12575.
fd 10 of pid 12710 monitors pid 12711.
This change closed #116.

Don't select the file descriptor field by default.
The version 4.88 introduced the change for selecting the file
descriptor field by default. However, the change is not
suitable for users who wants to print only PID field.
@po5857 suggests the use case and the way to improve the man page.

[linux]: enumerate fds monitored by an eventpoll fd
With this change, lsof prints an eventpoll fd in the following form:

```
[eventpoll:<fd0>,<fd1>,...,<fdn>...]
```

Here fdX is a file descriptor monitored by the eventpoll fd.
If an eventpoll fd monitors too many file descriptors, lsof
truncates the list of fds. "..." at the end of list implies
the truncation.

Example output:

```
# sudo ./lsof -p 1 -a -d 10,11,12
```

```
COMMAND PID USER   FD      TYPE DEVICE SIZE/OFF  NODE NAME
systemd   1 root   10u  a_inode   0,13        0 11624 [eventpoll:11,12]
systemd
1 root   11r      REG    0,4        0 17680 /proc/1/mountinfo
systemd   1 root   12r  a_inode   0,13        0 11624 inotify
```

systemd monitors fd 11 and fd 12 via eventpoll fd 10.

[linux]: implement "make check"
The target runs check.bash.

4.95.0 April 28, 2022

[n+obsd] fix syntax error
Corrected end of comment.
This change closes #138.
@albert-github reported this issue in #138,
and provided the fix in #140

Don't ignore failures in test/Makefile
Tobias Geerinckx-Rice <me@tobias.gr> provides the fix.

Update perl scripts for the past few decades of progress
Generally, perl is available on base systems - people who are manually
installing perl into /usr/local/bin are the exception rather than the
rule. In addition, Perl 5 was release in 1994, so Perl 4 isn't relevant
any more. We've also standardized on the .pl extension, rather than
.perl5 or whatever.
Provided by @dilinger (Andres Salomon) in #149.
A commit in the pull request includes work
of Nicholas Bamber.

Drop LSOF_CCDATE across all dialects to ensure reproducible builds
Simplify things for reproducible builds by just getting rid of
the embedded date/time string. With LSOF_CCDATE gone, keeping
SOURCE_DATE_EPOCH around doesn't make much sense, so drop that as
well. Folks doing reproducible builds should still override the
LSOF_HOST, LSOF_LOGNAME, LSOF_SYSINFO, and LSOF_USER variables (as
they were previously doing before SOURCE_DATE_EPOCH).
Provided by @dilinger (Andres Salomon) in #150.

[FreeBSD] get the ISO9660 filesystem working again
The ISO9660 filesystem broke starting with FreeBSD 7 due to the header

location changing. Fix the header search path to get it to be detected
again. Fix the header inclusion order. Also add the new way of finding
dev_t on more recent FreeBSD versions.
Provided by Damjan Jovanovic in #151.

[FreeBSD] add support for msdosfs on FreeBSD
Provided by Damjan Jovanovic in #151.

Fix FD field description.
In
811dc78 the output format was changed to not printf the `f`
field by default, however the field description in `lsof_fields.h`,
as seen in `-F?` output still included the `(always selected)` text.
Provided by @algorythmic (Grisha Levit) in #158.

Adjust alignment of buffer passed to stat().
The original code passes char[] buffer to stat(). This can be cause
a SIGBUS. #160 reported an actual crash on armv7a + glibc-2.33 platform.
See also https://sourceware.org/bugzilla/show_bug.cgi?id=27993.
Reported by @10ne1 in #160.

Clean up source code and documentats.
- remove trailing whitespace,
- fix some issues in scripts found through shellcheck, and
- fix spelling
Provided by @a1346054 in #163.

man page: fix hyphen issues
Properly use '-' and '\-' in the man page, ensuring that users
can cut & paste commandline options without issue. Original
patch from Raoul Gunnar Borenius <borenius@dfn.de>, and
submitted/expanded by @dilinger (Andres Salomon)
in #168.

[FreeBSD] update for FreeBSD 13 & 14, and various internal changes
submitted by @DmitryAndric & @emaste.

[FreeBSD] remove various old FreeBSD versions from support
submitted by @emaste

[FreeBSD] configure: suggest variable to set if FreeBSD sys not found
submitted by @emaste

Fix broken LSOF_CFLAGS_OVERRIDE.
Provided by Fabrice Fontaine in #172.

[linux] Remove sysvlegacy function.
Provided by Fabrice Fontaine in #195.

[linux] use close_range instead of calling close repeatedly
At the starting up, lsof closes its file descriptors greater than 2 by calling close(2) repeatedly. As reported in #186, it can take long time. Linux 5.9 introduced close_range(2). The new system call can close multiple file descriptors faster.
@qianzhangyl reported the original issue (#186).

Add -Q option for adjusting exit status when failed to find a search item (#129)
In the original code, lsof returned 1 when it failed to find a search item.
With the new option, lsof returns 0 in the case.

Document -Q option in manpage/00QUICKSTART, and adjust -h output by @dilinger (Andres Salomon) in #129.

Improve readability of complex adverbial clause by adding a comma.
Provided by Danny Fowler in #156.

The lsof-org team at GitHub
April 28, 2022

Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/00DIST
No license file was found, but licenses were detected in source scan.

```
#!/usr/bin/perl
#
# list_NULf.pl    -- sample Perl 5 script to list lsof NUL-terminated
#       full field output (i.e., -F0 output)
#
```

```
# This script has been tested under perl version 5.001e.
#
# Copyright 1994 Purdue Research Foundation, West Lafayette, Indiana
# 47907.  All rights reserved.
#
# Written by Victor A. Abell
#
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#    misrepresented as being the original software.
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# Initialize variables.

$fhdr = 0;       # fd hdr. flag
$fdst = 0;       # fd state
$access = $devch = $devn = $fd = $inode = $lock = $name = ""; # | file descr.
$offset = $proto = $size = $state = $stream = $type = ""; # | variables
$pidst = 0;       # process state
$cmd = $login = $pgrp = $pid = $ppid = $uid = "";  # process var.

# Process the ``lsof -F'' output a line at a time, gathering
# the variables for a process together before printing them;
# then gathering the variables for each file descriptor
# together before printing them.

while (<>) {
   chop;
   @F = split('\0', $_, 999);
   if ($F[0] =~ /^p/) {

# A process set begins with a PID field whose ID character is `p'.
```

```
 if ($pidst) { &list_proc }
 if ($fdst) { &list_fd; $fdst = 0; }
 foreach $i (0 ..
 ($#F - 1)) {

    PROC: {
  if ($F[$i] =~ /^c(.*)/) { $cmd = $1; last PROC }
  if ($F[$i] =~ /^g(.*)/) { $pgrp = $1; last PROC }
  if ($F[$i] =~ /^p(.*)/) { $pid = $1; last PROC }
  if ($F[$i] =~ /^u(.*)/) { $uid = $1; last PROC }
  if ($F[$i] =~ /^L(.*)/) { $login = $1; last PROC }
  if ($F[$i] =~ /^R(.*)/) { $ppid = $1; last PROC }
  print "ERROR: unrecognized process field: \"$F[$i]\"\n";
     }
 }
 $pidst = 1;
 next;
   }

# A file descriptor set begins with a file descriptor field whose ID
# character is `f'.

   if ($F[0] =~ /^f/) {
 if ($pidst) { &list_proc }
 if ($fdst) { &list_fd }
 foreach $i (0 .. ($#F - 1)) {

    FD: {
  if ($F[$i] =~ /^a(.*)/) { $access = $1; last FD; }
  if ($F[$i] =~ /^C(.*)/) { last FD; }
  if ($F[$i] =~ /^f(.*)/) { $fd = $1; last FD; }
  if ($F[$i] =~ /^F(.*)/) { last FD; }
  if ($F[$i] =~ /^d(.*)/) { $devch = $1; last FD; }
  if ($F[$i] =~ /^D(.*)/) { $devn = $1; last FD; }
  if ($F[$i] =~ /^G(.*)/) { last FD; }
  if ($F[$i] =~ /^i(.*)/) { $inode
 = $1; last FD; }
  if ($F[$i] =~ /^k(.*)/) { last FD; }
  if ($F[$i] =~ /^l(.*)/) { $lock = $1; last FD; }
  if ($F[$i] =~ /^N(.*)/) { last FD; }
  if ($F[$i] =~ /^o(.*)/) { $offset = $1; last FD; }
  if ($F[$i] =~ /^P(.*)/) { $proto = $1; last FD; }
  if ($F[$i] =~ /^s(.*)/) { $size = $1; last FD; }
  if ($F[$i] =~ /^S(.*)/) { $stream = $1; last FD; }
  if ($F[$i] =~ /^t(.*)/) { $type = $1; last FD; }
  if ($F[$i] =~ /^T(.*)/) {
      if ($state eq "") { $state = "(" . $1; }
      else { $state = $state . " " . $1; }
```

```
      last FD;
  }
  if ($F[$i] =~ /^n(.*)/) { $name = $1; last FD; }
  print "ERROR: unrecognized file set field: \"$F[$i]\"\n";
     }
 }
 $fdst = 1;
 next;
   }
   print "ERROR: unrecognized: \"$_\"\n";
}

# Flush any stored file or process output.

if ($fdst) { &list_fd }
if ($pidst) { &list_proc }
exit(0);


## list_fd -- list file descriptor information
#       Values are stored inelegantly in global variables.

sub list_fd {
   if ( ! $fhdr) {

   # Print header
 once.

 print "      FD   TYPE      DEVICE   SIZE/OFF      INODE  NAME\n";
 $fhdr = 1;
   }
   printf "    %4s%1.1s%1.1s %4.4s", $fd, $access, $lock, $type;
   $tmp = $devn; if ($devch ne "") { $tmp = $devch }
   printf "  %10.10s", $tmp;
   $tmp = $size; if ($offset ne "") { $tmp = $offset }
   printf " %10.10s", $tmp;
   $tmp = $inode; if ($proto ne "") { $tmp = $proto }
   printf " %10.10s", $tmp;
   $tmp = $stream; if ($name ne "") { $tmp = $name }
   print "  ", $tmp;
   if ($state ne "") { printf " %s)\n", $state; } else { print "\n"; }

# Clear variables.

   $access = $devch = $devn = $fd = $inode = $lock = "";
   $name = $offset = $proto = $size = $state = $stream = $type = "";
}
```

```
# list_proc -- list process information
#        Values are stored inelegantly in global variables.

sub list_proc {
   print "COMMAND       PID    PGRP    PPID  USER\n";
   $tmp = $uid; if ($login ne "") {$tmp = $login }
   printf "%-9.9s  %6d  %6d  %6d  %s\n", $cmd, $pid, $pgrp,
 $ppid, $tmp;

# Clear variables.

   $cmd = $login = $pgrp = $pid = $uid = "";
   $fhdr = $pidst = 0;
}
```

Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/scripts/list_NULf.pl
No license file was found, but licenses were detected in source scan.

```
#!/usr/bin/perl
#
# shared.pl    -- sample Perl 5 script to list processes that share
#    file descriptors or files, using `lsof +ffn -F..."
#    output
#
# Usage: shared [fd|file]
#
# where: fd to list file descriptors (default)
#
#  file to list files
#
# This script has been tested under perl version 5.001e.


# IMPORTANT DEFINITIONS
# ====================
#
# 1.  Set the interpreter line of this script to the local path of the
#     Perl5 executable.


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#
# Written by Victor A. Abell <abe@purdue.edu>
#
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```

```
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#
# 3. Altered versions must be plainly marked as such, and must not be
#    misrepresented as being the original software.
#
# 4. This notice may not be removed or altered.

# Initialize variables.

$Access = $Devch = $Devn = $Fd = $Fsa = $Inode = $Lock = # file
   $Na = $Name = "";     # | descriptor
$Cmd = $Login = $Pgrp = $Pid = $Ppid = $Uid = "";  # process var.
$Fdst = 0;       # fd state
$Hdr = 0;       # header state
$Offset = $Proto = $Size = $State = $Stream = $Type = ""; # | variables
$Pidst = 0;       # process state
$Pn = "shared";

# Set path to lsof.

if (($LSOF = &isexec("../lsof")) eq "") { # Try .. first
   if (($LSOF = &isexec("lsof")) eq "")
 { # Then try . and $PATH
 print "can't execute $LSOF\n"; exit 1
   }
}

# Define print field constants.

$CmdTtl = "CMD";
$CmdW = length($CmdTtl);
$DevTtl = "DEVICE";
$DevW = length($DevTtl);
$FdTtl = "FD";
$FdW = length($FdTtl);
$InoTtl = "NODE";
```

```
$InoW = length($InoTtl);
$KeyTtl = "FILEADDR";
$KeyW = length($KeyTtl);
$PidTtl = "PID";
$PidW = length($PidTtl);
$PpidTtl = "PPID";
$PpidW = length(PpidTtl);

# Process one (optional) argument.

if ($#ARGV >= 0) {
   $err = 0;
   if ($#ARGV > 1) { $err = 1; }
   elsif ($ARGV[0] eq "fd") {
 $KeyTtl = "FILEADDR";
 $Shfd = 1;
 $Shfile = 0;
   } elsif ($ARGV[0] eq "file") {
 $KeyTtl = "NODEID";
 $Shfd = 0;
 $Shfile = 1;
   } else { $err = 1; }
   if ($err) { die "$Pn: usage [fd|file]\n"; }
   shift;
} else { $Shfd = 1; $Shfile = 0; }
$KeyW = length($KeyTtl);

# Open a pipe from lsof.

if (!open(LSOF_PIPE, "$LSOF -R +ffn -F0pcRDfFinN |")) {
   die "$Pn: can't open pipe to: $LSOF\n";
}

# Process the lsof output a line at a time, gathering
 the variables for
# processes and files.

while (<LSOF_PIPE>) {
   chop;
   @F = split('\0', $_, 999);
   if ($F[0] =~ /^p/) {

# A process set begins with a PID field whose ID character is `p'.

 if ($Fdst) { &End_fd }
 if ($Pidst) { &End_proc }
 foreach $i (0 .. ($#F - 1)) {
```

```
    PROC: {
 if ($F[$i] =~ /^c(.*)/) { $Cmd = $1; last PROC }
 if ($F[$i] =~ /^g(.*)/) { $Pgrp = $1; last PROC }
 if ($F[$i] =~ /^p(.*)/) { $Pid = $1; last PROC }
 if ($F[$i] =~ /^u(.*)/) { $Uid = $1; last PROC }
 if ($F[$i] =~ /^L(.*)/) { $Login = $1; last PROC }
 if ($F[$i] =~ /^R(.*)/) { $Ppid = $1; last PROC }
 print "ERROR: unrecognized process field: \"$F[$i]\"\n";
    }
 }
 $Pidst = 1;
 next;
   }

# A file descriptor set begins with a file descriptor field whose ID
# character is `f'.

   if ($F[0] =~ /^f/) {
 if ($Fdst) { &End_fd }
 foreach $i (0 .. ($#F - 1)) {

    FD: {
 if ($F[$i] =~ /^a(.*)/) { $Access = $1; last FD; }
 if ($F[$i] =~ /^f(.*)/) { $Fd = $1; last FD; }
 if ($F[$i]
=~ /^F(.*)/) { $Fsa = $1; last FD; }
 if ($F[$i] =~ /^l(.*)/) { $Lock = $1; last FD; }
 if ($F[$i] =~ /^t(.*)/) { $Type = $1; last FD; }
 if ($F[$i] =~ /^d(.*)/) { $Devch = $1; last FD; }
 if ($F[$i] =~ /^D(.*)/) { $Devn = $1; last FD; }
 if ($F[$i] =~ /^s(.*)/) { $Size = $1; last FD; }
 if ($F[$i] =~ /^o(.*)/) { $Offset = $1; last FD; }
 if ($F[$i] =~ /^i(.*)/) { $Inode = $1; last FD; }
 if ($F[$i] =~ /^P(.*)/) { $Proto = $1; last FD; }
 if ($F[$i] =~ /^S(.*)/) { $Stream = $1; last FD; }
 if ($F[$i] =~ /^T(.*)/) {
     if ($State eq "") { $State = "(" . $1; }
     else { $State = $State . " " . $1; }
     last FD;
 }
 if ($F[$i] =~ /^n(.*)/) { $Name = $1; last FD; }
 if ($F[$i] =~ /^N(.*)/) { $Na = $1; last FD; }
 print "ERROR: unrecognized file set field: \"$F[$i]\"\n";
    }
 }
 $Fdst = 1;
 next;
   }
```

```
   print "ERROR: unrecognized: \"$_\"\n";
}
close(LSOF_PIPE);
if ($Fdst) { &End_fd }
if ($Pidst) { &End_proc }

# List matching files or file descriptors.

for ($pass
 = 0; $pass < 2; $pass++) {
   foreach $key (sort keys(%Fds)) {
 @Praw = split(' ', $Fds{$key}, 999);
 if ($#Praw < 1) { next; }
 if ($Shfd) { @P = sort Sort_by_FD_and_PID @Praw; }
 else { @P = sort Sort_by_PID_and_FD @Praw; }

   # Accumulate and print blocks of (key, PID, FD) triplets.

 for ($i = 0; $i < $#P; $i++) {
     if ($Shfile) {
  for ($n = 0; $n <= $#P; $n++) {
      ($pid, $fd) = split(",", $P[$n], 999);
      $PrtPid[$n] = $pid;
      $PrtFd[$n] = $fd;
  }
  $i = $n;
     } else {
  ($pid, $fd) = split(",", $P[$i], 999);
  $PrtFd[0] = $fd;
  $PrtPid[0] = $pid;
  for ($n = 1; $i < $#P; $i++, $n++) {
      ($nxtpid, $nxtfd) = split(",", $P[$i + 1], 999);
      if ($fd ne $nxtfd) { last; }
      $PrtFd[$n] = $nxtfd;
      $PrtPid[$n] = $nxtpid;
  }
     }
     if ($n > 1) { &Print_block($key, $n, $pass); }
 }
   }
}
exit(0);


## End_fd() -- process end of file descriptor

sub End_fd {
```

```
  local ($key);

  if ($Fdst && $Pidst && $Pid ne "") {
 if ($Cmd ne "") { $Cmds{$Pid}
 = $Cmd; }
 if ($Ppid ne "") { $Ppids{$Pid} = $Ppid; }
 $key = $Shfd ? $Fsa : $Na;
 if ($key ne "") {
    if (!defined($Fds{$key})) { $Fds{$key} = "$Pid,$Fd"; }
    else { $Fds{$key} .= " $Pid,$Fd"; }
    if ($Name ne "" && !defined($Name{$key})) { $Name{$key} = $Name }
    if ($Inode ne "" && !defined($Inodes{$key})) {
  $Inodes{$key} = $Inode;
    }
    if ($Devn ne "" && !defined($Devns{$key})) {
  $Devns{$key} = $Devn;
    }
 }
  }

# Clear variables.

  $Access = $Devch = $Devn = $Fd = $Fsa = $Inode = $Lock = "";
  $Na = $Name = $Offset = $Proto = $Size = $State = $Stream = $Type = "";
  $Fdst = 0;
}


## End_proc() -- process end of process

sub End_proc {

# Clear variables.

  $Cmd = $Login = $Pgrp = $Pid = $Ppid = $Uid = "";
  $Fdst = $Pidst = 0;
}


## Print_block() -- print a block of entries
#
# entry:
#
# @_[0] = block's key
# @_[1] = number of entries in the block
# @_[2] = print pass status (1 == print)

sub Print_block {
```

```
  my ($key, $n, $pass)
= @_;

  local ($fd, $i, $pid, $t, $tW);

  if ($pass) {
if (!$Hdr) {
    printf "%${KeyW}.${KeyW}s", $KeyTtl;
    printf " %${PidW}.${PidW}s", $PidTtl;
    printf " %${PpidW}.${PpidW}s", $PpidTtl;
    printf " %-${CmdW}.${CmdW}s", $CmdTtl;
    printf " %${FdW}.${FdW}s", $FdTtl;
    printf " %${DevW}.${DevW}s", $DevTtl;
    printf " %${InoW}.${InoW}s", $InoTtl;
    printf " NAME\n";
    $Hdr = 1;
} else { print "\n"; }
  }

# Loop through block.  During a non-print pass, caclulate maximum field widths.

  for ($i = 0; $i < $n; $i++) {
$fd = $PrtFd[$i];
$pid = $PrtPid[$i];

  # Process key.

if (!$pass) {
    $tW = length(sprintf("%s", $key));
    if ($tW > $KeyW) { $KeyW = $tW; }
} else { printf "%s", $key; }

  # Process PID.

if (!$pass) {
    $tW = length(sprintf(" %s", $pid));
    if ($tW > $PidW) { $PidW = $tW; }
} else { printf " %${PidW}.${PidW}s", $pid; }

  # Process parent PID.

$t = defined($Ppids{$pid}) ? $Ppids{$pid} : "";
if (!$pass)
{
    $tW = length(sprintf(" %s", $t));
    if ($tW > $PpidW) { $PpidW = $tW; }
} else { printf " %${PpidW}.${PpidW}s", $t; }
```

```
  # Process command name.

$t = defined($Cmds{$pid}) ? $Cmds{$pid} : "";
if (!$pass) {
    $tW = length(sprintf(" %s", $t));
    if ($tW > $CmdW) { $CmdW = $tW; }
} else { printf " %-${CmdW}.${CmdW}s", $t; }

  # Process file descriptor.

if (!$pass) {
    $tW = length(sprintf(" %s", $fd));
    if ($tW > $FdW) { $FdW = $tW; }
} else { printf " %${FdW}.${FdW}s", $fd; }

  # Process device number.

$t = defined($Devns{$key}) ? $Devns{$key} : "";
if (!$pass) {
    $tW = length(sprintf(" %s", $t));
    if ($tW > $DevW) { $DevW = $tW; }
} else { printf " %${DevW}.${DevW}s", $t; }

  # Process node number.

$t = defined($Inodes{$key}) ? $Inodes{$key} : $t;
if (!$pass) {
    $tW = length(sprintf (" %s", $t));
    if ($tW > $InoW) { $InoW = $tW; }
} else { printf " %${InoW}.${InoW}s", $t; }

  # Print name and line terminater, if this
is a print pass.

if ($pass) {
    if (defined($Name{$key})) { print " $Name{$key}\n"; }
    else { print "\n"; }
}
  }
}


## Sort_by_FD_and_PID() -- sort (PID,FD) doublets by FD first, then PID

sub Sort_by_FD_and_PID {

  local ($pida, $pidb, $fda, $fdj, $rv);
```

```
   ($pida, $fda) = split(",", $a);
   ($pidb, $fdb) = split(",", $b);
   if ($fda < $fdb) { return(-1); }
   if ($fda > $fdb) { return(1); }
   if ($pida < $pidb) { return(-1); }
   if ($pida > $pidb) { return(1); }
   return(0);
}


## Sort_by_PID_and_FD() -- sort (PID,FD) doublets by PID first, then FD

sub Sort_by_PID_and_FD {

   local ($pida, $pidb, $fda, $fdj, $rv);

   ($pida, $fda) = split(",", $a);
   ($pidb, $fdb) = split(",", $b);
   if ($pida < $pidb) { return(-1); }
   if ($pida > $pidb) { return(1); }
   if ($fda < $fdb) { return(-1); }
   return(0);
   if ($fda > $fdb) { return(1); }
}


## isexec($path) -- is $path executable
#
# $path   = absolute or relative path to file to test for
 executabiity.
#     Paths that begin with neither '/' nor '.' that arent't found as
#     simple references are also tested with the path prefixes of the
#     PATH environment variable.

sub
isexec {
   my ($path) = @_;
   my ($i, @P, $PATH);

   $path =~ s/^\s+|\s+$//g;
   if ($path eq "") { return(""); }
   if (($path =~ m#^[\/\.]#)) {
 if (-x $path) { return($path); }
 return("");
   }
   $PATH = $ENV{PATH};
   @P = split(":", $PATH);
```

```
  for ($i = 0; $i <= $#P; $i++) {
 if (-x "$P[$i]/$path") { return("$P[$i]/$path"); }
  }
  return("");
}
```

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*/
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*/
/*
* GetOpt() -- Local get option
*
* Liberally adapted from the public domain AT&T getopt() source,
```

```
* distributed at the 1985 UNIFORM conference in Dallas
*
* The modifications allow `?' to be an option character and allow
* the caller to decide that an option that may be followed by a
* value doesn't have one -- e.g., has a default instead.
*/
```

Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/main.c
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*/
/*
     * If this is a regular file with a non-numeric FD, it may be the
     * executable.
     */
```

Found in path(s):
* /lsof-4-95-0-orig-1-tar-bz2/lsof_4.95.0.linux/tests/LTbasic.c

1.1942 python-cryptography 41.0.7-4ubuntu0.1

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1.1948 libinih 55-1ubuntu2

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1.1949 tcp-wrappers 7.6.q-33

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1.1950 lmdb 0.9.31-1build1

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1.1951 libksba 1.6.6-1build1

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1.1955 libyaml 0.2.5-1build1

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1.1956 psmisc 23.7-1build1

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1.1957 libclone-perl 0.46-1build3

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```
#!./perl

# $Id: tied.pl,v 0.18 2006/10/08 03:37:29 ray Exp $
#
#  Copyright (c) 1995-1998, Raphael Manfredi
#
# You may redistribute and/or modify this file
# under the same terms as Perl itself.
#
# $Log: tied.pl,v $
# Revision 0.18  2006/10/08 03:37:29  ray
# Commented out VERSION causes errors with DynaLoader in perl 5.6.1 (and
```

```
# probably all earlier versions. It was removed.
#
# Revision 0.14  2003/09/07 22:02:36  ray
# VERSION 0.15
#
# Revision 0.13.2.1  2003/09/07 21:51:13  ray
# added support for unicode hash keys. This is only really a bug in 5.8.0 and
# the test in t/03scalar supports this.
#
# Revision 0.13  2002/06/12 06:41:55  ray
# VERSION 0.13
#
# Revision 0.11  2001/07/29 19:31:05  ray
# VERSION 0.11
#
# Revision 0.10  2001/04/29 21:56:10  ray
# VERSION 0.10
#
# Revision 0.9  2001/03/05 00:11:49  ray
# version 0.9
#
# Revision 0.9  2000/08/21 23:06:34  ray
# added support for code refs
#
# Revision
 0.8  2000/08/11 17:08:36  ray
# Release 0.08.
#
# Revision 0.7  2000/08/01 00:43:48  ray
# release 0.07.
#
# Revision 0.6.2.1  2000/08/01 00:42:53  ray
# modified to use as a require statement.
#
# Revision 0.6  2000/08/01 01:38:38  ray
# "borrowed" code from Storable
#
# Revision 0.6  1998/06/04 16:08:40  ram
# Baseline for first beta release.
#

require './t/dump.pl';

package TIED_HASH;

sub TIEHASH {
 my $self = bless {}, shift;
 return $self;
```

```
}

sub FETCH {
 my $self = shift;
 my ($key) = @_;
 $main::hash_fetch++;
 return $self->{$key};
}

sub STORE {
 my $self = shift;
 my ($key, $value) = @_;
 $self->{$key} = $value;
}

sub FIRSTKEY {
 my $self = shift;
 scalar keys %{$self};
 return each %{$self};
}

sub NEXTKEY {
 my $self = shift;
 return each %{$self};
}

package TIED_ARRAY;

sub TIEARRAY {
 my $self = bless [], shift;
 return $self;
}

sub FETCH {
 my $self = shift;
 my ($idx) = @_;
 $main::array_fetch++;
 return $self->[$idx];
}

sub STORE {
 my $self = shift;
 my ($idx, $value)
 = @_;
 $self->[$idx] = $value;
}

sub FETCHSIZE {
```

```
 my $self = shift;
 return @{$self};
}

package TIED_SCALAR;

sub TIESCALAR {
 my $scalar;
 my $self = bless \$scalar, shift;
 return $self;
}

sub FETCH {
 my $self = shift;
 $main::scalar_fetch++;
 return $$self;
}

sub STORE {
 my $self = shift;
 my ($value) = @_;
 $$self = $value;
}

1;
```

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* /libclone-perl-0-46-orig-1-tar-gz/Clone-0.46/t/tied.pl
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* /libclone-perl-0-46-orig-1-tar-gz/Clone-0.46/t/dclone.t
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```
/*
----------------------------------------------------------------------

   ppport.h -- Perl/Pollution/Portability Version 3.68
```

```
  Automatically created by Devel::PPPort running under perl 5.034000.

  Do NOT edit this file directly! -- Edit PPPort_pm.PL and the
  includes in parts/inc/ instead.

  Use 'perldoc ppport.h' to view the documentation below.

----------------------------------------------------------------------

SKIP

=pod

=head1 NAME

ppport.h - Perl/Pollution/Portability version 3.68

=head1 SYNOPSIS

 perl ppport.h [options] [source files]

 Searches current directory for files if no [source files] are given

 --help                      show short help

 --version                   show version

 --patch=file                write one patch file with changes
 --copy=suffix               write changed copies with suffix
 --diff=program              use diff program and options

 --compat-version=version
    provide compatibility with Perl version
 --cplusplus                 accept C++ comments

 --quiet                     don't output anything except fatal errors
 --nodiag                    don't show diagnostics
 --nohints                   don't show hints
 --nochanges                 don't suggest changes
 --nofilter                  don't filter input files

 --strip                     strip all script and doc functionality
                             from ppport.h

 --list-provided             list provided API
 --list-unsupported          list API that isn't supported all the way
                             back
```

--api-info=name show Perl API portability information

=head1 COMPATIBILITY

This version of F<ppport.h> is designed to support operation with Perl installations back to 5.003_07, and has been tested up to 5.35.9.

=head1 OPTIONS

=head2 --help

Display a brief usage summary.

=head2 --version

Display the version of F<ppport.h>.

=head2
--patch=I<file>

If this option is given, a single patch file will be created if any changes are suggested. This requires a working diff program to be installed on your system.

=head2 --copy=I<suffix>

If this option is given, a copy of each file will be saved with the given suffix that contains the suggested changes. This does not require any external programs. Note that this does not automagically add a dot between the original filename and the suffix. If you want the dot, you have to include it in the option argument.

If neither C<--patch> or C<--copy> are given, the default is to simply print the diffs for each file. This requires either C<Text::Diff> or a C<diff> program to be installed.

=head2 --diff=I<program>

Manually set the diff program and options to use. The default is to use C<Text::Diff>, when installed, and output unified context diffs.

=head2 --compat-version=I<version>

Tell F<ppport.h> to check for compatibility with the given Perl version. The

default is to check for compatibility with Perl
version 5.003_07. You can use this option to reduce the output
of F<ppport.h> if you intend to be backward compatible only
down to a certain Perl version.

=head2 --cplusplus

Usually, F<ppport.h> will detect C++ style comments and
replace them with C style comments for portability reasons.
Using this option instructs F<ppport.h> to leave C++
comments untouched.

=head2 --quiet

Be quiet. Don't print anything except fatal errors.

=head2 --nodiag

Don't output any diagnostic messages. Only portability
alerts will be printed.

=head2 --nohints

Don't output any hints. Hints often contain useful portability
notes. Warnings will still be displayed.

=head2 --nochanges

Don't suggest any changes. Only give diagnostic output and hints
unless these are also deactivated.

=head2 --nofilter

Don't filter the list of input files. By default, files not looking
like source code (i.e. not *.xs, *.c, *.cc, *.cpp or *.h) are skipped.

=head2 --strip

Strip
all script and documentation functionality from F<ppport.h>.
This reduces the size of F<ppport.h> dramatically and may be useful
if you want to include F<ppport.h> in smaller modules without
increasing their distribution size too much.

The stripped F<ppport.h> will have a C<--unstrip> option that allows
you to undo the stripping, but only if an appropriate C<Devel::PPPort>
module is installed.

=head2 --list-provided

Lists the API elements for which compatibility is provided by
F<ppport.h>. Also lists if it must be explicitly requested,
if it has dependencies, and if there are hints or warnings for it.

=head2 --list-unsupported

Lists the API elements that are known not to be FULLY supported by F<ppport.h>,
and below which version of Perl they probably won't be available or work.
By FULLY, we mean that support isn't provided all the way back to the first
version of Perl that F<ppport.h> supports at all.

=head2 --api-info=I<name>

Show portability information for elements matching
I<name>.
If I<name> is surrounded by slashes, it is interpreted as a regular
expression.

Normally, only API elements are shown, but if there are no matching API
elements but there are some other matching elements, those are shown. This
allows you to conveniently find when functions internal to the core
implementation were added; only people working on the core are likely to find
this last part useful.

=head1 DESCRIPTION

In order for a Perl extension (XS) module to be as portable as possible
across differing versions of Perl itself, certain steps need to be taken.

=over 4

=item *

Including this header is the first major one. This alone will give you
access to a large part of the Perl API that hasn't been available in
earlier Perl releases. Use

  perl ppport.h --list-provided

to see which API elements are provided by ppport.h.

=item *

You should avoid using deprecated parts of the API. For example, using
global Perl variables without the C<PL_> prefix is deprecated. Also,
some

API functions used to have a C<perl_> prefix. Using this form is
also deprecated. You can safely use the supported API, as F<ppport.h>
will provide wrappers for older Perl versions.

=item *

Although the purpose of F<ppport.h> is to keep you from having to concern
yourself with what version you are running under, there may arise instances
where you have to do so. These macros, the same ones as in base Perl, are
available to you in all versions, and are what you should use:

=over 4

=item C<PERL_VERSION_I<xx>(major, minor, patch)>

Returns whether or not the perl currently being compiled has the specified
relationship I<xx> to the perl given by the parameters. I<xx> is one of
C<EQ>, C<NE>, C<LT>, C<LE>, C<GT>, C<GE>.

For example,

```
#if PERL_VERSION_GT(5,24,2)
  code that will only be compiled on perls after v5.24.2
#else
  fallback code
#endif
```

Note that this is usable in making compile-time decisions

You may use the special value '*' for the final number to mean ALL possible
values
 for it. Thus,

```
#if PERL_VERSION_EQ(5,31,'*')
```

means all perls in the 5.31 series. And

```
#if PERL_VERSION_NE(5,24,'*')
```

means all perls EXCEPT 5.24 ones. And

```
#if PERL_VERSION_LE(5,9,'*')
```

is effectively

```
#if PERL_VERSION_LT(5,10,0)
```

=back

=item *

If you use one of a few functions or variables that were not present in earlier versions of Perl, and that can't be provided using a macro, you have to explicitly request support for these functions by adding one or more C<#define>s in your source code before the inclusion of F<ppport.h>.

These functions or variables will be marked C<explicit> in the list shown by C<--list-provided>.

Depending on whether you module has a single or multiple files that use such functions or variables, you want either C<static> or global variants.

For a C<static> function or variable (used only in a single source file), use:

```
#define NEED_function
#define NEED_variable
```

For a global function or variable (used in multiple source files), use:

```
#define NEED_function_GLOBAL
#define NEED_variable_GLOBAL
```

Note that you mustn't have more than one global request for the same function or variable in your project.

Function / Variable	Static Request	Global Request
caller_cx()	NEED_caller_cx	NEED_caller_cx_GLOBAL
ck_warner()	NEED_ck_warner	NEED_ck_warner_GLOBAL
ck_warner_d()	NEED_ck_warner_d	NEED_ck_warner_d_GLOBAL
croak_xs_usage()	NEED_croak_xs_usage	NEED_croak_xs_usage_GLOBAL
die_sv()	NEED_die_sv	NEED_die_sv_GLOBAL
eval_pv()	NEED_eval_pv	NEED_eval_pv_GLOBAL
grok_bin()	NEED_grok_bin	NEED_grok_bin_GLOBAL
grok_hex()	NEED_grok_hex	NEED_grok_hex_GLOBAL
grok_number()	NEED_grok_number	NEED_grok_number_GLOBAL
grok_numeric_radix()	NEED_grok_numeric_radix	NEED_grok_numeric_radix_GLOBAL
grok_oct()	NEED_grok_oct	NEED_grok_oct_GLOBAL
load_module()	NEED_load_module	NEED_load_module_GLOBAL
mess()	NEED_mess	NEED_mess_GLOBAL
mess_nocontext()	NEED_mess_nocontext	NEED_mess_nocontext_GLOBAL
mess_sv()	NEED_mess_sv	NEED_mess_sv_GLOBAL
mg_findext()	NEED_mg_findext	NEED_mg_findext_GLOBAL

```
my_snprintf()          NEED_my_snprintf          NEED_my_snprintf_GLOBAL
my_sprintf()           NEED_my_sprintf           NEED_my_sprintf_GLOBAL
my_strlcat()           NEED_my_strlcat           NEED_my_strlcat_GLOBAL
my_strlcpy()           NEED_my_strlcpy           NEED_my_strlcpy_GLOBAL
my_strnlen()
        NEED_my_strnlen          NEED_my_strnlen_GLOBAL
newCONSTSUB()          NEED_newCONSTSUB          NEED_newCONSTSUB_GLOBAL
newSVpvn_share()       NEED_newSVpvn_share       NEED_newSVpvn_share_GLOBAL
PL_parser              NEED_PL_parser            NEED_PL_parser_GLOBAL
PL_signals             NEED_PL_signals           NEED_PL_signals_GLOBAL
pv_display()           NEED_pv_display           NEED_pv_display_GLOBAL
pv_escape()            NEED_pv_escape            NEED_pv_escape_GLOBAL
pv_pretty()            NEED_pv_pretty            NEED_pv_pretty_GLOBAL
sv_catpvf_mg()         NEED_sv_catpvf_mg         NEED_sv_catpvf_mg_GLOBAL
sv_catpvf_mg_nocontext()  NEED_sv_catpvf_mg_nocontext  NEED_sv_catpvf_mg_nocontext_GLOBAL
sv_setpvf_mg()         NEED_sv_setpvf_mg         NEED_sv_setpvf_mg_GLOBAL
sv_setpvf_mg_nocontext()  NEED_sv_setpvf_mg_nocontext  NEED_sv_setpvf_mg_nocontext_GLOBAL
 sv_unmagicext()       NEED_sv_unmagicext        NEED_sv_unmagicext_GLOBAL
utf8_to_uvchr_buf()    NEED_utf8_to_uvchr_buf    NEED_utf8_to_uvchr_buf_GLOBAL
vload_module()         NEED_vload_module         NEED_vload_module_GLOBAL
vmess()                NEED_vmess                NEED_vmess_GLOBAL
warner()               NEED_warner               NEED_warner_GLOBAL
```

To avoid namespace conflicts, you can change the namespace of the
explicitly exported functions / variables using the C<DPPP_NAMESPACE>
macro. Just C<#define> the macro before including C<ppport.h>:

```
#define DPPP_NAMESPACE MyOwnNamespace_
#include "ppport.h"
```

The default namespace is C<DPPP_>.

=back

The good thing is that most of the above can be checked by running
F<ppport.h> on your source code. See the next section for
details.

=head1 EXAMPLES

To verify whether F<ppport.h> is needed for your module, whether you
should make any changes to your code, and whether
 any special defines
should be used, F<ppport.h> can be run as a Perl script to check your
source code. Simply say:

```
perl ppport.h
```

The result will usually be a list of patches suggesting changes
that should at least be acceptable, if not necessarily the most
efficient solution, or a fix for all possible problems.

If you know that your XS module uses features only available in
newer Perl releases, if you're aware that it uses C++ comments,
and if you want all suggestions as a single patch file, you could
use something like this:

```
perl ppport.h --compat-version=5.6.0 --cplusplus --patch=test.diff
```

If you only want your code to be scanned without any suggestions
for changes, use:

```
perl ppport.h --nochanges
```

You can specify a different C<diff> program or options, using
the C<--diff> option:

```
perl ppport.h --diff='diff -C 10'
```

This would output context diffs with 10 lines of context.

If you want to create patched copies of your files instead, use:

```
perl ppport.h --copy=.new
```

To
 display portability information for the C<newSVpvn> function,
use:

```
perl ppport.h --api-info=newSVpvn
```

Since the argument to C<--api-info> can be a regular expression,
you can use

```
perl ppport.h --api-info=/_nomg$/
```

to display portability information for all C<_nomg> functions or

```
perl ppport.h --api-info=/./
```

to display information for all known API elements.

=head1 BUGS

Some of the suggested edits and/or generated patches may not compile as-is
without tweaking manually. This is generally due to the need for an extra

parameter to be added to the call to prevent buffer overflow.

If this version of F<ppport.h> is causing failure during
the compilation of this module, please check if newer versions
of either this module or C<Devel::PPPort> are available on CPAN
before sending a bug report.

If F<ppport.h> was generated using the latest version of
C<Devel::PPPort> and is causing failure of this module, please
file a bug report at L<https://github.com/Dual-Life/Devel-PPPort/issues>

Please
include the following information:

=over 4

=item 1.

The complete output from running "perl -V"

=item 2.

This file.

=item 3.

The name and version of the module you were trying to build.

=item 4.

A full log of the build that failed.

=item 5.

Any other information that you think could be relevant.

=back

For the latest version of this code, please get the C<Devel::PPPort>
module from CPAN.

=head1 COPYRIGHT

Version 3.x, Copyright (c) 2004-2013, Marcus Holland-Moritz.

Version 2.x, Copyright (C) 2001, Paul Marquess.

Version 1.x, Copyright (C) 1999, Kenneth Albanowski.

```
This program is free software; you can redistribute it and/or
modify it under the same terms as Perl itself.

=head1 SEE ALSO

See L<Devel::PPPort>.

=cut

# These are tools that must be included in ppport.h.  It doesn't work if given
# a .pl suffix.
#
# WARNING: Use only constructs that are legal as far back as D:P handles, as
# this is run in the perl version being tested.

# What
 revisions are legal, to be output as-is and converted into a pattern
# that matches them precisely
my $r_pat = "[57]";

sub format_version
{
 # Given an input version that is acceptable to parse_version(), return a
 # string of the standard representation of it.

 my($r,$v,$s) = parse_version(shift);

 if ($r < 5 || ($r == 5 && $v < 6)) {
   my $ver = sprintf "%d.%03d", $r, $v;
   $s > 0 and $ver .= sprintf "_%02d", $s;

   return $ver;
 }

 return sprintf "%d.%d.%d", $r, $v, $s;
}

sub parse_version
{
 # Returns a triplet, (revision, major, minor) from the input, treated as a
 # string, which can be in any of several typical formats.

 my $ver = shift;
 $ver = "" unless defined $ver;

 my($r,$v,$s);
```

```
 if (   ($r, $v, $s) = $ver =~ /^([0-9]+)([0-9]{3})([0-9]{3})$/ # 5029010, from the file
                                        # names in our
                                        # parts/base/ and

            # parts/todo directories
     or ($r, $v, $s) = $ver =~ /^([0-9]+)\.([0-9]+)\.([0-9]+)$/  # 5.25.7
     or ($r, $v, $s) = $ver =~ /^([0-9]+)\.([0-9]{3})([0-9]{3})$/ # 5.025008, from the
                                           # output of $]
     or ($r, $v, $s) = $ver =~ /^([0-9]+)\.([0-9]{1,3})()$/    # 5.24, 5.004
     or ($r, $v, $s) = $ver =~ /^([0-9]+)\.(00[1-5])_?([0-9]{2})$/ # 5.003_07
 ) {

   $s = 0 unless $s;

   die "Only Perl $r_pat are supported '$ver'\n" unless $r =~ / ^ $r_pat $ /x;
   die "Invalid version number: $ver\n" if $v >= 1000 || $s >= 1000;
   return (0 +$r, 0 + $v, 0 + $s);
 }

 # For some safety, don't assume something is a version number if it has a
 # literal dot as one of the three characters.  This will have to be fixed
 # when we reach x.46 (since 46 is ord('.'))
 if ($ver !~ /\./ && (($r, $v, $s) = $ver =~ /^(.)(.)(.)$/))  # vstring 5.25.7
 {
   $r = ord $r;
   $v = ord $v;
   $s = ord $s;

   die "Only Perl
 $r_pat are supported '$ver'\n" unless $r =~ / ^ $r_pat $ /x;
   return ($r, $v, $s);
 }

 my $mesg = "";
 $mesg = ".  (In 5.00x_yz, x must be 1-5.)" if $ver =~ /_/;
 die "Invalid version number format: '$ver'$mesg\n";
}

sub int_parse_version
{
   # Returns integer 7 digit human-readable version, suitable for use in file
   # names in parts/todo parts/base.

   return 0 + join "", map { sprintf("%03d", $_) } parse_version(shift);
}

sub ivers    # Shorter name for int_parse_version
{
```

```
   return int_parse_version(shift);
}

sub format_version_line
{
   # Returns a floating point representation of the input version

   my $version = int_parse_version(shift);
   $version =~ s/ ^  ( $r_pat ) \B /$1./x;
   return $version;
}

BEGIN {
 if ("$]" < "5.006" ) {
   # On early perls, the implicit pass by reference doesn't work, so we have
   # to use the globals to initialize.
   eval q[sub dictionary_order($$) { _dictionary_order($a, $b) } ];
 } elsif ("$]" < "5.022" ) {

  eval q[sub dictionary_order($$) { _dictionary_order(@_) } ];
 } else {
   eval q[sub dictionary_order :prototype($$) { _dictionary_order(@_) } ];
 }
}

sub _dictionary_order { # Sort caselessly, ignoring punct
   my ($valid_a, $valid_b) = @_;

   my ($lc_a, $lc_b);
   my ($squeezed_a, $squeezed_b);

   $valid_a = '' unless defined $valid_a;
   $valid_b = '' unless defined $valid_b;

   $lc_a = lc $valid_a;
   $lc_b = lc $valid_b;

   $squeezed_a = $lc_a;
   $squeezed_a =~ s/^_+//g;    # No leading underscores
   $squeezed_a =~ s/\B_+\B//g; # No connecting underscores
   $squeezed_a =~ s/[\W]//g;   # No punct

   $squeezed_b = $lc_b;
   $squeezed_b =~ s/^_+//g;
   $squeezed_b =~ s/\B_+\B//g;
   $squeezed_b =~ s/[\W]//g;

   return( $squeezed_a cmp $squeezed_b
```

```
        or      $lc_a cmp $lc_b
        or    $valid_a cmp $valid_b);
}

sub sort_api_lines  # Sort lines of the form flags|return|name|args...
                    # by 'name'
{
   $a =~ / ^ [^|]* \| [^|]* \|
 ( [^|]* ) /x; # 3rd field '|' is sep
   my $a_name = $1;
   $b =~ / ^ [^|]* \| [^|]* \| ( [^|]* ) /x;
   my $b_name = $1;
   return dictionary_order($a_name, $b_name);
}

1;

use strict;

BEGIN { require warnings if "$]" > '5.006' }

# Disable broken TRIE-optimization
BEGIN { eval '${^RE_TRIE_MAXBUF} = -1' if "$]" >= "5.009004" && "$]" <= "5.009005"}

my $VERSION = 3.68;

my %opt = (
 quiet     => 0,
 diag      => 1,
 hints     => 1,
 changes   => 1,
 cplusplus => 0,
 filter    => 1,
 strip     => 0,
 version   => 0,
);

my($ppport) = $0 =~ /([\w.]+)$/;
my $LF = '(?:\r\n|[\r\n])';   # line feed
my $HS = "[ \t]";             # horizontal whitespace

# Never use C comments in this file!
my $ccs  = '/'.'*';
my $cce  = '*'.'/';
my $rccs = quotemeta $ccs;
my $rcce = quotemeta $cce;

eval {
```

```
 require Getopt::Long;
 Getopt::Long::GetOptions(\%opt, qw(
   help quiet diag! filter! hints! changes! cplusplus strip version
   patch=s copy=s diff=s compat-version=s
   list-provided
 list-unsupported api-info=s
 )) or usage();
};

if ($@ and grep /^-/, @ARGV) {
 usage() if "@ARGV" =~ /^--?h(?:elp)?$/;
 die "Getopt::Long not found. Please don't use any options.\n";
}

if ($opt{version}) {
 print "This is $0 $VERSION.\n";
 exit 0;
}

usage() if $opt{help};
strip() if $opt{strip};

$opt{'compat-version'} = 5.003_07 unless exists $opt{'compat-version'};
$opt{'compat-version'} = int_parse_version($opt{'compat-version'});

my $int_min_perl = int_parse_version(5.003_07);

# Each element of this hash looks something like:
# 'Poison' => {
#                       'base' => '5.008000',
#                       'provided' => 1,
#                       'todo' => '5.003007'
#             },
my %API = map { /^(\w+)\|([^|]*)\|([^|]*)\|(\w*)$/
             ? ( $1 => {
                  ($2                 ? ( base     => $2 ) : ()),
                  ($3                 ? ( todo     => $3 ) : ()),
                  (index($4, 'v') >= 0 ? ( varargs  => 1
  ) : ()),
                  (index($4, 'p') >= 0 ? ( provided => 1  ) : ()),
                  (index($4, 'n') >= 0 ? ( noTHXarg => 1  ) : ()),
                  (index($4, 'c') >= 0 ? ( core_only    => 1  ) : ()),
                  (index($4, 'd') >= 0 ? ( deprecated   => 1  ) : ()),
                  (index($4, 'i') >= 0 ? ( inaccessible => 1  ) : ()),
                  (index($4, 'x') >= 0 ? ( experimental => 1  ) : ()),
                  (index($4, 'u') >= 0 ? ( undocumented => 1  ) : ()),
                  (index($4, 'o') >= 0 ? ( ppport_fnc => 1  ) : ()),
                  (index($4, 'V') >= 0 ? ( unverified => 1  ) : ()),
```

```
                } )
            : die "invalid spec: $_" } qw(
ABDAY_1|5.027010||Viu
ABDAY_2|5.027010||Viu
ABDAY_3|5.027010||Viu
ABDAY_4|5.027010||Viu
ABDAY_5|5.027010||Viu
ABDAY_6|5.027010||Viu
ABDAY_7|5.027010||Viu
ABMON_10|5.027010||Viu
ABMON_11|5.027010||Viu
ABMON_12|5.027010||Viu
ABMON_1|5.027010||Viu
ABMON_2|5.027010||Viu
ABMON_3|5.027010||Viu
ABMON_4|5.027010||Viu
ABMON_5|5.027010||Viu
ABMON_6|5.027010||Viu
ABMON_7|5.027010||Viu
ABMON_8|5.027010||Viu
ABMON_9|5.027010||Viu
ABORT|5.003007||Viu
abort|5.005000||Viu
abort_execution|5.025010||Viu
accept|5.005000||Viu
ACCEPT|5.009005||Viu
ACCEPT_t8|5.035004||Viu
ACCEPT_t8_p8|5.033003||Viu
ACCEPT_t8_pb|5.033003||Viu
ACCEPT_tb|5.035004||Viu
ACCEPT_tb_p8|5.033003||Viu
ACCEPT_tb_pb|5.033003||Viu
access|5.005000||Viu
add_above_Latin1_folds|5.021001||Viu
add_cp_to_invlist|5.013011||Viu
add_data|5.005000||Vniu
add_multi_match|5.021004||Viu
_add_range_to_invlist|5.016000||cViu
add_utf16_textfilter|5.011001||Viu
adjust_size_and_find_bucket|5.019003||Vniu
advance_one_LB|5.023007||Viu
advance_one_SB|5.021009||Viu
advance_one_WB|5.021009||Viu
AHOCORASICK|5.009005||Viu
AHOCORASICKC|5.009005||Viu
AHOCORASICKC_t8|5.035004||Viu
AHOCORASICKC_t8_p8|5.033003||Viu
AHOCORASICKC_t8_pb|5.033003||Viu
```

AHOCORASICKC_tb|5.035004||Viu
AHOCORASICKC_tb_p8|5.033003||Viu
AHOCORASICKC_tb_pb|5.033003||Viu
AHOCORASICK_t8|5.035004||Viu
AHOCORASICK_t8_p8|5.033003||Viu
AHOCORASICK_t8_pb|5.033003||Viu
AHOCORASICK_tb|5.035004||Viu
AHOCORASICK_tb_p8|5.033003||Viu
AHOCORASICK_tb_pb|5.033003||Viu
ALIGNED_TYPE_NAME|||Viu
ALIGNED_TYPE|||Viu
alloccopstash|5.017001|5.017001|x
alloc_LOGOP|5.025004||xViu
allocmy|5.008001||Viu
ALLOC_THREAD_KEY|5.005003||Viu
ALT_DIGITS|5.027010||Viu
amagic_call|5.003007|5.003007|u
amagic_cmp|5.009003||Viu
amagic_cmp_desc|5.031011||Viu
amagic_cmp_locale|5.009003||Viu
amagic_cmp_locale_desc|5.031011||Viu
amagic_deref_call|5.013007|5.013007|u
amagic_i_ncmp|5.009003||Viu
amagic_i_ncmp_desc|5.031011||Viu
amagic_is_enabled|5.015008||Viu
amagic_ncmp|5.009003||Viu
amagic_ncmp_desc|5.031011||Viu
AMG_CALLun|5.003007||Viu
AMG_CALLunary|5.013009||Viu
AMGfallNEVER|5.003007||Viu
AMGfallNO|5.003007||Viu
AMGfallYES|5.003007||Viu
AMGf_assign|5.003007||Viu
AMGf_noleft|5.003007||Viu
AMGf_noright|5.003007||Viu
AMGf_numarg|5.021009||Viu
AMGf_numeric|5.013002||Viu
AMGf_unary|5.003007||Viu
AMGf_want_list|5.017002||Viu
AM_STR|5.027010||Viu
AMT_AMAGIC|5.004000||Viu
AMT_AMAGIC_off|5.004000||Viu
AMT_AMAGIC_on|5.004000||Viu
AMTf_AMAGIC|5.004000||Viu
_aMY_CXT|5.009000|5.009000|p
aMY_CXT|5.009000|5.009000|p
aMY_CXT_|5.009000|5.009000|p
anchored_end_shift|5.009005||Viu

anchored_offset|5.005000||Viu
anchored_substr|5.005000||Viu
anchored_utf8|5.008000||Viu
ANGSTROM_SIGN|5.017003||Viu
anonymise_cv_maybe|5.013003||Viu
any_dup|5.006000||Vu
ANYOF|5.003007||Viu
ANYOF_ALNUM|5.006000||Viu
ANYOF_ALNUML|5.004000||Viu
ANYOF_ALPHA|5.006000||Viu
ANYOF_ALPHANUMERIC|5.017008||Viu
ANYOF_ASCII|5.006000||Viu
ANYOF_BIT|5.004005||Viu
ANYOF_BITMAP|5.006000||Viu
ANYOF_BITMAP_BYTE|5.006000||Viu
ANYOF_BITMAP_CLEAR|5.006000||Viu
ANYOF_BITMAP_CLEARALL|5.007003||Viu
ANYOF_BITMAP_SET|5.006000||Viu
ANYOF_BITMAP_SETALL|5.007003||Viu
ANYOF_BITMAP_SIZE|5.006000||Viu
ANYOF_BITMAP_TEST|5.006000||Viu
ANYOF_BITMAP_ZERO|5.006000||Viu
ANYOF_BLANK|5.006001||Viu
ANYOF_CASED|5.017008||Viu
ANYOF_CLASS_OR|5.017007||Viu
ANYOF_CLASS_SETALL|5.013011||Viu
ANYOF_CLASS_TEST_ANY_SET|5.013008||Viu
ANYOF_CNTRL|5.006000||Viu
ANYOF_COMMON_FLAGS|5.019008||Viu
ANYOFD|5.023003||Viu
ANYOF_DIGIT|5.006000||Viu
ANYOFD_t8|5.035004||Viu
ANYOFD_t8_p8|5.033003||Viu
ANYOFD_t8_pb|5.033003||Viu
ANYOFD_tb|5.035004||Viu
ANYOFD_tb_p8|5.033003||Viu
ANYOFD_tb_pb|5.033003||Viu
ANYOF_FLAGS|5.006000||Viu
ANYOF_FLAGS_ALL|5.006000||Viu
ANYOF_GRAPH|5.006000||Viu
ANYOFH|5.029007||Viu
ANYOFHb|5.031001||Viu
ANYOFHb_t8|5.035004||Viu
ANYOFHb_t8_p8|5.033003||Viu
ANYOFHb_t8_pb|5.033003||Viu
ANYOFHb_tb|5.035004||Viu
ANYOFHb_tb_p8|5.033003||Viu
ANYOFHb_tb_pb|5.033003||Viu

ANYOF_HORIZWS|5.009005||Viu
ANYOFHr|5.031002||Viu
ANYOFHr_t8|5.035004||Viu
ANYOFHr_t8_p8|5.033003||Viu
ANYOFHr_t8_pb|5.033003||Viu
ANYOFHr_tb|5.035004||Viu
ANYOFHr_tb_p8|5.033003||Viu
ANYOFHr_tb_pb|5.033003||Viu
ANYOFHs|5.031007||Viu
ANYOFHs_t8|5.035004||Viu
ANYOFHs_t8_p8|5.033003||Viu
ANYOFHs_t8_pb|5.033003||Viu
ANYOFHs_tb|5.035004||Viu
ANYOFHs_tb_p8|5.033003||Viu
ANYOFHs_tb_pb|5.033003||Viu
ANYOFH_t8|5.035004||Viu
ANYOFH_t8_p8|5.033003||Viu
ANYOFH_t8_pb|5.033003||Viu
ANYOFH_tb|5.035004||Viu
ANYOFH_tb_p8|5.033003||Viu
ANYOFH_tb_pb|5.033003||Viu
ANYOF_INVERT|5.004000||Viu
ANYOFL|5.021008||Viu
ANYOFL_FOLD|5.023007||Viu
ANYOF_LOCALE_FLAGS|5.019005||Viu
ANYOF_LOWER|5.006000||Viu
ANYOFL_SHARED_UTF8_LOCALE_fold_HAS_MATCHES_nonfold_REQD|5.023007||Viu
ANYOFL_SOME_FOLDS_ONLY_IN_UTF8_LOCALE|5.023007||Viu
ANYOFL_t8|5.035004||Viu
ANYOFL_t8_p8|5.033003||Viu
ANYOFL_t8_pb|5.033003||Viu
ANYOFL_tb|5.035004||Viu
ANYOFL_tb_p8|5.033003||Viu
ANYOFL_tb_pb|5.033003||Viu
ANYOFL_UTF8_LOCALE_REQD|5.023007||Viu
ANYOFM|5.027009||Viu
ANYOF_MATCHES_ALL_ABOVE_BITMAP|5.021004||Viu
ANYOF_MATCHES_POSIXL|5.021004||Viu
ANYOF_MAX|5.006000||Viu
ANYOFM_t8|5.035004||Viu
ANYOFM_t8_p8|5.033003||Viu
ANYOFM_t8_pb|5.033003||Viu
ANYOFM_tb|5.035004||Viu
ANYOFM_tb_p8|5.033003||Viu
ANYOFM_tb_pb|5.033003||Viu
ANYOF_NALNUM|5.006000||Viu
ANYOF_NALNUML|5.004000||Viu
ANYOF_NALPHA|5.006000||Viu

ANYOF_NALPHANUMERIC|5.017008||Viu
ANYOF_NASCII|5.006000||Viu
ANYOF_NBLANK|5.006001||Viu
ANYOF_NCASED|5.017008||Viu
ANYOF_NCNTRL|5.006000||Viu
ANYOF_NDIGIT|5.006000||Viu
ANYOF_NGRAPH|5.006000||Viu
ANYOF_NHORIZWS|5.009005||Viu
ANYOF_NLOWER|5.006000||Viu
ANYOF_NPRINT|5.006000||Viu
ANYOF_NPUNCT|5.006000||Viu
ANYOF_NSPACE|5.006000||Viu
ANYOF_NSPACEL|5.004000||Viu
ANYOF_NUPPER|5.006000||Viu
ANYOF_NVERTWS|5.009005||Viu
ANYOF_NWORDCHAR|5.017005||Viu
ANYOF_NXDIGIT|5.006000||Viu
ANYOF_ONLY_HAS_BITMAP|5.021004||Viu
ANYOFPOSIXL|5.029004||Viu
ANYOF_POSIXL_AND|5.019005||Viu
ANYOF_POSIXL_BITMAP|5.035003||Viu
ANYOF_POSIXL_CLEAR|5.019005||Viu
ANYOF_POSIXL_MAX|5.019005||Viu
ANYOF_POSIXL_OR|5.019005||Viu
ANYOF_POSIXL_SET|5.019005||Viu
ANYOF_POSIXL_SETALL|5.019005||Viu
ANYOF_POSIXL_SET_TO_BITMAP|5.029004||Viu
ANYOF_POSIXL_SSC_TEST_ALL_SET|5.019009||Viu
ANYOF_POSIXL_SSC_TEST_ANY_SET|5.019009||Viu
ANYOFPOSIXL_t8|5.035004||Viu
ANYOFPOSIXL_t8_p8|5.033003||Viu
ANYOFPOSIXL_t8_pb|5.033003||Viu
ANYOFPOSIXL_tb|5.035004||Viu
ANYOFPOSIXL_tb_p8|5.033003||Viu
ANYOFPOSIXL_tb_pb|5.033003||Viu
ANYOF_POSIXL_TEST|5.019005||Viu
ANYOF_POSIXL_TEST_ALL_SET|5.019005||Viu
ANYOF_POSIXL_TEST_ANY_SET|5.019005||Viu
ANYOF_POSIXL_ZERO|5.019005||Viu
ANYOF_PRINT|5.006000||Viu
ANYOF_PUNCT|5.006000||Viu
ANYOFR|5.031007||Viu
ANYOFRb|5.031007||Viu
ANYOFRbase|5.031007||Viu
ANYOFR_BASE_BITS|5.031007||Viu
ANYOFRb_t8|5.035004||Viu
ANYOFRb_t8_p8|5.033003||Viu
ANYOFRb_t8_pb|5.033003||Viu

ANYOFRb_tb|5.035004||Viu
ANYOFRb_tb_p8|5.033003||Viu
ANYOFRb_tb_pb|5.033003||Viu
ANYOFRdelta|5.031007||Viu
ANYOFR_t8|5.035004||Viu
ANYOFR_t8_p8|5.033003||Viu
ANYOFR_t8_pb|5.033003||Viu
ANYOFR_tb|5.035004||Viu
ANYOFR_tb_p8|5.033003||Viu
ANYOFR_tb_pb|5.033003||Viu
ANYOF_SHARED_d_MATCHES_ALL_NON_UTF8_NON_ASCII_non_d_WARN_SUPER|5.023003||Viu
ANYOF_SHARED_d_UPPER_LATIN1_UTF8_STRING_MATCHES_non_d_RUNTIME_USER_PROP|5.023006||Viu
ANYOF_SPACE|5.006000||Viu
ANYOF_SPACEL|5.004000||Viu
ANYOF_t8|5.035004||Viu
ANYOF_t8_p8|5.033003||Viu
ANYOF_t8_pb|5.033003||Viu
ANYOF_tb|5.035004||Viu
ANYOF_tb_p8|5.033003||Viu
ANYOF_tb_pb|5.033003||Viu
ANYOF_UNIPROP|5.017006||Viu
ANYOF_UPPER|5.006000||Viu
ANYOF_VERTWS|5.009005||Viu
ANYOF_WORDCHAR|5.017005||Viu
ANYOF_XDIGIT|5.006000||Viu
ao|5.005000||Viu
_append_range_to_invlist|5.013010||Viu
append_utf8_from_native_byte|5.019004||cVniu
apply|5.003007||Viu
apply_attrs|5.006000||Viu
apply_attrs_my|5.007003||Viu
apply_attrs_string|5.006001|5.006001|xu
ARCHLIB|5.003007|5.003007|Vn
ARCHLIB_EXP|5.003007|5.003007|Vn
ARCHNAME|5.004000|5.004000|Vn
ARG1|5.003007||Viu
ARG1_LOC|5.005000||Viu
ARG1_SET|5.005000||Viu
ARG2|5.003007||Viu
ARG2L|5.009005||Viu
ARG2L_LOC|5.009005||Viu
ARG2_LOC|5.005000||Viu
ARG2L_SET|5.009005||Viu
ARG2_SET|5.005000||Viu
ARG|5.005000||Viu
ARG_LOC|5.005000||Viu
ARGp|5.031010||Viu

ARGp_LOC|5.031010||Viu
ARGp_SET|5.031010||Viu
ARG__SET|5.005000||Viu
ARG_SET|5.005000||Viu
ARGTARG|5.003007||Viu
ARG_VALUE|5.005000||Viu
argvout_final|5.029006||Viu
ASCIIish|5.005003||Viu
ASCII_MORE_RESTRICT_PAT_MODS|5.013010||Viu
ASCII_PLATFORM_UTF8_MAXBYTES|5.035004||Viu
ASCII_RESTRICT_PAT_MOD|5.013009||Viu
ASCII_RESTRICT_PAT_MODS|5.013009||Viu
ASCII_TO_NATIVE|5.007001||Viu
ASCII_TO_NEED|5.019004||dcVnu
asctime|5.009000||Viu
ASCTIME_R_PROTO|5.008000|5.008000|Vn
assert|5.003007||Viu
__ASSERT_|5.019007|5.008008|p
ASSERT_CURPAD_ACTIVE|5.008001||Viu
ASSERT_CURPAD_LEGAL|5.008001||Viu
ASSERT_IS_LITERAL|||Viu
ASSERT_IS_PTR|||Viu
assert_not_glob|5.009004||Viu
ASSERT_NOT_PTR|5.035004||Viu
assert_not_ROK|5.008001||Viu
assert_uft8_cache_coherent|5.013003||Viu
assignment_type|5.021005||Viu
ASSUME|5.019006|5.003007|p
atfork_lock|5.007003|5.007003|nu
atfork_unlock|5.007003|5.007003|nu
aTHX|5.006000|5.003007|p
aTHX_|5.006000|5.003007|p
aTHXa|5.017006||Viu
aTHXo|5.006000||Viu
aTHXR||5.003007|ponu
aTHXR_||5.003007|ponu
aTHXx|5.006000||Viu
Atof|5.006000||Viu
Atol|5.006000||Viu
atoll|5.008000||Viu
Atoul|5.006000||Viu
AvALLOC|5.003007||Viu
AvARRAY|5.003007|5.003007|
AvARYLEN|5.003007||Viu
av_arylen_p|||cu
av_clear|5.003007|5.003007|
av_count|5.033001|5.003007|p
av_create_and_push|||

av_create_and_unshift_one|||
av_delete|5.006000|5.006000|
av_exists|5.006000|5.006000|
av_extend|5.003007|5.003007|
av_extend_guts|5.017004||Viu
av_fetch|5.003007|5.003007|
av_fetch_simple|5.035002||cV
av_fill|5.003007|5.003007|
AvFILL|5.003007|5.003007|
AvFILLp|5.004005||pcV
av_iter_p|||cu
av_len|5.003007|5.003007|
av_make|5.003007|5.003007|
AvMAX|5.003007||Viu
av_new_alloc|5.035001|5.035001|
av_nonelem|5.027009||Viu
av_pop|5.003007|5.003007|
av_push|5.003007|5.003007|
AvREAL|5.003007||Viu
AvREALISH|5.003007||Viu
AvREAL_off|5.003007||Viu
AvREAL_on|5.003007||Viu
AvREAL_only|5.009003||Viu
AvREIFY|5.003007||Viu
av_reify|5.004004||cViu
AvREIFY_off|5.003007||Viu
AvREIFY_on|5.003007||Viu
AvREIFY_only|5.009003||Viu
av_shift|5.003007|5.003007|
av_store|5.003007|5.003007|
av_store_simple|5.035002||cV
av_tindex|5.017009|5.003007|p
av_tindex_skip_len_mg|5.025010||Viu
av_top_index|5.017009|5.003007|p
av_top_index_skip_len_mg|5.025010||Viu
av_undef|5.003007|5.003007|
av_unshift|5.003007|5.003007|
ax|5.003007|5.003007|
backup_one_GCB|5.025003||Viu
backup_one_LB|5.023007||Viu
backup_one_SB|5.021009||Viu
backup_one_WB|5.021009||Viu
bad_type_gv|5.019002||Viu
bad_type_pv|5.016000||Viu
BADVERSION|5.011004||Viu
BASEOP|5.003007||Viu
BhkDISABLE|5.013003||xV
BhkENABLE|5.013003||xV

BhkENTRY|5.013003||xVi
BhkENTRY_set|5.013003||xV
BHKf_bhk_eval|5.013006||Viu
BHKf_bhk_post_end|5.013006||Viu
BHKf_bhk_pre_end|5.013006||Viu
BHKf_bhk_start|5.013006||Viu
BhkFLAGS|5.013003||xVi
BIN|5.003007|5.003007|Vn
bind|5.005000||Viu
bind_match|5.003007||Viu
BIN_EXP|5.004000|5.004000|Vn
BIT_BUCKET|5.003007||Viu
BIT_DIGITS|5.004000||Viu
BITMAP_BYTE|5.009005||Viu
BITMAP_TEST|5.009005||Viu
blk_eval|5.003007||Viu
blk_format|5.011000||Viu
blk_gimme|5.003007||Viu
blk_givwhen|5.027008||Viu
blk_loop|5.003007||Viu
blk_oldcop|5.003007||Viu
blk_oldmarksp|5.003007||Viu
blk_oldpm|5.003007||Viu
blk_oldsaveix|5.023008||Viu
blk_oldscopesp|5.003007||Viu
blk_oldsp|5.003007||Viu
blk_old_tmpsfloor|5.023008||Viu
blk_sub|5.003007||Viu
blk_u16|5.011000||Viu
block_end|5.021006|5.021006|
block_gimme|5.004000|5.004000|u
blockhook_register|||x
block_start|5.021006|5.021006|
BmFLAGS|5.009005||Viu
BmPREVIOUS|5.003007||Viu
BmRARE|5.003007||Viu
BmUSEFUL|5.003007||Viu
BOL|5.003007||Viu
BOL_t8|5.035004||Viu
BOL_t8_p8|5.033003||Viu
BOL_t8_pb|5.033003||Viu
BOL_tb|5.035004||Viu
BOL_tb_p8|5.033003||Viu
BOL_tb_pb|5.033003||Viu
BOM_UTF8|5.025005|5.003007|p
BOM_UTF8_FIRST_BYTE|5.019004||Viu
BOM_UTF8_TAIL|5.019004||Viu
boolSV|5.004000|5.003007|p

boot_core_builtin|5.035007||Viu
boot_core_mro|5.009005||Viu
boot_core_PerlIO|5.007002||Viu
boot_core_UNIVERSAL|5.003007||Viu
BOUND|5.003007||Viu
BOUNDA|5.013009||Viu
BOUNDA_t8|5.035004||Viu
BOUNDA_t8_p8|5.033003||Viu
BOUNDA_t8_pb|5.033003||Viu
BOUNDA_tb|5.035004||Viu
BOUNDA_tb_p8|5.033003||Viu
BOUNDA_tb_pb|5.033003||Viu
BOUNDL|5.004000||Viu
BOUNDL_t8|5.035004||Viu
BOUNDL_t8_p8|5.033003||Viu
BOUNDL_t8_pb|5.033003||Viu
BOUNDL_tb|5.035004||Viu
BOUNDL_tb_p8|5.033003||Viu
BOUNDL_tb_pb|5.033003||Viu
BOUND_t8|5.035004||Viu
BOUND_t8_p8|5.033003||Viu
BOUND_t8_pb|5.033003||Viu
BOUND_tb|5.035004||Viu
BOUND_tb_p8|5.033003||Viu
BOUND_tb_pb|5.033003||Viu
BOUNDU|5.013009||Viu
BOUNDU_t8|5.035004||Viu
BOUNDU_t8_p8|5.033003||Viu
BOUNDU_t8_pb|5.033003||Viu
BOUNDU_tb|5.035004||Viu
BOUNDU_tb_p8|5.033003||Viu
BOUNDU_tb_pb|5.033003||Viu
BRANCH|5.003007||Viu
BRANCHJ|5.005000||Viu
BRANCHJ_t8|5.035004||Viu
BRANCHJ_t8_p8|5.033003||Viu
BRANCHJ_t8_pb|5.033003||Viu
BRANCHJ_tb|5.035004||Viu
BRANCHJ_tb_p8|5.033003||Viu
BRANCHJ_tb_pb|5.033003||Viu
BRANCH_next|5.009005||Viu
BRANCH_next_fail|5.009005||Viu
BRANCH_next_fail_t8|5.035004||Viu
BRANCH_next_fail_t8_p8|5.033003||Viu
BRANCH_next_fail_t8_pb|5.033003||Viu
BRANCH_next_fail_tb|5.035004||Viu
BRANCH_next_fail_tb_p8|5.033003||Viu
BRANCH_next_fail_tb_pb|5.033003||Viu

BRANCH_next_t8|5.035004||Viu
BRANCH_next_t8_p8|5.033003||Viu
BRANCH_next_t8_pb|5.033003||Viu
BRANCH_next_tb|5.035004||Viu
BRANCH_next_tb_p8|5.033003||Viu
BRANCH_next_tb_pb|5.033003||Viu
BRANCH_t8|5.035004||Viu
BRANCH_t8_p8|5.033003||Viu
BRANCH_t8_pb|5.033003||Viu
BRANCH_tb|5.035004||Viu
BRANCH_tb_p8|5.033003||Viu
BRANCH_tb_pb|5.033003||Viu
BSD_GETPGRP|5.003007||Viu
BSDish|5.008001||Viu
BSD_SETPGRP|5.003007||Viu
BUFSIZ|5.003007||Viu
_byte_dump_string|5.025006||cViu
BYTEORDER|5.003007|5.003007|Vn
bytes_cmp_utf8|5.013007|5.013007|
bytes_from_utf8|5.007001|5.007001|x
bytes_from_utf8_loc|5.027001||xcVn
bytes_to_utf8|5.006001|5.006001|x
call_argv|5.006000|5.003007|p
call_atexit|5.006000|5.006000|u
CALL_BLOCK_HOOKS|5.013003||xVi
CALL_CHECKER_REQUIRE_GV|5.021004|5.021004|
caller_cx|5.013005|5.006000|p
CALL_FPTR|5.006000||Viu
call_list|5.004000|5.004000|u
call_method|5.006000|5.003007|p
calloc|5.029005||Vn
call_pv|5.006000|5.003007|p
CALLREGCOMP|5.005000||Viu
CALLREGCOMP_ENG|5.009005||Viu
CALLREGDUPE|5.009005||Viu
CALLREGDUPE_PVT|5.009005||Viu
CALLREGEXEC|5.005000||Viu
CALLREGFREE|5.006000||Viu
CALLREGFREE_PVT|5.009005||Viu
CALLREG_INTUIT_START|5.006000||Viu
CALLREG_INTUIT_STRING|5.006000||Viu
CALLREG_NAMED_BUFF_ALL|5.009005||Viu
CALLREG_NAMED_BUFF_CLEAR|5.009005||Viu
CALLREG_NAMED_BUFF_COUNT|5.009005||Viu
CALLREG_NAMED_BUFF_DELETE|5.009005||Viu
CALLREG_NAMED_BUFF_EXISTS|5.009005||Viu
CALLREG_NAMED_BUFF_FETCH|5.009005||Viu
CALLREG_NAMED_BUFF_FIRSTKEY|5.009005||Viu

CALLREG_NAMED_BUFF_NEXTKEY|5.009005||Viu
CALLREG_NAMED_BUFF_SCALAR|5.009005||Viu
CALLREG_NAMED_BUFF_STORE|5.009005||Viu
CALLREG_NUMBUF_FETCH|5.009005||Viu
CALLREG_NUMBUF_LENGTH|5.009005||Viu
CALLREG_NUMBUF_STORE|5.009005||Viu
CALLREG_PACKAGE|5.009005||Viu
CALLRUNOPS|5.005000||Viu
call_sv|5.006000|5.003007|p
CAN64BITHASH|5.027001||Viu
CAN_COW_FLAGS|5.009000||Viu
CAN_COW_MASK|5.009000||Viu
cando|5.003007||Viu
CAN_PROTOTYPE|5.003007||Viu
C_ARRAY_END|5.013002|5.003007|p
C_ARRAY_LENGTH|5.008001|5.003007|p
case_100_SBOX32|5.027001||Viu
case_101_SBOX32|5.027001||Viu
case_102_SBOX32|5.027001||Viu
case_103_SBOX32|5.027001||Viu
case_104_SBOX32|5.027001||Viu
case_105_SBOX32|5.027001||Viu
case_106_SBOX32|5.027001||Viu
case_107_SBOX32|5.027001||Viu
case_108_SBOX32|5.027001||Viu
case_109_SBOX32|5.027001||Viu
case_10_SBOX32|5.027001||Viu
case_110_SBOX32|5.027001||Viu
case_111_SBOX32|5.027001||Viu
case_112_SBOX32|5.027001||Viu
case_113_SBOX32|5.027001||Viu
case_114_SBOX32|5.027001||Viu
case_115_SBOX32|5.027001||Viu
case_116_SBOX32|5.027001||Viu
case_117_SBOX32|5.027001||Viu
case_118_SBOX32|5.027001||Viu
case_119_SBOX32|5.027001||Viu
case_11_SBOX32|5.027001||Viu
case_120_SBOX32|5.027001||Viu
case_121_SBOX32|5.027001||Viu
case_122_SBOX32|5.027001||Viu
case_123_SBOX32|5.027001||Viu
case_124_SBOX32|5.027001||Viu
case_125_SBOX32|5.027001||Viu
case_126_SBOX32|5.027001||Viu
case_127_SBOX32|5.027001||Viu
case_128_SBOX32|5.027001||Viu
case_129_SBOX32|5.027001||Viu

case_12_SBOX32|5.027001||Viu
case_130_SBOX32|5.027001||Viu
case_131_SBOX32|5.027001||Viu
case_132_SBOX32|5.027001||Viu
case_133_SBOX32|5.027001||Viu
case_134_SBOX32|5.027001||Viu
case_135_SBOX32|5.027001||Viu
case_136_SBOX32|5.027001||Viu
case_137_SBOX32|5.027001||Viu
case_138_SBOX32|5.027001||Viu
case_139_SBOX32|5.027001||Viu
case_13_SBOX32|5.027001||Viu
case_140_SBOX32|5.027001||Viu
case_141_SBOX32|5.027001||Viu
case_142_SBOX32|5.027001||Viu
case_143_SBOX32|5.027001||Viu
case_144_SBOX32|5.027001||Viu
case_145_SBOX32|5.027001||Viu
case_146_SBOX32|5.027001||Viu
case_147_SBOX32|5.027001||Viu
case_148_SBOX32|5.027001||Viu
case_149_SBOX32|5.027001||Viu
case_14_SBOX32|5.027001||Viu
case_150_SBOX32|5.027001||Viu
case_151_SBOX32|5.027001||Viu
case_152_SBOX32|5.027001||Viu
case_153_SBOX32|5.027001||Viu
case_154_SBOX32|5.027001||Viu
case_155_SBOX32|5.027001||Viu
case_156_SBOX32|5.027001||Viu
case_157_SBOX32|5.027001||Viu
case_158_SBOX32|5.027001||Viu
case_159_SBOX32|5.027001||Viu
case_15_SBOX32|5.027001||Viu
case_160_SBOX32|5.027001||Viu
case_161_SBOX32|5.027001||Viu
case_162_SBOX32|5.027001||Viu
case_163_SBOX32|5.027001||Viu
case_164_SBOX32|5.027001||Viu
case_165_SBOX32|5.027001||Viu
case_166_SBOX32|5.027001||Viu
case_167_SBOX32|5.027001||Viu
case_168_SBOX32|5.027001||Viu
case_169_SBOX32|5.027001||Viu
case_16_SBOX32|5.027001||Viu
case_170_SBOX32|5.027001||Viu
case_171_SBOX32|5.027001||Viu
case_172_SBOX32|5.027001||Viu

case_173_SBOX32|5.027001||Viu
case_174_SBOX32|5.027001||Viu
case_175_SBOX32|5.027001||Viu
case_176_SBOX32|5.027001||Viu
case_177_SBOX32|5.027001||Viu
case_178_SBOX32|5.027001||Viu
case_179_SBOX32|5.027001||Viu
case_17_SBOX32|5.027001||Viu
case_180_SBOX32|5.027001||Viu
case_181_SBOX32|5.027001||Viu
case_182_SBOX32|5.027001||Viu
case_183_SBOX32|5.027001||Viu
case_184_SBOX32|5.027001||Viu
case_185_SBOX32|5.027001||Viu
case_186_SBOX32|5.027001||Viu
case_187_SBOX32|5.027001||Viu
case_188_SBOX32|5.027001||Viu
case_189_SBOX32|5.027001||Viu
case_18_SBOX32|5.027001||Viu
case_190_SBOX32|5.027001||Viu
case_191_SBOX32|5.027001||Viu
case_192_SBOX32|5.027001||Viu
case_193_SBOX32|5.027001||Viu
case_194_SBOX32|5.027001||Viu
case_195_SBOX32|5.027001||Viu
case_196_SBOX32|5.027001||Viu
case_197_SBOX32|5.027001||Viu
case_198_SBOX32|5.027001||Viu
case_199_SBOX32|5.027001||Viu
case_19_SBOX32|5.027001||Viu
case_1_SBOX32|5.027001||Viu
case_200_SBOX32|5.027001||Viu
case_201_SBOX32|5.027001||Viu
case_202_SBOX32|5.027001||Viu
case_203_SBOX32|5.027001||Viu
case_204_SBOX32|5.027001||Viu
case_205_SBOX32|5.027001||Viu
case_206_SBOX32|5.027001||Viu
case_207_SBOX32|5.027001||Viu
case_208_SBOX32|5.027001||Viu
case_209_SBOX32|5.027001||Viu
case_20_SBOX32|5.027001||Viu
case_210_SBOX32|5.027001||Viu
case_211_SBOX32|5.027001||Viu
case_212_SBOX32|5.027001||Viu
case_213_SBOX32|5.027001||Viu
case_214_SBOX32|5.027001||Viu
case_215_SBOX32|5.027001||Viu

case_216_SBOX32|5.027001||Viu
case_217_SBOX32|5.027001||Viu
case_218_SBOX32|5.027001||Viu
case_219_SBOX32|5.027001||Viu
case_21_SBOX32|5.027001||Viu
case_220_SBOX32|5.027001||Viu
case_221_SBOX32|5.027001||Viu
case_222_SBOX32|5.027001||Viu
case_223_SBOX32|5.027001||Viu
case_224_SBOX32|5.027001||Viu
case_225_SBOX32|5.027001||Viu
case_226_SBOX32|5.027001||Viu
case_227_SBOX32|5.027001||Viu
case_228_SBOX32|5.027001||Viu
case_229_SBOX32|5.027001||Viu
case_22_SBOX32|5.027001||Viu
case_230_SBOX32|5.027001||Viu
case_231_SBOX32|5.027001||Viu
case_232_SBOX32|5.027001||Viu
case_233_SBOX32|5.027001||Viu
case_234_SBOX32|5.027001||Viu
case_235_SBOX32|5.027001||Viu
case_236_SBOX32|5.027001||Viu
case_237_SBOX32|5.027001||Viu
case_238_SBOX32|5.027001||Viu
case_239_SBOX32|5.027001||Viu
case_23_SBOX32|5.027001||Viu
case_240_SBOX32|5.027001||Viu
case_241_SBOX32|5.027001||Viu
case_242_SBOX32|5.027001||Viu
case_243_SBOX32|5.027001||Viu
case_244_SBOX32|5.027001||Viu
case_245_SBOX32|5.027001||Viu
case_246_SBOX32|5.027001||Viu
case_247_SBOX32|5.027001||Viu
case_248_SBOX32|5.027001||Viu
case_249_SBOX32|5.027001||Viu
case_24_SBOX32|5.027001||Viu
case_250_SBOX32|5.027001||Viu
case_251_SBOX32|5.027001||Viu
case_252_SBOX32|5.027001||Viu
case_253_SBOX32|5.027001||Viu
case_254_SBOX32|5.027001||Viu
case_255_SBOX32|5.027001||Viu
case_256_SBOX32|5.027001||Viu
case_25_SBOX32|5.027001||Viu
case_26_SBOX32|5.027001||Viu
case_27_SBOX32|5.027001||Viu

case_28_SBOX32|5.027001||Viu
case_29_SBOX32|5.027001||Viu
case_2_SBOX32|5.027001||Viu
case_30_SBOX32|5.027001||Viu
case_31_SBOX32|5.027001||Viu
case_32_SBOX32|5.027001||Viu
case_33_SBOX32|5.027001||Viu
case_34_SBOX32|5.027001||Viu
case_35_SBOX32|5.027001||Viu
case_36_SBOX32|5.027001||Viu
case_37_SBOX32|5.027001||Viu
case_38_SBOX32|5.027001||Viu
case_39_SBOX32|5.027001||Viu
case_3_SBOX32|5.027001||Viu
case_40_SBOX32|5.027001||Viu
case_41_SBOX32|5.027001||Viu
case_42_SBOX32|5.027001||Viu
case_43_SBOX32|5.027001||Viu
case_44_SBOX32|5.027001||Viu
case_45_SBOX32|5.027001||Viu
case_46_SBOX32|5.027001||Viu
case_47_SBOX32|5.027001||Viu
case_48_SBOX32|5.027001||Viu
case_49_SBOX32|5.027001||Viu
case_4_SBOX32|5.027001||Viu
case_50_SBOX32|5.027001||Viu
case_51_SBOX32|5.027001||Viu
case_52_SBOX32|5.027001||Viu
case_53_SBOX32|5.027001||Viu
case_54_SBOX32|5.027001||Viu
case_55_SBOX32|5.027001||Viu
case_56_SBOX32|5.027001||Viu
case_57_SBOX32|5.027001||Viu
case_58_SBOX32|5.027001||Viu
case_59_SBOX32|5.027001||Viu
case_5_SBOX32|5.027001||Viu
case_60_SBOX32|5.027001||Viu
case_61_SBOX32|5.027001||Viu
case_62_SBOX32|5.027001||Viu
case_63_SBOX32|5.027001||Viu
case_64_SBOX32|5.027001||Viu
case_65_SBOX32|5.027001||Viu
case_66_SBOX32|5.027001||Viu
case_67_SBOX32|5.027001||Viu
case_68_SBOX32|5.027001||Viu
case_69_SBOX32|5.027001||Viu
case_6_SBOX32|5.027001||Viu
case_70_SBOX32|5.027001||Viu

case_71_SBOX32|5.027001||Viu
case_72_SBOX32|5.027001||Viu
case_73_SBOX32|5.027001||Viu
case_74_SBOX32|5.027001||Viu
case_75_SBOX32|5.027001||Viu
case_76_SBOX32|5.027001||Viu
case_77_SBOX32|5.027001||Viu
case_78_SBOX32|5.027001||Viu
case_79_SBOX32|5.027001||Viu
case_7_SBOX32|5.027001||Viu
case_80_SBOX32|5.027001||Viu
case_81_SBOX32|5.027001||Viu
case_82_SBOX32|5.027001||Viu
case_83_SBOX32|5.027001||Viu
case_84_SBOX32|5.027001||Viu
case_85_SBOX32|5.027001||Viu
case_86_SBOX32|5.027001||Viu
case_87_SBOX32|5.027001||Viu
case_88_SBOX32|5.027001||Viu
case_89_SBOX32|5.027001||Viu
case_8_SBOX32|5.027001||Viu
case_90_SBOX32|5.027001||Viu
case_91_SBOX32|5.027001||Viu
case_92_SBOX32|5.027001||Viu
case_93_SBOX32|5.027001||Viu
case_94_SBOX32|5.027001||Viu
case_95_SBOX32|5.027001||Viu
case_96_SBOX32|5.027001||Viu
case_97_SBOX32|5.027001||Viu
case_98_SBOX32|5.027001||Viu
case_99_SBOX32|5.027001||Viu
case_9_SBOX32|5.027001||Viu
CASE_STD_PMMOD_FLAGS_PARSE_SET|5.009005||Viu
CASTFLAGS|5.003007|5.003007|Vn
cast_i32|5.006000||cVnu
cast_iv|5.006000||cVnu
CASTNEGFLOAT|5.003007|5.003007|Vn
cast_ulong|5.003007||cVnu
cast_uv|5.006000||cVnu
CAT2|5.003007|5.003007|Vn
CATCH_GET|5.004000||Viu
CATCH_SET|5.004000||Viu
category_name|5.027008||Vniu
cBINOP|5.003007||Viu
cBINOPo|5.004005||Viu
cBINOPx|5.006000||Viu
cBOOL|5.013000|5.003007|p
cCOP|5.003007||Viu

cCOPo|5.004005||Viu
cCOPx|5.006000||Viu
C_FAC_POSIX|5.009003||Viu
cGVOP_gv|5.006000||Viu
cGVOPo_gv|5.006000||Viu
cGVOPx_gv|5.006000||Viu
change_engine_size|5.029004||Viu
CHANGE_MULTICALL_FLAGS|5.018000||Viu
CHARBITS|5.011002|5.011002|Vn
CHARSET_PAT_MODS|5.013010||Viu
chdir|5.005000||Viu
checkcomma|5.003007||Viu
check_end_shift|5.009005||Viu
check_locale_boundary_crossing|5.015006||Viu
CHECK_MALLOC_TAINT|5.008001||Viu
CHECK_MALLOC_TOO_LATE_FOR|5.008001||Viu
check_offset_max|5.005000||Viu
check_offset_min|5.005000||Viu
check_substr|5.005000||Viu
check_type_and_open|5.009003||Viu
check_uni|5.003007||Viu
check_utf8|5.008000||Viu
check_utf8_print|5.013009||Viu
child_offset_bits|5.009003||Viu
chmod|5.005000||Viu
chsize|5.005000||Viu
ckDEAD|5.006000||Viu
ck_entersub_args_core|||iu
ck_entersub_args_list|5.013006|5.013006|
ck_entersub_args_proto|5.013006|5.013006|
ck_entersub_args_proto_or_list|5.013006|5.013006|
ckWARN2|5.006000|5.003007|p
ckWARN2_d|5.006000|5.003007|p
ckWARN3|5.007003|5.003007|p
ckWARN3_d|5.007003|5.003007|p
ckWARN4|5.007003|5.003007|p
ckWARN4_d|5.007003|5.003007|p
ckWARN|5.006000|5.003007|p
ckwarn_common|5.011001||Viu
ckwarn|||cu
ckWARN_d|5.006000|5.003007|p
ckwarn_d|||cu
ck_warner|5.011001||pvV
ck_warner_d|5.011001||pvV
CLANG_DIAG_IGNORE|5.023006||Viu
CLANG_DIAG_IGNORE_DECL|5.027007||Viu
CLANG_DIAG_IGNORE_STMT|5.027007||Viu
CLANG_DIAG_PRAGMA|5.023006||Viu

CLANG_DIAG_RESTORE|5.023006||Viu
CLANG_DIAG_RESTORE_DECL|5.027007||Viu
CLANG_DIAG_RESTORE_STMT|5.027007||Viu
CLASS||5.003007|
CLEAR_ARGARRAY|5.006000||Viu
clear_defarray|5.023008|5.023008|u
clearerr|5.003007||Viu
CLEAR_ERRSV|5.025007|5.025007|
CLEARFEATUREBITS|5.031006||Viu
clear_placeholders|5.009004||xViu
clear_special_blocks|5.021003||Viu
cLISTOP|5.003007||Viu
cLISTOPo|5.004005||Viu
cLISTOPx|5.006000||Viu
cLOGOP|5.003007||Viu
cLOGOPo|5.004005||Viu
cLOGOPx|5.006000||Viu
CLONEf_CLONE_HOST|5.007002||Viu
CLONEf_COPY_STACKS|5.007001||Viu
CLONEf_JOIN_IN|5.008001||Viu
CLONEf_KEEP_PTR_TABLE|5.007001||Viu
clone_params_del|||nu
clone_params_new|||nu
cLOOP|5.003007||Viu
cLOOPo|5.004005||Viu
cLOOPx|5.006000||Viu
CLOSE|5.003007||Viu
close|5.005000||Viu
closedir|5.005000||Viu
closest_cop|5.007002||Viu
CLOSE_t8|5.035004||Viu
CLOSE_t8_p8|5.033003||Viu
CLOSE_t8_pb|5.033003||Viu
CLOSE_tb|5.035004||Viu
CLOSE_tb_p8|5.033003||Viu
CLOSE_tb_pb|5.033003||Viu
CLUMP_2IV|5.006000||Viu
CLUMP_2UV|5.006000||Viu
CLUMP|5.006000||Viu
CLUMP_t8|5.035004||Viu
CLUMP_t8_p8|5.033003||Viu
CLUMP_t8_pb|5.033003||Viu
CLUMP_tb|5.035004||Viu
CLUMP_tb_p8|5.033003||Viu
CLUMP_tb_pb|5.033003||Viu
cMETHOPx|5.021005||Viu
cMETHOPx_meth|5.021005||Viu
cMETHOPx_rclass|5.021007||Viu

cmpchain_extend|5.031011||Viu
cmpchain_finish|5.031011||Viu
cmpchain_start|5.031011||Viu
cmp_desc|5.031011||Viu
cmp_locale_desc|5.031011||Viu
cntrl_to_mnemonic|5.021004||cVniu
CODESET|5.027010||Viu
COMBINING_DOT_ABOVE_UTF8|5.029008||Viu
COMBINING_GRAVE_ACCENT_UTF8|5.017004||Viu
COMMIT|5.009005||Viu
COMMIT_next|5.009005||Viu
COMMIT_next_fail|5.009005||Viu
COMMIT_next_fail_t8|5.035004||Viu
COMMIT_next_fail_t8_p8|5.033003||Viu
COMMIT_next_fail_t8_pb|5.033003||Viu
COMMIT_next_fail_tb|5.035004||Viu
COMMIT_next_fail_tb_p8|5.033003||Viu
COMMIT_next_fail_tb_pb|5.033003||Viu
COMMIT_next_t8|5.035004||Viu
COMMIT_next_t8_p8|5.033003||Viu
COMMIT_next_t8_pb|5.033003||Viu
COMMIT_next_tb|5.035004||Viu
COMMIT_next_tb_p8|5.033003||Viu
COMMIT_next_tb_pb|5.033003||Viu
COMMIT_t8|5.035004||Viu
COMMIT_t8_p8|5.033003||Viu
COMMIT_t8_pb|5.033003||Viu
COMMIT_tb|5.035004||Viu
COMMIT_tb_p8|5.033003||Viu
COMMIT_tb_pb|5.033003||Viu
compile_wildcard|5.031010||Viu
compute_EXACTish|5.017003||Vniu
COND_BROADCAST|5.005000||Viu
COND_DESTROY|5.005000||Viu
COND_INIT|5.005000||Viu
COND_SIGNAL|5.005000||Viu
COND_WAIT|5.005000||Viu
connect|5.005000||Viu
construct_ahocorasick_from_trie|5.021001||Viu
CONTINUE_PAT_MOD|5.009005||Viu
cop_fetch_label|5.031004|5.031004|x
CopFILE|5.006000|5.003007|p
CopFILEAV|5.006000|5.003007|p
CopFILEAVn|5.035006|5.035006|
cop_file_avn|5.035006||cVu
CopFILEAVx|5.009003||Viu
CopFILE_free|5.007003||Viu
CopFILEGV|5.006000|5.003007|p

CopFILEGV_set|5.006000|5.003007|p
CopFILE_set|5.006000|5.003007|p
CopFILE_setn|5.009005||Viu
CopFILESV|5.006000|5.003007|p
cop_free|5.006000||Viu
cophh_2hv|5.013007|5.013007|x
cophh_copy|5.013007|5.013007|x
cophh_delete_pv|5.013007|5.013007|x
cophh_delete_pvn|5.013007|5.013007|x
cophh_delete_pvs|5.013007|5.013007|x
cophh_delete_sv|5.013007|5.013007|x
COPHH_EXISTS|5.033008||Viu
cophh_exists_pv|5.033008|5.033008|x
cophh_exists_pvn|5.033008|5.033008|x
cophh_exists_pvs|5.033008|5.033008|x
cophh_exists_sv|5.033008|5.033008|x
cophh_fetch_pv|5.013007|5.013007|x
cophh_fetch_pvn|5.013007|5.013007|x
cophh_fetch_pvs|5.013007|5.013007|x
cophh_fetch_sv|5.013007|5.013007|x
cophh_free|5.013007|5.013007|x
COPHH_KEY_UTF8|5.013007|5.013007|
cophh_new_empty|5.013007|5.013007|x
cophh_store_pv|5.013007|5.013007|x
cophh_store_pvn|5.013007|5.013007|x
cophh_store_pvs|5.013007|5.013007|x
cophh_store_sv|5.013007|5.013007|x
CopHINTHASH_get|5.013007||Viu
CopHINTHASH_set|5.013007||Viu
cop_hints_2hv|5.013007|5.013007|
cop_hints_exists_pv|5.033008|5.033008|
cop_hints_exists_pvn|5.033008|5.033008|
cop_hints_exists_pvs|5.033008|5.033008|
cop_hints_exists_sv|5.033008|5.033008|
cop_hints_fetch_pv|5.013007|5.013007|
cop_hints_fetch_pvn|5.013007|5.013007|
cop_hints_fetch_pvs|5.013007|5.013007|
cop_hints_fetch_sv|5.013007|5.013007|
CopHINTS_get|5.009004||Viu
CopHINTS_set|5.009004||Viu
CopLABEL|5.009005|5.009005|
CopLABEL_alloc|5.009005||Viu
CopLABEL_len|5.016000|5.016000|
CopLABEL_len_flags|5.016000|5.016000|
CopLINE|5.006000|5.006000|
CopLINE_dec|5.006000||Viu
CopLINE_inc|5.006000||Viu
CopLINE_set|5.006000||Viu

COP_SEQMAX_INC|5.021006||Viu
COP_SEQ_RANGE_HIGH|5.009005||Viu
COP_SEQ_RANGE_LOW|5.009005||Viu
CopSTASH|5.006000|5.003007|p
CopSTASH_eq|5.006000|5.003007|p
CopSTASH_ne|5.006000||Viu
CopSTASHPV|5.006000|5.003007|p
CopSTASHPV_set|5.017001|5.017001|p
CopSTASH_set|5.006000|5.003007|p
cop_store_label|5.031004|5.031004|x
Copy|5.003007|5.003007|
CopyD|5.009002|5.003007|p
copy_length|||Viu
core_prototype|5.015002||Vi
coresub_op|5.015003||Viu
CowREFCNT|5.017007||Viu
cPADOP|5.006000||Viu
cPADOPo|5.006000||Viu
cPADOPx|5.006000||Viu
CPERLarg|5.005000||Viu
CPERLscope|5.005000|5.003007|pdV
cPMOP|5.003007||Viu
cPMOPo|5.004005||Viu
cPMOPx|5.006000||Viu
CPPLAST|5.006000|5.006000|Vn
CPPMINUS|5.003007|5.003007|Vn
CPPRUN|5.006000|5.006000|Vn
CPPSTDIN|5.003007|5.003007|Vn
cPVOP|5.003007||Viu
cPVOPo|5.004005||Viu
cPVOPx|5.006000||Viu
create_eval_scope|5.009004||xViu
CR_NATIVE|5.019004||Viu
CRNCYSTR|5.027010||Viu
croak|5.003007||vV
croak_caller|5.025004||vVniu
croak_memory_wrap|5.019003||pcVnu
croak_nocontext|5.006000||pvVn
croak_no_mem|5.017006||Vniu
croak_no_modify|5.013003|5.003007|pn
croak_popstack|5.017008||cVniu
croak_sv|5.013001|5.003007|p
croak_xs_usage|5.010001|5.003007|pn
cr_textfilter|5.006000||Viu
crypt|5.009000||Viu
CRYPT_R_PROTO|5.008000|5.008000|Vn
CSH|5.003007|5.003007|Vn
csighandler1|5.031007||cVnu

csighandler3|5.031007||cVnu
csighandler|5.008001||cVnu
cSVOP|5.003007||Viu
cSVOPo|5.004005||Viu
cSVOPo_sv|5.006000||Viu
cSVOP_sv|5.006000||Viu
cSVOPx|5.006000||Viu
cSVOPx_sv|5.006000||Viu
cSVOPx_svp|5.006000||Viu
ctermid|5.009000||Viu
CTERMID_R_PROTO|5.008000|5.008000|Vn
ctime|5.009000||Viu
CTIME_R_PROTO|5.008000|5.008000|Vn
Ctl|5.003007||Viu
CTYPE256|5.003007||Viu
cUNOP|5.003007||Viu
cUNOP_AUX|5.021007||Viu
cUNOP_AUXo|5.021007||Viu
cUNOP_AUXx|5.021007||Viu
cUNOPo|5.004005||Viu
cUNOPx|5.006000||Viu
CURLY|5.003007||Viu
CURLY_B_max|5.009005||Viu
CURLY_B_max_fail|5.009005||Viu
CURLY_B_max_fail_t8|5.035004||Viu
CURLY_B_max_fail_t8_p8|5.033003||Viu
CURLY_B_max_fail_t8_pb|5.033003||Viu
CURLY_B_max_fail_tb|5.035004||Viu
CURLY_B_max_fail_tb_p8|5.033003||Viu
CURLY_B_max_fail_tb_pb|5.033003||Viu
CURLY_B_max_t8|5.035004||Viu
CURLY_B_max_t8_p8|5.033003||Viu
CURLY_B_max_t8_pb|5.033003||Viu
CURLY_B_max_tb|5.035004||Viu
CURLY_B_max_tb_p8|5.033003||Viu
CURLY_B_max_tb_pb|5.033003||Viu
CURLY_B_min|5.009005||Viu
CURLY_B_min_fail|5.009005||Viu
CURLY_B_min_fail_t8|5.035004||Viu
CURLY_B_min_fail_t8_p8|5.033003||Viu
CURLY_B_min_fail_t8_pb|5.033003||Viu
CURLY_B_min_fail_tb|5.035004||Viu
CURLY_B_min_fail_tb_p8|5.033003||Viu
CURLY_B_min_fail_tb_pb|5.033003||Viu
CURLY_B_min_t8|5.035004||Viu
CURLY_B_min_t8_p8|5.033003||Viu
CURLY_B_min_t8_pb|5.033003||Viu
CURLY_B_min_tb|5.035004||Viu

CURLY_B_min_tb_p8|5.033003||Viu
CURLY_B_min_tb_pb|5.033003||Viu
CURLYM|5.005000||Viu
CURLYM_A|5.009005||Viu
CURLYM_A_fail|5.009005||Viu
CURLYM_A_fail_t8|5.035004||Viu
CURLYM_A_fail_t8_p8|5.033003||Viu
CURLYM_A_fail_t8_pb|5.033003||Viu
CURLYM_A_fail_tb|5.035004||Viu
CURLYM_A_fail_tb_p8|5.033003||Viu
CURLYM_A_fail_tb_pb|5.033003||Viu
CURLYM_A_t8|5.035004||Viu
CURLYM_A_t8_p8|5.033003||Viu
CURLYM_A_t8_pb|5.033003||Viu
CURLYM_A_tb|5.035004||Viu
CURLYM_A_tb_p8|5.033003||Viu
CURLYM_A_tb_pb|5.033003||Viu
CURLYM_B|5.009005||Viu
CURLYM_B_fail|5.009005||Viu
CURLYM_B_fail_t8|5.035004||Viu
CURLYM_B_fail_t8_p8|5.033003||Viu
CURLYM_B_fail_t8_pb|5.033003||Viu
CURLYM_B_fail_tb|5.035004||Viu
CURLYM_B_fail_tb_p8|5.033003||Viu
CURLYM_B_fail_tb_pb|5.033003||Viu
CURLYM_B_t8|5.035004||Viu
CURLYM_B_t8_p8|5.033003||Viu
CURLYM_B_t8_pb|5.033003||Viu
CURLYM_B_tb|5.035004||Viu
CURLYM_B_tb_p8|5.033003||Viu
CURLYM_B_tb_pb|5.033003||Viu
CURLYM_t8|5.035004||Viu
CURLYM_t8_p8|5.033003||Viu
CURLYM_t8_pb|5.033003||Viu
CURLYM_tb|5.035004||Viu
CURLYM_tb_p8|5.033003||Viu
CURLYM_tb_pb|5.033003||Viu
CURLYN|5.005000||Viu
CURLYN_t8|5.035004||Viu
CURLYN_t8_p8|5.033003||Viu
CURLYN_t8_pb|5.033003||Viu
CURLYN_tb|5.035004||Viu
CURLYN_tb_p8|5.033003||Viu
CURLYN_tb_pb|5.033003||Viu
CURLY_t8|5.035004||Viu
CURLY_t8_p8|5.033003||Viu
CURLY_t8_pb|5.033003||Viu
CURLY_tb|5.035004||Viu

CURLY_tb_p8|5.033003||Viu
CURLY_tb_pb|5.033003||Viu
CURLYX|5.003007||Viu
CURLYX_end|5.009005||Viu
CURLYX_end_fail|5.009005||Viu
CURLYX_end_fail_t8|5.035004||Viu
CURLYX_end_fail_t8_p8|5.033003||Viu
CURLYX_end_fail_t8_pb|5.033003||Viu
CURLYX_end_fail_tb|5.035004||Viu
CURLYX_end_fail_tb_p8|5.033003||Viu
CURLYX_end_fail_tb_pb|5.033003||Viu
CURLYX_end_t8|5.035004||Viu
CURLYX_end_t8_p8|5.033003||Viu
CURLYX_end_t8_pb|5.033003||Viu
CURLYX_end_tb|5.035004||Viu
CURLYX_end_tb_p8|5.033003||Viu
CURLYX_end_tb_pb|5.033003||Viu
CURLYX_t8|5.035004||Viu
CURLYX_t8_p8|5.033003||Viu
CURLYX_t8_pb|5.033003||Viu
CURLYX_tb|5.035004||Viu
CURLYX_tb_p8|5.033003||Viu
CURLYX_tb_pb|5.033003||Viu
CURRENT_FEATURE_BUNDLE|5.015007||Viu
CURRENT_HINTS|5.015007||Viu
current_re_engine|5.017001||cViu
curse|5.013009||Viu
custom_op_desc|5.007003|5.007003|d
custom_op_get_field|5.019006||cViu
custom_op_name|5.007003|5.007003|d
custom_op_register|||
CUTGROUP|5.009005||Viu
CUTGROUP_next|5.009005||Viu
CUTGROUP_next_fail|5.009005||Viu
CUTGROUP_next_fail_t8|5.035004||Viu
CUTGROUP_next_fail_t8_p8|5.033003||Viu
CUTGROUP_next_fail_t8_pb|5.033003||Viu
CUTGROUP_next_fail_tb|5.035004||Viu
CUTGROUP_next_fail_tb_p8|5.033003||Viu
CUTGROUP_next_fail_tb_pb|5.033003||Viu
CUTGROUP_next_t8|5.035004||Viu
CUTGROUP_next_t8_p8|5.033003||Viu
CUTGROUP_next_t8_pb|5.033003||Viu
CUTGROUP_next_tb|5.035004||Viu
CUTGROUP_next_tb_p8|5.033003||Viu
CUTGROUP_next_tb_pb|5.033003||Viu
CUTGROUP_t8|5.035004||Viu
CUTGROUP_t8_p8|5.033003||Viu

CUTGROUP_t8_pb|5.033003||Viu
CUTGROUP_tb|5.035004||Viu
CUTGROUP_tb_p8|5.033003||Viu
CUTGROUP_tb_pb|5.033003||Viu
CvANON|5.003007||Viu
CvANONCONST|5.021008||Viu
CvANONCONST_off|5.021008||Viu
CvANONCONST_on|5.021008||Viu
CvANON_off|5.003007||Viu
CvANON_on|5.003007||Viu
CvAUTOLOAD|5.015004||Viu
CvAUTOLOAD_off|5.015004||Viu
CvAUTOLOAD_on|5.015004||Viu
cv_ckproto|5.009004||Viu
cv_ckproto_len_flags|5.015004||xcViu
CvCLONE|5.003007||Viu
cv_clone|5.015001|5.015001|
CvCLONED|5.003007||Viu
CvCLONED_off|5.003007||Viu
CvCLONED_on|5.003007||Viu
cv_clone_into|5.017004||Viu
CvCLONE_off|5.003007||Viu
CvCLONE_on|5.003007||Viu
CvCONST|5.007001||Viu
CvCONST_off|5.007001||Viu
CvCONST_on|5.007001||Viu
cv_const_sv|5.003007|5.003007|n
cv_const_sv_or_av|5.019003||Vniu
CvCVGV_RC|5.013003||Viu
CvCVGV_RC_off|5.013003||Viu
CvCVGV_RC_on|5.013003||Viu
CvDEPTH|5.003007|5.003007|nu
CvDEPTHunsafe|5.021006||Viu
cv_dump|5.006000||Vi
CvDYNFILE|5.015002||Viu
CvDYNFILE_off|5.015002||Viu
CvDYNFILE_on|5.015002||Viu
CvEVAL|5.005003||Viu
CvEVAL_off|5.005003||Viu
CvEVAL_on|5.005003||Viu
CVf_ANON|5.003007||Viu
CVf_ANONCONST|5.021008||Viu
CVf_AUTOLOAD|5.015004||Viu
CVf_BUILTIN_ATTRS|5.008000||Viu
CVf_CLONE|5.003007||Viu
CVf_CLONED|5.003007||Viu
CVf_CONST|5.007001||Viu
CVf_CVGV_RC|5.013003||Viu

CVf_DYNFILE|5.015002||Viu
CVf_HASEVAL|5.017002||Viu
CvFILE|5.006000||Viu
CvFILEGV|5.003007||Viu
CvFILE_set_from_cop|5.007002||Viu
CVf_ISXSUB|5.009004||Viu
CvFLAGS|5.003007||Viu
CVf_LEXICAL|5.021004||Viu
CVf_LVALUE|5.006000||Viu
CVf_METHOD|5.005000||Viu
CVf_NAMED|5.017004||Viu
CVf_NODEBUG|5.004000||Viu
cv_forget_slab|5.017002||Vi
CVf_SIGNATURE|5.035009||Viu
CVf_SLABBED|5.017002||Viu
CVf_UNIQUE|5.004000||Viu
CVf_WEAKOUTSIDE|5.008001||Viu
cv_get_call_checker|5.013006|5.013006|
cv_get_call_checker_flags|5.027003|5.027003|
CvGV|5.003007|5.003007|
cvgv_from_hek|||ciu
cvgv_set|5.013003||cViu
CvGV_set|5.013003||Viu
CvHASEVAL|5.017002||Viu
CvHASEVAL_off|5.017002||Viu
CvHASEVAL_on|5.017002||Viu
CvHASGV|5.021004||Viu
CvHSCXT|5.021006||Viu
CvISXSUB|5.009004||Viu
CvISXSUB_off|5.009004||Viu
CvISXSUB_on|5.009004||Viu
CvLEXICAL|5.021004||Viu
CvLEXICAL_off|5.021004||Viu
CvLEXICAL_on|5.021004||Viu
CvLVALUE|5.006000||Viu
CvLVALUE_off|5.006000||Viu
CvLVALUE_on|5.006000||Viu
CvMETHOD|5.005000||Viu
CvMETHOD_off|5.005000||Viu
CvMETHOD_on|5.005000||Viu
cv_name|5.021005|5.021005|
CvNAMED|5.017004||Viu
CvNAMED_off|5.017004||Viu
CvNAMED_on|5.017004||Viu
CvNAME_HEK_set|5.017004||Viu
CV_NAME_NOTQUAL|5.021005|5.021005|
CvNODEBUG|5.004000||Viu
CvNODEBUG_off|5.004000||Viu

CvNODEBUG_on|5.004000||Viu
CvOUTSIDE|5.003007||Viu
CvOUTSIDE_SEQ|5.008001||Viu
CvPADLIST|5.008001|5.008001|x
CvPADLIST_set|5.021006||Viu
CvPROTO|5.015004||Viu
CvPROTOLEN|5.015004||Viu
CvROOT|5.003007||Viu
cv_set_call_checker|5.013006|5.013006|
cv_set_call_checker_flags|5.021004|5.021004|
CvSIGNATURE|5.035009||Viu
CvSIGNATURE_off|5.035009||Viu
CvSIGNATURE_on|5.035009||Viu
CvSLABBED|5.017002||Viu
CvSLABBED_off|5.017002||Viu
CvSLABBED_on|5.017002||Viu
CvSPECIAL|5.005003||Viu
CvSPECIAL_off|5.005003||Viu
CvSPECIAL_on|5.005003||Viu
CvSTART|5.003007||Viu
CvSTASH|5.003007|5.003007|
cvstash_set|5.013007||cViu
CvSTASH_set|5.013007||Viu
cv_undef|5.003007|5.003007|
cv_undef_flags|5.021004||Viu
CV_UNDEF_KEEP_NAME|5.021004||Viu
CvUNIQUE|5.004000||Viu
CvUNIQUE_off|5.004000||Viu
CvUNIQUE_on|5.004000||Viu
CvWEAKOUTSIDE|5.008001||Vi
CvWEAKOUTSIDE_off|5.008001||Viu
CvWEAKOUTSIDE_on|5.008001||Viu
CvXSUB|5.003007||Viu
CvXSUBANY|5.003007||Viu
CX_CUR|5.023008||Viu
CX_CURPAD_SAVE|5.008001||Vi
CX_CURPAD_SV|5.008001||Vi
CX_DEBUG|5.023008||Viu
cx_dump|5.003007||cVu
cx_dup|5.006000||cVu
CxEVALBLOCK|5.033007||Viu
CxEVAL_TXT_REFCNTED|5.025007||Viu
CxFOREACH|5.009003||Viu
CxHASARGS|5.010001||Viu
cxinc|5.003007||cVu
CXINC|5.003007||Viu
CxITERVAR|5.006000||Viu
CxLABEL|5.010001||Viu

CxLABEL_len|5.016000||Viu
CxLABEL_len_flags|5.016000||Viu
CX_LEAVE_SCOPE|5.023008||Viu
CxLVAL|5.010001||Viu
CxMULTICALL|5.009003||Viu
CxOLD_IN_EVAL|5.010001||Viu
CxOLD_OP_TYPE|5.010001||Viu
CxONCE|5.010001||Viu
CxPADLOOP|5.006000||Viu
CXp_EVALBLOCK|5.033007||Viu
CXp_FINALLY|5.035008||Viu
CXp_FOR_DEF|5.027008||Viu
CXp_FOR_GV|5.023008||Viu
CXp_FOR_LVREF|5.021005||Viu
CXp_FOR_PAD|5.023008||Viu
CXp_HASARGS|5.011000||Viu
CXp_MULTICALL|5.009003||Viu
CXp_ONCE|5.011000||Viu
CX_POP|5.023008||Viu
cx_popblock|5.023008||xcVu
cx_popeval|5.023008||xcVu
cx_popformat|5.023008||xcVu
cx_popgiven|5.027008||xcVu
cx_poploop|5.023008||xcVu
CX_POP_SAVEARRAY|5.023008||Viu
cx_popsub|5.023008||xcVu
cx_popsub_args|5.023008||xcVu
cx_popsub_common|5.023008||xcVu
CX_POPSUBST|5.023008||Viu
cx_popwhen|5.027008||xcVu
CXp_REAL|5.005003||Viu
CXp_SUB_RE|5.018000||Viu
CXp_SUB_RE_FAKE|5.018000||Viu
CXp_TRY|5.033007||Viu
CXp_TRYBLOCK|5.006000||Viu
cx_pushblock|5.023008||xcVu
cx_pusheval|5.023008||xcVu
cx_pushformat|5.023008||xcVu
cx_pushgiven|5.027008||xcVu
cx_pushloop_for|5.023008||xcVu
cx_pushloop_plain|5.023008||xcVu
cx_pushsub|5.023008||xcVu
CX_PUSHSUB_GET_LVALUE_MASK|5.023008||Viu
CX_PUSHSUBST|5.023008||Viu
cx_pushtry|5.033007||xcVu
cx_pushwhen|5.027008||xcVu
CxREALEVAL|5.005003||Viu
cxstack|5.005000||Viu

cxstack_ix|5.005000||Viu
cxstack_max|5.005000||Viu
CXt_BLOCK|5.003007||Viu
CXt_DEFER|5.035004||Viu
CXt_EVAL|5.003007||Viu
CXt_FORMAT|5.006000||Viu
CXt_GIVEN|5.027008||Viu
CXt_LOOP_ARY|5.023008||Viu
CXt_LOOP_LAZYIV|5.011000||Viu
CXt_LOOP_LAZYSV|5.011000||Viu
CXt_LOOP_LIST|5.023008||Viu
CXt_LOOP_PLAIN|5.011000||Viu
CXt_NULL|5.003007||Viu
cx_topblock|5.023008||xcVu
CxTRY|5.033007||Viu
CxTRYBLOCK|5.006000||Viu
CXt_SUB|5.003007||Viu
CXt_SUBST|5.003007||Viu
CXt_WHEN|5.027008||Viu
CxTYPE|5.005003||Viu
cx_type|5.009005||Viu
CxTYPE_is_LOOP|5.011000||Viu
CXTYPEMASK|5.005003||Viu
dATARGET|5.003007||Viu
dAX|5.007002|5.003007|p
dAXMARK|5.009003|5.003007|p
DAY_1|5.027010||Viu
DAY_2|5.027010||Viu
DAY_3|5.027010||Viu
DAY_4|5.027010||Viu
DAY_5|5.027010||Viu
DAY_6|5.027010||Viu
DAY_7|5.027010||Viu
DB_Hash_t|5.003007|5.003007|Vn
DBM_ckFilter|5.008001||Viu
DBM_setFilter|5.008001||Viu
DB_Prefix_t|5.003007|5.003007|Vn
DBVARMG_COUNT|5.021005||Viu
DBVARMG_SIGNAL|5.021005||Viu
DBVARMG_SINGLE|5.021005||Viu
DBVARMG_TRACE|5.021005||Viu
DB_VERSION_MAJOR_CFG|5.007002|5.007002|Vn
DB_VERSION_MINOR_CFG|5.007002|5.007002|Vn
DB_VERSION_PATCH_CFG|5.007002|5.007002|Vn
deb|5.003007||vVu
deb_curcv|5.007002||Viu
deb_nocontext|5.006000||vVnu
debop|5.005000|5.005000|u

debprof|5.005000||Viu
debprofdump|5.005000|5.005000|u
debstack|5.007003|5.007003|u
deb_stack_all|5.008001||Viu
deb_stack_n|5.008001||Viu
debstackptrs|5.007003|5.007003|u
DEBUG|5.003007||Viu
DEBUG_A|5.009001||Viu
DEBUG_A_FLAG|5.009001||Viu
DEBUG_A_TEST|5.009001||Viu
DEBUG_B|5.011000||Viu
DEBUG_B_FLAG|5.011000||Viu
DEBUG_BOTH_FLAGS_TEST|5.033007||Viu
DEBUG_B_TEST|5.011000||Viu
DEBUG_BUFFERS_r|5.009005||Viu
DEBUG_c|5.003007||Viu
DEBUG_C|5.009000||Viu
DEBUG_c_FLAG|5.007001||Viu
DEBUG_C_FLAG|5.009000||Viu
DEBUG_COMPILE_r|5.009002||Viu
DEBUG_c_TEST|5.007001||Viu
DEBUG_C_TEST|5.009000||Viu
DEBUG_D|5.003007||Viu
DEBUG_DB_RECURSE_FLAG|5.007001||Viu
DEBUG_D_FLAG|5.007001||Viu
DEBUG_D_TEST|5.007001||Viu
DEBUG_DUMP_PRE_OPTIMIZE_r|5.031004||Viu
DEBUG_DUMP_r|5.009004||Viu
DEBUG_EXECUTE_r|5.009002||Viu
DEBUG_EXTRA_r|5.009004||Viu
DEBUG_f|5.003007||Viu
DEBUG_f_FLAG|5.007001||Viu
DEBUG_FLAGS_r|5.009005||Viu
DEBUG_f_TEST|5.007001||Viu
DEBUG_GPOS_r|5.011000||Viu
DEBUG_i|5.025002||Viu
DEBUG_i_FLAG|5.025002||Viu
DEBUG_INTUIT_r|5.009004||Viu
DEBUG_i_TEST|5.025002||Viu
DEBUG_J_FLAG|5.007003||Viu
DEBUG_J_TEST|5.007003||Viu
DEBUG_l|5.003007||Viu
DEBUG_L|5.019009||Viu
DEBUG_l_FLAG|5.007001||Viu
DEBUG_L_FLAG|5.019009||Viu
DEBUG_l_TEST|5.007001||Viu
DEBUG_L_TEST|5.019009||Viu
DEBUG_Lv|5.023003||Viu

DEBUG_Lv_TEST|5.023003||Viu
DEBUG_m|5.003007||Viu
DEBUG_M|5.027008||Viu
DEBUG_MASK|5.007001||Viu
DEBUG_MATCH_r|5.009004||Viu
DEBUG_m_FLAG|5.007001||Viu
DEBUG_M_FLAG|5.027008||Viu
DEBUG_m_TEST|5.007001||Viu
DEBUG_M_TEST|5.027008||Viu
DEBUG_o|5.003007||Viu
DEBUG_o_FLAG|5.007001||Viu
DEBUG_OPTIMISE_MORE_r|5.009005||Viu
DEBUG_OPTIMISE_r|5.009002||Viu
DEBUG_o_TEST|5.007001||Viu
DEBUG_P|5.003007||Viu
DEBUG_p|5.003007||Viu
DEBUG_PARSE_r|5.009004||Viu
DEBUG_P_FLAG|5.007001||Viu
DEBUG_p_FLAG|5.007001||Viu
DEBUG_POST_STMTS|5.033008||Viu
DEBUG_PRE_STMTS|5.033008||Viu
DEBUG_P_TEST|5.007001||Viu
DEBUG_p_TEST|5.007001||Viu
DEBUG_Pv|5.013008||Viu
DEBUG_Pv_TEST|5.013008||Viu
DEBUG_q|5.009001||Viu
DEBUG_q_FLAG|5.009001||Viu
DEBUG_q_TEST|5.009001||Viu
DEBUG_r|5.003007||Viu
DEBUG_R|5.007001||Viu
DEBUG_R_FLAG|5.007001||Viu
DEBUG_r_FLAG|5.007001||Viu
DEBUG_R_TEST|5.007001||Viu
DEBUG_r_TEST|5.007001||Viu
DEBUG_s|5.003007||Viu
DEBUG_S|5.017002||Viu
DEBUG_SBOX32_HASH|5.027001||Viu
DEBUG_SCOPE|5.008001||Viu
DEBUG_s_FLAG|5.007001||Viu
DEBUG_S_FLAG|5.017002||Viu
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DEBUG_STATE_r|5.009004||Viu
DEBUG_s_TEST|5.007001||Viu
DEBUG_S_TEST|5.017002||Viu
DEBUG_t|5.003007||Viu
DEBUG_T|5.007001||Viu
DEBUG_TEST_r|5.021005||Viu

DEBUG_T_FLAG|5.007001||Viu
DEBUG_t_FLAG|5.007001||Viu
DEBUG_TOP_FLAG|5.007001||Viu
DEBUG_TRIE_COMPILE_MORE_r|5.009002||Viu
DEBUG_TRIE_COMPILE_r|5.009002||Viu
DEBUG_TRIE_EXECUTE_MORE_r|5.009002||Viu
DEBUG_TRIE_EXECUTE_r|5.009002||Viu
DEBUG_TRIE_r|5.009002||Viu
DEBUG_T_TEST|5.007001||Viu
DEBUG_t_TEST|5.007001||Viu
DEBUG_u|5.003007||Viu
DEBUG_U|5.009005||Viu
DEBUG_u_FLAG|5.007001||Viu
DEBUG_U_FLAG|5.009005||Viu
DEBUG_u_TEST|5.007001||Viu
DEBUG_U_TEST|5.009005||Viu
DEBUG_Uv|5.009005||Viu
DEBUG_Uv_TEST|5.009005||Viu
DEBUG_v|5.008001||Viu
DEBUG_v_FLAG|5.008001||Viu
DEBUG_v_TEST|5.008001||Viu
DEBUG_X|5.003007||Viu
DEBUG_x|5.003007||Viu
DEBUG_X_FLAG|5.007001||Viu
DEBUG_x_FLAG|5.007001||Viu
DEBUG_X_TEST|5.007001||Viu
DEBUG_x_TEST|5.007001||Viu
DEBUG_Xv|5.008001||Viu
DEBUG_Xv_TEST|5.008001||Viu
DEBUG_y|5.031007||Viu
DEBUG_y_FLAG|5.031007||Viu
DEBUG_y_TEST|5.031007||Viu
DEBUG_yv|5.031007||Viu
DEBUG_yv_TEST|5.031007||Viu
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DECLARE_AND_GET_RE_DEBUG_FLAGS_NON_REGEX|5.031011||Viu
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DEFAULT_PAT_MOD|5.013006||Viu
defelem_target|5.019002||Viu
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DEFINEP_t8_p8|5.033003||Viu
DEFINEP_t8_pb|5.033003||Viu
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DEFINEP_tb_p8|5.033003||Viu

DEFINEP_tb_pb|5.033003||Viu
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DEFSV_set|5.010001|5.003007|p
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delete_eval_scope|5.009004||xViu
delimcpy|5.004000|5.004000|n
delimcpy_no_escape|5.025005||cVni
DEL_NATIVE|5.017010||Viu
del_sv|5.005000||Viu
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DEPENDS_PAT_MODS|5.013009||Viu
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deprecate_disappears_in|5.025009||Viu
deprecate_fatal_in|5.025009||Viu
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destroy_matcher|5.027008||Viu
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dEXT|5.003007||Viu
dEXTCONST|5.004000||Viu
DFA_RETURN_FAILURE|5.035004||Viu
DFA_RETURN_SUCCESS|5.035004||Viu
DFA_TEASE_APART_FF|5.035004||Viu
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DIE|5.003007||Viu
die|5.003007||vV
die_nocontext|5.006000||vVn
die_sv|5.013001|5.003007|p
die_unwind|5.013001||Viu
Direntry_t|5.003007|5.003007|Vn
dirp_dup|5.013007|5.013007|u
dITEMS|5.007002|5.003007|p
div128|5.005000||Viu
dJMPENV|5.004000||Viu
djSP|5.004005||Vi
dMARK|5.003007|5.003007|
DM_ARRAY_ISA|5.013002||Viu
DM_DELAY|5.003007||Viu
DM_EGID|5.003007||Viu
DM_EUID|5.003007||Viu
DM_GID|5.003007||Viu
DM_RGID|5.003007||Viu
DM_RUID|5.003007||Viu
DM_UID|5.003007||Viu
dMULTICALL|5.009003|5.009003|
dMY_CXT|5.009000|5.009000|p
dMY_CXT_INTERP|5.009003||Viu
dMY_CXT_SV|5.007003|5.003007|pV
dNOOP|5.006000|5.003007|p

do_aexec|5.009003||Viu
do_aexec5|5.006000||Viu
do_aspawn|5.008000||Vu
do_binmode|5.004005|5.004005|du
docatch|5.005000||Vi
do_chomp|5.003007||Viu
do_close|5.003007|5.003007|u
do_delete_local|5.011000||Viu
do_dump_pad|5.008001||Vi
do_eof|5.003007||Viu
does_utf8_overflow|5.025006||Vniu
doeval_compile|5.023008||Viu
do_exec3|5.006000||Viu
do_exec|5.009003||Viu
dofile|5.005003||Viu
dofindlabel|5.003007||Viu
doform|5.005000||Viu
do_gv_dump|5.006000||cVu
do_gvgv_dump|5.006000||cVu
do_hv_dump|5.006000||cVu
doing_taint|5.008001||cVnu
DOINIT|5.003007||Viu
do_ipcctl|5.003007||Viu
do_ipcget|5.003007||Viu
do_join|5.003007|5.003007|u
do_magic_dump|5.006000||cVu
do_msgrcv|5.003007||Viu
do_msgsnd|5.003007||Viu
do_ncmp|5.015001||Viu
do_oddball|5.006000||Viu
dooneliner|5.006000||Viu
do_op_dump|5.006000||cVu
do_open|5.003007|5.003007|u
do_open6|5.019010||xViu
do_open9|5.006000|5.006000|du
do_openn|5.007001|5.007001|u
doopen_pm|5.008001||Viu
do_open_raw|5.019010||xViu
doparseform|5.005000||Viu
do_pmop_dump|5.006000||cVu
dopoptoeval|5.003007||Viu
dopoptogivenfor|5.027008||Viu
dopoptolabel|5.005000||Viu
dopoptoloop|5.005000||Viu
dopoptosub_at|5.005000||Viu
dopoptowhen|5.027008||Viu
do_print|5.003007||Viu
do_readline|5.003007||Viu

doref|5.009003|5.009003|u
dORIGMARK|5.003007|5.003007|
do_seek|5.003007||Viu
do_semop|5.003007||Viu
do_shmio|5.003007||Viu
DOSISH|5.003007||Viu
do_smartmatch|5.027008||Viu
do_spawn|5.008000||Vu
do_spawn_nowait|5.008000||Vu
do_sprintf|5.003007|5.003007|u
do_sv_dump|5.006000||cVu
do_sysseek|5.004000||Viu
do_tell|5.003007||Viu
do_trans|5.003007||Viu
do_trans_complex|5.006001||Viu
do_trans_count|5.006001||Viu
do_trans_count_invmap|5.031006||Viu
do_trans_invmap|5.031006||Viu
do_trans_simple|5.006001||Viu
DOUBLE_BIG_ENDIAN|5.021009||Viu
DOUBLE_HAS_INF|5.025003|5.025003|Vn
DOUBLE_HAS_NAN|5.025003|5.025003|Vn
DOUBLE_HAS_NEGATIVE_ZERO|5.025007|5.025007|Vn
DOUBLE_HAS_SUBNORMALS|5.025007|5.025007|Vn
DOUBLEINFBYTES|5.023000|5.023000|Vn
DOUBLE_IS_CRAY_SINGLE_64_BIT|5.025006|5.025006|Vn
DOUBLE_IS_IBM_DOUBLE_64_BIT|5.025006|5.025006|Vn
DOUBLE_IS_IBM_SINGLE_32_BIT|5.025006|5.025006|Vn
DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN|5.021006|5.021006|Vn
DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN|5.021006|5.021006|Vn
DOUBLE_IS_IEEE_754_32_BIT_BIG_ENDIAN|5.021006|5.021006|Vn
DOUBLE_IS_IEEE_754_32_BIT_LITTLE_ENDIAN|5.021006|5.021006|Vn
DOUBLE_IS_IEEE_754_64_BIT_BIG_ENDIAN|5.021006|5.021006|Vn
DOUBLE_IS_IEEE_754_64_BIT_LITTLE_ENDIAN|5.021006|5.021006|Vn
DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_BE_LE|5.021006|5.021006|Vn
DOUBLE_IS_IEEE_754_64_BIT_MIXED_ENDIAN_LE_BE|5.021006|5.021006|Vn
DOUBLE_IS_IEEE_FORMAT|5.025003||Viu
DOUBLE_IS_UNKNOWN_FORMAT|5.021006|5.021006|Vn
DOUBLE_IS_VAX_D_FLOAT|5.025003|5.025003|Vn
DOUBLE_IS_VAX_F_FLOAT|5.025003|5.025003|Vn
DOUBLE_IS_VAX_FLOAT|5.025003||Viu
DOUBLE_IS_VAX_G_FLOAT|5.025003|5.025003|Vn
DOUBLEKIND|5.021006|5.021006|Vn
DOUBLE_LITTLE_ENDIAN|5.021009||Viu
DOUBLEMANTBITS|5.023000|5.023000|Vn
DOUBLE_MIX_ENDIAN|5.021009||Viu
DOUBLENANBYTES|5.023000|5.023000|Vn
DOUBLESIZE|5.005000|5.005000|Vn

DOUBLE_STYLE_IEEE|5.025007|5.025007|Vn
DOUBLE_VAX_ENDIAN|5.025003||Viu
do_uniprop_match|5.031011||cVniu
dounwind|5.003007|5.003007|u
DO_UTF8|5.006000|5.006000|
do_vecget|5.006000||Viu
do_vecset|5.003007||Viu
do_vop|5.003007||Viu
dowantarray|5.003007|5.003007|u
dPOPiv|5.003007||Viu
dPOPnv|5.003007||Viu
dPOPnv_nomg|5.013002||Viu
dPOPPOPiirl|5.003007||Viu
dPOPPOPnnrl|5.003007||Viu
dPOPPOPssrl|5.003007||Viu
dPOPss|5.003007||Viu
dPOPTOPiirl|5.003007||Viu
dPOPTOPiirl_nomg|5.013002||Viu
dPOPTOPiirl_ul_nomg|5.013002||Viu
dPOPTOPnnrl|5.003007||Viu
dPOPTOPnnrl_nomg|5.013002||Viu
dPOPTOPssrl|5.003007||Viu
dPOPuv|5.004000||Viu
dPOPXiirl|5.004000||Viu
dPOPXiirl_ul_nomg|5.013002||Viu
dPOPXnnrl|5.004000||Viu
dPOPXssrl|5.004000||Viu
DPTR2FPTR|5.009003||Viu
Drand01|5.006000|5.006000|
drand48_init_r|||cniu
drand48_r|||cniu
DRAND48_R_PROTO|5.008000|5.008000|Vn
dSAVEDERRNO|5.010001||Vi
dSAVE_ERRNO|5.010001||Vi
dSP|5.003007|5.003007|
dSS_ADD|5.017007||Viu
dTARG|5.003007||Viu
dTARGET|5.003007|5.003007|
dTARGETSTACKED|5.003007||Viu
D_T_FMT|5.027010||Viu
dTHR|5.004005|5.003007|p
dTHX|5.003007|5.003007|p
dTHXa|5.006000|5.003007|p
dTHX_DEBUGGING|5.027009||Viu
dTHXo|5.006000||Viu
dTHXoa|5.006001|5.003007|p
dTHXR||5.003007|ponu
dTHXs|5.007002||Viu

dTHXx|5.006000||Viu
dTOPiv|5.003007||Viu
dTOPnv|5.003007||Viu
dTOPss|5.003007||Viu
dTOPuv|5.004000||Viu
dtrace_probe_call|||ciu
dtrace_probe_load|||ciu
dtrace_probe_op|||ciu
dtrace_probe_phase|||ciu
dump_all|5.006000|5.006000|
dump_all_perl|5.011000||Viu
dump_c_backtrace|5.021001||V
dump_eval|5.006000|5.006000|u
dump_exec_pos|5.009004||Viu
dump_form|5.006000|5.006000|u
dump_indent|5.006000||vcVu
dump_mstats|5.003007||Vu
dump_packsubs|5.006000|5.006000|
dump_packsubs_perl|5.011000||Viu
dump_regex_sets_structures|5.025006||Viu
dump_sub|5.006000|5.006000|u
dump_sub_perl|5.011000||Viu
dump_sv_child|5.009003||Viu
dump_trie|5.009004||Viu
dump_trie_interim_list|5.009004||Viu
dump_trie_interim_table|5.009004||Viu
dumpuntil|5.005000||Viu
dump_vindent|5.006000||cVu
dUNDERBAR|5.009002|5.003007|p
dup2|5.005000||Viu
dup|5.005000||Viu
dup_attrlist|5.006000||Viu
DUP_WARNINGS|5.009004||Viu
dup_warnings|||ciu
dVAR|5.009003|5.003007|p
dXCPT|5.009002|5.003007|p
dXSARGS|5.003007|5.003007|
dXSBOOTARGSAPIVERCHK|5.021006||Viu
dXSBOOTARGSNOVERCHK|5.021006||Viu
dXSBOOTARGSXSAPIVERCHK|5.021006||Viu
dXSFUNCTION|5.005000||Viu
dXSI32|5.003007|5.003007|V
dXSTARG|5.006000|5.003007|poVnu
dXSUB_SYS|5.003007||Viu
edit_distance|5.023008||Vniu
EIGHT_BIT_UTF8_TO_NATIVE|5.023003||Viu
ELEMENT_RANGE_MATCHES_INVLIST|5.023002||Viu
EMBEDMYMALLOC|5.006000||Viu

emulate_cop_io|||xciu
emulate_setlocale|5.027009||Vniu
END|5.003007||Viu
END_EXTERN_C|5.005000|5.003007|pV
endgrent|5.009000||Viu
ENDGRENT_R_HAS_FPTR|5.008000||Viu
ENDGRENT_R_PROTO|5.008000|5.008000|Vn
endhostent|5.005000||Viu
ENDHOSTENT_R_PROTO|5.008000|5.008000|Vn
ENDLIKE|5.009005||Viu
ENDLIKE_t8|5.035004||Viu
ENDLIKE_t8_p8|5.033003||Viu
ENDLIKE_t8_pb|5.033003||Viu
ENDLIKE_tb|5.035004||Viu
ENDLIKE_tb_p8|5.033003||Viu
ENDLIKE_tb_pb|5.033003||Viu
endnetent|5.005000||Viu
ENDNETENT_R_PROTO|5.008000|5.008000|Vn
endprotoent|5.005000||Viu
ENDPROTOENT_R_PROTO|5.008000|5.008000|Vn
endpwent|5.009000||Viu
ENDPWENT_R_HAS_FPTR|5.008000||Viu
ENDPWENT_R_PROTO|5.008000|5.008000|Vn
endservent|5.005000||Viu
ENDSERVENT_R_PROTO|5.008000|5.008000|Vn
END_t8|5.035004||Viu
END_t8_p8|5.033003||Viu
END_t8_pb|5.033003||Viu
END_tb|5.035004||Viu
END_tb_p8|5.033003||Viu
END_tb_pb|5.033003||Viu
ENTER|5.003007|5.003007|
ENTER_with_name|5.011002|5.011002|
ENV_INIT|5.031011||Viu
environ|5.003007||Viu
ENV_LOCALE_LOCK|5.031011||Viu
ENV_LOCALE_READ_LOCK|5.031011||Viu
ENV_LOCALE_READ_UNLOCK|5.031011||Viu
ENV_LOCALE_UNLOCK|5.031011||Viu
ENV_LOCK|5.031011||Viu
ENV_READ_LOCK|5.033005||Viu
ENV_READ_UNLOCK|5.033005||Viu
ENV_TERM|5.031011||Viu
ENV_UNLOCK|5.031011||Viu
EOF|5.003007||Viu
EOF_NONBLOCK|5.003007|5.003007|Vn
EOL|5.003007||Viu
EOL_t8|5.035004||Viu

EOL_t8_p8|5.033003||Viu
EOL_t8_pb|5.033003||Viu
EOL_tb|5.035004||Viu
EOL_tb_p8|5.033003||Viu
EOL_tb_pb|5.033003||Viu
EOS|5.005000||Viu
EOS_t8|5.035004||Viu
EOS_t8_p8|5.033003||Viu
EOS_t8_pb|5.033003||Viu
EOS_tb|5.035004||Viu
EOS_tb_p8|5.033003||Viu
EOS_tb_pb|5.033003||Viu
ERA|5.027010||Viu
ERA_D_FMT|5.027010||Viu
ERA_D_T_FMT|5.027010||Viu
ERA_T_FMT|5.027010||Viu
ERRSV|5.004005|5.003007|p
ESC_NATIVE|5.021004||Viu
EVAL|5.005000||Viu
EVAL_B|5.025010||Viu
EVAL_B_fail|5.025010||Viu
EVAL_B_fail_t8|5.035004||Viu
EVAL_B_fail_t8_p8|5.033003||Viu
EVAL_B_fail_t8_pb|5.033003||Viu
EVAL_B_fail_tb|5.035004||Viu
EVAL_B_fail_tb_p8|5.033003||Viu
EVAL_B_fail_tb_pb|5.033003||Viu
EVAL_B_t8|5.035004||Viu
EVAL_B_t8_p8|5.033003||Viu
EVAL_B_t8_pb|5.033003||Viu
EVAL_B_tb|5.035004||Viu
EVAL_B_tb_p8|5.033003||Viu
EVAL_B_tb_pb|5.033003||Viu
EVAL_INEVAL|5.006000||Viu
EVAL_INREQUIRE|5.007001||Viu
EVAL_KEEPERR|5.006000||Viu
EVAL_NULL|5.006000||Viu
EVAL_postponed_AB|5.025010||Viu
EVAL_postponed_AB_fail|5.025010||Viu
EVAL_postponed_AB_fail_t8|5.035004||Viu
EVAL_postponed_AB_fail_t8_p8|5.033003||Viu
EVAL_postponed_AB_fail_t8_pb|5.033003||Viu
EVAL_postponed_AB_fail_tb|5.035004||Viu
EVAL_postponed_AB_fail_tb_p8|5.033003||Viu
EVAL_postponed_AB_fail_tb_pb|5.033003||Viu
EVAL_postponed_AB_t8|5.035004||Viu
EVAL_postponed_AB_t8_p8|5.033003||Viu
EVAL_postponed_AB_t8_pb|5.033003||Viu

EVAL_postponed_AB_tb|5.035004||Viu
EVAL_postponed_AB_tb_p8|5.033003||Viu
EVAL_postponed_AB_tb_pb|5.033003||Viu
eval_pv|5.006000|5.003007|p
EVAL_RE_REPARSING|5.017011||Viu
eval_sv|5.006000|5.003007|p
EVAL_t8|5.035004||Viu
EVAL_t8_p8|5.033003||Viu
EVAL_t8_pb|5.033003||Viu
EVAL_tb|5.035004||Viu
EVAL_tb_p8|5.033003||Viu
EVAL_tb_pb|5.033003||Viu
EVAL_WARNONLY|5.006000||Viu
EXACT|5.004000||Viu
EXACTF|5.004000||Viu
EXACTFAA|5.027009||Viu
EXACTFAA_NO_TRIE|5.027009||Viu
EXACTFAA_NO_TRIE_t8|5.035004||Viu
EXACTFAA_NO_TRIE_t8_p8|5.033003||Viu
EXACTFAA_NO_TRIE_t8_pb|5.033003||Viu
EXACTFAA_NO_TRIE_tb|5.035004||Viu
EXACTFAA_NO_TRIE_tb_p8|5.033003||Viu
EXACTFAA_NO_TRIE_tb_pb|5.033003||Viu
EXACTFAA_t8|5.035004||Viu
EXACTFAA_t8_p8|5.033003||Viu
EXACTFAA_t8_pb|5.033003||Viu
EXACTFAA_tb|5.035004||Viu
EXACTFAA_tb_p8|5.033003||Viu
EXACTFAA_tb_pb|5.033003||Viu
EXACTFL|5.004000||Viu
EXACTFL_t8|5.035004||Viu
EXACTFL_t8_p8|5.033003||Viu
EXACTFL_t8_pb|5.033003||Viu
EXACTFL_tb|5.035004||Viu
EXACTFL_tb_p8|5.033003||Viu
EXACTFL_tb_pb|5.033003||Viu
EXACTFLU8|5.021008||Viu
EXACTFLU8_t8|5.035004||Viu
EXACTFLU8_t8_p8|5.033003||Viu
EXACTFLU8_t8_pb|5.033003||Viu
EXACTFLU8_tb|5.035004||Viu
EXACTFLU8_tb_p8|5.033003||Viu
EXACTFLU8_tb_pb|5.033003||Viu
EXACTF_t8|5.035004||Viu
EXACTF_t8_p8|5.033003||Viu
EXACTF_t8_pb|5.033003||Viu
EXACTF_tb|5.035004||Viu
EXACTF_tb_p8|5.033003||Viu

EXACTF_tb_pb|5.033003||Viu
EXACTFU|5.013008||Viu
EXACTFUP|5.029007||Viu
EXACTFUP_t8|5.035004||Viu
EXACTFUP_t8_p8|5.033003||Viu
EXACTFUP_t8_pb|5.033003||Viu
EXACTFUP_tb|5.035004||Viu
EXACTFUP_tb_p8|5.033003||Viu
EXACTFUP_tb_pb|5.033003||Viu
EXACTFU_REQ8|5.031006||Viu
EXACTFU_REQ8_t8|5.035004||Viu
EXACTFU_REQ8_t8_p8|5.033003||Viu
EXACTFU_REQ8_t8_pb|5.033003||Viu
EXACTFU_REQ8_tb|5.035004||Viu
EXACTFU_REQ8_tb_p8|5.033003||Viu
EXACTFU_REQ8_tb_pb|5.033003||Viu
EXACTFU_S_EDGE|5.029007||Viu
EXACTFU_S_EDGE_t8|5.035004||Viu
EXACTFU_S_EDGE_t8_p8|5.033003||Viu
EXACTFU_S_EDGE_t8_pb|5.033003||Viu
EXACTFU_S_EDGE_tb|5.035004||Viu
EXACTFU_S_EDGE_tb_p8|5.033003||Viu
EXACTFU_S_EDGE_tb_pb|5.033003||Viu
EXACTFU_t8|5.035004||Viu
EXACTFU_t8_p8|5.033003||Viu
EXACTFU_t8_pb|5.033003||Viu
EXACTFU_tb|5.035004||Viu
EXACTFU_tb_p8|5.033003||Viu
EXACTFU_tb_pb|5.033003||Viu
EXACTL|5.021008||Viu
EXACTL_t8|5.035004||Viu
EXACTL_t8_p8|5.033003||Viu
EXACTL_t8_pb|5.033003||Viu
EXACTL_tb|5.035004||Viu
EXACTL_tb_p8|5.033003||Viu
EXACTL_tb_pb|5.033003||Viu
EXACT_REQ8|5.031006||Viu
EXACT_REQ8_t8|5.035004||Viu
EXACT_REQ8_t8_p8|5.033003||Viu
EXACT_REQ8_t8_pb|5.033003||Viu
EXACT_REQ8_tb|5.035004||Viu
EXACT_REQ8_tb_p8|5.033003||Viu
EXACT_REQ8_tb_pb|5.033003||Viu
EXACT_t8|5.035004||Viu
EXACT_t8_p8|5.033003||Viu
EXACT_t8_pb|5.033003||Viu
EXACT_tb|5.035004||Viu
EXACT_tb_p8|5.033003||Viu

EXACT_tb_pb|5.033003||Viu
EXEC_ARGV_CAST|5.007001||Viu
exec_failed|5.009004||Viu
execl|5.005000||Viu
EXEC_PAT_MOD|5.009005||Viu
EXEC_PAT_MODS|5.009005||Viu
execute_wildcard|5.031010||Viu
execv|5.005000||Viu
execvp|5.005000||Viu
exit|5.005000||Viu
EXPECT|5.009004||Viu
expect_number|5.007001||Viu
EXT|5.003007||Viu
EXTCONST|5.004000||Viu
EXTEND|5.003007|5.003007|
EXTEND_HWM_SET|5.027002||Viu
EXTEND_MORTAL|5.004000||Viu
EXTEND_SKIP|5.027002||Viu
EXTERN_C|5.005000|5.003007|pV
EXT_MGVTBL|5.009004||Viu
EXT_PAT_MODS|5.009005||Viu
EXTRA_SIZE|5.005000||Viu
EXTRA_STEP_2ARGS|5.005000||Viu
F0convert|5.009003||Vniu
FAKE_BIT_BUCKET|5.009005||Viu
FAKE_DEFAULT_SIGNAL_HANDLERS|5.009003||Viu
FAKE_PERSISTENT_SIGNAL_HANDLERS|5.009003||Viu
FALSE|5.003007||Viu
FATAL_ABOVE_FF_MSG|5.027010||Viu
F_atan2_amg|5.004000||Viu
FBMcf_TAIL|5.006000||Viu
FBMcf_TAIL_DOLLAR|5.006000||Viu
FBMcf_TAIL_DOLLARM|5.006000||Viu
FBMcf_TAIL_Z|5.006000||Viu
FBMcf_TAIL_z|5.006000||Viu
fbm_compile|5.005000|5.005000|
fbm_instr|5.005000|5.005000|
FBMrf_MULTILINE|5.006000||Viu
fclose|5.003007||Viu
fcntl|5.006000||Viu
FCNTL_CAN_LOCK|5.007001|5.007001|Vn
F_cos_amg|5.004000||Viu
FD_CLR|5.008000||Viu
FD_ISSET|5.008000||Viu
fdopen|5.003007||Viu
FD_SET|5.008000||Viu
fd_set|5.008000||Viu
FD_ZERO|5.008000||Viu

FEATURE_BAREWORD_FILEHANDLES_BIT|5.033006||Viu
FEATURE_BAREWORD_FILEHANDLES_IS_ENABLED|5.033006||Viu
FEATURE_BITWISE_BIT|5.031006||Viu
FEATURE_BITWISE_IS_ENABLED|5.021009||Viu
FEATURE_BUNDLE_510|5.015007||Viu
FEATURE_BUNDLE_511|5.015007||Viu
FEATURE_BUNDLE_515|5.015007||Viu
FEATURE_BUNDLE_523|5.023001||Viu
FEATURE_BUNDLE_527|5.027008||Viu
FEATURE_BUNDLE_535|5.035003||Viu
FEATURE_BUNDLE_CUSTOM|5.015007||Viu
FEATURE_BUNDLE_DEFAULT|5.015007||Viu
FEATURE_DEFER_BIT|5.035004||Viu
FEATURE_DEFER_IS_ENABLED|5.035004||Viu
FEATURE_EVALBYTES_BIT|5.031006||Viu
FEATURE_EVALBYTES_IS_ENABLED|5.015007||Viu
FEATURE_FC_BIT|5.031006||Viu
FEATURE_FC_IS_ENABLED|5.015008||Viu
FEATURE_INDIRECT_BIT|5.031010||Viu
FEATURE_INDIRECT_IS_ENABLED|5.031010||Viu
FEATURE_ISA_BIT|5.031007||Viu
FEATURE_ISA_IS_ENABLED|5.031007||Viu
FEATURE_IS_ENABLED_MASK|5.031006||Viu
FEATURE_MULTIDIMENSIONAL_BIT|5.033001||Viu
FEATURE_MULTIDIMENSIONAL_IS_ENABLED|5.033001||Viu
FEATURE_MYREF_BIT|5.031006||Viu
FEATURE_MYREF_IS_ENABLED|5.025003||Viu
FEATURE_POSTDEREF_QQ_BIT|5.031006||Viu
FEATURE_POSTDEREF_QQ_IS_ENABLED|5.019005||Viu
FEATURE_REFALIASING_BIT|5.031006||Viu
FEATURE_REFALIASING_IS_ENABLED|5.021005||Viu
FEATURE_SAY_BIT|5.031006||Viu
FEATURE_SAY_IS_ENABLED|5.015007||Viu
FEATURE_SIGNATURES_BIT|5.031006||Viu
FEATURE_SIGNATURES_IS_ENABLED|5.019009||Viu
FEATURE_STATE_BIT|5.031006||Viu
FEATURE_STATE_IS_ENABLED|5.015007||Viu
FEATURE___SUB___BIT|5.031006||Viu
FEATURE___SUB___IS_ENABLED|5.015007||Viu
FEATURE_SWITCH_BIT|5.031006||Viu
FEATURE_SWITCH_IS_ENABLED|5.015007||Viu
FEATURE_TRY_BIT|5.033007||Viu
FEATURE_TRY_IS_ENABLED|5.033007||Viu
FEATURE_UNICODE_BIT|5.031006||Viu
FEATURE_UNICODE_IS_ENABLED|5.015007||Viu
FEATURE_UNIEVAL_BIT|5.031006||Viu
FEATURE_UNIEVAL_IS_ENABLED|5.015007||Viu
feof|5.003007||Viu

ferror|5.003007||Viu
FETCHFEATUREBITSHH|5.031006||Viu
F_exp_amg|5.004000||Viu
FF_0DECIMAL|5.007001||Viu
FF_BLANK|5.003007||Viu
FF_CHECKCHOP|5.003007||Viu
FF_CHECKNL|5.003007||Viu
FF_CHOP|5.003007||Viu
FF_DECIMAL|5.003007||Viu
FF_END|5.003007||Viu
FF_FETCH|5.003007||Viu
FF_HALFSPACE|5.003007||Viu
FF_ITEM|5.003007||Viu
FF_LINEGLOB|5.003007||Viu
FF_LINEMARK|5.003007||Viu
FF_LINESNGL|5.009001||Viu
FF_LITERAL|5.003007||Viu
Fflush|5.003007||Viu
fflush|5.003007||Viu
FFLUSH_NULL|5.006000|5.006000|Vn
FF_MORE|5.003007||Viu
FF_NEWLINE|5.003007||Viu
FF_SKIP|5.003007||Viu
FF_SPACE|5.003007||Viu
fgetc|5.003007||Viu
fgetpos|5.003007||Viu
fgets|5.003007||Viu
FILE|5.003007||Viu
FILE_base|5.007000|5.007000|
FILE_bufsiz|5.007000|5.007000|
FILE_cnt|5.007000|5.007000|
fileno|5.003007||Viu
FILE_ptr|5.007000|5.007000|
FILL_ADVANCE_NODE_2L_ARG|5.021005||Viu
FILL_ADVANCE_NODE|5.005000||Viu
FILL_ADVANCE_NODE_ARG|5.005000||Viu
FILL_ADVANCE_NODE_ARGp|5.031010||Viu
FILL_NODE|5.029004||Viu
filter_add|5.003007|5.003007|
FILTER_DATA|5.003007||Viu
filter_del|5.003007|5.003007|u
filter_gets|5.005000||Viu
FILTER_ISREADER|5.003007||Viu
filter_read|5.003007|5.003007|
FILTER_READ|5.003007||Viu
finalize_op|5.015002||Viu
finalize_optree|5.015002||Vi
find_and_forget_pmops|5.009005||Viu

find_array_subscript|5.009004||Viu
find_beginning|5.005000||Viu
find_byclass|5.006000||Viu
find_default_stash|5.019004||Viu
find_first_differing_byte_pos|5.031007||Vniu
find_hash_subscript|5.009004||Viu
find_in_my_stash|5.006001||Viu
find_lexical_cv|5.019001||Viu
find_next_masked|5.027009||Vniu
find_runcv|5.009005|5.009005|
FIND_RUNCV_level_eq|5.017002||Viu
FIND_RUNCV_padid_eq|5.017004||Viu
find_runcv_where|5.017002||Viu
find_rundefsv|5.013002|5.013002|
find_rundefsvoffset|5.009002|5.009002|d
find_script|5.004005||Viu
find_span_end|5.027009||Vniu
find_span_end_mask|5.027009||Vniu
find_uninit_var|5.009002||xVi
FIRST_NON_ASCII_DECIMAL_DIGIT|5.027007||Viu
first_symbol|5.009003||Vniu
FIT_ARENA0|||Viu
FIT_ARENAn|||Viu
FIT_ARENA|||Viu
FITS_IN_8_BITS|5.013005||Viu
fixup_errno_string|5.019007||Viu
FLAGS|5.013006||Viu
FLEXFILENAMES|5.003007|5.003007|Vn
float_end_shift|5.009005||Viu
float_max_offset|5.005000||Viu
float_min_offset|5.005000||Viu
float_substr|5.005000||Viu
float_utf8|5.008000||Viu
flock|5.005000||Viu
flockfile|5.003007||Viu
F_log_amg|5.004000||Viu
FmLINES|5.003007||Viu
fold_constants|5.003007||Viu
foldEQ|5.013002|5.013002|n
foldEQ_latin1|5.013008||cVnu
foldEQ_latin1_s2_folded|5.029007||Vniu
foldEQ_locale|5.013002|5.013002|n
FOLDEQ_LOCALE|5.019009||cV
FOLDEQ_S1_ALREADY_FOLDED|5.015004||cV
FOLDEQ_S1_FOLDS_SANE|5.021008||cV
FOLDEQ_S2_ALREADY_FOLDED|5.015004||cV
FOLDEQ_S2_FOLDS_SANE|5.021008||cV
foldEQ_utf8|5.013002|5.007003|p

foldEQ_utf8_flags|5.013010||cVu
FOLDEQ_UTF8_NOMIX_ASCII|5.013010||cV
FOLD_FLAGS_FULL|5.015006||Viu
FOLD_FLAGS_LOCALE|5.015006||Viu
FOLD_FLAGS_NOMIX_ASCII|5.017000||Viu
fopen|5.003007||Viu
forbid_setid|5.005000||Viu
force_ident|5.003007||Viu
force_ident_maybe_lex|5.017004||Viu
force_list|5.003007||Viu
force_next|5.003007||Viu
_force_out_malformed_utf8_message|5.025009||cVu
force_strict_version|5.011004||Viu
force_version|5.005000||Viu
force_word|5.003007||Viu
forget_pmop|5.017007||Viu
form|5.004000||vV
form_alien_digit_msg|5.031009||cViu
form_cp_too_large_msg|5.031009||cViu
form_nocontext|5.006000||vVn
fp_dup|5.007003|5.007003|u
Fpos_t|5.003007|5.003007|Vn
F_pow_amg|5.004000||Viu
FP_PINF|5.021004||Viu
FP_QNAN|5.021004||Viu
fprintf|5.003007||Viu
fprintf_nocontext|5.006000||vdVnu
FPTR2DPTR|5.009003||Viu
fputc|5.003007||Viu
fputs|5.003007||Viu
fread|5.003007||Viu
free|5.003007||Viu
free_and_set_cop_warnings|5.031011||Viu
free_c_backtrace|5.021001||Vi
FreeOp|5.008001||Viu
Free_t|5.003007|5.003007|Vn
FREE_THREAD_KEY|5.006001||Viu
free_tied_hv_pool|5.008001||Viu
FREETMPS|5.003007|5.003007|
free_tmps|5.003007||cVu
freopen|5.003007||Viu
frewind|5.005000||Viu
FROM_INTERNAL_SIZE|5.023002||Viu
fscanf|5.003007||Viu
fseek|5.003007||Viu
FSEEKSIZE|5.006000||Viu
fsetpos|5.003007||Viu
F_sin_amg|5.004000||Viu

F_sqrt_amg|5.004000||Viu
Fstat|5.003007||Viu
fstat|5.005000||Viu
ftell|5.003007||Viu
ftruncate|5.006000||Viu
ftrylockfile|5.003007||Viu
FUNCTION|5.009003||Viu
funlockfile|5.003007||Viu
fwrite1|5.003007||Viu
fwrite|5.003007||Viu
G_ARRAY|5.003007||Viu
GCB_BREAKABLE|5.025003||Viu
GCB_EX_then_EM|5.025003||Viu
GCB_Maybe_Emoji_NonBreak|5.029002||Viu
GCB_NOBREAK|5.025003||Viu
GCB_RI_then_RI|5.025003||Viu
GCC_DIAG_IGNORE|5.019007||Viu
GCC_DIAG_IGNORE_DECL|5.027007||Viu
GCC_DIAG_IGNORE_STMT|5.027007||Viu
GCC_DIAG_PRAGMA|5.021001||Viu
GCC_DIAG_RESTORE|5.019007||Viu
GCC_DIAG_RESTORE_DECL|5.027007||Viu
GCC_DIAG_RESTORE_STMT|5.027007||Viu
Gconvert|5.003007|5.003007|
GDBMNDBM_H_USES_PROTOTYPES|5.032001|5.032001|Vn
G_DISCARD|5.003007|5.003007|
gen_constant_list|5.003007||Viu
get_and_check_backslash_N_name|5.017006||cViu
get_and_check_backslash_N_name_wrapper|5.029009||Viu
get_ANYOF_cp_list_for_ssc|5.019005||Viu
get_ANYOFM_contents|5.027009||Viu
GETATARGET|5.003007||Viu
get_aux_mg|5.011000||Viu
get_av|5.006000|5.003007|p
getc|5.003007||Viu
get_c_backtrace|5.021001||Vi
get_c_backtrace_dump|5.021001||V
get_context|5.006000|5.006000|nu
getc_unlocked|5.003007||Viu
get_cv|5.006000|5.003007|p
get_cvn_flags|5.009005|5.003007|p
get_cvs|5.011000|5.003007|p
getcwd_sv|5.007002|5.007002|
get_db_sub|||iu
get_debug_opts|5.008001||Viu
get_deprecated_property_msg|5.031011||cVniu
getegid|5.005000||Viu
getenv|5.005000||Viu

getenv_len|5.006000||Viu
GETENV_LOCK|5.033005||Viu
GETENV_PRESERVES_OTHER_THREAD|5.033005|5.033005|Vn
GETENV_UNLOCK|5.033005||Viu
geteuid|5.005000||Viu
getgid|5.005000||Viu
getgrent|5.009000||Viu
GETGRENT_R_HAS_BUFFER|5.008000||Viu
GETGRENT_R_HAS_FPTR|5.008000||Viu
GETGRENT_R_HAS_PTR|5.008000||Viu
GETGRENT_R_PROTO|5.008000|5.008000|Vn
getgrgid|5.009000||Viu
GETGRGID_R_HAS_BUFFER|5.008000||Viu
GETGRGID_R_HAS_PTR|5.008000||Viu
GETGRGID_R_PROTO|5.008000|5.008000|Vn
getgrnam|5.009000||Viu
GETGRNAM_R_HAS_BUFFER|5.008000||Viu
GETGRNAM_R_HAS_PTR|5.008000||Viu
GETGRNAM_R_PROTO|5.008000|5.008000|Vn
get_hash_seed|5.008001||Viu
gethostbyaddr|5.005000||Viu
GETHOSTBYADDR_R_HAS_BUFFER|5.008000||Viu
GETHOSTBYADDR_R_HAS_ERRNO|5.008000||Viu
GETHOSTBYADDR_R_HAS_PTR|5.008000||Viu
GETHOSTBYADDR_R_PROTO|5.008000|5.008000|Vn
gethostbyname|5.005000||Viu
GETHOSTBYNAME_R_HAS_BUFFER|5.008000||Viu
GETHOSTBYNAME_R_HAS_ERRNO|5.008000||Viu
GETHOSTBYNAME_R_HAS_PTR|5.008000||Viu
GETHOSTBYNAME_R_PROTO|5.008000|5.008000|Vn
gethostent|5.005000||Viu
GETHOSTENT_R_HAS_BUFFER|5.008000||Viu
GETHOSTENT_R_HAS_ERRNO|5.008000||Viu
GETHOSTENT_R_HAS_PTR|5.008000||Viu
GETHOSTENT_R_PROTO|5.008000|5.008000|Vn
gethostname|5.005000||Viu
get_hv|5.006000|5.003007|p
get_invlist_iter_addr|5.015001||Vniu
get_invlist_offset_addr|5.019002||Vniu
get_invlist_previous_index_addr|5.017004||Vniu
getlogin|5.005000||Viu
GETLOGIN_R_PROTO|5.008000|5.008000|Vn
get_mstats|5.006000||Vu
getnetbyaddr|5.005000||Viu
GETNETBYADDR_R_HAS_BUFFER|5.008000||Viu
GETNETBYADDR_R_HAS_ERRNO|5.008000||Viu
GETNETBYADDR_R_HAS_PTR|5.008000||Viu
GETNETBYADDR_R_PROTO|5.008000|5.008000|Vn

getnetbyname|5.005000||Viu
GETNETBYNAME_R_HAS_BUFFER|5.008000||Viu
GETNETBYNAME_R_HAS_ERRNO|5.008000||Viu
GETNETBYNAME_R_HAS_PTR|5.008000||Viu
GETNETBYNAME_R_PROTO|5.008000|5.008000|Vn
getnetent|5.005000||Viu
GETNETENT_R_HAS_BUFFER|5.008000||Viu
GETNETENT_R_HAS_ERRNO|5.008000||Viu
GETNETENT_R_HAS_PTR|5.008000||Viu
GETNETENT_R_PROTO|5.008000|5.008000|Vn
get_no_modify|5.005000||Viu
get_num|5.008001||Viu
get_opargs|5.005000||Viu
get_op_descs|5.005000|5.005000|u
get_op_names|5.005000|5.005000|u
getpeername|5.005000||Viu
getpid|5.006000||Viu
get_ppaddr|5.006000|5.006000|u
get_prop_definition|5.031011||cViu
get_prop_values|5.031011||cVniu
getprotobyname|5.005000||Viu
GETPROTOBYNAME_R_HAS_BUFFER|5.008000||Viu
GETPROTOBYNAME_R_HAS_PTR|5.008000||Viu
GETPROTOBYNAME_R_PROTO|5.008000|5.008000|Vn
getprotobynumber|5.005000||Viu
GETPROTOBYNUMBER_R_HAS_BUFFER|5.008000||Viu
GETPROTOBYNUMBER_R_HAS_PTR|5.008000||Viu
GETPROTOBYNUMBER_R_PROTO|5.008000|5.008000|Vn
getprotoent|5.005000||Viu
GETPROTOENT_R_HAS_BUFFER|5.008000||Viu
GETPROTOENT_R_HAS_PTR|5.008000||Viu
GETPROTOENT_R_PROTO|5.008000|5.008000|Vn
getpwent|5.009000||Viu
GETPWENT_R_HAS_BUFFER|5.008000||Viu
GETPWENT_R_HAS_FPTR|5.008000||Viu
GETPWENT_R_HAS_PTR|5.008000||Viu
GETPWENT_R_PROTO|5.008000|5.008000|Vn
getpwnam|5.009000||Viu
GETPWNAM_R_HAS_BUFFER|5.008000||Viu
GETPWNAM_R_HAS_PTR|5.008000||Viu
GETPWNAM_R_PROTO|5.008000|5.008000|Vn
getpwuid|5.009000||Viu
GETPWUID_R_HAS_PTR|5.008000||Viu
GETPWUID_R_PROTO|5.008000|5.008000|Vn
get_quantifier_value|5.033006||Viu
get_re_arg|||xciu
get_re_gclass_nonbitmap_data|5.031011||Viu
get_regclass_nonbitmap_data|5.031011||Viu

get_regex_charset_name|5.031004||Vniu
getservbyname|5.005000||Viu
GETSERVBYNAME_R_HAS_BUFFER|5.008000||Viu
GETSERVBYNAME_R_HAS_PTR|5.008000||Viu
GETSERVBYNAME_R_PROTO|5.008000|5.008000|Vn
getservbyport|5.005000||Viu
GETSERVBYPORT_R_HAS_BUFFER|5.008000||Viu
GETSERVBYPORT_R_HAS_PTR|5.008000||Viu
GETSERVBYPORT_R_PROTO|5.008000|5.008000|Vn
getservent|5.005000||Viu
GETSERVENT_R_HAS_BUFFER|5.008000||Viu
GETSERVENT_R_HAS_PTR|5.008000||Viu
GETSERVENT_R_PROTO|5.008000|5.008000|Vn
getsockname|5.005000||Viu
getsockopt|5.005000||Viu
getspnam|5.009000||Viu
GETSPNAM_R_HAS_BUFFER|5.031011||Viu
GETSPNAM_R_HAS_PTR|5.008000||Viu
GETSPNAM_R_PROTO|5.008000|5.008000|Vn
get_sv|5.006000|5.003007|p
GETTARGET|5.003007||Viu
GETTARGETSTACKED|5.003007||Viu
gettimeofday|5.008000||Viu
getuid|5.005000||Viu
get_vtbl|5.005003|5.005003|u
getw|5.003007||Viu
G_EVAL|5.003007|5.003007|
G_FAKINGEVAL|5.009004||Viu
Gid_t|5.003007|5.003007|Vn
Gid_t_f|5.006000|5.006000|Vn
Gid_t_sign|5.006000|5.006000|Vn
Gid_t_size|5.006000|5.006000|Vn
GIMME|5.003007|5.003007|d
GIMME_V|5.004000|5.004000|
gimme_V|5.031005||xcVu
G_KEEPERR|5.003007|5.003007|
G_LIST|5.035001|5.003007|
glob_2number|5.009004||Viu
GLOBAL_PAT_MOD|5.009005||Viu
glob_assign_glob|5.009004||Viu
G_METHOD|5.006001|5.003007|p
G_METHOD_NAMED|5.019002|5.019002|
gmtime|5.031011||Viu
GMTIME_MAX|5.010001|5.010001|Vn
GMTIME_MIN|5.010001|5.010001|Vn
GMTIME_R_PROTO|5.008000|5.008000|Vn
G_NOARGS|5.003007|5.003007|
G_NODEBUG|5.004005||Viu

GOSUB|5.009005||Viu
GOSUB_t8|5.035004||Viu
GOSUB_t8_p8|5.033003||Viu
GOSUB_t8_pb|5.033003||Viu
GOSUB_tb|5.035004||Viu
GOSUB_tb_p8|5.033003||Viu
GOSUB_tb_pb|5.033003||Viu
gp_dup|5.007003|5.007003|u
gp_free|5.003007|5.003007|u
GPOS|5.004000||Viu
GPOS_t8|5.035004||Viu
GPOS_t8_p8|5.033003||Viu
GPOS_t8_pb|5.033003||Viu
GPOS_tb|5.035004||Viu
GPOS_tb_p8|5.033003||Viu
GPOS_tb_pb|5.033003||Viu
gp_ref|5.003007|5.003007|u
GREEK_CAPITAL_LETTER_MU|5.013011||Viu
GREEK_SMALL_LETTER_MU|5.013008||Viu
G_RE_REPARSING|5.017011||Viu
G_RETHROW|5.031002|5.003007|p
grok_atoUV|5.021010||cVni
grok_bin|5.007003|5.003007|p
grok_bin_oct_hex|5.031008||cVu
grok_bslash_c|5.013001||cViu
grok_bslash_N|5.017003||Viu
grok_bslash_o|5.013003||cViu
grok_bslash_x|5.017002||cViu
grok_hex|5.007003|5.003007|p
grok_infnan|5.021004|5.021004|
grok_number|5.007002|5.003007|p
grok_number_flags|5.021002|5.021002|
GROK_NUMERIC_RADIX|5.007002|5.003007|p
grok_numeric_radix|5.007002|5.003007|p
grok_oct|5.007003|5.003007|p
group_end|5.007003||Viu
GROUPP|5.005000||Viu
GROUPPN|5.031001||Viu
GROUPPN_t8|5.035004||Viu
GROUPPN_t8_p8|5.033003||Viu
GROUPPN_t8_pb|5.033003||Viu
GROUPPN_tb|5.035004||Viu
GROUPPN_tb_p8|5.033003||Viu
GROUPPN_tb_pb|5.033003||Viu
GROUPP_t8|5.035004||Viu
GROUPP_t8_p8|5.033003||Viu
GROUPP_t8_pb|5.033003||Viu
GROUPP_tb|5.035004||Viu

GROUPP_tb_p8|5.033003||Viu
GROUPP_tb_pb|5.033003||Viu
Groups_t|5.003007|5.003007|Vn
GRPASSWD|5.005000|5.005000|Vn
G_SCALAR|5.003007|5.003007|
G_UNDEF_FILL|5.013001||Viu
GV_ADD|5.003007|5.003007|
gv_add_by_type|5.011000|5.011000|u
GV_ADDMG|5.015003|5.015003|
GV_ADDMULTI|5.003007|5.003007|
GV_ADDWARN|5.003007|5.003007|
Gv_AMG|5.003007||Viu
Gv_AMupdate|5.011000|5.011000|u
GvASSUMECV|5.003007||Viu
GvASSUMECV_off|5.003007||Viu
GvASSUMECV_on|5.003007||Viu
gv_autoload4|5.004000|5.004000|
GV_AUTOLOAD|5.011000||Viu
GV_AUTOLOAD_ISMETHOD|5.015004||Viu
gv_autoload_pv|5.015004|5.015004|u
gv_autoload_pvn|5.015004|5.015004|u
gv_autoload_sv|5.015004|5.015004|u
GvAV|5.003007|5.003007|
gv_AVadd|5.003007|5.003007|u
GvAVn|5.003007||Viu
GV_CACHE_ONLY|5.021004||Vi
gv_check|5.003007||cVu
gv_const_sv|5.009003|5.009003|
GV_CROAK|5.011000||Viu
GvCV|5.003007|5.003007|
GvCVGEN|5.003007||Viu
GvCV_set|5.013010||Viu
GvCVu|5.004000||Viu
gv_dump|5.006000|5.006000|u
gv_efullname3|5.003007|5.003007|u
gv_efullname4|5.006001|5.006001|u
gv_efullname|5.003007|5.003007|du
GvEGV|5.003007||Viu
GvEGVx|5.013000||Viu
GvENAME|5.003007||Viu
GvENAME_HEK|5.015004||Viu
GvENAMELEN|5.015004||Viu
GvENAMEUTF8|5.015004||Viu
GvESTASH|5.003007||Viu
GVf_ASSUMECV|5.003007||Viu
gv_fetchfile|5.003007|5.003007|
gv_fetchfile_flags|5.009005|5.009005|
gv_fetchmeth|5.003007|5.003007|

gv_fetchmeth_autoload|5.007003|5.007003|
gv_fetchmeth_internal|5.021007||Viu
gv_fetchmethod|5.003007|5.003007|
gv_fetchmethod_autoload|5.004000|5.004000|
gv_fetchmethod_flags|5.015004||Viu
gv_fetchmethod_pv_flags|5.015004|5.015004|xu
gv_fetchmethod_pvn_flags|5.015004|5.015004|xu
gv_fetchmethod_sv_flags|5.015004|5.015004|xu
gv_fetchmeth_pv|5.015004|5.015004|
gv_fetchmeth_pv_autoload|5.015004|5.015004|
gv_fetchmeth_pvn|5.015004|5.015004|
gv_fetchmeth_pvn_autoload|5.015004|5.015004|
gv_fetchmeth_sv|5.015004|5.015004|
gv_fetchmeth_sv_autoload|5.015004|5.015004|
gv_fetchpv|5.003007|5.003007|
gv_fetchpvn|5.013006|5.013006|
gv_fetchpvn_flags|5.009002|5.003007|p
gv_fetchpvs|5.009004|5.003007|p
gv_fetchsv|5.009002|5.003007|p
gv_fetchsv_nomg|5.015003|5.015003|
GvFILE|5.006000||Viu
GvFILEGV|5.003007||Viu
GvFILE_HEK|5.009004||Viu
GvFILEx|5.019006||Viu
GVf_IMPORTED|5.003007||Viu
GVf_IMPORTED_AV|5.003007||Viu
GVf_IMPORTED_CV|5.003007||Viu
GVf_IMPORTED_HV|5.003007||Viu
GVf_IMPORTED_SV|5.003007||Viu
GVf_INTRO|5.003007||Viu
GvFLAGS|5.003007||Viu
GVf_MULTI|5.003007||Viu
GVF_NOADD|5.035006||Viu
GvFORM|5.003007||Viu
gv_fullname3|5.003007|5.003007|u
gv_fullname4|5.006001|5.006001|u
gv_fullname|5.003007|5.003007|du
GvGP|5.003007||Viu
GvGPFLAGS|5.021004||Viu
GvGP_set|5.013010||Viu
gv_handler|5.007001|5.007001|u
GvHV|5.003007|5.003007|
gv_HVadd|5.003007|5.003007|u
GvHVn|5.003007||Viu
GvIMPORTED|5.003007||Viu
GvIMPORTED_AV|5.003007||Viu
GvIMPORTED_AV_off|5.003007||Viu
GvIMPORTED_AV_on|5.003007||Viu

GvIMPORTED_CV|5.003007||Viu
GvIMPORTED_CV_off|5.003007||Viu
GvIMPORTED_CV_on|5.003007||Viu
GvIMPORTED_HV|5.003007||Viu
GvIMPORTED_HV_off|5.003007||Viu
GvIMPORTED_HV_on|5.003007||Viu
GvIMPORTED_off|5.003007||Viu
GvIMPORTED_on|5.003007||Viu
GvIMPORTED_SV|5.003007||Viu
GvIMPORTED_SV_off|5.003007||Viu
GvIMPORTED_SV_on|5.003007||Viu
gv_init|5.003007|5.003007|
gv_init_pv|5.015004|5.015004|
gv_init_pvn|5.015004|5.003007|p
gv_init_sv|5.015004|5.015004|
gv_init_svtype|5.015004||Viu
GvIN_PAD|5.006000||Viu
GvIN_PAD_off|5.006000||Viu
GvIN_PAD_on|5.006000||Viu
GvINTRO|5.003007||Viu
GvINTRO_off|5.003007||Viu
GvINTRO_on|5.003007||Viu
GvIO|5.003007||Viu
gv_IOadd|5.003007|5.003007|u
GvIOn|5.003007||Viu
GvIOp|5.003007||Viu
gv_is_in_main|5.019004||Viu
GvLINE|5.003007||Viu
gv_magicalize|5.019004||Viu
gv_magicalize_isa|5.013005||Viu
gv_method_changed|5.017007||Viu
GvMULTI|5.003007||Viu
GvMULTI_off|5.003007||Viu
GvMULTI_on|5.003007||Viu
GvNAME|5.003007||Viu
GvNAME_get|5.009004||Viu
GvNAME_HEK|5.009004||Viu
GvNAMELEN|5.003007||Viu
GvNAMELEN_get|5.009004||Viu
gv_name_set|5.009004|5.009004|u
GvNAMEUTF8|5.015004||Viu
GV_NOADD_MASK|5.009005||Viu
GV_NOADD_NOINIT|5.009003|5.009003|
GV_NOEXPAND|5.009003|5.009003|
GV_NOINIT|5.004005|5.004005|
GV_NO_SVGMAGIC|5.015003|5.015003|
GV_NOTQUAL|5.009004|5.009004|
GV_NOUNIVERSAL|5.033009||Viu

G_VOID|5.004000|5.004000|
gv_override|5.019006||Viu
GvREFCNT|5.003007||Viu
gv_setref|5.021005||Viu
GvSTASH|5.003007||Viu
gv_stashpv|5.003007|5.003007|
gv_stashpvn|5.003007|5.003007|p
gv_stashpvn_internal|5.021004||Viu
gv_stashpvs|5.009003|5.003007|p
gv_stashsv|5.003007|5.003007|
gv_stashsvpvn_cached|5.021004||Vi
GV_SUPER|5.017004|5.017004|
GvSV|5.003007|5.003007|
gv_SVadd|5.011000||Vu
GvSVn|5.009003|5.003007|p
gv_try_downgrade|5.011002||xcVi
GvXPVGV|5.003007||Viu
G_WANT|5.010001||Viu
G_WARN_ALL_MASK|5.006000||Viu
G_WARN_ALL_OFF|5.006000||Viu
G_WARN_ALL_ON|5.006000||Viu
G_WARN_OFF|5.006000||Viu
G_WARN_ON|5.006000||Viu
G_WARN_ONCE|5.006000||Viu
G_WRITING_TO_STDERR|5.013009||Viu
HADNV|||Viu
handle_named_backref|5.023008||Viu
handle_names_wildcard|5.031011||Viu
handle_possible_posix|5.023008||Viu
handle_regex_sets|5.017009||Viu
handle_user_defined_property|5.029008||Viu
HAS_ACCEPT4|5.027008|5.027008|Vn
HAS_ACCESS|5.006000|5.006000|Vn
HAS_ACOSH|5.021004|5.021004|Vn
HAS_ALARM|5.003007|5.003007|Vn
HASARENA|||Viu
HAS_ASCTIME_R|5.010000|5.010000|Vn
HAS_ASINH|5.021006|5.021006|Vn
HAS_ATANH|5.021006|5.021006|Vn
HAS_ATOLL|5.006000|5.006000|Vn
HASATTRIBUTE_ALWAYS_INLINE|5.031007|5.031007|Vn
HASATTRIBUTE_DEPRECATED|5.010001|5.010001|Vn
HASATTRIBUTE_FORMAT|5.009003|5.009003|Vn
HASATTRIBUTE_MALLOC|5.009003|5.009003|Vn
HASATTRIBUTE_NONNULL|5.009003|5.009003|Vn
HASATTRIBUTE_NORETURN|5.009003|5.009003|Vn
HASATTRIBUTE_PURE|5.009003|5.009003|Vn
HASATTRIBUTE_UNUSED|5.009003|5.009003|Vn

HASATTRIBUTE_WARN_UNUSED_RESULT|5.009003|5.009003|Vn
HAS_BACKTRACE|5.021001|5.021001|Vn
HAS_BUILTIN_CHOOSE_EXPR|5.009004|5.009004|Vn
HAS_BUILTIN_EXPECT|5.010001|5.010001|Vn
HAS_BUILTIN_UNREACHABLE|5.033003||Viu
HAS_C99|5.021004||Viu
HAS_C99_VARIADIC_MACROS|5.009004|5.009004|Vn
HAS_CBRT|5.021006|5.021006|Vn
HAS_CF_AUX_TABLES|5.027011||Viu
HAS_CHOWN|5.003007|5.003007|Vn
HAS_CHROOT|5.003007|5.003007|Vn
HAS_CHSIZE|5.004005|5.004005|Vn
HAS_CLEARENV|5.009003|5.009003|Vn
HAS_COPYSIGN|5.021006|5.021006|Vn
HAS_COPYSIGNL|5.008001|5.008001|Vn
HAS_CRYPT|5.003007|5.003007|Vn
HAS_CRYPT_R|5.010000|5.010000|Vn
HAS_CSH|5.005000|5.005000|Vn
HAS_CTERMID|5.009005|5.009005|Vn
HAS_CTIME_R|5.010000|5.010000|Vn
HAS_CUSERID|5.003007|5.003007|Vn
HAS_DBMINIT_PROTO|5.032001|5.032001|Vn
HAS_DIFFTIME|5.003007|5.003007|Vn
HAS_DIRFD|5.007003|5.007003|Vn
HAS_DLADDR|5.021001|5.021001|Vn
HAS_DLERROR|5.003007|5.003007|Vn
HAS_DRAND48_PROTO|5.006000|5.006000|Vn
HAS_DRAND48_R|5.010000|5.010000|Vn
HAS_DUP2|5.003007|5.003007|Vn
HAS_DUP3|5.027008|5.027008|Vn
HAS_DUPLOCALE|5.027011|5.027011|Vn
HAS_EACCESS|5.006000|5.006000|Vn
HAS_ENDGRENT|5.005000|5.005000|Vn
HAS_ENDHOSTENT|5.005000|5.005000|Vn
HAS_ENDNETENT|5.005000|5.005000|Vn
HAS_ENDPROTOENT|5.005000|5.005000|Vn
HAS_ENDPWENT|5.005000|5.005000|Vn
HAS_ENDSERVENT|5.005000|5.005000|Vn
HAS_ERF|5.021006|5.021006|Vn
HAS_ERFC|5.021006|5.021006|Vn
HAS_EXP2|5.021006|5.021006|Vn
HAS_EXPM1|5.021006|5.021006|Vn
HAS_EXTRA_LONG_UTF8|5.035004||Viu
HAS_FAST_STDIO|5.008001|5.008001|Vn
HAS_FCHDIR|5.007002|5.007002|Vn
HAS_FCHMOD|5.003007|5.003007|Vn
HAS_FCHMODAT|5.027004|5.027004|Vn
HAS_FCHOWN|5.003007|5.003007|Vn

HAS_FCNTL|5.003007|5.003007|Vn
HAS_FDIM|5.021006|5.021006|Vn
HAS_FD_SET|5.006000|5.006000|Vn
HAS_FEGETROUND|5.021004|5.021004|Vn
HAS_FFS|5.035001|5.035001|Vn
HAS_FFSL|5.035001|5.035001|Vn
HAS_FGETPOS|5.003007|5.003007|Vn
HAS_FINITE|5.007003|5.007003|Vn
HAS_FINITEL|5.007003|5.007003|Vn
HAS_FLOCK|5.003007|5.003007|Vn
HAS_FLOCK_PROTO|5.007002|5.007002|Vn
HAS_FMA|5.021006|5.021006|Vn
HAS_FMAX|5.021006|5.021006|Vn
HAS_FMIN|5.021006|5.021006|Vn
HAS_FORK|5.003007|5.003007|Vn
HAS_FPATHCONF|5.003007|5.003007|Vn
HAS_FPCLASSIFY|5.021004|5.021004|Vn
HAS_FREELOCALE|5.023009|5.023009|Vn
HAS_FREXPL|5.006001|5.006001|Vn
HAS_FSEEKO|5.006000|5.006000|Vn
HAS_FSETPOS|5.003007|5.003007|Vn
HAS_FSTATFS|5.023005|5.023005|Vn
HAS_FSTATVFS|5.023005|5.023005|Vn
HAS_FSYNC|5.007001|5.007001|Vn
HAS_FTELLO|5.006000|5.006000|Vn
HAS_FUTIMES|5.009003|5.009003|Vn
HAS_GAI_STRERROR|5.025004|5.025004|Vn
HAS_GETADDRINFO|5.010001|5.010001|Vn
HAS_GETCWD|5.006000|5.006000|Vn
HAS_GETGRENT|5.005000|5.005000|Vn
HAS_GETGRENT_R|5.010000|5.010000|Vn
HAS_GETGRGID_R|5.010000|5.010000|Vn
HAS_GETGRNAM_R|5.010000|5.010000|Vn
HAS_GETGROUPS|5.003007|5.003007|Vn
HAS_GETHOSTBYADDR|5.005000|5.005000|Vn
HAS_GETHOSTBYADDR_R|5.010000|5.010000|Vn
HAS_GETHOSTBYNAME|5.005000|5.005000|Vn
HAS_GETHOSTBYNAME_R|5.010000|5.010000|Vn
HAS_GETHOSTENT|5.003007|5.003007|Vn
HAS_GETHOSTENT_R|5.010000|5.010000|Vn
HAS_GETHOSTNAME|5.006000|5.006000|Vn
HAS_GETHOST_PROTOS|5.005000|5.005000|Vn
HAS_GETITIMER|5.007001|5.007001|Vn
HAS_GETLOGIN|5.003007|5.003007|Vn
HAS_GETLOGIN_R|5.010000|5.010000|Vn
HAS_GETMNTENT|5.023005|5.023005|Vn
HAS_GETNAMEINFO|5.010001|5.010001|Vn
HAS_GETNETBYADDR|5.005000|5.005000|Vn

HAS_GETNETBYADDR_R|5.010000|5.010000|Vn
HAS_GETNETBYNAME|5.005000|5.005000|Vn
HAS_GETNETBYNAME_R|5.010000|5.010000|Vn
HAS_GETNETENT|5.005000|5.005000|Vn
HAS_GETNETENT_R|5.010000|5.010000|Vn
HAS_GETNET_PROTOS|5.005000|5.005000|Vn
HAS_GETPAGESIZE|5.007001|5.007001|Vn
HAS_GETPGID|5.003007|5.003007|Vn
HAS_GETPGRP|5.003007|5.003007|Vn
HAS_GETPPID|5.003007|5.003007|Vn
HAS_GETPRIORITY|5.003007|5.003007|Vn
HAS_GETPROTOBYNAME|5.005000|5.005000|Vn
HAS_GETPROTOBYNAME_R|5.010000|5.010000|Vn
HAS_GETPROTOBYNUMBER|5.005000|5.005000|Vn
HAS_GETPROTOBYNUMBER_R|5.010000|5.010000|Vn
HAS_GETPROTOENT|5.005000|5.005000|Vn
HAS_GETPROTOENT_R|5.010000|5.010000|Vn
HAS_GETPROTO_PROTOS|5.005000|5.005000|Vn
HAS_GETPWENT|5.005000|5.005000|Vn
HAS_GETPWENT_R|5.010000|5.010000|Vn
HAS_GETPWNAM_R|5.010000|5.010000|Vn
HAS_GETPWUID_R|5.010000|5.010000|Vn
HAS_GETSERVBYNAME|5.005000|5.005000|Vn
HAS_GETSERVBYNAME_R|5.010000|5.010000|Vn
HAS_GETSERVBYPORT|5.005000|5.005000|Vn
HAS_GETSERVBYPORT_R|5.010000|5.010000|Vn
HAS_GETSERVENT|5.005000|5.005000|Vn
HAS_GETSERVENT_R|5.010000|5.010000|Vn
HAS_GETSERV_PROTOS|5.005000|5.005000|Vn
HAS_GETSPNAM|5.006000|5.006000|Vn
HAS_GETSPNAM_R|5.010000|5.010000|Vn
HAS_GETTIMEOFDAY|5.004000|5.004000|Vn
HAS_GMTIME_R|5.010000|5.010000|Vn
HAS_GNULIBC|5.004005|5.004005|Vn
HAS_GROUP|5.003007||Viu
HAS_HASMNTOPT|5.023005|5.023005|Vn
HAS_HTONL|5.003007|5.003007|Vn
HAS_HTONS|5.003007|5.003007|Vn
HAS_HYPOT|5.021006|5.021006|Vn
HAS_ILOGB|5.021006|5.021006|Vn
HAS_ILOGBL|5.008001|5.008001|Vn
HAS_INET_ATON|5.004000|5.004000|Vn
HAS_INETNTOP|5.010001|5.010001|Vn
HAS_INETPTON|5.010001|5.010001|Vn
HAS_INT64_T|5.006000|5.006000|Vn
HAS_IOCTL|5.003007||Viu
HAS_IP_MREQ|5.017002|5.017002|Vn
HAS_IP_MREQ_SOURCE|5.017004|5.017004|Vn

HAS_IPV6_MREQ|5.015008|5.015008|Vn
HAS_ISASCII|5.003007|5.003007|Vn
HAS_ISBLANK|5.015007|5.015007|Vn
HAS_ISFINITE|5.021004|5.021004|Vn
HAS_ISINF|5.007003|5.007003|Vn
HAS_ISINFL|5.021004|5.021004|Vn
HAS_ISLESS|5.031007|5.031007|Vn
HAS_ISNAN|5.006001|5.006001|Vn
HAS_ISNANL|5.006001|5.006001|Vn
HAS_ISNORMAL|5.021006|5.021006|Vn
HAS_IVCF_AUX_TABLES|5.027011||Viu
HAS_J0|5.021004|5.021004|Vn
HAS_J0L|5.021004|5.021004|Vn
HAS_KILL|5.003007||Viu
HAS_KILLPG|5.003007|5.003007|Vn
HAS_LC_AUX_TABLES|5.027011||Viu
HAS_LCHOWN|5.005000|5.005000|Vn
HAS_LC_MONETARY_2008|5.021005|5.021005|Vn
HAS_LDBL_DIG|5.006000|5.006000|Vn
HAS_LDEXPL|5.021003|5.021003|Vn
HAS_LGAMMA|5.021006|5.021006|Vn
HAS_LGAMMA_R|5.021006|5.021006|Vn
HAS_LINK|5.003007|5.003007|Vn
HAS_LINKAT|5.027004|5.027004|Vn
HAS_LLRINT|5.021006|5.021006|Vn
HAS_LLRINTL|5.021009|5.021009|Vn
HAS_LLROUND|5.021006|5.021006|Vn
HAS_LLROUNDL|5.021009|5.021009|Vn
HAS_LOCALECONV|5.003007|5.003007|Vn
HAS_LOCALTIME_R|5.010000|5.010000|Vn
HAS_LOCKF|5.003007|5.003007|Vn
HAS_LOG1P|5.021006|5.021006|Vn
HAS_LOG2|5.021006|5.021006|Vn
HAS_LOGB|5.021006|5.021006|Vn
HAS_LONG_DOUBLE|5.005000|5.005000|Vn
HAS_LONG_LONG|5.005000|5.005000|Vn
HAS_LRINT|5.021006|5.021006|Vn
HAS_LRINTL|5.021009|5.021009|Vn
HAS_LROUND|5.021006|5.021006|Vn
HAS_LROUNDL|5.021009|5.021009|Vn
HAS_LSEEK_PROTO|5.006000|5.006000|Vn
HAS_LSTAT|5.003007|5.003007|Vn
HAS_MADVISE|5.006000|5.006000|Vn
HAS_MBLEN|5.003007|5.003007|Vn
HAS_MBRLEN|5.027006|5.027006|Vn
HAS_MBRTOWC|5.027006|5.027006|Vn
HAS_MBSTOWCS|5.003007|5.003007|Vn
HAS_MBTOWC|5.003007|5.003007|Vn

HAS_MEMMEM|5.024000|5.024000|Vn
HAS_MEMRCHR|5.027005|5.027005|Vn
HAS_MKDIR|5.003007|5.003007|Vn
HAS_MKDTEMP|5.006000|5.006000|Vn
HAS_MKFIFO|5.003007|5.003007|Vn
HAS_MKOSTEMP|5.027008|5.027008|Vn
HAS_MKSTEMP|5.006000|5.006000|Vn
HAS_MKSTEMPS|5.006000|5.006000|Vn
HAS_MKTIME|5.003007|5.003007|Vn
HAS_MMAP|5.006000|5.006000|Vn
HAS_MODFL|5.006001|5.006001|Vn
HAS_MODFL_PROTO|5.009003|5.009003|Vn
HAS_MPROTECT|5.006000|5.006000|Vn
HAS_MSG|5.003007|5.003007|Vn
HAS_MSYNC|5.006000|5.006000|Vn
HAS_MUNMAP|5.006000|5.006000|Vn
HAS_NAN|5.021006|5.021006|Vn
HAS_NANOSLEEP|5.027006|5.027006|Vn
HAS_NEARBYINT|5.021006|5.021006|Vn
HAS_NEWLOCALE|5.023009|5.023009|Vn
HAS_NEXTAFTER|5.021006|5.021006|Vn
HAS_NEXTTOWARD|5.021006|5.021006|Vn
HAS_NICE|5.003007|5.003007|Vn
HAS_NL_LANGINFO|5.007002|5.007002|Vn
HAS_NL_LANGINFO_L|5.035001|5.035001|Vn
HAS_NON_INT_BITFIELDS|5.035001|5.035001|Vn
HAS_NONLATIN1_FOLD_CLOSURE|5.033005||Viu
HAS_NONLATIN1_SIMPLE_FOLD_CLOSURE|5.033005||Viu
HAS_NTOHL|5.003007|5.003007|Vn
HAS_NTOHS|5.003007|5.003007|Vn
HAS_OFF64_T|5.010000|5.010000|Vn
HAS_OPEN3|5.003007|5.003007|Vn
HAS_OPENAT|5.027004|5.027004|Vn
HAS_PASSWD|5.003007||Viu
HAS_PATHCONF|5.003007|5.003007|Vn
HAS_PAUSE|5.003007|5.003007|Vn
HAS_PIPE2|5.027008|5.027008|Vn
HAS_PIPE|5.003007|5.003007|Vn
HAS_POLL|5.003007|5.003007|Vn
HAS_POSIX_2008_LOCALE|5.027003||Viu
HAS_PRCTL|5.013000|5.013000|Vn
HAS_PRCTL_SET_NAME|5.013000|5.013000|Vn
HAS_PROCSELFEXE|5.007003|5.007003|Vn
HAS_PTHREAD_ATFORK|5.010000|5.010000|Vn
HAS_PTHREAD_ATTR_SETSCOPE|5.008001|5.008001|Vn
HAS_PTHREAD_UNCHECKED_GETSPECIFIC_NP|5.007002||Viu
HAS_PTHREAD_YIELD|5.009005|5.009005|Vn
HAS_PTRDIFF_T|5.021001|5.021001|Vn

HAS_QUAD|5.003007|5.003007|Vn
HAS_RANDOM_R|5.010000|5.010000|Vn
HAS_READDIR|5.003007|5.003007|Vn
HAS_READDIR64_R|5.010000|5.010000|Vn
HAS_READDIR_R|5.010000|5.010000|Vn
HAS_READLINK|5.003007|5.003007|Vn
HAS_READV|5.007001|5.007001|Vn
HAS_RECVMSG|5.007001|5.007001|Vn
HAS_REGCOMP|5.021007|5.021007|Vn
HAS_REMAINDER|5.021006|5.021006|Vn
HAS_REMQUO|5.021006|5.021006|Vn
HAS_RENAME|5.003007|5.003007|Vn
HAS_RENAMEAT|5.027004|5.027004|Vn
HAS_REWINDDIR|5.003007|5.003007|Vn
HAS_RINT|5.021006|5.021006|Vn
HAS_RMDIR|5.003007|5.003007|Vn
HAS_ROUND|5.021006|5.021006|Vn
HAS_SBRK_PROTO|5.007001|5.007001|Vn
HAS_SCALBN|5.021006|5.021006|Vn
HAS_SCALBNL|5.008001|5.008001|Vn
HAS_SCHED_YIELD|5.005000|5.005000|Vn
HAS_SCX_AUX_TABLES|5.027008||Viu
HAS_SEEKDIR|5.003007|5.003007|Vn
HAS_SELECT|5.003007|5.003007|Vn
HAS_SEM|5.003007|5.003007|Vn
HAS_SENDMSG|5.007001|5.007001|Vn
HAS_SETEGID|5.003007|5.003007|Vn
HAS_SETEUID|5.003007|5.003007|Vn
HAS_SETGRENT|5.005000|5.005000|Vn
HAS_SETGROUPS|5.004000|5.004000|Vn
HAS_SETHOSTENT|5.005000|5.005000|Vn
HAS_SETITIMER|5.007001|5.007001|Vn
HAS_SETLINEBUF|5.003007|5.003007|Vn
HAS_SETLOCALE|5.003007|5.003007|Vn
HAS_SETNETENT|5.005000|5.005000|Vn
HAS_SETPGID|5.003007|5.003007|Vn
HAS_SETPGRP|5.003007|5.003007|Vn
HAS_SETPRIORITY|5.003007|5.003007|Vn
HAS_SETPROTOENT|5.005000|5.005000|Vn
HAS_SETPWENT|5.005000|5.005000|Vn
HAS_SETREGID|5.003007|5.003007|Vn
HAS_SETRESGID|5.003007|5.003007|Vn
HAS_SETRESGID_PROTO|5.010000|5.010000|Vn
HAS_SETRESUID|5.003007|5.003007|Vn
HAS_SETRESUID_PROTO|5.010000|5.010000|Vn
HAS_SETREUID|5.003007|5.003007|Vn
HAS_SETSERVENT|5.005000|5.005000|Vn
HAS_SETSID|5.003007|5.003007|Vn

HAS_SETVBUF|5.005000|5.005000|Vn
HAS_SHM|5.003007|5.003007|Vn
HAS_SHMAT_PROTOTYPE|5.003007|5.003007|Vn
HAS_SIGACTION|5.003007|5.003007|Vn
HAS_SIGINFO_SI_ADDR|5.023008|5.023008|Vn
HAS_SIGINFO_SI_BAND|5.023008|5.023008|Vn
HAS_SIGINFO_SI_ERRNO|5.023008|5.023008|Vn
HAS_SIGINFO_SI_PID|5.023008|5.023008|Vn
HAS_SIGINFO_SI_STATUS|5.023008|5.023008|Vn
HAS_SIGINFO_SI_UID|5.023008|5.023008|Vn
HAS_SIGINFO_SI_VALUE|5.023008|5.023008|Vn
HAS_SIGNBIT|5.009005|5.009005|Vn
HAS_SIGPROCMASK|5.007001|5.007001|Vn
HAS_SIGSETJMP|5.003007|5.003007|Vn
HAS_SIN6_SCOPE_ID|5.013009|5.013009|Vn
HAS_SKIP_LOCALE_INIT|5.019002||Viu
HAS_SNPRINTF|5.009003|5.009003|Vn
HAS_SOCKADDR_IN6|5.015008|5.015008|Vn
HAS_SOCKADDR_STORAGE|5.032001|5.032001|Vn
HAS_SOCKATMARK|5.007001|5.007001|Vn
HAS_SOCKATMARK_PROTO|5.007002|5.007002|Vn
HAS_SOCKET|5.003007|5.003007|Vn
HAS_SOCKETPAIR|5.003007|5.003007|Vn
HAS_SQRTL|5.006000|5.006000|Vn
HAS_SRAND48_R|5.010000|5.010000|Vn
HAS_SRANDOM_R|5.010000|5.010000|Vn
HAS_STAT|5.021007|5.021007|Vn
HAS_STATIC_INLINE|5.013004|5.013004|Vn
HAS_STRCOLL|5.003007|5.003007|Vn
HAS_STRERROR_L|5.025002|5.025002|Vn
HAS_STRERROR_R|5.010000|5.010000|Vn
HAS_STRFTIME|5.007002|5.007002|Vn
HAS_STRNLEN|5.027006|5.027006|Vn
HAS_STRTOD|5.004000|5.004000|Vn
HAS_STRTOD_L|5.027011|5.027011|Vn
HAS_STRTOL|5.004000|5.004000|Vn
HAS_STRTOLD|5.006000|5.006000|Vn
HAS_STRTOLD_L|5.027006|5.027006|Vn
HAS_STRTOLL|5.006000|5.006000|Vn
HAS_STRTOQ|5.007001|5.007001|Vn
HAS_STRTOUL|5.004000|5.004000|Vn
HAS_STRTOULL|5.006000|5.006000|Vn
HAS_STRTOUQ|5.006000|5.006000|Vn
HAS_STRUCT_CMSGHDR|5.007001|5.007001|Vn
HAS_STRUCT_MSGHDR|5.007001|5.007001|Vn
HAS_STRUCT_STATFS|5.023005|5.023005|Vn
HAS_STRUCT_STATFS_F_FLAGS|5.023005|5.023005|Vn
HAS_STRXFRM|5.003007|5.003007|Vn

HAS_STRXFRM_L|5.035001|5.035001|Vn
HAS_SYMLINK|5.003007|5.003007|Vn
HAS_SYSCALL|5.003007|5.003007|Vn
HAS_SYSCALL_PROTO|5.007002|5.007002|Vn
HAS_SYSCONF|5.003007|5.003007|Vn
HAS_SYS_ERRLIST|5.003007|5.003007|Vn
HAS_SYSTEM|5.003007|5.003007|Vn
HAS_TC_AUX_TABLES|5.027011||Viu
HAS_TCGETPGRP|5.003007|5.003007|Vn
HAS_TCSETPGRP|5.003007|5.003007|Vn
HAS_TELLDIR|5.003007|5.003007|Vn
HAS_TELLDIR_PROTO|5.006000|5.006000|Vn
HAS_TGAMMA|5.021006|5.021006|Vn
HAS_THREAD_SAFE_NL_LANGINFO_L|5.027006|5.027006|Vn
HAS_TIME|5.008000|5.008000|Vn
HAS_TIMEGM|5.010001|5.010001|Vn
HAS_TIMES|5.003007|5.003007|Vn
HAS_TMPNAM_R|5.010000|5.010000|Vn
HAS_TM_TM_GMTOFF|5.008001|5.008001|Vn
HAS_TM_TM_ZONE|5.008000|5.008000|Vn
HAS_TOWLOWER|5.029009|5.029009|Vn
HAS_TOWUPPER|5.029009|5.029009|Vn
HAS_TRUNC|5.021006|5.021006|Vn
HAS_TRUNCATE|5.003007|5.003007|Vn
HAS_TRUNCL|5.021004|5.021004|Vn
HAS_TTYNAME_R|5.010000|5.010000|Vn
HAS_TZNAME|5.003007|5.003007|Vn
HAS_UALARM|5.007001|5.007001|Vn
HAS_UC_AUX_TABLES|5.027011||Viu
HAS_UMASK|5.003007|5.003007|Vn
HAS_UNAME|5.003007|5.003007|Vn
HAS_UNLINKAT|5.027004|5.027004|Vn
HAS_UNSETENV|5.009003|5.009003|Vn
HAS_USELOCALE|5.023009|5.023009|Vn
HAS_USLEEP|5.007001|5.007001|Vn
HAS_USLEEP_PROTO|5.007002|5.007002|Vn
HAS_USTAT|5.023005|5.023005|Vn
HAS_UTIME|5.003007||Viu
HAS_VSNPRINTF|5.009003|5.009003|Vn
HAS_WAIT4|5.003007|5.003007|Vn
HAS_WAIT|5.003007||Viu
HAS_WAITPID|5.003007|5.003007|Vn
HAS_WCRTOMB|5.031007|5.031007|Vn
HAS_WCSCMP|5.021001|5.021001|Vn
HAS_WCSTOMBS|5.003007|5.003007|Vn
HAS_WCSXFRM|5.021001|5.021001|Vn
HAS_WCTOMB|5.003007|5.003007|Vn
HAS_WRITEV|5.007001|5.007001|Vn

HE_ARENA_ROOT_IX|5.035005||Viu
he_dup|5.007003|5.007003|u
HEf_SVKEY|5.003007|5.003007|p
HeHASH|5.003007|5.003007|
HEK_BASESIZE|5.004000||Viu
hek_dup|5.009000|5.009000|u
HeKEY|5.003007|5.003007|
HeKEY_hek|5.004000||Viu
HeKEY_sv|5.004000||Viu
HEKf256|5.015004||Viu
HEKf|5.015004||Viu
HEKfARG|5.015004||Viu
HEK_FLAGS|5.008000||Viu
HeKFLAGS|5.008000||Viu
HEK_HASH|5.004000||Viu
HEK_KEY|5.004000||Viu
HeKLEN|5.003007|5.003007|
HEK_LEN|5.004000||Viu
HeKLEN_UTF8|5.007001||Viu
HEK_UTF8|5.007001||Viu
HeKUTF8|5.007001||Viu
HEK_UTF8_off|5.008000||Viu
HEK_UTF8_on|5.008000||Viu
HEK_WASUTF8|5.008000||Viu
HeKWASUTF8|5.008000||Viu
HEK_WASUTF8_off|5.008000||Viu
HEK_WASUTF8_on|5.008000||Viu
HeNEXT|5.003007||Viu
HePV|5.004000|5.004000|
HeSVKEY|5.003007|5.003007|
HeSVKEY_force|5.003007|5.003007|
HeSVKEY_set|5.004000|5.004000|
HeUTF8|5.010001|5.008000|p
HeVAL|5.003007|5.003007|
hfree_next_entry|||iu
HIGHEST_ANYOF_HRx_BYTE|5.031002||Viu
HIGHEST_CASE_CHANGING_CP|5.033005||Viu
HINT_ALL_STRICT|5.033002||Viu
HINT_BLOCK_SCOPE|5.003007||Viu
HINT_BYTES|5.007002||Viu
HINT_EXPLICIT_STRICT_REFS|5.016000||Viu
HINT_EXPLICIT_STRICT_SUBS|5.016000||Viu
HINT_EXPLICIT_STRICT_VARS|5.016000||Viu
HINT_FEATURE_MASK|5.015007||Viu
HINT_FEATURE_SHIFT|5.015007||Viu
HINT_FILETEST_ACCESS|5.006000||Viu
HINT_INTEGER|5.003007||Viu
HINT_LEXICAL_IO_IN|5.009005||Viu

HINT_LEXICAL_IO_OUT|5.009005||Viu
HINT_LOCALE|5.004000||Viu
HINT_LOCALE_PARTIAL|5.021001||Viu
HINT_LOCALIZE_HH|5.005000||Viu
HINT_NEW_BINARY|5.005000||Viu
HINT_NEW_FLOAT|5.005000||Viu
HINT_NEW_INTEGER|5.005000||Viu
HINT_NEW_RE|5.005000||Viu
HINT_NEW_STRING|5.005000||Viu
HINT_NO_AMAGIC|5.010001||Viu
HINT_RE_EVAL|5.005000||Viu
HINT_RE_FLAGS|5.013007||Viu
HINT_RE_TAINT|5.004005||Viu
HINTS_DEFAULT|5.033002||Viu
HINTS_REFCNT_INIT|5.009004||Viu
HINTS_REFCNT_LOCK|5.009004||Viu
HINTS_REFCNT_TERM|5.009004||Viu
HINTS_REFCNT_UNLOCK|5.009004||Viu
HINT_STRICT_REFS|5.003007||Viu
HINT_STRICT_SUBS|5.003007||Viu
HINT_STRICT_VARS|5.003007||Viu
HINT_UNI_8_BIT|5.011002||Viu
HINT_UTF8|5.006000||Viu
H_PERL|5.003007||Viu
HS_APIVERLEN_MAX|5.021006||Viu
HS_CXT|5.021006||Viu
HSf_IMP_CXT|5.021006||Viu
HSf_NOCHK|5.021006||Viu
HSf_POPMARK|5.021006||Viu
HSf_SETXSUBFN|5.021006||Viu
HS_GETAPIVERLEN|5.021006||Viu
HS_GETINTERPSIZE|5.021006||Viu
HS_GETXSVERLEN|5.021006||Viu
HS_KEY|5.021006||Viu
HS_KEYp|5.021006||Viu
HSm_APIVERLEN|5.021006||Viu
HSm_INTRPSIZE|5.021006||Viu
HSm_KEY_MATCH|5.021006||Viu
HSm_XSVERLEN|5.021006||Viu
hsplit|5.005000||Viu
HS_XSVERLEN_MAX|5.021006||Viu
htoni|5.003007||Viu
htonl|5.003007||Viu
htons|5.003007||Viu
htovl|5.003007||Viu
htovs|5.003007||Viu
HvAMAGIC|5.017000||Viu
HvAMAGIC_off|5.017000||Viu

HvAMAGIC_on|5.017000||Viu
HvARRAY|5.003007||Viu
hv_assert|||
HvAUX|5.009003||Viu
hv_auxalloc|||iu
HVAUX_ARENA_ROOT_IX|5.035005||Viu
HvAUXf_NO_DEREF|5.019010||Viu
HvAUXf_SCAN_STASH|5.019010||Viu
hv_auxinit|5.009003||Viu
hv_backreferences_p|||xiu
hv_bucket_ratio|5.025003|5.025003|x
hv_clear|5.003007|5.003007|
hv_clear_placeholders|5.009001|5.009001|
hv_common|5.010000||cVu
hv_common_key_len|5.010000||cVu
hv_copy_hints_hv|5.013005|5.013005|
hv_delayfree_ent|5.004000|5.004000|u
hv_delete|5.003007|5.003007|
HV_DELETE|5.009005||Viu
hv_delete_common|5.009001||xViu
hv_delete_ent|5.003007|5.003007|
hv_deletehek|5.019006||Viu
hv_deletes|5.025006||Viu
HV_DISABLE_UVAR_XKEY|5.010000||Viu
HvEITER|5.003007||Viu
HvEITER_get|5.009003||Viu
hv_eiter_p|||u
HvEITER_set|5.009003||Viu
hv_eiter_set|||u
HvENAME|5.013007|5.013007|
hv_ename_add|5.013007||Vi
hv_ename_delete|5.013007||Vi
HvENAME_get|5.013007||Viu
HvENAME_HEK|5.013007||Viu
HvENAME_HEK_NN|5.013007||Viu
HvENAMELEN|5.015004|5.015004|
HvENAMELEN_get|5.013007||Viu
HvENAMEUTF8|5.015004|5.015004|
hv_exists|5.003007|5.003007|
hv_exists_ent|5.003007|5.003007|
hv_existshek|5.035003||Viu
hv_existss|5.025006||Viu
hv_fetch|5.003007|5.003007|
HV_FETCH_EMPTY_HE|5.013007||Viu
hv_fetch_ent|5.003007|5.003007|
hv_fetchhek|5.019006||Viu
HV_FETCH_ISEXISTS|5.009005||Viu
HV_FETCH_ISSTORE|5.009005||Viu

HV_FETCH_JUST_SV|5.009005||Viu
HV_FETCH_LVALUE|5.009005||Viu
hv_fetchs|5.009003|5.003007|p
hv_fill|||
HvFILL|5.003007|5.003007|
hv_free_ent|5.004000|5.004000|u
hv_free_ent_ret|5.015000||Viu
hv_free_entries|5.027002||Viu
HvHASKFLAGS|5.008000||Viu
HvHASKFLAGS_off|5.008000||Viu
HvHASKFLAGS_on|5.008000||Viu
HVhek_ENABLEHVKFLAGS|5.008002||Viu
HVhek_FREEKEY|5.008000||Viu
HVhek_KEYCANONICAL|5.010001||Viu
HVhek_MASK|5.008000||Viu
HVhek_PLACEHOLD|5.008000||Viu
HVhek_UNSHARED|5.009004||Viu
HVhek_UTF8|5.008000||Viu
HVhek_WASUTF8|5.008000||Viu
hv_iterinit|5.003007|5.003007|
hv_iterkey|5.003007|5.003007|
hv_iterkeysv|5.003007|5.003007|
hv_iternext|5.003007|5.003007|
hv_iternext_flags|5.008000|5.008000|x
hv_iternextsv|5.003007|5.003007|
HV_ITERNEXT_WANTPLACEHOLDERS|5.008000|5.008000|
hv_iterval|5.003007|5.003007|
HvKEYS|5.003007||Viu
hv_kill_backrefs|||xiu
hv_ksplit|5.003007|5.003007|u
HvLASTRAND_get|5.017011||Viu
HvLAZYDEL|5.003007||Viu
HvLAZYDEL_off|5.003007||Viu
HvLAZYDEL_on|5.003007||Viu
hv_magic|5.003007|5.003007|
hv_magic_check|5.006000||Vniu
HvMAX|5.003007||Viu
HvMROMETA|5.010001|5.010001|
HvNAME|5.003007|5.003007|
HvNAME_get|5.009003||pcV
HvNAME_HEK|5.009003||Viu
HvNAME_HEK_NN|5.013007||Viu
HvNAMELEN|5.015004|5.015004|
HvNAMELEN_get|5.009003|5.003007|p
hv_name_set|5.009003|5.009003|u
HV_NAME_SETALL|5.013008||Viu
hv_name_sets|5.025006||Viu
HvNAMEUTF8|5.015004|5.015004|

hv_notallowed|5.008000||Viu
HvPLACEHOLDERS|5.007003||Viu
HvPLACEHOLDERS_get|5.009003||Viu
hv_placeholders_get|||u
hv_placeholders_p|||ciu
HvPLACEHOLDERS_set|5.009003||Viu
hv_placeholders_set|||u
hv_pushkv|5.027003||Viu
HvRAND_get|5.017011||Viu
hv_rand_set|5.018000|5.018000|u
HVrhek_delete|5.009004||Viu
HVrhek_IV|5.009004||Viu
HVrhek_PV|5.009004||Viu
HVrhek_PV_UTF8|5.009005||Viu
HVrhek_typemask|5.009004||Viu
HVrhek_undef|5.009004||Viu
HVrhek_UV|5.009004||Viu
HvRITER|5.003007||Viu
HvRITER_get|5.009003||Viu
hv_riter_p|||u
HvRITER_set|5.009003||Viu
hv_riter_set|||u
hv_scalar|5.009001|5.009001|
HvSHAREKEYS|5.003007||Viu
HvSHAREKEYS_off|5.003007||Viu
HvSHAREKEYS_on|5.003007||Viu
hv_store|5.003007|5.003007|
hv_store_ent|5.003007|5.003007|
hv_store_flags|5.008000|5.008000|xu
hv_storehek|5.019006||Viu
hv_stores|5.009004|5.003007|p
HvTOTALKEYS|5.007003||Viu
hv_undef|5.003007|5.003007|
hv_undef_flags|||ciu
HvUSEDKEYS|5.007003||Viu
HYPHEN_UTF8|5.017004||Viu
I16_MAX|5.003007||Viu
I16_MIN|5.003007||Viu
I16SIZE|5.006000|5.006000|Vn
I16TYPE|5.006000|5.006000|Vn
I_32|5.006000|5.003007|
I32_MAX|5.003007||Viu
I32_MAX_P1|5.007002||Viu
I32_MIN|5.003007||Viu
I32SIZE|5.006000|5.006000|Vn
I32TYPE|5.006000|5.006000|Vn
I64SIZE|5.006000|5.006000|Vn
I64TYPE|5.006000|5.006000|Vn

I8SIZE|5.006000|5.006000|Vn
I8_TO_NATIVE|5.015006||Viu
I8_TO_NATIVE_UTF8|5.019004||Viu
I8TYPE|5.006000|5.006000|Vn
I_ARPA_INET|5.005000|5.005000|Vn
ibcmp|5.003007|5.003007|
ibcmp_locale|5.004000|5.004000|
ibcmp_utf8|5.007003|5.007003|
I_CRYPT|5.008000|5.008000|Vn
I_DBM|5.032001|5.032001|Vn
I_DIRENT|5.003007|5.003007|Vn
I_DLFCN|5.003007|5.003007|Vn
I_EXECINFO|5.021001|5.021001|Vn
I_FENV|5.021004|5.021004|Vn
IFMATCH|5.003007||Viu
IFMATCH_A|5.009005||Viu
IFMATCH_A_fail|5.009005||Viu
IFMATCH_A_fail_t8|5.035004||Viu
IFMATCH_A_fail_t8_p8|5.033003||Viu
IFMATCH_A_fail_t8_pb|5.033003||Viu
IFMATCH_A_fail_tb|5.035004||Viu
IFMATCH_A_fail_tb_p8|5.033003||Viu
IFMATCH_A_fail_tb_pb|5.033003||Viu
IFMATCH_A_t8|5.035004||Viu
IFMATCH_A_t8_p8|5.033003||Viu
IFMATCH_A_t8_pb|5.033003||Viu
IFMATCH_A_tb|5.035004||Viu
IFMATCH_A_tb_p8|5.033003||Viu
IFMATCH_A_tb_pb|5.033003||Viu
IFMATCH_t8|5.035004||Viu
IFMATCH_t8_p8|5.033003||Viu
IFMATCH_t8_pb|5.033003||Viu
IFMATCH_tb|5.035004||Viu
IFMATCH_tb_p8|5.033003||Viu
IFMATCH_tb_pb|5.033003||Viu
IFTHEN|5.005000||Viu
IFTHEN_t8|5.035004||Viu
IFTHEN_t8_p8|5.033003||Viu
IFTHEN_t8_pb|5.033003||Viu
IFTHEN_tb|5.035004||Viu
IFTHEN_tb_p8|5.033003||Viu
IFTHEN_tb_pb|5.033003||Viu
I_GDBM|5.021007|5.021007|Vn
I_GDBMNDBM|5.021007|5.021007|Vn
IGNORE_PAT_MOD|5.009005||Viu
I_GRP|5.003007|5.003007|Vn
I_INTTYPES|5.006000|5.006000|Vn
I_LANGINFO|5.007002|5.007002|Vn

I_LIMITS|5.003007||Viu
ILLEGAL_UTF8_BYTE|5.019004||Viu
I_LOCALE|5.003007|5.003007|Vn
I_MNTENT|5.023005|5.023005|Vn
IN_BYTES|5.007002||Viu
incline|5.005000||Viu
INCLUDE_PROTOTYPES|5.007001||Viu
INCMARK|5.023005||Viu
incpush|5.005000||Viu
INCPUSH_APPLLIB_EXP|5.027006||Viu
INCPUSH_APPLLIB_OLD_EXP|5.027006||Viu
INCPUSH_ARCHLIB_EXP|5.027006||Viu
incpush_if_exists|5.009003||Viu
INCPUSH_PERL5LIB|5.027006||Viu
INCPUSH_PERL_OTHERLIBDIRS|5.027006||Viu
INCPUSH_PERL_OTHERLIBDIRS_ARCHONLY|5.027006||Viu
INCPUSH_PERL_VENDORARCH_EXP|5.027006||Viu
INCPUSH_PERL_VENDORLIB_EXP|5.027006||Viu
INCPUSH_PERL_VENDORLIB_STEM|5.027006||Viu
INCPUSH_PRIVLIB_EXP|5.027006||Viu
INCPUSH_SITEARCH_EXP|5.027006||Viu
INCPUSH_SITELIB_EXP|5.027006||Viu
INCPUSH_SITELIB_STEM|5.027006||Viu
incpush_use_sep|5.011000||Viu
I_NDBM|5.032001|5.032001|Vn
inet_addr|5.005000||Viu
I_NETDB|5.005000|5.005000|Vn
I_NETINET_IN|5.003007|5.003007|Vn
I_NETINET_TCP|5.006000|5.006000|Vn
inet_ntoa|5.005000||Viu
INFNAN_NV_U8_DECL|5.023000||Viu
INFNAN_U8_NV_DECL|5.023000||Viu
ingroup|5.003007||Viu
INIT|5.003007||Viu
init_argv_symbols|5.007003||Viu
init_constants|5.017003||Viu
init_dbargs|||iu
init_debugger|5.005000||Viu
init_i18nl10n|5.006000||cVu
init_i18nl14n|5.006000||dcVu
initialize_invlist_guts|5.029002||Viu
init_ids|5.005000||Viu
init_interp|5.005000||Viu
init_main_stash|5.005000||Viu
init_named_cv|5.027010||cViu
init_os_extras|5.005000||Viu
init_perllib|5.005000||Viu
init_postdump_symbols|5.005000||Viu

init_predump_symbols|5.005000||Viu
init_stacks|5.005000|5.005000|u
INIT_THREADS|5.005000||Viu
init_tm|5.007002|5.007002|u
INIT_TRACK_MEMPOOL|5.009004||Viu
init_uniprops|5.027011||Viu
IN_LC|5.021001||Viu
IN_LC_ALL_COMPILETIME|5.021001||Viu
IN_LC_ALL_RUNTIME|5.021001||Viu
IN_LC_COMPILETIME|5.021001||Viu
IN_LC_PARTIAL_COMPILETIME|5.021001||Viu
IN_LC_PARTIAL_RUNTIME|5.021001||Viu
IN_LC_RUNTIME|5.021001||Viu
IN_LOCALE|5.007002|5.004000|p
IN_LOCALE_COMPILETIME|5.007002|5.004000|p
IN_LOCALE_RUNTIME|5.007002|5.004000|p
IN_PERL_COMPILETIME|5.008001|5.003007|p
IN_PERL_RUNTIME|5.008001|5.008001|
inplace_aassign|5.015003||Viu
inRANGE|5.029010||Viu
inRANGE_helper|5.033005||Viu
IN_SOME_LOCALE_FORM|5.015008||Viu
IN_SOME_LOCALE_FORM_COMPILETIME|5.015008||Viu
IN_SOME_LOCALE_FORM_RUNTIME|5.015008||Viu
instr|5.003007|5.003007|n
INSUBP|5.009005||Viu
INSUBP_t8|5.035004||Viu
INSUBP_t8_p8|5.033003||Viu
INSUBP_t8_pb|5.033003||Viu
INSUBP_tb|5.035004||Viu
INSUBP_tb_p8|5.033003||Viu
INSUBP_tb_pb|5.033003||Viu
INT16_C|5.003007|5.003007|
INT2PTR|5.006000|5.003007|p
INT32_C|5.003007|5.003007|
INT32_MIN|5.007002||Viu
INT64_C|5.023002|5.023002|
INT64_MIN|5.007002||Viu
INT_64_T|5.011000||Viu
INTMAX_C|5.003007|5.003007|
INT_PAT_MODS|5.009005||Viu
intro_my|5.021006|5.021006|
INTSIZE|5.003007|5.003007|Vn
intuit_method|5.005000||Viu
intuit_more|5.003007||Viu
IN_UNI_8_BIT|5.011002||Viu
IN_UTF8_CTYPE_LOCALE|5.019009||Viu
_inverse_folds|5.027011||cViu

invert|5.003007||Viu
invlist_array|5.013010||Vniu
_invlist_array_init|5.015001||Vniu
invlist_clear|5.023009||Viu
invlist_clone|5.015001||cViu
_invlist_contains_cp|5.017003||Vniu
invlist_contents|5.023008||Viu
_invlist_dump|5.019003||cViu
_invlistEQ|5.023006||cViu
invlist_extend|5.013010||Viu
invlist_highest|5.017002||Vniu
_invlist_intersection|5.015001||Viu
_invlist_intersection_maybe_complement_2nd|5.015008||cViu
_invlist_invert|5.015001||cViu
invlist_is_iterating|5.017008||Vniu
invlist_iterfinish|5.017008||Vniu
invlist_iterinit|5.015001||Vniu
invlist_iternext|5.015001||Vniu
_invlist_len|5.017004||Vniu
invlist_lowest|5.031007||xVniu
invlist_max|5.013010||Vniu
invlist_previous_index|5.017004||Vniu
invlist_replace_list_destroys_src|5.023009||Viu
_invlist_search|5.017003||cVniu
invlist_set_len|5.013010||Viu
invlist_set_previous_index|5.017004||Vniu
_invlist_subtract|5.015001||Viu
invlist_trim|5.013010||Vniu
_invlist_union|5.015001||cVu
_invlist_union_maybe_complement_2nd|5.015008||cViu
invmap_dump|5.031006||Viu
invoke_exception_hook|5.013001||Viu
IoANY|5.006001||Viu
IoBOTTOM_GV|5.003007||Viu
IoBOTTOM_NAME|5.003007||Viu
io_close|5.003007||Viu
IOCPARM_LEN|5.003007||Viu
ioctl|5.005000||Viu
IoDIRP|5.003007||Viu
IOf_ARGV|5.003007||Viu
IOf_DIDTOP|5.003007||Viu
IOf_FAKE_DIRP|5.006000||Viu
IOf_FLUSH|5.003007||Viu
IoFLAGS|5.003007||Viu
IoFMT_GV|5.003007||Viu
IoFMT_NAME|5.003007||Viu
IOf_NOLINE|5.005003||Viu
IOf_START|5.003007||Viu

IOf_UNTAINT|5.003007||Viu
IoIFP|5.003007||Viu
IoLINES|5.003007||Viu
IoLINES_LEFT|5.003007||Viu
IoOFP|5.003007||Viu
IoPAGE|5.003007||Viu
IoPAGE_LEN|5.003007||Viu
IoTOP_GV|5.003007||Viu
IoTOP_NAME|5.003007||Viu
IoTYPE|5.003007||Viu
IoTYPE_APPEND|5.006001||Viu
IoTYPE_CLOSED|5.006001||Viu
IoTYPE_IMPLICIT|5.008001||Viu
IoTYPE_NUMERIC|5.008001||Viu
IoTYPE_PIPE|5.006001||Viu
IoTYPE_RDONLY|5.006001||Viu
IoTYPE_RDWR|5.006001||Viu
IoTYPE_SOCKET|5.006001||Viu
IoTYPE_STD|5.006001||Viu
IoTYPE_WRONLY|5.006001||Viu
I_POLL|5.006000|5.006000|Vn
I_PTHREAD|5.005003|5.005003|Vn
I_PWD|5.003007|5.003007|Vn
isALNUM|5.003007|5.003007|p
isALNUM_A|5.031003|5.003007|p
isALNUMC|5.006000|5.003007|p
isALNUMC_A|5.013006|5.003007|p
isALNUMC_L1|5.013006|5.003007|p
isALNUMC_LC|5.006000|5.006000|
isALNUMC_LC_utf8_safe|5.031007||Viu
isALNUMC_LC_uvchr|5.017007|5.017007|
isALNUMC_uni|5.017007||Viu
isALNUMC_utf8|5.017007||Viu
isALNUMC_utf8_safe|5.031007||Viu
isALNUM_lazy_if_safe|5.031007||Viu
isALNUM_LC|5.004000|5.004000|
isALNUM_LC_utf8|5.006000||Viu
isALNUM_LC_utf8_safe|5.031007||Viu
isALNUM_LC_uvchr|5.007001|5.007001|
isALNUMU|5.011005||Viu
isALNUM_uni|5.006000||Viu
isALNUM_utf8|5.006000||Viu
isALNUM_utf8_safe|5.031007||Viu
isa_lookup|5.005000||Viu
isALPHA|5.003007|5.003007|p
isALPHA_A|5.013006|5.003007|p
isALPHA_FOLD_EQ|5.021004||Viu
isALPHA_FOLD_NE|5.021004||Viu

isALPHA_L1|5.013006|5.003007|p
isALPHA_LC|5.004000|5.004000|
isALPHA_LC_utf8|5.006000||Viu
isALPHA_LC_utf8_safe|5.025009|5.006000|p
isALPHA_LC_uvchr|5.007001|5.007001|
isALPHANUMERIC|5.017008|5.003007|p
isALPHANUMERIC_A|5.017008|5.003007|p
isALPHANUMERIC_L1|5.017008|5.003007|p
isALPHANUMERIC_LC|5.017008|5.004000|p
isALPHANUMERIC_LC_utf8|5.017008||Viu
isALPHANUMERIC_LC_utf8_safe|5.025009|5.006000|p
isALPHANUMERIC_LC_uvchr|5.017008|5.017008|
isALPHANUMERIC_uni|5.017008||Viu
isALPHANUMERIC_utf8|5.031005|5.031005|
isALPHANUMERIC_utf8_safe|5.025009|5.006000|p
isALPHANUMERIC_uvchr|5.023009|5.006000|p
isALPHAU|5.011005||Viu
isALPHA_uni|5.006000||Viu
isALPHA_utf8|5.031005|5.031005|
isALPHA_utf8_safe|5.025009|5.006000|p
isALPHA_uvchr|5.023009|5.006000|p
is_an_int|5.005000||Viu
is_ANYOF_SYNTHETIC|5.019009||Viu
IS_ANYOF_TRIE|5.009005||Viu
isASCII|5.006000|5.003007|p
isASCII_A|5.013006|5.003007|p
isASCII_L1|5.015004|5.003007|p
isASCII_LC|5.015008|5.003007|p
isASCII_LC_utf8|5.017007||Viu
isASCII_LC_utf8_safe|5.025009|5.025009|
isASCII_LC_uvchr|5.017007|5.017007|
is_ascii_string|5.011000|5.011000|n
isASCII_uni|5.006000||Viu
isASCII_utf8|5.031005|5.031005|
isASCII_utf8_safe|5.025009|5.003007|p
isASCII_uvchr|5.023009|5.003007|p
isatty|5.005000||Viu
ISA_VERSION_OBJ|5.019008||Viu
isBLANK|5.006001|5.003007|p
isBLANK_A|5.013006|5.003007|p
isBLANK_L1|5.013006|5.003007|p
isBLANK_LC|5.006001|5.003007|p
isBLANK_LC_uni|5.006001||Viu
isBLANK_LC_utf8|5.006001||Viu
isBLANK_LC_utf8_safe|5.025009|5.006000|p
isBLANK_LC_uvchr|5.017007|5.017007|
isBLANK_uni|5.006001||Viu
isBLANK_utf8|5.031005|5.031005|

isBLANK_utf8_safe|5.025009|5.006000|p
isBLANK_uvchr|5.023009|5.006000|p
isC9_STRICT_UTF8_CHAR|5.025005|5.025005|n
is_c9strict_utf8_string|5.025006|5.025006|n
is_c9strict_utf8_string_loc|5.025006|5.025006|n
is_c9strict_utf8_string_loclen|5.025006|5.025006|n
isCHARNAME_CONT|5.011005||Viu
isCNTRL|5.006000|5.003007|p
isCNTRL_A|5.013006|5.003007|p
isCNTRL_L1|5.013006|5.003007|p
isCNTRL_LC|5.006000|5.006000|
isCNTRL_LC_utf8|5.006000||Viu
isCNTRL_LC_utf8_safe|5.025009|5.006000|p
isCNTRL_LC_uvchr|5.007001|5.007001|
isCNTRL_uni|5.006000||Viu
isCNTRL_utf8|5.031005|5.031005|
isCNTRL_utf8_safe|5.025009|5.006000|p
isCNTRL_uvchr|5.023009|5.006000|p
_is_cur_LC_category_utf8|5.021001||cVu
isDEBUG_WILDCARD|5.031011||Viu
isDIGIT|5.003007|5.003007|p
isDIGIT_A|5.013006|5.003007|p
isDIGIT_L1|5.013006|5.003007|p
isDIGIT_LC|5.004000|5.004000|
isDIGIT_LC_utf8|5.006000||Viu
isDIGIT_LC_utf8_safe|5.025009|5.006000|p
isDIGIT_LC_uvchr|5.007001|5.007001|
isDIGIT_uni|5.006000||Viu
isDIGIT_utf8|5.031005|5.031005|
isDIGIT_utf8_safe|5.025009|5.006000|p
isDIGIT_uvchr|5.023009|5.006000|p
isEXACTFish|5.033003||Viu
isEXACT_REQ8|5.033003||Viu
isFF_overlong|5.035004||Vniu
is_FOLDS_TO_MULTI_utf8|5.019009||Viu
isFOO_lc|5.017007||Viu
isFOO_utf8_lc|5.017008||Viu
isGCB|5.021009||Viu
isGRAPH|5.006000|5.003007|p
isGRAPH_A|5.013006|5.003007|p
is_grapheme|5.031007||Viu
isGRAPH_L1|5.013006|5.003007|p
isGRAPH_LC|5.006000|5.006000|
isGRAPH_LC_utf8|5.006000||Viu
isGRAPH_LC_utf8_safe|5.025009|5.006000|p
isGRAPH_LC_uvchr|5.007001|5.007001|
isGRAPH_uni|5.006000||Viu
isGRAPH_utf8|5.031005|5.031005|

isGRAPH_utf8_safe|5.025009|5.006000|p
isGRAPH_uvchr|5.023009|5.006000|p
isGV|5.003007||Viu
isGV_or_RVCV|5.027005||Viu
isGV_with_GP|5.009004|5.003007|p
isGV_with_GP_off|5.009005||Viu
isGV_with_GP_on|5.009005||Viu
I_SHADOW|5.006000|5.006000|Vn
is_handle_constructor|5.006000||Vniu
is_HANGUL_ED_utf8_safe|5.029001||Viu
is_HORIZWS_cp_high|5.017006||Viu
is_HORIZWS_high|5.017006||Viu
isIDCONT|5.017008|5.003007|p
isIDCONT_A|5.017008|5.003007|p
isIDCONT_L1|5.017008|5.003007|p
isIDCONT_LC|5.017008|5.004000|p
isIDCONT_LC_utf8|5.017008||Viu
isIDCONT_LC_utf8_safe|5.025009|5.006000|p
isIDCONT_LC_uvchr|5.017008|5.017008|
isIDCONT_uni|5.017008||Viu
isIDCONT_utf8|5.031005|5.031005|
isIDCONT_utf8_safe|5.025009|5.006000|p
isIDCONT_uvchr|5.023009|5.006000|p
isIDFIRST|5.003007|5.003007|p
isIDFIRST_A|5.013006|5.003007|p
isIDFIRST_L1|5.013006|5.003007|p
isIDFIRST_lazy_if_safe|5.025009||Viu
isIDFIRST_LC|5.004000|5.004000|p
isIDFIRST_LC_utf8|5.006000||Viu
isIDFIRST_LC_utf8_safe|5.025009|5.006000|p
isIDFIRST_LC_uvchr|5.007001|5.007001|
isIDFIRST_uni|5.006000||Viu
isIDFIRST_utf8|5.031005|5.031005|
isIDFIRST_utf8_safe|5.025009|5.006000|p
isIDFIRST_uvchr|5.023009|5.006000|p
isinfnan|5.021004|5.021004|n
isinfnansv|5.021005||Vi
_is_in_locale_category|5.021001||cViu
IS_IN_SOME_FOLD_L1|5.033005||Viu
is_invariant_string|5.021007|5.011000|pn
is_invlist|5.029002||Vniu
is_LARGER_NON_CHARS_utf8|5.035003||Viu
is_LAX_VERSION|5.011004||Viu
isLB|5.023007||Viu
isLEXWARN_off|5.006000||Viu
isLEXWARN_on|5.006000||Viu
is_LNBREAK_latin1_safe|5.009005||Viu
is_LNBREAK_safe|5.009005||Viu

is_LNBREAK_utf8_safe|5.009005||Viu
isLOWER|5.003007|5.003007|p
isLOWER_A|5.013006|5.003007|p
isLOWER_L1|5.013006|5.003007|p
isLOWER_LC|5.004000|5.004000|
isLOWER_LC_utf8|5.006000||Viu
isLOWER_LC_utf8_safe|5.025009|5.006000|p
isLOWER_LC_uvchr|5.007001|5.007001|
isLOWER_uni|5.006000||Viu
isLOWER_utf8|5.031005|5.031005|
isLOWER_utf8_safe|5.025009|5.006000|p
isLOWER_uvchr|5.023009|5.006000|p
is_lvalue_sub|5.007001|5.007001|u
isMNEMONIC_CNTRL|5.031009||Viu
is_MULTI_CHAR_FOLD_latin1_safe|5.019010||Viu
is_MULTI_CHAR_FOLD_utf8_safe|5.019010||Viu
is_MULTI_CHAR_FOLD_utf8_safe_part0|5.019010||Viu
is_MULTI_CHAR_FOLD_utf8_safe_part1|5.019010||Viu
is_MULTI_CHAR_FOLD_utf8_safe_part2|5.025008||Viu
is_MULTI_CHAR_FOLD_utf8_safe_part3|5.025008||Viu
is_NONCHAR_utf8_safe|5.025005||Viu
IS_NON_FINAL_FOLD|5.033005||Viu
isnormal|5.021004||Viu
IS_NUMBER_GREATER_THAN_UV_MAX|5.007002|5.003007|p
IS_NUMBER_INFINITY|5.007002|5.003007|p
IS_NUMBER_IN_UV|5.007002|5.003007|p
IS_NUMBER_NAN|5.007003|5.003007|p
IS_NUMBER_NEG|5.007002|5.003007|p
IS_NUMBER_NOT_INT|5.007002|5.003007|p
IS_NUMBER_TRAILING|5.021002||Viu
IS_NUMERIC_RADIX|5.006000||Viu
isOCTAL|5.013005|5.003007|p
isOCTAL_A|5.013006|5.003007|p
isOCTAL_L1|5.013006|5.003007|p
IS_PADCONST|5.006000||Viu
IS_PADGV|5.006000||Viu
is_PATWS_safe|5.017008||Viu
isPOWER_OF_2|5.029006||Viu
isPRINT|5.004000|5.003007|p
isPRINT_A|5.013006|5.003007|p
isPRINT_L1|5.013006|5.003007|p
isPRINT_LC|5.004000|5.004000|
isPRINT_LC_utf8|5.006000||Viu
isPRINT_LC_utf8_safe|5.025009|5.006000|p
isPRINT_LC_uvchr|5.007001|5.007001|
isPRINT_uni|5.006000||Viu
isPRINT_utf8|5.031005|5.031005|
isPRINT_utf8_safe|5.025009|5.006000|p

isPRINT_uvchr|5.023009|5.006000|p
is_PROBLEMATIC_LOCALE_FOLD_cp|5.019009||Viu
is_PROBLEMATIC_LOCALE_FOLDEDS_START_cp|5.019009||Viu
is_PROBLEMATIC_LOCALE_FOLDEDS_START_utf8|5.019009||Viu
is_PROBLEMATIC_LOCALE_FOLD_utf8|5.019009||Viu
isPSXSPC|5.006001|5.003007|p
isPSXSPC_A|5.013006|5.003007|p
isPSXSPC_L1|5.013006|5.003007|p
isPSXSPC_LC|5.006001|5.006001|
isPSXSPC_LC_utf8|5.006001||Viu
isPSXSPC_LC_utf8_safe|5.025009|5.006000|p
isPSXSPC_LC_uvchr|5.017007|5.017007|
isPSXSPC_uni|5.006001||Viu
isPSXSPC_utf8|5.031005|5.031005|
isPSXSPC_utf8_safe|5.025009|5.006000|p
isPSXSPC_uvchr|5.023009|5.006000|p
isPUNCT|5.006000|5.003007|p
isPUNCT_A|5.013006|5.003007|p
isPUNCT_L1|5.013006|5.003007|p
isPUNCT_LC|5.006000|5.006000|
isPUNCT_LC_utf8|5.006000||Viu
isPUNCT_LC_utf8_safe|5.025009|5.006000|p
isPUNCT_LC_uvchr|5.007001|5.007001|
isPUNCT_uni|5.006000||Viu
isPUNCT_utf8|5.031005|5.031005|
isPUNCT_utf8_safe|5.025009|5.006000|p
isPUNCT_uvchr|5.023009|5.006000|p
is_QUOTEMETA_high|5.017004||Viu
isREGEXP|5.017006||Viu
IS_SAFE_PATHNAME|5.019004||Viu
IS_SAFE_SYSCALL|5.019004|5.019004|
is_safe_syscall|5.019004|5.019004|
isSB|5.021009||Viu
isSCRIPT_RUN|5.027008||cVi
is_SHORTER_NON_CHARS_utf8|5.035003||Viu
isSPACE|5.003007|5.003007|p
isSPACE_A|5.013006|5.003007|p
isSPACE_L1|5.013006|5.003007|p
isSPACE_LC|5.004000|5.004000|
isSPACE_LC_utf8|5.006000||Viu
isSPACE_LC_utf8_safe|5.025009|5.006000|p
isSPACE_LC_uvchr|5.007001|5.007001|
isSPACE_uni|5.006000||Viu
isSPACE_utf8|5.031005|5.031005|
isSPACE_utf8_safe|5.025009|5.006000|p
isSPACE_uvchr|5.023009|5.006000|p
is_ssc_worth_it|5.021005||Vniu
isSTRICT_UTF8_CHAR|5.025005|5.025005|n

is_strict_utf8_string|5.025006|5.025006|n
is_strict_utf8_string_loc|5.025006|5.025006|n
is_strict_utf8_string_loclen|5.025006|5.025006|n
is_STRICT_VERSION|5.011004||Viu
is_SURROGATE_utf8|5.035004||Viu
is_SURROGATE_utf8_safe|5.025005||Viu
I_STDARG|5.003007||Viu
I_STDBOOL|5.015003|5.015003|Vn
I_STDINT|5.021004|5.021004|Vn
is_THREE_CHAR_FOLD_HEAD_latin1_safe|5.031007||Viu
is_THREE_CHAR_FOLD_HEAD_utf8_safe|5.031007||Viu
is_THREE_CHAR_FOLD_latin1_safe|5.031007||Viu
is_THREE_CHAR_FOLD_utf8_safe|5.031007||Viu
IS_TRIE_AC|5.009005||Viu
isUNICODE_POSSIBLY_PROBLEMATIC|5.035004||Viu
_is_uni_FOO|5.017008||cVu
_is_uni_perl_idcont|5.017008||cVu
_is_uni_perl_idstart|5.017007||cVu
isUPPER|5.003007|5.003007|p
isUPPER_A|5.013006|5.003007|p
isUPPER_L1|5.013006|5.003007|p
isUPPER_LC|5.004000|5.004000|
isUPPER_LC_utf8|5.006000||Viu
isUPPER_LC_utf8_safe|5.025009|5.006000|p
isUPPER_LC_uvchr|5.007001|5.007001|
isUPPER_uni|5.006000||Viu
isUPPER_utf8|5.031005|5.031005|
isUPPER_utf8_safe|5.025009|5.006000|p
isUPPER_uvchr|5.023009|5.006000|p
is_utf8_char|5.006000|5.006000|dn
IS_UTF8_CHAR|5.009003||Viu
isUTF8_CHAR|5.021001|5.006001|pn
is_utf8_char_buf|5.015008|5.015008|n
isUTF8_CHAR_flags|5.025005|5.025005|n
is_utf8_char_helper_|5.035004||cVnu
is_utf8_common|5.009003||Viu
is_utf8_FF_helper_|5.035004||cVnu
is_utf8_fixed_width_buf_flags|5.025006|5.025006|n
is_utf8_fixed_width_buf_loc_flags|5.025006|5.025006|n
is_utf8_fixed_width_buf_loclen_flags|5.025006|5.025006|n
_is_utf8_FOO|5.031006||cVu
is_utf8_invariant_string|5.025005|5.011000|pn
is_utf8_invariant_string_loc|5.027001|5.027001|n
is_utf8_non_invariant_string|5.027007||cVni
is_utf8_overlong|5.035004||Vniu
_is_utf8_perl_idcont|5.031006||cVu
_is_utf8_perl_idstart|5.031006||cVu
isUTF8_POSSIBLY_PROBLEMATIC|5.023003||Viu

is_utf8_string|5.006001|5.006001|n
is_utf8_string_flags|5.025006|5.025006|n
is_utf8_string_loc|5.008001|5.008001|n
is_utf8_string_loc_flags|5.025006|5.025006|n
is_utf8_string_loclen|5.009003|5.009003|n
is_utf8_string_loclen_flags|5.025006|5.025006|n
is_utf8_valid_partial_char|5.025005|5.025005|n
is_utf8_valid_partial_char_flags|5.025005|5.025005|n
is_VERTWS_cp_high|5.017006||Viu
is_VERTWS_high|5.017006||Viu
isVERTWS_uni|5.017006||Viu
isVERTWS_utf8|5.017006||Viu
isVERTWS_utf8_safe|5.025009||Viu
isVERTWS_uvchr|5.023009||Viu
isWARNf_on|5.006001||Viu
isWARN_on|5.006000||Viu
isWARN_ONCE|5.006000||Viu
isWB|5.021009||Viu
isWORDCHAR|5.013006|5.003007|p
isWORDCHAR_A|5.013006|5.003007|p
isWORDCHAR_L1|5.013006|5.003007|p
isWORDCHAR_lazy_if_safe|5.025009||Viu
isWORDCHAR_LC|5.017007|5.004000|p
isWORDCHAR_LC_utf8|5.017007||Viu
isWORDCHAR_LC_utf8_safe|5.025009|5.006000|p
isWORDCHAR_LC_uvchr|5.017007|5.017007|
isWORDCHAR_uni|5.017006||Viu
isWORDCHAR_utf8|5.031005|5.031005|
isWORDCHAR_utf8_safe|5.025009|5.006000|p
isWORDCHAR_uvchr|5.023009|5.006000|p
isXDIGIT|5.006000|5.003007|p
isXDIGIT_A|5.013006|5.003007|p
is_XDIGIT_cp_high|5.017006||Viu
is_XDIGIT_high|5.017006||Viu
isXDIGIT_L1|5.013006|5.003007|p
isXDIGIT_LC|5.017007|5.003007|p
isXDIGIT_LC_utf8|5.017007||Viu
isXDIGIT_LC_utf8_safe|5.025009|5.006000|p
isXDIGIT_LC_uvchr|5.017007|5.017007|
isXDIGIT_uni|5.006000||Viu
isXDIGIT_utf8|5.031005|5.031005|
isXDIGIT_utf8_safe|5.025009|5.006000|p
isXDIGIT_uvchr|5.023009|5.006000|p
is_XPERLSPACE_cp_high|5.017006||Viu
is_XPERLSPACE_high|5.017006||Viu
I_SYS_DIR|5.003007|5.003007|Vn
I_SYS_FILE|5.003007|5.003007|Vn
I_SYS_IOCTL|5.003007|5.003007|Vn

I_SYSLOG|5.006000|5.006000|Vn
I_SYS_MOUNT|5.023005|5.023005|Vn
I_SYS_PARAM|5.003007|5.003007|Vn
I_SYS_POLL|5.010001|5.010001|Vn
I_SYS_RESOURCE|5.003007|5.003007|Vn
I_SYS_SELECT|5.003007|5.003007|Vn
I_SYS_STAT|5.003007|5.003007|Vn
I_SYS_STATFS|5.023005|5.023005|Vn
I_SYS_STATVFS|5.023005|5.023005|Vn
I_SYS_TIME|5.003007|5.003007|Vn
I_SYS_TIMES|5.003007|5.003007|Vn
I_SYS_TYPES|5.003007|5.003007|Vn
I_SYSUIO|5.006000|5.006000|Vn
I_SYS_UN|5.003007|5.003007|Vn
I_SYSUTSNAME|5.006000|5.006000|Vn
I_SYS_VFS|5.023005|5.023005|Vn
I_SYS_WAIT|5.003007|5.003007|Vn
items||5.003007|
I_TERMIOS|5.003007|5.003007|Vn
I_TIME|5.003007|5.003007|Vn
I_UNISTD|5.003007|5.003007|Vn
I_USTAT|5.023005|5.023005|Vn
I_UTIME|5.003007|5.003007|Vn
I_V|5.006000|5.003007|
IVdf|5.006000|5.003007|poVn
IV_DIG|5.006000||Viu
IV_IS_QUAD|5.006000||Viu
IV_MAX|5.003007|5.003007|
IV_MAX_P1|5.007002||Viu
IV_MIN|5.003007|5.003007|
IVSIZE|5.006000|5.003007|poVn
IVTYPE|5.006000|5.003007|poVn
I_WCHAR|5.027006|5.027006|Vn
I_WCTYPE|5.029009|5.029009|Vn
ix||5.003007|
I_XLOCALE|5.025004|5.025004|Vn
JE_OLD_STACK_HWM_restore|5.027002||Viu
JE_OLD_STACK_HWM_save|5.027002||Viu
JE_OLD_STACK_HWM_zero|5.027002||Viu
jmaybe|5.003007||Viu
JMPENV_BOOTSTRAP|5.006000||Viu
JMPENV_JUMP|5.004000|5.004000|
JMPENV_POP|5.004000||Viu
JMPENV_PUSH|5.004000||Viu
JOIN|5.005000||Viu
join_exact|5.009004||Viu
kBINOP|5.003007||Viu
kCOP|5.003007||Viu

KEEPCOPY_PAT_MOD|5.009005||Viu
KEEPCOPY_PAT_MODS|5.009005||Viu
KEEPS|5.009005||Viu
KEEPS_next|5.009005||Viu
KEEPS_next_fail|5.009005||Viu
KEEPS_next_fail_t8|5.035004||Viu
KEEPS_next_fail_t8_p8|5.033003||Viu
KEEPS_next_fail_t8_pb|5.033003||Viu
KEEPS_next_fail_tb|5.035004||Viu
KEEPS_next_fail_tb_p8|5.033003||Viu
KEEPS_next_fail_tb_pb|5.033003||Viu
KEEPS_next_t8|5.035004||Viu
KEEPS_next_t8_p8|5.033003||Viu
KEEPS_next_t8_pb|5.033003||Viu
KEEPS_next_tb|5.035004||Viu
KEEPS_next_tb_p8|5.033003||Viu
KEEPS_next_tb_pb|5.033003||Viu
KEEPS_t8|5.035004||Viu
KEEPS_t8_p8|5.033003||Viu
KEEPS_t8_pb|5.033003||Viu
KEEPS_tb|5.035004||Viu
KEEPS_tb_p8|5.033003||Viu
KEEPS_tb_pb|5.033003||Viu
KELVIN_SIGN|5.017003||Viu
KERNEL|5.003007||Viu
KEY_abs|5.003007||Viu
KEY_accept|5.003007||Viu
KEY_alarm|5.003007||Viu
KEY_and|5.003007||Viu
KEY_atan2|5.003007||Viu
KEY_AUTOLOAD|5.003007||Viu
KEY_BEGIN|5.003007||Viu
KEY_bind|5.003007||Viu
KEY_binmode|5.003007||Viu
KEY_bless|5.003007||Viu
KEY_break|5.027008||Viu
KEY_caller|5.003007||Viu
KEY_catch|5.033007||Viu
KEY_chdir|5.003007||Viu
KEY_CHECK|5.006000||Viu
KEY_chmod|5.003007||Viu
KEY_chomp|5.003007||Viu
KEY_chop|5.003007||Viu
KEY_chown|5.003007||Viu
KEY_chr|5.003007||Viu
KEY_chroot|5.003007||Viu
KEY_close|5.003007||Viu
KEY_closedir|5.003007||Viu

KEY_cmp|5.003007||Viu
KEY_connect|5.003007||Viu
KEY_continue|5.003007||Viu
KEY_cos|5.003007||Viu
KEY_crypt|5.003007||Viu
KEY___DATA|5.003007||Viu
KEY_dbmclose|5.003007||Viu
KEY_dbmopen|5.003007||Viu
KEY_default|5.027008||Viu
KEY_defer|5.035004||Viu
KEY_defined|5.003007||Viu
KEY_delete|5.003007||Viu
KEY_DESTROY|5.003007||Viu
KEY_die|5.003007||Viu
KEY_do|5.003007||Viu
KEY_dump|5.003007||Viu
KEY_each|5.003007||Viu
KEY_else|5.003007||Viu
KEY_elsif|5.003007||Viu
KEY___END|5.003007||Viu
KEY_END|5.003007||Viu
KEY_endgrent|5.003007||Viu
KEY_endhostent|5.003007||Viu
KEY_endnetent|5.003007||Viu
KEY_endprotoent|5.003007||Viu
KEY_endpwent|5.003007||Viu
KEY_endservent|5.003007||Viu
KEY_eof|5.003007||Viu
KEY_eq|5.003007||Viu
KEY_eval|5.003007||Viu
KEY_evalbytes|5.015005||Viu
KEY_exec|5.003007||Viu
KEY_exists|5.003007||Viu
KEY_exit|5.003007||Viu
KEY_exp|5.003007||Viu
KEY_fc|5.015008||Viu
KEY_fcntl|5.003007||Viu
KEY___FILE|5.003007||Viu
KEY_fileno|5.003007||Viu
KEY_finally|5.035008||Viu
KEY_flock|5.003007||Viu
KEY_for|5.003007||Viu
KEY_foreach|5.003007||Viu
KEY_fork|5.003007||Viu
KEY_format|5.003007||Viu
KEY_formline|5.003007||Viu
KEY_ge|5.003007||Viu
KEY_getc|5.003007||Viu

KEY_getgrent|5.003007||Viu
KEY_getgrgid|5.003007||Viu
KEY_getgrnam|5.003007||Viu
KEY_gethostbyaddr|5.003007||Viu
KEY_gethostbyname|5.003007||Viu
KEY_gethostent|5.003007||Viu
KEY_getlogin|5.003007||Viu
KEY_getnetbyaddr|5.003007||Viu
KEY_getnetbyname|5.003007||Viu
KEY_getnetent|5.003007||Viu
KEY_getpeername|5.003007||Viu
KEY_getpgrp|5.003007||Viu
KEY_getppid|5.003007||Viu
KEY_getpriority|5.003007||Viu
KEY_getprotobyname|5.003007||Viu
KEY_getprotobynumber|5.003007||Viu
KEY_getprotoent|5.003007||Viu
KEY_getpwent|5.003007||Viu
KEY_getpwnam|5.003007||Viu
KEY_getpwuid|5.003007||Viu
KEY_getservbyname|5.003007||Viu
KEY_getservbyport|5.003007||Viu
KEY_getservent|5.003007||Viu
KEY_getsockname|5.003007||Viu
KEY_getsockopt|5.003007||Viu
KEY_getspnam|5.031011||Viu
KEY_given|5.009003||Viu
KEY_glob|5.003007||Viu
KEY_gmtime|5.003007||Viu
KEY_goto|5.003007||Viu
KEY_grep|5.003007||Viu
KEY_gt|5.003007||Viu
KEY_hex|5.003007||Viu
KEY_if|5.003007||Viu
KEY_index|5.003007||Viu
KEY_INIT|5.005000||Viu
KEY_int|5.003007||Viu
KEY_ioctl|5.003007||Viu
KEY_isa|5.031007||Viu
KEY_join|5.003007||Viu
KEY_keys|5.003007||Viu
KEY_kill|5.003007||Viu
KEY_last|5.003007||Viu
KEY_lc|5.003007||Viu
KEY_lcfirst|5.003007||Viu
KEY_le|5.003007||Viu
KEY_length|5.003007||Viu
KEY___LINE|5.003007||Viu

KEY_link|5.003007||Viu
KEY_listen|5.003007||Viu
KEY_local|5.003007||Viu
KEY_localtime|5.003007||Viu
KEY_lock|5.005000||Viu
KEY_log|5.003007||Viu
KEY_lstat|5.003007||Viu
KEY_lt|5.003007||Viu
KEY_m|5.003007||Viu
KEY_map|5.003007||Viu
KEY_mkdir|5.003007||Viu
KEY_msgctl|5.003007||Viu
KEY_msgget|5.003007||Viu
KEY_msgrcv|5.003007||Viu
KEY_msgsnd|5.003007||Viu
KEY_my|5.003007||Viu
KEY_ne|5.003007||Viu
KEY_next|5.003007||Viu
KEY_no|5.003007||Viu
KEY_not|5.003007||Viu
KEY_NULL|5.003007||Viu
KEY_oct|5.003007||Viu
KEY_open|5.003007||Viu
KEY_opendir|5.003007||Viu
KEY_or|5.003007||Viu
KEY_ord|5.003007||Viu
KEY_our|5.006000||Viu
KEY_pack|5.003007||Viu
KEY_package|5.003007||Viu
KEY___PACKAGE|5.004000||Viu
KEY_pipe|5.003007||Viu
KEY_pop|5.003007||Viu
KEY_pos|5.003007||Viu
KEY_print|5.003007||Viu
KEY_printf|5.003007||Viu
KEY_prototype|5.003007||Viu
KEY_push|5.003007||Viu
KEY_q|5.003007||Viu
KEY_qq|5.003007||Viu
KEY_qr|5.005000||Viu
KEY_quotemeta|5.003007||Viu
KEY_qw|5.003007||Viu
KEY_qx|5.003007||Viu
KEY_rand|5.003007||Viu
KEY_read|5.003007||Viu
KEY_readdir|5.003007||Viu
KEY_readline|5.003007||Viu
KEY_readlink|5.003007||Viu

KEY_readpipe|5.003007||Viu
KEY_recv|5.003007||Viu
KEY_redo|5.003007||Viu
KEY_ref|5.003007||Viu
KEY_rename|5.003007||Viu
KEY_require|5.003007||Viu
KEY_reset|5.003007||Viu
KEY_return|5.003007||Viu
KEY_reverse|5.003007||Viu
KEY_rewinddir|5.003007||Viu
KEY_rindex|5.003007||Viu
KEY_rmdir|5.003007||Viu
KEY_s|5.003007||Viu
KEY_say|5.009003||Viu
KEY_scalar|5.003007||Viu
KEY_seek|5.003007||Viu
KEY_seekdir|5.003007||Viu
KEY_select|5.003007||Viu
KEY_semctl|5.003007||Viu
KEY_semget|5.003007||Viu
KEY_semop|5.003007||Viu
KEY_send|5.003007||Viu
KEY_setgrent|5.003007||Viu
KEY_sethostent|5.003007||Viu
KEY_setnetent|5.003007||Viu
KEY_setpgrp|5.003007||Viu
KEY_setpriority|5.003007||Viu
KEY_setprotoent|5.003007||Viu
KEY_setpwent|5.003007||Viu
KEY_setservent|5.003007||Viu
KEY_setsockopt|5.003007||Viu
KEY_shift|5.003007||Viu
KEY_shmctl|5.003007||Viu
KEY_shmget|5.003007||Viu
KEY_shmread|5.003007||Viu
KEY_shmwrite|5.003007||Viu
KEY_shutdown|5.003007||Viu
KEY_sigvar|5.025004||Viu
KEY_sin|5.003007||Viu
KEY_sleep|5.003007||Viu
KEY_socket|5.003007||Viu
KEY_socketpair|5.003007||Viu
KEY_sort|5.003007||Viu
KEY_splice|5.003007||Viu
KEY_split|5.003007||Viu
KEY_sprintf|5.003007||Viu
KEY_sqrt|5.003007||Viu
KEY_srand|5.003007||Viu

KEY_stat|5.003007||Viu
KEY_state|5.009004||Viu
KEY_study|5.003007||Viu
KEY_sub|5.003007||Viu
KEY___SUB|5.015006||Viu
KEY_substr|5.003007||Viu
KEY_symlink|5.003007||Viu
KEY_syscall|5.003007||Viu
KEY_sysopen|5.003007||Viu
KEY_sysread|5.003007||Viu
KEY_sysseek|5.004000||Viu
KEY_system|5.003007||Viu
KEY_syswrite|5.003007||Viu
KEY_tell|5.003007||Viu
KEY_telldir|5.003007||Viu
KEY_tie|5.003007||Viu
KEY_tied|5.003007||Viu
KEY_time|5.003007||Viu
KEY_times|5.003007||Viu
KEY_tr|5.003007||Viu
KEY_truncate|5.003007||Viu
KEY_try|5.033007||Viu
KEY_uc|5.003007||Viu
KEY_ucfirst|5.003007||Viu
KEY_umask|5.003007||Viu
KEY_undef|5.003007||Viu
KEY_UNITCHECK|5.009005||Viu
KEY_unless|5.003007||Viu
KEY_unlink|5.003007||Viu
KEY_unpack|5.003007||Viu
KEY_unshift|5.003007||Viu
KEY_untie|5.003007||Viu
KEY_until|5.003007||Viu
KEY_use|5.003007||Viu
KEY_utime|5.003007||Viu
KEY_values|5.003007||Viu
KEY_vec|5.003007||Viu
KEY_wait|5.003007||Viu
KEY_waitpid|5.003007||Viu
KEY_wantarray|5.003007||Viu
KEY_warn|5.003007||Viu
KEY_when|5.027008||Viu
KEY_while|5.003007||Viu
keyword|5.003007||Viu
KEYWORD_PLUGIN_DECLINE|5.011002||Viu
KEYWORD_PLUGIN_EXPR|5.011002||Viu
KEYWORD_PLUGIN_MUTEX_INIT|5.027006||Viu
KEYWORD_PLUGIN_MUTEX_LOCK|5.027006||Viu

KEYWORD_PLUGIN_MUTEX_TERM|5.027006||Viu
KEYWORD_PLUGIN_MUTEX_UNLOCK|5.027006||Viu
keyword_plugin_standard|||iu
KEYWORD_PLUGIN_STMT|5.011002||Viu
KEY_write|5.003007||Viu
KEY_x|5.003007||Viu
KEY_xor|5.003007||Viu
KEY_y|5.003007||Viu
kGVOP_gv|5.006000||Viu
kill|5.005000||Viu
killpg|5.005000||Viu
kLISTOP|5.003007||Viu
kLOGOP|5.003007||Viu
kLOOP|5.003007||Viu
kPADOP|5.006000||Viu
kPMOP|5.003007||Viu
kPVOP|5.003007||Viu
kSVOP|5.003007||Viu
kSVOP_sv|5.006000||Viu
kUNOP|5.003007||Viu
kUNOP_AUX|5.021007||Viu
LATIN1_TO_NATIVE|5.019004|5.003007|p
LATIN_CAPITAL_LETTER_A_WITH_RING_ABOVE|5.013011||Viu
LATIN_CAPITAL_LETTER_A_WITH_RING_ABOVE_NATIVE|5.017004||Viu
LATIN_CAPITAL_LETTER_I_WITH_DOT_ABOVE|5.023002||Viu
LATIN_CAPITAL_LETTER_I_WITH_DOT_ABOVE_UTF8|5.023002||Viu
LATIN_CAPITAL_LETTER_SHARP_S|5.014000||Viu
LATIN_CAPITAL_LETTER_SHARP_S_UTF8|5.019001||Viu
LATIN_CAPITAL_LETTER_Y_WITH_DIAERESIS|5.013011||Viu
LATIN_SMALL_LETTER_A_WITH_RING_ABOVE|5.013011||Viu
LATIN_SMALL_LETTER_A_WITH_RING_ABOVE_NATIVE|5.017004||Viu
LATIN_SMALL_LETTER_DOTLESS_I|5.023002||Viu
LATIN_SMALL_LETTER_DOTLESS_I_UTF8|5.023002||Viu
LATIN_SMALL_LETTER_LONG_S|5.017003||Viu
LATIN_SMALL_LETTER_LONG_S_UTF8|5.019001||Viu
LATIN_SMALL_LETTER_SHARP_S|5.011002||Viu
LATIN_SMALL_LETTER_SHARP_S_NATIVE|5.017004||Viu
LATIN_SMALL_LETTER_SHARP_S_UTF8|5.033003||Viu
LATIN_SMALL_LETTER_Y_WITH_DIAERESIS|5.011002||Viu
LATIN_SMALL_LETTER_Y_WITH_DIAERESIS_NATIVE|5.017004||Viu
LATIN_SMALL_LIGATURE_LONG_S_T|5.019004||Viu
LATIN_SMALL_LIGATURE_LONG_S_T_UTF8|5.019004||Viu
LATIN_SMALL_LIGATURE_ST|5.019004||Viu
LATIN_SMALL_LIGATURE_ST_UTF8|5.019004||Viu
LB_BREAKABLE|5.023007||Viu
LB_CM_ZWJ_foo|5.025003||Viu
LB_HY_or_BA_then_foo|5.023007||Viu
LB_NOBREAK|5.023007||Viu

LB_NOBREAK_EVEN_WITH_SP_BETWEEN|5.023007||Viu
LB_PR_or_PO_then_OP_or_HY|5.023007||Viu
LB_RI_then_RI|5.025003||Viu
LB_SP_foo|5.023007||Viu
LB_SY_or_IS_then_various|5.023007||Viu
LB_various_then_PO_or_PR|5.023007||Viu
LC_NUMERIC_LOCK|5.027009||pVu
LC_NUMERIC_UNLOCK|5.027009||pVu
LDBL_DIG|5.006000||Viu
LEAVE|5.003007|5.003007|
leave_adjust_stacks|5.023008|5.023008|xu
leave_scope|5.003007|5.003007|u
LEAVE_SCOPE|5.003007||Viu
LEAVE_with_name|5.011002|5.011002|
LEXACT|5.031005||Viu
LEXACT_REQ8|5.031006||Viu
LEXACT_REQ8_t8|5.035004||Viu
LEXACT_REQ8_t8_p8|5.033003||Viu
LEXACT_REQ8_t8_pb|5.033003||Viu
LEXACT_REQ8_tb|5.035004||Viu
LEXACT_REQ8_tb_p8|5.033003||Viu
LEXACT_REQ8_tb_pb|5.033003||Viu
LEXACT_t8|5.035004||Viu
LEXACT_t8_p8|5.033003||Viu
LEXACT_t8_pb|5.033003||Viu
LEXACT_tb|5.035004||Viu
LEXACT_tb_p8|5.033003||Viu
LEXACT_tb_pb|5.033003||Viu
lex_bufutf8|5.011002|5.011002|x
lex_discard_to|5.011002|5.011002|x
LEX_DONT_CLOSE_RSFP|5.015009||Viu
LEX_EVALBYTES|5.015005||Viu
lex_grow_linestr|5.011002|5.011002|x
LEX_IGNORE_UTF8_HINTS|5.015005||Viu
LEX_KEEP_PREVIOUS|5.011002|5.011002|
lex_next_chunk|5.011002|5.011002|x
LEX_NOTPARSING|5.004004||Viu
lex_peek_unichar|5.011002|5.011002|x
lex_read_space|5.011002|5.011002|x
lex_read_to|5.011002|5.011002|x
lex_read_unichar|5.011002|5.011002|x
lex_start|5.013007|5.013007|x
LEX_START_COPIED|5.015005||Viu
LEX_START_FLAGS|5.015005||Viu
LEX_START_SAME_FILTER|5.014000||Viu
lex_stuff_pv|5.013006|5.013006|x
lex_stuff_pvn|5.011002|5.011002|x
lex_stuff_pvs|5.013005|5.013005|x

lex_stuff_sv|5.011002|5.011002|x
LEX_STUFF_UTF8|5.011002|5.011002|
lex_unstuff|5.011002|5.011002|x
LF_NATIVE|5.019004||Viu
LIB_INVARG|5.008001||Viu
LIBM_LIB_VERSION|5.009003|5.009003|Vn
LIKELY|5.009004|5.003007|p
link|5.006000||Viu
LINKLIST|5.013006|5.013006|
list|5.003007||Viu
listen|5.005000||Viu
listkids|5.003007||Viu
LNBREAK|5.009005||Viu
LNBREAK_t8|5.035004||Viu
LNBREAK_t8_p8|5.033003||Viu
LNBREAK_t8_pb|5.033003||Viu
LNBREAK_tb|5.035004||Viu
LNBREAK_tb_p8|5.033003||Viu
LNBREAK_tb_pb|5.033003||Viu
load_charnames|5.031010||cViu
load_module|5.006000|5.003007|pv
load_module_nocontext|5.013006|5.013006|vn
LOCALECONV_LOCK|5.033005||Viu
LOCALECONV_UNLOCK|5.033005||Viu
LOCALE_INIT|5.024000||Viu
LOCALE_INIT_LC_NUMERIC|5.033005||Viu
LOCALE_LOCK|5.024000||Viu
LOCALE_PAT_MOD|5.013006||Viu
LOCALE_PAT_MODS|5.013006||Viu
LOCALE_READ_LOCK|5.033005||Viu
LOCALE_READ_UNLOCK|5.033005||Viu
LOCALE_TERM|5.024000||Viu
LOCALE_TERM_LC_NUMERIC|5.033005||Viu
LOCALE_TERM_POSIX_2008|5.033005||Viu
LOCALE_UNLOCK|5.024000||Viu
localize|5.003007||Viu
LOCAL_PATCH_COUNT|5.003007||Viu
localtime|5.031011||Viu
LOCALTIME_MAX|5.010001|5.010001|Vn
LOCALTIME_MIN|5.010001|5.010001|Vn
LOCALTIME_R_NEEDS_TZSET|5.010000|5.010000|Vn
LOCALTIME_R_PROTO|5.008000|5.008000|Vn
LOCK_DOLLARZERO_MUTEX|5.008001||Viu
lockf|5.006000||Viu
LOCK_LC_NUMERIC_STANDARD|5.021010||poVnu
LOCK_NUMERIC_STANDARD|||piu
LOC_SED|5.003007|5.003007|Vn
LOGICAL|5.005000||Viu

LOGICAL_t8|5.035004||Viu
LOGICAL_t8_p8|5.033003||Viu
LOGICAL_t8_pb|5.033003||Viu
LOGICAL_tb|5.035004||Viu
LOGICAL_tb_p8|5.033003||Viu
LOGICAL_tb_pb|5.033003||Viu
LONGDBLINFBYTES|5.023000|5.023000|Vn
LONGDBLMANTBITS|5.023000|5.023000|Vn
LONGDBLNANBYTES|5.023000|5.023000|Vn
LONGDOUBLE_BIG_ENDIAN|5.021009||Viu
LONGDOUBLE_DOUBLEDOUBLE|5.021009||Viu
LONG_DOUBLE_EQUALS_DOUBLE|5.007001||Viu
LONG_DOUBLE_IS_DOUBLE|5.021003|5.021003|Vn
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_BE|5.023006|5.023006|Vn
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BE_LE|5.023006|5.023006|Vn
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_BIG_ENDIAN|5.021003|5.021003|Vn
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_BE|5.023006|5.023006|Vn
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LE_LE|5.023006|5.023006|Vn
LONG_DOUBLE_IS_DOUBLEDOUBLE_128_BIT_LITTLE_ENDIAN|5.021003|5.021003|Vn
LONG_DOUBLE_IS_IEEE_754_128_BIT_BIG_ENDIAN|5.021003|5.021003|Vn
LONG_DOUBLE_IS_IEEE_754_128_BIT_LITTLE_ENDIAN|5.021003|5.021003|Vn
LONG_DOUBLE_IS_UNKNOWN_FORMAT|5.021003|5.021003|Vn
LONG_DOUBLE_IS_VAX_H_FLOAT|5.025004|5.025004|Vn
LONG_DOUBLE_IS_X86_80_BIT_BIG_ENDIAN|5.021003|5.021003|Vn
LONG_DOUBLE_IS_X86_80_BIT_LITTLE_ENDIAN|5.021003|5.021003|Vn
LONG_DOUBLEKIND|5.021003|5.021003|Vn
LONGDOUBLE_LITTLE_ENDIAN|5.021009||Viu
LONGDOUBLE_MIX_ENDIAN|5.023006||Viu
LONG_DOUBLESIZE|5.005000|5.005000|Vn
LONG_DOUBLE_STYLE_IEEE|5.025007|5.025007|Vn
LONG_DOUBLE_STYLE_IEEE_EXTENDED|5.025007|5.025007|Vn
LONGDOUBLE_VAX_ENDIAN|5.025004||Viu
LONGDOUBLE_X86_80_BIT|5.021009||Viu
LONGJMP|5.005000||Viu
longjmp|5.005000||Viu
LONGJMP_t8|5.035004||Viu
LONGJMP_t8_p8|5.033003||Viu
LONGJMP_t8_pb|5.033003||Viu
LONGJMP_tb|5.035004||Viu
LONGJMP_tb_p8|5.033003||Viu
LONGJMP_tb_pb|5.033003||Viu
LONGLONGSIZE|5.005000|5.005000|Vn
LONGSIZE|5.004000|5.003007|oVn
LOOKBEHIND_END_t8_p8|||Viu
LOOKBEHIND_END_t8_pb|||Viu
LOOKBEHIND_END_t8|||Viu
LOOKBEHIND_END_tb_p8|||Viu
LOOKBEHIND_END_tb_pb|||Viu

LOOKBEHIND_END_tb|||Viu
LOOKBEHIND_END|||Viu
looks_like_bool|5.027008||Viu
looks_like_number|5.003007|5.003007|
LOOP_PAT_MODS|5.009005||Viu
lop|5.005000||Viu
lossless_NV_to_IV|5.031001||Vniu
LOWEST_ANYOF_HRx_BYTE|5.031002||Viu
L_R_TZSET|5.009005|5.009005|Vn
lsbit_pos32|5.035003||cVnu
lsbit_pos|5.035004||Viu
lsbit_pos64|5.035003||cVnu
lsbit_pos_uintmax|5.035003||Viu
lseek|5.005000||Viu
LSEEKSIZE|5.006000|5.006000|Vn
lstat|5.005000||Viu
LvFLAGS|5.015006||Viu
LVf_NEG_LEN|5.027001||Viu
LVf_NEG_OFF|5.027001||Viu
LVf_OUT_OF_RANGE|5.027001||Viu
LVRET|5.007001||Vi
LvSTARGOFF|5.019004||Viu
LvTARG|5.003007||Viu
LvTARGLEN|5.003007||Viu
LvTARGOFF|5.003007||Viu
LvTYPE|5.003007||Viu
LZC_TO_MSBIT_POS|5.035003||Viu
magic_clear_all_env|5.004001||Viu
magic_cleararylen_p|5.017002||Viu
magic_clearenv|5.003007||Viu
magic_clearhint|5.009004||Vi
magic_clearhints|5.011000||Vi
magic_clearisa|5.010001||Viu
magic_clearpack|5.003007||Viu
magic_clearsig|5.003007||Viu
magic_copycallchecker|5.017000||Viu
magic_dump|5.006000|5.006000|u
magic_existspack|5.003007||Viu
magic_freearylen_p|5.009003||Viu
magic_freecollxfrm|5.033004||Viu
magic_freemglob|5.033004||Viu
magic_freeovrld|5.007001||Viu
magic_freeutf8|5.033004||Viu
magic_get|5.003007||Viu
magic_getarylen|5.003007||Viu
magic_getdebugvar|5.021005||Viu
magic_getdefelem|5.004000||Viu
magic_getnkeys|5.004005||Viu

magic_getpack|5.003007||Viu
magic_getpos|5.003007||Viu
magic_getsig|5.003007||Viu
magic_getsubstr|5.004005||Viu
magic_gettaint|5.003007||Viu
magic_getuvar|5.003007||Viu
magic_getvec|5.004005||Viu
magic_killbackrefs|5.006000||Viu
magic_methcall1|5.013001||Viu
magic_methcall|||vi
magic_methpack|5.005000||Viu
magic_nextpack|5.003007||Viu
magic_regdata_cnt|5.006000||Viu
magic_regdatum_get|5.006000||Viu
magic_regdatum_set|5.006001||Viu
magic_scalarpack|5.009001||Viu
magic_set|5.003007||Viu
magic_set_all_env|5.004004||Viu
magic_setarylen|5.003007||Viu
magic_setcollxfrm|5.004000||Viu
magic_setdbline|5.003007||Viu
magic_setdebugvar|5.021005||Viu
magic_setdefelem|5.004000||Viu
magic_setenv|5.003007||Viu
magic_sethint|5.009004||Vi
magic_sethint_feature|5.031007||Viu
magic_setisa|5.003007||Viu
magic_setlvref|5.021005||Viu
magic_setmglob|5.003007||Viu
magic_setnkeys|5.003007||Viu
magic_setnonelem|5.027009||Viu
magic_setpack|5.003007||Viu
magic_setpos|5.003007||Viu
magic_setregexp|5.008001||Viu
magic_setsig|5.003007||Viu
magic_setsigall|5.035001||Viu
magic_setsubstr|5.003007||Viu
magic_settaint|5.003007||Viu
magic_setutf8|5.008001||Viu
magic_setuvar|5.003007||Viu
magic_setvec|5.003007||Viu
magic_sizepack|5.005000||Viu
magic_wipepack|5.003007||Viu
make_exactf_invlist|5.031006||Viu
make_matcher|5.027008||Viu
make_trie|5.009002||Viu
malloc|5.003007||Vn
MALLOC_CHECK_TAINT2|5.008001||Viu

MALLOC_CHECK_TAINT|5.008001||Viu
malloced_size|5.005000||Vniu
malloc_good_size|5.010001||Vniu
MALLOC_INIT|5.005000||Viu
MALLOC_OVERHEAD|5.006000||Viu
Malloc_t|5.003007|5.003007|Vn
MALLOC_TERM|5.005000||Viu
MALLOC_TOO_LATE_FOR|5.008001||Viu
MARK|5.003007|5.003007|
MARKPOINT|5.009005||Viu
MARKPOINT_next|5.009005||Viu
MARKPOINT_next_fail|5.009005||Viu
MARKPOINT_next_fail_t8|5.035004||Viu
MARKPOINT_next_fail_t8_p8|5.033003||Viu
MARKPOINT_next_fail_t8_pb|5.033003||Viu
MARKPOINT_next_fail_tb|5.035004||Viu
MARKPOINT_next_fail_tb_p8|5.033003||Viu
MARKPOINT_next_fail_tb_pb|5.033003||Viu
MARKPOINT_next_t8|5.035004||Viu
MARKPOINT_next_t8_p8|5.033003||Viu
MARKPOINT_next_t8_pb|5.033003||Viu
MARKPOINT_next_tb|5.035004||Viu
MARKPOINT_next_tb_p8|5.033003||Viu
MARKPOINT_next_tb_pb|5.033003||Viu
MARKPOINT_t8|5.035004||Viu
MARKPOINT_t8_p8|5.033003||Viu
MARKPOINT_t8_pb|5.033003||Viu
MARKPOINT_tb|5.035004||Viu
MARKPOINT_tb_p8|5.033003||Viu
MARKPOINT_tb_pb|5.033003||Viu
markstack_grow|5.021001|5.021001|u
matcher_matches_sv|5.027008||Viu
MAX|5.025006||Viu
MAX_ANYOF_HRx_BYTE|5.031002||Viu
MAXARG|5.003007||Viu
MAX_CHARSET_NAME_LENGTH|5.013009||Viu
MAX_FEATURE_LEN|5.013010||Viu
MAX_FOLD_FROMS|5.029006||Viu
MAX_LEGAL_CP|5.029002||Viu
MAX_MATCHES|5.033005||Viu
MAXO|5.003007||Viu
MAXPATHLEN|5.006000||Viu
MAX_PORTABLE_UTF8_TWO_BYTE|5.011002||Viu
MAX_PRINT_A|5.033005||Viu
MAX_RECURSE_EVAL_NOCHANGE_DEPTH|5.009005||Viu
MAXSYSFD|5.003007||Viu
MAX_UNICODE_UTF8|5.027006||Viu
MAX_UNI_KEYWORD_INDEX|5.027011||Viu

MAX_UTF8_TWO_BYTE|5.019004||Viu
MAYBE_DEREF_GV|5.015003||Viu
MAYBE_DEREF_GV_flags|5.015003||Viu
MAYBE_DEREF_GV_nomg|5.015003||Viu
maybe_multimagic_gv|5.019004||Viu
mayberelocate|5.015006||Viu
MBLEN_LOCK|5.033005||Viu
MBLEN_UNLOCK|5.033005||Viu
MBOL|5.003007||Viu
MBOL_t8|5.035004||Viu
MBOL_t8_p8|5.033003||Viu
MBOL_t8_pb|5.033003||Viu
MBOL_tb|5.035004||Viu
MBOL_tb_p8|5.033003||Viu
MBOL_tb_pb|5.033003||Viu
MBTOWC_LOCK|5.033005||Viu
MBTOWC_UNLOCK|5.033005||Viu
MDEREF_ACTION_MASK|5.021007||Viu
MDEREF_AV_gvav_aelem|5.021007||Viu
MDEREF_AV_gvsv_vivify_rv2av_aelem|5.021007||Viu
MDEREF_AV_padav_aelem|5.021007||Viu
MDEREF_AV_padsv_vivify_rv2av_aelem|5.021007||Viu
MDEREF_AV_pop_rv2av_aelem|5.021007||Viu
MDEREF_AV_vivify_rv2av_aelem|5.021007||Viu
MDEREF_FLAG_last|5.021007||Viu
MDEREF_HV_gvhv_helem|5.021007||Viu
MDEREF_HV_gvsv_vivify_rv2hv_helem|5.021007||Viu
MDEREF_HV_padhv_helem|5.021007||Viu
MDEREF_HV_padsv_vivify_rv2hv_helem|5.021007||Viu
MDEREF_HV_pop_rv2hv_helem|5.021007||Viu
MDEREF_HV_vivify_rv2hv_helem|5.021007||Viu
MDEREF_INDEX_const|5.021007||Viu
MDEREF_INDEX_gvsv|5.021007||Viu
MDEREF_INDEX_MASK|5.021007||Viu
MDEREF_INDEX_none|5.021007||Viu
MDEREF_INDEX_padsv|5.021007||Viu
MDEREF_MASK|5.021007||Viu
MDEREF_reload|5.021007||Viu
MDEREF_SHIFT|5.021007||Viu
measure_struct|5.007003||Viu
MEM_ALIGNBYTES|5.003007|5.003007|Vn
memBEGINPs|5.027006||Viu
memBEGINs|5.027006||Viu
MEMBER_TO_FPTR|5.006000||Viu
memCHRs|5.031008|5.003007|p
mem_collxfrm|5.003007||dViu
_mem_collxfrm|5.025002||Viu
memENDPs|5.027006||Viu

memENDs|5.027006||Viu
memEQ|5.004000|5.003007|p
memEQs|5.009005|5.003007|p
memGE|5.025005||Viu
memGT|5.025005||Viu
memLE|5.025005||Viu
MEM_LOG_ALLOC|5.009003||Viu
mem_log_alloc|5.024000||Vniu
mem_log_common|5.010001||Vniu
MEM_LOG_DEL_SV|||Viu
MEM_LOG_FREE|5.009003||Viu
mem_log_free|5.024000||Vniu
MEM_LOG_NEW_SV|||Viu
MEM_LOG_REALLOC|5.009003||Viu
mem_log_realloc|5.024000||Vniu
memLT|5.025005||Viu
memNE|5.004000|5.003007|p
memNEs|5.009005|5.003007|p
MEM_SIZE|5.003007||Viu
MEM_SIZE_MAX|5.009005||Viu
MEM_WRAP_CHECK_1|5.009002||Viu
MEM_WRAP_CHECK|5.009002||Viu
MEM_WRAP_CHECK_s|5.027010||Viu
memzero|5.003007|5.003007|
MEOL|5.003007||Viu
MEOL_t8|5.035004||Viu
MEOL_t8_p8|5.033003||Viu
MEOL_t8_pb|5.033003||Viu
MEOL_tb|5.035004||Viu
MEOL_tb_p8|5.033003||Viu
MEOL_tb_pb|5.033003||Viu
mess|5.003007||pvV
mess_alloc|5.005000||Viu
mess_nocontext|5.006000||pvVn
mess_sv|5.013001|5.004000|p
MEXTEND|5.003007||Viu
mfree|||nu
MgBYTEPOS|5.019004||Viu
MgBYTEPOS_set|5.019004||Viu
mg_clear|5.003007|5.003007|
mg_copy|5.003007|5.003007|
mg_dup|5.007003|5.007003|u
MGf_BYTES|5.019004||Viu
MGf_COPY|5.007003||Viu
MGf_DUP|5.007003||Viu
MGf_GSKIP|5.003007||Viu
mg_find|5.003007|5.003007|n
mg_findext|5.013008|5.003007|pn

mg_find_mglob|5.019002||cViu
MGf_LOCAL|5.009003||Viu
MGf_MINMATCH|5.003007||Viu
MGf_PERSIST|5.021005||Viu
mg_free|5.003007|5.003007|
mg_freeext|5.027004|5.027004|
mg_free_type|5.013006|5.013006|
MGf_REFCOUNTED|5.003007||Viu
MGf_REQUIRE_GV|5.021004||Viu
MGf_TAINTEDDIR|5.003007||Viu
mg_get|5.003007|5.003007|
mg_length|5.005000|5.005000|d
mg_localize|5.009003||Vi
mg_magical|5.003007|5.003007|n
MgPV|5.003007||Viu
MgPV_const|5.009003||Viu
MgPV_nolen_const|5.009003||Viu
mg_set|5.003007|5.003007|
mg_size|5.005000|5.005000|u
MgSV|5.033009||Viu
MgTAINTEDDIR|5.003007||Viu
MgTAINTEDDIR_off|5.004000||Viu
MgTAINTEDDIR_on|5.003007||Viu
MICRO_SIGN|5.011002||Viu
MICRO_SIGN_NATIVE|5.017004||Viu
MICRO_SIGN_UTF8|5.033003||Viu
MIN|5.025006||Viu
mini_mktime|5.007002|5.007002|n
MINMOD|5.003007||Viu
MINMOD_t8|5.035004||Viu
MINMOD_t8_p8|5.033003||Viu
MINMOD_t8_pb|5.033003||Viu
MINMOD_tb|5.035004||Viu
MINMOD_tb_p8|5.033003||Viu
MINMOD_tb_pb|5.033003||Viu
minus_v|5.015006||Viu
missingterm|5.005000||Viu
Mkdir|5.004000||Viu
mkdir|5.005000||Viu
mktemp|5.005000||Viu
Mmap_t|5.006000|5.006000|Vn
mode_from_discipline|5.006000||Viu
Mode_t|5.003007|5.003007|Vn
modkids|5.003007||Viu
MON_10|5.027010||Viu
MON_11|5.027010||Viu
MON_12|5.027010||Viu
MON_1|5.027010||Viu

MON_2|5.027010||Viu
MON_3|5.027010||Viu
MON_4|5.027010||Viu
MON_5|5.027010||Viu
MON_6|5.027010||Viu
MON_7|5.027010||Viu
MON_8|5.027010||Viu
MON_9|5.027010||Viu
more_bodies|||cu
more_sv|5.009004||cVu
moreswitches|5.003007||cVu
mortal_getenv|5.031011||cVnu
Move|5.003007|5.003007|
MoveD|5.009002|5.003007|p
move_proto_attr|5.019005||Viu
M_PAT_MODS|5.009005||Viu
MPH_BUCKETS|5.027011||Viu
MPH_RSHIFT|5.027011||Viu
MPH_VALt|5.027011||Viu
mPUSHi|5.009002|5.003007|p
mPUSHn|5.009002|5.003007|p
mPUSHp|5.009002|5.003007|p
mPUSHs|5.010001|5.003007|p
mPUSHu|5.009002|5.003007|p
mro_clean_isarev|5.013007||Viu
mro_gather_and_rename|5.013007||Viu
mro_get_from_name|||u
mro_get_linear_isa|5.009005|5.009005|
mro_get_linear_isa_c3|||i
mro_get_linear_isa_dfs|5.009005||Vi
MRO_GET_PRIVATE_DATA|5.010001|5.010001|
mro_get_private_data|||cu
mro_isa_changed_in|5.009005||Vi
mro_meta_dup|5.009005||Viu
mro_meta_init|||ciu
mro_method_changed_in|5.009005|5.009005|
mro_package_moved|5.013006||Vi
mro_register|||
mro_set_mro|||u
mro_set_private_data|||
msbit_pos32|5.035003||cVnu
msbit_pos|5.035004||Viu
msbit_pos64|5.035003||cVnu
msbit_pos_uintmax|5.035003||Viu
MSPAGAIN|5.003007||Viu
MSVC_DIAG_IGNORE|5.029010||Viu
MSVC_DIAG_IGNORE_DECL|5.029010||Viu
MSVC_DIAG_IGNORE_STMT|5.029010||Viu

MSVC_DIAG_RESTORE|5.029010||Viu
MSVC_DIAG_RESTORE_DECL|5.029010||Viu
MSVC_DIAG_RESTORE_STMT|5.029010||Viu
mul128|5.005000||Viu
MULTICALL|5.009003|5.009003|
multiconcat_stringify|5.027006||cViu
multideref_stringify|5.021009||cViu
MULTILINE_PAT_MOD|5.009005||Viu
MULTIPLICITY|5.006000|5.006000|Vn
MUTABLE_AV|5.010001|5.003007|p
MUTABLE_CV|5.010001|5.003007|p
MUTABLE_GV|5.010001|5.003007|p
MUTABLE_HV|5.010001|5.003007|p
MUTABLE_IO|5.010001|5.003007|p
MUTABLE_PTR|5.010001|5.003007|p
MUTABLE_SV|5.010001|5.003007|p
MUTEX_DESTROY|5.005000||Viu
MUTEX_INIT|5.005000||Viu
MUTEX_INIT_NEEDS_MUTEX_ZEROED|5.005003||Viu
MUTEX_LOCK|5.005000||Viu
MUTEX_UNLOCK|5.005000||Viu
mXPUSHi|5.009002|5.003007|p
mXPUSHn|5.009002|5.003007|p
mXPUSHp|5.009002|5.003007|p
mXPUSHs|5.010001|5.003007|p
mXPUSHu|5.009002|5.003007|p
my|5.011000||Viu
my_atof2|5.029000||cVu
my_atof3|5.029000||cVu
my_atof|5.006000|5.006000|
my_attrs|5.006000||Viu
my_binmode|5.006000||Viu
my_bytes_to_utf8|5.021009||Vniu
my_chsize|5.003007||Vu
my_clearenv|5.009003||Viu
MY_CXT|5.009000|5.009000|p
MY_CXT_CLONE|5.009002|5.009000|p
MY_CXT_INDEX|5.009005||Viu
MY_CXT_INIT|5.009000|5.009000|p
MY_CXT_INIT_ARG|5.013005||Viu
MY_CXT_INIT_INTERP|5.009003||Viu
my_cxt_init|||u
my_dirfd|5.009005|5.009005|nu
my_exit|5.003007|5.003007|
my_exit_jump|5.005000||Viu
my_failure_exit|5.004000|5.004000|u
my_fflush_all|5.006000|5.006000|u
my_fork|5.007003|5.007003|nu

my_kid|5.006000||Viu
my_lstat|5.013003||Viu
my_lstat_flags|5.013003||cViu
my_memrchr|5.027006||Vniu
my_mkostemp_cloexec|||niu
my_mkostemp|||niu
my_mkstemp_cloexec|||niu
my_mkstemp|||niu
my_nl_langinfo|5.027006||Vniu
my_pclose|5.003007|5.003007|u
my_popen|5.003007|5.003007|u
my_popen_list|5.007001|5.007001|u
my_setenv|5.003007|5.003007|
my_snprintf|5.009004||pvVn
my_socketpair|5.007003|5.007003|nu
my_sprintf|5.009003|5.003007|pdn
my_stat|5.013003||Viu
my_stat_flags|5.013003||cViu
my_strerror|5.021001||Viu
my_strftime|5.007002||V
my_strlcat|5.009004|5.003007|pn
my_strlcpy|5.009004|5.003007|pn
my_strnlen|5.027006|5.003007|pn
my_strtod|5.029010|5.029010|n
my_unexec|5.003007||Viu
my_vsnprintf|5.009004|5.009004|n
N0|5.029001||Viu
N10|5.029001||Viu
N11|5.029001||Viu
N1|5.029001||Viu
N2|5.029001||Viu
N3|5.029001||Viu
N4|5.029001||Viu
N5|5.029001||Viu
N6|5.029001||Viu
N7|5.029001||Viu
N8|5.029001||Viu
N9|5.029001||Viu
NAN_COMPARE_BROKEN|5.021005||Viu
NANYOFM|5.029005||Viu
NANYOFM_t8|5.035004||Viu
NANYOFM_t8_p8|5.033003||Viu
NANYOFM_t8_pb|5.033003||Viu
NANYOFM_tb|5.035004||Viu
NANYOFM_tb_p8|5.033003||Viu
NANYOFM_tb_pb|5.033003||Viu
NATIVE8_TO_UNI|5.011000||Viu
NATIVE_BYTE_IS_INVARIANT|5.019004||Viu

NATIVE_SKIP|5.019004||Viu
NATIVE_TO_ASCII|5.007001||Viu
NATIVE_TO_I8|5.015006||Viu
NATIVE_TO_LATIN1|5.019004|5.003007|p
NATIVE_TO_NEED|5.019004||dcVnu
NATIVE_TO_UNI|5.007001|5.003007|p
NATIVE_TO_UTF|5.007001||Viu
NATIVE_UTF8_TO_I8|5.019004||Viu
nBIT_MASK|5.033001||Viu
nBIT_UMAX|5.033001||Viu
NBOUND|5.003007||Viu
NBOUNDA|5.013009||Viu
NBOUNDA_t8|5.035004||Viu
NBOUNDA_t8_p8|5.033003||Viu
NBOUNDA_t8_pb|5.033003||Viu
NBOUNDA_tb|5.035004||Viu
NBOUNDA_tb_p8|5.033003||Viu
NBOUNDA_tb_pb|5.033003||Viu
NBOUNDL|5.004000||Viu
NBOUNDL_t8|5.035004||Viu
NBOUNDL_t8_p8|5.033003||Viu
NBOUNDL_t8_pb|5.033003||Viu
NBOUNDL_tb|5.035004||Viu
NBOUNDL_tb_p8|5.033003||Viu
NBOUNDL_tb_pb|5.033003||Viu
NBOUND_t8|5.035004||Viu
NBOUND_t8_p8|5.033003||Viu
NBOUND_t8_pb|5.033003||Viu
NBOUND_tb|5.035004||Viu
NBOUND_tb_p8|5.033003||Viu
NBOUND_tb_pb|5.033003||Viu
NBOUNDU|5.013009||Viu
NBOUNDU_t8|5.035004||Viu
NBOUNDU_t8_p8|5.033003||Viu
NBOUNDU_t8_pb|5.033003||Viu
NBOUNDU_tb|5.035004||Viu
NBOUNDU_tb_p8|5.033003||Viu
NBOUNDU_tb_pb|5.033003||Viu
NBSP_NATIVE|5.021001||Viu
NBSP_UTF8|5.021001||Viu
NDBM_H_USES_PROTOTYPES|5.032001|5.032001|Vn
NDEBUG|5.021007||Viu
need_utf8|5.009003||Vniu
NEED_VA_COPY|5.007001|5.007001|Vn
NEGATIVE_INDICES_VAR|5.008001||Viu
Netdb_hlen_t|5.005000|5.005000|Vn
Netdb_host_t|5.005000|5.005000|Vn
Netdb_name_t|5.005000|5.005000|Vn

Netdb_net_t|5.005000|5.005000|Vn
NETDB_R_OBSOLETE|5.008000||Viu
New|5.003007||Viu
newANONATTRSUB|5.006000|5.006000|u
newANONHASH|5.003007|5.003007|u
newANONLIST|5.003007|5.003007|u
newANONSUB|5.003007|5.003007|u
newASSIGNOP|5.003007|5.003007|
newATTRSUB|5.006000|5.006000|
newATTRSUB_x|5.019008||cVi
newAV|5.003007|5.003007|
newAV_alloc_x|5.035001|5.035001|
newAV_alloc_xz|5.035001|5.035001|
newAVREF|5.003007|5.003007|u
newBINOP|5.003007|5.003007|
new_body_allocated|||Viu
new_body_from_arena|||Viu
Newc|5.003007||Viu
new_collate|5.006000||Viu
newCONDOP|5.003007|5.003007|
new_constant|||iu
newCONSTSUB|5.004005|5.003007|p
newCONSTSUB_flags|5.015006|5.015006|
new_ctype|5.006000||Viu
newCVREF|5.003007|5.003007|u
newDEFEROP|5.035004|5.035004|x
newDEFSVOP|5.021006|5.021006|
newFORM|5.003007|5.003007|u
newFOROP|5.013007|5.013007|
newGIVENOP|5.009003|5.009003|
newGIVWHENOP|5.027008||Viu
newGP|||xiu
newGVgen|5.003007|5.003007|u
newGVgen_flags|5.015004|5.015004|u
newGVOP|5.003007|5.003007|
newGVREF|5.003007|5.003007|u
new_he|5.005000||Viu
newHV|5.003007|5.003007|
newHVhv|5.005000|5.005000|u
newHVREF|5.003007|5.003007|u
_new_invlist|5.013010||cViu
_new_invlist_C_array|5.015008||cViu
newIO|5.003007|5.003007|u
newLISTOP|5.003007|5.003007|
newLOGOP|5.003007|5.003007|
new_logop|5.005000||Viu
newLOOPEX|5.003007|5.003007|
newLOOPOP|5.003007|5.003007|

newMETHOP|5.021005|5.021005|
newMETHOP_internal|5.021005||Viu
newMETHOP_named|5.021005|5.021005|
new_msg_hv|5.027009||Viu
newMYSUB|5.017004|5.017004|u
new_NOARENA|||Viu
new_NOARENAZ|||Viu
newNULLLIST|5.003007|5.003007|
new_numeric|5.006000||Viu
newOP|5.003007|5.003007|
NewOp|5.008001||Viu
newPADNAMELIST|5.021007|5.021007|xn
newPADNAMEouter|5.021007|5.021007|xn
newPADNAMEpvn|5.021007|5.021007|xn
newPADOP|5.006000||V
newPMOP|5.003007|5.003007|
newPROG|5.003007|5.003007|u
newPVOP|5.003007|5.003007|
newRANGE|5.003007|5.003007|
newRV|5.003007|5.003007|
newRV_inc|5.004000|5.003007|p
newRV_noinc|5.004000|5.003007|p
newSLICEOP|5.003007|5.003007|
new_stackinfo|5.005000|5.005000|u
newSTATEOP|5.003007|5.003007|
newSTUB|5.017001||Viu
newSUB|5.003007|5.003007|
newSV|5.003007|5.003007|
NEWSV|5.003007||Viu
newSVavdefelem|5.019004||Viu
newSVhek|5.009003|5.009003|
newSViv|5.003007|5.003007|
newSVnv|5.006000|5.003007|
newSVOP|5.003007|5.003007|
newSVpadname|5.017004|5.017004|x
newSVpv|5.003007|5.003007|
newSVpvf|5.004000||vV
newSVpvf_nocontext|5.006000||vVn
newSVpvn|5.004005|5.003007|p
newSVpvn_flags|5.010001|5.003007|p
newSVpvn_share|5.007001|5.003007|p
newSVpvn_utf8|5.010001|5.003007|p
newSVpvs|5.009003|5.003007|p
newSVpvs_flags|5.010001|5.003007|p
newSVpv_share|5.013006|5.013006|
newSVpvs_share|5.009003|5.003007|p
newSVREF|5.003007|5.003007|u
newSVrv|5.003007|5.003007|

newSVsv|5.003007|5.003007|
newSVsv_flags|5.029009|5.003007|p
newSVsv_nomg|5.029009|5.003007|p
newSV_type|5.009005|5.003007|p
newSV_type_mortal|||
newSVuv|5.006000|5.003007|p
new_SV|||Viu
newTRYCATCHOP|5.033007|5.033007|x
newUNOP|5.003007|5.003007|
newUNOP_AUX|5.021007|5.021007|
new_version|5.009000|5.009000|
NEW_VERSION|5.019008||Viu
new_warnings_bitfield|||xciu
newWHENOP|5.027008|5.027008|
newWHILEOP|5.013007|5.013007|
Newx|5.009003|5.003007|p
Newxc|5.009003|5.003007|p
new_XNV|||Viu
new_XPVMG|||Viu
new_XPVNV|||Viu
newXS|5.006000|5.006000|
newXS_deffile|5.021006||cViu
newXS_flags|5.009004|5.009004|xu
newXS_len_flags|5.015006||Vi
newXSproto|5.006000|5.006000|
Newxz|5.009003|5.003007|p
Newz|5.003007||Viu
nextargv|5.003007||Viu
nextchar|5.005000||Viu
NEXT_LINE_CHAR|5.007003||Viu
NEXT_OFF|5.005000||Viu
NEXTOPER|5.003007||Viu
next_symbol|5.007003||Viu
ninstr|5.003007|5.003007|n
NL_LANGINFO_LOCK|5.033005||Viu
NL_LANGINFO_UNLOCK|5.033005||Viu
NOARENA|||Viu
no_bareword_allowed|5.005004||Viu
no_bareword_filehandle|5.033006||Viu
NOCAPTURE_PAT_MOD|5.021008||Viu
NOCAPTURE_PAT_MODS|5.021008||Viu
NODE_ALIGN|5.005000||Viu
NODE_ALIGN_FILL|5.005000||Viu
NODE_STEP_REGNODE|5.005000||Viu
NODE_SZ_STR|5.006000||Viu
NO_ENV_ARRAY_IN_MAIN|5.009004||Viu
NOEXPR|5.027010||Viu
NofAMmeth|5.003007||Viu

no_fh_allowed|5.003007||Viu
NOLINE|5.003007||Viu
NO_LOCALE|5.007000||Viu
NONDESTRUCT_PAT_MOD|5.013002||Viu
NONDESTRUCT_PAT_MODS|5.013002||Viu
NON_OTHER_COUNT|5.033005||Viu
NONV|||Viu
no_op|5.003007||Viu
NOOP|5.005000|5.003007|p
noperl_die|5.021006||vVniu
NORETURN_FUNCTION_END|5.009003||Viu
NORMAL|5.003007||Viu
NOSTR|5.027010||Viu
NO_TAINT_SUPPORT|5.017006||Viu
not_a_number|5.005000||Viu
NOTE3|5.027001||Viu
NOTHING|5.003007||Viu
NOTHING_t8|5.035004||Viu
NOTHING_t8_p8|5.033003||Viu
NOTHING_t8_pb|5.033003||Viu
NOTHING_tb|5.035004||Viu
NOTHING_tb_p8|5.033003||Viu
NOTHING_tb_pb|5.033003||Viu
nothreadhook|5.008000|5.008000|
notify_parser_that_changed_to_utf8|5.025010||Viu
not_incrementable|5.021002||Viu
NOT_IN_PAD|5.005000||Viu
NOT_REACHED|5.019006|5.003007|poVnu
NPOSIXA|5.017003||Viu
NPOSIXA_t8|5.035004||Viu
NPOSIXA_t8_p8|5.033003||Viu
NPOSIXA_t8_pb|5.033003||Viu
NPOSIXA_tb|5.035004||Viu
NPOSIXA_tb_p8|5.033003||Viu
NPOSIXA_tb_pb|5.033003||Viu
NPOSIXD|5.017003||Viu
NPOSIXD_t8|5.035004||Viu
NPOSIXD_t8_p8|5.033003||Viu
NPOSIXD_t8_pb|5.033003||Viu
NPOSIXD_tb|5.035004||Viu
NPOSIXD_tb_p8|5.033003||Viu
NPOSIXD_tb_pb|5.033003||Viu
NPOSIXL|5.017003||Viu
NPOSIXL_t8|5.035004||Viu
NPOSIXL_t8_p8|5.033003||Viu
NPOSIXL_t8_pb|5.033003||Viu
NPOSIXL_tb|5.035004||Viu
NPOSIXL_tb_p8|5.033003||Viu

NPOSIXL_tb_pb|5.033003||Viu
NPOSIXU|5.017003||Viu
NPOSIXU_t8|5.035004||Viu
NPOSIXU_t8_p8|5.033003||Viu
NPOSIXU_t8_pb|5.033003||Viu
NPOSIXU_tb|5.035004||Viu
NPOSIXU_tb_p8|5.033003||Viu
NPOSIXU_tb_pb|5.033003||Viu
NSIG|5.009003||Viu
ntohi|5.003007||Viu
ntohl|5.003007||Viu
ntohs|5.003007||Viu
nuke_stacks|5.005000||Viu
Null|5.003007||Viu
Nullav|5.003007|5.003007|d
Nullch|5.003007|5.003007|
Nullcv|5.003007|5.003007|d
Nullfp|5.003007||Viu
Nullgv|5.003007||Viu
Nullhe|5.003007||Viu
Nullhek|5.004000||Viu
Nullhv|5.003007|5.003007|d
Nullop|5.003007||Viu
Nullsv|5.003007|5.003007|
NUM2PTR|5.006000||pVu
NUM_ANYOF_CODE_POINTS|5.021004||Viu
NUM_CLASSES|5.029001||Viu
num_overflow|5.009001||Vniu
NV_BIG_ENDIAN|5.021009||Viu
NV_DIG|5.006000||Viu
NVef|5.006001|5.003007|poVn
NV_EPSILON|5.007003||Viu
NVff|5.006001|5.003007|poVn
NVgf|5.006001|5.003007|poVn
NV_IMPLICIT_BIT|5.021009||Viu
NV_INF|5.007003||Viu
NV_LITTLE_ENDIAN|5.021009||Viu
NVMANTBITS|5.023000|5.023000|Vn
NV_MANT_DIG|5.006001||Viu
NV_MAX_10_EXP|5.007003||Viu
NV_MAX|5.006001||Viu
NV_MAX_EXP|5.021003||Viu
NV_MIN_10_EXP|5.007003||Viu
NV_MIN|5.006001||Viu
NV_MIN_EXP|5.021003||Viu
NV_MIX_ENDIAN|5.021009||Viu
NV_NAN|5.007003||Viu
NV_NAN_BITS|5.023000||Viu

NV_NAN_IS_QUIET|5.023000||Viu
NV_NAN_IS_SIGNALING|5.023000||Viu
NV_NAN_PAYLOAD_MASK|5.023000||Viu
NV_NAN_PAYLOAD_MASK_IEEE_754_128_BE|5.023000||Viu
NV_NAN_PAYLOAD_MASK_IEEE_754_128_LE|5.023000||Viu
NV_NAN_PAYLOAD_MASK_IEEE_754_64_BE|5.023000||Viu
NV_NAN_PAYLOAD_MASK_IEEE_754_64_LE|5.023000||Viu
NV_NAN_PAYLOAD_MASK_SKIP_EIGHT|5.023006||Viu
NV_NAN_PAYLOAD_PERM_0_TO_7|5.023000||Viu
NV_NAN_PAYLOAD_PERM|5.023000||Viu
NV_NAN_PAYLOAD_PERM_7_TO_0|5.023000||Viu
NV_NAN_PAYLOAD_PERM_IEEE_754_128_BE|5.023000||Viu
NV_NAN_PAYLOAD_PERM_IEEE_754_128_LE|5.023000||Viu
NV_NAN_PAYLOAD_PERM_IEEE_754_64_BE|5.023000||Viu
NV_NAN_PAYLOAD_PERM_IEEE_754_64_LE|5.023000||Viu
NV_NAN_PAYLOAD_PERM_SKIP_EIGHT|5.023006||Viu
NV_NAN_QS_BIT|5.023000||Viu
NV_NAN_QS_BIT_OFFSET|5.023000||Viu
NV_NAN_QS_BIT_SHIFT|5.023000||Viu
NV_NAN_QS_BYTE|5.023000||Viu
NV_NAN_QS_BYTE_OFFSET|5.023000||Viu
NV_NAN_QS_QUIET|5.023000||Viu
NV_NAN_QS_SIGNALING|5.023000||Viu
NV_NAN_QS_TEST|5.023000||Viu
NV_NAN_QS_XOR|5.023000||Viu
NV_NAN_SET_QUIET|5.023000||Viu
NV_NAN_SET_SIGNALING|5.023000||Viu
NV_OVERFLOWS_INTEGERS_AT|5.010001|5.010001|Vn
NV_PRESERVES_UV_BITS|5.006001|5.006001|Vn
NVSIZE|5.006001|5.006001|Vn
NVTYPE|5.006000|5.003007|poVn
NV_VAX_ENDIAN|5.025003||Viu
NV_WITHIN_IV|5.006000||Viu
NV_WITHIN_UV|5.006000||Viu
NV_X86_80_BIT|5.025004||Viu
NV_ZERO_IS_ALLBITS_ZERO|5.035009|5.035009|Vn
OA_AVREF|5.003007||Viu
OA_BASEOP|5.005000||Viu
OA_BASEOP_OR_UNOP|5.005000||Viu
OA_BINOP|5.005000||Viu
OA_CLASS_MASK|5.005000||Viu
OA_COP|5.005000||Viu
OA_CVREF|5.003007||Viu
OA_DANGEROUS|5.003007||Viu
OA_DEFGV|5.003007||Viu
OA_FILEREF|5.003007||Viu
OA_FILESTATOP|5.005000||Viu
OA_FOLDCONST|5.003007||Viu

OA_HVREF|5.003007||Viu
OA_LIST|5.003007||Viu
OA_LISTOP|5.005000||Viu
OA_LOGOP|5.005000||Viu
OA_LOOP|5.005000||Viu
OA_LOOPEXOP|5.005000||Viu
OA_MARK|5.003007||Viu
OA_METHOP|5.021005||Viu
OA_OPTIONAL|5.003007||Viu
OA_OTHERINT|5.003007||Viu
OA_PADOP|5.006000||Viu
OA_PMOP|5.005000||Viu
OA_PVOP_OR_SVOP|5.006000||Viu
OA_RETSCALAR|5.003007||Viu
OA_SCALAR|5.003007||Viu
OA_SCALARREF|5.003007||Viu
OASHIFT|5.003007||Viu
OA_SVOP|5.005000||Viu
OA_TARGET|5.003007||Viu
OA_TARGLEX|5.006000||Viu
OA_UNOP|5.005000||Viu
OA_UNOP_AUX|5.021007||Viu
O_BINARY|5.006000||Viu
O_CREAT|5.006000||Viu
OCSHIFT|5.006000||Viu
OCTAL_VALUE|5.019008||Viu
Off_t|5.003007|5.003007|Vn
Off_t_size|5.006000|5.006000|Vn
OFFUNI_IS_INVARIANT|5.023003||Viu
OFFUNISKIP|5.019004||Viu
OFFUNISKIP_helper|5.035004||Viu
ONCE_PAT_MOD|5.009005||Viu
ONCE_PAT_MODS|5.009005||Viu
ONE_IF_EBCDIC_ZERO_IF_NOT|5.035004||Viu
oopsAV|5.003007||Viu
oopsHV|5.003007||Viu
OP|5.003007||Viu
op_append_elem|5.013006|5.013006|
op_append_list|5.013006|5.013006|
opASSIGN|5.003007||Viu
OP_CHECK_MUTEX_INIT|5.015008||Viu
OP_CHECK_MUTEX_LOCK|5.015008||Viu
OP_CHECK_MUTEX_TERM|5.015008||Viu
OP_CHECK_MUTEX_UNLOCK|5.015008||Viu
OP_CLASS|5.013007|5.013007|
op_class|5.025010|5.025010|
op_clear|5.006000||cViu
OPCODE|5.003007||Viu

op_contextualize|5.013006|5.013006|
op_convert_list|5.021006|5.021006|
OP_DESC|5.007003|5.007003|
op_dump|5.006000|5.006000|
OPEN|5.003007||Viu
open|5.005000||Viu
opendir|5.005000||Viu
openn_cleanup|5.019010||Viu
openn_setup|5.019010||Viu
open_script|5.005000||Viu
OPEN_t8|5.035004||Viu
OPEN_t8_p8|5.033003||Viu
OPEN_t8_pb|5.033003||Viu
OPEN_tb|5.035004||Viu
OPEN_tb_p8|5.033003||Viu
OPEN_tb_pb|5.033003||Viu
OPERAND|5.003007||Viu
OPERANDl|5.031005||Viu
OPERANDs|5.031005||Viu
OPFAIL|5.009005||Viu
OPFAIL_t8|5.035004||Viu
OPFAIL_t8_p8|5.033003||Viu
OPFAIL_t8_pb|5.033003||Viu
OPFAIL_tb|5.035004||Viu
OPFAIL_tb_p8|5.033003||Viu
OPFAIL_tb_pb|5.033003||Viu
OPf_FOLDED|5.021007||Viu
OPf_KIDS|5.003007|5.003007|
OPf_KNOW|5.003007||Viu
OPf_LIST|5.003007||Viu
OPf_MOD|5.003007||Viu
OPf_PARENS|5.003007||Viu
op_free|5.003007|5.003007|
OP_FREED|5.017002||Viu
OPf_REF|5.003007||Viu
OPf_SPECIAL|5.003007||Viu
OPf_STACKED|5.003007||Viu
OPf_WANT|5.004000||Viu
OPf_WANT_LIST|5.004000||Viu
OPf_WANT_SCALAR|5.004000||Viu
OPf_WANT_VOID|5.004000||Viu
OP_GIMME|5.004000||Viu
OP_GIMME_REVERSE|5.010001||Viu
OpHAS_SIBLING|5.021007|5.003007|p
op_integerize|5.015003||Viu
OP_IS_DIRHOP|5.015003||Viu
OP_IS_FILETEST|5.006001||Viu
OP_IS_FILETEST_ACCESS|5.008001||Viu

OP_IS_INFIX_BIT|5.021009||Viu
OP_IS_NUMCOMPARE|5.015003||Viu
OP_IS_SOCKET|5.006001||Viu
OP_IS_STAT|5.031001||Viu
OpLASTSIB_set|5.021011|5.003007|p
op_linklist|5.013006|5.013006|
op_lvalue|5.013007|5.013007|x
op_lvalue_flags|||ciu
OP_LVALUE_NO_CROAK|5.015001||Viu
OpMAYBESIB_set|5.021011|5.003007|p
opmethod_stash|5.021007||Viu
OpMORESIB_set|5.021011|5.003007|p
OP_NAME|5.007003|5.007003|
op_null|5.007002|5.007002|
OPpALLOW_FAKE|5.015006||Viu
op_parent|5.025001|5.025001|n
OPpARG1_MASK|5.021004||Viu
OPpARG2_MASK|5.021004||Viu
OPpARG3_MASK|5.021004||Viu
OPpARG4_MASK|5.021004||Viu
OPpARGELEM_AV|5.025004||Viu
OPpARGELEM_HV|5.025004||Viu
OPpARGELEM_MASK|5.025004||Viu
OPpARGELEM_SV|5.025004||Viu
OPpASSIGN_BACKWARDS|5.003007||Viu
OPpASSIGN_COMMON_AGG|5.023002||Viu
OPpASSIGN_COMMON_RC1|5.023002||Viu
OPpASSIGN_COMMON_SCALAR|5.023002||Viu
OPpASSIGN_CV_TO_GV|5.009003||Viu
OPpASSIGN_TRUEBOOL|5.027003||Viu
OPpAVHVSWITCH_MASK|5.025006||Viu
OPpCONCAT_NESTED|5.027007||Viu
OPpCONST_BARE|5.003007||Viu
OPpCONST_ENTERED|5.003007||Viu
OPpCONST_NOVER|5.009003||Viu
OPpCONST_SHORTCIRCUIT|5.009001||Viu
OPpCONST_STRICT|5.005004||Viu
OPpCOREARGS_DEREF1|5.015003||Viu
OPpCOREARGS_DEREF2|5.015003||Viu
OPpCOREARGS_PUSHMARK|5.015003||Viu
OPpCOREARGS_SCALARMOD|5.015003||Viu
OPpDEFER_FINALLY|5.035008||Viu
OPpDEREF|5.004000||Viu
OPpDEREF_AV|5.003007||Viu
OPpDEREF_HV|5.003007||Viu
OPpDEREF_SV|5.004000||Viu
OPpDONT_INIT_GV|5.009003||Viu
OPpEARLY_CV|5.006000|5.006000|

OPpENTERSUB_AMPER|5.003007|5.003007|
OPpENTERSUB_DB|5.003007||Viu
OPpENTERSUB_HASTARG|5.006000||Viu
OPpENTERSUB_INARGS|5.006000||Viu
OPpENTERSUB_LVAL_MASK|5.015001||Viu
OPpENTERSUB_NOPAREN|5.005004||Viu
OPpEVAL_BYTES|5.015005||Viu
OPpEVAL_COPHH|5.015005||Viu
OPpEVAL_HAS_HH|5.009003||Viu
OPpEVAL_RE_REPARSING|5.017011||Viu
OPpEVAL_UNICODE|5.015005||Viu
OPpEXISTS_SUB|5.006000||Viu
OPpFLIP_LINENUM|5.003007||Viu
OPpFT_ACCESS|5.008001||Viu
OPpFT_AFTER_t|5.015008||Viu
OPpFT_STACKED|5.009001||Viu
OPpFT_STACKING|5.015001||Viu
OPpHINT_STRICT_REFS|5.021004||Viu
OPpHUSH_VMSISH|5.007003||Viu
OPpINDEX_BOOLNEG|5.027003||Viu
OPpITER_DEF|5.027008||Viu
OPpITER_REVERSED|5.009002||Viu
OPpKVSLICE|5.027001||Viu
OPpLIST_GUESSED|5.003007||Viu
OPpLVAL_DEFER|5.004000||Viu
OPpLVAL_INTRO|5.003007||Viu
OPpLVALUE|5.019006||Viu
OPpLVREF_AV|5.021005||Viu
OPpLVREF_CV|5.021005||Viu
OPpLVREF_ELEM|5.021005||Viu
OPpLVREF_HV|5.021005||Viu
OPpLVREF_ITER|5.021005||Viu
OPpLVREF_SV|5.021005||Viu
OPpLVREF_TYPE|5.021005||Viu
OPpMAYBE_LVSUB|5.007001||Viu
OPpMAYBE_TRUEBOOL|5.017004||Viu
OPpMAY_RETURN_CONSTANT|5.009003||Viu
OPpMULTICONCAT_APPEND|5.027006||Viu
OPpMULTICONCAT_FAKE|5.027006||Viu
OPpMULTICONCAT_STRINGIFY|5.027006||Viu
OPpMULTIDEREF_DELETE|5.021007||Viu
OPpMULTIDEREF_EXISTS|5.021007||Viu
OPpOFFBYONE|5.015002||Viu
OPpOPEN_IN_CRLF|5.006000||Viu
OPpOPEN_IN_RAW|5.006000||Viu
OPpOPEN_OUT_CRLF|5.006000||Viu
OPpOPEN_OUT_RAW|5.006000||Viu
OPpOUR_INTRO|5.006000||Viu

OPpPADHV_ISKEYS|5.027003||Viu
OPpPADRANGE_COUNTMASK|5.017006||Viu
OPpPADRANGE_COUNTSHIFT|5.017006||Viu
OPpPAD_STATE|5.009004||Viu
OPpPV_IS_UTF8|5.016000||Viu
OPpREFCOUNTED|5.006000||Viu
OPpREPEAT_DOLIST|5.003007||Viu
op_prepend_elem|5.013006|5.013006|
OPpREVERSE_INPLACE|5.011002||Viu
OPpRV2HV_ISKEYS|5.027003||Viu
OPpSLICE|5.004000||Viu
OPpSLICEWARNING|5.019004||Viu
OPpSORT_DESCEND|5.009002||Viu
OPpSORT_INPLACE|5.009001||Viu
OPpSORT_INTEGER|5.006000||Viu
OPpSORT_NUMERIC|5.006000||Viu
OPpSORT_REVERSE|5.006000||Viu
OPpSPLIT_ASSIGN|5.025006||Viu
OPpSPLIT_IMPLIM|5.019002||Viu
OPpSPLIT_LEX|5.025006||Viu
OPpSUBSTR_REPL_FIRST|5.015006||Viu
OPpTARGET_MY|5.006000||Viu
OPpTRANS_ALL|5.009001||Viu
OPpTRANS_CAN_FORCE_UTF8|5.031006||Viu
OPpTRANS_COMPLEMENT|5.003007||Viu
OPpTRANS_DELETE|5.003007||Viu
OPpTRANS_FROM_UTF|5.006000||Viu
OPpTRANS_GROWS|5.006000||Viu
OPpTRANS_IDENTICAL|5.006000||Viu
OPpTRANS_SQUASH|5.003007||Viu
OPpTRANS_TO_UTF|5.006000||Viu
OPpTRANS_USE_SVOP|5.031006||Viu
OPpTRUEBOOL|5.017004||Viu
OPpUSEINT|5.035005||Viu
OpREFCNT_dec|5.006000||Viu
op_refcnt_dec|||xiu
OpREFCNT_inc|5.006000||Viu
op_refcnt_inc|||xiu
OP_REFCNT_INIT|5.006000||Viu
OP_REFCNT_LOCK|5.006000||Viu
op_refcnt_lock|5.009002|5.009002|u
OpREFCNT_set|5.006000||Viu
OP_REFCNT_TERM|5.006000||Viu
OP_REFCNT_UNLOCK|5.006000||Viu
op_refcnt_unlock|5.009002|5.009002|u
op_relocate_sv|5.021005||Viu
op_scope|5.013007|5.013007|x
OP_SIBLING|5.021002||Viu

OpSIBLING|5.021007|5.003007|p
op_sibling_splice|5.021002|5.021002|n
OpSLAB|5.017002||Viu
opslab_force_free|5.017002||Viu
opslab_free|5.017002||Viu
opslab_free_nopad|5.017002||Viu
OpslabREFCNT_dec|5.017002||Viu
OpslabREFCNT_dec_padok|5.017002||Viu
OpSLOT|5.017002||Viu
OPSLOT_HEADER|5.017002||Viu
OpSLOToff|5.033001||Viu
op_std_init|5.015003||Viu
OPTIMIZED|5.005000||Viu
OPTIMIZED_t8|5.035004||Viu
OPTIMIZED_t8_p8|5.033003||Viu
OPTIMIZED_t8_pb|5.033003||Viu
OPTIMIZED_tb|5.035004||Viu
OPTIMIZED_tb_p8|5.033003||Viu
OPTIMIZED_tb_pb|5.033003||Viu
optimize_op|5.027006||Viu
optimize_optree|5.027006||Vi
optimize_regclass|5.035001||Viu
OP_TYPE_IS|5.019007|5.019007|
OP_TYPE_IS_NN|5.019010||Viu
OP_TYPE_ISNT|5.019010||Viu
OP_TYPE_ISNT_AND_WASNT|5.019010||Viu
OP_TYPE_ISNT_AND_WASNT_NN|5.019010||Viu
OP_TYPE_ISNT_NN|5.019010||Viu
OP_TYPE_IS_OR_WAS|5.019010|5.019010|
OP_TYPE_IS_OR_WAS_NN|5.019010||Viu
op_unscope|5.017003||xViu
op_wrap_finally|5.035008|5.035008|x
O_RDONLY|5.006000||Viu
O_RDWR|5.006000||Viu
ORIGMARK|5.003007|5.003007|
OSNAME|5.003007|5.003007|Vn
OSVERS|5.007002|5.007002|Vn
O_TEXT|5.006000||Viu
OutCopFILE|5.007003||Viu
output_non_portable|5.031008||Viu
output_posix_warnings|5.029005||Viu
O_VMS_DELETEONCLOSE|5.031002||Viu
O_WRONLY|5.006000||Viu
package|5.003007||Viu
package_version|5.011001||Viu
pack_cat|5.033002|5.033002|d
packlist|5.008001|5.008001|
pack_rec|5.008001||Viu

packWARN2|5.007003|5.003007|p
packWARN3|5.007003|5.003007|p
packWARN4|5.007003|5.003007|p
packWARN|5.007003|5.003007|p
pad_add_anon|5.015001|5.015001|
pad_add_name_pv|5.015001|5.015001|
pad_add_name_pvn|5.015001|5.015001|
pad_add_name_pvs|5.015001|5.015001|
pad_add_name_sv|5.015001|5.015001|
padadd_NO_DUP_CHECK|5.011002||Viu
padadd_OUR|5.011002||Viu
padadd_STALEOK|5.017003||Viu
padadd_STATE|5.011002||Viu
pad_add_weakref|5.021007||Viu
pad_alloc|5.015001|5.015001|x
pad_alloc_name|5.015001||Vi
PadARRAY|5.017004|5.017004|x
PAD_BASE_SV|5.008001||Vi
pad_block_start|5.008001||Vi
pad_check_dup|5.008001||Vi
PAD_CLONE_VARS|5.008001||Vi
PAD_COMPNAME|5.017004||Viu
PAD_COMPNAME_FLAGS|5.008001||Vi
PAD_COMPNAME_FLAGS_isOUR|5.009004||Viu
PAD_COMPNAME_GEN|5.008001||Vi
PAD_COMPNAME_GEN_set|5.009003||Vi
PAD_COMPNAME_OURSTASH|5.008001||Vi
PAD_COMPNAME_PV|5.008001||Vi
PAD_COMPNAME_SV|5.009005||Viu
PAD_COMPNAME_TYPE|5.008001||Vi
pad_compname_type|5.033005|5.033005|d
PAD_FAKELEX_ANON|5.009005||Viu
PAD_FAKELEX_MULTI|5.009005||Viu
pad_findlex|5.005000||Vi
pad_findmy_pv|5.015001|5.015001|
pad_findmy_pvn|5.015001|5.015001|
pad_findmy_pvs|5.015001|5.015001|
pad_findmy_sv|5.015001|5.015001|
pad_fixup_inner_anons|5.008001||Vi
pad_free|5.003007||Vi
pad_leavemy|5.003007||Vi
PadlistARRAY|5.017004|5.017004|x
padlist_dup|5.013002||Vi
PadlistMAX|5.017004|5.017004|x
PadlistNAMES|5.017004|5.017004|x
PadlistNAMESARRAY|5.017004|5.017004|x
PadlistNAMESMAX|5.017004|5.017004|x
PadlistREFCNT|5.017004|5.017004|x

padlist_store|5.017004||Viu
PadMAX|5.017004|5.017004|x
padname_dup|5.021007||Vi
PadnameFLAGS|5.021007||Viu
padname_free|||ciu
PADNAME_FROM_PV|5.021007||Viu
PadnameIN_SCOPE|5.031004||Vniu
PadnameIsOUR|5.017004||Vi
PadnameIsSTATE|5.017004||Vi
PadnameIsSTATE_on|5.021007||Viu
PadnameLEN|5.017004|5.017004|x
PadnamelistARRAY|5.017004|5.017004|x
padnamelist_dup|5.021007||Vi
padnamelist_fetch|5.021007|5.021007|xn
padnamelist_free|||ciu
PadnamelistMAX|5.017004|5.017004|x
PadnamelistMAXNAMED|5.019003||Viu
PadnamelistREFCNT|5.021007|5.021007|x
PadnamelistREFCNT_dec|5.021007|5.021007|x
padnamelist_store|5.021007|5.021007|x
PadnameLVALUE|5.021006||Viu
PadnameLVALUE_on|5.021006||Viu
PadnameOURSTASH|5.017004||Vi
PadnameOURSTASH_set|5.021007||Viu
PadnameOUTER|5.017004||Vi
PadnamePROTOCV|5.021007||Viu
PadnamePV|5.017004|5.017004|x
PadnameREFCNT|5.021007|5.021007|x
PadnameREFCNT_dec|5.021007|5.021007|x
PadnameSV|5.017004|5.017004|x
PADNAMEt_LVALUE|5.021007||Viu
PADNAMEt_OUR|5.021007||Viu
PADNAMEt_OUTER|5.021007|5.021007|
PADNAMEt_STATE|5.021007||Viu
PADNAMEt_TYPED|5.021007||Viu
PadnameTYPE|5.017004||Vi
PadnameTYPE_set|5.021007||Viu
PadnameUTF8|5.017004|5.017004|x
pad_new|5.015001|5.015001|
padnew_CLONE|5.008001||Viu
padnew_SAVE|5.008001||Viu
padnew_SAVESUB|5.008001||Viu
pad_peg|5.009004||Viu
pad_push|5.008001||cVi
pad_reset|5.003007||Vi
PAD_RESTORE_LOCAL|5.008001||Vi
PAD_SAVE_LOCAL|5.008001||Vi
PAD_SAVE_SETNULLPAD|5.008001||Vi

PAD_SET_CUR|5.008001||Vi
PAD_SET_CUR_NOSAVE|5.008002||Vi
pad_setsv|5.008001||cV
PAD_SETSV|5.008001||Vi
pad_sv|5.003007||cV
PAD_SV|5.003007||Vi
PAD_SVl|5.008001||Vi
pad_swipe|5.003007||Vi
pad_tidy|5.015001|5.015001|x
panic_write2|5.008001||Viu
PARENT_FAKELEX_FLAGS|5.009005||Viu
PARENT_PAD_INDEX|5.009005||Viu
parse_arithexpr|5.013008|5.013008|x
parse_barestmt|5.013007|5.013007|x
parse_block|5.013007|5.013007|x
parse_body|5.006000||Viu
parse_fullexpr|5.013008|5.013008|x
parse_fullstmt|5.013005|5.013005|x
parse_gv_stash_name|5.019004||Viu
parse_ident|5.017010||Viu
parse_label|5.013007|5.013007|x
parse_listexpr|5.013008|5.013008|x
parse_lparen_question_flags|5.017009||Viu
PARSE_OPTIONAL|5.013007|5.013007|
parser_dup|5.009000|5.009000|u
parser_free|5.009005||Viu
parser_free_nexttoke_ops|5.017006||Viu
parse_stmtseq|5.013006|5.013006|x
parse_subsignature|5.031003|5.031003|x
parse_termexpr|5.013008|5.013008|x
parse_unicode_opts|5.008001||Viu
parse_uniprop_string|5.027011||Viu
PATCHLEVEL|5.003007||Viu
path_is_searchable|5.019001||Vniu
Pause|5.003007||Viu
pause|5.005000||Viu
pclose|5.003007||Viu
peep|5.003007||Viu
pending_ident|5.017004||Viu
PERL_ABS|5.008001|5.003007|p
Perl_acos|5.021004|5.021004|n
perl_alloc|5.003007|5.003007|n
PERL_ALLOC_CHECK|5.006000||Viu
perl_alloc_using|5.006000||Vnu
PERL_ANY_COW|5.017007||Viu
PERL_API_REVISION|5.006000||Viu
PERL_API_SUBVERSION|5.006000||Viu
PERL_API_VERSION|5.006000||Viu

PERL_API_VERSION_STRING|5.013004||Viu
PERL_ARENA_ROOTS_SIZE|5.009004||Viu
PERL_ARENA_SIZE|5.009003||Viu
PERL_ARGS_ASSERT_CROAK_XS_USAGE|||ponu
Perl_asin|5.021004|5.021004|n
Perl_assert|5.011000||Viu
perl_assert_ptr|5.027004||Viu
PERL_ASYNC_CHECK|5.006000|5.006000|
Perl_atan2|5.006000|5.006000|n
Perl_atan|5.021004|5.021004|n
Perl_atof2|5.006001||Viu
Perl_atof|5.006000||Viu
PERL_BCDVERSION||5.003007|onu
PERL_BISON_VERSION|5.023008||Viu
PERL_BITFIELD16|5.010001||Viu
PERL_BITFIELD32|5.010001||Viu
PERL_BITFIELD8|5.010001||Viu
PERL_CALLCONV|5.005002||Viu
PERL_CALLCONV_NO_RET|5.017002||Viu
Perl_ceil|5.009001|5.009001|n
PERL_CKDEF|5.006000||Viu
perl_clone|5.006000||Vn
perl_clone_using|5.006000||Vnu
PERL_CLZ_32|5.035003||Viu
PERL_CLZ_64|5.035003||Viu
perl_construct|5.003007|5.003007|n
PERL_COP_SEQMAX|5.013010||Viu
PERL_COPY_ON_WRITE|5.023001||Viu
Perl_cos|5.006000|5.006000|n
Perl_cosh|5.021004|5.021004|n
PERL_COUNT_MULTIPLIER|5.027007||Viu
PERL_CTZ_32|5.035003||Viu
PERL_CTZ_64|5.035003||Viu
Perl_custom_op_xop|5.019006||V
PERLDB_ALL|5.004002||Viu
PERLDBf_GOTO|5.004005||Viu
PERLDBf_INTER|5.004002||Viu
PERLDBf_LINE|5.004002||Viu
PERLDBf_NAMEANON|5.006000||Viu
PERLDBf_NAMEEVAL|5.006000||Viu
PERLDBf_NONAME|5.004005||Viu
PERLDBf_NOOPT|5.004002||Viu
PERLDBf_SAVESRC|5.010001||Viu
PERLDBf_SAVESRC_INVALID|5.010001||Viu
PERLDBf_SAVESRC_NOSUBS|5.010001||Viu
PERLDBf_SINGLE|5.004002||Viu
PERLDBf_SUB|5.004002||Viu
PERLDBf_SUBLINE|5.004002||Viu

PERLDB_GOTO|5.004005||Viu
PERLDB_INTER|5.004002||Viu
PERLDB_LINE|5.004002||Viu
PERLDB_LINE_OR_SAVESRC|5.023002||Viu
PERLDB_NAMEANON|5.006000||Viu
PERLDB_NAMEEVAL|5.006000||Viu
PERLDB_NOOPT|5.004002||Viu
PERLDB_SAVESRC|5.010001||Viu
PERLDB_SAVESRC_INVALID|5.010001||Viu
PERLDB_SAVESRC_NOSUBS|5.010001||Viu
PERLDB_SINGLE|5.004002||Viu
PERLDB_SUB|5.004002||Viu
PERLDB_SUBLINE|5.004002||Viu
PERLDB_SUB_NN|5.004005||Viu
PERL_DEB2|5.021007||Viu
PERL_DEB|5.008001||Viu
PERL_deBruijnMagic32|5.035003||Viu
PERL_deBruijnMagic64|5.035003||Viu
PERL_deBruijnShift32|5.035003||Viu
PERL_deBruijnShift64|5.035003||Viu
PERL_DEBUG|5.008001||Viu
Perl_debug_log|5.003007||Viu
PERL_DEBUG_PAD|5.007003||Viu
PERL_DEBUG_PAD_ZERO|5.007003||Viu
PERL_DECIMAL_VERSION|5.019008||Viu
PERL_DEFAULT_DO_EXEC3_IMPLEMENTATION|5.009003||Viu
perl_destruct|5.007003|5.007003|n
PerlDir_chdir|5.005000||Viu
PerlDir_close|5.005000||Viu
PerlDir_mapA|5.006000||Viu
PerlDir_mapW|5.006000||Viu
PerlDir_mkdir|5.005000||Viu
PerlDir_open|5.005000||Viu
PerlDir_read|5.005000||Viu
PerlDir_rewind|5.005000||Viu
PerlDir_rmdir|5.005000||Viu
PerlDir_seek|5.005000||Viu
PerlDir_tell|5.005000||Viu
PERL_DONT_CREATE_GVSV|5.009003||Viu
Perl_drand48|5.019004||Viu
Perl_drand48_init|5.019004||Viu
PERL_DRAND48_QUAD|5.019004||Viu
PERL_DTRACE_PROBE_ENTRY|5.023009||Viu
PERL_DTRACE_PROBE_FILE_LOADED|5.023009||Viu
PERL_DTRACE_PROBE_FILE_LOADING|5.023009||Viu
PERL_DTRACE_PROBE_OP|5.023009||Viu
PERL_DTRACE_PROBE_PHASE|5.023009||Viu
PERL_DTRACE_PROBE_RETURN|5.023009||Viu

PERL_EBCDIC_TABLES_H|5.027001||Viu
PERL_ENABLE_EXPERIMENTAL_REGEX_OPTIMISATIONS|5.009004||Viu
PERL_ENABLE_EXTENDED_TRIE_OPTIMISATION|5.009004||Viu
PERL_ENABLE_POSITIVE_ASSERTION_STUDY|5.009005||Viu
PERL_ENABLE_TRIE_OPTIMISATION|5.009004||Viu
PerlEnv_clearenv|5.006000||Viu
PerlEnv_ENVgetenv|5.006000||Viu
PerlEnv_ENVgetenv_len|5.006000||Viu
PerlEnv_free_childdir|5.006000||Viu
PerlEnv_free_childenv|5.006000||Viu
PerlEnv_get_childdir|5.006000||Viu
PerlEnv_get_childenv|5.006000||Viu
PerlEnv_get_child_IO|5.006000||Viu
PerlEnv_getenv|5.005000||Viu
PerlEnv_getenv_len|5.006000||Viu
PerlEnv_lib_path|5.005000||Viu
PerlEnv_os_id|5.006000||Viu
PerlEnv_putenv|5.005000||Viu
PerlEnv_sitelib_path|5.005000||Viu
PerlEnv_uname|5.005004||Viu
PerlEnv_vendorlib_path|5.006000||Viu
Perl_error_log|5.006000||Viu
Perl_eval_pv||5.003007|onu
Perl_eval_sv||5.003007|onu
PERL_EXIT_ABORT|5.019003|5.019003|
PERL_EXIT_DESTRUCT_END|5.007003|5.007003|
PERL_EXIT_EXPECTED|5.006000|5.006000|
PERL_EXIT_WARN|5.019003|5.019003|
Perl_exp|5.006000|5.006000|n
Perl_fabs|5.035005||Viu
PERL_FEATURE_H|5.029006||Viu
PERL_FILE_IS_ABSOLUTE|5.006000||Viu
PERL_FILTER_EXISTS|5.009005||Viu
Perl_floor|5.006000|5.006000|n
PERL_FLUSHALL_FOR_CHILD|5.006000||Viu
Perl_fmod|5.006000|5.006000|n
Perl_fp_class|5.007003||Viu
Perl_fp_class_denorm|5.007003||Viu
Perl_fp_class_inf|5.007003||Viu
Perl_fp_class_nan|5.007003||Viu
Perl_fp_class_ndenorm|5.007003||Viu
Perl_fp_class_ninf|5.007003||Viu
Perl_fp_class_nnorm|5.007003||Viu
Perl_fp_class_norm|5.007003||Viu
Perl_fp_class_nzero|5.007003||Viu
Perl_fp_class_pdenorm|5.007003||Viu
Perl_fp_class_pinf|5.007003||Viu
Perl_fp_class_pnorm|5.007003||Viu

Perl_fp_class_pzero|5.007003||Viu
Perl_fp_class_qnan|5.007003||Viu
Perl_fp_class_snan|5.007003||Viu
Perl_fp_class_zero|5.007003||Viu
PERL_FPU_INIT|5.007002||Viu
PERL_FPU_POST_EXEC|5.008001||Viu
PERL_FPU_PRE_EXEC|5.008001||Viu
perl_free|5.003007|5.003007|n
Perl_free_c_backtrace|5.021001||Viu
Perl_frexp|5.006000|5.006000|n
PERL_FS_VER_FMT|5.006000||Viu
PERL_FS_VERSION|5.010001||Viu
PERL_GCC_BRACE_GROUPS_FORBIDDEN|5.008001||Viu
PERL_GCC_VERSION_GE|5.035003||Viu
PERL_GCC_VERSION_GT|5.035003||Viu
PERL_GCC_VERSION_LE|5.035003||Viu
PERL_GCC_VERSION_LT|5.035003||Viu
PERL_GET_CONTEXT|5.006000||Viu
PERL_GET_INTERP|5.006000||Viu
PERL_GET_THX|5.006000||Viu
PERL_GIT_UNPUSHED_COMMITS|5.010001||Viu
PERL_GPROF_MONCONTROL|5.007002||Viu
PERL_HANDY_H|5.027001||Viu
PERL_HAS_FAST_GET_LSB_POS32|5.035003||Viu
PERL_HAS_FAST_GET_LSB_POS64|5.035003||Viu
PERL_HAS_FAST_GET_MSB_POS32|5.035003||Viu
PERL_HAS_FAST_GET_MSB_POS64|5.035003||Viu
PERL_HASH|5.003007|5.003007|p
PERL_HASH_DEFAULT_HvMAX|5.017011||Viu
PERL_HASH_FUNC|5.017006||Viu
PERL_HASH_FUNC_SIPHASH13|5.033007||Viu
PERL_HASH_FUNC_ZAPHOD32|5.027001||Viu
PERL_HASH_INTERNAL|5.008002||Viu
PERL_HASH_ITER_BUCKET|5.018000||Viu
PERL_HASH_RANDOMIZE_KEYS|5.018000||Viu
PERL_HASH_SEED|5.008001||Viu
PERL_HASH_SEED_BYTES|5.017006||Viu
PERL_HASH_SEED_STATE|5.027001||Viu
PERL_HASH_SEED_WORDS|5.033007||Viu
PERL_HASH_STATE_BYTES|5.027001||Viu
PERL_HASH_STATE_WORDS|5.033007||Viu
PERL_HASH_USE_SBOX32_ALSO|5.027001||Viu
PERL_HASH_WITH_SEED|5.021001||Viu
PERL_HASH_WITH_STATE|5.027001||Viu
PERL_HV_ARRAY_ALLOC_BYTES|5.006000||Viu
PERL___I|5.009005||Viu
PERL_IMPLICIT_CONTEXT|5.006000||Viu
PERL_INC_VERSION_LIST|5.035009|5.035009|Vn

Perl_internal_drand48|5.027004||Viu
PERL_INTERPRETER_SIZE_UPTO_MEMBER|5.010000||Viu
PERL_INT_MAX|5.003007|5.003007|p
PERL_INT_MIN|5.003007|5.003007|p
PERL_INVLIST_INLINE_H|5.029006||Viu
PerlIO|5.003007||Viu
PerlIO_apply_layers|5.007001|5.007001|
PerlIOArg|5.007001||Viu
PerlIOBase|5.007001||Viu
PerlIO_binmode|5.007001|5.007001|
PERLIOBUF_DEFAULT_BUFSIZ|5.013007||Viu
PerlIO_canset_cnt|5.003007|5.003007|n
PerlIO_clearerr|5.007003|5.007003|
PerlIO_close|5.007003|5.007003|
PerlIO_context_layers|||u
PerlIO_debug|5.007001|5.007001|
PERLIO_DUP_CLONE|5.007003||Viu
PERLIO_DUP_FD|5.007003||Viu
PerlIO_eof|5.007003|5.007003|
PerlIO_error|5.007003|5.007003|
PerlIO_exportFILE|5.003007|5.003007|n
PERLIO_F_APPEND|5.007001|5.007001|
PerlIO_fast_gets|5.003007|5.003007|n
PERLIO_F_CANREAD|5.007001|5.007001|
PERLIO_F_CANWRITE|5.007001|5.007001|
PERLIO_F_CLEARED|5.013008||Viu
PERLIO_F_CRLF|5.007001|5.007001|
PerlIO_fdopen|5.003007|5.003007|n
PERLIO_F_EOF|5.007001|5.007001|
PERLIO_F_ERROR|5.007001|5.007001|
PERLIO_F_FASTGETS|5.007001|5.007001|
PerlIO_fileno|5.007003|5.007003|
PerlIO_fill|5.007000|5.007000|u
PerlIO_findFILE|5.003007|5.003007|n
PERLIO_F_LINEBUF|5.007001|5.007001|
PerlIO_flush|5.007003|5.007003|
PERLIO_F_NOTREG|5.008001||Viu
PERLIO_F_OPEN|5.007001|5.007001|
PERLIO_F_RDBUF|5.007001|5.007001|
PERLIO_F_TEMP|5.007001|5.007001|
PERLIO_F_TRUNCATE|5.007001|5.007001|
PERLIO_F_TTY|5.007001||Viu
PERLIO_F_UNBUF|5.007001|5.007001|
PERLIO_FUNCS_CAST|5.009003||pVu
PERLIO_FUNCS_DECL|5.009003|5.009003|pVu
PERLIO_F_UTF8|5.007001|5.007001|
PERLIO_F_WRBUF|5.007001|5.007001|
PerlIO_get_base|5.007003|5.007003|

PerlIO_get_bufsiz|5.007003|5.007003|
PerlIO_getc|5.003007|5.003007|n
PerlIO_get_cnt|5.007003|5.007003|
PerlIO_getpos|5.003007|5.003007|n
PerlIO_get_ptr|5.007003|5.007003|
PERLIO_H|5.027001||Viu
PerlIO_has_base|5.003007|5.003007|n
PerlIO_has_cntptr|5.003007|5.003007|n
PerlIO_importFILE|5.003007|5.003007|n
PERLIO_INIT|5.009005||Viu
PERLIO_K_BUFFERED|5.007001|5.007001|
PERLIO_K_CANCRLF|5.007001|5.007001|
PERLIO_K_DESTRUCT|5.007001||Viu
PERLIO_K_DUMMY|5.007001||Viu
PERLIO_K_FASTGETS|5.007001|5.007001|
PERLIO_K_MULTIARG|5.007003|5.007003|
PERLIO_K_RAW|5.007001|5.007001|
PERLIO_K_UTF8|5.007001||Viu
PERLIO_LAYERS|5.007001||Viu
PERLIOL_H|5.027001||Viu
PerlIONext|5.007001||Viu
PERLIO_NOT_STDIO|5.003007||Viu
PerlIO_open|5.003007|5.003007|n
PerlIO_printf|5.006000|5.003007|
PerlIO_putc|5.003007|5.003007|n
PerlIO_puts|5.003007|5.003007|n
PerlIO_read|5.007003|5.007003|
PerlIO_releaseFILE|5.003007|5.003007|n
PerlIO_reopen|5.003007|5.003007|n
PerlIO_restore_errno|5.021006||cViu
PerlIO_rewind|5.003007|5.003007|n
PerlIO_save_errno|5.021006||cViu
PerlIO_seek|5.007003|5.007003|
PerlIOSelf|5.007001||Viu
PerlIO_set_cnt|5.007003|5.007003|
PerlIO_setlinebuf|5.007003|5.007003|
PerlIO_setpos|5.003007|5.003007|n
PerlIO_set_ptrcnt|5.007003|5.007003|
PerlIO_stderr|5.007003|5.007003|
PerlIO_stdin|5.007003|5.007003|
PerlIO_stdout|5.007003|5.007003|
PerlIO_stdoutf|5.006000|5.003007|
PERLIO_STDTEXT|5.007001||Viu
PerlIO_tell|5.007003|5.007003|
PERLIO_TERM|5.009005||Viu
PerlIO_ungetc|5.003007|5.003007|n
PerlIO_unread|5.007003|5.007003|u
PERLIO_USING_CRLF|5.007003||Viu

PerlIOValid|5.007003||Viu
PerlIO_vprintf|5.003007|5.003007|n
PerlIO_write|5.007003|5.007003|
Perl_isfinite|5.007003|5.007003|n
Perl_isfinitel|5.021004||Viu
PERL_IS_GCC|5.032001||Viu
Perl_isinf|5.007003|5.007003|n
Perl_isnan|5.006001|5.006001|n
PERL_IS_SUBWORD_ADDR|5.027007||Viu
PERL_IS_UTF8_CHAR_DFA|5.035004||Viu
PERL_JNP_TO_DECIMAL|5.033001||Viu
Perl_langinfo|5.027004|5.027004|n
PERL_LANGINFO_H|5.027004||Viu
PERL_LAST_5_18_0_INTERP_MEMBER|5.017009||Viu
Perl_ldexp|5.021003|5.021003|n
PerlLIO_access|5.005000||Viu
PerlLIO_chmod|5.005000||Viu
PerlLIO_chown|5.005000||Viu
PerlLIO_chsize|5.005000||Viu
PerlLIO_close|5.005000||Viu
PerlLIO_dup2|5.005000||Viu
PerlLIO_dup2_cloexec|5.027008||Viu
PerlLIO_dup|5.005000||Viu
PerlLIO_dup_cloexec|5.027008||Viu
PerlLIO_flock|5.005000||Viu
PerlLIO_fstat|5.005000||Viu
PerlLIO_ioctl|5.005000||Viu
PerlLIO_isatty|5.005000||Viu
PerlLIO_link|5.006000||Viu
PerlLIO_lseek|5.005000||Viu
PerlLIO_lstat|5.005000||Viu
PerlLIO_mktemp|5.005000||Viu
PerlLIO_open3|5.005000||Viu
PerlLIO_open3_cloexec|5.027008||Viu
PerlLIO_open|5.005000||Viu
PerlLIO_open_cloexec|5.027008||Viu
PerlLIO_read|5.005000||Viu
PerlLIO_readlink|5.033005||Viu
PerlLIO_rename|5.005000||Viu
PerlLIO_setmode|5.005000||Viu
PerlLIO_stat|5.005000||Viu
PerlLIO_symlink|5.033005||Viu
PerlLIO_tmpnam|5.005000||Viu
PerlLIO_umask|5.005000||Viu
PerlLIO_unlink|5.005000||Viu
PerlLIO_utime|5.005000||Viu
PerlLIO_write|5.005000||Viu
PERL_LOADMOD_DENY|5.006000|5.003007|

PERL_LOADMOD_IMPORT_OPS|5.006000|5.003007|
PERL_LOADMOD_NOIMPORT|5.006000|5.003007|
Perl_log10|5.021004|5.021004|n
Perl_log|5.006000|5.006000|n
PERL_LONG_MAX|5.003007|5.003007|p
PERL_LONG_MIN|5.003007|5.003007|p
PERL_MAGIC_arylen|5.007002|5.003007|p
PERL_MAGIC_arylen_p|5.009003|5.009003|
PERL_MAGIC_backref|5.007002|5.003007|p
PERL_MAGIC_bm|5.007002|5.003007|p
PERL_MAGIC_checkcall|5.013006|5.013006|
PERL_MAGIC_collxfrm|5.007002|5.003007|p
PERL_MAGIC_dbfile|5.007002|5.003007|p
PERL_MAGIC_dbline|5.007002|5.003007|p
PERL_MAGIC_debugvar|5.021005|5.021005|
PERL_MAGIC_defelem|5.007002|5.003007|p
PERL_MAGIC_env|5.007002|5.003007|p
PERL_MAGIC_envelem|5.007002|5.003007|p
PERL_MAGIC_ext|5.007002|5.003007|p
PERL_MAGIC_fm|5.007002|5.003007|p
PERL_MAGIC_glob||5.003007|ponu
PERL_MAGIC_hints|5.009004|5.009004|
PERL_MAGIC_hintselem|5.009004|5.009004|
PERL_MAGIC_isa|5.007002|5.003007|p
PERL_MAGIC_isaelem|5.007002|5.003007|p
PERL_MAGIC_lvref|5.021005|5.021005|
PERL_MAGIC_mutex||5.003007|ponu
PERL_MAGIC_nkeys|5.007002|5.003007|p
PERL_MAGIC_nonelem|5.027009|5.027009|
PERL_MAGIC_overload||5.003007|ponu
PERL_MAGIC_overload_elem||5.003007|ponu
PERL_MAGIC_overload_table|5.007002|5.003007|p
PERL_MAGIC_pos|5.007002|5.003007|p
PERL_MAGIC_qr|5.007002|5.003007|p
PERL_MAGIC_READONLY_ACCEPTABLE|5.015000||Viu
PERL_MAGIC_regdata|5.007002|5.003007|p
PERL_MAGIC_regdatum|5.007002|5.003007|p
PERL_MAGIC_regex_global|5.007002|5.003007|p
PERL_MAGIC_rhash|5.009003|5.009003|
PERL_MAGIC_shared|5.007003|5.003007|p
PERL_MAGIC_shared_scalar|5.007003|5.003007|p
PERL_MAGIC_sig|5.007002|5.003007|p
PERL_MAGIC_sigelem|5.007002|5.003007|p
PERL_MAGIC_substr|5.007002|5.003007|p
PERL_MAGIC_sv|5.007002|5.003007|p
PERL_MAGIC_symtab|5.009003|5.009003|
PERL_MAGIC_taint|5.007002|5.003007|p
PERL_MAGIC_tied|5.007002|5.003007|p

PERL_MAGIC_tiedelem|5.007002|5.003007|p
PERL_MAGIC_tiedscalar|5.007002|5.003007|p
PERL_MAGIC_TYPE_IS_VALUE_MAGIC|5.015000||Viu
PERL_MAGIC_TYPE_READONLY_ACCEPTABLE|5.015000||Viu
PERL_MAGIC_utf8|5.008001|5.003007|p
PERL_MAGIC_UTF8_CACHESIZE|5.008001||Viu
PERL_MAGIC_uvar|5.007002|5.003007|p
PERL_MAGIC_uvar_elem|5.007003|5.003007|p
PERL_MAGIC_VALUE_MAGIC|5.015000||Viu
PERL_MAGIC_vec|5.007002|5.003007|p
PERL_MAGIC_vstring|5.008001|5.003007|p
PERL_MAGIC_VTABLE_MASK|5.015000||Viu
PERL_MALLOC_CTL_H|5.027001||Viu
Perl_malloc_good_size|5.010001||Viu
PERL_MALLOC_WRAP|5.009002|5.009002|Vn
PerlMem_calloc|5.006000||Viu
PerlMem_free|5.005000||Viu
PerlMem_free_lock|5.006000||Viu
PerlMem_get_lock|5.006000||Viu
PerlMem_is_locked|5.006000||Viu
PerlMem_malloc|5.005000||Viu
PERL_MEMORY_DEBUG_HEADER_SIZE|5.019009||Viu
PerlMemParse_calloc|5.006000||Viu
PerlMemParse_free|5.006000||Viu
PerlMemParse_free_lock|5.006000||Viu
PerlMemParse_get_lock|5.006000||Viu
PerlMemParse_is_locked|5.006000||Viu
PerlMemParse_malloc|5.006000||Viu
PerlMemParse_realloc|5.006000||Viu
PerlMem_realloc|5.005000||Viu
PerlMemShared_calloc|5.006000||Viu
PerlMemShared_free|5.006000||Viu
PerlMemShared_free_lock|5.006000||Viu
PerlMemShared_get_lock|5.006000||Viu
PerlMemShared_is_locked|5.006000||Viu
PerlMemShared_malloc|5.006000||Viu
PerlMemShared_realloc|5.006000||Viu
PERL_MG_UFUNC|5.007001||Viu
Perl_modf|5.006000|5.006000|n
PERL_MULTICONCAT_HEADER_SIZE|5.027006||Viu
PERL_MULTICONCAT_IX_LENGTHS|5.027006||Viu
PERL_MULTICONCAT_IX_NARGS|5.027006||Viu
PERL_MULTICONCAT_IX_PLAIN_LEN|5.027006||Viu
PERL_MULTICONCAT_IX_PLAIN_PV|5.027006||Viu
PERL_MULTICONCAT_IX_UTF8_LEN|5.027006||Viu
PERL_MULTICONCAT_IX_UTF8_PV|5.027006||Viu
PERL_MULTICONCAT_MAXARG|5.027006||Viu
Perl_my_mkostemp|5.027008||Viu

Perl_my_mkstemp|5.027004||Viu
PERL_MY_SNPRINTF_GUARDED|5.009004||Viu
PERL_MY_SNPRINTF_POST_GUARD|5.021002||Viu
PERL_MY_VSNPRINTF_GUARDED|5.009004||Viu
PERL_MY_VSNPRINTF_POST_GUARD|5.021002||Viu
PERL_NO_DEV_RANDOM|5.009004||Viu
PERL_NON_CORE_CHECK_EMPTY|5.035004||Viu
PERL_OBJECT_THIS|5.005000||Viu
PERL_OP_PARENT|5.025001||Viu
PERL_PADNAME_MINIMAL|5.021007||Viu
PERL_PADSEQ_INTRO|5.013010||Viu
perl_parse|5.006000|5.006000|n
PERL_PATCHLEVEL_H_IMPLICIT|5.006000||Viu
PERL_PATCHNUM|5.010001||Viu
PERL_POISON_EXPR|5.019006||Viu
Perl_pow|5.006000|5.006000|n
Perl_pp_accept|5.013009||Viu
Perl_pp_aelemfast_lex|5.015000||Viu
Perl_pp_andassign|5.013009||Viu
Perl_pp_avalues|5.013009||Viu
Perl_pp_bind|5.013009||Viu
Perl_pp_bit_xor|5.013009||Viu
Perl_pp_chmod|5.013009||Viu
Perl_pp_chomp|5.013009||Viu
Perl_pp_connect|5.013009||Viu
Perl_pp_cos|5.013009||Viu
Perl_pp_custom|5.013009||Viu
Perl_pp_dbmclose|5.013009||Viu
PERL_PPDEF|5.006000||Viu
Perl_pp_dofile|5.013009||Viu
Perl_pp_dor|5.013009||Viu
Perl_pp_dorassign|5.013009||Viu
Perl_pp_dump|5.013009||Viu
Perl_pp_egrent|5.013009||Viu
Perl_pp_enetent|5.013009||Viu
Perl_pp_eprotoent|5.013009||Viu
Perl_pp_epwent|5.013009||Viu
Perl_pp_eservent|5.013009||Viu
Perl_pp_exp|5.013009||Viu
Perl_pp_fcntl|5.013009||Viu
Perl_pp_ftatime|5.013009||Viu
Perl_pp_ftbinary|5.013009||Viu
Perl_pp_ftblk|5.013009||Viu
Perl_pp_ftchr|5.013009||Viu
Perl_pp_ftctime|5.013009||Viu
Perl_pp_ftdir|5.013009||Viu
Perl_pp_fteexec|5.013009||Viu
Perl_pp_fteowned|5.013009||Viu

Perl_pp_fteread|5.013009||Viu
Perl_pp_ftewrite|5.013009||Viu
Perl_pp_ftfile|5.013009||Viu
Perl_pp_ftmtime|5.013009||Viu
Perl_pp_ftpipe|5.013009||Viu
Perl_pp_ftrexec|5.013009||Viu
Perl_pp_ftrwrite|5.013009||Viu
Perl_pp_ftsgid|5.013009||Viu
Perl_pp_ftsize|5.013009||Viu
Perl_pp_ftsock|5.013009||Viu
Perl_pp_ftsuid|5.013009||Viu
Perl_pp_ftsvtx|5.013009||Viu
Perl_pp_ftzero|5.013009||Viu
Perl_pp_getpeername|5.013009||Viu
Perl_pp_getsockname|5.013009||Viu
Perl_pp_ggrgid|5.013009||Viu
Perl_pp_ggrnam|5.013009||Viu
Perl_pp_ghbyaddr|5.013009||Viu
Perl_pp_ghbyname|5.013009||Viu
Perl_pp_gnbyaddr|5.013009||Viu
Perl_pp_gnbyname|5.013009||Viu
Perl_pp_gpbyname|5.013009||Viu
Perl_pp_gpbynumber|5.013009||Viu
Perl_pp_gpwnam|5.013009||Viu
Perl_pp_gpwuid|5.013009||Viu
Perl_pp_gsbyname|5.013009||Viu
Perl_pp_gsbyport|5.013009||Viu
Perl_pp_gsockopt|5.013009||Viu
Perl_pp_hex|5.013009||Viu
Perl_pp_i_postdec|5.006000||Viu
Perl_pp_i_postinc|5.006000||Viu
Perl_pp_i_predec|5.006000||Viu
Perl_pp_i_preinc|5.006000||Viu
Perl_pp_keys|5.013009||Viu
Perl_pp_kill|5.013009||Viu
Perl_pp_lcfirst|5.013009||Viu
Perl_pp_lineseq|5.013009||Viu
Perl_pp_listen|5.013009||Viu
Perl_pp_localtime|5.013009||Viu
Perl_pp_log|5.013009||Viu
Perl_pp_lstat|5.013009||Viu
Perl_pp_mapstart|5.013009||Viu
Perl_pp_msgctl|5.013009||Viu
Perl_pp_msgget|5.013009||Viu
Perl_pp_msgrcv|5.013009||Viu
Perl_pp_msgsnd|5.013009||Viu
Perl_pp_nbit_xor|5.021009||Viu
Perl_pp_orassign|5.013009||Viu

Perl_pp_padany|5.013009||Viu
Perl_pp_pop|5.013009||Viu
Perl_pp_read|5.013009||Viu
Perl_pp_recv|5.013009||Viu
Perl_pp_regcmaybe|5.013009||Viu
Perl_pp_rindex|5.013009||Viu
Perl_pp_rv2hv|5.013009||Viu
Perl_pp_say|5.013009||Viu
Perl_pp_sbit_xor|5.021009||Viu
Perl_pp_scalar|5.013009||Viu
Perl_pp_schomp|5.013009||Viu
Perl_pp_scope|5.013009||Viu
Perl_pp_seek|5.013009||Viu
Perl_pp_semop|5.013009||Viu
Perl_pp_send|5.013009||Viu
Perl_pp_sge|5.013009||Viu
Perl_pp_sgrent|5.013009||Viu
Perl_pp_sgt|5.013009||Viu
Perl_pp_shmctl|5.013009||Viu
Perl_pp_shmget|5.013009||Viu
Perl_pp_shmread|5.013009||Viu
Perl_pp_shutdown|5.013009||Viu
Perl_pp_slt|5.013009||Viu
Perl_pp_snetent|5.013009||Viu
Perl_pp_socket|5.013009||Viu
Perl_pp_sprotoent|5.013009||Viu
Perl_pp_spwent|5.013009||Viu
Perl_pp_sqrt|5.013009||Viu
Perl_pp_sservent|5.013009||Viu
Perl_pp_ssockopt|5.013009||Viu
Perl_pp_symlink|5.013009||Viu
Perl_pp_transr|5.013009||Viu
Perl_pp_unlink|5.013009||Viu
Perl_pp_utime|5.013009||Viu
Perl_pp_values|5.013009||Viu
PERL_PRESERVE_IVUV|5.007001||Viu
PERL_PRIeldbl|5.006001|5.006001|Vn
PERL_PRIfldbl|5.006000|5.006000|Vn
PERL_PRIgldbl|5.006000|5.006000|Vn
PerlProc_abort|5.005000||Viu
PerlProc_crypt|5.005000||Viu
PerlProc_DynaLoad|5.006000||Viu
PerlProc_execl|5.005000||Viu
PerlProc_execv|5.005000||Viu
PerlProc_execvp|5.005000||Viu
PerlProc__exit|5.005000||Viu
PerlProc_exit|5.005000||Viu
PerlProc_fork|5.006000||Viu

PerlProc_getegid|5.005000||Viu
PerlProc_geteuid|5.005000||Viu
PerlProc_getgid|5.005000||Viu
PerlProc_getlogin|5.005000||Viu
PerlProc_GetOSError|5.006000||Viu
PerlProc_getpid|5.006000||Viu
PerlProc_gettimeofday|5.008000||Viu
PerlProc_getuid|5.005000||Viu
PerlProc_kill|5.005000||Viu
PerlProc_killpg|5.005000||Viu
PerlProc_lasthost|5.007001||Viu
PerlProc_longjmp|5.005000||Viu
PerlProc_pause|5.005000||Viu
PerlProc_pclose|5.005000||Viu
PerlProc_pipe|5.005000||Viu
PerlProc_pipe_cloexec|5.027008||Viu
PerlProc_popen|5.005000||Viu
PerlProc_popen_list|5.007001||Viu
PerlProc_setgid|5.005000||Viu
PerlProc_setjmp|5.005000||Viu
PerlProc_setuid|5.005000||Viu
PerlProc_signal|5.005000||Viu
PerlProc_sleep|5.005000||Viu
PerlProc_spawnvp|5.008000||Viu
PerlProc_times|5.005000||Viu
PerlProc_wait|5.005000||Viu
PerlProc_waitpid|5.005000||Viu
perl_pthread_mutex_lock|5.023006||Viu
perl_pthread_mutex_unlock|5.023006||Viu
PERL_PV_ESCAPE_ALL|5.009004|5.003007|p
PERL_PV_ESCAPE_DWIM|5.019008||Viu
PERL_PV_ESCAPE_DWIM_ALL_HEX|||Viu
PERL_PV_ESCAPE_FIRSTCHAR|5.009004|5.003007|p
PERL_PV_ESCAPE_NOBACKSLASH|5.009004|5.003007|p
PERL_PV_ESCAPE_NOCLEAR|5.009004|5.003007|p
PERL_PV_ESCAPE_NONASCII|5.013009|5.013009|
PERL_PV_ESCAPE_QUOTE|5.009004|5.003007|p
PERL_PV_ESCAPE_RE|5.009005|5.003007|p
PERL_PV_ESCAPE_UNI|5.009004|5.003007|p
PERL_PV_ESCAPE_UNI_DETECT|5.009004|5.003007|p
PERL_PV_PRETTY_DUMP|5.009004||pcV
PERL_PV_PRETTY_ELLIPSES|5.010000|5.003007|p
PERL_PV_PRETTY_EXACTSIZE|5.021005||Viu
PERL_PV_PRETTY_LTGT|5.009004|5.003007|p
PERL_PV_PRETTY_NOCLEAR|5.010000||pcV
PERL_PV_PRETTY_QUOTE|5.009004|5.003007|p
PERL_PV_PRETTY_REGPROP|5.009004||pcV
PERL_QUAD_MAX|5.003007|5.003007|p

PERL_QUAD_MIN|5.003007|5.003007|p
PERL_READ_LOCK|5.033005||Viu
PERL_READ_UNLOCK|5.033005||Viu
PERL_REENTR_API|5.009005||Viu
PERL_REENTR_H|5.027001||Viu
PERL_REENTR_USING_ASCTIME_R|5.031011||Viu
PERL_REENTR_USING_CRYPT_R|5.031011||Viu
PERL_REENTR_USING_CTERMID_R|5.031011||Viu
PERL_REENTR_USING_CTIME_R|5.031011||Viu
PERL_REENTR_USING_ENDGRENT_R|5.031011||Viu
PERL_REENTR_USING_ENDHOSTENT_R|5.031011||Viu
PERL_REENTR_USING_ENDNETENT_R|5.031011||Viu
PERL_REENTR_USING_ENDPROTOENT_R|5.031011||Viu
PERL_REENTR_USING_ENDPWENT_R|5.031011||Viu
PERL_REENTR_USING_ENDSERVENT_R|5.031011||Viu
PERL_REENTR_USING_GETGRENT_R|5.031011||Viu
PERL_REENTR_USING_GETGRGID_R|5.031011||Viu
PERL_REENTR_USING_GETGRNAM_R|5.031011||Viu
PERL_REENTR_USING_GETHOSTBYADDR_R|5.031011||Viu
PERL_REENTR_USING_GETHOSTBYNAME_R|5.031011||Viu
PERL_REENTR_USING_GETHOSTENT_R|5.031011||Viu
PERL_REENTR_USING_GETLOGIN_R|5.031011||Viu
PERL_REENTR_USING_GETNETBYADDR_R|5.031011||Viu
PERL_REENTR_USING_GETNETBYNAME_R|5.031011||Viu
PERL_REENTR_USING_GETNETENT_R|5.031011||Viu
PERL_REENTR_USING_GETPROTOBYNAME_R|5.031011||Viu
PERL_REENTR_USING_GETPROTOBYNUMBER_R|5.031011||Viu
PERL_REENTR_USING_GETPROTOENT_R|5.031011||Viu
PERL_REENTR_USING_GETPWENT_R|5.031011||Viu
PERL_REENTR_USING_GETPWNAM_R|5.031011||Viu
PERL_REENTR_USING_GETPWUID_R|5.031011||Viu
PERL_REENTR_USING_GETSERVBYNAME_R|5.031011||Viu
PERL_REENTR_USING_GETSERVBYPORT_R|5.031011||Viu
PERL_REENTR_USING_GETSERVENT_R|5.031011||Viu
PERL_REENTR_USING_GETSPNAM_R|5.031011||Viu
PERL_REENTR_USING_GMTIME_R|5.031011||Viu
PERL_REENTR_USING_LOCALTIME_R|5.031011||Viu
PERL_REENTR_USING_READDIR64_R|5.031011||Viu
PERL_REENTR_USING_READDIR_R|5.031011||Viu
PERL_REENTR_USING_SETGRENT_R|5.031011||Viu
PERL_REENTR_USING_SETHOSTENT_R|5.031011||Viu
PERL_REENTR_USING_SETLOCALE_R|5.031011||Viu
PERL_REENTR_USING_SETNETENT_R|5.031011||Viu
PERL_REENTR_USING_SETPROTOENT_R|5.031011||Viu
PERL_REENTR_USING_SETPWENT_R|5.031011||Viu
PERL_REENTR_USING_SETSERVENT_R|5.031011||Viu
PERL_REENTR_USING_STRERROR_R|5.031011||Viu
PERL_REENTR_USING_TMPNAM_R|5.031011||Viu

PERL_REENTR_USING_TTYNAME_R|5.031011||Viu
PERL_REGCHARCLASS_H|5.027001||Viu
PERL_REGCOMP_H|5.029006||Viu
PERL_REGMATCH_SLAB_SLOTS|5.009004||Viu
PERL_RELOCATABLE_INC|5.017002|5.017002|Vn
PERL_REVISION|5.006000|5.006000|d
perl_run|5.003007|5.003007|n
PERL_RW_MUTEX_DESTROY|5.033005||Viu
PERL_RW_MUTEX_INIT|5.033005||Viu
Perl_safesysmalloc_size|5.010001||Viu
PERL_SAWAMPERSAND|5.017010||Viu
PERL_SCAN_ALLOW_MEDIAL_UNDERSCORES|5.031009||Viu
PERL_SCAN_ALLOW_UNDERSCORES|5.007003|5.003007|p
PERL_SCAN_DISALLOW_PREFIX|5.007003|5.003007|p
PERL_SCAN_GREATER_THAN_UV_MAX|5.007003|5.003007|p
PERL_SCAN_NOTIFY_ILLDIGIT|5.031008||Viu
PERL_SCAN_SILENT_ILLDIGIT|5.008001|5.003007|p
PERL_SCAN_SILENT_NON_PORTABLE|5.015001||Viu
PERL_SCAN_SILENT_OVERFLOW|5.031009||Viu
PERL_SCAN_TRAILING|5.021002|5.021002|
PERL_SCNfldbl|5.006001|5.006001|Vn
PERL_SCRIPT_MODE|5.004005||Viu
PERL_SEEN_HV_FUNC_H|5.017010||Viu
PERL_SEEN_HV_MACRO_H|5.027001||Viu
PERL_SET_CONTEXT|5.006000||Viu
PERL_SET_INTERP|5.006000||Viu
Perl_setlocale|5.027002|5.027002|n
PERL_SET_PHASE|5.015001||Viu
PERL_SET_THX|5.006000||Viu
Perl_sharepvn|5.006000||Viu
PERL_SHORT_MAX|5.003007|5.003007|p
PERL_SHORT_MIN|5.003007|5.003007|p
PERLSI_DESTROY|5.005000||Viu
PERLSI_DIEHOOK|5.005000||Viu
PERL_SIGNALS_UNSAFE_FLAG|5.008001|5.003007|p
Perl_signbit|5.009005|5.009005|xn
PERLSI_MAGIC|5.005000||Viu
PERLSI_MAIN|5.005000||Viu
PERLSI_MULTICALL|5.023000||Viu
Perl_sin|5.006000|5.006000|n
Perl_sinh|5.021004|5.021004|n
PerlSIO_canset_cnt|5.007001||Viu
PerlSIO_clearerr|5.007001||Viu
PerlSIO_fast_gets|5.007001||Viu
PerlSIO_fclose|5.007001||Viu
PerlSIO_fdopen|5.007001||Viu
PerlSIO_fdupopen|5.007001||Viu
PerlSIO_feof|5.007001||Viu

PerlSIO_ferror|5.007001||Viu
PerlSIO_fflush|5.007001||Viu
PerlSIO_fgetc|5.007001||Viu
PerlSIO_fgetpos|5.007001||Viu
PerlSIO_fgets|5.007001||Viu
PerlSIO_fileno|5.007001||Viu
PerlSIO_fopen|5.007001||Viu
PerlSIO_fputc|5.007001||Viu
PerlSIO_fputs|5.007001||Viu
PerlSIO_fread|5.007001||Viu
PerlSIO_freopen|5.007001||Viu
PerlSIO_fseek|5.007001||Viu
PerlSIO_fsetpos|5.007001||Viu
PerlSIO_ftell|5.007001||Viu
PerlSIO_fwrite|5.007001||Viu
PerlSIO_get_base|5.007001||Viu
PerlSIO_get_bufsiz|5.007001||Viu
PerlSIO_get_cnt|5.007001||Viu
PerlSIO_get_ptr|5.007001||Viu
PerlSIO_has_base|5.007001||Viu
PerlSIO_has_cntptr|5.007001||Viu
PerlSIO_init|5.007001||Viu
PerlSIO_printf|5.007001||Viu
PerlSIO_rewind|5.007001||Viu
PerlSIO_setbuf|5.007001||Viu
PerlSIO_set_cnt|5.007001||Viu
PerlSIO_setlinebuf|5.007001||Viu
PerlSIO_set_ptr|5.007001||Viu
PerlSIO_setvbuf|5.007001||Viu
PerlSIO_stderr|5.007001||Viu
PerlSIO_stdin|5.007001||Viu
PerlSIO_stdout|5.007001||Viu
PerlSIO_stdoutf|5.007001||Viu
PerlSIO_tmpfile|5.007001||Viu
PerlSIO_ungetc|5.007001||Viu
PERLSI_OVERLOAD|5.005000||Viu
PerlSIO_vprintf|5.007001||Viu
PERL_SIPHASH_FNC|5.025008||Viu
PERLSI_REGCOMP|5.031011||Viu
PERLSI_REQUIRE|5.005000||Viu
PERLSI_SIGNAL|5.005000||Viu
PERLSI_SORT|5.005000||Viu
PERLSI_UNDEF|5.005000||Viu
PERLSI_UNKNOWN|5.005000||Viu
PERLSI_WARNHOOK|5.005000||Viu
PERL_SNPRINTF_CHECK|5.021002||Viu
PerlSock_accept|5.005000||Viu
PerlSock_accept_cloexec|5.027008||Viu

PerlSock_bind|5.005000||Viu
PerlSock_closesocket|5.006000||Viu
PerlSock_connect|5.005000||Viu
PerlSock_endhostent|5.005000||Viu
PerlSock_endnetent|5.005000||Viu
PerlSock_endprotoent|5.005000||Viu
PerlSock_endservent|5.005000||Viu
PerlSock_gethostbyaddr|5.005000||Viu
PerlSock_gethostbyname|5.005000||Viu
PerlSock_gethostent|5.005000||Viu
PerlSock_gethostname|5.005000||Viu
PerlSock_getnetbyaddr|5.005000||Viu
PerlSock_getnetbyname|5.005000||Viu
PerlSock_getnetent|5.005000||Viu
PerlSock_getpeername|5.005000||Viu
PerlSock_getprotobyname|5.005000||Viu
PerlSock_getprotobynumber|5.005000||Viu
PerlSock_getprotoent|5.005000||Viu
PerlSock_getservbyname|5.005000||Viu
PerlSock_getservbyport|5.005000||Viu
PerlSock_getservent|5.005000||Viu
PerlSock_getsockname|5.005000||Viu
PerlSock_getsockopt|5.005000||Viu
PerlSock_htonl|5.005000||Viu
PerlSock_htons|5.005000||Viu
PerlSock_inet_addr|5.005000||Viu
PerlSock_inet_ntoa|5.005000||Viu
PerlSock_listen|5.005000||Viu
PerlSock_ntohl|5.005000||Viu
PerlSock_ntohs|5.005000||Viu
PerlSock_recv|5.005000||Viu
PerlSock_recvfrom|5.005000||Viu
PerlSock_select|5.005000||Viu
PerlSock_send|5.005000||Viu
PerlSock_sendto|5.005000||Viu
PerlSock_sethostent|5.005000||Viu
PerlSock_setnetent|5.005000||Viu
PerlSock_setprotoent|5.005000||Viu
PerlSock_setservent|5.005000||Viu
PerlSock_setsockopt|5.005000||Viu
PerlSock_shutdown|5.005000||Viu
PERL_SOCKS_NEED_PROTOTYPES|5.007001||Viu
PerlSock_socket|5.005000||Viu
PerlSock_socket_cloexec|5.027008||Viu
PerlSock_socketpair|5.005000||Viu
PerlSock_socketpair_cloexec|5.027008||Viu
Perl_sqrt|5.006000|5.006000|n
PERL_STACK_OVERFLOW_CHECK|5.006000||Viu

PERL_STATIC_FORCE_INLINE|5.031011||Viu
PERL_STATIC_FORCE_INLINE_NO_RET|5.031011||Viu
PERL_STATIC_INLINE|5.013004|5.013004|poVn
PERL_STATIC_INLINE_NO_RET|5.017005||Viu
PERL_STATIC_NO_RET|5.017005||Viu
PERL_STRLEN_EXPAND_SHIFT|5.013004||Viu
PERL_STRLEN_ROUNDUP|5.009003||Viu
PERL_STRLEN_ROUNDUP_QUANTUM|5.009003||Viu
Perl_strtod|5.021004||Viu
PERL_SUB_DEPTH_WARN|5.010001||Viu
PERL_SUBVERSION|5.006000|5.003007|d
PERL_SYS_FPU_INIT|5.021005||Viu
PERL_SYS_INIT3|5.006000|5.006000|
PERL_SYS_INIT3_BODY|5.010000||Viu
PERL_SYS_INIT|5.003007|5.003007|
PERL_SYS_INIT_BODY|5.010000||Viu
PERL_SYS_TERM|5.003007|5.003007|
PERL_SYS_TERM_BODY|5.010000||Viu
Perl_tan|5.021004|5.021004|n
Perl_tanh|5.021004|5.021004|n
PERL_TARGETARCH|5.007002|5.007002|Vn
PERL_THREAD_LOCAL|5.035004|5.035004|Vn
PERL_TIME64_CONFIG_H|5.027001||Viu
PERL_TIME64_H|5.027001||Viu
PERL_TRACK_MEMPOOL|5.009003||Viu
PERL_TSA|5.023006||Viu
PERL_TSA_ACQUIRE|5.023006||Viu
PERL_TSA_ACTIVE|5.023006||Viu
PERL_TSA_CAPABILITY|5.023006||Viu
PERL_TSA_EXCLUDES|5.023006||Viu
PERL_TSA_GUARDED_BY|5.023006||Viu
PERL_TSA_NO_TSA|5.023006||Viu
PERL_TSA_PT_GUARDED_BY|5.023006||Viu
PERL_TSA_RELEASE|5.023006||Viu
PERL_TSA_REQUIRES|5.023006||Viu
PERL_UCHAR_MAX|5.003007|5.003007|p
PERL_UCHAR_MIN|5.003007|5.003007|p
PERL_UINT_MAX|5.003007|5.003007|p
PERL_UINT_MIN|5.003007|5.003007|p
PERL_ULONG_MAX|5.003007|5.003007|p
PERL_ULONG_MIN|5.003007|5.003007|p
PERL_UNICODE_ALL_FLAGS|5.008001||Viu
PERL_UNICODE_ARGV|5.008001||Viu
PERL_UNICODE_ARGV_FLAG|5.008001||Viu
PERL_UNICODE_CONSTANTS_H|5.027001||Viu
PERL_UNICODE_DEFAULT_FLAGS|5.008001||Viu
PERL_UNICODE_IN|5.008001||Viu
PERL_UNICODE_IN_FLAG|5.008001||Viu

PERL_UNICODE_INOUT|5.008001||Viu
PERL_UNICODE_INOUT_FLAG|5.008001||Viu
PERL_UNICODE_LOCALE|5.008001||Viu
PERL_UNICODE_LOCALE_FLAG|5.008001||Viu
PERL_UNICODE_MAX|5.007003||Viu
PERL_UNICODE_OUT|5.008001||Viu
PERL_UNICODE_OUT_FLAG|5.008001||Viu
PERL_UNICODE_STD|5.008001||Viu
PERL_UNICODE_STDERR|5.008001||Viu
PERL_UNICODE_STDERR_FLAG|5.008001||Viu
PERL_UNICODE_STD_FLAG|5.008001||Viu
PERL_UNICODE_STDIN|5.008001||Viu
PERL_UNICODE_STDIN_FLAG|5.008001||Viu
PERL_UNICODE_STDOUT|5.008001||Viu
PERL_UNICODE_STDOUT_FLAG|5.008001||Viu
PERL_UNICODE_UTF8CACHEASSERT|5.009004||Viu
PERL_UNICODE_UTF8CACHEASSERT_FLAG|5.009004||Viu
PERL_UNICODE_WIDESYSCALLS|5.008001||Viu
PERL_UNICODE_WIDESYSCALLS_FLAG|5.008001||Viu
PERL_UNLOCK_HOOK|5.009004||Viu
PERL_UNUSED_ARG|5.009003|5.003007|p
PERL_UNUSED_CONTEXT|5.009004|5.003007|p
PERL_UNUSED_DECL|5.007002|5.003007|p
PERL_UNUSED_RESULT|5.021001|5.003007|p
PERL_UNUSED_VAR|5.007002|5.003007|p
PERL_UQUAD_MAX|5.003007|5.003007|p
PERL_UQUAD_MIN|5.003007|5.003007|p
PERL_USE_DEVEL|5.010001|5.010001|Vn
PERL_USE_GCC_BRACE_GROUPS|5.009004|5.003007|pV
PERL_USES_PL_PIDSTATUS|5.009003||Viu
PERL_USE_THREAD_LOCAL|5.035004||Viu
PERL_USHORT_MAX|5.003007|5.003007|p
PERL_USHORT_MIN|5.003007|5.003007|p
PERL_UTF8_H|5.027001||Viu
PERL_UTIL_H|5.025012||Viu
Perl_va_copy|5.007001||Viu
PERLVAR|5.005000||Viu
PERLVARA|5.006000||Viu
PERLVARI|5.005000||Viu
PERL_VARIANTS_WORD_MASK|5.027007||Viu
PERLVARIC|5.005000||Viu
PERL_VERSION|5.006000|5.003007|d
PERL_VERSION_EQ|5.033001||p
PERL_VERSION_GE|5.033001|5.003007|p
PERL_VERSION_GT|5.033001|5.003007|p
PERL_VERSION_LE|5.033001|5.003007|p
PERL_VERSION_LT|5.033001|5.003007|p
PERL_VERSION_MAJOR|5.033001||Viu

PERL_VERSION_MINOR|5.033001||Viu
PERL_VERSION_NE|5.033001||p
PERL_VERSION_PATCH|5.033001||Viu
PERL_VERSION_STRING|5.010001||Viu
PERL_WAIT_FOR_CHILDREN|5.006000||Viu
Perl_Warn_Bit|5.033003||Viu
Perl_warner_nocontext||5.004000|ponu
PERL_WARNHOOK_FATAL|5.009004||Viu
Perl_Warn_Off|5.033003||Viu
PERL_WORD_BOUNDARY_MASK|5.027007||Viu
PERL_WORDSIZE|5.027007||Viu
PERL_WRITE_LOCK|5.033005||Viu
PERL_WRITE_MSG_TO_CONSOLE|5.007003||Viu
PERL_WRITE_UNLOCK|5.033005||Viu
PERL_XSUB_H|5.027001||Viu
perly_sighandler|5.031007||cVnu
phase_name|5.035007|5.035007|
PHOSTNAME|5.006000|5.006000|Vn
pidgone|5.003007||Viu
Pid_t|5.005000|5.005000|Vn
pipe|5.005000||Viu
PIPE_OPEN_MODE|5.008002||Viu
PIPESOCK_MODE|5.008001||Viu
PL_AboveLatin1|5.015008||Viu
PL_amagic_generation|5.005000||Viu
PL_an|5.005000||Viu
PL_argvgv|5.005000||Viu
PL_argvoutgv|5.005000||Viu
PL_argvout_stack|5.006000||Viu
PL_Assigned_invlist|5.025009||Viu
PL_basetime|5.005000||Viu
PL_beginav|5.005000||Viu
PL_beginav_save|5.006001||Viu
PL_blockhooks|5.013003||Viu
PL_body_arenas|5.009004||Viu
PL_body_roots|5.009003||Viu
PL_bodytarget|5.005000||Viu
PL_breakable_sub_gen|5.010001||Viu
PL_bufend||5.003007|ponu
PL_bufptr||5.003007|ponu
PL_CCC_non0_non230|5.029008||Viu
PL_check|5.009003|5.006000|
PL_checkav|5.006000||Viu
PL_checkav_save|5.008001||Viu
PL_chopset|5.005000||Viu
PL_clocktick|5.008001||Viu
PL_collation_ix|5.005000||Viu
PL_collation_name|5.005000||Viu

PL_collation_standard|5.005000||Viu
PL_collxfrm_base|5.005000||Viu
PL_collxfrm_mult|5.005000||Viu
PL_colors|5.005000||Viu
PL_colorset|5.005000||Viu
PL_compcv|5.005000||Viu
PL_compiling|5.005000|5.003007|poVnu
PL_comppad|5.008001|5.008001|x
PL_comppad_name|5.017004|5.017004|x
PL_comppad_name_fill|5.005000||Viu
PL_comppad_name_floor|5.005000||Viu
PL_constpadix|5.021004||Viu
PL_copline||5.003007|ponu
PL_cop_seqmax|5.005000||Viu
PL_cshlen|5.005000||Viu
PL_curcop|5.004005|5.003007|p
PL_curcopdb|5.005000||Viu
PL_curlocales|5.027009||Viu
PL_curpad|5.005000|5.005000|x
PL_curpm|5.005000||Viu
PL_curpm_under|5.025007||Viu
PL_curstack|5.005000||Viu
PL_curstackinfo|5.005000||Viu
PL_curstash|5.004005|5.003007|p
PL_curstname|5.005000||Viu
PL_custom_op_descs|5.007003||Viu
PL_custom_op_names|5.007003||Viu
PL_custom_ops|5.013007||Viu
PL_cv_has_eval|5.009000||Viu
PL_dbargs|5.005000||Viu
PL_DBcontrol|5.021005||Viu
PL_DBcv|5.005000||Viu
PL_DBgv|5.005000||Viu
PL_DBline|5.005000||Viu
PL_DBsignal|5.005000|5.003007|poVnu
PL_DBsignal_iv|5.021005||Viu
PL_DBsingle|5.005000||pV
PL_DBsingle_iv|5.021005||Viu
PL_DBsub|5.005000||pV
PL_DBtrace|5.005000||pV
PL_DBtrace_iv|5.021005||Viu
PL_debstash|5.005000|5.003007|poVnu
PL_debug|5.005000||Viu
PL_debug_pad|5.007003||Viu
PL_defgv|5.004005|5.003007|p
PL_def_layerlist|5.007003||Viu
PL_defoutgv|5.005000||Viu
PL_defstash|5.005000||Viu

PL_delaymagic|5.005000||Viu
PL_delaymagic_egid|5.015008||Viu
PL_delaymagic_euid|5.015008||Viu
PL_delaymagic_gid|5.015008||Viu
PL_delaymagic_uid|5.015008||Viu
PL_destroyhook|5.010000||Viu
PL_diehook|5.005000|5.003007|poVnu
PL_Dir|5.006000||Viu
PL_dirty|5.005000|5.003007|poVnu
PL_doswitches|5.005000||Viu
PL_dowarn|5.005000||pV
PL_dumper_fd|5.009003||Viu
PL_dumpindent|5.006000||Viu
PL_dump_re_max_len|5.023008||Viu
PL_efloatbuf|5.006000||Viu
PL_efloatsize|5.006000||Viu
PL_E_FORMAT_PRECISION|5.029000||Viu
PL_encoding|5.007003||Viu
PL_endav|5.005000||Viu
PL_Env|5.006000||Viu
PL_envgv|5.005000||Viu
PL_errgv|5.004005|5.003007|p
PL_error_count||5.003007|ponu
PL_errors|5.006000||Viu
PL_e_script|5.005000||Viu
PL_eval_root|5.005000||Viu
PL_evalseq|5.005000||Viu
PL_eval_start|5.005000||Viu
PL_exit_flags|5.006000|5.006000|
PL_exitlist|5.005000||Viu
PL_exitlistlen|5.005000||Viu
PL_expect||5.003007|ponu
PL_fdpid|5.005000||Viu
PL_filemode|5.005000||Viu
PL_firstgv|5.005000||Viu
PL_forkprocess|5.005000||Viu
PL_formtarget|5.005000||Viu
PL_GCB_invlist|5.021009||Viu
PL_generation|5.005000||Viu
PL_gensym|5.005000||Viu
PL_globalstash|5.005000||Viu
PL_globhook|5.015005||Viu
PL_hash_rand_bits|5.017010||Viu
PL_HASH_RAND_BITS_ENABLED|5.018000||Viu
PL_hash_rand_bits_enabled|5.018000||Viu
PL_hash_seed|5.033007||Viu
PL_hash_state|5.033007||Viu
PL_HasMultiCharFold|5.017005||Viu

PL_hexdigit||5.003007|pn
PL_hintgv|5.005000||Viu
PL_hints|5.005000|5.003007|poVnu
PL_hv_fetch_ent_mh|5.005000||Viu
PL_incgv|5.005000||Viu
PL_in_clean_all|5.005000||Viu
PL_in_clean_objs|5.005000||Viu
PL_in_eval|5.005000||Viu
PL_initav|5.005000||Viu
PL_in_load_module|5.008001||Viu
PL_in_my||5.003007|ponu
PL_in_my_stash||5.005000|ponu
PL_inplace|5.005000||Viu
PL_in_some_fold|5.029007||Viu
PL_internal_random_state|5.027004||Viu
PL_in_utf8_COLLATE_locale|5.025002||Viu
PL_in_utf8_CTYPE_locale|5.019009||Viu
PL_in_utf8_turkic_locale|5.029008||Viu
PL_isarev|5.009005||Viu
PL_keyword_plugin|5.011002|5.011002|x
PL_known_layers|5.007003||Viu
PL_langinfo_buf|5.027004||Viu
PL_langinfo_bufsize|5.027004||Viu
PL_lastfd|5.005000||Viu
PL_lastgotoprobe|5.005000||Viu
PL_last_in_gv|5.005000||Vi
PL_laststatval|5.005000|5.003007|poVnu
PL_laststype|5.005000||Viu
PL_Latin1|5.015008||Viu
PL_LB_invlist|5.023007||Viu
PL_lc_numeric_mutex_depth|5.027009||Viu
PL_lex_state||5.003007|ponu
PL_lex_stuff||5.003007|ponu
PL_linestr||5.003007|ponu
PL_LIO|5.006000||Viu
PL_locale_utf8ness|5.027009||Viu
PL_localizing|5.005000||Viu
PL_localpatches|5.005000||Viu
PL_lockhook|5.007003||Viu
PL_main_cv|5.005000||Viu
PL_main_root|5.005000||Viu
PL_mainstack|5.005000||Viu
PL_main_start|5.005000||Viu
PL_markstack|5.005000||Viu
PL_markstack_max|5.005000||Viu
PL_markstack_ptr|5.005000||Viu
PL_max_intro_pending|5.005000||Viu
PL_maxo|5.005000||Viu

PL_maxsysfd|5.005000|5.005000|
PL_mbrlen_ps|5.031010||Viu
PL_mbrtowc_ps|5.031010||Viu
PL_Mem|5.006000||Viu
PL_mem_log|5.033005||Viu
PL_memory_debug_header|5.009004||Viu
PL_MemParse|5.006000||Viu
PL_MemShared|5.006000||Viu
PL_mess_sv|5.005000|5.004000|poVnu
PL_min_intro_pending|5.005000||Viu
PL_minus_a|5.005000||Viu
PL_minus_c|5.005000||Viu
PL_minus_E|5.009003||Viu
PL_minus_F|5.005000||Viu
PL_minus_l|5.005000||Viu
PL_minus_n|5.005000||Viu
PL_minus_p|5.005000||Viu
PL_modcount|5.005000||Viu
PL_modglobal|5.005000|5.005000|
PL_multideref_pc|5.021007||Viu
PL_my_cxt_list|5.009003||Viu
PL_my_cxt_size|5.009003||Viu
PL_na|5.004005|5.003007|p
PL_nomemok|5.005000||Viu
PL_no_modify||5.003007|ponu
PL_numeric_name|5.005000||Viu
PL_numeric_radix_sv|5.007002||Viu
PL_numeric_standard|5.005000||Viu
PL_numeric_underlying|5.027006||Viu
PL_numeric_underlying_is_standard|5.027009||Viu
PL_ofsgv|5.011000||Vi
PL_oldname|5.005000||Viu
PL_op|5.005000||Viu
PL_op_exec_cnt|5.019002||Viu
PL_opfreehook|5.011000|5.011000|
PL_op_mask|5.005000||Viu
PL_origalen|5.005000||Viu
PL_origargc|5.005000||Viu
PL_origargv|5.005000||Viu
PL_origenviron|5.005000||Viu
PL_origfilename|5.005000||Viu
PL_ors_sv|5.007001||Viu
PL_osname|5.005000||Viu
PL_padix|5.005000||Viu
PL_padix_floor|5.005000||Viu
PL_padlist_generation|5.021007||Viu
PL_padname_const|5.021007||Viu
PL_padname_undef|5.021007||Viu

PL_pad_reset_pending|5.005000||Viu
PL_parser|5.009005|5.003007|p
PL_patchlevel|5.005000||Viu
PL_peepp|5.007003|5.007003|
PL_perldb|5.005000|5.003007|poVnu
PL_perl_destruct_level|5.004005|5.003007|p
PL_perlio|5.007003||Viu
PL_phase|5.013007|5.013007|
PL_pidstatus|5.005000||Viu
PL_Posix_ptrs|5.029000||Viu
PL_ppaddr||5.003007|ponu
PL_preambleav|5.005000||Viu
PL_prevailing_version|5.035009||Viu
PL_Private_Use|5.029009||Viu
PL_Proc|5.006000||Viu
PL_profiledata|5.005000||Viu
PL_psig_name|5.006000||Viu
PL_psig_pend|5.007001||Viu
PL_psig_ptr|5.006000||Viu
PL_ptr_table|5.006000||Viu
PL_random_state|5.019004||Viu
PL_RANDOM_STATE_TYPE|5.019004||Viu
PL_reentrant_buffer|5.007002||Viu
PL_reentrant_retint|5.008001||Viu
PL_reg_curpm|5.006000||Viu
PL_regex_pad|5.007002||Viu
PL_regex_padav|5.007002||Viu
PL_registered_mros|5.010001||Viu
PL_regmatch_slab|5.009004||Viu
PL_regmatch_state|5.009004||Viu
PL_replgv|5.005000||Viu
PL_restartjmpenv|5.013001||Viu
PL_restartop|5.005000|5.005000|
PL_rpeepp|5.013005|5.013005|
PL_rs|5.005000||Vi
PL_rsfp||5.003007|ponu
PL_rsfp_filters||5.003007|ponu
PL_runops|5.006000|5.006000|
PL_savebegin|5.007003||Viu
PL_savestack|5.005000||Viu
PL_savestack_ix|5.005000||Viu
PL_savestack_max|5.005000||Viu
PL_sawampersand|5.005000||Viu
PL_SB_invlist|5.021009||Viu
PL_scopestack|5.005000||Viu
PL_scopestack_ix|5.005000||Viu
PL_scopestack_max|5.005000||Viu
PL_scopestack_name|5.011002||Viu

PL_SCX_invlist|5.027008||Viu
PL_secondgv|5.005000||Viu
PL_setlocale_buf|5.027009||Viu
PL_setlocale_bufsize|5.027009||Viu
PL_sharehook|5.007003||Viu
PL_sighandler1p|5.031007||Viu
PL_sighandler3p|5.031007||Viu
PL_sighandlerp|5.005000||Viu
PL_signalhook|5.013002||Viu
PL_signals|5.008001|5.003007|poVnu
PL_sig_pending|5.007001||Viu
PL_Sock|5.006000||Viu
PL_sortcop|5.005000||Viu
PL_sortstash|5.005000||Viu
PL_splitstr|5.005000||Viu
PL_srand_called|5.006000||Viu
PL_stack_base|5.005000|5.003007|poVnu
PL_stack_max|5.005000||Viu
PL_stack_sp|5.005000|5.003007|poVnu
PL_start_env|5.005000||Viu
PL_stashcache|5.008001||Viu
PL_stashpad|5.017001||Viu
PL_stashpadix|5.017001||Viu
PL_stashpadmax|5.017001||Viu
PL_statcache|5.005000|5.003007|poVnu
PL_statgv|5.005000||Viu
PL_statname|5.005000||Viu
PL_statusvalue|5.005000||Viu
PL_statusvalue_posix|5.009003||Viu
PL_statusvalue_vms|5.005000||Viu
PL_stderrgv|5.006000||Viu
PL_stdingv|5.005000|5.003007|poVnu
PL_StdIO|5.006000||Viu
PL_strtab|5.005000||Viu
PL_strxfrm_is_behaved|5.025002||Viu
PL_strxfrm_max_cp|5.025002||Viu
PL_strxfrm_NUL_replacement|5.025008||Viu
PL_sub_generation|5.005000||Viu
PL_subline|5.005000||Viu
PL_subname|5.005000||Viu
PL_Sv|5.005000||pcV
PL_sv_arenaroot|5.005000|5.003007|poVnu
PL_sv_consts|5.019002||Viu
PL_sv_count|5.005000||Viu
PL_sv_immortals|5.027003||Viu
PL_sv_no|5.004005|5.003007|p
PL_sv_root|5.005000||Viu
PL_sv_serial|5.010001||Viu

PL_sv_undef|5.004005|5.003007|p
PL_sv_yes|5.004005|5.003007|p
PL_sv_zero|5.027003|5.027003|
PL_sys_intern|5.005000||Viu
PL_tainted|5.005000|5.003007|poVnu
PL_tainting|5.005000|5.003007|poVnu
PL_taint_warn|5.007003||Viu
PL_threadhook|5.008000||Viu
PL_tmps_floor|5.005000||Viu
PL_tmps_ix|5.005000||Viu
PL_tmps_max|5.005000||Viu
PL_tmps_stack|5.005000||Viu
PL_tokenbuf||5.003007|ponu
PL_top_env|5.005000||Viu
PL_toptarget|5.005000||Viu
PL_TR_SPECIAL_HANDLING_UTF8|5.031006||Viu
PL_underlying_numeric_obj|5.027009||Viu
PL_unicode|5.008001||Viu
PL_unitcheckav|5.009005||Viu
PL_unitcheckav_save|5.009005||Viu
PL_unlockhook|5.007003||Viu
PL_unsafe|5.005000||Viu
PL_UpperLatin1|5.019005||Viu
PLUS|5.003007||Viu
PLUS_t8|5.035004||Viu
PLUS_t8_p8|5.033003||Viu
PLUS_t8_pb|5.033003||Viu
PLUS_tb|5.035004||Viu
PLUS_tb_p8|5.033003||Viu
PLUS_tb_pb|5.033003||Viu
PL_utf8cache|5.009004||Viu
PL_utf8_charname_begin|5.017006||Viu
PL_utf8_charname_continue|5.017006||Viu
PL_utf8_foldclosures|5.013007||Viu
PL_utf8_idcont|5.008000||Viu
PL_utf8_idstart|5.008000||Viu
PL_utf8locale|5.008001||Viu
PL_utf8_mark|5.006000||Viu
PL_utf8_perl_idcont|5.017008||Viu
PL_utf8_perl_idstart|5.015004||Viu
PL_utf8_tofold|5.007003||Viu
PL_utf8_tolower|5.006000||Viu
PL_utf8_tosimplefold|5.027011||Viu
PL_utf8_totitle|5.006000||Viu
PL_utf8_toupper|5.006000||Viu
PL_utf8_xidcont|5.013010||Viu
PL_utf8_xidstart|5.013010||Viu
PL_vtbl_arylen|5.015000||Viu

PL_vtbl_arylen_p|5.015000||Viu
PL_vtbl_backref|5.015000||Viu
PL_vtbl_bm|5.015000||Viu
PL_vtbl_checkcall|5.017000||Viu
PL_vtbl_collxfrm|5.015000||Viu
PL_vtbl_dbline|5.015000||Viu
PL_vtbl_debugvar|5.021005||Viu
PL_vtbl_defelem|5.015000||Viu
PL_vtbl_env|5.015000||Viu
PL_vtbl_envelem|5.015000||Viu
PL_vtbl_fm|5.015000||Viu
PL_vtbl_hints|5.015000||Viu
PL_vtbl_hintselem|5.015000||Viu
PL_vtbl_isa|5.015000||Viu
PL_vtbl_isaelem|5.015000||Viu
PL_vtbl_lvref|5.021005||Viu
PL_vtbl_mglob|5.015000||Viu
PL_vtbl_nkeys|5.015000||Viu
PL_vtbl_nonelem|5.027009||Viu
PL_vtbl_ovrld|5.015000||Viu
PL_vtbl_pack|5.015000||Viu
PL_vtbl_packelem|5.015000||Viu
PL_vtbl_pos|5.015000||Viu
PL_vtbl_regdata|5.015000||Viu
PL_vtbl_regdatum|5.015000||Viu
PL_vtbl_regexp|5.015000||Viu
PL_vtbl_sig|5.035001||Viu
PL_vtbl_sigelem|5.015000||Viu
PL_vtbl_substr|5.015000||Viu
PL_vtbl_sv|5.015000||Viu
PL_vtbl_taint|5.015000||Viu
PL_vtbl_utf8|5.015000||Viu
PL_vtbl_uvar|5.015000||Viu
PL_vtbl_vec|5.015000||Viu
PL_warnhook|5.005000||Viu
PL_warn_locale|5.021008||Viu
PL_watchaddr|5.006000||Viu
PL_watchok|5.006000||Viu
PL_WB_invlist|5.021009||Viu
PL_wcrtomb_ps|5.031010||Viu
PL_XPosix_ptrs|5.017008||Viu
PL_Xpv|5.005000|5.003007|poVnu
PL_xsubfilename|5.021006||Viu
pm_description|5.009004||Viu
PMf_BASE_SHIFT|5.013004||Viu
PMf_CHARSET|5.017011||Viu
PMf_CODELIST_PRIVATE|5.017001||Viu
PMf_CONST|5.003007||Viu

PMf_CONTINUE|5.004000||Viu
PMf_EVAL|5.003007||Viu
PMf_EXTENDED|5.003007||Viu
PMf_EXTENDED_MORE|5.021005||Viu
PMf_FOLD|5.003007||Viu
PMf_GLOBAL|5.003007||Viu
PMf_HAS_CV|5.017001||Viu
PMf_HAS_ERROR|5.025010||Viu
PMf_IS_QR|5.017001||Viu
PMf_KEEP|5.003007||Viu
PMf_KEEPCOPY|5.009005||Viu
PMf_MULTILINE|5.003007||Viu
PMf_NOCAPTURE|5.021008||Viu
PMf_NONDESTRUCT|5.013002||Viu
PMf_ONCE|5.003007||Viu
PMf_RETAINT|5.004005||Viu
PMf_SINGLELINE|5.003007||Viu
PMf_SPLIT|5.017011||Viu
PMf_STRICT|5.021008||Viu
PMf_USED|5.009005||Viu
PMf_USE_RE_EVAL|5.017001||Viu
PMf_WILDCARD|5.031010||Viu
PM_GETRE|5.007002||Viu
pmop_dump|5.006000|5.006000|u
PmopSTASH|5.007001||Viu
PmopSTASHPV|5.007001||Viu
PmopSTASHPV_set|5.007001||Viu
PmopSTASH_set|5.007001||Viu
pmruntime|5.003007||Viu
PM_SETRE|5.007002||Viu
PM_STR|5.027010||Viu
pmtrans|5.003007||Viu
pMY_CXT|5.009000|5.009000|p
_pMY_CXT||5.009000|p
pMY_CXT_||5.009000|p
PNf|5.021007||Viu
PNfARG|5.021007||Viu
Poison|5.008000|5.003007|p
PoisonFree|5.009004|5.003007|p
PoisonNew|5.009004|5.003007|p
PoisonPADLIST|5.021006||Viu
POISON_SV_HEAD|||Viu
PoisonWith|5.009004|5.003007|p
popen|5.003007||Viu
POPi|5.003007|5.003007|
POPl|5.003007|5.003007|
POPMARK|5.003007||cViu
POP_MULTICALL|5.009003|5.009003|

POPn|5.006000|5.003007|
POPp|5.003007|5.003007|
POPpbytex|5.007001|5.007001|
POPpconstx|5.009003||Viu
POPpx|5.005003|5.005003|
POPs|5.003007|5.003007|
pop_scope|5.003007|5.003007|u
POPSTACK|5.005000||Viu
POPSTACK_TO|5.005000||Viu
POPu|5.004000|5.004000|
POPul|5.006000|5.006000|
populate_ANYOF_from_invlist|5.019005||Viu
populate_isa|||viu
POSIXA|5.017003||Viu
POSIXA_t8|5.035004||Viu
POSIXA_t8_p8|5.033003||Viu
POSIXA_t8_pb|5.033003||Viu
POSIXA_tb|5.035004||Viu
POSIXA_tb_p8|5.033003||Viu
POSIXA_tb_pb|5.033003||Viu
POSIX_CC_COUNT|5.017008||Viu
POSIXD|5.017003||Viu
POSIXD_t8|5.035004||Viu
POSIXD_t8_p8|5.033003||Viu
POSIXD_t8_pb|5.033003||Viu
POSIXD_tb|5.035004||Viu
POSIXD_tb_p8|5.033003||Viu
POSIXD_tb_pb|5.033003||Viu
POSIXL|5.017003||Viu
POSIXL_CLEAR|5.029004||Viu
POSIXL_SET|5.029004||Viu
POSIXL_t8|5.035004||Viu
POSIXL_t8_p8|5.033003||Viu
POSIXL_t8_pb|5.033003||Viu
POSIXL_tb|5.035004||Viu
POSIXL_tb_p8|5.033003||Viu
POSIXL_tb_pb|5.033003||Viu
POSIXL_TEST|5.029004||Viu
POSIXL_ZERO|5.029004||Viu
POSIXU|5.017003||Viu
POSIXU_t8|5.035004||Viu
POSIXU_t8_p8|5.033003||Viu
POSIXU_t8_pb|5.033003||Viu
POSIXU_tb|5.035004||Viu
POSIXU_tb_p8|5.033003||Viu
POSIXU_tb_pb|5.033003||Viu
PP|5.003007||Viu
pregcomp|5.009005|5.009005|

pregexec|5.003007|5.003007|
PREGf_ANCH|5.019009||Viu
PREGf_ANCH_GPOS|5.019009||Viu
PREGf_ANCH_MBOL|5.019009||Viu
PREGf_ANCH_SBOL|5.019009||Viu
PREGf_CUTGROUP_SEEN|5.009005||Viu
PREGf_GPOS_FLOAT|5.019009||Viu
PREGf_GPOS_SEEN|5.019009||Viu
PREGf_IMPLICIT|5.009005||Viu
PREGf_NAUGHTY|5.009005||Viu
PREGf_NOSCAN|5.019009||Viu
PREGf_RECURSE_SEEN|5.023009||Viu
pregfree2|5.011000||cVu
pregfree|5.003007|5.003007|u
PREGf_SKIP|5.009005||Viu
PREGf_USE_RE_EVAL|5.017001||Viu
PREGf_VERBARG_SEEN|5.009005||Viu
prepare_SV_for_RV|5.010001||Viu
prescan_version|5.011004|5.011004|
PRESCAN_VERSION|5.019008||Viu
PREVOPER|5.003007||Viu
PREV_RANGE_MATCHES_INVLIST|5.023002||Viu
printbuf|5.009004||Viu
print_bytes_for_locale|5.027002||Viu
print_collxfrm_input_and_return|5.025004||Viu
printf|5.003007||Viu
PRINTF_FORMAT_NULL_OK|5.009005|5.009005|Vn
printf_nocontext|5.007001||vdVnu
PRIVLIB|5.003007|5.003007|Vn
PRIVLIB_EXP|5.003007|5.003007|Vn
PRIVSHIFT|5.003007||Viu
process_special_blocks|5.009005||Viu
PROCSELFEXE_PATH|5.007003|5.007003|Vn
PRUNE|5.009005||Viu
PRUNE_t8|5.035004||Viu
PRUNE_t8_p8|5.033003||Viu
PRUNE_t8_pb|5.033003||Viu
PRUNE_tb|5.035004||Viu
PRUNE_tb_p8|5.033003||Viu
PRUNE_tb_pb|5.033003||Viu
PSEUDO|5.009004||Viu
PSEUDO_t8|5.035004||Viu
PSEUDO_t8_p8|5.033003||Viu
PSEUDO_t8_pb|5.033003||Viu
PSEUDO_tb|5.035004||Viu
PSEUDO_tb_p8|5.033003||Viu
PSEUDO_tb_pb|5.033003||Viu
pthread_addr_t|5.005000||Viu

PTHREAD_ATFORK|5.007002||Viu
pthread_attr_init|5.006000||Viu
PTHREAD_ATTR_SETDETACHSTATE|5.006000||Viu
pthread_condattr_default|5.005000||Viu
PTHREAD_CREATE|5.006000||Viu
pthread_create|5.008001||Viu
PTHREAD_CREATE_JOINABLE|5.005000||Viu
PTHREAD_GETSPECIFIC|5.007002||Viu
PTHREAD_GETSPECIFIC_INT|5.006000||Viu
pthread_key_create|5.005000||Viu
pthread_keycreate|5.008001||Viu
pthread_mutexattr_default|5.005000||Viu
pthread_mutexattr_init|5.005000||Viu
pthread_mutexattr_settype|5.005000||Viu
pTHX_12|5.019010||Viu
pTHX_1|5.006000||Viu
pTHX_2|5.006000||Viu
pTHX_3|5.006000||Viu
pTHX_4|5.006000||Viu
pTHX|5.006000|5.003007|p
pTHX_5|5.009003||Viu
pTHX_6|5.009003||Viu
pTHX_7|5.009003||Viu
pTHX_8|5.009003||Viu
pTHX_9|5.009003||Viu
pTHX_||5.003007|p
pTHX__FORMAT|5.009002||Viu
pTHX_FORMAT|5.009002||Viu
pTHXo|5.006000||Viu
pTHX__VALUE|5.009002||Viu
pTHX_VALUE|5.009002||Viu
pTHXx|5.006000||Viu
PTR2IV|5.006000|5.003007|p
PTR2nat|5.009003|5.003007|p
PTR2NV|5.006000|5.003007|p
PTR2ul|5.007001|5.003007|p
PTR2UV|5.006000|5.003007|p
Ptrdiff_t|5.029003||Viu
ptr_hash|5.017010||Vniu
PTRSIZE|5.005000|5.005000|Vn
ptr_table_fetch|5.009005|5.009005|u
ptr_table_find|5.009004||Vniu
ptr_table_free|5.009005|5.009005|u
ptr_table_new|5.009005|5.009005|u
ptr_table_split|5.009005|5.009005|u
ptr_table_store|5.009005|5.009005|u
PTRV|5.006000|5.003007|poVnu
PUSHi|5.003007|5.003007|

PUSHMARK|5.003007|5.003007|
PUSHmortal|5.009002|5.003007|p
PUSH_MULTICALL|5.011000|5.011000|
PUSH_MULTICALL_FLAGS|5.018000||Viu
PUSHn|5.006000|5.003007|
PUSHp|5.003007|5.003007|
PUSHs|5.003007|5.003007|
push_scope|5.003007|5.003007|u
PUSHSTACK|5.005000||Viu
PUSHSTACKi|5.005000||Viu
PUSHSTACK_INIT_HWM|5.027002||Viu
PUSHTARG|5.003007||Viu
PUSHu|5.004000|5.003007|p
PUTBACK|5.003007|5.003007|
putc|5.003007||Viu
put_charclass_bitmap_innards|5.021004||Viu
put_charclass_bitmap_innards_common|5.023008||Viu
put_charclass_bitmap_innards_invlist|5.023008||Viu
put_code_point|5.021004||Viu
putc_unlocked|5.003007||Viu
putenv|5.005000||Viu
put_range|5.019009||Viu
putw|5.003007||Viu
pv_display|5.006000|5.003007|p
pv_escape|5.009004|5.003007|p
pv_pretty|5.009004|5.003007|p
pv_uni_display|5.007003|5.007003|
pWARN_ALL|5.006000||Viu
pWARN_NONE|5.006000||Viu
pWARN_STD|5.006000||Viu
PWGECOS|5.004005|5.004005|Vn
PWPASSWD|5.005000|5.005000|Vn
qerror|5.006000||cViu
QR_PAT_MODS|5.009005||Viu
QUAD_IS_INT|5.006000|5.006000|Vn
QUAD_IS___INT64|5.015003|5.015003|Vn
QUAD_IS_INT64_T|5.006000|5.006000|Vn
QUAD_IS_LONG|5.006000|5.006000|Vn
QUAD_IS_LONG_LONG|5.006000|5.006000|Vn
QUADKIND|5.006000|5.006000|Vn
quadmath_format_needed|5.021004||Vni
quadmath_format_valid|5.031007||Vni
Quad_t|5.003007|5.003007|Vn
QUESTION_MARK_CTRL|5.021001||Viu
RADIXCHAR|5.027010||Viu
RANDBITS|5.003007|5.003007|Vn
RANDOM_R_PROTO|5.008000|5.008000|Vn
Rand_seed_t|5.006000|5.006000|Vn

RANGE_INDICATOR|5.031006||Viu
rck_elide_nothing|5.032001||Viu
RD_NODATA|5.003007|5.003007|Vn
read|5.005000||Viu
readdir|5.005000||Viu
readdir64|5.009000||Viu
READDIR64_R_PROTO|5.008000|5.008000|Vn
READDIR_R_PROTO|5.008000|5.008000|Vn
READ_XDIGIT|5.017006|5.017006|
realloc|5.003007||Vn
ReANY|5.017006||cVnu
re_compile|5.009005|5.009005|u
RE_COMPILE_RECURSION_INIT|5.029009||Viu
RE_COMPILE_RECURSION_LIMIT|5.029009||Viu
re_croak|||iu
recv|5.006000||Viu
recvfrom|5.005000||Viu
RE_DEBUG_COMPILE_DUMP|5.009004||Viu
RE_DEBUG_COMPILE_FLAGS|5.009005||Viu
RE_DEBUG_COMPILE_MASK|5.009004||Viu
RE_DEBUG_COMPILE_OPTIMISE|5.009004||Viu
RE_DEBUG_COMPILE_PARSE|5.009004||Viu
RE_DEBUG_COMPILE_TEST|5.021005||Viu
RE_DEBUG_COMPILE_TRIE|5.009004||Viu
RE_DEBUG_EXECUTE_INTUIT|5.009004||Viu
RE_DEBUG_EXECUTE_MASK|5.009004||Viu
RE_DEBUG_EXECUTE_MATCH|5.009004||Viu
RE_DEBUG_EXECUTE_TRIE|5.009004||Viu
RE_DEBUG_EXTRA_BUFFERS|5.009005||Viu
RE_DEBUG_EXTRA_DUMP_PRE_OPTIMIZE|5.031004||Viu
RE_DEBUG_EXTRA_GPOS|5.011000||Viu
RE_DEBUG_EXTRA_MASK|5.009004||Viu
RE_DEBUG_EXTRA_OPTIMISE|5.009005||Viu
RE_DEBUG_EXTRA_STACK|5.009005||Viu
RE_DEBUG_EXTRA_STATE|5.009004||Viu
RE_DEBUG_EXTRA_TRIE|5.009004||Viu
RE_DEBUG_EXTRA_WILDCARD|5.031011||Viu
RE_DEBUG_FLAG|5.009004||Viu
RE_DEBUG_FLAGS|5.009002||Viu
re_dup_guts|5.011000|5.011000|
reentrant_free|5.008000||cVu
reentrant_init|5.008000||cVu
REENTRANT_PROTO_B_B|5.008000||Viu
REENTRANT_PROTO_B_BI|5.008000||Viu
REENTRANT_PROTO_B_BW|5.008000||Viu
REENTRANT_PROTO_B_CCD|5.008000||Viu
REENTRANT_PROTO_B_CCS|5.008000||Viu
REENTRANT_PROTO_B_IBI|5.008000||Viu

REENTRANT_PROTO_B_IBW|5.008000||Viu
REENTRANT_PROTO_B_SB|5.008000||Viu
REENTRANT_PROTO_B_SBI|5.008000||Viu
REENTRANT_PROTO_I_BI|5.008000||Viu
REENTRANT_PROTO_I_BW|5.008000||Viu
REENTRANT_PROTO_I_CCSBWR|5.008000||Viu
REENTRANT_PROTO_I_CCSD|5.008000||Viu
REENTRANT_PROTO_I_CII|5.008000||Viu
REENTRANT_PROTO_I_CIISD|5.008000||Viu
REENTRANT_PROTO_I_CSBI|5.008000||Viu
REENTRANT_PROTO_I_CSBIR|5.008000||Viu
REENTRANT_PROTO_I_CSBWR|5.008000||Viu
REENTRANT_PROTO_I_CSBWRE|5.008000||Viu
REENTRANT_PROTO_I_CSD|5.008000||Viu
REENTRANT_PROTO_I_CWISBWRE|5.008000||Viu
REENTRANT_PROTO_I_CWISD|5.008000||Viu
REENTRANT_PROTO_I_D|5.008000||Viu
REENTRANT_PROTO_I_H|5.008000||Viu
REENTRANT_PROTO_I_IBI|5.008000||Viu
REENTRANT_PROTO_I_IBW|5.008000||Viu
REENTRANT_PROTO_I_ICBI|5.008000||Viu
REENTRANT_PROTO_I_ICSBWR|5.008000||Viu
REENTRANT_PROTO_I_ICSD|5.008000||Viu
REENTRANT_PROTO_I_ID|5.008000||Viu
REENTRANT_PROTO_I_IISD|5.008000||Viu
REENTRANT_PROTO_I_ISBWR|5.008000||Viu
REENTRANT_PROTO_I_ISD|5.008000||Viu
REENTRANT_PROTO_I_LISBI|5.008000||Viu
REENTRANT_PROTO_I_LISD|5.008000||Viu
REENTRANT_PROTO_I_SB|5.008000||Viu
REENTRANT_PROTO_I_SBI|5.008000||Viu
REENTRANT_PROTO_I_SBIE|5.008000||Viu
REENTRANT_PROTO_I_SBIH|5.008000||Viu
REENTRANT_PROTO_I_SBIR|5.008000||Viu
REENTRANT_PROTO_I_SBWR|5.008000||Viu
REENTRANT_PROTO_I_SBWRE|5.008000||Viu
REENTRANT_PROTO_I_SD|5.008000||Viu
REENTRANT_PROTO_I_TISD|5.008000||Viu
REENTRANT_PROTO_I_TS|5.008000||Viu
REENTRANT_PROTO_I_TSBI|5.008000||Viu
REENTRANT_PROTO_I_TSBIR|5.008000||Viu
REENTRANT_PROTO_I_TSBWR|5.008000||Viu
REENTRANT_PROTO_I_TsISBWRE|5.008001||Viu
REENTRANT_PROTO_I_TSR|5.008000||Viu
REENTRANT_PROTO_I_UISBWRE|5.008000||Viu
REENTRANT_PROTO_I_uISBWRE|5.008001||Viu
REENTRANT_PROTO_S_CBI|5.008000||Viu
REENTRANT_PROTO_S_CCSBI|5.008000||Viu

REENTRANT_PROTO_S_CIISBIE|5.008000||Viu
REENTRANT_PROTO_S_CSBI|5.008000||Viu
REENTRANT_PROTO_S_CSBIE|5.008000||Viu
REENTRANT_PROTO_S_CWISBIE|5.008000||Viu
REENTRANT_PROTO_S_CWISBWIE|5.008000||Viu
REENTRANT_PROTO_S_ICSBI|5.008000||Viu
REENTRANT_PROTO_S_ISBI|5.008000||Viu
REENTRANT_PROTO_S_LISBI|5.008000||Viu
REENTRANT_PROTO_S_SBI|5.008000||Viu
REENTRANT_PROTO_S_SBIE|5.008000||Viu
REENTRANT_PROTO_S_SBW|5.008000||Viu
REENTRANT_PROTO_S_TISBI|5.008000||Viu
REENTRANT_PROTO_S_TS|5.031011||Viu
REENTRANT_PROTO_S_TSBI|5.008000||Viu
REENTRANT_PROTO_S_TSBIE|5.008000||Viu
REENTRANT_PROTO_S_TWISBIE|5.008000||Viu
REENTRANT_PROTO_V_D|5.008000||Viu
REENTRANT_PROTO_V_H|5.008000||Viu
REENTRANT_PROTO_V_ID|5.008000||Viu
reentrant_retry|5.008000||vcVnu
reentrant_size|5.008000||cVu
REENTR_MEMZERO|5.009003||Viu
re_exec_indentf|5.023009||vViu
REF|5.003007||Viu
ref|5.009003||Viu
ref_array_or_hash|5.027008||Viu
refcounted_he_chain_2hv|5.013007||cVi
REFCOUNTED_HE_EXISTS|5.015007||Viu
refcounted_he_fetch_pv|5.013007||cVi
refcounted_he_fetch_pvn|5.013007||cVi
refcounted_he_fetch_pvs|5.013007||Vi
refcounted_he_fetch_sv|5.013007||cVi
refcounted_he_free|5.013007||cVi
refcounted_he_inc|5.013007||cVi
REFCOUNTED_HE_KEY_UTF8|5.013007||Viu
refcounted_he_new_pv|5.013007||cVi
refcounted_he_new_pvn|5.013007||cVi
refcounted_he_new_pvs|5.013007||Vi
refcounted_he_new_sv|5.013007||cVi
refcounted_he_value|5.009004||Viu
REFF|5.004001||Viu
REFFA|5.013010||Viu
REFFAN|5.031001||Viu
REFFAN_t8|5.035004||Viu
REFFAN_t8_p8|5.033003||Viu
REFFAN_t8_pb|5.033003||Viu
REFFAN_tb|5.035004||Viu
REFFAN_tb_p8|5.033003||Viu

REFFAN_tb_pb|5.033003||Viu
REFFA_t8|5.035004||Viu
REFFA_t8_p8|5.033003||Viu
REFFA_t8_pb|5.033003||Viu
REFFA_tb|5.035004||Viu
REFFA_tb_p8|5.033003||Viu
REFFA_tb_pb|5.033003||Viu
REFFL|5.004001||Viu
REFFLN|5.031001||Viu
REFFLN_t8|5.035004||Viu
REFFLN_t8_p8|5.033003||Viu
REFFLN_t8_pb|5.033003||Viu
REFFLN_tb|5.035004||Viu
REFFLN_tb_p8|5.033003||Viu
REFFLN_tb_pb|5.033003||Viu
REFFL_t8|5.035004||Viu
REFFL_t8_p8|5.033003||Viu
REFFL_t8_pb|5.033003||Viu
REFFL_tb|5.035004||Viu
REFFL_tb_p8|5.033003||Viu
REFFL_tb_pb|5.033003||Viu
REFFN|5.031001||Viu
REFFN_t8|5.035004||Viu
REFFN_t8_p8|5.033003||Viu
REFFN_t8_pb|5.033003||Viu
REFFN_tb|5.035004||Viu
REFFN_tb_p8|5.033003||Viu
REFFN_tb_pb|5.033003||Viu
REFF_t8|5.035004||Viu
REFF_t8_p8|5.033003||Viu
REFF_t8_pb|5.033003||Viu
REFF_tb|5.035004||Viu
REFF_tb_p8|5.033003||Viu
REFF_tb_pb|5.033003||Viu
REFFU|5.013008||Viu
REFFUN|5.031001||Viu
REFFUN_t8|5.035004||Viu
REFFUN_t8_p8|5.033003||Viu
REFFUN_t8_pb|5.033003||Viu
REFFUN_tb|5.035004||Viu
REFFUN_tb_p8|5.033003||Viu
REFFUN_tb_pb|5.033003||Viu
REFFU_t8|5.035004||Viu
REFFU_t8_p8|5.033003||Viu
REFFU_t8_pb|5.033003||Viu
REFFU_tb|5.035004||Viu
REFFU_tb_p8|5.033003||Viu
REFFU_tb_pb|5.033003||Viu

REF_HE_KEY|5.009005||Viu
refkids|5.003007||Viu
REFN|5.031001||Viu
REFN_t8|5.035004||Viu
REFN_t8_p8|5.033003||Viu
REFN_t8_pb|5.033003||Viu
REFN_tb|5.035004||Viu
REFN_tb_p8|5.033003||Viu
REFN_tb_pb|5.033003||Viu
REF_t8|5.035004||Viu
REF_t8_p8|5.033003||Viu
REF_t8_pb|5.033003||Viu
REF_tb|5.035004||Viu
REF_tb_p8|5.033003||Viu
REF_tb_pb|5.033003||Viu
refto|5.005000||Viu
reg2Lanode|5.021005||Viu
reg|5.005000||Viu
reganode|5.005000||Viu
REG_ANY|5.006000||Viu
REG_ANY_t8|5.035004||Viu
REG_ANY_t8_p8|5.033003||Viu
REG_ANY_t8_pb|5.033003||Viu
REG_ANY_tb|5.035004||Viu
REG_ANY_tb_p8|5.033003||Viu
REG_ANY_tb_pb|5.033003||Viu
regatom|5.005000||Viu
regbranch|5.005000||Viu
reg_check_named_buff_matched|5.009005||Vniu
regclass|5.005000||Viu
regcppop|5.005000||Viu
regcppush|5.005000||Viu
regcp_restore|5.025006||Viu
regcurly|5.013010||cVniu
REG_CUTGROUP_SEEN|5.019009||Viu
regdump|5.005000|5.005000|u
regdump_extflags|5.009005||Viu
regdump_intflags|5.019002||Viu
regdupe_internal|5.009005||cVu
regexec_flags|5.005000||cVu
REGEX_SET|5.031010||Viu
regex_set_precedence|5.021010||Vniu
REGEX_SET_t8|5.035004||Viu
REGEX_SET_t8_p8|5.033003||Viu
REGEX_SET_t8_pb|5.033003||Viu
REGEX_SET_tb|5.035004||Viu
REGEX_SET_tb_p8|5.033003||Viu
REGEX_SET_tb_pb|5.033003||Viu

REG_EXTFLAGS_NAME_SIZE|5.020000||Viu
regfree_internal|5.009005||cVu
REG_GPOS_SEEN|5.019009||Viu
reghop3|5.007001||Vniu
reghop4|5.009005||Vniu
reghopmaybe3|5.007001||Vniu
reginclass|5.005000||Viu
REG_INFTY|5.004005||Viu
reginitcolors|5.006000||cVu
reginsert|5.005000||Viu
REG_INTFLAGS_NAME_SIZE|5.020000||Viu
register|5.003007||Viu
reg_la_NOTHING|||Viu
reg_la_OPFAIL|||Viu
REG_LB_SEEN|||Viu
REG_LOOKBEHIND_SEEN|5.019009||Viu
REG_MAGIC|5.006000||Viu
regmatch|5.005000||Viu
REGMATCH_STATE_MAX|5.009005||Viu
reg_named_buff|5.009005||cViu
reg_named_buff_all|5.009005||cVu
reg_named_buff_exists|5.009005||cVu
reg_named_buff_fetch|5.009005||cVu
reg_named_buff_firstkey|5.009005||cVu
reg_named_buff_iter|5.009005||cViu
reg_named_buff_nextkey|5.009005||cVu
reg_named_buff_scalar|5.009005||cVu
regnext|5.003007||cVu
reg_node|5.005000||Viu
regnode_guts|5.021005||Viu
regnode_guts_debug|||Viu
REGNODE_MAX|5.009004||Viu
REGNODE_SIMPLE|5.013002||Viu
REGNODE_VARIES|5.013002||Viu
reg_numbered_buff_fetch|5.009005||cViu
reg_numbered_buff_length|5.009005||cViu
reg_numbered_buff_store|5.009005||cViu
regpiece|5.005000||Viu
regpnode|5.031010||Viu
regprop|5.003007||Viu
reg_qr_package|5.009005||cViu
REG_RECURSE_SEEN|5.019009||Viu
regrepeat|5.005000||Viu
REG_RUN_ON_COMMENT_SEEN|5.019009||Viu
reg_scan_name|5.009005||Viu
reg_skipcomment|5.009005||Vniu
regtail|5.005000||Viu
regtail_study|5.009004||Viu

reg_temp_copy|5.009005||cViu
REG_TOP_LEVEL_BRANCHES_SEEN|5.019009||Viu
regtry|5.005000||Viu
REG_UNBOUNDED_QUANTIFIER_SEEN|5.019009||Viu
REG_UNFOLDED_MULTI_SEEN|5.019009||Viu
REG_VERBARG_SEEN|5.019009||Viu
REG_ZERO_LEN_SEEN|5.019009||Viu
re_indentf|5.023009||vViu
re_intuit_start|5.006000||cVu
re_intuit_string|5.006000||cVu
rename|5.005000||Viu
Renew|5.003007|5.003007|
Renewc|5.003007|5.003007|
RENUM|5.005000||Viu
RENUM_t8|5.035004||Viu
RENUM_t8_p8|5.033003||Viu
RENUM_t8_pb|5.033003||Viu
RENUM_tb|5.035004||Viu
RENUM_tb_p8|5.033003||Viu
RENUM_tb_pb|5.033003||Viu
re_op_compile|5.017001||Viu
repeatcpy|5.003007|5.003007|nu
REPLACEMENT_CHARACTER_UTF8|5.025005|5.003007|p
report_evil_fh|5.006001||Viu
report_redefined_cv|5.015006||Viu
report_uninit|5.006000||cVi
report_wrongway_fh|5.013009||Viu
re_printf|5.023009||vViu
RE_PV_COLOR_DECL|5.009004||Viu
RE_PV_QUOTED_DECL|5.009004||Viu
require_pv|5.006000|5.006000|
require_tie_mod|5.009005||Viu
ReREFCNT_dec|5.005000||Viu
ReREFCNT_inc|5.005000||Viu
RESTORE_ERRNO|5.010001||Vi
RESTORE_LC_NUMERIC|5.021010|5.021010|p
restore_magic|5.009003||Viu
restore_switched_locale|5.027009||Viu
RE_SV_DUMPLEN|5.009004||Viu
RE_SV_ESCAPE|5.009004||Viu
RE_SV_TAIL|5.009004||Viu
RETPUSHNO|5.003007||Viu
RETPUSHUNDEF|5.003007||Viu
RETPUSHYES|5.003007||Viu
RE_TRIE_MAXBUF_INIT|5.009002||Viu
RE_TRIE_MAXBUF_NAME|5.009002||Viu
RETSETNO|5.003007||Viu
RETSETTARG|5.021009||Viu

RETSETUNDEF|5.003007||Viu
RETSETYES|5.003007||Viu
RETURN|5.003007||Viu
RETURNOP|5.003007||Viu
RETURNX|5.003007||Viu
RETVAL|5.003007|5.003007|V
rewind|5.003007||Viu
rewinddir|5.005000||Viu
REXEC_CHECKED|5.005000||Viu
REXEC_COPY_SKIP_POST|5.017004||Viu
REXEC_COPY_SKIP_PRE|5.017004||Viu
REXEC_COPY_STR|5.005000||Viu
REXEC_FAIL_ON_UNDERFLOW|5.019003||Viu
REXEC_IGNOREPOS|5.006000||Viu
REXEC_NOT_FIRST|5.006000||Viu
REXEC_SCREAM|5.006000||Viu
rmdir|5.005000||Viu
RMS_DIR|5.008001||Viu
RMS_FAC|5.008001||Viu
RMS_FEX|5.008001||Viu
RMS_FNF|5.008001||Viu
RMS_IFI|5.008001||Viu
RMS_ISI|5.008001||Viu
RMS_PRV|5.008001||Viu
rninstr|5.003007|5.003007|n
ROTL32|5.017010||Viu
ROTL64|5.017010||Viu
ROTL_UV|5.017010||Viu
ROTR32|5.027001||Viu
ROTR64|5.027001||Viu
ROTR_UV|5.027001||Viu
rpeep|5.013005||Viu
rsignal|5.004000|5.004000|
rsignal_restore|5.004000||Viu
rsignal_save|5.004000||Viu
rsignal_state|5.004000|5.004000|u
RsPARA|5.003007||Viu
RsRECORD|5.005000||Viu
RsSIMPLE|5.003007||Viu
RsSNARF|5.003007||Viu
run_body|5.006000||Viu
runops_debug|5.005000||cVu
RUNOPS_DEFAULT|5.005000||Viu
runops_standard|5.005000||cVu
run_user_filter|5.009003||Viu
rv2cv_op_cv|5.013006|5.013006|
RV2CVOPCV_FLAG_MASK|5.021004||Viu
RV2CVOPCV_MARK_EARLY|5.013006|5.013006|

RV2CVOPCV_MAYBE_NAME_GV|5.021004||Viu
RV2CVOPCV_RETURN_NAME_GV|5.013006|5.013006|
RV2CVOPCV_RETURN_STUB|5.021004||Viu
rvpv_dup|5.008008|5.008008|u
RX_ANCHORED_SUBSTR|5.010001||Viu
RX_ANCHORED_UTF8|5.010001||Viu
RXapif_ALL|5.009005||Viu
RXapif_CLEAR|5.009005||Viu
RXapif_DELETE|5.009005||Viu
RXapif_EXISTS|5.009005||Viu
RXapif_FETCH|5.009005||Viu
RXapif_FIRSTKEY|5.009005||Viu
RXapif_NEXTKEY|5.009005||Viu
RXapif_ONE|5.009005||Viu
RXapif_REGNAME|5.009005||Viu
RXapif_REGNAMES|5.009005||Viu
RXapif_REGNAMES_COUNT|5.009005||Viu
RXapif_SCALAR|5.009005||Viu
RXapif_STORE|5.009005||Viu
RX_BUFF_IDX_CARET_FULLMATCH|5.017004||Viu
RX_BUFF_IDX_CARET_POSTMATCH|5.017004||Viu
RX_BUFF_IDX_CARET_PREMATCH|5.017004||Viu
RX_BUFF_IDX_FULLMATCH|5.009005||Viu
RX_BUFF_IDX_POSTMATCH|5.009005||Viu
RX_BUFF_IDX_PREMATCH|5.009005||Viu
RX_CHECK_SUBSTR|5.010001||Viu
RX_COMPFLAGS|5.017011||Viu
RX_ENGINE|5.010001||Viu
RX_EXTFLAGS|5.010001||Viu
RXf_BASE_SHIFT|5.013004||Viu
RXf_CHECK_ALL|5.009005||Viu
RXf_COPY_DONE|5.009005||Viu
RXf_EVAL_SEEN|5.009005||Viu
RXf_INTUIT_TAIL|5.009005||Viu
RXf_IS_ANCHORED|5.019009||Viu
RX_FLOAT_SUBSTR|5.010001||Viu
RX_FLOAT_UTF8|5.010001||Viu
RXf_MATCH_UTF8|5.009005||Viu
RXf_NO_INPLACE_SUBST|5.017011||Viu
RXf_NULL|5.010000||Viu
RXf_PMf_CHARSET|5.013009||Viu
RXf_PMf_COMPILETIME|5.009005||Viu
RXf_PMf_EXTENDED|5.009005||Viu
RXf_PMf_EXTENDED_MORE|5.021005||Viu
RXf_PMf_FLAGCOPYMASK|5.017011||Viu
RXf_PMf_FOLD|5.009005||Viu
RXf_PMf_KEEPCOPY|5.009005||Viu
RXf_PMf_MULTILINE|5.009005||Viu

RXf_PMf_NOCAPTURE|5.021008||Viu
RXf_PMf_SINGLELINE|5.009005||Viu
RXf_PMf_SPLIT|5.017011||Viu
RXf_PMf_STD_PMMOD|5.009005||Viu
RXf_PMf_STD_PMMOD_SHIFT|5.010001||Viu
RXf_PMf_STRICT|5.021008||Viu
RXf_SKIPWHITE|5.009005||Viu
RXf_SPLIT|5.009005||Viu
RXf_START_ONLY|5.009005||Viu
RXf_TAINTED|5.009005||Viu
RXf_TAINTED_SEEN|5.009005||Viu
RXf_UNBOUNDED_QUANTIFIER_SEEN|5.019009||Viu
RXf_USE_INTUIT|5.009005||Viu
RXf_USE_INTUIT_ML|5.009005||Viu
RXf_USE_INTUIT_NOML|5.009005||Viu
RXf_WHITE|5.009005||Viu
RX_GOFS|5.010001||Viu
RXi_GET|5.009005||Viu
RXi_GET_DECL|5.009005||Viu
RX_INTFLAGS|5.019009||Viu
RXi_SET|5.009005||Viu
RX_ISTAINTED|5.017006||Viu
RX_LASTCLOSEPAREN|5.010001||Viu
RX_LASTPAREN|5.010001||Viu
RX_MATCH_COPIED|5.006000||Viu
RX_MATCH_COPIED_off|5.006000||Viu
RX_MATCH_COPIED_on|5.006000||Viu
RX_MATCH_COPIED_set|5.006000||Viu
RX_MATCH_COPY_FREE|5.009000||Viu
RX_MATCH_TAINTED|5.005000||Viu
RX_MATCH_TAINTED_off|5.005000||Viu
RX_MATCH_TAINTED_on|5.005000||Viu
RX_MATCH_TAINTED_set|5.005000||Viu
RX_MATCH_UTF8|5.008001||Viu
RX_MATCH_UTF8_off|5.008001||Viu
RX_MATCH_UTF8_on|5.008001||Viu
RX_MATCH_UTF8_set|5.008001||Viu
RX_MINLEN|5.010001||Viu
RX_MINLENRET|5.010001||Viu
RX_NPARENS|5.010001||Viu
RX_OFFS|5.010001||Viu
RXp_COMPFLAGS|5.017011||Viu
RXp_ENGINE|5.027003||Viu
RXp_EXTFLAGS|5.010001||Viu
RXp_GOFS|5.027003||Viu
RXp_HAS_CUTGROUP|5.027003||Viu
RXp_INTFLAGS|5.019009||Viu
RXp_ISTAINTED|5.027003||Viu

RXp_MATCH_COPIED|5.010001||Viu
RXp_MATCH_COPIED_off|5.010001||Viu
RXp_MATCH_COPIED_on|5.010001||Viu
RXp_MATCH_COPY_FREE|5.027003||Viu
RXp_MATCH_TAINTED|5.010001||Viu
RXp_MATCH_TAINTED_off|5.027003||Viu
RXp_MATCH_TAINTED_on|5.017008||Viu
RXp_MATCH_UTF8|5.010001||Viu
RXp_MATCH_UTF8_off|5.027003||Viu
RXp_MATCH_UTF8_on|5.027003||Viu
RXp_MATCH_UTF8_set|5.027003||Viu
RXp_MINLEN|5.027003||Viu
RXp_MINLENRET|5.027003||Viu
RXp_NPARENS|5.027003||Viu
RXp_OFFS|5.027003||Viu
RXp_PAREN_NAMES|5.010001||Viu
RX_PRECOMP|5.010001||Viu
RX_PRECOMP_const|5.010001||Viu
RX_PRELEN|5.010001||Viu
RXp_SAVED_COPY|5.027003||Viu
RXp_SUBBEG|5.027003||Viu
RXp_SUBOFFSET|5.027003||Viu
RXp_ZERO_LEN|5.027003||Viu
RX_REFCNT|5.010001||Viu
rxres_free|5.004000||Viu
rxres_restore|5.004000||Viu
rxres_save|5.004000||Viu
RX_SAVED_COPY|5.011000||Viu
RX_SUBBEG|5.010001||Viu
RX_SUBCOFFSET|5.017004||Viu
RX_SUBLEN|5.010001||Viu
RX_SUBOFFSET|5.017004||Viu
RX_TAINT_on|5.017006||Viu
RX_UTF8|5.010001||Viu
RX_WRAPLEN|5.010001||Viu
RX_WRAPPED|5.010001||Viu
RX_WRAPPED_const|5.011000||Viu
RX_ZERO_LEN|5.019003||Viu
safecalloc|5.003007||Viu
Safefree|5.003007|5.003007|
safefree|5.003007||Viu
safemalloc|5.003007||Viu
saferealloc|5.003007||Viu
safesyscalloc|5.006000|5.006000|n
safesysfree|5.006000|5.006000|n
safesysmalloc|5.006000|5.006000|n
safesysrealloc|5.006000|5.006000|n
SAFE_TRIE_NODENUM|5.009002||Viu

same_dirent|5.003007||Viu
SANE_ERRSV|5.031003|5.031003|
SANY|5.003007||Viu
SANY_t8|5.035004||Viu
SANY_t8_p8|5.033003||Viu
SANY_t8_pb|5.033003||Viu
SANY_tb|5.035004||Viu
SANY_tb_p8|5.033003||Viu
SANY_tb_pb|5.033003||Viu
save_adelete|5.011000|5.011000|u
SAVEADELETE|5.011000||Viu
save_aelem|5.004005|5.004005|u
save_aelem_flags|5.011000|5.011000|u
save_alloc|5.006000|5.006000|u
save_aptr|5.003007|5.003007|
save_ary|5.003007|5.003007|
SAVEBOOL|5.008001|5.008001|
save_bool|5.008001||cVu
save_clearsv|5.003007||cVu
SAVECLEARSV|5.003007||Vi
SAVECOMPILEWARNINGS|5.009004||Viu
SAVECOMPPAD|5.006000||Vi
SAVECOPFILE|5.006000||Viu
SAVECOPFILE_FREE|5.006001||Viu
SAVECOPLINE|5.006000||Viu
SAVECOPSTASH_FREE|5.006001||Viu
SAVE_DEFSV|5.004005|5.003007|p
SAVEDELETE|5.003007|5.003007|
save_delete|5.003007||cVu
save_destructor|5.003007||cVu
SAVEDESTRUCTOR|5.006000|5.006000|
SAVEDESTRUCTOR_X|5.006000|5.006000|
save_destructor_x|5.006000||cVu
SAVE_ERRNO|5.010001||Vi
SAVEFEATUREBITS|5.031006||Viu
SAVEf_KEEPOLDELEM|5.011000||Viu
SAVEFREECOPHH|5.013007||Viu
SAVEFREEOP|5.010001|5.010001|
save_freeop|5.010001||cVu
SAVEFREEPADNAME|5.021007||Viu
SAVEFREEPV|5.003007|5.003007|
save_freepv|5.010001||cVu
SAVEFREESV|5.003007|5.003007|
save_freesv|5.010001||cVu
SAVEf_SETMAGIC|5.011000||Viu
SAVEGENERICPV|5.006001||Viu
save_generic_pvref|5.006001|5.006001|u
SAVEGENERICSV|5.005003||Viu

save_generic_svref|5.005003|5.005003|u
save_gp|5.004000|5.004000|
save_hash|5.003007|5.003007|
save_hdelete|5.011000|5.011000|u
SAVEHDELETE|5.011000||Viu
save_hek_flags|5.008000||Vniu
save_helem|5.004005|5.004005|u
save_helem_flags|5.011000|5.011000|u
SAVEHINTS|5.005000||Viu
save_hints|5.013005|5.013005|u
save_hptr|5.003007|5.003007|
SAVEI16|5.004000|5.004000|
save_I16|5.004000||cVu
SAVEI32|5.003007|5.003007|
save_I32|5.003007||cVu
SAVEI8|5.006000|5.006000|
save_I8|5.006000||cVu
SAVEINT|5.003007|5.003007|
save_int|5.003007||cVu
save_item|5.003007|5.003007|
SAVEIV|5.003007|5.003007|
save_iv|5.004000||cVu
save_lines|5.005000||Viu
save_list|5.003007|5.003007|d
SAVELONG|5.003007|5.003007|
save_long|5.003007||dcVu
save_magic_flags|5.019002||Viu
SAVE_MASK|5.013001||Viu
SAVEMORTALIZESV|5.007001|5.007001|
save_mortalizesv|5.010001||cVu
save_nogv|5.003007|5.003007|du
SAVEOP|5.005000||Viu
save_op|5.010001|5.010001|u
save_padsv_and_mortalize|5.010001|5.010001|u
SAVEPADSVANDMORTALIZE|5.010001||Viu
SAVEPADSV|||i
SAVEPARSER|5.009005||Viu
SAVEPPTR|5.003007|5.003007|
save_pptr|5.003007||cVu
save_pushi32ptr|5.013006|5.013006|u
save_pushptr|5.010001|5.010001|u
save_pushptri32ptr|5.010001||Viu
save_pushptrptr|5.013006|5.013006|u
savepv|5.003007|5.003007|
savepvn|5.003007|5.003007|
savepvs|5.009003|5.009003|
save_re_context|5.006000||cVu
save_scalar|5.003007|5.003007|

save_scalar_at|5.005000||Viu
save_set_svflags|5.009000|5.009000|u
SAVESETSVFLAGS|5.009000||Viu
savesharedpv|5.007003|5.007003|
SAVESHAREDPV|5.007003||Viu
savesharedpvn|5.009005|5.009005|
save_shared_pvref|5.007003|5.007003|u
savesharedpvs|5.013006|5.013006|
savesharedsvpv|5.013006|5.013006|
SAVESPTR|5.003007|5.003007|
save_sptr|5.003007||cVu
savestack_grow|5.003007|5.003007|u
savestack_grow_cnt|5.008001|5.008001|u
SAVESTACK_POS|5.004000|5.004000|
save_strlen|5.019004||cViu
SAVESTRLEN|5.035005|5.035005|
savesvpv|5.009002|5.009002|
save_svref|5.003007|5.003007|
SAVESWITCHSTACK|5.009002||Viu
SAVEt_ADELETE|5.011000||Viu
SAVEt_AELEM|5.004005||Viu
SAVEt_ALLOC|5.006000||Viu
SAVEt_APTR|5.003007||Viu
SAVEt_AV|5.003007||Viu
SAVEt_BOOL|5.008001||Viu
SAVEt_CLEARPADRANGE|5.017006||Viu
SAVEt_CLEARSV|5.003007||Viu
SAVEt_COMPILE_WARNINGS|5.009004||Viu
SAVEt_COMPPAD|5.006000||Viu
SAVEt_DELETE|5.003007||Viu
SAVEt_DESTRUCTOR|5.003007||Viu
SAVEt_DESTRUCTOR_X|5.006000||Viu
SAVEt_FREECOPHH|5.013007||Viu
SAVEt_FREEOP|5.003007||Viu
SAVEt_FREEPADNAME|5.021007||Viu
SAVEt_FREEPV|5.003007||Viu
SAVEt_FREESV|5.003007||Viu
SAVEt_GENERIC_PVREF|5.006001||Viu
SAVEt_GENERIC_SVREF|5.005003||Viu
SAVEt_GP|5.003007||Viu
SAVEt_GVSLOT|5.017007||Viu
SAVEt_GVSV|5.013005||Viu
SAVEt_HELEM|5.004005||Viu
SAVEt_HINTS|5.005000||Viu
SAVEt_HINTS_HH|5.033001||Viu
SAVEt_HPTR|5.003007||Viu
SAVEt_HV|5.003007||Viu
SAVEt_I16|5.004000||Viu

SAVEt_I32|5.003007||Viu
SAVEt_I32_SMALL|5.013001||Viu
SAVEt_I8|5.006000||Viu
SAVE_TIGHT_SHIFT|5.013001||Viu
SAVEt_INT|5.003007||Viu
SAVEt_INT_SMALL|5.013001||Viu
SAVEt_ITEM|5.003007||Viu
SAVEt_IV|5.003007||Viu
SAVEt_LONG|5.003007||Viu
SAVEt_MORTALIZESV|5.007001||Viu
SAVETMPS|5.003007|5.003007|
savetmps|||xu
SAVEt_NSTAB|5.003007||Viu
save_to_buffer|5.027004||Vniu
SAVEt_OP|5.005000||Viu
SAVEt_PADSV_AND_MORTALIZE|5.010001||Viu
SAVEt_PARSER|5.009005||Viu
SAVEt_PPTR|5.003007||Viu
SAVEt_READONLY_OFF|5.019002||Viu
SAVEt_REGCONTEXT|5.003007||Viu
SAVEt_SAVESWITCHSTACK|5.009002||Viu
SAVEt_SET_SVFLAGS|5.009000||Viu
SAVEt_SHARED_PVREF|5.007003||Viu
SAVEt_SPTR|5.003007||Viu
SAVEt_STACK_POS|5.004000||Viu
SAVEt_STRLEN|5.019004||Viu
SAVEt_STRLEN_SMALL|5.033005||Viu
SAVEt_SV|5.003007||Viu
SAVEt_SVREF|5.003007||Viu
SAVEt_TMPSFLOOR|5.023008||Viu
SAVEt_VPTR|5.006000||Viu
save_vptr|5.006000|5.006000|u
SAVEVPTR|5.006000||Viu
SAWAMPERSAND_LEFT|5.017004||Viu
SAWAMPERSAND_MIDDLE|5.017004||Viu
SAWAMPERSAND_RIGHT|5.017004||Viu
sawparens|5.003007||Viu
sb_dstr|5.003007||Viu
sb_iters|5.003007||Viu
sb_m|5.003007||Viu
sb_maxiters|5.003007||Viu
SBOL|5.003007||Viu
SBOL_t8|5.035004||Viu
SBOL_t8_p8|5.033003||Viu
SBOL_t8_pb|5.033003||Viu
SBOL_tb|5.035004||Viu
SBOL_tb_p8|5.033003||Viu
SBOL_tb_pb|5.033003||Viu

sb_orig|5.003007||Viu
SBOX32_CHURN_ROUNDS|5.027001||Viu
SBOX32_MAX_LEN|5.027001||Viu
SBOX32_MIX3|5.027001||Viu
SBOX32_MIX4|5.027001||Viu
SBOX32_SCRAMBLE32|5.027001||Viu
SBOX32_SKIP_MASK|5.027001||Viu
SBOX32_STATE_BITS|5.027001||Viu
SBOX32_STATE_BYTES|5.027001||Viu
SBOX32_STATE_WORDS|5.027001||Viu
SBOX32_STATIC_INLINE|5.027001||Viu
SBOX32_WARN2|5.027001||Viu
SBOX32_WARN3|5.027001||Viu
SBOX32_WARN4|5.027001||Viu
SBOX32_WARN5|5.027001||Viu
SBOX32_WARN6|5.027001||Viu
sb_rflags|5.006000||Viu
sb_rx|5.003007||Viu
sb_rxres|5.004000||Viu
sb_rxtainted|5.004000||Viu
sb_s|5.003007||Viu
sb_strend|5.003007||Viu
sb_targ|5.003007||Viu
scalar|5.003007||Viu
scalarboolean|5.005000||Viu
scalarkids|5.003007||Viu
scalar_mod_type|5.006000||Vniu
scalarvoid|5.003007||Viu
scan_bin|5.006000|5.006000|
scan_commit|5.005000||Viu
scan_const|5.003007||Viu
SCAN_DEF|5.003007||Viu
scan_formline|5.003007||Viu
scan_heredoc|5.003007||Viu
scan_hex|5.006000|5.003007|
scan_ident|5.003007||Viu
scan_inputsymbol|5.003007||Viu
scan_num|5.003007||cVu
scan_oct|5.006000|5.003007|
scan_pat|5.003007||Viu
SCAN_REPL|5.003007||Viu
scan_str|5.003007||xcViu
scan_subst|5.003007||Viu
SCAN_TR|5.003007||Viu
scan_trans|5.003007||Viu
scan_version|5.009001|5.009001|
SCAN_VERSION|5.019008||Viu
scan_vstring|5.009005|5.009005|u

scan_word|5.003007||xcViu
SCHED_YIELD|5.006000|5.006000|Vn
SCOPE_SAVES_SIGNAL_MASK|5.007001||Viu
search_const|5.010001||Viu
seed|5.009003|5.009003|u
seedDrand01|5.006000|5.006000|
SEEK_CUR|5.003007||Viu
seekdir|5.005000||Viu
SEEK_END|5.003007||Viu
SEEK_SET|5.003007||Viu
select|5.005000||Viu
Select_fd_set_t|5.003007|5.003007|Vn
SELECT_MIN_BITS|5.005003|5.005003|Vn
Semctl|5.004005||Viu
semun|5.006000||Viu
send|5.005000||Viu
sendto|5.005000||Viu
SEOL|5.003007||Viu
SEOL_t8|5.035004||Viu
SEOL_t8_p8|5.033003||Viu
SEOL_t8_pb|5.033003||Viu
SEOL_tb|5.035004||Viu
SEOL_tb_p8|5.033003||Viu
SEOL_tb_pb|5.033003||Viu
sequence_num|5.009003||Viu
set_ANYOF_arg|5.019005||Viu
set_ANYOF_SYNTHETIC|5.019009||Viu
setbuf|5.003007||Viu
set_caret_X|5.019006||Viu
set_context|5.006000|5.006000|nu
setdefout|5.011000|5.011000|
SETERRNO|5.003007||Vi
setfd_cloexec|5.027008||Vniu
setfd_cloexec_for_nonsysfd|5.027008||Viu
setfd_cloexec_or_inhexec_by_sysfdness|5.027008||Viu
setfd_inhexec|5.027008||Vniu
setfd_inhexec_for_sysfd|5.027008||Viu
setgid|5.005000||Viu
setgrent|5.009000||Viu
SETGRENT_R_HAS_FPTR|5.008000||Viu
SETGRENT_R_PROTO|5.008000|5.008000|Vn
sethostent|5.005000||Viu
SETHOSTENT_R_PROTO|5.008000|5.008000|Vn
SETi|5.003007||Viu
setjmp|5.005000||Viu
setlinebuf|5.005000||Viu
setlocale|5.009000||Viu
setlocale_debug_string|5.027002||Vniu

SETLOCALE_LOCK|5.033005||Viu
SETLOCALE_R_PROTO|5.008000|5.008000|Vn
SETLOCALE_UNLOCK|5.033005||Viu
SET_MARK_OFFSET|5.006000||Viu
setmode|5.005000||Viu
SETn|5.003007||Viu
setnetent|5.005000||Viu
SETNETENT_R_PROTO|5.008000|5.008000|Vn
set_numeric_radix|5.006000||Viu
SET_NUMERIC_STANDARD|5.004000||Viu
set_numeric_standard|5.006000||cViu
SET_NUMERIC_UNDERLYING|5.021010||Viu
set_numeric_underlying|5.027006||cViu
SETp|5.003007||Viu
set_padlist|5.021006||cVniu
setprotoent|5.005000||Viu
SETPROTOENT_R_PROTO|5.008000|5.008000|Vn
setpwent|5.009000||Viu
SETPWENT_R_HAS_FPTR|5.008000||Viu
SETPWENT_R_PROTO|5.008000|5.008000|Vn
set_regex_pv|5.029004||Viu
setregid|5.003007||Viu
setreuid|5.003007||Viu
SETs|5.003007||Viu
setservent|5.005000||Viu
SETSERVENT_R_PROTO|5.008000|5.008000|Vn
setsockopt|5.005000||Viu
setSTR_LEN|5.031005||Viu
SET_SVANY_FOR_BODYLESS_IV|5.023008||Viu
SET_SVANY_FOR_BODYLESS_NV|5.023008||Viu
SETTARG|5.003007||Viu
SET_THR|5.005000||Viu
SET_THREAD_SELF|5.005003||Viu
SETu|5.004000||Viu
setuid|5.005000||Viu
_setup_canned_invlist|5.019008||cViu
setvbuf|5.003007||Viu
share_hek|5.009003|5.009003|u
share_hek_flags|5.008000||Viu
share_hek_hek|5.009003||Viu
sharepvn|5.005000||Viu
SHARP_S_SKIP|5.007003||Viu
Shmat_t|5.003007|5.003007|Vn
SHORTSIZE|5.004000|5.004000|Vn
should_warn_nl|5.021001||Vniu
should_we_output_Debug_r|5.031011||Viu
SH_PATH|5.003007|5.003007|Vn
shutdown|5.005000||Viu

si_dup|5.007003|5.007003|u
S_IEXEC|5.006000||Viu
S_IFIFO|5.011000||Viu
S_IFMT|5.003007||Viu
SIGABRT|5.003007||Viu
sighandler1|5.031007||Vniu
sighandler3|5.031007||Vniu
sighandler|5.003007||Vniu
SIGILL|5.003007||Viu
Sigjmp_buf|5.003007|5.003007|Vn
Siglongjmp|5.003007|5.003007|
signal|5.005000||Viu
Signal_t|5.003007|5.003007|Vn
SIG_NAME|5.003007|5.003007|Vn
SIG_NUM|5.003007|5.003007|Vn
Sigsetjmp|5.003007|5.003007|
SIG_SIZE|5.007001|5.007001|Vn
simplify_sort|5.006000||Viu
single_1bit_pos32|5.035003||cVnu
single_1bit_pos64|5.035003||cVnu
SINGLE_PAT_MOD|5.009005||Viu
SIPHASH_SEED_STATE|5.027001||Viu
SIPROUND|5.017006||Viu
S_IREAD|5.006000||Viu
S_IRGRP|5.003007||Viu
S_IROTH|5.003007||Viu
S_IRUSR|5.003007||Viu
S_IRWXG|5.006000||Viu
S_IRWXO|5.006000||Viu
S_IRWXU|5.006000||Viu
S_ISBLK|5.003007||Viu
S_ISCHR|5.003007||Viu
S_ISDIR|5.003007||Viu
S_ISFIFO|5.003007||Viu
S_ISGID|5.003007||Viu
S_ISLNK|5.003007||Viu
S_ISREG|5.003007||Viu
S_ISSOCK|5.003007||Viu
S_ISUID|5.003007||Viu
SITEARCH|5.003007|5.003007|Vn
SITEARCH_EXP|5.003007|5.003007|Vn
SITELIB|5.003007|5.003007|Vn
SITELIB_EXP|5.003007|5.003007|Vn
SITELIB_STEM|5.006000|5.006000|Vn
S_IWGRP|5.003007||Viu
S_IWOTH|5.003007||Viu
S_IWRITE|5.006000||Viu
S_IWUSR|5.003007||Viu

S_IXGRP|5.003007||Viu
S_IXOTH|5.003007||Viu
S_IXUSR|5.003007||Viu
SIZE_ALIGN|5.005000||Viu
Size_t|5.003007|5.003007|Vn
Size_t_MAX|5.021003||Viu
Size_t_size|5.006000|5.006000|Vn
SKIP|5.009005||Viu
SKIP_next|5.009005||Viu
SKIP_next_fail|5.009005||Viu
SKIP_next_fail_t8|5.035004||Viu
SKIP_next_fail_t8_p8|5.033003||Viu
SKIP_next_fail_t8_pb|5.033003||Viu
SKIP_next_fail_tb|5.035004||Viu
SKIP_next_fail_tb_p8|5.033003||Viu
SKIP_next_fail_tb_pb|5.033003||Viu
SKIP_next_t8|5.035004||Viu
SKIP_next_t8_p8|5.033003||Viu
SKIP_next_t8_pb|5.033003||Viu
SKIP_next_tb|5.035004||Viu
SKIP_next_tb_p8|5.033003||Viu
SKIP_next_tb_pb|5.033003||Viu
skipspace_flags|5.019002||xcViu
SKIP_t8|5.035004||Viu
SKIP_t8_p8|5.033003||Viu
SKIP_t8_pb|5.033003||Viu
SKIP_tb|5.035004||Viu
SKIP_tb_p8|5.033003||Viu
SKIP_tb_pb|5.033003||Viu
skip_to_be_ignored_text|5.023004||Viu
Slab_Alloc|5.006000||cViu
Slab_Free|5.007003||cViu
Slab_to_ro|5.017002||Viu
Slab_to_rw|5.009005||Viu
sleep|5.005000||Viu
SLOPPYDIVIDE|5.003007||Viu
socket|5.005000||Viu
SOCKET_OPEN_MODE|5.008002||Viu
socketpair|5.005000||Viu
Sock_size_t|5.006000|5.006000|Vn
softref2xv|||iu
sortcv|5.009003||Viu
sortcv_stacked|5.009003||Viu
sortcv_xsub|5.009003||Viu
sortsv|5.007003|5.007003|
sortsv_flags|5.009003|5.009003|
sortsv_flags_impl|5.031011||Viu
SP|5.003007|5.003007|

space_join_names_mortal|5.009004||Viu
SPAGAIN|5.003007|5.003007|
S_PAT_MODS|5.009005||Viu
specialWARN|5.006000||Viu
SRAND48_R_PROTO|5.008000|5.008000|Vn
SRANDOM_R_PROTO|5.008000|5.008000|Vn
SRCLOSE|5.027008||Viu
SRCLOSE_t8|5.035004||Viu
SRCLOSE_t8_p8|5.033003||Viu
SRCLOSE_t8_pb|5.033003||Viu
SRCLOSE_tb|5.035004||Viu
SRCLOSE_tb_p8|5.033003||Viu
SRCLOSE_tb_pb|5.033003||Viu
SROPEN|5.027008||Viu
SROPEN_t8|5.035004||Viu
SROPEN_t8_p8|5.033003||Viu
SROPEN_t8_pb|5.033003||Viu
SROPEN_tb|5.035004||Viu
SROPEN_tb_p8|5.033003||Viu
SROPEN_tb_pb|5.033003||Viu
SS_ACCVIO|5.008001||Viu
SS_ADD_BOOL|5.017007||Viu
SS_ADD_DPTR|5.017007||Viu
SS_ADD_DXPTR|5.017007||Viu
SS_ADD_END|5.017007||Viu
SS_ADD_INT|5.017007||Viu
SS_ADD_IV|5.017007||Viu
SS_ADD_LONG|5.017007||Viu
SS_ADD_PTR|5.017007||Viu
SS_ADD_UV|5.017007||Viu
SS_BUFFEROVF|5.021009||Viu
ssc_add_range|5.019005||Viu
ssc_and|5.019005||Viu
ssc_anything|5.019005||Viu
ssc_clear_locale|5.019005||Vniu
ssc_cp_and|5.019005||Viu
ssc_finalize|5.019005||Viu
SSCHECK|5.003007||Viu
ssc_init|5.019005||Viu
ssc_intersection|5.019005||Viu
ssc_is_anything|5.019005||Vniu
ssc_is_cp_posixl_init|5.019005||Vniu
SSC_MATCHES_EMPTY_STRING|5.021004||Viu
ssc_or|5.019005||Viu
ssc_union|5.019005||Viu
SS_DEVOFFLINE|5.008001||Viu
ss_dup|5.007003|5.007003|u
SSGROW|5.008001||Viu

SS_IVCHAN|5.008001||Viu
SSize_t|5.003007|5.003007|Vn
SSize_t_MAX|5.019004||Viu
SS_MAXPUSH|5.017007||Viu
SSNEW|5.006000||Viu
SSNEWa|5.006000||Viu
SSNEWat|5.007001||Viu
SSNEWt|5.007001||Viu
SS_NOPRIV|5.021001||Viu
SS_NORMAL|5.008001||Viu
SSPOPBOOL|5.008001||Viu
SSPOPDPTR|5.003007||Viu
SSPOPDXPTR|5.006000||Viu
SSPOPINT|5.003007||Viu
SSPOPIV|5.003007||Viu
SSPOPLONG|5.003007||Viu
SSPOPPTR|5.003007||Viu
SSPOPUV|5.013001||Viu
SSPTR|5.006000||Viu
SSPTRt|5.007001||Viu
SSPUSHBOOL|5.008001||Viu
SSPUSHDPTR|5.003007||Viu
SSPUSHDXPTR|5.006000||Viu
SSPUSHINT|5.003007||Viu
SSPUSHIV|5.003007||Viu
SSPUSHLONG|5.003007||Viu
SSPUSHPTR|5.003007||Viu
SSPUSHUV|5.013001||Viu
ST|5.003007|5.003007|
stack_grow|5.003007||cVu
STANDARD_C|5.003007||Viu
STAR|5.003007||Viu
STAR_t8|5.035004||Viu
STAR_t8_p8|5.033003||Viu
STAR_t8_pb|5.033003||Viu
STAR_tb|5.035004||Viu
STAR_tb_p8|5.033003||Viu
STAR_tb_pb|5.033003||Viu
START_EXTERN_C|5.005000|5.003007|pV
start_glob|||xi
START_MY_CXT|5.010000|5.010000|p
STARTPERL|5.003007|5.003007|Vn
start_subparse|5.004000|5.003007|pu
StashHANDLER|5.007001||Viu
Stat|5.003007||Viu
stat|5.005000||Viu
STATIC|5.005000||Viu
STATIC_ASSERT_1|5.021007||Viu

STATIC_ASSERT_2|5.021007||Viu
STATIC_ASSERT_DECL|5.027001||Viu
STATIC_ASSERT_STMT|5.021007||Viu
Stat_t|5.004005||Viu
STATUS_ALL_FAILURE|5.004000||Viu
STATUS_ALL_SUCCESS|5.004000||Viu
STATUS_CURRENT|5.004000||Viu
STATUS_EXIT|5.009003||Viu
STATUS_EXIT_SET|5.009003||Viu
STATUS_NATIVE|5.004000||Viu
STATUS_NATIVE_CHILD_SET|5.009003||Viu
STATUS_UNIX|5.009003||Viu
STATUS_UNIX_EXIT_SET|5.009003||Viu
STATUS_UNIX_SET|5.009003||Viu
STDCHAR|5.003007|5.003007|Vn
stderr|5.003007||Viu
ST_DEV_SIGN|5.035004|5.035004|Vn
ST_DEV_SIZE|5.035004|5.035004|Vn
stdin|5.003007||Viu
STDIO_PTR_LVAL_SETS_CNT|5.007001|5.007001|Vn
STDIO_PTR_LVALUE|5.006000|5.006000|Vn
STDIO_STREAM_ARRAY|5.006000|5.006000|Vn
stdize_locale|5.007001||Viu
stdout|5.003007||Viu
stdoutf|5.005000||Viu
STD_PAT_MODS|5.009005||Viu
STD_PMMOD_FLAGS_CLEAR|5.013006||Viu
ST_INO_SIGN|5.015002|5.015002|Vn
ST_INO_SIZE|5.015002|5.015002|Vn
STMT_END|5.003007|5.003007|pV
STMT_START|5.003007|5.003007|pV
STOREFEATUREBITSHH|5.031006||Viu
STORE_LC_NUMERIC_FORCE_TO_UNDERLYING|5.021010|5.021010|
STORE_LC_NUMERIC_SET_STANDARD|5.027009||pVu
STORE_LC_NUMERIC_SET_TO_NEEDED|5.021010|5.021010|
STORE_LC_NUMERIC_SET_TO_NEEDED_IN|5.031003|5.031003|
STORE_NUMERIC_SET_STANDARD|||piu
strBEGINs|5.027006||Viu
strEQ|5.003007|5.003007|
Strerror|5.003007||Viu
strerror|5.009000||Viu
STRERROR_R_PROTO|5.008000|5.008000|Vn
strGE|5.003007|5.003007|
strGT|5.003007|5.003007|
STRING|5.006000||Viu
STRINGIFY|5.003007|5.003007|Vn
STRINGl|5.031005||Viu
STRINGs|5.031005||Viu

strip_return|5.009003||Viu
strLE|5.003007|5.003007|
STR_LEN|5.006000||Viu
STRLEN|5.027001||Viu
STR_LENl|5.031005||Viu
STR_LENs|5.031005||Viu
strLT|5.003007|5.003007|
strNE|5.003007|5.003007|
strnEQ|5.003007|5.003007|
strnNE|5.003007|5.003007|
STR_SZ|5.006000||Viu
Strtod|5.029010|5.029010|n
Strtol|5.006000|5.006000|n
strtoll|5.006000||Viu
Strtoul|5.006000|5.006000|n
strtoull|5.006000||Viu
str_to_version|5.006000||cVu
StructCopy|5.003007|5.003007|V
STRUCT_OFFSET|5.004000||Viu
STRUCT_SV|5.007001||Viu
STR_WITH_LEN|5.009003|5.003007|pV
study_chunk|5.005000||Viu
sub_crush_depth|5.004000||Viu
sublex_done|5.005000||Viu
sublex_push|5.005000||Viu
sublex_start|5.005000||Viu
SUBST_TAINT_BOOLRET|5.013010||Viu
SUBST_TAINT_PAT|5.013010||Viu
SUBST_TAINT_REPL|5.013010||Viu
SUBST_TAINT_RETAINT|5.013010||Viu
SUBST_TAINT_STR|5.013010||Viu
SUBVERSION|5.003007||Viu
SUCCEED|5.003007||Viu
SUCCEED_t8|5.035004||Viu
SUCCEED_t8_p8|5.033003||Viu
SUCCEED_t8_pb|5.033003||Viu
SUCCEED_tb|5.035004||Viu
SUCCEED_tb_p8|5.033003||Viu
SUCCEED_tb_pb|5.033003||Viu
SUSPEND|5.005000||Viu
SUSPEND_t8|5.035004||Viu
SUSPEND_t8_p8|5.033003||Viu
SUSPEND_t8_pb|5.033003||Viu
SUSPEND_tb|5.035004||Viu
SUSPEND_tb_p8|5.033003||Viu
SUSPEND_tb_pb|5.033003||Viu
sv_2bool|5.013006||cV
sv_2bool_flags|5.013006||cV

sv_2bool_nomg|5.017002||Viu
sv_2cv|5.003007|5.003007|
sv_2io|5.003007|5.003007|
sv_2iuv_common|5.009004||Viu
sv_2iuv_non_preserve|5.007001||Viu
sv_2iv|5.009001||cVu
sv_2iv_flags|5.009001|5.009001|
sv_2mortal|5.003007|5.003007|
sv_2num|5.010000||xVi
sv_2nv|5.013001||Viu
sv_2nv_flags|5.013001|5.013001|
sv_2pv|5.005000||cVu
sv_2pvbyte|5.006000|5.003007|p
sv_2pvbyte_flags|5.031004|5.031004|u
sv_2pvbyte_nolen|5.009003||pcV
sv_2pv_flags|5.007002||pcV
sv_2pv_nolen|5.009003||pcV
sv_2pv_nomg|5.007002||Viu
sv_2pvutf8|5.006000|5.006000|
sv_2pvutf8_flags|5.031004|5.031004|u
sv_2pvutf8_nolen|5.009003||cV
sv_2uv|5.009001||pcVu
sv_2uv_flags|5.009001|5.009001|
sv_add_arena|5.003007||Vi
sv_add_backref|||iu
SvAMAGIC|5.003007||Viu
SvAMAGIC_off|5.003007|5.003007|nu
SvAMAGIC_on|5.003007|5.003007|nu
SvANY|5.003007||Viu
SvARENA_CHAIN_SET|||Viu
SvARENA_CHAIN|||Viu
sv_backoff|5.003007|5.003007|n
sv_bless|5.003007|5.003007|
sv_buf_to_ro|5.019008||Viu
sv_buf_to_rw|5.019008||Viu
SvCANCOW|5.017007||Viu
SvCANEXISTDELETE|5.011000||Viu
SV_CATBYTES|5.021005|5.021005|
sv_cat_decode|5.008001|5.008001|
sv_cathek|5.021004||Viu
sv_catpv|5.003007|5.003007|
sv_catpvf|5.004000||vV
sv_catpv_flags|5.013006|5.013006|
sv_catpvf_mg|5.004005||pvV
sv_catpvf_mg_nocontext|5.006000||pvVn
sv_catpvf_nocontext|5.006000||vVn
sv_catpv_mg|5.004005|5.003007|p
sv_catpvn|5.003007|5.003007|

sv_catpvn_flags|5.007002|5.007002|
sv_catpvn_mg|5.004005|5.003007|p
sv_catpvn_nomg|5.007002|5.003007|p
sv_catpvn_nomg_maybeutf8|5.017005||Viu
sv_catpvn_nomg_utf8_upgrade|5.017002||Viu
sv_catpv_nomg|5.013006|5.013006|
sv_catpvs|5.009003|5.003007|p
sv_catpvs_flags|5.013006|5.013006|
sv_catpvs_mg|5.013006|5.013006|
sv_catpvs_nomg|5.013006|5.013006|
sv_catsv|5.003007|5.003007|
sv_catsv_flags|5.007002|5.007002|
sv_catsv_mg|5.004005|5.003007|p
sv_catsv_nomg|5.007002|5.003007|p
SV_CATUTF8|5.021005|5.021005|
sv_catxmlpvs|5.013006||Viu
SV_CHECK_THINKFIRST|5.008001||Viu
SV_CHECK_THINKFIRST_COW_DROP|5.009000||Viu
sv_chop|5.003007|5.003007|
sv_clean_all|5.003007||Vi
sv_clean_objs|5.003007||Vi
sv_clear|5.003007|5.003007|
sv_cmp|5.003007|5.003007|
sv_cmp_flags|5.013006|5.013006|
sv_cmp_locale|5.004000|5.004000|
sv_cmp_locale_flags|5.013006|5.013006|
sv_collxfrm|5.013006||V
sv_collxfrm_flags|5.013006|5.013006|
SvCOMPILED|5.003007||Viu
SvCOMPILED_off|5.003007||Viu
SvCOMPILED_on|5.003007||Viu
SV_CONST|5.019002||Viu
SV_CONST_BINMODE|5.019002||Viu
SV_CONST_CLEAR|5.019002||Viu
SV_CONST_CLOSE|5.019002||Viu
SV_CONST_DELETE|5.019002||Viu
SV_CONST_DESTROY|5.019002||Viu
SV_CONST_EOF|5.019002||Viu
SV_CONST_EXISTS|5.019002||Viu
SV_CONST_EXTEND|5.019002||Viu
SV_CONST_FETCH|5.019002||Viu
SV_CONST_FETCHSIZE|5.019002||Viu
SV_CONST_FILENO|5.019002||Viu
SV_CONST_FIRSTKEY|5.019002||Viu
SV_CONST_GETC|5.019002||Viu
SV_CONST_NEXTKEY|5.019002||Viu
SV_CONST_OPEN|5.019002||Viu
SV_CONST_POP|5.019002||Viu

SV_CONST_PRINT|5.019002||Viu
SV_CONST_PRINTF|5.019002||Viu
SV_CONST_PUSH|5.019002||Viu
SV_CONST_READ|5.019002||Viu
SV_CONST_READLINE|5.019002||Viu
SV_CONST_RETURN|5.009003|5.003007|poVnu
SV_CONST_SCALAR|5.019002||Viu
SV_CONSTS_COUNT|5.019002||Viu
SV_CONST_SEEK|5.019002||Viu
SV_CONST_SHIFT|5.019002||Viu
SV_CONST_SPLICE|5.019002||Viu
SV_CONST_STORE|5.019002||Viu
SV_CONST_STORESIZE|5.019002||Viu
SV_CONST_TELL|5.019002||Viu
SV_CONST_TIEARRAY|5.019002||Viu
SV_CONST_TIEHANDLE|5.019002||Viu
SV_CONST_TIEHASH|5.019002||Viu
SV_CONST_TIESCALAR|5.019002||Viu
SV_CONST_UNSHIFT|5.019002||Viu
SV_CONST_UNTIE|5.019002||Viu
SV_CONST_WRITE|5.019002||Viu
sv_copypv|5.007003|5.007003|
sv_copypv_flags|5.017002|5.017002|
sv_copypv_nomg|5.017002|5.017002|
SV_COW_DROP_PV|5.008001|5.003007|p
SV_COW_OTHER_PVS|5.009005||Viu
SV_COW_REFCNT_MAX|5.017007||Viu
SV_COW_SHARED_HASH_KEYS|5.009005|5.003007|poVnu
SvCUR|5.003007|5.003007|
SvCUR_set|5.003007|5.003007|
sv_dec|5.003007|5.003007|
sv_dec_nomg|5.013002|5.013002|
sv_del_backref|5.006000||cViu
sv_derived_from|5.004000|5.004000|
sv_derived_from_pv|5.015004|5.015004|
sv_derived_from_pvn|5.015004|5.015004|
sv_derived_from_sv|5.015004|5.015004|
sv_derived_from_svpvn|5.031006||Viu
sv_destroyable|5.010000|5.010000|
SvDESTROYABLE|5.010000||Viu
sv_display|5.021002||Viu
SV_DO_COW_SVSETSV|5.009005||Viu
sv_does|5.009004|5.009004|
sv_does_pv|5.015004|5.015004|
sv_does_pvn|5.015004|5.015004|
sv_does_sv|5.015004|5.015004|
sv_dump|5.003007|5.003007|
sv_dup|5.007003|5.007003|u

sv_dup_common|5.013002||Viu
sv_dup_inc|5.013002|5.013002|u
sv_dup_inc_multiple|5.011000||Viu
SvEND|5.003007|5.003007|
SvEND_set|5.003007||Viu
SvENDx|5.003007||Viu
sv_eq|5.003007|5.003007|
sv_eq_flags|5.013006|5.013006|
sv_exp_grow|5.009003||Viu
SVf256|5.008001||Viu
SVf32|5.009002||Viu
SVf|5.006000|5.003007|p
SvFAKE|5.003007||Viu
SvFAKE_off|5.003007||Viu
SvFAKE_on|5.003007||Viu
SVf_AMAGIC|5.003007||Viu
SVfARG|5.009005|5.003007|p
SVf_BREAK|5.003007||Viu
SVf_FAKE|5.003007||Viu
SVf_IOK|5.003007||Viu
SVf_IsCOW|5.017006||Viu
SVf_IVisUV|5.006000||Viu
SvFLAGS|5.003007||Viu
SVf_NOK|5.003007||Viu
SVf_OK|5.003007||Viu
SVf_OOK|5.003007||Viu
sv_force_normal|5.006000|5.006000|
sv_force_normal_flags|5.007001|5.007001|
SV_FORCE_UTF8_UPGRADE|5.011000|5.011000|
SVf_POK|5.003007||Viu
SVf_PROTECT|5.021005||Viu
SVf_READONLY|5.003007||Viu
sv_free2|||xciu
sv_free|5.003007|5.003007|
sv_free_arenas|5.003007||Vi
SVf_ROK|5.003007||Viu
SVf_THINKFIRST|5.003007||Viu
SVf_UTF8|5.006000|5.003007|p
SvGAMAGIC|5.006001|5.006001|
sv_get_backrefs|5.021008|5.021008|xn
SvGETMAGIC|5.004005|5.003007|p
sv_gets|5.003007|5.003007|
SvGID|5.019001||Viu
SV_GMAGIC|5.007002|5.003007|p
SvGMAGICAL|5.003007||Viu
SvGMAGICAL_off|5.003007||Viu
SvGMAGICAL_on|5.003007||Viu
SvGROW|5.003007|5.003007|

sv_grow|5.003007||cV
Sv_Grow|5.003007||Viu
sv_grow_fresh|5.035006||cV
SvGROW_mutable|5.009003||Viu
SV_HAS_TRAILING_NUL|5.009004|5.003007|p
SV_IMMEDIATE_UNREF|5.007001|5.003007|p
SvIMMORTAL|5.004000||Viu
SvIMMORTAL_INTERP|5.027003||Viu
SvIMMORTAL_TRUE|5.027003||Viu
sv_inc|5.003007|5.003007|
sv_i_ncmp|5.009003||Viu
sv_i_ncmp_desc|5.031011||Viu
sv_inc_nomg|5.013002|5.013002|
sv_insert|5.003007|5.003007|
sv_insert_flags|5.010001|5.010001|
SvIOK|5.003007|5.003007|
SvIOK_nog|5.017002||Viu
SvIOK_nogthink|5.017002||Viu
SvIOK_notUV|5.006000|5.006000|
SvIOK_off|5.003007|5.003007|
SvIOK_on|5.003007|5.003007|
SvIOK_only|5.003007|5.003007|
SvIOK_only_UV|5.006000|5.006000|
SvIOKp|5.003007|5.003007|
SvIOKp_on|5.003007||Viu
SvIOK_UV|5.006000|5.006000|
sv_isa|5.003007|5.003007|
sv_isa_sv|5.031007|5.031007|x
SvIsBOOL|5.035004|5.035004|
SvIsCOW|5.008003|5.008003|
SvIsCOW_shared_hash|5.008003|5.008003|
SvIS_FREED|5.009003||Viu
sv_isobject|5.003007|5.003007|
SvIV|5.003007|5.003007|
sv_iv|5.005000||dcV
SvIV_nomg|5.009001|5.003007|p
SvIV_please|5.007001||Viu
SvIV_please_nomg|5.013002||Viu
SvIV_set|5.003007|5.003007|
SvIVX|5.003007|5.003007|
SvIVx|5.003007|5.003007|
SvIVXx|5.003007||Viu
sv_kill_backrefs|||xiu
sv_len|5.003007|5.003007|
SvLEN|5.003007|5.003007|
SvLEN_set|5.003007|5.003007|
sv_len_utf8|5.006000|5.006000|p
sv_len_utf8_nomg||5.006000|p

SvLENx|5.003007||Viu
SvLOCK|5.007003|5.007003|
sv_magic|5.003007|5.003007|
SvMAGIC|5.003007||Viu
SvMAGICAL|5.003007||Viu
SvMAGICAL_off|5.003007||Viu
SvMAGICAL_on|5.003007||Viu
sv_magicext|5.007003|5.007003|
sv_magicext_mglob|5.019002||cViu
sv_magic_portable||5.004000|pou
SvMAGIC_set|5.009003|5.003007|p
sv_mortalcopy|5.003007|5.003007|
sv_mortalcopy_flags|5.031001|5.003007|p
SV_MUTABLE_RETURN|5.009003|5.003007|poVnu
sv_ncmp|5.009003||Viu
sv_ncmp_desc|5.031011||Viu
sv_newmortal|5.003007|5.003007|
sv_newref|5.003007||cV
SvNIOK|5.003007|5.003007|
SvNIOK_nog|5.017002||Viu
SvNIOK_nogthink|5.017002||Viu
SvNIOK_off|5.003007|5.003007|
SvNIOKp|5.003007|5.003007|
SvNOK|5.003007|5.003007|
SvNOK_nog|5.017002||Viu
SvNOK_nogthink|5.017002||Viu
SvNOK_off|5.003007|5.003007|
SvNOK_on|5.003007|5.003007|
SvNOK_only|5.003007|5.003007|
SvNOKp|5.003007|5.003007|
SvNOKp_on|5.003007||Viu
sv_nolocking|5.031004|5.031004|d
sv_nosharing|5.007003|5.007003|
SV_NOSTEAL|5.009002|5.003007|p
sv_nounlocking|5.009004|5.009004|d
sv_numeq|5.035009|5.035009|
sv_numeq_flags|5.035009|5.035009|
sv_nv|5.005000||dcV
SvNV|5.006000|5.003007|
SvNV_nomg|5.013002|5.003007|p
SvNV_set|5.006000|5.003007|
SvNVX|5.006000|5.003007|
SvNVx|5.006000|5.003007|
SvNVXx|5.003007||Viu
SvOBJECT|5.003007||Viu
SvOBJECT_off|5.003007||Viu
SvOBJECT_on|5.003007||Viu
SvOK|5.003007|5.003007|

SvOK_off|5.003007||Viu
SvOK_off_exc_UV|5.006000||Viu
SvOKp|5.003007||Viu
sv_only_taint_gmagic|5.021010||Vniu
SvOOK|5.003007|5.003007|
SvOOK_off|5.003007|5.003007|
SvOOK_offset|5.011000|5.011000|
SvOOK_on|5.003007||Viu
sv_or_pv_len_utf8|5.017005||Viu
sv_or_pv_pos_u2b|5.019004||Viu
SvOURSTASH|5.009005||Viu
SvOURSTASH_set|5.009005||Viu
SvPADMY|5.003007||Viu
SvPADMY_on|5.003007||Viu
SVpad_OUR|5.006000||Viu
SvPAD_OUR|5.009004||Viu
SvPAD_OUR_on|5.009004||Viu
SvPADSTALE|5.009000||Viu
SvPADSTALE_off|5.009000||Viu
SvPADSTALE_on|5.009000||Viu
SVpad_STATE|5.009004||Viu
SvPAD_STATE|5.009004||Viu
SvPAD_STATE_on|5.009004||Viu
SvPADTMP|5.003007||Viu
SvPADTMP_off|5.003007||Viu
SvPADTMP_on|5.003007||Viu
SVpad_TYPED|5.007002||Viu
SvPAD_TYPED|5.009004||Viu
SvPAD_TYPED_on|5.009004||Viu
SVpav_REAL|5.009003||Viu
SVpav_REIFY|5.009003||Viu
SvPCS_IMPORTED|5.009005||Viu
SvPCS_IMPORTED_off|5.009005||Viu
SvPCS_IMPORTED_on|5.009005||Viu
SvPEEK|5.003007||Viu
sv_peek|5.005000|5.005000|u
SVpgv_GP|5.009005||Viu
SVphv_CLONEABLE|5.009003||Viu
SVphv_HASKFLAGS|5.008000||Viu
SVphv_LAZYDEL|5.003007||Viu
SVphv_SHAREKEYS|5.003007||Viu
SVp_IOK|5.003007||Viu
SVp_NOK|5.003007||Viu
SvPOK|5.003007|5.003007|
SvPOK_byte_nog|5.017002||Viu
SvPOK_byte_nogthink|5.017002||Viu
SvPOK_byte_pure_nogthink|5.017003||Viu
SvPOK_nog|5.017002||Viu

SvPOK_nogthink|5.017002||Viu
SvPOK_off|5.003007|5.003007|
SvPOK_on|5.003007|5.003007|
SvPOK_only|5.003007|5.003007|
SvPOK_only_UTF8|5.006000|5.006000|
SvPOK_or_cached_IV|||Viu
SvPOKp|5.003007|5.003007|
SvPOKp_on|5.003007||Viu
SvPOK_pure_nogthink|5.017003||Viu
SvPOK_utf8_nog|5.017002||Viu
SvPOK_utf8_nogthink|5.017002||Viu
SvPOK_utf8_pure_nogthink|5.017003||Viu
sv_pos_b2u|5.006000|5.006000|
sv_pos_b2u_flags|5.019003|5.019003|
sv_pos_b2u_midway|5.009004||Viu
sv_pos_u2b|5.006000|5.006000|
sv_pos_u2b_cached|5.009004||Viu
sv_pos_u2b_flags|5.011005|5.011005|
sv_pos_u2b_forwards|5.009004||Vniu
sv_pos_u2b_midway|5.009004||Vniu
SVp_POK|5.003007||Viu
SVppv_STATIC|5.035004||Viu
SVprv_PCS_IMPORTED|5.009005||Viu
SVprv_WEAKREF|5.006000||Viu
SVp_SCREAM|5.003007||Viu
SvPV|5.003007|5.003007|
sv_pv|5.008000||cV
SvPVbyte|5.006000|5.003007|p
sv_pvbyte|5.008000||cV
SvPVbyte_force|5.009002|5.009002|
sv_pvbyten|5.006000||dcV
sv_pvbyten_force|5.006000||cV
SvPVbyte_nolen|5.006000|5.006000|
SvPVbyte_nomg|5.031004|5.031004|
SvPVbyte_or_null|5.031004|5.031004|
SvPVbyte_or_null_nomg|5.031004|5.031004|
SvPVbytex|5.006000|5.006000|
SvPVbytex_force|5.006000|5.006000|
SvPVbytex_nolen|5.009003|5.009003|
SvPVCLEAR|5.025006|5.025006|p
SvPV_const|5.009003|5.003007|p
SvPV_flags|5.007002|5.003007|p
SvPV_flags_const|5.009003|5.003007|p
SvPV_flags_const_nolen|5.009003||pVu
SvPV_flags_mutable|5.009003|5.003007|p
SvPV_force|5.003007|5.003007|p
SvPV_force_flags|5.007002|5.003007|p
SvPV_force_flags_mutable|5.009003|5.003007|p

SvPV_force_flags_nolen|5.009003|5.003007|p
SvPV_force_mutable|5.009003|5.003007|p
SvPV_force_nolen|5.009003|5.003007|p
SvPV_force_nomg|5.007002|5.003007|p
SvPV_force_nomg_nolen|5.009003|5.003007|p
SvPV_free|5.009003|5.009003|
SvPV_mutable|5.009003|5.003007|p
sv_pvn|5.004000||dcV
sv_pvn_force|5.005000||cV
sv_pvn_force_flags|5.007002|5.003007|p
sv_pvn_force_nomg|5.007002||Viu
sv_pvn_nomg|5.007003|5.005000|pdu
SvPV_nolen|5.006000|5.003007|p
SvPV_nolen_const|5.009003|5.003007|p
SvPV_nomg|5.007002|5.003007|p
SvPV_nomg_const|5.009003|5.003007|p
SvPV_nomg_const_nolen|5.009003|5.003007|p
SvPV_nomg_nolen|5.013007|5.003007|p
SvPV_renew|5.009003|5.003007|p
SvPV_set|5.003007|5.003007|
SvPV_shrink_to_cur|5.009003||Viu
SvPVutf8|5.006000|5.006000|
sv_pvutf8|5.008000||cV
SvPVutf8_force|5.006000|5.006000|
sv_pvutf8n|5.006000||dcV
sv_pvutf8n_force|5.006000||cV
SvPVutf8_nolen|5.006000|5.006000|
SvPVutf8_nomg|5.031004|5.031004|
SvPVutf8_or_null|5.031004|5.031004|
SvPVutf8_or_null_nomg|5.031004|5.031004|
SvPVutf8x|5.006000|5.006000|
SvPVutf8x_force|5.006000|5.006000|
SvPVX|5.003007|5.003007|
SvPVx|5.003007|5.003007|
SvPVX_const|5.009003|5.003007|p
SvPVx_const|5.009003|5.009003|
SvPVx_force|5.005000|5.005000|
SvPVX_mutable|5.009003|5.003007|p
SvPVx_nolen|5.009003|5.009003|
SvPVx_nolen_const|5.009003|5.003007|p
SvPVXtrue|5.017002||Viu
SvPVXx|5.003007|5.003007|
SvREADONLY|5.003007|5.003007|
SvREADONLY_off|5.003007|5.003007|
SvREADONLY_on|5.003007|5.003007|
sv_recode_to_utf8|5.007003|5.007003|
sv_ref|5.023005|5.023005|
SvREFCNT|5.003007|5.003007|

SvREFCNT_dec|5.003007|5.003007|
SvREFCNT_dec_NN|5.017007|5.017007|
SvREFCNT_IMMORTAL|5.017008||Viu
SvREFCNT_inc|5.003007|5.003007|pn
SvREFCNT_inc_NN|5.009004|5.003007|pn
SvREFCNT_inc_simple|5.009004|5.003007|pn
SvREFCNT_inc_simple_NN|5.009004|5.003007|pn
SvREFCNT_inc_simple_void|5.009004|5.003007|pn
SvREFCNT_inc_simple_void_NN|5.009004|5.003007|pn
SvREFCNT_inc_void|5.009004|5.003007|pn
SvREFCNT_inc_void_NN|5.009004|5.003007|pn
sv_reftype|5.003007|5.003007|
sv_replace|5.003007|5.003007|
sv_report_used|5.003007|5.003007|
sv_reset|5.003007|5.003007|
sv_resetpvn|5.017005||Viu
SvRMAGICAL|5.003007||Viu
SvRMAGICAL_off|5.003007||Viu
SvRMAGICAL_on|5.003007||Viu
SvROK|5.003007|5.003007|
SvROK_off|5.003007|5.003007|
SvROK_on|5.003007|5.003007|
SvRV|5.003007|5.003007|
SvRV_const|5.010001||Viu
SvRV_set|5.009003|5.003007|p
sv_rvunweaken|5.027004|5.027004|
sv_rvweaken|5.006000|5.006000|
SvRVx|5.003007||Viu
SvRX|5.009005|5.003007|p
SvRXOK|5.009005|5.003007|p
SV_SAVED_COPY|5.009005||Viu
SvSCREAM|5.003007||Viu
SvSCREAM_off|5.003007||Viu
SvSCREAM_on|5.003007||Viu
sv_setbool|5.035004|5.035004|
sv_setbool_mg|5.035004|5.035004|
sv_setgid|5.019001||Viu
sv_sethek|5.015004||cViu
sv_setiv|5.003007|5.003007|
sv_setiv_mg|5.004005|5.003007|p
SvSETMAGIC|5.003007|5.003007|
SvSetMagicSV|5.004000|5.004000|
SvSetMagicSV_nosteal|5.004000|5.004000|
sv_setnv|5.006000|5.003007|
sv_setnv_mg|5.006000|5.003007|p
sv_setpv|5.003007|5.003007|
sv_setpv_bufsize|5.025006|5.025006|
sv_setpvf|5.004000||vV

sv_setpvf_mg|5.004005||pvV
sv_setpvf_mg_nocontext|5.006000||pvVn
sv_setpvf_nocontext|5.006000||vVn
sv_setpviv|5.008001|5.008001|d
sv_setpviv_mg|5.008001|5.008001|d
sv_setpv_mg|5.004005|5.003007|p
sv_setpvn|5.003007|5.003007|
sv_setpvn_fresh|5.035006|5.035006|
sv_setpvn_mg|5.004005|5.003007|p
sv_setpvs|5.009004|5.003007|p
sv_setpvs_mg|5.013006|5.013006|
sv_setref_iv|5.003007|5.003007|
sv_setref_nv|5.006000|5.003007|
sv_setref_pv|5.003007|5.003007|
sv_setref_pvn|5.003007|5.003007|
sv_setref_pvs|5.013006|5.013006|
sv_setref_uv|5.007001|5.007001|
sv_setrv_inc|5.035004|5.035004|
sv_setrv_inc_mg|5.035004|5.035004|
sv_setrv_noinc|5.035004|5.035004|
sv_setrv_noinc_mg|5.035004|5.035004|
sv_setsv|5.003007|5.003007|
SvSetSV|5.003007|5.003007|
sv_setsv_cow|5.009000||xcViu
sv_setsv_flags|5.007002|5.003007|p
sv_setsv_mg|5.004005|5.003007|p
sv_setsv_nomg|5.007002|5.003007|p
SvSetSV_nosteal|5.004000|5.004000|
sv_setuid|5.019001||Viu
sv_set_undef|5.025008|5.025008|
sv_setuv|5.004000|5.003007|p
sv_setuv_mg|5.004005|5.003007|p
SVs_GMG|5.003007||Viu
SvSHARE|5.007003|5.007003|
SvSHARED_HASH|5.009003|5.003007|p
SvSHARED_HEK_FROM_PV|5.009003||Viu
SV_SKIP_OVERLOAD|5.013001||Viu
SV_SMAGIC|5.009003|5.003007|p
SvSMAGICAL|5.003007||Viu
SvSMAGICAL_off|5.003007||Viu
SvSMAGICAL_on|5.003007||Viu
SVs_OBJECT|5.003007||Viu
SVs_PADMY|5.003007||Viu
SVs_PADSTALE|5.009000|5.009000|
SVs_PADTMP|5.003007||Viu
SVs_RMG|5.003007||Viu
SVs_SMG|5.003007||Viu
SvSTASH|5.003007|5.003007|

SvSTASH_set|5.009003|5.003007|p
SVs_TEMP|5.003007|5.003007|
sv_streq|5.035009|5.035009|
sv_streq_flags|5.035009|5.035009|
sv_string_from_errnum|5.027003|5.027003|
SvTAIL|5.003007||Viu
SvTAINT|5.003007|5.003007|
sv_taint|5.009003||cV
SvTAINTED|5.004000|5.004000|
sv_tainted|5.004000||cV
SvTAINTED_off|5.004000|5.004000|
SvTAINTED_on|5.004000|5.004000|
SvTEMP|5.003007||Viu
SvTEMP_off|5.003007||Viu
SvTEMP_on|5.003007||Viu
SVt_FIRST|5.021005||Viu
SvTHINKFIRST|5.003007||Vi
SvTIED_mg|5.005003||Viu
SvTIED_obj|5.005003|5.005003|
SVt_INVLIST|||c
SVt_IV|5.003007|5.003007|
SVt_MASK|5.015001||Viu
SVt_NULL|5.003007|5.003007|
SVt_NV|5.003007|5.003007|
SVt_PV|5.003007|5.003007|
SVt_PVAV|5.003007|5.003007|
SVt_PVBM|5.009005||Viu
SVt_PVCV|5.003007|5.003007|
SVt_PVFM|5.003007|5.003007|
SVt_PVGV|5.003007|5.003007|
SVt_PVHV|5.003007|5.003007|
SVt_PVIO|5.003007|5.003007|
SVt_PVIV|5.003007|5.003007|
SVt_PVLV|5.003007|5.003007|
SVt_PVMG|5.003007|5.003007|
SVt_PVNV|5.003007|5.003007|
SVt_REGEXP|5.011000|5.011000|
SvTRUE|5.003007|5.003007|
sv_true|5.005000||cV
SvTRUE_common|5.033005||cVu
SvTRUE_NN|5.017007|5.017007|
SvTRUE_nomg|5.013006|5.003007|p
SvTRUE_nomg_NN|5.017007|5.017007|
SvTRUEx|5.003007|5.003007|
SvTRUEx_nomg|5.017002||Viu
SVt_RV|5.011000||Viu
SvTYPE|5.003007|5.003007|
SVTYPEMASK|5.003007||Viu

SvUID|5.019001||Viu
SV_UNDEF_RETURNS_NULL|5.011000||Viu
sv_unglob|5.005000||Viu
sv_uni_display|5.007003|5.007003|
SvUNLOCK|5.007003|5.007003|
sv_unmagic|5.003007|5.003007|
sv_unmagicext|5.013008|5.003007|p
sv_unref|5.003007|5.003007|
sv_unref_flags|5.007001|5.007001|
sv_untaint|5.004000||cV
SvUOK|5.007001|5.006000|p
SvUOK_nog|5.017002||Viu
SvUOK_nogthink|5.017002||Viu
sv_upgrade|5.003007|5.003007|
SvUPGRADE|5.003007|5.003007|
sv_usepvn|5.003007|5.003007|
sv_usepvn_flags|5.009004|5.009004|
sv_usepvn_mg|5.004005|5.003007|p
SvUTF8|5.006000|5.003007|p
sv_utf8_decode|5.006000|5.006000|
sv_utf8_downgrade|5.006000|5.006000|
sv_utf8_downgrade_flags|5.031004|5.031004|
sv_utf8_downgrade_nomg|5.031004|5.031004|
sv_utf8_encode|5.006000|5.006000|
SV_UTF8_NO_ENCODING|5.008001|5.003007|pd
SvUTF8_off|5.006000|5.006000|
SvUTF8_on|5.006000|5.006000|
sv_utf8_upgrade|5.007001|5.007001|
sv_utf8_upgrade_flags|5.007002|5.007002|
sv_utf8_upgrade_flags_grow|5.011000|5.011000|
sv_utf8_upgrade_nomg|5.007002|5.007002|
SvUV|5.004000|5.003007|p
sv_uv|5.005000||pdcV
SvUV_nomg|5.009001|5.003007|p
SvUV_set|5.009003|5.003007|p
SvUVX|5.004000|5.003007|p
SvUVx|5.004000|5.003007|p
SvUVXx|5.004000|5.003007|pd
SvVALID|5.003007||Viu
sv_vcatpvf|5.006000|5.004000|p
sv_vcatpvf_mg|5.006000|5.004000|p
sv_vcatpvfn|5.004000|5.004000|
sv_vcatpvfn_flags|5.017002|5.017002|
SvVOK|5.008001|5.008001|
sv_vsetpvf|5.006000|5.004000|p
sv_vsetpvf_mg|5.006000|5.004000|p
sv_vsetpvfn|5.004000|5.004000|
SvVSTRING_mg|5.009004|5.003007|p

SvWEAKREF|5.006000||Viu
SvWEAKREF_off|5.006000||Viu
SvWEAKREF_on|5.006000||Viu
swallow_bom|5.006001||Viu
switch_category_locale_to_template|5.027009||Viu
SWITCHSTACK|5.003007||Viu
switch_to_global_locale|5.027009|5.003007|pn
sync_locale|5.027009|5.003007|pn
sys_init3|||cnu
sys_init|||cnu
sys_intern_clear|5.006001||Vu
sys_intern_dup|5.006000||Vu
sys_intern_init|5.006001||Vu
SYSTEM_GMTIME_MAX|5.011000||Viu
SYSTEM_GMTIME_MIN|5.011000||Viu
SYSTEM_LOCALTIME_MAX|5.011000||Viu
SYSTEM_LOCALTIME_MIN|5.011000||Viu
sys_term|||cnu
TAIL|5.005000||Viu
TAIL_t8|5.035004||Viu
TAIL_t8_p8|5.033003||Viu
TAIL_t8_pb|5.033003||Viu
TAIL_tb|5.035004||Viu
TAIL_tb_p8|5.033003||Viu
TAIL_tb_pb|5.033003||Viu
TAINT|5.004000||Viu
taint_env|5.003007|5.003007|u
TAINT_ENV|5.003007||Viu
TAINT_get|5.017006||Viu
TAINT_IF|5.003007||Viu
TAINTING_get|5.017006||Viu
TAINTING_set|5.017006||Viu
TAINT_NOT|5.003007||Viu
taint_proper|5.003007|5.003007|u
TAINT_PROPER|5.003007||Viu
TAINT_set|5.017006||Viu
TAINT_WARN_get|5.017006||Viu
TAINT_WARN_set|5.017006||Viu
TARG|5.003007|5.003007|
TARGi|5.023005||Viu
TARGn|5.023005||Viu
TARGu|5.023005||Viu
telldir|5.005000||Viu
T_FMT|5.027010||Viu
T_FMT_AMPM|5.027010||Viu
THIS|5.003007|5.003007|V
THOUSEP|5.027010||Viu
THR|5.005000||Viu

THREAD_CREATE_NEEDS_STACK|5.007002||Viu
thread_locale_init|5.027009|5.027009|xnu
thread_locale_term|5.027009|5.027009|xnu
THREAD_RET_TYPE|5.005000||Viu
tied_method|5.013009||vViu
TIED_METHOD_ARGUMENTS_ON_STACK|5.013009||Viu
TIED_METHOD_MORTALIZE_NOT_NEEDED|5.013009||Viu
TIED_METHOD_SAY|5.013009||Viu
times|5.005000||Viu
Time_t|5.003007|5.003007|Vn
Timeval|5.004000|5.004000|Vn
TM|5.011000||Viu
tmpfile|5.003007||Viu
tmpnam|5.005000||Viu
TMPNAM_R_PROTO|5.008000|5.008000|Vn
tmps_grow_p|5.021005||cViu
to_byte_substr|5.008000||Viu
to_case_cp_list|5.035004||Viu
toCTRL|5.004000||Viu
toFOLD|5.019001|5.019001|
toFOLD_A|5.019001|5.019001|
_to_fold_latin1|5.015005||cVniu
toFOLD_LC|5.019001||Viu
toFOLD_uni|5.007003||Viu
toFOLD_utf8|5.031005|5.031005|
toFOLD_utf8_safe|5.025009|5.006000|p
toFOLD_uvchr|5.023009|5.006000|p
TO_INTERNAL_SIZE|5.023002||Viu
tokenize_use|5.009003||Viu
tokeq|5.005000||Viu
tokereport|5.007001||Viu
toLOWER|5.003007|5.003007|
toLOWER_A|5.019001|5.019001|
toLOWER_L1|5.019001|5.019001|
toLOWER_LATIN1|5.013006|5.011002|
to_lower_latin1|5.015005||Vniu
toLOWER_LC|5.004000|5.004000|
toLOWER_uni|5.006000||Viu
toLOWER_utf8|5.031005|5.031005|
toLOWER_utf8_safe|5.025009|5.006000|p
toLOWER_uvchr|5.023009|5.006000|p
too_few_arguments_pv|5.016000||Viu
TOO_LATE_FOR|5.008001||Viu
too_many_arguments_pv|5.016000||Viu
TOPi|5.003007||Viu
TOPl|5.003007||Viu
TOPm1s|5.007001||Viu
TOPMARK|5.003007||cViu

TOPn|5.003007||Viu
TOPp1s|5.007001||Viu
TOPp|5.003007||Viu
TOPpx|5.005003||Viu
TOPs|5.003007||Viu
TOPu|5.004000||Viu
TOPul|5.006000||Viu
toTITLE|5.019001|5.019001|
toTITLE_A|5.019001|5.019001|
toTITLE_uni|5.006000||Viu
toTITLE_utf8|5.031005|5.031005|
toTITLE_utf8_safe|5.025009|5.006000|p
toTITLE_uvchr|5.023009|5.006000|p
to_uni_fold|5.014000||cVu
_to_uni_fold_flags|5.014000||cVu
to_uni_lower|5.006000||cVu
to_uni_title|5.006000||cVu
to_uni_upper|5.006000||cVu
toUPPER|5.003007|5.003007|
toUPPER_A|5.019001|5.019001|
toUPPER_LATIN1_MOD|5.011002||Viu
toUPPER_LC|5.004000||Viu
_to_upper_title_latin1|5.015005||Viu
toUPPER_uni|5.006000||Viu
toUPPER_utf8|5.031005|5.031005|
toUPPER_utf8_safe|5.025009|5.006000|p
toUPPER_uvchr|5.023009|5.006000|p
_to_utf8_case|5.023006||Viu
_to_utf8_fold_flags|5.014000||cVu
_to_utf8_lower_flags|5.015006||cVu
to_utf8_substr|5.008000||Viu
_to_utf8_title_flags|5.015006||cVu
_to_utf8_upper_flags|5.015006||cVu
translate_substr_offsets|5.015006||Vniu
traverse_op_tree|5.029008||Vi
TR_DELETE|5.031006||Viu
TRIE|5.009002||Viu
TRIE_BITMAP|5.009004||Viu
TRIE_BITMAP_BYTE|5.009004||Viu
TRIE_BITMAP_CLEAR|5.009004||Viu
TRIE_BITMAP_SET|5.009004||Viu
TRIE_BITMAP_TEST|5.009004||Viu
TRIEC|5.009004||Viu
TRIE_CHARCOUNT|5.009004||Viu
TRIEC_t8|5.035004||Viu
TRIEC_t8_p8|5.033003||Viu
TRIEC_t8_pb|5.033003||Viu
TRIEC_tb|5.035004||Viu

TRIEC_tb_p8|5.033003||Viu
TRIEC_tb_pb|5.033003||Viu
TRIE_next|5.009005||Viu
TRIE_next_fail|5.009005||Viu
TRIE_next_fail_t8|5.035004||Viu
TRIE_next_fail_t8_p8|5.033003||Viu
TRIE_next_fail_t8_pb|5.033003||Viu
TRIE_next_fail_tb|5.035004||Viu
TRIE_next_fail_tb_p8|5.033003||Viu
TRIE_next_fail_tb_pb|5.033003||Viu
TRIE_next_t8|5.035004||Viu
TRIE_next_t8_p8|5.033003||Viu
TRIE_next_t8_pb|5.033003||Viu
TRIE_next_tb|5.035004||Viu
TRIE_next_tb_p8|5.033003||Viu
TRIE_next_tb_pb|5.033003||Viu
TRIE_NODEIDX|5.009002||Viu
TRIE_NODENUM|5.009002||Viu
TRIE_t8|5.035004||Viu
TRIE_t8_p8|5.033003||Viu
TRIE_t8_pb|5.033003||Viu
TRIE_tb|5.035004||Viu
TRIE_tb_p8|5.033003||Viu
TRIE_tb_pb|5.033003||Viu
TRIE_WORDS_OFFSET|5.009005||Viu
TR_OOB|5.031006||Viu
TR_R_EMPTY|5.031006||Viu
TR_SPECIAL_HANDLING|5.031006||Viu
TRUE|5.003007||Viu
truncate|5.006000||Viu
TR_UNLISTED|5.031006||Viu
TR_UNMAPPED|5.031006||Viu
try_amagic_bin|||ciu
tryAMAGICbin_MG|5.013002||Viu
try_amagic_un|||ciu
tryAMAGICunDEREF|5.006000||Viu
tryAMAGICun_MG|5.013002||Viu
tryAMAGICunTARGETlist|5.017002||Viu
TS_W32_BROKEN_LOCALECONV|5.027010||Viu
tTHX|5.009003||Viu
ttyname|5.009000||Viu
TTYNAME_R_PROTO|5.008000|5.008000|Vn
turkic_fc|5.029008||Viu
turkic_lc|5.029008||Viu
turkic_uc|5.029008||Viu
TWO_BYTE_UTF8_TO_NATIVE|5.019004||Viu
TWO_BYTE_UTF8_TO_UNI|5.013008||Viu
TYPE_CHARS|5.004000||Viu

TYPE_DIGITS|5.004000||Viu
U16|5.027001||Viu
U16_MAX|5.003007||Viu
U16_MIN|5.003007||Viu
U16SIZE|5.006000|5.006000|Vn
U16TYPE|5.006000|5.006000|Vn
U_32|5.007002|5.007002|
U32|5.027001||Viu
U32_ALIGNMENT_REQUIRED|5.007001|5.007001|Vn
U32_MAX|5.003007||Viu
U32_MAX_P1|5.007002||Viu
U32_MAX_P1_HALF|5.007002||Viu
U32_MIN|5.003007||Viu
U32SIZE|5.006000|5.006000|Vn
U32TYPE|5.006000|5.006000|Vn
U64|5.023002||Viu
U64SIZE|5.006000|5.006000|Vn
U64TYPE|5.006000|5.006000|Vn
U8|5.027001||Viu
U8_MAX|5.003007||Viu
U8_MIN|5.003007||Viu
U8SIZE|5.006000|5.006000|Vn
U8TO16_LE|5.017010||Viu
U8TO32_LE|5.017010||Viu
U8TO64_LE|5.017006||Viu
U8TYPE|5.006000|5.006000|Vn
UCHARAT|5.003007||Viu
U_I|5.003007||Viu
Uid_t|5.003007|5.003007|Vn
Uid_t_f|5.006000|5.006000|Vn
Uid_t_sign|5.006000|5.006000|Vn
Uid_t_size|5.006000|5.006000|Vn
UINT16_C|5.003007|5.003007|
UINT32_C|5.003007|5.003007|
UINT32_MIN|5.006000||Viu
UINT64_C|5.023002|5.023002|
UINT64_MIN|5.006000||Viu
UINTMAX_C|5.003007|5.003007|
uiv_2buf|5.009003||Vniu
U_L|5.003007||Viu
umask|5.005000||Viu
uname|5.005004||Viu
UNDERBAR|5.009002|5.003007|p
unexpected_non_continuation_text|5.025006||Viu
ungetc|5.003007||Viu
UNI_age_values_index|5.029009||Viu
UNI_AHEX|5.029002||Viu
UNI_ahex_values_index|5.029009||Viu

UNI_ALNUM|5.029002||Viu
UNI_ALPHA|5.029002||Viu
UNI_ALPHABETIC|5.029002||Viu
UNI_alpha_values_index|5.029009||Viu
UNI_ASCIIHEXDIGIT|5.029002||Viu
UNI_BASICLATIN|5.029002||Viu
UNI_bc_values_index|5.029009||Viu
UNI_bidic_values_index|5.029009||Viu
UNI_bidim_values_index|5.029009||Viu
UNI_BLANK|5.029002||Viu
UNI_blk_values_index|5.029009||Viu
UNI_bpt_values_index|5.029009||Viu
UNI_cased_values_index|5.029009||Viu
UNI_CC|5.029002||Viu
UNI_ccc_values_index|5.029009||Viu
UNI_ce_values_index|5.029009||Viu
UNI_ci_values_index|5.029009||Viu
UNI_CNTRL|5.029002||Viu
UNICODE_ALLOW_ABOVE_IV_MAX|5.031006||Viu
UNICODE_ALLOW_ANY|5.007003||Viu
UNICODE_ALLOW_SUPER|5.007003||Viu
UNICODE_ALLOW_SURROGATE|5.007003||Viu
UNICODE_BYTE_ORDER_MARK|5.008000||Viu
UNICODE_DISALLOW_ABOVE_31_BIT|5.023006|5.023006|
UNICODE_DISALLOW_ILLEGAL_C9_INTERCHANGE|5.025005|5.025005|
UNICODE_DISALLOW_ILLEGAL_INTERCHANGE|5.013009|5.013009|
UNICODE_DISALLOW_NONCHAR|5.013009|5.013009|
UNICODE_DISALLOW_PERL_EXTENDED|5.027002|5.027002|
UNICODE_DISALLOW_SUPER|5.013009|5.013009|
UNICODE_DISALLOW_SURROGATE|5.013009|5.013009|
UNICODE_DOT_DOT_VERSION|5.023002||Viu
UNICODE_DOT_VERSION|5.023002||Viu
UNICODE_GOT_NONCHAR|5.027009||Viu
UNICODE_GOT_PERL_EXTENDED|5.027009||Viu
UNICODE_GOT_SUPER|5.027009||Viu
UNICODE_GOT_SURROGATE|5.027009||Viu
UNICODE_GREEK_CAPITAL_LETTER_SIGMA|5.007003||Viu
UNICODE_GREEK_SMALL_LETTER_FINAL_SIGMA|5.007003||Viu
UNICODE_GREEK_SMALL_LETTER_SIGMA|5.007003||Viu
UNICODE_IS_32_CONTIGUOUS_NONCHARS|5.023006||Viu
UNICODE_IS_BYTE_ORDER_MARK|5.007001||Viu
UNICODE_IS_END_PLANE_NONCHAR_GIVEN_NOT_SUPER|5.023006||Viu
UNICODE_IS_NONCHAR|5.013009|5.013009|
UNICODE_IS_PERL_EXTENDED|5.027002||Viu
UNICODE_IS_REPLACEMENT|5.007002|5.007002|
UNICODE_IS_SUPER|5.013009|5.013009|
UNICODE_IS_SURROGATE|5.007001|5.007001|
UNICODE_MAJOR_VERSION|5.023002||Viu

UNICODE_PAT_MOD|5.013006||Viu
UNICODE_PAT_MODS|5.013006||Viu
UNICODE_REPLACEMENT|5.007001|5.003007|p
UNICODE_SURROGATE_FIRST|5.007001||Viu
UNICODE_SURROGATE_LAST|5.007001||Viu
UNICODE_WARN_ABOVE_31_BIT|5.023006|5.023006|
UNICODE_WARN_ILLEGAL_C9_INTERCHANGE|5.025005|5.025005|
UNICODE_WARN_ILLEGAL_INTERCHANGE|5.013009|5.013009|
UNICODE_WARN_NONCHAR|5.013009|5.013009|
UNICODE_WARN_PERL_EXTENDED|5.027002|5.027002|
UNICODE_WARN_SUPER|5.013009|5.013009|
UNICODE_WARN_SURROGATE|5.013009|5.013009|
UNI_compex_values_index|5.029009||Viu
UNI_CONTROL|5.029002||Viu
UNI_cwcf_values_index|5.029009||Viu
UNI_cwcm_values_index|5.029009||Viu
UNI_cwkcf_values_index|5.029009||Viu
UNI_cwl_values_index|5.029009||Viu
UNI_cwt_values_index|5.029009||Viu
UNI_cwu_values_index|5.029009||Viu
UNI_dash_values_index|5.029009||Viu
UNI_DECIMALNUMBER|5.029002||Viu
UNI_dep_values_index|5.029009||Viu
UNI_dia_values_index|5.029009||Viu
UNI_DIGIT|5.029002||Viu
UNI_DISPLAY_BACKSLASH|5.007003|5.007003|
UNI_DISPLAY_BACKSPACE|5.031009|5.031009|
UNI_DISPLAY_ISPRINT|5.007003|5.007003|
UNI_DISPLAY_QQ|5.007003|5.007003|
UNI_DISPLAY_REGEX|5.007003|5.007003|
UNI_di_values_index|5.029009||Viu
UNI_dt_values_index|5.029009||Viu
UNI_ea_values_index|5.029009||Viu
UNI_ebase_values_index|5.031010||Viu
UNI_ecomp_values_index|5.031010||Viu
UNI_emod_values_index|5.031010||Viu
UNI_emoji_values_index|5.031010||Viu
UNI_epres_values_index|5.031010||Viu
UNI_extpict_values_index|5.031010||Viu
UNI_ext_values_index|5.029009||Viu
UNI_gcb_values_index|5.029009||Viu
UNI_gc_values_index|5.029009||Viu
UNI_GRAPH|5.029002||Viu
UNI_grbase_values_index|5.029009||Viu
UNI_grext_values_index|5.029009||Viu
UNI_HEX|5.029002||Viu
UNI_HEXDIGIT|5.029002||Viu
UNI_hex_values_index|5.029009||Viu

UNI_HORIZSPACE|5.029002||Viu
UNI_hst_values_index|5.029009||Viu
UNI_HYPHEN|5.029002||Viu
UNI_hyphen_values_index|5.029009||Viu
UNI_idc_values_index|5.029009||Viu
UNI_identifierstatus_values_index|5.031010||Viu
UNI_identifiertype_values_index|5.031010||Viu
UNI_ideo_values_index|5.029009||Viu
UNI_idsb_values_index|5.029009||Viu
UNI_idst_values_index|5.029009||Viu
UNI_ids_values_index|5.029009||Viu
UNI_inpc_values_index|5.029009||Viu
UNI_insc_values_index|5.029009||Viu
UNI_in_values_index|5.029009||Viu
UNI_IS_INVARIANT|5.007001||Viu
UNI_jg_values_index|5.029009||Viu
UNI_joinc_values_index|5.029009||Viu
UNI_jt_values_index|5.029009||Viu
UNI_L|5.029002||Viu
UNI_L_AMP|5.029002||Viu
UNI_LB__SG|5.029002||Viu
UNI_lb_values_index|5.029009||Viu
UNI_LC|5.029002||Viu
UNI_LL|5.029002||Viu
UNI_loe_values_index|5.029009||Viu
UNI_LOWER|5.029002||Viu
UNI_LOWERCASE|5.029002||Viu
UNI_lower_values_index|5.029009||Viu
UNI_LT|5.029002||Viu
UNI_LU|5.029002||Viu
UNI_math_values_index|5.029009||Viu
UNI_nchar_values_index|5.029009||Viu
UNI_ND|5.029002||Viu
UNI_nfcqc_values_index|5.029009||Viu
UNI_nfdqc_values_index|5.029009||Viu
UNI_nfkcqc_values_index|5.029009||Viu
UNI_nfkdqc_values_index|5.029009||Viu
UNI_nt_values_index|5.029009||Viu
UNI_nv_values_index|5.029009||Viu
UNI_patsyn_values_index|5.029009||Viu
UNI_patws_values_index|5.029009||Viu
UNI_pcm_values_index|5.029009||Viu
UNI_PERLSPACE|5.029002||Viu
UNI_PERLWORD|5.029002||Viu
UNI_PRINT|5.029002||Viu
UNI_qmark_values_index|5.029009||Viu
UNI_radical_values_index|5.029009||Viu
UNI_ri_values_index|5.029009||Viu

UNI_sb_values_index|5.029009||Viu
UNI_sc_values_index|5.029009||Viu
UNI_scx_values_index|5.029009||Viu
UNI_sd_values_index|5.029009||Viu
UNISKIP|5.007001||Viu
UNISKIP_BY_MSB|5.035004||Viu
UNI_SPACE|5.029002||Viu
UNI_SPACEPERL|5.029002||Viu
UNI_sterm_values_index|5.029009||Viu
UNI_term_values_index|5.029009||Viu
UNI_TITLECASE|5.029002||Viu
UNI_TITLECASELETTER|5.029002||Viu
UNI_TO_NATIVE|5.007001|5.003007|p
UNI_uideo_values_index|5.029009||Viu
UNI_UPPER|5.029002||Viu
UNI_UPPERCASE|5.029002||Viu
UNI_upper_values_index|5.029009||Viu
UNI_vo_values_index|5.029009||Viu
UNI_vs_values_index|5.029009||Viu
UNI_wb_values_index|5.029009||Viu
UNI_WHITESPACE|5.029002||Viu
UNI_WORD|5.029002||Viu
UNI_WSPACE|5.029002||Viu
UNI_wspace_values_index|5.029009||Viu
UNI_XDIGIT|5.029002||Viu
UNI_xidc_values_index|5.029009||Viu
UNI_xids_values_index|5.029009||Viu
UNI_XPERLSPACE|5.029002||Viu
UNKNOWN_ERRNO_MSG|5.019007||Viu
UNLESSM|5.003007||Viu
UNLESSM_t8|5.035004||Viu
UNLESSM_t8_p8|5.033003||Viu
UNLESSM_t8_pb|5.033003||Viu
UNLESSM_tb|5.035004||Viu
UNLESSM_tb_p8|5.033003||Viu
UNLESSM_tb_pb|5.033003||Viu
UNLIKELY|5.009004|5.003007|p
UNLINK|5.003007||Viu
unlink|5.005000||Viu
unlnk|5.003007||cVu
UNLOCK_DOLLARZERO_MUTEX|5.008001||Viu
UNLOCK_LC_NUMERIC_STANDARD|5.021010||poVnu
UNLOCK_NUMERIC_STANDARD|||piu
UNOP_AUX_item_sv|5.021007||Viu
unpack_rec|5.008001||Viu
unpack_str|5.007003|5.007003|d
unpackstring|5.008001|5.008001|
unpackWARN1|5.007003||Viu

unpackWARN2|5.007003||Viu
unpackWARN3|5.007003||Viu
unpackWARN4|5.007003||Viu
unreferenced_to_tmp_stack|5.013002||Viu
unshare_hek|5.004000||Viu
unshare_hek_or_pvn|5.008000||Viu
unsharepvn|5.003007|5.003007|u
unwind_handler_stack|5.009003||Viu
update_debugger_info|5.009005||Viu
upg_version|5.009005|5.009005|
UPG_VERSION|5.019008||Viu
uproot_SV|||Viu
Uquad_t|5.006000|5.006000|Vn
U_S|5.003007||Viu
usage|5.005000||Viu
USE_64_BIT_ALL|5.006000|5.006000|Vn
USE_64_BIT_INT|5.006000|5.006000|Vn
USE_64_BIT_RAWIO|5.006000||Viu
USE_64_BIT_STDIO|5.006000||Viu
USE_BSDPGRP|5.003007||Viu
USE_C_BACKTRACE|5.035009|5.035009|Vn
USE_DYNAMIC_LOADING|5.003007|5.003007|Vn
USE_ENVIRON_ARRAY|5.007001||Viu
USE_GRENT_BUFFER|5.008000||Viu
USE_GRENT_FPTR|5.008000||Viu
USE_GRENT_PTR|5.008000||Viu
USE_HASH_SEED|5.008001||Viu
USE_HOSTENT_BUFFER|5.008000||Viu
USE_HOSTENT_ERRNO|5.008000||Viu
USE_HOSTENT_PTR|5.008000||Viu
USE_ITHREADS|5.010000|5.010000|Vn
USE_LARGE_FILES|5.006000|5.006000|Vn
USE_LEFT|5.004000||Viu
USE_LOCALE|5.004000||Viu
USE_LOCALE_ADDRESS|5.027009||Viu
USE_LOCALE_COLLATE|5.004000||Viu
USE_LOCALE_CTYPE|5.004000||Viu
USE_LOCALE_IDENTIFICATION|5.027009||Viu
USE_LOCALE_MEASUREMENT|5.027009||Viu
USE_LOCALE_MESSAGES|5.019002||Viu
USE_LOCALE_MONETARY|5.019002||Viu
USE_LOCALE_NUMERIC|5.004000||Viu
USE_LOCALE_PAPER|5.027009||Viu
USE_LOCALE_SYNTAX|5.033001||Viu
USE_LOCALE_TELEPHONE|5.027009||Viu
USE_LOCALE_TIME|5.021002||Viu
USE_LOCALE_TOD|5.033001||Viu
USEMYBINMODE|5.006000||Viu

USE_NETENT_BUFFER|5.008000||Viu
USE_NETENT_ERRNO|5.008000||Viu
USE_NETENT_PTR|5.008000||Viu
USE_PERL_ATOF|5.008000||Viu
USE_PERLIO|5.007001|5.007001|Vn
USE_PERL_PERTURB_KEYS|5.018000||Viu
USE_POSIX_2008_LOCALE|5.027003||Viu
USE_PROTOENT_BUFFER|5.008000||Viu
USE_PROTOENT_PTR|5.008000||Viu
USE_PWENT_BUFFER|5.008000||Viu
USE_PWENT_FPTR|5.008000||Viu
USE_PWENT_PTR|5.008000||Viu
USE_REENTRANT_API|5.007003||Viu
USER_PROP_MUTEX_INIT|5.029008||Viu
USER_PROP_MUTEX_LOCK|5.029008||Viu
USER_PROP_MUTEX_TERM|5.029008||Viu
USER_PROP_MUTEX_UNLOCK|5.029008||Viu
USE_SEMCTL_SEMID_DS|5.004005|5.004005|Vn
USE_SEMCTL_SEMUN|5.004005|5.004005|Vn
USE_SERVENT_BUFFER|5.008000||Viu
USE_SERVENT_PTR|5.008000||Viu
USE_SPENT_BUFFER|5.031011||Viu
USE_SPENT_PTR|5.008000||Viu
USE_STAT_BLOCKS|5.005003|5.005003|Vn
USE_STAT_RDEV|5.003007||Viu
USE_STDIO|5.003007||Viu
USE_STDIO_BASE|5.006000|5.006000|Vn
USE_STDIO_PTR|5.006000|5.006000|Vn
USE_SYSTEM_GMTIME|5.011000||Viu
USE_SYSTEM_LOCALTIME|5.011000||Viu
USE_THREADS|5.006000|5.006000|Vn
USE_THREAD_SAFE_LOCALE|5.025004||Viu
USE_TM64|5.011000||Viu
USE_UTF8_IN_NAMES|5.007003||Viu
utf16_textfilter|5.011001||Viu
utf16_to_utf8|5.035004||cViu
utf16_to_utf8_base|5.035004||cViu
utf16_to_utf8_reversed|5.035004||cViu
UTF8_ACCUMULATE|5.007001||Viu
UTF8_ALLOW_ANY|5.007001||Viu
UTF8_ALLOW_ANYUV|5.007001||Viu
UTF8_ALLOW_CONTINUATION|5.007001||Viu
UTF8_ALLOW_DEFAULT|5.009004||Viu
UTF8_ALLOW_EMPTY|5.007001||Viu
UTF8_ALLOW_FE_FF|5.027009||Viu
UTF8_ALLOW_FFFF|5.007001||Viu
UTF8_ALLOW_LONG|5.007001||Viu
UTF8_ALLOW_LONG_AND_ITS_VALUE|5.025009||Viu

UTF8_ALLOW_NON_CONTINUATION|5.007001||Viu
UTF8_ALLOW_OVERFLOW|5.025009||Viu
UTF8_ALLOW_SHORT|5.007001||Viu
UTF8_ALLOW_SURROGATE|5.007001||Viu
UTF8_CHECK_ONLY|5.007001|5.007001|
UTF8_CHK_SKIP|5.031006|5.006000|p
UTF8_DISALLOW_ABOVE_31_BIT|5.023006||Viu
UTF8_DISALLOW_FE_FF|5.013009||Viu
UTF8_DISALLOW_ILLEGAL_C9_INTERCHANGE|5.025005|5.025005|
UTF8_DISALLOW_ILLEGAL_INTERCHANGE|5.013009|5.013009|
UTF8_DISALLOW_NONCHAR|5.013009|5.013009|
UTF8_DISALLOW_PERL_EXTENDED|5.027002|5.027002|
UTF8_DISALLOW_SUPER|5.013009|5.013009|
UTF8_DISALLOW_SURROGATE|5.013009|5.013009|
utf8_distance|5.006000|5.006000|
UTF8_EIGHT_BIT_HI|5.007001||Viu
UTF8_EIGHT_BIT_LO|5.007001||Viu
UTF8f|5.019001|5.003007|p
UTF8fARG|5.019002|5.003007|p
UTF8_GOT_ABOVE_31_BIT|5.025006||Viu
UTF8_GOT_CONTINUATION|5.025006|5.025006|
UTF8_GOT_EMPTY|5.025006|5.025006|
UTF8_GOT_LONG|5.025006|5.025006|
UTF8_GOT_NONCHAR|5.025006|5.025006|
UTF8_GOT_NON_CONTINUATION|5.025006|5.025006|
UTF8_GOT_OVERFLOW|5.025006|5.025006|
UTF8_GOT_PERL_EXTENDED|5.027002|5.027002|
UTF8_GOT_SHORT|5.025006|5.025006|
UTF8_GOT_SUPER|5.025006|5.025006|
UTF8_GOT_SURROGATE|5.025006|5.025006|
utf8_hop|5.006000|5.006000|n
utf8_hop_back|5.025007|5.025007|n
utf8_hop_forward|5.025007|5.025007|n
utf8_hop_safe|5.025007|5.025007|n
UTF8_IS_ABOVE_LATIN1|5.017004||Viu
UTF8_IS_ABOVE_LATIN1_START|5.023003||Viu
UTF8_IS_CONTINUATION|5.007001||Viu
UTF8_IS_CONTINUED|5.007001||Viu
UTF8_IS_DOWNGRADEABLE_START|5.007001||Viu
UTF8_IS_INVARIANT|5.007001|5.003007|p
UTF8_IS_NEXT_CHAR_DOWNGRADEABLE|5.017006||Viu
UTF8_IS_NONCHAR|5.023002|5.023002|
UTF8_IS_NONCHAR_GIVEN_THAT_NON_SUPER_AND_GE_PROBLEMATIC|5.013009||Viu
UTF8_IS_PERL_EXTENDED|5.035004||Viu
UTF8_IS_REPLACEMENT|||
UTF8_IS_START|5.007001||Viu
UTF8_IS_START_base|5.031007||Viu
UTF8_IS_SUPER|5.023002|5.023002|

UTF8_IS_SURROGATE|5.023002|5.023002|
utf8_length|5.007001|5.007001|
UTF8_MAXBYTES|5.009002|5.006000|p
UTF8_MAXBYTES_CASE|5.009002|5.003007|p
UTF8_MAX_FOLD_CHAR_EXPAND|5.013009||Viu
UTF8_MAXLEN|5.006000||Viu
utf8_mg_len_cache_update|5.013003||Viu
utf8_mg_pos_cache_update|5.009004||Viu
utf8n_to_uvchr|5.007001|5.007001|n
utf8n_to_uvchr_error|5.025006|5.025006|n
utf8n_to_uvchr_msgs|5.027009|5.027009|n
_utf8n_to_uvchr_msgs_helper|5.029001||cVnu
utf8n_to_uvuni|5.007001||dcV
UTF8_SAFE_SKIP|5.029009|5.006000|p
UTF8SKIP|5.006000|5.006000|
UTF8_SKIP|5.023002|5.006000|p
utf8_to_bytes|5.006001|5.006001|x
utf8_to_utf16|5.035004||Viu
utf8_to_utf16_base|5.035004||xcViu
utf8_to_utf16_reversed|5.035004||Viu
utf8_to_uvchr|5.007001|5.006001|pd
utf8_to_uvchr_buf|5.015009|5.006001|p
utf8_to_uvchr_buf_helper|5.031004||cVu
utf8_to_uvuni|5.007001||dcV
utf8_to_uvuni_buf|5.015009||dcV
UTF8_TWO_BYTE_HI|5.011002||Viu
UTF8_TWO_BYTE_HI_nocast|5.011002||Viu
UTF8_TWO_BYTE_LO|5.011002||Viu
UTF8_TWO_BYTE_LO_nocast|5.011002||Viu
UTF8_WARN_ABOVE_31_BIT|5.023006||Viu
UTF8_WARN_FE_FF|5.013009||Viu
UTF8_WARN_ILLEGAL_C9_INTERCHANGE|5.025005|5.025005|
UTF8_WARN_ILLEGAL_INTERCHANGE|5.013009|5.013009|
UTF8_WARN_NONCHAR|5.013009|5.013009|
UTF8_WARN_PERL_EXTENDED|5.027002|5.027002|
UTF8_WARN_SUPER|5.013009|5.013009|
UTF8_WARN_SURROGATE|5.013009|5.013009|
UTF_ACCUMULATION_SHIFT|5.007001||Viu
UTF_CONTINUATION_BYTE_INFO_BITS|5.035004||Viu
UTF_CONTINUATION_MARK|5.007001||Viu
UTF_CONTINUATION_MASK|5.007001||Viu
UTF_EBCDIC_CONTINUATION_BYTE_INFO_BITS|5.035004||Viu
UTF_FIRST_CONT_BYTE_110000|5.035004||Viu
UTF_FIRST_CONT_BYTE|5.035004||Viu
UTF_IS_CONTINUATION_MASK|5.023006||Viu
UTF_MIN_ABOVE_LATIN1_BYTE|5.031006||Viu
UTF_MIN_CONTINUATION_BYTE|5.035004||Viu
UTF_MIN_START_BYTE|5.031006||Viu

UTF_START_BYTE_110000|5.035004||Viu
UTF_START_BYTE|5.035004||Viu
UTF_START_MARK|5.007001||Viu
UTF_START_MASK|5.007001||Viu
UTF_TO_NATIVE|5.007001||Viu
utilize|5.003007||Viu
utime|5.005000||Viu
U_V|5.006000|5.003007|
UVCHR_IS_INVARIANT|5.019004|5.003007|p
UVCHR_SKIP|5.022000|5.003007|p
uvchr_to_utf8|5.007001|5.007001|
uvchr_to_utf8_flags|5.007003|5.007003|
uvchr_to_utf8_flags_msgs|5.027009|5.027009|
UV_DIG|5.006000||Viu
UVf|5.010000|5.010000|d
UV_IS_QUAD|5.006000||Viu
UV_MAX|5.003007|5.003007|
UV_MAX_P1|5.007002||Viu
UV_MAX_P1_HALF|5.007002||Viu
UV_MIN|5.003007|5.003007|
UVof|5.006000|5.003007|poVn
uvoffuni_to_utf8_flags|5.027009||cV
uvoffuni_to_utf8_flags_msgs|5.027009||cVu
UVSIZE|5.006000|5.003007|poVn
UVTYPE|5.006000|5.003007|poVn
UVuf|5.006000|5.003007|poVn
uvuni_to_utf8|5.019004||cVu
uvuni_to_utf8_flags|5.007003||dcV
UVxf|5.006000|5.003007|poVn
UVXf|5.007001|5.007001|poVn
VAL_EAGAIN|5.003007|5.003007|Vn
validate_proto|5.019002||xcVi
validate_suid|||iu
valid_utf8_to_uvchr|5.015009||cVn
valid_utf8_to_uvuni|5.015009||dcVu
VAL_O_NONBLOCK|5.003007|5.003007|Vn
variant_byte_number|5.031004||cVnu
variant_under_utf8_count|5.027007||Vni
varname|5.009003||Viu
vcmp|5.009000|5.009000|
VCMP|5.019008||Viu
vcroak|5.006000|5.006000|
vdeb|5.007003|5.007003|u
VERB|5.009005||Viu
VERB_t8|5.035004||Viu
VERB_t8_p8|5.033003||Viu
VERB_t8_pb|5.033003||Viu
VERB_tb|5.035004||Viu

VERB_tb_p8|5.033003||Viu
VERB_tb_pb|5.033003||Viu
vform|5.006000|5.006000|
vfprintf|5.003007||Viu
visit|5.005000||Viu
vivify_defelem|5.004000||cViu
vivify_ref|5.004000||Viu
vload_module|5.006000|5.003007|p
vmess|5.006000|5.004000|p
vnewSVpvf|5.006000|5.004000|p
vnormal|5.009002|5.009002|
VNORMAL|5.019008||Viu
vnumify|5.009000|5.009000|
VNUMIFY|5.019008||Viu
voidnonfinal|5.035002||Viu
VOL|5.003007||Viu
vstringify|5.009000|5.009000|
VSTRINGIFY|5.019008||Viu
VTBL_amagic|5.005003||Viu
VTBL_amagicelem|5.005003||Viu
VTBL_arylen|5.005003||Viu
VTBL_bm|5.005003||Viu
VTBL_collxfrm|5.005003||Viu
VTBL_dbline|5.005003||Viu
VTBL_defelem|5.005003||Viu
VTBL_env|5.005003||Viu
VTBL_envelem|5.005003||Viu
VTBL_fm|5.005003||Viu
VTBL_glob|5.005003||Viu
VTBL_isa|5.005003||Viu
VTBL_isaelem|5.005003||Viu
VTBL_mglob|5.005003||Viu
VTBL_nkeys|5.005003||Viu
VTBL_pack|5.005003||Viu
VTBL_packelem|5.005003||Viu
VTBL_pos|5.005003||Viu
VTBL_regdata|5.006000||Viu
VTBL_regdatum|5.006000||Viu
VTBL_regexp|5.005003||Viu
VTBL_sigelem|5.005003||Viu
VTBL_substr|5.005003||Viu
VTBL_sv|5.005003||Viu
VTBL_taint|5.005003||Viu
VTBL_uvar|5.005003||Viu
VTBL_vec|5.005003||Viu
vTHX|5.006000||Viu
VT_NATIVE|5.021004||Viu
vtohl|5.003007||Viu

vtohs|5.003007||Viu
VUTIL_REPLACE_CORE|5.019008||Viu
vverify|5.009003|5.009003|
VVERIFY|5.019008||Viu
vwarn|5.006000|5.003007|
vwarner|5.006000|5.004000|p
wait4pid|5.003007||Viu
wait|5.005000||Viu
want_vtbl_bm|5.015000||Viu
want_vtbl_fm|5.015000||Viu
warn|5.003007||vV
WARN_ALL|5.006000|5.003007|p
WARN_ALLstring|5.006000||Viu
WARN_AMBIGUOUS|5.006000|5.003007|p
WARN_ASSERTIONS||5.003007|ponu
WARN_BAREWORD|5.006000|5.003007|p
WARN_CLOSED|5.006000|5.003007|p
WARN_CLOSURE|5.006000|5.003007|p
WARN_DEBUGGING|5.006000|5.003007|p
WARN_DEPRECATED|5.006000|5.003007|p
WARN_DIGIT|5.006000|5.003007|p
warner|5.006000||pvV
warner_nocontext|5.006000||vVn
WARN_EXEC|5.006000|5.003007|p
WARN_EXITING|5.006000|5.003007|p
WARN_EXPERIMENTAL|5.017004|5.017004|
WARN_EXPERIMENTAL__ALPHA_ASSERTIONS|5.027009|5.027009|
WARN_EXPERIMENTAL__ARGS_ARRAY_WITH_SIGNATURES|5.035009|5.035009|
WARN_EXPERIMENTAL__BITWISE|5.021009|5.021009|
WARN_EXPERIMENTAL__BUILTIN|5.035009|5.035009|
WARN_EXPERIMENTAL__CONST_ATTR|5.021008|5.021008|
WARN_EXPERIMENTAL__DECLARED_REFS|5.025003|5.025003|
WARN_EXPERIMENTAL__DEFER|5.035004|5.035004|
WARN_EXPERIMENTAL__FOR_LIST|5.035005|5.035005|
WARN_EXPERIMENTAL__ISA|5.031007|5.031007|
WARN_EXPERIMENTAL__LEXICAL_SUBS|5.017005|5.017005|
WARN_EXPERIMENTAL__POSTDEREF|5.019005|5.019005|
WARN_EXPERIMENTAL__PRIVATE_USE|5.029009|5.029009|
WARN_EXPERIMENTAL__REFALIASING|5.021005|5.021005|
WARN_EXPERIMENTAL__REGEX_SETS|5.017008|5.017008|
WARN_EXPERIMENTAL__RE_STRICT|5.021008|5.021008|
WARN_EXPERIMENTAL__SCRIPT_RUN|5.027008|5.027008|
WARN_EXPERIMENTAL__SIGNATURES|5.019009|5.019009|
WARN_EXPERIMENTAL__SMARTMATCH|5.017011|5.017011|
WARN_EXPERIMENTAL__TRY|5.033007|5.033007|
WARN_EXPERIMENTAL__UNIPROP_WILDCARDS|5.029009|5.029009|
WARN_EXPERIMENTAL__VLB|5.029009|5.029009|
WARN_GLOB|5.006000|5.003007|p

WARN_ILLEGALPROTO|5.011004|5.011004|
WARN_IMPRECISION|5.011000|5.011000|
WARN_INPLACE|5.006000|5.003007|p
WARN_INTERNAL|5.006000|5.003007|p
WARN_IO|5.006000|5.003007|p
WARN_LAYER|5.008000|5.003007|p
WARN_LOCALE|5.021006|5.021006|
WARN_MALLOC|5.006000|5.003007|p
WARN_MISC|5.006000|5.003007|p
WARN_MISSING|5.021002|5.021002|
WARN_NEWLINE|5.006000|5.003007|p
warn_nocontext|5.006000||pvVn
WARN_NONCHAR|5.013010|5.013010|
WARN_NONEstring|5.006000||Viu
WARN_NON_UNICODE|5.013010|5.013010|
WARN_NUMERIC|5.006000|5.003007|p
WARN_ONCE|5.006000|5.003007|p
warn_on_first_deprecated_use|5.025009||Viu
WARN_OVERFLOW|5.006000|5.003007|p
WARN_PACK|5.006000|5.003007|p
WARN_PARENTHESIS|5.006000|5.003007|p
WARN_PIPE|5.006000|5.003007|p
WARN_PORTABLE|5.006000|5.003007|p
WARN_PRECEDENCE|5.006000|5.003007|p
WARN_PRINTF|5.006000|5.003007|p
_warn_problematic_locale|5.021008||cVniu
WARN_PROTOTYPE|5.006000|5.003007|p
WARN_QW|5.006000|5.003007|p
WARN_RECURSION|5.006000|5.003007|p
WARN_REDEFINE|5.006000|5.003007|p
WARN_REDUNDANT|5.021002|5.021002|
WARN_REGEXP|5.006000|5.003007|p
WARN_RESERVED|5.006000|5.003007|p
WARN_SEMICOLON|5.006000|5.003007|p
WARN_SEVERE|5.006000|5.003007|p
WARN_SHADOW|5.027007|5.027007|
WARNshift|5.011001||Viu
WARN_SIGNAL|5.006000|5.003007|p
WARNsize|5.006000||Viu
WARN_SUBSTR|5.006000|5.003007|p
WARN_SURROGATE|5.013010|5.013010|
warn_sv|5.013001|5.003007|p
WARN_SYNTAX|5.006000|5.003007|p
WARN_SYSCALLS|5.019004|5.019004|
WARN_TAINT|5.006000|5.003007|p
WARN_THREADS|5.008000|5.003007|p
WARN_UNINITIALIZED|5.006000|5.003007|p
WARN_UNOPENED|5.006000|5.003007|p

WARN_UNPACK|5.006000|5.003007|p
WARN_UNTIE|5.006000|5.003007|p
WARN_UTF8|5.006000|5.003007|p
WARN_VOID|5.006000|5.003007|p
was_lvalue_sub|||ciu
watch|5.003007||Viu
WB_BREAKABLE|5.023008||Viu
WB_DQ_then_HL|5.023008||Viu
WB_Ex_or_FO_or_ZWJ_then_foo|5.025003||Viu
WB_HL_then_DQ|5.023008||Viu
WB_hs_then_hs|5.023008||Viu
WB_LE_or_HL_then_MB_or_ML_or_SQ|5.023008||Viu
WB_MB_or_ML_or_SQ_then_LE_or_HL|5.023008||Viu
WB_MB_or_MN_or_SQ_then_NU|5.023008||Viu
WB_NOBREAK|5.023008||Viu
WB_NU_then_MB_or_MN_or_SQ|5.023008||Viu
WB_RI_then_RI|5.025003||Viu
WCTOMB_LOCK|5.033005||Viu
WCTOMB_UNLOCK|5.033005||Viu
what_MULTI_CHAR_FOLD_latin1_safe|5.033005||Viu
what_MULTI_CHAR_FOLD_utf8_safe|5.033005||Viu
what_MULTI_CHAR_FOLD_utf8_safe_part0|5.033005||Viu
what_MULTI_CHAR_FOLD_utf8_safe_part1|5.033005||Viu
what_MULTI_CHAR_FOLD_utf8_safe_part2|5.033005||Viu
what_MULTI_CHAR_FOLD_utf8_safe_part3|5.033005||Viu
what_MULTI_CHAR_FOLD_utf8_safe_part4|5.033005||Viu
what_MULTI_CHAR_FOLD_utf8_safe_part5|5.033005||Viu
what_MULTI_CHAR_FOLD_utf8_safe_part6|5.033005||Viu
what_MULTI_CHAR_FOLD_utf8_safe_part7|5.033005||Viu
whichsig|5.003007|5.003007|
whichsig_pv|5.015004|5.015004|
whichsig_pvn|5.015004|5.015004|
whichsig_sv|5.015004|5.015004|
WHILEM|5.003007||Viu
WHILEM_A_max|5.009005||Viu
WHILEM_A_max_fail|5.009005||Viu
WHILEM_A_max_fail_t8|5.035004||Viu
WHILEM_A_max_fail_t8_p8|5.033003||Viu
WHILEM_A_max_fail_t8_pb|5.033003||Viu
WHILEM_A_max_fail_tb|5.035004||Viu
WHILEM_A_max_fail_tb_p8|5.033003||Viu
WHILEM_A_max_fail_tb_pb|5.033003||Viu
WHILEM_A_max_t8|5.035004||Viu
WHILEM_A_max_t8_p8|5.033003||Viu
WHILEM_A_max_t8_pb|5.033003||Viu
WHILEM_A_max_tb|5.035004||Viu
WHILEM_A_max_tb_p8|5.033003||Viu
WHILEM_A_max_tb_pb|5.033003||Viu

WHILEM_A_min|5.009005||Viu
WHILEM_A_min_fail|5.009005||Viu
WHILEM_A_min_fail_t8|5.035004||Viu
WHILEM_A_min_fail_t8_p8|5.033003||Viu
WHILEM_A_min_fail_t8_pb|5.033003||Viu
WHILEM_A_min_fail_tb|5.035004||Viu
WHILEM_A_min_fail_tb_p8|5.033003||Viu
WHILEM_A_min_fail_tb_pb|5.033003||Viu
WHILEM_A_min_t8|5.035004||Viu
WHILEM_A_min_t8_p8|5.033003||Viu
WHILEM_A_min_t8_pb|5.033003||Viu
WHILEM_A_min_tb|5.035004||Viu
WHILEM_A_min_tb_p8|5.033003||Viu
WHILEM_A_min_tb_pb|5.033003||Viu
WHILEM_A_pre|5.009005||Viu
WHILEM_A_pre_fail|5.009005||Viu
WHILEM_A_pre_fail_t8|5.035004||Viu
WHILEM_A_pre_fail_t8_p8|5.033003||Viu
WHILEM_A_pre_fail_t8_pb|5.033003||Viu
WHILEM_A_pre_fail_tb|5.035004||Viu
WHILEM_A_pre_fail_tb_p8|5.033003||Viu
WHILEM_A_pre_fail_tb_pb|5.033003||Viu
WHILEM_A_pre_t8|5.035004||Viu
WHILEM_A_pre_t8_p8|5.033003||Viu
WHILEM_A_pre_t8_pb|5.033003||Viu
WHILEM_A_pre_tb|5.035004||Viu
WHILEM_A_pre_tb_p8|5.033003||Viu
WHILEM_A_pre_tb_pb|5.033003||Viu
WHILEM_B_max|5.009005||Viu
WHILEM_B_max_fail|5.009005||Viu
WHILEM_B_max_fail_t8|5.035004||Viu
WHILEM_B_max_fail_t8_p8|5.033003||Viu
WHILEM_B_max_fail_t8_pb|5.033003||Viu
WHILEM_B_max_fail_tb|5.035004||Viu
WHILEM_B_max_fail_tb_p8|5.033003||Viu
WHILEM_B_max_fail_tb_pb|5.033003||Viu
WHILEM_B_max_t8|5.035004||Viu
WHILEM_B_max_t8_p8|5.033003||Viu
WHILEM_B_max_t8_pb|5.033003||Viu
WHILEM_B_max_tb|5.035004||Viu
WHILEM_B_max_tb_p8|5.033003||Viu
WHILEM_B_max_tb_pb|5.033003||Viu
WHILEM_B_min|5.009005||Viu
WHILEM_B_min_fail|5.009005||Viu
WHILEM_B_min_fail_t8|5.035004||Viu
WHILEM_B_min_fail_t8_p8|5.033003||Viu
WHILEM_B_min_fail_t8_pb|5.033003||Viu
WHILEM_B_min_fail_tb|5.035004||Viu

WHILEM_B_min_fail_tb_p8|5.033003||Viu
WHILEM_B_min_fail_tb_pb|5.033003||Viu
WHILEM_B_min_t8|5.035004||Viu
WHILEM_B_min_t8_p8|5.033003||Viu
WHILEM_B_min_t8_pb|5.033003||Viu
WHILEM_B_min_tb|5.035004||Viu
WHILEM_B_min_tb_p8|5.033003||Viu
WHILEM_B_min_tb_pb|5.033003||Viu
WHILEM_t8|5.035004||Viu
WHILEM_t8_p8|5.033003||Viu
WHILEM_t8_pb|5.033003||Viu
WHILEM_tb|5.035004||Viu
WHILEM_tb_p8|5.033003||Viu
WHILEM_tb_pb|5.033003||Viu
WIDEST_UTYPE|5.015004|5.003007|poVnu
win32_croak_not_implemented|5.017006||Vniu
WIN32SCK_IS_STDSCK|5.007001||Viu
win32_setlocale|5.027006||Viu
withinCOUNT|5.031004||Viu
withinCOUNT_KNOWN_VALID|5.033005||Viu
WITH_LC_NUMERIC_SET_TO_NEEDED|5.031003|5.031003|
WITH_LC_NUMERIC_SET_TO_NEEDED_IN|5.031003|5.031003|
with_queued_errors|5.013001||Viu
with_tp_UTF8ness|5.033003||Viu
with_t_UTF8ness|5.035004||Viu
wrap_keyword_plugin|5.027006|5.027006|x
wrap_op_checker|5.015008|5.015008|
write|5.005000||Viu
write_to_stderr|5.008001||Viu
XCPT_CATCH|5.009002|5.003007|p
XCPT_RETHROW|5.009002|5.003007|p
XCPT_TRY_END|5.009002|5.003007|p
XCPT_TRY_START|5.009002|5.003007|p
XDIGIT_VALUE|5.019008||Viu
xio_any|5.006001||Viu
xio_dirp|5.006001||Viu
xiv_iv|5.009003||Viu
xlv_targoff|5.019004||Viu
XopDISABLE|5.013007|5.013007|V
XOPd_xop_class|5.013007||Viu
XOPd_xop_desc|5.013007||Viu
XOPd_xop_name|5.013007||Viu
XOPd_xop_peep|5.013007||Viu
XopENABLE|5.013007|5.013007|V
XopENTRY|5.013007|5.013007|V
XopENTRYCUSTOM|5.019006|5.013007|V
XopENTRY_set|5.013007|5.013007|V
XopFLAGS|5.013007|5.013007|

XOPf_xop_class|5.013007||Viu
XOPf_xop_desc|5.013007||Viu
XOPf_xop_name|5.013007||Viu
XOPf_xop_peep|5.013007||Viu
XORSHIFT128_set|5.027001||Viu
XORSHIFT96_set|5.027001||Viu
XPUSHi|5.003007|5.003007|
XPUSHmortal|5.009002|5.003007|p
XPUSHn|5.006000|5.003007|
XPUSHp|5.003007|5.003007|
XPUSHs|5.003007|5.003007|
XPUSHTARG|5.003007||Viu
XPUSHu|5.004000|5.003007|p
XPUSHundef|5.006000||Viu
xpv_len|5.017006||Viu
XS|5.003007|5.003007|Vu
XSANY|5.003007||Viu
XS_APIVERSION_BOOTCHECK|5.013004|5.013004|
XS_APIVERSION_POPMARK_BOOTCHECK|5.021006||Viu
XS_APIVERSION_SETXSUBFN_POPMARK_BOOTCHECK|5.021006||Viu
xs_boot_epilog|5.021006||cViu
XS_BOTHVERSION_BOOTCHECK|5.021006||Viu
XS_BOTHVERSION_POPMARK_BOOTCHECK|5.021006||Viu
XS_BOTHVERSION_SETXSUBFN_POPMARK_BOOTCHECK|5.021006||Viu
XS_DYNAMIC_FILENAME|5.009004||Viu
XS_EXTERNAL|5.015002|5.015002|Vu
xs_handshake|||vcniu
XSINTERFACE_CVT|5.005000||Viu
XSINTERFACE_CVT_ANON|5.010000||Viu
XSINTERFACE_FUNC|5.005000||Viu
XSINTERFACE_FUNC_SET|5.005000||Viu
XS_INTERNAL|5.015002|5.015002|Vu
XSprePUSH|5.006000|5.003007|poVnu
XSPROTO|5.010000|5.003007|pVu
XSRETURN|5.003007|5.003007|p
XSRETURN_EMPTY|5.003007|5.003007|
XSRETURN_IV|5.003007|5.003007|
XSRETURN_NO|5.003007|5.003007|
XSRETURN_NV|5.006000|5.003007|
XSRETURN_PV|5.003007|5.003007|
XSRETURN_PVN|5.006000||Viu
XSRETURN_UNDEF|5.003007|5.003007|
XSRETURN_UV|5.008001|5.003007|p
XSRETURN_YES|5.003007|5.003007|
XS_SETXSUBFN_POPMARK|5.021006||Viu
XST_mIV|5.003007|5.003007|
XST_mNO|5.003007|5.003007|
XST_mNV|5.006000|5.003007|

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XST_mPV|5.003007|5.003007|
XST_mPVN|5.006000||Viu
XST_mUNDEF|5.003007|5.003007|
XST_mUV|5.008001|5.003007|p
XST_mYES|5.003007|5.003007|
XS_VERSION|5.003007|5.003007|
XS_VERSION_BOOTCHECK|5.003007|5.003007|
xs_version_bootcheck|||iu
XTENDED_PAT_MOD|5.009005||Viu
xuv_uv|5.009003||Viu
YESEXPR|5.027010||Viu
YESSTR|5.027010||Viu
YIELD|5.005000||Viu
YYDEBUG|5.025006||Viu
YYEMPTY|5.009005||Viu
yyerror|5.003007||Viu
yyerror_pv|5.016000||Viu
yyerror_pvn|5.016000||Viu
yylex|5.003007||cViu
yyparse|5.003007||Viu
yyquit|5.025010||Viu
YYSTYPE_IS_DECLARED|5.009001||Viu
YYSTYPE_IS_TRIVIAL|5.009001||Viu
YYTOKENTYPE|5.009001||Viu
yyunlex|5.013005||Viu
yywarn|5.003007||Viu
ZAPHOD32_FINALIZE|5.027001||Viu
ZAPHOD32_MIX|5.027001||Viu
ZAPHOD32_SCRAMBLE32|5.027001||Viu
ZAPHOD32_STATIC_INLINE|5.027001||Viu
ZAPHOD32_WARN2|5.027001||Viu
ZAPHOD32_WARN3|5.027001||Viu
ZAPHOD32_WARN4|5.027001||Viu
ZAPHOD32_WARN5|5.027001||Viu
ZAPHOD32_WARN6|5.027001||Viu
Zero|5.003007|5.003007|
ZeroD|5.009002|5.003007|p
);

if
 (exists $opt{'list-unsupported'}) {
 my $f;
 for $f (sort dictionary_order keys %API) {
   next if $API{$f}{core_only};
   next if $API{$f}{beyond_depr};
   next if $API{$f}{inaccessible};
   next if $API{$f}{experimental};
   next unless $API{$f}{todo};
```

```
  next if int_parse_version($API{$f}{todo}) <= $int_min_perl;
  my $repeat = 40 - length($f);
  $repeat = 0 if $repeat
 < 0;
  print "$f ", '.'x $repeat, " ", format_version($API{$f}{todo}), "\n";
 }
 exit 0;
}

# Scan for hints, possible replacement candidates, etc.

my(%replace, %need, %hints, %warnings, %depends);
my $replace = 0;
my($hint, $define, $function);

sub find_api
{
 BEGIN { 'warnings'->unimport('uninitialized') if "$]" > '5.006' }
 my $code = shift;
 $code =~ s{
  / (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*)
 | "[^"\\]*(?:\\.[^"\\]*)*"
 | '[^'\\]*(?:\\.[^'\\]*)*' }{}egsx;
 grep { exists $API{$_} } $code =~ /(\w+)/mg;
}

while (<DATA>) {
 if ($hint) {

  # Here, we are in the middle of accumulating a hint or warning.
  my $end_of_hint = 0;

  # A line containing a comment end marker closes the hint.  Remove that
  # marker for processing below.
  if (s/\s*$rcce(.*?)\s*$//) {
     die "Nothing can follow the end of comment in '$_'\n" if length $1 > 0;
     $end_of_hint = 1;
  }

  # Set $h to the hash of which type.
  my $h = $hint->[0] eq 'Hint' ?
 \%hints : \%warnings;

  # Ignore any leading and trailing white space, and an optional star comment
  # continuation marker, then place the meat of the line into $1
  m/^\s*(?:\*\s*)?(.*?)\s*$/;

  # Add the meat of this line to the hash value of each API element it
```

```
  # applies to
  for (@{$hint->[1]}) {
    $h->{$_} ||= '';  # avoid the warning older perls generate
    $h->{$_} .= "$1\n";
  }

  # If the line had a comment close, we are through with this hint
  undef $hint if $end_of_hint;

  next;
}

# Set up $hint if this is the beginning of a Hint: or Warning:
# These are from a multi-line C comment in the file, with the first line
# looking like (a space has been inserted because this file can't have C
# comment markers in it):
#   / * Warning: PL_expect, PL_copline, PL_rsfp
#
# $hint becomes
#     [
#      'Warning',
#                [
#                  'PL_expect',
#                  'PL_copline',
#                  'PL_rsfp',
 #                ],
#     ]
if (m{^\s*$rccs\s+(Hint|Warning):\s+(\w+(?:,?\s+\w+)*)\s*$}) {
    $hint = [$1, [split /,?\s+/, $2]];
    next;
}

if ($define) { # If in the middle of a definition...

  # append a continuation line ending with backslash.
  if ($define->[1] =~ /\\$/) {
    $define->[1] .= $_;
  }
  else {  # Otherwise this line ends the definition, make foo depend on bar
          # (and what bar depends on) if its not one of ppp's own constructs
    if (exists $API{$define->[0]} && $define->[1] !~ /^DPPP_\(/) {
      my @n = find_api($define->[1]);
      push @{$depends{$define->[0]}}, @n if @n
    }
    undef $define;
  }
}
```

```
# For '#define foo bar' or '#define foo(a,b,c) bar', $define becomes a
# reference to [ foo, bar ]
$define = [$1, $2] if m{^\s*#\s*define\s+(\w+)(?:\([^)]*\))?\s+(.*)};

if ($function) {
  if (/^}/) {
    if (exists $API{$function->[0]}) {
      my @n = find_api($function->[1]);
      push @{$depends{$function->[0]}},
@n if @n
    }
    undef $function;
  }
  else {
    $function->[1] .= $_;
  }
}

$function = [$1, ''] if m{^DPPP_\(my_(\w+)\)};

# Set $replace to the number given for lines that look like
# / * Replace: \d+ * /
# Thus setting it to 1 starts a region where replacements are automatically
# done, and setting it to 0 ends that region.
$replace     = $1 if m{^\s*$rccs\s+Replace:\s+(\d+)\s+$rcce\s*$};

# Add bar => foo to %replace  for lines like '#define foo bar in a region
# where $replace is non-zero
$replace{$2} = $1 if $replace and m{^\s*#\s*define\s+(\w+)(?:\([^)]*\))?\s+(\w+)};

# Add bar => foo to %replace for lines like '#define foo bar  / * Replace * /
$replace{$2} = $1 if m{^\s*#\s*define\s+(\w+)(?:\([^)]*\))?\s+(\w+).*$rccs\s+Replace\s+$rcce};

# Add foo => bar to %replace for lines like / * Replace foo with bar * /
$replace{$1} = $2 if m{^\s*$rccs\s+Replace (\w+) with (\w+.*?)\s+$rcce\s*$};

# For lines like /
* foo, bar depends on baz, bat * /
# create a list of the elements on the rhs, and make that list apply to each
# element in the lhs, which becomes a key in \%depends.
if (m{^\s*$rccs\s+(\w+(\s*,\s*\w+)*)\s+depends\s+on\s+(\w+(\s*,\s*\w+)*)\s+$rcce\s*$}) {
  my @deps = map { s/\s+//g; $_ } split /,/, $3;
  my $d;
  for $d (map { s/\s+//g; $_ } split /,/, $1) {
    push @{$depends{$d}}, @deps;
  }
}
```

```
 $need{$1} = 1 if m{^#if\s+defined\(NEED_(\w+)(?:_GLOBAL)?\)};
}

for (values %depends) {
 my %seen;
 $_ = [sort dictionary_order grep !$seen{$_}++, @$_];
}

if (exists $opt{'api-info'}) {
 my $f;
 my $count = 0;
 my $match = $opt{'api-info'} =~ m!^/(.*)/$! ? $1 : "^\Q$opt{'api-info'}\E\$";

 # Sort the names, and split into two classes; one for things that are part of
 # the API; a second for things that aren't.
 my @ok_to_use;
 my @shouldnt_use;
 for $f (sort dictionary_order keys %API) {
   next unless $f =~ /$match/;
   my $base = int_parse_version($API{$f}{base})
 if $API{$f}{base};
   if ($base && ! $API{$f}{inaccessible} && ! $API{$f}{core_only}) {
       push @ok_to_use, $f;
   }
   else {
       push @shouldnt_use, $f;
   }
 }

 # We normally suppress non-API items.  But if the search matched no API
 # items, output the non-ones.  This allows someone to get the info for an
 # item if they ask for it specifically enough, but doesn't normally clutter
 # the output with irrelevant results.
 @ok_to_use = @shouldnt_use unless @ok_to_use;

 for $f (@ok_to_use) {
   print "\n=== $f ===\n";
   my $info = 0;
   my $base;
   $base = int_parse_version($API{$f}{base}) if $API{$f}{base};
   my $todo;
   $todo = int_parse_version($API{$f}{todo}) if $API{$f}{todo};

   # Output information
   if ($base) {
       my $with_or= "";
       if (    $base <= $int_min_perl
           || (   (! $API{$f}{provided} && ! $todo)
```

```
            || ($todo && $todo >= $base)))
      {
         $with_or= " with or";
      }


   my $Supported = ($API{$f}{undocumented}) ? 'Available' : 'Supported';
      print "\n$Supported at least since perl-",
            format_version($base), ",$with_or without $ppport.";
      if ($API{$f}{unverified}) {
         print "\nThis information is based on inspection of the source code",
               " and has not been\n",
               "verified by successful compilation.";
      }
      print "\n";
      $info++;
   }
   if ($API{$f}{provided} || $todo) {
      print "\nThis is only supported by $ppport, and NOT by perl versions going forward.\n" unless $base;
      if ($todo) {
         if (! $base || $todo < $base) {
            my $additionally = "";
            $additionally .= " additionally" if $base;
            print "$ppport$additionally provides support at least back to perl-",
               format_version($todo),
               ".\n";
         }
      }
      elsif (! $base || $base > $int_min_perl)
{
         if (exists $depends{$f}) {
            my $max = 0;
            for (@{$depends{$f}}) {
               $max = int_parse_version($API{$_}{todo}) if $API{$_}{todo} && $API{$_}{todo} > $max;
               # XXX What to assume unspecified values are?  This effectively makes them MIN_PERL
            }
            $todo = $max if $max;
         }
         print "\n$ppport provides support for this, but ironically, does not",
               " currently know,\n",
               "for this report, the minimum version it supports for this";
         if ($API{$f}{undocumented}) {
            print " and many things\n",
                  "it provides that are implemented as macros and aren't",
                  " documented.  You can\n",
                  "help by submitting a documentation patch";
         }
         print ".\n";
```

```
        if ($todo) {
           if ($todo <= $int_min_perl) {

  print "It may very well be supported all the way back to ",
                  format_version(5.003_07), ".\n";
           }
           else {
              print "But given the things $f depends on, it's a good",
                  " guess that it isn't\n",
                  "supported prior to ", format_version($todo), ".\n";
           }
        }
     }
  }
  if ($API{$f}{provided}) {
    print "Support needs to be explicitly requested by #define NEED_$f\n",
        "(or #define NEED_${f}_GLOBAL).\n"            if exists $need{$f};
    $info++;
  }

  if ($base || ! $API{$f}{ppport_fnc}) {
    my $email = "Send email to perl5-porters\@perl.org if you need to have this functionality.\n";
    if ($API{$f}{inaccessible}) {
      print "\nThis is not part of the public API, and may not even be accessible to XS code.\n";
      $info++;
    }
    elsif ($API{$f}{core_only}) {
      print "\nThis is not part
of the public API, and should not be used by XS code.\n";
      $info++;
    }
    elsif ($API{$f}{deprecated}) {
      print "\nThis is deprecated and should not be used.  Convert existing uses.\n";
      $info++;
    }
    elsif ($API{$f}{experimental}) {
      print "\nThe API for this is unstable and should not be used by XS code.\n", $email;
      $info++;
    }
    elsif ($API{$f}{undocumented}) {
      print "\nSince this is undocumented, the API should be considered unstable.\n";
      if ($API{$f}{provided}) {
         print "Consider bringing this up on the list: perl5-porters\@perl.org.\n";
      }
      else {
         print "It may be that this is not intended for XS use, or it may just be\n",
              "that no one has gotten around to documenting it.\n", $email;
      }
```

```
      $info++;
    }
    unless ($info) {
      print "No portability information available.  Check your spelling; or",
            " this could
 be\na bug in Devel::PPPort.  To report an issue:\n",
            "https://github.com/Dual-Life/Devel-PPPort/issues/new\n";
    }
  }

  print "\nDepends on: ", join(', ', @{$depends{$f}}), ".\n"
                                          if exists $depends{$f};
  if (exists $hints{$f} || exists $warnings{$f}) {
    print "\n$hints{$f}" if exists $hints{$f};
    print "\nWARNING:\n$warnings{$f}" if exists $warnings{$f};
    $info++;
  }
  $count++;
 }

 $count or print "\nFound no API matching '$opt{'api-info'}'.";
 print "\n";
 exit 0;
}

if (exists $opt{'list-provided'}) {
 my $f;
 for $f (sort dictionary_order keys %API) {
   next unless $API{$f}{provided};
   my @flags;
   push @flags, 'explicit' if exists $need{$f};
   push @flags, 'depend'   if exists $depends{$f};
   push @flags, 'hint'     if exists $hints{$f};
   push @flags, 'warning'  if exists $warnings{$f};
   my $flags = @flags ? '  ['.join(', ', @flags).']' : '';
   print "$f$flags\n";
  }
 exit 0;
}

my @files;
my @srcext = qw( .xs .c .h .cc .cpp -c.inc -xs.inc );
my $srcext = join '|', map { quotemeta $_ } @srcext;

if (@ARGV) {
 my %seen;
 for (@ARGV) {
   if (-e) {
```

```
    if (-f) {
      push @files, $_ unless $seen{$_}++;
    }
    else { warn "'$_' is not a file.\n" }
  }
  else {
    my @new = grep { -f } glob $_
        or warn "'$_' does not exist.\n";
    push @files, grep { !$seen{$_}++ } @new;
  }
 }
}
else {
 eval {
  require File::Find;
  File::Find::find(sub {
    $File::Find::name =~ /($srcext)$/i
        and push @files, $File::Find::name;
  }, '.');
 };
 if ($@) {
  @files = map { glob "*$_" } @srcext;
 }
}

if (!@ARGV || $opt{filter}) {
 my(@in, @out);
 my %xsc = map { /(.*)\.xs$/ ? ("$1.c" => 1, "$1.cc" => 1) : () } @files;
 for (@files) {
  my $out = exists $xsc{$_} || /\b\Q$ppport\E$/i || !/($srcext)$/i;
  push @{ $out ? \@out : \@in }, $_;
 }
 if (@ARGV && @out) {
  warning("Skipping
 the following files (use --nofilter to avoid this):\n| ", join "\n| ", @out);
 }
 @files = @in;
}

die "No input files given!\n" unless @files;

my(%files, %global, %revreplace);
%revreplace = reverse %replace;
my $filename;
my $patch_opened = 0;

for $filename (@files) {
 unless (open IN, "<$filename") {
```

```
  warn "Unable to read from $filename: $!\n";
  next;
}

info("Scanning $filename ...");

my $c = do { local $/; <IN> };
close IN;

my %file = (orig => $c, changes => 0);

# Temporarily remove C/XS comments and strings from the code
my @ccom;

$c =~ s{
  ( ^$HS*\#$HS*include\b[^\r\n]+\b(?:\Q$ppport\E|XSUB\.h)\b[^\r\n]*
  | ^$HS*\#$HS*(?:define|elif|if(?:def)?)\b[^\r\n]* )
| ( ^$HS*\#[^\r\n]*
  | "[^"\\]*(?:\\.[^"\\]*)*"
  | '[^'\\]*(?:\\.[^'\\]*)*'
  | / (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]* ) )
}{ defined $2 and push @ccom, $2;
   defined $1 ? $1 : "$ccs$#ccom$cce" }mgsex;

$file{ccom} = \@ccom;
$file{code} = $c;
$file{has_inc_ppport}
= $c =~ /^$HS*#$HS*include[^\r\n]+\b\Q$ppport\E\b/m;

my $func;

for $func (keys %API) {
  my $match = $func;
  $match .= "|$revreplace{$func}" if exists $revreplace{$func};
  if ($c =~ /\b(?:Perl_)?($match)\b/) {
    $file{uses_replace}{$1}++ if exists $revreplace{$func} && $1 eq $revreplace{$func};
    $file{uses_Perl}{$func}++ if $c =~ /\bPerl_$func\b/;
    if (exists $API{$func}{provided}) {
      $file{uses_provided}{$func}++;
      if ( ! exists $API{$func}{base}
          || int_parse_version($API{$func}{base}) > $opt{'compat-version'})
      {
        $file{uses}{$func}++;
        my @deps = rec_depend($func);
        if (@deps) {
          $file{uses_deps}{$func} = \@deps;
          for (@deps) {
            $file{uses}{$_} = 0 unless exists $file{uses}{$_};
```

```
          }
        }
        for ($func, @deps) {
          $file{needs}{$_} = 'static' if exists $need{$_};
        }
      }
    }
    if (   exists $API{$func}{todo}
         && int_parse_version($API{$func}{todo}) > $opt{'compat-version'})
    {
      if ($c =~ /\b$func\b/) {
        $file{uses_todo}{$func}++;
      }
    }
  }
}

while ($c =~ /^$HS*#$HS*define$HS+(NEED_(\w+?)(_GLOBAL)?)\b/mg) {
  if (exists $need{$2}) {
    $file{defined $3 ? 'needed_global' : 'needed_static'}{$2}++;
  }
  else { warning("Possibly wrong #define $1 in $filename") }
}

for (qw(uses needs uses_todo needed_global needed_static)) {
  for $func (keys %{$file{$_}}) {
    push @{$global{$_}{$func}}, $filename;
  }
}

$files{$filename} = \%file;
}

# Globally resolve NEED_'s
my $need;
for $need (keys %{$global{needs}}) {
 if (@{$global{needs}{$need}} > 1) {
   my @targets = @{$global{needs}{$need}};
   my @t = grep $files{$_}{needed_global}{$need}, @targets;
   @targets = @t if @t;
   @t = grep /\.xs$/i, @targets;
   @targets = @t if @t;
   my $target = shift @targets;
   $files{$target}{needs}{$need} = 'global';
   for
 (@{$global{needs}{$need}}) {
     $files{$_}{needs}{$need} = 'extern' if $_ ne $target;
   }
```

```
 }
}

for $filename (@files) {
 exists $files{$filename} or next;

 info("=== Analyzing $filename ===");

 my %file = %{$files{$filename}};
 my $func;
 my $c = $file{code};
 my $warnings = 0;

 for $func (sort dictionary_order keys %{$file{uses_Perl}}) {
  if ($API{$func}{varargs}) {
    unless ($API{$func}{noTHXarg}) {
      my $changes = ($c =~ s{\b(Perl_$func\s*\(\s*)(?!aTHX_?)(\)|[^\s)]*\))}
                        { $1 . ($2 eq ')' ? 'aTHX' : 'aTHX_ ') . $2 }ge);
      if ($changes) {
        warning("Doesn't pass interpreter argument aTHX to Perl_$func");
        $file{changes} += $changes;
      }
    }
  }
  else {
    warning("Uses Perl_$func instead of $func");
    $file{changes} += ($c =~ s{\bPerl_$func(\s*)\((\s*aTHX_?)?\s*}
                          {$func$1(}g);
  }
 }

 for $func (sort dictionary_order keys %{$file{uses_replace}})
 {
  warning("Uses $func instead of $replace{$func}");
  $file{changes} += ($c =~ s/\b$func\b/$replace{$func}/g);
 }

 for $func (sort dictionary_order keys %{$file{uses_provided}}) {
  if ($file{uses}{$func}) {
    if (exists $file{uses_deps}{$func}) {
      diag("Uses $func, which depends on ", join(', ', @{$file{uses_deps}{$func}}));
    }
    else {
      diag("Uses $func");
    }
  }
  $warnings += (hint($func) || 0);
 }
```

```
unless ($opt{quiet}) {
  for $func (sort dictionary_order keys %{$file{uses_todo}}) {
    next if int_parse_version($API{$func}{todo}) <= $int_min_perl;
    print "*** WARNING: Uses $func, which may not be portable below perl ",
          format_version($API{$func}{todo}), ", even with '$ppport'\n";
    $warnings++;
  }
}

for $func (sort dictionary_order keys %{$file{needed_static}}) {
  my $message = '';
  if (not exists $file{uses}{$func}) {
    $message = "No need to define NEED_$func if $func is never used";
   }
  elsif (exists $file{needs}{$func} && $file{needs}{$func} ne 'static') {
    $message = "No need to define NEED_$func when already needed globally";
  }
  if ($message) {
    diag($message);
    $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_$func\b.*$LF//mg);
  }
}

for $func (sort dictionary_order keys %{$file{needed_global}}) {
  my $message = '';
  if (not exists $global{uses}{$func}) {
    $message = "No need to define NEED_${func}_GLOBAL if $func is never used";
  }
  elsif (exists $file{needs}{$func}) {
    if ($file{needs}{$func} eq 'extern') {
      $message = "No need to define NEED_${func}_GLOBAL when already needed globally";
    }
    elsif ($file{needs}{$func} eq 'static') {
      $message = "No need to define NEED_${func}_GLOBAL when only used in this file";
    }
  }
  if ($message) {
    diag($message);
    $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_${func}_GLOBAL\b.*$LF//mg);
  }
}

$file{needs_inc_ppport}
= keys %{$file{uses}};

if ($file{needs_inc_ppport}) {
  my $pp = '';
```

```
  for $func (sort dictionary_order keys %{$file{needs}}) {
    my $type = $file{needs}{$func};
    next if $type eq 'extern';
    my $suffix = $type eq 'global' ? '_GLOBAL' : '';
    unless (exists $file{"needed_$type"}{$func}) {
      if ($type eq 'global') {
        diag("Files [@{$global{needs}{$func}}] need $func, adding global request");
      }
      else {
        diag("File needs $func, adding static request");
      }
      $pp .= "#define NEED_$func$suffix\n";
    }
  }

  if ($pp && ($c =~ s/^(?=$HS*#$HS*define$HS+NEED_\w+)/$pp/m)) {
    $pp = '';
    $file{changes}++;
  }

  unless ($file{has_inc_ppport}) {
    diag("Needs to include '$ppport'");
    $pp .= qq(#include "$ppport"\n)
  }

  if ($pp) {
    $file{changes} += ($c =~ s/^($HS*#$HS*define$HS+NEED_\w+.*?)^/$1$pp/ms)
                  || ($c =~ s/^(?=$HS*#$HS*include.*\Q$ppport\E)/$pp/m)
                   || ($c =~ s/^($HS*#$HS*include.*XSUB.*\s*?)^/$1$pp/m)
                  || ($c =~ s/^/$pp/);
  }
}
else {
  if ($file{has_inc_ppport}) {
    diag("No need to include '$ppport'");
    $file{changes} += ($c =~ s/^$HS*?#$HS*include.*\Q$ppport\E.*?$LF//m);
  }
}

# put back in our C comments
my $ix;
my $cppc = 0;
my @ccom = @{$file{ccom}};
for $ix (0 .. $#ccom) {
  if (!$opt{cplusplus} && $ccom[$ix] =~ s!^//!!) {
    $cppc++;
    $file{changes} += $c =~ s/$rccs$ix$rcce/$ccs$ccom[$ix] $cce/;
```

```
  }
  else {
    $c =~ s/$rccs$ix$rcce/$ccom[$ix]/;
  }
}

if ($cppc) {
  my $s = $cppc != 1 ? 's' : '';
  warning("Uses $cppc C++ style comment$s, which is not portable");
}

my $s = $warnings != 1 ? 's' : '';
my $warn = $warnings ? " ($warnings warning$s)" : '';
info("Analysis completed$warn");

if ($file{changes}) {
  if (exists $opt{copy}) {
    my $newfile = "$filename$opt{copy}";
    if (-e $newfile)
{
      error("'$newfile' already exists, refusing to write copy of '$filename'");
    }
    else {
      local *F;
      if (open F, ">$newfile") {
        info("Writing copy of '$filename' with changes to '$newfile'");
        print F $c;
        close F;
      }
      else {
        error("Cannot open '$newfile' for writing: $!");
      }
    }
  }
  elsif (exists $opt{patch} || $opt{changes}) {
    if (exists $opt{patch}) {
      unless ($patch_opened) {
        if (open PATCH, ">$opt{patch}") {
          $patch_opened = 1;
        }
        else {
          error("Cannot open '$opt{patch}' for writing: $!");
          delete $opt{patch};
          $opt{changes} = 1;
          goto fallback;
        }
      }
      mydiff(\*PATCH, $filename, $c);
```

```
     }
     else {
fallback:
       info("Suggested changes:");
       mydiff(\*STDOUT, $filename, $c);
     }
   }
   else {
     my $s = $file{changes} == 1 ? '' : 's';

   info("$file{changes} potentially required change$s detected");
   }
 }
 else {
   info("Looks good");
 }
}

close PATCH if $patch_opened;

exit 0;


sub try_use { eval "use @_;"; return $@ eq '' }

sub mydiff
{
 local *F = shift;
 my($file, $str) = @_;
 my $diff;

 if (exists $opt{diff}) {
   $diff = run_diff($opt{diff}, $file, $str);
 }

 if (!defined $diff and try_use('Text::Diff')) {
   $diff = Text::Diff::diff($file, \$str, { STYLE => 'Unified' });
   $diff = <<HEADER . $diff;
--- $file
+++ $file.patched
HEADER
 }

 if (!defined $diff) {
   $diff = run_diff('diff -u', $file, $str);
 }

 if (!defined $diff) {
```

```
  $diff = run_diff('diff', $file, $str);
 }

 if (!defined $diff) {
  error("Cannot generate a diff. Please install Text::Diff or use --copy.");
  return;
 }

 print F $diff;
}

sub run_diff
{
 my($prog, $file, $str) = @_;
 my $tmp = 'dppptemp';
 my $suf = 'aaa';
 my $diff = '';
 local *F;

 while (-e "$tmp.$suf") { $suf++ }
 $tmp = "$tmp.$suf";

  if (open F, ">$tmp") {
  print F $str;
  close F;

  if (open F, "$prog $file $tmp |") {
    while (<F>) {
      s/\Q$tmp\E/$file.patched/;
      $diff .= $_;
    }
    close F;
    unlink $tmp;
    return $diff;
  }

  unlink $tmp;
 }
 else {
  error("Cannot open '$tmp' for writing: $!");
 }

 return undef;
}

sub rec_depend
{
 my($func, $seen) = @_;
```

```
 return () unless exists $depends{$func};
 $seen = {%{$seen||{}}};
 return () if $seen->{$func}++;
 my %s;
 grep !$s{$_}++, map { ($_, rec_depend($_, $seen)) } @{$depends{$func}};
}

sub info
{
 $opt{quiet} and return;
 print @_, "\n";
}

sub diag
{
 $opt{quiet} and return;
 $opt{diag} and print @_, "\n";
}

sub warning
{
 $opt{quiet} and return;
 print "*** ", @_, "\n";
}

sub error
{
 print "*** ERROR: ", @_, "\n";
}

my %given_hints;
my %given_warnings;
sub hint
{
 $opt{quiet} and return;
 my $func = shift;
 my $rv = 0;
 if (exists $warnings{$func} && !$given_warnings{$func}++) {
    my $warn = $warnings{$func};
   $warn =~ s!^!*** !mg;
   print "*** WARNING: $func\n", $warn;
   $rv++;
 }
 if ($opt{hints} && exists $hints{$func} && !$given_hints{$func}++) {
   my $hint = $hints{$func};
   $hint =~ s/^/   /mg;
   print "   --- hint for $func ---\n", $hint;
 }
```

```
 $rv || 0;
}

sub usage
{
 my($usage) = do { local(@ARGV,$/)=($0); <> } =~ /^=head\d$HS+SYNOPSIS\s*^(.*?)\s*^=/ms;
 my %M = ( 'I' => '*' );
 $usage =~ s/^\s*perl\s+\S+/$^X $0/;
 $usage =~ s/([A-Z])<([^>]+)>/$M{$1}$2$M{$1}/g;

 print <<ENDUSAGE;

Usage: $usage

See perldoc $0 for details.

ENDUSAGE

 exit 2;
}

sub strip
{
 my $self = do { local(@ARGV,$/)=($0); <> };
 my($copy) = $self =~ /^=head\d\s+COPYRIGHT\s*^(.*?)^=\w+/ms;
 $copy =~ s/^(?=\S+)/    /gms;
 $self =~ s/^$HS+Do NOT edit.*?(?=^-)/$copy/ms;
 $self =~ s/^SKIP.*(?=^__DATA__)/SKIP
if (\@ARGV && \$ARGV[0] eq '--unstrip') {
 eval { require Devel::PPPort };
 \$@ and die "Cannot require Devel::PPPort, please install.\\n";
 if
 (eval \$Devel::PPPort::VERSION < $VERSION) {
   die "$0 was originally generated with Devel::PPPort $VERSION.\\n"
     . "Your Devel::PPPort is only version \$Devel::PPPort::VERSION.\\n"
     . "Please install a newer version, or --unstrip will not work.\\n";
 }
 Devel::PPPort::WriteFile(\$0);
 exit 0;
}
print <<END;

Sorry, but this is a stripped version of \$0.

To be able to use its original script and doc functionality,
please try to regenerate this file using:

 \$^X \$0 --unstrip
```

```
END
/ms;
 my($pl, $c) = $self =~ /(.*^__DATA__)(.*)/ms;
 $c =~ s{
   / (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*)
 | ( "[^"\\]*(?:\\.[^"\\]*)*"
   | '[^'\\]*(?:\\.[^'\\]*)*' )
 | ($HS+) }{ defined $2 ? ' ' : ($1 || '') }gsex;
 $c =~ s!\s+$!!mg;
 $c =~ s!^$LF!!mg;
 $c =~ s!^\s*#\s*!#!mg;
 $c =~ s!^\s+!!mg;

 open OUT, ">$0" or die "cannot strip $0: $!\n";
 print OUT "$pl$c\n";

 exit 0;
}

__DATA__
*/
/* earlier perls included all of the isSPACE() characters, which is wrong. The
 * version provided by Devel::PPPort always overrides an existing buggy
* version. */
```

Found in path(s):
* /libclone-perl-0-46-orig-1-tar-gz/Clone-0.46/ppport.h
No license file was found, but licenses were detected in source scan.

Revision history for Perl module Clone

0.46 2022-10-18 20:23:00 garu
 - fix backwards compatibility with older perls (haarg)
 - bump MANIFEST to include extra tests

0.45 2020-04-23 14:46:00 atoomic
 - bump B::COW requirement to fix big-endian issue

0.44 2020-04-20 11:30:00 atoomic
 - support Perls with COW disabled (plicease)
 - bump B::COW requirement for testing

0.43 2019-07-29 13:47:42 atoomic
 - fix an issue when cloning a NULL mg_ptr pointer

0.42 2019-07-19 23:06:04 garu
 - make handling of mg_ptr safer (ATOOMIC, Harald Jörg)

- change license wording on some test files to
  make the entire dist released under the same
  terms as Perl itself (fixes GH#20) (GARU)

0.41 2018-10-25 10:20:03 garu
- Check the CowREFCNT of a COWed PV (ATOOMIC)
  this should fix some issues people have been
  having with 0.40 on DBD drives and DBIx::Class
- Make buildtools files not executable (Mohammad S Anwar)
- Move bugtracker to Github (GARU)

0.40 2018-10-23 20:001:49 garu
- reuse COWed PV when cloning (fixes RT97535) (ATOOMIC)
- extra protection against potential infinite loop (ATOOMIC)
- improved tests

0.39 2017-04-07 13:06:00 garu
- use explicit '.' in tests since it may not be in @INC
  anymore in newer perls (fixes RT120648) (PLICEASE, SIMCOP)

0.38 2015-01-18 19:27:41 garu
- typo fixes and improvements to the README (zmughal)
- travis/coveralls integration (zmughal)

0.37 2014-05-15 16:45:33 garu
- removed Carp dependency (GARU)
- silenced some clang warnings (JACQUESG)
- added a README (GARU)

0.36 2013-12-07 17:36:04 garu
- fixed compilation issue on AIX and C89 (GAAS)

0.35 2013-09-05 13:26:54 garu
- SV's can be NULL (shit happens) (fixes RT86217) (HMBRAND)
- making tests compatible with older versions of Test::More (GARU)

0.34 2012-12-09 14:46:09 garu
- making some tests optional (fixes RT81774) (GARU)
- modernizing synopsis (GARU)

0.33
  2012-11-24 11:37:22 garu
- fix typo in croak message (Salvatore Bonaccorso)

0.32 2012-11-22 12:14:07 garu
- Stop skipping SvROK handling for all magical scalars. This fixes
  RT issues 67105, 79730 and 80201 (FLORA).
- making the Changes file compliant to the CPAN::Changes spec (GARU).

- Fixing tests when Scalar::Util::weaken is not available. As a
  result, tests should now pass even in odd OpenBSD versions (GARU).
- removed dubious documentation on the optional parameter until
  it is 'fixed'. Right now it just increases the refcount when it's 0,
  and clones otherwise (which isn't exactly what it says). This
  fixes RT issue 57773 (GARU).
- updated remark on Storable's dclone() to address RT issue 50174 (GARU)
- updated Makefile.PL to include test dependencies (GARU)

0.31 2009-01-20 04:54:37 ray
- Made changes for build failure on Solaris, apparently compiler warnings
  from the last patch are errors in Solaris.
- Also, brought Changes file
up to date.

0.30 2008-12-14 03:33:14 ray
- Updating log: Applied patches from RT # 40957 and #41551.

0.29 2008-12-14 03:32:41 ray
- Updating log: Applied patches supplied by Andreas Koenig, see RT #34317.

0.28 2008-12-14 03:31:33 ray
- Updating log: Made a change in CLONE_KEY to the way Clone stores refs in
  the ref hash.
- Perl no longer uses the SvANY part of the SV struct in the same way which
  means the old way of storing the hash key is no longer unique.
  Thanks to Slaven Rezic for the patch.

0.27 2008-12-14 03:30:40 ray
- Updating Log: Latest patch from Ruslan Zakirov. Patched another
  memory leak.

0.26 2007-10-15 04:52:42 ray
- Made a change in CLONE_KEY to the way Clone stores refs in the ref hash.
- Perl no longer uses the SvANY part of the SV struct in the same way which
  means the old way of storing the hash key is no longer unique.
  Thanks to Slaven Rezic for the patch.

0.25 2007-07-25 03:41:04 ray
- Latest patch from Ruslan
Zakirov. Patched another memory leak.

0.24 2007-07-25 03:33:57 ray
- Bug fix for 5.9.*, for some reason the 'visible' logic is no longer
  working. I #if 'ed it out until I figure out what is going on.
- Also removed an old redundant CLONE_STORE, could have been the cause of
  some memory leaks.

0.23 2007-04-20 05:40:27 ray
- Applied patch so clone will contiue to work with newer perls.
- Also fixed test to work with older perls.

0.22 2006-10-08 05:35:19 ray
- D'oh! The 0.21 tardist that I just uploaded to CPAN contained the
  0.20 Clone.xs file. This release is just in case any of the 0.21
  releases get mirrored.

0.21 2006-10-08 04:02:56 ray
- Clone was segfaulting due to a null SV object in a magical reference (a
  PERL_MAGIC_utf8).
- 21859: Clone segfault (isolated example)

0.20 2006-03-08 17:15:23 ray
- Commented out VERSION causes errors with DynaLoader in perl 5.6.1 (and
  probably all earlier versions. It was removed.

0.19 2006-03-06
07:22:32 ray
- added a test and fix for tainted variables.
- use a static VERSION in Clone.pm.

0.18 2005-05-23 15:34:31 ray
- moved declaration to top of function, M$ (and other) C compilers choke.

0.17 2005-05-05 22:26:01 ray
- Changed PERL_MAGIC_backref to '<' for compatability with 5.6

0.16 2005-04-20 15:49:35 ray
- Bug fix for id 11997, "Clone dies horribly when Scalar::Util::weaken
  is around" see http://rt.cpan.org/Ticket/Display.html?id=11997
  for details.

0.15.2.1 2005-05-05 21:55:30 ray
- changed PERL_MAGIC_backref to '<' for backward compatibility with 5.6

0.15 2003-09-07 22:02:35 ray
- VERSION 0.15

0.13.2.3 2003-09-07 21:51:03 ray
- added support for unicode hash keys. This is only really a bug in 5.8.0
  and the test in t/03scalar supports this.

0.14 2003-09-07 05:48:10 ray
- VERSION 0.14

0.13.2.2 2003-09-07 05:45:52 ray

- bug fix: refs to a qr (regexp) expression was causing a segfault.

0.13.2.1 2003-09-06 20:18:37
  ray
- Bug fix on cloning references, only set ROK in clone if it's set in ref.

0.13 2002-02-03 02:12:29 ray
- VERSION 0.13

0.11.2.1 2002-02-03 02:10:30 ray
- removed dependency on Storable for tests.

0.12 2001-09-30 20:35:27 ray
- Version 0.12 release.

0.11 2001-07-29 19:30:27 ray
- VERSION 0.11

0.10.2.3 2001-07-28 21:53:03 ray
- fixed memory leaks on un-blessed references.

0.10.2.2 2001-07-28 21:52:41 ray
- added test cases for circular reference bugs and memory leaks.

0.10.2.1 2001-07-28 21:52:15 ray
- fixed circular reference bugs.

0.10 2001-04-29 21:48:45 ray
- VERSION 0.10

0.09.2.3 2001-03-11 00:54:41 ray
- change call to rv_clone in clone to sv_clone; this allows any scalar to
  be cloned.

0.09.2.2 2001-03-11 00:50:01 ray
- version 0.09.3: cleaned up code, consolidated MAGIC.

0.09.2.1 2001-03-05 16:01:52 ray
- added support for double-types.

0.09 2000-08-21 23:05:55 ray
- added support for code refs

0.08 2000-08-11
 17:08:24 ray
- Release 0.08.

0.07 2000-08-01 00:31:24 ray

```
 - release 0.07.

0.06.2.3  2000-07-28 20:40:25  ray
 - added support for circular references

0.06.2.2  2000-07-28 19:04:14  ray
 - first pass at circular references.

0.06.2.1  2000-07-28 18:54:33  ray
 - added support for scalar types.

0.06  Thu May 25 17:48:59 2000 GMT
 - initial release to CPAN.

0.01  Tue May 16 08:55:10 2000
 - original version; created by h2xs 1.19

Found in path(s):
* /libclone-perl-0-46-orig-1-tar-gz/Clone-0.46/Changes
No license file was found, but licenses were detected in source scan.

=head1 NAME

Clone - recursively copy Perl datatypes

=for html
<a href="https://travis-ci.org/garu/Clone"><img src="https://travis-ci.org/garu/Clone.png?branch=master"
alt="Build Status"></a>
<a href="https://coveralls.io/r/garu/Clone?branch=master"><img
src="https://coveralls.io/repos/garu/Clone/badge.png?branch=master" alt="Coverage Status"></a>
<a href="https://metacpan.org/pod/Clone"><img src="https://badge.fury.io/pl/Clone.svg" alt="CPAN version"></a>

=head1 SYNOPSIS

  use Clone 'clone';

  my $data = {
    set => [ 1 .. 50 ],
    foo => {
        answer => 42,
        object => SomeObject->new,
    },
  };

  my $cloned_data = clone($data);

  $cloned_data->{foo}{answer} = 1;
  print $cloned_data->{foo}{answer};  # '1'
```

```
  print $data->{foo}{answer};        # '42'
```

You can also add it to your class:

```
  package Foo;
  use parent 'Clone';
  sub new { bless {}, shift }

  package
main;

  my $obj = Foo->new;
  my $copy = $obj->clone;
```

=head1 DESCRIPTION

This module provides a C<clone()> method which makes recursive
copies of nested hash, array, scalar and reference types,
including tied variables and objects.

C<clone()> takes a scalar argument and duplicates it. To duplicate lists,
arrays or hashes, pass them in by reference, e.g.

```
  my $copy = clone (\@array);

  # or

  my %copy = %{ clone (\%hash) };
```

=head1 SEE ALSO

L<Storable>'s C<dclone()> is a flexible solution for cloning variables,
albeit slower for average-sized data structures. Simple
and naive benchmarks show that Clone is faster for data structures
with 3 or fewer levels, while C<dclone()> can be faster for structures
4 or more levels deep.

=head1 COPYRIGHT

Copyright 2001-2022 Ray Finch. All Rights Reserved.

This module is free software; you can redistribute it and/or
modify it under the same terms as Perl itself.

=head1 AUTHOR

Ray Finch C<< <rdf@cpan.org> >>

Breno G. de Oliveira
 C<< <garu@cpan.org> >>,
Nicolas Rochelemagne C<< <atoomic@cpan.org> >>
and
Florian Ragwitz C<< <rafl@debian.org> >> perform routine maintenance
releases since 2012.

=cut

Found in path(s):
* /libclone-perl-0-46-orig-1-tar-gz/Clone-0.46/Clone.pm
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---
abstract: 'recursively copy Perl datatypes'
author:
 - 'Ray Finch <rdf@cpan.org>'
build_requires:
 B::COW: '0.004'
 ExtUtils::MakeMaker: '0'
 Test::More: '0.88'
configure_requires:
 ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.64, CPAN::Meta::Converter version 2.150010'
license: perl
meta-spec:
 url: http://module-build.sourceforge.net/META-spec-v1.4.html
 version: '1.4'
name: Clone
no_index:
 directory:
   - t
   - inc
resources:
 bugtracker: https://github.com/garu/Clone/issues
 license: http://dev.perl.org/licenses/
 repository: http://github.com/garu/Clone
version: '0.46'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'

Found in path(s):
* /libclone-perl-0-46-orig-1-tar-gz/Clone-0.46/META.yml
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;# Id: dump.pl,v 0.7 2000/08/03 22:04:45 ram Exp
;#
;# Copyright (c) 1995-2000, Raphael Manfredi

```
;#
;# You may redistribute and/or modify this file
;# under the same terms as Perl itself.
;#
;# Log: dump.pl,v
;# Revision 0.7  2000/08/03 22:04:45  ram
;# Baseline for second beta release.
;#

sub ok {
 my ($num, $ok) = @_;
 print "not " unless $ok;
 print "ok $num\n";
}

package dump;

%dump = (
 'SCALAR' => 'dump_scalar',
 'ARRAY'  => 'dump_array',
 'HASH'  => 'dump_hash',
 'REF'  => 'dump_ref',
 'CODE'  => 'dump_code',
);

# Given an object, dump its transitive data closure
sub main'dump {
 my ($object) = @_;
 die "Not a reference!" unless ref($object);
 local %dumped;
 local %object;
 local $count = 0;
 local $dumped = '';
 &recursive_dump($object, 1);
 return $dumped;
}

# This is the root recursive dumping routine that may indirectly be
# called by one of the routine it calls...
# The link parameter is set to
 false when the reference passed to
# the routine is an internal temporay variable, implying the object's
# address is not to be dumped in the %dumped table since it's not a
# user-visible object.
sub recursive_dump {
 my ($object, $link) = @_;

 # Get something like SCALAR(0x...) or TYPE=SCALAR(0x...).
```

```
 # Then extract the bless, ref and address parts of that string.

 my $what = "$object";  # Stringify
 my ($bless, $ref, $addr) = $what =~ /^(\w+)=(\w+)\((0x.*)\)$/;
 ($ref, $addr) = $what =~ /^(\w+)\((0x.*)\)$/ unless $bless;

 # Special case for references to references. When stringified,
 # they appear as being scalars. However, ref() correctly pinpoints
 # them as being references indirections. And that's it.

 $ref = 'REF' if ref($object) eq 'REF';

 # Make sure the object has not been already dumped before.
 # We don't want to duplicate data. Retrieval will know how to
 # relink from the previously seen object.

 if ($link && $dumped{$addr}++) {
  my $num = $object{$addr};
  $dumped
 .= "OBJECT #$num seen\n";
  return;
 }

 my $objcount = $count++;
 $object{$addr} = $objcount;

 # Call the appropriate dumping routine based on the reference type.
 # If the referenced was blessed, we bless it once the object is dumped.
 # The retrieval code will perform the same on the last object retrieved.

 die "Unknown simple type '$ref'" unless defined $dump{$ref};

 &{$dump{$ref}}($object); # Dump object
 &bless($bless) if $bless; # Mark it as blessed, if necessary

 $dumped .= "OBJECT $objcount\n";
}

# Indicate that current object is blessed
sub bless {
 my ($class) = @_;
 $dumped .= "BLESS $class\n";
}

# Dump single scalar
sub dump_scalar {
 my ($sref) = @_;
 my $scalar = $$sref;
```

```
 unless (defined $scalar) {
  $dumped .= "UNDEF\n";
  return;
 }
 my $len = length($scalar);
 $dumped .= "SCALAR len=$len $scalar\n";
}

# Dump array
sub dump_array {
 my ($aref) = @_;
 my $items = 0 + @{$aref};
 $dumped .= "ARRAY items=$items\n";
 foreach $item (@{$aref}) {
  unless (defined $item)
  {
   $dumped .= 'ITEM_UNDEF' . "\n";
   next;
  }
  $dumped .= 'ITEM ';
  &recursive_dump(\$item, 1);
 }
}

# Dump hash table
sub dump_hash {
 my ($href) = @_;
 my $items = scalar(keys %{$href});
 $dumped .= "HASH items=$items\n";
 foreach $key (sort keys %{$href}) {
  $dumped .= 'KEY ';
  &recursive_dump(\$key, undef);
  unless (defined $href->{$key}) {
   $dumped .= 'VALUE_UNDEF' . "\n";
   next;
  }
  $dumped .= 'VALUE ';
  &recursive_dump(\$href->{$key}, 1);
 }
}

# Dump reference to reference
sub dump_ref {
 my ($rref) = @_;
 my $deref = $$rref;    # Follow reference to reference
 $dumped .= 'REF ';
 &recursive_dump($deref, 1);  # $dref is a reference
}
```

```
# Dump code
sub dump_code {
 my ($sref) = @_;
 $dumped .= "CODE\n";
}

1;
```

Found in path(s):
* /libclone-perl-0-46-orig-1-tar-gz/Clone-0.46/t/dump.pl

1.1958 libxext 1.3.4-1build2

1.1958.1 Available under license :

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1.1960 libxau 1.0.9-1build6

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1.1962 patch 2.7.6-7build3

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The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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<signature of Ty Coon>, 1 April 1989
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1.1966 fdisk 2.39.3

1.1966.1 Available under license :

NR START END SECTORS SIZE NAME UUID
1 32 7679 7648 3.7M 8f8378c0-01
2 7680 16383 8704 4.3M 8f8378c0-02
5 7936 12799 4864 2.4M
6 12544 16127 3584 1.8M

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1.1967 libpcap 1.10.4-4.1ubuntu3

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1.1968 libwebp 1.3.2-0.4build3

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1.1969 libsigsegv 2.14-1ubuntu2

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1.1971 json-c 0.17-1build1

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1.1972 texinfo 7.1-3build2

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<tr>
<td><a href="js/modernizr.js">js/modernizr.js</a></td>
<td><a href="http://www.jclark.com/xml/copying.txt">Expat</a></td>
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1.1974 libedit 3.1-20230828-1build1

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1.1975 python-cffi 1.16.0-2build1

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1.1976 jbig-kit 2.1-6.1ubuntu2

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Gnomovision version 69, Copyright (C) 19yy name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
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under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c'
should show the appropriate
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`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
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1.1977 distro-info 1.7build1

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1.1978 libhttp-message-perl 6.45-1ubuntu1

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```
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```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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```
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1.1985 gettext 0.21-14ubuntu2

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table, the facility still operates, and performs whatever part of
its purpose remains meaningful.

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application. Therefore, Subsection 2d requires that any
application-supplied function or table used by this function must
be optional: if the application does not supply it, the square
root function must still compute square roots.)
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from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not
compelled to copy the source along with the object code.

@item

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Library, but is designed to work with the Library by being compiled or
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work, in isolation, is not a derivative work of the Library, and
therefore falls outside the scope of this License.

However, linking a ``work that uses the Library'' with the Library
creates an executable that is a derivative of the Library (because
it
contains portions of the Library), rather than a ``work that uses the
library''. The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a ``work that uses the Library'' uses material from a header file
that is part of the Library, the object code for the work may be a
derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be
linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
file is unrestricted, regardless of whether it is legally a derivative
work. (Executables containing this object code plus portions of the
Library will still fall under Section 6.)

Otherwise,
if the work is a derivative of the Library, you may
distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

@item
As an exception to the Sections above, you may also combine or
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of these things:

@enumerate a
@item
Accompany the work with the complete corresponding
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Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable ``work that
uses the Library'', as object code and/or source code, so that the
user can modify the Library and then relink to produce a modified
executable containing the modified Library. (It is understood
that the user who changes the contents of definitions files in the
Library will not necessarily be able to recompile the application
to use the modified definitions.)

@item
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suitable mechanism is one that (1) uses at run time a copy of the
library already present on the user's computer system, rather than
copying library functions into the executable,
and (2) will operate
properly with a modified version of the library, if the user installs
one, as long as the modified version is interface-compatible with the
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reproducing the executable from it. However, as a special exception,
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components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies the
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smallexample

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@var{signature of Ty Coon}, 1 April 1990
Ty Coon, President of Vice
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@ifinfo
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@end ifinfo

@page
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@end smallexample

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@example
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@var{signature of Ty Coon}, 1 April 1989
Ty Coon, President of Vice
@end example

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Version 2.1, February 1999

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^L
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When a program is linked with a library, whether statically or using
a shared library, the combination of the two is legally speaking a
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permits such linking only if the
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We call this license the "Lesser" General Public License because it
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case, there is little to gain by limiting
the free library to free
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^L

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"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation
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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not

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Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.
^L
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You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one

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d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

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It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally

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Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand
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1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

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b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

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1.1986 man-db 2.12.0-4build2

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the work with the complete corresponding
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work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely

defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

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For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself

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It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such
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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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under the terms of Sections 1 and 2 above provided that you accompany
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must be
distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
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compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the
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However, linking a "work that uses the Library" with the Library
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derivative work of the Library even though the source code is not.
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threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if

the
user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
least three years, to give the same user the materials
specified in Subsection 6a, above, for a charge no more
than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy
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specified materials from the same place.

e) Verify that the user has already received a copy of these
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reproducing the executable from it. However, as a special exception,
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components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
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b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

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grn preprocessor
==========

grn, written by Barry Roitblat <barry@rentonww.com> and David
Slattengren <slatteng@Xinet.COM>, was part of the Berkeley
device-independent troff distribution. The files contain no AT&T code
and are in the public domain. Historically, the original package could
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 src/preproc/grn/gprint.h
 src/preproc/grn/hdb.cpp

src/preproc/grn/hgraph.cpp
src/preproc/grn/hpoint.cpp
src/preproc/grn/main.cpp

gxditview output driver
==========

gxditview is based on the X Window System (Version 11)'s "xditview"
program, and is licensed under the same terms as the rest of X11R5.

src/devices/xditview/DESC.in
src/devices/xditview/Dvi.c
src/devices/xditview/Dvi.h
src/devices/xditview/DviP.h
src/devices/xditview/FontMap-X11
src/devices/xditview/GXditview.ad
src/devices/xditview/Menu.h
src/devices/xditview/ad2c
src/devices/xditview/device.c
src/devices/xditview/device.h
src/devices/xditview/draw.c
src/devices/xditview/font.c
src/devices/xditview/gray1.bm
src/devices/xditview/gray2.bm
src/devices/xditview/gray3.bm
src/devices/xditview/gray4.bm
src/devices/xditview/gray5.bm
src/devices/xditview/gray6.bm
src/devices/xditview/gray7.bm
src/devices/xditview/gray8.bm
src/devices/xditview/gxditview.man
src/devices/xditview/lex.c
src/devices/xditview/page.c
src/devices/xditview/parse.c
src/devices/xditview/xdit.bm
src/devices/xditview/xdit_mask.bm
src/devices/xditview/xditview.c

src/include/DviChar.h
src/include/XFontName.h

src/libs/libxutil/DviChar.c
src/libs/libxutil/XFontName.c

mdoc
macro package
==========

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tmac/doc.tmac
tmac/doc-old.tmac
tmac/mdoc/doc-common
tmac/mdoc/doc-ditroff
tmac/mdoc/doc-nroff
tmac/mdoc/doc-syms
tmac/groff_mdoc.7.man

me
macro package
==========

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tmac/e.tmac
tmac/groff_me.man
doc/meintro.me
doc/meintro_fr.me
doc/meref.me

Hyphenation patterns
==========

groff's hyphenation pattern files are adapted from those used by various
TeX-related projects.

* "tmac/hyphen.cs" is renamed from "czhyphen.tex", and obtained from
<http://dante.ctan.org/CTAN/macros/cstex/base/csplain.tar.gz>.

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* "tmac/hyphen.den" and "tmac/hyphen.det" are renamed from
"dehyphn-x-2017-03-31.pat" and "dehypht-x-2017-03-31.pat",
respectively, in the "dehyph-exptl-0.41" package.

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.TOC
.\" Local Variables:
.\" mode: nroff
.\" End:
.\" vim: filetype=groff:

1.1997 xmlsec 1.2.39-5build2

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1.1998 go-datastructures 1.1.5

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1.2002 pyyaml 6.0.2

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1.2003 zlib 1.3.0.1

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1.2005 alpine-keys 2.5-r0

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1.2006 libpsl5t64 0.21.2-1.1build1

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1.2007 libkeyutils 1.6.3-3build1

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Whether this is true is especially significant if the work can be
linked without the Library, or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
structure layouts and accessors, and small macros and small inline
functions (ten lines or less in length), then the use of the object
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Otherwise, if the work is a derivative of the Library, you may
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code for the work under the terms of Section 6.
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a) Accompany
the work with the complete corresponding
machine-readable source code for the Library including whatever

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the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

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1.2012 github.com/moby/sys/userns 0.1.0

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the

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Otherwise, if the work is a derivative of the Library, you may distribute the
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* /blinker-1-7-0-orig-1-tar-gz/blinker-1.7.0/src/blinker/_saferef.py
No license file was found, but licenses were detected in source scan.

.. rst-class:: hide-header

Blinker Documentation
==========

.. image:: _static/blinker-named.png
   :align: center

Blinker provides fast & simple object-to-object and broadcast
signaling for Python objects.

The core of Blinker is quite small but provides powerful features:

- a global registry of named signals
- anonymous signals
- custom name registries
- permanently or temporarily connected receivers

- automatically disconnected receivers via weak referencing
- sending arbitrary data payloads
- collecting return values from signal receivers
- thread safety

Blinker was written by Jason Kirtand and is provided under the MIT License. The library supports Python 3.8 or later; or PyPy3.9 or later.

Decoupling With Named Signals

Named signals are created with :func:`signal`:

.. code-block:: python

```
>>> from blinker import signal
>>> initialized = signal('initialized')
 >>> initialized is signal('initialized')
True
```

Every call to ``signal('name')`` returns the same signal object, allowing unconnected parts of code (different modules, plugins, anything) to all use the same signal without requiring any code sharing or special imports.

Subscribing to Signals

:meth:`Signal.connect` registers a function to be invoked each time the signal is emitted. Connected functions are always passed the object that caused the signal to be emitted.

.. code-block:: python

```
>>> def subscriber(sender):
...     print(f"Got a signal sent by {sender!r}")
...
>>> ready = signal('ready')
>>> ready.connect(subscriber)
<function subscriber at 0x...>
```

Emitting Signals

Code producing events of interest can :meth:`Signal.send`

notifications to all connected receivers.

Below, a simple ``Processor`` class emits a ``ready`` signal when it's about to process something, and ``complete`` when it is done. It passes ``self``
to the :meth:`~Signal.send` method, signifying that
that particular instance was responsible for emitting the signal.

.. code-block:: python

```
>>> class Processor:
...     def __init__(self, name):
...         self.name = name
...
...     def go(self):
...         ready = signal('ready')
...         ready.send(self)
...         print("Processing.")
...         complete = signal('complete')
...         complete.send(self)
...
...     def __repr__(self):
...         return f'<Processor {self.name}>'
...
>>> processor_a = Processor('a')
>>> processor_a.go()
Got a signal sent by <Processor a>
Processing.
```

Notice the ``complete`` signal in ``go()``? No receivers have connected to ``complete`` yet, and that's a-ok. Calling :meth:`~Signal.send` on a signal with no receivers will result in no notifications being sent, and these no-op sends are optimized to be as inexpensive as possible.

Subscribing to Specific Senders

The default
connection to a signal invokes the receiver function when
any sender emits it. The :meth:`Signal.connect` function accepts an optional argument to restrict the subscription to one specific sending object:

.. code-block:: python

```
>>> def b_subscriber(sender):
```

```
 ...     print("Caught signal from processor_b.")
 ...     assert sender.name == 'b'
 ...
 >>> processor_b = Processor('b')
 >>> ready.connect(b_subscriber, sender=processor_b)
 <function b_subscriber at 0x...>
```

This function has been subscribed to ``ready`` but only when sent by ``processor_b``:

.. code-block:: python

```
 >>> processor_a.go()
 Got a signal sent by <Processor a>
 Processing.
 >>> processor_b.go()
 Got a signal sent by <Processor b>
 Caught signal from processor_b.
 Processing.
```

Sending and Receiving Data Through Signals

Additional keyword arguments can be passed to :meth:`~Signal.send`. These will in turn be passed to the connected functions:

.. code-block::
 python

```
 >>> send_data = signal('send-data')
 >>> @send_data.connect
 ... def receive_data(sender, **kw):
 ...     print(f"Caught signal from {sender!r}, data {kw!r}")
 ...     return 'received!'
 ...
 >>> result = send_data.send('anonymous', abc=123)
 Caught signal from 'anonymous', data {'abc': 123}
```

The return value of :meth:`~Signal.send` collects the return values of each connected function as a list of (``receiver function``, ``return value``) pairs:

.. code-block:: python

```
 >>> result
 [(<function receive_data at 0x...>, 'received!')]
```

Muting signals

To mute a signal, as may be required when testing, the
:meth:`~Signal.muted` can be used as a context decorator:

.. code-block:: python

```
sig = signal('send-data')
with sig.muted():
    ...
```

Anonymous Signals

Signals need not be named. The :class:`Signal` constructor creates a
unique signal each time it is invoked. For example, an alternative
implementation of the
Processor from above might provide the
processing signals as class attributes:

.. code-block:: python

```
>>> from blinker import Signal
>>> class AltProcessor:
...     on_ready = Signal()
...     on_complete = Signal()
...
...     def __init__(self, name):
...         self.name = name
...
...     def go(self):
...         self.on_ready.send(self)
...         print("Alternate processing.")
...         self.on_complete.send(self)
...
...     def __repr__(self):
...         return f'<AltProcessor {self.name}>'
...
```

``connect`` as a Decorator

You may have noticed the return value of :meth:`~Signal.connect` in
the console output in the sections above. This allows ``connect`` to
be used as a decorator on functions:

.. code-block:: python

```
>>> apc = AltProcessor('c')
>>> @apc.on_complete.connect
... def completed(sender):
...     print f"AltProcessor {sender.name} completed!"
...
>>> apc.go()
Alternate processing.
AltProcessor
c completed!
```

While convenient, this form unfortunately does not allow the ``sender`` or ``weak`` arguments to be customized for the connected function. For this, :meth:`~Signal.connect_via` can be used:

.. code-block:: python

```
>>> dice_roll = signal('dice_roll')
>>> @dice_roll.connect_via(1)
... @dice_roll.connect_via(3)
... @dice_roll.connect_via(5)
... def odd_subscriber(sender):
...     print(f"Observed dice roll {sender!r}.")
...
>>> result = dice_roll.send(3)
Observed dice roll 3.
```

Optimizing Signal Sending

Signals are optimized to send very quickly, whether receivers are connected or not. If the keyword data to be sent with a signal is expensive to compute, it can be more efficient to check to see if any receivers are connected first by testing the :attr:`~Signal.receivers` property:

.. code-block:: python

```
>>> bool(signal('ready').receivers)
True
>>> bool(signal('complete').receivers)
False
>>> bool(AltProcessor.on_complete.receivers)
 True
```

Checking for a receiver listening for a particular sender is also possible:

.. code-block:: python

```
>>> signal('ready').has_receivers_for(processor_a)
True
```

Documenting Signals

Both named and anonymous signals can be passed a ``doc`` argument at construction to set the pydoc help text for the signal. This documentation will be picked up by most documentation generators (such as sphinx) and is nice for documenting any additional data parameters that will be sent down with the signal.

See the documentation of the :obj:`receiver_connected` built-in signal for an example.

Async receivers

Receivers can be coroutine functions which can be called and awaited via the :meth:`~Signal.send_async` method:

.. code-block:: python

```
sig = blinker.Signal()

async def receiver():
    ...

sig.connect(receiver)
await sig.send_async()
```

This however requires that all receivers are awaitable which then precludes the usage of :meth:`~Signal.send`. To mix and match the :meth:`~Signal.send_async` method takes a ``_sync_wrapper`` argument such as:

.. code-block:: python

```
sig = blinker.Signal()
```

```
  def receiver():
      ...

  sig.connect(receiver)

  def wrapper(func):

      async def inner(*args, **kwargs):
          func(*args, **kwargs)

      return inner

  await sig.send_async(_sync_wrapper=wrapper)
```

The equivalent usage for :meth:`~Signal.send` is via the
``_async_wrapper`` argument. This usage is will depend on your event
loop, and in the simple case whereby you aren't running within an
event loop the following example can be used:

.. code-block:: python

```
  sig = blinker.Signal()

  async def receiver():
      ...

  sig.connect(receiver)

  def wrapper(func):

      def inner(*args, **kwargs):
          asyncio.run(func(*args, **kwargs))

      return inner

  await sig.send(_async_wrapper=wrapper)
```

Call receivers in order of registration

It
 can be advantageous to call a signal's receivers in the order they
were registered. To achieve this the storage class for receivers should
be changed from an (unordered) set to an ordered set,

.. code-block:: python

```
from blinker import Signal
from ordered_set import OrderedSet

Signal.set_class = OrderedSet
```

Please note that ``ordered_set`` is a PyPI package and is not
installed with blinker.

API Documentation

All public API members can (and should) be imported from ``blinker``::

```
from blinker import ANY, signal
```

.. currentmodule:: blinker.base

Basic Signals
++++++++++++++

.. autodata:: blinker.base.ANY

.. autodata:: blinker.base.receiver_connected

.. autoclass:: Signal
  :members:
  :undoc-members:

Named Signals
++++++++++++++

.. function:: signal(name, doc=None)

Return the :class:`NamedSignal` *name*, creating it if required.

Repeated calls to this function will return the same signal object.
Signals are created in a global
:class:`Namespace`.

.. autoclass:: NamedSignal
  :show-inheritance:
  :members:

.. autoclass:: Namespace
  :show-inheritance:
  :members: signal

.. autoclass:: WeakNamespace
  :show-inheritance:
  :members: signal

Changes
=======

.. include:: ../CHANGES.rst

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===========

.. include:: ../LICENSE.rst

Found in path(s):
* /blinker-1-7-0-orig-1-tar-gz/blinker-1.7.0/docs/index.rst

1.2027 libjcat 0.2.0-2build3

1.2027.1 Available under license :

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1.2032 libsort-naturally-perl 1.03-4

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```
=head1 NAME

Sort::Naturally -- sort lexically, but sort numeral parts numerically

=head1 SYNOPSIS

 @them = nsort(qw(
  foo12a foo12z foo13a foo 14 9x foo12 fooa foolio Foolio Foo12a
 ));
 print join(' ', @them), "\n";

Prints:

 9x 14 foo fooa foolio Foolio foo12 foo12a Foo12a foo12z foo13a

(Or "foo12a" + "Foo12a" and "foolio" + "Foolio" and might be
switched, depending on your locale.)

=head1 DESCRIPTION

This module exports two functions, C<nsort> and C<ncmp>; they are used
in implementing my idea of a "natural sorting" algorithm.  Under natural
sorting, numeric substrings are compared numerically, and other
word-characters are compared lexically.

This is the way I define natural sorting:

=over

=item *

Non-numeric word-character substrings are sorted lexically,
case-insensitively: "Foo" comes between "fish" and "fowl".

=item *

Numeric substrings are sorted numerically:
```

"100" comes after "20", not before.

=item
 *

\W substrings (neither words-characters nor digits) are I<ignored>.

=item *

Our use of \w, \d, \D, and \W is locale-sensitive: Sort::Naturally
uses a C<use locale> statement.

=item *

When comparing two strings, where a numeric substring in one
place is I<not> up against a numeric substring in another,
the non-numeric always comes first. This is fudged by
reading pretending that the lack of a number substring has
the value -1, like so:

```
 foo       =>  "foo",  -1
 foobar    =>  "foo",  -1,  "bar"
 foo13     =>  "foo",  13,
 foo13xyz  =>  "foo",  13,  "xyz"
```

That's so that "foo" will come before "foo13", which will come
before "foobar".

=item *

The start of a string is exceptional: leading non-\W (non-word,
non-digit)
components are are ignored, and numbers come I<before> letters.

=item *

I define "numeric substring" just as sequences matching m/\d+/ --
scientific notation, commas, decimals, etc., are not seen. If
your data has thousands separators in numbers
("20,000
 Leagues Under The Sea" or "20.000 lieues sous les mers"),
consider stripping them before feeding them to C<nsort> or
C<ncmp>.

=back

=head2 The nsort function

This function takes a list of strings, and returns a copy of the list,
sorted.

This is what most people will want to use:

```
 @stuff = nsort(...list...);
```

When nsort needs to compare non-numeric substrings, it
uses Perl's C<lc> function in scope of a <use locale>.
And when nsort needs to lowercase things, it uses Perl's
C<lc> function in scope of a <use locale>. If you want nsort
to use other functions instead, you can specify them in
an arrayref as the first argument to nsort:

```
 @stuff = nsort( [
                  \&string_comparator,   # optional
                  \&lowercaser_function  # optional
                ],
                ...list...
              );
```

If you want to specify a string comparator but no lowercaser,
then the options list is C<[\&comparator, ""]> or
C<[\&comparator]>. If you want to
 specify no string comparator
but a lowercaser, then the options list is
C<["", \&lowercaser]>.

Any comparator you specify is called as
C<$comparator-E<gt>($left, $right)>,
and, like a normal Perl C<cmp> replacement, must return
-1, 0, or 1 depending on whether the left argument is stringwise
less than, equal to, or greater than the right argument.

Any lowercaser function you specify is called as
C<$lowercased = $lowercaser-E<gt>($original)>. The routine
must not modify its C<$_[0]>.

=head2 The ncmp function

Often, when sorting non-string values like this:

```
  @objects_sorted = sort { $a->tag cmp $b->tag } @objects;
```

...or even in a Schwartzian transform, like this:

```
  @strings =
    map $_->[0]
```

```
  sort { $a->[1] cmp $b->[1] }
  map { [$_, make_a_sort_key_from($_) ]
  @_
 ;
```

...you wight want something that replaces not C<sort>, but C<cmp>.
That's what Sort::Naturally's C<ncmp> function is for. Call it with
the syntax C<ncmp($left,$right)> instead of C<$left cmp $right>,
but
 otherwise it's a fine replacement:

```
 @objects_sorted = sort { ncmp($a->tag,$b->tag) } @objects;

 @strings =
  map $_->[0]
  sort { ncmp($a->[1], $b->[1]) }
  map { [$_, make_a_sort_key_from($_) ]
  @_
 ;
```

Just as with C<nsort> can take different a string-comparator
and/or lowercaser, you can do the same with C<ncmp>, by passing
an arrayref as the first argument:

```
 ncmp( [
        \&string_comparator,   # optional
        \&lowercaser_function  # optional
       ],
       $left, $right
     )
```

You might get string comparators from L<Sort::ArbBiLex|Sort::ArbBiLex>.

=head1 NOTES

=over

=item *

This module is not a substitute for
L<Sort::Versions|Sort::Versions>! If
you just need proper version sorting, use I<that!>

=item *

If you need something that works I<sort of> like this module's
functions, but not quite the same, consider scouting thru this
module's source code, and adapting what you see. Besides

the functions that actually compile in this
module, after the POD,
there's several alternate attempts of mine at natural sorting
routines, which are not compiled as part of the module, but which you
might find useful. They should all be I<working> implementations of
slightly different algorithms
(all of them based on Martin Pool's C<nsort>) which I eventually
discarded in favor of my algorithm. If you are having to
naturally-sort I<very large> data sets, and sorting is getting
ridiculously slow, you might consider trying one of those
discarded functions -- I have a feeling they might be faster on
large data sets. Benchmark them on your data and see. (Unless
you I<need> the speed, don't bother. Hint: substitute C<sort>
for C<nsort> in your code, and unless your program speeds up
drastically, it's not the sorting that's slowing things down.
But if it I<is> C<nsort> that's slowing things down, consider
just:

```
if(@set >= SOME_VERY_BIG_NUMBER) {
  no locale; # vroom vroom
  @sorted = sort(@set);  # feh, good enough
 } elsif(@set >= SOME_BIG_NUMBER) {
  use locale;
  @sorted = sort(@set);  # feh, good enough
} else {
  # but keep it pretty for normal cases
  @sorted = nsort(@set);
}
```

=item *

If you do adapt the routines in this module, email me; I'd
just be interested in hearing about it.

=item *

Thanks to the EFNet #perl people for encouraging this module,
especially magister and a-mused.

=back

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```
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=head1 AUTHOR

Sean M. Burke C<sburke@cpan.org>

=cut

############   END OF DOCS   ############

##############################################################################
##############################################################################

############
 BEGIN OLD STUFF ############

# We can't have "use integer;", or else (5 <=> 5.1) comes out "0" !

#-----------------------------------------------------------------------------
sub nsort {
 my($cmp, $lc);
 return @_ if @_ < 2;   # Just to be CLEVER.

 my($x, $i);  # scratch vars

 # And now, the GREAT BIG Schwartzian transform:

 map
   $_->[0],

 sort {
   # Uses $i as the index variable, $x as the result.
   $x = 0;
   $i = 1;
   DEBUG and print "\nComparing ", map("{$_}", @$a),
                ' : ', map("{$_}", @$b), , "...\n";

   while($i < @$a and $i < @$b) {
     DEBUG and print "  comparing $i: {$a->[$i]} cmp {$b->[$i]} => ",
       $a->[$i] cmp $b->[$i], "\n";
     last if ($x = ($a->[$i] cmp $b->[$i])); # lexicographic
     ++$i;

     DEBUG and print "  comparing $i: {$a->[$i]} <=> {$b->[$i]} => ",
       $a->[$i] <=> $b->[$i], "\n";
     last if ($x = ($a->[$i]
```

```
 <=> $b->[$i])); # numeric
    ++$i;
  }

  DEBUG and print "{$a->[0]} : {$b->[0]} is ",
    $x || (@$a <=> @$b) || 0
    ,"\n"
  ;
  $x || (@$a <=> @$b) || ($a->[0] cmp $b->[0]);
    # unless we found a result for $x in the while loop,
    #  use length as a tiebreaker, otherwise use cmp
    #  on the original string as a fallback tiebreaker.
 }

 map {
  my @bit = ($x = defined($_) ? $_ : '');

  if($x =~ m/^[+-]?(?=\d|\.\d)\d*(?:\.\d*)?(?:[Ee](?:[+-]?\d+))?\z/s) {
    # It's entirely purely numeric, so treat it specially:
    push @bit, '', $x;
  } else {
    # Consume the string.
    while(length $x) {
      push @bit, ($x =~ s/^(\D+)//s) ? lc($1) : '';
      push @bit, ($x =~ s/^(\d+)//s) ?    $1  :  0;
    }
  }
  DEBUG and print "$bit[0] => ", map("{$_} ", @bit), "\n";

  # End result: [original bit         , (text, number), (text, number), ...]
  # Minimally:  [0-length original bit,]
  # Examples:
  #    ['10'
  => "   ,  10,              ]
  #    ['fo900'      => 'fo' , 900,              ]
  #    ['foo10'      => 'foo',  10,              ]
  #    ['foo9.pl'    => 'foo',   9,   , '.pl', 0 ]
  #    ['foo32.pl'   => 'foo',  32,   , '.pl', 0 ]
  #    ['foo325.pl'  => 'foo', 325,   , '.pl', 0 ]
  #  Yes, always an ODD number of elements.

  \@bit;
 }
 @_;
}

#-----------------------------------------------------------------------------
# Same as before, except without the pure-number trap.
```

```
sub nsorts {
 return @_ if @_ < 2;   # Just to be CLEVER.

 my($x, $i);  # scratch vars

 # And now, the GREAT BIG Schwartzian transform:

 map
   $_->[0],

 sort {
   # Uses $i as the index variable, $x as the result.
   $x = 0;
   $i = 1;
   DEBUG and print "\nComparing ", map("{$_}", @$a),
                ' : ', map("{$_}", @$b), , "...\n";

   while($i < @$a and $i < @$b) {
     DEBUG and print "  comparing $i: {$a->[$i]} cmp {$b->[$i]} => ",
       $a->[$i] cmp $b->[$i], "\n";
      last if ($x = ($a->[$i] cmp $b->[$i])); # lexicographic
     ++$i;

     DEBUG and print "  comparing $i: {$a->[$i]} <=> {$b->[$i]} => ",
       $a->[$i] <=> $b->[$i], "\n";
     last if ($x = ($a->[$i] <=> $b->[$i])); # numeric
     ++$i;
   }

   DEBUG and print "{$a->[0]} : {$b->[0]} is ",
     $x || (@$a <=> @$b) || 0
     ,"\n"
   ;
   $x || (@$a <=> @$b) || ($a->[0] cmp $b->[0]);
     # unless we found a result for $x in the while loop,
     #  use length as a tiebreaker, otherwise use cmp
     #  on the original string as a fallback tiebreaker.
 }

 map {
   my @bit = ($x = defined($_) ? $_ : '');

   while(length $x) {
     push @bit, ($x =~ s/^(\D+)//s) ? lc($1) : '';
     push @bit, ($x =~ s/^(\d+)//s) ?    $1  :  0;
   }
   DEBUG and print "$bit[0] => ", map("{$_} ", @bit), "\n";
```

```
  # End result: [original bit         , (text, number), (text, number), ...]
  # Minimally:  [0-length original bit,]
  # Examples:
  #    ['10'         => ''
  ,  10,              ]
  #    ['fo900'      => 'fo' , 900,              ]
  #    ['foo10'      => 'foo',  10,              ]
  #    ['foo9.pl'    => 'foo',   9,   , '.pl', 0 ]
  #    ['foo32.pl'   => 'foo',  32,   , '.pl', 0 ]
  #    ['foo325.pl'  => 'foo', 325,   , '.pl', 0 ]
  #  Yes, always an ODD number of elements.

  \@bit;
 }
 @_;
}

#-----------------------------------------------------------------------------
# Same as before, except for the sort-key-making

sub nsort0 {
 return @_ if @_ < 2;   # Just to be CLEVER.

 my($x, $i);  # scratch vars

 # And now, the GREAT BIG Schwartzian transform:

 map
  $_->[0],

 sort {
  # Uses $i as the index variable, $x as the result.
  $x = 0;
  $i = 1;
  DEBUG and print "\nComparing ", map("{$_}", @$a),
              ' : ', map("{$_}", @$b), , "...\n";

  while($i < @$a and $i < @$b) {
    DEBUG and print "  comparing $i: {$a->[$i]} cmp {$b->[$i]} => ",
      $a->[$i] cmp $b->[$i], "\n";
    last
 if ($x = ($a->[$i] cmp $b->[$i])); # lexicographic
    ++$i;

    DEBUG and print "  comparing $i: {$a->[$i]} <=> {$b->[$i]} => ",
      $a->[$i] <=> $b->[$i], "\n";
    last if ($x = ($a->[$i] <=> $b->[$i])); # numeric
```

```
    ++$i;
  }

  DEBUG and print "{$a->[0]} : {$b->[0]} is ",
    $x || (@$a <=> @$b) || 0
    ,"\n"
  ;
  $x || (@$a <=> @$b) || ($a->[0] cmp $b->[0]);
    # unless we found a result for $x in the while loop,
    #  use length as a tiebreaker, otherwise use cmp
    #  on the original string as a fallback tiebreaker.
 }

 map {
  my @bit = ($x = defined($_) ? $_ : '');

  if($x =~ m/^[+-]?(?=\d|\.\d)\d*(?:\.\d*)?(?:[Ee](?:[+-]?\d+))?\z/s) {
    # It's entirely purely numeric, so treat it specially:
    push @bit, '', $x;
  } else {
    # Consume the string.
    while(length $x) {
      push @bit, ($x =~ s/^(\D+)//s) ? lc($1) : '';
      # Secret sauce:
      if($x =~ s/^(\d+)//s) {
        if(substr($1,0,1) eq '0' and
 $1 != 0) {
          push @bit, $1 / (10 ** length($1));
        } else {
          push @bit, $1;
        }
      } else {
        push @bit, 0;
      }
    }
  }
  DEBUG and print "$bit[0] => ", map("{$_} ", @bit), "\n";

  \@bit;
 }
 @_;
}

#-----------------------------------------------------------------------------
# Like nsort0, but WITHOUT pure number handling, and WITH special treatment
# of pulling off extensions and version numbers.

sub nsortf {
```

```
return @_ if @_ < 2;   # Just to be CLEVER.

my($x, $i);  # scratch vars

# And now, the GREAT BIG Schwartzian transform:

map
  $_->[0],

sort {
  # Uses $i as the index variable, $x as the result.
  $x = 0;
  $i = 3;
  DEBUG and print "\nComparing ", map("{$_}", @$a),
              ' : ', map("{$_}", @$b), , "...\n";

  while($i < @$a and $i < @$b) {
    DEBUG and print "  comparing $i: {$a->[$i]} cmp {$b->[$i]} => ",
      $a->[$i] cmp $b->[$i], "\n";
    last if ($x = ($a->[$i]
cmp $b->[$i])); # lexicographic
    ++$i;

    DEBUG and print "  comparing $i: {$a->[$i]} <=> {$b->[$i]} => ",
      $a->[$i] <=> $b->[$i], "\n";
    last if ($x = ($a->[$i] <=> $b->[$i])); # numeric
    ++$i;
  }

  DEBUG and print "{$a->[0]} : {$b->[0]} is ",
    $x || (@$a <=> @$b) || 0
    ,"\n"
  ;
  $x || (@$a     <=> @$b    ) || ($a->[1] cmp $b->[1])
     || ($a->[2] <=> $b->[2]) || ($a->[0] cmp $b->[0]);
    # unless we found a result for $x in the while loop,
    #  use length as a tiebreaker, otherwise use the
    #  lc'd extension, otherwise the verison, otherwise use
    #  the original string as a fallback tiebreaker.
}

map {
  my @bit = ( ($x = defined($_) ? $_ : ''), ',0 );

  {
    # Consume the string.

    # First, pull off any VAX-style version
```

```
    $bit[2] = $1 if $x =~ s/;(\d+)$//;

    # Then pull off any apparent extension
    if( $x !~ m/^\.+$/s and     # don't mangle ".", "..", or "..."
        $x =~
s/(\.[^\.\;]*)$//sg
        # We could try to avoid catching all-digit extensions,
        #  but I think that's getting /too/ clever.
    ) {
      $i = $1;
      if($x =~ m<[^\\\://]$>s) {
        # We didn't take the whole basename.
        $bit[1] = lc $i;
        DEBUG and print "Consuming extension \"$1\"\n";
      } else {
        # We DID take the whole basename.  Fix it.
        $x = $1;  # Repair it.
      }
    }

    push @bit, '', -1   if $x =~ m/^\./s;
     # A hack to make .-initial filenames sort first, regardless of locale.
     # And -1 is always a sort-firster, since in the code below, there's
     # no allowance for filenames containing negative numbers: -1.dat
     # will be read as string '-' followed by number 1.

    while(length $x) {
      push @bit, ($x =~ s/^(\D+)//s) ? lc($1) : '';
      # Secret sauce:
      if($x =~ s/^(\d+)//s) {
        if(substr($1,0,1) eq '0' and $1 != 0) {
          push @bit, $1 / (10
** length($1));
        } else {
          push @bit, $1;
        }
      } else {
        push @bit, 0;
      }
    }
  }

  DEBUG and print "$bit[0] => ", map("{$_} ", @bit), "\n";

  \@bit;
 }
 @_;
}
```

yowza yowza yowza.

Found in path(s):
* /libsort-naturally-perl-1-03-orig-1-tar-gz/Sort-Naturally-1.03/lib/Sort/Naturally.pm
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```
README for Sort::Naturally
                                Time-stamp: "2001-05-25 21:17:33 MDT"

      Sort::Naturally

[extracted from the Pod...]

NAME
   Sort::Naturally -- sort lexically, but sort numeral parts
   numerically

SYNOPSIS
     @them = nsort(qw(
      foo12a foo12z foo13a foo 14 9x foo12 fooa foolio Foolio Foo12a
     ));
     print join(' ', @them), "\n";

   Prints:

     9x 14 foo fooa foolio Foolio foo12 foo12a Foo12a foo12z foo13a

   (Or "foo12a" + "Foo12a" and "foolio" + "Foolio" and might be
   switched, depending on your locale.)

DESCRIPTION
   This module exports two functions, nsort and ncmp; they are
   used in implementing my idea of a "natural sorting"
   algorithm.  Under natural sorting, numeric substrings are
   compared numerically, and other word-characters are compared
   lexically.

   This is the way I define natural sorting:

   o
  Non-numeric word-character substrings are sorted
        lexically, case-insensitively: "Foo" comes between
        "fish" and "fowl".

   o    Numeric substrings are sorted numerically:  "100" comes
        after "20", not before.
```

- \W substrings (neither words-characters nor digits) are ignored.

- Our use of \w, \d, \D, and \W is locale-sensitive: Sort::Naturally uses a use locale statement.

- When comparing two strings, where a numeric substring in one place is not up against a numeric substring in another, the non-numeric always comes first. This is fudged by reading pretending that the lack of a number substring has the value -1, like so:

```
foo       =>  "foo",  -1
foobar    =>  "foo",  -1,  "bar"
foo13     =>  "foo",  13,
foo13xyz  =>  "foo",  13,  "xyz"
```

  That's so that "foo" will come before "foo13", which will come before
"foobar".

- The start of a string is exceptional: leading non-\W (non-word, non-digit) components are are ignored, and numbers come before letters.

- I define "numeric substring" just as sequences matching m/\d+/ -- scientific notation, commas, decimals, etc., are not seen. If your data has thousands separators in numbers ("20,000 Leagues Under The Sea" or "20.000 lieues sous les mers"), consider stripping them before feeding them to nsort or ncmp.

[end Pod extract]

INSTALLATION

You install Sort::Naturally, as you would install any perl module library, by running these commands:

```
perl Makefile.PL
make
make test
make install
```

If you want to install a private copy of Sort::Naturally in your home directory, then you should try to produce the initial Makefile with something like this command:

perl Makefile.PL LIB=~/perl

See perldoc perlmodinstall for more information on installing
modules.

DOCUMENTATION

POD-format documentation is included in Naturally.pm. POD is readable
with the 'perldoc' utility. See ChangeLog for recent changes.

SUPPORT

Questions, bug reports, useful code bits, and suggestions for
Sort::Naturally should just be sent to me at sburke@cpan.org

AVAILABILITY

The latest version of Sort::Naturally is available from the
Comprehensive Perl Archive Network (CPAN). Visit
<http://www.perl.com/CPAN/> to find a CPAN site near you.

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---
abstract: 'sort lexically, but sort numeral parts numerically'
author:
 - 'Sean M. Burke <sburke@cpan.org>'
build_requires:

```
 ExtUtils::MakeMaker: 0
configure_requires:
 ExtUtils::MakeMaker: 0
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 6.62, CPAN::Meta::Converter version 2.120921'
license: perl
meta-spec:
 url: http://module-build.sourceforge.net/META-spec-v1.4.html
 version: 1.4
name: Sort-Naturally
no_index:
 directory:
   - t
   - inc
requires:
 perl: 5
resources:
 repository: https://github.com/bingos/sort-naturally
version: 1.03
```

Found in path(s):
* /libsort-naturally-perl-1-03-orig-1-tar-gz/Sort-Naturally-1.03/META.yml

1.2033 python-tz 2024.1-2

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Found in path(s):
* /python-click-8-1-6-orig-1-tar-gz/click-8.1.6/LICENSE.rst
No license file was found, but licenses were detected in source scan.

Including attribution to #612

Found in path(s):
* /python-click-8-1-6-orig-1-tar-gz/click-8.1.6/tests/test_formatting.py
No license file was found, but licenses were detected in source scan.

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Found in path(s):

* /python-click-8-1-6-orig-1-tar-gz/click-8.1.6/src/click/parser.py
No license file was found, but licenses were detected in source scan.

.. _contrib:

==========
click-contrib
==========

As the number of users of Click grows, more and more major feature requests are made. To users it may seem reasonable to include those features with Click; however, many of them are experimental or aren't practical to support generically. Maintainers have to choose what is reasonable to maintain in Click core.

The click-contrib_ GitHub organization exists as a place to collect third-party packages that extend Click's features. It is also meant to ease the effort of searching for such extensions.

Please note that the quality and stability of those packages may be different than Click itself. While published under a common organization, they are still separate from Click and the Pallets maintainers.

.. _click-contrib: https://github.com/click-contrib/

Found in path(s):
* /python-click-8-1-6-orig-1-tar-gz/click-8.1.6/docs/contrib.rst
No license file was found, but licenses were detected in source scan.

Contributor Covenant Code of Conduct

Our Pledge

In the interest of fostering an open and welcoming environment, we as contributors and maintainers pledge to making participation in our project and our community a harassment-free experience for everyone, regardless of age, body size, disability, ethnicity, sex characteristics, gender identity and expression, level of experience, education, socio-economic status, nationality, personal appearance, race, religion, or sexual identity and orientation.

Our Standards

Examples of behavior that contributes to creating a positive environment include:

* Using welcoming and inclusive language
* Being respectful of differing viewpoints and experiences
* Gracefully accepting constructive criticism

* Focusing on what is best for the community
* Showing empathy towards other community members

Examples of unacceptable behavior by participants include:

* The use of sexualized
 language or imagery and unwelcome sexual attention or
advances
* Trolling, insulting/derogatory comments, and personal or political attacks
* Public or private harassment
* Publishing others' private information, such as a physical or electronic
address, without explicit permission
* Other conduct which could reasonably be considered inappropriate in a
professional setting

Our Responsibilities

Project maintainers are responsible for clarifying the standards of acceptable behavior and are expected to take appropriate and fair corrective action in response to any instances of unacceptable behavior.

Project maintainers have the right and responsibility to remove, edit, or reject comments, commits, code, wiki edits, issues, and other contributions that are not aligned to this Code of Conduct, or to ban temporarily or permanently any contributor for other behaviors that they deem inappropriate, threatening, offensive, or harmful.

Scope

This Code of Conduct applies both within
 project spaces and in public spaces
when an individual is representing the project or its community. Examples of representing a project or community include using an official project e-mail address, posting via an official social media account, or acting as an appointed representative at an online or offline event. Representation of a project may be further defined and clarified by project maintainers.

Enforcement

Instances of abusive, harassing, or otherwise unacceptable behavior may be reported by contacting the project team at report@palletsprojects.com. All complaints will be reviewed and investigated and will result in a response that is deemed necessary and appropriate to the circumstances. The project team is obligated to maintain confidentiality with regard to the reporter of an incident. Further details of specific enforcement policies may be posted separately.

Project maintainers who do not follow or enforce the Code of Conduct in good faith may face temporary or

permanent repercussions as determined by other
members of the project's leadership.

Attribution

This Code of Conduct is adapted from the [Contributor Covenant][homepage], version 1.4,
available at https://www.contributor-covenant.org/version/1/4/code-of-conduct.html

[homepage]: https://www.contributor-covenant.org

For answers to common questions about this code of conduct, see
https://www.contributor-covenant.org/faq

Found in path(s):
* /python-click-8-1-6-orig-1-tar-gz/click-8.1.6/CODE_OF_CONDUCT.md

1.2039 fonts-ubuntu 0.869+git20240321-0ubuntu1

1.2039.1 Available under license :

UBUNTU FONT LICENCE Version 1.0

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Ubuntu Font Family Licensing FAQ

Stylistic Foundations

The Ubuntu Font Family is the first time that a libre typeface has been designed professionally and explicitly with the intent of developing a public and long-term community-based development process.

When developing an open project, it is generally necessary to have firm foundations: a font needs to maintain harmony within itself even across many type designers and writing systems. For the [1]Ubuntu Font Family, the process has been guided with the type foundry Dalton Maag setting the project up with firm stylistic foundation covering several left-to-right scripts: Latin, Greek and Cyrillic; and right-to-left scripts: Arabic and Hebrew (due in 2011).

With this starting point the community will, under the supervision of [2]Canonical and [3]Dalton Maag, be able to build on the existing font sources to expand their character coverage. Ultimately everybody will be
able to use the Ubuntu Font Family in their own written languages across the whole of Unicode (and this will take some time!).

Licensing

The licence chosen by any free software project is one of the foundational decisions that sets out how derivatives and contributions can occur, and in turn what kind of community will form around the project.

Using a licence that is compatible with other popular licences is a powerful constraint because of the [4]network effects: the freedom to share improvements between projects allows free software to reach high-quality over time. Licence-proliferation leads to many incompatible licences, undermining the network effect, the freedom to share and ultimately making the libre movement that Ubuntu is a part of less effective. For all kinds of software, writing a new licence is not to be taken lightly and is a choice that needs to be thoroughly justified if this path is taken.

Today it is not clear to Canonical what the best licence for a font project like the Ubuntu Font Family is: one that starts life designed by professionals and continues with the full range of community development, from highly commercial work in new directions to curious beginners' experimental contributions. The fast and steady pace of the Ubuntu release cycle means that an interim libre licence has been necessary to enable the consideration of the font family as part of Ubuntu 10.10 operating system release.

Before taking any decision on licensing, Canonical as sponsor and backer of the project has reviewed the many existing licenses used for libre/open fonts and engaged the stewards of the most popular licenses in detailed discussions. The current interim licence is the first step in progressing the state-of-the-art in licensing for libre/open font development.

The public discussion must now involve everyone in the (comparatively new) area of the libre/open font community; including font users, software freedom advocates, open source supporters and existing libre font developers. Most importantly, the minds and wishes of professional type designers considering entering the free software business community must be taken on board.

Conversations and discussion has taken place, privately, with individuals from the following groups (generally speaking personally on behalf of themselves, rather than their affiliations):

* [5]SIL International
* [6]Open Font Library

* [7]Software Freedom Law Center
* [8]Google Font API

Document embedding

One issue highlighted early on in the survey of existing font licences is that of document embedding. Almost all font licences, both free and unfree, permit embedding a font into a document to a certain degree. Embedding a font with other works that make up a document creates a "combined work" and copyleft would normally require the whole document to be distributed under the terms of the font licence. As beautiful as the font might be, such a licence makes a font too restrictive for useful general purpose digital publishing.

The situation is not entirely unique to fonts and is encountered also with tools such as GNU Bison: a vanilla GNU GPL licence would require anything generated with Bison to be made available under the terms of the GPL as well. To avoid this, Bison is [9]published with an additional permission to the GPL which allows the output of Bison to be made available under any licence.

The conflict between licensing of fonts and licensing of documents, is addressed in two popular libre font licences, the SIL OFL and GNU GPL:

* [10]SIL Open Font Licence: When OFL fonts are embedded in a document, the OFL's terms do not apply to that document. (See [11]OFL-FAQ for details.
* [12]GPL Font Exception: The situation is resolved by granting an additional permission to allow documents to not be covered by the GPL. (The exception is being reviewed).

The Ubuntu Font Family must also resolve this conflict, ensuring that if the font is embedded and then extracted it is once again clearly under the terms of its libre licence.

Long-term licensing

Those individuals involved, especially from Ubuntu and Canonical, are interested in finding a long-term libre licence that finds broad favour across the whole libre/open font community. The deliberation during the past months has been on how to licence the Ubuntu Font Family in the short-term, while knowingly encouraging everyone to pursue a long-term goal.

* [13]Copyright assignment will be required so that the Ubuntu Font Family's licensing can be progressively expanded to one (or more) licences, as best practice continues to evolve within the libre/open font community.

* Canonical will support and fund legal work on libre font licensing.

It is recognised that the cost and time commitments required are likely to be significant. We invite other capable parties to join in supporting this activity.

The GPL version 3 (GPLv3) will be used for Ubuntu Font Family build scripts and the CC-BY-SA for associated documentation and non-font content: all items which do not end up embedded in general works and documents.

Ubuntu Font Licence

For the short-term only, the initial licence is the [14]Ubuntu Font License (UFL). This is loosely inspired from the work on the SIL OFL 1.1, and seeks to clarify the issues that arose during discussions and legal review, from the perspective of the backers, Canonical Ltd. Those already using established licensing models such as the GPL, OFL or Creative Commons licensing should have no worries about continuing to use them. The Ubuntu Font Licence (UFL) and the SIL Open Font Licence (SIL OFL) are not identical and should not be confused with each other. Please read the terms precisely. The UFL is only intended as an interim license, and the overriding aim is to support the creation of a more suitable and generic libre font licence. As soon as such a licence is developed, the Ubuntu Font Family will migrate to itmade possible by copyright assignment in the interium. Between the OFL 1.1, and the UFL 1.0, the following changes are made to produce the Ubuntu Font Licence:

* Clarification:

1. Document embedding (see [15]embedding section above).
2. Apply at point of distribution, instead of receipt
3. Author vs. copyright holder disambiguation (type designers are authors, with the copyright holder normally being the funder)
4. Define "Propagate" (for internationalisation, similar to the GPLv3)
5. Define "Substantially Changed"
6. Trademarks are explicitly not transferred
7. Refine renaming requirement

Streamlining:

8. Remove "not to be sold separately" clause
9. Remove "Reserved Font Name(s)" declaration

A visual demonstration of how these points were implemented can be found in the accompanying coloured diff between SIL OFL 1.1 and the Ubuntu Font Licence 1.0: [16]ofl-1.1-ufl-1.0.diff.html

References

1. http://font.ubuntu.com/
2. http://www.canonical.com/
3. http://www.daltonmaag.com/
4. http://en.wikipedia.org/wiki/Network_effect
5. http://scripts.sil.org/
6. http://openfontlibrary.org/
7. http://www.softwarefreedom.org/
8. http://code.google.com/webfonts
9. http://www.gnu.org/licenses/gpl-faq.html#CanIUseGPLToolsForNF
10. http://scripts.sil.org/OFL_web
11. http://scripts.sil.org/OFL-FAQ_web
12. http://www.gnu.org/licenses/gpl-faq.html#FontException
13. https://launchpad.net/~uff-contributors
14. http://font.ubuntu.com/ufl/ubuntu-font-licence-1.0.txt
15. http://font.ubuntu.com/ufl/FAQ.html#embedding
16. http://font.ubuntu.com/ufl/ofl-1.1-ufl-1.0.diff.html

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1.2040 libintl-perl 1.33-1build3

1.2040.1 Available under license :

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Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand
ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

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b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

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d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

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When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms
of Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

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For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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1.2045 popt 1.19+dfsg-1build1

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When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be

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under the terms of Sections 1 and 2 above provided that you accompany
it with the complete corresponding
machine-readable source code, which
must be distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not
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5. A program that contains no derivative of any portion of the
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work, in isolation, is not a derivative work of the Library, and
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However, linking a "work that uses the Library" with the Library
creates an executable that is a derivative of the Library (because it
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uses the
library". The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the
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a) Accompany
the work with the complete corresponding
machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

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1.2051 libqmi 1.35.2-0ubuntu2

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1.2052 libterm-readkey-perl 2.38-2build4

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Term::ReadKey 2.36 - Change terminal modes, and perform non-blocking reads.

Copyright (C) 1994-1999 Kenneth Albanowski.
2001-2016 Jonathan Stowe and others

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This module, ReadKey, provides ioctl control for terminals and Win32
consoles
so the input modes can be changed (thus allowing reads of a single
character at a time), and also provides non-blocking reads of stdin, as well
as several other terminal related features, including retrieval/modification
of the screen size, and retrieval/modification of the control characters.
Installation requires MakeMaker 3.5 or higher (MakeMaker 3.7 is included
with perl 5.001, so now is a good time to upgrade if you haven't already.)

To install, unpack somewhere, type "perl Makefile.PL", and then "make test".
If the compilation and the tests are successful, then change to root and run
"make install".

As of 2.17 the interactive test has been removed as the default for the
convenience of automated installers, CPAN-Testers and so on. The non
interactive tests whilst confirming that the module has built correctly
and has a good chance of working correctly cannot determine whether the
effect as observed on the screen is correct so you might want to run:

```
perl -Mblib
example/test.pl interactive
```

before you run 'make install'.

Also from 2.17 this module has to provide its own support for compilers
that can't take function prototypes as with Perl 5.8.0 this last vestige
of support for non-ANSI compilers will disappear. The requirement for
an ANSI C compiler has been present since Perl 5.005 so it is likely that
at some point in the future this module will follow that requirement too.
If you have any difficulties with older Perl's please contact the maintainer.

The module has support for Win32 since version 2.10. Version 2.17 has been
tested with ActivePerl build 623 and Visual Studio 6 and found to work
as expected, but do not be surprised if it fails with another compiler
or distribution. There are some limitations, with the ReadLine call
being unavailable, and ReadKey possibly generating bad results if you

are reading from multiple consoles, and key repeat is used. For Win32 users without a C compiler there is a precompiled version of this module available
as a package for ActivePerl, it is probably a few versions behind the latest release but has been reported to work well.

VERY IMPORTANT: In 2.00, the ReadKey/ReadLine arguments changed. Now, if you want a call that is non-blocking and returns immediately if no character is waiting, please call it with -1, instead of 1. Positive arguments now indicate a timeout, so 1 would wait a second before timing out.

As older versions will accept -1, it is reccomended to change all code that uses ReadMode.

The terminal mode function is controlled by the "ReadMode" function, which takes a single numeric argument, and an optional filehandle. This argument should be one of the following:

0: (Reset) Restore original settings.

1: (Cooked) Change to what is commonly the default mode, echo on, buffered, signals enabled, Xon/Xoff possibly enabled, and 8-bit mode possibly disabled.

2: (Cooked-Invisible) Same as 1, just with echo off. Nice for reading passwords.

3:
(CBreak) Echo off, unbuffered, signals enabled, Xon/Xoff possibly enabled, and 8-bit mode possibly enabled.

4: (Raw) Echo off, unbuffered, signals disabled, Xon/Xoff disabled, and 8-bit mode possibly disabled.

5: (Really-Raw) Echo off, unbuffered, signals disabled, Xon/Xoff disabled, 8-bit mode enabled if parity permits, and CR to CR/LF translation turned off.

If you just need to read a key at a time, then modes 3 or 4 are probably sufficient. Mode 4 is a tad more flexible, but needs a bit more work to control. If you use ReadMode 3, then you should install a SIGINT or END handler to reset the terminal (via ReadMode 0) if the user aborts the program via ^C. (For any mode, an END handler consisting of "ReadMode 0" is actually a good idea.)

Non-blocking support is provided via the ReadKey and ReadLine functions. If

they are passed no argument, or an argument of zero, they will act like a
normal getc(STDIN) or scalar(<STDIN>). If
they are passed a negative
argument, then they will immediatly return undef if no input is present. If
passed a positive argument, then they will wait until that time in seconds
has passed before returning undef. In most situations, you will probably
want to use "ReadKey -1".

Note that a non-blocking ReadLine probably won't do what you expect,
although it is perfectly predictable, and that the ReadMode will have to be
1 or 0 for it to make sense at all.

A routine is also provided to get the current terminal size,
"GetTerminalSize". This will either return a four value array containing the
width and height of the screen in characters and then in pixels, or nothing
(if the OS can't return that info). SetTerminalSize allows the stored
settings to be modified. Note that this does _not_ change the physical size
of the screen, it will only change the size reported by GetTerminalSize, and
other programs that check the terminal size in the same manner.

GetControlChars returns a hash containing
all of the valid control
characters, such as ("INTERRUPT" => "\x3", etc.). SetControlChars takes an
array (or a hash) as a parameter that should consist of similar name/value
pairs and will modify the control character settings.

Note that it is entirely possible that there are portability problems with
the routines in ReadKey.xs. If you find any problems, including compilation
failures, or control characters not supported by Set/GetControlChars,
please tell me about them, by mailing the maintainer at jns@gellyfish.co.uk,
or lastly contacting perl5-porters@perl.org. Any problems
will get fixed if at all possible, but that's not going to happen if I don't
know about them.

The code is available at https://github.com/jonathanstowe/TermReadKey so
as ever patches are kindly welcomed, especially for platforms such as
Windows that I am unable to test on.

Oh, you may also be interested in the Configure.pm module. It provides tools
to make porting stuff easier -- calling the compiler,
finding headers, etc.
It contains documentation inside it, and you are welcome to use it in your
own modules. If you make use of it, I'd be grateful for a message sent to
the above address.

Found in path(s):
* /libterm-readkey-perl-2-38-orig-1-tar-gz/TermReadKey-2.38/README

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```
---
abstract: 'Change terminal modes, and perform non-blocking reads.'
author:
 - 'Kenneth Albanowski'
 - 'Jonathan Stowe'
build_requires:
 ExtUtils::MakeMaker: '6.58'
configure_requires:
 ExtUtils::MakeMaker: '6.58'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.34, CPAN::Meta::Converter version 2.150010'
license: perl
meta-spec:
 url: http://module-build.sourceforge.net/META-spec-v1.4.html
 version: '1.4'
name: TermReadKey
no_index:
 file:
   - Configure.pm
 package:
   - Configure
provides:
 Term::ReadKey:
   file: ReadKey.pm.PL
   version: '2.38'
resources:
 repository: https://github.com/jonathanstowe/TermReadKey.git
version: '2.38'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'
```

Found in path(s):
* /libterm-readkey-perl-2-38-orig-1-tar-gz/TermReadKey-2.38/META.yml
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```
#! perl

package Term::ReadKey;

# This also needs to be adjusted in the generated code below
# and in the Makefile.PL
use vars qw($VERSION);

$VERSION = '2.38';

use Config;
use File::Basename qw(&basename &dirname);
```

```
use File::Spec;
use Cwd;

# List explicitly here the variables you want Configure to
# generate.  Metaconfig only looks for shell variables, so you
# have to mention them as if they were shell variables, not
# %Config entries.  Thus you write
#  $startperl
# to ensure Configure will look for $Config{startperl}.
# Wanted:  $archlibexp

# This forces PL files to create target in same directory as PL file.
# This is so that make depend always knows where to find PL derivatives.
my $origdir = cwd;
my $dir = dirname($0);
chdir $dir;
my $file = 'ReadKey.pm';

open OUT, ">", $file or die "Can't create $file: $!";

print "Creating $file\n";

print OUT <<'!FIRSTPART';
# -*- buffer-read-only: t -*-
#
# This file
 is auto-generated. ***ANY*** changes here will be lost
#
package Term::ReadKey;

use strict;
use warnings;

=head1 NAME

Term::ReadKey - A perl module for simple terminal control

=head1 SYNOPSIS

   use Term::ReadKey;
   ReadMode 4; # Turn off controls keys
   while (not defined ($key = ReadKey(-1))) {
      # No key yet
   }
   print "Get key $key\n";
   ReadMode 0; # Reset tty mode before exiting

=head1 DESCRIPTION
```

Term::ReadKey is a compiled perl module dedicated to providing simple control over terminal driver modes (cbreak, raw, cooked, etc.,) support for non-blocking reads, if the architecture allows, and some generalized handy functions for working with terminals. One of the main goals is to have the functions as portable as possible, so you can just plug in "use Term::ReadKey" on any architecture and have a good likelihood of it working.

Version 2.30.01:
Added handling of arrows, page up/down, home/end, insert/delete keys under Win32. These keys emit xterm-compatible
 sequences.
Works with Term::ReadLine::Perl.

=over 4

=item ReadMode MODE [, Filehandle]

Takes an integer argument or a string synonym (case insensitive), which can currently be one of the following values:

```
  INT   SYNONYM    DESCRIPTION

  0    'restore'   Restore original settings.

  1    'normal'    Change to what is commonly the default mode,
                   echo on, buffered, signals enabled, Xon/Xoff
                   possibly enabled, and 8-bit mode possibly disabled.

  2    'noecho'    Same as 1, just with echo off. Nice for
                   reading passwords.

  3    'cbreak'    Echo off, unbuffered, signals enabled, Xon/Xoff
                   possibly enabled, and 8-bit mode possibly enabled.

  4    'raw'       Echo off, unbuffered, signals disabled, Xon/Xoff
                   disabled, and 8-bit mode possibly disabled.

  5    'ultra-raw' Echo off, unbuffered, signals disabled, Xon/Xoff
                   disabled, 8-bit mode enabled
 if parity permits,
                   and CR to CR/LF translation turned off.
```

These functions are automatically applied to the STDIN handle if no other handle is supplied. Modes 0 and 5 have some special properties worth mentioning: not only will mode 0 restore original settings, but it cause the next ReadMode call to save a new set of default settings. Mode

5 is similar to mode 4, except no CR/LF translation is performed, and if possible, parity will be disabled (only if not being used by the terminal, however. It is no different from mode 4 under Windows.)

If you just need to read a key at a time, then modes 3 or 4 are probably sufficient. Mode 4 is a tad more flexible, but needs a bit more work to control. If you use ReadMode 3, then you should install a SIGINT or END handler to reset the terminal (via ReadMode 0) if the user aborts the program via C<^C>. (For any mode, an END handler consisting of "ReadMode 0" is actually a good idea.)

If you are executing another program
that may be changing the terminal mode,
you will either want to say

```
ReadMode 1;            # same as ReadMode 'normal'
system('someprogram');
ReadMode 1;
```

which resets the settings after the program has run, or:

```
$somemode=1;
ReadMode 0;            # same as ReadMode 'restore'
system('someprogram');
ReadMode 1;
```

which records any changes the program may have made, before resetting the mode.

=item ReadKey MODE [, Filehandle]

Takes an integer argument, which can currently be one of the following values:

```
0    Perform a normal read using getc
-1   Perform a non-blocked read
>0   Perform a timed read
```

If the filehandle is not supplied, it will default to STDIN. If there is nothing waiting in the buffer during a non-blocked read, then undef will be returned. In most situations, you will probably want to use C<ReadKey -1>.

I<NOTE> that if the OS does not provide any known mechanism for non-blocking reads, then a C<ReadKey -1> can die with a fatal
error. This will hopefully
not be common.

If MODE is greater then zero, then ReadKey will use it as a timeout value in

seconds (fractional seconds are allowed), and won't return C<undef> until that time expires.

I<NOTE>, again, that some OS's may not support this timeout behaviour.

If MODE is less then zero, then this is treated as a timeout of zero, and thus will return immediately if no character is waiting. A MODE of zero, however, will act like a normal getc.

I<NOTE>, there are currently some limitations with this call under Windows. It may be possible that non-blocking reads will fail when reading repeating keys from more then one console.

=item ReadLine MODE [, Filehandle]

Takes an integer argument, which can currently be one of the following values:

```
 0    Perform a normal read using scalar(<FileHandle>)
-1    Perform a non-blocked read
>0    Perform a timed read
```

If there is nothing waiting in the buffer during a non-blocked read, then undef will be returned.

I<NOTE>,
 that if the OS does not provide any known mechanism for non-blocking reads, then a C<ReadLine 1> can die with a fatal error. This will hopefully not be common.

I<NOTE> that a non-blocking test is only performed for the first character in the line, not the entire line. This call will probably B<not> do what you assume, especially with C<ReadMode> MODE values higher then 1. For example, pressing Space and then Backspace would appear to leave you where you started, but any timeouts would now be suspended.

B<This call is currently not available under Windows>.

=item GetTerminalSize [Filehandle]

Returns either an empty array if this operation is unsupported, or a four element array containing: the width of the terminal in characters, the height of the terminal in character, the width in pixels, and the height in pixels. (The pixel size will only be valid in some environments.)

I<NOTE>, under Windows, this function must be called with an B<output> filehandle, such as C<STDOUT>,

or a handle opened to C<CONOUT$>.

=item SetTerminalSize WIDTH,HEIGHT,XPIX,YPIX [, Filehandle]

Return -1 on failure, 0 otherwise.

I<NOTE> that this terminal size is only for B<informative> value, and
changing the size via this mechanism will B<not> change the size of
the screen. For example, XTerm uses a call like this when
it resizes the screen. If any of the new measurements vary from the old, the
OS will probably send a SIGWINCH signal to anything reading that tty or pty.

B<This call does not work under Windows>.

=item GetSpeed [, Filehandle]

Returns either an empty array if the operation is unsupported, or a two
value array containing the terminal in and out speeds, in B<decimal>. E.g,
an in speed of 9600 baud and an out speed of 4800 baud would be returned as
(9600,4800). Note that currently the in and out speeds will always be
identical in some OS's.

B<No speeds are reported under Windows>.

=item GetControlChars [, Filehandle]

Returns an array containing key/value pairs
suitable for a hash. The pairs
consist of a key, the name of the control character/signal, and the value
of that character, as a single character.

B<This call does nothing under Windows>.

Each key will be an entry from the following list:

DISCARD
DSUSPEND
EOF
EOL
EOL2
ERASE
ERASEWORD
INTERRUPT
KILL
MIN
QUIT
QUOTENEXT
REPRINT

```
START
STATUS
STOP
SUSPEND
SWITCH
TIME
```

Thus, the following will always return the current interrupt character, regardless of platform.

```
%keys = GetControlChars;
$int = $keys{INTERRUPT};
```

=item SetControlChars [, Filehandle]

Takes an array containing key/value pairs, as a hash will produce. The pairs should consist of a key that is the name of a legal control character/signal, and the value should be either a single character, or a number in the range 0-255. SetControlChars will die with a runtime error if an invalid character name is passed or there is an error changing the settings. The list of valid names is easily available via

```
%cchars
= GetControlChars();
@cnames = keys %cchars;
```

B<This call does nothing under Windows>.

=back

=head1 AUTHOR

Kenneth Albanowski <kjahds@kjahds.com>

Currently maintained by Jonathan Stowe <jns@gellyfish.co.uk>

=head1 SUPPORT

The code is maintained at

    https://github.com/jonathanstowe/TermReadKey

Please feel free to fork and suggest patches.

=head1 LICENSE

Prior to the 2.31 release the license statement was:

```
Copyright (C) 1994-1999 Kenneth Albanowski.
            2001-2005 Jonathan Stowe and others

            Unlimited distribution and/or modification is allowed as long as this
            copyright notice remains intact.

And was only stated in the README file.

Because I believe the original author's intent was to be more open than the
other commonly used licenses I would like to leave that in place. However if
you or your lawyers require something with some more words you can optionally
choose to license this under the standard Perl license:

    This
 module is free software; you can redistribute it and/or modify it
    under the terms of the Artistic License. For details, see the full
    text of the license in the file "Artistic" that should have been provided
    with the version of perl you are using.

    This program is distributed in the hope that it will be useful, but
    without any warranty; without even the implied warranty of merchantability
    or fitness for a particular purpose.


=cut

use vars qw($VERSION);

$VERSION = '2.38';

require Exporter;
require DynaLoader;

use vars qw(@ISA @EXPORT_OK @EXPORT);

@ISA = qw(Exporter DynaLoader);

# Items to export into callers namespace by default
# (move infrequently used names to @EXPORT_OK below)

@EXPORT = qw(
 ReadKey
 ReadMode
 ReadLine
 GetTerminalSize
 SetTerminalSize
 GetSpeed
```

```
 GetControlChars
 SetControlChars
);

@EXPORT_OK = qw();

bootstrap Term::ReadKey;

# Should we use LINES and COLUMNS to try and get the terminal size?
# Change this to zero
 if you have systems where these are commonly
# set to erroneous values. (But if either are near zero, they won't be
# used anyhow.)

use vars qw($UseEnv $CurrentMode %modes);

$UseEnv = 1;

$CurrentMode = 0;

%modes = (                          # lowercase is canonical
   original    => 0,
   restore     => 0,
   normal      => 1,
   noecho      => 2,
   cbreak      => 3,
   raw         => 4,
   'ultra-raw' => 5
);

# reduce Carp memory footprint, only load when needed
sub croak { require Carp; goto &Carp::croak; }
sub carp  { require Carp; goto &Carp::carp; }

sub ReadMode
{
   my $mode = $modes{ lc $_[0] };  # lowercase is canonical
   my $fh = normalizehandle( ( @_ > 1 ? $_[1] : \*STDIN ) );

   if ( defined($mode) )    { $CurrentMode = $mode }
   elsif ( $_[0] =~ /^\d/ ) { $CurrentMode = $_[0] }
   else                     { croak("Unknown terminal mode `$_[0]'"); }

   SetReadMode($CurrentMode, $fh);
}

sub normalizehandle
{
```

```
  my ($file) = @_; # allows fake signature
 optimization

  no strict;
  # print "Handle = $file\n";
  if ( ref($file) ) { return $file; }    # Reference is fine

  # if ($file =~ /^\*/) { return $file; } # Type glob is good
  if ( ref( \$file ) eq 'GLOB' ) { return $file; }    # Glob is good

  # print "Caller = ",(caller(1))[0],"\n";
  return \*{ ( ( caller(1) )[0] ) . "::$file" };
}

sub GetTerminalSize
{
  my $file = normalizehandle( ( @_ > 0 ? $_[0] : \*STDOUT ) );

  my (@results, @fail);

  if ( &termsizeoptions() & 1 )                    # VIO
  {
     @results = GetTermSizeVIO($file);
     push( @fail, "VIOGetMode call" );
  }
  elsif ( &termsizeoptions() & 2 )                  # GWINSZ
  {
     @results = GetTermSizeGWINSZ($file);
     push( @fail, "TIOCGWINSZ ioctl" );
  }
  elsif ( &termsizeoptions() & 4 )                  # GSIZE
  {
     @results = GetTermSizeGSIZE($file);
     push( @fail, "TIOCGSIZE ioctl" );
  }
  elsif ( &termsizeoptions() & 8
 )                 # WIN32
  {
     @results = GetTermSizeWin32($file);
     push( @fail, "Win32 GetConsoleScreenBufferInfo call" );
  }
  else
  {
     @results = ();
  }

  if ( @results < 4 and $UseEnv )
  {
```

```
    my ($C) = defined( $ENV{COLUMNS} ) ? $ENV{COLUMNS} : 0;
    my ($L) = defined( $ENV{LINES} )   ? $ENV{LINES}   : 0;
    if ( ( $C >= 2 ) and ( $L >= 2 ) )
    {
        @results = ( $C + 0, $L + 0, 0, 0 );
    }
    push( @fail, "COLUMNS and LINES environment variables" );
}

if ( @results < 4 && $^O ne 'MSWin32')
{
    my ($prog) = "resize";

    # Workaround for Solaris path silliness
    if ( -f "/usr/openwin/bin/resize" ) {
        $prog = "/usr/openwin/bin/resize";
    }

    my ($resize) = scalar(`$prog 2>/dev/null`);
    if (defined $resize
        and (  $resize =~ /COLUMNS\s*=\s*(\d+)/
            or $resize =~ /setenv\s+COLUMNS\s+'?(\d+)/ )
       )
    {
         $results[0] = $1;
        if (   $resize =~ /LINES\s*=\s*(\d+)/
            or $resize =~ /setenv\s+LINES\s+'?(\d+)/ )
        {
            $results[1] = $1;
            @results[ 2, 3 ] = ( 0, 0 );
        }
        else
        {
            @results = ();
        }
    }
    else
    {
        @results = ();
    }
    push( @fail, "resize program" );
}

if ( @results < 4 && $^O ne 'MSWin32' )
{
    my ($prog) = "stty size";

    my ($stty) = scalar(`$prog 2>/dev/null`);
```

```
      if (defined $stty
         and (  $stty =~ /(\d+) (\d+)/ )
        )
      {
         $results[0] = $2;
         $results[1] = $1;
         @results[ 2, 3 ] = ( 0, 0 );
      }
      else
      {
         @results = ();
      }
      push( @fail, "stty program" );
   }

   if ( @results != 4 )
   {
      carp("Unable to get Terminal Size."
           . join( "", map( " The $_ didn't
 work.", @fail ) ));
 return undef;
   }

   @results;
}

!FIRSTPART

close OUT;
# preload the XS module needed for the blockoptions() expansions below
# does not work with miniperl
package Term::ReadKey;
require DynaLoader;
our @ISA = qw(DynaLoader);

print "Bootstrapping the XS for blockoptions: ";
bootstrap Term::ReadKey or die;
print blockoptions()."\n";

open OUT, ">>", $file or die "Can't append to $file: $!";
print OUT "# blockoptions: \n";
if ( &blockoptions() & 1 )    # Use nodelay
{
   print OUT "#nodelay\n";
   if ( &blockoptions() & 2 )    #poll
   {
      print OUT <<'!NO!SUBS!';
# poll
```

```
sub ReadKey {
 my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
 if (defined $_[0] && $_[0] > 0) {
     if ($_[0]) {
         return undef if &pollfile($File,$_[0]) == 0;
     }
 }
 if (defined $_[0] && $_[0] < 0) { &setnodelay($File,1); }
 my $value = getc $File;
 if (defined $_[0] && $_[0] < 0) { &setnodelay($File,0); }
 $value;
}
sub ReadLine {
   my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
    if (defined $_[0] && $_[0] > 0) {
       if ($_[0]) {
           return undef if &pollfile($File,$_[0]) == 0;
       }
   }
   if (defined $_[0] && $_[0] < 0) { &setnodelay($File,1) };
   my $value = scalar(<$File>);
   if (defined $_[0] && $_[0] < 0) { &setnodelay($File,0) };
   $value;
}
!NO!SUBS!

   }
   elsif ( &blockoptions() & 4 )    #select
   {
       print OUT <<'!NO!SUBS!';
#select
sub ReadKey {
   my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
   if (defined $_[0] && $_[0] > 0) {
       if ($_[0]) { return undef if &selectfile($File,$_[0]) == 0 }
   }
   if (defined $_[0] && $_[0] < 0) { &setnodelay($File,1); }
   my $value = getc $File;
   if (defined $_[0] && $_[0] < 0) { &setnodelay($File,0); }
   $value;
}
sub ReadLine {
   my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
   if (defined $_[0] && $_[0] > 0) {
       if ($_[0]) { return undef if &selectfile($File,$_[0]) == 0 }
   }
   if (defined $_[0] && $_[0]
```

```
 < 0) { &setnodelay($File,1) };
   my $value = scalar(<$File>);
   if (defined $_[0] && $_[0] < 0) { &setnodelay($File,0) };
   $value;
}
!NO!SUBS!

   }
   else
   {    #nothing
       print OUT <<'!NO!SUBS!';
sub ReadKey {
   my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
   if (defined $_[0] && $_[0] > 0) {
    # Nothing better seems to exist, so I just use time-of-day
    # to timeout the read. This isn't very exact, though.
    $starttime = time;
    $endtime = $starttime + $_[0];
       &setnodelay($File,1);
       my $value;
    while (time < $endtime) { # This won't catch wraparound!
           $value = getc $File;
           last if defined($value);
    }
       &setnodelay($File,0);
       return $value;
   }
   if (defined $_[0] && $_[0] < 0) { &setnodelay($File,1); }
   my $value = getc $File;
   if (defined $_[0] && $_[0] < 0) { &setnodelay($File,0); }
   $value;
}
sub ReadLine {
   my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
   if
 (defined $_[0] && $_[0] > 0) {
    # Nothing better seems to exist, so I just use time-of-day
    # to timeout the read. This isn't very exact, though.
    $starttime = time;
    $endtime = $starttime + $_[0];
       &setnodelay($File,1);
       my $value;
    while (time < $endtime) { # This won't catch wraparound!
           $value = scalar(<$File>);
           last if defined($value);
    }
       &setnodelay($File,0);
       return $value;
```

```
   }
   if (defined $_[0] && $_[0] < 0) { &setnodelay($File,1) };
   my $value = scalar(<$File>);
   if (defined $_[0] && $_[0] < 0) { &setnodelay($File,0) };
   $value;
}
!NO!SUBS!

   }
}
else {
   print OUT "#no nodelay\n";

   if ( &blockoptions() & 2 )    # Use poll
   {
      print OUT <<'!NO!SUBS!';
#poll
sub ReadKey {
   my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
   if (defined $_[0] && $_[0] != 0) {
      return undef if &pollfile($File,$_[0]) == 0
   }
   getc $File;
}
sub ReadLine {
   my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
    if (defined $_[0] && $_[0] != 0 ) {
      return undef if &pollfile($File,$_[0]) == 0;
   }
   scalar(<$File>);
}
!NO!SUBS!

   }
   elsif ( &blockoptions() & 4 )    # Use select
   {
      print OUT <<'!NO!SUBS!';
#select
sub ReadKey {
   my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
   if (defined $_[0] && $_[0] != 0) {
      return undef if &selectfile($File,$_[0]) == 0
   }
   getc $File;
}
sub ReadLine {
   my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
   if (defined $_[0] && $_[0] != 0) {
```

```
        return undef if &selectfile($File,$_[0]) == 0;
    }
    scalar(<$File>);
}
!NO!SUBS!

    }
    elsif ( &blockoptions() & 8 )    # Use Win32
    {
        print OUT <<'!NO!SUBS!';
#Win32
sub ReadKey {
    my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
    if ($_[0] || $CurrentMode >= 3) {
        Win32PeekChar($File, $_[0]);
    } else {
 getc $File;
    }
    #if ($_[0]!=0) {return undef if !Win32PeekChar($File, $_[0])};
     #getc $File;
}
sub ReadLine {
    my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
    #if ($_[0]!=0) {return undef if !Win32PeekChar($File, $_[0])};
    #scalar(<$File>);
    if ($_[0]) {
        croak("Non-blocking ReadLine is not supported on this architecture")
    }
    scalar(<$File>);
}
!NO!SUBS!

    }
    else
    {
        print OUT <<'!NO!SUBS!';
sub ReadKey {
    my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
    if ($_[0]) {
        croak("Non-blocking ReadKey is not supported on this architecture")
    }
    getc $File;
}
sub ReadLine {
    my $File = normalizehandle((@_>1?$_[1]:\*STDIN));
    if ($_[0]) {
      croak("Non-blocking ReadLine is not supported on this architecture")
    }
```

```
   scalar(<$File>);
}
!NO!SUBS!

   }
}

print OUT <<'EOF';
1;
# ex: set ro:
EOF

close OUT;
if (-s $file < 1000) {
   warn "WARNING: $file probably too small";
} else {
   print "Done\n";
}
```

Found in path(s):
* /libterm-readkey-perl-2-38-orig-1-tar-gz/TermReadKey-2.38/ReadKey.pm.PL
No license file was found, but licenses were detected in source scan.

```
/*
----------------------------------------------------------------------

   ppport.h -- Perl/Pollution/Portability Version 3.21

   Automatically created by Devel::PPPort running under perl 5.014004.

   Do NOT edit this file directly! -- Edit PPPort_pm.PL and the
   includes in parts/inc/ instead.

   Use 'perldoc ppport.h' to view the documentation below.

----------------------------------------------------------------------

SKIP

=pod

=head1 NAME

ppport.h - Perl/Pollution/Portability version 3.21

=head1 SYNOPSIS

 perl ppport.h [options] [source files]
```

Searches current directory for files if no [source files] are given

```
--help                    show short help

--version                 show version

--patch=file              write one patch file with changes
--copy=suffix             write changed copies with suffix
--diff=program            use diff program and options

--compat-version=version
   provide compatibility with Perl version
--cplusplus               accept C++ comments

--quiet                   don't output anything except fatal errors
--nodiag                  don't show diagnostics
--nohints                 don't show hints
--nochanges               don't suggest changes
--nofilter                don't filter input files

--strip                   strip all script and doc functionality from
                          ppport.h

--list-provided           list provided API
--list-unsupported        list unsupported API
--api-info=name           show Perl API portability information
```

=head1 COMPATIBILITY

This version of F<ppport.h> is designed to support operation with Perl installations back to 5.003, and has been tested up to 5.11.5.

=head1 OPTIONS

=head2 --help

Display a brief usage summary.

=head2 --version

Display the version of F<ppport.h>.

=head2 --patch=I<file>

If this option is given,
a single patch file will be created if
any changes are suggested. This requires a working diff program

to be installed on your system.

=head2 --copy=I<suffix>

If this option is given, a copy of each file will be saved with the given suffix that contains the suggested changes. This does not require any external programs. Note that this does not automagially add a dot between the original filename and the suffix. If you want the dot, you have to include it in the option argument.

If neither C<--patch> or C<--copy> are given, the default is to simply print the diffs for each file. This requires either C<Text::Diff> or a C<diff> program to be installed.

=head2 --diff=I<program>

Manually set the diff program and options to use. The default is to use C<Text::Diff>, when installed, and output unified context diffs.

=head2 --compat-version=I<version>

Tell F<ppport.h> to check for compatibility with the given Perl version. The default is to check for compatibility with Perl version 5.003.
 You can use this option to reduce the output of F<ppport.h> if you intend to be backward compatible only down to a certain Perl version.

=head2 --cplusplus

Usually, F<ppport.h> will detect C++ style comments and replace them with C style comments for portability reasons. Using this option instructs F<ppport.h> to leave C++ comments untouched.

=head2 --quiet

Be quiet. Don't print anything except fatal errors.

=head2 --nodiag

Don't output any diagnostic messages. Only portability alerts will be printed.

=head2 --nohints

Don't output any hints. Hints often contain useful portability
notes. Warnings will still be displayed.

=head2 --nochanges

Don't suggest any changes. Only give diagnostic output and hints
unless these are also deactivated.

=head2 --nofilter

Don't filter the list of input files. By default, files not looking
like source code (i.e. not *.xs, *.c, *.cc, *.cpp or *.h) are skipped.

=head2 --strip

Strip all script and documentation functionality from F<ppport.h>.
This
 reduces the size of F<ppport.h> dramatically and may be useful
if you want to include F<ppport.h> in smaller modules without
increasing their distribution size too much.

The stripped F<ppport.h> will have a C<--unstrip> option that allows
you to undo the stripping, but only if an appropriate C<Devel::PPPort>
module is installed.

=head2 --list-provided

Lists the API elements for which compatibility is provided by
F<ppport.h>. Also lists if it must be explicitly requested,
if it has dependencies, and if there are hints or warnings for it.

=head2 --list-unsupported

Lists the API elements that are known not to be supported by
F<ppport.h> and below which version of Perl they probably
won't be available or work.

=head2 --api-info=I<name>

Show portability information for API elements matching I<name>.
If I<name> is surrounded by slashes, it is interpreted as a regular
expression.

=head1 DESCRIPTION

In order for a Perl extension (XS) module to be as portable as possible
across

differing versions of Perl itself, certain steps need to be taken.

=over 4

=item *

Including this header is the first major one. This alone will give you access to a large part of the Perl API that hasn't been available in earlier Perl releases. Use

```
perl ppport.h --list-provided
```

to see which API elements are provided by ppport.h.

=item *

You should avoid using deprecated parts of the API. For example, using global Perl variables without the C<PL_> prefix is deprecated. Also, some API functions used to have a C<perl_> prefix. Using this form is also deprecated. You can safely use the supported API, as F<ppport.h> will provide wrappers for older Perl versions.

=item *

If you use one of a few functions or variables that were not present in earlier versions of Perl, and that can't be provided using a macro, you have to explicitly request support for these functions by adding one or more C<#define>s in your source code before the inclusion of F<ppport.h>.

These functions or variables will be marked C<explicit> in the list shown by C<--list-provided>.

Depending on whether you module has a single or multiple files that use such functions or variables, you want either C<static> or global variants.

For a C<static> function or variable (used only in a single source file), use:

```
#define NEED_function
#define NEED_variable
```

For a global function or variable (used in multiple source files), use:

```
#define NEED_function_GLOBAL
#define NEED_variable_GLOBAL
```

Note that you mustn't have more than one global request for the
same function or variable in your project.

```
Function / Variable       Static Request              Global Request
-------------------------------------------------------------------------------------------
PL_parser                 NEED_PL_parser              NEED_PL_parser_GLOBAL
PL_signals                NEED_PL_signals             NEED_PL_signals_GLOBAL
eval_pv()                 NEED_eval_pv                NEED_eval_pv_GLOBAL
grok_bin()                NEED_grok_bin               NEED_grok_bin_GLOBAL
grok_hex()                NEED_grok_hex               NEED_grok_hex_GLOBAL
grok_number()             NEED_grok_number            NEED_grok_number_GLOBAL
grok_numeric_radix()      NEED_grok_numeric_radix     NEED_grok_numeric_radix_GLOBAL
grok_oct()                NEED_grok_oct               NEED_grok_oct_GLOBAL
load_module()             NEED_load_module            NEED_load_module_GLOBAL
my_snprintf()             NEED_my_snprintf            NEED_my_snprintf_GLOBAL
my_sprintf()              NEED_my_sprintf             NEED_my_sprintf_GLOBAL
my_strlcat()              NEED_my_strlcat             NEED_my_strlcat_GLOBAL
my_strlcpy()              NEED_my_strlcpy             NEED_my_strlcpy_GLOBAL
newCONSTSUB()             NEED_newCONSTSUB            NEED_newCONSTSUB_GLOBAL
newRV_noinc()             NEED_newRV_noinc            NEED_newRV_noinc_GLOBAL
newSV_type()              NEED_newSV_type             NEED_newSV_type_GLOBAL
newSVpvn_flags()          NEED_newSVpvn_flags         NEED_newSVpvn_flags_GLOBAL
newSVpvn_share()          NEED_newSVpvn_share         NEED_newSVpvn_share_GLOBAL
pv_display()              NEED_pv_display             NEED_pv_display_GLOBAL
pv_escape()               NEED_pv_escape              NEED_pv_escape_GLOBAL
pv_pretty()               NEED_pv_pretty              NEED_pv_pretty_GLOBAL
sv_2pv_flags()            NEED_sv_2pv_flags           NEED_sv_2pv_flags_GLOBAL
sv_2pvbyte()              NEED_sv_2pvbyte             NEED_sv_2pvbyte_GLOBAL
sv_catpvf_mg()            NEED_sv_catpvf_mg           NEED_sv_catpvf_mg_GLOBAL
sv_catpvf_mg_nocontext()  NEED_sv_catpvf_mg_nocontext  NEED_sv_catpvf_mg_nocontext_GLOBAL
sv_pvn_force_flags()      NEED_sv_pvn_force_flags     NEED_sv_pvn_force_flags_GLOBAL
sv_setpvf_mg()            NEED_sv_setpvf_mg
NEED_sv_setpvf_mg_GLOBAL
sv_setpvf_mg_nocontext()  NEED_sv_setpvf_mg_nocontext  NEED_sv_setpvf_mg_nocontext_GLOBAL
vload_module()            NEED_vload_module           NEED_vload_module_GLOBAL
vnewSVpvf()               NEED_vnewSVpvf              NEED_vnewSVpvf_GLOBAL
warner()                  NEED_warner                 NEED_warner_GLOBAL
```

To avoid namespace conflicts, you can change the namespace of the
explicitly exported functions / variables using the C<DPPP_NAMESPACE>
macro. Just C<#define> the macro before including C<ppport.h>:

```
#define DPPP_NAMESPACE MyOwnNamespace_
#include "ppport.h"
```

The default namespace is C<DPPP_>.

=back

The good thing is that most of the above can be checked by running F<ppport.h> on your source code. See the next section for details.

=head1 EXAMPLES

To verify whether F<ppport.h> is needed for your module, whether you should make any changes to your code, and whether any special defines should be used, F<ppport.h> can be run as a Perl script to check your source code. Simply say:

```
perl ppport.h
```

The result will usually be a list of patches suggesting changes that should at least be acceptable, if not necessarily the most efficient solution, or a fix for all possible problems.

If you know that your XS module uses features only available in newer Perl releases, if you're aware that it uses C++ comments, and if you want all suggestions as a single patch file, you could use something like this:

```
perl ppport.h --compat-version=5.6.0 --cplusplus --patch=test.diff
```

If you only want your code to be scanned without any suggestions for changes, use:

```
perl ppport.h --nochanges
```

You can specify a different C<diff> program or options, using the C<--diff> option:

```
perl ppport.h --diff='diff -C 10'
```

This would output context diffs with 10 lines of context.

If you want to create patched copies of your files instead, use:

```
perl ppport.h --copy=.new
```

To display portability information for the C<newSVpvn> function, use:

```
perl ppport.h --api-info=newSVpvn
```

Since the argument to C<--api-info> can be a regular expression,
you can use

```
perl ppport.h --api-info=/_nomg$/
```

to display portability information for all C<_nomg> functions or

```
perl ppport.h --api-info=/./
```

to display information for all known API elements.

=head1 BUGS

If this version of F<ppport.h> is causing failure during
the compilation of this module, please check if newer versions
of either this module or C<Devel::PPPort> are available on CPAN
before sending a bug report.

If F<ppport.h> was generated using the latest version of
C<Devel::PPPort> and is causing failure of this module, please
file a bug report using the CPAN Request Tracker at L<http://rt.cpan.org/>.

Please include the following information:

=over 4

=item 1.

The complete output from running "perl -V"

=item 2.

This file.

=item 3.

The name and version of the module you were trying to build.

=item 4.

A full log of the build that failed.

=item
5.

Any other information that you think could be relevant.

```
=back

For the latest version of this code, please get the C<Devel::PPPort>
module from CPAN.

=head1 COPYRIGHT

Version 3.x, Copyright (c) 2004-2013, Marcus Holland-Moritz.

Version 2.x, Copyright (C) 2001, Paul Marquess.

Version 1.x, Copyright (C) 1999, Kenneth Albanowski.

This program is free software; you can redistribute it and/or
modify it under the same terms as Perl itself.

=head1 SEE ALSO

See L<Devel::PPPort>.

=cut

use strict;

# Disable broken TRIE-optimization
BEGIN { eval '${^RE_TRIE_MAXBUF} = -1' if $] >= 5.009004 && $] <= 5.009005 }

my $VERSION = 3.21;

my %opt = (
 quiet     => 0,
 diag      => 1,
 hints     => 1,
 changes   => 1,
 cplusplus => 0,
 filter    => 1,
 strip     => 0,
 version   => 0,
);

my($ppport) = $0 =~ /([\w.]+)$/;
my $LF = '(?:\r\n|[\r\n])';   # line feed
my $HS = "[ \t]";             # horizontal whitespace

# Never use C comments in this file!
my $ccs  = '/'.'*';
my
```

```
 $cce  = '*'./';
my $rccs = quotemeta $ccs;
my $rcce = quotemeta $cce;

eval {
 require Getopt::Long;
 Getopt::Long::GetOptions(\%opt, qw(
   help quiet diag! filter! hints! changes! cplusplus strip version
   patch=s copy=s diff=s compat-version=s
   list-provided list-unsupported api-info=s
 )) or usage();
};

if ($@ and grep /^-/, @ARGV) {
 usage() if "@ARGV" =~ /^--?h(?:elp)?$/;
 die "Getopt::Long not found. Please don't use any options.\n";
}

if ($opt{version}) {
 print "This is $0 $VERSION.\n";
 exit 0;
}

usage() if $opt{help};
strip() if $opt{strip};

if (exists $opt{'compat-version'}) {
 my($r,$v,$s) = eval { parse_version($opt{'compat-version'}) };
 if ($@) {
   die "Invalid version number format: '$opt{'compat-version'}'\n";
 }
 die "Only Perl 5 is supported\n" if $r != 5;
 die "Invalid version number: $opt{'compat-version'}\n" if $v >= 1000 || $s >= 1000;
 $opt{'compat-version'} = sprintf "%d.%03d%03d", $r, $v, $s;
}
else {
 $opt{'compat-version'} = 5;
}

my
 %API = map { /^(\w+)\|([^|]*)\|([^|]*)\|(\w*)$/
             ? ( $1 => {
                 ($2                 ? ( base     => $2 ) : ()),
                 ($3                 ? ( todo     => $3 ) : ()),
                 (index($4, 'v') >= 0 ? ( varargs  => 1  ) : ()),
                 (index($4, 'p') >= 0 ? ( provided => 1  ) : ()),
                 (index($4, 'n') >= 0 ? ( nothxarg => 1  ) : ()),
                } )
```

```
            : die "invalid spec: $_" } qw(
AvFILLp|5.004050||p
AvFILL|||
BhkDISABLE||5.019003|
BhkENABLE||5.019003|
BhkENTRY_set||5.019003|
BhkENTRY|||
BhkFLAGS|||
CALL_BLOCK_HOOKS|||
CLASS|||n
CPERLscope|5.005000||p
CX_CURPAD_SAVE|||
CX_CURPAD_SV|||
CopFILEAV|5.006000||p
CopFILEGV_set|5.006000||p
CopFILEGV|5.006000||p
CopFILESV|5.006000||p
CopFILE_set|5.006000||p
CopFILE|5.006000||p
CopSTASHPV_set|5.006000||p
CopSTASHPV|5.006000||p
CopSTASH_eq|5.006000||p
CopSTASH_set|5.006000||p
CopSTASH|5.006000||p
CopyD|5.009002|5.004050|p
Copy||5.004050|
CvPADLIST||5.008001|
CvSTASH|||
CvWEAKOUTSIDE|||
DEFSV_set|5.010001||p
DEFSV|5.004050||p
END_EXTERN_C|5.005000||p
ENTER|||
ERRSV|5.004050||p
EXTEND|||
EXTERN_C|5.005000||p
F0convert|||n
FREETMPS|||
GIMME_V||5.004000|n
GIMME|||n
GROK_NUMERIC_RADIX|5.007002||p
G_ARRAY|||
G_DISCARD|||
G_EVAL|||
G_METHOD|5.006001||p
G_NOARGS|||
G_SCALAR|||
G_VOID||5.004000|
```

GetVars|||
GvAV|||
GvCV|||
GvHV|||
GvSVn|5.009003||p
GvSV|||
Gv_AMupdate||5.011000|
HEf_SVKEY||5.004000|
HeHASH||5.004000|
HeKEY||5.004000|
HeKLEN||5.004000|
HePV||5.004000|
HeSVKEY_force||5.004000|
HeSVKEY_set||5.004000|
HeSVKEY||5.004000|
HeUTF8||5.010001|
HeVAL||5.004000|
HvENAMELEN||5.015004|
HvENAMEUTF8||5.015004|
HvENAME||5.013007|
HvNAMELEN_get|5.009003||p
HvNAMELEN||5.015004|
HvNAMEUTF8||5.015004|
HvNAME_get|5.009003||p
HvNAME|||
INT2PTR|5.006000||p
IN_LOCALE_COMPILETIME|5.007002||p
IN_LOCALE_RUNTIME|5.007002||p
IN_LOCALE|5.007002||p
IN_PERL_COMPILETIME|5.008001||p
IS_NUMBER_GREATER_THAN_UV_MAX|5.007002||p
IS_NUMBER_INFINITY|5.007002||p
IS_NUMBER_IN_UV|5.007002||p
IS_NUMBER_NAN|5.007003||p
IS_NUMBER_NEG|5.007002||p
IS_NUMBER_NOT_INT|5.007002||p
IVSIZE|5.006000||p
IVTYPE|5.006000||p
IVdf|5.006000||p
LEAVE|||
LINKLIST||5.013006|
LVRET|||
MARK|||
MULTICALL||5.019003|
MY_CXT_CLONE|5.009002||p
MY_CXT_INIT|5.007003||p
MY_CXT|5.007003||p
MoveD|5.009002|5.004050|p

Move||5.004050|
NOOP|5.005000||p
NUM2PTR|5.006000||p
NVTYPE|5.006000||p
NVef|5.006001||p
NVff|5.006001||p
NVgf|5.006001||p
Newxc|5.009003||p
Newxz|5.009003||p
Newx|5.009003||p
Nullav|||
Nullch|||
Nullcv|||
Nullhv|||
Nullsv|||
OP_CLASS||5.013007|
OP_DESC||5.007003|
OP_NAME||5.007003|
ORIGMARK|||
PAD_BASE_SV|||
PAD_CLONE_VARS|||
PAD_COMPNAME_FLAGS|||
PAD_COMPNAME_GEN_set|||
PAD_COMPNAME_GEN|||
PAD_COMPNAME_OURSTASH|||
PAD_COMPNAME_PV|||
PAD_COMPNAME_TYPE|||
PAD_RESTORE_LOCAL|||
PAD_SAVE_LOCAL|||
PAD_SAVE_SETNULLPAD|||
PAD_SETSV|||
PAD_SET_CUR_NOSAVE|||
PAD_SET_CUR|||
PAD_SVl|||
PAD_SV|||
PERLIO_FUNCS_CAST|5.009003||p
PERLIO_FUNCS_DECL|5.009003||p
PERL_ABS|5.008001||p
PERL_BCDVERSION|5.019002||p
PERL_GCC_BRACE_GROUPS_FORBIDDEN|5.008001||p
PERL_HASH|5.004000||p
PERL_INT_MAX|5.004000||p
PERL_INT_MIN|5.004000||p
PERL_LONG_MAX|5.004000||p
PERL_LONG_MIN|5.004000||p
PERL_MAGIC_arylen|5.007002||p
PERL_MAGIC_backref|5.007002||p
PERL_MAGIC_bm|5.007002||p

PERL_MAGIC_collxfrm|5.007002||p
PERL_MAGIC_dbfile|5.007002||p
PERL_MAGIC_dbline|5.007002||p
PERL_MAGIC_defelem|5.007002||p
PERL_MAGIC_envelem|5.007002||p
PERL_MAGIC_env|5.007002||p
PERL_MAGIC_ext|5.007002||p
PERL_MAGIC_fm|5.007002||p
PERL_MAGIC_glob|5.019002||p
PERL_MAGIC_isaelem|5.007002||p
PERL_MAGIC_isa|5.007002||p
PERL_MAGIC_mutex|5.019002||p
PERL_MAGIC_nkeys|5.007002||p
PERL_MAGIC_overload_elem|5.019002||p
PERL_MAGIC_overload_table|5.007002||p
PERL_MAGIC_overload|5.019002||p
PERL_MAGIC_pos|5.007002||p
PERL_MAGIC_qr|5.007002||p
PERL_MAGIC_regdata|5.007002||p
PERL_MAGIC_regdatum|5.007002||p
PERL_MAGIC_regex_global|5.007002||p
PERL_MAGIC_shared_scalar|5.007003||p
PERL_MAGIC_shared|5.007003||p
PERL_MAGIC_sigelem|5.007002||p
PERL_MAGIC_sig|5.007002||p
PERL_MAGIC_substr|5.007002||p
PERL_MAGIC_sv|5.007002||p
PERL_MAGIC_taint|5.007002||p
PERL_MAGIC_tiedelem|5.007002||p
PERL_MAGIC_tiedscalar|5.007002||p
PERL_MAGIC_tied|5.007002||p
PERL_MAGIC_utf8|5.008001||p
PERL_MAGIC_uvar_elem|5.007003||p
PERL_MAGIC_uvar|5.007002||p
PERL_MAGIC_vec|5.007002||p
PERL_MAGIC_vstring|5.008001||p
PERL_PV_ESCAPE_ALL|5.009004||p
PERL_PV_ESCAPE_FIRSTCHAR|5.009004||p
PERL_PV_ESCAPE_NOBACKSLASH|5.009004||p
PERL_PV_ESCAPE_NOCLEAR|5.009004||p
PERL_PV_ESCAPE_QUOTE|5.009004||p
PERL_PV_ESCAPE_RE|5.009005||p
PERL_PV_ESCAPE_UNI_DETECT|5.009004||p
PERL_PV_ESCAPE_UNI|5.009004||p
PERL_PV_PRETTY_DUMP|5.009004||p
PERL_PV_PRETTY_ELLIPSES|5.010000||p
PERL_PV_PRETTY_LTGT|5.009004||p
PERL_PV_PRETTY_NOCLEAR|5.010000||p

PERL_PV_PRETTY_QUOTE|5.009004||p
PERL_PV_PRETTY_REGPROP|5.009004||p
PERL_QUAD_MAX|5.004000||p
PERL_QUAD_MIN|5.004000||p
PERL_REVISION|5.006000||p
PERL_SCAN_ALLOW_UNDERSCORES|5.007003||p
PERL_SCAN_DISALLOW_PREFIX|5.007003||p
PERL_SCAN_GREATER_THAN_UV_MAX|5.007003||p
PERL_SCAN_SILENT_ILLDIGIT|5.008001||p
PERL_SHORT_MAX|5.004000||p
PERL_SHORT_MIN|5.004000||p
PERL_SIGNALS_UNSAFE_FLAG|5.008001||p
PERL_SUBVERSION|5.006000||p
PERL_SYS_INIT3||5.010000|
PERL_SYS_INIT||5.010000|
PERL_SYS_TERM||5.019003|
PERL_UCHAR_MAX|5.004000||p
PERL_UCHAR_MIN|5.004000||p
PERL_UINT_MAX|5.004000||p
PERL_UINT_MIN|5.004000||p
PERL_ULONG_MAX|5.004000||p
PERL_ULONG_MIN|5.004000||p
PERL_UNUSED_ARG|5.009003||p
PERL_UNUSED_CONTEXT|5.009004||p
PERL_UNUSED_DECL|5.007002||p
PERL_UNUSED_VAR|5.007002||p
PERL_UQUAD_MAX|5.004000||p
PERL_UQUAD_MIN|5.004000||p
PERL_USE_GCC_BRACE_GROUPS|5.009004||p
PERL_USHORT_MAX|5.004000||p
PERL_USHORT_MIN|5.004000||p
PERL_VERSION|5.006000||p
PL_DBsignal|5.005000||p
PL_DBsingle|||pn
PL_DBsub|||pn
PL_DBtrace|||pn
PL_Sv|5.005000||p
PL_bufend|5.019002||p
PL_bufptr|5.019002||p
PL_check||5.006000|
PL_compiling|5.004050||p
PL_comppad_name||5.017004|
PL_comppad||5.008001|
PL_copline|5.019002||p
PL_curcop|5.004050||p
PL_curpad||5.005000|
PL_curstash|5.004050||p
PL_debstash|5.004050||p

PL_defgv|5.004050||p
PL_diehook|5.004050||p
PL_dirty|5.004050||p
PL_dowarn|||pn
PL_errgv|5.004050||p
PL_error_count|5.019002||p
PL_expect|5.019002||p
PL_hexdigit|5.005000||p
PL_hints|5.005000||p
PL_in_my_stash|5.019002||p
PL_in_my|5.019002||p
PL_keyword_plugin||5.011002|
PL_last_in_gv|||n
PL_laststatval|5.005000||p
PL_lex_state|5.019002||p
PL_lex_stuff|5.019002||p
PL_linestr|5.019002||p
PL_modglobal||5.005000|n
PL_na|5.004050||pn
PL_no_modify|5.006000||p
PL_ofsgv|||n
PL_opfreehook||5.011000|n
PL_parser|5.009005|5.009005|p
PL_peepp||5.007003|n
PL_perl_destruct_level|5.004050||p
PL_perldb|5.004050||p
PL_ppaddr|5.006000||p
PL_rpeepp||5.013005|n
PL_rsfp_filters|5.019002||p
PL_rsfp|5.019002||p
PL_rs|||n
PL_signals|5.008001||p
PL_stack_base|5.004050||p
PL_stack_sp|5.004050||p
PL_statcache|5.005000||p
PL_stdingv|5.004050||p
PL_sv_arenaroot|5.004050||p
PL_sv_no|5.004050||pn
PL_sv_undef|5.004050||pn
PL_sv_yes|5.004050||pn
PL_tainted|5.004050||p
PL_tainting|5.004050||p
PL_tokenbuf|5.019002||p
POP_MULTICALL||5.019003|
POPi|||n
POPl|||n
POPn|||n
POPpbytex||5.007001|n

POPpx||5.005030|n
POPp|||n
POPs|||n
PTR2IV|5.006000||p
PTR2NV|5.006000||p
PTR2UV|5.006000||p
PTR2nat|5.009003||p
PTR2ul|5.007001||p
PTRV|5.006000||p
PUSHMARK|||
PUSH_MULTICALL||5.019003|
PUSHi|||
PUSHmortal|5.009002||p
PUSHn|||
PUSHp|||
PUSHs|||
PUSHu|5.004000||p
PUTBACK|||
PadARRAY||5.019003|
PadMAX||5.019003|
PadlistARRAY||5.019003|
PadlistMAX||5.019003|
PadlistNAMESARRAY||5.019003|
PadlistNAMESMAX||5.019003|
PadlistNAMES||5.019003|
PadlistREFCNT||5.017004|
PadnameIsOUR|||
PadnameIsSTATE|||
PadnameLEN||5.019003|
PadnameOURSTASH|||
PadnameOUTER|||
PadnamePV||5.019003|
PadnameSV||5.019003|
PadnameTYPE|||
PadnameUTF8||5.019003|
PadnamelistARRAY||5.019003|
PadnamelistMAX||5.019003|
PerlIO_clearerr||5.007003|
PerlIO_close||5.007003|
PerlIO_context_layers||5.009004|
PerlIO_eof||5.007003|
PerlIO_error||5.007003|
PerlIO_fileno||5.007003|
PerlIO_fill||5.007003|
PerlIO_flush||5.007003|
PerlIO_get_base||5.007003|
PerlIO_get_bufsiz||5.007003|
PerlIO_get_cnt||5.007003|

PerlIO_get_ptr||5.007003|
PerlIO_read||5.007003|
PerlIO_seek||5.007003|
PerlIO_set_cnt||5.007003|
PerlIO_set_ptrcnt||5.007003|
PerlIO_setlinebuf||5.007003|
PerlIO_stderr||5.007003|
PerlIO_stdin||5.007003|
PerlIO_stdout||5.007003|
PerlIO_tell||5.007003|
PerlIO_unread||5.007003|
PerlIO_write||5.007003|
Perl_signbit||5.009005|n
PoisonFree|5.009004||p
PoisonNew|5.009004||p
PoisonWith|5.009004||p
Poison|5.008000||p
READ_XDIGIT||5.017006|
RETVAL|||n
Renewc|||
Renew|||
SAVECLEARSV|||
SAVECOMPPAD|||
SAVEPADSV|||
SAVETMPS|||
SAVE_DEFSV|5.004050||p
SPAGAIN|||
SP|||
START_EXTERN_C|5.005000||p
START_MY_CXT|5.007003||p
STMT_END|||p
STMT_START|||p
STR_WITH_LEN|5.009003||p
ST|||
SV_CONST_RETURN|5.009003||p
SV_COW_DROP_PV|5.008001||p
SV_COW_SHARED_HASH_KEYS|5.009005||p
SV_GMAGIC|5.007002||p
SV_HAS_TRAILING_NUL|5.009004||p
SV_IMMEDIATE_UNREF|5.007001||p
SV_MUTABLE_RETURN|5.009003||p
SV_NOSTEAL|5.009002||p
SV_SMAGIC|5.009003||p
SV_UTF8_NO_ENCODING|5.008001||p
SVfARG|5.009005||p
SVf_UTF8|5.006000||p
SVf|5.006000||p
SVt_INVLIST||5.019002|

SVt_IV|||
SVt_NULL|||
SVt_NV|||
SVt_PVAV|||
SVt_PVCV|||
SVt_PVFM|||
SVt_PVGV|||
SVt_PVHV|||
SVt_PVIO|||
SVt_PVIV|||
SVt_PVLV|||
SVt_PVMG|||
SVt_PVNV|||
SVt_PV|||
SVt_REGEXP||5.011000|
Safefree|||
Slab_Alloc|||
Slab_Free|||
Slab_to_ro|||
Slab_to_rw|||
StructCopy|||
SvCUR_set|||
SvCUR|||
SvEND|||
SvGAMAGIC||5.006001|
SvGETMAGIC|5.004050||p
SvGROW|||
SvIOK_UV||5.006000|
SvIOK_notUV||5.006000|
SvIOK_off|||
SvIOK_only_UV||5.006000|
SvIOK_only|||
SvIOK_on|||
SvIOKp|||
SvIOK|||
SvIVX|||
SvIV_nomg|5.009001||p
SvIV_set|||
SvIVx|||
SvIV|||
SvIsCOW_shared_hash||5.008003|
SvIsCOW||5.008003|
SvLEN_set|||
SvLEN|||
SvLOCK||5.007003|
SvMAGIC_set|5.009003||p
SvNIOK_off|||
SvNIOKp|||

SvNIOK|||
SvNOK_off|||
SvNOK_only|||
SvNOK_on|||
SvNOKp|||
SvNOK|||
SvNVX|||
SvNV_nomg||5.013002|
SvNV_set|||
SvNVx|||
SvNV|||
SvOK|||
SvOOK_offset||5.011000|
SvOOK|||
SvPOK_off|||
SvPOK_only_UTF8||5.006000|
SvPOK_only|||
SvPOK_on|||
SvPOKp|||
SvPOK|||
SvPVX_const|5.009003||p
SvPVX_mutable|5.009003||p
SvPVX|||
SvPV_const|5.009003||p
SvPV_flags_const_nolen|5.009003||p
SvPV_flags_const|5.009003||p
SvPV_flags_mutable|5.009003||p
SvPV_flags|5.007002||p
SvPV_force_flags_mutable|5.009003||p
SvPV_force_flags_nolen|5.009003||p
SvPV_force_flags|5.007002||p
SvPV_force_mutable|5.009003||p
SvPV_force_nolen|5.009003||p
SvPV_force_nomg_nolen|5.009003||p
SvPV_force_nomg|5.007002||p
SvPV_force|||p
SvPV_mutable|5.009003||p
SvPV_nolen_const|5.009003||p
SvPV_nolen|5.006000||p
SvPV_nomg_const_nolen|5.009003||p
SvPV_nomg_const|5.009003||p
SvPV_nomg_nolen|5.013007||p
SvPV_nomg|5.007002||p
SvPV_renew|5.009003||p
SvPV_set|||
SvPVbyte_force||5.009002|
SvPVbyte_nolen||5.006000|
SvPVbytex_force||5.006000|

SvPVbytex||5.006000|
SvPVbyte|5.006000||p
SvPVutf8_force||5.006000|
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sv_setpviv||5.008001|
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sv_setpvs|5.009004||p
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);

if
 (exists $opt{'list-unsupported'}) {
 my $f;
 for $f (sort { lc $a cmp lc $b } keys %API) {
   next unless $API{$f}{todo};
   print "$f ", '.'x(40-length($f)), " ", format_version($API{$f}{todo}), "\n";
 }
 exit 0;
}

# Scan for possible replacement candidates

my(%replace, %need, %hints, %warnings, %depends);
my $replace = 0;
my($hint, $define, $function);

sub find_api
{
 my $code = shift;
 $code =~ s{
   / (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*)
 | "[^"\\]*(?:\\.[^"\\]*)*"
 | '[^'\\]*(?:\\.[^'\\]*)*' }{}egsx;
 grep { exists $API{$_} } $code =~ /(\w+)/mg;
}
```

```
while (<DATA>) {
 if ($hint) {
   my $h = $hint->[0] eq 'Hint' ? \%hints : \%warnings;
   if (m{^\s*\*\s(.*?)\s*$}) {
     for (@{$hint->[1]}) {
        $h->{$_} ||= '';  # suppress warning with older perls
       $h->{$_} .= "$1\n";
     }
   }
   else { undef $hint }
 }

 $hint = [$1, [split /,?\s+/, $2]]
     if m{^\s*$rccs\s+(Hint|Warning):\s+(\w+(?:,?\s+\w+)*)\s*$};

 if ($define) {
   if ($define->[1] =~ /\\$/) {
     $define->[1] .= $_;
   }
   else {
     if (exists $API{$define->[0]} && $define->[1] !~ /^DPPP_\(/) {
       my @n = find_api($define->[1]);
       push @{$depends{$define->[0]}}, @n if @n
     }
     undef $define;
   }
 }

 $define = [$1, $2] if m{^\s*#\s*define\s+(\w+)(?:\([^)]*\))?\s+(.*)};

 if ($function) {
   if (/^}/) {
     if (exists $API{$function->[0]}) {
       my @n = find_api($function->[1]);
       push @{$depends{$function->[0]}}, @n if @n
     }
     undef $function;
   }
   else {
     $function->[1] .= $_;
   }
 }

 $function = [$1, ''] if m{^DPPP_\(my_(\w+)\)};

 $replace     = $1 if m{^\s*$rccs\s+Replace:\s+(\d+)\s+$rcce\s*$};
 $replace{$2} = $1 if $replace
```

```
 and m{^\s*#\s*define\s+(\w+)(?:\([^)]*\))?\s+(\w+)};
 $replace{$2} = $1 if m{^\s*#\s*define\s+(\w+)(?:\([^)]*\))?\s+(\w+).*$rccs\s+Replace\s+$rcce};
 $replace{$1} = $2 if m{^\s*$rccs\s+Replace (\w+) with (\w+)\s+$rcce\s*$};

 if (m{^\s*$rccs\s+(\w+(\s*,\s*\w+)*)\s+depends\s+on\s+(\w+(\s*,\s*\w+)*)\s+$rcce\s*$}) {
   my @deps = map { s/\s+//g; $_ } split /,/, $3;
   my $d;
   for $d (map { s/\s+//g; $_ } split /,/, $1) {
     push @{$depends{$d}}, @deps;
   }
 }

 $need{$1} = 1 if m{^#if\s+defined\(NEED_(\w+)(?:_GLOBAL)?\)};
}

for (values %depends) {
 my %s;
 $_ = [sort grep !$s{$_}++, @$_];
}

if (exists $opt{'api-info'}) {
 my $f;
 my $count = 0;
 my $match = $opt{'api-info'} =~ m!^/(.*)/$! ? $1 : "^\Q$opt{'api-info'}\E\$";
 for $f (sort { lc $a cmp lc $b } keys %API) {
   next unless $f =~ /$match/;
   print "\n=== $f ===\n\n";
   my $info = 0;
   if ($API{$f}{base} || $API{$f}{todo}) {
     my $base = format_version($API{$f}{base} || $API{$f}{todo});

    print "Supported at least starting from perl-$base.\n";
     $info++;
   }
   if ($API{$f}{provided}) {
     my $todo = $API{$f}{todo} ? format_version($API{$f}{todo}) : "5.003";
     print "Support by $ppport provided back to perl-$todo.\n";
     print "Support needs to be explicitly requested by NEED_$f.\n" if exists $need{$f};
     print "Depends on: ", join(', ', @{$depends{$f}}), ".\n" if exists $depends{$f};
     print "\n$hints{$f}" if exists $hints{$f};
     print "\nWARNING:\n$warnings{$f}" if exists $warnings{$f};
     $info++;
   }
   print "No portability information available.\n" unless $info;
   $count++;
 }
 $count or print "Found no API matching '$opt{'api-info'}'.";
 print "\n";
```

```
 exit 0;
}

if (exists $opt{'list-provided'}) {
 my $f;
 for $f (sort { lc $a cmp lc $b } keys %API) {
   next unless $API{$f}{provided};
   my @flags;
   push @flags, 'explicit' if exists $need{$f};
   push @flags, 'depend'   if exists $depends{$f};
   push @flags, 'hint'
     if exists $hints{$f};
   push @flags, 'warning'  if exists $warnings{$f};
   my $flags = @flags ? '  ['.join(', ', @flags).']' : '';
   print "$f$flags\n";
 }
 exit 0;
}

my @files;
my @srcext = qw( .xs .c .h .cc .cpp -c.inc -xs.inc );
my $srcext = join '|', map { quotemeta $_ } @srcext;

if (@ARGV) {
 my %seen;
 for (@ARGV) {
   if (-e) {
     if (-f) {
       push @files, $_ unless $seen{$_}++;
     }
     else { warn "'$_' is not a file.\n" }
   }
   else {
     my @new = grep { -f } glob $_
         or warn "'$_' does not exist.\n";
     push @files, grep { !$seen{$_}++ } @new;
   }
 }
}
else {
 eval {
   require File::Find;
   File::Find::find(sub {
     $File::Find::name =~ /($srcext)$/i
         and push @files, $File::Find::name;
   }, '.');
 };
 if ($@) {
```

```
   @files = map { glob "*$_" } @srcext;
  }
 }

if (!@ARGV || $opt{filter}) {
 my(@in, @out);
 my %xsc = map { /(.*)\.xs$/ ? ("$1.c" => 1, "$1.cc" => 1) : () } @files;
 for (@files) {
    my $out = exists $xsc{$_} || /\b\Q$ppport\E$/i || !/($srcext)$/i;
   push @{ $out ? \@out : \@in }, $_;
  }
 if (@ARGV && @out) {
   warning("Skipping the following files (use --nofilter to avoid this):\n| ", join "\n| ", @out);
  }
 @files = @in;
}

die "No input files given!\n" unless @files;

my(%files, %global, %revreplace);
%revreplace = reverse %replace;
my $filename;
my $patch_opened = 0;

for $filename (@files) {
 unless (open IN, "<$filename") {
   warn "Unable to read from $filename: $!\n";
   next;
  }

 info("Scanning $filename ...");

 my $c = do { local $/; <IN> };
 close IN;

 my %file = (orig => $c, changes => 0);

 # Temporarily remove C/XS comments and strings from the code
 my @ccom;

 $c =~ s{
   ( ^$HS*\#$HS*include\b[^\r\n]+\b(?:\Q$ppport\E|XSUB\.h)\b[^\r\n]*
   | ^$HS*\#$HS*(?:define|elif|if(?:def)?)\b[^\r\n]* )
 | ( ^$HS*\#[^\r\n]*
   | "[^"\\]*(?:\\.[^"\\]*)*"
   | '[^'\\]*(?:\\.[^'\\]*)*'
   | / (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*
```

```
) )
}{ defined $2 and push @ccom, $2;
   defined $1 ? $1 : "$ccs$#ccom$cce" }mgsex;

$file{ccom} = \@ccom;
$file{code} = $c;
$file{has_inc_ppport} = $c =~ /^$HS*#$HS*include[^\r\n]+\b\Q$ppport\E\b/m;

my $func;

for $func (keys %API) {
  my $match = $func;
  $match .= "|$revreplace{$func}" if exists $revreplace{$func};
  if ($c =~ /\b(?:Perl_)?($match)\b/) {
    $file{uses_replace}{$1}++ if exists $revreplace{$func} && $1 eq $revreplace{$func};
    $file{uses_Perl}{$func}++ if $c =~ /\bPerl_$func\b/;
    if (exists $API{$func}{provided}) {
      $file{uses_provided}{$func}++;
      if (!exists $API{$func}{base} || $API{$func}{base} > $opt{'compat-version'}) {
        $file{uses}{$func}++;
        my @deps = rec_depend($func);
        if (@deps) {
          $file{uses_deps}{$func} = \@deps;
          for (@deps) {
            $file{uses}{$_} = 0 unless exists $file{uses}{$_};
          }
        }
        for ($func, @deps) {

      $file{needs}{$_} = 'static' if exists $need{$_};
        }
      }
    }
    if (exists $API{$func}{todo} && $API{$func}{todo} > $opt{'compat-version'}) {
      if ($c =~ /\b$func\b/) {
        $file{uses_todo}{$func}++;
      }
    }
  }
}

while ($c =~ /^$HS*#$HS*define$HS+(NEED_(\w+?)(_GLOBAL)?)\b/mg) {
  if (exists $need{$2}) {
    $file{defined $3 ? 'needed_global' : 'needed_static'}{$2}++;
  }
  else { warning("Possibly wrong #define $1 in $filename") }
}
```

```
 for (qw(uses needs uses_todo needed_global needed_static)) {
   for $func (keys %{$file{$_}}) {
     push @{$global{$_}{$func}}, $filename;
   }
 }

 $files{$filename} = \%file;
}

# Globally resolve NEED_'s
my $need;
for $need (keys %{$global{needs}}) {
 if (@{$global{needs}{$need}} > 1) {
   my @targets = @{$global{needs}{$need}};
   my @t = grep $files{$_}{needed_global}{$need}, @targets;
   @targets = @t if @t;
   @t = grep /\.xs$/i, @targets;
   @targets = @t if @t;
   my
 $target = shift @targets;
   $files{$target}{needs}{$need} = 'global';
   for (@{$global{needs}{$need}}) {
     $files{$_}{needs}{$need} = 'extern' if $_ ne $target;
   }
 }
}

for $filename (@files) {
 exists $files{$filename} or next;

 info("=== Analyzing $filename ===");

 my %file = %{$files{$filename}};
 my $func;
 my $c = $file{code};
 my $warnings = 0;

 for $func (sort keys %{$file{uses_Perl}}) {
   if ($API{$func}{varargs}) {
     unless ($API{$func}{nothxarg}) {
       my $changes = ($c =~ s{\b(Perl_$func\s*\(\s*)(?!aTHX_?)(\)|[^\s)]*\))}
                          { $1 . ($2 eq ')' ? 'aTHX' : 'aTHX_ ') . $2 }ge);
       if ($changes) {
         warning("Doesn't pass interpreter argument aTHX to Perl_$func");
         $file{changes} += $changes;
       }
     }
   }
```

```
  else {
    warning("Uses Perl_$func instead of $func");
    $file{changes} += ($c =~ s{\bPerl_$func(\s*)\((\s*aTHX_?)?\s*}
                              {$func$1(}g);
  }
}

 for $func (sort keys %{$file{uses_replace}}) {
  warning("Uses $func instead of $replace{$func}");
  $file{changes} += ($c =~ s/\b$func\b/$replace{$func}/g);
}

for $func (sort keys %{$file{uses_provided}}) {
  if ($file{uses}{$func}) {
    if (exists $file{uses_deps}{$func}) {
      diag("Uses $func, which depends on ", join(', ', @{$file{uses_deps}{$func}}));
    }
    else {
      diag("Uses $func");
    }
  }
  $warnings += hint($func);
}

unless ($opt{quiet}) {
  for $func (sort keys %{$file{uses_todo}}) {
    print "*** WARNING: Uses $func, which may not be portable below perl ",
          format_version($API{$func}{todo}), ", even with '$ppport'\n";
    $warnings++;
  }
}

for $func (sort keys %{$file{needed_static}}) {
  my $message = '';
  if (not exists $file{uses}{$func}) {
    $message = "No need to define NEED_$func if $func is never used";
  }
  elsif (exists $file{needs}{$func} && $file{needs}{$func} ne 'static') {
     $message = "No need to define NEED_$func when already needed globally";
  }
  if ($message) {
    diag($message);
    $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_$func\b.*$LF//mg);
  }
}

for $func (sort keys %{$file{needed_global}}) {
  my $message = '';
```

```
  if (not exists $global{uses}{$func}) {
    $message = "No need to define NEED_${func}_GLOBAL if $func is never used";
  }
  elsif (exists $file{needs}{$func}) {
    if ($file{needs}{$func} eq 'extern') {
      $message = "No need to define NEED_${func}_GLOBAL when already needed globally";
    }
    elsif ($file{needs}{$func} eq 'static') {
      $message = "No need to define NEED_${func}_GLOBAL when only used in this file";
    }
  }
  if ($message) {
    diag($message);
    $file{changes} += ($c =~ s/^$HS*#$HS*define$HS+NEED_${func}_GLOBAL\b.*$LF//mg);
  }
}

$file{needs_inc_ppport} = keys %{$file{uses}};

if ($file{needs_inc_ppport}) {
  my $pp = '';

  for $func
(sort keys %{$file{needs}}) {
    my $type = $file{needs}{$func};
    next if $type eq 'extern';
    my $suffix = $type eq 'global' ? '_GLOBAL' : '';
    unless (exists $file{"needed_$type"}{$func}) {
      if ($type eq 'global') {
        diag("Files [@{$global{needs}{$func}}] need $func, adding global request");
      }
      else {
        diag("File needs $func, adding static request");
      }
      $pp .= "#define NEED_$func$suffix\n";
    }
  }

  if ($pp && ($c =~ s/^(?=$HS*#$HS*define$HS+NEED_\w+)/$pp/m)) {
    $pp = '';
    $file{changes}++;
  }

  unless ($file{has_inc_ppport}) {
    diag("Needs to include '$ppport'");
    $pp .= qq(#include "$ppport"\n)
  }
```

```
  if ($pp) {
    $file{changes} += ($c =~ s/^($HS*#$HS*define$HS+NEED_\w+.*?)^/$1$pp/ms)
                  || ($c =~ s/^(?=$HS*#$HS*include.*\Q$ppport\E)/$pp/m)
                  || ($c =~ s/^($HS*#$HS*include.*XSUB.*\s*?)^/$1$pp/m)
                  || ($c =~ s/^/$pp/);
  }
}
else {
  if ($file{has_inc_ppport}) {
    diag("No need to include '$ppport'");
    $file{changes} += ($c =~ s/^$HS*?#$HS*include.*\Q$ppport\E.*?$LF//m);
  }
}

# put back in our C comments
my $ix;
my $cppc = 0;
my @ccom = @{$file{ccom}};
for $ix (0 .. $#ccom) {
  if (!$opt{cplusplus} && $ccom[$ix] =~ s!^//!!) {
    $cppc++;
    $file{changes} += $c =~ s/$rccs$ix$rcce/$ccs$ccom[$ix] $cce/;
  }
  else {
    $c =~ s/$rccs$ix$rcce/$ccom[$ix]/;
  }
}

if ($cppc) {
  my $s = $cppc != 1 ? 's' : '';
  warning("Uses $cppc C++ style comment$s, which is not portable");
}

my $s = $warnings != 1 ? 's' : '';
my $warn = $warnings ? " ($warnings warning$s)" : '';
info("Analysis completed$warn");

if ($file{changes}) {
  if (exists $opt{copy}) {
    my $newfile = "$filename$opt{copy}";
    if (-e $newfile) {
      error("'$newfile' already exists, refusing to write copy of '$filename'");
    }
    else {
      local
*F;
      if (open F, ">$newfile") {
        info("Writing copy of '$filename' with changes to '$newfile'");
```

```
        print F $c;
        close F;
      }
      else {
        error("Cannot open '$newfile' for writing: $!");
      }
    }
  }
  elsif (exists $opt{patch} || $opt{changes}) {
    if (exists $opt{patch}) {
      unless ($patch_opened) {
        if (open PATCH, ">$opt{patch}") {
          $patch_opened = 1;
        }
        else {
          error("Cannot open '$opt{patch}' for writing: $!");
          delete $opt{patch};
          $opt{changes} = 1;
          goto fallback;
        }
      }
      mydiff(\*PATCH, $filename, $c);
    }
    else {
fallback:
      info("Suggested changes:");
      mydiff(\*STDOUT, $filename, $c);
    }
  }
  else {
    my $s = $file{changes} == 1 ? '' : 's';
    info("$file{changes} potentially required change$s detected");
  }
}
else {
  info("Looks good");
}
}

close
 PATCH if $patch_opened;

exit 0;


sub try_use { eval "use @_;"; return $@ eq '' }

sub mydiff
```

```
{
 local *F = shift;
 my($file, $str) = @_;
 my $diff;

 if (exists $opt{diff}) {
   $diff = run_diff($opt{diff}, $file, $str);
 }

 if (!defined $diff and try_use('Text::Diff')) {
   $diff = Text::Diff::diff($file, \$str, { STYLE => 'Unified' });
   $diff = <<HEADER . $diff;
--- $file
+++ $file.patched
HEADER
 }

 if (!defined $diff) {
   $diff = run_diff('diff -u', $file, $str);
 }

 if (!defined $diff) {
   $diff = run_diff('diff', $file, $str);
 }

 if (!defined $diff) {
   error("Cannot generate a diff. Please install Text::Diff or use --copy.");
   return;
 }

 print F $diff;
}

sub run_diff
{
 my($prog, $file, $str) = @_;
 my $tmp = 'dppptemp';
 my $suf = 'aaa';
 my $diff = '';
 local *F;

 while (-e "$tmp.$suf") { $suf++ }
 $tmp = "$tmp.$suf";

 if (open F, ">$tmp") {
   print F $str;
   close F;
```

```
  if (open F, "$prog $file $tmp |") {
    while (<F>)
 {
      s/\Q$tmp\E/$file.patched/;
      $diff .= $_;
    }
    close F;
    unlink $tmp;
    return $diff;
  }

  unlink $tmp;
 }
 else {
  error("Cannot open '$tmp' for writing: $!");
 }

 return undef;
}

sub rec_depend
{
 my($func, $seen) = @_;
 return () unless exists $depends{$func};
 $seen = {%{$seen||{}}};
 return () if $seen->{$func}++;
 my %s;
 grep !$s{$_}++, map { ($_, rec_depend($_, $seen)) } @{$depends{$func}};
}

sub parse_version
{
 my $ver = shift;

 if ($ver =~ /^(\d+)\.(\d+)\.(\d+)$/) {
  return ($1, $2, $3);
 }
 elsif ($ver !~ /^\d+\.[\d_]+$/) {
  die "cannot parse version '$ver'\n";
 }

 $ver =~ s/_//g;
 $ver =~ s/$/000000/;

 my($r,$v,$s) = $ver =~ /(\d+)\.(\d{3})(\d{3})/;

 $v = int $v;
 $s = int $s;
```

```
 if ($r < 5 || ($r == 5 && $v < 6)) {
   if ($s % 10) {
     die "cannot parse version '$ver'\n";
   }
 }

 return ($r, $v, $s);
}

sub format_version
{
 my $ver = shift;

 $ver =~ s/$/000000/;
 my($r,$v,$s) =
 $ver =~ /(\d+)\.(\d{3})(\d{3})/;

 $v = int $v;
 $s = int $s;

 if ($r < 5 || ($r == 5 && $v < 6)) {
   if ($s % 10) {
     die "invalid version '$ver'\n";
   }
   $s /= 10;

   $ver = sprintf "%d.%03d", $r, $v;
   $s > 0 and $ver .= sprintf "_%02d", $s;

   return $ver;
 }

 return sprintf "%d.%d.%d", $r, $v, $s;
}

sub info
{
 $opt{quiet} and return;
 print @_, "\n";
}

sub diag
{
 $opt{quiet} and return;
 $opt{diag} and print @_, "\n";
}
```

```
sub warning
{
 $opt{quiet} and return;
 print "*** ", @_, "\n";
}

sub error
{
 print "*** ERROR: ", @_, "\n";
}

my %given_hints;
my %given_warnings;
sub hint
{
 $opt{quiet} and return;
 my $func = shift;
 my $rv = 0;
 if (exists $warnings{$func} && !$given_warnings{$func}++) {
   my $warn = $warnings{$func};
   $warn =~ s!^!*** !mg;
   print "*** WARNING: $func\n", $warn;
   $rv++;
 }
 if ($opt{hints} && exists $hints{$func} && !$given_hints{$func}++) {
   my $hint = $hints{$func};
   $hint =~ s/^/   /mg;
   print
 "   --- hint for $func ---\n", $hint;
 }
 $rv;
}

sub usage
{
 my($usage) = do { local(@ARGV,$/)=($0); <> } =~ /^=head\d$HS+SYNOPSIS\s*^(.*?)\s*^=/ms;
 my %M = ( 'I' => '*' );
 $usage =~ s/^\s*perl\s+\S+/$^X $0/;
 $usage =~ s/([A-Z])<([^>]+)>/$M{$1}$2$M{$1}/g;

 print <<ENDUSAGE;

Usage: $usage

See perldoc $0 for details.

ENDUSAGE
```

```
 exit 2;
}

sub strip
{
 my $self = do { local(@ARGV,$/)=($0); <> };
 my($copy) = $self =~ /^=head\d\s+COPYRIGHT\s*^(.*?)^=\w+/ms;
 $copy =~ s/^(?=\S+)/    /gms;
 $self =~ s/^$HS+Do NOT edit.*?(?=^-)/$copy/ms;
 $self =~ s/^SKIP.*(?=^__DATA__)/SKIP
if (\@ARGV && \$ARGV[0] eq '--unstrip') {
 eval { require Devel::PPPort };
 \$@ and die "Cannot require Devel::PPPort, please install.\\n";
 if (eval \$Devel::PPPort::VERSION < $VERSION) {
   die "$0 was originally generated with Devel::PPPort $VERSION.\\n"
     . "Your Devel::PPPort is only version \$Devel::PPPort::VERSION.\\n"
     . "Please install a newer version, or --unstrip will not work.\\n";
  }
 Devel::PPPort::WriteFile(\$0);
 exit 0;
}
print <<END;

Sorry, but this is a stripped version of \$0.

To be able to use its original script and doc functionality,
please try to regenerate this file using:

 \$^X \$0 --unstrip

END
/ms;
 my($pl, $c) = $self =~ /(.*^__DATA__)(.*)/ms;
 $c =~ s{
   / (?: \*[^*]*\*+(?:[^$ccs][^*]*\*+)* / | /[^\r\n]*)
 | ( "[^"\\]*(?:\\.[^"\\]*)*"
   | '[^'\\]*(?:\\.[^'\\]*)*' )
 | ($HS+) }{ defined $2 ? ' ' : ($1 || '') }gsex;
 $c =~ s!\s+$!!mg;
 $c =~ s!^$LF!!mg;
 $c =~ s!^\s*#\s*!#!mg;
 $c =~ s!^\s+!!mg;

 open OUT, ">$0" or die "cannot strip $0: $!\n";
 print OUT "$pl$c\n";

 exit 0;
}
```

__DATA__
*/

Found in path(s):
* /libterm-readkey-perl-2-38-orig-1-tar-gz/TermReadKey-2.38/ppport.h

1.2053 byobu 6.11-0ubuntu1

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1.2054 python-launchpadlib 1.11.0-6

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Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

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Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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1.2056 pyopenssl 23.2.0-1

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1.2057 libqrtr-glib 1.2.2-1ubuntu4

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

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Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License.

Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the
object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany
the work with the complete corresponding
machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application

to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source
code, which
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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

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1.2063 libmodule-find-perl 0.16-2

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Module::Find version 0.16
==========

Module::Find lets you find and use modules in categories. This can be very
useful for auto-detecting driver or plugin modules. You can differentiate
between looking in the category itself or in all subcategories.

INSTALLATION

To install this module type the following:

```
perl Makefile.PL
make
make test
make install
```

DEPENDENCIES

This module requires these other modules and libraries:

Test::More
File::Spec
File::Find

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=back

=head1 HISTORY

=over 8

=item 0.01, 2004-04-22

Original version; created by h2xs 1.22

=item 0.02, 2004-05-25

Added test modules that were left out in the first version. Thanks to
Stuart Johnston for alerting me to this.

=item 0.03, 2004-06-18

Fixed a bug (non-localized $_) by declaring a loop variable in use functions.
Thanks to Stuart Johnston for alerting me to this and providing a fix.

Fixed non-platform compatibility by using File::Spec.
Thanks to brian d foy.

Added setmoduledirs and updated tests. Idea shamelessly stolen from
...errm... inspired by brian d foy.

=item 0.04, 2005-05-20

Added POD tests.

=item 0.05, 2005-11-30

Fixed issue with bugfix in PathTools-3.14.

=item 0.06, 2008-01-26

Module::Find now won't report duplicate modules several times anymore (thanks to Uwe Völker for the report and the patch)

=item 0.07, 2009-09-08

Fixed RT#38302: Module::Find now follows symlinks by default
(can be disabled).

=item 0.08, 2009-09-08

Fixed RT#49511: Removed Mac OS X extended attributes from distribution

=item 0.09, 2010-02-26

Fixed RT#38302: Fixed META.yml generation (thanks very much to cpanservice for the help).

=item 0.10, 2010-02-26

Fixed RT#55010: Removed Unicode BOM from Find.pm.

=item 0.11, 2012-05-22

Fixed RT#74251: defined(@array) is deprecated under Perl 5.15.7.
Thanks to Roman F, who contributed the implementation.

=item 0.12, 2014-02-08

Fixed RT#81077: useall fails in taint mode
Thanks to Aran Deltac, who contributed the implementation and test.

Fixed RT#83596: Documentation doesn't describe behaviour if a module fails to load
Clarified documentation for useall and usesub.

Fixed RT#62923: setmoduledirs(undef) doesn't reset to searching @INC
Added more explicit tests.
Thanks to Colin Robertson for his input.

=item 0.13, 2015-03-09

This release contains two contributions from Moritz Lenz:

Link to Module::Pluggable and Class::Factory::Util in "SEE ALSO"

Align
 package name parsing with how perl does it (allowing single quotes as module separator)

Also, added a test for meta.yml

=item 0.14, 2019-12-25

A long overdue update. Thank you for the many contributions!

Fixed RT#99055: Removed file readability check (pull request contributed by Moritz Lenz)

Now supports @INC hooks (pull request contributed by Graham Knop)

Now filters out filenames starting with a dot (pull request contributed by Desmond Daignault)

Now uses strict (pull request contributed by Shlomi Fish)

Fixed RT#122016: test/ files show up in metacpan (bug report contributed by Karen Etheridge)

=item 0.15, 2019-12-26

Fixed RT#127657 (bug report contributed by Karen Etheridge): Module::Find now uses @ModuleDirs
(if specified) for loading modules. Previously, when using setmoduledirs() to set an array of
directories that did not contain @INC, Module::Find would find the modules correctly, but load
them from @INC.

=item 0.16, 2022-08-01

Fixes an issue where symlink
 tests failed on systems that do not support creation of symlinks.
The issue appears on Windows systems due to changed behaviour in C<File::Find> described
in L<perl5/issue #19995|https://github.com/Perl/perl5/issues/19995>
Symlink tests were previously skipped if C<symlink()> is not available, and now
also if creation of a symlink is not possible.

Fixes L<issue #9|https://github.com/crenz/Module-Find/issues/9>. Note that on Windows system,
the patch to C<File::Find> from L<perl5/PR #20008|https://github.com/Perl/perl5/pull/20008>
will be required for proper operation.

=back

=head1 DEVELOPMENT NOTES

The development repository for this module is hosted on GitHub: L<http://github.com/crenz/Module-Find/>. Please
report any bugs by opening an issue there.

=head1 SEE ALSO

L<perl>, L<Module::Pluggable>, L<Class::Factory::Util>

=head1 AUTHOR

Christian Renz, E<lt>crenz@web42.comE<gt>

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---
abstract: 'Find and use installed modules in a (sub)category'
author:
 - 'Christian Renz <crenz@web42.com>'
build_requires:
 Test::More: '0'
configure_requires:
 ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.34, CPAN::Meta::Converter version 2.150010'
license: perl
meta-spec:
 url: http://module-build.sourceforge.net/META-spec-v1.4.html
 version: '1.4'
name: Module-Find
no_index:
 directory:
   - t
   - inc
recommends:
 Test::Pod: '1.14'
 Test::Pod::Coverage: '1.04'
requires:
 File::Find: '0'
 File::Spec: '0'

perl: '5.008001'
resources:
repository: http://github.com/crenz/Module-Find
version: '0.16'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'

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1.2064 python-colorama 0.4.6-4

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1.2065 dbus-glib 0.112-3build2

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1.2067 pyjwt 2.7.0-1

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1.2069 libftdi 1.5-6build5

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c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding
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must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that
uses the
library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The

threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the
object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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the work with the complete corresponding
machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate

properly with a modified version of the library, if
the user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
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specified in Subsection 6a, above, for a charge no more
than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy
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1.2072 python-wadllib 1.3.6-5

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1.2073 cloud-utils 0.33-1

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// Original can be found at:
// https://bitbucket.org/lindenlab/llsd
// Modifications by Joshua Bell inexorabletash@gmail.com
// https://github.com/inexorabletash/polyfill

// ES3/ES5 implementation of the Krhonos Typed Array Specification
// Ref: http://www.khronos.org/registry/typedarray/specs/latest/
// Date: 2011-02-01
//

// Variations:
// * Allows typed_array.get/set() as alias for subscripts (typed_array[])
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1.2078 python-stdlib-extensions 3.12.3-0ubuntu1

1.2078.1 Available under license :

No license file was found, but licenses were detected in source scan.

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Found in path(s):

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* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/tests/pytree_idempotency.py
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* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/tests/pytree_idempotency.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/fixes/fix_exec.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/fixes/fix_execfile.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/fixes/fix_repr.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/fixes/fix_has_key.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/fixes/fix_apply.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/fixes/fix_ne.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/fixes/fix_ne.py
*
/python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/fixes/fix_execfile.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/tests/pytree_idempotency.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/pygram.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/refactor.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/fixes/fix_print.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/fixes/fix_exec.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/fixer_base.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/refactor.py
*
/python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/tests/test_pytree.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/tests/test_pytree.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/fixes/fix_execfile.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/pytree.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/fixes/fix_long.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/fixes/fix_has_key.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/patcomp.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/refactor.py

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Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/pgen2/tokenize.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/pgen2/tokenize.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/pgen2/tokenize.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/pgen2/tokenize.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/pgen2/tokenize.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/pgen2/tokenize.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/pgen2/tokenize.py
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Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/pgen2/driver.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/pgen2/driver.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/pgen2/driver.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/pgen2/driver.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/pgen2/driver.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/pgen2/driver.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/pgen2/driver.py
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```
/* An object allocator for Python.

  Here is an introduction to the layers of the Python memory architecture,
  showing where the object allocator is actually used (layer +2), It is
  called for every object allocation and deallocation (PyObject_New/Del),
  unless the object-specific allocators implement a proprietary allocation
  scheme (ex.: ints use a simple free list). This is also the place where
  the cyclic garbage collector operates selectively on container objects.


    Object-specific allocators
    _____   _______   _______      _________
  [ int ] [ dict ] [ list ] ... [ string ]       Python core         |
+3 | <----- Object-specific memory -----> | <-- Non-object memory --> |
    _______________________________________       |                       |
  [   Python's object allocator   ]      |                       |
+2 | ####### Object memory ####### | <------ Internal buffers ------> |
    ______________________________________________________________________
```

```
   |
  [         Python's raw memory allocator (PyMem_ API)          ]   |
+1 | <----- Python memory (under PyMem manager's control) ------> |   |
  ___________________________________________________________________
  [    Underlying general-purpose allocator (ex: C library malloc)   ]
0 | <------ Virtual memory allocated for the python process -------> |

  =========================================================================
  ______________________________________________________________________
  [               OS-specific Virtual Memory Manager (VMM)               ]
-1 | <--- Kernel dynamic storage allocation & management (page-based) ---> |
  ___________________________________   ___________________________________
  [                                  ] [                                  ]
-2 | <-- Physical memory: ROM/RAM --> | | <-- Secondary storage (swap) --> |

*/
```

Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Modules/pycore_obmalloc.h
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```
/*****************************************************************
Copyright (C) 1994 Steen Lumholt.

                    All Rights Reserved

******************************************************************/
```

Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Modules/_tkinter.c
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Modules/_tkinter.c
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Modules/_tkinter.c
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Modules/_tkinter.c
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Modules/_tkinter.c
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Modules/_tkinter.c
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Modules/_tkinter.c
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```
# Copyright 2006 Google, Inc. All Rights Reserved.
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# A grammar to describe tree matching patterns.
# Not shown here:
# - 'TOKEN' stands for any token (leaf node)
# - 'any' stands for any node (leaf or interior)
# With 'any' we can still specify the sub-structure.

# The start symbol is 'Matcher'.
```

Matcher: Alternatives ENDMARKER

Alternatives: Alternative ('|' Alternative)*

Alternative: (Unit | NegatedUnit)+

Unit: [NAME '='] (STRING [Repeater]
| NAME [Details] [Repeater]
| '(' Alternatives ')' [Repeater]
| '[' Alternatives ']'
)

NegatedUnit: 'not' (STRING | NAME [Details] | '(' Alternatives ')')

Repeater: '*' | '+' | '{' NUMBER [',' NUMBER] '}'

Details: '<' Alternatives '>'

Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/PatternGrammar.txt
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/PatternGrammar.txt
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/PatternGrammar.txt
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/PatternGrammar.txt
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/PatternGrammar.txt
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/PatternGrammar.txt
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/PatternGrammar.txt
No license file was found, but licenses were detected in source scan.

executable.

Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/distutils/spawn.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/distutils/spawn.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/distutils/spawn.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/distutils/spawn.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/distutils/spawn.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/distutils/spawn.py
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Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/pgen2/grammar.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/pgen2/conv.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/pgen2/parse.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/pgen2/pgen.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/pgen2/__init__.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/pgen2/conv.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/pgen2/literals.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/pgen2/parse.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/pgen2/parse.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/pgen2/parse.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/pgen2/literals.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/pgen2/__init__.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/pgen2/grammar.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/pgen2/pgen.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/pgen2/grammar.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/pgen2/conv.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/pgen2/pgen.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/pgen2/conv.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/pgen2/__init__.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/pgen2/conv.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/lib2to3/pgen2/literals.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/pgen2/parse.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/pgen2/pgen.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/pgen2/literals.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/pgen2/parse.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/pgen2/__init__.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/pgen2/pgen.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/pgen2/conv.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/pgen2/grammar.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/pgen2/grammar.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/pgen2/__init__.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/pgen2/literals.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/pgen2/conv.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/pgen2/grammar.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/pgen2/parse.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/pgen2/pgen.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/pgen2/literals.py

* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/pgen2/__init__.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/pgen2/pgen.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/lib2to3/pgen2/literals.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/pgen2/__init__.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/pgen2/grammar.py
No license file was found, but licenses were detected in source scan.

file.write('License: %s\n' % self.get_license())

Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/distutils/dist.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/distutils/dist.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/distutils/dist.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/distutils/dist.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/distutils/dist.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/distutils/dist.py
No license file was found, but licenses were detected in source scan.

('binary-only', None,
"cannot supply both '--source-only' and '--binary-only'")
'License: ' + self.distribution.get_license(),

Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/distutils/command/bdist_rpm.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/distutils/command/bdist_rpm.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/distutils/command/bdist_rpm.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/distutils/command/bdist_rpm.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/distutils/command/bdist_rpm.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/distutils/command/bdist_rpm.py
No license file was found, but licenses were detected in source scan.

version.

Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/distutils/command/bdist_msi.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/distutils/cygwinccompiler.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/distutils/cygwinccompiler.py

* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/distutils/cygwinccompiler.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/distutils/command/bdist_msi.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/distutils/command/bdist_msi.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.7/Lib/distutils/command/bdist_wininst.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/distutils/cygwinccompiler.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/distutils/cygwinccompiler.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/distutils/command/bdist_wininst.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/distutils/command/bdist_wininst.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/distutils/command/bdist_wininst.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.6/Lib/distutils/command/bdist_msi.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/distutils/cygwinccompiler.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/distutils/command/bdist_msi.py
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Found in path(s):
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/fixes/fix_filter.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.11/Lib/lib2to3/fixes/fix_buffer.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/fixes/fix_filter.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/fixes/fix_dict.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.12/Lib/lib2to3/fixes/fix_map.py
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* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.8/Lib/lib2to3/fixes/fix_filter.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.10/Lib/lib2to3/fixes/fix_standarderror.py
* /python3-stdlib-extensions-3-12-3-orig-tar-xz/python3-stdlib-extensions-3.12.3/3.9/Lib/lib2to3/fixes/fix_dict.py

1.2079 os-prober 1.81ubuntu4

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1.2080 python-certifi 2023.11.17-1

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ca-bundle.crt -- Bundle of CA Root Certificates

This is a bundle of X.509 certificates of public Certificate Authorities
(CA). These were automatically extracted from Mozilla's root certificates
file (certdata.txt). This file can be found in the mozilla source tree:
https://hg.mozilla.org/mozilla-central/file/tip/security/nss/lib/ckfw/builtins/certdata.txt
It contains the certificates in PEM format and therefore
can be directly used with curl / libcurl / php_curl, or with
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Just configure this file as the SSLCACertificateFile.#

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@(#) $RCSfile: certdata.txt,v $ $Revision: 1.80 $ $Date: 2011/11/03 15:11:58 $

1.2081 hd-parm 9.65+ds-1build1

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1.2082 usbmuxd 1.1.1-5~exp3ubuntu2

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Proc::ProcessTable

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MAINTENANCE STATUS

This module is maintained by Joachim Bargsten. I have nearly zero knowledge of
the implementation within but wanted to rescue the distribution from
abandonment and try to get critical bug fixes out. This will need to be
a community effort.

The source is in github -

  https://github.com/jwbargsten/perl-proc-processtable

Commit bits will be generously granted, send me your github id.

STATUS

This is BETA software; it seems to work, but use at your own risk :)

Currently works on darwin, nonstop-ux, Windows (both native MSWin32 and Cygwin), linux,
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Please note that the Windows port is derived from Cygwin code and is therefore covered
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Multithread support is now available for Solaris; please see
README.solaris for info. It may work under other OS's as well; please

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Comments, bug reports, patches and especially ports are greatly appreciated. If you want to submit a patch, *please* use standard context-diff format; if you're submitting a port, a tarball of the new files is great.

DESCRIPTION

This module is a first crack at providing a consistent interface to Unix (and maybe other multitasking OS's) process table information. The impetus for this came about with my frustration at having to parse the output of various systems' ps commands to check whether specific processes were running on different boxes at a larged mixed Unix site. The output format of ps was different on each OS, and sometimes changed with each new release of an OS. Also, running a ps subprocess from within a perl or shell script and parsing the output was not a very efficient or aesthetic way to do things.

With this module, you can do things like this:

```
# kill memory pigs
use Proc::ProcessTable;

my $t = Proc::ProcessTable->new;
foreach my $p ( @{$t->table} ) {
    if( $p->pctmem > 95 ){
      $p->kill(9);
    }
}
```

There is another short example in the file "example.pl" in the distribution. For a more elaborate example (in German), see <http://www.linux-magazin.de/ausgabe.1999.02/Proc/proc.html>. <shameless plug> If you can't read German, try my other module, WWW::Babelfish!</shameless plug>

There are also two contributed modules: a module called Proc::Killall contributed by Aaron Sherman to kill all processes whose command-lines match a given pattern, and a module called Proc::Killfam by Stephen Lidie to kill a list of processes and their children. These modules are installed along with Proc::ProcessTable. Pod documentation is included in both of them.

INSTALLATION

This module needs the File::Find and Storable modules in order to
work. File::Find is generally included with perl distributions;
Storable is available from CPAN.

After unpacking the tar file, do:

```
perl Makefile.PL
make
make test
make install
```

There is embedded POD documentation in ProcessTable.pm and
Process/Process.pm.

ACKNOWLEDGEMENTS

Thanks to the many people who have sent in ports and patches. Without
them this module would be impossible to support on so many platforms.
Patches are noted in the Changes file.

* David Paquet <David.Paquet@cnes.fr>: AIX port
* Mike Romberg
 <romberg@fsl.noaa.gov>: HPUX port
* Slaven Rezic <eserte@cs.tu-berlin.de>: FreeBSD port
* W. Phillip Moore <wpm@ms.com>: IRIX port
* Peter ? <hooft@natlab.research.philips.com>: IRIX version patch
* Bernhard Schmalhofer <Bernhard.Schmalhofer@gmx.de>: dec_osf port
* Sean Eskins <sean@gilasoft.com>: bsdi port
* Peter Reich <pr@alles.prima.de>: netbsd port
* Aaron Sherman <ajs@ajs.com>: Proc::Killall module
* Steve Lidie <sol0@Lehigh.EDU>: Killfam.pm module
* Martin Lucina <mato@catalyst.net.nz>: Unixware 7.x port
* Shawn Clifford <shawn.a.clifford@lmco.com> SunOS port
* J Robert Ray <jrray@jrray.org>:Windows (Cygwin) port.
* Tom Wyant <twyant3@comcast.net>:Darwin port.
* Mike Steinert <mike.steinert@motorola.com>: Nonstop-UX port.
* <bsd@openbsd.rutgers.edu>: Openbsd port.

Please note that Bernard Schmalhofer is no longer able to provide
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=head1 NAME

killall - Kill all instances of a process by pattern matching the command-line

=head1 SYNOPSIS

 use Proc::Killall;

 killall('HUP', 'xterm'); # SIGHUP all xterms
 killall('KILL', '^netscape$'); # SIGKILL to "netscape"

=head1 DESCRIPTION

This module provides one function, C<killall()>, which takes two parameters:
a signal name or number (see C<kill()>) and a process pattern. This pattern
is matched against the process' command-line as the C<ps> command would
show it (C<ps> is not used internally, instead a package called
C<Proc::ProcessTable> is used).

C<killall> searches the process table and sends that signal to all processes
which match the pattern. The return value is the number of processes that
were successfully signaled. If any kills failed, the C<$!> variable
will be set based on that last one that failed (even if a successful kill
happened afterward).

=head1 AUTHOR

Written in 2000 by Aaron
 Sherman E<lt>ajs@ajs.comE<gt>

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distributed under the same terms as Perl itself.

=head1 PREREQUISITES

C<Proc::ProcessTable> is required for C<Proc::Killall> to function.

=head1 SEE ALSO

L<perl>, L<perlfunc>, L<perlvar>, L<Proc::ProcessTable>

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```
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```

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*/
```

Found in path(s):
* /libproc-processtable-perl-0-636-orig-tar-gz/Proc-ProcessTable-0.636/os/darwin.c
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/*
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*
* Author: James FitzGibbon <james.fitzgibbon@target.com>
*
* based on aix.c distributed with Proc::ProcessTable v0.35, which
* is Copyright (c) 1998, David Paquet.
*
*/
```

Found in path(s):
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* /libproc-processtable-perl-0-636-orig-tar-gz/Proc-ProcessTable-0.636/os/bsdi.h
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/*
* Copyright (c) 2001 by Shawn A. Clifford <shawn.a.clifford@lmco.com>
* This file may be distributed under the same terms as Perl.
*
* Modification History:
*
* Who When Description
* --- ---------- --
* SAC 30July2001 Original code
*/

Found in path(s):
* /libproc-processtable-perl-0-636-orig-tar-gz/Proc-ProcessTable-0.636/os/SunOS.c
* /libproc-processtable-perl-0-636-orig-tar-gz/Proc-ProcessTable-0.636/os/SunOS.h
No license file was found, but licenses were detected in source scan.

---
abstract: 'Perl extension to access the unix process table'
author:
 - 'Joachim Bargsten <jw@bargsten.org>'
build_requires:
 ExtUtils::MakeMaker: '0'
 Test::More: '0'
configure_requires:
 ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.64, CPAN::Meta::Converter version 2.150010'
license: artistic_2
meta-spec:
 url: http://module-build.sourceforge.net/META-spec-v1.4.html
 version: '1.4'
name: Proc-ProcessTable
no_index:
 directory:
   - t
   - inc
requires:
 File::Find: '0'
 Storable: '0'

```
 perl: '5.006'
resources:
 repository: https://github.com/jwbargsten/perl-proc-processtable
version: '0.636'
x_serialization_backend: 'CPAN::Meta::YAML version 0.018'
```

Found in path(s):
* /libproc-processtable-perl-0-636-orig-tar-gz/Proc-ProcessTable-0.636/META.yml
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*
*/
```

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* /libproc-processtable-perl-0-636-orig-tar-gz/Proc-ProcessTable-0.636/os/aix_getprocs.h
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```
port of Proc::ProcessTable under AIX

New files
=========

os/aix.c
os/aix.h
hints/aix.pl
README.aix

Sample (low effort) application (please don't laugh ;)
==============================
minitop.pl
xminitop


Blah
====

o Documentation under AIX is rather cryptic and incomplete. I managed to read
 the process table using undocumented calls : getproc, getuser, getargs.
```

I've read C code from Vic Abell <abe@purdue.edu> in lsof-4.36, Jussi Maki <Jussi.Maki@csc.fi> and Marcel J.E. Mol <marcel@mesa.nl> in monitor-2.1.2

as well as a usenet news posted by Michael Wojcik <mike@raederle.mfltd.co.uk> (Article: 63164 of comp.unix.aix, Date: 04/04/95)

[lsof is a really nice tool and provides C examples to read low-level structures under nearly any UNIX system on earth.]

o my port was only tested under the following conditions :

AIX 4.1.5
perl 5.005_02

o I am not a C programming terminator, so consider this as really ALPHA software.

o I wanted this tool to be usable by a non root user. This is why I don't read /dev/kmem unlike Vic and Jussi.

Bugs
====

o When mapping tty device numbers to names, I get a 'permission denied' message due to the /dev/.SRC-unix directory whose perms are as follows :

```
drwxrwx---   2 root     system       512 Aug 12 11:26 .SRC-unix/
```

This dir contains only a few unix domain socket files used by IBM's System Resource Controller, so it is of no interest for getting ttynames.

Maybe we should bind STDERR to /dev/null

o I sometimes get :
"Can't access `pctmem' field in class Proc::ProcessTable::Process"

It comes from the AUTOLOAD function defined in Process.pm. How come we are able to access fields like "pctcpu" but not "pctmem" ? I am puzzled.

We may chenge the 'croak' statement to a 'warn' but it'd be better if we knew where this error comes from.

o Hidden ones ? I bet there is some ...

Thanks

======
Daniel J. Urist <durist@world.std.com>
Vic
Abell <abe@purdue.edu>
Jussi Maki <Jussi.Maki@csc.fi>
Cedric Le Goater <LE-GOATER_Cedric@stna.dgac.fr>
Gregory Kurz <KURZ_Gregory@stna.dgac.fr>

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--
David Paquet
david-paquet@usa.net

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```

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```
/*
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*/
```

Found in path(s):
* /libproc-processtable-perl-0-636-orig-tar-gz/Proc-ProcessTable-0.636/os/OpenBSD.c
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/*alan.martin@oracle.com
* Copyright (c) 1998 by Mike Romberg (romberg@fsl.noaa.gov)
* This file may be distributed under the same terms as Perl.
*
* This will probably only work under HPUX-10 or later.
*
* 8/26/99 Added "fname" field for consistency with other OS's - D. Urist
*
*/

Found in path(s):
* /libproc-processtable-perl-0-636-orig-tar-gz/Proc-ProcessTable-0.636/os/HPUX.c
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Proc::ProcessTable

Please use rt.cpan.org to submit bugs and patches.

MAINTENANCE STATUS
==========
This module is now being lightly "maintained" by Jonathan Swartz <swartz@pobox.com>. I have nearly zero knowledge of the implementation within but wanted to rescue the distribution from abandonment and try to get critical bug fixes out. This will need to be a community effort.

The source is in github -

https://github.com/jwbargsten/perl-proc-processtable

Commit bits will be generously granted, send me your github id.

STATUS
======
This is BETA software; it seems to work, but use at your own risk :)

Currently works on darwin, nonstop-ux, Windows (both native MSWin32 and Cygwin), linux, solaris, aix, hpux, freebsd, irix, dec_osf, bsdi, netbsd, unixware 7.x, SunOS and openbsd. Please see the "README.osname" files for details on individual os implementations. Please see the file PORTING if you are interested
in making it work on something else. Please see the file TODO for a list of issues that need to be addressed (and send me patches!).

Please note that the Windows port is derived from Cygwin code and is therefore covered by the Cygwin license (http://cygwin.com/licensing.html).

Multithread support is now available for Solaris; please see

README.solaris for info. It may work under other OS's as well; please let me know if it does.

Comments, bug reports, patches and especially ports are greatly appreciated. If you want to submit a patch, *please* use standard context-diff format; if you're submitting a port, a tarball of the new files is great.

DESCRIPTION
==========
This module is a first crack at providing a consistent interface to Unix (and maybe other multitasking OS's) process table information. The impetus for this came about with my frustration at having to parse the output of various systems' ps commands to check whether specific processes were running on different boxes
 at a larged mixed Unix site.
The output format of ps was different on each OS, and sometimes changed with each new release of an OS. Also, running a ps subprocess from within a perl or shell script and parsing the output was not a very efficient or aesthetic way to do things.

With this module, you can do things like this:

```
# kill memory pigs
use Proc::ProcessTable;

my $t = Proc::ProcessTable->new;
foreach my $p ( @{$t->table} ) {
    if( $p->pctmem > 95 ){
      $p->kill(9);
    }
}
```

There is another short example in the file "example.pl" in the distribution. For a more elaborate example (in German), see <http://www.linux-magazin.de/ausgabe.1999.02/Proc/proc.html>. <shameless plug> If you can't read German, try my other module, WWW::Babelfish!</shameless plug>

There are also two contributed modules: a module called Proc::Killall contributed by Aaron Sherman to kill all processes whose command-lines match a given pattern, and a module called Proc::Killfam
 by Stephen
Lidie to kill a list of processes and their children. These modules are installed along with Proc::ProcessTable. Pod documentation is included in both of them.

INSTALLATION
==========
This module needs the File::Find and Storable modules in order to work. File::Find is generally included with perl distributions; Storable is available from CPAN.

After unpacking the tar file, do:

```
perl Makefile.PL
make
make test
make install
```

There is embedded POD documentation in ProcessTable.pm and Process/Process.pm.

ACKNOWLEDGEMENTS
==========
Thanks to the many people who have sent in ports and patches. Without them this module would be impossible to support on so many platforms. Patches are noted in the Changes file.

David Paquet <David.Paquet@cnes.fr> AIX port
Mike Romberg <romberg@fsl.noaa.gov> HPUX port
Slaven Rezic <eserte@cs.tu-berlin.de> FreeBSD port
W. Phillip Moore <wpm@ms.com> IRIX port
Peter ? <hooft@natlab.research.philips.com> IRIX version patch
Bernhard Schmalhofer <Bernhard.Schmalhofer@gmx.de> dec_osf port
Sean Eskins <sean@gilasoft.com> bsdi port
Peter Reich <pr@alles.prima.de> netbsd port
Aaron Sherman <ajs@ajs.com> Proc::Killall module
Steve Lidie <sol0@Lehigh.EDU> Killfam.pm module
Martin Lucina <mato@catalyst.net.nz> Unixware 7.x port
Shawn Clifford <shawn.a.clifford@lmco.com> SunOS port
J Robert Ray <jrray@jrray.org> Windows (Cygwin) port.
Tom Wyant <twyant3@comcast.net> Darwin port.
Mike Steinert <mike.steinert@motorola.com> Nonstop-UX port.
<bsd@openbsd.rutgers.edu> Openbsd port.

Please note that Bernard Schmalhofer is no longer able to provide support for the dec_osf port.

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--
Daniel J. Urist
durist@frii.com

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* /libproc-processtable-perl-0-636-orig-tar-gz/Proc-ProcessTable-0.636/README

1.2086 rich 13.7.1-1

1.2086.1 Available under license :

Contributors

The following people have contributed to the development of Rich:

<!-- Add your name below, sort alphabetically by surname. Link to GitHub profile / your home page. -->

- [Patrick Arminio](https://github.com/patrick91)
- [Gregory Beauregard](https://github.com/GBeauregard/pyffstream)
- [Artur Borecki](https://github.com/pufereq)
- [Pedro Aaron](https://github.com/paaaron)
- [Robin Bowes](https://github.com/yo61)
- [Dennis Brakhane](https://github.com/brakhane)
- [Darren Burns](https://github.com/darrenburns)
- [Jim Crist-Harif](https://github.com/jcrist)
- [Ed Davis](https://github.com/davised)
- [Pete Davison](https://github.com/pd93)
- [James Estevez](https://github.com/jstvz)
- [Aryaz Eghbali](https://github.com/AryazE)
- [Oleksis Fraga](https://github.com/oleksis)
- [Andy Gimblett](https://github.com/gimbo)
- [Micha Grny](https://github.com/mgorny)
- [Nok Lam Chan](https://github.com/noklam)
- [Leron Gray](https://github.com/daddycocoaman)
- [Andre Hora](https://github.com/andrehora)
-
 [Kenneth Hoste](https://github.com/boegel)
- [Lanqing Huang](https://github.com/lqhuang)
- [Finn Hughes](https://github.com/finnhughes)
- [Ionite](https://github.com/ionite34)
- [Josh Karpel](https://github.com/JoshKarpel)
- [Jan Katins](https://github.com/jankatins)
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- [Andrew Kettmann](https://github.com/akettmann)
- [Martin Larralde](https://github.com/althonos)
- [Hedy Li](https://github.com/hedythedev)

- [Henry Mai](https://github.com/tanducmai)
- [Luka Mamukashvili](https://github.com/UltraStudioLTD)
- [Alexander Mancevice](https://github.com/amancevice)
- [Will McGugan](https://github.com/willmcgugan)
- [Paul McGuire](https://github.com/ptmcg)
- [Antony Milne](https://github.com/AntonyMilneQB)
- [Michael Milton](https://github.com/multimeric)
- [Martina Oefelein](https://github.com/oefe)
- [Nathan Page](https://github.com/nathanrpage97)
- [Dave Pearson](https://github.com/davep/)
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-
 [Laurent Peuch](https://github.com/psycojoker)
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- [Kylian Point](https://github.com/p0lux)
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- [Sebastin Ramrez](https://github.com/tiangolo)
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- [Gabriele N. Tornetta](https://github.com/p403n1x87)
- [Nils Vu](https://github.com/nilsvu)
- [Arian Mollik Wasi](https://github.com/wasi-master)
-
 [Handhika Yanuar Pratama](https://github.com/theDreamer911)
- [za](https://github.com/za)
- [Motahhar Mokfi](https://github.com/motahhar)
- [Tomer Shalev](https://github.com/tomers)
- [Serkan UYSAL](https://github.com/uysalserkan)
- [Zhe Huang](https://github.com/onlyacat)
- [Adrian Zuber](https://github.com/xadrianzetx)
- [Ke Sun](https://github.com/ksun212)
- [Qiming Xu](https://github.com/xqm32)
- [James Addison](https://github.com/jayaddison)
- [Pierro](https://github.com/xpierroz)
- [Bernhard Wagner](https://github.com/bwagner)
- [Aaron Beaudoin](https://github.com/AaronBeaudoin)

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1.2087 libtext-charwidth-perl 0.04-11build3

1.2087.1 Available under license :

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Text::CharWidth version 0.04
==========

This is a module to provide equivalent feature as wcwidth(3) and
wcswidth(3). This also provides mblen(3) equivalent subroutine.

mbwidth() and mbswidth() are provided subroutines corresponding
wcwidth(3) and wcswidth(3) in C language. The prefix "mb" expresses
that they handles "multibyte character" in C meaning, i.e., character
encoding specified by LC_CTYPE locale.

These subroutines are used to get the width of characters on terminal.
Though most characters have width of 1, there are exceptions.
Fullwidth characters are characters with width of 2. Most of east
Asian characters such as Hiragana, Katakana, Hangul, Han Ideogram
are fullwidth. Combining characters are characters with width of 0.
Unicode has many combining characters like diacritical marks. There
are languages which need combining characters such as Thai and
Vietnamese.

Thus, if you would
like to format international texts on terminal,
you will have to be aware of variation of character width and will

want to use this module.

mblen() returns the number of bytes for the first character of
the given string. In 8bit character encodings, it is always 1.
However, in multibyte encodings, this may be more than 1.

The parameter is given in locale encoding, not UTF-8 string.
(Of course locale encoding is UTF-8 in UTF-8 locales.)

Prerequisites

This module requires your system to have wcwidth(), wcswidth(), and
mblen() functions which are complian with the Single Unix Specification.

Build and Install

Please use standard way to build and install this module:

```
perl Makefile.PL
make
make install
```

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No license file was found, but licenses were detected in source scan.

Below is stub documentation for your module. You'd better edit it!

=head1 NAME

Text::CharWidth - Get number of occupied columns of a string on terminal

=head1 SYNOPSIS

```
 use Text::CharWidth qw(mbwidth mbswidth mblen);
 mbwidth(string);
 mbswidth(string);
 mblen(string);
```

=head1 DESCRIPTION

This module supplies features similar as wcwidth(3) and wcswidth(3)
in C language.

Characters have its own width on terminal depending on locale.
For example, ASCII characters occupy one column per character,
east Asian fullwidth characters (like Hiragana or Han Ideograph)
occupy two columns per character, and combining characters (apperaring
in ISO-8859-11 Thai, Unicode, and so on) occupy zero columns per
character. mbwidth() gives the width of the first character of
the given string and mbswidth() gives the width of the whole given
string.

The names of mbwidth and mbswidth came from "multibyte" versions
of wcwidth and
 wcswidth which are "wide character" versions.

I<mblen(string)> returns number of bytes of the first character of the
string. Please note that a character may consist of multiple
bytes in multibyte encodings such as UTF-8, EUC-JP, EUC-KR,
GB2312, or Big5.

I<mbwidth(string)> returns the width of the first character of the
string. I<mbswidth(string)> returns the width of the whole string.

Parameters are to be given in locale encodings, not always in UTF-8.

=head1 SEE ALSO

locale(5), wcwidth(3), wcswidth(3)

=head1 AUTHOR

Tomohiro KUBOTA, E<lt>kubota@debian.orgE<gt>

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=cut

Found in path(s):
* /libtext-charwidth-perl-0-04-orig-2-tar-bz2/libtext-charwidth-perl-0.04.orig/CharWidth.pm
No license file was found, but licenses were detected in source scan.

/* ppport.h -- Perl/Pollution/Portability Version 2.0002
*
* Automatically Created by Devel::PPPort on Thu Jun 19 12:28:11 2003
*
* Do NOT edit this file directly! -- Edit PPPort.pm instead.
*
* Version 2.x, Copyright (C) 2001, Paul Marquess.
* Version 1.x, Copyright (C) 1999, Kenneth Albanowski.
* This code may be used and distributed under the same license as any
* version of Perl.
*
* This version of ppport.h is designed to support operation with Perl
* installations back to 5.004, and has been tested up to 5.8.0.
*
* If this version of ppport.h is failing during the compilation of this
* module, please check if a newer version of Devel::PPPort is available
* on CPAN before sending a bug report.
*
* If you are using the latest version of Devel::PPPort and it is failing
* during compilation of this module, please send a report to perlbug@perl.com
*
* Include all following information:
*
*
  1. The complete output from running "perl -V"
*
* 2. This file.
*
* 3. The name & version of the module you were trying to build.
*
* 4. A full log of the build that failed.
*
* 5. Any other information that you think could be relevant.
*
*
* For the latest version of this code, please retreive the Devel::PPPort

* module from CPAN.
*
*/

Found in path(s):
* /libtext-charwidth-perl-0-04-orig-2-tar-bz2/libtext-charwidth-perl-0.04.orig/ppport.h

1.2088 lsb-release-minimal 12.0-2

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1.2089 libmbim 1.31.2-0ubuntu3

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Accompany the work with the complete corresponding
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1.2096 zope-interface 6.1-1build1

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1.2097 libtext-iconv-perl 1.7-8build3

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/libtext-iconv-perl-1-7-orig-2-tar-bz2/Text-Iconv-1.7/README: binary file matches

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Text::Iconv Version 1.6

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Description

This module provides a Perl interface to the iconv() codeset
conversion function, as defined by the Single UNIX Specification. For
more details see the POD documentation embedded in the file Iconv.pm,
which will also be installed as Text::Iconv(3) man page.

Prerequisites

Your system should be compliant with the Single UNIX Specification or
at least provide iconv_open(), iconv() and iconv_close() functions
compliant with it.

Note that the possible conversions and the quality of the conversions
depend on the available iconv conversion tables and algorithms, which
are in most cases supplied by the operating system vendor. Some
systems also allow you to build your own tables (e.g., HP-UX,
Tru64
UNIX, and AIX provide the genxlt(1) command).

It is also possible to use a separate iconv library such as GNU
libiconv package, just make sure that the desired library is found
(see <http://www.gnu.org/directory/localization/libiconv.html>).

Building the module

Since the Single UNIX Specification only specifies an interface,
several issues are left to the implementation to define, namely:

1. The supported codesets
2. The supported conversions
3. The names for the supported codesets

Please check your system documentation for the above points.

The module can be built using this sequence of commands:

```
perl Makefile.PL
make
make test
```

On some systems, the iconv functions are in libc; on others (and when you want to use a separate iconv library, such as GNU libiconv), you have to link with -liconv. Makefile.PL tries to automatically detect this. However, if your iconv library is in a non-standard path, you might have to help it.

You can specify library and include paths like this:

```
perl Makefile.PL LIBS='-L/path/to/lib' INC='-I/path/to/include
```

You might also have to do this if you have multiple iconv implementations installed and want to use a specific one.

The purpose of the test scripts (run by "make test") is to check if an iconv library can be found, and if the iconv functions can be called. It is neither intended to find out which conversions are supported, nor to test the quality of the conversions provided by your iconv library. However, since the iconv functions can only be tested by calling them, which in turn requires the specification of codesets to be converted. The test scripts try some conversions which seem to be widely supported. Conversions not supported by your iconv implementation are skipped, but for the purpose outlined above this is no problem, as it shows that the iconv functions are working. There is no standard way to find out which conversions are supported by an implementation.

This is also the reason why Text::Iconv can't provide platform-independent support for codeset identifiers (even if it it would be nice to have).

Installation

```
make install
```

Feedback

Text::Iconv was tested on various platforms and with different iconv implementations.

If you built Text::Iconv on a platform where you needed to specify additional libraries, or where none of the codeset identifiers in the test scripts are supported, please drop me a note.

Thanks

Thanks go to all those who reported bugs and suggested features.

Michael Piotrowski <mxp@dynalabs.de>

Found in path(s):
* /libtext-iconv-perl-1-7-orig-2-tar-bz2/Text-Iconv-1.7/README

1.2098 upower 1.90.3-1

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*/

#ifndef __UP_BACKEND_BSD_PRIVATE_H
#define __UP_BACKEND_BSD_PRIVATE_H

#include
 <gio/gio.h>
#include "up-backend.h"
#include "up-config.h"

#define CONSOLEKIT2_DBUS_NAME                "org.freedesktop.ConsoleKit"
#define CONSOLEKIT2_DBUS_PATH                "/org/freedesktop/ConsoleKit/Manager"
#define CONSOLEKIT2_DBUS_INTERFACE           "org.freedesktop.ConsoleKit.Manager"

GDBusProxy *up_backend_get_seat_manager_proxy (UpBackend  *backend);

UpConfig   *up_backend_get_config            (UpBackend  *backend);


#endif /* __UP_BACKEND_BSD_PRIVATE_H */
```

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1.2102 pyserial 3.5-2

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1.2103 libtracefs 1.8.0-1ubuntu1

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libtracefs(3)
==========

NAME
----
tracefs_event_get_file, tracefs_event_file_read, tracefs_event_file_write, tracefs_event_file_append,

tracefs_event_file_clear, tracefs_event_file_exists - Work with trace event files.

SYNOPSIS

[verse]
--
#include <tracefs.h>

char pass:[*]*tracefs_event_get_file*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const char pass:[*]_event_,
    const char pass:[*]_file_);
char pass:[*]*tracefs_event_file_read*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const char pass:[*]_event_,
    const char pass:[*]_file_, int pass:[*]_psize_);
int *tracefs_event_file_write*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const char pass:[*]_event_,
    const char pass:[*]_file_, const char pass:[*]_str_);
int *tracefs_event_file_append*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const char pass:[*]_event_,
    const char pass:[*]_file_, const char pass:[*]_str_);
int *tracefs_event_file_clear*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const char pass:[*]_event_,
    const char pass:[*]_file_);
bool *tracefs_event_file_exists*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const char pass:[*]_event_,
    const char pass:[*]_file_);
--

DESCRIPTION

These are functions for accessing tracefs event specific files.
These functions act similar to the tracefs instance file functions
but are easier to get to if the system and events are known before hand.

The *tracefs_event_get_file()* returns the full path of the _file_ for
the given _system_ and _event_ that is within the given _instance_.
If _instance_ is NULL, then the file for the _event_ for the top level
instance is returned. Note, there is no check to see if the file actually
exists or even if the system and
event exist. It only creates the path
name for such an event if it did exist. This acts similar to the
tracefs_instance_get_file(3), but is to be used to get to event files
if the _system_ and _event_ are already known.

The *tracefs_event_file_read()* reads the content for the _event_ _file_
for the given _instance_ or the top level instance if _instance_ is
NULL. The content of the file is returned and _psize_ is set to the amount
of data that was read. The returned content must be freed with *free*(3).

This acts similar to the *tracefs_instance_file_read*(3), but is
to be used to read the event file if the _system_ and _event_ are already
known.

The *tracefs_event_file_write()* writes _str_ to the _event_ _file_.
It will truncate anything that is already in that file.
This acts similar to the *tracefs_instance_file_write*(3), but is
to be used to read the event file if the _system_ and _event_ are already
known.

The *tracefs_event_file_append()* appends _str_ to the _event_ _file_.
It
 will not clear out the file as it writes _sting_.
This acts similar to the *tracefs_instance_file_append*(3), but is
to be used to read the event file if the _system_ and _event_ are already
known.

The *tracefs_event_file_clear()* clears the content of the _event_ _file_.
This acts similar to the *tracefs_instance_file_clear*(3), but is
to be used to read the event file if the _system_ and _event_ are already
known.

The *tracefs_event_file_exists()* returns true if the _event_ _file_
exists, and false otherwise. This acts similar to the *tracefs_instance_file_exists*(3),
but is to be used to read the event file if the _system_ and _event_ are already
known.

RETURN VALUE
---
tracefs_event_get_file() returns the path of the given _system_/_event_ _file_ on
success and NULL on error. The return value must be freed with *tracefs_put_tracing_file*(3).

tracefs_event_file_read() reads the content of the _system_/_event_ _file_ or
NULL on error. The return pointer must
 be freed with *free*(3).

tracefs_event_file_write() and *tracefs_event_file_append()* returns the number of
bytes written to the _system_/_event_ _file_ or negative on error.

tracefs_event_file_clear() returns zero on success and -1 on error.

tracefs_event_file_exists() returns true if the _system_/_event_ _file_ exists for
the given _instance_ (or top level if _instance_ is NULL) or false otherwise.

EXAMPLE

[source,c]
--

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <tracefs.h>

int main(int argc, char **argv)
{
 char *system;
 char *event;
 char *file;
 char *cmd = NULL;
 char *buf;
 char *str;
 char ch = 'r';
 int size;

 if (argc < 4) {
  printf("usage: %s sytem event file [(-a|-w) write | -c]\n"
         "   reads the system/event file or writes if [write is supplied]\n",
         argv[0]);
  exit(0);
 }

 system = argv[1];
 event = argv[2];
 file = argv[3];
 if (argc > 4)
  cmd = argv[4];

 if (!tracefs_event_file_exists(NULL, system, event,
 file)) {
  fprintf(stderr, "File %s/%s/%s does not exist\n",
    system, event, file);
  exit(-1);
 }

 if (cmd) {
  if (cmd[0] != '-')
   ch = cmd[0];
  else
   ch = cmd[1];
  if (!ch)
   ch = 'c';
 }

 switch (ch) {
 case 'r':
  buf = tracefs_event_file_read(NULL, system, event, file, &size);
```

```
  if (buf)
   printf("%s", buf);
  else
   fprintf(stderr, "Failed to read %s/%s/%s\n",
    system, event, file);
  free(buf);
  break;
 case 'w':
 case 'a':
  if (argc < 6) {
   fprintf(stderr, "%s command requires something to write\n",
    ch == 'w' ? "write" : "append");
   exit(-1);
  }
  if (ch == 'w')
   size = tracefs_event_file_write(NULL, system, event, file, argv[5]);
  else
   size = tracefs_event_file_append(NULL, system, event, file, argv[5]);
  if (size < 0) {
   fprintf(stderr, "Failed to write '%s' to %s/%s/%s\n",
     argv[5], system, event, file);
   exit(-1);
  }
  break;
 case 'c':
  if (tracefs_event_file_clear(NULL, system, event, file) < 0) {
   fprintf(stderr, "Failed
 to clear %s/%s/%s\n",
    system, event, file);
   exit(-1);
  }
  break;
 default:
  fprintf(stderr, "Unknown command '%c'\n", ch);
  exit(-1);
 }
 exit(0);
}
--
FILES
-----
[verse]
--
*tracefs.h*
 Header file to include in order to have access to the library APIs.
*-ltracefs*
 Linker switch to add when building a program that uses the library.
--
```

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

[verse]
--
Steven Rostedt <rostedt@goodmis.org>
--
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libtracefs(3)
==========

NAME
---
tracefs_hist_start, tracefs_hist_destroy, tracefs_hist_pause,
tracefs_hist_continue, tracefs_hist_reset - Pause, continue, or clear an existing histogram

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_hist_start*(struct tracefs_instance pass:[*]_instance_, struct tracefs_hist pass:[*]_hist_);
int *tracefs_hist_destroy*(struct tracefs_instance pass:[*]_instance_, struct tracefs_hist pass:[*]_hist_);
int *tracefs_hist_pause*(struct tracefs_instance pass:[*]_instance_, struct tracefs_hist pass:[*]_hist_);
int *tracefs_hist_continue*(struct tracefs_instance pass:[*]_instance_, struct tracefs_hist pass:[*]_hist_);
int *tracefs_hist_reset*(struct tracefs_instance pass:[*]_instance_, struct tracefs_hist pass:[*]_hist_);

--

DESCRIPTION
---

tracefs_hist_start() is called to actually start the histogram _hist_.
The _instance_ is the instance to start the histogram
 in, NULL if it
should start at the top level.

tracefs_hist_pause() is called to pause the histogram _hist_.
The _instance_ is the instance to pause the histogram in, NULL if it
is in the top level.

tracefs_hist_continue() is called to continue a paused histogram _hist_.
The _instance_ is the instance to continue the histogram, NULL if it
is in the top level.

tracefs_hist_reset() is called to clear / reset the histogram _hist_.
The _instance_ is the instance to clear the histogram, NULL if it
is in the top level.

tracefs_hist_destroy() is called to delete the histogram where it will no longer
exist. The _instance_ is the instance to delete the histogram from, NULL if it
is in the top level.

RETURN VALUE

All the return zero on success or -1 on error.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <tracefs.h>

enum commands {
 START,
 PAUSE,
 CONT,
 RESET,
```

```
 DELETE,
 SHOW,
};

int main (int argc, char **argv, char **env)
{
 struct tracefs_instance
 *instance;
 struct tracefs_hist *hist;
 struct tep_handle *tep;
 enum commands cmd;
 char *cmd_str;
 int ret;

 if (argc < 2) {
  fprintf(stderr, "usage: %s command\n", argv[0]);
  exit(-1);
 }

 cmd_str = argv[1];

 if (!strcmp(cmd_str, "start"))
  cmd = START;
 else if (!strcmp(cmd_str, "pause"))
  cmd = PAUSE;
 else if (!strcmp(cmd_str, "cont"))
  cmd = CONT;
 else if (!strcmp(cmd_str, "reset"))
  cmd = RESET;
 else if (!strcmp(cmd_str, "delete"))
  cmd = DELETE;
 else if (!strcmp(cmd_str, "show"))
  cmd = SHOW;
 else {
  fprintf(stderr, "Unknown command %s\n", cmd_str);
  exit(-1);
 }

 tep = tracefs_local_events(NULL);
 if (!tep) {
  perror("Reading tracefs");
  exit(-1);
 }

 instance = tracefs_instance_create("hist_test");
 if (!instance) {
  fprintf(stderr, "Failed instance create\n");
  exit(-1);
```

```
}

hist = tracefs_hist_alloc_2d(tep, "kmem", "kmalloc",
        "call_site",TRACEFS_HIST_KEY_SYM,
        "bytes_req", 0);
if (!hist) {
 fprintf(stderr, "Failed hist create\n");
 exit(-1);
}

ret
= tracefs_hist_add_value(hist, "bytes_alloc");
ret |= tracefs_hist_add_sort_key(hist, "bytes_req");
ret |= tracefs_hist_add_sort_key(hist, "bytes_alloc");

ret |= tracefs_hist_sort_key_direction(hist, "bytes_alloc",
          TRACEFS_HIST_SORT_DESCENDING);
if (ret) {
 fprintf(stderr, "Failed modifying histogram\n");
 exit(-1);
}

tracefs_error_clear(instance);

switch (cmd) {
case START:
 ret = tracefs_hist_start(instance, hist);
 if (ret) {
  char *err = tracefs_error_last(instance);
  if (err)
   fprintf(stderr, "\n%s\n", err);
 }
 break;
case PAUSE:
 ret = tracefs_hist_pause(instance, hist);
 break;
case CONT:
 ret = tracefs_hist_continue(instance, hist);
 break;
case RESET:
 ret = tracefs_hist_reset(instance, hist);
 break;
case DELETE:
 ret = tracefs_hist_destroy(instance, hist);
 break;
case SHOW: {
 char *content;
 content = tracefs_event_file_read(instance, "kmem", "kmalloc",
```

```
        "hist", NULL);
  ret = content ?
 0 : -1;
  if (content) {
   printf("%s\n", content);
   free(content);
  }
  break;
 }
 }
 if (ret)
  fprintf(stderr, "Failed: command\n");
 exit(ret);
}
```

--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1),
tracefs_hist_alloc(3),
tracefs_hist_alloc_2d(3),
tracefs_hist_alloc_nd(3),
tracefs_hist_free(3),
tracefs_hist_add_key(3),
tracefs_hist_add_value(3),
tracefs_hist_add_name(3),
tracefs_hist_start(3),
tracefs_hist_destory(3),
tracefs_hist_add_sort_key(3),
tracefs_hist_sort_key_direction(3)

AUTHOR

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--
REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org>

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libtracefs(3)
==========

NAME
---
tracefs_cpu_read_buf, tracefs_cpu_buffered_read_buf, tracefs_cpu_flush_buf
- Reading trace_pipe_raw data returning a kbuffer

SYNOPSIS

[verse]
--
#include <tracefs.h>

struct kbuffer pass:[*]*tracefs_cpu_read_buf*(struct tracefs_cpu pass:[*]_tcpu_, bool _nonblock_);
struct kbuffer pass:[*]*tracefs_cpu_buffered_read_buf*(struct tracefs_cpu pass:[*]_tcpu_, bool _nonblock_);
struct kbuffer pass:[*]*tracefs_cpu_flush_buf*(struct tracefs_cpu pass:[*]_tcpu_);
--

DESCRIPTION

This set of APIs can be used to read the raw data from the trace_pipe_raw

files in the tracefs file system and return a kbuffer structure to read it with.

The *tracefs_cpu_read_buf()* reads the trace_pipe_raw files associated to _tcpu_
and returns a kbuffer structure that can be used to iterate the events.
If _nonblock_ is set, and there's no data available, it will return immediately.
Otherwise
 depending on how _tcpu_ was opened, it will block. If _tcpu_ was
opened with nonblock set, then this _nonblock_ will make no difference.

The *tracefs_cpu_buffered_read_buf()* is basically the same as *tracefs_cpu_read_buf()*
except that it uses a pipe through splice to buffer reads. This will batch
reads keeping the reading from the ring buffer less intrusive to the system,
as just reading all the time can cause quite a disturbance. Note, one
difference between this and *tracefs_cpu_read()* is that it will read only in
sub buffer pages. If the ring buffer has not filled a page, then it will not
return anything, even with _nonblock_ set. Calls to *tracefs_cpu_flush_buf()*
or *tracefs_cpu_flush()* should be done to read the rest of the file at the
end of the trace.

The *tracefs_cpu_flush_buf()* reads the trace_pipe_raw file associated by the
tcpu and puts it into _buffer_, which must be the size of the sub buffer
which is retrieved. This should be called at the end of tracing
to
 get the rest of the data. This call will convert the file descriptor of
trace_pipe_raw into non-blocking mode.

RETURN VALUE

The functions *tracefs_cpu_read_buf()*, tracefs_cpu_buffered_read_buf()* and
tracefs_cpu_flush() returns a kbuffer descriptor that can be iterated
over to find the events. Note, this descriptor is part of the tracefs_cpu structure
and should not be freed. It will be freed. It returns NULL on error or if nonblock
is set and there are no events available. In the case of no events, errno will be
set with EAGAIN.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <ctype.h>
#include <tracefs.h>

static void read_page(struct tep_handle *tep, struct kbuffer *kbuf)
{
 static struct trace_seq seq;
 struct tep_record record;
```

```
 if (seq.buffer)
  trace_seq_reset(&seq);
 else
  trace_seq_init(&seq);

 while ((record.data = kbuffer_read_event(kbuf, &record.ts))) {
  record.size = kbuffer_event_size(kbuf);
  kbuffer_next_event(kbuf, NULL);
  tep_print_event(tep,
 &seq, &record,
    "%s-%d %9d\t%s: %s\n",
    TEP_PRINT_COMM,
    TEP_PRINT_PID,
    TEP_PRINT_TIME,
    TEP_PRINT_NAME,
    TEP_PRINT_INFO);
  trace_seq_do_printf(&seq);
  trace_seq_reset(&seq);
 }
}

int main (int argc, char **argv)
{
 struct tracefs_cpu *tcpu;
 struct tep_handle *tep;
 struct kbuffer *kbuf;
 int cpu;

 if (argc < 2 || !isdigit(argv[1][0])) {
  printf("usage: %s cpu\n\n", argv[0]);
  exit(-1);
 }

 cpu = atoi(argv[1]);

 tep = tracefs_local_events(NULL);
 if (!tep) {
  perror("Reading trace event formats");
  exit(-1);
 }

 tcpu = tracefs_cpu_open(NULL, cpu, 0);
 if (!tcpu) {
  perror("Open CPU 0 file");
  exit(-1);
 }

 while ((kbuf = tracefs_cpu_buffered_read_buf(tcpu, true))) {
```

```
 read_page(tep, kbuf);
}

kbuf = tracefs_cpu_flush_buf(tcpu);
if (kbuf)
 read_page(tep, kbuf);

tracefs_cpu_close(tcpu);
tep_free(tep);

return 0;
}
```

--

FILES

[verse]

--

tracefs.h

Header file to include in order to have access to the library APIs.

-ltracefs

Linker

switch to add when building a program that uses the library.

--

SEE ALSO

---

tracefs_cpu_open(3)

tracefs_cpu_close(3)

tracefs_cpu_read(3)

tracefs_cpu_buffered_read(3)

tracefs_cpu_flush(3)

libtracefs(3),

libtraceevent(3),

trace-cmd(1)

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libtracefs(3)
==========

NAME
---
tracefs_synth_alloc, tracefs_synth_add_match_field, tracefs_synth_add_compare_field,
tracefs_synth_add_start_field,
tracefs_synth_add_end_field, tracefs_synth_append_start_filter, tracefs_synth_append_end_filter,
tracefs_synth_free,
- Creation of a synthetic event descriptor

SYNOPSIS

[verse]
--
#include <tracefs.h>

```
struct tracefs_synth pass:[*]*tracefs_synth_alloc*(struct tep_handle pass:[*]_tep_,
      const char pass:[*]_name_,
      const char pass:[*]_start_system_,
      const char pass:[*]_start_event_,
      const char pass:[*]_end_system_,
      const char pass:[*]_end_event_,
      const char pass:[*]_start_match_field_,
      const char pass:[*]_end_match_field_,
      const char pass:[*]_match_name_);
int *tracefs_synth_add_match_field*(struct tracefs_synth pass:[*]_synth_,
      const char pass:[*]_start_match_field_,
      const char pass:[*]_end_match_field_,

  const char pass:[*]_name_);
int *tracefs_synth_add_compare_field*(struct tracefs_synth pass:[*]_synth_,
        const char pass:[*]_start_compare_field_,
        const char pass:[*]_end_compare_field_,
```

```
        enum tracefs_synth_calc _calc_,
        const char pass:[*]_name_);
int *tracefs_synth_add_start_field*(struct tracefs_synth pass:[*]_synth_,
      const char pass:[*]_start_field_,
      const char pass:[*]_name_);
int *tracefs_synth_add_end_field*(struct tracefs_synth pass:[*]_synth_,
    const char pass:[*]_end_field_,
    const char pass:[*]_name_);
int *tracefs_synth_append_start_filter*(struct tracefs_synth pass:[*]_synth_,
          struct tracefs_filter _type_,
          const char pass:[*]_field_,
          enum tracefs_synth_compare _compare_,
          const char pass:[*]_val_);
int *tracefs_synth_append_end_filter*(struct tracefs_synth pass:[*]_synth_,
        struct tracefs_filter _type_,
        const char pass:[*]_field_,
        enum tracefs_synth_compare
 _compare_,
        const char pass:[*]_val_);
void *tracefs_synth_free*(struct tracefs_synth pass:[*]_synth_);
```

--

DESCRIPTION

Synthetic events are dynamic events that are created by matching two other events which triggers a synthetic event. One event is the starting event which some field is recorded, and when the second event is executed, if it has a field (or fields) that matches the starting event's field (or fields) then it will trigger the synthetic event. The field values other than the matching fields may be passed from the starting event to the end event to perform calculations on, or to simply pass as a parameter to the synthetic event.

One common use case is to set "sched_waking" as the starting event. This event is triggered when a process is awoken. Then set "sched_switch" as the ending event. This event is triggered when a new task is scheduled on the CPU. By setting the "common_pid" of both events as the matching fields, the time between the two events
 is considered the wake up latency of that process. Use *TRACEFS_TIMESTAMP* as a field for both events to calculate the delta in nanoseconds, or use *TRACEFS_TIMESTAMP_USECS" as the compare fields for both events to calculate the delta in microseconds. This is used as the example below.

tracefs_synth_alloc() allocates and initializes a synthetic event. It does not create the synthetic event, but supplies the minimal information to do so. See *tracefs_synth_create*(3) for how to create the synthetic event in the system. It requires a _tep_ handler that can be created by *tracefs_local_events*(3) for more information. The _name_ holds the name of the synthetic event that will be created. The _start_system_ is the name

of the system for the starting event. It may be NULL and the first event
with the name of _start_event_ will be chosen. The _end_system_ is the
name of the system for theh ending event. It may be NULL and the first event
with the name of _end_event_ will be chosen as the
ending event. If _match_name_
is given, then this will be the field of the created synthetic event that
holds the matching keys of the starting event's _start_match_field_ and
the ending event's _end_match_field_. If _match_name_ is NULL, then it will
not be recorded in the created synthetic event.

tracefs_synth_add_match_field() will add a second key to match between the
starting event and the ending event. If _name_ is given, then the content
of the matching field will be saved by this _name_ in the synthetic event.
The _start_match_field_ is the field of the starting event to mach with the
ending event's _end_match_field_.

tracefs_synth_add_compare_field() is used to compare the _start_compare_field_
of the starting event with the _end_compare_field_ of the ending event. The _name_
must be given so that the result will be saved by the synthetic event. It makes
no sense to not pass this to the synthetic event after doing the work of
the compared fields, as it serves no other
purpose. The _calc_ parameter
can be one of:

TRACEFS_SYNTH_DELTA_END - calculate the difference between the content in
the _end_compare_field_ from the content of the _start_compare_field_.

name = _end_compare_field_ - _start_compare_field_

TRACEFS_SYNTH_DELTA_START - calculate the difference between the content in
the _start_compare_field_ from the content of the _end_compare_field_.

name = _start_compare_field_ - _end_compare_field_

TRACEFS_SYNTH_ADD - Add the content of the _start_compare_field_ to the
content of the _end_compare_field_.

name = _start_compare_field_ + _end_compare_field_

tracefs_synth_add_start_field() - Records the _start_field_ of the starting
event as _name_ in the synthetic event. If _name_ is NULL, then the name used
will be the same as _start_field_.

tracefs_synth_add_end_field() - Records the _end_field_ of the ending
event as _name_ in the synthetic event. If _name_ is NULL, then the name used
will be the same as _end_field_.

tracefs_synth_append_start_filter()

creates a filter or appends to it for the
starting event. Depending on _type_, it will build a string of tokens for
parenthesis or logic statements, or it may add a comparison of _field_
to _val_ based on _compare_.

If _type_ is:
TRACEFS_FILTER_COMPARE - See below
TRACEFS_FILTER_AND - Append "&&" to the filter
TRACEFS_FILTER_OR - Append "||" to the filter
TRACEFS_FILTER_NOT - Append "!" to the filter
TRACEFS_FILTER_OPEN_PAREN - Append "(" to the filter
TRACEFS_FILTER_CLOSE_PAREN - Append ")" to the filter

field, _compare_, and _val_ are ignored unless _type_ is equal to
TRACEFS_FILTER_COMPARE, then _compare will be used for the following:

TRACEFS_COMPARE_EQ - _field_ == _val_

TRACEFS_COMPARE_NE - _field_ != _val_

TRACEFS_COMPARE_GT - _field_ > _val_

TRACEFS_COMPARE_GE - _field_ >= _val_

TRACEFS_COMPARE_LT - _field_ < _val_

TRACEFS_COMPARE_LE - _field_ <pass:[=] _val_

TRACEFS_COMPARE_RE
- _field_ ~ "_val_" : where _field_ is a string.

TRACEFS_COMPARE_AND - _field_ & _val_ : where _field_ is a flags field.

tracefs_synth_append_end_filter() is the same as *tracefs_synth_append_start_filter* but
filters on the ending event.

tracefs_synth_free() frees the allocated descriptor returned by
tracefs_synth_alloc().

RETURN VALUE
---
tracefs_synth_alloc() returns an allocated struct tracefs_synth descriptor
on success or NULL on error.

All other functions that return an integer returns zero on success or -1
on error.

ERRORS

The following errors are for all the above calls:

EPERM Not run as root user when required.

EINVAL Either a parameter is not valid (NULL when it should not be)
 or a field that is not compatible for calculations.

ENODEV An event or one of its fields is not found.

EBADE The fields of the start and end events are not compatible for
 either matching or comparing.

ENOMEM not enough memory is available.

And
 more errors may have happened from the system calls to the system.

EXAMPLE

[source,c]
--
```c
#include <stdlib.h>
#include <tracefs.h>

#define start_event "sched_waking"
#define start_field "pid"

#define end_event "sched_switch"
#define end_field "next_pid"

#define match_name "pid"

static struct tracefs_synth *synth;

static void make_event(void)
{
 struct tep_handle *tep;

 /* Load all events from the system */
 tep = tracefs_local_events(NULL);

 /* Initialize the synthetic event */
 synth = tracefs_synth_alloc(tep, "wakeup_lat",
        NULL, start_event,
        NULL, end_event,
        start_field, end_field,
        match_name);
```

```
/* The tep is no longer needed */
tep_free(tep);


/* Save the "prio" field as "prio" from the start event */
tracefs_synth_add_start_field(synth, "prio", NULL);

/* Save the "next_comm" as "comm" from the end event */
tracefs_synth_add_end_field(synth, "next_comm", "comm");

/* Save the "prev_prio" as "prev_prio" from the end event */
tracefs_synth_add_end_field(synth,
"prev_prio", NULL);

/*
 * Take a microsecond time difference between end and start
 * and record as "delta"
 */
tracefs_synth_add_compare_field(synth, TRACEFS_TIMESTAMP_USECS,
    TRACEFS_TIMESTAMP_USECS,
    TRACEFS_SYNTH_DELTA_END, "delta");

/* Only record if start event "prio" is less than 100 */
tracefs_synth_append_start_filter(synth, TRACEFS_FILTER_COMPARE,
      "prio", TRACEFS_COMPARE_LT, "100");

/*
 * Only record if end event "next_prio" is less than 50
 * or the previous task's prio was not greater than or equal to 100.
 *   next_prio < 50 || !(prev_prio >= 100)
 */
tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_COMPARE,
    "next_prio", TRACEFS_COMPARE_LT, "50");
tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_OR, NULL, 0, NULL);
tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_NOT, NULL, 0, NULL);
tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_OPEN_PAREN, NULL, 0, NULL);
tracefs_synth_append_end_filter(synth,
TRACEFS_FILTER_COMPARE,
    "prev_prio", TRACEFS_COMPARE_GE, "100");
/*
 * Note, the above only added: "next_prio < 50 || !(prev_prio >= 100"
 * That's because, when the synth is executed, the remaining close parenthesis
 * will be added. That is, the string will end up being:
 * "next_prio < 50 || !(prev_prio >= 100)" when one of tracefs_sync_create()
 * or tracefs_sync_echo_cmd() is run.
 */
}
```

```
/* Display how to create the synthetic event */
static void show_event(void)
{
 struct trace_seq s;

 trace_seq_init(&s);

 tracefs_synth_echo_cmd(&s, synth);
 trace_seq_terminate(&s);
 trace_seq_do_printf(&s);
 trace_seq_destroy(&s);
}

int main (int argc, char **argv)
{
 make_event();

 if (argc > 1) {
  if (!strcmp(argv[1], "create")) {
   /* Create the synthetic event */
   tracefs_synth_create(synth);
  } else if (!strcmp(argv[1], "delete")) {
   /* Delete the synthetic event */
   tracefs_synth_destroy(synth);
  } else {
   printf("usage: %s [create|delete]\n",
 argv[0]);
   exit(-1);
  }
 } else
  show_event();

 tracefs_synth_free(synth);

 return 0;
}
```
--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
tracefs_synth_create(3),
tracefs_synth_destroy(3),
tracfes_synth_echo_cmd(3),
libtracefs(3),
libtraceevent(3),
trace-cmd(1),
tracefs_hist_alloc(3),
tracefs_hist_alloc_2d(3),
tracefs_hist_alloc_nd(3),
tracefs_hist_free(3),
tracefs_hist_add_key(3),
tracefs_hist_add_value(3),
tracefs_hist_add_name(3),
tracefs_hist_start(3),
tracefs_hist_destory(3),
tracefs_hist_add_sort_key(3),
tracefs_hist_sort_key_direction(3),
tracefs_synth_create(3),
tracefs_synth_destroy(3),
tracefs_synth_complete(3),
tracefs_synth_trace(3),
tracefs_synth_snapshot(3),
tracefs_synth_save(3),
tracefs_synth_echo_cmd(3),
tracefs_synth_get_start_hist(3),
tracefs_synth_get_name(3),
tracefs_synth_raw_fmt(3),
tracefs_synth_show_event(3),
tracefs_synth_show_start_hist(3),
tracefs_synth_show_end_hist(3),
tracefs_synth_get_event(3),

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libtracefs(3)
==========

NAME
----
tracefs_filter_pid_function, tracefs_filter_pid_events, tracefs_filter_pid_function_clear,
tracefs_filter_pid_events_clear -
Add and remove PID filtering for functions and events

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_filter_pid_function*(struct tracefs_instance pass:[*]_instance,_ int _pid_,
    bool _reset_, bool _notrace_);
int *tracefs_filter_pid_function_clear*(struct tracefs_instance pass:[*]_instance_, bool _notrace_);
int *tracefs_filter_pid_events*(struct tracefs_instance pass:[*]_instance_, int _pid_,

bool _reset_, bool _notrace_);
int *tracefs_filter_pid_events_clear*(struct tracefs_instance pass:[*]_instance_, bool _notrace_);
--

DESCRIPTION

Both events and functions can be filtered by PID, but they are done separately.
PID filtering for functions affect the function and function_graph tracer, where
as PID filtering for
events affect all events such as _sched_switch_ and _sched_waking_.
If the *TRACEFS_OPTION_FUNCTION_FORK* is enabled (see *tracefs_option_enable*(3)),
any PID that is set as part of the function PID filtering will automatically
have its children added when they are spawned, as well as the PID removed when
they exit. If the *TRACEFS_OPTION_EVENT_FORK* is set, the same is true for
event PID filtering. This also includes the _notrace_ option where the child
threads and processes of PIDs that are labled as notrace will also not be
traced.

The *tracefs_filter_pid_function()* affects function PID filtering and *tracefs_filter_pid_events()*
affects the PID event filtering. For both functions, they add a _pid_ to be filtered in the given _instance_.
If _reset_ is true, then any PIDs already being filtered will be removed, otherwise
the _pid_ is simply added to the filtering. If _notrace_ is true, then the PID
is added to the list of PIDs that are not to be traced. Note, that _reset_ only affects
the
list associated with _notrace_. That is, if both _reset_ and _notrace_ are true,
then it will not affect PIDs that are to be traced. Same is if _reset_ is true and _notrace_
is false, it will not affect PIDs that are not to be traced.

The *tracefs_filter_pid_function_clear()* affects function PID filtering and
tracefs_filter_pid_events_clear() affects the PID event filtering. For both
functions it will clear all the PIDs that are being filtered for the given
filter. If _notrace_ is true it clears all the PIDs that are not to be traced
otherwise if it is false, it clears all the PIDs that are to be traced.

RETURN VALUE

All the functions return 0 on success and -1 on error.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <stdio.h>
#include <ctype.h>
#include <tracefs.h>

static void usage(char **argv)
```

```
{
 fprintf(stderr, "usage: %s [-e|-f][-c|-n] pid [pid ...]\n", argv[0]);
 fprintf(stderr, "   -e enable event filter\n");
 fprintf(stderr, "   -f enable
 function filter\n");
 fprintf(stderr, "     (default is both, function and event)\n");
 fprintf(stderr, "   -c clear the filter\n");
 fprintf(stderr, "   -n notrace filter\n");
 exit(-1);
}

int main (int argc, char **argv)
{
 bool events = false;
 bool funcs = false;
 bool neg = false;
 bool clear = false;
 bool reset = true;
 int i;

 for (i = 1; i < argc && argv[i][0] == '-'; i++) {
  char *arg = argv[i];
  int c;
  for (c = 1; arg[c]; c++) {
   switch (arg[c]) {
   case 'e': events = true; break;
   case 'f': funcs = true; break;
   case 'n': neg = true; break;
   case 'c': clear = true; break;
   default:
    usage(argv);
   }
  }
  if (c == 1)
   usage(argv);
 }

 if (i == argc && !clear)
  usage(argv);

 if (!events && !funcs) {
  events = true;
  funcs = true;
 }

 if (clear) {
  if (events)
   tracefs_filter_pid_events_clear(NULL, neg);
```

```
 if (funcs)
  tracefs_filter_pid_function_clear(NULL, neg);
 exit(0);
}

for (; i < argc; i++) {
 int pid = atoi(argv[i]);

 if (events)
  tracefs_filter_pid_events(NULL,
pid, reset, neg);
 if (funcs)
  tracefs_filter_pid_function(NULL, pid, reset, neg);

 reset = false;
}

exit(0);
}
```

--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1),
tracefs_hist_alloc(3),
tracefs_hist_alloc_2d(3),
tracefs_hist_alloc_nd(3),
tracefs_hist_free(3),
tracefs_hist_add_key(3),
tracefs_hist_add_value(3),
tracefs_hist_add_name(3),
tracefs_hist_start(3),
tracefs_hist_destory(3),
tracefs_hist_add_sort_key(3),
tracefs_hist_sort_key_direction(3)

AUTHOR

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--
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libtracefs(3)
==========

NAME
---
tracefs_tracers, tracefs_tracer_available, tracefs_get_clock, tracefs_list_free,
tracefs_list_add, tracefs_list_size - Helper functions for working with trace file system.

SYNOPSIS

[verse]
--
#include <tracefs.h>

char pass:[*]pass:[*]*tracefs_tracers*(const char pass:[*]_tracing_dir_);
bool *tracefs_tracer_available*(const char pass:[*]_tracing_dir_, const char pass:[*]_tracer_);
char pass:[*]*tracefs_get_clock*(struct tracefs_instance pass:[*]_instance_);
void *tracefs_list_free*(char pass:[*]pass:[*]_list_);
char pass:[**]*tracefs_list_add*(char **_list_, const char *_string_);

int *tracefs_list_size*(char pass:[**]_list_);
--

DESCRIPTION

Various useful functions for working with trace file system.

The *tracefs_tracers()* function returns array of strings with the
names of supported tracer plugins, located in the given _tracing_dir_
directory. This could
be NULL or the location of the tracefs mount point
for the trace systems of the local machine, or it may be a path to a copy
of the tracefs directory from another machine. The last entry in the array
as a NULL pointer. The array must be freed with *tracefs_list_free()* API.

The *tracefs_tracer_available()* returns true if the _tracer_ is available
in the given _tracing_dir_director_, and false otherwise.

The *tracefs_get_clock()* function returns name of the current trace clock,
used in the given _instance_. If _instance_ is NULL, the clock of the main
trace instance is returned. The returned string must be freed with free().

The *tracefs_list_free()* function frees an array of strings, returned by
tracefs_event_systems(), *tracefs_system_events()* and *tracefs_tracers()*
APIs.

The *tracefs_list_add()* function adds _string_ to the string _list_. If
list is NULL, then a new list is created with the first element a copy
of _string_, and the second element will be a NULL pointer.
If _list_ is
not NULL, then it is reallocated to include a new element and a NULL terminator,
and the new allocated array is returned. The list passed in should be ignored,
as it wil be freed if a new one was allocated.

The *tracefs_list_size()* is a fast way to find out the number of elements
in a string array that is to be freed with *tracefs_list_free()*. Note, this
depends on meta data that is created for these lists and will not work on
normal string arrays like argv.

RETURN VALUE

The *tracefs_tracers()* returns array of strings. The last element in that
array is a NULL pointer. The array must be freed with *tracefs_list_free()* API.
In case of an error, NULL is returned.

The *tracefs_tracer_available()* returns true if the _tracer_ is available,
and false otherwise.

The *tracefs_get_clock()* returns string, that must be freed with free(), or NULL in case of an error.

The *tracefs_list_add()* returns an allocated string array that must be freed with *tracefs_list_free()*
 on success or NULL on error. If NULL is returned,
then the passed in _list_ is untouched. Thus, *tracefs_list_add()* should be treated similarly to *realloc*(3).

The *tracefs_list_size()* returns the number of strings in the _list_. The passed in list must be one that is to be freed with *tracefs_list_free()* as the list has meta data that is used to determine the size and this does not work on any normal string array like argv.

EXAMPLE

[source,c]
--
```
#include <tracefs.h>

char **tracers = tracefs_tracers(NULL);

 if (tracers) {
  /* Got tracer plugins from the top trace instance */
  ...
  tracefs_list_free(tracers);
 }
....
char *clock = tracefs_get_clock(NULL);

 if (clock) {
  /* Got current trace clock of the top trace instance */
  ...
  free(clock);
 }
```
--
FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---

libtracefs(3),
libtraceevent(3),
trace-cmd(1)

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libtracefs(3)
==========

NAME
---
tracefs_iterate_raw_events, tracefs_iterate_stop, tracefs_follow_event, tracefs_follow_missed_events, tracefs_follow_event_clear, tracefs_follow_missed_events_clear, tracefs_iterate_snapshot_events - Iterate over events in the ring buffer

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_iterate_raw_events*(struct tep_handle pass:[*]_tep_, struct tracefs_instance pass:[*]_instance_,
    cpu_set_t pass:[*]_cpus_, int _cpu_size_,
    int (pass:[*]_callback_)(struct tep_event pass:[*], struct tep_record pass:[*], int, void pass:[*]),
    void pass:[*]_callback_context_);
void *tracefs_iterate_stop*(struct tracefs_instance pass:[*]_instance_);

int *tracefs_follow_event*(struct tep_handle pass:[*]_tep_, struct tracefs_instance pass:[*]_instance_,
    const char pass:[*]_system_, const char pass:[*]_event_name_,
    int (pass:[*]_callback_)(struct tep_event pass:[*],

  struct tep_record pass:[*],
      int, void pass:[*]),
    void pass:[*]_callback_data_);
int *tracefs_follow_missed_events*(struct tracefs_instance pass:[*]_instance_,
    int (pass:[*]_callback_)(struct tep_event pass:[*],
      struct tep_record pass:[*],
      int, void pass:[*]),
    void pass:[*]_callback_data_);

int *tracefs_follow_event_clear*(struct tracefs_instance pass:[*]_instance_,
    const char pass:[*]_system_, const char pass:[*]_event_name_);
int *tracefs_follow_missed_events_clear*(struct tracefs_instance pass:[*]_instance_);

int *tracefs_iterate_snapshot_events*(struct tep_handle pass:[*]_tep_, struct tracefs_instance pass:[*]_instance_,
    cpu_set_t pass:[*]_cpus_, int _cpu_size_,
    int (pass:[*]_callback_)(struct tep_event pass:[*], struct tep_record pass:[*], int, void pass:[*]),
    void pass:[*]_callback_context_);
--

DESCRIPTION

Trace iterator over raw events.

The *tracefs_iterate_raw_events()* function will read the tracefs
 raw
data buffers and call the specified _callback_ function for every event it
encounters. Events are iterated in sorted order: oldest first. An initialized
tep handler is required (See *tracefs_local_events*(3)). If _instance_ is
NULL, then the toplevel tracefs buffer is used, otherwise the buffer for
the corresponding _instance_ is read. To filter only on a subset of CPUs,
cpus and _cpu_size_ may be set to only call _callback_ with events that
occurred on the CPUs specified, otherwise if _cpus_ is NULL then the _callback_
function will be called for all events, and _cpu_size_ is ignored. The
callback function will be called with the following parameters: A
pointer to a struct tep_event that corresponds to the type of event the
record is; The record representing the event; The CPU that the event
occurred on; and a pointer to user specified _callback_context_. If the _callback_
returns non-zero, the iteration stops.

The *tracefs_iterate_snapshot_events()* works the same as
 tracefs_iterate_raw_events()
except that it works on the snapshot buffer.

Use *tracefs_iterate_stop()* to force a executing *tracefs_iterate_raw_events()*
to halt. This can be called from either a callback that is called by
the iterator (even though a return of non-zero will stop it), or from another
thread.

The *tracefs_follow_event()* is used with *tracefs_iterate_raw_events()* but
intead of the callback being called for every event, it is only called for the
specified _system_ / _event_name_ given to the function. The _callback_ is the
same as for *tracefs_iterate_raw_events()*, and the passed in _callback_context_
will be passed to the _callback_ as well. Note, if it returns something other
than 0, it will stop the loop before the _callback_ of *tracefs_iterate_raw_events()*
is called.

The *tracefs_follow_missed_events()* will call the _callback_ when missed
events are detected. It will set the _record_ parameter of the callback to the
record that came after the missed events
 and _event_ will be of the type of
event _record_ is. _cpu_ will be set to the CPU that missed the events, and
_callback_data_ will be the content that was passed in to the function.

The *tracefs_follow_event_clear()* will remove followers from _instance_ that
match _system_ and _event_name_. If _system_ and _event_name_ are both NULL,
then it will remove all event followers associated to _instance_. If just _system_
is NULL, then it will remove all followers that follow events that match _event_name_. If just _event_name_
is NULL, then it will remove all followers that are attached to events that are
apart of a system that matches _system_.

The *tracefs_follow_missed_events_clear()* will remove all followers for missed
events.

RETURN VALUE

The *tracefs_iterate_raw_events()* function returns -1 in case of an error or
0 otherwise.

Both *tracefs_follow_event_clear()* and *tracefs_follow_missed_events_clear()* return
0 on success and -1 on error, or if it found no followers
 that match and should be removed.

EXAMPLE

[source,c]
--

```
#include <unistd.h>
#include <tracefs.h>
#include <stdbool.h>
#include <signal.h>

struct my_struct {
 bool  stopped;
};

#define MAX_COUNT 500000
static int counter;

static int callback(struct tep_event *event, struct tep_record *record,
      int cpu, void *data)
{
 struct my_struct *my_data = data;
 static struct trace_seq seq;

 if (counter++ > MAX_COUNT) {
  my_data->stopped = true;
  return 1;
 }

 if (!seq.buffer)
  trace_seq_init(&seq);

 tep_print_event(event->tep, &seq, record, "%16s-%-5d [%03d] %6.1000d %s: %s\n",
   TEP_PRINT_COMM, TEP_PRINT_PID, TEP_PRINT_CPU,
   TEP_PRINT_TIME, TEP_PRINT_NAME, TEP_PRINT_INFO);
 trace_seq_terminate(&seq);
 trace_seq_do_printf(&seq);
 trace_seq_reset(&seq);
 return 0;
}

static int sched_callback(struct tep_event *event, struct tep_record *record,
     int cpu, void *data)
{
 static struct tep_format_field *prev_pid;
 static struct tep_format_field *next_pid;
 unsigned long
 long pid;
 int this_pid = *(int *)data;

 if (!prev_pid) {
  prev_pid = tep_find_field(event, "prev_pid");
  next_pid = tep_find_field(event, "next_pid");
  if (!prev_pid || !next_pid) {
```

```
   fprintf(stderr, "No pid fields??\n");
   return -1;
  }
 }

 tep_read_number_field(prev_pid, record->data, &pid);
 if (pid == this_pid)
  printf("WE ARE LEAVING!\n");
 tep_read_number_field(next_pid, record->data, &pid);
 if (pid == this_pid)
  printf("WE ARE ARRIVING!\n");
 return 0;
}

static int missed_callback(struct tep_event *event, struct tep_record *record,
      int cpu, void *data)
{
 printf("OOPS! cpu %d dropped ", cpu);
 if (record->missed_events > 0)
  printf("%lld ", record->missed_events);
 printf("events\n");
 return 0;
}

static struct tracefs_instance *instance;
static struct my_struct my_data;

static void sig(int s)
{
 tracefs_iterate_stop(instance);
 my_data.stopped = true;
}

int main (int argc, char **argv, char **env)
{
 struct tep_handle *tep;
 int this_pid = getpid();

 instance
 = tracefs_instance_create("my-buffer");
 if (!instance)
  return -1;

 signal(SIGINT, sig);

 tracefs_event_enable(instance, NULL, NULL);
 sleep(1);
 tracefs_event_disable(instance, NULL, NULL);
```

```
 tep = tracefs_local_events(NULL);
 tep_load_plugins(tep);
 tracefs_follow_missed_events(instance, missed_callback, NULL);
 tracefs_follow_event(tep, instance, "sched", "sched_switch", sched_callback, &this_pid);
 tracefs_iterate_raw_events(tep, instance, NULL, 0, callback, &my_data);

 /* Note, the clear here is to show how to clear all followers
  * in case tracefs_iterate_raw_events() is called again, but
  * does not want to include the followers. It's not needed
  * here because tracefs_instance_free() will clean them up.
  */
 tracefs_follow_event_clear(instance, NULL, NULL);
 tracefs_follow_missed_events_clear(instance);

 tracefs_instance_destroy(instance);
 tracefs_instance_free(instance);

 if (my_data.stopped) {
  if (counter > MAX_COUNT)
   printf("Finished max count\n");
  else
   printf("Finished
 via signal\n");
 }

 return 0;
}
```

--

FILES

[verse]

--

tracefs.h

Header file to include in order to have access to the library APIs.

-ltracefs

Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),

trace-cmd(1)

AUTHOR

[verse]

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libtracefs(3)
==========

NAME
---
tracefs_options_get_supported, tracefs_option_is_supported, tracefs_options_get_enabled,
tracefs_option_is_enabled, tracefs_option_mask_is_set, tracefs_option_id
- Get and check ftrace options.

SYNOPSIS

[verse]
--
#include <tracefs.h>

const struct tracefs_options_mask pass:[*]*tracefs_options_get_supported*(struct tracefs_instance
pass:[*]_instance_);
bool *tracefs_option_is_supported*(struct tracefs_instance pass:[*]_instance_, enum tracefs_option_id _id_);
const struct tracefs_options_mask pass:[*]*tracefs_options_get_enabled*(struct tracefs_instance
pass:[*]_instance_);
bool *tracefs_option_is_enabled*(struct tracefs_instance pass:[*]_instance_, enum tracefs_option_id _id_);
bool *tracefs_option_mask_is_set*(const struct tracefs_options_mask *options, enum tracefs_option_id id);
enum tracefs_option_id *tracefs_option_id*(const char pass:[*]_name_);
--

DESCRIPTION

This
set of APIs can be used to get and check current ftrace options. Supported ftrace options may depend on the kernel version and the kernel configuration.

The *tracefs_options_get_supported()* function gets all ftrace options supported by the system in the given _instance_. If _instance_ is NULL, supported options of the top trace instance are returned. The set of supported options is the same in all created trace instances, but may be different than the top trace instance.

The *tracefs_option_is_supported()/ function checks if the option with given _id_ is supported by the system in the given _instance_. If _instance_ is NULL, the top trace instance is used. If an option is supported at the top trace instance, it it may not be supported in a created trace instance.

The *tracefs_options_get_enabled()* function gets all ftrace options, currently enabled in the given _instance_. If _instance_ is NULL, enabled options of the top trace instance are returned.

The *tracefs_option_is_enabled()*
function checks if the option with given _id_ is enabled in the
given _instance_. If _instance_ is NULL, the top trace instance is used.

The *tracefs_option_mask_is_set()* function checks if the bit, corresponding to the option with _id_ is set in the _options_ bitmask returned from *tracefs_option_get_enabled()* and *tracefs_option_is_supported()*.

The *tracefs_option_id()* converts an option _name_ into its corresponding id, if it is found. This allows to find the option _id_ to use in the other functions if only the _name_ is known.

RETURN VALUE

The *tracefs_options_get_supported()* and *tracefs_options_get_enabled()* functions, on success, return a pointer to the bitmask within the instance, or a global bitmask for the top level, or NULL in case of an error. As the returned bitmask is part of the instance structure (or a global variable) and must not be freed or modified.

The *tracefs_option_is_supported()* and *tracefs_option_is_enabled()*
functions return true if the
option in supported / enabled, or false otherwise.

The *tracefs_option_mask_is_set()* returns true if the corresponding option is set in the mask or false otherwise.

The *tracefs_option_id()* returns the corresponding id defined by *tracefs_options*(3) from the given _name_. If the _name_ can not be found, then TRACEFS_OPTION_INVALID is returned.

EXAMPLE

```
[source,c]
--
#include <tracefs.h>
...
const struct tracefs_options_mask *options;
...
options = tracefs_options_get_supported(NULL);
if (!options) {
 /* Failed to get supported options */
} else {
 ...
}
...
options = tracefs_options_get_enabled(NULL);
if (!options) {
 /* Failed to get options, enabled in the top instance */
} else {
 ...
}
if (tracefs_options_mask_is_set(options, TRACEFS_OPTION_LATENCY_FORMAT)) {
 ...
}
...

if (tracefs_option_is_supported(NULL, TRACEFS_OPTION_LATENCY_FORMAT)) {
 /* Latency format option is supprted */
}

...

if (tracefs_option_is_enabled(NULL, TRACEFS_OPTION_STACKTRACE))
 {
 /* Stacktrace option is enabled in the top instance */
}

--
FILES
-----
[verse]
--
*tracefs.h*
 Header file to include in order to have access to the library APIs.
*-ltracefs*
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
--------
```

libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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libtracefs(3)
==========

NAME
---
tracefs_eprobe_alloc - Allocate new event probe (eprobe)

SYNOPSIS

[verse]
--
#include <tracefs.h>

struct tracefs_dynevent pass:[*]
tracefs_eprobe_alloc(const char pass:[*]_system_, const char pass:[*]_event_,
    const char pass:[*]_target_system_, const char pass:[*]_target_event_,

```
        const char pass:[*]_fetchargs_);
--
```

DESCRIPTION
---

tracefs_eprobe_alloc() allocates a new eprobe context. The ebrobe is not configured in the system. The new eprobe will be in the _system_ group (or eprobes if _system_ is NULL) and have the name of _event_. The eprobe will be attached to _target_event_, located in _target_system_. The list of arguments, described in _fetchargs_, will be fetched from _target_event_. The returned pointer to the event probe must be freed with *tracefs_dynevent_free*().

RETURN VALUE

The *tracefs_eprobe_alloc*() API
 returns a pointer to an allocated tracefs_dynevent structure,
describing the event probe. This pointer must be freed by *tracefs_dynevent_free*(3). Note, this only allocates a descriptor representing the eprobe. It does not modify the running system. On error NULL is returned.

EXAMPLE

[source,c]
--

```
#include <stdlib.h>
#include <unistd.h>
#include <sys/wait.h>

#include <tracefs.h>

static struct tep_event *open_event;
static struct tep_format_field *file_field;

static int callback(struct tep_event *event, struct tep_record *record,
     int cpu, void *data)
{
 struct trace_seq seq;

 trace_seq_init(&seq);
 tep_print_event(event->tep, &seq, record, "%d-%s: ", TEP_PRINT_PID, TEP_PRINT_COMM);

 if (event->id == open_event->id) {
  trace_seq_puts(&seq, "open file='");
  tep_print_field(&seq, record->data, file_field);
  trace_seq_puts(&seq, "'\n");
 }

 trace_seq_terminate(&seq);
```

```
 trace_seq_do_printf(&seq);
 trace_seq_destroy(&seq);

 return 0;
}

static pid_t run_exec(char **argv,
 char **env)
{
 pid_t pid;

 pid = fork();
 if (pid)
  return pid;

 execve(argv[0], argv, env);
 perror("exec");
 exit(-1);
}

const char *myprobe = "my_eprobes";

int main (int argc, char **argv, char **env)
{
 struct tracefs_dynevent *eprobe;
 struct tracefs_instance *instance;
 struct tep_handle *tep;
 const char *sysnames[] = { myprobe, NULL };
 pid_t pid;

 if (argc < 2) {
  printf("usage: %s command\n", argv[0]);
  exit(-1);
 }

 instance = tracefs_instance_create("exec_open");
 if (!instance) {
  perror("creating instance");
  exit(-1);
 }

 tracefs_dynevent_destroy_all(TRACEFS_DYNEVENT_EPROBE, true);

 eprobe = tracefs_eprobe_alloc(myprobe, "sopen", "syscalls", "sys_enter_openat2",
         "file=+0($filename):ustring");
 if (!eprobe) {
  perror("allocating event probe");
  exit(-1);
```

```
 }

 if (tracefs_dynevent_create(eprobe)) {
  perror("creating event probe");
  exit(-1);
 }

 tep = tracefs_local_events_system(NULL, sysnames);
 if (!tep) {
  perror("reading events");
  exit(-1);
 }

 open_event
 = tep_find_event_by_name(tep, myprobe, "sopen");
 file_field = tep_find_field(open_event, "file");

 tracefs_event_enable(instance, myprobe, "sopen");
 pid = run_exec(&argv[1], env);

 /* Let the child start to run */
 sched_yield();

 do {
  tracefs_load_cmdlines(NULL, tep);
  tracefs_iterate_raw_events(tep, instance, NULL, 0, callback, NULL);
 } while (waitpid(pid, NULL, WNOHANG) != pid);

 /* Will disable the events */
 tracefs_dynevent_destroy(eprobe, true);
 tracefs_dynevent_free(eprobe);
 tracefs_instance_destroy(instance);
 tep_free(tep);

 return 0;
}
--

FILES
-----
[verse]
--
*tracefs.h*
 Header file to include in order to have access to the library APIs.
*-ltracefs*
 Linker switch to add when building a program that uses the library.
--
```

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

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libtracefs(3)
==========

NAME
---

tracefs_instance_file_open,
tracefs_instance_file_write, tracefs_instance_file_write_number, tracefs_instance_file_append,
tracefs_instance_file_clear,
tracefs_instance_file_read, tracefs_instance_file_read_number - Work with files in tracing instances.

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_instance_file_open*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, int _mode_);
int *tracefs_instance_file_write*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, const char pass:[*]_str_);
int *tracefs_instance_file_write_number*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, size_t _val_);
int *tracefs_instance_file_append*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, const char pass:[*]_str_);
int *tracefs_instance_file_clear*(struct tracefs_instance pass:[*]_instance_,
 const char pass:[*]_file_);
char pass:[*]*tracefs_instance_file_read*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, int pass:[*]_psize_);
int *tracefs_instance_file_read_number*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, long long int pass:[*]_res_);

--

DESCRIPTION

This set of APIs can be used to work with trace files in all trace instances.
Each of these APIs take an _instance_ argument, that can be NULL to act
on the top level instance. Otherwise, it acts on an instance created with
tracefs_insance_create(3)

The *tracefs_instance_file_open()* function opens trace _file_ from given _instance_ and returns
a file descriptor to it. The file access _mode_ can be specified, see *open*(3) for more details.
If -1 is passed as _mode_, default O_RDWR is used.

The *tracefs_instance_file_write()* function writes a string _str_ in a _file_ from
the given _instance_, without the terminating NULL character. When opening the
 file, this function
tries to truncates the size of the file to zero, which clears all previously existing settings.

The *tracefs_instance_file_write_number()* function converts _val_ into a string
and then writes it to the given file. This is a helper function that does the number
conversion to string and then calls *tracefs_instance_file_write()*.

The *tracefs_instance_file_append()* function writes a string _str_ in a _file_ from
the given _instance_, without the terminating NULL character. This function is similar to
tracefs_instance_file_write(), but the existing content of the is not cleared. Thus the
new settings are appended to the existing ones (if any).

The *tracefs_instance_file_clear()* function tries to truncates the size of the file to zero,
which clears all previously existing settings. If the file has content that does not get

cleared in this way, this will not have any effect.

The *tracefs_instance_file_read()* function reads the content of a _file_ from
the given
instance.

The *tracefs_instance_file_read_number()* function reads the content of a _file_ from
the given _instance_ and converts it to a long long integer, which is stored in _res_.

RETURN VALUE

The *tracefs_instance_file_open()* function returns a file descriptor to the opened file. It must be
closed with *close*(3). In case of an error, -1 is returned.

The *tracefs_instance_file_write()* function returns the number of written bytes,
or -1 in case of an error.

The *tracefs_instance_file_write_number()* function returns 0 on success and -1 on error.

The *tracefs_instance_file_append()* function returns the number of written bytes,
or -1 in case of an error.

The *tracefs_instance_file_clear()* function returns 0 on success, or -1 in case of an error.

The *tracefs_instance_file_read()* function returns a pointer to a NULL terminated
string, read from the file, or NULL in case of an error. The returned string must
be freed with free().

The *tracefs_instance_file_read_number()*
function returns 0 if a valid integer is read from
the file and stored in _res_ or -1 in case of an error.

EXAMPLE

[source,c]
--
```
#include <tracefs.h>

struct tracefs_instance *inst = tracefs_instance_create("foo");
 if (!inst) {
  /* Error creating a new trace instance */
  ...
 }

 if (tracefs_file_exists(inst,"trace_clock")) {
  /* The instance foo supports trace clock */
  char *path, *clock;
  int size;
```

```
 path =  = tracefs_instance_get_file(inst, "trace_clock")
 if (!path) {
  /* Error getting the path to trace_clock file in instance foo */
  ...
 }
 ...
 tracefs_put_tracing_file(path);

 clock = tracefs_instance_file_read(inst, "trace_clock", &size);
 if (!clock) {
  /* Failed to read trace_clock file in instance foo */
  ...
 }
 ...
 free(clock);

 if (tracefs_instance_file_write(inst, "trace_clock", "global") != strlen("global")) {
  /* Failed to set gloabl trace clock in instance foo */
  ...
 }
} else {
 /* The instance foo does not
support trace clock */
}

if (tracefs_dir_exists(inst,"options")) {
 /* The instance foo supports trace options */
 char *path = tracefs_instance_get_file(inst, "options");
 if (!path) {
  /* Error getting the path to options directory in instance foo */
  ...
 }

 tracefs_put_tracing_file(path);
} else {
 /* The instance foo does not support trace options */
}

...

if (tracefs_instance_is_new(inst))
 tracefs_instance_destroy(inst);
else
 tracefs_instance_free(inst);
...

long long int res;
```

```
if (tracefs_instance_file_read_number(NULL, "tracing_on", &res) == 0) {
 if (res == 0) {
  /* tracing is disabled in the top instance */
 } else if (res == 1) {
  /* tracing is enabled in the top instance */
 } else {
  /* Unknown tracing state of the top instance */
 }
} else {
 /* Failed to read integer from tracing_on file */
}

...

int fd;
fd = tracefs_instance_file_open(NULL, "tracing_on", O_WRONLY);
if (fd >= 0) {
 /* Got file descriptor to the tracing_on
file from the top instance for writing */
  ...
  close(fd);
}
```

--

FILES

[verse]

--

tracefs.h

Header file to include in order to have access to the library APIs.

-ltracefs

Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),

trace-cmd(1)

AUTHOR

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Tzvetomir Stoyanov <tz.stoyanov@gmail.com>

--

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libtracefs(3)
==========

NAME
---
tracefs_error_last, tracefs_error_all, tracefs_error_clear -
functions to read and clear the tracefs error log.

SYNOPSIS

[verse]
--
#include <tracefs.h>

char pass:[*]*tracefs_error_last*(struct tracefs_instance pass:[*]_instance_);
char pass:[*]*tracefs_error_all*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_error_clear*(struct tracefs_instance pass:[*]_instance_);
--

DESCRIPTION

The *tracefs_error_last*() returns the last error message in the tracefs
error log. Several actions that require proper syntax written into the
tracefs file system may produce error messages in the error log. This
function will show the most recent error in the error log.

The *tracefs_error_all*() returns all messages saved in the error log.
Note, this may not be all messages that were ever produced, as the kernel
only keeps a limited amount of messages, and older

ones may be discarded
by the kernel.

The *tracefs_error_clear*() will clear the error log.

RETURN VALUE

Both *tracefs_error_last*() and *tracefs_error_all*() will return an allocated string an error exists in the log, otherwise NULL is returned. If an error occurs, errno will be set, otherwise if there is no error messages to display then errno is not touched.

tracefs_error_clear() returns 0 on success or -1 on error.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <unistd.h>
#include <errno.h>

#include <tracefs.h>

int main (int argc, char **argv, char **env)
{
 struct tracefs_dynevent *kevent;
 char *system = NULL;
 char *kprobe;
 char *format;
 char *addr;
 int arg = 1;
 int ret;

 if (argc < 4) {
  printf("usage: %s [system] kprobe addr fmt\n", argv[0]);
  exit(-1);
 }

 if (argc > 5)
  system = argv[arg++];

 kprobe = argv[arg++];
 addr = argv[arg++];
 format = argv[arg++];

 tracefs_error_clear(NULL);
 kevent = tracefs_dynevent_get(TRACEFS_DYNEVENT_KPROBE,
```

```
 system, kprobe);
 if (kevent) {
  tracefs_dynevent_destroy(kevent, true);
  tracefs_dynevent_free(kevent);
 }

 ret = tracefs_kprobe_raw(system, kprobe, addr, format);
 if (ret < 0) {
  char *err;

  perror("Failed creating kprobe");
  errno = 0;
  err = tracefs_error_last(NULL);
  if (err)
   fprintf(stderr, "%s\n", err);
  else if (errno)
   perror("Failed reading error log");
  free(err);
 }

 exit(ret);
}
```

--

FILES

[verse]

--

tracefs.h

 Header file to include in order to have access to the library APIs.

-ltracefs

 Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),

trace-cmd(1)

AUTHOR

[verse]

--

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Tzvetomir Stoyanov <tz.stoyanov@gmail.com>

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libtracefs(3)
==========

NAME
---
tracefs_cpu_open_mapped, tracefs_cpu_is_mapped, tracefs_mapped_is_supported, tracefs_cpu_map, tracefs_cpu_unmap - Memory mapping of the ring buffer

SYNOPSIS

[verse]
--
#include <tracefs.h>

bool *tracefs_cpu_is_mapped*(struct tracefs_cpu pass:[*]tcpu);
bool *tracefs_mapped_is_supported*(void);
int *tracefs_cpu_map*(struct tracefs_cpu pass:[*]tcpu);
void *tracefs_cpu_unmap*(struct tracefs_cpu pass:[*]tcpu);
struct tracefs_cpu pass:[*]*tracefs_cpu_open_mapped*(struct tracefs_instance pass:[*]instance,
        int cpu, bool nonblock);
--

DESCRIPTION

If the trace_pipe_raw supports memory mapping, this is usually a more efficient
method to stream data from the kernel ring buffer than by reading it, as it does
not require copying the memory that is being read.

If memory mapping is supported by the kernel and the application asks to use the memory mapping via
either *tracefs_cpu_map()* or by *tracefs_cpu_open_mapped()*
then the functions *tracefs_cpu_read*(3) and *tracefs_cpu_read_buf*(3) will use the mapping directly instead of calling the read system call.

Note, mapping will cause *tracefs_cpu_buffered_read*(3) and *tracefs_cpu_buffered_read_buf*(3) to act just like *tracefs_cpu_read*(3) and *tracefs_cpu_read_buf*(3) respectively as it doesn't make sense to use a splice pipe when mapped. The kernel will do a copy for splice reads on mapping, and then another copy in the function when it can avoid the copying if the ring buffer is memory mapped.

If the _tcpu_ is memory mapped it will also force *tracefs_cpu_write*(3) and *tracefs_cpu_pipe*(3) to copy from the mapping instead of using splice.
Thus care must be used when determining to map the ring buffer or not, and why it does not get mapped by default.

The *tracefs_cpu_is_mapped()* function will return true if _tcpu_ currently has its ring buffer memory mapped and false otherwise. This
does not return whether or
not that the kernel supports memory mapping, but that can usually be determined by calling *tracefs_cpu_map()*.

The *tracefs_mapped_is_supported()* returns true if the ring buffer can be memory mapped.

The *tracefs_cpu_map()* function will attempt to map the ring buffer associated to _tcpu_ if it is not already mapped.

The *tracefs_cpu_unmap()* function will unmap the ring buffer associated to _tcpu_ if it is mapped.

The *tracefs_cpu_open_mapped()* is equivalent to calling *tracefs_cpu_open*(3) followed by *tracefs_cpu_map()* on the returned _tcpu_ of *tracefs_cpu_open*(3). Note, this will still succeed if the mapping fails, in which case it acts the same as *tracefs_cpu_open*(3). If knowing if the mapping succeed or not, *tracefs_cpu_is_mapped()* should be called on the return _tcpu_.

RETURN VALUE
---
tracefs_cpu_is_mapped() returns true if the given _tcpu_ has its ring buffer memory mapped or false otherwise.

tracefs_mapped_is_supported()
returns true if the tracing ring buffer can be
memory mapped or false if it cannot be or an error occurred.

tracefs_cpu_map() returns 0 on success and -1 on error in mapping. If 0 is

returned then *tracefs_cpu_is_mapped()* will return true afterward, or false
if the mapping failed.

tracefs_cpu_open_mapped() returns an allocated tracefs_cpu on success of creation
regardless if it succeed in mapping the ring buffer or not. It returns NULL for
the same reasons *tracefs_cpu_open*(3) returns NULL. If success of mapping is
to be known, then calling *tracefs_cpu_is_mapped()* afterward is required.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <ctype.h>
#include <tracefs.h>

static void read_subbuf(struct tep_handle *tep, struct kbuffer *kbuf)
{
 static struct trace_seq seq;
 struct tep_record record;
 int missed_events;

 if (seq.buffer)
  trace_seq_reset(&seq);
 else
  trace_seq_init(&seq);

 while ((record.data = kbuffer_read_event(kbuf, &record.ts))) {
  record.size
 = kbuffer_event_size(kbuf);
  missed_events = kbuffer_missed_events(kbuf);
  if (missed_events) {
   printf("[MISSED EVENTS");
   if (missed_events > 0)
    printf(": %d]\n", missed_events);
   else
    printf("]\n");
  }
  kbuffer_next_event(kbuf, NULL);
  tep_print_event(tep, &seq, &record,
    "%s-%d %6.1000d\t%s: %s\n",
    TEP_PRINT_COMM,
    TEP_PRINT_PID,
    TEP_PRINT_TIME,
    TEP_PRINT_NAME,
    TEP_PRINT_INFO);
  trace_seq_do_printf(&seq);
  trace_seq_reset(&seq);
```

```
 }
}

int main (int argc, char **argv)
{
 struct tracefs_cpu *tcpu;
 struct tep_handle *tep;
 struct kbuffer *kbuf;
 bool mapped;
 int cpu;

 if (argc < 2 || !isdigit(argv[1][0])) {
  printf("usage: %s cpu\n\n", argv[0]);
  exit(-1);
 }

 cpu = atoi(argv[1]);

 tep = tracefs_local_events(NULL);
 if (!tep) {
  perror("Reading trace event formats");
  exit(-1);
 }

 tcpu = tracefs_cpu_open_mapped(NULL, cpu, 0);
 if (!tcpu) {
  perror("Open CPU 0 file");
  exit(-1);
 }

 /*
  * If this kernel supports mapping, use normal
 read,
  * otherwise use the piped buffer read, although if
  * the mapping succeeded, tracefs_cpu_buffered_read_buf()
  * acts the same as tracefs_cpu_read_buf(). But this is just
  * an example on how to use tracefs_cpu_is_mapped().
  */
 mapped = tracefs_cpu_is_mapped(tcpu);
 if (!mapped)
  printf("Was not able to map, falling back to buffered read\n");
 while ((kbuf = mapped ? tracefs_cpu_read_buf(tcpu, true) :
   tracefs_cpu_buffered_read_buf(tcpu, true))) {
  read_subbuf(tep, kbuf);
 }

 kbuf = tracefs_cpu_flush_buf(tcpu);
 if (kbuf)
```

```
  read_subbuf(tep, kbuf);

 tracefs_cpu_close(tcpu);
 tep_free(tep);

 return 0;
}
```
--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
tracefs_cpu_open(3),
tracefs_cpu_read(3),
tracefs_cpu_read_buf(3),
tracefs_cpu_buffered_read(3),
tracefs_cpu_buffered_read_buf(3),
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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--
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libtracefs(3)
==========

NAME
---
tracefs_sql - Create a synthetic event via an SQL statement

SYNOPSIS

[verse]
--
#include <tracefs.h>

struct tracefs_synth pass:[*]*tracefs_sql*(struct tep_handle pass:[*]_tep_, const char pass:[*]_name_,
    const char pass:[*]_sql_buffer_, char pass:[**]_err_);
--

DESCRIPTION

Synthetic events are dynamically created events that attach two existing events
together via one or more matching fields between the two events. It can be used
to find the latency between the events, or to simply pass fields of the first event
on to the second event to display as one event.

The Linux kernel interface to create synthetic events is complex, and there needs
to be a better way to create synthetic events that is easy and can be understood
via existing technology.

If you think of each event as a table, where the fields are the column of the table
and each instance of
 the event as a row, you can understand how SQL can be used
to attach two events together and form another event (table). Utilizing the
SQL *SELECT* *FROM* *JOIN* *ON* [*WHERE*] syntax, a synthetic event can easily
be created from two different events.

For simple SQL queries to make a histogram instead of a synthetic event, see
HISTOGRAMS below.

tracefs_sql() takes in a _tep_ handler (See _tep_local_events_(3)) that is used to verify the events within the _sql_buffer_ expression. The _name_ is the name of the synthetic event to create. If _err_ points to an address of a string, it will be filled with a detailed message on any type of parsing error, including fields that do not belong to an event, or if the events or fields are not properly compared.

The example program below is a fully functional parser where it will create a synthetic event from a SQL syntax passed in via the command line or a file.

The SQL format is as follows:

SELECT <fields> *FROM* <start-event> *JOIN* <end-event>
 ON <matching-fields> *WHERE* <filter>

Note, although the examples show the SQL commands in uppercase, they are not required to be so. That is, you can use "SELECT" or "select" or "sElEct".

For example:
[source,c]
--
SELECT syscalls.sys_enter_read.fd, syscalls.sys_exit_read.ret FROM syscalls.sys_enter_read
  JOIN syscalls.sys_exit_read
  ON syscalls.sys_enter_read.common_pid = syscalls.sys_exit_write.common_pid
--

Will create a synthetic event that with the fields:

 u64 fd; s64 ret;

Because the function takes a _tep_ handle, and usually all event names are unique, you can leave off the system (group) name of the event, and *tracefs_sql*() will discover the system for you.

That is, the above statement would work with:

[source,c]
--
SELECT sys_enter_read.fd, sys_exit_read.ret FROM sys_enter_read JOIN sys_exit_read
  ON sys_enter_read.common_pid = sys_exit_write.common_pid
--

The *AS* keyword can be used to name the fields as well as to give an alias to the events,
 such that the above can be simplified even more as:

[source,c]
--
SELECT start.fd, end.ret FROM sys_enter_read AS start JOIN sys_exit_read AS end ON start.common_pid =

end.common_pid
--

The above aliases _sys_enter_read_ as *start* and _sys_exit_read_ as *end* and uses those aliases to reference the event throughout the statement.

Using the *AS* keyword in the selection portion of the SQL statement will define what those fields will be called in the synthetic event.

[source,c]
--
SELECT start.fd AS filed, end.ret AS return FROM sys_enter_read AS start JOIN sys_exit_read AS end
  ON start.common_pid = end.common_pid
--

The above labels the _fd_ of _start_ as *filed* and the _ret_ of _end_ as *return* where the synthetic event that is created will now have the fields:

 u64 filed; s64 return;

The fields can also be calculated with results passed to the synthetic event:

[source,c]
--
select start.truesize, end.len, (start.truesize - end.len) as diff from napi_gro_receive_entry as
 start
  JOIN netif_receive_skb as end ON start.skbaddr = end.skbaddr
--

Which would show the *truesize* of the _napi_gro_receive_entry_ event, the actual _len_ of the content, shown by the _netif_receive_skb_, and the delta between the two and expressed by the field *diff*.

The code also supports recording the timestamps at either event, and performing calculations on them. For wakeup latency, you have:

[source,c]
--
select start.pid, (end.TIMESTAMP_USECS - start.TIMESTAMP_USECS) as lat from sched_waking as start
  JOIN sched_switch as end ON start.pid = end.next_pid
--

The above will create a synthetic event that records the _pid_ of the task being woken up, and the time difference between the _sched_waking_ event and the _sched_switch_ event. The *TIMESTAMP_USECS* will truncate the time down to microseconds as the timestamp usually recorded in the tracing buffer has nanosecond resolution. If you do not want that truncation, use *TIMESTAMP* instead of *TIMESTAMP_USECS*.

Because
it is so common to have:

[source,c]
--
(end.TIMESTAMP_USECS - start.TIMESTAMP_USECS)
--

The above can be represented with *TIMESTAMP_DELTA_USECS* or if nanoseconds are OK, you can use *TIMESTAMP_DELTA*. That is, the previous select can also be represented by:

[source,c]
--
select start.pid, TIMESTAMP_DELTA_USECS as lat from sched_waking as start JOIN sched_switch as end ON start.pid = end.next_pid
--

Finally, the *WHERE* clause can be added, that will let you add filters on either or both events.

[source,c]
--
select start.pid, (end.TIMESTAMP_USECS - start.TIMESTAMP_USECS) as lat from sched_waking as start
JOIN sched_switch as end ON start.pid = end.next_pid
WHERE start.prio < 100 && (!(end.prev_pid < 1 || end.prev_prio > 100) || end.prev_pid == 0)
--

NOTE

Although both events can be used together in the *WHERE* clause, they must not be mixed outside the top most "&&" statements. You can not OR (||) the events together, where a filter of one event is OR'd to a filter
of the other event. This does not make sense, as the synthetic event requires both events to take place to be recorded. If one is filtered out, then the synthetic event does not execute.

[source,c]
--
select start.pid, (end.TIMESTAMP_USECS - start.TIMESTAMP_USECS) as lat from sched_waking as start
JOIN sched_switch as end ON start.pid = end.next_pid
WHERE start.prio < 100 && end.prev_prio < 100
--

The above is valid.

Where as the below is not.

[source,c]

```
--
select start.pid, (end.TIMESTAMP_USECS - start.TIMESTAMP_USECS) as lat from sched_waking as start
  JOIN sched_switch as end ON start.pid = end.next_pid
  WHERE start.prio < 100 || end.prev_prio < 100
--
```

If the kernel supports it, you can pass around a stacktrace between events.

```
[source, c]
--
select start.prev_pid as pid, (end.TIMESTAMP_USECS - start.TIMESTAMP_USECS) as delta,
start.STACKTRACE as stack
  FROM sched_switch as start JOIN sched_switch as end ON start.prev_pid = end.next_pid
  WHERE start.prev_state
 == 2
--
```

The above will record a stacktrace when a task is in the UNINTERRUPTIBLE (blocked) state, and trigger the synthetic event when it is scheduled back in, recording the time delta that it was blocked for.
It will record the stacktrace of where it was when it scheduled out along with the delta.

KEYWORDS AS EVENT FIELDS

In some cases, an event may have a keyword. For example, regcache_drop_region has "from"
as a field and the following will not work

```
[source,c]
--
 select from from regcache_drop_region
--
```

In such cases, add a backslash to the conflicting field, and this will tell the parser
that the "from" is a field and not a keyword:

```
[source,c]
--
 select \from from regcache_drop_region
--
```

HISTOGRAMS

Simple SQL statements without the *JOIN* *ON* may also be used, which will create a histogram
instead. When doing this, the struct tracefs_hist descriptor can be retrieved from the
returned synthetic event descriptor via the *tracefs_synth_get_start_hist*(3).

In
order to utilize the histogram types (see xxx) the CAST command of SQL can be used.

That is:

[source,c]
--
select CAST(common_pid AS comm), CAST(id AS syscall) FROM sys_enter
--

Which produces:

[source,c]
--
```
# echo 'hist:keys=common_pid.execname,id.syscall' > events/raw_syscalls/sys_enter/trigger

# cat events/raw_syscalls/sys_enter/hist

{ common_pid: bash           [     18248], id: sys_setpgid                  [109] } hitcount:         1
{ common_pid: sendmail       [      1812], id: sys_read                     [  0] } hitcount:         1
{ common_pid: bash           [     18247], id: sys_getpid                   [ 39] } hitcount:         1
{ common_pid: bash           [     18247], id: sys_dup2                     [ 33] } hitcount:         1
{ common_pid: gmain          [     13684], id: sys_inotify_add_watch        [254] } hitcount:         1
{ common_pid: cat            [     18247], id: sys_access                   [ 21] } hitcount:
         1
{ common_pid: bash           [     18248], id: sys_getpid                   [ 39] } hitcount:         1
{ common_pid: cat            [     18247], id: sys_fadvise64                [221] } hitcount:         1
{ common_pid: sendmail       [      1812], id: sys_openat                   [257] } hitcount:         1
{ common_pid: less           [     18248], id: sys_munmap                   [ 11] } hitcount:         1
{ common_pid: sendmail       [      1812], id: sys_close                    [  3] } hitcount:         1
{ common_pid: gmain          [      1534], id: sys_poll                     [  7] } hitcount:         1
{ common_pid: bash           [     18247], id: sys_execve                   [ 59] } hitcount:         1
```
--

Note, string fields may not be cast.

The possible types to cast to are:

HEX - convert the value to use hex and not decimal

SYM - convert a pointer to symbolic (kallsyms values)

SYM-OFFSET - convert a pointer to symbolic
and include the offset.

SYSCALL - convert the number to the mapped system call name

EXECNAME or *COMM* - can only be used with the common_pid field. Will show the task

name of the process.

LOG or *LOG2* - bucket the key values in a log 2 values (1, 2, 3-4, 5-8, 9-16, 17-32, ...)

The above fields are not case sensitive, and "LOG2" works as good as "log".

A special CAST to _COUNTER_ or __COUNTER__ will make the field a value and not
a key. For example:

```
[source,c]
--
 SELECT common_pid, CAST(bytes_req AS _COUNTER_) FROM kmalloc
--
```

Which will create

```
[source,c]
--
 echo 'hist:keys=common_pid:vals=bytes_req' > events/kmem/kmalloc/trigger

 cat events/kmem/kmalloc/hist

{ common_pid:       1812 } hitcount:          1  bytes_req:         32
{ common_pid:       9111 } hitcount:          2  bytes_req:        272
{ common_pid:       1768 } hitcount:          3  bytes_req:       1112
{ common_pid:          0 } hitcount:          4  bytes_req:        512
{ common_pid:      18297 }
 hitcount:         11  bytes_req:       2004
--
```

RETURN VALUE

Returns 0 on success and -1 on failure. On failure, if _err_ is defined, it will be
allocated to hold a detailed description of what went wrong if it the error was caused
by a parsing error, or that an event, field does not exist or is not compatible with
what it was combined with.

CREATE A TOOL

The below example is a functional program that can be used to parse SQL commands into
synthetic events.

```
[source, c]
--
  man tracefs_sql | sed -ne '/^EXAMPLE/,/FILES/ { /EXAMPLE/d ; /FILES/d ; p}' > sqlhist.c
  gcc -o sqlhist sqlhist.c `pkg-config --cflags --libs libtracefs`
--
```

Then you can run the above examples:

```
[source, c]
--
 sudo ./sqlhist 'select start.pid, (end.TIMESTAMP_USECS - start.TIMESTAMP_USECS) as lat from sched_waking
as start
                JOIN sched_switch as end ON start.pid = end.next_pid
                WHERE start.prio < 100 || end.prev_prio < 100'
--
EXAMPLE
-------
[source,c]
--
#include
 <stdio.h>
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <errno.h>
#include <unistd.h>
#include <tracefs.h>

static void usage(char **argv)
{
 fprintf(stderr, "usage: %s [-ed][-n name][-s][-S fields][-m var][-c var][-T][-t dir][-f file | sql-command-line]\n"
  "  -n name - name of synthetic event 'Anonymous' if left off\n"
  "  -t dir - use dir instead of /sys/kernel/tracing\n"
  "  -e - execute the commands to create the synthetic event\n"
  "  -m - trigger the action when var is a new max.\n"
  "  -c - trigger the action when var changes.\n"
  "  -s - used with -m or -c to do a snapshot of the tracing buffer\n"
  "  -S - used with -m or -c to save fields of the end event (comma deliminated)\n"
  "  -T - used with -m or -c to do both a snapshot and a trace\n"
  "  -f file - read sql lines from file otherwise from the command line\n"
  "            if file is '-' then read from standard input.\n",
  argv[0]);
 exit(-1);
}

enum action {
 ACTION_DEFAULT  =
 0,
 ACTION_SNAPSHOT  = (1 << 0),
 ACTION_TRACE  = (1 << 1),
 ACTION_SAVE  = (1 << 2),
 ACTION_MAX  = (1 << 3),
 ACTION_CHANGE  = (1 << 4),
```

```
};

#define ACTIONS ((ACTION_MAX - 1))

static int do_sql(const char *instance_name,
    const char *buffer, const char *name, const char *var,
    const char *trace_dir, bool execute, int action,
    char **save_fields)
{
 struct tracefs_synth *synth;
 struct tep_handle *tep;
 struct trace_seq seq;
 enum tracefs_synth_handler handler;
 char *err;
 int ret;

 if ((action & ACTIONS) && !var) {
  fprintf(stderr, "Error: -s, -S and -T not supported without -m or -c");
  exit(-1);
 }

 if (!name)
  name = "Anonymous";

 trace_seq_init(&seq);
 tep = tracefs_local_events(trace_dir);
 if (!tep) {
  if (!trace_dir)
   trace_dir = "tracefs directory";
  perror(trace_dir);
  exit(-1);
 }

 synth = tracefs_sql(tep, name, buffer, &err);
 if (!synth) {
  perror("Failed creating synthetic event!");
  if (err)
   fprintf(stderr, "%s", err);
  free(err);
  exit(-1);
 }

 if
 (tracefs_synth_complete(synth)) {
  if (var) {
   if (action & ACTION_MAX)
    handler = TRACEFS_SYNTH_HANDLE_MAX;
   else
```

```
    handler = TRACEFS_SYNTH_HANDLE_CHANGE;

   if (action & ACTION_SAVE) {
    ret = tracefs_synth_save(synth, handler, var, save_fields);
    if (ret < 0) {
     err = "adding save";
     goto failed_action;
    }
   }
   if (action & ACTION_TRACE) {
    /*
     * By doing the trace before snapshot, it will be included
     * in the snapshot.
     */
    ret = tracefs_synth_trace(synth, handler, var);
    if (ret < 0) {
     err = "adding trace";
     goto failed_action;
    }
   }
   if (action & ACTION_SNAPSHOT) {
    ret = tracefs_synth_snapshot(synth, handler, var);
    if (ret < 0) {
     err = "adding snapshot";
failed_action:
     perror(err);
     if (errno == ENODEV)
      fprintf(stderr, "ERROR: '%s' is not a variable\n",
       var);
     exit(-1);
    }
   }
  }
  tracefs_synth_echo_cmd(&seq, synth);
  if (execute) {
   ret = tracefs_synth_create(synth);
   if
 (ret < 0) {
    fprintf(stderr, "%s\n", tracefs_error_last(NULL));
    exit(-1);
   }
  }
 } else {
  struct tracefs_instance *instance = NULL;
  struct tracefs_hist *hist;

  hist = tracefs_synth_get_start_hist(synth);
  if (!hist) {
```

```
  perror("get_start_hist");
  exit(-1);
 }
 if (instance_name) {
  if (execute)
   instance = tracefs_instance_create(instance_name);
  else
   instance = tracefs_instance_alloc(trace_dir,
         instance_name);
  if (!instance) {
   perror("Failed to create instance");
   exit(-1);
  }
 }
 tracefs_hist_echo_cmd(&seq, instance, hist, 0);
 if (execute) {
  ret = tracefs_hist_start(instance, hist);
  if (ret < 0) {
   fprintf(stderr, "%s\n", tracefs_error_last(instance));
   exit(-1);
  }
 }
}

tracefs_synth_free(synth);

trace_seq_do_printf(&seq);
trace_seq_destroy(&seq);
return 0;
}

int main (int argc, char **argv)
{
 char *trace_dir = NULL;
 char *buffer = NULL;
 char buf[BUFSIZ];
 int buffer_size
 = 0;
 const char *file = NULL;
 const char *instance = NULL;
 bool execute = false;
 char **save_fields = NULL;
 const char *name;
 const char *var;
 int action = 0;
 char *tok;
 FILE *fp;
 size_t r;
```

```
int c;
int i;

for (;;) {
 c = getopt(argc, argv, "ht:f:en:m:c:sS:TB:");
 if (c == -1)
  break;

 switch(c) {
 case 'h':
  usage(argv);
 case 't':
  trace_dir = optarg;
  break;
 case 'f':
  file = optarg;
  break;
 case 'e':
  execute = true;
  break;
 case 'm':
  action |= ACTION_MAX;
  var = optarg;
  break;
 case 'c':
  action |= ACTION_CHANGE;
  var = optarg;
  break;
 case 's':
  action |= ACTION_SNAPSHOT;
  break;
 case 'S':
  action |= ACTION_SAVE;
  tok = strtok(optarg, ",");
  while (tok) {
   save_fields = tracefs_list_add(save_fields, tok);
   tok = strtok(NULL, ",");
  }
  if (!save_fields) {
   perror(optarg);
   exit(-1);
  }
  break;
 case 'T':
  action |= ACTION_TRACE | ACTION_SNAPSHOT;
  break;
 case 'B':
  instance = optarg;
```

```
  break;
 case
'n':
  name = optarg;
  break;
 }
}

if ((action & (ACTION_MAX|ACTION_CHANGE)) == (ACTION_MAX|ACTION_CHANGE)) {
 fprintf(stderr, "Can not use both -m and -c together\n");
 exit(-1);
}
if (file) {
 if (!strcmp(file, "-"))
  fp = stdin;
 else
  fp = fopen(file, "r");
 if (!fp) {
  perror(file);
  exit(-1);
 }
 while ((r = fread(buf, 1, BUFSIZ, fp)) > 0) {
  buffer = realloc(buffer, buffer_size + r + 1);
  strncpy(buffer + buffer_size, buf, r);
  buffer_size += r;
 }
 fclose(fp);
 if (buffer_size)
  buffer[buffer_size] = '\0';
} else if (argc == optind) {
 usage(argv);
} else {
 for (i = optind; i < argc; i++) {
  r = strlen(argv[i]);
  buffer = realloc(buffer, buffer_size + r + 2);
  if (i != optind)
   buffer[buffer_size++] = ' ';
  strcpy(buffer + buffer_size, argv[i]);
  buffer_size += r;
 }
}

do_sql(instance, buffer, name, var, trace_dir, execute, action, save_fields);
free(buffer);

return 0;
}
--
```

FILES

[verse]
--
tracefs.h
 Header
 file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
sqlhist(1),
libtracefs(3),
libtraceevent(3),
trace-cmd(1),
tracefs_synth_init(3),
tracefs_synth_add_match_field(3),
tracefs_synth_add_compare_field(3),
tracefs_synth_add_start_field(3),
tracefs_synth_add_end_field(3),
tracefs_synth_append_start_filter(3),
tracefs_synth_append_end_filter(3),
tracefs_synth_create(3),
tracefs_synth_destroy(3),
tracefs_synth_free(3),
tracefs_synth_echo_cmd(3),
tracefs_hist_alloc(3),
tracefs_hist_alloc_2d(3),
tracefs_hist_alloc_nd(3),
tracefs_hist_free(3),
tracefs_hist_add_key(3),
tracefs_hist_add_value(3),
tracefs_hist_add_name(3),
tracefs_hist_start(3),
tracefs_hist_destory(3),
tracefs_hist_add_sort_key(3),
tracefs_hist_sort_key_direction(3)

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REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org>

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---
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RESOURCES
---
https://git.kernel.org/pub/scm/libs/libtrace/libtracefs.git/

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* /libtracefs-1-8-0-orig-tar-xz/libtracefs-1.8.0/Documentation/libtracefs-sql.txt
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libtracefs(3)
==========

NAME
---
tracefs_trace_pipe_stream, tracefs_trace_pipe_print, tracefs_trace_pipe_stop -
redirect the stream of trace data to an output or stdout.

SYNOPSIS

[verse]
--
#include <tracefs.h>

ssize_t *tracefs_trace_pipe_stream*(int _fd_, struct tracefs_instance pass:[*]_instance_, int _flags_);
ssize_t *tracefs_trace_pipe_print*(struct tracefs_instance pass:[*]_instance_, int _flags_);
void *tracefs_trace_pipe_stop*(struct tracefs_instance pass:[*]_instance_);

--

DESCRIPTION

If NULL is passed as _instance_, the top trace instance is used.

The reading of the trace_pipe file can be stopped by calling *tracefs_trace_pipe_stop()* which could be placed in a signal handler in case the application wants to stop the reading, for example, with the user pressing Ctrl-C.

The *tracefs_trace_pipe_stream()* function redirects the stream of trace data to an output file. The "splice"
 system call is used to moves the data without copying between kernel
address space and user address space. The _fd_ is the file descriptor of the output file and _flags_ is a bit mask of flags to be passed to the open system call of the trace_pipe file (see *open(2)*). If flags contain O_NONBLOCK, then that is also passed to the splice calls that may read the file to the output stream file descriptor. Note, O_RDONLY is or'd to the _flags_ and only O_NONBLOCK is useful for this parameter.

The *tracefs_trace_pipe_print()* function is similar to *tracefs_trace_pipe_stream()*, but the stream of trace data is redirected to stdout.

RETURN VALUE

The *tracefs_trace_pipe_stream()*, and *tracefs_trace_pipe_print()* functions return the number of bytes transfered if the operation is successful, or -1 in case of an error.

EXAMPLE

[source,c]
--
```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <signal.h>
#include <fcntl.h>

#include <tracefs.h>

void
 stop(int sig)
{
 tracefs_trace_pipe_stop(NULL);
}

int main(int argc, char **argv)
{
 mode_t mode = S_IRUSR | S_IWUSR | S_IRGRP | S_IROTH;
 const char *filename;
 int fd;
 int ret;
```

```
 if (argc < 2) {
  fprintf(stderr, "usage: %s output_file\n", argv[0]);
  exit(-1);
 }
 filename = argv[1];
 fd = creat(filename, mode);
 if (fd < 0) {
  perror(filename);
  exit(-1);
 }
 signal(SIGINT, stop);
 ret = tracefs_trace_pipe_stream(fd, NULL, SPLICE_F_NONBLOCK);
 close(fd);

 return ret;
}
```

--

FILES

[verse]

--

tracefs.h

 Header file to include in order to have access to the library APIs.

-ltracefs

 Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),

trace-cmd(1),

Documentation/trace/ftrace.rst from the Linux kernel tree

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REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org>

LICENSE

---

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RESOURCES
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libtracefs(3)
==========

NAME
---
tracefs_filter_string_append, tracefs_filter_string_verify, tracefs_event_filter_apply, tracefs_event_filter_clear - Add, verify and apply event filters

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_filter_string_append*(struct tep_event pass:[*]_event_, char pass:[**]_filter_,
    struct tracefs_filter _type_, const char pass:[*]_field_,
    enum tracefs_synth_compare _compare_, const char pass:[*]_val_);
int *tracefs_filter_string_verify*(struct tep_event pass:[*]_event_, const char pass:[*]_filter_, char pass:[**]_err_);
int *tracefs_event_filter_apply*(struct tracefs_instance pass:[*]_instance_, struct tep_event pass:[*]_event_, const char pass:[*]_filter_);
int *tracefs_event_filter_clear*(struct tracefs_instance pass:[*]_instance_, struct tep_event pass:[*]_event_);

--

DESCRIPTION
---
tracefs_filter_string_append() is a way to create and
verify event filters for
a given event. It will verify that the _field_ belongs to the event and that
the _compare_ option that is used is valid for the type of the field, as well
as _val_. For the _type_ that is not of *TRACEFS_FILTER_COMPARE*, it will build
the logical string and also make sure that the syntax is correct. For example,
there are no more close parenthesis than open parenthesis. An AND (&&) or OR

(||) is not misplaced, etc.

tracefs_synth_append_start_filter() creates a filter or appends to it for the starting event. Depending on _type_, it will build a string of tokens for parenthesis or logic statemens, or it may add a comparison of _field_ to _val_ based on _compare_.

If _type_ is:
TRACEFS_FILTER_COMPARE - See below
TRACEFS_FILTER_AND - Append "&&" to the filter
TRACEFS_FILTER_OR - Append "||" to the filter
TRACEFS_FILTER_NOT - Append "!" to the filter
TRACEFS_FILTER_OPEN_PAREN - Append "(" to the filter
TRACEFS_FILTER_CLOSE_PAREN
- Append ")" to the filter

field, _compare_, and _val_ are ignored unless _type_ is equal to *TRACEFS_FILTER_COMPARE*, then _compare will be used for the following:

TRACEFS_COMPARE_EQ - _field_ == _val_

TRACEFS_COMPARE_NE - _field_ != _val_

TRACEFS_COMPARE_GT - _field_ > _val_

TRACEFS_COMPARE_GE - _field_ >= _val_

TRACEFS_COMPARE_LT - _field_ < _val_

TRACEFS_COMPARE_LE - _field_ <pass:[=] _val_

TRACEFS_COMPARE_RE - _field_ ~ "_val_" : where _field_ is a string.

TRACEFS_COMPARE_AND - _field_ & _val_ : where _field_ is a flags field.

tracefs_filter_string_verify() will parse _filter_ to make sure that the fields are for the _event_, and that the syntax is correct. If there's an error in the syntax, and _err_ is not NULL, then it will be allocated with an error message stating what was found wrong with the filter. _err_ must be freed with *free*().

tracefs_event_filter_apply() applies given _filter_ string on _event_ in given _instance_.

tracefs_event_filter_clear()
clear all filters on _event_ in given _instance_.

RETURN VALUE
---

tracefs_filter_string_append() returns 0 on success and -1 on error.

tracefs_filter_string_verify() returns 0 on success and -1 on error. if there is an error, and _errno_ is not *ENOMEM*, then _err_ is allocated and will contain a string describing what was found wrong with _filter_. _err_ must be freed with *free*().

tracefs_event_filter_apply() returns 0 on success and -1 on error.

tracefs_event_filter_clear() returns 0 on success and -1 on error.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <stdio.h>
#include <ctype.h>
#include <tracefs.h>

static void usage(char **argv)
{
 fprintf(stderr, "usage: %s [system] event filter\n", argv[0]);
 exit(-1);
}

int main (int argc, char **argv)
{
 struct tep_handle *tep;
 struct tep_event *event;
 const char *system = NULL;
 const char *event_name;
 const char *filter;
 char *new_filter = NULL;
 char *err = NULL;
 int
 i;

 if (argc < 3)
  usage(argv);

 if (argc < 4) {
  event_name = argv[1];
  filter = argv[2];
 } else {
  system = argv[1];
  event_name = argv[2];
  filter = argv[3];
```

```
}

/* Load all events from the system */
tep = tracefs_local_events(NULL);
if (!tep) {
 perror("tep");
 exit(-1);
}

event = tep_find_event_by_name(tep, system, event_name);
if (!event) {
 fprintf(stderr, "Event %s%s%s not found\n",
  system ? system : "" , system ? " " : "",
  event_name);
 exit(-1);
}

if (tracefs_filter_string_verify(event, filter, &err) < 0) {
 perror("tracecfs_event_verify_filter");
 if (err)
  fprintf(stderr, "%s", err);
 free(err);
 exit(-1);
}

for (i = 0; filter[i]; i++) {
 char buf[strlen(filter)];
 char *field = NULL;
 char *val = NULL;
 enum tracefs_filter type;
 enum tracefs_compare compare = 0;
 int start_i, n;
 int quote;
 bool backslash;

 while (isspace(filter[i]))
  i++;

 switch(filter[i]) {
 case '(':
  type = TRACEFS_FILTER_OPEN_PAREN;
  break;
 case
')':
  type = TRACEFS_FILTER_CLOSE_PAREN;
  break;
 case '!':
  type = TRACEFS_FILTER_NOT;
```

```
 break;
case '&':
 type = TRACEFS_FILTER_AND;
 i++;
 break;
case '|':
 type = TRACEFS_FILTER_OR;
 i++;
 break;
default:
 type = TRACEFS_FILTER_COMPARE;

 while (isspace(filter[i]))
  i++;

 start_i = i;
 for (; filter[i]; i++) {
  switch(filter[i]) {
  case 'a' ... 'z':
  case 'A' ... 'Z':
  case '0' ... '9':
  case '_':
   continue;
  }
  break;
 }

 n = i - start_i;
 field = buf;
 strncpy(field, filter + start_i, n);
 field[n++] = '\0';

 val = buf + n;

 while (isspace(filter[i]))
  i++;

 start_i = i;
 switch(filter[i++]) {
 case '>':
  compare = TRACEFS_COMPARE_GT;
  if (filter[i] == '=') {
   i++;
   compare = TRACEFS_COMPARE_GE;
  }
  break;
 case '<':
  compare = TRACEFS_COMPARE_LT;
```

```
 if (filter[i] == '=') {
  i++;
  compare = TRACEFS_COMPARE_LE;
 }
 break;
case '=':
 compare
= TRACEFS_COMPARE_EQ;
 i++;
 break;
case '!':
 compare = TRACEFS_COMPARE_NE;
 i++;
 break;
case '~':
 compare = TRACEFS_COMPARE_RE;
 break;
case '&':
 compare = TRACEFS_COMPARE_AND;
 break;
}

while (isspace(filter[i]))
 i++;

quote = 0;
backslash = false;
start_i = i;
for (; filter[i]; i++) {
 if (quote) {
  if (backslash)
   backslash = false;
  else if (filter[i] == '\\')
   backslash = true;
  else if (filter[i] == quote)
   quote = 0;
  continue;
 }
 switch(filter[i]) {
 case '"': case '\'':
  quote = filter[i];
  continue;
 case 'a' ... 'z':
 case 'A' ... 'Z':
 case '0' ... '9':
 case '_':
  continue;
 }
```

```
    break;
   }
   n = i - start_i;
   strncpy(val, filter + start_i, n);
   val[n] = '\0';
   break;
  }
  n = tracefs_filter_string_append(event, &new_filter, type,
      field, compare, val);
  if (n < 0) {
   fprintf(stderr, "Failed making new filter:\n'%s'\n",
    new_filter
 ? new_filter : "(null)");
   exit(-1);
  }
 }

 if (tracefs_event_filter_apply(NULL, event, new_filter))
  fprintf(stderr, "Failed to apply filter on event");

 tep_free(tep);

 printf("Created new filter: '%s'\n", new_filter);
 free(new_filter);

 exit(0);
}
```

--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1),
tracefs_hist_alloc(3),
tracefs_hist_alloc_2d(3),
tracefs_hist_alloc_nd(3),
tracefs_hist_free(3),

tracefs_hist_add_key(3),
tracefs_hist_add_value(3),
tracefs_hist_add_name(3),
tracefs_hist_start(3),
tracefs_hist_destory(3),
tracefs_hist_add_sort_key(3),
tracefs_hist_sort_key_direction(3)

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libtracefs(3)
==========

NAME
---
tracefs_instance_get_name, tracefs_instance_get_trace_dir, tracefs_instances_walk, tracefs_instance_exists, tracefs_instance_get_buffer_size, tracefs_instance_set_buffer_size, tracefs_instance_get_buffer_percent, tracefs_instance_set_buffer_percent - Helper functions for working with tracing instances.

SYNOPSIS

[verse]
--
#include <tracefs.h>

const char pass:[*]*tracefs_instance_get_name*(struct tracefs_instance pass:[*]_instance_);
const char pass:[*]*tracefs_instance_get_trace_dir*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_instances_walk*(int (pass:[*]_callback_)(const char pass:[*], void pass:[*]), void pass:[*]_context)_;
bool *tracefs_instance_exists*(const char pass:[*]_name_);
size_t *tracefs_instance_get_buffer_size*(struct tracefs_instance pass:[*]_instance_, int _cpu_);
int *tracefs_instance_set_buffer_size*(struct tracefs_instance pass:[*]_instance_,
 size_t _size_, int _cpu_);
int *tracefs_instance_get_buffer_percent*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_instance_set_buffer_percent*(struct tracefs_instance pass:[*]_instance_, int _val_);
--

DESCRIPTION

Helper functions for working with trace instances.

The *tracefs_instance_get_name()* function returns the name of the given _instance_.
Note that the top instance has no name, the function returns NULL for it.

The *tracefs_instance_get_trace_dir()* function returns the tracing directory, where
the given _instance_ is configured.

The *tracefs_instances_walk()* function walks through all configured tracing
instances in the system and calls _callback_ for each one of them. The _context_
argument is passed to the _callback_, together with the instance name. If the
callback returns non-zero, the iteration stops. Note, the _callback_ is not
called for the top top instance.

The *tracefs_instance_exists()* function checks if an instance with
 the given
name exists in the system.

The *tracefs_instace_get_buffer_size()* returns the size of the ring buffer. If _cpu_
is negative, it returns the total size of all the per CPU ring buffers, otherwise
it returns the size of the per CPU ring buffer for _cpu_.

The *tracefs_instance_set_buffer_size()* function sets the size of the ring buffer.
If _cpu_ is negative, then it sets all the per CPU ring buffers to _size_ (note
the total size is the number of CPUs * _size_). If _cpu_ is specified, then it only
sets the size of the per CPU ring buffer.

The *tracefs_instance_set_buffer_percent()* sets the buffer percent value of
the tracing ring buffer for _instance_ or the top level buffer if _instance_ is
NULL. The buffer percent decides when readers on *tracefs_cpu_read*(3),

tracefs_cpu_buffered_read(3), *tracefs_cpu_write*(3) and *tracefs_cpu_pipe*(3)
will block when O_NONBLOCK is not set. The value of _val_ must be between 0 and
100, where:

[verse]
--
 0   - block until there's
 any data in the ring buffer
 1   - block until 1% of the ring buffer sub-buffers are filled
 50 - block until 50% of the ring buffer sub-buffers are filled
 100 - block until the entire ring buffer is filled
--

Note, any number from 0 to 100 can be used where it is the percentage of the
ring buffer that must be filled before a blocked reader will be notified that
there's data to be retrieved.

The *tracefs_instance_get_buffer_percent()* retrieves the current buffer percent
setting of the tracing ring buffer for _instance_ or the top level buffer
if _instance_ is NULL.

RETURN VALUE

The *tracefs_instance_get_name()* returns a string or NULL in case of the top
instance. The returned string must _not_ be freed.

The *tracefs_instance_get_trace_dir()* returns a string or NULL in case of an error.
The returned string must _not_ be freed.

The *tracefs_instances_walk()* function returns 0, if all instances were iterated, 1
if the iteration was stopped by the _callback_, or
 -1 in case of an error.

The *tracefs_instance_exists()* returns true if an instance with the given _name_
exists in the system or false otherwise.

The *tracefs_instance_get_buffer_size()* returns the size of the ring buffer depending on
the _cpu_ value passed in, or -1 on error.

The *tracefs_instance_set_buffer_size()* returns zero on success and -1 on error.

EXAMPLE

[source,c]
--
#include <tracefs.h>

struct tracefs_instance *inst;

```
....
char *name = tracefs_instance_get_name(inst);
 if(name) {
  /* Got name of the instance */
 }
char *dir = tracefs_instance_get_trace_dir(inst);
 if(dir) {
  /* Got tracing directory of the instance */
 }
...
static int instance_walk(char *name, void *context)
{
 /* Got instance with name */
 return 0;
}
...
 if (tracefs_instances_walk(instance_walk, NULL) < 0) {
  /* Error walking through the instances */
 }
...
 if (tracefs_instance_exists("foo")) {
  /* There is instance with name foo in the system */
 } else {
  /* There is no instance
 with name foo in the system */
 }
```

--

FILES

[verse]

--

tracefs.h

Header file to include in order to have access to the library APIs.

-ltracefs

Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),

trace-cmd(1)

AUTHOR

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REPORTING BUGS

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libtracefs(3)
==========

NAME
---
tracefs_synth_echo_cmd, tracefs_synth_get_start_hist, tracefs_synth_get_name,
tracefs_synth_raw_fmt, tracefs_synth_show_event, tracefs_synth_show_start_hist, tracefs_synth_show_end_hist,
tracefs_synth_get_event - Retrieve data of synthetic events.

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_synth_echo_cmd*(struct trace_seq pass:[*]_seq_, struct tracefs_synth pass:[*]_synth_);
struct tracefs_hist pass:[*]*tracefs_synth_get_start_hist*(struct tracefs_synth pass:[*]_synth_);

const char pass:[*]*tracefs_synth_get_name*(struct tracefs_synth pass:[*]_synth_);
int *tracefs_synth_raw_fmt*(struct trace_seq pass:[*]_seq_, struct tracefs_synth pass:[*]_synth_);
const char pass:[*]*tracefs_synth_show_event*(struct tracefs_synth pass:[*]_synth_);
const char pass:[*]*tracefs_synth_show_start_hist*(struct tracefs_synth pass:[*]_synth_);
const char pass:[*]*tracefs_synth_show_end_hist*(struct
 tracefs_synth pass:[*]_synth_);
struct tep_event pass:[*]*tracefs_synth_get_event*(struct tep_handle pass:[*]_tep_, struct tracefs_synth

pass:[*]_synth_);

--

DESCRIPTION

Synthetic events are dynamic events that are created by matching
two other events which triggers a synthetic event. One event is the starting
event which some field is recorded, and when the second event is executed,
if it has a field (or fields) that matches the starting event's field (or fields)
then it will trigger the synthetic event. The field values other than the matching
fields may be passed from the starting event to the end event to perform calculations
on, or to simply pass as a parameter to the synthetic event.

One common use case is to set "sched_waking" as the starting event. This event is
triggered when a process is awoken. Then set "sched_switch" as the ending event.
This event is triggered when a new task is scheduled on the CPU. By setting
the "common_pid" of both
 events as the matching fields, the time between the
two events is considered the wake up latency of that process. Use *TRACEFS_TIMESTAMP*
as a field for both events to calculate the delta in nanoseconds, or use
TRACEFS_TIMESTAMP_USECS as the compare fields for both events to calculate the
delta in microseconds. This is used as the example below.

See *tracefs_synth_alloc*(3) for allocation of synthetic events, and
tracefs_synth_create() for creating the synthetic event on the system.

tracefs_synth_echo_cmd() acts like *tracefs_synth_create*(), but instead of creating
the synthetic event in the system, it will write the echo commands to manually create
it in the _seq_ given.

tracefs_synth_get_start_hist() returns a struct tracefs_hist descriptor describing
the histogram used to create the synthetic event.

[verse]
--
enum tracefs_synth_handler {
 TRACEFS_SYNTH_HANDLE_MATCH,
 TRACEFS_SYNTH_HANDLE_MAX,
 TRACEFS_SYNTH_HANDLE_CHANGE,
};
--

tracefs_synth_get_name() returns
 the name of the synthetic event or NULL on error.
The returned string belongs to the synth event object and is freed with the event
by *tracefs_synth_free*().

tracefs_synth_raw_fmt() writes the raw format strings (dynamic event and histograms) of the synthetic event in the _seq_ given.

tracefs_synth_show_event() returns the format of the dynamic event used by the synthetic event or NULL on error. The returned string belongs to the synth event object and is freed with the event by *tracefs_synth_free*().

tracefs_synth_show_start_hist() returns the format of the start histogram used by the synthetic event or NULL on error. The returned string belongs to the synth event object and is freed with the event by *tracefs_synth_free*().

tracefs_synth_show_end_hist() returns the format of the end histogram used by the synthetic event or NULL on error. The returned string belongs to the synth event object and is freed with the event by *tracefs_synth_free*().

The *tracefs_synth_get_event*()
function returns a tep event, describing the given synthetic
event. The API detects any newly created or removed dynamic events. The returned pointer to tep event is controlled by @tep and must not be freed.

RETURN VALUE
---
tracefs_synth_get_name(), *tracefs_synth_show_event*(), *tracefs_synth_show_start_hist*() and *tracefs_synth_show_end_hist*() return a string owned by the synth event object.

The *tracefs_synth_get_event*() function returns a pointer to a tep event or NULL in case of an error or if the requested synthetic event is missing. The returned pointer to tep event is controlled by @tep and must not be freed.

All other functions return zero on success or -1 on error.

ERRORS

The following errors are for all the above calls:

EPERM Not run as root user when required.

EINVAL Either a parameter is not valid (NULL when it should not be)
or a field that is not compatible for calculations.

ENODEV An event or one of its fields is not found.

EBADE
The fields of the start and end events are not compatible for
either matching or comparing.

ENOMEM not enough memory is available.

And more errors may have happened from the system calls to the system.

EXAMPLE

See *tracefs_sql*(3) for a more indepth use of some of this code.

[source,c]
--
```
#include <stdlib.h>
#include <tracefs.h>

#define start_event "sched_waking"
#define start_field "pid"

#define end_event "sched_switch"
#define end_field "next_pid"

#define match_name "pid"

static struct tracefs_synth *synth;

static void make_event(void)
{
 struct tep_handle *tep;

 /* Load all events from the system */
 tep = tracefs_local_events(NULL);

 /* Initialize the synthetic event */
 synth = tracefs_synth_alloc(tep, "wakeup_lat",
        NULL, start_event,
        NULL, end_event,
        start_field, end_field,
        match_name);

 /* The tep is no longer needed */
 tep_free(tep);


 /* Save the "prio" field as "prio" from the start event */
 tracefs_synth_add_start_field(synth,
 "prio", NULL);

 /* Save the "next_comm" as "comm" from the end event */
 tracefs_synth_add_end_field(synth, "next_comm", "comm");

 /* Save the "prev_prio" as "prev_prio" from the end event */
 tracefs_synth_add_end_field(synth, "prev_prio", NULL);
```

```
 /*
  * Take a microsecond time difference between end and start
  * and record as "delta"
  */
 tracefs_synth_add_compare_field(synth, TRACEFS_TIMESTAMP_USECS,
     TRACEFS_TIMESTAMP_USECS,
     TRACEFS_SYNTH_DELTA_END, "delta");

 /* Only record if start event "prio" is less than 100 */
 tracefs_synth_append_start_filter(synth, TRACEFS_FILTER_COMPARE,
       "prio", TRACEFS_COMPARE_LT, "100");

 /*
  * Only record if end event "next_prio" is less than 50
  * or the previous task's prio was not greater than or equal to 100.
  *   next_prio < 50 || !(prev_prio >= 100)
  */
 tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_COMPARE,
     "next_prio", TRACEFS_COMPARE_LT, "50");
 tracefs_synth_append_end_filter(synth,
 TRACEFS_FILTER_OR, NULL, 0, NULL);
 tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_NOT, NULL, 0, NULL);
 tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_OPEN_PAREN, NULL, 0, NULL);
 tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_COMPARE,
     "prev_prio", TRACEFS_COMPARE_GE, "100");
 /*
  * Note, the above only added: "next_prio < 50 || !(prev_prio >= 100"
  * That's because, when the synth is executed, the remaining close parenthesis
  * will be added. That is, the string will end up being:
  * "next_prio < 50 || !(prev_prio >= 100)" when one of tracefs_sync_create()
  * or tracefs_sync_echo_cmd() is run.
  */
}

/* Display how to create the synthetic event */
static void show_event(void)
{
 struct trace_seq s;

 trace_seq_init(&s);

 tracefs_synth_echo_cmd(&s, synth);
 trace_seq_terminate(&s);
 trace_seq_do_printf(&s);
 trace_seq_destroy(&s);
}
```

```
int main (int argc, char **argv)
{
 make_event();

 if (argc > 1) {
  if (!strcmp(argv[1], "create")) {
   /* Create the
 synthetic event */
   tracefs_synth_create(synth);
  } else if (!strcmp(argv[1], "delete")) {
   /* Delete the synthetic event */
   tracefs_synth_destroy(synth);
  } else {
   printf("usage: %s [create|delete]\n", argv[0]);
   exit(-1);
  }
 } else
  show_event();

 tracefs_synth_free(synth);

 return 0;
}
```

--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1),
tracefs_hist_alloc(3),
tracefs_hist_alloc_2d(3),
tracefs_hist_alloc_nd(3),
tracefs_hist_free(3),
tracefs_hist_add_key(3),
tracefs_hist_add_value(3),
tracefs_hist_add_name(3),
tracefs_hist_start(3),

tracefs_hist_destory(3),
tracefs_hist_add_sort_key(3),
tracefs_hist_sort_key_direction(3),
tracefs_synth_alloc(3),
tracefs_synth_add_match_field(3),
tracefs_synth_add_compare_field(3),
tracefs_synth_add_start_field(3),
tracefs_synth_add_end_field(3),
tracefs_synth_append_start_filter(3),
tracefs_synth_append_end_filter(3),
tracefs_synth_free(3),
tracefs_synth_create(3),
tracefs_synth_destroy(3),
tracefs_synth_complete(3),
tracefs_synth_trace(3),
tracefs_synth_snapshot(3),
tracefs_synth_save(3),

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libtracefs(3)
==========

NAME
---
tracefs_instance_create, tracefs_instance_destroy, tracefs_instance_alloc, tracefs_instance_free, tracefs_instance_is_new, tracefs_instances, tracefs_instance_clear, tracefs_instance_reset - Manage trace instances.

SYNOPSIS

[verse]
--
#include <tracefs.h>

struct tracefs_instance pass:[*]*tracefs_instance_create*(const char pass:[*]_name_);
int *tracefs_instance_destroy*(struct tracefs_instance pass:[*]_instance_);
struct tracefs_instance pass:[*]*tracefs_instance_alloc*(const char pass:[*]_tracing_dir_, const char pass:[*]_name_);
void *tracefs_instance_free*(struct tracefs_instance pass:[*]_instance_);
bool *tracefs_instance_is_new*(struct tracefs_instance pass:[*]_instance_);
char pass:[**]*tracefs_instances*(const char pass:[*]_regex_);
void *tracefs_instance_clear*(struct tracefs_instance pass:[*]_instance_);
void *tracefs_instance_reset*(struct tracefs_instance
 pass:[*]_instance_);

--

DESCRIPTION

This set of functions can be used to manage trace instances. A trace instance is a sub buffer used by the Linux tracing system. Given a unique name, the events enabled in an instance do not affect the main tracing system, nor other instances, as events enabled in the main tracing system or other instances do not affect the given instance.

The *tracefs_instance_create()* function allocates and initializes a new tracefs_instance structure and returns it. If the instance with _name_ does not yet exist in the system, it will be created. The _name_ could be NULL, then the new tracefs_instance structure is initialized for the top instance. Note that the top instance cannot be created in the system, if it does not exist.

The *tracefs_instance_destroy()* removes the instance from the system, but does not free the structure. *tracefs_instance_free()* must still be called on _instance_.

The tracefs_instance_alloc()* function allocates a new tracefs_instance

structure
for existing trace instance. If the instance does not exist in the system, the function fails. The _tracing_dir_ parameter points to the system trace directory. It can be NULL, then default system trace directory is used. This parameter is useful to allocate instances to trace directories, copied from another machine. The _name_ is the name of the instance, or NULL for the top instance in the given _tracing_dir_.

The *tracefs_instance_free()* function frees the tracefs_instance structure, without removing the trace instance from the system.

The *tracefs_instance_is_new()* function checks if the given _instance_ is newly created by *tracefs_instance_create()*, or it has been in the system before that.

The *tracefs_instances*() function returns a list of instances that exist in the system that match the regular expression _regex_. If _regex_ is NULL, then it will match all instances that exist. The returned list must be freed with *tracefs_list_free*(3). Note,
if no instances are found an empty list is returned
and that too needs to be free with *tracefs_list_free*(3).

The *tracefs_instance_clear()* function clears the ring buffer of the given _instance_ or the top level ring buffer if _instance_ is NULL.

The *tracefs_instance_reset*() function resets the given _instance_ to its default state.

RETURN VALUE

The *tracefs_instance_create()* and *tracefs_instance_alloc()* functions return a pointer to a newly allocated tracefs_instance structure. It must be freed with *tracefs_instance_free()*.

The *tracefs_instance_destroy()* function returns 0 if it succeeds to remove the instance, otherwise it returns -1 if the instance does not exist or it fails to remove it.

The *tracefs_instance_is_new()* function returns true if the *tracefs_instance_create()* that allocated _instance_ also created the trace instance in the system, or false if the trace instance already existed in the system when _instance_ was allocated by *tracefs_instance_create()*
or *tracefs_instance_alloc()*.

The *tracefs_instances()* returns a list of instance names that exist on the system. The list must be freed with *tracefs_list_free*(3). An empty list is returned if no instance exists that matches _regex_, and this needs to be freed with *tracefs_list_free*(3) as well. NULL is returned on error.

The *tracefs_instance_clear()* returns 0 if it successfully cleared the ring buffer,

or -1 on error.

EXAMPLE

[source,c]
--
```
#include <tracefs.h>

struct tracefs_instance *inst = tracefs_instance_create("foo");
 if (!inst) {
  /* Error creating a new trace instance */
  ...
 }

 ...

 if (tracefs_instance_is_new(inst))
  tracefs_instance_destroy(inst);
 tracefs_instance_free(inst);
...

struct tracefs_instance *inst = tracefs_instance_alloc(NULL, "bar");
 if (!inst) {
  /* Error allocating 'bar' trace instance */
  ...
 }

 ...
 tracefs_instance_reset(inst);
 tracefs_instance_free(inst);
```
--
FILES

[verse]
--
tracefs.h
 Header file
 to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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--
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libtracefs(3)
==========

NAME
---
tracefs_instance_set_affinity, tracefs_instance_set_affinity_set, tracefs_instance_set_affinity_raw,
tracefs_instance_get_affinity, tracefs_instance_get_affinity_set, tracefs_instance_get_affinity_raw
- Sets or retrieves the affinity for an instance or top level for what CPUs enable tracing.

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_instance_set_affinity*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_cpu_str_);
int *tracefs_instance_set_affinity_set*(struct tracefs_instance pass:[*]_instance_, cpu_set_t pass:[*]_set_, size_t
_set_size_);
int *tracefs_instance_set_affinity_raw*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_mask_);

char pass:[*]*tracefs_instance_get_affinity*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_instance_get_affinity_set*(struct tracefs_instance pass:[*]_instance_, cpu_set_t pass:[*]_set_,
 size_t _set_size_);
char pass:[*]*tracefs_instance_get_affinity_raw*(struct tracefs_instance pass:[*]_instance_);
--

DESCRIPTION

These functions set or retrieve the CPU affinity that limits what CPUs will have tracing enabled
for a given instance defined by the _instance_ parameter. If _instance_ is NULL, then
the top level instance is affected.

The *tracefs_instance_set_affinity()* function takes a string _cpu_str_ that is a
list of CPUs to set the affinity for. If _cpu_str_ is NULL, then all the CPUs in
the system will be set. The format of _cpu_str_ is a comma delimited string of
decimal numbers with no spaces. A range may be specified by a hyphen.

For example: "1,4,6-8"

The numbers do not need to be in order except for ranges, where the second number
must be equal to or greater than the first.

The *tracefs_instance_set_affinity_set()* function takes a CPU set defined by
CPU_SET(3). The size of the set defined by _set_size_ is the size in bytes of
set. If
 set is NULL then all the CPUs on the system will be set, and _set_size_
is ignored.

The *tracefs_instance_set_affinity_raw()* function takes a string that holds
a hexidecimal bitmask, where each 32 bits is separated by a comma. For a
machine with more that 32 CPUs, to set CPUS 1-10 and CPU 40:

"100,000007fe"

Where the above is a hex representation of bits 1-10 and bit 40 being set.

The *tracefs_instance_get_affinity()* will retrieve the affinity in a human readable
form.

For example: "1,4,6-8"

The string returned must be freed with *free*(3).

The *tracefs_instance_get_affinity_set()* will set all the bits in the passed in
cpu set (from *CPU_SET*(3)). Note it will not clear any bits that are already set
in the set but the CPUs are not. If only the bits for the CPUs that are enabled
should be set, a CPU_ZERO_S() should be performed on the set before calling this
function.

The *tracefs_instance_get_affinity_raw()* will simply read the instance tracing_cpumask and return that
 string. The returned string must be freed with *free*(3).

RETURN VALUE

All the set functions return 0 on success and -1 on error.

The functions *tracefs_instance_get_affinity()* and *tracefs_instance_get_affinity_raw()* returns an allocated string that must be freed with *free*(3), or NULL on error.

The function *tracefs_instance_get_affinity_set()* returns the number of CPUs that were found set, or -1 on error.

ERRORS

The following errors are for all the above calls:

EFBIG if a CPU is set that is greater than what is in the system.

EINVAL One of the parameters was invalid.

The following errors are for *tracefs_instance_set_affinity*() and *tracefs_instance_set_affinity_set*():

ENOMEM Memory allocation error.

ENODEV dynamic events of requested type are not configured for the running kernel.

The following errors are just for *tracefs_instance_set_affinity*()

EACCES The _cpu_str_ was modified by another thread when processing it.

EXAMPLE

[source,c]
--
```
#include
 <sched.h>
#include <stdio.h>
#include <stdlib.h>
#include <tracefs.h>

int main (int argc, char **argv)
{
 struct trace_seq seq;
 cpu_set_t *set;
```

```
size_t set_size;
char *c;
int cpu1;
int cpu2;
int i;

c = tracefs_instance_get_affinity(NULL);
printf("The affinity was %s\n", c);
free(c);

if (argc < 2) {
 tracefs_instance_set_affinity(NULL, NULL);
 exit(0);
}
/* Show example using a set */
if (argc == 2 && !strchr(argv[1],',')) {
 cpu1 = atoi(argv[1]);
 c = strchr(argv[1], '-');
 if (c++)
  cpu2 = atoi(c);
 else
  cpu2 = cpu1;
 if (cpu2 < cpu1) {
  fprintf(stderr, "Invalid CPU range\n");
  exit(-1);
 }
 set = CPU_ALLOC(cpu2 + 1);
 set_size = CPU_ALLOC_SIZE(cpu2 + 1);
 CPU_ZERO_S(set_size, set);
 for ( ; cpu1 <= cpu2; cpu1++)
  CPU_SET(cpu1, set);
 tracefs_instance_set_affinity_set(NULL, set, set_size);
 CPU_FREE(set);
 exit(0);
}

trace_seq_init(&seq);
for (i = 1; i < argc; i++) {
 if (i > 1)
  trace_seq_putc(&seq, ',');
 trace_seq_puts(&seq,
argv[i]);
}
trace_seq_terminate(&seq);
tracefs_instance_set_affinity(NULL, seq.buffer);
trace_seq_destroy(&seq);
exit(0);
```

```
 return 0;
}
```
--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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libtracefs(3)

==========

NAME
---
tracefs_binary_init, tracefs_binary_close, tracefs_binary_write -
Open, close and write binary data in the trace buffer.

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_binary_init*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_binary_write*(struct tracefs_instance pass:[*]_instance_, void pass:[*]_data_, int _len_);
void *tracefs_binary_close*(struct tracefs_instance pass:[*]_instance_);

--

DESCRIPTION

Set of functions to write binary data in the trace buffer.
See Documentation/trace/ftrace.rst from the Linux kernel tree for more information about writing data from user space in the trace buffer. All these APIs have _instance_ as a first argument. If NULL is passed as _instance_, the top trace instance is used.

The *tracefs_binary_init()* function initializes the library for writing into the trace buffer of the selected _instance_.
It is not mandatory to call this API before writing data, the *tracefs_binary_write()* will call it automatically, if the library is not yet initialized.
But calling *tracefs_binary_init()* in advance will speed up the writing.

The *tracefs_binary_write()* function writes a binary data in the trace buffer of the selected _instance_. The _data_ points to the data with length _len_, that is going to be written in the trace buffer.

The *tracefs_binary_close()* function closes the resources, used by the library for writing in the trace buffer of the selected instance.

RETURN VALUE

The *tracefs_binary_init()*, and *tracefs_binary_write()* functions return 0 if the operation is successful, or -1 in case of an error.

EXAMPLE

[source,c]
--

```
#include <tracefs.h>

if (tracefs_binary_init(NULL) < 0) {
/* Failed to initialize the library for writing in the trace buffer of the top trace instance */
}

unsigned int data = 0xdeadbeef;

 if (tracefs_binary_write(NULL, &data, sizeof(data))
 < 0) {
  /* Failed to write in the trace buffer */
 }

tracefs_binary_close();
```

--

FILES

[verse]

--

tracefs.h

 Header file to include in order to have access to the library APIs.

-ltracefs

 Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),

trace-cmd(1),

Documentation/trace/ftrace.rst from the Linux kernel tree

AUTHOR

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--

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libtracefs(3)
==========

NAME
---
tracefs_find_cid_pid, tracefs_instance_find_cid_pid, tracefs_time_conversion -
helper functions to handle tracing guests

SYNOPSIS

[verse]
--
#include <tracefs.h>

char pass:[*]*tracefs_find_cid_pid*(int _cid_);
char pass:[*]*tracefs_instance_find_cid_pid*(struct tracefs_instance pass:[*]_instance_, int _cid_);
int *tracefs_time_conversion*(int _cpu_, int pass:[*]_shift_, int pass:[*]_multi_, long long pass:[*]offset);
--

DESCRIPTION

The *tracefs_find_cid_pid*() will use tracing to follow the wakeups of connecting to
the given _cid_ in order to find the pid of the guest thread that belongs to the vsocket cid.
It will then read the proc file system to find the thread leader, and it will return
the pid of the thread leader.

The *tracefs_instance_find_cid_pid*() is the same as *tracefs_find_cid_pid*() but defines
the instance to use to perform the tracing in.
If NULL it will use the top level
buffer to perform the tracing.

The *tracefs_time_conversion*() will return the values used by the kernel to convert
the raw time stamp counter into nanoseconds for the given _cpu_. Pointers for _shift_, _multi_
and _offset_ can be NULL to be ignored, otherwise they are set with the shift, multiplier
and offset repectively.

RETURN VALUE

Both *tracefs_find_cid_pid*() and *tracefs_instance_find_cid_pid*() will return the pid of the guest main thread that belongs to the _cid_, or -1 on error (or not found).

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <unistd.h>
#include <tracefs.h>

#define MAX_CID  256

static void find_cid(struct tracefs_instance *instance, int cid)
{
 int pid;

 pid = tracefs_instance_find_cid_pid(instance, cid);
 if (pid >= 0)
  printf("%d\t%d\n", cid, pid);
}

static int find_cids(void)
{
 struct tracefs_instance *instance;
 char *name;
 int cid;
 int ret;

 ret = asprintf(&name, "vsock_find-%d\n", getpid());
 if
 (ret < 0)
  return ret;

 instance = tracefs_instance_create(name);
 free(name);
 if (!instance)
  return -1;

 for (cid = 0; cid < MAX_CID; cid++)
  find_cid(instance, cid);

 tracefs_event_disable(instance, NULL, NULL);
 tracefs_instance_destroy(instance);
 tracefs_instance_free(instance);
 return 0;
```

```
}

struct time_info {
 int  shift;
 int  multi;
};

static void show_time_conversion(void)
{
 struct time_info *tinfo;
 int cpus;
 int cpu;
 int ret;

 cpus = sysconf(_SC_NPROCESSORS_CONF);
 tinfo = calloc(cpus, sizeof(*tinfo));
 if (!tinfo)
  exit(-1);

 for (cpu = 0; cpu < cpus; cpu++) {
  ret  = tracefs_time_conversion(cpu,
      &tinfo[cpu].shift,
      &tinfo[cpu].multi,
      NULL);
  if (ret)
   break;
 }
 if (cpu != cpus) {
  if (!cpu) {
   perror("tracefs_time_conversion");
   exit(-1);
  }
  printf("Only read %d of %d CPUs", cpu, cpus);
  cpus = cpu + 1;
 }

 /* Check if all the shift and mult values are the same */
 for (cpu = 1; cpu < cpus; cpu++) {
  if (tinfo[cpu
 - 1].shift != tinfo[cpu].shift)
   break;
  if (tinfo[cpu - 1].multi != tinfo[cpu].multi)
   break;
 }

 if (cpu == cpus) {
  printf("All cpus have:\n");
  printf(" shift:  %d\n", tinfo[0].shift);
```

```
  printf(" multi:  %d\n", tinfo[0].multi);
  printf("\n");
  return;
 }

 for (cpu = 0; cpu < cpus; cpu++) {
  printf("CPU: %d\n", cpu);
  printf(" shift:  %d\n", tinfo[cpu].shift);
  printf(" multi:  %d\n", tinfo[cpu].multi);
  printf("\n");
 }
}

int main(int argc, char *argv[])
{
 show_time_conversion();
 find_cids();
 exit(0);
}
```

--

FILES

[verse]

--

tracefs.h

 Header file to include in order to have access to the library APIs.

-ltracefs

 Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),

trace-cmd(1)

AUTHOR

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libtracefs(3)
==========

NAME
----
tracefs_event_systems, tracefs_system_events, tracefs_event_enable, tracefs_event_disable,
tracefs_event_is_enabled - Work with trace systems and events.

SYNOPSIS

[verse]
--
#include <tracefs.h>

enum tracefs_event_state {
 TRACEFS_ERROR = -1,
 TRACEFS_ALL_DISABLED = 0,
 TRACEFS_ALL_ENABLED = 1,
 TRACEFS_SOME_ENABLED = 2,
};

char pass:[*]pass:[*]*tracefs_event_systems*(const char pass:[*]_tracing_dir_);
char pass:[*]pass:[*]*tracefs_system_events*(const char pass:[*]_tracing_dir_, const char pass:[*]_system_);
int *tracefs_event_enable*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_,
      const char pass:[*]_event_);
int *tracefs_event_disable*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_,
       const char pass:[*]_event_);
enum tracefs_enable_state *tracefs_event_is_enabled*(struct tracefs_instance pass:[*]_instance_,

 const char pass:[*]_system_, const char pass:[*]_event_);
--

DESCRIPTION

Trace systems and events related APIs.

The *tracefs_event_systems()* function returns array of strings with the names of all registered trace systems, located in the given _tracing_dir_ directory. This could be NULL or the location of the tracefs mount point for the trace systems of the local machine, or it may be a path to a copy of the tracefs directory from another machine. The last entry in the array is a NULL pointer. The array must be freed with *tracefs_list_free()* API.

The *tracefs_system_events()* function returns array of strings with the names of all registered trace events for given trace system specified by _system_, located in the given _tracing_dir_ directory. This could be NULL or the location of the tracefs mount point for the trace systems of the local machine, or it may be a path to a copy of the tracefs directory from another machine. The last entry in the array as a
NULL pointer.
The array must be freed with *tracefs_list_free()* API.

The *tracefs_event_enable()* function enables a given event based on the _system_ and _event_ passed in for the given _instance_. If _instance_ is NULL, then the top level tracing directory is used. If _system_ and _event_ are both NULL, then all events are enabled for the _instance_. If _event_ is NULL then all events within the _system_ are enabled. If _system_ is NULL, then all systems are searched and any event within a system that matches _event_ is enabled. Both _system_ and _event_ may be regular expressions as defined by *regex*(3).

The *tracefs_event_disable()* function disables the events that match the _system_ and _event_ parameters for the given _instance_. What events are disable follow the same rules as *tracefs_event_enable()* for matching events. That is, if _instance_ is NULL, then the top level tracing directory is used. If both _system_ and _event_ are NULL then all events are disabled for the
given _instance_, and so on.

The *tracefs_event_is_enabled()* returns if an event is enabled, a set of events are enabled, a system is enabled, or all events are enabled. If both _system_ and _event_ are NULL, then it returns the enable state of all events. If _system_ is not NULL and _event_ is NULL, then it will check if all the events in all the systems that _system_ and return the enable state of those events. If _system_ is NULL and _event_ is not NULL, then it will match all the events in all systems that match _event_ and return their enabled state. If both _system_ and _event_ are not NULL, then it will return the enabled state of all matching events. The enabled state is defined as:

TRACEFS_ERROR - An error occurred including no event were matched.

TRACEFS_ALL_DISABLED - All matching events are disabled.

TRACEFS_ALL_ENABLED - All matching events are enabled.

TRACEFS_SOME_ENABLED - Some matching events were enabled while others were not.

RETURN VALUE

The
 tracefs_event_systems() and *tracefs_system_events()* functions return
an array of strings. The last element in that array is a NULL pointer. The array
must be freed with *tracefs_list_free()* API. In case of an error, NULL is returned.

Both *tracefs_event_enable()* and *tracefs_event_disable()* return 0 if they found
any matching events (Note it does not check the previous status of the event. If
tracefs_event_enable() finds an event that is already enabled, and there are no
other errors, then it will return 0). If an error occurs, even if other events were
found, it will return -1 and errno will be set. If no errors occur, but no events
are found that match the _system_ and _event_ parameters, then -1 is returned
and errno is not set.

The *tracefs_event_is_enabled()* returns the enabled status of the matching events
or TRACEFS_ERROR on error.

EXAMPLE

[source,c]
--
```
#include <tracefs.h>

char **systems = tracefs_event_systems(NULL);

 if (systems) {
  int i = 0;
  /*
 Got registered trace systems from the top trace instance */
  while (systems[i]) {
   char **events = tracefs_system_events(NULL, systems[i]);
   if (events) {
    /* Got registered events in system[i] from the top trace instance */
    int j = 0;

    while (events[j]) {
     /* Got event[j] in system[i] from the top trace instance */
     j++;
    }
```

```
    tracefs_list_free(events);
   }
   i++;
  }
  tracefs_list_free(systems);
 }
....
static int records_walk(struct tep_event *tep, struct tep_record *record, int cpu, void *context)
{
 /* Got recorded event on cpu */
 return 0;
}
...
struct tep_handle *tep = tracefs_local_events(NULL);

 if (!tep) {
  /* Failed to initialise tep handler with local events */
  ...
 }

 errno = 0;
 ret = tracefs_event_enable(NULL, "sched", NULL);
 if (ret < 0 && !errno)
  printf("Could not find 'sched' events\n");
 tracefs_event_enable(NULL, "irq", "irq_handler_\(enter\|exit\)");

 if (tracefs_iterate_raw_events(tep, NULL, NULL, 0, records_walk, NULL) <
 0) {
  /* Error walking through the recorded raw events */
 }

 /* Disable all events */
 tracefs_event_disable(NULL, NULL, NULL);
 tep_free(tep);
```

--

FILES

[verse]

--

tracefs.h

 Header file to include in order to have access to the library APIs.

-ltracefs

 Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),
trace-cmd(1)

AUTHOR

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libtracefs(3)
==========

NAME
---
tracefs_hist_add_sort_key, tracefs_hist_set_sort_key, tracefs_hist_sort_key_direction,
tracefs_hist_add_name, tracefs_hist_append_filter, tracefs_hist_echo_cmd, tracefs_hist_command,
tracefs_hist_get_name, tracefs_hist_get_event, tracefs_hist_get_system - Update and describe an event histogram

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_hist_add_sort_key*(struct tracefs_hist pass:[*]_hist_,
    const char pass:[*]_sort_key_);

```
int *tracefs_hist_set_sort_key*(struct tracefs_hist pass:[*]_hist_,
        const char pass:[*]_sort_key_, _..._);
int *tracefs_hist_sort_key_direction*(struct tracefs_hist pass:[*]_hist_,
       const char pass:[*]_sort_key_,
       enum tracefs_hist_sort_direction _dir_);

int *tracefs_hist_add_name*(struct tracefs_hist pass:[*]_hist_, const char pass:[*]_name_);

int *tracefs_hist_append_filter*(struct tracefs_hist pass:[*]_hist_,

      enum tracefs_filter _type_,
         const char pass:[*]_field_,
         enum tracefs_compare _compare_,
         const char pass:[*]_val_);

int *tracefs_hist_echo_cmd*(struct trace_seq pass:[*]_s_, struct tracefs_instance pass:[*]_instance_,
    struct tracefs_hist pass:[*]_hist_,
    enum tracefs_hist_command _command_);

int *tracefs_hist_command*(struct tracefs_instance pass:[*]_instance_,
   struct tracefs_hist pass:[*]_hist_,
   enum tracefs_hist_command _command_);

const char pass:[*]*tracefs_hist_get_name*(struct tracefs_hist pass:[*]_hist_);

const char pass:[*]*tracefs_hist_get_event*(struct tracefs_hist pass:[*]_hist_);

const char pass:[*]*tracefs_hist_get_system*(struct tracefs_hist pass:[*]_hist_);
```

--

DESCRIPTION

Event histograms are created by the trigger file in the event directory.
The syntax can be complex and difficult to get correct. This API handles the
syntax, and facilitates the creation and interaction with the event histograms.
See
https://www.kernel.org/doc/html/latest/trace/histogram.html for more information.

tracefs_hist_add_sort_key() will add a key to sort on. The _hist_ is the
histogram descriptor to add the sort key to. The _sort_key_ is a string
that must match either an already defined key of the histogram, or an already
defined value. If _hist_ already has sorting keys (previously added) the new
_sort_key_ will have lower priority(be secondary or so on) when sorting.

tracefs_hist_set_sort_key() will reset the list of key to sort on. The _hist_ is
the histogram descriptor to reset the sort key to. The _sort_key_ is a string

that must match either an already defined key of the histogram, or an already
defined value. Multiple sort keys may be added to denote a secondary, sort order
and so on, but all sort keys must match an existing key or value, or be
TRACEFS_HIST_HITCOUNT. The last parameter of *tracefs_hist_add_sort_key*() must
be NULL.

tracefs_hist_sort_key_direction() allows to
change the direction of an
existing sort key of _hist_. The _sort_key_ is the sort key to change, and
dir can be either TRACEFS_HIST_SORT_ASCENDING or TRACEFS_HIST_SORT_DESCENDING,
to make the direction of the sort key either ascending or descending respectively.

tracefs_hist_add_name() adds a name to a histogram. A histogram may be
named and if the name matches between more than one event, and they have
compatible keys, the multiple histograms with the same name will be merged
into a single histogram (shown by either event's hist file). The _hist_
is the histogram to name, and the _name_ is the name to give it.

tracefs_hist_append_filter() creates a filter or appends to it for the
histogram event. Depending on _type_, it will build a string of tokens for
parenthesis or logic statements, or it may add a comparison of _field_
to _val_ based on _compare_.

If _type_ is:
TRACEFS_FILTER_COMPARE - See below
TRACEFS_FILTER_AND - Append "&&" to the filter
TRACEFS_FILTER_OR
- Append "||" to the filter
TRACEFS_FILTER_NOT - Append "!" to the filter
TRACEFS_FILTER_OPEN_PAREN - Append "(" to the filter
TRACEFS_FILTER_CLOSE_PAREN - Append ")" to the filter

field, _compare_, and _val_ are ignored unless _type_ is equal to
TRACEFS_FILTER_COMPARE, then _compare_ will be used for the following:

TRACEFS_COMPARE_EQ - _field_ == _val_

TRACEFS_COMPARE_NE - _field_ != _val_

TRACEFS_COMPARE_GT - _field_ > _val_

TRACEFS_COMPARE_GE - _field_ >= _val_

TRACEFS_COMPARE_LT - _field_ < _val_

TRACEFS_COMPARE_LE - _field_ <pass:[=] _val_

TRACEFS_COMPARE_RE - _field_ ~ "_val_" : where _field_ is a string.

TRACEFS_COMPARE_AND - _field_ & _val_ : where _field_ is a flags field.

trace_hist_echo_cmd() prints the commands needed to create the given histogram in the given _instance_, or NULL for the top level, into the _seq_.
The command that is printed is described by _command_ and shows the functionality that would
be done by *tracefs_hist_command*(3).

tracefs_hist_command() is called to process a command on the histogram _hist_ for its event in the given _instance_, or NULL for the top level.
The _cmd_ can be one of:

TRACEFS_HIST_CMD_START or zero to start execution of the histogram.

TRACEFS_HIST_CMD_PAUSE to pause the given histogram.

TRACEFS_HIST_CMD_CONT to continue a paused histogram.

TRACEFS_HIST_CMD_CLEAR to reset the values of a histogram.

TRACEFS_HIST_CMD_DESTROY to destroy the histogram (undo a START).

The below functions are wrappers to tracefs_hist_command() to make the calling conventions a bit easier to understand what is happening.

KEY TYPES
---

tracefs_hist_alloc_nd() and *tracefs_hist_add_key*() both add a key and requires that key to have a type. The types may be:

TRACEFS_HIST_KEY_NORMAL or zero (0) which is to not modify the type.

TRACEFS_HIST_KEY_HEX to display the key in hex.

TRACEFS_HIST_KEY_SYM to display the key as a kernel symbol (if found). If
the key is an address, this is useful as it will display the function names instead of just a number.

TRACEFS_HIST_KEY_SYM_OFFSET similar to *TRACEFS_HIST_KEY_SYM* but will also include the offset of the function to match the exact address.

TRACEFS_HIST_KEY_SYSCALL If the key is a system call "id" (the number passed from user space to the kernel to tell it what system call it is calling), then the name of the system call is displayed.

TRACEFS_HIST_KEY_EXECNAME If "common_pid" is the key (the pid of the executing task), instead of showing the number, show the name of the running task.

TRACEFS_HIST_KEY_LOG will display the key in a binary logarithmic scale.

TRACEFS_HIST_KEY_USECS for use with "common_timestamp" or TRACEFS_HIST_TIMESTAMP, in which case it will show the timestamp in microseconds instead of nanoseconds.

RETURN VALUE
---
tracefs_hist_get_name() returns the name of the histogram or NULL on error.
The returned string belongs to the histogram
 object and is freed with the histogram
by *tracefs_hist_free*().

tracefs_hist_get_event() returns the event name of the histogram or NULL on error.
The returned string belongs to the histogram object and is freed with the histogram
by *tracefs_hist_free*().

tracefs_hist_get_system() returns the system name of the histogram or NULL on error.
The returned string belongs to the histogram object and is freed with the histogram
by *tracefs_hist_free*().

tracefs_hist_alloc_nd() returns an allocated histogram descriptor which must
be freed by *tracefs_hist_free*() or NULL on error.

tracefs_hist_get_name(), *tracefs_hist_get_event*() and *tracefs_hist_get_system*()
return strings owned by the histogram object.

All the other functions return zero on success or -1 on error.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <unistd.h>
#include <tracefs.h>

enum commands {
 START,
 PAUSE,
 CONT,
 RESET,
 DELETE,
 SHOW,
};
```

```
static void parse_system_event(char *group, char
 **system, char **event)
{
 *system = strtok(group, "/");
 *event = strtok(NULL, "/");
 if (!*event) {
  *event = *system;
  *system = NULL;
 }
}

static int parse_keys(char *keys, struct tracefs_hist_axis **axes)
{
 char *sav = NULL;
 char *key;
 int cnt = 0;

 for (key = strtok_r(keys, ",", &sav); key; key = strtok_r(NULL, ",", &sav)) {
  struct tracefs_hist_axis *ax;
  char *att;

  ax = realloc(*axes, sizeof(*ax) * (cnt + 2));
  if (!ax) {
   perror("Failed to allocate axes");
   exit(-1);
  }
  ax[cnt].key = key;
  ax[cnt].type = 0;
  ax[cnt + 1].key = NULL;
  ax[cnt + 1].type = 0;

  *axes = ax;

  att = strchr(key, '.');
  if (att) {
   *att++ = '\0';
   if (strcmp(att, "hex") == 0)
    ax[cnt].type = TRACEFS_HIST_KEY_HEX;
   else if (strcmp(att, "sym") == 0)
    ax[cnt].type = TRACEFS_HIST_KEY_SYM;
   else if (strcmp(att, "sym_offset") == 0)
    ax[cnt].type = TRACEFS_HIST_KEY_SYM_OFFSET;
   else if (strcmp(att, "syscall") == 0)
    ax[cnt].type = TRACEFS_HIST_KEY_SYSCALL;
   else
 if (strcmp(att, "exec") == 0)
    ax[cnt].type = TRACEFS_HIST_KEY_EXECNAME;
   else if (strcmp(att, "log") == 0)
```

```
    ax[cnt].type = TRACEFS_HIST_KEY_LOG;
   else if (strcmp(att, "usecs") == 0)
    ax[cnt].type = TRACEFS_HIST_KEY_USECS;
   else {
    fprintf(stderr, "Undefined attribute '%s'\n", att);
    fprintf(stderr,"  Acceptable attributes:\n");
    fprintf(stderr,"    hex, sym, sym_offset, syscall, exe, log, usecs\n");
    exit(-1);
   }
  }
  cnt++;
 }
 return cnt;
}

static void process_hist(enum commands cmd, const char *instance_name,
    char *group, char *keys, char *vals, char *sort,
    char *ascend, char *desc)
{
 struct tracefs_instance *instance = NULL;
 struct tracefs_hist *hist;
 struct tep_handle *tep;
 struct tracefs_hist_axis *axes = NULL;
 char *system;
 char *event;
 char *sav;
 char *val;
 int ret;
 int cnt;

 if (instance_name) {
  instance = tracefs_instance_create(instance_name);
  if (!instance) {
   fprintf(stderr, "Failed instance create\n");
   exit(-1);
  }
 }

 tep
 = tracefs_local_events(NULL);
 if (!tep) {
  perror("Could not read events");
  exit(-1);
 }

 parse_system_event(group, &system, &event);

 if (cmd == SHOW) {
```

```
 char *content;
 content = tracefs_event_file_read(instance, system, event,
       "hist", NULL);
 if (!content) {
  perror("Reading hist file");
  exit(-1);
 }
 printf("%s\n", content);
 free(content);
 return;
}

if (!keys) {
 fprintf(stderr, "Command needs -k option\n");
 exit(-1);
}

cnt = parse_keys(keys, &axes);
if (!cnt) {
 fprintf(stderr, "No keys??\n");
 exit(-1);
}

/* Show examples of hist1d and hist2d */
switch (cnt) {
case 1:
 hist = tracefs_hist_alloc(tep, system, event,
      axes[0].key, axes[0].type);
 break;
case 2:
 hist = tracefs_hist_alloc_2d(tep, system, event,
         axes[0].key, axes[0].type,
         axes[1].key, axes[1].type);
 break;
default:
 /* Really, 1 and 2 could use this too */
 hist = tracefs_hist_alloc_nd(tep, system, event, axes);
}
if (!hist)
{
 fprintf(stderr, "Failed hist create\n");
 exit(-1);
}

if (vals) {
 sav = NULL;
 for (val = strtok_r(vals, ",", &sav); val; val = strtok_r(NULL, ",", &sav)) {
  ret = tracefs_hist_add_value(hist, val);
```

```
  if (ret) {
   fprintf(stderr, "Failed to add value %s\n", val);
   exit(-1);
  }
 }
}

if (sort) {
 sav = NULL;
 for (val = strtok_r(sort, ",", &sav); val; val = strtok_r(NULL, ",", &sav)) {
  ret = tracefs_hist_add_sort_key(hist, val);
  if (ret) {
   fprintf(stderr, "Failed to add sort key/val %s\n", val);
   exit(-1);
  }
 }
}

if (ascend) {
 sav = NULL;
 for (val = strtok_r(ascend, ",", &sav); val; val = strtok_r(NULL, ",", &sav)) {
  ret = tracefs_hist_sort_key_direction(hist, val, TRACEFS_HIST_SORT_ASCENDING);
  if (ret) {
   fprintf(stderr, "Failed to add ascending key/val %s\n", val);
   exit(-1);
  }
 }
}

if (desc) {
 sav = NULL;
 for (val = strtok_r(desc, ",", &sav); val; val = strtok_r(NULL, ",", &sav)) {
  ret = tracefs_hist_sort_key_direction(hist,
val, TRACEFS_HIST_SORT_DESCENDING);
  if (ret) {
   fprintf(stderr, "Failed to add descending key/val %s\n", val);
   exit(-1);
  }
 }
}

tracefs_error_clear(instance);

switch (cmd) {
case START:
 ret = tracefs_hist_start(instance, hist);
 if (ret) {
  char *err = tracefs_error_last(instance);
```

```
  if (err)
   fprintf(stderr, "\n%s\n", err);
  }
  break;
 case PAUSE:
  ret = tracefs_hist_pause(instance, hist);
  break;
 case CONT:
  ret = tracefs_hist_continue(instance, hist);
  break;
 case RESET:
  ret = tracefs_hist_reset(instance, hist);
  break;
 case DELETE:
  ret = tracefs_hist_destroy(instance, hist);
  break;
 case SHOW:
  /* Show was already done */
  break;
 }
 if (ret)
  fprintf(stderr, "Failed: command\n");
 exit(ret);
}

int main (int argc, char **argv, char **env)
{
 enum commands cmd;
 char *instance = NULL;
 char *cmd_str;
 char *event = NULL;
 char *keys = NULL;
 char *vals = NULL;
 char *sort = NULL;
 char *desc = NULL;
 char *ascend
 = NULL;

 if (argc < 2) {
  fprintf(stderr, "usage: %s command [-B instance][-e [system/]event][-k keys][-v vals][-s sort]\n", argv[0]);
  fprintf(stderr, "      [-a ascending][-d descending]\n");
  exit(-1);
 }

 cmd_str = argv[1];

 if (!strcmp(cmd_str, "start"))
  cmd = START;
```

```
else if (!strcmp(cmd_str, "pause"))
 cmd = PAUSE;
else if (!strcmp(cmd_str, "cont"))
 cmd = CONT;
else if (!strcmp(cmd_str, "reset"))
 cmd = RESET;
else if (!strcmp(cmd_str, "delete"))
 cmd = DELETE;
else if (!strcmp(cmd_str, "show"))
 cmd = SHOW;
else {
 fprintf(stderr, "Unknown command %s\n", cmd_str);
 exit(-1);
}

for (;;) {
 int c;

 c = getopt(argc - 1, argv + 1, "e:k:v:B:s:d:a:");
 if (c == -1)
  break;

 switch (c) {
 case 'e':
  event = optarg;
  break;
 case 'k':
  keys = optarg;
  break;
 case 'v':
  vals = optarg;
  break;
 case 'B':
  instance = optarg;
  break;
 case 's':
  sort = optarg;
  break;
 case 'd':
  desc = optarg;
  break;
 case 'a':
  ascend
= optarg;
  break;
 }
}
if (!event) {
```

```
  event = "kmem/kmalloc";
  if (!keys)
   keys = "call_site.sym,bytes_req";
  if (!vals)
   vals = "bytes_alloc";
  if (!sort)
   sort = "bytes_req,bytes_alloc";
  if (!desc)
   desc = "bytes_alloc";
 }
 process_hist(cmd, instance, event, keys, vals, sort, ascend, desc);
}
```

--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1),
tracefs_hist_pause(3),
tracefs_hist_continue(3),
tracefs_hist_reset(3)

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--
REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org>

LICENSE
---
libtracefs is Free Software licensed under the GNU LGPL 2.1

RESOURCES
---
https://git.kernel.org/pub/scm/libs/libtrace/libtracefs.git/

COPYING

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Found in path(s):
* /libtracefs-1-8-0-orig-tar-xz/libtracefs-1.8.0/Documentation/libtracefs-hist-mod.txt
No license file was found, but licenses were detected in source scan.

libtracefs(3)
==========

NAME
---
libtracefs - Linux kernel trace file system library

SYNOPSIS

[verse]
--
#include <tracefs.h>

Locations of tracing files and directories:
char pass:[*]*tracefs_get_tracing_file*(const char pass:[*]_name_);
void *tracefs_put_tracing_file*(char pass:[*]_name_);
const char pass:[*]*tracefs_tracing_dir*(void);
const char pass:[*]*tracefs_debug_dir*(void);
int *tracefs_set_tracing_dir*(char pass:[*]_tracing_dir_)
int *tracefs_tracing_dir_is_mounted*(bool _mount_, const char pass:[**]_path_);

Trace instances:
struct tracefs_instance pass:[*]*tracefs_instance_create*(const char pass:[*]_name_);
int *tracefs_instance_destroy*(struct tracefs_instance pass:[*]_instance_);
struct tracefs_instance pass:[*]*tracefs_instance_alloc*(const char pass:[*]_tracing_dir_, const char pass:[*]_name_);
void *tracefs_instance_free*(struct tracefs_instance pass:[*]_instance_);
char
pass:[**]*tracefs_instances*(const char pass:[*]_regex_);
void *tracefs_instance_clear*(struct tracefs_instance pass:[*]_instance_);
void *tracefs_instance_reset*(struct tracefs_instance pass:[*]_instance_);
bool *tracefs_instance_is_new*(struct tracefs_instance pass:[*]_instance_);
bool *tracefs_file_exists*(struct tracefs_instance pass:[*]_instance_, char pass:[*]_name_);

```
 bool *tracefs_dir_exists*(struct tracefs_instance pass:[*]_instance_, char pass:[*]_name_);
 char pass:[*]*tracefs_instance_get_file*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_);
 char pass:[*]*tracefs_instance_get_dir*(struct tracefs_instance pass:[*]_instance_);
 int *tracefs_instance_file_open*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, int _mode_);
 int *tracefs_instance_file_write*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, const char
pass:[*]_str_);
 int *tracefs_instance_file_write_number*(struct tracefs_instance pass:[*]_instance_,
 const char pass:[*]_file_, size_t _val_);
 int *tracefs_instance_file_append*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, const char
pass:[*]_str_);
 int *tracefs_instance_file_clear*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_);
 char pass:[*]*tracefs_instance_file_read*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, int
pass:[*]_psize_);
 int *tracefs_instance_file_read_number*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_, long
long int pass:[*]_res_);
 const char pass:[*]*tracefs_instance_get_name*(struct tracefs_instance pass:[*]_instance_);
 const char pass:[*]*tracefs_instance_get_trace_dir*(struct tracefs_instance pass:[*]_instance_);
 int *tracefs_instances_walk*(int (pass:[*]_callback_)(const char pass:[*], void pass:[*]), void pass:[*]_context)_;
 bool *tracefs_instance_exists*(const char pass:[*]_name_);
 int *tracefs_instance_set_affinity*(struct tracefs_instance
 pass:[*]_instance_, const char pass:[*]_cpu_str_);
 int *tracefs_instance_set_affinity_set*(struct tracefs_instance pass:[*]_instance_, cpu_set_t pass:[*]_set_, size_t
_set_size_);
 int *tracefs_instance_set_affinity_raw*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_mask_);
 char pass:[*]*tracefs_instance_get_affinity*(struct tracefs_instance pass:[*]_instance_);
 int *tracefs_instance_get_affinity_set*(struct tracefs_instance pass:[*]_instance_, cpu_set_t pass:[*]_set_, size_t
_set_size_);
 char pass:[*]*tracefs_instance_get_affinity_raw*(struct tracefs_instance pass:[*]_instance_);
 size_t *tracefs_instance_get_buffer_size*(struct tracefs_instance pass:[*]_instance_, int _cpu_);
 int *tracefs_instance_set_buffer_size*(struct tracefs_instance pass:[*]_instance_, size_t _size_, int _cpu_);
 int *tracefs_instance_get_buffer_percent*(struct tracefs_instance pass:[*]_instance_);
 int *tracefs_instance_set_buffer_percent*(struct tracefs_instance pass:[*]_instance_, int
 _val_);

Trace events:
 char pass:[*]pass:[*]*tracefs_event_systems*(const char pass:[*]_tracing_dir_);
 char pass:[*]pass:[*]*tracefs_system_events*(const char pass:[*]_tracing_dir_, const char pass:[*]_system_);
 int *tracefs_event_enable*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_,
                        const char pass:[*]_event_);
 int *tracefs_event_disable*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_,
                         const char pass:[*]_event_);
 enum tracefs_enable_state *tracefs_event_is_enabled*(struct tracefs_instance pass:[*]_instance_,
     const char pass:[*]_system_, const char pass:[*]_event_);
 int *tracefs_iterate_raw_events*(struct tep_handle pass:[*]_tep_, struct tracefs_instance pass:[*]_instance_,
cpu_set_t pass:[*]_cpus_, int _cpu_size_, int (pass:[*]_callback_)(struct tep_event pass:[*], struct tep_record
pass:[*], int, void pass:[*]), void pass:[*]_callback_context_);
 void *tracefs_iterate_stop*(struct
```

```
tracefs_instance pass:[*]_instance_);
int *tracefs_follow_event*(struct tep_handle pass:[*]_tep_, struct tracefs_instance pass:[*]_instance_,
    const char pass:[*]_system_, const char pass:[*]_event_name_,
    int (pass:[*]_callback_)(struct tep_event pass:[*],
      struct tep_record pass:[*],
      int, void pass:[*]),
    void pass:[*]_callback_data_);
int *tracefs_follow_missed_events*(struct tracefs_instance pass:[*]_instance_,
    int (pass:[*]_callback_)(struct tep_event pass:[*],
      struct tep_record pass:[*],
      int, void pass:[*]),
    void pass:[*]_callback_data_);
int *tracefs_follow_event_clear*(struct tracefs_instance pass:[*]_instance_,
   const char pass:[*]_system_, const char pass:[*]_event_name_);
int *tracefs_follow_missed_events_clear*(struct tracefs_instance pass:[*]_instance_);
struct tep_handle pass:[*]*tracefs_local_events*(const char pass:[*]_tracing_dir_);
struct tep_handle pass:[*]*tracefs_local_events_system*(const
char pass:[*]_tracing_dir_, const char pass:[*] const pass:[*]_sys_names_);
int *tracefs_fill_local_events*(const char pass:[*]_tracing_dir_, struct tep_handle pass:[*]_tep_, int
pass:[*]_parsing_failures_);
int *tracefs_load_cmdlines*(const char pass:[*]_tracing_dir_, struct tep_handle pass:[*]_tep_);
int *tracefs_load_headers*(const char pass:[*]_tracing_dir_, struct tep_handle pass:[*]_tep_);
char pass:[*]*tracefs_event_get_file*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const
char pass:[*]_event_,
      const char pass:[*]_file_);
char pass:[*]*tracefs_event_file_read*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_,
const char pass:[*]_event_,
       const char pass:[*]_file_, int pass:[*]_psize_);
int *tracefs_event_file_write*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const char
pass:[*]_event_,
      const char pass:[*]_file_, const char pass:[*]_str_);
int *tracefs_event_file_append*(struct
tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const char pass:[*]_event_,
       const char pass:[*]_file_, const char pass:[*]_str_);
int *tracefs_event_file_clear*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const char
pass:[*]_event_,
      const char pass:[*]_file_);
bool *tracefs_event_file_exists*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_system_, const char
pass:[*]_event_,
        const char pass:[*]_file_);
```

Snapshot buffer:

```
int *tracefs_snapshot_snap*(struct tracefs_instance pass:[*]instance);
int *tracefs_snapshot_clear*(struct tracefs_instance pass:[*]instance);
int *tracefs_snapshot_free*(struct tracefs_instance pass:[*]instance);
int *tracefs_iterate_snapshot_events*(struct tep_handle pass:[*]_tep_, struct tracefs_instance pass:[*]_instance_,
    cpu_set_t pass:[*]_cpus_, int _cpu_size_,
    int (pass:[*]_callback_)(struct tep_event pass:[*], struct tep_record pass:[*],
```

```
 int, void pass:[*]),
     void pass:[*]_callback_context_);
 struct tracefs_cpu pass:[*]*tracefs_cpu_snapshot_open*(struct tracefs_instance pass:[*]_instance_,
          int _cpu_, bool _nonblock_);
```

Event filters:

```
 int *tracefs_filter_string_append*(struct tep_event pass:[*]_event_, char pass:[**]_filter_,
      struct tracefs_filter _type_, const char pass:[*]_field_,
      enum tracefs_synth_compare _compare_, const char pass:[*]_val_);
 int *tracefs_filter_string_verify*(struct tep_event pass:[*]_event_, const char pass:[*]_filter_, char pass:[**]_err_);
 int *tracefs_event_filter_apply*(struct tracefs_instance pass:[*]_instance_, struct tep_event pass:[*]_event_, const
char pass:[*]_filter_);
 int *tracefs_event_filter_clear*(struct tracefs_instance pass:[*]_instance_, struct tep_event pass:[*]_event_);
```

Function filters:

```
 int *tracefs_function_filter*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_filter_, const char
pass:[*]_module_, int _flags_);
 int *tracefs_function_notrace*(struct
 tracefs_instance pass:[*]_instance_, const char pass:[*]_filter_, const char pass:[*]_module_, int _flags_);
 int *tracefs_filter_functions*(const char pass:[*]_filter_, const char pass:[*]_module_, char
pass:[*]pass:[*]pass:[*]_list_);
```

PID filters:

```
 int *tracefs_filter_pid_function*(struct tracefs_instance pass:[*]_instance,_ int _pid_,
    bool _reset_, bool _notrace_);
 int *tracefs_filter_pid_function_clear*(struct tracefs_instance pass:[*]_instance_, bool _notrace_);
 int *tracefs_filter_pid_events*(struct tracefs_instance pass:[*]_instance_, int _pid_,
    bool _reset_, bool _notrace_);
 int *tracefs_filter_pid_events_clear*(struct tracefs_instance pass:[*]_instance_, bool _notrace_);
```

Trace helper functions:

```
 void *tracefs_list_free*(char pass:[*]pass:[*]_list_);
 char pass:[**]*tracefs_list_add*(char **_list_, const char *_string_);
 int *tracefs_list_size*(char pass:[**]_list_);
 char pass:[*]*tracefs_get_clock*(struct tracefs_instance pass:[*]_instance_);
 int
 *tracefs_trace_is_on*(struct tracefs_instance pass:[*]_instance_);
 int *tracefs_trace_on*(struct tracefs_instance pass:[*]_instance_);
 int *tracefs_trace_off*(struct tracefs_instance pass:[*]_instance_);
 int *tracefs_trace_on_get_fd*(struct tracefs_instance pass:[*]_instance_);
 int *tracefs_trace_on_fd*(int _fd_);
 int *tracefs_trace_off_fd*(int _fd_);
```

Trace stream:

```
 ssize_t *tracefs_trace_pipe_stream*(int _fd_, struct tracefs_instance pass:[*]_instance_, int _flags_);
 ssize_t *tracefs_trace_pipe_print*(struct tracefs_instance pass:[*]_instance_, int _flags_);
 void *tracefs_trace_pipe_stop*(struct tracefs_instance pass:[*]_instance_);
```

Memory mapping the ring buffer:
bool *tracefs_cpu_is_mapped*(struct tracefs_cpu pass:[*]tcpu);
bool *tracefs_mapped_is_supported*(void);
int *tracefs_cpu_map*(struct tracefs_cpu pass:[*]tcpu);
void *tracefs_cpu_unmap*(struct tracefs_cpu pass:[*]tcpu);
struct tracefs_cpu pass:[*]*tracefs_cpu_open_mapped*(struct tracefs_instance pass:[*]instance,
int
cpu, bool nonblock);

Trace options:
const struct tracefs_options_mask pass:[*]*tracefs_options_get_supported*(struct tracefs_instance pass:[*]_instance_);
bool *tracefs_option_is_supported*(struct tracefs_instance pass:[*]_instance_, enum tracefs_option_id _id_);
const struct tracefs_options_mask pass:[*]*tracefs_options_get_enabled*(struct tracefs_instance pass:[*]_instance_);
bool *tracefs_option_is_enabled*(struct tracefs_instance pass:[*]_instance_, enum tracefs_option_id _id_);
bool *tracefs_option_mask_is_set*(const struct tracefs_options_mask *options, enum tracefs_option_id id);
int *tracefs_option_enable*(struct tracefs_instance pass:[*]_instance_, enum tracefs_option_id _id_);
int *tracefs_option_disable*(struct tracefs_instance pass:[*]_instance_, enum tracefs_option_id _id_);
const char pass:[*]*tracefs_option_name*(enum tracefs_option_id _id_);
enum tracefs_option_id *tracefs_option_id*(const char pass:[*]_name_);

Ftrace tracers:
char
pass:[*]pass:[*]*tracefs_tracers*(const char pass:[*]_tracing_dir_);
char pass:[**] *tracefs_instance_tracers*(struct tracefs_instance pass:[*]_instance_);
bool *tracefs_tracer_available*(const char pass:[*]_tracing_dir_, const char pass:[*]_tracer_);
int *tracefs_tracer_set*(struct tracefs_instance pass:[*]_instance_, enum tracefs_tracers _tracer_);
int *tracefs_tracer_set*(struct tracefs_instance pass:[*]_instance_, enum tracefs_tracers _tracer_, const char pass:[*]_name_);
int *tracefs_tracer_clear*(struct tracefs_instance pass:[*]_instance_);

Writing data in the trace buffer:
int *tracefs_print_init*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_printf*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_fmt_, _..._);
int *tracefs_vprintf*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_fmt_, va_list _ap_);
void *tracefs_print_close*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_binary_init*(struct tracefs_instance pass:[*]_instance_);
int
tracefs_binary_write(struct tracefs_instance pass:[*]_instance_, void pass:[*]_data_, int _len_);
void *tracefs_binary_close*(struct tracefs_instance pass:[*]_instance_);

Control library logs:
int *tracefs_set_loglevel*(enum tep_loglevel _level_);

Read the ring buffer statistics:
struct tracefs_buffer_stat pass:[*]*tracefs_instance_get_stat*(struct tracefs_instance pass:[*]_instance_, int _cpu_);
void *tracefs_instance_put_stat*(struct tracefs_buffer_stat pass:[*]_tstat_);

ssize_t *tracefs_buffer_stat_entries*(struct tracefs_buffer_stat pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_overrun*(struct tracefs_buffer_stat pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_commit_overrun*(struct tracefs_buffer_stat pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_bytes*(struct tracefs_buffer_stat pass:[*]_tstat_);
long long *tracefs_buffer_stat_event_timestamp*(struct tracefs_buffer_stat pass:[*]_tstat_);
long long *tracefs_buffer_stat_timestamp*(struct tracefs_buffer_stat
pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_dropped_events*(struct tracefs_buffer_stat pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_read_events*(struct tracefs_buffer_stat pass:[*]_tstat_);

Dynamic event generic APIs:
struct *tracefs_dynevent*;
enum *tracefs_dynevent_type*;
int *tracefs_dynevent_create*(struct tracefs_dynevent pass:[*]_devent_);
int *tracefs_dynevent_destroy*(struct tracefs_dynevent pass:[*]_devent_, bool _force_);
int *tracefs_dynevent_destroy_all*(unsigned int _types_, bool _force_);
void *tracefs_dynevent_free*(struct tracefs_dynevent pass:[*]_devent_);
void *tracefs_dynevent_list_free*(struct tracefs_dynevent pass:[*]pass:[*]_events_);
struct tracefs_dynevent pass:[*]*tracefs_dynevent_get*(enum tracefs_dynevent_type _type_, const char pass:[*]_system_, const char pass:[*]_event_);
struct tracefs_dynevent pass:[*]pass:[*]*tracefs_dynevent_get_all*(unsigned int _types_, const char pass:[*]_system_);
enum tracefs_dynevent_type *tracefs_dynevent_info*(struct
tracefs_dynevent pass:[*]_dynevent_, char pass:[*]pass:[*]_system_, char pass:[*]pass:[*]_event_, char pass:[*]pass:[*]_prefix_, char pass:[*]pass:[*]_addr_, char pass:[*]pass:[*]_format_);
struct tep_event pass:[*]*tracefs_dynevent_get_event*(struct tep_handle pass:[*]_tep_, struct tracefs_dynevent pass:[*]_dynevent_);

Even probes (eprobes):
struct tracefs_dynevent pass:[*] *tracefs_eprobe_alloc*(const char pass:[*]_system_, const char pass:[*]_event_, const char pass:[*]_target_system_, const char pass:[*]_target_event_, const char pass:[*]_fetchargs_);

Uprobes, Kprobes and Kretprobes:
struct tracefs_dynevent pass:[*] *tracefs_kprobe_alloc*(const char pass:[*]_system_, const char pass:[*]_event_, const char pass:[*]_addr_, const char pass:[*]_format_);
struct tracefs_dynevent pass:[*] *tracefs_kretprobe_alloc*(const char pass:[*]_system_, const char pass:[*]_event_, const char pass:[*]_addr_, const char pass:[*]_format_, unsigned int _max_);
int *tracefs_kprobe_raw*(const
char pass:[*]_system_, const char pass:[*]_event_, const char pass:[*]_addr_, const char pass:[*]_format_);
int *tracefs_kretprobe_raw*(const char pass:[*]_system_, const char pass:[*]_event_, const char pass:[*]_addr_, const char pass:[*]_format_);
tracefs_uprobe_alloc(const char pass:[*]_system_, const char pass:[*]_event_,
const char pass:[*]_file_, unsigned long long _offset_, const char pass:[*]_fetchargs_)
tracefs_uretprobe_alloc(const char pass:[*]_system_, const char pass:[*]_event_,
const char pass:[*]_file_, unsigned long long _offset_, const char pass:[*]_fetchargs_);
int *tracefs_kprobe_destroy*(const char pass:[*]_system_, const char pass:[*]_event_,
const char pass:[*]_addr_, const char pass:[*]_format_, bool _force_);

Synthetic events:

```
struct tracefs_synth pass:[*]*tracefs_sql*(struct tep_handle pass:[*]_tep_, const char pass:[*]_name_,
    const char pass:[*]_sql_buffer_, char pass:[**]_err_);
struct tracefs_synth pass:[*]*tracefs_synth_alloc*(struct
tep_handle pass:[*]_tep_,
      const char pass:[*]_name_,
      const char pass:[*]_start_system_,
      const char pass:[*]_start_event_,
      const char pass:[*]_end_system_,
      const char pass:[*]_end_event_,
      const char pass:[*]_start_match_field_,
      const char pass:[*]_end_match_field_,
      const char pass:[*]_match_name_);
int *tracefs_synth_add_match_field*(struct tracefs_synth pass:[*]_synth_,
      const char pass:[*]_start_match_field_,
      const char pass:[*]_end_match_field_,
      const char pass:[*]_name_);
int *tracefs_synth_add_compare_field*(struct tracefs_synth pass:[*]_synth_,
        const char pass:[*]_start_compare_field_,
        const char pass:[*]_end_compare_field_,
        enum tracefs_synth_calc _calc_,
        const char pass:[*]_name_);
int *tracefs_synth_add_start_field*(struct tracefs_synth pass:[*]_synth_,
      const char pass:[*]_start_field_,
      const char pass:[*]_name_);
int *tracefs_synth_add_end_field*(struct
tracefs_synth pass:[*]_synth_,
    const char pass:[*]_end_field_,
    const char pass:[*]_name_);
int *tracefs_synth_append_start_filter*(struct tracefs_synth pass:[*]_synth_,
          struct tracefs_filter _type_,
          const char pass:[*]_field_,
          enum tracefs_synth_compare _compare_,
          const char pass:[*]_val_);
int *tracefs_synth_append_end_filter*(struct tracefs_synth pass:[*]_synth_,
        struct tracefs_filter _type_,
        const char pass:[*]_field_,
        enum tracefs_synth_compare _compare_,
        const char pass:[*]_val_);
void *tracefs_synth_free*(struct tracefs_synth pass:[*]_synth_);
int *tracefs_synth_create*(struct tracefs_synth pass:[*]_synth_);
int *tracefs_synth_destroy*(struct tracefs_synth pass:[*]_synth_);
int *tracefs_synth_set_instance*(struct tracefs_synth pass:[*]_synth_, struct tracefs_instance pass:[*]_instance_);
int *tracefs_synth_echo_cmd*(struct trace_seq pass:[*]_seq_, struct
tracefs_synth pass:[*]_synth_);
bool *tracefs_synth_complete*(struct tracefs_synth pass:[*]_synth_);
struct tracefs_hist pass:[*]*tracefs_synth_get_start_hist*(struct tracefs_synth pass:[*]_synth_);
int *tracefs_synth_trace*(struct tracefs_synth pass:[*]_synth_,
```

```
   enum tracefs_synth_handler _type_, const char pass:[*]_var_);
int *tracefs_synth_snapshot*(struct tracefs_synth pass:[*]_synth_,
      enum tracefs_synth_handler _type_, const char pass:[*]_var_);
int *tracefs_synth_save*(struct tracefs_synth pass:[*]_synth_,
         enum tracefs_synth_handler _type_, const char pass:[*]_var_,
         char pass:[**]_save_fields_);
const char pass:[*]*tracefs_synth_get_name*(struct tracefs_synth pass:[*]_synth_);
int *tracefs_synth_raw_fmt*(struct trace_seq pass:[*]_seq_, struct tracefs_synth pass:[*]_synth_);
const char pass:[*]*tracefs_synth_show_event*(struct tracefs_synth pass:[*]_synth_);
const char pass:[*]*tracefs_synth_show_start_hist*(struct tracefs_synth pass:[*]_synth_);
const
char pass:[*]*tracefs_synth_show_end_hist*(struct tracefs_synth pass:[*]_synth_);
struct tep_event pass:[*]*tracefs_synth_get_event*(struct tep_handle pass:[*]_tep_, struct tracefs_synth
pass:[*]_synth_);

Ftrace errors reporting:
char pass:[*]*tracefs_error_last*(struct tracefs_instance pass:[*]_instance_);
char pass:[*]*tracefs_error_all*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_error_clear*(struct tracefs_instance pass:[*]_instance_);

Histograms:
struct tracefs_hist pass:[*]*tracefs_hist_alloc*(struct tracefs_tep pass:[*] _tep_,
   const char pass:[*]_system_, const char pass:[*]_event_,
   const char pass:[*]_key_, enum tracefs_hist_key_type _type_);
struct tracefs_hist pass:[*]*tracefs_hist_alloc_2d*(struct tracefs_tep pass:[*] _tep_,
   const char pass:[*]_system_, const char pass:[*]_event_,
   const char pass:[*]_key1_, enum tracefs_hist_key_type _type1_,
   const char pass:[*]_key2_, enum tracefs_hist_key_type _type2_));
struct tracefs_hist
pass:[*]*tracefs_hist_alloc_nd*(struct tracefs_tep pass:[*] _tep_,
   const char pass:[*]_system_, const char pass:[*]_event_,
   struct tracefs_hist_axis pass:[*]_axes_);
struct tracefs_hist pass:[*]*tracefs_hist_alloc_nd_cnt*(struct tep_handle pass:[*]_tep_,
     const char pass:[*]_system_, const char pass:[*]_event_name_,
     struct tracefs_hist_axis_cnt pass:[*]_axes_);
void *tracefs_hist_free*(struct tracefs_hist pass:[*]_hist_);
int *tracefs_hist_add_key*(struct tracefs_hist pass:[*]_hist_, const char pass:[*]_key_,
    enum tracefs_hist_key_type _type_);
int *tracefs_hist_add_key_cnt*(struct tracefs_hist pass:[*]_hist_, const char pass:[*]_key_,
    enum tracefs_hist_key_type _type_, int _cnt_);
int *tracefs_hist_add_value*(struct tracefs_hist pass:[*]_hist_, const char pass:[*]_value_);
int *tracefs_hist_add_sort_key*(struct tracefs_hist pass:[*]_hist_,
         const char pass:[*]_sort_key_);
int *tracefs_hist_set_sort_key*(struct tracefs_hist pass:[*]_hist_,

     const char pass:[*]_sort_key_, _..._);
int *tracefs_hist_sort_key_direction*(struct tracefs_hist pass:[*]_hist_,
        const char pass:[*]_sort_key_,
```

```
        enum tracefs_hist_sort_direction _dir_);
int *tracefs_hist_add_name*(struct tracefs_hist pass:[*]_hist_, const char pass:[*]_name_);
int *tracefs_hist_append_filter*(struct tracefs_hist pass:[*]_hist_,
          enum tracefs_filter _type_,
          const char pass:[*]_field_,
          enum tracefs_compare _compare_,
          const char pass:[*]_val_);
int *tracefs_hist_echo_cmd*(struct trace_seq pass:[*]_s_, struct tracefs_instance pass:[*]_instance_,
     struct tracefs_hist pass:[*]_hist_,
     enum tracefs_hist_command _command_);
int *tracefs_hist_command*(struct tracefs_instance pass:[*]_instance_,
    struct tracefs_hist pass:[*]_hist_,
    enum tracefs_hist_command _command_);
const char pass:[*]*tracefs_hist_get_name*(struct tracefs_hist pass:[*]_hist_);
const char pass:[*]*tracefs_hist_get_event*(struct
tracefs_hist pass:[*]_hist_);
const char pass:[*]*tracefs_hist_get_system*(struct tracefs_hist pass:[*]_hist_);
int *tracefs_hist_start*(struct tracefs_instance pass:[*]_instance_, struct tracefs_hist pass:[*]_hist_);
int *tracefs_hist_destroy*(struct tracefs_instance pass:[*]_instance_, struct tracefs_hist pass:[*]_hist_);
int *tracefs_hist_pause*(struct tracefs_instance pass:[*]_instance_, struct tracefs_hist pass:[*]_hist_);
int *tracefs_hist_continue*(struct tracefs_instance pass:[*]_instance_, struct tracefs_hist pass:[*]_hist_);
int *tracefs_hist_reset*(struct tracefs_instance pass:[*]_instance_, struct tracefs_hist pass:[*]_hist_);
```

Recording of trace_pipe_raw files:

```
struct tracefs_cpu pass:[*]*tracefs_cpu_open*(struct tracefs_instance pass:[*]_instance_,
        int _cpu_, bool _nonblock_);
struct tracefs_cpu pass:[*]*tracefs_cpu_alloc_fd*(int _fd_, int _subbuf_size_, bool _nonblock_);
void *tracefs_cpu_close*(struct tracefs_cpu pass:[*]_tcpu_);
void
*tracefs_cpu_free_fd*(struct tracefs_cpu pass:[*]_tcpu_);
int *tracefs_cpu_read_size*(struct tracefs_cpu pass:[*]_tcpu_);
int *tracefs_cpu_read*(struct tracefs_cpu pass:[*]_tcpu_, void pass:[*]_buffer_, bool _nonblock_);
int *tracefs_cpu_buffered_read*(struct tracefs_cpu pass:[*]_tcpu_, void pass:[*]_buffer_, bool _nonblock_);
int *tracefs_cpu_write*(struct tracefs_cpu pass:[*]_tcpu_, int _wfd_, bool _nonblock_);
int *tracefs_cpu_stop*(struct tracefs_cpu pass:[*]_tcpu_);
int *tracefs_cpu_flush*(struct tracefs_cpu pass:[*]_tcpu_, void pass:[*]_buffer_);
int *tracefs_cpu_flush_write*(struct tracefs_cpu pass:[*]_tcpu_, int _wfd_);
int *tracefs_cpu_pipe*(struct tracefs_cpu pass:[*]_tcpu_, int _wfd_, bool _nonblock_);
struct kbuffer pass:[*]*tracefs_cpu_read_buf*(struct tracefs_cpu pass:[*]_tcpu_, bool _nonblock_);
struct kbuffer pass:[*]*tracefs_cpu_buffered_read_buf*(struct tracefs_cpu pass:[*]_tcpu_, bool _nonblock_);
struct kbuffer pass:[*]*tracefs_cpu_flush_buf*(struct
tracefs_cpu pass:[*]_tcpu_);
```

Helper functions for modifying the ring buffer sub-buffers:

```
size_t *tracefs_instance_get_subbuf_size*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_instance_set_subbuf_size*(struct tracefs_instance pass:[*]_instance_, size_t _size_);
```

Helper functions for guest tracing:

```
 char pass:[*]*tracefs_find_cid_pid*(int _cid_);
 char pass:[*]*tracefs_instance_find_cid_pid*(struct tracefs_instance pass:[*]_instance_, int _cid_);
 int *tracefs_time_conversion*(int _cpu_, int pass:[*]_shift_, int pass:[*]_multi_, long long pass:[*]offset);
```
--

DESCRIPTION

The libtracefs(3) library provides APIs to access kernel trace file system.

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtraceevent(3),
trace-cmd(1)

AUTHOR

[verse]
--
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*Tzvetomir
 Stoyanov* <tz.stoyanov@gmail.com>
--
REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org>

LICENSE
---
libtracefs is Free Software licensed under the GNU LGPL 2.1

RESOURCES
---
https://git.kernel.org/pub/scm/libs/libtrace/libtracefs.git/

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libtracefs(3)
==========

NAME
---
tracefs_uprobe_alloc,tracefs_uretprobe_alloc - Allocate new user (return) probe

SYNOPSIS

[verse]
--
#include <tracefs.h>

struct tracefs_dynevent pass:[*]
tracefs_uprobe_alloc(const char pass:[*]_system_, const char pass:[*]_event_,
    const char pass:[*]_file_, unsigned long long _offset_, const char pass:[*]_fetchargs_)
struct tracefs_dynevent pass:[*]
tracefs_uretprobe_alloc(const char pass:[*]_system_, const char pass:[*]_event_,
    const char pass:[*]_file_, unsigned long long _offset_, const char pass:[*]_fetchargs_)
--

DESCRIPTION
---
tracefs_uprobe_alloc() allocates a new uprobe context. It will be in the _system_ group
(or uprobes if _system_ is NULL) and with _event_ name. The uprobe will be attached to _offset_
within the _file_. The list of arguments, described in _fetchargs_, will be fetched with the uprobe.
The returned pointer to
the user probe context must be freed with *tracefs_dynevent_free*().
The ubrobe is not configured in the system, tracefs_dynevent_* set of APIs can be used to configure
it.

The *tracefs_uretprobe_alloc*() behaves the same as *tracefs_uprobe_alloc*(), the only difference is
that it allocates context to user return probe (uretprobe).

RETURN VALUE

The *tracefs_uprobe_alloc*() and *tracefs_uretprobe_alloc*() APIs return a pointer to an allocated
tracefs_dynevent structure, describing the user probe. This pointer must be freed with
tracefs_dynevent_free(3). Note, this only allocates a descriptor representing the uprobe. It does
not modify the running system. On error NULL is returned.

EXAMPLE

[source,c]
--

```
#include <stdlib.h>
#include <unistd.h>
#include <sys/wait.h>

#include <tracefs.h>

static int callback(struct tep_event *event, struct tep_record *record,
      int cpu, void *data)
{
 struct trace_seq seq;

 trace_seq_init(&seq);
 tep_print_event(event->tep,
 &seq, record, "%d-%s: %s",
   TEP_PRINT_PID, TEP_PRINT_COMM, TEP_PRINT_NAME);
 trace_seq_puts(&seq, "'\n");

 trace_seq_terminate(&seq);
 trace_seq_do_printf(&seq);
 trace_seq_destroy(&seq);

 return 0;
}

static pid_t run_exec(char **argv, char **env)
{
 pid_t pid;

 pid = fork();
 if (pid)
  return pid;

 execve(argv[0], argv, env);
 perror("exec");
 exit(-1);
}

const char *myprobe = "my_urobes";

int main (int argc, char **argv, char **env)
{
 struct tracefs_dynevent *uprobe, *uretprobe;
 struct tep_handle *tep;
 struct tracefs_instance *instance;
 const char *sysnames[] = { myprobe, NULL };
```

```
long addr;
pid_t pid;

if (argc < 3) {
 printf("usage: %s file_offset command\n", argv[0]);
 exit(-1);
}
addr = strtol(argv[1], NULL, 0);

instance = tracefs_instance_create("exec_open");
if (!instance) {
 perror("creating instance");
 exit(-1);
}

tracefs_dynevent_destroy_all(TRACEFS_DYNEVENT_UPROBE|TRACEFS_DYNEVENT_URETPROBE, true);

uprobe = tracefs_uprobe_alloc(myprobe, "user_probe",
argv[2], addr, NULL);
uretprobe = tracefs_uretprobe_alloc(myprobe, "user_retprobe", argv[2], addr, NULL);
if (!uprobe || !uretprobe) {
 perror("allocating user probes");
 exit(-1);
}

if (tracefs_dynevent_create(uprobe) ||
    tracefs_dynevent_create(uretprobe)) {
 perror("creating user probes");
 exit(-1);
}

tep = tracefs_local_events_system(NULL, sysnames);
if (!tep) {
 perror("reading events");
 exit(-1);
}

tracefs_event_enable(instance, myprobe, "user_probe");
tracefs_event_enable(instance, myprobe, "user_retprobe");

pid = run_exec(&argv[2], env);

/* Let the child start to run */
sched_yield();

do {
 tracefs_load_cmdlines(NULL, tep);
 tracefs_iterate_raw_events(tep, instance, NULL, 0, callback, NULL);
```

```
 } while (waitpid(pid, NULL, WNOHANG) != pid);

 /* disable and destroy the events */
 tracefs_dynevent_destroy(uprobe, true);
 tracefs_dynevent_destroy(uretprobe, true);
 tracefs_dynevent_free(uprobe);
 tracefs_dynevent_free(uretprobe);
 tracefs_instance_destroy(instance);

 return
 0;
}
```
--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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--

REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org>

LICENSE
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RESOURCES
---

https://git.kernel.org/pub/scm/libs/libtrace/libtracefs.git/

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libtracefs(3)
==========

NAME
---
tracefs_instance_get_stat, tracefs_instance_put_stat, tracefs_buffer_stat_entries, tracefs_buffer_stat_overrun, tracefs_buffer_stat_commit_overrun, tracefs_buffer_stat_bytes, tracefs_buffer_stat_event_timestamp, tracefs_buffer_stat_timestamp, tracefs_buffer_stat_dropped_events, tracefs_buffer_stat_read_events
- Handling tracing buffer stats

SYNOPSIS

[verse]
--
#include <tracefs.h>

struct tracefs_buffer_stat pass:[*]*tracefs_instance_get_stat*(struct tracefs_instance pass:[*]_instance_, int _cpu_);
void *tracefs_instance_put_stat*(struct tracefs_buffer_stat pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_entries*(struct tracefs_buffer_stat pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_overrun*(struct tracefs_buffer_stat pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_commit_overrun*(struct tracefs_buffer_stat pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_bytes*(struct
 tracefs_buffer_stat pass:[*]_tstat_);
long long *tracefs_buffer_stat_event_timestamp*(struct tracefs_buffer_stat pass:[*]_tstat_);
long long *tracefs_buffer_stat_timestamp*(struct tracefs_buffer_stat pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_dropped_events*(struct tracefs_buffer_stat pass:[*]_tstat_);
ssize_t *tracefs_buffer_stat_read_events*(struct tracefs_buffer_stat pass:[*]_tstat_);
--

DESCRIPTION

This set of functions read and parse the tracefs/per_cpu/cpuX/stats file.
These files hold the statistics of the per CPU ring buffer, such as how
many events are in the ring buffer, how many have been read and so on.

The *tracefs_instance_get_stat()* function will read and parse a given statistics
file for a given _instance_ and _cpu_. As the ring buffer is split into per_cpu buffers,

the information is only associated to the given _cpu_. The returned tracefs_buffer_stat pointer can be used with the other *tracefs_buffer_stat* functions and must be freed with *tracefs_instance_put_stat()*.

The
 tracefs_instance_put_stat() will free the resources allocated for the given _stat_ that was created by *tracefs_instance_get_stat()*.

The *tracefs_buffer_stat_entries()* returns the number of events that are currently in the ring buffer associated with _tstat_.

The *tracefs_buffer_stat_overrun()* returns the number of events that were lost by the ring buffer writer overrunning the reader.

The *tracefs_buffer_stat_commit_overrun()* returns the number of events that were lost because the ring buffer was too small and an interrupt interrupted a lower context event being recorded and it added more events than the ring buffer could hold. Note this is not a common occurrence and when it happens it means that something was not set up properly.

The *tracefs_buffer_stat_bytes()* returns the number of bytes that the current events take up. Note, it includes the meta data for the events, but does not include the meta data for the sub-buffers.

The *tracefs_buffer_stat_event_timestamp()*
 returns the timestamp of the last event in the
ring buffer.

The *tracefs_buffer_stat_timestamp()* returns the current timestamp of the ring buffer. Note, it is only read when *tracefs_instance_get_stat()* is called. It will have the timestamp of the ring buffer when that function was called.

The *tracefs_buffer_stat_dropped_events()* returns the number of events that were dropped if overwrite mode is disabled. It will show the events that were lost because the writer caught up to the reader and could not write any more events.

The *tracefs_buffer_stat_read_events()* returns the number of events that were consumed by a reader.

RETURN VALUE

The *tracefs_instance_get_stat()* returns a tracefs_buffer_stat structure that can be used to retrieve the statistics via the other functions. It must be freed with *tracefs_instance_put_stat()*.

The other functions that return different values from the tracefs_buffer_stat structure all return the value, or

-1 if the value was not found.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <unistd.h>
#include <tracefs.h>

int main(int argc, char **argv)
{
 char *trace;
 char buf[1000];
 int ret;
 int i;

 for (i = 0; i < sizeof(buf) - 1; i++) {
  buf[i] = '0' + i % 10;
 }
 buf[i] = '\0';

 tracefs_instance_clear(NULL);

 for (i = 0; i < 4; i++) {
  ret = tracefs_printf(NULL, "%s\n", buf);
  if (ret < 0)
   perror("write");
 }

 trace = tracefs_instance_file_read(NULL, "trace", NULL);
 printf("%s\n", trace);
 free(trace);

 for (i = 0; i < sysconf(_SC_NPROCESSORS_CONF); i++) {
  struct tracefs_buffer_stat *tstat;
  ssize_t entries, eread;

  tstat = tracefs_instance_get_stat(NULL, i);
  if (!tstat)
   continue;

  entries = tracefs_buffer_stat_entries(tstat);
  eread = tracefs_buffer_stat_read_events(tstat);
  if (!entries && !eread) {
   tracefs_instance_put_stat(tstat);
   continue;
```

```
  }

  printf("CPU: %d\n", i);;
  printf("\tentries: %zd\n", entries);
  printf("\toverrun: %zd\n",
 tracefs_buffer_stat_overrun(tstat));
  printf("\tcommit_overrun: %zd\n", tracefs_buffer_stat_commit_overrun(tstat));
  printf("\tbytes: %zd\n", tracefs_buffer_stat_bytes(tstat));
  printf("\tevent_timestamp: %lld\n", tracefs_buffer_stat_event_timestamp(tstat));
  printf("\ttimestamp: %lld\n", tracefs_buffer_stat_timestamp(tstat));
  printf("\tdropped_events: %zd\n", tracefs_buffer_stat_dropped_events(tstat));
  printf("\tread_events: %zd\n", eread);

  tracefs_instance_put_stat(tstat);
 }
}
```

--

FILES

[verse]

--

tracefs.h

 Header file to include in order to have access to the library APIs.

-ltracefs

 Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),

trace-cmd(1)

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--

REPORTING BUGS

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---

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libtracefs(3)
==========

NAME
----
tracefs_dynevent_create, tracefs_dynevent_destroy, tracefs_dynevent_destroy_all,
tracefs_dynevent_free, tracefs_dynevent_list_free, tracefs_dynevent_get, tracefs_dynevent_get_all,
tracefs_dynevent_info, tracefs_dynevent_get_event - Create, destroy, free and get dynamic events.

SYNOPSIS

[verse]
--
#include <tracefs.h>

struct *tracefs_dynevent*;
enum *tracefs_dynevent_type*;
int *tracefs_dynevent_create*(struct tracefs_dynevent pass:[*]_devent_);
int *tracefs_dynevent_destroy*(struct tracefs_dynevent pass:[*]_devent_, bool _force_);
int *tracefs_dynevent_destroy_all*(unsigned int _types_, bool _force_);
void *tracefs_dynevent_free*(struct tracefs_dynevent pass:[*]_devent_);
void *tracefs_dynevent_list_free*(struct tracefs_dynevent pass:[*]pass:[*]_events_);
struct tracefs_dynevent pass:[*]*tracefs_dynevent_get*(enum tracefs_dynevent_type _type_, const char pass:[*]_system_,
 const char pass:[*]_event_);
struct tracefs_dynevent pass:[*]pass:[*]*tracefs_dynevent_get_all*(unsigned int _types_, const char pass:[*]_system_);
enum tracefs_dynevent_type *tracefs_dynevent_info*(struct tracefs_dynevent pass:[*]_dynevent_, char pass:[*]pass:[*]_system_, char pass:[*]pass:[*]_event_, char pass:[*]pass:[*]_prefix_, char pass:[*]pass:[*]_addr_, char pass:[*]pass:[*]_format_);
struct tep_event pass:[*]*tracefs_dynevent_get_event*(struct tep_handle pass:[*]_tep_, struct tracefs_dynevent pass:[*]_dynevent_);
--

DESCRIPTION

The *tracefs_dynevent_create*() function creates dynamic event _devent_ in the system.

The *tracefs_dynevent_destroy*() function removes dynamic event _devent_ from the system. If _force_ is true, the function will attempt to disable all events in all trace instances, before removing the dynamic event. The _devent_ context is not freed, use *tracefs_dynevent_free*() to free it.

The *tracefs_dynevent_destroy_all*() function removes
all dynamic events of given types from the
system. The _types_ parameter is a type of specific dynamic event, or a bitmask of dynamic events types *tracefs_dynevent_type*, that will be removed. If _types_ is 0, dynamic events from all types will be removed. If _force_ is true, the function will attempt to disable all events in all trace instances, before removing the dynamic events.

The *tracefs_dynevent_get*() function allocates and returns a single instance of a dynamic event that matches the given *type*, *system* and *event* that is passed to it. NULL is returned if there is no match. The returned event is what is found in the system, and must be freed with *tracefs_dynevent_free*(). If *system* is NULL, then the first *event* of any system of the given type that has the name of *event* will be returned.

The *tracefs_dynevent_get_all*() function allocates and returns an array of pointers to dynamic events of given types that exist in the system. The last element of the array is
a NULL pointer.
The array must be freed with *tracefs_dynevent_list_free*(). If there are no events a NULL pointer is returned. The _types_ parameter is a type of specific dynamic event, or a bitmask of dynamic events types *tracefs_dynevent_type*, that will be retrieved. If _types_ is 0, dynamic events from all types will be retrieved.

The *tracefs_dynevent_free*() function frees a dynamic event context _devent_.

The *tracefs_dynevent_list_free*() function frees an array of pointers to dynamic event, returned by *tracefs_dynevent_get_all()* API.

The *tracefs_dynevent_info*() function returns the type and information of a given dynamic event _dynevent_. If any of the _system_, _event_, _prefix_, _addr_ or _format_ arguments are not NULL, then strings are allocated and returned back via these arguments. The _system_ and _event_ holds the system and the name of the dynamic event. If _prefix_ is non NULL, then it will hold an allocated string that holds the prefix portion of the dynamic
event (the content up to the ":", exluding it).
If _addr_ is non NULL, it will hold the address or function that the dynamic event is attached to, if relevant for this event type. If _format_ is non NULL, it will hold the format string of the dynamic event. Note, that the content in _group_, _event_, _prefix_, _addr_, and _format_ must be freed with free(3) if they are set.

The *tracefs_dynevent_get_event*() function returns a tep event, describing the given dynamic event. The API detects any newly created or removed dynamic events. The returned pointer to tep event is controlled by @tep and must not be freed.

RETURN VALUE
---

tracefs_dynevent_create() returns 0 on success, or -1 on error. If a parsing error occurs then *tracefs_error_last*(3) may be used to retrieve the error message explaining the parsing issue.

tracefs_dynevent_destroy() and *tracefs_dynevent_destroy_all*() return 0 on success, or -1 on error. If _force_ is enabled, the functions may fail on disabling
 the events.

tracefs_dynevent_get() function returns an allocated dynamic event from the system that matches the type, system and event given.

tracefs_dynevent_get_all() function returns allocated array of pointers to dynamic events, or NULL in case of an error or in case there are no events in the system. That array must be freed by *tracefs_dynevent_list_free*().

tracefs_dynevent_info() returns the type of the given dynamic event or TRACEFS_DYNEVENT_UNKNOWN on error. If _system_, _event_, _prefix_, _addr_, or _format_ are non NULL, they will contain allocated strings that must be freed by free(3).

The *tracefs_dynevent_get_event*() function returns a pointer to a tep event or NULL in case of an error or if the requested dynamic event is missing. The returned pointer to tep event is controlled by @tep and must not be freed.

ERRORS

The following errors are for all the above calls:

ENODEV dynamic events of requested type are not configured for the running kernel.

ENOMEM
 Memory allocation error.

tracefs_dynevent_create() can fail with the following errors:

EINVAL Most likely a parsing error occurred (use *tracefs_error_last*(3) to possibly
 see what that error was).

Other errors may also happen caused by internal system calls.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <unistd.h>
#include <sys/wait.h>

#include <tracefs.h>

static struct tep_event *open_event;
static struct tep_format_field *file_field;
```

```
static struct tep_event *openret_event;
static struct tep_format_field *ret_field;

static int callback(struct tep_event *event, struct tep_record *record,
      int cpu, void *data)
{
 struct trace_seq seq;

 trace_seq_init(&seq);
 tep_print_event(event->tep, &seq, record, "%d-%s: ", TEP_PRINT_PID, TEP_PRINT_COMM);

 if (event->id == open_event->id) {
  trace_seq_puts(&seq, "open file='");
  tep_print_field(&seq, record->data, file_field);
  trace_seq_puts(&seq, "'\n");
 } else if (event->id == openret_event->id)
 {
  unsigned long long ret;
  tep_read_number_field(ret_field, record->data, &ret);
  trace_seq_printf(&seq, "open ret=%lld\n", ret);
 } else {
  goto out;
 }

 trace_seq_terminate(&seq);
 trace_seq_do_printf(&seq);
out:
 trace_seq_destroy(&seq);

 return 0;
}

static pid_t run_exec(char **argv, char **env)
{
 pid_t pid;

 pid = fork();
 if (pid)
  return pid;

 execve(argv[0], argv, env);
 perror("exec");
 exit(-1);
}

const char *mykprobe = "my_kprobes";

int main (int argc, char **argv, char **env)
```

```
{
 struct tracefs_dynevent *kprobe, *kretprobe;
 const char *sysnames[] = { mykprobe, NULL };
 struct tracefs_instance *instance;
 struct tep_handle *tep;
 pid_t pid;

 if (argc < 2) {
  printf("usage: %s command\n", argv[0]);
  exit(-1);
 }

 instance = tracefs_instance_create("exec_open");
 if (!instance) {
  perror("creating instance");
  exit(-1);
 }

 tracefs_dynevent_destroy_all(TRACEFS_DYNEVENT_KPROBE | TRACEFS_DYNEVENT_KRETPROBE,
true);

 kprobe = tracefs_kprobe_alloc(mykprobe,
 "open", "do_sys_openat2",
         "file=+0($arg2):ustring flags=+0($arg3):x64 mode=+8($arg3):x64\n");
 kretprobe = tracefs_kretprobe_alloc(mykprobe, "openret", "do_sys_openat2", "ret=%ax", 0);
 if (!kprobe || !kretprobe) {
  perror("allocating dynamic events");
  exit(-1);
 }

 if (tracefs_dynevent_create(kprobe) || tracefs_dynevent_create(kretprobe)){
  char *err = tracefs_error_last(NULL);
  perror("Failed to create kprobes:");
  if (err && strlen(err))
   fprintf(stderr, "%s\n", err);
  exit(-1);
 }

 tep = tracefs_local_events_system(NULL, sysnames);
 if (!tep) {
  perror("reading events");
  exit(-1);
 }
 open_event = tep_find_event_by_name(tep, mykprobe, "open");
 file_field = tep_find_field(open_event, "file");

 openret_event = tep_find_event_by_name(tep, mykprobe, "openret");
 ret_field = tep_find_field(openret_event, "ret");
```

```
 tracefs_event_enable(instance, mykprobe, NULL);
 pid = run_exec(&argv[1], env);

 /* Let the child start to run */
 sched_yield();

 do {
  tracefs_load_cmdlines(NULL,
 tep);
  tracefs_iterate_raw_events(tep, instance, NULL, 0, callback, NULL);
 } while (waitpid(pid, NULL, WNOHANG) != pid);

 /* Will disable the events */
 tracefs_dynevent_destroy_all(TRACEFS_DYNEVENT_KPROBE | TRACEFS_DYNEVENT_KRETPROBE,
true);
 tracefs_dynevent_free(kprobe);
 tracefs_dynevent_free(kretprobe);
 tracefs_instance_destroy(instance);
 tep_free(tep);

 return 0;
}
```

--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

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--
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libtracefs(3)
==========

NAME
---
tracefs_cpu_open, tracefs_cpu_close, tracefs_cpu_alloc_fd, tracefs_cpu_free_fd, tracefs_cpu_snapshot_open - Opening trace_pipe_raw data for reading

SYNOPSIS

[verse]
--
#include <tracefs.h>

struct tracefs_cpu pass:[*]*tracefs_cpu_open*(struct tracefs_instance pass:[*]_instance_,
        int _cpu_, bool _nonblock_);
void *tracefs_cpu_close*(struct tracefs_cpu pass:[*]_tcpu_);

struct tracefs_cpu pass:[*]*tracefs_cpu_alloc_fd*(int _fd_, int _subbuf_size_, bool _nonblock_);
void *tracefs_cpu_free_fd*(struct tracefs_cpu pass:[*]_tcpu_);

struct tracefs_cpu pass:[*]*tracefs_cpu_snapshot_open*(struct tracefs_instance pass:[*]_instance_,
        int _cpu_, bool _nonblock_);
--

DESCRIPTION

This set of APIs can be used to open the raw data from the trace_pipe_raw
files in the tracefs file system in oder to read them with the *tracefs_cpu_read*(3)
functions.

The
 tracefs_cpu_open() creates a descriptor that can read the tracefs
trace_pipe_raw file for a given _cpu_ in a given _instance_. If _instance_ is
NULL than the toplevel trace_pipe_raw file is used.

The *tracefs_cpu_close()* closes all the file descriptors associated to the trace_pipe_raw
opened by *tracefs_cpu_open()*.

The *tracefs_cpu_alloc_fd()* will create a tracefs_cpu descriptor from an existing
file descriptor _fd_. This is useful to use when connecting to a socket or pipe where
the other end is feeding raw tracing data in the same format as the trace_pipe_raw
file would (like in guest to host tracing). The caller is responsible for determining
the _subbuf_size_ that will be used to break up the sub-buffers being read by the
file descriptor. The _nonblock_ is treated the same as the same parameter in
tracefs_cpu_open().

The *tracefs_cpu_free_fd()* is used to free the descriptor returned by *tracefs_cpu_alloc_fd()*.
It does all the clean up that *tracefs_cpu_close()* performs,
 and that could also be
used to free up the descriptor created by *tracefs_cpu_alloc_fd()* but will also close
the file descriptor passed in. Note that *tracefs_cpu_free_fd()* should not be used
on the descriptor returned by *tracefs_cpu_open()* as it will not close the file descriptor
created by it.

The *tracefs_cpu_snapshot_open()* is similar to *tracefs_cpu_open()* except that it
opens the snapshot buffer (see *tracefs_snapshot_snap*(3)). The snapshot buffer
does not have a writer to it, it is only created by a snapshot action that swaps
the current ring buffer with the snapshot buffer. The _nonblock_, when false, acts a little
differently here too. Reads are not affected by the "buffer_percent" file. If the
snapshot buffer is empty, it will block until a new snapshot happens.

RETURN VALUE

The *tracefs_cpu_open()* and *tracefs_cpu_snapshot_open() both return a struct
tracefs_cpu descriptor that can be used by the other functions or NULL on error.

The *tracefs_cpu_alloc_fd()*
 returns a struct tracefs_cpu descriptor that can
be used by the *tracefs_cpu_read*(3) related functions, where the descriptor
will be reading the passed in _fd_ file descriptor.

EXAMPLE

See *tracefs_cpu_read*(3) for an example.

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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Steven Rostedt <rostedt@goodmis.org>
--
REPORTING BUGS

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libtracefs(3)
==========

NAME
---
tracefs_snapshot_snap, tracefs_snapshot_clear, tracefs_snapshot_free -
API to create, clear and read snapshots

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_snapshot_snap*(struct tracefs_instance pass:[*]instance);
int *tracefs_snapshot_clear*(struct tracefs_instance pass:[*]instance);
int *tracefs_snapshot_free*(struct tracefs_instance pass:[*]instance);
--

DESCRIPTION

The Linux kernel tracing provides a "snapshot" feature. The kernel has two
ring buffers. One that is written to by the tracing system and another one that
is the "snapshot" buffer. When a snapshot happens, the two buffers are swapped, and
the current snapshot buffer becomes the one being written to, and the buffer
that was being written to becomes the saved snapshot.

Note, the snapshot buffer is allocated the first time it is taken, so it is best
to take a snapshot at the start
before one is needed so that it is allocated
and a snapshot is ready, then the snapshot will happen immediately.

The *tracefs_snapshot_snap()* will allocate (if not already allocated) the snapshot
buffer and then take a "snapshot" (swap the main buffer that's being written to with
the allocated snapshot buffer). It will do this to the given _instance_ buffer or
the top instance if _instance_ is NULL.

The *tracefs_snapshot_clear()* will erase the content of the snapshot buffer for
the given _instance_ or the top level instance if _instance_ is NULL.

The *tracefs_snapshot_free()* will free the allocated snapshot for the given _instance_
or the top level instance if _instance_ is NULL. That is, if another call to
tracefs_snapshot_snap() is done after this, then it will need to allocate
the snapshot buffer again before it can take a snapshot. This function should
be used to free up the kernel memory used by hte snapshot buffer when no longer in use.

RETURN VALUE

The *tracefs_snapshot_snap()*,

tracefs_snapshot_clear() and the *tracefs_snapshot_free()*
all return 0 on success and -1 on failure.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <stdio.h>
#include <tracefs.h>

static int callback(struct tep_event *event, struct tep_record *record, int cpu, void *data)
{
 static struct trace_seq seq;
 struct tep_handle *tep = event->tep;

 if (!seq.buffer)
  trace_seq_init(&seq);

 trace_seq_reset(&seq);

 tep_print_event(tep, &seq, record, "[%03d] %s-%d %6.1000d\t%s: %s\n",
    TEP_PRINT_CPU,
    TEP_PRINT_COMM,
    TEP_PRINT_PID,
    TEP_PRINT_TIME,
    TEP_PRINT_NAME,
    TEP_PRINT_INFO);
 trace_seq_do_printf(&seq);
 return 0;
}

int main (int argc, char **argv)
{
 struct tracefs_instance *instance;
 struct tep_handle *tep;
 char *line = NULL;
 size_t len = 0;
 int ret;

 instance = tracefs_instance_create("my_snapshots");
 if (!instance) {
  perror("creating instance");
  exit(-1);
 }

 tep = tracefs_local_events(NULL);
 if (!tep) {
```

```
 perror("reading
event formats");
 goto out;
}

/* Make sure the snapshot buffer is allocated */
ret = tracefs_snapshot_snap(instance);
if (ret < 0)
 goto out;

ret = tracefs_event_enable(instance, "sched", NULL);
if (ret < 0) {
 perror("enabling event");
 goto out;
}

for (;;) {
 printf("Hit enter without text to take snapshot!\n");
 printf("Enter any text to display the snapshot\n");
 printf("Enter 'quit' to exit\n");
 getline(&line, &len, stdin);
 ret = tracefs_snapshot_snap(instance);
 if (ret < 0) {
  perror("taking snapshot");
  goto out;
 }
 if (!line)
  break;
 if (strlen(line) < 2)
  continue;
 if (strncmp(line, "quit", 4) == 0)
  break;
 tracefs_iterate_snapshot_events(tep, instance, NULL, 0, callback, NULL);
}

free(line);

tracefs_instance_clear(instance);

out:
tracefs_snapshot_free(instance);
tracefs_event_disable(instance, "sched", NULL);
tracefs_instance_destroy(instance);
tracefs_instance_free(instance);

exit(0);
}
--
```

FILES

[verse]
--
tracefs.h
 Header
 file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
tracefs_iterate_snapshot_events(3)
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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REPORTING BUGS

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libtracefs(3)
==========

NAME
---
tracefs_cpu_read_size, tracefs_cpu_read, tracefs_cpu_buffered_read, tracefs_cpu_write,
tracefs_cpu_stop, tracefs_cpu_flush, tracefs_cpu_flush_write, tracefs_cpu_pipe
- Reading trace_pipe_raw data

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_cpu_read_size*(struct tracefs_cpu pass:[*]_tcpu_);
int *tracefs_cpu_read*(struct tracefs_cpu pass:[*]_tcpu_, void pass:[*]_buffer_, bool _nonblock_);
int *tracefs_cpu_buffered_read*(struct tracefs_cpu pass:[*]_tcpu_, void pass:[*]_buffer_, bool _nonblock_);
int *tracefs_cpu_write*(struct tracefs_cpu pass:[*]_tcpu_, int _wfd_, bool _nonblock_);
int *tracefs_cpu_stop*(struct tracefs_cpu pass:[*]_tcpu_);
int *tracefs_cpu_flush*(struct tracefs_cpu pass:[*]_tcpu_, void pass:[*]_buffer_);
int *tracefs_cpu_flush_write*(struct tracefs_cpu pass:[*]_tcpu_, int _wfd_);
int *tracefs_cpu_pipe*(struct tracefs_cpu pass:[*]_tcpu_, int _wfd_,
 bool _nonblock_);
--

DESCRIPTION

This set of APIs can be used to read the raw data from the trace_pipe_raw
files in the tracefs file system.

The *tracefs_cpu_read_size()* returns the subbuffer size of the trace_pipe_raw. This
returns the minimum size of the buffer that is passed to the below functions.

The *tracefs_cpu_read()* reads the trace_pipe_raw files associated to _tcpu_ into _buffer_.
buffer must be at least the size of the sub buffer of the ring buffer,
which is returned by *tracefs_cpu_read_size()*. If _nonblock_ is set, and
there's no data available, it will return immediately. Otherwise depending
on how _tcpu_ was opened, it will block. If _tcpu_ was opened with nonblock
set, then this _nonblock_ will make no difference.

The *tracefs_cpu_buffered_read()* is basically the same as *tracefs_cpu_read()*
except that it uses a pipe through splice to buffer reads. This will batch
reads keeping the reading from the ring buffer less intrusive to the system,
as
 just reading all the time can cause quite a disturbance. Note, one
difference between this and *tracefs_cpu_read()* is that it will read only in
sub buffer pages. If the ring buffer has not filled a page, then it will not
return anything, even with _nonblock_ set. Calls to *tracefs_cpu_flush()*
should be done to read the rest of the file at the end of the trace.

The *tracefs_cpu_write()* will pipe the data from the trace_pipe_raw
file associated with _tcpu_ into the _wfd_ file descriptor. If _nonblock_ is set,
then it will not block on if there's nothing to write. Note, it will only write
sub buffer size data to _wfd_. Calls to tracefs_cpu_flush_write() are needed to
write out the rest.

The *tracefs_cpu_stop()* will attempt to unblock a task blocked on _tcpu_ reading it.
On older kernels, it may not do anything for the pipe reads, as older kernels do not
wake up tasks waiting on the ring buffer. Returns 0 if it definitely woke up any possible
waiters, but returns 1 if it is not sure
it worked and waiters may need to have a signal
sent to them.

The *tracefs_cpu_flush()* reads the trace_pipe_raw file associated by the _tcpu_ and puts it
into _buffer_, which must be the size of the sub buffer which is retrieved.
by *tracefs_cpu_read_size()*. This should be called at the end of tracing
to get the rest of the data. This call will convert the file descriptor of
trace_pipe_raw into non-blocking mode.

The *tracefs_cpu_flush_write()* same as *trace_cpu_flush()* except it takes a file
descriptor _wfd_ to flush the data into.

The *tracefs_cpu_pipe()* is similar to *tracefs_cpu_write()* but the _wfd_ file descriptor
must be a pipe. This call is an optimization of *tracefs_cpu_write()* that uses two calls
to *splice*(2) in order to connect the trace_pipe_raw file descriptor with the write file
descriptor. *splice*(2) requires that one of the passed in file descriptors is a pipe.
If the application wants to pass the data to an existing pipe, there's no reason for
there to
be two *splice*(2) system calls and *tracefs_cpu_pipe()* can simply use a single
call to _wfd_.

RETURN VALUE

The *tracefs_cpu_open()* returns a struct tracefs_cpu descriptor that can be
used by the other functions or NULL on error.

The *tracefs_cpu_read_size()* returns the minimum size of the buffers to be
used with *tracefs_cpu_read()*, *tracefs_cpu_buffered_read()* and *tracefs_cpu_flush()*.
Returns negative on error.

The *tracefs_cpu_read()* returns the number of bytes read, or negative on error.

The *tracefs_cpu_buffered_read()* returns the number of bytes read or negative on error.

The *tracefs_cpu_write()* returns the number of bytes written to the file
or negative on error.

The *tracefs_cpu_stop()* returns zero if any waiters were guaranteed to be

woken up from waiting on input, or returns one if this is an older kernel that does not supply that guarantee, and a signal may need to be sent to any waiters. Returns negative on error.

The *tracefs_cpu_flush()* returns
 the number of bytes read or negative on error.

The *tracefs_cpu_flush_write()* returns the number of bytes written to the file or negative on error.

EXAMPLE

[source,c]
--
```
#define _LARGEFILE64_SOURCE
#include <stdlib.h>
#include <ctype.h>
#include <pthread.h>
#include <unistd.h>
#include <tracefs.h>

struct thread_data {
 struct tracefs_cpu *tcpu;
 int   done;
 int   fd;
};

static void *thread_run(void *arg)
{
 struct thread_data *data = arg;
 struct tracefs_cpu *tcpu = data->tcpu;
 int fd = data->fd;
 int ret;

 while (!data->done) {
  ret = tracefs_cpu_write(tcpu, fd, false);
  printf("wrote %d\n", ret);
 }
 return NULL;
}

int main (int argc, char **argv)
{
 struct tracefs_instance *instance;
 struct thread_data data;
 pthread_t thread;
 char *file;
 int secs = 10;
```

```
int cpu;
int ret;

if (argc < 3 || !isdigit(argv[1][0])) {
 printf("usage: %s cpu file_destination [sleep secs]\n\n", argv[0]);
 exit(-1);
}

cpu = atoi(argv[1]);
file = argv[2];

if (argc > 3)
 secs
= atoi(argv[3]);

instance = tracefs_instance_create("cpu_write");
if (!instance) {
 perror("create instance");
 exit(-1);
}

memset(&data, 0, sizeof(data));

data.tcpu = tracefs_cpu_open(instance, cpu, 0);
if (!data.tcpu) {
 perror("Open instance");
 exit(-1);
}

data.fd = open(file, O_WRONLY | O_CREAT | O_TRUNC | O_LARGEFILE, 0644);
if (data.fd < 0) {
 perror(file);
 exit(-1);
}

pthread_create(&thread, NULL, thread_run, &data);

sleep(secs);

data.done = 1;
printf("stopping\n");
ret = tracefs_cpu_stop(data.tcpu);

printf("joining %d\n", ret);
pthread_join(thread, NULL);

tracefs_trace_off(instance);
do {
```

```
  ret = tracefs_cpu_flush_write(data.tcpu, data.fd);
  printf("flushed %d\n", ret);
 } while (ret > 0);
 tracefs_trace_on(instance);

 tracefs_cpu_close(data.tcpu);
 close(data.fd);

 return 0;
}
```

--

FILES

[verse]

--

tracefs.h

 Header file to include in order to have access to the library APIs.

-ltracefs

 Linker switch to add when building a

 program that uses the library.

--

SEE ALSO

---

tracefs_cpu_open(3)

tracefs_cpu_close(3)

tracefs_cpu_read_buf(3)

tracefs_cpu_buffered_read_buf(3)

tracefs_cpu_flush_buf(3)

libtracefs(3),

libtraceevent(3),

trace-cmd(1)

AUTHOR

[verse]

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--

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libtracefs(3)
==========

NAME
---
tracefs_get_tracing_file, tracefs_put_tracing_file, tracefs_tracing_dir, tracefs_debug_dir, tracefs_set_tracing_dir, tracefs_tracing_dir_is_mounted - Find and set locations of trace directory and files.

SYNOPSIS

[verse]
--
#include <tracefs.h>

char pass:[*]*tracefs_get_tracing_file*(const char pass:[*]_name_);
void *tracefs_put_tracing_file*(char pass:[*]_name_);
const char pass:[*]*tracefs_tracing_dir*(void);
const char pass:[*]*tracefs_debug_dir*(void);
int *tracefs_set_tracing_dir*(char pass:[*]_tracing_dir_)
int *tracefs_tracing_dir_is_mounted*(bool _mount_, const char pass:[**]_path_);
--

DESCRIPTION

This set of APIs can be used to find the full path of the trace file
system mount point and trace files in it.

The *tracefs_set_tracing_dir()* function sets a custom location of the
system's tracing directory mount point. Usually, the library auto detects
it
using the information from the /proc/mounts file. Use this API only if the
mount point is not standard and cannot be detected by the library. The _tracing_dir_
argument can be NULL, in that case the custom location is deleted and the library
auto detection logic is used.

The *tracefs_get_tracing_file()* function returns the full path of the

file with given _name_ in the trace file system. The function works only with files in the tracefs main directory, it is not trace instance aware. It is recommended to use *tracefs_instance_get_file()* and *tracefs_instance_get_dir()* instead. The returned string must be freed with *tracefs_put_tracing_file()*.

The *tracefs_put_tracing_file()* function frees trace file name, returned by *tracefs_get_tracing_file()*.

The *tracefs_tracing_dir()* function returns the full path to the trace file system. In the first function call, the mount point of the tracing file system is located, cached and returned. It will mount it, if it is not mounted.
On any subsequent call the cached path is returned.
The return string must _not_ be freed.

The *tracefs_debug_dir()* is similar to *tracefs_tracing_dir()* except that it will return where the debugfs file system is mounted. If it is not mounted it will try to mount it. The return string must _not_ be freed.

tracefs_tracing_dir_is_mounted() returns 1 if the tracing directory is already mounted and 0 if it is not. If _mount_ is true, it will try to mount it if it is not, and returns 0 if it succesfully mounted it and -1 if it did not. If _path_ is set, it will be assigned to the path where it mounted it. _path_ is internal and should not be freed.

RETURN VALUE

The *tracefs_set_tracing_dir()* function returns 0 on success, -1 otherwise.

The *tracefs_get_tracing_file()* function returns a string or NULL in case of an error. The returned string must be freed with *tracefs_put_tracing_file()*.

The *tracefs_tracing_dir()* function returns a constant string or NULL in case
of an error. The returned string must _not_ be freed.

The *tracefs_debug_dir()* function returns a constant string or NULL in case of an error. The returned string must _not_ be freed.

The *tracefs_tracing_dir_is_mounted()* returns 1 if the tracing directory is already mounted, 0 if it is not, and -1 on error.

EXAMPLE

[source,c]
--

```
#include <tracefs.h>
...
char *trace_on = tracefs_get_tracing_file("tracing_on");
 if (trace_on) {
  ...
  tracefs_put_tracing_file(trace_on);
 }
...
const char *trace_dir = tracefs_tracing_dir();
```

--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

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--

REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org>

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/* Bison interface for Yacc-like parsers in C

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  part or all of the Bison parser skeleton and distribute that work
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libtracefs(3)
==========

NAME
---

tracefs_print_init, tracefs_print_close, tracefs_printf, tracefs_vprintf -
Open, close and write formated strings in the trace buffer.

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_print_init*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_printf*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_fmt_, _..._);
int *tracefs_vprintf*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_fmt_, va_list _ap_);
void *tracefs_print_close*(struct tracefs_instance pass:[*]_instance_);

--

DESCRIPTION

Set of functions to write formated strings in the trace buffer.
See Documentation/trace/ftrace.rst from the Linux kernel tree for more information about writing data from user space in the trace buffer. All these APIs have _instance_ as a first argument. If NULL is passed as _instance_, the top trace instance is used.

The
 tracefs_print_init() function initializes the library for writing into the trace buffer of the selected _instance_. It is not mandatory to call this API before writing strings, any of the printf APIs will call it automatically, if the library is not yet initialized. But calling *tracefs_print_init()* in advance will speed up the writing.

The *tracefs_printf()* function writes a formatted string in the trace buffer of the selected _instance_. The _fmt_ argument is a string in printf format, followed by variable arguments _..._.

The *tracefs_vprintf()* function writes a formatted string in the trace buffer of the selected _instance_. The _fmt_ argument is a string in printf format, followed by list _ap_ of arguments.

The *tracefs_print_close()* function closes the resources, used by the library for writing in the trace buffer of the selected instance.

RETURN VALUE

The *tracefs_print_init()*, *tracefs_printf()*, and *tracefs_vprintf()* functions return 0 if the operation
 is successful, or -1 in case of an error.

EXAMPLE

[source,c]
--

```
#include <tracefs.h>

if (tracefs_print_init(NULL) < 0) {
/* Failed to initialize the library for writing in the trace buffer of the top trace instance */
}

void foo_print(char *format, ...)
{
 va_list ap;
 va_start(ap, format);
 if (tracefs_vprintf(NULL, format, ap) < 0) {
  /* Failed to print in the trace buffer */
 }
 va_end(ap);
}

void foo_print_string(char *message)
{
 if (tracefs_printf(NULL, "Message from user space: %s", message) < 0) {
  /* Failed to print in the trace buffer */
 }
}

tracefs_print_close();
```

--

FILES

[verse]

--

tracefs.h
 Header file to include in order to have access to the library APIs.

-ltracefs
 Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),
libtraceevent(3),
trace-cmd(1),
Documentation/trace/ftrace.rst from the Linux kernel tree

AUTHOR

[verse]

--

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Tzvetomir Stoyanov

<tz.stoyanov@gmail.com>
--
REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org>

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libtracefs(3)
==========

NAME
---
tracefs_hist_alloc, tracefs_hist_alloc_2d, tracefs_hist_alloc_nd, tracefs_hist_alloc_nd_cnt, tracefs_hist_free, tracefs_hist_add_key, tracefs_hist_add_key_cnt, tracefs_hist_add_value - Create and destroy event histograms

SYNOPSIS

[verse]
--
#include <tracefs.h>

enum *tracefs_hist_key_type* {
 TRACEFS_HIST_KEY_NORMAL = 0,
 TRACEFS_HIST_KEY_HEX,
 TRACEFS_HIST_KEY_SYM,
 TRACEFS_HIST_KEY_SYM_OFFSET,
 TRACEFS_HIST_KEY_SYSCALL,
 TRACEFS_HIST_KEY_EXECNAME,
 TRACEFS_HIST_KEY_LOG,
 TRACEFS_HIST_KEY_USECS,
 TRACEFS_HIST_KEY_MAX
};

```
struct *tracefs_hist_axis* {
 const char pass:[*]_key_;
 enum tracefs_hist_key_type _type_;
};

struct tracefs_hist pass:[*]*tracefs_hist_alloc*(struct tracefs_tep pass:[*] _tep_,
   const char pass:[*]_system_, const char pass:[*]_event_,
   const char pass:[*]_key_, enum tracefs_hist_key_type _type_);
struct tracefs_hist pass:[*]*tracefs_hist_alloc_2d*(struct
 tracefs_tep pass:[*] _tep_,
   const char pass:[*]_system_, const char pass:[*]_event_,
   const char pass:[*]_key1_, enum tracefs_hist_key_type _type1_,
   const char pass:[*]_key2_, enum tracefs_hist_key_type _type2_));
struct tracefs_hist pass:[*]*tracefs_hist_alloc_nd*(struct tracefs_tep pass:[*] _tep_,
   const char pass:[*]_system_, const char pass:[*]_event_,
   struct tracefs_hist_axis pass:[*]_axes_);
struct tracefs_hist pass:[*]*tracefs_hist_alloc_nd_cnt*(struct tep_handle pass:[*]_tep_,
     const char pass:[*]_system_, const char pass:[*]_event_name_,
     struct tracefs_hist_axis_cnt pass:[*]_axes_);
void *tracefs_hist_free*(struct tracefs_hist pass:[*]_hist_);

int *tracefs_hist_add_key*(struct tracefs_hist pass:[*]_hist_, const char pass:[*]_key_,
    enum tracefs_hist_key_type _type_);
int *tracefs_hist_add_key_cnt*(struct tracefs_hist pass:[*]_hist_, const char pass:[*]_key_,
    enum tracefs_hist_key_type _type_, int _cnt_);
int *tracefs_hist_add_value*(struct
 tracefs_hist pass:[*]_hist_, const char pass:[*]_value_);
--

DESCRIPTION
-----------
Event histograms are created by the trigger file in the event directory.
The syntax can be complex and difficult to get correct. This API handles the
syntax, and facilitates the creation and interaction with the event histograms.
See https://www.kernel.org/doc/html/latest/trace/histogram.html for more information.

*tracefs_hist_alloc*() allocates a "struct tracefs_hist" descriptor of a one-dimensional
histogram and returns the address of it. This descriptor must be freed by *tracefs_hist_free*().
The _tep_ is a trace event handle (see *tracefs_local_events*(3)), that holds the
_system_ and _event_ that the histogram will be attached to. The _system_ is the
system or group of the event. The _event_ is the event to attach the histogram to.
The _key_ is a field of the event that will be used as the key(dimension) of the histogram.
The _type_ is the type of the _key_. See KEY TYPES
 below.

*tracefs_hist_alloc_2d*() allocates a "struct tracefs_hist" descriptor of a two-dimensional
histogram and returns the address of it. This descriptor must be freed by *tracefs_hist_free*().
```

The _tep_ is a trace event handle (see *tracefs_local_events*(3)), that holds the
system and _event_ that the histogram will be attached to. The _system_ is the
system or group of the event. The _event_ is the event to attach the histogram to.
The _key1_ is the first field of the event that will be used as the key(dimension)
of the histogram. The _type1_ is the type of the _key1_. See KEY TYPES below.
The _key2_ is the second field of the event that will be used as the key(dimension)
of the histogram. The _type2_ is the type of the _key2_. See KEY TYPES below.

tracefs_hist_alloc_nd() allocates a "struct tracefs_hist" descriptor of an N-dimensional
histogram and returns the address of it. This descriptor must be freed by *tracefs_hist_free*().
The _tep_ is a trace event handle (see *tracefs_local_events*(3)),
that holds the
system and _event_ that the histogram will be attached to. The _system_ is the
system or group of the event. The _event_ is the event to attach the histogram to.
The _axes_ is an array of _key_ / _type_ pairs, defining the dimensions of the histogram.

tracefs_hist_alloc_nd_cnt() will initialize a histogram descriptor that will be attached to
the _system_/_event_. This only initializes the descriptor with the given _axes_ keys as primaries.
This only initializes the descriptor, it does not start the histogram in the kernel.
The difference between this and *tracefs_hist_alloc_nd()* is that the _axes_ parameter
is of type *struct tracefs_hist_axis_cnt* and not *struct tracefs_hist_axis*.

tracefs_hist_free() frees the _tracefs_hist_ descriptor. Note, it does not stop
or disable the running histogram if it was started. *tracefs_hist_destroy*() needs
to be called to do so.

tracefs_hist_add_key() Adds a secondary or tertiary key to the histogram.
The
key passed to *tracefs_hist_alloc_nd*() is the primary key of the histogram.
The first time this function is called, it will add a secondary key (or two dimensional
histogram). If this function is called again on the same histogram, it will add
a _tertiary_ key (or three dimensional histogram). The _hist_ parameter is the
histogram descriptor to add the _key_ to. The _type_ is the type of key to add
(See KEY TYPES below).

The *tracefs_hist_add_key_cnt*() is the same as *tracefs_hist_add_key*() except
that it allows to add a counter for the given type. Currently, there's only
the *buckets* type that requires a counter. When adding a key with the buckets
type, *tracefs_hist_add_key*() is not sufficient, as the *buckets* type requires
a counter or bucket size. Use *tracefs_hist_add_key_cnt*() when specifing
a key that is broken up into buckets, and pass in the size of those buckets
into _cnt_.

tracefs_hist_add_value() will add a value to record. By default, the value is
simply
the "hitcount" of the number of times a instance of the histogram's
key was hit. The _hist_ is the histogram descriptor to add the value to.
The _value_ is a field in the histogram to add to when an instance of the

key is hit.

KEY TYPES
---

tracefs_hist_alloc_nd() and *tracefs_hist_add_key*() both add a key and requires
that key to have a type. The types may be:

TRACEFS_HIST_KEY_NORMAL or zero (0) which is to not modify the type.

TRACEFS_HIST_KEY_HEX to display the key in hex.

TRACEFS_HIST_KEY_SYM to display the key as a kernel symbol (if found). If
the key is an address, this is useful as it will display the function names instead
of just a number.

TRACEFS_HIST_KEY_SYM_OFFSET similar to *TRACEFS_HIST_KEY_SYM* but will also include
the offset of the function to match the exact address.

TRACEFS_HIST_KEY_SYSCALL If the key is a system call "id" (the number passed from user
space to the kernel to tell it what system call it is calling), then the name of
the system
call is displayed.

TRACEFS_HIST_KEY_EXECNAME If "common_pid" is the key (the pid of the executing task),
instead of showing the number, show the name of the running task.

TRACEFS_HIST_KEY_LOG will display the key in a binary logarithmic scale.

TRACEFS_HIST_KEY_USECS for use with "common_timestamp" or TRACEFS_HIST_TIMESTAMP,
in which case it will show the timestamp in microseconds instead of nanoseconds.

RETURN VALUE
---
tracefs_hist_alloc_nd() returns an allocated histogram descriptor which must
be freed by *tracefs_hist_free*() or NULL on error.

All the other functions return zero on success or -1 on error.

If *tracefs_hist_start*() returns an error, a message may be displayed
in the kernel that can be retrieved by *tracefs_error_last()*.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <ctype.h>
```

```
#include <unistd.h>
#include <tracefs.h>

enum commands {
 START,
 PAUSE,
 CONT,
 RESET,
 DELETE,
 SHOW,
};

static void parse_system_event(char *group,
 char **system, char **event)
{
 *system = strtok(group, "/");
 *event = strtok(NULL, "/");
 if (!*event) {
  *event = *system;
  *system = NULL;
 }
}

static int parse_keys(char *keys, struct tracefs_hist_axis_cnt **axes)
{
 char *sav = NULL;
 char *key;
 int cnt = 0;

 for (key = strtok_r(keys, ",", &sav); key; key = strtok_r(NULL, ",", &sav)) {
  struct tracefs_hist_axis_cnt *ax;
  char *att;

  ax = realloc(*axes, sizeof(*ax) * (cnt + 2));
  if (!ax) {
   perror("Failed to allocate axes");
   exit(-1);
  }
  ax[cnt].key = key;
  ax[cnt].type = 0;
  ax[cnt + 1].key = NULL;
  ax[cnt + 1].type = 0;

  *axes = ax;

  att = strchr(key, '.');
  if (att) {
   *att++ = '\0';
```

```
  if (strcmp(att, "hex") == 0)
   ax[cnt].type = TRACEFS_HIST_KEY_HEX;
  else if (strcmp(att, "sym") == 0)
   ax[cnt].type = TRACEFS_HIST_KEY_SYM;
  else if (strcmp(att, "sym_offset") == 0)
   ax[cnt].type = TRACEFS_HIST_KEY_SYM_OFFSET;
  else if (strcmp(att, "syscall") == 0)
   ax[cnt].type = TRACEFS_HIST_KEY_SYSCALL;
  else
 if (strcmp(att, "exec") == 0)
   ax[cnt].type = TRACEFS_HIST_KEY_EXECNAME;
  else if (strcmp(att, "log") == 0)
   ax[cnt].type = TRACEFS_HIST_KEY_LOG;
  else if (strcmp(att, "usecs") == 0)
   ax[cnt].type = TRACEFS_HIST_KEY_USECS;
  else if (strncmp(att, "buckets", 7) == 0) {
   if (att[7] != '=' && !isdigit(att[8])) {
    fprintf(stderr, "'buckets' key type requires '=<size>'\n");
    exit(-1);
   }
   ax[cnt].type = TRACEFS_HIST_KEY_BUCKETS;
   ax[cnt].cnt = atoi(&att[8]);
  } else {
   fprintf(stderr, "Undefined attribute '%s'\n", att);
   fprintf(stderr,"  Acceptable attributes:\n");
   fprintf(stderr,"    hex, sym, sym_offset, syscall, exe, log, usecs\n");
   exit(-1);
  }
 }
 cnt++;
}
return cnt;
}

static void process_hist(enum commands cmd, const char *instance_name,
   char *group, char *keys, char *vals, char *sort,
   char *ascend, char *desc)
{
 struct tracefs_instance *instance = NULL;
 struct tracefs_hist *hist;
 struct tep_handle *tep;
 struct
 tracefs_hist_axis_cnt *axes = NULL;
 char *system;
 char *event;
 char *sav;
 char *val;
 int ret;
```

```
int cnt;

if (instance_name) {
 instance = tracefs_instance_create(instance_name);
 if (!instance) {
  fprintf(stderr, "Failed instance create\n");
  exit(-1);
 }
}

tep = tracefs_local_events(NULL);
if (!tep) {
 perror("Could not read events");
 exit(-1);
}

parse_system_event(group, &system, &event);

if (cmd == SHOW) {
 char *content;
 content = tracefs_event_file_read(instance, system, event,
       "hist", NULL);
 if (!content) {
  perror("Reading hist file");
  exit(-1);
 }
 printf("%s\n", content);
 free(content);
 return;
}

if (!keys) {
 fprintf(stderr, "Command needs -k option\n");
 exit(-1);
}

cnt = parse_keys(keys, &axes);
if (!cnt) {
 fprintf(stderr, "No keys??\n");
 exit(-1);
}

/* buckets require the nd_cnt function */
switch (cnt) {
case 2:
 if (axes[1].type == TRACEFS_HIST_KEY_BUCKETS)
  cnt = -1;
 /* fall through */
```

```
case
1:
 if (axes[0].type == TRACEFS_HIST_KEY_BUCKETS)
  cnt = -1;
}

/* Show examples of hist1d and hist2d */
switch (cnt) {
case 1:
 hist = tracefs_hist_alloc(tep, system, event,
      axes[0].key, axes[0].type);
 break;
case 2:
 hist = tracefs_hist_alloc_2d(tep, system, event,
         axes[0].key, axes[0].type,
         axes[1].key, axes[1].type);
 break;
default:
 /* Really, 1 and 2 could use this too */
 hist = tracefs_hist_alloc_nd_cnt(tep, system, event, axes);
}
if (!hist) {
 fprintf(stderr, "Failed hist create\n");
 exit(-1);
}

if (vals) {
 sav = NULL;
 for (val = strtok_r(vals, ",", &sav); val; val = strtok_r(NULL, ",", &sav)) {
  ret = tracefs_hist_add_value(hist, val);
  if (ret) {
   fprintf(stderr, "Failed to add value %s\n", val);
   exit(-1);
  }
 }
}

if (sort) {
 sav = NULL;
 for (val = strtok_r(sort, ",", &sav); val; val = strtok_r(NULL, ",", &sav)) {
  ret = tracefs_hist_add_sort_key(hist, val);
  if (ret) {
   fprintf(stderr,
"Failed to add sort key/val %s\n", val);
   exit(-1);
  }
 }
}
```

```
if (ascend) {
 sav = NULL;
 for (val = strtok_r(ascend, ",", &sav); val; val = strtok_r(NULL, ",", &sav)) {
  ret = tracefs_hist_sort_key_direction(hist, val, TRACEFS_HIST_SORT_ASCENDING);
  if (ret) {
   fprintf(stderr, "Failed to add ascending key/val %s\n", val);
   exit(-1);
  }
 }
}

if (desc) {
 sav = NULL;
 for (val = strtok_r(desc, ",", &sav); val; val = strtok_r(NULL, ",", &sav)) {
  ret = tracefs_hist_sort_key_direction(hist, val, TRACEFS_HIST_SORT_DESCENDING);
  if (ret) {
   fprintf(stderr, "Failed to add descending key/val %s\n", val);
   exit(-1);
  }
 }
}

tracefs_error_clear(instance);

switch (cmd) {
case START:
 ret = tracefs_hist_start(instance, hist);
 if (ret) {
  char *err = tracefs_error_last(instance);
  if (err)
   fprintf(stderr, "\n%s\n", err);
 }
 break;
case PAUSE:
 ret = tracefs_hist_pause(instance, hist);
 break;
case CONT:
 ret = tracefs_hist_continue(instance,
hist);
 break;
case RESET:
 ret = tracefs_hist_reset(instance, hist);
 break;
case DELETE:
 ret = tracefs_hist_destroy(instance, hist);
 break;
case SHOW:
```

```
 /* Show was already done */
 break;
 }
 if (ret)
  fprintf(stderr, "Failed: command\n");
 exit(ret);
}

int main (int argc, char **argv, char **env)
{
 enum commands cmd;
 char *instance = NULL;
 char *cmd_str;
 char *event = NULL;
 char *keys = NULL;
 char *vals = NULL;
 char *sort = NULL;
 char *desc = NULL;
 char *ascend = NULL;

 if (argc < 2) {
  fprintf(stderr, "usage: %s command [-B instance][-e [system/]event][-k keys][-v vals][-s sort]\n", argv[0]);
  fprintf(stderr, "      [-a ascending][-d descending]\n");
  exit(-1);
 }

 cmd_str = argv[1];

 if (!strcmp(cmd_str, "start"))
  cmd = START;
 else if (!strcmp(cmd_str, "pause"))
  cmd = PAUSE;
 else if (!strcmp(cmd_str, "cont"))
  cmd = CONT;
 else if (!strcmp(cmd_str, "reset"))
  cmd = RESET;
 else if (!strcmp(cmd_str, "delete"))
  cmd = DELETE;
 else if
 (!strcmp(cmd_str, "show"))
  cmd = SHOW;
 else {
  fprintf(stderr, "Unknown command %s\n", cmd_str);
  exit(-1);
 }

 for (;;) {
  int c;
```

```
 c = getopt(argc - 1, argv + 1, "e:k:v:B:s:d:a:");
 if (c == -1)
  break;

 switch (c) {
 case 'e':
  event = optarg;
  break;
 case 'k':
  keys = optarg;
  break;
 case 'v':
  vals = optarg;
  break;
 case 'B':
  instance = optarg;
  break;
 case 's':
  sort = optarg;
  break;
 case 'd':
  desc = optarg;
  break;
 case 'a':
  ascend = optarg;
  break;
 }
}
if (!event) {
 event = "kmem/kmalloc";
 if (!keys)
  keys = "call_site.sym,bytes_req";
 if (!vals)
  vals = "bytes_alloc";
 if (!sort)
  sort = "bytes_req,bytes_alloc";
 if (!desc)
  desc = "bytes_alloc";
}
process_hist(cmd, instance, event, keys, vals, sort, ascend, desc);
}
```

--

FILES

[verse]

--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE
 ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1),
tracefs_hist_pause(3),
tracefs_hist_continue(3),
tracefs_hist_reset(3)

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* /libtracefs-1-8-0-orig-tar-xz/libtracefs-1.8.0/Documentation/libtracefs-hist.txt
No license file was found, but licenses were detected in source scan.

libtracefs(3)
==========

NAME
---
tracefs_synth_create, tracefs_synth_destroy, tracefs_synth_complete,
tracefs_synth_trace, tracefs_synth_snapshot, tracefs_synth_save,tracefs_synth_set_instance,
- Creation of synthetic events

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_synth_create*(struct tracefs_synth pass:[*]_synth_);
int *tracefs_synth_destroy*(struct tracefs_synth pass:[*]_synth_);
bool *tracefs_synth_complete*(struct tracefs_synth pass:[*]_synth_);

int *tracefs_synth_set_instance*(struct tracefs_synth pass:[*]_synth_, struct tracefs_instance pass:[*]_instance_);
int *tracefs_synth_trace*(struct tracefs_synth pass:[*]_synth_,
  enum tracefs_synth_handler _type_, const char pass:[*]_var_);
int *tracefs_synth_snapshot*(struct tracefs_synth pass:[*]_synth_,
    enum tracefs_synth_handler _type_, const char pass:[*]_var_);
int *tracefs_synth_save*(struct tracefs_synth pass:[*]_synth_,

    enum tracefs_synth_handler _type_, const char pass:[*]_var_,
      char pass:[**]_save_fields_);
--

DESCRIPTION

Synthetic events are dynamic events that are created by matching
two other events which triggers a synthetic event. One event is the starting
event which some field is recorded, and when the second event is executed,
if it has a field (or fields) that matches the starting event's field (or fields)
then it will trigger the synthetic event. The field values other than the matching
fields may be passed from the starting event to the end event to perform calculations
on, or to simply pass as a parameter to the synthetic event.

One common use case is to set "sched_waking" as the starting event. This event is
triggered when a process is awoken. Then set "sched_switch" as the ending event.
This event is triggered when a new task is scheduled on the CPU. By setting
the "common_pid" of both events as the matching fields, the time between the
two events is considered
 the wake up latency of that process. Use *TRACEFS_TIMESTAMP*
as a field for both events to calculate the delta in nanoseconds, or use
TRACEFS_TIMESTAMP_USECS as the compare fields for both events to calculate the
delta in microseconds. This is used as the example below.

tracefs_synth_create() creates the synthetic event in the system. By default, the histogram triggers are created in the top trace instance, as any synthetic event can be used globally across all instances. In case an application wants to keep the histogram triggers out of the top level instance, it can use *tracefs_synth_set_instance()* to have the histograms used for creating the synthetic event in an instance other than the top level. A synthetic event descriptor must be created with *tracefs_synth_alloc*(3) before this can be used to create it on the system.

tracefs_synth_destroy() destroys the synthetic event. It will attempt to stop the running of it in its instance (top by default), but if its running
in another instance this may fail as busy.

tracefs_synth_complete() returns true if the synthetic event _synth_ has both a starting and ending event.

tracefs_synth_trace() Instead of doing just a trace on matching of the start and end events, do the _type_ handler where *TRACEFS_SYNTH_HANDLE_MAX* will do a trace when the given variable _var_ hits a new max for the matching keys. Or *TRACEFS_SYNTH_HANDLE_CHANGE* for when the _var_ changes. _var_ must be one of the _name_ elements used in *tracefs_synth_add_end_field*(3).

tracefs_synth_snapshot() When the given variable _var_ is either a new max if _handler_ is *TRACEFS_SYNTH_HANDLE_MAX* or simply changed if *TRACEFS_SYNTH_HANDLE_CHANGE*
then take a "snapshot" of the buffer. The snapshot moves the normal "trace" buffer into a "snapshot" buffer, that can be accessed via the "snapshot" file in the top level tracefs directory, or one of the instances. _var_ changes. _var_ must be one of the _name_ elements used in *tracefs_synth_add_end_field*(3).

tracefs_synth_save()
When the given variable _var_ is either a new max if
handler is *TRACEFS_SYNTH_HANDLE_MAX* or simpy changed if
TRACEFS_SYNTH_HANDLE_CHANGE
then save the given _save_fields_ list. The fields will be stored in the histogram "hist" file of the event that can be retrieved with *tracefs_event_file_read*(3).
var must be one of the _name_ elements used in *tracefs_synth_add_end_field*(3).

tracefs_synth_set_instance() Set the trace instance, where the histogram triggers that create the synthetic event will be created. By default, the top instance is used. This API must be called before the call to *tracefs_synth_create()*, in order to use the new instance when creating the event. Note, that even if the synthetic event is created in an instance, it is still visible by all other instances including the top level. That is, other instances can enable the created synthetic event and have it traced in the buffers that belong to the instance that
enabled it.

RETURN VALUE

All functions return zero on success or -1 on error.

ERRORS

The following errors are for all the above calls:

EPERM Not run as root user when required.

EINVAL Either a parameter is not valid (NULL when it should not be)
 or a field that is not compatible for calculations.

ENODEV An event or one of its fields is not found.

EBADE The fields of the start and end events are not compatible for
 either matching or comparing.

ENOMEM not enough memory is available.

And more errors may have happened from the system calls to the system.

EXAMPLE

See *tracefs_sql*(3) for a more indepth use of some of this code.

[source,c]
--
```
#include <stdlib.h>
#include <tracefs.h>

#define start_event "sched_waking"
#define start_field "pid"

#define end_event "sched_switch"
#define end_field "next_pid"

#define match_name "pid"

static struct tracefs_synth *synth;

static void make_event(void)
{
 struct tep_handle *tep;

 /* Load all
 events from the system */
 tep = tracefs_local_events(NULL);
```

```
/* Initialize the synthetic event */
synth = tracefs_synth_alloc(tep, "wakeup_lat",
        NULL, start_event,
        NULL, end_event,
        start_field, end_field,
        match_name);

/* The tep is no longer needed */
tep_free(tep);


/* Save the "prio" field as "prio" from the start event */
tracefs_synth_add_start_field(synth, "prio", NULL);

/* Save the "next_comm" as "comm" from the end event */
tracefs_synth_add_end_field(synth, "next_comm", "comm");

/* Save the "prev_prio" as "prev_prio" from the end event */
tracefs_synth_add_end_field(synth, "prev_prio", NULL);

/*
 * Take a microsecond time difference between end and start
 * and record as "delta"
 */
tracefs_synth_add_compare_field(synth, TRACEFS_TIMESTAMP_USECS,
    TRACEFS_TIMESTAMP_USECS,
    TRACEFS_SYNTH_DELTA_END, "delta");

/* Only record if start event "prio" is less than 100 */
tracefs_synth_append_start_filter(synth, TRACEFS_FILTER_COMPARE,

 "prio", TRACEFS_COMPARE_LT, "100");

/*
 * Only record if end event "next_prio" is less than 50
 * or the previous task's prio was not greater than or equal to 100.
 *   next_prio < 50 || !(prev_prio >= 100)
 */
tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_COMPARE,
    "next_prio", TRACEFS_COMPARE_LT, "50");
tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_OR, NULL, 0, NULL);
tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_NOT, NULL, 0, NULL);
tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_OPEN_PAREN, NULL, 0, NULL);
tracefs_synth_append_end_filter(synth, TRACEFS_FILTER_COMPARE,
    "prev_prio", TRACEFS_COMPARE_GE, "100");
/*
 * Note, the above only added: "next_prio < 50 || !(prev_prio >= 100"
```

```
  * That's because, when the synth is executed, the remaining close parenthesis
  * will be added. That is, the string will end up being:
  * "next_prio < 50 || !(prev_prio >= 100)" when one of tracefs_sync_create()
  * or tracefs_sync_echo_cmd()
 is run.
  */
}

/* Display how to create the synthetic event */
static void show_event(void)
{
 struct trace_seq s;

 trace_seq_init(&s);

 tracefs_synth_echo_cmd(&s, synth);
 trace_seq_terminate(&s);
 trace_seq_do_printf(&s);
 trace_seq_destroy(&s);
}

int main (int argc, char **argv)
{
 make_event();

 if (argc > 1) {
  if (!strcmp(argv[1], "create")) {
   /* Create the synthetic event */
   tracefs_synth_create(synth);
  } else if (!strcmp(argv[1], "delete")) {
   /* Delete the synthetic event */
   tracefs_synth_destroy(synth);
  } else {
   printf("usage: %s [create|delete]\n", argv[0]);
   exit(-1);
  }
 } else
  show_event();

 tracefs_synth_free(synth);

 return 0;
}
--

FILES
-----
[verse]
```

--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1),
tracefs_hist_alloc(3),
tracefs_hist_alloc_2d(3),
tracefs_hist_alloc_nd(3),
tracefs_hist_free(3),
tracefs_hist_add_key(3),
tracefs_hist_add_value(3),
tracefs_hist_add_name(3),
tracefs_hist_start(3),
tracefs_hist_destory(3),
tracefs_hist_add_sort_key(3),
tracefs_hist_sort_key_direction(3),
tracefs_synth_alloc(3),
tracefs_synth_add_match_field(3),
tracefs_synth_add_compare_field(3),
tracefs_synth_add_start_field(3),
tracefs_synth_add_end_field(3),
tracefs_synth_append_start_filter(3),
tracefs_synth_append_end_filter(3),
tracefs_synth_free(3),
tracefs_synth_echo_cmd(3),
tracefs_synth_get_start_hist(3),
tracefs_synth_get_name(3),
tracefs_synth_raw_fmt(3),
tracefs_synth_show_event(3),
tracefs_synth_show_start_hist(3),
tracefs_synth_show_end_hist(3),
tracefs_synth_get_event(3),

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--
REPORTING BUGS

Report bugs
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libtracefs(3)
==========

NAME
---
tracefs_file_exists, tracefs_dir_exists,
tracefs_instance_get_file, tracefs_instance_get_dir - Work with files directories in tracing instances.

SYNOPSIS

[verse]
--
#include <tracefs.h>

bool *tracefs_file_exists*(struct tracefs_instance pass:[*]_instance_, char pass:[*]_name_);
bool *tracefs_dir_exists*(struct tracefs_instance pass:[*]_instance_, char pass:[*]_name_);
char pass:[*]*tracefs_instance_get_file*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_file_);
char pass:[*]*tracefs_instance_get_dir*(struct tracefs_instance pass:[*]_instance_);

--

DESCRIPTION

This set of APIs can be used to work with trace files in all trace instances.
Each of these APIs take an _instance_ argument, that can be NULL to act

on the top level instance. Otherwise, it acts on an instance created with
tracefs_insance_create(3)

The *tracefs_file_exists()*
 function checks if a file with _name_ exists in _instance_.

The *tracefs_dir_exists()* function checks if a directory with _name_ exists in _instance_.

The *tracefs_instance_get_file()* function returns the full path of the file
with given _name_ in _instance_. Note, it does not check if the file exists in
the instance.

The *tracefs_instance_get_dir()* function returns the full path of the directory
with given _name_ in _instance_. Note, it does not check if the directory exists
in the instance.

RETURN VALUE

The *tracefs_file_exists()* and *tracefs_dir_exists()* functions return true if the
file / directory exist in the given instance or false if it does not exist.

The *tracefs_instance_get_file()* and *tracefs_instance_get_dir()* functions return
a string or NULL in case of an error. The returned string must be freed with
tracefs_put_tracing_file().

EXAMPLE

[source,c]
--
```
#include <tracefs.h>

struct tracefs_instance *inst = tracefs_instance_create("foo");
 if
 (!inst) {
  /* Error creating a new trace instance */
  ...
 }

 if (tracefs_file_exists(inst,"trace_clock")) {
  /* The instance foo supports trace clock */
  char *path, *clock;
  int size;

  path =  = tracefs_instance_get_file(inst, "trace_clock")
  if (!path) {
   /* Error getting the path to trace_clock file in instance foo */
   ...
  }
```

```
 ...
 tracefs_put_tracing_file(path);

 clock = tracefs_instance_file_read(inst, "trace_clock", &size);
 if (!clock) {
  /* Failed to read trace_clock file in instance foo */
  ...
 }
 ...
 free(clock);

 if (tracefs_instance_file_write(inst, "trace_clock", "global") != strlen("global")) {
  /* Failed to set gloabl trace clock in instance foo */
  ...
 }
} else {
 /* The instance foo does not support trace clock */
}

if (tracefs_dir_exists(inst,"options")) {
 /* The instance foo supports trace options */
 char *path = tracefs_instance_get_file(inst, "options");
 if (!path) {
  /* Error getting the path to options directory
in instance foo */
  ...
 }

 tracefs_put_tracing_file(path);
} else {
 /* The instance foo does not support trace options */
}

...

if (tracefs_instance_is_new(inst))
 tracefs_instance_destroy(inst);
else
 tracefs_instance_free(inst);
...

long long int res;
if (tracefs_instance_file_read_number(NULL, "tracing_on", &res) == 0) {
 if (res == 0) {
  /* tracing is disabled in the top instance */
 } else if (res == 1) {
  /* tracing is enabled in the top instance */
 } else {
```

```
  /* Unknown tracing state of the top instance */
 }
} else {
 /* Failed to read integer from tracing_on file */
}

...

int fd;
fd = tracefs_instance_file_open(NULL, "tracing_on", O_WRONLY);
if (fd >= 0) {
 /* Got file descriptor to the tracing_on file from the top instance for writing */
 ...
 close(fd);
}
```

--

FILES

[verse]

--

tracefs.h

Header file to include in order to have access to the library APIs.

-ltracefs

Linker switch to add when building a program that uses
the library.

--

SEE ALSO

---

libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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--

REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org>

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---

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RESOURCES
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libtracefs(3)
==========

NAME
---
tracefs_options - ftrace options, that can be controlled using tracefs library.

SYNOPSIS

[verse]
--
#include <tracefs.h>

enum tracefs_option_id {
 TRACEFS_OPTION_INVALID,
 TRACEFS_OPTION_ANNOTATE,
 TRACEFS_OPTION_BIN,
 TRACEFS_OPTION_BLK_CGNAME,
 TRACEFS_OPTION_BLK_CGROUP,
 TRACEFS_OPTION_BLK_CLASSIC,
 TRACEFS_OPTION_BLOCK,
 TRACEFS_OPTION_CONTEXT_INFO,
 TRACEFS_OPTION_DISABLE_ON_FREE,
 TRACEFS_OPTION_DISPLAY_GRAPH,
 TRACEFS_OPTION_EVENT_FORK,
 TRACEFS_OPTION_FGRAPH_ABSTIME,
 TRACEFS_OPTION_FGRAPH_CPU,
 TRACEFS_OPTION_FGRAPH_DURATION,
 TRACEFS_OPTION_FGRAPH_IRQS,
 TRACEFS_OPTION_FGRAPH_OVERHEAD,
 TRACEFS_OPTION_FGRAPH_OVERRUN,
 TRACEFS_OPTION_FGRAPH_PROC,
 TRACEFS_OPTION_FGRAPH_TAIL,
 TRACEFS_OPTION_FUNC_STACKTRACE,
 TRACEFS_OPTION_FUNCTION_FORK,

TRACEFS_OPTION_FUNCTION_TRACE,
TRACEFS_OPTION_GRAPH_TIME,
TRACEFS_OPTION_HEX,
TRACEFS_OPTION_IRQ_INFO,
TRACEFS_OPTION_LATENCY_FORMAT,
TRACEFS_OPTION_MARKERS,
TRACEFS_OPTION_OVERWRITE,
TRACEFS_OPTION_PAUSE_ON_TRACE,
TRACEFS_OPTION_PRINTK_MSG_ONLY,
TRACEFS_OPTION_PRINT_PARENT,
TRACEFS_OPTION_RAW,
TRACEFS_OPTION_RECORD_CMD,
TRACEFS_OPTION_RECORD_TGID,
TRACEFS_OPTION_SLEEP_TIME,
TRACEFS_OPTION_STACKTRACE,
TRACEFS_OPTION_SYM_ADDR,
TRACEFS_OPTION_SYM_OFFSET,
TRACEFS_OPTION_SYM_USEROBJ,
TRACEFS_OPTION_TRACE_PRINTK,
TRACEFS_OPTION_USERSTACKTRACE,
TRACEFS_OPTION_VERBOSE,
};
--

DESCRIPTION

This
enum contains all ftrace options, that can be manipulated using tracefs library. More detailed information about each option is available in Documentation/trace/ftrace.rst from the Linux kernel tree, in the trace_options section. Note that some ftrace options cannot be manipulated by this library, as they are intended for internal, debug purposes. These options control the tracers or the trace output. All options
have two states - on and off, the default state is different for
each of them.
[verse]
--
Common options for all tracers:
TRACEFS_OPTION_INVALID Not a valid ftrace option, used by the API to indicate an error.
TRACEFS_OPTION_ANNOTATE Display when a new CPU buffer started.
TRACEFS_OPTION_BIN Display the formats in raw binary.
TRACEFS_OPTION_CONTEXT_INFO Show only the event data. Hides the comm, PID, timestamp, CPU, and other useful data.
TRACEFS_OPTION_BLOCK When set, reading trace_pipe will not block when polled.
TRACEFS_OPTION_DISABLE_ON_FREE When the free_buffer is closed, tracing will stop.
TRACEFS_OPTION_DISPLAY_GRAPH When set, the latency tracers will use function graph tracing instead of function tracing.
TRACEFS_OPTION_EVENT_FORK When set, tasks with PIDs listed in set_event_pid will have the PIDs of their children added to set_event_pid when those tasks fork.

TRACEFS_OPTION_FUNCTION_FORK When set, tasks with PIDs listed in set_ftrace_pid will have the PIDs of their children added to set_ftrace_pid when those tasks fork.
TRACEFS_OPTION_FUNCTION_TRACE When enabled, the latency tracers will trace functions.
TRACEFS_OPTION_HEX Display numbers in a hexadecimal format.
TRACEFS_OPTION_IRQ_INFO Display the interrupt, preempt count, need resched data.
TRACEFS_OPTION_LATENCY_FORMAT Display additional information about the latency.
TRACEFS_OPTION_MARKERS When set, the trace_marker is enabled - writable (only by root).
TRACEFS_OPTION_OVERWRITE Controls what happens when the trace buffer is full. If set, the oldest events are discarded and overwritten. If disabled, then the newest events are discarded.
TRACEFS_OPTION_PAUSE_ON_TRACE When set, opening the trace file for read, will pause writing to the ring buffer. When the file is closed, tracing will be enabled again.
TRACEFS_OPTION_PRINTK_MSG_ONLY When set, trace_printk()s will only show the format and not their parameters.
TRACEFS_OPTION_PRINT_PARENT On function traces, display the calling (parent) function as well as the function being traced.
TRACEFS_OPTION_RAW Display raw numbers.
TRACEFS_OPTION_RECORD_CMD Save a mapping with a pid and corresponding command.
TRACEFS_OPTION_RECORD_TGID Save a mapping with a pid and corresponding Thread Group IDs.
TRACEFS_OPTION_STACKTRACE Record a stack trace after any trace event.
TRACEFS_OPTION_SYM_ADDR Display the function address as well as the function name.
TRACEFS_OPTION_SYM_OFFSET Display not only the function name, but also the offset in the function.
TRACEFS_OPTION_SYM_USEROBJ When *TRACEFS_OPTION_USERSTACKTRACE* is set, look up which object the address belongs to, and print the object and a relative address.
TRACEFS_OPTION_TRACE_PRINTK Disable trace_printk() from writing into the buffer.
TRACEFS_OPTION_USERSTACKTRACE Records a stack trace of the current user space thread after each trace event.
TRACEFS_OPTION_VERBOSE When *TRACEFS_OPTION_LATENCY_FORMAT* is enabled, print more detailed information.

Options, specific to function tracer:
TRACEFS_OPTION_FUNC_STACKTRACE Record a stack trace after every function.

Options, specific to function_graph tracer:
TRACEFS_OPTION_FGRAPH_ABSTIME Display the timestamp at each line.
TRACEFS_OPTION_FGRAPH_CPU Display the CPU number of the CPU where the trace occurred.
TRACEFS_OPTION_FGRAPH_DURATION Display the duration of the amount of time at the end of each function, in microseconds.
TRACEFS_OPTION_FGRAPH_IRQS Trace functions that happen inside an interrupt.
TRACEFS_OPTION_FGRAPH_OVERHEAD Display a marker if a function takes longer than a certain amount of time.
TRACEFS_OPTION_FGRAPH_OVERRUN Display "overrun" of the call graph, in the case of functions missed due to big callstack.
TRACEFS_OPTION_FGRAPH_PROC Display the command of each process at every line.
TRACEFS_OPTION_FGRAPH_TAIL Display the function name on its return.
TRACEFS_OPTION_SLEEP_TIME Account time the task has been scheduled out as part of the function call.
TRACEFS_OPTION_GRAPH_TIME Display the time to call nested functions, if function profiler is enabled.

Options, specific to blk tracer:
 TRACEFS_OPTION_BLK_CGNAME
 TRACEFS_OPTION_BLK_CGROUP
 TRACEFS_OPTION_BLK_CLASSIC Display a more minimalistic output.
--
FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1),
Documentation/trace/ftrace.rst from the Linux kernel tree.

AUTHOR

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--
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Tzvetomir Stoyanov <tz.stoyanov@gmail.com>
--
REPORTING BUGS

Report bugs to <linux-trace-devel@vger.kernel.org>

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RESOURCES
---
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libtracefs(3)
==========

NAME
---
tracefs_trace_is_on, tracefs_trace_on, tracefs_trace_off, tracefs_trace_on_get_fd,
tracefs_trace_on_fd, tracefs_trace_off_fd - Functions to enable or disable tracing.

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_trace_is_on*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_trace_on*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_trace_off*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_trace_on_get_fd*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_trace_on_fd*(int _fd_);
int *tracefs_trace_off_fd*(int _fd_);
--

DESCRIPTION

This set of functions can be used to check, enable or disable writing to the ring buffer in
the given trace instance. The tracing is enabled when writing to the ring buffer is enabled.

The *tracefs_trace_is_on()* function checks if tracing is enabled for the given _instance_. If
instance
 is NULL, the top instance is used.

The *tracefs_trace_on()* and *tracefs_trace_off()* functions set the tracing in the _instance_
to enable or disable state. If _instance_ is NULL, the top instance is used.

The *tracefs_trace_on_get_fd()* function returns a file descriptor to the "tracing_on" file from
the given _instance_. If _instance_ is NULL, the top trace instance is used. The returned descriptor
can be used for fast enabling or disabling the tracing of the instance.

The *tracefs_trace_on_fd()* and *tracefs_trace_off_fd()* functions set the tracing state to enable
or disable using the given _fd_. This file descriptor must be opened for writing with
tracefs_trace_on_get_fd(3) of the desired trace instance. These functions are faster than
tracefs_trace_on and *tracefs_trace_off*.

RETURN VALUE

The *tracefs_trace_is_on()* function returns 0 if tracing is disable, 1 if it is enabled or
-1 in case of an error.

The *tracefs_trace_on_get_fd()* function returns
 a file descriptor to "tracing_on"
file for reading and writing, which must be closed wuth close(). In case of an error -1 is returned.

The *tracefs_trace_on()*, *tracefs_trace_off()*, *tracefs_trace_on_fd()* and
tracefs_trace_off_fd() functions return -1 in case of an error or 0 otherwise.

EXAMPLE

[source,c]
--
```
#include <tracefs.h>

 int ret;

 ret = tracefs_trace_is_on(NULL);
 if (ret == 0) {
  /* Tracing is disabled in the top instance */
 } else if (ret == 1) {
  /* Tracing is enabled in the top instance */
 } else {
  /* Error getting tracing state of the top instance */
 }

 ...

 if (!tracefs_trace_on(NULL)) {
     /* Enabled tracing in the top instance */

     ...

     if (!tracefs_trace_off(NULL)) {
      /* Disabled tracing in the top instance */
     } else {
      /* Error disabling tracing in the top instance */
     }
 } else {
  /* Error enabling tracing in the top instance */
 }

 ...

 int fd = tracefs_trace_on_get_fd(NULL);

 if (fd < 0) {
```

```
 /* Error opening
tracing_on file */
}
...
if (!tracefs_trace_on_fd(fd)) {
    /* Enabled tracing in the top instance */

    ...

    if (!tracefs_trace_off_fd(fd)) {
     /* Disabled tracing in the top instance */
    } else {
     /* Error disabling tracing in the top instance */
    }
} else {
 /* Error enabling tracing in the top instance */
}

...

close(fd);
```

--

FILES

[verse]

--

tracefs.h

Header file to include in order to have access to the library APIs.

-ltracefs

Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),

trace-cmd(1)

AUTHOR

[verse]

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Steven Rostedt <rostedt@goodmis.org>

Tzvetomir Stoyanov <tz.stoyanov@gmail.com>

--

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```
/**
* tracefs_uprobe_alloc - Allocate new user probe (uprobe)
* @system: The system name (NULL for the default uprobes)
* @event: The name of the event to create
* @file: The full path to the binary file, where the uprobe will be set
* @offset: Offset within the @file
* @fetchargs: String with arguments, that will be fetched with the uprobe
*
* Allocate new uprobe context that will be in the @system group
* (or uprobes if @system is NULL) and with @event name. The new uprobe will be
* attached to @offset within the @file. The arguments described in @fetchargs
* will fetched with the uprobe. See linux/Documentation/trace/uprobetracer.rst
* for more details.
*
* The uprobe is not created in the system.
*
* Return a pointer to a uprobe context on success, or NULL on error.
* The returned pointer must be freed with tracefs_dynevent_free()
*
*/
```

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libtracefs(3)
==========

NAME

---
tracefs_instance_tracers, tracefs_tracer_set, tracefs_tracer_clear - Enable or disable a tracer in an instance or the top level

SYNOPSIS

[verse]
--
#include <tracefs.h>

char pass:[**] *tracefs_instance_tracers*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_tracer_set*(struct tracefs_instance pass:[*]_instance_, enum tracefs_tracers _tracer_);
int *tracefs_tracer_set*(struct tracefs_instance pass:[*]_instance_, enum tracefs_tracers _tracer_, const char pass:[*]_name_);
int *tracefs_tracer_clear*(struct tracefs_instance pass:[*]_instance_);
--

DESCRIPTION
---
tracefs_instance_tracers will return a list of available tracers for a given
instance (note, an instance may not have the same set of available tracers as
the top level). If _instance_ is NULL, then the list of available tracers
returned will be for the top level.

tracefs_tracer_set enables
 a tracer in the given instance, defined by the
instance parameter. If _instance_ is NULL, then the top level instance is
changed. If _tracer_ is set to *TRACFES_TRACER_CUSTOM* then a _name_
string must be passed in as the third parameter, and that is written into the
instance to enable the tracer with that name. This is useful for newer or
custom kernels that contain tracers that are not yet identified by the
tracefs_tracers enum.

tracefs_tracer_clear disables the tracer for the given instance defined by
the _instance_ variable, or the top level instance if it is NULL.
This is the same as calling *tracefs_tracer_set* with TRACEFS_TRACER_NOP as
the _tracer_ parameter.

TRACEFS_TRACER ENUMS

The currently defined enums that are accepted are:

TRACEFS_TRACER_NOP :
This is the idle tracer, which does nothing and is used to clear any
active tracer.

TRACEFS_TRACER_FUNCTION :

Enables most functions in the kernel to be traced.

TRACEFS_TRACER_FUNCTION_GRAPH
:
Enables most functions in the kernel to be traced as well as the return
of the function.

TRACEFS_TRACER_IRQSOFF :
Tracers the latency of interrupts disabled.

TRACEFS_TRACER_PREEMPTOFF :
Tracers the latency of preemption disabled (the time in the kernel that
tasks can not be scheduled from the CPU).

TRACEFS_TRACER_PREEMPTIRQSOFF :
Traces the combined total latency of when interrupts are disabled as well as when
preemption is disabled.

TRACEFS_TRACER_WAKEUP :
Traces the latency of when the highest priority task takes to wake up.

TRACEFS_TRACER_WAKEUP_RT :
Traces the latency of when the highest priority real-time task takes to wake up.
All other tasks are ignored.

TRACEFS_TRACER_WAKEUP_DL :
Traces the latency of when the highest priority DEADLINE task takes to wake up.
All other tasks are ignored.

TRACEFS_TRACER_MMIOTRACE :
Traces the interaction of devices with the kernel.

TRACEFS_TRACER_HWLAT :
Detects latency caused by the hardware that is outside the scope
of the kernel.

TRACEFS_TRACER_BRANCH :
Traces when likely or unlikely branches are taken.

TRACEFS_TRACER_BLOCK :
Special tracer for the block devices.

Note that the above tracers may not be available in the kernel and
tracefs_tracer_set() will return an error with errno set to ENODEV,
if the kernel does not support the _tracer_ option, or the custom one
if TRACEFS_TRACER_CUSTOM is used.

RETURN VALUE

Returns 0 on success, or -1 on error.

ERRORS
---

tracefs_tracer_set() can fail with the following errors:

EINVAL The _tracer_ parameter is outside the scope of what is defined.

ENOMEM Memory allocation error.

ENOENT Tracers are not supported on the running kernel.

ENODEV The specified tracer is not supported on the running kernel.

Other errors may also happen caused by internal system calls.

EXAMPLE

[source,c]
--
```c
#include <stdlib.h>
#include <stdio.h>
#include <getopt.h>
#include <errno.h>
#include <tracefs.h>

int main(int argc, char *argv[])
{
 struct
 tracefs_instance *inst = NULL;
 enum tracefs_tracers t = TRACEFS_TRACER_NOP;
 const char *cust = NULL;
 const char *buf = NULL;
 char **tracers;
 int ret;
 int ch;
 int i;

 while ((ch = getopt(argc, argv, "nfgiwdc:B:")) > 0) {
  switch (ch) {
  case 'f': t = TRACEFS_TRACER_FUNCTION; break;
  case 'g': t = TRACEFS_TRACER_FUNCTION_GRAPH; break;
  case 'i': t = TRACEFS_TRACER_PREEMPTIRQSOFF; break;
  case 'w': t = TRACEFS_TRACER_WAKEUP_RT; break;
  case 'd': t = TRACEFS_TRACER_WAKEUP_DL; break;
  case 'c':
```

```
  t = TRACEFS_TRACER_CUSTOM;
  cust = optarg;
  break;
 case 'B':
  buf = optarg;
  break;
 case 'n':
  /* nop */
  break;
 default:
  printf("Unknow arg %c\n", ch);
  exit(-1);
 }
}

if (buf) {
 inst = tracefs_instance_create(buf);
 if (!inst) {
  printf("failed to create instance\n");
  exit(-1);
 }
}

if (t == TRACEFS_TRACER_CUSTOM)
 ret = tracefs_tracer_set(inst, t, cust);
else
 ret = tracefs_tracer_set(inst, t);

if (ret < 0) {
 if (errno
== ENODEV) {
  if (cust)
   printf("Tracer '%s' not supported by kernel\n", cust);
  else
   printf("Tracer not supported by kernel\n");
  tracers = tracefs_instance_tracers(inst);
  printf("Available tracers:");
  for (i = 0; tracers && tracers[i]; i++)
   printf(" %s", tracers[i]);
  tracefs_list_free(tracers);
  printf("\n");
 } else
  perror("Error");
 if (inst) {
  tracefs_instance_destroy(inst);
  tracefs_instance_free(inst);
 }
 exit(-1);
```

```
 }

 tracefs_instance_free(inst);

 exit(0);
}
```
--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

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--
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libtracefs(3)
==========

NAME
----
tracefs_kprobe_alloc, tracefs_kretprobe_alloc, tracefs_kprobe_raw, tracefs_kretprobe_raw,
tracefs_kprobe_destroy -
Allocate, get, create, and remove kprobes

SYNOPSIS

[verse]
--
#include <tracefs.h>

struct tracefs_dynevent pass:[*]
tracefs_kprobe_alloc(const char pass:[*]_system_, const char pass:[*]_event_,
        const char pass:[*]_addr_, const char pass:[*]_format_);
struct tracefs_dynevent pass:[*]
tracefs_kretprobe_alloc(const char pass:[*]_system_, const char pass:[*]_event_,
    const char pass:[*]_addr_, const char pass:[*]_format_, unsigned int _max_);
int *tracefs_kprobe_raw*(const char pass:[*]_system_, const char pass:[*]_event_,
   const char pass:[*]_addr_, const char pass:[*]_format_);
int *tracefs_kretprobe_raw*(const char pass:[*]_system_, const char pass:[*]_event_,
      const char pass:[*]_addr_, const char pass:[*]_format_);
int *tracefs_kprobe_destroy*(const
 char pass:[*]_system_, const char pass:[*]_event_,
     const char pass:[*]_addr_, const char pass:[*]_format_, bool _force_);
--

DESCRIPTION
----
tracefs_kprobe_alloc() allocates a new kprobe context. The kbrobe is not configured in the system.
The kprobe can be added to the system by passing in the returned descriptor into
tracefs_dynevent_create(3).
The new kprobe will be in the _system_ group (or kprobes if _system_ is NULL) and have the name of
event (or _addr_ if _event_ is NULL). The kprobe will be inserted to _addr_ (function name, with
or without offset, or a address), and the _format_ will define the format of the kprobe. See the
Linux documentation file under: Documentation/trace/kprobetrace.rst

tracefs_kretprobe_alloc() is the same as *tracefs_kprobe_alloc*, but allocates context for
kretprobe. It has one additional parameter, which is optional, _max_ - maxactive count.

See description of kretprobes in the Documentation/trace/kprobetrace.rst
file.

tracefs_kprobe_raw() will create a kprobe event. If _system_ is NULL, then
the default "kprobes" is used for the group (event system). Otherwise if _system_
is specified then the kprobe will be created under the group by that name. The
event is the name of the kprobe event to create. The _addr_ can be a function,
a function and offset, or a kernel address. This is where the location of the
kprobe will be inserted in the kernel. The _format_ is the kprobe format as
specified as FETCHARGS in the Linux kernel source in the Documentation/trace/kprobetrace.rst
document.

tracefs_kretprobe_raw() is the same as *tracefs_kprobe_raw()*, except that it
creates a kretprobe instead of a kprobe. The difference is also described
in the Linux kernel source in the Documentation/trace/kprobetrace.rst file.

tracefs_kprobe_destroy() will destroy a specific kprobe or kretprobe created by
tracefs_kprobe_raw() or *tracefs_kretprobe_raw*() with the same parameters.

RETURN VALUE
---

tracefs_kprobe_raw()
and *tracefs_kretprobe_raw*() return 0 on success, or -1 on error.
If a parsing error occurs on *tracefs_kprobe_raw*() or *tracefs_kretprobe_raw*() then
tracefs_error_last(3) may be used to retrieve the error message explaining the parsing issue.

The *tracefs_kprobe_alloc*() and *tracefs_kretprobe_alloc*() APIs return a pointer to an allocated
tracefs_dynevent structure, describing the probe. This pointer must be freed by
tracefs_dynevent_free(3). Note, this only allocates a descriptor representing the kprobe. It does
not modify the running system.

The *tracefs_kprobe_destroy*() returns 0 on success or -1 on error if it was not able to
successful destory (or find) the kprobe or kretprobe.

ERRORS

The following errors are for all the above calls:

EPERM Not run as root user

ENODEV Kprobe events are not configured for the running kernel.

ENOMEM Memory allocation error.

tracefs_kprobe_raw(), *tracefs_kretprobe_raw*(), *tracefs_kprobe_alloc*(),
and

tracefs_kretprobe_alloc() can fail with the following errors:

EBADMSG if _addr_ is NULL.

EINVAL Most likely a parsing error occurred (use *tracefs_error_last*(3) to possibly
see what that error was).

Other errors may also happen caused by internal system calls.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include <unistd.h>
#include <sys/wait.h>

#include <tracefs.h>

static struct tep_event *open_event;
static struct tep_format_field *file_field;

static struct tep_event *openret_event;
static struct tep_format_field *ret_field;

static int callback(struct tep_event *event, struct tep_record *record,
    int cpu, void *data)
{
 struct trace_seq seq;

 trace_seq_init(&seq);
 tep_print_event(event->tep, &seq, record, "%d-%s: ", TEP_PRINT_PID, TEP_PRINT_COMM);

 if (event->id == open_event->id) {
  trace_seq_puts(&seq, "open file='");
  tep_print_field(&seq, record->data, file_field);
  trace_seq_puts(&seq, "'\n");
 } else if (event->id ==
 openret_event->id) {
  unsigned long long ret;
  tep_read_number_field(ret_field, record->data, &ret);
  trace_seq_printf(&seq, "open ret=%lld\n", ret);
 } else {
  goto out;
 }

 trace_seq_terminate(&seq);
 trace_seq_do_printf(&seq);
```

```
out:
 trace_seq_destroy(&seq);

 return 0;
}

static pid_t run_exec(char **argv, char **env)
{
 pid_t pid;

 pid = fork();
 if (pid)
  return pid;

 execve(argv[0], argv, env);
 perror("exec");
 exit(-1);
}

const char *mykprobe = "my_kprobes";

enum kprobe_type {
 KPROBE,
 KRETPROBE,
};

static void __kprobe_create(enum kprobe_type type, const char *event,
       const char *addr, const char *fmt)
{
 char *err;
 int r;

 if (type == KPROBE)
  r = tracefs_kprobe_raw(mykprobe, event, addr, fmt);
 else
  r = tracefs_kretprobe_raw(mykprobe, event, addr, fmt);
 if (r < 0) {
  err = tracefs_error_last(NULL);
  perror("Failed to create kprobe:");
  if (err && strlen(err))
   fprintf(stderr, "%s\n", err);
 }
}

static void kprobe_create(const char *event, const
 char *addr,
     const char *fmt)
{
```

```
 __kprobe_create(KPROBE, event, addr, fmt);
}

static void kretprobe_create(const char *event, const char *addr,
        const char *fmt)
{
 __kprobe_create(KRETPROBE, event, addr, fmt);
}

int main (int argc, char **argv, char **env)
{
 struct tracefs_instance *instance;
 struct tep_handle *tep;
 const char *sysnames[] = { mykprobe, NULL };
 pid_t pid;

 if (argc < 2) {
  printf("usage: %s command\n", argv[0]);
  exit(-1);
 }

 instance = tracefs_instance_create("exec_open");
 if (!instance) {
  perror("creating instance");
  exit(-1);
 }

 tracefs_dynevent_destroy_all(TRACEFS_DYNEVENT_KPROBE | TRACEFS_DYNEVENT_KRETPROBE,
true);

 kprobe_create("open", "do_sys_openat2",
        "file=+0($arg2):ustring flags=+0($arg3):x64 mode=+8($arg3):x64\n");

 kretprobe_create("openret", "do_sys_openat2", "ret=%ax");

 tep = tracefs_local_events_system(NULL, sysnames);
 if (!tep) {
  perror("reading events");
  exit(-1);
 }
 open_event = tep_find_event_by_name(tep,
 mykprobe, "open");
 file_field = tep_find_field(open_event, "file");

 openret_event = tep_find_event_by_name(tep, mykprobe, "openret");
 ret_field = tep_find_field(openret_event, "ret");

 tracefs_event_enable(instance, mykprobe, NULL);
```

```
 pid = run_exec(&argv[1], env);

 /* Let the child start to run */
 sched_yield();

 do {
  tracefs_load_cmdlines(NULL, tep);
  tracefs_iterate_raw_events(tep, instance, NULL, 0, callback, NULL);
 } while (waitpid(pid, NULL, WNOHANG) != pid);

 /* Will disable the events */
 tracefs_dynevent_destroy_all(TRACEFS_DYNEVENT_KPROBE | TRACEFS_DYNEVENT_KRETPROBE,
true);
 tracefs_instance_destroy(instance);
 tep_free(tep);

 return 0;
}
```
--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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libtracefs(3)
==========

NAME
---
tracefs_local_events, tracefs_local_events_system, tracefs_fill_local_events,
tracefs_load_cmdlines, tracefs_load_headers -
Initialize a tep handler with trace events from the local system.

SYNOPSIS

[verse]
--
#include <tracefs.h>

struct tep_handle pass:[*]*tracefs_local_events*(const char pass:[*]_tracing_dir_);
struct tep_handle pass:[*]*tracefs_local_events_system*(const char pass:[*]_tracing_dir_, const char pass:[*] const pass:[*]_sys_names_);
int *tracefs_fill_local_events*(const char pass:[*]_tracing_dir_, struct tep_handle pass:[*]_tep_, int pass:[*]_parsing_failures_);
int *tracefs_load_cmdlines*(const char pass:[*]_tracing_dir_, struct tep_handle pass:[*]_tep_);
int *tracefs_load_headers*(const char pass:[*]_tracing_dir_, struct tep_handle pass:[*]_tep_);
--

DESCRIPTION

Functions for initializing a tep handler with trace events from the local
 system.

The *tracefs_local_events()* function allocates a new _tep_ handler and

initializes it with events from all trace systems, located in the given _tracing_dir_ directory. This could be NULL or the location of the tracefs mount point for the trace systems of the local machine, or it may be a path to a copy of the tracefs directory from another machine.

The *tracefs_local_events_system()* function allocates a new _tep_ handler and initializes it with events from specified trace systems _sys_names_, located in the given _tracing_dir_ directory. This could be NULL or the location of the tracefs mount point for the trace systems of the local machine, or it may be a path to a copy of the tracefs directory from another machine. The _sys_names_ argument is an array of trace system names, that will be used for _tep_ handler initialization. The last element in that array must be a NULL pointer.

The *tracefs_fill_local_events()* function initializes already allocated _tep_ handler with events
from all trace systems, located in the given _tracing_dir_ directory. This could be NULL or the location of the tracefs mount point for the trace systems of the local machine, or it may be a path to a copy of the tracefs directory from another machine. The _tep_ argument must be a pointer to already allocated tep handler, that is going to be initialized. The _parsing_failures_ argument could be NULL or a pointer to an integer, where the number of failures while parsing the event files are returned.

The above functions will also load the mappings between pids and the process command line names. In some cases the _tep_ handle is created with one of the above before tracing begins. As the mappings get updated during the trace, there may be a need to read the mappings again after the trace. The *tracefs_load_cmdlines()* does just that. The _tracing_dir_ is the directory of the mount point to load from, or NULL to use the mount point of the tracefs file system.

The *tracefs_load_headers()*
will reade the "header_page" of the events
directory that will update the _tep_ handle with information on how to parse the tracing ring buffer sub-buffer.

RETURN VALUE

The *tracefs_local_events()* and *tracefs_local_events_system()* functions return pointer to allocated and initialized _tep_ handler, or NULL in case of an error. The returned _tep_ handler must be freed with *tep_free*(3).

The *tracefs_fill_local_events()* function returns -1 in case of an error or 0 otherwise.

The *tracefs_load_cmdlines()* function returns -1 in case of an error, or 0 otherwise.

EXAMPLE

[source,c]
--
```
#include <tracefs.h>

struct tep_handle *tep;
...
 tep = tracefs_local_events(NULL);
 if (!tep) {
  /* Failed to initialise tep handler with local events from top instance */
  ...
 }
...
 tep_free(tep);
...
 const char *systems[] = {"ftrace", "irq", NULL};
 tep = tracefs_local_events_system(NULL, systems);
 if (!tep) {
  /* Failed to initialise tep handler with local events
 from
   * ftrace and irq systems in top instance.
   */
  ...
 }
...
 tep_free(tep);
...
 int parsing_failures;
 tep = tep_alloc();
 if (!tep) {
  /* Failed to allocate a tep handler */
  ...
 }
 if (tracefs_fill_local_events(NULL, tep, &parsing_failures) < 0) {
  /* Failed to initialise tep handler with local events from top instance */
 }
 tracefs_load_cmdlines(NULL, tep);
...
 tep_free(tep);
```
--
FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.

-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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libtracefs(3)
==========

NAME
---
tracefs_function_filter, tracefs_function_notrace, tracefs_filter_functions
- Functions to modify the the function trace filters

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_function_filter*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_filter_, const char pass:[*]_module_, int _flags_);
int *tracefs_function_notrace*(struct tracefs_instance pass:[*]_instance_, const char pass:[*]_filter_, const char pass:[*]_module_, int _flags_);
int *tracefs_filter_functions*(const char pass:[*]_filter_, const char pass:[*]_module_, char pass:[*]pass:[*]pass:[*]_list_);
--

DESCRIPTION
---
tracefs_function_filter and *tracefs_function_notrace* can be used to limit the
Linux kernel functions that would be traced by the function and function-graph tracers.
The *tracefs_function_filter* defines a list of functions that can be traced.
The *tracefs_function_notrace*
defines a list of functions that will not be traced.
If a function is in both lists, it will not be traced.

They take an _instance_ , that can be NULL for the top level tracing,
filter, a string that represents a filter that should
be applied to define what functions are to be traced,
module, to limit the filtering on a specific module (or NULL to filter on all functions),
flags which holds control knobs on how the filters will be handled (see *FLAGS*)
section below.

The *tracefs_filter_functions* returns a list of functions that can be filtered on
via the _filter_ and _module_ that are supplied. If both _filter_ and _module_ are
NULL then, all available functions that can be filtered is returned.
On success, _list_ must be freed with *tracefs_list_free()*(3).

The _filter_ may be either a straight match of a
function, a glob or regex(3). A glob is where 'pass:[*]' matches zero or more
characters, '?' will match zero or one character, and '.' only matches a
period.
If the _filter_ is determined to be a regex (where it contains
anything other than alpha numeric characters, or '.', 'pass:[*]', '?') the _filter_
will be processed as a regex(3) following the rules of regex(3), and '.' is
not a period, but will match any one character. To force a regular
expression, either prefix _filter_ with a '^' or append it with a '$' as
the _filter_ does complete matches of the functions anyway.

If _module_ is set and _filter_ is NULL, this will imply the same as _filter_ being
equal to "pass:[*]". Which will enable all functions for a given _module_. Otherwise
the _filter_ may be NULL if a previous call to *tracefs_function_filter()* with

the same _instance_ had *TRACEFS_FL_CONTINUE* set and this call does not. This is useful to simply commit the previous filters. It may also be NULL if *TRACEFS_FL_RESET* is set and the previous call did not have the same _instance_ and *TRACEFS_FL_CONTINUE* set. This is useful to just clear the filter.

FLAGS

The _flags_ parameter may have the following set, or be zero.

TRACEFS_FL_RESET :
If _flags_ contains *TRACEFS_FL_RESET*, then it will clear the filters that are currently set before applying _filter_. Otherwise, _filter_ is added to the current set of filters already enabled. If this flag is set and the previous call to tracefs_function_filter() had the same _instance_ and the *TRACEFS_FL_CONTINUE* flag was set, then the function will fail with a return of -1 and errno set to EBUSY.

TRACEFS_FL_CONTINUE :
If _flags_ contains *TRACEFS_FL_CONTINUE*, then _filter_ will not take effect after a successful call to tracefs_function_filter(). This allows for multiple calls to tracefs_function_filter() to update the filter function and then a single call (one without the *TRACEFS_FL_CONTINUE* flag set) to commit all the filters.
It can be called multiple times to add more filters. A call without this flag set will commit the changes before returning (if the _filter_ passed in successfully matched).
A tracefs_function_filter() call after one that had the *TRACEFS_FL_CONTINUE* flag set for the same instance will fail if *TRACEFS_FL_RESET* flag is set, as the reset flag is only applicable for the first filter to be added before committing.

TRACEFS_FL_FUTURE :
If _flags_ contains *TRACEFS_FL_FUTURE* and _module_ holds a string of a module, then if the module is not loaded it will attemp to write the filter with the module in the filter file. Starting in Linux v4.13 module functions could be added to the filter before they are loaded. The filter will be cached, and when the module is loaded, the filter will be set before the module executes, allowing to trace init functions of a module. This will only work if the _filter_ is not a regular expression.

RETURN VALUE

For *tracefs_function_filter()* and *tracefs_function_notrace()* a return of 0 means success. If the there is an error but the filtering was not started, then 1 is returned. If filtering was started

but an error occurs,
then -1 is returned. The state of the filtering may be in an unknown state.

If *TRACEFS_FL_CONTINUE* was set, and 0 or -1 was returned, then another call
to *tracefs_function_filter()* must be done without *TRACEFS_FL_CONTINUE* set
in order to commit (and close) the filtering.

For *tracefs_filter_functions()*, a return of 0 means success, and the _list_
parameter is filled with a list of function names that matched _filter_ and
module. _list_ is a string array, where the last string pointer in the
array is NULL. The _list_ must be freed with *tracefs_list_free()*.
On failure, a negative is returned, and _list_ is ignored.

ERRORS
---

tracefs_function_filter() can fail with the following errors:

EINVAL The filter is invalid or did not match any functions.

EBUSY The previous call of *tracefs_function_filter*() was called
with the same instance and *TRACEFS_FL_CONTINUE* set and the current call
had *TRACEFS_FL_RESET* set.

Other errors may also happen
caused by internal system calls.

EXAMPLE

[source,c]
--
```
#include <stdio.h>
#include <errno.h>
#include <tracefs.h>

#define INST "dummy"

static const char *filters[] = { "run_init_process", "try_to_run_init_process", "dummy1", NULL };

int main(int argc, char *argv[])
{
 struct tracefs_instance *inst = tracefs_instance_create(INST);
 char **func_list;
 int ret;
 int i;

 if (!inst) {
  /* Error creating new trace instance */
```

```
}

if (tracefs_filter_functions("*lock*", NULL, &func_list) < 0) {
 printf("Failed to read filter functions\n");
 goto out;
}
printf("Ignoring the following functions:\n");
for (i = 0; func_list[i]; i++)
 printf("  %s\n", func_list[i]);
tracefs_list_free(func_list);

/* Do not trace any function with the word "lock" in it */
ret = tracefs_function_notrace(inst, "*lock*", NULL, TRACEFS_FL_RESET);
if (ret) {
 printf("Failed to set the notrace filter\n");
 goto out;
}

/* First reset the filter */
ret = tracefs_function_filter(inst, NULL, NULL,

    TRACEFS_FL_RESET | TRACEFS_FL_CONTINUE);
if (ret) {
 printf("Failed to reset the filter\n");
 /* Make sure it is closed, -1 means filter was started */
 if (ret < 0)
  tracefs_function_filter(inst, NULL, NULL, 0);
}

for (i = 0; filters[i]; i++) {
 ret = tracefs_function_filter(inst, filters[i], NULL,
        TRACEFS_FL_CONTINUE);

 if (ret) {
  if (errno == EINVAL)
   printf("Filter %s did not match\n", filters[i]);
  else
   printf("Failed writing %s\n", filters[i]);
 }
}

ret = tracefs_function_filter(inst, "*", "ext4", 0);
if (ret) {
 printf("Failed to set filters for ext4\n");
 /* Force the function to commit previous filters */
 tracefs_function_filter(inst, NULL, NULL, 0);
}
```

```
out:
 tracefs_instance_destroy(inst);
 return ret;
}
```
--

FILES

[verse]
--
tracefs.h
 Header file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

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libtracefs(3)
==========

NAME
----
tracefs_instance_get_subbuf_size, tracefs_instance_set_subbuf_size - Helper functions for working with ring buffer sub buffers.

SYNOPSIS

[verse]
--
#include <tracefs.h>

size_t *tracefs_instance_get_subbuf_size*(struct tracefs_instance pass:[*]_instance_);
int *tracefs_instance_set_subbuf_size*(struct tracefs_instance pass:[*]_instance_, size_t _size_);
--

DESCRIPTION

Helper functions for working with the sub-buffers of the tracing ring buffer.
The tracing ring buffer is broken up into *sub-buffers*. An event can not be
bigger than the data section of the sub-buffer (see *tep_get_sub_buffer_data_size*(3)).
By default, the ring buffer uses the architectures *page_size* as the default
size of the sub-buffer, but this can be limiting if there is a need for large
events, for example, the application wants to write large strings into
the trace_marker file.

The
 tracefs_instance_get_subbuf_size() returns the current size in kilobytes
fo the ring buffer sub-buffers.

The *tracefs_instance_set_subbuf_size()* will write the size in kilobytes of
what the new sub-buffer size should be. Note, that this is only a hint to what
the minimum sub-buffer size should be. It also does not take into account the
meta-data that is used by the sub-buffer, so the size written should be no less
than 16 bytes more than the maximum event size that will be used. The kernel
will likely make the sub-buffer size larger than specified, as it may need to
align the size for implementation purposes.

RETURN VALUE

The *tracefs_instance_get_subbuf_size()* returns the size of the current
sub-buffer for the given _instance_ ring buffer or -1 on error.

The *tracefs_instance_set_subbuf_size()* will return 0 if it successfully set the _instance_ ring buffer sub-buffer size in kilobytes, or -1 on error.

EXAMPLE

[source,c]
--
```
#include <stdlib.h>
#include
 <tracefs.h>
#include <errno.h>

int main(int argc, char **argv)
{
 struct tep_handle *tep;
 ssize_t save_subsize;
 ssize_t subsize;
 char *trace;
 char buf[3000];
 int meta_size;
 int ret;
 int i;

 tep = tep_alloc();
 ret = tracefs_load_headers(NULL, tep);
 tep_free(tep);

 if (ret < 0) {
  perror("reading headers");
  exit(-1);
 }

 meta_size = tep_get_sub_buffer_size(tep) - tep_get_sub_buffer_data_size(tep);

 save_subsize = tracefs_instance_get_subbuf_size(NULL);
 if (save_subsize < 0) {
  printf("Changing sub-buffer size not available\n");
  exit(-1);
 }

 subsize = save_subsize * 1024;

 /* Have at least 4 writes fit on a sub-buffer */
 if (subsize - meta_size < sizeof(buf) *4 ) {
  subsize = ((sizeof(buf) * 4 + meta_size) + 1023) / 1024;
  tracefs_instance_set_subbuf_size(NULL, subsize);
 }
```

```
 for (i = 0; i < sizeof(buf) - 1; i++) {
  buf[i] = '0' + i % 10;
 }
 buf[i] = '\0';

 tracefs_instance_clear(NULL);

 for (i = 0; i < 4; i++) {
  ret = tracefs_printf(NULL, "%s\n", buf);
  if
 (ret < 0)
   perror("write");
 }

 trace = tracefs_instance_file_read(NULL, "trace", NULL);
 printf("%s\n", trace);
 free(trace);

 printf("Buffer size was: %zd * 1024\n",
        tracefs_instance_get_subbuf_size(NULL));

 tracefs_instance_set_subbuf_size(NULL, save_subsize);
}
```

--

FILES

[verse]

--

tracefs.h

 Header file to include in order to have access to the library APIs.

-ltracefs

 Linker switch to add when building a program that uses the library.

--

SEE ALSO

---

libtracefs(3),

libtraceevent(3),

trace-cmd(1)

AUTHOR

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Tzvetomir Stoyanov <tz.stoyanov@gmail.com>

--

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libtracefs(3)
==========

NAME
---
tracefs_option_enable, tracefs_option_disable, tracefs_option_name -
Various trace option functions.

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_option_enable*(struct tracefs_instance pass:[*]_instance_, enum tracefs_option_id _id_);
int *tracefs_option_disable*(struct tracefs_instance pass:[*]_instance_, enum tracefs_option_id _id_);
const char pass:[*]*tracefs_option_name*(enum tracefs_option_id _id_);
--

DESCRIPTION

This set of APIs can be used to enable and disable ftrace options and to get the name of an option.

The *tracefs_option_enable()* function enables the option with _id_ in the given _instance_. If
instance is NULL, the option is enabled in the top trace instance.

The *tracefs_option_disable()* function disables the option with _id_ in the given _instance_. If _instance_ is NULL, the option is disabled in the top trace instance.

The
 tracefs_option_name() function returns a string, representing the option with _id_. The string must *not* be freed.

RETURN VALUE

The *tracefs_option_enable()* and *tracefs_option_disable()* functions return 0 if the state of the option is set successfully, or -1 in case of an error.

The *tracefs_option_name()* function returns string with option name, or "unknown" in case of an error. The returned string must *not* be freed.

EXAMPLE

[source,c]
--
```
#include <tracefs.h>
...
if (tracefs_option_enable(NULL, TRACEFS_OPTION_ANNOTATE)) {
 /* Failed to enable annotate option in top trace instance */
}
...
if (tracefs_option_disable(NULL, TRACEFS_OPTION_CONTEXT_INFO)) {
 /* Failed to disable context info option in top trace instance */
}
...
char *name = tracefs_option_name(TRACEFS_OPTION_FUNC_STACKTRACE);
if (strcmp(name, "unknown")) {
 /* Cannot get the name of the option */
}
```
--
FILES

[verse]
--
tracefs.h
 Header file to include in order to have access
 to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO

----
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

AUTHOR

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libtracefs(3)
==========

NAME
----
tracefs_set_loglevel - Set log level of the library

SYNOPSIS

[verse]
--
#include <tracefs.h>

int *tracefs_set_loglevel*(enum tep_loglevel _level_);
--

DESCRIPTION

The *tracefs_set_loglevel()* function sets the level of the library logs that will be printed on the console. See _libtraceevent(3)_ for detailed description of the log levels. Setting the log level to specific value means that logs from the previous levels will be printed too. For example _TEP_LOG_WARNING_ will print any logs with severity _TEP_LOG_WARNING_, _TEP_LOG_ERROR_ and _TEP_LOG_CRITICAL_. The default log level is _TEP_LOG_CRITICAL_. When a new level is set, it is also propagated to the libtraceevent.

EXAMPLE

[source,c]
--
#include <tracefs.h>

tracefs_set_loglevel(TEP_LOG_ALL);
...
/* call libtracefs or libtraceevent APIs and observe any logs they produce */
...
tracefs_set_loglevel(TEP_LOG_CRITICAL);
--
FILES

[verse]
--
tracefs.h
 Header
 file to include in order to have access to the library APIs.
-ltracefs
 Linker switch to add when building a program that uses the library.
--

SEE ALSO
---
libtracefs(3),
libtraceevent(3),
trace-cmd(1)

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1.2108 lazr-restfulclient 0.14.6-1

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1.2109 xdg-user-dirs 0.18-1build1

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Douglas Gilbert
10th April 2012

1.2111 libhttp-date-perl 6.06-1

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1.2114 libtry-tiny-perl 0.31-2

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1.2115 libencode-locale-perl 1.05-3

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```
---
abstract: 'Determine the locale encoding'
author:
 - 'Gisle Aas <gisle@activestate.com>'
build_requires:
 ExtUtils::MakeMaker: '0'
 Test::More: '0'
configure_requires:
 ExtUtils::MakeMaker: '0'
dynamic_config: 1
generated_by: 'ExtUtils::MakeMaker version 7.0401, CPAN::Meta::Converter version 2.150001'
license: perl
meta-spec:
 url: http://module-build.sourceforge.net/META-spec-v1.4.html
 version: '1.4'
name: Encode-Locale
no_index:
 directory:
   - t
   - inc
recommends:
```

```
 I18N::Langinfo: '0'
requires:
 Encode: '2'
 Encode::Alias: '0'
 perl: '5.008'
resources:
 repository: http://github.com/gisle/encode-locale
version: '1.05'
```

Found in path(s):
* /libencode-locale-perl-1-05-orig-1-tar-gz/Encode-Locale-1.05/META.yml
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Encode-Locale
==========

The purpose of this Perl module is try determine what encodings should be used
when interfacing to various external interfaces. You will need perl-5.8 or
better to use this module.

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=head1 NAME

Encode::Locale - Determine the locale encoding

=head1 SYNOPSIS

```
 use Encode::Locale;
 use Encode;

 $string = decode(locale => $bytes);
 $bytes = encode(locale => $string);

 if (-t) {
    binmode(STDIN, ":encoding(console_in)");
    binmode(STDOUT, ":encoding(console_out)");
    binmode(STDERR, ":encoding(console_out)");
 }

 # Processing file names passed in as arguments
```

```
 my $uni_filename = decode(locale => $ARGV[0]);
 open(my $fh, "<", encode(locale_fs => $uni_filename))
    || die "Can't open '$uni_filename': $!";
 binmode($fh, ":encoding(locale)");
 ...
```

=head1 DESCRIPTION

In many applications it's wise to let Perl use Unicode for the strings it processes. Most of the interfaces Perl has to the outside world are still byte based. Programs therefore need to decode byte strings that enter the program from the outside and encode them again on the way out.

The POSIX locale system is used to specify both the language conventions requested by the user and the preferred character set to consume and output. The C<Encode::Locale> module looks up the charset and encoding (called a CODESET in the locale jargon) and arranges for the L<Encode> module to know this encoding under the name "locale". It means bytes obtained from the environment can be converted to Unicode strings by calling C<< Encode::encode(locale => $bytes) >> and converted back again with C<< Encode::decode(locale => $string) >>.

Where file systems interfaces pass file names in and out of the program we also need care. The trend is for operating systems to use a fixed file encoding that don't actually depend on the locale; and this module determines the most appropriate encoding for file names. The L<Encode> module will know this encoding under the name "locale_fs". For traditional Unix systems this will be an alias to the same encoding as "locale".

For programs running in a terminal window (called a "Console" on some systems) the "locale" encoding is usually a good choice for what to expect as input and output. Some systems allows us to query the encoding set for the terminal and C<Encode::Locale> will do that if available and make these encodings known under the C<Encode> aliases "console_in" and "console_out". For systems where we can't determine the terminal encoding these will be aliased as the same encoding as "locale". The advice is to use "console_in" for input known to come from the terminal and "console_out" for output to the terminal.

In addition to arranging for various Encode aliases the following functions and variables are provided:

=over

=item decode_argv( )

=item decode_argv(Encode::FB_CROAK)

This will decode the command line arguments to perl (the C<@ARGV> array) in-place.

The function will by default replace characters that can't be decoded by
"\x{FFFD}", the Unicode replacement character.

Any argument provided is passed as CHECK to underlying Encode::decode()
 call.
Pass the value C<Encode::FB_CROAK> to have the decoding croak if not all the
command line arguments can be decoded. See L<Encode/"Handling Malformed Data">
for details on other options for CHECK.

=item env($uni_key)

=item env($uni_key => $uni_value)

Interface to get/set environment variables. Returns the current value as a
Unicode string. The $uni_key and $uni_value arguments are expected to be
Unicode strings as well. Passing C<undef> as $uni_value deletes the
environment variable named $uni_key.

The returned value will have the characters that can't be decoded replaced by
"\x{FFFD}", the Unicode replacement character.

There is no interface to request alternative CHECK behavior as for
decode_argv(). If you need that you need to call encode/decode yourself.
For example:

```
  my $key = Encode::encode(locale => $uni_key, Encode::FB_CROAK);
  my $uni_value = Encode::decode(locale => $ENV{$key}, Encode::FB_CROAK);
```

=item reinit( )

=item reinit($encoding
)

Reinitialize the encodings from the locale. You want to call this function if
you changed anything in the environment that might influence the locale.

This function will croak if the determined encoding isn't recognized by
the Encode module.

With argument force $ENCODING_... variables to set to the given value.

=item $ENCODING_LOCALE

The encoding name determined to be suitable for the current locale.
L<Encode> know this encoding as "locale".

=item $ENCODING_LOCALE_FS

The encoding name determined to be suitable for file system interfaces
involving file names.
L<Encode> know this encoding as "locale_fs".

=item $ENCODING_CONSOLE_IN

=item $ENCODING_CONSOLE_OUT

The encodings to be used for reading and writing output to the a console.
L<Encode> know these encodings as "console_in" and "console_out".

=back

=head1 NOTES

This table summarizes the mapping of the encodings set up
by the C<Encode::Locale> module:

```
 Encode      |         |              |
 Alias       | Windows |
 Mac OS X     | POSIX
 ------------+---------+--------------+------------
 locale      | ANSI    | nl_langinfo  | nl_langinfo
 locale_fs   | ANSI    | UTF-8        | nl_langinfo
 console_in  | OEM     | nl_langinfo  | nl_langinfo
 console_out | OEM     | nl_langinfo  | nl_langinfo
```

=head2 Windows

Windows has basically 2 sets of APIs. A wide API (based on passing UTF-16
strings) and a byte based API based a character set called ANSI. The
regular Perl interfaces to the OS currently only uses the ANSI APIs.
Unfortunately ANSI is not a single character set.

The encoding that corresponds to ANSI varies between different editions of
Windows. For many western editions of Windows ANSI corresponds to CP-1252
which is a character set similar to ISO-8859-1. Conceptually the ANSI
character set is a similar concept to the POSIX locale CODESET so this module
figures out what the ANSI code page is and make this available as
$ENCODING_LOCALE and the "locale" Encoding alias.

Windows systems
 also operate with another byte based character set.
It's called the OEM code page. This is the encoding that the Console
takes as input and output. It's common for the OEM code page to

differ from the ANSI code page.

=head2 Mac OS X

On Mac OS X the file system encoding is always UTF-8 while the locale
can otherwise be set up as normal for POSIX systems.

File names on Mac OS X will at the OS-level be converted to
NFD-form. A file created by passing a NFC-filename will come
in NFD-form from readdir(). See L<Unicode::Normalize> for details
of NFD/NFC.

Actually, Apple does not follow the Unicode NFD standard since not all
character ranges are decomposed. The claim is that this avoids problems with
round trip conversions from old Mac text encodings. See L<Encode::UTF8Mac> for
details.

=head2 POSIX (Linux and other Unixes)

File systems might vary in what encoding is to be used for
filenames. Since this module has no way to actually figure out
what the is correct it goes with the
 best guess which is to
assume filenames are encoding according to the current locale.
Users are advised to always specify UTF-8 as the locale charset.

=head1 SEE ALSO

L<I18N::Langinfo>, L<Encode>, L<Term::Encoding>

=head1 AUTHOR

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=cut

Found in path(s):
* /libencode-locale-perl-1-05-orig-1-tar-gz/Encode-Locale-1.05/lib/Encode/Locale.pm

1.2116 libhtml-tagset-perl 3.20-6

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```
README for HTML::Tagset

                    HTML::Tagset

This module contains data tables useful in dealing with HTML.

It provides no functions or methods.



PREREQUISITES

This suite requires Perl 5.

HTML::Tagset doesn't use any nonstandard modules.


INSTALLATION

You install HTML::Tagset, as you would install any perl module
library, by running these commands:

  perl Makefile.PL
  make
  make test
  make install

If you want to install a private copy of HTML::Tagset in your home
directory, then you should try to produce the initial Makefile with
something like this command:

  perl Makefile.PL LIB=~/perl


DOCUMENTATION

POD-format documentation is included in Tagset.pm.  POD is readable
with the 'perldoc' utility.  See ChangeLog for recent changes.


MACPERL INSTALLATION NOTES

Don't bother with the makefiles.  Just make a HTML directory in your
MacPerl site_lib or lib directory, and move Tagset.pm
```

into there.

SUPPORT

Questions, bug reports, and suggestions for HTML::Tagset should just
be sent to me at sburke@cpan.org

AVAILABILITY

The latest version of HTML::Tagset is available from the
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No license file was found, but licenses were detected in source scan.

=head1 CAVEATS

You may find it useful to alter the behavior of modules (like
C<HTML::Element> or C<HTML::TreeBuilder>) that use C<HTML::Tagset>'s
data tables by altering the data tables themselves. You are welcome
to try, but be careful; and be aware that different modules may or may
react differently to the data tables being changed.

Note that it may be inappropriate to use these tables for I<producing>
HTML -- for example, C<%isHeadOrBodyElement> lists the tagnames
for all elements that can appear either in the head or in the body,
such as "script". That doesn't mean that I am saying your code that
produces HTML should feel free to put script elements in either place!
If you are producing programs that spit out HTML, you should be
I<intimately> familiar with the DTDs for HTML or XHTML (available at
C<http://www.w3.org/>), and you should slavishly obey them, not
the data tables in this document.

=head1 SEE ALSO

L<HTML::Element>,
 L<HTML::TreeBuilder>, L<HTML::LinkExtor>

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Most of the code/data in this module was adapted from code written
by Gisle Aas for C<HTML::Element>, C<HTML::TreeBuilder>, and
C<HTML::LinkExtor>. Then it was maintained by Sean M. Burke.

=head1 AUTHOR

Current maintainer: Andy Lester, C<< <andy at petdance.com> >>

=head1 BUGS

Please report any bugs or feature requests to
C<bug-html-tagset at rt.cpan.org>, or through the web interface at
L<http://rt.cpan.org/NoAuth/ReportBug.html?Queue=HTML-Tagset>. I will
be notified, and then you'll automatically be notified of progress on
your bug as I make changes.

=cut

Found in path(s):
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license:	~

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* /libhtml-tagset-perl-3-20-orig-1-tar-gz/HTML-Tagset-3.20/META.yml

1.2117 libproxy 0.5.4-4build1

1.2117.1 Available under license :

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Version 2.1, February 1999

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1.2118 tdb 1.4.10-1build1

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1.2120 cairo 1.18.0-3build1

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1.2121 libwww-perl 6.76-1

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1.2122 mhash 0.9.9.9-9build3

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c) You must cause the whole of the work to be licensed at no
charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the

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a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

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library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

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1.2123.1 Available under license :

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=head1 NAME

HTTP::Negotiate - choose a variant to serve

=head1 SYNOPSIS

```
use HTTP::Negotiate qw(choose);

# ID      QS     Content-Type   Encoding Char-Set       Lang   Size
$variants =
 [['var1',  1.000, 'text/html',   undef,   'iso-8859-1',   'en',   3000],
  ['var2',  0.950, 'text/plain',  'gzip',  'us-ascii',     'no',    400],
  ['var3',  0.3,   'image/gif',   undef,   undef,          undef, 43555],
 ];

@preferred = choose($variants, $request_headers);
$the_one   = choose($variants);
```

=head1 DESCRIPTION

This module provides a complete implementation of the HTTP content negotiation algorithm specified in F<draft-ietf-http-v11-spec-00.ps> chapter 12. Content negotiation allows for the selection of a preferred content representation based upon attributes of the negotiable variants and the value of the various Accept* header fields in the request.

The variants are ordered by preference by calling the function choose().

The first parameter is reference to an array of the variants to choose among.
Each element in this array is an array with the values [$id, $qs, $content_type, $content_encoding, $charset, $content_language, $content_length] whose meanings are described below. The $content_encoding and $content_language can be either a single scalar value or an array reference if there are several values.

The second optional parameter is either a HTTP::Headers or a HTTP::Request object which is searched for "Accept*" headers. If this parameter is missing, then the accept specification is initialized from the CGI environment variables HTTP_ACCEPT, HTTP_ACCEPT_CHARSET, HTTP_ACCEPT_ENCODING and HTTP_ACCEPT_LANGUAGE.

In an array context, choose() returns a list of [variant identifier, calculated quality, size] tuples. The values are sorted by quality, highest quality first. If the calculated quality is the same for two variants, then they are sorted by size (smallest first). I<E.g.>:

```
  (['var1', 1, 2000], ['var2', 0.3, 512], ['var3', 0.3, 1024]);
```

Note that also zero quality variants are included in the return list even if these should never be served to the client.

In a scalar context, it returns the identifier of the variant with the highest score or C<undef> if none have non-zero quality.

If the $HTTP::Negotiate::DEBUG variable is set to TRUE, then a lot of noise is generated on STDOUT during evaluation of choose().

=head1 VARIANTS

A variant is described by a list of the following values. If the attribute does not make sense or is unknown for a variant, then use C<undef> instead.

=over 3

=item identifier

This is a string that you use as the name for the variant. This identifier for the preferred variants returned by choose().

=item qs

This is a number between 0.000 and 1.000 that describes the "source quality". This is what F<draft-ietf-http-v11-spec-00.ps> says about this value:

Source quality is measured by the content provider as representing
the
amount of degradation from the original source. For example, a picture in JPEG form would have a lower qs when translated to the XBM format, and much lower qs when translated to an ASCII-art representation. Note, however, that this is a function of the source - an original piece of ASCII-art may degrade in quality if it is captured in JPEG form. The qs values should be assigned to each variant by the content provider; if no qs value has been assigned, the default is generally "qs=1".

=item content-type

This is the media type of the variant. The media type does not include a charset attribute, but might contain other parameters. Examples are:

```
text/html
text/html;version=2.0
text/plain
image/gif
image/jpg
```

=item content-encoding

This is one or more content encodings that has been applied to the variant. The content encoding is generally used as a modifier to the content media type. The most common content encodings are:

gzip
compress

=item content-charset

This
is the character set used when the variant contains text.
The charset value should generally be C<undef> or one of these:

us-ascii
iso-8859-1 ... iso-8859-9
iso-2022-jp
iso-2022-jp-2
iso-2022-kr
unicode-1-1
unicode-1-1-utf-7
unicode-1-1-utf-8

=item content-language

This describes one or more languages that are used in the variant. Language is described like this in F<draft-ietf-http-v11-spec-00.ps>: A language is in this context a natural language spoken, written, or otherwise conveyed by human beings for communication of information to other human beings. Computer languages are explicitly excluded.

The language tags are defined by RFC 3066. Examples
are:

no Norwegian
en International English
en-US US English
en-cockney

=item content-length

This is the number of bytes used to represent the content.

=back

=head1 ACCEPT HEADERS

The following Accept* headers can be used for describing content preferences in
 a request (This description is an edited extract from F<draft-ietf-http-v11-spec-00.ps>):

=over 3

=item Accept

This header can be used to indicate a list of media ranges which are acceptable as a response to the request. The "*" character is used to group media types into ranges, with "*/*" indicating all media types and "type/*" indicating all subtypes of that type.

The parameter q is used to indicate the quality factor, which represents the user's preference for that range of media types. The parameter mbx gives the maximum acceptable size of the response content. The default values are: q=1 and mbx=infinity. If no Accept header is present, then the client accepts all media types with q=1.

For example:

 Accept: audio/*;q=0.2;mbx=200000, audio/basic

would mean: "I prefer audio/basic (of any size), but send me any audio type if it is the best available after an 80% mark-down in quality and its size is less than 200000 bytes"

=item Accept-Charset

Used to indicate what character
 sets are acceptable for the response.
The "us-ascii" character set is assumed to be acceptable for all user agents. If no Accept-Charset field is given, the default is that any charset is acceptable. Example:

 Accept-Charset: iso-8859-1, unicode-1-1

=item Accept-Encoding

Restricts the Content-Encoding values which are acceptable in the response. If no Accept-Encoding field is present, the server may assume that the client will accept any content encoding. An empty Accept-Encoding means that no content encoding is acceptable. Example:

Accept-Encoding: compress, gzip

=item Accept-Language

This field is similar to Accept, but restricts the set of natural
languages that are preferred in a response. Each language may be
given an associated quality value which represents an estimate of the
user's comprehension of that language. For example:

Accept-Language: no, en-gb;q=0.8, de;q=0.55

would mean: "I prefer Norwegian, but will accept British English (with
80% comprehension)
or German (with 55% comprehension).

=back

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NAME
  HTTP::Negotiate - choose a variant to serve

SYNOPSIS
   use HTTP::Negotiate qw(choose);

```
# ID      QS     Content-Type   Encoding Char-Set       Lang   Size
$variants =
 [['var1',  1.000, 'text/html',   undef,   'iso-8859-1',   'en',   3000],
  ['var2',  0.950, 'text/plain',  'gzip',  'us-ascii',     'no',    400],
  ['var3',  0.3,   'image/gif',   undef,   undef,          undef, 43555],
 ];

@preferred = choose($variants, $request_headers);
$the_one   = choose($variants);
```

DESCRIPTION

This module provides a complete implementation of the HTTP content negotiation algorithm specified in draft-ietf-http-v11-spec-00.ps chapter 12. Content negotiation allows for the selection of a preferred content representation based upon attributes of the negotiable variants and the value of the various Accept* header fields in the request.

The variants are ordered by preference by calling the function choose().

The first parameter is reference to an array of the variants to choose among. Each element in this array is an array with the values [$id, $qs, $content_type, $content_encoding, $charset, $content_language, $content_length] whose meanings are described below. The $content_encoding and $content_language can be either a single scalar value or an array reference if there are several values.

The second optional parameter is either a HTTP::Headers or a HTTP::Request object which is searched for "Accept*" headers. If this parameter is missing, then the accept specification is initialized from the CGI environment variables HTTP_ACCEPT, HTTP_ACCEPT_CHARSET, HTTP_ACCEPT_ENCODING and HTTP_ACCEPT_LANGUAGE.

In an array context, choose() returns a list of [variant identifier, calculated quality, size] tuples. The values are sorted by quality, highest quality first. If the calculated quality is the same for two variants, then they are sorted by size (smallest first). *E.g.*:

```
 (['var1', 1, 2000], ['var2', 0.3, 512], ['var3', 0.3, 1024]);
```

Note that also zero quality variants are included in the return list even if these should never be served to the client.

In a scalar context, it returns the identifier of the variant with the highest score or `undef' if none have non-zero quality.

If the $HTTP::Negotiate::DEBUG variable is set to TRUE, then a lot of

noise is generated on STDOUT during evaluation of choose().

VARIANTS

A variant is described by a list of the following values. If the attribute does not make sense or is unknown for a variant, then use `undef' instead.

identifier

This is a string that you use as the name for the variant. This identifier for the preferred variants returned by choose().

qs This is a number between 0.000 and 1.000 that describes the "source quality". This is what
draft-ietf-http-v11-spec-00.ps says about this value:

Source quality is measured by the content provider as representing the amount of degradation from the original source. For example, a picture in JPEG form would have a lower qs when translated to the XBM format, and much lower qs when translated to an ASCII-art representation. Note, however, that this is a function of the source - an original piece of ASCII-art may degrade in quality if it is captured in JPEG form. The qs values should be assigned to each variant by the content provider; if no qs value has been assigned, the default is generally "qs=1".

content-type

This is the media type of the variant. The media type does not include a charset attribute, but might contain other parameters. Examples are:

text/html
text/html;version=2.0
text/plain
image/gif
image/jpg

content-encoding

This is one or more content encodings that has been applied to the variant. The content encoding is generally used as a modifier to the content media type. The most common content encodings are:

gzip
compress

content-charset

This is the character set used when the variant contains text. The charset value should generally be `undef' or one of these:

us-ascii
iso-8859-1 ... iso-8859-9
iso-2022-jp
iso-2022-jp-2
iso-2022-kr
unicode-1-1
unicode-1-1-utf-7
unicode-1-1-utf-8

content-language

This describes one or more languages that are used in the variant. Language is described like this in draft-ietf-http-v11-spec-00.ps: A language is in this context a natural language spoken, written, or otherwise conveyed by human beings for communication of information to other human beings. Computer languages are explicitly excluded.

The language tags are defined by RFC 3066. Examples are:

no	Norwegian
en	International English
en-US	US English
en-cockney	

content-length

This is the number of bytes used to represent the content.

ACCEPT HEADERS

The following Accept* headers can be used for describing content preferences in a request (This description is an edited extract from draft-ietf-http-v11-spec-00.ps):

Accept

This header can be used to indicate a list of media ranges which are acceptable as a response to the request. The "*" character is used to group media types into ranges, with "*/*" indicating all media types and "type/*" indicating all subtypes of that type.

The parameter q is used to indicate the quality factor, which represents the user's preference for that range of media types. The parameter mbx gives the maximum acceptable size of the response content. The default values are: q=1 and mbx=infinity. If no Accept header is present, then the client accepts all media types with q=1.

For example:

Accept: audio/*;q=0.2;mbx=200000, audio/basic

would mean: "I prefer audio/basic (of any size), but send me any audio type if it is the best available after an 80% mark-down in quality and its size is less than 200000 bytes"

Accept-Charset

Used to indicate what character sets are acceptable for the response. The "us-ascii" character set is assumed to be acceptable for all user agents. If no Accept-Charset field is given, the default is that any charset is acceptable. Example:

```
Accept-Charset: iso-8859-1, unicode-1-1
```

Accept-Encoding

Restricts the Content-Encoding values which are acceptable in the response. If no Accept-Encoding field is present, the server may assume that the client will accept any content encoding. An empty Accept-Encoding means that no content encoding is acceptable. Example:

```
Accept-Encoding: compress, gzip
```

Accept-Language

This field is similar to Accept, but restricts the set of natural languages that are preferred in a response. Each language may be given an associated quality value which represents an estimate of the user's comprehension of that language. For example:

```
Accept-Language: no, en-gb;q=0.8, de;q=0.55
```

would mean: "I prefer Norwegian, but will accept British English (with 80% comprehension) or German (with 55% comprehension).

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AUTHOR

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For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

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Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The

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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

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"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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This option is useful when you wish to copy part of the code of
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machine-readable source code, which
must be distributed under the terms of Sections 1 and 2 above on a
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If distribution of object code is made by offering access to copy
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5. A program that contains no derivative of any portion of the
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contains portions of the Library), rather than a "work that

uses the
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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the
object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany
the work with the complete corresponding
machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood

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c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

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1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

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1.2132 liburi-perl 5.27-1

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1.2133 libtextwrapinperl 0.06-10

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1.2134 ldb 1.2.840

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1.2135 python-typing-extensions 4.10.0-1

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A. HISTORY OF THE SOFTWARE
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Python was created in the early 1990s by Guido van Rossum at Stichting
Mathematisch Centrum (CWI, see https://www.cwi.nl) in the Netherlands

as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see https://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All Python releases are Open Source (see https://opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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Thanks to the many outside volunteers who have worked under Guido's
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1.2136 libburn 1.5.6-1.1build1

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1.2144 session-migration 0.3.9build1

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If you develop a new program, and you want it to be of the greatest possible use to humanity, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the

"copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
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Gnomovision version 69, Copyright (C) 19xx name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
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program.

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school, if any, to sign a "copyright disclaimer" for the program, if
necessary. Here a sample; alter the names:

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program `Gnomovision' (a program to direct compilers to make passes
at assemblers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

That's all there is to it!

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1.2148 ptyprocess 0.7.0-5

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1.2149 libnet-http-perl 6.23-1

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patches, bug reports, help with troubleshooting, etc. A huge

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1.2150 command-not-found 23.04.0

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1.2151 yajl 2.1.0-5build1

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1.2152 libimagequant 2.18.0-1build1

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1.2153 libio-html-perl 1.004-3

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The End

1.2154 free-type 2.13.2+dfsg-1build3

1.2154.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*********************************************************************
*
*  grx11.c  graphics driver for X11.
*
*  This is the driver for displaying inside a window under X11,
*  used by the graphics utility of the FreeType test suite.
*
*  Copyright (C) 1999-2023 by
*  Antoine Leca, David Turner, Robert Wilhelm, and Werner Lemberg.
*
*  This file is part of the FreeType project, and may only be used
*  modified and distributed under the terms of the FreeType project
*  license, LICENSE.TXT. By continuing to use, modify or distribute
*  this file you indicate that you have read the license and
*  understand and accept it fully.
*
*********************************************************************/
```

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/graph/x11/grx11.c
No license file was found, but licenses were detected in source scan.

```
/*********************************************************************
*
*  grwin32.h  graphics driver for Win32 platform (header)
*
```

```
*  This is the driver for displaying inside a window under Win32,
*  used by the graphics utility of the FreeType test suite.
*
*  Written by Antoine Leca.
*  Copyright (C) 1999-2023 by
*  Antoine Leca, David Turner, Robert Wilhelm, and Werner Lemberg.
*
*  Borrowing liberally from the other FreeType drivers.
*
*  This file is part of the FreeType project, and may only be used
*  modified and distributed under the terms of the FreeType project
*  license, LICENSE.TXT. By continuing to use, modify or distribute
*  this file you indicate that you have read the license and
*  understand and accept it fully.
*
*********************************************************************/
```

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/graph/win32/grwin32.h
No license file was found, but licenses were detected in source scan.

and distributed under the terms of the FreeType project license,

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/graph/meson.build
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/meson_options.txt
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/meson.build
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/src/ftinspect/meson.build
No license file was found, but licenses were detected in source scan.

2023-08-25 Werner Lemberg <wl@gnu.org>

 * Version 2.13.2 released.
 ==========================

 Tag sources with 'VER-2-13-2'.

 * README: Updated.
 * meson.build: Updated.
 * man/*.1: Updated.

2023-08-25 Werner Lemberg <wl@gnu.org>

 Fix clang warnings.

 * graph/gblblit.c (gblender_glyph_upgray), src/ftmulti.c (Render_All): Add
   cast.
 * src/ftdump.c (get_english_name_entry): Initialize `name`.

2023-08-24 Werner Lemberg <wl@gnu.org>

* subprojects/*.wrap: Updated.

2023-08-17 Hugh McMaster <hugh.mcmaster@outlook.com>

ftlint.1: Instruct man(1) to run the groff `tbl` preprocessor

The latest version of groff (1.23.0) emits a warning when it detects the
use of table macros (.TS, .TE) with no .TW (table width) macro defined:

  tbl preprocessor failed, or it or soelim was not run; table(s) likely
  not rendered (TE macro called with TW register undefined).

The warning occurs because the `tbl` preprocessor
was not invoked by
the `man` command. To fix the issue, we need to instruct man(1) to
run the `tbl` preprocessor before rendering the source as text.

This issue was detected by Debian's Lintian tool.

2023-08-13 Hugh McMaster <hmc@debian.org>

* src/ftmulti.c: Miscellaneous spelling and readability fixes.

  * Update comments.
  * Fix a typo: dimentions -> dimensions.

2023-08-06 Charlie Jiang <w@chariri.moe>

[ftinspect] Fix default named instance handling.

Now the named instance selector no longer doubles the default named instance.
`FT_Get_Default_Named_Instance` is used to get the default NI index.
The default one is labeled as " (default)".

* src/ftinspect/widgets/tripletselector.cpp: Properly handle the new 1-based
  named instance indices. Label the default NI correctly.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  Add `Engine::defualtNamedInstanceIndex`.

* src/ftinspect/engine/mmgx.cpp: Change comments.

2023-08-06 Charlie
Jiang <w@chariri.moe>

[ftinspect] Fix named instances switching.

* src/ftinspect/engine/mmgx.cpp, src/ftinspect/engine/mmgx.hpp:
  Load the default values of MMGX axes from the named instance instead of
  the global default one.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  Switch the named instance using `FT_Set_Named_Instance` when loading
  fonts.

2023-07-28 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c (usage): Document the `-a` option.

2023-07-26 Charlie Jiang <w@chariri.moe>

[ftinspect] Fix the glyph index selector layout when the window resizes.

Fixes #26. When the window resizes, the invisible tabs don't get notified.
Therefore, when the active tab changes, we need to trigger a manual
relayouting of invisible tabs.

* src/ftinspect/widgets/glyphindexselector.hpp,
  src/ftinspect/widgets/glyphindexselector.cpp:
  Extract public method `relayoutNavigation` from `resizeEvent`.

* src/ftinspect/panels/abstracttab.hpp:
Add `relayout` virtual method.

* src/ftinspect/maingui.cpp: Call `AbstractTab::relayout` on the new tab
  when the active tab changes.

* src/ftinspect/panels/singular.cpp, src/ftinspect/panels/singular.hpp,
  src/ftinspect/panels/continuous.cpp, src/ftinspect/panels/continuous.hpp:
  Implement `relayout` method and call `relayoutNavigation` of the glyph
  index selector in `relayout`.

2023-07-26 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftdump.c (Print_MM_Info): Fix signedness mismatch.

2023-07-21 Jouk Jansen <joukj@hrem.nano.tudelft.nl>

* vms_make.com: Synchronize with similar changes in the FreeType library.

2023-07-16 Hin-Tak Leung <htl10@users.sourceforge.net>

src/rsvg-port.c: Correct usage of `FT_Bool` vs `gboolean` comparison.

`TRUE` in this context is from glib headers (`glib-2.0/glib/gmacros.h`),
imported indirectly from rsvg headers. It should not be used for comparison
with `FT_Bool` types. Other usages of `TRUE/FALSE` in this file is
okay.

2023-07-08 Hin-Tak Leung <htl10@users.sourceforge.net>

rsvg-port.c: Simplify usage of `rsvg_handle_render_*`.

* src/rsvg-port.c (rsvg_port_preset_slot): Remove usage of
`rsvg_handle_render_document` (and `rsvg_handle_render_cairo`). They are
functionally the same as `rsvg_handle_render_layer` (and
`rsvg_handle_render_cairo_sub`) with argument id set to NULL.

2023-07-08 Hin-Tak Leung <htl10@users.sourceforge.net>

* src/ttdebug.c (RunIns): Signature fix.

A somewhat similar change to what happened in the FreeType library:

```
commit 95d635eab1b08a0051de07b6c33067d2c1984848
Author: Werner Lemberg <wl@gnu.org>
Date:   Sun May 7 08:34:32 2023 +0200

    [truetype] Signature fixes.
```

2023-06-24 Werner Lemberg <wl@gnu.org>

* Version 2.13.1 released.
==========

Tag sources with 'VER-2-13-1'.

* README: Updated.
* meson.build: Updated.
* man/*.1: Updated.
* subprojects/zlib.wrap: Updated.

2023-06-24 Werner Lemberg <wl@gnu.org>

* src/rsvg-port.c
(rsvg_port_preset_slot): Fix C++ compilation warning.

2023-06-03 Hin-Tak Leung <htl10@users.sourceforge.net>

Fix out-of-memory conditions with newer 'librsvg'.

Excerpts from `rsvg_handle_get_intrinsic_dimensions` section in
`librsvg/rsvg.h`:

```
Before librsvg 2.54.0, the `out_has_width` and `out_has_height` arguments
would be set to true or false depending on whether the SVG document actually
had `width` and `height` attributes, respectively.

However, since librsvg 2.54.0, `width` and `height` are now [geometry
properties](https://www.w3.org/TR/SVG2/geometry.html) per the SVG2
specification; they are not plain attributes.  SVG2 made it so that the
initial value of those properties is `auto`, which is equivalent to
specifying a value of `100%`.  In this sense, even SVG documents which lack
`width` or `height` attributes semantically have to make them default to
`100%`.  This is why since librsvg 2.54.0, `out_has_width` and
`out_has_heigth` are always
returned as `TRUE`, since with SVG2 all
documents *have* a default width and height of `100%`.
```

* src/rsvg-port.c (rsvg_port_preset_slot): Adjust for change of behavior of
`rsvg_handle_get_intrinsic_dimensions` in librsvg 2.53+. We avoid
`LIBRSVG_CHECK_VERSION` as it is possible to build against one version but
run against another version.

2023-06-03 Hin-Tak Leung <htl10@users.sourceforge.net>

Fix 'librsvg' deprecation warnings.

* src/rsvg-port.c (rsvg_port_preset_slot): Use `rsvg_handle_render_document`
instead of `rsvg_handle_render_cairo`, and `rsvg_handle_render_layer`
instead of `rsvg_handle_render_cairo_sub`, as suggested by the warning,
conditionally on newer librsvg 2.52+.

2023-05-22 Werner Lemberg <wl@gnu.org>

man/ftview.1: Improve documentation of option `-l`.

2023-05-19 Seigo Nonaka <nona@google.com>

* src/ftmulti.c (main): Make program actually handle option `-a`.

2023-05-19 Seigo Nonaka <nona@google.com>

[ftbench] New option `-a` to apply
design coordinates.

The performance of MM fonts is quite different in comparison to static

fonts. To be able to get benchmarks for the former, add a new command-line option to pass design coordinates.

* src/ftbench.c: Include `ftmm.h`.
(MAX_MM_AXES): New macro.
(multimaster, design_pos, requested_pos, requested_cnt, used_num_axes): New global variables.
(get_face): Load MM data if requested.
(parse_design_coords): New function.

* man/ftbench.1: Updated.

2023-05-15 Werner Lemberg <wl@gnu.org>

[ftview] New key 'Z' to flip SVG rendering.

* src/ftcommon.h (FTDemo_Handle): New field `use_svg`.
* src/ftcommon.c (FTDemo_New, FTDemo_Update_Current_Flags): Handle it.

* src/ftview.c (Process_Event): Make key 'Z' toggle SVG usage.
(event_help, write_header): Updated.

2023-05-14 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftbench] Set up cache earlier.

* src/ftbench.c (main): Run `FTC_Manager_New` and `FTC_*Cache_New` earlier and decide the test availability accordingly.
(test_*_cache,benchmark):
Do not check if cache is set.

2023-05-12 Alexei Podtelezhnikov <apodtele@gmail.com>

*src/ftbench.c (test_stroke): Test outline glyphs only.

2023-05-12 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c (main): Assure cache setup, clean exit.

2023-05-12 Ben Wagner <bungeman@chromium.org>

Correct type of icon_span

The `icon_span` is used as a `FT_SpanFunc`. To avoid undefined behavior and a CFI sanitizer report, this function needs to called through a pointer of the same type. Fix this by making `icon_span` take the right parameter types and cast the argument in the function body.

* src/ftcommon.c (icon_span): take correct parameters and cast in
function body. (FTDemo_Icon): remove cast

2023-05-12 Ben Wagner <bungeman@chromium.org>

[graph] Correct function pointer types

Building the demos with the CFI sanitizer detects a number of uses of
undefined behavior in the Minimalist Graphics Subsystem where an
indirect function
call is made through a pointer of a different type.
All of these cases worked in practice since the differing argument
types were the same size and would have the same pointer value at
runtime.

Change the functions to take the correct types and downcast inside the
function.

* graph/beos/grbeos.cpp: remove casts

* graph/mac/grmac.c: correct return type of `listen_event`, remove casts

* graph/os2/gros2pm.c: correct function signatures, downcast inside
functions, remove function pointer casts

* graph/win32/grwin32.c: ditto

* graph/x11/grx11.c: ditto

2023-05-12 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftbench] Use proper `face_requester`.

It is wrong to forfeit the face ownership to the cache manager. Fixes #29.

* src/ftbench.c (face_requester): Call `get face`.
(main): Never pass `face` to the cache manager.

2023-05-10 Werner Lemberg <wl@gnu.org>

subprojects/*.wrap: Updated.

2023-05-09 Jouk Jansen <joukj@hrem.nano.tudelft.nl>

vms_make.com:
Correctly handle 'libbz2'.

2023-05-08 Werner Lemberg <wl@gnu.org>

* src/ftdump.c (Print_Sfnt_Tables): Insert spaces between bytes.

2023-05-08 Werner Lemberg <wl@gnu.org>

[ftdump] Show more variation font info.

* src/ftdump.c (Print_MM_Axes): Rename to...
(Print_MM_Info): ...this.
Show Variation Font PostScript name prefix.
Show named instances.

2023-05-08 Werner Lemberg <wl@gnu.org>

[ftdump] Code cleanup.

* src/ftdump.c (Print_MM_Axes): Move code to find an English name entry
to...
(get_english_name_entry): ... this new function.

2023-05-08 Werner Lemberg <wl@gnu.org>

* src/output.c: Handle `\0` specially.

Broken or intentionally invalidated fonts might contain NULL bytes at
arbitrary places.

2023-05-05 suzuki toshiya <mpsuzuki@hiroshima-u.ac.jp>

[ftdump] Print CID-keyed font properties if available.

* src/ftdump.c

(FT_CID_MAX): New macro.

(usage): Mention the CID coverage in `-c' and `-C'
options.

(Print_UInt_Range): New function to print
2 numbers
with a separator if needed.

(Print_CIDs): New function to print the implemented
CIDs in a compressed syntax. If a case
`gid_N < gid_M && CID_N > CID_M' is found, ftdump
aborts and guide the user to file the issue.

(Print_ROS_From_Face): New function to print the

Registry, Ordering, and Supplement of the CID-keyed
fonts, if available. If `-c' or `-C' option is
given, Print_CIDs() is invoked.

(main): Invoke Print_ROS_From_Face().

2023-04-24 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftgrid.c (grid_status_rescale): Use PPEM-based scaling.

The zoom becomes well defined for the given size but the ascender and
descender lines might be offside.

2023-04-23 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftview.c (Render_{All,Fancy,Stroke}): Improve zero-width glyphs.

2023-04-23 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftview.c (Render_{All,Fancy,Stroke}): Tweak zero-width glyphs.

This helps to avoid collisions and unhides zero-width
glyphs better.

2023-04-21 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftview] Use green empty boxes instead.

* src/ftview.c (status): Store green color.
(main): Initialize it.
(Render_*): Use it.

2023-04-21 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftview.c (main): Remove unnecessary code.

2023-03-27 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftlint.c (main): Handle rendering errors differently.

2023-03-27 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftlint.c (main): Fix segfault with bad command line.

2023-03-26 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftlint] Examine the outline shape complexity.

Measured as a ratio of the outline half-perimeter to the sum of its
control box dimensions, the shape complexity is a useful metric.
For example, an `I` and an `M` would have complexities of about
1.0 and 2.0, respectively.

* src/ftlint.c (Examine): Implement the shape complexity calculation.
(main) Report the shape complexity.
* man/ftlint.1:
Add a brief explanation.

2023-03-15 Charlie Jiang <w@chariri.moe>

[ftinspect] Support gray level scaling.

See commit 746d5be5: Convert to 256 grays. Slightly tweaked code style.

* src/ftinspect/engine/rendering.cpp (RenderingEngine::convertBitmapTo8Bpp):
Implement it.

2023-03-10 Jouk Jansen <joukj@hrem.nano.tudelft.nl>

Update VMS installation support.

2023-03-03 Charlie Jiang <w@chariri.moe>

[ftinspect] Fix uninitialized memory issue and reference misuse.

Fixes issue #23.

* src/ftinspect/engine/rendering.cpp (RenderingEngine::convertBitmapTo8Bpp):
Properly initialize `FT_Bitmap` since it is a value type.
(RenderingEngine::convertBitmapToQImage): Fix the accidental overwriting of
the source bitmap when converting the bitmap format (only happens for
`FT_PIXEL_MODE_GRAY2` and `FT_PIXEL_MODE_GRAY4`) due to a misuse of a C++
reference.

* src/ftinspect/glyphcomponents/glyphcontinuous.cpp
(GlyphContinuous::drawCacheGlyph): Fix a crash when the `QImage`
was failed
to produce.

2023-03-02 Werner Lemberg <wl@gnu.org>

* graph/gblblit.c: Include `<stdlib.h>`.

This is for the `abs` function.

2023-03-02 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Handle glyphs with 4 or 16 grays.

* graph/gblblit.c (gblender_glyph_upgray): Convert to 256 grays.
(gblender_blit_init): Call it if necessary.

2023-02-27 Werner Lemberg <wl@gnu.org>

TrueType mode v38 is gone.

Synchronize with FreeType commit 'Hide Infinality.' from 2023-Feb-17.

Both macros `TT_INTERPRETER_VERSION_38` and `TT_INTERPRETER_VERSION_40` have
now the same value, leading to numerous compilation errors because we use
these two macros as (different) case labels in switch statements.

* src/ftbench.c (tt_interpreter_versions, header, usage, main): Don't use
`TT_INTERPRETER_VERSION_38`.
* src/ftcommon.c (FTDemo_Hinting_Engine_Change, FTDemo_Get_Info): Ditto.
* src/ftdiff.c (ColumnStateRec, render_state_init, render_state_draw):
Ditto.
* src/ftmulti.c
(tt_interpreter_versions, main): Ditto.
* src/ttdebug.c (tt_interpreter_versions, Usage, main): Ditto.

* src/ftinspect/engine/engine.hpp (EngineDefaultValues): Ditto.
* src/ftinspect/engine/engine.cpp (Engine::queryEngine): Ditto.
* src/ftinspect/models/customcomboboxmodels.hpp (HintingModeComboBoxModel):
Ditto.
* src/ftinspect/models/customcomboboxmodels.cpp
(HintingModeComboBoxModel::HintingModeComboBoxModel): Ditto.
* src/ftinspect/panels/settingpanel.cpp (SettingPanel::setDefaults): Ditto.

2023-02-13 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftmulti.c: Clean up loading and scaling.

2023-02-13 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftmulti.c (main, Init_Display): Clean up GUI setup.

2023-02-13 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftmulti.c: Clean up and fix MSVC warnings.

2023-02-13 Alexei Podtelezhnikov <apodtele@gmail.com>

* man/ftmulti.1: Updated.

2023-02-12 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftmulti] Enable
fill rule flag testing.

Variation fonts often relay on overlapping contours. To reveal them,
we enable turning the even-odd fill rule on and off. This flag is
always off in FreeType by default but supported by the anti-aliased
renderer.

* src/ftmulti.c (Process_Event): Reassign F3 to fill rule toggle,
assign Tab to anti-aliasing toggle.
(Render_Glyph): Tinker with the fill rule flags before rendering.

2023-02-12 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftmulti.c: Clean up and fix warnings.

2023-02-12 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftmulti.c (Process_Event): Miscellaneous tweaks.

Set default step at 1/40 which covers most preferable coordinates.
Adjust the step by doubling or halving it. Round all large-range
coordinates, not just MM. Wrap the coordinates around.

2023-02-12 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftmulti.c (Render_All, Render_Text, main): Layout tweaks.

2023-02-12 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftmulti]
Enable overlap flag testing.

Variation fonts often relay on overlapping contours, which require
oversampling to render properly. FreeType relies on FT_OUTLINE_OVERLAP
to trigger the expensive mitigation algorithm. This commit enables
tinkering with the overlap flags and, therefore, the oversampling.
Normally, the flags should be set by the font designers sparingly.

The bitmap strike toggle is no longer available, which has never
been important for the variation font testing.

* src/ftmulti.c (Process_Event): Reassign F4 to overlap toggle.
(Render_Glyph): Tinker with the overlap flags before rendering.

2023-02-11 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftmulti.c (Init_Display): Use automatic color depth.

2023-02-11 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftmulti.c (main): Synchronize options with the others.

2023-02-09 Werner Lemberg <wl@gnu.org>

* Version 2.13.0 released.
==========

Tag sources with 'VER-2-13-0'.

*
README: Updated.
* meson.build: Updated.
* man/*.1: Updated.

2023-02-09 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/win32/grwin32.c (Message_Process): Drop some sizing messages.

With the window procedure in a separate thread we only need to forward
basic WM_SIZE, which is sent frequently enough.

2023-02-08 Werner Lemberg <wl@gnu.org>

Fix various minor compiler warnings.

2023-02-08 Werner Lemberg <wl@gnu.org>

[ftgrid] Synchronize with FreeType git.

The changes are necessary due to the commit

```
Avoid reserved identifiers that are globally defined.
```

2023-02-08 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftmulti.c (Render_All): Tighten right margin.

2023-02-07 Alexei Podtelezhnikov <apodtele@gmail.com>

[builds/windows] Add ftmulti.

* builds/windows/msvc/ftmulti.vcxproj: New project.
* builds/windows/msvc/ft2demos.sln: Add it to solutions.

2023-02-07 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph/win32] Minor driver improvements.

*
graph/win32/grwin32.c: (gr_win32_device_init): Do not set icon
or background, which is covered anyway.
(Message_Process) [WM_PAINT]: Paint only updated rectangle.

2023-02-06 Werner Lemberg <wl@gnu.org>

* src/ftmulti.c (Process_Event): Simplify.

2023-02-06 Werner Lemberg <wl@gnu.org>

[ftmulti] More key reassignments.

This is a try to better harmonize with other demo programs, and to make the
selection of axes more mnemonic.

* src/ftmulti.c (MAX_MM_AXES): Set to 16.
(Process_Event): Use keys 'aA' for axis 0, 'bB' for axis 1, ..., 'pP' for
axis 16.
Use F1 for help, too.
Use 16, 256, and 4096 as the glyph index increments.
Also adjust other keys to avoid collisions.
(Help): Updated.
(main): Show mnemonic letter next to axis.
Updated.

2023-02-05 Werner Lemberg <wl@gnu.org>

[ftmulti] Display up to 15 axes.

Due to the support of the 'avar' version 2 OpenType extension it is expected
that the number of axes in many fonts will increase because adding
'virtual
axes' is cheap now.

* src/ftmulti.c (MAX_MM_AXES): Set to 15.
(Help): Updated.
(Process_Event): Handle keys '7890-=' for axes 6-8, '!@#$%^' for axes 9-11,
and '&*()_+' for axes 12-14.

2023-02-05 Werner Lemberg <wl@gnu.org>

[ftmulti] Change layout to list axes vertically.

* src/ftmulti.c (Render_All, Render_Text): Shift 'upper left corner' for
glyph display up and to the right.
(main): Emit one axis per line at the left side of the screen.

2023-02-05 Werner Lemberg <wl@gnu.org>

* graph/grevents.h (grKey): Add `grKeyHash` and `grKeyAmpersand`.

2023-02-04 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftcommon.c (my_face_requester): Recognize t1 file extension.

2023-02-04 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/win32/grwin32.c (Message_Process): Return TRUE on WM_SIZING.

2023-02-02 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph/win32] Improve error handling.

* graph/win32/grwin32.c (gr_win32_surface_resize): Change return type.
(gr_win32_surface_init):
Ditto and handle failure gracefully.

2023-02-01 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftstring.c (write_header): Change layout.

2023-01-30 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftlint.c (Analyze): Report void bitmaps.

2023-01-30 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftstring] Reduce floating point use.

* src/ftcommon.c (FTDemo_String_Load): Use signed integers, not doubles.
* src/ftstring.c (event_angle_change): Minor.

2023-01-30 Werner Lemberg <wl@gnu.org>

* subprojects/libpng.wrap: Updated.

2023-01-29 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftstring.c (write_header): Always report kerning info.

2023-01-28 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftstring] New feature: simple string editor.

It only handles printable ASCII characters and backspace to erase them.

* src/ftstring.c (Process_Event): Use Enter key to initiate this mode.
(Process_TTY): Intercept and handle relevant keys
while editing.
(Render_TTY): Special rendering mode while editing.
(main, event_help): Updated.

2023-01-28 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftstring.c (event_render_mode_change): Remove report.

2023-01-28 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/win32/grwin32.c (key_translators): Sort virtual-key codes.

2023-01-27 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftstring.c (Render_Waterfall): Avoid bitmap reloading.

This hides horrible performance of compressed PCF fonts.

2023-01-25 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftview.c (Render_Waterfall): Fill the right margin.

The waterfall looks better if the string runs over the edge.

2023-01-25 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftgrid,ftstring,ftview] Option to select charmap by index.

* src/ftcommon.c (FTDemo_Install_Font): Accept a charmap index.
(FTDemo_Make_Encoding_Tag): Fall back on a numeric value to return.

* src/ftgrid.c, src/ftstring.c, src/ftview.c
(usage): Updated.
* man/ftgrid.1, man/ftstring.1, man/ftview.1: Ditto.

2023-01-24 Alexei Podtelezhnikov <apodtele@gmail.com>

Typos.

2023-01-23 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftlint.c (Usage): Output to stderr, like others do.

2023-01-22 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftbench,ftgrid,ftmulti,ftview] Accept hexadecimal glyph indices.

This helps to use charcodes on the command line.

* src/ftbench.c (main): Use sscanf with "%i".
* src/ftgrid.c (parse_cmdline): Ditto.
* src/ftmulti.c (main): Ditto.
* src/ftview.c (parse_cmdline): Ditto.

2023-01-21 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/win32/grwin32.c (gr_win32_surface_init): Polish gray mode.

2023-01-21 Alexei Podtelezhnikov <apodtele@gmail.com>

Edit comments.

2023-01-20 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Explain the blender cache.

2023-01-18 Alexei Podtelezhnikov <apodtele@gmail.com>

Typos.

2023-01-17 Werner Lemberg <wl@gnu.org>

Update
all copyright notices.

2023-01-17 Werner Lemberg <wl@gnu.org>

* src/ftinspect/*.[ch]pp: Normalize copyright notices

This allows the use of FreeType's `update-copyright-year` script.

2023-01-17 Werner Lemberg <wl@gnu.org>

Minor comment typos.

2023-01-16 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftview.c (Process_Event): Fix -Wswitch warning.

2023-01-14 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftview] Microoptimization.

* src/ftview.c (parse_cmdline, write_header, Process_Event, parse):
Prioritize easy checks.

2023-01-14 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftview.c (Process_Event): Trigger screen updates locally.
(main, status): Cleaned up.

2023-01-14 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftview.c (Process_Event): Minor refactoring.

2023-01-13 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftview.c (Process_Event): Small harmonization.

2023-01-12 Alexei Podtelezhnikov <apodtele@gmail.com>

Typos.

2023-01-11
Alexei Podtelezhnikov <apodtele@gmail.com>

Minor comment.

2023-01-11 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftcommon.c (FTDemo_Draw_Header): Minor.

2023-01-11 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/*.c: Pair up `grRefreshSurface` and `grListenSurface` calls.

2023-01-10 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftstring.c (main, write_header): Reset custom header differently.

2023-01-10 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftstring] Fix error reporting.

* src/ftstring.c (Render_*): Do not return or overwrite errors.
(main): Updated accordingly.

2023-01-09 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftview.c: Remove obsolete comments.

2023-01-09 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftcommon.c (FTDemo_Draw_Header): Show sizing errors again.

2023-01-08 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftview, ftstring] Prevent locking on broken unsizable fonts.

* src/ftstring.c (Render_Waterfall):
Break on error.
* src/ftview.c (Render_Waterfall): Break on error.

2023-01-06 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftview.c: Fix a warning.

2023-01-05 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftlint.c (main): Decorate opening and sizing errors.

2023-01-03 Werner Lemberg <wl@gnu.org>

* src/ftcommon.c (FTDemo_Draw_Header): Handle invalid `size` objects.

2022-12-07 Werner Lemberg <wl@gnu.org>

* subprojects/zlib.wrap: Micro-update from upstream.

2022-12-01 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c (main): Sync the render mode and the load target.

2022-11-30 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c (main): Honor render mode with FT_LOAD_RENDER.

2022-11-14 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c: Relocate and undo BBox rotations.

2022-11-13 Alexei Podtelezhnikov <apodtele@gmail.com>

 * man/ftbench.1: Minor updates.

2022-11-11 Alexei Podtelezhnikov <apodtele@gmail.com>

 *
src/ftbench.c (test_get_bbox): Use `FT_Set_Transform`.

2022-11-11 Alexei Podtelezhnikov <apodtele@gmail.com>

 [ftbench] Fix up charmap benchmarking.

 * src/ftbench.c (main): Parse and process the charmap index option.
(header): Report the active charmap index.
(usage): Document it.
(test_cmap_cache): Call `FTC_CMapCache_Lookup` with correct argument.
(test_cmap_iter): Do not count idle charmaps.

 * man/ftbench.1: Document the charmap selection.

2022-10-25 Alexei Podtelezhnikov <apodtele@gmail.com>

 [ftview] Improve error tracking.

 * src/ftcommon.c (FTDemo_Error_String): Spin off new function from...
(PanicZ): ... this function.
* src/ftcommon.h (FTDemo_Error_String): Declare it.
* src/ftview.c (Process_Error): Count and track persistent errors.
(Render_*): Use it.
(main): Report the persistent error code and description.

2022-10-25 Alexei Podtelezhnikov <apodtele@gmail.com>

 * src/ftview.c (Render_Stroke): Render bitmaps without stroking.

2022-10-24 Werner Lemberg
  <wl@gnu.org>

 Replace '1/50th' (and similar entries) with '1/64' in output and comments.

2022-10-20 Werner Lemberg <wl@gnu.org>

 * subprojects/zlib.wrap: Update to zlib version 1.2.13.

2022-10-08 Alexei Podtelezhnikov <apodtele@gmail.com>

 * graph/x11/grx11.c (gr_x11_surface_{init,done}): Use DefaultGC.

2022-10-07 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/x11/grx11.c (gr_x11_surface_init): Ignore border and colormap.

The colormap is unused. The border is set by a window manager.

2022-10-03 Charlie Jiang <w@chariri.moe>

[ftinspect] Change unclear comments.

* src/ftinspect/engine/fontinfo.hpp,
src/ftinspect/glyphcomponents/glyphcontinuous.cpp: Clearify comments.

* src/ftinspect/maingui.cpp: Actually the left widget does more than
setting the margin, so the comment line about removing the left widget and
layout is removed.

2022-10-03 Charlie Jiang <w@chariri.moe>

* src/ftinspect/engine/engine.cpp: Fix CBDT/CBLC colored fonts.

Add
`FT_LOAD_COLOR` for those fonts.

2022-10-03 Werner Lemberg <wl@gnu.org>

[ftinspect] Format `src/ftinspect/*`.

2022-10-03 Werner Lemberg <wl@gnu.org>

[ftinspect] Format `src/ftinspect/widgets/*`.

2022-10-03 Werner Lemberg <wl@gnu.org>

[ftinspect] Format `src/ftinspect/panels/*`.

2022-10-03 Werner Lemberg <wl@gnu.org>

[ftinspect] Format `src/ftinspect/models/*`.

2022-10-03 Werner Lemberg <wl@gnu.org>

[ftinspect] Format `src/ftinspect/glyphcomponents/*`.

2022-10-03 Werner Lemberg <wl@gnu.org>

[ftinspect] Format `src/ftinspect/engine/*`.

2022-10-02 Werner Lemberg <wl@gnu.org>

[ftinspect] Format build files for cmake and meson.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Do it.
Also sort entries.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Activate the color layers by default.

Don't deactivate it when color layers are absent. Also fix typo.

* src/ftinspect/panels/settingpanel.cpp: Updated.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect]
Fix memory-related crash, and refactor outline-retaining...

graphics items. Also fix some compiler warnings.

* src/ftinspect/glyphcomponents/glyphoutline.cpp,
  src/ftinspect/glyphcomponents/glyphoutline.hpp:
  Don't retain the `FT_Outline*` whose lifetime is bound to the glyph.
  Prepare the path in the ctor so the outline isn't saved.
  Add `GlyphUsingOutline` as the base class for all classes that have to
  retain a `FT_Outline` object.

* src/ftinspect/glyphcomponents/glyphpointnumbers.cpp,
  src/ftinspect/glyphcomponents/glyphpointnumbers.hpp,
  src/ftinspect/glyphcomponents/glyphpoints.cpp,
  src/ftinspect/glyphcomponents/glyphpoints.hpp: Refactored.

* src/ftinspect/engine/engine.hpp, src/ftinspect/panels/singular.hpp,
  src/ftinspect/engine/rendering.hpp
  Add default values to initialize member fields.

* src/ftinspect/panels/singular.cpp:
  Pass the `FT_Library` into the graphics items.

* src/ftinspect/models/fontinfomodels.cpp:
Fix warning.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Add transformation and scaling info to the composite glyph view.

Note: Untested since no font with non-1.0 scale subglyphs is found.

* src/ftinspect/engine/fontinfo.cpp, src/ftinspect/engine/fontinfo.hpp:
  Fetch transformation and scaling info from the font.

* src/ftinspect/models/fontinfomodels.cpp,
  src/ftinspect/models/fontinfomodels.hpp:
  Change the "Position" column to "Position and Transformation".
  Display the transformation info.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Improve bitmap display in the glyph details pane.

Now the ppem square is displayed as light gray, ink box as blue,
xy-axis as thin black lines.
Adding ppem square improves displaying of non-spacing glyphs.

* src/ftinspect/panels/glyphdetails.cpp:
  Pass the ppem box to the `GlyphBitmap` widget.

* src/ftinspect/glyphcomponents/glyphbitmap.cpp,
  src/ftinspect/glyphcomponents/glyphbitmap.hpp:
  Add a `placeholderRect`
to store the ppem square info. Layout the glyph
  bitmap on the basis of the ppem square.
  Draw auxiliary lines on the canvas.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Modify the about text and add actual version.

* src/ftinspect/maingui.cpp: As described.

* src/ftinspect/ftinspect.cpp: Pass the actual version.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  Add `dynamicLibraryVersion` func.

2022-09-25 Charlie Jiang <w@chariri.moe>

* src/ftinspect/engine/engine.cpp: Minor formatting.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Fix random crash when closing fonts.

```
* src/ftinspect/widgets/tripletselector.cpp: Disallow font indices below 0.
  It seems the CFF driver can't handle this properly.

2022-09-25  Charlie Jiang  <w@chariri.moe>

 [ftinspect] Add "Font Info" tab.

 * src/ftinspect/panels/info.cpp, src/ftinspect/panels/info.hpp:
   New files, add the `InfoTab` class.

 * src/ftinspect/engine/fontinfo.cpp,
 src/ftinspect/engine/fontinfo.hpp:
   Add `SFNTTableInfo`, `FontBasicInfo`, `FontTypeEntries`, `FontFixedSize`
   and `CompositeGlyphInfo`. The `SFNTTableInfo` and `CompositeGlyphInfo`
   classes retrieve info without the related FreeType API, but directly
   parse the font data.

 * src/ftinspect/models/fontinfomodels.cpp,
   src/ftinspect/models/fontinfomodels.hpp:
   New files. Add models for the tables and the tree view in the info tab to
   use.

 * src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
   Add `loadDefaults` function for the composite glyphs view to draw its
   small icon.
   Add `currentFontHasGlyphName`, `currentFontPSInfo`,
   `currentFontPSPrivateInfo` and `currentFontSFNTTableInfo` to obtain info.
   Add getters.

 * src/ftinspect/engine/fontinfonamesmapping.cpp: New file for name mapping.

 * src/ftinspect/engine/fontfilemanager.cpp,
   src/ftinspect/engine/fontfilemanager.hpp:
   Add `currentReloadDueToPeriodicUpdate` so the composite glyph
 tree isn't
   refreshed (which is a very expensive process) for the periodic updating of
   symbolic font files.

 * src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp:
   Add the font info tab info the main window and wire events.

 * src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25  Charlie Jiang  <w@chariri.moe>

 [ftinspect] Add "Comparator View".

 * src/ftinspect/panels/comparator.cpp, src/ftinspect/panels/comparator.hpp:
```

New files, adding the `ComparatorTab`.

* src/ftinspect/panels/settingpanel.cpp,
src/ftinspect/panels/settingpanel.hpp: Add comparator mode.

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp:
Add comparator tab and modify `switchTab` to prevent unwanted window
resizing, and to fix the tab bar position.
Modify `applySettings` to skip applying for comparator tab.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Add left/right click
behaviour to the continuous view.

Left clicking will open the glyph details pane, and right clicking will
switch to the singular tab.

* src/ftinspect/panels/glyphdetails.cpp,
src/ftinspect/panels/glyphdetails.hpp:
New files, add the `GlyphDetails` class.

* src/ftinspect/glyphcomponents/glyphcontinuous.cpp,
src/ftinspect/glyphcomponents/glyphcontinuous.hpp:
Add `mouseReleaseEvent` event handler which emits the new
`updateGlyphDetails` and `rightClickGlyph` signals.

* src/ftinspect/glyphcomponents/glyphbitmap.cpp,
src/ftinspect/glyphcomponents/glyphbitmap.hpp:
Add `GlyphBitmapWidget` to show the enlarged bitmap.

* src/ftinspect/panels/continuous.cpp, src/ftinspect/panels/continuous.hpp:
Add code to update the details panel, and wire up events.

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp:
Add code to initialize the glyph details panel, and wire up components and
events.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25
Charlie Jiang <w@chariri.moe>

[ftinspect] Add "Continuous View".

Most new features in the continuous view are included in the commit, except

the mouse left (details pane)/right (go to singular) click behaviour.

* src/ftinspect/panels/continuous.cpp, src/ftinspect/panels/continuous.hpp:
  New files, the main continuous tab.

* src/ftinspect/glyphcomponents/glyphcontinuous.cpp,
  src/ftinspect/glyphcomponents/glyphcontinuous.hpp:
  New files, adding the `GlyphContinuous` as the actual canvas for
  continuous rendering.

* src/ftinspect/engine/stringrenderer.cpp,
  src/ftinspect/engine/stringrenderer.hpp:
  New files, adding `StringRenderer` to layout the strings and produce
  glyphs for the canvas to draw.

* src/ftinspect/widgets/charmapcombobox.cpp,
  src/ftinspect/widgets/charmapcombobox.hpp:
  New files, add the `CharMapComboBox` widget.

* src/ftinspect/engine/charmap.cppsrc/ftinspect/engine/charmap.hpp:
  New files, adding `CharMapInfo` class.

*
src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  Add necessary fields and getters for string rendering.
  Retrieve charmap when loading fonts.

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp:
  Add the continuous view to the main window.
  Call `ContinuousTab::highlightGlyph` when switching from singular to
  continuous view.

* src/ftinspect/panels/settingpanel.cpp: Uncomment functional code.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25 Charlie Jiang <w@chariri.moe>

This is a combination of 2 commits.
This is the 1st commit message:

[ftinspect] Add "Continuous View".

Most new features in the continuous view are included in the commit, except
the mouse left (details pane)/right (go to singular) click behaviour.

* src/ftinspect/panels/continuous.cpp, src/ftinspect/panels/continuous.hpp:
  New files, the main continuous tab.

```
* src/ftinspect/glyphcomponents/glyphcontinuous.cpp,
  src/ftinspect/glyphcomponents/glyphcontinuous.hpp:

 New files, adding the `GlyphContinuous` as the actual canvas for
  continuous rendering.

* src/ftinspect/engine/stringrenderer.cpp,
  src/ftinspect/engine/stringrenderer.hpp:
  New files, adding `StringRenderer` to layout the strings and produce
  glyphs for the canvas to draw.

* src/ftinspect/widgets/charmapcombobox.cpp,
  src/ftinspect/widgets/charmapcombobox.hpp:
  New files, add the `CharMapComboBox` widget.

* src/ftinspect/engine/charmap.cppsrc/ftinspect/engine/charmap.hpp:
  New files, adding `CharMapInfo` class.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  Add necessary fields and getters for string rendering.
  Retrieve charmap when loading fonts.

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp:
  Add the continuous view to the main window.
  Call `ContinuousTab::highlightGlyph` when switching from singular to
  continuous view.

* src/ftinspect/panels/settingpanel.cpp: Uncomment
functional code.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

# This is the commit message #2:

* src/ftinspect/engine/stringrenderer.cpp: Fix infinite loop.

Don't limit the glyph position and exit too early, or the loop in `render`
function won't stop forever. Also, since the string can be moved by the
mouse, there's no point to limit the line position in the canvas viewport.

2022-09-25  Charlie Jiang  <w@chariri.moe>

[ftinspect] Add SFNT `name` table retrieving.

* src/ftinspect/engine/fontinfo.cpp, src/ftinspect/engine/fontinfo.hpp:
  New files, add `SFNTName` to retrieve `name` table.
  Conversions to `QString` from mainstream encodings are supported.
```

```
* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  Add `currentFontSFNTNames` and retrieve the `name` table when loading the
  font. Also pass the SFNT name table when loading palettes.

* src/ftinspect/engine/mmgx.cpp, src/ftinspect/engine/paletteinfo.cpp:
  Uncomment functional
code to make use of the `name` table.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25  Charlie Jiang  <w@chariri.moe>

[ftinspect] Support MM/GX.

* src/ftinspect/panels/settingpanelmmgx.cpp,
  src/ftinspect/panels/settingpanelmmgx.hpp:
  Add GUI widgets for MM/GX settings.

* src/ftinspect/engine/mmgx.cpp, src/ftinspect/engine/mmgx.hpp:
  Add `MMGXAxisInfo` to retrieve axes info. However, the SFNT name table
  isn't implemented, so the SFNT based axis names are unavailable.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  Add `applyMMGXDesignCoords`. Add getters `currentFontMMGXState` and
  `currentFontMMGXAxes`. Info is retrieved when loading font.

* src/ftinspect/panels/settingpanel.cpp,
  src/ftinspect/panels/settingpanel.hpp: Uncomment functional code.
  Remove `checkHintingMode` and `checkStemDarkening`. Applying of delayed
  settings is taken care by the `MainGUI`. So emitting `fontReloadNeeded`

simply will do the work.

* src/ftinspect/maingui.cpp: Don't reset the cache so aggressively.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25  Charlie Jiang  <w@chariri.moe>

[ftinspect] Add auxiliary lines for the grid view.

The aux lines will show advance and asc/descender.

* src/ftinspect/glyphcomponents/grid.cpp,
  src/ftinspect/glyphcomponents/grid.hpp: Implement aux lines.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
```

Add `currentSizeAscDescPx`.

* src/ftinspect/panels/singular.cpp, src/ftinspect/panels/singular.hpp:
  Pass parameters to the `Grid` graphics item.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Support opening files drag-dropping.

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp: Add related code.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Support opening files via command-line.

* src/ftinspect/engine/fontfilemanager.cpp,
  src/ftinspect/engine/fontfilemanager.hpp:

  Add `loadFromCommandLine` func.

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp:
  Add and call `loadCommandLine` func.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Support LCD rendering.

* src/ftinspect/engine/rendering.cpp, src/ftinspect/engine/rendering.hpp:
  Implement `convertLCDToARGB` and `convertLCDVToARGB`.
  Add `lcdUsesBGR` property.

* src/ftinspect/panels/settingpanel.cpp: Uncomment functional code.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Support color layers.

* src/ftinspect/engine/rendering.cpp:
  Add implementation of `tryDirectRenderColorLayers`.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  Implement `loadPaletteInfos` and `loadPalette`.
  Add `currentFontHasColorLayers` and a group of getters/setters supporting
  color layer rendering.
  Also reorder fields as the number of fields grows.

* src/ftinspect/panels/settingpanel.cpp,
  src/ftinspect/panels/settingpanel.hpp:

Implement
`populatePalettes` and reorder functions.
Fix `checkPalette` about combo box enabling state and reset the cache when
the palette settings change.
Uncomment functional code.

* src/ftinspect/engine/paletteinfo.cpp,
src/ftinspect/engine/paletteinfo.hpp: New files adding `PaletteInfo`.
Retrieving palette names using SFNT name tables is not supported yet.

* src/ftinspect/panels/singular.cpp:
Call `Engine::loadPalette` when drawing.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Support stem darkening.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
Add `setStemDarkening` func.

* src/ftinspect/panels/settingpanel.cpp: Uncomment function code.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Support tricky fonts.

For tricky fonts, we disable auto-hinter and limit the TT interpreter
version.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:

Add `currentFontTricky` function and turn off hinting forcibly when the
user turns it off in the GUI for tricky fonts.

* src/ftinspect/panels/settingpanel.cpp: As described.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Support embedded bitmap and bitmap-only fonts.

Bitmap glyphs are already supported in the new rendering engine, so we make
the option effective in the GUI. Also support bitmap-only fonts by coercing
sizes to available ones and force embedded bitmaps.

* src/ftinspect/widgets/fontsizeselector.cpp,
src/ftinspect/widgets/fontsizeselector.hpp:

Retrieve fixed sizes info from the engine and coerce to nearest available
sizes when using bitmap-only fonts.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
Add `embeddedBitmapEnabled` property and `currentFontHasEmbeddedBitmap`,
`currentFontBitmapOnly` and `currentFontFixedSizes` getters.

* src/ftinspect/panels/settingpanel.cpp: Uncomment functional code.

2022-09-25
Charlie Jiang <w@chariri.moe>

[ftinspect] Refactor `Engine` and fix the singular tab.

This comment brings the new glyph loading and bitmap rendering code.
The bitmap rendering part is in `RenderingEngine` which can be obtained
from the `Engine`. The `Engine` now supports loading the glyph by loading
with image cache and without image cache.
The `loadOutline` function is removed.

Accompanying this change, some new features are introduced as well. Most
notable the improvements in rendering: back/foreground color and gamma,
support bitmap glyphs (not enabled in the UI). Support for LCD and color
layer font is absent yet.

The singular tab is now enabled by uncommented functional code that was
commented in the last commit.

In `Engine`, a `ftFallbackFace_` is introduced for all non-rendering work,
and the old `ftSize_` is only used for rendering. This helps dealing with
non-scalable fonts since we can safely retrieve info with the fallback face.

* src/ftinspect/engine/engine.cpp,
src/ftinspect/engine/engine.hpp:
Integrate the `RenderingEngine`.
Change `loadFont` to update the `ftFallbackFace_` as well.
Change all info-retrieving functions to use `ftFallbackFace_`.
Add `loadGlyph`, `loadGlyphIntoSlotWithoutCache` and
`loadGlyphWithoutUpdate`, and remove `loadOutline`.
Extract code about "get a face object from the cache and do sth."
into a new function `withFace`.
Add property `antiAliasingEnabled` and `renderMode` for the rendering
engine.
Some minor changes are included.

* src/ftinspect/engine/rendering.cpp, src/ftinspect/engine/rendering.hpp:
New files, as described.

```
* src/ftinspect/panels/settingpanel.cpp,
  src/ftinspect/glyphcomponents/glyphbitmap.cpp,
  src/ftinspect/panels/singular.cpp: Uncomment functional code.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25  Charlie Jiang  <w@chariri.moe>

[ftinspect] Add the `SingularTab` and related widgets.

This introduces
the new singular tab. However, because the new tab heavily
depend on the new engine structure, it's current not functional. No bitmap
or outline will be displayed. This would be fixed after the `Engine` was
refactored in the next commit.

The new singular tab has the size and glyph index selector moved out as
modular widgets to be reused.

The new scroll and shortcut behaviours are introduced in this commit, which
depend on scroll events introduced in the custom `QGraphicsViewx`.

The infinity panning of grid is implemented mainly via
`SingularTab::updateGrid` and `Grid::updateRect`.

This commit is introducing new features since it would be unfavorable to
"backport" old version of glyph components, and add those new features in
future commits - this is way too complex.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  Add `currentFontNumberOfGlyphs` and `dpi` functions.

* src/ftinspect/widgets/fontsizeselector.cpp,
  src/ftinspect/widgets/fontsizeselector.hpp:

  This is the new font size selector to replace the old size/DPI/zoom boxes.
  This widget is capable of handling wheel and key events delegated from
  other widgets.
  The support for fixed sizes and bitmap-only font is not yet added.

* src/ftinspect/widgets/glyphindexselector.cpp,
  src/ftinspect/widgets/glyphindexselector.hpp:
  This is the new glyph index selector to replace the old navi buttons.
  This selector is aware of index min/max, consists of a group of navi
  buttons, a text box (actually a spin box without buttons) to directly
  input glyph index.

* src/ftinspect/glyphcomponents/graphicsdefault.cpp,
```

src/ftinspect/glyphcomponents/graphicsdefault.hpp:
This struct contains all default graphical settings (mainly for singular view, e.g. the grid line color).

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp:
Add the new tab into the main window.

* src/ftinspect/glyphcomponents/glyphbitmap.cpp,
src/ftinspect/glyphcomponents/glyphbitmap.hpp:

This will now delegate rendering to the engine instead of doing rendering itself. However, since the rendering part of the `Engine` is not implemented, code initializing `image_` is left commented.
Also add another constructor for initializing directly from a `QImage`.

* src/ftinspect/glyphcomponents/glyphoutline.cpp,
src/ftinspect/glyphcomponents/glyphoutline.hpp,
src/ftinspect/glyphcomponents/glyphpointnumbers.cpp,
src/ftinspect/glyphcomponents/glyphpointnumbers.hpp,
src/ftinspect/glyphcomponents/glyphpoints.cpp,
src/ftinspect/glyphcomponents/glyphpoints.hpp:
Constructors of those items now accept a `FT_Glyph` instead of `FT_Outline`. The conversion is done inside the view, and the view won't be displayed if the glyph isn't outline glyph.
This simplifies the code of `SingularTab`.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Rewrite `MainGUI`.

Note:
This commit compiles, but the main view is removed, so you will get a blank right panel. The singular view will be added back with major changes in the next commit.

This commit mainly introduces below changes:

1. The original `MainGUI` contains almost all GUI elements. Most of them are taken out to modular components. The current `MainGUI` serves only as a skeleton provides coordinate between components, greatly shortened.
It also provides some auxiliary code such as calling to file chooser.
2. The left panel is moved to `SettingPanel` class. The current `settingpanel.[ch]pp` are directly modified from the latest code, so they contains some options not implemented in the `Engine`.
Structural code that is only added accompanying later change is removed, such as the comparator mode. Such code will be added back with the

related feature. However, code for unimplemented options are simply
commented out.
3. The main part is transformed into
a tabbed view. The original code is
removed. Refactored, it will be added back in the next commit.
4. The navigation buttons (Next/Prev Font/Face/NI) are changed into the new
triplet-selector, which is a major UI improvement.

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp: As described.

* src/ftinspect/panels/abstracttab.hpp: Add `AbstractTab` which is an
interface for all tabs listening for font reloading and repainting.

* src/ftinspect/panels/settingpanel.cpp,
src/ftinspect/panels/settingpanel.hpp:
As described, this is the left panel. This requires intensive reviewing
since many bugs had rooted here.

* src/ftinspect/widgets/tripletselector.cpp,
src/ftinspect/widgets/tripletselector.hpp:
As described, this is the triplet (Font/Subface/NI) selector.
This component is also responsible for repopulating triplet information
and keep up with the font file change (i.e. the
`FontFileManager::currentFileChanged` event is captured here).

*
src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
Add `fontValid` and `namedInstanceName` since `TripletSelector` requires
them. However, they'll subject to change later.

* src/ftinspect/ftinspect.cpp: Remove call to `MainGUI::setDefaults`.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] WIP: Rewrite `MainGUI`.

Note: This commit doesn't compile. This change is splitted into 2 commits
to avoid a complicated diff.

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp: Old version removed.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Rename `rendering` dir to `glyphcomponents`.

All classes in `rendering` directory will be responsible for draw

glyphs, either as independent widgets or as `QGraphicsItem`. However, the
actual drawing part will be placed into `RenderingEngine`. Therefore, we
rename it to `glyphcomponents`.

* src/ftinspect/rendering/**: Renamed.

*
src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build,
src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp: Updated.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Re-organize custom widgets.

* src/ftinspect/widgets/customwidgets.cpp,
src/ftinspect/widgets/customwidgets.cpp: New files.
Include `QGraphicsViewx`, `ZoomSpinBox` and `UnboundScrollArea` (for later
use).

* src/ftinspect/widgets/qspinboxx.hpp, src/ftinspect/widgets/qspinboxx.hpp:
Changed into `ZoomSpinBox` in `customwidgets.cpp`.

* src/ftinspect/widgets/qgraphicsviewx.cpp,
src/ftinspect/widgets/qgraphicsviewx.hpp:
Merged into `customwidgets.cpp`

* src/ftinspect/widgets/qcomboboxx.hpp,
src/ftinspect/widgets/qcomboboxx.cpp: Removed. No longer needed.
We're using custom `QAbstractListModel`'s `flags` func to disable items.

* src/ftinspect/widgets/qpushbuttonx.hpp,
src/ftinspect/widgets/qpushbuttonx.cpp: Removed. No longer needed.
We're using `setButtonNarrowest` in `uihelper.cpp`.

*
src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp: Updated to use new
custom widgets.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Use custom `QAbstractListModel` instead of manually mapping.

In `maingui.cpp`, mapping between `QComboBox` indices and actual FreeType
values was done manually. The enabled statuses of individual ComboBox items
were also maintained in `maingui.cpp`.

In this commit, those code was moved to seperate custom classes
implementating `QAbstractListModel`. All mapping was done there.
Enable/Disable states was maintained in the classes as well.
By doing this, the reason why some items were disabled was made more clear
and explicit. Adding more items is easier.

The `QComboBoxx` custom widget is no longer needed since disable flag can
be provided by the custom model by overriding the `flags` function.

`SimpleComboBoxModel` is a basic class for Key-Value-DisplayName
mapping.
Other models could extend this class if no complicated mapping (e.g.
`HintingModeComboBoxModel`) is needed.

* src/ftinspect/models/customcomboboxmodels.cpp,
  src/ftinspect/models/customcomboboxmodels.cpp: New files.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  `Engine` now accepts "load target" value of certain anti-aliasing mode
  instead of the anti-aliasing enum value. The mapping was moved into
  `AntiAliasingComboBoxModel`.

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp: Move all mappings
  and enabled/disabled statuses to separate models.
  Remove mapping `QHash`es. Use `QComboBox` instead of `QComboBoxx`.

* src/ftinspect/meson.build, src/ftinspect/CMakeLists.txt: Updated.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Rename all private member variables with an underscore suffix.

(pure mechnical commit)

* src/ftinspect/**: Renaming. Also some variables with abbreviations
were renamed.

This
will enable nicer getter/setters, as discussed in #13.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Refactor `Engine`.

This commit decouples `Engine` so it no longer depends on `MainGUI`.

Because of that, a lot of getters and setters are added to `Engine`, and
`MainGUI` call setters in its `applySettings` function, which makes applying

of the settings lazy (only happen when the glyph repaints).

In the later commits, options will be divided into two types: mostly lazy ones, and a few eager ones which need to be immediately applied, because they need the cache to be purged.

Some code in `MainGUI` is moved into `Engine`, as well.

Functions in the `Engine` are re-ordered. Constructor is greatly reduced to `queryEngine`.

* src/ftinspect/engine/engine.cpp, src/ftinspect/engine/engine.hpp:
  As described.

* src/ftinspect/maingui.cpp, src/ftinspect/maingui.hpp:
  As described.

* src/ftinspect/ftinspect.cpp: Remove dependency of `Engine` against
  `MainGUI`.

2022-09-25
 Charlie Jiang <w@chariri.moe>

[ftinspect] Move out font file managing/watching out to a new class.

Introduce the feature that rejects invalid files.

* src/ftinspect/maingui.hpp, src/ftinspect/maingui.cpp: Move `fontList`,
  `fontWatcher`, `timer` and other code related to font file managing to
  new class `FontFileManager`.

* src/ftinspect/engine.hpp, src/ftinspect/engine.cpp:
  `Engine` class now holds `FontFileManager`.
  Also, make `MainGUI` open and close fonts indirectly via `Engine`.

* src/ftinspect/fontfilemanager.hpp, src/ftinspect/fontfilemanager.cpp:
  New files.

* src/ftinspect/CMakeLists.txt, src/ftinspect/meson.build: Updated.

2022-09-25 Charlie Jiang <w@chariri.moe>

[ftinspect] Update build system settings.

* src/ftinspect/CMakeLists.txt: Fix MSVC-only options. Require Qt 5.15 and
  enable higher warning level.

* src/ftinspect/meson.build: Set C++ version. Require Qt 5.15.

2022-09-24 Alexei Podtelezhnikov <apodtele@gmail.com>

*
graph/x11/grx11.c (gr_x11_blitter_reset): Minor improvement.

2022-09-23 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/meson.build: No macOS driver yet.

Fixes #19.

2022-09-17 Alexei Podtelezhnikov <apodtele@gmail.com>

Revert "* src/ftlint.c (Checksum): Accept negative pitch."

This reverts commit bac9a53080b24e76a2dfe8def2b15682135b8454.
The pitch is always positive in the converted bitmap.

2022-09-17 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftlint.c (Checksum): Accept negative pitch.

2022-09-16 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblblit.c (gblender_blit_init): Fix for negative pitch.

Reported by Anurag Thakur.

2022-09-15 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Clean up the cache clearance.

Use separate functions to clear the color and channel gradient
caches and call them conditionally instead of passing the switch
around.

* graph/gblender.c (gblender_clear): Separate out...
(gblender_clear_channels): ...
this function.
(gblender_use_channels): Removed.
* graph/gblender.h: Update their declarations.
* graph/gblgblit.c (gblender_blit_init, grSetTargetPenBrush):
Updated to call the above functions and formatted.

2022-09-13 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftdiff.c: Add const qualifier to the executable basename.

2022-09-12 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftcommon.c (FTDemo_Display_New): Handle window titles.
* src/ftcommon.h: Update its prototype.
* src/ftgamma.c, src/ftgrid.c, src/ftsdf.c, src/ftstring.c, src/ftview.c
(main): Updated accordingly.

2022-09-11 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftdiff.c (render_state_draw), src/common.d (ft_strdup): Clean up.

2022-09-08 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/*.*: Add const qualifier to the executable basename.

2022-09-08 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/grobjs.* (grAlloc): Return void pointer.

2022-09-06 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph]
Fortify channel cache.

Using signed short offsets in the channel cache will risk to overflow
if the current cache size is to increase. Here we switch to unsigned
index and express it in the cache units.

* graph/gblender.h (GBlenderChanKeyRec): Update `index`.
* graph/gblender.c (gblender_clear, gblender_lookup_channel,
gblender_reset_channel_key): Updated accordingly.

2022-09-06 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblender.* (GBlenderRec): Cosmetic changes to cache array.

2022-08-29 shugaley <https://gitlab.freedesktop.org/shugaley>

* src/ftpngout.c (FTDemo_Display_Print): Declare `code` volatile.

Fixes #18.

2022-08-29 Alexei Podtelezhnikov <apodtele@gmail.com>

* Makefile (FTCOMMON_OBJ): Add `graph` dependency, include `rsvg-port`.

2022-08-29 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Rework #ifdef GBLENDER_STORE_BYTES.

This also settles on tripling the number of channel keys, which is
a safe bet in all
circumstances. Quadrupling might only work on
64-bit architectures or with added key structure padding, without
GBLENDER_STORE_BYTES defined.

* graph/gblender.h (GBlenderCell): Change definition.
* graph/gblblit.c (GDST_STOREB): Updated accordingly.
* graph/gblender.c (gblender_clear, gblender_reset_key,
  gblender_lookup, gblender_lookup_channel): Ditto.

2022-08-28 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Better hash function and a fix.

* graph/gblender.c (gblender_clear): Initialize recently grown array.
(gblender_lookup_channel): Improve hash function.

2022-08-28 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblender.c (gblender_lookup): Quest for perfect hash function.

2022-08-28 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Minor fixes.

(gblender_clear): Initialize with black background, whereas
foreground stays invalid.
(gblender_lookup_channel): Increase cache utilization.

2022-08-26 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph]
Slight optimization of cached gradients.

This saves about 1% of `ftgrid` execution time.

* graph/gblender.c (gblender_reset_key, gblender_reset_channel_key):
Implement faster gradients, which are rounded anyway.

2022-08-25 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Rework cache management.

With more complex rendering in `ftgrid`, the old cache management

resulted in excessive clashes and slow `gblender_lookup`. It is
better to replace the clashing entries than to preserve them and
search for an available spot in the table. This saves about 10%
of execution time in `ftgrid` without much effect on the others.

* graph/gblender.c (gblender_lookup): Replace old clashing entries
and hash function.
(gblender_lookup_channel): Ditto.
* graph/gblender.h (GBlenderRec): Remove `stat_clears`.

2022-08-25 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblender.c (gblender_lookup*): Count clashes directly.

2022-08-23 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph]
Count the number of hash clashes.

The hash table lookups take very noticeable time when rendering is
complex like in `ftgrid`. This can help optimize the hash function.

* graph/gblender.h (GBLENDER_STATS): New field for clashes.
* graph/gblender.c (gblender_init, gblender_lookup{,_channel},
gblender_dump_stats): Initialize, collect, and report clashes.

2022-08-18 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Fix mishandling of LCDv formats.

* graph/gblblit.c (gblender_blit)init): Triple the LCDv pitch.
* graph/gblany.h (_gblender_blit_{vrgb,vbgr}_*): Updated accordingly.

2022-08-17 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblender.c: Minor.

2022-08-17 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblblit.c (grBlitGlyphToSurface): Remove redundant check.

The rare empty glyphs will be caught later in `gblender_blit_init`.

2022-08-17 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblender.c (gblender_set_gamma_table):
Reintroduce linear loops.

2022-08-17 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblender.c (gblender_set_gamma_table): Updated sRGB ramps.

When we use finite approxination it is more appropriate to use the
actual values for the linear portion instead of the standard ones.

2022-08-16 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/common.c (utf8_next): Use more efficient algorithm.

2022-08-15 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftcommon.c (FTDemo_String_Set): Refactor.

2022-08-15 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftcommon.c (FTDemo_Make_Encoding_Tag): Refactor.

2022-08-11 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblender.c (gblender_set_gamma_table): Minor improvements.

2022-08-11 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftcommon.c (FTDemo_Draw_Header): Show non-trivial face index.

This is a useful hint if a file contains multiple faces.

2022-08-07 Alexei Podtelezhnikov <apodtele@gmail.com>

*
src/win32/grwin32.c: Cosmetic updates.

2022-08-06 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftgrid,ftmulti,ftstring,ftview] Document optional size.

* man/ftgrid.1, man/ftmulti.1, man/ftstring.1, man/ftview.1: Update.
* src/ftgrid.c, src/ftmulti.c, src/ftstring.c, src/ftview.c: Ditto.

2022-08-05 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftgrid,ftmulti,ftstring,ftview] Make the size optional.

* src/ftgrid.c (parse_cmdline), src/ftview.c (parse_cmdline),
src/ftstring.c (parse_cmdline), src/ftmulti.c (main): Fallback on
a default size if it is missing on the command line.

2022-07-30 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftgrid.c: Sync with freetype.

2022-07-30 Werner Lemberg <wl@gnu.org>

* src/ftlint.c (main): Check number of glyphs.

Problem reported by Marc Schönefeld <marc.schoenefeld@gmx.org>.

2022-07-30 Werner Lemberg <wl@gnu.org>

[ftgrid] Fix memory-related problems.

Reported by Marc Schönefeld <marc.schoenefeld@gmx.org>.

*
src/ftgrid.c (bitmap_scale): Limit bitmap size.
(grid_status_draw_outline): Handle errors in `FT_Get_Glyph`.

2022-07-11 Charlie Jiang <w@chariri.moe>

[meson] Add option to disable librsvg dependency.

As discussed in #14.

Currently, 'librsvg' is used to render OT-SVG glyphs. However, 'librsvg' is
far from simple to build as it requires tons of transitive dependencies,
especially on Windows.

Therefore we introducee a configuration option to switch 'librsvg' on or
off. This is trivial because the source code itself already honors a
`HAVE_LIBRSVG` macro.

* meson_options.txt: Add `librsvg` option (feature), defaulting to
`enabled`.

* meson.build: Honor the option above.

2022-06-28 Charlie Jiang <w@chariri.moe>

[ftinspect] Drop QMake, add CMake.

* src/ftinspect/CMakeLists.txt: Add CMake build file for `ftinspect`.

* src/ftinspect/ftinspect.pro: Remove QMake build file.

Fixes #11

2022-06-28 Charlie Jiang <w@chariri.moe>

* /src/ftinspect/.gitignore: Ignore
Visual Studio specific files.

This is for `ftinspect`.

2022-06-28 Charlie Jiang <w@chariri.moe>

[ftinspect] Eliminate compile warnings.

* src/ftinspect/engine.hpp: Use `uintptr_t` as type for `faceCounter`
instead of `int`.

* src/ftinspect/engine.cpp: Changing all casts to use `FTC_IDType` type
(=`uintptr_t`) we defined.

Fixes #10.

2022-06-21 Hugh McMaster <hugh.mcmaster@outlook.com>

* Makefile: Append CPPFLAGS to CFLAGS so that they work in `graph`.

2022-06-06 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftcommon.c (FTDemo_Hinting_Engine_Change): Minor fix.

2022-06-05 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c (main): Minor.

2022-06-04 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftbench] Minor tweaks.

* builds/windows/msvc/ftbench.vcxproj: Do not depend on "common.c".
* src/ftbench.c: Do not include "common.h".
(main): Minor output optimization.

2022-06-03 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftdump.c (main):
Report filename.

2022-06-03 Alexei Podtelezhnikov <apodtele@gmail.com>

* subprojects/zlib.wrap: Update to zlib version 1.2.12.

2022-06-02 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c (main): Indicate memory-mapped fonts.

2022-05-26 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftbench] Create more concise and informative header.

* src/ftbench.c (header): Report face, driver, and target info.
Borrowed from `FTDemo_Get_Info`.
(main): Remove and rearrange output.

2022-05-25 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c (main): Output spaces before units.

2022-05-24 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c (main): Reformat output (cont'd).

2022-05-24 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c (main): Reformat output.

2022-05-24 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftbench.c (main): Check the number of glyphs.

Fixes #8.

2022-05-24 Alexei Podtelezhnikov <apodtele@gmail.com>

*
graph/win32/grwin32.c: Do not include <string.h>, formatting.

2022-05-23 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph/win32] Simplify icon setting further.

* graph/win32/grwin32.c (gr_win32_surface_set_icon): Use `CreateIcon`.

2022-05-23 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph/win32] Simplify icon setting.

* graph/win32/grwin32.c (gr_win32_surface_set_icon): Use basic

`CreateBitmap` for color, which seems to work.

2022-05-22 Alexei Podtelezhnikov <apodtele@gmail.com>

This reverts commit 454797135a90.

* graph/win32/grwin32.c (gr_win32_surface_refresh_rectangle): Revert
to fix the 24 bpp rectangle invalidation.

2022-05-19 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/win32/grwin32.c (gr_win32_surface_refresh_rectangle): Minor move.

2022-05-01 Werner Lemberg <wl@gnu.org>

* Version 2.12.1 released.
==========

Tag sources with 'VER-2-12-1'.

* README: Updated.
* meson.build: Updated.
* man/*.1: Updated.

2022-04-09
Charlie Jiang <w@chariri.moe>

[windows] Fix IME freezing window, don't filter messages by HWND

* graph/win32/grwin32.c (Window_ThreadProc): Remove HWND filter of GetMessage call

2022-04-08 Charlie Jiang <w@chariri.moe>

[windows] Fix some GUI keys not working

* graph/win32/grwin32.c (gr_win32_surface_listen_event, Message_Process): Switch to custom Windows messaage ID.

2022-03-31 Werner Lemberg <wl@gnu.org>

* Version 2.12.0 released.
==========

Tag sources with 'VER-2-12-0'.

* README: Updated.
* meson.build: Updated.
* man/*.1: Updated.

* Makefile (dist): Generate `ChangeLog` entries for all commits since
version 2.11.0 (when we stopped creating this file manually).

2022-03-31 Werner Lemberg <wl@gnu.org>

Fix clang++ warnings.

* src/ftsdf.c (event_font_update, write_header, draw), src/rsvg-port.c
(rsvg_port_preset_slot): Add or remove casts.

2022-03-24 Anuj Verma <anuj@womp.xyz>

[ftsdf] Fix segmentation fault.

* src/ftsdf.c (draw):
Use integer to avoid overflow while reverse
looping `j`.

2022-02-19 Werner Lemberg <wl@gnu.org>

/: Replace header macros with file names.

We already did the same some time ago in the FreeTye library.

Also remove redundant inclusion of some header macros.

2022-02-19 Ben Wagner <bungeman@chromium.org>

[ftview] Handle foreground COLR.

* src/ftview.c (Render_All): handle 0xFFFF `layer_color_idx` without
crashing.

2022-02-11 Werner Lemberg <wl@gnu.org>

[ftdump] Emit PS dictionary info for option `-n` if available.

* src/ftdump.c: Include `FT_TYPE1_TABLES_H`.
(Print_Array): New function.
(Print_FontInfo_Dictionary, Print_FontPrivate_Dictionary): New functions.
(main): Use them.
(usage): Updated.

2022-02-06 Alexei Podtelezhnikov <apodtele@gmail.com>

[builds/windows] Add `rsvg` port to project files.

* builds/windows/msvc/ftgamma.vcxproj: Updated.
* builds/windows/msvc/ftgrid.vcxproj: Updated.
* builds/windows/msvc/ftstring.vcxproj: Updated.
* builds/windows/msvc/ftview.vcxproj:
Updated.

2022-02-05 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftgrid] Minor tweaks.

* src/ftgrid.c (scale_bitmap): Take the buffer immediately.
(DO_BITMAP): Minor.
* src/ftcommon.c (FTDemo_Glyph_To_Bitmap): Clarify ownership.

2022-02-05 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftgrid.c (bitmap_scale): Implement BGRA scaling.

2022-02-05 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftgrid] Implement embedded bitmap toggle.

* src/ftgrid.c (grid_status_draw_outline): Undo the last change.
(Process_Event): Implement the embedded bitmap toggle and shift
some other toggle keys for consistency.
(event_help, main): Updated.

2022-02-01 Werner Lemberg <wl@gnu.org>

src/ftgrid.c (grid_status_draw_outline): Enable embedded bitmaps.

Previously, bitmap-only fonts were displayed but bitmap strikes were not.

2022-01-30 Werner Lemberg <wl@gnu.org>

src/ftinspect/ftinspect.pro (PKGCONFIG, LIBS): Add 'librsvg'.

2022-01-28 Werner
Lemberg <wl@gnu.org>

* meson.build: We need 'librsvg' version 2.46.0 or newer.

Older versions don't have function `rsvg_handle_get_intrinsic_dimensions`.

2022-01-26 Werner Lemberg <wl@gnu.org>

* meson.build: Fix typo.

2022-01-25 Werner Lemberg <wl@gnu.org>

Use 'librsvg' conditionally.

* src/ftcommon.c, src/rsvg-port.c: Guard SVG code with `HAVE_LIBRSVG`.

2022-01-23 Werner Lemberg <wl@gnu.org>

* src/ftcommon.c (FTDemo_New): Update to recent FreeType change.

2022-01-23 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Reshuffle some headers.

* graph/grobjs.c, graph/grobjs.h, graph/win32/grwin32.c: Updated.

2022-01-20 Moazin Khatti <moazinkhatri@gmail.com>

Prototype SVG support.

* src/rsvg-port.c, src/rsvg-port.h: New files, providing SVG rendering hooks
using the 'librsvg' library.

* src/ftcommon.c: Include `FT_OTSVG_H` and `rsvg-port.h`.
(FTDemo_New): Set SVG renderer hooks.
(FTDemo_Glyph_To_Bitmap): Also accept SVG glyph format.

* Makefile:
Update for recent FreeType changes; the library's `configure`
script now tests for 'librsvg'.
(COMPILE): Updated to use `FT_DEMO_CFLAGS` for normal compilation, and
manually adding flags for 'librsvg' otherwise.
Update all users.
(LINK_LIBS): Updated to use `FT_DEMO_LDFLAGS` for normal compilation, and
manually adding flags for 'librsvg' otherwise.
(COMMON_OBJ): Updated
(rsvg-port): New rule.

* meson.build (librsvg_dep): New dependency.
(ftcommon_lib): Add `rsvg-port.*` files and update dependencies.

2022-01-16 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph/win32] Fix up the key event handling.

* graph/win32/grwin32.c (key_translators): Do not translate the keys
that Windows translates. We used to by-pass the system.
(gr_win32_surface_listen_event): Move custom translations from here...

(Message_Process): ... to here, which reduces the message posting.

2022-01-12 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftgrid] Use lighter gridlines to improve readability.

*
src/ftgrid.c (grid_status_colors, grid_status_alt_colors): Updated.

2022-01-11 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftgrid.c (write_header): Show page with glyph number or code.

2022-01-11 Werner Lemberg <wl@gnu.org>

Update all copyright notices.

2022-01-11 Werner Lemberg <wl@gnu.org>

* subprojects/libpng.wrap, subprojects/zlip.wrap: Update from upstream.

2022-01-09 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblblit.c (gblender_blit_init): Remove double dereferencing.

2022-01-08 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Fix negative pitch issues.

Some cropping issues were identified by forcing unusual negative
pitch in glyphs. This fixes those issues and removes some unused
fields.

* graph/gblblit.c (GBlenderBlitRec): Remove unused fields.
* graph/gblblit.c (graph/gblblit.c): Revise negative pitch code.
* graph/gblender.h (gblender_dump_stats): Remove macro semicolon.

2022-01-07 Werner Lemberg <wl@gnu.org>

* src/ftcommon.c
(icon_span): Fix undefined left-shift behaviour.

2022-01-07 Werner Lemberg <wl@gnu.org>

graph/grobjs.c (grFindColor): Fix undefined left-shift behaviour.

2022-01-01 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph/win32] Consolidate resizing calls.

Suggested by Dmitry Timoshkov.

* graph/win32/grwin32.c (gr_win32_surface_listen_event): Purge
obsolete WM_RESIZE.

2021-12-31 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/win32/grwin32.c: Logging and formatting clean-ups.

2021-12-31 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph/win32] Implement smooth resizing.

The window creation and the message loop has to be put in a separate
thread in order to achieve smooth resizing. Othrewise, the modal
loop cannot be interrupted to redraw the canvas. The main thread
also has a loop to receive the reposted messages, to update the
canvas and send WM_PAINT back via UpdateWindow. After this update
the win32 resizing feels similar to the X11 resizing.

*
graph/win32/grwin32.c (grWin32Surface): Store the host thread id.
(gr_win32_surface_init): Spin off `CreateWindow` from here...
(Window_ThreadProc): ... to here and run the window message loop.
(Message_Process): Updated to repost messages to the host thread.
(gr_win32_surface_listen_event): Run the host thread message loop.

2021-12-31 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/win32/grwin32.c (gr_win32_surface_init): Check allocations.

2021-12-31 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftcommon.c (FTDemo_Done): Flush stdout for mintty.

2021-12-31 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph/win32] Improve surface initialization.

* graph/win32/grwin32.c (gr_win32_surface_init): Allocate bitmaps by
calling `gr_win32_surface_resize`.

2021-12-11 Ben Wagner <bungeman@chromium.org>

[ftbench] Free stroker when done.

LeakSanitizer reported that the stroker object was being leaked.
Properly free it with FT_Stroker_Done. (!14)

* src/ftbench.c
(test_stroke): Free stroker.

2021-12-02 Werner Lemberg <wl@gnu.org>

* Version 2.11.1 released.
==========

Tag sources with 'VER-2-11-1'.

* README: Updated.
* meson.build: Updated.
* man/*.1: Updated.

* ChangeLog: Renamed to ...
* ChangeLog.old: ... this.

* Makefile (version_tag, CHANGELOG_SCRIPT): New variables.
(dist): Generate `ChangeLog` file with all commits since last release.

2021-11-30 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Minor clean-ups.

* graph/gblender.c (gblender_reset_key): Remove unnecessary masks.
* graph/gblany.h (*vrgb*, *vbgr*): Remove redundant casts.

2021-11-25 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/gblblit.c (gblender_blit_init): Remove dummy fallback.

2021-11-24 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/*.*: Remove legacy blitter ghosts.

2021-11-24 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Revise function arguments.

* graph/gblblit.c (grSetTargetGamma, grSetTargetPenBrush):
Input
surface instead of bitmap as more appropriate.
* graph/graph.h (grSetTargetGamma, grSetTargetPenBrush): Update
decarations.
* graph/grdevice.c, src/ftcommon.c, src/ftdiff.c: Update callers.

2021-11-22 Werner Lemberg <wl@gnu.org>

Whitespace, typos, other minor issues.

2021-11-22 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftview] Show empty charmaps if error, including UVS.

* src/ftcommon.c (get_last_char): Call `FT_Set_Charmap` and handle
its errors effectively setting `num_indices` to 0.
* src/ftview.c (event_index_change, event_encoding_change): Updated.

2021-11-22 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftdump.c (Print_Charmaps): Do not iterate UVS charmaps.

2021-11-20 Werner Lemberg <wl@gnu.org>

* graph/*: Fix clang compilation warnings.

Add casts for signed vs. unsigned issues.

2021-11-20 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftview] Report the last shown index or charcode.

Together with the index or charcode
limit, it gives a sense of the
portion of the font under review. This is reported at the bottom-
left corner.

* src/ftview.c (main): Pass the last shown index instead of error.
(Render_*): Return the last shown index, charcode, or -1.
(write_header): Receive and display the last shown index or charcode.

2021-11-18 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftcommon.c (get_last_char): Speed up sparse convergence.

2021-11-17 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftview] Report the last available index or charcode.

* src/ftcommon.c (get_last_char): Implement the binary search for
the last charcode using `FT_Get_Next_Char`.
(FTDemo_Set_Current_Font): Set the number of indices accordingly.
* src/ftview.c (write_header): Display the last charcode or index.

2021-11-17 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Complete removal of legacy blitter.

This switches the remaing monochrome rendering of headers to the main blender and deletes the
legacy blitter. The old blitter can handle
exotic target surfaces like monochrome or 4-bit bitmaps. Anything
beyond the alpha blender can do.

* graph/grfont.c (grWriteCellChar, grWriteCellString): Switch from
`grBlitGlyphToBitmap` to `grBlitGlyphToSurface`.
* graph/grblit.[ch]: Delete files.
* graph/graph.h, graph/grconfig.h: Remove references.
* graph/rules.mk, graph/meson.build, vms_make.com,
builds/windows/msvc/migs.vcxproj: Update build scripts.

2021-11-15 Werner Lemberg <wl@gnu.org>

* src/*: Fix clang warnings.

All of them are minor and belong to one of the following categories:

* signedness casts
* corrected `printf` signatures
* missing `static` keyword for local functions

2021-11-15 Werner Lemberg <wl@gnu.org>

[ftbench] Fix clang warnings.

* src/ftbench.c (first_index, last_index): Make these two global variables
signed, to be of the same type as `incr_index` (which can be positive or
negative).
Update all related code.

2021-11-15 Alexei Podtelezhnikov
<apodtele@gmail.com>

* graph/win32/grwin32.c (gr_win32_surface_set_icon): Add background.

2021-11-15 Alexei Podtelezhnikov <apodtele@gmail.com>

Minor.

2021-11-12 Alexei Podtelezhnikov <apodtele@gmail.com>

[builds/windows] Use `props` to share dependencies.

Merges !12 from @ubawurinna.

* builds/windows/msvc/ft2demos.props: Consolidate FreeType dependencies.
* builds/windows/msvc/*.vcxproj: Updated.

2021-10-31 Alexei Podtelezhnikov <apodtele@gmail.com>

[builds/windows] New project and solution files.

These files can be used to build selected FreeType demo programs
using Microsoft Visual C++. FreeType should be compiled in the
parallel folder with freetype.lib available in freetype\objs\
for compilation. The executables will be delivered into
freetype-demos\bin\ and expect freetype.dll there as well.

* builds/windows/msvc/ft2demos.sln: Solution file.
* builds/windows/msvc/*.vcxproj: Project files.

2021-10-26 Alexei Podtelezhnikov <apodtele@gmail.com>

*
Makefile: Remove obsolete rule.

2021-10-26 Alexei Podtelezhnikov <apodtele@gmail.com>

* Makefile: Reduce FT2_BUILD_FREETYPE usage

Public macro FT_FACE_DRIVER_NAME utilized in d01c79af9838 makes
FT2_BUILD_LIBRARY unnecassary in most cases.

* src/ftinspect/ftinspect.pro: Ditto.

2021-10-23 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/grblit.c (grBlitClean): Fix warnings.

2021-10-22 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/grblit.c (grGetSaturation, grBlitClean): Dead fixes.

2021-10-22 Alexei Podtelezhnikov <apodtele@gmail.com>

Minor.

2021-10-22 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/grblit.c (grGetSaturation): Fix return value.

2021-10-22 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Avoid unnecessary memory zeroing.

* graph/x11/grx11.c (gr_x11_surface_init): Call `malloc` explicitly.
* graph/grblit.c (grGetSaturation, grGetConversion): Call `malloc`
and `memset` explicitly even though this code is unused.

2021-10-18
Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/grdevice.c (grWriteSurface{Char,String}): Use GR_FONT_SIZE.

2021-10-18 Alexei Podtelezhnikov <apodtele@gmail.com>

[graph] Do not zero a new bitmap.

The `grNewBitmap` function is mostly used to allocate and resize
canvas, which is shortly flooded with a background color. There is
no need to zero it.

* graph/grobjs.c (grNewBitmap): Always call `realloc` directly,
which does not initialize the buffer.
* graph/grobjs.c (grNewBitmap): Update description.

2021-10-13 Hugh McMaster <hugh.mcmaster@outlook.com>

graph/x11/rules.mk: Use standard pkg-config variable naming

2021-10-13 Hugh McMaster <hugh.mcmaster@outlook.com>

graph/x11/rules.mk: Use pkg-config to find the X11 headers and library

2021-10-07 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftinspect/engine/engine.cpp: Include FT_MODULE_H.

Fixes #2.

2021-10-05 Jouk Jansen <joukj@hrem.stm.tudelft.nl>

* vms_make.com: Updated to include
more demos.

2021-10-03 Alexei Podtelezhnikov <apodtele@gmail.com>

Synchronize with FreeType.

* src/ftcommon.c (FTDemo_Hinting_Engine_Change, FTDemo_Get_Info):
Use new public `FT_FACE_DRIVER_NAME` macro.
* src/ftdump.c (Print_Type): Ditto.
* src/ftdiff.c (process_event, render_state_draw): Ditto.
* src/ftinspect/engine/engine.cpp (loadFont): Ditto.

2021-10-01 Jouk Jansen <joukj@hrem.stm.tudelft.nl>

* graph/grtypes.h [__VMS]: Accomodate non-compliant C99.

2021-10-01 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/win32/grwin32.c (gr_win32_device_init): Use neutral background.

2021-09-30 Jouk Jansen <joukj@hrem.stm.tudelft.nl>

* vms_make.com, src/mlgetopt.h [VMS]: Updated.

2021-09-30 Alexei Podtelezhnikov <apodtele@gmail.com>

* graph/grtypes.h: Don't give up on <stdint.h>.

2021-09-16 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftdump.c (Print_Name): Reformat font revision.

2021-09-10 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftdump.c
(Print_Name): Ignore negative pre-epoch time.

2021-09-09 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftdump.c (Print_Name): Avoid negative pre-epoch time.

2021-09-09 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftdump.c (Print_Programs, Print_Glyfs): Handle no-data glyphs.

2021-09-09 Alexei Podtelezhnikov <apodtele@gmail.com>

* src/ftdump.c (Print_Programs, Print_Glyfs): Generalize messages.

2021-08-26 Alexei Podtelezhnikov <apodtele@gmail.com>

[ftstring] Loop through a custom string if present.

* src/ftstring.c (Sample): Use the initial pointer for a custom string.
(parse_cmdline): Assing the pointer here if any.
(event_text_change): Loop through the pointer if set.
(main): Minor tweak.

2021-07-24 Werner Lemberg <wl@gnu.org>

* meson.build: Build `ttdebug`.

Problem reported by Andreas Radke <andreas.radke@mailbox.org>.

2021-07-24 Werner Lemberg <wl@gnu.org>

* meson.build: Sort executable rules.

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/ChangeLog
No license file was found, but licenses were detected in source scan.

```
/*
*  This is a cheap replacement for getopt() because that routine is not
*  available on some platforms and behaves differently on other platforms.
*  This code was written from scratch without looking at any other
*  implementation.
*
*  This code is hereby expressly placed in the public domain.
*  mleisher@crl.nmsu.edu (Mark Leisher)
*  10 October 1997
*
*  Last update 2019-06-10.
*/
```

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/src/mlgetopt.c
No license file was found, but licenses were detected in source scan.

```
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supporting documentation, and that the names of Stichting Mathematisch
```

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ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT
OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

**********/

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/mac/getargv.c
No license file was found, but licenses were detected in source scan.

/**********
*
* grwin32.c graphics driver for Win32 platform
*
* This is the driver for displaying inside a window under Win32,
* used by the graphics utility of the FreeType test suite.
*
* Written by Antoine Leca.
* Copyright (C) 1999-2023 by
* Antoine Leca, David Turner, Robert Wilhelm, and Werner Lemberg.
*
* Borrowing liberally from the other FreeType drivers.
*
* This file is part of the FreeType project, and may only be used
* modified and distributed under the terms of the FreeType project
* license, LICENSE.TXT. By continuing to use, modify or distribute
* this file you indicate that you have read the license and
* understand and accept it fully.
*
**********/

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/graph/win32/grwin32.c
No license file was found, but licenses were detected in source scan.

/**********
*
* grbeos.c graphics driver for BeOS platform. 0.1
*
* This is the driver for displaying inside a window under BeOS,

```
*  used by the graphics utility of the FreeType test suite.
*
*  Written by Michael Pfeiffer.
*  Copyright (C) 2001-2023 by
*  Michael Pfeiffer
*
*  This file is part of the FreeType project, and may only be used
*  modified and distributed under the terms of the FreeType project
*  license, LICENSE.TXT. By continuing to use, modify or distribute
*  this file you indicate that you have read the license and
*  understand and accept it fully.
*
*****************************************************************/
```

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/graph/beos/grbeos.cpp
No license file was found, but licenses were detected in source scan.

```
/*
*  This is a cheap replacement for getopt() because that routine is not
*  available on some platforms and behaves differently on other platforms.
*
*  This code is hereby expressly placed in the public domain.
*  mleisher@crl.nmsu.edu (Mark Leisher)
*  10 October 1997
*/
```

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/src/mlgetopt.h
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```
/*****************************************************************
*
*  grbatch.c  Batch processing driver.
*
*  This driver maintains the image in memory without displaying it,
*  used by the graphics utility of the FreeType test suite.
*
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*
*****************************************************************/
```

Found in path(s):
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```
/*
* This is an OpenSSL-compatible implementation of the RSA Data Security, Inc.
* MD5 Message-Digest Algorithm (RFC 1321).
*
* Homepage:
* http://openwall.info/wiki/people/solar/software/public-domain-source-code/md5
*
* Author:
* Alexander Peslyak, better known as Solar Designer <solar at openwall.com>
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* See md5.c for more information.
*/
```

Found
 in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/src/md5.h
No license file was found, but licenses were detected in source scan.

```
/*********************************************************************
*
*  grx11.h  graphics driver for X11 (header)
*
*  This is the driver for displaying inside a window under X11,
*  used by the graphics utility of the FreeType test suite.
*
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*
*****************************************************************/
```

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No license file was found, but licenses were detected in source scan.

```
/*****************************************************************
*
*  grmac.c  graphics driver for MacOS platform.
*
*  This is the driver for displaying inside a window under MacOS,
*  used by the graphics utility of the FreeType test suite.
*
*  Largely written by Just van Rossum, but derived from grwin32.c.
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*  David Turner, Robert Wilhelm, and Werner Lemberg.
*
*  Borrowing liberally from the other FreeType drivers.
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*
*****************************************************************/
```

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```
/*****************************************************************************
*
* rsvg-port.c
*
*   Librsvg-based hook functions for OT-SVG rendering in FreeType
*   (implementation).
*
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*/

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* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/src/rsvg-port.c
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No license file was found, but licenses were detected in source scan.

/***
*
* rsvg-port.h
*
*   Librsvg based hook functions for OT-SVG rendering in FreeType
*   (headers).
*
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*
*/

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/src/rsvg-port.h
No license file was found, but licenses were detected in source scan.

/*
* This is an OpenSSL-compatible implementation of the RSA Data Security, Inc.
* MD5 Message-Digest Algorithm (RFC 1321).
*
* Homepage:
* http://openwall.info/wiki/people/solar/software/public-domain-source-code/md5
*
* Author:
* Alexander Peslyak, better known as Solar Designer <solar at openwall.com>
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 *
* This differs from Colin Plumb's older public domain implementation in that
* no exactly 32-bit integer data type is required (any 32-bit or wider
* unsigned integer data type will do), there's no compile-time endianness
* configuration, and the function prototypes match OpenSSL's. No code from
* Colin Plumb's implementation has been reused; this comment merely compares
* the properties of the two independent implementations.
*
* The primary goals of this implementation are portability and ease of use.
* It is meant to be fast, but not as fast as possible. Some known
* optimizations are not included to reduce source code size and avoid
* compile-time configuration.
*/

Found in path(s):
* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/src/md5.c
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*
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*/

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* /freetype-2-13-2-dfsg-orig-ft2demos-tar-xz/ft2demos-2.13.2/graph/grswizzle.c

1.2155 usb-ids 2024.03.18-1

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1.2156 google-golang-org-genproto 0.0.0-20230410155749-daa745c078e1

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1.2159 tpm2-tss-tcti 4.0.1-7.1ubuntu5.1

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Version 3, 29 June 2007

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1.2168 google-cloud-go 0.115.0

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.34.1
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
```

```
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
```

```
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
```

```
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67,
```

```
0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64,
0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x33,
}
```

```
var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []interface{}{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v interface{}, i int)
interface{} {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
```

```
    return &v.sizeCache
   case 2:
    return &v.unknownFields
   default:
    return nil
   }
  }
 }
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []interface{}{}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
  GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
  RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
  NumEnums:      2,
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes:
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically
generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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```

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}
```

```
func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
```

```
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
```

```
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
```

```
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
```

```
 return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
```

```
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close();
 err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v",
 "project", url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if
err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
```

```
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds
= append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.License{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return
err
 }

 return nil
```

```
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return
err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
```

```
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery
= params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if
err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
```

```
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req
 *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v",
 req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
```

```
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if
err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
```

```
  }
  it.Response = resp
  return resp.GetItems(), resp.GetNextPageToken(), nil
 }

 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
```

```
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource
 is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
```

```
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
```

```
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return
nil, e
}
return resp, nil
}
```

1.2169 logsave 1.46.5-2ubuntu1.2

1.2169.1 Available under license :

This package was added to the e2fsprogs debian source package by
Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

http://sourceforge.net/projects/e2fsprogs

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This is the Debian GNU/Linux prepackaged version of the static EXT2
file system consistency checker (e2fsck.static). The EXT2 utilities
were written by Theodore Ts'o <tytso@mit.edu> and Remy Card
<card@masi.ibp.fr>.

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```
#
# This is a Makefile stub which handles the creation of BSD shared
# libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
 @echo " MKDIR pic"
 @mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:  $(BSD_LIB)

$(BSD_LIB): $(OBJS)
 (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
 $(MV) pic/$(BSD_LIB) .
 $(RM) -f ../$(BSD_LIB)
 (cd ..; $(LN) $(LINK_BUILD_FLAGS) \
  `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
```

```
 @echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
 @$(INSTALL_PROGRAM) $(BSD_LIB) \
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
 @-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
 $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
 $(RM)
 -rf pic
 $(RM) -f $(BSD_LIB)
 $(RM) -f ../$(BSD_LIB)
```

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This is the Debian GNU/Linux prepackaged version of the translation
files of the EXT2 file system utilities. The EXT2 utilities were
written by Theodore Ts'o <tytso@mit.edu> and Remy Card
<card@masi.ibp.fr>.

Sources were obtained from http://sourceforge.net/projects/e2fsprogs

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This package was added to the e2fsprogs debian source package by Theodore Ts'o <tytso@mit.edu> on Fri Dec 14 22:24:35 EST 2007

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```
Index: tdbsa/tdb.c
===================================================================
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/
 /*
-   Unix SMB/CIFS implementation.
+   trivial database library - standalone version

-   trivial database library - private includes
-
-   Copyright (C) Andrew Tridgell            2005
+   Copyright (C) Andrew Tridgell            1999-2005
+   Copyright (C) Jeremy Allison             2000-2006
+   Copyright (C) Paul `Rusty' Russell       2000

    ** NOTE! The following LGPL license applies to the tdb
    ** library. This does NOT imply that all of Samba is released
```

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Gadi Oxman, August 1995

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`Gnomovision' (which makes passes at compilers) written by James Hacker.

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Theodore Ts'o
23-June-2007

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```
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This package was put together by Yann Dirson <dirson@debian.org>,
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1.2170 libext2fs2 1.46.5-2ubuntu1.2

1.2170.1 Available under license :

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This is the Debian GNU/Linux prepackaged version of the static EXT2
file system consistency checker (e2fsck.static). The EXT2 utilities
were written by Theodore Ts'o <tytso@mit.edu> and Remy Card
<card@masi.ibp.fr>.

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#
# This is a Makefile stub which handles the creation of BSD shared
# libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
 @echo " MKDIR pic"
 @mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:  $(BSD_LIB)

$(BSD_LIB): $(OBJS)
 (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
 $(MV) pic/$(BSD_LIB) .
 $(RM) -f ../$(BSD_LIB)
 (cd ..; $(LN) $(LINK_BUILD_FLAGS) \
  `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
 @echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
```

```
 @$(INSTALL_PROGRAM) $(BSD_LIB) \
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
 @-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
 $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
 $(RM)
 -rf pic
 $(RM) -f $(BSD_LIB)
 $(RM) -f ../$(BSD_LIB)
```

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files of the EXT2 file system utilities. The EXT2 utilities were
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```
Index: tdbsa/tdb.c
===================================================================
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/
 /*
-   Unix SMB/CIFS implementation.
+   trivial database library - standalone version

-   trivial database library - private includes
-
-   Copyright (C) Andrew Tridgell            2005
+   Copyright (C) Andrew Tridgell            1999-2005
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    ** NOTE! The following LGPL license applies to the tdb
    ** library. This does NOT imply that all of Samba is released
```

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Gadi Oxman, August 1995

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Theodore Ts'o
23-June-2007

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That's all there is to it!
This is the Debian GNU/Linux prepackaged version of the EXT2 file
system utilities (e2fsck, mke2fs, etc.). The EXT2 utilities were
written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

Sources were obtained from http://sourceforge.net/projects/e2fsprogs

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Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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This is the Debian GNU/Linux prepackaged version of the ss
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This package was put together by Yann Dirson <dirson@debian.org>,
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1.2171 libss 1.46.5-2ubuntu1.2

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This is the Debian GNU/Linux prepackaged version of the static EXT2
file system consistency checker (e2fsck.static). The EXT2 utilities
were written by Theodore Ts'o <tytso@mit.edu> and Remy Card
<card@masi.ibp.fr>.

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#
# This is a Makefile stub which handles the creation of BSD shared
# libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
 @echo " MKDIR pic"
 @mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:  $(BSD_LIB)

$(BSD_LIB): $(OBJS)
 (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
 $(MV) pic/$(BSD_LIB) .
 $(RM) -f ../$(BSD_LIB)
 (cd ..; $(LN) $(LINK_BUILD_FLAGS) \
  `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
 @echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
 @$(INSTALL_PROGRAM) $(BSD_LIB) \
```

```
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
 @-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
 $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
 $(RM)
 -rf pic
 $(RM) -f $(BSD_LIB)
 $(RM) -f ../$(BSD_LIB)
```

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files of the EXT2 file system utilities. The EXT2 utilities were
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```
Index: tdbsa/tdb.c
===================================================================
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/
 /*
-   Unix SMB/CIFS implementation.
+   trivial database library - standalone version

-   trivial database library - private includes
-
-   Copyright (C) Andrew Tridgell            2005
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    ** NOTE! The following LGPL license applies to the tdb
    ** library. This does NOT imply that all of Samba is released
```

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Gadi Oxman, August 1995

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Theodore Ts'o
23-June-2007

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That's all there is to it!
This is the Debian GNU/Linux prepackaged version of the EXT2 file
system utilities (e2fsck, mke2fs, etc.). The EXT2 utilities were
written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

Sources were obtained from http://sourceforge.net/projects/e2fsprogs

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Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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This package was put together by Yann Dirson <dirson@debian.org>,
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1.2172 libcom-err 1.46.5-2ubuntu1.2

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This is the Debian GNU/Linux prepackaged version of the static EXT2
file system consistency checker (e2fsck.static). The EXT2 utilities
were written by Theodore Ts'o <tytso@mit.edu> and Remy Card
<card@masi.ibp.fr>.

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#
# This is a Makefile stub which handles the creation of BSD shared
# libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
 @echo " MKDIR pic"
 @mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:  $(BSD_LIB)

$(BSD_LIB): $(OBJS)
 (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
 $(MV) pic/$(BSD_LIB) .
 $(RM) -f ../$(BSD_LIB)
 (cd ..; $(LN) $(LINK_BUILD_FLAGS) \
  `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
 @echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
 @$(INSTALL_PROGRAM) $(BSD_LIB) \
```

```
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
 @-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
 $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
 $(RM)
 -rf pic
 $(RM) -f $(BSD_LIB)
 $(RM) -f ../$(BSD_LIB)
```

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files of the EXT2 file system utilities. The EXT2 utilities were
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```
Index: tdbsa/tdb.c
===================================================================
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/
 /*
-   Unix SMB/CIFS implementation.
+   trivial database library - standalone version

-   trivial database library - private includes
-
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Gadi Oxman, August 1995

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That's all there is to it!
This is the Debian GNU/Linux prepackaged version of the EXT2 file
system utilities (e2fsck, mke2fs, etc.). The EXT2 utilities were
written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

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This package was added to the e2fsprogs debian source package by
Theodore Ts'o <tytso@mit.edu> on Sat Mar 15 15:33:37 EST 2003

It is part of the main e2fsprogs distribution, which can be found at:

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1.2173 python 3.10.6-1~22.04.1

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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1.2174 protoc-gen-validate 1.1.0

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1.2175 cpuid 2.2.5

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1.2176 httprouter 1.3.0

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1.2177 armon-go-metrics 0.3.10

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1.2178 reflectwalk 1.0.2

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1.2181 go-syslog 1.0.0

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1.2182 protobuf 1.30.0

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1.2184 go-rootcerts 1.0.2

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1.2185 go-msgpack 0.5.5

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1.2186 mitchellh-mapstructure 1.4.1

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1.2193 gax-go 2.13.0

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1.2200 libpkit 0.25.3-4ubuntu2.1

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```
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===================================================================
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/
 /*
-   Unix SMB/CIFS implementation.
+   trivial database library - standalone version

-   trivial database library - private includes
-
-   Copyright (C) Andrew Tridgell             2005
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```
#
# This is a Makefile stub which handles the creation of BSD shared
# libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
 @echo " MKDIR pic"
 @mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:  $(BSD_LIB)

$(BSD_LIB): $(OBJS)
 (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
 $(MV) pic/$(BSD_LIB) .
 $(RM) -f ../$(BSD_LIB)
 (cd ..; $(LN) $(LINK_BUILD_FLAGS) \
  `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
 @echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
 @$(INSTALL_PROGRAM) $(BSD_LIB) \
```

```
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
 @-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
 $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
 $(RM)
 -rf pic
 $(RM) -f $(BSD_LIB)
 $(RM) -f ../$(BSD_LIB)
```

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1.2205 xid 1.6.0

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1.2206 ansi-regex 6.1.0

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1.2207 send 0.19.0

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1.2208 go-toml 2.2.3

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@@ -4,11 +4,11 @@ Rev: 23371
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*/
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Theodore Ts'o
23-June-2007

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That's all there is to it!
#
# This is a Makefile stub which handles the creation of BSD shared
# libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
 @echo " MKDIR pic"
 @mkdir -p pic
```

```
BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:  $(BSD_LIB)

$(BSD_LIB): $(OBJS)
 (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
 $(MV) pic/$(BSD_LIB) .
 $(RM) -f ../$(BSD_LIB)
 (cd ..; $(LN) $(LINK_BUILD_FLAGS) \
  `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
 @echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
 @$(INSTALL_PROGRAM) $(BSD_LIB) \
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
 @-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
 $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
 $(RM)
 -rf pic
 $(RM) -f $(BSD_LIB)
 $(RM) -f ../$(BSD_LIB)
```

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1.2220 libss 1.47.0-2.4~exp1ubuntu4.1

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```
Index: tdbsa/tdb.c
===================================================================
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/
 /*
-   Unix SMB/CIFS implementation.
+   trivial database library - standalone version

-   trivial database library - private includes
-
-   Copyright (C) Andrew Tridgell            2005
+   Copyright (C) Andrew Tridgell            1999-2005
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    ** NOTE! The following LGPL license applies to the tdb
    ** library. This does NOT imply that all of Samba is released
Format: https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/
Upstream-Name: e2fsprogs
Upstream-Contact: Theodore Ts'o <tytso@mit.edu>
Source: http://sourceforge.net/projects/e2fsprogs
Comment:
This is the Debian GNU/Linux prepackaged version of the EXT2 file
system utilities (e2fsck, mke2fs, etc.).  The EXT2 utilities were
written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

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debugfs/do_journal.c
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Theodore Ts'o
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That's all there is to it!
#
# This is a Makefile stub which handles the creation of BSD shared
# libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
 @echo " MKDIR pic"
 @mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:  $(BSD_LIB)

$(BSD_LIB): $(OBJS)
```

```
 (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
 $(MV) pic/$(BSD_LIB) .
 $(RM) -f ../$(BSD_LIB)
 (cd ..; $(LN) $(LINK_BUILD_FLAGS) \
  `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
 @echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
 @$(INSTALL_PROGRAM) $(BSD_LIB) \
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
 @-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
 $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
 $(RM)
 -rf pic
 $(RM) -f $(BSD_LIB)
 $(RM) -f ../$(BSD_LIB)
```

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1.2221 libdbus 1.14.10-4ubuntu4.1

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==========
--- tdbsa.orig/tdb.c
+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/

```
 /*
-   Unix SMB/CIFS implementation.
+   trivial database library - standalone version

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library `Frob' (a library for tweaking knobs) written by James Random Hacker.

```
 <signature of Ty Coon>, 1 April 1990
 Ty Coon, President of Vice

That's all there is to it!
#
# This is a Makefile stub which handles the creation of BSD shared
# libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
 @echo " MKDIR pic"
 @mkdir -p pic

BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:  $(BSD_LIB)

$(BSD_LIB): $(OBJS)
 (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
 $(MV) pic/$(BSD_LIB) .
 $(RM) -f ../$(BSD_LIB)
 (cd ..; $(LN) $(LINK_BUILD_FLAGS) \
  `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
 @echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
 @$(INSTALL_PROGRAM) $(BSD_LIB) \
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
 @-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
 $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
```

$(RM)
-rf pic
$(RM) -f $(BSD_LIB)
$(RM) -f ../$(BSD_LIB)
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+++ tdbsa/tdb.c
@@ -4,11 +4,11 @@ Rev: 23371
Last Changed Date: 2007-06-06 20:14:06 -0400 (Wed, 06 Jun 2007)
*/
 /*
-   Unix SMB/CIFS implementation.
+   trivial database library - standalone version

-   trivial database library - private includes
-
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Comment:
This is the Debian GNU/Linux prepackaged version of the EXT2 file
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Theodore Ts'o
23-June-2007

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"Source code" for a work means the preferred form of the work for
making modifications to it. For a library, complete source code means
all the source code for all modules it contains, plus any associated
interface definition files, plus the scripts used to control compilation
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d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those

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and every part regardless of who wrote
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Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled

to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library,
or if the work is itself a library. The
threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that
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b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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that part of it is a work based on the Library, and explaining
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To apply these terms, attach the following notices to the library. It is
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"copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>

```
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You should also get your employer (if you work as a programmer) or your
school, if any, to sign a "copyright disclaimer" for the library, if
necessary.  Here is a sample; alter the names:

 Yoyodyne, Inc., hereby disclaims all copyright interest in the
 library `Frob' (a library for tweaking knobs) written by James Random Hacker.

 <signature of Ty Coon>, 1 April 1990
 Ty Coon, President of Vice

That's all there is to it!
#
# This is a Makefile stub which handles the creation of BSD shared
# libraries.
#
# In order to use this stub, the following makefile variables must be defined.
#
# BSDLIB_VERSION = 1.0
# BSDLIB_IMAGE = libce
# BSDLIB_MYDIR = et
# BSDLIB_INSTALL_DIR = $(SHLIBDIR)
#

all:: image

real-subdirs:: Makefile
 @echo " MKDIR pic"
 @mkdir -p pic
```

```
BSD_LIB = $(BSDLIB_IMAGE).so.$(BSDLIB_VERSION)
BSDLIB_PIC_FLAG = -fpic

image:  $(BSD_LIB)

$(BSD_LIB): $(OBJS)
 (cd pic; ld -Bshareable -o $(BSD_LIB) $(LDFLAGS_SHLIB) $(OBJS))
 $(MV) pic/$(BSD_LIB) .
 $(RM) -f ../$(BSD_LIB)
 (cd ..; $(LN) $(LINK_BUILD_FLAGS) \
  `echo $(my_dir) | sed -e 's;lib/;;'`/$(BSD_LIB) $(BSD_LIB))

install-shlibs install:: $(BSD_LIB)
 @echo " INSTALL_PROGRAM $(BSDLIB_INSTALL_DIR)/$(BSD_LIB)"
 @$(INSTALL_PROGRAM) $(BSD_LIB) \
  $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)
 @-$(LDCONFIG)

install-strip: install

install-shlibs-strip:: install-shlibs

uninstall-shlibs uninstall::
 $(RM) -f $(DESTDIR)$(BSDLIB_INSTALL_DIR)/$(BSD_LIB)

clean::
 $(RM)
 -rf pic
 $(RM) -f $(BSD_LIB)
 $(RM) -f ../$(BSD_LIB)
```

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1.2226 apparmor 3.0.4-2ubuntu2.4

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For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use
the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

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0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

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2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no

charge to all third parties under the terms of this License.

d) If a facility in the modified
Library refers to a function or a
table of data to be supplied by an application program that uses
the facility, other than as an argument passed when the facility
is invoked, then you must make a good faith effort to ensure that,
in the event an application does not supply such function or
table, the facility still operates, and performs whatever part of
its purpose remains meaningful.

(For example, a function in a library to compute square roots has
a purpose that is entirely well-defined independent of the
application. Therefore, Subsection 2d requires that any
application-supplied function or table used by this function must
be optional: if the application does not supply it, the square
root function must still compute square roots.)

These requirements apply to the modified work as a whole. If
identifiable sections of that work are not derived from the Library,
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Thus, it is not the intent of this section to claim rights or contest
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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed
under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this
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When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

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1.2228 x-net 0.28.0

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1.2230 openipmi 2.0.29-0.1ubuntu6

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1.2232 prometheus-client 1.20.4

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1.2233 metrics-logback 4.2.23

1.2233.1 Available under license :

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.logback
Build-Jdk-Spec: 17
Bundle-Description: An instrumented appender for Logback.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Logback
Bundle-SymbolicName: io.dropwizard.metrics.logback
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9

Export-Package: com.codahale.metrics.logback;uses:="ch.qos.logback.cla
ssic.spi,ch.qos.logback.core,com.codahale.metrics";version="4.2.23"
Implementation-Title: Metrics Integration for Logback
Implementation-Version: 4.2.23
Import-Package: ch.qos.logback.classic;version="[1.2,2)",ch.qos.logbac
k.classic.spi;version="[1.2,2)",ch.qos.logback.core;version="[1.2,2)"
,com.codahale.metrics;version="[4.2,5)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
*
 /metrics-logback-4-2-23-jar/META-INF/MANIFEST.MF

1.2234 metrics-caffeine 4.2.23

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.caffeine
Build-Jdk-Spec: 17
Bundle-Description: Metrics Integration for Caffeine 2.x.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Caffeine 2.x
Bundle-SymbolicName: io.dropwizard.metrics.caffeine
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.caffeine;uses:="com.codahale.metr
ics,com.github.benmanes.caffeine.cache,com.github.benmanes.caffeine.c
ache.stats,org.checkerframework.checker.index.qual";version="4.2.23"
Implementation-Title: Metrics Integration for Caffeine 2.x
Implementation-Version: 4.2.23
Import-Package: com.codahale.metrics;version="[4.2,5)",com.github.benm
anes.caffeine.cache;version="[2.9,3)",com.github.benmanes.caffeine.ca
che.stats;version="[2.9,3)",org.checkerframework.checker.index.qual;v
ersion="[3.41,4)"
Require-Capability:
 osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-caffeine-4-2-23-jar/META-INF/MANIFEST.MF

1.2235 metrics-jetty 4.2.23

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jetty9
Build-Jdk-Spec: 17
Bundle-Description: A set of extensions for Jetty 9.3 and higher which
 provide instrumentation of thread pools, connector        metrics, a
nd application latency and utilization.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Jetty 9.3 and higher
Bundle-SymbolicName: io.dropwizard.metrics.jetty9
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.jetty9;uses:="com.codahale.metric
s,com.codahale.metrics.annotation,javax.servlet,javax.servlet.http,or
g.eclipse.jetty.io,org.eclipse.jetty.server,org.eclipse.jetty.server.
handler,org.eclipse.jetty.util.annotation,org.eclipse.jetty.util.comp
onent,org.eclipse.jetty.util.thread";version="4.2.23"
Implementation-Title: Metrics Integration for Jetty
 9.3 and higher
Implementation-Version: 4.2.23
Import-Package: javax.servlet;version="[2.5.0,4.0.0)",javax.servlet.ht
tp;version="[2.5.0,4.0.0)",com.codahale.metrics;version="[4.2,5)",com
.codahale.metrics.annotation;version="[4.2,5)",org.eclipse.jetty.http
;version="[9.4,10)",org.eclipse.jetty.io;version="[9.4,10)",org.eclip
se.jetty.server;version="[9.4,10)",org.eclipse.jetty.server.handler;v
ersion="[9.4,10)",org.eclipse.jetty.util.annotation;version="[9.4,10)
",org.eclipse.jetty.util.component;version="[9.4,10)",org.eclipse.jet
ty.util.thread;version="[9.4,10)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316
```

Found in path(s):
* /metrics-jetty9-4-2-23-jar/META-INF/MANIFEST.MF

1.2236 metrics-jersey2 4.2.23

1.2236.1 Available under license :

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```
Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.jersey2
```

Build-Jdk-Spec: 17
Bundle-Description: A set of class providing Metrics integration for J
ersey, the reference JAX-RS implementation.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Integration for Jersey 2.x
Bundle-SymbolicName: io.dropwizard.metrics.jersey2
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.jersey2;uses:="com.codahale.metri
cs,javax.ws.rs.core,javax.ws.rs.ext,org.glassfish.jersey.server.model
,org.glassfish.jersey.server.monitoring";version="4.2.23"
Implementation-Title: Metrics Integration for Jersey 2.x
Implementation-Version: 4.2.23
Import-Package: com.codahale.metrics;version="[4.2,5)",com.codahale.me
trics.annotation;version="[4.2,5)",javax.ws.rs.core;version="[2.1,3)"
,javax.ws.rs.ext;version="[2.1,3)",org.glassfish.jersey.server;versio
n="[2.41,3)",org.glassfish.jersey.server.model;version="[2.41,3)",org
.glassfish.jersey.server.monitoring;version="[2.41,3)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /metrics-jersey2-4-2-23-jar/META-INF/MANIFEST.MF

1.2237 metrics-servlets 4.2.23

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Manifest-Version: 1.0
Automatic-Module-Name: com.codahale.metrics.servlets
Build-Jdk-Spec: 17
Bundle-Description: A set of utility servlets for Metrics, allowing yo
u to expose valuable information about your production environ
ment.
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html
Bundle-ManifestVersion: 2
Bundle-Name: Metrics Utility Servlets
Bundle-SymbolicName: io.dropwizard.metrics.servlets
Bundle-Version: 4.2.23
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: com.codahale.metrics.servlets;uses:="com.codahale.metr
ics,com.codahale.metrics.health,com.fasterxml.jackson.databind,javax.
servlet,javax.servlet.http";version="4.2.23"
Implementation-Title: Metrics Utility Servlets
Implementation-Version: 4.2.23

Import-Package: javax.servlet;version="[2.5.0,4.0.0)",javax.servlet.ht
tp;version="[2.5.0,4.0.0)",com.codahale.metrics;version="[4.2,5)",com
.codahale.metrics.health;version="[4.2,5)",com.codahale.metrics.json;
 version="[4.2,5)",com.codahale.metrics.jvm;version="[4.2,5)",com.fast
erxml.jackson.databind;version="[2.12,3)",com.fasterxml.jackson.datab
ind.util;version="[2.12,3)",com.papertrail.profiler;version="[1.1,2)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316

Found in path(s):
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1.2238 body-parser 1.20.3

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1.2239 serve-static 1.16.2

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Name: badpaletteentry
Columns: 4
#
0 0 0 Index 3

65 38
103 62 49 Index 6
79 73 72 Index 7
114 101 97 Index 8
208 127 100 Index 9
151 144 142 Index 10
221 207 199 Index 11
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==========

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Name: Test
Columns: 0
#
GIMP Palette
Name: badpalettefile
Columns: 4
#
 0 0 0 Index 3
0123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
34567890123456789
103 62 49 Index 6
79 73 72 Index 7
114 101 97 Index 8
208 127 100 Index 9
151 144 142 Index 10
221 207 199 Index 11
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Julian Seward, jseward@acm.org
bzip2/libbzip2 version 1.0.8 of 13 July 2019

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Name: custompalette
Columns: 4
#
 0 0 0 Index 3
65 38 30 Index 4
103 62 49 Index 6
79 73 72 Index 7
114 101 97 Index 8
208 127 100 Index 9
151 144 142 Index 10
221 207 199 Index 11
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When a "work that uses the Library" uses material from a header file

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b) Use a suitable shared library mechanism for linking with the

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1.2247 hwdata 0.379-1

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## Commands to generate dependency files
GEN_DEPS.c= $(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc= $(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE= -Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic

## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation
```

```
 rules
%.$(STATIC_O): $(srcdir)/%.c
 $(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
 $(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
 $(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
 $(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<


## Dependency rules
%.d: $(srcdir)/%.c
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.c) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

%.d: $(srcdir)/%.cpp
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.cc) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

## Versioned libraries rules

%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)
 $(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)
 $(RM) $@ && ln -s ${*F}.$(SO).$(SO_TARGET_VERSION) $@

##  Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

## End BSD-specific setup
```

1.2249 ieee-data 20220827.1

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1.2250 python-setuptools 68.1.2-2ubuntu1.1

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2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
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In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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A. HISTORY OF THE SOFTWARE
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Python was created in the early 1990s by Guido van Rossum at Stichting
Mathematisch Centrum (CWI, see https://www.cwi.nl) in the Netherlands

as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see https://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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Thanks to the many outside volunteers who have worked under Guido's
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1.2253 grafana-pyroscope-go-godeltaprof 0.1.8

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1.2254 c2h5oh-datasize 0.0.0-20231215233829-aa82cc1e6500

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/go-dnscollector-1-0-0-linux-amd64-tar-gz/go-dnscollector: binary file matches

Found in path(s):
* /bin/grep

1.2255 netcat 1.10-48

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1.2256 dbus-daemon 1.14.10-4ubuntu4.1

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1.2257 libicu74 74.2-1ubuntu3.1

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```
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## Commands to generate dependency files
GEN_DEPS.c= $(CC) -E -MM $(DEFS) $(CPPFLAGS)
GEN_DEPS.cc= $(CXX) -E -MM $(DEFS) $(CPPFLAGS)

## Flags for position independent code
SHAREDLIBCFLAGS = -fPIC
SHAREDLIBCXXFLAGS = -fPIC
SHAREDLIBCPPFLAGS = -DPIC

## Additional flags when building libraries and with threads
THREADSCPPFLAGS = -D_REENTRANT
LIBCPPFLAGS =

## Compiler switch to embed a runtime search path
LD_RPATH=
LD_RPATH_PRE= -Wl,-rpath,

## Compiler switch to embed a library name
LD_SONAME = -Wl,-soname -Wl,$(notdir $(MIDDLE_SO_TARGET))

## Shared library options
LD_SOOPTIONS= -Wl,-Bsymbolic

## Shared object suffix
SO = so
## Non-shared intermediate object suffix
STATIC_O = ao

## Compilation
 rules
%.$(STATIC_O): $(srcdir)/%.c
 $(COMPILE.c) $(STATICCPPFLAGS) $(STATICCFLAGS) -o $@ $<
%.o: $(srcdir)/%.c
 $(COMPILE.c) $(DYNAMICCPPFLAGS) $(DYNAMICCFLAGS) -o $@ $<

%.$(STATIC_O): $(srcdir)/%.cpp
 $(COMPILE.cc) $(STATICCPPFLAGS) $(STATICCXXFLAGS) -o $@ $<
%.o: $(srcdir)/%.cpp
 $(COMPILE.cc) $(DYNAMICCPPFLAGS) $(DYNAMICCXXFLAGS) -o $@ $<
```

```
## Dependency rules
%.d: $(srcdir)/%.c
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.c) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

%.d: $(srcdir)/%.cpp
 @echo "generating dependency information for $<"
 @$(SHELL) -ec '$(GEN_DEPS.cc) $< \
  | sed '\"s/\($*\)\.o[ :]*/\1.o $@ : /g'\" > $@; \
  [ -s $@ ] || rm -f $@'

## Versioned libraries rules

%.$(SO).$(SO_TARGET_VERSION_MAJOR): %.$(SO).$(SO_TARGET_VERSION)
 $(RM) $@ && ln -s ${<F} $@
%.$(SO): %.$(SO).$(SO_TARGET_VERSION_MAJOR)
 $(RM) $@ && ln -s ${*F}.$(SO).$(SO_TARGET_VERSION) $@

##  Bind internal references

# LDflags that pkgdata will use
BIR_LDFLAGS= -Wl,-Bsymbolic

# Dependencies [i.e. map files] for the final library
BIR_DEPS=

## Remove shared library 's'
STATIC_PREFIX_WHEN_USED =
STATIC_PREFIX =

## End BSD-specific setup
```

1.2258 libjson-c5 0.17-1build1

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1.2259 dbus-system-bus-common 1.14.10-4ubuntu4.1

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1.2262 dbus-bin 1.14.10-4ubuntu4.1

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Building

```shell
make build_tools
```

Running

The simplest way to run the verification tool is to execute

```shell
telegraf$ ./tools/license_checker/license_checker
```

using the current directory as telegraf's root directory and verifies
all licenses. Only errors will be reported by default.

There are multiple options you can use to customize the verification.
Take a look at

```shell
telegraf$ ./tools/license_checker/license_checker --help
```

to get an overview.

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link to the latest license text the classification might not match
the actual license of our used dependency. Furthermore, some license
text might be wrongly classified, or not classified at all. In these
cases, you can use a _whitelist_ to explicitly state the license
SPDX classifier for those packages.
See the [whitelist section](#whitelist) for more details.

The recommended use in telegraf is to run

```shell
telegraf$ ./tools/license_checker/license_checker \
        -whitelist ./tools/license_checker/data/whitelist
```

using the code-versioned whitelist. This command will report all
non-matching entries with an `ERR:` prefix.

Whitelist

Whitelist entries contain explicit license information for
a set of packages to use instead of classification. Each entry
in the whitelist is a line of the form

```text
[comparison operator]<package name>[@vX.Y.Z] <license SPDX>
```

where the _comparison operator_ is one of
`>`, `>=`, `=`, `<=` or `<`
and the _license SPDX_ is a [SPDX license identifier][spdx].
In case no package version is specified, the entry matches all versions
of the library. Furthermore, the comparison operator can be omitted
which is equivalent to an exact match (`=`).

The entries are processed in order until the first match is found.

Here is an example of a whitelist. Assume that you have library
`github.com/foo/bar` which started out with the `MIT` license
until version 1.0.0 where it changed to `EFL-1.0` until it again
changed to `EFL-2.0` starting __after__ version 2.3.0. In this case
the whitelist should look like this

```text
<github.com/foo/bar@v1.0.0 MIT
<=github.com/foo/bar@v2.3.0 EFL-1.0
github.com/foo/bar EFL-2.0
```

All versions below 1.0.0 are matched by the first line and are thus
classified as `MIT`. The second line matches everything that is
above 1.0.0 (thus not matched by the first line) until (and including)
2.3.0. The last line with catch everything that was
passing the first
two lines i.e. everything after 2.3.0.

```
[spdx]: https://spdx.org/licenses/
package main

import (
 "bufio"
 "log"
 "os"
 "regexp"
 "strings"

 "github.com/coreos/go-semver/semver"
)

type whitelist []whitelistEntry

type whitelistEntry struct {
 Name     string
 Version  *semver.Version
 Operator string
 License  string
}

var re = regexp.MustCompile(`^([<=>]+\s*)?([-\.\/\w]+)(@v[\d\.]+)?\s+([-\.\w]+)$`)

func (w *whitelist) Parse(filename string) error {
 file, err := os.Open(filename)
 if err != nil {
  return err
 }
 defer file.Close()

 // Read file line-by-line and split by semicolon
 lineno := 0
 scanner := bufio.NewScanner(file)
 for scanner.Scan() {
  line := strings.TrimSpace(scanner.Text())
  lineno++
  if strings.HasPrefix(line, "#") {
   // Comment
   continue
  }

  groups := re.FindAllStringSubmatch(line, -1)
  if len(groups) != 1 {
   log.Printf("WARN: Ignoring not matching entry in line %d", lineno)
   continue
  }
```

```
 group := groups[0]
 if len(group) != 5 {
  // Malformed
  log.Printf("WARN: Ignoring malformed entry in line %d", lineno)
  continue
 }

 //
An entry has the form:
 // [operator]<package name>[@version] [license SPDX]
 var operator, version string
 if group[1] != "" {
  operator = strings.TrimSpace(group[1])
 }
 name := group[2]
 if group[3] != "" {
  version = strings.TrimSpace(group[3])
  version = strings.TrimLeft(version, "@v")
 }
 license := strings.TrimSpace(group[4])

 entry := whitelistEntry{Name: name, License: license, Operator: operator}
 if version != "" {
  entry.Version, err = semver.NewVersion(version)
  if err != nil {
   // Malformed
   log.Printf("Ignoring malformed version in line %d: %v", lineno, err)
   continue
  }
  if entry.Operator == "" {
   entry.Operator = "="
  }
 }
 *w = append(*w, entry)
}

return scanner.Err()
}

func (w *whitelist) Check(pkg, version, spdx string) (ok, found bool) {
 v := strings.TrimSpace(version)
 v = strings.TrimPrefix(v, "v")
 if v == "" {
  return false, false
 }
 pkgver := *semver.New(v)

 for _, entry := range *w {
```

```
 if entry.Name
!= pkg {
  continue
 }

 var match bool
 switch entry.Operator {
 case "":
  match = true
 case "=":
  match = pkgver.Equal(*entry.Version)
 case "<":
  match = pkgver.LessThan(*entry.Version)
 case "<=":
  match = pkgver.LessThan(*entry.Version) || pkgver.Equal(*entry.Version)
 case ">":
  match = !(pkgver.LessThan(*entry.Version) || pkgver.Equal(*entry.Version))
 case ">=":
  match = !pkgver.LessThan(*entry.Version)
 }
 if match {
  return entry.License == spdx, true
 }
}

return false, false
}
package main

import (
 "errors"
 "fmt"
 "io"
 "net/http"
 "net/url"
 "strings"

 "github.com/google/licensecheck"
)

type packageInfo struct {
 name    string
 version string
 license string
 url     string
 spdx    string
}
```

```
func (pkg *packageInfo) ToSPDX() {
 pkg.spdx = nameToSPDX[pkg.license]
}

func (pkg *packageInfo) Classify() (float64, error) {
 // Check for a valid SPDX
 if pkg.spdx == "" {
  return 0.0, fmt.Errorf("empty SPDX for license %q", pkg.license)
 }

 // Download the license text
 source, err := normalizeURL(pkg.url)
 if err != nil {
  return 0.0, fmt.Errorf("%q is not a valid URL: %w", pkg.url, err)
 }
 debugf("%q downloading from %q", pkg.name, source)

 response, err := http.Get(source.String())
 if err != nil {
  return 0.0, fmt.Errorf("download from %q failed: %w", source, err)
 }
 if response.StatusCode < 200 || response.StatusCode > 299 {
  status := response.StatusCode
  return 0.0, fmt.Errorf("download from %q failed %d: %s", source, status, http.StatusText(status))
 }
 defer
 response.Body.Close()
 text, err := io.ReadAll(response.Body)
 if err != nil {
  return 0.0, fmt.Errorf("reading body failed: %w", err)
 }
 if len(text) < 1 {
  return 0.0, errors.New("empty body")
 }

 // Classify the license text
 coverage := licensecheck.Scan(text)
 if len(coverage.Match) == 0 {
  return coverage.Percent, errors.New("no match found")
 }
 match := coverage.Match[0]
 debugf("%q found match: %q with confidence %f%%", pkg.name, match.ID, coverage.Percent)

 if match.ID != pkg.spdx {
  return coverage.Percent, fmt.Errorf("classification %q does not match", match.ID)
 }
 return coverage.Percent, nil
}
```

```
func normalizeURL(raw string) (*url.URL, error) {
 u, err := url.Parse(raw)
 if err != nil {
  return nil, err
 }

 switch u.Hostname() {
 case "github.com":
  u.Host = "raw.githubusercontent.com"
  var cleaned []string
  for _, p := range strings.Split(u.Path, "/") {
   // Filter out elements
   if p == "blob" {
    continue
   }
   cleaned = append(cleaned,
 p)
  }
  u.Path = strings.Join(cleaned, "/")
 case "gitlab.com":
  u.Path = strings.Replace(u.Path, "/-/blob/", "/-/raw/", 1)
 case "git.octo.it":
  parts := strings.Split(u.RawQuery, ";")
  for i, p := range parts {
   if p == "a=blob" {
    parts[i] = "a=blob_plain"
    break
   }
  }
  u.RawQuery = strings.Join(parts, ";")
 }

 return u, nil
}
```

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package compute_test

import (
 "context"
```

```
 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
```

```
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
```

```
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
// protoc-gen-go v1.34.2
// protoc   v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (

```
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)
```

```
func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
```

```
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":           1,
  "WRITER":          2,
  "READER":          3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
```

```
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}
```

```
func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}
```

```
var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67,
 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
```

```
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64,
 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
```

```
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func
 file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v any, i int) any {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
    return &v.sizeCache
   case 2:
    return &v.unknownFields
   default:
    return nil
   }
  }
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:
         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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//     https://www.apache.org/licenses/LICENSE-2.0
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
```

```
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
```

```
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}
```

```
// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by
third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
```

```
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
```

```
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
```

```
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
```

```
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license",
url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf,
 err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
```

```
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()),
 "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
```

```
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err
 := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and
 context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
```

```
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp);
 err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
```

```
jsonReq, err := m.Marshal(body)
if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId",
fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err !=
nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
```

```
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient)
 List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
```

```
 return nil, "", err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.Filter != nil {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req != nil && req.MaxResults != nil {
 params.Add("maxResults",
fmt.Sprintf("%v", req.GetMaxResults()))
}
if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}
if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return
err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }
```

```
  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only
 by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
```

```
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on
 the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
```

```
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return
nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
```

1.2268 grpc-go v1.59.0

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1.2269 thanos v0.32.4

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1.2270 go-zookeeper v0.0.0-20190923202752-2cc03de413da

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1.2272 fluxcd-flux2 v2.2.3

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1.2273 fsnotify 1.6.0

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1.2274 easyjson 0.7.7

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1.2275 go-funk 0.9.3

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1.2277 kubernetes-apiserver 0.31.1

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1.2279 cel-go 0.21.0

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1.2280 tmux 3.4-1ubuntu0.1

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1.2286 xz 5.6.3-r0

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1.2287 bash 5.2.37-r0

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1.2288 github.com/azure/azure-sdk-for-go/sdk/internal 1.10.0

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1.2289 go-compute-metadata 0.5.2

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
```

```
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
```

```
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}
```

```
func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
```

```
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
```

```
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
```

```
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
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 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
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 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
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 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
```

```
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
```

```
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
```

```
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
```

```
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)
```

```
func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
```

```
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
```

```
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
```

```
ctx := context.Background()
// This snippet has been automatically
generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
```

```
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
```

```
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
```

```
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}
```

```
// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}
```

```
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
```

```
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}
```

```
// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
```

```
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
```

```
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
```

```
 return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}
```

```
// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }
```

```
  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
```

```
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
```

```
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
```

```
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
```

```
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
```

```
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
```

```
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
```

```
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
```

```
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
```

```
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
```

```
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
```

```
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
```

```
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
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 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
 0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
 0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
 0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
 0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
```

```
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                       // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                       // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                      // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                      // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
```

```
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
```

```
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
```

```
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
```

```
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
```

```
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
```

```
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
```

```
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
```

```
 },
},
Streams:  []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"
```

```
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
```

```
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
```

```
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
```

```
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
```

```
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
```

0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
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0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
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0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
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0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,

```
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
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 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
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 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
```

```
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.2290 prometheus-common 0.60.0

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1.2291 kubernetes-apimachinery 0.31.1

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1.2292 dario.cat/mergo 1.0.1

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import: ../../../../fossene/db/schema/thing.yml
fields:
  site: string
  author: root

1.2293 libpsl 0.21.5-r3

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1.2294 tar 7.4.3

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1.2295 grpc-go v1.65.0

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1.2300 cookie 0.7.1

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1.2302 libconfig 1.5-0.4build2

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distribute the object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6, whether
or not they are linked directly with the Library itself.

@sp 1
@item
As an exception to the Sections above, you may also combine or link a
``work that uses the Library'' with the Library to produce a work
containing portions of the Library, and distribute that work under terms
of your choice, provided that the terms permit modification of the work
for the customer's own use and reverse engineering for debugging such
modifications.

You must give prominent notice with each copy of the work that the
Library is used in it and that the Library and its use are covered by
this License. You must supply a copy of this License. If the work
during execution displays copyright notices, you must include the
copyright notice for the Library among
 them, as well as a reference
directing the user to the copy of this License. Also, you must do one
of these things:

@enumerate a

@sp 1
@item
Accompany the work with the complete corresponding machine-readable
source code for the Library including whatever changes were used in the
work (which must be distributed under Sections 1 and 2 above); and, if
the work is an executable linked with the Library, with the complete
machine-readable ``work that uses the Library'', as object code and/or
source code, so that the user can modify the Library and then relink to

produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

@sp 1
@item
Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on
the user's computer system, rather than
copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

@sp 1
@item
Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

@sp 1
@item
If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

@sp 1
@item
Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

@end enumerate

For an executable, the required form of the ``work that uses the Library'' must include any data and utility programs needed for reproducing the executable from
it. However, as a special exception, the materials to
be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

@sp 1
@item
You may place library facilities that are a work based on the Library
side-by-side in a single library together with other library facilities
not covered by this License, and distribute such a combined library,
provided that the separate distribution of the work based on the Library
and of the other library facilities is otherwise permitted, and provided
that you do these two things:

@enumerate
a

@sp 1
@item
Accompany the combined library with a copy of the same work based on the
Library, uncombined with any other library facilities. This must be
distributed under the terms of the Sections above.

@sp 1
@item
Give prominent notice with the combined library of the fact that part of
it is a work based on the Library, and explaining where to find the
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@end enumerate

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@end enumerate

@sp 1
@center END OF TERMS AND CONDITIONS
@sp 1
@page
@center How to Apply These Terms to Your New Libraries

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necessary. Here is a sample; alter the names:

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library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice
}
@end format

That's all there is to it!

@c @bye

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Version 2.1, February 1999

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"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

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c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote

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exercise the right to control the distribution of derivative or
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In addition, mere aggregation of another work not based on the Library
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4. You may copy and distribute the Library (or a portion or
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under the terms of Sections 1 and 2 above provided that you accompany
it with the complete corresponding
machine-readable source code, which
must be distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate
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That's all there is to it!

1.2303 x-text 0.19.0

1.2303.1 Available under license :

```
package notify

import (
 "fmt"
 "strings"
)
```

```
// FilePermission is a bit-mask of apparmor permissions in relation to files.
// It is applicable to messages with the class of AA_CLASS_FILE.
type FilePermission uint32

const (
 // AA_MAY_EXEC implies that a process has a permission to execute another
 // program. The specific details of the program are not conveyed.
 AA_MAY_EXEC FilePermission = 1 << iota
 // AA_MAY_WRITE implies that a process may write to a file or socket, or
 // may modify directory contents.
 AA_MAY_WRITE
 // AA_MAY_READ implies that a process may read from a file or socket, or
 // may enumerate directory contents.
 AA_MAY_READ
 // AA_MAY_APPEND implies that a process may open a file in append mode.
 AA_MAY_APPEND
 // AA_MAY_CREATE implies that a process may create a new file.
 AA_MAY_CREATE
 // AA_MAY_DELETE implies that a process may delete a file, directory,
 // symbolic link or socket.
 AA_MAY_DELETE
 // AA_MAY_OPEN implies that a process may open a file or directory.
 The
 // additional presence of AA_MAY_WRITE or AA_MAY_READ grants specific type
 // of access.
 AA_MAY_OPEN
 // AA_MAY_RENAME implies that a process may rename a file.
 AA_MAY_RENAME
 // AA_MAY_SETATTR is not checked by the kernel.
 AA_MAY_SETATTR
 // AA_MAY_GETATTR is not checked by the kernel.
 AA_MAY_GETATTR
 // AA_MAY_SETCRED is not used in the kernel.
 AA_MAY_SETCRED
 // AA_MAY_GETCRED is not used in the kernel.
 AA_MAY_GETCRED
 // AA_MAY_CHMOD implies that a process may change UNIX file permissions.
 AA_MAY_CHMOD
 // AA_MAY_CHOWN implies that a process may change file ownership.
 AA_MAY_CHOWN
 // AA_MAY_CHGRP implies that a process may change the group ownership of a
 // file. The C-level macro is not defined in any userspace header but is
 // already supported and reported by the kernel.
 AA_MAY_CHGRP
 // AA_MAY_LOCK implies that a process may perform fcntl locking operations
 // on a file.
 AA_MAY_LOCK
```

```
 // AA_EXEC_MMAP implies that a process may execute code from an page
 //
 memory-mapped from a file.
 AA_EXEC_MMAP

 // There are additional permissions defined in the kernel but it seems some
 // of those are unused and their exact scope and meaning is unclear.

 // AA_MAY_LINK implies that a process may create a hard link. Their
 // associated file information describes the hard link name, not the
 // original file.
 AA_MAY_LINK FilePermission = 1 << 18
 // AA_MAY_ONEXEC implies that a process may change the apparmor profile on
 // the next exec call.
 AA_MAY_ONEXEC FilePermission = 1 << 29
 // AA_MAY_CHANGE_PROFILE implies that a process may change the apparmor
 // profile on demand.
 AA_MAY_CHANGE_PROFILE FilePermission = 1 << 30
)

const filePermissionMask = (AA_MAY_EXEC | AA_MAY_WRITE | AA_MAY_READ |
 AA_MAY_APPEND | AA_MAY_CREATE | AA_MAY_DELETE | AA_MAY_OPEN |
 AA_MAY_RENAME | AA_MAY_SETATTR | AA_MAY_GETATTR | AA_MAY_SETCRED |
 AA_MAY_GETCRED | AA_MAY_CHMOD | AA_MAY_CHOWN | AA_MAY_CHGRP |
 AA_MAY_LOCK | AA_EXEC_MMAP | AA_MAY_LINK | AA_MAY_ONEXEC |
 AA_MAY_CHANGE_PROFILE)

//
 String returns readable representation of the file permission value.
func (p FilePermission) String() string {
 frags := make([]string, 0, 21)
 if p&AA_MAY_EXEC != 0 {
  frags = append(frags, "execute")
 }
 if p&AA_MAY_WRITE != 0 {
  frags = append(frags, "write")
 }
 if p&AA_MAY_READ != 0 {
  frags = append(frags, "read")
 }
 if p&AA_MAY_APPEND != 0 {
  frags = append(frags, "append")
 }
 if p&AA_MAY_CREATE != 0 {
  frags = append(frags, "create")
 }
 if p&AA_MAY_DELETE != 0 {
  frags = append(frags, "delete")
```

```
}
if p&AA_MAY_OPEN != 0 {
 frags = append(frags, "open")
}
if p&AA_MAY_RENAME != 0 {
 frags = append(frags, "rename")
}
if p&AA_MAY_SETATTR != 0 {
 frags = append(frags, "set-attr")
}
if p&AA_MAY_GETATTR != 0 {
 frags = append(frags, "get-attr")
}
if p&AA_MAY_SETCRED != 0 {
 frags = append(frags, "set-cred")
}
if p&AA_MAY_GETCRED != 0 {
 frags = append(frags, "get-cred")
}
if p&AA_MAY_CHMOD != 0 {
 frags = append(frags, "change-mode")
}
if
p&AA_MAY_CHOWN != 0 {
 frags = append(frags, "change-owner")
}
if p&AA_MAY_CHGRP != 0 {
 frags = append(frags, "change-group")
}
if p&AA_MAY_LOCK != 0 {
 frags = append(frags, "lock")
}
if p&AA_EXEC_MMAP != 0 {
 frags = append(frags, "execute-map")
}
if p&AA_MAY_LINK != 0 {
 frags = append(frags, "link")
}
if p&AA_MAY_ONEXEC != 0 {
 frags = append(frags, "change-profile-on-exec")
}
if p&AA_MAY_CHANGE_PROFILE != 0 {
 frags = append(frags, "change-profile")
}
if residue := p &^ filePermissionMask; residue != 0 {
 frags = append(frags, fmt.Sprintf("%#x", uint(residue)))
}
if len(frags) == 0 {
```

```
  return "none"
 }
 return strings.Join(frags, "|")
}

// IsValid returns true if the given file permission contains only known bits set.
func (p FilePermission) IsValid() bool {
 return p & ^filePermissionMask == 0
}
```

Format: http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/
Upstream-Name: snappy
Source: https://github.com/snapcore/snapd

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```
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// From https://spdx.org/licenses/
// data files: https://github.com/spdx/license-list-data
// Version: 3.11 2020-11-25
//
// jq < json/licenses.json '.licenses | .[] | select(.isOsiApproved == true) | .licenseId' | sort | sed -e 's/$/,/'
//
//nolint:unused
var osi = []string{
 "0BSD",
 "AAL",
 "AFL-1.1",
 "AFL-1.2",
 "AFL-2.0",
 "AFL-2.1",
 "AFL-3.0",
 "AGPL-3.0",
 "AGPL-3.0-only",
 "AGPL-3.0-or-later",
 "Apache-1.1",
 "Apache-2.0",
 "APL-1.0",
 "APSL-1.0",
 "APSL-1.1",
 "APSL-1.2",
 "APSL-2.0",
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 "Artistic-1.0-cl8",
 "Artistic-1.0-Perl",
 "Artistic-2.0",
 "BSD-1-Clause",
 "BSD-2-Clause",
 "BSD-2-Clause-Patent",
 "BSD-3-Clause",
 "BSD-3-Clause-LBNL",
 "BSL-1.0",
 "CAL-1.0",
 "CAL-1.0-Combined-Work-Exception",
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 "CDDL-1.0",
 "CECILL-2.1",
 "CNRI-Python",
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 "CUA-OPL-1.0",
 "ECL-1.0",
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"ECL-2.0",
"EFL-1.0",
"EFL-2.0",
"Entessa",
"EPL-1.0",
"EPL-2.0",
"EUDatagrid",
"EUPL-1.1",
"EUPL-1.2",
"Fair",
"Frameworx-1.0",
"GPL-2.0",
"GPL-2.0+",
"GPL-2.0-only",
"GPL-2.0-or-later",
"GPL-3.0",
"GPL-3.0+",
"GPL-3.0-only",
"GPL-3.0-or-later",
"GPL-3.0-with-GCC-exception",
"HPND",
"Intel",
"IPA",
"IPL-1.0",
"ISC",
"LGPL-2.0",
"LGPL-2.0+",
"LGPL-2.0-only",
"LGPL-2.0-or-later",
"LGPL-2.1",
"LGPL-2.1+",
"LGPL-2.1-only",
"LGPL-2.1-or-later",
"LGPL-3.0",
"LGPL-3.0+",
"LGPL-3.0-only",
"LGPL-3.0-or-later",
"LiLiQ-P-1.1",
"LiLiQ-R-1.1",
"LiLiQ-Rplus-1.1",
"LPL-1.0",
"LPL-1.02",
"LPPL-1.3c",
"MirOS",
"MIT",
"MIT-0",
"Motosoto",
"MPL-1.0",

"MPL-1.1",
"MPL-2.0",
"MPL-2.0-no-copyleft-exception",
"MS-PL",
"MS-RL",
"MulanPSL-2.0",
"Multics",
"NASA-1.3",
"Naumen",
"NCSA",
"NGPL",
"Nokia",
"NPOSL-3.0",
"NTP",
"OCLC-2.0",
"OFL-1.1",
"OFL-1.1-no-RFN",
"OFL-1.1-RFN",
"OGTSL",
"OLDAP-2.8",
"OSET-PL-2.1",
"OSL-1.0",
"OSL-2.0",
"OSL-2.1",
"OSL-3.0",
"PHP-3.0",
"PHP-3.01",
"PostgreSQL",
"Python-2.0",
"QPL-1.0",
"RPL-1.1",
"RPL-1.5",
"RPSL-1.0",
"RSCPL",
"SimPL-2.0",
"SISSL",
"Sleepycat",
"SPL-1.0",
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```
}

//
 using SPDX license data:
// jq < json/licenses.json '.licenses | .[] | .licenseId' | sort | sed -e 's/$/,/'
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 FIXME: non SPDX licenses that the snapstore uses
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// from
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Version 3, 29 June 2007

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b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the

Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

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1.2308 kubernetes-api 0.31.1

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1.2309 write-file-atomic 6.0.0

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1.2310 npm-pick-manifest 10.0.0

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1.2311 cacache 19.0.1

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1.2312 unique-filename 4.0.0

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1.2313 parse-conflict-json 4.0.0

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1.2314 proggy 3.0.0

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1.2315 @npmcli/fs 4.0.0

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1.2318 read-package-json-fast 4.0.0

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1.2322 promzard 2.0.0

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1.2327 @npmcli/agent 3.0.0

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1.2328 bin-links 5.0.0

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1.2331 xmltodict 0.14.2

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1.2332 jaraco-collections 5.1.0

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1.2333 cpp 14.2.0-r4

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Julian Seward, jseward@bzip.org
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Version 3.1, 31 March 2009

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The "Compilation Process" transforms
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non-intermediate languages designed for human-written code, and/or in
Java Virtual Machine byte code, into Target Code. Thus, for example,
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1.2334 twmb-franz-go-plugin-kotel 1.5.0

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1.2335 x-time 0.7.0

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1.2337 github.com/pelletier/go-toml/v2 2.2.3

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1.2338 githubcommiekgdns 1.1.62

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1.2339 btree 1.1.3

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1.2340 prometheus-client 1.20.5

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1.2342 jackson-dataformat-yaml 2.16.1

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Jackson is a high-performance, Free/Open Source JSON processing library.
It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has
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1.2343 cpp 14.2.0-4ubuntu2~24.04

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This is the Debian GNU/Linux prepackaged version of the GNU compiler
collection, containing Ada, C, C++, D, Fortran 95, Go, Objective-C,
Objective-C++, and Modula-2 compilers, documentation, and support
libraries. In addition, Debian provides the gm2 compiler, either in
the same source package, or built from a separate same source package.
Packaging is done by the Debian GCC Maintainers
<debian-gcc@lists.debian.org>, with sources obtained from:

```
 ftp://gcc.gnu.org/pub/gcc/releases/  (for full releases)
 svn://gcc.gnu.org/svn/gcc/           (for prereleases)
 ftp://sourceware.org/pub/newlib/     (for newlib)
 git://git.savannah.gnu.org/gm2.git   (for Modula-2)
```

The current gcc-14 source package is taken from the git gcc-14-branch.

Changes: See changelog.Debian.gz

Debian splits the GNU Compiler Collection into packages for each language,
library, and documentation as follows:

```
Language       Compiler package  Library package    Documentation
-----------------------------------------------------------------------------
Ada
           gnat-14          libgnat-14          gnat-14-doc
C              gcc-14                               gcc-14-doc
C++            g++-14           libstdc++6         libstdc++6-14-doc
D              gdc-14
Fortran 95     gfortran-14      libgfortran5       gfortran-14-doc
Go             gccgo-14         libgo0
Objective C    gobjc-14         libobjc4
Objective C++  gobjc++-14
Modula-2       gm2-14           libgm2
Rust           gccrs-14
```

For some language run-time libraries, Debian provides source files,
development files, debugging symbols and libraries containing position-
independent code in separate packages:

```
Language  Sources      Development   Debugging            Position-Independent
-----------------------------------------------------------------------------
C++                                  libstdc++6-14-dbg  libstdc++6-14-pic
D         libphobos-14-dev
```

Additional packages include:

All languages:
libgcc1, libgcc2, libgcc4
GCC intrinsics (platform-dependent)
gcc-14-base Base files common to all compilers
gcc-14-soft-float Software floating point (ARM only)
gcc-14-source The sources with patches

Ada:
libgnat-util14-dev, libgnat-util14 GNAT version library

C:
cpp-14, cpp-14-doc GNU C Preprocessor
libssp0-dev, libssp0 GCC stack smashing protection library
libquadmath0 Math routines for the __float128 type
fixincludes Fix non-ANSI header files

C, C++ and Fortran 95:
libgomp1-dev, libgomp1 GCC OpenMP (GOMP) support library
libitm1-dev, libitm1 GNU Transactional Memory Library

Biarch support: On some 64-bit platforms which can also run 32-bit code, Debian provides additional packages containing 32-bit versions of some libraries. These packages have names beginning with 'lib32' instead of 'lib', for example lib32stdc++6. Similarly, on some 32-bit platforms which can also run 64-bit code,
Debian provides additional packages with names
beginning with 'lib64' instead of 'lib'. These packages contain 64-bit versions of the libraries. (At this time, not all platforms and not all libraries support biarch.) The license terms for these lib32 or lib64 packages are identical to the ones for the lib packages.

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  gcc/emults.c, gcc/gbl-ctors.h, gcc/gcov-io.h, gcc/libgcov.c,
  gcc/tsystem.h, gcc/typeclass.h).
- libatomic
- libdecnumber
- libgm2
- libgomp
- libgrust
- libitm
- libssp
- libstdc++-v3
- libobjc
- libgfortran
- The libgnat-14 Ada support library and libgnat-util14 library.
- Various config files in gcc/config/ used in runtime libraries.
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Version 3.1, 31 March 2009

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D:
gdc-14 GNU D Compiler
libphobos-14-dev D standard runtime library

The D source package is made up of the following components.

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The DMD Compiler implementation of the D programming language:

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The Phobos standard runtime library:
- libphobos/*

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Library module defined by the International Standard
Information technology - programming languages
BS ISO/IEC 10514-1:1996E Part 1: Modula-2, Base Language.

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newlib-X.Y.Z/:

Upstream

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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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1.2347 libusb 2:1.0.27-1

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that
any
application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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1.2366 libgudev 1:238-5ubuntu1

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1.2373 file 1:5.45-3build1

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1.2374 gawk 1:5.2.1-2build3

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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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Version 3.1, 31 March 2009

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Version 3.1, 31 March 2009

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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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iconv (Charset Conversion Library) v2.0

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1.2382 gcc-14-base 14.2.0-4ubuntu2~24.04

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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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(28) Artem Bityuckiy (--enable-newlib-iconv)

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1.2383 pcre 2:8.39-15

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This package was put together by me, Mark Baker <mbaker@iee.org> from the
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1.2384 nghttp2 1.64.0-r0

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1.2385 kubernetes-kubectl 0.31.1

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1.2386 kubernetes-cliruntime 0.31.1

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1.2391 pyhamcrest 2.1.0-1

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1.2392 pyasn1 0.4.8-4

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Metadata-Version: 1.2
Name: pyasn1
Version: 0.4.8
Summary: ASN.1 types and codecs
Home-page: https://github.com/etingof/pyasn1
Author: Ilya Etingof
Author-email: etingof@gmail.com
Maintainer: Ilya Etingof <etingof@gmail.com>
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Description: Pure-Python implementation of ASN.1 types and DER/BER/CER codecs (X.208)
Platform: any
Classifier: Development Status :: 5 - Production/Stable
Classifier: Environment :: Console
Classifier: Intended Audience :: Developers
Classifier: Intended Audience :: Education
Classifier: Intended Audience :: Information Technology
Classifier: Intended Audience :: System Administrators
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Classifier: Programming Language :: Python :: 3.6
Classifier: Programming Language :: Python :: 3.7
Classifier: Topic :: Communications
Classifier: Topic :: Software Development :: Libraries :: Python Modules

Found in path(s):
* /pyasn1-0-4-8-orig-1-tar-gz/pyasn1-0.4.8/PKG-INFO
* /pyasn1-0-4-8-orig-1-tar-gz/pyasn1-0.4.8/pyasn1.egg-info/PKG-INFO

1.2393 automat 22.10.0-2

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1.2394 python-pyasn1-modules 0.2.8-1

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1.2395 cloud-initramfs-tools 0.49~24.04.1

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1.2404 argparse 2.0.1

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ASN.1 library for Python

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This is a free and open source implementation of ASN.1 types and codecs
as a Python package. It has been first written to support particular
protocol (SNMP) but then generalized to be suitable for a wide range
of protocols based on
[ASN.1 specification](https://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-X.208-198811-W!!PDF-
E&type=items).

NOTE:
 The package is now maintained by *Christian Heimes* and
Simon Pichugin in project https://github.com/pyasn1/pyasn1.

Features
---

* Generic implementation of ASN.1 types (X.208)
* Standards compliant BER/CER/DER codecs
* Can operate on streams of serialized data
* Dumps/loads ASN.1 structures from Python types
* 100% Python, works with Python 3.8+
* MT-safe
* Contributed ASN.1 compiler [Asn1ate](https://github.com/kimgr/asn1ate)

Why using pyasn1

ASN.1 solves the data serialisation problem. This solution was
designed long ago by the wise Ancients. Back then, they did not
have the luxury of wasting bits. That is why ASN.1 is designed
to serialise data structures of unbounded complexity into
something compact and efficient when it comes to processing
the data.

That probably explains why many network protocols and file formats
still rely on the 30+ years old technology.
 Including a number of
high-profile Internet protocols and file formats.

Quite a number of books cover the topic of ASN.1.
[Communication between heterogeneous systems](http://www.oss.com/asn1/dubuisson.html)
by Olivier Dubuisson is one of those high quality books freely
available on the Internet.

The pyasn1 package is designed to help Python programmers tackling

network protocols and file formats at the comfort of their Python
prompt. The tool struggles to capture all aspects of a rather
complicated ASN.1 system and to represent it on the Python terms.

How to use pyasn1

With pyasn1 you can build Python objects from ASN.1 data structures.
For example, the following ASN.1 data structure:

```bash
Record ::= SEQUENCE {
 id        INTEGER,
 room  [0] INTEGER OPTIONAL,
 house [1] INTEGER DEFAULT 0
}
```

Could be expressed in pyasn1 like this:

```python
class Record(Sequence):
   componentType = NamedTypes(
       NamedType('id', Integer()),
       OptionalNamedType(
           'room', Integer().subtype(
              implicitTag=Tag(tagClassContext, tagFormatSimple, 0)
           )
       ),
       DefaultedNamedType(
           'house', Integer(0).subtype(
              implicitTag=Tag(tagClassContext, tagFormatSimple, 1)
           )
       )
   )
```

It is in the spirit of ASN.1 to take abstract data description
and turn it into a programming language specific form.
Once you have your ASN.1 data structure expressed in Python, you
can use it along the lines of similar Python type (e.g. ASN.1
`SET` is similar to Python `dict`, `SET OF` to `list`):

```python
>>> record = Record()
>>> record['id'] = 123
>>> record['room'] = 321
>>> str(record)
```

```
Record:
id=123
room=321
>>>
```

Part of the power of ASN.1 comes from its serialisation features. You can serialise your data structure and send it over the network.

```python
>>> from pyasn1.codec.der.encoder import encode
>>> substrate = encode(record)
>>> hexdump(substrate)
00000:
 30 07 02 01 7B 80 02 01 41
```

Conversely, you can turn serialised ASN.1 content, as received from network or read from a file, into a Python object which you can introspect, modify, encode and send back.

```python
>>> from pyasn1.codec.der.decoder import decode
>>> received_record, rest_of_substrate = decode(substrate, asn1Spec=Record())
>>>
>>> for field in received_record:
>>>    print('{} is {}'.format(field, received_record[field]))
id is 123
room is 321
house is 0
>>>
>>> record == received_record
True
>>> received_record.update(room=123)
>>> substrate = encode(received_record)
>>> hexdump(substrate)
00000: 30 06 02 01 7B 80 01 7B
```

The pyasn1 classes struggle to emulate their Python prototypes (e.g. int, list, dict etc.). But ASN.1 types exhibit more complicated behaviour. To make life easier for a Pythonista, they can turn their pyasn1 classes into Python built-ins:

```python
>>> from pyasn1.codec.native.encoder import encode
>>> encode(record)
{'id': 123, 'room': 321,
```

'house': 0}
```

Or vice-versa -- you can initialize an ASN.1 structure from a tree of
Python objects:

```python
>>> from pyasn1.codec.native.decoder import decode
>>> record = decode({'id': 123, 'room': 321, 'house': 0}, asn1Spec=Record())
>>> str(record)
Record:
id=123
room=321
>>>
```

With ASN.1 design, serialisation codecs are decoupled from data objects,
so you could turn every single ASN.1 object into many different
serialised forms. As of this moment, pyasn1 supports BER, DER, CER and
Python built-ins codecs. The extremely compact PER encoding is expected
to be introduced in the upcoming pyasn1 release.

More information on pyasn1 APIs can be found in the
[documentation](https://pyasn1.readthedocs.io/en/latest/pyasn1/contents.html),
compiled ASN.1 modules for different protocols and file formats
could be found in the pyasn1-modules
[repo](https://github.com/pyasn1/pyasn1-modules).

How to get pyasn1

The pyasn1 package is distributed under terms and conditions
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BSD [license](https://pyasn1.readthedocs.io/en/latest/license.html). Source code is freely
available as a GitHub [repo](https://github.com/pyasn1/pyasn1).

You could `pip install pyasn1` or download it from [PyPI](https://pypi.org/project/pyasn1).

If something does not work as expected,
[open an issue](https://github.com/epyasn1/pyasn1/issues) at GitHub or
post your question [on Stack Overflow](https://stackoverflow.com/questions/ask)
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Name: pyasn1
Version: 0.6.1
Summary: Pure-Python implementation of ASN.1 types and DER/BER/CER codecs (X.208)
Home-page: https://github.com/pyasn1/pyasn1
Author: Ilya Etingof
Author-email: etingof@gmail.com
Maintainer: pyasn1 maintenance organization
Maintainer-email: Christian Heimes <christian@python.org>
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ASN.1 library for Python

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*

Generic implementation of ASN.1 types (X.208)
* Standards compliant BER/CER/DER codecs
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For example, the following ASN.1 data structure:

```bash
Record ::= SEQUENCE {
 id       INTEGER,
 room  [0] INTEGER OPTIONAL,
 house [1] INTEGER DEFAULT 0
}
```

Could be expressed in pyasn1 like this:

```python
class Record(Sequence):
  componentType = NamedTypes(
     NamedType('id', Integer()),
     OptionalNamedType(
        'room', Integer().subtype(
           implicitTag=Tag(tagClassContext, tagFormatSimple, 0)
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        'house', Integer(0).subtype(
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It is in the spirit of ASN.1 to take abstract data description
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Once you have your ASN.1 data structure expressed in Python, you
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```python
>>> record = Record()
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>>> str(record)
Record:
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Part of the power of ASN.1 comes from its serialisation features. You
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>>>
>>> for field in received_record:
>>>    print('{} is {}'.format(field, received_record[field]))
id is 123
room is 321
house is 0
>>>
>>> record == received_record
True
>>> received_record.update(room=123)
>>> substrate = encode(received_record)
>>> hexdump(substrate)
00000: 30 06 02 01 7B 80 01 7B
```

The pyasn1 classes struggle to emulate their Python prototypes (e.g. int, list, dict etc.). But ASN.1 types exhibit more complicated behaviour. To make life easier for a Pythonista, they can turn their pyasn1 classes into Python built-ins:

```python
>>> from pyasn1.codec.native.encoder import encode
>>> encode(record)
{'id': 123, 'room': 321, 'house': 0}
```

Or vice-versa -- you can initialize an ASN.1 structure from a tree of Python objects:

```python
>>> from pyasn1.codec.native.decoder import decode
>>> record = decode({'id': 123, 'room':
 321, 'house': 0}, asn1Spec=Record())
>>> str(record)
Record:
id=123
room=321
>>>
```

With ASN.1 design, serialisation codecs are decoupled from data objects, so you could turn every single ASN.1 object into many different serialised forms. As of this moment, pyasn1 supports BER, DER, CER and

Python built-ins codecs. The extremely compact PER encoding is expected
to be introduced in the upcoming pyasn1 release.

More information on pyasn1 APIs can be found in the
[documentation](https://pyasn1.readthedocs.io/en/latest/pyasn1/contents.html),
compiled ASN.1 modules for different protocols and file formats
could be found in the pyasn1-modules
[repo](https://github.com/pyasn1/pyasn1-modules).

How to get pyasn1

The pyasn1 package is distributed under terms and conditions of 2-clause
BSD [license](https://pyasn1.readthedocs.io/en/latest/license.html). Source code is freely
available as a GitHub [repo](https://github.com/pyasn1/pyasn1).

You could `pip install pyasn1`
 or download it from [PyPI](https://pypi.org/project/pyasn1).

If something does not work as expected,
[open an issue](https://github.com/epyasn1/pyasn1/issues) at GitHub or
post your question [on Stack Overflow](https://stackoverflow.com/questions/ask)
or try browsing pyasn1
[mailing list archives](https://sourceforge.net/p/pyasn1/mailman/pyasn1-users/).

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Found in path(s):
* /pyasn1-0-6-1-1-tar-gz/pyasn1-0.6.1/PKG-INFO
* /pyasn1-0-6-1-1-tar-gz/pyasn1-0.6.1/pyasn1.egg-info/PKG-INFO
No license file was found, but licenses were detected in source scan.

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Found in path(s):
* /pyasn1-0-6-1-1-tar-gz/pyasn1-0.6.1/docs/source/contents.rst
No license file was found, but licenses were detected in source scan.

[metadata]
name = pyasn1
version = attr: pyasn1.__version__
description = Pure-Python implementation of ASN.1 types and DER/BER/CER codecs (X.208)
long_description = file: README.md
long_description_content_type = text/markdown
license = BSD-2-Clause
license_files = LICENSE.rst
url = https://github.com/pyasn1/pyasn1

```
author = Ilya Etingof
author_email = etingof@gmail.com
maintainer = pyasn1 maintenance organization
maintainer_email = Christian Heimes <christian@python.org>
project_urls =
 Documentation=https://pyasn1.readthedocs.io
 Source=https://github.com/pyasn1/pyasn1
 Issues=https://github.com/pyasn1/pyasn1/issues
 Changelog=https://pyasn1.readthedocs.io/en/latest/changelog.html
platforms = any
classifiers =
 Development Status :: 5 - Production/Stable
 Environment :: Console
 Intended Audience :: Developers
 Intended Audience :: Education
 Intended Audience :: Information Technology
 Intended Audience :: System
 Administrators
 Intended Audience :: Telecommunications Industry
 License :: OSI Approved :: BSD License
 Natural Language :: English
 Operating System :: OS Independent
 Programming Language :: Python :: 3
 Programming Language :: Python :: 3.8
 Programming Language :: Python :: 3.9
 Programming Language :: Python :: 3.10
 Programming Language :: Python :: 3.11
 Programming Language :: Python :: 3.12
 Programming Language :: Python :: 3.13
 Programming Language :: Python :: Implementation :: CPython
 Programming Language :: Python :: Implementation :: PyPy
 Topic :: Communications
 Topic :: Software Development :: Libraries :: Python Modules

[options]
python_requires = >=3.8
zip_safe = True
setup_requires = setuptools
packages =
 pyasn1
 pyasn1.type
 pyasn1.compat
 pyasn1.codec
 pyasn1.codec.ber
 pyasn1.codec.cer
 pyasn1.codec.der
 pyasn1.codec.native
```

[egg_info]
tag_build =
tag_date = 0

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* /pyasn1-0-6-1-1-tar-gz/pyasn1-0.6.1/setup.cfg

1.2406 pycparser 2.22

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pycparser -- A C parser in Python

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1.2407 werkzeug 3.1.3

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1.2408 color 1.18.0

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1.2409 systemd 252.31-1~deb12u1

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Files: src/basic/MurmurHash2.c
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Files: src/udev/ata_id/ata_id.c
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1.2410 base-files 12.4+deb12u8

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Version 3.0, 18 August 2009

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1.2424 openssl 3.4.0

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```
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```

The hypothetical commands `show w' and `show c' should show the
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the names:

```
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program `Gnomovision' (a program to direct compilers to make passes
at assemblers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
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x ?"U@,5 @mISmIN<GimCN7g1u|E
43mI,5WEV @@ WEV @mImImIAmImImI0mImImI*mImI
A0mImImI...
lost+found...

;9GimCN7g

!"#$%&'()*+,-
./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~

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1.2432 libuuid 2.38.1-5+deb12u2

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NR START END SECTORS SIZE NAME UUID
1 32 7679 7648 3.7M 8f8378c0-01
2 7680 16383 8704 4.3M 8f8378c0-02
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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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Otherwise, if the work is a derivative of the Library, you may distribute the
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;9GimCN7g

!"#$%&'()*+,-
./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~

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1.2434 ncurses 6.5_p20241006-r3

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1.2436 beautiful-soup 4.12.3-1

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//
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 Name string `json:"name,omitempty"`
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Protocol Buffers for Go with Gadgets

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 //              on SPDX License List
 LicenseIdentifier string `json:"licenseId"`

 // 10.2: Extracted Text
 // Cardinality: conditional (mandatory, one) if there is a
 //              License Identifier assigned
 ExtractedText string `json:"extractedText"`

 // 10.3: License Name: single line of text or "NOASSERTION"
 // Cardinality: conditional (mandatory, one) if license is not
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 LicenseName string `json:"name,omitempty"`

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 // Cardinality: conditional (optional, one or many) if license
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 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 //
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 // Cardinality: optional, one
 LicenseComment string `json:"comment,omitempty"`
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// OtherLicense is an Other License Information section of an
// SPDX Document for version 2.1 of the spec.
type OtherLicense struct {
 // 6.1: License Identifier: "LicenseRef-[idstring]"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseIdentifier string `json:"licenseId"`

 // 6.2: Extracted Text
 // Cardinality: conditional (mandatory, one) if there is a
 //              License Identifier assigned
 ExtractedText string `json:"extractedText"`

 // 6.3: License Name: single line of text or "NOASSERTION"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseName string `json:"name,omitempty"`

 // 6.4: License Cross Reference
 // Cardinality: conditional (optional, one or many) if license
 //              is not on SPDX License List
 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 // 6.5:
 License Comment
 // Cardinality: optional, one
 LicenseComment string `json:"comment,omitempty"`
}
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 // Cardinality: conditional (mandatory, one) if license is not
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 LicenseIdentifier string `json:"licenseId"`

 // 10.2: Extracted Text
 // Cardinality: conditional (mandatory, one) if there is a
 //              License Identifier assigned
 ExtractedText string `json:"extractedText"`

 // 10.3: License Name: single line of text or "NOASSERTION"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseName string `json:"name,omitempty"`

 // 10.4: License Cross Reference
 // Cardinality: conditional (optional, one or many) if license
 //              is not on SPDX License List
 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 // 10.5: License Comment
 // Cardinality:
 optional, one
 LicenseComment string `json:"comment,omitempty"`
}
```

procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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localtime.go, localtime_test.go:

Originals:
https://raw.githubusercontent.com/googleapis/google-cloud-go/ed46f5086358513cf8c25f8e3f022cb838a49d66/civil/civil.go
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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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package spec
```

```
// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
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package spec

import "testing"

func TestIntegrationLicense(t *testing.T) {
 license := License{Name: "the name", URL: "the url"}
 const licenseJSON = `{"name":"the name","url":"the url"}`
 const licenseYAML = "name: the name\nurl: the url\n"

 assertSerializeJSON(t, license, licenseJSON)
 assertParsesJSON(t, licenseJSON, license)
}
```

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file_io/unix/mktemp.c, strings/apr_strings.c:

```
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From network_io/unix/inet_ntop.c, network_io/unix/inet_pton.c:

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From dso/aix/dso.c:

* Based on libdl (dlfcn.c/dlfcn.h) which is

```
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```

From strings/apr_strnatcmp.c,
include/apr_strings.h:

```
strnatcmp.c -- Perform 'natural order' comparisons of strings in C.
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```

From
strings/apr_snprintf.c:

```
*
* cvt - IEEE floating point formatting routines.
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1.2459 cross-spawn 7.0.6

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1.2460 contrib-instrumentation-github.com-emicklei-go-restful-otelrestful 0.44.0

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1.2461 x-oauth2 0.24.0

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1.2462 jsonpointer 3.0.0

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1.2463 python3-prometheus-client 0.9.0-1

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1.2464 intltool 0.51.0-6

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1.2466 testify 1.10.0

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1.2467 make-fetch-happen 14.0.3

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1.2468 npm-registry-fetch 18.0.2

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1.2469 promise-call-limit 3.0.2

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1.2471 @tufjs/models 3.0.1

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1.2472 ansible-compat 24.10.0

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1.2473 python-prometheus-client 0.9.0-1

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1.2474 defusedxml 0.7.1-1

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

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b) Use a suitable shared library mechanism for linking with the

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1.2478 libteam 1.31-3.ph5

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1.2479 libteam5 1.31-1build2

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1.2482 pwauth 2.3.11-5

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* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/auth_openbsd.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/main.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/checkfaillog.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/auth_mdw.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/fail_check.c
*
 /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/auth_bsd.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/auth_aix.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/auth_pam.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/auth_sun.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/fail_log.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/auth_hpux.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/lastlog.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/nologin.c
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/pwauth.h
* /pwauth-2-3-11-orig-2-tar-gz/pwauth-2.3.11/snooze.c

1.2483 httpparser 0.9.0-1build4

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util.py - IOrderedDict

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py25.IOBase, py25.RawIOBase, py25.BufferedReader, py25.TextIOWrapper:

Partial implementation of io classes from python 2.7. Only read
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1.2484 snmp-mibs-downloader 1.5

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1.2486 nose 1.3.7-8

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1.2487 python3-nose 1.3.7-8

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*/

package minio

import (
 "bytes"
 "context"
 "encoding/xml"
 "fmt"
 "net/http"
 "net/url"

 "github.com/minio/minio-go/v7/pkg/s3utils"
)

// objectLegalHold - object legal hold specified in
// https://docs.aws.amazon.com/AmazonS3/latest/API/archive-RESTObjectPUTLegalHold.html
type objectLegalHold struct {
 XMLNS   string          `xml:"xmlns,attr,omitempty"`
 XMLName
 xml.Name        `xml:"LegalHold"`
 Status  LegalHoldStatus `xml:"Status,omitempty"`
}
```

```
// PutObjectLegalHoldOptions represents options specified by user for PutObjectLegalHold call
type PutObjectLegalHoldOptions struct {
 VersionID string
 Status    *LegalHoldStatus
}

// GetObjectLegalHoldOptions represents options specified by user for GetObjectLegalHold call
type GetObjectLegalHoldOptions struct {
 VersionID string
}

// LegalHoldStatus - object legal hold status.
type LegalHoldStatus string

const (
 // LegalHoldEnabled indicates legal hold is enabled
 LegalHoldEnabled LegalHoldStatus = "ON"

 // LegalHoldDisabled indicates legal hold is disabled
 LegalHoldDisabled LegalHoldStatus = "OFF"
)

func (r LegalHoldStatus) String() string {
 return string(r)
}

// IsValid - check whether this legal hold status is valid or not.
func (r LegalHoldStatus) IsValid() bool {
 return r == LegalHoldEnabled || r == LegalHoldDisabled
}

func newObjectLegalHold(status *LegalHoldStatus)
 (*objectLegalHold, error) {
 if status == nil {
  return nil, fmt.Errorf("Status not set")
 }
 if !status.IsValid() {
  return nil, fmt.Errorf("invalid legal hold status `%v`", status)
 }
 legalHold := &objectLegalHold{
  Status: *status,
 }
 return legalHold, nil
}

// PutObjectLegalHold : sets object legal hold for a given object and versionID.
func (c *Client) PutObjectLegalHold(ctx context.Context, bucketName, objectName string, opts
```

```
PutObjectLegalHoldOptions) error {
 // Input validation.
 if err := s3utils.CheckValidBucketName(bucketName); err != nil {
  return err
 }

 if err := s3utils.CheckValidObjectName(objectName); err != nil {
  return err
 }

 // Get resources properly escaped and lined up before
 // using them in http request.
 urlValues := make(url.Values)
 urlValues.Set("legal-hold", "")

 if opts.VersionID != "" {
  urlValues.Set("versionId", opts.VersionID)
 }

 lh, err := newObjectLegalHold(opts.Status)
 if err != nil {
  return err
 }

 lhData, err := xml.Marshal(lh)
 if
 err != nil {
  return err
 }

 reqMetadata := requestMetadata{
  bucketName:       bucketName,
  objectName:       objectName,
  queryValues:      urlValues,
  contentBody:      bytes.NewReader(lhData),
  contentLength:    int64(len(lhData)),
  contentMD5Base64: sumMD5Base64(lhData),
  contentSHA256Hex: sum256Hex(lhData),
 }

 // Execute PUT Object Legal Hold.
 resp, err := c.executeMethod(ctx, http.MethodPut, reqMetadata)
 defer closeResponse(resp)
 if err != nil {
  return err
 }
 if resp != nil {
  if resp.StatusCode != http.StatusOK && resp.StatusCode != http.StatusNoContent {
```

```
  return httpRespToErrorResponse(resp, bucketName, objectName)
 }
}
return nil
}

// GetObjectLegalHold gets legal-hold status of given object.
func (c *Client) GetObjectLegalHold(ctx context.Context, bucketName, objectName string, opts
GetObjectLegalHoldOptions) (status *LegalHoldStatus, err error) {
 // Input validation.
 if err := s3utils.CheckValidBucketName(bucketName); err != nil {
  return
 nil, err
 }

 if err := s3utils.CheckValidObjectName(objectName); err != nil {
  return nil, err
 }
 urlValues := make(url.Values)
 urlValues.Set("legal-hold", "")

 if opts.VersionID != "" {
  urlValues.Set("versionId", opts.VersionID)
 }

 // Execute GET on bucket to list objects.
 resp, err := c.executeMethod(ctx, http.MethodGet, requestMetadata{
  bucketName:       bucketName,
  objectName:       objectName,
  queryValues:      urlValues,
  contentSHA256Hex: emptySHA256Hex,
 })
 defer closeResponse(resp)
 if err != nil {
  return nil, err
 }
 if resp != nil {
  if resp.StatusCode != http.StatusOK {
   return nil, httpRespToErrorResponse(resp, bucketName, objectName)
  }
 }
 lh := &objectLegalHold{}
 if err = xml.NewDecoder(resp.Body).Decode(lh); err != nil {
  return nil, err
 }

 return &lh.Status, nil
}
```

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1.2493 ncw-swift 2.0.3

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1.2494 thanos-io-objstore 0.0.0-20241111205755-d1dd89d41f97

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1.2495 coder-quartz 0.1.2

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1.2500 golang-org-x-exp 0.0.0-20240909161429-701f63a606c0

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1.2501 path-to-regexp 0.1.12

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1.2502 x-sys 0.28.0

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1.2503 masterminds-semver 3.3.0

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1.2505 es-define-property 1.0.1

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1.2506 x-text 0.21.0

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1.2507 socks-proxy-agent 8.0.5

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1.2508 resenje.org-singleflight 0.4.3

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1.2509 grpc-gateway 2.24.0

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1.2510 github.com/moby/sys/capability 0.4.0

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1.2516 structured-merge-diff 4.4.2

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package migration

import "fmt"

// Notice is a migration warning
type Notice struct {
 Plugin     string
 Option     string
 Severity   string // 'deprecated', 'removed', or 'unsupported'
 ReplacedBy string
 Additional string
 Version    string
}

func (n *Notice) ToString() string {
 s := ""
 if n.Option == "" {
  s += fmt.Sprintf(`Plugin "%v" `, n.Plugin)
 } else {
  s += fmt.Sprintf(`Option "%v" in plugin "%v" `, n.Option, n.Plugin)
 }
 if n.Severity == SevUnsupported {
  s += "is unsupported by this migration tool in " + n.Version + "."
 } else if n.Severity == SevNewDefault {
  s += "is added as a default in " + n.Version + "."
 } else {
  s += "is " + n.Severity + " in " + n.Version + "."
 }
 if n.ReplacedBy != "" {
  s += fmt.Sprintf(` It is replaced by "%v".`, n.ReplacedBy)
 }
 if n.Additional != "" {
  s += " " + n.Additional
 }
 return s
}

const (
 // The following statuses are used to indicate the state of support/deprecation in a given release.
 SevDeprecated  = "deprecated"
```

```
  // deprecated, but still completely functional
 SevIgnored     = "ignored"     // if included in the corefile, it will be ignored by CoreDNS
 SevRemoved     = "removed"     // completely removed from CoreDNS, and would cause CoreDNS to exit if present
in the Corefile
 SevNewDefault  = "newdefault"  // added to the default corefile.  CoreDNS may not function properly if it is not
present in the corefile.
 SevUnsupported = "unsupported" // the plugin/option is not supported by the migration tool

 // The following statuses are used for selecting/filtering notifications
 SevAll = "all" // show all statuses
)
```

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==========
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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL string `json:"url,omitempty"`

}
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procfs provides functions to retrieve system, kernel and process
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```
package migration

import "fmt"

// Notice is a migration warning
type Notice struct {
 Plugin     string
 Option     string
 Severity   string // 'deprecated', 'removed', or 'unsupported'
 ReplacedBy string
 Additional string
 Version    string
}

func (n *Notice) ToString() string {
 s := ""
 if n.Option == "" {
```

```
 s += fmt.Sprintf(`Plugin "%v" `, n.Plugin)
 } else {
 s += fmt.Sprintf(`Option "%v" in plugin "%v" `, n.Option, n.Plugin)
 }
 if n.Severity == SevUnsupported {
 s += "is unsupported by this migration tool in " + n.Version + "."
 } else if n.Severity == SevNewDefault {
 s += "is added as a default in " + n.Version + "."
 } else {
 s += "is " + n.Severity + " in " + n.Version + "."
 }
 if n.ReplacedBy != "" {
 s += fmt.Sprintf(` It is replaced by "%v".`, n.ReplacedBy)
 }
 if n.Additional != "" {
 s += " " + n.Additional
 }
 return s
}

const (
 // The following statuses are used to indicate the state of support/deprecation in a given release.
 SevDeprecated  = "deprecated"
  // deprecated, but still completely functional
 SevIgnored     = "ignored"     // if included in the corefile, it will be ignored by CoreDNS
 SevRemoved     = "removed"     // completely removed from CoreDNS, and would cause CoreDNS to exit if present
in the Corefile
 SevNewDefault  = "newdefault"  // added to the default corefile.  CoreDNS may not function properly if it is not
present in the corefile.
 SevUnsupported = "unsupported" // the plugin/option is not supported by the migration tool

 // The following statuses are used for selecting/filtering notifications
 SevAll = "all" // show all statuses
)
```

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==========
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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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==========
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1.2519 https-proxy-agent 7.0.6

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1.2520 x-crypto 0.31.0

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1.2521 grpc-go 1.68.1

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1.2522 nanoid 3.3.8

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1.2523 leodido-go-syslog 4.2.0

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1.2528 curl 7.81.0-1ubuntu1.20

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1.2529 prometheus-common 0.61.0

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1.2530 dunder-proto 1.0.1

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1.2531 curl 8.5.0-2ubuntu10.6

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1.2532 libcurl4t64 8.5.0-2ubuntu10.6

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1.2533 x-net 0.33.0

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1.2534 math-intrinsics 1.1.0

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1.2535 libncursesw 6.5_p20241006-r3

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```
# ncurses 6.5 - patch 20241006 - Thomas E. Dickey
#
# -------------------------------------------------------------------------------
#
# Ncurses 6.5 is at
#   https://invisible-island.net/archives/ncurses/
#   https://invisible-mirror.net/archives/ncurses/
#   https://ftp.gnu.org/gnu/ncurses/
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# Patches for ncurses 6.5 can be found at
#   https://invisible-island.net/archives/ncurses/6.5
#   https://invisible-mirror.net/archives/ncurses/6.5
#
```

```
# ----------------------------------------------------------------------------
# https://invisible-island.net/archives/ncurses/6.5/ncurses-6.5-20241006.patch.gz
# patch by Thomas E. Dickey <dickey@invisible-island.net>
# created  Sun Oct  6 23:44:01 UTC 2024
# ----------------------------------------------------------------------------
# NEWS                          |    6 +++
# VERSION                       |    2 -
# c++/cursesf.cc                |    6 +--
# c++/cursesf.h
                                |    6 +--
# c++/cursesm.cc                |    6 +--
# c++/cursesm.h                 |    6 +--
# c++/cursesp.cc                |    6 +--
# c++/cursespad.cc              |    6 +--
# c++/cursslk.cc                |   12 +++----
# c++/cursslk.h                 |    6 +--
# dist.mk                       |    4 +-
# misc/terminfo.src             |   23 ++++++++++--
# ncurses/base/lib_screen.c     |    4 +-
# ncurses/base/new_pair.c       |    4 +-
# ncurses/curses.priv.h         |    4 +-
# ncurses/new_pair.h            |    4 +-
# ncurses/tinfo/trim_sgr0.c     |    7 ++--
# ncurses/tty/lib_twait.c       |    6 +--
# package/debian-mingw/changelog   |    4 +-
# package/debian-mingw64/changelog |    4 +-
# package/debian/changelog      |    4 +-
# package/mingw-ncurses.nsi     |    4 +-
# package/mingw-ncurses.spec    |    2 -
# package/ncurses.spec          |    2 -
# package/ncursest.spec         |
    2 -
# test/blue.c                   |   10 +++---
# test/bs.c                     |    8 ++--
# test/cardfile.c               |   12 +++----
# test/chgat.c                  |    6 +--
# test/clip_printw.c            |    8 ++--
# test/color_name.h             |    6 +--
# test/demo_defkey.c            |    4 +-
# test/demo_forms.c             |   22 ++++++-------
# test/demo_menus.c             |   32 ++++++++++---------
# test/demo_new_pair.c          |    4 +-
# test/demo_panels.c            |   16 ++++-----
# test/demo_termcap.c           |   18 +++++-----
# test/demo_terminfo.c          |   18 +++++-----
# test/dots.c                   |    6 +--
# test/dots_mvcur.c             |    6 +--
# test/dots_termcap.c           |    8 ++--
```

```
# test/dup_field.c              |  14 ++++----
# test/filter.c                 |   6 +--
# test/form_driver_w.c          |   6 +--
# test/gdc.c                    |  10 +++---
# test/inch_wide.c
                |   6 +--
# test/inchs.c                  |   6 +--
# test/ins_wide.c               |   6 +--
# test/insdelln.c               |   8 ++--
# test/inserts.c                |   6 +--
# test/knight.c                 |   7 ++--
# test/list_keys.c              |   8 ++--
# test/move_field.c             |  18 +++++-----
# test/movewindow.c             |  16 ++++-----
# test/ncurses.c                |  61 ++++++++++++++++++++----------------------
# test/padview.c                |  12 +++----
# test/parse_rgb.h              |   6 +--
# test/picsmap.c                |  14 ++++----
# test/popup_msg.c              |   8 ++--
# test/popup_msg.h              |   6 +--
# test/railroad.c               |   6 +--
# test/rain.c                   |  20 ++++++------
# test/redraw.c                 |   6 +--
# test/savescreen.c             |  14 ++++----
# test/tclock.c                 |   4 +-
# test/test.priv.h
                |  10 +++---
# test/test_add_wchstr.c        |   6 +--
# test/test_addchstr.c          |   6 +--
# test/test_addstr.c            |   6 +--
# test/test_addwstr.c           |   6 +--
# test/test_endwin.c            |   6 +--
# test/test_get_wstr.c          |   8 ++--
# test/test_getstr.c            |   8 ++--
# test/test_instr.c             |   8 ++--
# test/test_inwstr.c            |   8 ++--
# test/test_mouse.c             |   4 +-
# test/test_opaque.c            |   8 ++--
# test/test_sgr.c               |  26 +++++++--------
# test/test_tparm.c             |  12 +++----
# test/test_vidputs.c           |   6 +--
# test/testcurs.c               |   8 ++--
# test/testscanw.c              |   6 +--
# test/view.c                   |  21 +++++-------
# 83 files changed, 392 insertions(+), 369 deletions(-)
# ------------------------------------------------------------------------------
Index: NEWS
Prereq:
```

```
  1.4185
--- ncurses-6.5-20240928+/NEWS 2024-09-28 20:27:44.000000000 +0000
+++ ncurses-6.5-20241006/NEWS 2024-10-06 08:53:45.000000000 +0000
@@ -26,7 +26,7 @@
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-- authorization.                                                            --
--------------------------------------------------------------------------------
--- $Id: NEWS,v 1.4185 2024/09/28 20:27:44 tom Exp $
+-- $Id: NEWS,v 1.4188 2024/10/06 08:53:45 tom Exp $
--------------------------------------------------------------------------------

This is a log of changes that ncurses has gone through since Zeyd started
@@ -46,6 +46,10 @@
Changes through 1.9.9e did not credit all contributions;
it is not possible to add this information.

+20241006
+ + fixes for compiler warnings/cppcheck.
+ + use xterm+alt+title in wezterm -TD
+
20240928
 + improve error-message from infocmp when a terminal entry cannot be
   opened (patch by Branden Robinson).
Index:
 VERSION
--- ncurses-6.5-20240928+/VERSION 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/VERSION 2024-10-06 08:53:45.000000000 +0000
@@ -1 +1 @@
-5:0:10 6.5 20240928
+5:0:10 6.5 20241006
Index: c++/cursesf.cc
Prereq:  1.26
--- ncurses-6.5-20240928+/c++/cursesf.cc 2021-04-17 18:11:08.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesf.cc 2024-10-05 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
/****************************************************************************
- * Copyright 2019-2020,2021 Thomas E. Dickey                                *
+ * Copyright 2019-2021,2024 Thomas E. Dickey                                *
 * Copyright 1998-2005,2011 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -36,7 +36,7 @@
#include "cursesf.h"
#include "cursesapp.h"

-MODULE_ID("$Id: cursesf.cc,v 1.26 2021/04/17 18:11:08 tom Exp $")
+MODULE_ID("$Id: cursesf.cc,v 1.27 2024/10/05 22:47:12 tom Exp $")
```

```
NCursesFormField::~NCursesFormField () THROWS(NCursesException)
{
@@ -76,7 +76,7 @@

void NCursesForm::setDefaultAttributes()
{
-  NCursesApplication* S = NCursesApplication::getApplication();
+  const NCursesApplication* S = NCursesApplication::getApplication();

  int n = count();
  if (n > 0) {
Index: c++/cursesf.h
Prereq:  1.39
--- ncurses-6.5-20240928+/c++/cursesf.h 2022-08-20 20:52:15.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesf.h 2024-10-05 22:47:12.000000000 +0000
@@ -1,7 +1,7 @@
// * This makes emacs happy -*-Mode: C++;-*-
// vile:cppmode
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 Foundation, Inc.                 *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -33,7 +33,7 @@
 *   Author: Juergen Pfeifer, 1997                                          *
 *****************************************************************************/

-// $Id: cursesf.h,v 1.39 2022/08/20 20:52:15 tom Exp $
+// $Id: cursesf.h,v 1.40 2024/10/05 22:47:12 tom Exp $

#ifndef NCURSES_CURSESF_H_incl
#define NCURSES_CURSESF_H_incl 1
@@ -384,7 +384,7 @@
  }

  inline void *get_user() {
-    UserHook* uptr = reinterpret_cast<UserHook*>(::form_userptr (form));
+    const UserHook* uptr = reinterpret_cast<UserHook*>(::form_userptr (form));
    assert (uptr != 0 && uptr->m_back==this && uptr->m_owner==form);
    return uptr->m_user;
  }
Index: c++/cursesm.cc
Prereq:  1.27
--- ncurses-6.5-20240928+/c++/cursesm.cc 2021-04-17 18:11:08.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesm.cc 2024-10-05
```

```
 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
/******************************************************************************
- * Copyright 2019-2020,2021 Thomas E. Dickey                                  *
+ * Copyright 2019-2021,2024 Thomas E. Dickey                                  *
 * Copyright 1998-2011,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -36,7 +36,7 @@
#include "cursesm.h"
#include "cursesapp.h"

-MODULE_ID("$Id: cursesm.cc,v 1.27 2021/04/17 18:11:08 tom Exp $")
+MODULE_ID("$Id: cursesm.cc,v 1.28 2024/10/05 22:47:12 tom Exp $")

NCursesMenuItem::~NCursesMenuItem() THROWS(NCursesException)
{
@@ -168,7 +168,7 @@
void
NCursesMenu::setDefaultAttributes()
{
-  NCursesApplication* S = NCursesApplication::getApplication();
+
  const NCursesApplication* S = NCursesApplication::getApplication();
  if (S) {
    ::set_menu_fore(menu, S->foregrounds());
    ::set_menu_back(menu, S->backgrounds());
Index: c++/cursesm.h
Prereq:  1.35
--- ncurses-6.5-20240928+/c++/cursesm.h 2022-08-20 20:52:15.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesm.h 2024-10-05 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * This makes emacs happy -*-Mode: C++;-*-
/******************************************************************************
- * Copyright 2019-2020,2022 Thomas E. Dickey                                  *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                  *
 * Copyright 1998-2012,2014 Free Software Foundation, Inc.                    *
 *                                                                            *
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@@ -32,7 +32,7 @@
 *   Author: Juergen Pfeifer, 1997                                            *
 ******************************************************************************/

-// $Id: cursesm.h,v 1.35 2022/08/20 20:52:15 tom Exp $
+// $Id: cursesm.h,v 1.36 2024/10/05 22:47:12 tom Exp $

#ifndef NCURSES_CURSESM_H_incl
```

```
#define NCURSES_CURSESM_H_incl 1
@@ -245,7 +245,7 @@
  }

  inline void *get_user() {
-    UserHook* uptr = STATIC_CAST(UserHook*)(::menu_userptr (menu));
+    const UserHook* uptr = STATIC_CAST(UserHook*)(::menu_userptr (menu));
    assert (uptr != 0 && uptr->m_back==this && uptr->m_owner==menu);
    return uptr->m_user;
  }
Index: c++/cursesp.cc
Prereq:  1.27
--- ncurses-6.5-20240928+/c++/cursesp.cc 2020-02-02 23:34:34.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesp.cc 2024-10-05 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
/*****************************************************************************
- * Copyright 2019,2020 Thomas E. Dickey                                     *
+ * Copyright 2019-2020,2024
 Thomas E. Dickey                                                           *
 * Copyright 1998-2003,2005 Free Software Foundation, Inc.                   *
 *                                                                           *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -35,7 +35,7 @@
#include "internal.h"
#include "cursesp.h"

-MODULE_ID("$Id: cursesp.cc,v 1.27 2020/02/02 23:34:34 tom Exp $")
+MODULE_ID("$Id: cursesp.cc,v 1.28 2024/10/05 22:47:12 tom Exp $")

NCursesPanel* NCursesPanel::dummy = static_cast<NCursesPanel*>(0);

@@ -64,7 +64,7 @@
void
NCursesPanel::redraw()
{
-  PANEL *pan;
+  const PANEL *pan;

  pan = ::panel_above(NULL);
  while (pan) {
Index: c++/cursespad.cc
Prereq:  1.18
--- ncurses-6.5-20240928+/c++/cursespad.cc 2020-02-02 23:34:34.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursespad.cc 2024-10-05 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
/*****************************************************************************
```

```
-
 * Copyright 2020 Thomas E. Dickey                                    *
+ * Copyright 2020,2024 Thomas E. Dickey                                    *
 * Copyright 1999-2012,2013 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -36,7 +36,7 @@

#include <cursesw.h>

-MODULE_ID("$Id: cursespad.cc,v 1.18 2020/02/02 23:34:34 tom Exp $")
+MODULE_ID("$Id: cursespad.cc,v 1.19 2024/10/05 22:47:12 tom Exp $")

NCursesPad::NCursesPad(int nlines, int ncols)
  : NCursesWindow(),
@@ -221,7 +221,7 @@
void NCursesFramedPad::OnOperation(int pad_req)
{
  (void) pad_req;
-  NCursesWindow* W = Win();
+  const NCursesWindow* W = Win();
  NCursesWindow* W2 = getWindow();

  if ((static_cast<NCursesWindow*>(0) != W) && (static_cast<NCursesWindow*>(0) != W2)) {
Index: c++/cursslk.cc
Prereq:
  1.22
--- ncurses-6.5-20240928+/c++/cursslk.cc 2024-06-15 21:07:30.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursslk.cc 2024-10-05 19:36:22.000000000 +0000
@@ -35,10 +35,10 @@
#include "internal.h"
#include "cursesapp.h"

-MODULE_ID("$Id: cursslk.cc,v 1.22 2024/06/15 21:07:30 tom Exp $")
+MODULE_ID("$Id: cursslk.cc,v 1.23 2024/10/05 19:36:22 tom Exp $")

Soft_Label_Key_Set::Soft_Label_Key&
-  Soft_Label_Key_Set::Soft_Label_Key::operator=(char *text)
+  Soft_Label_Key_Set::Soft_Label_Key::operator=(const char *text)
{
  delete[] label;
  size_t need = 1 + ::strlen(text);
@@ -111,11 +111,11 @@

void Soft_Label_Key_Set::activate_label(int i, bool bf) {
  if (!b_attrInit) {
-    NCursesApplication* A = NCursesApplication::getApplication();
+    const NCursesApplication* A = NCursesApplication::getApplication();
```

```
    if (A) attrset(A->labels());
    b_attrInit = TRUE;
  }
-  Soft_Label_Key& K = (*this)[i];
+  const Soft_Label_Key& K = (*this)[i];
  if (ERR==::slk_set(K.num,bf?K.label:"",K.format))
     Error("slk_set");
  noutrefresh();
@@ -124,12 +124,12 @@
void Soft_Label_Key_Set::activate_labels(bool bf)
{
  if (!b_attrInit) {
-    NCursesApplication* A = NCursesApplication::getApplication();
+    const NCursesApplication* A = NCursesApplication::getApplication();
    if (A) attrset(A->labels());
    b_attrInit = TRUE;
  }
  for(int i=1; i <= num_labels; i++) {
-    Soft_Label_Key& K = (*this)[i];
+    const Soft_Label_Key& K = (*this)[i];
    if (ERR==::slk_set(K.num,bf?K.label:"",K.format))
      Error("slk_set");
  }
Index: c++/cursslk.h
Prereq:  1.19
--- ncurses-6.5-20240928+/c++/cursslk.h 2021-04-17 18:11:08.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursslk.h 2024-10-05 22:47:12.000000000 +0000
@@ -1,7 +1,7 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
// vile:cppmode
/******************************************************************************
- * Copyright 2019-2020,2021 Thomas E. Dickey
             *
+ * Copyright 2019-2021,2024 Thomas E. Dickey                                *
 * Copyright 1998-2003,2005 Free Software Foundation, Inc.                   *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -33,7 +33,7 @@
 *   Author: Juergen Pfeifer, 1997                                          *
 ******************************************************************************/

-// $Id: cursslk.h,v 1.19 2021/04/17 18:11:08 tom Exp $
+// $Id: cursslk.h,v 1.20 2024/10/05 22:47:12 tom Exp $

#ifndef NCURSES_CURSSLK_H_incl
#define NCURSES_CURSSLK_H_incl
@@ -62,7 +62,7 @@
```

```
  public:
    // Set the text of the Label
-    Soft_Label_Key& operator=(char *text);
+    Soft_Label_Key& operator=(const char *text);

    // Set the Justification of the Label
    Soft_Label_Key& operator=(Justification just) {
Index: dist.mk
Prereq:  1.1634
--- ncurses-6.5-20240928+/dist.mk 2024-09-28
 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/dist.mk 2024-10-06 08:53:45.000000000 +0000
@@ -26,7 +26,7 @@
# use or other dealings in this Software without prior written              #
# authorization.                                                            #
##############################################################################
-# $Id: dist.mk,v 1.1634 2024/09/28 09:53:21 tom Exp $
+# $Id: dist.mk,v 1.1636 2024/10/06 08:53:45 tom Exp $
# Makefile for creating ncurses distributions.
#
# This only needs to be used directly as a makefile by developers, but
@@ -38,7 +38,7 @@
# These define the major/minor/patch versions of ncurses.
NCURSES_MAJOR = 6
NCURSES_MINOR = 5
-NCURSES_PATCH = 20240928
+NCURSES_PATCH = 20241006

# We don't append the patch to the version, since this only applies to releases
VERSION = $(NCURSES_MAJOR).$(NCURSES_MINOR)
Index: misc/terminfo.src
--- ncurses-6.5-20240928+/misc/terminfo.src 2024-09-07 16:23:31.000000000
 +0000
+++ ncurses-6.5-20241006/misc/terminfo.src 2024-10-05 16:04:17.000000000 +0000
@@ -6,8 +6,8 @@
# Report bugs and new terminal descriptions to
# bug-ncurses@gnu.org
#
-# $Revision: 1.1150 $
-# $Date: 2024/09/07 16:23:31 $
+# $Revision: 1.1153 $
+# $Date: 2024/10/05 16:04:17 $
#
# The original header is preserved below for reference.  It is noted that there
# is a "newer" version which differs in some cosmetic details (but actually
@@ -8060,6 +8060,17 @@
# "wezterm is a terminal emulator with support for modern features
#  such as fonts with ligatures, hyperlinks, tabs and multiple windows."
```

```
#
+# The documentation bears mention.  It refers to the "ANSI" standard and
+#  https://wezfurlong.org/wezterm/what-is-a-terminal.html#ansi-and-ecma-48
+# X3.64 (withdrawn long ago).  A related website
+# https://github.com/wez/ecma48
+# states that ECMA-48 was issued in 1979 and not revised since.  Actually that
+# was the second revision; the fifth revision in 1991 is current.  The source
+#
 code refers to the second revision in a half-dozen places.  Further, there
+# are three times as many references to Wikipedia as to xterm's documentation.
+# The git commit comments in several instances hint at an incomplete reading
+# of the relevant standards.
+#
# wezterm-20240203-110809-5046fc22 tested with MacOS
# General:
# + initial screensize is now 80x24
@@ -8094,7 +8105,7 @@
# + poor (doesn't copy anyone, most of the results are wrong)
# vttest:
# + DA is VT5xx with sixel, selective erase, user windows, color
-# + DA2 is VT220 version 277
+# + DA2 is VT220 version 277, perhaps a reference to xterm #277
# + only the VT100 character set works, contrary to DA/DA2.
# + no NRCS, either
# + double-sized character work, with some debris
@@ -8136,7 +8147,7 @@
 use=ansi+rep, use=ansi+sgrdim, use=bracketed+paste,
 use=ecma+index, use=ecma+italics, use=ecma+strikeout,
 use=report+version, use=vt220+cvis,
- use=xterm+256color2, use=xterm+alt1049,
+ use=xterm+256color2,
 use=xterm+alt+title,
 use=xterm+focus, use=xterm+pcc2, use=xterm+pce2,
 use=xterm+pcf2, use=xterm+sl-alt, use=xterm+sm+1006,
 use=xterm+tmux,
@@ -27644,4 +27655,8 @@
# 2024-09-07
# + update comments -TD
#
+# 2024-10-05
+# + use xterm+alt+title in wezterm -TD
+# + update comments -TD
+#
######## SHANTIH!  SHANTIH!  SHANTIH!
Index: ncurses/base/lib_screen.c
Prereq:  1.108
--- ncurses-6.5-20240928+/ncurses/base/lib_screen.c 2024-09-22 20:20:36.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/base/lib_screen.c 2024-10-05 20:47:44.000000000 +0000
```

```
@@ -42,7 +42,7 @@
#define CUR SP_TERMTYPE
#endif

-MODULE_ID("$Id: lib_screen.c,v 1.108 2024/09/22 20:20:36 tom Exp $")
+MODULE_ID("$Id: lib_screen.c,v 1.109 2024/10/05 20:47:44 tom Exp $")

#define MAX_SIZE 0x3fff  /* 16k is big enough for a window or pad */

@@ -943,7 +943,7 @@
 * Replace a window covering the whole screen, i.e., newscr or curscr.
 */
static WINDOW *
-replace_window(WINDOW *target, FILE *source)
+replace_window(const
 WINDOW *target, FILE *source)
{
   WINDOW *result = getwin(source);
#if NCURSES_EXT_FUNCS
Index: ncurses/base/new_pair.c
Prereq:  1.24
--- ncurses-6.5-20240928+/ncurses/base/new_pair.c 2024-07-27 19:22:23.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/base/new_pair.c 2024-10-05 20:51:29.000000000 +0000
@@ -61,7 +61,7 @@

#endif

-MODULE_ID("$Id: new_pair.c,v 1.24 2024/07/27 19:22:23 tom Exp $")
+MODULE_ID("$Id: new_pair.c,v 1.25 2024/10/05 20:51:29 tom Exp $")

#if NCURSES_EXT_COLORS

@@ -193,7 +193,7 @@
 * pair table.
 */
NCURSES_EXPORT(void)
-_nc_reset_color_pair(SCREEN *sp, int pair, colorpair_t * next)
+_nc_reset_color_pair(SCREEN *sp, int pair, const colorpair_t * next)
{
   colorpair_t *last;

Index: ncurses/curses.priv.h
Prereq:  1.691
--- ncurses-6.5-20240928+/ncurses/curses.priv.h 2024-09-28 15:35:01.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/curses.priv.h 2024-10-05 21:01:50.000000000 +0000
@@ -35,7 +35,7 @@
 ****************************************************************************/
```

```
/*
- * $Id: curses.priv.h,v 1.691 2024/09/28 15:35:01 tom Exp $
+ * $Id: curses.priv.h,v 1.692 2024/10/05 21:01:50 tom Exp $
 *
 * curses.priv.h
 *
@@ -2170,7 +2170,7 @@
extern NCURSES_EXPORT(int) _nc_read_termcap_entry (const char *const, TERMTYPE2 *const);
extern NCURSES_EXPORT(int) _nc_setup_tinfo(const char *, TERMTYPE2 *);
extern NCURSES_EXPORT(int) _nc_setupscreen (int, int, FILE *, int, int);
-extern NCURSES_EXPORT(int) _nc_timed_wait (SCREEN *, int, int, int * EVENTLIST_2nd(_nc_eventlist *));
+extern NCURSES_EXPORT(int) _nc_timed_wait (const SCREEN *, int, int, int *
EVENTLIST_2nd(_nc_eventlist *));
extern NCURSES_EXPORT(int) _nc_trans_string (char *, const char *);
extern NCURSES_EXPORT(void) _nc_init_termtype (TERMTYPE2 *const);
extern NCURSES_EXPORT(void) _nc_do_color (int, int, int, NCURSES_OUTC);
Index: ncurses/new_pair.h
Prereq:  1.14
--- ncurses-6.5-20240928+/ncurses/new_pair.h 2024-05-25 23:10:33.000000000 +0000
+++
 ncurses-6.5-20241006/ncurses/new_pair.h 2024-10-05 20:57:47.000000000 +0000
@@ -34,7 +34,7 @@
/*
 * Common type definitions and macros for new_pair.c, lib_color.c
 *
- * $Id: new_pair.h,v 1.14 2024/05/25 23:10:33 tom Exp $
+ * $Id: new_pair.h,v 1.15 2024/10/05 20:57:47 tom Exp $
 */

#ifndef NEW_PAIR_H
@@ -116,7 +116,7 @@
#if NCURSES_EXT_FUNCS && NCURSES_EXT_COLORS
extern NCURSES_EXPORT(void)     _nc_copy_pairs(SCREEN*, colorpair_t*, colorpair_t*, int);
extern NCURSES_EXPORT(void)     _nc_free_ordered_pairs(SCREEN*);
-extern NCURSES_EXPORT(void)     _nc_reset_color_pair(SCREEN*, int, colorpair_t*);
+extern NCURSES_EXPORT(void)     _nc_reset_color_pair(SCREEN*, int, const colorpair_t*);
extern NCURSES_EXPORT(void)     _nc_set_color_pair(SCREEN*, int, int);
#else
#define _nc_free_ordered_pairs(sp) /* nothing */
Index: ncurses/tinfo/trim_sgr0.c
Prereq:  1.23
--- ncurses-6.5-20240928+/ncurses/tinfo/trim_sgr0.c 2024-07-27 19:22:23.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/tinfo/trim_sgr0.c 2024-10-05
 20:53:48.000000000 +0000
@@ -37,7 +37,7 @@

#include <tic.h>
```

```
-MODULE_ID("$Id: trim_sgr0.c,v 1.23 2024/07/27 19:22:23 tom Exp $")
+MODULE_ID("$Id: trim_sgr0.c,v 1.24 2024/10/05 20:53:48 tom Exp $")

#undef CUR
#define CUR tp->
@@ -237,12 +237,10 @@

   if (PRESENT(exit_attribute_mode)
 && PRESENT(set_attributes)) {
- bool found = FALSE;
 char *on = set_attribute_9(tp, 1);
 char *off = set_attribute_9(tp, 0);
 char *end = strdup(exit_attribute_mode);
 char *tmp;
- size_t i, j, k;

 TR(TRACE_DATABASE, ("checking if we can trim sgr0 based on sgr"));
 TR(TRACE_DATABASE, ("sgr0       %s", _nc_visbuf(end)));
@@ -255,6 +253,9 @@
    FreeIfNeeded(off);
 } else if (similar_sgr(off, end)
    && !similar_sgr(off, on)) {
+    bool found = FALSE;
+    size_t i, j, k;
+
    TR(TRACE_DATABASE, ("adjusting sgr(9:off) : %s", _nc_visbuf(off)));
    result = off;
    /*
Index: ncurses/tty/lib_twait.c
Prereq:  1.81
--- ncurses-6.5-20240928+/ncurses/tty/lib_twait.c 2023-09-16
 16:30:40.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/tty/lib_twait.c 2024-10-05 22:47:12.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018-2020,2023 Thomas E. Dickey                                *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                *
 * Copyright 1998-2015,2016 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -76,7 +76,7 @@
#endif
#undef CUR

-MODULE_ID("$Id: lib_twait.c,v 1.81 2023/09/16 16:30:40 tom Exp $")
+MODULE_ID("$Id: lib_twait.c,v 1.82 2024/10/05 22:47:12 tom Exp $")
```

```
/*
 * Returns an elapsed time, in milliseconds (if possible).
@@ -168,7 +168,7 @@
 * descriptors.
 */
NCURSES_EXPORT(int)
-_nc_timed_wait(SCREEN *sp MAYBE_UNUSED,
+_nc_timed_wait(const
 SCREEN *sp MAYBE_UNUSED,
        int mode MAYBE_UNUSED,
        int milliseconds,
        int *timeleft
Index: package/debian-mingw/changelog
--- ncurses-6.5-20240928+/package/debian-mingw/changelog 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/debian-mingw/changelog 2024-10-06 08:53:45.000000000 +0000
@@ -1,8 +1,8 @@
-ncurses6td (6.5+20240928) unstable; urgency=low
+ncurses6td (6.5+20241006) unstable; urgency=low

  * latest weekly patch

- -- Thomas E. Dickey <dickey@invisible-island.net>  Sat, 28 Sep 2024 05:53:21 -0400
+ -- Thomas E. Dickey <dickey@invisible-island.net>  Sun, 06 Oct 2024 04:53:45 -0400

ncurses6 (5.9+20131005) unstable; urgency=low

Index: package/debian-mingw64/changelog
--- ncurses-6.5-20240928+/package/debian-mingw64/changelog 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/debian-mingw64/changelog 2024-10-06 08:53:45.000000000 +0000
@@ -1,8 +1,8 @@
-ncurses6td (6.5+20240928) unstable; urgency=low
+ncurses6td
 (6.5+20241006) unstable; urgency=low

  * latest weekly patch

- -- Thomas E. Dickey <dickey@invisible-island.net>  Sat, 28 Sep 2024 05:53:21 -0400
+ -- Thomas E. Dickey <dickey@invisible-island.net>  Sun, 06 Oct 2024 04:53:45 -0400

ncurses6 (5.9+20131005) unstable; urgency=low

Index: package/debian/changelog
--- ncurses-6.5-20240928+/package/debian/changelog 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/debian/changelog 2024-10-06 08:53:45.000000000 +0000
@@ -1,8 +1,8 @@
-ncurses6td (6.5+20240928) unstable; urgency=low
+ncurses6td (6.5+20241006) unstable; urgency=low
```

```
  * latest weekly patch

- -- Thomas E. Dickey <dickey@invisible-island.net>  Sat, 28 Sep 2024 05:53:21 -0400
+ -- Thomas E. Dickey <dickey@invisible-island.net>  Sun, 06 Oct 2024 04:53:45 -0400

ncurses6 (5.9+20120608) unstable; urgency=low

Index: package/mingw-ncurses.nsi
Prereq:  1.669
--- ncurses-6.5-20240928+/package/mingw-ncurses.nsi 2024-09-28 09:53:21.000000000 +0000
+++
 ncurses-6.5-20241006/package/mingw-ncurses.nsi 2024-10-06 08:53:45.000000000 +0000
@@ -1,4 +1,4 @@
-; $Id: mingw-ncurses.nsi,v 1.669 2024/09/28 09:53:21 tom Exp $
+; $Id: mingw-ncurses.nsi,v 1.671 2024/10/06 08:53:45 tom Exp $

; TODO add examples
; TODO bump ABI to 6
@@ -10,7 +10,7 @@
!define VERSION_MAJOR "6"
!define VERSION_MINOR "5"
!define VERSION_YYYY  "2024"
-!define VERSION_MMDD  "0928"
+!define VERSION_MMDD  "1006"
!define VERSION_PATCH ${VERSION_YYYY}${VERSION_MMDD}

!define MY_ABI   "5"
Index: package/mingw-ncurses.spec
--- ncurses-6.5-20240928+/package/mingw-ncurses.spec 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/mingw-ncurses.spec 2024-10-06 08:53:45.000000000 +0000
@@ -3,7 +3,7 @@
Summary: shared libraries for terminal handling
Name: mingw32-ncurses6
Version: 6.5
-Release: 20240928
+Release: 20241006
License: X11
Group: Development/Libraries
URL: https://invisible-island.net/ncurses/
Index: package/ncurses.spec
--- ncurses-6.5-20240928+/package/ncurses.spec 2024-09-28
 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/ncurses.spec 2024-10-06 08:53:45.000000000 +0000
@@ -1,7 +1,7 @@
Summary: shared libraries for terminal handling
Name: ncurses6
Version: 6.5
-Release: 20240928
```

```
+Release: 20241006
License: X11
Group: Development/Libraries
URL: https://invisible-island.net/ncurses/
Index: package/ncursest.spec
--- ncurses-6.5-20240928+/package/ncursest.spec 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/ncursest.spec 2024-10-06 08:53:45.000000000 +0000
@@ -1,7 +1,7 @@
Summary: Curses library with POSIX thread support.
Name: ncursest6
Version: 6.5
-Release: 20240928
+Release: 20241006
License: X11
Group: Development/Libraries
Source: ncurses-%{version}-%{release}.tgz
Index: test/blue.c
Prereq:  1.55
--- ncurses-6.5-20240928+/test/blue.c 2022-12-10 23:31:31.000000000 +0000
+++ ncurses-6.5-20241006/test/blue.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
-
 * Copyright 2019-2021,2022 Thomas E. Dickey                                  *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                  *
 * Copyright 1998-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -37,7 +37,7 @@
 ******************************************************************************/

/*
- * $Id: blue.c,v 1.55 2022/12/10 23:31:31 tom Exp $
+ * $Id: blue.c,v 1.56 2024/10/05 19:26:24 tom Exp $
 */

#include <test.priv.h>
@@ -437,7 +437,7 @@
static void
use_pc_display(void)
{
-    char *check = nl_langinfo(CODESET);
+    const char *check = nl_langinfo(CODESET);
    if (!strcmp(check, "UTF-8")) {
#if USE_WIDEC_SUPPORT
 suits = uglyphs;
@@ -448,8 +448,8 @@
     !strcmp(check, "CP437") ||
```

```
    !strcmp(check,
 "IBM850") ||
    !strcmp(check, "CP850")) {
-     char *smacs = tigetstr("smacs");
-     char *smpch = tigetstr("smpch");
+     const char *smacs = tigetstr("smacs");
+     const char *smpch = tigetstr("smpch");
    /*
     * The ncurses library makes this check to decide whether to allow
     * the alternate character set for the (normally) nonprinting codes.
Index: test/bs.c
Prereq:  1.79
--- ncurses-6.5-20240928+/test/bs.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/bs.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                  *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                  *
 * Copyright 1998-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge,
 to any person obtaining a  *
@@ -35,7 +35,7 @@
 * v2.0 featuring strict ANSI/POSIX conformance, November 1993.
 * v2.1 with ncurses mouse support, September 1995
 *
- * $Id: bs.c,v 1.79 2023/05/27 20:13:10 tom Exp $
+ * $Id: bs.c,v 1.80 2024/10/05 19:26:24 tom Exp $
 */

#include <test.priv.h>
@@ -147,7 +147,7 @@
   bool placed;  /* has it been placed on the board? */
} ship_t;

-static bool checkplace(int b, ship_t * ss, int vis);
+static bool checkplace(int b, const ship_t * ss, int vis);

#define SHIPIT(name, symbol, length) { name, 0, symbol, length, 0,0, 0, FALSE }

@@ -686,7 +686,7 @@
}

static bool
-checkplace(int b, ship_t * ss, int vis)
+checkplace(int b, const ship_t * ss, int vis)
{
   int l, xend, yend;
```

```
Index: test/cardfile.c
Prereq:  1.51
--- ncurses-6.5-20240928+/test/cardfile.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/cardfile.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
-
 * Copyright 2019-2021,2022 Thomas E. Dickey                                  *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                  *
 * Copyright 1999-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: cardfile.c,v 1.51 2022/12/04 00:40:11 tom Exp $
+ * $Id: cardfile.c,v 1.52 2024/10/05 19:26:24 tom Exp $
 *
 * File format: text beginning in column 1 is a title; other text is content.
 */
@@ -161,7 +161,7 @@
}

static CARD *
-find_card(char *title)
+find_card(const char *title)
{
   CARD *card;

@@ -173,7 +173,7 @@
}

static void
-read_data(char *fname)
+read_data(const char *fname)
{
   FILE *fp;

@@ -341,7 +341,7 @@
}

static FIELD **
-make_fields(CARD * p, int form_high,
 int form_wide)
+make_fields(const CARD * p, int form_high, int form_wide)
{
```

```
   FIELD **f = typeCalloc(FIELD *, (size_t) 3);

@@ -385,7 +385,7 @@
/****************************************************************************/

static void
-cardfile(char *fname)
+cardfile(const char *fname)
{
   WINDOW *win;
   CARD *p;
Index: test/chgat.c
Prereq:  1.21
--- ncurses-6.5-20240928+/test/chgat.c 2024-06-29 17:45:32.000000000 +0000
+++ ncurses-6.5-20241006/test/chgat.c 2024-10-06 22:35:55.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                               *
 ****************************************************************************/
/*
- * $Id: chgat.c,v 1.21 2024/06/29 17:45:32 tom Exp $
+ * $Id: chgat.c,v 1.23 2024/10/06 22:35:55 tom Exp $
 *
 * test-driver for chgat/wchgat/mvchgat/mvwchgat
 */
@@ -160,7 +160,7 @@
}

static void
-do_subwindow(WINDOW *win, STATUS * sp, void func(WINDOW *))
+do_subwindow(WINDOW *win, const STATUS
 * sp, void func(WINDOW *))
{
   WINDOW *win1 = newwin(sp->y_max - 2, sp->x_max - 2,
    sp->y_beg + 1, sp->x_beg + 1);
@@ -204,7 +204,7 @@
static void
show_help(WINDOW *win)
{
-    static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
   {
 "Basic commands:"
 ,"Use h/j/k/l or arrow keys to move the cursor."
Index: test/clip_printw.c
Prereq:  1.23
--- ncurses-6.5-20240928+/test/clip_printw.c 2023-09-30 19:57:44.000000000 +0000
+++ ncurses-6.5-20241006/test/clip_printw.c 2024-10-06 22:36:25.000000000 +0000
@@ -1,5 +1,5 @@
```

```
/******************************************************************************
- * Copyright 2019-2022,2023 Thomas E. Dickey                                 *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                 *
 * Copyright 2008-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge,
 to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: clip_printw.c,v 1.23 2023/09/30 19:57:44 tom Exp $
+ * $Id: clip_printw.c,v 1.25 2024/10/06 22:36:25 tom Exp $
 *
 * demonstrate how to use printw with/without wrapping.
 */
@@ -212,7 +212,7 @@
}

static void
-do_subwindow(WINDOW *win, STATUS * sp, void func(WINDOW *))
+do_subwindow(WINDOW *win, const STATUS * sp, void func(WINDOW *))
{
   WINDOW *win1 = newwin(sp->y_max - (2 * MARGIN),
    sp->x_max - (2 * MARGIN),
@@ -268,7 +268,7 @@
static void
show_help(WINDOW *win)
{
-    static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
    {
 "Basic commands:"
 ,"Use h/j/k/l or arrow keys to move the cursor."
Index: test/color_name.h
Prereq:  1.9
--- ncurses-6.5-20240928+/test/color_name.h 2021-04-24 23:25:29.000000000 +0000
+++ ncurses-6.5-20241006/test/color_name.h 2024-10-05
 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2018-2020,2021 Thomas E. Dickey                                 *
+ * Copyright 2018-2021,2024 Thomas E. Dickey                                 *
 * Copyright 2011-2012,2016 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
```

```
 ****************************************************************************/
/*
- * $Id: color_name.h,v 1.9 2021/04/24 23:25:29 tom Exp $
+ * $Id: color_name.h,v 1.10 2024/10/05 19:26:24 tom Exp $
 */

#ifndef __COLORNAME_H
@@ -63,7 +63,6 @@
{
    int result = 0;
    char *endp = 0;
-    size_t n;

    if ((result = (int) strtol(color,
 &endp, 0)) >= 0
 && (endp == 0 || *endp == 0)) {
@@ -71,6 +70,7 @@
    } else if (!strcmp(color, "default")) {
 result = -1;
    } else {
+ size_t n;
 for (n = 0; n < SIZEOF(the_color_names); ++n) {
     if (!strcmp(the_color_names[n], color)) {
  result = (int) n;
Index: test/demo_defkey.c
Prereq:  1.35
--- ncurses-6.5-20240928+/test/demo_defkey.c 2024-01-20 20:46:12.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_defkey.c 2024-10-05 18:20:04.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                               *
 ****************************************************************************/
/*
- * $Id: demo_defkey.c,v 1.35 2024/01/20 20:46:12 tom Exp $
+ * $Id: demo_defkey.c,v 1.36 2024/10/05 18:20:04 tom Exp $
 *
 * Demonstrate the define_key() function.
 * Thomas Dickey - 2002/11/23
@@ -199,7 +199,7 @@
}

static void
-redefine(WINDOW *win, char *string, int code)
+redefine(WINDOW *win, const char *string, int code)
{

   really_define_key(win, string, code);
}
Index: test/demo_forms.c
```

```
Prereq:  1.63
--- ncurses-6.5-20240928+/test/demo_forms.c 2023-11-11 00:29:53.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_forms.c 2024-10-06 21:15:12.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                  *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                  *
 * Copyright 2003-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: demo_forms.c,v 1.63 2023/11/11 00:29:53 tom Exp $
+ * $Id: demo_forms.c,v 1.67
 2024/10/06 21:15:12 tom Exp $
 *
 * Demonstrate a variety of functions from the form library.
 * Thomas Dickey - 2003/4/26
@@ -148,7 +148,7 @@
}

static FIELD *
-make_label(const char *label, int frow, int fcol)
+make_label(NCURSES_CONST char *label, int frow, int fcol)
{
   FIELD *f = new_field(1, (int) strlen(label), frow, fcol, 0, 0);

@@ -242,7 +242,7 @@
#define O_SELECTABLE (O_ACTIVE | O_VISIBLE)

static FIELD *
-another_field(FORM *form, const FIELD *const field)
+another_field(NCURSES_CONST FORM *form, NCURSES_CONST FIELD *const field)
{
   FIELD **f = form_fields(form);
   FIELD *result = 0;
@@ -306,9 +306,9 @@
}

static void
-show_current_field(WINDOW *win, FORM *form)
+show_current_field(WINDOW *win, NCURSES_CONST FORM *form)
{
-    FIELD *field;
+    NCURSES_CONST FIELD *field;
   int field_rows, field_cols, field_max;
```

```
    int currow, curcol;

@@ -325,7 +325,7 @@
    waddch(win, '\n');

    if ((field = current_field(form)) != 0) {
- FIELDTYPE *type;
+ NCURSES_CONST
 FIELDTYPE *type;
 int nbuf;

 wprintw(win, "Page %d%s, Field %d/%d%s:",
@@ -383,7 +383,7 @@

 waddstr(win, "\n");
 for (nbuf = 0; nbuf <= 2; ++nbuf) {
-     char *buffer;
+     NCURSES_CONST char *buffer;
     if ((buffer = field_buffer(field, nbuf)) != 0) {
  wprintw(win, "buffer %d:", nbuf);
  (void) wattrset(win, A_REVERSE);
@@ -408,8 +408,8 @@
    int c;
    unsigned n = 0;
    int pg;
-    const char *fname;
-    static const char *my_enum[] =
+    NCURSES_CONST char *fname;
+    static NCURSES_CONST char *my_enum[] =
    {"first", "second", "third", 0};

#ifdef NCURSES_MOUSE_VERSION
@@ -515,7 +515,7 @@
    f[n] = (FIELD *) 0;

    if ((form = new_form(f)) != 0) {
- WINDOW *w;
+ NCURSES_CONST WINDOW *w;
 WINDOW *also;
 int finished = 0;

Index: test/demo_menus.c
Prereq:  1.80
--- ncurses-6.5-20240928+/test/demo_menus.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_menus.c 2024-10-06 19:58:28.000000000 +0000
@@ -1,5
 +1,5 @@
/******************************************************************************
```

```
- * Copyright 2019-2022,2023 Thomas E. Dickey                              *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                              *
 * Copyright 2003-2016,2017 Free Software Foundation, Inc.                 *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: demo_menus.c,v 1.80 2023/05/27 20:13:10 tom Exp $
+ * $Id: demo_menus.c,v 1.82 2024/10/06 19:58:28 tom Exp $
 *
 * Demonstrate a variety of functions from the menu library.
 * Thomas Dickey - 2005/4/9
@@ -185,7 +185,7 @@
}

static int
-menu_getc(MENU * m)
+menu_getc(NCURSES_CONST MENU * m)
{
   return wGetchar(menu_win(m));
 }
@@ -214,7 +214,7 @@
my_menu_init(MENU * menu)
{
   Trace(("called MenuHook my_menu_init"));
-   mvwprintw(status, 2, 0, "menu_init %p", (void *) menu);
+   mvwprintw(status, 2, 0, "menu_init %p", (const void *) menu);
   wclrtoeol(status);
   wrefresh(status);
}
@@ -223,7 +223,7 @@
my_menu_term(MENU * menu)
{
   Trace(("called MenuHook my_menu_term"));
-   mvwprintw(status, 2, 0, "menu_term %p", (void *) menu);
+   mvwprintw(status, 2, 0, "menu_term %p", (const void *) menu);
   wclrtoeol(status);
   wrefresh(status);
}
@@ -231,7 +231,7 @@
static void
my_item_init(MENU * menu)
{
-   ITEM *item = current_item(menu);
+   NCURSES_CONST ITEM *item = current_item(menu);
   const char *name = item_name(item);
```

```
   Trace(("called MenuHook my_item_init (%s)", name));
@@ -243,7 +243,7 @@
static void
my_item_term(MENU * menu)
{
-    ITEM *item = current_item(menu);
+    NCURSES_CONST ITEM *item = current_item(menu);
   const char *name = item_name(item);

   Trace(("called MenuHook my_item_term (%s)", name));
@@ -348,7 +348,7 @@

/* force the given menu to appear */
static void
-menu_display(MENU * m)
+menu_display(NCURSES_CONST MENU * m)
{
   touchwin(menu_win(m));
   wrefresh(menu_win(m));
@@ -584,10 +584,10 @@
 * the others
 */
static bool
-update_trace_menu(MENU * m)
+update_trace_menu(NCURSES_CONST MENU * m)
{
   ITEM **items;
-    ITEM *i;
+    NCURSES_CONST ITEM *i;
   bool changed = FALSE;

   items = menu_items(m);
@@ -613,7 +613,7 @@
   int result;

   for (ip = menu_items(mpTrace); *ip; ip++) {
- MENU_DATA *td = (MENU_DATA *) item_userptr(*ip);
+ NCURSES_CONST MENU_DATA *td = (MENU_DATA *) item_userptr(*ip);
 unsigned mask = td->mask;
 if (mask == 0)
     set_item_value(*ip, _nc_tracing == 0);
@@ -628,7 +628,7 @@
     unsigned newtrace = 0;
     for (ip = menu_items(mpTrace); *ip; ip++) {
  if (item_value(*ip)) {
-      MENU_DATA *td = (MENU_DATA *) item_userptr(*ip);
+      NCURSES_CONST
```

```
 MENU_DATA *td = (MENU_DATA *) item_userptr(*ip);
      newtrace |= td->mask;
  }
    }
@@ -718,7 +718,9 @@
}

static int
-move_menu(MENU * menu, MENU * current, int by_y, int by_x)
+move_menu(NCURSES_CONST MENU * menu,
+   NCURSES_CONST MENU * current,
+   int by_y, int by_x)
{
   WINDOW *top_win = menu_win(menu);
   WINDOW *sub_win = menu_sub(menu);
@@ -798,7 +800,7 @@
#endif /* defined(KEY_RESIZE) && NCURSES_EXT_FUNCS */

static void
-show_status(int ch, MENU * menu)
+show_status(int ch, NCURSES_CONST MENU * menu)
{
   wmove(status, 0, 0);
   wprintw(status, "key %s, menu %d, mark %s, match %s",
@@ -919,7 +921,7 @@
 wrefresh(menu_win(last_menu));
 if (code == E_UNKNOWN_COMMAND
     || code == E_NOT_POSTED) {
-     ITEM *item = current_item(last_menu);
+     NCURSES_CONST ITEM *item = current_item(last_menu);
     MENU_DATA *td = (MENU_DATA *) item_userptr(item);
     td->func((int) td->mask);
 }
Index: test/demo_new_pair.c
Prereq:  1.28
--- ncurses-6.5-20240928+/test/demo_new_pair.c 2024-06-29
 19:30:26.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_new_pair.c 2024-10-05 18:21:44.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                               *
 ******************************************************************************/
/*
- * $Id: demo_new_pair.c,v 1.28 2024/06/29 19:30:26 tom Exp $
+ * $Id: demo_new_pair.c,v 1.29 2024/10/05 18:21:44 tom Exp $
 *
 * Demonstrate the alloc_pair() function.
 */
@@ -49,7 +49,7 @@
```

```
static bool
valid_cap(NCURSES_CONST char *name)
{
-    char *value = tigetstr(name);
+    const char *value = tigetstr(name);
    return (value != 0 && value != (char *) -1) ? TRUE : FALSE;
}

Index: test/demo_panels.c
Prereq:  1.48
--- ncurses-6.5-20240928+/test/demo_panels.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_panels.c 2024-10-06 20:01:21.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
-
 * Copyright 2018-2020,2022 Thomas E. Dickey                                  *
+ * Copyright 2018-2022,2024 Thomas E. Dickey                                  *
 * Copyright 2003-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: demo_panels.c,v 1.48 2022/12/04 00:40:11 tom Exp $
+ * $Id: demo_panels.c,v 1.50 2024/10/06 20:01:21 tom Exp $
 *
 * Demonstrate a variety of functions from the panel library.
 */
@@ -42,7 +42,7 @@
#define TEMP_POS '>'

typedef void (*InitPanel) (void);
-typedef void (*FillPanel) (PANEL *);
+typedef void (*FillPanel) (NCURSES_CONST PANEL *);

static bool use_colors = FALSE;
static bool
 unboxed = FALSE;
@@ -301,7 +301,7 @@
 int code;
 int y0, x0;
 int y1, x1;
- WINDOW *win = panel_window(pans[which]);
+ NCURSES_CONST WINDOW *win = panel_window(pans[which]);
 char also[80];

 getbegyx(win, y0, x0);
```

```
@@ -368,7 +368,7 @@
}

static void
-fill_panel(PANEL *pan)
+fill_panel(NCURSES_CONST PANEL *pan)
{
   WINDOW *win = panel_window(pan);
   const char *userptr = (const char *) panel_userptr(pan);
@@ -388,7 +388,7 @@
}

static void
-fill_unboxed(PANEL *pan)
+fill_unboxed(NCURSES_CONST PANEL *pan)
{
   WINDOW *win = panel_window(pan);
   const char *userptr = (const char *) panel_userptr(pan);
@@ -431,7 +431,7 @@
}

static void
-fill_wide_panel(PANEL *pan)
+fill_wide_panel(NCURSES_CONST PANEL *pan)
{
   WINDOW *win = panel_window(pan);
   int num = ((const char *) panel_userptr(pan))[1];
@@ -453,7 +453,7 @@
#define MAX_PANELS 5

static int
-which_panel(PANEL *px[MAX_PANELS + 1], PANEL *pan)
+which_panel(PANEL *px[MAX_PANELS + 1], NCURSES_CONST
 PANEL *pan)
{
   int result = 0;
   int j;
Index: test/demo_termcap.c
Prereq:  1.65
--- ncurses-6.5-20240928+/test/demo_termcap.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_termcap.c 2024-10-06 20:05:09.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2019-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                *
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 *                                                                          *
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```

```
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: demo_termcap.c,v 1.65 2023/05/27 20:13:10 tom Exp $
+ * $Id: demo_termcap.c,v 1.70 2024/10/06 20:05:09 tom Exp $
 *
 * A simple demo of the termcap interface.
 */
@@ -256,7 +256,7 @@

   * to hold all of the strings extracted from the terminal entry.
    */
   char area[1024], *ap = area;
-   char *str;
+   NCURSES_CONST char *str;
   int num;

   if ((str = tgetstr(cap, &ap)) != 0) {
@@ -289,7 +289,7 @@
}

static void
-brute_force(const char *name)
+brute_force(NCURSES_CONST char *name)
{
   char buffer[1024];

@@ -369,7 +369,7 @@
#ifdef NCURSES_VERSION
 if (x_opt && (my_blob == 0) && y_opt) {
#if NCURSES_XNAMES
-    TERMTYPE *term = (TERMTYPE *) cur_term;
+    NCURSES_CONST TERMTYPE *term = (TERMTYPE *) cur_term;
    if (term != 0
  && ((NUM_BOOLEANS(term) != BOOLCOUNT)
     || (NUM_NUMBERS(term) != NUMCOUNT)
@@ -781,12 +781,12 @@
{
   int ch;
   int n;
-   char *name;
+   NCURSES_CONST char *name;
   bool a_opt = FALSE;
#if defined(NCURSES_VERSION) || defined(HAVE_CURSES_DATA_OSPEED)
   bool v_opt = FALSE;
#endif
-   char *input_name = 0;
```

```
+    NCURSES_CONST char *input_name = 0;

    int repeat;
    int r_opt = 1;
@@ -867,7
 +867,7 @@
     } else if ((name = getenv("TERM")) != 0) {
  brute_force(name);
     } else {
-  static char dumb[] = "dumb";
+  static NCURSES_CONST char dumb[] = "dumb";
  brute_force(dumb);
     }
 }
@@ -894,7 +894,7 @@
     } else if ((name = getenv("TERM")) != 0) {
  demo_termcap(name);
     } else {
-  static char dumb[] = "dumb";
+  static NCURSES_CONST char dumb[] = "dumb";
  demo_termcap(dumb);
     }
 }
Index: test/demo_terminfo.c
Prereq:  1.57
--- ncurses-6.5-20240928+/test/demo_terminfo.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_terminfo.c 2024-10-06 21:16:43.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2019-2022,2023 Thomas E. Dickey                                  *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                  *
 * Copyright 2009-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
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@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: demo_terminfo.c,v 1.57 2023/05/27 20:13:10 tom Exp $
+ * $Id: demo_terminfo.c,v 1.59 2024/10/06 21:16:43 tom Exp $
 *
 * A simple demo of the terminfo interface.
 */
@@ -253,7 +253,7 @@
#define LegalItem(c,n) (n)

static void
```

```
-brute_force(const char *name)
+brute_force(NCURSES_CONST char *name)
{
#define MAX_FORCE 5  /* omit "colors", since CPU-time is a problem */
   static const char legal[] = "\
@@ -324,7 +324,7 @@
#endif

static void
-demo_terminfo(char *name)
+demo_terminfo(NCURSES_CONST char *name)
{
   unsigned n;
   NCURSES_CONST char *cap;
@@ -366,7 +366,7 @@
   if (x_opt && (my_blob == 0)) {
 if (y_opt) {
#if NCURSES_XNAMES
-     TERMTYPE *term = (TERMTYPE *) cur_term;
+     const TERMTYPE *term = (TERMTYPE *) cur_term;
     if (term != 0
  && ((NUM_BOOLEANS(term)
 != BOOLCOUNT)
      || (NUM_NUMBERS(term) != NUMCOUNT)
@@ -813,9 +813,9 @@
   int ch;
   int n;
   int repeat;
-    char *name;
+    NCURSES_CONST char *name;
   int r_opt = 1;
-    char *input_name = 0;
+    const char *input_name = 0;

   while ((ch = getopt(argc, argv, OPTS_COMMON "abd:e:fi:nqr:sxy")) != -1) {
 switch (ch) {
@@ -891,7 +891,7 @@
     } else if ((name = getenv("TERM")) != 0) {
  brute_force(name);
     } else {
-  static char dumb[] = "dumb";
+  static NCURSES_CONST char dumb[] = "dumb";
  brute_force(dumb);
     }
 }
@@ -918,7 +918,7 @@
     } else if ((name = getenv("TERM")) != 0) {
  demo_terminfo(name);
```

```
     } else {
-  static char dumb[] = "dumb";
+  static NCURSES_CONST char dumb[] = "dumb";
  demo_terminfo(dumb);
     }
 }
Index: test/dots.c
Prereq:  1.45
--- ncurses-6.5-20240928+/test/dots.c 2023-01-07 17:21:48.000000000 +0000
+++ ncurses-6.5-20241006/test/dots.c 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
-
 * Copyright 2019-2022,2023 Thomas E. Dickey                                  *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                  *
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 *                                                                            *
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@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey <dickey@clark.net> 1999
 *
- * $Id: dots.c,v 1.45 2023/01/07 17:21:48 tom Exp $
+ * $Id: dots.c,v 1.46 2024/10/06 21:17:54 tom Exp $
 *
 * A simple demo of the terminfo interface.
 */
@@ -61,7 +61,7 @@
}

static bool
-outs(const char *s)
+outs(NCURSES_CONST char *s)
{
   if (VALID_STRING(s)) {
 tputs(s, 1, outc);
Index: test/dots_mvcur.c
Prereq:  1.31
--- ncurses-6.5-20240928+/test/dots_mvcur.c 2023-01-07 17:21:48.000000000 +0000
+++ ncurses-6.5-20241006/test/dots_mvcur.c 2024-10-06
 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2019-2022,2023 Thomas E. Dickey                                  *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                  *
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 *                                                                            *
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```

```
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey - 2007
 *
- * $Id: dots_mvcur.c,v 1.31 2023/01/07 17:21:48 tom Exp $
+ * $Id: dots_mvcur.c,v 1.32 2024/10/06 21:17:54 tom Exp $
 *
 * A simple demo of the terminfo interface, and mvcur.
 */
@@ -62,7 +62,7 @@
}

static bool
-outs(const char *s)
+outs(NCURSES_CONST char *s)
{
   if (VALID_STRING(s)) {
 tputs(s, 1, outc);
Index: test/dots_termcap.c
Prereq:  1.33
--- ncurses-6.5-20240928+/test/dots_termcap.c 2024-08-31
 15:55:46.000000000 +0000
+++ ncurses-6.5-20241006/test/dots_termcap.c 2024-10-06 21:18:35.000000000 +0000
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: dots_termcap.c,v 1.33 2024/08/31 15:55:46 tom Exp $
+ * $Id: dots_termcap.c,v 1.35 2024/10/06 21:18:35 tom Exp $
 *
 * A simple demo of the termcap interface.
 */
@@ -113,7 +113,7 @@
}

static bool
-outs(char *s)
+outs(NCURSES_CONST char *s)
{
   if (VALID_STRING(s)) {
 tputs(s, 1, outc);
@@ -178,7 +178,7 @@
get_number(NCURSES_CONST char *cap, const char *env)
{
   int result = tgetnum(cap);
-   char *value = env ? getenv(env) : 0;
+   const char *value = env ? getenv(env) : 0;
   if (value != 0 && *value != 0) {
```

```
 char *next = 0;
 long check = strtol(value, &next, 10);
@@ -229,7 +229,7 @@
    double c;
    char buffer[1024];
    char area[1024];
-    char *name;
+    NCURSES_CONST char *name;
    size_t need;
    char *my_env;

Index: test/dup_field.c
Prereq:  1.9
--- ncurses-6.5-20240928+/test/dup_field.c 2024-06-29
 17:45:32.000000000 +0000
+++ ncurses-6.5-20241006/test/dup_field.c 2024-10-06 20:07:19.000000000 +0000
@@ -26,7 +26,7 @@
 * authorization.                                               *
 ******************************************************************************/
/*
- * $Id: dup_field.c,v 1.9 2024/06/29 17:45:32 tom Exp $
+ * $Id: dup_field.c,v 1.11 2024/10/06 20:07:19 tom Exp $
 *
 * Demonstrate dup_field().
 */
@@ -146,27 +146,27 @@
}

static FieldAttrs *
-my_field_attrs(FIELD *f)
+my_field_attrs(NCURSES_CONST FIELD *f)
{
    return (FieldAttrs *) field_userptr(f);
}

static int
-buffer_length(FIELD *f)
+buffer_length(NCURSES_CONST FIELD *f)
{
    return my_field_attrs(f)->row_lengths[0];
}

static void
-set_buffer_length(FIELD *f, int length)
+set_buffer_length(NCURSES_CONST FIELD *f, int length)
{
    my_field_attrs(f)->row_lengths[0] = length;
}
```

```
static int
-offset_in_field(FORM *form)
+offset_in_field(NCURSES_CONST
 FORM *form)
{
-    FIELD *field = current_field(form);
+    NCURSES_CONST FIELD *field = current_field(form);
    int currow, curcol;

    form_getyx(form, currow, curcol);
@@ -245,7 +245,7 @@

 default:
     modified = (ch < MIN_FORM_COMMAND
-   && isprint(ch));
+   && isprint(UChar(ch)));
     break;
 }

Index: test/filter.c
Prereq:  1.38
--- ncurses-6.5-20240928+/test/filter.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/filter.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2019-2020,2022 Thomas E. Dickey                                  *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                  *
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 *                                                                            *
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@@
 -30,7 +30,7 @@
/*
 * Author:  Thomas E. Dickey 1998
 *
- * $Id: filter.c,v 1.38 2022/12/04 00:40:11 tom Exp $
+ * $Id: filter.c,v 1.39 2024/10/05 19:26:24 tom Exp $
 *
 * An example of the 'filter()' function in ncurses, this program prompts
 * for commands and executes them (like a command shell).  It illustrates
@@ -65,7 +65,7 @@
    if (clocked) {
 if (limit >= 3) {
     time_t now = time((time_t *) 0);
-     struct tm *my = localtime(&now);
+     const struct tm *my = localtime(&now);
     char buffer[80];
```

```
    int skip, y, x;
    int margin;
Index: test/form_driver_w.c
Prereq:  1.17
--- ncurses-6.5-20240928+/test/form_driver_w.c 2022-12-10 23:31:31.000000000 +0000
+++ ncurses-6.5-20241006/test/form_driver_w.c 2024-10-06 23:13:40.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                     *
+ * Copyright 2020-2022,2024 Thomas E. Dickey
                                                                            *
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 *                                                                          *
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@@ -32,7 +32,7 @@
 ****************************************************************************/

/*
- * $Id: form_driver_w.c,v 1.17 2022/12/10 23:31:31 tom Exp $
+ * $Id: form_driver_w.c,v 1.18 2024/10/06 23:13:40 tom Exp $
 *
 * Test form_driver_w (int, int, wchar_t), a wide char aware
 * replacement of form_driver.
@@ -68,7 +68,7 @@
int
main(int argc, char *argv[])
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
    {
 "Commands:",
 "  ^D,^Q,ESC           - quit program",
Index: test/gdc.c
Prereq:  1.60
--- ncurses-6.5-20240928+/test/gdc.c 2024-06-29 19:59:06.000000000 +0000
+++ ncurses-6.5-20241006/test/gdc.c 2024-10-06 20:08:59.000000000 +0000
@@ -34,7 +34,7 @@
 * modified 10-18-89
 for curses (jrl)
 * 10-18-89 added signal handling
 *
- * $Id: gdc.c,v 1.60 2024/06/29 19:59:06 tom Exp $
+ * $Id: gdc.c,v 1.62 2024/10/06 20:08:59 tom Exp $
 */

#include <test.priv.h>
@@ -181,7 +181,7 @@
    int check;
```

```
   time_t result;
   char c = 0;
-   struct tm *tm;
+   NCURSES_CONST struct tm *tm;

   switch (sscanf(value, "%d:%d:%d%c", &hh, &mm, &ss, &c)) {
   default:
@@ -243,7 +243,7 @@
main(int argc, char *argv[])
{
   time_t now;
-   struct tm *tm;
+   NCURSES_CONST struct tm *tm;
   long t, a;
   int i, j, s, k, ch;
   int count = 0;
@@ -293,7 +293,7 @@

   InitAndCatch({
 if (redirected) {
-     char *name = getenv("TERM");
+     NCURSES_CONST char *name = getenv("TERM");
     if (name == 0
  || newterm(name, ofp, ifp) == 0) {
  fprintf(stderr, "cannot open terminal\n");
@@ -431,7 +431,7 @@
     _nc_STRNCPY(buf, ctime(&now), (size_t) 30);
     {
  char *d2 = buf + 10;
-  char *s2 = buf + 19;
+  NCURSES_CONST char *s2 = buf + 19;
   while ((*d2++ = *s2++) != '\0') ;
     }
     MvAddStr(16, 30, buf);
Index: test/inch_wide.c
Prereq:  1.13
--- ncurses-6.5-20240928+/test/inch_wide.c 2022-12-10 23:55:34.000000000 +0000
+++ ncurses-6.5-20241006/test/inch_wide.c 2024-10-06 23:14:31.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2019-2020,2022 Thomas E. Dickey                                  *
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 * Copyright 2007-2010,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
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@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
```

```
/*
- * $Id: inch_wide.c,v 1.13 2022/12/10 23:55:34 tom Exp $
+
 * $Id: inch_wide.c,v 1.14 2024/10/06 23:14:31 tom Exp $
 */
/*
       int in_wch(cchar_t *wcval);
@@ -61,7 +61,7 @@
static int
test_inchs(int level, char **argv, WINDOW *chrwin, WINDOW *strwin)
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
    {
 "Test input from screen using inch(), etc., in a moveable viewport.",
 "",
Index: test/inchs.c
Prereq:  1.19
--- ncurses-6.5-20240928+/test/inchs.c 2022-12-11 00:01:39.000000000 +0000
+++ ncurses-6.5-20241006/test/inchs.c 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2019-2020,2022 Thomas E. Dickey                                  *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                  *
 * Copyright 2007-2012,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
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 charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: inchs.c,v 1.19 2022/12/11 00:01:39 tom Exp $
+ * $Id: inchs.c,v 1.20 2024/10/06 21:17:54 tom Exp $
 *
 * Author: Thomas E Dickey
 */
@@ -71,7 +71,7 @@
static int
test_inchs(int level, char **argv, WINDOW *chrwin, WINDOW *strwin)
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
    {
 "Test input from screen using inch(), etc., in a moveable viewport.",
 "",
Index: test/ins_wide.c
Prereq:  1.30
```

```
--- ncurses-6.5-20240928+/test/ins_wide.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/ins_wide.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                       *
+ * Copyright
 2020-2022,2024 Thomas E. Dickey                                            *
 * Copyright 2002-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
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@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: ins_wide.c,v 1.30 2022/12/10 22:28:50 tom Exp $
+ * $Id: ins_wide.c,v 1.31 2024/10/05 19:26:24 tom Exp $
 *
 * Demonstrate the wins_wstr() and wins_wch functions.
 * Thomas Dickey - 2002/11/23
@@ -73,7 +73,7 @@
static int n_opt = -1;

static void
-legend(WINDOW *win, int level, Options state, wchar_t *buffer, int length)
+legend(WINDOW *win, int level, Options state, const wchar_t *buffer, int length)
{
    const char *showstate;

Index: test/insdelln.c
Prereq:  1.15
--- ncurses-6.5-20240928+/test/insdelln.c 2022-12-10
 23:31:31.000000000 +0000
+++ ncurses-6.5-20241006/test/insdelln.c 2024-10-06 21:08:52.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2019-2020,2022 Thomas E. Dickey                                  *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                  *
 * Copyright 2008-2014,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: insdelln.c,v 1.15 2022/12/10 23:31:31 tom Exp $
+ * $Id: insdelln.c,v 1.17 2024/10/06 21:08:52 tom Exp $
 *
 * test-driver for deleteln, wdeleteln, insdelln, winsdelln, insertln, winsertln
```

```
  */
@@ -160,7 +160,7 @@
}

static void
-do_subwindow(WINDOW *win, STATUS * sp, void func(WINDOW *))
+do_subwindow(WINDOW *win, const STATUS * sp, void func(WINDOW *))
{
    WINDOW *win1 = newwin(sp->y_max - 2, sp->x_max - 2,
     sp->y_beg + 1, sp->x_beg + 1);
@@ -204,7 +204,7 @@
static void
show_help(WINDOW *win)
{
-    static const char *table[] =
+    static NCURSES_CONST char *table[] =
    {
 "Basic commands:"
 ,"Use h/j/k/l or arrow keys to move the cursor."
Index: test/inserts.c
Prereq:  1.34
--- ncurses-6.5-20240928+/test/inserts.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/inserts.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                       *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                  *
 * Copyright 2002-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
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@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: inserts.c,v 1.34 2022/12/10 22:28:50 tom Exp $
+ * $Id: inserts.c,v 1.35 2024/10/05 19:26:24 tom Exp $
 *
 * Demonstrate the winsstr() and winsch functions.
 * Thomas Dickey - 2002/10/19
@@ -98,7 +98,7 @@
}

static int
-ColOf(char *buffer, int length, int margin)
+ColOf(const char *buffer, int length, int margin)
{
    int n;
```

```
   int result;
Index: test/knight.c
Prereq:  1.52
--- ncurses-6.5-20240928+/test/knight.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/knight.c 2024-10-05 19:38:58.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright
 2018-2021,2022 Thomas E. Dickey                                *
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 * Copyright 1998-2013,2017 Free Software Foundation, Inc.                   *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -34,7 +34,7 @@
 * Eric S. Raymond <esr@snark.thyrsus.com> July 22 1995.  Mouse support
 * added September 20th 1995.
 *
- * $Id: knight.c,v 1.52 2022/12/04 00:40:11 tom Exp $
+ * $Id: knight.c,v 1.53 2024/10/05 19:38:58 tom Exp $
 */

#include <test.priv.h>
@@ -450,7 +450,8 @@
}

static bool
-evaluate_move(SQUARES squares, HISTORY * doneData, int doneSize, int row, int column)
+evaluate_move(SQUARES squares, const HISTORY * doneData, int doneSize,
+       int row, int column)
{
   if (doneSize <= 1)
 return (TRUE);
Index: test/list_keys.c
Prereq:  1.33
--- ncurses-6.5-20240928+/test/list_keys.c 2023-11-11
 00:35:05.000000000 +0000
+++ ncurses-6.5-20241006/test/list_keys.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                *
 * Copyright 2016,2017 Free Software Foundation, Inc.                        *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ******************************************************************************/
/*
```

```
- * $Id: list_keys.c,v 1.33 2023/11/11 00:35:05 tom Exp $
+ * $Id: list_keys.c,v 1.34 2024/10/05 19:26:24 tom Exp $
 *
 * Author: Thomas E Dickey
 *
@@ -297,7 +297,7 @@
#if NCURSES_XNAMES
    if (x_opt) {
  for (k = 0; k < count; ++k) {
-     TERMTYPE *term;
+     const TERMTYPE *term;
     set_curterm(terms[k]);
     term = (TERMTYPE *) cur_term;
     total += (size_t) (NUM_STRINGS(term) - STRCOUNT);
@@ -348,7 +348,7 @@
 widths1 = (int) strlen(modifier);

    for (k = 0; k < count; ++k) {
- char *value;
+ const char *value;
 set_curterm(terms[k]);
 if ((value = termname()) == NULL)
     failed("termname");
Index: test/move_field.c
Prereq:  1.16
--- ncurses-6.5-20240928+/test/move_field.c 2024-06-29 17:45:02.000000000 +0000
+++ ncurses-6.5-20241006/test/move_field.c 2024-10-06 21:12:35.000000000 +0000
@@ -26,7 +26,7 @@
 * authorization.                                               *
 ****************************************************************************/
/*
- * $Id: move_field.c,v 1.16 2024/06/29 17:45:02 tom Exp $
+ * $Id: move_field.c,v 1.19 2024/10/06 21:12:35 tom Exp $
 *
 * Demonstrate move_field().
 */
@@ -146,27 +146,27 @@
}

static FieldAttrs
 *
-my_field_attrs(FIELD *f)
+my_field_attrs(NCURSES_CONST FIELD *f)
{
    return (FieldAttrs *) field_userptr(f);
}

static int
```

```
-buffer_length(FIELD *f)
+buffer_length(NCURSES_CONST FIELD *f)
{
   return my_field_attrs(f)->row_lengths[0];
}

static void
-set_buffer_length(FIELD *f, int length)
+set_buffer_length(NCURSES_CONST FIELD *f, int length)
{
   my_field_attrs(f)->row_lengths[0] = length;
}

static int
-offset_in_field(FORM *form)
+offset_in_field(NCURSES_CONST FORM *form)
{
-    FIELD *field = current_field(form);
+    NCURSES_CONST FIELD *field = current_field(form);
   int currow, curcol;

   form_getyx(form, currow, curcol);
@@ -245,7 +245,7 @@

 default:
     modified = (ch < MIN_FORM_COMMAND
-   && isprint(ch));
+   && isprint(UChar(ch)));
     break;
 }

@@ -275,9 +275,9 @@

/* display a status message to show what's happening */
static void
-show_status(FORM *form, FIELD *field)
+show_status(NCURSES_CONST FORM *form, NCURSES_CONST FIELD
 *field)
{
-    WINDOW *sub = form_sub(form);
+    NCURSES_CONST WINDOW *sub = form_sub(form);
   int currow, curcol;

   getyx(stdscr, currow, curcol);
Index: test/movewindow.c
Prereq:  1.54
--- ncurses-6.5-20240928+/test/movewindow.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/movewindow.c 2024-10-06 18:44:26.000000000 +0000
```

```
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                  *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                  *
 * Copyright 2006-2013,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
 /*
- * $Id: movewindow.c,v 1.54 2023/05/27 20:13:10 tom Exp $
+ * $Id: movewindow.c,v 1.56 2024/10/06 18:44:26 tom Exp $
 *
 * Demonstrate move functions for windows and derived windows from the curses
 * library.
@@ -135,7 +135,7 @@
 */
static PAIR *
selectcell(WINDOW *parent,
-    WINDOW *child,
+    NCURSES_CONST WINDOW *child,
    int uli, int ulj,
    int lri, int lrj,
    bool relative,
@@ -252,7 +252,7 @@
    int max_col = (parent == stdscr) ? COL_MAX : getmaxx(parent);
    int min_line = (parent == stdscr) ? LINE_MIN : 0;
    int max_line = (parent == stdscr) ? LINE_MAX : getmaxy(parent);
-    PAIR *tmp;
+    NCURSES_CONST PAIR *tmp;
    bool result = FALSE;

    head_line("Use arrows to move cursor, anything else to mark corner 1");
@@ -346,7 +346,7 @@
}

static WINDOW *
-parent_of(WINDOW *win)
+parent_of(NCURSES_CONST WINDOW *win)
{
    WINDOW *result = 0;
    int n = window2num(win);
@@ -435,7 +435,7 @@
 int max_col = top ? COL_MAX
 : getmaxx(parent);
 int min_line = top ? LINE_MIN : 0;
 int max_line = top ? LINE_MAX : getmaxy(parent);
```

```
- PAIR *tmp;
+ NCURSES_CONST PAIR *tmp;
 bool more;

 head_line("Select new position for %swindow", top ? "" : "sub");
@@ -474,7 +474,7 @@
}

static void
-show_derwin(WINDOW *win)
+show_derwin(NCURSES_CONST WINDOW *win)
{
    int pary, parx, maxy, maxx;

@@ -500,7 +500,7 @@
 int max_col = top ? COL_MAX : getmaxx(parent);
 int min_line = top ? LINE_MIN : 0;
 int max_line = top ? LINE_MAX : getmaxy(parent);
- PAIR *tmp;
+ NCURSES_CONST PAIR *tmp;
 bool more;

 show_derwin(win);
Index: test/ncurses.c
Prereq:  1.538
--- ncurses-6.5-20240928+/test/ncurses.c 2023-11-11 01:23:59.000000000 +0000
+++ ncurses-6.5-20241006/test/ncurses.c 2024-10-06 20:18:59.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                  *
+ * Copyright 2018-2023,2024
 Thomas E. Dickey                                                             *
 * Copyright 1998-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -41,7 +41,7 @@
   Author: Eric S. Raymond <esr@snark.thyrsus.com> 1993
           Thomas E. Dickey (beginning revision 1.27 in 1996).

-$Id: ncurses.c,v 1.538 2023/11/11 01:23:59 tom Exp $
+$Id: ncurses.c,v 1.541 2024/10/06 20:18:59 tom Exp $

******************************************************************************/

@@ -273,7 +273,7 @@
     ++x;
     break;
 default:
```

```
-     if (!isprint(ch) || ch >= KEY_MIN) {
+     if (!isprint(UChar(ch)) || ch >= KEY_MIN) {
  beep();
     } else if ((int) strlen(buffer) < limit) {
  int j;
@@ -928,7 +928,7 @@
  /* at least Solaris SVR4 curses breaks unctrl(128), etc. */
  c2 &= 0x7f;
#endif
-  if (isprint(c))
+  if (isprint(UChar(c)))
      (void)
 wprintw(win, "%c", UChar(c));
  else if (c2 != UChar(c))
      (void) wprintw(win, "M-%s", unctrl(c2));
@@ -1693,7 +1693,7 @@
     chtype extras = (chtype) ac;

     if (UseColors) {
-  NCURSES_PAIRS_T pair = 0;
+  NCURSES_PAIRS_T pair;
  if ((fg != COLOR_BLACK) || (bg != COLOR_BLACK)) {
      pair = 1;
      if (init_pair(pair, fg, bg) == ERR) {
@@ -2345,7 +2345,6 @@
 for (i = (NCURSES_PAIRS_T) (base_row * per_row); i < pairs_max; i++) {
     int row = grid_top + (i / per_row) - base_row;
     int col = (i % per_row + 1) * width;
-     NCURSES_PAIRS_T pair = i;

     if ((i / per_row) > row_limit)
  break;
@@ -2355,6 +2354,7 @@
     if (row >= 0 && move(row, col) != ERR) {
  NCURSES_COLOR_T fg = (NCURSES_COLOR_T) InxToFG(i);
  NCURSES_COLOR_T bg = (NCURSES_COLOR_T) InxToBG(i);
+  NCURSES_PAIRS_T pair = i;

  init_pair(pair, fg, bg);
  attron(COLOR_PAIR(pair));
@@ -2517,7 +2517,7 @@
static int
x_color_test(bool recur GCC_UNUSED)
{
-    long i;
+    int i;
```

```
 int top = 0, width;
    int base_row = 0;
    int grid_top = top + 3;
@@ -2613,17 +2613,17 @@
 /* show color names/numbers across the top */
 for (i = 0; i < per_row; i++) {
     show_color_name(top + 2,
-       ((int) i + 1) * width,
-       (int) i * zoom_size + MinColors,
+       (i + 1) * width,
+       i * zoom_size + MinColors,
       opt_wide,
       opt_zoom);
 }

 /* show a grid of colors, with color names/ numbers on the left */
 for (i = (base_row * per_row); i < pairs_max; i++) {
-     int row = grid_top + ((int) i / per_row) - base_row;
-     int col = ((int) i % per_row + 1) * width;
-     int pair = (int) i;
+     int row = grid_top + (i / per_row) - base_row;
+     int col = (i % per_row + 1) * width;
+     int pair = i;

     if ((i / per_row) > row_limit)
  break;
@@ -2828,7 +2828,7 @@
#define DecodeRGB(n) (NCURSES_COLOR_T) ((n * 1000) / 0xffff)

static void
-init_all_colors(bool xterm_colors, char *palette_file)
+init_all_colors(bool xterm_colors, NCURSES_CONST
 char *palette_file)
{
    NCURSES_PAIRS_T cp;
    all_colors = typeMalloc(RGB_DATA, (unsigned) MaxColors);
@@ -3317,7 +3317,7 @@
{
    int c, fmt = 1;
    char buf[9];
-    char *s;
+    NCURSES_CONST char *s;
    attr_t attr = A_NORMAL;
    unsigned at_code = 0;
#if HAVE_SLK_COLOR
@@ -3938,8 +3938,7 @@

    *dst = *src;
```

```
    do {
- int count;
- TEST_CCHAR(src, count, {
+ TEST_CCHAR(src, {
     attr |= (test_attrs & A_ALTCHARSET);
     setcchar(dst, test_wch, attr, pair, NULL);
 }, {
@@ -4810,7 +4809,8 @@
/* Ask user for a window definition */
{
    WINDOW *rwindow;
-    pair ul, lr, *tmp;
+    pair ul, lr;
+    NCURSES_CONST pair *tmp;

    move(0, 0);
    clrtoeol();
@@ -5014,7 +5014,8 @@
#if HAVE_WRESIZE
 case CTRL('X'): /* resize window */
     if (current) {
-  pair *tmp, ul, lr;
+  NCURSES_CONST pair *tmp;
+  pair ul, lr;
  int mx, my;

  move(0, 0);
@@ -5249,7 +5250,7 @@
}

static void
-fill_panel(PANEL *pan)
+fill_panel(NCURSES_CONST PANEL
 *pan)
{
    WINDOW *win = panel_window(pan);
    const char *userptr = (const char *) panel_userptr(pan);
@@ -5286,7 +5287,7 @@
}

static void
-fill_wide_panel(PANEL *pan)
+fill_wide_panel(NCURSES_CONST PANEL *pan)
{
    WINDOW *win = panel_window(pan);
    const char *userptr = (const char *) panel_userptr(pan);
@@ -5336,7 +5337,7 @@
}
```

```
static int
-demo_panels(void (*InitPanel) (WINDOW *), void (*FillPanel) (PANEL *))
+demo_panels(void (*InitPanel) (WINDOW *), void (*FillPanel) (NCURSES_CONST PANEL *))
{
   int count;
   int itmp;
@@ -6246,7 +6247,8 @@
run_trace_menu(MENU * m)
{
   ITEM **items;
-   ITEM *i, **p;
+   NCURSES_CONST ITEM *i;
+   ITEM **p;

   for (;;) {
 bool changed = FALSE;
@@ -6424,7 +6426,7 @@

   if (field_info(me, &rows, &cols, &frow, &fcol, &nrow, &nbuf) == E_OK
 && nbuf > 0) {
- char *source = field_buffer(me, 1);
+ NCURSES_CONST char *source = field_buffer(me, 1);
 size_t have = (source ? strlen(source) : 0) + 1;
 size_t need
 = 80 + have;
 char *temp = malloc(need);
@@ -6434,7 +6436,7 @@
     _nc_STRNCPY(temp, source ? source : "", have + 1);
     len = (size_t) (char *) field_userptr(me);
     if (c <= KEY_MAX) {
-  if (isgraph(c) && (len + 1) < sizeof(temp)) {
+  if (isgraph(UChar(c)) && (len + 1) < sizeof(temp)) {
      temp[len++] = (char) c;
      temp[len] = 0;
      set_field_buffer(me, 1, temp);
@@ -6484,7 +6486,7 @@
}

static int
-form_virtualize(FORM *f, WINDOW *w)
+form_virtualize(NCURSES_CONST FORM *f, WINDOW *w)
{
   /* *INDENT-OFF* */
   static const struct {
@@ -6658,7 +6660,7 @@
static
FIELDCHECK_CB(pw_field_check)
```

```
{
-    char *s = field_buffer(fld, 0);
+    NCURSES_CONST char *s = field_buffer(fld, 0);
    int n;

    for (n = 0; s[n] != '\0'; ++n) {
@@ -6680,7 +6682,8 @@
form_test(bool recur GCC_UNUSED)
{
    FORM *form;
-    FIELD *f[12], *secure;
+    FIELD *f[12];
+    NCURSES_CONST FIELD *secure;
    FIELDTYPE *fty_middle = new_fieldtype(mi_field_check, mi_char_check);
     FIELDTYPE *fty_passwd = new_fieldtype(pw_field_check, pw_char_check);
    int c;
@@ -7176,7 +7179,7 @@
}

static void
-overlap_test_4(int flavor, WINDOW *a, WINDOW *b)
+overlap_test_4(int flavor, NCURSES_CONST WINDOW *a, WINDOW *b)
{
    switch ((otCOPY) flavor) {
    case otCOPY_overwrite:
@@ -7899,7 +7902,7 @@
    bool monochrome = FALSE;
#if HAVE_COLOR_CONTENT
    bool xterm_colors = FALSE;
-    char *palette_file = 0;
+    NCURSES_CONST char *palette_file = 0;
#endif

    setlocale(LC_ALL, "");
Index: test/padview.c
Prereq:  1.22
--- ncurses-6.5-20240928+/test/padview.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/padview.c 2024-10-06 21:08:25.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2019-2021,2022 Thomas E. Dickey                                  *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                  *
 * Copyright 2017 Free
 Software Foundation, Inc.                                                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -29,7 +29,7 @@
/*
```

```
 * clone of view.c, using pads
 *
- * $Id: padview.c,v 1.22 2022/12/04 00:40:11 tom Exp $
+ * $Id: padview.c,v 1.24 2024/10/06 21:08:25 tom Exp $
 */

#include <test.priv.h>
@@ -182,7 +182,7 @@

#if USE_WIDEC_SUPPORT
    if (!memcmp("\357\273\277", my_blob, 3)) {
- char *s = my_blob + 3;
+ const char *s = my_blob + 3;
 char *d = my_blob;
 Trace(("trim BOM"));
 do {
@@ -213,7 +213,7 @@
    for (k = 0; my_vec[k]; ++k) {
 char *s;
#if USE_WIDEC_SUPPORT
- char *last = my_vec[k] + (int) strlen(my_vec[k]);
+ const char *last = my_vec[k] + (int) strlen(my_vec[k]);
 wchar_t wch[2];
 size_t rc;
#ifndef state_unused
@@ -279,7 +279,7 @@
int
main(int argc, char *argv[])
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =

    {
 "Commands:",
 "  q,^Q,ESC       - quit this program",
@@ -532,7 +532,7 @@
     beep();
     break;
 }
- if (c >= KEY_MIN || (c > 0 && !isdigit(c))) {
+ if (c >= KEY_MIN || (c > 0 && !isdigit(UChar(c)))) {
     got_number = FALSE;
     value = 0;
 }
Index: test/parse_rgb.h
Prereq:  1.5
--- ncurses-6.5-20240928+/test/parse_rgb.h 2020-02-02 23:34:34.000000000 +0000
+++ ncurses-6.5-20241006/test/parse_rgb.h 2024-10-05 19:26:24.000000000 +0000
```

```
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2018,2020 Thomas E. Dickey                                       *
+ * Copyright 2018-2020,2024 Thomas E. Dickey                                  *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a    *
 * copy of this software and associated documentation files (the              *
@@ -26,7 +26,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: parse_rgb.h,v 1.5 2020/02/02 23:34:34 tom Exp $
+ * $Id: parse_rgb.h,v 1.6 2024/10/05 19:26:24 tom Exp $
 *
 * Sample implementation of ncurses RGB extension from user_caps(5).
 */
@@ -49,7 +49,7 @@
 int bits;
 int pwr2;
 int r = 0, g = 0, b = 0;
- char *data;
+ const char *data;
 char ch;

 for (max_bits = 0, pwr2 = 1;
Index: test/picsmap.c
Prereq:  1.149
--- ncurses-6.5-20240928+/test/picsmap.c 2023-04-23 23:20:37.000000000 +0000
+++ ncurses-6.5-20241006/test/picsmap.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                  *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                  *
 * Copyright 2017,2018 Free Software Foundation, Inc.                         *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a    *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: picsmap.c,v 1.149 2023/04/23 23:20:37 tom Exp $
+ * $Id: picsmap.c,v 1.150 2024/10/05 19:26:24 tom Exp $
 *
 * Author: Thomas E. Dickey
 *
@@ -574,7 +574,7 @@
```

```
     _nc_STRCAT(full_name, filename, need);
     if (tries & 4) {
  char *t = s;
-  char *tc;
+  const char *tc;
  int num;
  char chr;
  int found = 0;
@@ -1374,8 +1374,8 @@
  int r, g, b, nocolor;
  float rf, gf, bf;
  unsigned check;
-  char *t;
-  char *s = t = strchr(buffer, '#');
+  char *s = strchr(buffer, '#');
+  const char *t = s;
  bool matched = FALSE;

  if (s != 0) {
@@ -1492,7 +1492,7 @@
#define fg_color(pics,n) (pics->fgcol[n].fgcol)

static void
-dump_picture(PICS_HEAD
 * pics)
+dump_picture(const PICS_HEAD * pics)
{
    int y, x;

@@ -1767,7 +1767,7 @@
#if USE_EXTENDED_COLORS
 case 'x':
     {
-  char *s = optarg;
+  const char *s = optarg;
  while (*s) {
      switch (*s++) {
      case 'p':
Index: test/popup_msg.c
Prereq:  1.12
--- ncurses-6.5-20240928+/test/popup_msg.c 2024-06-29 18:34:58.000000000 +0000
+++ ncurses-6.5-20241006/test/popup_msg.c 2024-10-06 21:07:01.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                               *
 ******************************************************************************/
/*
- * $Id: popup_msg.c,v 1.12 2024/06/29 18:34:58 tom Exp $
+ * $Id: popup_msg.c,v 1.13 2024/10/06 21:07:01 tom Exp $
```

```
 *
 * Show a multi-line message in a window which may extend beyond the screen.
 *
@@ -62,7 +62,7 @@
 * Display a temporary window, e.g., to display a help-message.
 */
void
-popup_msg(WINDOW *parent, const char *const *msg)
+popup_msg(WINDOW *parent, NCURSES_CONST
 char *const *msg)
{
   int x0 = 4;
   int y0 = 2;
@@ -171,12 +171,12 @@
void
popup_msg2(WINDOW *parent, char **msg)
{
-   popup_msg(parent, (const char *const *) msg);
+   popup_msg(parent, (NCURSES_CONST char *const *) msg);
}

#else
void
-popup_msg(WINDOW *parent, const char *const *msg)
+popup_msg(WINDOW *parent, NCURSES_CONST char *const *msg)
{
   (void) parent;
   (void) msg;
Index: test/popup_msg.h
Prereq:  1.5
--- ncurses-6.5-20240928+/test/popup_msg.h 2020-02-02 23:34:34.000000000 +0000
+++ ncurses-6.5-20241006/test/popup_msg.h 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2018,2020 Thomas E. Dickey                                     *
+ * Copyright 2018-2020,2024 Thomas E. Dickey                                *
 * Copyright 2017 Free Software Foundation, Inc.                            *
 *
                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ******************************************************************************/
/*
- * $Id: popup_msg.h,v 1.5 2020/02/02 23:34:34 tom Exp $
+ * $Id: popup_msg.h,v 1.6 2024/10/06 21:17:54 tom Exp $
 *
 * Utility functions for a popup-message or help-screen.
```

```
 */
@@ -37,7 +37,7 @@

#include <test.priv.h>

-extern void popup_msg(WINDOW *parent, const char *const *msg);
+extern void popup_msg(WINDOW *parent, NCURSES_CONST char *const *msg);
extern void popup_msg2(WINDOW *parent, char **msg);

#endif /* POPUP_MSG_H_incl */
Index: test/railroad.c
Prereq:  1.26
--- ncurses-6.5-20240928+/test/railroad.c 2022-12-11 00:12:13.000000000 +0000
+++ ncurses-6.5-20241006/test/railroad.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
-
 * Copyright 2019-2020,2022 Thomas E. Dickey                                  *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                  *
 * Copyright 2000-2013,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey - 2000
 *
- * $Id: railroad.c,v 1.26 2022/12/11 00:12:13 tom Exp $
+ * $Id: railroad.c,v 1.27 2024/10/05 19:26:24 tom Exp $
 *
 * A simple demo of the termcap interface.
 */
@@ -113,7 +113,7 @@
static void
ShowSign(char *string)
{
-    char *base = string;
+    const char *base = string;
    int first, last;

    if (moveit != 0) {
Index: test/rain.c
Prereq:  1.58
--- ncurses-6.5-20240928+/test/rain.c 2024-08-31 15:56:10.000000000 +0000
+++ ncurses-6.5-20241006/test/rain.c 2024-10-06 21:09:00.000000000 +0000
@@ -27,7 +27,7
 @@
 * authorization.                                                             *
 ******************************************************************************/
```

```
/*
- * $Id: rain.c,v 1.58 2024/08/31 15:56:10 tom Exp $
+ * $Id: rain.c,v 1.62 2024/10/06 21:09:00 tom Exp $
 */
#include <test.priv.h>
#include <popup_msg.h>
@@ -45,7 +45,7 @@

struct DATA;

-typedef void (*DrawPart) (struct DATA *);
+typedef void (*DrawPart) (const struct DATA *);

typedef struct DATA {
   int y, x;
@@ -118,25 +118,25 @@
}

static void
-part1(DATA * drop)
+part1(const DATA * drop)
{
   MvAddCh(drop->y, drop->x, '.');
}

static void
-part2(DATA * drop)
+part2(const DATA * drop)
{
   MvAddCh(drop->y, drop->x, 'o');
}

static void
-part3(DATA * drop)
+part3(const DATA * drop)
{
   MvAddCh(drop->y, drop->x, 'O');
}

static void
-part4(DATA * drop)
+part4(const DATA * drop)
{
   MvAddCh(drop->y - 1, drop->x, '-');
   MvAddStr(drop->y, drop->x - 1, "|.|");
@@ -144,7 +144,7 @@
 }
```

```
static void
-part5(DATA * drop)
+part5(const DATA * drop)
{
   MvAddCh(drop->y - 2, drop->x, '-');
   MvAddStr(drop->y - 1, drop->x - 1, "/ \\");
@@ -154,7 +154,7 @@
}

static void
-part6(DATA * drop)
+part6(const DATA * drop)
{
   MvAddCh(drop->y - 2, drop->x, ' ');
   MvAddStr(drop->y - 1, drop->x - 1, "   ");
@@ -186,7 +186,7 @@
}

static void
-draw_part(void (*func) (DATA *), int state, DATA * data)
+draw_part(void (*func) (const DATA *), int state, DATA * data)
{
   data->func = func;
   data->state = state;
@@ -328,7 +328,7 @@
int
main(int argc, char *argv[])
{
-   static const char *help[] =
+   static NCURSES_CONST char *help[] =
   {
 "Commands:",
 " q/Q        exit the program",
Index: test/redraw.c
Prereq:  1.17
--- ncurses-6.5-20240928+/test/redraw.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/redraw.c 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
-
 * Copyright 2020-2021,2022 Thomas E. Dickey                                  *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                  *
 * Copyright 2006-2012,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
```

```
/*
- * $Id: redraw.c,v 1.17 2022/12/10 22:28:50 tom Exp $
+ * $Id: redraw.c,v 1.18 2024/10/06 21:17:54 tom Exp $
 *
 * Demonstrate the redrawwin() and wredrawln() functions.
 * Thomas Dickey - 2006/11/4
@@ -61,7 +61,7 @@
static void
test_redraw(WINDOW *win)
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
    {
 "Commands:",
 "  ^Q/ESC/q   - quit",
Index: test/savescreen.c
Prereq:
  1.62
--- ncurses-6.5-20240928+/test/savescreen.c 2022-12-10 23:23:27.000000000 +0000
+++ ncurses-6.5-20241006/test/savescreen.c 2024-10-06 21:10:09.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018-2021,2022 Thomas E. Dickey                                *
+ * Copyright 2018-2022,2024 Thomas E. Dickey                                *
 * Copyright 2006-2017,2018 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: savescreen.c,v 1.62 2022/12/10 23:23:27 tom Exp $
+ * $Id: savescreen.c,v 1.65 2024/10/06 21:10:09 tom Exp $
 *
 * Demonstrate save/restore functions
 from the curses library.
 * Thomas Dickey - 2007/7/14
@@ -96,7 +96,7 @@
}

static int
-load_screen(char *filename)
+load_screen(NCURSES_CONST char *filename)
{
    int result;

@@ -170,7 +170,7 @@
#if USE_WIDEC_SUPPORT
```

```
    cchar_t mycc;
#endif
-    char *filename = files[which];
+    NCURSES_CONST char *filename = files[which];
    bool dumped = FALSE;

    if (filename != 0) {
@@ -216,7 +216,7 @@
static void
editor_help(void)
{
-    static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
    {
 "You are now in the screen-editor, which allows you to make some",
 "lines on the screen, as well as save copies of the screen to a",
@@ -238,7 +238,7 @@
static void
replay_help(void)
{
-    static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
    {
 "You are now in the screen-loader, which allows you to view",
 "the dumped/restored screens.",
@@ -286,7 +286,7 @@
    bool replaying = FALSE;
    bool done = FALSE;
    char **files;
-
    char *fill_by = 0;
+    NCURSES_CONST char *fill_by = 0;
#if USE_WIDEC_SUPPORT
    cchar_t mycc;
    static const wchar_t mywc[2] =
Index: test/tclock.c
Prereq:  1.48
--- ncurses-6.5-20240928+/test/tclock.c 2023-02-25 16:42:22.000000000 +0000
+++ ncurses-6.5-20241006/test/tclock.c 2024-10-05 18:47:56.000000000 +0000
@@ -1,4 +1,4 @@
-/* $Id: tclock.c,v 1.48 2023/02/25 16:42:22 tom Exp $ */
+/* $Id: tclock.c,v 1.49 2024/10/05 18:47:56 tom Exp $ */

#define NEED_TIME_H
#include <test.priv.h>
@@ -145,7 +145,7 @@
    int lastbeep = -1;
    bool odd = FALSE;
```

```
   time_t tim;
-   struct tm *t;
+   const struct tm *t;
   char szChar[20];
   char *text;
   short my_bg = COLOR_BLACK;
Index: test/test.priv.h
Prereq:  1.219
--- ncurses-6.5-20240928+/test/test.priv.h 2024-08-31 10:46:01.000000000 +0000
+++ ncurses-6.5-20241006/test/test.priv.h 2024-10-05 19:01:00.000000000 +0000
@@ -30,7 +30,7 @@
/******************************************************************************
  *  Author: Thomas E. Dickey                    1996-on                    *
 ******************************************************************************/
-/* $Id: test.priv.h,v 1.219 2024/08/31 10:46:01 Rafael.Kitover Exp $ */
+/* $Id: test.priv.h,v 1.220 2024/10/05 19:01:00 tom Exp $ */

#ifndef __TEST_PRIV_H
#define __TEST_PRIV_H 1
@@ -765,8 +765,8 @@

#define VERSION_COMMON() \
static char *version_common(char **argv) { \
- char *base = argv[0]; \
- char *part = strrchr(base, '/'); \
+ const char *base = argv[0]; \
+ const char *part = strrchr(base, '/'); \
 size_t need = strlen(base) + 80; \
 char *result = malloc(need); \
 if (result != NULL) { \
@@ -916,8 +916,8 @@
 * Workaround in case getcchar() returns a positive value when the source
 * string produces only a L'\0'.
 */
-#define TEST_CCHAR(s, count, then_stmt, else_stmt) \
- if ((count = getcchar(s, NULL, NULL, NULL, NULL)) > 0) { \
+#define TEST_CCHAR(s, then_stmt, else_stmt) \
+ if (getcchar(s, NULL, NULL,
 NULL, NULL) > 0) { \
     wchar_t test_wch[CCHARW_MAX + 2]; \
     attr_t test_attrs; \
     NCURSES_PAIRS_T test_pair; \
Index: test/test_add_wchstr.c
Prereq:  1.34
--- ncurses-6.5-20240928+/test/test_add_wchstr.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/test_add_wchstr.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
```

```
- * Copyright 2020-2021,2022 Thomas E. Dickey                            *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                            *
 * Copyright 2009-2016,2017 Free Software Foundation, Inc.                *
 *                                                                        *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                         *
 ****************************************************************************/
 /*
- * $Id: test_add_wchstr.c,v 1.34 2022/12/10 22:28:50 tom Exp $
+ * $Id: test_add_wchstr.c,v 1.35 2024/10/05 19:26:24 tom Exp $
 *
 * Demonstrate the waddwchstr() and wadd_wch functions.
 * Thomas Dickey - 2009/9/12
@@ -158,7 +158,7 @@
}

static void
-legend(WINDOW *win, int level, Options state, wchar_t *buffer, int length)
+legend(WINDOW *win, int level, Options state, const wchar_t *buffer, int length)
{
   const char *showstate;

Index: test/test_addchstr.c
Prereq:  1.29
--- ncurses-6.5-20240928+/test/test_addchstr.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/test_addchstr.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                   *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                            *
 * Copyright 2009-2016,2017 Free Software Foundation, Inc.                *
  *                                                                        *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                         *
 ****************************************************************************/
/*
- * $Id: test_addchstr.c,v 1.29 2022/12/10 22:28:50 tom Exp $
+ * $Id: test_addchstr.c,v 1.30 2024/10/05 19:26:24 tom Exp $
 *
 * Demonstrate the waddchstr() and waddch functions.
 * Thomas Dickey - 2009/9/12
@@ -169,7 +169,7 @@
}

static int
-ColOf(char *buffer, int length, int margin)
```

```
+ColOf(const char *buffer, int length, int margin)
{
   int n;
   int result;
Index: test/test_addstr.c
Prereq:  1.20
--- ncurses-6.5-20240928+/test/test_addstr.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/test_addstr.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
-
 * Copyright 2020,2022 Thomas E. Dickey                                       *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                  *
 * Copyright 2009-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: test_addstr.c,v 1.20 2022/12/10 22:28:50 tom Exp $
+ * $Id: test_addstr.c,v 1.21 2024/10/05 19:27:33 tom Exp $
 *
 * Demonstrate the waddstr() and waddch functions.
 * Thomas Dickey - 2009/9/12
@@ -91,7 +91,7 @@
}

static int
-ColOf(char *buffer, int length, int margin)
+ColOf(const char *buffer, int length, int margin)
{
   int n;
   int result;
Index: test/test_addwstr.c
Prereq:  1.22
---
 ncurses-6.5-20240928+/test/test_addwstr.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/test_addwstr.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2020-2022,2023 Thomas E. Dickey                                  *
+ * Copyright 2020-2023,2024 Thomas E. Dickey                                  *
 * Copyright 2009-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                             *
```

```
 ****************************************************************************/
/*
- * $Id: test_addwstr.c,v 1.22 2023/05/27 20:13:10 tom Exp $
+ * $Id: test_addwstr.c,v 1.23 2024/10/05 19:27:33 tom Exp $
 *
 * Demonstrate the waddwstr() and wadd_wch
 functions.
 * Thomas Dickey - 2009/9/12
@@ -82,7 +82,7 @@
static int n_opt = -1;

static void
-legend(WINDOW *win, int level, Options state, wchar_t *buffer, int length)
+legend(WINDOW *win, int level, Options state, const wchar_t *buffer, int length)
{
   const char *showstate;

Index: test/test_endwin.c
Prereq:  1.2
--- ncurses-6.5-20240928+/test/test_endwin.c 2023-11-10 15:17:19.000000000 +0000
+++ ncurses-6.5-20241006/test/test_endwin.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2023 Thomas E. Dickey                                          *
+ * Copyright 2023,2024 Thomas E. Dickey                                     *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
 * copy of this software and associated documentation files (the            *
@@ -26,7 +26,7 @@
  * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: test_endwin.c,v 1.2 2023/11/10 15:17:19 tom Exp $
+ * $Id: test_endwin.c,v 1.3 2024/10/05 19:27:33 tom Exp $
 */
#include <test.priv.h>

@@ -67,7 +67,7 @@
   int rc_e1 = OK;
   int rc_e2 = OK;
   int rc_e3 = OK;
-   SCREEN *sp = NULL;
+   const SCREEN *sp = NULL;
   bool opt_e = FALSE;
   bool opt_i = FALSE;
   bool opt_n = FALSE;
Index: test/test_get_wstr.c
Prereq:  1.14
```

```
--- ncurses-6.5-20240928+/test/test_get_wstr.c 2022-12-10 23:59:13.000000000 +0000
+++ ncurses-6.5-20241006/test/test_get_wstr.c 2024-10-06 23:15:10.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                     *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                *
 * Copyright 2007-2011,2017
 Free Software Foundation, Inc.                   *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ******************************************************************************/
/*
- * $Id: test_get_wstr.c,v 1.14 2022/12/10 23:59:13 tom Exp $
+ * $Id: test_get_wstr.c,v 1.16 2024/10/06 23:15:10 tom Exp $
 *
 * Author: Thomas E Dickey
 *
@@ -69,7 +69,7 @@
}

static int
-Remainder(WINDOW *txtwin)
+Remainder(const WINDOW *txtwin)
{
    int result = getmaxx(txtwin) - getcurx(txtwin);
    return (result > 0) ? result : 0;
@@ -138,7 +138,7 @@
static int
recursive_test(int level, char **argv, WINDOW *strwin)
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
    {
 "Commands:",
 "  q,^Q,ESC       - quit this program",
Index: test/test_getstr.c
Prereq:
  1.16
--- ncurses-6.5-20240928+/test/test_getstr.c 2022-12-10 23:58:37.000000000 +0000
+++ ncurses-6.5-20241006/test/test_getstr.c 2024-10-06 22:36:46.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                     *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                *
 * Copyright 2007-2012,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
```

```
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                            *
 ****************************************************************************/
/*
- * $Id: test_getstr.c,v 1.16 2022/12/10 23:58:37 tom Exp $
+ * $Id: test_getstr.c,v 1.19 2024/10/06 22:36:46 tom Exp $
 *
 * Author: Thomas E Dickey
  *
@@ -76,7 +76,7 @@
}

static int
-Remainder(WINDOW *txtwin)
+Remainder(NCURSES_CONST WINDOW *txtwin)
{
   int result = getmaxx(txtwin) - getcurx(txtwin);
   return (result > 0) ? result : 0;
@@ -145,7 +145,7 @@
static int
recursive_test(int level, char **argv, WINDOW *strwin)
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
    {
 "Commands:",
 "  q,^Q,ESC       - quit this program",
Index: test/test_instr.c
Prereq:  1.13
--- ncurses-6.5-20240928+/test/test_instr.c 2024-06-29 18:42:53.000000000 +0000
+++ ncurses-6.5-20241006/test/test_instr.c 2024-10-06 21:11:54.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                                            *
 ****************************************************************************/
/*
- * $Id: test_instr.c,v 1.13 2024/06/29 18:42:53 tom Exp $
+ * $Id: test_instr.c,v 1.15 2024/10/06 21:11:54 tom Exp $
 *
 * Author: Thomas E Dickey
 *
@@ -56,13 +56,13 @@
}

static
 void
-show_1st(WINDOW *win, int line, char *buffer)
+show_1st(WINDOW *win, int line, NCURSES_CONST char *buffer)
```

```
{
    MvWAddStr(win, line, 5, buffer);
}

static void
-showmore(WINDOW *win, int line, char *buffer)
+showmore(WINDOW *win, int line, NCURSES_CONST char *buffer)
{
    wmove(win, line, 0);
    wclrtoeol(win);
@@ -72,7 +72,7 @@
static void
show_help(WINDOW *win)
{
-    static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
    {
 "Show file contents and a viewport from the variants of winstr."
 ,"Use h/j/k/l or arrow keys to move the viewport."
Index: test/test_inwstr.c
Prereq:  1.9
--- ncurses-6.5-20240928+/test/test_inwstr.c 2024-06-29 18:40:02.000000000 +0000
+++ ncurses-6.5-20241006/test/test_inwstr.c 2024-10-06 23:15:38.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                       *
 ****************************************************************************/
/*
- * $Id: test_inwstr.c,v
 1.9 2024/06/29 18:40:02 tom Exp $
+ * $Id: test_inwstr.c,v 1.11 2024/10/06 23:15:38 tom Exp $
 *
 * Author: Thomas E Dickey
 *
@@ -59,13 +59,13 @@
}

static void
-show_1st(WINDOW *win, int line, wchar_t *buffer)
+show_1st(WINDOW *win, int line, const wchar_t *buffer)
{
    (void) mvwaddwstr(win, line, 5, buffer);
}

static void
-showmore(WINDOW *win, int line, wchar_t *buffer)
+showmore(WINDOW *win, int line, const wchar_t *buffer)
{
    wmove(win, line, 0);
```

```
   wclrtoeol(win);
@@ -75,7 +75,7 @@
static void
show_help(WINDOW *win)
{
-    static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
    {
 "Show file contents and a viewport from the variants of winwstr."
 ,"Use h/j/k/l or arrow keys to move the viewport."
Index: test/test_mouse.c
Prereq:  1.32
--- ncurses-6.5-20240928+/test/test_mouse.c 2024-08-31 10:46:01.000000000 +0000
+++ ncurses-6.5-20241006/test/test_mouse.c 2024-10-05 18:47:56.000000000 +0000
@@ -22,7 +22,7 @@
 * THE USE OR OTHER DEALINGS
 IN THE SOFTWARE.                                         *
 ****************************************************************************/
/*
- * $Id: test_mouse.c,v 1.32 2024/08/31 10:46:01 Rafael.Kitover Exp $
+ * $Id: test_mouse.c,v 1.33 2024/10/05 18:47:56 tom Exp $
 *
 * Author: Leonid S Usov
 *
@@ -38,7 +38,7 @@
static void
raw_loop(void)
{
-    char *xtermcap;
+    const char *xtermcap;

    printf("Entering raw mode. Ctrl-c to quit.\n");

Index: test/test_opaque.c
Prereq:  1.15
--- ncurses-6.5-20240928+/test/test_opaque.c 2022-12-11 00:03:10.000000000 +0000
+++ ncurses-6.5-20241006/test/test_opaque.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020-2021,2022 Thomas E. Dickey                                *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                *
 * Copyright 2007-2008,2009 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
```

```
/*
- * $Id: test_opaque.c,v 1.15 2022/12/11 00:03:10 tom Exp $
+ * $Id: test_opaque.c,v 1.16 2024/10/05 19:27:33 tom Exp $
 *
 * Author: Thomas E Dickey
 *
@@ -157,13 +157,13 @@
}

static int
-status_y(WINDOW *stswin, int cell)
+status_y(const WINDOW *stswin, int cell)
{
   return (cell % getmaxy(stswin));
}

static int
-status_x(WINDOW *stswin, int cell)
+status_x(const WINDOW *stswin, int cell)
{
   return (15 * (cell / getmaxy(stswin)));
}
Index: test/test_sgr.c
Prereq:  1.22
--- ncurses-6.5-20240928+/test/test_sgr.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/test_sgr.c 2024-10-06 21:05:50.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
-
 * Copyright 2019-2022,2023 Thomas E. Dickey                                  *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                  *
 * Copyright 2015-2016,2017 Free Software Foundation, Inc.                    *
 *                                                                            *
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@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: test_sgr.c,v 1.22 2023/05/27 20:13:10 tom Exp $
+ * $Id: test_sgr.c,v 1.25 2024/10/06 21:05:50 tom Exp $
 *
 * A simple demo of the sgr/sgr0 terminal capabilities.
 */
@@ -142,10 +142,10 @@
#define MASK_REV  (1 << 2)

static void
-dumpit(unsigned bits, unsigned ignore, const char *sgr, const char *sgr0)
```

```
+dumpit(unsigned bits, unsigned ignore, NCURSES_CONST char *sgr, NCURSES_CONST char *sgr0)
{
-    static const char sample[] = "abcdefghijklm";
-    static
 char params[] = "SURBDBIPA";
+    static NCURSES_CONST char sample[] = "abcdefghijklm";
+    static NCURSES_CONST char params[] = "SURBDBIPA";
    unsigned n;

    printf("%4u ", bits);
@@ -177,12 +177,11 @@
static void
brute_force(const char *name)
{
-    unsigned count;
-    char *my_sgr;
-    char *my_sgr0;
-    char *my_bold;
-    char *my_revs;
-    char *my_smso;
+    NCURSES_CONST char *my_sgr;
+    NCURSES_CONST char *my_sgr0;
+    NCURSES_CONST char *my_bold;
+    NCURSES_CONST char *my_revs;
+    NCURSES_CONST char *my_smso;
    char *my_name = strdup(name);

    if (db_list) {
@@ -219,6 +218,7 @@
 unsigned ignore = 0;
 unsigned reason = 0;
 unsigned repeat = 0;
+ unsigned count;
 for (count = 0; count < MAXSGR; ++count) {
     values[count] = tparm(my_sgr,
      BITS2P(1),
@@ -334,7 +334,7 @@
main(int argc, char *argv[])
{
    int ch;
-    char *name;
+    const char *name;

    while ((ch = getopt(argc, argv, OPTS_COMMON "d:e:nq")) != -1) {
 switch (ch)
 {
@@ -369,7 +369,7 @@
    } else if ((name = getenv("TERM")) != 0) {
```

```
 brute_force(name);
    } else {
- static char dumb[] = "dumb";
+ static const char dumb[] = "dumb";
 brute_force(dumb);
    }

Index: test/test_tparm.c
Prereq:  1.39
--- ncurses-6.5-20240928+/test/test_tparm.c 2023-11-11 01:00:03.000000000 +0000
+++ ncurses-6.5-20241006/test/test_tparm.c 2024-10-06 20:50:27.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
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 * copy of this software and associated documentation files (the            *
@@ -29,7 +29,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: test_tparm.c,v 1.39 2023/11/11 01:00:03
 tom Exp $
+ * $Id: test_tparm.c,v 1.42 2024/10/06 20:50:27 tom Exp $
 *
 * Exercise tparm/tiparm, either for all possible capabilities with fixed
 * parameters, or one capability with specific combinations of parameters.
@@ -107,7 +107,7 @@
}

static int
-isNumeric(char *source)
+isNumeric(NCURSES_CONST char *source)
{
    char *next = 0;
    long value = strtol(source, &next, 0);
@@ -245,7 +245,7 @@
#define NS_9(fmt) NS_8(fmt), NumStr(8)

static void
-test_tparm(const char *name, const char *format, long *number, char **string)
+test_tparm(const char *name, NCURSES_CONST char *format, long *number, char **string)
{
    char *use_strings[MAX_PARM];
    char *result = NULL;
@@ -527,7 +527,7 @@
     }
```

```
 } else {
     char *s = t_opt;
-     char *t;
+     NCURSES_CONST char *t;
     while ((t = strtok(s, ",")) != 0) {
  s = 0;
  if (len_terms + 2 >= max_terms) {
@@ -603,7 +603,7 @@
#if NCURSES_XNAMES
     len_caps = std_caps;
     if (cur_term) {
-  TERMTYPE *term =
 (TERMTYPE *) cur_term;
+  NCURSES_CONST TERMTYPE *term = (TERMTYPE *) cur_term;
  for (n = STRCOUNT; n < NUM_STRINGS(term); ++n) {
      GrowArray(all_caps, max_caps, len_caps);
      GrowArray(cap_name, max_name, len_caps);
Index: test/test_vidputs.c
Prereq:  1.15
--- ncurses-6.5-20240928+/test/test_vidputs.c 2022-12-10 23:23:27.000000000 +0000
+++ ncurses-6.5-20241006/test/test_vidputs.c 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
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@@ -27,7 +27,7 @@
 * authorization.                                                             *
 ******************************************************************************/
/*
- * $Id: test_vidputs.c,v 1.15 2022/12/10 23:23:27 tom Exp $
+ * $Id: test_vidputs.c,v 1.16 2024/10/06 21:17:54 tom Exp $
 *
 * Demonstrate the vidputs and vidattr functions.
 * Thomas Dickey - 2013/01/12
@@ -51,7 +51,7 @@
}

static bool
-outs(const char *s)
+outs(NCURSES_CONST char *s)
{
   if (VALID_STRING(s)) {
 tputs(s, 1, outc);
Index: test/testcurs.c
```

```
Prereq:  1.58
--- ncurses-6.5-20240928+/test/testcurs.c 2023-05-28 14:23:34.000000000 +0000
+++ ncurses-6.5-20241006/test/testcurs.c 2024-10-05 19:17:19.000000000 +0000
@@ -6,7 +6,7 @@
 *  wrs(5/28/93) -- modified to be consistent (perform identically) with either
 *                  PDCurses or under Unix System V, R4
 *
- * $Id: testcurs.c,v 1.58 2023/05/28 14:23:34 tom Exp $
+ * $Id: testcurs.c,v 1.59 2024/10/05 19:17:19 tom Exp $
 */

#include <test.priv.h>
@@ -245,7 +245,7 @@
 wclrtobot(win);
 if (c >= KEY_MIN)
      wprintw(win, "Key Pressed: %s", keyname(c));
- else if (isprint(c))
+ else if (isprint(UChar(c)))
     wprintw(win, "Key Pressed: %c", c);
 else
     wprintw(win, "Key Pressed: %s", unctrl(UChar(c)));
@@ -748,8 +748,8 @@
 keypad(stdscr, TRUE);
 raw();
 key = getch();
- if (key < KEY_MIN && key > 0 && isalpha(key)) {
-     if (islower(key))
+ if (key < KEY_MIN && key > 0 && isalpha(UChar(key))) {
+     if (islower(UChar(key)))
  key = toupper(key);
     for (n = 0; n < MAX_OPTIONS; ++n) {
  if (key == command[n].text[0]) {
Index: test/testscanw.c
Prereq:  1.15
--- ncurses-6.5-20240928+/test/testscanw.c 2022-12-11 00:10:29.000000000 +0000
+++ ncurses-6.5-20241006/test/testscanw.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
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@@ -30,7 +30,7 @@
 * Date:  1997/03/17
 * From:  bayern@morpheus.cis.yale.edu
 *
```

```
- * $Id: testscanw.c,v 1.15 2022/12/11 00:10:29 tom Exp $
+ * $Id: testscanw.c,v 1.16 2024/10/05 19:27:33 tom Exp $
 */
#include <test.priv.h>

@@ -85,7 +85,7 @@
    curses_trace(TRACE_UPDATE | TRACE_CALLS);
#endif
    while (optind < argc) {
- char *token = argv[optind++];
+ const char *token = argv[optind++];
 if (isdigit(UChar(*token)))
     move(atoi(token), 0);
 else if (!strcmp(token, "k+"))
Index: test/view.c
Prereq:  1.145
--- ncurses-6.5-20240928+/test/view.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/view.c 2024-10-06 21:08:05.000000000 +0000
@@ -1,5 +1,5 @@
/******************************************************************************
-
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@@ -52,7 +52,7 @@
 * scroll operation worked, and the refresh() code only had to do a
 * partial repaint.
 *
- * $Id: view.c,v 1.145 2022/12/04 00:40:11 tom Exp $
+ * $Id: view.c,v 1.147 2024/10/06 21:08:05 tom Exp $
 */

#include <test.priv.h>
@@ -93,8 +93,7 @@

#if USE_WIDEC_SUPPORT
    for (;;) {
- int count;
- TEST_CCHAR(src, count, {
+ TEST_CCHAR(src, {
     int len = wcwidth(test_wch[0]);
     result += (len > 0) ? len : 1;
     ++src;
@@ -186,12 +185,10 @@
      */
     {
```

```
  int j;
-  int width = 1;
+  int width;

  for (j = actual = 0; j < shift; ++j) {
-      int count;
-
-
    TEST_CCHAR(s + j, count, {
+      TEST_CCHAR(s + j, {
   width = wcwidth(test_wch[0]);
      }
      , {
@@ -294,7 +291,7 @@

#if USE_WIDEC_SUPPORT
    if (!memcmp("\357\273\277", my_blob, 3)) {
- char *s = my_blob + 3;
+ const char *s = my_blob + 3;
 char *d = my_blob;
 Trace(("trim BOM"));
 do {
@@ -329,7 +326,7 @@
 char *s;
 int y, x;
#if USE_WIDEC_SUPPORT
- char *last = my_vec[k] + (int) strlen(my_vec[k]);
+ const char *last = my_vec[k] + (int) strlen(my_vec[k]);
 wchar_t wch[2];
 size_t rc;
#ifndef state_unused
@@ -408,7 +405,7 @@
int
main(int argc, char *argv[])
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
    {
 "Commands:",
 "  q,^Q,ESC       - quit this program",
@@ -659,7 +656,7 @@
     beep();
     break;
 }
- if (c >= KEY_MIN || (c > 0 && !isdigit(c))) {
+ if (c >= KEY_MIN || (c > 0 && !isdigit(UChar(c)))) {
     got_number = FALSE;
     value = 0;
```

}

Found in path(s):
* /ncurses-6-5-20241006-patch-gz/ncurses-6.5-20241006.patch

1.2536 scanelf 1.3.8-r1

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1.2537 spf13-cast 1.7.0

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1.2539 github.com/youmark/pkcs8 0.0.0-20240726163527-a2c0da244d78

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1.2540 go-pkcs12 0.5.0

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1.2541 githubcomfsnotifyfsnotify 1.8.0

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1.2543 github.com/thoas/go-funk 0.9.3

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1.2544 github.com/antlr4-go/antlr/v4 4.13.1

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1.2545 gonum 0.15.1

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is preserved.
A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
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The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre
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- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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1.2546 opentelemetry-collector-contrib 0.55.0

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1.2547 github.com/knadh/koanf/v2 2.1.2

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1.2548 github.com/go-viper/mapstructure/v2 2.2.1

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1.2549 google-golang-org-grpc 1.68.1

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Julian Seward, jseward@bzip.org
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GCC RUNTIME LIBRARY EXCEPTION

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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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GCC RUNTIME LIBRARY EXCEPTION

Version 3.1, 31 March 2009

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1.2554 go-compute-metadata 0.6.0

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Insert()
{
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
}
op, err := c.Insert(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
```

```
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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//
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
```

```
  }
  // TODO: Use resp.
  _ = resp
 }
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
```

```
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
```

```
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}
```

```
func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
```

```
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}
```

```
func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
```

```
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
```

```
 return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
```

```
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
```

```
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
```

```
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
```

```
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
```

```
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
```

```
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}
```

```
func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
```

0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f,
0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a, 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f, 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a, 0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01, 0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73,
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,

0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x63, 0x6f, 0x6c, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x41, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72,
0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x3b, 0x0a,
0x17, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x15, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x75, 0x6e, 0x74, 0x12, 0x33, 0x0a, 0x13, 0x74, 0x6f,
0x74, 0x61, 0x6c, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e,
0x74, 0x18, 0x04, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03, 0xe0, 0x41, 0x03, 0x52, 0x11, 0x74, 0x6f,
0x74, 0x61, 0x6c, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x75, 0x6e,
0x74, 0x3a,
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0x2f, 0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12,
0xe7, 0x01, 0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3f, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73, 0x70,
0x6f, 0x6e, 0x73, 0x65, 0x22, 0x5a, 0xda,
0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d,
0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x41, 0x3a, 0x01, 0x2a, 0x22, 0x3c, 0x2f, 0x76, 0x31,
0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67,
0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72,
0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d,
0x3a, 0x75, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x92, 0x02, 0x0a, 0x16, 0x45, 0x6e,
0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55,
0x73, 0x65, 0x72, 0x73, 0x12, 0x4c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c,
0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e,
0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e,
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65,
0x73, 0x74, 0x1a, 0x4d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e,
0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f,
0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,

```
 0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
 0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
 0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
 0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
 0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
 0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
```

```
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
```

```
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
```

```
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
```

```
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
```

```
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
```

```
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
```

```
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
```

```
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
```

```
  Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
```

```
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
```

```
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
```

```
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
```

```
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution
This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
```

```
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
```

```
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
```

```
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf,
resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
```

```
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
```

```
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
```

```
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()
```

```
 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
```

```
  return err
 }

 if
err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
```

```
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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package compute_test

import (
 "context"
```

```
 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
```

```
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
```

```
 //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
```

```
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
}
resp, err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```


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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
```

```
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
```

```
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}
```

```
// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
```

```
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
```

```
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
```

```
 0x54,
 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
```

```
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.2555 auto-sdk 1.1.0

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package version

// Collection is a type that implements the sort.Interface interface
// so that versions can be sorted.
type Collection []*Version

func (v Collection) Len() int {
 return len(v)
}

func (v Collection) Less(i, j int) bool {
 return v[i].LessThan(v[j])
}

func (v Collection) Swap(i, j int) {
 v[i], v[j] = v[j], v[i]
}
```

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package version

import (
 "reflect"
 "sort"
 "testing"
)

```
func TestCollection(t *testing.T) {
 versionsRaw := []string{
  "1.1.1",
  "1.0",
  "1.2",
  "2",
  "0.7.1",
 }

 versions := make([]*Version, len(versionsRaw))
 for i, raw := range versionsRaw {
  v, err := NewVersion(raw)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  versions[i] = v
 }

 sort.Sort(Collection(versions))

 actual := make([]string, len(versions))
 for i, v := range versions {
  actual[i] = v.String()
 }

 expected := []string{
  "0.7.1",
  "1.0.0",
  "1.1.1",
  "1.2.0",
  "2.0.0",
 }

 if !reflect.DeepEqual(actual, expected) {
  t.Fatalf("bad: %#v", actual)
 }
}
name: go-tests

on: [push]

env:
 TEST_RESULTS: /tmp/test-results

jobs:

 go-tests:
```

```
  runs-on: ubuntu-latest
  strategy:
    matrix:
      go-version: [ 1.15.3, 1.19 ]

  steps:
    - name: Setup go
      uses: actions/setup-go@41dfa10bad2bb2ae585af6ee5bb4d7d973ad74ed # v5.1.0
      with:
        go-version: ${{ matrix.go-version }}

    - name: Checkout code
      uses: actions/checkout@11bd71901bbe5b1630ceea73d27597364c9af683 # v4.2.2

    - name: Create test directory
      run: |
        mkdir -p ${{ env.TEST_RESULTS }}

    - name: Download go modules
      run: go mod download

    - name: Cache / restore go modules
      uses: actions/cache@1bd1e32a3bdc45362d1e726936510720a7c30a57 # v4.2.0
      with:
        path: |
          ~/go/pkg/mod
        key: ${{ runner.os }}-go-${{ hashFiles('**/go.sum') }}
        restore-keys: |
          ${{ runner.os }}-go-

    # Check go fmt output because it does not report
non-zero when there are fmt changes
    - name: Run gofmt
      run: |
        go fmt ./...
        files=$(go fmt ./...)
          if [ -n "$files" ]; then
            echo "The following file(s) do not conform to go fmt:"
            echo "$files"
            exit 1
          fi

    # Install gotestsum with go get for 1.15.3; otherwise default to go install
    - name: Install gotestsum
      run: |
        GTS="gotest.tools/gotestsum@v1.8.2"
        # We use the same error message prefix in either failure case, so just define it once here.
        ERROR="Failed to install $GTS"
```

```
        # First try to 'go install', if that fails try 'go get'...
        go install "$GTS" || go get "$GTS" || { echo "$ERROR: both 'go install' and 'go get' failed"; exit 1; }
        # Check that the gotestsum command was actually installed in the path...
        command -v gotestsum > /dev/null 2>&1 || { echo "$ERROR: gotestsum command not installed"; exit
1; }
        echo "OK: Command 'gotestsum' installed ($GTS)"

    - name: Run go tests
      run: |
        PACKAGE_NAMES=$(go list ./...)
        gotestsum --format=short-verbose --junitfile $TEST_RESULTS/gotestsum-report.xml --
$PACKAGE_NAMES

    # Save coverage report parts
    - name: Upload and save artifacts
      uses: actions/upload-artifact@b4b15b8c7c6ac21ea08fcf65892d2ee8f75cf882 # v4.4.3
      with:
        name: Test Results
        path: ${{ env.TEST_RESULTS }}
```

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Versioning Library for Go

![Build Status](https://github.com/hashicorp/go-version/actions/workflows/go-tests.yml/badge.svg)
[![GoDoc](https://godoc.org/github.com/hashicorp/go-version?status.svg)](https://godoc.org/github.com/hashicorp/go-version)

go-version is a library for parsing versions and version constraints,
and verifying versions against a set of constraints. go-version
can sort a collection of versions properly, handles prerelease/beta
versions, can increment versions, etc.

Versions used with go-version must follow [SemVer](http://semver.org/).

Installation and Usage

Package documentation can be found on
[GoDoc](http://godoc.org/github.com/hashicorp/go-version).

Installation can be done with a normal `go get`:

```
$ go get github.com/hashicorp/go-version
```

Version Parsing and Comparison

```go
v1, err := version.NewVersion("1.2")
v2, err := version.NewVersion("1.5+metadata")

// Comparison example. There is also GreaterThan, Equal, and just
// a simple Compare
 that returns an int allowing easy >=, <=, etc.
if v1.LessThan(v2) {
   fmt.Printf("%s is less than %s", v1, v2)
}
```

Version Constraints

```go
v1, err := version.NewVersion("1.2")

// Constraints example.
constraints, err := version.NewConstraint(">= 1.0, < 1.4")
if constraints.Check(v1) {
 fmt.Printf("%s satisfies constraints %s", v1, constraints)
}
```

Version Sorting

```go
versionsRaw := []string{"1.1", "0.7.1", "1.4-beta", "1.4", "2"}
versions := make([]*version.Version, len(versionsRaw))
for i, raw := range versionsRaw {
   v, _ := version.NewVersion(raw)
   versions[i] = v
}
```

```
// After this, the versions are properly sorted
sort.Sort(version.Collection(versions))
```

Issues and Contributing

If you find an issue with this library, please report an issue. If you'd like, we welcome any contributions. Fork this library and submit a pull request.

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package version

import (

```
 "encoding/json"
 "fmt"
 "reflect"
 "testing"
)

func TestNewVersion(t *testing.T) {
 cases := []struct {
  version string
  err     bool
 }{
  {"", true},
  {"1.2.3", false},
  {"1.0", false},
  {"1", false},
  {"1.2.beta", true},
  {"1.21.beta", true},
  {"foo", true},
  {"1.2-5", false},
  {"1.2-beta.5", false},
  {"\n1.2", true},
  {"1.2.0-x.Y.0+metadata", false},
  {"1.2.0-x.Y.0+metadata-width-hyphen", false},
  {"1.2.3-rc1-with-hyphen", false},
  {"1.2.3.4", false},
  {"1.2.0.4-x.Y.0+metadata", false},
  {"1.2.0.4-x.Y.0+metadata-width-hyphen", false},
  {"1.2.0-X-1.2.0+metadata~dist", false},
  {"1.2.3.4-rc1-with-hyphen", false},
  {"1.2.3.4", false},
  {"v1.2.3", false},
  {"foo1.2.3", true},
  {"1.7rc2", false},
  {"v1.7rc2", false},
  {"1.0-", false},
 }

 for _, tc := range cases {
  _, err := NewVersion(tc.version)
  if tc.err && err == nil {
   t.Fatalf("expected error for version:
%q", tc.version)
  } else if !tc.err && err != nil {
   t.Fatalf("error for version %q: %s", tc.version, err)
  }
 }
}
```

```
func TestNewSemver(t *testing.T) {
 cases := []struct {
  version string
  err     bool
 }{
  {"", true},
  {"1.2.3", false},
  {"1.0", false},
  {"1", false},
  {"1.2.beta", true},
  {"1.21.beta", true},
  {"foo", true},
  {"1.2-5", false},
  {"1.2-beta.5", false},
  {"\n1.2", true},
  {"1.2.0-x.Y.0+metadata", false},
  {"1.2.0-x.Y.0+metadata-width-hyphen", false},
  {"1.2.3-rc1-with-hyphen", false},
  {"1.2.3.4", false},
  {"1.2.0.4-x.Y.0+metadata", false},
  {"1.2.0.4-x.Y.0+metadata-width-hyphen", false},
  {"1.2.0-X-1.2.0+metadata~dist", false},
  {"1.2.3.4-rc1-with-hyphen", false},
  {"1.2.3.4", false},
  {"v1.2.3", false},
  {"foo1.2.3", true},
  {"1.7rc2", true},
  {"v1.7rc2", true},
  {"1.0-", true},
 }

 for _, tc := range cases {
  _, err := NewSemver(tc.version)
  if tc.err && err == nil {
   t.Fatalf("expected error for version: %q", tc.version)
  } else
 if !tc.err && err != nil {
   t.Fatalf("error for version %q: %s", tc.version, err)
  }
 }
}

func TestCore(t *testing.T) {
 cases := []struct {
  v1 string
  v2 string
 }{
  {"1.2.3", "1.2.3"},
```

```
 {"2.3.4-alpha1", "2.3.4"},
 {"3.4.5alpha1", "3.4.5"},
 {"1.2.3-2", "1.2.3"},
 {"4.5.6-beta1+meta", "4.5.6"},
 {"5.6.7.1.2.3", "5.6.7"},
}

for _, tc := range cases {
 v1, err := NewVersion(tc.v1)
 if err != nil {
  t.Fatalf("error for version %q: %s", tc.v1, err)
 }
 v2, err := NewVersion(tc.v2)
 if err != nil {
  t.Fatalf("error for version %q: %s", tc.v2, err)
 }

 actual := v1.Core()
 expected := v2

 if !reflect.DeepEqual(actual, expected) {
  t.Fatalf("expected: %s\nactual: %s", expected, actual)
 }
}
}

func TestVersionCompare(t *testing.T) {
 cases := []struct {
  v1       string
  v2       string
  expected int
 }{
  {"1.2.3", "1.4.5", -1},
  {"1.2-beta", "1.2-beta", 0},
  {"1.2", "1.1.4", 1},
  {"1.2", "1.2-beta", 1},
  {"1.2+foo", "1.2+beta", 0},
  {"v1.2", "v1.2-beta",
 1},
  {"v1.2+foo", "v1.2+beta", 0},
  {"v1.2.3.4", "v1.2.3.4", 0},
  {"v1.2.0.0", "v1.2", 0},
  {"v1.2.0.0.1", "v1.2", 1},
  {"v1.2", "v1.2.0.0", 0},
  {"v1.2", "v1.2.0.0.1", -1},
  {"v1.2.0.0", "v1.2.0.0.1", -1},
  {"v1.2.3.0", "v1.2.3.4", -1},
  {"1.7rc2", "1.7rc1", 1},
```

```
 {"1.7rc2", "1.7", -1},
 {"1.2.0", "1.2.0-X-1.2.0+metadata~dist", 1},
}

for _, tc := range cases {
 v1, err := NewVersion(tc.v1)
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 v2, err := NewVersion(tc.v2)
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 actual := v1.Compare(v2)
 expected := tc.expected
 if actual != expected {
  t.Fatalf(
   "%s <=> %s\nexpected: %d\nactual: %d",
   tc.v1, tc.v2,
   expected, actual)
 }
}
}

func TestVersionCompare_versionAndSemver(t *testing.T) {
 cases := []struct {
  versionRaw string
  semverRaw  string
  expected   int
 }{
  {"0.0.2", "0.0.2", 0},
  {"1.0.2alpha", "1.0.2-alpha", 0},
  {"v1.2+foo", "v1.2+beta", 0},
  {"v1.2", "v1.2+meta", 0},
  {"1.2",
"1.2-beta", 1},
  {"v1.2", "v1.2-beta", 1},
  {"1.2.3", "1.4.5", -1},
  {"v1.2", "v1.2.0.0.1", -1},
  {"v1.0.3-", "v1.0.3", -1},
 }

 for _, tc := range cases {
  ver, err := NewVersion(tc.versionRaw)
  if err != nil {
   t.Fatalf("err: %s", err)
```

```
  }

  semver, err := NewSemver(tc.semverRaw)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  actual := ver.Compare(semver)
  if actual != tc.expected {
   t.Fatalf(
    "%s <=> %s\nexpected: %d\n actual: %d",
    tc.versionRaw, tc.semverRaw, tc.expected, actual,
   )
  }
 }
}

func TestVersionEqual_nil(t *testing.T) {
 mustVersion := func(v string) *Version {
  ver, err := NewVersion(v)
  if err != nil {
   t.Fatal(err)
  }
  return ver
 }
 cases := []struct {
  leftVersion  *Version
  rightVersion *Version
  expected     bool
 }{
  {mustVersion("1.0.0"), nil, false},
  {nil, mustVersion("1.0.0"), false},
  {nil, nil, true},
 }

 for _, tc := range cases {
  given := tc.leftVersion.Equal(tc.rightVersion)
  if given != tc.expected {
   t.Fatalf("expected
 Equal to nil to be %t", tc.expected)
  }
 }
}

func TestComparePreReleases(t *testing.T) {
 cases := []struct {
  v1       string
  v2       string
```

```
 expected int
}{
 {"1.2-beta.2", "1.2-beta.2", 0},
 {"1.2-beta.1", "1.2-beta.2", -1},
 {"1.2-beta.2", "1.2-beta.11", -1},
 {"3.2-alpha.1", "3.2-alpha", 1},
 {"1.2-beta.2", "1.2-beta.1", 1},
 {"1.2-beta.11", "1.2-beta.2", 1},
 {"1.2-beta", "1.2-beta.3", -1},
 {"1.2-alpha", "1.2-beta.3", -1},
 {"1.2-beta", "1.2-alpha.3", 1},
 {"3.0-alpha.3", "3.0-rc.1", -1},
 {"3.0-alpha3", "3.0-rc1", -1},
 {"3.0-alpha.1", "3.0-alpha.beta", -1},
 {"5.4-alpha", "5.4-alpha.beta", 1},
 {"v1.2-beta.2", "v1.2-beta.2", 0},
 {"v1.2-beta.1", "v1.2-beta.2", -1},
 {"v3.2-alpha.1", "v3.2-alpha", 1},
 {"v3.2-rc.1-1-g123", "v3.2-rc.2", 1},
}

for _, tc := range cases {
 v1, err := NewVersion(tc.v1)
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 v2, err := NewVersion(tc.v2)
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 actual
:= v1.Compare(v2)
 expected := tc.expected
 if actual != expected {
  t.Fatalf(
   "%s <=> %s\nexpected: %d\nactual: %d",
   tc.v1, tc.v2,
   expected, actual)
 }
}
}

func TestVersionMetadata(t *testing.T) {
 cases := []struct {
  version  string
  expected string
```

```
 }{
  {"1.2.3", ""},
  {"1.2-beta", ""},
  {"1.2.0-x.Y.0", ""},
  {"1.2.0-x.Y.0+metadata", "metadata"},
  {"1.2.0-metadata-1.2.0+metadata~dist", "metadata~dist"},
 }

 for _, tc := range cases {
  v, err := NewVersion(tc.version)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  actual := v.Metadata()
  expected := tc.expected
  if actual != expected {
   t.Fatalf("expected: %s\nactual: %s", expected, actual)
  }
 }
}

func TestVersionPrerelease(t *testing.T) {
 cases := []struct {
  version  string
  expected string
 }{
  {"1.2.3", ""},
  {"1.2-beta", "beta"},
  {"1.2.0-x.Y.0", "x.Y.0"},
  {"1.2.0-7.Y.0", "7.Y.0"},
  {"1.2.0-x.Y.0+metadata", "x.Y.0"},
  {"1.2.0-metadata-1.2.0+metadata~dist", "metadata-1.2.0"},
  {"17.03.0-ce",
 "ce"}, // zero-padded fields
 }

 for _, tc := range cases {
  v, err := NewVersion(tc.version)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  actual := v.Prerelease()
  expected := tc.expected
  if actual != expected {
   t.Fatalf("expected: %s\nactual: %s", expected, actual)
  }
```

```
 }
}

func TestVersionSegments(t *testing.T) {
 cases := []struct {
  version  string
  expected []int
 }{
  {"1.2.3", []int{1, 2, 3}},
  {"1.2-beta", []int{1, 2, 0}},
  {"1-x.Y.0", []int{1, 0, 0}},
  {"1.2.0-x.Y.0+metadata", []int{1, 2, 0}},
  {"1.2.0-metadata-1.2.0+metadata~dist", []int{1, 2, 0}},
  {"17.03.0-ce", []int{17, 3, 0}}, // zero-padded fields
 }

 for _, tc := range cases {
  v, err := NewVersion(tc.version)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  actual := v.Segments()
  expected := tc.expected
  if !reflect.DeepEqual(actual, expected) {
   t.Fatalf("expected: %#v\nactual: %#v", expected, actual)
  }
 }
}

func TestVersionSegments64(t *testing.T) {
 cases
 := []struct {
  version  string
  expected []int64
 }{
  {"1.2.3", []int64{1, 2, 3}},
  {"1.2-beta", []int64{1, 2, 0}},
  {"1-x.Y.0", []int64{1, 0, 0}},
  {"1.2.0-x.Y.0+metadata", []int64{1, 2, 0}},
  {"1.4.9223372036854775807", []int64{1, 4, 9223372036854775807}},
 }

 for _, tc := range cases {
  v, err := NewVersion(tc.version)
  if err != nil {
   t.Fatalf("err: %s", err)
  }
```

```
 actual := v.Segments64()
 expected := tc.expected
 if !reflect.DeepEqual(actual, expected) {
  t.Fatalf("expected: %#v\nactual: %#v", expected, actual)
 }

 {
  expected := actual[0]
  actual[0]++
  actual = v.Segments64()
  if actual[0] != expected {
   t.Fatalf("Segments64 is mutable")
  }
 }
}
}

func TestJsonMarshal(t *testing.T) {
 cases := []struct {
  version string
  err     bool
 }{
  {"1.2.3", false},
  {"1.2.0-x.Y.0+metadata", false},
  {"1.2.0-x.Y.0+metadata-width-hyphen", false},
  {"1.2.3-rc1-with-hyphen", false},
  {"1.2.3.4", false},
  {"1.2.0.4-x.Y.0+metadata", false},
  {"1.2.0.4-x.Y.0+metadata-width-hyphen",
 false},
  {"1.2.0-X-1.2.0+metadata~dist", false},
  {"1.2.3.4-rc1-with-hyphen", false},
  {"1.2.3.4", false},
 }

 for _, tc := range cases {
  v, err1 := NewVersion(tc.version)
  if err1 != nil {
   t.Fatalf("error for version %q: %s", tc.version, err1)
  }

  parsed, err2 := json.Marshal(v)
  if err2 != nil {
   t.Fatalf("error marshaling version %q: %s", tc.version, err2)
  }
  result := string(parsed)
  expected := fmt.Sprintf("%q", tc.version)
```

```
  if result != expected && !tc.err {
   t.Fatalf("Error marshaling unexpected marshaled content: result=%q expected=%q", result, expected)
  }
 }
}

func TestJsonUnmarshal(t *testing.T) {
 cases := []struct {
  version string
  err     bool
 }{
  {"1.2.3", false},
  {"1.2.0-x.Y.0+metadata", false},
  {"1.2.0-x.Y.0+metadata-width-hyphen", false},
  {"1.2.3-rc1-with-hyphen", false},
  {"1.2.3.4", false},
  {"1.2.0.4-x.Y.0+metadata", false},
  {"1.2.0.4-x.Y.0+metadata-width-hyphen", false},
  {"1.2.0-X-1.2.0+metadata~dist",
 false},
  {"1.2.3.4-rc1-with-hyphen", false},
  {"1.2.3.4", false},
 }

 for _, tc := range cases {
  expected, err1 := NewVersion(tc.version)
  if err1 != nil {
   t.Fatalf("err: %s", err1)
  }

  actual := &Version{}
  err2 := json.Unmarshal([]byte(fmt.Sprintf("%q", tc.version)), actual)
  if err2 != nil {
   t.Fatalf("error unmarshaling version: %s", err2)
  }
  if !reflect.DeepEqual(actual, expected) {
   t.Fatalf("error unmarshaling, unexpected object content: actual=%q expected=%q", actual, expected)
  }
 }
}

func TestVersionString(t *testing.T) {
 cases := [][]string{
  {"1.2.3", "1.2.3"},
  {"1.2-beta", "1.2.0-beta"},
  {"1.2.0-x.Y.0", "1.2.0-x.Y.0"},
  {"1.2.0-x.Y.0+metadata", "1.2.0-x.Y.0+metadata"},
  {"1.2.0-metadata-1.2.0+metadata~dist", "1.2.0-metadata-1.2.0+metadata~dist"},
```

```
 {"17.03.0-ce", "17.3.0-ce"}, // zero-padded fields
}

for _, tc := range cases {
 v, err := NewVersion(tc[0])
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 actual := v.String()
 expected
:= tc[1]
 if actual != expected {
  t.Fatalf("expected: %s\nactual: %s", expected, actual)
 }
 if actual := v.Original(); actual != tc[0] {
  t.Fatalf("expected original: %q\nactual: %q", tc[0], actual)
 }
}
}

func TestEqual(t *testing.T) {
 cases := []struct {
  v1       string
  v2       string
  expected bool
 }{
  {"1.2.3", "1.4.5", false},
  {"1.2-beta", "1.2-beta", true},
  {"1.2", "1.1.4", false},
  {"1.2", "1.2-beta", false},
  {"1.2+foo", "1.2+beta", true},
  {"v1.2", "v1.2-beta", false},
  {"v1.2+foo", "v1.2+beta", true},
  {"v1.2.3.4", "v1.2.3.4", true},
  {"v1.2.0.0", "v1.2", true},
  {"v1.2.0.0.1", "v1.2", false},
  {"v1.2", "v1.2.0.0", true},
  {"v1.2", "v1.2.0.0.1", false},
  {"v1.2.0.0", "v1.2.0.0.1", false},
  {"v1.2.3.0", "v1.2.3.4", false},
  {"1.7rc2", "1.7rc1", false},
  {"1.7rc2", "1.7", false},
  {"1.2.0", "1.2.0-X-1.2.0+metadata~dist", false},
 }

 for _, tc := range cases {
  v1, err := NewVersion(tc.v1)
```

```
 if err != nil {
  t.Fatalf("err:
%s", err)
 }

 v2, err := NewVersion(tc.v2)
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 actual := v1.Equal(v2)
 expected := tc.expected
 if actual != expected {
  t.Fatalf(
   "%s <=> %s\nexpected: %t\nactual: %t",
   tc.v1, tc.v2,
   expected, actual)
 }
}
}

func TestGreaterThan(t *testing.T) {
 cases := []struct {
  v1       string
  v2       string
  expected bool
 }{
  {"1.2.3", "1.4.5", false},
  {"1.2-beta", "1.2-beta", false},
  {"1.2", "1.1.4", true},
  {"1.2", "1.2-beta", true},
  {"1.2+foo", "1.2+beta", false},
  {"v1.2", "v1.2-beta", true},
  {"v1.2+foo", "v1.2+beta", false},
  {"v1.2.3.4", "v1.2.3.4", false},
  {"v1.2.0.0", "v1.2", false},
  {"v1.2.0.0.1", "v1.2", true},
  {"v1.2", "v1.2.0.0", false},
  {"v1.2", "v1.2.0.0.1", false},
  {"v1.2.0.0", "v1.2.0.0.1", false},
  {"v1.2.3.0", "v1.2.3.4", false},
  {"1.7rc2", "1.7rc1", true},
  {"1.7rc2", "1.7", false},
  {"1.2.0", "1.2.0-X-1.2.0+metadata~dist", true},
 }

 for _, tc := range cases {
  v1,
```

```
 err := NewVersion(tc.v1)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  v2, err := NewVersion(tc.v2)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  actual := v1.GreaterThan(v2)
  expected := tc.expected
  if actual != expected {
   t.Fatalf(
    "%s > %s\nexpected: %t\nactual: %t",
    tc.v1, tc.v2,
    expected, actual)
  }
 }
}

func TestLessThan(t *testing.T) {
 cases := []struct {
  v1       string
  v2       string
  expected bool
 }{
  {"1.2.3", "1.4.5", true},
  {"1.2-beta", "1.2-beta", false},
  {"1.2", "1.1.4", false},
  {"1.2", "1.2-beta", false},
  {"1.2+foo", "1.2+beta", false},
  {"v1.2", "v1.2-beta", false},
  {"v1.2+foo", "v1.2+beta", false},
  {"v1.2.3.4", "v1.2.3.4", false},
  {"v1.2.0.0", "v1.2", false},
  {"v1.2.0.0.1", "v1.2", false},
  {"v1.2", "v1.2.0.0", false},
  {"v1.2", "v1.2.0.0.1", true},
  {"v1.2.0.0", "v1.2.0.0.1", true},
  {"v1.2.3.0", "v1.2.3.4", true},
  {"1.7rc2", "1.7rc1", false},
  {"1.7rc2", "1.7", true},
  {"1.2.0", "1.2.0-X-1.2.0+metadata~dist",
 false},
 }

 for _, tc := range cases {
```

```
 v1, err := NewVersion(tc.v1)
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 v2, err := NewVersion(tc.v2)
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 actual := v1.LessThan(v2)
 expected := tc.expected
 if actual != expected {
  t.Fatalf(
   "%s < %s\nexpected: %t\nactual: %t",
   tc.v1, tc.v2,
   expected, actual)
 }
}
}

func TestGreaterThanOrEqual(t *testing.T) {
 cases := []struct {
  v1       string
  v2       string
  expected bool
 }{
  {"1.2.3", "1.4.5", false},
  {"1.2-beta", "1.2-beta", true},
  {"1.2", "1.1.4", true},
  {"1.2", "1.2-beta", true},
  {"1.2+foo", "1.2+beta", true},
  {"v1.2", "v1.2-beta", true},
  {"v1.2+foo", "v1.2+beta", true},
  {"v1.2.3.4", "v1.2.3.4", true},
  {"v1.2.0.0", "v1.2", true},
  {"v1.2.0.0.1", "v1.2", true},
  {"v1.2", "v1.2.0.0", true},
  {"v1.2", "v1.2.0.0.1", false},
  {"v1.2.0.0", "v1.2.0.0.1", false},
  {"v1.2.3.0", "v1.2.3.4", false},
  {"1.7rc2", "1.7rc1", true},
  {"1.7rc2",
 "1.7", false},
  {"1.2.0", "1.2.0-X-1.2.0+metadata~dist", true},
 }

 for _, tc := range cases {
```

```
 v1, err := NewVersion(tc.v1)
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 v2, err := NewVersion(tc.v2)
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 actual := v1.GreaterThanOrEqual(v2)
 expected := tc.expected
 if actual != expected {
  t.Fatalf(
   "%s >= %s\nexpected: %t\nactual: %t",
   tc.v1, tc.v2,
   expected, actual)
 }
}
}

func TestLessThanOrEqual(t *testing.T) {
 cases := []struct {
  v1       string
  v2       string
  expected bool
 }{
  {"1.2.3", "1.4.5", true},
  {"1.2-beta", "1.2-beta", true},
  {"1.2", "1.1.4", false},
  {"1.2", "1.2-beta", false},
  {"1.2+foo", "1.2+beta", true},
  {"v1.2", "v1.2-beta", false},
  {"v1.2+foo", "v1.2+beta", true},
  {"v1.2.3.4", "v1.2.3.4", true},
  {"v1.2.0.0", "v1.2", true},
  {"v1.2.0.0.1", "v1.2", false},
  {"v1.2", "v1.2.0.0", true},
  {"v1.2", "v1.2.0.0.1", true},
  {"v1.2.0.0", "v1.2.0.0.1", true},
  {"v1.2.3.0",
 "v1.2.3.4", true},
  {"1.7rc2", "1.7rc1", false},
  {"1.7rc2", "1.7", true},
  {"1.2.0", "1.2.0-X-1.2.0+metadata~dist", false},
 }

 for _, tc := range cases {
```

```
  v1, err := NewVersion(tc.v1)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  v2, err := NewVersion(tc.v2)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  actual := v1.LessThanOrEqual(v2)
  expected := tc.expected
  if actual != expected {
   t.Fatalf(
    "%s <= %s\nexpected: %t\nactual: %t",
    tc.v1, tc.v2,
    expected, actual)
  }
 }
}
```

Data model artifacts for Prometheus.
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1.7.0 (May 24, 2024)

ENHANCEMENTS:

- Remove `reflect` dependency ([#91](https://github.com/hashicorp/go-version/pull/91))
- Implement the `database/sql.Scanner` and `database/sql/driver.Value` interfaces for `Version` ([#133](https://github.com/hashicorp/go-version/pull/133))

INTERNAL:

- [COMPLIANCE] Add Copyright and License Headers ([#115](https://github.com/hashicorp/go-version/pull/115))
- [COMPLIANCE] Update MPL-2.0 LICENSE ([#105](https://github.com/hashicorp/go-version/pull/105))
- Bump actions/cache from 3.0.11 to 3.2.5 ([#116](https://github.com/hashicorp/go-version/pull/116))
- Bump actions/checkout from 3.2.0 to 3.3.0 ([#111](https://github.com/hashicorp/go-version/pull/111))
- Bump actions/upload-artifact from 3.1.1 to 3.1.2 ([#112](https://github.com/hashicorp/go-version/pull/112))

- GHA Migration ([#103](https://github.com/hashicorp/go-version/pull/103))
- github: Pin external GitHub Actions to hashes ([#107](https://github.com/hashicorp/go-version/pull/107))
- SEC-090:
 Automated trusted workflow pinning (2023-04-05) ([#124](https://github.com/hashicorp/go-version/pull/124))
- update readme ([#104](https://github.com/hashicorp/go-version/pull/104))

1.6.0 (June 28, 2022)

FEATURES:

- Add `Prerelease` function to `Constraint` to return true if the version includes a prerelease field ([#100](https://github.com/hashicorp/go-version/pull/100))

1.5.0 (May 18, 2022)

FEATURES:

- Use `encoding` `TextMarshaler` & `TextUnmarshaler` instead of JSON equivalents ([#95](https://github.com/hashicorp/go-version/pull/95))
- Add JSON handlers to allow parsing from/to JSON ([#93](https://github.com/hashicorp/go-version/pull/93))

1.4.0 (January 5, 2022)

FEATURES:

- Introduce `MustConstraints()` ([#87](https://github.com/hashicorp/go-version/pull/87))
- `Constraints`: Introduce `Equals()` and `sort.Interface` methods ([#88](https://github.com/hashicorp/go-version/pull/88))

1.3.0 (March 31, 2021)

Please note that CHANGELOG.md does not exist in the source
 code prior to this release.

FEATURES:
- Add `Core` function to return a version without prerelease or metadata ([#85](https://github.com/hashicorp/go-version/pull/85))

1.2.1 (June 17, 2020)

BUG FIXES:
- Prevent `Version.Equal` method from panicking on `nil` encounter ([#73](https://github.com/hashicorp/go-version/pull/73))

1.2.0 (April 23, 2019)

FEATURES:
- Add `GreaterThanOrEqual` and `LessThanOrEqual` helper methods ([#53](https://github.com/hashicorp/go-

version/pull/53))

1.1.0 (Jan 07, 2019)

FEATURES:
- Add `NewSemver` constructor ([#45](https://github.com/hashicorp/go-version/pull/45))

1.0.0 (August 24, 2018)

Initial release.
procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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```
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package version

import (
 "fmt"
 "regexp"
 "sort"
 "strings"
)

// Constraint represents a single constraint for a version, such as
// ">= 1.0".
type Constraint struct {
 f        constraintFunc
 op       operator
 check    *Version
 original string
}

func (c *Constraint) Equals(con *Constraint) bool {
 return c.op == con.op && c.check.Equal(con.check)
}

// Constraints is a slice of constraints. We make a custom type so that
// we can add methods to it.
type Constraints []*Constraint

type constraintFunc func(v, c *Version) bool

var constraintOperators map[string]constraintOperation

type constraintOperation struct {
 op operator
 f  constraintFunc
}

var constraintRegexp *regexp.Regexp

func init() {
 constraintOperators = map[string]constraintOperation{
```

```
  "":   {op: equal, f: constraintEqual},
  "=":  {op: equal, f: constraintEqual},
  "!=": {op: notEqual, f: constraintNotEqual},
  ">":  {op: greaterThan, f: constraintGreaterThan},
  "<":
  {op: lessThan, f: constraintLessThan},
  ">=": {op: greaterThanEqual, f: constraintGreaterThanEqual},
  "<=": {op: lessThanEqual, f: constraintLessThanEqual},
  "~>": {op: pessimistic, f: constraintPessimistic},
 }

 ops := make([]string, 0, len(constraintOperators))
 for k := range constraintOperators {
  ops = append(ops, regexp.QuoteMeta(k))
 }

 constraintRegexp = regexp.MustCompile(fmt.Sprintf(
  `^\s*(%s)\s*(%s)\s*$`,
  strings.Join(ops, "|"),
  VersionRegexpRaw))
}

// NewConstraint will parse one or more constraints from the given
// constraint string. The string must be a comma-separated list of
// constraints.
func NewConstraint(v string) (Constraints, error) {
 vs := strings.Split(v, ",")
 result := make([]*Constraint, len(vs))
 for i, single := range vs {
  c, err := parseSingle(single)
  if err != nil {
   return nil, err
  }

  result[i] = c
 }

 return Constraints(result), nil
}

// MustConstraints is a helper that wraps a call to a function
//
 returning (Constraints, error) and panics if error is non-nil.
func MustConstraints(c Constraints, err error) Constraints {
 if err != nil {
  panic(err)
 }
```

```
 return c
}

// Check tests if a version satisfies all the constraints.
func (cs Constraints) Check(v *Version) bool {
 for _, c := range cs {
  if !c.Check(v) {
   return false
  }
 }

 return true
}

// Equals compares Constraints with other Constraints
// for equality. This may not represent logical equivalence
// of compared constraints.
// e.g. even though '>0.1,>0.2' is logically equivalent
// to '>0.2' it is *NOT* treated as equal.
//
// Missing operator is treated as equal to '=', whitespaces
// are ignored and constraints are sorted before comaparison.
func (cs Constraints) Equals(c Constraints) bool {
 if len(cs) != len(c) {
  return false
 }

 // make copies to retain order of the original slices
 left := make(Constraints, len(cs))
 copy(left, cs)
 sort.Stable(left)
 right := make(Constraints, len(c))
 copy(right, c)
 sort.Stable(right)

 //
 compare sorted slices
 for i, con := range left {
  if !con.Equals(right[i]) {
   return false
  }
 }

 return true
}

func (cs Constraints) Len() int {
 return len(cs)
```

```
}

func (cs Constraints) Less(i, j int) bool {
 if cs[i].op < cs[j].op {
  return true
 }
 if cs[i].op > cs[j].op {
  return false
 }

 return cs[i].check.LessThan(cs[j].check)
}

func (cs Constraints) Swap(i, j int) {
 cs[i], cs[j] = cs[j], cs[i]
}

// Returns the string format of the constraints
func (cs Constraints) String() string {
 csStr := make([]string, len(cs))
 for i, c := range cs {
  csStr[i] = c.String()
 }

 return strings.Join(csStr, ",")
}

// Check tests if a constraint is validated by the given version.
func (c *Constraint) Check(v *Version) bool {
 return c.f(v, c.check)
}

// Prerelease returns true if the version underlying this constraint
// contains a prerelease field.
func (c *Constraint) Prerelease() bool {
 return len(c.check.Prerelease()) > 0
}

func (c *Constraint) String()
 string {
 return c.original
}

func parseSingle(v string) (*Constraint, error) {
 matches := constraintRegexp.FindStringSubmatch(v)
 if matches == nil {
  return nil, fmt.Errorf("Malformed constraint: %s", v)
 }
```

```
 check, err := NewVersion(matches[2])
 if err != nil {
  return nil, err
 }

 cop := constraintOperators[matches[1]]

 return &Constraint{
  f:        cop.f,
  op:       cop.op,
  check:    check,
  original: v,
 }, nil
}

func prereleaseCheck(v, c *Version) bool {
 switch vPre, cPre := v.Prerelease() != "", c.Prerelease() != ""; {
 case cPre && vPre:
  // A constraint with a pre-release can only match a pre-release version
  // with the same base segments.
  return v.equalSegments(c)

 case !cPre && vPre:
  // A constraint without a pre-release can only match a version without a
  // pre-release.
  return false

 case cPre && !vPre:
  // OK, except with the pessimistic operator
 case !cPre && !vPre:
  // OK
 }
 return true
}

//-------------------------------------------------------------------
//
 Constraint functions
//-------------------------------------------------------------------

type operator rune

const (
 equal            operator = '='
 notEqual         operator = ''
 greaterThan      operator = '>'
 lessThan         operator = '<'
```

```
 greaterThanEqual operator = ''
 lessThanEqual    operator = ''
 pessimistic      operator = '~'
)

func constraintEqual(v, c *Version) bool {
 return v.Equal(c)
}

func constraintNotEqual(v, c *Version) bool {
 return !v.Equal(c)
}

func constraintGreaterThan(v, c *Version) bool {
 return prereleaseCheck(v, c) && v.Compare(c) == 1
}

func constraintLessThan(v, c *Version) bool {
 return prereleaseCheck(v, c) && v.Compare(c) == -1
}

func constraintGreaterThanEqual(v, c *Version) bool {
 return prereleaseCheck(v, c) && v.Compare(c) >= 0
}

func constraintLessThanEqual(v, c *Version) bool {
 return prereleaseCheck(v, c) && v.Compare(c) <= 0
}

func constraintPessimistic(v, c *Version) bool {
 // Using a pessimistic
 constraint with a pre-release, restricts versions to pre-releases
 if !prereleaseCheck(v, c) || (c.Prerelease() != "" && v.Prerelease() == "") {
  return false
 }

 // If the version being checked is naturally less than the constraint, then there
 // is no way for the version to be valid against the constraint
 if v.LessThan(c) {
  return false
 }
 // We'll use this more than once, so grab the length now so it's a little cleaner
 // to write the later checks
 cs := len(c.segments)

 // If the version being checked has less specificity than the constraint, then there
 // is no way for the version to be valid against the constraint
 if cs > len(v.segments) {
```

```
 return false
}

// Check the segments in the constraint against those in the version. If the version
// being checked, at any point, does not have the same values in each index of the
// constraints segments, then it cannot be valid against the constraint.
for i := 0; i < c.si-1; i++ {
 if v.segments[i] != c.segments[i]
{
  return false
 }
}

// Check the last part of the segment in the constraint. If the version segment at
// this index is less than the constraints segment at this index, then it cannot
// be valid against the constraint
if c.segments[cs-1] > v.segments[cs-1] {
 return false
}

// If nothing has rejected the version by now, it's valid
return true
}
version: 2
updates:
 - package-ecosystem: "gomod"
   directory: "/"
   schedule:
     interval: "daily"
   labels: ["dependencies"]

 - package-ecosystem: github-actions
   directory: /
   schedule:
     interval: monthly
   labels:
     - dependencies
   # only update HashiCorp actions, external actions managed by TSCCR
   allow:
     - dependency-name: hashicorp/*
   groups:
     github-actions-breaking:
       update-types:
         - major
     github-actions-backward-compatible:
       update-types:
         - minor
         - patch
```

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module github.com/hashicorp/go-version
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```
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package version

import (
 "fmt"
 "reflect"
 "sort"
 "testing"
)

func TestNewConstraint(t *testing.T) {
 cases := []struct {
  input string
  count int
  err   bool
 }{
  {">= 1.2", 1, false},
  {"1.0", 1, false},
  {">= 1.x", 0, true},
  {">= 1.2, < 1.0", 2, false},

  // Out of bounds
  {"1138777878078144567552950000000000000000", 0, true},
 }

 for _, tc := range cases {
  v, err := NewConstraint(tc.input)
  if tc.err && err == nil {
   t.Fatalf("expected error for input: %s", tc.input)
  } else if !tc.err && err != nil {
   t.Fatalf("error for input %s: %s", tc.input, err)
  }

  if len(v) != tc.count {
   t.Fatalf("input: %s\nexpected len: %d\nactual: %d",
    tc.input, tc.count, len(v))
  }
 }
}

func TestConstraintCheck(t *testing.T) {
 cases := []struct {
  constraint string
```

```
 version    string
 check      bool
}{
 {">= 1.0, < 1.2", "1.1.5", true},
 {"< 1.0, < 1.2", "1.1.5", false},
 {"= 1.0", "1.1.5",
false},
 {"= 1.0", "1.0.0", true},
 {"1.0", "1.0.0", true},
 {"~> 1.0", "2.0", false},
 {"~> 1.0", "1.1", true},
 {"~> 1.0", "1.2.3", true},
 {"~> 1.0.0", "1.2.3", false},
 {"~> 1.0.0", "1.0.7", true},
 {"~> 1.0.0", "1.1.0", false},
 {"~> 1.0.7", "1.0.4", false},
 {"~> 1.0.7", "1.0.7", true},
 {"~> 1.0.7", "1.0.8", true},
 {"~> 1.0.7", "1.0.7.5", true},
 {"~> 1.0.7", "1.0.6.99", false},
 {"~> 1.0.7", "1.0.8.0", true},
 {"~> 1.0.9.5", "1.0.9.5", true},
 {"~> 1.0.9.5", "1.0.9.4", false},
 {"~> 1.0.9.5", "1.0.9.6", true},
 {"~> 1.0.9.5", "1.0.9.5.0", true},
 {"~> 1.0.9.5", "1.0.9.5.1", true},
 {"~> 2.0", "2.1.0-beta", false},
 {"~> 2.1.0-a", "2.2.0", false},
 {"~> 2.1.0-a", "2.1.0", false},
 {"~> 2.1.0-a", "2.1.0-beta", true},
 {"~> 2.1.0-a", "2.2.0-alpha", false},
 {"> 2.0", "2.1.0-beta", false},
 {">= 2.1.0-a", "2.1.0-beta", true},
 {">= 2.1.0-a", "2.1.1-beta", false},
 {">= 2.0.0", "2.1.0-beta", false},
 {">= 2.1.0-a", "2.1.1", true},
 {">= 2.1.0-a", "2.1.1-beta",
false},
 {">= 2.1.0-a", "2.1.0", true},
 {"<= 2.1.0-a", "2.0.0", true},
}

for _, tc := range cases {
 c, err := NewConstraint(tc.constraint)
 if err != nil {
  t.Fatalf("err: %s", err)
 }
```

```
  v, err := NewVersion(tc.version)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  actual := c.Check(v)
  expected := tc.check
  if actual != expected {
   t.Fatalf("Version: %s\nConstraint: %s\nExpected: %#v",
    tc.version, tc.constraint, expected)
  }
 }
}

func TestConstraintPrerelease(t *testing.T) {
 cases := []struct {
  constraint string
  prerelease bool
 }{
  {"= 1.0", false},
  {"= 1.0-beta", true},
  {"~> 2.1.0", false},
  {"~> 2.1.0-dev", true},
  {"> 2.0", false},
  {">= 2.1.0-a", true},
 }

 for _, tc := range cases {
  c, err := parseSingle(tc.constraint)
  if err != nil {
   t.Fatalf("err: %s", err)
  }

  actual := c.Prerelease()
  expected := tc.prerelease
  if actual != expected {
   t.Fatalf("Constraint: %s\nExpected: %#v",
    tc.constraint, expected)
  }
 }
}

func
 TestConstraintEqual(t *testing.T) {
 cases := []struct {
  leftConstraint  string
  rightConstraint string
  expectedEqual   bool
```

```
}{
 {
  "0.0.1",
  "0.0.1",
  true,
 },
 { // whitespaces
  " 0.0.1 ",
  "0.0.1",
  true,
 },
 { // equal op implied
  "=0.0.1 ",
  "0.0.1",
  true,
 },
 { // version difference
  "=0.0.1",
  "=0.0.2",
  false,
 },
 { // operator difference
  ">0.0.1",
  "=0.0.1",
  false,
 },
 { // different order
  ">0.1.0, <=1.0.0",
  "<=1.0.0, >0.1.0",
  true,
 },
}

for _, tc := range cases {
 leftCon, err := NewConstraint(tc.leftConstraint)
 if err != nil {
  t.Fatalf("err: %s", err)
 }
 rightCon, err := NewConstraint(tc.rightConstraint)
 if err != nil {
  t.Fatalf("err: %s", err)
 }

 actual := leftCon.Equals(rightCon)
 if actual != tc.expectedEqual {
  t.Fatalf("Constraints: %s vs %s\nExpected: %t\nActual: %t",
   tc.leftConstraint, tc.rightConstraint, tc.expectedEqual, actual)
 }
```

```
 }
}

func TestConstraint_sort(t
 *testing.T) {
 cases := []struct {
  constraint          string
  expectedConstraints string
 }{
  {
   ">= 0.1.0,< 1.12",
   "< 1.12,>= 0.1.0",
  },
  {
   "< 1.12,>= 0.1.0",
   "< 1.12,>= 0.1.0",
  },
  {
   "< 1.12,>= 0.1.0,0.2.0",
   "< 1.12,0.2.0,>= 0.1.0",
  },
  {
   ">1.0,>0.1.0,>0.3.0,>0.2.0",
   ">0.1.0,>0.2.0,>0.3.0,>1.0",
  },
 }

 for i, tc := range cases {
  t.Run(fmt.Sprintf("%d", i), func(t *testing.T) {
   c, err := NewConstraint(tc.constraint)
   if err != nil {
    t.Fatalf("err: %s", err)
   }

   sort.Sort(c)

   actual := c.String()

   if !reflect.DeepEqual(actual, tc.expectedConstraints) {
    t.Fatalf("unexpected order\nexpected: %#v\nactual: %#v",
     tc.expectedConstraints, actual)
   }
  })
 }
}

func TestConstraintsString(t *testing.T) {
 cases := []struct {
```

```
 constraint string
 result     string
}{
 {">= 1.0, < 1.2", ""},
 {"~> 1.0.7", ""},
}

for _, tc := range cases {
 c, err := NewConstraint(tc.constraint)
 if err != nil {
  t.Fatalf("err:
%s", err)
 }

 actual := c.String()
 expected := tc.result
 if expected == "" {
  expected = tc.constraint
 }

 if actual != expected {
  t.Fatalf("Constraint: %s\nExpected: %#v\nActual: %s",
   tc.constraint, expected, actual)
 }
}
}
```

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package version

import (
 "bytes"
 "database/sql/driver"
 "fmt"
 "regexp"
 "strconv"
 "strings"
)

// The compiled regular expression used to test the validity of a version.
var (
 versionRegexp *regexp.Regexp
 semverRegexp  *regexp.Regexp
)

// The raw regular expression string used for testing the validity
// of a version.
const (
 VersionRegexpRaw string = `v?([0-9]+(\.[0-9]+)*?)` +
  `(-([0-9]+[0-9A-Za-z\-~]*(\.[0-9A-Za-z\-~]+)*)|(-?([A-Za-z\-~]+[0-9A-Za-z\-~]*(\.[0-9A-Za-z\-~]+)*)))?` +
  `(\+([0-9A-Za-z\-~]+(\.[0-9A-Za-z\-~]+)*))?` +
  `?`

 // SemverRegexpRaw requires a separator between version and prerelease
 SemverRegexpRaw string = `v?([0-9]+(\.[0-9]+)*?)` +
  `(-([0-9]+[0-9A-Za-z\-~]*(\.[0-9A-Za-z\-~]+)*)|(-([A-Za-z\-~]+[0-9A-Za-z\-~]*(\.[0-9A-Za-z\-~]+)*)))?` +
  `(\+([0-9A-Za-z\-~]+(\.[0-9A-Za-z\-~]+)*))?` +
  `?`
)

// Version represents a single version.
type Version struct {
 metadata string
 pre
   string
 segments []int64
```

```
 si       int
 original string
}

func init() {
 versionRegexp = regexp.MustCompile("^" + VersionRegexpRaw + "$")
 semverRegexp = regexp.MustCompile("^" + SemverRegexpRaw + "$")
}

// NewVersion parses the given version and returns a new
// Version.
func NewVersion(v string) (*Version, error) {
 return newVersion(v, versionRegexp)
}

// NewSemver parses the given version and returns a new
// Version that adheres strictly to SemVer specs
// https://semver.org/
func NewSemver(v string) (*Version, error) {
 return newVersion(v, semverRegexp)
}

func newVersion(v string, pattern *regexp.Regexp) (*Version, error) {
 matches := pattern.FindStringSubmatch(v)
 if matches == nil {
  return nil, fmt.Errorf("Malformed version: %s", v)
 }
 segmentsStr := strings.Split(matches[1], ".")
 segments := make([]int64, len(segmentsStr))
 for i, str := range segmentsStr {
  val, err := strconv.ParseInt(str, 10, 64)
  if err != nil {
   return nil, fmt.Errorf(
    "Error parsing version:
 %s", err)
  }

  segments[i] = val
 }

 // Even though we could support more than three segments, if we
 // got less than three, pad it with 0s. This is to cover the basic
 // default usecase of semver, which is MAJOR.MINOR.PATCH at the minimum
 for i := len(segments); i < 3; i++ {
  segments = append(segments, 0)
 }

 pre := matches[7]
```

```
 if pre == "" {
  pre = matches[4]
 }

 return &Version{
  metadata: matches[10],
  pre:      pre,
  segments: segments,
  si:       len(segmentsStr),
  original: v,
 }, nil
}

// Must is a helper that wraps a call to a function returning (*Version, error)
// and panics if error is non-nil.
func Must(v *Version, err error) *Version {
 if err != nil {
  panic(err)
 }

 return v
}

// Compare compares this version to another version. This
// returns -1, 0, or 1 if this version is smaller, equal,
// or larger than the other version, respectively.
//
// If you want boolean results, use the LessThan, Equal,
// GreaterThan, GreaterThanOrEqual or LessThanOrEqual
 methods.
func (v *Version) Compare(other *Version) int {
 // A quick, efficient equality check
 if v.String() == other.String() {
  return 0
 }

 // If the segments are the same, we must compare on prerelease info
 if v.equalSegments(other) {
  preSelf := v.Prerelease()
  preOther := other.Prerelease()
  if preSelf == "" && preOther == "" {
   return 0
  }
  if preSelf == "" {
   return 1
  }
  if preOther == "" {
   return -1
```

```
 }

 return comparePrereleases(preSelf, preOther)
}

segmentsSelf := v.Segments64()
segmentsOther := other.Segments64()
// Get the highest specificity (hS), or if they're equal, just use segmentSelf length
lenSelf := len(segmentsSelf)
lenOther := len(segmentsOther)
hS := lenSelf
if lenSelf < lenOther {
 hS = lenOther
}
// Compare the segments
// Because a constraint could have more/less specificity than the version it's
// checking, we need to account for a lopsided or jagged comparison
for i := 0; i < hS; i++ {
 if i > lenSelf-1 {
  //
This means Self had the lower specificity
  // Check to see if the remaining segments in Other are all zeros
  if !allZero(segmentsOther[i:]) {
   // if not, it means that Other has to be greater than Self
   return -1
  }
  break
 } else if i > lenOther-1 {
  // this means Other had the lower specificity
  // Check to see if the remaining segments in Self are all zeros -
  if !allZero(segmentsSelf[i:]) {
   // if not, it means that Self has to be greater than Other
   return 1
  }
  break
 }
 lhs := segmentsSelf[i]
 rhs := segmentsOther[i]
 if lhs == rhs {
  continue
 } else if lhs < rhs {
  return -1
 }
 // Otherwis, rhs was > lhs, they're not equal
 return 1
}

// if we got this far, they're equal
```

```
 return 0
}

func (v *Version) equalSegments(other *Version) bool {
 segmentsSelf := v.Segments64()
 segmentsOther := other.Segments64()

 if len(segmentsSelf) != len(segmentsOther) {
  return false
 }
 for i, v := range segmentsSelf {
  if v != segmentsOther[i]
 {
   return false
  }
 }
 return true
}

func allZero(segs []int64) bool {
 for _, s := range segs {
  if s != 0 {
   return false
  }
 }
 return true
}

func comparePart(preSelf string, preOther string) int {
 if preSelf == preOther {
  return 0
 }

 var selfInt int64
 selfNumeric := true
 selfInt, err := strconv.ParseInt(preSelf, 10, 64)
 if err != nil {
  selfNumeric = false
 }

 var otherInt int64
 otherNumeric := true
 otherInt, err = strconv.ParseInt(preOther, 10, 64)
 if err != nil {
  otherNumeric = false
 }

 // if a part is empty, we use the other to decide
```

```
if preSelf == "" {
 if otherNumeric {
  return -1
 }
 return 1
}

if preOther == "" {
 if selfNumeric {
  return 1
 }
 return -1
}

if selfNumeric && !otherNumeric {
 return -1
} else if !selfNumeric && otherNumeric {
 return 1
} else if !selfNumeric && !otherNumeric && preSelf > preOther {
 return 1
} else if selfInt > otherInt {
 return 1
}

return -1
}

func comparePrereleases(v string, other string)
int {
// the same pre release!
if v == other {
 return 0
}

// split both pre releases for analyse their parts
selfPreReleaseMeta := strings.Split(v, ".")
otherPreReleaseMeta := strings.Split(other, ".")

selfPreReleaseLen := len(selfPreReleaseMeta)
otherPreReleaseLen := len(otherPreReleaseMeta)

biggestLen := otherPreReleaseLen
if selfPreReleaseLen > otherPreReleaseLen {
 biggestLen = selfPreReleaseLen
}

// loop for parts to find the first difference
for i := 0; i < biggestLen; i = i + 1 {
```

```
  partSelfPre := ""
  if i < selfPreReleaseLen {
   partSelfPre = selfPreReleaseMeta[i]
  }

  partOtherPre := ""
  if i < otherPreReleaseLen {
   partOtherPre = otherPreReleaseMeta[i]
  }

  compare := comparePart(partSelfPre, partOtherPre)
  // if parts are equals, continue the loop
  if compare != 0 {
   return compare
  }
 }

 return 0
}

// Core returns a new version constructed from only the MAJOR.MINOR.PATCH
// segments of the version, without prerelease or metadata.
func
 (v *Version) Core() *Version {
 segments := v.Segments64()
 segmentsOnly := fmt.Sprintf("%d.%d.%d", segments[0], segments[1], segments[2])
 return Must(NewVersion(segmentsOnly))
}

// Equal tests if two versions are equal.
func (v *Version) Equal(o *Version) bool {
 if v == nil || o == nil {
  return v == o
 }

 return v.Compare(o) == 0
}

// GreaterThan tests if this version is greater than another version.
func (v *Version) GreaterThan(o *Version) bool {
 return v.Compare(o) > 0
}

// GreaterThanOrEqual tests if this version is greater than or equal to another version.
func (v *Version) GreaterThanOrEqual(o *Version) bool {
 return v.Compare(o) >= 0
}
```

```
// LessThan tests if this version is less than another version.
func (v *Version) LessThan(o *Version) bool {
 return v.Compare(o) < 0
}

// LessThanOrEqual tests if this version is less than or equal to another version.
func (v *Version) LessThanOrEqual(o *Version) bool {
 return v.Compare(o) <= 0
}

// Metadata returns any metadata
 that was part of the version
// string.
//
// Metadata is anything that comes after the "+" in the version.
// For example, with "1.2.3+beta", the metadata is "beta".
func (v *Version) Metadata() string {
 return v.metadata
}

// Prerelease returns any prerelease data that is part of the version,
// or blank if there is no prerelease data.
//
// Prerelease information is anything that comes after the "-" in the
// version (but before any metadata). For example, with "1.2.3-beta",
// the prerelease information is "beta".
func (v *Version) Prerelease() string {
 return v.pre
}

// Segments returns the numeric segments of the version as a slice of ints.
//
// This excludes any metadata or pre-release information. For example,
// for a version "1.2.3-beta", segments will return a slice of
// 1, 2, 3.
func (v *Version) Segments() []int {
 segmentSlice := make([]int, len(v.segments))
 for i, v := range v.segments {
  segmentSlice[i] = int(v)
 }
 return segmentSlice
}

// Segments64 returns the
 numeric segments of the version as a slice of int64s.
//
// This excludes any metadata or pre-release information. For example,
// for a version "1.2.3-beta", segments will return a slice of
```

```
// 1, 2, 3.
func (v *Version) Segments64() []int64 {
 result := make([]int64, len(v.segments))
 copy(result, v.segments)
 return result
}

// String returns the full version string included pre-release
// and metadata information.
//
// This value is rebuilt according to the parsed segments and other
// information. Therefore, ambiguities in the version string such as
// prefixed zeroes (1.04.0 => 1.4.0), `v` prefix (v1.0.0 => 1.0.0), and
// missing parts (1.0 => 1.0.0) will be made into a canonicalized form
// as shown in the parenthesized examples.
func (v *Version) String() string {
 var buf bytes.Buffer
 fmtParts := make([]string, len(v.segments))
 for i, s := range v.segments {
  // We can ignore err here since we've pre-parsed the values in segments
  str := strconv.FormatInt(s, 10)
  fmtParts[i]
 = str
 }
 fmt.Fprintf(&buf, strings.Join(fmtParts, "."))
 if v.pre != "" {
  fmt.Fprintf(&buf, "-%s", v.pre)
 }
 if v.metadata != "" {
  fmt.Fprintf(&buf, "+%s", v.metadata)
 }

 return buf.String()
}

// Original returns the original parsed version as-is, including any
// potential whitespace, `v` prefix, etc.
func (v *Version) Original() string {
 return v.original
}

// UnmarshalText implements encoding.TextUnmarshaler interface.
func (v *Version) UnmarshalText(b []byte) error {
 temp, err := NewVersion(string(b))
 if err != nil {
  return err
 }
```

```
 *v = *temp

 return nil
}

// MarshalText implements encoding.TextMarshaler interface.
func (v *Version) MarshalText() ([]byte, error) {
 return []byte(v.String()), nil
}

// Scan implements the sql.Scanner interface.
func (v *Version) Scan(src interface{}) error {
 switch src := src.(type) {
 case string:
  return v.UnmarshalText([]byte(src))
 case nil:
  return nil
 default:
  return fmt.Errorf("cannot scan %T as Version", src)
 }
}

//
 Value implements the driver.Valuer interface.
func (v *Version) Value() (driver.Value, error) {
 return v.String(), nil
}
```

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1.2559 zstd 1.5.6-r2

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plugins/elements/gstqueue2.c
plugins/elements/gstqueue2.h
plugins/elements/gsttee.c
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1.2561 protobuf 1.36.1

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1.2562 common 0.61.0

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1.2563 sigs.k8s.io/kustomize/kyaml 0.18.1

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1.2565 google.golang.org/genproto/googleapis/rpc 0.0.0-20240826202546-f6391c0de4c7

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1.2575 alpine-baselayout 3.6.8-r1

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1.2581 swag 0.22.3

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1.2582 structured-merge-diff 4.2.3

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1.2585 protobuf-go 1.30.0

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1.2587 reflect2 1.0.2

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1.2588 x-sync 0.8.0

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1.2589 platforms 0.2.1

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1.2590 otel-exporters-otlp-otlptrace 1.19.0

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1.2594 locker 1.0.1

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1.2595 float16 0.8.4

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1.2596 jsonreference 0.20.2

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1.2601 agext-levenshtein 1.2.3

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1.2602 aws-sdk-go-v2-internal-ini 1.8.0

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
```

```
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-
Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil,
 err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err !=
 nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack);
 err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

AWS SDK for Go

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```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
```

```
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}
```

```
type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return
 err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
```

```
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
          }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
           "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
```

```
        },
        "output": {

          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
{
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists the settings defined for Linux subscriptions discovery. The
settings include if\n      Organizations integration has been enabled, and
 which Regions data will be aggregated from.</p>"
            }
          },
```

```
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays
 the aggregated data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }

        },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription being used by the instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux

subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],

"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},

"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
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"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
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"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
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"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
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"smithy.api#documentation": " With License Manager, you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
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"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",

"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

"type": "Boolean"
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"Endpoint": {
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"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"type": "error"
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"smithy.rules#endpointTests": {
"testCases": [
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"UseDualStack": false
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"params": {
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"UseDualStack": false,
"Endpoint": "https://example.com"
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"expect": {
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"params": {
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"Endpoint": "https://example.com"
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"expect": {
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
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"version": "1.0"
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"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
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"smithy.api#enum": [
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"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
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}
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"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
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"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",

"smithy.api#required": {}
}
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"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
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{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
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"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
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"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",

"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>AmiID</code> with an optional operator to see subscriptions that match, partially\n match, or don't match a certain Amazon Machine Image (AMI) ID. \n The valid names for this filter are: \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n The valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation":
" An array that contains instance objects. "
}
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"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
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"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
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"errors": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
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{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
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"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Subscriptions"

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    },
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        "type": "structure",
        "members": {
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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The valid Operators for this filter are:</p>\n
         <ul>\n           <li>\n              <p>\n                  <code>contains</code>\n              </p>\n           </li>\n
<li>\n              <p>\n                  <code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
              <code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
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                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
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                        "min": 1,
                        "max": 16384
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parameters in request increases."
        }
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        "members": {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
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"smithy.api#documentation": " An array that contains subscription objects. "
}
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for
the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",

"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",

"traits":
{
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "

}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux
subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },

      "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
```

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated
from. ",

"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home
Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},

"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //   - Beneficiary
 //   - ProductSKU
 //   - Fingerprint
 //
   - Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if
 err := addProtocolFinalizerMiddlewares(stack, options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 //
 This member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "DisassociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type
 CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
```

```
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource
 Name (ARN) of the checkout license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil
 {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack);
err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier
 that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
```

```
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return
err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide
 to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
```

```
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity
 *types.DatetimeRange

 // Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add
protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
```

```
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return
err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
//
  - ProductSKU
//   - Status
//   - Fingerprint
//   - IssuerName
//   - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack);
err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
```

```
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

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```
{
  "smithy": "2.0",
  "shapes": {
```

"com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n        hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
        monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
 EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider of the user.</p>",
```

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n resource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",

```
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }

    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
```

"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",

"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required":
{}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},

"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",

"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",

"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",

"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack

endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},

true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"

```
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [

{
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",
```

```
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "type": "tree",

      "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"

                      },
                      true
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",

  "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
```

"supportsFIPS"
]
}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{

"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{

"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "type": "tree",

        "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"

                ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}

            },
                    "type": "endpoint"
                  }
                ]
              },
              {
                "conditions": [],
```

```
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {

                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {

                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
```

```
                                    },
                                    "type": "endpoint"
                                }
                            ]
                        },
                        {
                            "conditions": [],
                            "error": "DualStack is enabled but this partition does
not support DualStack",
                            "type": "error"
                        }
                    ]
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ]
        }
    ]
},
{
    "conditions":
[],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
```

```
            }
        },
        {
            "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
            },

        "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
```

"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}

},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}

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        },
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          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
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            }
          },
           "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
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                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
    },
    {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
{
"type": "structure",

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    "members": {
        "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
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"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name
of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match
one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {

"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated":
 {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
 provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify.</p>"
```

```
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
    "type": "structure",
    "members": {
        "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
    "type": "structure",
    "members": {

    "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for a user. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for a user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " The summary of the user-based subscription products for a user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}

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},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
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"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},

"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings

such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity
provider. \n <note>\n Your estimated bill for charges on the number of users and related costs
will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status)
in Amazon Web Services Billing.
For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n monthly
charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"

```
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
         "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
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"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
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"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
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"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required":
{}
}
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"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
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"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
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"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
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"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",

"traits": {
"smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
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"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
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"errors": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered

identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
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"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
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"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n update any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
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},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
}

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    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n      require connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
 that allows inbound TCP port 1688 communication between resources in\n      your VPC and the VPC endpoints for
activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n      the subnets to provision VPC endpoints.</p>"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
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  "smithy": "2.0",
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        "namespace": "*"
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        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
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        "id": "PaginatedTrait",
        "namespace": "*"
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        "id": "HttpHeaderTrait",
        "namespace": "*"
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        "id": "HttpUriConflict",
        "namespace": "*"
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        "id": "Service",
        "namespace": "*"
      }
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  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
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          "target": "com.amazonaws.licensemanager#CheckInLicense"
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          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
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        {
          "target": "com.amazonaws.licensemanager#CheckoutLicense"
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    {
      "target": "com.amazonaws.licensemanager#CreateGrant"
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      "target": "com.amazonaws.licensemanager#CreateGrantVersion"
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      "target": "com.amazonaws.licensemanager#CreateLicense"
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      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
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      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
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      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
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    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
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      "target": "com.amazonaws.licensemanager#CreateToken"
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      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
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      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
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      "target": "com.amazonaws.licensemanager#DeleteToken"
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      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

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      "target": "com.amazonaws.licensemanager#GetAccessToken"
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    {
      "target": "com.amazonaws.licensemanager#GetGrant"
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"target": "com.amazonaws.licensemanager#GetLicense"
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"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
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"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
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"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
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"target": "com.amazonaws.licensemanager#GetLicenseUsage"
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"target": "com.amazonaws.licensemanager#GetServiceSettings"
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"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
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"target": "com.amazonaws.licensemanager#ListDistributedGrants"
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
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"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
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"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
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"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
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"target": "com.amazonaws.licensemanager#ListLicenses"
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"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
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"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
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"target": "com.amazonaws.licensemanager#ListReceivedGrants"
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"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
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"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
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"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
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"target": "com.amazonaws.licensemanager#ListResourceInventory"
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"target": "com.amazonaws.licensemanager#ListTagsForResource"
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"target": "com.amazonaws.licensemanager#ListTokens"
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"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
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"target": "com.amazonaws.licensemanager#RejectGrant"
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"target": "com.amazonaws.licensemanager#TagResource"
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"target": "com.amazonaws.licensemanager#UntagResource"
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"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
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"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
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"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
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{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
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"traits": {
"aws.api#service": {

"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

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    "rules": [
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        "conditions": [
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            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]

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        "type": "tree",
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseFIPS"
                  },
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                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {

"conditions": [
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                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
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                "conditions": [],
                "endpoint": {
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                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
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          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",
                    "argv": [
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                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref":
"UseFIPS"
                          },
```

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                    true
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            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
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        "type": "tree",
        "rules": [
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                "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
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                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]

                }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },

"supportsDualStack"
                                ]
                            }
                        ]
```

```
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}

            },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",

          "argv": [
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                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
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{
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ],
        "type": "tree",
        "rules": [

{
            "conditions": [],
            "endpoint": {
              "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
      {
        "conditions": [],
        "error": "FIPS is enabled but this
partition does not support FIPS",
        "type": "error"
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
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                        "argv": [
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                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

"supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
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                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

                },
                        "type": "endpoint"
                      }
                    ]
                  },
                  {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                  }
                ]
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                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                   "properties": {},
                  "headers": {}
```

```
                    },
                    "type": "endpoint"
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            ]
        }
    ]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
             }
        },
        {
            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
```

```
            }
        },
        "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }

},
    {
        "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
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          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
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"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
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"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {
"Region": "eu-north-1",
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"expect": {
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"UseDualStack": false
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          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
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          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
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          "params": {
            "Region": "eu-west-3",
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            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
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"params": {
"Region": "me-south-1",
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"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
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"params": {
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"expect": {
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
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"params": {
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"UseFIPS": true,
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"params": {

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"params": {
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"UseDualStack": true
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
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"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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}
},

"params": {
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                }
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            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
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            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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            }
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            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
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"expect": {
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"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"expect": {
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}

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                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
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                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
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                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
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                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                },
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                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
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                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
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"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
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            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
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        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"

}
    ],
    "traits": {
        "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant
```

ARN. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": " Grant status. "
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Grant version. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": " Access to resource denied. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
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"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
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"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
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"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
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"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
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"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

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},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
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    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
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    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the
account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

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            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
     "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

```
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

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        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

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    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

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            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
                }
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            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
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    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

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            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
```

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

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            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Seconds"
            }
        },
        "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
             }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

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            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

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        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
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        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

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    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }

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            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                 }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

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        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

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    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
```

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            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
```

"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

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        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

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    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n        <code>resource_id</code> - The ID of the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

```
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
      "type": "structure",
      "members": {
        "ResourceInventoryList": {
          "target": "com.amazonaws.licensemanager#ResourceInventoryList",
          "traits": {
            "smithy.api#documentation": "<p>Information
about the resources.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

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            "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
    }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

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        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
```

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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

```
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

        "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version
 of the license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack,
 options); err != nil {
  return err
```

```
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
```

1.2603 protobuf-go 1.34.2

1.2603.1 Available under license :

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1.2604 otel-exporters-otlp-otlptrace-otlptracehttp 1.19.0

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1.2610 jsonpatch 4.12.0

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1.2611 proto-otlp 1.0.0

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1.2612 otel-metric 1.28.0

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1.2613 otel-exporters-otlp-otlptrace-otlptracegrpc 1.19.0

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1.2614 genproto-googleapis-rpc 0.0.0-20240701130421-f6361c86f094

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1.2618 otel-trace 1.28.0

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1.2619 protobuf 1.5.4

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1.2623 reference 0.5.0

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1.2632 jsonpatch 1.33

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1.2633 rich 13.9.4

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1.2634 send/node_modules/ms 2.1.3

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1.2635 go-warnings 0.1.2

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1.2636 go-crypto 0.0.0-20230828082145-3c4c8a2d2371

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1.2637 multierr 1.11.0

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1.2638 zap-exp 1.27.0

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1.2639 go-glob 1.0.0

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1.2641 koanf-maps 0.1.1

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1.2642 go-metrics 0.4.1

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1.2643 x-exp 0.0.0-20230321023759-10a507213a29

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1.2658 bbolt 1.3.10

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1.2659 otel-metric 1.20.0

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module _ // Auto generated by https://github.com/bwplotka/bingo. DO NOT EDIT

go 1.16

require github.com/efficientgo/tools/copyright v0.0.0-20210326193628-425a09c04e05

1.2672 dropwizard-metrics-graphite 2.1.11

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1.2678 amqp-client 5.20.0

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/amqp-client-5-20-0-3-jar/com/rabbitmq/client/impl/AMQConnection.class: binary file matches
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* /amqp-client-5-20-0-3-jar/META-INF/maven/com.rabbitmq/amqp-client/pom.xml
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Manifest-Version: 1.0
Bundle-Description: The RabbitMQ Java client library allows Java appli
cations to interface with RabbitMQ.
Implementation-Title: RabbitMQ Java Client

Automatic-Module-Name: com.rabbitmq.client
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.html, http
s://www.gnu.org/licenses/gpl-2.0.txt, https://www.mozilla.org/en-US/M
PL/2.0/
Bundle-SymbolicName: com.rabbitmq.client
Implementation-Version: 5.20.0
Bnd-LastModified: 1698243701289
Bundle-ManifestVersion: 2
Specification-Vendor: AMQP Working Group (www.amqp.org)
Specification-Title: AMQP
Bundle-DocURL: https://www.rabbitmq.com
Bundle-Vendor: VMware, Inc. or its affiliates.
Import-Package: com.codahale.metrics;version="[4.2,5)";resolution:=opt
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nal,com.fasterxml.jackson.databind;version="[2.15,3)";resolution:=opt
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ion;version="[1.11,2)";resolution:=optional,io.micrometer.observation
.docs;version="[1.11,2)";resolution:=optional,io.micrometer.observati
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llback,javax.security.auth.x500,javax.security.sasl,org.slf4j;version
 ="[1.7,2)"
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Tool: Bnd-6.3.1.202206071316
Implementation-Vendor: VMware, Inc. or its affiliates.
Export-Package: com.rabbitmq.client;uses:="com.rabbitmq.client.impl,co
m.rabbitmq.client.impl.nio,com.rabbitmq.client.impl.recovery,com.rabb
itmq.client.observation,com.rabbitmq.utility,javax.net,javax.net.ssl"
;version="5.20.0",com.rabbitmq.client.impl;uses:="com.codahale.metric
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ient.observation,io.micrometer.common,io.micrometer.common.docs,io.mi

crometer.observation,io.micrometer.observation.docs,io.micrometer.obs
ervation.transport";version="5.20.0",com.rabbitmq.tools;version="5.20
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pc;uses:="com.fasterxml.jackson.core,com.fasterxml.jackson.databind,c
om.rabbitmq.client";version="5.20.0",com.rabbitmq.utility;version="5.
20.0"
Bundle-Name: RabbitMQ Java Client
Bundle-Version: 5.20.0
Build-Jdk-Spec: 1.8
Created-By: Apache Maven Bundle Plugin 5.1.9
Implementation-URL: https://www.rabbitmq.com
Specification-Version: 0.9.1

Found in path(s):
* /amqp-client-5-20-0-3-jar/META-INF/MANIFEST.MF

1.2679 zap-exp 1.21.0

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1.2680 otel-exporters-otlp-otlptrace-otlptracegrpc 1.20.0

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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1.2695 procfs 0.7.3

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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1.2696 etcd-api 3.5.4

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1.2698 console 1.0.3

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1.2699 sqlexp 0.1.0

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1.2700 go-metro 0.0.0-20180109044635-280f6062b5bc

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1.2702 go-textseg 13.0.0

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1.2716 jsonreference 0.21.0

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1.2717 pgproto3 2.3.3

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1.2718 contrib-instrumentation-google.golang.org-grpc-otelgrpc 0.49.0

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1.2723 cronexpr 1.1.2

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1.2726 otel-trace 1.21.0

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1.2729 microsoft-authentication-library-for-go 1.2.2

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1.2732 xattr 0.4.10

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1.2735 blackmagic 1.0.2

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1.2736 httpcc 1.0.1

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1.2738 option 1.0.1

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1.2739 genproto-googleapis-rpc 0.0.0-20240930140551-af27646dc61f

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1.2740 genproto-googleapis-api 0.0.0-20240930140551-af27646dc61f

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1.2741 jsonpatch 5.9.0

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1.2742 regexp 0.0.0-20221122212121-6b5c0a4cb7fd

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1.2743 koanf-providers-confmap 0.1.0

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1.2744 asm 1.2.0

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* /asm-1-0-2-sources-zip/net/minidev/asm/Accessor.java
* /asm-1-0-2-sources-zip/net/minidev/asm/ASMUtil.java
* /asm-1-0-2-sources-zip/net/minidev/asm/BeansAccess.java
* /asm-1-0-2-sources-zip/net/minidev/asm/DynamicClassLoader.java

1.2745 xml-rpc 0.0.0-20220921171641-a4b6fa1dd06b

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1.2746 cgroups 3.0.2

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1.2747 fastjson 1.6.4

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1.2748 go-kmsg-parser 2.0.0+incompatible

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```
func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
```

```
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
```

```
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
```

```
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range
values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown
in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
```

```
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.32.0
//  protoc        v4.23.2
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
```

```
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
```

```
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
```

```
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67,
```

0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64,
0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```
var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []interface{}{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v interface{}, i int)
interface{} {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
```

```
   return &v.sizeCache
  case 2:
   return &v.unknownFields
  default:
   return nil
  }
 }
}
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []interface{}{}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
  GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
  RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
  NumEnums:      2,
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes:
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test
```

```
import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
```

```
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
```

```
    http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
```

```
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}
```

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use

```
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
```

```
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{"x-goog-api-client", gax.XGoogHeader(kv...)}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close();
 err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
```

```
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v",
 "project", url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
```

```
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if
 err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
```

```
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return
 err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
```

```
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf,
 err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery
 = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if
err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}
```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-

cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest,
 opts ...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if
 req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
  headers := gax.BuildHeaders(ctx, hds...)
  e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   if settings.Path != "" {
```

```
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err
= googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
it.Response = resp
return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
```

```
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud
 Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
```

```
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource
 is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return
 nil, e
 }
 return resp, nil
}
```

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1.2750 google-cloud-go-logging 1.9.0

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
```

```
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
```

```
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000
* time.Millisecond),
 },
}
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}
```

```
// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by
third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
```

```
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
```

```
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
```

```
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{"x-goog-api-client", gax.XGoogHeader(kv...)}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns
 nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
```

```
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil
{
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
```

```
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
```

```
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for
 a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by
third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
```

```
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return
nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }
```

```
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v",
"project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return
```

```
err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}
```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm
 := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())
```

```
 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req !=
nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return
```

```
err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption)
 (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e
 := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
 context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
```

```
 "fmt"
 "io"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get               []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient
```

```
 interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
```

```
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode,
 error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
```

```
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{"x-goog-api-client", gax.XGoogHeader(kv...)}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are
 mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for
use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm
 := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
```

```
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"

```
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range
 values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown
in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
// Copyright 2023 Google LLC
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.31.0
//  protoc        v4.23.2
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
```

```
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}
```

```
func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
```

```
  "READER":          3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //     tunedModels/{tuned_model}/permissions/{permission}
 //     corpora/{corpus}/permissions/{permission}
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
```

0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67,
0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,

```
 0x64,
 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []interface{}{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
```

```
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v interface{}, i int)
interface{} {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
    return &v.sizeCache
   case 2:
    return &v.unknownFields
   default:
    return nil
   }
  }
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []interface{}{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes:
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.2751 go-conntrack 0.0.0-20190716064945-2f068394615f

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1.2752 mock 1.6.0

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1.2753 grpc-opentracing 0.0.0-20180507213350-8e809c8a8645

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1.2754 line-protocol 2.2.1

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1.2755 strcase 0.3.0

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1.2756 ebpf 0.9.1

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1.2757 govultr 2.17.2

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1.2758 proto-otlp 1.3.1

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1.2759 pkcs7 0.0.0-20200128120323-432b2356ecb1

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1.2760 go-metrics 0.3.10

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1.2761 strfmt 0.21.3

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1.2762 image-spec 1.0.2

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1.2763 generic-list-go 0.2.0

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1.2765 vsock 1.2.1

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1.2766 genproto-googleapis-rpc 0.0.0-20240401170217-c3f982113cda

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1.2767 filepath-securejoin 0.3.1

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1.2768 go-ordered-map 2.1.8

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1.2769 spec 0.20.8

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1.2770 go-str2duration 2.1.0

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1.2771 socket 0.5.1

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1.2773 kubernetes-yaml 1.1.0

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1.2774 ntp 1.4.3

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1.2779 pkcs11 1.1.1

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1.2780 socket 0.4.1

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1.2782 native 1.1.0

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1.2783 simpleclient_servlet_common 0.16.0

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1.2784 v1-gonum 0.11.0

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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T. Nishimura, ``Tables of 64-bit Mersenne Twisters"
ACM Transactions on Modeling and
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M. Matsumoto and T. Nishimura,
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1.2785 go-ordered-map 1.0.0

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DOMAIN NAMES - IMPLEMENTATION AND SPECIFICATION

1. STATUS OF THIS MEMO

This RFC describes the details of the domain system and protocol, and assumes that the reader is familiar with the concepts discussed in a companion RFC, "Domain Names - Concepts and Facilities" [RFC-1034].

The domain system is a mixture of functions and data types which are an official protocol and
functions and data types which are still
experimental. Since the domain system is intentionally extensible, new data types and experimental behavior should always be expected in parts of the system beyond the official protocol. The official protocol parts include standard queries, responses and the Internet class RR data formats (e.g., host addresses). Since the previous RFC set, several definitions have changed, so some previous definitions are obsolete.

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2. INTRODUCTION

2.1. Overview

The goal of domain names is to provide a mechanism for naming resources in such a way that the names are usable in different hosts, networks, protocol families, internets, and administrative organizations.

From the user's point of view, domain names are useful as arguments to a local agent, called a resolver, which retrieves information associated with the domain name. Thus a user might ask for the host address or mail information associated with a particular domain name. To enable the user to request a particular type of information, an appropriate query type is passed to the resolver with the domain name. To the user, the domain tree is a single information space; the resolver is responsible for hiding the distribution of data among name servers from the user.

From the resolver's point of view, the database that makes up the domain space is distributed among various name servers. Different parts of the domain space are stored in different name servers, although a particular data item will be stored redundantly in two or more name servers. The resolver starts with knowledge of at least one name server. When the resolver processes a user query it asks a known name server for the information; in return, the resolver either receives the desired information or a referral to another name server. Using these referrals, resolvers learn the identities and contents of other name servers. Resolvers are responsible for dealing with the distribution of the domain space and dealing with the effects of name server failure by consulting redundant databases in other servers.

Name servers manage two kinds of data. The first kind of data held in sets called zones; each zone is the complete database for a particular "pruned" subtree of the domain space. This data is called authoritative. A name server periodically checks to make sure that its zones are up to date, and if not, obtains a new copy of updated zones

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from master files stored locally or in another name server. The second kind of data is cached data which was acquired by a local resolver. This data may be incomplete, but improves the performance of the retrieval process when non-local data is repeatedly accessed. Cached data is eventually discarded by a timeout mechanism.

This functional structure isolates the problems of user interface, failure recovery, and distribution in the resolvers and isolates the database update and refresh problems in the name servers.

2.2. Common configurations

A
host can participate in the domain name system in a number of ways, depending on whether the host runs programs that retrieve information from the domain system, name servers that answer queries from other hosts, or various combinations of both functions. The simplest, and perhaps most typical, configuration is shown below:

```
            Local Host                    |  Foreign
                                          |
  +---------+              +----------+        |  +--------+
  |        | user queries  |          |queries  | |        |
  |  User   |-------------->|          |---------|->|Foreign |
  | Program |              | Resolver |        | |  Name  |
  |        |<--------------|          |<--------|--| Server |
  |        | user responses|          |responses|  |        |
  +---------+              +----------+        |  +--------+
                        |     A           |
           cache additions |     | references
|
                         V     |           |
                       +----------+        |
                       |  cache   |        |
                       +----------+        |
```

User programs interact with the domain name space through resolvers; the format of user queries and user responses is specific to the host and its operating system. User queries will typically be operating system calls, and the resolver and its cache will be part of the host operating system. Less capable hosts may choose to implement the resolver as a subroutine to be linked in with every program that needs its services. Resolvers answer user queries with information they acquire via queries to foreign name servers and the local cache.

Note that the resolver may have to make several queries to several different foreign name servers to answer a particular user query, and

hence the resolution of a user query may involve several network accesses and an arbitrary amount of time. The queries to foreign name servers and the corresponding responses have a standard format described

in this memo, and may be datagrams.

Depending on its capabilities, a name server could be a stand alone program on a dedicated machine or a process or processes on a large timeshared host. A simple configuration might be:

```
            Local Host                    |  Foreign
                                          |
   +---------+                            |
  /        /|                            |
 +---------+ |            +----------+        |  +--------+
 |        | |            |         |responses|  |       |
 |        | |            |   Name   |---------|->|Foreign |
 |  Master |--------------->|  Server  |        |  |Resolver|
 |  files  | |
  |         |<--------|--|       |
 |        |/            |         | queries |  +--------+
 +---------+             +----------+        |
```

Here a primary name server acquires information about one or more zones by reading master files from its local file system, and answers queries about those zones that arrive from foreign resolvers.

The DNS requires that all zones be redundantly supported by more than one name server. Designated secondary servers can acquire zones and check for updates from the primary server using the zone transfer protocol of the DNS. This configuration is shown below:

```
            Local Host                    |  Foreign
                                          |
   +---------+                            |
  /        /|                            |
 +---------+ |            +----------+        |  +--------+
 |        | |            |         |responses|  |       |
 |        | |
```

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```
 |   Name   |---------|->|Foreign |
 |  Master |-------------->|  Server  |        |  |Resolver|
 |  files  | |            |        |<--------|--|       |
 |        |/             |        | queries |  +--------+
 +---------+              +----------+        |
                          A     |maintenance |  +--------+
                          |     +------------|->|        |
                          |      queries     |  |Foreign |
                          |                  | |  Name  |
                          +------------------|--| Server |
                       maintenance responses |  +--------+
```

In this configuration, the name server periodically establishes a virtual circuit to a foreign name server to acquire a copy of a zone or to check that an existing copy has not changed. The messages sent for

these maintenance activities follow the same form as queries and responses, but the message sequences are somewhat different.

The information flow in a host that supports all aspects of the domain name system is shown below:

```
             Local Host                    |  Foreign
                                           |
  +---------+              +----------+        |  +--------+
  |        | user queries  |         |queries  | |        |
  |  User   |-------------->|         |---------|->|Foreign |
  | Program |              | Resolver |        | |  Name  |
  |        |<--------------|         |<--------|--| Server |
  |        | user responses|         |responses|  |        |
  +---------+              +----------+        |  +--------+
                           |     A           |
            cache additions |     | references |
                           V     |           |

                     +----------+        |
                         |  Shared  |        |
                         | database |        |
                         +----------+        |
                           A     |           |
```

```
   +---------+     refreshes |     | references |
  /        /|              |     V            |
 +---------+ |            +----------+         |  +--------+
 |        | |            |         |responses|  |        |
 |        | |            |  Name   |---------|->|Foreign |
 |  Master |--------------->|  Server  |         |  |Resolver|
 |  files  | |            |         |<--------|--|        |
 |        |/             |         | queries |  +--------+
 +---------+              +----------+         |
                           A     |maintenance |  +--------+
                           |    +------------|->|        |
                           |     queries     |  |Foreign
|
                           |                 | |  Name  |
                           +-------------------|--| Server |
                         maintenance responses |  +--------+
```

The shared database holds domain space data for the local name server and resolver. The contents of the shared database will typically be a mixture of authoritative data maintained by the periodic refresh operations of the name server and cached data from previous resolver requests. The structure of the domain data and the necessity for synchronization between name servers and resolvers imply the general characteristics of this database, but the actual format is up to the local implementor.

Information flow can also be tailored so that a group of hosts act together to optimize activities. Sometimes this is done to offload less capable hosts
so that they do not have to implement a full resolver.
This can be appropriate for PCs or hosts which want to minimize the amount of new network code which is required. This scheme can also allow a group of hosts can share a small number of caches rather than maintaining a large number of separate caches, on the premise that the centralized caches will have a higher hit ratio. In either case, resolvers are replaced with stub resolvers which act as front ends to resolvers located in a recursive server in one or more name servers known to perform that service:

```
                Local Hosts                 |  Foreign
```

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```
                                        |
  +---------+                            |
  |         | responses                  |
  | Stub    |<--------------------+      |
  | Resolver|                     |      |
  |         |----------------+    |      |
  +---------+ recursive      |    |
   |
            queries        |    |      |
                        V    |      |
  +---------+ recursive     +----------+         |  +--------+
  |         | queries       |         |queries  | |        |
  | Stub    |-------------->| Recursive|---------|->|Foreign |
  | Resolver|               | Server   |         | |  Name  |
  |         |<--------------|         |<--------|--| Server |
  +---------+ responses     |         |responses| |        |
                        +----------+         |  +--------+
                        |  Central |         |
                        |   cache  |         |
                        +----------+         |
```

In any case, note that domain components are always replicated for reliability whenever possible.

2.3. Conventions

The domain system has several conventions dealing with low-level, but fundamental, issues. While the implementor is free to violate these conventions WITHIN
HIS OWN SYSTEM, he must observe these conventions in
ALL behavior observed from other hosts.

2.3.1. Preferred name syntax

The DNS specifications attempt to be as general as possible in the rules for constructing domain names. The idea is that the name of any existing object can be expressed as a domain name with minimal changes.

However, when assigning a domain name for an object, the prudent user will select a name which satisfies both the rules of the domain system and any existing rules for the object, whether these rules are published

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or implied by existing programs.

For example, when naming a mail domain, the user should satisfy both the rules of this memo and those in RFC-822. When creating a new host name, the old rules for HOSTS.TXT should be followed. This avoids problems when old software is converted to use domain names.

The following syntax will result in fewer problems with many

applications that use domain names (e.g., mail, TELNET).

<domain> ::= <subdomain> | " "

<subdomain> ::= <label> | <subdomain> "." <label>

<label> ::= <letter> [[<ldh-str>] <let-dig>]

<ldh-str> ::= <let-dig-hyp> | <let-dig-hyp> <ldh-str>

<let-dig-hyp> ::= <let-dig> | "-"

<let-dig> ::= <letter> | <digit>

<letter> ::= any one of the 52 alphabetic characters A through Z in upper case and a through z in lower case

<digit> ::= any one of the ten digits 0 through 9

Note that while upper and lower case letters are allowed in domain names, no significance is attached to the case. That is, two names with the same spelling but different case are to be treated as if identical.

The labels must follow the rules for ARPANET host names. They must start with a letter, end with a letter or digit, and have as interior characters only letters, digits, and hyphen. There are also some restrictions on the length. Labels must be 63 characters or less.

For example, the following strings identify hosts in the Internet:

A.ISI.EDU XX.LCS.MIT.EDU SRI-NIC.ARPA

2.3.2. Data Transmission Order

The order of transmission of the header and data described in this document is resolved to the octet level. Whenever a diagram shows a

group of octets, the order of transmission of those octets is the normal order in which they are read in English. For example, in the following diagram, the octets are transmitted in the order they are numbered.

```
 0                   1
 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|      1      |      2      |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|      3      |      4      |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|      5      |      6      |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

Whenever an octet represents a numeric quantity, the left most bit in the diagram is the high order or most significant bit. That is, the bit labeled 0 is the most significant bit. For example, the following diagram represents the value 170 (decimal).

```
 0 1 2 3 4 5 6 7
+-+-+-+-+-+-+-+-+
|1 0 1 0 1 0 1 0|
+-+-+-+-+-+-+-+-+
```

Similarly, whenever a multi-octet field represents a numeric quantity the left most bit of the whole field is the most significant bit. When a multi-octet quantity is transmitted the most significant octet is transmitted first.

2.3.3. Character Case

For all parts of the DNS that are part of the official protocol, all comparisons between character strings (e.g., labels, domain names, etc.) are done in a case-insensitive manner. At present, this rule is in force throughout the domain system without exception. However, future additions beyond current usage may need to use the full binary octet capabilities in names, so attempts to store domain names in 7-bit ASCII or use of special bytes to terminate labels, etc., should be avoided.

When data enters the domain system, its original case should be preserved whenever possible. In certain circumstances this cannot be done. For example, if two RRs are stored in a database, one at x.y and one at X.Y, they are actually stored at the same place in the database, and hence only one casing would be preserved. The basic rule is that case can be discarded only when data is used to define structure in a database, and two names are identical when compared in a case insensitive manner.

Loss of case sensitive data must be minimized. Thus while data for x.y and X.Y may both be stored under a single location x.y or X.Y, data for a.x and B.X would never be stored under A.x, A.X, b.x, or b.X. In general, this preserves the case of the first
label of a domain name,
but forces standardization of interior node labels.

Systems administrators who enter data into the domain database should take care to represent the data they supply to the domain system in a case-consistent manner if their system is case-sensitive. The data distribution system in the domain system will ensure that consistent representations are preserved.

2.3.4. Size limits

Various objects and parameters in the DNS have size limits. They are listed below. Some could be easily changed, others are more fundamental.

labels 63 octets or less

names 255 octets or less

TTL positive values of a signed 32 bit number.

UDP messages 512 octets or less

3. DOMAIN NAME SPACE AND RR DEFINITIONS

3.1. Name space definitions

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Domain names in messages are expressed in terms of a sequence of labels. Each label is represented as a one octet length field followed by that number of octets. Since every domain name ends with the null label of the root, a domain name is terminated by a length byte of zero. The high order two bits of every length octet must be zero, and the remaining six bits of the length field limit the label to 63 octets or less.

To simplify implementations, the total length of a domain name (i.e., label octets and label length octets) is restricted to 255 octets or less.

Although labels can contain any 8 bit values in octets that make up a label, it is strongly recommended that labels follow the preferred syntax described elsewhere in this memo, which is compatible with existing host naming conventions. Name servers and resolvers must compare labels in a case-insensitive manner (i.e., A=a), assuming ASCII with zero parity. Non-alphabetic codes must match exactly.

3.2. RR definitions

3.2.1. Format

All RRs have the same top level format shown below:

```
                    1  1  1  1  1  1
  0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                                               |
/                                               /
/                      NAME                     /
|                                               |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                      TYPE                     |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                     CLASS                     |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                      TTL                      |
|                                               |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

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```
|                RDLENGTH                |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--|
/                 RDATA                  /
/
                    /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

NAME an owner name, i.e., the name of the node to which this resource record pertains.

TYPE two octets containing one of the RR TYPE codes.

CLASS two octets containing one of the RR CLASS codes.

TTL a 32 bit signed integer that specifies the time interval that the resource record may be cached before the source of the information should again be consulted. Zero values are interpreted to mean that the RR can only be used for the transaction in progress, and should not be cached. For example, SOA records are always distributed with a zero TTL to prohibit caching. Zero values can also be used for extremely volatile data.

RDLENGTH an unsigned 16 bit integer that specifies the length in octets of the
RDATA field.

RDATA a variable length string of octets that describes the resource. The format of this information varies according to the TYPE and CLASS of the resource record.

3.2.2. TYPE values

TYPE fields are used in resource records. Note that these types are a subset of QTYPEs.

TYPE value and meaning

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A 1 a host address

NS 2 an authoritative name server

MD 3 a mail destination (Obsolete - use MX)

MF 4 a mail forwarder (Obsolete - use MX)

CNAME 5 the canonical name for an alias

SOA 6 marks the start of a zone of authority

MB 7 a mailbox domain name (EXPERIMENTAL)

MG 8 a mail group member (EXPERIMENTAL)

MR 9 a mail rename domain name (EXPERIMENTAL)

NULL
10 a null RR (EXPERIMENTAL)

WKS 11 a well known service description

PTR 12 a domain name pointer

HINFO 13 host information

MINFO 14 mailbox or mail list information

MX 15 mail exchange

TXT 16 text strings

3.2.3. QTYPE values

QTYPE fields appear in the question part of a query. QTYPES are a superset of TYPEs, hence all TYPEs are valid QTYPEs. In addition, the following QTYPEs are defined:

AXFR 252 A request for a transfer of an entire zone

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MAILB 253 A request for mailbox-related records (MB, MG or MR)

MAILA 254 A request for mail agent RRs (Obsolete - see MX)

* 255 A request for all records

3.2.4. CLASS values

CLASS fields appear in resource records. The following CLASS mnemonics and values are defined:

IN
1 the Internet

CS 2 the CSNET class (Obsolete - used only for examples in some obsolete RFCs)

CH 3 the CHAOS class

HS 4 Hesiod [Dyer 87]

3.2.5. QCLASS values

QCLASS fields appear in the question section of a query. QCLASS values are a superset of CLASS values; every CLASS is a valid QCLASS. In addition to CLASS values, the following QCLASSes are defined:

* 255 any class

3.3. Standard RRs

The following RR definitions are expected to occur, at least potentially, in all classes. In particular, NS, SOA, CNAME, and PTR will be used in all classes, and have the same format in all classes. Because their RDATA format is known, all domain names in the RDATA section of these RRs may be compressed.

<domain-name> is a domain name represented as a series of labels, and terminated by a label with zero length. <character-string> is a single length octet followed by that number of characters. <character-string> is
treated as binary information, and can be up to 256 characters in length (including the length octet).

3.3.1. CNAME RDATA format

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                 CNAME                 /
/                                       /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

CNAME A <domain-name> which specifies the canonical or primary name for the owner. The owner name is an alias.

CNAME RRs cause no additional section processing, but name servers may choose to restart the query at the canonical name in certain cases. See the description of name server logic in [RFC-1034] for details.

3.3.2. HINFO RDATA format

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                 CPU                   /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                 OS                    /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

CPU A <character-string> which specifies the CPU type.

OS A <character-string> which specifies the operating system type.

Standard values for CPU and OS can be found in [RFC-1010].

HINFO records are used to acquire general information about a host. The main use is for protocols such as FTP that can use special procedures when talking between machines or operating systems of the same type.

3.3.3. MB RDATA format (EXPERIMENTAL)

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                MADNAME                  /
/                                         /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

MADNAME A <domain-name> which specifies a host which has the specified mailbox.

MB records cause additional section processing which looks up an A type RRs corresponding to MADNAME.

3.3.4. MD RDATA format (Obsolete)

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                MADNAME                  /
/                                         /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

MADNAME A <domain-name> which specifies a host which has a mail agent for the domain which should be able to deliver mail for the domain.

MD records cause additional section processing which looks up an A type record corresponding to MADNAME.

MD is obsolete. See the definition of MX and [RFC-974] for details of the new scheme. The recommended policy for dealing with MD RRs found in a master file is to reject them, or to convert them to MX RRs with a preference of 0.

3.3.5. MF RDATA format (Obsolete)

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                MADNAME                  /
/                                         /
```

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

MADNAME A <domain-name> which specifies a host which has a mail agent for the domain which will accept mail for forwarding to the domain.

MF records cause additional section processing which looks up an A type record corresponding to MADNAME.

MF is obsolete. See the definition of MX and [RFC-974] for details ofw the new scheme. The recommended policy for dealing with MD RRs found in a master file is to reject them, or to convert them to MX RRs with a preference of 10.

3.3.6. MG RDATA format (EXPERIMENTAL)

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                MGMNAME                /
/                                       /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

MGMNAME A <domain-name> which specifies a mailbox which is a member of the mail group specified by the domain name.

MG records cause no additional section processing.

3.3.7. MINFO RDATA format (EXPERIMENTAL)

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                RMAILBX                /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                EMAILBX                /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

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where:

RMAILBX A <domain-name> which specifies a mailbox which is responsible for the mailing list or mailbox. If this domain name names the root, the owner of the MINFO RR is responsible for itself. Note that many existing mailing lists use a mailbox X-request for the RMAILBX field of mailing list X, e.g., Msgroup-request for Msgroup. This field provides a more general mechanism.

EMAILBX A <domain-name> which specifies a mailbox which is to receive error messages related to the mailing list or mailbox specified by the owner of the MINFO RR (similar to the ERRORS-TO: field which has been proposed). If this domain name names the root, errors should be returned to the sender of the message.

MINFO records cause no additional section processing. Although these records can be associated with a simple mailbox, they are usually used with a mailing list.

3.3.8. MR RDATA format (EXPERIMENTAL)

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                    NEWNAME                    /
/                                               /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

NEWNAME A <domain-name> which specifies a mailbox which is the proper rename of the specified mailbox.

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MR records cause no additional section processing. The main use for MR is as a forwarding entry for a user who has moved to a different mailbox.

3.3.9. MX RDATA format

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                PREFERENCE                     |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                EXCHANGE                       /
/                                               /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

PREFERENCE A 16 bit integer which specifies the preference given to this RR among others at the same owner. Lower values are preferred.

EXCHANGE A <domain-name> which specifies a host willing to act as a mail exchange for the owner name.

MX records cause type A additional section processing for the host specified by EXCHANGE. The use of MX RRs is explained in detail in [RFC-974].

3.3.10. NULL RDATA format (EXPERIMENTAL)

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                <anything>                     /
/                                               /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

Anything at all may be in the RDATA field so long as it is 65535 octets or less.

NULL records cause no additional section processing. NULL RRs are not allowed in master files. NULLs are used as placeholders in some experimental extensions of the DNS.

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3.3.11. NS RDATA format

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                 NSDNAME                       /
/                                               /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

NSDNAME A <domain-name> which specifies a host which should be authoritative for the specified class and domain.

NS records cause both the usual additional section processing to locate a type A record, and, when used in a referral, a special search of the zone in which they reside for glue information.

The NS RR states that the named host should be expected to have a zone starting at owner name of the specified class. Note that the class may not indicate the protocol family which should be used to communicate with the host, although it is typically a strong hint. For example, hosts which are name servers for either Internet (IN) or Hesiod (HS) class information are normally queried using IN class protocols.

3.3.12. PTR RDATA format

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                 PTRDNAME                      /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

PTRDNAME A <domain-name> which points to some location in the domain name space.

PTR records cause no additional section processing. These RRs are used in special domains to point to some other location in the domain space. These records are simple data, and don't imply any special processing similar to that performed by CNAME, which identifies aliases. See the description of the IN-ADDR.ARPA domain for an example.

3.3.13. SOA RDATA format

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                 MNAME                 /
/                                       /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/
                RNAME                   /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|               SERIAL                  |
|                                       |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|               REFRESH                 |
|                                       |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                RETRY                  |
|                                       |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|               EXPIRE                  |
|                                       |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|               MINIMUM                 |
|                                       |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

MNAME The <domain-name> of the name server that was the

original or primary source of data for this zone.

RNAME A <domain-name> which specifies the mailbox of the person responsible for this zone.

SERIAL The unsigned 32 bit version number of the original copy of the zone. Zone transfers preserve this value. This value wraps and should be compared using sequence space arithmetic.

REFRESH A 32 bit time interval before the zone should be refreshed.

RETRY A 32 bit time interval that should elapse before a

failed refresh should be retried.

EXPIRE A 32 bit time value that specifies the upper limit on the time interval that can elapse before the zone is no longer authoritative.

MINIMUM The unsigned 32 bit minimum TTL field that should be exported with any RR from this zone.

SOA records cause no additional section processing.

All times are in units of seconds.

Most of these fields are pertinent only for name server maintenance operations. However, MINIMUM is used in all query operations that retrieve RRs from a zone. Whenever a RR is sent in a response to a query, the TTL field is set to the maximum of the TTL field from the RR and the MINIMUM field in the appropriate SOA. Thus MINIMUM is a lower bound on the TTL field for all RRs in a zone. Note that this use of MINIMUM should occur when the RRs are copied into the response and not when the zone is loaded from a master file or via a zone transfer. The reason for this provison is to allow future dynamic update facilities to change the SOA RR with known semantics.

3.3.14. TXT RDATA format

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
/                TXT-DATA                       /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

TXT-DATA
One or more <character-string>s.

TXT RRs are used to hold descriptive text. The semantics of the text depends on the domain where it is found.

3.4. Internet specific RRs

3.4.1. A RDATA format

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                ADDRESS                |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

ADDRESS A 32 bit Internet address.

Hosts that have multiple Internet addresses will have multiple A records.

A records cause no additional section processing. The RDATA section of an A line in a master file is an Internet address expressed as four decimal numbers separated by dots without any imbedded spaces (e.g., "10.2.0.52" or "192.0.5.6").

3.4.2. WKS RDATA format

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                ADDRESS                |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|     PROTOCOL     |                    |
+--+--+--+--+--+--+--+--+                    |
|                                       |
/                <BIT MAP>                /
/                                       /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

ADDRESS An 32 bit Internet address

PROTOCOL An 8 bit IP protocol number

<BIT MAP> A variable length bit map. The bit map must be a multiple of 8 bits long.

The WKS record is used to describe the well known services supported by a particular protocol on a particular internet address. The PROTOCOL field specifies an IP protocol number, and the bit map has one bit per port of the specified protocol. The first bit corresponds to port 0, the second to port 1, etc. If the bit map does not include a bit for a protocol of interest, that bit is assumed zero. The appropriate values and mnemonics for ports and protocols are specified in [RFC-1010].

For example, if PROTOCOL=TCP (6), the 26th bit corresponds to TCP port 25 (SMTP). If this bit is set, a SMTP server should be listening on TCP port 25; if zero, SMTP service is not supported on the specified address.

The purpose of WKS RRs is to provide availability information for servers for TCP and UDP. If a server supports both TCP and UDP, or has multiple Internet addresses, then multiple WKS RRs are used.

WKS RRs cause no additional section processing.

In master files, both ports and protocols are expressed using mnemonics or decimal numbers.

3.5. IN-ADDR.ARPA domain

The Internet uses a special domain to support gateway location and Internet address to host mapping. Other classes may employ a similar strategy in other domains. The intent of this domain is to provide a guaranteed method to perform host address to host name mapping, and to facilitate queries to locate all gateways on a particular network in the Internet.

Note that both of these services are similar to functions that could be performed by inverse queries; the difference is that this part of the domain name space is structured according to address, and hence can guarantee that the appropriate data can be located without an exhaustive

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search of the domain space.

The domain begins at IN-ADDR.ARPA and has a substructure which follows the Internet addressing structure.

Domain names in the IN-ADDR.ARPA domain are defined to have up to four labels in addition to the IN-ADDR.ARPA suffix. Each label represents one octet of an Internet address, and is expressed as a character string for a decimal value in the range 0-255 (with leading zeros omitted except in the case of a zero octet which is represented by a single zero).

Host addresses are represented by domain names that have all four labels specified. Thus data for Internet address 10.2.0.52 is located at domain name 52.0.2.10.IN-ADDR.ARPA. The reversal, though awkward to read, allows zones to be delegated which are exactly one network of address space. For example, 10.IN-ADDR.ARPA can be a zone containing data for the ARPANET, while 26.IN-ADDR.ARPA can be a separate zone for MILNET. Address nodes are used to hold pointers to primary host names in the normal domain space.

Network numbers correspond to some non-terminal nodes at various depths in the IN-ADDR.ARPA domain, since Internet network numbers are either 1, 2, or 3 octets. Network nodes are used to hold pointers to the primary host names of gateways attached to that network. Since a gateway is, by definition, on more than one network, it will typically have two or more network nodes which point at it. Gateways will also have host level pointers at their fully qualified addresses.

Both the gateway pointers at network nodes and the normal host pointers at full address nodes use the PTR RR to point back to the primary domain names of the corresponding hosts.

For example, the IN-ADDR.ARPA domain will contain information about the ISI gateway between net 10 and 26, an MIT gateway from net 10 to MIT's

net 18, and hosts A.ISI.EDU and MULTICS.MIT.EDU. Assuming that ISI gateway has addresses 10.2.0.22 and 26.0.0.103, and a name MILNET-GW.ISI.EDU, and the MIT gateway has addresses 10.0.0.77 and 18.10.0.4

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and a name GW.LCS.MIT.EDU, the domain database would contain:

```
10.IN-ADDR.ARPA.          PTR MILNET-GW.ISI.EDU.
10.IN-ADDR.ARPA.          PTR GW.LCS.MIT.EDU.
18.IN-ADDR.ARPA.          PTR GW.LCS.MIT.EDU.
26.IN-ADDR.ARPA.          PTR MILNET-GW.ISI.EDU.
22.0.2.10.IN-ADDR.ARPA.
 PTR MILNET-GW.ISI.EDU.
103.0.0.26.IN-ADDR.ARPA.   PTR MILNET-GW.ISI.EDU.
77.0.0.10.IN-ADDR.ARPA.    PTR GW.LCS.MIT.EDU.
4.0.10.18.IN-ADDR.ARPA.    PTR GW.LCS.MIT.EDU.
103.0.3.26.IN-ADDR.ARPA.   PTR A.ISI.EDU.
6.0.0.10.IN-ADDR.ARPA.     PTR MULTICS.MIT.EDU.
```

Thus a program which wanted to locate gateways on net 10 would originate a query of the form QTYPE=PTR, QCLASS=IN, QNAME=10.IN-ADDR.ARPA. It would receive two RRs in response:

```
10.IN-ADDR.ARPA.          PTR MILNET-GW.ISI.EDU.
10.IN-ADDR.ARPA.          PTR GW.LCS.MIT.EDU.
```

The program could then originate QTYPE=A, QCLASS=IN queries for MILNET-GW.ISI.EDU. and GW.LCS.MIT.EDU. to discover the Internet addresses of these gateways.

A resolver which wanted to find the host name corresponding to Internet host address 10.0.0.6 would pursue a query of the form QTYPE=PTR, QCLASS=IN, QNAME=6.0.0.10.IN-ADDR.ARPA, and would receive:

```
6.0.0.10.IN-ADDR.ARPA.     PTR MULTICS.MIT.EDU.
```

Several cautions
apply to the use of these services:

- Since the IN-ADDR.ARPA special domain and the normal domain for a particular host or gateway will be in different zones, the possibility exists that that the data may be inconsistent.

- Gateways will often have two names in separate domains, only one of which can be primary.

- Systems that use the domain database to initialize their routing tables must start with enough gateway information to guarantee that they can access the appropriate name server.

- The gateway data only reflects the existence of a gateway in a manner equivalent to the current HOSTS.TXT file. It doesn't replace the dynamic availability information from GGP or EGP.

3.6. Defining new types, classes, and special namespaces

The previously defined types and classes are the ones in use as of the date of this memo. New definitions should be expected. This section makes some recommendations to designers considering additions to the existing facilities. The mailing list NAMEDROPPERS@SRI-NIC.ARPA is the forum where general discussion of design issues takes place.

In general, a new type is appropriate when new information is to be added to the database about an existing object, or we need new data formats for some totally new object. Designers should accept to define types and their RDATA formats that are generally applicable to all classes, and which avoid duplication of information. New classes are appropriate when the DNS is to be used for a new protocol, etc which requires new class-specific data formats, or when a copy of the existing name space is desired, but a separate management domain is necessary.

New types and classes need mnemonics for master files; the format of the master files requires that the mnemonics for type and class be disjoint.

TYPE and CLASS values must be a proper subset of QTYPEs and QCLASSes respectively.

The present system uses multiple RRs to represent multiple values of a type rather than storing multiple values in the RDATA section of a single RR. This is less efficient for most applications, but does keep RRs shorter. The multiple RRs assumption is incorporated in some experimental work on dynamic update methods.

The present system attempts to minimize the duplication of data in the database in order to insure consistency. Thus, in order to find the address of the host for a mail exchange, you map the mail domain name to a host name, then the host name to addresses, rather than a direct mapping to host address. This approach is preferred because it avoids the opportunity for inconsistency.

In defining a new type of data, multiple RR types should not be used to create an ordering between entries or express different formats for equivalent bindings, instead this information should be carried in the

body
of the RR and a single type used. This policy avoids problems with caching multiple types and defining QTYPEs to match multiple types.

For example, the original form of mail exchange binding used two RR types one to represent a "closer" exchange (MD) and one to represent a "less close" exchange (MF). The difficulty is that the presence of one RR type in a cache doesn't convey any information about the other because the query which acquired the cached information might have used a QTYPE of MF, MD, or MAILA (which matched both). The redesigned

service used a single type (MX) with a "preference" value in the RDATA section which can order different RRs. However, if any MX RRs are found in the cache, then all should be there.

4. MESSAGES

4.1. Format

All communications inside of the domain protocol are carried in a single format called
a message. The top level format of message is divided
into 5 sections (some of which are empty in certain cases) shown below:

```
+---------------------+
|        Header       |
+---------------------+
|       Question      | the question for the name server
+---------------------+
|        Answer       | RRs answering the question
+---------------------+
|      Authority      | RRs pointing toward an authority
+---------------------+
|      Additional     | RRs holding additional information
+---------------------+
```

The header section is always present. The header includes fields that specify which of the remaining sections are present, and also specify whether the message is a query or a response, a standard query or some other opcode, etc.

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The names of the sections after the header are derived from their use in standard queries. The question section contains fields that describe a question to a name server. These fields are a query type (QTYPE), a query class (QCLASS), and a query domain name (QNAME). The last three sections have the same format: a possibly empty list of concatenated resource records (RRs). The answer section contains RRs that answer the question; the authority section contains RRs that point toward an authoritative name server; the additional records section contains RRs which relate to the query, but are not strictly answers for the question.

4.1.1. Header section format

The header contains the following fields:

```
                                1  1  1  1  1  1
  0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                      ID                       |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|QR|   Opcode  |AA|TC|RD|RA|   Z    |   RCODE   |

+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                    QDCOUNT                    |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                    ANCOUNT                    |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                    NSCOUNT                    |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                    ARCOUNT                    |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

ID A 16 bit identifier assigned by the program that generates any kind of query. This identifier is copied the corresponding reply and can be used by the requester to match up replies to outstanding queries.

QR A one bit field that specifies whether this message is a query (0), or a response (1).

OPCODE A four bit field that specifies kind of query in this message. This value is set by the originator of a query and copied into the response. The values are:

0 a standard query (QUERY)

1 an inverse query (IQUERY)

2 a server status request (STATUS)

3-15 reserved for future use

AA Authoritative Answer - this bit is valid in responses, and specifies that the responding name server is an authority for the domain name in question section.

Note that the contents of the answer section may have multiple owner names because of aliases. The AA bit

corresponds to the name which matches the query name, or the first owner name in the answer section.

TC TrunCation - specifies that this message was truncated due to length greater than that permitted on the transmission channel.

RD Recursion Desired - this bit may be set in a query and is copied into the response. If RD is set, it directs

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the name server to pursue the query recursively. Recursive query support is optional.

RA Recursion Available - this be is set or cleared in a response, and denotes whether recursive query support is available in the name server.

Z Reserved for future use. Must be zero in all queries and responses.

RCODE Response code - this 4 bit field is set as part of responses. The values have the following interpretation:

0 No error condition

1 Format error - The name server was unable
to interpret the query.

2 Server failure - The name server was unable to process this query due to a problem with the name server.

3 Name Error - Meaningful only for responses from an authoritative name server, this code signifies that the domain name referenced in the query does not exist.

4 Not Implemented - The name server does not support the requested kind of query.

5 Refused - The name server refuses to perform the specified operation for policy reasons. For example, a name server may not wish to provide the

information to the particular requester,
or a name server may not wish to perform a particular operation (e.g., zone

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transfer) for particular data.

6-15 Reserved for future use.

QDCOUNT an unsigned 16 bit integer specifying the number of entries in the question section.

ANCOUNT an unsigned 16 bit integer specifying the number of resource records in the answer section.

NSCOUNT an unsigned 16 bit integer specifying the number of name server resource records in the authority records section.

ARCOUNT an unsigned 16 bit integer specifying the number of resource records in the additional records section.

4.1.2.
Question section format

The question section is used to carry the "question" in most queries, i.e., the parameters that define what is being asked. The section contains QDCOUNT (usually 1) entries, each of the following format:

```
                                1  1  1  1  1  1
  0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                                               |
/                     QNAME                     /
/                                               /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                     QTYPE                     |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                     QCLASS                    |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

QNAME a domain name represented as a sequence of labels, where each label consists of a length octet followed by that

number of octets. The domain name terminates with the zero length octet for the null label of the root. Note that this field may be an odd number of octets; no padding is used.

QTYPE a two octet code which specifies the type of the query.

The values for this field include all codes valid for a TYPE field, together with some more general codes which can match more than one type of RR.

QCLASS a two octet code that specifies the class of the query. For example, the QCLASS field is IN for the Internet.

4.1.3. Resource record format

The answer, authority, and additional sections all share the same format: a variable number of resource records, where the number of records is specified in the corresponding count field in the header.
Each resource record has the following format:

```
                                1  1  1  1  1  1
  0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                                               |
/                                               /
/                      NAME                     /
|                                               |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                      TYPE                     |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                     CLASS                     |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                      TTL                      |
|                                               |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                   RDLENGTH                    |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--|
/                     RDATA                     /
/                                               /
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

where:

NAME a domain name to which this resource record pertains.

TYPE two octets containing one of the RR type codes. This

field specifies the meaning of the data in the RDATA field.

CLASS two octets which specify the class of the data in the RDATA field.

TTL a 32 bit unsigned integer that specifies the time interval (in seconds) that the resource record may be cached before it should be discarded. Zero values are interpreted to mean that the RR can only be used for the transaction in progress, and should not be cached.

RDLENGTH
an unsigned 16 bit integer that specifies the length in octets of the RDATA field.

RDATA a variable length string of octets that describes the resource. The format of this information varies according to the TYPE and CLASS of the resource record. For example, the if the TYPE is A and the CLASS is IN, the RDATA field is a 4 octet ARPA Internet address.

4.1.4. Message compression

In order to reduce the size of messages, the domain system utilizes a compression scheme which eliminates the repetition of domain names in a message. In this scheme, an entire domain name or a list of labels at the end of a domain name is replaced with a pointer to a prior occurance of the same name.

The pointer takes the form of a two octet sequence:

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
| 1  1|                OFFSET                   |
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

The
first two bits are ones. This allows a pointer to be distinguished from a label, since the label must begin with two zero bits because

labels are restricted to 63 octets or less. (The 10 and 01 combinations are reserved for future use.) The OFFSET field specifies an offset from the start of the message (i.e., the first octet of the ID field in the domain header). A zero offset specifies the first byte of the ID field, etc.

The compression scheme allows a domain name in a message to be represented as either:

- a sequence of labels ending in a zero octet

- a pointer

- a sequence of labels ending with a pointer

Pointers can only be used for occurances of a domain name where the format is not class specific. If this were not the case, a name server or resolver would be required to know the format of all RRs it handled. As yet, there are no such cases, but they may occur in future RDATA formats.

If a domain name is contained in a part of the message subject to
a
length field (such as the RDATA section of an RR), and compression is

used, the length of the compressed name is used in the length calculation, rather than the length of the expanded name.

Programs are free to avoid using pointers in messages they generate, although this will reduce datagram capacity, and may cause truncation. However all programs are required to understand arriving messages that contain pointers.

For example, a datagram might need to use the domain names F.ISI.ARPA, FOO.F.ISI.ARPA, ARPA, and the root. Ignoring the other fields of the message, these domain names might be represented as:

```
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  20 |          1          |          F          |
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  22 |          3          |          I          |
```

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```
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  24 |          S          |          I          |
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  26 |          4          |          A          |
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  28 |          R          |          P          |
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  30 |          A          |          0          |
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+

     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  40 |          3          |          F          |
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  42 |          O          |          O          |
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  44 | 1  1|              20                    |
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+

     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  64 | 1  1|
  26                     |
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+

     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
  92 |          0          |                    |
     +--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
```

The domain name for F.ISI.ARPA is shown at offset 20. The domain name FOO.F.ISI.ARPA is shown at offset 40; this definition uses a pointer to concatenate a label for FOO to the previously defined F.ISI.ARPA. The domain name ARPA is defined at offset 64 using a pointer to the ARPA component of the name F.ISI.ARPA at 20; note that this pointer relies on ARPA being the last label in the string at 20. The root domain name is

defined by a single octet of zeros at 92; the root domain name has no labels.

4.2. Transport

The DNS assumes that messages will be transmitted as datagrams or

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in a
byte stream carried by a virtual circuit. While virtual circuits can be used for any DNS activity, datagrams are preferred for queries due to their lower overhead and better performance. Zone refresh activities must use virtual circuits because of the need for reliable transfer.

The Internet supports name server access using TCP [RFC-793] on server port 53 (decimal) as well as datagram access using UDP [RFC-768] on UDP port 53 (decimal).

4.2.1. UDP usage

Messages sent using UDP user server port 53 (decimal).

Messages carried by UDP are restricted to 512 bytes (not counting the IP or UDP headers). Longer messages are truncated and the TC bit is set in the header.

UDP is not acceptable for zone transfers, but is the recommended method for standard queries in the Internet. Queries sent using UDP may be lost, and hence a retransmission strategy is required. Queries or their responses may be reordered by the network, or by processing in name servers, so resolvers should not
depend on them being returned in order.

The optimal UDP retransmission policy will vary with performance of the Internet and the needs of the client, but the following are recommended:

- The client should try other servers and server addresses before repeating a query to a specific address of a server.

- The retransmission interval should be based on prior statistics if possible. Too aggressive retransmission can easily slow responses for the community at large. Depending on how well connected the client is to its expected servers, the minimum retransmission interval should be 2-5 seconds.

More suggestions on server selection and retransmission policy can be found in the resolver section of this memo.

4.2.2. TCP usage

Messages sent over TCP connections use server port 53 (decimal). The message is prefixed with a two byte length field which gives the message

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length, excluding the two byte length field. This length field allows the low-level processing to assemble a complete message before beginning to parse it.

Several connection management policies are recommended:

- The server should not block other activities waiting for TCP data.

- The server should support multiple connections.

- The server should assume that the client will initiate connection closing, and should delay closing its end of the connection until all outstanding client requests have been satisfied.

- If the server needs to close a dormant connection to reclaim resources, it should wait until the connection has been idle for a period on the order of two minutes. In particular, the server should allow the SOA and AXFR request sequence (which begins a refresh operation) to be made on a single connection. Since the server would be unable to answer queries anyway, a unilateral close or reset may be used instead of a graceful close.

5. MASTER FILES

Master files are text files that contain RRs in text form. Since the contents of a zone can be expressed in the form of a list of RRs a master file is most often used to define a zone, though it can be used to list a cache's contents. Hence, this section first discusses the format of RRs in a master file, and then the special considerations when a master file is used to create a zone in some name server.

5.1. Format

The format of these files is a sequence of entries. Entries are predominantly line-oriented, though parentheses can be used to continue a list of items across a line boundary, and text literals can contain CRLF within the text. Any combination of tabs and spaces act as a delimiter between the separate items that make up an entry. The end of any line in the master file can end with a comment. The comment starts

with a ";" (semicolon).

The following entries are
defined:

<blank>[<comment>]

$ORIGIN <domain-name> [<comment>]

$INCLUDE <file-name> [<domain-name>] [<comment>]

<domain-name><rr> [<comment>]

<blank><rr> [<comment>]

Blank lines, with or without comments, are allowed anywhere in the file.

Two control entries are defined: $ORIGIN and $INCLUDE. $ORIGIN is followed by a domain name, and resets the current origin for relative domain names to the stated name. $INCLUDE inserts the named file into the current file, and may optionally specify a domain name that sets the relative domain name origin for the included file. $INCLUDE may also have a comment. Note that a $INCLUDE entry never changes the relative origin of the parent file, regardless of changes to the relative origin made within the included file.

The last two forms represent RRs. If an entry for an
RR begins with a
blank, then the RR is assumed to be owned by the last stated owner. If an RR entry begins with a <domain-name>, then the owner name is reset.

<rr> contents take one of the following forms:

[<TTL>] [<class>] <type> <RDATA>

[<class>] [<TTL>] <type> <RDATA>

The RR begins with optional TTL and class fields, followed by a type and RDATA field appropriate to the type and class. Class and type use the standard mnemonics, TTL is a decimal integer. Omitted class and TTL

values are default to the last explicitly stated values. Since type and class mnemonics are disjoint, the parse is unique. (Note that this order is different from the order used in examples and the order used in the actual RRs; the given order allows easier parsing and defaulting.)

<domain-name>s make up a large share of the data in the master file. The labels in the domain name are expressed as character strings and separated by dots. Quoting conventions allow arbitrary characters to be stored
in domain names. Domain names that end in a dot are called absolute, and are taken as complete. Domain names which do not end in a dot are called relative; the actual domain name is the concatenation of the relative part with an origin specified in a $ORIGIN, $INCLUDE, or as an argument to the master file loading routine. A relative name is an error when no origin is available.

<character-string> is expressed in one or two ways: as a contiguous set of characters without interior spaces, or as a string beginning with a " and ending with a ". Inside a " delimited string any character can occur, except for a " itself, which must be quoted using \ (back slash).

Because these files are text files several special encodings are necessary to allow arbitrary data to be loaded. In particular:

of the root.

@
A free standing @ is used to denote the current origin.

\X where X is any character other than a digit (0-9), is used to quote that character so that its special meaning does not apply. For example, "\." can be used to place a dot character in a label.

\DDD where each D is a digit is the octet corresponding to the decimal number described by DDD. The resulting octet is assumed to be text and is not checked for special meaning.

( ) Parentheses are used to group data that crosses a line boundary. In effect, line terminations are not recognized within parentheses.

; Semicolon is used to start a comment; the remainder of the line is ignored.

5.2. Use of master files to define zones

When a master file is used to load a zone, the operation should be suppressed if any errors are encountered in the master file. The rationale for this is that a single error can have widespread consequences. For example, suppose that the RRs defining a delegation have syntax errors; then the server will return authoritative name errors for all names in the subzone (except in the case where the subzone is also present on the server).

Several other validity checks that should be performed in addition to insuring that the file is syntactically correct:

1. All RRs in the file should have the same class.

2. Exactly one SOA RR should be present at the top of the zone.

3. If delegations are present and glue information is required, it should be present.

4. Information present outside of the authoritative nodes in the zone should be glue information, rather than the result of an origin or similar error.

5.3. Master file example

The following is an example file which might be used to define the ISI.EDU zone.and is loaded with an origin of ISI.EDU:

```
@   IN  SOA     VENERA      Action\.domains (
                        20     ; SERIAL
                        7200   ; REFRESH
```

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```
                    600    ; RETRY
                    3600000; EXPIRE
                    60)    ; MINIMUM

      NS      A.ISI.EDU.
      NS      VENERA
      NS      VAXA
      MX      10      VENERA
      MX      20      VAXA

A       A       26.3.0.103

VENERA  A       10.1.0.52
      A       128.9.0.32

VAXA    A       10.2.0.27
      A       128.9.0.33


$INCLUDE <SUBSYS>ISI-MAILBOXES.TXT
```

Where the file <SUBSYS>ISI-MAILBOXES.TXT is:

```
  MOE     MB      A.ISI.EDU.
  LARRY   MB      A.ISI.EDU.
  CURLEY  MB      A.ISI.EDU.
  STOOGES MG      MOE
          MG      LARRY
          MG      CURLEY
```

Note the use of the \ character in the SOA
 RR to specify the responsible
person mailbox "Action.domains@E.ISI.EDU".

6. NAME SERVER IMPLEMENTATION

6.1. Architecture

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The optimal structure for the name server will depend on the host operating system and whether the name server is integrated with resolver operations, either by supporting recursive service, or by sharing its database with a resolver. This section discusses implementation considerations for a name server which shares a database with a resolver, but most of these concerns are present in any name server.

6.1.1. Control

A name server must employ multiple concurrent activities, whether they are implemented as separate tasks in the host's OS or multiplexing inside a single name server program. It is simply not acceptable for a name server to block the service of UDP requests while it waits for TCP data for refreshing
or query activities. Similarly, a name server
should not attempt to provide recursive service without processing such requests in parallel, though it may choose to serialize requests from a single client, or to regard identical requests from the same client as duplicates. A name server should not substantially delay requests while it reloads a zone from master files or while it incorporates a newly refreshed zone into its database.

6.1.2. Database

While name server implementations are free to use any internal data structures they choose, the suggested structure consists of three major parts:

- A "catalog" data structure which lists the zones available to this server, and a "pointer" to the zone data structure. The main purpose of this structure is to find the nearest ancestor zone, if any, for arriving standard queries.

- Separate data structures for each of the zones held by the name server.

- A data structure for cached data. (or perhaps separate
caches
for different classes)

All of these data structures can be implemented an identical tree structure format, with different data chained off the nodes in different parts: in the catalog the data is pointers to zones, while in the zone and cache data structures, the data will be RRs. In designing the tree framework the designer should recognize that query processing will need to traverse the tree using case-insensitive label comparisons; and that

in real data, a few nodes have a very high branching factor (100-1000 or more), but the vast majority have a very low branching factor (0-1).

One way to solve the case problem is to store the labels for each node in two pieces: a standardized-case representation of the label where all ASCII characters are in a single case, together with a bit mask that denotes which characters are actually of a different case. The branching factor diversity can be handled using a simple linked list for a node until the branching factor exceeds some threshold, and transitioning to a hash structure after the threshold is exceeded. In any case, hash structures used to store tree sections must insure that hash functions and procedures preserve the casing conventions of the DNS.

The use of separate structures for the different parts of the database is motivated by several factors:

- The catalog structure can be an almost static structure that need change only when the system administrator changes the zones supported by the server. This structure can also be used to store parameters used to control refreshing activities.

- The individual data structures for zones allow a zone to be replaced simply by changing a pointer in the catalog. Zone refresh operations can build a new structure and, when complete, splice it into the database via a simple pointer replacement. It is very important that when a zone is refreshed, queries should not use old and new data simultaneously.

- With the proper search procedures, authoritative data in zones will always "hide", and hence take precedence over, cached data.

- Errors in zone definitions that cause overlapping zones, etc., may cause erroneous responses to queries, but problem determination is simplified, and the contents of one "bad" zone can't corrupt another.

- Since the cache is most frequently updated, it is most vulnerable to corruption during system restarts. It can also become full of expired RR data. In either case, it can easily be discarded without disturbing zone data.

A major aspect of database design is selecting a structure which allows the name server to deal with crashes of the name server's host. State information which a name server should save across system crashes

includes the catalog structure (including the state of refreshing for each zone) and the zone data itself.

6.1.3. Time

Both the TTL data for RRs and the timing data for refreshing activities depends on 32 bit timers in units of seconds. Inside the database, refresh timers and TTLs for cached data conceptually "count down", while data in the zone stays with constant TTLs.

A recommended implementation strategy is to store time in two ways: as a relative increment and as an absolute time. One way to do this is to use positive 32 bit numbers for one type and negative numbers for the other. The RRs in zones use relative times; the refresh timers and cache data use absolute times. Absolute numbers are taken with respect to some known origin and converted to relative values when placed in the response to a query. When an absolute TTL is negative after conversion
to relative, then the data is expired and should be ignored.

6.2. Standard query processing

The major algorithm for standard query processing is presented in [RFC-1034].

When processing queries with QCLASS=*, or some other QCLASS which matches multiple classes, the response should never be authoritative unless the server can guarantee that the response covers all classes.

When composing a response, RRs which are to be inserted in the

additional section, but duplicate RRs in the answer or authority sections, may be omitted from the additional section.

When a response is so long that truncation is required, the truncation should start at the end of the response and work forward in the datagram. Thus if there is any data for the authority section, the answer section is guaranteed to be unique.

The MINIMUM value in the SOA should be used to set a floor on the TTL of data distributed from a zone. This floor function should be done when the data is copied into a response.
This will allow future dynamic
update protocols to change the SOA MINIMUM field without ambiguous semantics.

6.3. Zone refresh and reload processing

In spite of a server's best efforts, it may be unable to load zone data from a master file due to syntax errors, etc., or be unable to refresh a zone within the its expiration parameter. In this case, the name server

should answer queries as if it were not supposed to possess the zone.

If a master is sending a zone out via AXFR, and a new version is created during the transfer, the master should continue to send the old version if possible. In any case, it should never send part of one version and part of another. If completion is not possible, the master should reset the connection on which the zone transfer is taking place.

6.4. Inverse queries (Optional)

Inverse queries are an
optional part of the DNS. Name servers are not
required to support any form of inverse queries. If a name server receives an inverse query that it does not support, it returns an error response with the "Not Implemented" error set in the header. While inverse query support is optional, all name servers must be at least able to return the error response.

6.4.1. The contents of inverse queries and responses Inverse queries reverse the mappings performed by standard query operations;

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while a standard query maps a domain name to a resource, an inverse query maps a resource to a domain name. For example, a standard query might bind a domain name to a host address; the corresponding inverse query binds the host address to a domain name.

Inverse queries take the form of a single RR in the answer section of the message, with an empty question section. The owner name of the query RR and its TTL are not significant. The response carries questions in the question section which identify all names possessing the query RR WHICH THE NAME SERVER KNOWS. Since no name server knows about all of the domain name space, the response can never be assumed to be complete. Thus inverse queries are primarily useful for database management and debugging activities. Inverse queries are NOT an acceptable method of mapping host addresses to host names; use the IN-ADDR.ARPA domain instead.

Where possible, name servers should provide case-insensitive comparisons for inverse queries. Thus an inverse query asking for an MX RR of "Venera.isi.edu" should get the same response as a query for "VENERA.ISI.EDU"; an inverse query for HINFO RR "IBM-PC UNIX" should produce the same result as an inverse query for "IBM-pc unix". However, this cannot be guaranteed because name servers may possess RRs that contain character strings but the name server does not know that the data is character.

When a name server processes an inverse query, it either returns:

1. zero, one, or multiple domain names for the specified resource as QNAMEs in the question section

2. an error code indicating that the name server doesn't support inverse mapping of the specified resource type.

When the response to an inverse query contains one or more QNAMEs, the owner name and TTL of the RR in the answer section which defines the inverse query is modified to exactly match an RR found at the first QNAME.

RRs returned in the inverse queries cannot be cached using the same

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mechanism as is used for the replies to standard queries. One reason for this is that a name might have multiple RRs of the same type, and only one would appear. For example, an inverse query for a single address of a multiply homed host might create the impression that only one address existed.

6.4.2. Inverse query and response example The overall structure of an inverse query for retrieving the domain name that corresponds to Internet address 10.1.0.52 is shown below:

```
                +---------------------------------------+
        Header  |        OPCODE=IQUERY, ID=997          |
                +---------------------------------------+
      Question  |              <empty>                  |
                +---------------------------------------+
        Answer  |      <anyname> A IN 10.1.0.52         |
                +---------------------------------------+
     Authority  |              <empty>                  |
                +---------------------------------------+
    Additional  |              <empty>                  |
                +---------------------------------------+
```

This query asks for a question whose answer is the Internet style address 10.1.0.52. Since the owner name is not known, any domain name can be used as a placeholder (and is ignored). A single octet of zero, signifying the root, is usually used because it minimizes the length of the message. The TTL of the RR is not significant. The response to this query might be:

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```
                +----------------------------------------+
 Header         |        OPCODE=RESPONSE, ID=997         |
                +----------------------------------------+
Question        |QTYPE=A, QCLASS=IN, QNAME=VENERA.ISI.EDU |
                +----------------------------------------+
 Answer         |  VENERA.ISI.EDU  A IN 10.1.0.52        |
                +----------------------------------------+
Authority       |               <empty>                  |
                +----------------------------------------+
Additional      |               <empty>                  |
                +----------------------------------------+
```

Note that the QTYPE in a response to an inverse query is the same as the TYPE field in the answer section of the inverse query. Responses to inverse queries may contain multiple questions when the inverse is not unique. If the question section in the response is not empty, then the RR in the answer section is modified to correspond to be an exact copy of an RR at the first QNAME.

6.4.3. Inverse query processing

Name servers that support inverse queries can support these operations through exhaustive searches of their databases, but this becomes impractical as the size of the database increases. An alternative approach is to invert the database according to the search key.

For name servers that support multiple zones and a large amount of data, the recommended approach is separate inversions for each zone. When a particular zone is changed during a refresh, only its inversions need to be redone.

Support for transfer of this type of inversion may be included in future versions of the domain system, but is not supported in this version.

6.5. Completion queries and responses

The optional completion services described in RFC-882 and RFC-883 have been deleted. Redesigned services may become available in the future.

7. RESOLVER IMPLEMENTATION

The top levels of the recommended resolver algorithm are discussed in [RFC-1034]. This section discusses implementation details assuming the database structure suggested in the name server implementation section of this memo.

7.1. Transforming a user request into a query

The first step a resolver takes is to transform the client's request, stated in a format suitable to the local OS, into a search specification for RRs at a specific name which match a specific QTYPE and QCLASS. Where possible, the QTYPE and QCLASS should correspond to a single type and a single class, because this makes the use of cached data much simpler. The reason for this is that the presence of data of one type in a cache doesn't confirm the existence or non-existence of data of other types, hence the only way to be sure is to consult an authoritative source. If QCLASS=* is used, then authoritative answers won't be available.

Since a resolver must be able to multiplex multiple requests if it is to perform its function efficiently, each pending request is usually represented in some block of state information. This state block will typically contain:

- A timestamp indicating the time the request began.
  The timestamp is used to decide whether RRs in the database can be used or are out of date. This timestamp uses the absolute time format previously discussed for RR storage in zones and caches. Note that when an RRs TTL indicates a relative time, the RR must be timely, since it is part of a zone. When the RR has an absolute time, it is part of a cache, and the TTL of the RR is compared against the timestamp for the start of the request.

  Note that using the timestamp is superior to using a current

time, since it allows RRs with TTLs of zero to be entered in the cache in the usual manner, but still used by the current request, even after intervals of many seconds due to system load, query retransmission timeouts, etc.

- Some sort of parameters to limit the amount of work which will be performed for this request.

  The amount of work which a resolver will do in response to a client request must be limited to guard against errors in the database, such as circular CNAME references, and operational problems, such as network partition which prevents the

resolver from accessing the name servers it needs. While local limits on the number of times a resolver will retransmit a particular query to a particular name server address are essential, the resolver should have a global per-request counter to limit work on a single request. The counter should be set to some initial value and decremented whenever the resolver performs any action (retransmission timeout, retransmission, etc.) If the counter passes zero, the request is terminated with a temporary error.

  Note that if the resolver structure allows one request to start others in parallel, such as when the need to access a name server for one request causes a parallel resolve for the name server's addresses, the spawned request should be started with a lower counter. This prevents circular references in the database from starting a chain reaction of resolver activity.

- The SLIST data structure discussed in [RFC-1034].

  This structure keeps track of the state of a request if it must wait for answers from foreign name servers.

7.2. Sending the queries

As described in [RFC-1034], the basic task of the resolver is to

formulate a query which will answer the client's request and direct that query to name servers which can provide the information. The resolver will usually only have very strong hints about which servers to ask, in the form of NS RRs, and may have to revise the query, in response to CNAMEs, or revise the set of name servers the resolver is asking, in response to delegation responses which point the resolver to name servers closer to the desired information. In addition to the information requested by the client, the resolver may have to call upon its own services to determine the address of name servers it wishes to contact.

In any case, the model used in this memo assumes that the resolver is multiplexing attention between multiple requests, some from the client, and some internally generated. Each request is represented by some state information, and the desired behavior is that the resolver transmit queries to name servers in a way that maximizes the probability that the request is answered, minimizes the time that the request takes, and avoids excessive transmissions. The key algorithm uses the state information of the request to select the next name server address to query, and also computes a timeout which will cause the next action should a response not arrive. The next action will usually be a transmission to some other server, but may be a temporary error to the

client.

The resolver always starts with a list of server names to query (SLIST). This list will be all NS RRs which correspond to the nearest ancestor zone that the resolver knows about. To avoid startup problems, the resolver should have a set of default servers which it will ask should it have no current NS RRs which are appropriate. The resolver then adds to SLIST all of the known addresses for the name servers, and may start parallel requests to acquire the addresses of the servers when the resolver has the name, but no addresses, for the name servers.

To complete initialization of SLIST, the resolver attaches whatever history information it has to the each address in SLIST. This will usually consist of some sort of weighted averages for the response time of the address, and the batting average of the address (i.e., how often the address responded at all to the request). Note that this

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information should be kept on a per address basis, rather than on a per name server basis, because the response time and batting average of a particular server may vary considerably from address to address. Note also that this information is actually specific to a resolver address / server address pair, so a resolver with multiple addresses may wish to keep separate histories for each of its addresses. Part of this step must deal with addresses which have no such history; in this case an expected round trip time of 5-10 seconds should be the worst case, with lower estimates for the same local network, etc.

Note that whenever a delegation is followed, the resolver algorithm reinitializes SLIST.

The information establishes a partial ranking of the available name server addresses. Each time an address is chosen and the state should be altered to prevent its selection again until all other addresses have been tried. The timeout for each transmission should be 50-100% greater than the average predicted value to allow for variance in response.

Some fine points:

- The resolver may encounter a situation where no addresses are available for any of the name servers named in SLIST, and where the servers in the list are precisely those which would normally be used to look up their own addresses. This situation typically occurs when the glue address RRs have a smaller TTL than the NS RRs marking delegation, or when the resolver caches the result of a NS search. The resolver should detect this condition and restart the search at the next ancestor zone, or alternatively at the root.

- If a resolver gets a server error or other bizarre response from a name server, it should remove it from SLIST, and may wish to schedule an immediate transmission to the next candidate server address.

7.3. Processing responses

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The first step in processing arriving response datagrams is to parse the response. This procedure should include:

- Check the header for reasonableness. Discard datagrams which are queries when responses are expected.

- Parse the sections of the message, and insure that all RRs are correctly formatted.

- As an optional step, check the TTLs of arriving data looking for RRs with excessively long TTLs. If a RR has an excessively long TTL, say greater than 1 week, either discard the whole response, or limit all TTLs in the response to 1 week.

The next step is to match the response to a current resolver request. The recommended strategy is to do a preliminary matching using the ID field in the domain header, and then to verify that the question section corresponds to the information currently desired. This requires that the transmission algorithm devote several bits of the domain ID field to a request identifier of some sort. This step has several fine points:

- Some name servers send their responses from different addresses than the one used to receive the query. That is, a resolver cannot rely that a response will come from the same address which it sent the corresponding query to. This name server bug is typically encountered in UNIX systems.

- If the resolver retransmits a particular request to a name server it should be able to use a response from any of the transmissions. However, if it is using the response to sample the round trip time to access the name server, it must be able to determine which transmission matches the response (and keep transmission times for each outgoing message), or only calculate round trip times based on initial transmissions.

- A name server will occasionally not have a current copy of a zone which it should have according to some NS RRs. The resolver should simply remove the name server from the current SLIST, and continue.

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7.4. Using the cache

In general, we expect a resolver to cache all data which it receives in responses since it may be useful in answering future client requests. However, there are several types of data which should not be cached:

- When several RRs of the same type are available for a particular owner name, the resolver should either cache them all or none at all. When a response is truncated, and a resolver doesn't know whether it has a complete set, it should not cache a possibly partial set of RRs.

- Cached data should never be used in preference to authoritative data, so if caching would cause this to happen the data should not be cached.

- The results of an inverse query should not be cached.

- The results of standard queries where the QNAME contains "*" labels if the data might be used to construct wildcards. The reason is that the cache does not necessarily contain existing

  RRs or zone boundary information which is necessary to restrict the application of the wildcard RRs.

- RR data in responses of dubious reliability. When a resolver receives unsolicited responses or RR data other than that requested, it should discard it without caching it. The basic implication is that all sanity checks on a packet should be performed before any of it is cached.

In a similar vein, when a resolver has a set of RRs for some name in a response, and wants to cache the RRs, it should check its cache for already existing RRs. Depending on the circumstances, either the data in the response or the cache is preferred, but the two should never be combined. If the data in the response is from authoritative data in the answer section, it is always preferred.

8. MAIL SUPPORT

The domain system defines a standard for mapping mailboxes into domain names, and two methods for using the mailbox information to derive mail routing information. The first

method is called mail exchange binding
and the other method is mailbox binding. The mailbox encoding standard and mail exchange binding are part of the DNS official protocol, and are the recommended method for mail routing in the Internet. Mailbox binding is an experimental feature which is still under development and subject to change.

The mailbox encoding standard assumes a mailbox name of the form "<local-part>@<mail-domain>". While the syntax allowed in each of these sections varies substantially between the various mail internets, the preferred syntax for the ARPA Internet is given in [RFC-822].

The DNS encodes the <local-part> as a single label, and encodes the <mail-domain> as a domain name. The single label from the <local-part> is prefaced to the domain name from <mail-domain> to form the domain name corresponding to
the mailbox. Thus the mailbox HOSTMASTER@SRI-NIC.ARPA is mapped into the domain name HOSTMASTER.SRI-NIC.ARPA. If the <local-part> contains dots or other special characters, its representation in a master file will require the use of backslash quoting to ensure that the domain name is properly encoded. For example, the mailbox Action.domains@ISI.EDU would be represented as Action\.domains.ISI.EDU.

8.1. Mail exchange binding

Mail exchange binding uses the <mail-domain> part of a mailbox specification to determine where mail should be sent. The <local-part> is not even consulted. [RFC-974] specifies this method in detail, and should be consulted before attempting to use mail exchange support.

One of the advantages of this method is that it decouples mail destination naming from the hosts used to support mail service, at the cost of another layer of indirection in the lookup function. However, the addition layer should eliminate the need for complicated "%", "!", etc encodings in
<local-part>.

The essence of the method is that the <mail-domain> is used as a domain name to locate type MX RRs which list hosts willing to accept mail for

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<mail-domain>, together with preference values which rank the hosts according to an order specified by the administrators for <mail-domain>.

In this memo, the <mail-domain> ISI.EDU is used in examples, together with the hosts VENERA.ISI.EDU and VAXA.ISI.EDU as mail exchanges for ISI.EDU. If a mailer had a message for Mockapetris@ISI.EDU, it would route it by looking up MX RRs for ISI.EDU. The MX RRs at ISI.EDU name VENERA.ISI.EDU and VAXA.ISI.EDU, and type A queries can find the host addresses.

8.2. Mailbox binding (Experimental)

In mailbox binding, the mailer uses the entire mail destination specification to construct a domain name. The encoded domain name for the mailbox is used as the QNAME field in a QTYPE=MAILB query.

Several outcomes are possible for this query:

1. The query can return a name error indicating that the mailbox does not exist as a domain name.

   In the long term, this would indicate that the specified mailbox doesn't exist. However, until the use of mailbox binding is universal, this error condition should be interpreted to mean that the organization identified by the global part does not support mailbox binding. The appropriate procedure is to revert to exchange binding at this point.

2. The query can return a Mail Rename (MR) RR.

   The MR RR carries new mailbox specification in its RDATA field. The mailer should replace the old mailbox with the new one and retry the operation.

3. The query can return a MB RR.

   The MB RR carries a domain name for a host in its RDATA field. The mailer should deliver the message to that host via whatever

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protocol is applicable, e.g., b,SMTP.

4. The query can return one or more Mail Group (MG) RRs.

   This condition means that the mailbox was actually a mailing list or mail group, rather than a single mailbox. Each MG RR has a RDATA field that identifies a mailbox that is a member of the group. The mailer should deliver a copy of the message to each member.

5. The query can return a MB RR as well as one or more MG RRs.

   This condition means the the mailbox was actually a mailing list. The mailer can either deliver the message to the host specified by the MB RR, which will in turn do the delivery to all members, or the mailer can use the MG RRs to do the expansion itself.

In any of these cases, the response may include a Mail Information (MINFO) RR. This RR is usually associated with a mail group, but is legal with a MB. The MINFO RR identifies two mailboxes. One of these identifies a responsible person for the original mailbox name. This mailbox should be used for requests to be added to a mail group, etc. The second mailbox name in the MINFO RR identifies a mailbox that should receive error messages for mail failures. This is particularly appropriate for mailing lists when errors in member names should be reported to a person other than the one who sends a message to the list.

New fields may be added to this RR in the future.

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No license file was found, but licenses were detected in source scan.

Network Working Group P. Resnick, Editor
Request for Comments: 2822 QUALCOMM Incorporated
Obsoletes: 822 April 2001
Category: Standards Track

Internet Message Format

Status of this Memo

This document specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state and status of this protocol. Distribution of this memo is unlimited.

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Abstract

This standard specifies a syntax for text messages that are sent between computer users, within the framework of "electronic mail" messages. This standard supersedes the one specified in Request For Comments (RFC) 822, "Standard for the Format of ARPA Internet Text Messages", updating it to reflect current practice and incorporating incremental changes that were specified in other RFCs.

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1. Introduction

1.1. Scope

This standard specifies a syntax for text messages that are sent between computer users, within the framework of "electronic mail" messages. This standard supersedes the one specified in Request For Comments (RFC) 822, "Standard for the Format of ARPA Internet Text Messages" [RFC822], updating it to reflect current practice and incorporating incremental changes that were specified in other RFCs [STD3].

This standard specifies a syntax only for text messages. In particular,
it makes no provision for the transmission of images, audio, or other sorts of structured data in electronic mail messages. There are several extensions published, such as the MIME document series [RFC2045, RFC2046, RFC2049], which describe mechanisms for the transmission of such data through electronic mail, either by

extending the syntax provided here or by structuring such messages to conform to this syntax. Those mechanisms are outside of the scope of this standard.

In the context of electronic mail, messages are viewed as having an envelope and contents. The envelope contains whatever information is needed to accomplish transmission and delivery. (See [RFC2821] for a discussion of the envelope.) The contents comprise the object to be delivered to the recipient. This standard applies only to the format and some of the semantics of message contents. It contains no specification of the information in the envelope.

However, some message systems may use information from the contents to create the envelope. It is intended that this standard facilitate the acquisition of such information by programs.

This specification is intended as a definition of what message content format is to be passed between systems. Though some message systems locally store messages in this format (which eliminates the need for translation between formats) and others use formats that differ from the one specified in this standard, local storage is outside of the scope of this standard.

Note: This standard is not intended to dictate the internal formats used by sites, the specific message system features that they are expected to support, or any of the characteristics of user interface programs that create or read messages. In addition, this standard does not specify an encoding of the characters for either transport or storage; that is, it does not specify the number of bits used or how those bits are specifically transferred over the wire or stored on disk.

1.2. Notational conventions

1.2.1. Requirements notation

This document occasionally uses terms that appear in capital letters. When the terms "MUST", "SHOULD", "RECOMMENDED", "MUST NOT", "SHOULD NOT", and "MAY" appear capitalized, they are being used to indicate

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particular requirements of this specification. A discussion of the meanings of these terms appears in [RFC2119].

1.2.2. Syntactic notation

This standard uses the Augmented Backus-Naur Form (ABNF) notation specified in [RFC2234] for the formal definitions of the syntax of messages. Characters will be specified either by a decimal value (e.g., the value %d65 for uppercase A and %d97 for lowercase A) or by a case-insensitive literal value enclosed in quotation marks (e.g., "A" for either uppercase or lowercase A). See [RFC2234] for the full description of the notation.

1.3. Structure of this document

This document is divided into several sections.

This section, section 1, is a short introduction to the document.

Section 2 lays out the general description of a message and its constituent parts. This is an overview to help the reader understand some of the general principles used in the later portions of this document. Any examples in this section MUST NOT be taken as specification of the formal syntax of any part of a message.

Section 3 specifies formal ABNF rules for the structure of each part of a message (the syntax) and describes the relationship between those parts and their meaning in the context of a message (the semantics). That is, it describes the actual rules for the structure of each part of a message (the syntax) as well as a description of the parts and instructions on how they ought to be interpreted (the semantics). This includes analysis of the syntax and semantics of

subparts of messages that have specific structure. The syntax included in section 3 represents messages as they MUST be created. There are also notes in section 3 to indicate if any of the options specified in the syntax SHOULD be used over any of the others.

Both sections 2 and 3 describe messages that are legal to generate for purposes of this standard.

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Section 4 of this document specifies an "obsolete" syntax. There are references in section 3 to these obsolete syntactic elements. The rules of the obsolete syntax are elements that have appeared in earlier revisions of this standard or have previously been widely used in Internet messages. As such, these elements MUST be interpreted by parsers of messages in order to be conformant to this standard. However, since items in this syntax have been determined to be non-interoperable or to cause significant problems for recipients of messages, they MUST NOT be generated by creators of conformant messages.

Section 5 details security considerations to take into account when implementing this standard.

Section 6 is a bibliography of references in this document.

Section 7 contains the editor's address.

Section 8 contains acknowledgements.

Appendix A lists examples of different sorts of messages. These examples are not exhaustive of the types of messages that appear on the Internet, but give a broad overview of certain syntactic forms.

Appendix B lists the differences between this standard and earlier standards for Internet messages.

Appendix C has copyright and intellectual property notices.

2. Lexical Analysis of Messages

2.1. General Description

At the most basic level, a message is a series of characters. A message that is conformant with this standard is comprised of characters with values in the range 1 through 127 and interpreted as US-ASCII characters [ASCII]. For brevity, this document sometimes refers to this range of characters as simply "US-ASCII characters".

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Note: This standard specifies that messages are made up of characters in the US-ASCII range of 1 through 127. There are other documents, specifically the MIME document series [RFC2045, RFC2046, RFC2047, RFC2048, RFC2049], that extend this standard to allow for values outside of that range. Discussion of those mechanisms is not within the scope of this standard.

Messages are divided into lines of characters. A line is a series of characters that is delimited with the two characters carriage-return and line-feed;
that is, the carriage return (CR) character (ASCII
value 13) followed immediately by the line feed (LF) character (ASCII value 10). (The carriage-return/line-feed pair is usually written in this document as "CRLF".)

A message consists of header fields (collectively called "the header of the message") followed, optionally, by a body. The header is a sequence of lines of characters with special syntax as defined in this standard. The body is simply a sequence of characters that follows the header and is separated from the header by an empty line (i.e., a line with nothing preceding the CRLF).

2.1.1. Line Length Limits

There are two limits that this standard places on the number of characters in a line. Each line of characters MUST be no more than 998 characters, and SHOULD be no more than 78 characters, excluding the CRLF.

The 998 character limit is due to limitations in many implementations which send, receive, or store Internet
Message Format messages that
simply cannot handle more than 998 characters on a line. Receiving implementations would do well to handle an arbitrarily large number of characters in a line for robustness sake. However, there are so many implementations which (in compliance with the transport requirements of [RFC2821]) do not accept messages containing more than 1000 character including the CR and LF per line, it is important for implementations not to create such messages.

The more conservative 78 character recommendation is to accommodate the many implementations of user interfaces that display these messages which may truncate, or disastrously wrap, the display of more than 78 characters per line, in spite of the fact that such implementations are non-conformant to the intent of this

specification (and that of [RFC2821] if they actually cause information to be lost). Again, even though this limitation is put on messages, it is encumbant upon implementations which display messages

to handle an arbitrarily large number of characters in a line (certainly at least up to the 998 character limit) for the sake of robustness.

2.2. Header Fields

Header fields are lines composed of a field name, followed by a colon (":"), followed by a field body, and terminated by CRLF. A field name MUST be composed of printable US-ASCII characters (i.e., characters that have values between 33 and 126, inclusive), except colon. A field body may be composed of any US-ASCII characters, except for CR and LF. However, a field body may contain CRLF when used in header "folding" and "unfolding" as described in section 2.2.3. All field bodies MUST conform to the syntax described in sections 3 and 4 of this standard.

2.2.1. Unstructured Header Field Bodies

Some field bodies in this standard are defined simply as "unstructured" (which is specified below as any US-ASCII characters, except for CR and LF) with no further restrictions. These are referred to as unstructured field bodies. Semantically, unstructured field bodies are simply to be treated as a single line of characters with no further processing (except for header "folding" and "unfolding" as described in section 2.2.3).

2.2.2. Structured Header Field Bodies

Some field bodies in this standard have specific syntactical structure more restrictive than the unstructured field bodies described above. These are referred to as "structured" field bodies. Structured field bodies are sequences of specific lexical tokens as described in sections 3 and 4 of this standard. Many of these tokens are allowed (according to their syntax) to be introduced or end with

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comments (as described in section 3.2.3) as well as the space (SP, ASCII value 32)
and horizontal tab (HTAB, ASCII value 9) characters (together known as the white space characters, WSP), and those WSP characters are subject to header "folding" and "unfolding" as described in section 2.2.3. Semantic analysis of structured field bodies is given along with their syntax.

2.2.3. Long Header Fields

Each header field is logically a single line of characters comprising the field name, the colon, and the field body. For convenience however, and to deal with the 998/78 character limitations per line, the field body portion of a header field can be split into a multiple line representation; this is called "folding". The general rule is

that wherever this standard allows for folding white space (not simply WSP characters), a CRLF may be inserted before any WSP. For example, the header field:

```
Subject: This is a test
```

can be represented as:

```
Subject: This
 is a test
```

Note: Though structured field bodies are defined in such a way that folding can take place between many of the lexical tokens (and even within some of the lexical tokens), folding SHOULD be limited to placing the CRLF at higher-level syntactic breaks. For instance, if a field body is defined as comma-separated values, it is recommended that folding occur after the comma separating the structured items in preference to other places where the field could be folded, even if it is allowed elsewhere.

The process of moving from this folded multiple-line representation of a header field to its single line representation is called "unfolding". Unfolding is accomplished by simply removing any CRLF that is immediately followed by WSP. Each header field should be treated in its unfolded form for further syntactic and semantic

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evaluation.

2.3. Body

The body of a message is simply lines of US-ASCII characters. The only two limitations on the body are as follows:

- CR and LF MUST only occur together as CRLF; they MUST NOT appear independently in the body.

- Lines of characters in the body MUST be limited to 998 characters, and SHOULD be limited to 78 characters, excluding the CRLF.

Note: As was stated earlier, there are other standards documents, specifically the MIME documents [RFC2045, RFC2046, RFC2048, RFC2049] that extend this standard to allow for different sorts of message bodies. Again, these mechanisms are beyond the scope of this document.

3. Syntax

3.1. Introduction

The syntax as given in this section defines the legal syntax of Internet messages. Messages that are conformant to this standard MUST conform to the syntax in this section. If there are options in this section where one option SHOULD be generated, that is indicated either in the prose or in a comment next to the syntax.

For the defined expressions, a short description of the syntax and use is given, followed by the syntax in ABNF, followed by a semantic analysis. Primitive tokens that are used but otherwise unspecified come from [RFC2234].

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In some of the definitions, there will be nonterminals whose names start with "obs-". These "obs-" elements refer to tokens defined in the obsolete syntax in section 4. In all cases, these productions are to be ignored for the purposes of generating legal Internet messages and MUST NOT be used as part of such a message. However, when interpreting messages, these tokens MUST be honored as part of the legal syntax. In this sense, section 3 defines a grammar for generation of messages, with "obs-" elements that are to be ignored, while
section 4 adds grammar for interpretation of messages.

3.2. Lexical Tokens

The following rules are used to define an underlying lexical analyzer, which feeds tokens to the higher-level parsers. This section defines the tokens used in structured header field bodies.

Note: Readers of this standard need to pay special attention to how these lexical tokens are used in both the lower-level and higher-level syntax later in the document. Particularly, the white space tokens and the comment tokens defined in section 3.2.3 get used in the lower-level tokens defined here, and those lower-level tokens are in turn used as parts of the higher-level tokens defined later. Therefore, the white space and comments may be allowed in the higher-level tokens even though they may not explicitly appear in a particular definition.

3.2.1. Primitive Tokens

The following are primitive tokens referred to elsewhere in this standard, but not otherwise defined in [RFC2234].
Some of them will
not appear anywhere else in the syntax, but they are convenient to refer to in other parts of this document.

Note: The "specials" below are just such an example. Though the specials token does not appear anywhere else in this standard, it is useful for implementers who use tools that lexically analyze messages. Each of the characters in specials can be used to indicate a tokenization point in lexical analysis.

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```
NO-WS-CTL       =       %d1-8 /         ; US-ASCII control characters
                        %d11 /          ;  that do not include the
                        %d12 /          ;  carriage return, line feed,
                        %d14-31 /       ;  and white space characters
                        %d127

text            =       %d1-9 /         ; Characters excluding CR and LF
                         %d11 /
                        %d12 /
                        %d14-127 /
                        obs-text

specials        =       "(" / ")" /     ; Special characters used in
                        "<" / ">" /     ;  other parts of the syntax
                        "[" / "]" /
                        ":" / ";" /
                        "@" / "\" /
                        "," / "." /
                        DQUOTE
```

No special semantics are attached to these tokens. They are simply single characters.

3.2.2. Quoted characters

Some characters are reserved for special interpretation, such as delimiting lexical tokens. To permit use of these characters as uninterpreted data, a quoting mechanism is provided.

```
quoted-pair     =       ("\" text) / obs-qp
```

Where any quoted-pair appears, it is to be interpreted as the text character alone. That is to say, the "\" character that appears as part of a quoted-pair is semantically "invisible".

Note: The "\" character may appear in a message where it is not part of a quoted-pair. A "\" character that does not appear in a quoted-pair is not semantically invisible. The only places in this standard where quoted-pair currently appears are ccontent, qcontent, dcontent, no-fold-quote, and no-fold-literal.

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3.2.3. Folding white space and comments

White space characters, including white space used in folding (described in section 2.2.3), may appear between many elements in header field bodies. Also, strings of characters that are treated as comments may be included in structured field bodies as characters enclosed in parentheses. The following defines the folding white space (FWS) and comment constructs.

Strings of characters enclosed in parentheses are considered comments so long as they
do not appear within a "quoted-string", as defined in section 3.2.5. Comments may nest.

There are several places in this standard where comments and FWS may be freely inserted. To accommodate that syntax, an additional token for "CFWS" is defined for places where comments and/or FWS can occur. However, where CFWS occurs in this standard, it MUST NOT be inserted in such a way that any line of a folded header field is made up entirely of WSP characters and nothing else.

```
FWS          =      ([*WSP CRLF] 1*WSP) /   ; Folding white space
                  obs-FWS

ctext        =      NO-WS-CTL /     ; Non white space controls

                  %d33-39 /       ; The rest of the US-ASCII
                  %d42-91 /       ;  characters not including "(",
                  %d93-126        ;  ")", or "\"

ccontent     =      ctext / quoted-pair / comment

comment      =      "(" *([FWS] ccontent) [FWS] ")"

CFWS         =
   *([FWS] comment) (([FWS] comment) / FWS)
```

Throughout this standard, where FWS (the folding white space token) appears, it indicates a place where header folding, as discussed in section 2.2.3, may take place. Wherever header folding appears in a message (that is, a header field body containing a CRLF followed by any WSP), header unfolding (removal of the CRLF) is performed before any further lexical analysis is performed on that header field according to this standard. That is to say, any CRLF that appears in FWS is semantically "invisible."

A comment is normally used in a structured field body to provide some human readable informational text. Since a comment is allowed to contain FWS, folding is permitted within the comment. Also note that since quoted-pair is allowed in a comment, the parentheses and

backslash characters may appear in a comment so long as they appear as a quoted-pair. Semantically, the enclosing parentheses are not part of the comment; the comment is what is contained between the two parentheses. As stated earlier, the "\" in any quoted-pair and the CRLF in any FWS that appears within the comment are semantically "invisible" and therefore not part of the comment either.

Runs of FWS, comment or CFWS that occur between lexical tokens in a structured field header are semantically interpreted as a single space character.

3.2.4. Atom

Several productions in structured header field bodies are simply strings of certain basic characters. Such productions are called atoms.

Some of the structured header field bodies also allow the period character (".", ASCII value 46) within runs of atext. An additional "dot-atom" token is defined for those purposes.

```
atext          =      ALPHA / DIGIT / ; Any character except
 controls,
                    "!" / "#" /     ;  SP, and specials.
                    "$" / "%" /     ;  Used for atoms
                    "&" / "'" /
                    "*" / "+" /
                    "-" / "/" /
                    "=" / "?" /
                    "^" / "_" /
                    "`" / "{" /
                    "|" / "}" /
                    "~"
```

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```
atom          =      [CFWS] 1*atext [CFWS]

dot-atom      =      [CFWS] dot-atom-text [CFWS]

dot-atom-text  =     1*atext *("." 1*atext)
```

Both atom and dot-atom are interpreted as a single unit, comprised of the string of characters that make it up. Semantically, the optional comments and FWS surrounding the rest of the characters are not part of the atom; the atom is only the run of atext characters in an atom, or the atext and "." characters in a dot-atom.

3.2.5. Quoted strings

Strings of characters that include characters other than those allowed in atoms may be represented in a quoted string format, where the characters are surrounded by quote (DQUOTE, ASCII value 34) characters.

```
qtext         =      NO-WS-CTL /     ; Non white space controls

                     %d33 /          ; The rest of the US-ASCII
                     %d35-91 /       ;  characters not including "\"
                     %d93-126        ;  or the quote character

qcontent      =      qtext / quoted-pair

quoted-string  =     [CFWS]
                     DQUOTE *([FWS] qcontent) [FWS] DQUOTE
                     [CFWS]
```

A quoted-string is treated as a unit. That is, quoted-string is identical to atom, semantically. Since a quoted-string is allowed to contain FWS, folding is permitted. Also note that since quoted-pair is allowed in a quoted-string, the quote

and backslash characters may
appear in a quoted-string so long as they appear as a quoted-pair.

Semantically, neither the optional CFWS outside of the quote characters nor the quote characters themselves are part of the quoted-string; the quoted-string is what is contained between the two quote characters. As stated earlier, the "\" in any quoted-pair and the CRLF in any FWS/CFWS that appears within the quoted-string are semantically "invisible" and therefore not part of the quoted-string either.

3.2.6. Miscellaneous tokens

Three additional tokens are defined, word and phrase for combinations of atoms and/or quoted-strings, and unstructured for use in unstructured header fields and in some places within structured header fields.

```
word          =      atom / quoted-string

phrase        =      1*word / obs-phrase
```



```
utext         =      NO-WS-CTL /     ; Non white space controls
                     %d33-126 /      ; The rest of US-ASCII
                     obs-utext

unstructured  =      *([FWS] utext) [FWS]
```

3.3. Date and Time Specification

Date and time occur in several header fields. This section specifies the syntax for a full date and time specification. Though folding white space is permitted throughout the date-time specification, it is RECOMMENDED that a single space be used in each place that FWS appears (whether it is required or optional); some older

implementations may not interpret other occurrences of folding white space correctly.

```
date-time       =       [ day-of-week "," ] date FWS time [CFWS]

day-of-week     =       ([FWS] day-name) / obs-day-of-week

day-name        =       "Mon" / "Tue" / "Wed" / "Thu" /
                        "Fri" / "Sat" / "Sun"

date            =       day month year

year            =
                4*DIGIT / obs-year

month           =       (FWS month-name FWS) / obs-month

month-name      =       "Jan" / "Feb" / "Mar" / "Apr" /
                        "May" / "Jun" / "Jul" / "Aug" /
                        "Sep" / "Oct" / "Nov" / "Dec"

day             =       ([FWS] 1*2DIGIT) / obs-day

time            =       time-of-day FWS zone

time-of-day     =       hour ":" minute [ ":" second ]

hour            =       2DIGIT / obs-hour

minute          =       2DIGIT / obs-minute

second          =       2DIGIT / obs-second

zone            =       (( "+" / "-" ) 4DIGIT) / obs-zone
```


The day is the numeric day of the month. The year is any numeric year 1900 or later.

The time-of-day specifies the number of hours, minutes, and

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optionally seconds since midnight of the date indicated.

The date and time-of-day SHOULD express local time.

The zone specifies the offset from Coordinated Universal Time (UTC, formerly referred to as "Greenwich Mean Time") that the date and time-of-day represent. The "+" or "-" indicates whether the time-of-day is ahead of (i.e., east of) or behind (i.e., west of) Universal Time. The first two digits indicate the number of hours difference from Universal Time, and the last two digits indicate the number of minutes difference from Universal Time. (Hence, +hhmm means +(hh * 60 + mm) minutes, and -hhmm means -(hh * 60 + mm) minutes). The form "+0000" SHOULD be used to indicate a time zone at Universal Time. Though "-0000" also indicates Universal Time, it is used to indicate that the time was generated on a system that may be in a local time zone other than Universal Time and therefore indicates that the date-time contains no information about the local time zone.

A date-time specification MUST be semantically valid. That is, the day-of-the-week (if included) MUST be the day implied by the date, the numeric day-of-month MUST be between 1 and the number of days allowed for the specified month (in the specified year), the time-of-day MUST be in the range 00:00:00 through 23:59:60 (the number of seconds allowing for a leap second; see [STD12]), and the zone MUST be within the range -9959 through +9959.

3.4. Address Specification

Addresses occur in several message header fields to indicate senders and recipients of messages. An address may either be an individual mailbox, or a group of mailboxes.

```
address        =       mailbox / group

mailbox        =       name-addr / addr-spec

name-addr      =       [display-name] angle-addr

angle-addr     =       [CFWS] "<" addr-spec ">" [CFWS] / obs-angle-addr

group          =       display-name ":" [mailbox-list / CFWS] ";"
                       [CFWS]
```

```
display-name    =       phrase

mailbox-list    =       (mailbox *("," mailbox)) / obs-mbox-list

address-list    =       (address *("," address)) / obs-addr-list
```

A mailbox receives mail. It is a conceptual entity which does not necessarily pertain to file storage. For example, some sites may choose to print mail on a printer and deliver the output to the addressee's desk. Normally, a mailbox is comprised of two parts: (1) an optional display name that indicates the name of the recipient (which could be a person or a system) that could be displayed to the user of a mail application, and (2) an addr-spec address enclosed in angle brackets ("<" and ">"). There is also an alternate simple form of a mailbox where the addr-spec address appears alone, without the recipient's name or the angle brackets. The Internet addr-spec address is described in section 3.4.1.

Note:
Some legacy implementations used the simple form where the addr-spec appears without the angle brackets, but included the name of the recipient in parentheses as a comment following the addr-spec. Since the meaning of the information in a comment is unspecified, implementations SHOULD use the full name-addr form of the mailbox, instead of the legacy form, to specify the display name associated with a mailbox. Also, because some legacy implementations interpret the comment, comments generally SHOULD NOT be used in address fields to avoid confusing such implementations.

When it is desirable to treat several mailboxes as a single unit (i.e., in a distribution list), the group construct can be used. The group construct allows the sender to indicate a named group of recipients. This is done by giving a display name for the group, followed by a colon, followed by a comma separated list of any number of mailboxes (including zero and one), and ending with a semicolon.
Because the list of mailboxes can be empty, using the group construct is also a simple way to communicate to recipients that the message was sent to one or more named sets of recipients, without actually providing the individual mailbox address for each of those recipients.

3.4.1. Addr-spec specification

An addr-spec is a specific Internet identifier that contains a locally interpreted string followed by the at-sign character ("@", ASCII value 64) followed by an Internet domain. The locally interpreted string is either a quoted-string or a dot-atom. If the string can be represented as a dot-atom (that is, it contains no characters other than atext characters or "." surrounded by atext

characters), then the dot-atom form SHOULD be used and the quoted-string form SHOULD NOT be used. Comments and folding white space SHOULD NOT be used around the "@" in the addr-spec.

```
addr-spec       =       local-part "@" domain

local-part      =       dot-atom / quoted-string / obs-local-part

domain          =       dot-atom / domain-literal / obs-domain

domain-literal  =       [CFWS] "[" *([FWS] dcontent) [FWS] "]" [CFWS]

dcontent        =       dtext / quoted-pair

dtext           =       NO-WS-CTL /     ; Non white space controls

                        %d33-90 /       ; The rest of the US-ASCII
                        %d94-126        ;  characters not including "[",
                                        ;  "]", or "\"
```

The domain portion identifies the point to which the mail is delivered. In the dot-atom form, this is interpreted as an Internet domain name (either a host name or a mail exchanger name) as described in [STD3, STD13, STD14]. In the domain-literal form, the domain is interpreted as the literal Internet address of the particular host. In both cases, how addressing is used and how messages are transported to a particular host is covered in the mail transport document [RFC2821]. These mechanisms are outside of the scope of this document.

The local-part portion is a domain dependent string. In addresses, it is simply interpreted on the particular host as a name of a particular mailbox.

3.5 Overall message syntax

A message consists of header fields, optionally followed by a message body. Lines in a message MUST be a maximum of 998 characters excluding the CRLF, but it is RECOMMENDED that lines be limited to 78 characters excluding the CRLF. (See section 2.1.1 for explanation.) In a message body, though all of the characters listed in the text rule MAY be used, the use of US-ASCII control characters (values 1 through 8, 11, 12, and 14 through 31) is discouraged since their interpretation by receivers for display is not guaranteed.


```
message      =     (fields / obs-fields)
                   [CRLF body]

body         =     *(*998text CRLF) *998text
```

The header fields carry most of the semantic information and are defined in section 3.6. The body is simply a series of lines of text which are uninterpreted for the purposes of this standard.

3.6. Field definitions

The header fields of a message are defined here. All header fields have the same general syntactic structure: A field name, followed by a colon, followed by the field body. The specific syntax for each header field is defined in the subsequent sections.

Note: In the ABNF syntax for each field in subsequent sections, each field name is followed by the required colon. However, for brevity sometimes the colon is not referred to in the textual description of the syntax. It is, nonetheless,

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required.

It is important to note that the header fields are not guaranteed to be in a particular order. They may appear in any order, and they have been known to be reordered occasionally when transported over the Internet. However, for the purposes of this standard, header fields SHOULD NOT be reordered when a message is transported or transformed. More importantly, the trace header fields and resent header fields MUST NOT be reordered, and SHOULD be kept in blocks prepended to the message. See sections 3.6.6 and 3.6.7 for more information.

The only required header fields are the origination date field and the originator address field(s). All other header fields are syntactically optional. More information is contained in the table following this definition.

```
fields        =      *(trace
                    *(resent-date /
                      resent-from /
                      resent-sender /

          resent-to /
                      resent-cc /
                      resent-bcc /
                      resent-msg-id))
                   *(orig-date /
                   from /
                   sender /
                   reply-to /
```



```
                   to /
                   cc /
                   bcc /
                   message-id /
                   in-reply-to /
                   references /
                   subject /
                   comments /
                   keywords /
                   optional-field)
```

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The following table indicates limits on the number of times each field may occur in a message header as well as any special limitations on the use of those fields. An asterisk next to a value in the minimum or maximum column indicates that a special restriction appears in the Notes column.

Field	Min number	Max number	Notes
trace	0	unlimited	Block prepended - see 3.6.7
resent-date	0*	unlimited*	One per block, required if other resent fields present - see 3.6.6
resent-from	0	unlimited*	One per block - see 3.6.6
resent-sender	0*	unlimited*	One per block, MUST occur with multi-address resent-from - see 3.6.6
resent-to	0	unlimited*	One per block - see 3.6.6
resent-cc	0	unlimited*	One per block - see 3.6.6
resent-bcc	0	unlimited*	One per block - see 3.6.6
resent-msg-id	0	unlimited*	One per block - see 3.6.6
orig-date	1	1	
from	1	1	See sender and 3.6.2

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sender 0* 1 MUST occur with multi-
address from - see 3.6.2

reply-to 0 1

to 0 1

cc 0 1

bcc 0 1

message-id 0* 1 SHOULD be present - see
3.6.4

in-reply-to 0*
1 SHOULD occur in some
replies - see 3.6.4

references 0* 1 SHOULD occur in some
replies - see 3.6.4

subject 0 1

comments 0 unlimited

keywords 0 unlimited

optional-field 0 unlimited

The exact interpretation of each field is described in subsequent sections.

3.6.1. The origination date field

The origination date field consists of the field name "Date" followed by a date-time specification.

orig-date = "Date:" date-time CRLF

The origination date specifies the date and time at which the creator of the message indicated that the message was complete and ready to enter the mail delivery system. For instance, this might be the time that a user pushes the "send" or "submit" button in an application program. In any case,
it is specifically not intended to convey the
time that the message is actually transported, but rather the time at which the human or other creator of the message has put the message into its final form, ready for transport. (For example, a portable

computer user who is not connected to a network might queue a message

for delivery. The origination date is intended to contain the date and time that the user queued the message, not the time when the user connected to the network to send the message.)

3.6.2. Originator fields

The originator fields of a message consist of the from field, the sender field (when applicable), and optionally the reply-to field. The from field consists of the field name "From" and a comma-separated list of one or more mailbox specifications. If the from field contains more than one mailbox specification in the mailbox-list, then the sender field, containing the field name "Sender" and a single mailbox specification, MUST appear in the message. In either case, an optional reply-to field MAY also be included, which contains the field name "Reply-To" and a comma-separated list of one or more addresses.

```
from        =    "From:" mailbox-list CRLF

sender      =    "Sender:" mailbox CRLF

reply-to    =    "Reply-To:" address-list CRLF
```

The originator fields indicate the mailbox(es) of the source of the message. The "From:" field specifies the author(s) of the message, that is, the mailbox(es) of the person(s) or system(s) responsible for the writing of the message. The "Sender:" field specifies the mailbox of the agent responsible for the actual transmission of the message. For example, if a secretary were to send a message for another person, the mailbox of the secretary would appear in the "Sender:" field and the mailbox of the actual author would appear in the "From:" field. If the originator of the message can be indicated by a single mailbox and the author and transmitter are identical, the "Sender:" field SHOULD NOT be used. Otherwise, both fields SHOULD appear.

The originator fields also provide the information required when

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replying to a message. When the "Reply-To:" field is present, it indicates the mailbox(es) to which the author of the message suggests that replies be sent. In the absence of the "Reply-To:" field, replies SHOULD by default be sent to the mailbox(es) specified in the "From:" field unless otherwise specified by the person composing the reply.

In all cases, the "From:" field SHOULD NOT contain any mailbox that does not belong to the author(s) of the message. See also section 3.6.3 for more information on forming the destination addresses for a reply.

3.6.3. Destination address fields

The destination fields of a message consist of three possible fields, each of the same form: The field name, which is either "To", "Cc", or "Bcc", followed by a comma-separated list of one or more addresses (either mailbox or group syntax).

```
to          =     "To:" address-list CRLF

cc          =     "Cc:" address-list CRLF

bcc         =     "Bcc:" (address-list / [CFWS]) CRLF
```

The destination fields specify the recipients of the message. Each destination field may have one or more addresses, and each of the addresses indicate the intended recipients of the message. The only difference between the three fields is how each is used.

The "To:" field contains the address(es) of the primary recipient(s) of the message.

The "Cc:" field (where the "Cc" means "Carbon Copy" in the sense of making
a copy on a typewriter using carbon paper) contains the addresses of others who are to receive the message, though the content of the message may not be directed at them.

The "Bcc:" field (where the "Bcc" means "Blind Carbon Copy") contains

addresses of recipients of the message whose addresses are not to be revealed to other recipients of the message. There are three ways in which the "Bcc:" field is used. In the first case, when a message containing a "Bcc:" field is prepared to be sent, the "Bcc:" line is removed even though all of the recipients (including those specified in the "Bcc:" field) are sent a copy of the message. In the second case, recipients specified in the "To:" and "Cc:" lines each are sent a copy of the message with the "Bcc:" line removed as above, but the recipients on the "Bcc:" line get a separate copy of the message containing a "Bcc:" line. (When there are multiple recipient addresses in the "Bcc:" field, some implementations actually send a separate copy of the message to each recipient with a "Bcc:" containing only the address of that particular recipient.) Finally, since a "Bcc:" field may contain no addresses, a "Bcc:" field can be sent without any addresses indicating to the recipients that blind copies were sent to someone. Which method to use with "Bcc:" fields is implementation dependent, but refer to the "Security Considerations" section of this document for a discussion of each.

When a message is a reply to another message, the mailboxes of the authors of the original message (the mailboxes in the "From:" field) or mailboxes specified in the "Reply-To:" field (if it exists) MAY appear in the "To:" field of the reply since these would normally be the primary recipients of the reply. If a reply is sent to a message that has destination fields, it is often desirable to send a copy of the reply to all of the recipients of the message, in addition to the author. When such a reply is formed, addresses in the "To:" and "Cc:" fields of the original message MAY appear in the "Cc:" field of the reply, since these are normally secondary recipients of the reply. If a "Bcc:" field is present in the original message, addresses in that field MAY appear in the "Bcc:" field of the reply, but SHOULD NOT appear in the "To:" or "Cc:" fields.

Note: Some mail applications have automatic reply commands that include the destination addresses of the original message in the destination addresses of the reply. How those reply commands behave

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is implementation dependent and is beyond the scope of this document. In particular, whether or not to include the original destination addresses when the original message had a "Reply-To:" field is not addressed here.

3.6.4. Identification fields

Though optional, every message SHOULD have a "Message-ID:" field. Furthermore, reply messages SHOULD have "In-Reply-To:" and "References:" fields as appropriate, as described below.

The "Message-ID:" field contains a single unique message identifier. The "References:" and "In-Reply-To:" field each contain one or more unique message identifiers, optionally separated by CFWS.

The message identifier (msg-id) is similar in syntax to an angle-addr construct without the internal CFWS.

```
message-id      =       "Message-ID:" msg-id CRLF

in-reply-to     =       "In-Reply-To:" 1*msg-id CRLF

references      =       "References:" 1*msg-id CRLF

msg-id          =       [CFWS] "<" id-left "@" id-right ">" [CFWS]

id-left         =       dot-atom-text / no-fold-quote / obs-id-left

id-right        =       dot-atom-text / no-fold-literal / obs-id-right

no-fold-quote   =       DQUOTE *(qtext / quoted-pair) DQUOTE
```



```
no-fold-literal =       "[" *(dtext / quoted-pair) "]"
```

The "Message-ID:" field provides a unique message identifier that refers to a particular version of a particular message. The uniqueness of the message identifier is guaranteed by the host that generates it (see below). This message identifier is intended to be machine readable and not necessarily meaningful to humans. A message

identifier pertains to exactly one instantiation of a particular message; subsequent revisions to the message each receive new message identifiers.

Note: There are many instances when messages are "changed", but those changes do not constitute a new instantiation of that message, and therefore the message would not get a new message identifier. For example, when messages are introduced into the transport system, they are often prepended with additional header fields such as trace fields (described in section 3.6.7) and resent fields (described in section 3.6.6). The addition of such header fields does not change the identity of the message and therefore the original "Message-ID:" field is retained. In all cases, it is the meaning that the sender of the message wishes to convey (i.e., whether this is the same message or a different message) that determines whether or not the "Message-ID:" field changes, not any particular syntactic difference that appears (or does not appear) in the message.

The "In-Reply-To:" and "References:" fields are used when creating a reply to a message. They hold the message identifier of the original message and the message identifiers of other messages (for example, in the case of a reply to a message which was itself a reply). The "In-Reply-To:" field may be used to identify the message (or messages) to which the new message is a reply, while the "References:" field may be used to identify a "thread" of conversation.

When creating a reply to a message, the "In-Reply-To:" and "References:" fields of the resultant message are constructed as follows:

The "In-Reply-To:" field will contain the contents of the "Message-ID:" field of the message to which this one is a reply (the "parent message"). If there is more than one parent message, then the "In-Reply-To:" field will contain the contents of all of the parents' "Message-ID:" fields. If there is no "Message-ID:" field in any of the parent messages, then the new message will have no "In-Reply-To:" field.

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The "References:" field will contain the contents of the parent's "References:" field (if any) followed by the contents of the parent's "Message-ID:" field (if any). If the parent message does not contain a "References:" field but does have an "In-Reply-To:" field containing a single message identifier, then the "References:" field will contain the contents of the parent's "In-Reply-To:" field followed by the contents of the parent's "Message-ID:" field (if any). If the parent has none of the "References:", "In-Reply-To:", or "Message-ID:" fields, then the new message will have no "References:" field.

Note: Some implementations parse the "References:" field to display the "thread of the discussion". These implementations assume that each new message is a reply to a single parent and hence that they can walk backwards through the "References:" field to find the parent of each message listed there. Therefore, trying to form a "References:" field for a reply that has multiple parents is discouraged and how to do so is not defined in this document.

The message identifier (msg-id) itself MUST be a globally unique identifier for a message. The generator of the message identifier MUST guarantee that the msg-id is unique. There are several algorithms that can be used to accomplish this. Since the msg-id has a similar syntax to angle-addr (identical except that comments and folding white space are not allowed), a good method is to put the domain name (or a domain literal IP address) of the host on which the message identifier was created on the right hand side of the "@", and put a combination of the current absolute date and time along with some other currently unique (perhaps sequential) identifier available on the system (for example, a process id number) on the left hand side. Using a date on the left hand side and a domain name or domain literal on the right hand side makes it possible to guarantee uniqueness since no two hosts use the same domain name or IP address at the same time. Though other algorithms will work, it is RECOMMENDED that the right hand side contain some domain identifier (either of the host itself or otherwise) such that the generator of the message identifier can guarantee the uniqueness of the left hand side within the scope of that domain.

Semantically, the angle bracket characters are not part of the msg-id; the msg-id is what is contained between the two angle bracket characters.

3.6.5. Informational fields

The informational fields are all optional. The "Keywords:" field contains a comma-separated list of one or more words or quoted-strings. The "Subject:" and "Comments:" fields are unstructured fields as defined in section 2.2.1, and therefore may contain text or folding white space.

```
subject       =      "Subject:" unstructured CRLF

comments      =      "Comments:" unstructured CRLF

keywords
      =      "Keywords:" phrase *("," phrase) CRLF
```

These three fields are intended to have only human-readable content with information about the message. The "Subject:" field is the most common and contains a short string identifying the topic of the message. When used in a reply, the field body MAY start with the string "Re: " (from the Latin "res", in the matter of) followed by the contents of the "Subject:" field body of the original message. If this is done, only one instance of the literal string "Re: " ought to be used since use of other strings or more than one instance can lead to undesirable consequences. The "Comments:" field contains any additional comments on the text of the body of the message. The "Keywords:" field contains a comma-separated list of important words and phrases that might be useful for the recipient.

3.6.6. Resent fields

Resent fields SHOULD be added to any message that is reintroduced by a user into the
transport system. A separate set of resent fields
SHOULD be added each time this is done. All of the resent fields

corresponding to a particular resending of the message SHOULD be together. Each new set of resent fields is prepended to the message; that is, the most recent set of resent fields appear earlier in the message. No other fields in the message are changed when resent fields are added.

Each of the resent fields corresponds to a particular field elsewhere in the syntax. For instance, the "Resent-Date:" field corresponds to the "Date:" field and the "Resent-To:" field corresponds to the "To:" field. In each case, the syntax for the field body is identical to the syntax given previously for the corresponding field.

When resent fields are used, the "Resent-From:" and "Resent-Date:" fields MUST be sent. The "Resent-Message-ID:" field SHOULD be sent. "Resent-Sender:" SHOULD NOT be used if "Resent-Sender:" would be identical to
"Resent-From:".


```
resent-date     =       "Resent-Date:" date-time CRLF

resent-from     =       "Resent-From:" mailbox-list CRLF

resent-sender   =       "Resent-Sender:" mailbox CRLF

resent-to       =       "Resent-To:" address-list CRLF

resent-cc       =       "Resent-Cc:" address-list CRLF

resent-bcc      =       "Resent-Bcc:" (address-list / [CFWS]) CRLF

resent-msg-id   =       "Resent-Message-ID:" msg-id CRLF
```

Resent fields are used to identify a message as having been reintroduced into the transport system by a user. The purpose of using resent fields is to have the message appear to the final recipient as if it were sent directly by the original sender, with all of the original fields remaining the same. Each set of resent fields correspond to a particular resending event. That is, if a message is resent
multiple times, each set of resent fields gives
identifying information for each individual time. Resent fields are

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strictly informational. They MUST NOT be used in the normal processing of replies or other such automatic actions on messages.

Note: Reintroducing a message into the transport system and using resent fields is a different operation from "forwarding". "Forwarding" has two meanings: One sense of forwarding is that a mail reading program can be told by a user to forward a copy of a message to another person, making the forwarded message the body of the new message. A forwarded message in this sense does not appear to have come from the original sender, but is an entirely new message from the forwarder of the message. On the other hand, forwarding is also used to mean when a mail transport program gets a message and forwards it on to a different destination for final delivery. Resent header fields are not intended for use with either type of forwarding.

The resent originator fields indicate the mailbox of the person(s) or system(s) that resent the message. As with the regular originator fields, there are two forms: a simple "Resent-From:" form which contains the mailbox of the individual doing the resending, and the more complex form, when one individual (identified in the "Resent-Sender:" field) resends a message on behalf of one or more others (identified in the "Resent-From:" field).

Note: When replying to a resent message, replies behave just as they would with any other message, using the original "From:",

"Reply-To:", "Message-ID:", and other fields. The resent fields are only informational and MUST NOT be used in the normal processing of replies.

The "Resent-Date:" indicates the date and time at which the resent message is dispatched by the resender of the message. Like the "Date:" field, it is not the date and time that the message was actually transported.

The "Resent-To:", "Resent-Cc:", and "Resent-Bcc:" fields function identically to the "To:", "Cc:", and "Bcc:" fields respectively, except that they indicate the recipients of the resent message, not

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the recipients of the original message.

The "Resent-Message-ID:" field provides a unique identifier for the resent message.

3.6.7. Trace fields

The trace fields are a group of header fields consisting of an optional "Return-Path:" field, and one or more "Received:" fields. The "Return-Path:" header field contains a pair of angle brackets that enclose an optional addr-spec. The "Received:" field contains a (possibly empty) list of name/value pairs followed by a semicolon and a date-time specification. The first item of the name/value pair is defined by item-name, and the second item is either an addr-spec, an atom, a domain, or a msg-id. Further restrictions may be applied to the syntax of the trace fields by standards that provide for their use, such as [RFC2821].

```
trace          =      [return]
                   1*received

return         =      "Return-Path:" path CRLF

path           =      ([CFWS] "<" ([CFWS] / addr-spec) ">" [CFWS]) /
                   obs-path

received       =      "Received:" name-val-list ";" date-time CRLF

name-val-list  =      [CFWS] [name-val-pair *(CFWS name-val-pair)]

name-val-pair  =      item-name CFWS item-value

item-name      =      ALPHA *(["-"] (ALPHA / DIGIT))

item-value     =      1*angle-addr / addr-spec /
                   atom / domain / msg-id
```


A full discussion of the Internet mail use of trace fields is contained

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in [RFC2821]. For the purposes of this standard, the trace fields are strictly informational, and any formal interpretation of them is outside of the scope of this document.

3.6.8. Optional fields

Fields may appear in messages that are otherwise unspecified in this standard. They MUST conform to the syntax of an optional-field. This is a field name, made up of the printable US-ASCII characters except SP and colon, followed by a colon, followed by any text which conforms to unstructured.

The field names of any optional-field MUST NOT be identical to any field name specified elsewhere in this standard.

```
optional-field  =      field-name ":" unstructured CRLF

field-name      =      1*ftext

ftext           =      %d33-57 /              ; Any character except
                       %d59-126               ;  controls, SP, and
                                              ;  ":".
```

For the purposes of this standard, any optional field is uninterpreted.

4. Obsolete Syntax

Earlier versions of this standard allowed for different (usually more liberal) syntax than is allowed in this version. Also, there have been syntactic elements used in messages on the Internet whose interpretation have never been documented. Though some of these syntactic forms MUST NOT be generated according to the grammar in section 3, they MUST be accepted and parsed by a conformant receiver. This section documents many of these syntactic elements. Taking the grammar in section 3 and adding the definitions presented in this section will result in the grammar to use for interpretation of messages.

Note: This section identifies syntactic forms that any implementation MUST reasonably interpret. However, there are certainly Internet messages which do not conform to even the additional syntax given in this section. The fact that a particular form does not appear in any section of this document is not justification for computer programs to crash or for malformed data to be irretrievably lost by any implementation. To repeat an example, though this document requires

lines in messages to be no longer than 998 characters, silently

discarding the 999th and subsequent characters in a line without warning would still be bad behavior for an implementation. It is up to the implementation to deal with messages robustly.

One important difference between the obsolete (interpreting) and the current (generating) syntax is that in structured header field bodies (i.e., between the colon and the CRLF of any structured header field), white space characters, including folding white space, and comments can be freely inserted between any syntactic tokens. This allows many complex forms that have proven difficult for some implementations to parse.

Another key difference between the obsolete and the current syntax is that the rule in section 3.2.3 regarding lines composed entirely of white space in comments and folding white space does not apply. See the discussion of folding white space in section 4.2 below.

Finally, certain characters that were formerly allowed in messages appear in this section. The NUL character (ASCII value 0) was once allowed, but is no longer for compatibility reasons. CR and LF were allowed to appear in messages other than as CRLF; this use is also shown here.

Other differences in syntax and semantics are noted in the following sections.

4.1. Miscellaneous obsolete tokens

These syntactic elements are used elsewhere in the obsolete syntax or in the main syntax. The obs-char and obs-qp elements each add ASCII value 0. Bare CR and bare LF are added to obs-text and obs-utext. The period character is added to obs-phrase. The obs-phrase-list provides for "empty" elements in a comma-separated list of phrases.

Note: The "period" (or "full stop") character (".") in obs-phrase is not a form that was allowed in earlier versions of this or any other standard. Period (nor any other character from specials) was not allowed in phrase because it introduced a parsing difficulty distinguishing between phrases and portions of an addr-spec (see

section 4.4). It appears here because the period character is currently used in many messages in the display-name portion of addresses, especially for initials in names, and therefore must be interpreted properly. In the future, period may appear in the regular syntax of phrase.

```
obs-qp        =      "\" (%d0-127)

obs-text      =      *LF *CR *(obs-char *LF *CR)
```



```
obs-char      =      %d0-9
 / %d11 /          ; %d0-127 except CR and
                   %d12 / %d14-127         ;  LF

obs-utext     =      obs-text

obs-phrase    =      word *(word / "." / CFWS)

obs-phrase-list =    phrase / 1*([phrase] [CFWS] "," [CFWS]) [phrase]
```

Bare CR and bare LF appear in messages with two different meanings. In many cases, bare CR or bare LF are used improperly instead of CRLF to indicate line separators. In other cases, bare CR and bare LF are used simply as ASCII control characters with their traditional ASCII meanings.

4.2. Obsolete folding white space

In the obsolete syntax, any amount of folding white space MAY be inserted where the obs-FWS rule is allowed. This creates the possibility of having two consecutive "folds" in a line, and therefore the possibility that a line which makes up a folded header field could be composed entirely of white space.

```
obs-FWS       =      1*WSP *(CRLF 1*WSP)
```

4.3. Obsolete Date and Time

The syntax for the obsolete date format allows a 2 digit year in the date field and allows for a list of alphabetic time zone

specifications that were used in earlier versions of this standard. It also permits comments and folding white space between many of the tokens.

```
obs-day-of-week =       [CFWS] day-name [CFWS]

obs-year        =       [CFWS] 2*DIGIT [CFWS]

obs-month       =       CFWS month-name CFWS

obs-day         =       [CFWS] 1*2DIGIT [CFWS]

obs-hour        =       [CFWS] 2DIGIT [CFWS]

obs-minute      =       [CFWS] 2DIGIT [CFWS]

obs-second      =       [CFWS] 2DIGIT [CFWS]

obs-zone        =       "UT" / "GMT" /          ; Universal Time
```



```
                                ; North American UT
                                ; offsets
                "EST" / "EDT" /
 ; Eastern:  - 5/ - 4
                "CST" / "CDT" /         ; Central:  - 6/ - 5
                "MST" / "MDT" /         ; Mountain: - 7/ - 6
                "PST" / "PDT" /         ; Pacific:  - 8/ - 7

                %d65-73 /               ; Military zones - "A"
                %d75-90 /               ; through "I" and "K"
                %d97-105 /              ; through "Z", both
                %d107-122               ; upper and lower case
```

Where a two or three digit year occurs in a date, the year is to be interpreted as follows: If a two digit year is encountered whose value is between 00 and 49, the year is interpreted by adding 2000, ending up with a value between 2000 and 2049. If a two digit year is encountered with a value between 50 and 99, or any three digit year is encountered, the year is interpreted by adding 1900.

In the obsolete time zone, "UT" and "GMT" are indications of

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"Universal
Time" and "Greenwich Mean Time" respectively and are both semantically identical to "+0000".

The remaining three character zones are the US time zones. The first letter, "E", "C", "M", or "P" stands for "Eastern", "Central", "Mountain" and "Pacific". The second letter is either "S" for "Standard" time, or "D" for "Daylight" (or summer) time. Their interpretations are as follows:

EDT is semantically equivalent to -0400
EST is semantically equivalent to -0500
CDT is semantically equivalent to -0500
CST is semantically equivalent to -0600
MDT is semantically equivalent to -0600
MST is semantically equivalent to -0700
PDT is semantically equivalent to -0700
PST is semantically equivalent to -0800

The 1 character military time zones were defined in a non-standard way in [RFC822] and are therefore unpredictable in their meaning. The original definitions of the military zones "A" through "I" are equivalent to "+0100" through "+0900"
respectively; "K", "L", and "M"
are equivalent to "+1000", "+1100", and "+1200" respectively; "N" through "Y" are equivalent to "-0100" through "-1200" respectively; and "Z" is equivalent to "+0000". However, because of the error in [RFC822], they SHOULD all be considered equivalent to "-0000" unless there is out-of-band information confirming their meaning.

Other multi-character (usually between 3 and 5) alphabetic time zones have been used in Internet messages. Any such time zone whose meaning is not known SHOULD be considered equivalent to "-0000" unless there is out-of-band information confirming their meaning.

4.4. Obsolete Addressing

There are three primary differences in addressing. First, mailbox addresses were allowed to have a route portion before the addr-spec when enclosed in "<"

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and ">". The route is simply a comma-separated list of domain names, each preceded by "@", and the list terminated by a colon. Second, CFWS were allowed between the period-separated elements of local-part and domain (i.e., dot-atom was not used). In addition, local-part is allowed to contain quoted-string in addition to just atom. Finally, mailbox-list and address-list were allowed to have "null" members. That is, there could be two or more commas in such a list with nothing in between them.

```
obs-angle-addr  =      [CFWS] "<" [obs-route] addr-spec ">" [CFWS]

obs-route       =      [CFWS] obs-domain-list ":" [CFWS]

obs-domain-list =      "@" domain *(*(CFWS / "," ) [CFWS] "@" domain)

obs-local-part  =      word *("." word)

obs-domain      =      atom *("." atom)

obs-mbox-list   =      1*([mailbox] [CFWS] "," [CFWS]) [mailbox]

obs-addr-list   =      1*([address] [CFWS] "," [CFWS]) [address]
```

When interpreting addresses, the route portion SHOULD be ignored.

4.5. Obsolete header fields

Syntactically, the primary difference in the obsolete field syntax is that it allows multiple occurrences of any of the fields and they may occur in any order. Also, any amount of white space is allowed before the ":" at the end of the field name.

```
obs-fields      =      *(obs-return /
                       obs-received /
                       obs-orig-date /
                       obs-from /
                       obs-sender /
                       obs-reply-to /
                       obs-to /
```


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```
                obs-cc /
                obs-bcc /
                obs-message-id /
                obs-in-reply-to /
                obs-references /
                obs-subject /
                obs-comments /

            obs-keywords /
                obs-resent-date /
                obs-resent-from /
                obs-resent-send /
                obs-resent-rply /
                obs-resent-to /
                obs-resent-cc /
                obs-resent-bcc /
                obs-resent-mid /
                obs-optional)
```

Except for destination address fields (described in section 4.5.3), the interpretation of multiple occurrences of fields is unspecified. Also, the interpretation of trace fields and resent fields which do not occur in blocks prepended to the message is unspecified as well. Unless otherwise noted in the following sections, interpretation of other fields is identical to the interpretation of their non-obsolete counterparts in section 3.

4.5.1. Obsolete origination date field

```
obs-orig-date   =       "Date" *WSP ":" date-time CRLF
```

4.5.2. Obsolete originator fields

```
obs-from
     =       "From" *WSP ":" mailbox-list CRLF

obs-sender      =       "Sender" *WSP ":" mailbox CRLF

obs-reply-to    =       "Reply-To" *WSP ":" mailbox-list CRLF
```

4.5.3. Obsolete destination address fields

```
obs-to          =       "To" *WSP ":" address-list CRLF

obs-cc          =       "Cc" *WSP ":" address-list CRLF

obs-bcc         =       "Bcc" *WSP ":" (address-list / [CFWS]) CRLF
```

When multiple occurrences of destination address fields occur in a message, they SHOULD be treated as if the address-list in the first occurrence of the field is combined with the address lists of the subsequent occurrences by adding a comma and concatenating.

4.5.4. Obsolete identification fields

The obsolete "In-Reply-To:" and "References:" fields differ from the current syntax in that they allow phrase (words or quoted strings) to
appear. The obsolete forms of the left and right sides of msg-id allow interspersed CFWS, making them syntactically identical to local-part and domain respectively.

```
obs-message-id  =       "Message-ID" *WSP ":" msg-id CRLF

obs-in-reply-to =       "In-Reply-To" *WSP ":" *(phrase / msg-id) CRLF

obs-references  =       "References" *WSP ":" *(phrase / msg-id) CRLF

obs-id-left     =       local-part

obs-id-right    =       domain
```

For purposes of interpretation, the phrases in the "In-Reply-To:" and "References:" fields are ignored.

Semantically, none of the optional CFWS surrounding the local-part and the domain are part of the obs-id-left and obs-id-right respectively.

4.5.5. Obsolete informational fields

```
obs-subject     =       "Subject" *WSP ":" unstructured CRLF

obs-comments    =       "Comments" *WSP ":" unstructured CRLF

obs-keywords    =       "Keywords" *WSP ":" obs-phrase-list CRLF
```

4.5.6. Obsolete resent fields

The obsolete syntax adds
a "Resent-Reply-To:" field, which consists
of the field name, the optional comments and folding white space, the
colon, and a comma separated list of addresses.

```
obs-resent-from =       "Resent-From" *WSP ":" mailbox-list CRLF

obs-resent-send =       "Resent-Sender" *WSP ":" mailbox CRLF
```



```
obs-resent-date =       "Resent-Date" *WSP ":" date-time CRLF

obs-resent-to   =       "Resent-To" *WSP ":" address-list CRLF

obs-resent-cc   =       "Resent-Cc" *WSP ":" address-list CRLF

obs-resent-bcc  =       "Resent-Bcc" *WSP ":"
                        (address-list / [CFWS]) CRLF

obs-resent-mid  =       "Resent-Message-ID" *WSP ":" msg-id CRLF

obs-resent-rply =       "Resent-Reply-To" *WSP ":" address-list CRLF
```

As with other resent fields, the "Resent-Reply-To:" field is to be
treated as trace information only.

4.5.7. Obsolete
trace fields

The obs-return and obs-received are again given here as template
definitions, just as return and received are in section 3. Their
full syntax is given in [RFC2821].

```
obs-return      =       "Return-Path" *WSP ":" path CRLF

obs-received    =       "Received" *WSP ":" name-val-list CRLF

obs-path        =       obs-angle-addr
```

4.5.8. Obsolete optional fields

obs-optional = field-name *WSP ":" unstructured CRLF

5. Security Considerations

Care needs to be taken when displaying messages on a terminal or terminal emulator. Powerful terminals may act on escape sequences and other combinations of ASCII control characters with a variety of consequences. They can remap the keyboard or permit other modifications to the terminal which could lead to denial of service or even damaged data. They can trigger (sometimes programmable) answerback messages which can allow a message to cause commands to be issued on the recipient's behalf.
They can also effect the operation
of terminal attached devices such as printers. Message viewers may wish to strip potentially dangerous terminal escape sequences from the message prior to display. However, other escape sequences appear in messages for useful purposes (cf. [RFC2045, RFC2046, RFC2047, RFC2048, RFC2049, ISO2022]) and therefore should not be stripped indiscriminately.

Transmission of non-text objects in messages raises additional security issues. These issues are discussed in [RFC2045, RFC2046, RFC2047, RFC2048, RFC2049].

Many implementations use the "Bcc:" (blind carbon copy) field described in section 3.6.3 to facilitate sending messages to recipients without revealing the addresses of one or more of the addressees to the other recipients. Mishandling this use of "Bcc:" has implications for confidential information that might be revealed, which could eventually lead to security problems through knowledge of even the existence of a particular mail address. For example, if using the first method described in section 3.6.3, where the "Bcc:" line is removed from the message, blind recipients have no explicit indication that they have been sent a blind copy, except insofar as their address does not appear in the message header. Because of this, one of the blind addressees could potentially send a reply to all of the shown recipients and accidentally reveal that the message went to the blind recipient. When the second method from section

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3.6.3 is used, the blind recipient's address appears in the "Bcc:" field of a separate copy of the message. If the "Bcc:" field sent contains all of the blind addressees, all of the "Bcc:" recipients will be seen by each "Bcc:" recipient. Even if a separate message is sent to each "Bcc:" recipient with only the individual's address, implementations still need to be careful to process replies to the message as per section 3.6.3 so as not to accidentally reveal the blind recipient to other recipients.

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Appendix A. Example messages

This section presents a selection of messages. These are intended to assist in the implementation of this standard, but should not be taken as normative; that is to say, although the examples in this section were carefully reviewed, if there happens to be a conflict between these examples and the syntax described in sections 3 and 4 of this document, the syntax in those sections is to be taken as correct.

Messages are delimited in this section between lines of "----". The "----" lines are not part of the message itself.

A.1. Addressing examples

The following are examples of messages that might be sent between two individuals.

A.1.1. A message from one person to another with simple addressing

This could be called a canonical message. It has a single author, John Doe, a single recipient, Mary Smith, a subject, the date, a message identifier, and a textual message in the body.

```
From: John
 Doe <jdoe@machine.example>
To: Mary Smith <mary@example.net>
Subject: Saying Hello
Date: Fri, 21 Nov 1997 09:55:06 -0600
Message-ID: <1234@local.machine.example>

This is a message just to say hello.
So, "Hello".
----
```


If John's secretary Michael actually sent the message, though John was the author and replies to this message should go back to him, the sender field would be used:

```
----
From: John Doe <jdoe@machine.example>
Sender: Michael Jones <mjones@machine.example>
To: Mary Smith <mary@example.net>
Subject: Saying Hello
Date: Fri, 21 Nov 1997 09:55:06 -0600
Message-ID: <1234@local.machine.example>

This is a message just to say hello.
So, "Hello".
----
```

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A.1.2. Different types of mailboxes

This message includes multiple addresses in the destination fields and also uses several different forms of addresses.

```
----
From:
 "Joe Q. Public" <john.q.public@example.com>
To: Mary Smith <mary@x.test>, jdoe@example.org, Who? <one@y.test>
Cc: <boss@nil.test>, "Giant; \"Big\" Box" <sysservices@example.net>
Date: Tue, 1 Jul 2003 10:52:37 +0200
Message-ID: <5678.21-Nov-1997@example.com>

Hi everyone.
----
```

Note that the display names for Joe Q. Public and Giant; "Big" Box needed to be enclosed in double-quotes because the former contains the period and the latter contains both semicolon and double-quote characters (the double-quote characters appearing as quoted-pair construct). Conversely, the display name for Who? could appear without them because the question mark is legal in an atom. Notice also that jdoe@example.org and boss@nil.test have no display names associated with them at all, and jdoe@example.org uses the simpler address form without the angle brackets.

A.1.3. Group addresses

```
----
From: Pete <pete@silly.example>
To: A Group:Chris Jones <c@a.test>,joe@where.test,John <jdoe@one.test>;
Cc: Undisclosed recipients:;
```

Date: Thu, 13 Feb 1969 23:32:54 -0330
Message-ID: <testabcd.1234@silly.example>

Testing.

In this message, the "To:" field has a single group recipient named A Group which contains 3 addresses, and a "Cc:" field with an empty group recipient named Undisclosed recipients.

A.2. Reply messages

The following is a series of three messages that make up a conversation thread between John and Mary. John firsts sends a message to Mary, Mary then replies to John's message, and then John replies to Mary's reply message.

Note especially the "Message-ID:", "References:", and "In-Reply-To:" fields in each message.

From: John Doe <jdoe@machine.example>
To: Mary Smith <mary@example.net>
Subject: Saying Hello
Date: Fri, 21 Nov 1997 09:55:06 -0600
Message-ID:
<1234@local.machine.example>

This is a message just to say hello.
So, "Hello".

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When sending replies, the Subject field is often retained, though prepended with "Re: " as described in section 3.6.5.

```
----
From: Mary Smith <mary@example.net>
To: John Doe <jdoe@machine.example>
Reply-To: "Mary Smith: Personal Account" <smith@home.example>
Subject: Re: Saying Hello
Date: Fri, 21 Nov 1997 10:01:10 -0600
Message-ID: <3456@example.net>
In-Reply-To: <1234@local.machine.example>
References: <1234@local.machine.example>

This is a reply to your hello.
----
```

Note the "Reply-To:" field in the above message. When John replies to Mary's message above, the reply should go to the address in the "Reply-To:" field instead of the address in the "From:" field.

```
----
To: "Mary Smith: Personal Account" <smith@home.example>
From:
 John Doe <jdoe@machine.example>
Subject: Re: Saying Hello
Date: Fri, 21 Nov 1997 11:00:00 -0600
Message-ID: <abcd.1234@local.machine.tld>
In-Reply-To: <3456@example.net>
References: <1234@local.machine.example> <3456@example.net>

This is a reply to your reply.
----
```

A.3. Resent messages

Start with the message that has been used as an example several times:

```
----
From: John Doe <jdoe@machine.example>
To: Mary Smith <mary@example.net>
Subject: Saying Hello
Date: Fri, 21 Nov 1997 09:55:06 -0600
Message-ID: <1234@local.machine.example>
```

This is a message just to say hello.
So, "Hello".

Say that Mary, upon receiving this message, wishes to send a copy of the message to Jane such that (a) the message would appear to have come straight from John; (b) if Jane replies to the message, the reply should
go back to John; and (c) all of the original
information, like the date the message was originally sent to Mary, the message identifier, and the original addressee, is preserved. In this case, resent fields are prepended to the message:

Resent-From: Mary Smith <mary@example.net>
Resent-To: Jane Brown <j-brown@other.example>
Resent-Date: Mon, 24 Nov 1997 14:22:01 -0800
Resent-Message-ID: <78910@example.net>
From: John Doe <jdoe@machine.example>
To: Mary Smith <mary@example.net>
Subject: Saying Hello
Date: Fri, 21 Nov 1997 09:55:06 -0600
Message-ID: <1234@local.machine.example>

This is a message just to say hello.
So, "Hello".

If Jane, in turn, wished to resend this message to another person, she would prepend her own set of resent header fields to the above and send that.

A.4. Messages with trace fields

As messages are sent through the transport system as described in [RFC2821], trace fields are prepended to the message. The following is an example of what those trace fields might look like. Note that there is some folding white space in the first one since these lines can be long.

```
----
Received: from x.y.test
  by example.net
  via TCP
  with ESMTP
  id ABC12345
  for <mary@example.net>;  21 Nov 1997 10:05:43 -0600
Received: from machine.example by x.y.test; 21 Nov 1997 10:01:22 -0600
From: John Doe <jdoe@machine.example>
To: Mary Smith <mary@example.net>
Subject: Saying Hello
Date: Fri, 21 Nov 1997 09:55:06 -0600
Message-ID: <1234@local.machine.example>

This is a message just to say hello.
So, "Hello".
----
```

A.5. White space, comments, and other oddities

```
  White space,
 including folding white space, and comments can be
  inserted between many of the tokens of fields.  Taking the example
  from A.1.3, white space and comments can be inserted into all of the
  fields.

----
From: Pete(A wonderful \) chap) <pete(his account)@silly.test(his host)>
To:A Group(Some people)
    :Chris Jones <c@(Chris's host.)public.example>,
        joe@example.org,
 John <jdoe@one.test> (my dear friend); (the end of the group)
Cc:(Empty list)(start)Undisclosed recipients  :(nobody(that I know))  ;
Date: Thu,
     13
       Feb
```

1969
23:32
-0330 (Newfoundland Time)
Message-ID: <testabcd.1234@silly.test>

Testing.

The above example is aesthetically displeasing, but perfectly legal. Note particularly (1) the comments in the "From:" field (including one that has a ")" character appearing as part of a quoted-pair); (2) the white space absent after the ":" in the "To:" field as well as the comment and
folding white space after the group name, the special character ("(") in the comment in Chris Jones's address, and the folding white space before and after "joe@example.org,"; (3) the multiple and nested comments in the "Cc:" field as well as the comment immediately following the ":" after "Cc"; (4) the folding white space (but no comments except at the end) and the missing seconds in the time of the date field; and (5) the white space before (but not within) the identifier in the "Message-ID:" field.

A.6. Obsoleted forms

The following are examples of obsolete (that is, the "MUST NOT generate") syntactic elements described in section 4 of this document.

A.6.1. Obsolete addressing

Note in the below example the lack of quotes around Joe Q. Public, the route that appears in the address for Mary
Smith, the two commas
that appear in the "To:" field, and the spaces that appear around the "." in the jdoe address.

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```
----
From: Joe Q. Public <john.q.public@example.com>
To: Mary Smith <@machine.tld:mary@example.net>, , jdoe@test   . example
Date: Tue, 1 Jul 2003 10:52:37 +0200
Message-ID: <5678.21-Nov-1997@example.com>

Hi everyone.
----
```

A.6.2. Obsolete dates

The following message uses an obsolete date format, including a non-numeric time zone and a two digit year. Note that although the day-of-week is missing, that is not specific to the obsolete syntax; it is optional in the current syntax as well.

```
----
From: John Doe <jdoe@machine.example>
To: Mary Smith <mary@example.net>
Subject: Saying Hello
Date: 21 Nov 97 09:55:06 GMT
Message-ID: <1234@local.machine.example>

This is a message just to say hello.
So, "Hello".
----
```

A.6.3. Obsolete white space and comments

White space and comments can appear between many more elements than in the current syntax. Also,
folding lines that are made up entirely
of white space are legal.

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```
----
From  : John Doe <jdoe@machine(comment).  example>
To    : Mary Smith
__
        <mary@example.net>
Subject     : Saying Hello
Date  : Fri, 21 Nov 1997 09(comment):   55  :  06 -0600
Message-ID  : <1234   @   local(blah)  .machine .example>

This is a message just to say hello.
So, "Hello".
----
```

Note especially the second line of the "To:" field. It starts with two space characters. (Note that "__" represent blank spaces.) Therefore, it is considered part of the folding as described in section 4.2. Also, the comments and white space throughout addresses, dates, and message identifiers are all part of the obsolete syntax.

Appendix B. Differences from earlier standards

This appendix contains a list of changes that have been made in the Internet Message Format from earlier standards, specifically [RFC822] and [STD3]. Items marked with an asterisk (*) below are items which appear in section 4 of this document and therefore can no longer be generated.

1. Period allowed in obsolete form of phrase.
2. ABNF moved out of document to [RFC2234].
3. Four or more digits allowed for year.
4. Header field ordering (and lack thereof) made explicit.
5. Encrypted header field removed.
6. Received syntax loosened to allow any token/value pair.
7. Specifically allow and give meaning to "-0000" time zone.
8. Folding white space is not allowed between every token.
9. Requirement for destinations removed.
10. Forwarding and resending redefined.
11. Extension header fields no longer specifically called out.
12. ASCII 0 (null) removed.*
13. Folding continuation lines cannot contain only white space.*
14. Free insertion of comments not allowed in date.*
15. Non-numeric time zones not allowed.*
16. Two digit years not allowed.*

17. Three digit years interpreted, but not allowed for generation.
18. Routes in addresses not allowed.*
19. CFWS within local-parts and domains not allowed.*
20. Empty members of address lists not allowed.*

21. Folding white space between field name and colon not allowed.*
22. Comments between field name and colon not allowed.
23. Tightened syntax of in-reply-to and references.*
24. CFWS within msg-id not allowed.*
25. Tightened semantics of resent fields as informational only.
26. Resent-Reply-To not allowed.*
27. No multiple occurrences of fields (except resent and received).*
28. Free CR and LF not allowed.*
29. Routes in return path not allowed.*
30. Line length limits specified.
31. Bcc more clearly specified.

Appendix C.
Notices

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Acknowledgement

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No license file was found, but licenses were detected in source scan.

Network Working Group N. Freed
Request for Comments: 2231 Innosoft
Updates: 2045, 2047, 2183 K. Moore
Obsoletes: 2184 University of Tennessee
Category: Standards Track November 1997

MIME Parameter Value and Encoded Word Extensions: Character Sets, Languages, and Continuations

Status of this Memo

This document specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state

and status of this protocol. Distribution of this memo is unlimited.

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1. Abstract

This memo defines extensions to the RFC 2045 media type and RFC 2183 disposition parameter value mechanisms to provide

(1) a means to specify parameter values in character sets other than US-ASCII,

(2) to specify the language to be used should the value be displayed, and

(3) a continuation mechanism for long parameter values to avoid problems with header line wrapping.

This memo also defines an extension to the encoded words defined in RFC 2047 to allow the specification of the language to be used for display as well as the character set.

2. Introduction

The Multipurpose Internet Mail Extensions, or MIME [RFC-2045, RFC-2046, RFC-2047, RFC-2048, RFC-2049], define a message format that allows for:

(1) textual message bodies in character sets other than US-ASCII,

(2) non-textual message bodies,

(3) multi-part message bodies, and

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(4) textual header information in character sets other than US-ASCII.

MIME is now widely deployed and is used by a variety of Internet protocols, including, of course, Internet email. However, MIME's success has resulted in the need for additional mechanisms that were not provided in the original protocol specification.

In particular, existing MIME mechanisms provide for named media type (content-type field) parameters as well as named disposition (content-disposition field). A MIME media type may specify any number of parameters associated with all of its subtypes, and any specific subtype may specify additional parameters for its own use. A MIME disposition value may specify any number of associated parameters, the most important of which is probably the attachment disposition's filename parameter.

These parameter names and values end up appearing in the content-type and content-disposition header fields in Internet email. This inherently imposes three crucial limitations:

(1) Lines in Internet email header fields are folded according to RFC 822 folding rules. This makes long parameter values problematic.

(2) MIME headers, like the RFC 822 headers they often appear in, are limited to 7bit US-ASCII, and the encoded-word mechanisms of RFC 2047 are not available to parameter values. This makes it impossible to have parameter values in character sets other than US-ASCII without specifying some sort of private per-parameter encoding.

(3) It has recently become clear that character set information is not sufficient to properly display some sorts of information -- language information is also needed [RFC-2130]. For example, support for handicapped
users may require reading text string

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aloud. The language the text is written in is needed for this to be done correctly. Some parameter values may need to be displayed, hence there is a need to allow for the inclusion of language information.

The last problem on this list is also an issue for the encoded words defined by RFC 2047, as encoded words are intended primarily for display purposes.

This document defines extensions that address all of these limitations. All of these extensions are implemented in a fashion that is completely compatible at a syntactic level with existing MIME implementations. In addition, the extensions are designed to have as little impact as possible on existing uses of MIME.

IMPORTANT NOTE: These mechanisms end up being somewhat gibbous when they actually are used. As such, these mechanisms should not be used lightly; they should be reserved for situations where a real need for them exists.

2.1. Requirements notation

This document occasionally uses terms that appear in capital letters. When the terms "MUST", "SHOULD", "MUST NOT", "SHOULD NOT", and "MAY" appear capitalized, they are being used to indicate particular requirements of this specification. A discussion of the meanings of these terms appears in [RFC- 2119].

3. Parameter Value Continuations

Long MIME media type or disposition parameter values do not interact well with header line wrapping conventions. In particular, proper header line wrapping depends on there being places where linear whitespace (LWSP) is allowed, which may or may not be present in a parameter value, and even if present may not be recognizable as such since specific knowledge of parameter value syntax may not be available to the agent doing the line wrapping. The result is that long parameter values may end up getting truncated or otherwise damaged by incorrect line wrapping implementations.

A mechanism is therefore needed to break up parameter values into smaller units that are amenable to line wrapping. Any such mechanism MUST be compatible with existing MIME processors. This means that

(1) the mechanism MUST NOT change the syntax of MIME media type and disposition lines, and

(2) the mechanism MUST NOT depend on parameter ordering since MIME states that parameters are not order sensitive. Note that while MIME does prohibit modification of MIME headers during transport, it is still possible that parameters will be reordered when user agent level processing is done.

The obvious solution, then, is to use multiple parameters to contain a single parameter value and to use some kind of distinguished name to indicate when this is being done. And this obvious solution is exactly what is specified here: The asterisk character ("*") followed by a decimal count is employed to indicate that multiple parameters are being used to encapsulate a single parameter value. The count starts at 0 and increments by 1 for each subsequent section of the parameter value. Decimal values are used and neither leading zeroes nor gaps in the sequence are allowed.

The original parameter value is recovered by concatenating the various sections of the parameter, in order. For example, the content-type field

```
Content-Type: message/external-body; access-type=URL;
 URL*0="ftp://";
 URL*1="cs.utk.edu/pub/moore/bulk-mailer/bulk-mailer.tar"
```

is semantically identical to

```
Content-Type: message/external-body; access-type=URL;
  URL="ftp://cs.utk.edu/pub/moore/bulk-mailer/bulk-mailer.tar"
```

Note that quotes around parameter values are part of the value syntax; they are NOT part of the value itself. Furthermore, it is explicitly permitted to have a mixture of quoted and unquoted continuation fields.

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4. Parameter Value Character Set and Language Information

Some parameter values may need to be qualified with character set or language information. It is clear that a distinguished parameter name is needed to identify when this information is present along with a specific syntax for the information in the value itself. In addition, a lightweight encoding mechanism is needed to accommodate 8 bit information in parameter values.

Asterisks ("*") are reused to provide the indicator that language and character set information is present and encoding is being used. A single quote ("") is used to delimit the character set and language information at the beginning of the parameter value. Percent signs ("%") are used as the encoding flag, which agrees with RFC 2047.

Specifically, an asterisk at the end of a parameter name acts as an indicator that character set and language information may appear at the beginning of the parameter value. A single quote is used to separate the character set, language, and actual value information in the parameter value string, and an percent sign is used to flag octets encoded in hexadecimal. For example:

```
Content-Type: application/x-stuff;
 title*=us-ascii'en-us'This%20is%20%2A%2A%2Afun%2A%2A%2A
```

Note that it is perfectly permissible to leave either the character set or language field blank. Note also that the single quote delimiters MUST be present even when one of the field values is omitted.
This is done when either character set, language, or both are not relevant to the parameter value at hand. This MUST NOT be done in order to indicate a default character set or language -- parameter field definitions MUST NOT assign a default character set or language.

4.1. Combining Character Set, Language, and Parameter Continuations

Character set and language information may be combined with the parameter continuation mechanism. For example:

```
Content-Type: application/x-stuff
 title*0*=us-ascii'en'This%20is%20even%20more%20
 title*1*=%2A%2A%2Afun%2A%2A%2A%20
 title*2="isn't it!"
```

Note that:

(1) Language and character set information only appear at the beginning of a given parameter value.

(2) Continuations do not provide a facility for using more than one character set or language in the same parameter value.

(3) A value presented using multiple continuations may contain a mixture of encoded and unencoded segments.

(4) The first segment of a continuation MUST be encoded if language and character set information are given.

(5) If the first segment of a continued parameter value is encoded the language and character set field delimiters MUST be present even when the fields are left blank.

5. Language specification in Encoded Words

RFC 2047 provides support for non-US-ASCII character sets in RFC 822 message header comments, phrases, and any unstructured text field. This is done by defining an encoded word construct which can appear in any of these places. Given that these are fields intended for display, it is sometimes necessary to associate language information with encoded words as well as just the character set. This specification extends the

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definition of an encoded word to allow the
inclusion of such information. This is simply done by suffixing the
character set specification with an asterisk followed by the language
tag. For example:

From: =?US-ASCII*EN?Q?Keith_Moore?= <moore@cs.utk.edu>

6. IMAP4 Handling of Parameter Values

IMAP4 [RFC-2060] servers SHOULD decode parameter value continuations
when generating the BODY and BODYSTRUCTURE fetch attributes.

7. Modifications to MIME ABNF

The ABNF for MIME parameter values given in RFC 2045 is:

```
parameter := attribute "=" value

attribute := token
             ; Matching of attributes
             ; is ALWAYS case-insensitive.
```

This specification changes this ABNF to:

```
parameter := regular-parameter / extended-parameter

regular-parameter := regular-parameter-name "=" value

regular-parameter-name := attribute [section]

attribute := 1*attribute-char
```



```
attribute-char := <any (US-ASCII) CHAR except SPACE, CTLs,
                   "*", "'", "%", or tspecials>

section := initial-section / other-sections

initial-section := "*0"
```

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```
other-sections := "*" ("1" / "2" / "3" / "4" / "5" /
                       "6" / "7" / "8" / "9") *DIGIT)

extended-parameter := (extended-initial-name "="
                       extended-value) /
                      (extended-other-names "="
                       extended-other-values)

extended-initial-name := attribute [initial-section] "*"

extended-other-names := attribute other-sections "*"

extended-initial-value := [charset] "'" [language] "'"
                          extended-other-values

extended-other-values := *(ext-octet / attribute-char)

ext-octet := "%" 2(DIGIT / "A" / "B" / "C" / "D" / "E" / "F")

charset := <registered character set name>

language
:= <registered language tag [RFC-1766]>
```

The ABNF given in RFC 2047 for encoded-words is:

```
encoded-word := "=?" charset "?" encoding "?" encoded-text "?="
```

This specification changes this ABNF to:

```
encoded-word := "=?" charset ["*" language] "?" encoded-text "?="
```

8. Character sets which allow specification of language

In the future it is likely that some character sets will provide facilities for inline language labeling. Such facilities are inherently more flexible than those defined here as they allow for language switching in the middle of a string.

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If and when such facilities are developed they SHOULD be used in preference to the language labeling facilities specified here. Note that all the mechanisms defined here allow for the omission of language labels so as to be able to accommodate this possible future usage.

9. Security Considerations

This RFC does not discuss security issues and is not believed to raise any security issues not already endemic in electronic mail and present in fully conforming implementations of MIME.

10. References

[RFC-822]
Crocker, D., "Standard for the Format of ARPA Internet Text Messages", STD 11, RFC 822 August 1982.

[RFC-1766]
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[RFC-2048]
Freed, N., Klensin, J. and J. Postel, "Multipurpose Internet Mail Extensions (MIME) Part Four: MIME Registration Procedures", RFC 2048, December 1996.

[RFC-2049]

Freed, N. and N. Borenstein, "Multipurpose Internet Mail Extensions (MIME) Part Five: Conformance Criteria and Examples", RFC 2049, December 1996.

[RFC-2060]
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[RFC-2119]
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No license file was found, but licenses were detected in source scan.

Network Working Group G. Vaudreuil
Request for Comments: 3462 Lucent Technologies
Obsoletes: 1892 January 2003
Category: Standards Track

The Multipart/Report Content Type for the Reporting of Mail System Administrative Messages

Status of this Memo

This document specifies an Internet standards track protocol for the

Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state and status of this protocol. Distribution of this memo is unlimited.

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Abstract

The Multipart/Report Multipurpose Internet Mail Extensions (MIME) content-type is a general "family" or "container" type for electronic mail reports of any kind. Although this memo defines only the use of the Multipart/Report content-type with respect to delivery status reports, mail processing programs will benefit if a single content-type is used to for all kinds of reports.

This document is part of a four document set describing the delivery status report service. This collection includes the Simple Mail Transfer Protocol (SMTP) extensions to request delivery status reports, a MIME content for the reporting of delivery reports, an enumeration of extended status codes, and a multipart container for the delivery report, the original message, and a human-friendly summary of the failure.

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Document Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in BCP 14, RFC 2119 [RFC2119].

1. The Multipart/Report Content Type

The Multipart/Report MIME content-type is a general "family" or "container" type for electronic mail reports of any kind. Although this memo defines only the use of the Multipart/Report content-type with respect to delivery status reports, mail processing programs will benefit if a single content-type is used to for all kinds of reports.

The Multipart/Report content-type is defined as follows:

MIME type name: multipart
MIME subtype name: report
Required parameters: boundary, report-type
Optional parameters: none
Encoding considerations: 7bit should always be adequate
Security considerations: see section 3 of this memo

The syntax of Multipart/Report is identical to the Multipart/Mixed content type defined in [MIME]. When used to send a report, the Multipart/Report content-type must be the top-level MIME content type for any report message. The report-type parameter identifies the type of report. The parameter is the MIME content sub-type of the second body part of the Multipart/Report.

User agents and gateways must be able to automatically determine that a message is a mail system report and should be processed as such. Placing the Multipart/Report as the outermost content provides a mechanism whereby an auto-processor may detect through parsing the RFC 822 headers that the message is a report.

The Multipart/Report content-type contains either two or three sub-parts, in the following order:

1) [Required] The first body part contains human readable message. The purpose of this message is to provide an easily understood description of the condition(s) that caused the report to be generated, for a human reader who may not have a user agent capable of interpreting the second section of the Multipart/Report.

The text in the first section may be in any MIME standards-track content-type, charset, or language. Where a description of the error is desired in several languages or several media, a Multipart/Alternative construct may be used.

This body part may also be used to send detailed information that cannot be easily formatted into a Message/Report body part.

(2) [Required] A machine parsable body part containing an account of the reported message handling event. The purpose of this body part is to provide a machine-readable description of the condition(s) that caused the report to be generated, along with details not present in the first body part that may be useful to human experts. An initial body part, Message/delivery-status is defined in [DSN].

(3) [Optional] A body part containing the returned message or a portion thereof. This information may be useful to aid human experts in diagnosing problems. (Although it may also be useful to allow the sender to identify the message which the report was issued, it is hoped that the envelope-id and original-recipient-address returned in the Message/Report body part will replace the traditional use of the returned content for this purpose.)

Return of content may be wasteful of network bandwidth and a variety of implementation strategies can be used. Generally the sender should choose the appropriate strategy and inform the recipient of the required level of returned content required. In the absence of an explicit request for level of return of content such as that provided in [DRPT], the agent that generated the delivery service report should return the full message content.

When 8-bit or binary data not encoded in a 7 bit form is to be returned, and the return path is not guaranteed to be 8-bit or binary capable, two options are available. The original message MAY be re-encoded into a legal 7-bit MIME message or the Text/RFC822-Headers content-type MAY be used to return only the original message headers.

2. The Text/RFC822-Headers content-type

The Text/RFC822-Headers MIME content-type provides a mechanism to label and return only the RFC 822 headers of a failed message. These headers are not the complete message and should not be returned as a Message/RFC822. The returned headers are useful for identifying the failed message and for diagnostics based on the received lines.

The Text/RFC822-Headers content-type is defined as follows:

MIME type name: Text
MIME subtype name: RFC822-Headers
Required parameters: None
Optional parameters: None
Encoding considerations: 7 bit is sufficient for normal RFC822 headers, however, if the headers are broken and require encoding to make them legal 7 bit content, they may be encoded in quoted-printable.
Security considerations: See section 3 of this memo.

The Text/RFC822-Headers body part should contain all the RFC822 header lines from the message which caused the report. The RFC822 headers include all lines prior to the blank line in the message. They include the MIME-Version and MIME Content-Headers.

3. Security Considerations

Automated use of report types without authentication presents several security issues. Forging negative reports presents the opportunity

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for denial-of-service attacks when the reports are used for automated maintenance of directories or mailing lists. Forging positive reports may cause the sender to incorrectly believe a message was delivered when it was not.

A signature covering the entire multipart/report structure could be used to prevent such forgeries; such a signature scheme is, however, beyond the scope of this document.

4. Normative References

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Requirement Levels", BCP 14, RFC 2119, March 1997.

Appendix A - Changes from RFC 1892

Changed Authors contact information

Updated required standards boilerplate

Edited the text to make it spell-checker and grammar checker compliant

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INFORMATIONAL

Errata

Network Working Group J. Klensin
Request for Comments: 3696 February 2004
Category: Informational

Application Techniques for Checking and Transformation of Names

Status of this Memo

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Abstract

Many Internet applications have been designed to deduce top-level domains (or other domain name labels) from partial information. The introduction of new top-level domains, especially non-country-code ones, has exposed flaws in some of the methods used by these applications. These flaws make it more difficult, or impossible, for users of the applications to access the full Internet. This memo discusses some of the techniques that have been used and gives some guidance for minimizing their negative impact as the domain name environment evolves. This document draws summaries of the applicable rules together in one place and supplies references to the actual standards.

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1. Introduction

Designers of user interfaces to Internet applications have often found it useful to examine user-provided values for validity before passing them to the Internet tools themselves. This type of test, most commonly involving syntax checks or application of other rules

to domain names, email addresses, or "web addresses" (URLs or, occasionally, extended URI forms (see Section 4)) may enable better-quality diagnostics for the user than might be available from the protocol itself. Local validity tests on values are also thought to improve the efficiency of back-office processing programs and to reduce the load on the protocols themselves. Certainly, they are consistent with the well-established principle that it is better to detect errors as early as possible.

The tests must, however, be made correctly or at least safely. If criteria are applied that do not match the protocols, users will be inconvenienced, addresses and sites will effectively become inaccessible to some groups, and business and communications opportunities will be lost. Experience in recent years indicates that syntax tests are often performed incorrectly and that tests for top-level domain names are applied using obsolete lists and conventions. We assume that most of these incorrect tests are the result of the inability to conveniently locate exact definitions for the criteria to be applied. This document draws summaries of the applicable rules together in one place and supplies references to the

actual standards. It does not add anything to those standards; it merely draws the information together into a form that may be more accessible.

Many experts on Internet protocols believe that tests and rules of these sorts should be avoided in applications and that the tests in the protocols and back-office systems should be relied on instead. Certainly implementations of the protocols cannot assume that the data passed to them will be valid. Unless the standards specify particular behavior, this document takes no position on whether or not the testing is desirable. It only identifies the correct tests to be made if tests are to be applied.

The sections that follow discuss domain names, email addresses, and URLs.

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2. Restrictions on domain (DNS) names

The authoritative definitions of the format and syntax of domain names appear in RFCs 1035 [RFC1035], 1123 [RFC1123], and 2181 [RFC2181].

Any characters, or combination of bits (as octets), are permitted in DNS names. However, there is a preferred form that is required by most applications. This preferred form has been the only one permitted in the names of top-level domains, or TLDs. In general, it is also the only form permitted in most second-level names registered in TLDs, although some names that are normally not seen by users obey other rules. It derives from the original ARPANET rules for the naming of hosts (i.e., the "hostname" rule) and is perhaps better described as the "LDH rule", after the characters that it permits. The LDH rule, as updated, provides that the labels (words or strings separated by periods) that make up a domain name must consist of only the ASCII [ASCII] alphabetic and numeric characters, plus the hyphen. No other symbols or punctuation characters are permitted, nor is blank space. If the hyphen is used, it is not permitted to appear at either the beginning or end of a label. There is an additional rule that essentially requires that top-level domain names not be all-numeric.

When it is necessary to express labels with non-character octets, or to embed periods within labels, there is a mechanism for keying them in that utilizes an escape sequence. RFC 1035 [RFC1035] should be consulted if that mechanism is needed (most common applications, including email and the Web, will generally not permit those escaped strings). A special encoding is now available for non-ASCII characters, see the brief discussion in Section 5.

Most internet applications that reference other hosts or systems assume they will be supplied with "fully-qualified" domain names, i.e., ones that include all of the labels leading to the root, including the TLD name. Those fully-qualified domain names are then passed to either the domain name resolution protocol itself or to the remote systems. Consequently, purported DNS names to be used in

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applications and to locate resources generally must contain at least one period (".") character. Those that do not are either invalid or require the application to supply additional information. Of course, this principle does not apply when the purpose of the application is to process or query TLD names themselves. The DNS specification also permits a trailing period to be used to denote the root, e.g., "a.b.c" and "a.b.c." are equivalent, but the latter is more explicit and is required to be accepted by applications. This convention is especially important when a TLD name is being referred to directly. For example, while ".COM" has become the popular terminology for referring to that top-level domain, "COM." would be strictly and technically correct in talking about the DNS, since it shows that "COM" is a top-level domain name.

There is a long history of applications moving beyond the "one or more periods" test in an attempt to verify that a valid TLD name is actually present. They have done this either by applying some heuristics to the form of the name or by consulting a local list of valid names. The historical heuristics are no longer effective. If one is to keep a local list, much more effort must be devoted to keeping it up-to-date than was the case several years ago.

The heuristics were based on the observation that, since the DNS was first deployed, all top-level domain names were two, three, or four characters in length. All two-character names were associated with "country code" domains, with the specific labels (with a few early exceptions) drawn from the ISO list of codes for countries and similar entities [IS3166]. The three-letter names were "generic" TLDs, whose function was not country-specific, and there was exactly one four-letter TLD, the infrastructure domain "ARPA." [RFC1591]. However, these length-dependent rules were conventions, rather than anything on which the protocols depended.

Before the mid-1990s, lists of valid top-level domain names changed infrequently. New country codes were gradually, and then more rapidly, added as the Internet expanded, but the list of generic domains did not change at all between the establishment of the "INT." domain in 1988 and ICANN's allocation of new generic TLDs in 2000. Some application developers responded by assuming that any two-letter domain name could be valid as a TLD, but the list of generic TLDs was fixed and could be kept locally and tested. Several of these assumptions changed as ICANN started to allocate new top-level

domains: one two-letter domain that does not appear in the ISO 3166-1 table [ISO.3166.1988] was tentatively approved, and new domains were created with three, four, and even six letter codes.

As of the first quarter of 2003, the list of valid, non-country, top-level domains was .AERO, .BIZ, .COM, .COOP, .EDU, .GOV, .INFO, .INT, .MIL, .MUSEUM, .NAME, .NET, .ORG, .PRO, and .ARPA. ICANN is expected to expand that list at regular intervals, so the list that appears here should not be used in testing. Instead, systems that filter by testing top-level domain names should regularly update their local tables of TLDs (both "generic" and country-code-related) by polling the list published by IANA [DomainList]. It is likely that the better strategy has now become to make the "at least one period" test, to verify LDH conformance (including verification that the apparent TLD name is not all-numeric), and then to use the DNS to determine domain name validity, rather than trying to maintain a local list of valid TLD names.

A DNS label may be no more than 63 octets long. This is in the form actually stored; if a non-ASCII label is converted to encoded "punycode" form (see Section 5), the length of that form may restrict the number of actual characters (in the original character set) that can be accommodated. A complete, fully-qualified, domain name must not exceed 255 octets.

Some additional mechanisms for guessing correct domain names when incomplete information is provided have been developed for use with the web and are discussed in Section 4.4.

3. Restrictions on email addresses

Reference documents: RFC 2821 [RFC2821] and RFC 2822 [RFC2822]

Contemporary email addresses consist of a "local part" separated from a "domain part" (a fully-qualified domain name) by an at-sign ("@"). The syntax of the domain part corresponds to that in the previous section. The concerns identified in that section about filtering and lists of names apply to the domain names used in an email context as well. The domain name can also be replaced by an IP address in square brackets, but that form is strongly discouraged except for testing and troubleshooting purposes.

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The local part may appear using the quoting conventions described below. The quoted forms are rarely used in practice, but are required for some legitimate purposes. Hence, they should not be rejected in filtering routines but, should instead be passed to the email system for evaluation by the destination host.

The exact rule is that any ASCII character, including control characters, may appear quoted, or in a quoted string. When quoting is needed, the backslash character is used to quote the following character. For example

Abc\@def@example.com

is a valid form of an email address. Blank spaces may also appear, as in

Fred\ Bloggs@example.com

The backslash character may also be used to quote itself, e.g.,

Joe.\\Blow@example.com

In addition to quoting using the backslash character, conventional double-quote characters may be used to surround strings. For example

"Abc@def"@example.com

"Fred Bloggs"@example.com

are alternate forms of the first two examples above. These quoted forms are rarely recommended, and are uncommon in practice, but, as discussed above, must be supported by applications that are processing email addresses. In particular, the quoted forms often appear in the context of addresses associated with transitions from other systems and contexts; those transitional requirements do still arise and, since a system that accepts a user-provided email address cannot "know" whether that address is associated with a legacy

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system, the address forms must be accepted and passed into the email environment.

Without quotes, local-parts may consist of any combination of alphabetic characters, digits, or any of the special characters

! # $ % & ' * + - / = ? ^ _ ` . { | } ~

period (".") may also appear, but may not be used to start or end the local part, nor may two or more consecutive periods appear. Stated differently, any ASCII graphic (printing) character other than the at-sign ("@"), backslash, double quote, comma, or square brackets may appear without quoting. If any of that list of excluded characters are to appear, they must be quoted. Forms such as

user+mailbox@example.com

customer/department=shipping@example.com

$A12345@example.com

!def!xyz%abc@example.com

_somename@example.com

are valid and are seen fairly regularly, but any of the characters listed above are permitted. In the context of local parts, apostrophe ("'") and acute accent ("`") are ordinary characters, not quoting characters. Some of the characters listed above are used in conventions about routing or other types of special handling by some receiving hosts. But, since there is no way to know whether the remote host is using those conventions or just treating these characters as normal text, sending programs (and programs evaluating address validity) must simply accept the strings and pass them on.

In addition to restrictions on syntax, there is a length limit on email addresses. That limit is a maximum of 64 characters (octets) in the "local part" (before the "@") and a maximum of 255 characters

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(octets) in the domain part (after the "@") for a total length of 320 characters. Systems that handle email should be prepared to process addresses which are that long, even though they are rarely encountered.

4. URLs and URIs

4.1. URI syntax definitions and issues

The syntax for URLs (Uniform Resource Locators) is specified in [RFC1738]. The syntax for the more general "URI" (Uniform Resource Identifier) is specified in [RFC2396]. The URI syntax is extremely general, with considerable variations permitted according to the type of "scheme" (e.g., "http", "ftp", "mailto") that is being used. While it is possible to use the general syntax rules of RFC 2396 to perform syntax checks, they are general enough --essentially only specifying the separation of the scheme name and "scheme specific part" with a colon (":") and excluding some characters that must be escaped if used-- to provide little significant filtering or validation power.

The following characters are reserved in many URIs -- they must be used for either their URI-intended purpose or must be encoded. Some particular schemes may either broaden or relax these restrictions (see the following sections for URLs applicable to "web pages" and electronic mail), or apply them only to particular URI component parts.

; / ? : @ & = + $, ?

In addition, control characters, the space character, the double-quote (") character,
and the following special characters

< > # %

are generally forbidden and must either be avoided or escaped, as discussed below.

The colon after the scheme name, and the percent sign used to escape characters, are specifically reserved for those purposes, although

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":" may also be used elsewhere in some schemes.

When it is necessary to encode these, or other, characters, the method used is to replace it with a percent-sign ("%") followed by two hexidecimal digits representing its octet value. See section 2.4.1 of [RFC2396] for an exact definition. Unless it is used as a delimiter of the URI scheme itself, any character may optionally be encoded this way; systems that are testing URI syntax should be prepared for these encodings to appear in any component of the URI except the scheme name itself.

A "generic URI" syntax is specified and is more restrictive, but using it to test URI strings requires that one know whether or not

the particular scheme in use obeys that syntax. Consequently, applications that intend to check or validate URIs should normally identify the scheme name and then apply scheme-specific tests. The rules for two of those -- HTTP [RFC1738] and MAILTO [RFC2368] URLs -- are discussed below, but the author of an application which intends to make very precise checks, or to reject particular syntax rather than just warning the user, should consult the relevant scheme-definition documents for precise syntax and relationships.

4.2. The HTTP URL

Absolute HTTP URLs consist of the scheme name, a host name (expressed as a domain name or IP address), and optional port number, and then, optionally, a path, a search part, and a fragment identifier. These are separated, respectively, by a colon and the two slashes that precede the host name, a colon, a slash, a question mark, and a hash mark ("#"). So we have

```
http://host:port/path?search#fragment


http://host/path/

http://host/path#fragment
```



```
http://host/path?search
```

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http://host

and other variations on that form. There is also a "relative" form, but it almost never appears in text that a user might, e.g., enter into a form. See [RFC2616] for details.

The characters

/ ; ?

are reserved within the path and search parts and must be encoded; the first of these may be used unencoded, and is often used within the path, to designate hierarchy.

4.3. The MAILTO URL

MAILTO is a URL type whose content is an email address. It can be used to encode any of the email address formats discussed in Section 3 above. It can also support multiple addresses and the inclusion of headers (e.g., Subject lines) within the body of the URL. MAILTO is authoritatively defined in RFC 2368 [RFC2368]; anyone expecting to accept and test multiple addresses or mail header or body formats should consult that document carefully.

In accepting text for, or validating, a MAILTO URL, it is important to note that, while it can be used to encode any valid email address, it is not sufficient to copy an email address into a MAILTO URL since email addresses may include a number of characters that are invalid in, or have reserved uses for, URLs. Those characters must be encoded, as outlined in Section 4.1 above, when the addresses are mapped into the URL form. Conversely, addresses in MAILTO URLs cannot, in general, be copied directly into email contexts, since few email programs will reverse the decodings (and doing so might be interpreted as a protocol violation).

The following characters may appear in MAILTO URLs only with the specific defined meanings given. If they appear in an email address (i.e., for some other purpose), they must be encoded:

: The colon in "mailto:"

< > # " % { } | \ ^ ~ `

These characters are "unsafe" in any URL, and must always be encoded.

The following characters must also be encoded if they appear in a MAILTO URL

? & =
Used to delimit headers and their values when these are encoded into URLs.

Some examples may be helpful:

Email address	MAILTO URL	Notes
Joe@example.com	mailto:joe@example.com	1
user+mailbox@example.com	mailto:user%2Bmailbox@example.com	2
customer/department=shipping@example.com	mailto:customer%2Fdepartment=shipping@example.com	3
$A12345@example.com	mailto:$A12345@example.com	4
!def!xyz%abc@example.com	mailto:!def!xyz%25abc@example.com	5
_somename@example.com	mailto:_somename@example.com	4

Table 1

Notes on Table

1. No characters appear in the email address that require escaping, so the body of the MAILTO URL is identical to the email address.

2. There is actually some uncertainty as to whether or not the "+" characters requires escaping in MAILTO URLs (the standards are not precisely clear). But, since any character in the address specification may optionally be encoded, it is probably safer to encode it.

3. The "/" character is generally reserved in URLs, and must be encoded as %2F.

4. Neither the "$" nor the "_" character are given any special interpretation in
MAILTO URLs, so need not be encoded.

5. While the "!" character has no special interpretation, the "%" character is used to introduce encoded sequences and hence it must always be encoded.

4.4. Guessing domain names in web contexts

Several web browsers have adopted a practice that permits an incomplete domain name to be used as input instead of a complete URL. This has, for example, permitted users to type "microsoft" and have the browser interpret the input as "http://www.microsoft.com/". Other browser versions have gone even further, trying to build DNS names up through a series of heuristics, testing each variation in turn to see if it appears in the DNS, and accepting the first one found as the intended domain name. Still, others automatically invoke search engines if no period appears or if the reference fails. If any of these approaches are to be used, it is often critical that the browser recognize the complete list of TLDs. If an incomplete
list is used, complete domain names may not be recognized as such and the system may try to turn them into completely different names. For example, "example.aero" is a fully-qualified name, since "AERO." is a TLD name. But, if the system doesn't recognize "AERO" as a TLD name, it is likely to try to look up "example.aero.com" and "www.example.aero.com" (and then fail or find the wrong host), rather than simply looking up the user-supplied name.

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As discussed in Section 2 above, there are dangers associated with software that attempts to "know" the list of top-level domain names locally and take advantage of that knowledge. These name-guessing heuristics are another example of that situation: if the lists are up-to-date and used carefully, the systems in which they are embedded may provide an easier, and more attractive, experience for at least some users. But finding the wrong host, or being unable to find a host even when its name is precisely known, constitute bad experiences by any measure.

More generally, there have been bad experiences with attempts to "complete" domain names by adding additional information to them. These issues are described in some detail in RFC 1535 [RFC1535].

5. Implications of internationalization

The IETF has adopted a series of proposals ([RFC3490] - [RFC3492]) whose purpose is to permit encoding internationalized (i.e., non-ASCII) names in the DNS. The primary standard, and the group generically, are known as "IDNA". The actual strings stored in the

DNS are in an encoded form: the labels begin with the characters "xn--" followed by the encoded string. Applications should be prepared to accept and process the encoded form (those strings are consistent with the "LDH rule" (see Section 2) so should not raise any separate issues) and the use of local, and potentially other, characters as appropriate to local systems and circumstances.

The IDNA specification describes the exact process to be used to validate a name or encoded string. The process is sufficiently complex that shortcuts or heuristics, especially for versions of labels written directly in Unicode or other coded character sets, are likely to fail and cause problems. In particular, the strings cannot be validated with syntax or semantic rules of any of the usual sorts: syntax validity is defined only in terms of the result of executing a particular function.

In addition to the restrictions imposed by the protocols themselves, many domains are implementing rules about just which non-ASCII names

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they will permit to be registered (see, e.g., [JET], [RegRestr]). This work is still relatively new, and the rules and conventions are likely to be different for each domain, or at least each language or script group. Attempting to test for those rules in a client program to see if a user-supplied name might possibly exist in the relevant domain would almost certainly be ill-advised.

One quick local test however, may be reasonable: as of the time of this writing, there should be no instances of labels in the DNS that start with two characters, followed by two hyphens, where the two characters are not "xn" (in, of course, either upper or lower case). Such label strings, if they appear, are probably erroneous or obsolete, and it may be reasonable to at least warn the user about them.

There is ongoing work in the IETF and elsewhere to define internationalized formats for use in other protocols, including email addresses. Those forms may or may not conform to existing rules for ASCII-only identifiers; anyone designing evaluators or filters should watch that work closely.

6. Summary

When an application accepts a string from the user and ultimately passes it on to an API for a protocol, the desirability of testing or filtering the text in any way not required by the protocol itself is hotly debated. If it must divide the string into its components, or otherwise interpret it, it obviously must make at least enough tests to validate that process. With, e.g., domain names or email addresses that can be passed on untouched, the appropriateness of

trying to figure out which ones are valid and which ones are not requires a more complex decision, one that should include considerations of how to make exactly the correct tests and to keep information that changes and evolves up-to-date. A test containing obsolete information, can be extremely frustrating for potential correspondents or customers and may harm desired relationships.

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7. Security Considerations

Since this document merely summarizes the requirements of existing standards, it does not introduce any new security issues. However, many of the techniques that motivate the document raise important security concerns of their own. Rejecting valid forms of domain names, email addresses, or URIs often denies service to the user of those entities. Worse, guessing at the user's intent when an incomplete address, or other string, is given can result in compromises to privacy or accuracy of reference if the wrong target is found and returned. From a security standpoint, the optimum behavior is probably to never guess, but instead, to force the user to specify exactly what is wanted. When that position involves a tradeoff with an acceptable user experience, good judgment should be used and the fact that it is a tradeoff recognized.

Some characters have special or privileged meanings on some systems (i.e., ` on Unix). Applications should be careful to escape those locally if necessary. By the same token, they are valid, and should not be disallowed locally, or escaped when transmitted through Internet protocols, for such reasons if a remote site chooses to use them.

The presence of local checking does not permit remote checking to be bypassed. Note that this can apply to a single machine; in particular, a local MTA should not assume that a local MUA has properly escaped locally-significant special characters.

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[ASCII] American National Standards Institute (formerly United States of America Standards Institute), "USA Code for Information Interchange", ANSI X3.4-1968. ANSI X3.4-1968 has been replaced by newer versions with slight modifications, but the 1968 version remains definitive for the Internet.

[DomainList] Internet Assigned Numbers Authority (IANA), Untitled

alphabetical list of current top-level domains.
http://data.iana.org/TLD/tlds-alpha-by-domain.txt
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Network Working Group D. Crocker, Ed.
Request for Comments: 4234 Brandenburg InternetWorking
Obsoletes: 2234 P. Overell
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October 2005

Augmented BNF for Syntax Specifications: ABNF

Status of This Memo

This document specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state and status of this protocol. Distribution of this memo is unlimited.

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Abstract

Internet technical specifications often need to define a formal syntax. Over the years, a modified version of Backus-Naur Form (BNF), called Augmented BNF (ABNF), has been popular among many Internet specifications. The current specification documents ABNF. It balances compactness and simplicity, with reasonable representational power. The differences between standard BNF and ABNF involve naming rules, repetition, alternatives, order-independence, and value ranges. This specification also supplies additional rule definitions and encoding for a core lexical analyzer of the type common to several Internet specifications.

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1. INTRODUCTION

Internet technical specifications often need to define a formal syntax and are free to employ whatever notation their authors deem useful. Over the years, a modified version of Backus-Naur Form (BNF), called Augmented BNF (ABNF), has been popular among many Internet specifications.
It balances compactness and simplicity,
with reasonable representational power. In the early days of the Arpanet, each specification contained its own definition of ABNF. This included the email specifications, [RFC733] and then [RFC822], which came to be the common citations for defining ABNF. The current document separates those definitions to permit selective reference. Predictably, it also provides some modifications and enhancements.

The differences between standard BNF and ABNF involve naming rules, repetition, alternatives, order-independence, and value ranges. Appendix B supplies rule definitions and encoding for a core lexical analyzer of the type common to several Internet specifications. It is provided as a convenience and is otherwise separate from the meta

language defined
in the body of this document, and separate from its
formal status.

Changes since [RFC2234]:

In Section 3.7, the phrase: "That is, exactly <N> occurrences of <element>." was corrected to: "That is, exactly <n> occurrences of <element>."

Some continuation comment lines needed to be corrected to begin with comment character (";").

2. RULE DEFINITION

2.1. Rule Naming

The name of a rule is simply the name itself; that is, a sequence of characters, beginning with an alphabetic character, and followed by a combination of alphabetics, digits, and hyphens (dashes).

NOTE:

Rule names are case-insensitive

The names <rulename>, <Rulename>, <RULENAME>, and <rUlENamE> all refer to the same rule.

Unlike original BNF, angle brackets ("<", ">") are not required. However, angle brackets may be used around a rule name whenever their presence facilitates in discerning the use of a rule name. This is typically restricted
to rule name references in free-form prose, or
to distinguish partial rules that combine into a string not separated by white space, such as shown in the discussion about repetition, below.

2.2. Rule Form

A rule is defined by the following sequence:

```
name =  elements crlf
```

where <name> is the name of the rule, <elements> is one or more rule names or terminal specifications, and <crlf> is the end-of-line indicator (carriage return followed by line feed). The equal sign separates the name from the definition of the rule. The elements form a sequence of one or more rule names and/or value definitions, combined according to the various operators defined in this document, such as alternative and repetition.

For visual ease, rule definitions are left aligned. When a rule requires multiple
lines, the continuation lines are indented. The
left alignment and indentation are relative to the first lines of the ABNF rules and need not match the left margin of the document.

2.3. Terminal Values

Rules resolve into a string of terminal values, sometimes called characters. In ABNF, a character is merely a non-negative integer. In certain contexts, a specific mapping (encoding) of values into a character set (such as ASCII) will be specified.

Terminals are specified by one or more numeric characters, with the base interpretation of those characters indicated explicitly. The following bases are currently defined:

```
b       =  binary

d       =  decimal

x       =  hexadecimal
```

Hence:

```
CR      =  %d13

CR      =  %x0D
```

respectively specify the decimal and hexadecimal representation of [US-ASCII] for carriage return.

A concatenated string of such values is specified compactly, using a period (".") to indicate a separation of characters within that value. Hence:

```
CRLF       =  %d13.10
```

ABNF permits the specification of literal text strings directly, enclosed in quotation-marks. Hence:

```
command     =  "command string"
```

Literal text strings are interpreted as a concatenated set of printable characters.

NOTE:

ABNF strings are case-insensitive and the character set for these strings is us-ascii.

Hence:

```
rulename = "abc"
```

and:

```
rulename = "aBc"
```

will match "abc", "Abc", "aBc", "abC", "ABc", "aBC", "AbC", and "ABC".

To specify a rule that IS case SENSITIVE, specify the characters individually.

For example:

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```
rulename    =  %d97 %d98 %d99
```

or

```
rulename    =  %d97.98.99
```

will match only the string that comprises only the lowercased characters, abc.

2.4. External Encodings

External representations of terminal value characters will vary according to constraints in the storage or transmission environment. Hence, the same ABNF-based grammar may have multiple external encodings, such as one for a 7-bit US-ASCII environment, another for a binary octet environment, and still a different one when 16-bit Unicode is used. Encoding details are beyond the scope of ABNF, although Appendix A (Core) provides definitions for a 7-bit US-ASCII environment as has been common to much of the Internet.

By separating external encoding from the syntax, it is intended that alternate encoding environments can be used for the same syntax.

3. OPERATORS

3.1. Concatenation: Rule1 Rule2

A rule can define a simple, ordered string of values (i.e., a concatenation of contiguous characters) by listing a sequence of rule names. For example:

```
foo      =  %x61        ; a

bar      =  %x62        ; b
```

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```
mumble      =  foo bar foo
```

So that the rule <mumble> matches the lowercase string "aba".

LINEAR WHITE SPACE: Concatenation is at the core of the ABNF parsing model. A string of contiguous characters (values) is parsed according to the rules defined in ABNF. For Internet specifications, there is some history of permitting linear white space (space and horizontal tab) to be freely and implicitly interspersed around major constructs, such as delimiting special characters or atomic strings.

NOTE:

This specification for ABNF does not provide for implicit specification of linear white space.

Any grammar that wishes to permit linear white space around delimiters or string segments must specify it explicitly.
It is
often useful to provide for such white space in "core" rules that are then used variously among higher-level rules. The "core" rules might be formed into a lexical analyzer or simply be part of the main ruleset.

3.2. Alternatives: Rule1 / Rule2

Elements separated by a forward slash ("/") are alternatives. Therefore,

```
foo / bar
```

will accept <foo> or <bar>.

NOTE:

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A quoted string containing alphabetic characters is a special form for specifying alternative characters and is interpreted as a non-terminal representing the set of combinatorial strings with the contained characters, in the specified order but with any mixture of upper and lower case.

3.3. Incremental Alternatives: Rule1 =/ Rule2

It is sometimes convenient to specify a list of alternatives in fragments. That is, an initial rule may match one or more alternatives, with later rule definitions adding to the set of alternatives. This is particularly useful for otherwise, independent specifications that derive from the same parent rule set, such as often occurs with parameter lists. ABNF permits this incremental definition through the construct:

```
oldrule     =/ additional-alternatives
```

So that the rule set

```
ruleset     =  alt1 / alt2

ruleset     =/ alt3

ruleset     =/ alt4 / alt5
```

is the same as specifying

```
ruleset     =  alt1 / alt2 / alt3 / alt4 / alt5
```

3.4. Value Range Alternatives: %c##-##

A range of alternative numeric values can be specified compactly, using dash ("-") to indicate the range of alternative values. Hence:

```
DIGIT       =  %x30-39
```

is equivalent to:

```
DIGIT       =  "0" / "1" / "2" / "3" / "4" / "5" / "6" /

               "7" / "8" / "9"
```

Concatenated numeric values and numeric value ranges cannot be specified in the same string. A numeric value may use the dotted notation for concatenation or it may use the dash notation to specify

one value range. Hence, to specify one printable character between end of line sequences, the specification could be:

```
char-line = %x0D.0A %x20-7E %x0D.0A
```

3.5. Sequence Group: (Rule1 Rule2)

Elements enclosed in parentheses are treated as a single element, whose contents are STRICTLY ORDERED. Thus,

```
elem (foo / bar) blat
```

matches (elem foo blat) or (elem bar blat), and

```
elem foo / bar blat
```

matches (elem foo) or (bar blat).

NOTE:

It is strongly advised that grouping notation be used, rather than relying on the proper reading of "bare" alternations, when alternatives consist of multiple rule names or literals.

Hence, it is recommended that the following form be used:

```
(elem foo) / (bar blat)
```

It will avoid misinterpretation by casual readers.

The sequence group notation is also used within free text to set off an element sequence from the prose.

3.6. Variable Repetition: *Rule

The operator "*" preceding an element indicates repetition. The full form is:

```
<a>*<b>element
```

where <a> and <b> are optional decimal values, indicating at least <a> and at most <b> occurrences of the element.

Default values are 0 and infinity so that *<element> allows any number, including zero; 1*<element> requires at least one; 3*3<element> allows exactly 3 and 1*2<element> allows one or two.

3.7. Specific Repetition: nRule

A rule of the form:

```
<n>element
```

is equivalent to

```
<n>*<n>element
```

That is, exactly <n> occurrences of <element>. Thus, 2DIGIT is a 2-digit number, and 3ALPHA is a string of three alphabetic characters.

3.8. Optional Sequence: [RULE]

Square brackets enclose an optional element sequence:

```
[foo bar]
```

is equivalent to

```
*1(foo bar).
```

3.9. Comment: ; Comment

A semi-colon starts a comment that continues to the end of line. This is a simple way of including useful notes in parallel with the specifications.

3.10. Operator Precedence

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The various mechanisms described above have the following precedence, from highest (binding tightest) at the top, to lowest (loosest) at the bottom:

Strings, Names formation

Comment

Value range

Repetition

Grouping, Optional

Concatenation

Alternative

Use of the alternative operator, freely mixed with concatenations, can be confusing.

Again, it is recommended that the grouping operator be used to make explicit concatenation groups.

4. ABNF DEFINITION OF ABNF

NOTES:

1. This syntax requires a formatting of rules that is relatively strict. Hence, the version of a ruleset included in a specification might need preprocessing to ensure that it can be interpreted by an ABNF parser.

2. This syntax uses the rules provided in Appendix B (Core).

```
rulelist       =  1*( rule / (*c-wsp c-nl) )

rule           =  rulename defined-as elements c-nl
                     ; continues if next line starts
                     ;  with white space
```

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```
rulename       =  ALPHA *(ALPHA / DIGIT / "-")

defined-as     =  *c-wsp ("=" / "=/") *c-wsp
                  ; basic
rules definition and
                  ;  incremental alternatives

elements       =  alternation *c-wsp

c-wsp          =  WSP / (c-nl WSP)

c-nl           =  comment / CRLF
                  ; comment or newline

comment        =  ";" *(WSP / VCHAR) CRLF

alternation    =  concatenation
                 *(*c-wsp "/" *c-wsp concatenation)

concatenation  =  repetition *(1*c-wsp repetition)

repetition     =  [repeat] element

repeat         =  1*DIGIT / (*DIGIT "*" *DIGIT)
```



```
element        =  rulename / group / option /
                 char-val / num-val / prose-val

group          =  "(" *c-wsp alternation *c-wsp ")"

option         =  "[" *c-wsp alternation *c-wsp "]"

char-val
      =  DQUOTE *(%x20-21 / %x23-7E) DQUOTE
                  ; quoted string of SP and VCHAR
                  ;  without DQUOTE

num-val        =  "%" (bin-val / dec-val / hex-val)
```

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```
bin-val        =  "b" 1*BIT
                 [ 1*("." 1*BIT) / ("-" 1*BIT) ]
                     ; series of concatenated bit values
                     ;  or single ONEOF range

dec-val        =  "d" 1*DIGIT
                 [ 1*("." 1*DIGIT) / ("-" 1*DIGIT) ]

hex-val        =  "x" 1*HEXDIG
                 [ 1*("." 1*HEXDIG) / ("-" 1*HEXDIG) ]

prose-val      =  "<" *(%x20-3D / %x3F-7E) ">"
                     ; bracketed string of SP and VCHAR
                     ;  without angles
                     ; prose description, to be used as
                     ;  last resort
```

5. SECURITY CONSIDERATIONS

Security is truly believed
to be irrelevant to this document.

6. References

6.1. Normative References

[US-ASCII] American National Standards Institute, "Coded Character Set -- 7-bit American Standard Code for Information Interchange", ANSI X3.4, 1986.

6.2. Informative References

[RFC2234] Crocker, D. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", RFC 2234, November 1997.

[RFC733] Crocker, D., Vittal, J., Pogran, K., and D. Henderson, "Standard for the format of ARPA network text messages", RFC 733, November 1977.

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[RFC822] Crocker, D., "Standard for the format of ARPA Internet text messages", STD 11, RFC 822, August 1982.

Appendix A. ACKNOWLEDGEMENTS

The syntax for ABNF was originally specified in RFC 733. Ken L. Harrenstien, of SRI International, was responsible for re-coding the BNF into an augmented BNF that makes the representation smaller and easier to understand.

This recent project began as a simple effort to cull out the portion of RFC 822 that has been repeatedly cited by non-email specification writers, namely the description of augmented BNF. Rather than simply and blindly converting the existing text into a separate document, the working group chose to give careful consideration to the deficiencies, as well as benefits, of the existing specification and related specifications made available over the last 15 years, and therefore to pursue enhancement. This turned the project into something rather more ambitious than was first intended. Interestingly, the result is not massively different from that original, although decisions, such as removing the list notation, came as a surprise.

This "separated" version of the specification was part of the DRUMS working group, with significant contributions from Jerome Abela, Harald Alvestrand, Robert Elz, Roger Fajman, Aviva Garrett, Tom Harsch, Dan Kohn, Bill McQuillan, Keith Moore, Chris Newman, Pete Resnick, and Henning Schulzrinne.

Julian Reschke warrants a special thanks for converting the Draft Standard version to XML source form.

Appendix B. APPENDIX - CORE ABNF OF ABNF

This Appendix is provided as a convenient core for specific grammars. The definitions may be used as a core set of rules.

B.1. Core Rules

Certain basic rules are in uppercase, such as SP, HTAB, CRLF, DIGIT, ALPHA, etc.

```
ALPHA          =  %x41-5A / %x61-7A   ; A-Z / a-z
```

```
BIT          =  "0" / "1"

CHAR         =  %x01-7F
                ; any
7-bit US-ASCII character,
                ;  excluding NUL
```



```
CR           =  %x0D
                ; carriage return

CRLF         =  CR LF
                ; Internet standard newline

CTL          =  %x00-1F / %x7F
                ; controls

DIGIT        =  %x30-39
                ; 0-9

DQUOTE       =  %x22
                ; " (Double Quote)

HEXDIG       =  DIGIT / "A" / "B" / "C" / "D" / "E" / "F"

HTAB         =  %x09
                ; horizontal tab

LF           =  %x0A
                ; linefeed

LWSP         =  *(WSP / CRLF WSP)
                ; linear white space (past newline)


OCTET        =  %x00-FF
                ; 8 bits of data

SP           =  %x20
```

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```
VCHAR          =  %x21-7E
                  ; visible (printing) characters

WSP            =  SP / HTAB
                  ; white space
```

B.2. Common Encoding

Externally, data are represented as "network virtual ASCII" (namely, 7-bit US-ASCII in an 8-bit field), with the high (8th) bit set to zero. A string of values is in "network byte order", in which the higher-valued bytes are represented on the left-hand side and are sent over the network first.

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INFORMATIONAL

Network Working Group E. Hall
Request for Comments: 4155 September 2005
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The application/mbox Media Type

Status of This Memo

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Abstract

This memo requests that the application/mbox media type be authorized for allocation by the IESG, according to the terms specified in RFC 2048. This memo also defines a default format for the mbox database, which must be supported by all conformant implementations.

1. Background and Overview

UNIX-like operating systems have historically made widespread use of "mbox" database files for a variety of local email purposes. In the common case, mbox files store linear sequences of one or more electronic mail messages, with local email clients treating the database as a logical folder of email messages. mbox databases are also used by a variety of other messaging tools, such as mailing list management programs, archiving and filtering utilities, messaging servers, and other related applications. In recent years, mbox databases have also become common on a large number of non-UNIX computing platforms, for similar kinds of purposes.

The increased pervasiveness of these files has led to an increased demand for a standardized, network-wide interchange of these files as discrete database objects. In turn, this dictates a need for a general media type definition for mbox files, which is the subject

and purpose of this memo.

2. About the mbox Database

The mbox database format is not documented in an authoritative specification, but instead exists as a well-known output format that is anecdotally documented, or which is only authoritatively documented for a specific platform or tool.

mbox databases typically contain a linear sequence of electronic mail messages. Each message begins with a separator line that identifies the message sender, and also identifies the date and time at which the message was received by the final recipient (either the last-hop system in the transfer path, or the system which serves as the recipient's mailstore). Each message is typically terminated by an empty line. The end of the database is usually recognized by either the absence of any additional data, or by the presence of an explicit end-of-file marker.

The structure of the separator lines vary across implementations, but usually contain the exact character sequence of "From", followed by a single Space character (0x20), an email address of some kind, another Space character, a timestamp sequence of some kind, and an end-of-line marker. However, due to the lack of any authoritative specification, each of these attributes are known to vary widely across implementations. For example, the email address can reflect any addressing syntax that has ever been used on any messaging system in all of history (specifically including address forms that are not compatible with Internet messages, as defined by RFC 2822 [RFC2822]). Similarly, the timestamp sequences can also vary according to system output, while the end-of-line sequences will often reflect platform-specific requirements. Different data formats can even appear within a single database as a result of multiple mbox files being

concatenated together, or because a single file was accessed by multiple messaging clients, each of which has used its own syntax for the separator line.

Message data within mbox databases often reflects site-specific peculiarities. For example, it is entirely possible for the message body or headers in an mbox database to contain untagged eight-bit character data that implicitly reflects a site-specific default language or locale, or that reflects local defaults for timestamps and email addresses; none of this data is widely portable beyond the local scope. Similarly, message data can also contain unencoded eight-bit binary data, or can use encoding formats that represent a specific platform (e.g., BINHEX or UUENCODE sequences).

Many implementations are also known to escape message body lines that begin with the character sequence of "From ", so as to prevent confusion with overly-liberal parsers that do not search for full separator lines. In the common case, a leading Greater-Than symbol (0x3E) is used for this purpose (with "From " becoming ">From "). However, other implementations are known not to escape such lines unless they are immediately preceded by a blank line or if they also appear to contain an email address and a timestamp. Other implementations are also known to perform secondary escapes against these lines if they are already escaped or quoted, while others ignore these mechanisms altogether.

A comprehensive description of mbox database files on UNIX-like systems can be found at http://qmail.org./man/man5/mbox.html, which should be treated as mostly authoritative for those variations that are otherwise only documented in anecdotal form. However, readers are advised that many other platforms and tools make use of mbox databases, and that there are many more potential variations that can be encountered in the wild.

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In order to mitigate errors that may arise from such vagaries, this specification defines a "format" parameter to the application/mbox media type declaration, which can be used to identify the specific kind of mbox database that is being transferred. Furthermore, this specification defines a "default" database format which MUST be supported by implementations that claim to be compliant with this specification, and which is to be used as the implicit format for undeclared application/mbox data objects. Additional format types are to be defined in subsequent specifications. Messaging systems that receive an mbox database with an unknown format parameter value SHOULD treat the data as an opaque binary object, as if the data had been declared as application/octet-stream

Refer to Appendix A for a description of the default mbox format.

Note that RFC 2046 [RFC2046] defines
the multipart/digest media type
for transferring platform-independent message files. Because that specification defines a set of neutral and strict formatting rules, the multipart/digest media type already facilitates highly-predictable transfer and conversion operations; as such, implementers are strongly encouraged to support and use that media type where possible.

3. Prerequisites and Terminology

Readers of this document are expected to be familiar with the specification for MIME [RFC2045] and MIME-type registrations [RFC2048].

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 [RFC2119].

4. The application/mbox Media Type Registration

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This section provides the media type registration application (as per [RFC2048]).

MIME media type name: application

MIME subtype name: mbox

Required parameters: none

Optional parameters: The "format" parameter identifies the format of the mbox database and the messages contained therein. The default value for the "format" parameter is "default", and refers to the formatting rules defined in Appendix A of this memo. mbox databases that do not have a "format" parameter SHOULD be interpreted as having the implicit "format" value of "default". mbox databases that have an unknown value for the "format" parameter SHOULD be treated as opaque data objects, as if the media type had been specified as application/octet-stream. Additional values for the format parameter are to be defined in subsequent specifications, and registered with IANA.

Encoding considerations: If an email client receives an mbox database as a message attachment, and then stores that attachment within a local mbox database, the contents of the two database files may become irreversibly intermingled, such that both databases are rendered unrecognizable. In order to avoid these collisions, messaging systems that support this specification MUST encode an mbox database (or at a minimum, the separator lines) with non-transparent transfer encoding (such as BASE64 or Quoted-Printable) whenever an application/mbox object is transferred via messaging protocols. Other transfer services are generally encouraged to adopt similar encoding strategies in order to allow for any subsequent retransmission that might occur, but this is not a requirement. Implementers should also be prepared to encode mbox data locally if non-compliant data is received.

Security considerations:

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mbox data is passive, and does not generally represent a unique or new security threat. However, there is risk in sharing any kind of data, because unintentional information may be exposed, and this risk certainly applies to mbox data as well.

Interoperability considerations: Due to the lack of a single authoritative specification for mbox databases, there are a large number of variations between database formats (refer to the introduction text for common examples), and it is expected that non-conformant data will be erroneously tagged or exchanged. Although the "default" format specified in this memo does not allow for these kinds of vagaries, prior negotiation or agreement between humans may sometimes be needed.

Published specification: see Appendix A.

Applications that use this media type: hundreds of messaging products make use of the mbox database format, in one form or another.

Magic number(s): mbox database files can be recognized by having a leading character sequence of "From", followed by a single Space character (0x20), followed by additional printable character data (refer to the description in Appendix A for details). However, implementers are cautioned that all such files will not be compliant with all of the formatting rules, therefore implementers should treat these files with an appropriate amount of circumspection.

File extension(s): mbox database files sometimes have an ".mbox" extension, but this is not required nor expected. As with magic numbers, implementers should avoid reflexive assumptions about the contents of such files.

Macintosh File Type Code(s): None are known to be common.

Person & email address to contact for further information: Eric A. Hall (ehall@ntrg.com)

Intended usage: COMMON

5. Security Considerations

See the discussion in section 4.

6. IANA Considerations

The IANA has registered the application/mbox media type in the MIME registry, using the application provided in section 4 above.

Furthermore, IANA has established and will maintain a registry of values for the "format" parameter as described in this memo. The first registration is the "default" value, using the description provided in Appendix A. Subsequent values for the "format" parameter MUST be accompanied by some form of recognizable, complete, and legitimate specification, such as an IESG-approved specification, or some kind of authoritative vendor documentation.

7. Normative References

[RFC2045] Freed, N. and N. Borenstein, "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies", RFC 2045, November 1996.

[RFC2046] Freed, N. and N. Borenstein, "Multipurpose Internet Mail

Extensions (MIME) Part Two: Media Types", RFC 2046, November 1996.

[RFC2048] Freed, N., Klensin, J., and J. Postel, "Multipurpose Internet Mail Extensions (MIME) Part Four: Registration Procedures", BCP 13, RFC 2048, November 1996.

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

[RFC2822] Resnick, P., "Internet Message Format", RFC 2822, April 2001.

Appendix A. The "default" mbox Database Format

In order to improve interoperability among messaging systems, this memo defines a "default" mbox database format, which MUST be supported by all implementations that claim to be compliant with this specification.

The "default" mbox database format uses a linear sequence of Internet messages, with each message being immediately prefaced by a separator line, and being terminated by an empty line. More specifically:

- o Each message within the database MUST follow the syntax and formatting rules defined in RFC 2822 [RFC2822] and its related specifications, with the exception that the canonical mbox database MUST use a single Line-Feed character (0x0A) as the end-of-line sequence, and MUST NOT use a Carriage-Return/Line-Feed pair (NB: this requirement only applies to the canonical mbox database as transferred, and does not override any other specifications). This usage represents the most common historical representation of the mbox database format, and allows for the least amount of conversion.

- o Messages within the default mbox database MUST consist of seven-bit characters within an eight-bit stream. Eight-bit data within the stream MUST be converted to a seven-bit form (using appropriate, standardized encoding) and appropriately tagged (with the correct header fields) before the database is

transferred.

o Message headers and data in the default mbox database MUST be fully-qualified, as per the relevant specification(s). For example, email addresses in the various header fields MUST have legitimate domain names (as per RFC 2822), while extended characters and encodings MUST be specified in the appropriate location (as per the appropriate MIME specifications), and so forth.

o Each message in the mbox database MUST be immediately preceded by a single separator line, which MUST conform to the following syntax:

The exact character sequence of "From";

a single Space character (0x20);

the email address of the message sender (as obtained from the message envelope
or other authoritative source), conformant
with the "addr-spec" syntax from RFC 2822;

a single Space character;

a timestamp indicating the UTC date and time when the message was originally received, conformant with the syntax of the traditional UNIX 'ctime' output sans timezone (note that the use of UTC precludes the need for a timezone indicator);

an end-of-line marker.

o Each message in the database MUST be terminated by an empty line, containing a single end-of-line marker.

Note that the first message in an mbox database will only be prefaced by a separator line, while every other message will begin with two end-of-line sequences (one at the end of the message itself, and another to mark the end of the message within the mbox database file
stream) and a separator line (marking the new message). The end of

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the database is implicitly reached when no more message data or separator lines are found.

Also note that this specification does not prescribe any escape syntax for message body lines that begin with the character sequence of "From ". Recipient systems are expected to parse full separator lines as they are documented above.

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Type.txt
No license file was found, but licenses were detected in source scan.

Network Working Group
Request for Comments: 2821
Obsoletes: 821, 974, 1869
Updates: 1123
Category: Standards Track

J. Klensin, Editor
AT&T Laboratories
April 2001

Simple Mail Transfer Protocol

Status of this Memo

This document specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state and status of this protocol. Distribution of this memo is unlimited.

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Abstract

This document is a self-contained specification of the basic protocol for the Internet electronic mail transport. It consolidates, updates and clarifies, but doesn't add new or change existing functionality of the following:

- the original SMTP (Simple Mail Transfer Protocol) specification of RFC 821 [30],

- domain name system requirements and implications for mail transport from RFC 1035 [22] and RFC 974 [27],

- the clarifications and applicability statements in RFC 1123 [2], and

- material drawn from the SMTP Extension mechanisms [19].

It obsoletes RFC 821, RFC 974, and updates RFC 1123 (replaces the mail transport materials of RFC 1123). However, RFC 821 specifies some features that were not in significant use in the Internet by the mid-1990s and (in appendices) some additional transport models. Those sections are omitted here in the interest of clarity and brevity; readers needing them should refer to RFC 821.

It also includes some additional material from RFC 1123 that required amplification. This material has been identified in multiple ways,

mostly by tracking flaming on various lists and newsgroups and problems of unusual readings or interpretations that have appeared as the SMTP extensions have been deployed. Where this specification moves beyond consolidation and actually differs from earlier documents, it supersedes them technically as well as textually.

Although SMTP was designed as a mail transport and delivery protocol, this specification also contains information that is important to its use as a 'mail submission' protocol, as recommended for POP [3, 26] and IMAP [6]. Additional submission issues are discussed in RFC 2476 [15].

Section 2.3 provides definitions of terms specific to this document. Except when the historical terminology is necessary for clarity, this document uses the current 'client' and 'server' terminology to identify the sending and receiving SMTP processes, respectively.

A companion document [32] discusses message headers, message bodies and formats
and structures for them, and their relationship.

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1. Introduction

The objective of the Simple Mail Transfer Protocol (SMTP) is to transfer mail reliably and efficiently.

SMTP is independent of the particular transmission subsystem and requires only a reliable ordered data stream channel. While this document specifically discusses transport over TCP, other transports are possible. Appendices to RFC 821 describe some of them.

An important feature of SMTP is its capability to transport mail across networks, usually referred to as "SMTP mail relaying" (see section 3.8). A network consists of the mutually-TCP-accessible hosts on the public Internet, the mutually-TCP-accessible hosts on a firewall-isolated TCP/IP Intranet, or hosts in some other LAN or WAN environment utilizing a non-TCP transport-level protocol. Using

SMTP, a process can transfer mail to another process on the same network or to some other network via a relay or gateway process accessible to both networks.

In this way, a mail message may pass through a number of intermediate relay or gateway hosts on its path from sender to ultimate recipient. The Mail eXchanger mechanisms of the domain name system [22, 27] (and section 5 of this document) are used to identify the appropriate next-hop destination for a message being transported.

2. The SMTP Model

2.1 Basic Structure

The SMTP design can be pictured as:

```
            +----------+                +----------+
+------+    |          |                |          |
| User |<-->|          |     SMTP       |          |
+------+    |  Client- |Commands/Replies| Server-  |
+------+    |   SMTP   |<--------------->|   SMTP   |    +------+
| File |<-->|          |    and Mail    |          |<-->| File |
|System|    |          |                |          |    |System|
+------+    +----------+                +----------+    +------+
            SMTP client                 SMTP server
```

When an SMTP client has a message to transmit, it establishes a two-way transmission channel to an SMTP server. The responsibility of an SMTP client is to transfer mail messages to one or more SMTP servers, or report its failure to do so.

The means by which a mail message is presented to an SMTP client, and how that client determines the domain name(s) to which mail messages are to be transferred is a local matter,

and is not addressed by this
document. In some cases, the domain name(s) transferred to, or
determined by, an SMTP client will identify the final destination(s)
of the mail message. In other cases, common with SMTP clients
associated with implementations of the POP [3, 26] or IMAP [6]
protocols, or when the SMTP client is inside an isolated transport
service environment, the domain name determined will identify an
intermediate destination through which all mail messages are to be
relayed. SMTP clients that transfer all traffic, regardless of the
target domain names associated with the individual messages, or that
do not maintain queues for retrying message transmissions that
initially cannot be completed, may otherwise conform to this
specification but are not considered fully-capable. Fully-capable
SMTP implementations, including the relays used by these less capable

ones, and their destinations, are expected to support all of the
queuing,
retrying, and alternate address functions discussed in this
specification.

The means by which an SMTP client, once it has determined a target
domain name, determines the identity of an SMTP server to which a
copy of a message is to be transferred, and then performs that
transfer, is covered by this document. To effect a mail transfer to
an SMTP server, an SMTP client establishes a two-way transmission
channel to that SMTP server. An SMTP client determines the address
of an appropriate host running an SMTP server by resolving a
destination domain name to either an intermediate Mail eXchanger host
or a final target host.

An SMTP server may be either the ultimate destination or an
intermediate "relay" (that is, it may assume the role of an SMTP
client after receiving the message) or "gateway" (that is, it may
transport the message further using some protocol other than SMTP).
SMTP commands are generated by the SMTP client and sent to
the SMTP
server. SMTP replies are sent from the SMTP server to the SMTP
client in response to the commands.

In other words, message transfer can occur in a single connection
between the original SMTP-sender and the final SMTP-recipient, or can
occur in a series of hops through intermediary systems. In either
case, a formal handoff of responsibility for the message occurs: the
protocol requires that a server accept responsibility for either
delivering a message or properly reporting the failure to do so.

Once the transmission channel is established and initial handshaking
completed, the SMTP client normally initiates a mail transaction.

Such a transaction consists of a series of commands to specify the originator and destination of the mail and transmission of the message content (including any headers or other structure) itself. When the same message is sent to multiple recipients, this protocol encourages the transmission of only one copy of the data for all recipients at the same destination (or intermediate relay) host.

The server responds to each command with a reply; replies may indicate that the command was accepted, that additional commands are expected, or that a temporary or permanent error condition exists. Commands specifying the sender or recipients may include server-permitted SMTP service extension requests as discussed in section 2.2. The dialog is purposely lock-step, one-at-a-time, although this can be modified by mutually-agreed extension requests such as command pipelining [13].

Once a given mail message has been transmitted, the client may either request that the connection be shut down or may initiate other mail transactions. In addition, an SMTP client may use a connection to an SMTP server for ancillary services such as verification of email addresses or retrieval of mailing list subscriber addresses.

As suggested above, this protocol provides mechanisms for the transmission of mail. This transmission normally occurs directly from the sending user's host to the receiving user's host when the two hosts are connected to the same transport service. When they are not connected to the same transport service, transmission occurs via one or more relay SMTP servers. An intermediate host that acts as either an SMTP relay or as a gateway into some other transmission environment is usually selected through the use of the domain name service (DNS) Mail eXchanger mechanism.

Usually, intermediate hosts are determined via the DNS MX record, not by explicit "source" routing (see section 5 and appendices C and F.2).

2.2 The Extension Model

2.2.1 Background

In an effort that started in 1990, approximately a decade after RFC 821 was completed, the protocol was modified with a "service extensions" model that permits the client and server to agree to utilize shared functionality beyond the original SMTP requirements.
The SMTP extension mechanism defines a means whereby an extended SMTP

client and server may recognize each other, and the server can inform the client as to the service extensions that it supports.

Contemporary SMTP implementations MUST support the basic extension mechanisms. For instance, servers MUST support the EHLO command even if they do not implement any specific extensions and clients SHOULD preferentially utilize EHLO rather than HELO. (However, for compatibility with older conforming implementations, SMTP clients and servers MUST support the original HELO mechanisms as a fallback.) Unless the different characteristics of HELO must be identified for interoperability purposes, this document discusses only EHLO.

SMTP is widely deployed and high-quality implementations have proven to be very robust. However, the Internet community now considers some services to be important that were not anticipated when the

protocol was first designed. If support for those services is to be added, it must be done in a way that permits older implementations to continue working acceptably. The extension framework consists of:

- The SMTP command EHLO, superseding the earlier HELO,

- a registry of SMTP service extensions,

- additional parameters to the SMTP MAIL and RCPT commands, and

- optional replacements for commands defined in this protocol, such as for DATA in non-ASCII transmissions [33].

SMTP's strength comes primarily from its simplicity. Experience with many protocols has shown that protocols with few options tend towards ubiquity, whereas protocols with many options tend towards obscurity.

Each and every extension, regardless of its benefits, must be carefully scrutinized with respect to its implementation, deployment, and interoperability costs. In many cases, the cost of extending the SMTP service will likely outweigh the benefit.

2.2.2 Definition and Registration of Extensions

The IANA maintains a registry of SMTP service extensions. A corresponding EHLO keyword value is associated with each extension. Each service extension registered with the IANA must be defined in a formal standards-track or IESG-approved experimental protocol document. The definition must include:

- the textual name of the SMTP service extension;

- the EHLO keyword value associated with the extension;

- the syntax and possible values of parameters associated with the EHLO keyword value;

- any additional SMTP verbs associated with the extension (additional verbs will usually be, but are not required to be, the same as the EHLO keyword value);

- any new parameters the extension associates with the MAIL or RCPT verbs;

- a description of how support for the extension affects the behavior of a server and client SMTP; and,

- the increment by which the extension is increasing the maximum length of the commands MAIL and/or RCPT, over that specified in this standard.

In addition, any EHLO keyword value starting with an upper or lower case "X" refers to a local SMTP service extension used exclusively through bilateral agreement. Keywords beginning with "X" MUST NOT be used in a registered service extension. Conversely, keyword values presented in the EHLO response that do not begin with "X" MUST correspond to a standard, standards-track, or IESG-approved experimental SMTP service extension registered with IANA. A conforming server MUST NOT offer non-"X"-prefixed keyword values that are not described in a registered extension.

Additional verbs and parameter names are bound by the same rules as EHLO keywords; specifically, verbs beginning with "X" are local extensions that may not be registered or standardized. Conversely, verbs not beginning with "X" must always be registered.

2.3 Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described below.

1. MUST This word, or the terms "REQUIRED" or "SHALL", mean that the definition is an absolute requirement of the specification.

2. MUST NOT This phrase, or the phrase "SHALL NOT", mean that the definition is an absolute prohibition of the specification.

3. SHOULD This word, or the adjective "RECOMMENDED", mean that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.

4. SHOULD NOT This phrase, or the phrase "NOT RECOMMENDED" mean that there may exist valid reasons in particular circumstances when the particular behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.

5. MAY This word, or the adjective "OPTIONAL", mean that an item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because the vendor feels that it enhances the product while another vendor may omit the same item. An implementation which does not include a particular option MUST be prepared to interoperate with another implementation which does include the option, though perhaps with reduced functionality. In the same vein an implementation which

does include a particular option MUST be prepared to interoperate with another implementation which does not include the option (except, of course, for the feature the option provides.)

2.3.1 Mail Objects

SMTP transports a mail object. A mail object contains an envelope and content.

The SMTP envelope is sent as a series of SMTP protocol units (described in section 3). It consists of an originator address (to which error reports should be directed); one or more recipient addresses; and optional protocol extension material. Historically, variations on the recipient address specification command (RCPT TO) could be used to specify alternate delivery modes, such as immediate display; those variations have now been deprecated (see appendix F, section F.6).

The SMTP content is sent in the SMTP DATA protocol unit and has two parts: the headers and the body. If the content conforms to other contemporary standards, the headers form a collection of field/value pairs structured as in the message format specification [32]; the body, if structured, is defined according to MIME [12]. The content

is textual in nature, expressed using the US-ASCII repertoire [1]. Although SMTP extensions (such as "8BITMIME" [20]) may relax this restriction for the content body, the content headers are always encoded using the US-ASCII repertoire. A MIME extension [23] defines an algorithm for representing header values outside the US-ASCII repertoire, while still encoding them using the US-ASCII repertoire.

2.3.2 Senders and Receivers

In RFC 821, the two hosts participating in an SMTP transaction were described as the "SMTP-sender" and "SMTP-receiver". This document has been changed to reflect current industry terminology and hence refers to them as the "SMTP client" (or sometimes just "the client") and "SMTP server" (or just "the server"), respectively. Since a given host may act both as server and client in a relay situation, "receiver" and "sender" terminology is still used where needed for clarity.

2.3.3 Mail Agents and Message Stores

Additional mail system terminology became common after RFC 821 was published and, where convenient, is used in this specification. In particular, SMTP servers and clients provide a mail transport service and therefore act as "Mail Transfer Agents" (MTAs). "Mail User Agents" (MUAs or UAs) are normally thought of as the sources and

targets of mail. At the source, an MUA might collect mail to be transmitted from a user and hand it off to an MTA; the final ("delivery") MTA would be thought of as handing the mail off to an MUA (or at least transferring responsibility to it, e.g., by depositing the message in a "message store"). However, while these terms are used with at least the appearance of great precision in other environments, the implied boundaries between MUAs and MTAs often do not accurately match common, and conforming, practices with Internet mail. Hence, the reader should be cautious about inferring the strong relationships and responsibilities that might be implied if these terms were used elsewhere.

2.3.4 Host

For the purposes of this specification, a host is a computer system attached to the Internet (or, in some cases, to a private TCP/IP network) and supporting the SMTP protocol. Hosts are known by names (see "domain"); identifying them by numerical address is discouraged.

2.3.5 Domain

A domain (or domain name) consists of one or more dot-separated components. These components ("labels" in DNS terminology [22]) are restricted for SMTP purposes to consist of a sequence of letters, digits, and hyphens drawn from the ASCII character set [1]. Domain names are used as names of hosts and of other entities in the domain name hierarchy. For example, a domain may refer to an alias (label of a CNAME RR) or the label of Mail eXchanger records to be used to deliver mail instead of representing a host name. See [22] and section 5 of this specification.

The domain name, as described in this document and in [22], is the entire, fully-qualified name (often referred to as an "FQDN"). A domain name that is not in FQDN
form is no more than a local alias.
Local aliases MUST NOT appear in any SMTP transaction.

2.3.6 Buffer and State Table

SMTP sessions are stateful, with both parties carefully maintaining a common view of the current state. In this document we model this state by a virtual "buffer" and a "state table" on the server which may be used by the client to, for example, "clear the buffer" or "reset the state table," causing the information in the buffer to be discarded and the state to be returned to some previous state.

2.3.7 Lines

SMTP commands and, unless altered by a service extension, message data, are transmitted in "lines". Lines consist of zero or more data characters terminated by the sequence ASCII character "CR" (hex value 0D) followed immediately by ASCII character "LF" (hex value 0A). This termination sequence is denoted as <CRLF> in this document. Conforming implementations MUST NOT recognize or generate any other character or character
sequence as a line terminator. Limits MAY be
imposed on line lengths by servers (see section 4.5.3).

In addition, the appearance of "bare" "CR" or "LF" characters in text (i.e., either without the other) has a long history of causing problems in mail implementations and applications that use the mail system as a tool. SMTP client implementations MUST NOT transmit these characters except when they are intended as line terminators and then MUST, as indicated above, transmit them only as a <CRLF> sequence.

2.3.8 Originator, Delivery, Relay, and Gateway Systems

This specification makes a distinction among four types of SMTP systems, based on the role those systems play in transmitting electronic mail. An "originating" system (sometimes called an SMTP originator) introduces mail into the Internet or, more generally, into a transport service environment. A "delivery" SMTP system is one that receives mail from a transport service environment and passes it to a mail user agent or deposits it in a message store which a mail user agent is expected to subsequently access. A "relay" SMTP system (usually referred to just as a "relay") receives mail from an SMTP client and transmits it, without modification to the message data other than adding trace information, to another SMTP server for further relaying or for delivery.

A "gateway" SMTP system (usually referred to just as a "gateway") receives mail from a client system in one transport environment and transmits it to a server system in another transport environment. Differences in protocols or message semantics between the transport environments on either side of a gateway may require that the gateway system perform transformations to the message that are not permitted to SMTP relay systems. For the purposes of this specification, firewalls that rewrite addresses should be considered as gateways, even if SMTP is used on both sides of them (see [11]).

2.3.9 Message Content and Mail Data

The terms "message content" and "mail data" are used interchangeably in this document to describe the material transmitted after the DATA command is accepted and before the end of data indication is transmitted. Message content includes message headers and the possibly-structured message body. The MIME specification [12] provides the standard mechanisms for structured message bodies.

2.3.10 Mailbox and Address

As used in this specification, an "address" is a character string that identifies a user to whom mail will be sent or a location into which mail will be deposited. The term "mailbox" refers to that depository. The two terms are typically used interchangeably unless the distinction between the location in which mail is placed (the mailbox) and a reference to it (the address) is important. An address normally consists of user and domain specifications. The standard mailbox naming convention is defined to be "local-part@domain": contemporary usage permits a much broader set of applications than simple "user names". Consequently, and due to a long history of problems when intermediate hosts have attempted to

optimize transport by modifying them, the local-part MUST be interpreted and assigned semantics only by the host specified in the domain part of the address.

2.3.11 Reply

An SMTP reply is an acknowledgment (positive or negative) sent from receiver to sender via the transmission channel in response to a command. The general form of a reply is a numeric completion code (indicating failure or success) usually followed by a text string. The codes are for use by programs and the text is usually intended for human users. Recent work [34] has specified further structuring of the reply strings, including the use of supplemental and more specific completion codes.

2.4 General Syntax Principles and Transaction Model

SMTP commands and replies have a rigid syntax. All commands begin with a command verb. All Replies begin with a three digit numeric code. In some commands and replies, arguments MUST follow the verb or reply code. Some commands do not accept arguments (after the verb), and some reply codes are followed, sometimes optionally, by free form text. In both cases, where text appears, it is separated from the verb or reply code by a space character. Complete definitions of commands and replies appear in section 4.

Verbs and argument values (e.g., "TO:" or "to:" in the RCPT command and extension name keywords) are not case sensitive, with the sole exception in this specification of a mailbox local-part (SMTP Extensions may explicitly specify case-sensitive elements). That is, a command verb, an argument value other than a mailbox local-part, and free form text MAY be encoded in upper case, lower case, or any mixture of upper and lower case with no impact on its meaning. This is NOT true of a mailbox local-part. The local-part of a mailbox MUST BE treated as case sensitive. Therefore, SMTP implementations MUST take care to preserve the case of mailbox local-parts. Mailbox domains are not case sensitive. In particular, for some hosts the user "smith" is different from the user "Smith". However, exploiting the case sensitivity of mailbox local-parts impedes interoperability and is discouraged.

A few SMTP servers, in violation of this specification (and RFC 821) require that command verbs be encoded by clients in upper case. Implementations MAY wish to employ this encoding to accommodate those servers.

The argument field consists of a variable length character string ending with the end of the line, i.e., with the character sequence <CRLF>. The receiver will take no action until this sequence is received.

The syntax for each command is shown with the discussion of that command. Common elements and parameters are shown in section 4.1.2.

Commands and replies are composed of characters from the ASCII character set [1]. When the transport service provides an 8-bit byte (octet) transmission channel, each 7-bit character is transmitted right justified in an octet with the high order bit cleared to zero. More specifically, the unextended SMTP service provides seven bit transport only. An originating SMTP client which has not successfully negotiated an appropriate extension with a particular server MUST NOT transmit messages with information in the high-order bit of octets. If such messages are transmitted in violation of this rule, receiving SMTP servers MAY clear the high-order bit or reject the message as invalid. In general, a relay SMTP SHOULD assume that the message content it has received is valid and, assuming that the envelope permits doing so, relay it without inspecting that content. Of course, if the content is mislabeled and the data path cannot accept the actual content, this may result in ultimate delivery of a severely garbled message to the recipient. Delivery SMTP systems MAY reject ("bounce") such messages rather than deliver them. No sending SMTP system is permitted to send envelope commands in any character

set other than US-ASCII; receiving systems SHOULD reject such commands, normally using "500 syntax error - invalid character" replies.

Eight-bit message content transmission MAY be requested of the server by a client using extended SMTP facilities, notably the "8BITMIME" extension [20]. 8BITMIME SHOULD be supported by SMTP servers. However, it MUST not be construed as authorization to transmit unrestricted eight bit material. 8BITMIME MUST NOT be requested by senders for material with the high bit on that is not in MIME format with an appropriate content-transfer encoding; servers MAY reject such messages.

The metalinguistic notation used in this document corresponds to the "Augmented BNF" used in other Internet mail system documents. The reader who is not familiar with that syntax should consult the ABNF specification [8]. Metalanguage terms used in running text are surrounded by pointed brackets (e.g., <CRLF>) for clarity.

3. The SMTP Procedures: An Overview

This section contains descriptions of the procedures used in SMTP: session initiation, the mail transaction, forwarding mail, verifying mailbox names and expanding mailing lists, and the opening and closing exchanges. Comments on relaying, a note on mail domains, and a discussion of changing roles are included at the end of this section. Several complete scenarios are presented in appendix D.

3.1 Session Initiation

An SMTP session is initiated when a client opens a connection to a server and the server responds with an opening message.

SMTP server implementations MAY include identification of their software and version information in the connection greeting reply after the 220 code, a practice that permits more efficient isolation and repair of any problems. Implementations MAY make provision for SMTP servers to disable the software and version announcement where it causes security concerns. While some systems also identify their contact point for mail problems, this is not a substitute for maintaining the required "postmaster" address (see section 4.5.1).

The SMTP protocol allows a server to formally reject a transaction while still allowing the initial connection as follows: a 554 response MAY be given in the initial connection opening message instead of the 220. A server taking this approach MUST still wait for the client to send a QUIT (see section 4.1.1.10) before closing the connection and SHOULD respond to any intervening commands with "503 bad sequence of commands". Since an attempt to make an SMTP connection to such a system is probably in error, a server returning a 554 response on connection opening SHOULD provide enough information in the reply text to facilitate debugging of the sending system.

3.2 Client Initiation

Once the server has sent the welcoming message and the client has received it, the client normally sends the EHLO command to the server, indicating the client's identity. In addition to opening the session, use of EHLO indicates that the client is able to process service extensions and requests that the server provide a list of the extensions it supports. Older SMTP systems which are unable to support service extensions and contemporary clients which do not require service extensions in the mail session being initiated, MAY

use HELO instead of EHLO. Servers MUST NOT return the extended EHLO-style response to a HELO command. For a particular connection attempt, if the server returns a "command not recognized" response to EHLO, the client SHOULD be able to fall back and send HELO.

In the EHLO command the host sending the command identifies itself; the command may be interpreted as saying "Hello, I am <domain>" (and, in the case of EHLO, "and I support service extension requests").

3.3 Mail Transactions

There are three steps to SMTP mail transactions. The transaction starts with a MAIL command which gives the sender identification. (In general, the MAIL command may be sent only when no mail transaction is in progress; see section 4.1.4.) A series of one or more RCPT commands follows giving the receiver information. Then a DATA command initiates transfer of the mail data and is terminated by the "end of mail" data indicator, which also confirms the transaction.

The first step in the procedure is the MAIL command.

```
MAIL FROM:<reverse-path> [SP <mail-parameters> ] <CRLF>
```

This command tells the SMTP-receiver that a new mail transaction is starting and to reset all its state tables and buffers, including any recipients or mail data. The <reverse-path> portion of the first or only argument contains the source mailbox (between "<" and ">" brackets), which can be used to report errors (see section 4.2 for a discussion of error reporting). If accepted, the SMTP server returns a 250 OK reply. If the mailbox specification is not acceptable for some reason, the server MUST return a reply indicating whether the

failure is permanent (i.e., will occur again if the client tries to send the same address again) or temporary (i.e., the address might be accepted if the client tries again later). Despite the apparent scope of this requirement, there are circumstances in which the acceptability of the reverse-path may not be determined until one or more forward-paths (in RCPT commands) can be examined. In those cases, the server MAY reasonably accept the reverse-path (with a 250 reply) and then report problems after the forward-paths are received and examined. Normally, failures produce 550 or 553 replies.

Historically, the <reverse-path> can contain more than just a mailbox, however, contemporary systems SHOULD NOT use source routing

(see appendix C).

The optional <mail-parameters> are associated with negotiated SMTP service extensions (see section 2.2).

The second step in the procedure is the RCPT command.

RCPT TO:<forward-path> [SP <rcpt-parameters>] <CRLF>

The first or only argument to this command includes a forward-path (normally a mailbox and domain, always surrounded by "<" and ">" brackets) identifying one recipient. If accepted, the SMTP server returns a 250 OK reply and stores the forward-path. If the recipient is known not to be a deliverable address, the SMTP server returns a 550 reply, typically with a string such as "no such user - " and the mailbox name (other circumstances and reply codes are possible). This step of the procedure can be repeated any number of times.

The <forward-path> can contain more than just a mailbox. Historically, the <forward-path> can be a source routing list of hosts and the destination mailbox, however, contemporary SMTP clients SHOULD NOT utilize source routes (see appendix C). Servers MUST be prepared to encounter a list of source routes in the forward path, but SHOULD ignore the routes or MAY decline to support the relaying they imply. Similarly, servers MAY decline to accept mail that is destined for other hosts or systems. These restrictions make a server useless as a relay for clients that do not support full SMTP functionality. Consequently, restricted-capability clients MUST NOT assume that any SMTP server on the Internet can be used as their mail processing (relaying) site. If a RCPT command appears without a previous MAIL command, the server MUST return a 503 "Bad sequence of commands" response. The optional <rcpt-parameters> are associated with negotiated SMTP service extensions (see section 2.2).

The third step in the procedure is the DATA command (or some alternative specified in a service extension).

DATA <CRLF>

If accepted, the SMTP server returns a 354 Intermediate reply and considers all succeeding lines up to but not including the end of mail data indicator to be the message text. When the end of text is successfully received and stored the SMTP-receiver sends a 250 OK reply.

Since the mail data is sent on the transmission channel, the end of mail data must be indicated so that the command and reply dialog can

be resumed. SMTP indicates the end of the mail data by sending a line containing only a "." (period or full stop). A transparency procedure is used to prevent this from interfering with the user's text (see section 4.5.2).

The end of mail data indicator also confirms the mail transaction and tells the SMTP server to now process the stored recipients and mail data. If accepted, the SMTP server returns a 250 OK reply. The DATA command can fail at only two points in the protocol exchange:

- If there was no MAIL, or no RCPT, command, or all such commands were rejected, the server MAY return a "command out of sequence" (503) or "no valid recipients" (554) reply in response to the DATA command. If one of those replies (or any other 5yz reply) is received, the client MUST NOT send the message data; more generally, message data MUST NOT be sent unless a 354 reply is received.

- If the verb is initially accepted and the 354 reply issued, the DATA command should fail only if the mail transaction was incomplete (for example, no recipients), or if resources were unavailable (including, of course, the server unexpectedly becoming unavailable), or if the server determines that the message should be rejected for policy or other reasons.

However, in practice, some servers do not perform recipient verification until after the message text is received. These servers SHOULD treat a failure for one or more recipients as a "subsequent failure" and return a mail message as discussed in section 6. Using a "550 mailbox not found" (or equivalent) reply code after the data are accepted makes it difficult or impossible for the client to determine which recipients failed.

When RFC 822 format [7, 32] is being used, the mail data include the memo header items such as Date, Subject, To, Cc, From. Server SMTP systems SHOULD NOT reject messages based on perceived defects in the RFC 822 or MIME [12] message header or message body. In particular,

they MUST NOT reject messages in which the numbers of Resent-fields do not match or Resent-to appears without Resent-from and/or Resent-date.

Mail transaction commands MUST be used in the order discussed above.

3.4 Forwarding

for Address Correction or Updating

Forwarding support is most often required to consolidate and simplify addresses within, or relative to, some enterprise and less frequently to establish addresses to link a person's prior address with current one. Silent forwarding of messages (without server notification to the sender), for security or non-disclosure purposes, is common in the contemporary Internet.

In both the enterprise and the "new address" cases, information hiding (and sometimes security) considerations argue against exposure of the "final" address through the SMTP protocol as a side-effect of the forwarding activity. This may be especially important when the final address may not even be reachable by the sender. Consequently, the "forwarding" mechanisms described in section 3.2 of RFC 821, and especially the 251 (corrected destination) and 551 reply codes from RCPT must be evaluated carefully by implementers and, when they are available, by those configuring systems.

In particular:

* Servers MAY forward messages when they are aware of an address change. When they do so, they MAY either provide address-updating information with a 251 code, or may forward "silently" and return a 250 code. But, if a 251 code is used, they MUST NOT assume that the client will actually update address information or even return that information to the user.

Alternately,

* Servers MAY reject or bounce messages when they are not deliverable when addressed. When they do so, they MAY either provide address-updating information with a 551 code, or may reject the message as undeliverable with a 550 code and no address-specific information. But, if a 551 code is used, they MUST NOT assume that the client will actually update address information or even return that information to the user.

SMTP server implementations that support the 251 and/or 551 reply codes are strongly encouraged to provide configuration mechanisms so that sites which conclude that they would undesirably disclose information can disable or restrict their use.

3.5 Commands for Debugging Addresses

3.5.1 Overview

SMTP provides commands to verify a user name or obtain the content of a mailing list. This is done with the VRFY and EXPN commands, which have character string arguments. Implementations SHOULD support VRFY and EXPN (however, see section 3.5.2 and 7.3).

For the VRFY command, the string is a user name or a user name and domain (see below). If a normal (i.e., 250) response is returned, the response MAY include the full name of the user and MUST include the mailbox of the user. It MUST be in either of the following forms:

```
User Name <local-part@domain>
local-part@domain
```

When a name that is the argument to VRFY could identify more than one mailbox, the server MAY either note the ambiguity or identify the alternatives. In other words, any of the following are legitimate response to VRFY:

```
553 User ambiguous
```

or

```
553- Ambiguous;  Possibilities are
553-Joe Smith <jsmith@foo.com>
553-Harry Smith <hsmith@foo.com>
553 Melvin Smith <dweep@foo.com>
```

or

```
553-Ambiguous;  Possibilities
553- <jsmith@foo.com>
553- <hsmith@foo.com>
553 <dweep@foo.com>
```

Under normal circumstances, a client receiving a 553 reply would be expected to expose the result to the user. Use of exactly the forms given, and the "user ambiguous" or "ambiguous" keywords, possibly supplemented by extended reply codes such as those described in [34], will facilitate automated translation into other languages as needed. Of course, a client that was highly automated or that was operating in another language than English, might choose to try to translate the response, to return some other indication to the user than the literal text of the reply, or to take some automated action such as consulting a directory service for additional information before

reporting to the user.

For the EXPN command, the string identifies a mailing list, and the successful (i.e., 250) multiline response MAY include the full name of the users and MUST give the mailboxes on the mailing list.

In some hosts the distinction between a mailing list and an alias for a single mailbox is a bit fuzzy, since a common data structure may hold both types of entries, and it is possible to have mailing lists containing only one mailbox. If a request is made to apply VRFY to a mailing list, a positive response MAY be given if a message so addressed would be delivered to everyone on the list, otherwise an error SHOULD be reported (e.g., "550 That is a mailing list, not a user" or "252 Unable to verify members of mailing list"). If a request is made to expand a user name, the server MAY return a positive
response consisting of a list containing one name, or an error MAY be reported (e.g., "550 That is a user name, not a mailing list").

In the case of a successful multiline reply (normal for EXPN) exactly one mailbox is to be specified on each line of the reply. The case of an ambiguous request is discussed above.

"User name" is a fuzzy term and has been used deliberately. An implementation of the VRFY or EXPN commands MUST include at least recognition of local mailboxes as "user names". However, since current Internet practice often results in a single host handling mail for multiple domains, hosts, especially hosts that provide this functionality, SHOULD accept the "local-part@domain" form as a "user name"; hosts MAY also choose to recognize other strings as "user names".

The case of expanding a mailbox list requires a multiline reply, such as:

```
C: EXPN Example-People
S: 250-Jon Postel <Postel@isi.edu>
S: 250-Fred
Fonebone <Fonebone@physics.foo-u.edu>
S: 250 Sam Q. Smith <SQSmith@specific.generic.com>
```

or

```
C: EXPN Executive-Washroom-List
S: 550 Access Denied to You.
```

The character string arguments of the VRFY and EXPN commands cannot

be further restricted due to the variety of implementations of the user name and mailbox list concepts. On some systems it may be appropriate for the argument of the EXPN command to be a file name for a file containing a mailing list, but again there are a variety of file naming conventions in the Internet. Similarly, historical variations in what is returned by these commands are such that the response SHOULD be interpreted very carefully, if at all, and SHOULD generally only be used for diagnostic purposes.

3.5.2 VRFY Normal Response

When normal (2yz or 551) responses are returned from a VRFY or EXPN request, the reply normally includes the mailbox name, i.e., "<local-part@domain>", where "domain" is a fully qualified domain name, MUST appear in the syntax. In circumstances exceptional enough to justify violating the intent of this specification, free-form text MAY be returned. In order to facilitate parsing by both computers and people, addresses SHOULD appear in pointed brackets. When addresses, rather than free-form debugging information, are returned, EXPN and VRFY MUST return only valid domain addresses that are usable in SMTP RCPT commands. Consequently, if an address implies delivery to a program or other system, the mailbox name used to reach that target MUST be given. Paths (explicit source routes) MUST NOT be returned by VRFY or EXPN.

Server implementations SHOULD support both VRFY and EXPN. For security reasons, implementations MAY provide local installations a way to disable either or both of these commands through configuration options or the equivalent. When these commands are supported, they are not required to work across relays when relaying is supported. Since they were both optional in RFC 821, they MUST be listed as service extensions in an EHLO response, if they are supported.

3.5.3 Meaning of VRFY or EXPN Success Response

A server MUST NOT return a 250 code in response to a VRFY or EXPN command unless it has actually verified the address. In particular, a server MUST NOT return 250 if all it has done is to verify that the syntax given is valid. In that case, 502 (Command not implemented) or 500 (Syntax error, command unrecognized) SHOULD be returned. As stated elsewhere, implementation (in the sense of actually validating addresses and returning information) of VRFY and EXPN are strongly recommended. Hence, implementations that return 500 or 502 for VRFY are not in full compliance with this specification.

There may be circumstances where an address appears to be valid but

cannot reasonably be verified in real time, particularly when a server
is acting as a mail exchanger for another server or domain. "Apparent validity" in this case would normally involve at least syntax checking and might involve verification that any domains specified were ones to which the host expected to be able to relay mail. In these situations, reply code 252 SHOULD be returned. These cases parallel the discussion of RCPT verification discussed in section 2.1. Similarly, the discussion in section 3.4 applies to the use of reply codes 251 and 551 with VRFY (and EXPN) to indicate addresses that are recognized but that would be forwarded or bounced were mail received for them. Implementations generally SHOULD be more aggressive about address verification in the case of VRFY than in the case of RCPT, even if it takes a little longer to do so.

3.5.4 Semantics and Applications of EXPN

EXPN is often very useful in debugging and understanding problems with mailing lists and multiple-target-address aliases. Some systems have attempted to use source expansion of mailing lists as a means of eliminating duplicates. The propagation of aliasing systems with mail on the Internet, for hosts (typically with MX and CNAME DNS records), for mailboxes (various types of local host aliases), and in various proxying arrangements, has made it nearly impossible for these strategies to work consistently, and mail systems SHOULD NOT attempt them.

3.6 Domains

Only resolvable, fully-qualified, domain names (FQDNs) are permitted when domain names are used in SMTP. In other words, names that can be resolved to MX RRs or A RRs (as discussed in section 5) are permitted, as are CNAME RRs whose targets can be resolved, in turn, to MX or A RRs. Local nicknames or unqualified names MUST NOT be used. There are two exceptions to the rule requiring FQDNs:

- The domain name given in the EHLO command MUST BE either a primary host name (a domain name that resolves to an A RR) or, if the host has no name, an address literal as described in section 4.1.1.1.

- The reserved mailbox name "postmaster" may be used in a RCPT command without domain qualification (see section 4.1.1.3) and MUST be accepted if so used.

3.7 Relaying

In general, the availability of Mail eXchanger records in the domain name system [22, 27] makes the use of explicit source routes in the Internet mail system unnecessary. Many historical problems with their interpretation have made their use undesirable. SMTP clients SHOULD NOT generate explicit source routes except under unusual circumstances. SMTP servers MAY decline to act as mail relays or to accept addresses that specify source routes. When route information is encountered, SMTP servers are also permitted to ignore the route information and simply send to the final destination specified as the last element in the route and SHOULD do so. There has been an invalid practice
of using names that do not appear in the DNS as destination names, with the senders counting on the intermediate hosts specified in source routing to resolve any problems. If source routes are stripped, this practice will cause failures. This is one of several reasons why SMTP clients MUST NOT generate invalid source routes or depend on serial resolution of names.

When source routes are not used, the process described in RFC 821 for constructing a reverse-path from the forward-path is not applicable and the reverse-path at the time of delivery will simply be the address that appeared in the MAIL command.

A relay SMTP server is usually the target of a DNS MX record that designates it, rather than the final delivery system. The relay server may accept or reject the task of relaying the mail in the same way it accepts or rejects mail for a local user. If it accepts the task, it then becomes an SMTP client, establishes a transmission channel to the next SMTP server specified in the DNS (according to the rules in section 5), and sends it the mail. If it declines to relay mail to a particular address for policy reasons, a 550 response SHOULD be returned.

Many mail-sending clients exist, especially in conjunction with facilities that receive mail via POP3 or IMAP, that have limited capability to support some of the requirements of this specification, such as the ability to queue messages for subsequent delivery attempts. For these clients, it is common practice to make private arrangements to send all messages to a single server for processing and subsequent distribution. SMTP, as specified here, is not ideally suited for this role, and work is underway on standardized mail submission protocols that might eventually supercede the current practices. In any event, because these arrangements are private and fall outside the scope of this specification, they are not described here.

It is important to note that MX records can point to SMTP servers which act as gateways into other environments, not just SMTP relays

and final delivery systems; see sections 3.8 and 5.

If an SMTP server has accepted the task of relaying the mail and later finds that the destination is incorrect or that the mail cannot be delivered for some other reason, then it MUST construct an "undeliverable mail" notification message and send it to the originator of the undeliverable mail (as indicated by the reverse-path). Formats specified for non-delivery reports by other standards (see, for example, [24, 25]) SHOULD be used if possible.

This notification message must be from the SMTP server at the relay host or the host that first determines that delivery cannot be accomplished. Of course, SMTP servers MUST NOT send notification messages about problems transporting notification messages. One way to prevent loops in error reporting is to specify a null reverse-path in the MAIL command of a notification message. When such a message is transmitted the reverse-path MUST be set to null (see section 4.5.5 for additional discussion). A MAIL command with a null reverse-path appears as follows:

```
MAIL FROM:<>
```

As discussed in section 2.4.1, a relay SMTP has no need to inspect or act upon the headers or body of the message data and MUST NOT do so except to add its own "Received:" header (section 4.4) and, optionally, to attempt to detect looping in the mail system (see section 6.2).

3.8 Mail Gatewaying

While the relay function discussed above operates within the Internet SMTP transport service environment, MX records or various forms of explicit routing may require that an intermediate SMTP server perform a translation function between one transport service and another. As discussed in section 2.3.8, when such a system is at the boundary between two transport service environments, we refer to it as a "gateway" or "gateway SMTP".

Gatewaying mail between different mail environments, such as different mail formats and protocols, is complex and does not easily yield to standardization. However, some general requirements may be given for a gateway between the Internet and another mail environment.

3.8.1 Header Fields in Gatewaying

Header fields MAY be rewritten when necessary as messages are gatewayed across mail environment boundaries. This may involve inspecting the message body or interpreting the local-part of the destination address in spite of the prohibitions in section 2.4.1.

Other mail systems gatewayed to the Internet often use a subset of RFC 822 headers or provide similar functionality with a different syntax, but some of these mail systems do not have an equivalent to the SMTP envelope. Therefore, when a message leaves the Internet environment, it may be necessary to fold the SMTP envelope information into the message header. A possible solution would be to create new header fields to carry the envelope information (e.g., "X-SMTP-MAIL:" and "X-SMTP-RCPT:"); however, this would require changes in mail programs in foreign environments and might risk disclosure of private information (see section 7.2).

3.8.2 Received Lines in Gatewaying

When forwarding a message into or out of the Internet environment, a gateway MUST prepend a Received: line, but it MUST NOT alter in any way a Received: line that is already in the header.

"Received:" fields of messages originating from other environments may not conform exactly to this specification. However, the most important use of Received: lines is for debugging mail faults, and this debugging can be severely hampered by well-meaning gateways that try to "fix" a Received: line. As another consequence of trace fields arising in non-SMTP environments, receiving systems MUST NOT reject
mail based on the format of a trace field and SHOULD be extremely robust in the light of unexpected information or formats in those fields.

The gateway SHOULD indicate the environment and protocol in the "via" clauses of Received field(s) that it supplies.

3.8.3 Addresses in Gatewaying

From the Internet side, the gateway SHOULD accept all valid address formats in SMTP commands and in RFC 822 headers, and all valid RFC 822 messages. Addresses and headers generated by gateways MUST conform to applicable Internet standards (including this one and RFC 822). Gateways are, of course, subject to the same rules for handling source routes as those described for other SMTP systems in section 3.3.

3.8.4 Other Header Fields in Gatewaying

The gateway MUST ensure that all header fields of a message that it forwards into the Internet mail environment meet the requirements for Internet mail. In particular, all addresses in "From:", "To:", "Cc:", etc., fields MUST be transformed (if necessary) to satisfy RFC 822 syntax, MUST reference only fully-qualified domain names, and MUST be effective and useful for sending replies. The translation algorithm used to convert mail from the Internet protocols to another environment's protocol SHOULD ensure that error messages from the foreign mail environment are delivered to the return path from the SMTP envelope, not to the sender listed in the "From:" field (or other fields) of the RFC 822 message.

3.8.5 Envelopes in Gatewaying

Similarly, when forwarding a message from another environment into the Internet, the gateway SHOULD set the envelope return path in accordance with an error message return address, if supplied by the foreign environment. If the foreign environment has no equivalent concept, the gateway must select and use a best approximation, with the message originator's address as the default of last resort.

3.9 Terminating Sessions and Connections

An SMTP connection is terminated when the client sends a QUIT command. The server responds with a positive reply code, after which it closes the connection.

An SMTP server MUST NOT intentionally close the connection except:

- After receiving a QUIT command and responding with a 221 reply.

- After detecting the need to shut down the SMTP service and returning a 421 response code. This response code can be issued after the server receives any command or, if necessary, asynchronously from command receipt (on the assumption that the client will receive it after the next command is issued).

In particular, a server that closes connections in response to commands that are not understood is in violation of this specification. Servers are expected to be tolerant of unknown commands, issuing a 500 reply and awaiting further instructions from the client.

An SMTP server which is forcibly shut down via external means SHOULD attempt to send a line containing a 421 response code to the SMTP client before exiting. The SMTP client will normally read the 421

response code after sending its next command.

SMTP clients that experience a connection close, reset, or other communications failure due to circumstances not under their control (in violation of the intent of this specification but sometimes unavoidable) SHOULD, to maintain the robustness of the mail system, treat the mail transaction as if a 451 response had been received and act accordingly.

3.10 Mailing Lists and Aliases

An SMTP-capable host SHOULD support both the alias and the list models of address expansion for multiple delivery. When a message is delivered or forwarded to each address of an expanded list form, the return address in the envelope ("MAIL FROM:") MUST be changed to be the address of a person or other entity who administers the list. However, in this case, the message header [32] MUST be left unchanged; in particular, the "From" field of the message header is unaffected.

An important mail facility is a mechanism for multi-destination delivery of a single message, by transforming (or "expanding" or "exploding") a pseudo-mailbox address into a list of destination mailbox addresses. When a message is sent to such a pseudo-mailbox (sometimes called an "exploder"), copies are forwarded or redistributed to each mailbox in the expanded list. Servers SHOULD simply utilize the addresses on the list; application of heuristics or other matching rules to eliminate some addresses, such as that of the originator, is strongly discouraged. We classify such a pseudo-mailbox as an "alias" or a "list", depending upon the expansion rules.

3.10.1 Alias

To expand an alias, the recipient mailer simply replaces the pseudo-mailbox address in the envelope with each of the expanded addresses in turn; the rest of the envelope and the message body are left unchanged. The message is then delivered or forwarded to each expanded address.

3.10.2 List

A mailing list may be said to operate by "redistribution" rather than by "forwarding". To expand a list, the recipient mailer replaces the pseudo-mailbox address in the envelope with all of the expanded

addresses. The return address in the envelope is changed so that all error messages generated by the final deliveries will be returned to a list administrator, not to the message originator, who generally has no control over the contents of the list and will typically find error messages annoying.

4. The SMTP Specifications

4.1 SMTP Commands

4.1.1 Command Semantics and Syntax

The SMTP commands define the mail transfer or the mail system function requested by the user. SMTP commands are character strings terminated by <CRLF>. The commands themselves are alphabetic characters terminated by <SP> if parameters follow and <CRLF> otherwise. (In the interest of improved interoperability, SMTP receivers are encouraged to tolerate trailing white space before the terminating <CRLF>.) The syntax of the local part of a mailbox must conform to receiver site conventions and the syntax specified in section 4.1.2. The SMTP commands are discussed below. The SMTP replies are discussed in section 4.2.

A mail transaction involves several data objects which are communicated as arguments to different commands. The reverse-path is the argument of the MAIL command, the forward-path is the argument of the RCPT command, and the mail data is the argument of the DATA command. These arguments or data objects must be transmitted and held pending the confirmation communicated by the end of mail data indication which finalizes the transaction. The model for this is that distinct buffers are provided to hold the types of data objects, that is, there is a reverse-path buffer, a forward-path buffer, and a mail data buffer. Specific commands cause information to be appended to a specific buffer, or cause one or more buffers to be cleared.

Several commands (RSET, DATA, QUIT) are specified as not permitting parameters. In the absence of specific extensions offered by the server and accepted by the client, clients MUST NOT send such parameters and servers SHOULD reject commands containing them as having invalid syntax.

4.1.1.1 Extended HELLO (EHLO) or HELLO (HELO)

These commands are used to identify the SMTP client to the SMTP server. The argument field contains the fully-qualified domain name of the SMTP client if one is available. In situations in which the SMTP client system does not have a meaningful domain name (e.g., when

its address is dynamically allocated and no reverse mapping record is

available), the client SHOULD send an address literal (see section
4.1.3), optionally followed by information that will help
to identify
the client system. y The SMTP server identifies itself to the SMTP
client in the connection greeting reply and in the response to this
command.

A client SMTP SHOULD start an SMTP session by issuing the EHLO
command. If the SMTP server supports the SMTP service extensions it
will give a successful response, a failure response, or an error
response. If the SMTP server, in violation of this specification,
does not support any SMTP service extensions it will generate an
error response. Older client SMTP systems MAY, as discussed above,
use HELO (as specified in RFC 821) instead of EHLO, and servers MUST
support the HELO command and reply properly to it. In any event, a
client MUST issue HELO or EHLO before starting a mail transaction.

These commands, and a "250 OK" reply to one of them, confirm that
both the SMTP client and the SMTP server are in the initial state,
that is, there is no transaction in progress and all state
tables and
buffers are cleared.

Syntax:

```
ehlo          = "EHLO" SP Domain CRLF
helo          = "HELO" SP Domain CRLF
```

Normally, the response to EHLO will be a multiline reply. Each line
of the response contains a keyword and, optionally, one or more
parameters. Following the normal syntax for multiline replies, these
keyworks follow the code (250) and a hyphen for all but the last
line, and the code and a space for the last line. The syntax for a
positive response, using the ABNF notation and terminal symbols of
[8], is:

```
ehlo-ok-rsp  =    ( "250"    domain [ SP ehlo-greet ] CRLF )
            / (    "250-"   domain [ SP ehlo-greet ] CRLF
               *( "250-"   ehlo-line              CRLF )
                  "250"    SP ehlo-line           CRLF  )

ehlo-greet   = 1*(%d0-9 / %d11-12 / %d14-127)
            ; string of any characters other than CR or LF

ehlo-line    = ehlo-keyword *( SP
```

ehlo-param)

```
ehlo-keyword = (ALPHA / DIGIT) *(ALPHA / DIGIT / "-")
               ; additional syntax of ehlo-params depends on
               ; ehlo-keyword

ehlo-param   = 1*(%d33-127)
               ; any CHAR excluding <SP> and all
               ; control characters (US-ASCII 0-31 inclusive)
```

Although EHLO keywords may be specified in upper, lower, or mixed case, they MUST always be recognized and processed in a case-insensitive manner. This is simply an extension of practices specified in RFC 821 and section 2.4.1.

4.1.1.2 MAIL (MAIL)

This command is used to initiate a mail transaction in which the mail data is delivered to an SMTP server which may, in turn, deliver it to one or more mailboxes or pass it on to another system (possibly using SMTP). The argument field contains a reverse-path and may contain optional parameters. In general, the MAIL command may be sent only when no mail transaction is in progress, see section 4.1.4.

The reverse-path consists of the sender mailbox. Historically, that mailbox might optionally have been preceded by a list of hosts, but that behavior is now deprecated (see appendix C). In some types of reporting messages for which a reply is likely to cause a mail loop (for example, mail delivery and nondelivery notifications), the reverse-path may be null (see section 3.7).

This command clears the reverse-path buffer, the forward-path buffer, and the mail data buffer; and inserts the reverse-path information from this command into the reverse-path buffer.

If service extensions were negotiated, the MAIL command may also carry parameters associated with a particular service extension.

Syntax:

```
"MAIL FROM:" ("<>" / Reverse-Path)
             [SP Mail-parameters] CRLF
```

4.1.1.3 RECIPIENT (RCPT)

This command is used to identify an individual recipient of the mail data; multiple recipients are specified by multiple

use of this
command. The argument field contains a forward-path and may contain optional parameters.

The forward-path normally consists of the required destination mailbox. Sending systems SHOULD not generate the optional list of hosts known as a source route. Receiving systems MUST recognize

source route syntax but SHOULD strip off the source route specification and utilize the domain name associated with the mailbox as if the source route had not been provided.

Similarly, relay hosts SHOULD strip or ignore source routes, and names MUST NOT be copied into the reverse-path. When mail reaches its ultimate destination (the forward-path contains only a destination mailbox), the SMTP server inserts it into the destination mailbox in accordance with its host mail conventions.

For example, mail received at relay host xyz.com with envelope commands

```
MAIL FROM:<userx@y.foo.org>
RCPT TO:<@hosta.int,@jkl.org:userc@d.bar.org>
```

will normally be sent directly on to host d.bar.org with envelope commands

```
MAIL FROM:<userx@y.foo.org>
RCPT TO:<userc@d.bar.org>
```

As provided in appendix C, xyz.com MAY also choose to relay the message to hosta.int, using the envelope commands

```
MAIL FROM:<userx@y.foo.org>
RCPT TO:<@hosta.int,@jkl.org:userc@d.bar.org>
```

or to jkl.org, using the envelope commands

```
MAIL FROM:<userx@y.foo.org>
RCPT TO:<@jkl.org:userc@d.bar.org>
```

Of course, since hosts are not required to relay mail at all, xyz.com may also reject the message entirely when the RCPT command is received, using a 550 code (since this is a "policy reason").

If service extensions were negotiated, the RCPT command may also carry parameters associated with a particular service extension offered by the server. The client MUST NOT transmit parameters other

than those associated with a service extension offered by the server in its EHLO response.

Syntax:

"RCPT TO:" ("<Postmaster@" domain ">" / "<Postmaster>" / Forward-Path)
[SP Rcpt-parameters] CRLF

4.1.1.4 DATA (DATA)

The receiver normally sends a 354 response to DATA, and then treats the lines (strings ending in <CRLF> sequences, as described in section 2.3.7) following the command as mail data from the sender. This command causes the mail data to be appended to the mail data buffer. The mail data may contain any of the 128 ASCII character codes, although experience has indicated that use of control characters other than SP, HT, CR, and LF may cause problems and SHOULD be avoided when possible.

The mail data is terminated by a line containing only a period, that is, the character sequence "<CRLF>.<CRLF>" (see section 4.5.2). This is the end of mail data indication. Note that the first <CRLF> of this terminating sequence is also the <CRLF> that ends the final line of the data (message text) or, if there was no data, ends the DATA command itself. An extra <CRLF> MUST NOT be added, as that would cause an empty line to be added to the message. The only exception to this rule would arise if the message body were passed to the originating SMTP-sender with a final "line" that did not end in <CRLF>; in that case, the originating SMTP system MUST either reject the message as invalid or add <CRLF> in order to have the receiving SMTP server recognize the "end of data" condition.

The custom of accepting lines ending only in <LF>, as a concession to non-conforming behavior on the part of some UNIX systems, has proven to cause more interoperability problems than it solves, and SMTP server systems MUST NOT do this, even in the name of improved robustness. In particular, the sequence "<LF>.<LF>" (bare line feeds, without carriage returns) MUST NOT be treated as equivalent to <CRLF>.<CRLF> as the end of mail data indication.

Receipt of the end of mail data indication requires the server to process the stored mail transaction information. This processing consumes the information in the reverse-path buffer, the forward-path buffer, and the mail data buffer, and on the completion of this command these buffers are cleared. If the processing is successful, the receiver MUST send an OK reply. If the processing fails the receiver MUST send a failure reply. The SMTP model does not allow

for partial failures at this point: either the message is accepted by the server for delivery and a positive response is returned or it is not accepted and a failure reply is returned. In sending a positive completion reply to the end of data indication, the receiver takes full responsibility for the message (see section 6.1). Errors that are diagnosed subsequently MUST be reported in a mail message, as discussed in section 4.4.

When the SMTP server accepts a message either for relaying or for final delivery, it inserts a trace record (also referred to interchangeably as a "time stamp line" or "Received" line) at the top of the mail data. This trace record indicates the identity of the host that sent the message, the identity of the host that received the message (and is inserting this time stamp), and the date and time the message was received. Relayed messages will have multiple time stamp lines. Details for formation of these lines, including their syntax, is specified in section 4.4.

Additional discussion about the operation of the DATA command appears in section 3.3.

Syntax:

"DATA" CRLF

4.1.1.5 RESET (RSET)

This command specifies that the current mail transaction will be aborted. Any stored sender, recipients, and mail data MUST be discarded, and all buffers and state tables cleared. The receiver MUST send a "250 OK" reply to a RSET command with no arguments. A reset command may be issued by the client at any time. It is effectively equivalent to a NOOP (i.e., if has no effect) if issued immediately after EHLO, before EHLO is issued in the session, after an end-of-data indicator has been sent and acknowledged, or immediately before a QUIT. An SMTP server MUST NOT close the connection as the result of receiving a RSET; that action is reserved for QUIT (see section 4.1.1.10).

Since EHLO implies some additional processing and response by the server, RSET will normally be more efficient than reissuing that command, even though the formal semantics are the same.

There are circumstances, contrary to the intent of this specification, in which an SMTP server may receive an indication that the underlying TCP connection has been closed or reset. To preserve the robustness of the mail system, SMTP servers SHOULD be prepared

for this condition and SHOULD treat it as if a QUIT had been received before the connection disappeared.

Syntax:
"RSET" CRLF

4.1.1.6 VERIFY (VRFY)

This command asks the receiver to confirm that the argument identifies a user or mailbox. If it is a user name, information is returned as specified in section 3.5.

This command has no effect on the reverse-path buffer, the forward-path buffer, or the mail data buffer.

Syntax:
"VRFY" SP String CRLF

4.1.1.7 EXPAND (EXPN)

This command asks the receiver to confirm that the argument identifies a mailing list, and if so, to return the membership of that list. If the command is successful, a reply is returned containing information as described in section 3.5. This reply will have multiple lines except in the trivial case of a one-member list.

This command has no effect on the reverse-path buffer, the forward-path buffer, or the mail data buffer and may be issued at any time.

Syntax:
"EXPN" SP String CRLF

4.1.1.8 HELP (HELP)

This command causes the server to send helpful information to the client. The command MAY take
an argument (e.g., any command name)
and return more specific information as a response.

This command has no effect on the reverse-path buffer, the forward-path buffer, or the mail data buffer and may be issued at any time.

SMTP servers SHOULD support HELP without arguments and MAY support it with arguments.

Syntax:
"HELP" [SP String] CRLF

4.1.1.9 NOOP (NOOP)

This command does not affect any parameters or previously entered commands. It specifies no action other than that the receiver send an OK reply.

This command has no effect on the reverse-path buffer, the forward-path buffer, or the mail data buffer and may be issued at any time. If a parameter string is specified, servers SHOULD ignore it.

Syntax:
"NOOP" [SP String] CRLF

4.1.1.10 QUIT (QUIT)

This command specifies that the receiver MUST send an OK reply, and then close the transmission channel.

The receiver MUST NOT intentionally close the transmission channel until it receives and replies to a QUIT command (even if there was an error). The sender MUST NOT intentionally close the transmission channel until it sends a QUIT command and SHOULD wait until it receives the reply (even if there was an error response to a previous command). If the connection is closed prematurely due to violations of the above or system or network failure, the server MUST cancel any pending transaction, but not undo any previously completed transaction, and generally MUST act as if the command or transaction in progress had received a temporary error (i.e., a 4yz response).

The QUIT command may be issued at any time.

Syntax:
"QUIT" CRLF

4.1.2 Command Argument Syntax

The syntax of the argument fields of the above commands (using the syntax specified in [8] where applicable) is given below. Some of the productions given below are used only in conjunction with source routes as described in appendix C. Terminals not defined in this document, such as ALPHA, DIGIT, SP, CR, LF, CRLF, are as defined in the "core" syntax [8 (section 6)] or in the message format syntax [32].

Reverse-path = Path
Forward-path = Path

```
Path = "<" [ A-d-l ":" ] Mailbox ">"
A-d-l = At-domain *( "," A-d-l )
     ; Note that this form, the so-called "source route",
     ; MUST BE accepted, SHOULD NOT be generated, and SHOULD be
     ; ignored.
At-domain = "@" domain
Mail-parameters = esmtp-param *(SP esmtp-param)
Rcpt-parameters = esmtp-param *(SP esmtp-param)

esmtp-param     = esmtp-keyword ["=" esmtp-value]
esmtp-keyword   = (ALPHA / DIGIT) *(ALPHA / DIGIT / "-")
esmtp-value     = 1*(%d33-60 / %d62-127)
     ; any CHAR excluding "=", SP, and control characters
Keyword  = Ldh-str
Argument = Atom
Domain = (sub-domain 1*("." sub-domain)) / address-literal
sub-domain = Let-dig [Ldh-str]

address-literal
= "[" IPv4-address-literal /
                IPv6-address-literal /
                General-address-literal "]"
     ; See section 4.1.3

Mailbox = Local-part "@" Domain

Local-part = Dot-string / Quoted-string
     ; MAY be case-sensitive

Dot-string = Atom *("." Atom)

Atom = 1*atext

Quoted-string = DQUOTE *qcontent DQUOTE

String = Atom / Quoted-string
```

While the above definition for Local-part is relatively permissive, for maximum interoperability, a host that expects to receive mail SHOULD avoid defining mailboxes where the Local-part requires (or uses) the Quoted-string form or where the Local-part is case-sensitive. For any purposes that require generating or comparing Local-parts (e.g., to specific mailbox names), all quoted forms MUST be treated as equivalent and the sending system SHOULD transmit the form that uses the minimum quoting possible.

Systems MUST NOT

define mailboxes in such a way as to require the use
in SMTP of non-ASCII characters (octets with the high order bit set
to one) or ASCII "control characters" (decimal value 0-31 and 127).
These characters MUST NOT be used in MAIL or RCPT commands or other
commands that require mailbox names.

Note that the backslash, "\", is a quote character, which is used to
indicate that the next character is to be used literally (instead of
its normal interpretation). For example, "Joe\,Smith" indicates a
single nine character user field with the comma being the fourth
character of the field.

To promote interoperability and consistent with long-standing
guidance about conservative use of the DNS in naming and applications
(e.g., see section 2.3.1 of the base DNS document, RFC1035 [22]),
characters outside the set of alphas, digits, and hyphen MUST NOT
appear in domain name labels for SMTP clients or servers. In
particular, the underscore character
is not permitted. SMTP servers
that receive a command in which invalid character codes have been
employed, and for which there are no other reasons for rejection,
MUST reject that command with a 501 response.

4.1.3 Address Literals

Sometimes a host is not known to the domain name system and
communication (and, in particular, communication to report and repair
the error) is blocked. To bypass this barrier a special literal form
of the address is allowed as an alternative to a domain name. For
IPv4 addresses, this form uses four small decimal integers separated
by dots and enclosed by brackets such as [123.255.37.2], which
indicates an (IPv4) Internet Address in sequence-of-octets form. For
IPv6 and other forms of addressing that might eventually be
standardized, the form consists of a standardized "tag" that
identifies the address syntax, a colon, and the address itself, in a
format specified as part of the IPv6 standards [17].

Specifically:

```
 IPv4-address-literal = Snum 3("." Snum)
IPv6-address-literal = "IPv6:" IPv6-addr
General-address-literal = Standardized-tag ":" 1*dcontent
Standardized-tag = Ldh-str
     ; MUST be specified in a standards-track RFC
     ; and registered with IANA

Snum = 1*3DIGIT  ; representing a decimal integer
     ; value in the range 0 through 255
```

```
Let-dig = ALPHA / DIGIT
Ldh-str = *( ALPHA / DIGIT / "-" ) Let-dig

IPv6-addr = IPv6-full / IPv6-comp / IPv6v4-full / IPv6v4-comp
IPv6-hex  = 1*4HEXDIG
IPv6-full = IPv6-hex 7(":" IPv6-hex)
IPv6-comp = [IPv6-hex *5(":" IPv6-hex)] "::" [IPv6-hex *5(":"
        IPv6-hex)]
     ; The "::" represents at least 2 16-bit groups of zeros
     ; No more than 6 groups in addition to the "::" may be
     ; present
IPv6v4-full = IPv6-hex 5(":" IPv6-hex) ":" IPv4-address-literal
IPv6v4-comp = [IPv6-hex *3(":" IPv6-hex)] "::"


        [IPv6-hex *3(":" IPv6-hex) ":"] IPv4-address-literal
     ; The "::" represents at least 2 16-bit groups of zeros
     ; No more than 4 groups in addition to the "::" and
     ; IPv4-address-literal may be present
```

4.1.4 Order of Commands

There are restrictions on the order in which these commands may be used.

A session that will contain mail transactions MUST first be initialized by the use of the EHLO command. An SMTP server SHOULD accept commands for non-mail transactions (e.g., VRFY or EXPN) without this initialization.

An EHLO command MAY be issued by a client later in the session. If it is issued after the session begins, the SMTP server MUST clear all buffers and reset the state exactly as if a RSET command had been issued. In other words, the sequence of RSET followed immediately by EHLO is redundant, but not harmful other than in the performance cost of executing unnecessary commands.

If the EHLO command is not acceptable to the SMTP server, 501, 500, or 502 failure replies MUST be returned as appropriate. The SMTP server MUST stay in the same state after transmitting these replies that it was in before the EHLO was received.

The SMTP client MUST, if possible, ensure that the domain parameter to the EHLO command is a valid principal host name (not a CNAME or MX name) for its host. If this is not possible (e.g., when the client's address is dynamically assigned and the client does not have an obvious name), an address literal SHOULD be substituted for the

domain name and supplemental information provided that will assist in identifying the client.

An SMTP server MAY verify that the domain name parameter in the EHLO command actually corresponds to the IP address of the client. However, the server MUST NOT refuse to accept a message for this reason if the verification fails: the information about verification failure is for logging and tracing only.

The NOOP, HELP, EXPN, VRFY, and RSET commands can be used at any time during a session, or without previously initializing a session. SMTP servers SHOULD process these normally (that is, not return a 503 code) even if no EHLO command has yet been received; clients SHOULD open a session with EHLO before sending these commands.

If these rules are followed, the example in RFC 821 that shows "550 access denied to you" in response to an EXPN command is incorrect unless an EHLO command precedes the EXPN or the denial of access is based on the client's IP address or other authentication or authorization-determining mechanisms.

The MAIL command (or the obsolete SEND, SOML, or SAML commands) begins a mail transaction. Once started, a mail transaction consists of a transaction beginning command, one or more RCPT commands, and a DATA command, in that order. A mail transaction may be aborted by the RSET (or a new EHLO) command. There may be zero or more transactions in a session. MAIL (or SEND, SOML, or SAML) MUST NOT be sent if a mail transaction is already open, i.e., it should be sent only if no mail transaction had been started in the session, or it the previous one successfully concluded with a successful DATA command, or if the previous one was aborted with a RSET.

If the transaction beginning command argument is not acceptable, a 501 failure reply MUST be returned and the SMTP server MUST stay in the same state. If the commands in a transaction are out of order to the degree that they cannot be processed by the server, a 503 failure reply MUST be returned and the SMTP server MUST stay in the same state.

The last command in a session MUST be the QUIT command. The QUIT command cannot be used at any other time in a session, but SHOULD be used by the client SMTP to request connection closure, even when no session opening command was sent and accepted.

4.1.5

Private-use Commands

As specified in section 2.2.2, commands starting in "X" may be used by bilateral agreement between the client (sending) and server (receiving) SMTP agents. An SMTP server that does not recognize such a command is expected to reply with "500 Command not recognized". An extended SMTP server MAY list the feature names associated with these private commands in the response to the EHLO command.

Commands sent or accepted by SMTP systems that do not start with "X" MUST conform to the requirements of section 2.2.2.

4.2 SMTP Replies

Replies to SMTP commands serve to ensure the synchronization of requests and actions in the process of mail transfer and to guarantee that the SMTP client always knows the state of the SMTP server. Every command MUST generate exactly one reply.

The details of the command-reply sequence are described in section 4.3.

An SMTP reply consists of a three digit number (transmitted as three numeric characters) followed by some text unless specified otherwise in this document. The number is for use by automata to determine what state to enter next; the text is for the human user. The three digits contain enough encoded information that the SMTP client need not examine the text and may either discard it or pass it on to the user, as appropriate. Exceptions are as noted elsewhere in this document. In particular, the 220, 221, 251, 421, and 551 reply codes are associated with message text that must be parsed and interpreted by machines. In the general case, the text may be receiver dependent and context dependent, so there are likely to be varying texts for each reply code. A discussion of the theory of reply codes is given in section 4.2.1. Formally, a reply is defined to be the sequence: a three-digit code, <SP>, one line of text, and <CRLF>, or a multiline reply (as defined in section 4.2.1). Since, in violation of this specification, the text is sometimes not sent, clients which do not receive it SHOULD be prepared to process the code alone (with or without a trailing space character). Only the EHLO, EXPN, and HELP commands are expected to result in multiline replies in normal circumstances, however, multiline replies are allowed for any command.

In ABNF, server responses are:

Greeting = "220 " Domain [SP text] CRLF
Reply-line = Reply-code [SP text] CRLF

where "Greeting" appears only in the 220 response that announces that the server is opening its part of the connection.

An SMTP server SHOULD send only the reply codes listed in this document. An SMTP server SHOULD use the text shown in the examples whenever appropriate.

An SMTP client MUST determine its actions only by the reply code, not by the text (except for the "change of address" 251 and 551 and, if necessary, 220, 221, and 421 replies); in the general case, any text, including no text
at all (although senders SHOULD NOT send bare
codes), MUST be acceptable. The space (blank) following the reply code is considered part of the text. Whenever possible, a receiver-SMTP SHOULD test the first digit (severity indication) of the reply code.

The list of codes that appears below MUST NOT be construed as permanent. While the addition of new codes should be a rare and significant activity, with supplemental information in the textual part of the response being preferred, new codes may be added as the result of new Standards or Standards-track specifications. Consequently, a sender-SMTP MUST be prepared to handle codes not specified in this document and MUST do so by interpreting the first digit only.

4.2.1 Reply Code Severities and Theory

The three digits of the reply each have a special significance. The first digit denotes whether the response is good, bad or incomplete. An unsophisticated SMTP client, or one that receives
an unexpected
code, will be able to determine its next action (proceed as planned, redo, retrench, etc.) by examining this first digit. An SMTP client that wants to know approximately what kind of error occurred (e.g., mail system error, command syntax error) may examine the second digit. The third digit and any supplemental information that may be present is reserved for the finest gradation of information.

There are five values for the first digit of the reply code:

1yz Positive Preliminary reply
The command has been accepted, but the requested action is being held in abeyance, pending confirmation of the information in this reply. The SMTP client should send another command specifying

whether to continue or abort the action. Note: unextended SMTP does not have any commands that allow this type of reply, and so does not have continue or abort commands.

2yz Positive Completion reply
The requested action has been successfully completed. A new request may be initiated.

3yz Positive Intermediate reply
The command has been accepted, but the requested action is being held in abeyance, pending receipt of further information. The SMTP client should send another command specifying this information. This reply is used in command sequence groups (i.e., in DATA).

4yz Transient Negative Completion reply
The command was not accepted, and the requested action did not occur. However, the error condition is temporary and the action may be requested again. The sender should return to the beginning of the command sequence (if any). It is difficult to assign a meaning to "transient" when two different sites (receiver- and

sender-SMTP agents) must agree on the interpretation. Each reply in this category might have a different time value, but the SMTP client is encouraged to try again. A rule of thumb to determine whether a reply fits into the 4yz or the 5yz category (see below) is that replies are 4yz if they can be successful if repeated without any change in command form or in properties of the sender or receiver (that is, the command is repeated identically and the receiver does not put up a new implementation.)

5yz Permanent Negative Completion reply
The command was not accepted and the requested action did not occur. The SMTP client is discouraged from repeating the exact request (in the same sequence). Even some "permanent" error conditions can be corrected, so the human user may want to direct the SMTP client to reinitiate the command sequence by direct action at some point in the future (e.g., after the spelling has been changed, or the user has altered the account status).

The second digit encodes responses in specific categories:

x0z Syntax: These replies refer to syntax errors, syntactically correct commands that do not fit any functional category, and unimplemented or superfluous commands.

x1z Information: These are replies to requests for information, such as status or help.

x2z Connections: These are replies referring to the transmission channel.

x3z Unspecified.

x4z Unspecified.

x5z Mail system: These replies indicate the status of the receiver mail system vis-a-vis the requested transfer or other mail system action.

The third digit gives a finer gradation of meaning in each category specified by the second digit. The list of replies illustrates this. Each reply text is recommended rather than mandatory, and may even change according to the command with which it is associated. On the other hand, the reply codes must strictly follow the specifications in this section. Receiver implementations should not invent new codes for slightly different situations from the ones described here, but rather adapt codes already defined.

For example, a command such as NOOP, whose successful execution does not offer the SMTP client any new information, will return a 250 reply. The reply is 502 when the command requests an unimplemented non-site-specific action. A refinement of that is the 504 reply for a command that is implemented, but that requests an unimplemented parameter.

The reply text may be longer than a single line; in these cases the complete text must be marked so the SMTP client knows when it can stop reading the reply. This requires a special format to indicate a multiple line reply.

The format for multiline replies requires that every line, except the last, begin with the reply code, followed immediately by a hyphen, "-" (also known as minus), followed by text. The last line will begin with the reply code, followed immediately by <SP>, optionally some text, and <CRLF>. As noted above, servers SHOULD send the <SP> if subsequent text is not sent, but clients MUST be prepared for it to be omitted.

For example:

123-First line

123-Second line
123-234 text beginning with numbers
123 The last line

In many cases the SMTP client then simply needs to search for a line beginning with the reply code followed by <SP> or <CRLF> and ignore all preceding lines. In a few cases, there is important data for the client in the reply "text". The client will be able to identify these cases from the current context.

4.2.2 Reply Codes by Function Groups

500 Syntax error, command unrecognized
(This may include errors such as command line too long)
501 Syntax error in parameters or arguments
502 Command not implemented (see section 4.2.4)
503 Bad sequence of commands
504 Command parameter not implemented

211 System status, or system help reply
214 Help message
(Information on how to use the receiver or the meaning of a particular non-standard command; this reply is useful only to the human user)

220 <domain> Service ready
221 <domain> Service closing transmission channel
421 <domain> Service not available, closing transmission channel
(This may be a reply to any command if the service knows it must shut down)

250 Requested mail action okay, completed
251 User not local; will forward to <forward-path>
(See section 3.4)
252 Cannot VRFY user, but will accept message and attempt delivery
(See section 3.5.3)
450 Requested mail action not taken: mailbox unavailable
(e.g., mailbox busy)
550 Requested action not taken: mailbox unavailable
(e.g., mailbox not found, no access, or command rejected for policy reasons)
451 Requested action aborted: error in processing
551 User not local; please try <forward-path>
(See section 3.4)
452 Requested action not taken: insufficient system storage

552 Requested mail action aborted: exceeded storage allocation
553 Requested action not taken: mailbox name not allowed
(e.g., mailbox syntax incorrect)
354 Start mail input; end with <CRLF>.<CRLF>
554 Transaction failed (Or, in the case of a connection-opening
response, "No SMTP service here")

4.2.3 Reply Codes in Numeric Order

211 System status, or system help reply
214 Help message
(Information on how to use the receiver or the meaning of a
particular non-standard command; this reply is useful only
to the human user)
220 <domain> Service ready
221 <domain> Service closing transmission channel
250 Requested mail action okay, completed
251 User not local; will forward to <forward-path>
(See section 3.4)
252 Cannot VRFY user, but will accept message and attempt
delivery
(See
section 3.5.3)

354 Start mail input; end with <CRLF>.<CRLF>

421 <domain> Service not available, closing transmission channel
(This may be a reply to any command if the service knows it
must shut down)
450 Requested mail action not taken: mailbox unavailable
(e.g., mailbox busy)
451 Requested action aborted: local error in processing
452 Requested action not taken: insufficient system storage
500 Syntax error, command unrecognized
(This may include errors such as command line too long)
501 Syntax error in parameters or arguments
502 Command not implemented (see section 4.2.4)
503 Bad sequence of commands
504 Command parameter not implemented
550 Requested action not taken: mailbox unavailable
(e.g., mailbox not found, no access, or command rejected
for policy reasons)
551 User not local; please try <forward-path>
(See section 3.4)
552 Requested
mail action aborted: exceeded storage allocation
553 Requested action not taken: mailbox name not allowed
(e.g., mailbox syntax incorrect)

554 Transaction failed (Or, in the case of a connection-opening response, "No SMTP service here")

4.2.4 Reply Code 502

Questions have been raised as to when reply code 502 (Command not implemented) SHOULD be returned in preference to other codes. 502 SHOULD be used when the command is actually recognized by the SMTP server, but not implemented. If the command is not recognized, code 500 SHOULD be returned. Extended SMTP systems MUST NOT list capabilities in response to EHLO for which they will return 502 (or 500) replies.

4.2.5 Reply Codes After DATA and the Subsequent <CRLF>.<CRLF>

When an SMTP server returns a positive completion status (2yz code) after the DATA command is completed with <CRLF>.<CRLF>, it accepts responsibility for:

- delivering the message (if the recipient mailbox exists), or

- if attempts to deliver the message fail due to transient conditions, retrying delivery some reasonable number of times at intervals as specified in section 4.5.4.

- if attempts to deliver the message fail due to permanent conditions, or if repeated attempts to deliver the message fail due to transient conditions, returning appropriate notification to the sender of the original message (using the address in the SMTP MAIL command).

When an SMTP server returns a permanent error status (5yz) code after the DATA command is completed with <CRLF>.<CRLF>, it MUST NOT make any subsequent attempt to deliver that message. The SMTP client retains responsibility for delivery of that message and may either return it to the user or requeue it for a subsequent attempt (see section 4.5.4.1).

The user who originated the message SHOULD be able to interpret the return of a transient failure status (by mail message or otherwise) as a non-delivery indication, just as a permanent failure would be interpreted. I.e., if the client SMTP successfully handles these conditions, the user will not receive such a reply.

When an SMTP server returns a permanent error status (5yz) code after the DATA command is completely with <CRLF>.<CRLF>, it MUST NOT make

any subsequent attempt to deliver the message. As with temporary error status codes, the SMTP client retains responsibility for the message, but SHOULD not again attempt delivery to the same server without user review and intervention of the message.

4.3 Sequencing of Commands and Replies

4.3.1 Sequencing Overview

The communication between the sender and receiver is an alternating dialogue, controlled by the sender. As such, the sender issues a command and the receiver responds with a reply. Unless other arrangements are negotiated through service extensions, the sender MUST wait for this response before sending further commands.

One important reply is the connection greeting. Normally, a receiver will send a 220 "Service ready" reply when the connection is completed. The sender SHOULD wait for this greeting message before sending any commands.

Note: all the greeting-type replies have the official name (the fully-qualified primary domain name) of the server host as the first word following the reply code. Sometimes the host will have no meaningful name. See 4.1.3 for a discussion of alternatives in these situations.

For example,

```
220 ISIF.USC.EDU Service ready
or
220 mail.foo.com SuperSMTP v 6.1.2 Service ready
or
220 [10.0.0.1] Clueless host service ready
```

The table below lists alternative success and failure replies for each command. These SHOULD be strictly adhered to: a receiver may substitute text in the replies, but the meaning and action implied by the code numbers and by the specific command reply sequence cannot be altered.

4.3.2 Command-Reply Sequences

Each command is listed with its usual possible replies. The prefixes used before the possible replies are "I" for intermediate, "S" for success, and "E" for error. Since some servers may generate other replies under special circumstances, and to allow for future

extension, SMTP clients SHOULD, when possible, interpret only the first digit of the reply and MUST be prepared to deal with unrecognized reply codes by interpreting the first digit only. Unless extended using the mechanisms described in section 2.2, SMTP servers MUST NOT transmit reply codes to an SMTP client that are other than three digits or that do not start in a digit between 2 and 5 inclusive.

These sequencing rules and, in principle, the codes themselves, can be extended or modified by SMTP extensions offered by the server and accepted (requested) by the client.

In addition to the codes listed below, any SMTP command can return any of the following codes if the corresponding unusual circumstances are encountered:

500 For the "command line too long" case or if the command name was not recognized. Note that producing a "command not recognized" error in response to the required subset of these commands is a violation of this specification.

501 Syntax error in command or arguments. In order to provide for future extensions, commands that are specified in this document as not accepting arguments (DATA, RSET, QUIT) SHOULD return a 501 message if arguments are supplied in the absence of EHLO-advertised extensions.

421 Service shutting down and closing transmission channel

Specific sequences are:

CONNECTION ESTABLISHMENT
  S: 220
  E: 554
EHLO or HELO
  S: 250
  E: 504, 550
MAIL
  S: 250
  E: 552, 451, 452, 550, 553, 503
RCPT
  S: 250, 251 (but see section 3.4 for discussion of 251 and 551)

  E: 550, 551, 552, 553, 450, 451, 452, 503, 550
DATA
  I: 354 -> data -> S: 250
                E: 552, 554, 451, 452

E: 451, 554, 503
RSET
S: 250
VRFY
S: 250, 251, 252
E: 550, 551, 553, 502, 504
EXPN
S: 250, 252
E: 550, 500, 502, 504
HELP
S: 211, 214
E: 502, 504
NOOP
S: 250
QUIT
S: 221

4.4 Trace Information

When an SMTP server receives a message for delivery or further processing, it MUST insert trace ("time stamp" or "Received") information at the beginning of the message content, as discussed in section 4.1.1.4.

This line MUST be structured as follows:

- The FROM field, which MUST be supplied in an SMTP environment, SHOULD contain both (1) the name of the source host as presented in the EHLO command and (2) an address literal containing the IP address of the source, determined from the TCP connection.

- The ID field MAY contain an "@" as suggested in RFC 822, but this is not required.

- The FOR field MAY contain a list of <path> entries when multiple RCPT commands have been given. This may raise some security issues and is usually not desirable; see section 7.2.

An Internet mail program MUST NOT change a Received: line that was previously added to the message header. SMTP servers MUST prepend Received lines to messages; they MUST NOT change the order of existing lines or insert Received lines in any other location.

As the Internet grows, comparability of Received fields is important for detecting problems, especially slow relays. SMTP servers that create Received fields SHOULD use explicit offsets in the dates (e.g., -0800), rather than time zone names of any type. Local time

(with an offset) is preferred to UT when feasible. This formulation allows slightly more information about local circumstances to be specified. If UT is needed, the receiver need merely do some simple arithmetic to convert the values. Use of UT loses information about the time zone-location of the server. If it is desired to supply a time zone name, it SHOULD be included in a comment.

When the delivery SMTP server makes the "final delivery" of a message, it inserts a return-path line at the beginning of the mail data. This use of return-path is required; mail systems MUST support it. The return-path line preserves the information in the <reverse-path> from the MAIL command. Here, final delivery means the message has left the SMTP environment. Normally, this would mean it had been delivered to the destination user or an associated mail drop, but in some cases it may be further processed and transmitted by another mail system.

It is possible for the mailbox in the return path to be different from the actual sender's mailbox, for example, if error responses are to be delivered to a special error handling mailbox rather than to the message sender. When mailing lists are involved, this arrangement is common and useful as a means of directing errors to the list maintainer rather than the message originator.

The text above implies that the final mail data will begin with a return path line, followed by one or more time stamp lines. These lines will be followed by the mail data headers and body [32].

It is sometimes difficult for an SMTP server to determine whether or not it is making final delivery since forwarding or other operations may occur after the message is accepted for delivery. Consequently,

any further (forwarding, gateway, or relay) systems MAY remove the return path and rebuild the MAIL command as needed to ensure that exactly one such line appears in a delivered message.

A message-originating SMTP system SHOULD NOT send a message that already contains a Return-path header. SMTP servers performing a relay function MUST NOT inspect the message data, and especially not to the extent needed to determine if Return-path headers are present. SMTP servers making final delivery MAY remove Return-path headers before adding their own.

The primary purpose of the Return-path is to designate the address to which messages indicating non-delivery or other mail system failures

are to be sent. For this to be unambiguous, exactly one return path SHOULD be present when the message is delivered. Systems using RFC 822 syntax with non-SMTP transports SHOULD designate an unambiguous address, associated with the transport envelope, to which error reports (e.g., non-delivery messages) should be sent.

Historical note: Text in RFC 822 that appears to contradict the use of the Return-path header (or the envelope reverse path address from the MAIL command) as the destination for error messages is not applicable on the Internet. The reverse path address (as copied into the Return-path) MUST be used as the target of any mail containing delivery error messages.

In particular:

- a gateway from SMTP->elsewhere SHOULD insert a return-path header, unless it is known that the "elsewhere" transport also uses Internet domain addresses and maintains the envelope sender address separately.

- a gateway from elsewhere->SMTP SHOULD delete any return-path header present in the message, and either copy that information to the SMTP envelope or combine it with information present in the envelope of the other transport system to construct the reverse path argument to the MAIL command in the SMTP envelope.

The server must give special treatment to cases in which the processing following the end of mail data indication is only partially successful. This could happen if, after accepting several recipients and the mail data, the SMTP server finds that the mail data could be successfully delivered to some, but not all, of the recipients. In such cases, the response to the DATA command MUST be an OK reply. However, the SMTP server MUST compose and send an "undeliverable mail" notification message to the originator of the message.

A single notification listing all of the failed recipients or separate notification messages MUST be sent for each failed recipient. For economy of processing by the sender, the former is preferred when possible. All undeliverable mail notification messages are sent using the MAIL command (even if they result from processing the obsolete SEND, SOML, or SAML commands) and use a null return path as discussed in section 3.7.

The time stamp line and the return path line are formally defined as follows:

```
Return-path-line = "Return-Path:" FWS Reverse-path <CRLF>

Time-stamp-line = "Received:" FWS Stamp <CRLF>

Stamp = From-domain By-domain Opt-info ";"  FWS date-time

    ; where "date-time" is as defined in [32]
    ; but the "obs-" forms, especially
 two-digit
    ; years, are prohibited in SMTP and MUST NOT be used.

From-domain = "FROM" FWS Extended-Domain CFWS

By-domain = "BY" FWS Extended-Domain CFWS

Extended-Domain = Domain /
        ( Domain FWS "(" TCP-info ")" ) /
        ( Address-literal FWS "(" TCP-info ")" )

TCP-info = Address-literal / ( Domain FWS Address-literal )
    ; Information derived by server from TCP connection
    ; not client EHLO.

Opt-info = [Via] [With] [ID] [For]

Via = "VIA" FWS Link CFWS

With = "WITH" FWS Protocol CFWS

ID = "ID" FWS String / msg-id CFWS

For = "FOR" FWS 1*( Path / Mailbox ) CFWS

Link = "TCP" / Addtl-Link
Addtl-Link = Atom
    ; Additional standard names for links are registered with the
       ; Internet Assigned Numbers Authority (IANA).  "Via" is
       ; primarily of value with non-Internet transports.  SMTP

       ; servers SHOULD NOT use unregistered names.
Protocol = "ESMTP" / "SMTP" / Attdl-Protocol
Attdl-Protocol = Atom
    ; Additional standard
 names for protocols are registered with the
       ; Internet Assigned Numbers Authority (IANA).  SMTP servers
       ; SHOULD NOT use unregistered names.
```

4.5 Additional Implementation Issues

4.5.1 Minimum Implementation

In order to make SMTP workable, the following minimum implementation is required for all receivers. The following commands MUST be supported to conform to this specification:

EHLO
HELO
MAIL
RCPT
DATA
RSET
NOOP
QUIT
VRFY

Any system that includes an SMTP server supporting mail relaying or delivery MUST support the reserved mailbox "postmaster" as a case-insensitive local name. This postmaster address is not strictly necessary if the server always returns 554 on connection opening (as described in section 3.1). The requirement to accept mail for postmaster implies that RCPT commands which specify a mailbox for postmaster at any of the domains for which the SMTP server provides mail service, as well as the special case of "RCPT TO:<Postmaster>" (with no domain specification), MUST be supported.

SMTP systems are expected to make every reasonable effort to accept mail directed to Postmaster from any other system on the Internet. In extreme cases --such as to contain a denial of service attack or other breach of security-- an SMTP server may block mail directed to Postmaster. However, such arrangements SHOULD be narrowly tailored so as to avoid blocking messages which are not part of such attacks.

4.5.2 Transparency

Without some provision for data transparency, the character sequence "<CRLF>.<CRLF>" ends the mail text and cannot be sent by the user. In general, users are not aware of such "forbidden" sequences. To

allow all user composed text to be transmitted transparently, the following procedures are used:

- Before sending a line of mail text, the SMTP client checks the first character of the line.
If it is a period, one additional
period is inserted at the beginning of the line.

- When a line of mail text is received by the SMTP server, it checks the line. If the line is composed of a single period, it is treated as the end of mail indicator. If the first character is a period and there are other characters on the line, the first character is deleted.

The mail data may contain any of the 128 ASCII characters. All characters are to be delivered to the recipient's mailbox, including spaces, vertical and horizontal tabs, and other control characters. If the transmission channel provides an 8-bit byte (octet) data stream, the 7-bit ASCII codes are transmitted right justified in the octets, with the high order bits cleared to zero. See 3.7 for special treatment of these conditions in SMTP systems serving a relay function.

In some systems it may be necessary to transform the data as it is received and stored.
This may be necessary for hosts that use a different character set than ASCII as their local character set, that store data in records rather than strings, or which use special character sequences as delimiters inside mailboxes. If such transformations are necessary, they MUST be reversible, especially if they are applied to mail being relayed.

4.5.3 Sizes and Timeouts

4.5.3.1 Size limits and minimums

There are several objects that have required minimum/maximum sizes. Every implementation MUST be able to receive objects of at least these sizes. Objects larger than these sizes SHOULD be avoided when possible. However, some Internet mail constructs such as encoded X.400 addresses [16] will often require larger objects: clients MAY attempt to transmit these, but MUST be prepared for a server to reject them if they cannot be handled by it. To the maximum extent possible, implementation techniques which impose no limits on the length of these
objects should be used.

local-part
The maximum total length of a user name or other local-part is 64 characters.

domain
The maximum total length of a domain name or number is 255 characters.

path

The maximum total length of a reverse-path or forward-path is 256 characters (including the punctuation and element separators).

command line

The maximum total length of a command line including the command word and the <CRLF> is 512 characters. SMTP extensions may be used to increase this limit.

reply line

The maximum total length of a reply line including the reply code and the <CRLF> is 512 characters. More information may be conveyed through multiple-line replies.

text line

The maximum total length of a text line including the <CRLF> is 1000 characters (not counting the leading dot duplicated for transparency). This number may be increased by the use of SMTP Service Extensions.

message content

The maximum total length of a message content (including any message headers as well as the message body) MUST BE at least 64K octets. Since the introduction of Internet standards for multimedia mail [12], message lengths on the Internet have grown dramatically, and message size restrictions should be avoided if at all possible. SMTP server systems that must impose restrictions SHOULD implement the "SIZE" service extension [18], and SMTP client systems that will send large messages SHOULD utilize it when possible.

recipients buffer

The minimum total number of recipients that must be buffered is 100 recipients. Rejection of messages (for excessive recipients) with fewer than 100 RCPT commands is a violation of this specification. The general principle that relaying SMTP servers MUST NOT, and delivery SMTP servers SHOULD NOT, perform validation tests on message
headers suggests that rejecting a message based on the total number of recipients shown in header fields is to be discouraged. A server which imposes a limit on the number of recipients MUST behave in an orderly fashion, such as to reject additional addresses over its limit rather than silently discarding addresses previously accepted. A client that needs to

deliver a message containing over 100 RCPT commands SHOULD be prepared to transmit in 100-recipient "chunks" if the server declines to accept more than 100 recipients in a single message.

Errors due to exceeding these limits may be reported by using the reply codes. Some examples of reply codes are:

500 Line too long.
or
501 Path too long
or
452 Too many recipients (see below)
or
552 Too much mail data.

RFC 821 [30] incorrectly listed the error where an SMTP server exhausts its implementation limit on the number of RCPT commands ("too many recipients") as having reply code 552. The correct reply code for this condition is 452. Clients SHOULD treat a 552 code in this case as a temporary, rather than permanent, failure so the logic below works.

When a conforming SMTP server encounters this condition, it has at least 100 successful RCPT commands in its recipients buffer. If the server is able to accept the message, then at least these 100 addresses will be removed from the SMTP client's queue. When the client attempts retransmission of those addresses which received 452 responses, at least 100 of these will be able to fit in the SMTP server's recipients buffer. Each retransmission attempt which is able to deliver anything will be able to dispose of at least 100 of these recipients.

If an SMTP server has an implementation limit on the number of RCPT commands and this limit is exhausted, it MUST use a response code of 452 (but the client SHOULD also be prepared
for a 552, as noted
above). If the server has a configured site-policy limitation on the number of RCPT commands, it MAY instead use a 5XX response code. This would be most appropriate if the policy limitation was intended to apply if the total recipient count for a particular message body were enforced even if that message body was sent in multiple mail transactions.

4.5.3.2 Timeouts

An SMTP client MUST provide a timeout mechanism. It MUST use per-command timeouts rather than somehow trying to time the entire mail transaction. Timeouts SHOULD be easily reconfigurable, preferably without recompiling the SMTP code. To implement this, a timer is set

for each SMTP command and for each buffer of the data transfer. The

latter means that the overall timeout is inherently proportional to the size of the message.

Based on extensive experience with busy mail-relay hosts, the minimum per-command timeout values SHOULD be as follows:

Initial
220 Message: 5 minutes
An SMTP client process needs to distinguish between a failed TCP connection and a delay in receiving the initial 220 greeting message. Many SMTP servers accept a TCP connection but delay delivery of the 220 message until their system load permits more mail to be processed.

MAIL Command: 5 minutes

RCPT Command: 5 minutes
A longer timeout is required if processing of mailing lists and aliases is not deferred until after the message was accepted.

DATA Initiation: 2 minutes
This is while awaiting the "354 Start Input" reply to a DATA command.

Data Block: 3 minutes
This is while awaiting the completion of each TCP SEND call transmitting a chunk of data.

DATA Termination: 10 minutes.
This is while awaiting the "250 OK" reply. When the receiver gets the final period terminating the message data, it typically performs processing to deliver the message to a user mailbox.
A
spurious timeout at this point would be very wasteful and would typically result in delivery of multiple copies of the message, since it has been successfully sent and the server has accepted responsibility for delivery. See section 6.1 for additional discussion.

An SMTP server SHOULD have a timeout of at least 5 minutes while it is awaiting the next command from the sender.

4.5.4 Retry Strategies

The common structure of a host SMTP implementation includes user mailboxes, one or more areas for queuing messages in transit, and one or more daemon processes for sending and receiving mail. The exact structure will vary depending on the needs of the users on the host

and the number and size of mailing lists supported by the host. We describe several optimizations that have proved helpful, particularly for mailers supporting high traffic levels.

Any queuing strategy MUST include timeouts on all activities on a per-command basis. A queuing strategy MUST NOT send error messages in response to error messages under any circumstances.

4.5.4.1 Sending Strategy

The general model for an SMTP client is one or more processes that periodically attempt to transmit outgoing mail. In a typical system, the program that composes a message has some method for requesting immediate attention for a new piece of outgoing mail, while mail that cannot be transmitted immediately MUST be queued and periodically retried by the sender. A mail queue entry will include not only the message itself but also the envelope information.

The sender MUST delay retrying a particular destination after one attempt has failed. In general, the retry interval SHOULD be at least 30 minutes; however, more sophisticated and variable strategies will be beneficial when the SMTP client can determine the reason for non-delivery.

Retries continue until the message is transmitted or the sender gives up; the give-up time generally needs to be at least 4-5 days. The parameters to the retry algorithm MUST be configurable.

A client SHOULD keep a list of hosts it cannot reach and corresponding connection timeouts, rather than just retrying queued mail items.

Experience suggests that failures are typically transient (the target system or its connection has crashed), favoring a policy of two connection attempts in the first hour the message is in the queue, and then backing off to one every two or three hours.

The SMTP client can shorten the queuing delay in cooperation with the SMTP server. For example, if mail is received from a particular address, it is likely that mail queued for that host can now be sent. Application of this principle may, in many cases, eliminate the requirement for an explicit "send queues now" function such as ETRN [9].

The strategy may be further modified as a result of multiple

addresses per host (see
below) to optimize delivery time vs. resource
usage.

An SMTP client may have a large queue of messages for each
unavailable destination host. If all of these messages were retried
in every retry cycle, there would be excessive Internet overhead and
the sending system would be blocked for a long period. Note that an
SMTP client can generally determine that a delivery attempt has
failed only after a timeout of several minutes and even a one-minute
timeout per connection will result in a very large delay if retries
are repeated for dozens, or even hundreds, of queued messages to the
same host.

At the same time, SMTP clients SHOULD use great care in caching
negative responses from servers. In an extreme case, if EHLO is
issued multiple times during the same SMTP connection, different
answers may be returned by the server. More significantly, 5yz
responses to the MAIL command MUST NOT be cached.

When a mail message is to be delivered
to multiple recipients, and
the SMTP server to which a copy of the message is to be sent is the
same for multiple recipients, then only one copy of the message
SHOULD be transmitted. That is, the SMTP client SHOULD use the
command sequence: MAIL, RCPT, RCPT,... RCPT, DATA instead of the
sequence: MAIL, RCPT, DATA, ..., MAIL, RCPT, DATA. However, if there
are very many addresses, a limit on the number of RCPT commands per
MAIL command MAY be imposed. Implementation of this efficiency
feature is strongly encouraged.

Similarly, to achieve timely delivery, the SMTP client MAY support
multiple concurrent outgoing mail transactions. However, some limit
may be appropriate to protect the host from devoting all its
resources to mail.

4.5.4.2 Receiving Strategy

The SMTP server SHOULD attempt to keep a pending listen on the SMTP
port at all times. This requires the support of multiple incoming
TCP connections for SMTP. Some limit MAY be imposed
but servers that
cannot handle more than one SMTP transaction at a time are not in
conformance with the intent of this specification.

As discussed above, when the SMTP server receives mail from a
particular host address, it could activate its own SMTP queuing
mechanisms to retry any mail pending for that host address.

4.5.5 Messages with a null reverse-path

There are several types of notification messages which are required by existing and proposed standards to be sent with a null reverse path, namely non-delivery notifications as discussed in section 3.7,

other kinds of Delivery Status Notifications (DSNs) [24], and also Message Disposition Notifications (MDNs) [10]. All of these kinds of messages are notifications about a previous message, and they are sent to the reverse-path of the previous mail message. (If the delivery of such a notification message fails, that usually indicates a problem with the mail system of the host to which the notification message is addressed. For this reason, at some hosts the MTA is set up to forward such failed notification messages to someone who is able to fix problems with the mail system, e.g., via the postmaster alias.)

All other types of messages (i.e., any message which is not required by a standards-track RFC to have a null reverse-path) SHOULD be sent with with a valid, non-null reverse-path.

Implementors of automated email processors should be careful to make sure that the various kinds of messages with null reverse-path are handled correctly, in particular such systems SHOULD NOT reply to messages with null reverse-path.

5. Address Resolution and Mail Handling

Once an SMTP client lexically identifies a domain to which mail will be delivered for processing (as described in sections 3.6 and 3.7), a DNS lookup MUST be performed to resolve the domain name [22]. The names are expected to be fully-qualified domain names (FQDNs): mechanisms for inferring FQDNs from partial names or local aliases are outside of this specification and, due to a history of problems, are generally discouraged. The lookup first attempts to locate an MX record associated with the name. If a CNAME record is found instead, the resulting name is processed as if it were the initial name. If no MX records are found, but an A RR is found, the A RR is treated as if it was associated with an implicit MX RR, with a preference of 0, pointing to that host. If one or more MX RRs are found for a given name, SMTP systems MUST NOT utilize any A RRs associated with that name unless they are located using the MX RRs; the "implicit MX" rule above applies only if there are no MX records present. If MX records are present, but none of them are usable, this situation MUST be reported as an error.

When the lookup succeeds, the mapping can result in a list of alternative delivery addresses rather than a single address, because of multiple MX records, multihoming, or both. To provide reliable mail transmission, the SMTP client MUST be able to try (and retry) each of the relevant addresses in this list in order, until a delivery attempt succeeds. However, there MAY also be a configurable limit on the number of alternate addresses that can be tried. In any case, the SMTP client SHOULD try at least two addresses.

Two types of information is used to rank the host addresses: multiple MX records, and multihomed hosts.

Multiple MX records contain a preference indication that MUST be used in sorting (see below). Lower numbers are more preferred than higher ones. If there are multiple destinations with the same preference and there is no clear reason to favor one (e.g., by recognition of an easily-reached address), then the sender-SMTP MUST randomize them to spread the load across multiple mail exchangers for a specific organization.

The destination host (perhaps taken from the preferred MX record) may be multihomed, in which case the domain name resolver will return a list of alternative IP addresses. It is the responsibility of the domain name resolver interface to have ordered this list by decreasing preference if necessary, and SMTP MUST try them in the order presented.

Although the capability to try multiple alternative addresses is required, specific installations may want to limit or disable the use of alternative addresses. The question of whether a sender should attempt retries using the different addresses of a multihomed host has been controversial. The main argument for using the multiple addresses is that it maximizes the probability of timely delivery, and indeed sometimes the probability of any delivery; the counter-argument is that it may result in unnecessary resource use. Note that resource use is also strongly determined by the sending strategy discussed in section 4.5.4.1.

If an SMTP server receives a message with a destination for which it is a designated Mail eXchanger, it MAY relay the message (potentially after having rewritten the MAIL FROM and/or RCPT TO addresses), make final delivery of the message, or hand it off using some mechanism outside the SMTP-provided transport environment. Of course, neither of the latter require that the list of MX records be examined further.

If it determines that it should relay the message without rewriting the address, it MUST sort the MX records to determine candidates for delivery. The records are first ordered by preference, with the lowest-numbered records being most preferred. The relay host MUST then inspect the list for any of the names or addresses by which it might be known in mail transactions. If a matching record is found, all records at that preference level and higher-numbered ones MUST be discarded from consideration. If there are no records left at that point, it is an error condition, and the message MUST be returned as undeliverable. If records do remain, they SHOULD be tried, best preference first, as described above.

6. Problem Detection and Handling

6.1 Reliable Delivery and Replies by Email

When the receiver-SMTP accepts a piece of mail (by sending a "250 OK" message in response to DATA), it is accepting responsibility for delivering or relaying the message. It must take this responsibility seriously. It MUST NOT lose the message for frivolous reasons, such as because the host later crashes or because of a predictable resource shortage.

If there is a delivery failure after acceptance of a message, the receiver-SMTP MUST formulate and mail a notification message. This notification MUST be sent using a null ("<>") reverse path in the envelope. The recipient of this notification MUST be the address from the envelope return path (or the Return-Path: line). However, if this address is null ("<>"), the receiver-SMTP MUST NOT send a notification. Obviously, nothing in this section can or should prohibit local decisions (i.e., as part of the same system environment as the receiver-SMTP) to log or otherwise transmit information about null address events locally if that is desired. If the address is an explicit source route, it MUST be stripped down to its final hop.

For example, suppose that an error notification must be sent for a message that arrived with:

```
MAIL FROM:<@a,@b:user@d>
```

The notification message MUST be sent using:

```
RCPT TO:<user@d>
```

Some delivery failures after the message is accepted by SMTP will be unavoidable. For example, it may be impossible for the receiving SMTP server to validate all the delivery addresses in RCPT command(s) due to a "soft" domain system error, because the target is a mailing list (see earlier discussion of RCPT), or because the server is acting as a relay and has no immediate access to the delivering system.

To avoid receiving duplicate messages as the result of timeouts, a receiver-SMTP MUST seek to minimize the time required to respond to the final <CRLF>.<CRLF> end of data indicator. See RFC 1047 [28] for a discussion of this problem.

6.2 Loop Detection

Simple counting of the number of "Received:" headers in a message has proven to be an effective, although rarely optimal, method of detecting loops in mail systems. SMTP servers using this technique SHOULD use a large rejection threshold, normally at least 100 Received entries. Whatever mechanisms are used, servers MUST contain provisions for detecting and stopping trivial loops.

6.3 Compensating for Irregularities

Unfortunately, variations, creative interpretations, and outright violations of Internet mail protocols do occur; some would suggest that they occur quite frequently. The debate as to whether a well-behaved SMTP receiver or relay should reject a malformed message, attempt to pass it on unchanged, or attempt to repair it to increase the odds of successful delivery (or subsequent reply) began almost with the dawn of structured network mail and shows no signs of abating. Advocates of rejection claim that attempted repairs are rarely completely adequate and that rejection of bad messages is the only way to get the offending software repaired. Advocates of "repair" or "deliver no matter what" argue that users prefer that mail go through it if at all possible and that there are significant market pressures in that direction. In practice, these market pressures may be more important to particular vendors than strict conformance to the standards, regardless of the preference of the actual developers.

The problems associated with ill-formed messages were exacerbated by the introduction of the split-UA mail reading protocols [3, 26, 5, 21].
These protocols have encouraged the use of SMTP as a posting protocol, and SMTP servers as relay systems for these client hosts (which are often only intermittently connected to the Internet).

Historically, many of those client machines lacked some of the mechanisms and information assumed by SMTP (and indeed, by the mail format protocol [7]). Some could not keep adequate track of time; others had no concept of time zones; still others could not identify their own names or addresses; and, of course, none could satisfy the assumptions that underlay RFC 822's conception of authenticated addresses.

In response to these weak SMTP clients, many SMTP systems now complete messages that are delivered to them in incomplete or incorrect form. This strategy is generally considered appropriate when the server can identify or authenticate the client, and there are prior agreements between them. By contrast, there is at best great concern about fixes applied by a relay or delivery SMTP server that has little or no knowledge of the user or client machine.

The following changes to a message being processed MAY be applied when necessary by an originating SMTP server, or one used as the target of SMTP as an initial posting protocol:

- Addition of a message-id field when none appears

- Addition of a date, time or time zone when none appears

- Correction of addresses to proper FQDN format

The less information the server has about the client, the less likely these changes are to be correct and the more caution and conservatism should be applied when considering whether or not to perform fixes and how. These changes MUST NOT be applied by an SMTP server that provides an intermediate relay function.

In all cases, properly-operating clients supplying correct information are preferred to corrections by the SMTP server. In all cases, documentation of actions performed by the servers (in trace fields and/or header comments) is strongly encouraged.

7. Security Considerations

7.1 Mail Security and Spoofing

SMTP mail is inherently insecure in that it is feasible for even fairly casual users to negotiate directly with receiving and relaying SMTP servers and create messages that will trick a naive recipient into believing that they came from somewhere else. Constructing such a message so that the "spoofed" behavior cannot be detected by an

expert is somewhat more difficult, but not sufficiently so as to be a deterrent to someone who is determined and knowledgeable. Consequently, as knowledge of Internet mail increases, so does the knowledge that SMTP mail inherently cannot be authenticated, or integrity checks provided, at the transport level. Real mail security lies only in end-to-end methods involving the message bodies, such as those which use digital signatures (see [14] and, e.g., PGP [4] or S/MIME [31]).

Various protocol extensions and configuration options that provide authentication at the transport level (e.g., from an SMTP client to an SMTP server) improve somewhat on the traditional situation described above. However, unless they are accompanied by careful handoffs of responsibility in a carefully-designed trust environment, they remain inherently weaker than end-to-end mechanisms which use digitally signed messages rather than depending on the integrity of the transport system.

Efforts to make it more difficult for users to set envelope return path and header "From" fields to point to valid addresses other than their own are largely misguided: they frustrate legitimate applications in which mail is sent by one user on behalf of another or in which error (or normal) replies should be directed to a special address. (Systems that provide convenient ways for users to alter these fields on a per-message basis should accept to establish a primary and permanent mailbox address for the user so that Sender fields within the message data can be generated sensibly.)

This specification does not further address the authentication issues associated with SMTP other than to advocate that useful functionality not be disabled in the hope of providing some small margin of protection against an ignorant user who is trying to fake mail.

7.2 "Blind" Copies

Addresses that do not appear in the message headers may appear in the RCPT commands to an SMTP server for a number of reasons. The two most common involve the use of a mailing address as a "list exploder" (a single address that resolves into multiple addresses) and the appearance of "blind copies". Especially when more than one RCPT command is present, and in order to avoid defeating some of the purpose of these mechanisms, SMTP clients and servers SHOULD NOT copy the full set of RCPT command arguments into the headers, either as part of trace headers or as informational or private-extension headers. Since this rule is often violated in practice, and cannot

be enforced, sending SMTP systems that are aware of "bcc" use MAY find it helpful to send each blind copy as a separate message transaction containing only a single RCPT command.

There is no inherent relationship between either "reverse" (from MAIL, SAML, etc., commands) or "forward" (RCPT) addresses in the SMTP transaction ("envelope") and the addresses in the headers. Receiving systems SHOULD NOT attempt to deduce such relationships and use them to alter the headers of the message for delivery. The popular "Apparently-to" header is a violation of this principle as well as a common source of unintended information disclosure and SHOULD NOT be used.

7.3 VRFY, EXPN, and Security

As discussed in section 3.5, individual sites may want to disable either or both of VRFY or EXPN for security reasons. As a corollary to the above,
implementations that permit this MUST NOT appear to have verified addresses that are not, in fact, verified. If a site

disables these commands for security reasons, the SMTP server MUST return a 252 response, rather than a code that could be confused with successful or unsuccessful verification.

Returning a 250 reply code with the address listed in the VRFY command after having checked it only for syntax violates this rule. Of course, an implementation that "supports" VRFY by always returning 550 whether or not the address is valid is equally not in conformance.

Within the last few years, the contents of mailing lists have become popular as an address information source for so-called "spammers." The use of EXPN to "harvest" addresses has increased as list administrators have installed protections against inappropriate uses of the lists themselves. Implementations SHOULD still provide support for EXPN, but sites SHOULD carefully evaluate
the tradeoffs.
As authentication mechanisms are introduced into SMTP, some sites may choose to make EXPN available only to authenticated requestors.

7.4 Information Disclosure in Announcements

There has been an ongoing debate about the tradeoffs between the debugging advantages of announcing server type and version (and, sometimes, even server domain name) in the greeting response or in response to the HELP command and the disadvantages of exposing information that might be useful in a potential hostile attack. The

utility of the debugging information is beyond doubt. Those who argue for making it available point out that it is far better to actually secure an SMTP server rather than hope that trying to conceal known vulnerabilities by hiding the server's precise identity will provide more protection. Sites are encouraged to evaluate the tradeoff with that issue in mind; implementations are strongly encouraged to minimally provide for making type and version information available in some way to other network hosts.

7.5 Information Disclosure in Trace Fields

In some circumstances, such as when mail originates from within a LAN whose hosts are not directly on the public Internet, trace ("Received") fields produced in conformance with this specification may disclose host names and similar information that would not normally be available. This ordinarily does not pose a problem, but sites with special concerns about name disclosure should be aware of it. Also, the optional FOR clause should be supplied with caution or not at all when multiple recipients are involved lest it inadvertently disclose the identities of "blind copy" recipients to others.

7.6 Information Disclosure in Message Forwarding

As discussed in section 3.4, use of the 251 or 551 reply codes to identify the replacement address associated with a mailbox may inadvertently disclose sensitive information. Sites that are concerned about those issues should ensure that they select and configure servers appropriately.

7.7 Scope of Operation of SMTP Servers

It is a well-established principle that an SMTP server may refuse to accept mail for any operational or technical reason that makes sense to the site providing the server. However, cooperation among sites and installations makes the Internet possible. If sites take excessive advantage of the right to reject traffic, the ubiquity of email availability (one of the strengths of the Internet) will be threatened; considerable care should be taken and balance maintained if a site decides to be selective about the traffic it will accept and process.

In recent years, use of the relay function through arbitrary sites has been used as part of hostile efforts to hide the actual origins of mail. Some sites have decided to limit the use of the relay function to known or identifiable sources, and implementations

SHOULD
provide the capability to perform this type of filtering. When mail is rejected for these or other policy reasons, a 550 code SHOULD be used in response to EHLO, MAIL, or RCPT as appropriate.

8. IANA Considerations

IANA will maintain three registries in support of this specification. The first consists of SMTP service extensions with the associated keywords, and, as needed, parameters and verbs. As specified in section 2.2.2, no entry may be made in this registry that starts in an "X". Entries may be made only for service extensions (and associated keywords, parameters, or verbs) that are defined in standards-track or experimental RFCs specifically approved by the IESG for this purpose.

The second registry consists of "tags" that identify forms of domain literals other than those for IPv4 addresses (specified in RFC 821 and in this document) and IPv6 addresses (specified in this document). Additional literal types require standardization before being used; none are anticipated at this time.

The third, established by RFC 821 and renewed by this specification, is a registry of link and protocol identifiers to be used with the "via" and "with" subclauses of the time stamp ("Received: header")

described in section 4.4. Link and protocol identifiers in addition to those specified in this document may be registered only by standardization or by way of an RFC-documented, IESG-approved, Experimental protocol extension.

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11. Acknowledgments

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APPENDICES

A. TCP Transport Service

The TCP connection supports the transmission of 8-bit bytes. The SMTP data is 7-bit ASCII characters. Each character is transmitted as an 8-bit byte with the high-order bit cleared to zero. Service extensions may modify this rule to permit transmission of full 8-bit data bytes as part of the message body, but not in SMTP commands or responses.

B. Generating SMTP Commands from RFC 822 Headers

Some systems use RFC 822 headers (only) in a mail submission protocol, or otherwise generate SMTP commands from RFC 822 headers when such a message is handed to an MTA from a UA. While the MTA-UA protocol is a private matter, not covered by any Internet Standard, there are problems with this approach. For example, there have been repeated problems with proper handling of "bcc" copies and

redistribution lists when information that conceptually belongs to a mail envelopes is not separated early in processing from header information (and kept separate).

It is recommended that the UA provide its initial ("submission client") MTA with an envelope separate from the message itself. However, if the envelope is not supplied, SMTP commands SHOULD be generated as follows:

1. Each recipient address from a TO, CC, or BCC header field SHOULD be copied to a RCPT command (generating multiple message copies if that is required for queuing or delivery). This includes any addresses listed in a RFC 822 "group". Any BCC fields SHOULD then be removed from the headers. Once this process is completed, the remaining headers SHOULD be checked to verify that at least one To:, Cc:, or Bcc: header remains. If none do, then a bcc: header with no additional information SHOULD be inserted as specified in [32].

2. The return address in the MAIL command SHOULD, if possible, be derived from the system's identity for the submitting (local) user, and the "From:" header field otherwise. If there is a system identity available, it SHOULD also be copied to the Sender header field if it is different from the address in the From header field. (Any Sender field that was already there SHOULD be removed.) Systems may provide a way for submitters to override the envelope return address, but may want to restrict its use to privileged users. This will not prevent mail forgery, but may lessen its incidence; see section 7.1.

When an MTA is being used in this way, it bears responsibility for ensuring that the message being transmitted is valid. The mechanisms for checking that validity, and for handling (or returning) messages that are not valid at the time of arrival, are part of the MUA-MTA interface and not covered by this specification.

A submission protocol based on Standard RFC 822 information alone MUST NOT be used to gateway a message from a foreign (non-SMTP) mail system into an SMTP environment. Additional information to construct an envelope must come from some source in the other environment, whether supplemental headers or the foreign system's envelope.

Attempts to gateway messages using only their header "to" and "cc" fields have repeatedly caused mail loops and other behavior adverse to the proper

functioning of the Internet mail environment. These problems have been especially common when the message originates from an Internet mailing list and is distributed into the foreign environment using envelope information. When these messages are then processed by a header-only remailer, loops back to the Internet environment (and the mailing list) are almost inevitable.

C. Source Routes

Historically, the <reverse-path> was a reverse source routing list of hosts and a source mailbox. The first host in the <reverse-path> SHOULD be the host sending the MAIL command. Similarly, the <forward-path> may be a source routing lists of hosts and a destination mailbox. However, in general, the <forward-path> SHOULD contain only a mailbox and domain name, relying on the domain name system to supply routing information if required. The use of source routes is deprecated; while servers MUST be prepared to receive and handle them as discussed in section 3.3 and F.2, clients SHOULD NOT transmit them and this section was included only to provide context.

For relay purposes, the forward-path may be a source route of the form "@ONE,@TWO:JOE@THREE", where ONE, TWO, and THREE MUST BE fully-qualified domain names. This form is used to emphasize the distinction between an address and a route. The mailbox is an absolute address, and the route is information about how to get there. The two concepts should not be confused.

If source routes are used, RFC 821 and the text below should be consulted for the mechanisms for constructing and updating the forward- and reverse-paths.

The SMTP server transforms the command arguments by moving its own identifier (its domain name or that of any domain for which it is acting as a mail exchanger), if it appears, from the forward-path to the beginning of the reverse-path.

Notice that the forward-path and reverse-path appear in the SMTP commands and replies, but not necessarily in the message. That is, there is no need for these paths and especially this syntax to appear in the "To:" , "From:", "CC:", etc. fields of the message header. Conversely, SMTP servers MUST NOT derive final message delivery information from message header fields.

When the list of hosts is present, it is a "reverse" source route and indicates that the mail was relayed through each host on the list (the first host in the list was the most recent relay). This list is

used as a source route to return non-delivery notices to the sender. As each relay host adds itself to the beginning of the list, it MUST use its name as known in the transport environment to which it is relaying the mail rather than that of the transport environment from which the mail came (if they are different).

D. Scenarios

This section presents complete scenarios of several types of SMTP sessions. In the examples, "C:" indicates what is said by the SMTP client, and "S:" indicates what is said by the SMTP server.

D.1 A Typical SMTP Transaction Scenario

This SMTP example shows mail sent by Smith at host bar.com, to Jones, Green, and Brown at host foo.com. Here we assume that host bar.com contacts host foo.com directly. The mail is accepted for Jones and Brown. Green does not have a mailbox at host foo.com.

```
S: 220 foo.com Simple Mail Transfer Service Ready
C: EHLO bar.com
S: 250-foo.com greets bar.com
S: 250-8BITMIME
S: 250-SIZE
S: 250-DSN
S: 250 HELP
C: MAIL FROM:<Smith@bar.com>
S: 250 OK
C: RCPT TO:<Jones@foo.com>
S: 250 OK
C: RCPT TO:<Green@foo.com>
S: 550 No such user here
C: RCPT TO:<Brown@foo.com>

S: 250 OK
C: DATA
S: 354 Start mail input; end with <CRLF>.<CRLF>
C: Blah blah blah...
C: ...etc. etc. etc.
C: .
S: 250 OK
C: QUIT
S: 221 foo.com Service closing transmission channel
```

D.2 Aborted SMTP Transaction Scenario

S: 220 foo.com Simple Mail Transfer Service Ready
C: EHLO bar.com
S: 250-foo.com greets bar.com
S: 250-8BITMIME
S: 250-SIZE
S: 250-DSN
S: 250 HELP
C: MAIL FROM:<Smith@bar.com>
S: 250 OK
C: RCPT TO:<Jones@foo.com>
S: 250 OK
C: RCPT TO:<Green@foo.com>
S: 550 No such user here
C: RSET
S: 250 OK
C: QUIT
S: 221 foo.com Service closing transmission channel

D.3 Relayed Mail Scenario

Step 1 -- Source Host to Relay Host

S: 220 foo.com Simple Mail Transfer Service Ready
C: EHLO bar.com
S: 250-foo.com greets bar.com
S: 250-8BITMIME
S: 250-SIZE
S: 250-DSN
S: 250 HELP
C: MAIL FROM:<JQP@bar.com>
S: 250 OK
C: RCPT TO:<@foo.com:Jones@XYZ.COM>
S: 250 OK
C: DATA
S: 354 Start mail input; end with <CRLF>.<CRLF>
C: Date: Thu, 21 May 1998 05:33:29 -0700

C: From: John Q. Public <JQP@bar.com>
C: Subject: The Next Meeting of the Board
C: To: Jones@xyz.com
C:
C: Bill:
C: The next meeting of the board of directors will be
C: on Tuesday.
C: John.
C: .
S: 250 OK

C: QUIT
S: 221 foo.com Service closing transmission channel

Step 2 -- Relay Host to Destination Host

S: 220 xyz.com Simple Mail Transfer Service Ready
C: EHLO foo.com
S: 250 xyz.com is on the air
C: MAIL FROM:<@foo.com:JQP@bar.com>
S: 250 OK
C: RCPT TO:<Jones@XYZ.COM>
S: 250 OK
C: DATA
S: 354 Start mail input; end with <CRLF>.<CRLF>
C: Received: from bar.com by foo.com ; Thu, 21 May 1998
C: 05:33:29 -0700
C: Date: Thu, 21 May 1998 05:33:22 -0700
C: From: John Q. Public <JQP@bar.com>
C: Subject: The Next Meeting of the Board
C: To: Jones@xyz.com
C:
C: Bill:
C: The next meeting
of the board of directors will be
C: on Tuesday.
C: John.
C: .
S: 250 OK
C: QUIT
S: 221 foo.com Service closing transmission channel

D.4 Verifying and Sending Scenario

S: 220 foo.com Simple Mail Transfer Service Ready
C: EHLO bar.com
S: 250-foo.com greets bar.com
S: 250-8BITMIME
S: 250-SIZE
S: 250-DSN

S: 250-VRFY
S: 250 HELP
C: VRFY Crispin
S: 250 Mark Crispin <Admin.MRC@foo.com>
C: SEND FROM:<EAK@bar.com>
S: 250 OK
C: RCPT TO:<Admin.MRC@foo.com>
S: 250 OK

C: DATA
S: 354 Start mail input; end with <CRLF>.<CRLF>
C: Blah blah blah...
C: ...etc. etc. etc.
C: .
S: 250 OK
C: QUIT
S: 221 foo.com Service closing transmission channel

E. Other Gateway Issues

In general, gateways between the Internet and other mail systems SHOULD attempt to preserve any layering semantics across the boundaries between the two mail systems involved. Gateway-translation approaches that attempt to take shortcuts by mapping, (such as envelope information from one system to the message headers or body of another) have generally proven to be inadequate in important ways. Systems translating between environments that do not support both envelopes and headers and Internet mail must be written with the understanding that some information loss is almost inevitable.

F. Deprecated Features of RFC 821

A few features of RFC 821 have proven to be problematic and SHOULD NOT be used in Internet mail.

F.1 TURN

This command, described in RFC 821, raises important security issues since, in the absence of strong authentication of the host requesting that the client and server switch roles, it can easily be used to divert mail from its correct destination. Its use is deprecated; SMTP systems SHOULD NOT use it unless the server can authenticate the client.

F.2
Source Routing

RFC 821 utilized the concept of explicit source routing to get mail from one host to another via a series of relays. The requirement to utilize source routes in regular mail traffic was eliminated by the introduction of the domain name system "MX" record and the last significant justification for them was eliminated by the introduction, in RFC 1123, of a clear requirement that addresses following an "@" must all be fully-qualified domain names. Consequently, the only remaining justifications for the use of source

routes are support for very old SMTP clients or MUAs and in mail system debugging. They can, however, still be useful in the latter circumstance and for routing mail around serious, but temporary, problems such as problems with the relevant DNS records.

SMTP servers MUST continue to accept source route syntax as specified in the main body of this document and in RFC 1123. They MAY, if necessary, ignore the routes
and utilize only the target domain in
the address. If they do utilize the source route, the message MUST be sent to the first domain shown in the address. In particular, a server MUST NOT guess at shortcuts within the source route.

Clients SHOULD NOT utilize explicit source routing except under unusual circumstances, such as debugging or potentially relaying around firewall or mail system configuration errors.

F.3 HELO

As discussed in sections 3.1 and 4.1.1, EHLO is strongly preferred to HELO when the server will accept the former. Servers must continue to accept and process HELO in order to support older clients.

F.4 #-literals

RFC 821 provided for specifying an Internet address as a decimal integer host number prefixed by a pound sign, "#". In practice, that form has been obsolete since the introduction of TCP/IP. It is deprecated and MUST NOT be used.

F.5 Dates and Years

When dates are inserted into messages by SMTP clients or
servers
(e.g., in trace fields), four-digit years MUST BE used. Two-digit years are deprecated; three-digit years were never permitted in the Internet mail system.

F.6 Sending versus Mailing

In addition to specifying a mechanism for delivering messages to user's mailboxes, RFC 821 provided additional, optional, commands to deliver messages directly to the user's terminal screen. These commands (SEND, SAML, SOML) were rarely implemented, and changes in workstation technology and the introduction of other protocols may have rendered them obsolete even where they are implemented.

Clients SHOULD NOT provide SEND, SAML, or SOML as services. Servers

MAY implement them. If they are implemented by servers, the implementation model specified in RFC 821 MUST be used and the command names MUST be published in the response to the EHLO command.

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Found in path(s):
* /mikel-mail-2-3-1-0-g2cc19d5-tar-gz/mikel-mail-2cc19d5/reference/rfc2821 Simple Mail Transfer Protocol.txt
No license file was found, but licenses were detected in source scan.

Network Working Group E. Levinson
Request for Comments: 2111 XIson, Inc.
Category: Standards Track March 1997

Status of this Memo

This document specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state and status of this protocol. Distribution of this memo is unlimited.

Abstract

The Uniform Resource Locator (URL) schemes, "cid:" and "mid:" allow references to messages and the body parts of messages. For example, within a single multipart message, one HTML body part might include embedded references to other parts of the same message.

1. Introduction

The use of [MIME] within email to convey Web pages and their associated images requires a URL scheme to permit the HTML to refer to the images or other data included in the message. The Content-ID Uniform Resource Locator, "cid:", serves that purpose.

Similarly Net News readers use Message-IDs to link related messages together. The Message-ID URL provides a scheme, "mid:", to refer to such messages as a "resource".

The "mid" (Message-ID) and "cid" (Content-ID) URL schemes provide identifiers for messages and their body parts. The "mid" scheme uses (a part of) the message-id of an email message to refer to a specific message. The "cid" scheme refers to a specific body part of a message; its use is generally limited to references to other body parts in the same message as the referring body part. The "mid" scheme may also refer to a specific body part within a designated message, by including the content-ID's address.

A note on terminology. The terms "body part" and "MIME entity" are used interchangeably. They refer to the headers and body of a MIME message, either the message itself or one of the body parts contained in a Multipart message.

2. The MID and CID URL Schemes

RFC1738 [URL] reserves the "mid" and "cid" schemes for Message-ID and Content-ID respectively. This memorandum defines the syntax for those URLs. Because they use the same syntactic elements they are presented together.

The URLs take the form

```
content-id    = url-addr-spec

message-id    = url-addr-spec

url-addr-spec = addr-spec  ; URL encoding of RFC 822 addr-spec

cid-url       = "cid" ":" content-id

mid-url       = "mid" ":" message-id [ "/" content-id ]
```

Note: in Internet mail messages, the addr-spec in a Content-ID [MIME] or Message-ID [822] header are enclosed in angle brackets (<>). Since addr-spec in a Message-ID or Content-ID might contain characters not allowed within a URL; any such character (including "/", which is reserved within the "mid" scheme) must be hex-encoded using the %hh escape mechanism in [URL].

A "mid" URL with only a "message-id" refers to an entire message. With the appended "content-id", it refers to a body part within a message, as does a "cid" URL. The Content-ID of a MIME body part is required to be globally unique. However, in many systems that store messages, body parts are not indexed independently their context (message). The "mid" URL long form was designed to supply the context needed to support interoperability with such systems.

A implementation conforming to this specification is required to support the "mid" URL long form (message-id/content-id). Conforming implementations can choose to, but are not required to, take advantage of the content-id's uniqueness and interpret a "cid" URL to refer to any body part within the message store.

In limited circumstances (e.g., within multipart/alternate), a single

message may contain several body parts that have the same Content-ID. That occurs, for example, when identical data can be accessed through different methods [MIME, sect. 7.2.3]. In those cases, conforming implementations are required to use the rules of the containing MIME entity (e.g., multi-part/alternate) to select the body part to which the Content-ID refers.

A "cid" URL is converted to the corresponding Content-ID message header [MIME] by removing the "cid:" prefix, converting %hh hex-escaped characters to their ASCII equivalents and enclosing the remaining parts with an angle bracket pair, "<" and ">". For example, "mid:foo4%25foo1@bar.net" corresponds to

Message-ID: <foo4%foo1@bar.net>

A "mid" URL is converted to a Message-ID or Message-ID/Content-ID pair in a similar fashion.

Both message-id and content-id are required to be globally unique. That is, no two different messages will ever have the same Message-ID addr-spec; no different body parts will ever have the same Content-ID addr-spec. A common technique used by many message systems is to use a time and date stamp along with the local host's domain name, e.g., 950124.162336@XIson.com.

Some Examples

The following message contains an HTML body part that refers to an image contained in another body part. Both body parts are contained in a Multipart/Related MIME entity. The HTML IMG tag contains a cidurl which points to the image.

```
From: foo1@bar.net
To: foo2@bar.net
Subject: A simple example
Mime-Version:
1.0
Content-Type: multipart/related; boundary="boundary-example-1";
          type=Text/HTML
```

Open Source Used In SMI 2025.04.1-Oct-2025 32693

```
--boundary-example 1
Content-Type: Text/HTML; charset=US-ASCII

... text of the HTML document, which might contain a hyperlink
to the other body part, for example through a statement such as:
<IMG SRC="cid:foo4*foo1@bar.net" ALT="IETF logo">

--boundary-example-1
Content-ID: foo4*foo1@bar.net
Content-Type: IMAGE/GIF
Content-Transfer-Encoding: BASE64
```



```
R0lGODlhGAGgAPEAAP/////ZRaCgoAAAACH+PUNvcHlyaWdodCAoQykgMTk5
NSBJRVRGLiBVbmF1dGhvcml6ZWQgZHVwbGljYXRpb24gcHJvaGliaXRlZC4A
etc...

--boundary-example-1--
```

The following message points to another message (hopefully still in the recipient's message store).

```
From: bar@none.com
To: phooey@all.com
 Subject: Here's how to do it
Content-type: text/html; charset=usascii

...  The items in my
<A HREF= "mid:960830.1639@XIson.com/partA.960830.1639@XIson.com">
previous message</A>, shows how the approach you propose can be
used to accomplish ...
```

3. Security Considerations

The URLs defined here provide an addressing or referencing mechanism. The values of these URLs disclose no more about the originators environment than the corresponding Message-ID and Content-ID values.

Where concern exists about such disclosures the originator of a message using mid and cid URLs must take precautions to insure that confidential information is not disclosed. Those precautions should already be in place to handle existing mail use of the Message-ID and Content-ID.

4. References

[822] Crocker, D., "Standard for the Format of ARPA Internet Text Messages," August 1982, University of Delaware, STD 11, RFC 822.

[MIME] N. Borenstein, N. Freed, "MIME (Multipurpose Internet Mail Extensions) Part One: Mechanisms for Specifying and Describing the Format of Internet Message Bodies," September 1993, RFC 1521.

[URL] Berners-Lee, T., Masinter, L., and McCahill, M., "Uniform Resource Locators (URL)," December 1994.

[MULREL] E. Levinson, "The MIME Multipart/Related Content-type," December 1995, RFC 1874.

5. Acknowledgments

The original concept of "mid" and "cid" URLs were part of the Tim Berners-Lee's original vision of the World Wide Web. The ideas and design have benefited greatly by discussions with Harald Alvestrand, Dan Connolly, Roy Fielding, Larry Masinter, Jacob Palme, and others in the MHTML working group.

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Open Source Used In SMI 2025.04.1-Oct-2025 32695

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Found in path(s):
* /mikel-mail-2-3-1-0-g2cc19d5-tar-gz/mikel-mail-2cc19d5/reference/rfc2111 Content-ID and Message-ID URLs.txt
No license file was found, but licenses were detected in source scan.

= Mail

== Introduction

Mail is an internet library for Ruby that is designed to handle emails generation, parsing and sending in a simple, rubyesque manner.

The purpose of this library is to provide a single point of access to handle all email functions, including sending and receiving emails. All network type actions are done through proxy methods to Net::SMTP, Net::POP3 etc.

Built from my experience with TMail, it is designed to be a pure ruby implementation that makes generating, sending and parsing emails a no brainer.

It is also designed form the ground up to work with Ruby 1.9. This is because Ruby 1.9 handles text encodings much more magically than Ruby 1.8.x and so these features have been taken full advantage of in this library allowing Mail to handle a lot more messages more cleanly than TMail. Mail does run on Ruby 1.8.x... it's just not as fun to code.

Finally, Mail has been designed with a very
simple object oriented system
that really opens up the email messages you are parsing, if you know what you are doing, you can fiddle with every last bit of your email directly.

== Compatibility

Mail is tested and works on the following platforms:

* jruby-1.5.2 [[x86_64-java]]
* ree-1.8.7-2010.02 [x86_64]
* ruby-1.8.6-p399 [x86_64]
* ruby-1.8.7-p302 [x86_64]
* ruby-1.9.2-p0 [x86_64]

== Discussion

If you want to discuss mail with like minded individuals, please subscribe to the Google Group http://groups.google.com/group/mail-ruby

== Current Capabilities of Mail

* RFC2822 Support, Reading and Writing
* RFC2045-2049 Support for multipart emails
* Support for creating multipart alternate emails
* Support for reading multipart/report emails & getting details from such
* Support for multibyte emails - needs quite a lot of work and testing
* Wrappers for File, Net/POP3, Net/SMTP
* Auto encoding of non US-ASCII header fields
* Auto encoding of non US-ASCII bodies

Mail is RFC2822
compliant now, that is, it can parse and generate valid US-ASCII
emails. There are a few obsoleted syntax emails that it will have problems with, but
it also is quite robust, meaning, if it finds something it doesn't understand it will
not crash, instead, it will skip the problem and keep parsing. In the case of a header
it doesn't understand, it will initialise the header as an optional unstructured
field and continue parsing.

This means Mail won't (ever) crunch your data (I think).

You can also create MIME emails. There are helper methods for making a
multipart/alternate email for text/plain and text/html (the most common pair)
and you can manually create any other type of MIME email.

== Roadmap

Next TODO:

* Improve MIME support for character sets in headers, currently works, mostly, needs
refinement.

== Testing Policy

Basically... we do BDD on Mail. No method gets written in Mail without a
corresponding or covering spec. We expect as a minimum 100% coverage
measured
by RCov. While this is not perfect by any measure, it is pretty
good. Additionally, all functional tests from TMail are to be passing before
the gem gets released.

It also means you can be sure Mail will behave correctly.

== API Policy

No API removals within a single point release. All removals to be depreciated with
warnings for at least one MINOR point release before removal.

Also, all private or protected methods to be declared as such - though this is still I/P.

== Installation

Installation is fairly simple, I host mail on rubygems, so you can just do:

gem install mail

== Encodings

If you didn't know, handling encodings in Emails is not as straight forward as you

would hope.

I have tried to simplify it some:

1. All objects that can render into an email, have an :encoded method. Encoded will return the object as a complete string ready to send in the mail system, that is, it will include the header field and value and CRLF at the end and wrapped as needed.

2. All objects that can render into an email, have a :decoded method. Decoded will return the object's "value" only as a string. This means it will not include the header fields (like 'To:' or 'Subject:').

3. By default, calling :to_s on a container object will call it's encoded method, while :to_s on a field object will call it's decoded method. So calling :to_s on a Mail object will return the mail, all encoded ready to send, while calling :to_s on the From field or the body will return the decoded value of the object. The header object of Mail is considered a container. If you are in doubt, call :encoded, or :decoded explicitly, this is safer if you are not sure.

4. Structured fields that have parameter values that can be encoded (e.g. Content-Type) will provide decoded parameter values when you call the parameter names as methods against the object.

5. Structured fields that have parameter values that can be encoded (e.g. Content-Type) will provide encoded parameter values when you call the parameter names through the object.parameters['<parameter_name>'] method call.

== Contributing

Please do! Contributing is easy in Mail:

1. Check the Reference RFCs, they are in the References directory, so no excuses.
2. Open a ticket on github, maybe someone else has the problem too
3. Make a fork of my github repository
4. Make a spec driven change to the code base
5. Make sure it works and all specs pass, on Ruby versions 1.8.6, 1.8.7 and 1.9
6. Update the README if needed to reflect your change / addition
7. With all specs passing push your changes back to your fork
8. Send me a pull request

== Usage

All major mail functions should be able to happen from the Mail::module.
So, you should be able to just "require 'mail'" to get started.

=== Making an email

```
require 'mail'

mail = Mail.new do
     from 'mikel@test.lindsaar.net'
       to 'you@test.lindsaar.net'
  subject 'This is a test email'
     body File.read('body.txt')
 end

mail.to_s #=> "From: mikel@test.lindsaar.net\r\nTo: you@...
```

=== Making an email, have it your way:

```
require 'mail'

mail = Mail.new do
  body File.read('body.txt')
end

mail['from'] = 'mikel@test.lindsaar.net'
mail[:to]    = 'you@test.lindsaar.net'
mail.subject = 'This is a test email'

mail.to_s #=> "From: mikel@test.lindsaar.net\r\nTo: you@...
```

=== Don't Worry About Message IDs:

```
require 'mail'

mail = Mail.new do
    to 'you@test.lindsaar.net'
  body 'Some simple body'
end

mail.to_s =~ /Message\-ID: <[\d\w_]+@.+.mail/ #=> 27
```

Mail will automatically add a Message-ID field if it is missing and
give it a unique, random Message-ID along the lines of:

```
<4a7ff76d7016_13a81ab802e1@local.fqdn.mail>
```

=== Or do worry about Message-IDs:

```
require 'mail'

mail = Mail.new do
         to 'you@test.lindsaar.net'
```

```
 message_id '<ThisIsMyMessageId@some.domain.com>'
      body 'Some simple body'
end

mail.to_s =~ /Message\-ID: <ThisIsMyMessageId@some.domain.com>/
 #=> 27
```

Mail will take the message_id you assign to it trusting that you know what you are doing.

=== Sending an email:

Mail defaults to sending via SMTP to localhost port 25. If you have a sendmail or postfix daemon running on on this port, sending email is as easy as:

```
Mail.deliver do
     from 'me@test.lindsaar.net'
       to 'you@test.lindsaar.net'
  subject 'Here is the image you wanted'
     body File.read('body.txt')
  add_file '/full/path/to/somefile.png'
end
```

or

```
mail = Mail.new do
     from 'me@test.lindsaar.net'
       to 'you@test.lindsaar.net'
  subject 'Here is the image you wanted'
     body File.read('body.txt')
  add_file {:filename => 'somefile.png', :content => File.read('/somefile.png')}
end

mail.deliver!
```

Sending via sendmail can be done like so:

```
 mail = Mail.new do
      from 'me@test.lindsaar.net'
        to 'you@test.lindsaar.net'
   subject 'Here is the image you wanted'
      body File.read('body.txt')
  add_file {:filename
 => 'somefile.png', :content => File.read('/somefile.png')}
 end

 mail.delivery_method :sendmail
```

mail.deliver

{Learn more about SMTP Delivery}[link:classes/Mail/SMTP.html]

{Learn more about File Delivery}[link:classes/Mail/FileDelivery.html]

{Learn more about Sendmail Delivery}[link:classes/Mail/Sendmail.html]

{Learn more about Test Email Delivery}[link:classes/Mail/TestMailer.html]

=== Getting emails from a pop server:

The most recent email:

```
Mail.defaults do
  retriever_method :pop3, { :address             => "pop.gmail.com",
                            :port                => 995,
                            :user_name           => '<username>',
                            :password            => '<password>',
                            :enable_ssl          => true }
end

Mail.all    #=> Returns an array of all emails
Mail.first  #=> Returns the first unread email
Mail.last   #=> Returns the first unread email
```

The first 10 emails sorted by date in ascending
order:

```
require 'mail'

Mail.defaults do
  retriever_method :pop3, { :address             => "pop.gmail.com",
                            :port                => 995,
                            :user_name           => '<username>',
                            :password            => '<password>',
                            :enable_ssl          => true }
end

emails = Mail.find(:what => :first, :count => 10, :order => :asc)
emails.length #=> 10
```

Or even all emails:

```
Mail.defaults do
  retriever_method :pop3, { :address             => "pop.gmail.com",
                            :port                => 995,
```

```
                    :user_name        => '<username>',
                    :password         => '<password>',
                    :enable_ssl       => true }
end

emails = Mail.all

emails.length #=> LOTS!
```

{Learn more about POP3}[link:classes/Mail/POP3.html]

{Learn more about IMAP}[link:classes/Mail/IMAP.html]

=== Reading an
 Email

```
require 'mail'

mail = Mail.read('/path/to/message.eml')

mail.envelope.from   #=> 'mikel@test.lindsaar.net'
mail.from.addresses  #=> ['mikel@test.lindsaar.net', 'ada@test.lindsaar.net']
mail.sender.address  #=> 'mikel@test.lindsaar.net'
mail.to              #=> 'bob@test.lindsaar.net'
mail.cc              #=> 'sam@test.lindsaar.net'
mail.subject         #=> "This is the subject"
mail.date.to_s       #=> '21 Nov 1997 09:55:06 -0600'
mail.message_id      #=> '<4D6AA7EB.6490534@xxx.xxx>'
mail.body.decoded    #=> 'This is the body of the email...
```

Many more methods available.

=== Reading a Multipart Email

```
require 'mail'

mail = Mail.read('multipart_email')

mail.multipart?          #=> true
mail.parts.length        #=> 2
mail.preamble            #=> "Text before the first part"
mail.epilogue            #=> "Text after the last part"
mail.parts.map { |p| p.content_type }  #=> ['text/plain', 'application/pdf']
mail.parts.map { |p| p.class }         #=> [Mail::Message,
 Mail::Message]
mail.parts[0].content_type_parameters  #=> {'charset' => 'ISO-8859-1'}
mail.parts[1].content_type_parameters  #=> {'name' => 'my.pdf'}
```

Mail generates a tree of parts. Each message has many or no parts. Each part is another message which can have many or no parts.

A message will only have parts if it is a multipart/mixed or related/mixed content type and has a boundary defined.

=== Writing and sending a multipart/alternative (html and text) email

Mail makes some basic assumptions and makes doing the common thing as simple as possible.... (asking a lot from a mail library)

```
require 'mail'

mail = Mail.deliver do
  to 'nicolas@test.lindsaar.net.au'
  from 'Mikel Lindsaar <mikel@test.lindsaar.net.au>'
  subject 'First multipart email sent with Mail'
  text_part do
    body 'This is plain text'
  end
  html_part do
    content_type 'text/html; charset=UTF-8'
    body '<h1>This is HTML</h1>'
  end
end
```

Mail then delivers the email at the end of the
 block and returns the
resulting Mail::Message object, which you can then inspect if you
so desire...

```
puts mail.to_s #=>

To: nicolas@test.lindsaar.net.au
From: Mikel Lindsaar <mikel@test.lindsaar.net.au>
Subject: First multipart email sent with Mail
Content-Type: multipart/alternative;
  boundary=--==_mimepart_4a914f0c911be_6f0f1ab8026659
Message-ID: <4a914f12ac7e_6f0f1ab80267d1@baci.local.mail>
Date: Mon, 24 Aug 2009 00:15:46 +1000
Mime-Version: 1.0
Content-Transfer-Encoding: 7bit


----==_mimepart_4a914f0c911be_6f0f1ab8026659
Content-ID: <4a914f12c8c4_6f0f1ab80268d6@baci.local.mail>
Date: Mon, 24 Aug 2009 00:15:46 +1000
Mime-Version: 1.0
```

```
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

This is plain text
----==_mimepart_4a914f0c911be_6f0f1ab8026659
Content-Type: text/html; charset=UTF-8
Content-ID: <4a914f12cf86_6f0f1ab802692c@baci.local.mail>
Date: Mon, 24 Aug 2009 00:15:46 +1000
Mime-Version: 1.0
Content-Transfer-Encoding: 7bit

<h1>This is HTML</h1>
 ----==_mimepart_4a914f0c911be_6f0f1ab8026659--
```

Mail inserts the content transfer encoding, the mime version, the content-id's and handles the content-type and boundary.

Mail assumes that if your text in the body is only us-ascii, that your transfer encoding is 7bit and it is text/plain. You can override this by explicitly declaring it.

=== Making Multipart/Alternate, without a block

You don't have to use a block with the text and html part included, you can just do it declaratively. However, you need to add Mail::Parts to an email, not Mail::Messages.

```
require 'mail'

mail = Mail.new do
  to 'nicolas@test.lindsaar.net.au'
  from 'Mikel Lindsaar <mikel@test.lindsaar.net.au>'
  subject 'First multipart email sent with Mail'
end

text_part = Mail::Part.new do
  body 'This is plain text'
end

html_part = Mail::Part.new do
  content_type 'text/html; charset=UTF-8'
  body '<h1>This is HTML</h1>'
end

mail.text_part = text_part
mail.html_part = html_part
```

Results in the

same email as done using the block form

=== Getting error reports from an email:

```
require 'mail'

@mail = Mail.read('/path/to/bounce_message.eml')

@mail.bounced?         #=> true
@mail.final_recipient  #=> rfc822;mikel@dont.exist.com
@mail.action           #=> failed
@mail.error_status     #=> 5.5.0
@mail.diagnostic_code  #=> smtp;550 Requested action not taken: mailbox unavailable
@mail.retryable?       #=> false
```

=== Attaching and Detaching Files

```
require 'mail'
```

You can just read the file off an absolute path, Mail will try
to guess the mime_type and will encode the file in Base64 for you.

```
@mail = Mail.new
@mail.add_file("/path/to/file.jpg")
@mail.parts.first.attachment? #=> true
@mail.parts.first.content_transfer_encoding.to_s #=> 'base64'
@mail.attachments.first.mime_type #=> 'image/jpg'
@mail.attachments.first.filename #=> 'file.jpg'
@mail.attachments.first.decoded == File.read('/path/to/file.jpg') #=> true
```

Or You can pass in file_data and give it a
filename, again, mail
will try and guess the mime_type for you.

```
@mail = Mail.new
@mail.attachments['myfile.pdf'] = File.read('path/to/myfile.pdf')
@mail.parts.first.attachment? #=> true
@mail.attachments.first.mime_type #=> 'application/pdf'
@mail.attachments.first.decoded == File.read('path/to/myfile.pdf') #=> true
```

You can also override the guessed MIME media type if you really know better
than mail (this should be rarely needed)

```
@mail = Mail.new
file_data = File.read('path/to/myfile.pdf')
@mail.attachments['myfile.pdf'] = { :mime_type => 'application/x-pdf',
                                    :content => File.read('path/to/myfile.pdf') }
@mail.parts.first.mime_type #=> 'application/x-pdf'
```

Of course... Mail will round trip an attachment as well

```
@mail = Mail.new do
  to 'nicolas@test.lindsaar.net.au'
  from 'Mikel Lindsaar <mikel@test.lindsaar.net.au>'
  subject 'First multipart email sent with Mail'
  text_part do
    body 'Here is the attachment
you wanted'
  end
  html_part do
    content_type 'text/html; charset=UTF-8'
    body '<h1>Funky Title</h1><p>Here is the attachment you wanted</p>'
  end
  add_file '/path/to/myfile.pdf'
end

@round_tripped_mail = Mail.new(@mail.encoded)

@round_tripped_mail.attachments.length #=> 1
@round_tripped_mail.attachments.first.filename #=> 'myfile.pdf'
```

== Using Mail with Testing or Spec'ing Libraries

If mail is part of your system, you'll need a way to test it without actually sending emails, the TestMailer can do this for you.

```
require 'mail'
=> true
Mail.defaults do
  delivery_method :test
end
=> #<Mail::Configuration:0x19345a8 @delivery_method=Mail::TestMailer>
Mail::TestMailer.deliveries
=> []
Mail.deliver do
  to 'mikel@me.com'
  from 'you@you.com'
  subject 'testing'
  body 'hello'
end
=> #<Mail::Message:0x19284ec ...
Mail::TestMailer.deliveries.length
=> 1
Mail::TestMailer.deliveries.first
=> #<Mail::Message:0x19284ec ...
```

Mail::TestMailer.deliveries.clear
=> []

== Excerpts from TREC Spam Corpus 2005

The spec fixture files in spec/fixtures/emails/from_trec_2005 are from the
2005 TREC Public Spam Corpus. They remain copyrighted under the terms of
that project and license agreement. They are used in this project to verify
and describe the development of this email parser implementation.

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CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,
TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE
SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Found in path(s):

* /mikel-mail-2-3-1-0-g2cc19d5-tar-gz/mikel-mail-2cc19d5/README.rdoc
No license file was found, but licenses were detected in source scan.

Network Working Group
Request for Comments: 2048
BCP: 13
Obsoletes: 1521, 1522, 1590
Category: Best Current Practice

N. Freed
Innosoft
J. Klensin
MCI
J. Postel
ISI

November 1996

Multipurpose Internet Mail Extensions (MIME) Part Four: Registration Procedures

Status of this Memo

This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements. Distribution of this memo is unlimited.

Abstract

STD 11, RFC 822, defines a message representation protocol specifying considerable detail about US-ASCII message headers, and leaves the message content, or message body, as flat US-ASCII text. This set of documents, collectively called the Multipurpose Internet Mail Extensions, or MIME, redefines the format of messages to allow for

(1) textual message bodies in character sets other than US-ASCII,

(2) an extensible set of different formats for non-textual message bodies,

(3) multi-part message bodies, and

(4) textual header information in character sets other than US-ASCII.

These documents are based on earlier work documented in RFC 934, STD 11, and RFC 1049, but extends and revises them. Because RFC 822 said so little about message bodies, these documents are largely orthogonal to (rather than a revision of) RFC 822.

This fourth document, RFC 2048, specifies various IANA registration procedures for the following MIME facilities:

(1) media types,

(2) external body access types,

(3) content-transfer-encodings.

Registration of character sets for use in MIME is covered elsewhere and is no longer addressed by this document.

These documents are revisions of RFCs 1521 and 1522, which themselves were revisions of RFCs 1341 and 1342. An appendix in RFC 2049 describes differences and changes from previous versions.

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1. Introduction

Recent Internet protocols have been carefully designed to be easily extensible in certain areas. In particular, MIME [RFC 2045] is an open-ended framework and can accommodate additional object types, character sets, and access methods without any changes to the basic protocol. A registration process is needed, however, to ensure that the set of such values is developed in an orderly, well-specified, and public manner.

This document defines registration procedures which use the Internet Assigned Numbers Authority (IANA) as a central registry for such values.

Historical Note: The registration process for media types was initially defined in the context of the asynchronous Internet mail environment. In this mail environment there is a need to limit the number of possible media types to increase the likelihood of interoperability when the capabilities of the remote mail system are not known. As media types are used in new environments, where the proliferation of media types is not a hindrance to interoperability, the original procedure was excessively restrictive and had to be generalized.

2. Media Type Registration

Registration of a new media type or types starts with the construction of a registration proposal. Registration may occur in several different registration trees, which have different requirements as discussed below. In general, the new registration proposal is circulated and reviewed in a fashion appropriate to the tree involved. The media type is then registered if the proposal is acceptable. The following sections describe the requirements and procedures used for each of the different registration trees.

2.1. Registration Trees and Subtype Names

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In order to increase the efficiency and flexibility of the registration process, different structures of subtype names may be registered to accomodate the different natural requirements for, e.g., a subtype that will be recommended for wide support and implementation by the Internet Community or a subtype that is used to move files associated with proprietary software. The following subsections define registration "trees", distinguished by the use of faceted names (e.g., names of the form "tree.subtree...type"). Note that some media types defined prior to this document do not conform to the naming conventions described below. See Appendix A for a discussion of them.

2.1.1. IETF Tree

The IETF tree is intended for types of general interest to the Internet Community. Registration in the IETF tree requires approval by the IESG and publication of the media type registration as some form of RFC.

Media types in the IETF tree are normally denoted by names that are not explicitly faceted, i.e., do not contain period (".", full stop) characters.

The "owner" of a media type registration in the IETF tree is assumed to be the IETF itself. Modification or alteration of the specification requires the same level of processing (e.g. standards track) required for the initial registration.

2.1.2. Vendor Tree

The vendor tree is used for media types associated with commercially available products. "Vendor" or "producer" are construed as equivalent and very broadly in this context.

A registration may be placed in the vendor tree by anyone who has need to interchange files associated with the particular product. However, the registration formally belongs to the vendor or organization producing the software or file format. Changes to the specification will be made at their request, as discussed in

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subsequent sections.

Registrations in the vendor tree will be distinguished by the leading facet "vnd.". That may be followed, at the discretion of the registration, by either a media type name from a well-known producer (e.g., "vnd.mudpie") or by an IANA-approved designation of the producer's name which is then followed by a media type or product designation (e.g., vnd.bigcompany.funnypictures).

While public exposure and review of media types to be registered in the vendor tree is not required, using the ietf-types list for review is strongly encouraged to improve the quality of those specifications. Registrations in the vendor tree may be submitted directly to the IANA.

2.1.3. Personal or Vanity Tree

Registrations for media types created experimentally or as part of products that are not distributed commercially may be registered in the personal or vanity tree. The registrations are distinguished by the leading facet "prs.".

The owner of "personal" registrations and associated specifications is the person or entity making the registration, or one to whom responsibility has been transferred as described below.

While public exposure and review of media types to be registered in the personal tree is not required, using the ietf-types list for review is strongly encouraged to improve the quality of those specifications. Registrations in the personl tree may be submitted directly to the IANA.

2.1.4. Special `x.' Tree

For convenience and symmetry with this registration scheme, media type names with "x." as the first facet may be used for the same purposes for which names starting in "x-" are normally used. These types are unregistered, experimental, and should be used only with the active agreement of the parties exchanging them.

However, with the simplified registration procedures described above for vendor and personal trees, it should rarely, if ever, be necessary to use unregistered experimental types, and as such use of both "x-" and "x." forms is discouraged.

2.1.5. Additional Registration Trees

From time to time and as required by the community, the IANA may, with the advice and consent of the IESG, create new top-level registration trees. It is explicitly assumed that these trees may be created for external registration and management by well-known permanent bodies, such as scientific societies for media types specific to the sciences they cover. In general, the quality of review of specifications for one of these additional registration trees is expected
to be equivalent to that which IETF would give to registrations in its own tree. Establishment of these new trees will be announced through RFC publication approved by the IESG.

2.2. Registration Requirements

Media type registration proposals are all expected to conform to various requirements laid out in the following sections. Note that requirement specifics sometimes vary depending on the registration tree, again as detailed in the following sections.

2.2.1. Functionality Requirement

Media types must function as an actual media format: Registration of things that are better thought of as a transfer encoding, as a character set, or as a collection of separate entities of another type, is not allowed. For example, although applications exist to decode the base64 transfer encoding [RFC 2045], base64 cannot be registered as a media type.

This requirement applies regardless of the registration tree involved.

2.2.2. Naming Requirements

All registered media types must be assigned MIME type and subtype names. The combination of these names then serves to uniquely identify the media type and the format of the subtype name identifies

the registration tree.

The choice of top-level type name must take the nature of media type involved into account. For example, media normally used for representing still images should be a subtype of the image content type, whereas media capable of representing audio information belongs

under the audio content type. See RFC 2046 for additional information on the basic set of top-level types and their characteristics.

New subtypes of top-level types must conform to the restrictions of the top-level type, if any. For example, all subtypes of the multipart content type must use the same encapsulation syntax.

In some cases a new media type may not "fit" under any currently defined top-level content type. Such cases are expected to be quite rare. However, if such a case arises a new top-level type can be defined to accommodate it. Such a definition must be done via standards-track RFC; no other mechanism can be used to define additional top-level content types.

These requirements apply regardless of the registration tree involved.

2.2.3. Parameter Requirements

Media types may elect to use one or more MIME content type parameters, or some parameters may be automatically made available to the media type by virtue of being a subtype of a content type that defines a set of parameters applicable to any of its subtypes. In either case, the names, values, and meanings of any parameters must be fully specified when a media type is registered in the IETF tree, and should be specified as completely as possible when media types are registered in the vendor or personal trees.

New parameters must not be defined as a way to introduce new functionality in types registered in the IETF tree, although new parameters may be added to convey additional information that does not otherwise change existing functionality. An example of this

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would be a "revision" parameter to indicate a revision level of an external specification such as JPEG. Similar behavior is encouraged for media types registered in the vendor or personal trees but is not required.

2.2.4. Canonicalization and Format Requirements

All registered media types must employ a single, canonical data format, regardless of registration tree.

A precise and openly available specification of the format of each media type is required for all types registered in the IETF tree and must at a minimum be referenced by, if it isn't actually included in, the media type registration proposal itself.

The specifications of format and processing particulars may or may not be publically available for media types registered in the vendor tree, and such registration proposals are explicitly permitted to include only a specification of which software and version produce or process such media types. References to or inclusion of format specifications in registration proposals is encouraged but not required.

Format specifications are still required for registration in the personal tree, but may be either published as RFCs or otherwise deposited with IANA. The deposited specifications will meet the same criteria as those required to register a well-known TCP port and, in particular, need not be made public.

Some media types involve the use of patented technology. The registration of media types involving patented technology is specifically permitted. However, the restrictions set forth in RFC 1602 on the use of patented technology in standards-track protocols must be respected when the specification of a media type is part of a standards-track protocol.

2.2.5. Interchange Recommendations

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Media types should, whenever possible, interoperate across as many systems and applications as possible. However, some media types will inevitably have problems interoperating across different platforms. Problems with different versions, byte ordering, and specifics of gateway handling can and will arise.

Universal interoperability of media types is not required, but known interoperability issues should be identified whenever possible. Publication of a media type does not require an exhaustive review of interoperability, and the interoperability considerations section is subject to continuing evaluation.

These recommendations apply regardless of the registration tree involved.

2.2.6.
Security Requirements

An analysis of security issues is required for for all types registered in the IETF Tree. (This is in accordance with the basic requirements for all IETF protocols.) A similar analysis for media types registered in the vendor or personal trees is encouraged but not required. However, regardless of what security analysis has or has not been done, all descriptions of security issues must be as accurate as possible regardless of registration tree. In particular, a statement that there are "no security issues associated with this

type" must not be confused with "the security issues associates with this type have not been assessed".

There is absolutely no requirement that media types registered in any tree be secure or completely free from risks. Nevertheless, all known security risks must be identified in the registration of a media type, again regardless of registration tree.

The security considerations section of all registrations is subject to continuing evaluation and modification, and in particular may be extended by use of the "comments on media types" mechanism described in subsequent sections.

Some of the issues that should be looked at in a security analysis of

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a media type are:

(1) Complex media types may include provisions for directives that institute actions on a recipient's files or other resources. In many cases provision is made for originators to specify arbitrary actions in an unrestricted fashion which may then have devastating effects. See the registration of the application/postscript media type in RFC 2046 for an example of such directives and how to handle them.

(2) Complex media types may include provisions for directives that institute actions which, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in some way. Again, the registration of the application/postscript media type illustrates how such directives can be handled.

(3) A media type might be targeted for applications that require some sort of security assurance but not provide the necessary security mechanisms themselves. For example, a media type could be defined for storage of confidential medical information which in turn requires an external confidentiality service.

2.2.7. Usage and Implementation Non-requirements

In the asynchronous mail environment, where information on the capabilities of the remote mail agent is frequently not available to the sender, maximum interoperability is attained by restricting the number of media types used to those "common" formats expected to be widely implemented. This was asserted in the past as a reason to

limit the number of possible media types and resulted in a registration process with a significant hurdle and delay for those registering media types.

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However, the need for "common" media types does not require limiting the registration of new media types. If a limited set of media types is recommended for a particular application, that should be asserted by a separate applicability statement specific for the application and/or environment.

As such, universal support and implementation of a media type is NOT a requirement for registration. If, however, a media type is explicitly intended for limited use, this should be noted in its registration.

2.2.8. Publication Requirements

Proposals for media types registered in the IETF tree must be published as RFCs. RFC publication of vendor and personal media type proposals is encouraged but not required. In all cases IANA will retain copies of all media type proposals and "publish" them as part of the media types registration tree itself.

Other than in the IETF tree, the registration of a data type does not imply endorsement, approval, or recommendation by IANA or IETF or even certification that the specification is adequate. To become Internet Standards, protocol, data objects, or whatever must go through the IETF standards process. This is too difficult and too lengthy a process for the convenient registration of media types.

The IETF tree exists for media types that do require require a substantive review and approval process with the vendor and personal trees exist for those that do not. It is expected that applicability statements for particular applications will be published from time to time that recommend implementation of, and support for, media types that have proven particularly useful in those contexts.

As discussed above, registration of a top-level type requires standards-track processing and, hence, RFC publication.

2.2.9. Additional Information

Various sorts of optional information may be included in the specification of a media type if it is available:

(1) Magic number(s) (length, octet values). Magic numbers are byte sequences that are always present and thus can be used to identify entities as being of a given media

type.

(2) File extension(s) commonly used on one or more platforms to indicate that some file containing a given type of media.

(3) Macintosh File Type code(s) (4 octets) used to label files containing a given type of media.

Such information is often quite useful to implementors and if available should be provided.

2.3. Registration Procedure

The following procedure has been implemented by the IANA for review and approval of new media types. This is not a formal standards process, but rather an administrative procedure intended to allow community comment and sanity checking without excessive time delay. For registration in the IETF tree, the normal IETF processes should be followed, treating posting of an internet-draft and announcement on the ietf-types list (as described in the next subsection) as a first step. For registrations in the vendor or personal tree, the initial review step described below may be omitted and the type registered directly by submitting the template and an explanation directly to IANA (at iana@iana.org). However, authors of vendor or personal media type specifications are encouraged to seek community review and comment whenever that is feasible.

2.3.1. Present the Media Type to the Community for Review

Send a proposed media type registration to the "ietf-types@iana.org" mailing list for a two week review period. This mailing list has been established for the purpose of reviewing proposed media and access types. Proposed media types are not formally registered and must not be used; the "x-" prefix specified in RFC 2045 can be used until registration is complete.

The intent of the public posting is to solicit comments and feedback on the choice of type/subtype name, the unambiguity of the references with respect to versions and external profiling information, and a review of any interoperability or security considerations. The submitter may submit a revised registration, or withdraw the

registration completely, at any time.

2.3.2. IESG Approval

Media types registered in the IETF tree must be submitted to the IESG for approval.

2.3.3. IANA Registration

Provided that the media type meets the requirements for media types and has obtained approval that is necessary, the author may submit the registration request to the IANA, which will register the media type and make the media type registration available to the community.

2.4. Comments on Media Type Registrations

Comments on registered media types may be submitted by members of the community to IANA. These comments will be passed on to the "owner" of the media type if possible. Submitters of comments may request that their comment be attached to the media type registration itself, and if IANA approves of this the comment will be made accessible in conjunction with the type registration itself.

2.5. Location of Registered Media Type List

Media type registrations will be posted in the anonymous FTP directory "ftp://ftp.isi.edu/in-notes/iana/assignments/media-types/" and all registered media types will be listed in the periodically issued "Assigned Numbers" RFC [currently STD 2, RFC 1700]. The media type description and other supporting material may also be published as an Informational RFC by sending it to "rfc-editor@isi.edu" (please follow the instructions to RFC authors [RFC-1543]).

2.6. IANA Procedures for Registering Media Types

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The IANA will only register media types in the IETF tree in response to a communication from the IESG stating that a given registration has been approved. Vendor and personal types will be registered by the IANA automatically and without any formal review as long as the following minimal conditions are met:

(1) Media types must function as an actual media format. In particular, character sets and transfer encodings may not be registered as media types.

(2) All media types must have properly formed type and subtype names. All type names must be defined by a standards-track RFC. All subtype names must be unique, must conform to the MIME grammar for such names, and must contain the proper tree prefix.

(3) Types registered in the personal tree must either provide a format specification or a pointer to one.

(4) Any security considerations given must not be obviously bogus. (It is neither possible nor necessary for the IANA to conduct a comprehensive security review of media type registrations. Nevertheless, IANA has the authority to identify obviously incompetent material and exclude it.)

2.7. Change Control

Once a media type has been published by IANA, the author may request a change to its definition. The descriptions of the different registration trees above designate the "owners" of each type of registration. The change request follows the same procedure as the registration request:

(1) Publish the revised template on the ietf-types list.

(2) Leave at least two weeks for comments.

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(3) Publish using IANA after formal review if required.

Changes should be requested only when there are serious omission or errors in the published specification. When review is required, a change request may be denied if it renders entities that were valid under the previous definition invalid under the new definition.

The owner of a content type may pass responsibility for the content type to another person or agency by informing IANA and the ietf-types list; this can be done without discussion or review.

The IESG may reassign responsibility for a media type. The most common case of this will be to enable changes to be made to types where the author of the registration has died, moved out of contact or is otherwise unable to make changes that are important to the community.

Media type registrations may not be deleted; media types which are no longer believed appropriate for use can be declared OBSOLETE by a change to their "intended use" field; such media types will be clearly marked in the lists published by IANA.

2.8. Registration Template

To: ietf-types@iana.org
Subject: Registration of MIME media type XXX/YYY

MIME media type name:

MIME subtype name:

Required parameters:

Optional parameters:

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Encoding considerations:

Security considerations:

Interoperability considerations:

Published specification:

Applications which use this media type:

Additional information:

Magic number(s):
File extension(s):
Macintosh File Type Code(s):

Person & email address to contact for further information:

Intended usage:

(One of COMMON, LIMITED USE or OBSOLETE)

Author/Change controller:

(Any other information that the author deems interesting may be added below this line.)

3. External Body Access Types

RFC 2046 defines the message/external-body media type, whereby a MIME entity can act as pointer to the actual body data in lieu of including the data directly in the entity body. Each message/external-body reference specifies an access type, which determines the mechanism used to retrieve the actual body data. RFC 2046 defines an initial set of access types, but allows for the

registration of additional access types to accommodate new retrieval mechanisms.

3.1. Registration Requirements

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New access type specifications must conform to a number of requirements as described below.

3.1.1. Naming Requirements

Each access type must have a unique name. This name appears in the access-type parameter in the message/external-body content-type header field, and must conform to MIME content type parameter syntax.

3.1.2. Mechanism Specification Requirements

All of the protocols, transports, and procedures used by a given access type must be described, either in the specification of the access type itself or in some other publicly available specification, in sufficient detail for the access type to be implemented by any competent implementor. Use of secret and/or proprietary methods in access types are expressly prohibited. The restrictions imposed by RFC 1602 on the standardization of patented algorithms must be respected as well.

3.1.3. Publication Requirements

All access types must be described by an RFC. The RFC may be informational rather than standards-track, although standard-track review and approval are encouraged for all access types.

3.1.4. Security Requirements

Any known security issues that arise from the use of the access type must be completely and fully described. It is not required that the access type be secure or that it be free from risks, but that the known risks be identified. Publication of a new access type does not require an exhaustive security review, and the security considerations section is subject to continuing evaluation. Additional security considerations should be addressed by publishing revised versions of the access type specification.

3.2. Registration Procedure

Registration of a new access type starts with the construction of a draft of an RFC.

3.2.1. Present the Access Type to the Community

Send a proposed access type specification to the "ietf-types@iana.org" mailing list for a two week review period. This mailing list has been established for the purpose of reviewing proposed access and media types. Proposed access types are not formally registered and must not be used.

The intent of the public posting is to solicit comments and feedback on the access type specification and a review of any security considerations.

3.2.2. Access Type Reviewer

When the two week period has passed, the access type reviewer, who is appointed by the IETF Applications Area Director, either forwards the request to iana@isi.edu, or rejects it because of significant objections raised on the list.

Decisions made by the reviewer must be posted to the ietf-types mailing
list within 14 days. Decisions made by the reviewer may be appealed to the IESG.

3.2.3. IANA Registration

Provided that the access type has either passed review or has been successfully appealed to the IESG, the IANA will register the access type and make the registration available to the community. The specification of the access type must also be published as an RFC. Informational RFCs are published by sending them to "rfc-editor@isi.edu" (please follow the instructions to RFC authors [RFC-1543]).

3.3. Location of Registered Access Type List

Access type registrations will be posted in the anonymous FTP directory "ftp://ftp.isi.edu/in-notes/iana/assignments/access-types/" and all registered access types will be listed in the periodically issued "Assigned Numbers" RFC [currently RFC-1700].

3.4. IANA Procedures for Registering Access Types

The identity of the access type reviewer is communicated to the IANA by the IESG. The IANA then only acts in response to access type definitions that either are approved by the access type reviewer and forwarded by the reviewer to the IANA for registration, or in response to a communication from the IESG that an access type definition appeal has overturned the access type reviewer's ruling.

4. Transfer Encodings

Transfer encodings are tranformations applied to MIME media types after conversion to the media type's canonical form. Transfer encodings are used for several purposes:

(1) Many transports, especially message transports, can only handle data consisting of relatively short lines of text. There can also be severe restrictions on what characters can be used in these lines of text -- some transports are restricted to a small subset of US-ASCII

and others cannot handle certain character sequences. Transfer encodings are used to transform binary data into textual form that can survive such transports. Examples of this sort of transfer encoding include the base64 and quoted-printable transfer encodings defined in RFC 2045.

(2) Image, audio, video, and even application entities are sometimes quite large. Compression algorithms are often quite effective in reducing the size of large entities. Transfer encodings can be used to apply general-purpose non-lossy compression algorithms to MIME entities.

(3) Transport encodings can be defined as a means of representing existing encoding formats in a MIME context.

IMPORTANT: The standardization of a large numbers of different transfer encodings is seen as a significant barrier to widespread interoperability and is expressely discouraged. Nevertheless, the

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following procedure has been defined to provide a means of defining additional transfer encodings, should standardization actually be justified.

4.1. Transfer Encoding Requirements

Transfer encoding specifications must conform to a number of requirements as described below.

4.1.1. Naming Requirements

Each transfer encoding must have a unique name. This name appears in the Content-Transfer-Encoding header field and must conform to the syntax of that field.

4.1.2. Algorithm Specification Requirements

All of the algorithms used in a transfer encoding (e.g. conversion to printable form, compression) must be described in their entirety in the transfer encoding specification. Use of secret and/or proprietary algorithms in standardized transfer encodings are expressly prohibited. The restrictions imposed by RFC 1602 on the standardization of patented algorithms must be respected as well.

4.1.3. Input Domain Requirements

All transfer encodings must be applicable to an arbitrary sequence of octets of any length. Dependence on particular input forms is not allowed.

It should be noted that the 7bit and 8bit encodings do not conform to this requirement. Aside from the undesireability of having specialized encodings, the intent here is to forbid the addition of additional encodings along the lines of 7bit and 8bit.

4.1.4. Output Range Requirements

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There is no requirement that a particular tranfer encoding produce a particular form of encoded output. However, the output format for each transfer encoding must be fully and completely documented. In particular, each specification must clearly state whether the output format always lies within the confines of 7bit data, 8bit data, or is simply pure binary data.

4.1.5. Data Integrity and Generality Requirements

All transfer encodings must be fully invertible on any platform; it must be possible for anyone to recover the original data by performing the corresponding decoding operation. Note that this requirement effectively excludes all forms of lossy compression as well as all forms of encryption from use as a transfer encoding.

4.1.6. New Functionality Requirements

All transfer encodings must provide some sort of new functionality. Some degree of functionality overlap with previously defined transfer encodings is acceptable, but any new transfer encoding must also offer something no other transfer encoding provides.

4.2. Transfer Encoding Definition Procedure

Definition of a new transfer encoding starts with the construction of a draft of a standards-track RFC.
The RFC must define the transfer encoding precisely and completely, and must also provide substantial justification for defining and standardizing a new transfer encoding. This specification must then be presented to the IESG for consideration. The IESG can

(1) reject the specification outright as being inappropriate for standardization,

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(2) approve the formation of an IETF working group to work on the specification in accordance with IETF procedures, or,

(3) accept the specification as-is and put it directly on the standards track.

Transfer encoding specifications on the standards track follow normal IETF rules for standards track documents. A transfer encoding is considered to be defined and available for use once it is on the standards track.

4.3. IANA Procedures for Transfer Encoding Registration

There is no need for a special procedure for registering Transfer Encodings with the IANA.
All legitimate transfer encoding registrations must appear as a standards-track RFC, so it is the IESG's responsibility to notify the IANA when a new transfer encoding has been approved.

4.4. Location of Registered Transfer Encodings List

Transfer encoding registrations will be posted in the anonymous FTP directory "ftp://ftp.isi.edu/in-notes/iana/assignments/transfer-encodings/" and all registered transfer encodings will be listed in the periodically issued "Assigned Numbers" RFC [currently RFC-1700].

5. Authors' Addresses

For more information, the authors of this document are best

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Appendix A -- Grandfathered Media Types

A number of media types, registered prior to 1996, would, if registered under the guidelines in this document, be placed into either the vendor or personal trees. Reregistration of those types to reflect the appropriate trees is encouraged, but not required. Ownership and change control principles outlined in this document apply to those types as if they had been registered in the trees described above.

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Found in path(s):
* /mikel-mail-2-3-1-0-g2cc19d5-tar-gz/mikel-mail-2cc19d5/reference/rfc2048 Multipurpose Internet Mail Extensions (4).txt
No license file was found, but licenses were detected in source scan.

Network Working Group E. Levinson
Request for Comments: 2387 August 1998
Obsoletes: 2112
Category: Standards Track

The MIME Multipart/Related Content-type

Status of this Memo

This document specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state and status of this protocol. Distribution of this memo is unlimited.

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Abstract

The Multipart/Related content-type provides a common mechanism for representing objects that are aggregates of related MIME body parts. This document defines the Multipart/Related content-type and provides examples of its use.

1. Introduction

Several applications of MIME, including MIME-PEM, and MIME-Macintosh and other proposals, require multiple body parts that make sense only

in the aggregate. The present approach to these compound objects has been to define specific multipart subtypes for each new object. In keeping with the MIME philosophy of having one mechanism to achieve the same goal for different purposes, this document describes a single mechanism for such aggregate or compound objects.

The Multipart/Related content-type addresses the MIME representation of compound objects. The object is categorized by a "type" parameter. Additional parameters are provided to indicate a specific starting body part or root and auxiliary information which may be required when unpacking or processing the object.

Multipart/Related MIME entities may contain Content-Disposition headers that provide suggestions for the storage and display of a body part. Multipart/Related processing takes precedence over Content-Disposition; the interaction between them is discussed in section 4.

Responsibility for the display or processing of a Multipart/Related's constituent entities rests with the application that handles the compound object.

2. Multipart/Related Registration Information

The following form is copied from RFC 1590, Appendix A.

To: IANA@isi.edu
Subject: Registration of new Media Type content-type/subtype

Media Type name: Multipart

Media subtype name: Related

Required parameters: Type, a media type/subtype.

Optional parameters: Start
Start-info

Encoding considerations: Multipart content-types cannot have encodings.

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Security considerations: Depends solely on the referenced type.

Published specification: RFC-REL (this document).

Person & email address to contact for further information:

Edward Levinson
47 Clive Street
Metuchen, NJ 08840-1060
+1 908 494 1606
XIson@cnj.digex.net

3. Intended usage

The Multipart/Related media type is intended for compound objects consisting of several inter-related body parts. For a Multipart/Related object, proper display cannot be achieved by individually displaying the constituent body parts. The content-type of the Multipart/Related object is specified by the type parameter. The "start" parameter, if given, points, via a content-ID, to the body part that contains the object root. The default root is the first body part within the Multipart/Related body.

The relationships among the body parts of a compound object distinguishes it from other object types. These relationships are often represented by links internal to the object's components that

reference the other components. Within a single operating environment the links are often file names, such links may be represented within a MIME message using content-IDs or the value of some other "Content-" headers.

3.1. The Type Parameter

The type parameter must be specified and its value is the MIME media type of the "root" body part. It permits a MIME user agent to determine the content-type without reference to the enclosed body part. If the value of the type parameter and the root body part's content-type differ then the User Agent's behavior is undefined.

3.2. The Start Parameter

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The start parameter, if given, is the content-ID of the compound object's "root". If not present the "root" is the first body part in the Multipart/Related entity. The "root" is the element the applications processes first.

3.3. The Start-Info Parameter

Additional information can be provided to an application by the start-info parameter. It contains either a string or points, via a content-ID, to another MIME entity in the message. A typical use might be to provide additional command line parameters or a MIME entity giving auxiliary information for processing the compound object.

Applications that use Multipart/Related must specify the interpretation of start-info. User Agents shall provide the parameter's value to the processing application. Processes can distinguish a start-info reference from a token or quoted-string by examining the first non-white-space character, "<" indicates a reference.

3.4. Syntax

```
related-param   := [ ";"
"start" "=" cid ]
                [ ";" "start-info"  "="
                  ( cid-list / value ) ]
                [ ";" "type"  "=" type "/" subtype ]
                ; order independent

cid-list        := cid cid-list

cid             := msg-id     ; c.f. [822]
```



```
value           := token / quoted-string    ; c.f. [MIME]
                   ; value cannot begin with "<"
```

Note that the parameter values will usually require quoting. Msg-id contains the special characters "<", ">", "@", and perhaps other

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special characters. If msg-id contains quoted-strings, those quote marks must be escaped. Similarly, the type parameter contains the special character "/".

4. Handling Content-Disposition Headers

Content-Disposition Headers [DISP] suggest presentation styles for MIME body parts. [DISP] describes two presentation styles, called the disposition type, INLINE and ATTACHMENT. These, used within a multipart entity, allow the sender to suggest presentation information. [DISP] also provides for an optional storage (file) name. Content-Disposition headers could appear in one or more body parts contained within a Multipart/Related entity.

Using Content-Disposition headers in addition to Multipart/Related provides presentation information to User Agents that do not recognize Multipart/Related. They will treat the multipart as Multipart/Mixed and they may find the Content-Disposition information useful.

With Multipart/Related however, the application processing the compound object determines the presentation style for all the contained parts. In that context the Content-Disposition header information is redundant or even misleading. Hence, User Agents that understand Multipart/Related shall ignore the disposition type within a Multipart/Related body part.

It may be possible for a User Agent capable of handling both Multipart/Related and Content-Disposition headers to provide the invoked application the Content-Disposition header's optional filename parameter to the Multipart/Related. The use of that information will depend on the specific application and should be specified when describing the handling of the corresponding compound object. Such descriptions would be appropriate in an RFC registering that object's media type.

5. Examples

5.1 Application/X-FixedRecord

The X-FixedRecord content-type consists of one or more octet-streams and a list of the lengths of each record. The root, which lists the record lengths of each record within the streams. The record length

list, type
Application/X-FixedRecord, consists of a set of INTEGERs
in ASCII format, one per line. Each INTEGER gives the number of
octets from the octet-stream body part that constitute the next
"record".

The example below, uses a single data block.

```
Content-Type: Multipart/Related; boundary=example-1
      start="<950120.aaCC@XIson.com>";
      type="Application/X-FixedRecord"
      start-info="-o ps"

--example-1
Content-Type: Application/X-FixedRecord
Content-ID: <950120.aaCC@XIson.com>

25
10
34
10
25
21
26
10
--example-1
Content-Type: Application/octet-stream
Content-Description: The fixed length records
Content-Transfer-Encoding: base64
Content-ID: <950120.aaCB@XIson.com>

T2xkIE1hY0RvbmFsZCBoYWQgYSBmYXJtCkUgSS
BFIEkgTwpBbmQgb24gaGlzIGZhcm0gaGUgaGFk
IHNvbWUgZHVja3MKRSBJIEUgSSBPCldpdGggYS
BxdWFjayBxdWFjayBoZXJlLAphIHF1YWNrIHF1
YWNrIHRoZXJlLApldmVyeSB3aGVyZSBhIHF1YW
 NrIHF1YWNrCkUgSSBFIEkgTwo=

--example-1--
```

5.2 Text/X-Okie

The Text/X-Okie is an invented markup language permitting the inclusion of images with text. A feature of this example is the inclusion of two additional body parts, both picture. They are referred to internally by the encapsulated document via each picture's body part content-ID. Usage of "cid:", as in this example, may be useful for a variety of compound objects. It is not, however, a part of the Multipart/Related specification.

```
Content-Type: Multipart/Related; boundary=example-2;
      start="<950118.AEBH@XIson.com>"
      type="Text/x-Okie"

--example-2
Content-Type: Text/x-Okie; charset=iso-8859-1;
      declaration="<950118.AEB0@XIson.com>"
Content-ID: <950118.AEBH@XIson.com>
 Content-Description: Document

{doc}
This picture was taken by an automatic camera mounted ...
{image file=cid:950118.AECB@XIson.com}
{para}
Now this is an enlargement of the area ...
{image file=cid:950118:AFDH@XIson.com}
{/doc}
--example-2
Content-Type: image/jpeg
Content-ID: <950118.AFDH@XIson.com>
Content-Transfer-Encoding: BASE64
Content-Description: Picture A

[encoded jpeg image]
```

```
--example-2
Content-Type: image/jpeg
Content-ID: <950118.AECB@XIson.com>
Content-Transfer-Encoding: BASE64
Content-Description: Picture B

[encoded jpeg image]
--example-2--
```

5.3 Content-Disposition

In the above example each image body part could also have a Content-Disposition header. For example,


```
--example-2
Content-Type:
image/jpeg
Content-ID: <950118.AECB@XIson.com>
Content-Transfer-Encoding: BASE64
Content-Description: Picture B
Content-Disposition: INLINE

[encoded jpeg image]
--example-2--
```

User Agents that recognize Multipart/Related will ignore the Content-Disposition header's disposition type. Other User Agents will process the Multipart/Related as Multipart/Mixed and may make use of that header's information.

6. User Agent Requirements

User agents that do not recognize Multipart/Related shall, in accordance with [MIME], treat the entire entity as Multipart/Mixed. MIME User Agents that do recognize Multipart/Related entities but are unable to process the given type should give the user the option of suppressing the entire Multipart/Related body part shall be.

Existing MIME-capable mail user agents (MUAs) handle the existing media types in a straightforward manner. For discrete media types

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(e.g. text, image, etc.) the body of
the entity can be directly
passed to a display process. Similarly the existing composite subtypes can be reduced to handing one or more discrete types. Handling Multipart/Related differs in that processing cannot be reduced to handling the individual entities.

The following sections discuss what information the processing application requires.

It is possible that an application specific "receiving agent" will manipulate the entities for display prior to invoking actual application process. Okie, above, is an example of this; it may need a receiving agent to parse the document and substitute local file names for the originator's file names. Other applications may just require a table showing the correspondence between the local file names and the originator's. The receiving agent takes responsibility for such processing.

6.1 Data Requirements

MIME-capable mail user agents (MUAs) are required to provide the application:

(a) the bodies of the MIME entities and the entity Content-* headers,

(b) the parameters of the Multipart/Related Content-type header, and

(c) the correspondence between each body's local file name, that body's header data, and, if present, the body part's content-ID.

6.2 Storing Multipart/Related Entities

The Multipart/Related media type will be used for objects that have internal linkages between the body parts. When the objects are stored the linkages may require processing by the application or its receiving agent.

6.3 Recursion

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MIME is a recursive structure. Hence one must expect a Multipart/Related entity to contain other Multipart/Related entities. When a Multipart/Related entity is being processed for display or storage, any enclosed Multipart/Related entities shall be processed as though
they were being stored.

6.4 Configuration Considerations

It is suggested that MUAs that use configuration mechanisms, see [CFG] for an example, refer to Multipart/Related as Multi-part/Related/<type>, were <type> is the value of the "type" parameter.

7. Security Considerations

Security considerations relevant to Multipart/Related are identical to those of the underlying content-type.

8. Acknowledgments

This proposal is the result of conversations the author has had with many people. In particular, Harald A. Alvestrand, James Clark, Charles Goldfarb, Gary Houston, Ned Freed, Ray Moody, and Don Stinchfield, provided both encouragement and invaluable help. The author, however, take full responsibility for all errors contained in this document.

9. References

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[DISP] Troost, R., and S. Dorner, "Communicating Presentation Information in Internet Messages: The Content-Disposition Header", RFC 1806, June 1995.

[MIME] Borenstein, N., and Freed, N., "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies", RFC 2045, November 1996.

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10. Changes from previous draft (RFC 2112)

Corrected cid urls to conform to RFC 2111; the angle brackets were removed.

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Levinson Standards Track [Page 10]

Found in path(s):
* /mikel-mail-2-3-1-0-g2cc19d5-tar-gz/mikel-mail-2cc19d5/reference/rfc2387
 MIME Multipart-Related Content-type.txt

1.2793 error_prone_annotations 2.23.0

1.2793.1 Available under license :

No license file was found, but licenses were detected in source scan.

Manifest-Version: 1.0
Created-By: Maven JAR Plugin 3.2.2
Build-Jdk-Spec: 17
Automatic-Module-Name: com.google.errorprone.annotations
Bundle-Description: Error Prone is a static analysis tool for Java that
catches common programming mistakes at compile-time.
Bundle-DocURL: https://errorprone.info/error_prone_annotations
Bundle-License: "Apache 2.0";link="http://www.apache.org/licenses/LICENS
E-2.0.txt"
Bundle-ManifestVersion: 2
Bundle-Name: error-prone annotations
Bundle-SCM: url="https://github.com/google/error-prone/error_prone_annot
ations",connection="scm:git:https://github.com/google/error-prone.git/e
rror_prone_annotations",developer-connection="scm:git:git@github.com:go
ogle/error-prone.git/error_prone_annotations",tag=HEAD
Bundle-SymbolicName: com.google.errorprone.annotations
Bundle-Vendor: Google LLC
Bundle-Version: 2.23.0
Export-Package: com.google.errorprone.annotations;uses:="javax.lang.mode
l.element";version="2.23.0",com.google.errorprone.annotations.concurren
 t;version="2.23.0"
Import-Package: javax.lang.model.element
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"

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* /error-prone-annotations-2-23-0-4-jar/META-INF/MANIFEST.MF
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-->

Found in path(s):
* /error-prone-annotations-2-23-0-4-jar/META-INF/maven/com.google.errorprone/error_prone_annotations/pom.xml

1.2794 line-protocol 0.0.0-20210311194329-9aa0e372d097

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1.2795 wire 0.5.0

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1.2796 apd 2.0.2

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1.2797 snowballstem 0.9.0

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1.2798 vellum 1.0.7

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1.2807 fifo 1.1.0

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1.2808 sys-signal 0.7.0

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1.2809 bigfft 0.0.0-20230129092748-24d4a6f8daec

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1.2810 x-mod 0.22.0

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1.2812 sys-user 0.3.0

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1.2814 runtime-spec 1.1.0

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localtime.go, localtime_test.go:

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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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1.2819 promptui 0.9.0

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1.2820 gosmi 0.4.4

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1.2821 aws-sdk-go-v2-internal-ini 1.8.0

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```
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package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-
Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil,
 err
 }

 out := result.(*AssociateLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err !=
 nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack);
err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
```

```
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

AWS SDK for Go

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```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
```

```
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
```

```
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return
```

```
 err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
          "type": "structure",
          "members": {
              "Name": {
                  "target": "smithy.api#String",
                  "traits": {
                      "smithy.api#documentation": "<p>The type of name to filter by.</p>"
```

```
            }
        },
        "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
        },
        "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
             "traits": {
                "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
    },
    "output": {

      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings.</p>",
```

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
{
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists the settings defined for Linux subscriptions discovery. The
settings include if\n Organizations integration has been enabled, and
which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being
applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings
current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays

the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance type of the resource. "
}

},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription being used by the instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",

"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],

"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",

"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"

```
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can discover and track your commercial
Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
                "Region": {
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The
 AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

                 "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
                    "type": "String"
                }
            },
            "rules": [
                {
                    "conditions": [
                        {
```

```
        "fn": "isSet",
        "argv": [
            {
                "ref": "Endpoint"
            }
        ]
    }
],
"type": "tree",
"rules": [
    {

  "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "type": "tree",
        "rules": [
            {

     "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
```

"endpoint": {
"url": {
"ref": "Endpoint"
},
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},
{
"conditions": [],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "isSet",

"argv": [
{
"ref": "Region"
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "aws.partition",
"argv": [
{
"ref": "Region"
}
],

"assign": "PartitionResult"
}
],
"type": "tree",
"rules": [
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
},

{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]

}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",

"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"type": "tree",
"rules": [
{

"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]

},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",

"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{

"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,

{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
}
]
}
],
"type": "tree",

"rules": [
{
"conditions": [],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
}
]

```
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"
                    }
                ]

},
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "type": "tree",
                    "rules": [
                        {

                     "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                             ]
                                        }
                                    ]
                                }
                            ],
                            "type": "tree",
                            "rules": [
                                {
                                    "conditions": [],
                                    "type": "tree",
                                    "rules": [
```

{
"conditions": [],

"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},

{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}

```
            ]
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {

"endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
               "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
```

"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint":

{
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}

```
                },
                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled
and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                        }
                    },
                    "params": {
                        "Region": "us-isob-east-1",

        "UseFIPS": false,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",

            "expect": {
                        "endpoint": {
                            "url": "https://example.com"
```

```
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,

    "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }

    }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
  "type": "string",
  "traits": {
```

"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {

      "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by
 the name of\n        <code>AmiID</code> with an optional operator to see subscriptions that match, partially\n
match, or don't match a certain Amazon Machine Image (AMI) ID.</p>\n        <p>The valid names for this filter
are:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>AmiID</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                    <code>InstanceID</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>AccountID</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n            <li>\n
    <p>\n                    <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
     <code>InstanceType</code>\n                </p>\n            </li>\n        </ul>\n        <p>The valid Operators for this
filter are:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>contains</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                    <code>equals</code>\n                </p>\n            </li>\n            <li>\n
```

```
<p>\n <code>Notequal</code>\n </p>\n </li>\n </ul>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"

}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": "<p>An array that contains instance objects.</p>"
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n <li>\n            <p>\n                <code>Subscription</code>\n            </p>\n        </li>\n        </ul>\n <p>The valid Operators for this filter are:</p>\n
        <ul>\n        <li>\n            <p>\n                <code>contains</code>\n            </p>\n        </li>\n <li>\n            <p>\n                <code>equals</code>\n            </p>\n        </li>\n        <li>\n            <p>\n
```

```
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>",
              "smithy.api#length": {

               "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for
 the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
```

```
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
            },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
```

"traits": {
"smithy.api#enum": [

{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",

```
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"

        }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },

      "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
              "smithy.api#required": {}
            }
```

```
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",

  "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },

         "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
```

```
                "traits": {
                    "smithy.api#documentation":
 "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //   - Beneficiary
 //   - ProductSKU
 //   - Fingerprint
 //
   - Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if
 err := addProtocolFinalizerMiddlewares(stack, options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
```

```
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
```

```
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 //
 This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "DisassociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type
 CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource
 Name (ARN) of the checkout license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil
 {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
```

```
 return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack);
 err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier
 that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
 //
```

```
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
```

```
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
```

```
 return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return
 err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide
 to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity
*types.DatetimeRange

// Information about the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde

```
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add
 protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
```

```
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return
 err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

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DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
   - ProductSKU
 //   - Status
 //   - Fingerprint
 //   - IssuerName
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
```

```
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack);
 err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Details about an Active Directory identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n        hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
        monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
```

"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the
EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider of the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n      resource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",

"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}

```
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used
 to return more specific results from a describe\n      operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n      attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Details about an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
```

"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",

"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}

```
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",

     "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
         },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
            "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
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"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"rules": [
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                            "ref": "Endpoint"
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                }
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                            "fn": "booleanEquals",
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                                },

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"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
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                    "conditions": [],
                    "endpoint": {
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        "type": "endpoint"
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      "argv": [

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          "argv": [
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              "ref": "Region"
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          "assign": "PartitionResult"
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      "type": "tree",

"rules": [
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                        "argv": [
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                            },
                            true
                        ]
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                                    {
                                        "fn": "getAttr",

"argv": [
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                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    }
                                ]
                            },
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                                "fn": "booleanEquals",
                                "argv": [
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                                    {

"fn": "getAttr",
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                                                "ref": "PartitionResult"
                                            },
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                                        ]
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                                ]
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```

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                    "rules": [
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ]
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                     "type": "error"
                }
            ]
        },
        {
            "conditions": [
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                    "fn": "booleanEquals",
                    "argv": [
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                                    {
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                                ]
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fips.{Region}.{PartitionResult#dnsSuffix}",
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                                "type": "endpoint"
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                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"
                    }
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            {
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                              },
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                            ]
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                        "headers": {}
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                      "type": "endpoint"
                    }
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                  "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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                "headers": {}
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```

```
                "type": "endpoint"
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        "error": "Invalid Configuration: Missing Region",
        "type": "error"
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  "smithy.rules#endpointTests": {
    "testCases": [
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        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
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      {
        "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
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        "params": {
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          "UseFIPS": true,
          "UseDualStack": false
        }
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        "expect": {
          "endpoint": {
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            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
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            "params": {
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                "UseDualStack": false
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            "documentation": "For region cn-north-1 with
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            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
            },

    "params": {
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"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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"endpoint": {
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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"documentation": "For region us-gov-east-1
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"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":
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"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack":
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
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"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,

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            "UseDualStack": true
        }
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
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            }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
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    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
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        "params": {
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            "UseFIPS": false,
            "UseDualStack": true
        }
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    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
        },
         "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
        "expect": {
            "endpoint": {
                "url": "https://example.com"
            }
        },
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {

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                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/ListIdentityProviders"
    },
    "smithy.api#paginated":
```

{
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " Maximum number of results to return in a single call. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " Token for the next set of results. "
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": " Metadata that describes the list identity providers operation. ",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " Token for the next set of results. "
            }
          }
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      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
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"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name
 of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
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"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {

"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}

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        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
    "type": "structure",
    "members": {

    "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }

},
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
            }
        },
```

"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " The summary of the user-based subscription products for a user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n      subnets to provision VPC endpoints.</p>"
                }
            }
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",

   "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
```

"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n        hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing.
 For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n        monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
         "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required":
{}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation":
"<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {

             "target": "smithy.api#String"
            }
        },
        "traits": {
```

"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n update any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n require connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}

```
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
 that allows inbound TCP port 1688 communication between resources in\n      your VPC and the VPC endpoints for
activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n      the subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
        {
            "id": "HttpMethodSemantics",
            "namespace": "*"
        },
        {
            "id": "HttpResponseCodeSemantics",
            "namespace": "*"
        },
        {
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
```

```
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
```

"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},

{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"

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            },
            {
                "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#RejectGrant"
            },
            {
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                "target": "com.amazonaws.licensemanager#UntagResource"
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                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
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                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
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                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
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                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
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                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
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            "aws.auth#sigv4": {
                "name": "license-manager"
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            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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            "smithy.rules#endpointRuleSet": {
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            "Region": {
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              "required": false,
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              "type": "String"
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            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
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            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
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              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
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                      "ref": "Endpoint"
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                  "conditions": [
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            "type": "error"
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            "type": "error"
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"argv": [
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"ref": "PartitionResult"
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"supportsDualStack"
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"properties": {},
"headers": {}

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"type": "error"
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"argv": [
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"argv": [
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"type": "error"
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"argv": [
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"ref": "PartitionResult"
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                    "type": "endpoint"
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                "type": "error"
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    "type": "error"
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{
"documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "ap-east-1",
"UseFIPS": false,
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"expect": {
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"Region": "ap-northeast-1",
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"UseDualStack": false
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"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.ap-northeast-2.amazonaws.com"
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"params": {
"Region": "ap-northeast-2",
"UseFIPS": false,
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          "expect": {
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            }
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            "UseFIPS": false,
            "UseDualStack": false
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            "endpoint": {
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          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
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            "endpoint": {
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          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            "params": {
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            "expect": {
                "endpoint": {
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            "params": {
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                "UseFIPS": false,
                "UseDualStack": false
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                "UseFIPS": false,
                "UseDualStack": false
            }
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            "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
            "expect": {
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            "params": {
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                "UseDualStack": false
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{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
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"params": {
"Region":
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"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.eu-west-1.amazonaws.com"
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"params": {
"Region": "eu-west-1",
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"UseDualStack": false
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"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
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            "params": {
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                "UseDualStack": false
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            "expect": {
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            "params": {
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"UseDualStack": false
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            "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.me-south-1.amazonaws.com"
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                "Region": "me-south-1",
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                "UseDualStack": false
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            "expect": {
                "endpoint": {
                    "url": "https://license-manager.sa-east-1.amazonaws.com"
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            "params": {
                "Region": "sa-east-1",
                "UseFIPS": false,
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"url": "https://license-manager-fips.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
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"params": {

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"UseDualStack": false
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"UseDualStack": false
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"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

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"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
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"params": {

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"UseFIPS": false,
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "cn-northwest-1",
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
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"Region": "cn-north-1",
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            "UseFIPS": true,
            "UseDualStack": false
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        "expect": {
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                "url": "https://license-manager.us-gov-west-1.amazonaws.com"
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            "Region": "us-gov-west-1",
            "UseFIPS": false,
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                    "UseFIPS": false,
                    "UseDualStack": true
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disabled",
                "expect": {
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"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
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"params": {
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"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseDualStack": true
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}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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"params": {
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"UseDualStack": false
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

```
    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}

```
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "

```
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
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            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
 account that created the license is the same that is performing the check out, you must\n            specify the account
 as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
```

"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "

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            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
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    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ConflictException",
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"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {

"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of

license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

```
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
        }
    },
    "GrantName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
        }
    },
    "AllowedOperations": {
        "target": "com.amazonaws.licensemanager#AllowedOperationList",
        "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "StatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
        }
    },
    "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
        }
    },
    "Options": {
        "target": "com.amazonaws.licensemanager#Options",
        "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
        }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
  "type": "structure",
  "members": {
```

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
},
"traits":
{
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
           "traits": {
            "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
          }
        },
        "LicenseCountHardLimit": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
          }
        },
        "LicenseRules": {
          "target":
 "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
```

```
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n          </li>\n
<li>\n
  <p>\n                <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
          },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
                    "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be

generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn":
 {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product
 name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
```

```
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
             },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
```

"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}

```
            },

  "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },

      {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT
token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n         JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n         License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n         to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
```

```
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",

       "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>"
        }
      },
      "TokenType": {
        "target": "com.amazonaws.licensemanager#TokenType",
        "traits": {
          "smithy.api#documentation": "<p>Token type.</p>"
        }
      },
      "Token": {
        "target": "com.amazonaws.licensemanager#TokenString",
        "traits": {
          "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
         "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
```

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
 {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {

"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {

"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}

```
        },
        "BYTES": {
          "target": "smithy.api#Unit",
           "traits": {
             "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Kilobytes"
          }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Megabits"
```

```
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},

"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},

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"BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes"
     }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
```

```
            },
            "GIGABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits"
                }
            },
            "TERABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits"
                }
            },
            "PERCENT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Percent"
                }
            },
            "BYTES_PER_SECOND": {
                "target":
"smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bytes/Second"
                }
            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
```

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
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"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {

"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {

"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
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"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
    }
},
"LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
```

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}

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            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
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"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",

"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

          },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {

  "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
          "LicenseUsage": {
            "target":
"com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
```

"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data,

discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "

```
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
```

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            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
```

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",

"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
```

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "enum",
"members": {

"EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage

of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},

"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {

"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n

Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "

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            }
        },
        "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
            }
        },

    "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfiguration"
    }
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
    "members": {
        "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
                "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
            }
        }
    },
```

"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation":
" The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {

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                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
```

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    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
```

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"

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            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
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"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n

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</li>\n <li>\n <p>\n <code>GrantStatus</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n            Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n            Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
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</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

         "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
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account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}

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        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
```

```
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

```
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n              <p>\n                <code>Beneficiary</code>\n              </p>\n
      </li>\n           <li>\n              <p>\n                <code>ProductSKU</code>\n              </p>\n           </li>\n
   <li>\n              <p>\n                <code>Fingerprint</code>\n              </p>\n           </li>\n           <li>\n
<p>\n                <code>Status</code>\n              </p>\n           </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
```

"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while

specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}

```
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
      <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
```

```
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n              <p>\n                <code>LicenseArns</code>\n              </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100

```
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>. \n \n \n
\n <code>Application Publisher</code> - The publisher of the application.\n Logical

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

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        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
     }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
```

```
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
```

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            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
```

```
        "members": {
          "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 308
        }
      },
      "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
```

{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

```
            }
          },
          "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

           "traits": {
              "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
          "DAY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DAY"
            }
          },
          "WEEK": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WEEK"
            }
          },
          "MONTH": {
            "target": "smithy.api#Unit",
            "traits":
 {
              "smithy.api#enumValue": "MONTH"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>"
            }
          },
```

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report

generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}

```
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
```

"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResource.NotFound",
"httpResponseCode": 400
},
"smithy.api#documentation": " The resource cannot be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceType": {
"type": "enum",
"members": {
"EC2_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096

```
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
"com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>One or more tags.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#TagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#TokenData": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
```

format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {

"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
```

"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
```

update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
```

```
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version
 of the license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack,
 options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
```

```
 return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
```

1.2822 dig 1.17.1

1.2822.1 Available under license :

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1.2823 participle 0.4.1

1.2823.1 Available under license :

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1.2824 aws-sdk-go-v2-service-sts 1.30.3

1.2824.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
```

```
        uses: actions/setup-python@v2
        with:
          python-version: ${{ matrix.python-version }}
      # ScanCode
      - name: Self-configure scancode
        working-directory: ./scancode-toolkit
        run: ./scancode --help
      - name: Run Scan code on target
        run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
      - name: Run Scan code on pr ref
        run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
      # compare
      - name: License test
        run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
ListReceivedLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
```

```
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
```

```
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {
```

```
 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AssociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation

```
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}
```

```
type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
ListLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "

```
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},

"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux
subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
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{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
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{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
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{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",

"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
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"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

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            "type": "Boolean"
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            "builtIn": "SDK::Endpoint",
            "required": false,
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            "type": "String"
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                            "argv": [
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                                    "argv": [
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                                            "ref": "UseDualStack"
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                    },
                    true
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}
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                            "argv": [
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                    "argv": [
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                    "argv": [
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                            "ref": "UseDualStack"
                        },
                        true
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                            "argv": [
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                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"

},
                                        "supportsFIPS"
                                    ]
                                }
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                            "fn": "getAttr",
                            "argv": [

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                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
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                }
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            "rules": [
                {
                    "conditions": [],

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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
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            "type": "error"
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"ref": "PartitionResult"
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"conditions": [],
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but this partition does not support FIPS",
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                        "argv": [
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                            "headers": {}
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}
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            "type": "tree"
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            "type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
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    "type": "tree"
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        ],
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    },
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        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
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    },
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
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"params": {
"Region": "cn-north-1",
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"UseDualStack": false
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
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},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",

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}

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"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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"params": {
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"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,

"UseDualStack": true
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{
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"expect": {
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
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}
},
"params": {
"Region": "us-iso-east-1",
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"UseDualStack": false
}
},
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

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        "Region": "us-isob-east-1",
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        "UseDualStack": true
    }
},
{
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    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
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    "params": {
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        "UseFIPS": false,
        "UseDualStack": true
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    "expect": {
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        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
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                }

        },
                "params": {
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                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
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                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
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                "params": {
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                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
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                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
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                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

 "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
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                }
            },
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                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
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        "version": "1.0"
      }
    }
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  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
        {
          "name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled LinuxSubscriptionsDiscovery"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
      "SourceRegions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
        "traits": {
          "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "OrganizationIntegration": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
        "traits": {
          "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
          "smithy.api#required": {}
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```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
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    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
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"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {

"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
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"smithy.api#idempotent": {},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
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"members": {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
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"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",

"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"

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            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
```

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                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "

```
            }
        },
        "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
```

"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
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"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",

"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

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        },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
             "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target":
 "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
```

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                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
```

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod
```

```
 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return
 err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
```

```
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
 {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
```

```
//
//   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
```

```
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
            "smithy.api#error": "client"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
         "type": "structure",
         "members": {
            "DirectoryId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>Details about an Active Directory identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
         "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the
EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider of the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n resource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }

    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required":

{}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {

"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

```
  },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",

       "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

```
 ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n      a per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack
 endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                        "type": "Boolean"
                    },
                    "UseFIPS": {
                        "builtIn": "AWS::UseFIPS",
                        "required": true,
                        "default": false,
                        "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                        "type": "Boolean"
                    },
                    "Endpoint": {
                        "builtIn": "SDK::Endpoint",
                        "required": false,
                        "documentation": "Override the endpoint used to send this request",
                        "type": "String"
                    }

        },
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "isSet",
                                "argv": [
                                    {
                                        "ref": "Endpoint"
                                    }
                                ]
```

```
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },

                        true
                        ]
                    }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
```

```
        },
        {
          "conditions": [
            {
              "fn": "isSet",
              "argv": [

    {
                  "ref": "Region"
              }
              ]
            }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "aws.partition",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ],
                  "assign": "PartitionResult"
                }
              ],
              "type": "tree",

  "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
```

```
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",

"argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {

"fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {

"conditions": [],
                        "endpoint": {
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"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",

"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"

]
}

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                    ]
                }
            ],
            "type": "tree",
            "rules": [
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                    "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}

        },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"
        }
    ]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
```

"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{

"conditions": [],
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"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
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},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},

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                {
                    "conditions":
[],
                    "error": "Invalid Configuration: Missing Region",
                    "type": "error"
                }
            ]
        },
        "smithy.rules#endpointTests": {
            "testCases": [
                {
                    "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                        }
                    },

                "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
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"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {

"endpoint": {
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"

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                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack":
true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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            "endpoint": {
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            }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }

    },
        {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
        },
        {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
        },
         "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
        },
        {
        "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
        "expect": {
            "endpoint": {
                "url": "https://example.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
        }
```

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            },
            {

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                 "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                 "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
      "type": "structure",
      "members": {
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
{
      "type": "structure",
      "members": {
        "IdentityProviderSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
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```
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type":
 "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
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                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {

        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }

    },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
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"traits": {
"smithy.api#documentation": " The
start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " The summary of the user-based subscription products for a user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n      subnets to provision VPC endpoints.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
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"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},

"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required":
{}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",

"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n update any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n require connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n      the subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
        {
            "id": "HttpMethodSemantics",
            "namespace": "*"
        },
        {
            "id": "HttpResponseCodeSemantics",
            "namespace": "*"
        },
        {
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
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```
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
            },
```

```
        {
          "target": "com.amazonaws.licensemanager#DeleteLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
        },
        {
          "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
        },
        {
          "target": "com.amazonaws.licensemanager#DeleteToken"
        },
        {
          "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

      },
        {
          "target": "com.amazonaws.licensemanager#GetAccessToken"
        },
        {
          "target": "com.amazonaws.licensemanager#GetGrant"
        },
        {
          "target": "com.amazonaws.licensemanager#GetLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
        },
        {
          "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
        },
        {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
        },
        {
          "target": "com.amazonaws.licensemanager#GetLicenseUsage"
        },
        {
          "target": "com.amazonaws.licensemanager#GetServiceSettings"
        },
        {
          "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
        },
        {
          "target": "com.amazonaws.licensemanager#ListDistributedGrants"
        },
        {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
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},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{

"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,

"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],

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                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {

"conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                     },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
```

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                "fn": "aws.partition",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref":
"UseFIPS"
                      },
                      true
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
```

```
                    ]

                }
                    ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },

"supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}

            },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
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both",
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{
    "conditions": [
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"fn": "booleanEquals",

"argv": [
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"supportsFIPS"
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"properties": {},
"headers": {}
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"type": "endpoint"
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partition does not support FIPS",
"type": "error"
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"argv": [
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"argv": [
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"ref": "PartitionResult"
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"supportsDualStack"
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"headers": {}

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                "type": "error"
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            "headers": {}
        },
        "type": "endpoint"
    }
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}
]
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"error": "Invalid Configuration: Missing Region",
"type": "error"
}
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"smithy.rules#endpointTests": {
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}
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"params": {
"Region": "af-south-1",
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"UseDualStack": false
}
},
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  "params": {
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    "UseFIPS": false,
    "UseDualStack": false
  }
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    }
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    "UseDualStack": false
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  "params": {
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    "UseFIPS": false,
    "UseDualStack": false
  }
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    }
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  "params": {
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"params": {
"Region": "ap-south-1",
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"UseDualStack": false
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"expect": {
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"params": {
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"UseDualStack": false
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"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
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"UseFIPS": false,
"UseDualStack": false
}
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"params": {
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}
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.eu-central-1.amazonaws.com"
}
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"params": {
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"UseDualStack": false
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disabled and DualStack disabled",
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"params": {

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"UseDualStack": false
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"UseDualStack": false
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"params": {
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"UseDualStack": false
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"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
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"params": {
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"UseDualStack": false
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"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",

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"params": {
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"UseDualStack": false
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"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"expect": {
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": false
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
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}

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"params": {
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"UseDualStack": false
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
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us-west-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.us-west-1.amazonaws.com"
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"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
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"UseDualStack": false
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"UseDualStack": false
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{
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"UseDualStack": false
}
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"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

}
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            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
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        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
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        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
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            }
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        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
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        "expect": {
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        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
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        "expect": {
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            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
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        "params": {
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          "UseFIPS": true,
          "UseDualStack": false
        }
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        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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        "expect": {
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              "UseDualStack": false
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              }
            },

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              }
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            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
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disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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              "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
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              "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
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                }
              },
              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
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              "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "error": "DualStack is enabled
but this partition does not support DualStack"
              },
              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
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              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
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          "UseDualStack": true
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        "expect": {
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          }
        },

    "params": {
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          "UseFIPS": true,
          "UseDualStack": false
        }
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        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
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          }
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        "params": {
          "Region": "us-east-1",
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}
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"params": {
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"UseDualStack": false,
"Endpoint": "https://example.com"
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"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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"expect": {

"error": "Invalid Configuration: Missing Region"
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"version": "1.0"
}
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"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

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"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
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"errors": [
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
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"target": "com.amazonaws.licensemanager#AuthorizationException"
},
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"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
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"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

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"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
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"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
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"traits": {
"smithy.api#output": {}
}
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"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
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"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
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"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
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"com.amazonaws.licensemanager#AllowedOperation": {

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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
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"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},

"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time that automated discovery last ran. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes automated discovery. "
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }

```
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
```

"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

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                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

```
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

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        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
             "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
     "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
```

<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region for the license.</p>",
              "smithy.api#required": {}

    }
          },
          "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
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"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
```

grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},

```
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Bytes"
                }
            },
            "KILOBYTES": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

```
            "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bytes"
                }
            },
            "KILOBYTES": {
                "target": "smithy.api#Unit",
                "traits": {
```

```
        "smithy.api#enumValue": "Kilobytes"
      }
    },
    "MEGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes"
      }
    },
    "GIGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes"
      }
    },
    "TERABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes"
      }
    },
    "BITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits"
      }
    },
    "KILOBITS": {
      "target": "smithy.api#Unit",
      "traits": {

       "smithy.api#enumValue": "Kilobits"
      }
    },
    "MEGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabits"
      }
    },
    "GIGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabits"
      }
    },
    "TERABITS": {
      "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

```
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
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```
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
```

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
```

"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
```

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

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    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
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"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

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            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

      },
        "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {

  "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
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"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

```
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

```
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

```
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

"smithy.api#documentation": "<p>Failure time.</p>"
            }
        },
        "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
        },
```

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

```
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
```

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
        {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

```
{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
               "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
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</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
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"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

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        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

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            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
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            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
},
"com.amazonaws.licensemanager#ReportFrequency": {
    "type": "structure",
    "members": {
        "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
                "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
        },
        "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

            "traits": {
                "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Details about how frequently reports are generated. "
        }
      },
      "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
          "DAY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DAY"
            }
          },
          "WEEK": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WEEK"
            }
          },
          "MONTH": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "MONTH"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Name of the report generator. "
            }
          },
          "ReportType": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": " Type of reports that are generated. "
            }
          },
          "ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

    },
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
        }
      }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
      }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
      "type": "structure",
      "members": {
        "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
        },
```

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

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    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
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"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

```
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

```
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
        },
        "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
            }
                }
            },
            "traits": {
                "smithy.api#input": {}
            }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
            "type": "structure",
            "members": {},
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#UsageOperation": {
            "type": "string",
            "traits": {
                "smithy.api#length": {
                    "min": 0,
                    "max": 50
                }
            }
        },
        "com.amazonaws.licensemanager#ValidationException": {
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

        "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
```


1.2825 aws-sdk-go-v2-aws-protocol-eventstream 1.6.3

1.2825.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
```

```
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
ListReceivedLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
```

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
          "type": "structure",
          "members": {
              "Name": {
                  "target": "smithy.api#String",
                  "traits": {
                      "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                  }
              },
              "Values": {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
```

"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
 {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the settings defined for Linux subscriptions discovery. The
settings include if\n      Organizations integration has been enabled, and
 which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays
 the aggregated data for Linux\n      subscriptions.</p>"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
          }
        },
        "InstanceID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
          }
        },
        "InstanceType": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The instance type of the resource.</p>"
          }

      },
        "AccountID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
 more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User
Guide</i>.</p>"
```

```
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery
 updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription being used by the instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
         }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
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"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],

"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",

"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",

"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"

```
            }
        ]
    }
],
"type": "tree",
"rules": [
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    "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "type": "tree",
        "rules": [
            {

      "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],

"endpoint": {
                    "url": {
                        "ref": "Endpoint"
```

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                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
},
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    "conditions": [],
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    "rules": [
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            "conditions": [
                {
                    "fn": "isSet",

"argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
            ],
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            "rules": [
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                    "conditions": [
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                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],

"assign": "PartitionResult"
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                    ],
                    "type": "tree",
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            },

        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
            }
        ],
        "type": "tree",
        "rules": [
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                "conditions": [
                    {

                "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]

}
                    ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
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"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"type": "tree",
"rules": [
{

"conditions": [],
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"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]

},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{

"ref": "UseFIPS"
},
true
]

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                    }
                ],
                "type": "tree",
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                                "argv": [
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{
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    }
                                ]
                            }
                        ],
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                    "rules": [
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                                "conditions": [],
                                "type": "tree",
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}

                                        },
                                        "type": "endpoint"
                                    }
                                ]
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
```

```
                "type": "error"
            }
        ]

},
        {
        "conditions": [
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                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
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        "rules": [
            {

         "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
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                "rules": [
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                        "conditions": [],
                        "type": "tree",
                        "rules": [
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"endpoint": {
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"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},

{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
}
]

```
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {

"endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
```

```
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {

    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
         "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
```

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            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
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                  "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                }
              },
```

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    "params": {
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      "UseDualStack": true
    }
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  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
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        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
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  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled

and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {

"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,

"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}

}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",

"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {

      "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by
 the name of\n        <code>AmiID</code> with an optional operator to see subscriptions that match, partially\n
match, or don't match a certain Amazon Machine Image (AMI) ID.</p>\n        <p>The valid names for this filter
are:</p>\n        <ul>\n            <li>\n                <p>\n                <code>AmiID</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>InstanceID</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>AccountID</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Region</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>UsageOperation</code>\n                </p>\n            </li>\n            <li>\n
    <p>\n                <code>ProductCode</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
     <code>InstanceType</code>\n                </p>\n            </li>\n        </ul>\n        <p>The valid Operators for this
filter are:</p>\n        <ul>\n            <li>\n                <p>\n                <code>contains</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>equals</code>\n                </p>\n            </li>\n            <li>\n
        <p>\n                <code>Notequal</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Subscriptions"
            }

        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name.</p>\n <p>The valid names for this filter are:</p>\n <ul>\n <li>\n <p>\n <code>Subscription</code>\n </p>\n </li>\n </ul>\n <p>The valid Operators for this filter are:</p>\n <ul>\n <li>\n <p>\n <code>contains</code>\n </p>\n </li>\n <li>\n <p>\n <code>equals</code>\n </p>\n </li>\n <li>\n <p>\n <code>Notequal</code>\n </p>\n </li>\n </ul>"
                }
            },
```

```
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>",
                    "smithy.api#length": {

                     "min": 1,
                       "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for
 the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
```

"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [

```
{
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits":
{
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
```

"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "

}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

```
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
```

"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",

"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},

"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation":

```
 "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
```

```
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName:
```

```
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
```

```
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
 {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step

```
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
```

```
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack);
err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
```

```
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
ListLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

```
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

```
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
```

```
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
```

```
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
 {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
```

AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
```

"smithy.api#documentation":
" Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
```

```
            "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n      resource.</p>",
                "smithy.api#error": "server"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider":
 {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
                 },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
                }
            ],
            "traits": {
```

"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",

"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",

"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

        },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
             },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",
                    "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
```

"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [

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                {
                    "ref": "Endpoint"
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },

                    true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
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```
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [

{
                    "ref": "Region"
                }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "type": "tree",

"rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
```

```
                    {
                        "ref": "UseDualStack"

                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
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                "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",

"argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {

            "fn": "getAttr",
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
```

"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",

"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"

```
                    ]
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}

        },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"
        }
    ]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
```

```
                                    {

                                  "fn": "getAttr",
                                      "argv": [
                                        {
                                          "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                      ]
                                    }
                                  ]
                                }
                              ],
                              "type": "tree",
                              "rules": [
                                {

                                  "conditions": [],
                                  "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                  },
                                  "type": "endpoint"
                                }
                              ]
                            },
                            {
                              "conditions": [],
                              "error": "DualStack is enabled but this partition does
 not support DualStack",
                              "type": "error"
                            }
                          ]
                        },
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ]
                    }
```

```
                ]
            },
            {
                "conditions":
[],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },
```

"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":

{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},

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            {
              "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
               "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}

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            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/ListIdentityProviders"
          },
          "smithy.api#paginated":
{
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
```

```
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
  {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
```

```
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },

     "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

```
            }
        }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
    "type": "structure",
    "members": {

    "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }

},
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
```

```
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
                }
            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n      subnets to provision VPC endpoints.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
```

"IdentityProviderSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {

"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required":
{}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {

             "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
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"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}

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            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n      update any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n              <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
          <li>\n              <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n              <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n      require connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
```

that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n the subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
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}
{
"smithy": "2.0",
"metadata": {
"suppressions": [
{
"id": "HttpMethodSemantics",
"namespace": "*"
},
{
"id": "HttpResponseCodeSemantics",
"namespace": "*"
},
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"id": "PaginatedTrait",
"namespace": "*"
},
{
"id": "HttpHeaderTrait",
"namespace": "*"
},
{
"id": "HttpUriConflict",
"namespace": "*"
},

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        {
            "id": "Service",
            "namespace": "*"
        }
    ]
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"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

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                "target": "com.amazonaws.licensemanager#CheckInLicense"
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            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
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            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
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            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
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    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
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    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
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      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
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    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
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},
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
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"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
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"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
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"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
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"target": "com.amazonaws.licensemanager#ListLicenses"
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"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
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"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
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"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
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"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
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"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
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"target": "com.amazonaws.licensemanager#ListTokens"
},
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"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
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"target": "com.amazonaws.licensemanager#RejectGrant"
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"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
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"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},

"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true

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                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {

"conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
             },
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
},
{
  "conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
  ],
  "type": "tree",
  "rules": [
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                    {
                      "conditions": [
                        {
                          "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
                          }
                        ],
                        "assign": "PartitionResult"
                        }
                      ],
                      "type": "tree",
                      "rules": [
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                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref":
"UseFIPS"
                              },
                              true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "type": "tree",
                        "rules": [
                          {
                           "conditions": [
                              {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
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"ref": "PartitionResult"
},
"supportsFIPS"
]

}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},

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{
  "conditions": [
    {
      "fn": "booleanEquals",

 "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,

{
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ],
    "type": "tree",
    "rules": [

{
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ]
    },
```

```
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this
partition does not support FIPS",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "type": "tree",
                 "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
```

```
                                "properties": {},
                                "headers": {}

                            },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
  ]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
```

```
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-3.amazonaws.com"
        }
```

```
            },
            "params": {
                "Region": "ap-northeast-3",
                "UseFIPS": false,
                "UseDualStack": false
            }

        },
        {
            "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-1.amazonaws.com"

    }
            },
            "params": {
                "Region": "ap-southeast-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-2.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-southeast-2",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
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{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}

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            },
            "params": {
              "Region": "eu-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-south-1.amazonaws.com"
              }
            },
            "params": {
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"eu-south-1",
              "UseFIPS": false,
              "UseDualStack": false
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            "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-west-1.amazonaws.com"
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            "params": {
              "Region": "eu-west-1",
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              "UseDualStack": false
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            "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
            "expect": {

            "endpoint": {
                "url": "https://license-manager.eu-west-2.amazonaws.com"
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            },
            "params": {
              "Region": "eu-west-2",
              "UseFIPS": false,
              "UseDualStack": false
            }
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        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
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          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
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          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
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          "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.sa-east-1.amazonaws.com"
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          "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.amazonaws.com"
            }
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          "params": {
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            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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        "expect": {
            "endpoint": {
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        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
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        "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-2.amazonaws.com"
            }

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        "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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us-west-1 with FIPS disabled and DualStack disabled",
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"UseDualStack": false
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
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"expect": {
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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"expect": {
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"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
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"expect": {
"endpoint": {
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}
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"params": {
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"UseFIPS": true,
"UseDualStack": true
}
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"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"expect": {
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"expect": {
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"params": {
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"UseDualStack": false
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"UseDualStack": false
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}
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"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false

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            }
        },
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            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
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        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled
but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
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            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
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                "UseFIPS": false,
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"UseDualStack": false
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"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{

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                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
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"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"

  }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
    }
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"com.amazonaws.licensemanager#AcceptGrantRequest": {
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"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
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"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"

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            }
        },
        "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckInLicense"
            }
        },
        "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
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"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
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            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
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"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
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"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
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"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
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"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"

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{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
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    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
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```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
```

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
```

"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}

```
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
             "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409

```
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
```

"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {

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                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

   "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
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"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
},
"traits":
{
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",

"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for

<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
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"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":

{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

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        "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>"
        }
    },
    "TokenType": {
        "target": "com.amazonaws.licensemanager#TokenType",
        "traits": {
            "smithy.api#documentation": "<p>Token type.</p>"
        }
    },
    "Token": {
        "target": "com.amazonaws.licensemanager#TokenString",
        "traits": {
            "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
        }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DateTime": {
  "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
  "type": "structure",
  "members": {
    "Begin": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
            "smithy.api#documentation": "<p>Start of the time range.</p>",
            "smithy.api#required": {}
        }
    },
    "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
            "smithy.api#documentation": "<p>End of the time range.</p>"
        }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrant": {
  "type": "operation",
  "input": {
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"target": "com.amazonaws.licensemanager#DeleteGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}

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            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

      "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {

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        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },

    {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
      "type": "structure",
      "members": {
        "TokenId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>",
            "smithy.api#required": {}
          }
        }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
```

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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

}
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
```

"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",

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        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},

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        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

            "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
```

```
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
```

"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {

"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {

"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
```

"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "

```
    }
},
"LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
```

"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}

```
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

  "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"
```

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in

ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

```
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": "<p>Condition of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

            "smithy.api#documentation": "<p>License name.</p>"
                }
```

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "

```
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
```

"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
```

```
                "traits": {
                    "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

        "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
```

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            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
```

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        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

"smithy.api#documentation": "<p>Failure time.</p>"
            }
```

```
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
                }
            },
            "MetadataList": {

                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}

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        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
```

```
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n

```
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
```

```
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

         "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},

```
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

```
            }
            },
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                 },
                {
                    "target": "com.amazonaws.licensemanager#ServerInternalException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
                "ResourceArn": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                        "smithy.api#required": {}
                    }
                },
                "MaxResults": {
                    "target": "com.amazonaws.licensemanager#BoxInteger",
```

"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",

"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"

```
            },
            "output": {
                "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
                 "traits": {
                    "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

          "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n        <li>\n        <p>\n        <code>ProductSKU</code>\n        </p>\n
```

```
</li>\n <li>\n <p>\n <code>Status</code>\n </p>\n </li>\n
<li>\n <p>\n <code>Fingerprint</code>\n </p>\n </li>\n <li>\n
<p>\n <code>IssuerName</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Beneficiary</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
              "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
```

```
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
```

"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {

"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
        }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
        "traits": {
            "smithy.api#range": {
                "min": 1,
                "max": 100
            }
        }
    },
```

"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The key name. "
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The value. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes key/value pairs. "
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }

},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":

" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform

Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n \n \n \n \n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n
\n \n <code>License Included</code> - The type of license included.\n Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:
<code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-
web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
The following filters and logical operators are supported when the resource type\n is
<code>RDS</code>: \n \n \n \n <code>Engine Edition</code> -
The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>. \n \n \n \n <code>License Pack</code> - The license
pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data
guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},

```
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
```

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                "traits": {
                    "smithy.api#httpHeader": "Location"
                }
            },
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
  {
        "type": "enum",
        "members": {
```

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {

"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {

"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},

"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {

"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {

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        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
            "bucket": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
                }
            },
            "keyPrefix": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
```

"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license
configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",

"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",

"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}

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            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
```

"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "

```
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

1.2826 patternmatcher 0.6.0

1.2826.1 Available under license :

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1.2827 antlr 4.13.0

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1.2828 times 1.6.0

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1.2829 aws-sdk-go-v2-feature-ec2-imds 1.16.11

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```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
```

```
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
```

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
```

```
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

```
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
```

```
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
```

```
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry

RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

```
  RequestResponseLogger
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err
= smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
```

```
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
}

out := result.(*AssociateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type AssociateLicenseInput struct {

// The type of license to associate with the workspace.
//
// Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
// trials.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.
//
// This member is required.
WorkspaceId *string

// A token from Grafana Labs that ties your Amazon Web Services account with a
// Grafana Labs account. For more information, see [Link your account with Grafana Labs].
//
// [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
GrafanaToken *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
```

"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {

"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists

the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}

```
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
                }
            },
            "LastUpdatedTime": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
                }
            },
            "SubscriptionName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
```

}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
```

"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [],

```
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
```

```
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                    "ref": "UseFIPS"
                                            },
                                            true
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
                                    }

        ],
                                "rules": [
                                    {
                                        "conditions": [
                                            {
                                                "fn": "booleanEquals",
                                                "argv": [
                                                    true,
                                                    {
                                                        "fn": "getAttr",
```

"argv": [
{
"ref": "PartitionResult"

},
"supportsFIPS"
]
}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"

```
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {

        "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true

                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
```

```
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS is enabled
but this partition does not support FIPS",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
```

"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-

subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
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"params": {
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"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},

{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

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"params": {
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"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
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"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

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"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false

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    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
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"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}

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                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
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"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
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linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,

"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
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"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription

provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",

```
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {

"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

```
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
```

```
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
```

```
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
 {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
```

AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
```

"smithy.api#documentation":
" Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
```

```
            "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n      resource.</p>",
                "smithy.api#error": "server"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider":
 {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
                 },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
                }
            ],
            "traits": {
```

"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",

"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits":
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"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",

"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},

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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
         },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
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            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
            "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
```

"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [

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                {
                    "ref": "Endpoint"
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },

                    true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
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                },
                "type": "endpoint"
            }
        ]
    },
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                "argv": [

{
                    "ref": "Region"
                }
                ]
            }
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        "rules": [
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                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
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                "type": "tree",

"rules": [
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                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
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                    {
                        "ref": "UseDualStack"

                    },
                    true
                ]
            }
        ],
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                        "argv": [
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                            {
                                "fn": "getAttr",

"argv": [
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                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {

"fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",

"rules": [
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"

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                    ]
                        }
                    ]
                }
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            "type": "tree",
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
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fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}

        },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"
        }
    ]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
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    "rules": [
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            "conditions": [
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                    "fn": "booleanEquals",
                    "argv": [
                        true,
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                                    {

                                  "fn": "getAttr",
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                                        {
                                          "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                      ]
                                    }
                                  ]
                                }
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                                  "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                  },
                                  "type": "endpoint"
                                }
                              ]
                            },
                            {
                              "conditions": [],
                              "error": "DualStack is enabled but this partition does
 not support DualStack",
                              "type": "error"
                            }
                          ]
                        },
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ]
                    }
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                ]
            },
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                "conditions":
[],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
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                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
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}
},

"params": {
"Region": "us-gov-east-1",
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}
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}
},

"params": {
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"UseDualStack": false
}
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{
"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":

{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},

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              "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
               "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}

```
            ],
            "version": "1.0"
        }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/ListIdentityProviders"
        },
        "smithy.api#paginated":
{
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
```

```
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
  {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
```

```
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },

     "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

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            }
        }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
    "type": "structure",
    "members": {

    "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }

},
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
```

```
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
                }
            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n      subnets to provision VPC endpoints.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
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"IdentityProviderSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {

"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required":
{}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
```

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            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {

             "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
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"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
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"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
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"errors": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}

```
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n      update any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n              <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
          <li>\n              <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n              <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n      require connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
```

that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n the subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
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"smithy": "2.0",
"metadata": {
"suppressions": [
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"id": "HttpMethodSemantics",
"namespace": "*"
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"id": "HttpResponseCodeSemantics",
"namespace": "*"
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"id": "PaginatedTrait",
"namespace": "*"
},
{
"id": "HttpHeaderTrait",
"namespace": "*"
},
{
"id": "HttpUriConflict",
"namespace": "*"
},

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          "id": "Service",
          "namespace": "*"
        }
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    "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
          {
            "target": "com.amazonaws.licensemanager#AcceptGrant"
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            "target": "com.amazonaws.licensemanager#CheckInLicense"
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            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
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          {
            "target": "com.amazonaws.licensemanager#CheckoutLicense"
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            "target": "com.amazonaws.licensemanager#CreateGrant"
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            "target": "com.amazonaws.licensemanager#CreateGrantVersion"
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          {
            "target": "com.amazonaws.licensemanager#CreateLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
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          {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateToken"
          },
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    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
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    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
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      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
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    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
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"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
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"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
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"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
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"target": "com.amazonaws.licensemanager#ListLicenses"
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"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
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"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
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"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
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"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
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"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
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"target": "com.amazonaws.licensemanager#ListResourceInventory"
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"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
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"target": "com.amazonaws.licensemanager#ListTokens"
},
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"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
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"target": "com.amazonaws.licensemanager#RejectGrant"
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"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
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"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
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"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},

"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
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"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true

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                ]
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        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
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    {

"conditions": [
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                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
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        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
             },
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
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{
  "conditions": [
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        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
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  ],
  "type": "tree",
  "rules": [
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                    {
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                        "argv": [
                          {
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                          }
                        ],
                        "assign": "PartitionResult"
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                      "type": "tree",
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                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref":
"UseFIPS"
                              },
                              true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "type": "tree",
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                           "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
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"ref": "PartitionResult"
},
"supportsFIPS"
]

}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},

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{
  "conditions": [
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      "fn": "booleanEquals",

 "argv": [
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        true
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  "type": "tree",
  "rules": [
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      "conditions": [
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          "fn": "booleanEquals",
          "argv": [
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{
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            }
          ]
        }
      ],
      "type": "tree",
      "rules": [

{
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ]
    },
```

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                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this
partition does not support FIPS",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "type": "tree",
                 "rules": [
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                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
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"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},
{
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"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"Region": "af-south-1",
"UseFIPS": false,

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        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-3.amazonaws.com"
        }
```

```
            },
            "params": {
                "Region": "ap-northeast-3",
                "UseFIPS": false,
                "UseDualStack": false
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        },
        {
            "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
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            "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-1.amazonaws.com"

        }
            },
            "params": {
                "Region": "ap-southeast-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
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            "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-2.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-southeast-2",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
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{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}

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            },
            "params": {
              "Region": "eu-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-south-1.amazonaws.com"
              }
            },
            "params": {
              "Region":
"eu-south-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-west-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "eu-west-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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            "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
            "expect": {

            "endpoint": {
                "url": "https://license-manager.eu-west-2.amazonaws.com"
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            },
            "params": {
              "Region": "eu-west-2",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.sa-east-1.amazonaws.com"
             }
          },
          "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.amazonaws.com"
            }
          },
          "params": {
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"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region

us-west-1 with FIPS disabled and DualStack disabled",

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                "expect": {
                  "endpoint": {
                    "url": "https://license-manager.us-west-1.amazonaws.com"
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                },
                "params": {
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                  "UseFIPS": false,
                  "UseDualStack": false
                }
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                "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-fips.us-west-1.amazonaws.com"
                  }
                },
                "params": {
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"Region": "us-west-1",

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                  "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager.us-west-2.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "us-west-2",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
```

"expect": {

```
                  "endpoint": {
                    "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                  }
                },
                "params": {
```

```
            "Region": "us-west-2",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,

            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
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"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
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"params": {
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"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
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"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false

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            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled
but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
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            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
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"UseDualStack": false
}
},

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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{

"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"

```
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
          "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateToken"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max":
7
          }
        }
      },
      "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
```

```
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
```

"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
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"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
```

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
```

"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}

```
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
             "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409

```
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
```

"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {

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                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
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            "smithy.api#documentation": "<p>Grant name.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
```

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            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",

"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for

<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
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"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":

{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
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"target": "com.amazonaws.licensemanager#DeleteGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}

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            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

      "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {

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        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },

    {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
      "type": "structure",
      "members": {
        "TokenId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>",
            "smithy.api#required": {}
          }
        }
```

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}

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        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
```

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            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},

"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",

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        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},

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        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
```

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            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

            "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
```

```
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
```

"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {

"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {

"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

```
    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
```

"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "

```
    }
},
"LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
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"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}

```
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

  "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"
```

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in

ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

```
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": "<p>Condition of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

            "smithy.api#documentation": "<p>License name.</p>"
                }
```

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "

```
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
```

"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
```

```
                "traits": {
                    "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

          "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
```

```
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
```

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        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

"smithy.api#documentation": "<p>Failure time.</p>"
            }
```

```
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
                }
            },
            "MetadataList": {

                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}

```
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
```

```
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n

```
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
```

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<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

         "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},

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            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

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            }
            },
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                 },
                {
                    "target": "com.amazonaws.licensemanager#ServerInternalException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
                "ResourceArn": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                        "smithy.api#required": {}
                    }
                },
                "MaxResults": {
                    "target": "com.amazonaws.licensemanager#BoxInteger",
```

"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",

"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </p>\n
    </li>\n        <li>\n            <p>\n                <code>ProductSKU</code>\n
            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
                 "traits": {
                    "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

             "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n    <li>\n    <p>\n    <code>ProductSKU</code>\n    </p>\n
```

```
</li>\n <li>\n <p>\n <code>Status</code>\n </p>\n </li>\n
<li>\n <p>\n <code>Fingerprint</code>\n </p>\n </li>\n <li>\n
<p>\n <code>IssuerName</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Beneficiary</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
              "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
```

```
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
```

"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {

"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
        }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
        "traits": {
            "smithy.api#range": {
                "min": 1,
                "max": 100
            }
        }
    },
```

"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The key name. "
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The value. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes key/value pairs. "
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }

```
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n        Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n        <ul>\n            <li>\n                <p>As a license administrator, you can optionally specify an\n                <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n  </li>\n            <li>\n                <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                account in your organization.</p>\n            </li>\n            <li>\n                <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n                <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n                are activating the grant.</p>\n            </li>\n        </ul>\n        <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n            <dd>\n                <p>Use this value to activate a grant without replacing any member accounts\n                active grants for the same product.</p>\n            </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n            <dd>\n                <p>Use this value to activate a grant and disable other active grants in any\n                member accounts
 for the same product. This action will also replace their\n                previously activated grants with this activated grant.</p>\n            </dd>\n        </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n        override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation":
```

" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform

Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n \n \n \n \n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n
\n \n <code>License Included</code> - The type of license included.\n Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:
<code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-
web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
The following filters and logical operators are supported when the resource type\n is
<code>RDS</code>: \n \n \n \n <code>Engine Edition</code> -
The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>. \n \n \n \n <code>License Pack</code> - The license
pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data
guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},

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        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

```
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
```

```
                "traits": {
                    "smithy.api#httpHeader": "Location"
                }
            },
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

 }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
```

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {

"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {

"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},

"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {

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        "type": "enum",
        "members": {
          "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

      },
          "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportType"
        }
      },
      "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
          "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {

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        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
            "bucket": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
                }
            },
            "keyPrefix": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
```

"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license
configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",

"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",

"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}

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            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
```

"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "

```
            }
        },

        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
                "ResourceArn": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                        "smithy.api#required": {}
                    }
                },
                "AddLicenseSpecifications": {
                    "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                    "traits": {
                        "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                    }
                },
                "RemoveLicenseSpecifications": {
                    "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                    "traits": {
                        "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#input": {}
            }
        },
        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
            "type": "structure",
            "members": {},
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettings": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
            },
            "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

1.2830 ragel-machinery 0.0.0-20190525184631-5f46317e436b

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1.2831 gorilla-mux 1.8.1

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1.2832 go-autorest-autorest-azure-auth 0.5.13

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1.2833 x-exp 0.0.0-20240506185415-9bf2ced13842

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1.2835 smithy-go 1.20.3

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1.2836 azure-sdk-for-go-sdk-resourcemanager-compute-armcompute 5.7.0

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//go:build go1.18
// +build go1.18

```
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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
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package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
```

```
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
```

```
 srv                     *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }
```

```
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
```

```
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
```

```
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}
```

```
func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
```

```
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
```

```
 body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
 if err != nil {
  return nil, err
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginUpdate = &respr
 l.beginUpdate.add(req, beginUpdate)
}

resp, err := server.PollerResponderNext(beginUpdate, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK},
resp.StatusCode) {
 l.beginUpdate.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginUpdate) {
 l.beginUpdate.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
```

```
 if matches == nil || len(matches) < 1 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 body,
err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginValidateLicense = &respr
 l.beginValidateLicense.add(req, beginValidateLicense)
}

resp, err := server.PollerResponderNext(beginValidateLicense, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK}, resp.StatusCode) {
 l.beginValidateLicense.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginValidateLicense) {
 l.beginValidateLicense.remove(req)
}

return resp, nil
}
```

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  SOFTWARE
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
```

```
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
```

```
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
```

```
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
```

```
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
```

```
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
```

```
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
```

```
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2023-06-20-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
```

```
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
```

```
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
```

```
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
```

```
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
```

```
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

azwebpubsub

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```
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//go:build go1.18
// +build go1.18

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// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
```

```
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //
   State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
```

```
"{licenseName}", armhybridcompute.License{
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}
```

```
// Generated
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specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
```

```
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

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manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

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manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
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manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
```

```
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListBySubscription.json
```

```
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //
     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
```

}
}

1.2837 gorilla-websocket 1.5.3

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1.2838 azure-sdk-for-go-sdk-resourcemanager-network-armnetwork 4.3.0

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1.2839 aws-sdk-go-v2-credentials 1.17.27

1.2839.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
```

toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
compare
- name: License test
run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
CreateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter

```
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
```

```
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string
```

```
 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement
```

```
 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
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package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
```

```
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
 {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
```

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata

```
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
```

```
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
```

```
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack,
options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
ListLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
```

"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

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            }
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        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

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            "smithy.api#idempotent": {}
        }
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    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
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"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}

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            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User
Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
                }
            },
            "LastUpdatedTime": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
                }
            },
            "SubscriptionName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
                }
            },
            "OsVersion": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
                }
            },
            "SubscriptionProviderCreateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
                }
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
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"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",

"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",

"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [

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{
  "conditions": [
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      "fn": "isSet",
      "argv": [
        {
          "ref": "Endpoint"
        }
      ]
    }
  ],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }

],
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [],
      "rules": [
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          "conditions": [
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              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]

}
          ],
          "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
          "type": "error"
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```

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                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
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        "type": "tree"

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    ],
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},
{
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                    "argv": [
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                            "ref": "Region"
                        }
                    ]
                }
            ],
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                {
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    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
```

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                    {
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                        "argv": [
                            {

                    "ref": "UseFIPS"
                            },
                            true
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }

],
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                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"

},
                                            "supportsFIPS"
                                        ]
                                    }
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
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{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
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"type": "tree"
},
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"

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                    },
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                ]
            }
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        "rules": [
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                "conditions": [
                    {

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                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true

                ]
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                                "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
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                        ],
                        "type": "tree"
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                "type": "tree"
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but this partition does not support FIPS",
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"type": "tree"
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"argv": [
{
"ref": "UseDualStack"
},
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]
}
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
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{
"conditions": [],
"rules": [

{
"conditions": [],

"endpoint": {
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"properties": {},
"headers": {}
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"type": "endpoint"
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],
"type": "tree"

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"type": "error"
}
],
"type": "tree"
},
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"conditions": [],
"rules": [
{
"conditions": [],
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"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",

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                "type": "error"
            }
        ],
        "type": "tree"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {

   "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
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                }
            },
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                "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                    }

        },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                "expect": {
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"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false

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            }
        },
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            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
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                    "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {

        "Region": "us-iso-east-1",
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                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
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"UseDualStack": true
}
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"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
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"UseDualStack": false
}
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"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"Region": "us-isob-east-1",
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"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"

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            }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {

       "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
        "expect": {
            "endpoint": {
                "url": "https://example.com"
            }

},
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
        }
    },
```

{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"

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            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled LinuxSubscriptionsDiscovery"

    },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled LinuxSubscriptionsDiscovery"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n

```
<code>AmiID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>DualSubscription</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceType</code>\n </p>\n </li>\n <li>\n <p>\n
<code>ProductCode</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Region</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Status</code>\n </p>\n </li>\n <li>\n <p>\n
<code>UsageOperation</code>\n </p>\n </li>\n </ul>\n <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n <ul>\n <li>\n <p>\n
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
    "type": "structure",
    "members": {
        "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
        },
        "NextToken": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "

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            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
        }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
```

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            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },
```

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,

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                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
```

"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {

"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}

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            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
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        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
```

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
              }
            ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",

  "documentation": "INVALID status"
          },
```

```
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
```

```
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
```

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
             "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target":
 "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
```

```
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil
 {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

```
GetLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
```

```
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
{
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
```

```
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the

EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider of the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n resource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider":

{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",

```
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }

    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Details about an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n      settings such as the subnets to provision VPC endpoints.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
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"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
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"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",

"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
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"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
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"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
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"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
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"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
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"InstanceId": {
"target": "smithy.api#String",
"traits":
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"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",

"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
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"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
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"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
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"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
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"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
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"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}

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        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",

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        "operations": [
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                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
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                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
            },
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                "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
            },
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                "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

},
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                "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
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                "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
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                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
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                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
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            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
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                    "x-amz-user-agent",
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                    "x-amzn-trace-id",
                    "content-length",
                    "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"

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            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n      a per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
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                        "builtIn": "AWS::Region",
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"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"argv": [
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"fn": "getAttr",
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"ref": "PartitionResult"
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"supportsDualStack"
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "error"
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"argv": [
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},
"supportsFIPS"

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            "type": "error"
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                        },
                        "supportsDualStack"
                      ]
                  }
                ]
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"type": "endpoint"
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not support DualStack",
"type": "error"
}
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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"type": "endpoint"
}
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"type": "error"
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"smithy.rules#endpointTests": {
"testCases": [
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"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
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"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"expect": {
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"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": false
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"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
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with FIPS disabled and DualStack disabled",
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"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
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}
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-gov-east-1
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"params": {

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"params": {
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"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":
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"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"

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                    "UseDualStack":
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                }
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                "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
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                    "UseDualStack": false
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                "expect": {
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                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                    }
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                "params": {
                    "Region": "us-isob-east-1",
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
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"expect": {
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"UseDualStack": false
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
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"url": "https://example.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
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"url": "https://example.com"
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"params": {
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"UseDualStack": false,

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            "expect": {
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            "documentation": "Missing region",
            "expect": {
                 "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
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  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
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"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated":
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"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
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},
"NextToken": {
"target": "smithy.api#String",

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            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
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    "type": "structure",
    "members": {
        "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
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"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
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    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
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    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
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        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
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            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
```

"type":
"structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
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"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {

"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},

"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for a user. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for a user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},

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    "traits": {
        "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
        },
```

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {

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            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",

    "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation":
  "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
```

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688 communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs

will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"

```
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required":
{}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation":
"<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {

             "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n      provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n      update any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
            <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n require connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n the subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {

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                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
        {
            "id": "HttpMethodSemantics",
            "namespace": "*"
        },
        {
            "id": "HttpResponseCodeSemantics",
            "namespace": "*"
        },
        {
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
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"endpointPrefix": "license-manager"
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"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
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"type": "String"
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"type": "Boolean"
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"supportsDualStack"

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    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
        }
    },
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true

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                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
                    }
                },

        "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://example.com"
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                }
            },
            "params": {
                "UseFIPS": false,

    "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
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"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
```

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        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

      "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
```

```
            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
    }
},
"com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Arn"
    }
},
"com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
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"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
```

{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
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            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the account that created the license is the same that is performing the check out, you must\n            specify the account as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
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idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}

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            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PROVISIONAL"
                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
             }
        }
    },
```

"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {

```
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }
    },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
    }
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
    }
  },
  "com.amazonaws.licensemanager#ConsumptionConfiguration": {
    "type": "structure",
    "members": {
        "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
        },
        "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
             }
        },
        "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
```

"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
```

```
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "

```
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
 {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}

        }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
```

"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",

"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",

"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}

```
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
```

```
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
```

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        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}

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    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members":
{
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {

"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":

"com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": " Indicates whether check-ins are allowed. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes a resource entitled for use with a license. "
    }
},
"com.amazonaws.licensemanager#EntitlementData": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement data name. ",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement
data value. "
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": " Entitlement data unit. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Data associated with an entitlement resource. "
    }
},
"com.amazonaws.licensemanager#EntitlementDataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
    }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
    "type": "enum",
    "members": {

"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}

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        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
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```
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes/Second"
    }
},
"KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
    }
},
"MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
    }
},
"GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
     "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
    }
},
"TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
    }
},
"BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits/Second"
    }
},
"KILOBITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
    }
},
"MEGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
```

"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},

```
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
```

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        },
        "BYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
```

"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},

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            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

  }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {

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    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access
tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

        },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
```

"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}

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            },
            "ConsumedLicenseSummaryList": {
                "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
                }
            },
            "ManagedResourceSummaryList": {
                "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                 "traits": {
                    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            },
            "AutomatedDiscoveryInformation": {
                "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
                "traits": {
                    "smithy.api#documentation": "<p>Automated discovery information.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
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"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "

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            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
```

"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
        "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
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"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},

"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",

"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {

"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}

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            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
```

```
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
```

"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},

"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {

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        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

    },
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
      "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "

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            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "

```
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },

    "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

       "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
```

},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
```

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    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
```

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            }
        },
        "MetadataList": {

            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
    }
},
"com.amazonaws.licensemanager#LicenseSpecification": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

            "smithy.api#required": {}
            }
        },
        "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
```

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    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

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            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
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configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

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        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseConfigurationArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
 {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {

```
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
```

```
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
```

},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
            <li>\n                <p>\n                <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

```
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n

```
</li>\n <li>\n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
```

}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license

pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#RedirectException": {
"type": "structure",
"members": {
"Location": {
"target": "com.amazonaws.licensemanager#Location",
"traits": {
"smithy.api#httpHeader": "Location"
}
},
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " This is not the correct Region for the resource. Try again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#RejectGrantRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}

```
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

```
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
 {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
```

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {

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            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
```

```
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "

```
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
```

"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
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"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
```

"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation":
" ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {

```
            "min": 0,
            "max": 50
          }
        }
      },
      "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

       "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
  }
```


1.2840 ipvs 1.1.0

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1.2841 regexp 0.0.0-20240518133315-a468a5bfb3bc

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1.2842 google-cloud-go-storage 1.43.0

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```
func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
```

```
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
```

```
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
```

```
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
```

```
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
```

```
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
```

```
 // TODO: Handle error.
 }
// TODO: Use resp.
_ = resp
}
```

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```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.34.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
```

```
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}
```

```
// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
```

```
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
```

```
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
```

```
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
```

0x0b, 0x67,
0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64,
0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x33,

```
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func
 file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v any, i int) any {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
```

```
    return &v.sizeCache
   case 2:
    return &v.unknownFields
   default:
    return nil
   }
  }
 }
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
  GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
  RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
  NumEnums:      2,
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:
        file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute
```

```
import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
```

```
    },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
```

```
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
```

```
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}
```

```
// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
```

```
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}
```

```
// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license",
url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
```

```
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf,
err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()),
 "license", url.QueryEscape(req.GetLicense()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err
 := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
```

```
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and
 context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp);
 err != nil {
   return err
```

```
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId",
 fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err !=
nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
```

```
 return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
 List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults",
 fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return
err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
```

```
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only
 by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on
 the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return
```

```
 nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.2843 src-go-pkcs12 0.5.0

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1.2844 otel 1.30.0

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1.2845 otel-trace 1.30.0

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1.2846 analysis 0.23.0

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1.2851 gorilla/handlers 1.5.2

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1.2852 otel-metric 1.30.0

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1.2853 asn1-ber 1.5.7

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1.2854 httprc 1.0.6

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1.2855 x-sync 0.10.0

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1.2856 idna 15.1.0

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1.2857 json 0.0.0-20211020170558-c049b76a60c6

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1.2858 kube-openapi 0.0.0-20211115234752-e816edb12b65

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package spec

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//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
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package spec

import "testing"

func TestIntegrationLicense(t *testing.T) {
 license := License{Name: "the name", URL: "the url"}
 const licenseJSON = `{"name":"the name","url":"the url"}`
 const licenseYAML = "name: the name\nurl: the url\n"

 assertSerializeJSON(t, license, licenseJSON)
 assertParsesJSON(t, licenseJSON, license)
}
```

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localtime.go, localtime_test.go:

Originals:
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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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1.2869 sys-signal 0.7.1

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1.2871 protobuf-go 1.36.1

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1.2872 typeurl 2.2.3

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1.2873 stargz-snapshotter-estargz 0.15.1

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1.2874 go-runc 1.0.0

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1.2879 seccomp 0.10.0

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1.2880 x-sys 0.29.0

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1.2881 sys-capability 0.4.0

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1.2882 go-cni 1.1.9

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1.2883 contrib-instrumentation-google.golang.org-grpc-otelgrpc 0.46.1

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1.2885 pop 6.1.1

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1.2886 btrfs 2.0.0

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1.2887 go-runc 1.1.0

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1.2888 console 1.0.4

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1.2889 aws-sdk-go-v2-service-cloudwatchlogs 1.32.0

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-
Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil,
 err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
```

```
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err !=
 nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack);
err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack,
```

```
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

AWS SDK for Go

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```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
```

```
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
```

```
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return
err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
        "type": "integer"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
        "type": "long"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
           "Name": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>The type of name to filter by.</p>"
              }
           },
           "Values": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                 "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
              }
           },
           "Operator": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
               "traits": {
                 "smithy.api#documentation": "<p>An operator for filtering results.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {

          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
{
        "type": "structure",
        "members": {}
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and
which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays
the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}

```
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }

        },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
 more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User
Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
                }
```

```
            },
            "LastUpdatedTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery
 updated the instance details.</p>"
                }
            },
            "SubscriptionName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription being used by the instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],

    "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",
                    "x-api-key",
                    "authorization",
                    "x-amz-date",

  "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can discover and track your commercial
Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
```

"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The
AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"type": "tree",
"rules": [
{

```
"conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
    "type": "error"
},
{
    "conditions": [],
    "type": "tree",
    "rules": [
        {

  "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],

"endpoint": {
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ]
}
```

```
            ]
        },
        {
            "conditions": [],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",

    "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
                    ],
                    "type": "tree",
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "aws.partition",
                                    "argv": [
                                        {
                                            "ref": "Region"
                                        }
                                    ],

"assign": "PartitionResult"
                                }
                            ],
                            "type": "tree",
                            "rules": [
                                {
                                    "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                {
                                                    "ref": "UseFIPS"
                                                },
                                                true
                                            ]
                                        },
```

```
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [
                            {

                        "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]

}
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

                                "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
```

"type": "tree",
"rules": [
{
"conditions": [],
"type": "tree",
"rules": [
{

"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]

},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{

"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{

```
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,

        {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            }
                                        ]
                                    }
                                ],
                                "type": "tree",

                            "rules": [
                                    {
                                        "conditions": [],
                                        "type": "tree",
                                        "rules": [
                                            {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}

                                                },
                                                "type": "endpoint"
                                            }
                                        ]
                                    }
                                ]
                            },
                            {
                                "conditions": [],
                                "error": "FIPS is enabled but this partition does not support FIPS",
                                "type": "error"
                            }
                        ]

    },
                        {
                            "conditions": [
```

```
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {

                "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "type": "tree",
                                "rules": [
                                    {
                                        "conditions": [],

                                    "endpoint": {
                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
```

```
                                    ]
                                }
                            ]
                        },

                {
                            "conditions": [],
                            "error": "DualStack is enabled but this partition does not support DualStack",
                            "type": "error"
                        }
                    ]
                },
                {
                    "conditions": [],
                    "type": "tree",
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url":
"https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ]
                }
            ]
        }
    ]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
```

```
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {

"endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
             "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
```

```
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {

              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                 "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
              },
```

"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",

```
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
```

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled
and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}

```
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",

        "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",

          "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
```

```
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,

        "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }

      }
          ],
          "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
```

commercial Linux\n subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>AmiID</code> with an optional operator to see subscriptions that match, partially\n match, or don't match a certain Amazon Machine Image (AMI) ID. \n The valid names for this filter are: \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n The valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

}
},
"NextToken": {
"target": "smithy.api#String",

```
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
    "type": "structure",
    "members": {
        "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
                "smithy.api#documentation":
 "<p>An array that contains instance objects.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
         },
        {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Subscriptions"
}

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. ",
"smithy.api#length": {

"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",

```
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [

{
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
```

```
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits":
{
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The name of the subscription. "

}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"

```
        },

    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",

  "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
```

"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},

"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation":
" A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}

```
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //   - Beneficiary
 //   - ProductSKU
 //   - Fingerprint
 //
   - Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if
err := addProtocolFinalizerMiddlewares(stack, options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 //
 This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "DisassociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type
 CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
```

```
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource
 Name (ARN) of the checkout license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil
{
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack);
 err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier
 that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
```

```
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return
err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide
 to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement
```

```
 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity
 *types.DatetimeRange

 // Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add
 protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {
```

```
 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return
 err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
```

```
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "GetLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
```

```
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
   - ProductSKU
 //   - Status
 //   - Fingerprint
 //   - IssuerName
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack);
```

```
 err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
      "type": "operation",
      "input": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the
EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider of the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n      resource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
```

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},

```
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used
 to return more specific results from a describe\n      operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n      attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Details about an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n      settings such as the subnets to provision VPC endpoints.</p>",
                    "smithy.api#required":
 {}
                }
```

```
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Describes an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status
```

of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits":

{
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based

subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",

"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},

"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

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"rules": [
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"conditions": [
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"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
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        "type": "tree",
        "rules": [
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            "conditions": [
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                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },

                true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
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          {
            "conditions": [
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                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
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            "conditions": [],
            "endpoint": {
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                "ref": "Endpoint"
              },
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
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      {
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                "argv": [

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                    "ref": "Region"
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              }
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                "conditions": [
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                    "fn": "aws.partition",
                    "argv": [
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                    ],
                    "assign": "PartitionResult"
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                "type": "tree",

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                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
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                            "ref": "UseFIPS"
                          },
                          true
                        ]
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                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"

                          },
                          true
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```
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                                "argv": [
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                                    {
                                        "fn": "getAttr",

 "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    }
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {

                "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
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                        "type": "tree",
                        "rules": [
                            {

                "conditions": [],
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                                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
```

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                "headers": {}
            },
            "type": "endpoint"
        }
    ]
  },
  {
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
     "type": "error"
  }
]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
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"rules": [
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        {
          "fn": "booleanEquals",
          "argv": [
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            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"

            ]
            }
          ]
        }
      ],
```

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"headers": {}

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"type": "endpoint"
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"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
}
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
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"ref": "UseDualStack"
},
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{

"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"

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                                    "supportsDualStack"
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                            }
                        ]
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                "type": "tree",
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does
 not support DualStack",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
]
}
]
},
{
    "conditions":
 [],
    "error": "Invalid Configuration: Missing Region",
```

```
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },

            "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

```
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }

    },
            {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
            },
            {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
              }
            },
             "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
            },
            {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
            },
            {
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",

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        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },

     "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",

"members": {

"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for a user. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for a user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The

start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " The summary of the user-based subscription products for a user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider

operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {

"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n        hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing.
 For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n        monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required":
{}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",

"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related

configuration settings. You can\n update any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n require connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}
}
},

"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n the subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
{
"smithy": "2.0",
"metadata": {
"suppressions": [
{
"id": "HttpMethodSemantics",
"namespace": "*"
},
{
"id": "HttpResponseCodeSemantics",
"namespace": "*"
},
{
"id": "PaginatedTrait",
"namespace": "*"
},
{
"id": "HttpHeaderTrait",
"namespace": "*"
},
{
"id": "HttpUriConflict",
"namespace": "*"
},
{
"id": "Service",
"namespace": "*"
}
]

```
},
"shapes": {
  "com.amazonaws.licensemanager#AWSLicenseManager": {
    "type": "service",
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"endpointPrefix": "license-manager"
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"aws.auth#sigv4": {
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"aws.protocols#awsJson1_1": {},
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"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
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"required": false,
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"type": "String"
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"required": true,
"default": false,
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"type": "Boolean"
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                "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
              }
            },
            "params": {
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"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",

"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

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            {
                "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
                    }
                },

        "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
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"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}

```
                }
            ],
            "version": "1.0"
        }
    }
  },
  "com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
      "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"

  }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant
ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#AccessDeniedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
```

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"

```
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
```

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    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
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"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

```
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
```

"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

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                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

```
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

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        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

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            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
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<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
                }
            },

  "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
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{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region for the license.</p>",
              "smithy.api#required": {}

    }
          },
          "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

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            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
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"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
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grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

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    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},

"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

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        "smithy.api#enumValue": "Kilobytes"
      }
    },
    "MEGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes"
      }
    },
    "GIGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes"
      }
    },
    "TERABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes"
      }
    },
    "BITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits"
      }
    },
    "KILOBITS": {
      "target": "smithy.api#Unit",
      "traits": {

       "smithy.api#enumValue": "Kilobits"
      }
    },
    "MEGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabits"
      }
    },
    "GIGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabits"
      }
    },
    "TERABITS": {
      "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
```

"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
```

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
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"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

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    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
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"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
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                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

```
            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

      },
        "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {

  "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

```
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

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                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
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"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

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            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
```

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
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"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

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{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
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    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
               "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                    <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                    <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
```

```
</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilter": {
      "type": "structure",
      "members": {
        "ProductInformationFilterName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Filter name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterValue": {
          "target": "com.amazonaws.licensemanager#StringList",

        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
          }
        },
        "ProductInformationFilterComparator": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
         "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
        },
```

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

```
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
```

```
                }
            },
            "WEEKLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Weekly"
                }
            },
            "MONTHLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Monthly"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
            "licenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
            "value": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

```
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

    },
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
        }
      }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
      }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
      "type": "structure",
      "members": {
        "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
        },
```

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

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{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

```
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
        },
        "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version
 of the license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack,
 options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
```

1.2890 codegangsta-cli 1.22.12

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1.2891 container-device-interface-specs-go 0.8.0

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1.2892 flock 0.12.1

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1.2893 sys-sequential 0.6.0

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1.2894 x-exp 0.0.0-20240909161429-701f63a606c0

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1.2900 goleak 1.2.1

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1.2901 idna 14.0.0

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1.2903 go-metro 0.0.0-20211217172704-adc40b04c140

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1.2905 agnivade-levenshtein 1.2.0

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1.2907 cni 1.2.3

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1.2908 kubernetes-cri-api 0.27.1

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1.2909 protobuf 1.5.4

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1.2911 protobuf-go 1.35.2

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1.2912 winston/node_modules/readable-stream 3.6.0

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1.2913 jsonpatch 1.32

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1.2914 kubernetes-model-flowcontrol 6.9.2

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Manifest-Version: 1.0
Build-Jdk-Spec: 1.8
Bundle-Description: Java client for Kubernetes and OpenShift
Bundle-DocURL: https://redhat.com
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.txt
Bundle-ManifestVersion: 2
Bundle-Name: Fabric8 :: Kubernetes Model :: FlowControl
Bundle-SymbolicName: io.fabric8.kubernetes-model-flowcontrol
Bundle-Vendor: Red Hat
Bundle-Version: 6.9.2
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: io.fabric8.kubernetes.api.model.flowcontrol.v1alpha1;u
ses:="com.fasterxml.jackson.annotation,com.fasterxml.jackson.databind
,com.fasterxml.jackson.databind.annotation,io.fabric8.kubernetes.api.
builder,io.fabric8.kubernetes.api.model,io.fabric8.kubernetes.model.a
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l.v1beta1;uses:="com.fasterxml.jackson.annotation,com.fasterxml.jacks
on.databind,com.fasterxml.jackson.databind.annotation,io.fabric8.kube
rnetes.api.builder,io.fabric8.kubernetes.api.model,io.fabric8.kuberne
tes.model.annotation";version="6.9.2",io.fabric8.kubernetes.api.model
.flowcontrol.v1beta2;uses:="com.fasterxml.jackson.annotation,com.fast
erxml.jackson.databind,com.fasterxml.jackson.databind.annotation,io.f
abric8.kubernetes.api.builder,io.fabric8.kubernetes.api.model,io.fabr
ic8.kubernetes.model.annotation";version="6.9.2",io.fabric8.kubernete
s.api.model.flowcontrol.v1beta3;uses:="com.fasterxml.jackson.annotati
on,com.fasterxml.jackson.databind,com.fasterxml.jackson.databind.anno
tation,io.fabric8.kubernetes.api.builder,io.fabric8.kubernetes.api.mo
del,io.fabric8.kubernetes.model.annotation";version="6.9.2",io.fabric
8.kubernetes.api.model.internal.apiserver.v1alpha1;uses:="com.fasterx

ml.jackson.annotation,com.fasterxml.jackson.databind,com.fasterxml.ja
ckson.databind.annotation,io.fabric8.kubernetes.api.builder,io.fabric
8.kubernetes.api.model,io.fabric8.kubernetes.model.annotation";versio
n="6.9.2"
Implementation-URL:
 https://github.com/fabric8io/kubernetes-client/kub
ernetes-model-generator/kubernetes-model-flowcontrol
Import-Package: com.fasterxml.jackson.annotation;version="[2.15,3)",co
m.fasterxml.jackson.databind;version="[2.15,3)",com.fasterxml.jackson
.databind.annotation;version="[2.15,3)",io.fabric8.kubernetes.api.bui
lder;version="[6.9,7)",io.fabric8.kubernetes.api.model,io.fabric8.kub
ernetes.model.annotation;version="[6.9,7)"
Include-Resource: META-INF/services/io.fabric8.kubernetes.api.model.Ku
bernetesResource=target/classes/META-INF/services/io.fabric8.kubernet
es.api.model.KubernetesResource,manifest.vm=src/main/resources/manife
st.vm,schema/kube-schema.json=src/main/resources/schema/kube-schema.j
son,schema/validation-schema.json=src/main/resources/schema/validatio
n-schema.json,/META-INF/jandex.idx=target/classes/META-INF/jandex.idx
Private-Package: schema
Provide-Capability: osgi.serviceloader;osgi.serviceloader="io.fabric8.
kubernetes.api.model.KubernetesResource"
Require-Capability:
 osgi.extender;filter:="(osgi.extender=osgi.service
loader.registrar)",osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Scm-Connection: scm:git:git@github.com:fabric8io/kubernetes-client.git
/kubernetes-model-generator/kubernetes-model-flowcontrol
Scm-Revision: ${buildNumber}
Scm-Url: https://github.com/fabric8io/kubernetes-client/kubernetes-mod
el-generator/kubernetes-model-flowcontrol/
Specification-Title: Fabric8 :: Kubernetes Model :: FlowControl
Specification-Vendor: Red Hat
Specification-Version: 6.9
Tool: Bnd-6.3.1.202206071316

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1.2915 kubernetes-client 6.9.2

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#

io.fabric8.kubernetes.client.impl.URLFromEnvVarsImpl
io.fabric8.kubernetes.client.impl.URLFromIngressImpl
io.fabric8.kubernetes.client.impl.URLFromNodePortImpl
io.fabric8.kubernetes.client.impl.URLFromClusterIPImpl

Found in path(s):
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1.2916 kubernetes-model-node 6.9.2

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Bundle-DocURL: https://redhat.com
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.txt
Bundle-ManifestVersion: 2
Bundle-Name: Fabric8 :: Kubernetes Model :: Node
Bundle-SymbolicName: io.fabric8.kubernetes-model-node
Bundle-Vendor: Red Hat
Bundle-Version: 6.9.2
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: io.fabric8.kubernetes.api.model.node.v1;uses:="com.fas
terxml.jackson.annotation,com.fasterxml.jackson.databind,com.fasterxm

```
l.jackson.databind.annotation,io.fabric8.kubernetes.api.builder,io.fa
bric8.kubernetes.api.model,io.fabric8.kubernetes.model.annotation";ve
rsion="6.9.2",io.fabric8.kubernetes.api.model.node.v1alpha1;uses:="co
m.fasterxml.jackson.annotation,com.fasterxml.jackson.databind,com.fas
terxml.jackson.databind.annotation,io.fabric8.kubernetes.api.builder,
io.fabric8.kubernetes.api.model,io.fabric8.kubernetes.model.annotatio
 n";version="6.9.2",io.fabric8.kubernetes.api.model.node.v1beta1;uses:
="com.fasterxml.jackson.annotation,com.fasterxml.jackson.databind,com
.fasterxml.jackson.databind.annotation,io.fabric8.kubernetes.api.buil
der,io.fabric8.kubernetes.api.model,io.fabric8.kubernetes.model.annot
ation";version="6.9.2"
Implementation-URL: https://github.com/fabric8io/kubernetes-client/kub
ernetes-model-generator/kubernetes-model-node
Import-Package: com.fasterxml.jackson.annotation;version="[2.15,3)",co
m.fasterxml.jackson.databind;version="[2.15,3)",com.fasterxml.jackson
.databind.annotation;version="[2.15,3)",io.fabric8.kubernetes.api.bui
lder;version="[6.9,7)",io.fabric8.kubernetes.api.model,io.fabric8.kub
ernetes.model.annotation;version="[6.9,7)"
Include-Resource: META-INF/services/io.fabric8.kubernetes.api.model.Ku
bernetesResource=target/classes/META-INF/services/io.fabric8.kubernet
es.api.model.KubernetesResource,manifest.vm=src/main/resources/manife
 st.vm,schema/kube-schema.json=src/main/resources/schema/kube-schema.j
son,schema/validation-schema.json=src/main/resources/schema/validatio
n-schema.json,/META-INF/jandex.idx=target/classes/META-INF/jandex.idx
Private-Package: schema
Provide-Capability: osgi.serviceloader;osgi.serviceloader="io.fabric8.
kubernetes.api.model.KubernetesResource"
Require-Capability: osgi.extender;filter:="(osgi.extender=osgi.service
loader.registrar)",osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Scm-Connection: scm:git:git@github.com:fabric8io/kubernetes-client.git
/kubernetes-model-generator/kubernetes-model-node
Scm-Revision: ${buildNumber}
Scm-Url: https://github.com/fabric8io/kubernetes-client/kubernetes-mod
el-generator/kubernetes-model-node/
Specification-Title: Fabric8 :: Kubernetes Model :: Node
Specification-Vendor: Red Hat
Specification-Version: 6.9
Tool: Bnd-6.3.1.202206071316

Found in path(s):
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```

1.2917 kubernetes-client-api 6.9.2

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1.2918 kubernetes-model-gatewayapi 6.9.2

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```
Manifest-Version: 1.0
Build-Jdk-Spec: 1.8
Bundle-Description: Java client for Kubernetes and OpenShift
Bundle-DocURL: https://redhat.com
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.txt
Bundle-ManifestVersion: 2
Bundle-Name: Fabric8 :: Kubernetes Model :: Sigs :: Gateway API
Bundle-SymbolicName: io.fabric8.kubernetes-model-gatewayapi
Bundle-Vendor: Red Hat
Bundle-Version: 6.9.2
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: io.fabric8.kubernetes.api.model.gatewayapi.v1alpha2;us
es:="com.fasterxml.jackson.annotation,com.fasterxml.jackson.databind,
com.fasterxml.jackson.databind.annotation,io.fabric8.kubernetes.api.b
uilder,io.fabric8.kubernetes.api.model,io.fabric8.kubernetes.api.mode
l.gatewayapi.v1beta1,io.fabric8.kubernetes.model.annotation";version=
"6.9.2",io.fabric8.kubernetes.api.model.gatewayapi.v1beta1;uses:="com
.fasterxml.jackson.annotation,com.fasterxml.jackson.databind,com.fast
 erxml.jackson.databind.annotation,io.fabric8.kubernetes.api.builder,i
o.fabric8.kubernetes.api.model,io.fabric8.kubernetes.model.annotation
";version="6.9.2"
Implementation-URL: https://github.com/fabric8io/kubernetes-client/kub
ernetes-model-generator/kubernetes-model-gatewayapi
Import-Package: com.fasterxml.jackson.annotation;version="[2.15,3)",co
```

m.fasterxml.jackson.databind;version="[2.15,3)",com.fasterxml.jackson
.databind.annotation;version="[2.15,3)",io.fabric8.kubernetes.api.bui
lder;version="[6.9,7)",io.fabric8.kubernetes.api.model,io.fabric8.kub
ernetes.api.model.gatewayapi.v1beta1,io.fabric8.kubernetes.model.anno
tation;version="[6.9,7)"
Include-Resource: META-INF/services/io.fabric8.kubernetes.api.model.Ku
bernetesResource=target/classes/META-INF/services/io.fabric8.kubernet
es.api.model.KubernetesResource,manifest.vm=src/main/resources/manife
st.vm,schema/kube-schema.json=src/main/resources/schema/kube-schema.j
son,schema/validation-schema.json=src/main/resources/schema/validatio
n-schema.json,/META-INF/jandex.idx=target/classes/META-INF/jandex.idx
Private-Package: schema
Provide-Capability: osgi.serviceloader;osgi.serviceloader="io.fabric8.
kubernetes.api.model.KubernetesResource"
Require-Capability: osgi.extender;filter:="(osgi.extender=osgi.service
loader.registrar)",osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Scm-Connection: scm:git:git@github.com:fabric8io/kubernetes-client.git
/kubernetes-model-generator/kubernetes-model-gatewayapi
Scm-Revision: ${buildNumber}
Scm-Url: https://github.com/fabric8io/kubernetes-client/kubernetes-mod
el-generator/kubernetes-model-gatewayapi/
Specification-Title: Fabric8 :: Kubernetes Model :: Sigs :: Gateway AP
I
Specification-Vendor: Red Hat
Specification-Version: 6.9
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /kubernetes-model-gatewayapi-6-9-2-1-jar/META-INF/MANIFEST.MF

1.2919 kubernetes-httpclient-okhttp 6.9.2

1.2919.1 Available under license :

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-->

Found in path(s):
* /kubernetes-httpclient-okhttp-6-9-2-1-jar/META-INF/maven/io.fabric8/kubernetes-httpclient-okhttp/pom.xml
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limitations under the License.
#

io.fabric8.kubernetes.client.okhttp.OkHttpClientFactory

Found in path(s):
* /kubernetes-httpclient-okhttp-6-9-2-1-jar/META-INF/services/io.fabric8.kubernetes.client.http.HttpClient$Factory

1.2920 kubernetes-model 6.9.2

1.2920.1 Available under license :

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-->

Found in path(s):
* /kubernetes-model-admissionregistration-6-9-2-1-jar/META-INF/maven/io.fabric8/kubernetes-model-admissionregistration/pom.xml
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```
Manifest-Version: 1.0
Build-Jdk-Spec: 1.8
Bundle-Description: Java client for Kubernetes and OpenShift
Bundle-DocURL: https://redhat.com
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.txt
Bundle-ManifestVersion: 2
Bundle-Name: Fabric8 :: Kubernetes Model :: Admission Registration, Au
thentication and Authorization
Bundle-SymbolicName: io.fabric8.kubernetes-model-admissionregistration
Bundle-Vendor: Red Hat
Bundle-Version: 6.9.2
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: io.fabric8.kubernetes.api.model.admission.v1;uses:="co
m.fasterxml.jackson.annotation,com.fasterxml.jackson.databind,com.fas
terxml.jackson.databind.annotation,io.fabric8.kubernetes.api.builder,
io.fabric8.kubernetes.api.model,io.fabric8.kubernetes.api.model.authe
ntication,io.fabric8.kubernetes.model.annotation";version="6.9.2",io.
fabric8.kubernetes.api.model.admission.v1beta1;uses:="com.fasterxml.j
ackson.annotation,com.fasterxml.jackson.databind,com.fasterxml.jackso
 n.databind.annotation,io.fabric8.kubernetes.api.builder,io.fabric8.ku
bernetes.api.model,io.fabric8.kubernetes.api.model.authentication,io.
fabric8.kubernetes.model.annotation";version="6.9.2",io.fabric8.kuber
netes.api.model.admissionregistration.v1;uses:="com.fasterxml.jackson
.annotation,com.fasterxml.jackson.databind,com.fasterxml.jackson.data
bind.annotation,io.fabric8.kubernetes.api.builder,io.fabric8.kubernet
es.api.model,io.fabric8.kubernetes.model.annotation";version="6.9.2",
io.fabric8.kubernetes.api.model.admissionregistration.v1alpha1;uses:=
"com.fasterxml.jackson.annotation,com.fasterxml.jackson.databind,com.
fasterxml.jackson.databind.annotation,io.fabric8.kubernetes.api.build
er,io.fabric8.kubernetes.api.model,io.fabric8.kubernetes.model.annota
tion";version="6.9.2",io.fabric8.kubernetes.api.model.admissionregist
ration.v1beta1;uses:="com.fasterxml.jackson.annotation,com.fasterxml.
jackson.databind,com.fasterxml.jackson.databind.annotation,io.fabric8
 .kubernetes.api.builder,io.fabric8.kubernetes.api.model,io.fabric8.ku
bernetes.api.model.admissionregistration.v1,io.fabric8.kubernetes.mod
el.annotation";version="6.9.2",io.fabric8.kubernetes.api.model.authen
```

```
tication;uses:="com.fasterxml.jackson.annotation,com.fasterxml.jackso
n.databind,com.fasterxml.jackson.databind.annotation,io.fabric8.kuber
netes.api.builder,io.fabric8.kubernetes.api.model,io.fabric8.kubernet
es.model.annotation";version="6.9.2",io.fabric8.kubernetes.api.model.
authentication.v1alpha1;uses:="com.fasterxml.jackson.annotation,com.f
asterxml.jackson.databind,com.fasterxml.jackson.databind.annotation,i
o.fabric8.kubernetes.api.builder,io.fabric8.kubernetes.api.model,io.f
abric8.kubernetes.api.model.authentication,io.fabric8.kubernetes.mode
l.annotation";version="6.9.2",io.fabric8.kubernetes.api.model.authent
ication.v1beta1;uses:="com.fasterxml.jackson.annotation,com.fasterxml
.jackson.databind,com.fasterxml.jackson.databind.annotation,io.fabric
 8.kubernetes.api.builder,io.fabric8.kubernetes.api.model,io.fabric8.k
ubernetes.api.model.authentication,io.fabric8.kubernetes.model.annota
tion";version="6.9.2",io.fabric8.kubernetes.api.model.authorization.v
1;uses:="com.fasterxml.jackson.annotation,com.fasterxml.jackson.datab
ind,com.fasterxml.jackson.databind.annotation,io.fabric8.kubernetes.a
pi.builder,io.fabric8.kubernetes.api.model,io.fabric8.kubernetes.mode
l.annotation";version="6.9.2",io.fabric8.kubernetes.api.model.authori
zation.v1beta1;uses:="com.fasterxml.jackson.annotation,com.fasterxml.
jackson.databind,com.fasterxml.jackson.databind.annotation,io.fabric8
.kubernetes.api.builder,io.fabric8.kubernetes.api.model,io.fabric8.ku
bernetes.model.annotation";version="6.9.2"
Implementation-URL: https://github.com/fabric8io/kubernetes-client/kub
ernetes-model-generator/kubernetes-model-admissionregistration
Import-Package: com.fasterxml.jackson.annotation;version="[2.15,3)",co
 m.fasterxml.jackson.databind;version="[2.15,3)",com.fasterxml.jackson
.databind.annotation;version="[2.15,3)",io.fabric8.kubernetes.api.bui
lder;version="[6.9,7)",io.fabric8.kubernetes.api.model,io.fabric8.kub
ernetes.api.model.admissionregistration.v1,io.fabric8.kubernetes.api.
model.authentication,io.fabric8.kubernetes.model.annotation;version="
[6.9,7)"
Include-Resource: META-INF/services/io.fabric8.kubernetes.api.model.Ku
bernetesResource=target/classes/META-INF/services/io.fabric8.kubernet
es.api.model.KubernetesResource,manifest.vm=src/main/resources/manife
st.vm,schema/kube-schema.json=src/main/resources/schema/kube-schema.j
son,schema/validation-schema.json=src/main/resources/schema/validatio
n-schema.json,/META-INF/jandex.idx=target/classes/META-INF/jandex.idx
Private-Package: schema
Provide-Capability: osgi.serviceloader;osgi.serviceloader="io.fabric8.
kubernetes.api.model.KubernetesResource"
Require-Capability: osgi.extender;filter:="(osgi.extender=osgi.service
 loader.registrar)",osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Scm-Connection: scm:git:git@github.com:fabric8io/kubernetes-client.git
/kubernetes-model-generator/kubernetes-model-admissionregistration
Scm-Revision: ${buildNumber}
Scm-Url: https://github.com/fabric8io/kubernetes-client/kubernetes-mod
el-generator/kubernetes-model-admissionregistration/
Specification-Title: Fabric8 :: Kubernetes Model :: Admission Registra
```

tion, Authentication and Authorization
Specification-Vendor: Red Hat
Specification-Version: 6.9
Tool: Bnd-6.3.1.202206071316

Found in path(s):
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* /kubernetes-model-admissionregistration-6-9-2-1-jar/manifest.vm

1.2921 kubernetes-model-common 6.9.2

1.2921.1 Available under license :

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Manifest-Version: 1.0
Build-Jdk-Spec: 1.8
Bundle-Description: Java client for Kubernetes and OpenShift
Bundle-DocURL: https://redhat.com
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.txt
Bundle-ManifestVersion: 2
Bundle-Name: Fabric8 :: Kubernetes Model :: Common
Bundle-SymbolicName: io.fabric8.kubernetes-model-common
Bundle-Vendor: Red Hat
Bundle-Version: 6.9.2
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: io.fabric8.kubernetes.model;version="6.9.2",io.fabric8
.kubernetes.model.annotation;version="6.9.2",io.fabric8.kubernetes.mo
del.jackson;uses:="com.fasterxml.jackson.core,com.fasterxml.jackson.d

```
atabind,com.fasterxml.jackson.databind.deser,com.fasterxml.jackson.da
tabind.introspect,com.fasterxml.jackson.databind.jsontype,com.fasterx
ml.jackson.databind.jsontype.impl,com.fasterxml.jackson.databind.modu
le,com.fasterxml.jackson.databind.ser";version="6.9.2",io.fabric8.kub
ernetes.model.util;uses:="io.fabric8.kubernetes.api.builder";version=
 "6.9.2",io.fabric8.kubernetes.api.builder;version="6.9.2"
Implementation-URL: https://github.com/fabric8io/kubernetes-client/kub
ernetes-model-generator/kubernetes-model-common
Import-Package: com.fasterxml.jackson.annotation;version="[2.15,3)",co
m.fasterxml.jackson.core;version="[2.15,3)",com.fasterxml.jackson.dat
abind;version="[2.15,3)",com.fasterxml.jackson.databind.deser;version
="[2.15,3)",com.fasterxml.jackson.databind.exc;version="[2.15,3)",com
.fasterxml.jackson.databind.introspect;version="[2.15,3)",com.fasterx
ml.jackson.databind.jsontype;version="[2.15,3)",com.fasterxml.jackson
.databind.jsontype.impl;version="[2.15,3)",com.fasterxml.jackson.data
bind.module;version="[2.15,3)",com.fasterxml.jackson.databind.node;ve
rsion="[2.15,3)",com.fasterxml.jackson.databind.ser;version="[2.15,3)
",com.fasterxml.jackson.databind.util;version="[2.15,3)",io.fabric8.k
ubernetes.api.builder,io.fabric8.kubernetes.model.annotation,org.slf4
 j;version="[2.0,3)"
Include-Resource: ,/META-INF/jandex.idx=target/classes/META-INF/jandex
.idx
Provide-Capability: osgi.serviceloader;osgi.serviceloader="io.fabric8.
kubernetes.api.model.KubernetesResource"
Require-Capability: osgi.extender;filter:="(osgi.extender=osgi.service
loader.registrar)",osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Scm-Connection: scm:git:git@github.com:fabric8io/kubernetes-client.git
/kubernetes-model-generator/kubernetes-model-common
Scm-Revision: ${buildNumber}
Scm-Url: https://github.com/fabric8io/kubernetes-client/kubernetes-mod
el-generator/kubernetes-model-common/
Specification-Title: Fabric8 :: Kubernetes Model :: Common
Specification-Vendor: Red Hat
Specification-Version: 6.9
Tool: Bnd-6.3.1.202206071316

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* /kubernetes-model-common-6-9-2-1-jar/META-INF/MANIFEST.MF
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Found in path(s):
* /kubernetes-model-common-6-9-2-1-jar/META-INF/maven/io.fabric8/kubernetes-model-common/pom.xml

1.2922 kubernetes-model-resource 6.9.2

1.2922.1 Available under license :

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Manifest-Version: 1.0
Build-Jdk-Spec: 1.8
Bundle-Description: Java client for Kubernetes and OpenShift
Bundle-DocURL: https://redhat.com
Bundle-License: https://www.apache.org/licenses/LICENSE-2.0.txt
Bundle-ManifestVersion: 2
Bundle-Name: Fabric8 :: Kubernetes Model :: Resource
Bundle-SymbolicName: io.fabric8.kubernetes-model-resource
Bundle-Vendor: Red Hat
Bundle-Version: 6.9.2
Created-By: Apache Maven Bundle Plugin 5.1.9
Export-Package: io.fabric8.kubernetes.api.model.resource.v1alpha2;uses
:="com.fasterxml.jackson.annotation,com.fasterxml.jackson.databind,co
m.fasterxml.jackson.databind.annotation,io.fabric8.kubernetes.api.bui
lder,io.fabric8.kubernetes.api.model,io.fabric8.kubernetes.model.anno
tation";version="6.9.2"
Implementation-URL: https://github.com/fabric8io/kubernetes-client/kub
ernetes-model-generator/kubernetes-model-resource
Import-Package: com.fasterxml.jackson.annotation;version="[2.15,3)",co
 m.fasterxml.jackson.databind;version="[2.15,3)",com.fasterxml.jackson
.databind.annotation;version="[2.15,3)",io.fabric8.kubernetes.api.bui
lder;version="[6.9,7)",io.fabric8.kubernetes.api.model,io.fabric8.kub
ernetes.model.annotation;version="[6.9,7)"
Include-Resource: META-INF/services/io.fabric8.kubernetes.api.model.Ku
bernetesResource=target/classes/META-INF/services/io.fabric8.kubernet
es.api.model.KubernetesResource,manifest.vm=src/main/resources/manife
st.vm,schema/kube-schema.json=src/main/resources/schema/kube-schema.j
son,schema/validation-schema.json=src/main/resources/schema/validatio
n-schema.json,/META-INF/jandex.idx=target/classes/META-INF/jandex.idx

Private-Package: schema
Provide-Capability: osgi.serviceloader;osgi.serviceloader="io.fabric8.
kubernetes.api.model.KubernetesResource"
Require-Capability: osgi.extender;filter:="(osgi.extender=osgi.service
loader.registrar)",osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.8))"
Scm-Connection: scm:git:git@github.com:fabric8io/kubernetes-client.git
 /kubernetes-model-generator/kubernetes-model-resource
Scm-Revision: ${buildNumber}
Scm-Url: https://github.com/fabric8io/kubernetes-client/kubernetes-mod
el-generator/kubernetes-model-resource/
Specification-Title: Fabric8 :: Kubernetes Model :: Resource
Specification-Vendor: Red Hat
Specification-Version: 6.9
Tool: Bnd-6.3.1.202206071316

Found in path(s):
* /kubernetes-model-resource-6-9-2-1-jar/META-INF/MANIFEST.MF
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Found in path(s):
* /kubernetes-model-resource-6-9-2-1-jar/manifest.vm
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Found in path(s):
* /kubernetes-model-resource-6-9-2-1-jar/META-INF/maven/io.fabric8/kubernetes-model-resource/pom.xml
```

1.2923 aws-sdk-go-v2-service-sso 1.22.4

1.2923.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
  name: License Scan
  runs-on: ubuntu-latest
  strategy:
   matrix:
    python-version: [3.9]

  steps:
   - name: Checkout target
    uses: actions/checkout@v2
    with:
     path: sdkbase
     ref: ${{ github.base_ref }}
   - name: Checkout this ref
    uses: actions/checkout@v2
    with:
     path: new-ref
     fetch-depth: 0
   - name: Get Diff
    run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
   - name: Get Target Files
    run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
   - name: Checkout scancode
    uses: actions/checkout@v2
    with:
     repository: nexB/scancode-toolkit
```

```
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
```

```
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
ListReceivedLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string
```

```
// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
```

```
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AssociateLicense
Initialize stack step
RegisterServiceMetadata

```
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
```

```
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string
```

```
 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
ListLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
```

Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}

},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},

```
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
```

"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}

},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your

instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux
subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
```

"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,

"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [

```
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
```

```
                "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
                          }
                        ],
                        "assign": "PartitionResult"
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {

                         "ref": "UseFIPS"
                              },
                              true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }

],
                        "rules": [
                          {
                            "conditions": [
                              {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
                                        "ref": "PartitionResult"

                  },
                                      "supportsFIPS"
```

```
                    ]
                }
            ]
        },
        {
            "fn": "booleanEquals",
            "argv": [
                true,
                {
                    "fn": "getAttr",
                    "argv": [

                    {
                        "ref": "PartitionResult"
                    },
                    "supportsDualStack"
                    ]
                }
            ]
        }
    ],
    "rules": [
        {
            "conditions": [],

"rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],

"type": "tree"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
    "type": "error"
```

```
                    }
                ],
                "type": "tree"
            },
            {

        "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true

                            ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "rules": [
                                        {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
```

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS is enabled
but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"

```
                    ]
                }
            ]
        }
    ],
    "rules": [
        {
            "conditions": [],
            "rules": [

{
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"

        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "DualStack is enabled but this partition does not support DualStack",
    "type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
```

```
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
```

{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"

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            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
         },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

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"params": {
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"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"

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    },
    "params": {
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      "UseFIPS": true,
      "UseDualStack": true
    }
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    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
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"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation":

" Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":

```
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
      <code>AmiID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Region</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Status</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n            <li>\n            <p>\n
<code>contains</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>equals</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n            </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

      "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
```

"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},

"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration

resources for your account. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": " The maximum items to return in a request. ",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",

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            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
```

"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"

```
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
                "smithy.api#error": "client"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
            "type": "string",
            "traits": {
                "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
            "type": "string",
            "traits": {
                "smithy.api#enum": [
                    {
                        "name": "InProgress",
                        "value": "InProgress",
                        "documentation": "InProgress status"
                    },
                    {
                        "name": "Completed",
                        "value": "Completed",
                        "documentation": "Completed status"
                    },
                    {
                        "name": "Successful",
                        "value": "Successful",
                        "documentation": "Successful status"
                    },
                    {
                        "name": "Failed",
                        "value": "Failed",
                        "documentation": "Failed status"
                    }
                ]
            }
```

```
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
```

```
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
```

"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web
Services resource. ",

"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

```
        },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
             "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target":
 "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
```

Region. "
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
            }

      },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",

```
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
```

```
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil
 {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
```

```
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
```

setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod
```

```
 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return
 err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
```

```
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
 {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
```

```
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
```

```
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
          "type": "structure",
          "members": {
              "message": {
                  "target": "smithy.api#String"
              }
          },
          "traits": {
              "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
              "smithy.api#error": "client"
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
          "type": "structure",
          "members": {
              "DirectoryId": {
                  "target": "smithy.api#String",
                  "traits": {
                      "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                  }
              }
          },
          "traits": {
              "smithy.api#documentation":
"<p>Details about an Active Directory identity provider.</p>"
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
          "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the
EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider of the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n resource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}

```
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
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"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required":

{}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {

"target": "smithy.api#String",
"traits":
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"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

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  },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",

       "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

```
 ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n      a per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
               "version": "1.0",
               "parameters": {
                  "Region": {
                     "builtIn": "AWS::Region",
                     "required": false,
                     "documentation": "The AWS region used to dispatch the request.",
                     "type": "String"
                  },
                  "UseDualStack": {
                     "builtIn": "AWS::UseDualStack",
                     "required": true,
                     "default": false,
                     "documentation": "When true, use the dual-stack
 endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                     "type": "Boolean"
                  },
                  "UseFIPS": {
                     "builtIn": "AWS::UseFIPS",
                     "required": true,
                     "default": false,
                     "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                     "type": "Boolean"
                  },
                  "Endpoint": {
                     "builtIn": "SDK::Endpoint",
                     "required": false,
                     "documentation": "Override the endpoint used to send this request",
                     "type": "String"
                  }

         },
               "rules": [
                  {
                     "conditions": [
                        {
                           "fn": "isSet",
                           "argv": [
                              {
                                 "ref": "Endpoint"
                              }
                           ]
```

```
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },

                        true
                        ]
                    }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
```

```
        },
        {
          "conditions": [
            {
              "fn": "isSet",
              "argv": [

    {
                  "ref": "Region"
              }
              ]
            }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "aws.partition",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ],
                  "assign": "PartitionResult"
                }
              ],
              "type": "tree",

  "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
```

```
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",

"argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {

"fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {

"conditions": [],
                        "endpoint": {
```

"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",

"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"

]
}

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                    ]
                }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}

        },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"
        }
    ]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
```

"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{

"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},

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                {
                    "conditions":
[],
                    "error": "Invalid Configuration: Missing Region",
                    "type": "error"
                }
            ]
        },
        "smithy.rules#endpointTests": {
            "testCases": [
                {
                    "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                        }
                    },

                "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
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"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
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}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"

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            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack":
true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
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this partition does not support one or both"
        },
        "params": {
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            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
```

```
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }

    },
        {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
        },
        {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
        },
         "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
        },
        {
        "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
        "expect": {
            "endpoint": {
                "url": "https://example.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
        }
```

```
            },
            {

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                 "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                 "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
      "type": "structure",
      "members": {
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
{
      "type": "structure",
      "members": {
        "IdentityProviderSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

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                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type":
 "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
```

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                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {

        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }

    },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The
start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " The summary of the user-based subscription products for a user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n      subnets to provision VPC endpoints.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
```

"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},

"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
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                    "smithy.api#required":
{}
                }
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            "Product": {
                "target": "smithy.api#String",
                "traits": {
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                    "smithy.api#required": {}
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                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
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"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
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"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
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"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
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"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
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"smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
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"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
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"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
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"members": {
"message": {

"target": "smithy.api#String"
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"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
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"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
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"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
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"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
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"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
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"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
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"smithy.api#idempotent": {}
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"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
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"smithy.api#required": {}
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"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
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"UpdateSettings": {
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"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n update any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
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"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
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"AddSubnets": {

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"traits": {
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"smithy.api#required": {}
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"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
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"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}

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            }
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        "traits": {
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settings such as\n      the subnets to provision VPC endpoints.</p>"
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                "target": "smithy.api#String"
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            "smithy.api#error": "client"
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            "namespace": "*"
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            "id": "HttpResponseCodeSemantics",
            "namespace": "*"
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            "id": "PaginatedTrait",
            "namespace": "*"
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                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
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                "target": "com.amazonaws.licensemanager#CheckoutLicense"
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                "target": "com.amazonaws.licensemanager#CreateGrant"
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                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
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                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
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                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
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                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
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                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
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                "target": "com.amazonaws.licensemanager#CreateToken"
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"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

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"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
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"target": "com.amazonaws.licensemanager#GetLicenseUsage"
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"target": "com.amazonaws.licensemanager#GetServiceSettings"
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"

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"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
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"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
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"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,

"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"argv": [
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"ref": "Endpoint"
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"argv": [
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                "type": "endpoint"
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                    "argv": [
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"supportsDualStack"
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}

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                    "type": "endpoint"
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both",
            "type": "error"
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                        "headers": {}
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsDualStack"

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"type": "tree",
"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

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                "type": "error"
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            "headers": {}
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        "type": "endpoint"
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"type": "error"
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"params": {
"Region": "af-south-1",
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  "params": {
    "Region": "ap-east-1",
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  "params": {
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  "expect": {
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"UseFIPS": false,
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"Region": "ap-south-1",
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"params": {
"Region": "ap-southeast-2",
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
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"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
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"params": {
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"params": {
"Region": "eu-central-1",
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"params": {
"Region": "sa-east-1",
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"UseDualStack": false
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{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

}
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
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    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
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        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
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        },

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        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
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            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
          }
         },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
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        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
          }
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                },
                "params": {
                    "Region": "us-gov-west-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
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                "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-fips.us-gov-east-1.api.aws"
                    }
                },

    "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager.us-gov-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                    }
                },
                "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                }
            },
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        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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      },

    {
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      "expect": {
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      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },

  "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {

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            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
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"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},

"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time that automated discovery last ran. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes automated discovery. "
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }

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    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
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"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
```

"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

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                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

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    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
```

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        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

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        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

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            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
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<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
                }
            },

  "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
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            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
 {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}

        }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
```

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

  }
            },
            "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

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            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
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"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
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grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

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    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},

```
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Bytes"
                }
            },
            "KILOBYTES": {
                "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
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"BITS": {
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"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
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"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
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                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
```

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
```

"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

```
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
```

"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

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                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }

        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

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        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

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    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

```
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with
the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

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            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
```

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
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"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

```
{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

```
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                    <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                    <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
```

```
</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n
<li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:
 <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-
web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n
<p>The following filters and logical operators are supported when the resource type\n is
<code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> -
The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license
pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data
guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n
</li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
         "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
        },
```

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

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        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

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            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
```

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                }
            },
            "WEEKLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Weekly"
                }
            },
            "MONTHLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Monthly"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
            "licenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
            "value": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

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{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

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        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

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            }
        },
        "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }
        }
    },
    "traits": {

      "smithy.api#documentation": "<p>Describes a token.</p>"
    }
  },
  "com.amazonaws.licensemanager#TokenList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#TokenData"
    }
  },
  "com.amazonaws.licensemanager#TokenString": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 4096
        },
        "smithy.api#pattern": "^\\S+$"
    }
  },
  "com.amazonaws.licensemanager#TokenType": {
    "type": "enum",
    "members": {
        "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REFRESH_TOKEN"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


1.2924 aws-sdk-go-v2-service-ssooidc 1.26.4

1.2924.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
```

```
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
```

"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",

"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/CreateLicenseServerEndpoint"
         },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "IdentityProviderArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
```

```
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

               "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
 {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"

                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
```

"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},

"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation":
" Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {

"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {

     "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
          }

  },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
```

```
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server",
             "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
```

```
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {

          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
```

```
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
      }
    ],
    "traits": {
      "aws.api#service": {
        "sdkId": "License Manager User Subscriptions",
        "arnNamespace": "license-manager-user-subscriptions",
        "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-user-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id",
          "content-length",
          "x-api-key",

"authorization",
          "x-amz-date",
          "x-amz-security-token",
          "Access-Control-Allow-Headers",
          "Access-Control-Allow-Methods",
          "Access-Control-Allow-Origin"
        ],
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"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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},
"rules": [
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"fn": "isSet",

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                "argv": [
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                    "ref": "Endpoint"
                  }
                ]
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        "rules": [
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                    "argv": [
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                        "ref": "UseFIPS"
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                "type": "error"
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                "conditions": [
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"fn": "booleanEquals",
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                "type": "error"
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                    "ref": "Endpoint"
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                  "properties": {},
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                "type": "endpoint"
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        "type": "tree"
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                "argv": [
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                        "ref": "Region"
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                ]
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                        "fn": "aws.partition",
                        "argv":
[
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                                "ref": "Region"
                            }
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                        "assign": "PartitionResult"
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                "rules": [
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                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref": "UseFIPS"
                                    },
                                    true

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                                "fn": "booleanEquals",
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                        {
                            "fn": "getAttr",
                            "argv": [
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                                    "ref": "PartitionResult"
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                                "supportsFIPS"
                            ]
                        }
                    ]
                },

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                    "argv": [
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                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]

                }
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            "rules": [
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                    "conditions": [],
                    "endpoint": {
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"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"conditions": [],
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"type": "error"
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"conditions": [
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"fn": "booleanEquals",
"argv": [
{

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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
},
"supportsFIPS"
]

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fips.{Region}.{PartitionResult#dnsSuffix}",
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                    "headers": {}
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                "type": "endpoint"
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        "type": "tree"
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        "type": "error"
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                },
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                                                "ref": "PartitionResult"
                                            },
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
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                                    "type": "endpoint"
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                            "type": "tree"
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                            "type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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                        "headers": {}
                    },
                    "type": "endpoint"
                }
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            "type": "tree"
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```

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                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
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    "smithy.rules#endpointTests": {
        "testCases": [
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                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint":
{
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
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                    "UseDualStack": true
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                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
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                    }
                },
                "params": {
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                    "UseFIPS": true,

        "UseDualStack": false
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                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
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                "params": {
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
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"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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}
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"params": {
"Region": "cn-north-1",
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
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},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
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}
},
"params": {
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"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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"params": {
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"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
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"params": {
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"UseDualStack": false
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"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
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"UseFIPS": true,
"UseDualStack": true
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},
{

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
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"params": {
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"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
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"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"expect": {
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"url": "https://example.com"
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"params": {
"Region": "us-east-1",

"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
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"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
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{
"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
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"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},

"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation":
" The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation":
" The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}

```
            },
            "CreationTime": {

        "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
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            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
```

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            },
            {
                "name": "DELETION_FAILED",
                "value": "DELETION_FAILED",
                "documentation": ""
            },
            {
                 "name": "DELETED",
                "value": "DELETED",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "HEALTHY",
                "value": "HEALTHY",
                "documentation": ""
            },
            {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
            },
            {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
    "type": "structure",
    "members": {
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
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"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
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"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },

         "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
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    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
    <ul>\n        <li>\n            <p>Product</p>\n        </li>\n        <li>\n            <p>DirectoryId</p>\n
  </li>\n      </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n

```
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When
 this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
          {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},
"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits":
{
"smithy.api#documentation": " You can use the following filters to streamline results: \n

```
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n

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</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {

                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n        <p>Status</p>\n        </li>\n        <li>\n        <p>Username</p>\n
</li>\n        <li>\n        <p>Domain</p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
```

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to
 retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

      }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags for the specified resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits":
{
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
```

"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":

"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider
operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
```

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",

"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An
object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription

operation.</p>",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },

    "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
 {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes
 tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
 to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {

 "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}

```
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n              <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n              <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n              <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

  "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint
```

for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
```

```
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string
```

```
 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
```

```
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  spanRetryLoop
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
```

```
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
spanRetryLoop
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step

ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
spanRetryLoop
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AssociateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

```
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  spanRetryLoop
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
```

```
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
```

SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
spanRetryLoop
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart

```
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  spanRetryLoop
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
```

```
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  spanRetryLoop
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
```

OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
```

"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
```

"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}

```
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}

```
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User
Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
```

}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"

```
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
```

"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

        ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

          }
          ],
```

```
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
```

```
                    },
                    true
                ]
            }

],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"

},
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [

                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

"rules": [
                                {
```

"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [

```
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true

                        ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
 but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
```

```
                    },
                    true

                ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

{
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"

                }
                    ],
                    "type": "tree"
                },
```

```
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
```

```
}
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
          }

  },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
```

```
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
               },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
```

```
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
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{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",

"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
      <code>AmiID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>DualSubscription</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>InstanceID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>InstanceType</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>ProductCode</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>Region</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>Status</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n            <li>\n              <p>\n
<code>contains</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>equals</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n            </li>\n        </ul>"
                }
            },
            "MaxResults": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "

```
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
        "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
        "target":
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration
resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to
return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {

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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
```

```
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"

      },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
    "type": "structure",
    "members": {
        "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
```

```
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
 subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
```

"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,

"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied due to request throttling. ",
"smithy.api#error": "client"
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

           "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}

```
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


GetLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
spanRetryLoop
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
ResolveAuthScheme
GetIdentity

```
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  spanRetryLoop
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
```

```
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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```
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
```

```
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
```

```
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

ServiceID: ServiceID,
OperationName: "ListReceivedLicenses",
}
}
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
spanRetryLoop
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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"smithy": "2.0",
"metadata": {

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    "suppressions": [
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            "namespace": "*"
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        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
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            "id": "HttpUriConflict",
            "namespace": "*"
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            "namespace": "*"
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"shapes": {
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        "type": "service",
        "version": "2018-08-01",
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                "target": "com.amazonaws.licensemanager#CheckInLicense"
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            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
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            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
```

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"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
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"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
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"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
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"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"

},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
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"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
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"target": "com.amazonaws.licensemanager#GetServiceSettings"
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"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
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"target": "com.amazonaws.licensemanager#ListDistributedGrants"
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},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
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"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
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{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
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"traits": {
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"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",

"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
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"rules": [
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"conditions": [

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            {
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                        "ref": "Endpoint"
                    }
                ]

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                            },
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                        ]
                    }
                ],
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                "type": "error"
            },
            {

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                            },
                            true
                        ]
                    }
                ],
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                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
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                        "ref": "Endpoint"
```

```
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                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
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"UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
```

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                  true
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                      {
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                          },
                          "supportsFIPS"
                        ]

                }
                    ]
                  },
                  {
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },

"supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
```

```
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}

                },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ]
    },
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        "conditions": [
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                    },
                    true
                ]
            }
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        "type": "tree",
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                "conditions": [
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                            true,

    {
                        "fn": "getAttr",
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                            {
                                "ref": "PartitionResult"
```

```
                    },
                    "supportsFIPS"
                ]
            }
        ]
    }
],
"type": "tree",
"rules": [

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            "headers": {}
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        "type": "endpoint"
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]
},
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partition does not support FIPS",
"type": "error"
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]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
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},
true
]
}
],
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"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
```

```
                                    true,
                                    {
                                        "fn": "getAttr",
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                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                        },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
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                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
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                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
```

```
            },
            {
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              "type": "error"
            }
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        "smithy.rules#endpointTests": {
          "testCases": [
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              "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager.af-south-1.amazonaws.com"
                }
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              "params": {
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                "UseDualStack": false
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            },
            {
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              "expect": {
                "endpoint": {
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                }
              },
              "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
               }
            },
            {
              "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.ap-northeast-1.amazonaws.com"
                }
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              "params": {
                "Region": "ap-northeast-1",
                "UseFIPS": false,
                "UseDualStack": false
```

```
            }
        },
        {
            "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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            },
            "params": {
                "Region": "ap-northeast-2",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-3.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-northeast-3",
                "UseFIPS": false,
                "UseDualStack": false
            }

    },
        {
            "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-1.amazonaws.com"
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}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}

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        },
        {
          "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-central-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-central-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-north-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region":
"eu-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
```

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        },
        "params": {
          "Region": "eu-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
        "expect": {

        "endpoint": {
            "url": "https://license-manager.eu-west-2.amazonaws.com"
          }
        },
        "params": {
          "Region": "eu-west-2",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.eu-west-3.amazonaws.com"
          }
        },
        "params": {
          "Region": "eu-west-3",
          "UseFIPS": false,

"UseDualStack": false
        }
      },
      {
        "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.me-south-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "me-south-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
```

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            {
              "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.sa-east-1.amazonaws.com"
                 }
              },
              "params": {
                "Region": "sa-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-2.amazonaws.com"
                }
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"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

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"UseFIPS": true,
"UseDualStack": false
}
},

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            {
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                }
              },
              "params": {
                "Region": "us-west-2",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
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              "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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                  "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                }
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              "params": {
                "Region": "us-west-2",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
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              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.api.aws"
                }
              },
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-east-1",

"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
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"UseDualStack": false
}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
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"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {

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            "endpoint": {
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            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,

"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"

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                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
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"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}

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        }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
        "members": {
            "CREATE_GRANT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateGrant"
                }
            },
            "CHECKOUT_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutLicense"
                }
            },
            "CHECKOUT_BORROW_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutBorrowLicense"
                }
            },
            "CHECK_IN_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckInLicense"
                }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ExtendConsumptionLicense"
                }
            },
            "LIST_PURCHASED_LICENSES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
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```
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
{
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
```

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            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
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"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}

```
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
 use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
```

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                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {

"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "

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            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
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"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,

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                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
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"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
```

"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},

"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}

```
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used.

Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target":
"com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n
\n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
<code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |
<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

```
    "traits": {
            "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
```

"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}

```
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
             },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
```

"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

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                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
```

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}

```
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

         "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
```

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            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}

```
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "

```
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
    "members": {
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

{
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
    }
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Token ID. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}

  }
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
    "type": "enum",
    "members": {
        "JWT_PS384": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "JWT_PS384"
            }
        }
    }
},
"com.amazonaws.licensemanager#Entitlement": {
    "type": "structure",
    "members": {
        "Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":

{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}

```
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue":
"Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
```

```
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
```

```
    "traits": {
        "smithy.api#enumValue": "Seconds"
    }
},
"MICROSECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Microseconds"
    }
},
"MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Milliseconds"
    }
},
"BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes"
     }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},

"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"

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            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

       "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
```

```
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
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"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",

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        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

   },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
```

```
            "smithy.api#required": {}
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrantResponse": {
      "type": "structure",
      "members": {
        "Grant": {
          "target": "com.amazonaws.licensemanager#Grant",
          "traits": {
            "smithy.api#documentation": "<p>Grant details.</p>"
          }
        }
      },
      "traits": {

    "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information

about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
```

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {

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            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
```

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            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }

        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
```

Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},

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            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantStatus": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
```

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    "member": {
        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
```

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            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }

  },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
```

"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",

```
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

},
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                 "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
```

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            }
        },
        "com.amazonaws.licensemanager#Issuer": {
            "type": "structure",
            "members": {
                "Name": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Issuer name.</p>",
                        "smithy.api#required": {}
                    }
                },
                "SignKey": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
            }
        },
        "com.amazonaws.licensemanager#IssuerDetails": {
            "type": "structure",
            "members": {
                "Name": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Issuer name.</p>"
                    }
                },
                "SignKey": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                    }
                },
                "KeyFingerprint": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                    }
                }
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```
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
```

"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}

```
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {

"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},

"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target":

"com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

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        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
      "IN_PROGRESS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "IN_PROGRESS"
        }
      },
      "SUCCEEDED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SUCCEEDED"
        }
      },
      "FAILED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "FAILED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
  },
  "com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
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            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}

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        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
    },
    "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",
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        "traits": {
            "smithy.api#enumValue": "AVAILABLE"
        }
        },
        "PENDING_AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "PENDING_AVAILABLE"
        }
        },
        "DEACTIVATED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DEACTIVATED"
        }
        },
        "SUSPENDED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "SUSPENDED"
        }
        },
        "EXPIRED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "EXPIRED"
        }
        },

      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
        }
        },
        "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DELETED"
        }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
```

"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {

"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
```

"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {

"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configurations
for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license
configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

          "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "Filters": {
```

"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
                }
            },
            "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

    "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </p>\n
    </li>\n        <li>\n            <p>\n                <code>ProductSKU</code>\n            </p>\n        </li>\n
  <li>\n            <p>\n                <code>Fingerprint</code>\n            </p>\n        </li>\n        <li>\n
<p>\n                <code>Status</code>\n            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
```

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

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    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n        <code>resource_id</code> - The ID of the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

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        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>LicenseArns</code>\n            </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

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    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

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            "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
    }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

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        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
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"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
```

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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

```
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

        "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
```

1.2925 aws-sdk-go-v2-service-internal-accept-encoding 1.11.3

1.2925.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
```

```
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
          }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
```

"output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
{
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists the settings defined for Linux subscriptions discovery. The
settings include if\n Organizations integration has been enabled, and
which Regions data will be aggregated from. "
}
},
"Status": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance type of the resource. "
}

},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "

```
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
 more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User
Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery
 updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription being used by the instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
```

```
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
         }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],

"traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
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"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",

"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,

"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"rules": [
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"fn": "isSet",
"argv": [
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"ref": "Endpoint"
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"argv": [
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"ref": "UseFIPS"
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"type": "error"
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"conditions": [],
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"rules": [
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                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
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                    "conditions": [],

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                            "ref": "Endpoint"
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                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
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    "type": "tree",
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                        "argv": [
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                            "ref": "Region"
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"assign": "PartitionResult"
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                            "argv": [
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                                "ref": "UseFIPS"
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                                "ref": "UseDualStack"
                              },
                              true
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                            "conditions": [
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                                                "ref": "PartitionResult"
                                            },
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                                        ]

}
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                                    "fn": "booleanEquals",
                                    "argv": [
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                                        {
                                            "fn": "getAttr",
                                            "argv": [
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                                                    "ref": "PartitionResult"
                                                },

                                     "supportsDualStack"
                                            ]
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                                    ]
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                                    "rules": [
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ]
                                }
                            ]
```

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},
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
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},
{
"conditions": [
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"argv": [
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"ref": "UseFIPS"
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]
}
],
"type": "tree",
"rules": [
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
}
]
}
],
"type": "tree",

"rules": [
{
```

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                    "rules": [
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                        "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",
                          "properties": {},
                          "headers": {}

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                        "type": "endpoint"
                      }
                    ]
                  }
                ]
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                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"
              }
            ]

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            {
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                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
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                }
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                      "argv": [
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                        {
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"rules": [
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"conditions": [],

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"properties": {},
"headers": {}
},
"type": "endpoint"
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{
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"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
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"conditions": [],
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"https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
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{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
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}
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},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false

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    }
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  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
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        "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
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    }
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    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
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        "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
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    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {

    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
      }
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        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": true,
           "UseDualStack": false
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        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
          }
        },
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          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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        "expect": {
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          "Region": "us-gov-east-1",
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"params": {
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"UseDualStack": true
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},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true

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            }
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        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
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            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
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            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
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            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
                }
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                "UseDualStack": false
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            "expect": {
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"Region": "us-isob-east-1",
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"expect": {
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled
and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
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"UseDualStack": true
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"expect": {
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"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
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"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {

"url": "https://example.com"
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},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
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"UseFIPS": true,
"UseDualStack": false,

"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"

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                }
            },
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                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }

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            ],
            "version": "1.0"
        }
    }
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"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                "smithy.api#required": {}
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```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {

      "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
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"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>AmiID</code> with an optional operator to see subscriptions that match, partially\n match, or don't match a certain Amazon Machine Image (AMI) ID. \n The valid names for this filter are: \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n The valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",

"traits": {
"smithy.api#documentation":
" An array that contains instance objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Subscriptions"
}

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The valid Operators for this filter are:</p>\n
         <ul>\n           <li>\n              <p>\n                  <code>contains</code>\n              </p>\n           </li>\n
<li>\n              <p>\n                  <code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
              <code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
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            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>",
                    "smithy.api#length": {

                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },

  "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
```

```
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [

{
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits":
```

{
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The name of the subscription. "

    }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
            }
        },
        "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
                "smithy.api#documentation": " The total amount of running instances using this subscription. "
            }

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux
subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
```

"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated
from. ",

"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home
Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},

"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
```

```
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
```

This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

```
 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return
err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
```

```
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader

setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {
```

```
 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
ListLicenses
 Initialize stack step
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil
 {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
```

DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

```
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
```

```
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
 {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
```

```
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:
```

ServiceID,
OperationName: "ListLicenses",
}
}
CheckInLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Details about an Active Directory identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n        hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
        monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
 EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n resource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
```

"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,

```
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }

    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation":
 "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
```

```
                "smithy.api#required": {}
            }
        }
    }
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
    "type": "structure",
    "members": {
        "Attribute": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
        },
        "Operation": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
        },
        "Value": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used
 to return more specific results from a describe\n      operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n      attributes, or IDs.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
    "type": "union",
    "members": {
        "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Details about an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n      settings such as the subnets to provision VPC endpoints.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#documentation":
" Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

```
    }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits":
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                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
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"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {

"type": "service",

"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"

},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",

"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

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"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
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"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},

true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
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{
"conditions": [
{
"fn": "booleanEquals",

"argv": [
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"ref": "UseDualStack"
},
true
]
}
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"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
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"conditions": [],
"endpoint": {
"url": {
"ref": "Endpoint"
},
"properties": {},
"headers": {}
},
"type": "endpoint"
}
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},
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"fn": "isSet",
"argv": [

{
"ref": "Region"
}
]
}
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"conditions": [
{
"fn": "aws.partition",
"argv": [
{
"ref": "Region"
}
],

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                "assign": "PartitionResult"
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        "type": "tree",

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                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"

                            },
                            true
                        ]
                    }
                ],
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                                "fn": "booleanEquals",
                                "argv": [
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                                    {
                                        "fn": "getAttr",

"argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    }
                                ]
                            },
```

```
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {

                "fn": "getAttr",
                                                "argv": [
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                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
                                        ]
                                    }
                                ],
                                "type": "tree",
                                "rules": [
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            "conditions": [],
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                                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ]
                            },
                            {
                                "conditions": [],
                                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                                 "type": "error"
                            }
                        ]
                    },
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
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```
                    true
                ]
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        ],
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                        "argv": [
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                            {
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                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"

                ]
                            }
                        ]
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                        "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}

        },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"
            }
        ]
    },
```

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{
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      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
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  ],
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  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {

              "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsDualStack"
                ]
            }
          ]
        }
      ],
      "type": "tree",
      "rules": [
        {

          "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ]
    },
```

```
                    {
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                        "error": "DualStack is enabled but this partition does
not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
},
{
    "conditions":
[],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
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        {
            "documentation":
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"For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
},

"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
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"UseDualStack": true
}
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"documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
"expect": {
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}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
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}
},

"params": {
"Region": "us-gov-east-1",
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"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
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"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
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}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":
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"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"

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                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }

    },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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"endpoint": {
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}
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
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"expect": {
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"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"

```
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {
```

```
            "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
```

"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

```
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
```

```
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name
 of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
 one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
```

"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists user associations for an identity provider. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity
provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those
that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " Token for
the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {

"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

```
    },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
                }
            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

```
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n      subnets to provision VPC endpoints.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
```

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n        hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing.
 For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n          monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}

```
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required":
{}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation":
"<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
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request.</p>",
            "smithy.api#error": "client"
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"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
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"UpdateSettings": {
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"smithy.api#required": {}
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"RemoveSubnets": {
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"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
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"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}
}
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"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n the subnets to provision VPC endpoints. "
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"smithy.api#error": "client"
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"target": "com.amazonaws.licensemanager#GetServiceSettings"
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"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
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"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
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"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",

"endpointPrefix": "license-manager"
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"aws.auth#sigv4": {
"name": "license-manager"
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"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
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"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                        "type": "endpoint"
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both",
                "type": "error"
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partition does not support FIPS",
"type": "error"
}
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"argv": [
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"ref": "UseDualStack"
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                        "type": "error"
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                    "headers": {}
                },
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]
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              "type": "error"
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              "expect": {
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                "UseDualStack": false
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                "UseDualStack": false
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            "expect": {
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                "Region": "ap-northeast-3",
                "UseFIPS": false,
                "UseDualStack": false
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"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "ap-southeast-2",
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
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"params": {
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"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
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disabled and DualStack disabled",
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            "UseDualStack": false
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                "UseDualStack": false
              }
            },
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                "UseDualStack": false
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              "expect": {
                "endpoint": {
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},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},

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            {
              "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-west-2.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-west-2",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-west-2",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
              }
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              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.api.aws"
                }
              },
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
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"params": {
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"UseFIPS": false,
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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"params": {
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
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"params": {
"Region": "cn-north-1",
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"UseDualStack": true
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
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"params": {
"Region": "us-gov-east-1",
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"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
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"params": {
"Region": "us-gov-east-1",

"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
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"params": {
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"UseDualStack": false
}
},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
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"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {

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                "url": "https://license-manager.us-gov-east-1.api.aws"
            }
        },
        "params": {
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            "UseFIPS": false,
            "UseDualStack": true
        }
    },
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        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"

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                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
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"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}

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        }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
        "members": {
            "CREATE_GRANT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateGrant"
                }
            },
            "CHECKOUT_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutLicense"
                }
            },
            "CHECKOUT_BORROW_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutBorrowLicense"
                }
            },
            "CHECK_IN_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckInLicense"
                }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ExtendConsumptionLicense"
                }
            },
            "LIST_PURCHASED_LICENSES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
{
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
```

```
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
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"com.amazonaws.licensemanager#BoxBoolean": {
    "type": "boolean"
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"com.amazonaws.licensemanager#BoxInteger": {
    "type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
    "type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

},
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
    }

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    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
 use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {

"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "

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            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
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"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,

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                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
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"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
```

"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},

"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}

```
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used.

Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target":
"com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n
\n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
<code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |
<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

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    "traits": {
            "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
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"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}

```
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
             },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
```

"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}

```
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

         "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
```

```
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}

```
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "

```
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
    "members": {
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

{
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
    }
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Token ID. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}

  }
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
    "type": "enum",
    "members": {
        "JWT_PS384": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "JWT_PS384"
            }
        }
    }
},
"com.amazonaws.licensemanager#Entitlement": {
    "type": "structure",
    "members": {
        "Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":

{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}

```
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue":
"Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
```

```
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
```

```
    "traits": {
        "smithy.api#enumValue": "Seconds"
    }
},
"MICROSECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Microseconds"
    }
},
"MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Milliseconds"
    }
},
"BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes"
     }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},

"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"

```
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

       "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
```

```
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
```

"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",

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        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
```

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    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

   },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
```

"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information

about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
```

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {

"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {

```
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }

        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
```

Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},

```
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantStatus": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
```

```
    "member": {
        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
```

```
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }

  },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
```

"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",

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                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

},
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                 "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
```

```
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
```

"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}

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        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {

"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},

"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target":

"com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

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        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
      "IN_PROGRESS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "IN_PROGRESS"
        }
      },
      "SUCCEEDED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SUCCEEDED"
        }
      },
      "FAILED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "FAILED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
  },
  "com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
```

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            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
    },
    "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",
```

```
        "traits": {
            "smithy.api#enumValue": "AVAILABLE"
        }
        },
        "PENDING_AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "PENDING_AVAILABLE"
        }
        },
        "DEACTIVATED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DEACTIVATED"
        }
        },
        "SUSPENDED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "SUSPENDED"
        }
        },
        "EXPIRED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "EXPIRED"
        }
        },

      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
        }
        },
        "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DELETED"
        }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
```

"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {

"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
```

"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {

"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configurations
for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license
configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

          "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "Filters": {
```

"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

    "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </p>\n
    </li>\n        <li>\n            <p>\n                <code>ProductSKU</code>\n            </p>\n        </li>\n
  <li>\n            <p>\n                <code>Fingerprint</code>\n            </p>\n        </li>\n        <li>\n
<p>\n                <code>Status</code>\n            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
```

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

```
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n        <code>resource_id</code> - The ID of the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

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    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

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            "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
    }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

```
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

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}
    },
    "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

},
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
```

"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}

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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

```
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

        "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
```

1.2926 aws-sdk-go-v2-internal-endpoints 2.6.15

1.2926.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
```

```
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string
```

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

```
 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
```

```
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
```

```
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
```

}
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},

"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
            "type": "structure",
            "members": {},
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
            "type": "structure",
            "members": {
                "Name": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                    }
                },
                "Values": {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                    "traits": {
                        "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                    }
                },
                "Operator": {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                    "traits": {
                        "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
            "type":
 "list",
            "member": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
            },
```

"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {

"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists

the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}

```
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
                }
            },
            "LastUpdatedTime": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
                }
            },
            "SubscriptionName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
```

```
                }
            },
            "OsVersion": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
                }
            },
            "SubscriptionProviderCreateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
                }
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
```

```
            "type": "Boolean"
        },
        "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
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            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
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                {
                    "conditions": [],
```

```
                "rules": [
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                                "argv": [
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                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
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                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
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                        "type": "endpoint"
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                "type": "tree"

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            "conditions": [],
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                            "fn": "isSet",
                            "argv": [
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                                    "ref": "Region"
                                }
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                                        "fn": "booleanEquals",
                                        "argv": [
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                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
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                                                "argv": [
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                                                    {
                                                        "fn": "getAttr",
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"argv": [
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},
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]
}
]
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
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"conditions": [],

"rules": [
{
"conditions": [],
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"properties": {},
"headers": {}
},
"type": "endpoint"
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"type": "tree"
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],
"type": "tree"

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                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
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                "type": "tree"
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                        "argv": [
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                                "ref": "UseFIPS"
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                                        "fn": "getAttr",
                                        "argv": [
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                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true

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                        "rules": [
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                                "conditions": [],
                                "rules": [
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    "properties": {},
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                                            "type": "endpoint"
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                                    "type": "tree"
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                            "type": "tree"
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but this partition does not support FIPS",
                            "type": "error"
                        }
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                    "type": "tree"
                },
                {
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                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                ]
                        }
                    ],
                    "rules": [
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                            "conditions": [
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                                    "fn": "booleanEquals",
                                    "argv": [
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                                        {
                                            "fn": "getAttr",
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},
"supportsDualStack"
]
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]
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
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],
"type": "tree"
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}

},
"params": {
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"params": {
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"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
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"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false

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    }
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  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
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      "UseDualStack": true
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  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
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        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
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      "UseDualStack": false
    }
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    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
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    "params": {
      "Region": "us-isob-east-1",
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      "UseDualStack": true
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  },
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    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
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"UseDualStack": false
}
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
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"UseDualStack": false,
"Endpoint": "https://example.com"
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},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
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"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}

```
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
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"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
```

linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,

"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
```

"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription

provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",

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                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {

"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

```
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
```

```
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
```

```
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
 {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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END OF TERMS AND CONDITIONS

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```
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  limitations under the License.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
```

AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
```

"smithy.api#documentation":
" Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
```

```
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n      resource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required":
{}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",

"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",

"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

        },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
             },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",
                    "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
```

"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [

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                {
                    "ref": "Endpoint"
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },

                    true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
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        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
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                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [

{
                    "ref": "Region"
                }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "type": "tree",

"rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            },
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                                "fn": "booleanEquals",
                                "argv": [
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                    {
                        "ref": "UseDualStack"

                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
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                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",

"argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {

"fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
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]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
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"fn": "booleanEquals",
"argv": [
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"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",

"rules": [
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"

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                    ]
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                    ]
                }
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            "type": "tree",
            "rules": [
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fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}

        },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"
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    ]
},
{
    "conditions": [
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            "fn": "booleanEquals",
            "argv": [
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                    "ref": "UseDualStack"
                },
                true
            ]
        }
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    "rules": [
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            "conditions": [
                {
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                    "argv": [
                        true,
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                                    {

                                  "fn": "getAttr",
                                      "argv": [
                                        {
                                          "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                      ]
                                    }
                                  ]
                                }
                              ],
                              "type": "tree",
                              "rules": [
                                {

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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                  },
                                  "type": "endpoint"
                                }
                              ]
                            },
                            {
                              "conditions": [],
                              "error": "DualStack is enabled but this partition does
 not support DualStack",
                              "type": "error"
                            }
                          ]
                        },
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ]
                    }
```

```
                ]
            },
            {
                "conditions":
[],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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}
},

"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-gov-east-1
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}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":

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"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
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"UseDualStack":
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},

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            {
              "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
               "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}

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            ],
            "version": "1.0"
        }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/ListIdentityProviders"
        },
        "smithy.api#paginated":
{
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
```

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            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
  {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
```

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    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

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            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },

     "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

```
            }
        }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
    "type": "structure",
    "members": {

    "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }

},
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
```

```
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
                }
            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n      subnets to provision VPC endpoints.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
```

"IdentityProviderSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {

"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required":
{}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {

             "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}

```
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n      update any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n              <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
          <li>\n              <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n              <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n      require connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
```

that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n the subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
{
"smithy": "2.0",
"metadata": {
"suppressions": [
{
"id": "HttpMethodSemantics",
"namespace": "*"
},
{
"id": "HttpResponseCodeSemantics",
"namespace": "*"
},
{
"id": "PaginatedTrait",
"namespace": "*"
},
{
"id": "HttpHeaderTrait",
"namespace": "*"
},
{
"id": "HttpUriConflict",
"namespace": "*"
},

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        {
          "id": "Service",
          "namespace": "*"
        }
      ]
    },
    "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
          {
            "target": "com.amazonaws.licensemanager#AcceptGrant"
          },

 {
            "target": "com.amazonaws.licensemanager#CheckInLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CheckoutLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateGrant"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateGrantVersion"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
           },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateToken"
          },
```

```
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
```

},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{

"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},

"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"rules": [
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"conditions": [
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"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
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}
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"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true

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                ]
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        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
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"conditions": [
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                "fn": "booleanEquals",
                "argv": [
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                        "ref": "UseDualStack"
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                    true
                ]
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        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
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        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
             },
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
},
{
  "conditions": [
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        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
  ],
  "type": "tree",
  "rules": [
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                                    }
                                ],
                                "assign": "PartitionResult"
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                                "conditions": [
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                                                "ref":
"UseFIPS"
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                                            true
                                        ]
                                    },
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                                        "argv": [
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                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
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                                                        "fn": "getAttr",
                                                        "argv": [
                                                            {
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"ref": "PartitionResult"
},
"supportsFIPS"
]

}
]
},
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
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]
}
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"type": "tree",
"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

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"type": "endpoint"
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]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},

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{
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        true
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  "rules": [
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          "argv": [
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{
            "fn": "getAttr",
            "argv": [
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                "ref": "PartitionResult"
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            ]
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      }
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    "rules": [

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          "properties": {},
          "headers": {}
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        "type": "endpoint"
      }
    ]
  },
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partition does not support FIPS",
                        "type": "error"
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                        "fn": "booleanEquals",
                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
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                ],
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                        "conditions": [
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                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
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                                    }
                                ]
                            }
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                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                "headers": {}

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                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "DualStack is enabled but this partition does not support DualStack",
        "type": "error"
    }
]
},
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    "conditions": [],
    "endpoint": {
        "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
}
]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
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"smithy.rules#endpointTests": {
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            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
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                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
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"UseDualStack": false
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"documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.ap-east-1.amazonaws.com"
}
},
"params": {
"Region": "ap-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-1.amazonaws.com"
}
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"params": {
"Region": "ap-northeast-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-2.amazonaws.com"
}
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"params": {
"Region": "ap-northeast-2",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}

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            },
            "params": {
                "Region": "ap-northeast-3",
                "UseFIPS": false,
                "UseDualStack": false
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            "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-south-1.amazonaws.com"
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            },
            "params": {
                "Region": "ap-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
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            "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-1.amazonaws.com"

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            },
            "params": {
                "Region": "ap-southeast-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
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        {
            "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-2.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-southeast-2",
                "UseFIPS": false,
                "UseDualStack": false
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{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
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"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
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"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}

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            },
            "params": {
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              "UseFIPS": false,
              "UseDualStack": false
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            "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
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                "url": "https://license-manager.eu-south-1.amazonaws.com"
              }
            },
            "params": {
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"eu-south-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
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            "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
            "expect": {
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                "url": "https://license-manager.eu-west-1.amazonaws.com"
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            },
            "params": {
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              "UseDualStack": false
            }
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            "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
            "expect": {

            "endpoint": {
                "url": "https://license-manager.eu-west-2.amazonaws.com"
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            },
            "params": {
              "Region": "eu-west-2",
              "UseFIPS": false,
              "UseDualStack": false
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          },
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            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
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          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.sa-east-1.amazonaws.com"
             }
          },
          "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.amazonaws.com"
            }
          },
          "params": {
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"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region

us-west-1 with FIPS disabled and DualStack disabled",

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                  "UseDualStack": false
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                "params": {
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                  "UseDualStack": false
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                  "UseDualStack": false
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"expect": {

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"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
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"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
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"UseDualStack": false
}
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"expect": {
"endpoint": {
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
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}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false

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            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled
but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
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"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{

"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
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"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
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"errors": [
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"

```
            }
        },
        "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckInLicense"
            }
        },
        "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
```

```
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
```

"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
```

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            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
```

"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}

```
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
             "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409

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        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
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                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
```

"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {

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                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
            "smithy.api#documentation": "<p>Grant name.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
```

```
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",

"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for

<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
```

"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":

{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

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        "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>"
        }
    },
    "TokenType": {
        "target": "com.amazonaws.licensemanager#TokenType",
        "traits": {
            "smithy.api#documentation": "<p>Token type.</p>"
        }
    },
    "Token": {
        "target": "com.amazonaws.licensemanager#TokenString",
        "traits": {
            "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
        }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DateTime": {
  "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
  "type": "structure",
  "members": {
    "Begin": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
            "smithy.api#documentation": "<p>Start of the time range.</p>",
            "smithy.api#required": {}
        }
    },
    "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
            "smithy.api#documentation": "<p>End of the time range.</p>"
        }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrant": {
  "type": "operation",
  "input": {
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"target": "com.amazonaws.licensemanager#DeleteGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}

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            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

      "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {

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        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },

    {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
      "type": "structure",
      "members": {
        "TokenId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>",
            "smithy.api#required": {}
          }
        }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

}
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
```

"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",

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        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},

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        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

            "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
```

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            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
```

"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {

"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {

"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
```

"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "

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    }
},
"LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
```

"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}

```
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

  "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}

```
            },
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#GetServiceSettings": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                 },
                {
                    "target": "com.amazonaws.licensemanager#ServerInternalException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
            }
        },
        "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
            "type": "structure",
            "members": {},
            "traits": {
                "smithy.api#input": {}
            }
        },
        "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
            "type": "structure",
            "members": {
                "S3BucketArn": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"
```

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in

ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

```
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": "<p>Condition of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

            "smithy.api#documentation": "<p>License name.</p>"
                }
```

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "

```
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
```

"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
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```
                "traits": {
                    "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

        "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
```

```
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
```

```
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

"smithy.api#documentation": "<p>Failure time.</p>"
            }
```

```
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
                }
            },
            "MetadataList": {

                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}

```
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
```

```
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n

```
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
```

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<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

         "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},

```
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

```
            }
            },
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                 },
                {
                    "target": "com.amazonaws.licensemanager#ServerInternalException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
                "ResourceArn": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                        "smithy.api#required": {}
                    }
                },
                "MaxResults": {
                    "target": "com.amazonaws.licensemanager#BoxInteger",
```

"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",

```
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
              "smithy.api#documentation": "<p>Received grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </p>\n
    </li>\n        <li>\n            <p>\n                <code>ProductSKU</code>\n
            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
                 "traits": {
                    "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

             "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n        <li>\n        <p>\n        <code>ProductSKU</code>\n        </p>\n
```

```
</li>\n <li>\n <p>\n <code>Status</code>\n </p>\n </li>\n
<li>\n <p>\n <code>Fingerprint</code>\n </p>\n </li>\n <li>\n
<p>\n <code>IssuerName</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Beneficiary</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
              "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
```

```
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
```

"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {

"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
        }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
        "traits": {
            "smithy.api#range": {
                "min": 1,
                "max": 100
            }
        }
    },
```

"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The key name. "
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The value. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes key/value pairs. "
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }

},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":

" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform

Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n \n \n \n \n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n
\n \n <code>License Included</code> - The type of license included.\n Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:
<code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-
web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
The following filters and logical operators are supported when the resource type\n is
<code>RDS</code>: \n \n \n \n <code>Engine Edition</code> -
The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>. \n \n \n \n <code>License Pack</code> - The license
pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data
guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},

```
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

```
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
```

```
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
  {
        "type": "enum",
        "members": {
```

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {

"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {

"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},

"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {

"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {

```
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
            "bucket": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
                }
            },
            "keyPrefix": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
```

"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license
configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",

"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",

"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}

```
            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
```

"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "

```
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
```

{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

1.2927 aws-sdk-go-v2-service-internal-presigned-url 1.11.17

1.2927.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
```

```
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
ListReceivedLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
```

```
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
```

```
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string
```

```
 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
```

```
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string
```

```
 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
 {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation

```
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
```

```
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack,
options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
ListLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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Copyright 2014-2015 Stripe, Inc.
{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
```

"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}

```
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
```

"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",

"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {

"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the

registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{

```
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
        "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
```

"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [

```
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
                    },
                    {
                      "conditions": [],
                      "endpoint": {
```

```
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"

  }
  ],
  "type": "tree"
},
{
  "conditions": [],
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {

  "fn": "aws.partition",
              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
```

```
                "argv": [
                  {

            "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"

        },
                            "supportsFIPS"
                          ]
                        }
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [

                           {
                              "ref": "PartitionResult"
```

```
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],

        "rules": [
                                            {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],

                        "type": "tree"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {

            "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
```

```
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

        "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                    ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
```

but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-

subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}

```
            ],
            "type": "tree"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
```

{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}

```
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }

       },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
```

{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack

disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"

     },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
      },
```

"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n

```
<code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

      "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {

"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

           "NextToken": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",

```
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
        "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
            },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
```

"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}

```
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
```

"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {

"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",

"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {

"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
```

"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string
```

```
 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil
 {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
GetLicense
 Initialize stack step
  RegisterServiceMetadata
```

```
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
```

```
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
```

```
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
```

```
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
```

```
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
 {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n        hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
        monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
 EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

"traits": {
"smithy.api#documentation": " The identity provider of the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n resource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n      operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n      attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required":
{}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},

"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
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"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "

```
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }

        }
            },
            "traits": {
                "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
            "type": "structure",
            "members": {
                "Username": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                        "smithy.api#required": {}
                    }
                },
                "InstanceId": {
                    "target": "smithy.api#String",
                    "traits":
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                        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                        "smithy.api#required": {}
                    }
                },
                "IdentityProvider": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                    "traits": {
                        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                        "smithy.api#required": {}
                    }
                },
                "Status": {
                    "target": "smithy.api#String",
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"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",

     "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

},
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
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"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,

"documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},

true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",

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                "type": "error"
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                "conditions": [
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                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [

{
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
```

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                "fn": "aws.partition",
                "argv": [
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                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "type": "tree",

      "rules": [
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                "conditions": [
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                    "fn": "booleanEquals",
                    "argv": [
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                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"

                     },
                      true
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
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                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",

  "argv": [
                                  {
                                    "ref": "PartitionResult"
```

```
                    },
                    "supportsFIPS"
                ]
            }
        ]
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        "fn": "booleanEquals",
        "argv": [
            true,
            {

"fn": "getAttr",
                "argv": [
                    {
                        "ref": "PartitionResult"
                    },
                    "supportsDualStack"
                ]
            }
        ]
    }
],
"type": "tree",
"rules": [
    {

"conditions": [],
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
]
},
{
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
     "type": "error"
}
]
},
{
    "conditions": [
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                    {
                      "fn": "booleanEquals",
                      "argv": [
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                          "ref": "UseFIPS"
                        },
                        true
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        "rules": [
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                          "argv": [
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                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
                                "supportsFIPS"

                          ]
                            }
                          ]
                        }
                      ],
                      "type": "tree",
                      "rules": [
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                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}

            },
                          "type": "endpoint"
                        }
                      ]
                    },
                    {
```

"conditions": [],
"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{

"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{

"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},

"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does
not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},
{
"conditions":
[],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",

"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}

},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true

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            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
            },
             "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
```

```
                "params": {
                    "Region": "us-east-1",
                     "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                     "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
```

```
{
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type":
 "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
```

```
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
```

```
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name
 of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
 one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
          }
        },

     "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target":
 "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {

"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for a user. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for a user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " The summary of the user-based subscription products for a user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {

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        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",

    "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation":
 "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n      your VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688 communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,

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            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
         "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
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            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
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                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
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            "output": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
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            "errors": [
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                    "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

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                    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
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                    "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
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                    "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
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                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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                    "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
                }
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            "traits": {
                "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
                 "smithy.api#http": {
                    "code": 200,
                    "method": "POST",
                    "uri": "/user/StopProductSubscription"
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"target": "smithy.api#String",
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"smithy.api#documentation": " The domain name of the user. "
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"smithy.api#required": {}
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"type": "list",
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"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
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"smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
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"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
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"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
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"members": {
"message": {

"target": "smithy.api#String"
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"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
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"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
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"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
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"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
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"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
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"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
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"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
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"smithy.api#idempotent": {}
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"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
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"traits": {
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"smithy.api#required": {}
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"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n update any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
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"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
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                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n      require connectivity to activation servers.</p>",
                    "smithy.api#required": {}
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            "RemoveSubnets": {
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                "traits": {
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                    "smithy.api#required": {}
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            },
            "SecurityGroupId": {
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                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
 that allows inbound TCP port 1688 communication between resources in\n      your VPC and the VPC endpoints for
activation servers.</p>"
                }
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        "traits": {
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settings such as\n      the subnets to provision VPC endpoints.</p>"
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        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
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"target": "com.amazonaws.licensemanager#ListLicenses"
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"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
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      "target": "com.amazonaws.licensemanager#UntagResource"
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      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
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      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
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      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
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      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
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"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
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"aws.auth#sigv4": {
"name": "license-manager"
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"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"smithy.rules#endpointRuleSet": {
"version": "1.0",
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"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

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                    "type": "error"
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                        }
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                    "type": "error"
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"UseFIPS"

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                                "argv": [
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                                        "ref": "PartitionResult"
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"supportsDualStack"

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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}

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        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
        "type": "error"
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]
},
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    "conditions": [
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            "fn": "booleanEquals",

  "argv": [
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"type": "tree",
"rules": [
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        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
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                    "ref": "PartitionResult"
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                ]
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            ]
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              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
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partition does not support FIPS",
        "type": "error"
      }
    ]
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  {
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        "argv": [
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            "ref": "UseDualStack"
          },
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                            "argv": [
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                                "ref": "PartitionResult"
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"supportsDualStack"
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                        ]
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

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                        "type": "endpoint"
                      }
                    ]
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                  {
                    "conditions": [],
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                    "type": "error"
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                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
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                    },
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    "type": "error"
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"smithy.rules#endpointTests": {
    "testCases": [
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            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
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            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
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            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
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            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
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            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
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            }
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        "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
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        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
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    {
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        "params": {
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            "UseFIPS": false,
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            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
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          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
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          "expect": {
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"UseFIPS": false,
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"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
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"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
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            "endpoint": {
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          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
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        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
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          "params": {
            "Region": "eu-west-3",
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"UseDualStack": false
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          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
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"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
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"params": {
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
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"params": {

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"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
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"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
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"url": "https://license-manager-fips.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
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},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
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"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
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            "UseFIPS": true,
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        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
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                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
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        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
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        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
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"params": {
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"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
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"UseFIPS": true,
"UseDualStack": false
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}
},

"params": {
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"UseDualStack": true

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            }
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            "expect": {
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                }
            },
            "params": {
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                "UseFIPS": false,
                "UseDualStack": true
            }
        },
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            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
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        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
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"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
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"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

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                        "UseDualStack": false
                    }
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                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
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                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                },
                {
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
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"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
```

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            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"

}
    ],
    "traits": {
        "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant
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ARN. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": " Grant status. "
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Grant version. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": " Access to resource denied. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
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"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
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"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

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},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
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    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
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    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

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            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

```
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
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"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

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        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

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    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

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            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
                }
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            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
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    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

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            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
```

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

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            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

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            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

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        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
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```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
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        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
```

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }

```
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"

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    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

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            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                 }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
```

"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

```
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
  </li>\n  <li>\n  <p>\n  <code>application_name</code> - The name of the application. \n  Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
  </li>\n  <li>\n  <p>\n  <code>license_included</code> - The type of license included. \n
  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n  Possible values are <code>sql-server-enterprise</code> | \n  <code>sql-server-standard</code> | \n  <code>sql-server-web</code> |  \n  <code>windows-server-datacenter</code>.</p>\n  </li>\n  <li>\n
  <p>\n  <code>platform</code> - The platform of the resource.\n  Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n  </li>\n  <li>\n  <p>\n
  <code>resource_id</code> - The ID of the resource. \n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  <li>\n  <p>\n
  <code>tag:<key></code> - The key/value combination of a tag assigned \n  to the resource. Logical operators are <code>EQUALS</code> (single account) or\n  <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n  </li>\n  </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

```
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
      "type": "structure",
      "members": {
        "ResourceInventoryList": {
          "target": "com.amazonaws.licensemanager#ResourceInventoryList",
          "traits": {
            "smithy.api#documentation": "<p>Information
about the resources.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>LicenseArns</code>\n            </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}

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        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

```
            },
            "LastRunFailureReason":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
                }
            },
            "LastReportGenerationTime": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
                }
            },
            "ReportCreatorAccount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",

        "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "S3Location": {
                "target": "com.amazonaws.licensemanager#S3Location",
                "traits": {
                    "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Time the report was created.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
                }
```

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}

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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

1.2928 aws-sdk-go-v2-internal-configsources 1.3.15

1.2928.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
```

```
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string
```

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

```
 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
```

```
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
```

```
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
```

}
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},

"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
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    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
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"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
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"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {

"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists

the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}

},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "

}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
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"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
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"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
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],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
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]
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"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
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"conditions": [],

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                                "argv": [
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                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
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                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
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                "type": "tree"

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                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
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                    {
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                                "argv": [
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                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
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                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                    "ref": "UseFIPS"
                                            },
                                            true
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
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                                                "argv": [
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"argv": [
{
"ref": "PartitionResult"

},
"supportsFIPS"
]
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]
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{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"type": "tree"

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                        "conditions": [],
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one or both",
                        "type": "error"
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                        "fn": "booleanEquals",
                        "argv": [
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                                "ref": "UseFIPS"
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                                        "fn": "getAttr",
                                        "argv": [
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                                                "ref": "PartitionResult"
                                            },
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                                        ]
                                    },
                                    true

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                                "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

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                                                "headers": {}
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                                            "type": "endpoint"
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                                    "type": "tree"
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                            "type": "tree"
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but this partition does not support FIPS",
                            "type": "error"
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                            "argv": [
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                                },
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"argv": [
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},
"supportsDualStack"
]
}
]
}
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"conditions": [],
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"headers": {}
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"type": "error"
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],
"type": "tree"
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"conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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"headers": {}
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"type": "endpoint"
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"type": "tree"
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"type": "tree"
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"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
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"params": {
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},

{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
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}

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"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false

```
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
```

"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}

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                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
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"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
```

linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,

"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
```

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                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
            },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription

provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",

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                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {

"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

```
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
```

```
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
```

```
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
 {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
```

AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
```

"smithy.api#documentation":
" Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
```

```
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n      resource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",

"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",

"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},

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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
         },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
            "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
```

"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [

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                {
                    "ref": "Endpoint"
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },

                    true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
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                "properties": {},
                "headers": {}
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                },
                "type": "endpoint"
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        ]
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        "conditions": [
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                "fn": "isSet",
                "argv": [

{
                    "ref": "Region"
                }
                ]
            }
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        "type": "tree",
        "rules": [
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                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv": [
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                                "ref": "Region"
                            }
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                        "assign": "PartitionResult"
                    }
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                "type": "tree",

"rules": [
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                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
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                    {
                        "ref": "UseDualStack"

                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
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                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",

"argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {

"fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",

"rules": [
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"

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                ]
                    }
                ]
            }
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        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
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fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}

},
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
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                    "ref": "UseDualStack"
                },
                true
            ]
        }
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    "rules": [
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            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
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                                    {

                                  "fn": "getAttr",
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                                        {
                                          "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                      ]
                                    }
                                  ]
                                }
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                              "type": "tree",
                              "rules": [
                                {

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                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                  },
                                  "type": "endpoint"
                                }
                              ]
                            },
                            {
                              "conditions": [],
                              "error": "DualStack is enabled but this partition does
 not support DualStack",
                              "type": "error"
                            }
                          ]
                        },
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ]
                    }
```

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                ]
            },
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                "conditions":
[],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":

{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},

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            {
              "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
               "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}

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            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/ListIdentityProviders"
          },
          "smithy.api#paginated":
{
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
```

```
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
  {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
```

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    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },

     "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

```
            }
        }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
    "type": "structure",
    "members": {

    "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }

},
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
```

```
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
                }
            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n      subnets to provision VPC endpoints.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
```

"IdentityProviderSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {

"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required":
{}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {

             "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}

```
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n      update any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n              <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
          <li>\n              <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n              <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n      require connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
```

that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n the subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
{
"smithy": "2.0",
"metadata": {
"suppressions": [
{
"id": "HttpMethodSemantics",
"namespace": "*"
},
{
"id": "HttpResponseCodeSemantics",
"namespace": "*"
},
{
"id": "PaginatedTrait",
"namespace": "*"
},
{
"id": "HttpHeaderTrait",
"namespace": "*"
},
{
"id": "HttpUriConflict",
"namespace": "*"
},

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        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
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"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
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"aws.auth#sigv4": {
"name": "license-manager"
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"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"required": true,
"default": false,
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"type": "Boolean"
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"required": true,
"default": false,
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"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"ref": "Endpoint"
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"ref": "UseFIPS"
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"type": "error"
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    "type": "error"
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        "UseFIPS": false,
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        "UseFIPS": false,
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disabled and DualStack disabled",
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            "UseDualStack": false
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},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false

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            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled
but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
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"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{

"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"

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            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
          "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateToken"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max":
7
          }
        }
      },
      "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
```

```
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
```

"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
```

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
```

"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}

```
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
             "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409

```
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
```

"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {

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                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

   "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
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"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
},
"traits":
{
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",

"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for

<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
```

"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":

{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

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        "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>"
        }
    },
    "TokenType": {
        "target": "com.amazonaws.licensemanager#TokenType",
        "traits": {
            "smithy.api#documentation": "<p>Token type.</p>"
        }
    },
    "Token": {
        "target": "com.amazonaws.licensemanager#TokenString",
        "traits": {
            "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
        }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DateTime": {
  "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
  "type": "structure",
  "members": {
    "Begin": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
            "smithy.api#documentation": "<p>Start of the time range.</p>",
            "smithy.api#required": {}
        }
    },
    "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
            "smithy.api#documentation": "<p>End of the time range.</p>"
        }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrant": {
  "type": "operation",
  "input": {
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"target": "com.amazonaws.licensemanager#DeleteGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}

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            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

      "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {

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        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

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    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },

    {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
      "type": "structure",
      "members": {
        "TokenId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>",
            "smithy.api#required": {}
          }
        }
```

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
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            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},

"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",

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        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},

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        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

            "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
```

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            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
```

"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {

"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {

"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
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"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "

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    }
},
"LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
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"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}

```
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

  "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"
```

```
 }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }

        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in

ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

```
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": "<p>Condition of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

            "smithy.api#documentation": "<p>License name.</p>"
                }
```

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "

```
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
```

"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
```

"traits": {
"smithy.api#documentation":
" The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}

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            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
```

```
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

"smithy.api#documentation": "<p>Failure time.</p>"
            }
```

```
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
                }
            },
            "MetadataList": {

                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}

```
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
```

```
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n

```
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
```

```
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

         "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},

```
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

```
            }
            },
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                 },
                {
                    "target": "com.amazonaws.licensemanager#ServerInternalException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
                "ResourceArn": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                        "smithy.api#required": {}
                    }
                },
                "MaxResults": {
                    "target": "com.amazonaws.licensemanager#BoxInteger",
```

"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",

"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"

```
            },
            "output": {
                "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
                 "traits": {
                    "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

          "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n    <li>\n    <p>\n    <code>ProductSKU</code>\n    </p>\n
```

```
</li>\n <li>\n <p>\n <code>Status</code>\n </p>\n </li>\n
<li>\n <p>\n <code>Fingerprint</code>\n </p>\n </li>\n <li>\n
<p>\n <code>IssuerName</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Beneficiary</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
              "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
```

```
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
```

"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {

"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
        }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
        "traits": {
            "smithy.api#range": {
                "min": 1,
                "max": 100
            }
        }
    },
```

"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The key name. "
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The value. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes key/value pairs. "
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }

```
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n        Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n        <ul>\n            <li>\n                <p>As a license administrator, you can optionally specify an\n                <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n  </li>\n            <li>\n                <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                account in your organization.</p>\n            </li>\n            <li>\n                <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n                <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n                are activating the grant.</p>\n            </li>\n        </ul>\n        <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n            <dd>\n                <p>Use this value to activate a grant without replacing any member accounts\n                active grants for the same product.</p>\n            </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n            <dd>\n                <p>Use this value to activate a grant and disable other active grants in any\n                member accounts
 for the same product. This action will also replace their\n                previously activated grants with this activated grant.</p>\n            </dd>\n        </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n        override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation":
```

" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform

Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n \n \n \n \n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n
\n \n <code>License Included</code> - The type of license included.\n Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:
<code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-
web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
The following filters and logical operators are supported when the resource type\n is
<code>RDS</code>: \n \n \n \n <code>Engine Edition</code> -
The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>. \n \n \n \n <code>License Pack</code> - The license
pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data
guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},

```
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

```
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
```

"traits": {
"smithy.api#httpHeader": "Location"
}
},
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " This is not the correct Region for the resource. Try again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#RejectGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "

```
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
```

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {

"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {

"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},

"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {

"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {

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        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
            "bucket": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
                }
            },
            "keyPrefix": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
```

"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license
configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",

"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",

"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}

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            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
```

"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "

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        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

1.2929 aws-sdk-go-v2-config 1.27.27

1.2929.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
```

```
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
ListReceivedLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
```

```
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
```

```
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string
```

```
 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
```

```
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string
```

```
 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
 {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation

```
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
```

```
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack,
options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
ListLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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Copyright 2014-2015 Stripe, Inc.
{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
```

"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}

```
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
```

"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",

"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {

"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the

registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{

```
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
        "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
```

"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [

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                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
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                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

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                  "type": "error"
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                            },
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                          ]

}
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                      "type": "error"
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                      "conditions": [],
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```

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        "type": "tree"

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                            "argv": [
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                                }
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                            "assign": "PartitionResult"
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                    "rules": [
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                                {
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```

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                "argv": [
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            "ref": "UseFIPS"
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                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

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                      "argv": [
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                          "argv": [
                            {
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                            "supportsFIPS"
                          ]
                        }
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
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                        {
                          "fn": "getAttr",
                          "argv": [

                          {
                              "ref": "PartitionResult"
```

```
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],

        "rules": [
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                                                "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
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                                "conditions": [],
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one or both",
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                    },
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            "conditions": [
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                                "argv": [
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                                    },
                                    true
```

```
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                        {

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                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                    ]
                        }
                    ],
                    "rules": [
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                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
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fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
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                    "type": "tree"
                },
                {
                    "conditions": [],
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```

but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

]
}
],
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{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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}
]
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"rules": [

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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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"headers": {}
},
"type": "endpoint"
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],
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},
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"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
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"conditions": [],
"endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}

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            ],
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},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
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"UseDualStack": false
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
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}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}

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      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
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      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
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        }

     },
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        "UseDualStack": false
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"params": {
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"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
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}
},
"params": {
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"UseDualStack": false
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"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

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"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-iso-east-1",
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack

disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"

     },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
      },
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"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n

```
<code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

      "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {

```
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
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                }
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            "NextToken": {
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                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

           "NextToken": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",

```
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
        "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
            },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
```

"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}

```
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
```

"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {

"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",

"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {

"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
```

"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string
```

```
 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil
 {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
GetLicense
 Initialize stack step
  RegisterServiceMetadata
```

```
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
```

```
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
```

```
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
```

```
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
```

```
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
{
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n        hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
        monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
 EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

"traits": {
"smithy.api#documentation": " The identity provider of the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n resource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n      operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n      attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required":
{}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},

"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "

```
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }

        }
            },
            "traits": {
                "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
            "type": "structure",
            "members": {
                "Username": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                        "smithy.api#required": {}
                    }
                },
                "InstanceId": {
                    "target": "smithy.api#String",
                    "traits":
 {
                        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                        "smithy.api#required": {}
                    }
                },
                "IdentityProvider": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                    "traits": {
                        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                        "smithy.api#required": {}
                    }
                },
                "Status": {
                    "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",

     "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

},
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
```

"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,

"documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},

true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",

```
                "type": "error"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [

{
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
```

```
                "fn": "aws.partition",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "type": "tree",

      "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"

                      },
                      true
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",

  "argv": [
                                  {
                                    "ref": "PartitionResult"
```

```
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {

"fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {

"conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                 "type": "error"
            }
        ]
    },
    {
        "conditions": [
```

```
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }
                  ],
                  "type": "tree",

        "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
                                "supportsFIPS"

                          ]
                            }
                          ]
                        }
                      ],
                      "type": "tree",
                      "rules": [
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}

            },
                          "type": "endpoint"
                        }
                      ]
                    },
                    {
```

"conditions": [],
"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{

"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},

"headers": {}
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"type": "endpoint"
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]
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does
not support DualStack",
"type": "error"
}
]
},
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
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},
{
"conditions":
[],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",

"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}

},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true

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            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
            },
             "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
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                "params": {
                    "Region": "us-east-1",
                     "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                     "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
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{
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type":
 "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
```

```
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
```

```
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name
of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

 "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
          }
        },

     "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target":
 "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {

"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for a user. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for a user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " The summary of the user-based subscription products for a user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",

    "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation":
 "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n      your VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688 communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,

```
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
         "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
```

```
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

    },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
                 "smithy.api#http": {
                    "code": 200,
                    "method": "POST",
                    "uri": "/user/StopProductSubscription"
                }
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
            "type": "structure",
            "members": {
                "Username": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required":
{}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},

"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n update any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}

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            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n      require connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
 that allows inbound TCP port 1688 communication between resources in\n      your VPC and the VPC endpoints for
activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n      the subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
```

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  }
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
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"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},

{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

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      "target": "com.amazonaws.licensemanager#ListLicenseVersions"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListResourceInventory"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTokens"
    },
    {
      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#RejectGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
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"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

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            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

            }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {

"conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref":
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"UseFIPS"

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                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]

                }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
```

"supportsDualStack"

```
                                ]
```

```
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}

        },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
        "type": "error"
    }
  ]
},
{
  "conditions": [
    {
        "fn": "booleanEquals",

  "argv": [
            {
                "ref": "UseFIPS"
            },
            true
        ]
    }
  ],
  "type": "tree",
  "rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
```

```
{
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ],
        "type": "tree",
        "rules": [

{
            "conditions": [],
            "endpoint": {
              "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
      {
        "conditions": [],
        "error": "FIPS is enabled but this
partition does not support FIPS",
        "type": "error"
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "type": "tree",
```

```
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

"supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

                },
                        "type": "endpoint"
                      }
                    ]
                  },
                  {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                  }
                ]
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                   "properties": {},
                  "headers": {}
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                    },
                    "type": "endpoint"
                }
            ]
        }
    ]
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    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
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"smithy.rules#endpointTests": {
    "testCases": [
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            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
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{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
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            "params": {
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                "UseFIPS": false,
                "UseDualStack": false
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            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager.ap-east-1.amazonaws.com"
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            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
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            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
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            }
        },
        "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
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        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
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        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
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        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
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    {
        "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-south-1.amazonaws.com"
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        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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}
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
          },
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"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},

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        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
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"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

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"url": "https://license-manager-fips.us-west-2.amazonaws.com"
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"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",

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            "UseFIPS": true,
            "UseDualStack": true
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        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
             }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
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        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },

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        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
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"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true

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            }
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            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

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                    },

            "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                },
                {
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant

ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

```
},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

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            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

```
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

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            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}

```
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
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    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

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            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

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            }
          }
        },
        "com.amazonaws.licensemanager#Entitlement": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
              }
            },
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#Long",
              "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
              }
            },
            "Overage": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement unit.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowCheckIn": {
              "target":
"com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
              }
            }
          },
          "traits": {
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"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

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            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

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            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
```

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            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
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        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
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"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

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        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

```
        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
```

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }

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            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

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    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
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"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

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    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
```

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            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
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"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
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"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

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        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

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            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

```
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
  </li>\n  <li>\n  <p>\n  <code>application_name</code> - The name of the application. \n  Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
  </li>\n  <li>\n  <p>\n  <code>license_included</code> - The type of license included. \n
  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n  Possible values are <code>sql-server-enterprise</code> | \n  <code>sql-server-standard</code> | \n  <code>sql-server-web</code> |  \n  <code>windows-server-datacenter</code>.</p>\n  </li>\n  <li>\n
  <p>\n  <code>platform</code> - The platform of the resource.\n  Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n  </li>\n  <li>\n  <p>\n
  <code>resource_id</code> - The ID of the resource. \n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  <li>\n  <p>\n
  <code>tag:<key></code> - The key/value combination of a tag assigned \n  to the resource. Logical operators are <code>EQUALS</code> (single account) or\n  <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n  </li>\n  </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

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                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
```

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        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

```
}
    },
    "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

},
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
```

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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

```
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

```
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

      "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
  }
```

1.2930 aws-sdk-go-v2-service-sts 1.30.3

1.2930.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
```

```
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
```

setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack,
options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
```

```
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange
```

```
 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return
err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
```

Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash

Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware

```
  RecordResponseTiming
  RequestResponseLogger
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
```

```
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack);
err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
```

```
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
```

}
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},

"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
```

"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {

"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists

the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}

},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "

```
                }
            },
            "OsVersion": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
                }
            },
            "SubscriptionProviderCreateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
                }
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

        "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
```

```
            "type": "Boolean"
        },
        "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
```

```
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
```

```
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                    "ref": "UseFIPS"
                                            },
                                            true
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
                                    }

        ],
                                "rules": [
                                    {
                                        "conditions": [
                                            {
                                                "fn": "booleanEquals",
                                                "argv": [
                                                    true,
                                                    {
                                                        "fn": "getAttr",
```

"argv": [
{
"ref": "PartitionResult"

},
"supportsFIPS"
]
}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"

```
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {

        "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true

                            ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
```

```
                                                    {
                                                        "conditions": [],
                                                        "endpoint": {
                                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                            "headers": {}
                                                        },
                                                        "type": "endpoint"
                                                    }
                                                ],
                                                "type": "tree"
                                            }
                                        ],
                                        "type": "tree"
                                    },
                                    {
                                        "conditions": [],
                                        "error": "FIPS is enabled
but this partition does not support FIPS",
                                        "type": "error"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true

                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [
                                            {
                                                "fn": "booleanEquals",
                                                "argv": [
                                                    true,
                                                    {
                                                        "fn": "getAttr",
```

"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-

subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},

{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false

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    }
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  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
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"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}

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                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
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"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
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linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,

"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
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"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription

provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",

```
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {

"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

```
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
```

```
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
```

```
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
 {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
```

AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
```

"smithy.api#documentation":
" Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
```

```
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n      resource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
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"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
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"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
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"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required":
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}
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"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes an identity provider. "
}
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
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"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
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"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
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"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",

"smithy.api#required": {}
}
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"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
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"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
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"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
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"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
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"InstanceId": {
"target": "smithy.api#String",
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"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
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"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",

"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

        },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
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            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
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                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",
                    "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
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"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

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"rules": [
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"fn": "isSet",
"argv": [

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                }
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    "rules": [
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                    "argv": [
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                            "ref": "UseFIPS"
                        },

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                    ]
                }
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            "type": "error"
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                    "argv": [
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                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
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                    "ref": "Endpoint"
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                "properties": {},
                "headers": {}
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                        "argv": [
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                                "argv": [
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"argv": [
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                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
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                        "argv": [
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                            {

"fn": "getAttr",
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                                        "ref": "PartitionResult"
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                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
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                "type": "tree",
                "rules": [
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"properties": {},
"headers": {}
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"type": "endpoint"
}
]
},
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
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"conditions": [
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"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
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"conditions": [
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"argv": [
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{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"

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                    ]
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                    ]
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            "type": "tree",
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fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}

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                    "type": "endpoint"
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            ]
        },
        {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"
        }
    ]
},
{
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            "argv": [
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                    "ref": "UseDualStack"
                },
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                                    "headers": {}
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                            },
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 not support DualStack",
                              "type": "error"
                            }
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ]
                    }
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                ]
            },
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                "type": "error"
            }
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    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
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                    }
                },
                "params": {
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                    "UseFIPS": true,
                    "UseDualStack": false
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                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
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"params": {
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"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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"expect": {
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}
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"params": {
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"UseDualStack": false
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}
},
"params": {
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}
},
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with FIPS disabled and DualStack disabled",
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}
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},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
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"endpoint": {
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}
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with FIPS disabled and DualStack enabled",
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"params": {
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"UseDualStack": true
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"expect": {
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}
},

"params": {
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"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":

{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
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"error": "DualStack is enabled but this partition does not support DualStack"
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"UseDualStack":
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}
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"expect": {
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"params": {
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"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},

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              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
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              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
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              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
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                }
              },
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                "UseFIPS": false,
                "UseDualStack": false
              }
            },
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              "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
              "expect": {
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                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": false,
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}
},
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
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"endpoint": {
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"params": {
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"Endpoint": "https://example.com"
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"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"UseDualStack": false,
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"UseDualStack": true,
"Endpoint": "https://example.com"
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}

```
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/ListIdentityProviders"
          },
          "smithy.api#paginated":
{
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
```

```
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
  {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
```

```
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },

     "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

```
            }
        }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
    "type": "structure",
    "members": {

    "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }

},
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
```

```
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
                }
            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n      subnets to provision VPC endpoints.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
```

"IdentityProviderSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {

"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required":
{}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {

             "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}

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            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n      update any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n              <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
          <li>\n              <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n              <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n      require connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
```

that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n the subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
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"smithy": "2.0",
"metadata": {
"suppressions": [
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"id": "HttpMethodSemantics",
"namespace": "*"
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{
"id": "HttpResponseCodeSemantics",
"namespace": "*"
},
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"id": "PaginatedTrait",
"namespace": "*"
},
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"id": "HttpHeaderTrait",
"namespace": "*"
},
{
"id": "HttpUriConflict",
"namespace": "*"
},

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        {
            "id": "Service",
            "namespace": "*"
        }
    ]
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"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
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                "target": "com.amazonaws.licensemanager#AcceptGrant"
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                "target": "com.amazonaws.licensemanager#CheckInLicense"
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                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
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            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
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                "target": "com.amazonaws.licensemanager#CreateGrant"
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                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
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            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
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            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
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                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
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{
"target": "com.amazonaws.licensemanager#DeleteGrant"
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"target": "com.amazonaws.licensemanager#DeleteLicense"
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"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
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"target": "com.amazonaws.licensemanager#DeleteToken"
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"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

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"target": "com.amazonaws.licensemanager#GetAccessToken"
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"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
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"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
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"target": "com.amazonaws.licensemanager#GetServiceSettings"
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"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"

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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
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"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
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"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
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"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
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"target": "com.amazonaws.licensemanager#ListLicenses"
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"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
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"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
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"target": "com.amazonaws.licensemanager#ListReceivedGrants"
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"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
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"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
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"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
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"target": "com.amazonaws.licensemanager#ListResourceInventory"
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"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
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"target": "com.amazonaws.licensemanager#ListTokens"
},
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"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
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"target": "com.amazonaws.licensemanager#RejectGrant"
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"target": "com.amazonaws.licensemanager#TagResource"
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"target": "com.amazonaws.licensemanager#UntagResource"
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"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
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"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},

"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
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"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true

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                ]
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        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
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    {

"conditions": [
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                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
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        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
             },
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
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{
  "conditions": [
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        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
  ],
  "type": "tree",
  "rules": [
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                    {
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                        "argv": [
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                          }
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                        "assign": "PartitionResult"
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                            "fn": "booleanEquals",
                            "argv": [
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                                "ref":
"UseFIPS"
                              },
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                            ]
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                          {
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                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
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                                    "argv": [
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"supportsFIPS"
]

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]
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"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},

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{
  "conditions": [
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 "argv": [
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        true
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  "type": "tree",
  "rules": [
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      "conditions": [
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          "argv": [
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{
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            }
          ]
        }
      ],
      "type": "tree",
      "rules": [

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          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ]
    },
```

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                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this
partition does not support FIPS",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
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                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                "properties": {},
                "headers": {}

            },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "DualStack is enabled but this partition does not support DualStack",
        "type": "error"
    }
]
},
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
}
]
},
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    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
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"smithy.rules#endpointTests": {
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            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
```

```
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-3.amazonaws.com"
        }
```

```
            },
            "params": {
                "Region": "ap-northeast-3",
                "UseFIPS": false,
                "UseDualStack": false
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        },
        {
            "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
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            "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-1.amazonaws.com"

        }
            },
            "params": {
                "Region": "ap-southeast-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
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            "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
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                }
            },
            "params": {
                "Region": "ap-southeast-2",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
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{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}

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            },
            "params": {
              "Region": "eu-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-south-1.amazonaws.com"
              }
            },
            "params": {
              "Region":
"eu-south-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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            "expect": {
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                "url": "https://license-manager.eu-west-1.amazonaws.com"
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            },
            "params": {
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              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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            "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
            "expect": {

            "endpoint": {
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            },
            "params": {
              "Region": "eu-west-2",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
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          "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.sa-east-1.amazonaws.com"
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          },
          "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.amazonaws.com"
            }
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          "params": {
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"Region": "us-east-1",
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"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
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"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region

us-west-1 with FIPS disabled and DualStack disabled",

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                "expect": {
                  "endpoint": {
                    "url": "https://license-manager.us-west-1.amazonaws.com"
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                },
                "params": {
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                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
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                "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
                "expect": {
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                    "url": "https://license-manager-fips.us-west-1.amazonaws.com"
                  }
                },
                "params": {
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"Region": "us-west-1",

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                  "UseDualStack": false
                }
              },
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                "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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                    "url": "https://license-manager.us-west-2.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "us-west-2",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
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"expect": {

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                "params": {
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            "UseDualStack": false
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    },
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,

            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
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"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": true
}
},

{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false

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            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled
but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
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"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{

"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"

```
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
          "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateToken"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max":
7
          }
        }
      },
      "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
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```
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
```

"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
```

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            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
```

"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}

```
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
             "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409

```
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
```

"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {

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                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
},
"traits":
{
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",

"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for

<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
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"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":

{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
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"target": "com.amazonaws.licensemanager#DeleteGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}

```
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

      "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {

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        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
```

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}

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        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
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            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},

"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",

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        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},

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        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
```

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            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

            "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
```

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            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
```

"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {

"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {

"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

```
    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
```

"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "

```
    }
},
"LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
```

"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}

```
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

  "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"
```

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in

ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

```
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": "<p>Condition of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

            "smithy.api#documentation": "<p>License name.</p>"
                }
```

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "

```
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
```

"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
```

"traits": {
"smithy.api#documentation":
" The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}

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            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
```

```
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

"smithy.api#documentation": "<p>Failure time.</p>"
            }
```

```
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
                }
            },
            "MetadataList": {

                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}

```
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
```

```
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n

```
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
```

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<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

         "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},

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            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

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            }
            },
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                 },
                {
                    "target": "com.amazonaws.licensemanager#ServerInternalException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
                "ResourceArn": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                        "smithy.api#required": {}
                    }
                },
                "MaxResults": {
                    "target": "com.amazonaws.licensemanager#BoxInteger",
```

"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",

```
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
              "smithy.api#documentation": "<p>Received grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </p>\n
    </li>\n        <li>\n            <p>\n                <code>ProductSKU</code>\n
            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
                 "traits": {
                    "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

             "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n    <li>\n    <p>\n    <code>ProductSKU</code>\n    </p>\n
```

```
</li>\n <li>\n <p>\n <code>Status</code>\n </p>\n </li>\n
<li>\n <p>\n <code>Fingerprint</code>\n </p>\n </li>\n <li>\n
<p>\n <code>IssuerName</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Beneficiary</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
              "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
```

```
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
```

"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {

"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

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    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
        }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
        "traits": {
            "smithy.api#range": {
                "min": 1,
                "max": 100
            }
        }
    },
```

"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The key name. "
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The value. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes key/value pairs. "
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }

},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":

" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform

Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n \n \n \n \n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n
\n \n <code>License Included</code> - The type of license included.\n Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:
<code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-
web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
The following filters and logical operators are supported when the resource type\n is
<code>RDS</code>: \n \n \n \n <code>Engine Edition</code> -
The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>. \n \n \n \n <code>License Pack</code> - The license
pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data
guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},

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        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

```
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
```

```
                "traits": {
                    "smithy.api#httpHeader": "Location"
                }
            },
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

 }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
```

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {

"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {

"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},

"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {

"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {

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        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
            "bucket": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
                }
            },
            "keyPrefix": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
```

"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license
configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",

"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",

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                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
        },
        "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
```

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            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
```

"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "

```
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

1.2931 aws-sdk-go-v2-credentials 1.17.27

1.2931.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
```

```
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
ListReceivedLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
```

```
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
```

```
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string
```

```
 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
```

```
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string
```

```
 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
 {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation

```
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack);
 err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
```

```
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
```

```
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
ListLicenses
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
```

"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}

```
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
```

"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",

"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {

"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the

registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{

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        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
        "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
```

"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [

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                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

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                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
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                    {
                      "conditions": [],
                      "endpoint": {
```

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                    "url": {
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                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
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    "type": "tree"
},
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    "conditions": [],
    "rules": [
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                    "fn": "isSet",
                    "argv": [
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                            "ref": "Region"
                        }
                    ]
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            "rules": [
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                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
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                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
```

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                "argv": [
                  {

            "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

],
              "rules": [
              {
                "conditions": [
                  {
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                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"

        },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [

                        {
                            "ref": "PartitionResult"
```

```
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

        "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

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                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                    "type": "error"
                }
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            "type": "tree"
        },
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            "conditions": [
                {
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                    "argv": [
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                            "ref": "UseFIPS"
                        },
                        true
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                    ]
                }
            ],
            "rules": [
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                    "conditions": [
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                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                    ]
                        }
                    ],
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                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                                        "headers": {}
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                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
```

but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

]
}
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
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"conditions": [],
"rules": [

{
"conditions": [],
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"url": "https://license-manager-linux-

subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

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},
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"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
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"conditions": [],
"rules": [
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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"type": "endpoint"
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],
"type": "tree"
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"type": "tree"
}
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"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}

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            ],
            "type": "tree"
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"smithy.rules#endpointTests": {
    "testCases": [
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            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
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{
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"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": true
}
},
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack

disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"

     },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
      },
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"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n

```
<code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

      "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {

"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

           "NextToken": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",

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                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
        "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
     }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
            },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
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"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}

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            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
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"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {

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            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
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"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",

"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {

"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
```

"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string
```

```
 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil
 {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
GetLicense
 Initialize stack step
  RegisterServiceMetadata
```

```
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
```

```
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
```

```
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
```

```
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
```

```
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
{
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n        hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
        monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
 EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

"traits": {
"smithy.api#documentation": " The identity provider of the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n resource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

```
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n      operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n      attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Details about an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n      settings such as the subnets to provision VPC endpoints.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
```

"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "

```
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }

    }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",

     "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

},
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
```

"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,

"documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

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"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},

true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",

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                "type": "error"
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                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
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            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
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                "fn": "isSet",
                "argv": [

{
                        "ref": "Region"
                    }
                ]
            }
        ],
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        "rules": [
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                "conditions": [
                    {
```

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                "fn": "aws.partition",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "type": "tree",

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                    "fn": "booleanEquals",
                    "argv": [
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                        "ref": "UseFIPS"
                      },
                      true
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                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"

                     },
                      true
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
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                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",

    "argv": [
                                  {
                                    "ref": "PartitionResult"
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                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
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                    {
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                        "argv": [
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                            {

"fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {

"conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                 "type": "error"
            }
        ]
    },
    {
        "conditions": [
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                    {
                      "fn": "booleanEquals",
                      "argv": [
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                          "ref": "UseFIPS"
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                              "fn": "getAttr",
                              "argv": [
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                                },
                                "supportsFIPS"

                          ]
                            }
                          ]
                        }
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fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}

            },
                          "type": "endpoint"
                        }
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                    },
                    {
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"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
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},
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"ref": "UseDualStack"
},
true
]
}
],
"type": "tree",
"rules": [
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
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{

"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
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"type": "tree",
"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},

"headers": {}
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"type": "endpoint"
}
]
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{
"conditions": [],
"error": "DualStack is enabled but this partition does
not support DualStack",
"type": "error"
}
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},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},
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"conditions":
[],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
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"documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
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}
},
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "cn-north-1",

"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
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}
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
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}
},

"params": {
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"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack":
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}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}

},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true

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            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
            },
             "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
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                "params": {
                    "Region": "us-east-1",
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                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                     "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
```

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{
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type":
 "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
```

```
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
```

```
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name
of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

 "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
          }
        },

     "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
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          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target":
 "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated":
{
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {

"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for a user. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for a user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " The summary of the user-based subscription products for a user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",

    "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation":
 "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n      your VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688 communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,

```
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
         "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

  },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
             "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required":
{}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},

"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n update any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}

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            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n      require connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
 that allows inbound TCP port 1688 communication between resources in\n      your VPC and the VPC endpoints for
activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n      the subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
```

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  }
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
```

"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},

{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

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      "target": "com.amazonaws.licensemanager#ListLicenseVersions"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListResourceInventory"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTokens"
    },
    {
      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#RejectGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
```

"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

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            "type": "String"
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    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

            }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {

"conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
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            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
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                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
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                "conditions": [
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                        "argv": [
                            {
                                "ref": "Region"
                            }
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                        "assign": "PartitionResult"
                    }
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                "type": "tree",
                "rules": [
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                        "conditions": [
                            {
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                                "argv": [
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                                        "ref":
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"UseFIPS"

```
                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
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        "rules": [
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                        "argv": [
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]

                }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
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"supportsDualStack"

```
                                ]
```

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                    }
                ]
            }
        ],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}

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                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
        "type": "error"
    }
]
},
{
    "conditions": [
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            "fn": "booleanEquals",

  "argv": [
                {
                    "ref": "UseFIPS"
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                true
            ]
        }
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    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
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                    "argv": [
                        true,
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{
                "fn": "getAttr",
                "argv": [
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                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ],
        "type": "tree",
        "rules": [

{
            "conditions": [],
            "endpoint": {
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              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
      {
        "conditions": [],
        "error": "FIPS is enabled but this
partition does not support FIPS",
        "type": "error"
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    ]
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  {
    "conditions": [
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        "fn": "booleanEquals",
        "argv": [
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            "ref": "UseDualStack"
          },
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        ]
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                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

"supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

                },
                        "type": "endpoint"
                      }
                    ]
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                  {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                  }
                ]
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              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                   "properties": {},
                  "headers": {}
```

```
                    },
                    "type": "endpoint"
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            ]
        }
    ]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
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            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
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            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
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            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
             }
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            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
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            }
        },
        "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
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        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }

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    {
        "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
          },
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"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},

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        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
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          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
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"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
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"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

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"url": "https://license-manager-fips.us-west-2.amazonaws.com"
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"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",

"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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{
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"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
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"params": {
"Region": "us-gov-west-1",
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"UseDualStack": false
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}
},

"params": {
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"UseDualStack": true

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            }
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        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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                }
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            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
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        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

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                    },

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                        "UseFIPS": true,
                        "UseDualStack": false
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                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
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                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
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                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
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                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                },
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                    "expect": {
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                    },
                    "params": {
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                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
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"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
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                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
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                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
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            "version": "1.0"
        }
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"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant

ARN. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": " Grant status. "
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Grant version. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": " Access to resource denied. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

```
},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the
account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

```
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

```
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

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        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

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    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

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            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
                }
```

```
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
```

```
    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

```
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
```

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

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            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Seconds"
            }
        },
        "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
             }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

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            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

```
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

```
        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}

```
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"

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    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                 }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

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    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
```

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            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
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"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

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    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>resource_id</code> - The ID of the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

```
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
      "type": "structure",
      "members": {
        "ResourceInventoryList": {
          "target": "com.amazonaws.licensemanager#ResourceInventoryList",
          "traits": {
            "smithy.api#documentation": "<p>Information
about the resources.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n                <p>\n                <code>LicenseArns</code>\n                </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

```
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
```

```
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}

```
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

```
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

1.2932 aws-sdk-go-v2-feature-ec2-imds 1.16.11

1.2932.1 Available under license :

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
```

```
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
CreateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string
```

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

```
 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return
 err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
```

```
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
CheckoutLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
AssociateLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
```

```
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err
 = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
```

```
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
```

```
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack);
err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
```

```
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack,
 options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
```

}
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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Copyright 2014-2015 Stripe, Inc.
{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},

"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
```

"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {

"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists

the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}

```
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
                }
            },
            "LastUpdatedTime": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
                }
            },
            "SubscriptionName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
```

}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
```

```
            "type": "Boolean"
        },
        "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
```

```
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
```

```
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                    "ref": "UseFIPS"
                                            },
                                            true
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
                                    }

        ],
                                "rules": [
                                    {
                                        "conditions": [
                                            {
                                                "fn": "booleanEquals",
                                                "argv": [
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                                                    {
                                                        "fn": "getAttr",
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"argv": [
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"ref": "PartitionResult"

},
"supportsFIPS"
]
}
]
},
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"fn": "booleanEquals",
"argv": [
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{
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"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
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"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
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"properties": {},
"headers": {}
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"type": "endpoint"
}
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"type": "tree"
}
],
"type": "tree"

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                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
                    }
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        "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
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                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true

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                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
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                                        {
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    "properties": {},
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                                            "type": "endpoint"
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                                    ],
                                    "type": "tree"
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                            "type": "tree"
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                            "conditions": [],
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but this partition does not support FIPS",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                ]
                        }
                    ],
                    "rules": [
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                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
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"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

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"type": "tree"
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{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
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"type": "tree"
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"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-

subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
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"type": "tree"
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"type": "tree"
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"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
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]
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},

{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
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},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false

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    }
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  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
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  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
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"UseDualStack": false
}
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{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}

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                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
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"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
```

linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,

"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
```

"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription

provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",

```
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"

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      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",

"documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
       },
      "errors": [
        {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {

"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
          }
        }
    }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil
{
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
DeleteLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
 Finalize stack step
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

```
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
```

```
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
```

```
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return
err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil
 {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
CheckInLicense
 Initialize stack step
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
 Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
```

AddTimeOffsetMiddleware
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
```

"smithy.api#documentation":
" Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
```

```
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n      resource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
```

"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",

"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status
of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}

},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",

"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

        },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
             },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",
                    "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
```

"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [

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                {
                    "ref": "Endpoint"
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },

                    true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
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```
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [

{
                    "ref": "Region"
                }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "type": "tree",

"rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
```

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                    {
                        "ref": "UseDualStack"

                    },
                    true
                ]
            }
        ],
        "type": "tree",
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                "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",

"argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {

"fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
```

"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",

"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"

```
                ]
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}

},
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
```

```
                                    {

                                  "fn": "getAttr",
                                      "argv": [
                                        {
                                          "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                      ]
                                    }
                                  ]
                                }
                              ],
                              "type": "tree",
                              "rules": [
                                {

                                  "conditions": [],
                                  "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                  },
                                  "type": "endpoint"
                                }
                              ]
                            },
                            {
                              "conditions": [],
                              "error": "DualStack is enabled but this partition does
 not support DualStack",
                              "type": "error"
                            }
                          ]
                        },
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ]
                    }
```

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                ]
            },
            {
                "conditions":
[],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },
```

"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect":

{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},

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            {
              "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
               "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}

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            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/ListIdentityProviders"
          },
          "smithy.api#paginated":
{
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
```

```
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
  {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
```

```
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n      more sets of key-value pairs that you specify.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },

     "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

```
            }
        }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
    "type": "structure",
    "members": {

    "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }

},
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
```

```
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
                }
            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n      subnets to provision VPC endpoints.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
```

"IdentityProviderSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {

"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation":
" The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688
communication between resources in\n your VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n endpoints. The security group should permit inbound TCP port 1688
communication from resources\n in the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing.
For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required":
{}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the user.</p>"
                }
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```
            }
        }
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    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the start product subscription operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {

             "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
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"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}

```
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n      update any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n              <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
          <li>\n              <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n              <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n      require connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID
```

that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n the subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
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"smithy": "2.0",
"metadata": {
"suppressions": [
{
"id": "HttpMethodSemantics",
"namespace": "*"
},
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"id": "HttpResponseCodeSemantics",
"namespace": "*"
},
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"id": "PaginatedTrait",
"namespace": "*"
},
{
"id": "HttpHeaderTrait",
"namespace": "*"
},
{
"id": "HttpUriConflict",
"namespace": "*"
},

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        {
          "id": "Service",
          "namespace": "*"
        }
      ]
    },
    "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
          {
            "target": "com.amazonaws.licensemanager#AcceptGrant"
          },

 {
            "target": "com.amazonaws.licensemanager#CheckInLicense"
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            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
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          {
            "target": "com.amazonaws.licensemanager#CheckoutLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateGrant"
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            "target": "com.amazonaws.licensemanager#CreateGrantVersion"
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            "target": "com.amazonaws.licensemanager#CreateLicense"
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            "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
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            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
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            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
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          {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
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          {
            "target": "com.amazonaws.licensemanager#CreateToken"
          },
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      "target": "com.amazonaws.licensemanager#DeleteGrant"
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      "target": "com.amazonaws.licensemanager#DeleteLicense"
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      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
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      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

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    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
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      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
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    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
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    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
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"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
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"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
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"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
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"target": "com.amazonaws.licensemanager#ListLicenses"
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"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
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"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
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"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
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"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
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"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
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"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
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"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},

"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true

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                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {

"conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
             },
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
},
{
  "conditions": [
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        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
  ],
  "type": "tree",
  "rules": [
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                    {
                      "conditions": [
                        {
                          "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
                          }
                        ],
                        "assign": "PartitionResult"
                        }
                      ],
                      "type": "tree",
                      "rules": [
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                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref":
"UseFIPS"
                              },
                              true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "type": "tree",
                        "rules": [
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                           "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
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"ref": "PartitionResult"
},
"supportsFIPS"
]

}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},

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{
  "conditions": [
    {
      "fn": "booleanEquals",

 "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,

{
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ],
    "type": "tree",
    "rules": [

{
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  },
```

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                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this
partition does not support FIPS",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "type": "tree",
                 "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
```

"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"Region": "af-south-1",
"UseFIPS": false,

```
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-3.amazonaws.com"
        }
```

```
            },
            "params": {
                "Region": "ap-northeast-3",
                "UseFIPS": false,
                "UseDualStack": false
            }

        },
        {
            "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-1.amazonaws.com"

        }
            },
            "params": {
                "Region": "ap-southeast-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-2.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-southeast-2",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
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{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.eu-central-1.amazonaws.com"
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"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
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            },
            "params": {
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              "UseFIPS": false,
              "UseDualStack": false
            }
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            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-south-1.amazonaws.com"
              }
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            "params": {
              "Region":
"eu-south-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
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            "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-west-1.amazonaws.com"
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            },
            "params": {
              "Region": "eu-west-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
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          {
            "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
            "expect": {

            "endpoint": {
                "url": "https://license-manager.eu-west-2.amazonaws.com"
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            },
            "params": {
              "Region": "eu-west-2",
              "UseFIPS": false,
              "UseDualStack": false
            }
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          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.sa-east-1.amazonaws.com"
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          "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.amazonaws.com"
            }
          },
          "params": {
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"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region

us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
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"Region": "us-west-2",
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"UseDualStack": false
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"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
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"url": "https://license-manager-fips.us-east-1.api.aws"
}
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"params": {
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"UseFIPS": true,

"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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"endpoint": {
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
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"params": {
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"UseDualStack": false
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
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"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
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"params": {
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"UseFIPS": true,
"UseDualStack": true
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"expect": {
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"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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"UseDualStack": true
}
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "us-gov-east-1",
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"UseDualStack": false
}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"params": {
"Region": "us-gov-east-1",
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"UseDualStack": false
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"expect": {
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"params": {
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"UseDualStack": false
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"params": {
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"UseDualStack": false
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"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false

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            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
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                "UseFIPS": true,
                 "UseDualStack": true
            }
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            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled
but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
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            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
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                "UseFIPS": false,
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"UseDualStack": false
}
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"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": true
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
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"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
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{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"

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            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
          "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateToken"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max":
7
          }
        }
      },
      "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
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            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
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"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
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"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
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"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
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"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
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"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"

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{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
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                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
```

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
```

"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}

```
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
             "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409

```
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
```

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                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
```

"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {

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                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
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"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
},
"traits":
{
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",

"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for

<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
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"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":

{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
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"target": "com.amazonaws.licensemanager#DeleteGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}

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            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

      "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}

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    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
```

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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

}
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
```

"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",

```
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},

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        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

            "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
```

```
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
```

"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {

"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {

"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
```

"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "

```
    }
},
"LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
```

"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}

```
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

  "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"
```

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in

ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

```
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": "<p>Condition of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

            "smithy.api#documentation": "<p>License name.</p>"
                }
```

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "

```
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
```

"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
```

"traits": {
"smithy.api#documentation":
" The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}

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            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
```

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        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

"smithy.api#documentation": "<p>Failure time.</p>"
            }
```

```
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
                }
            },
            "MetadataList": {

                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}

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        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
```

```
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n

```
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
```

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<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

         "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},

```
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

```
            }
            },
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                 },
                {
                    "target": "com.amazonaws.licensemanager#ServerInternalException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
                "ResourceArn": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                        "smithy.api#required": {}
                    }
                },
                "MaxResults": {
                    "target": "com.amazonaws.licensemanager#BoxInteger",
```

"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",

"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </p>\n
    </li>\n        <li>\n            <p>\n                <code>ProductSKU</code>\n
            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
                 "traits": {
                    "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

             "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n    <li>\n    <p>\n    <code>ProductSKU</code>\n    </p>\n
```

```
</li>\n <li>\n <p>\n <code>Status</code>\n </p>\n </li>\n
<li>\n <p>\n <code>Fingerprint</code>\n </p>\n </li>\n <li>\n
<p>\n <code>IssuerName</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Beneficiary</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
              "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
```

```
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
```

"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {

"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
        }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
        "traits": {
            "smithy.api#range": {
                "min": 1,
                "max": 100
            }
        }
    },
```

"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The key name. "
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The value. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes key/value pairs. "
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }

},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":

" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform

Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n \n \n \n \n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n
\n \n <code>License Included</code> - The type of license included.\n Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:
<code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-
web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
The following filters and logical operators are supported when the resource type\n is
<code>RDS</code>: \n \n \n \n <code>Engine Edition</code> -
The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>. \n \n \n \n <code>License Pack</code> - The license
pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data
guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},

```
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#RedirectException": {
"type": "structure",
"members": {
"Location": {
"target": "com.amazonaws.licensemanager#Location",

"traits": {
"smithy.api#httpHeader": "Location"
}
},
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " This is not the correct Region for the resource. Try again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#RejectGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "

```
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

 }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
```

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {

"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {

"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},

"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {

"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {

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        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
            "bucket": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
                }
            },
            "keyPrefix": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
```

"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license
configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",

"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",

"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}

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            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
```

"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "

```
            }
        },

        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
                "ResourceArn": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                        "smithy.api#required": {}
                    }
                },
                "AddLicenseSpecifications": {
                    "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                    "traits": {
                        "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                    }
                },
                "RemoveLicenseSpecifications": {
                    "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                    "traits": {
                        "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#input": {}
            }
        },
        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
            "type": "structure",
            "members": {},
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettings": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
            },
            "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

1.2933 brotli 1.1.1

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1.2934 gorilla-mux 1.8.0

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1.2935 v1-gonum 0.12.0

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is preserved.
A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre
quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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uniform pseudorandom number generator"
ACM Transactions on Modeling and
Computer Simulation 8. (Jan. 1998) 3--30.

Any feedback is very welcome.
http://www.math.hiroshima-u.ac.jp/~m-mat/MT/emt.html
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1.2936 jsonpatch 5.6.0+incompatible

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1.2937 tgo 1.0.7

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1.2938 v1-gonum 0.15.1

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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T. Nishimura, ``Tables of 64-bit Mersenne Twisters"
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M. Matsumoto and T. Nishimura,
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ACM Transactions on Modeling and
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{{- end -}}
{{- end -}}

name,url,version,revision,license,sourceURL{{ template "depInfo" .Direct }}{{ template "depInfo" .Indirect }}
{{- define "depInfo" -}}
{{- range $i, $dep := . }}
{{ "-" | line }}
Dependency : {{ $dep.Name }}
Version: {{ $dep.Version }}
Licence type (autodetected): {{ $dep.LicenceType }}
{{ "-" | line }}

{{ $dep | licenceText }}
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package mage

import (
 "fmt"
 "os"

 "github.com/magefile/mage/mg"

 "github.com/elastic/lunes/dev-tools/mage/gotool"
)

func GenerateNotice(overrides, rules, noticeTemplate string) error {
 mg.Deps(InstallGoNoticeGen,
 Deps.CheckModuleTidy)

 err := gotool.Mod.Download(gotool.Download.All())
 if err != nil {
```

```
 return fmt.Errorf("error while downloading dependencies: %w", err)
}

// Ensure the go.mod file is left unchanged after go mod download all runs.
// go mod download will modify go.sum in a way that conflicts with go mod tidy.
// https://github.com/golang/go/issues/43994#issuecomment-770053099
defer gotool.Mod.Tidy() //nolint:errcheck // No value in handling this error.

out, _ := gotool.ListDepsForNotice()
depsFile, _ := os.CreateTemp("", "depsout")
defer os.Remove(depsFile.Name())
_, _ = depsFile.Write([]byte(out))
depsFile.Close()

generator := gotool.NoticeGenerator
return generator(
 generator.Dependencies(depsFile.Name()),
 generator.IncludeIndirect(),
 generator.Overrides(overrides),
 generator.Rules(rules),
 generator.NoticeTemplate(noticeTemplate),
 generator.NoticeOutput("NOTICE.txt"),
)
}
{
 "allowlist": [
   "Apache-2.0",
   "BSD",
   "BSD-2-Clause",
   "BSD-2-Clause-FreeBSD",
   "BSD-3-Clause",
   "CC0-1.0",
   "Elastic",
   "ISC",
   "MIT",
   "MPL-2.0",
   "Public Domain",
   "Zlib"
 ],
 "maybelist": [
   "EPL-1.0",
   "GPL-3.0",
   "LGPL-3.0"
 ]
}
```

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Dependency : github.com/cyphar/filepath-securejoin
Version: v0.2.5
Licence type (autodetected): BSD-3-Clause

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Version: v1.1.1
Licence type (autodetected): ISC

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Version: v0.6.0
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Version: v1.15.6
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Version:
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Version: v2.2.7

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1.2941 uio 0.0.0-20240224005618-d2acac8f3701

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1.2942 smetrics 0.0.0-20240521201337-686a1a2994c1

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1.2943 github.com/pierrec/lz4/v4 4.1.22

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1.2944 otel-exporters-otlp-otlptrace-otlptracegrpc 1.27.0

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1.2945 google-apis 1.4.0

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1.2948 go-autorest-logger v0.2.1

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1.2949 grafana-loki-pkg-push v0.0.0-20230127102416-571f88bc5765

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1.2950 lmdb 0.9.33-r0

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# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
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pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
```

```
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
```

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-
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student practice (Universite Bordeaux, France). For additional information about X-splines, see:
"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html
# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
 # some GNU autoconf options are ignored, but it works
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  --sysconfdir=/etc \
  --mandir=/usr/share/man \
  --localstatedir=/var/lib # it really shouldn't be in /var
 make
}

package() {
 make DESTDIR="$pkgdir" install
 install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
"
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
```

```
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}

build() {
```

```
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.3.0
pkgrel=1
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}
```

```
sha512sums="
3fe4ac8830085fe38d8ee713a332047941b2a7a8ff5f31810b124c5903335a8343a222926aefe000da66a49b4d6f8b934
af3cc350448b075a4ec6aa1fdb51aef
  license-expression-30.3.0.tar.gz
"
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(EMU Soundfont 2 Format)

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http://members.nbci.com/silicon39/
http://www.mp3.com/silicon39
https://analoguesque.x10host.com/
# Automatically generated by apkbuild-cpan, template 4
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=9
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
```

```
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
```

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```
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.24.0
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
```

```
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
 subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
 mkdir -p "$pkgdir"
}

_subpkg() {
 local type=${subpkgname/$pkgname-/}
 pkgdesc="$pkgdesc ($type)"
 install_if="$pkgname=$pkgver-r$pkgrel"
 mkdir -p "$subpkgdir"/usr/share/spdx
 cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
 pkgdesc="$pkgdesc (licence list)"
 mkdir -p "$subpkgdir"/usr/share/spdx
 local i; for i in "$builddir"/text/*.txt;
 do
  local license=${i##*/}
  echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
 done
}

sha512sums="
6eb81424e1b3173dbd8e17859b2e15dfe1c2af8f4da59b7dad0729c038a4cbdba95c34c2c546285fcdbbd41562e39575e
6a6ebb9463b70121e0a12b99d1307e7  license-list-data-3.24.0.tar.gz
"
```

mini_sendmail - accept email on behalf of real sendmail

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```
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
```

}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e76654309e001aee9bace727b5b4c8589405256a3c020 libart_lgpl-2.3.21.tar.bz2"

1.2951 goleak 1.3.0

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1.2952 ca-certificates 20240203~22.04.1

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Source: http://ftp.debian.org/debian/pool/main/c/ca-certificates/

Files: debian/*
    examples/*
    Makefile
    mozilla/*

sbin/*
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Comment: Original Copyright: 1994-2000 Netscape Communications Corporation
(certdata.txt <= CVS Revision: 1.82)
NSS no longer contains explicit copyright. Upstream indicates
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required Copyright: field in Debian's machine-readable format.
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1.2953 structtag 1.2.0

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1.2954 zstd 1.9.4

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1.2958 xorm-xorm 0.8.2

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
```

```
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
```

```
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)
```

```
func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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// versions:
//  protoc-gen-go v1.34.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
```

```
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}
```

```
func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
```

```
  "READER":          3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
```

0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67,
0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
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0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,

```
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64,
 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
```

```
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func
 file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v any, i int) any {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
    return &v.sizeCache
   case 2:
    return &v.unknownFields
   default:
    return nil
   }
  }
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:
         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
// Copyright 2024 Google LLC
//
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete          []gax.CallOption
 Get             []gax.CallOption
 GetIamPolicy    []gax.CallOption
 Insert          []gax.CallOption
 List            []gax.CallOption
```

```
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
```

```
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
```

```
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by
third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
```

belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
```

```
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
```

```
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license",
url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf,
err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}
```

```
// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()),
 "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }
```

```
  if err
 := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and
 context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
```

```
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp);
err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId",
fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err !=
nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient)
 List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
```

```
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults",
fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return
err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only
 by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
```

```
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
// TestIamPermissions returns permissions that a caller has on
 the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
```

```
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return
nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
```

1.2960 protobuf-go 1.35.2

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1.2961 influxdb-client-go 2.12.3

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1.2962 sentry-go 0.12.0

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1.2963 rueidis 1.0.16

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1.2964 mage 1.15.0

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---
title: Notice
description : "Message pour vous aider structurer votre contenu"

Le shortcode *Notice* permet d'afficher 4 types de message pour vous aider structurer votre contenu.

Note

```
{{%/* notice note */%}}
Une notice de type *note*
{{%/* /notice */%}}
```

s'affiche comme

{{% notice note %}}
Une notice de type *note*
{{% /notice %}}

Info

```
{{%/* notice info */%}}
Une notice de type *info*
{{%/* /notice */%}}
```

s'affiche comme

{{% notice info %}}
Une notice de type *info*
{{% /notice %}}

Tip

```
{{%/* notice tip */%}}
```

Une notice de type *tip*
{{%/* /notice */%}}
```

s'affiche comme

{{% notice tip %}}
Une notice de type *tip*
{{% /notice %}}

### Warning

```
{{%/* notice warning */%}}
Une notice de type *warning*
{{%/* /notice */%}}
```

s'affiche comme

{{% notice warning %}}
Une notice de type *warning*
{{% /notice %}}
---
title: Notice
description : "Disclaimers to help you structure your page"

The notice shortcode shows 4 types of disclaimers to help you structure your page.

Note

```
{{%/* notice note */%}}
A notice disclaimer
{{%/* /notice */%}}
```

renders as

{{% notice note %}}
A notice disclaimer
{{% /notice %}}

Info

```
{{%/* notice info */%}}

An information disclaimer
{{%/* /notice */%}}
```

renders as

{{% notice info %}}
An information disclaimer
{{% /notice %}}

Tip

```
{{%/* notice tip */%}}
A tip disclaimer
{{%/* /notice */%}}
```

renders as

{{% notice tip %}}
A tip disclaimer
{{% /notice %}}

Warning

```
{{%/* notice warning */%}}
An warning disclaimer
{{%/* /notice */%}}
```

renders as

{{% notice warning %}}
A warning disclaimer
{{% /notice %}}

1.2965 snowflake 0.3.0

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1.2968 regexp 0.0.0-20221123153739-15dc172cd2db

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1.2969 centrifuge 0.30.2

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1.2970 eagle 0.1.0

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1.2971 hcl 2.17.0

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1.2972 kin-openapi 0.120.0

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```
package openapi3

import (
 "context"
 "encoding/json"
 "errors"
)

// License is specified by OpenAPI/Swagger standard version 3.
// See https://github.com/OAI/OpenAPI-Specification/blob/main/versions/3.0.3.md#license-object
type License struct {
 Extensions map[string]interface{} `json:"-" yaml:"-"`

 Name string `json:"name" yaml:"name"` // Required
 URL  string `json:"url,omitempty" yaml:"url,omitempty"`
}

// MarshalJSON returns the JSON encoding of License.
func (license License) MarshalJSON() ([]byte, error) {
 m := make(map[string]interface{}, 2+len(license.Extensions))
 for k, v := range license.Extensions {
  m[k] = v
 }
 m["name"] = license.Name
 if x := license.URL; x != "" {
  m["url"] = x
 }
 return json.Marshal(m)
}

// UnmarshalJSON sets License to a copy of data.
func (license *License) UnmarshalJSON(data []byte) error {
 type LicenseBis License
 var x LicenseBis
 if err := json.Unmarshal(data, &x); err != nil {
  return err
 }
 _ = json.Unmarshal(data, &x.Extensions)
 delete(x.Extensions,
```

```
 "name")
 delete(x.Extensions, "url")
 *license = License(x)
 return nil
}

// Validate returns an error if License does not comply with the OpenAPI spec.
func (license *License) Validate(ctx context.Context, opts ...ValidationOption) error {
 ctx = WithValidationOptions(ctx, opts...)

 if license.Name == "" {
  return errors.New("value of license name must be a non-empty string")
 }

 return validateExtensions(ctx, license.Extensions)
}
```

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1.2973 exporter-toolkit 0.10.1-0.20230714054209-2f4150c63f97

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1.2987 go-base32 0.1.0

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1.2988 content-disposition/node_modules/safe-buffer 5.2.1

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1.2990 ca-certificates 20241121-r1

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* C implementation based on the original Perl and shell versions
*
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pkgname=ca-certificates
pkgver=20241121
pkgrel=1
pkgdesc="Common CA certificates PEM files from Mozilla"
url="https://www.mozilla.org/en-US/about/governance/policies/security-group/certs/"
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1.2991 githubcommattngorunewidth 0.0.16

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1.2992 github.com/pkg/xattr 0.4.10

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1.2993 go-grpc-middleware 2.1.0

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module _ // Auto generated by https://github.com/bwplotka/bingo. DO NOT EDIT

go 1.16

require github.com/efficientgo/tools/copyright v0.0.0-20210326193628-425a09c04e05

1.2994 go-grpc-middleware-providers-prometheus 1.0.1

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module _ // Auto generated by https://github.com/bwplotka/bingo. DO NOT EDIT

go 1.16

require github.com/efficientgo/tools/copyright v0.0.0-20210326193628-425a09c04e05

1.2995 mod 0.22.0

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1.2996 mapstructure 2.2.1

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1.2997 x-crypto 0.32.0

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1.2998 rocacheck 0.0.0-20171023193734-afe73141d399

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1.2999 json 0.0.0-20241014173422-cfa47c3a1cc8

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1.3000 go-securesystemslib 0.6.0

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1.3001 koanf 2.1.2

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1.3002 json-query 1.1.5

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1.3003 bytebufferpool 1.0.0

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1.3004 aws-sdk-go-v2-internal-endpoints 2.4.3

1.3004.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * Fingerprint
 //
 // * IssuerName
 //
 // * Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
```

```
 return
err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string
```

```
 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
```

```
 return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err
 = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack,
 options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil
 {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
```

```
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure
 the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional configuration
 // for workloads running with continuous connectivity. Choose a borrow
 // configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string
```

```
 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 //
 Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return
 err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This
 member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if
 err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
{
  "smithy": "1.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },
```

{
"target": "com.amazonaws.licensemanager#CheckInLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},

{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"

```
    },
    {
      "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
    },
    {

     "target": "com.amazonaws.licensemanager#ListLicenseVersions"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
    },
    {
      "target": "com.amazonaws.licensemanager#ListResourceInventory"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTokens"
    },
    {
      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#RejectGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
```

"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix":
"license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
```

```
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#AllowedOperation":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "CreateGrant",
                    "name": "CREATE_GRANT"
                },
                {
                    "value": "CheckoutLicense",
                    "name": "CHECKOUT_LICENSE"
                },
                {
                    "value": "CheckoutBorrowLicense",
                    "name": "CHECKOUT_BORROW_LICENSE"
                },
                {
                    "value": "CheckInLicense",
                    "name": "CHECK_IN_LICENSE"
                },
                {
                    "value": "ExtendConsumptionLicense",
                    "name": "EXTEND_CONSUMPTION_LICENSE"
                },
                {
                    "value": "ListPurchasedLicenses",
                    "name": "LIST_PURCHASED_LICENSES"
                 },
                {
                    "value": "CreateToken",
                    "name": "CREATE_TOKEN"
                }
```

```
            ]
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
```

```
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation":
{
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },
    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                     "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#box": {}
        }
    },
```

```
"com.amazonaws.licensemanager#BoxInteger": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#BoxLong": {

"type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#CheckInLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
```

"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",

"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                 "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
```

"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",

"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {

"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation":
" Information about constraints. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. "
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",

"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Node ID. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {

"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation":
" Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
}

```
    },
    "com.amazonaws.licensemanager#CheckoutType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "value": "PROVISIONAL",
            "name": "PROVISIONAL"
          },
          {
            "value": "PERPETUAL",
            "name": "PERPETUAL"
          }
        ]
      }
    },
    "com.amazonaws.licensemanager#ClientRequestToken":
{
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 36
        }
      }
    },
    "com.amazonaws.licensemanager#ClientToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#ConflictException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ConflictException",
          "httpResponseCode": 409
        },
```

"smithy.api#documentation": " There
was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {

"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license entitlements with specific Amazon Web Services accounts. "
}
},

"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},

"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}

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        }
    },
    "com.amazonaws.licensemanager#CreateGrantResponse":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion": {
        "type": "operation",
        "input": {

  "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

              "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                     "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
```

"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",

"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant
status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license
agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits":
{
"smithy.api#documentation": " Product information. "

```
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest":
```

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{
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to. For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target":
"com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
```

"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {

"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

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            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation":
 "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {

             "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
```

```
}
        }
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>",
                "smithy.api#required": {}
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
```

},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target":

"com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},

"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

        {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT
token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed
```

in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}

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            }
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
        "type": "timestamp"
    },
    "com.amazonaws.licensemanager#DatetimeRange": {
        "type": "structure",
        "members": {
            "Begin": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Start of the time range.</p>",
                    "smithy.api#required": {}
                }
            },
            "End": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>End of the time range.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC
format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {

    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
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                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation":
"<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#DeleteLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p> \n          <p>You cannot delete a license configuration
 that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

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            }
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

         "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
```

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}

},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "JWT_PS384",
"name": "JWT_PS384"
}
]
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",

"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {

"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " Data associated
with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",
"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{

"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"
},
{
"value": "Megabytes",
"name": "MEGABYTES"
},

```
            {
              "value": "Gigabytes",
              "name": "GIGABYTES"
            },
            {
              "value": "Terabytes",
              "name": "TERABYTES"
            },
            {
              "value": "Bits",
              "name": "BITS"
            },
            {
              "value": "Kilobits",
              "name": "KILOBITS"
             },
            {
              "value": "Megabits",
              "name": "MEGABITS"
            },
            {
              "value": "Gigabits",
              "name": "GIGABITS"
            },
            {
              "value": "Terabits",
              "name": "TERABITS"
            },
            {
              "value": "Percent",
              "name": "PERCENT"
            },
            {
              "value": "Bytes/Second",
              "name": "BYTES_PER_SECOND"
            },
            {
              "value": "Kilobytes/Second",
              "name": "KILOBYTES_PER_SECOND"
            },
            {
              "value": "Megabytes/Second",
              "name": "MEGABYTES_PER_SECOND"

        },
            {
              "value": "Gigabytes/Second",
              "name": "GIGABYTES_PER_SECOND"
```

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            },
            {
                "value": "Terabytes/Second",
                "name": "TERABYTES_PER_SECOND"
            },
            {
                "value": "Bits/Second",
                "name": "BITS_PER_SECOND"
            },
            {
                "value": "Kilobits/Second",
                "name": "KILOBITS_PER_SECOND"
            },
            {
                "value": "Megabits/Second",
                "name": "MEGABITS_PER_SECOND"
            },
            {
                "value": "Gigabits/Second",
                "name": "GIGABITS_PER_SECOND"
            },
            {
                "value": "Terabits/Second",

"name": "TERABITS_PER_SECOND"
            },
            {
                "value": "Count/Second",
                "name": "COUNT_PER_SECOND"
            }
        ]
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
```

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",
"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{
"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"

},
{
"value": "Megabytes",
"name": "MEGABYTES"
},
{
"value": "Gigabytes",
"name": "GIGABYTES"
},
{
"value": "Terabytes",

"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"
},
{
"value": "Kilobits",
"name": "KILOBITS"
},
{
"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},
{
"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"
},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
},
{
"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{

"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",
"name": "TERABITS_PER_SECOND"
},
{
"value": "Count/Second",
"name": "COUNT_PER_SECOND"
}
]
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",

"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "

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            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
             "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {

    "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",

        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation": " A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " Filter values. Filter values are case-sensitive. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error":
"client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName":
"item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}

}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {

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        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",

    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules.</p>"
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the
owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList":

{
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Gets
information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license
type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license
conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "

}
},
"StatusMessage": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic
reports about your license configurations. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target":
"com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse":
{
"type": "structure",
"members": {
"LicenseUsage": {
"target": "com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

  {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"
                }

            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",

"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {

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        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "string",

  "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_WORKFLOW",
                "name": "PENDING_WORKFLOW"
            },
            {
                "value": "PENDING_ACCEPT",
                "name": "PENDING_ACCEPT"
            },
            {
                "value": "REJECTED",
                "name": "REJECTED"
            },
            {
                "value": "ACTIVE",
                "name": "ACTIVE"
            },
            {
                "value": "FAILED_WORKFLOW",
                "name": "FAILED_WORKFLOW"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            },
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
             },
            {
                "value": "DISABLED",
                "name": "DISABLED"
            },
            {
                "value": "WORKFLOW_COMPLETED",
                "name": "WORKFLOW_COMPLETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
```

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",

"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer",
        "traits": {
            "smithy.api#box": {}
        }
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",

 "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
```

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EQUALS",
"name": "EQUALS"
},
{
"value": "NOT_EQUALS",
"name": "NOT_EQUALS"
},
{
"value": "BEGINS_WITH",
"name": "BEGINS_WITH"
},
{
"value": "CONTAINS",
"name": "CONTAINS"
}
]
}
},
"com.amazonaws.licensemanager#InventoryFilterList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},

"traits": {

"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "

```
            }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
```

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        },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                    "smithy.api#documentation": "<p>License rules.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"

    }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated
discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license
agreement that can be\n consumed and enforced by License Manager. Components include specifications for
the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a

host), and the number of licenses purchased and used. "
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name
 (ARN) of the resource. "
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": " Type of server resource. "
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource
consuming licenses. "
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time when the license configuration was associated with the
resource. "
                }
            },
            "AmiAssociationScope":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-
account</code>. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes an association with a license configuration. "
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",

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        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "AVAILABLE",
                    "name": "AVAILABLE"
                },
                 {
                    "value": "DISABLED",
                    "name": "DISABLED"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

"smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
```

"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}

},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},

"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "

```
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

        "smithy.api#documentation": "<p>The time the usage operation value of the resource was changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type":
"string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "IN_PROGRESS",
                    "name": "IN_PROGRESS"
                },
                {
                    "value": "SUCCEEDED",
                    "name": "SUCCEEDED"
                },
                {
                    "value": "FAILED",
                    "name": "FAILED"
                }
            ]
```

```
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "vCPU",
                "name": "VCPU"

            },
            {
                "value": "Instance",
                "name": "INSTANCE"
            },
            {
                "value": "Core",
                "name": "CORE"
            },
            {
                "value": "Socket",
                "name": "SOCKET"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseList": {
```

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "

}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",

"traits": {

"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "PENDING_AVAILABLE",
"name": "PENDING_AVAILABLE"
},
{
"value": "DEACTIVATED",
"name": "DEACTIVATED"
},
{
"value": "SUSPENDED",
"name": "SUSPENDED"
},
{
"value": "EXPIRED",
"name": "EXPIRED"
},
{
"value": "PENDING_DELETE",
"name": "PENDING_DELETE"
},
{

"value": "DELETED",
"name": "DELETED"
}
]
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {

         "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p> \n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending on \n        the license
rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                 }
            }
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {
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"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},

"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

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                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n
                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement
is used. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that indicates
whether the available licenses have been exceeded. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"

                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target":
"com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
                 }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
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"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type":
"structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to
return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input":
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the
license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an
associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum
number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
         "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n
        <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {

    "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received but not accepted.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",

    "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n
  <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
```

"Grants": {

"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",

"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n
\n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {

"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}

```
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"

},
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
```

"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits":
{
"smithy.api#documentation": " Information about the resources. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required":
{}
}

```
            }
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
```

"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target":
"com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListTokensResponse":
{
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource
at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

```
            }
        },
        "NextToken": {

            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> |
<code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).
 \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
    <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the
resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n        </ul>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#Location": {
    "type": "string"
},
"com.amazonaws.licensemanager#Long": {
```

```
    "type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {},
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
```

```
                "min": 0,
                "max": 3
            }
        }
    },
    "com.amazonaws.licensemanager#Message": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The key name.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }

    },
    "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Metadata"
        }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
```

```
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
      "type": "structure",
      "members": {
        "EnableIntegration": {
          "target": "com.amazonaws.licensemanager#Boolean",

       "traits": {
            "smithy.api#documentation": "<p>Enables Organizations integration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
      }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Arn"
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 1
        }
      }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

 "smithy.api#documentation": "<p>Resource type. The possible values are <code>SSM_MANAGED</code> |
<code>RDS</code>.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterList": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
          "traits": {
            "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
```

for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n
Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n
<code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}

```
            }
          },
          "ProductInformationFilterValue": {
            "target":
"com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>Filter value.</p>"
            }
          },
          "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Logical operator.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes product information filters.</p>"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationFilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilter"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationList": {
        "type": "list",

        "member": {
          "target": "com.amazonaws.licensemanager#ProductInformation"
        }
      },
      "com.amazonaws.licensemanager#ProvisionalConfiguration": {
        "type": "structure",
        "members": {
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"

      }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
        "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 429
      }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
      "type": "structure",
      "members": {
        "ReceivedStatus": {
          "target": "com.amazonaws.licensemanager#ReceivedStatus",
          "traits": {
            "smithy.api#documentation": "<p>Received status.</p>"
          }
        },
        "ReceivedStatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {

      "smithy.api#documentation": "<p>Received status reason.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
```

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "PENDING_WORKFLOW",
"name": "PENDING_WORKFLOW"
},
{
"value": "PENDING_ACCEPT",
"name": "PENDING_ACCEPT"
},
{
"value": "REJECTED",
"name": "REJECTED"
},
{
"value": "ACTIVE",
"name": "ACTIVE"
},
{
"value": "FAILED_WORKFLOW",
"name": "FAILED_WORKFLOW"
},
{
"value": "DELETED",
"name": "DELETED"
},
{
"value": "DISABLED",
"name": "DISABLED"
},
{
"value": "WORKFLOW_COMPLETED",
"name": "WORKFLOW_COMPLETED"
}
]
}
},
"com.amazonaws.licensemanager#RedirectException": {
"type": "structure",
"members": {

"Location": {
"target": "com.amazonaws.licensemanager#Location",
"traits": {
"smithy.api#httpHeader": "Location"
}
},

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
```

```
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licensemanager#RejectGrantResponse": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Grant ARN.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
          "smithy.api#documentation": "<p>Grant status.</p>"

    }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Grant version.</p>"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#RenewType": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "value": "None",
          "name": "NONE"
        },
        {
          "value": "Weekly",
          "name": "WEEKLY"
        },
        {
          "value": "Monthly",
```

"name": "MONTHLY"
}
]
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {

"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",
"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "string",
"traits": {

```
        "smithy.api#enum": [
            {
                "value": "DAY",
                "name": "DAY"
            },
            {
                "value": "WEEK",
                "name": "WEEK"
            },
            {
                "value": "MONTH",

        "name": "MONTH"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ReportGenerator": {
    "type": "structure",
    "members": {
        "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>"
            }
        },
        "ReportType": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
                "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
            }
        },
        "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
                "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
             }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
        },
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},

```
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }
        }
    },

"traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
  },
  "com.amazonaws.licensemanager#ReportType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "LicenseConfigurationSummaryReport",
                "name": "LICENSE_CONFIGURATION_SUMMARY_REPORT"
            },
            {
                "value": "LicenseConfigurationUsageReport",
                 "name": "LICENSE_CONFIGURATION_USAGE_REPORT"
            }
        ]
    }
  },
  "com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
  },
```

```
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
             "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
```

"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have
been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResource.NotFound",
"httpResponseCode": 400
},
"smithy.api#documentation": " The resource cannot be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EC2_INSTANCE",
"name": "EC2_INSTANCE"
},
{
"value": "EC2_HOST",

"name": "EC2_HOST"
},
{
"value": "EC2_AMI",
"name": "EC2_AMI"
},
{
"value": "RDS",
"name": "RDS"
},
{
"value": "SYSTEMS_MANAGER_MANAGED_INSTANCE",
"name": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
]
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket
reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published
to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

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                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation":
"<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"

      }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
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                "traits": {
                    "smithy.api#documentation": "<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

  {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"

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        }
    },
    "com.amazonaws.licensemanager#TokenType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "REFRESH_TOKEN",
                    "name": "REFRESH_TOKEN"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest":
 {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {

        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a
license\n        configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
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configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "

}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",

"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"

},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services

resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}

```
        },
        "com.amazonaws.licensemanager#ValidationException": {
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
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package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {
```

```
 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string
```

```
// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

//
Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err
```

```
 != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
```

```
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
 // * Fingerprint
 //
 //
 * Status
 Filters []types.Filter
```

```
 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListLicenses",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the
 license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "DeleteLicense",
 }
}
```

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incurred by, or claims asserted against, such Contributor by reason
of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following
boilerplate notice, with the fields enclosed by brackets "[]"
replaced with your own identifying information. (Don't include
the brackets!) The text should be enclosed in the appropriate
comment syntax for the file format. We also recommend that a
file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
identification within third-party archives.

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WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out
 := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if
 err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
```

```
 err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "AssociateLicense",
 }
}
```

1.3005 aws-sdk-go-v2-service-ec2 1.1.0

1.3005.1 Available under license :

```
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 //
 This member is required.
 SourceVersion *string
}

type DeleteLicenseOutput struct {

 // Date on which the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
}
```

```
func addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if
 err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack);
 err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns, addOperationGetLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
}

func addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil
 {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
```

```
 // * KeyFingerprint
 //
 //
 * Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
}

func addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
```

```
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata
```

```
 middleware.Metadata
}

func addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack);
 err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure
 the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional configuration
 // for workloads running with continuous connectivity. Choose a borrow
 // configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer
```

```
 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 //
 Information about the license.
 LicenseMetadata []types.Metadata
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
}

func addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack,
options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * KeyFingerprint
 //
 // * Issuer
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
}

func addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return
err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
```

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package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you
```

```
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 //
 Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string
```

```
 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
}

func addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
}

func addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
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}
if err =
addHTTPSignerV4Middleware(stack, options); err != nil {
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}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
```

1.3006 segment 0.9.0

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1.3007 waitress 3.0.2

1.3007.1 Available under license :

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1.3008 maphash 0.1.0

1.3008.1 Available under license :

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1.3009 aws-sdk-go-v2-credentials 1.11.2

1.3009.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * Fingerprint
 //
 // * IssuerName
 //
 // * Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
```

```
 return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
 nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
```

```
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
```

```
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
```

```
 }
 if err
 = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack,
 options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil
 {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
```

```
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
```

```
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure
the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional configuration
// for workloads running with continuous connectivity. Choose a borrow
// configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
```

```
 //
 // This member is required.
 Validity *types.DatetimeRange

 //
 Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return
 err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This
 member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
```

```
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
```

```
 return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if
 err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
{
   "smithy": "1.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
```

```
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
```

"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},

```
            {
                "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#RejectGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix":
 "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            }
        }
    },
    "com.amazonaws.licensemanager#AcceptGrant": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
            {

           "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant
status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#AllowedOperation":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "CreateGrant",
"name": "CREATE_GRANT"

```
            },
            {
                "value": "CheckoutLicense",
                "name": "CHECKOUT_LICENSE"
            },
            {
                "value": "CheckoutBorrowLicense",
                "name": "CHECKOUT_BORROW_LICENSE"
            },
            {
                "value": "CheckInLicense",
                "name": "CHECK_IN_LICENSE"
            },
            {
                "value": "ExtendConsumptionLicense",
                "name": "EXTEND_CONSUMPTION_LICENSE"
            },
            {
                "value": "ListPurchasedLicenses",
                "name": "LIST_PURCHASED_LICENSES"
            },
            {
                "value": "CreateToken",
                "name": "CREATE_TOKEN"
            }
        ]
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
```

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},
"com.amazonaws.licensemanager#Boolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {

```
        "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                 "smithy.api#required": {}
            }
        },
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
    }
},
"com.amazonaws.licensemanager#BoxBoolean": {
    "type": "boolean",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#BoxInteger": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#BoxLong": {

"type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#CheckInLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
    },
    "errors": [
        {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",

"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
}
},

"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                 "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web
Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
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"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {

"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation":
" Information about constraints. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

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            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                 "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
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idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Node ID. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation":
" Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {

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            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",

             "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PROVISIONAL",
                "name": "PROVISIONAL"
            },
            {
                "value": "PERPETUAL",
                "name": "PERPETUAL"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ClientRequestToken":
{
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
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            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode": 409
            },
            "smithy.api#documentation": "<p>There
was a conflict processing the request. Try your request again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
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        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
          }
        },
        "BorrowConfiguration": {

          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

        {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license entitlements with specific Amazon Web Services accounts.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {

  "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
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                "smithy.api#required": {}
            }
        },

    "Principals": {
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
                "smithy.api#documentation": "<p>The grant principals.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    }
    },
    "com.amazonaws.licensemanager#CreateGrantResponse":
{
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
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            }
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion": {
        "type": "operation",
        "input": {

   "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

              "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
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            "smithy.api#required": {}
          }
        },
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
             "smithy.api#required": {}
          }
        },
        "GrantName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",

       "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant
status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p> \n        <p>A license configuration is an abstraction of a customer license
 agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
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"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |

<code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest":
 {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS
CLI</a> in the <i>License Manager User Guide</i>.</p>",
               "smithy.api#required": {}
            }
          },
          "DestinationLicenseContext": {
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"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the AWS CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target":
 "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}
                }
            },

        "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be
generated daily, monthly, or weekly.</p>",
```

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation":
" Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}

```
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {

             "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}

    }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
```

```
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},

"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target":
"com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}

```
        },

    "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

  {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}

```
            }
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token,
encoded as a JWT token.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
        "type": "timestamp"
    },
    "com.amazonaws.licensemanager#DatetimeRange": {
        "type": "structure",
        "members": {
            "Begin": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Start of the time range.</p>",
                    "smithy.api#required": {}
                }
            },
            "End": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>End of the time range.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Describes a time range, in ISO8601-UTC format. "
}
},
"com.amazonaws.licensemanager#DeleteGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}

```
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {

      "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation":
"<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration
that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

        "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },

  "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse":
{
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}

},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "JWT_PS384",
"name": "JWT_PS384"
}
]
}
},

```
  "com.amazonaws.licensemanager#Entitlement": {
      "type": "structure",

"members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement resource. Use only if the unit is None.</p>"
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#Long",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
            }
        },
        "Overage": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",

  "traits": {
                "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement unit.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
    }
  },
```

```
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
         "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated
with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "Count",
                    "name": "COUNT"
                },
                {
                    "value": "None",
                    "name": "NONE"
                },
                {
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"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{

"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"
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},
{
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"name": "TERABYTES"
},
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"name": "BITS"
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"name": "KILOBITS"
},
{
"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},

{
"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
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"name": "MEGABYTES_PER_SECOND"

},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
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{
"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{
"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",

"name": "TERABITS_PER_SECOND"
},
{
"value": "Count/Second",
"name": "COUNT_PER_SECOND"
}
]
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",
"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"

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        },
        {
          "value": "Milliseconds",
          "name": "MILLISECONDS"
        },
        {
          "value": "Bytes",
          "name": "BYTES"
        },
        {
          "value": "Kilobytes",
          "name": "KILOBYTES"

    },
        {
          "value": "Megabytes",
          "name": "MEGABYTES"
        },
        {
          "value": "Gigabytes",
          "name": "GIGABYTES"
        },
        {
          "value": "Terabytes",
          "name": "TERABYTES"
        },
        {
          "value": "Bits",
          "name": "BITS"
        },
        {
          "value": "Kilobits",
          "name": "KILOBITS"
        },
        {
          "value": "Megabits",
          "name": "MEGABITS"
        },
        {
          "value": "Gigabits",
          "name": "GIGABITS"
        },
        {
          "value": "Terabits",
           "name": "TERABITS"
        },
        {
          "value": "Percent",
```

"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"
},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
},
{
"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{

"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",
"name": "TERABITS_PER_SECOND"
},
{
"value": "Count/Second",
"name": "COUNT_PER_SECOND"
}
]

```
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",

"members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                 "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {

        "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
```

```
        }
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
    "type": "structure",

  "members": {
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#FailedDependencyException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        },
        "ErrorCode": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },

 "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FailedDependency",
            "httpResponseCode": 424
        },
        "smithy.api#documentation": "<p>A dependency required to run the API is missing.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 424
    }
},
"com.amazonaws.licensemanager#Filter": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#FilterName",
            "traits": {
```

"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " Filter values. Filter values are case-sensitive. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName":
"item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}

```
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }

            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse": {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
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"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified grant. "
}
},
"com.amazonaws.licensemanager#GetGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
}
},

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"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",

    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
     "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
```

```
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation":
"<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {

  "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License configuration status.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Account ID of the
owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList":
{
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type":

"operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets
information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {

"smithy.api#documentation": " ID of the license
type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license
conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "

}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},

"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},

"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic
reports about your license configurations. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target":

"com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}

```
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse":
{
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target": "com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

 {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
```

"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "
}

},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}

```
        },
        "GrantName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

            "smithy.api#documentation": "<p>Grant name.</p>",
            "smithy.api#required": {}
          }
        },
        "ParentArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Parent ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "GranteePrincipalArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The grantee principal ARN.</p>",

"smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantStatus": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
```

"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "string",

"traits": {
"smithy.api#enum": [
{
"value": "PENDING_WORKFLOW",
"name": "PENDING_WORKFLOW"
},
{
"value": "PENDING_ACCEPT",
"name": "PENDING_ACCEPT"
},
{
"value": "REJECTED",
"name": "REJECTED"
},
{
"value": "ACTIVE",

"name": "ACTIVE"
},
{
"value": "FAILED_WORKFLOW",
"name": "FAILED_WORKFLOW"
},
{
"value": "DELETED",
"name": "DELETED"
},
{
"value": "PENDING_DELETE",
"name": "PENDING_DELETE"
},
{
"value": "DISABLED",
"name": "DISABLED"
},
{
"value": "WORKFLOW_COMPLETED",
"name": "WORKFLOW_COMPLETED"
}
]
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}

```
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Version of the granted license.</p>"
                }
            },
            "ReceivedMetadata": {
                "target": "com.amazonaws.licensemanager#ReceivedMetadata",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
```

```
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer",
        "traits": {
            "smithy.api#box": {}
        }
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",

 "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
             "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value
of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EQUALS",
"name": "EQUALS"
},
{
"value": "NOT_EQUALS",
"name": "NOT_EQUALS"
},
{
"value": "BEGINS_WITH",
"name": "BEGINS_WITH"
},
{
"value": "CONTAINS",
"name": "CONTAINS"
}
]
}
},

"com.amazonaws.licensemanager#InventoryFilterList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {

"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},

```
        "KeyFingerprint": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>"
```

```
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
             "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"

         }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>License creation time.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits":
{
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource

consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "DISABLED",
"name": "DISABLED"
}
]
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}

},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

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        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {
        "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds
 to the license type you are converting your resource from.  For more information about which platforms correspond
to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-
info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
```

```
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },

  "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

        "smithy.api#documentation": "<p>The time the usage operation value of the resource was changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {
```

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            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type":
"string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "IN_PROGRESS",
                    "name": "IN_PROGRESS"
                },
                {
                    "value": "SUCCEEDED",
                    "name": "SUCCEEDED"
                },
                {
                    "value": "FAILED",
                    "name": "FAILED"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "vCPU",
                    "name": "VCPU"

                },
                {
                    "value": "Instance",
                    "name": "INSTANCE"
                },
                {
                    "value": "Core",
```

```
            "name": "CORE"
          },
          {
            "value": "Socket",
            "name": "SOCKET"
          }
        ]
      }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "value": "PENDING_DELETE",
            "name": "PENDING_DELETE"
          },
          {
            "value": "DELETED",
            "name": "DELETED"
          }
        ]
      }
    },
    "com.amazonaws.licensemanager#LicenseList": {
      "type": "list",
       "member": {
        "target": "com.amazonaws.licensemanager#License"
      }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
          }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type.</p>"
          }
        },
        "ErrorMessage": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
```

"smithy.api#documentation": " Error message. "

}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {

"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "PENDING_AVAILABLE",
"name": "PENDING_AVAILABLE"
},
{
"value": "DEACTIVATED",
"name": "DEACTIVATED"
},
{
"value": "SUSPENDED",
"name": "SUSPENDED"

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                },
                {
                    "value": "EXPIRED",
                    "name": "EXPIRED"
                },
                {
                    "value": "PENDING_DELETE",
                    "name": "PENDING_DELETE"
                },
                {

                 "value": "DELETED",
                    "name": "DELETED"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {

         "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
```

```
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p> \n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending on \n        the license
rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

             "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n
        <code>LicenseArn</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GranteePrincipalARN</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>LicenseIssuerName</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},

"com.amazonaws.licensemanager#ListLicenseConfigurations":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configurations for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>licenseCountingType</code> - The dimension for which licenses are counted.\n  Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  <li>\n  <p>\n
                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. \n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  <li>\n  <p>\n  <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  </ul>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"

            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

    {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
        "type":
 "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n              <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to
 return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input":
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the
license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an
associated license configuration. ",
"smithy.api#required": {}

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            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

         "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
     "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum
number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
```

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            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {

"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received but not accepted. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",

"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are

supported: \n \n \n \n <code>ProductSKU</code>\n \n
\n \n \n <code>LicenseIssuerName</code>\n \n
\n \n \n <code>LicenseArn</code>\n \n \n
\n \n
<code>GrantStatus</code>\n \n \n \n \n
<code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {

"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",

"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n
\n \n \n \n <code>Beneficiary</code>\n \n \n "

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            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {

"target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"

},
        {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FailedDependencyException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {

"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are

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<code>EQUALS</code> | <code>NOT_EQUALS</code>.\n            Possible values are <code>sql-server-enterprise</code> | \n            <code>sql-server-standard</code> | \n            <code>sql-server-web</code> |  \n            <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n            <p>\n            <code>platform</code> - The platform of the resource.\n            Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n            <p>\n            <code>resource_id</code> - The ID of the resource. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n            <p>\n            <code>tag:<key></code> - The key/value combination of a tag assigned \n            to the resource. Logical operators are <code>EQUALS</code> (single account) or\n            <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits":
{
                    "smithy.api#documentation": "<p>Information about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required":
{}
}
}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target":
"com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse":
{
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource
 at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {

                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).
 \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
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        }
    }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#Location": {
    "type": "string"
},
"com.amazonaws.licensemanager#Long": {
    "type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                 "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
```

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},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {},
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
     },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
```

"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}

},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {

"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n
Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n
\n \n The following filters and logical operators are supported when the resource type\n

is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n
<code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target":
"com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"

}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {

"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {

"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "PENDING_WORKFLOW",
"name": "PENDING_WORKFLOW"
},
{
"value": "PENDING_ACCEPT",
"name": "PENDING_ACCEPT"
},
{
"value": "REJECTED",
"name": "REJECTED"
},
{
"value": "ACTIVE",
"name": "ACTIVE"
},
{
"value": "FAILED_WORKFLOW",
"name": "FAILED_WORKFLOW"
},
{

"value": "DELETED",
"name": "DELETED"
},
{
"value": "DISABLED",
"name": "DISABLED"
},
{
"value": "WORKFLOW_COMPLETED",
"name": "WORKFLOW_COMPLETED"
}
]
}
},
"com.amazonaws.licensemanager#RedirectException": {
"type": "structure",
"members": {

"Location": {
"target": "com.amazonaws.licensemanager#Location",
"traits": {
"smithy.api#httpHeader": "Location"
}
},
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " This is not the correct Region for the resource. Try again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#RejectGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
```

```
            }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RenewType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "None",
                    "name": "NONE"
                },
                {
                    "value": "Weekly",
                    "name": "WEEKLY"
                },
                {
                    "value": "Monthly",
                    "name": "MONTHLY"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {

  "licenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that
this generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
```

"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",
"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "DAY",
"name": "DAY"
},
{
"value": "WEEK",
"name": "WEEK"
},
{
"value": "MONTH",

"name": "MONTH"
}
]
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "

```
        }
    },
    "ReportType": {
        "target": "com.amazonaws.licensemanager#ReportTypeList",
        "traits": {
            "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
        }
    },
    "ReportContext": {
        "target": "com.amazonaws.licensemanager#ReportContext",
        "traits": {
            "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
         }
    },
    "ReportFrequency": {
        "target": "com.amazonaws.licensemanager#ReportFrequency",
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
        }
    },
    "LastRunStatus": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
        }
    },
    "LastRunFailureReason": {

  "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
        }
    },
    "LastReportGenerationTime": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
        }
    },
    "ReportCreatorAccount": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
```

"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}
}
},

"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100

```
        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "LicenseConfigurationSummaryReport",
                "name": "LICENSE_CONFIGURATION_SUMMARY_REPORT"
            },
            {
                "value": "LicenseConfigurationUsageReport",
                 "name": "LICENSE_CONFIGURATION_USAGE_REPORT"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
        "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
         "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have
been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {

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        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "EC2_INSTANCE",
                 "name": "EC2_INSTANCE"
            },
            {
                "value": "EC2_HOST",
                "name": "EC2_HOST"
            },
            {
                "value": "EC2_AMI",
                "name": "EC2_AMI"
            },
            {
                "value": "RDS",
                "name": "RDS"
            },
            {
                "value": "SYSTEMS_MANAGER_MANAGED_INSTANCE",
                "name": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        ]
    }
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
    "members": {
        "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket
```

reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 400
},

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            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"

      }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

  {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required":
 {}
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "ExpirationTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC format.</p>"
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "REFRESH_TOKEN",
"name": "REFRESH_TOKEN"
}
]
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",

```
            "traits": {
                "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
    "type": "structure",
    "members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {

    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "

}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",

"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"

```
        },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p> \n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
         "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to remove.</p>"
                }
            }
         }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {

"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type":
"string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string
```

```
 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 //
 Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err
!= nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
 // * Fingerprint
 //
 //
 * Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the
 license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "DeleteLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out
 := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if
 err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "AssociateLicense",
 }
}
```

1.3010 go-ntlmssp 0.0.0-20220621081337-cb9428e4ac1e

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1.3011 binaryregexp 0.2.0

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1.3012 vfsgen 0.0.0-20200824052919-0d455de96546

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1.3013 go-shortid 0.0.0-20171029131806-771a37caa5cf

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1.3014 go-metrics 0.3.3

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1.3015 protoreflect 1.8.3-0.20210616212123-6cc1efa697ca

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1.3016 aws-sdk-go-v2-feature-ec2-imds 1.12.3

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package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * Fingerprint
 //
 // * IssuerName
```

```
 //
 // * Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
 nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
```

```
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
```

```
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err
 = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
```

```
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack,
 options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil
 {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
```

```
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CreateLicenseInput struct {

// License beneficiary.
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure
the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional configuration
// for workloads running with continuous connectivity. Choose a borrow
// configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 //
 Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return
 err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This
 member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
```

```
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if
 err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
```

```
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
{
   "smithy": "1.0",
```

```
"metadata": {
    "suppressions": [
        {
            "id": "HttpMethodSemantics",
            "namespace": "*"
        },
        {
            "id": "HttpResponseCodeSemantics",
            "namespace": "*"
        },
        {
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#CreateGrantVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
```

"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},

{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix":
"license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"

```
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            }
        }
    },
    "com.amazonaws.licensemanager#AcceptGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
            {

           "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest":
```

```
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
```

```
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#AllowedOperation":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "CreateGrant",
                    "name": "CREATE_GRANT"
                },
                {
                    "value": "CheckoutLicense",
                    "name": "CHECKOUT_LICENSE"
                },
                {
                    "value": "CheckoutBorrowLicense",
                    "name": "CHECKOUT_BORROW_LICENSE"
                },
                {
                    "value": "CheckInLicense",
                    "name": "CHECK_IN_LICENSE"
                },
                {
                    "value": "ExtendConsumptionLicense",
                    "name": "EXTEND_CONSUMPTION_LICENSE"
                },
                {
                    "value": "ListPurchasedLicenses",
                    "name": "LIST_PURCHASED_LICENSES"
                 },
                {
                    "value": "CreateToken",
                    "name": "CREATE_TOKEN"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
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"min": 1,
"max": 7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "

```
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes automated discovery.</p>"
    }
},
"com.amazonaws.licensemanager#Boolean": {
    "type": "boolean"
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
    "type": "structure",
    "members": {
        "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                 "smithy.api#required": {}
            }
        },
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
    }
},
"com.amazonaws.licensemanager#BoxBoolean": {
    "type": "boolean",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#BoxInteger": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#BoxLong": {

"type": "long",
    "traits": {
```

"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License consumption token. ",

"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                 "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web
Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation":
" Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},

"SignedToken": {

"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation":
" Information about constraints. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"

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            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",

  "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
```

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation":
" Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "PROVISIONAL",
"name": "PROVISIONAL"
},
{

```
                "value": "PERPETUAL",
                "name": "PERPETUAL"
            }
        ]
    }
  },
  "com.amazonaws.licensemanager#ClientRequestToken":
{
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
  },
  "com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
  },
  "com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode": 409
        },
        "smithy.api#documentation": "<p>There
was a conflict processing the request. Try your request again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 409
    }
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
```

"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {

"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}

```
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

        {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license entitlements with specific Amazon Web Services accounts.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {

  "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },

    "Principals": {
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
                "smithy.api#documentation": "<p>The grant principals.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    }
  },
  "com.amazonaws.licensemanager#CreateGrantResponse":
{
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
```

```
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#CreateGrantVersion": {
    "type": "operation",
    "input": {

"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {

          "target": "com.amazonaws.licensemanager#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                     "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",

           "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                }
            },
```

```
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the grant.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license
agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest":
{
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}

```
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS
CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS
CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target":
 "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n
</ul>",
                    "smithy.api#required": {}
                }
            },
```

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation":
"<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {

            "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}

    }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

```
            "smithy.api#documentation": "<p>Current version of the license.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>"
          }
        },

      "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#CreateToken": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

     {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT
token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n          JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed
in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
```

"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}
}
}
},
"com.amazonaws.licensemanager#DateTime": {
"type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
"type": "structure",
"members": {
"Begin": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Start of the time range. ",
"smithy.api#required": {}
}
},
"End": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " End of the time range. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a time range, in ISO8601-UTC format. "
}
},
"com.amazonaws.licensemanager#DeleteGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {

      "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant status.</p>"
                }
            },
            "Version": {
```

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            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#DeleteLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
    "type": "operation",
    "input": {
```

"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration
that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

      "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
```

```
        }
    },

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse":
{
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
```

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {

      "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }

    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
```

"members": {}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "JWT_PS384",
"name": "JWT_PS384"
}
]
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",

"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}

```
            }
          },
          "AllowCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
         "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data value.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data unit.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Data associated
with an entitlement resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementData"
        }
      },
```

"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",
"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{

"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"
},
{
"value": "Megabytes",
"name": "MEGABYTES"
},
{
"value": "Gigabytes",
"name": "GIGABYTES"
},
{
"value": "Terabytes",
"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"

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            },
            {
              "value": "Kilobits",
              "name": "KILOBITS"
             },
            {
              "value": "Megabits",
              "name": "MEGABITS"
            },
            {
              "value": "Gigabits",
              "name": "GIGABITS"
            },
            {
              "value": "Terabits",
              "name": "TERABITS"
            },
            {
              "value": "Percent",
              "name": "PERCENT"
            },
            {
              "value": "Bytes/Second",
              "name": "BYTES_PER_SECOND"
            },
            {
              "value": "Kilobytes/Second",
              "name": "KILOBYTES_PER_SECOND"
            },
            {
              "value": "Megabytes/Second",
              "name": "MEGABYTES_PER_SECOND"

        },
            {
              "value": "Gigabytes/Second",
              "name": "GIGABYTES_PER_SECOND"
            },
            {
              "value": "Terabytes/Second",
              "name": "TERABYTES_PER_SECOND"
            },
            {
              "value": "Bits/Second",
              "name": "BITS_PER_SECOND"
            },
            {
              "value": "Kilobits/Second",
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"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",

"name": "TERABITS_PER_SECOND"
},
{
"value": "Count/Second",
"name": "COUNT_PER_SECOND"
}
]
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",

"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{
"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"

},
{
"value": "Megabytes",
"name": "MEGABYTES"
},
{
"value": "Gigabytes",
"name": "GIGABYTES"
},
{
"value": "Terabytes",
"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"
},
{
"value": "Kilobits",
"name": "KILOBITS"
},
{

"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},
{
"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"
},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
},
{
"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{

"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},

```
            {
                "value": "Gigabits/Second",
                "name": "GIGABITS_PER_SECOND"
            },
            {
                "value": "Terabits/Second",
                "name": "TERABITS_PER_SECOND"
            },
            {
                "value": "Count/Second",
                "name": "COUNT_PER_SECOND"
            }
        ]
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",

"members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
             "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
```

"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {

"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",

"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",

"httpResponseCode": 424
},
"smithy.api#documentation": " A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " Filter values. Filter values are case-sensitive. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName":
"item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }

            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse": {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
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        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
```

```
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",

    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
     "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Unique ID for the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {

"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the
owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList":
{
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}

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            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets
 information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
```

on. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license
type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license
conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "

}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic
reports about your license configurations.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
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                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target":
"com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
```

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        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse":
{
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target": "com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

  {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"
                }

            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }

    },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
```

```
    }
  },
  "com.amazonaws.licensemanager#Grant": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      },
      "GrantName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

          "smithy.api#documentation": "<p>Grant name.</p>",
          "smithy.api#required": {}
        }
      },
      "ParentArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Parent ARN.</p>",
          "smithy.api#required": {}
        }
      },
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>License ARN.</p>",
          "smithy.api#required": {}
        }
      },
      "GranteePrincipalArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>The grantee principal ARN.</p>",

"smithy.api#required": {}
        }
      },
      "HomeRegion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Home Region of the grant.</p>",
          "smithy.api#required": {}
        }
```

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        },
        "GrantStatus": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "Version": {

    "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Granted operations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a grant.</p>"
    }
},
"com.amazonaws.licensemanager#GrantList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "string",

    "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_WORKFLOW",
                "name": "PENDING_WORKFLOW"
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            },
            {
                "value": "PENDING_ACCEPT",
                "name": "PENDING_ACCEPT"
            },
            {
                "value": "REJECTED",
                "name": "REJECTED"
            },
            {
                "value": "ACTIVE",
                "name": "ACTIVE"
            },
            {
                "value": "FAILED_WORKFLOW",
                "name": "FAILED_WORKFLOW"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            },
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
            },
            {
                "value": "DISABLED",
                "name": "DISABLED"
            },
            {
                "value": "WORKFLOW_COMPLETED",
                "name": "WORKFLOW_COMPLETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},

"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},

"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",

"httpResponseCode": 400
},
"smithy.api#documentation": " One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},

"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EQUALS",
"name": "EQUALS"
},
{
"value": "NOT_EQUALS",
"name": "NOT_EQUALS"
},

```
                {
                    "value": "BEGINS_WITH",
                    "name": "BEGINS_WITH"
                },
                {
                    "value": "CONTAINS",
                    "name": "CONTAINS"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}

},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "

}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}

},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated
discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license
agreement that can be\n consumed and enforced by License Manager. Components include specifications for
the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a
host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name
(ARN) of the resource. "
}

```
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was associated with the
resource.</p>"
                }
            },
            "AmiAssociationScope":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "AVAILABLE",
                    "name": "AVAILABLE"
                },
```

```
                {
                  "value": "DISABLED",
                  "name": "DISABLED"
                }
              ]
            }
          },
          "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
            "type": "structure",
            "members": {
              "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
              },
              "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                  "smithy.api#documentation": "<p>Type of resource.</p>"
                }
              },
              "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
              },
              "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
              },
              "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                  "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
              },
              "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                  "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
              }
```

},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type":
"string",
"traits": {
"smithy.api#enum": [
{
"value": "IN_PROGRESS",
"name": "IN_PROGRESS"
},
{
"value": "SUCCEEDED",
"name": "SUCCEEDED"
},
{
"value": "FAILED",
"name": "FAILED"
}
]
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConversionTask"
}
},
"com.amazonaws.licensemanager#LicenseCountingType": {
"type": "string",
"traits": {
"smithy.api#enum": [

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            {
                "value": "vCPU",
                "name": "VCPU"

          },
            {
                "value": "Instance",
                "name": "INSTANCE"
            },
            {
                "value": "Core",
                "name": "CORE"
            },
            {
                "value": "Socket",
                "name": "SOCKET"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
```

```
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"

    }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Failure time.</p>"
            }
        },
        "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
            }
        },
        "OperationRequestedBy": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
            }
        },
        "MetadataList": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
            }
        }
    },
```

"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},

```
            {
                "value": "PENDING_AVAILABLE",
                "name": "PENDING_AVAILABLE"
            },
            {
                "value": "DEACTIVATED",
                "name": "DEACTIVATED"
            },
            {
                "value": "SUSPENDED",
                "name": "SUSPENDED"
            },
            {
                "value": "EXPIRED",
                "name": "EXPIRED"
            },
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
            },
            {

             "value": "DELETED",
                "name": "DELETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
```

```
        },
        "traits": {

         "aws.protocols#awsQueryError": {
              "code": "LicenseUsageFailure",
              "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p> \n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending on \n        the license
rules).</p>"
        }
    },
```

"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target":

"com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n

```
<code>LicenseArn</code>\n </p>\n </li>\n <li>\n <p>\n
<code>GrantStatus</code>\n </p>\n </li>\n <li>\n <p>\n
<code>GranteePrincipalARN</code>\n </p>\n </li>\n <li>\n <p>\n
<code>ProductSKU</code>\n </p>\n </li>\n <li>\n <p>\n
<code>LicenseIssuerName</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
             "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

  "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
```

```
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
    "type": "structure",
    "members": {
        "LicenseOperationFailureList": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
                "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurations":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },

    {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
```

"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "

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                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target":
"com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

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            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
                 }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },

        {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
        "type":
 "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n              <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to
```

return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the
license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

             "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
"<p>Lists all versions of the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum
number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n            </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n            </p>\n            </li>\n
    <li>\n            <p>\n
        <code>Fingerprint</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Status</code>\n            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
```

"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received but not accepted. "
}

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",

    "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n
  <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {

       "target": "com.amazonaws.licensemanager#GrantList",
          "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
        "NextToken": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",

"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n
\n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {

"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}

```
    },
    "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"

},
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FailedDependencyException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {

        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required":
{}
}
}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {

"smithy.api#documentation": " Information about the tags. "
}
}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target":
"com.amazonaws.licensemanager#FilterList",
"traits": {

"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListTokensResponse":
{
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource
 at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {

                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
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"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType": {

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            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {},
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
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"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}

},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#documentation": " Enables Organizations integration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is

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<code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>Platform
Type</code> - The platform type.\n
 Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
<code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from
automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended
to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>.
<code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n              </p>\n
        </li>\n            <li>\n              <p>\n                <code>AccountId</code> - The 12-digit ID of an Amazon Web
Services account you wish to exclude from automated discovery.\n              Logical operator is
<code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>License
Included</code> - The type of license included.\n              Logical operators are <code>EQUALS</code> and
<code>NOT_EQUALS</code>.\n
              Possible values are: <code>sql-server-enterprise</code> | \n              <code>sql-server-standard</code> |
\n              <code>sql-server-web</code> |  \n              <code>windows-server-datacenter</code>.</p>\n
</li>\n        </ul>\n        <p>The following filters and logical operators are supported when the resource type\n
is <code>RDS</code>:</p>\n        <ul>\n            <li>\n              <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n              Logical operator is <code>EQUALS</code>.\n              Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>License Pack</code> - The license
pack.\n              Logical operator is <code>EQUALS</code>.\n              Possible values are: <code>data
guard</code> | \n
            <code>diagnostic pack sqlt</code> | \n              <code>tuning pack sqlt</code> | \n
<code>ols</code> | \n              <code>olap</code>.</p>\n            </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#ProductInformationFilter": {
          "type": "structure",
          "members": {
            "ProductInformationFilterName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductInformationFilterValue": {
              "target":
 "com.amazonaws.licensemanager#StringList",
              "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
              }
            },
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        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",

   "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
    }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"

   }
    },
```

"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {

"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "PENDING_WORKFLOW",
"name": "PENDING_WORKFLOW"
},
{
"value": "PENDING_ACCEPT",

"name": "PENDING_ACCEPT"
},
{
"value": "REJECTED",
"name": "REJECTED"
},
{
"value": "ACTIVE",
"name": "ACTIVE"
},
{
"value": "FAILED_WORKFLOW",
"name": "FAILED_WORKFLOW"
},
{
"value": "DELETED",
"name": "DELETED"
},
{
"value": "DISABLED",
"name": "DISABLED"
},
{
"value": "WORKFLOW_COMPLETED",
"name": "WORKFLOW_COMPLETED"
}
]
}
},
"com.amazonaws.licensemanager#RedirectException": {
"type": "structure",
"members": {

"Location": {
"target": "com.amazonaws.licensemanager#Location",
"traits": {
"smithy.api#httpHeader": "Location"
}
},
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " This is not the correct Region for the resource. Try again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 308
}

```
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
```

```
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"

    }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#RenewType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "None",
                "name": "NONE"
            },
            {
                "value": "Weekly",
                "name": "WEEKLY"
            },
            {
                "value": "Monthly",
                "name": "MONTHLY"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
```

"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",
"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "DAY",
"name": "DAY"
},
{
"value": "WEEK",
"name": "WEEK"
},

```
            {
                "value": "MONTH",

        "name": "MONTH"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ReportGenerator": {
    "type": "structure",
    "members": {
        "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>"
            }
        },
        "ReportType": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
                "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
            }
        },
        "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
                "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
             }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
        },
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}
}
},

"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "LicenseConfigurationSummaryReport",
"name": "LICENSE_CONFIGURATION_SUMMARY_REPORT"
},
{
"value": "LicenseConfigurationUsageReport",
"name": "LICENSE_CONFIGURATION_USAGE_REPORT"
}
]
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}

```
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
             "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
    },
    "com.amazonaws.licensemanager#ResourceLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
```

```
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ResourceLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>Your resource limits have
been exceeded.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResource.NotFound",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The resource cannot be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#ResourceType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "EC2_INSTANCE",
                     "name": "EC2_INSTANCE"
                },
                {
                    "value": "EC2_HOST",
                    "name": "EC2_HOST"
                },
                {
                    "value": "EC2_AMI",
                    "name": "EC2_AMI"
                },
                {
                    "value": "RDS",
```

"name": "RDS"
},
{
"value": "SYSTEMS_MANAGER_MANAGED_INSTANCE",
"name": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
]
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}

```
},
"com.amazonaws.licensemanager#SignedToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 4096
        }
    }
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 400
        },
        "smithy.api#pattern": "^[\\s\\S]+$"
    }
},
"com.amazonaws.licensemanager#String": {
    "type": "string"
},
"com.amazonaws.licensemanager#StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"

  }
},
"com.amazonaws.licensemanager#Tag": {
    "type": "structure",
    "members": {
        "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Tag key.</p>"
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Tag value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

  {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}

```
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
             },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType":
 {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
```

```
                "value": "REFRESH_TOKEN",
                "name": "REFRESH_TOKEN"
            }
        ]
    }
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#UntagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UntagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UntagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Removes the specified tags from the specified license configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest":
 {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {

        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a
license\n          configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
                }
```

```
    },
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New name of the license configuration.</p>"
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New description of the license configuration.</p>"
          }
        },
        "ProductInformationList": {
          "target": "com.amazonaws.licensemanager#ProductInformationList",
          "traits": {
            "smithy.api#documentation": "<p>New product information.</p>"
          }
        },
        "DisassociateWhenNotFound": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "

}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {

"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"

},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {

"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

```
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
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package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
```

```
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn *string

 // License consumption token.
```

```
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 //
 Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err
 != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
 // * Fingerprint
 //
 //
 * Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
```

```
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the
 license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "DeleteLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
```

```
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out
 := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if
 err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "AssociateLicense",
 }
}
```

1.3017 bitset 1.2.0

1.3017.1 Available under license :

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1.3018 aws-sdk-go-v2-service-sso 1.11.3

1.3018.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * Fingerprint
 //
 // * IssuerName
 //
 // * Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return
```

```
err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {
```

```
 // Unique, case-sensitive identifier that you
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
```

```
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
```

```
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err
 = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack,
 options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil
 {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
```

```
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
```

```
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure
 the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional configuration
 // for workloads running with continuous connectivity. Choose a borrow
 // configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string
```

```
 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 //
 Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return
 err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
```

```
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This
 member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
```

```
 return err
 }
 if
 err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
{
  "smithy": "1.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
```

},
{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {

"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix":
"license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest":
{
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant
status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {

```
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "value": "CreateGrant",
              "name": "CREATE_GRANT"
            },
            {
              "value": "CheckoutLicense",
              "name": "CHECKOUT_LICENSE"
            },
            {
              "value": "CheckoutBorrowLicense",
              "name": "CHECKOUT_BORROW_LICENSE"
            },
            {
              "value": "CheckInLicense",
              "name": "CHECK_IN_LICENSE"
            },
            {
              "value": "ExtendConsumptionLicense",
              "name": "EXTEND_CONSUMPTION_LICENSE"
            },
            {
              "value": "ListPurchasedLicenses",
              "name": "LIST_PURCHASED_LICENSES"
             },
            {
              "value": "CreateToken",
              "name": "CREATE_TOKEN"
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
```

"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},
"com.amazonaws.licensemanager#Boolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer",

"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#BoxLong": {

"type": "long",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "

```
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",

        "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web

Signature (JWS) algorithm PS384.\n For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "

```
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {

         "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation":
"<p>Information about constraints.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
```

"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Node ID. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}

```
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation":
"<p>Allowed license entitlements.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",

              "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
```

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "PROVISIONAL",
"name": "PROVISIONAL"
},
{
"value": "PERPETUAL",
"name": "PERPETUAL"
}
]
}
},
"com.amazonaws.licensemanager#ClientRequestToken":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode": 409
},
"smithy.api#documentation": "<p>There

was a conflict processing the request. Try your request again. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": " Resource type of the resource consuming a license. "
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": " Number of licenses consumed by the resource. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Details about license consumption. "
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": " Renewal frequency. "
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": " Details about a provisional configuration. "
                }
            },
            "BorrowConfiguration": {

"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license entitlements with specific Amazon Web Services accounts. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {

"type": "structure",
"members": {

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},

"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
}

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    },
    "com.amazonaws.licensemanager#CreateGrantResponse":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion": {
        "type": "operation",
        "input": {

  "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "

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            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",

         "traits": {
              "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant
status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
```

```
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p> \n        <p>A license configuration is an abstraction of a customer license
 agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {

"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits":
{
"smithy.api#documentation": " Product information. "
}

```
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest":
```

```
{
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to. For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target":
"com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
```

"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {

"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

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            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation":
 "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {

             "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
```

```
}
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>",
                "smithy.api#required": {}
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
```

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            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                     "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target":
```

"com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},

"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

        {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT
token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed
```

in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}

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            }
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
        "type": "timestamp"
    },
    "com.amazonaws.licensemanager#DatetimeRange": {
        "type": "structure",
        "members": {
            "Begin": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Start of the time range.</p>",
                    "smithy.api#required": {}
                }
            },
            "End": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>End of the time range.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC
format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {

    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
```

"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation":
" Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p> \n          <p>You cannot delete a license configuration
 that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

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            }
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

         "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
```

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}

},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "JWT_PS384",
"name": "JWT_PS384"
}
]
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",

"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {

"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " Data associated
with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",
"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{

"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"
},
{
"value": "Megabytes",
"name": "MEGABYTES"
},

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            {
              "value": "Gigabytes",
              "name": "GIGABYTES"
            },
            {
              "value": "Terabytes",
              "name": "TERABYTES"
            },
            {
              "value": "Bits",
              "name": "BITS"
            },
            {
              "value": "Kilobits",
              "name": "KILOBITS"
             },
            {
              "value": "Megabits",
              "name": "MEGABITS"
            },
            {
              "value": "Gigabits",
              "name": "GIGABITS"
            },
            {
              "value": "Terabits",
              "name": "TERABITS"
            },
            {
              "value": "Percent",
              "name": "PERCENT"
            },
            {
              "value": "Bytes/Second",
              "name": "BYTES_PER_SECOND"
            },
            {
              "value": "Kilobytes/Second",
              "name": "KILOBYTES_PER_SECOND"
            },
            {
              "value": "Megabytes/Second",
              "name": "MEGABYTES_PER_SECOND"

        },
            {
              "value": "Gigabytes/Second",
              "name": "GIGABYTES_PER_SECOND"
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            },
            {
                "value": "Terabytes/Second",
                "name": "TERABYTES_PER_SECOND"
            },
            {
                "value": "Bits/Second",
                "name": "BITS_PER_SECOND"
            },
            {
                "value": "Kilobits/Second",
                "name": "KILOBITS_PER_SECOND"
            },
            {
                "value": "Megabits/Second",
                "name": "MEGABITS_PER_SECOND"
            },
            {
                "value": "Gigabits/Second",
                "name": "GIGABITS_PER_SECOND"
            },
            {
                "value": "Terabits/Second",

"name": "TERABITS_PER_SECOND"
            },
            {
                "value": "Count/Second",
                "name": "COUNT_PER_SECOND"
            }
        ]
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
```

```
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {

 "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "Count",
                "name": "COUNT"
            },
            {
                "value": "None",
                "name": "NONE"
            },
            {
                "value": "Seconds",
                "name": "SECONDS"
            },
            {
                "value": "Microseconds",
                "name": "MICROSECONDS"
            },
            {
                "value": "Milliseconds",
                "name": "MILLISECONDS"
            },
            {
                "value": "Bytes",
                "name": "BYTES"
            },
            {
                "value": "Kilobytes",
                "name": "KILOBYTES"

    },
            {
                "value": "Megabytes",
                "name": "MEGABYTES"
            },
            {
                "value": "Gigabytes",
                "name": "GIGABYTES"
            },
            {
                "value": "Terabytes",
```

"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"
},
{
"value": "Kilobits",
"name": "KILOBITS"
},
{
"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},
{
"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"
},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
},
{
"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{

"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",
"name": "TERABITS_PER_SECOND"
},
{
"value": "Count/Second",
"name": "COUNT_PER_SECOND"
}
]
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",

"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "

```
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
             "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {

    "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",

        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation": " A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " Filter values. Filter values are case-sensitive. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error":
"client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName":
"item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}

}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {

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        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",

    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

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            }
          }
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules.</p>"
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the
owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList":

{
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Gets
information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license
type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license
conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "

}
},
"StatusMessage": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic
reports about your license configurations. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target":
"com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse":
{
"type": "structure",
"members": {
"LicenseUsage": {
"target": "com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

  {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"
                }

            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",

"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {

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        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "string",

  "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_WORKFLOW",
                "name": "PENDING_WORKFLOW"
            },
            {
                "value": "PENDING_ACCEPT",
                "name": "PENDING_ACCEPT"
            },
            {
                "value": "REJECTED",
                "name": "REJECTED"
            },
            {
                "value": "ACTIVE",
                "name": "ACTIVE"
            },
            {
                "value": "FAILED_WORKFLOW",
                "name": "FAILED_WORKFLOW"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            },
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
             },
            {
                "value": "DISABLED",
                "name": "DISABLED"
            },
            {
                "value": "WORKFLOW_COMPLETED",
                "name": "WORKFLOW_COMPLETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
```

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",

"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer",
        "traits": {
            "smithy.api#box": {}
        }
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",

 "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
```

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EQUALS",
"name": "EQUALS"
},
{
"value": "NOT_EQUALS",
"name": "NOT_EQUALS"
},
{
"value": "BEGINS_WITH",
"name": "BEGINS_WITH"
},
{
"value": "CONTAINS",
"name": "CONTAINS"
}
]
}
},
"com.amazonaws.licensemanager#InventoryFilterList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},

"traits": {

"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "

```
            }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
```

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        },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                    "smithy.api#documentation": "<p>License rules.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"

    }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated
discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license
agreement that can be\n consumed and enforced by License Manager. Components include specifications for
the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a

host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name
(ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource
consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was associated with the
resource. "
}
},
"AmiAssociationScope":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-
account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",

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        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "AVAILABLE",
                    "name": "AVAILABLE"
                },
                 {
                    "value": "DISABLED",
                    "name": "DISABLED"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

"smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
```

"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}

},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},

"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "

```
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

        "smithy.api#documentation": "<p>The time the usage operation value of the resource was changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type":
"string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "IN_PROGRESS",
                    "name": "IN_PROGRESS"
                },
                {
                    "value": "SUCCEEDED",
                    "name": "SUCCEEDED"
                },
                {
                    "value": "FAILED",
                    "name": "FAILED"
                }
            ]
```

```
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "vCPU",
                "name": "VCPU"

            },
            {
                "value": "Instance",
                "name": "INSTANCE"
            },
            {
                "value": "Core",
                "name": "CORE"
            },
            {
                "value": "Socket",
                "name": "SOCKET"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseList": {
```

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "

}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",

"traits": {

"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "PENDING_AVAILABLE",
"name": "PENDING_AVAILABLE"
},
{
"value": "DEACTIVATED",
"name": "DEACTIVATED"
},
{
"value": "SUSPENDED",
"name": "SUSPENDED"
},
{
"value": "EXPIRED",
"name": "EXPIRED"
},
{
"value": "PENDING_DELETE",
"name": "PENDING_DELETE"
},
{

"value": "DELETED",
"name": "DELETED"
}
]
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {

         "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p> \n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending on \n        the license
rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                 }
            }
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {
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"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},

"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

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                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

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        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n
                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement
is used. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that indicates
whether the available licenses have been exceeded. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"

                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target":
"com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
      "type": "structure",
      "members": {
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#Filters",
          "traits": {
            "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
      "type": "structure",
      "members": {
        "LicenseConversionTasks": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
      },
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"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type":
"structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to
return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input":
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the
license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an
associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum
number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
         "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n
        <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {

    "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received but not accepted.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",

    "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n
  <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
```

"Grants": {

"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",

"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n
\n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {

"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}

```
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"

},
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
```

"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits":
{
"smithy.api#documentation": " Information about the resources. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required":
{}
}

```
            }
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
```

"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target":
"com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListTokensResponse":
{
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource
at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

```
                }
            },
            "NextToken": {

                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> |
<code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).
 \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
    <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the
resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n        </ul>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
```

```
    "type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {},
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
     },
    "traits": {
        "smithy.api#length": {
```

```
                "min": 0,
                "max": 3
            }
        }
    },
    "com.amazonaws.licensemanager#Message": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The key name.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }

    },
    "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Metadata"
        }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
```

```
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
      "type": "structure",
      "members": {
        "EnableIntegration": {
          "target": "com.amazonaws.licensemanager#Boolean",

      "traits": {
            "smithy.api#documentation": "<p>Enables Organizations integration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
      }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Arn"
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 1
        }
      }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

 "smithy.api#documentation": "<p>Resource type. The possible values are <code>SSM_MANAGED</code> |
<code>RDS</code>.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterList": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
          "traits": {
            "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
```

for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n
Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n
<code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}

```
            }
        },
        "ProductInformationFilterValue": {
            "target":
"com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",

   "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
    }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"

      }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
        "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 429
      }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
      "type": "structure",
      "members": {
        "ReceivedStatus": {
          "target": "com.amazonaws.licensemanager#ReceivedStatus",
          "traits": {
            "smithy.api#documentation": "<p>Received status.</p>"
          }
        },
        "ReceivedStatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {

      "smithy.api#documentation": "<p>Received status reason.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
```

```
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "value": "PENDING_WORKFLOW",
            "name": "PENDING_WORKFLOW"
          },
          {
            "value": "PENDING_ACCEPT",
            "name": "PENDING_ACCEPT"
          },
           {
            "value": "REJECTED",
            "name": "REJECTED"
          },
          {
            "value": "ACTIVE",
            "name": "ACTIVE"
          },
          {
            "value": "FAILED_WORKFLOW",
            "name": "FAILED_WORKFLOW"
          },
          {
            "value": "DELETED",
            "name": "DELETED"
          },
          {
            "value": "DISABLED",
            "name": "DISABLED"
          },
          {
            "value": "WORKFLOW_COMPLETED",
            "name": "WORKFLOW_COMPLETED"
          }
        ]
      }
    },
    "com.amazonaws.licensemanager#RedirectException": {
      "type": "structure",
      "members": {

  "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
```

```
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licensemanager#RejectGrantResponse": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Grant ARN.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
          "smithy.api#documentation": "<p>Grant status.</p>"

    }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Grant version.</p>"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#RenewType": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "value": "None",
          "name": "NONE"
        },
        {
          "value": "Weekly",
          "name": "WEEKLY"
        },
        {
          "value": "Monthly",
```

"name": "MONTHLY"
}
]
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {

"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",
"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "string",
"traits": {

```
        "smithy.api#enum": [
            {
                "value": "DAY",
                "name": "DAY"
            },
            {
                "value": "WEEK",
                "name": "WEEK"
            },
            {
                "value": "MONTH",

        "name": "MONTH"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ReportGenerator": {
    "type": "structure",
    "members": {
        "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>"
            }
        },
        "ReportType": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
                "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
            }
        },
        "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
                "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
             }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
        },
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},

```
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }
        }
    },

"traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
  },
  "com.amazonaws.licensemanager#ReportType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "LicenseConfigurationSummaryReport",
                "name": "LICENSE_CONFIGURATION_SUMMARY_REPORT"
            },
            {
                "value": "LicenseConfigurationUsageReport",
                 "name": "LICENSE_CONFIGURATION_USAGE_REPORT"
            }
        ]
    }
  },
  "com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
  },
```

```
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
             "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
```

"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have
been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResource.NotFound",
"httpResponseCode": 400
},
"smithy.api#documentation": " The resource cannot be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EC2_INSTANCE",
"name": "EC2_INSTANCE"
},
{
"value": "EC2_HOST",

"name": "EC2_HOST"
},
{
"value": "EC2_AMI",
"name": "EC2_AMI"
},
{
"value": "RDS",
"name": "RDS"
},
{
"value": "SYSTEMS_MANAGER_MANAGED_INSTANCE",
"name": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
]
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket
reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published
to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

```
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation":
"<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"

       }
      },
      "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Tag key.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"

```
        }
    },
    "com.amazonaws.licensemanager#TokenType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "REFRESH_TOKEN",
                    "name": "REFRESH_TOKEN"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest":
 {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {

        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a
license\n configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
```

configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "

}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",

"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"

},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services

resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}

```
        },
        "com.amazonaws.licensemanager#ValidationException": {
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {
```

```
 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string
```

```
// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

//
Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err
```

```
 != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
```

```
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
 // * Fingerprint
 //
 //
 * Status
 Filters []types.Filter
```

```
 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListLicenses",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the
 license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "DeleteLicense",
 }
}
```

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1. Definitions.

"License" shall mean the terms and conditions for use, reproduction,
and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by
the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all
other entities that control, are controlled by, or are under common
control with that entity. For the purposes of this definition,
"control" means (i) the power, direct or indirect, to cause the
direction or management of such entity, whether by contract or
otherwise, or (ii) ownership of fifty percent (50%) or more of the
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out
 := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if
 err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
```

```
 err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "AssociateLicense",
 }
}
```

1.3019 sshtunnel 0.4.0

1.3019.1 Available under license :

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1.3020 tail 1.0.1-0.20210707231403-b283181d1fa7

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tomb - support for clean goroutine termination in Go.

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1.3021 aws-sdk-go-v2-internal-configsources 1.1.9

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```
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package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * Fingerprint
 //
 // * IssuerName
 //
 // * Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
```

```
 nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {
```

```
 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
```

```
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err
 = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string
```

```
 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack,
 options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil
 {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
```

```
  name: License Scan
  runs-on: ubuntu-latest
  strategy:
    matrix:
      python-version: [3.9]

  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure
 the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional configuration
 // for workloads running with continuous connectivity. Choose a borrow
 // configuration for workloads with offline usage.
 //
 // This member is required.
```

```
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 //
 Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string
```

```
 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return
 err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This
 member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if
err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addRequestResponseLogging(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
{
   "smithy": "1.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
           {
               "id": "HttpHeaderTrait",
               "namespace": "*"
           },
           {
               "id": "HttpUriConflict",
               "namespace": "*"
           },
           {
               "id": "Service",
               "namespace": "*"
           }
       ]
```

```
},
"shapes": {
  "com.amazonaws.licensemanager#AWSLicenseManager": {
    "type": "service",
    "version": "2018-08-01",
    "operations": [
      {
        "target": "com.amazonaws.licensemanager#AcceptGrant"
      },

 {
        "target": "com.amazonaws.licensemanager#CheckInLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrantVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
       },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateToken"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteLicense"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
    },
    {
```

"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},

{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix":
"license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest":
{
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant
status. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#AllowedOperation":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "CreateGrant",
                    "name": "CREATE_GRANT"
                },
                {
                    "value": "CheckoutLicense",
                    "name": "CHECKOUT_LICENSE"
                },
                {
                    "value": "CheckoutBorrowLicense",
                    "name": "CHECKOUT_BORROW_LICENSE"
                },
                {
                    "value": "CheckInLicense",
                    "name": "CHECK_IN_LICENSE"
                },
                {
                    "value": "ExtendConsumptionLicense",
```

"name": "EXTEND_CONSUMPTION_LICENSE"
},
{
"value": "ListPurchasedLicenses",
"name": "LIST_PURCHASED_LICENSES"
},
{
"value": "CreateToken",
"name": "CREATE_TOKEN"
}
]
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

```
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation":
 {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },
    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                     "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

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    "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
    }
},
"com.amazonaws.licensemanager#BoxBoolean": {
    "type": "boolean",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#BoxInteger": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#BoxLong": {

"type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#CheckInLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
        {
```

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",

"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

              "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                 "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web
Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",

  "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
```

```
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "SignedToken": {

       "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
        },
        "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation":
"<p>Information about constraints.</p>"
            }
        }
    }
},
```

"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. "
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {

"ProductSKU":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Node ID. "

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            }
          }
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
        "type": "structure",
        "members": {
          "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
              "smithy.api#documentation": "<p>Checkout type.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation":
"<p>Allowed license entitlements.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PROVISIONAL",
                "name": "PROVISIONAL"
            },
            {
                "value": "PERPETUAL",
                "name": "PERPETUAL"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ClientRequestToken":
{
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
```

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode": 409
},
"smithy.api#documentation": " There
was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",

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            "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
        },
        "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
            }
        },
        "BorrowConfiguration": {

            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
},
"com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },

    {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license entitlements with specific Amazon Web Services accounts. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},

"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateGrantResponse":
{
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "

```
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",

       "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant
status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
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```
            "smithy.api#documentation": "<p>New version of the grant.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
```

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p> \n        <p>A license configuration is an abstraction of a customer license
 agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},

"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest":
 {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS
CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS
CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
```

```
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a report generator.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
    "type": "structure",
```

"members": {
"ReportGeneratorName": {
"target":
"com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},

"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation":
" Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {

"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",

"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}

}
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}

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            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
            "target":
 "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>"
            }
        },

      "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
```

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        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

      {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT
token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token,
encoded as a JWT token. "
}
}
}
},
"com.amazonaws.licensemanager#DateTime": {
"type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
"type": "structure",
"members": {
"Begin": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Start of the time range. ",
"smithy.api#required": {}
}
},
"End": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " End of the time range. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a time range, in ISO8601-UTC
format. "
}
},
"com.amazonaws.licensemanager#DeleteGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteGrantResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {

"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. ",
"smithy.api#required": {}

```
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p> \n          <p>You cannot delete a license configuration
 that is in use.</p>"
        }
```

```
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
    "type": "structure",
    "members": {}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse":

```
{
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {

      "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }

  },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "JWT_PS384",
                    "name": "JWT_PS384"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",

   "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Entitlement resource. Use only if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data value. "

```
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Data associated
with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementDataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
    }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "Count",
                "name": "COUNT"
            },
            {
                "value": "None",
                "name": "NONE"
            },
            {
                "value": "Seconds",
                "name": "SECONDS"
            },
            {
                "value": "Microseconds",
                "name": "MICROSECONDS"
            },
            {

"value": "Milliseconds",
                "name": "MILLISECONDS"
            },
            {
                "value": "Bytes",
```

"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"
},
{
"value": "Megabytes",
"name": "MEGABYTES"
},
{
"value": "Gigabytes",
"name": "GIGABYTES"
},
{
"value": "Terabytes",
"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"
},
{
"value": "Kilobits",
"name": "KILOBITS"
},
{
"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},
{
"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",

"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"

},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
},
{
"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{
"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",

"name": "TERABITS_PER_SECOND"
},
{
"value": "Count/Second",
"name": "COUNT_PER_SECOND"
}
]
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}

```
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {

 "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "Count",
                "name": "COUNT"
            },
            {
                "value": "None",
                "name": "NONE"
            },
            {
                "value": "Seconds",
                "name": "SECONDS"
            },
            {
                "value": "Microseconds",
                "name": "MICROSECONDS"
            },
            {
                "value": "Milliseconds",
                "name": "MILLISECONDS"
            },
            {
                "value": "Bytes",
                "name": "BYTES"
            },
            {
                "value": "Kilobytes",
                "name": "KILOBYTES"
```

},
{
"value": "Megabytes",
"name": "MEGABYTES"
},
{
"value": "Gigabytes",
"name": "GIGABYTES"
},
{
"value": "Terabytes",
"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"
},
{
"value": "Kilobits",
"name": "KILOBITS"
},
{
"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},
{
"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"

```
            },
            {
              "value": "Gigabytes/Second",
              "name": "GIGABYTES_PER_SECOND"
            },
            {
              "value": "Terabytes/Second",
              "name": "TERABYTES_PER_SECOND"
            },
            {

      "value": "Bits/Second",
              "name": "BITS_PER_SECOND"
            },
            {
              "value": "Kilobits/Second",
              "name": "KILOBITS_PER_SECOND"
            },
            {
              "value": "Megabits/Second",
              "name": "MEGABITS_PER_SECOND"
            },
            {
              "value": "Gigabits/Second",
              "name": "GIGABITS_PER_SECOND"
            },
            {
              "value": "Terabits/Second",
              "name": "TERABITS_PER_SECOND"
            },
            {
              "value": "Count/Second",
              "name": "COUNT_PER_SECOND"
            }
          ]
        }
      },
      "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",

    "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement usage name.</p>",
              "smithy.api#required": {}
            }
          },
```

```
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
             "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {

    "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",

"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation": " A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " Filter values. Filter
values are case-sensitive. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results

from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error":
"client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {

"smithy.api#xmlName":
"item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",

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            "traits": {
                "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
            }

        }
    }
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
    "type": "structure",
    "members": {
        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
```

```
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",

    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
```

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
```

```
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {

  "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License configuration status.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the
owner of the license configuration.</p>"
            }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList":
{
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets
information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license
type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
```

"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "

}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},

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        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
```

"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},

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        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageResponse":
    {
        "type": "structure",
        "members": {
          "LicenseUsage": {
            "target": "com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
              "smithy.api#documentation": "<p>License usage details.</p>"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "
}

},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}

```
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }

    },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

                   "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
```

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        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>",
                "smithy.api#required": {}
            }
        },
        "GranteePrincipalArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The grantee principal ARN.</p>",

"smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantStatus": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "Version": {

    "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Granted operations.</p>",
```

```
            "smithy.api#required": {}
          }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a grant.</p>"
    }
},
"com.amazonaws.licensemanager#GrantList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "string",

  "traits": {
        "smithy.api#enum": [
          {
            "value": "PENDING_WORKFLOW",
            "name": "PENDING_WORKFLOW"
          },
          {
            "value": "PENDING_ACCEPT",
            "name": "PENDING_ACCEPT"
          },
          {
            "value": "REJECTED",
            "name": "REJECTED"
          },
          {
            "value": "ACTIVE",
            "name": "ACTIVE"
          },
          {
            "value": "FAILED_WORKFLOW",
            "name": "FAILED_WORKFLOW"
          },
          {
            "value": "DELETED",
            "name": "DELETED"
          },
          {
            "value": "PENDING_DELETE",
            "name": "PENDING_DELETE"
           },
          {
```

```
                "value": "DISABLED",
                "name": "DISABLED"
            },
            {
                "value": "WORKFLOW_COMPLETED",
                "name": "WORKFLOW_COMPLETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
            }

},
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
```

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            }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license status.</p>"
                }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                 "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
            },
            "Version": {
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"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",

"httpResponseCode": 400
},
"smithy.api#documentation": " One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",

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                "traits": {
                    "smithy.api#documentation": "<p>Value
of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "EQUALS",
                    "name": "EQUALS"
                },
                {
                    "value": "NOT_EQUALS",
                    "name": "NOT_EQUALS"
                },
                {
                    "value": "BEGINS_WITH",
                    "name": "BEGINS_WITH"
                },
                {
                    "value": "CONTAINS",
                    "name": "CONTAINS"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
```

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                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {

        "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
```

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},

"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "

}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},

"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {

"smithy.api#documentation": " Automated
discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license
agreement that can be\n consumed and enforced by License Manager. Components include specifications for
the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a
host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name
(ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource
consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was associated with the
resource. "
}
},
"AmiAssociationScope":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-

account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "DISABLED",
"name": "DISABLED"
}
]
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}

},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds

to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Information about a license type conversion task. "
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": " The ID of the license type conversion task. "
            }
          },
          "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": " Information about the license type this conversion task converted from. "
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": " Information about the license type this conversion task converted to. "
            }
          },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": " The status of the conversion task. "
            }
          },

"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type":
"string",
"traits": {
"smithy.api#enum": [
{
"value": "IN_PROGRESS",
"name": "IN_PROGRESS"

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            },
            {
                "value": "SUCCEEDED",
                "name": "SUCCEEDED"
            },
            {
                "value": "FAILED",
                "name": "FAILED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "vCPU",
                "name": "VCPU"

            },
            {
                "value": "Instance",
                "name": "INSTANCE"
            },
            {
                "value": "Core",
                "name": "CORE"
            },
            {
                "value": "Socket",
                "name": "SOCKET"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_DELETE",
```

```
            "name": "PENDING_DELETE"
          },
          {
            "value": "DELETED",
            "name": "DELETED"
          }
        ]
      }
    },
    "com.amazonaws.licensemanager#LicenseList": {
      "type": "list",
       "member": {
        "target": "com.amazonaws.licensemanager#License"
      }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
          }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type.</p>"
          }
        },
        "ErrorMessage": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Error message.</p>"

      }
        },
        "FailureTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Failure time.</p>"
          }
        },
        "OperationName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the operation.</p>"
          }
```

```
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

           "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
                }
            },
            "MetadataList": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
    },
    "com.amazonaws.licensemanager#LicenseStatus":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "AVAILABLE",
                    "name": "AVAILABLE"
                },
                {
                    "value": "PENDING_AVAILABLE",
                    "name": "PENDING_AVAILABLE"
                },
                {
                    "value": "DEACTIVATED",
                    "name": "DEACTIVATED"
                },
                {
                    "value": "SUSPENDED",
                    "name": "SUSPENDED"
                },
                {
                    "value": "EXPIRED",
                    "name": "EXPIRED"
                },
                {
                    "value": "PENDING_DELETE",
                    "name": "PENDING_DELETE"
                },
                {

                 "value": "DELETED",
                    "name": "DELETED"
                }
            ]
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {

         "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {

"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {

"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",

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                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
    "type": "structure",
    "members": {
        "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
                "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurations":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configurations for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are

```
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n            <p>\n
                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n            <p>\n                <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"

                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target":
```

"com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {

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            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },

{
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
    "type":
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"structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to
return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input":
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the
 license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

             "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

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            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
     "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation":
```

" Lists all versions of the specified license. "
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Token for the next set of results. "
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": " Maximum
number of results to return in a single call. "
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": " License details. "
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Token for the next set of results. "
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {

"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {

    "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received but not accepted.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",

    "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n
  <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {

         "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Received grant details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"

},
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",

    "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>Status</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>IssuerName</code>\n
            </p>\n            </li>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
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```
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {

"target": "com.amazonaws.licensemanager#GrantedLicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>Received license details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"

  },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FailedDependencyException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {

        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>account_id</code>
 - The ID of the Amazon Web Services account that owns the resource.\n            Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n            <p>\n
    <code>application_name</code> - The name of the application. \n            Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n            <p>\n
    <code>license_included</code> - The type of license included. \n            Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.\n            Possible values are <code>sql-server-
enterprise</code> | \n            <code>sql-server-standard</code> | \n            <code>sql-server-web</code> |  \n
        <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n            <p>\n
<code>platform</code> - The platform of the resource.\n
    Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n
<li>\n            <p>\n                <code>resource_id</code> - The ID of the resource. \n            Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n            <p>\n
        <code>tag:<key></code> - The key/value combination of a tag assigned \n            to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n            <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
      "type": "structure",
      "members": {
        "ResourceInventoryList": {
          "target": "com.amazonaws.licensemanager#ResourceInventoryList",
          "traits":
{
            "smithy.api#documentation": "<p>Information about the resources.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
      }
    },
```

"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target":
"com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListTokensResponse":
{
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource
 at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).
\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#Location": {
    "type": "string"
},
"com.amazonaws.licensemanager#Long": {
    "type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {},
        "smithy.api#range": {
            "min": 1,
```

```
            "max": 100
          }
        }
      },
      "com.amazonaws.licensemanager#MaxSize3StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 3
          }
        }
      },
      "com.amazonaws.licensemanager#Message": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#Metadata": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The key name.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }

    },
      "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Metadata"
        }
      },
      "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
```

"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n
Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n
<code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
        "traits": {
            "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ProductInformationFilter": {
        "type": "structure",
        "members": {
            "ProductInformationFilterName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Filter name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterValue": {
                "target":
"com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Filter value.</p>"
                }
            },
            "ProductInformationFilterComparator": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Logical operator.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes product information filters.</p>"
        }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilter"
        }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
        "type": "list",

       "member": {
            "target": "com.amazonaws.licensemanager#ProductInformation"
        }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
        "type": "structure",
```

"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"

}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {

"smithy.api#documentation": " Received status reason. "
}
},

```
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
    }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_WORKFLOW",
                "name": "PENDING_WORKFLOW"
            },
            {
                "value": "PENDING_ACCEPT",
                "name": "PENDING_ACCEPT"
            },
             {
                "value": "REJECTED",
                "name": "REJECTED"
            },
            {
                "value": "ACTIVE",
                "name": "ACTIVE"
            },
            {
                "value": "FAILED_WORKFLOW",
                "name": "FAILED_WORKFLOW"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            },
            {
                "value": "DISABLED",
                "name": "DISABLED"
            },
            {
                "value": "WORKFLOW_COMPLETED",
                "name": "WORKFLOW_COMPLETED"
            }
        ]
```

```
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
        "members": {

"Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"

        }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RenewType": {
        "type": "string",
```

"traits": {
"smithy.api#enum": [
{
"value": "None",
"name": "NONE"
},
{
"value": "Weekly",
"name": "WEEKLY"
},
{
"value": "Monthly",
"name": "MONTHLY"
}
]
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {

"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",
"traits": {

"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "DAY",
"name": "DAY"
},
{
"value": "WEEK",
"name": "WEEK"
},
{
"value": "MONTH",

"name": "MONTH"
}
]
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "

}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {

"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}
}
},

"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "LicenseConfigurationSummaryReport",
"name": "LICENSE_CONFIGURATION_SUMMARY_REPORT"
},
{

```
                "value": "LicenseConfigurationUsageReport",
                "name": "LICENSE_CONFIGURATION_USAGE_REPORT"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
        "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
        },
        "PlatformVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
            }
        },
        "ResourceOwningAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation":
" ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have
been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResource.NotFound",
"httpResponseCode": 400
},
"smithy.api#documentation": " The resource cannot be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400

```
        }
    },
    "com.amazonaws.licensemanager#ResourceType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "EC2_INSTANCE",
                     "name": "EC2_INSTANCE"
                },
                {
                    "value": "EC2_HOST",
                    "name": "EC2_HOST"
                },
                {
                    "value": "EC2_AMI",
                    "name": "EC2_AMI"
                },
                {
                    "value": "RDS",
                    "name": "RDS"
                },
                {
                    "value": "SYSTEMS_MANAGER_MANAGED_INSTANCE",
                    "name": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
            "bucket": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the S3 bucket
reports are published to.</p>"
                }
            },
            "keyPrefix": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
```

to. "
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation":
 " The server experienced an internal error. Try again. ",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"

```
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "REFRESH_TOKEN",
"name": "REFRESH_TOKEN"
}
]
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest":
 {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {}
    },
```

"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "

```
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a
license\n        configuration is licenseAffinityToHost.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
            }

    },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        }
```

```
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

      {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"

  }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
```

"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}

```
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
    "type": "structure",
    "members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidResourceStateException"

    },
        {
            "target": "com.amazonaws.licensemanager#LicenseUsageException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
```

"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "
}
}
}
},

```
      "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
         "type": "structure",
         "members": {}
      },
      "com.amazonaws.licensemanager#UsageOperation": {
         "type":
 "string",
         "traits": {
            "smithy.api#length": {
               "min": 0,
               "max": 50
            }
         }
      },
      "com.amazonaws.licensemanager#ValidationException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
         }
      }
   }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 //
 Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
```

```
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err
!= nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 return
 nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
 // * Fingerprint
 //
 //
 * Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
```

```
 LicenseArn *string

 // Current version of the
 license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
```

```
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack);
err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:        region,
 ServiceID:     ServiceID,
 SigningName:   "license-manager",
```

```
  OperationName: "DeleteLicense",
 }
}
```

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package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out
 := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string
```

```
 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if
 err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
```

```
 return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "AssociateLicense",
 }
}
```

1.3022 memberlist 0.5.0

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1.3028 aws-sdk-go-v2-internal-ini 1.3.10

1.3028.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * Fingerprint
 //
 // * IssuerName
 //
 // * Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
```

```
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
 nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
```

```
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string
```

```
 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err
= stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {
```

```
 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil
 {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
```

```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
```

```
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure
 the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

// Configuration for consumption of the license. Choose a provisional configuration
// for workloads running with continuous connectivity. Choose a borrow
// configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

//
Information about the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde

```
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
```

```
 return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return
 err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana
```

```
import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This
 member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
```

```
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
```

```
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
```

```
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if
 err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
{
   "smithy": "1.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
           {
               "id": "HttpHeaderTrait",
               "namespace": "*"
           },
           {
               "id": "HttpUriConflict",
               "namespace": "*"
```

```
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
    },
    {
```

"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"

```
            },
            {
                "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix":
 "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            }
        }
    },
    "com.amazonaws.licensemanager#AcceptGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest":
{
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

```
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#AllowedOperation":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "CreateGrant",
                    "name": "CREATE_GRANT"
                },
                {
                    "value": "CheckoutLicense",
                    "name": "CHECKOUT_LICENSE"
                },
                {
                    "value": "CheckoutBorrowLicense",
                    "name": "CHECKOUT_BORROW_LICENSE"
```

```
            },
            {
              "value": "CheckInLicense",
              "name": "CHECK_IN_LICENSE"
            },
            {
              "value": "ExtendConsumptionLicense",
              "name": "EXTEND_CONSUMPTION_LICENSE"
            },
            {
              "value": "ListPurchasedLicenses",
              "name": "LIST_PURCHASED_LICENSES"
            },
            {
              "value": "CreateToken",
              "name": "CREATE_TOKEN"
            }
          ]
        }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 7
          }
        }
      },
      "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
          },
          "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
      },
      "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        }
```

```
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation":
 {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },
    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                     "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
```

```
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
    }
},
"com.amazonaws.licensemanager#BoxBoolean": {
    "type": "boolean",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#BoxInteger": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#BoxLong": {

"type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#CheckInLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",

        "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members": {
```

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {

```
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",

"traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {

         "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

```
                "traits": {
                    "smithy.api#documentation":
"<p>Information about constraints.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Checks out the specified license. "
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "

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            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",

  "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
        "type": "structure",
        "members": {
          "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation":
"<p>Allowed license entitlements.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
```

"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "PROVISIONAL",
"name": "PROVISIONAL"
},
{
"value": "PERPETUAL",
"name": "PERPETUAL"
}
]
}
},
"com.amazonaws.licensemanager#ClientRequestToken":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,

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                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode": 409
            },
            "smithy.api#documentation": "<p>There
was a conflict processing the request. Try your request again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
         }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
```

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},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
    "type": "structure",
    "members": {
        "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
        },
        "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
            }
        },
        "BorrowConfiguration": {

            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
},
"com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },

    {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license entitlements with specific Amazon Web Services accounts. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},

"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. ",

"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateGrantResponse":
{
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",

"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",

"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {

"smithy.api#documentation": " Grant
status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license
agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

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            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits":
 {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest":
{
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS
CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS
CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
```

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        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
             "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target":
"com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide

to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},

"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation":
" Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {

"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}

}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion":

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target":
"com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},

"Version": {
"target": "com.amazonaws.licensemanager#String",

```
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

  {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
```

"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {

"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token,
encoded as a JWT token. "
}
}
}
},
"com.amazonaws.licensemanager#DateTime": {
"type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
"type": "structure",
"members": {
"Begin": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Start of the time range. ",
"smithy.api#required": {}
}
},
"End": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " End of the time range. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a time range, in ISO8601-UTC
format. "
}
},

```
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

  },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
```

"traits": {

"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation":
" Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p> \n          <p>You cannot delete a license configuration
 that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

        "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },

  "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse":
{
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }

    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "JWT_PS384",
                    "name": "JWT_PS384"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
```

"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",

```
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data value.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data unit.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Data associated
with an entitlement resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementData"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "value": "Count",
              "name": "COUNT"
            },
            {
              "value": "None",
              "name": "NONE"
            },
            {
              "value": "Seconds",
              "name": "SECONDS"
```

```
            },
            {
               "value": "Microseconds",
               "name": "MICROSECONDS"
            },
            {

"value": "Milliseconds",
               "name": "MILLISECONDS"
            },
            {
               "value": "Bytes",
               "name": "BYTES"
            },
            {
               "value": "Kilobytes",
               "name": "KILOBYTES"
            },
            {
               "value": "Megabytes",
               "name": "MEGABYTES"
            },
            {
               "value": "Gigabytes",
               "name": "GIGABYTES"
            },
            {
               "value": "Terabytes",
               "name": "TERABYTES"
            },
            {
               "value": "Bits",
               "name": "BITS"
            },
            {
               "value": "Kilobits",
               "name": "KILOBITS"
             },
            {
               "value": "Megabits",
               "name": "MEGABITS"
            },
            {
               "value": "Gigabits",
               "name": "GIGABITS"
            },
            {
               "value": "Terabits",
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"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"

},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
},
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"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{
"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
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{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",

"name": "TERABITS_PER_SECOND"
},

```
            {
                "value": "Count/Second",
                "name": "COUNT_PER_SECOND"
            }
        ]
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {

 "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "Count",
                "name": "COUNT"
            },
            {
                "value": "None",
                "name": "NONE"
            },
            {
                "value": "Seconds",
                "name": "SECONDS"
            },
            {
                "value": "Microseconds",
                "name": "MICROSECONDS"
            },
            {
```

"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"

},
{
"value": "Megabytes",
"name": "MEGABYTES"
},
{
"value": "Gigabytes",
"name": "GIGABYTES"
},
{
"value": "Terabytes",
"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"
},
{
"value": "Kilobits",
"name": "KILOBITS"
},
{
"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},
{
"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},

```
            {
              "value": "Bytes/Second",
              "name": "BYTES_PER_SECOND"
            },
            {
              "value": "Kilobytes/Second",
              "name": "KILOBYTES_PER_SECOND"
            },
            {
              "value": "Megabytes/Second",
              "name": "MEGABYTES_PER_SECOND"
            },
            {
              "value": "Gigabytes/Second",
              "name": "GIGABYTES_PER_SECOND"
            },
            {
              "value": "Terabytes/Second",
              "name": "TERABYTES_PER_SECOND"
            },
            {

    "value": "Bits/Second",
              "name": "BITS_PER_SECOND"
            },
            {
              "value": "Kilobits/Second",
              "name": "KILOBITS_PER_SECOND"
            },
            {
              "value": "Megabits/Second",
              "name": "MEGABITS_PER_SECOND"
            },
            {
              "value": "Gigabits/Second",
              "name": "GIGABITS_PER_SECOND"
            },
            {
              "value": "Terabits/Second",
              "name": "TERABITS_PER_SECOND"
            },
            {
              "value": "Count/Second",
              "name": "COUNT_PER_SECOND"
            }
          ]
        }
      },
```

```
    "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",

"members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                 "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
}

```
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
    "type": "structure",

  "members": {
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#FailedDependencyException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        },
        "ErrorCode": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },

 "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FailedDependency",
            "httpResponseCode": 424
        },
        "smithy.api#documentation": "<p>A dependency required to run the API is missing.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 424
    }
},
"com.amazonaws.licensemanager#Filter": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#FilterName",
            "traits": {
                "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
            }
```

```
            },
            "Values": {
                "target": "com.amazonaws.licensemanager#FilterValues",
                "traits": {
                    "smithy.api#documentation": "<p>Filter values. Filter
values are case-sensitive.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a\n        describe operation. Filters can be used to match a set of resources by specific criteria,\n        such as
tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error":
"client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
```

"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName":
"item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {

"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}

}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
```

```
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
```

"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the

owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList":
{
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets
information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license
type conversion task.</p>"
                }
```

```
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type converted from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type converted to.</p>"

        }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                 "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
```

"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {

"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic
reports about your license configurations. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target":
"com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}

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        }
    }
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse":
```

```
{
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target": "com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

 {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "
}

},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The grantee principal ARN. ",

"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "string",

"traits": {
"smithy.api#enum": [
{
"value": "PENDING_WORKFLOW",
"name": "PENDING_WORKFLOW"
},
{
"value": "PENDING_ACCEPT",
"name": "PENDING_ACCEPT"
},
{
"value": "REJECTED",
"name": "REJECTED"
},
{
"value": "ACTIVE",
"name": "ACTIVE"
},
{
"value": "FAILED_WORKFLOW",

```
                "name": "FAILED_WORKFLOW"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            },
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
             },
            {
                "value": "DISABLED",
                "name": "DISABLED"
            },
            {
                "value": "WORKFLOW_COMPLETED",
                "name": "WORKFLOW_COMPLETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
            }

},
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
```

```
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#IssuerDetails",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license issuer.</p>"
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

            }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license status.</p>"
                }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                 "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
```

"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer",
"traits": {

"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",

"httpResponseCode": 400
},
"smithy.api#documentation": " One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}

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            }
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value
of the filter.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "EQUALS",
                "name": "EQUALS"
            },
            {
                "value": "NOT_EQUALS",
                "name": "NOT_EQUALS"
            },
            {
                "value": "BEGINS_WITH",
                "name": "BEGINS_WITH"
            },
            {
                "value": "CONTAINS",
                "name": "CONTAINS"
            }
        ]
    }
},
"com.amazonaws.licensemanager#InventoryFilterList":
{
    "type": "list",
    "member": {
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"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {

"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
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"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "

}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " License version. "

```
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }

  },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
```

"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {

"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},

"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "DISABLED",
"name": "DISABLED"
}
]
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "

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            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

  "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
        },
        "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }

    },
      "traits": {
          "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
      "type": "list",
      "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
```

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds
to the license type you are converting your resource from. For more information about which platforms correspond
to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-
info-fields.html#billing-info\">Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated
with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted
from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",

"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50

```
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type":
"string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "IN_PROGRESS",
                    "name": "IN_PROGRESS"
                },
                {
                    "value": "SUCCEEDED",
                    "name": "SUCCEEDED"
                },
                {
                    "value": "FAILED",
                    "name": "FAILED"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "vCPU",
                    "name": "VCPU"

                },
                {
                    "value": "Instance",
                    "name": "INSTANCE"
                },
                {
                    "value": "Core",
                    "name": "CORE"
                },
                {
```

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                "value": "Socket",
                "name": "SOCKET"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
```

```
        }
          },
          "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Failure time.</p>"
            }
          },
          "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
            }
          },
          "OperationRequestedBy": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

         "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
            }
          },
          "MetadataList": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Reserved.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
```

"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "PENDING_AVAILABLE",
"name": "PENDING_AVAILABLE"
},
{
"value": "DEACTIVATED",
"name": "DEACTIVATED"
},
{
"value": "SUSPENDED",
"name": "SUSPENDED"
},
{

"value": "EXPIRED",
"name": "EXPIRED"
},
{
"value": "PENDING_DELETE",
"name": "PENDING_DELETE"
},
{

"value": "DELETED",
"name": "DELETED"
}
]
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "
}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},

"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",

"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

             "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n
        <code>LicenseArn</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GranteePrincipalARN</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>LicenseIssuerName</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
```

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            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
```

```
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
    "type": "structure",
    "members": {
        "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
                "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurations":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n
                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement
is used. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that indicates
whether the available licenses have been exceeded. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"

                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target":
"com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n "
}
}
}

```
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
      "type": "structure",
      "members": {
        "LicenseConversionTasks": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
           }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },

    {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type":
"structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to
return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input":
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the
license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an
associated license configuration. ",
"smithy.api#required": {}
}

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        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

         "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
     "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum
number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
```

```
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
     "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
     }
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
```

```
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n              <p>\n                <code>Beneficiary</code>\n              </p>\n
        </li>\n            <li>\n              <p>\n                <code>ProductSKU</code>\n              </p>\n            </li>\n
    <li>\n              <p>\n
        <code>Fingerprint</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>Status</code>\n              </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {

    "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
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"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received but not accepted. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",

"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n

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</li>\n <li>\n <p>\n <code>LicenseIssuerName</code>\n </p>\n
</li>\n <li>\n <p>\n <code>LicenseArn</code>\n </p>\n </li>\n
<li>\n <p>\n
<code>GrantStatus</code>\n </p>\n </li>\n <li>\n <p>\n
<code>GranterAccountId</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {

          "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Received grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"

 },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",

   "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>Status</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>IssuerName</code>\n
            </p>\n            </li>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n        </ul>"
                }
```

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            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {

"target": "com.amazonaws.licensemanager#GrantedLicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>Received license details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"

  },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
                "target": "com.amazonaws.licensemanager#FailedDependencyException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {

        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>account_id</code>
 - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>application_name</code> - The name of the application. \n                Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>license_included</code> - The type of license included. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-
```

enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits":
{
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required":
 {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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```
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target":
 "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n                <p>\n                    <code>LicenseArns</code>\n                </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse":
{
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource
 at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {

                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).
 \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
    }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#Location": {
    "type": "string"
},
"com.amazonaws.licensemanager#Long": {
    "type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                 "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
```

"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {},
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The key name. "
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The value. "
            }
        }
    },
    "traits": {

"smithy.api#documentation": " Describes key/value pairs. "
}

},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,

"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> -

The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n
<code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n
<code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target":
"com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"

```
        }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
        "type": "list",

       "member": {
            "target": "com.amazonaws.licensemanager#ProductInformation"
        }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
        "type": "structure",
        "members": {
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"

       }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
```

"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {

"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "PENDING_WORKFLOW",
"name": "PENDING_WORKFLOW"
},
{
"value": "PENDING_ACCEPT",
"name": "PENDING_ACCEPT"
},
{
"value": "REJECTED",
"name": "REJECTED"
},
{
"value": "ACTIVE",
"name": "ACTIVE"
},
{
"value": "FAILED_WORKFLOW",
"name": "FAILED_WORKFLOW"
},
{
"value": "DELETED",

"name": "DELETED"
},
{
"value": "DISABLED",
"name": "DISABLED"
},
{
"value": "WORKFLOW_COMPLETED",
"name": "WORKFLOW_COMPLETED"
}
]
}
},
"com.amazonaws.licensemanager#RedirectException": {
"type": "structure",
"members": {

"Location": {
"target": "com.amazonaws.licensemanager#Location",
"traits": {
"smithy.api#httpHeader": "Location"
}
},
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " This is not the correct Region for the resource. Try again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#RejectGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
```

```
            }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RenewType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "None",
                    "name": "NONE"
                },
                {
                    "value": "Weekly",
                    "name": "WEEKLY"
                },
                {
                    "value": "Monthly",
                    "name": "MONTHLY"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {

  "licenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that
this generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
```

"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",
"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "DAY",
"name": "DAY"
},
{
"value": "WEEK",
"name": "WEEK"
},
{
"value": "MONTH",

"name": "MONTH"
}
]
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "

```
        }
    },
    "ReportType": {
        "target": "com.amazonaws.licensemanager#ReportTypeList",
        "traits": {
            "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
        }
    },
    "ReportContext": {
        "target": "com.amazonaws.licensemanager#ReportContext",
        "traits": {
            "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
         }
    },
    "ReportFrequency": {
        "target": "com.amazonaws.licensemanager#ReportFrequency",
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
        }
    },
    "LastRunStatus": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
        }
    },
    "LastRunFailureReason": {

  "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
        }
    },
    "LastReportGenerationTime": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
        }
    },
    "ReportCreatorAccount": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
```

"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}
}
},

"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100

```
        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "LicenseConfigurationSummaryReport",
                "name": "LICENSE_CONFIGURATION_SUMMARY_REPORT"
            },
            {
                "value": "LicenseConfigurationUsageReport",
                 "name": "LICENSE_CONFIGURATION_USAGE_REPORT"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
        "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
         "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have
been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {

```
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "EC2_INSTANCE",
                 "name": "EC2_INSTANCE"
            },
            {
                "value": "EC2_HOST",
                "name": "EC2_HOST"
            },
            {
                "value": "EC2_AMI",
                "name": "EC2_AMI"
            },
            {
                "value": "RDS",
                "name": "RDS"
            },
            {
                "value": "SYSTEMS_MANAGER_MANAGED_INSTANCE",
                "name": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        ]
    }
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
    "members": {
        "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket
```

reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 400
},

```
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"

      }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

  {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required":
 {}
                }
            }
        }
```

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    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "ExpirationTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC format.</p>"
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "REFRESH_TOKEN",
"name": "REFRESH_TOKEN"
}
]
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",

```
            "traits": {
                "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
    "type": "structure",
    "members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {

    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "

}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",

"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"

```
        },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p> \n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
         "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to remove.</p>"
                }
            }
         }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {

"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type":
"string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string
```

```
 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 //
 Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err
!= nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
 // * Fingerprint
 //
 //
 * Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the
 license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "DeleteLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out
 := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if
 err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "AssociateLicense",
 }
}
```

1.3029 aws-sdk-go-v2-config 1.15.3

1.3029.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * Fingerprint
 //
 // * IssuerName
 //
 // * Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return
```

```
err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {
```

```
 // Unique, case-sensitive identifier that you
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
```

```
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
```

```
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err
 = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack,
 options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil
 {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
```

```
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
```

```
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure
 the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional configuration
 // for workloads running with continuous connectivity. Choose a borrow
 // configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string
```

```
 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 //
 Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
```

```
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return
 err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
```

```
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This
 member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
```

```
 return err
 }
 if
 err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
{
  "smithy": "1.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
```

},
{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {

"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix":
"license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest":
{
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant
status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {

```
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "value": "CreateGrant",
              "name": "CREATE_GRANT"
            },
            {
              "value": "CheckoutLicense",
              "name": "CHECKOUT_LICENSE"
            },
            {
              "value": "CheckoutBorrowLicense",
              "name": "CHECKOUT_BORROW_LICENSE"
            },
            {
              "value": "CheckInLicense",
              "name": "CHECK_IN_LICENSE"
            },
            {
              "value": "ExtendConsumptionLicense",
              "name": "EXTEND_CONSUMPTION_LICENSE"
            },
            {
              "value": "ListPurchasedLicenses",
              "name": "LIST_PURCHASED_LICENSES"
             },
            {
              "value": "CreateToken",
              "name": "CREATE_TOKEN"
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
```

"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},
"com.amazonaws.licensemanager#Boolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer",

"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#BoxLong": {

"type": "long",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "

```
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",

        "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web

Signature (JWS) algorithm PS384.\n For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "

```
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {

         "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation":
"<p>Information about constraints.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
```

"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Node ID. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}

```
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation":
"<p>Allowed license entitlements.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",

              "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
```

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "PROVISIONAL",
"name": "PROVISIONAL"
},
{
"value": "PERPETUAL",
"name": "PERPETUAL"
}
]
}
},
"com.amazonaws.licensemanager#ClientRequestToken":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode": 409
},
"smithy.api#documentation": "<p>There

was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {

"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license entitlements with specific Amazon Web Services accounts. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {

"type": "structure",
"members": {

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},

"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
}

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    },
    "com.amazonaws.licensemanager#CreateGrantResponse":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion": {
        "type": "operation",
        "input": {

  "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "

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            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",

         "traits": {
              "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant
status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
```

```
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p> \n        <p>A license configuration is an abstraction of a customer license
 agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {

"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits":
{
"smithy.api#documentation": " Product information. "
}

```
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest":
```

{
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n For the structure of the source license, see Convert a license type using the AWS CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the AWS CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target":
"com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
```

"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {

"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

```
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation":
 "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {

             "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
```

```
}
        }
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>",
                "smithy.api#required": {}
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
```

```
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation":
 "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license.</p>"
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",
             "smithy.api#required": {}
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n        running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n        usage.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>",
            "smithy.api#required": {}
          }
        },
        "ClientToken": {
          "target":
```

"com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},

"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

        {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT
token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed
```

in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
        "type": "timestamp"
    },
    "com.amazonaws.licensemanager#DatetimeRange": {
        "type": "structure",
        "members": {
            "Begin": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Start of the time range.</p>",
                    "smithy.api#required": {}
                }
            },
            "End": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>End of the time range.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC
format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {

    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
```

"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation":
" Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p> \n          <p>You cannot delete a license configuration
 that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

         "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
```

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse":
{
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}

},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "JWT_PS384",
"name": "JWT_PS384"
}
]
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",

"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {

"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " Data associated
with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",
"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{

"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"
},
{
"value": "Megabytes",
"name": "MEGABYTES"
},

{
"value": "Gigabytes",
"name": "GIGABYTES"
},
{
"value": "Terabytes",
"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"
},
{
"value": "Kilobits",
"name": "KILOBITS"
},
{
"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},
{
"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"

},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"

```
            },
            {
                "value": "Terabytes/Second",
                "name": "TERABYTES_PER_SECOND"
            },
            {
                "value": "Bits/Second",
                "name": "BITS_PER_SECOND"
            },
            {
                "value": "Kilobits/Second",
                "name": "KILOBITS_PER_SECOND"
            },
            {
                "value": "Megabits/Second",
                "name": "MEGABITS_PER_SECOND"
            },
            {
                "value": "Gigabits/Second",
                "name": "GIGABITS_PER_SECOND"
            },
            {
                "value": "Terabits/Second",

"name": "TERABITS_PER_SECOND"
            },
            {
                "value": "Count/Second",
                "name": "COUNT_PER_SECOND"
            }
        ]
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
```

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",
"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{
"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"

},
{
"value": "Megabytes",
"name": "MEGABYTES"
},
{
"value": "Gigabytes",
"name": "GIGABYTES"
},
{
"value": "Terabytes",

"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"
},
{
"value": "Kilobits",
"name": "KILOBITS"
},
{
"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},
{
"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"
},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
},
{
"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{

"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",
"name": "TERABITS_PER_SECOND"
},
{
"value": "Count/Second",
"name": "COUNT_PER_SECOND"
}
]
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",

"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "

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            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
             "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {

    "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",

        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation": " A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " Filter values. Filter values are case-sensitive. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error":
"client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName":
"item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}

}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {

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        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",

    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

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            }
          }
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules.</p>"
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the
owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList":

{
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Gets
information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license
type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license
conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "

}
},
"StatusMessage": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic
reports about your license configurations. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target":
"com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse":
{
"type": "structure",
"members": {
"LicenseUsage": {
"target": "com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

  {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"
                }

            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",

"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {

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        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "string",

  "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_WORKFLOW",
                "name": "PENDING_WORKFLOW"
            },
            {
                "value": "PENDING_ACCEPT",
                "name": "PENDING_ACCEPT"
            },
            {
                "value": "REJECTED",
                "name": "REJECTED"
            },
            {
                "value": "ACTIVE",
                "name": "ACTIVE"
            },
            {
                "value": "FAILED_WORKFLOW",
                "name": "FAILED_WORKFLOW"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            },
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
             },
            {
                "value": "DISABLED",
                "name": "DISABLED"
            },
            {
                "value": "WORKFLOW_COMPLETED",
                "name": "WORKFLOW_COMPLETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
```

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",

"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer",
        "traits": {
            "smithy.api#box": {}
        }
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",

 "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
```

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EQUALS",
"name": "EQUALS"
},
{
"value": "NOT_EQUALS",
"name": "NOT_EQUALS"
},
{
"value": "BEGINS_WITH",
"name": "BEGINS_WITH"
},
{
"value": "CONTAINS",
"name": "CONTAINS"
}
]
}
},
"com.amazonaws.licensemanager#InventoryFilterList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},

"traits": {

"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "

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            }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
```

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        },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                    "smithy.api#documentation": "<p>License rules.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"

    }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated
discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license
agreement that can be\n consumed and enforced by License Manager. Components include specifications for
the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a

host), and the number of licenses purchased and used. "
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name
 (ARN) of the resource. "
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": " Type of server resource. "
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource
consuming licenses. "
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time when the license configuration was associated with the
resource. "
                }
            },
            "AmiAssociationScope":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-
account</code>. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes an association with a license configuration. "
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",

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        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "AVAILABLE",
                    "name": "AVAILABLE"
                },
                 {
                    "value": "DISABLED",
                    "name": "DISABLED"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

"smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
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"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}

},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},

"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "

```
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

        "smithy.api#documentation": "<p>The time the usage operation value of the resource was changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type":
"string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "IN_PROGRESS",
                    "name": "IN_PROGRESS"
                },
                {
                    "value": "SUCCEEDED",
                    "name": "SUCCEEDED"
                },
                {
                    "value": "FAILED",
                    "name": "FAILED"
                }
            ]
```

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    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "vCPU",
                "name": "VCPU"

            },
            {
                "value": "Instance",
                "name": "INSTANCE"
            },
            {
                "value": "Core",
                "name": "CORE"
            },
            {
                "value": "Socket",
                "name": "SOCKET"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseList": {
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"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "

}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",

"traits": {

"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "PENDING_AVAILABLE",
"name": "PENDING_AVAILABLE"
},
{
"value": "DEACTIVATED",
"name": "DEACTIVATED"
},
{
"value": "SUSPENDED",
"name": "SUSPENDED"
},
{
"value": "EXPIRED",
"name": "EXPIRED"
},
{
"value": "PENDING_DELETE",
"name": "PENDING_DELETE"
},
{

"value": "DELETED",
"name": "DELETED"
}
]
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {

         "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p> \n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending on \n        the license
rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                 }
            }
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {
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"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},

"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

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                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

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        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n
                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement
is used. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that indicates
whether the available licenses have been exceeded. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"

                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target":
"com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
```

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    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
                 }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type":
"structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to
return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input":
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the
license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an
associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum
number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
         "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n
        <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {

    "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received but not accepted.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",

    "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n
  <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
```

"Grants": {

"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",

"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n
\n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {

"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}

```
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"

},
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
```

"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits":
{
"smithy.api#documentation": " Information about the resources. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required":
{}
}

```
            }
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
```

"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target":
"com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListTokensResponse":
{
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource
at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

```
            }
        },
        "NextToken": {

            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> |
<code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).
 \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
    <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the
resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n        </ul>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#Location": {
    "type": "string"
},
"com.amazonaws.licensemanager#Long": {
```

```
    "type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {},
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
```

```
                "min": 0,
                "max": 3
            }
        }
    },
    "com.amazonaws.licensemanager#Message": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The key name.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }

    },
    "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Metadata"
        }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
```

```
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
      "type": "structure",
      "members": {
        "EnableIntegration": {
          "target": "com.amazonaws.licensemanager#Boolean",

      "traits": {
            "smithy.api#documentation": "<p>Enables Organizations integration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
      }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Arn"
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 1
        }
      }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

 "smithy.api#documentation": "<p>Resource type. The possible values are <code>SSM_MANAGED</code> |
<code>RDS</code>.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterList": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
          "traits": {
            "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
```

for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n
Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n
<code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}

```
            }
          },
          "ProductInformationFilterValue": {
            "target":
"com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>Filter value.</p>"
            }
          },
          "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Logical operator.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes product information filters.</p>"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationFilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilter"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationList": {
        "type": "list",

        "member": {
          "target": "com.amazonaws.licensemanager#ProductInformation"
        }
      },
      "com.amazonaws.licensemanager#ProvisionalConfiguration": {
        "type": "structure",
        "members": {
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"

      }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
        "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 429
      }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
      "type": "structure",
      "members": {
        "ReceivedStatus": {
          "target": "com.amazonaws.licensemanager#ReceivedStatus",
          "traits": {
            "smithy.api#documentation": "<p>Received status.</p>"
          }
        },
        "ReceivedStatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {

      "smithy.api#documentation": "<p>Received status reason.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "value": "PENDING_WORKFLOW",
              "name": "PENDING_WORKFLOW"
            },
            {
              "value": "PENDING_ACCEPT",
              "name": "PENDING_ACCEPT"
            },
             {
              "value": "REJECTED",
              "name": "REJECTED"
            },
            {
              "value": "ACTIVE",
              "name": "ACTIVE"
            },
            {
              "value": "FAILED_WORKFLOW",
              "name": "FAILED_WORKFLOW"
            },
            {
              "value": "DELETED",
              "name": "DELETED"
            },
            {
              "value": "DISABLED",
              "name": "DISABLED"
            },
            {
              "value": "WORKFLOW_COMPLETED",
              "name": "WORKFLOW_COMPLETED"
            }
          ]
        }
      },
      "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
        "members": {

    "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
```

```
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licensemanager#RejectGrantResponse": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Grant ARN.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
          "smithy.api#documentation": "<p>Grant status.</p>"

    }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Grant version.</p>"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#RenewType": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "value": "None",
          "name": "NONE"
        },
        {
          "value": "Weekly",
          "name": "WEEKLY"
        },
        {
          "value": "Monthly",
```

"name": "MONTHLY"
}
]
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {

"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",
"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "string",
"traits": {

```
        "smithy.api#enum": [
            {
                "value": "DAY",
                "name": "DAY"
            },
            {
                "value": "WEEK",
                "name": "WEEK"
            },
            {
                "value": "MONTH",

        "name": "MONTH"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ReportGenerator": {
    "type": "structure",
    "members": {
        "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>"
            }
        },
        "ReportType": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
                "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
            }
        },
        "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
                "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
             }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
        },
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},

```
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }
        }
    },

"traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
  },
  "com.amazonaws.licensemanager#ReportType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "LicenseConfigurationSummaryReport",
                "name": "LICENSE_CONFIGURATION_SUMMARY_REPORT"
            },
            {
                "value": "LicenseConfigurationUsageReport",
                 "name": "LICENSE_CONFIGURATION_USAGE_REPORT"
            }
        ]
    }
  },
  "com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
  },
```

```
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
             "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
```

"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have
been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResource.NotFound",
"httpResponseCode": 400
},
"smithy.api#documentation": " The resource cannot be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EC2_INSTANCE",
"name": "EC2_INSTANCE"
},
{
"value": "EC2_HOST",

"name": "EC2_HOST"
},
{
"value": "EC2_AMI",
"name": "EC2_AMI"
},
{
"value": "RDS",
"name": "RDS"
},
{
"value": "SYSTEMS_MANAGER_MANAGED_INSTANCE",
"name": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
]
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket
reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published
to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation":
" The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"

}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",

```
            "traits": {
                "smithy.api#documentation": "<p>Tag value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#TagKeyList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    }
},
"com.amazonaws.licensemanager#TagList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Tag"
    }
},
"com.amazonaws.licensemanager#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },

 {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"

```
        }
    },
    "com.amazonaws.licensemanager#TokenType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "REFRESH_TOKEN",
                    "name": "REFRESH_TOKEN"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest":
 {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {

        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a
license\n        configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
```

configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "

}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",

"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"

},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services

resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}

```
        },
        "com.amazonaws.licensemanager#ValidationException": {
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {
```

```
 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string
```

```
// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

//
Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err
```

```
 != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
```

```
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
 // * Fingerprint
 //
 //
 * Status
 Filters []types.Filter
```

```
 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListLicenses",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the
 license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "DeleteLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out
 := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if
 err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
```

```
 err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "AssociateLicense",
 }
}
```

1.3030 aws-sdk-go-v2-service-internal-presigned-url 1.9.3

1.3030.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * Fingerprint
 //
 // * IssuerName
 //
 // * Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
```

```
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
```

```
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
 nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
```

```
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err
```

```
 = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack,
 options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil
 {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
```

```
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string
```

```
// Unique, case-sensitive identifier that you provide to ensure
the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional configuration
// for workloads running with continuous connectivity. Choose a borrow
// configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
```

```
 Validity *types.DatetimeRange

 //
 Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return
 err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This
 member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string
```

```
 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
```

```
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
 middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if
 err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
{
   "smithy": "1.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
```

```
        {
          "id": "HttpHeaderTrait",
          "namespace": "*"
        },
        {
          "id": "HttpUriConflict",
          "namespace": "*"
        },
        {
          "id": "Service",
          "namespace": "*"
        }
      ]
    },
    "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
          {
            "target": "com.amazonaws.licensemanager#AcceptGrant"
          },

 {
            "target": "com.amazonaws.licensemanager#CheckInLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CheckoutLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateGrant"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateGrantVersion"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
          },
          {
```

"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},

{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"

```
            },
            {
                "target": "com.amazonaws.licensemanager#RejectGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#TagResource"
             },
            {
                "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix":
 "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            }
        }
    },
    "com.amazonaws.licensemanager#AcceptGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
            {

           "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
```

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant
status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#AllowedOperation":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "CreateGrant",
"name": "CREATE_GRANT"
},
{

"value": "CheckoutLicense",
"name": "CHECKOUT_LICENSE"
},
{
"value": "CheckoutBorrowLicense",
"name": "CHECKOUT_BORROW_LICENSE"
},
{
"value": "CheckInLicense",
"name": "CHECK_IN_LICENSE"
},
{
"value": "ExtendConsumptionLicense",
"name": "EXTEND_CONSUMPTION_LICENSE"
},
{
"value": "ListPurchasedLicenses",
"name": "LIST_PURCHASED_LICENSES"
},
{
"value": "CreateToken",
"name": "CREATE_TOKEN"
}
]
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"

```
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation":
 {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },
    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#BoxLong": {

"type": "long",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",

        "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
```

"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the

idempotency of the request. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {

"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation":
" Information about constraints. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

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            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                 "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
```

"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Node ID. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation":
" Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",

             "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PROVISIONAL",
                "name": "PROVISIONAL"
            },
            {
                "value": "PERPETUAL",
                "name": "PERPETUAL"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ClientRequestToken":
{
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
```

```
            }
        },
        "com.amazonaws.licensemanager#ClientToken": {
            "type": "string",
            "traits": {
                "smithy.api#length": {
                    "min": 0,
                    "max": 2048
                },
                "smithy.api#pattern": "^\\S+$"
            }
        },
        "com.amazonaws.licensemanager#ConflictException": {
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "aws.protocols#awsQueryError": {
                    "code": "ConflictException",
                    "httpResponseCode": 409
                },
                "smithy.api#documentation": "<p>There
was a conflict processing the request. Try your request again.</p>",
                "smithy.api#error": "client",
                "smithy.api#httpError": 409
            }
        },
        "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
            "type": "structure",
            "members": {
                "ResourceType": {
                    "target": "com.amazonaws.licensemanager#ResourceType",
                    "traits": {
                        "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                    }
                },
                "ConsumedLicenses": {
                    "target": "com.amazonaws.licensemanager#BoxLong",
                    "traits": {
                        "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>Details about license consumption.</p>"
```

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    }
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
    }
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
    "type": "structure",
    "members": {
        "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
        },
        "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
            }
        },
        "BorrowConfiguration": {

            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
},
"com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license entitlements with specific Amazon Web Services accounts. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}

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            }
          },

        "Principals": {
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
                "smithy.api#documentation": "<p>The grant principals.</p>",
                "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CreateGrantResponse":
{
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
```

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        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion": {
        "type": "operation",
        "input": {

  "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

              "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                 "smithy.api#required": {}
            }
        },
        "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>"
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",

       "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
```

"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant
status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p> \n        <p>A license configuration is an abstraction of a customer license
 agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for

<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest":
{
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n For the structure of the source license, see Convert a license type using the AWS CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {

"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the AWS CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target":
"com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientRequestToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide
to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation":
" Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},

"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {

"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}

}
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}

```
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
```

"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",

"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},

```
    "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

  {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT
 token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed
 in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n        to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token,
encoded as a JWT token.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
        "type": "timestamp"
    },
    "com.amazonaws.licensemanager#DatetimeRange": {
        "type": "structure",
        "members": {
            "Begin": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Start of the time range.</p>",
                    "smithy.api#required": {}
                }
            },
            "End": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>End of the time range.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC
```

format. "
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " Deletes the specified grant. "
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
                    "smithy.api#required": {}
                }

```
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {

        "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
```

```
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p> \n        <p>You cannot
delete a license configuration
 that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
```

{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",

"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse":
{
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }

    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "JWT_PS384",
                    "name": "JWT_PS384"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
```

"type": "structure",

"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {

```
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data value.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data unit.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Data associated
with an entitlement resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementData"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "value": "Count",
              "name": "COUNT"
            },
            {
              "value": "None",
              "name": "NONE"
            },
            {
              "value": "Seconds",
```

"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{

"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"
},
{
"value": "Megabytes",
"name": "MEGABYTES"
},
{
"value": "Gigabytes",
"name": "GIGABYTES"
},
{
"value": "Terabytes",
"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"
},
{
"value": "Kilobits",
"name": "KILOBITS"
},
{
"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},
{

"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"

},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
},
{
"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{
"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",

"name": "TERABITS_PER_SECOND"
},
{
"value": "Count/Second",
"name": "COUNT_PER_SECOND"
}
]
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",
"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"

```
        },
        {
          "value": "Milliseconds",
          "name": "MILLISECONDS"
        },
        {
          "value": "Bytes",
          "name": "BYTES"
        },
        {
          "value": "Kilobytes",
          "name": "KILOBYTES"

    },
        {
          "value": "Megabytes",
          "name": "MEGABYTES"
        },
        {
          "value": "Gigabytes",
          "name": "GIGABYTES"
        },
        {
          "value": "Terabytes",
          "name": "TERABYTES"
        },
        {
          "value": "Bits",
          "name": "BITS"
        },
        {
          "value": "Kilobits",
          "name": "KILOBITS"
        },
        {
          "value": "Megabits",
          "name": "MEGABITS"
        },
        {
          "value": "Gigabits",
          "name": "GIGABITS"
        },
        {
          "value": "Terabits",
           "name": "TERABITS"
        },
        {
          "value": "Percent",
```

"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"
},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
},
{
"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{

"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",
"name": "TERABITS_PER_SECOND"
},
{
"value": "Count/Second",
"name": "COUNT_PER_SECOND"
}
]

```
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",

"members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                 "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {

        "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
```

```
        }
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
    "type": "structure",

  "members": {
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#FailedDependencyException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        },
        "ErrorCode": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },

 "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FailedDependency",
            "httpResponseCode": 424
        },
        "smithy.api#documentation": "<p>A dependency required to run the API is missing.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 424
    }
},
"com.amazonaws.licensemanager#Filter": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#FilterName",
            "traits": {
```

"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " Filter values. Filter values are case-sensitive. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName":
"item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}

```
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }

            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse": {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
```

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            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    }
},
```

"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",

    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
     "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
```

```
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation":
"<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {

  "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License configuration status.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Account ID of the
owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList":
{
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type":

"operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets
information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {

"smithy.api#documentation": " ID of the license
type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license
conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "

}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},

"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},

"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic
reports about your license configurations. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target":

"com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}

```
            }
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse":
{
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target": "com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

 {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
```

"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "
}

},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}

```
        },
        "GrantName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

            "smithy.api#documentation": "<p>Grant name.</p>",
            "smithy.api#required": {}
          }
        },
        "ParentArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Parent ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "GranteePrincipalArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The grantee principal ARN.</p>",

"smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantStatus": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
```

"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "string",

"traits": {
"smithy.api#enum": [
{
"value": "PENDING_WORKFLOW",
"name": "PENDING_WORKFLOW"
},
{
"value": "PENDING_ACCEPT",
"name": "PENDING_ACCEPT"
},
{
"value": "REJECTED",
"name": "REJECTED"
},
{
"value": "ACTIVE",

"name": "ACTIVE"
},
{
"value": "FAILED_WORKFLOW",
"name": "FAILED_WORKFLOW"
},
{
"value": "DELETED",
"name": "DELETED"
},
{
"value": "PENDING_DELETE",
"name": "PENDING_DELETE"
},
{
"value": "DISABLED",
"name": "DISABLED"
},
{
"value": "WORKFLOW_COMPLETED",
"name": "WORKFLOW_COMPLETED"
}
]
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}

```
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Version of the granted license.</p>"
                }
            },
            "ReceivedMetadata": {
                "target": "com.amazonaws.licensemanager#ReceivedMetadata",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
```

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    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer",
        "traits": {
            "smithy.api#box": {}
        }
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",

 "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
             "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value
of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EQUALS",
"name": "EQUALS"
},
{
"value": "NOT_EQUALS",
"name": "NOT_EQUALS"
},
{
"value": "BEGINS_WITH",
"name": "BEGINS_WITH"
},
{
"value": "CONTAINS",
"name": "CONTAINS"
}
]
}
},

"com.amazonaws.licensemanager#InventoryFilterList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {

"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},

```
        "KeyFingerprint": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>"
```

```
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
             "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"

         }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>License creation time.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits":
{
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource

consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "DISABLED",
"name": "DISABLED"
}
]
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}

},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

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        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {
        "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds
 to the license type you are converting your resource from.  For more information about which platforms correspond
to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-
info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
```

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            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },

  "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

        "smithy.api#documentation": "<p>The time the usage operation value of the resource was changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {
```

```
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type":
"string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "IN_PROGRESS",
                    "name": "IN_PROGRESS"
                },
                {
                    "value": "SUCCEEDED",
                    "name": "SUCCEEDED"
                },
                {
                    "value": "FAILED",
                    "name": "FAILED"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "vCPU",
                    "name": "VCPU"

                },
                {
                    "value": "Instance",
                    "name": "INSTANCE"
                },
                {
                    "value": "Core",
```

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            "name": "CORE"
          },
          {
            "value": "Socket",
            "name": "SOCKET"
          }
        ]
      }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "value": "PENDING_DELETE",
            "name": "PENDING_DELETE"
          },
          {
            "value": "DELETED",
            "name": "DELETED"
          }
        ]
      }
    },
    "com.amazonaws.licensemanager#LicenseList": {
      "type": "list",
       "member": {
        "target": "com.amazonaws.licensemanager#License"
      }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
          }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type.</p>"
          }
        },
        "ErrorMessage": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
```

"smithy.api#documentation": " Error message. "

}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {

"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "PENDING_AVAILABLE",
"name": "PENDING_AVAILABLE"
},
{
"value": "DEACTIVATED",
"name": "DEACTIVATED"
},
{
"value": "SUSPENDED",
"name": "SUSPENDED"

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                },
                {
                    "value": "EXPIRED",
                    "name": "EXPIRED"
                },
                {
                    "value": "PENDING_DELETE",
                    "name": "PENDING_DELETE"
                },
                {

                 "value": "DELETED",
                    "name": "DELETED"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {

         "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
```

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        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p> \n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending on \n        the license
rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

             "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n
        <code>LicenseArn</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GranteePrincipalARN</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>LicenseIssuerName</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

```
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
    "type": "structure",
    "members": {
        "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
                "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
```

"com.amazonaws.licensemanager#ListLicenseConfigurations":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configurations for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>licenseCountingType</code> - The dimension for which licenses are counted.\n  Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  <li>\n  <p>\n
                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. \n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  <li>\n  <p>\n  <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  </ul>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"

            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

    {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
        "type":
 "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n              <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to
 return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input":
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the
license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an
associated license configuration. ",
"smithy.api#required": {}

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            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

         "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
     "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum
number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
```

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            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {

"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received but not accepted. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",

"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are

supported: \n \n \n \n <code>ProductSKU</code>\n \n
\n \n \n <code>LicenseIssuerName</code>\n \n
\n \n \n <code>LicenseArn</code>\n \n \n
\n \n
<code>GrantStatus</code>\n \n \n \n \n
<code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {

"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",

"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n
\n \n \n \n <code>Beneficiary</code>\n \n \n "

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            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {

"target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
              "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"

    },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FailedDependencyException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {

"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are

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<code>EQUALS</code> | <code>NOT_EQUALS</code>.\n            Possible values are <code>sql-server-enterprise</code> | \n            <code>sql-server-standard</code> | \n            <code>sql-server-web</code> |  \n            <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n            <p>\n            <code>platform</code> - The platform of the resource.\n            Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n            <p>\n            <code>resource_id</code> - The ID of the resource. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n            <p>\n            <code>tag:<key></code> - The key/value combination of a tag assigned \n            to the resource. Logical operators are <code>EQUALS</code> (single account) or\n            <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits":
{
                    "smithy.api#documentation": "<p>Information about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required":
{}
}
}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target":
"com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

```
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse":
{
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource
 at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {

                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).
 \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
```

```
        }
    }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#Location": {
    "type": "string"
},
"com.amazonaws.licensemanager#Long": {
    "type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                 "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
```

```
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {},
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
     },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
```

"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}

},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {

"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n
Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n
\n \n The following filters and logical operators are supported when the resource type\n

is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n
<code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target":
"com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"

}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {

"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {

"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "PENDING_WORKFLOW",
"name": "PENDING_WORKFLOW"
},
{
"value": "PENDING_ACCEPT",
"name": "PENDING_ACCEPT"
},
{
"value": "REJECTED",
"name": "REJECTED"
},
{
"value": "ACTIVE",
"name": "ACTIVE"
},
{
"value": "FAILED_WORKFLOW",
"name": "FAILED_WORKFLOW"
},
{

"value": "DELETED",
"name": "DELETED"
},
{
"value": "DISABLED",
"name": "DISABLED"
},
{
"value": "WORKFLOW_COMPLETED",
"name": "WORKFLOW_COMPLETED"
}
]
}
},
"com.amazonaws.licensemanager#RedirectException": {
"type": "structure",
"members": {

"Location": {
"target": "com.amazonaws.licensemanager#Location",
"traits": {
"smithy.api#httpHeader": "Location"
}
},
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " This is not the correct Region for the resource. Try again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#RejectGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
```

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            }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RenewType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "None",
                    "name": "NONE"
                },
                {
                    "value": "Weekly",
                    "name": "WEEKLY"
                },
                {
                    "value": "Monthly",
                    "name": "MONTHLY"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {

  "licenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that
this generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
```

"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",
"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "DAY",
"name": "DAY"
},
{
"value": "WEEK",
"name": "WEEK"
},
{
"value": "MONTH",

"name": "MONTH"
}
]
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "

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        }
    },
    "ReportType": {
        "target": "com.amazonaws.licensemanager#ReportTypeList",
        "traits": {
            "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
        }
    },
    "ReportContext": {
        "target": "com.amazonaws.licensemanager#ReportContext",
        "traits": {
            "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
         }
    },
    "ReportFrequency": {
        "target": "com.amazonaws.licensemanager#ReportFrequency",
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
        }
    },
    "LastRunStatus": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
        }
    },
    "LastRunFailureReason": {

  "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
        }
    },
    "LastReportGenerationTime": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
        }
    },
    "ReportCreatorAccount": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
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"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}
}
},

"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100

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        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "LicenseConfigurationSummaryReport",
                "name": "LICENSE_CONFIGURATION_SUMMARY_REPORT"
            },
            {
                "value": "LicenseConfigurationUsageReport",
                 "name": "LICENSE_CONFIGURATION_USAGE_REPORT"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
        "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
         "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
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"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have
been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {

```
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "EC2_INSTANCE",
                 "name": "EC2_INSTANCE"
            },
            {
                "value": "EC2_HOST",
                "name": "EC2_HOST"
            },
            {
                "value": "EC2_AMI",
                "name": "EC2_AMI"
            },
            {
                "value": "RDS",
                "name": "RDS"
            },
            {
                "value": "SYSTEMS_MANAGER_MANAGED_INSTANCE",
                "name": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        ]
    }
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
    "members": {
        "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket
```

reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 400
},

"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"

}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",

```
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

  {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required":
 {}
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "ExpirationTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC format.</p>"
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "REFRESH_TOKEN",
"name": "REFRESH_TOKEN"
}
]
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",

```
            "traits": {
                "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
    "type": "structure",
    "members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {

    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"

    }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"

```
        },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p> \n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
         "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to remove.</p>"
                }
            }
         }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {

"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type":
"string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string
```

```
 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 //
 Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err
!= nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
 // * Fingerprint
 //
 //
 * Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the
 license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "DeleteLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out
 := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if
 err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "AssociateLicense",
 }
}
```

1.3031 aws-sdk-go-v2-service-sts 1.16.3

1.3031.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
```

```
 //
 *
 // ProductSKU
 //
 // * Status
 //
 // * Fingerprint
 //
 // * IssuerName
 //
 // * Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return
```

```
err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListReceivedLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {
```

```
 // Unique, case-sensitive identifier that you
 provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
```

```
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
```

```
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err
 = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack,
 options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil
 {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckInLicense",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
```

```
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
```

```
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure
 the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional configuration
 // for workloads running with continuous connectivity. Choose a borrow
 // configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string
```

```
 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 //
 Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
```

```
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return
 err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
```

```
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This
 member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
```

```
 return err
 }
 if
 err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  SigningName:   "license-manager",
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
{
  "smithy": "1.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
```

},
{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
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{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
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"target": "com.amazonaws.licensemanager#CreateLicense"
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"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
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"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
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{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
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"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
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"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
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"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
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"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
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"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {

"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix":
"license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest":
{
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant
status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {

```
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "value": "CreateGrant",
              "name": "CREATE_GRANT"
            },
            {
              "value": "CheckoutLicense",
              "name": "CHECKOUT_LICENSE"
            },
            {
              "value": "CheckoutBorrowLicense",
              "name": "CHECKOUT_BORROW_LICENSE"
            },
            {
              "value": "CheckInLicense",
              "name": "CHECK_IN_LICENSE"
            },
            {
              "value": "ExtendConsumptionLicense",
              "name": "EXTEND_CONSUMPTION_LICENSE"
            },
            {
              "value": "ListPurchasedLicenses",
              "name": "LIST_PURCHASED_LICENSES"
             },
            {
              "value": "CreateToken",
              "name": "CREATE_TOKEN"
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
```

"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},
"com.amazonaws.licensemanager#Boolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer",

"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#BoxLong": {

"type": "long",
"traits": {
"smithy.api#box": {}
}
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "

```
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",

        "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web

Signature (JWS) algorithm PS384.\n For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "

```
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {

         "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation":
"<p>Information about constraints.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
```

"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Node ID. "
}
}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}

```
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation":
"<p>Allowed license entitlements.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",

              "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
```

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "PROVISIONAL",
"name": "PROVISIONAL"
},
{
"value": "PERPETUAL",
"name": "PERPETUAL"
}
]
}
},
"com.amazonaws.licensemanager#ClientRequestToken":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode": 409
},
"smithy.api#documentation": "<p>There

was a conflict processing the request. Try your request again. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": " Resource type of the resource consuming a license. "
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": " Number of licenses consumed by the resource. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Details about license consumption. "
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": " Renewal frequency. "
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": " Details about a provisional configuration. "
                }
            },
            "BorrowConfiguration": {

"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license entitlements with specific Amazon Web Services accounts. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {

"type": "structure",
"members": {

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},

"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
}

```
    },
    "com.amazonaws.licensemanager#CreateGrantResponse":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion": {
        "type": "operation",
        "input": {

  "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "

```
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",

         "traits": {
              "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant
status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
```

```
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p> \n        <p>A license configuration is an abstraction of a customer license
 agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {

"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits":
{
"smithy.api#documentation": " Product information. "
}

```
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest":
```

```
{
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to. For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the AWS CLI</a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
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```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target":
"com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
```

"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},

"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {

"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation":
" Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {

"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}

```
    }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>",
                "smithy.api#required": {}
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
```

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            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                     "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target":
```

"com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},

"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed

in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}

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            }
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
        "type": "timestamp"
    },
    "com.amazonaws.licensemanager#DatetimeRange": {
        "type": "structure",
        "members": {
            "Begin": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Start of the time range.</p>",
                    "smithy.api#required": {}
                }
            },
            "End": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>End of the time range.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC
format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {

    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
```

"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation":
" Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p> \n          <p>You cannot delete a license configuration
 that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

         "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
```

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}

},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {

```
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>",
                "smithy.api#required": {}
            }
        }
    }
  },
  "com.amazonaws.licensemanager#DeleteTokenResponse": {
    "type": "structure",
    "members": {}
  },
  "com.amazonaws.licensemanager#DigitalSignatureMethod": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "JWT_PS384",
                "name": "JWT_PS384"
            }
        ]
    }
  },
  "com.amazonaws.licensemanager#Entitlement": {
    "type": "structure",

"members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement resource. Use only if the unit is None.</p>"
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#Long",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
            }
        },
        "Overage": {
```

"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " Data associated
with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",
"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{

"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"
},
{
"value": "Megabytes",
"name": "MEGABYTES"
},

```
            {
              "value": "Gigabytes",
              "name": "GIGABYTES"
            },
            {
              "value": "Terabytes",
              "name": "TERABYTES"
            },
            {
              "value": "Bits",
              "name": "BITS"
            },
            {
              "value": "Kilobits",
              "name": "KILOBITS"
             },
            {
              "value": "Megabits",
              "name": "MEGABITS"
            },
            {
              "value": "Gigabits",
              "name": "GIGABITS"
            },
            {
              "value": "Terabits",
              "name": "TERABITS"
            },
            {
              "value": "Percent",
              "name": "PERCENT"
            },
            {
              "value": "Bytes/Second",
              "name": "BYTES_PER_SECOND"
            },
            {
              "value": "Kilobytes/Second",
              "name": "KILOBYTES_PER_SECOND"
            },
            {
              "value": "Megabytes/Second",
              "name": "MEGABYTES_PER_SECOND"

        },
            {
              "value": "Gigabytes/Second",
              "name": "GIGABYTES_PER_SECOND"
```

```
            },
            {
                "value": "Terabytes/Second",
                "name": "TERABYTES_PER_SECOND"
            },
            {
                "value": "Bits/Second",
                "name": "BITS_PER_SECOND"
            },
            {
                "value": "Kilobits/Second",
                "name": "KILOBITS_PER_SECOND"
            },
            {
                "value": "Megabits/Second",
                "name": "MEGABITS_PER_SECOND"
            },
            {
                "value": "Gigabits/Second",
                "name": "GIGABITS_PER_SECOND"
            },
            {
                "value": "Terabits/Second",

"name": "TERABITS_PER_SECOND"
            },
            {
                "value": "Count/Second",
                "name": "COUNT_PER_SECOND"
            }
        ]
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
```

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "Count",
"name": "COUNT"
},
{
"value": "None",
"name": "NONE"
},
{
"value": "Seconds",
"name": "SECONDS"
},
{
"value": "Microseconds",
"name": "MICROSECONDS"
},
{
"value": "Milliseconds",
"name": "MILLISECONDS"
},
{
"value": "Bytes",
"name": "BYTES"
},
{
"value": "Kilobytes",
"name": "KILOBYTES"

},
{
"value": "Megabytes",
"name": "MEGABYTES"
},
{
"value": "Gigabytes",
"name": "GIGABYTES"
},
{
"value": "Terabytes",

"name": "TERABYTES"
},
{
"value": "Bits",
"name": "BITS"
},
{
"value": "Kilobits",
"name": "KILOBITS"
},
{
"value": "Megabits",
"name": "MEGABITS"
},
{
"value": "Gigabits",
"name": "GIGABITS"
},
{
"value": "Terabits",
"name": "TERABITS"
},
{
"value": "Percent",
"name": "PERCENT"
},
{
"value": "Bytes/Second",
"name": "BYTES_PER_SECOND"
},
{
"value": "Kilobytes/Second",
"name": "KILOBYTES_PER_SECOND"
},
{
"value": "Megabytes/Second",
"name": "MEGABYTES_PER_SECOND"
},
{
"value": "Gigabytes/Second",
"name": "GIGABYTES_PER_SECOND"
},
{
"value": "Terabytes/Second",
"name": "TERABYTES_PER_SECOND"
},
{

"value": "Bits/Second",
"name": "BITS_PER_SECOND"
},
{
"value": "Kilobits/Second",
"name": "KILOBITS_PER_SECOND"
},
{
"value": "Megabits/Second",
"name": "MEGABITS_PER_SECOND"
},
{
"value": "Gigabits/Second",
"name": "GIGABITS_PER_SECOND"
},
{
"value": "Terabits/Second",
"name": "TERABITS_PER_SECOND"
},
{
"value": "Count/Second",
"name": "COUNT_PER_SECOND"
}
]
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",

"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "

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            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
             "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {

    "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",

        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation": " A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " Filter values. Filter values are case-sensitive. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error":
"client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName":
"item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}

}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {

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        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",

    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules.</p>"
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the
owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList":

{
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Gets
information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license
type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license
conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "

}
},
"StatusMessage": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic
reports about your license configurations. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target":
"com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse":
{
"type": "structure",
"members": {
"LicenseUsage": {
"target": "com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

  {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"
                }

            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",

"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {

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        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "string",

  "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_WORKFLOW",
                "name": "PENDING_WORKFLOW"
            },
            {
                "value": "PENDING_ACCEPT",
                "name": "PENDING_ACCEPT"
            },
            {
                "value": "REJECTED",
                "name": "REJECTED"
            },
            {
                "value": "ACTIVE",
                "name": "ACTIVE"
            },
            {
                "value": "FAILED_WORKFLOW",
                "name": "FAILED_WORKFLOW"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            },
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
             },
            {
                "value": "DISABLED",
                "name": "DISABLED"
            },
            {
                "value": "WORKFLOW_COMPLETED",
                "name": "WORKFLOW_COMPLETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
```

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",

"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer",
        "traits": {
            "smithy.api#box": {}
        }
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",

 "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
```

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EQUALS",
"name": "EQUALS"
},
{
"value": "NOT_EQUALS",
"name": "NOT_EQUALS"
},
{
"value": "BEGINS_WITH",
"name": "BEGINS_WITH"
},
{
"value": "CONTAINS",
"name": "CONTAINS"
}
]
}
},
"com.amazonaws.licensemanager#InventoryFilterList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},

"traits": {

"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "

```
            }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
```

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        },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                    "smithy.api#documentation": "<p>License rules.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"

    }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated
discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license
agreement that can be\n consumed and enforced by License Manager. Components include specifications for
the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a

host), and the number of licenses purchased and used. "
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name
 (ARN) of the resource. "
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": " Type of server resource. "
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource
consuming licenses. "
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time when the license configuration was associated with the
resource. "
                }
            },
            "AmiAssociationScope":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-
account</code>. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes an association with a license configuration. "
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",

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        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "AVAILABLE",
                    "name": "AVAILABLE"
                },
                 {
                    "value": "DISABLED",
                    "name": "DISABLED"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

"smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
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"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}

},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},

"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "

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                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

        "smithy.api#documentation": "<p>The time the usage operation value of the resource was changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type":
"string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "IN_PROGRESS",
                    "name": "IN_PROGRESS"
                },
                {
                    "value": "SUCCEEDED",
                    "name": "SUCCEEDED"
                },
                {
                    "value": "FAILED",
                    "name": "FAILED"
                }
            ]
```

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    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "vCPU",
                "name": "VCPU"

            },
            {
                "value": "Instance",
                "name": "INSTANCE"
            },
            {
                "value": "Core",
                "name": "CORE"
            },
            {
                "value": "Socket",
                "name": "SOCKET"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "PENDING_DELETE",
                "name": "PENDING_DELETE"
            },
            {
                "value": "DELETED",
                "name": "DELETED"
            }
        ]
    }
},
"com.amazonaws.licensemanager#LicenseList": {
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"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "

}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",

"traits": {

"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "AVAILABLE",
"name": "AVAILABLE"
},
{
"value": "PENDING_AVAILABLE",
"name": "PENDING_AVAILABLE"
},
{
"value": "DEACTIVATED",
"name": "DEACTIVATED"
},
{
"value": "SUSPENDED",
"name": "SUSPENDED"
},
{
"value": "EXPIRED",
"name": "EXPIRED"
},
{
"value": "PENDING_DELETE",
"name": "PENDING_DELETE"
},
{

"value": "DELETED",
"name": "DELETED"
}
]
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {

         "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p> \n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending on \n        the license
rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                 }
            }
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},

"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

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                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

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        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n
                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement
is used. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that indicates
whether the available licenses have been exceeded. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"

                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target":
"com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
      "type": "structure",
      "members": {
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#Filters",
          "traits": {
            "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
      "type": "structure",
      "members": {
        "LicenseConversionTasks": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
      },
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"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type":
"structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to
return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input":
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the
license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an
associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum
number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
         "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n
        <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {

    "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received but not accepted.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",

    "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n
  <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
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"Grants": {

"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",

"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n
\n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {

"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}

```
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"

},
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
```

"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits":
{
"smithy.api#documentation": " Information about the resources. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required":
{}
}

```
            }
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
```

"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target":
"com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
}
},
"com.amazonaws.licensemanager#ListTokensResponse":
{
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource
at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

```
            }
        },
        "NextToken": {

            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> |
<code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).
 \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
    <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the
resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n        </ul>"
            }
        }
    }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanager#Location": {
    "type": "string"
},
"com.amazonaws.licensemanager#Long": {
```

```
    "type": "long",
    "traits": {
        "smithy.api#box": {}
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#box": {},
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
```

```
                "min": 0,
                "max": 3
            }
        }
    },
    "com.amazonaws.licensemanager#Message": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The key name.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }

    },
    "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Metadata"
        }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
```

```
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
      "type": "structure",
      "members": {
        "EnableIntegration": {
          "target": "com.amazonaws.licensemanager#Boolean",

      "traits": {
            "smithy.api#documentation": "<p>Enables Organizations integration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
      }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Arn"
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 1
        }
      }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

 "smithy.api#documentation": "<p>Resource type. The possible values are <code>SSM_MANAGED</code> |
<code>RDS</code>.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterList": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
          "traits": {
            "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
```

for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n
Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n
<code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}

```
            }
          },
          "ProductInformationFilterValue": {
            "target":
"com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>Filter value.</p>"
            }
          },
          "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Logical operator.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes product information filters.</p>"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationFilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilter"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationList": {
        "type": "list",

        "member": {
          "target": "com.amazonaws.licensemanager#ProductInformation"
        }
      },
      "com.amazonaws.licensemanager#ProvisionalConfiguration": {
        "type": "structure",
        "members": {
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"

      }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
        "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 429
      }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
      "type": "structure",
      "members": {
        "ReceivedStatus": {
          "target": "com.amazonaws.licensemanager#ReceivedStatus",
          "traits": {
            "smithy.api#documentation": "<p>Received status.</p>"
          }
        },
        "ReceivedStatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {

      "smithy.api#documentation": "<p>Received status reason.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "value": "PENDING_WORKFLOW",
              "name": "PENDING_WORKFLOW"
            },
            {
              "value": "PENDING_ACCEPT",
              "name": "PENDING_ACCEPT"
            },
             {
              "value": "REJECTED",
              "name": "REJECTED"
            },
            {
              "value": "ACTIVE",
              "name": "ACTIVE"
            },
            {
              "value": "FAILED_WORKFLOW",
              "name": "FAILED_WORKFLOW"
            },
            {
              "value": "DELETED",
              "name": "DELETED"
            },
            {
              "value": "DISABLED",
              "name": "DISABLED"
            },
            {
              "value": "WORKFLOW_COMPLETED",
              "name": "WORKFLOW_COMPLETED"
            }
          ]
        }
      },
      "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
        "members": {

    "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
```

```
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licensemanager#RejectGrantResponse": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Grant ARN.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
          "smithy.api#documentation": "<p>Grant status.</p>"

    }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Grant version.</p>"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#RenewType": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "value": "None",
          "name": "NONE"
        },
        {
          "value": "Weekly",
          "name": "WEEKLY"
        },
        {
          "value": "Monthly",
```

"name": "MONTHLY"
}
]
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {

"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",
"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "string",
"traits": {

```
        "smithy.api#enum": [
            {
                "value": "DAY",
                "name": "DAY"
            },
            {
                "value": "WEEK",
                "name": "WEEK"
            },
            {
                "value": "MONTH",

        "name": "MONTH"
            }
        ]
    }
},
"com.amazonaws.licensemanager#ReportGenerator": {
    "type": "structure",
    "members": {
        "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>"
            }
        },
        "ReportType": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
                "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
            }
        },
        "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
                "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
             }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
        },
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},

```
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }
        }
    },

"traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
  },
  "com.amazonaws.licensemanager#ReportType": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "value": "LicenseConfigurationSummaryReport",
                "name": "LICENSE_CONFIGURATION_SUMMARY_REPORT"
            },
            {
                "value": "LicenseConfigurationUsageReport",
                 "name": "LICENSE_CONFIGURATION_USAGE_REPORT"
            }
        ]
    }
  },
  "com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
  },
```

```
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
             "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
```

"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have
been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResource.NotFound",
"httpResponseCode": 400
},
"smithy.api#documentation": " The resource cannot be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"value": "EC2_INSTANCE",
"name": "EC2_INSTANCE"
},
{
"value": "EC2_HOST",

"name": "EC2_HOST"
},
{
"value": "EC2_AMI",
"name": "EC2_AMI"
},
{
"value": "RDS",
"name": "RDS"
},
{
"value": "SYSTEMS_MANAGER_MANAGED_INSTANCE",
"name": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
]
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket
reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published
to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

```
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation":
"<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"

       }
      },
      "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Tag key.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

```
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required":
 {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"

```
        }
    },
    "com.amazonaws.licensemanager#TokenType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "value": "REFRESH_TOKEN",
                    "name": "REFRESH_TOKEN"
                }
            ]
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest":
 {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {

        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a
license\n        configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
```

configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"

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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

       {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"

  }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
```

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",

"members": {}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"

},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services

resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "
}
}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}

```
        },
        "com.amazonaws.licensemanager#ValidationException": {
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {
```

```
 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive
 identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string
```

```
// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

//
Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err
```

```
 != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "CheckoutLicense",
```

```
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 // *
 // Beneficiary
 //
 // * ProductSKU
 //
 // * Fingerprint
 //
 //
 * Status
 Filters []types.Filter
```

```
 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "ListLicenses",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the
 license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack);
 err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "license-manager",
  OperationName: "DeleteLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out
 := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if
 err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = addHTTPSignerV4Middleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
```

```
 err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  SigningName:   "grafana",
  OperationName: "AssociateLicense",
 }
}
```

1.3032 pysnmp-pyasn1 1.1.3

1.3032.1 Available under license :

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```
ASN.1 library for Python
========================

.. toctree::
  :maxdepth: 1

Abstract Syntax Notation One (`ASN.1
<http://en.wikipedia.org/wiki/Abstract_Syntax_Notation_1x>`_) is a
technology for exchanging structured data in a universally understood,
```

hardware agnostic way. Many industrial, security and telephony
applications heavily rely on ASN.1.

The `pyasn1 <https://pypi.org/project/pyasn1/>`_ library implements
ASN.1 support in pure-Python.

What is ASN.1

ASN.1 is a large, arguably over-engineered and extremely old data modelling and
serialisation tool. It is probably among the first serialisation protocols in
the history of computer science and technology.

ASN.1 started its life over 30 years ago as a serialisation mechanism for the first
electronic mail (known as X.400). Later on if was split off the e-mail application
and become a stand-alone tech still being actively supported by its designers
and
widely used in industry and technology.

Since then ASN.1 is sort of haunted by its relations with the OSI model -- the
first, unsuccessful, version of the Internet. You can read many interesting
`discussions <https://news.ycombinator.com/item?id=8871453>`_ on that topic.

In the following years, generations of software engineers tackled the serialisation
problem many times. We can see that in Google's `ProtoBuffers <https://developers.google.com/protocol-buffers/>`_
or `FlatBuffers <https://google.github.io/flatbuffers/>`_, for example.
Interestingly, many new takes on binary protocol design do not depart
far from ASN.1 from technical perspective. It's more of a matter of striking
a balance between processing overhead, wire format overhead and human
readability.

Looking at what ASN.1 has to offer, it has three loosely coupled parts:

* Data types: the standard introduces a collection of basic data types
(integers, bits, strings, arrays and records) that can be used for describing
arbitrarily complex, nested data structures.

* Serialisation protocols: the above data structures could be converted into a
series of octets for storage or transmission over the wire as well as
recovered back into their structured form. The system is fully agnostic
to hardware architectures differences.

* Schema language: ASN.1 data structures could be described in terms
of a schema language for ASN.1 compiler to turn it into platform-specific
implementation.

ASN.1 applications

Being an old and generally successful standard, ASN.1 is widely
adopted for many uses. To give you an example, these technologies
use ASN.1 for their data exchange needs:

* Signaling standards for the public switched telephone network (SS7 family)
* Network management standards (SNMP, CMIP)
* Directory standards (X.500 family, LDAP)
* Public Key Infrastructure standards (X.509, etc.)
* PBX control (CSTA)
* IP-based Videoconferencing (H.323 family)
* Biometrics (BIP, CBEFF,
 ACBio)
* Intelligent transportation (SAE J2735)
* Cellular telephony (GSM, GPRS/EDGE, UMTS, LTE)

ASN.1 gotchas

Apparently, ASN.1 is hard to implement properly. Quality open-source
ASN.1 tools are rare, but ad-hoc implementations are numerous. Judging from the
`statistics <http://cve.mitre.org/cgi-bin/cvekey.cgi?keyword=ASN.1>`_ on discovered
security vulnerabilities, many people have implemented ASN.1 parsers
and oftentimes fell victim to its edge cases.

On the bright side, ASN.1 has been around for a long time, it is well understood
and security reviewed.

Documentation

.. toctree::
  :maxdepth: 2

  /pyasn1/contents

Use case

.. toctree::
  :maxdepth: 2

  /example-use-case

Download & Install

.. toctree::
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  /download

Changes

All changes and release history is maintained in changelog. There you
could also download the latest unreleased pyasn1 tarball containing
the latest fixes and improvements.

..
 toctree::
  :maxdepth: 1

  /changelog

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Getting help

Please, file your `issues <https://github.com/etingof/pyasn1/issues>`_
and `PRs <https://github.com/etingof/pyasn1/pulls>`_ at GitHub.
Alternatively, you could ask for help at
`Stack Overflow <http://stackoverflow.com/questions/tagged/pyasn1>`_
or search
`pyasn1-users <https://lists.sourceforge.net/lists/listinfo/pyasn1-users>`_
mailing list archive.

Books on ASN.1

The pyasn1 implementation is largely based on reading up the following awesome
books:

* `ASN.1 - Communication between heterogeneous systems <http://www.oss.com/asn1/dubuisson.html>`_ by
Olivier Dubuisson
* `ASN.1 Complete <http://www.oss.com/asn1/resources/books-whitepapers-pubs/larmouth-asn1-book.pdf>`_ by

Prof John Larmouth

Here you can get the official standards which is hard to read:

* `ITU standards
 <http://www.itu.int/ITU-T/studygroups/com17/languages/X.680-X.693-0207w.zip>`_

On the other end of the readability spectrum, here is a quick and sweet write up:

* `A Layman's Guide to a Subset of ASN.1, BER, and DER <ftp://ftp.rsasecurity.com/pub/pkcs/ascii/layman.asc>`_ by Burton S. Kaliski

If you are working with ASN.1, we'd highly recommend reading a proper
book on the subject.

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* /pysnmp-pyasn1-1-1-3-tar-gz/pysnmp-pyasn1-1.1.3/docs/source/contents.rst
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ASN.1 library for Python

[![PyPI](https://img.shields.io/pypi/v/pysnmp-pyasn1.svg?maxAge=2592000)](https://pypi.org/project/pysnmp-pyasn1)
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This is a free and open source implementation of ASN.1 types and codecs
as a Python package. It has been first written to support particular
protocol (SNMP) but then generalized to be suitable for a wide range
of protocols based on
[ASN.1 specification](https://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-X.208-198811-W!!PDF-E&type=items).

This
 project has been forked for ongoing maintenance and modernization.

Features
---

* Generic implementation of ASN.1 types (X.208)
* Standards compliant BER/CER/DER codecs
* Can operate on streams of serialized data
* Dumps/loads ASN.1 structures from Python types
* 100% Python, works with Python 2.7 and 3.5+

* MT-safe
* Contributed ASN.1 compiler [Asn1ate](https://github.com/kimgr/asn1ate)

Why using pyasn1

ASN.1 solves the data serialisation problem. This solution was designed long ago by the wise Ancients. Back then, they did not have the luxury of wasting bits. That is why ASN.1 is designed to serialise data structures of unbounded complexity into something compact and efficient when it comes to processing the data.

That probably explains why many network protocols and file formats still rely on the 30+ years old technology. Including a number of high-profile Internet protocols and file formats.

Quite a number of books cover the topic of ASN.1.

[Communication between heterogeneous systems](http://www.oss.com/asn1/dubuisson.html) by Olivier Dubuisson is one of those high quality books freely available on the Internet.

The pyasn1 package is designed to help Python programmers tackling network protocols and file formats at the comfort of their Python prompt. The tool struggles to capture all aspects of a rather complicated ASN.1 system and to represent it on the Python terms.

How to use pyasn1

With pyasn1 you can build Python objects from ASN.1 data structures. For example, the following ASN.1 data structure:

```bash
Record ::= SEQUENCE {
 id       INTEGER,
 room  [0] INTEGER OPTIONAL,
 house [1] INTEGER DEFAULT 0
}
```

Could be expressed in pyasn1 like this:

```python
class Record(Sequence):
  componentType = NamedTypes(
      NamedType('id', Integer()),
```

```
      OptionalNamedType(
         'room', Integer().subtype(
            implicitTag=Tag(tagClassContext, tagFormatSimple, 0)

     )
      ),
      DefaultedNamedType(
         'house', Integer(0).subtype(
            implicitTag=Tag(tagClassContext, tagFormatSimple, 1)
         )
      )
   )
```

It is in the spirit of ASN.1 to take abstract data description
and turn it into a programming language specific form.
Once you have your ASN.1 data structure expressed in Python, you
can use it along the lines of similar Python type (e.g. ASN.1
`SET` is similar to Python `dict`, `SET OF` to `list`):

```python
>>> record = Record()
>>> record['id'] = 123
>>> record['room'] = 321
>>> str(record)
Record:
id=123
room=321
>>>
```

Part of the power of ASN.1 comes from its serialisation features. You
can serialise your data structure and send it over the network.

```python
>>> from pyasn1.codec.der.encoder import encode
>>> substrate = encode(record)
>>> hexdump(substrate)
00000: 30 07 02 01 7B 80 02 01 41
```

Conversely, you can turn serialised ASN.1 content, as received from
network or read from
 a file, into a Python object which you can
introspect, modify, encode and send back.

```python
>>> from pyasn1.codec.der.decoder import decode
```

```
>>> received_record, rest_of_substrate = decode(substrate, asn1Spec=Record())
>>>
>>> for field in received_record:
>>>    print('{} is {}'.format(field, received_record[field]))
id is 123
room is 321
house is 0
>>>
>>> record == received_record
True
>>> received_record.update(room=123)
>>> substrate = encode(received_record)
>>> hexdump(substrate)
00000: 30 06 02 01 7B 80 01 7B
```

The pyasn1 classes struggle to emulate their Python prototypes (e.g. int, list, dict etc.). But ASN.1 types exhibit more complicated behaviour. To make life easier for a Pythonista, they can turn their pyasn1 classes into Python built-ins:

```python
>>> from pyasn1.codec.native.encoder import encode
>>> encode(record)
{'id': 123, 'room': 321, 'house': 0}
```

Or vice-versa -- you can initialize an ASN.1 structure from a tree of Python objects:

```python
>>> from
 pyasn1.codec.native.decoder import decode
>>> record = decode({'id': 123, 'room': 321, 'house': 0}, asn1Spec=Record())
>>> str(record)
Record:
id=123
room=321
>>>
```

With ASN.1 design, serialisation codecs are decoupled from data objects, so you could turn every single ASN.1 object into many different serialised forms. As of this moment, pyasn1 supports BER, DER, CER and Python built-ins codecs. The extremely compact PER encoding is expected to be introduced in the upcoming pyasn1 release.

More information on pyasn1 APIs can be found in the

[documentation](http://snmplabs.com/pysnmp/pyasn1/docs),
compiled ASN.1 modules for different protocols and file formats
could be found in the pyasn1-modules
[repo](https://github.com/pysnmp/pyasn1-modules).

How to get pyasn1

This project is forked from pyasn1. The pyasn1 package is distributed under terms
and conditions of 2-clause BSD [license](http://snmplabs.com/pyasn1/license.html).
Source code is freely available as
 a GitHub [repo](https://github.com/pysnmp/pyasn1).

You could `pip install pysnmp-pyasn1` or download it from [PyPI](https://pypi.org/project/pysnmp-pyasn1).

If something does not work as expected,
[open an issue](https://github.com/pysnmp/pyasn1/issues) at GitHub or
post your question [on Stack Overflow](https://stackoverflow.com/questions/ask)
or try browsing pyasn1 .

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1.3039 go-ps 0.3.28

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1.3040 go-deadlock 0.3.5

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1.3041 winston/node_modules/is-stream 2.0.1

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1.3042 kube-openapi 0.0.0-20240423202451-8948a665c108

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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
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package spec

import "testing"

func TestIntegrationLicense(t *testing.T) {
 license := License{Name: "the name", URL: "the url"}
 const licenseJSON = `{"name":"the name","url":"the url"}`
 const licenseYAML = "name: the name\nurl: the url\n"

 assertSerializeJSON(t, license, licenseJSON)
 assertParsesJSON(t, licenseJSON, license)
}
```

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1.3047 protobuf 1.5.4

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1.3049 klauspost-compress 1.16.7

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Files: s2/cmd/internal/readahead/*

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Files: snappy/*
Files: internal/snapref/*

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1.3050 golang-genproto 0.0.0-20231211222908-989df2bf70f3

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1.3051 aws-sdk-go-v2-service-cloudwatchlogs 1.32.0

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```
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import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-
Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil,
```

```
 err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err !=
 nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack);
err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack,
 options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

AWS SDK for Go

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```
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
```

```
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary
 *string

 noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return
 err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
       "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
           "type": "integer"
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
           "type": "long"
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
           "type": "structure",
           "members": {
```

"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
{
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the settings defined for Linux subscriptions discovery. The
settings include if\n      Organizations integration has been enabled, and
 which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
```

"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance type of the resource. "
}

},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}

```
            },
            "UsageOperation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
 more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User
Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
                }
            },
            "LastUpdatedTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery
 updated the instance details.</p>"
                }
            },
            "SubscriptionName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription being used by the instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
```

```
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],

"traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id",
                "content-length",
                "x-api-key",
                "authorization",
                "x-amz-date",
```

"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},

```
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ],
    "type": "tree",
    "rules": [
      {

        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseFIPS"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
        "type": "tree",
        "rules": [
          {

          "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
```

"type": "error"
},
{
"conditions": [],

"endpoint": {
"url": {
"ref": "Endpoint"
},
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},
{
"conditions": [],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "isSet",

"argv": [
{
"ref": "Region"
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "aws.partition",
"argv": [
{
"ref": "Region"
}
],

"assign": "PartitionResult"
}

```
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
                          true
                        ]
                      },

            {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [
                          {

                       "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]

}
                            ]
                          },
                          {
                            "fn": "booleanEquals",
```

```
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },

                    "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [],
                    "type": "tree",
                    "rules": [
                        {

        "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ]
                }
            ]

        },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
```

"fn": "booleanEquals",
"argv": [
{

"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,

{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
}
]
}
],
"type": "tree",

"rules": [
{
"conditions": [],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"

```
                    }
                ]
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]

},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {

     "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
```

```
                                    {
                                      "conditions": [],
                                      "type": "tree",
                                      "rules": [
                                        {
                                          "conditions": [],

                                     "endpoint": {
                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                          },
                                          "type": "endpoint"
                                        }
                                      ]
                                    }
                                  ]
                                },

        {
                                  "conditions": [],
                                  "error": "DualStack is enabled but this partition does not support DualStack",
                                  "type": "error"
                                }
                              ]
                            },
                            {
                              "conditions": [],
                              "type": "tree",
                              "rules": [
                                {
                                  "conditions": [],
                                  "endpoint": {
                                    "url":
 "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                  },
                                  "type": "endpoint"
                                }
                              ]
                            }
                          ]
                        }
                      ]
                    },
                    {
```

"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"

```
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint":
{
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
             "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
```

```
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
             }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
```

"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {

"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled
and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",

```
  "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,

   "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }

 }
      ],
      "version": "1.0"
   }
}
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled LinuxSubscriptionsDiscovery"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled LinuxSubscriptionsDiscovery"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>AmiID</code> with an optional operator to see subscriptions that match, partially\n match, or don't match a certain Amazon Machine Image (AMI) ID. \n The valid names for this filter are: \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n

```
<p>\n <code>ProductCode</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceType</code>\n </p>\n </li>\n </ul>\n <p>The valid Operators for this
filter are:</p>\n <ul>\n <li>\n <p>\n <code>contains</code>\n </p>\n
</li>\n <li>\n <p>\n <code>equals</code>\n </p>\n </li>\n <li>\n
<p>\n <code>Notequal</code>\n </p>\n </li>\n </ul>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"

}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation":
"<p>An array that contains instance objects.</p>"
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
}
},
```

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Subscriptions"
}

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n

```
<li>\n <p>\n <code>Subscription</code>\n </p>\n </li>\n </ul>\n
<p>The valid Operators for this filter are:</p>\n
<ul>\n <li>\n <p>\n <code>contains</code>\n </p>\n </li>\n
<li>\n <p>\n <code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>",
"smithy.api#length": {

"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": "<p>Token for
the next set of results.</p>"
}
}
}
},
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },

"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

    {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"

        }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux
subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},

"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",

"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",

"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},

"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "

```
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation":
 "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
```

```
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //   - Beneficiary
 //   - ProductSKU
 //   - Fingerprint
 //
   - Status
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if
 err := addProtocolFinalizerMiddlewares(stack, options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 //
 This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
```

```
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "DisassociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
```

```
 return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type
 CheckoutLicenseInput struct {

 // Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
```

```
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource
 Name (ARN) of the checkout license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string
```

```
 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil
 {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
```

```
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack);
 err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

```
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier
 that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see RFC 7518 Digital Signature with
 // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string
```

```
 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
```

```
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return
 err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
```

```
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide
```

```
to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity
```

```
 *types.DatetimeRange

 // Information about the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add
 protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName:
 "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version
 *string

 noSmithyDocumentSerde
}

type GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return
err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
 return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
 return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
 return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack);
err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

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DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE

```
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
   - ProductSKU
 //   - Status
 //   - Fingerprint
 //   - IssuerName
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
```

```
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
```

```
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack);
 err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
```

"type": "structure",
"members": {
"DirectoryId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based
subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related

costs will take 48\n hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n monthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider of the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {

"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n resource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the identity provider from providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}

```
                }
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }

 },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
```

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
}
},

"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",

"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " An object that details an Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation":
" Details about an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " An object that details the registered identity providers product related configuration\n settings such as the subnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an identity provider. ",
"smithy.api#required": {}
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"

```
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
            "type": "structure",
            "members": {
                "InstanceId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                        "smithy.api#required": {}
                    }
                },
                "Status": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The status
 of an EC2 instance resource.</p>",
                        "smithy.api#required": {}
                    }
                },
                "Products": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                    "traits": {
                        "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                        "smithy.api#required": {}
                    }
                },
                "LastStatusCheckDate": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The date of the last status check.</p>"
                    }
                },
                "StatusMessage": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                    }

        }
            },
            "traits": {
                "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
            "type": "list",
```

"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}

```
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",

     "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
         },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
```

"content-length",
"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
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"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"

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"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n a per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

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            "type": "String"
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                    "argv": [
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                "type": "error"
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                    "argv": [
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                        "ref": "UseDualStack"
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"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
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"conditions": [],
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"ref": "Endpoint"
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"assign": "PartitionResult"
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"type": "tree",

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                  },
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                    "argv": [
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                      {
                        "fn": "getAttr",

"argv": [
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                            "ref": "PartitionResult"
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                          "supportsFIPS"
                        ]
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                    "argv": [
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"fn": "getAttr",
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"ref": "PartitionResult"
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"supportsDualStack"
]
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"properties": {},
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"type": "endpoint"
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
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                            },
                            "supportsFIPS"

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fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}

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                      "type": "endpoint"
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                  "type": "error"
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                      "ref": "UseDualStack"
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
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                "type": "error"
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"headers": {}
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"conditions":
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"error": "Invalid Configuration: Missing Region",
"type": "error"
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false

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            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
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                "UseDualStack": true
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            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
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                }
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            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
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            "documentation": "For region cn-north-1 with
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            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
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            "expect": {
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region cn-north-1
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"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
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},

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"UseDualStack": true
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"params": {
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"params": {
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"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"

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              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect":
{
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": false
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            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
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            "params": {
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              "UseFIPS": false,
              "UseDualStack":
true
            }
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              }
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              "UseDualStack": false
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"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
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"params": {
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
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"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": false
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              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
              "expect": {
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                "Endpoint": "https://example.com"
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              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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              "params": {
                "Region": "us-east-1",
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                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
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              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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                "UseFIPS": false,
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                "Endpoint": "https://example.com"
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            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
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"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
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  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
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"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated":
{
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse":
{
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list identity providers operation. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
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    }
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"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
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    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
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    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
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    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
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"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
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"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
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"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
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"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list instances operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
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"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
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"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
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"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
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"errors": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
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"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name

of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
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"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
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"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
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"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

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            }
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
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        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
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          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
          },
          "smithy.api#paginated":
{
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
```

"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {

```
        "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
    "type": "structure",
    "members": {

    "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }

  },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for a user.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusMessage": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for a user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " The summary of the user-based subscription products for a user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",

"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n subnets to provision VPC endpoints. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {

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            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation":
 "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n      your VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n      subnets to provision VPC endpoints, and the security group ID that
 is associated with the VPC\n      endpoints. The security group should permit inbound TCP port 1688
communication from resources\n      in the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n        hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing.
 For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n          monthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the user. "
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required":
{}
}
},
"Product": {
"target": "smithy.api#String",

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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the user.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
    "type": "structure",
    "members": {
        "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
                "smithy.api#documentation":
"<p>Metadata that describes the start product subscription operation.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
    "type": "structure",
    "members": {
        "message": {
```

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",

"traits": {
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n update any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n require connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID
that allows inbound TCP port 1688 communication between resources in\n your VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n the subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
{
"smithy": "2.0",
"metadata": {
"suppressions": [
{
"id": "HttpMethodSemantics",
"namespace": "*"
},
{
"id": "HttpResponseCodeSemantics",
"namespace": "*"
},
{
"id": "PaginatedTrait",

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            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
```

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    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
```

"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},

{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"

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        },
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]

              }
              ],
              "type": "tree",
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```
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {

"conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          },
          {
            "conditions": [
              {
```

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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "type": "tree",
            "rules": [
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                "conditions": [
                  {
                    "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref":
"UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
```

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{
    "conditions": [
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        "fn": "booleanEquals",
        "argv": [
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          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]

  }
        ]
      },
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },

"supportsDualStack"
            ]
          }
        ]
      }
    ],
    "type": "tree",
    "rules": [
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        "conditions": [],
        "endpoint": {
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
          "properties": {},
          "headers": {}

},
        "type": "endpoint"
      }
```

```
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
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        "argv": [
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                },
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                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
```

```
                    {
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                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
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            {
                "conditions": [],
                "error": "FIPS is enabled but this
partition does not support FIPS",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
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         "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },

"supportsDualStack"
                                ]
```

```
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
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                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                        },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
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  "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint":
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      "url": "https://license-manager.af-south-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "af-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
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{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
   }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
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  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
     }
  },
  "params": {
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"Region": "ap-northeast-2",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
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"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
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"params": {
"Region": "eu-central-1",

"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
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{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,

"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
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"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false

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            }
        },
        {
            "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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                    "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-west-2",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
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            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url":
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"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}

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    },
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      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },

  {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
       },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
      },
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"params": {
"Region": "us-gov-west-1",
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"UseDualStack": false
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{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
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}
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"params": {
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
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},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}

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      },
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        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
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            "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
          }
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },

    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },

"params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
```

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                "UseDualStack": true
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        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
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                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,

        "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
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"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
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"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}

```
            },
            "CHECKOUT_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutLicense"
                }
            },
            "CHECKOUT_BORROW_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutBorrowLicense"
                }
            },
            "CHECK_IN_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckInLicense"
                }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ExtendConsumptionLicense"
                }
            },
            "LIST_PURCHASED_LICENSES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
```

"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }

},
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}

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            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
```

"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {

"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {

"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
```

```
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode":
 409
          },
          "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 409
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
            }
          },
          "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },

 "traits": {
          "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
      },
      "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
          "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
              "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
```

```
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n <ul>\n
            <li>\n                <p>An organization, which will include all accounts across your organization.</p>\n </li>\n        </ul>",
                    "smithy.api#required": {}
                }
```

```
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
```

```
    },
    "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
        }
    },
    "GrantName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
        }
    },
    "AllowedOperations": {
        "target": "com.amazonaws.licensemanager#AllowedOperationList",
        "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
         "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "StatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
        }
    },
    "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
        }
    },
    "Options": {
        "target": "com.amazonaws.licensemanager#Options",
        "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
        }
    }
},
 "traits": {
    "smithy.api#input": {}
}
```

```
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the grant.</p>"
          }
        }
      },
      "traits":
{
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
```

all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |

<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {

            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",

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        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
```

"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {

"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for

workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT

token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the
grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {

"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
```

"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},

"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},

"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {

"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {

```
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

           "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {

"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"

```
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Filter",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
             "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
```

tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},

```
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
```

},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
```

```
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {

"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "

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                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
                }
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
```

configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {

```
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
```

"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",

"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

```
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
```

```
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

},
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#IssuerDetails",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license issuer.</p>"
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

             }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license status.</p>"
                }
```

```
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                 "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

    }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Version of the granted license.</p>"
                }
            },
            "ReceivedMetadata": {
                "target": "com.amazonaws.licensemanager#ReceivedMetadata",
                "traits": {
```

"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},

```
"com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                 "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
},
"com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer name.</p>",
                "smithy.api#required": {}
            }
        },
        "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "

```
                }
            },
            "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
```

"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}

```
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the license configuration.</p>"
        }
    },
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

   }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
        }
    },
    "ManagedResourceSummaryList": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
        }
    },
    "ProductInformationList": {
        "target": "com.amazonaws.licensemanager#ProductInformationList",
        "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
        }
    },
    "AutomatedDiscoveryInformation": {

        "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
        "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
```

agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},

```
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
```

```
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
    "type": "string",
    "traits": {

   "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConversionTask"
}
},
"com.amazonaws.licensemanager#LicenseCountingType": {
"type": "enum",
"members": {
"VCPU": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "vCPU"
}
},
"INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Instance"
}
},
"CORE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Core"
}
},
"SOCKET": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Socket"
}
}
}

```
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
```

"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",

"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {

"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configurations
for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license
configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |

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<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n              <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n              Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

          "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your

account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}

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        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
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```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

```
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n              <p>\n                <code>Beneficiary</code>\n              </p>\n
      </li>\n            <li>\n              <p>\n                <code>ProductSKU</code>\n              </p>\n            </li>\n
   <li>\n              <p>\n                <code>Fingerprint</code>\n              </p>\n            </li>\n            <li>\n
<p>\n                <code>Status</code>\n              </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
```

"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while

specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}

```
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
      <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
```

```
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n              <p>\n                <code>LicenseArns</code>\n              </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100

```
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>. \n \n \n
\n <code>Application Publisher</code> - The publisher of the application.\n Logical

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

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        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
     }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
```

```
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
```

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            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
```

```
        "members": {
          "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 308
        }
      },
      "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
```

{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

```
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
```

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report

generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}

```
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
```

"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

```
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096

```
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
"com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>One or more tags.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#TagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#TokenData": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
```

format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {

"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
```

"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
```

update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
```

```
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version
 of the license.
 //
 // This member is required.
 SourceVersion *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack,
 options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
  return err
 }
 if err = addRetryMiddlewares(stack, options); err != nil {
```

```
 return err
 }
 if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
```

```
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
```

1.3052 klauspost-compress 1.17.11

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1.3053 @npmcli/node-gyp 4.0.0

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1.3054 @npmcli/name-from-folder 3.0.0

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1.3055 @dabh/diagnostics 2.0.2

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1.3056 npmcli-promise-spawn 8.0.2

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1.3057 subprocess-tee 0.4.2

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1.3058 @ungap/promise-all-settled 1.1.2

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1.3059 npmcli-installed-package-contents 3.0.0

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1.3060 xml-commons-resolver 1.1

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1.3062 mcs-api 0.1.1-0.20240624222831-d7001fe1d21c

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1.3063 otel-exporters-prometheus 0.52.0

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minor_changes:

- galaxy - include ``license_file`` in the default manifest directives
  (https://github.com/ansible/ansible/pull-request/79420)

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1.3069 protoreflect 1.15.1

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1.3070 x-time 0.9.0

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1.3071 github.com/klauspost/cpuid/v2 2.2.9

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1.3072 genproto-googleapis-api 0.0.0-20241209162323-e6fa225c2576

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
```

```
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
```

```
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}
```

```
func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
```

```
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
0x61, 0x67,
0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
```

```
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
```

```
 },
 GoTypes:          file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
 EnumInfos:        file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
 MessageInfos:     file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
= nil
file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"
```

```
 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test
```

```
import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
```

```
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
```

```
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"
```

```
 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
```

```
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
```

```
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
```

```
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
```

```
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
```

```
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution
This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
```

```
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
```

```
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
```

```
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
```

```
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
```

```
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
```

```
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
```

```
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
```

```
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
```

```
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
```

```
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23
```

```
package compute_test
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseCodeRequest{
 // TODO: Fill request
struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
}
resp, err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
```

```
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"
```

```
 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}
```

```
func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
```

```
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
```

```
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
```

```
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
```

```
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}
```

```
// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
```

```
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}
```

```
func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
```

```
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}
```

```
func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
```

```
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
```

```
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x64,
 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
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sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}
```

```
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
```

```
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
```

```
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
```

```
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
```

```
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
```

```
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
```

```
 return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
```

```
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
```

```
  Handler:    _LicenseManagementService_Unassign_Handler,
 },
 {
  MethodName: "EnumerateLicensedUsers",
  Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
 },
},
Streams:  []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto
```

```
package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
```

```
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
```

```
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
```

```
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}
```

```
var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54,
 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
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 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
```

```
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
```

```
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.3073 fgprof 0.9.5

1.3073.1 Available under license :

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1.3074 opentelemetry-operations-go-detectors-gcp 1.25.0

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
```

```
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
```

```
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
```

```
  "OWNER":          1,
  "WRITER":         2,
  "READER":         3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
```

```
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
```

0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,

```
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
```

```
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
```

```
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.UpdateLicensePoolRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
}
resp, err := c.UpdateLicensePool(ctx, req)
if err != nil {
 // TODO: Handle error.
}
//
TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
}
resp, err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
 //
TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
}
op, err := c.Delete(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
```

```
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
```

```
ExampleLicensesClient_SetIamPolicy() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically
generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
```

_ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete          []gax.CallOption
 Get             []gax.CallOption
 GetIamPolicy    []gax.CallOption
 Insert          []gax.CallOption
```

```
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
```

```
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
```

```
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}
```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.

```
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
```

```
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
```

```
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
```

```
 req.MaxResults = proto.Uint32(uint32(pageSize))
}
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, "", err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.Filter != nil {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req != nil && req.MaxResults != nil {
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
}
if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}
if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from
client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }
```

```
  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
```

```
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
```

```
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
```

```
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)
```

```
func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)
```

```
func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
```

```
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}
```

```
func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
```

```
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
```

```
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
```

```
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
```

```
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
```

```
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
```

```
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}
```

```
func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
```

```
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}
```

```
func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}
```

```
func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
```

```
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}
```

```
func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
```

```
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x64,
 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
 0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
```

0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
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0x8b, 0x02, 0x0a, 0x11, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73,
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0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f,

0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65,
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0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e,
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x4c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x22, 0x71, 0xda, 0x41, 0x18, 0x6c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x2c, 0x75, 0x70, 0x64, 0x61,
0x74, 0x65, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x50, 0x3a, 0x0c, 0x6c,
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0x65,
0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72,
0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52,
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0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63,
0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73,
0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x58, 0xda, 0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
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0x3a, 0x01, 0x2a, 0x22, 0x3a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73,
0x2f, 0x2a, 0x2f, 0x6f,
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0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12,
0xe7, 0x01, 0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67,
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0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
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0x2a, 0x2f, 0x6f,
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0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
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0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
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0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
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0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x43,
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0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
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0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```
var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
```

```
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
```

```
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
```

```
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
```

```
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
```

```
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
```

```
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
```

```
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}
```

```
var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
```

```
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
```

```
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}
```

```
func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
```

```
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72,
0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
```

```
},
GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
EnumInfos:        file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
MessageInfos:     file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.3075 cpuid 2.2.9

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1.3078 sigs.k8s.io/network-policy-api 0.1.5

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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
```

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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```
//go:build go1.10
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package pq

import (
 "context"
 "database/sql/driver"
)

// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
 return c.(*conn).noticeHandler
```

```
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
 c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
 on it.
type NoticeHandlerConnector struct {
 driver.Connector
 noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
 c, err := n.Connector.Connect(ctx)
 if err == nil {
  SetNoticeHandler(c, n.noticeHandler)
 }
 return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  return c.noticeHandler
 }
 return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
 setting the notice
// handler. A nil notice handler may be used to unset it.
//
```

```
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  c.noticeHandler = handler
  return c
 }
 return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
```

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1.3081 genproto-googleapis-rpc 0.0.0-20240826202546-f6391c0de4c7

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1.3082 distlib 0.3.4

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related

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All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	2.1.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2.1	2.2	2002	PSF	yes
2.2.2	2.2.1	2002	PSF	yes
2.2.3	2.2.2	2003	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes
2.3.5	2.3.4	2005	PSF	yes
2.4	2.3	2004	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes
2.6.5	2.6.4	2010	PSF	yes

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Distutils2 Contributors
==========

The Distutils2 project was started by Tarek Ziad and is currently maintained by ric Araujo. Many people have contributed to the project.

distlib has started off using some of the code from distutil2.

If you're making a patch, please add your name below in alphabetical order,

and welcome into the Fellowship of the Packaging!

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1.3083 antlr 4.13.1

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* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ANTLRParser.g
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```
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*/

/** ANTLR tool checks output templates are compatible with tool code generation.
*  For now, a simple string match used on x.y of x.y.z scheme.
*  Must match Tool.VERSION during load to templates.
*
*  REQUIRED.
*/

javascriptTypeInitMap ::= [
 "bool":"false",
 "int":"0",
 "float":"0.0",
 "str":"",
 default:"{}" // anything
 other than a primitive type is an object
]

// args must be <object-model-object>, <fields-resulting-in-STs>

ParserFile(file, parser, namedActions, contextSuperClass) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
import antlr4 from 'antlr4';
<if(file.genListener)>
import <file.grammarName>Listener from './<file.grammarName>Listener.js';
<endif>
<if(file.genVisitor)>
import <file.grammarName>Visitor from './<file.grammarName>Visitor.js';
<endif>

<namedActions.header>
<parser>
>>
```

```
ListenerFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
import antlr4 from 'antlr4';

// This class defines a complete listener for a parse tree produced by <file.parserName>.
export default class <file.grammarName>Listener extends antlr4.tree.ParseTreeListener {

<file.listenerNames:{lname |
 // Enter a parse tree produced by <file.parserName>#<lname>.
 enter<lname; format="cap">(ctx) {
 \}

 // Exit a parse tree produced by <file.parserName>#<lname>.
 exit<lname;
 format="cap">(ctx) {
 \}

}; separator="\n">

}
>>


VisitorFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
import antlr4 from 'antlr4';

// This class defines a complete generic visitor for a parse tree produced by <file.parserName>.

export default class <file.grammarName>Visitor extends antlr4.tree.ParseTreeVisitor {

<file.visitorNames:{lname |
 // Visit a parse tree produced by <file.parserName>#<lname>.
 visit<lname; format="cap">(ctx) {
   return this.visitChildren(ctx);
 \}

}; separator="\n">

}
>>


fileHeader(grammarFileName, ANTLRVersion) ::= <<
// Generated from <grammarFileName> by ANTLR <ANTLRVersion>
// jshint ignore: start
>>
```

```
Parser(parser, funcs, atn, sempredFuncs, superClass) ::= <<
<if(superClass)>
import <superClass> from './<superClass>.js';
<endif>

<atn>

const atn = new antlr4.atn.ATNDeserializer().deserialize(serializedATN);

const decisionsToDFA = atn.decisionToState.map( (ds, index) => new antlr4.dfa.DFA(ds,
 index) );

const sharedContextCache = new antlr4.atn.PredictionContextCache();

export default class <parser.name> extends <superClass; null="antlr4.Parser"> {

  static grammarFileName = "<parser.grammarFileName>";
  static literalNames = [ <parser.literalNames:{t | <t>}; null="null", separator=", ", wrap, anchor> ];
  static symbolicNames = [ <parser.symbolicNames:{t | <t>}; null="null", separator=", ", wrap, anchor> ];
  static ruleNames = [ <parser.ruleNames:{r | "<r>"}; separator=", ", wrap, anchor> ];

  constructor(input) {
      super(input);
      this._interp = new antlr4.atn.ParserATNSimulator(this, atn, decisionsToDFA, sharedContextCache);
      this.ruleNames = <parser.name>.ruleNames;
      this.literalNames = <parser.name>.literalNames;
      this.symbolicNames = <parser.name>.symbolicNames;
      <namedActions.members>
  }

  <if(sempredFuncs)>
  sempred(localctx, ruleIndex, predIndex) {
   switch(ruleIndex) {
   <parser.sempredFuncs.values:{f
| case <f.ruleIndex>:
    return this.<f.name>_sempred(localctx, predIndex);}; separator="\n">
      default:
          throw "No predicate with index:" + ruleIndex;
     }
  }

  <sempredFuncs.values; separator="\n">
  <endif>

 <funcs; separator="\n">

}
```

```
<parser.name>.EOF = antlr4.Token.EOF;
<if(parser.tokens)>
<parser.tokens:{k | <parser.name>.<k> = <parser.tokens.(k)>;}; separator="\n", wrap, anchor>
<endif>

<if(parser.rules)>
<parser.rules:{r | <parser.name>.RULE_<r.name> = <r.index>;}; separator="\n", wrap, anchor>
<endif>

<funcs:{f | <ruleContexts(f)>}; separator="\n">

<! Define fields of this parser to export the context classes !>
<parser.funcs:{f | <parser.name>.<f.ctxType> = <f.ctxType>; }; separator="\n">

>>

ruleContexts(currentRule) ::= <<
<currentRule.ruleCtx>

<currentRule.altLabelCtxs:{l | <currentRule.altLabelCtxs.(l)>}; separator="\n">
>>

dumpActions(recog, argFuncs, actionFuncs, sempredFuncs) ::= <<
<if(actionFuncs)>
<lexer.name>.prototype.action
 = function(localctx, ruleIndex, actionIndex) {
 switch (ruleIndex) {
 <recog.actionFuncs.values:{f|
case <f.ruleIndex>:
 this.<f.name>_action(localctx, actionIndex);
 break;}; separator="\n">
 default:
  throw "No registered action for:" + ruleIndex;
 }
};

<actionFuncs.values; separator="\n">
<endif>
<if(sempredFuncs)>
<lexer.name>.prototype.sempred = function(localctx, ruleIndex, predIndex) {
 switch (ruleIndex) {
  <recog.sempredFuncs.values:{f| case <f.ruleIndex>:
 return this.<f.name>_sempred(localctx, predIndex);}; separator="\n">
    default:
     throw "No registered predicate for:" + ruleIndex;
   }
};
```

```
<sempredFuncs.values; separator="\n">
<endif>
>>


/* This generates a private method since the actionIndex is generated, making an
* overriding implementation impossible to maintain.
*/
RuleActionFunction(r, actions) ::= <<

<lexer.name>.prototype.<r.name>_action = function(localctx , actionIndex) {
 switch (actionIndex) {
 <actions:{index|
case <index>:
 <actions.(index)>
 break;};
 separator="\n">
 default:
  throw "No registered action for:" + actionIndex;
 }
};
>>

/* This generates a private method since the predIndex is generated, making an
* overriding implementation impossible to maintain.
*/
RuleSempredFunction(r, actions) ::= <<
<if (r.factory.g.lexer)><lexer.name>.prototype.<r.name>_sempred =
function<else><r.name>_sempred<endif>(localctx, predIndex) {
 switch(predIndex) {
  <actions:{index| case <index>:
 return <actions.(index)>;}; separator="\n">
  default:
   throw "No predicate with index:" + predIndex;
 }
};

>>

RuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,namedActions,finallyAction,postamble,exceptions)
::= <<


<currentRule.escapedName>(<currentRule.args:{a | <a.escapedName>}; separator=", ">) {
   let localctx = new <currentRule.ctxType>(this, this._ctx, this.state<currentRule.args:{a | , <a.escapedName>}>);
   this.enterRule(localctx, <currentRule.startState>, <parser.name>.RULE_<currentRule.name>);
```

```
 <namedActions.init>
<locals; separator="\n">
try {
    <code>
    <postamble; separator="\n">
    <namedActions.after>
}<if(exceptions)>
<exceptions; separator="\n">
<else> catch (re) {
 if(re instanceof antlr4.error.RecognitionException) {
      localctx.exception = re;
      this._errHandler.reportError(this, re);
      this._errHandler.recover(this, re);
   } else {
    throw re;
   }
}<endif> finally {
    <finallyAction>
    this.exitRule();
}
return localctx;
}

>>

LeftRecursiveRuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,
 namedActions,finallyAction,postamble) ::=
<<

<currentRule.escapedName>(_p<if(currentRule.args)>, <args:{a | , <a>}><endif>) {
 if(_p===undefined) {
    _p = 0;
 }
  const _parentctx = this._ctx;
  const _parentState = this.state;
  let localctx = new <currentRule.ctxType>(this, this._ctx, _parentState<args:{a | , <a.escapedName>}>);
  let _prevctx
 = localctx;
  const _startState = <currentRule.startState>;
  this.enterRecursionRule(localctx, <currentRule.startState>, <parser.name>.RULE_<currentRule.name>, _p);
  <namedActions.init>
  <locals; separator="\n">
  try {
      <code>
      <postamble; separator="\n">
      <namedActions.after>
  } catch( error) {
      if(error instanceof antlr4.error.RecognitionException) {
```

```
        localctx.exception = error;
        this._errHandler.reportError(this, error);
        this._errHandler.recover(this, error);
    } else {
     throw error;
    }
  } finally {
      <finallyAction>
      this.unrollRecursionContexts(_parentctx)
  }
  return localctx;
}

>>

CodeBlockForOuterMostAlt(currentOuterMostAltCodeBlock, locals, preamble, ops) ::= <<
<if(currentOuterMostAltCodeBlock.altLabel)>localctx = new <currentOuterMostAltCodeBlock.altLabel;
format="cap">Context(this, localctx);<endif>
this.enterOuterAlt(localctx, <currentOuterMostAltCodeBlock.alt.altNum>);
<CodeBlockForAlt(currentAltCodeBlock=currentOuterMostAltCodeBlock,
 ...)>
>>

CodeBlockForAlt(currentAltCodeBlock, locals, preamble, ops) ::= <<
<locals; separator="\n">
<preamble; separator="\n">
<ops; separator="\n">
>>

LL1AltBlock(choice, preamble, alts, error) ::= <<
this.state = <choice.stateNumber>;
this._errHandler.sync(this);
<if(choice.label)><labelref(choice.label)> = this._input.LT(1);<endif>
<preamble; separator="\n">
switch(this._input.LA(1)) {
<choice.altLook,alts:{look,alt| <cases(tokens=look)>
  <alt>
  break;}; separator="\n">
default:
  <error>
}
>>

LL1OptionalBlock(choice, alts, error) ::= <<
this.state = <choice.stateNumber>;
this._errHandler.sync(this);
switch (this._input.LA(1)) {
<choice.altLook,alts:{look,alt| <cases(tokens=look)>
```

```
 <alt>
 break;}; separator="\n">
default:
 break;
}
>>

LL1OptionalBlockSingleAlt(choice, expr, alts, preamble, error, followExpr) ::= <<
this.state = <choice.stateNumber>;
this._errHandler.sync(this);
<preamble; separator="\n">
if(<expr>)
 {
   <alts; separator="\n">
}
<!else if ( !(<followExpr>) ) <error>!>
>>

LL1StarBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
this.state = <choice.stateNumber>;
this._errHandler.sync(this);
<preamble; separator="\n">
while(<loopExpr>) {
   <alts; separator="\n">
   this.state = <choice.loopBackStateNumber>;
   this._errHandler.sync(this);
   <iteration>
}
>>

LL1PlusBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
this.state = <choice.blockStartStateNumber>; <! alt block decision !>
this._errHandler.sync(this);
<preamble; separator="\n">
do {
   <alts; separator="\n">
   this.state = <choice.stateNumber>; <! loopback/exit decision !>
   this._errHandler.sync(this);
   <iteration>
} while(<loopExpr>);
>>

// LL(*) stuff

AltBlock(choice, preamble, alts, error) ::= <<
this.state = <choice.stateNumber>;
this._errHandler.sync(this);
<if(choice.label)><labelref(choice.label)> = _input.LT(1)<endif>
```

```
<preamble; separator="\n">
var
 la_ = this._interp.adaptivePredict(this._input,<choice.decision>,this._ctx);
switch(la_) {
<alts:{alt |
case <i>:
   <alt>
   break;
}; separator="\n">
}
>>

OptionalBlock(choice, alts, error) ::= <<
this.state = <choice.stateNumber>;
this._errHandler.sync(this);
var la_ = this._interp.adaptivePredict(this._input,<choice.decision>,this._ctx);
<alts:{alt |
if(la_===<i><if(!choice.ast.greedy)>+1<endif>) {
   <alt>
}; separator="\n} else ">
}
>>

StarBlock(choice, alts, sync, iteration) ::= <<
this.state = <choice.stateNumber>;
this._errHandler.sync(this);
var _alt = this._interp.adaptivePredict(this._input,<choice.decision>,this._ctx)
while(_alt!=<choice.exitAlt> && _alt!=antlr4.atn.ATN.INVALID_ALT_NUMBER) {
   if(_alt===1<if(!choice.ast.greedy)>+1<endif>) {
       <iteration>
       <alts> <! should only be one !>
   }
   this.state = <choice.loopBackStateNumber>;
   this._errHandler.sync(this);
   _alt = this._interp.adaptivePredict(this._input,<choice.decision>,this._ctx);
}

>>

PlusBlock(choice,
 alts, error) ::= <<
this.state = <choice.blockStartStateNumber>; <! alt block decision !>
this._errHandler.sync(this);
var _alt = 1<if(!choice.ast.greedy)>+1<endif>;
do {
 switch (_alt) {
 <alts:{alt|
case <i><if(!choice.ast.greedy)>+1<endif>:
```

```
 <alt>
 break;}; separator="\n">
 default:
  <error>
 }
 this.state = <choice.loopBackStateNumber>; <! loopback/exit decision !>
 this._errHandler.sync(this);
 _alt = this._interp.adaptivePredict(this._input,<choice.decision>, this._ctx);
} while ( _alt!=<choice.exitAlt> && _alt!=antlr4.atn.ATN.INVALID_ALT_NUMBER );
>>

Sync(s) ::= "sync(<s.expecting.name>)"

ThrowNoViableAlt(t) ::= "throw new antlr4.error.NoViableAltException(this);"

TestSetInline(s) ::= <<
<s.bitsets:{bits | <if(rest(rest(bits.tokens)))><bitsetBitfieldComparison(s, bits)><else><bitsetInlineComparison(s,
bits)><endif>}; separator=" || ">
>>

// Javascript language spec - shift operators are 32 bits long max
testShiftInRange(shiftAmount) ::= <<
((<shiftAmount>)
 & ~0x1f) === 0
>>

bitsetBitfieldComparison(s, bits) ::= <%
(<testShiftInRange({<offsetShiftVar(s.varName, bits.shift)>})> && ((1 \<\< <offsetShiftVar(s.varName,
bits.shift)>) & <bits.calculated>) !== 0)
%>

isZero ::= [
"0":true,
default:false
]

offsetShiftVar(shiftAmount, offset) ::= <%
<if(!isZero.(offset))>(<shiftAmount> - <offset>)<else><shiftAmount><endif>
%>

offsetShiftType(shiftAmount, offset) ::= <%
<if(!isZero.(offset))>(<parser.name>.<shiftAmount> - <offset>)<else><parser.name>.<shiftAmount><endif>
%>

bitsetInlineComparison(s, bits) ::= <%
<bits.tokens:{t | <s.varName>===<t.type>}; separator=" || ">
%>
```

```
cases(tokens) ::= <<
<tokens:{t | case <t.type>:}; separator="\n">
>>

InvokeRule(r, argExprsChunks) ::= <<
this.state = <r.stateNumber>;
<if(r.labels)><r.labels:{l | <labelref(l)> =
}><endif>this.<r.escapedName>(<if(r.ast.options.p)><r.ast.options.p><if(argExprsChunks)>,<endif><endif><argE
xprsChunks>);
>>

MatchToken(m) ::= <<
this.state = <m.stateNumber>;
<if(m.labels)><m.labels:{l
 | <labelref(l)> = }><endif>this.match(<parser.name>.<m.name>);
>>

MatchSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, false)>"

MatchNotSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, true)>"

CommonSetStuff(m, expr, capture, invert) ::= <<
this.state = <m.stateNumber>;
<if(m.labels)><m.labels:{l | <labelref(l)> = }>this._input.LT(1);<endif>
<capture>
<if(invert)>if(<m.varName>\<=0 || <expr>)<else>if(!(<expr>))<endif> {
   <if(m.labels)><m.labels:{l | <labelref(l)> = }><endif>this._errHandler.recoverInline(this);
}
else {
 this._errHandler.reportMatch(this);
   this.consume();
}
>>

Wildcard(w) ::= <<
this.state = <w.stateNumber>;
<if(w.labels)><w.labels:{l | <labelref(l)> = }><endif>this.matchWildcard();
>>

// ACTION STUFF

Action(a, foo, chunks) ::= "<chunks>"

ArgAction(a, chunks) ::= "<chunks>"

SemPred(p, chunks, failChunks) ::= <<
this.state = <p.stateNumber>;
if (!( <chunks>)) {
```

```
   throw new antlr4.error.FailedPredicateException(this,
 <p.predicate><if(failChunks)>, <failChunks><elseif(p.msg)>, <p.msg><endif>);
}
>>

ExceptionClause(e, catchArg, catchAction) ::= <<
catch (<catchArg>) {
 <catchAction>
}
>>

// lexer actions are not associated with model objects

LexerSkipCommand()  ::= "this.skip();"
LexerMoreCommand()  ::= "this.more();"
LexerPopModeCommand() ::= "this.popMode();"
LexerTypeCommand(arg, grammar)      ::= "this._type = <arg>;"
LexerChannelCommand(arg, grammar)   ::= "this._channel = <arg>;"
LexerModeCommand(arg, grammar)      ::= "this._mode = <arg>;"
LexerPushModeCommand(arg, grammar)  ::= "this.pushMode(<arg>);"

ActionText(t) ::= "<t.text>"
ActionTemplate(t) ::= "<t.st>"
ArgRef(a) ::= "localctx.<a.escapedName>"
LocalRef(a) ::= "localctx.<a.escapedName>"
RetValueRef(a) ::= "localctx.<a.escapedName>"
QRetValueRef(a) ::= "<ctx(a)>.<a.dict>.<a.escapedName>"
/** How to translate $tokenLabel */
TokenRef(t) ::= "<ctx(t)>.<t.escapedName>"
LabelRef(t) ::= "<ctx(t)>.<t.escapedName>"
ListLabelRef(t) ::=
 "<ctx(t)>.<ListLabelName(t.escapedName)>"
SetAttr(s,rhsChunks) ::= "<ctx(s)>.<s.escapedName> = <rhsChunks>"

TokenLabelType() ::= "<file.TokenLabelType; null={Token}>"
InputSymbolType() ::= "<file.InputSymbolType; null={Token}>"

TokenPropertyRef_text(t) ::= "(<ctx(t)>.<t.label> == null ? null : <ctx(t)>.<t.label>.text)"
TokenPropertyRef_type(t) ::= "(<ctx(t)>.<t.label> == null ? 0 : <ctx(t)>.<t.label>.type)"
TokenPropertyRef_line(t) ::= "(<ctx(t)>.<t.label> == null ? 0 : <ctx(t)>.<t.label>.line)"
TokenPropertyRef_pos(t) ::= "(<ctx(t)>.<t.label> == null ? 0 : <ctx(t)>.<t.label>.column)"
TokenPropertyRef_channel(t) ::= "(<ctx(t)>.<t.label> == null ? 0 : <ctx(t)>.<t.label>.channel)"
TokenPropertyRef_index(t) ::= "(<ctx(t)>.<t.label> == null ? 0 : <ctx(t)>.<t.label>.tokenIndex)"
TokenPropertyRef_int(t) ::= "(<ctx(t)>.<t.label> == null ? 0 : parseInt(<ctx(t)>.<t.label>.text))"

RulePropertyRef_start(r) ::= "(<ctx(r)>.<r.label> == null ? null : <ctx(r)>.<r.label>.start)"
RulePropertyRef_stop(r)
```

```
 ::= "(<ctx(r)>.<r.label> == null ? null : <ctx(r)>.<r.label>.stop)"
RulePropertyRef_text(r)  ::= "(<ctx(r)>.<r.label> == null ? null : this._input.getText(new
antlr4.Interval(<ctx(r)>.<r.label>.start,<ctx(r)>.<r.label>.stop)))"
RulePropertyRef_ctx(r)  ::= "<ctx(r)>.<r.label>"
RulePropertyRef_parser(r)  ::= "this"

ThisRulePropertyRef_start(r) ::= "localctx.start"
ThisRulePropertyRef_stop(r)  ::= "localctx.stop"
ThisRulePropertyRef_text(r)  ::= "this._input.getText(new antlr4.Interval(localctx.start, this._input.LT(-1)))"
ThisRulePropertyRef_ctx(r)  ::= "localctx"
ThisRulePropertyRef_parser(r)  ::= "this"

NonLocalAttrRef(s)     ::= "this.getInvokingContext(<s.ruleIndex>).<s.escapedName>"
SetNonLocalAttr(s, rhsChunks)  ::= "this.getInvokingContext(<s.ruleIndex>).<s.escapedName> = <rhsChunks>"

AddToLabelList(a) ::= "<ctx(a.label)>.<a.listName>.push(<labelref(a.label)>);"

TokenDecl(t) ::= "this.<t.escapedName> = null;"
TokenTypeDecl(t) ::= "var <t.escapedName> = 0;"
TokenListDecl(t)
 ::= "this.<t.escapedName> = [];"
RuleContextDecl(r) ::= "this.<r.escapedName> = null;"
RuleContextListDecl(rdecl) ::= "this.<rdecl.escapedName> = [];"

ContextTokenGetterDecl(t)      ::= <<
<t.escapedName>() {
   return this.getToken(<parser.name>.<t.name>, 0);
};
>>

// should never be called
ContextTokenListGetterDecl(t)  ::= <<
<t.escapedName>_list() {
   return this.getTokens(<parser.name>.<t.name>);
}
>>

ContextTokenListIndexedGetterDecl(t)  ::= <<
<t.escapedName> = function(i) {
 if(i===undefined) {
  i = null;
 }
   if(i===null) {
       return this.getTokens(<parser.name>.<t.name>);
   } else {
       return this.getToken(<parser.name>.<t.name>, i);
   }
};
```

```
>>

ContextRuleGetterDecl(r)       ::= <<
<r.escapedName>() {
  return this.getTypedRuleContext(<r.ctxName>,0);
};
>>

// should never be called
ContextRuleListGetterDecl(r)   ::= <<
<r.escapedName>_list() {
  return this.getTypedRuleContexts(<parser.name>.<r.ctxName>);
}
>>

ContextRuleListIndexedGetterDecl(r)
  ::= <<
<r.escapedName> = function(i) {
  if(i===undefined) {
     i = null;
  }
  if(i===null) {
     return this.getTypedRuleContexts(<r.ctxName>);
  } else {
     return this.getTypedRuleContext(<r.ctxName>,i);
  }
};
>>

LexerRuleContext() ::= "RuleContext"

/** The rule context name is the rule followed by a suffix; e.g.,
* r becomes rContext.
*/
RuleContextNameSuffix() ::= "Context"

ImplicitTokenLabel(tokenName) ::= "_<tokenName>"
ImplicitRuleLabel(ruleName)   ::= "_<ruleName>"
ImplicitSetLabel(id)    ::= "_tset<id>"
ListLabelName(label)    ::= "<label>"

CaptureNextToken(d) ::= "<d.varName> = self._input.LT(1)"
CaptureNextTokenType(d) ::= "<d.varName> = this._input.LA(1);"

StructDecl(struct,ctorAttrs,attrs,getters,dispatchMethods,interfaces,extensionMembers,signatures) ::= <<
class <struct.escapedName> extends
<if(contextSuperClass)><contextSuperClass><else>antlr4.ParserRuleContext<endif> {
```

```
  constructor(parser, parent, invokingState<struct.ctorAttrs:{a
| , <a.escapedName>}>) {
      if(parent===undefined) {
          parent = null;
      }
      if(invokingState===undefined || invokingState===null) {
          invokingState = -1;
      }
      super(parent, invokingState);
      this.parser = parser;
      this.ruleIndex = <parser.name>.RULE_<struct.derivedFromName>;
      <attrs:{a | <a>}; separator="\n">
      <struct.ctorAttrs:{a | this.<a.escapedName> = <a.escapedName> || null;}; separator="\n">
  }

<getters:{g | <g>}; separator="\n\n">

<if(struct.provideCopyFrom)> <! don't need copy unless we have subclasses !>
copyFrom(ctx) {
 super.copyFrom(ctx);
 <struct.attrs:{a | this.<a.escapedName> = ctx.<a.escapedName>;}; separator="\n">
}
<endif>
<dispatchMethods; separator="\n">
<extensionMembers; separator="\n">

}

>>

AltLabelStructDecl(struct,attrs,getters,dispatchMethods) ::= <<
class <struct.escapedName> extends <struct.parentRule; format="cap">Context {

  constructor(parser, ctx) {

     super(parser);
      <attrs:{a | <a>;}; separator="\n">
      super.copyFrom(ctx);
  }

<getters:{g | <g>}; separator="\n\n">

<dispatchMethods; separator="\n">

}

<! Define fields of this parser to export this struct/context class !>
```

```
<parser.name>.<struct.name> = <struct.escapedName>;

>>

ListenerDispatchMethod(method) ::= <<
<if(method.isEnter)>enter<else>exit<endif>Rule(listener) {
   if(listener instanceof <parser.grammarName>Listener ) {
       listener.<if(method.isEnter)>enter<else>exit<endif><struct.derivedFromName; format="cap">(this);
 }
}

>>

VisitorDispatchMethod(method) ::= <<
accept(visitor) {
   if ( visitor instanceof <parser.grammarName>Visitor ) {
       return visitor.visit<struct.derivedFromName; format="cap">(this);
   } else {
       return visitor.visitChildren(this);
   }
}

>>

AttributeDecl(d) ::= "this.<d.escapedName> = <if(d.initValue)><d.initValue><else>null<endif>"

/** If we don't know location of label def x, use this template */
labelref(x)
 ::= "<if(!x.isLocal)>localctx.<endif><x.escapedName>"

/** For any action chunk, what is correctly-typed context struct ptr? */
ctx(actionChunk) ::= "localctx"

// used for left-recursive rules
recRuleAltPredicate(ruleName,opPrec)  ::= "this.precpred(this._ctx, <opPrec>)"
recRuleSetReturnAction(src,name)   ::= "$<name>=$<src>.<name>"
recRuleSetStopToken()                ::= "this._ctx.stop = this._input.LT(-1);"

recRuleAltStartAction(ruleName, ctxName, label, isListLabel) ::= <<
localctx = new <ctxName>Context(this, _parentctx, _parentState);
<if(label)>
<if(isListLabel)>
localctx.<label>.push(_prevctx);
<else>
localctx.<label> = _prevctx;
<endif>
<endif>
this.pushNewRecursionContext(localctx, _startState, <parser.name>.RULE_<ruleName>);
```

```
>>

recRuleLabeledAltStartAction(ruleName, currentAltLabel, label, isListLabel) ::= <<
localctx = new <currentAltLabel; format="cap">Context(this, new <ruleName; format="cap">Context(this,
_parentctx, _parentState));
<if(label)>
<if(isListLabel)>
localctx.<label>.push(_prevctx);
<else>
localctx.<label>
 = _prevctx;
<endif>
<endif>
this.pushNewRecursionContext(localctx, _startState, <parser.name>.RULE_<ruleName>);
>>

recRuleReplaceContext(ctxName) ::= <<
localctx = new <ctxName>Context(this, localctx);
this._ctx = localctx;
_prevctx = localctx;
>>

recRuleSetPrevCtx() ::= <<
if(this._parseListeners!==null) {
   this.triggerExitRuleEvent();
}
_prevctx = localctx;
>>


LexerFile(lexerFile, lexer, namedActions) ::= <<
<fileHeader(lexerFile.grammarFileName, lexerFile.ANTLRVersion)>
import antlr4 from 'antlr4';

<namedActions.header>

<lexer>

>>

Lexer(lexer, atn, actionFuncs, sempredFuncs, superClass) ::= <<
<if(superClass)>
import <superClass> from './<superClass>.js';

<endif>
<atn>

const atn = new antlr4.atn.ATNDeserializer().deserialize(serializedATN);
```

```
const decisionsToDFA = atn.decisionToState.map( (ds, index) => new antlr4.dfa.DFA(ds, index) );

export default class <lexer.name> extends <if(superClass)><superClass><else>antlr4.Lexer<endif>
 {

   static grammarFileName = "<lexer.grammarFileName>";
   static channelNames = [ "DEFAULT_TOKEN_CHANNEL", "HIDDEN"<if (lexer.channelNames)>,
<lexer.channelNames:{c| "<c>"}; separator=", ", wrap, anchor><endif> ];
 static modeNames = [ <lexer.modes:{m| "<m>"}; separator=", ", wrap, anchor> ];
 static literalNames = [ <lexer.literalNames:{t | <t>}; null="null", separator=", ", wrap, anchor> ];
 static symbolicNames = [ <lexer.symbolicNames:{t | <t>}; null="null", separator=", ", wrap, anchor> ];
 static ruleNames = [ <lexer.ruleNames:{r | "<r>"}; separator=", ", wrap, anchor> ];

   constructor(input) {
       super(input)
       this._interp = new antlr4.atn.LexerATNSimulator(this, atn, decisionsToDFA, new
antlr4.atn.PredictionContextCache());
       <namedActions.members>
   }
}

<lexer.name>.EOF = antlr4.Token.EOF;
<if(lexer.tokens)>
<lexer.tokens:{k | <lexer.name>.<k> = <lexer.tokens.(k)>;}; separator="\n", wrap, anchor>
<endif>

<if(lexer.escapedChannels)>
<lexer.escapedChannels:{c|
 <lexer.name>.<c> = <lexer.escapedChannels.(c)>;}; separator="\n">

<endif>
<if(rest(lexer.escapedModeNames))>
<rest(lexer.escapedModeNames):{m| <lexer.name>.<m> = <i>;}; separator="\n">

<endif>

<dumpActions(lexer, "", actionFuncs, sempredFuncs)>


>>

SerializedATN(model) ::= <<
const serializedATN = [<model.serialized: {s | <s>}; separator=",", wrap>];

>>

/** Using a type to init value map, try to init a type; if not in table
```

```
* must be an object, default value is "null".
*/
initValue(typeName) ::= <<
<javacriptTypeInitMap.(typeName)>
>>

codeFileExtension() ::= ".js"
```

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* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/codegen/JavaScript/JavaScript.stg
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```
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*/
```

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* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ANTLRParser.java
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```
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```

```
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*/

/** Find left-recursive rules */
tree grammar LeftRecursiveRuleWalker;

options {
 tokenVocab=ANTLRParser;
   ASTLabelType=GrammarAST;
}

@header {
package org.antlr.v4.parse;

import org.antlr.v4.misc.*;
import org.antlr.v4.tool.*;
import org.antlr.v4.tool.ast.*;
}

@members {
private String ruleName;
private int currentOuterAltNumber; // which outer alt of rule?
public
```

```
 int numAlts;  // how many alts for this rule total?

public void setAltAssoc(AltAST altTree, int alt) {}
public void binaryAlt(AltAST altTree, int alt) {}
public void prefixAlt(AltAST altTree, int alt) {}
public void suffixAlt(AltAST altTree, int alt) {}
public void otherAlt(AltAST altTree, int alt) {}
public void setReturnValues(GrammarAST t) {}
}

@rulecatch { }

// TODO: can get parser errors for not matching pattern; make them go away
public
rec_rule returns [boolean isLeftRec]
@init
{
 currentOuterAltNumber = 1;
}
 : ^( r=RULE id=RULE_REF {ruleName=$id.getText();}
   ruleModifier?
//   (ARG_ACTION)? shouldn't allow args, right?
   (^(RETURNS a=ARG_ACTION {setReturnValues($a);}))?
//        ( ^(THROWS .+) )? don't allow
       ( ^(LOCALS ARG_ACTION) )? // TODO: copy these to gen'd code
       ( ^(OPTIONS .*)
      |   ^(AT ID ACTION) // TODO: copy
      )*
   ruleBlock {$isLeftRec = $ruleBlock.isLeftRec;}
   exceptionGroup
  )
 ;

exceptionGroup
   : exceptionHandler* finallyClause?
    ;

exceptionHandler
 : ^(CATCH ARG_ACTION ACTION)
 ;

finallyClause
 : ^(FINALLY ACTION)
 ;

ruleModifier
   : PUBLIC
   | PRIVATE
```

```
  | PROTECTED
  ;

ruleBlock returns [boolean isLeftRec]
@init{boolean lr=false; this.numAlts = $start.getChildCount();}
 : ^( BLOCK
   (
    o=outerAlternative
    {if ($o.isLeftRec) $isLeftRec = true;}
    {currentOuterAltNumber++;}
   )+
  )
 ;

/** An alt is either prefix, suffix, binary, or ternary operation or "other" */
outerAlternative returns [boolean isLeftRec]
  :   (binary)=>          binary
                        {binaryAlt((AltAST)$start, currentOuterAltNumber); $isLeftRec=true;}
  |   (prefix)=>          prefix
                        {prefixAlt((AltAST)$start, currentOuterAltNumber);}
  |   (suffix)=>          suffix
                        {suffixAlt((AltAST)$start, currentOuterAltNumber); $isLeftRec=true;}
  |   nonLeftRecur        {otherAlt((AltAST)$start,  currentOuterAltNumber);}
  ;

binary
 : ^(
 ALT elementOptions? recurse element* recurse epsilonElement* )
      {setAltAssoc((AltAST)$ALT,currentOuterAltNumber);}
 ;

prefix
 : ^( ALT elementOptions?
   element+
   recurse epsilonElement*
   )
       {setAltAssoc((AltAST)$ALT,currentOuterAltNumber);}
 ;

suffix
  :   ^( ALT elementOptions? recurse element+ )
       {setAltAssoc((AltAST)$ALT,currentOuterAltNumber);}
  ;

nonLeftRecur
  :   ^(ALT elementOptions? element+)
  ;
```

```
recurse
 : ^(ASSIGN ID recurseNoLabel)
 | ^(PLUS_ASSIGN ID recurseNoLabel)
 | recurseNoLabel
 ;

recurseNoLabel : {((CommonTree)input.LT(1)).getText().equals(ruleName)}? RULE_REF;

token returns [GrammarAST t=null]
 : ^(ASSIGN ID s=token {$t = $s.t;})
 | ^(PLUS_ASSIGN ID s=token {$t = $s.t;})
 | b=STRING_LITERAL         {$t = $b;}
   | ^(b=STRING_LITERAL elementOptions)  {$t = $b;}
   | ^(c=TOKEN_REF elementOptions)   {$t = $c;}
 | c=TOKEN_REF              {$t = $c;}
 ;

elementOptions
   : ^(ELEMENT_OPTIONS elementOption*)

  ;

elementOption
   : ID
   |   ^(ASSIGN ID ID)
   |   ^(ASSIGN ID STRING_LITERAL)
   |   ^(ASSIGN ID ACTION)
   |   ^(ASSIGN ID INT)
   ;

element
 : atom
 | ^(NOT element)
 | ^(RANGE atom atom)
 | ^(ASSIGN ID element)
 | ^(PLUS_ASSIGN ID element)
   | ^(SET setElement+)
   |   RULE_REF
 | ebnf
 | epsilonElement
 ;

epsilonElement
 : ACTION
 | SEMPRED
 | EPSILON
 | ^(ACTION elementOptions)
 | ^(SEMPRED elementOptions)
```

```
 ;

setElement
 : ^(STRING_LITERAL elementOptions)
 | ^(TOKEN_REF elementOptions)
 | STRING_LITERAL
 | TOKEN_REF
 ;

ebnf:   block
   |   ^( OPTIONAL block )
   |   ^( CLOSURE block )
   |   ^( POSITIVE_CLOSURE block )
   ;

block
   : ^(BLOCK ACTION? alternative+)
   ;

alternative
 : ^(ALT elementOptions? element+)
   ;

atom
 : ^(RULE_REF ARG_ACTION? elementOptions?)
   |  ^(STRING_LITERAL elementOptions)
 | STRING_LITERAL
   | ^(TOKEN_REF elementOptions)
 | TOKEN_REF
   | ^(WILDCARD elementOptions)
 | WILDCARD
 | ^(DOT ID element)
 ;
```

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*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/LeftRecursiveRuleWalker.g
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```
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*/

// args must be <object-model-object>, <fields-resulting-in-STs>

ParserFile(file, parser, namedActions, contextSuperClass) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
namespace <file.genPackage> {
<endif>
<namedActions.header>
using System;
using System.IO;
using System.Text;
using System.Diagnostics;
using System.Collections.Generic;
using
 Antlr4.Runtime;
using Antlr4.Runtime.Atn;
using Antlr4.Runtime.Misc;
using Antlr4.Runtime.Tree;
using DFA = Antlr4.Runtime.Dfa.DFA;

<parser>
<if(file.genPackage)>
} // namespace <file.genPackage>
<endif>
>>
```

```
ListenerFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
namespace <file.genPackage> {
<endif>
<header>
using Antlr4.Runtime.Misc;
using IParseTreeListener = Antlr4.Runtime.Tree.IParseTreeListener;
using IToken = Antlr4.Runtime.IToken;

/// \<summary>
/// This interface defines a complete listener for a parse tree produced by
/// \<see cref="<file.parserName>"/>.
/// \</summary>
[System.CodeDom.Compiler.GeneratedCode("ANTLR", "<file.ANTLRVersion>")]
[System.CLSCompliant(false)]
public interface I<file.grammarName>Listener : IParseTreeListener {
 <file.listenerNames:{lname |
/// \<summary>
<if(file.listenerLabelRuleNames.(lname))>
/// Enter a parse tree produced by the \<c><lname>\</c>
/// labeled alternative in
 \<see cref="<file.parserName>.<file.listenerLabelRuleNames.(lname)>"/>.
<else>
/// Enter a parse tree produced by \<see cref="<file.parserName>.<lname>"/>.
<endif>
/// \</summary>
/// \<param name="context">The parse tree.\</param>
void Enter<lname; format="cap">([NotNull] <file.parserName>.<lname; format="cap">Context context);
/// \<summary>
<if(file.listenerLabelRuleNames.(lname))>
/// Exit a parse tree produced by the \<c><lname>\</c>
/// labeled alternative in \<see cref="<file.parserName>.<file.listenerLabelRuleNames.(lname)>"/>.
<else>
/// Exit a parse tree produced by \<see cref="<file.parserName>.<lname>"/>.
<endif>
/// \</summary>
/// \<param name="context">The parse tree.\</param>
void Exit<lname; format="cap">([NotNull] <file.parserName>.<lname; format="cap">Context context);};
separator="\n">
}
<if(file.genPackage)>
} // namespace <file.genPackage>
<endif>
>>

BaseListenerFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
```

```
<if(file.genPackage)>
namespace
 <file.genPackage> {
<endif>
<header>

using Antlr4.Runtime.Misc;
using IErrorNode = Antlr4.Runtime.Tree.IErrorNode;
using ITerminalNode = Antlr4.Runtime.Tree.ITerminalNode;
using IToken = Antlr4.Runtime.IToken;
using ParserRuleContext = Antlr4.Runtime.ParserRuleContext;

/// \<summary>
/// This class provides an empty implementation of \<see cref="I<file.grammarName>Listener"/>,
/// which can be extended to create a listener which only needs to handle a subset
/// of the available methods.
/// \</summary>
[System.CodeDom.Compiler.GeneratedCode("ANTLR", "<file.ANTLRVersion>")]
[System.Diagnostics.DebuggerNonUserCode]
[System.CLSCompliant(false)]
public partial class <file.grammarName>BaseListener : I<file.grammarName>Listener {
 <file.listenerNames:{lname |
/// \<summary>
<if(file.listenerLabelRuleNames.(lname))>
/// Enter a parse tree produced by the \<c><lname>\</c>
/// labeled alternative in \<see cref="<file.parserName>.<file.listenerLabelRuleNames.(lname)>"/>.
<else>
///
 Enter a parse tree produced by \<see cref="<file.parserName>.<lname>"/>.
<endif>
/// \<para>The default implementation does nothing.\</para>
/// \</summary>
/// \<param name="context">The parse tree.\</param>
public virtual void Enter<lname; format="cap">([NotNull] <file.parserName>.<lname; format="cap">Context
context) { \}
/// \<summary>
<if(file.listenerLabelRuleNames.(lname))>
/// Exit a parse tree produced by the \<c><lname>\</c>
/// labeled alternative in \<see cref="<file.parserName>.<file.listenerLabelRuleNames.(lname)>"/>.
<else>
/// Exit a parse tree produced by \<see cref="<file.parserName>.<lname>"/>.
<endif>
/// \<para>The default implementation does nothing.\</para>
/// \</summary>
/// \<param name="context">The parse tree.\</param>
public virtual void Exit<lname; format="cap">([NotNull] <file.parserName>.<lname; format="cap">Context
context) { \}}; separator="\n">
```

```
 /// \<inheritdoc/>
 /// \<remarks>The default implementation does nothing.\</remarks>
 public
 virtual void EnterEveryRule([NotNull] ParserRuleContext context) { }
 /// \<inheritdoc/>
 /// \<remarks>The default implementation does nothing.\</remarks>
 public virtual void ExitEveryRule([NotNull] ParserRuleContext context) { }
 /// \<inheritdoc/>
 /// \<remarks>The default implementation does nothing.\</remarks>
 public virtual void VisitTerminal([NotNull] ITerminalNode node) { }
 /// \<inheritdoc/>
 /// \<remarks>The default implementation does nothing.\</remarks>
 public virtual void VisitErrorNode([NotNull] IErrorNode node) { }
}
<if(file.genPackage)>
} // namespace <file.genPackage>
<endif>
>>

VisitorFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
namespace <file.genPackage> {
<endif>
<header>
using Antlr4.Runtime.Misc;
using Antlr4.Runtime.Tree;
using IToken = Antlr4.Runtime.IToken;

/// \<summary>
/// This interface defines a complete generic visitor for a parse tree produced
/// by \<see cref="<file.parserName>"/>.
///
 \</summary>
/// \<typeparam name="Result">The return type of the visit operation.\</typeparam>
[System.CodeDom.Compiler.GeneratedCode("ANTLR", "<file.ANTLRVersion>")]
[System.CLSCompliant(false)]
public interface I<file.grammarName>Visitor\<Result> : IParseTreeVisitor\<Result> {
 <file.visitorNames:{lname |
/// \<summary>
<if(file.visitorLabelRuleNames.(lname))>
/// Visit a parse tree produced by the \<c><lname>\</c>
/// labeled alternative in \<see cref="<file.parserName>.<file.visitorLabelRuleNames.(lname)>"/>.
<else>
/// Visit a parse tree produced by \<see cref="<file.parserName>.<lname>"/>.
<endif>
/// \</summary>
/// \<param name="context">The parse tree.\</param>
```

```
/// \<return>The visitor result.\</return>
Result Visit<lname; format="cap">([NotNull] <file.parserName>.<lname; format="cap">Context context);};
separator="\n">
}
<if(file.genPackage)>
} // namespace <file.genPackage>
<endif>
>>

BaseVisitorFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName,
 file.ANTLRVersion)>
<if(file.genPackage)>
namespace <file.genPackage> {
<endif>
<header>
using Antlr4.Runtime.Misc;
using Antlr4.Runtime.Tree;
using IToken = Antlr4.Runtime.IToken;
using ParserRuleContext = Antlr4.Runtime.ParserRuleContext;

/// \<summary>
/// This class provides an empty implementation of \<see cref="I<file.grammarName>Visitor{Result}"/>,
/// which can be extended to create a visitor which only needs to handle a subset
/// of the available methods.
/// \</summary>
/// \<typeparam name="Result">The return type of the visit operation.\</typeparam>
[System.CodeDom.Compiler.GeneratedCode("ANTLR", "<file.ANTLRVersion>")]
[System.Diagnostics.DebuggerNonUserCode]
[System.CLSCompliant(false)]
public partial class <file.grammarName>BaseVisitor\<Result> : AbstractParseTreeVisitor\<Result>,
I<file.grammarName>Visitor\<Result> {
 <file.visitorNames:{lname |
/// \<summary>
<if(file.visitorLabelRuleNames.(lname))>
/// Visit a parse tree produced by the \<c><lname>\</c>
///
 labeled alternative in \<see cref="<file.parserName>.<file.visitorLabelRuleNames.(lname)>"/>.
<else>
/// Visit a parse tree produced by \<see cref="<file.parserName>.<lname>"/>.
<endif>
/// \<para>
/// The default implementation returns the result of calling \<see
cref="AbstractParseTreeVisitor{Result\}.VisitChildren(IRuleNode)"/>
/// on \<paramref name="context"/>.
/// \</para>
/// \</summary>
/// \<param name="context">The parse tree.\</param>
```

```
/// \<return>The visitor result.\</return>
public virtual Result Visit<lname; format="cap">([NotNull] <file.parserName>.<lname; format="cap">Context
context) { return VisitChildren(context); \}}; separator="\n">
}
<if(file.genPackage)>
} // namespace <file.genPackage>
<endif>
>>

fileHeader(grammarFileName, ANTLRVersion) ::= <<
//------------------------------------------------------------------------------
// \<auto-generated>
//     This code was generated by a tool.
//     ANTLR Version: <ANTLRVersion>
//
//     Changes to this file may
 cause incorrect behavior and will be lost if
//     the code is regenerated.
// \</auto-generated>
//------------------------------------------------------------------------------

// Generated from <grammarFileName> by ANTLR <ANTLRVersion>

// Unreachable code detected
#pragma warning disable 0162
// The variable '...' is assigned but its value is never used
#pragma warning disable 0219
// Missing XML comment for publicly visible type or member '...'
#pragma warning disable 1591
// Ambiguous reference in cref attribute
#pragma warning disable 419

>>

Parser(parser, funcs, atn, sempredFuncs, superClass) ::= <<
<Parser_(ctor="parser_ctor", ...)>
>>

Parser_(parser, funcs, atn, sempredFuncs, ctor, superClass) ::= <<
[System.CodeDom.Compiler.GeneratedCode("ANTLR", "<file.ANTLRVersion>")]
[System.CLSCompliant(false)]
public partial class <parser.name> : <superClass; null="Parser"> {
 protected static DFA[] decisionToDFA;
 protected static PredictionContextCache sharedContextCache = new PredictionContextCache();
 <if(parser.tokens)>
 public
 const int
  <parser.tokens:{k | <k>=<parser.tokens.(k)>}; separator=", ", wrap, anchor>;
```

```
 <endif>
 <if(parser.rules)>
 public const int
  <parser.rules:{r | RULE_<r.name> = <r.index>}; separator=", ", wrap, anchor>;
 <endif>
 public static readonly string[] ruleNames = {
  <parser.ruleNames:{r | "<r>"}; separator=", ", wrap, anchor>
 };

 <vocabulary(parser.literalNames, parser.symbolicNames)>

 public override string GrammarFileName { get { return "<parser.grammarFileName>"; } }

 public override string[] RuleNames { get { return ruleNames; } }

 public override int[] SerializedAtn { get { return _serializedATN; } }

 static <parser.name>() {
  decisionToDFA = new DFA[_ATN.NumberOfDecisions];
  for (int i = 0; i \< _ATN.NumberOfDecisions; i++) {
   decisionToDFA[i] = new DFA(_ATN.GetDecisionState(i), i);
  }
 }

 <namedActions.members>
 <parser:(ctor)()>
 <funcs; separator="\n">

<if(sempredFuncs)>
 public override bool Sempred(RuleContext
 _localctx, int ruleIndex, int predIndex) {
  switch (ruleIndex) {
  <parser.sempredFuncs.values:{f|
case <f.ruleIndex>: return <f.name>_sempred((<f.ctxType>)_localctx, predIndex);}; separator="\n">
  }
  return true;
 }
 <sempredFuncs.values; separator="\n">
<endif>

 <atn>
}
>>

vocabulary(literalNames, symbolicNames) ::= <<
private static readonly string[] _LiteralNames = {
 <literalNames:{t | <t>}; null="null", separator=", ", wrap, anchor>
};
```

```
private static readonly string[] _SymbolicNames = {
 <symbolicNames:{t | <t>}; null="null", separator=", ", wrap, anchor>
};
public static readonly IVocabulary DefaultVocabulary = new Vocabulary(_LiteralNames, _SymbolicNames);

[NotNull]
public override IVocabulary Vocabulary
{
 get
 {
  return DefaultVocabulary;
 }
}
>>

dumpActions(recog, argFuncs, actionFuncs, sempredFuncs) ::= <<
<if(actionFuncs)>
public override void Action(RuleContext _localctx, int ruleIndex, int actionIndex) {
 switch (ruleIndex) {
 <recog.actionFuncs.values:{f|
case
 <f.ruleIndex> : <f.name>_action(<if(!recog.modes)>(<f.ctxType>)<endif>_localctx, actionIndex); break;};
separator="\n">
 }
}
<actionFuncs.values; separator="\n">
<endif>
<if(sempredFuncs)>
public override bool Sempred(RuleContext _localctx, int ruleIndex, int predIndex) {
 switch (ruleIndex) {
 <recog.sempredFuncs.values:{f|
case <f.ruleIndex> : return <f.name>_sempred(<if(!recog.modes)>(<f.ctxType>)<endif>_localctx, predIndex);};
separator="\n">
 }
 return true;
}
<sempredFuncs.values; separator="\n">
<endif>
>>

parser_ctor(parser) ::= <<
 public <parser.name>(ITokenStream input) : this(input, Console.Out, Console.Error) { }

 public <parser.name>(ITokenStream input, TextWriter output, TextWriter errorOutput)
 : base(input, output, errorOutput)
{
 Interpreter = new ParserATNSimulator(this, _ATN, decisionToDFA, sharedContextCache);
}
```

```
>>

/* This generates a private method since the actionIndex is generated, making an
* overriding implementation impossible to maintain.
*/
RuleActionFunction(r,
 actions) ::= <<
private void <r.name>_action(<r.ctxType> _localctx, int actionIndex) {
 switch (actionIndex) {
 <actions:{index|
case <index>: <actions.(index)> break;}; separator="\n">
 }
}
>>

/* This generates a private method since the predIndex is generated, making an
* overriding implementation impossible to maintain.
*/
RuleSempredFunction(r, actions) ::= <<
private bool <r.name>_sempred(<r.ctxType> _localctx, int predIndex) {
 switch (predIndex) {
 <actions:{index|
case <index>: return <actions.(index)>;}; separator="\n">
 }
 return true;
}
>>

RuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,namedActions,finallyAction,postamble,exceptions)
::= <<

<if(ruleCtx)>
<ruleCtx>
<endif>
<altLabelCtxs:{l | <altLabelCtxs.(l)>}; separator="\n">

[RuleVersion(<namedActions.version; null="0">)]
<if(currentRule.modifiers)><currentRule.modifiers:{f | <f> }><else>public <endif><currentRule.ctxType>
<currentRule.escapedName>(<args; separator=", ">) {
 <currentRule.ctxType>
 _localctx = new <currentRule.ctxType>(Context, State<currentRule.args:{a | , <a.escapedName>}>);
 EnterRule(_localctx, <currentRule.startState>, RULE_<currentRule.name>);
 <namedActions.init>
 <locals; separator="\n">
 try {
<if(currentRule.hasLookaheadBlock)>
  int _alt;
<endif>
```

```
 <code>
 <postamble; separator="\n">
 <namedActions.after>
}
<if(exceptions)>
<exceptions; separator="\n">
<else>
catch (RecognitionException re) {
 _localctx.exception = re;
 ErrorHandler.ReportError(this, re);
 ErrorHandler.Recover(this, re);
}
<endif>
finally {
 <finallyAction>
 ExitRule();
}
return _localctx;
}
>>

LeftFactoredRuleFunction(currentRule,args,code,locals,namedActions,finallyAction,postamble) ::=
<<

<if(currentRule.modifiers)><currentRule.modifiers:{f | <f> }><else>private <endif><currentRule.ctxType>
<currentRule.escapedName>(<args; separator=", ">) {
 <currentRule.ctxType> _localctx = new <currentRule.ctxType>(Context, State<currentRule.args:{a | ,
<a.escapedName>}>);
 EnterLeftFactoredRule(_localctx,
 <currentRule.startState>, RULE_<currentRule.variantOf>);
 <namedActions.init>
 <locals; separator="\n">
 try {
<if(currentRule.hasLookaheadBlock)>
  int _alt;
<endif>
  <code>
  <postamble; separator="\n">
  <namedActions.after>
 }
 catch (RecognitionException re) {
  _localctx.exception = re;
  ErrorHandler.ReportError(this, re);
  ErrorHandler.Recover(this, re);
 }
 finally {
  <finallyAction>
  ExitRule();
```

```
 }
 return _localctx;
}
>>

// This behaves similar to RuleFunction (enterRule is called, and no adjustments
// are made to the parse tree), but since it's still a variant no context class
// needs to be generated.
LeftUnfactoredRuleFunction(currentRule,args,code,locals,namedActions,finallyAction,postamble) ::=
<<

<if(currentRule.modifiers)><currentRule.modifiers:{f | <f> }><else>private <endif><currentRule.ctxType>
<currentRule.escapedName>(<args; separator=", ">) {
 <currentRule.ctxType> _localctx = new <currentRule.ctxType>(Context,
 State<currentRule.args:{a | , <a.escapedName>}>);
 EnterRule(_localctx, <currentRule.startState>, RULE_<currentRule.variantOf>);
 <namedActions.init>
 <locals; separator="\n">
 try {
<if(currentRule.hasLookaheadBlock)>
  int _alt;
<endif>
  <code>
  <postamble; separator="\n">
  <namedActions.after>
 }
 catch (RecognitionException re) {
  _localctx.exception = re;
  ErrorHandler.ReportError(this, re);
  ErrorHandler.Recover(this, re);
 }
 finally {
  <finallyAction>
  ExitRule();
 }
 return _localctx;
}
>>

LeftRecursiveRuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,
 namedActions,finallyAction,postamble) ::=
<<

<ruleCtx>
<altLabelCtxs:{l | <altLabelCtxs.(l)>}; separator="\n">

[RuleVersion(<namedActions.version; null="0">)]
<if(currentRule.modifiers)><currentRule.modifiers:{f | <f> }><else>public <endif><currentRule.ctxType>
```

```
<currentRule.escapedName>(<args; separator=", ">) {
 return <currentRule.escapedName>(0<currentRule.args:{a | , <a.escapedName>}>);
}

private <currentRule.ctxType>
 <currentRule.escapedName>(int _p<args:{a | , <a>}>) {
 ParserRuleContext _parentctx = Context;
 int _parentState = State;
 <currentRule.ctxType> _localctx = new <currentRule.ctxType>(Context, _parentState<currentRule.args:{a | ,
<a.escapedName>}>);
 <currentRule.ctxType> _prevctx = _localctx;
 int _startState = <currentRule.startState>;
 EnterRecursionRule(_localctx, <currentRule.startState>, RULE_<currentRule.name>, _p);
 <namedActions.init>
 <locals; separator="\n">
 try {
<if(currentRule.hasLookaheadBlock)>
  int _alt;
<endif>
  <code>
  <postamble; separator="\n">
  <namedActions.after>
 }
 catch (RecognitionException re) {
  _localctx.exception = re;
  ErrorHandler.ReportError(this, re);
  ErrorHandler.Recover(this, re);
 }
 finally {
  <finallyAction>
  UnrollRecursionContexts(_parentctx);
 }
 return _localctx;
}
>>

CodeBlockForOuterMostAlt(currentOuterMostAltCodeBlock, locals, preamble, ops) ::= <<
<if(currentOuterMostAltCodeBlock.altLabel)>_localctx = new
 <currentOuterMostAltCodeBlock.altLabel; format="cap">Context(_localctx);<endif>
EnterOuterAlt(_localctx, <currentOuterMostAltCodeBlock.alt.altNum>);
<CodeBlockForAlt(currentAltCodeBlock=currentOuterMostAltCodeBlock, ...)>
>>

CodeBlockForAlt(currentAltCodeBlock, locals, preamble, ops) ::= <<
{
<locals; separator="\n">
<preamble; separator="\n">
<ops; separator="\n">
```

```
}
>>

LL1AltBlock(choice, preamble, alts, error) ::= <<
State = <choice.stateNumber>;
ErrorHandler.Sync(this);
<if(choice.label)><labelref(choice.label)> = TokenStream.LT(1);<endif>
<preamble; separator="\n">
switch (TokenStream.LA(1)) {
<choice.altLook,alts:{look,alt| <cases(tokens=look)>
 <alt>
 break;}; separator="\n">
default:
 <error>
}
>>

LL1OptionalBlock(choice, alts, error) ::= <<
State = <choice.stateNumber>;
ErrorHandler.Sync(this);
switch (TokenStream.LA(1)) {
<choice.altLook,alts:{look,alt| <cases(tokens=look)>
 <alt>
 break;}; separator="\n">
default:
 break;
}
>>

LL1OptionalBlockSingleAlt(choice, expr, alts,
 preamble, error, followExpr) ::= <<
State = <choice.stateNumber>;
ErrorHandler.Sync(this);
<preamble; separator="\n">
if (<expr>) {
 <alts; separator="\n">
}
<!else if ( !(<followExpr>) ) <error>!>
>>

LL1StarBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
State = <choice.stateNumber>;
ErrorHandler.Sync(this);
<preamble; separator="\n">
while (<loopExpr>) {
 <alts; separator="\n">
 State = <choice.loopBackStateNumber>;
 ErrorHandler.Sync(this);
```

```
 <iteration>
}
>>

LL1PlusBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
State = <choice.blockStartStateNumber>;<! alt block decision !>
ErrorHandler.Sync(this);
<preamble; separator="\n">
do {
 <alts; separator="\n">
 State = <choice.stateNumber>;<! loopback/exit decision !>
 ErrorHandler.Sync(this);
 <iteration>
} while ( <loopExpr> );
>>

// LL(*) stuff

AltBlock(choice, preamble, alts, error) ::= <<
State = <choice.stateNumber>;
ErrorHandler.Sync(this);
<if(choice.label)><labelref(choice.label)> = TokenStream.LT(1);<endif>
<preamble;
 separator="\n">
switch ( Interpreter.AdaptivePredict(TokenStream,<choice.decision>,Context) ) {
<alts:{alt |
case <i>:
 <alt>
 break;}; separator="\n">
}
>>

OptionalBlock(choice, alts, error) ::= <<
State = <choice.stateNumber>;
ErrorHandler.Sync(this);
switch ( Interpreter.AdaptivePredict(TokenStream,<choice.decision>,Context) ) {
<alts:{alt |
case <i><if(!choice.ast.greedy)>+1<endif>:
 <alt>
 break;}; separator="\n">
}
>>

StarBlock(choice, alts, sync, iteration) ::= <<
State = <choice.stateNumber>;
ErrorHandler.Sync(this);
_alt = Interpreter.AdaptivePredict(TokenStream,<choice.decision>,Context);
while ( _alt!=<choice.exitAlt> && _alt!=global::Antlr4.Runtime.Atn.ATN.INVALID_ALT_NUMBER ) {
```

```
 if ( _alt==1<if(!choice.ast.greedy)>+1<endif> ) {
  <iteration>
  <alts> <! should only be one !>
 }
 State = <choice.loopBackStateNumber>;
 ErrorHandler.Sync(this);
 _alt = Interpreter.AdaptivePredict(TokenStream,<choice.decision>,Context);
}
>>

PlusBlock(choice,
 alts, error) ::= <<
State = <choice.blockStartStateNumber>;<! alt block decision !>
ErrorHandler.Sync(this);
_alt = 1<if(!choice.ast.greedy)>+1<endif>;
do {
 switch (_alt) {
 <alts:{alt|
case <i><if(!choice.ast.greedy)>+1<endif>:
 <alt>
 break;}; separator="\n">
 default:
  <error>
 }
 State = <choice.loopBackStateNumber>;<! loopback/exit decision !>
 ErrorHandler.Sync(this);
 _alt = Interpreter.AdaptivePredict(TokenStream,<choice.decision>,Context);
} while ( _alt!=<choice.exitAlt> && _alt!=global::Antlr4.Runtime.Atn.ATN.INVALID_ALT_NUMBER );
>>

Sync(s) ::= "Sync(<s.expecting.name>);"

ThrowNoViableAlt(t) ::= "throw new NoViableAltException(this);"

TestSetInline(s) ::= <<
<s.bitsets:{bits | <if(rest(rest(bits.tokens)))><bitsetBitfieldComparison(s, bits)><else><bitsetInlineComparison(s,
bits)><endif>}; separator=" || ">
>>

// Java language spec 15.19 - shift operators mask operands rather than overflow to 0... need range test
testShiftInRange(shiftAmount) ::= <<
((<shiftAmount>) &
 ~0x3f) == 0
>>

// produces smaller bytecode only when bits.tokens contains more than two items
bitsetBitfieldComparison(s, bits) ::= <%
(<testShiftInRange({<offsetShift(s.varName, bits.shift)>})> && ((1L \<\< <offsetShift(s.varName, bits.shift)>) &
```

```
<bits.calculated>L) != 0)
%>

isZero ::= [
"0":true,
default:false
]

offsetShift(shiftAmount, offset) ::= <%
<if(!isZero.(offset))>(<shiftAmount> - <offset>)<else><shiftAmount><endif>
%>

bitsetInlineComparison(s, bits) ::= <%
<bits.tokens:{t | <s.varName>==<tokenType.(t.name)>}; separator=" || ">
%>

cases(tokens) ::= <<
<tokens:{t | case <tokenType.(t.name)>:}; separator="\n">
>>

InvokeRule(r, argExprsChunks) ::= <<
State = <r.stateNumber>;
<if(r.labels)><r.labels:{l | <labelref(l)> =
}><endif><r.escapedName>(<if(r.ast.options.p)><r.ast.options.p><if(argExprsChunks)>,<endif><endif><argExprs
Chunks>);
>>

MatchToken(m) ::= <<
State = <m.stateNumber>;
<if(m.labels)><m.labels:{l | <labelref(l)> = }><endif>Match(<tokenType.(m.name)>);
>>

MatchSet(m,
 expr, capture) ::= "<CommonSetStuff(m, expr, capture, false)>"

MatchNotSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, true)>"

CommonSetStuff(m, expr, capture, invert) ::= <<
State = <m.stateNumber>;
<if(m.labels)><m.labels:{l | <labelref(l)> = }>TokenStream.LT(1);<endif>
<capture>
if ( <if(invert)><m.varName> \<= 0 || <else>!<endif>(<expr>) ) {
 <if(m.labels)><m.labels:{l | <labelref(l)> = }><endif>ErrorHandler.RecoverInline(this);
}
else {
 ErrorHandler.ReportMatch(this);
   Consume();
}
```

```
>>

Wildcard(w) ::= <<
State = <w.stateNumber>;
<if(w.labels)><w.labels:{l | <labelref(l)> = }><endif>MatchWildcard();
>>

// ACTION STUFF

Action(a, foo, chunks) ::= "<chunks>"

ArgAction(a, chunks) ::= "<chunks>"

SemPred(p, chunks, failChunks) ::= <<
State = <p.stateNumber>;
if (!(<chunks>)) throw new FailedPredicateException(this, <p.predicate><if(failChunks)>,
<failChunks><elseif(p.msg)>, <p.msg><endif>);
>>

ExceptionClause(e, catchArg, catchAction) ::= <<
catch (<catchArg>)
 {
 <catchAction>
}
>>

// lexer actions are not associated with model objects

LexerSkipCommand()  ::= "Skip();"
LexerMoreCommand()  ::= "More();"
LexerPopModeCommand() ::= "PopMode();"

LexerTypeCommand(arg, grammar)      ::= "_type = <tokenType.(arg)>;"
LexerChannelCommand(arg, grammar)   ::= "_channel = <channelName.(arg)>;"
LexerModeCommand(arg, grammar)      ::= "_mode = <modeName.(arg)>;"
LexerPushModeCommand(arg, grammar)  ::= "PushMode(<modeName.(arg)>);"

ActionText(t) ::= "<t.text>"
ActionTemplate(t) ::= "<t.st>"
ArgRef(a) ::= "_localctx.<a.escapedName>"
LocalRef(a) ::= "_localctx.<a.escapedName>"
RetValueRef(a) ::= "_localctx.<a.escapedName>"
QRetValueRef(a) ::= "<ctx(a)>.<a.dict>.<a.escapedName>"
/** How to translate $tokenLabel */
TokenRef(t) ::= "<ctx(t)>.<tokenType.(t.escapedName)>"
LabelRef(t) ::= "<ctx(t)>.<t.escapedName>"
ListLabelRef(t) ::= "<ctx(t)>.<ListLabelName(t.escapedName)>"
SetAttr(s,rhsChunks) ::= "<ctx(s)>.<s.escapedName> = <rhsChunks>;"
```

```
TokenLabelType()
 ::= "<file.TokenLabelType; null={IToken}>"
InputSymbolType() ::= "<file.InputSymbolType; null={IToken}>"

TokenPropertyRef_text(t) ::= "(<ctx(t)>.<tokenType.(t.label)>!=null?<ctx(t)>.<tokenType.(t.label)>.Text:null)"
TokenPropertyRef_type(t) ::= "(<ctx(t)>.<tokenType.(t.label)>!=null?<ctx(t)>.<tokenType.(t.label)>.Type:0)"
TokenPropertyRef_line(t) ::= "(<ctx(t)>.<tokenType.(t.label)>!=null?<ctx(t)>.<tokenType.(t.label)>.Line:0)"
TokenPropertyRef_pos(t) ::=
"(<ctx(t)>.<tokenType.(t.label)>!=null?<ctx(t)>.<tokenType.(t.label)>.CharPositionInLine:0)"
TokenPropertyRef_channel(t) ::=
"(<ctx(t)>.<tokenType.(t.label)>!=null?<ctx(t)>.<tokenType.(t.label)>.Channel:0)"
TokenPropertyRef_index(t) ::=
"(<ctx(t)>.<tokenType.(t.label)>!=null?<ctx(t)>.<tokenType.(t.label)>.TokenIndex:0)"
TokenPropertyRef_int(t) ::=
"(<ctx(t)>.<tokenType.(t.label)>!=null?int.Parse(<ctx(t)>.<tokenType.(t.label)>.Text):0)"

RulePropertyRef_start(r) ::= "(<ctx(r)>.<r.label>!=null?(<ctx(r)>.<r.label>.Start):null)"
RulePropertyRef_stop(r)
 ::= "(<ctx(r)>.<r.label>!=null?(<ctx(r)>.<r.label>.Stop):null)"
RulePropertyRef_text(r)  ::=
"(<ctx(r)>.<r.label>!=null?TokenStream.GetText(<ctx(r)>.<r.label>.Start,<ctx(r)>.<r.label>.Stop):null)"
RulePropertyRef_ctx(r)  ::= "<ctx(r)>.<r.label>"
RulePropertyRef_parser(r)  ::= "this"

ThisRulePropertyRef_start(r) ::= "_localctx.Start"
ThisRulePropertyRef_stop(r)  ::= "_localctx.Stop"
ThisRulePropertyRef_text(r)  ::= "TokenStream.GetText(_localctx.Start, TokenStream.LT(-1))"
ThisRulePropertyRef_ctx(r)  ::= "_localctx"
ThisRulePropertyRef_parser(r)  ::= "this"

NonLocalAttrRef(s)   ::= <%((<s.ruleName;
format="cap">Context)GetInvokingContext(<s.ruleIndex>)).<s.escapedName>%>
SetNonLocalAttr(s, rhsChunks)   ::=
 <%((<s.ruleName; format="cap">Context)GetInvokingContext(<s.ruleIndex>)).<s.escapedName> =
<rhsChunks>;%>

AddToLabelList(a) ::= "<ctx(a.label)>.<a.listName>.Add(<labelref(a.label)>);"

TokenDecl(t) ::= "<TokenLabelType()> <tokenType.(t.escapedName)>"
TokenTypeDecl(t)
 ::= "int <tokenType.(t.escapedName)>;"
TokenListDecl(t) ::= "IList\<IToken> <tokenType.(t.escapedName)> = new List\<IToken>()"
RuleContextDecl(r) ::= "<r.ctxName> <r.escapedName>"
RuleContextListDecl(rdecl) ::= "IList\<<rdecl.ctxName>> <rdecl.escapedName> = new List\<<rdecl.ctxName>>()"

contextGetterCollection(elementType) ::= <%
<elementType>[]
```

```
%>

ContextTokenGetterDecl(t)      ::=
   "[System.Diagnostics.DebuggerNonUserCode] public ITerminalNode <tokenType.(t.name)>() { return
GetToken(<parser.name>.<tokenType.(t.name)>, 0); }"
ContextTokenListGetterDecl(t)  ::= <<
[System.Diagnostics.DebuggerNonUserCode] public <contextGetterCollection("ITerminalNode")>
<tokenType.(t.name)>() { return GetTokens(<parser.name>.<tokenType.(t.name)>); }
>>
ContextTokenListIndexedGetterDecl(t)  ::= <<
[System.Diagnostics.DebuggerNonUserCode] public ITerminalNode <tokenType.(t.name)>(int i) {
 return GetToken(<parser.name>.<tokenType.(t.name)>, i);
}
>>
ContextRuleGetterDecl(r)       ::= <<
[System.Diagnostics.DebuggerNonUserCode]
 public <r.ctxName> <r.escapedName>() {
 return GetRuleContext\<<r.ctxName>\>(0);
}
>>
ContextRuleListGetterDecl(r)   ::= <<
[System.Diagnostics.DebuggerNonUserCode] public <contextGetterCollection({<r.ctxName>})>
<r.escapedName>() {
 return GetRuleContexts\<<r.ctxName>\>();
}
>>
ContextRuleListIndexedGetterDecl(r)   ::= <<
[System.Diagnostics.DebuggerNonUserCode] public <r.ctxName> <r.escapedName>(int i) {
 return GetRuleContext\<<r.ctxName>\>(i);
}
>>

LexerRuleContext() ::= "RuleContext"

/** The rule context name is the rule followed by a suffix; e.g.,
* r becomes rContext.
*/
RuleContextNameSuffix() ::= "Context"

ImplicitTokenLabel(tokenName) ::= "_<tokenType.(tokenName)>"
ImplicitRuleLabel(ruleName)   ::= "_<ruleName>"
ImplicitSetLabel(id)    ::= "_tset<id>"
ListLabelName(label)    ::= "_<label>"

CaptureNextToken(d) ::= "<d.varName> = TokenStream.LT(1);"
CaptureNextTokenType(d) ::= "<d.varName> = TokenStream.LA(1);"

StructDecl(struct,ctorAttrs,attrs,getters,dispatchMethods,interfaces,extensionMembers,signatures,
```

```
        superClass={ParserRuleContext}) ::= <<
public partial class <struct.escapedName> :
<if(contextSuperClass)><contextSuperClass><else>ParserRuleContext<endif><if(interfaces)>, <interfaces;
separator=", "><endif> {
 <attrs:{a | public <a>;}; separator="\n">
 <getters:{g | <g>}; separator="\n">
 <if(ctorAttrs)>public <struct.escapedName>(ParserRuleContext parent, int invokingState) : base(parent,
invokingState) { }<endif>
 public <struct.escapedName>(ParserRuleContext parent, int invokingState<ctorAttrs:{a | , <a>}>)
  : base(parent, invokingState)
 {
  <struct.ctorAttrs:{a | this.<a.escapedName> = <a.escapedName>;}; separator="\n">
 }
 public override int RuleIndex { get { return RULE_<struct.derivedFromName>; } }
<if(struct.provideCopyFrom)> <! don't need copy unless we have subclasses !>
 public <struct.escapedName>() { }
 public virtual void CopyFrom(<struct.escapedName> context) {
  base.CopyFrom(context);
  <struct.attrs:{a
 | this.<a.escapedName> = context.<a.escapedName>;}; separator="\n">
 }
<endif>
 <dispatchMethods; separator="\n">
 <extensionMembers; separator="\n">
}
>>

AltLabelStructDecl(struct,attrs,getters,dispatchMethods) ::= <<
public partial class <struct.escapedName> : <currentRule.name; format="cap">Context {
 <attrs:{a | public <a>;}; separator="\n">
 <getters:{g | <g>}; separator="\n">
 public <struct.escapedName>(<currentRule.name; format="cap">Context context) { CopyFrom(context); }
 <dispatchMethods; separator="\n">
}
>>

ListenerDispatchMethod(method) ::= <<
[System.Diagnostics.DebuggerNonUserCode]
public override void <if(method.isEnter)>Enter<else>Exit<endif>Rule(IParseTreeListener listener) {
 I<parser.grammarName>Listener typedListener = listener as I<parser.grammarName>Listener;
 if (typedListener != null) typedListener.<if(method.isEnter)>Enter<else>Exit<endif><struct.derivedFromName;
format="cap">(this);
}
>>

VisitorDispatchMethod(method) ::= <<
[System.Diagnostics.DebuggerNonUserCode]
public
```

```
 override TResult Accept\<TResult>(IParseTreeVisitor\<TResult> visitor) {
 I<parser.grammarName>Visitor\<TResult> typedVisitor = visitor as I<parser.grammarName>Visitor\<TResult>;
 if (typedVisitor != null) return typedVisitor.Visit<struct.derivedFromName; format="cap">(this);
 else return visitor.VisitChildren(this);
}
>>

AttributeDecl(d) ::= "<d.type> <d.escapedName><if(d.initValue)> = <d.initValue><endif>"

/** If we don't know location of label def x, use this template */
labelref(x) ::= "<if(!x.isLocal)><typedContext(x.ctx)>.<endif><x.escapedName>"

/** For any action chunk, what is correctly-typed context struct ptr? */
ctx(actionChunk) ::= "<typedContext(actionChunk.ctx)>"

// only casts _localctx to the type when the cast isn't redundant (i.e. to a sub-context for a labeled alt)
typedContext(ctx) ::= "<if(ctx.provideCopyFrom)>((<ctx.name>)_localctx)<else>_localctx<endif>"

// used for left-recursive rules
recRuleAltPredicate(ruleName,opPrec)
  ::= "Precpred(Context, <opPrec>)"
recRuleSetReturnAction(src,name)   ::= "$<name>=$<src>.<name>;"
recRuleSetStopToken()              ::= "Context.Stop = TokenStream.LT(-1);"

recRuleAltStartAction(ruleName, ctxName, label, isListLabel) ::= <<
_localctx = new <ctxName>Context(_parentctx, _parentState);
<if(label)>
<if(isListLabel)>
_localctx.<label>.Add(_prevctx);
<else>
_localctx.<label> = _prevctx;
<endif>
<endif>
PushNewRecursionContext(_localctx, _startState, RULE_<ruleName>);
>>

recRuleLabeledAltStartAction(ruleName, currentAltLabel, label, isListLabel) ::= <<
_localctx = new <currentAltLabel; format="cap">Context(new <ruleName; format="cap">Context(_parentctx,
_parentState));
<if(label)>
<if(isListLabel)>
((<currentAltLabel; format="cap">Context)_localctx).<label>.Add(_prevctx);
<else>
((<currentAltLabel; format="cap">Context)_localctx).<label> = _prevctx;
<endif>
<endif>
PushNewRecursionContext(_localctx, _startState, RULE_<ruleName>);
>>
```

```
recRuleReplaceContext(ctxName)
 ::= <<
_localctx = new <ctxName>Context(_localctx);
Context = _localctx;
_prevctx = _localctx;
>>

recRuleSetPrevCtx() ::= <<
if ( ParseListeners!=null )
 TriggerExitRuleEvent();
_prevctx = _localctx;
>>


LexerFile(file, lexer, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
namespace <file.genPackage> {
<endif>
<namedActions.header>
using System;
using System.IO;
using System.Text;
using Antlr4.Runtime;
using Antlr4.Runtime.Atn;
using Antlr4.Runtime.Misc;
using DFA = Antlr4.Runtime.Dfa.DFA;

<lexer>
<if(file.genPackage)>
} // namespace <file.genPackage>
<endif>
>>

Lexer(lexer, atn, actionFuncs, sempredFuncs, superClass) ::= <<
[System.CodeDom.Compiler.GeneratedCode("ANTLR", "<file.ANTLRVersion>")]
[System.CLSCompliant(false)]
public partial class <lexer.name> : <superClass; null="Lexer"> {
 protected static DFA[] decisionToDFA;
 protected static PredictionContextCache sharedContextCache = new PredictionContextCache();
 <if(lexer.tokens)>
 public
 const int
  <lexer.tokens:{k | <tokenType.(k)>=<lexer.tokens.(k)>}; separator=", ", wrap, anchor>;
 <endif>
 <if(lexer.escapedChannels)>
 public const int
```

```
 <lexer.escapedChannels:{k | <k>=<lexer.escapedChannels.(k)>}; separator=", ", wrap, anchor>;
<endif>
<if(rest(lexer.escapedModeNames))>
public const int
 <rest(lexer.escapedModeNames):{m | <m>=<i>}; separator=", ", wrap, anchor>;
<endif>
public static string[] channelNames = {
 "DEFAULT_TOKEN_CHANNEL", "HIDDEN"<if (lexer.channelNames)>, <lexer.channelNames:{c| "<c>"};
separator=", ", wrap, anchor><endif>
};

public static string[] modeNames = {
 <lexer.modes:{m| "<m>"}; separator=", ", wrap, anchor>
};

public static readonly string[] ruleNames = {
 <lexer.ruleNames:{r | "<r>"}; separator=", ", wrap, anchor>
};

<namedActions.members>

public <lexer.name>(ICharStream input)
: this(input, Console.Out, Console.Error) { }

public <lexer.name>(ICharStream input, TextWriter output, TextWriter errorOutput)
:
base(input, output, errorOutput)
{
 Interpreter = new LexerATNSimulator(this, _ATN, decisionToDFA, sharedContextCache);
}

<vocabulary(lexer.literalNames, lexer.symbolicNames)>

public override string GrammarFileName { get { return "<lexer.grammarFileName>"; } }

public override string[] RuleNames { get { return ruleNames; } }

public override string[] ChannelNames { get { return channelNames; } }

public override string[] ModeNames { get { return modeNames; } }

public override int[] SerializedAtn { get { return _serializedATN; } }

static <lexer.name>() {
 decisionToDFA = new DFA[_ATN.NumberOfDecisions];
 for (int i = 0; i \< _ATN.NumberOfDecisions; i++) {
  decisionToDFA[i] = new DFA(_ATN.GetDecisionState(i), i);
 }
```

```
 }
 <dumpActions(lexer, "", actionFuncs, sempredFuncs)>
 <atn>
}
>>

SerializedATN(model) ::= <<
private static int[] _serializedATN = {
 <model.serialized: {s | <s>}; separator=",", wrap>
};

public static readonly ATN _ATN =
 new ATNDeserializer().Deserialize(_serializedATN);


>>

initValue(typeName)
 ::= <<
default(<typeName>)
>>

codeFileExtension() ::= ".cs"

modeName ::= [
 "DEFAULT_MODE" : "DefaultMode",
 default : key
]

channelName ::= [
 "HIDDEN" : "Hidden",
 "DEFAULT_TOKEN_CHANNEL" : "DefaultTokenChannel",
 default : key
]

tokenType ::= [
 "EOF" : "Eof",
 default : key
]
```

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* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/codegen/CSharp/CSharp.stg
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*/

tree grammar BlockSetTransformer;
options {
 language     = Java;
 tokenVocab   = ANTLRParser;
 ASTLabelType = GrammarAST;
 output   = AST;
 filter   = true;
}

@header {
package org.antlr.v4.parse;
import org.antlr.v4.misc.Utils;
import org.antlr.v4.misc.*;
import org.antlr.v4.tool.*;
```

```
import org.antlr.v4.tool.ast.*;
import java.util.List;
import java.util.Set;
import
 java.util.HashSet;
import java.util.ArrayList;
import org.antlr.v4.runtime.misc.IntervalSet;
}

@members {
public String currentRuleName;
public GrammarAST currentAlt;
public Grammar g;
public BlockSetTransformer(TreeNodeStream input, Grammar g) {
   this(input, new RecognizerSharedState());
   this.g = g;
}
}

topdown
   : ^(RULE (id=TOKEN_REF|id=RULE_REF) {currentRuleName=$id.text;} .+)
   | setAlt
   | ebnfBlockSet
   | blockSet
 ;

setAlt
 : {inContext("RULE BLOCK")}?
  ALT {currentAlt = $start;}
 ;

// (BLOCK (ALT (+ (BLOCK (ALT INT) (ALT ID)))))
ebnfBlockSet
@after {
 GrammarTransformPipeline.setGrammarPtr(g, $tree);
}
 : ^(ebnfSuffix blockSet) -> ^(ebnfSuffix ^(BLOCK<BlockAST> ^(ALT<AltAST> blockSet)))
 ;

ebnfSuffix
@after {$tree = (GrammarAST)adaptor.dupNode($start);}
 : OPTIONAL
  | CLOSURE
   | POSITIVE_CLOSURE
 ;

blockSet
@init {
```

```
boolean inLexer = Grammar.isTokenName(currentRuleName);
}
@after {
 GrammarTransformPipeline.setGrammarPtr(g, $tree);
}
 : {inContext("RULE")}?
 // top-level: rule block and > 1 alt
  ^(BLOCK ^(alt=ALT elementOptions? {((AltAST)$alt).altLabel==null}? setElement[inLexer]) ( ^(ALT
elementOptions? setElement[inLexer]) )+)
  -> ^(BLOCK<BlockAST>[$BLOCK.token] ^(ALT<AltAST>[$BLOCK.token,"ALT"] ^(SET[$BLOCK.token,
"SET"] setElement+)))
 | {!inContext("RULE")}? // if not rule block and > 1 alt
  ^(BLOCK ^(ALT elementOptions? setElement[inLexer]) ( ^(ALT elementOptions? setElement[inLexer]) )+)
  -> ^(SET[$BLOCK.token, "SET"] setElement+)
 ;

setElement[boolean inLexer]
@after {
 GrammarTransformPipeline.setGrammarPtr(g, $tree);
}
 : ( ^(a=STRING_LITERAL elementOptions) {!inLexer ||
CharSupport.getCharValueFromGrammarCharLiteral($a.getText())!=-1}?
  |   a=STRING_LITERAL {!inLexer || CharSupport.getCharValueFromGrammarCharLiteral($a.getText())!=-1}?
  | {!inLexer}?=> ^(TOKEN_REF elementOptions)
  | {!inLexer}?=>   TOKEN_REF
  | {inLexer}?=>  ^(RANGE a=STRING_LITERAL b=STRING_LITERAL)
   {CharSupport.getCharValueFromGrammarCharLiteral($a.getText())!=-1
 &&
    CharSupport.getCharValueFromGrammarCharLiteral($b.getText())!=-1}?
  )
 ;

elementOptions
 : ^(ELEMENT_OPTIONS elementOption*)
 ;

elementOption
 : ID
 | ^(ASSIGN id=ID v=ID)
 | ^(ASSIGN ID v=STRING_LITERAL)
 | ^(ASSIGN ID v=ACTION)
 | ^(ASSIGN ID v=INT)
 ;
```

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/BlockSetTransformer.g
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*/

tree grammar ATNBuilder;
options {
 language     = Java;
 tokenVocab   = ANTLRParser;
 ASTLabelType = GrammarAST;
// filter       = true;
}

// Include the copyright in this source and also the generated source
@header {
/*
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*/
package org.antlr.v4.parse;
import org.antlr.v4.tool.*;
import org.antlr.v4.tool.ast.*;
import org.antlr.v4.automata.ATNFactory;
}

@members {
   ATNFactory factory;
   public ATNBuilder(TreeNodeStream input, ATNFactory factory) {
    this(input);
    this.factory = factory;
   }
}

dummy : block[null] ; // avoid error about no start rule

ruleBlock[GrammarAST ebnfRoot] returns [ATNFactory.Handle p]
@init {
   List<ATNFactory.Handle> alts = new ArrayList<ATNFactory.Handle>();
   int alt = 1;
   factory.setCurrentOuterAlt(alt);
}
   : ^(BLOCK
         (^(OPTIONS .*))?
         (   a=alternative
             {alts.add($a.p); factory.setCurrentOuterAlt(++alt);}
         )+
      )
```

```
    {$p = factory.block((BlockAST)$BLOCK, ebnfRoot, alts);}
  ;

block[GrammarAST ebnfRoot] returns [ATNFactory.Handle p]
@init {List<ATNFactory.Handle> alts = new ArrayList<ATNFactory.Handle>();}
  : ^(BLOCK (^(OPTIONS .*))? (a=alternative {alts.add($a.p);})+)
   {$p = factory.block((BlockAST)$BLOCK, ebnfRoot, alts);}
  ;

alternative returns [ATNFactory.Handle p]
@init {List<ATNFactory.Handle> els = new ArrayList<ATNFactory.Handle>();}
  : ^(LEXER_ALT_ACTION a=alternative lexerCommands)
      {$p = factory.lexerAltCommands($a.p,$lexerCommands.p);}
  | ^(ALT elementOptions? EPSILON)       {$p = factory.epsilon($EPSILON);}
  |   ^(ALT elementOptions? (e=element {els.add($e.p);})+) {$p = factory.alt(els);}
  ;

lexerCommands returns [ATNFactory.Handle p]
@init {List<ATNFactory.Handle> cmds = new ArrayList<ATNFactory.Handle>();}
  :   (c=lexerCommand {if ($c.cmd != null) cmds.add($c.cmd);})+
      {
      $p = factory.alt(cmds);
      }
  ;

lexerCommand returns
 [ATNFactory.Handle cmd]
 : ^(LEXER_ACTION_CALL ID lexerCommandExpr)
      {$cmd = factory.lexerCallCommand($ID, $lexerCommandExpr.start);}
 | ID
      {$cmd = factory.lexerCommand($ID);}
 ;

lexerCommandExpr
 : ID
 | INT
 ;

element returns [ATNFactory.Handle p]
 : labeledElement    {$p = $labeledElement.p;}
 | atom      {$p = $atom.p;}
 | subrule      {$p = $subrule.p;}
 |   ACTION      {$p = factory.action((ActionAST)$ACTION);}
 |   SEMPRED      {$p = factory.sempred((PredAST)$SEMPRED);}
 |   ^(ACTION .)     {$p = factory.action((ActionAST)$ACTION);}
 |   ^(SEMPRED .)    {$p = factory.sempred((PredAST)$SEMPRED);}
  | ^(NOT b=blockSet[true])  {$p = $b.p;}
  | LEXER_CHAR_SET    {$p = factory.charSetLiteral($start);}
```

```
 ;

astOperand returns [ATNFactory.Handle p]
 : atom      {$p = $atom.p;}
 | ^(NOT blockSet[true])  {$p = $blockSet.p;}
 ;

labeledElement returns [ATNFactory.Handle p]
 : ^(ASSIGN ID element)     {$p = factory.label($element.p);}
 | ^(PLUS_ASSIGN ID element)
  {$p = factory.listLabel($element.p);}
 ;

subrule returns [ATNFactory.Handle p]
 : ^(OPTIONAL block[$start])   {$p = $block.p;}
 | ^(CLOSURE block[$start])   {$p = $block.p;}
 | ^(POSITIVE_CLOSURE block[$start]) {$p = $block.p;}
 |  block[null]       {$p = $block.p;}
   ;

blockSet[boolean invert] returns [ATNFactory.Handle p]
@init {List<GrammarAST> alts = new ArrayList<GrammarAST>();}
 : ^(SET (setElement {alts.add($setElement.start);})+) {$p = factory.set($start, alts, $invert);}
 ;

/** Don't combine with atom otherwise it will build spurious ATN nodes */
setElement
 : ^(STRING_LITERAL .)
 | ^(TOKEN_REF .)
 | STRING_LITERAL
 | TOKEN_REF
 | ^(RANGE a=STRING_LITERAL b=STRING_LITERAL)
   |   LEXER_CHAR_SET
 ;

atom returns [ATNFactory.Handle p]
 : range     {$p = $range.p;}
 | ^(DOT ID terminal)  {$p = $terminal.p;}
 | ^(DOT ID ruleref)  {$p = $ruleref.p;}
   | ^(WILDCARD .)   {$p = factory.wildcard($start);}
   | WILDCARD    {$p = factory.wildcard($start);}
   | blockSet[false]   {$p
 = $blockSet.p;}
   |   terminal    {$p = $terminal.p;}
   |   ruleref     {$p = $ruleref.p;}
   ;

ruleref returns [ATNFactory.Handle p]
```

```
  : ^(RULE_REF ARG_ACTION? ^(ELEMENT_OPTIONS .*))  {$p = factory.ruleRef($RULE_REF);}
  | ^(RULE_REF ARG_ACTION?)        {$p = factory.ruleRef($RULE_REF);}
  | RULE_REF           {$p = factory.ruleRef($RULE_REF);}
  ;

range returns [ATNFactory.Handle p]
  : ^(RANGE a=STRING_LITERAL b=STRING_LITERAL) {$p = factory.range($a,$b);}
  ;

terminal returns [ATNFactory.Handle p]
  :  ^(STRING_LITERAL .)   {$p = factory.stringLiteral((TerminalAST)$start);}
  | STRING_LITERAL    {$p = factory.stringLiteral((TerminalAST)$start);}
  | ^(TOKEN_REF ARG_ACTION .) {$p = factory.tokenRef((TerminalAST)$start);}
  | ^(TOKEN_REF .)    {$p = factory.tokenRef((TerminalAST)$start);}
  | TOKEN_REF     {$p = factory.tokenRef((TerminalAST)$start);}
  ;

elementOptions
 : ^(ELEMENT_OPTIONS elementOption*)
 ;

elementOption
 : ID
 | ^(ASSIGN ID
 ID)
 | ^(ASSIGN ID STRING_LITERAL)
 | ^(ASSIGN ID ACTION)
 | ^(ASSIGN ID INT)
 ;
```

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* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ATNBuilder.g
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*/

tree grammar SourceGenTriggers;
options {
 language     = Java;
 tokenVocab   = ANTLRParser;
 ASTLabelType = GrammarAST;
}

@header {
package org.antlr.v4.codegen;
import org.antlr.v4.misc.Utils;
import org.antlr.v4.codegen.model.*;
import org.antlr.v4.codegen.model.decl.*;
import org.antlr.v4.tool.*;
import org.antlr.v4.tool.ast.*;
import java.util.Collections;
import
 java.util.Map;
import java.util.HashMap;
}

@members {
 public OutputModelController controller;
   public boolean hasLookaheadBlock;
   public SourceGenTriggers(TreeNodeStream input, OutputModelController controller) {
    this(input);
    this.controller = controller;
   }
}

dummy : block[null, null] ;
```

```
block[GrammarAST label, GrammarAST ebnfRoot] returns [List<? extends SrcOp> omos]
  : ^( blk=BLOCK (^(OPTIONS .+))?
  {List<CodeBlockForAlt> alts = new ArrayList<CodeBlockForAlt>();}
   ( alternative {alts.add($alternative.altCodeBlock);} )+
  )
  {
  if ( alts.size()==1 && ebnfRoot==null) return alts;
  if ( ebnfRoot==null ) {
      $omos = DefaultOutputModelFactory.list(controller.getChoiceBlock((BlockAST)$blk, alts, $label));
  }
  else {
        Choice choice = controller.getEBNFBlock($ebnfRoot, alts);
        hasLookaheadBlock |= choice instanceof PlusBlock || choice instanceof StarBlock;
      $omos = DefaultOutputModelFactory.list(choice);
   }
  }
  ;

alternative returns [CodeBlockForAlt altCodeBlock, List<SrcOp> ops]
@init {
  boolean outerMost = inContext("RULE BLOCK");
}
@after {
  controller.finishAlternative($altCodeBlock, $ops, outerMost);
}
  : a=alt[outerMost] {$altCodeBlock=$a.altCodeBlock; $ops=$a.ops;}
 ;

alt[boolean outerMost] returns [CodeBlockForAlt altCodeBlock, List<SrcOp> ops]
@init {
 // set alt if outer ALT only (the only ones with alt field set to Alternative object)
 AltAST altAST = (AltAST)retval.start;
 if ( outerMost ) controller.setCurrentOuterMostAlt(altAST.alt);
}
 : {
  List<SrcOp> elems = new ArrayList<SrcOp>();
  // TODO: shouldn't we pass $start to controller.alternative()?
  $altCodeBlock = controller.alternative(controller.getCurrentOuterMostAlt(), outerMost);
  $altCodeBlock.ops = $ops = elems;
  controller.setCurrentBlock($altCodeBlock);
  }
  ^( ALT elementOptions? ( element {if ($element.omos!=null) elems.addAll($element.omos);} )+ )

 | ^(ALT elementOptions?
 EPSILON)
      {$altCodeBlock = controller.epsilon(controller.getCurrentOuterMostAlt(), outerMost);}
  ;
```

```
element returns [List<? extends SrcOp> omos]
 : labeledElement     {$omos = $labeledElement.omos;}
 | atom[null,false]   {$omos = $atom.omos;}
 | subrule       {$omos = $subrule.omos;}
 |   ACTION       {$omos = controller.action((ActionAST)$ACTION);}
 |   SEMPRED       {$omos = controller.sempred((ActionAST)$SEMPRED);}
 | ^(ACTION elementOptions)  {$omos = controller.action((ActionAST)$ACTION);}
 |   ^(SEMPRED elementOptions)  {$omos = controller.sempred((ActionAST)$SEMPRED);}
 ;

labeledElement returns [List<? extends SrcOp> omos]
 : ^(ASSIGN ID atom[$ID,false] )   {$omos = $atom.omos;}
 | ^(PLUS_ASSIGN ID atom[$ID,false])  {$omos = $atom.omos;}
 | ^(ASSIGN ID block[$ID,null] )   {$omos = $block.omos;}
 | ^(PLUS_ASSIGN ID block[$ID,null])  {$omos = $block.omos;}
 ;

subrule returns [List<? extends SrcOp> omos]
 : ^(OPTIONAL b=block[null,$OPTIONAL])
  {
  $omos = $block.omos;
  }
 | ( ^(op=CLOSURE
 b=block[null,null])
  | ^(op=POSITIVE_CLOSURE b=block[null,null])
  )
  {
  List<CodeBlockForAlt> alts = new ArrayList<CodeBlockForAlt>();
  SrcOp blk = $b.omos.get(0);
  CodeBlockForAlt alt = new CodeBlockForAlt(controller.delegate);
  alt.addOp(blk);
  alts.add(alt);
  SrcOp loop = controller.getEBNFBlock($op, alts); // "star it"
      hasLookaheadBlock |= loop instanceof PlusBlock || loop instanceof StarBlock;
      $omos = DefaultOutputModelFactory.list(loop);
  }
 |  block[null, null]     {$omos = $block.omos;}
   ;

blockSet[GrammarAST label, boolean invert] returns [List<SrcOp> omos]
   : ^(SET atom[label,invert]+) {$omos = controller.set($SET, $label, invert);}
   ;

/*
setElement
 : STRING_LITERAL
 | TOKEN_REF
 | ^(RANGE STRING_LITERAL STRING_LITERAL)
```

```
 ;
*/

// TODO: combine ROOT/BANG into one then just make new op ref'ing return value of atom/terminal...
// TODO: same for NOT
atom[GrammarAST label, boolean invert] returns [List<SrcOp> omos]
 : ^(NOT
 a=atom[$label, true])  {$omos = $a.omos;}
 | range[label]       {$omos = $range.omos;}
 | ^(DOT ID terminal[$label])
 | ^(DOT ID ruleref[$label])
   | ^(WILDCARD .)       {$omos = controller.wildcard($WILDCARD, $label);}
   | WILDCARD        {$omos = controller.wildcard($WILDCARD, $label);}
   |   terminal[label]     {$omos = $terminal.omos;}
   |   ruleref[label]     {$omos = $ruleref.omos;}
 | blockSet[$label, invert]  {$omos = $blockSet.omos;}
 ;

ruleref[GrammarAST label] returns [List<SrcOp> omos]
   : ^(RULE_REF ARG_ACTION? elementOptions?)  {$omos = controller.ruleRef($RULE_REF, $label,
$ARG_ACTION);}
   ;

range[GrammarAST label] returns [List<SrcOp> omos]
   : ^(RANGE a=STRING_LITERAL b=STRING_LITERAL)
   ;

terminal[GrammarAST label] returns [List<SrcOp> omos]
   :  ^(STRING_LITERAL .)   {$omos = controller.stringRef($STRING_LITERAL, $label);}
   | STRING_LITERAL    {$omos = controller.stringRef($STRING_LITERAL, $label);}
   | ^(TOKEN_REF ARG_ACTION .) {$omos =
 controller.tokenRef($TOKEN_REF, $label, $ARG_ACTION);}
   | ^(TOKEN_REF .)    {$omos = controller.tokenRef($TOKEN_REF, $label, null);}
   | TOKEN_REF     {$omos = controller.tokenRef($TOKEN_REF, $label, null);}
   ;

elementOptions
   : ^(ELEMENT_OPTIONS elementOption+)
   ;

elementOption
   : ID
   |   ^(ASSIGN ID ID)
   |   ^(ASSIGN ID STRING_LITERAL)
   |   ^(ASSIGN ID ACTION)
   |   ^(ASSIGN ID INT)
   ;
```

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/SourceGenTriggers.g
No license file was found, but licenses were detected in source scan.

/*
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*/
/*
This file contains the actual layout of the messages emitted by ANTLR.
This file contains the default format ANTLR uses.
*/

location(file, line, column) ::= "<file>:<line>:<column>:"

message(id, text) ::= "(<id>) <text>"

report(location, message, type) ::= "<type>(<message.id>): <location> <message.text>"

wantsSingleLineMessage() ::= "false"

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/messages/formats/antlr.stg
No license file was found, but licenses were detected in source scan.

```
/*
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*  THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

import "Files.stg" // All file specific stuff.

cppTypeInitMap ::= [
   "int":"0",
   "long":"0",
   "float":"0.0f",
   "double":"0.0",
   "bool":"false",
   "short":"0",
   "char":"0",
   default: "nullptr" // anything other than a primitive type is an object
]

LexerHeader(lexer, atn, actionFuncs, sempredFuncs, superClass = {antlr4::Lexer}) ::= <<
<namedActions.context>

class <file.exportMacro>
 <lexer.name> : public <superClass> {
public:
```

```
<if (lexer.tokens)>
 enum {
   <lexer.tokens: {k | <k> = <lexer.tokens.(k)>}; separator=", ", wrap, anchor>
 };
<endif>

<if (lexer.escapedChannels)>
 enum {
   <lexer.escapedChannels: {k | <k> = <lexer.escapedChannels.(k)>}; separator=", ", wrap, anchor>
 };
<endif>

<if (rest(lexer.escapedModeNames))>
 enum {
   <rest(lexer.escapedModeNames): {m | <m> = <i>}; separator=", ", wrap, anchor>
 };
<endif>

 explicit <lexer.name>(antlr4::CharStream *input);

 ~<lexer.name>() override;

 <namedActions.members>

 std::string getGrammarFileName() const override;

 const std::vector\<std::string>& getRuleNames() const override;

 const std::vector\<std::string>& getChannelNames() const override;

 const std::vector\<std::string>& getModeNames() const override;

 const antlr4::dfa::Vocabulary& getVocabulary() const override;

 antlr4::atn::SerializedATNView getSerializedATN() const override;

 const antlr4::atn::ATN& getATN()
 const override;

 <if (actionFuncs)>
 void action(antlr4::RuleContext *context, size_t ruleIndex, size_t actionIndex) override;
 <endif>

 <if (sempredFuncs)>
 bool sempred(antlr4::RuleContext *_localctx, size_t ruleIndex, size_t predicateIndex) override;
 <endif>

 // By default the static state used to implement the lexer is lazily initialized during the first
```

```
 // call to the constructor. You can call this function if you wish to initialize the static state
 // ahead of time.
 static void initialize();

private:
 <namedActions.declarations>

 // Individual action functions triggered by action() above.
 <actionFuncs.values; separator="\n">

 // Individual semantic predicate functions triggered by sempred() above.
 <sempredFuncs.values; separator="\n">

 <atn>
};
>>

Lexer(lexer, atn, actionFuncs, sempredFuncs, superClass = {Lexer}) ::= <<

using namespace antlr4;

namespace {

struct <lexer.name; format = "cap">StaticData final {
 <lexer.name; format = "cap">StaticData(std::vector\<std::string>
 ruleNames,
                    std::vector\<std::string> channelNames,
                    std::vector\<std::string> modeNames,
                    std::vector\<std::string> literalNames,
                    std::vector\<std::string> symbolicNames)
    : ruleNames(std::move(ruleNames)), channelNames(std::move(channelNames)),
      modeNames(std::move(modeNames)), literalNames(std::move(literalNames)),
      symbolicNames(std::move(symbolicNames)),
      vocabulary(this->literalNames, this->symbolicNames) {}

 <lexer.name; format = "cap">StaticData(const <lexer.name; format = "cap">StaticData&) = delete;
 <lexer.name; format = "cap">StaticData(<lexer.name; format = "cap">StaticData&&) = delete;
 <lexer.name; format = "cap">StaticData& operator=(const <lexer.name; format = "cap">StaticData&) = delete;
 <lexer.name; format = "cap">StaticData& operator=(<lexer.name; format = "cap">StaticData&&) = delete;

 std::vector\<antlr4::dfa::DFA>
 decisionToDFA;
 antlr4::atn::PredictionContextCache sharedContextCache;
 const std::vector\<std::string> ruleNames;
 const std::vector\<std::string> channelNames;
 const std::vector\<std::string> modeNames;
 const std::vector\<std::string> literalNames;
 const std::vector\<std::string> symbolicNames;
```

```
 const antlr4::dfa::Vocabulary vocabulary;
 antlr4::atn::SerializedATNView serializedATN;
 std::unique_ptr\<antlr4::atn::ATN> atn;
};

::antlr4::internal::OnceFlag <lexer.grammarName; format = "lower">LexerOnceFlag;
#if ANTLR4_USE_THREAD_LOCAL_CACHE
static thread_local
#endif
<lexer.name; format = "cap">StaticData *<lexer.grammarName; format = "lower">LexerStaticData = nullptr;

void <lexer.grammarName; format = "lower">LexerInitialize() {
#if ANTLR4_USE_THREAD_LOCAL_CACHE
 if (<lexer.grammarName; format = "lower">LexerStaticData != nullptr) {
   return;
 }
#else
 assert(<lexer.grammarName; format = "lower">LexerStaticData == nullptr);
#endif
 auto staticData
 = std::make_unique\<<lexer.name; format = "cap">StaticData>(
   std::vector\<std::string>{
     <lexer.ruleNames: {r | "<r>"}; separator = ", ", wrap, anchor>
   },
   std::vector\<std::string>{
     "DEFAULT_TOKEN_CHANNEL", "HIDDEN"<if (lexer.channels)>, <lexer.channels: {c | "<c>"}; separator =
", ", wrap, anchor><endif>
   },
   std::vector\<std::string>{
     <lexer.modes: {m | "<m>"}; separator = ", ", wrap, anchor>
   },
   std::vector\<std::string>{
     <lexer.literalNames: {t | <t>}; null = "\"\"", separator = ", ", wrap, anchor>
   },
   std::vector\<std::string>{
     <lexer.symbolicNames: {t | <t>}; null = "\"\"", separator = ", ", wrap, anchor>
   }
 );
 <atn>
 <lexer.grammarName; format = "lower">LexerStaticData = staticData.release();
}

}

<lexer.name>::<lexer.name>(CharStream *input) : <superClass>(input) {
 <lexer.name>::initialize();
 _interpreter = new atn::LexerATNSimulator(this, *<lexer.grammarName; format = "lower">LexerStaticData->atn,
<lexer.grammarName;
```

```
 format = "lower">LexerStaticData->decisionToDFA, <lexer.grammarName; format = "lower">LexerStaticData-
>sharedContextCache);
}

<lexer.name>::~<lexer.name>() {
 delete _interpreter;
}

std::string <lexer.name>::getGrammarFileName() const {
 return "<lexer.grammarFileName>";
}

const std::vector\<std::string>& <lexer.name>::getRuleNames() const {
 return <lexer.grammarName; format = "lower">LexerStaticData->ruleNames;
}

const std::vector\<std::string>& <lexer.name>::getChannelNames() const {
 return <lexer.grammarName; format = "lower">LexerStaticData->channelNames;
}

const std::vector\<std::string>& <lexer.name>::getModeNames() const {
 return <lexer.grammarName; format = "lower">LexerStaticData->modeNames;
}

const dfa::Vocabulary& <lexer.name>::getVocabulary() const {
 return <lexer.grammarName; format = "lower">LexerStaticData->vocabulary;
}

antlr4::atn::SerializedATNView <lexer.name>::getSerializedATN() const {
 return <lexer.grammarName; format = "lower">LexerStaticData->serializedATN;
}

const
 atn::ATN& <lexer.name>::getATN() const {
 return *<lexer.grammarName; format = "lower">LexerStaticData->atn;
}

<namedActions.definitions>

<if (actionFuncs)>
void <lexer.name>::action(RuleContext *context, size_t ruleIndex, size_t actionIndex) {
 switch (ruleIndex) {
   <lexer.actionFuncs.values: {f | case <f.ruleIndex>: <f.name>Action(antlrcpp::downCast\<<f.ctxType>
*>(context), actionIndex); break;}; separator="\n">

 default:
   break;
 }
```

```
}
<endif>

<if (sempredFuncs)>
bool <lexer.name>::sempred(RuleContext *context, size_t ruleIndex, size_t predicateIndex) {
 switch (ruleIndex) {
   <lexer.sempredFuncs.values: {f | case <f.ruleIndex>: return <f.name>Sempred(antlrcpp::downCast\<<f.ctxType>
*>(context), predicateIndex);}; separator="\n">

 default:
   break;
 }
 return true;
}
<endif>

<actionFuncs.values; separator="\n">

<sempredFuncs.values; separator="\n">

void <lexer.name>::initialize() {
#if ANTLR4_USE_THREAD_LOCAL_CACHE

 <lexer.grammarName; format = "lower">LexerInitialize();
#else
 ::antlr4::internal::call_once(<lexer.grammarName; format = "lower">LexerOnceFlag, <lexer.grammarName;
format = "lower">LexerInitialize);
#endif
}
>>

RuleActionFunctionHeader(r, actions) ::= <<
void <r.name>Action(<r.ctxType> *context, size_t actionIndex);
>>

RuleActionFunction(r, actions) ::= <<
void <r.factory.grammar.name>::<r.name>Action(<r.ctxType> *context, size_t actionIndex) {
 switch (actionIndex) {
   <actions: {index | case <index>: <actions.(index)> break;}; separator="\n">

 default:
   break;
 }
}

>>

RuleSempredFunctionHeader(r, actions) ::= <<
```

```
bool <r.name>Sempred(<r.ctxType> *_localctx, size_t predicateIndex);
>>

RuleSempredFunction(r, actions) ::= <<
<! Called for both lexer and parser. But only one of them is actually available. Testing for the parser directly
  generates a warning, however. So do the check via the factory instead. !>
bool <if (r.factory.g.lexer)><lexer.name><else><parser.name><endif>::<r.name>Sempred(<r.ctxType>
 *_localctx, size_t predicateIndex) {
 switch (predicateIndex) {
   <actions: {index | case <index>: return <actions.(index)>}; separator=";\n">;

 default:
   break;
 }
 return true;
}

>>

//-----------------------------------------------------------------------------------------------------

ParserHeader(parser, funcs, atn, sempredFuncs, superClass = {antlr4::Parser}) ::= <<
<namedActions.context>

class <file.exportMacro> <parser.name> : public <superClass> {
public:
<if (parser.tokens)>
 enum {
   <parser.tokens: {k | <k> = <parser.tokens.(k)>}; separator=", ", wrap, anchor>
 };
<endif>

<if (parser.rules)>
 enum {
   <parser.rules: {r | Rule<r.name; format="cap"> = <r.index>}; separator=", ", wrap, anchor>
 };
<endif>

 explicit <parser.name>(antlr4::TokenStream *input);

 <parser.name>(antlr4::TokenStream *input, const antlr4::atn::ParserATNSimulatorOptions &options);

 ~<parser.name>() override;

 std::string getGrammarFileName()
 const override;

 const antlr4::atn::ATN& getATN() const override;
```

```
 const std::vector\<std::string>& getRuleNames() const override;

 const antlr4::dfa::Vocabulary& getVocabulary() const override;

 antlr4::atn::SerializedATNView getSerializedATN() const override;

 <namedActions.members>

 <parser.funcs: {f | class <f.name; format = "cap">Context;};  separator = "\n"> <! Forward declare context classes.
!>

 <funcs; separator = "\n">

 <if (sempredFuncs)>
 bool sempred(antlr4::RuleContext *_localctx, size_t ruleIndex, size_t predicateIndex) override;

 <sempredFuncs.values; separator = "\n">
 <endif>

 // By default the static state used to implement the parser is lazily initialized during the first
 // call to the constructor. You can call this function if you wish to initialize the static state
 // ahead of time.
 static void initialize();

private:
 <namedActions.declarations>
};
>>

Parser(parser, funcs, atn, sempredFuncs, superClass = {Parser}) ::= <<

using namespace
 antlr4;

namespace {

struct <parser.name; format = "cap">StaticData final {
 <parser.name; format = "cap">StaticData(std::vector\<std::string> ruleNames,
                    std::vector\<std::string> literalNames,
                    std::vector\<std::string> symbolicNames)
    : ruleNames(std::move(ruleNames)), literalNames(std::move(literalNames)),
      symbolicNames(std::move(symbolicNames)),
      vocabulary(this->literalNames, this->symbolicNames) {}

 <parser.name; format = "cap">StaticData(const <parser.name; format = "cap">StaticData&) = delete;
 <parser.name; format = "cap">StaticData(<parser.name; format = "cap">StaticData&&) = delete;
 <parser.name; format = "cap">StaticData& operator=(const <parser.name; format = "cap">StaticData&) = delete;
```

```
 <parser.name; format = "cap">StaticData& operator=(<parser.name; format = "cap">StaticData&&) = delete;

 std::vector\<antlr4::dfa::DFA> decisionToDFA;
 antlr4::atn::PredictionContextCache sharedContextCache;
  const std::vector\<std::string> ruleNames;
 const std::vector\<std::string> literalNames;
 const std::vector\<std::string> symbolicNames;
 const antlr4::dfa::Vocabulary vocabulary;
 antlr4::atn::SerializedATNView serializedATN;
 std::unique_ptr\<antlr4::atn::ATN> atn;
};

::antlr4::internal::OnceFlag <parser.grammarName; format = "lower">ParserOnceFlag;
#if ANTLR4_USE_THREAD_LOCAL_CACHE
static thread_local
#endif
<parser.name; format = "cap">StaticData *<parser.grammarName; format = "lower">ParserStaticData = nullptr;

void <parser.grammarName; format = "lower">ParserInitialize() {
#if ANTLR4_USE_THREAD_LOCAL_CACHE
 if (<parser.grammarName; format = "lower">ParserStaticData != nullptr) {
   return;
 }
#else
 assert(<parser.grammarName; format = "lower">ParserStaticData == nullptr);
#endif
 auto staticData = std::make_unique\<<parser.name; format = "cap">StaticData>(
   std::vector\<std::string>{
     <parser.ruleNames: {r | "<r>"}; separator = ", ", wrap, anchor>
   },
    std::vector\<std::string>{
     <parser.literalNames: {t | <t>}; null = "\"\"", separator = ", ", wrap, anchor>
   },
   std::vector\<std::string>{
     <parser.symbolicNames: {t | <t>}; null = "\"\"", separator = ", ", wrap, anchor>
   }
 );
 <atn>
 <parser.grammarName; format = "lower">ParserStaticData = staticData.release();
}

}

<parser.name>::<parser.name>(TokenStream *input) : <parser.name>(input,
antlr4::atn::ParserATNSimulatorOptions()) {}

<parser.name>::<parser.name>(TokenStream *input, const antlr4::atn::ParserATNSimulatorOptions &options) :
<superClass>(input) {
```

```
 <parser.name>::initialize();
 _interpreter = new atn::ParserATNSimulator(this, *<parser.grammarName; format = "lower">ParserStaticData-
>atn, <parser.grammarName; format = "lower">ParserStaticData->decisionToDFA, <parser.grammarName; format
= "lower">ParserStaticData->sharedContextCache, options);
}

<parser.name>::~<parser.name>() {
 delete _interpreter;
}

const atn::ATN& <parser.name>::getATN()
 const {
 return *<parser.grammarName; format = "lower">ParserStaticData->atn;
}

std::string <parser.name>::getGrammarFileName() const {
 return "<parser.grammarFileName>";
}

const std::vector\<std::string>& <parser.name>::getRuleNames() const {
 return <parser.grammarName; format = "lower">ParserStaticData->ruleNames;
}

const dfa::Vocabulary& <parser.name>::getVocabulary() const {
 return <parser.grammarName; format = "lower">ParserStaticData->vocabulary;
}

antlr4::atn::SerializedATNView <parser.name>::getSerializedATN() const {
 return <parser.grammarName; format = "lower">ParserStaticData->serializedATN;
}

<namedActions.definitions>

<funcs; separator = "\n\n">

<if (sempredFuncs)>
bool <parser.name>::sempred(RuleContext *context, size_t ruleIndex, size_t predicateIndex) {
 switch (ruleIndex) {
 <parser.sempredFuncs.values: {f |
 case <f.ruleIndex>: return <f.name>Sempred(antlrcpp::downCast\<<f.ctxType> *>(context), predicateIndex);};
separator="\n">

 default:
   break;
  }
 return true;
}
```

```
<sempredFuncs.values; separator="\n"><endif>

void <parser.name>::initialize() {
#if ANTLR4_USE_THREAD_LOCAL_CACHE
 <parser.grammarName; format = "lower">ParserInitialize();
#else
 ::antlr4::internal::call_once(<parser.grammarName; format = "lower">ParserOnceFlag, <parser.grammarName;
format = "lower">ParserInitialize);
#endif
}
>>

SerializedATNHeader(model) ::= <<
>>

SerializedATN(model) ::= <<
static const int32_t serializedATNSegment[] = {
 <model.serialized: {s | <s>}; separator=",", wrap>
};
staticData->serializedATN = antlr4::atn::SerializedATNView(serializedATNSegment,
sizeof(serializedATNSegment) / sizeof(serializedATNSegment[0]));

antlr4::atn::ATNDeserializer deserializer;
staticData->atn = deserializer.deserialize(staticData->serializedATN);

const size_t count = staticData->atn->getNumberOfDecisions();
staticData->decisionToDFA.reserve(count);
for (size_t i = 0; i \< count; i++) { <! Rework class ATN to allow standard iterations. !>
 staticData->decisionToDFA.emplace_back(staticData->atn->getDecisionState(i),
 i);
}
>>

RuleFunctionHeader(currentRule, args, code, locals, ruleCtx, altLabelCtxs, namedActions, finallyAction,
postamble, exceptions) ::= <<
<ruleCtx>
<! TODO: untested !><if (altLabelCtxs)><altLabelCtxs: {l | <altLabelCtxs.(l)>}; separator="\n"><endif>
<currentRule.ctxType>* <currentRule.escapedName>(<args; separator=",">);

>>

RuleFunction(currentRule, args, code, locals, ruleCtx, altLabelCtxs, namedActions, finallyAction, postamble,
exceptions) ::= <<
<ruleCtx>
<! TODO: untested !><altLabelCtxs: {l | <altLabelCtxs.(l)>}; separator = "\n">
<parser.name>::<currentRule.ctxType>* <parser.name>::<currentRule.escapedName>(<args; separator=",">) {
 <currentRule.ctxType> *_localctx = _tracker.createInstance\<<currentRule.ctxType>\>(_ctx,
getState()<currentRule.args:{a | , <a.escapedName>}>);
```

```
 enterRule(_localctx, <currentRule.startState>, <parser.name>::Rule<currentRule.name; format = "cap">);
 <namedActions.init>
 <locals;
 separator = "\n">

#if __cplusplus > 201703L
 auto onExit = finally([=, this] {
#else
 auto onExit = finally([=] {
#endif
 <finallyAction>
   exitRule();
 });
 try {
<! TODO: untested !><if (currentRule.hasLookaheadBlock)>
   size_t alt;
   <endif>
   <code>
<! TODO: untested !>   <postamble; separator = "\n">
   <namedActions.after>
 }
 <if (exceptions)>
 <exceptions; separator="\n">
 <else>
 catch (RecognitionException &e) {
   _errHandler->reportError(this, e);
   _localctx->exception = std::current_exception();
   _errHandler->recover(this, _localctx->exception);
 }
 <endif>

 return _localctx;
}
>>

LeftRecursiveRuleFunctionHeader(currentRule, args, code, locals, ruleCtx, altLabelCtxs, namedActions,
finallyAction, postamble) ::= <<
<ruleCtx>
<! TODO: untested !><altLabelCtxs: {l | <altLabelCtxs.(l)>}; separator="\n">
<currentRule.ctxType>* <currentRule.escapedName>(<currentRule.args; separator = ", ">);
<currentRule.ctxType>* <currentRule.escapedName>(int
 precedence<currentRule.args: {a | , <a>}>);
>>

LeftRecursiveRuleFunction(currentRule, args, code, locals, ruleCtx, altLabelCtxs, namedActions, finallyAction,
postamble) ::= <<
<ruleCtx>
<altLabelCtxs: {l | <altLabelCtxs.(l)>}; separator="\n">
```

```
<parser.name>::<currentRule.ctxType>* <parser.name>::<currentRule.escapedName>(<currentRule.args;
separator=", ">) {
<! TODO: currentRule.args untested !>   return <currentRule.escapedName>(0<currentRule.args: {a | ,
<a.escapedName>}>);
}

<parser.name>::<currentRule.ctxType>* <parser.name>::<currentRule.escapedName>(int
precedence<currentRule.args:{a | , <a>}>) {
 ParserRuleContext *parentContext = _ctx;
 size_t parentState = getState();
 <parser.name>::<currentRule.ctxType> *_localctx = _tracker.createInstance\<<currentRule.ctxType>\>(_ctx,
parentState<currentRule.args: {a | , <a.escapedName>}>);
 <parser.name>::<currentRule.ctxType> *previousContext = _localctx;
 (void)previousContext; // Silence compiler, in case the context is not
 used by generated code.
 size_t startState = <currentRule.startState>;
 enterRecursionRule(_localctx, <currentRule.startState>, <parser.name>::Rule<currentRule.name; format = "cap">,
precedence);

   <namedActions.init>
<! TODO: untested !>    <locals; separator = "\n">

#if __cplusplus > 201703L
 auto onExit = finally([=, this] {
#else
 auto onExit = finally([=] {
#endif
 <if (finallyAction)><finallyAction><endif>
   unrollRecursionContexts(parentContext);
 });
 try {
   <if (currentRule.hasLookaheadBlock)>size_t alt;<endif>
   <code>
<! TODO: untested !><postamble; separator = "\n">
   <namedActions.after>
 }
 catch (RecognitionException &e) {
   _errHandler->reportError(this, e);
   _localctx->exception = std::current_exception();
   _errHandler->recover(this, _localctx->exception);
 }
 return _localctx;
}
>>

StructDeclHeader(struct, ctorAttrs, attrs, getters, dispatchMethods, interfaces, extensionMembers) ::= <<
class <file.exportMacro> <struct.escapedName> : public
```

```
 <if (contextSuperClass)><contextSuperClass><else>antlr4::ParserRuleContext<endif><if(interfaces)>, <interfaces;
separator=", "><endif> {
public:
 <attrs: {a | <a>;}; separator = "\n">
 <if (ctorAttrs)><struct.escapedName>(antlr4::ParserRuleContext *parent, size_t invokingState);<endif>
 <struct.escapedName>(antlr4::ParserRuleContext *parent, size_t invokingState<ctorAttrs: {a | , <a>}>);
<if (struct.provideCopyFrom)> <! don't need copy unless we have subclasses !>
 <struct.escapedName>() = default;
 void copyFrom(<struct.escapedName> *context);
 using antlr4::ParserRuleContext::copyFrom;
<endif>

 virtual size_t getRuleIndex() const override;
 <getters: {g | <g>}; separator = "\n">

 <dispatchMethods; separator = "\n">
<! TODO: untested !> <extensionMembers; separator = "\n">
};

>>

StructDecl(struct, ctorAttrs, attrs, getters, dispatchMethods, interfaces, extensionMembers, signatures) ::= <<
//----------------- <struct.escapedName> ------------------------------------------------------------------

<if
 (ctorAttrs)>
<parser.name>::<struct.escapedName>::<struct.escapedName>(ParserRuleContext *parent, size_t invokingState)
 : <if (contextSuperClass)><contextSuperClass><else>ParserRuleContext<endif>(parent, invokingState) {
}
<endif>

<parser.name>::<struct.escapedName>::<struct.escapedName>(ParserRuleContext *parent, size_t
invokingState<ctorAttrs: {a | , <a>}>)
 : <if (contextSuperClass)><contextSuperClass><else>ParserRuleContext<endif>(parent, invokingState) {
 <struct.ctorAttrs: {a | this-><a.escapedName> = <a.escapedName>;}; separator="\n">
}

<getters: {g | <g>}; separator = "\n">

size_t <parser.name>::<struct.escapedName>::getRuleIndex() const {
 return <parser.name>::Rule<struct.derivedFromName; format = "cap">;
}

<if (struct.provideCopyFrom)>
void <parser.name>::<struct.escapedName>::copyFrom(<struct.escapedName> *ctx) {
 <if (contextSuperClass)><contextSuperClass><else>ParserRuleContext<endif>::copyFrom(ctx);
 <struct.attrs: {a | this-><a.escapedName>
```

```
 = ctx-><a.escapedName>;}; separator = "\n">
}
<endif>
<dispatchMethods; separator = "\n\n">
<! TODO: untested !><extensionMembers; separator = "\n\n">

>>

AltLabelStructDeclHeader(struct, attrs, getters, dispatchMethods) ::= <<
class <file.exportMacro> <struct.escapedName> : public <currentRule.name; format = "cap">Context {
public:
 <struct.escapedName>(<currentRule.name; format = "cap">Context *ctx);

 <if (attrs)><attrs: {a | <a>;}; separator = "\n"><endif>
 <getters: {g | <g>}; separator = "\n">
 <dispatchMethods; separator = "\n">
};

>>

AltLabelStructDecl(struct, attrs, getters, dispatchMethods) ::= <<
//----------------- <struct.escapedName> ------------------------------------------------------------------

<! TODO: untested !><if (attrs)><attrs: {a | <a>}; separator = "\n"><endif>
<getters: {g | <g>}; separator = "\n">
<parser.name>::<struct.escapedName>::<struct.escapedName>(<currentRule.name; format = "cap">Context *ctx) {
copyFrom(ctx); }

<dispatchMethods;
 separator="\n">
>>


CodeBlockForOuterMostAltHeader(currentOuterMostAltCodeBlock, locals, preamble, ops) ::= "<! Required to
exist, but unused. !>"
CodeBlockForOuterMostAlt(currentOuterMostAltCodeBlock, locals, preamble, ops) ::= <<
<if (currentOuterMostAltCodeBlock.altLabel)>
_localctx = _tracker.createInstance\<<parser.name>::<currentOuterMostAltCodeBlock.altLabel; format =
"cap">Context>(_localctx);
<endif>
enterOuterAlt(_localctx, <currentOuterMostAltCodeBlock.alt.altNum>);
<CodeBlockForAlt(currentAltCodeBlock = currentOuterMostAltCodeBlock, ...)>
>>

CodeBlockForAltHeader(currentAltCodeBlock, locals, preamble, ops) ::= "<! Required to exist, but unused. !>"
CodeBlockForAlt(currentAltCodeBlock, locals, preamble, ops) ::= <<
<! TODO: untested !><locals; separator = "\n">
<! TODO: untested !><preamble; separator = "\n">
```

```
<ops; separator = "\n">
>>

LL1AltBlockHeader(choice, preamble, alts, error) ::= "<! Required to exist, but unused. !>"
LL1AltBlock(choice, preamble, alts, error)
 ::= <<
setState(<choice.stateNumber>);
_errHandler->sync(this);
<! TODO: untested !><if (choice.label)>LL1AltBlock(choice, preamble, alts, error) <labelref(choice.label)> =
_input->LT(1);<endif>
<preamble; separator="\n">
switch (_input->LA(1)) {
 <choice.altLook, alts: {look, alt | <cases(tokens = look)> {
 <alt>
 break;
\}
}; separator = "\n">
default:
 <error>
}
>>

LL1OptionalBlockHeader(choice, alts, error) ::= "<! Required but unused. !>"
LL1OptionalBlock(choice, alts, error) ::= <<
setState(<choice.stateNumber>);
_errHandler->sync(this);
switch (_input->LA(1)) {
 <choice.altLook, alts: {look, alt | <cases(tokens = look)> {
 <alt>
 break;
\}
}; separator="\n">
default:
 break;
}
>>

LL1OptionalBlockSingleAltHeader(choice, expr, alts, preamble, error, followExpr) ::= "<! Required but unused. !>"
LL1OptionalBlockSingleAlt(choice, expr, alts, preamble, error, followExpr) ::= <<
setState(<choice.stateNumber>);
_errHandler->sync(this);

<preamble; separator = "\n">
if (<expr>)
 {
 <alts; separator = "\n">
}
>>
```

```
LL1StarBlockSingleAltHeader(choice, loopExpr, alts, preamble, iteration) ::= "<! Required but unused. !>"
LL1StarBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
setState(<choice.stateNumber>);
_errHandler->sync(this);
<preamble; separator="\n">
while (<loopExpr>) {
 <alts; separator="\n">
 setState(<choice.loopBackStateNumber>);
 _errHandler->sync(this);
 <iteration>
}
>>

LL1PlusBlockSingleAltHeader(choice, loopExpr, alts, preamble, iteration) ::= "<! Required but unused. !>"
LL1PlusBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
setState(<choice.blockStartStateNumber>); <! alt block decision !>
_errHandler->sync(this);
<preamble; separator="\n">
do {
 <alts; separator="\n">
 setState(<choice.stateNumber>); <! loopback/exit decision !>
 _errHandler->sync(this);
 <iteration>
} while (<loopExpr>);
>>

// LL(*) stuff

AltBlockHeader(choice, preamble, alts, error) ::= "<! Unused but must be present. !>"
AltBlock(choice,
 preamble, alts, error) ::= <<
setState(<choice.stateNumber>);
_errHandler->sync(this);
<! TODO: untested !><if (choice.label)><labelref(choice.label)> = _input->LT(1);<endif>
<! TODO: untested !><preamble; separator = "\n">
switch (getInterpreter\<atn::ParserATNSimulator>()->adaptivePredict(_input, <choice.decision>, _ctx)) {
<alts: {alt | case <i>: {
 <alt>
 break;
\}
}; separator="\n">
default:
 break;
}
>>

OptionalBlockHeader(choice, alts, error) ::= "<! Unused but must be present. !>"
```

```
OptionalBlock(choice, alts, error) ::= <<
setState(<choice.stateNumber>);
_errHandler->sync(this);

switch (getInterpreter\<atn::ParserATNSimulator>()->adaptivePredict(_input, <choice.decision>, _ctx)) {
<alts: {alt | case <i><if (!choice.ast.greedy)> + 1<endif>: {
 <alt>
 break;
\}
}; separator = "\n">
default:
 break;
}
>>

StarBlockHeader(choice, alts, sync, iteration) ::= "<! Unused but must be present. !>"
StarBlock(choice, alts, sync, iteration) ::= <<
setState(<choice.stateNumber>);
_errHandler->sync(this);
alt
 = getInterpreter\<atn::ParserATNSimulator>()->adaptivePredict(_input, <choice.decision>, _ctx);
while (alt != <choice.exitAlt> && alt != atn::ATN::INVALID_ALT_NUMBER) {
 if (alt == 1<if(!choice.ast.greedy)> + 1<endif>) {
   <iteration>
   <alts> <! should only be one !>
 }
 setState(<choice.loopBackStateNumber>);
 _errHandler->sync(this);
 alt = getInterpreter\<atn::ParserATNSimulator>()->adaptivePredict(_input, <choice.decision>, _ctx);
}
>>

PlusBlockHeader(choice, alts, error) ::= "<! Required to exist, but unused. !>"
PlusBlock(choice, alts, error) ::= <<
setState(<choice.blockStartStateNumber>); <! alt block decision !>
_errHandler->sync(this);
alt = 1<if(!choice.ast.greedy)> + 1<endif>;
do {
 switch (alt) {
   <alts: {alt | case <i><if (!choice.ast.greedy)> + 1<endif>: {
     <alt>
     break;
   \}
}; separator="\n">
 default:
   <error>
 }
 setState(<choice.loopBackStateNumber>); <! loopback/exit decision !>
```

```
 _errHandler->sync(this);
  alt = getInterpreter\<atn::ParserATNSimulator>()->adaptivePredict(_input, <choice.decision>, _ctx);
} while (alt != <choice.exitAlt> && alt != atn::ATN::INVALID_ALT_NUMBER);
>>

Sync(s) ::= "Sync(s) sync(<s.expecting.name>);"

ThrowNoViableAltHeader(t) ::= "<! Unused but must be present. !>"
ThrowNoViableAlt(t) ::= "throw NoViableAltException(this);"

TestSetInlineHeader(s) ::= "<! Required but unused. !>"
TestSetInline(s) ::= <<
<s.bitsets: {bits | <if (rest(rest(bits.tokens)))><bitsetBitfieldComparison(s, bits)><else><bitsetInlineComparison(s,
bits)><endif>}; separator=" || ">
>>

// Java language spec 15.19 - shift operators mask operands rather than overflow to 0... need range test
testShiftInRange(shiftAmount) ::= <<
((<shiftAmount> & ~ 0x3fULL) == 0)
>>

bitsetBitfieldComparison(s, bits) ::= <<
(<testShiftInRange({<offsetShift(s.varName, bits.shift)>})> &&
 ((1ULL \<\< <offsetShift(s.varName, bits.shift)>) & <bits.calculated>) != 0)
>>

isZero ::= [
 "0": true,
  default: false
]

offsetShift(shiftAmount, offset, prefix = false) ::= <%
<if (!isZero.(offset))>(<if (prefix)><parser.name>::<endif><shiftAmount> - <offset>)<else><if
(prefix)><parser.name>::<endif><shiftAmount><endif>
%>

bitsetInlineComparison(s, bits) ::= <%
<bits.tokens: {t | <s.varName> == <parser.name>::<t.name>}; separator = "\n\n|| ">
%>

cases(tokens) ::= <<
<tokens: {t | case <parser.name>::<t.name>:}; separator="\n">
>>

InvokeRuleHeader(r, argExprsChunks) ::= "InvokeRuleHeader"
InvokeRule(r, argExprsChunks) ::= <<
setState(<r.stateNumber>);
<if(r.labels)><r.labels: {l | <labelref(l)> =
```

```
}><endif><r.escapedName>(<if(r.ast.options.p)><r.ast.options.p><if(argExprsChunks)>,<endif><endif><argExprs
Chunks>);
>>

MatchTokenHeader(m) ::= "<! Required but unused. !>"
MatchToken(m) ::= <<
setState(<m.stateNumber>);
<if (m.labels)><m.labels: {l | <labelref(l)> = }><endif>match(<parser.name>::<m.escapedName>);
>>

MatchSetHeader(m, expr, capture) ::= "<! Required but unused. !>"
MatchSet(m,
 expr, capture) ::= "<CommonSetStuff(m, expr, capture, false)>"

MatchNotSetHeader(m, expr, capture) ::= "<! Required but unused. !>"
MatchNotSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, true)>"

CommonSetStuff(m, expr, capture, invert) ::= <<
setState(<m.stateNumber>);
<if (m.labels)><m.labels: {l | <labelref(l)> = }>_input->LT(1);<endif>
<capture>
if (<if (invert)><m.varName> == 0 || <m.varName> == Token::EOF || <else>!<endif>(<expr>)) {
 <if (m.labels)><m.labels: {l | <labelref(l)> = }><endif>_errHandler->recoverInline(this);
}
else {
 _errHandler->reportMatch(this);
 consume();
}
>>

WildcardHeader(w) ::= "<! Required but unused. !>"
Wildcard(w) ::= <<
setState(<w.stateNumber>);
<if (w.labels)><w.labels: {l | <labelref(l)> = }><endif>matchWildcard();
>>

// ACTION STUFF

ActionHeader(a, foo, chunks) ::= "<chunks>"
Action(a, foo, chunks) ::= "<chunks>"

ArgAction(a, chunks) ::= "ArgAction(a, chunks) <chunks>"

SemPredHeader(p, chunks, failChunks) ::= "<! Required
 but unused. !>"
SemPred(p, chunks, failChunks) ::= <<
setState(<p.stateNumber>);
```

```
if (!(<chunks>)) throw FailedPredicateException(this, <p.predicate><if (failChunks)>, <failChunks><elseif
(p.msg)>, <p.msg><endif>);
>>

ExceptionClauseHeader(e, catchArg, catchAction) ::= "<! Required but unused. !>"
ExceptionClause(e, catchArg, catchAction) ::= <<
catch (<catchArg>) {
 <catchAction>
}
>>

// Lexer actions are not associated with model objects.

LexerSkipCommand()  ::= "skip();"
LexerMoreCommand()  ::= "more();"
LexerPopModeCommand() ::= "popMode();"

LexerTypeCommand(arg, grammar)      ::= "type = <grammar.name>::<arg>;"
LexerChannelCommand(arg, grammar)   ::= "channel = <arg>;"
LexerModeCommand(arg, grammar)      ::= "mode = <grammar.name>Mode::<arg>;"
LexerPushModeCommand(arg, grammar)  ::= "pushMode(<grammar.name>Mode::<arg>);"

ActionTextHeader(t) ::= "<t.text>"
ActionText(t) ::= "<t.text>"

ActionTemplateHeader(t) ::= "<! Required but unused. !>"
ActionTemplate(t) ::= "<t.st>"

ArgRefHeader(t)
 ::= "<! Required but unused. !>"
ArgRef(a) ::= "_localctx-><a.escapedName>"

LocalRefHeader(t) ::= "<! Required but unused. !>"
LocalRef(a) ::= "_localctx-><a.escapedName>"

RetValueRefHeader(t) ::= "<! Required but unused. !>"
RetValueRef(a) ::= "_localctx-><a.escapedName>"

QRetValueRefHeader(t) ::= "<! Required but unused. !>"
QRetValueRef(a) ::= "<ctx(a)>-><a.dict>-><a.escapedName>"
/** How to translate $tokenLabel */

TokenRefHeader(t) ::= "<! Required but unused. !>"
TokenRef(t) ::= "<ctx(t)>-><t.escapedName>"

LabelRefHeader(t) ::= "<! Required but unused. !>"
LabelRef(t) ::= "<ctx(t)>-><t.escapedName>"
```

```
ListLabelRefHeader(t) ::= "<! Required but unused. !>"
ListLabelRef(t) ::= "<ctx(t)>-><ListLabelName(t.escapedName)>"

SetAttrHeader(t) ::= "<! Required but unused. !>"
SetAttr(s,rhsChunks) ::= "<ctx(s)>-><s.escapedName> = <rhsChunks>;"

InputSymbolType() ::= "<file.InputSymbolType; null = {Token}> *"

TokenPropertyRef_textHeader(t) ::= "<! Required but unused.
 !>"
TokenPropertyRef_text(t) ::= <<(<ctx(t)>-><t.label> != nullptr ? <ctx(t)>-><t.label>->getText() : "")>>

TokenPropertyRef_typeHeader(t) ::= "<! Required but unused. !>"
TokenPropertyRef_type(t) ::= "(<ctx(t)>-><t.label> != nullptr ? <ctx(t)>-><t.label>->getType() : 0)"

TokenPropertyRef_lineHeader(t) ::= "<! Required but unused. !>"
TokenPropertyRef_line(t) ::= "(<ctx(t)>-><t.label> != nullptr ? <ctx(t)>-><t.label>->getLine() : 0)"

TokenPropertyRef_posHeader(t) ::= "<! Required but unused. !>"
TokenPropertyRef_pos(t) ::= "(<ctx(t)>-><t.label> != nullptr ? <ctx(t)>-><t.label>->getCharPositionInLine() : 0)"

TokenPropertyRef_channelHeader(t) ::= "<! Required but unused. !>"
TokenPropertyRef_channel(t) ::= "(<ctx(t)>-><t.label> != nullptr ? <ctx(t)>-><t.label>->getChannel() : 0)"

TokenPropertyRef_indexHeader(t) ::= "<! Required but unused. !>"
TokenPropertyRef_index(t) ::= "(<ctx(t)>-><t.label> != nullptr ? <ctx(t)>-><t.label>->getTokenIndex() : 0)"

TokenPropertyRef_intHeader(t)
 ::= "<! Required but unused. !>"
TokenPropertyRef_int(t) ::= "(<ctx(t)>-><t.label> != nullptr ? std::stoi(<ctx(t)>-><t.label>->getText()) : 0)"

RulePropertyRef_startHeader(r)  ::= "<! Required but unused. !>"
RulePropertyRef_start(r) ::= "(<ctx(r)>-><r.label> != nullptr ? (<ctx(r)>-><r.label>->start) : nullptr)"

RulePropertyRef_stopHeader(r)  ::= "<! Required but unused. !>"
RulePropertyRef_stop(r)  ::= "(<ctx(r)>-><r.label> != nullptr ? (<ctx(r)>-><r.label>->stop) : nullptr)"

RulePropertyRef_textHeader(r)  ::= "<! Required but unused. !>"
RulePropertyRef_text(r)  ::= "(<ctx(r)>-><r.label> != nullptr ? _input->getText(<ctx(r)>-><r.label>->start,
<ctx(r)>-><r.label>->stop) : nullptr)"

RulePropertyRef_ctxHeader(r)   ::= "<! Required but unused. !>"
RulePropertyRef_ctx(r)   ::= "<ctx(r)>-><r.label>"

ThisRulePropertyRef_start(r) ::= "ThisRulePropertyRef_start(r) _localctx->start"
ThisRulePropertyRef_stop(r)  ::= "ThisRulePropertyRef_stop(r) _localctx->stop"

ThisRulePropertyRef_textHeader(r)
```

```
  ::= "<! Required but unused. !>"
ThisRulePropertyRef_text(r)  ::= "_input->getText(_localctx->start, _input->LT(-1))"

ThisRulePropertyRef_ctxHeader(r)   ::= "<! Required but unused. !>"
ThisRulePropertyRef_ctx(r)   ::= "_localctx"

ThisRulePropertyRef_parserHeader(r)  ::= "<! Required but unused. !>"
ThisRulePropertyRef_parser(r)  ::= "this"

NonLocalAttrRef(s) ::= "NonLocalAttrRef(s) ((<s.ruleName;
format=\"cap\">Context)getInvokingContext(<s.ruleIndex>)).<s.escapedName>"
SetNonLocalAttr(s, rhsChunks) ::=
 "SetNonLocalAttr(s, rhsChunks) ((<s.ruleName;
format=\"cap\">Context)getInvokingContext(<s.ruleIndex>)).<s.escapedName> = <rhsChunks>;"

AddToLabelListHeader(a) ::= "<! Required but unused. !>"
AddToLabelList(a) ::= <<
<ctx(a.label)>-><a.listName>.push_back(<labelref(a.label)>);
>>

TokenLabelType() ::= "<file.TokenLabelType; null = {Token}> *"

TokenDeclHeader(t) ::= "antlr4::<TokenLabelType()><t.escapedName> = nullptr"
TokenDecl(t) ::= "<! Variable Declaration !>"

TokenTypeDeclHeader(t)
 ::= "<! Local Variable !>"
TokenTypeDecl(t) ::= "size_t <t.escapedName> = 0;"

TokenListDeclHeader(t) ::= "std::vector\<antlr4::Token *> <t.escapedName>"
TokenListDecl(t) ::= "<! Variable Declaration !>"

RuleContextDeclHeader(r) ::= "<parser.name>::<r.ctxName> *<r.escapedName> = nullptr"
RuleContextDecl(r) ::= "<! Variable Declaration !>"

RuleContextListDeclHeader(rdecl) ::= "std::vector\<<rdecl.ctxName> *> <rdecl.escapedName>"
RuleContextListDecl(rdecl) ::= "<! Variable Declaration !>"

ContextTokenGetterDeclHeader(t) ::= "antlr4::tree::TerminalNode *<t.escapedName>();"
ContextTokenGetterDecl(t) ::= <<
tree::TerminalNode* <parser.name>::<t.ctx.name>::<t.escapedName>() {
 return getToken(<parser.name>::<t.escapedName>, 0);
}

>>

ContextTokenListGetterDeclHeader(t) ::= "std::vector\<antlr4::tree::TerminalNode *> <t.escapedName>();"
ContextTokenListGetterDecl(t) ::= <<
```

```
std::vector\<tree::TerminalNode *> <parser.name>::<t.ctx.name>::<t.escapedName>() {
 return getTokens(<parser.name>::<t.escapedName>);
}

>>

ContextTokenListIndexedGetterDeclHeader(t)
 ::= "antlr4::tree::TerminalNode* <t.escapedName>(size_t i);"
ContextTokenListIndexedGetterDecl(t)  ::= <<
tree::TerminalNode* <parser.name>::<t.ctx.name>::<t.escapedName>(size_t i) {
 return getToken(<parser.name>::<t.escapedName>, i);
}

>>

ContextRuleGetterDeclHeader(r) ::= "<r.ctxName> *<r.escapedName>();"
ContextRuleGetterDecl(r) ::= <<
<! Note: ctxName is the name of the context to return, while ctx is the owning context. !>
<parser.name>::<r.ctxName>* <parser.name>::<r.ctx.name>::<r.escapedName>() {
 return getRuleContext\<<parser.name>::<r.ctxName>\>(0);
}

>>

ContextRuleListGetterDeclHeader(r) ::= "std::vector\<<r.ctxName> *> <r.escapedName>();"
ContextRuleListGetterDecl(r) ::= <<
std::vector\<<parser.name>::<r.ctxName> *> <parser.name>::<r.ctx.name>::<r.escapedName>() {
 return getRuleContexts\<<parser.name>::<r.ctxName>\>();
}

>>

ContextRuleListIndexedGetterDeclHeader(r) ::= "<r.ctxName>*
 <r.escapedName>(size_t i);"
ContextRuleListIndexedGetterDecl(r) ::= <<
<parser.name>::<r.ctxName>* <parser.name>::<r.ctx.name>::<r.escapedName>(size_t i) {
 return getRuleContext\<<parser.name>::<r.ctxName>\>(i);
}

>>

LexerRuleContext() ::= "antlr4::RuleContext"

// The rule context name is the rule followed by a suffix; e.g. r becomes rContext.
RuleContextNameSuffix() ::= "Context"

ImplicitTokenLabel(tokenName) ::= <<
<tokenName; format = "lower">Token
```

```
>>

ImplicitRuleLabel(ruleName) ::= "<ruleName>Context"
ImplicitSetLabel(id) ::= "_tset<id>"
ListLabelName(label) ::= "<label>"

CaptureNextToken(d) ::= "CaptureNextToken(d) <d.varName> = _input->LT(1);"

CaptureNextTokenTypeHeader(d) ::= "<! Required but unused. !>"
CaptureNextTokenType(d) ::= "<d.varName> = _input->LA(1);"

ListenerDispatchMethodHeader(method) ::= <<
virtual void <if (method.isEnter)>enter<else>exit<endif>Rule(antlr4::tree::ParseTreeListener *listener) override;
>>
ListenerDispatchMethod(method) ::= <<
void
 <parser.name>::<struct.escapedName>::<if (method.isEnter)>enter<else>exit<endif>Rule(tree::ParseTreeListener
*listener) {
 auto parserListener = dynamic_cast\<<parser.grammarName>Listener *>(listener);
 if (parserListener != nullptr)
   parserListener-><if(method.isEnter)>enter<else>exit<endif><struct.derivedFromName; format="cap">(this);
}
>>

VisitorDispatchMethodHeader(method) ::= <<

virtual std::any accept(antlr4::tree::ParseTreeVisitor *visitor) override;
>>
VisitorDispatchMethod(method) ::=  <<

std::any <parser.name>::<struct.escapedName>::accept(tree::ParseTreeVisitor *visitor) {
 if (auto parserVisitor = dynamic_cast\<<parser.grammarName>Visitor*>(visitor))
   return parserVisitor->visit<struct.derivedFromName; format="cap">(this);
 else
   return visitor->visitChildren(this);
}
>>

AttributeDeclHeader(d) ::= "<d.type> <d.escapedName><if(d.initValue)> = <d.initValue><endif>"
AttributeDecl(d) ::= "<d.type> <d.escapedName>"

/** If we don't know location of label def
 x, use this template */
labelref(x) ::= "<if (!x.isLocal)>antlrcpp::downCast\<<x.ctx.name> *>(_localctx)-><endif><x.escapedName>"

/** For any action chunk, what is correctly-typed context struct ptr? */
ctx(actionChunk) ::= "antlrcpp::downCast\<<actionChunk.ctx.name> *>(_localctx)"
```

```
// used for left-recursive rules
recRuleAltPredicate(ruleName,opPrec) ::= "precpred(_ctx, <opPrec>)"
recRuleSetReturnAction(src,name) ::= "recRuleSetReturnAction(src,name) $<name>=$<src>.<name>;"
recRuleSetStopToken() ::= "_ctx->stop = _input->LT(-1);"

recRuleAltStartAction(ruleName, ctxName, label, isListLabel) ::= <<
_localctx = _tracker.createInstance\<<ctxName>Context>(parentContext, parentState);
<if(label)>
<if(isListLabel)>
_localctx-><label>.push_back(previousContext);
<else>
_localctx-><label> = previousContext;
<endif>
<endif>
pushNewRecursionContext(_localctx, startState, Rule<ruleName; format = "cap">);
>>

// Separate context variable to avoid frequent pointer type casts.
recRuleLabeledAltStartAction(ruleName,
 currentAltLabel, label, isListLabel) ::= <<
auto newContext = _tracker.createInstance\<<currentAltLabel; format =
"cap">Context>(_tracker.createInstance\<<ruleName; format="cap">Context>(parentContext, parentState));
_localctx = newContext;
<if(label)>
<if(isListLabel)>
newContext-><label>.push_back(previousContext);
<else>
newContext-><label> = previousContext;
<endif>
<endif>
pushNewRecursionContext(newContext, startState, Rule<ruleName; format = "cap">);
>>

recRuleReplaceContext(ctxName) ::= <<
_localctx = _tracker.createInstance\<<ctxName>Context>(_localctx);
_ctx = _localctx;
previousContext = _localctx;
>>

recRuleSetPrevCtx() ::= <<
if (!_parseListeners.empty())
 triggerExitRuleEvent();
previousContext = _localctx;
>>

/** Using a type to init value map, try to init a type; if not in table
*  must be an object, default value is "null".
*/
```

initValue(typeName) ::= <<
<cppTypeInitMap.(typeName)>
>>

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/codegen/Cpp/Cpp.stg
No license file was found, but licenses were detected in source scan.

/*
* Copyright (c) 2012-2017 The ANTLR Project. All rights reserved.
* Use of this file is governed by the BSD 3-clause license that
* can be found in the LICENSE.txt file in the project root.
*/

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/LL1Choice.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/RulePropertyRef_stop.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/OutputModelWalker.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/dbg.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/ActionTranslator.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/ModelElement.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/RulePropertyRef.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/RulePropertyRef_start.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/TokenDecl.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/ParserFactory.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/Action.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/gui/SystemFontMetrics.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/gui/PostScriptDocument.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/semantics/BlankActionSplitterListener.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/semantics/SymbolCollector.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/RuleRefAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/GrammarASTWithOptions.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/semantics/SemanticPipeline.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/ElementFrequenciesVisitor.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ErrorManager.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/LL1AltBlock.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/automata/ATNVisitor.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/target/Python3Target.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/ArgAction.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/QuantifierAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/gui/TreeTextProvider.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ScopeParser.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/MatchToken.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/GrammarSyntaxMessage.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/GrammarASTErrorNode.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/LeftRecursionCyclesMessage.java

* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/ParserFile.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/misc/MutableInt.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/misc/FrequencySet.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/ThisRulePropertyRef_ctx.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/Attribute.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/ActionAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/RuleElementAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/AttributeResolver.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/semantics/ActionSniffer.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/Tool.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/OutputModelFactory.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/TokenPropertyRef_index.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ResyncToEndOfRuleBlock.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/OptionalBlockAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/TokenPropertyRef_pos.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/ContextRuleListGetterDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/MatchNotSet.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/GrammarToken.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/Wildcard.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/RulePropertyRef_ctx.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/LexerGrammar.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/RuleActionFunction.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/InvokeRule.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/RuleElement.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/RuleFunction.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/Target.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/StructDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/AttributeDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/AltBlock.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/LL1OptionalBlock.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/LexerFile.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/LexerFactory.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ErrorSeverity.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/target/CppTarget.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/GrammarInterpreterRuleContext.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/TokenPropertyRef_line.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/LabelRef.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/LeftRecursiveRuleFunction.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/GrammarASTAdaptor.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/automata/TailEpsilonRemover.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/RulePropertyRef_text.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/ListLabelRef.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/TokenPropertyRef.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/misc/Graph.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/Sync.java

*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/target/JavaScriptTarget.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/CodeBlockForOuterMostAlt.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/VisitorFile.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/misc/OrderedHashMap.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/LabelType.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/LL1Loop.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/LeftRecursiveRule.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/analysis/LeftRecursiveRuleAnalyzer.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/TerminalAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/ActionChunk.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/semantics/SymbolChecks.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/LabeledOp.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/RuleAST.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/OptionalBlock.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/StarBlock.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/LabelElementPair.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/RetValueRef.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/Loop.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/ThrowEarlyExitException.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/RuleContextDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/BaseVisitorFile.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/TestSetInline.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/ElementListDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/RangeAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/BlankOutputModelFactory.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ANTLRMessage.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/GrammarParserInterpreter.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/Rule.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/ExceptionClause.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/gui/TestRig.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/TokenRef.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/semantics/RuleCollector.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/automata/ATNOptimizer.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/SetAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/AddToLabelList.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/AttributeDict.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/PredAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/GrammarAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/GrammarRootAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/PlusBlockAST.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/DOTGenerator.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/gui/TreePostScriptGenerator.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/CodeBlockForAlt.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/ThrowRecognitionException.java

* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/LocalRef.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/BuildDependencyGenerator.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ToolANTLRLexer.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/CodeBlock.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/misc/EscapeSequenceParsing.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/TokenTypeDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/OutputModelObject.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/CodeGenPipeline.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/ContextRuleListIndexedGetterDecl.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/GrammarSemanticsMessage.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/gui/JFileChooserConfirmOverwrite.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/analysis/LeftRecursiveRuleAltInfo.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/ContextTokenListGetterDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/target/JavaTarget.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/ThrowNoViableAlt.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/target/SwiftTarget.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/gui/Trees.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/ContextRuleGetterDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/CodeGeneratorExtension.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/LL1OptionalBlockSingleAlt.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/QRetValueRef.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/TokenPropertyRef_channel.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/target/GoTarget.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/ListenerFile.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/ContextTokenListIndexedGetterDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/CaptureNextTokenType.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/RulePropertyRef_parser.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/semantics/AttributeChecks.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/ThisRulePropertyRef_start.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/VisitorDispatchMethod.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/ArgRef.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/CaptureNextToken.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/OutputFile.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/NotAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/v4ParserException.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/unicode/UnicodeDataTemplateController.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/semantics/BasicSemanticChecks.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/semantics/UseDefAnalyzer.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/BaseListenerFile.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/TokenVocabParser.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/ActionTemplate.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/PlusBlock.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/Grammar.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/AltAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/target/CSharpTarget.java

* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/SemPred.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/automata/LexerATNFactory.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/Recognizer.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/Parser.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/MatchSet.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/TokenPropertyRef_type.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ActionSplitterListener.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/target/PHPTarget.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/automata/ATNPrinter.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/Decl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/GrammarTransformPipeline.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/SetAttr.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/TokenPropertyRef_int.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/misc/Utils.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/ActionText.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/RuleSempredFunction.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/ContextGetterDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/ThisRulePropertyRef_parser.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/automata/ParserATNFactory.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/ContextTokenGetterDecl.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ToolMessage.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/OutputModelController.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/LL1PlusBlockSingleAlt.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/ThisRulePropertyRef_text.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/analysis/AnalysisPipeline.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/CodeGenerator.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/AltLabelStructDecl.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ANTLRToolListener.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/gui/TreeViewer.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/ListenerDispatchMethod.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/ThisRulePropertyRef_stop.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/Lexer.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/TokenPropertyRef_text.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ErrorType.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/automata/ATNFactory.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/gui/BasicFontMetrics.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/DefaultToolListener.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/BlockAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/Choice.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/TokenListDecl.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/analysis/LeftRecursiveRuleTransformer.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/analysis/LeftRecursionDetector.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/target/DartTarget.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/misc/CharSupport.java

* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/Alternative.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/UnicodeEscapes.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/GrammarASTVisitor.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/DefaultOutputModelFactory.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/SerializedATN.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/SetNonLocalAttr.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/DispatchMethod.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ToolANTLRParser.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/chunk/NonLocalAttrRef.java
*
 /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/SrcOp.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/ast/StarBlockAST.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/gui/TreeLayoutAdaptor.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/LL1StarBlockSingleAlt.java
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/model/decl/RuleContextListDecl.java
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*  (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
*  THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/
```

Found in path(s):

* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/codegen/Cpp/Files.stg
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THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/
/*
This file contains the actual layout of the messages emitted by ANTLR.
The text itself is coming out of the languages/*stg files, according to the chosen locale.
This file contains the default format ANTLR uses.
*/

location(file, line, column) ::= "<file>(<line>,<column>)"

message(id, text) ::= "error <id> : <text>"

report(location, message, type) ::= "<location> : <type> <message.id> : <message.text>"

wantsSingleLineMessage() ::= "true"
```

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/messages/formats/vs2005.stg
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/*
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*/

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/codegen/target/TypeScriptTarget.java
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* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

```
atn(startState, states, edges, rankdir, decisionRanks, useBox) ::= <<
digraph ATN {
rankdir=LR;
<decisionRanks; separator="\n">
<states; separator="\n">
<edges; separator="\n">
}
>>
```

```
dfa(name, startState, states, edges, rankdir, decisionRanks, useBox) ::= <<
digraph <name>  {
<if(rankdir)>rankdir=<rankdir>;<endif>
<decisionRanks; separator="\n">
<states; separator="\n">
<edges;
 separator="\n">
}
>>

decision-rank(states) ::= <<
{rank=same; rankdir=TB; <states:{s | s<s>}; separator="; ">}
>>

edge(src,target,label,arrowhead,transitionIndex) ::= <<
<src><if(transitionIndex)>:p<transitionIndex><endif> -> <target> [fontsize=11, fontname="Courier", arrowsize=.7,
label = "<label>"<if(arrowhead)>, arrowhead = <arrowhead><endif>];
>>

action-edge(src,target,label,arrowhead,transitionIndex) ::= <<
<src><if(transitionIndex)>:p<transitionIndex><endif> -> <target> [fontsize=11, fontname="Courier", arrowsize=.7,
label = "<label>"<if(arrowhead)>, arrowhead = <arrowhead><endif>];
>>

epsilon-edge(src,label,target,arrowhead,transitionIndex,loopback=false) ::= <<
<src><if(transitionIndex)>:p<transitionIndex><endif> -> <target> [fontname="Times-Italic",
label="&epsilon;"<if(loopback)>, style="dashed"<endif>];
>>

state(state, label, name, transitions) ::= <%
<name>[fontsize=11,
  label="
      <! rest(transition) tests for decision states: these nodes have a non-empty
 set of transitions after the first one. !>
      <if(rest(transitions))>
         {
         <! Label on the left side of the record node. !>
         <label>
         |
         <! Named ports in order on right side of record node, no display text. !>
         {<transitions:{t|\<p<i0>>}; separator="|">}}
      <else>
         <label>
      <endif>
      "
  <if(rest(transitions))>
      , shape=record, fixedsize=false
```

```
   <else>
      , shape=circle, fixedsize=true, width=.55
   <endif>
   , peripheries=1];
%>

stopstate(name,label,actionIndex,useBox) ::= <<
<name>[fontsize=11, label="<label><if(actionIndex)>,\naction:<actionIndex><endif>",
<if(useBox)>shape=polygon,sides=4,peripheries=2,fixedsize=false<else>shape=doublecircle, fixedsize=true,
width=.6<endif>];
>>
```

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/dot/graphs.stg
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```
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*/
```

```
/** ANTLR tool checks output templates are compatible with tool code generation.
*  For now, a simple string match used on x.y of x.y.z scheme.
*  Must match Tool.VERSION during load to templates.
*
*  REQUIRED.
*/

pythonTypeInitMap ::= [
 "bool":"False",
 "int":"0",
 "float":"0.0",
 "str":"",
 default:"None" // anything other
 than a primitive type is an object
]

// args must be <object-model-object>, <fields-resulting-in-STs>

ParserFile(file, parser, namedActions, contextSuperClass) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
# encoding: utf-8
from antlr4 import *
from io import StringIO
import sys
if sys.version_info[1] > 5:
 from typing import TextIO
else:
 from typing.io import TextIO

<namedActions.header>
<parser>

>>

ListenerFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
from antlr4 import *
if "." in __name__:
   from .<file.parserName> import <file.parserName>
else:
   from <file.parserName> import <file.parserName>
<header>

# This class defines a complete listener for a parse tree produced by <file.parserName>.
class <file.grammarName>Listener(ParseTreeListener):

   <file.listenerNames:{lname |
# Enter a parse tree produced by <file.parserName>#<lname>.
```

```
def enter<lname; format="cap">(self, ctx:<file.parserName>.<lname; format="cap">Context):
    pass

# Exit a parse tree produced by <file.parserName>#<lname>.
def exit<lname; format="cap">(self, ctx:<file.parserName>.<lname; format="cap">Context):
   pass

}; separator="\n">

del <file.parserName>
>>


VisitorFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
from antlr4 import *
if "." in __name__:
   from .<file.parserName> import <file.parserName>
else:
   from <file.parserName> import <file.parserName>
<header>

# This class defines a complete generic visitor for a parse tree produced by <file.parserName>.

class <file.grammarName>Visitor(ParseTreeVisitor):

   <file.visitorNames:{lname |
# Visit a parse tree produced by <file.parserName>#<lname>.
def visit<lname; format="cap">(self, ctx:<file.parserName>.<lname; format="cap">Context):
   return self.visitChildren(ctx)

}; separator="\n">

del <file.parserName>
>>


fileHeader(grammarFileName, ANTLRVersion) ::= <<
# Generated from <grammarFileName> by ANTLR
 <ANTLRVersion>
>>

Parser(parser, funcs, atn, sempredFuncs, superClass) ::= <<
<Parser_(ctor="parser_ctor", ...)>
>>

Parser_(parser, funcs, atn, sempredFuncs, ctor, superClass) ::= <<
<if(superClass)>
```

```
if "." in __name__:
   from .<superClass> import <superClass>
else:
   from <superClass> import <superClass>

<endif>
<atn>

class <parser.name> ( <if(superClass)><superClass><else>Parser<endif> ):

   grammarFileName = "<parser.grammarFileName>"

   atn = ATNDeserializer().deserialize(serializedATN())

   decisionsToDFA = [ DFA(ds, i) for i, ds in enumerate(atn.decisionToState) ]

   sharedContextCache = PredictionContextCache()

   literalNames = [ <parser.literalNames:{t | <t>}; null="\"\<INVALID>\"", separator=", ", wrap, anchor> ]

   symbolicNames = [ <parser.symbolicNames:{t | <t>}; null="\"\<INVALID>\"", separator=", ", wrap, anchor> ]

   <if(parser.rules)>
   <parser.rules:{r | RULE_<r.name> = <r.index>}; separator="\n", wrap, anchor>
   <endif>

   ruleNames =
  [ <parser.ruleNames:{r | "<r>"}; separator=", ", wrap, anchor> ]

   EOF = <TokenLabelType()>.EOF
   <if(parser.tokens)>
   <parser.tokens:{k | <k>=<parser.tokens.(k)>}; separator="\n", wrap, anchor>
   <endif>

   <parser:(ctor)()>

   <namedActions.members>

   <funcs; separator="\n">


<if(sempredFuncs)>
   def sempred(self, localctx:RuleContext, ruleIndex:int, predIndex:int):
       if self._predicates == None:
           self._predicates = dict()
<parser.sempredFuncs.values:{f |
       self._predicates[<f.ruleIndex>] = self.<f.name>_sempred}; separator="\n        ">
       pred = self._predicates.get(ruleIndex, None)
```

```
        if pred is None:
            raise Exception("No predicate with index:" + str(ruleIndex))
        else:
            return pred(localctx, predIndex)

    <sempredFuncs.values; separator="\n">
<endif>



>>

dumpActions(recog, argFuncs, actionFuncs, sempredFuncs) ::= <<
<if(actionFuncs)>
def action(self, localctx:RuleContext, ruleIndex:int, actionIndex:int):
    if self._actions is None:
        actions = dict()
<recog.actionFuncs.values:{f|
        actions[<f.ruleIndex>] = self.<f.name>_action }; separator="\n">
        self._actions = actions
    action = self._actions.get(ruleIndex, None)
    if action is not None:
        action(localctx, actionIndex)
    else:
        raise Exception("No registered action for:" + str(ruleIndex))

<actionFuncs.values; separator="\n">

<endif>
<if(sempredFuncs)>
def sempred(self, localctx:RuleContext, ruleIndex:int, predIndex:int):
    if self._predicates is None:
        preds = dict()
<recog.sempredFuncs.values:{f|
        preds[<f.ruleIndex>] = self.<f.name>_sempred}; separator="\n">
        self._predicates = preds
    pred = self._predicates.get(ruleIndex, None)
    if pred is not None:
        return pred(localctx, predIndex)
    else:
        raise Exception("No registered predicate for:" + str(ruleIndex))

<sempredFuncs.values; separator="\n">
<endif>
>>

parser_ctor(p) ::= <<
def __init__(self,
```

```
 input:TokenStream, output:TextIO = sys.stdout):
   super().__init__(input, output)
   self.checkVersion("<file.ANTLRVersion>")
   self._interp = ParserATNSimulator(self, self.atn, self.decisionsToDFA, self.sharedContextCache)
   self._predicates = None

>>

/* This generates a private method since the actionIndex is generated, making an
* overriding implementation impossible to maintain.
*/
RuleActionFunction(r, actions) ::= <<

def <r.name>_action(self, localctx:<r.ctxType> , actionIndex:int):
<actions:{index|
<if(first(actions))>
   if actionIndex == <index>:
       <actions.(index)>
<elseif(rest(actions))>
   elif actionIndex == <index>:
       <actions.(index)>
<endif> }; separator="\n">
>>

/* This generates a private method since the predIndex is generated, making an
* overriding implementation impossible to maintain.
*/
RuleSempredFunction(r, actions) ::= <<
def <r.name>_sempred(self, localctx:<r.ctxType>, predIndex:int):
   <actions:{index|
<if(first(actions))>
    if predIndex == <index>:
       return <actions.(index)>
<elseif(rest(actions))>
   elif predIndex == <index>:
       return <actions.(index)>
<endif> }; separator="\n">

>>

RuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,namedActions,finallyAction,postamble,exceptions)
::= <<

<ruleCtx>

<altLabelCtxs:{l | <altLabelCtxs.(l)>}; separator="\n">

def <currentRule.escapedName>(self<currentRule.args:{a | , <a.escapedName><if(a.type)>:<a.type><endif>}>):
```

```
   localctx = <parser.name>.<currentRule.ctxType>(self, self._ctx, self.state<currentRule.args:{a | ,
<a.escapedName>}>)
   self.enterRule(localctx, <currentRule.startState>, self.RULE_<currentRule.name>)
   <namedActions.init>
   <locals; separator="\n">
   try:
       <code>
       <postamble; separator="\n">
       <namedActions.after>
   <if(exceptions)>
   <exceptions; separator="\n">
   <else>
   except RecognitionException as re:
       localctx.exception = re
       self._errHandler.reportError(self,
 re)
       self._errHandler.recover(self, re)
   <endif>
   finally:
       <finallyAction>
       self.exitRule()
   return localctx

>>

LeftRecursiveRuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,
 namedActions,finallyAction,postamble) ::=
<<

<ruleCtx>
<altLabelCtxs:{l | <altLabelCtxs.(l)>}; separator="\n">

def <currentRule.escapedName>(self, _p:int=0<if(currentRule.args)>, <args:{a | , <a>}><endif>):
   _parentctx = self._ctx
   _parentState = self.state
   localctx = <parser.name>.<currentRule.ctxType>(self, self._ctx, _parentState<args:{a | , <a.escapedName>}>)
   _prevctx = localctx
   _startState = <currentRule.startState>
   self.enterRecursionRule(localctx, <currentRule.startState>, self.RULE_<currentRule.name>, _p)
   <namedActions.init>
   <locals; separator="\n">
   try:
       <code>
       <postamble; separator="\n">
       <namedActions.after>
   except RecognitionException as re:
       localctx.exception = re
```

```
  self._errHandler.reportError(self, re)
      self._errHandler.recover(self, re)
  finally:
      <finallyAction>
      self.unrollRecursionContexts(_parentctx)
  return localctx

>>

CodeBlockForOuterMostAlt(currentOuterMostAltCodeBlock, locals, preamble, ops) ::= <<
<if(currentOuterMostAltCodeBlock.altLabel)>localctx = <parser.name>.<currentOuterMostAltCodeBlock.altLabel;
format="cap">Context(self, localctx)<endif>
self.enterOuterAlt(localctx, <currentOuterMostAltCodeBlock.alt.altNum>)
<CodeBlockForAlt(currentAltCodeBlock=currentOuterMostAltCodeBlock, ...)>
>>

CodeBlockForAlt(currentAltCodeBlock, locals, preamble, ops) ::= <<
<locals; separator="\n">
<preamble; separator="\n">
<ops; separator="\n">
>>

LL1AltBlock(choice, preamble, alts, error) ::= <<
self.state = <choice.stateNumber>
self._errHandler.sync(self)
<if(choice.label)><labelref(choice.label)> = _input.LT(1)<endif>
<preamble; separator="\n">
token = self._input.LA(1)
<choice.altLook,alts:{look,alt| <cases(tokens=look)>
    <alt>
  pass}; separator="\nel">
else:
  <error>

>>

LL1OptionalBlock(choice, alts, error) ::= <<
self.state = <choice.stateNumber>
self._errHandler.sync(self)
token = self._input.LA(1)
<choice.altLook,alts:{look,alt| <cases(tokens=look)>
  <alt>
  pass}; separator="\nel">
else:
  pass
>>
```

```
LL1OptionalBlockSingleAlt(choice, expr, alts, preamble, error, followExpr) ::= <<
self.state = <choice.stateNumber>
self._errHandler.sync(self)
<preamble; separator="\n">
if <expr>:
   <alts; separator="\n">

<!else if ( !(<followExpr>) ) <error>!>
>>


LL1StarBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
self.state = <choice.stateNumber>
self._errHandler.sync(self)
<preamble; separator="\n">
while <loopExpr>:
   <alts; separator="\n">
   self.state = <choice.loopBackStateNumber>
   self._errHandler.sync(self)
   <iteration>

>>

LL1PlusBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
self.state = <choice.blockStartStateNumber> <! alt
 block decision !>
self._errHandler.sync(self)
<preamble; separator="\n">
while True:
   <alts; separator="\n">
   self.state = <choice.stateNumber> <! loopback/exit decision !>
   self._errHandler.sync(self)
   <iteration>
   if not (<loopExpr>):
       break

>>

// LL(*) stuff

AltBlock(choice, preamble, alts, error) ::= <<
self.state = <choice.stateNumber>
self._errHandler.sync(self)
<if(choice.label)><labelref(choice.label)> = _input.LT(1)<endif>
<preamble; separator="\n">
la_ = self._interp.adaptivePredict(self._input,<choice.decision>,self._ctx)
<alts:{alt |
if la_ == <i>:
```

```
   <alt>
   pass
}; separator="\nel">

>>

OptionalBlock(choice, alts, error) ::= <<
self.state = <choice.stateNumber>
self._errHandler.sync(self)
la_ = self._interp.adaptivePredict(self._input,<choice.decision>,self._ctx)
<alts:{alt |
if la_ == <i><if(!choice.ast.greedy)>+1<endif>:
   <alt>
}; separator="\nel">

>>

StarBlock(choice, alts, sync, iteration) ::= <<
self.state = <choice.stateNumber>
self._errHandler.sync(self)
_alt
 = self._interp.adaptivePredict(self._input,<choice.decision>,self._ctx)
while _alt!=<choice.exitAlt> and _alt!=ATN.INVALID_ALT_NUMBER:
   if _alt==1<if(!choice.ast.greedy)>+1<endif>:
       <iteration>
       <alts> <! should only be one !>
   self.state = <choice.loopBackStateNumber>
   self._errHandler.sync(self)
   _alt = self._interp.adaptivePredict(self._input,<choice.decision>,self._ctx)

>>

PlusBlock(choice, alts, error) ::= <<
self.state = <choice.blockStartStateNumber> <! alt block decision !>
self._errHandler.sync(self)
_alt = 1<if(!choice.ast.greedy)>+1<endif>
while _alt!=<choice.exitAlt> and _alt!=ATN.INVALID_ALT_NUMBER:
   <alts:{alt|
if _alt == <i><if(!choice.ast.greedy)>+1<endif>:
   <alt>
}; separator="\nel">
   else:
       <error>
   self.state = <choice.loopBackStateNumber> <! loopback/exit decision !>
   self._errHandler.sync(self)
   _alt = self._interp.adaptivePredict(self._input,<choice.decision>,self._ctx)

>>
```

```
Sync(s)
 ::= "sync(<s.expecting.name>)"

ThrowNoViableAlt(t) ::= "raise NoViableAltException(self)"

TestSetInline(s) ::= <<
<s.bitsets:{bits | <if(rest(rest(bits.tokens)))><bitsetBitfieldComparison(s, bits)><else><bitsetInlineComparison(s,
bits)><endif>}; separator=" or ">
>>

// Java language spec 15.19 - shift operators mask operands rather than overflow to 0... need range test
testShiftInRange(shiftAmount) ::= <<
((<shiftAmount>) & ~0x3f) == 0
>>

bitsetBitfieldComparison(s, bits) ::= <%
(<testShiftInRange({<offsetShiftVar(s.varName, bits.shift)>})> and ((1 \<\< <offsetShiftVar(s.varName,
bits.shift)>) & <bits.calculated>) != 0)
%>

isZero ::= [
"0":true,
default:false
]

offsetShiftVar(shiftAmount, offset) ::= <%
<if(!isZero.(offset))>(<shiftAmount> - <offset>)<else><shiftAmount><endif>
%>

offsetShiftType(shiftAmount, offset) ::= <%
<if(!isZero.(offset))>(<parser.name>.<shiftAmount> - <offset>)<else><parser.name>.<shiftAmount><endif>
%>

bitsetInlineComparison(s, bits) ::= <%
<bits.tokens:{t
 | <s.varName>==<t.type>}; separator=" or ">
%>

cases(tokens) ::= <<
if token in [<tokens:{t | <t.type>}; separator=", ">]:
>>

InvokeRule(r, argExprsChunks) ::= <<
self.state = <r.stateNumber>
<if(r.labels)><r.labels:{l | <labelref(l)> =
}><endif>self.<r.escapedName>(<if(r.ast.options.p)><r.ast.options.p><if(argExprsChunks)>,<endif><endif><argE
xprsChunks>)
```

```
>>

MatchToken(m) ::= <<
self.state = <m.stateNumber>
<if(m.labels)><m.labels:{l | <labelref(l)> = }><endif>self.match(<parser.name>.<m.name>)
>>

MatchSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, false)>"

MatchNotSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, true)>"

CommonSetStuff(m, expr, capture, invert) ::= <<
self.state = <m.stateNumber>
<if(m.labels)><m.labels:{l | <labelref(l)> = }>self._input.LT(1)<endif>
<capture>
<if(invert)>if <m.varName> \<= 0 or <expr><else>if not(<expr>)<endif>:
<if(m.labels)><m.labels:{l |     <labelref(l)> = }><else>    <endif>self._errHandler.recoverInline(self)
else:
    self._errHandler.reportMatch(self)
   self.consume()
>>

Wildcard(w) ::= <<
self.state = <w.stateNumber>
<if(w.labels)><w.labels:{l | <labelref(l)> = }><endif>self.matchWildcard()
>>

// ACTION STUFF

Action(a, foo, chunks) ::= "<chunks>"

ArgAction(a, chunks) ::= "<chunks>"

SemPred(p, chunks, failChunks) ::= <<
self.state = <p.stateNumber>
if not <chunks>:
   from antlr4.error.Errors import FailedPredicateException
   raise FailedPredicateException(self, <p.predicate><if(failChunks)>, <failChunks><elseif(p.msg)>,
<p.msg><endif>)
>>

ExceptionClause(e, catchArg, catchAction) ::= <<
except <catchArg>:
   <catchAction>
>>

// lexer actions are not associated with model objects
```

```
LexerSkipCommand()  ::= "skip()"
LexerMoreCommand()  ::= "more()"
LexerPopModeCommand() ::= "popMode()"

LexerTypeCommand(arg, grammar)      ::= "_type = <arg>"
LexerChannelCommand(arg, grammar)   ::= "_channel = <arg>"
LexerModeCommand(arg, grammar)      ::= "_mode = <arg>"
LexerPushModeCommand(arg,
 grammar)  ::= "pushMode(<arg>)"

ActionText(t) ::= "<t.text>"
ActionTemplate(t) ::= "<t.st>"
ArgRef(a) ::= "localctx.<a.escapedName>"
LocalRef(a) ::= "localctx.<a.escapedName>"
RetValueRef(a) ::= "localctx.<a.escapedName>"
QRetValueRef(a) ::= "<ctx(a)>.<a.dict>.<a.escapedName>"
/** How to translate $tokenLabel */
TokenRef(t) ::= "<ctx(t)>.<t.escapedName>"
LabelRef(t) ::= "<ctx(t)>.<t.escapedName>"
ListLabelRef(t) ::= "<ctx(t)>.<ListLabelName(t.escapedName)>"
SetAttr(s,rhsChunks) ::= "<ctx(s)>.<s.escapedName> = <rhsChunks>"

TokenLabelType() ::= "<file.TokenLabelType; null={Token}>"
InputSymbolType() ::= "<file.InputSymbolType; null={Token}>"

TokenPropertyRef_text(t) ::= "(None if <ctx(t)>.<t.label> is None else <ctx(t)>.<t.label>.text)"
TokenPropertyRef_type(t) ::= "(0 if <ctx(t)>.<t.label> is None else <ctx(t)>.<t.label>.type)"
TokenPropertyRef_line(t) ::= "(0 if <ctx(t)>.<t.label> is None else <ctx(t)>.<t.label>.line)"
TokenPropertyRef_pos(t) ::= "(0 if <ctx(t)>.<t.label> is None
 else <ctx(t)>.<t.label>.column)"
TokenPropertyRef_channel(t) ::= "(0 if <ctx(t)>.<t.label> is None else <ctx(t)>.<t.label>.channel)"
TokenPropertyRef_index(t) ::= "(0 if <ctx(t)>.<t.label> is None else <ctx(t)>.<t.label>.tokenIndex)"
TokenPropertyRef_int(t) ::= "(0 if <ctx(t)>.<t.label> is None else int(<ctx(t)>.<t.label>.text))"

RulePropertyRef_start(r) ::= "(None if <ctx(r)>.<r.label> is None else <ctx(r)>.<r.label>.start)"
RulePropertyRef_stop(r)  ::= "(None if <ctx(r)>.<r.label> is None else <ctx(r)>.<r.label>.stop)"
RulePropertyRef_text(r)  ::= "(None if <ctx(r)>.<r.label> is None else
self._input.getText(<ctx(r)>.<r.label>.start,<ctx(r)>.<r.label>.stop))"
RulePropertyRef_ctx(r)  ::= "<ctx(r)>.<r.label>"
RulePropertyRef_parser(r)  ::= "self"

ThisRulePropertyRef_start(r) ::= "localctx.start"
ThisRulePropertyRef_stop(r)  ::= "localctx.stop"
ThisRulePropertyRef_text(r)  ::= "self._input.getText(localctx.start, self._input.LT(-1))"
ThisRulePropertyRef_ctx(r)  ::= "localctx"
ThisRulePropertyRef_parser(r)
 ::= "self"
```

```
NonLocalAttrRef(s)     ::= "self.getInvokingContext(<s.ruleIndex>).<s.escapedName>"
SetNonLocalAttr(s, rhsChunks)  ::= "self.getInvokingContext(<s.ruleIndex>).<s.escapedName> = <rhsChunks>"

AddToLabelList(a) ::= "<ctx(a.label)>.<a.listName>.append(<labelref(a.label)>)"

TokenDecl(t) ::= "self.<t.escapedName> = None # <TokenLabelType()>"
TokenTypeDecl(t) ::= "self.<t.escapedName> = 0 # <TokenLabelType()> type"
TokenListDecl(t) ::= "self.<t.escapedName> = list() # of <TokenLabelType()>s"
RuleContextDecl(r) ::= "self.<r.escapedName> = None # <r.ctxName>"
RuleContextListDecl(rdecl) ::= "self.<rdecl.escapedName> = list() # of <rdecl.ctxName>s"

ContextTokenGetterDecl(t)      ::= <<
def <t.escapedName>(self):
  return self.getToken(<parser.name>.<t.name>, 0)
>>

// should never be called
ContextTokenListGetterDecl(t)  ::= <<
def <t.name>_list(self):
  return self.getTokens(<parser.name>.<t.name>)
>>

ContextTokenListIndexedGetterDecl(t)  ::= <<
def <t.escapedName>(self,
 i:int=None):
  if i is None:
      return self.getTokens(<parser.name>.<t.name>)
  else:
      return self.getToken(<parser.name>.<t.name>, i)
>>

ContextRuleGetterDecl(r)       ::= <<
def <r.escapedName>(self):
  return self.getTypedRuleContext(<parser.name>.<r.ctxName>,0)

>>

// should never be called
ContextRuleListGetterDecl(r)   ::= <<
def <r.name>_list(self):
  return self.getTypedRuleContexts(<parser.name>.<r.ctxName>)

>>

ContextRuleListIndexedGetterDecl(r)   ::= <<
def <r.escapedName>(self, i:int=None):
  if i is None:
      return self.getTypedRuleContexts(<parser.name>.<r.ctxName>)
```

```
  else:
      return self.getTypedRuleContext(<parser.name>.<r.ctxName>,i)

>>

LexerRuleContext() ::= "RuleContext"

/** The rule context name is the rule followed by a suffix; e.g.,
*  r becomes rContext.
*/
RuleContextNameSuffix() ::= "Context"

ImplicitTokenLabel(tokenName) ::= "_<tokenName>"
ImplicitRuleLabel(ruleName)   ::= "_<ruleName>"
ImplicitSetLabel(id)
  ::= "_tset<id>"
ListLabelName(label)    ::= "<label>"

CaptureNextToken(d) ::= "<d.varName> = self._input.LT(1)"
CaptureNextTokenType(d) ::= "<d.varName> = self._input.LA(1)"

StructDecl(struct,ctorAttrs,attrs,getters,dispatchMethods,interfaces,extensionMembers,signatures) ::= <<
class <struct.escapedName>(<if(contextSuperClass)><contextSuperClass><else>ParserRuleContext<endif>):
  __slots__ = 'parser'

  def __init__(self, parser, parent:ParserRuleContext=None, invokingState:int=-1<struct.ctorAttrs:{a | ,
<a.escapedName><if(a.type)>:<a.type><endif>=None}>):
      super().__init__(parent, invokingState)
      self.parser = parser
      <attrs:{a | <a>}; separator="\n">
      <struct.ctorAttrs:{a | self.<a.escapedName> = <a.escapedName>}; separator="\n">

  <getters:{g | <g>}; separator="\n\n">

  def getRuleIndex(self):
      return <parser.name>.RULE_<struct.derivedFromName>

<if(struct.provideCopyFrom)> <! don't need copy unless we have subclasses !>
   def copyFrom(self, ctx:ParserRuleContext):
      super().copyFrom(ctx)
      <struct.attrs:{a | self.<a.escapedName> = ctx.<a.escapedName>}; separator="\n">

<endif>
  <dispatchMethods; separator="\n">
  <extensionMembers; separator="\n">

>>
```

```
AltLabelStructDecl(struct,attrs,getters,dispatchMethods) ::= <<
class <struct.escapedName>(<currentRule.name; format="cap">Context):

   def __init__(self, parser, ctx:ParserRuleContext): # actually a <parser.name>.<currentRule.name;
format="cap">Context
       super().__init__(parser)
       <attrs:{a | <a>}; separator="\n">
       self.copyFrom(ctx)

   <getters:{g | <g>}; separator="\n">

   <dispatchMethods; separator="\n">

>>

ListenerDispatchMethod(method) ::= <<
def <if(method.isEnter)>enter<else>exit<endif>Rule(self, listener:ParseTreeListener):
   if hasattr( listener, "<if(method.isEnter)>enter<else>exit<endif><struct.derivedFromName; format="cap">" ):
       listener.<if(method.isEnter)>enter<else>exit<endif><struct.derivedFromName;
 format="cap">(self)

>>

VisitorDispatchMethod(method) ::= <<
def accept(self, visitor:ParseTreeVisitor):
   if hasattr( visitor, "visit<struct.derivedFromName; format="cap">" ):
       return visitor.visit<struct.derivedFromName; format="cap">(self)
   else:
       return visitor.visitChildren(self)

>>

AttributeDecl(d) ::= "self.<d.escapedName> = <if(d.initValue)><d.initValue><else>None<endif>"

/** If we don't know location of label def x, use this template */
labelref(x) ::= "<if(!x.isLocal)>localctx.<endif><x.escapedName>"

/** For any action chunk, what is correctly-typed context struct ptr? */
ctx(actionChunk) ::= "localctx"

// used for left-recursive rules
recRuleAltPredicate(ruleName,opPrec)  ::= "self.precpred(self._ctx, <opPrec>)"
recRuleSetReturnAction(src,name)   ::= "$<name>=$<src>.<name>"
recRuleSetStopToken()                ::= "self._ctx.stop = self._input.LT(-1)"

recRuleAltStartAction(ruleName, ctxName, label, isListLabel) ::= <<
localctx =
```

```
 <parser.name>.<ctxName>Context(self, _parentctx, _parentState)
<if(label)>
<if(isListLabel)>
localctx.<label>.append(_prevctx)
<else>
localctx.<label> = _prevctx
<endif>
<endif>
self.pushNewRecursionContext(localctx, _startState, self.RULE_<ruleName>)
>>

recRuleLabeledAltStartAction(ruleName, currentAltLabel, label, isListLabel) ::= <<
localctx = <parser.name>.<currentAltLabel; format="cap">Context(self, <parser.name>.<ruleName;
format="cap">Context(self, _parentctx, _parentState))
<if(label)>
<if(isListLabel)>
localctx.<label>.append(_prevctx)
<else>
localctx.<label> = _prevctx
<endif>
<endif>
self.pushNewRecursionContext(localctx, _startState, self.RULE_<ruleName>)
>>

recRuleReplaceContext(ctxName) ::= <<
localctx = <parser.name>.<ctxName>Context(self, localctx)
self._ctx = localctx
_prevctx = localctx
>>

recRuleSetPrevCtx() ::= <<
if self._parseListeners is not None:
   self.triggerExitRuleEvent()
_prevctx = localctx
>>


LexerFile(lexerFile, lexer, namedActions) ::= <<
<fileHeader(lexerFile.grammarFileName,
 lexerFile.ANTLRVersion)>
from antlr4 import *
from io import StringIO
import sys
if sys.version_info[1] > 5:
   from typing import TextIO
else:
   from typing.io import TextIO
```

```
<namedActions.header>

<lexer>
>>

Lexer(lexer, atn, actionFuncs, sempredFuncs, superClass) ::= <<
<if(superClass)>
if "." in __name__:
  from .<superClass> import <superClass>
else:
  from <superClass> import <superClass>

<endif>
<atn>

class <lexer.name>(<if(superClass)><superClass><else>Lexer<endif>):

  atn = ATNDeserializer().deserialize(serializedATN())

  decisionsToDFA = [ DFA(ds, i) for i, ds in enumerate(atn.decisionToState) ]

<if(lexer.escapedChannels)>
  <lexer.escapedChannels:{c| <c> = <lexer.escapedChannels.(c)>}; separator="\n">

<endif>
<if(rest(lexer.escapedModeNames))>
  <rest(lexer.escapedModeNames):{m| <m> = <i>}; separator="\n">

<endif>
  <if(lexer.tokens)>
  <lexer.tokens:{k | <k> = <lexer.tokens.(k)>}; separator="\n", wrap, anchor>
  <endif>

   channelNames = [ u"DEFAULT_TOKEN_CHANNEL", u"HIDDEN"<if (lexer.channelNames)>,
<lexer.channelNames:{c| u"<c>"}; separator=", ", wrap, anchor><endif> ]

  modeNames = [ <lexer.modes:{m| "<m>"}; separator=", ", wrap, anchor> ]

  literalNames = [ "\<INVALID>",
        <lexer.literalNames:{t | <t>}; separator=", ", wrap, anchor> ]

  symbolicNames = [ "\<INVALID>",
        <lexer.symbolicNames:{t | <t>}; separator=", ", wrap, anchor> ]

  ruleNames = [ <lexer.ruleNames:{r | "<r>"}; separator=", ", wrap, anchor> ]

  grammarFileName = "<lexer.grammarFileName>"
```

```
  def __init__(self, input=None, output:TextIO = sys.stdout):
      super().__init__(input, output)
      self.checkVersion("<lexerFile.ANTLRVersion>")
      self._interp = LexerATNSimulator(self, self.atn, self.decisionsToDFA, PredictionContextCache())
      self._actions = None
      self._predicates = None

  <namedActions.members>

  <dumpActions(lexer, "", actionFuncs, sempredFuncs)>

>>

SerializedATN(model)
 ::= <<
def serializedATN():
  return [
      <model.serialized: {s | <s>}; separator=",", wrap>
  ]
>>

/** Using a type to init value map, try to init a type; if not in table
*  must be an object, default value is "null".
*/
initValue(typeName) ::= <<
<pythonTypeInitMap.(typeName)>
>>

codeFileExtension() ::= ".py"
```

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/codegen/Python3/Python3.stg
No license file was found, but licenses were detected in source scan.

/*
[The "BSD licence"]
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modification, are permitted provided that the following conditions
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*/
/*
This file contains the actual layout of the messages emitted by ANTLR.
The text itself is coming out of the languages/*stg files, according to the chosen locale.
This file contains the format that mimicks GCC output.
*/

location(file, line, column) ::= "<file>:<line>:<column>:"

message(id, text) ::= "<text> [error <id>]"

report(location, message, type) ::= "<location> <type>: <message>"

wantsSingleLineMessage() ::= "true"

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/messages/formats/gnu.stg
No license file was found, but licenses were detected in source scan.

/*
* [The "BSD license"]
* Copyright (c) 2012-2016 Terence Parr
* Copyright (c) 2012-2016 Sam Harwell
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* modification, are permitted provided that the following conditions
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```
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*  THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
*  (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
*  THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/

phpTypeInitMap ::= [
 "int":"0",
 "long":"0",
 "float":"0.0",
 "double":"0.0",
 "boolean":"false",
 default:"null"
]

// args must be <object-model-object>, <fields-resulting-in-STs>

ParserFile(file, parser, namedActions, contextSuperClass) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<parser>
>>

ListenerFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName,
 file.ANTLRVersion)>
<if(file.genPackage)>
namespace <file.genPackage>;
<endif>
<header>
use Antlr\\Antlr4\\Runtime\\Tree\\ParseTreeListener;

/**
* This interface defines a complete listener for a parse tree produced by
* {@see <file.parserName>}.
*/
interface <file.grammarName>Listener extends ParseTreeListener {
 <file.listenerNames:{lname |
/**
<if(file.listenerLabelRuleNames.(lname))>
* Enter a parse tree produced by the `<lname>`
```

```
* labeled alternative in {@see <file.parserName>::<file.listenerLabelRuleNames.(lname)>()\}.
<else>
* Enter a parse tree produced by {@see <file.parserName>::<lname>()\}.
<endif>
* @param $context The parse tree.
*/
public function enter<lname; format="cap">(Context\\<lname; format="cap">Context $context): void;
/**
<if(file.listenerLabelRuleNames.(lname))>
* Exit a parse tree produced by the `<lname>` labeled alternative
* in {@see <file.parserName>::<file.listenerLabelRuleNames.(lname)>()\}.
<else>
* Exit a parse
 tree produced by {@see <file.parserName>::<lname>()\}.
<endif>
* @param $context The parse tree.
*/
public function exit<lname; format="cap">(Context\\<lname; format="cap">Context $context): void;};
separator="\n">
}
>>

BaseListenerFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
namespace <file.genPackage>;
<endif>
<header>

use Antlr\\Antlr4\\Runtime\\ParserRuleContext;
use Antlr\\Antlr4\\Runtime\\Tree\\ErrorNode;
use Antlr\\Antlr4\\Runtime\\Tree\\TerminalNode;

/**
* This class provides an empty implementation of {@see <file.grammarName>Listener},
* which can be extended to create a listener which only needs to handle a subset
* of the available methods.
*/
class <file.grammarName>BaseListener implements <file.grammarName>Listener
{
 <file.listenerNames:{lname |
/**
* {@inheritdoc\}
*
* The default implementation does nothing.
*/
public function enter<lname; format="cap">(Context\\<lname; format="cap">Context
```

```
 $context): void {\}

/**
* {@inheritdoc\}
*
* The default implementation does nothing.
*/
public function exit<lname; format="cap">(Context\\<lname; format="cap">Context $context): void {\}};
separator="\n">

 /**
  * {@inheritdoc\}
  *
  * The default implementation does nothing.
  */
 public function enterEveryRule(ParserRuleContext $context): void {}

 /**
  * {@inheritdoc\}
  *
  * The default implementation does nothing.
  */
 public function exitEveryRule(ParserRuleContext $context): void {}

 /**
  * {@inheritdoc\}
  *
  * The default implementation does nothing.
  */
 public function visitTerminal(TerminalNode $node): void {}

 /**
  * {@inheritdoc\}
  *
  * The default implementation does nothing.
  */
 public function visitErrorNode(ErrorNode $node): void {}
}
>>

VisitorFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
namespace <file.genPackage>;
<endif>

<header>
use Antlr\\Antlr4\\Runtime\\Tree\\ParseTreeVisitor;
```

```
/**
 * This interface defines a complete generic visitor for a parse tree produced by {@see <file.parserName>}.
*/
interface <file.grammarName>Visitor extends ParseTreeVisitor
{
 <file.visitorNames:{lname |
/**
<if(file.visitorLabelRuleNames.(lname))>
* Visit a parse tree produced by the `<lname>` labeled alternative
* in {@see <file.parserName>::<file.visitorLabelRuleNames.(lname)>()\}.
<else>
* Visit a parse tree produced by {@see <file.parserName>::<lname>()\}.
<endif>
*
* @param Context\\<lname; format="cap">Context $context The parse tree.
*
* @return mixed The visitor result.
*/
public function visit<lname; format="cap">(Context\\<lname; format="cap">Context $context);};
separator="\n\n">
}
>>

BaseVisitorFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
namespace <file.genPackage>;
<endif>
<header>
use Antlr\\Antlr4\\Runtime\\Tree\\AbstractParseTreeVisitor;

/**
* This class provides an
 empty implementation of {@see <file.grammarName>Visitor},
* which can be extended to create a visitor which only needs to handle a subset
* of the available methods.
*/
class <file.grammarName>BaseVisitor extends AbstractParseTreeVisitor implements <file.grammarName>Visitor
{
 <file.visitorNames:{lname |
/**
* {@inheritdoc\}
*
* The default implementation returns the result of calling
* {@see self::visitChildren()\} on `context`.
*/
public function visit<lname; format="cap">(Context\\<lname; format="cap">Context $context)
```

```
{
   return $this->visitChildren($context);
\}}; separator="\n\n">
}
>>

fileHeader(grammarFileName, ANTLRVersion) ::= <<
\<?php

/*
* Generated from <grammarFileName> by ANTLR <ANTLRVersion>
*/

>>
Parser(parser, funcs, atn, sempredFuncs, superClass) ::= <<
<Parser_(ctor="parser_ctor", ...)>
>>

Parser_(parser, funcs, atn, sempredFuncs, ctor, superClass) ::= <<
namespace<if(file.genPackage)> <file.genPackage><endif> {
<if(namedActions.header)><namedActions.header><endif>
 use
 Antlr\\Antlr4\\Runtime\\Atn\\ATN;
 use Antlr\\Antlr4\\Runtime\\Atn\\ATNDeserializer;
 use Antlr\\Antlr4\\Runtime\\Atn\\ParserATNSimulator;
 use Antlr\\Antlr4\\Runtime\\Dfa\\DFA;
 use Antlr\\Antlr4\\Runtime\\Error\\Exceptions\\FailedPredicateException;
 use Antlr\\Antlr4\\Runtime\\Error\\Exceptions\\NoViableAltException;
 use Antlr\\Antlr4\\Runtime\\PredictionContexts\\PredictionContextCache;
 use Antlr\\Antlr4\\Runtime\\Error\\Exceptions\\RecognitionException;
 use Antlr\\Antlr4\\Runtime\\RuleContext;
 use Antlr\\Antlr4\\Runtime\\Token;
 use Antlr\\Antlr4\\Runtime\\TokenStream;
 use Antlr\\Antlr4\\Runtime\\Vocabulary;
 use Antlr\\Antlr4\\Runtime\\VocabularyImpl;
 use Antlr\\Antlr4\\Runtime\\RuntimeMetaData;
 use Antlr\\Antlr4\\Runtime\\Parser;
<if(namedActions.definitions)><namedActions.definitions><endif>

 final class <parser.name> extends <superClass; null="Parser">
 {
  <if(parser.tokens)>
  public const <parser.tokens:{k | <k> = <parser.tokens.(k)>}; separator=",
 ", wrap, anchor>;
  <endif>

  <if(parser.rules)>
  public const <parser.rules:{r | RULE_<r.name> = <r.index>}; separator=", ", wrap, anchor>;
```

```
<endif>

/**
 * @var array\<string>
 */
public const RULE_NAMES = [
 <parser.ruleNames:{r | '<r>'}; separator=", ", wrap, anchor>
];

<vocabulary(parser.literalNames, parser.symbolicNames)>

<atn>
protected static $atn;
protected static $decisionToDFA;
protected static $sharedContextCache;
<if(namedActions.members)>

<namedActions.members>
<endif>


<parser:(ctor)()>

private static function initialize(): void
{
 if (self::$atn !== null) {
  return;
 }

 RuntimeMetaData::checkVersion('<file.ANTLRVersion>', RuntimeMetaData::VERSION);

 $atn = (new ATNDeserializer())->deserialize(self::SERIALIZED_ATN);

 $decisionToDFA = [];
 for ($i = 0, $count = $atn->getNumberOfDecisions(); $i \< $count; $i++) {
  $decisionToDFA[] = new DFA($atn->getDecisionState($i), $i);
 }

 self::$atn = $atn;
 self::$decisionToDFA
= $decisionToDFA;
 self::$sharedContextCache = new PredictionContextCache();
}

public function getGrammarFileName(): string
{
 return "<parser.grammarFileName>";
}
```

```
  public function getRuleNames(): array
  {
   return self::RULE_NAMES;
  }

  public function getSerializedATN(): array
  {
   return self::SERIALIZED_ATN;
  }

  public function getATN(): ATN
  {
   return self::$atn;
  }

  public function getVocabulary(): Vocabulary
      {
          static $vocabulary;

   return $vocabulary = $vocabulary ?? new VocabularyImpl(self::LITERAL_NAMES, self::SYMBOLIC_NAMES);
      }
<if(funcs)>

  <funcs; separator="\n\n">
<endif>
<if(sempredFuncs)>

  public function sempred(?RuleContext $localContext, int $ruleIndex, int $predicateIndex): bool
  {
   switch ($ruleIndex) {
   <parser.sempredFuncs.values:{f|
  case <f.ruleIndex>:
   return $this->sempred<f.name; format="cap">($localContext, $predicateIndex);}; separator="\n\n">

    default:
     return
 true;
    }
  }

  <sempredFuncs.values; separator="\n\n">
<endif>
 }
}

namespace <if(file.genPackage)><file.genPackage>\\<endif>Context {
 use Antlr\\Antlr4\\Runtime\\ParserRuleContext;
```

```
 use Antlr\\Antlr4\\Runtime\\Token;
 use Antlr\\Antlr4\\Runtime\\Tree\\ParseTreeVisitor;
 use Antlr\\Antlr4\\Runtime\\Tree\\TerminalNode;
 use Antlr\\Antlr4\\Runtime\\Tree\\ParseTreeListener;
 use <if(file.genPackage)><file.genPackage>\\<endif><parser.name>;
 <if (file.genVisitor)>use <if(file.genPackage)><file.genPackage>\\<endif><file.grammarName>Visitor;<endif>
 <if (file.genListener)>use <if(file.genPackage)><file.genPackage>\\<endif><file.grammarName>Listener;<endif>
 <namedActions.contexts>

 <funcs :{ func | <func.ruleCtx><if(func.altLabelCtxs)>

<func.altLabelCtxs:{l | <func.altLabelCtxs.(l)>}; separator="\n\n"><endif> }; separator="\n\n">
}
>>

vocabulary(literalNames, symbolicNames) ::= <<
/**
* @var array\<string|null>
*/
private const LITERAL_NAMES = [
   <literalNames:{t | <t>}; null="null",
 separator=", ", wrap, anchor>
];

/**
* @var array\<string>
*/
private const SYMBOLIC_NAMES = [
   <symbolicNames:{t | <t>}; null="null", separator=", ", wrap, anchor>
];
>>

dumpActions(recog, argFuncs, actionFuncs, sempredFuncs) ::= <<
<if(actionFuncs)>

public function action(?RuleContext $localContext, int $ruleIndex, int $actionIndex): void
{
 switch ($ruleIndex) {
 <recog.actionFuncs.values:{f|
 case <f.ruleIndex>:
  $this->action<f.name; format="cap">($localContext, $actionIndex);
  break;}; separator="\n\n">
 }
}

<actionFuncs.values; separator="\n">
<endif>
<if(sempredFuncs)>
```

```
public function sempred(?RuleContext $localContext, int $ruleIndex, int $predicateIndex): bool
{
 switch ($ruleIndex) {
 <recog.sempredFuncs.values:{f|
   case <f.ruleIndex>:
       return $this->sempred<f.name; format="cap">($localContext, $predicateIndex);}; separator="\n\n">
 }

 return true;
}
<sempredFuncs.values; separator="\n\n">
<endif>
>>

parser_ctor(p) ::= <<
public function __construct(TokenStream
 $input)
{
 parent::__construct($input);

 self::initialize();

 $this->interp = new ParserATNSimulator($this, self::$atn, self::$decisionToDFA, self::$sharedContextCache);
}
>>

/**
* This generates a private method since the actionIndex is generated, making
* an overriding implementation impossible to maintain.
*/
RuleActionFunction(r, actions) ::= <<
private function action<r.name; format="cap">(?<r.ctxType> $localContext, int $actionIndex): void
{
 switch ($actionIndex) {
 <actions:{index|
 case <index>:
 <actions.(index)>

 break;}; separator="\n\n">
 }
}
>>

/**
* This generates a private method since the predicateIndex is generated, making
* an overriding implementation impossible to maintain.
*/
```

```
RuleSempredFunction(r, actions) ::= <<
private function sempred<r.name; format="cap">(?Context\\<r.ctxType> $localContext, int $predicateIndex): bool
{
 switch ($predicateIndex) {
 <actions:{index|
   case <index>:
       return <actions.(index)>;}; separator="\n\n">
 }

 return
 true;
}
>>

RuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,namedActions,finallyAction,exceptions,postamble)
::= <<
/**
* @throws RecognitionException
*/
<if(currentRule.modifiers)><currentRule.modifiers:{f | <f> }><endif>public function <currentRule.name>(<args;
separator=",">): Context\\<currentRule.ctxType>
{
   $localContext = new Context\\<currentRule.ctxType>($this->ctx, $this->getState()<currentRule.args:{a | ,
$<a.name>}>);

   $this->enterRule($localContext, <currentRule.startState>, self::RULE_<currentRule.name>);
   <namedActions.init>
   <locals; separator="\n">

   try {
       <code>
       <postamble; separator="\n">
       <namedActions.after>
   }<if(exceptions)><exceptions; separator="\n"><else> catch (RecognitionException $exception) {
       $localContext->exception = $exception;
       $this->errorHandler->reportError($this, $exception);
       $this->errorHandler->recover($this, $exception);
   }<endif> finally {

       <finallyAction>
       $this->exitRule();
   }

   return $localContext;
}
>>

LeftRecursiveRuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,namedActions,finallyAction,postamb
```

```
le) ::= <<
/**
* @throws RecognitionException
*/
<if(currentRule.modifiers)><currentRule.modifiers:{f | <f> }><endif>public function <currentRule.name>(<args;
separator=", ">): Context\\<currentRule.ctxType>
{
 return $this->recursive<currentRule.name; format="cap">(0<currentRule.args:{a | , <a.name>}>);
}

/**
* @throws RecognitionException
*/
private function recursive<currentRule.name; format="cap">(int $precedence<args:{a | , <a>}>):
Context\\<currentRule.ctxType>
{
 $parentContext = $this->ctx;
 $parentState = $this->getState();
 $localContext = new Context\\<currentRule.ctxType>($this->ctx, $parentState<currentRule.args:{a | ,
<a.name>}>);
 $previousContext = $localContext;
 $startState = <currentRule.startState>;
 $this->enterRecursionRule($localContext, <currentRule.startState>,
 self::RULE_<currentRule.name>, $precedence);
 <namedActions.init>
 <locals; separator="\n">

 try {
  <code>
  <postamble; separator="\n">
  <namedActions.after>
 } catch (RecognitionException $exception) {
  $localContext->exception = $exception;
  $this->errorHandler->reportError($this, $exception);
  $this->errorHandler->recover($this, $exception);
 } finally {
  <finallyAction>
  $this->unrollRecursionContexts($parentContext);
 }

 return $localContext;
}
>>

CodeBlockForOuterMostAlt(currentOuterMostAltCodeBlock, locals, preamble, ops) ::= <<
<if(currentOuterMostAltCodeBlock.altLabel)>$localContext = new
Context\\<currentOuterMostAltCodeBlock.altLabel; format="cap">Context($localContext);<endif>
$this->enterOuterAlt($localContext, <currentOuterMostAltCodeBlock.alt.altNum>);
```

```
<CodeBlockForAlt(currentAltCodeBlock=currentOuterMostAltCodeBlock, ...)>
>>

CodeBlockForAlt(currentAltCodeBlock, locals, preamble, ops) ::= <<
<locals; separator="\n">
<preamble; separator="\n">
<ops; separator="\n">
>>

LL1AltBlock(choice,
 preamble, alts, error) ::= <<
$this->setState(<choice.stateNumber>);
$this->errorHandler->sync($this);
<if(choice.label)><labelref(choice.label)> = $this->input->LT(1);<endif>
<preamble; separator="\n">

switch ($this->input->LA(1)) {
   <choice.altLook,alts:{look,alt| <cases(tokens=look)>
 <alt>
 break;}; separator="\n\n">

default:
 <error>
}
>>

LL1OptionalBlock(choice, alts, error) ::= <<
$this->setState(<choice.stateNumber>);
$this->errorHandler->sync($this);

switch ($this->input->LA(1)) {
   <choice.altLook,alts:{look,alt| <cases(tokens=look)>
 <alt>
 break;}; separator="\n\n">

default:
 break;
}
>>

LL1OptionalBlockSingleAlt(choice, expr, alts, preamble, error, followExpr) ::= <<
$this->setState(<choice.stateNumber>);
$this->errorHandler->sync($this);
<preamble; separator="\n">

if (<expr>) {
 <alts; separator="\n">
}
```

```
>>

LL1StarBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
$this->setState(<choice.stateNumber>);
$this->errorHandler->sync($this);

<preamble;
 separator="\n">
while (<loopExpr>) {
 <alts; separator="\n">
 $this->setState(<choice.loopBackStateNumber>);
 $this->errorHandler->sync($this);
 <iteration>
}
>>

LL1PlusBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
$this->setState(<choice.blockStartStateNumber>); <! alt block decision !>
$this->errorHandler->sync($this);

<preamble; separator="\n">
do {
 <alts; separator="\n">
 $this->setState(<choice.stateNumber>); <! loopback/exit decision !>
 $this->errorHandler->sync($this);
 <iteration>
} while (<loopExpr>);
>>

// LL(*) stuff

AltBlock(choice, preamble, alts, error) ::= <<
$this->setState(<choice.stateNumber>);
$this->errorHandler->sync($this);
<if(choice.label)><labelref(choice.label)> = $this->input->LT(1);<endif>
<preamble; separator="\n">

switch ($this->getInterpreter()->adaptivePredict($this->input, <choice.decision>, $this->ctx)) {
 <alts:{alt |
case <i>:
   <alt>
break;}; separator="\n\n">
}
>>

OptionalBlock(choice,
 alts, error) ::= <<
$this->setState(<choice.stateNumber>);
```

```
$this->errorHandler->sync($this);

switch ($this->getInterpreter()->adaptivePredict($this->input, <choice.decision>, $this->ctx)) {
<alts:{alt |
   case <i><if(!choice.ast.greedy)>+1<endif>:
     <alt>
 break;}; separator="\n\n">
}
>>

StarBlock(choice, alts, sync, iteration) ::= <<
$this->setState(<choice.stateNumber>);
$this->errorHandler->sync($this);

$alt = $this->getInterpreter()->adaptivePredict($this->input, <choice.decision>, $this->ctx);

while ($alt !== <choice.exitAlt> && $alt !== ATN::INVALID_ALT_NUMBER) {
 if ($alt === 1<if(!choice.ast.greedy)>+1<endif>) {
  <iteration>
  <alts> <! should only be one !>
 }

 $this->setState(<choice.loopBackStateNumber>);
 $this->errorHandler->sync($this);

 $alt = $this->getInterpreter()->adaptivePredict($this->input, <choice.decision>, $this->ctx);
}
>>

PlusBlock(choice, alts, error) ::= <<
$this->setState(<choice.blockStartStateNumber>); <! alt block decision !>
$this->errorHandler->sync($this);

$alt
 = 1<if(!choice.ast.greedy)>+1<endif>;

do {
 switch ($alt) {
 <alts:{alt|
case <i><if(!choice.ast.greedy)>+1<endif>:
 <alt>
 break;}; separator="\n\n">
 default:
  <error>
 }

 $this->setState(<choice.loopBackStateNumber>); <! loopback/exit decision !>
 $this->errorHandler->sync($this);
```

```
 $alt = $this->getInterpreter()->adaptivePredict($this->input, <choice.decision>, $this->ctx);
} while ($alt !== <choice.exitAlt> && $alt !== ATN::INVALID_ALT_NUMBER);
>>

Sync(s) ::= "sync(<s.expecting.name>);"

ThrowNoViableAlt(t) ::= "throw new NoViableAltException($this);"

TestSetInline(s) ::= <<
<s.bitsets:{bits | <if(rest(rest(bits.tokens)))><bitsetBitfieldComparison(s, bits)><else><bitsetInlineComparison(s,
bits)><endif>}; separator=" || ">
>>

// Java language spec 15.19 - shift operators mask operands rather than overflow to 0... need range test
testShiftInRange(shiftAmount) ::= <<
((<shiftAmount>) & ~0x3f) === 0
>>

bitsetBitfieldComparison(s, bits) ::= <%
(<testShiftInRange({<offsetShiftVar(s.varName,
 bits.shift)>})> && ((1 \<\< <offsetShiftVar(s.varName, bits.shift)>) & <bits.calculated>) !== 0)
%>

isZero ::= [
"0":true,
default:false
]

offsetShiftVar(shiftAmount, offset) ::= <%
<if(!isZero.(offset))>($<shiftAmount> - <offset>)<else>$<shiftAmount><endif>
%>
offsetShiftConst(shiftAmount, offset) ::= <%
<if(!isZero.(offset))>(self::<shiftAmount> - <offset>)<else>self::<shiftAmount><endif>
%>

bitsetInlineComparison(s, bits) ::= <%
<bits.tokens:{t | $<s.varName> === self::<t.name>}; separator=" || ">
%>

cases(tokens) ::= <<
<tokens:{t | case self::<t.name>:}; separator="\n">
>>

InvokeRule(r, argExprsChunks) ::= <<
$this->setState(<r.stateNumber>);
<if(r.labels)><r.labels:{l | <labelref(l)> = }><endif>$this-><if(r.ast.options.p)>recursive<r.name;
format="cap"><else><r.name><endif>(<if(r.ast.options.p)><r.ast.options.p><if(argExprsChunks)>,<endif><endif>
```

```
<argExprsChunks>);
>>

MatchToken(m) ::= <<
$this->setState(<m.stateNumber>);
<if(m.labels)><m.labels:{l
 | <labelref(l)> = }><endif>$this->match(self::<m.name>);
>>

MatchSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, false)>"

MatchNotSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, true)>"

CommonSetStuff(m, expr, capture, invert) ::= <<
$this->setState(<m.stateNumber>);

<if(m.labels)><m.labels:{l | <labelref(l)> = }>$this->input->LT(1);<endif>
<capture>

if (<if(invert)>$<m.varName> \<= 0 || <else>!<endif>(<expr>)) {
    <if(m.labels)><m.labels:{l | <labelref(l)> = }><endif>$this->errorHandler->recoverInline($this);
} else {
 if ($this->input->LA(1) === Token::EOF) {
    $this->matchedEOF = true;
   }

 $this->errorHandler->reportMatch($this);
 $this->consume();
}
>>

Wildcard(w) ::= <<
$this->setState(<w.stateNumber>);
<if(w.labels)><w.labels:{l | <labelref(l)> = }><endif>$this->matchWildcard();
>>

// ACTION STUFF

Action(a, foo, chunks) ::= "<chunks>"

ArgAction(a, chunks) ::= "<chunks>"

SemPred(p, chunks, failChunks) ::= <<
$this->setState(<p.stateNumber>);

if
 (!(<chunks>)) {
   throw new FailedPredicateException($this, <p.predicate><if(failChunks)>, <failChunks><elseif(p.msg)>,
```

```
<p.msg><endif>);
}
>>

ExceptionClause(e, catchArg, catchAction) ::= <<
catch (<catchArg>) {
 <catchAction>
}
>>

// lexer actions are not associated with model objects

LexerSkipCommand()  ::= "$this->skip();"
LexerMoreCommand()  ::= "$this->more();"
LexerPopModeCommand() ::= "$this->popMode();"

LexerTypeCommand(arg, grammar)      ::= "$this->type = <arg>;"
LexerChannelCommand(arg, grammar)   ::= "$this->channel = <arg>;"
LexerModeCommand(arg, grammar)      ::= "$this->mode = <arg>;"
LexerPushModeCommand(arg, grammar)  ::= "$this->pushMode(<arg>);"

ActionText(t) ::= "<t.text>"
ActionTemplate(t) ::= "<t.st>"
ArgRef(a) ::= "$localContext-><a.name>"
LocalRef(a) ::= "$localContext-><a.name>"
RetValueRef(a) ::= "$localContext-><a.name>"
QRetValueRef(a) ::= "<ctx(a)>-><a.dict>-><a.name>"
/** How to translate $tokenLabel */
TokenRef(t) ::= "<ctx(t)>-><t.name>"
LabelRef(t)
 ::= "<ctx(t)>-><t.name>"
ListLabelRef(t) ::= "<ctx(t)>-><ListLabelName(t.name)>"
SetAttr(s,rhsChunks) ::= "<ctx(s)>-><s.name> = <rhsChunks>;"

TokenLabelType() ::= "<file.TokenLabelType; null={Token}>"
InputSymbolType() ::= "<file.InputSymbolType; null={Token}>"

TokenPropertyRef_text(t) ::= "(<ctx(t)>-><t.label> !== null ? <ctx(t)>-><t.label>->getText() : null)"
TokenPropertyRef_type(t) ::= "(<ctx(t)>-><t.label> !== null ? <ctx(t)>-><t.label>->getType() : 0)"
TokenPropertyRef_line(t) ::= "(<ctx(t)>-><t.label> !== null ? <ctx(t)>-><t.label>->getLine() : 0)"
TokenPropertyRef_pos(t) ::= "(<ctx(t)>-><t.label> !== null ? <ctx(t)>-><t.label>->getCharPositionInLine() : 0)"
TokenPropertyRef_channel(t) ::= "(<ctx(t)>-><t.label> !== null ? <ctx(t)>-><t.label>->getChannel() : 0)"
TokenPropertyRef_index(t) ::= "(<ctx(t)>-><t.label> !== null ? <ctx(t)>-><t.label>->getTokenIndex() : 0)"
TokenPropertyRef_int(t) ::= "(<ctx(t)>-><t.label> !== null ? (int) <ctx(t)>-><t.label>->getText()
 : 0)"

RulePropertyRef_start(r) ::= "(<ctx(r)>-><r.label> !== null ? (<ctx(r)>-><r.label>->start) : null)"
RulePropertyRef_stop(r)  ::= "(<ctx(r)>-><r.label> !== null ? (<ctx(r)>-><r.label>->stop) : null)"
```

```
RulePropertyRef_text(r)  ::= "(<ctx(r)>-><r.label> !== null ? $this->input->getTextByTokens(<ctx(r)>-><r.label>-
>start, <ctx(r)>-><r.label>->stop) : null)"
RulePropertyRef_ctx(r)  ::= "<ctx(r)>-><r.label>"
RulePropertyRef_parser(r)::= "\$this"

ThisRulePropertyRef_start(r) ::= "$localContext->start"
ThisRulePropertyRef_stop(r)  ::= "$localContext->stop"
ThisRulePropertyRef_text(r)  ::= "$this->input->getTextByTokens($localContext->start, $this->input->LT(-1))"
ThisRulePropertyRef_ctx(r)  ::= "$localContext"
ThisRulePropertyRef_parser(r)::= "$this"

NonLocalAttrRef(s)        ::= "\$this->getInvokingContext(<s.ruleIndex>)-><s.name>"
SetNonLocalAttr(s, rhsChunks) ::= "\$this->getInvokingContext(<s.ruleIndex>)-><s.name> = <rhsChunks>;"

AddToLabelList(a) ::= "<ctx(a.label)>-><a.listName>[]
 = <labelref(a.label)>;"

TokenDecl(t) ::= "<TokenLabelType()> $<t.name>"
TokenTypeDecl(t) ::= ""
TokenListDecl(t) ::= "array $<t.name> = []"
RuleContextDecl(r) ::= "<r.ctxName> $<r.name>"
RuleContextListDecl(rdecl) ::= "array $<rdecl.name> = []"
AttributeDecl(d) ::= "<d.type> $<d.name><if(d.initValue)> = <d.initValue><endif>"

PropertiesDecl(struct) ::= <<
<if(struct.tokenListDecls)>
 <struct.tokenListDecls : {d | /**
* @var array\<Token>|null $<d.name>
*/
public $<d.name>;}; separator="\n\n">
<endif>
<if(struct.tokenDecls)>
<if(struct.tokenListDecls)>

<endif>
 <struct.tokenDecls : {d | /**
* @var <TokenLabelType()>|null $<d.name>
*/
public $<d.name>;}; separator="\n\n">
<endif>
<if(struct.ruleContextDecls)>
<if(struct.tokenListDecls || struct.tokenDecls)>

<endif>
 <struct.ruleContextDecls : {d | /**
* @var <d.ctxName>|null $<d.name>
*/
public $<d.name>;}; separator="\n\n">
```

```
<endif>
<if(struct.ruleContextListDecls)>
<if(struct.tokenListDecls || struct.tokenDecls
 || struct.ruleContextDecls)>

<endif>
 <struct.ruleContextListDecls : {d | /**
* @var array\<<d.ctxName>\>|null $<d.name>
*/
public $<d.name>;}; separator="\n\n">
<endif>
<if(struct.attributeDecls)>
<if(struct.tokenListDecls || struct.tokenDecls || struct.ruleContextDecls || struct.ruleContextListDecls)>

<endif>
 <struct.attributeDecls : {d | /**
* @var <d.type><if(!d.initValue)>|null<endif> $<d.name>
*/
public $<d.name><if(d.initValue)> = <d.initValue><endif>;}; separator="\n\n">
<endif>

>>

ContextTokenGetterDecl(t) ::= <<
public function <t.name>(): ?TerminalNode
{
   return $this->getToken(<parser.name>::<t.name>, 0);
}
>>

ContextTokenListGetterDecl(t)  ::= <<
>>

ContextTokenListIndexedGetterDecl(t)  ::= <<
/**
* @return array\<TerminalNode>|TerminalNode|null
*/
public function <t.name>(?int $index = null)
{
 if ($index === null) {
  return $this->getTokens(<parser.name>::<t.name>);
 }

   return $this->getToken(<parser.name>::<t.name>, $index);
}
>>

ContextRuleGetterDecl(r)
```

```
      ::= <<
public function <r.name>(): ?<r.ctxName>
{
 return $this->getTypedRuleContext(<r.ctxName>::class, 0);
}
>>

ContextRuleListGetterDecl(r)   ::= <<
>>

ContextRuleListIndexedGetterDecl(r)   ::= <<
/**
* @return array\<<r.ctxName>\>|<r.ctxName>|null
*/
public function <r.name>(?int $index = null)
{
 if ($index === null) {
  return $this->getTypedRuleContexts(<r.ctxName>::class);
 }

   return $this->getTypedRuleContext(<r.ctxName>::class, $index);
}
>>

LexerRuleContext() ::= "RuleContext"

/**
* The rule context name is the rule followed by a suffix; e.g., r becomes rContext.
*/
RuleContextNameSuffix() ::= "Context"

ImplicitTokenLabel(tokenName) ::= "<tokenName>"
ImplicitRuleLabel(ruleName)   ::= "<ruleName>"
ImplicitSetLabel(id)    ::= "_tset<id>"
ListLabelName(label)    ::= "<label>"

CaptureNextToken(d) ::= "$<d.varName> = \$this->input->LT(1);"
CaptureNextTokenType(d) ::= "$<d.varName> = $this->input->LA(1);"

StructDecl(struct,ctorAttrs,attrs,getters,dispatchMethods,interfaces,extensionMembers,signatures)
 ::= <<
class <struct.name> extends
<if(contextSuperClass)><contextSuperClass><else>ParserRuleContext<endif><if(interfaces)> implements
<interfaces; separator=", "><endif>
{
<PropertiesDecl(struct)>
 public function __construct(?ParserRuleContext $parent, ?int $invokingState = null<ctorAttrs:{a | , ?<a> = null}>)
 {
```

```
  parent::__construct($parent, $invokingState);
<if(struct.ctorAttrs)>

  <struct.ctorAttrs:{a | $this-><a.name> = $<a.name> ?? $this-><a.name>;}; separator="\n">
<endif>
 }

 public function getRuleIndex(): int
 {
     return <parser.name>::RULE_<struct.derivedFromName>;
   }
<if(getters)>

   <getters:{g | <g>}; separator="\n\n">
<endif>
<if(struct.provideCopyFrom)> <! don't need copy unless we have subclasses !>
 public function copyFrom(ParserRuleContext $context): void
 {
  parent::copyFrom($context);

  <struct.attrs:{a | $this-><a.name> = $context-><a.name>;}; separator="\n">
 }
<endif>
<if(dispatchMethods)>

 <dispatchMethods;
 separator="\n\n">
<endif>
<if(extensionMembers)>

 <extensionMembers; separator="\n\n">
<endif>
}
>>

AltLabelStructDecl(struct,attrs,getters,dispatchMethods) ::= <<
class <struct.name> extends <struct.parentRule; format="cap">Context
{
<PropertiesDecl(struct)>
 public function __construct(<struct.parentRule; format="cap">Context $context)
 {
     parent::__construct($context);

     $this->copyFrom($context);
   }
<if(getters)>

   <getters:{g | <g>}; separator="\n\n">
```

```
<endif>
<if(dispatchMethods)>

 <dispatchMethods; separator="\n\n">
<endif>
}
>>

ListenerDispatchMethod(method) ::= <<
public function <if(method.isEnter)>enter<else>exit<endif>Rule(ParseTreeListener $listener): void
{
 if ($listener instanceof <parser.grammarName>Listener) {
    $listener-><if(method.isEnter)>enter<else>exit<endif><struct.derivedFromName; format="cap">($this);
   }
}
>>

VisitorDispatchMethod(method) ::= <<
public function accept(ParseTreeVisitor $visitor): mixed
{
 if ($visitor instanceof
 <parser.grammarName>Visitor) {
    return $visitor->visit<struct.derivedFromName; format="cap">($this);
   }

 return $visitor->visitChildren($this);
}
>>

/** If we don't know location of label def x, use this template */
labelref(x) ::= "<if(!x.isLocal)>$localContext-><endif><x.name>"

/** For any action chunk, what is correctly-typed context struct ptr? */
ctx(actionChunk) ::= "$localContext"

// used for left-recursive rules
recRuleAltPredicate(ruleName,opPrec)  ::= "\$this->precpred(\$this->ctx, <opPrec>)"

recRuleSetReturnAction(src,name)   ::= "\$<name> = \$<src>-><name>;"

recRuleSetStopToken()                ::= "$this->ctx->stop = $this->input->LT(-1);"

recRuleAltStartAction(ruleName, ctxName, label, isListLabel) ::= <<
$localContext = new Context\\<ctxName>Context($parentContext, $parentState);
<if(label)>
<if(isListLabel)>
$localContext-><label>[] = $previousContext;
<else>
```

```
$localContext-><label> = $previousContext;
<endif>
<endif>

$this->pushNewRecursionContext($localContext,
 $startState, self::RULE_<ruleName>);
>>

recRuleLabeledAltStartAction(ruleName, currentAltLabel, label, isListLabel) ::= <<
$localContext = new Context\\<currentAltLabel; format="cap">Context(new Context\\<ruleName;
format="cap">Context($parentContext, $parentState));
<if(label)>
<if(isListLabel)>
$localContext-><label>[] = $previousContext;
<else>
$localContext-><label> = $previousContext;
<endif>
<endif>

$this->pushNewRecursionContext($localContext, $startState, self::RULE_<ruleName>);
>>

recRuleReplaceContext(ctxName) ::= <<
$localContext = new Context\\<ctxName>Context($localContext);
$this->ctx = $localContext;
$previousContext = $localContext;
>>

recRuleSetPrevCtx() ::= <<
if ($this->getParseListeners() !== null) {
   $this->triggerExitRuleEvent();
}

$previousContext = $localContext;
>>


LexerFile(lexerFile, lexer, namedActions) ::= <<
<fileHeader(lexerFile.grammarFileName, lexerFile.ANTLRVersion)>
<lexer>
>>

Lexer(lexer, atn, actionFuncs, sempredFuncs, superClass)
 ::= <<
namespace<if(lexerFile.genPackage)> <lexerFile.genPackage><endif> {
<if(namedActions.header)><namedActions.header><endif>
 use Antlr\\Antlr4\\Runtime\\Atn\\ATNDeserializer;
 use Antlr\\Antlr4\\Runtime\\Atn\\LexerATNSimulator;
```

```
use Antlr\\Antlr4\\Runtime\\Lexer;
use Antlr\\Antlr4\\Runtime\\CharStream;
use Antlr\\Antlr4\\Runtime\\PredictionContexts\\PredictionContextCache;
use Antlr\\Antlr4\\Runtime\\RuleContext;
use Antlr\\Antlr4\\Runtime\\Atn\\ATN;
use Antlr\\Antlr4\\Runtime\\Dfa\\DFA;
use Antlr\\Antlr4\\Runtime\\Vocabulary;
use Antlr\\Antlr4\\Runtime\\RuntimeMetaData;
use Antlr\\Antlr4\\Runtime\\VocabularyImpl;
<if(namedActions.definitions)><namedActions.definitions><endif>

final class <lexer.name> extends <superClass; null="Lexer">
{
 <if(lexer.tokens)>
 public const <lexer.tokens:{k | <k> = <lexer.tokens.(k)>}; separator=", ", wrap, anchor>;
 <endif>

 <if(lexer.escapedChannels)>
 public const <lexer.escapedChannels:{c | <c> = <lexer.escapedChannels.(c)>};
separator=", ", wrap, anchor>;
 <endif>

 <if(rest(lexer.escapedModeNames))>
 public const <rest(lexer.escapedModeNames):{m | <m>=<i>}; separator=", ", wrap, anchor>;
 <endif>

 /**
  * @var array\<string>
  */
 public const CHANNEL_NAMES = [
  'DEFAULT_TOKEN_CHANNEL', 'HIDDEN'<if (lexer.channelNames)>, <lexer.channelNames:{c| '<c>'};
separator=", ", wrap, anchor><endif>
 ];

 /**
  * @var array\<string>
  */
 public const MODE_NAMES = [
  <lexer.modes:{m| '<m>'}; separator=", ", wrap, anchor>
 ];

 /**
  * @var array\<string>
  */
 public const RULE_NAMES = [
  <lexer.ruleNames:{r | '<r>'}; separator=", ", wrap, anchor>
 ];
```

```
  <vocabulary(lexer.literalNames, lexer.symbolicNames)>

  <atn>
  protected static $atn;
  protected static $decisionToDFA;
  protected static $sharedContextCache;
<if(namedActions.members)>

  <namedActions.members>
<endif>

  public function __construct(CharStream $input)
  {
   parent::__construct($input);

   self::initialize();

   $this->interp
 = new LexerATNSimulator($this, self::$atn, self::$decisionToDFA, self::$sharedContextCache);
  }

  private static function initialize(): void
  {
   if (self::$atn !== null) {
    return;
   }

   RuntimeMetaData::checkVersion('<lexerFile.ANTLRVersion>', RuntimeMetaData::VERSION);

   $atn = (new ATNDeserializer())->deserialize(self::SERIALIZED_ATN);

   $decisionToDFA = [];
   for ($i = 0, $count = $atn->getNumberOfDecisions(); $i \< $count; $i++) {
    $decisionToDFA[] = new DFA($atn->getDecisionState($i), $i);
   }

   self::$atn = $atn;
   self::$decisionToDFA = $decisionToDFA;
   self::$sharedContextCache = new PredictionContextCache();
  }

  public static function vocabulary(): Vocabulary
  {
   static $vocabulary;

   return $vocabulary = $vocabulary ?? new VocabularyImpl(self::LITERAL_NAMES, self::SYMBOLIC_NAMES);
  }
```

```
 public function getGrammarFileName(): string
 {
  return '<lexer.grammarFileName>';
 }

 public function getRuleNames(): array
 {
  return
self::RULE_NAMES;
 }

 public function getSerializedATN(): array
 {
  return self::SERIALIZED_ATN;
 }

 /**
  * @return array\<string>
  */
 public function getChannelNames(): array
 {
  return self::CHANNEL_NAMES;
 }

 /**
  * @return array\<string>
  */
 public function getModeNames(): array
 {
  return self::MODE_NAMES;
 }

 public function getATN(): ATN
 {
  return self::$atn;
 }

 public function getVocabulary(): Vocabulary
 {
  return self::vocabulary();
 }
 <dumpActions(lexer, "", actionFuncs, sempredFuncs)>
}
}
>>

SerializedATN(model) ::= <<
private const SERIALIZED_ATN =
```

```
 [<model.serialized: {s | <s>}; separator=", ", wrap={<\n>    }>];
>>

/**
* Using a type to init value map, try to init a type; if not in table
* must be an object, default value is `null`.
*/
initValue(typeName) ::= <<
<phpTypeInitMap.(typeName)>
>>

codeFileExtension() ::= ".php"
```

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/codegen/PHP/PHP.stg
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```
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*/
```

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* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ATNBuilder.java
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```
/*
```

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*/

lexer grammar ActionSplitter;

options { filter=true; }

@header {
package org.antlr.v4.parse;
import org.antlr.v4.tool.*;
import org.antlr.v4.tool.ast.*;
}

@members {
ActionSplitterListener delegate;

public ActionSplitter(CharStream input, ActionSplitterListener delegate) {
   this(input, new RecognizerSharedState());
   this.delegate = delegate;
}
```

```
/** force filtering
 (and return tokens). triggers all above actions. */
public List<Token> getActionTokens() {
   List<Token> chunks = new ArrayList<Token>();
   Token t = nextToken();
   while ( t.getType()!=Token.EOF ) {
       chunks.add(t);
       t = nextToken();
   }
   return chunks;
}

private boolean isIDStartChar(int c) {
 return c == '_' || Character.isLetter(c);
}
}

// ignore comments right away

COMMENT
   :   '/*' ( options {greedy=false;} : . )* '*/' {delegate.text($text);}
   ;

LINE_COMMENT
   : '//' ~('\n'|'\r')* '\r'? '\n' {delegate.text($text);}
   ;

SET_NONLOCAL_ATTR
 : '$' x=ID '::' y=ID WS? '=' expr=ATTR_VALUE_EXPR ';'
  {
  delegate.setNonLocalAttr($text, $x, $y, $expr);
  }
 ;

NONLOCAL_ATTR
 : '$' x=ID '::' y=ID {delegate.nonLocalAttr($text, $x, $y);}
 ;

QUALIFIED_ATTR
 : '$' x=ID '.' y=ID {input.LA(1)!='('}? {delegate.qualifiedAttr($text, $x, $y);}
 ;

SET_ATTR
 : '$' x=ID WS? '=' expr=ATTR_VALUE_EXPR ';'
  {
  delegate.setAttr($text, $x, $expr);
  }
 ;
```

```
ATTR
 : '$'
 x=ID {delegate.attr($text, $x);}
 ;

// Anything else is just random text
TEXT
@init {StringBuilder buf = new StringBuilder();}
@after {delegate.text(buf.toString());}
 : ( c=~('\\'| '$') {buf.append((char)$c);}
  | '\\$' {buf.append('$');}
  | '\\' c=~('$') {buf.append('\\').append((char)$c);}
  | {!isIDStartChar(input.LA(2))}? => '$' {buf.append('$');}
  )+
 ;

fragment
ID  : ('a'..'z'|'A'..'Z'|'_') ('a'..'z'|'A'..'Z'|'0'..'9'|'_')*
   ;

/** Don't allow an = as first char to prevent $x == 3; kind of stuff. */
fragment
ATTR_VALUE_EXPR
 : ~'=' (~';')*
 ;

fragment
WS : (' '|'\t'|'\n'|'\r')+
 ;
```

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* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ActionSplitter.g
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 */

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*/

javaTypeInitMap ::= [
 "int":"0",
 "long":"0",
 "float":"0.0f",
 "double":"0.0",
 "boolean":"false",
 "byte":"0",
 "short":"0",
 "char":"0",
 default:"null" // anything other than a primitive type is an object
]

// args must be <object-model-object>, <fields-resulting-in-STs>

ParserFile(file, parser, namedActions, contextSuperClass) ::= <<
<fileHeader(file.grammarFileName,
 file.ANTLRVersion)>
<if(file.genPackage)>
package <file.genPackage>;
<endif>
<namedActions.header>
import org.antlr.v4.runtime.atn.*;
import org.antlr.v4.runtime.dfa.DFA;
import org.antlr.v4.runtime.*;
import org.antlr.v4.runtime.misc.*;
import org.antlr.v4.runtime.tree.*;
import java.util.List;
import java.util.Iterator;
import java.util.ArrayList;
```

```
<parser>
>>

ListenerFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
package <file.genPackage>;
<endif>
<header>
import org.antlr.v4.runtime.tree.ParseTreeListener;

/**
* This interface defines a complete listener for a parse tree produced by
* {@link <file.parserName>}.
*/
public interface <file.grammarName>Listener extends ParseTreeListener {
 <file.listenerNames:{lname |
/**
<if(file.listenerLabelRuleNames.(lname))>
* Enter a parse tree produced by the {@code <lname>\}
* labeled alternative in {@link <file.parserName>#<file.listenerLabelRuleNames.(lname)>\}.
<else>
 * Enter a parse tree produced by {@link <file.parserName>#<lname>\}.
<endif>
* @param ctx the parse tree
*/
void enter<lname; format="cap">(<file.parserName>.<lname; format="cap">Context ctx);
/**
<if(file.listenerLabelRuleNames.(lname))>
* Exit a parse tree produced by the {@code <lname>\}
* labeled alternative in {@link <file.parserName>#<file.listenerLabelRuleNames.(lname)>\}.
<else>
* Exit a parse tree produced by {@link <file.parserName>#<lname>\}.
<endif>
* @param ctx the parse tree
*/
void exit<lname; format="cap">(<file.parserName>.<lname; format="cap">Context ctx);}; separator="\n">
}
>>

BaseListenerFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
package <file.genPackage>;
<endif>
<header>
```

```
import org.antlr.v4.runtime.ParserRuleContext;
import org.antlr.v4.runtime.tree.ErrorNode;
import org.antlr.v4.runtime.tree.TerminalNode;

/**
* This class provides an empty implementation of {@link <file.grammarName>Listener},
 * which can be extended to create a listener which only needs to handle a subset
* of the available methods.
*/
@SuppressWarnings("CheckReturnValue")
public class <file.grammarName>BaseListener implements <file.grammarName>Listener {
 <file.listenerNames:{lname |
/**
* {@inheritDoc\}
*
* \<p>The default implementation does nothing.\</p>
*/
@Override public void enter<lname; format="cap">(<file.parserName>.<lname; format="cap">Context ctx) { \}
/**
* {@inheritDoc\}
*
* \<p>The default implementation does nothing.\</p>
*/
@Override public void exit<lname; format="cap">(<file.parserName>.<lname; format="cap">Context ctx) { \}};
separator="\n">

 /**
  * {@inheritDoc\}
  *
  * \<p>The default implementation does nothing.\</p>
  */
 @Override public void enterEveryRule(ParserRuleContext ctx) { }
 /**
  * {@inheritDoc\}
  *
  * \<p>The default implementation does nothing.\</p>
  */
 @Override public void exitEveryRule(ParserRuleContext ctx) { }
 /**
  *
 {@inheritDoc\}
  *
  * \<p>The default implementation does nothing.\</p>
  */
 @Override public void visitTerminal(TerminalNode node) { }
 /**
  * {@inheritDoc\}
  *
```

```
  * \<p>The default implementation does nothing.\</p>
  */
 @Override public void visitErrorNode(ErrorNode node) { }
}
>>

VisitorFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
package <file.genPackage>;
<endif>
<header>
import org.antlr.v4.runtime.tree.ParseTreeVisitor;

/**
* This interface defines a complete generic visitor for a parse tree produced
* by {@link <file.parserName>}.
*
* @param \<T> The return type of the visit operation. Use {@link Void} for
* operations with no return type.
*/
public interface <file.grammarName>Visitor\<T> extends ParseTreeVisitor\<T> {
 <file.visitorNames:{lname |
/**
<if(file.visitorLabelRuleNames.(lname))>
* Visit a parse tree produced by the {@code <lname>\}
* labeled alternative in {@link <file.parserName>#<file.visitorLabelRuleNames.(lname)>\}.
<else>
 * Visit a parse tree produced by {@link <file.parserName>#<lname>\}.
<endif>
* @param ctx the parse tree
* @return the visitor result
*/
T visit<lname; format="cap">(<file.parserName>.<lname; format="cap">Context ctx);}; separator="\n">
}
>>

BaseVisitorFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
package <file.genPackage>;
<endif>
<header>
import org.antlr.v4.runtime.tree.AbstractParseTreeVisitor;

/**
* This class provides an empty implementation of {@link <file.grammarName>Visitor},
* which can be extended to create a visitor which only needs to handle a subset
```

```
* of the available methods.
*
* @param \<T> The return type of the visit operation. Use {@link Void} for
* operations with no return type.
*/
@SuppressWarnings("CheckReturnValue")
public class <file.grammarName>BaseVisitor\<T> extends AbstractParseTreeVisitor\<T> implements
<file.grammarName>Visitor\<T>
 {
 <file.visitorNames:{lname |
/**
* {@inheritDoc\}
*
* \<p>The default implementation returns the result of calling
* {@link #visitChildren\} on {@code ctx\}.\</p>
*/
@Override public T visit<lname; format="cap">(<file.parserName>.<lname; format="cap">Context ctx) { return
visitChildren(ctx); \}}; separator="\n">
}
>>

fileHeader(grammarFileName, ANTLRVersion) ::= <<
// Generated from <grammarFileName> by ANTLR <ANTLRVersion>
>>

Parser(parser, funcs, atn, sempredFuncs, superClass) ::= <<
<Parser_(ctor="parser_ctor", ...)>
>>

Parser_(parser, funcs, atn, sempredFuncs, ctor, superClass) ::= <<
@SuppressWarnings({"all", "warnings", "unchecked", "unused", "cast", "CheckReturnValue"})
public class <parser.name> extends <superClass; null="Parser"> {
 static { RuntimeMetaData.checkVersion("<file.ANTLRVersion>", RuntimeMetaData.VERSION); }

 protected static final DFA[] _decisionToDFA;
 protected static final PredictionContextCache _sharedContextCache =
  new PredictionContextCache();
 <if(parser.tokens)>
 public
 static final int
  <parser.tokens:{k | <k>=<parser.tokens.(k)>}; separator=", ", wrap, anchor>;
 <endif>
 <if(parser.rules)>
 public static final int
  <parser.rules:{r | RULE_<r.name> = <r.index>}; separator=", ", wrap, anchor>;
 <endif>
 private static String[] makeRuleNames() {
  return new String[] {
```

```
  <parser.ruleNames:{r | "<r>"}; separator=", ", wrap, anchor>
 };
 }
 public static final String[] ruleNames = makeRuleNames();

 <vocabulary(parser.literalNames, parser.symbolicNames)>

 @Override
 public String getGrammarFileName() { return "<parser.grammarFileName>"; }

 @Override
 public String[] getRuleNames() { return ruleNames; }

 @Override
 public String getSerializedATN() { return _serializedATN; }

 @Override
 public ATN getATN() { return _ATN; }

 <namedActions.members>
 <parser:(ctor)()>
 <funcs; separator="\n">

<if(sempredFuncs)>
 public boolean sempred(RuleContext _localctx, int ruleIndex, int predIndex) {
  switch (ruleIndex) {
  <parser.sempredFuncs.values:{f|
case
 <f.ruleIndex>:
 return <f.name>_sempred((<f.ctxType>)_localctx, predIndex);}; separator="\n">
  }
  return true;
 }
 <sempredFuncs.values; separator="\n">
<endif>

 <atn>
}
>>

vocabulary(literalNames, symbolicNames) ::= <<
private static String[] makeLiteralNames() {
 return new String[] {
  <literalNames:{t | <t>}; null="null", separator=", ", wrap, anchor>
 };
}
private static final String[] _LITERAL_NAMES = makeLiteralNames();
private static String[] makeSymbolicNames() {
```

```
 return new String[] {
  <symbolicNames:{t | <t>}; null="null", separator=", ", wrap, anchor>
 };
}
private static final String[] _SYMBOLIC_NAMES = makeSymbolicNames();
public static final Vocabulary VOCABULARY = new VocabularyImpl(_LITERAL_NAMES,
_SYMBOLIC_NAMES);

/**
* @deprecated Use {@link #VOCABULARY} instead.
*/
@Deprecated
public static final String[] tokenNames;
static {
 tokenNames = new String[_SYMBOLIC_NAMES.length];
 for (int i = 0; i \< tokenNames.length; i++) {
  tokenNames[i]
 = VOCABULARY.getLiteralName(i);
  if (tokenNames[i] == null) {
   tokenNames[i] = VOCABULARY.getSymbolicName(i);
  }

  if (tokenNames[i] == null) {
   tokenNames[i] = "\<INVALID>";
  }
 }
}

@Override
@Deprecated
public String[] getTokenNames() {
 return tokenNames;
}

@Override

public Vocabulary getVocabulary() {
 return VOCABULARY;
}
>>

dumpActions(recog, argFuncs, actionFuncs, sempredFuncs) ::= <<
<if(actionFuncs)>
@Override
public void action(RuleContext _localctx, int ruleIndex, int actionIndex) {
 switch (ruleIndex) {
 <recog.actionFuncs.values:{f|
case <f.ruleIndex>:
```

```
 <f.name>_action((<f.ctxType>)_localctx, actionIndex);
 break;}; separator="\n">
 }
}
<actionFuncs.values; separator="\n">
<endif>
<if(sempredFuncs)>
@Override
public boolean sempred(RuleContext _localctx, int ruleIndex, int predIndex) {
 switch (ruleIndex) {
 <recog.sempredFuncs.values:{f|
case <f.ruleIndex>:
 return <f.name>_sempred((<f.ctxType>)_localctx, predIndex);}; separator="\n">
 }
 return
 true;
}
<sempredFuncs.values; separator="\n">
<endif>
>>

parser_ctor(p) ::= <<
public <p.name>(TokenStream input) {
 super(input);
 _interp = new ParserATNSimulator(this,_ATN,_decisionToDFA,_sharedContextCache);
}
>>

/* This generates a private method since the actionIndex is generated, making an
* overriding implementation impossible to maintain.
*/
RuleActionFunction(r, actions) ::= <<
private void <r.name>_action(<r.ctxType> _localctx, int actionIndex) {
 switch (actionIndex) {
 <actions:{index|
case <index>:
 <actions.(index)>
 break;}; separator="\n">
 }
}
>>

/* This generates a private method since the predIndex is generated, making an
* overriding implementation impossible to maintain.
*/
RuleSempredFunction(r, actions) ::= <<
private boolean <r.name>_sempred(<r.ctxType> _localctx, int predIndex) {
 switch (predIndex) {
```

```
 <actions:{index|
case <index>:
 return <actions.(index)>;}; separator="\n">
 }
 return true;
}
>>

RuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,namedActions,finallyAction,postamble,exceptions)
 ::= <<

<ruleCtx>
<altLabelCtxs:{l | <altLabelCtxs.(l)>}; separator="\n">

<if(currentRule.modifiers)><currentRule.modifiers:{f | <f> }><else>public final <endif><currentRule.ctxType>
<currentRule.escapedName>(<args; separator=",">) throws RecognitionException {
 <currentRule.ctxType> _localctx = new <currentRule.ctxType>(_ctx, getState()<currentRule.args:{a | ,
<a.escapedName>}>);
 enterRule(_localctx, <currentRule.startState>, RULE_<currentRule.name>);
 <namedActions.init>
 <locals; separator="\n">
 try {
<if(currentRule.hasLookaheadBlock)>
  int _alt;
<endif>
  <code>
  <postamble; separator="\n">
  <namedActions.after>
 }
 <if(exceptions)>
 <exceptions; separator="\n">
 <else>
 catch (RecognitionException re) {
  _localctx.exception = re;
  _errHandler.reportError(this, re);
  _errHandler.recover(this, re);
 }
 <endif>
 finally {
  <finallyAction>
  exitRule();
 }
 return _localctx;
}
>>

LeftRecursiveRuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,
 namedActions,finallyAction,postamble)
```

```
 ::=
<<

<ruleCtx>
<altLabelCtxs:{l | <altLabelCtxs.(l)>}; separator="\n">

<if(currentRule.modifiers)><currentRule.modifiers:{f | <f> }><else>public final <endif><currentRule.ctxType>
<currentRule.escapedName>(<args; separator=", ">) throws RecognitionException {
 return <currentRule.escapedName>(0<currentRule.args:{a | , <a.escapedName>}>);
}

private <currentRule.ctxType> <currentRule.escapedName>(int _p<args:{a | , <a>}>) throws RecognitionException
{
 ParserRuleContext _parentctx = _ctx;
 int _parentState = getState();
 <currentRule.ctxType> _localctx = new <currentRule.ctxType>(_ctx, _parentState<currentRule.args:{a | ,
<a.escapedName>}>);
 <currentRule.ctxType> _prevctx = _localctx;
 int _startState = <currentRule.startState>;
 enterRecursionRule(_localctx, <currentRule.startState>, RULE_<currentRule.name>, _p);
 <namedActions.init>
 <locals; separator="\n">
 try {
<if(currentRule.hasLookaheadBlock)>
  int
 _alt;
<endif>
  <code>
  <postamble; separator="\n">
  <namedActions.after>
 }
 catch (RecognitionException re) {
  _localctx.exception = re;
  _errHandler.reportError(this, re);
  _errHandler.recover(this, re);
 }
 finally {
  <finallyAction>
  unrollRecursionContexts(_parentctx);
 }
 return _localctx;
}
>>

CodeBlockForOuterMostAlt(currentOuterMostAltCodeBlock, locals, preamble, ops) ::= <<
<if(currentOuterMostAltCodeBlock.altLabel)>_localctx = new <currentOuterMostAltCodeBlock.altLabel;
format="cap">Context(_localctx);<endif>
enterOuterAlt(_localctx, <currentOuterMostAltCodeBlock.alt.altNum>);
```

```
<CodeBlockForAlt(currentAltCodeBlock=currentOuterMostAltCodeBlock, ...)>
>>

CodeBlockForAlt(currentAltCodeBlock, locals, preamble, ops) ::= <<
{
<locals; separator="\n">
<preamble; separator="\n">
<ops; separator="\n">
}
>>

LL1AltBlock(choice, preamble, alts, error) ::= <<
setState(<choice.stateNumber>);
_errHandler.sync(this);
<if(choice.label)><labelref(choice.label)> = _input.LT(1);<endif>
<preamble;
 separator="\n">
switch (_input.LA(1)) {
<choice.altLook,alts:{look,alt| <cases(tokens=look)>
 <alt>
 break;}; separator="\n">
default:
 <error>
}
>>

LL1OptionalBlock(choice, alts, error) ::= <<
setState(<choice.stateNumber>);
_errHandler.sync(this);
switch (_input.LA(1)) {
<choice.altLook,alts:{look,alt| <cases(tokens=look)>
 <alt>
 break;}; separator="\n">
default:
 break;
}
>>

LL1OptionalBlockSingleAlt(choice, expr, alts, preamble, error, followExpr) ::= <<
setState(<choice.stateNumber>);
_errHandler.sync(this);
<preamble; separator="\n">
if (<expr>) {
 <alts; separator="\n">
}
<!else if ( !(<followExpr>) ) <error>!>
>>
```

```
LL1StarBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
setState(<choice.stateNumber>);
_errHandler.sync(this);
<preamble; separator="\n">
while (<loopExpr>) {
 <alts; separator="\n">
 setState(<choice.loopBackStateNumber>);
 _errHandler.sync(this);
 <iteration>
}
>>

LL1PlusBlockSingleAlt(choice, loopExpr, alts, preamble, iteration)
 ::= <<
setState(<choice.blockStartStateNumber>); <! alt block decision !>
_errHandler.sync(this);
<preamble; separator="\n">
do {
 <alts; separator="\n">
 setState(<choice.stateNumber>); <! loopback/exit decision !>
 _errHandler.sync(this);
 <iteration>
} while ( <loopExpr> );
>>

// LL(*) stuff

AltBlock(choice, preamble, alts, error) ::= <<
setState(<choice.stateNumber>);
_errHandler.sync(this);
<if(choice.label)><labelref(choice.label)> = _input.LT(1);<endif>
<preamble; separator="\n">
switch ( getInterpreter().adaptivePredict(_input,<choice.decision>,_ctx) ) {
<alts:{alt |
case <i>:
 <alt>
 break;}; separator="\n">
}
>>

OptionalBlock(choice, alts, error) ::= <<
setState(<choice.stateNumber>);
_errHandler.sync(this);
switch ( getInterpreter().adaptivePredict(_input,<choice.decision>,_ctx) ) {
<alts:{alt |
case <i><if(!choice.ast.greedy)>+1<endif>:
 <alt>
 break;}; separator="\n">
```

```
}
>>

StarBlock(choice, alts, sync, iteration) ::= <<
setState(<choice.stateNumber>);
_errHandler.sync(this);
_alt
 = getInterpreter().adaptivePredict(_input,<choice.decision>,_ctx);
while ( _alt!=<choice.exitAlt> && _alt!=org.antlr.v4.runtime.atn.ATN.INVALID_ALT_NUMBER ) {
 if ( _alt==1<if(!choice.ast.greedy)>+1<endif> ) {
  <iteration>
  <alts> <! should only be one !>
 }
 setState(<choice.loopBackStateNumber>);
 _errHandler.sync(this);
 _alt = getInterpreter().adaptivePredict(_input,<choice.decision>,_ctx);
}
>>

PlusBlock(choice, alts, error) ::= <<
setState(<choice.blockStartStateNumber>); <! alt block decision !>
_errHandler.sync(this);
_alt = 1<if(!choice.ast.greedy)>+1<endif>;
do {
 switch (_alt) {
 <alts:{alt|
case <i><if(!choice.ast.greedy)>+1<endif>:
 <alt>
 break;}; separator="\n">
 default:
  <error>
 }
 setState(<choice.loopBackStateNumber>); <! loopback/exit decision !>
 _errHandler.sync(this);
 _alt = getInterpreter().adaptivePredict(_input,<choice.decision>,_ctx);
} while ( _alt!=<choice.exitAlt> && _alt!=org.antlr.v4.runtime.atn.ATN.INVALID_ALT_NUMBER );
>>

Sync(s)
 ::= "sync(<s.expecting.name>);"

ThrowNoViableAlt(t) ::= "throw new NoViableAltException(this);"

TestSetInline(s) ::= <<
<s.bitsets:{bits | <if(rest(rest(bits.tokens)))><bitsetBitfieldComparison(s, bits)><else><bitsetInlineComparison(s,
bits)><endif>}; separator=" || ">
>>
```

```
// Java language spec 15.19 - shift operators mask operands rather than overflow to 0... need range test
testShiftInRange(shiftAmount) ::= <<
((<shiftAmount>) & ~0x3f) == 0
>>

bitsetBitfieldComparison(s, bits) ::= <%
(<testShiftInRange({<offsetShift(s.varName, bits.shift)>})> && ((1L \<\< <offsetShift(s.varName, bits.shift)>) &
<bits.calculated>L) != 0)
%>

isZero ::= [
"0":true,
default:false
]

offsetShift(shiftAmount, offset) ::= <%
<if(!isZero.(offset))>(<shiftAmount> - <offset>)<else><shiftAmount><endif>
%>

bitsetInlineComparison(s, bits) ::= <%
<bits.tokens:{t | <s.varName>==<t.name>}; separator=" || ">
%>

cases(tokens) ::= <<
<tokens:{t | case <t.name>:}; separator="\n">
>>

InvokeRule(r, argExprsChunks)
 ::= <<
setState(<r.stateNumber>);
<if(r.labels)><r.labels:{l | <labelref(l)> =
}><endif><r.escapedName>(<if(r.ast.options.p)><r.ast.options.p><if(argExprsChunks)>,<endif><endif><argExprs
Chunks>);
>>

MatchToken(m) ::= <<
setState(<m.stateNumber>);
<if(m.labels)><m.labels:{l | <labelref(l)> = }><endif>match(<m.escapedName>);
>>

MatchSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, false)>"

MatchNotSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, true)>"

CommonSetStuff(m, expr, capture, invert) ::= <<
setState(<m.stateNumber>);
<if(m.labels)><m.labels:{l | <labelref(l)> = }>_input.LT(1);<endif>
<capture>
```

```
if ( <if(invert)><m.varName> \<= 0 || <else>!<endif>(<expr>) ) {
 <if(m.labels)><m.labels:{l | <labelref(l)> = (Token)}><endif>_errHandler.recoverInline(this);
}
else {
 if ( _input.LA(1)==Token.EOF ) matchedEOF = true;
 _errHandler.reportMatch(this);
 consume();
}
>>

Wildcard(w) ::= <<
setState(<w.stateNumber>);
<if(w.labels)><w.labels:{l | <labelref(l)> =
 }><endif>matchWildcard();
>>

// ACTION STUFF

Action(a, foo, chunks) ::= "<chunks>"

ArgAction(a, chunks) ::= "<chunks>"

SemPred(p, chunks, failChunks) ::= <<
setState(<p.stateNumber>);
if (!(<chunks>)) throw new FailedPredicateException(this, <p.predicate><if(failChunks)>,
<failChunks><elseif(p.msg)>, <p.msg><endif>);
>>

ExceptionClause(e, catchArg, catchAction) ::= <<
catch (<catchArg>) {
 <catchAction>
}
>>

// lexer actions are not associated with model objects

LexerSkipCommand()  ::= "skip();"
LexerMoreCommand()  ::= "more();"
LexerPopModeCommand() ::= "popMode();"

LexerTypeCommand(arg, grammar)      ::= "_type = <arg>;"
LexerChannelCommand(arg, grammar)   ::= "_channel = <arg>;"
LexerModeCommand(arg, grammar)      ::= "_mode = <arg>;"
LexerPushModeCommand(arg, grammar)  ::= "pushMode(<arg>);"

ActionText(t) ::= "<t.text>"
ActionTemplate(t) ::= "<t.st>"
ArgRef(a) ::= "_localctx.<a.escapedName>"
```

```
LocalRef(a) ::= "_localctx.<a.escapedName>"
RetValueRef(a) ::= "_localctx.<a.escapedName>"
QRetValueRef(a)
 ::= "<ctx(a)>.<a.dict>.<a.escapedName>"
/** How to translate $tokenLabel */
TokenRef(t) ::= "<ctx(t)>.<t.escapedName>"
LabelRef(t) ::= "<ctx(t)>.<t.escapedName>"
ListLabelRef(t) ::= "<ctx(t)>.<ListLabelName(t.escapedName)>"
SetAttr(s,rhsChunks) ::= "<ctx(s)>.<s.escapedName> = <rhsChunks>;"

TokenLabelType() ::= "<file.TokenLabelType; null={Token}>"
InputSymbolType() ::= "<file.InputSymbolType; null={Token}>"

TokenPropertyRef_text(t) ::= "(<ctx(t)>.<t.label>!=null?<ctx(t)>.<t.label>.getText():null)"
TokenPropertyRef_type(t) ::= "(<ctx(t)>.<t.label>!=null?<ctx(t)>.<t.label>.getType():0)"
TokenPropertyRef_line(t) ::= "(<ctx(t)>.<t.label>!=null?<ctx(t)>.<t.label>.getLine():0)"
TokenPropertyRef_pos(t) ::= "(<ctx(t)>.<t.label>!=null?<ctx(t)>.<t.label>.getCharPositionInLine():0)"
TokenPropertyRef_channel(t) ::= "(<ctx(t)>.<t.label>!=null?<ctx(t)>.<t.label>.getChannel():0)"
TokenPropertyRef_index(t) ::= "(<ctx(t)>.<t.label>!=null?<ctx(t)>.<t.label>.getTokenIndex():0)"
TokenPropertyRef_int(t)
 ::= "(<ctx(t)>.<t.label>!=null?Integer.valueOf(<ctx(t)>.<t.label>.getText()):0)"

RulePropertyRef_start(r) ::= "(<ctx(r)>.<r.label>!=null?(<ctx(r)>.<r.label>.start):null)"
RulePropertyRef_stop(r)  ::= "(<ctx(r)>.<r.label>!=null?(<ctx(r)>.<r.label>.stop):null)"
RulePropertyRef_text(r)  ::=
"(<ctx(r)>.<r.label>!=null?_input.getText(<ctx(r)>.<r.label>.start,<ctx(r)>.<r.label>.stop):null)"
RulePropertyRef_ctx(r)  ::= "<ctx(r)>.<r.label>"
RulePropertyRef_parser(r)  ::= "this"

ThisRulePropertyRef_start(r) ::= "_localctx.start"
ThisRulePropertyRef_stop(r)  ::= "_localctx.stop"
ThisRulePropertyRef_text(r)  ::= "_input.getText(_localctx.start, _input.LT(-1))"
ThisRulePropertyRef_ctx(r)  ::= "_localctx"
ThisRulePropertyRef_parser(r)  ::= "this"

NonLocalAttrRef(s)   ::= "((<s.ruleName;
format=\"cap\">Context)getInvokingContext(<s.ruleIndex>)).<s.escapedName>"
SetNonLocalAttr(s, rhsChunks)   ::=
 "((<s.ruleName; format=\"cap\">Context)getInvokingContext(<s.ruleIndex>)).<s.escapedName>
 = <rhsChunks>;"

AddToLabelList(a) ::= "<ctx(a.label)>.<a.listName>.add(<labelref(a.label)>);"

TokenDecl(t) ::= "<TokenLabelType()> <t.escapedName>"
TokenTypeDecl(t) ::= "int <t.escapedName>;"
TokenListDecl(t) ::= "List\<Token> <t.escapedName> = new ArrayList\<Token>()"
RuleContextDecl(r) ::= "<r.ctxName> <r.escapedName>"
RuleContextListDecl(rdecl) ::= "List\<<rdecl.ctxName>> <rdecl.escapedName> = new
```

```
ArrayList\<<rdecl.ctxName>>()"

ContextTokenGetterDecl(t)      ::=
   "public TerminalNode <t.name>() { return getToken(<parser.name>.<t.name>, 0); }"
ContextTokenListGetterDecl(t)  ::=
   "public List\<TerminalNode> <t.name>() { return getTokens(<parser.name>.<t.name>); }"
ContextTokenListIndexedGetterDecl(t)  ::= <<
public TerminalNode <t.name>(int i) {
 return getToken(<parser.name>.<t.name>, i);
}
>>
ContextRuleGetterDecl(r)       ::= <<
public <r.ctxName> <r.escapedName>() {
 return getRuleContext(<r.ctxName>.class,0);
}
>>
ContextRuleListGetterDecl(r)   ::= <<
public
 List\<<r.ctxName>\> <r.escapedName>() {
 return getRuleContexts(<r.ctxName>.class);
}
>>
ContextRuleListIndexedGetterDecl(r)   ::= <<
public <r.ctxName> <r.escapedName>(int i) {
 return getRuleContext(<r.ctxName>.class,i);
}
>>

LexerRuleContext() ::= "RuleContext"

/** The rule context name is the rule followed by a suffix; e.g.,
* r becomes rContext.
*/
RuleContextNameSuffix() ::= "Context"

ImplicitTokenLabel(tokenName) ::= "<tokenName>"
ImplicitRuleLabel(ruleName)   ::= "<ruleName>"
ImplicitSetLabel(id)    ::= "_tset<id>"
ListLabelName(label)    ::= "<label>"

CaptureNextToken(d) ::= "<d.varName> = _input.LT(1);"
CaptureNextTokenType(d) ::= "<d.varName> = _input.LA(1);"

StructDecl(struct,ctorAttrs,attrs,getters,dispatchMethods,interfaces,extensionMembers,signatures)
 ::= <<
@SuppressWarnings("CheckReturnValue")
public static class <struct.escapedName> extends
<if(contextSuperClass)><contextSuperClass><else>ParserRuleContext<endif><if(interfaces)> implements
```

```
<interfaces; separator=",
 "><endif> {
 <attrs:{a | public <a>;}; separator="\n">
 <getters:{g | <g>}; separator="\n">
 <if(ctorAttrs)>public <struct.escapedName>(ParserRuleContext parent, int invokingState) { super(parent,
invokingState); }<endif>
 public <struct.escapedName>(ParserRuleContext parent, int invokingState<ctorAttrs:{a | , <a>}>) {
  super(parent, invokingState);
  <struct.ctorAttrs:{a | this.<a.escapedName> = <a.escapedName>;}; separator="\n">
 }
 @Override public int getRuleIndex() { return RULE_<struct.derivedFromName>; }
<if(struct.provideCopyFrom)> <! don't need copy unless we have subclasses !>
 public <struct.escapedName>() { }
 public void copyFrom(<struct.escapedName> ctx) {
  super.copyFrom(ctx);
  <struct.attrs:{a | this.<a.escapedName> = ctx.<a.escapedName>;}; separator="\n">
 }
<endif>
 <dispatchMethods; separator="\n">
 <extensionMembers; separator="\n">
}
>>

AltLabelStructDecl(struct,attrs,getters,dispatchMethods) ::= <<
@SuppressWarnings("CheckReturnValue")
public static class
 <struct.escapedName> extends <currentRule.name; format="cap">Context {
 <attrs:{a | public <a>;}; separator="\n">
 <getters:{g | <g>}; separator="\n">
 public <struct.escapedName>(<currentRule.name; format="cap">Context ctx) { copyFrom(ctx); }
 <dispatchMethods; separator="\n">
}
>>

ListenerDispatchMethod(method) ::= <<
@Override
public void <if(method.isEnter)>enter<else>exit<endif>Rule(ParseTreeListener listener) {
 if ( listener instanceof <parser.grammarName>Listener )
((<parser.grammarName>Listener)listener).<if(method.isEnter)>enter<else>exit<endif><struct.derivedFromName;
format="cap">(this);
}
>>

VisitorDispatchMethod(method) ::= <<
@Override
public \<T> T accept(ParseTreeVisitor\<? extends T> visitor) {
 if ( visitor instanceof <parser.grammarName>Visitor ) return ((<parser.grammarName>Visitor\<? extends
T>)visitor).visit<struct.derivedFromName; format="cap">(this);
```

```
 else return visitor.visitChildren(this);
}
>>

AttributeDecl(d) ::= "<d.type> <d.escapedName><if(d.initValue)>
 = <d.initValue><endif>"

/** If we don't know location of label def x, use this template */
labelref(x) ::= "<if(!x.isLocal)>((<x.ctx.name>)_localctx).<endif><x.escapedName>"

/** For any action chunk, what is correctly-typed context struct ptr? */
ctx(actionChunk) ::= "((<actionChunk.ctx.name>)_localctx)"

// used for left-recursive rules
recRuleAltPredicate(ruleName,opPrec)  ::= "precpred(_ctx, <opPrec>)"
recRuleSetReturnAction(src,name)   ::= "$<name>=$<src>.<name>;"
recRuleSetStopToken()                ::= "_ctx.stop = _input.LT(-1);"

recRuleAltStartAction(ruleName, ctxName, label, isListLabel) ::= <<
_localctx = new <ctxName>Context(_parentctx, _parentState);
<if(label)>
<if(isListLabel)>
_localctx.<label>.add(_prevctx);
<else>
_localctx.<label> = _prevctx;
<endif>
<endif>
pushNewRecursionContext(_localctx, _startState, RULE_<ruleName>);
>>

recRuleLabeledAltStartAction(ruleName, currentAltLabel, label, isListLabel) ::= <<
_localctx = new <currentAltLabel; format="cap">Context(new
 <ruleName; format="cap">Context(_parentctx, _parentState));
<if(label)>
<if(isListLabel)>
((<currentAltLabel; format="cap">Context)_localctx).<label>.add(_prevctx);
<else>
((<currentAltLabel; format="cap">Context)_localctx).<label> = _prevctx;
<endif>
<endif>
pushNewRecursionContext(_localctx, _startState, RULE_<ruleName>);
>>

recRuleReplaceContext(ctxName) ::= <<
_localctx = new <ctxName>Context(_localctx);
_ctx = _localctx;
_prevctx = _localctx;
>>
```

```
recRuleSetPrevCtx() ::= <<
if ( _parseListeners!=null ) triggerExitRuleEvent();
_prevctx = _localctx;
>>


LexerFile(lexerFile, lexer, namedActions) ::= <<
<fileHeader(lexerFile.grammarFileName, lexerFile.ANTLRVersion)>
<if(lexerFile.genPackage)>
package <lexerFile.genPackage>;
<endif>
<namedActions.header>
import org.antlr.v4.runtime.Lexer;
import org.antlr.v4.runtime.CharStream;
import org.antlr.v4.runtime.Token;
import org.antlr.v4.runtime.TokenStream;
import org.antlr.v4.runtime.*;
import org.antlr.v4.runtime.atn.*;
import
 org.antlr.v4.runtime.dfa.DFA;
import org.antlr.v4.runtime.misc.*;

<lexer>
>>

Lexer(lexer, atn, actionFuncs, sempredFuncs, superClass) ::= <<
@SuppressWarnings({"all", "warnings", "unchecked", "unused", "cast", "CheckReturnValue", "this-escape"})
public class <lexer.name> extends <superClass; null="Lexer"> {
 static { RuntimeMetaData.checkVersion("<lexerFile.ANTLRVersion>", RuntimeMetaData.VERSION); }

 protected static final DFA[] _decisionToDFA;
 protected static final PredictionContextCache _sharedContextCache =
  new PredictionContextCache();
 <if(lexer.tokens)>
 public static final int
  <lexer.tokens:{k | <k>=<lexer.tokens.(k)>}; separator=", ", wrap, anchor>;
 <endif>
 <if(lexer.escapedChannels)>
 public static final int
  <lexer.escapedChannels:{c | <c>=<lexer.escapedChannels.(c)>}; separator=", ", wrap, anchor>;
 <endif>
 <if(rest(lexer.escapedModeNames))>
 public static final int
  <rest(lexer.escapedModeNames):{m | <m>=<i>}; separator=", ", wrap, anchor>;
 <endif>
 public static
```

```
 String[] channelNames = {
  "DEFAULT_TOKEN_CHANNEL", "HIDDEN"<if (lexer.channelNames)>, <lexer.channelNames:{c| "<c>"};
separator=", ", wrap, anchor><endif>
 };

 public static String[] modeNames = {
  <lexer.modes:{m| "<m>"}; separator=", ", wrap, anchor>
 };

 private static String[] makeRuleNames() {
  return new String[] {
   <lexer.ruleNames:{r | "<r>"}; separator=", ", wrap, anchor>
  };
 }
 public static final String[] ruleNames = makeRuleNames();

 <vocabulary(lexer.literalNames, lexer.symbolicNames)>

 <namedActions.members>

 public <lexer.name>(CharStream input) {
  super(input);
  _interp = new LexerATNSimulator(this,_ATN,_decisionToDFA,_sharedContextCache);
 }

 @Override
 public String getGrammarFileName() { return "<lexer.grammarFileName>"; }

 @Override
 public String[] getRuleNames() { return ruleNames; }

 @Override
 public String getSerializedATN() { return _serializedATN; }

 @Override
 public String[] getChannelNames() { return channelNames; }

 @Override
 public
 String[] getModeNames() { return modeNames; }

 @Override
 public ATN getATN() { return _ATN; }

 <dumpActions(lexer, "", actionFuncs, sempredFuncs)>
 <atn>
}
>>
```

```
SerializedJavaATN(model) ::= <<
<if(rest(model.segments))>
<! requires segmented representation !>
<model.segments:{segment|private static final String _serializedATNSegment<i0> =
 "<segment; wrap={"+<\n><\t>"}>";}; separator="\n">
public static final String _serializedATN = Utils.join(
 new String[] {
  <model.segments:{segment | _serializedATNSegment<i0>}; separator=",\n">
 },
 ""
);
<else>
<! only one segment, can be inlined !>
public static final String _serializedATN =
 "<model.serialized; wrap={"+<\n><\t>"}>";
<endif>
public static final ATN _ATN =
 new ATNDeserializer().deserialize(_serializedATN.toCharArray());
static {
 _decisionToDFA = new DFA[_ATN.getNumberOfDecisions()];
 for (int i = 0; i \< _ATN.getNumberOfDecisions(); i++) {
  _decisionToDFA[i] = new DFA(_ATN.getDecisionState(i), i);
 }
<! org.antlr.v4.tool.DOTGenerator
 dot = new org.antlr.v4.tool.DOTGenerator(null);!>
<! System.out.println(dot.getDOT(_ATN.decisionToState.get(0), ruleNames, false));!>
<! System.out.println(dot.getDOT(_ATN.ruleToStartState[2], ruleNames, false));!>
}
>>

/** Using a type to init value map, try to init a type; if not in table
* must be an object, default value is "null".
*/
initValue(typeName) ::= <<
<javaTypeInitMap.(typeName)>
>>

codeFileExtension() ::= ".java"
```

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/codegen/Java/Java.stg
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*/

/** How to generate rules derived from left-recursive rules.
*  These rely on recRuleAltPredicate(),
*  recRuleArg(), recRuleSetResultAction(), recRuleSetReturnAction()
*  templates in main language.stg
*/
group LeftRecursiveRules;

recRule(ruleName, argName, primaryAlts, opAlts, setResultAction,
      userRetvals, leftRecursiveRuleRefLabels) ::=
<<
<ruleName><if(userRetvals)>
 returns [<userRetvals>]<endif>
  :  ( {} <primaryAlts:{alt | <alt.altText> }; separator="\n        | ">
     )
     (
       <opAlts; separator="\n        | ">
     )*
  ;
>>

recRuleAlt(alt, precOption, opPrec, pred) ::= <<
```

{<pred>}?\<<precOption>=<opPrec>\> <alt.altText>
>>

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* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/LeftRecursiveRules.stg
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*/

/** templates used to generate make-compatible dependencies */

/** Generate "f : x, y, z" dependencies for input
* dependencies and generated files. in and out
* are File objects. For example, you can say
* <f.canonicalPath>
*/
dependencies(grammarFileName,in,out) ::= <<
<if(in)><grammarFileName>: <in; separator=", "><endif>
<out:{f | <f> : <grammarFileName>};
 separator="\n">
>>

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*/

SwiftTypeInitMap ::= [
 "Int":"0",
 "Int64":"0",
 "Float":"0.0",
 "Double":"0.0",
 "Bool":"false",
 default:"nil" // anything other than a primitive type is an object
]
SwiftTypeMap ::= [
 "int":"Int",
 "float":"Float",
 "long":"Int64",
 "double":"Double",
 "bool":"Bool",
 "boolean":"Bool",
 default : key
]
// args must be <object-model-object>,
```

```
 <fields-resulting-in-STs>

accessLevelOpenOK(obj) ::= "<obj.accessLevel; null=\"open\">"
accessLevelNotOpen(obj) ::= "<obj.accessLevel; null=\"public\">"

ParserFile(file, parser, namedActions,contextSuperClass) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
<!package <file.genPackage>;!>
<endif>
<namedActions.header>
import Antlr4

<parser>
>>

ListenerFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
<!package <file.genPackage>;!>
<endif>
<header>
import Antlr4

/**
* This interface defines a complete listener for a parse tree produced by
* {@link <file.parserName>}.
*/
<accessLevelNotOpen(file)> protocol <file.grammarName>Listener: ParseTreeListener {
 <file.listenerNames:{lname |
/**
<if(file.listenerLabelRuleNames.(lname))>
* Enter a parse tree produced by the {@code <lname>\}
* labeled alternative in {@link <file.parserName>#<file.listenerLabelRuleNames.(lname)>\}.
<else>
 * Enter a parse tree produced by {@link <file.parserName>#<lname>\}.
<endif>
- Parameters:
  - ctx: the parse tree
*/
func enter<lname; format="cap">(_ ctx: <file.parserName>.<lname; format="cap">Context)
/**
<if(file.listenerLabelRuleNames.(lname))>
* Exit a parse tree produced by the {@code <lname>\}
* labeled alternative in {@link <file.parserName>#<file.listenerLabelRuleNames.(lname)>\}.
<else>
* Exit a parse tree produced by {@link <file.parserName>#<lname>\}.
<endif>
```

```
- Parameters:
  - ctx: the parse tree
*/
func exit<lname; format="cap">(_ ctx: <file.parserName>.<lname; format="cap">Context)}; separator="\n">
}
>>

BaseListenerFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
<!package <file.genPackage>;!>
<endif>
<header>

import Antlr4


/**
* This class provides an empty implementation of {@link <file.grammarName>Listener},
* which can be extended to create a listener which only needs to handle
 a subset
* of the available methods.
*/
<accessLevelOpenOK(file)> class <file.grammarName>BaseListener: <file.grammarName>Listener {
    <accessLevelNotOpen(file)> init() { \}
 <file.listenerNames:{lname |

/**
* {@inheritDoc\}
*
* \<p>The default implementation does nothing.\</p>
*/
<accessLevelOpenOK(file)> func enter<lname; format="cap">(_ ctx: <file.parserName>.<lname;
format="cap">Context) { \}
/**
* {@inheritDoc\}
*
* \<p>The default implementation does nothing.\</p>
*/
<accessLevelOpenOK(file)> func exit<lname; format="cap">(_ ctx: <file.parserName>.<lname;
format="cap">Context) { \}}; separator="\n">

 /**
  * {@inheritDoc\}
  *
  * \<p>The default implementation does nothing.\</p>
  */
 <accessLevelOpenOK(file)> func enterEveryRule(_ ctx: ParserRuleContext) throws { }
```

```
/**
 * {@inheritDoc\}
 *
 * \<p>The default implementation does nothing.\</p>
 */
<accessLevelOpenOK(file)> func exitEveryRule(_ ctx: ParserRuleContext) throws { }
/**
 * {@inheritDoc\}
 *

* \<p>The default implementation does nothing.\</p>
 */
<accessLevelOpenOK(file)> func visitTerminal(_ node: TerminalNode) { }
/**
 * {@inheritDoc\}
 *
 * \<p>The default implementation does nothing.\</p>
 */
<accessLevelOpenOK(file)> func visitErrorNode(_ node: ErrorNode) { }
}
>>

VisitorFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
<!package <file.genPackage>;!>
<endif>
<header>
import Antlr4

/**
* This interface defines a complete generic visitor for a parse tree produced
* by {@link <file.parserName>}.
*
* @param \<T> The return type of the visit operation. Use {@link Void} for
* operations with no return type.
*/
<accessLevelOpenOK(file)> class <file.grammarName>Visitor\<T>: ParseTreeVisitor\<T> {
 <file.visitorNames:{lname |
/**
<if(file.visitorLabelRuleNames.(lname))>
* Visit a parse tree produced by the {@code <lname>\}
* labeled alternative in {@link <file.parserName>#<file.visitorLabelRuleNames.(lname)>\}.
<else>
 * Visit a parse tree produced by {@link <file.parserName>#<lname>\}.
<endif>
- Parameters:
 - ctx: the parse tree
```

```
- returns: the visitor result
*/
<accessLevelOpenOK(file)> func visit<lname; format="cap">(_ ctx: <file.parserName>.<lname;
format="cap">Context) -> T {
 fatalError(#function + " must be overridden")
\}
}; separator="\n">
}
>>

BaseVisitorFile(file, header, namedActions) ::= <<
<fileHeader(file.grammarFileName, file.ANTLRVersion)>
<if(file.genPackage)>
<!package <file.genPackage>;!>
<endif>
<header>
import Antlr4

/**
* This class provides an empty implementation of {@link <file.grammarName>Visitor},
* which can be extended to create a visitor which only needs to handle a subset
* of the available methods.
*
* @param \<T> The return type of the visit operation. Use {@link Void} for
* operations with no return type.
*/
<accessLevelOpenOK(file)> class <file.grammarName>BaseVisitor\<T>: AbstractParseTreeVisitor\<T> {
 <file.visitorNames:{lname
|
/**
* {@inheritDoc\}
*
* \<p>The default implementation returns the result of calling
* {@link #visitChildren\} on {@code ctx\}.\</p>
*/
<accessLevelOpenOK(file)> func visit<lname; format="cap">(_ ctx: <file.parserName>.<lname;
format="cap">Context) -> T? { return visitChildren(ctx) \}}; separator="\n">
}
>>

fileHeader(grammarFileName, ANTLRVersion) ::= <<
// Generated from <grammarFileName> by ANTLR <ANTLRVersion>
>>

Parser(parser, funcs, atn, sempredFuncs, superClass) ::= <<
<Parser_(ctor="parser_ctor", ...)>
>>
```

```
Parser_(parser, funcs, atn, sempredFuncs, ctor, superClass) ::= <<
<!//@SuppressWarnings({"all", "warnings", "unchecked", "unused", "cast"})!>
<accessLevelOpenOK(parser)> class <parser.name>: <superClass; null="Parser"> {

 internal static var _decisionToDFA: [DFA] = {
        var decisionToDFA = [DFA]()
        let length = <parser.name>._ATN.getNumberOfDecisions()
        for i in 0..\<length {
         <!// decisionToDFA[i] = DFA(<parser.name>._ATN.getDecisionState(i)!,
 i);!>
          decisionToDFA.append(DFA(<parser.name>._ATN.getDecisionState(i)!, i))
         }
         return decisionToDFA
   }()

 internal static let _sharedContextCache = PredictionContextCache()

 <if(parser.tokens)>
 <accessLevelNotOpen(parser)>
 enum Tokens: Int {
  case EOF = -1, <parser.tokens:{k | <k> = <parser.tokens.(k)>}; separator=", ", wrap, anchor>
 }
 <endif>

 <accessLevelNotOpen(parser)>
 <if(parser.rules)>
 static let <parser.rules:{r | RULE_<r.name> = <r.index>}; separator=", ", wrap, anchor>
 <endif>

 <accessLevelNotOpen(parser)>
 static let ruleNames: [String] = [
  <parser.ruleNames:{r | "<r>"}; separator=", ", wrap, anchor>
 ]

 <vocabulary(parser.literalNames, parser.symbolicNames,
                 accessLevelNotOpen(parser))>

 override <accessLevelOpenOK(parser)>
 func getGrammarFileName() -> String { return "<parser.grammarFileName>" }

 override <accessLevelOpenOK(parser)>
 func getRuleNames() -> [String] { return <parser.name>.ruleNames
 }

 override <accessLevelOpenOK(parser)>
 func getSerializedATN() -> [Int] { return <parser.name>._serializedATN }

 override <accessLevelOpenOK(parser)>
```

```
 func getATN() -> ATN { return <parser.name>._ATN }

 <namedActions.members>
 <parser:(ctor)()>
 <funcs; separator="\n">

<if(sempredFuncs)>
 override <accessLevelOpenOK(parser)>
 func sempred(_ _localctx: RuleContext?, _ ruleIndex: Int,  _ predIndex: Int)throws -> Bool {
  switch (ruleIndex) {
  <parser.sempredFuncs.values:{f|
case  <f.ruleIndex>:
 return try <f.name>_sempred(_localctx?.castdown(<f.ctxType>.self), predIndex)}; separator="\n">
     default: return true
  }
  <!return true;!>
 }
 <sempredFuncs.values; separator="\n">
<endif>

 <atn>

 <accessLevelNotOpen(parser)>
 static let _ATN = try! ATNDeserializer().deserialize(_serializedATN)
}
>>

vocabulary(literalNames, symbolicNames, accessLevel) ::= <<
private static let _LITERAL_NAMES: [String?] = [
 <literalNames:{t | <t>}; null="nil", separator=", ", wrap,
 anchor>
]
private static let _SYMBOLIC_NAMES: [String?] = [
 <symbolicNames:{t | <t>}; null="nil", separator=", ", wrap, anchor>
]
<accessLevel>
static let VOCABULARY = Vocabulary(_LITERAL_NAMES, _SYMBOLIC_NAMES)
>>

dumpActions(recog, argFuncs, actionFuncs, sempredFuncs) ::= <<
<if(actionFuncs)>
override <accessLevelOpenOK(parser)>
func action(_ _localctx: RuleContext?,  _ ruleIndex: Int, _ actionIndex: Int) throws {
 switch (ruleIndex) {
 <recog.actionFuncs.values:{f|
case <f.ruleIndex>:
 try <f.name>_action((_localctx as <f.ctxType>?), actionIndex)
  }; separator="\n">
```

```
 default: break
 }
}
<actionFuncs.values; separator="\n">
<endif>
<if(sempredFuncs)>
override <accessLevelOpenOK(parser)>
func sempred(_ _localctx: RuleContext?, _  ruleIndex: Int,_   predIndex: Int) throws -> Bool {
 switch (ruleIndex) {
 <recog.sempredFuncs.values:{f|
case <f.ruleIndex>:
 return try <f.name>_sempred(_localctx?.castdown(<f.ctxType>.self), predIndex)}; separator="\n">
 default: return true
 }
 <!return
 true;!>
}
<sempredFuncs.values; separator="\n">
<endif>
>>

parser_ctor(p) ::= <<

override <accessLevelOpenOK(parser)>
func getVocabulary() -> Vocabulary {
   return <p.name>.VOCABULARY
}

override <accessLevelNotOpen(parser)>
init(_ input:TokenStream) throws {
   RuntimeMetaData.checkVersion("<file.ANTLRVersion>", RuntimeMetaData.VERSION)
 try super.init(input)
 _interp = ParserATNSimulator(self,<p.name>._ATN,<p.name>._decisionToDFA,
<parser.name>._sharedContextCache)
}

>>

/* This generates a private method since the actionIndex is generated, making an
* overriding implementation impossible to maintain.
*/
RuleActionFunction(r, actions) ::= <<
private func <r.name>_action(_ _localctx: <r.ctxType>?,  _ actionIndex: Int) throws {
 switch (actionIndex) {
 <actions:{index|
case <index>:
 <actions.(index)>
  }; separator="\n">
```

```
  default: break
 }
}
>>

/* This generates a private method since the predIndex is generated, making an
* overriding implementation impossible to maintain.
 */
RuleSempredFunction(r, actions) ::= <<
private func <r.name>_sempred(_ _localctx: <r.ctxType>!,  _ predIndex: Int) throws -> Bool {
 switch (predIndex) {
 <actions:{index|
   case <index>:return <actions.(index)>}; separator="\n">
     default: return true
 }
 <!return true;!>
}
>>

RuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,namedActions,finallyAction,postamble,exceptions)
::= <<
<ruleCtx>
<altLabelCtxs:{l | <altLabelCtxs.(l)>}; separator="\n">
@discardableResult
<if(currentRule.modifiers)><currentRule.modifiers:{f | <f> }><else> <accessLevelOpenOK(parser)> func
<endif><currentRule.escapedName>(<if(first(args))>_ <endif><args; separator=", _">) throws ->
<currentRule.ctxType> {
 var _localctx: <currentRule.ctxType>
 _localctx = <currentRule.ctxType>(_ctx, getState()<currentRule.args:{a | , <a.escapedName>}>)
 try enterRule(_localctx, <currentRule.startState>, <parser.name>.RULE_<currentRule.name>)
 <namedActions.init>
 <locals; separator="\n">
 defer {

    <finallyAction>
     try! exitRule()
   }
 do {
<if(currentRule.hasLookaheadBlock)>
  var _alt:Int
<endif>
   <code>
  <postamble; separator="\n">
   <namedActions.after>
 }
 <if(exceptions)>
 <exceptions; separator="\n">
 <else>
```

```
 catch ANTLRException.recognition(let re) {
  _localctx.exception = re
  _errHandler.reportError(self, re)
  try _errHandler.recover(self, re)
 }
 <endif>

 return _localctx
}
>>

LeftRecursiveRuleFunction(currentRule,args,code,locals,ruleCtx,altLabelCtxs,
 namedActions,finallyAction,postamble) ::=
<<

<ruleCtx>
<altLabelCtxs:{l | <altLabelCtxs.(l)>}; separator="\n">

<if(currentRule.modifiers)><currentRule.modifiers:{f | <f> }><else> <accessLevelNotOpen(parser)> final <endif>
func <currentRule.escapedName>( <if(first(args))>_ <endif><args; separator=", _">) throws ->
<currentRule.ctxType>   {
 return try <currentRule.escapedName>(0<currentRule.args:{a | , <a.escapedName>}>)
}
@discardableResult
private func <currentRule.escapedName>(_ _p<args:{a | , <a>}>:
 Int) throws -> <currentRule.ctxType>   {
 let _parentctx: ParserRuleContext? = _ctx
 let _parentState: Int = getState()
 var _localctx: <currentRule.ctxType>
 _localctx = <currentRule.ctxType>(_ctx, _parentState<currentRule.args:{a | , <a.escapedName>}>)
 var _prevctx: <currentRule.ctxType> = _localctx
 let _startState: Int = <currentRule.startState>
 try enterRecursionRule(_localctx, <currentRule.startState>, <parser.name>.RULE_<currentRule.name>, _p)
 <namedActions.init>
 <locals; separator="\n">
 defer {
    <finallyAction>
    try! unrollRecursionContexts(_parentctx)
   }
 do {
<if(currentRule.hasLookaheadBlock)>
  var _alt: Int
<endif>
  <code>
  <postamble; separator="\n">
  <namedActions.after>
 }
 catch ANTLRException.recognition(let re) {
```

```
  _localctx.exception = re
  _errHandler.reportError(self, re)
  try _errHandler.recover(self, re)
 }

 return _localctx;
}
>>

CodeBlockForOuterMostAlt(currentOuterMostAltCodeBlock, locals, preamble, ops) ::= <<
<if(currentOuterMostAltCodeBlock.altLabel)>_localctx
 =  <currentOuterMostAltCodeBlock.altLabel; format="cap">Context(_localctx);<endif>
try enterOuterAlt(_localctx, <currentOuterMostAltCodeBlock.alt.altNum>)
<CodeBlockForAlt(currentAltCodeBlock=currentOuterMostAltCodeBlock, ...)>
>>

CodeBlockForAlt(currentAltCodeBlock, locals, preamble, ops) ::= <<
<!//{!>
<locals; separator="\n">
<preamble; separator="\n">
<ops; separator="\n">
<!//}!>
>>

LL1AltBlock(choice, preamble, alts, error) ::= <<
setState(<choice.stateNumber>)
try _errHandler.sync(self)
<if(choice.label)><labelref(choice.label)> = try _input.LT(1)<endif>
<preamble; separator="\n">
switch (<parser.name>.Tokens(rawValue: try _input.LA(1))!) {
<choice.altLook,alts:{look,alt | <cases(tokens=look)>
 <alt>
 break}; separator="\n">
default:
 <error>
}
>>

LL1OptionalBlock(choice, alts, error) ::= <<
setState(<choice.stateNumber>)
try _errHandler.sync(self)
switch (<parser.name>.Tokens(rawValue: try _input.LA(1))!) {
<choice.altLook,alts:{look,alt| <cases(tokens=look)>
  <alt>
 break}; separator="\n">
default:
 break
}
```

```
>>

LL1OptionalBlockSingleAlt(choice, expr, alts, preamble, error, followExpr) ::= <<
setState(<choice.stateNumber>)
try _errHandler.sync(self)
<preamble; separator="\n">
if (<expr>) {
 <alts; separator="\n">
}
<!else if ( !(<followExpr>) ) <error>!>
>>

LL1StarBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
setState(<choice.stateNumber>)
try _errHandler.sync(self)
<preamble; separator="\n">
while (<loopExpr>) {
 <alts; separator="\n">
 setState(<choice.loopBackStateNumber>)
 try _errHandler.sync(self)
 <iteration>
}
>>

LL1PlusBlockSingleAlt(choice, loopExpr, alts, preamble, iteration) ::= <<
setState(<choice.blockStartStateNumber>) <! alt block decision !>
try _errHandler.sync(self)
<preamble; separator="\n">
repeat {
 <alts; separator="\n">
 setState(<choice.stateNumber>); <! loopback/exit decision !>
 try _errHandler.sync(self)
 <iteration>
} while (<loopExpr>)
>>

// LL(*) stuff

AltBlock(choice,
 preamble, alts, error) ::= <<
setState(<choice.stateNumber>)
try _errHandler.sync(self)
<if(choice.label)><labelref(choice.label)> = try _input.LT(1)<endif>
<preamble; separator="\n">
switch(try getInterpreter().adaptivePredict(_input,<choice.decision>, _ctx)) {
<alts:{alt |
case <i>:
 <alt>
```

```
 break}; separator="\n">
default: break
}
>>

OptionalBlock(choice, alts, error) ::= <<
setState(<choice.stateNumber>)
try _errHandler.sync(self)
switch (try getInterpreter().adaptivePredict(_input,<choice.decision>,_ctx)) {
<alts:{alt |
case <i><if(!choice.ast.greedy)>+1<endif>:
 <alt>
 break}; separator="\n">
default: break
}
>>

StarBlock(choice, alts, sync, iteration) ::= <<
setState(<choice.stateNumber>)
try _errHandler.sync(self)
_alt = try getInterpreter().adaptivePredict(_input,<choice.decision>,_ctx)
while (_alt != <choice.exitAlt> && _alt != ATN.INVALID_ALT_NUMBER) {
 if ( _alt==1<if(!choice.ast.greedy)>+1<endif> ) {
  <iteration>
  <alts> <! should only be one !>
 }
 setState(<choice.loopBackStateNumber>)
 try
 _errHandler.sync(self)
 _alt = try getInterpreter().adaptivePredict(_input,<choice.decision>,_ctx)
}
>>

PlusBlock(choice, alts, error) ::= <<
setState(<choice.blockStartStateNumber>); <! alt block decision !>
try _errHandler.sync(self)
_alt = 1<if(!choice.ast.greedy)>+1<endif>;
repeat {
 switch (_alt) {
 <alts:{alt|
case <i><if(!choice.ast.greedy)>+1<endif>:
 <alt>
 break}; separator="\n">
 default:
  <error>
 }
 setState(<choice.loopBackStateNumber>); <! loopback/exit decision !>
 try _errHandler.sync(self)
```

```
 _alt = try getInterpreter().adaptivePredict(_input,<choice.decision>,_ctx)
} while (_alt != <choice.exitAlt> && _alt !=  ATN.INVALID_ALT_NUMBER)
>>

Sync(s) ::= "sync(<s.expecting.name>);"

ThrowNoViableAlt(t) ::= "throw ANTLRException.recognition(e: NoViableAltException(self))"

TestSetInline(s) ::= <<
<s.bitsets:{bits | <if(rest(rest(bits.tokens)))><bitsetBitfieldComparison(s, bits)><else><bitsetInlineComparison(s,
bits)><endif>}; separator=" || ">
>>

//
 Java language spec 15.19 - shift operators mask operands rather than overflow to 0... need range test
testShiftInRange(shiftAmount) ::= <<
(Int64(<shiftAmount>) & ~0x3f) == 0
>>

bitsetBitfieldComparison(s, bits) ::= <<
(<testShiftInRange({<offsetShift(s.varName, bits.shift)>})> && ((Int64(1) \<\< <offsetShift(s.varName,
bits.shift)>) & <bits.calculated>) != 0)
>>

isZero ::= [
"0": true,
default: false
]
parserName(t) ::= <%
<parser.name>.Tokens.<t.name>.rawValue
%>
offsetShift(shiftAmount, offset) ::= <%
<if(!isZero.(offset))>(<shiftAmount> - <offset>)<else><shiftAmount><endif>
%>

bitsetInlineComparison(s, bits) ::= <%
<bits.tokens:{t | <s.varName> == <parser.name>.Tokens.<t.name>.rawValue}; separator=" || ">
%>

cases(tokens) ::= <<
<trunc(tokens): {t | case .<t.name>:fallthrough}  ; separator="\n">
<last(tokens): {t | case .<t.name>:}  ; separator="\n">
>>

InvokeRule(r, argExprsChunks) ::= <<
setState(<r.stateNumber>)
<if(r.labels)>
try {
```

```
  let assignmentValue = try
<r.escapedName>(<if(r.ast.options.p)><r.ast.options.p><if(argExprsChunks)>,<endif><endif><argExprsChunks>)
  <r.labels:{l
 | <labelref(l)> = assignmentValue} ; separator="\n">
    }()
<else>try
<r.escapedName>(<if(r.ast.options.p)><r.ast.options.p><if(argExprsChunks)>,<endif><endif><argExprsChunks>)<
endif>
>>

MatchToken(m) ::= <<
setState(<m.stateNumber>)
<if(m.labels)>
try {
  let assignmentValue = try match(<parser.name>.Tokens.<m.escapedName>.rawValue)
  <m.labels:{l | <labelref(l)> = assignmentValue}  ; separator="\n">
    }()
<else>try match(<parser.name>.Tokens.<m.escapedName>.rawValue)<endif>
>>

MatchSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, false)>"

MatchNotSet(m, expr, capture) ::= "<CommonSetStuff(m, expr, capture, true)>"

CommonSetStuff(m, expr, capture, invert) ::= <<
setState(<m.stateNumber>)
<if(m.labels)><m.labels:{l | <labelref(l)> = }>try _input.LT(1)<endif>
<capture>
if (<if(invert)><m.varName> \<= 0 || <else>!<endif>(<expr>)) {
 <if(m.labels)><m.labels:{l
 | <labelref(l)> = }><endif>try _errHandler.recoverInline(self)<if(m.labels)> as Token<endif>
}
else {
 _errHandler.reportMatch(self)
 try consume()
}
>>

Wildcard(w) ::= <<
setState(<w.stateNumber>)
<if(w.labels)><w.labels:{l | <labelref(l)> = }><endif>try matchWildcard();
>>

// ACTION STUFF

Action(a, foo, chunks) ::= "<chunks>"

ArgAction(a, chunks) ::= "<chunks>"
```

```
SemPred(p, chunks, failChunks) ::= <<
setState(<p.stateNumber>)
if (!(<chunks>)) {
   throw ANTLRException.recognition(e:FailedPredicateException(self, <p.predicate><if(failChunks)>,
<failChunks><elseif(p.msg)>, <p.msg><endif>))
}
>>

ExceptionClause(e, catchArg, catchAction) ::= <<
catch (<catchArg>) {
 <catchAction>
}
>>

// lexer actions are not associated with model objects

LexerSkipCommand()  ::= "skip()"
LexerMoreCommand()  ::= "more()"
LexerPopModeCommand() ::= "popMode()"

LexerTypeCommand(arg)      ::= "_type = <arg>"
LexerChannelCommand(arg)   ::= "_channel = <arg>"
LexerModeCommand(arg)      ::= "_mode =
 <arg>"
LexerPushModeCommand(arg)  ::= "pushMode(<arg>)"

ActionText(t) ::= "<t.text>"
ActionTemplate(t) ::= "<t.st>"
ArgRef(a) ::= "_localctx.<a.escapedName>"
LocalRef(a) ::= "_localctx.<a.escapedName>"
RetValueRef(a) ::= "_localctx.<a.escapedName>"
QRetValueRef(a) ::= "<ctx(a)>.<a.dict>.<a.escapedName>"
/** How to translate $tokenLabel */
TokenRef(t) ::= "<ctx(t)>.<t.escapedName>"
LabelRef(t) ::= "<ctx(t)>.<t.escapedName>"
ListLabelRef(t) ::= "<ctx(t)>.<ListLabelName(t.escapedName)>"
SetAttr(s,rhsChunks) ::= "<ctx(s)>.<s.escapedName> = <rhsChunks>"

TokenLabelType() ::= "<file.TokenLabelType; null={Token}>"
InputSymbolType() ::= "<file.InputSymbolType; null={Token}>"

TokenPropertyRef_text(t) ::= "(<ctx(t)>.<t.label> != nil ? <ctx(t)>.<t.label>!.getText()! : \"\")"
TokenPropertyRef_type(t) ::= "(<ctx(t)>.<t.label> != nil ? <ctx(t)>.<t.label>!.getType() : 0)"
TokenPropertyRef_line(t) ::= "(<ctx(t)>.<t.label> != nil ? <ctx(t)>.<t.label>!.getLine() : 0)"
TokenPropertyRef_pos(t) ::= "(<ctx(t)>.<t.label>
 != nil ? <ctx(t)>.<t.label>!.getCharPositionInLine() : 0)"
TokenPropertyRef_channel(t) ::= "(<ctx(t)>.<t.label> != nil ? <ctx(t)>.<t.label>!.getChannel() : 0)"
```

```
TokenPropertyRef_index(t) ::= "(<ctx(t)>.<t.label> != nil ? <ctx(t)>.<t.label>!.getTokenIndex() : 0)"
TokenPropertyRef_int(t) ::= "(<ctx(t)>.<t.label> != nil ? Int(<ctx(t)>.<t.label>!.getText()!) : 0)"

RulePropertyRef_start(r) ::= "(<ctx(r)>.<r.label> != nil ? (<ctx(r)>.<r.label>!.start?.description ?? \"\") : \"\")"
RulePropertyRef_stop(r)  ::= "(<ctx(r)>.<r.label> != nil ? (<ctx(r)>.<r.label>!.stop?.description ?? \"\") : \"\")"
RulePropertyRef_text(r)  ::= "(<ctx(r)>.<r.label> != nil ? try
_input.getText(<ctx(r)>.<r.label>!.start,<ctx(r)>.<r.label>!.stop) : \"\")"
RulePropertyRef_ctx(r)  ::= "<ctx(r)>.<r.label>"
RulePropertyRef_parser(r)  ::= "self"

ThisRulePropertyRef_start(r) ::= "_localctx.start"
ThisRulePropertyRef_stop(r)  ::= "_localctx.stop"
ThisRulePropertyRef_text(r)  ::= "(try _input.getText(_localctx.start,
 try _input.LT(-1)))"
ThisRulePropertyRef_ctx(r)  ::= "_localctx"
ThisRulePropertyRef_parser(r)  ::= "self"

NonLocalAttrRef(s)   ::= "((<s.ruleName;
format=\"cap\">Context)getInvokingContext(<s.ruleIndex>)).<s.escapedName>"
SetNonLocalAttr(s, rhsChunks)   ::=
 "((<s.ruleName; format=\"cap\">Context)getInvokingContext(<s.ruleIndex>)).<s.escapedName> = <rhsChunks>"

AddToLabelList(a) ::= "<ctx(a.label)>.<a.listName>.append(<labelref(a.label)>)"

TokenDecl(t) ::= "<t.escapedName>: <SwiftTypeMap.(TokenLabelType())>!"
TokenTypeDecl(t) ::= "var <t.escapedName>: Int = 0"
TokenListDecl(t) ::= "<t.escapedName>: [Token] = [Token]()"
RuleContextDecl(r) ::= "<r.escapedName>: <r.ctxName>!"
RuleContextListDecl(rdecl) ::= "<rdecl.escapedName>: [<rdecl.ctxName>] = [<rdecl.ctxName>]()"

ContextTokenGetterDecl(t) ::= <<
 <accessLevelOpenOK(parser)>
 func <t.escapedName>() -> TerminalNode? {
  return getToken(<parser.name>.Tokens.<t.escapedName>.rawValue, 0)
 }
>>
ContextTokenListGetterDecl(t)
 ::= <<
 <accessLevelOpenOK(parser)>
 func <t.escapedName>() -> [TerminalNode] {
  return getTokens(<parser.name>.Tokens.<t.escapedName>.rawValue)
 }
>>
ContextTokenListIndexedGetterDecl(t) ::= <<
 <accessLevelOpenOK(parser)>
 func <t.escapedName>(_ i:Int) -> TerminalNode? {
  return getToken(<parser.name>.Tokens.<t.escapedName>.rawValue, i)
 }
```

```
>>
ContextRuleGetterDecl(r) ::= <<
 <accessLevelOpenOK(parser)>
 func <r.escapedName>() -> <r.ctxName>? {
  return getRuleContext(<r.ctxName>.self, 0)
 }
>>
ContextRuleListGetterDecl(r) ::= <<
 <accessLevelOpenOK(parser)>
 func <r.escapedName>() -> [<r.ctxName>] {
  return getRuleContexts(<r.ctxName>.self)
 }
>>
ContextRuleListIndexedGetterDecl(r)   ::= <<
 <accessLevelOpenOK(parser)>
 func <r.escapedName>(_ i: Int) -> <r.ctxName>? {
  return getRuleContext(<r.ctxName>.self, i)
 }
>>

LexerRuleContext() ::= "RuleContext"

/** The rule context name is the rule followed by a suffix; e.g.,
* r becomes rContext.
*/
RuleContextNameSuffix() ::= "Context"

ImplicitTokenLabel(tokenName)
 ::= "_<tokenName>"
ImplicitRuleLabel(ruleName)   ::= "_<ruleName>"
ImplicitSetLabel(id)    ::= "_tset<id>"
ListLabelName(label)    ::= "<label>"

CaptureNextToken(d) ::= "<d.varName> = try _input.LT(1)"
CaptureNextTokenType(d) ::= "<d.varName> = try _input.LA(1)"

StructDecl(struct,ctorAttrs,attrs,getters,dispatchMethods,interfaces,extensionMembers,signatures,
        superClass={ParserRuleContext}) ::= <<

<accessLevelNotOpen(parser)> class <struct.escapedName>:
<if(contextSuperClass)><contextSuperClass><else>ParserRuleContext<endif><if(interfaces)>, <interfaces;
separator=", "><endif> {
 <attrs:{a | <accessLevelOpenOK(parser)> var <a>}; separator="\n">
 <getters:{g | <g>}; separator="\n">
 <! <if(ctorAttrs)> <accessLevelNotOpen(parser)> init(_ parent: ParserRuleContext,_ invokingState: Int) {
super.init(parent, invokingState)  }<endif> !>
 <if(ctorAttrs)>
 <accessLevelNotOpen(parser)> convenience init(_ parent: ParserRuleContext?, _ invokingState:
```

```
 Int<ctorAttrs:{a | , _ <a>}>) {
  self.init(parent, invokingState)
  <struct.ctorAttrs:{a | self.<a.escapedName> = <a.escapedName>;}; separator="\n">
 }
 <endif>

 override <accessLevelOpenOK(parser)>
 func getRuleIndex() -> Int {
  return <parser.name>.RULE_<struct.derivedFromName>
 }
<if(struct.provideCopyFrom && struct.attrs)> <! don't need copy unless we have subclasses !>
 <accessLevelOpenOK(parser)>
 override func copyFrom(_ ctx_: ParserRuleContext) {
  super.copyFrom(ctx_)
  let ctx = ctx_ as! <struct.escapedName>
  <struct.attrs:{a | self.<a.escapedName> = ctx.<a.escapedName>;}; separator="\n">
 }
<endif>
 <dispatchMethods; separator="\n">
 <extensionMembers; separator="\n">
}
>>

AltLabelStructDecl(struct,attrs,getters,dispatchMethods) ::= <<
<accessLevelNotOpen(parser)> class <struct.escapedName>: <currentRule.name; format="cap">Context {
 <attrs:{a | <accessLevelNotOpen(parser)> var <a>}; separator="\n">
 <getters:{g | <g>}; separator="\n">

 <accessLevelNotOpen(parser)>
 init(_
 ctx: <currentRule.name; format="cap">Context) {
  super.init()
  copyFrom(ctx)
 }
 <dispatchMethods; separator="\n">
}
>>

ListenerDispatchMethod(method) ::= <<
override <accessLevelOpenOK(parser)>
func <if(method.isEnter)>enter<else>exit<endif>Rule(_ listener: ParseTreeListener) {
 if let listener = listener as? <parser.grammarName>Listener {
  listener.<if(method.isEnter)>enter<else>exit<endif><struct.derivedFromName; format="cap">(self)
 }
}
>>

VisitorDispatchMethod(method) ::= <<
```

```
override <accessLevelOpenOK(parser)>
func accept\<T>(_ visitor: ParseTreeVisitor\<T>) -> T? {
 if let visitor = visitor as? <parser.grammarName>Visitor {
    return visitor.visit<struct.derivedFromName; format="cap">(self)
 }
 else if let visitor = visitor as? <parser.grammarName>BaseVisitor {
    return visitor.visit<struct.derivedFromName; format="cap">(self)
 }
 else {
     return visitor.visitChildren(self)
 }
}
>>

AttributeDecl(d) ::= "<d.escapedName>: <SwiftTypeMap.(d.type)><if(d.initValue)>
 = <d.initValue><else>!<endif>"

/** If we don't know location of label def x, use this template (_localctx as! <x.ctx.name> */
labelref(x) ::= "<if(!x.isLocal)>_localctx.castdown(<x.ctx.name>.self).<endif><x.escapedName>"

/** For any action chunk, what is correctly-typed context struct ptr?    */
ctx(actionChunk) ::= "_localctx.castdown(<actionChunk.ctx.name>.self)"

// used for left-recursive rules
recRuleAltPredicate(ruleName,opPrec)  ::= "precpred(_ctx, <opPrec>)"
recRuleSetReturnAction(src,name)   ::= "$<name>=$<src>.<name>"
recRuleSetStopToken()                ::= "_ctx!.stop = try _input.LT(-1)"

recRuleAltStartAction(ruleName, ctxName, label, isListLabel) ::= <<
_localctx = <ctxName>Context(_parentctx, _parentState);
<if(label)>
<if(isListLabel)>
_localctx.<label>.append(_prevctx)
<else>
_localctx.<label> = _prevctx
<endif>
<endif>
try pushNewRecursionContext(_localctx, _startState, <parser.name>.RULE_<ruleName>)
>>

recRuleLabeledAltStartAction(ruleName, currentAltLabel,
 label, isListLabel) ::= <<
_localctx = <currentAltLabel; format="cap">Context(  <ruleName; format="cap">Context(_parentctx,
_parentState))
<if(label)>
<if(isListLabel)>
(_localctx as! <currentAltLabel; format="cap">Context).<label>.append(_prevctx)
<else>
```

```
(_localctx as! <currentAltLabel; format="cap">Context).<label> = _prevctx
<endif>
<endif>
try pushNewRecursionContext(_localctx, _startState, <parser.name>.RULE_<ruleName>)
>>

recRuleReplaceContext(ctxName) ::= <<
_localctx = <ctxName>Context(_localctx)
_ctx = _localctx
_prevctx = _localctx
>>

recRuleSetPrevCtx() ::= <<
if _parseListeners != nil {
  try triggerExitRuleEvent()
}
_prevctx = _localctx
>>


LexerFile(lexerFile, lexer, namedActions) ::= <<
<fileHeader(lexerFile.grammarFileName, lexerFile.ANTLRVersion)>
<if(lexerFile.genPackage)>
<!package <lexerFile.genPackage>;!>
<endif>
<namedActions.header>
import Antlr4

<lexer>
>>
Lexer(lexer, atn, actionFuncs, sempredFuncs, superClass) ::= <<
<accessLevelOpenOK(lexer)> class <lexer.name>:
 <superClass; null="Lexer"> {

 internal static var _decisionToDFA: [DFA] = {
        var decisionToDFA = [DFA]()
        let length = <lexer.name>._ATN.getNumberOfDecisions()
        for i in 0..\<length {
          <! decisionToDFA[i] = DFA(<lexer.name>._ATN.getDecisionState(i)!, i);!>
             decisionToDFA.append(DFA(<lexer.name>._ATN.getDecisionState(i)!, i))
        }
         return decisionToDFA
   }()

 internal static let _sharedContextCache = PredictionContextCache()

 <accessLevelNotOpen(lexer)>
 <if(lexer.tokens)>
```

```
static let <lexer.tokens:{k | <k>=<lexer.tokens.(k)>}; separator=", ", wrap, anchor>
<endif>

<if(lexer.escapedChannels)>
<accessLevelNotOpen(lexer)>
static let <lexer.escapedChannels:{k | <k>=<lexer.escapedChannels.(k)>}; separator=", ", wrap, anchor>
<endif>
<if(rest(lexer.escapedModeNames))>
<accessLevelNotOpen(lexer)>
static let <rest(lexer.escapedModeNames):{m| <m>=<i>}; separator=", ", wrap, anchor>
<endif>
<accessLevelNotOpen(lexer)>
static
let channelNames: [String] = [
 "DEFAULT_TOKEN_CHANNEL", "HIDDEN"<if (lexer.channelNames)>, <lexer.channelNames:{c| "<c>"};
separator=", ", wrap, anchor><endif>
]

<accessLevelNotOpen(lexer)>
static let modeNames: [String] = [
 <lexer.modes:{m| "<m>"}; separator=", ", wrap, anchor>
]

<accessLevelNotOpen(lexer)>
static let ruleNames: [String] = [
 <lexer.ruleNames:{r | "<r>"}; separator=", ", wrap, anchor>
]

<vocabulary(lexer.literalNames, lexer.symbolicNames,
            accessLevelNotOpen(lexer))>

<namedActions.members>

override <accessLevelOpenOK(lexer)>
func getVocabulary() -> Vocabulary {
 return <lexer.name>.VOCABULARY
}

<accessLevelNotOpen(lexer)>
required init(_ input: CharStream) {
    RuntimeMetaData.checkVersion("<lexerFile.ANTLRVersion>", RuntimeMetaData.VERSION)
 super.init(input)
 _interp = LexerATNSimulator(self, <lexer.name>._ATN, <lexer.name>._decisionToDFA,
<lexer.name>._sharedContextCache)
}

override <accessLevelOpenOK(lexer)>
func
```

```
 getGrammarFileName() -> String { return "<lexer.grammarFileName>" }

 override <accessLevelOpenOK(lexer)>
 func getRuleNames() -> [String] { return <lexer.name>.ruleNames }

 override <accessLevelOpenOK(lexer)>
 func getSerializedATN() -> [Int] { return <lexer.name>._serializedATN }

 override <accessLevelOpenOK(lexer)>
 func getChannelNames() -> [String] { return <lexer.name>.channelNames }

 override <accessLevelOpenOK(lexer)>
 func getModeNames() -> [String] { return <lexer.name>.modeNames }

 override <accessLevelOpenOK(lexer)>
 func getATN() -> ATN { return <lexer.name>._ATN }

 <dumpActions(lexer, "", actionFuncs, sempredFuncs)>
 <atn>

 <accessLevelNotOpen(lexer)>
 static let _ATN: ATN = try! ATNDeserializer().deserialize(_serializedATN)
}
>>

SerializedATN(model) ::= <<
static let _serializedATN:[Int] = [
 <model.serialized: {s | <s>}; separator=",", wrap>
]
>>

/** Using a type to init value map, try to init a type; if not in table
* must be an object,
 default value is "null".
*/
initValue(typeName) ::= <<
<SwiftTypeInitMap.(typeName)>
>>

codeFileExtension() ::= ".swift"
```

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/tool/templates/codegen/Swift/Swift.stg
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/** The definitive ANTLR v3 tree grammar to walk/visit ANTLR v4 grammars.

```
*  Parses trees created by ANTLRParser.g.
*
*  Rather than have multiple tree grammars, one for each visit, I'm
*  creating this generic visitor that knows about context. All of the
*  boilerplate pattern recognition is done here. Then, subclasses can
*  override the methods they care about.
 This prevents a lot of the same
*  context tracking stuff like "set current alternative for current
*  rule node" that is repeated in lots of tree filters.
*/
tree grammar GrammarTreeVisitor;
options {
 language      = Java;
 tokenVocab    = ANTLRParser;
 ASTLabelType  = GrammarAST;
}

// Include the copyright in this source and also the generated source
@header {
/*
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*/
```

```
package org.antlr.v4.parse;
import org.antlr.v4.Tool;
import org.antlr.v4.tool.*;
import org.antlr.v4.tool.ast.*;
import java.lang.reflect.InvocationTargetException;
import java.lang.reflect.Method;
}

@members
 {
public String grammarName;
public GrammarAST currentRuleAST;
public String currentModeName = LexerGrammar.DEFAULT_MODE_NAME;
public String currentRuleName;
public GrammarAST currentOuterAltRoot;
public int currentOuterAltNumber = 1; // 1..n
public int rewriteEBNFLevel = 0;

public GrammarTreeVisitor() { this(null); }

// Should be abstract but can't make gen'd parser abstract;
// subclasses should implement else everything goes to stderr!
public ErrorManager getErrorManager() { return null; }

public void visitGrammar(GrammarAST t) { visit(t, "grammarSpec"); }
public void visit(GrammarAST t, String ruleName) {
 CommonTreeNodeStream nodes = new CommonTreeNodeStream(new GrammarASTAdaptor(), t);
 setTreeNodeStream(nodes);
 try {
  Method m = getClass().getMethod(ruleName);
  m.invoke(this);
 }
 catch (Throwable e) {
  ErrorManager errMgr = getErrorManager();
  if ( e instanceof InvocationTargetException ) {
   e = e.getCause();
  }
  //e.printStackTrace(System.err);
  if
 ( errMgr==null ) {
   System.err.println("can't find rule "+ruleName+
         " or tree structure error: "+t.toStringTree()
         );
   e.printStackTrace(System.err);
  }
  else errMgr.toolError(ErrorType.INTERNAL_ERROR, e);
 }
}
```

```
public void discoverGrammar(GrammarRootAST root, GrammarAST ID) { }
public void finishPrequels(GrammarAST firstPrequel) { }
public void finishGrammar(GrammarRootAST root, GrammarAST ID) { }

public void grammarOption(GrammarAST ID, GrammarAST valueAST) { }
public void ruleOption(GrammarAST ID, GrammarAST valueAST) { }
public void blockOption(GrammarAST ID, GrammarAST valueAST) { }
public void defineToken(GrammarAST ID) { }
public void defineChannel(GrammarAST ID) { }
public void globalNamedAction(GrammarAST scope, GrammarAST ID, ActionAST action) { }
public void importGrammar(GrammarAST label, GrammarAST ID) { }

public void modeDef(GrammarAST m, GrammarAST ID) { }

public void discoverRules(GrammarAST rules) { }
public void finishRules(GrammarAST
 rule) { }
public void discoverRule(RuleAST rule, GrammarAST ID, List<GrammarAST> modifiers,
      ActionAST arg, ActionAST returns, GrammarAST thrws,
      GrammarAST options, ActionAST locals,
      List<GrammarAST> actions,
      GrammarAST block) { }
public void finishRule(RuleAST rule, GrammarAST ID, GrammarAST block) { }
public void discoverLexerRule(RuleAST rule, GrammarAST ID, List<GrammarAST> modifiers, GrammarAST
options,
                        GrammarAST block) { }
public void finishLexerRule(RuleAST rule, GrammarAST ID, GrammarAST block) { }
public void ruleCatch(GrammarAST arg, ActionAST action) { }
public void finallyAction(ActionAST action) { }
public void discoverOuterAlt(AltAST alt) { }
public void finishOuterAlt(AltAST alt) { }
public void discoverAlt(AltAST alt) { }
public void finishAlt(AltAST alt) { }

public void ruleRef(GrammarAST ref, ActionAST arg) { }
public void tokenRef(TerminalAST ref) { }
public void elementOption(GrammarASTWithOptions t,
 GrammarAST ID, GrammarAST valueAST) { }
public void stringRef(TerminalAST ref) { }
public void wildcardRef(GrammarAST ref) { }
public void actionInAlt(ActionAST action) { }
public void sempredInAlt(PredAST pred) { }
public void label(GrammarAST op, GrammarAST ID, GrammarAST element) { }
public void lexerCallCommand(int outerAltNumber, GrammarAST ID, GrammarAST arg) { }
public void lexerCommand(int outerAltNumber, GrammarAST ID) { }

protected void enterGrammarSpec(GrammarAST tree) { }
```

```
protected void exitGrammarSpec(GrammarAST tree) { }

protected void enterPrequelConstructs(GrammarAST tree) { }
protected void exitPrequelConstructs(GrammarAST tree) { }

protected void enterPrequelConstruct(GrammarAST tree) { }
protected void exitPrequelConstruct(GrammarAST tree) { }

protected void enterOptionsSpec(GrammarAST tree) { }
protected void exitOptionsSpec(GrammarAST tree) { }

protected void enterOption(GrammarAST tree) { }
protected void exitOption(GrammarAST tree) { }

protected void enterOptionValue(GrammarAST
 tree) { }
protected void exitOptionValue(GrammarAST tree) { }

protected void enterDelegateGrammars(GrammarAST tree) { }
protected void exitDelegateGrammars(GrammarAST tree) { }

protected void enterDelegateGrammar(GrammarAST tree) { }
protected void exitDelegateGrammar(GrammarAST tree) { }

protected void enterTokensSpec(GrammarAST tree) { }
protected void exitTokensSpec(GrammarAST tree) { }

protected void enterTokenSpec(GrammarAST tree) { }
protected void exitTokenSpec(GrammarAST tree) { }

protected void enterChannelsSpec(GrammarAST tree) { }
protected void exitChannelsSpec(GrammarAST tree) { }

protected void enterChannelSpec(GrammarAST tree) { }
protected void exitChannelSpec(GrammarAST tree) { }

protected void enterAction(GrammarAST tree) { }
protected void exitAction(GrammarAST tree) { }

protected void enterRules(GrammarAST tree) { }
protected void exitRules(GrammarAST tree) { }

protected void enterMode(GrammarAST tree) { }
protected void exitMode(GrammarAST
 tree) { }

protected void enterLexerRule(GrammarAST tree) { }
protected void exitLexerRule(GrammarAST tree) { }
```

```
protected void enterRule(GrammarAST tree) { }
protected void exitRule(GrammarAST tree) { }

protected void enterExceptionGroup(GrammarAST tree) { }
protected void exitExceptionGroup(GrammarAST tree) { }

protected void enterExceptionHandler(GrammarAST tree) { }
protected void exitExceptionHandler(GrammarAST tree) { }

protected void enterFinallyClause(GrammarAST tree) { }
protected void exitFinallyClause(GrammarAST tree) { }

protected void enterLocals(GrammarAST tree) { }
protected void exitLocals(GrammarAST tree) { }

protected void enterRuleReturns(GrammarAST tree) { }
protected void exitRuleReturns(GrammarAST tree) { }

protected void enterThrowsSpec(GrammarAST tree) { }
protected void exitThrowsSpec(GrammarAST tree) { }

protected void enterRuleAction(GrammarAST tree) { }
protected void exitRuleAction(GrammarAST tree) { }

protected void enterRuleModifier(GrammarAST
 tree) { }
protected void exitRuleModifier(GrammarAST tree) { }

protected void enterLexerRuleBlock(GrammarAST tree) { }
protected void exitLexerRuleBlock(GrammarAST tree) { }

protected void enterRuleBlock(GrammarAST tree) { }
protected void exitRuleBlock(GrammarAST tree) { }

protected void enterLexerOuterAlternative(AltAST tree) { }
protected void exitLexerOuterAlternative(AltAST tree) { }

protected void enterOuterAlternative(AltAST tree) { }
protected void exitOuterAlternative(AltAST tree) { }

protected void enterLexerAlternative(GrammarAST tree) { }
protected void exitLexerAlternative(GrammarAST tree) { }

protected void enterLexerElements(GrammarAST tree) { }
protected void exitLexerElements(GrammarAST tree) { }

protected void enterLexerElement(GrammarAST tree) { }
```

```
protected void exitLexerElement(GrammarAST tree) { }

protected void enterLexerBlock(GrammarAST tree) { }
protected void exitLexerBlock(GrammarAST tree) { }

protected void enterLexerAtom(GrammarAST tree) { }
protected
 void exitLexerAtom(GrammarAST tree) { }

protected void enterActionElement(GrammarAST tree) { }
protected void exitActionElement(GrammarAST tree) { }

protected void enterAlternative(AltAST tree) { }
protected void exitAlternative(AltAST tree) { }

protected void enterLexerCommand(GrammarAST tree) { }
protected void exitLexerCommand(GrammarAST tree) { }

protected void enterLexerCommandExpr(GrammarAST tree) { }
protected void exitLexerCommandExpr(GrammarAST tree) { }

protected void enterElement(GrammarAST tree) { }
protected void exitElement(GrammarAST tree) { }

protected void enterAstOperand(GrammarAST tree) { }
protected void exitAstOperand(GrammarAST tree) { }

protected void enterLabeledElement(GrammarAST tree) { }
protected void exitLabeledElement(GrammarAST tree) { }

protected void enterSubrule(GrammarAST tree) { }
protected void exitSubrule(GrammarAST tree) { }

protected void enterLexerSubrule(GrammarAST tree) { }
protected void exitLexerSubrule(GrammarAST tree) { }

protected
 void enterBlockSuffix(GrammarAST tree) { }
protected void exitBlockSuffix(GrammarAST tree) { }

protected void enterEbnfSuffix(GrammarAST tree) { }
protected void exitEbnfSuffix(GrammarAST tree) { }

protected void enterAtom(GrammarAST tree) { }
protected void exitAtom(GrammarAST tree) { }

protected void enterBlockSet(GrammarAST tree) { }
protected void exitBlockSet(GrammarAST tree) { }
```

```
protected void enterSetElement(GrammarAST tree) { }
protected void exitSetElement(GrammarAST tree) { }

protected void enterBlock(GrammarAST tree) { }
protected void exitBlock(GrammarAST tree) { }

protected void enterRuleref(GrammarAST tree) { }
protected void exitRuleref(GrammarAST tree) { }

protected void enterRange(GrammarAST tree) { }
protected void exitRange(GrammarAST tree) { }

protected void enterTerminal(GrammarAST tree) { }
protected void exitTerminal(GrammarAST tree) { }

protected void enterElementOptions(GrammarAST tree) { }
protected void exitElementOptions(GrammarAST tree) {
 }

protected void enterElementOption(GrammarAST tree) { }
protected void exitElementOption(GrammarAST tree) { }

 @Override
 public void traceIn(String ruleName, int ruleIndex)  {
  System.err.println("enter "+ruleName+": "+input.LT(1));
 }

 @Override
 public void traceOut(String ruleName, int ruleIndex)  {
  System.err.println("exit "+ruleName+": "+input.LT(1));
 }
}

grammarSpec
@init {
 enterGrammarSpec($start);
}
@after {
 exitGrammarSpec($start);
}
   :   ^( GRAMMAR ID {grammarName=$ID.text;}
     {discoverGrammar((GrammarRootAST)$GRAMMAR, $ID);}
      prequelConstructs
     {finishPrequels($prequelConstructs.firstOne);}
      rules mode*
     {finishGrammar((GrammarRootAST)$GRAMMAR, $ID);}
   )
```

```
 ;

prequelConstructs returns [GrammarAST firstOne=null]
@init {
 enterPrequelConstructs($start);
}
@after {
 exitPrequelConstructs($start);
}
 : {$firstOne=$start;} prequelConstruct+
 |
 ;

prequelConstruct
@init {
 enterPrequelConstructs($start);
}
@after {
 exitPrequelConstructs($start);
}
 :
   optionsSpec
   |   delegateGrammars
   |   tokensSpec
   |   channelsSpec
   |   action
   ;

optionsSpec
@init {
 enterOptionsSpec($start);
}
@after {
 exitOptionsSpec($start);
}
 : ^(OPTIONS option*)
   ;

option
@init {
 enterOption($start);
 boolean rule = inContext("RULE ...");
 boolean block = inContext("BLOCK ...");
}
@after {
 exitOption($start);
}
   :   ^(a=ASSIGN ID v=optionValue)
```

```
    {
    if ( block ) blockOption($ID, $v.start); // most specific first
    else if ( rule ) ruleOption($ID, $v.start);
    else grammarOption($ID, $v.start);
    }
   ;

optionValue returns [String v]
@init {
 enterOptionValue($start);
 $v = $start.token.getText();
}
@after {
 exitOptionValue($start);
}
   :   ID
   |   STRING_LITERAL
   |   INT
   ;

delegateGrammars
@init {
 enterDelegateGrammars($start);
}
@after {
 exitDelegateGrammars($start);
}
 :   ^(IMPORT delegateGrammar+)
 ;

delegateGrammar
@init {
 enterDelegateGrammar($start);
}
@after {
 exitDelegateGrammar($start);
}
    :   ^(ASSIGN label=ID id=ID) {importGrammar($label, $id);}
   |   id=ID      {importGrammar(null, $id);}
   ;

tokensSpec
@init {
 enterTokensSpec($start);
}
@after {
 exitTokensSpec($start);
}
```

```
 :   ^(TOKENS_SPEC tokenSpec+)
 ;

tokenSpec
@init {
 enterTokenSpec($start);
}
@after {
 exitTokenSpec($start);
}
 : ID     {defineToken($ID);}
 ;

channelsSpec
@init {
 enterChannelsSpec($start);
}
@after {
 exitChannelsSpec($start);
}
 :   ^(CHANNELS channelSpec+)
 ;

channelSpec
@init {
 enterChannelSpec($start);
}
@after {
 exitChannelSpec($start);
}
 : ID     {defineChannel($ID);}
 ;

action
@init {
 enterAction($start);
}
@after {
 exitAction($start);
}
 : ^(AT sc=ID? name=ID ACTION) {globalNamedAction($sc, $name, (ActionAST)$ACTION);}
 ;

rules
@init {
 enterRules($start);
}
@after {
```

```
 exitRules($start);
}
   : ^(RULES {discoverRules($RULES);} (rule|lexerRule)* {finishRules($RULES);})
   ;

mode
@init {
 enterMode($start);
}
@after {
 exitMode($start);
}
 : ^(
 MODE ID {currentModeName=$ID.text; modeDef($MODE, $ID);} lexerRule* )
 ;

lexerRule
@init {
 enterLexerRule($start);
 List<GrammarAST> mods = new ArrayList<GrammarAST>();
 currentOuterAltNumber=0;
}
@after {
 exitLexerRule($start);
}
 : ^( RULE TOKEN_REF
   {currentRuleName=$TOKEN_REF.text; currentRuleAST=$RULE;}
   (^(RULEMODIFIERS m=FRAGMENT {mods.add($m);}))?
   opts=optionsSpec*
       {discoverLexerRule((RuleAST)$RULE, $TOKEN_REF, mods, $opts.start, (GrammarAST)input.LT(1));}
       lexerRuleBlock
       {
       finishLexerRule((RuleAST)$RULE, $TOKEN_REF, $lexerRuleBlock.start);
       currentRuleName=null; currentRuleAST=null;
       }
       )
 ;

rule
@init {
 enterRule($start);
 List<GrammarAST> mods = new ArrayList<GrammarAST>();
 List<GrammarAST> actions = new ArrayList<GrammarAST>(); // track roots
 currentOuterAltNumber=0;
}
@after {
 exitRule($start);
}
```

```
 :   ^( RULE RULE_REF {currentRuleName=$RULE_REF.text; currentRuleAST=$RULE;}
   (^(RULEMODIFIERS (m=ruleModifier{mods.add($m.start);})+))?
   ARG_ACTION?
        ret=ruleReturns?
       thr=throwsSpec?
       loc=locals?
       ( opts=optionsSpec
      |   a=ruleAction {actions.add($a.start);}
      )*
       {discoverRule((RuleAST)$RULE, $RULE_REF, mods, (ActionAST)$ARG_ACTION,
           $ret.start!=null?(ActionAST)$ret.start.getChild(0):null,
           $thr.start, $opts.start,
           $loc.start!=null?(ActionAST)$loc.start.getChild(0):null,
           actions, (GrammarAST)input.LT(1));}
       ruleBlock exceptionGroup
       {finishRule((RuleAST)$RULE, $RULE_REF, $ruleBlock.start); currentRuleName=null; currentRuleAST=null;}
       )
   ;

exceptionGroup
@init {
 enterExceptionGroup($start);
}
@after {
 exitExceptionGroup($start);
}
   : exceptionHandler* finallyClause?
   ;

exceptionHandler
@init {
 enterExceptionHandler($start);
}
@after {
 exitExceptionHandler($start);
}
 : ^(CATCH ARG_ACTION ACTION) {ruleCatch($ARG_ACTION, (ActionAST)$ACTION);}
 ;

finallyClause
@init
 {
 enterFinallyClause($start);
}
@after {
 exitFinallyClause($start);
}
 : ^(FINALLY ACTION)    {finallyAction((ActionAST)$ACTION);}
```

```
 ;

locals
@init {
 enterLocals($start);
}
@after {
 exitLocals($start);
}
 : ^(LOCALS ARG_ACTION)
 ;

ruleReturns
@init {
 enterRuleReturns($start);
}
@after {
 exitRuleReturns($start);
}
 : ^(RETURNS ARG_ACTION)
 ;

throwsSpec
@init {
 enterThrowsSpec($start);
}
@after {
 exitThrowsSpec($start);
}
   : ^(THROWS ID+)
   ;

ruleAction
@init {
 enterRuleAction($start);
}
@after {
 exitRuleAction($start);
}
 : ^(AT ID ACTION)
 ;

ruleModifier
@init {
 enterRuleModifier($start);
}
@after {
 exitRuleModifier($start);
```

```
}
   : PUBLIC
   | PRIVATE
   | PROTECTED
   | FRAGMENT
   ;

lexerRuleBlock
@init {
 enterLexerRuleBlock($start);
}
@after {
 exitLexerRuleBlock($start);
}
   : ^( BLOCK
     ( {
      currentOuterAltRoot = (GrammarAST)input.LT(1);
    currentOuterAltNumber++;
    }
      lexerOuterAlternative
     )+
    )
   ;

ruleBlock
@init
 {
 enterRuleBlock($start);
}
@after {
 exitRuleBlock($start);
}
   : ^( BLOCK
     ( {
      currentOuterAltRoot = (GrammarAST)input.LT(1);
    currentOuterAltNumber++;
    }
      outerAlternative
     )+
    )
   ;

lexerOuterAlternative
@init {
 enterLexerOuterAlternative((AltAST)$start);
 discoverOuterAlt((AltAST)$start);
}
@after {
```

```
 finishOuterAlt((AltAST)$start);
 exitLexerOuterAlternative((AltAST)$start);
}
 : lexerAlternative
 ;


outerAlternative
@init {
 enterOuterAlternative((AltAST)$start);
 discoverOuterAlt((AltAST)$start);
}
@after {
 finishOuterAlt((AltAST)$start);
 exitOuterAlternative((AltAST)$start);
}
 : alternative
 ;

lexerAlternative
@init {
 enterLexerAlternative($start);
}
@after {
 exitLexerAlternative($start);
}
 : ^(LEXER_ALT_ACTION lexerElements lexerCommand+)
   |   lexerElements
   ;

lexerElements
@init {
 enterLexerElements($start);
}
@after {
 exitLexerElements($start);
}
   : ^(ALT lexerElement+)
   ;

lexerElement
@init {
 enterLexerElement($start);
}
@after
 {
 exitLexerElement($start);
}
```

```
 : lexerAtom
 | lexerSubrule
 |   ACTION      {actionInAlt((ActionAST)$ACTION);}
 |   SEMPRED      {sempredInAlt((PredAST)$SEMPRED);}
 |   ^(ACTION elementOptions) {actionInAlt((ActionAST)$ACTION);}
 |   ^(SEMPRED elementOptions) {sempredInAlt((PredAST)$SEMPRED);}
 | EPSILON
 ;

lexerBlock
@init {
 enterLexerBlock($start);
}
@after {
 exitLexerBlock($start);
}
 : ^(BLOCK optionsSpec? lexerAlternative+)
   ;

lexerAtom
@init {
 enterLexerAtom($start);
}
@after {
 exitLexerAtom($start);
}
   :   terminal
   |   ^(NOT blockSet)
   |   blockSet
   |   ^(WILDCARD elementOptions)
   |   WILDCARD
   | LEXER_CHAR_SET
   |   range
   |   ruleref
   ;

actionElement
@init {
 enterActionElement($start);
}
@after {
 exitActionElement($start);
}
 : ACTION
 |   ^(ACTION elementOptions)
 |   SEMPRED
 |   ^(SEMPRED elementOptions)
 ;
```

```
alternative
@init {
 enterAlternative((AltAST)$start);
 discoverAlt((AltAST)$start);
}
@after {
 finishAlt((AltAST)$start);
 exitAlternative((AltAST)$start);
}
 : ^(ALT
 elementOptions? element+)
 | ^(ALT elementOptions? EPSILON)
   ;

lexerCommand
@init {
 enterLexerCommand($start);
}
@after {
 exitLexerCommand($start);
}
 : ^(LEXER_ACTION_CALL ID lexerCommandExpr)
       {lexerCallCommand(currentOuterAltNumber, $ID, $lexerCommandExpr.start);}
 | ID
       {lexerCommand(currentOuterAltNumber, $ID);}
 ;

lexerCommandExpr
@init {
 enterLexerCommandExpr($start);
}
@after {
 exitLexerCommandExpr($start);
}
 : ID
 | INT
 ;

element
@init {
 enterElement($start);
}
@after {
 exitElement($start);
}
 : labeledElement
 | atom
```

```
 | subrule
 |   ACTION      {actionInAlt((ActionAST)$ACTION);}
 |   SEMPRED      {sempredInAlt((PredAST)$SEMPRED);}
 |   ^(ACTION elementOptions) {actionInAlt((ActionAST)$ACTION);}
 |   ^(SEMPRED elementOptions) {sempredInAlt((PredAST)$SEMPRED);}
 | range
 | ^(NOT blockSet)
 | ^(NOT block)
 ;

astOperand
@init {
 enterAstOperand($start);
}
@after {
 exitAstOperand($start);
}
 : atom
 | ^(NOT
 blockSet)
 | ^(NOT block)
 ;

labeledElement
@init {
 enterLabeledElement($start);
}
@after {
 exitLabeledElement($start);
}
 : ^((ASSIGN|PLUS_ASSIGN) ID element) {label($start, $ID, $element.start);}
 ;

subrule
@init {
 enterSubrule($start);
}
@after {
 exitSubrule($start);
}
 : ^(blockSuffix block)
 |  block
   ;

lexerSubrule
@init {
 enterLexerSubrule($start);
}
```

```
@after {
 exitLexerSubrule($start);
}
 : ^(blockSuffix lexerBlock)
 |  lexerBlock
   ;

blockSuffix
@init {
 enterBlockSuffix($start);
}
@after {
 exitBlockSuffix($start);
}
   : ebnfSuffix
   ;

ebnfSuffix
@init {
 enterEbnfSuffix($start);
}
@after {
 exitEbnfSuffix($start);
}
 : OPTIONAL
  | CLOSURE
   | POSITIVE_CLOSURE
 ;

atom
@init {
 enterAtom($start);
}
@after {
 exitAtom($start);
}
 : ^(DOT ID terminal)
 | ^(DOT ID ruleref)
   | ^(WILDCARD elementOptions) {wildcardRef($WILDCARD);}
   | WILDCARD     {wildcardRef($WILDCARD);}
   |   terminal
   | blockSet
   |   ruleref
   ;

blockSet
@init
```

```
 {
 enterBlockSet($start);
}
@after {
 exitBlockSet($start);
}
 : ^(SET setElement+)
 ;

setElement
@init {
 enterSetElement($start);
}
@after {
 exitSetElement($start);
}
 : ^(STRING_LITERAL elementOptions)    {stringRef((TerminalAST)$STRING_LITERAL);}
 | ^(TOKEN_REF elementOptions)   {tokenRef((TerminalAST)$TOKEN_REF);}
 | STRING_LITERAL                    {stringRef((TerminalAST)$STRING_LITERAL);}
 | TOKEN_REF                     {tokenRef((TerminalAST)$TOKEN_REF);}
 | ^(RANGE a=STRING_LITERAL b=STRING_LITERAL)
  {
  stringRef((TerminalAST)$a);
  stringRef((TerminalAST)$b);
  }
      |      LEXER_CHAR_SET
 ;

block
@init {
 enterBlock($start);
}
@after {
 exitBlock($start);
}
   : ^(BLOCK optionsSpec? ruleAction* ACTION? alternative+)
   ;

ruleref
@init {
 enterRuleref($start);
}
@after {
 exitRuleref($start);
}
   : ^(RULE_REF arg=ARG_ACTION? elementOptions?)
    {
    ruleRef($RULE_REF, (ActionAST)$ARG_ACTION);
```

```
    if ( $arg!=null ) actionInAlt((ActionAST)$arg);
     }
   ;

range
@init {
 enterRange($start);
}
@after {
 exitRange($start);
}
   : ^(RANGE STRING_LITERAL STRING_LITERAL)
   ;

terminal
@init {
 enterTerminal($start);
}
@after {
 exitTerminal($start);
}
   :  ^(STRING_LITERAL elementOptions)
          {stringRef((TerminalAST)$STRING_LITERAL);}
   | STRING_LITERAL    {stringRef((TerminalAST)$STRING_LITERAL);}
   | ^(TOKEN_REF elementOptions) {tokenRef((TerminalAST)$TOKEN_REF);}
   | TOKEN_REF        {tokenRef((TerminalAST)$TOKEN_REF);}
   ;

elementOptions
@init {
 enterElementOptions($start);
}
@after {
 exitElementOptions($start);
}
   : ^(ELEMENT_OPTIONS elementOption[(GrammarASTWithOptions)$start.getParent()]*)
   ;

elementOption[GrammarASTWithOptions t]
@init {
 enterElementOption($start);
}
@after {
 exitElementOption($start);
}
   : ID        {elementOption(t, $ID, null);}
   |   ^(ASSIGN id=ID v=ID)   {elementOption(t, $id, $v);}
   |   ^(ASSIGN ID v=STRING_LITERAL) {elementOption(t, $ID, $v);}
```

```
  |   ^(ASSIGN
 ID v=ACTION)   {elementOption(t, $ID, $v);}
  |   ^(ASSIGN ID v=INT)    {elementOption(t, $ID, $v);}
  ;
```

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/GrammarTreeVisitor.g
No license file was found, but licenses were detected in source scan.

```
/*
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*/

// File      : A3Lexer.g
// Author    : Jim Idle (jimi@temporal-wave.com)
// Copyright : Free BSD - See @header clause below
// Version   : First implemented as part of ANTLR 3.2 this is the self
//             hosting ANTLR 3 Lexer.
//
// Description
// -----------
```

```
// This is the definitive lexer grammar for parsing ANTLR V3.x.x grammars. All other
// grammars are
 derived from this grammar via source code control integration (perforce)
// or by the gdiff tool.
//
// This grammar and its associated grammars A3Parser.g and A3Walker.g exhibit the following
// traits, which are recommended for all production quality grammars:
//
// 1) They are separate grammars, not composite grammars;
// 2) They implement all supporting methods in a superclass (at least this is recommended
//    for language targets that support inheritance;
// 3) All errors are pushed as far down the parsing chain as possible, which means
//    that the lexer tries to defer error reporting to the parser, and the parser
//    tries to defer error reporting to a semantic phase consisting of a single
//    walk of the AST. The reason for this is that the error messages produced
//    from later phases of the parse will generally have better context and so
//    be more useful to the end user. Consider the message: "Syntax error at 'options'"
//    vs: "You cannot specify two options{}
 sections in a single grammar file".
// 4) The lexer is 'programmed' to catch common mistakes such as unterminated literals
//    and report them specifically and not just issue confusing lexer mismatch errors.
//

/** Read in an ANTLR grammar and build an AST.  Try not to do
*  any actions, just build the tree.
*
*  The phases are:
*
*  A3Lexer.g (this file)
*           A3Parser.g
*           A3Verify.g (derived from A3Walker.g)
*  assign.types.g
*  define.g
*  buildnfa.g
*  antlr.print.g (optional)
*  codegen.g
*
*  Terence Parr
*  University of San Francisco
*  2005
*  Jim Idle (this v3 grammar)
*  Temporal Wave LLC
*  2009
*/
lexer grammar ANTLRLexer;

// ==============================================================================
// Note that while this grammar does not care about order of constructs
```

```
// that don't really matter, such as options before @header etc, it must first
// be parsed by the original v2 parser, before it replaces it. That parser
 does
// care about order of structures. Hence we are constrained by the v2 parser
// for at least the first bootstrap release that causes this parser to replace
// the v2 version.
// ==============================================================================

// -------
// Options
//
// V3 option directives to tell the tool what we are asking of it for this
// grammar.
//
options {

 // Target language is Java, which is the default but being specific
 // here as this grammar is also meant as a good example grammar for
 // for users.
 //
 language      = Java;

 // The super class that this lexer should expect to inherit from, and
 // which contains any and all support routines for the lexer. This is
 // commented out in this baseline (definitive or normative grammar)
 // - see the ANTLR tool implementation for hints on how to use the super
 //   class
 //
 //superclass    = AbstractA3Lexer;
}

tokens { SEMPRED; TOKEN_REF; RULE_REF; LEXER_CHAR_SET; ARG_ACTION; }

// Include the copyright
 in this source and also the generated source
//
@lexer::header {
/*
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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
*/
package org.antlr.v4.parse;
import org.antlr.v4.tool.*;
import org.antlr.v4.runtime.misc.Interval;
}


@members {
 public static final int COMMENTS_CHANNEL = 2;

   public CommonTokenStream tokens; // track stream we push to; need for context info
   public boolean isLexerRule = false;

 public void grammarError(ErrorType etype, org.antlr.runtime.Token token, Object... args) { }

 /** scan backwards from current point in this.tokens list
  *  looking for the start of the rule or
 subrule.
  *  Return token or null if for some reason we can't find the start.
  */
 public Token getRuleOrSubruleStartToken() {
  if (tokens == null) return null;
  int i = tokens.index();
  int n = tokens.size();
  if (i >= n) i = n - 1; // seems index == n as we lex
  boolean withinOptionsBlock = false;
  while (i >= 0 && i < n) {
   int ttype = tokens.get(i).getType();
   if (withinOptionsBlock) {
    // Ignore rule options content
    if (ttype == OPTIONS) {
     withinOptionsBlock = false;
```

```
    }
   }
   else {
    if (ttype == RBRACE) {
     withinOptionsBlock = true;
    }
    else if (ttype == LPAREN || ttype == TOKEN_REF || ttype == RULE_REF) {
     return tokens.get(i);
    }
   }
   i--;
  }
  return null;
 }
}

// --------
// Comments
//
// ANTLR comments can be multi or single line and we don't care
// which particularly. However we also accept Javadoc style comments
// of the form: /** ... */ and we do take care to distinguish those
// from ordinary multi-line comments
//
 Note how we guide the lexical PATH because we want to issue a descriptive
// error message in case of a standalone '/' character, which makes no
// sense in ANTLR source code. We alo trap unterminated multi-line comments
//
fragment DOC_COMMENT : ;
COMMENT
@init {

 // Record the start line and offsets as if we need to report an
 // unterminated comment, then we want to show the start of the comment
 // we think is broken, not the end, where people will have to try and work
 // it out themselves.
 //
 int startLine = $line;
 int offset    = getCharPositionInLine();
}
   : // Eat the first character only, then see if we have a comment
     // or something silly.
     //
     '/'  // Comment introducer

     (
         // Single line comment, possibly with embedded src/line directives
         // in a similar style to the C pre-processor, allowing generated
```

```
    // code to refer the programmer back to the original source code
    // in case of error.
    //

  '/'
      (
         (' $ANTLR')=> ' $ANTLR' SRC
       | ~NLCHARS*
      )

  | // Multi-line comment, which may be a documentation comment
    // if it starts /** (note that we protect against accidentally
    // recognizing a comment /**/ as a documentation comment
    //
    '*' (
         { input.LA(2) != '/'}?=> '*' { $type = DOC_COMMENT; }
       | { true }?=>  // Required to cover all alts with predicates
         )

         // Should we support embedded multiline comments here?
         //
         (
            // Pick out end of multiline comment and exit the loop
            // if we find it.
            //
            {    !(input.LA(1) == '*' && input.LA(2) == '/') }?

              // Anything else other than the non-greedy match of
              // the comment close sequence
              //
              .

        )*
      (
           // Look for the comment terminator, but if it is accidentally
           // unterminated, then we will hit EOF, which will trigger the
           // epsilon alt and hence we can issue an error message relative
           // to the start of the unterminated multi-line comment
           //
           '*/'

         | // Unterminated comment!
           //
           {
             // ErrorManager.msg(Msg.UNTERMINATED_DOC_COMMENT, startLine, offset, $pos, startLine,
offset, $pos, (Object)null);
           }
        )
```

```
      | // There was nothing that made sense following the opening '/' and so
        // we issue an error regarding the malformed comment
        //
        {
          // TODO: Insert error message relative to comment start
          //
        }
    )
    {
      // We do not wish to pass the comments in to the parser. If you are

      // writing a formatter then you will want to preserve the comments off
      // channel, but could just skip and save token space if not.
      //
      $channel=COMMENTS_CHANNEL;
    }
  ;

ARG_OR_CHARSET
options {k=1;}
  :   {isLexerRule}?=> LEXER_CHAR_SET {$type=LEXER_CHAR_SET;}
  |   {!isLexerRule}?=> ARG_ACTION
      {
      $type=ARG_ACTION;
      // Set the token text to our gathered string minus outer [ ]
      String t = $text;
      t = t.substring(1,t.length()-1);
      setText(t);
      }
  ;

fragment
LEXER_CHAR_SET
 : '['
  ( '\\' ~('\r'|'\n')
  | ~('\r'|'\n'|'\\'|']')
  )*
  ']'
 ;

// --------------
// Argument specs
//
// Certain argument lists, such as those specifying call parameters
// to a rule invocation, or input parameters to a rule specification
// are contained within square brackets. In the lexer we consume them
// all at once and sort them out later in the grammar analysis.
```

```
//
fragment
ARG_ACTION
 : '['
       (

          ARG_ACTION

         | ('")=>ACTION_STRING_LITERAL

         | ('\")=>ACTION_CHAR_LITERAL

         | ~('['|']')
     )*

     ']'
 ;

// -------
// Actions
//
// Other than making sure to distinguish between { and } embedded
// within what we have assumed to be literals in the action code, the
// job of the lexer is merely to gather the code within the action
// (delimited by {}) and pass it to the parser as a single token.
// We know that this token will be asked for its text somewhere
// in the upcoming parse, so setting the text here to exclude
// the delimiting {} is no additional overhead.
//
ACTION
 : NESTED_ACTION ( '?' {$type = SEMPRED;} )?
 ;

// ----------------
// Action structure
//
// Many language targets use {} as block delimiters and so we
// must recursively match {} delimited blocks to balance the
// braces. Additionally, we must make some assumptions about
// literal string representation in the target language. We assume
// that they are delimited
 by ' or " and so consume these
// in their own alts so as not to inadvertently match {}.
// This rule calls itself on matching a {
//
fragment
NESTED_ACTION
@init {
```

```
// Record the start line and offsets as if we need to report an
// unterminated block, then we want to show the start of the comment
// we think is broken, not the end, where people will have to try and work
// it out themselves.
//
int startLine = getLine();
int offset    = getCharPositionInLine();
}

  : // Action and other blocks start with opening {
    //
  '{'
    (
    // And now we can match one of a number of embedded
    // elements within the action until we find a
    // } that balances the opening {. If we do not find
    // the balanced } then we will hit EOF and can issue
    // an error message about the brace that we believe to
    // be mismatched. This won't be foolproof but we will
    // be able to at least report an error against the
    // opening brace that we feel is in error
 and this will
    // guide the user to the correction as best we can.
    //


        // An embedded {} block
      //
      NESTED_ACTION

      | // What appears to be a literal
        //
        ACTION_CHAR_LITERAL

      | // We have assumed that the target language has C/Java
        // type comments.
        //
        COMMENT

      | // What appears to be a literal
        //
        ACTION_STRING_LITERAL

    | // What appears to be an escape sequence
      //
      ACTION_ESC
```

```
    | // Some other single character that is not
      // handled above
      //
      ~('\\'|'"'|'\"'|'/'|'{'|'}')

    )*

 (
    // Correctly balanced closing brace
    //
    '}'

  | // Looks like have an imbalanced {} block, report
    // with respect to the opening brace.
    //
    {
        // TODO: Report imbalanced {}
        System.out.println("Block starting  at line " + startLine + " offset " + (offset+1) + " contains imbalanced {} or
is missing
 a }");
    }
 )
  ;



// Keywords
// --------
// Keywords may not be used as labels for rules or in any other context
// where they would be ambiguous with the keyword vs some other identifier
// OPTIONS, TOKENS, and CHANNELS must also consume the opening brace that captures
// their option block, as this is the easiest way to parse it separate
// to an ACTION block, despite it using the same {} delimiters.
//
OPTIONS      : 'options'  WSNLCHARS* '{'  ;
TOKENS_SPEC  : 'tokens'   WSNLCHARS* '{'  ;
CHANNELS     : 'channels' WSNLCHARS* '{'  ;

IMPORT       : 'import'               ;
FRAGMENT     : 'fragment'             ;
LEXER        : 'lexer'                ;
PARSER       : 'parser'               ;
GRAMMAR      : 'grammar'              ;
RETURNS      : 'returns'              ;
LOCALS       : 'locals'               ;
THROWS       : 'throws'               ;
CATCH        : 'catch'                ;
FINALLY      : 'finally'              ;
MODE         : 'mode'                 ;
```

```
// -----------
//
 Punctuation
//
// Character sequences used as separators, delimiters, operators, etc
//
COLON       : ':'
            {
            // scan backwards, looking for a RULE_REF or TOKEN_REF.
            // which would indicate the start of a rule definition.
            // If we see a LPAREN, then it's the start of the subrule.
            // this.tokens is the token string we are pushing into, so
            // just loop backwards looking for a rule definition. Then
            // we set isLexerRule.
            Token t = getRuleOrSubruleStartToken();
            if ( t!=null ) {
                if ( t.getType()==RULE_REF ) isLexerRule = false;
                else if ( t.getType()==TOKEN_REF ) isLexerRule = true;
                // else must be subrule; don't alter context
            }
            }
          ;
COLONCOLON   : '::'                ;
COMMA       : ','                  ;
SEMI        : ';'
    ;
LPAREN      : '('                  ;
RPAREN      : ')'                  ;
RARROW      : '->'                 ;
LT          : '<'                  ;
GT          : '>'                  ;
ASSIGN      : '='                  ;
QUESTION    : '?'                  ;
STAR        : '*'                  ;
PLUS        : '+'                  ;
PLUS_ASSIGN  : '+='                ;
OR          : '|'                  ;
DOLLAR      : '$'                  ;
DOT       : '.'                    ; // can be WILDCARD or DOT in qid or imported rule ref
RANGE       : '..'                 ;
AT          : '@'                  ;
POUND       : '#'                  ;
NOT         : '~'                  ;
RBRACE      : '}'                  ;

/** Allow unicode rule/token names */
ID   : a=NameStartChar NameChar*
```

```
    {
    if ( Grammar.isTokenName($a.text) ) $type = TOKEN_REF;
    else $type = RULE_REF;
    }
   ;

fragment
NameChar    :   NameStartChar

    |   '0'..'9'
        |   '_'
        |   '\u00B7'
        |   '\u0300'..'\u036F'
        |   '\u203F'..'\u2040'
        ;

fragment
NameStartChar
        :   'A'..'Z' | 'a'..'z'
        |   '\u00C0'..'\u00D6'
        |   '\u00D8'..'\u00F6'
        |   '\u00F8'..'\u02FF'
        |   '\u0370'..'\u037D'
        |   '\u037F'..'\u1FFF'
        |   '\u200C'..'\u200D'
        |   '\u2070'..'\u218F'
        |   '\u2C00'..'\u2FEF'
        |   '\u3001'..'\uD7FF'
        |   '\uF900'..'\uFDCF'
        |   '\uFDF0'..'\uFEFE'
        |   '\uFF00'..'\uFFFD'
        ; // ignores | ['\u10000-'\uEFFFF] ;

// ----------------------------
// Literals embedded in actions
//
// Note that we have made the assumption that the language used within
// actions uses the fairly standard '' and ' delimiters for literals and
// that within these literals, characters are escaped using the \ character.
// There are some languages which do
 not conform to this in all cases, such
// as by using /string/ and so on. We will have to deal with such cases if
// if they come up in targets.
//

// Within actions, or other structures that are not part of the ANTLR
// syntax, we may encounter literal characters. Within these, we do
// not want to inadvertently match things like '}' and so we eat them
```

```
// specifically. While this rule is called CHAR it allows for the fact that
// some languages may use/allow ' as the string delimiter.
//
fragment
ACTION_CHAR_LITERAL
 : '\'' (('\\')=>ACTION_ESC | ~'\'' )* '\''
 ;

// Within actions, or other structures that are not part of the ANTLR
// syntax, we may encounter literal strings. Within these, we do
// not want to inadvertently match things like '}' and so we eat them
// specifically.
//
fragment
ACTION_STRING_LITERAL
 : '"' (('\\')=>ACTION_ESC | ~'")* '"'
 ;

// Within literal strings and characters that are not part of the ANTLR
// syntax, we must allow for escaped character sequences
 so that we do not
// inadvertently recognize the end of a string or character when the terminating
// delimiter has been escaped.
//
fragment
ACTION_ESC
 : '\\' .
 ;

// -------
// Integer
//
// Obviously (I hope) match an arbitrary long sequence of digits.
//
INT : ('0'..'9')+
   ;

// -----------
// Source spec
//
// A fragment rule for picking up information about an originating
// file from which the grammar we are parsing has been generated. This allows
// ANTLR to report errors against the originating file and not the generated
// file.
//
fragment
SRC : 'src' WSCHARS+ file=ACTION_STRING_LITERAL WSCHARS+ line=INT
    {
```

```
        // TODO: Add target specific code to change the source file name and current line number
        //
      }
    ;

// --------------
// Literal string
//
// ANTLR makes no distinction between a single character literal and a
// multi-character string. All literals are single quote delimited and
// may contain unicode escape sequences of the form \uxxxx
 or \u{xxxxxx},
// where x is a valid hexadecimal number.
STRING_LITERAL
   :  '\'' ( ( ESC_SEQ | ~('\\'|'\'|'\r'|'\n') ) )*
      (    '\'
      |    // Unterminated string literal
           {
           Token t = new CommonToken(input, state.type, state.channel, state.tokenStartCharIndex, getCharIndex()-1);
           t.setLine(state.tokenStartLine);
           t.setText(state.text);
           t.setCharPositionInLine(state.tokenStartCharPositionInLine);
           grammarError(ErrorType.UNTERMINATED_STRING_LITERAL, t);
           }
      )
   ;

// A valid hex digit specification
//
fragment
HEX_DIGIT : ('0'..'9'|'a'..'f'|'A'..'F') ;

// Any kind of escaped character that we can embed within ANTLR
// literal strings.
//
fragment
ESC_SEQ
   : '\\'
       (
            // The standard escaped character set such as tab, newline, etc...
       'b'|'t'|'n'|'f'|'r'|'\'|'\\'

        | // A Java style Unicode escape sequence
          UNICODE_ESC

           | // A
 Swift/Hack style Unicode escape sequence
            UNICODE_EXTENDED_ESC
```

```
        | // An illegal escape sequence
          ~('b'|'t'|'n'|'f'|'r'|'\''|'\\'|'u') // \x for any invalid x (make sure to match char here)
          {
              Token t = new CommonToken(input, state.type, state.channel, getCharIndex()-2, getCharIndex()-1);
              t.setText(t.getText());
              t.setLine(input.getLine());
              t.setCharPositionInLine(input.getCharPositionInLine()-2);
              grammarError(ErrorType.INVALID_ESCAPE_SEQUENCE, t, input.substring(getCharIndex()-
2,getCharIndex()-1));
          }
      )
  ;

fragment
UNICODE_ESC
@init {

 // Flag to tell us whether we have a valid number of
 // hex digits in the escape sequence
 //
 int hCount = 0;
}
  :   'u' // Leadin for unicode escape sequence

      // We now require 4 hex digits. Note though
      // that we accept any number of characters
      // and issue an error if we do not get
 4. We cannot
      // use an infinite count such as + because this
      // might consume too many, so we lay out the lexical
      // options and issue an error at the invalid paths.
      //
   (
      (
        HEX_DIGIT  { hCount++; }
         (
             HEX_DIGIT  { hCount++; }
           (
               HEX_DIGIT  { hCount++; }
               (
                  // Four valid hex digits, we are good
                  //
                  HEX_DIGIT { hCount++; }

                | // Three valid digits
               )
```

```
                | // Two valid digits
               )

              | // One valid digit
          )
            )
          | // No valid hex digits at all
      )

      // Now check the digit count and issue an error if we need to
      //
      {
       if (hCount < 4) {
      Interval badRange = Interval.of(getCharIndex()-2-hCount, getCharIndex());
      String lastChar = input.substring(badRange.b,
 badRange.b);
      if ( lastChar.codePointAt(0)=='\'' ) {
       badRange.b--;
      }
      String bad = input.substring(badRange.a, badRange.b);
      Token t = new CommonToken(input, state.type, state.channel, badRange.a, badRange.b);
      t.setLine(input.getLine());
      t.setCharPositionInLine(input.getCharPositionInLine()-hCount-2);
      grammarError(ErrorType.INVALID_ESCAPE_SEQUENCE, t, bad);
       }
      }
     ;

fragment
UNICODE_EXTENDED_ESC
     :   'u{' // Leadin for unicode extended escape sequence

         HEX_DIGIT+ // One or more hexadecimal digits

         '}' // Leadout for unicode extended escape sequence

         // Now check the digit count and issue an error if we need to
         {
             int numDigits = getCharIndex()-state.tokenStartCharIndex-6;
             if (numDigits > 6) {
                 Token t = new CommonToken(input, state.type, state.channel, state.tokenStartCharIndex, getCharIndex()-
1);
                 t.setText(t.getText());
                 t.setLine(input.getLine());
                  t.setCharPositionInLine(input.getCharPositionInLine()-numDigits);
                 grammarError(ErrorType.INVALID_ESCAPE_SEQUENCE, t,
input.substring(state.tokenStartCharIndex,getCharIndex()-1));
         }
```

```
      }
   ;

// ----------
// Whitespace
//
// Characters and character constructs that are of no import
// to the parser and are used to make the grammar easier to read
// for humans.
//
WS
   : (
      ' '
       | '\t'
       | '\r'
       | '\n'
       | '\f'
     )+
     {$channel=HIDDEN;}
   ;

// A fragment rule for use in recognizing end of line in
// rules like COMMENT.
//
fragment
NLCHARS
   : '\n' | '\r'
   ;

// A fragment rule for recognizing traditional whitespace
// characters within lexer rules.
//
fragment
WSCHARS
   : ' ' | '\t' | '\f'
   ;

// A fragment rule for recognizing both traditional whitespace and
// end of line markers, when we don't care to distinguish but don't
// want any action code going on.
//
fragment
WSNLCHARS
    : ' ' | '\t' | '\f' | '\n' | '\r'
   ;

// This rule allows ANTLR 4 to parse grammars using the UTF-8 encoding with a
// byte order mark. Since this Unicode character doesn't appear as a token
```

```
// anywhere else in the grammar, we can simply skip all instances of it without
// problem. This rule will not break usage of \uFEFF inside a LEXER_CHAR_SET or
// STRING_LITERAL.
UnicodeBOM
   :   '\uFEFF' {skip();}
   ;

// -----------------
// Illegal Character
//
// This is an illegal character trap which is always the last rule in the
// lexer specification. It matches a single character of any value and being
// the last rule in the file will match when no other rule knows what to do
// about the character. It is reported as an error but is not passed on to the
// parser. This means that the parser to deal with the grammar file anyway
// but we will not try to analyse or code generate from a file with lexical
// errors.
//
ERRCHAR
   : .
     {
        Token t = new CommonToken(input,
 state.type, state.channel, state.tokenStartCharIndex, getCharIndex()-1);
        t.setLine(state.tokenStartLine);
        t.setText(state.text);
        t.setCharPositionInLine(state.tokenStartCharPositionInLine);
        String msg = getTokenErrorDisplay(t) + " came as a complete surprise to me";
        grammarError(ErrorType.SYNTAX_ERROR, t, msg);
        state.syntaxErrors++;
        skip();
     }
   ;
```

Found in path(s):
* /antlr4-4-13-1-sources-1-jar/org/antlr/v4/parse/ANTLRLexer.g

1.3084 ansible-lint 6.22.2

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For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we
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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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1.3105 libaudit 1:3.1.2-2.1build1.1

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Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

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1.3109 libproc2-0 2:4.0.4-4ubuntu3.2

1.3109.1 Available under license :

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Section 6 states terms for distribution of such executables.

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Whether this is true is especially significant if the work can be
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threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
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inline
functions (ten lines or less in length), then the use of the object
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b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

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For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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Version 2.1, February 1999

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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1.3115 moby-sys-reexec 0.1.0

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* Source: https://github.com/apache/maven/tree/master/maven-plugin-api

maven-resolver-api (1.1.1)

* License: Apache-2.0

maven-resolver-util (1.1.1)

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maven-settings (3.5.2)

* License: Apache-2.0

mex.xsd Version: 2004/09 (n/a)

* License: Oasis Style
* Project: https://www.w3.org/Submission/WS-MetadataExchange/#appendix-II
* Source: http://schemas.xmlsoap.org/ws/2004/09/mex/MetadataExchange.xsd

plexus-utils (3.1.0)

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relaxng-datatype (1.0)

* License: New BSD license

stax2-api (4.1)

* License: Pending
* Project: https://github.com/FasterXML/stax2-api
* Source:
  http://central.maven.org/maven2/org/codehaus/woodstox/stax2-api/4.1/stax2-api-4.1-sources.jar

testng (6.14.2)

* License: Apache-2.0 AND MIT
* Project: https://testng.org/doc/index.html

* Source: https://github.com/cbeust/testng

woodstox-core-asl
(4.4.1)

* License: Apache-2.0

woodstox-core-asl (5.1.0)

* License: Pending
* Project: https://github.com/FasterXML/woodstox
* Source: https://github.com/FasterXML/woodstox

ws-addr.wsd (1.0)

* License: W3C
* Project: https://www.w3.org/2005/08/addressing/
* Source: https://www.w3.org/2006/03/addressing/ws-addr.xsd

wsat.xsd Version: 2004/10 (n/a)

* License: Oasis Style
* Project: http://schemas.xmlsoap.org/ws/2004/10/wsat/
* Source: http://schemas.xmlsoap.org/ws/2004/10/wsat/wsat.xsd

wscoor.xsd (1.0)

* License: OASIS Style

wscoor.xsd (1.1)

* License: Oasis (Custom)
* Project: http://docs.oasis-open.org/ws-tx/wscoor/2006/06
* Source:
http://docs.oasis-open.org/ws-tx/wscoor/2006/06/wstx-wscoor-1.1-schema-200701.xsd

wsrm Version: 2005/02 (n/a)

* License: Oasis (Custom)
* Project: http://schemas.xmlsoap.org/ws/2005/02/rm/
* Source:
http://schemas.xmlsoap.org/ws/2005/02/rm/wsrm.xsd;%20http://schemas.xmlsoap.org/ws/2005/02/rm/wsrm-policy.xsd

wsrm.xsd
(1.2)

* License: Oasis

wstx-wsat.xsd (1.1)

* License: Oasis (Custom)

xmlsec (1.5.8)

* License: Apache-2.0
* Project: http://santuario.apache.org/
* Source:
  https://repo1.maven.org/maven2/org/apache/santuario/xmlsec/1.5.8/xmlsec-1.5.8-sources.jar

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1.3124 es-object-atoms 1.1.1

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1.3125 spdx-license-ids 3.0.21

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"zlib-acknowledgement"
]
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spdx-license-ids

[![npm version](https://img.shields.io/npm/v/spdx-license-ids.svg)](https://www.npmjs.com/package/spdx-license-ids)

A list of [SPDX license](https://spdx.org/licenses/) identifiers

Installation

[Download JSON directly](https://raw.githubusercontent.com/jslicense/spdx-license-ids/main/index.json), or [use](https://docs.npmjs.com/cli/install) [npm](https://docs.npmjs.com/about-npm/):

```
npm install spdx-license-ids
```

[Node.js](https://nodejs.org/) API

require('spdx-license-ids')

Type: `string[]`

All license IDs except for the currently deprecated ones.

```javascript
const ids = require('spdx-license-ids');
//=> ['0BSD', 'AAL', 'ADSL', 'AFL-1.1', 'AFL-1.2', 'AFL-2.0', 'AFL-2.1', 'AFL-3.0', 'AGPL-1.0-only', ...]

ids.includes('BSD-3-Clause'); //=> true
ids.includes('CC-BY-1.0'); //=> true

ids.includes('GPL-3.0'); //=> false
```

require('spdx-license-ids/deprecated')

Type: `string[]`

Deprecated license IDs.

```javascript
const deprecatedIds
 = require('spdx-license-ids/deprecated');
//=> ['AGPL-1.0', 'AGPL-3.0', 'GFDL-1.1', 'GFDL-1.2', 'GFDL-1.3', 'GPL-1.0', 'GPL-2.0', ...]

deprecatedIds.includes('BSD-3-Clause'); //=> false
deprecatedIds.includes('CC-BY-1.0'); //=> false

deprecatedIds.includes('GPL-3.0'); //=> true
```

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1.3126 github.com/containerd/errdefs 1.0.0

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1.3127 attr 2.5.2-1build1.1

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package spec

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//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
```

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package spec

import (
 "encoding/json"

 "github.com/go-openapi/swag"
)

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 LicenseProps
 VendorExtensible
}

// LicenseProps holds the properties of a License object
type LicenseProps struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}

// UnmarshalJSON
```

```
 hydrates License from json
func (l *License) UnmarshalJSON(data []byte) error {
 if err := json.Unmarshal(data, &l.LicenseProps); err != nil {
  return err
 }
 return json.Unmarshal(data, &l.VendorExtensible)
}

// MarshalJSON produces License as json
func (l License) MarshalJSON() ([]byte, error) {
 b1, err := json.Marshal(l.LicenseProps)
 if err != nil {
  return nil, err
 }
 b2, err := json.Marshal(l.VendorExtensible)
 if err != nil {
  return nil, err
 }
 return swag.ConcatJSON(b1, b2), nil
}
```

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Kubeval - Validate Kubernetes configuration files

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github.com/pelletier/go-toml:

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localtime.go, localtime_test.go:

Originals:
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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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//go:build go1.10
// +build go1.10

```
package pq

import (
 "context"
 "database/sql/driver"
)

// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
 return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
```

```
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
 c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
 on it.
type NoticeHandlerConnector struct {
 driver.Connector
 noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
 c, err := n.Connector.Connect(ctx)
 if err == nil {
  SetNoticeHandler(c, n.noticeHandler)
 }
 return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  return c.noticeHandler
 }
 return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
 setting the notice
// handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  c.noticeHandler = handler
  return c
```

```
 }
 return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
```

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1.3137 go-autorest-logger v0.2.1

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1.3139 franz-go-pkg-kmsg 1.9.0

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1.3140 prometheus-sig 0.1.0

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1.3141 groupcache 0.0.0-20241129210726-2c02b8208cf8

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1.3142 mmap-go 1.2.0

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1.3143 gax-go 2.14.1

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1.3145 cjson v1.7.16

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Also thanks to all the people who reported bugs and suggested new features.

1.3146 etcd-etcdutl v3.5.15

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1.3147 nomad-api 0.0.0-20241218080744-e3ac00f30eec

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---
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page_title: 'Commands: license'
description: |
 The license command is used to interact with an enterprise license.

Command: license

~> License commands are only available with Nomad Enterprise.

The `license` commands can be used to retrieve license information from a server,

or inspect and validate a license.

Click [here](https://www.hashicorp.com/products/nomad/trial) to get a trial license for Nomad Enterprise.

Usage

Usage: `nomad license <subcommand> [options]`

Run `nomad license <subcommand> -h` for help on that subcommand. The following
subcommands are available:

- [`license get`][get] - Get the current license from a server
- [`license inspect`][inspect] - Inspect and validate a license

[get]: /nomad/docs/commands/license/get 'Get the current license from a server'
[inspect]: /nomad/docs/commands/license/inspect 'Inspect and validate a license'
---
layout: docs
page_title: 'Commands: license get'
description: |
 The license get command is used to get the current license.

Command: license get

The `license get` command is used to retrieve the current Nomad Enterprise
license. The command is not forwarded to the Nomad leader, and will return
the license from the specific server being contacted.

~> License commands are only available with Nomad Enterprise.

Usage

```plaintext
nomad license get [options]
```

When ACLs are enabled, this command requires a token with the 'operator:read'
capability.

General Options

@include 'general_options_no_namespace.mdx'

Examples

```shell-session
$ nomad license get
```

```
Product       = nomad
License Status = valid
License ID     = e23f63b1-00ec-4e67-e926-c22e7937ceec
Customer ID    = 350356e5-8aec-bdf4-8510-b205079ccad2
Issued At      = 2021-03-31 14:21:16.969610774 +0000 UTC
Expires At     = 2020-05-09 00:00:00 +0000 UTC
Terminates At  = 2020-05-10 00:00:00 +0000 UTC
Datacenter
    = *
Modules:
      governance-policy
Licensed Features:
      Automated Upgrades
      Enhanced Read Scalability
      Redundancy Zones
      Namespaces
      Resource Quotas
      Preemption
      Audit Logging
      Setinel Policies
```

```shell-session
$ nomad license get -stale=true

Product       = nomad
License Status = valid
License ID     = 8c647f6c-1e6d-18d8-7f05-92c4d8110b2d
Customer ID    = 350356e5-8aec-bdf4-8510-b205079ccad2
Issued At      = 2021-03-31 14:21:16.969610774 +0000 UTC
Expires At     = 2022-04-01 00:00:00 +0000 UTC
Terminates At  = 2022-04-04 00:00:00 +0000 UTC
Datacenter     = *
Modules:
      governance-policy
      multicluster-and-efficiency
Licensed Features:
      Automated Upgrades
      Enhanced Read Scalability
      Redundancy Zones
      Namespaces
      Resource Quotas
      Audit Logging
      Sentinel Policies
      Multiregion Deployments
      Automated Backups
      Multi-Vault Namespaces
```

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```
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package command

import (
```

```
 "fmt"
 "strings"
 "time"

 "github.com/hashicorp/nomad/api"
 "github.com/mitchellh/cli"
)

var _ cli.Command = &LicenseCommand{}

type LicenseCommand struct {
 Meta
}

func (l *LicenseCommand) Help() string {
 helpText := `
Usage: nomad license <subcommand> [options] [args]

This command has subcommands for managing the Nomad Enterprise license.
For more detailed examples see:
https://developer.hashicorp.com/nomad/docs/commands/license

Retrieve the server's license:

 $ nomad license get

 `
 return strings.TrimSpace(helpText)
}

func (l *LicenseCommand) Synopsis() string {
 return "Interact with Nomad Enterprise License"
}

func (l *LicenseCommand) Name() string { return "license" }

func (l *LicenseCommand) Run(args []string) int {
 return cli.RunResultHelp
}

func OutputLicenseReply(ui cli.Ui, resp *api.LicenseReply) int {
 now := time.Now()
 expired := resp.License.ExpirationTime.Before(now)
 terminated
 := resp.License.TerminationTime.Before(now)
 outputLicenseInfo(ui, resp.License, expired, terminated)
 if expired {
  return 1
```

```
 }
 return 0
}

func outputLicenseInfo(ui cli.Ui, lic *api.License, expired, terminated bool) {
 expStr := ""
 if expired {
  expStr = fmt.Sprintf("Expired At|%s", lic.ExpirationTime.String())
 } else {
  expStr = fmt.Sprintf("Expires At|%s", lic.ExpirationTime.String())
 }
 termStr := ""
 if terminated {
  termStr = fmt.Sprintf("Terminated At|%s", lic.TerminationTime.String())
 } else {
  termStr = fmt.Sprintf("Terminates At|%s", lic.TerminationTime.String())
 }

 validity := "valid"
 if expired {
  validity = "expired!"
 }
 output := []string{
  fmt.Sprintf("Product|%s", lic.Product),
  fmt.Sprintf("License Status|%s", validity),
  fmt.Sprintf("License ID|%s", lic.LicenseID),
  fmt.Sprintf("Customer ID|%s", lic.CustomerID),
  fmt.Sprintf("Issued At|%s", lic.IssueTime),
  expStr,
  termStr,
  fmt.Sprintf("Datacenter|%s", lic.InstallationID),
 }
 ui.Output(formatKV(output))

 if
 len(lic.Modules) > 0 {
  ui.Output("Modules:")
  for _, mod := range lic.Modules {
   ui.Output(fmt.Sprintf("\t%s", mod))
  }
 }
 if len(lic.Features) > 0 {
  ui.Output("Licensed Features:")
  for _, f := range lic.Features {
   ui.Output(fmt.Sprintf("\t%s", f))
  }
 }
}
```

---
layout: docs
page_title: Nomad Enterprise Licensing
description: >-
 Learn about how Nomad Enterprise licensing works.

Nomad Enterprise Licensing

Licensing capabilities were added to Nomad Enterprise v0.12.0. Each server in
the cluster must have a license to start. Nomad Enterprise can be downloaded from
the [releases site].

Click [here](https://www.hashicorp.com/go/nomad-enterprise) to set up a demo of Nomad Enterprise
or [here](/nomad/tutorials/enterprise/hashicorp-enterprise-license#request-a-trial-license)
for instructions on how to get a trial license.

~> **Note:** A Nomad Enterprise cluster cannot be downgraded to the open
source version of Nomad. Servers running the open source version of Nomad will
panic if they are joined to a Nomad Enterprise cluster, due to raft entries
relating to Enterprise features not being parseable by open source Nomad.

Expiring Licenses

Nomad Enterprise licenses have an expiration time.
You can read and validate the license on a running
 server,
on disk, or in your environment with the
[`nomad license` commands](/nomad/docs/commands/license).

Before upgrading Nomad or replacing your license with a new one, you should always run
[`nomad license inspect`](/nomad/docs/commands/license/inspect)
to ensure the license is valid with your server binary.

As a Nomad Enterprise license approaches its expiration time, Nomad servers
will periodically log a warning message about the approaching
expiration. Below shows log excerpts of the warnings.

```
   2021-03-29T15:02:28.100-0400 [WARN]  nomad.licensing: license expiring: time_left=5m0s
   2021-03-29T15:03:28.103-0400 [WARN]  nomad.licensing: license expiring: time_left=4m0s
   2021-03-29T15:04:28.106-0400 [WARN]  nomad.licensing: license expiring: time_left=3m0s
   2021-03-29T15:05:28.109-0400 [WARN]  nomad.licensing: license expiring: time_left=2m0s
   2021-03-29T15:06:28.112-0400 [WARN]  nomad.licensing: license expiring: time_left=1m0s
   2021-03-29T15:07:28.114-0400
 [WARN]  nomad.licensing: license expiring: time_left=0s
   2021-03-29T15:07:58.104-0400 [ERROR] nomad.licensing: license expired, please update license: error="invalid
license or license is expired"
```

```

When the license expires, enterprise functionality will become limited. Only
read operations on enterprise endpoints will be supported, and write
operations will return an error.

## Configuring the License

See the server [license configuration] reference documentation on all the
options to set an enterprise license. Nomad will load the license file from
disk or environment when it starts.

~> **Note:** An Enterprise license [tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license) is available
to help you install the license on the server.

In order to immediately alert operators of a bad configuration setting, if a
license configuration option is an invalid or expired license, the Nomad server
will exit with an error.

NOMAD_LICENSE=misconfigured nomad agent -dev
==>
 No configuration files loaded
==> Starting Nomad agent...
==> Error starting agent: server setup failed: failed to initialize enterprise licensing: a file license was configured but
the license is invalid: error decoding version: expected integer

See the [License commands](/nomad/docs/commands/license) for more information on
interacting with the Enterprise License.

[releases site]: https://releases.hashicorp.com/nomad
[license configuration]: /nomad/docs/configuration/server#license_path
[license endpoint]: /nomad/api-docs/operator/license#updating-the-nomad-enterprise-license
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Parameters

Licensor:             HashiCorp, Inc.
Licensed Work:        Nomad Version 1.7.0 or later. The Licensed Work is (c) 2024
                      HashiCorp, Inc.
Additional Use Grant: You may make production use of the Licensed Work, provided
                      Your use does not include offering the Licensed Work to third
                      parties on a hosted or embedded basis in order to compete with
                      HashiCorp's paid version(s) of the Licensed Work. For purposes
                      of this license:
```

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//go:build !ent

package nomad

func (c *LicenseConfig) Validate() error {
 return nil
}
---
layout: api
page_title: License - Operator - HTTP API
description: |-

The /operator/license endpoints allow for retrieving the Nomad Enterprise License.

License Operator HTTP API

<EnterpriseAlert />

Get Nomad Enterprise License Info

This endpoint gets information about the current license.

Method	Path	Produces
`GET`	`/v1/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/nomad/api-docs#blocking-queries) and
[required ACLs](/nomad/api-docs#acls).

Blocking Queries	ACL Required
`NO`	`operator:read`

Sample Request

```shell-session
$ curl \
  https://localhost:4646/v1/operator/license
```

Sample Response

```json
{
 "KnownLeader": false,
 "LastContact": 0,
 "LastIndex": 0,
 "License": {
   "CustomerID": "customer name",
   "ExpirationTime":
 "2020-06-01T14:50:16.581304556-04:00",
   "Features": [
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Redundancy Zones",
     "Namespaces",
     "Resource Quotas",
     "Preemption",
```

"Audit Logging",
"Setinel Policies"
],
"Flags": {
"modules": ["governance-policy"]
},
"InstallationID": "*",
"IssueTime": "2020-06-01T08:50:16.581304556-04:00",
"LicenseID": "6f706a45-bdac-4a70-968b-d93784894653",
"Modules": ["governance-policy"],
"Product": "nomad",
"StartTime": "2020-06-01T08:50:16.581304556-04:00",
"TerminationTime": "2020-06-01T14:50:16.581304556-04:00"
},
"RequestTime": 0
}
```
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package command

import (
 "fmt"

 "github.com/hashicorp/nomad/api"
 "github.com/posener/complete"
)

type LicenseGetCommand struct {
 Meta
}

func (c *LicenseGetCommand) Help() string {
 helpText := `
Usage: nomad license get [options]

 Gets the license loaded by the server. The command is not forwarded to the
 Nomad leader, and will return the license from the specific server being
 contacted.

 When ACLs are enabled, this command requires a token with the
 'operator:read' capability.

General Options:

 ` + generalOptionsUsage(usageOptsDefault|usageOptsNoNamespace)
```

```
 return helpText
}

func (c *LicenseGetCommand) AutocompleteFlags() complete.Flags {
 return complete.Flags{}
}

func (c *LicenseGetCommand) AutocompleteArgs() complete.Predictor {
 return complete.PredictNothing
}

func (c *LicenseGetCommand) Synopsis() string {
 return "Retrieve the current Nomad Enterprise License"
}

func (c *LicenseGetCommand)
 Name() string { return "license get" }

func (c *LicenseGetCommand) Run(args []string) int {
 flags := c.Meta.FlagSet(c.Name(), FlagSetClient)
 flags.Usage = func() { c.Ui.Output(c.Help()) }

 if err := flags.Parse(args); err != nil {
  c.Ui.Error(fmt.Sprintf("Error parsing flags: %s", err))
  return 1
 }

 client, err := c.Meta.Client()
 if err != nil {
  c.Ui.Error(fmt.Sprintf("Error initializing client: %s", err))
  return 1
 }

 resp, _, err := client.Operator().LicenseGet(&api.QueryOptions{})
 if err != nil {
  c.Ui.Error(fmt.Sprintf("Error getting license: %v", err))
  return 1
 }

 return OutputLicenseReply(c.Ui, resp)
}
---
layout: docs
page_title: Automated license utilization reporting
description: >-
 Learn what data HashiCorp collects to meter Enterprise license utilization. Enable or disable reporting. Review
sample payloads and logs.
---
```

Automated license utilization reporting

Automated license utilization reporting sends license utilization data to HashiCorp without requiring you to manually collect and report them. It also lets you review your license usage with the monitoring solution you already use (for example Splunk, Datadog, or others) so you can optimize and manage your deployments. Use these reports to understand how much more you can deploy under your current contract, protect against overutilization, and budget for predicted consumption.

Automated reporting shares the minimum data required to validate license utilization as defined in our contracts. They consist of mostly computed metrics and will never contain Personal Identifiable Information (PII) or other sensitive information.
Automated reporting shares the data with HashiCorp using a secure,
unidirectional HTTPS API and makes an auditable record in the product logs each time it submits a report. The reporting process is GDPR compliant and submits reports roughly once every 24 hours.

Enable automated reporting

To enable automated reporting, you need to make sure that outbound network traffic is configured correctly and upgrade your enterprise product to a version that supports it. If your installation is air-gapped or network settings are not in place, automated reporting will not work.

1. Allow outbound HTTPS traffic on port 443

Make sure that your network allows HTTPS egress on port 443 from https://reporting.hashicorp.services by allow-listing the following IP addresses:

- 100.20.70.12
- 35.166.5.222
- 23.95.85.111
- 44.215.244.1

2. Upgrade

Upgrade to a release that supports license utilization reporting. These releases include:
- [Nomad v1.7.0](/nomad/downloads) and later

3. Check logs

Automatic license utilization reporting will start sending data within roughly 24 hours. Check the product logs for records that the data sent successfully.

Instructions on how to check logs.

```
[DEBUG] core.reporting: beginning snapshot export
[DEBUG] core.reporting: creating payload
```

```
[DEBUG] core.reporting: marshalling payload to json
[DEBUG] core.reporting: generating authentication headers
[DEBUG] core.reporting: creating request
[DEBUG] core.reporting: sending request
[DEBUG] core.reporting: performing request: method=POST url=https://reporting.hashicorp.services
[DEBUG] core.reporting: recording audit record
[INFO]  reporting: Report sent: auditRecord={"payload":{"payload_version":"1","license_id":"d2cdd857-4202-5a45-70a6-e4b531050c34","product":"nomad","product_version":"1.6.0","export_timestamp":"2023-05-26T20:09:13.753921087Z","snapshots":[{"snapshot_version":1,"snapshot_id":"0001J724F90F4XWQDSAA76ZQWA","process_id":"01H1CTJPC1S8H7Q45MKTJ689ZW","timestamp":"2023-05-26T20:09:13.753513962Z","schema_version":"1.0.0","service":"nomad","metrics":{"nomad.billable.nodes":{"key":"nomad.billable.nodes","kind":"counter","mode":"write","value":33}}}]}}
[DEBUG]
 completed recording audit record
[DEBUG] core.reporting: export finished successfully
```

If your installation is air-gapped or your network doesnt allow the correct egress, logs will show an error.

```
[DEBUG] core.reporting: beginning snapshot export
[DEBUG] core.reporting: creating payload
[DEBUG] core.reporting: marshalling payload to json
[DEBUG] core.reporting: generating authentication headers
[DEBUG] core.reporting: creating request
[DEBUG] core.reporting: sending request
[DEBUG] core.reporting: performing request: method=POST url=https://reporting.hashicorp.services
[DEBUG] core.reporting: error status code received: statusCode=403
```

In this case, reconfigure your network to allow egress and check back in 24 hours.

Opt out

If your installation is air-gapped or you
 want to manually collect and report on the same license
utilization metrics, you can opt-out of automated reporting.

Manually reporting these metrics can be time consuming. Opting out of automated reporting does not mean that you also opt out from sending license utilization metrics. Customers who opt out of automated reporting will still be required to manually collect and send license utilization metrics to HashiCorp.

If you are considering opting out because youre worried about the data, we strongly recommend that you review the [example payloads](#example-payloads) before opting out. If you have concerns with any of the automatically-reported data please bring them to your account manager.

You have two options to opt out of automated reporting: HCL configuration (recommended) and Environment

variable (requires restart).

Opting out in your products configuration file doesnt require a system restart, and is the method we recommend. Add the following block to your `server.hcl`
 file.

```hcl
reporting {
 license {
  enabled = false
   }
}
```

If you need to, you can also opt out using an environment variable, which will provide a startup message confirming that you have disabled automated reporting. This option requires a system restart.

Set the following environment variable.

```
$ export OPTOUT_LICENSE_REPORTING=true
```

Now restart your system by following [these instructions](/nomad/docs/operations/nomad-agent).

Check your product logs roughly 24 hours after opting out to make sure that the system isnt trying to send reports.

If your configuration file and environment variable differ, the environment variable setting will take precedence.

Example payloads

HashiCorp collects the following utilization data as JSON payloads:

`billable.nodes` - Number of billable nodes in Nomad

```json
"metrics": {
   "nomad.billable.nodes": {
       "key": "nomad.billable.nodes",
       "kind": "counter",
       "mode": "write",
       "value":
 33
   }
}
```

---
layout: docs
page_title: Nomad Enterprise License FAQ
description: >-
 Frequently Asked Questions pertaining to Nomad Enterprise Licensing.

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Nomad Enterprise version v1.6.0+ent.

For license-related FAQ for earlier versions, please refer to earlier versions of this document
using the version drop-down on this page, e.g. [v1.5.x](/nomad/docs/v1.5.x/enterprise/license/faq).

Q: Can I get a quick summary of the Nomad changes?

Starting with Nomad Enterprise v1.6.0, license expiration is different.

For trial licenses, the behavior remains the same. Enterprise features will stop working
when the license expires, and a server can not start with an expired license.

For new "non-terminating" contract licenses, instead of expiration being compared to the current time,
expiration time is compared to the build date of the Nomad binary, which you can find in the output of the
[`nomad version`](/nomad/docs/commands/version)
 command.

The practical result is that newer contract licenses will work in perpetuity for any v1.6.0+ version of Nomad
built prior to the expiration time of the license. No features will stop working,
and server agents can be restarted safely.

However, if you try to upgrade to a newer binary past license expiration, the server will not start.
To proactively avoid that, you can test a new binary with your license using the new
[`nomad license inspect`][license inspect] command
before trying to upgrade your servers.

Q: What resources are available?

The list below is a great starting point for learning more about license usage in general.

- [v1.6.0 Upgrade Guide](/nomad/docs/upgrade/upgrade-specific#enterprise-license-validation-with-builddate)

- [Nomad License Documentation](/nomad/docs/enterprise/license)

- [License configuration values documentation](/nomad/docs/configuration/server#license_path)

- [Install a HashiCorp Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license)

##

Q: Does this affect older versions of Nomad?

This change only affects Nomad Enterprise version v1.6.0+ent and later.

Q: Does the license have to be present on Nomad client nodes?

Only Nomad server nodes need to have the license present.
Nomad agents running with the `-dev` flag will also need a license.

Q: What are some pitfalls that could be experienced during an upgrade because of the license changes?

If you have an expired license that has not yet become fully nonfunctional
(i.e. it is in grace period between ExpirationTime and TerminationTime),
then a Nomad server will not be able to start using a new v1.6.0+ binary.

Before shutting down a server agent to replace it with a new version,
be sure to run [`nomad license inspect`][license inspect] with the new binary.

Q: How can a user get their existing license?

If you are an existing HashiCorp enterprise customer you may contact your organization's customer success manager (CSM) or email support-softwaredelivery@hashicorp.com for information on how to get your organization's enterprise license.
You can use `nomad license get` to retrieve information about the license, but not the license itself.

Q: What happens when a license expires?

All features will continue to work until you attempt to upgrade Nomad that is newer than your license expiration time.
In that case, the server agent will fail to start, and you'll need to roll back to the previous working version
and acquire a new license to use with the newer Nomad version before attempting the upgrade again.

Q: Are licenses cluster-specific? node-specific?

Licenses can be reused on different nodes and different clusters.

Q: Where can users get a trial license for Nomad?

Follow [these instructions](/nomad/tutorials/enterprise/hashicorp-enterprise-license#request-a-trial-license) to request and enable a free 30-day trial license.

Q: When a Nomad client agent restarts, will it still need a license file?

Every time `nomad agent` runs as a server (or in `-dev`), it requires a license.

Q: May I downgrade Nomad Enterprise from v1.6.0 to an earlier version?

Yes, if you upgrade a server to 1.6.0+ but it fails to start due to license expiration,
you can roll back to a previous working version with the old expiration logic.

If a server fails to start for any other reason aside from license expiration,
roll back to a previous version is not supported due to the Nomad state store
not having forward compatibility, and may result in a crash loop.

Q: Is there a tutorial available for the license configuration steps?
Please visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license).

[license inspect]: /nomad/docs/commands/license/inspect

```
// Copyright (c) HashiCorp, Inc.
// SPDX-License-Identifier: BUSL-1.1

package nomad

import (
 "slices"
 "time"
)

// LicenseConfig allows for tunable licensing config
// primarily used for enterprise testing
type LicenseConfig struct {
 // BuildDate is the time of the git commit used to build the program.
 BuildDate time.Time

 // LicenseEnvBytes is the license bytes to use for the server's license
 LicenseEnvBytes string

 // LicensePath is the path to use for the server's license
 LicensePath string

 // AdditionalPubKeys is a set of public keys to
 AdditionalPubKeys []string
}

func (c *LicenseConfig) Copy() *LicenseConfig {
 if c == nil {
  return nil
 }

 nc := *c
 nc.AdditionalPubKeys = slices.Clone(c.AdditionalPubKeys)
 return &nc
}
```

ISC

```
// Copyright (c) HashiCorp, Inc.
// SPDX-License-Identifier: BUSL-1.1

package command

import (
 "testing"
 "time"

 "github.com/hashicorp/nomad/api"
 "github.com/hashicorp/nomad/ci"
 "github.com/mitchellh/cli"
 "github.com/shoenig/test/must"
)

var _ cli.Command = &LicenseGetCommand{}

func TestCommand_LicenseGet_OSSErr(t *testing.T) {
 ci.Parallel(t)

 srv, _, url := testServer(t, false, nil)
 defer srv.Shutdown()

 ui := cli.NewMockUi()
 cmd := &LicenseGetCommand{Meta: Meta{Ui: ui}}

 code := cmd.Run([]string{"-address=" + url})
 if srv.Enterprise {
  must.Zero(t, code)
 } else {
  must.One(t, code)
  must.StrContains(t, ui.ErrorWriter.String(), "Nomad Enterprise only endpoint")
 }
}

func TestOutputLicenseReply(t *testing.T) {
 ci.Parallel(t)

 now := time.Now()
 lic := &api.LicenseReply{
  License: &api.License{
   LicenseID:       "licenseID",
   CustomerID:      "customerID",
   InstallationID:  "*",
   IssueTime:       now,
   StartTime:       now,
   ExpirationTime:  now.Add(1
```

```
 * time.Hour),
   TerminationTime: now,
   Product:         "nomad",
   Flags: map[string]interface{}{
    "": nil,
   },
  },
 }

 ui := cli.NewMockUi()

 must.Zero(t, OutputLicenseReply(ui, lic))

 out := ui.OutputWriter.String()
 must.StrContains(t, out, "Customer ID")
 must.StrContains(t, out, "License ID")
}
```

---
layout: docs
page_title: 'Commands: license inspect'
description: |
 The license inspect command is used to inspect and validate an enterprise license.

Command: license inspect

<EnterpriseAlert>
 This command is only present in Nomad Enterprise.
</EnterpriseAlert>

The `license inspect` command is used to inspect and validate a Nomad Enterprise license. It will read the license from a file on disk or an environment variable and exit non-0 if the license is not valid with the Nomad binary.

This command should always be run with the new binary before upgrading Nomad on a server, as the server agent will not start with an invalid license.

Usage

```plaintext
nomad license inspect [/path/to/license.hclic]
```

Examples

With a license file argument:

```shell-session
```

```
$ nomad license inspect /path/to/nomad/license.hclic
Source: /path/to/nomad/license.hclic
Product: nomad
License ID: aaaaaaaa-aaaa-aaaa-aaaa-aaaaaaaaaaaa
Customer ID: bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb
Installation
 ID: *
Issue Time: 2021-12-01 17:49:23.021041516 +0000 UTC
Start Time: 2021-12-01 00:00:00 +0000 UTC
Expiration Time: 2023-12-01 00:00:00 +0000 UTC
Termination Time: 2024-01-01 00:00:00 +0000 UTC
Build Date: 2000-01-01 00:00:00 +0000 UTC
Flags: {
  "modules": [
    "multicluster-and-efficiency",
    "governance-policy"
  ]
}

License is valid
```

With a license file environment variable:

```shell-session
$ export NOMAD_LICENSE_PATH=/path/to/nomad/license.hclic
$ nomad license inspect
Source: /path/to/nomad/license.hclic (path from the NOMAD_LICENSE_PATH environment variable)
Product: nomad
.....
License is valid
```

With a license string environment variable:

```shell-session
$ export NOMAD_LICENSE=full-license-text-string
$ nomad license inspect
Source: NOMAD_LICENSE environment variable
.....
License is valid
```

Example error

```shell-session
$ nomad license inspect license.hclic
...
```

Validation Errors:
  * license is no longer valid
  * license expiration
 date is before version build date: expiration=2023-01-13T23:59:59Z build=2023-03-17T00:00:00Z
```

# 1.3148 pgx 4.18.2

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# 1.3149 pprof 0.0.0-20241210010833-40e02aabc2ad

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#
# https://developers.google.com/open-source/cla/individual
# https://developers.google.com/open-source/cla/corporate
#
```

Names should be added to this file as:
Name <email address>
Raul Silvera <rsilvera@google.com>
Tipp Moseley <tipp@google.com>
Hyoun Kyu Cho <netforce@google.com>
Martin Spier <spiermar@gmail.com>
Taco de Wolff <tacodewolff@gmail.com>
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1.3150 zk 1.0.4

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* /ice-zk-1-0-4-sources-jar/META-INF/maven/com.kik.config/ice-zk/pom.xml
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* /ice-zk-1-0-4-sources-jar/com/kik/config/ice/source/ZooKeeperDynamicConfigSource.java

1.3151 projectcalico-api v3.29.1

1.3151.1 Available under license :

TEMPORARY
btf_dump/btf_dump: syntax
kprobe_multi_bench_attach
core_reloc/enum64val
core_reloc/size___diff_sz
core_reloc/type_based___diff_sz
test_ima # All of CI is broken on it following 6.3-rc1 merge

lwt_reroute # crashes kernel after netnext merge from 2ab1efad60ad "net/sched: cls_api: complement tcf_tfilter_dump_policy"
tc_links_ingress # started failing after net-next merge from 2ab1efad60ad "net/sched: cls_api: complement tcf_tfilter_dump_policy"
xdp_bonding/xdp_bonding_features # started failing after net merge from 359e54a93ab4 "l2tp: pass correct message length to ip6_append_data"
tc_redirect/tc_redirect_dtime # uapi breakage after net-next commit 885c36e59f46 ("net: Re-use and set mono_delivery_time bit for userspace tstamp packets")
migrate_reuseport/IPv4 TCP_NEW_SYN_RECV reqsk_timer_handler # flaky, under investigation
migrate_reuseport/IPv6 TCP_NEW_SYN_RECV reqsk_timer_handler # flaky, under investigation
<picture>
 <source media="(prefers-color-scheme: dark)" srcset="assets/libbpf-logo-sideways-darkbg.png" width="40%">
 <img src="assets/libbpf-logo-sideways.png" width="40%">
</picture>

libbpf
[![Github Actions Builds & Tests](https://github.com/libbpf/libbpf/actions/workflows/test.yml/badge.svg)](https://github.com/libbpf/libbpf/actions/workflows/test.yml)
[![Coverity](https://img.shields.io/coverity/scan/18195.svg)](https://scan.coverity.com/projects/libbpf)
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[![Read the Docs](https://readthedocs.org/projects/libbpf/badge/?version=latest)](https://libbpf.readthedocs.io/en/latest/)
======

This is the official home of the libbpf library.

*Please use this Github
 repository for building and packaging libbpf
and when using it in your projects through Git submodule.*

Libbpf *authoritative source code* is developed as part of [bpf-next Linux source
tree](https://kernel.googlesource.com/pub/scm/linux/kernel/git/bpf/bpf-next) under
`tools/lib/bpf` subdirectory and is periodically synced to Github. As such, all the
libbpf changes should be sent to [BPF mailing list](http://vger.kernel.org/vger-lists.html#bpf),
please don't open PRs here unless you are changing Github-specific parts of libbpf
(e.g., Github-specific Makefile).

Libbpf and general BPF usage questions
==========

Libbpf documentation can be found [here](https://libbpf.readthedocs.io/en/latest/api.html).
It's an ongoing effort and has ways to go, but please take a look and consider contributing as well.

Please check out [libbpf-bootstrap](https://github.com/libbpf/libbpf-bootstrap)
and [the companion blog post](https://nakryiko.com/posts/libbpf-bootstrap/)
 for
the examples of building BPF applications with libbpf.
[libbpf-tools](https://github.com/iovisor/bcc/tree/master/libbpf-tools) are also
a good source of the real-world libbpf-based tracing tools.

See also ["BPF CO-RE reference guide"](https://nakryiko.com/posts/bpf-core-reference-guide/)
for the coverage of practical aspects of building BPF CO-RE applications and
["BPF CO-RE"](https://nakryiko.com/posts/bpf-portability-and-co-re/) for
general introduction into BPF portability issues and BPF CO-RE origins.

All general BPF questions, including kernel functionality, libbpf APIs and
their application, should be sent to bpf@vger.kernel.org mailing list. You can
subscribe to it [here](http://vger.kernel.org/vger-lists.html#bpf) and search
its archive [here](https://lore.kernel.org/bpf/). Please search the archive
before asking new questions. It very well might be that this was already
addressed or answered before.

bpf@vger.kernel.org is monitored by many more people and they will
 happily try
to help you with whatever issue you have. This repository's PRs and issues
should be opened only for dealing with issues pertaining to specific way this
libbpf mirror repo is set up and organized.

Building libbpf
==========
libelf is an internal dependency of libbpf and thus it is required to link

against and must be installed on the system for applications to work.
pkg-config is used by default to find libelf, and the program called can be
overridden with `PKG_CONFIG`.

If using `pkg-config` at build time is not desired, it can be disabled by
setting `NO_PKG_CONFIG=1` when calling make.

To build both static libbpf.a and shared libbpf.so:
```bash
$ cd src
$ make
```

To build only static libbpf.a library in directory
build/ and install them together with libbpf headers in a staging directory
root/:
```bash
$ cd src
$ mkdir build root
$ BUILD_STATIC_ONLY=y OBJDIR=build DESTDIR=root make install
```

To build both static libbpf.a and shared libbpf.so against a custom libelf
dependency
 installed in /build/root/ and install them together with libbpf
headers in a build directory /build/root/:
```bash
$ cd src
$ PKG_CONFIG_PATH=/build/root/lib64/pkgconfig DESTDIR=/build/root make install
```

BPF CO-RE (Compile Once Run Everywhere)
==========

Libbpf supports building BPF CO-RE-enabled applications, which, in contrast to
[BCC](https://github.com/iovisor/bcc/), do not require Clang/LLVM runtime
being deployed to target servers and doesn't rely on kernel-devel headers
being available.

It does rely on kernel to be built with [BTF type
information](https://www.kernel.org/doc/html/latest/bpf/btf.html), though.
Some major Linux distributions come with kernel BTF already built in:
- Fedora 31+
- RHEL 8.2+
- OpenSUSE Tumbleweed (in the next release, as of 2020-06-04)
- Arch Linux (from kernel 5.7.1.arch1-1)
- Manjaro (from kernel 5.4 if compiled after 2021-06-18)
- Ubuntu 20.10

- Debian 11 (amd64/arm64)

If your kernel
doesn't come with BTF built-in, you'll need to build custom
kernel. You'll need:
- `pahole` 1.16+ tool (part of `dwarves` package), which performs DWARF to
  BTF conversion;
- kernel built with `CONFIG_DEBUG_INFO_BTF=y` option;
- you can check if your kernel has BTF built-in by looking for
  `/sys/kernel/btf/vmlinux` file:

```shell
$ ls -la /sys/kernel/btf/vmlinux
-r--r--r--. 1 root root 3541561 Jun  2 18:16 /sys/kernel/btf/vmlinux
```

To develop and build BPF programs, you'll need Clang/LLVM 10+. The following
distributions have Clang/LLVM 10+ packaged by default:
- Fedora 32+
- Ubuntu 20.04+
- Arch Linux
- Ubuntu 20.10 (LLVM 11)
- Debian 11 (LLVM 11)
- Alpine 3.13+

Otherwise, please make sure to update it on your system.

The following resources are useful to understand what BPF CO-RE is and how to
use it:
- [BPF CO-RE reference guide](https://nakryiko.com/posts/bpf-core-reference-guide/)
- [BPF Portability and CO-RE](https://nakryiko.com/posts/bpf-portability-and-co-re/)
-
 [HOWTO: BCC to libbpf conversion](https://nakryiko.com/posts/bcc-to-libbpf-howto-guide/)
- [libbpf-tools in BCC repo](https://github.com/iovisor/bcc/tree/master/libbpf-tools)
 contain lots of real-world tools converted from BCC to BPF CO-RE. Consider
 converting some more to both contribute to the BPF community and gain some
 more experience with it.

Distributions
==========

Distributions packaging libbpf from this mirror:
- [Fedora](https://src.fedoraproject.org/rpms/libbpf)
- [Gentoo](https://packages.gentoo.org/packages/dev-libs/libbpf)
- [Debian](https://packages.debian.org/source/sid/libbpf)
- [Arch](https://archlinux.org/packages/core/x86_64/libbpf/)
- [Ubuntu](https://packages.ubuntu.com/source/jammy/libbpf)
- [Alpine](https://pkgs.alpinelinux.org/packages?name=libbpf)

Benefits of packaging from the mirror over packaging from kernel sources:
- Consistent versioning across distributions.
- No ties to any specific kernel, transparent
handling of older kernels.
  Libbpf is designed to be kernel-agnostic and work across multitude of
  kernel versions. It has built-in mechanisms to gracefully handle older
  kernels, that are missing some of the features, by working around or
  gracefully degrading functionality. Thus libbpf is not tied to a specific
  kernel version and can/should be packaged and versioned independently.
- Continuous integration testing via
  [GitHub Actions](https://github.com/libbpf/libbpf/actions).
- Static code analysis via [LGTM](https://lgtm.com/projects/g/libbpf/libbpf)
  and [Coverity](https://scan.coverity.com/projects/libbpf).

Package dependencies of libbpf, package names may vary across distros:
- zlib
- libelf

[![libbpf distro packaging status](https://repology.org/badge/vertical-allrepos/libbpf.svg)](https://repology.org/project/libbpf/versions)

bpf-next to Github sync
==========

All the gory details of syncing can be found in `scripts/sync-kernel.sh`
script.
See SYNC.md for instruction.

Some header files in this repo (`include/linux/*.h`) are reduced versions of
their counterpart files at
[bpf-next](https://git.kernel.org/pub/scm/linux/kernel/git/bpf/bpf-next.git/)'s
`tools/include/linux/*.h` to make compilation successful.

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==========
3e9bc0472b910d4115e16e9c2d684c7757cb6c60
version: v1.0
name: Run Fossa Scan

```
agent:
 machine:
   type: f1-standard-2
   os_image: ubuntu2004

execution_time_limit:
 minutes: 30

blocks:
 - name: "Trigger Fossa Scan"
   skip:
     # Only run on master or release branches, not PRs.
     when: "(branch =~ 'master|release-.*') and (branch !~ '.+')"
   dependencies: []
   task:
     prologue:
       commands:
         - "curl -fsSLH 'Cache-Control: no-cache' https://raw.githubusercontent.com/fossas/fossa-cli/master/install-
latest.sh | bash"
         - checkout
         - retry git fetch --unshallow
     jobs:
       - name: "FOSSA scan"
```

commands:
- fossa analyze
secrets:
- name: foss-api-key

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ELF@@@w a]Dual BSD/GPLBPF triggered from PID %d.
+

#
ctxinthandle_tptp/syscalls/sys_enter_write/home/vagrant/libbpf-bootstrap/examples/c/minimal.bpf.c int pid =
bpf_get_current_pid_tgid() >> 32; if (pid != my_pid) bpf_printk("BPF triggered from PID %d.\n",
pid);}char__ARRAY_SIZE_TYPE__LICENSEmy_pidhandle_tp.____fmt.bss.rodatalicense l/g4/g'4/
<(/<0/HX/TzR|hX
+hy0
,@P`p.text.rel.BTF.exthandle_tp.____fmt.bsshandle_tp.llvm_addrsig.reltp/syscalls/sys_enter_writelicense.rel.eh_fra
memy_pid.strtab.symtab.rodata.rel.BTFLICENSELBB0_2@G@hc
&S'o0C 0 p k x 5Lo
breathe
sphinx_rtd_theme
TEMPORARY
sockmap_listen/sockhash VSOCK test_vsock_redir
usdt/basic # failing verifier due to bounds check after LLVM update
usdt/multispec # same as above

deny_namespace # not yet in bpf denylist
tc_redirect/tc_redirect_dtime # very flaky
lru_bug # not yet in bpf-next denylist

Disabled temporarily for a crash.
https://lore.kernel.org/bpf/c9923c1d-971d-4022-8dc8-1364e929d34c@gmail.com/

```
dummy_st_ops/dummy_init_ptr_arg
fexit_bpf2bpf
tailcalls
trace_ext
xdp_bpf2bpf
xdp_metadata
DOXYFILE_ENCODING      = UTF-8
PROJECT_NAME           = "libbpf"
PROJECT_NUMBER         =
PROJECT_BRIEF          =
PROJECT_LOGO           =
OUTPUT_DIRECTORY       = ./build
CREATE_SUBDIRS         = NO
ALLOW_UNICODE_NAMES    = NO
OUTPUT_LANGUAGE        = English
OUTPUT_TEXT_DIRECTION  = None
BRIEF_MEMBER_DESC      = YES
REPEAT_BRIEF           = YES
ALWAYS_DETAILED_SEC    = NO
INLINE_INHERITED_MEMB  = NO
FULL_PATH_NAMES        = YES
STRIP_FROM_PATH        =
STRIP_FROM_INC_PATH    =
SHORT_NAMES            = NO
JAVADOC_AUTOBRIEF      = NO
JAVADOC_BANNER         = NO
QT_AUTOBRIEF           = NO
MULTILINE_CPP_IS_BRIEF = NO
PYTHON_DOCSTRING       = NO
INHERIT_DOCS           = YES
SEPARATE_MEMBER_PAGES  = NO
TAB_SIZE               = 4
ALIASES                =
OPTIMIZE_OUTPUT_FOR_C  = YES
OPTIMIZE_OUTPUT_JAVA   = NO
OPTIMIZE_FOR_FORTRAN   = NO
OPTIMIZE_OUTPUT_VHDL   = NO
OPTIMIZE_OUTPUT_SLICE  = NO
EXTENSION_MAPPING      =
MARKDOWN_SUPPORT       = YES
TOC_INCLUDE_HEADINGS   = 5
AUTOLINK_SUPPORT
      = YES
BUILTIN_STL_SUPPORT    = NO
CPP_CLI_SUPPORT        = NO
SIP_SUPPORT            = NO
IDL_PROPERTY_SUPPORT   = YES
DISTRIBUTE_GROUP_DOC   = NO
```

```
GROUP_NESTED_COMPOUNDS = NO
SUBGROUPING            = YES
INLINE_GROUPED_CLASSES = NO
INLINE_SIMPLE_STRUCTS  = NO
TYPEDEF_HIDES_STRUCT   = NO
LOOKUP_CACHE_SIZE      = 0
NUM_PROC_THREADS       = 1
EXTRACT_ALL            = NO
EXTRACT_PRIVATE        = NO
EXTRACT_PRIV_VIRTUAL   = NO
EXTRACT_PACKAGE        = NO
EXTRACT_STATIC         = NO
EXTRACT_LOCAL_CLASSES  = YES
EXTRACT_LOCAL_METHODS  = NO
EXTRACT_ANON_NSPACES   = NO
RESOLVE_UNNAMED_PARAMS = YES
HIDE_UNDOC_MEMBERS     = NO
HIDE_UNDOC_CLASSES     = NO
HIDE_FRIEND_COMPOUNDS  = NO
HIDE_IN_BODY_DOCS      = NO
INTERNAL_DOCS          = NO
CASE_SENSE_NAMES       = YES
HIDE_SCOPE_NAMES       = NO
HIDE_COMPOUND_REFERENCE= NO
SHOW_INCLUDE_FILES     = YES
SHOW_GROUPED_MEMB_INC  = NO
FORCE_LOCAL_INCLUDES   = NO
INLINE_INFO            = YES
SORT_MEMBER_DOCS       = YES
SORT_BRIEF_DOCS        = NO
SORT_MEMBERS_CTORS_1ST
 = NO
SORT_GROUP_NAMES       = NO
SORT_BY_SCOPE_NAME     = NO
STRICT_PROTO_MATCHING  = NO
GENERATE_TODOLIST      = YES
GENERATE_TESTLIST      = YES
GENERATE_BUGLIST       = YES
GENERATE_DEPRECATEDLIST= YES
ENABLED_SECTIONS       =
MAX_INITIALIZER_LINES  = 30
SHOW_USED_FILES        = YES
SHOW_FILES             = YES
SHOW_NAMESPACES        = YES
FILE_VERSION_FILTER    =
LAYOUT_FILE            =
CITE_BIB_FILES         =
QUIET                  = NO
```

```
WARNINGS               = YES
WARN_IF_UNDOCUMENTED   = YES
WARN_IF_DOC_ERROR      = YES
WARN_NO_PARAMDOC       = NO
WARN_AS_ERROR          = NO
WARN_FORMAT            = "$file:$line: $text"
WARN_LOGFILE           =
INPUT                  = ../../../src
INPUT_ENCODING         = UTF-8
FILE_PATTERNS          = *.c \
                         *.h
RECURSIVE              = NO
EXCLUDE                =
EXCLUDE_SYMLINKS       = NO
EXCLUDE_PATTERNS       =
EXCLUDE_SYMBOLS        = ___*
EXAMPLE_PATH           =
EXAMPLE_PATTERNS       = *
EXAMPLE_RECURSIVE
     = NO
IMAGE_PATH             =
INPUT_FILTER           =
FILTER_PATTERNS        =
FILTER_SOURCE_FILES    = NO
FILTER_SOURCE_PATTERNS =
USE_MDFILE_AS_MAINPAGE = YES
SOURCE_BROWSER         = NO
INLINE_SOURCES         = NO
STRIP_CODE_COMMENTS    = YES
REFERENCED_BY_RELATION = NO
REFERENCES_RELATION    = NO
REFERENCES_LINK_SOURCE = YES
SOURCE_TOOLTIPS        = YES
USE_HTAGS              = NO
VERBATIM_HEADERS       = YES
ALPHABETICAL_INDEX     = YES
IGNORE_PREFIX          =
GENERATE_HTML          = NO
HTML_OUTPUT            = html
HTML_FILE_EXTENSION    = .html
HTML_HEADER            =
HTML_FOOTER            =
HTML_STYLESHEET        =
HTML_EXTRA_STYLESHEET  =
HTML_EXTRA_FILES       =
HTML_COLORSTYLE_HUE    = 220
HTML_COLORSTYLE_SAT    = 100
HTML_COLORSTYLE_GAMMA  = 80
```

```
HTML_TIMESTAMP         = NO
HTML_DYNAMIC_MENUS     = YES
HTML_DYNAMIC_SECTIONS  = NO
HTML_INDEX_NUM_ENTRIES = 100
GENERATE_DOCSET        = NO
DOCSET_FEEDNAME        = "Doxygen generated docs"
DOCSET_BUNDLE_ID
       = org.doxygen.Project
DOCSET_PUBLISHER_ID    = org.doxygen.Publisher
DOCSET_PUBLISHER_NAME  = Publisher
GENERATE_HTMLHELP      = NO
CHM_FILE               =
HHC_LOCATION           =
GENERATE_CHI           = NO
CHM_INDEX_ENCODING     =
BINARY_TOC             = NO
TOC_EXPAND             = NO
GENERATE_QHP           = NO
QCH_FILE               =
QHP_NAMESPACE          = org.doxygen.Project
QHP_VIRTUAL_FOLDER     = doc
QHP_CUST_FILTER_NAME   =
QHP_CUST_FILTER_ATTRS  =
QHP_SECT_FILTER_ATTRS  =
QHG_LOCATION           =
GENERATE_ECLIPSEHELP   = NO
ECLIPSE_DOC_ID         = org.doxygen.Project
DISABLE_INDEX          = NO
GENERATE_TREEVIEW      = NO
ENUM_VALUES_PER_LINE   = 4
TREEVIEW_WIDTH         = 250
EXT_LINKS_IN_WINDOW    = NO
HTML_FORMULA_FORMAT    = png
FORMULA_FONTSIZE       = 10
FORMULA_TRANSPARENT    = YES
FORMULA_MACROFILE      =
USE_MATHJAX            = NO
MATHJAX_FORMAT         = HTML-CSS
MATHJAX_RELPATH        = https://cdn.jsdelivr.net/npm/mathjax@2
MATHJAX_EXTENSIONS
  =
MATHJAX_CODEFILE       =
SEARCHENGINE           = YES
SERVER_BASED_SEARCH    = NO
EXTERNAL_SEARCH        = NO
SEARCHENGINE_URL       =
SEARCHDATA_FILE        = searchdata.xml
EXTERNAL_SEARCH_ID     =
```

```
EXTRA_SEARCH_MAPPINGS  =
GENERATE_LATEX         = NO
LATEX_OUTPUT           = latex
LATEX_CMD_NAME         =
MAKEINDEX_CMD_NAME     = makeindex
LATEX_MAKEINDEX_CMD    = makeindex
COMPACT_LATEX          = NO
PAPER_TYPE             = a4
EXTRA_PACKAGES         =
LATEX_HEADER           =
LATEX_FOOTER           =
LATEX_EXTRA_STYLESHEET =
LATEX_EXTRA_FILES      =
PDF_HYPERLINKS         = YES
USE_PDFLATEX           = YES
LATEX_BATCHMODE        = NO
LATEX_HIDE_INDICES     = NO
LATEX_SOURCE_CODE      = NO
LATEX_BIB_STYLE        = plain
LATEX_TIMESTAMP        = NO
LATEX_EMOJI_DIRECTORY  =
GENERATE_RTF           = NO
RTF_OUTPUT             = rtf
COMPACT_RTF            = NO
RTF_HYPERLINKS         = NO
RTF_STYLESHEET_FILE    =
RTF_EXTENSIONS_FILE    =
RTF_SOURCE_CODE        = NO
GENERATE_MAN
   = NO
MAN_OUTPUT             = man
MAN_EXTENSION          = .3
MAN_SUBDIR             =
MAN_LINKS              = NO
GENERATE_XML           = YES
XML_OUTPUT             = xml
XML_PROGRAMLISTING     = YES
XML_NS_MEMB_FILE_SCOPE = NO
GENERATE_DOCBOOK       = NO
DOCBOOK_OUTPUT         = docbook
DOCBOOK_PROGRAMLISTING = NO
GENERATE_AUTOGEN_DEF   = NO
GENERATE_PERLMOD       = NO
PERLMOD_LATEX          = NO
PERLMOD_PRETTY         = YES
PERLMOD_MAKEVAR_PREFIX =
ENABLE_PREPROCESSING   = YES
MACRO_EXPANSION        = NO
```

```
EXPAND_ONLY_PREDEF     = YES
SEARCH_INCLUDES        = YES
INCLUDE_PATH           =
INCLUDE_FILE_PATTERNS  =
PREDEFINED             =
EXPAND_AS_DEFINED      =
SKIP_FUNCTION_MACROS   = NO
TAGFILES               =
GENERATE_TAGFILE       =
ALLEXTERNALS           = NO
EXTERNAL_GROUPS        = YES
EXTERNAL_PAGES         = YES
CLASS_DIAGRAMS         = YES
DIA_PATH               =
HIDE_UNDOC_RELATIONS   = YES
HAVE_DOT               = NO
DOT_NUM_THREADS        = 0
DOT_FONTNAME
 = Helvetica
DOT_FONTSIZE           = 10
DOT_FONTPATH           =
CLASS_GRAPH            = YES
COLLABORATION_GRAPH    = YES
GROUP_GRAPHS           = YES
UML_LOOK               = NO
UML_LIMIT_NUM_FIELDS   = 10
DOT_UML_DETAILS        = NO
DOT_WRAP_THRESHOLD     = 17
TEMPLATE_RELATIONS     = NO
INCLUDE_GRAPH          = YES
INCLUDED_BY_GRAPH      = YES
CALL_GRAPH             = NO
CALLER_GRAPH           = NO
GRAPHICAL_HIERARCHY    = YES
DIRECTORY_GRAPH        = YES
DOT_IMAGE_FORMAT       = png
INTERACTIVE_SVG        = NO
DOT_PATH               =
DOTFILE_DIRS           =
MSCFILE_DIRS           =
DIAFILE_DIRS           =
PLANTUML_JAR_PATH      =
PLANTUML_CFG_FILE      =
PLANTUML_INCLUDE_PATH  =
DOT_GRAPH_MAX_NODES    = 50
MAX_DOT_GRAPH_DEPTH    = 0
DOT_TRANSPARENT        = NO
DOT_MULTI_TARGETS      = NO
```

```
GENERATE_LEGEND        = YES
DOT_CLEANUP            = YES
009367099eb61a4fc2af44d4eb06b6b4de7de6db
LIBBPF_0.0.1 {
 global:
  bpf_btf_get_fd_by_id;
  bpf_map__btf_key_type_id;
  bpf_map__btf_value_type_id;
  bpf_map__fd;
  bpf_map__name;
  bpf_map__pin;
  bpf_map__reuse_fd;
  bpf_map__set_ifindex;
  bpf_map__set_inner_map_fd;
  bpf_map__unpin;
  bpf_map_delete_elem;
  bpf_map_get_fd_by_id;
  bpf_map_get_next_id;
  bpf_map_get_next_key;
  bpf_map_lookup_and_delete_elem;
  bpf_map_lookup_elem;
  bpf_map_update_elem;
  bpf_obj_get;
  bpf_obj_get_info_by_fd;
  bpf_obj_pin;
  bpf_object__btf_fd;
  bpf_object__close;
  bpf_object__find_map_by_name;
  bpf_object__kversion;
  bpf_object__load;
  bpf_object__name;
  bpf_object__open;
  bpf_object__pin;
  bpf_object__pin_maps;
  bpf_object__pin_programs;
  bpf_object__unpin_maps;
  bpf_object__unpin_programs;
  bpf_prog_attach;
  bpf_prog_detach;
  bpf_prog_detach2;
  bpf_prog_get_fd_by_id;
  bpf_prog_get_next_id;
  bpf_prog_query;
  bpf_program__fd;
  bpf_program__pin;
  bpf_program__set_expected_attach_type;
  bpf_program__set_ifindex;
  bpf_program__set_type;
```

```
  bpf_program__unload;
  bpf_program__unpin;
  bpf_prog_linfo__free;
  bpf_prog_linfo__new;
  bpf_prog_linfo__lfind_addr_func;
  bpf_prog_linfo__lfind;
  bpf_raw_tracepoint_open;
  bpf_task_fd_query;
  btf__fd;
  btf__find_by_name;
  btf__free;
  btf__name_by_offset;
  btf__new;
  btf__resolve_size;
  btf__resolve_type;
  btf__type_by_id;
  libbpf_attach_type_by_name;
  libbpf_get_error;
  libbpf_prog_type_by_name;
  libbpf_set_print;
  libbpf_strerror;
 local:
  *;
};

LIBBPF_0.0.2
 {
 global:
  bpf_map_lookup_elem_flags;
  bpf_object__btf;
  bpf_object__find_map_fd_by_name;
  btf__get_raw_data;
  btf_ext__free;
  btf_ext__get_raw_data;
  btf_ext__new;
} LIBBPF_0.0.1;

LIBBPF_0.0.3 {
 global:
  bpf_map__is_internal;
  bpf_map_freeze;
} LIBBPF_0.0.2;

LIBBPF_0.0.4 {
 global:
  bpf_link__destroy;
  bpf_program__attach_kprobe;
  bpf_program__attach_perf_event;
```

```
  bpf_program__attach_raw_tracepoint;
  bpf_program__attach_tracepoint;
  bpf_program__attach_uprobe;
  btf_dump__dump_type;
  btf_dump__free;
  btf__parse_elf;
  libbpf_num_possible_cpus;
  perf_buffer__free;
  perf_buffer__poll;
}
 LIBBPF_0.0.3;

LIBBPF_0.0.5 {
 global:
  bpf_btf_get_next_id;
} LIBBPF_0.0.4;

LIBBPF_0.0.6 {
 global:
  bpf_map__get_pin_path;
  bpf_map__is_pinned;
  bpf_map__set_pin_path;
  bpf_object__open_file;
  bpf_object__open_mem;
  bpf_program__attach_trace;
  bpf_program__get_expected_attach_type;
  bpf_program__get_type;
  btf__find_by_name_kind;
  libbpf_find_vmlinux_btf_id;
} LIBBPF_0.0.5;

LIBBPF_0.0.7 {
 global:
  btf_dump__emit_type_decl;
  bpf_link__disconnect;
  bpf_map__attach_struct_ops;
  bpf_map_delete_batch;
  bpf_map_lookup_and_delete_batch;
  bpf_map_lookup_batch;
  bpf_map_update_batch;
  bpf_object__find_program_by_name;
  bpf_object__attach_skeleton;
  bpf_object__destroy_skeleton;
  bpf_object__detach_skeleton;
  bpf_object__load_skeleton;
  bpf_object__open_skeleton;
  bpf_program__attach;
  bpf_program__name;
```

```
  btf__align_of;
  libbpf_find_kernel_btf;
 }
 LIBBPF_0.0.6;

LIBBPF_0.0.8 {
 global:
  bpf_link__fd;
  bpf_link__open;
  bpf_link__pin;
  bpf_link__pin_path;
  bpf_link__unpin;
  bpf_link__update_program;
  bpf_link_create;
  bpf_link_update;
  bpf_map__set_initial_value;
  bpf_prog_attach_opts;
  bpf_program__attach_cgroup;
  bpf_program__attach_lsm;
  bpf_program__set_attach_target;
} LIBBPF_0.0.7;

LIBBPF_0.0.9 {
 global:
  bpf_enable_stats;
  bpf_iter_create;
  bpf_link_get_fd_by_id;
  bpf_link_get_next_id;
  bpf_program__attach_iter;
  bpf_program__attach_netns;
  perf_buffer__consume;
  ring_buffer__add;
  ring_buffer__consume;
  ring_buffer__free;
  ring_buffer__new;
  ring_buffer__poll;
} LIBBPF_0.0.8;

LIBBPF_0.1.0 {
 global:
  bpf_link__detach;
  bpf_link_detach;
  bpf_map__ifindex;
  bpf_map__key_size;
  bpf_map__map_flags;
  bpf_map__max_entries;
  bpf_map__numa_node;
  bpf_map__set_key_size;
```

```
  bpf_map__set_map_flags;
  bpf_map__set_max_entries;
  bpf_map__set_numa_node;
  bpf_map__set_type;
  bpf_map__set_value_size;
  bpf_map__type;
  bpf_map__value_size;
  bpf_program__attach_xdp;
  bpf_program__autoload;
  bpf_program__set_autoload;
  btf__parse;
  btf__parse_raw;
  btf__pointer_size;
  btf__set_fd;
  btf__set_pointer_size;
}
 LIBBPF_0.0.9;

LIBBPF_0.2.0 {
 global:
  bpf_prog_bind_map;
  bpf_prog_test_run_opts;
  bpf_program__attach_freplace;
  bpf_program__section_name;
  btf__add_array;
  btf__add_const;
  btf__add_enum;
  btf__add_enum_value;
  btf__add_datasec;
  btf__add_datasec_var_info;
  btf__add_field;
  btf__add_func;
  btf__add_func_param;
  btf__add_func_proto;
  btf__add_fwd;
  btf__add_int;
  btf__add_ptr;
  btf__add_restrict;
  btf__add_str;
  btf__add_struct;
  btf__add_typedef;
  btf__add_union;
  btf__add_var;
  btf__add_volatile;
  btf__endianness;
  btf__find_str;
  btf__new_empty;
  btf__set_endianness;
```

```
  btf__str_by_offset;
  perf_buffer__buffer_cnt;
  perf_buffer__buffer_fd;
  perf_buffer__epoll_fd;
  perf_buffer__consume_buffer;
} LIBBPF_0.1.0;

LIBBPF_0.3.0 {
 global:
  btf__base_btf;
  btf__parse_elf_split;
  btf__parse_raw_split;
  btf__parse_split;
  btf__new_empty_split;
  ring_buffer__epoll_fd;
}
 LIBBPF_0.2.0;

LIBBPF_0.4.0 {
 global:
  btf__add_float;
  btf__add_type;
  bpf_linker__add_file;
  bpf_linker__finalize;
  bpf_linker__free;
  bpf_linker__new;
  bpf_map__inner_map;
  bpf_object__set_kversion;
  bpf_tc_attach;
  bpf_tc_detach;
  bpf_tc_hook_create;
  bpf_tc_hook_destroy;
  bpf_tc_query;
} LIBBPF_0.3.0;

LIBBPF_0.5.0 {
 global:
  bpf_map__initial_value;
  bpf_map__pin_path;
  bpf_map_lookup_and_delete_elem_flags;
  bpf_program__attach_kprobe_opts;
  bpf_program__attach_perf_event_opts;
  bpf_program__attach_tracepoint_opts;
  bpf_program__attach_uprobe_opts;
  bpf_object__gen_loader;
  btf__load_from_kernel_by_id;
  btf__load_from_kernel_by_id_split;
  btf__load_into_kernel;
```

```
  btf__load_module_btf;
  btf__load_vmlinux_btf;
  btf_dump__dump_type_data;
  libbpf_set_strict_mode;
} LIBBPF_0.4.0;

LIBBPF_0.6.0 {
 global:
  bpf_map__map_extra;
  bpf_map__set_map_extra;
  bpf_map_create;
  bpf_object__next_map;
  bpf_object__next_program;
  bpf_object__prev_map;
  bpf_object__prev_program;
  bpf_prog_load;
  bpf_program__flags;
  bpf_program__insn_cnt;
  bpf_program__insns;
  bpf_program__set_flags;
  btf__add_btf;
  btf__add_decl_tag;
  btf__add_type_tag;
  btf__dedup;
  btf__raw_data;
  btf__type_cnt;
  btf_dump__new;
  libbpf_major_version;
  libbpf_minor_version;
  libbpf_version_string;
  perf_buffer__new;
  perf_buffer__new_raw;
}
 LIBBPF_0.5.0;

LIBBPF_0.7.0 {
 global:
  bpf_btf_load;
  bpf_program__expected_attach_type;
  bpf_program__log_buf;
  bpf_program__log_level;
  bpf_program__set_log_buf;
  bpf_program__set_log_level;
  bpf_program__type;
  bpf_xdp_attach;
  bpf_xdp_detach;
  bpf_xdp_query;
  bpf_xdp_query_id;
```

```
  libbpf_probe_bpf_helper;
  libbpf_probe_bpf_map_type;
  libbpf_probe_bpf_prog_type;
  libbpf_set_memlock_rlim;
} LIBBPF_0.6.0;

LIBBPF_0.8.0 {
 global:
  bpf_map__autocreate;
  bpf_map__get_next_key;
  bpf_map__delete_elem;
  bpf_map__lookup_and_delete_elem;
  bpf_map__lookup_elem;
  bpf_map__set_autocreate;
  bpf_map__update_elem;
  bpf_map_delete_elem_flags;
  bpf_object__destroy_subskeleton;
  bpf_object__open_subskeleton;
  bpf_program__attach_kprobe_multi_opts;
  bpf_program__attach_trace_opts;
  bpf_program__attach_usdt;
  bpf_program__set_insns;
  libbpf_register_prog_handler;
  libbpf_unregister_prog_handler;
}
 LIBBPF_0.7.0;

LIBBPF_1.0.0 {
 global:
  bpf_obj_get_opts;
  bpf_prog_query_opts;
  bpf_program__attach_ksyscall;
  bpf_program__autoattach;
  bpf_program__set_autoattach;
  btf__add_enum64;
  btf__add_enum64_value;
  libbpf_bpf_attach_type_str;
  libbpf_bpf_link_type_str;
  libbpf_bpf_map_type_str;
  libbpf_bpf_prog_type_str;
  perf_buffer__buffer;
} LIBBPF_0.8.0;

LIBBPF_1.1.0 {
 global:
  bpf_btf_get_fd_by_id_opts;
  bpf_link_get_fd_by_id_opts;
  bpf_map_get_fd_by_id_opts;
```

```
  bpf_prog_get_fd_by_id_opts;
  user_ring_buffer__discard;
  user_ring_buffer__free;
  user_ring_buffer__new;
  user_ring_buffer__reserve;
  user_ring_buffer__reserve_blocking;
  user_ring_buffer__submit;
}
 LIBBPF_1.0.0;

LIBBPF_1.2.0 {
 global:
  bpf_btf_get_info_by_fd;
  bpf_link__update_map;
  bpf_link_get_info_by_fd;
  bpf_map_get_info_by_fd;
  bpf_prog_get_info_by_fd;
} LIBBPF_1.1.0;

LIBBPF_1.3.0 {
 global:
  bpf_obj_pin_opts;
  bpf_object__unpin;
  bpf_prog_detach_opts;
  bpf_program__attach_netfilter;
  bpf_program__attach_netkit;
  bpf_program__attach_tcx;
  bpf_program__attach_uprobe_multi;
  ring__avail_data_size;
  ring__consume;
  ring__consumer_pos;
  ring__map_fd;
  ring__producer_pos;
  ring__size;
  ring_buffer__ring;
} LIBBPF_1.2.0;

LIBBPF_1.4.0 {
 global:
  bpf_program__attach_raw_tracepoint_opts;
  bpf_raw_tracepoint_open_opts;
  bpf_token_create;
  btf__new_split;
  btf_ext__raw_data;
} LIBBPF_1.3.0;

LIBBPF_1.5.0 {
 global:
```

```
  bpf_program__attach_sockmap;
  ring__consume_n;
  ring_buffer__consume_n;
} LIBBPF_1.4.0;
```

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decap_sanity # weird failure with decap_sanity_ns netns already existing, TBD
empty_skb # waiting the fix in bpf tree to make it to bpf-next
bpf_nf/tc-bpf-ct # test consistently failing on x86: https://github.com/libbpf/libbpf/pull/698#issuecomment-1590341200
bpf_nf/xdp-ct   # test consistently failing on x86: https://github.com/libbpf/libbpf/pull/698#issuecomment-1590341200
kprobe_multi_bench_attach # suspected to cause crashes in CI
find_vma # test consistently fails on latest kernel, see https://github.com/libbpf/libbpf/issues/754 for details
bpf_cookie/perf_event
send_signal/send_signal_nmi
send_signal/send_signal_nmi_thread

lwt_reroute # crashes kernel, fix pending upstream
tc_links_ingress # fails, same fix is pending upstream
tc_redirect   # enough is enough, banned for life for flakiness
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Corresponding Source conveyed, and Installation Information provided,

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The sample BIRD configuration in this directory is distributed under
GPLv3. See the file COPYING-v3 for details.
<picture>
 <source media="(prefers-color-scheme: dark)" srcset="assets/libbpf-logo-sideways-darkbg.png" width="40%">
 <img src="assets/libbpf-logo-sideways.png" width="40%">
</picture>

Libbpf sync
==========

Libbpf *authoritative source code* is developed as part of [bpf-next Linux source tree](https://kernel.googlesource.com/pub/scm/linux/kernel/git/bpf/bpf-next) under `tools/lib/bpf` subdirectory and is periodically synced to Github.

Most of the mundane mechanical things like bpf and bpf-next tree merge, Git history transformation, cherry-picking relevant commits, re-generating auto-generated headers, etc. are taken care by [sync-kernel.sh script](https://github.com/libbpf/libbpf/blob/master/scripts/sync-kernel.sh). But occasionally human needs to do few extra things to make everything work nicely.

This document goes over the process of syncing libbpf sources from Linux repo to this Github repository. Feel free to contribute fixes and additions if you run into new problems not
 outlined here.

Setup expectations

Sync script has particular expectation of upstream Linux repo setup. It expects that current HEAD of that repo points to bpf-next's master branch and that there is a separate local branch pointing to bpf tree's master branch. This is important, as the script will automatically merge their histories for the purpose of libbpf sync.

Below, we assume that Linux repo is located at `~/linux`, it's current head is at latest `bpf-next/master`, and libbpf's Github repo is located at `~/libbpf`, checked out to latest commit on `master` branch. It doesn't matter from where to run `sync-kernel.sh` script, but we'll be running it from inside `~/libbpf`.

```
$ cd ~/linux && git remote -v | grep -E '^(bpf|bpf-next)'
bpf     https://git.kernel.org/pub/scm/linux/kernel/git/bpf/bpf.git (fetch)
bpf     ssh://git@gitolite.kernel.org/pub/scm/linux/kernel/git/bpf/bpf.git
```

```
(push)
bpf-next
https://git.kernel.org/pub/scm/linux/kernel/git/bpf/bpf-next.git
 (fetch)
bpf-next
ssh://git@gitolite.kernel.org/pub/scm/linux/kernel/git/bpf/bpf-next.git (push)
$ git branch -vv | grep -E '^? (master|bpf-master)'
* bpf-master                    2d311f480b52 [bpf/master] riscv, bpf: Fix patch_text implicit declaration
  master                        c8ee37bde402 [bpf-next/master] libbpf: Fix bpf_xdp_query() in old kernels
$ git checkout bpf-master && git pull && git checkout master && git pull
...
$ git log --oneline -n1
c8ee37bde402 (HEAD -> master, bpf-next/master) libbpf: Fix bpf_xdp_query() in old kernels
$ cd ~/libbpf && git checkout master && git pull
Your branch is up to date with 'libbpf/master'.
Already up to date.
```

Running setup script

First step is to always run `sync-kernel.sh` script. It expects three arguments:

```
$ scripts/sync-kernel.sh <libbpf-repo> <kernel-repo> <bpf-branch>
```

Note, that we'll store script's entire output in `/tmp/libbpf-sync.txt` and
put it into PR summary later
 on. **Please store scripts output and include it
in PR summary for others to check for anything unexpected and suspicious.**

```
$ scripts/sync-kernel.sh ~/libbpf ~/linux bpf-master | tee /tmp/libbpf-sync.txt
Dumping existing libbpf commit signatures...
WORKDIR:        /home/andriin/libbpf
LINUX REPO:     /home/andriin/linux
LIBBPF REPO:    /home/andriin/libbpf
...
```

Most of the time this will go very uneventful. One expected case when sync
script might require user intervention is if `bpf` tree has some libbpf fixes,
which is nowadays not a very frequent occurence. But if that happens, script
will show you a diff between expected state as of latest bpf-next and synced
Github repo state. And will ask if these changes look good. Please use your
best judgement to verify that differences are indeed from expected `bpf` tree
fixes. E.g., it might look like below:

```
Comparing list of files...
Comparing file contents...
--- /home/andriin/linux/include/uapi/linux/netdev.h     2023-02-27
 16:54:42.270583372 -0800
+++ /home/andriin/libbpf/include/uapi/linux/netdev.h    2023-02-27 16:54:34.615530796 -0800
@@ -19,7 +19,7 @@
 * @NETDEV_XDP_ACT_XSK_ZEROCOPY: This feature informs if netdev supports AF_XDP
 *   in zero copy mode.
 * @NETDEV_XDP_ACT_HW_OFFLOAD: This feature informs if netdev supports XDP hw
- *   oflloading.
+ *   offloading.
 * @NETDEV_XDP_ACT_RX_SG: This feature informs if netdev implements non-linear
 *   XDP buffer support in the driver napi callback.
 * @NETDEV_XDP_ACT_NDO_XMIT_SG: This feature informs if netdev implements
/home/andriin/linux/include/uapi/linux/netdev.h and /home/andriin/libbpf/include/uapi/linux/netdev.h are different!
Unfortunately, there are some inconsistencies, please double check.
Does everything look good? [y/N]:
```

If it looks sensible and expected, type `y` and script will proceed.

If sync is successful, your `~/linux` repo will be left in original state on
the original HEAD commit. `~/libbpf` repo will now be on a
 new branch, named
`libbpf-sync-<timestamp>` (e.g., `libbpf-sync-2023-02-28T00-53-40.072Z`).

Push this branch into your fork of `libbpf/libbpf` Github repo and create a PR:

```
$ git push --set-upstream origin libbpf-sync-2023-02-28T00-53-40.072Z
Enumerating objects: 130, done.
Counting objects: 100% (115/115), done.
Delta compression using up to 80 threads
Compressing objects: 100% (28/28), done.
Writing objects: 100% (32/32), 5.57 KiB | 1.86 MiB/s, done.
Total 32 (delta 21), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (21/21), completed with 9 local objects.
remote:
remote: Create a pull request for 'libbpf-sync-2023-02-28T00-53-40.072Z' on GitHub by visiting:
remote:      https://github.com/anakryiko/libbpf/pull/new/libbpf-sync-2023-02-28T00-53-40.072Z
remote:
To github.com:anakryiko/libbpf.git
* [new branch]              libbpf-sync-2023-02-28T00-53-40.072Z -> libbpf-sync-2023-02-28T00-53-40.072Z
Branch 'libbpf-sync-2023-02-28T00-53-40.072Z' set up to track
 remote branch 'libbpf-sync-2023-02-28T00-53-40.072Z' from 'origin'.
```

**Please, adjust PR name to have a properly looking timestamp. Libbpf
maintainers will be very thankful for that!**

By default Github will turn above branch name into PR with subject "Libbpf sync
2023 02 28 t00 53 40.072 z". Please fix this into a proper timestamp, e.g.:
"Libbpf sync 2023-02-28T00:53:40.072Z". Thank you!

**Please don't forget to paste contents of /tmp/libbpf-sync.txt into PR
summary!**

Once PR is created, libbpf CI will run a bunch of tests to check that
everything is good. In simple cases that would be all you'd need to do. In more
complicated cases some extra adjustments might be necessary.

Please, keep naming and style consistent. Prefix CI-related fixes with `ci: `
prefix. If you had to modify sync script, prefix it with `sync: `. Also make
sure that each such commit has `Signed-off-by: Your Full Name <your@email.com>`,
just like you'd do that for Linux upstream patch. Libbpf closely
follows kernel
conventions and styling, so please help maintaining that.

Including new sources

If entirely new source files (typically `*.c`) were added to the library in the
kernel repository, it may be necessary to add these to the build system
manually (you may notice linker errors otherwise), because the script cannot
handle such changes automatically. To that end, edit `src/Makefile` as
necessary. Commit
[c2495832ced4](https://github.com/libbpf/libbpf/commit/c2495832ced4239bcd376b9954db38a6addd89ca)
is an example of how to go about doing that.

Similarly, if new public API header files were added, the `Makefile` will need
to be adjusted as well.

Updating allow/deny lists

Libbpf CI intentionally runs a subset of latest BPF selftests on old kernel
(4.9 and 5.5, currently). It happens from time to time that some tests that
previously were successfully running on old kernels now don't, typically due to
reliance on some freshly added
kernel feature. It might look something like this in [CI
logs](https://github.com/libbpf/libbpf/actions/runs/4206303272/jobs/7299609578#step:4:2733):

```
All error logs:
```

```
 serial_test_xdp_info:FAIL:get_xdp_none errno=2
 #283     xdp_info:FAIL
 Summary: 49/166 PASSED, 5 SKIPPED, 1 FAILED
```

In such case we can either work with upstream to fix test to be compatible with
old kernels, or we'll have to add a test into a denylist (or remove it from
allowlist, like was [done](https://github.com/libbpf/libbpf/commit/ea284299025bf85b85b4923191de6463cd43ccd6)
for the case above).

```
$ find . -name '*LIST*'
./ci/vmtest/configs/ALLOWLIST-4.9.0
./ci/vmtest/configs/DENYLIST-5.5.0
./ci/vmtest/configs/DENYLIST-latest.s390x
./ci/vmtest/configs/DENYLIST-latest
./ci/vmtest/configs/ALLOWLIST-5.5.0
```

Please determine which tests need to be added/removed from which list. And then
add that as a separate commit. **Please keep using the same branch name, so
that the same PR can be updated.** There
 is no need to open new PRs for each
such fix.

Regenerating vmlinux.h header

To compile latest BPF selftests against old kernels, we check in pre-generated
[vmlinux.h](https://github.com/libbpf/libbpf/blob/master/.github/actions/build-selftests/vmlinux.h)
header file, located at `.github/actions/build-selftests/vmlinux.h`, which
contains type definitions from latest upstream kernel. When after libbpf sync
upstream BPF selftests require new kernel types, we'd need to regenerate
`vmlinux.h` and check it in as well.

This will looks something like this in [CI
logs](https://github.com/libbpf/libbpf/actions/runs/4198939244/jobs/7283214243#step:4:1903):

```
 In file included from progs/test_spin_lock_fail.c:5:
 /home/runner/work/libbpf/libbpf/.kernel/tools/testing/selftests/bpf/bpf_experimental.h:73:53: error: declaration of
'struct bpf_rb_root' will not be visible outside of this function [-Werror,-Wvisibility]
 extern struct bpf_rb_node *bpf_rbtree_remove(struct
 bpf_rb_root *root,
                                              ^
 /home/runner/work/libbpf/libbpf/.kernel/tools/testing/selftests/bpf/bpf_experimental.h:81:35: error: declaration of
'struct bpf_rb_root' will not be visible outside of this function [-Werror,-Wvisibility]
 extern void bpf_rbtree_add(struct bpf_rb_root *root, struct bpf_rb_node *node,
```

```
                                ^
 /home/runner/work/libbpf/libbpf/.kernel/tools/testing/selftests/bpf/bpf_experimental.h:90:52: error: declaration of
'struct bpf_rb_root' will not be visible outside of this function [-Werror,-Wvisibility]
 extern struct bpf_rb_node *bpf_rbtree_first(struct bpf_rb_root *root) __ksym;
                                                    ^
 3 errors generated.
 make: *** [Makefile:572:
/home/runner/work/libbpf/libbpf/.kernel/tools/testing/selftests/bpf/test_spin_lock_fail.bpf.o] Error 1
 make: *** Waiting for unfinished jobs....
 Error: Process completed with exit code 2.
```

You'll
 need to build latest upstream kernel from `bpf-next` tree, using BPF
selftest configs. Concat arch-agnostic and arch-specific configs, build kernel,
then use bpftool to dump `vmlinux.h`:

```
$ cd ~/linux
$ cat tools/testing/selftests/bpf/config \
  tools/testing/selftests/bpf/config.x86_64 > .config
$ make -j$(nproc) olddefconfig all
...
$ bpftool btf dump file ~/linux/vmlinux format c > ~/libbpf/.github/actions/build-selftests/vmlinux.h
$ cd ~/libbpf && git add . && git commit -s
```

Check in generated `vmlinux.h`, don't forget to use `ci: ` commit prefix, add
it on top of sync commits. Push to Github and let libbpf CI do the checking for
you. See [this commit](https://github.com/libbpf/libbpf/commit/34212c94a64df8eeb1dd5d064630a65e1dfd4c20)
for reference.

Troubleshooting

If something goes wrong and sync script exits early or is terminated early by
user, you might end up with `~/linux` repo on temporary sync-related branch.
Don't worry, though, sync script never
 destroys repo state, it follows
"copy-on-write" philosophy and creates new branches where necessary. So it's
very easy to restore previous state. So if anything goes wrong, it's easy to
start fresh:

```
$ git branch | grep -E 'libbpf-.*Z'
 libbpf-baseline-2023-02-28T00-43-35.146Z
 libbpf-bpf-baseline-2023-02-28T00-43-35.146Z
 libbpf-bpf-tip-2023-02-28T00-43-35.146Z
```

```
 libbpf-squash-base-2023-02-28T00-43-35.146Z
* libbpf-squash-tip-2023-02-28T00-43-35.146Z
$ git cherry-pick --abort
$ git checkout master && git branch | grep -E 'libbpf-.*Z' | xargs git br -D
Switched to branch 'master'
Your branch is up to date with 'bpf-next/master'.
Deleted branch libbpf-baseline-2023-02-28T00-43-35.146Z (was 951bce29c898).
Deleted branch libbpf-bpf-baseline-2023-02-28T00-43-35.146Z (was 3a70e0d4c9d7).
Deleted branch libbpf-bpf-tip-2023-02-28T00-43-35.146Z (was 2d311f480b52).
Deleted branch libbpf-squash-base-2023-02-28T00-43-35.146Z (was 957f109ef883).
Deleted branch libbpf-squash-tip-2023-02-28T00-43-35.146Z
 (was be66130d2339).
Deleted branch libbpf-tip-2023-02-28T00-43-35.146Z (was 2d311f480b52).
```

You might need to do the same for your `~/libbpf` repo sometimes, depending at which stage sync script was terminated.

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1.3152 msgpack v5.3.5

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1.3153 libguestfs 1.46.1-4ubuntu2

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uses the
library". The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

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a) Accompany
the work with the complete corresponding
machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate
properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

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library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!
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All the examples in the perl/examples/ subdirectory may be freely
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1.3154 libcalico-go v3.29.1

1.3154.1 Available under license :

```
# TEMPORARY
btf_dump/btf_dump: syntax
kprobe_multi_bench_attach
core_reloc/enum64val
core_reloc/size___diff_sz
core_reloc/type_based___diff_sz
test_ima # All of CI is broken on it following 6.3-rc1 merge

lwt_reroute      # crashes kernel after netnext merge from 2ab1efad60ad "net/sched: cls_api: complement
tcf_tfilter_dump_policy"
tc_links_ingress # started failing after net-next merge from 2ab1efad60ad "net/sched: cls_api: complement
tcf_tfilter_dump_policy"
xdp_bonding/xdp_bonding_features     # started failing after net merge from 359e54a93ab4 "l2tp: pass correct
message length to ip6_append_data"
tc_redirect/tc_redirect_dtime # uapi breakage after net-next commit 885c36e59f46 ("net: Re-use and set
mono_delivery_time bit for userspace tstamp packets")
migrate_reuseport/IPv4 TCP_NEW_SYN_RECV reqsk_timer_handler # flaky, under investigation
migrate_reuseport/IPv6 TCP_NEW_SYN_RECV reqsk_timer_handler # flaky, under investigation
<picture>
 <source media="(prefers-color-scheme: dark)" srcset="assets/libbpf-logo-sideways-darkbg.png" width="40%">
 <img src="assets/libbpf-logo-sideways.png" width="40%">
</picture>

libbpf
[![Github Actions Builds &
Tests](https://github.com/libbpf/libbpf/actions/workflows/test.yml/badge.svg)](https://github.com/libbpf/libbpf/actio
ns/workflows/test.yml)
[![Coverity](https://img.shields.io/coverity/scan/18195.svg)](https://scan.coverity.com/projects/libbpf)
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bpf/libbpf/actions?query=workflow%3ACodeQL+branch%3Amaster)
[![OSS-Fuzz Status](https://oss-fuzz-build-logs.storage.googleapis.com/badges/libbpf.svg)](https://oss-fuzz-build-
logs.storage.googleapis.com/index.html#libbpf)
[![Read the
Docs](https://readthedocs.org/projects/libbpf/badge/?version=latest)](https://libbpf.readthedocs.io/en/latest/)
======

**This is the official home of the libbpf library.**

*Please use this Github
 repository for building and packaging libbpf
and when using it in your projects through Git submodule.*

Libbpf *authoritative source code* is developed as part of [bpf-next Linux source
tree](https://kernel.googlesource.com/pub/scm/linux/kernel/git/bpf/bpf-next) under
```

`tools/lib/bpf` subdirectory and is periodically synced to Github. As such, all the
libbpf changes should be sent to [BPF mailing list](http://vger.kernel.org/vger-lists.html#bpf),
please don't open PRs here unless you are changing Github-specific parts of libbpf
(e.g., Github-specific Makefile).

Libbpf and general BPF usage questions
==========

Libbpf documentation can be found [here](https://libbpf.readthedocs.io/en/latest/api.html).
It's an ongoing effort and has ways to go, but please take a look and consider contributing as well.

Please check out [libbpf-bootstrap](https://github.com/libbpf/libbpf-bootstrap)
and [the companion blog post](https://nakryiko.com/posts/libbpf-bootstrap/)
for
the examples of building BPF applications with libbpf.
[libbpf-tools](https://github.com/iovisor/bcc/tree/master/libbpf-tools) are also
a good source of the real-world libbpf-based tracing tools.

See also ["BPF CO-RE reference guide"](https://nakryiko.com/posts/bpf-core-reference-guide/)
for the coverage of practical aspects of building BPF CO-RE applications and
["BPF CO-RE"](https://nakryiko.com/posts/bpf-portability-and-co-re/) for
general introduction into BPF portability issues and BPF CO-RE origins.

All general BPF questions, including kernel functionality, libbpf APIs and
their application, should be sent to bpf@vger.kernel.org mailing list. You can
subscribe to it [here](http://vger.kernel.org/vger-lists.html#bpf) and search
its archive [here](https://lore.kernel.org/bpf/). Please search the archive
before asking new questions. It very well might be that this was already
addressed or answered before.

bpf@vger.kernel.org is monitored by many more people and they will
happily try
to help you with whatever issue you have. This repository's PRs and issues
should be opened only for dealing with issues pertaining to specific way this
libbpf mirror repo is set up and organized.

Building libbpf
==========
libelf is an internal dependency of libbpf and thus it is required to link
against and must be installed on the system for applications to work.
pkg-config is used by default to find libelf, and the program called can be
overridden with `PKG_CONFIG`.

If using `pkg-config` at build time is not desired, it can be disabled by
setting `NO_PKG_CONFIG=1` when calling make.

To build both static libbpf.a and shared libbpf.so:
```bash
```

```
$ cd src
$ make
```

To build only static libbpf.a library in directory
build/ and install them together with libbpf headers in a staging directory
root/:

```bash
$ cd src
$ mkdir build root
$ BUILD_STATIC_ONLY=y OBJDIR=build DESTDIR=root make install
```

To build both static libbpf.a and shared libbpf.so against a custom libelf
dependency
 installed in /build/root/ and install them together with libbpf
headers in a build directory /build/root/:

```bash
$ cd src
$ PKG_CONFIG_PATH=/build/root/lib64/pkgconfig DESTDIR=/build/root make install
```

BPF CO-RE (Compile Once Run Everywhere)
==========

Libbpf supports building BPF CO-RE-enabled applications, which, in contrast to
[BCC](https://github.com/iovisor/bcc/), do not require Clang/LLVM runtime
being deployed to target servers and doesn't rely on kernel-devel headers
being available.

It does rely on kernel to be built with [BTF type
information](https://www.kernel.org/doc/html/latest/bpf/btf.html), though.
Some major Linux distributions come with kernel BTF already built in:
 - Fedora 31+
 - RHEL 8.2+
 - OpenSUSE Tumbleweed (in the next release, as of 2020-06-04)
 - Arch Linux (from kernel 5.7.1.arch1-1)
 - Manjaro (from kernel 5.4 if compiled after 2021-06-18)
 - Ubuntu 20.10
 - Debian 11 (amd64/arm64)

If your kernel
 doesn't come with BTF built-in, you'll need to build custom
kernel. You'll need:
 - `pahole` 1.16+ tool (part of `dwarves` package), which performs DWARF to
   BTF conversion;
 - kernel built with `CONFIG_DEBUG_INFO_BTF=y` option;
 - you can check if your kernel has BTF built-in by looking for

`/sys/kernel/btf/vmlinux` file:

```shell
$ ls -la /sys/kernel/btf/vmlinux
-r--r--r--. 1 root root 3541561 Jun  2 18:16 /sys/kernel/btf/vmlinux
```

To develop and build BPF programs, you'll need Clang/LLVM 10+. The following distributions have Clang/LLVM 10+ packaged by default:
- Fedora 32+
- Ubuntu 20.04+
- Arch Linux
- Ubuntu 20.10 (LLVM 11)
- Debian 11 (LLVM 11)
- Alpine 3.13+

Otherwise, please make sure to update it on your system.

The following resources are useful to understand what BPF CO-RE is and how to use it:
- [BPF CO-RE reference guide](https://nakryiko.com/posts/bpf-core-reference-guide/)
- [BPF Portability and CO-RE](https://nakryiko.com/posts/bpf-portability-and-co-re/)
- [HOWTO: BCC to libbpf conversion](https://nakryiko.com/posts/bcc-to-libbpf-howto-guide/)
- [libbpf-tools in BCC repo](https://github.com/iovisor/bcc/tree/master/libbpf-tools) contain lots of real-world tools converted from BCC to BPF CO-RE. Consider converting some more to both contribute to the BPF community and gain some more experience with it.

Distributions
==========

Distributions packaging libbpf from this mirror:
- [Fedora](https://src.fedoraproject.org/rpms/libbpf)
- [Gentoo](https://packages.gentoo.org/packages/dev-libs/libbpf)
- [Debian](https://packages.debian.org/source/sid/libbpf)
- [Arch](https://archlinux.org/packages/core/x86_64/libbpf/)
- [Ubuntu](https://packages.ubuntu.com/source/jammy/libbpf)
- [Alpine](https://pkgs.alpinelinux.org/packages?name=libbpf)

Benefits of packaging from the mirror over packaging from kernel sources:
- Consistent versioning across distributions.
- No ties to any specific kernel, transparent handling of older kernels.
  Libbpf is designed to be kernel-agnostic and work across multitude of kernel versions. It has built-in mechanisms to gracefully handle older kernels, that are missing some of the features, by working around or gracefully degrading functionality. Thus libbpf is not tied to a specific

kernel version and can/should be packaged and versioned independently.
- Continuous integration testing via
  [GitHub Actions](https://github.com/libbpf/libbpf/actions).
- Static code analysis via [LGTM](https://lgtm.com/projects/g/libbpf/libbpf)
  and [Coverity](https://scan.coverity.com/projects/libbpf).

Package dependencies of libbpf, package names may vary across distros:
- zlib
- libelf

[![libbpf distro packaging status](https://repology.org/badge/vertical-allrepos/libbpf.svg)](https://repology.org/project/libbpf/versions)

bpf-next to Github sync
==========

All the gory details of syncing can be found in `scripts/sync-kernel.sh`
script.
See SYNC.md for instruction.

Some header files in this repo (`include/linux/*.h`) are reduced versions of
their counterpart files at
[bpf-next](https://git.kernel.org/pub/scm/linux/kernel/git/bpf/bpf-next.git/)'s
`tools/include/linux/*.h` to make compilation successful.

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==========
3e9bc0472b910d4115e16e9c2d684c7757cb6c60
version: v1.0
name: Run Fossa Scan

agent:
 machine:
   type: f1-standard-2
   os_image: ubuntu2004

execution_time_limit:
 minutes: 30

blocks:
 - name: "Trigger Fossa Scan"
   skip:
     # Only run on master or release branches, not PRs.
     when: "(branch =~ 'master|release-.*') and (branch !~ '.+')"
   dependencies: []
   task:
     prologue:
       commands:
         - "curl -fsSLH 'Cache-Control: no-cache' https://raw.githubusercontent.com/fossas/fossa-cli/master/install-latest.sh | bash"
         - checkout
         - retry git fetch --unshallow
     jobs:
       - name: "FOSSA scan"
         commands:
           - fossa analyze
     secrets:
       - name: foss-api-key
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ELF@@@w a]Dual BSD/GPLBPF triggered from PID %d.
+

#
ctxinthandle_tptp/syscalls/sys_enter_write/home/vagrant/libbpf-bootstrap/examples/c/minimal.bpf.c int pid =
bpf_get_current_pid_tgid() >> 32; if (pid != my_pid) bpf_printk("BPF triggered from PID %d.\n",
pid);}char__ARRAY_SIZE_TYPE__LICENSEmy_pidhandle_tp.____fmt.bss.rodatalicense l/g4/g'4/
<(/<0/HX/TzR|hX
+hy0
,@P`p.text.rel.BTF.exthandle_tp.____fmt.bsshandle_tp.llvm_addrsig.reltp/syscalls/sys_enter_writelicense.rel.eh_fra
memy_pid.strtab.symtab.rodata.rel.BTFLICENSELBB0_2@G@hc
&S'o0C 0 p k x 5Lo
TEMPORARY
sockmap_listen/sockhash VSOCK test_vsock_redir
usdt/basic # failing verifier due to bounds check after LLVM update
usdt/multispec # same as above

deny_namespace # not yet in bpf denylist
tc_redirect/tc_redirect_dtime # very flaky
lru_bug # not yet in bpf-next denylist

Disabled temporarily for a crash.
https://lore.kernel.org/bpf/c9923c1d-971d-4022-8dc8-1364e929d34c@gmail.com/
dummy_st_ops/dummy_init_ptr_arg
fexit_bpf2bpf
tailcalls
trace_ext
xdp_bpf2bpf
xdp_metadata
breathe
sphinx_rtd_theme
DOXYFILE_ENCODING = UTF-8
PROJECT_NAME = "libbpf"
PROJECT_NUMBER =

```
PROJECT_BRIEF          =
PROJECT_LOGO           =
OUTPUT_DIRECTORY       = ./build
CREATE_SUBDIRS         = NO
ALLOW_UNICODE_NAMES    = NO
OUTPUT_LANGUAGE        = English
OUTPUT_TEXT_DIRECTION  = None
BRIEF_MEMBER_DESC      = YES
REPEAT_BRIEF           = YES
ALWAYS_DETAILED_SEC    = NO
INLINE_INHERITED_MEMB  = NO
FULL_PATH_NAMES        = YES
STRIP_FROM_PATH        =
STRIP_FROM_INC_PATH    =
SHORT_NAMES            = NO
JAVADOC_AUTOBRIEF      = NO
JAVADOC_BANNER         = NO
QT_AUTOBRIEF           = NO
MULTILINE_CPP_IS_BRIEF = NO
PYTHON_DOCSTRING       = NO
INHERIT_DOCS           = YES
SEPARATE_MEMBER_PAGES  = NO
TAB_SIZE               = 4
ALIASES                =
OPTIMIZE_OUTPUT_FOR_C  = YES
OPTIMIZE_OUTPUT_JAVA   = NO
OPTIMIZE_FOR_FORTRAN   = NO
OPTIMIZE_OUTPUT_VHDL   = NO
OPTIMIZE_OUTPUT_SLICE  = NO
EXTENSION_MAPPING      =
MARKDOWN_SUPPORT       = YES
TOC_INCLUDE_HEADINGS   = 5
AUTOLINK_SUPPORT
      = YES
BUILTIN_STL_SUPPORT    = NO
CPP_CLI_SUPPORT        = NO
SIP_SUPPORT            = NO
IDL_PROPERTY_SUPPORT   = YES
DISTRIBUTE_GROUP_DOC   = NO
GROUP_NESTED_COMPOUNDS = NO
SUBGROUPING            = YES
INLINE_GROUPED_CLASSES = NO
INLINE_SIMPLE_STRUCTS  = NO
TYPEDEF_HIDES_STRUCT   = NO
LOOKUP_CACHE_SIZE      = 0
NUM_PROC_THREADS       = 1
EXTRACT_ALL            = NO
EXTRACT_PRIVATE        = NO
```

```
EXTRACT_PRIV_VIRTUAL   = NO
EXTRACT_PACKAGE        = NO
EXTRACT_STATIC         = NO
EXTRACT_LOCAL_CLASSES  = YES
EXTRACT_LOCAL_METHODS  = NO
EXTRACT_ANON_NSPACES   = NO
RESOLVE_UNNAMED_PARAMS = YES
HIDE_UNDOC_MEMBERS     = NO
HIDE_UNDOC_CLASSES     = NO
HIDE_FRIEND_COMPOUNDS  = NO
HIDE_IN_BODY_DOCS      = NO
INTERNAL_DOCS          = NO
CASE_SENSE_NAMES       = YES
HIDE_SCOPE_NAMES       = NO
HIDE_COMPOUND_REFERENCE= NO
SHOW_INCLUDE_FILES     = YES
SHOW_GROUPED_MEMB_INC  = NO
FORCE_LOCAL_INCLUDES   = NO
INLINE_INFO            = YES
SORT_MEMBER_DOCS       = YES
SORT_BRIEF_DOCS        = NO
SORT_MEMBERS_CTORS_1ST
 = NO
SORT_GROUP_NAMES       = NO
SORT_BY_SCOPE_NAME     = NO
STRICT_PROTO_MATCHING  = NO
GENERATE_TODOLIST      = YES
GENERATE_TESTLIST      = YES
GENERATE_BUGLIST       = YES
GENERATE_DEPRECATEDLIST= YES
ENABLED_SECTIONS       =
MAX_INITIALIZER_LINES  = 30
SHOW_USED_FILES        = YES
SHOW_FILES             = YES
SHOW_NAMESPACES        = YES
FILE_VERSION_FILTER    =
LAYOUT_FILE            =
CITE_BIB_FILES         =
QUIET                  = NO
WARNINGS               = YES
WARN_IF_UNDOCUMENTED   = YES
WARN_IF_DOC_ERROR      = YES
WARN_NO_PARAMDOC       = NO
WARN_AS_ERROR          = NO
WARN_FORMAT            = "$file:$line: $text"
WARN_LOGFILE           =
INPUT                  = ../../../src
INPUT_ENCODING         = UTF-8
```

```
FILE_PATTERNS         = *.c \
                        *.h
RECURSIVE             = NO
EXCLUDE               =
EXCLUDE_SYMLINKS      = NO
EXCLUDE_PATTERNS      =
EXCLUDE_SYMBOLS       = ___*
EXAMPLE_PATH          =
EXAMPLE_PATTERNS      = *
EXAMPLE_RECURSIVE
     = NO
IMAGE_PATH            =
INPUT_FILTER          =
FILTER_PATTERNS       =
FILTER_SOURCE_FILES    = NO
FILTER_SOURCE_PATTERNS =
USE_MDFILE_AS_MAINPAGE = YES
SOURCE_BROWSER         = NO
INLINE_SOURCES         = NO
STRIP_CODE_COMMENTS    = YES
REFERENCED_BY_RELATION = NO
REFERENCES_RELATION    = NO
REFERENCES_LINK_SOURCE = YES
SOURCE_TOOLTIPS        = YES
USE_HTAGS              = NO
VERBATIM_HEADERS       = YES
ALPHABETICAL_INDEX     = YES
IGNORE_PREFIX          =
GENERATE_HTML          = NO
HTML_OUTPUT            = html
HTML_FILE_EXTENSION    = .html
HTML_HEADER            =
HTML_FOOTER            =
HTML_STYLESHEET        =
HTML_EXTRA_STYLESHEET  =
HTML_EXTRA_FILES       =
HTML_COLORSTYLE_HUE    = 220
HTML_COLORSTYLE_SAT    = 100
HTML_COLORSTYLE_GAMMA  = 80
HTML_TIMESTAMP         = NO
HTML_DYNAMIC_MENUS     = YES
HTML_DYNAMIC_SECTIONS  = NO
HTML_INDEX_NUM_ENTRIES = 100
GENERATE_DOCSET        = NO
DOCSET_FEEDNAME        = "Doxygen generated docs"
DOCSET_BUNDLE_ID
       = org.doxygen.Project
DOCSET_PUBLISHER_ID    = org.doxygen.Publisher
```

```
DOCSET_PUBLISHER_NAME  = Publisher
GENERATE_HTMLHELP      = NO
CHM_FILE               =
HHC_LOCATION           =
GENERATE_CHI           = NO
CHM_INDEX_ENCODING     =
BINARY_TOC             = NO
TOC_EXPAND             = NO
GENERATE_QHP           = NO
QCH_FILE               =
QHP_NAMESPACE          = org.doxygen.Project
QHP_VIRTUAL_FOLDER     = doc
QHP_CUST_FILTER_NAME   =
QHP_CUST_FILTER_ATTRS  =
QHP_SECT_FILTER_ATTRS  =
QHG_LOCATION           =
GENERATE_ECLIPSEHELP   = NO
ECLIPSE_DOC_ID         = org.doxygen.Project
DISABLE_INDEX          = NO
GENERATE_TREEVIEW      = NO
ENUM_VALUES_PER_LINE   = 4
TREEVIEW_WIDTH         = 250
EXT_LINKS_IN_WINDOW    = NO
HTML_FORMULA_FORMAT    = png
FORMULA_FONTSIZE       = 10
FORMULA_TRANSPARENT    = YES
FORMULA_MACROFILE      =
USE_MATHJAX            = NO
MATHJAX_FORMAT         = HTML-CSS
MATHJAX_RELPATH        = https://cdn.jsdelivr.net/npm/mathjax@2
MATHJAX_EXTENSIONS
  =
MATHJAX_CODEFILE       =
SEARCHENGINE           = YES
SERVER_BASED_SEARCH    = NO
EXTERNAL_SEARCH        = NO
SEARCHENGINE_URL       =
SEARCHDATA_FILE        = searchdata.xml
EXTERNAL_SEARCH_ID     =
EXTRA_SEARCH_MAPPINGS  =
GENERATE_LATEX         = NO
LATEX_OUTPUT           = latex
LATEX_CMD_NAME         =
MAKEINDEX_CMD_NAME     = makeindex
LATEX_MAKEINDEX_CMD    = makeindex
COMPACT_LATEX          = NO
PAPER_TYPE             = a4
EXTRA_PACKAGES         =
```

```
LATEX_HEADER           =
LATEX_FOOTER           =
LATEX_EXTRA_STYLESHEET =
LATEX_EXTRA_FILES      =
PDF_HYPERLINKS         = YES
USE_PDFLATEX           = YES
LATEX_BATCHMODE        = NO
LATEX_HIDE_INDICES     = NO
LATEX_SOURCE_CODE      = NO
LATEX_BIB_STYLE        = plain
LATEX_TIMESTAMP        = NO
LATEX_EMOJI_DIRECTORY  =
GENERATE_RTF           = NO
RTF_OUTPUT             = rtf
COMPACT_RTF            = NO
RTF_HYPERLINKS         = NO
RTF_STYLESHEET_FILE    =
RTF_EXTENSIONS_FILE    =
RTF_SOURCE_CODE        = NO
GENERATE_MAN
   = NO
MAN_OUTPUT             = man
MAN_EXTENSION          = .3
MAN_SUBDIR             =
MAN_LINKS              = NO
GENERATE_XML           = YES
XML_OUTPUT             = xml
XML_PROGRAMLISTING     = YES
XML_NS_MEMB_FILE_SCOPE = NO
GENERATE_DOCBOOK       = NO
DOCBOOK_OUTPUT         = docbook
DOCBOOK_PROGRAMLISTING = NO
GENERATE_AUTOGEN_DEF   = NO
GENERATE_PERLMOD       = NO
PERLMOD_LATEX          = NO
PERLMOD_PRETTY         = YES
PERLMOD_MAKEVAR_PREFIX =
ENABLE_PREPROCESSING   = YES
MACRO_EXPANSION        = NO
EXPAND_ONLY_PREDEF     = YES
SEARCH_INCLUDES        = YES
INCLUDE_PATH           =
INCLUDE_FILE_PATTERNS  =
PREDEFINED             =
EXPAND_AS_DEFINED      =
SKIP_FUNCTION_MACROS   = NO
TAGFILES               =
GENERATE_TAGFILE       =
```

```
ALLEXTERNALS          = NO
EXTERNAL_GROUPS       = YES
EXTERNAL_PAGES        = YES
CLASS_DIAGRAMS        = YES
DIA_PATH              =
HIDE_UNDOC_RELATIONS   = YES
HAVE_DOT              = NO
DOT_NUM_THREADS       = 0
DOT_FONTNAME
 = Helvetica
DOT_FONTSIZE          = 10
DOT_FONTPATH          =
CLASS_GRAPH           = YES
COLLABORATION_GRAPH    = YES
GROUP_GRAPHS          = YES
UML_LOOK              = NO
UML_LIMIT_NUM_FIELDS   = 10
DOT_UML_DETAILS       = NO
DOT_WRAP_THRESHOLD     = 17
TEMPLATE_RELATIONS     = NO
INCLUDE_GRAPH          = YES
INCLUDED_BY_GRAPH      = YES
CALL_GRAPH             = NO
CALLER_GRAPH           = NO
GRAPHICAL_HIERARCHY    = YES
DIRECTORY_GRAPH        = YES
DOT_IMAGE_FORMAT       = png
INTERACTIVE_SVG        = NO
DOT_PATH               =
DOTFILE_DIRS           =
MSCFILE_DIRS           =
DIAFILE_DIRS           =
PLANTUML_JAR_PATH      =
PLANTUML_CFG_FILE      =
PLANTUML_INCLUDE_PATH  =
DOT_GRAPH_MAX_NODES    = 50
MAX_DOT_GRAPH_DEPTH    = 0
DOT_TRANSPARENT        = NO
DOT_MULTI_TARGETS      = NO
GENERATE_LEGEND        = YES
DOT_CLEANUP            = YES
009367099eb61a4fc2af44d4eb06b6b4de7de6db
LIBBPF_0.0.1 {
 global:
  bpf_btf_get_fd_by_id;
  bpf_map__btf_key_type_id;
  bpf_map__btf_value_type_id;
  bpf_map__fd;
```

bpf_map__name;
bpf_map__pin;
bpf_map__reuse_fd;
bpf_map__set_ifindex;
bpf_map__set_inner_map_fd;
bpf_map__unpin;
bpf_map_delete_elem;
bpf_map_get_fd_by_id;
bpf_map_get_next_id;
bpf_map_get_next_key;
bpf_map_lookup_and_delete_elem;
bpf_map_lookup_elem;
bpf_map_update_elem;
bpf_obj_get;
bpf_obj_get_info_by_fd;
bpf_obj_pin;
bpf_object__btf_fd;
bpf_object__close;
bpf_object__find_map_by_name;
bpf_object__kversion;
bpf_object__load;
bpf_object__name;
bpf_object__open;
bpf_object__pin;
bpf_object__pin_maps;
bpf_object__pin_programs;
bpf_object__unpin_maps;
bpf_object__unpin_programs;
bpf_prog_attach;
bpf_prog_detach;
bpf_prog_detach2;
bpf_prog_get_fd_by_id;
bpf_prog_get_next_id;
bpf_prog_query;
bpf_program__fd;
bpf_program__pin;
bpf_program__set_expected_attach_type;
bpf_program__set_ifindex;
bpf_program__set_type;
bpf_program__unload;
bpf_program__unpin;
bpf_prog_linfo__free;
bpf_prog_linfo__new;
bpf_prog_linfo__lfind_addr_func;
bpf_prog_linfo__lfind;
bpf_raw_tracepoint_open;
bpf_task_fd_query;
btf__fd;

```
  btf__find_by_name;
  btf__free;
  btf__name_by_offset;
  btf__new;
  btf__resolve_size;
  btf__resolve_type;
  btf__type_by_id;
  libbpf_attach_type_by_name;
  libbpf_get_error;
  libbpf_prog_type_by_name;
  libbpf_set_print;
  libbpf_strerror;
 local:
  *;
};

LIBBPF_0.0.2
 {
 global:
  bpf_map_lookup_elem_flags;
  bpf_object__btf;
  bpf_object__find_map_fd_by_name;
  btf__get_raw_data;
  btf_ext__free;
  btf_ext__get_raw_data;
  btf_ext__new;
} LIBBPF_0.0.1;

LIBBPF_0.0.3 {
 global:
  bpf_map__is_internal;
  bpf_map_freeze;
} LIBBPF_0.0.2;

LIBBPF_0.0.4 {
 global:
  bpf_link__destroy;
  bpf_program__attach_kprobe;
  bpf_program__attach_perf_event;
  bpf_program__attach_raw_tracepoint;
  bpf_program__attach_tracepoint;
  bpf_program__attach_uprobe;
  btf_dump__dump_type;
  btf_dump__free;
  btf__parse_elf;
  libbpf_num_possible_cpus;
  perf_buffer__free;
  perf_buffer__poll;
```

```
}
 LIBBPF_0.0.3;

LIBBPF_0.0.5 {
 global:
  bpf_btf_get_next_id;
} LIBBPF_0.0.4;

LIBBPF_0.0.6 {
 global:
  bpf_map__get_pin_path;
  bpf_map__is_pinned;
  bpf_map__set_pin_path;
  bpf_object__open_file;
  bpf_object__open_mem;
  bpf_program__attach_trace;
  bpf_program__get_expected_attach_type;
  bpf_program__get_type;
  btf__find_by_name_kind;
  libbpf_find_vmlinux_btf_id;
} LIBBPF_0.0.5;

LIBBPF_0.0.7 {
 global:
  btf_dump__emit_type_decl;
  bpf_link__disconnect;
  bpf_map__attach_struct_ops;
  bpf_map_delete_batch;
  bpf_map_lookup_and_delete_batch;
  bpf_map_lookup_batch;
  bpf_map_update_batch;
  bpf_object__find_program_by_name;
  bpf_object__attach_skeleton;
  bpf_object__destroy_skeleton;
  bpf_object__detach_skeleton;
  bpf_object__load_skeleton;
  bpf_object__open_skeleton;
  bpf_program__attach;
  bpf_program__name;
  btf__align_of;
  libbpf_find_kernel_btf;
}
 LIBBPF_0.0.6;

LIBBPF_0.0.8 {
 global:
  bpf_link__fd;
  bpf_link__open;
```

```
  bpf_link__pin;
  bpf_link__pin_path;
  bpf_link__unpin;
  bpf_link__update_program;
  bpf_link_create;
  bpf_link_update;
  bpf_map__set_initial_value;
  bpf_prog_attach_opts;
  bpf_program__attach_cgroup;
  bpf_program__attach_lsm;
  bpf_program__set_attach_target;
} LIBBPF_0.0.7;

LIBBPF_0.0.9 {
 global:
  bpf_enable_stats;
  bpf_iter_create;
  bpf_link_get_fd_by_id;
  bpf_link_get_next_id;
  bpf_program__attach_iter;
  bpf_program__attach_netns;
  perf_buffer__consume;
  ring_buffer__add;
  ring_buffer__consume;
  ring_buffer__free;
  ring_buffer__new;
  ring_buffer__poll;
} LIBBPF_0.0.8;

LIBBPF_0.1.0 {
 global:
  bpf_link__detach;
  bpf_link_detach;
  bpf_map__ifindex;
  bpf_map__key_size;
  bpf_map__map_flags;
  bpf_map__max_entries;
  bpf_map__numa_node;
  bpf_map__set_key_size;
  bpf_map__set_map_flags;
  bpf_map__set_max_entries;
  bpf_map__set_numa_node;
  bpf_map__set_type;
  bpf_map__set_value_size;
  bpf_map__type;
  bpf_map__value_size;
  bpf_program__attach_xdp;
  bpf_program__autoload;
```

```
  bpf_program__set_autoload;
  btf__parse;
  btf__parse_raw;
  btf__pointer_size;
  btf__set_fd;
  btf__set_pointer_size;
}
 LIBBPF_0.0.9;

LIBBPF_0.2.0 {
 global:
  bpf_prog_bind_map;
  bpf_prog_test_run_opts;
  bpf_program__attach_freplace;
  bpf_program__section_name;
  btf__add_array;
  btf__add_const;
  btf__add_enum;
  btf__add_enum_value;
  btf__add_datasec;
  btf__add_datasec_var_info;
  btf__add_field;
  btf__add_func;
  btf__add_func_param;
  btf__add_func_proto;
  btf__add_fwd;
  btf__add_int;
  btf__add_ptr;
  btf__add_restrict;
  btf__add_str;
  btf__add_struct;
  btf__add_typedef;
  btf__add_union;
  btf__add_var;
  btf__add_volatile;
  btf__endianness;
  btf__find_str;
  btf__new_empty;
  btf__set_endianness;
  btf__str_by_offset;
  perf_buffer__buffer_cnt;
  perf_buffer__buffer_fd;
  perf_buffer__epoll_fd;
  perf_buffer__consume_buffer;
} LIBBPF_0.1.0;

LIBBPF_0.3.0 {
 global:
```

```
  btf__base_btf;
  btf__parse_elf_split;
  btf__parse_raw_split;
  btf__parse_split;
  btf__new_empty_split;
  ring_buffer__epoll_fd;
}
 LIBBPF_0.2.0;

LIBBPF_0.4.0 {
 global:
  btf__add_float;
  btf__add_type;
  bpf_linker__add_file;
  bpf_linker__finalize;
  bpf_linker__free;
  bpf_linker__new;
  bpf_map__inner_map;
  bpf_object__set_kversion;
  bpf_tc_attach;
  bpf_tc_detach;
  bpf_tc_hook_create;
  bpf_tc_hook_destroy;
  bpf_tc_query;
} LIBBPF_0.3.0;

LIBBPF_0.5.0 {
 global:
  bpf_map__initial_value;
  bpf_map__pin_path;
  bpf_map_lookup_and_delete_elem_flags;
  bpf_program__attach_kprobe_opts;
  bpf_program__attach_perf_event_opts;
  bpf_program__attach_tracepoint_opts;
  bpf_program__attach_uprobe_opts;
  bpf_object__gen_loader;
  btf__load_from_kernel_by_id;
  btf__load_from_kernel_by_id_split;
  btf__load_into_kernel;
  btf__load_module_btf;
  btf__load_vmlinux_btf;
  btf_dump__dump_type_data;
  libbpf_set_strict_mode;
} LIBBPF_0.4.0;

LIBBPF_0.6.0 {
 global:
  bpf_map__map_extra;
```

```
  bpf_map__set_map_extra;
  bpf_map_create;
  bpf_object__next_map;
  bpf_object__next_program;
  bpf_object__prev_map;
  bpf_object__prev_program;
  bpf_prog_load;
  bpf_program__flags;
  bpf_program__insn_cnt;
  bpf_program__insns;
  bpf_program__set_flags;
  btf__add_btf;
  btf__add_decl_tag;
  btf__add_type_tag;
  btf__dedup;
  btf__raw_data;
  btf__type_cnt;
  btf_dump__new;
  libbpf_major_version;
  libbpf_minor_version;
  libbpf_version_string;
  perf_buffer__new;
  perf_buffer__new_raw;
}
 LIBBPF_0.5.0;

LIBBPF_0.7.0 {
 global:
  bpf_btf_load;
  bpf_program__expected_attach_type;
  bpf_program__log_buf;
  bpf_program__log_level;
  bpf_program__set_log_buf;
  bpf_program__set_log_level;
  bpf_program__type;
  bpf_xdp_attach;
  bpf_xdp_detach;
  bpf_xdp_query;
  bpf_xdp_query_id;
  libbpf_probe_bpf_helper;
  libbpf_probe_bpf_map_type;
  libbpf_probe_bpf_prog_type;
  libbpf_set_memlock_rlim;
} LIBBPF_0.6.0;

LIBBPF_0.8.0 {
 global:
  bpf_map__autocreate;
```

```
  bpf_map__get_next_key;
  bpf_map__delete_elem;
  bpf_map__lookup_and_delete_elem;
  bpf_map__lookup_elem;
  bpf_map__set_autocreate;
  bpf_map__update_elem;
  bpf_map_delete_elem_flags;
  bpf_object__destroy_subskeleton;
  bpf_object__open_subskeleton;
  bpf_program__attach_kprobe_multi_opts;
  bpf_program__attach_trace_opts;
  bpf_program__attach_usdt;
  bpf_program__set_insns;
  libbpf_register_prog_handler;
  libbpf_unregister_prog_handler;
}
 LIBBPF_0.7.0;

LIBBPF_1.0.0 {
 global:
  bpf_obj_get_opts;
  bpf_prog_query_opts;
  bpf_program__attach_ksyscall;
  bpf_program__autoattach;
  bpf_program__set_autoattach;
  btf__add_enum64;
  btf__add_enum64_value;
  libbpf_bpf_attach_type_str;
  libbpf_bpf_link_type_str;
  libbpf_bpf_map_type_str;
  libbpf_bpf_prog_type_str;
  perf_buffer__buffer;
} LIBBPF_0.8.0;

LIBBPF_1.1.0 {
 global:
  bpf_btf_get_fd_by_id_opts;
  bpf_link_get_fd_by_id_opts;
  bpf_map_get_fd_by_id_opts;
  bpf_prog_get_fd_by_id_opts;
  user_ring_buffer__discard;
  user_ring_buffer__free;
  user_ring_buffer__new;
  user_ring_buffer__reserve;
  user_ring_buffer__reserve_blocking;
  user_ring_buffer__submit;
}
```

```
 LIBBPF_1.0.0;

LIBBPF_1.2.0 {
 global:
  bpf_btf_get_info_by_fd;
  bpf_link__update_map;
  bpf_link_get_info_by_fd;
  bpf_map_get_info_by_fd;
  bpf_prog_get_info_by_fd;
} LIBBPF_1.1.0;

LIBBPF_1.3.0 {
 global:
  bpf_obj_pin_opts;
  bpf_object__unpin;
  bpf_prog_detach_opts;
  bpf_program__attach_netfilter;
  bpf_program__attach_netkit;
  bpf_program__attach_tcx;
  bpf_program__attach_uprobe_multi;
  ring__avail_data_size;
  ring__consume;
  ring__consumer_pos;
  ring__map_fd;
  ring__producer_pos;
  ring__size;
  ring_buffer__ring;
} LIBBPF_1.2.0;

LIBBPF_1.4.0 {
 global:
  bpf_program__attach_raw_tracepoint_opts;
  bpf_raw_tracepoint_open_opts;
  bpf_token_create;
  btf__new_split;
  btf_ext__raw_data;
} LIBBPF_1.3.0;

LIBBPF_1.5.0 {
 global:
  bpf_program__attach_sockmap;
  ring__consume_n;
  ring_buffer__consume_n;
} LIBBPF_1.4.0;
```

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decap_sanity # weird failure with decap_sanity_ns netns already existing, TBD
empty_skb # waiting the fix in bpf tree to make it to bpf-next
bpf_nf/tc-bpf-ct # test consistently failing on x86: https://github.com/libbpf/libbpf/pull/698#issuecomment-1590341200
bpf_nf/xdp-ct # test consistently failing on x86: https://github.com/libbpf/libbpf/pull/698#issuecomment-1590341200
kprobe_multi_bench_attach # suspected to cause crashes in CI
find_vma # test consistently fails on latest kernel, see https://github.com/libbpf/libbpf/issues/754 for details
bpf_cookie/perf_event
send_signal/send_signal_nmi
send_signal/send_signal_nmi_thread

lwt_reroute # crashes kernel, fix pending upstream
tc_links_ingress # fails, same fix is pending upstream
tc_redirect # enough is enough, banned for life for flakiness

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prefix=@PREFIX@
libdir=@LIBDIR@
includedir=${prefix}/include

Name: libbpf
Description: BPF library
Version: @VERSION@
Libs: -L${libdir} -lbpf
Requires.private: libelf zlib
Cflags: -I${includedir}
```

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INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN
CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
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POSSIBILITY OF SUCH DAMAGE.
The sample BIRD configuration in this directory is distributed under
GPLv3. See the file COPYING-v3 for details.
<picture>
<source media="(prefers-color-scheme: dark)" srcset="assets/libbpf-logo-sideways-darkbg.png" width="40%">
<img src="assets/libbpf-logo-sideways.png" width="40%">

</picture>

Libbpf sync
==========

Libbpf *authoritative source code* is developed as part of [bpf-next Linux source tree](https://kernel.googlesource.com/pub/scm/linux/kernel/git/bpf/bpf-next) under `tools/lib/bpf` subdirectory and is periodically synced to Github.

Most of the mundane mechanical things like bpf and bpf-next tree merge, Git history transformation, cherry-picking relevant commits, re-generating auto-generated headers, etc. are taken care by [sync-kernel.sh script](https://github.com/libbpf/libbpf/blob/master/scripts/sync-kernel.sh). But occasionally human needs to do few extra things to make everything work nicely.

This document goes over the process of syncing libbpf sources from Linux repo to this Github repository. Feel free to contribute fixes and additions if you run into new problems not
 outlined here.

Setup expectations

Sync script has particular expectation of upstream Linux repo setup. It expects that current HEAD of that repo points to bpf-next's master branch and that there is a separate local branch pointing to bpf tree's master branch. This is important, as the script will automatically merge their histories for the purpose of libbpf sync.

Below, we assume that Linux repo is located at `~/linux`, it's current head is at latest `bpf-next/master`, and libbpf's Github repo is located at `~/libbpf`, checked out to latest commit on `master` branch. It doesn't matter from where to run `sync-kernel.sh` script, but we'll be running it from inside `~/libbpf`.

```
$ cd ~/linux && git remote -v | grep -E '^(bpf|bpf-next)'
bpf     https://git.kernel.org/pub/scm/linux/kernel/git/bpf/bpf.git (fetch)
bpf     ssh://git@gitolite.kernel.org/pub/scm/linux/kernel/git/bpf/bpf.git
(push)
bpf-next
https://git.kernel.org/pub/scm/linux/kernel/git/bpf/bpf-next.git
 (fetch)
bpf-next
ssh://git@gitolite.kernel.org/pub/scm/linux/kernel/git/bpf/bpf-next.git (push)
$ git branch -vv | grep -E '^? (master|bpf-master)'
* bpf-master                    2d311f480b52 [bpf/master] riscv, bpf: Fix patch_text implicit declaration
```

```
 master                          c8ee37bde402 [bpf-next/master] libbpf: Fix bpf_xdp_query() in old kernels
$ git checkout bpf-master && git pull && git checkout master && git pull
...
$ git log --oneline -n1
c8ee37bde402 (HEAD -> master, bpf-next/master) libbpf: Fix bpf_xdp_query() in old kernels
$ cd ~/libbpf && git checkout master && git pull
Your branch is up to date with 'libbpf/master'.
Already up to date.
```

Running setup script

First step is to always run `sync-kernel.sh` script. It expects three arguments:

```
$ scripts/sync-kernel.sh <libbpf-repo> <kernel-repo> <bpf-branch>
```

Note, that we'll store script's entire output in `/tmp/libbpf-sync.txt` and
put it into PR summary later
 on. **Please store scripts output and include it
in PR summary for others to check for anything unexpected and suspicious.**

```
$ scripts/sync-kernel.sh ~/libbpf ~/linux bpf-master | tee /tmp/libbpf-sync.txt
Dumping existing libbpf commit signatures...
WORKDIR:          /home/andriin/libbpf
LINUX REPO:       /home/andriin/linux
LIBBPF REPO:      /home/andriin/libbpf
...
```

Most of the time this will go very uneventful. One expected case when sync
script might require user intervention is if `bpf` tree has some libbpf fixes,
which is nowadays not a very frequent occurence. But if that happens, script
will show you a diff between expected state as of latest bpf-next and synced
Github repo state. And will ask if these changes look good. Please use your
best judgement to verify that differences are indeed from expected `bpf` tree
fixes. E.g., it might look like below:

```
Comparing list of files...
Comparing file contents...
--- /home/andriin/linux/include/uapi/linux/netdev.h     2023-02-27
 16:54:42.270583372 -0800
+++ /home/andriin/libbpf/include/uapi/linux/netdev.h    2023-02-27 16:54:34.615530796 -0800
@@ -19,7 +19,7 @@
```

```
 * @NETDEV_XDP_ACT_XSK_ZEROCOPY: This feature informs if netdev supports AF_XDP
 *   in zero copy mode.
 * @NETDEV_XDP_ACT_HW_OFFLOAD: This feature informs if netdev supports XDP hw
- *   oflloading.
+ *   offloading.
 * @NETDEV_XDP_ACT_RX_SG: This feature informs if netdev implements non-linear
 *   XDP buffer support in the driver napi callback.
 * @NETDEV_XDP_ACT_NDO_XMIT_SG: This feature informs if netdev implements
/home/andriin/linux/include/uapi/linux/netdev.h and /home/andriin/libbpf/include/uapi/linux/netdev.h are different!
Unfortunately, there are some inconsistencies, please double check.
Does everything look good? [y/N]:
```

If it looks sensible and expected, type `y` and script will proceed.

If sync is successful, your `~/linux` repo will be left in original state on
the original HEAD commit. `~/libbpf` repo will now be on a
 new branch, named
`libbpf-sync-<timestamp>` (e.g., `libbpf-sync-2023-02-28T00-53-40.072Z`).

Push this branch into your fork of `libbpf/libbpf` Github repo and create a PR:

```
$ git push --set-upstream origin libbpf-sync-2023-02-28T00-53-40.072Z
Enumerating objects: 130, done.
Counting objects: 100% (115/115), done.
Delta compression using up to 80 threads
Compressing objects: 100% (28/28), done.
Writing objects: 100% (32/32), 5.57 KiB | 1.86 MiB/s, done.
Total 32 (delta 21), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (21/21), completed with 9 local objects.
remote:
remote: Create a pull request for 'libbpf-sync-2023-02-28T00-53-40.072Z' on GitHub by visiting:
remote:      https://github.com/anakryiko/libbpf/pull/new/libbpf-sync-2023-02-28T00-53-40.072Z
remote:
To github.com:anakryiko/libbpf.git
* [new branch]              libbpf-sync-2023-02-28T00-53-40.072Z -> libbpf-sync-2023-02-28T00-53-40.072Z
Branch 'libbpf-sync-2023-02-28T00-53-40.072Z' set up to track
 remote branch 'libbpf-sync-2023-02-28T00-53-40.072Z' from 'origin'.
```

**Please, adjust PR name to have a properly looking timestamp. Libbpf
maintainers will be very thankful for that!**

By default Github will turn above branch name into PR with subject "Libbpf sync
2023 02 28 t00 53 40.072 z". Please fix this into a proper timestamp, e.g.:
"Libbpf sync 2023-02-28T00:53:40.072Z". Thank you!

Please don't forget to paste contents of /tmp/libbpf-sync.txt into PR summary!

Once PR is created, libbpf CI will run a bunch of tests to check that everything is good. In simple cases that would be all you'd need to do. In more complicated cases some extra adjustments might be necessary.

Please, keep naming and style consistent. Prefix CI-related fixes with `ci: ` prefix. If you had to modify sync script, prefix it with `sync: `. Also make sure that each such commit has `Signed-off-by: Your Full Name <your@email.com>`, just like you'd do that for Linux upstream patch. Libbpf closely follows kernel conventions and styling, so please help maintaining that.

Including new sources

If entirely new source files (typically `*.c`) were added to the library in the kernel repository, it may be necessary to add these to the build system manually (you may notice linker errors otherwise), because the script cannot handle such changes automatically. To that end, edit `src/Makefile` as necessary. Commit [c2495832ced4](https://github.com/libbpf/libbpf/commit/c2495832ced4239bcd376b9954db38a6addd89ca) is an example of how to go about doing that.

Similarly, if new public API header files were added, the `Makefile` will need to be adjusted as well.

Updating allow/deny lists

Libbpf CI intentionally runs a subset of latest BPF selftests on old kernel (4.9 and 5.5, currently). It happens from time to time that some tests that previously were successfully running on old kernels now don't, typically due to reliance on some freshly added kernel feature. It might look something like this in [CI logs](https://github.com/libbpf/libbpf/actions/runs/4206303272/jobs/7299609578#step:4:2733):

```
All error logs:
serial_test_xdp_info:FAIL:get_xdp_none errno=2
#283     xdp_info:FAIL
Summary: 49/166 PASSED, 5 SKIPPED, 1 FAILED
```

In such case we can either work with upstream to fix test to be compatible with old kernels, or we'll have to add a test into a denylist (or remove it from allowlist, like was [done](https://github.com/libbpf/libbpf/commit/ea284299025bf85b85b4923191de6463cd43ccd6)

for the case above).

```
$ find . -name '*LIST*'
./ci/vmtest/configs/ALLOWLIST-4.9.0
./ci/vmtest/configs/DENYLIST-5.5.0
./ci/vmtest/configs/DENYLIST-latest.s390x
./ci/vmtest/configs/DENYLIST-latest
./ci/vmtest/configs/ALLOWLIST-5.5.0
```

Please determine which tests need to be added/removed from which list. And then add that as a separate commit. **Please keep using the same branch name, so that the same PR can be updated.** There is no need to open new PRs for each such fix.

Regenerating vmlinux.h header

To compile latest BPF selftests against old kernels, we check in pre-generated [vmlinux.h](https://github.com/libbpf/libbpf/blob/master/.github/actions/build-selftests/vmlinux.h) header file, located at `.github/actions/build-selftests/vmlinux.h`, which contains type definitions from latest upstream kernel. When after libbpf sync upstream BPF selftests require new kernel types, we'd need to regenerate `vmlinux.h` and check it in as well.

This will looks something like this in [CI logs](https://github.com/libbpf/libbpf/actions/runs/4198939244/jobs/7283214243#step:4:1903):

```
 In file included from progs/test_spin_lock_fail.c:5:
 /home/runner/work/libbpf/libbpf/.kernel/tools/testing/selftests/bpf/bpf_experimental.h:73:53: error: declaration of 'struct bpf_rb_root' will not be visible outside of this function [-Werror,-Wvisibility]
 extern struct bpf_rb_node *bpf_rbtree_remove(struct
 bpf_rb_root *root,
                                              ^
 /home/runner/work/libbpf/libbpf/.kernel/tools/testing/selftests/bpf/bpf_experimental.h:81:35: error: declaration of 'struct bpf_rb_root' will not be visible outside of this function [-Werror,-Wvisibility]
 extern void bpf_rbtree_add(struct bpf_rb_root *root, struct bpf_rb_node *node,
                                   ^
 /home/runner/work/libbpf/libbpf/.kernel/tools/testing/selftests/bpf/bpf_experimental.h:90:52: error: declaration of 'struct bpf_rb_root' will not be visible outside of this function [-Werror,-Wvisibility]
 extern struct bpf_rb_node *bpf_rbtree_first(struct bpf_rb_root *root) __ksym;
                                             ^
 3 errors generated.
 make: *** [Makefile:572:
/home/runner/work/libbpf/libbpf/.kernel/tools/testing/selftests/bpf/test_spin_lock_fail.bpf.o] Error 1
```

```
 make: *** Waiting for unfinished jobs....
 Error: Process completed with exit code 2.
```

You'll
 need to build latest upstream kernel from `bpf-next` tree, using BPF
selftest configs. Concat arch-agnostic and arch-specific configs, build kernel,
then use bpftool to dump `vmlinux.h`:

```
$ cd ~/linux
$ cat tools/testing/selftests/bpf/config \
  tools/testing/selftests/bpf/config.x86_64 > .config
$ make -j$(nproc) olddefconfig all
...
$ bpftool btf dump file ~/linux/vmlinux format c > ~/libbpf/.github/actions/build-selftests/vmlinux.h
$ cd ~/libbpf && git add . && git commit -s
```

Check in generated `vmlinux.h`, don't forget to use `ci: ` commit prefix, add
it on top of sync commits. Push to Github and let libbpf CI do the checking for
you. See [this commit](https://github.com/libbpf/libbpf/commit/34212c94a64df8eeb1dd5d064630a65e1dfd4c20)
for reference.

Troubleshooting

If something goes wrong and sync script exits early or is terminated early by
user, you might end up with `~/linux` repo on temporary sync-related branch.
Don't worry, though, sync script never
 destroys repo state, it follows
"copy-on-write" philosophy and creates new branches where necessary. So it's
very easy to restore previous state. So if anything goes wrong, it's easy to
start fresh:

```
$ git branch | grep -E 'libbpf-.*Z'
 libbpf-baseline-2023-02-28T00-43-35.146Z
 libbpf-bpf-baseline-2023-02-28T00-43-35.146Z
 libbpf-bpf-tip-2023-02-28T00-43-35.146Z
 libbpf-squash-base-2023-02-28T00-43-35.146Z
* libbpf-squash-tip-2023-02-28T00-43-35.146Z
$ git cherry-pick --abort
$ git checkout master && git branch | grep -E 'libbpf-.*Z' | xargs git br -D
Switched to branch 'master'
Your branch is up to date with 'bpf-next/master'.
Deleted branch libbpf-baseline-2023-02-28T00-43-35.146Z (was 951bce29c898).
Deleted branch libbpf-bpf-baseline-2023-02-28T00-43-35.146Z (was 3a70e0d4c9d7).
```

```
Deleted branch libbpf-bpf-tip-2023-02-28T00-43-35.146Z (was 2d311f480b52).
Deleted branch libbpf-squash-base-2023-02-28T00-43-35.146Z (was 957f109ef883).
Deleted branch libbpf-squash-tip-2023-02-28T00-43-35.146Z
 (was be66130d2339).
Deleted branch libbpf-tip-2023-02-28T00-43-35.146Z (was 2d311f480b52).
```

You might need to do the same for your `~/libbpf` repo sometimes, depending at which stage sync script was terminated.

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package migration

import "fmt"

// Notice is a migration warning
type Notice struct {
 Plugin     string
 Option     string
 Severity   string // 'deprecated', 'removed', or 'unsupported'
 ReplacedBy string
 Additional string
 Version    string
}

func (n *Notice) ToString() string {
 s := ""
 if n.Option == "" {
  s += fmt.Sprintf(`Plugin "%v" `, n.Plugin)
 } else {
  s += fmt.Sprintf(`Option "%v" in plugin "%v" `, n.Option, n.Plugin)
 }
 if n.Severity == SevUnsupported {
  s += "is unsupported by this migration tool in " + n.Version + "."
 } else if n.Severity == SevNewDefault {
  s += "is added as a default in " + n.Version + "."
 } else {
  s += "is " + n.Severity + " in " + n.Version + "."
 }
 if n.ReplacedBy != "" {
  s += fmt.Sprintf(` It is replaced by "%v".`, n.ReplacedBy)
 }
 if n.Additional != "" {
  s += " " + n.Additional
 }
 return s
}

const (
 // The following statuses are used to indicate the state of support/deprecation in a given release.
 SevDeprecated  = "deprecated"
```

// deprecated, but still completely functional
SevIgnored = "ignored" // if included in the corefile, it will be ignored by CoreDNS
SevRemoved = "removed" // completely removed from CoreDNS, and would cause CoreDNS to exit if present in the Corefile
SevNewDefault = "newdefault" // added to the default corefile. CoreDNS may not function properly if it is not present in the corefile.
SevUnsupported = "unsupported" // the plugin/option is not supported by the migration tool

// The following statuses are used for selecting/filtering notifications
SevAll = "all" // show all statuses
)
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==========
The common/types/pb/equal.go modification of proto.Equal logic
==========
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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL string `json:"url,omitempty"`
}

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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==========
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```
package migration

import "fmt"

// Notice is a migration warning
type Notice struct {
 Plugin     string
 Option     string
 Severity   string // 'deprecated', 'removed', or 'unsupported'
 ReplacedBy string
 Additional string
 Version    string
}

func (n *Notice) ToString() string {
 s := ""
 if n.Option == "" {
  s += fmt.Sprintf(`Plugin "%v" `, n.Plugin)
 } else {
  s += fmt.Sprintf(`Option "%v" in plugin "%v" `, n.Option, n.Plugin)
 }
```

```
 if n.Severity == SevUnsupported {
  s += "is unsupported by this migration tool in " + n.Version + "."
 } else if n.Severity == SevNewDefault {
  s += "is added as a default in " + n.Version + "."
 } else {
  s += "is " + n.Severity + " in " + n.Version + "."
 }
 if n.ReplacedBy != "" {
  s += fmt.Sprintf(` It is replaced by "%v".`, n.ReplacedBy)
 }
 if n.Additional != "" {
  s += " " + n.Additional
 }
 return s
}

const (
 // The following statuses are used to indicate the state of support/deprecation in a given release.
 SevDeprecated  = "deprecated"
  // deprecated, but still completely functional
 SevIgnored     = "ignored"     // if included in the corefile, it will be ignored by CoreDNS
 SevRemoved     = "removed"     // completely removed from CoreDNS, and would cause CoreDNS to exit if present
in the Corefile
 SevNewDefault  = "newdefault"  // added to the default corefile.  CoreDNS may not function properly if it is not
present in the corefile.
 SevUnsupported = "unsupported" // the plugin/option is not supported by the migration tool

 // The following statuses are used for selecting/filtering notifications
 SevAll = "all" // show all statuses
)
```

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==========
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package spec

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```
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
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Go support for Protocol Buffers - Google's data interchange format

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```
package migration

import "fmt"

// Notice is a migration warning
type Notice struct {
 Plugin     string
 Option     string
 Severity   string // 'deprecated', 'removed', or 'unsupported'
 ReplacedBy string
 Additional string
 Version    string
}

func (n *Notice) ToString() string {
 s := ""
 if n.Option == "" {
  s += fmt.Sprintf(`Plugin "%v" `, n.Plugin)
 } else {
  s += fmt.Sprintf(`Option "%v" in plugin "%v" `, n.Option, n.Plugin)
 }
```

```
 if n.Severity == SevUnsupported {
  s += "is unsupported by this migration tool in " + n.Version + "."
 } else if n.Severity == SevNewDefault {
  s += "is added as a default in " + n.Version + "."
 } else {
  s += "is " + n.Severity + " in " + n.Version + "."
 }
 if n.ReplacedBy != "" {
  s += fmt.Sprintf(` It is replaced by "%v".`, n.ReplacedBy)
 }
 if n.Additional != "" {
  s += " " + n.Additional
 }
 return s
}

const (
 // The following statuses are used to indicate the state of support/deprecation in a given release.
 SevDeprecated  = "deprecated"
  // deprecated, but still completely functional
 SevIgnored     = "ignored"     // if included in the corefile, it will be ignored by CoreDNS
 SevRemoved     = "removed"     // completely removed from CoreDNS, and would cause CoreDNS to exit if present
in the Corefile
 SevNewDefault  = "newdefault"  // added to the default corefile.  CoreDNS may not function properly if it is not
present in the corefile.
 SevUnsupported = "unsupported" // the plugin/option is not supported by the migration tool

 // The following statuses are used for selecting/filtering notifications
 SevAll = "all" // show all statuses
)
```

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==========
The common/types/pb/equal.go modification of proto.Equal logic
==========
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 Name string `json:"name,omitempty"`
 URL string `json:"url,omitempty"`
}
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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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==========
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1.3168 azure-sdk-for-go-sdk-azidentity v1.5.1

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```
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//go:build go1.18
// +build go1.18

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// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
```

```
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
```

```
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                         *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                 *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate                 *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
```

```
 resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
```

```
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
```

```
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
```

```
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
```

```
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
```

```
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }
```

```
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
```

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```
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// +build go1.18

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package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}
```

```
// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
```

```
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
```

```
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
```

```
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
```

```
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
```

```
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
```

```
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
```

```
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2023-06-20-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
```

```
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
```

```
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
```

```
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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```
//go:build go1.18
// +build go1.18

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// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"
```

```
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
```

```
// ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
// Location: to.Ptr("eastus2euap"),
// Properties: &armhybridcompute.LicenseProperties{
//  LicenseDetails: &armhybridcompute.LicenseDetails{
//   Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//   AssignedLicenses: to.Ptr[int32](2),
//   Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//   ImmutableID: to.Ptr("<generated Guid>"),
//   Processors: to.Ptr[int32](6),
//
   State: to.Ptr(armhybridcompute.LicenseStateActivated),
//   Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//  },
//  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//  TenantID: to.Ptr("{tenandId}"),
// },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
```

```
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
```

```
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}
```

```
// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
```

```
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
```

```
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //    {
  //     Name: to.Ptr("{licenseName}"),
  //
    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //     ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //     Location: to.Ptr("eastus2euap"),
  //     Properties: &armhybridcompute.LicenseProperties{
  //      LicenseDetails: &armhybridcompute.LicenseDetails{
  //       Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //       AssignedLicenses: to.Ptr[int32](8),
  //       Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //       ImmutableID: to.Ptr("<generated Guid>"),
  //       Processors: to.Ptr[int32](6),
  //       State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //       Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //      },
  //      LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //      TenantID: to.Ptr("{tenandId}"),
  //     },
  //  }},
  // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
```

```
  log.Fatalf("failed to advance page: %v", err)
 }
 for _, v := range page.Value {
  // You could use page here. We use blank identifier for just demo purposes.
  _ = v
 }
 // If the HTTP response code is 200 as defined in example definition, your page structure would look as
follows. Please pay attention that all the values in the output are fake values for just demo purposes.
 // page.LicensesListResult = armhybridcompute.LicensesListResult{
 //  Value: []*armhybridcompute.License{
 //   {
 //    Name: to.Ptr("{licenseName}"),
 //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

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1.3170 protobuf-go 1.36.3

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1.3171 genproto-googleapis-rpc 0.0.0-20250115164207-1a7da9e5054f

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1.3172 go-md2man 2.0.6

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1.3173 google-cloud-go-trace v1.10.4

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook
```

```
// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient
 interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
```

```
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode,
 error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string
```

```
 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
```

```
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{"x-goog-api-client", gax.XGoogHeader(kv...)}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are
 mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for
use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm
 := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
```

```
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook
```

```
// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
```

```
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
```

```
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by
third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}
```

```
// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string
```

```
 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
```

```
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{"x-goog-api-client", gax.XGoogHeader(kv...)}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns
 nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
hds
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil
{
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
```

```
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
```

```
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for
 a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by
third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return
nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }
```

```
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v",
"project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return
```

```
err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}
```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm
 := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())
```

```
 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req !=
nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return
```

```
err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption)
 (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e
 := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
 context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// LicenseIterator manages a stream of *computepb.License.
type LicenseIterator struct {
 items    []*computepb.License
 pageInfo
 *iterator.PageInfo
 nextFunc func() error

 // Response is the raw response for the current page.
 // It must be cast to the RPC response type.
 // Calling Next() or InternalFetch() updates this value.
 Response interface{}

 // InternalFetch is for use by the Google Cloud Libraries only.
 // It is not part of the stable interface of this package.
 //
 // InternalFetch returns results from a single call to the underlying RPC.
 // The number of results is no greater than pageSize.
 // If there are no more results, nextPageToken is empty and err is nil.
 InternalFetch func(pageSize int, pageToken string) (results []*computepb.License, nextPageToken string, err error)
}
```

```
// PageInfo supports pagination. See the google.golang.org/api/iterator package for details.
func (it *LicenseIterator) PageInfo() *iterator.PageInfo {
 return it.pageInfo
}

// Next returns the next result. Its second return value is iterator.Done if there are no more
// results. Once Next returns Done,
 all subsequent calls will return Done.
func (it *LicenseIterator) Next() (*computepb.License, error) {
 var item *computepb.License
 if err := it.nextFunc(); err != nil {
  return item, err
 }
 item = it.items[0]
 it.items = it.items[1:]
 return item, nil
}

func (it *LicenseIterator) bufLen() int {
 return len(it.items)
}

func (it *LicenseIterator) takeBuf() interface{} {
 b := it.items
 it.items = nil
 return b
}
```

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"

```
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range
 values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown
 in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

1.3174 githubcommailrueasyjson 0.9.0

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1.3175 github.com/google/gnostic-models 0.6.9

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1.3181 go.opentelemetry.io/otel/sdk/metric 1.33.0

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```

```
package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
```

```
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
```

```
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23
```

```
package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)
```

```
const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}
```

```
func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
```

```
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
```

```
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}
```

```
func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}
```

```
func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
```

```
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}
```

```
// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}
```

```
func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
```

```
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
```

```
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
```

0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
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0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73,
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0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65,
0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x63, 0x6f, 0x6c, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x41, 0x2e, 0x67, 0x6f, 0x6f,

0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72,
0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x3b, 0x0a,
0x17, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x15, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x75, 0x6e, 0x74, 0x12, 0x33, 0x0a, 0x13, 0x74, 0x6f,
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0x74, 0x18, 0x04, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03, 0xe0, 0x41, 0x03, 0x52, 0x11, 0x74, 0x6f,
0x74, 0x61, 0x6c, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x75, 0x6e,
0x74, 0x3a,
0x9a, 0x01, 0xea, 0x41, 0x96, 0x01, 0x0a, 0x3b, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f,
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0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50,
0x6f, 0x6f, 0x6c, 0x12, 0x3c, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f,
0x75, 0x6e, 0x74, 0x73, 0x2f, 0x7b, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x5f, 0x61, 0x63,
0x63, 0x6f, 0x75, 0x6e, 0x74, 0x7d, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x7b, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x7d, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f,
0x6c, 0x2a, 0x0c, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x73, 0x32,
0x0b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x22, 0x30, 0x0a, 0x15,
0x47, 0x65, 0x74,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65,
0x71, 0x75, 0x65, 0x73, 0x74, 0x12, 0x17, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01, 0x20,
0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x52, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x22, 0xc0,
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0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x41, 0x3a, 0x01, 0x2a, 0x22, 0x3c, 0x2f, 0x76, 0x31,
0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67,
0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72,
0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d,
0x3a, 0x75, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x92, 0x02, 0x0a, 0x16, 0x45, 0x6e,
0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55,
0x73, 0x65, 0x72, 0x73, 0x12, 0x4c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c,
0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e,
0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e,
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65,
0x73, 0x74, 0x1a, 0x4d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e,
0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f,
0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,
0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,

```
 0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
 0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
```

```
 (*UnassignResponse)(nil),                    // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                                  // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                  // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
```

```
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
```

```
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}
```

```
func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
```

```
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
```

```
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}
```

```
func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
```

```
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
// Copyright 2024 Google LLC
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```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2024 Google LLC
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
```

```
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
```

```
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
```

```
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}
```

```
// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
```

```
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
```

```
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client
and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf,
resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
```

```
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
```

```
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
```

```
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
```

```
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
```

Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
 {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from
 client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
  headers := gax.BuildHeaders(ctx, hds...)
  e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   if settings.Path != "" {
```

```
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
```

```
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err !=
nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
```

```
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleNewLicenseManagementRESTClient() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c,
err := procurement.NewLicenseManagementRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleLicenseManagementClient_Assign() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.AssignRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
```

```
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
```

```
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
```

```
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
defer c.Close()

req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
}
resp, err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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// versions:
//  protoc-gen-go v1.35.2
```

```
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
```

```
  "USER":                    1,
  "GROUP":                   2,
  "EVERYONE":                3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)
```

```
// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
```

```
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
```

```
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
```

```
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
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 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54,
 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
```

```
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
```

```
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.3183 chalk 5.4.1

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1.3184 vim 9.1.0724-2.ph4

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<Bram@vim.org>.

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Kibaale Children's Centre
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, , 2022, <kazorin@basealt.ru>
Restorer, , 2024, <restorer@mail2k.ru>

vim:tw=78:ts=8:noet:ft=help:norl:
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Contributors to the EditorConfig Vim Plugin:

Hong Xu
Trey Hunner
Kent Frazier
Chris White
uganda.txt For Vim version 9.1. Last change: 2024 Aug 14

VIM REFERENCE MANUAL by Bram Moolenaar

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vim.sf.net, www.vim.org and/or comp.editors). When it is completely
impossible to contact the maintainer, the obligation to send him
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==========

Kibaale Children's Centre *kcc* *Kibaale* *charity*

Kibaale Children's Centre (KCC) is located in Kibaale, a small town in the south of Uganda, near Tanzania, in East Africa. The area is known as Rakai District. The population is mostly farmers. Although people are poor, there usually is enough food. But this district is suffering from AIDS more than any other part of the world. Some say that it started there. Estimations are that in the past 10 to 30% of the Ugandans are infected with HIV. Because parents
die, there are many orphans. In this district about 60,000 children have lost one or both parents, out of a population of 350,000. Although AIDS is now mostly under control, the problems are still continuing.

The children need a lot of help. The KCC is working hard to provide the needy with food, medical care and education. Food and medical care to keep them healthy now, and education so that they can take care of themselves in the future. KCC works on a Christian base, but help is given to children of any religion.

The key to solving the problems in this area is education. This has been neglected in the past years with president Idi Amin and the following civil wars. Now that the government is stable again, the children and parents have to learn how to take care of themselves and how to avoid infections. There is also help for people who are ill and hungry, but the primary goal is to prevent people from getting ill and to teach them how to grow healthy food.

Most of the
orphans are living in an extended family. An uncle or older sister is taking care of them. Because these families are big and the income (if any) is low, a child is lucky if it gets healthy food. Clothes, medical care and schooling is beyond its reach. To help these needy children, a sponsorship program was put into place. A child can be financially adopted. For a few dollars a month KCC sees to it that the child gets indispensable items, is healthy, goes to school and KCC takes care of anything else that needs to be done for the child and the family that supports it.

Besides helping the child directly, the environment where the child grows up needs to be improved. KCC helps schools to improve their teaching methods. There is a demonstration school at the centre and teacher trainings are given. Health workers are being trained, hygiene education is carried out and households are stimulated to build a proper latrine. I helped setting up a

production site for cement slabs. These
are used to build a good latrine.
They are sold below cost price.

There is a clinic at the project, which provides children and their family medical help. Since 2020 a maternity ward was added and 24/7 service is available. When needed, transport to a hospital is offered. Immunization programs are carried out and help is provided when an epidemic is breaking out (measles and cholera have been a problem).

donate

Summer 1994 to summer 1995 I spent a whole year at the centre, working as a volunteer. I have helped to expand the centre and worked in the area of water and sanitation. I learned that the help that the KCC provides really helps. When I came back to Holland, I wanted to continue supporting KCC. To do this I'm raising funds and organizing the sponsorship program. Please consider one of these possibilities:

1. Sponsor a child in primary school: 17 euro a month (or more).
2. Sponsor a child in secondary school: 25 euro a month (or more).
3. Sponsor the clinic:
   Any amount a month or quarter
4. A one-time donation

Compared with other organizations that do child sponsorship the amounts are very low. This is because the money goes directly to the centre. Less than 5% is used for administration. This is possible because this is a small organization that works with volunteers. If you would like to sponsor a child, you should have the intention to do this for at least one year.

How do you know that the money will be spent right? First of all you have my personal guarantee as the author of Vim. I trust the people that are working at the centre, I know them personally. Furthermore, the centre has been co-sponsored and inspected by World Vision, Save the Children Fund and is now under the supervision of Pacific Academy Outreach Society. The centre is visited about once a year to check the progress (at our own cost). I have visited the centre myself many times, starting in 1993. The visit reports are on the ICCF web site.

If you have
any further questions, send e-mail: <Bram@vim.org>.

The address of the centre is:
Kibaale Children's Centre
p.o. box 1658
Masaka, Uganda, East Africa

Sending money: *iccf-donations*

Check the ICCF web site for the latest information! See |iccf| for the URL.

USA: The methods mentioned below can be used.
If you must send a check send it to our Canadian partner:
https://www.kuwasha.net/

Canada: Contact Kuwasha in Surrey, Canada. They take care of the
Canadian sponsors for the children in Kibaale. Kuwasha
forwards 100% of the money to the project in Uganda. You can
send them a one time donation directly.
Look on their site for information about sponsorship:
https://www.kuwasha.net/
If you make a donation to Kuwasha you will receive a tax
receipt which can be submitted with your tax return.

Holland: Transfer to the account of "Stichting ICCF Holland" in
Amersfoort. This will allow for tax deduction if you live in
Holland. ING bank, IBAN: NL95
INGB 0004 5487 74

Germany: It is possible to make donations that allow for a tax return.
Check the ICCF web site for the latest information:
https://iccf-holland.org/germany.html

Europe: Use a bank transfer if possible. See "Others" below for the
swift code and IBAN number.
Any other method should work. Ask for information about
sponsorship.

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The e-mail address for sending the money to is:
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Others: Transfer to this account if possible:
ING bank: IBAN: NL95 INGB 0004 5487 74
Swift code: INGBNL2A
under the name "stichting ICCF Holland", Amersfoort
Checks are not accepted.

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set yrange [0:]
set terminal pngcairo font 'Sans, 8' lw 1 size 1400,1024
set xtics rotate by -45
set style histogram errorbars gap 2 lw 1
set style fill solid border -1
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1.3186 icu 74.2

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Section: pkg.m4 - Macros to locate and utilise pkg-config.

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#
builds/unix/pkg.m4
#
docs/FTL.TXT
docs/GPLv2.TXT
#
include/freetype/internal/fthash.h
#
src/base/fthash.c
src/base/md5.c
src/base/md5.h
#
src/bdf/bdf.c
src/bdf/bdf.h
src/bdf/bdfdrivr.c
src/bdf/bdfdrivr.h
src/bdf/bdferror.h
src/bdf/bdflib.c
src/bdf/module.mk
src/bdf/README
src/bdf/rules.mk
#
src/pcf/module.mk
src/pcf/pcf.c
src/pcf/pcf.h
src/pcf/pcfdrivr.c
src/pcf/pcfdrivr.h
src/pcf/pcferror.h
src/pcf/pcfread.c
src/pcf/pcfread.h
src/pcf/pcfutil.c
src/pcf/pcfutil.h
src/pcf/README
src/pcf/rules.mk
#
src/gzip/adler32.c
src/gzip/infblock.c
src/gzip/infblock.h
src/gzip/infcodes.c
src/gzip/infcodes.h
```

src/gzip/inffixed.h
src/gzip/inflate.c
src/gzip/inftrees.c
src/gzip/inftrees.h
src/gzip/infutil.c
src/gzip/infutil.h
src/gzip/zconf.h
src/gzip/zlib.h
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src/gzip/zutil.h
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1.3192 busybox 1.37.0-r12

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jseward@bzip.org
bzip2/libbzip2 version 1.0.4 of 20 December 2006
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1.3193 ssl-client 1.37.0-r12

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maintainer="Celeste <cielesti@protonmail.com>"
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
```

```
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
```

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Julian Seward, Cambridge, UK.
jseward@bzip.org
bzip2/libbzip2 version 1.0.4 of 20 December 2006
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Ty Coon, President of
Vice

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# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=2

```
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz
 0001-bsd-games-scores-dir.patch
 "
options="!check" # no tests

build() {
 # some GNU autoconf options are ignored, but it works
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  --sysconfdir=/etc \
  --mandir=/usr/share/man \
  --scoredir=/usr/share/$pkgname
 make
}

package() {
 make DESTDIR="$pkgdir" install
 install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
e1def0d4835a877242c4173fae862e278a7858738e0bacacbb045a42bcabec2aa7c72d000bbd2421ce35fe66cdc1f52c0
577b7e278029ca5ed50f7aab22319f6  0001-bsd-games-scores-dir.patch
"
```

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http://www.mp3.com/silicon39
https://analoguesque.x10host.com/
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check" # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub

```
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
mini_sendmail - accept email on behalf of real sendmail

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# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.26.0
pkgrel=0
```

```
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
 subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
 mkdir -p "$pkgdir"
}

_subpkg() {
 local type=${subpkgname/$pkgname-/}
 pkgdesc="$pkgdesc ($type)"
 install_if="$pkgname=$pkgver-r$pkgrel"
 mkdir -p "$subpkgdir"/usr/share/spdx
 cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
 pkgdesc="$pkgdesc (licence list)"
 mkdir -p "$subpkgdir"/usr/share/spdx
 local i; for i in "$builddir"/text/*.txt;
 do
  local license=${i##*/}
  echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
 done
}

sha512sums="
67e618d4642dfe4f366935d9514d6f7941d3711e77c49bc1b340ac572d36015981b8f10c72a9f80f1d83e132ae7e5093c
0155e0c0e786e4777ee16d1cb7b885a  license-list-data-3.26.0.tar.gz
"
# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
```

```
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
```

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-

```
bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a
student practice (Universite Bordeaux, France). For additional information about X-splines, see:
"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html
# Contributor: Dhruvin Gandhi <contact@dhru.vin>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.1
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
114c630f098939757e49187e35b4e54883266a2ee9ca283724992420ef4c860f9606a8342da0ab74d93627c10805f312
fda3f699cbc7c4fbd47a71e220440fb0
  license_expression-30.4.1.tar.gz
"
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
```

```
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}
```

```
build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
```

1.3194 python3-defusedxml 0.7.1-1

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1.3195 ssh-tools 1.7-2

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1.3197 gateway-api 1.2.1

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Contributor Ladder

Within the Kubernetes community, the concept of a contributor ladder has been developed to define how individuals can earn formal roles within the project. The Gateway API contributor ladder largely follows the [roles defined by the broader Kubernetes community](https://github.com/kubernetes/community/blob/master/community-membership.md), though there are some aspects that are unique to this community.

Goals

We hope that this doc will provide an initial step towards the following goals:

* Ensure the long term health of the Gateway API community
* Encourage new contributors to work towards formal roles and responsibilities in the project
* Clearly define the path towards leadership roles
* Develop a strong leadership pipeline so we have great candidates to fill project leadership roles

Scope

The following repositories are covered by this doc:

* [kubernetes-sigs/gateway-api](https://github.com/kubernetes-sigs/gateway-api)
* [kubernetes-sigs/ingress2gateway](https://github.com/kubernetes-sigs/ingress2gateway)
* kubernetes-sigs/blixt (once migration is complete)

Within each of these projects, there are opportunities to become an approver or reviewer for either the entire project, or a subset of that project. For example, you could become a reviewer or approver focused on just docs, GEPs, API changes, or conformance tests.

General Guidelines

1. Everyone is welcome

We appreciate all contributions. You dont need to have a formal role in the project to make or review pull requests, and help with issues or discussions. Accepting a formal role within the project is entirely optional.

2. These roles require continued contributions

Applying for one of the roles defined above should only be done if you intend to

continue to contribute at a level that would merit that role. If for any reason
you are unable to continue in one of the roles above, please resign. Members
with an extended period away from the project with no activity
will be removed
from the Kubernetes GitHub Organizations and will be required to go through the
org membership process again after re-familiarizing themselves with the current
state.

3. Dont merge without consensus

If you have reason to believe that a change may be contentious, please wait for
additional perspectives from others before merging any PRs. Even if you have
access to merge a PR, it doesnt mean you should. Although we cant have PRs
blocked indefinitely, we need to make sure everyone has had a chance to present
their perspective.

4. Start a discussion

If youre interested in working towards one of these roles, please reach out to
a Gateway API maintainer on Slack.

Contributor Ladder

The Gateway API contributor ladder has the following steps:

1. Member
2. Reviewer
3. Approver
4. Maintainer

This is also a GAMMA-specific leadership role that does not fit as cleanly on
this ladder. All of these roles will be defined in more detail below.

Member, Reviewer,
and Approver

The first steps on the contributor ladder are already [clearly defined in the
upstream Kubernetes
Community](https://github.com/kubernetes/community/blob/master/community-membership.md#community-membership).
Gateway API follows those guidelines along with the rest of the Kubernetes
community. Within Gateway API, there are a variety of areas one can become a
reviewer or approver, this includes:

* Conformance
* Documentation
* GEPs

Maintainers and GAMMA Leads

The final steps on the contributor ladder represent large overall leadership roles within the project as a whole. The spaces available for these roles are limited (generally 3-4 people in each role is ideal). Wherever possible, we try to ensure that different companies are represented in these roles.

Maintainers

Gateway API Maintainers are known as [Subproject Owners](https://github.com/kubernetes/community/blob/master/community-membership.md#subproject-owner) within the Kubernetes community. To become a Gateway API Maintainer, the most important things we expect are:

* Long term, sustained contributions to Gateway API for at least 6 months
* Deep understanding of technical goals and direction of the project
* Successfully authored and led significant enhancement proposals
* Approver for at least 3 months
* Ability to lead community meetings

In addition to all of the expectations described above, we expect maintainers to set the technical direction and goals for the project. This role is critical to the health of the project, maintainers should mentor new approvers and reviewers, and ensure that there are healthy processes in place for discussion and decision making. Finally, maintainers are ultimately responsible for releasing new versions of the API.

GAMMA Leads

The concept of GAMMA Leads does not have a perfect parallel on the upstream Kubernetes community ladder. They are essentially Subproject Owners, but for the GAMMA initiative, which is a major initiative within Gateway API.

To become a GAMMA lead, the most important thing we expect are:

* Significant experience with Service Mesh implementation(s)
* Deep understanding of technical goals and direction of the project
* Long term, sustained contributions to the GAMMA initiative for at least 6 months
* Ability to lead community meetings

In addition to all of the expectations described above, we expect GAMMA Leads to set the technical direction and goals for the GAMMA initiative. They should ensure that there are healthy processes in place for discussion and decision making and that the release goals and milestones are clearly defined.

1.3198 sctp 0.0.0-20230406120618-7ff4192f6ff2

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1.3219 mmap-go 1.1.0

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1.3224 etcd-etcdctl v3.5.15

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*     Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
*       bug 185682 - Increment/decrement operators mark local variables as read
*       bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*       bug 331649 - [compiler][null] consider null annotations for fields
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       bug 392384 - [1.8][compiler][null] Restore nullness
 info from type annotations in class files
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 411964 - [1.8][null] leverage null type annotation in foreach statement
*       Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
*******************************************************************************/
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* Jesper S Moller - Contributions for
* Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
* Bug 406973 - [compiler] Parse MethodParameters attribute
* Andy Clement - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/AttributeNamesConstants.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/JavadocModuleReference.java
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*     Stephan Herrmann - Contribution for
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*******************************************************************************/
```

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* bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
* bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
* Bug 416885 - [1.8][compiler]IncompatibleClassChange error (edit)
* Stephan Herrmann - Contribution for
* bug 401030 - [1.8][null] Null analysis support for lambda methods.
* Bug 392099
 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
* Bug 425142 - [1.8][compiler] NPE in ConstraintTypeFormula.reduceSubType
* Bug 425153 - [1.8] Having wildcard allows incompatible types in a lambda expression
* Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
* Bug 425798 - [1.8][compiler] Another NPE in ConstraintTypeFormula.reduceSubType
* Bug 425156 - [1.8] Lambda as an argument is flagged with incompatible error
* Bug 424403 - [1.8][compiler] Generic method call with method reference argument fails to resolve properly.
* Bug 426563 - [1.8] AIOOBE when method with error
 invoked with lambda expression as argument
* Bug 420525 - [1.8] [compiler] Incorrect error "The type Integer does not define sum(Object, Object) that is applicable here"
* Bug 427438 - [1.8][compiler] NPE at org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 428294 - [1.8][compiler] Type mismatch: cannot convert from List<Object> to Collection<Object[]>
* Bug 428786 - [1.8][compiler] Inference needs to compute the "ground target type" when reducing a lambda compatibility constraint
* Bug 428980 - [1.8][null] simple expression as lambda body doesn't leverage null annotation on argument
* Bug 429430 - [1.8] Lambdas and method reference infer wrong exception type with generics (RuntimeException instead of IOException)
* Bug 432110 - [1.8][compiler] nested lambda type incorrectly inferred vs javac
* Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type
 variables
* Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
* Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
* Bug 453483 - [compiler][null][loop] Improve null analysis for loops
* Bug 455723 - Nonnull argument not correctly inferred in loop
* Bug 463728 - [1.8][compiler][inference] Ternary operator in lambda derives wrong type
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for

*   Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/batch/BasicModule.java
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* bug 358827 - [1.7] exception analysis for t-w-r spoils null analysis
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
* bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
* bug 345305 - [compiler][null]
Compiler misidentifies a case of "variable can only be null"
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
* bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug 453483 - [compiler][null][loop] Improve null analysis for loops
* Bug 455723 - Nonnull argument not correctly inferred in loop
* Bug 415790 - [compiler][resource]Incorrect potential resource leak warning in for loop with close in try/catch
* Bug 446691 - [1.8][null][compiler] NullPointerException in SingleNameReference.analyseCode
**********/

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* Frits Jalvingh - fix for bug 533830.
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*       bug 328281 - visibility leaks not detected when analyzing unused field in private class
*       bug 382353 - [1.8][compiler] Implementation property modifiers should be accepted on default methods.
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* Bug 407191 - [1.8] Binary access support for type annotations
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/classfmt/FieldInfoWithTypeAnnotation.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/IBinaryTypeAnnotation.java
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* bug 331649 - [compiler][null] consider null annotations for fields
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 426996 - [1.8][inference] try to avoid method Expression.unresolve()?
* Jesper S Moller - Contributions for
* bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
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* Contributors:
* IBM Corporation - initial API and implementation
* Luiz-Otavio Zorzella <zorzella at gmail dot com> - Improve CamelCase algorithm
* Gábor Kövesdán - Contribution for Bug 350000 - [content assist] Include non-prefix matches in auto-complete suggestions
* Stefan Xenos <sxenos@gmail.com> (Google) - Bug 501283 - Lots of hash collisions during indexing
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/core/compiler/CharOperation.java
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* Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
* Bug 426676 - [1.8][compiler] Wrong generic method type inferred from lambda expression
* Bug 426542 - [1.8] Most specific method not picked when one method has intersection type as type parameter
* Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.

*	Andy
Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*	Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
*	Jesper S Møller - Contributions for bug 381345 : [1.8] Take care of the Java 8 major version
*	Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
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*	bug 236385 - [compiler] Warn for potential programming problem if an object is created but not used
*	bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*	bug 349326 - [1.7] new warning for missing try-with-resources
*	bug 186342 - [compiler][null] Using annotations for null checking
*	bug 358903 - Filter practically unimportant resource
leak warnings
*	bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*	bug 370639 - [compiler][resource] restore the default for resource leak warnings
*	bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*	bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*	bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
*	Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*	Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*	Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*	Bug 424727 - [compiler][null] NullPointerException in nullAnnotationUnsupportedLocation(ProblemReporter.java:5708)
*	Bug 424710
- [1.8][compiler] CCE in SingleNameReference.localVariableBinding
*	Bug 425152 - [1.8] [compiler] Lambda Expression not resolved but flow analyzed leading to NPE.
*	Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
*	Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
*	Bug 426366 - [1.8][compiler] Type inference doesn't handle multiple candidate target types in outer overload context

```
*       Bug 426290 - [1.8][compiler] Inference + overloading => wrong method resolution ?
*       Bug 426764 - [1.8] Presence of conditional expression as method argument confuses compiler
*       Bug 424930 - [1.8][compiler] Regression: "Cannot infer type arguments" error from compiler.
*       Bug 427483 - [Java 8] Variables in lambdas sometimes can't be resolved
*       Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
 *       Bug 426996 - [1.8][inference] try to avoid method Expression.unresolve()?
*       Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*       Bug 429203 - [1.8][compiler] NPE in AllocationExpression.binding
*       Bug 429430 - [1.8] Lambdas and method reference infer wrong exception type with generics (RuntimeException
instead of IOException)
*       Bug 434297 - [1.8] NPE in LamdaExpression.analyseCode with lamda expression nested in a conditional
expression
*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*       Bug 448709 - [1.8][null] ensure we don't infer types that violate null constraints on a type parameter's bound
*     Jesper S Moller <jesper@selskabet.org> - Contributions for
*       bug 378674 - "The method can be declared as static" is wrong
*     Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 383624 - [1.8][compiler] Revive
 code generation support for type annotations (from Olivier's work)
*                       Bug 409245 - [1.8][compiler] Type annotations dropped when call is routed through a synthetic
bridge method
*     Till Brychcy - Contributions for
*          bug 413460 - NonNullByDefault is not inherited to Constructors when accessed via Class File
*     Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
*          Bug 473178
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*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
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*   bug 349326 - [1.7] new warning for missing try-with-resources
*   bug 359362 - FUP of bug 349326: Resource leak on non-Closeable resource
*   bug 186342 - [compiler][null] Using annotations for null checking
*   bug 358903 - Filter practically unimportant resource leak warnings
*   bug 400421 - [compiler] Null analysis for fields does not take @com.google.inject.Inject
 into account
*   bug 382069 - [null] Make the null analysis consider JUnit's assertNotNull similarly to assertions
*   Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object),
Collection#remove(Object) et al.
*   Jesper S Moller <jesper@selskabet.org> - Contributions for
*   Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*   Ulrich Grave <ulrich.grave@gmx.de> - Contributions for
*   bug 386692 - Missing "unused" warning on "autowired" fields
*   Pierre-Yves B. <pyvesdev@gmail.com> - Contribution for
*   bug 542520 - [JUnit 5] Warning The method xxx from the type X is never used locally is shown
when using MethodSource
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*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
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*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*         Bug 407191 - [1.8] Binary access support for type annotations
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```

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* Contributors:
*     IBM Corporation - initial API and implementation
*     Stephan Herrmann - Contributions for
*       bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
*       Bug
 422796 - [compiler][null] boxed boolean reported as potentially null after null test in lazy disjunction
*******************************************************************************/
```

Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/OR_OR_Expression.java
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* Contributors:
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*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*         Bug 407191 - [1.8] Binary access support for type annotations
*******************************************************************************/
```

Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/classfmt/FieldInfo.java
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* Stephan Herrmann - Contributions for
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 370639 - [compiler][resource] restore the default for resource leak warnings
* bug 265744 - Enum switch should warn about missing default
* bug 374605 - Unreasonable warning for enum-based switch statements
* bug 381443
 - [compiler][null] Allow parameter widening from @NonNull to unannotated
* Bug 441208 - [1.8][null]SuppressWarnings("null") does not suppress / marked Unnecessary
* Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object),
Collection#remove(Object) et al.
***/

Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/IrritantSet.java
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* Contributors:
* IBM Corporation - initial API and implementation
* IBM Corporation - added the following constants
* NonStaticAccessToStaticField
* NonStaticAccessToStaticMethod
* Task
* ExpressionShouldBeAVariable
* AssignmentHasNoEffect
* IBM Corporation - added the following constants

```
*       TooManySyntheticArgumentSlots
*       TooManyArrayDimensions
*       TooManyBytesForStringConstant
*       TooManyMethods
*       TooManyFields
 *       NonBlankFinalLocalAssignment
*       ObjectCannotHaveSuperTypes
*       MissingSemiColon
*       InvalidParenthesizedExpression
*       EnclosingInstanceInConstructorCall
*       BytecodeExceeds64KLimitForConstructor
*       IncompatibleReturnTypeForNonInheritedInterfaceMethod
*       UnusedPrivateMethod
*       UnusedPrivateConstructor
*       UnusedPrivateType
*       UnusedPrivateField
*       IncompatibleExceptionInThrowsClauseForNonInheritedInterfaceMethod
*       InvalidExplicitConstructorCall
*    IBM Corporation - added the following constants
*       PossibleAccidentalBooleanAssignment
*       SuperfluousSemicolon
*       IndirectAccessToStaticField
*       IndirectAccessToStaticMethod
*       IndirectAccessToStaticType
*       BooleanMethodThrowingException
*       UnnecessaryCast
*       UnnecessaryArgumentCast
*       UnnecessaryInstanceof
*
  FinallyMustCompleteNormally
*       UnusedMethodDeclaredThrownException
*       UnusedConstructorDeclaredThrownException
*       InvalidCatchBlockSequence
*       UnqualifiedFieldAccess
*    IBM Corporation - added the following constants
*       Javadoc
*       JavadocUnexpectedTag
*       JavadocMissingParamTag
*       JavadocMissingParamName
*       JavadocDuplicateParamName
*       JavadocInvalidParamName
*       JavadocMissingReturnTag
*       JavadocDuplicateReturnTag
*       JavadocMissingThrowsTag
*       JavadocMissingThrowsClassName
*       JavadocInvalidThrowsClass
*       JavadocDuplicateThrowsClassName
*       JavadocInvalidThrowsClassName
```

```
*       JavadocMissingSeeReference
*       JavadocInvalidSeeReference
*       JavadocInvalidSeeHref
*       JavadocInvalidSeeArgs
*       JavadocMissing
*       JavadocInvalidTag
*       JavadocMessagePrefix
 *       EmptyControlFlowStatement
*    IBM Corporation - added the following constants
*       IllegalUsageOfQualifiedTypeReference
*       InvalidDigit
*    IBM Corporation - added the following constants
*       ParameterAssignment
*       FallthroughCase
*    IBM Corporation - added the following constants
*                       UnusedLabel
*                       UnnecessaryNLSTag
*                       LocalVariableMayBeNull
*                       EnumConstantsCannotBeSurroundedByParenthesis
*                       JavadocMissingIdentifier
*                       JavadocNonStaticTypeFromStaticInvocation
*                       RawTypeReference
*                       NoAdditionalBoundAfterTypeVariable
*                       UnsafeGenericArrayForVarargs
*                       IllegalAccessFromTypeVariable
*
  AnnotationValueMustBeArrayInitializer
*                       InvalidEncoding
*                       CannotReadSource
*                       EnumStaticFieldInInInitializerContext
*                       ExternalProblemNotFixable
*                       ExternalProblemFixable
*    IBM Corporation - added the following constants
*                       AnnotationValueMustBeAnEnumConstant
*                       OverridingMethodWithoutSuperInvocation
*                       MethodMustOverrideOrImplement
*                       TypeHidingTypeParameterFromType
*                       TypeHidingTypeParameterFromMethod
*                       TypeHidingType
*    IBM Corporation - added the following constants
*       NullLocalVariableReference
*       PotentialNullLocalVariableReference
*       RedundantNullCheckOnNullLocalVariable
*        NullLocalVariableComparisonYieldsFalse
 *        RedundantLocalVariableNullAssignment
*        NullLocalVariableInstanceofYieldsFalse
*        RedundantNullCheckOnNonNullLocalVariable
*        NonNullLocalVariableComparisonYieldsFalse
```

```
*    IBM Corporation - added the following constants
*                         InvalidUsageOfTypeParametersForAnnotationDeclaration
*                         InvalidUsageOfTypeParametersForEnumDeclaration
*    IBM Corporation - added the following constants
*        RedundantSuperinterface
*  Benjamin Muskalla - added the following constants
*       MissingSynchronizedModifierInInheritedMethod
*  Stephan Herrmann  - added the following constants
*       UnusedObjectAllocation
*       PotentiallyUnclosedCloseable
*       PotentiallyUnclosedCloseableAtExit
*       UnclosedCloseable
*       UnclosedCloseableAtExit
*       ExplicitlyClosedAutoCloseable
*          RequiredNonNullButProvidedNull
 *        RequiredNonNullButProvidedPotentialNull
*        RequiredNonNullButProvidedUnknown
*        NullAnnotationNameMustBeQualified
*        IllegalReturnNullityRedefinition
*        IllegalRedefinitionToNonNullParameter
*        IllegalDefinitionToNonNullParameter
*        ParameterLackingNonNullAnnotation
*        ParameterLackingNullableAnnotation
*        PotentialNullMessageSendReference
*        RedundantNullCheckOnNonNullMessageSend
*        CannotImplementIncompatibleNullness
*        RedundantNullAnnotation
*       RedundantNullDefaultAnnotation
*       RedundantNullDefaultAnnotationPackage
*       RedundantNullDefaultAnnotationType
*       RedundantNullDefaultAnnotationMethod
*       ContradictoryNullAnnotations
*       IllegalAnnotationForBaseType
*       RedundantNullCheckOnSpecdNonNullLocalVariable
*       SpecdNonNullLocalVariableComparisonYieldsFalse
*       RequiredNonNullButProvidedSpecdNullable
*       MissingDefaultCase
 *       MissingEnumConstantCaseDespiteDefault
*       UninitializedLocalVariableHintMissingDefault
*       UninitializedBlankFinalFieldHintMissingDefault
*       ShouldReturnValueHintMissingDefault
*       IllegalModifierForInterfaceDefaultMethod
*       InheritedDefaultMethodConflictsWithOtherInherited
*       ConflictingNullAnnotations
*       ConflictingInheritedNullAnnotations
*       UnsafeElementTypeConversion
*       ArrayReferencePotentialNullReference
*       DereferencingNullableExpression
```

```
*       NullityMismatchingTypeAnnotation
*       NullityMismatchingTypeAnnotationSuperHint
*       NullityUncheckedTypeAnnotationDetail
*       NullityUncheckedTypeAnnotationDetailSuperHint
*       NullableFieldReference
*       UninitializedNonNullField
*       UninitializedNonNullFieldHintMissingDefault
*       NonNullMessageSendComparisonYieldsFalse
*       RedundantNullCheckOnNonNullSpecdField
*       NonNullSpecdFieldComparisonYieldsFalse
 *       NonNullExpressionComparisonYieldsFalse
*       RedundantNullCheckOnNonNullExpression
*       ReferenceExpressionParameterNullityMismatch
*       ReferenceExpressionParameterNullityUnchecked
*       ReferenceExpressionReturnNullRedef
*       ReferenceExpressionReturnNullRedefUnchecked
*       DuplicateInheritedDefaultMethods
*       SuperAccessCannotBypassDirectSuper
*       SuperCallCannotBypassOverride
*       ConflictingNullAnnotations
*       ConflictingInheritedNullAnnotations
*       UnsafeElementTypeConversion
*       PotentialNullUnboxing
*       NullUnboxing
*       NullExpressionReference
*       PotentialNullExpressionReference
*       RedundantNullCheckAgainstNonNullType
*       NullAnnotationUnsupportedLocation
*       NullAnnotationUnsupportedLocationAtType
*       NullityMismatchTypeArgument
*       ContradictoryNullAnnotationsOnBound
*       UnsafeNullnessCast
 *       ContradictoryNullAnnotationsInferred
*       NonNullDefaultDetailIsNotEvaluated
*       NullNotCompatibleToFreeTypeVariable
*       NullityMismatchAgainstFreeTypeVariable
*       ImplicitObjectBoundNoNullDefault
*       IllegalParameterNullityRedefinition
*       ContradictoryNullAnnotationsInferredFunctionType
*       IllegalReturnNullityRedefinitionFreeTypeVariable
*       UnlikelyCollectionMethodArgumentType
*       UnlikelyEqualsArgumentType
*     Jesper S Moller  - added the following constants
*       TargetTypeNotAFunctionalInterface
*       OuterLocalMustBeEffectivelyFinal
*       IllegalModifiersForPackage
*       DuplicateAnnotationNotMarkedRepeatable
*       DisallowedTargetForContainerAnnotation
```

```
*       RepeatedAnnotationWithContainerAnnotation
*       ContainingAnnotationMustHaveValue
*       ContainingAnnotationHasNonDefaultMembers
*       ContainingAnnotationHasWrongValueType
*        ContainingAnnotationHasShorterRetention
 *       RepeatableAnnotationHasTargets
*       RepeatableAnnotationTargetMismatch
*       RepeatableAnnotationIsDocumented
*       RepeatableAnnotationIsInherited
*       RepeatableAnnotationWithRepeatingContainerAnnotation
*       VarLocalMultipleDeclarators
*       VarLocalCannotBeArray
*       VarLocalReferencesItself
*       VarLocalWithoutInitizalier
*       VarLocalInitializedToNull
*       VarLocalCannotBeArrayInitalizers
*       VarLocalCannotBeLambda
*       VarLocalCannotBeMethodReference
*       VarIsReserved
*       VarIsReservedInFuture
*       VarIsNotAllowedHere
*******************************************************************************/
```

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/core/compiler/IProblem.java
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Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/tool/JrtFileSystem.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/apt/util/JrtFileSystem.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/YieldStatement.java
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*   Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
*   bug 185682 - Increment/decrement operators mark local variables as read
*   bug 186342 - [compiler][null] Using annotations for null checking
*   bug 365519 - editorial cleanup after bug 186342 and bug 365387
*   bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*   bug 345305 - [compiler][null]
 Compiler misidentifies a case of "variable can only be null"
*   Bug 414380 - [compiler][internal] QualifiedNameReference#indexOfFirstFieldBinding does not point to the first
field
*   Bug 458396 - NPE in CodeStream.invoke()
*   Jesper S Moller - Contributions for
*   bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
*   bug 331649 - [compiler][null] consider null annotations for fields
*   bug 383368 - [compiler][null] syntactic null analysis for field references
*   bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
*   Jesper S Moller <jesper@selskabet.org> - Contributions for
*   bug 378674 - "The method can be declared as static" is wrong
**********/

Found in path(s):

* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/QualifiedNameReference.java
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* Contributors:
*     Stephan Herrmann - initial API and implementation
*     Till Brychcy - Contributions for
*                         Bug 467482 - TYPE_USE null annotations: Incorrect "Redundant null check"-warning
*******************************************************************************/
```

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/NullAnnotationMatching.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/IQualifiedTypeResolutionListener.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/FloatUtil.java
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* Contributors:
*    Igor Fedorenko - extracted from ElementsImpl
*******************************************************************************/
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* Contributors:
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*     Jesper S Moller - Contributions for
*       Bug 378674 - "The method can be declared as static" is wrong
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Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/SuperReference.java

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*     Stephan Herrmann - Contribution for
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 417295 - [1.8[[null]
 Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*       Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*       Andy Clement - Contributions for
*                       Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
*******************************************************************************/
```

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/InstanceOfExpression.java
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*     IBM Corporation - initial API and implementation
*     Stephan Herrmann - Contribution for
*      Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
```

* Bug 409236 - [1.8][compiler] Type annotations on intersection cast types dropped by code generator
**********/

Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/IntersectionCastTypeReference.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/apt/dispatch/BatchAnnotationProcessorManager.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/apt/model/ElementImpl.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ClassFilePool.java
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*   IBM Corporation - initial API and implementation
*   Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*   bug 407191 - [1.8] Binary access support for type annotations
*   Stephan Herrmann - Contribution for
*   Bug 440474 - [null] textual encoding of external null annotations
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/IBinaryType.java
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*   Stephan Herrmann - Contribution for
*   Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
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Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/JavadocImplicitTypeReference.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/ElementValuePair.java
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* Contributors:
*   wharley@bea.com - initial API and implementation
*   IBM Corporation - fix for 342470
*   IBM Corporation - fix for 342598
*   IBM Corporation - Java 8 support
**********/

Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/apt/model/TypeParameterElementImpl.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/StringLiteral.java

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*     Stephan Herrmann - Contributions for
*       Bug 186342 - [compiler][null] Using annotations for null checking
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
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Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/MostSpecificExceptionMethodBinding.java
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* Contributors:
*     IBM Corporation - initial API and implementation
*    Jesper Steen Moller - Bug 412150 [1.8] [compiler] Enable reflected parameter names during annotation
processing
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* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/OpensStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/PackageExportImpl.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/UsesStatement.java
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* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug 415790
 - [compiler][resource]Incorrect potential resource leak warning in for loop with close in try/catch
**********/

Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/ForStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/WhileStatement.java
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* Stephan Herrmann - Contribution for
* bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Jesper Steen Moller - Contributions for
* Bug 412150 [1.8] [compiler]
 Enable reflected parameter names during annotation processing
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*
* Contributors:
*   wharley@bea.com - derived base class from BatchMessagerImpl
*
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*   bug 342671 - ClassCastException: org.eclipse.jdt.internal.compiler.lookup.SourceTypeBinding cannot be cast to
org.eclipse.jdt.internal.compiler.lookup.ArrayBinding
*   Bug 420894 - ClassCastException in DefaultBindingResolver.resolveType(Type)
*   bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*   Bug 415043 - [1.8][null] Follow-up re null type
 annotations after bug 392099
*   Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*   Bug 434600 - Incorrect null analysis error reporting on type parameters
*   Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*   Bug 456508 - Unexpected RHS PolyTypeBinding for: <code-snippet>
*   Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*   Andy Clement - Contributions for
*   Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/ParameterizedSingleTypeReference.java

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*    Kenneth Olson - Contribution for bug 188796 - [jsr199] Using JSR199 to extend ECJ
*    Dennis Hendriks - Contribution for bug 188796 - [jsr199] Using JSR199 to extend ECJ
*    Frits Jalvingh  - fix for bug 533830.
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*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*       Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 415543 - [1.8][compiler] Incorrect bound index in RuntimeInvisibleTypeAnnotations attribute
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/TypeParameter.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/SortedSimpleNameVector.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/SortedCharArrays.java
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*     Stephan Herrmann - contributions for
*          bug 337868 - [compiler][model] incomplete support for package-info.java when using SearchableEnvironment
*          bug 186342 - [compiler][null] Using annotations for null checking
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* Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
* Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
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*     Stephan Herrmann - Contributions for
*          bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 359334 - Analysis for resource leak warnings does not consider exceptions as method exit points
*       bug 358903 - Filter practically unimportant resource leak warnings
*       bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*       bug 370639 - [compiler][resource]
```

restore the default for resource leak warnings
*	bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*	bug 379784 - [compiler] "Method can be static" is not getting reported
*	bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
*	bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
*	Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*	Bug 371614 - [compiler][resource] Wrong "resource leak" problem on return/throw inside while loop
*	Bug 421035 - [resource] False alarm of resource leak warning when casting a closeable in its assignment
*	Bug 444964 - [1.7+][resource] False resource leak warning (try-with-resources for ByteArrayOutputStream - return inside for loop)
*	Bug 396575 - [compiler][resources] Incorrect Errors/Warnings check for potential resource leak when surrounding with try-catch
*	Jesper S Moller <jesper@selskabet.org> - Contributions for
*	bug 378674 - "The method can be declared as static" is wrong
*	Keigo Imai - Contribution for bug 388903 - Cannot extend inner class as an anonymous class when it extends the outer class
**********/

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*	Stephan Herrmann - Contribution for bug 186342 - [compiler][null] Using annotations for null checking
*	Jesper S Moller -. Contribution for bug 400830: [1.8][formatter] Code formatter for Java 8
**********/

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* Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
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* Contributors:
* wharley@bea.com - initial API and implementation
* IBM Corporation - fix for 342598
* IBM Corporation - Java 8 support
* het@google.com - Bug 427943 - The method
org.eclipse.jdt.internal.compiler.apt.model.Factory.getPrimitiveType does not throw IllegalArgumentException

```
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*          bug 343713 - [compiler] bogus line number in constructor of inner class in 1.5 compliance
*          bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 361407 - Resource leak warning when resource is assigned to a field outside of constructor
*       bug 368546 - [compiler][resource] Avoid
 remaining false positives found when compiling the Eclipse SDK
*       bug 383690 - [compiler] location of error re uninitialized final field should be aligned
*       bug 331649 - [compiler][null] consider null annotations for fields
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       bug 400421 - [compiler] Null analysis for fields does not take @com.google.inject.Inject into account
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 415399 - [1.8][compiler] Type annotations on constructor results dropped by the code
generator
*     Ulrich Grave <ulrich.grave@gmx.de> - Contributions
 for
*                         bug 386692 - Missing "unused" warning on "autowired" fields
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* Contributors:
* IBM Corporation - initial API and implementation
* Stephen Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* bug 133125 - [compiler][null] need to report the null status of expressions and analyze them simultaneously
* bug 292478 - Report potentially null across variable assignment
* bug 324178 - [null] ConditionalExpression.nullStatus(..) doesn't take into account the analysis of condition itself
* bug 354554 - [null] conditional with redundant condition
yields weak error message
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 426078 - [1.8] VerifyError when conditional expression passed as an argument
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 418537 - [1.8][null] Fix null type annotation analysis for poly conditional expressions
* Bug 428352 - [1.8][compiler] Resolution errors don't always surface
* Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
**********/

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* Contributors:
* IBM Corporation - initial API and implementation
* Stephan Herrmann - Contribution for bug 186342 - [compiler][null] Using annotations for null checking
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for

```
*        Bug 407191 - [1.8] Binary access support for type annotations
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*     Benjamin Muskalla - Contribution for bug 239066
*     Stephan Herrmann - Contribution for
*          bug 382347 - [1.8][compiler] Compiler accepts incorrect default method inheritance
*       bug 388954 - [1.8][compiler] detect default methods in class files
*       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 388739 - [1.8][compiler] consider default methods when detecting whether a class needs
 to be declared abstract
*       bug 390883 - [1.8][compiler] Unable to override default method
*       bug 401796 - [1.8][compiler] don't treat default methods as overriding an independent inherited abstract method
*       bug 395681 - [compiler] Improve simulation of javac6 behavior from bug 317719 after fixing bug 388795
*       bug 406928 - computation of inherited methods seems damaged (affecting @Overrides)
*       bug 409473 - [compiler] JDT cannot compile against JRE 1.8
*       Bug 420080 - [1.8] Overridden Default method is reported as duplicated
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* Contributors:
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* Stephan Herrmann - Contribution for
* Bug 440477 - [null] Infrastructure for feeding external annotations into compilation
* Bug 440687 - [compiler][batch][null] improve command line option for external annotations
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* David Foerster - patch for toUpperCase as described in https://bugs.eclipse.org/bugs/show_bug.cgi?id=153125
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*     Nikolay Metchev (nikolaymetchev@gmail.com) - Contributions for
*       bug 411098 - [compiler][resource] Invalid Resource Leak Warning using ternary operator inside try-with-resource
*******************************************************************************/
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*    tyeung@bea.com  - initial API and implementation
*    IBM Corporation - fix for bug 342757
*    Stephan Herrmann - Contribution for bug 186342 - [compiler][null] Using annotations for null checking
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* Stephan Herrmann - contributions for
* bug 336428 - [compiler][null] bogus warning "redundant null check" in condition of do {} while() loop
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
* bug 365859 - [compiler][null]

distinguish warnings based on flow analysis vs. null annotations
*	bug 385626 - @NonNull fails across loop boundaries
*	bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*	bug 376263 - Bogus "Potential null pointer access" warning
*	bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
*	bug 406384 - Internal error with I20130413
*	Bug 415413 - [compiler][null] NullpointerException in Null Analysis caused by interaction of LoopingFlowContext and FinallyFlowContext
*	Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*	Bug 455557 - [jdt] NPE LoopingFlowContext.recordNullReference
*	Bug 455723 - Nonnull argument not correctly inferred in loop
*	Bug 415790 - [compiler][resource]Incorrect potential resource leak warning in for loop with close in try/catch
*	Bug 421035 - [resource]
False alarm of resource leak warning when casting a closeable in its assignment
*	Jesper S Moller - contributions for
*	bug 404657 - [1.8][compiler] Analysis for effectively final variables fails to consider loops
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* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 265744 - Enum switch should warn about missing default
* bug 374605 - Unreasonable warning for enum-based switch statements
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
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* Stephan Herrmann - Contributions for
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
* bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
* Bug 392099
 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 412076 - [compiler] @NonNullByDefault doesn't work for varargs parameter when in generic interface
* Bug 403216 - [1.8][null] TypeReference#captureTypeAnnotations treats type annotations as type argument
annotations
* Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 416175 - [1.8][compiler][null] NPE with a code snippet that used null annotations on wildcards
* Bug 416174 - [1.8][compiler][null] Bogus name clash error with null annotations
* Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
* Bug 400874 - [1.8][compiler]

Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*	Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*	Bug 425278 - [1.8][compiler] Suspect error: The target type of this expression is not a well formed parameterized type due to bound(s) mismatch
*	Bug 425798 - [1.8][compiler] Another NPE in ConstraintTypeFormula.reduceSubType
*	Bug 425156 - [1.8] Lambda as an argument is flagged with incompatible error
*	Bug 426563 - [1.8] AIOOBE when method with error invoked with lambda expression as argument
*	Bug 426792 - [1.8][inference][impl] generify new type inference engine
*	Bug 428294 - [1.8][compiler] Type mismatch: cannot convert from List<Object> to Collection<Object[]>
*	Bug 427199 - [1.8][resource] avoid resource leak warnings on Streams that have no resource
*	Bug 416182 - [1.8][compiler][null] Contradictory null annotations not rejected
*	Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*	Bug 438179 - [1.8][null] 'Contradictory null annotations' error on type variable with explicit null-annotation.
*	Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
*	Bug 446434 - [1.8][null] Enable interned captures also when analysing null type annotations
*	Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*	Bug 456508 - Unexpected RHS PolyTypeBinding for: <code-snippet>
*	Bug 390064 - [compiler][resource] Resource leak warning missing when extending parameterized class
*	Jesper S Møller - Contributions for bug 381345 : [1.8] Take care of the Java 8 major version
*	Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
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*	Karen Moore - fix for https://bugs.eclipse.org/bugs/show_bug.cgi?id=207411
*	Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
*		bug 185682 - Increment/decrement operators mark local variables as read
*		bug 186342 - [compiler][null] Using annotations for null checking
*	bug 365519 - editorial cleanup after
bug 186342 and bug 365387
*	bug 374605 - Unreasonable warning for enum-based switch statements
*	bug 384870 - [compiler] @Deprecated annotation not detected if preceded by other annotation
*	bug 393719 - [compiler] inconsistent warnings on iteration variables

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*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 424742 - [1.8] NPE in LambdaExpression.isCompatibleWith
*       Bug 424710 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
*       Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
*       Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
*       Bug 426366
 - [1.8][compiler] Type inference doesn't handle multiple candidate target types in outer overload context
*       Bug 427282 - [1.8][compiler] AIOOB (-1) at
org.eclipse.jdt.internal.compiler.ClassFile.traverse(ClassFile.java:6209)
*       Bug 427483 - [Java 8] Variables in lambdas sometimes can't be resolved
*       Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*       Bug 427163 - [1.8][null] bogus error "Contradictory null specification" on varags
*       Bug 432348 - [1.8] Internal compiler error (NPE) after upgrade to 1.8
*       Bug 440143 - [1.8][null] one more case of contradictory null annotations regarding type variables
*       Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
*       Bug 434483 - [1.8][compiler][inference] Type inference not picked up with method reference
*       Bug 446442 - [1.8] merge null annotations from super methods
*       Bug 437072 - [compiler][null] Null analysis emits
 possibly incorrect warning for new int[][] despite @NonNullByDefault
*     Jesper S Moller - Contributions for
*       bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
*       bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*       bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*       bug 412149 - [1.8][compiler] Emit repeated annotations into the designated container
*       bug 419209 - [1.8] Repeating container annotations should be rejected in the presence of annotation it contains
*     Till Brychcy - Contributions for
*               bug 467094 - [1.8][null] TYPE_USE NullAnnotations of array contents are applied to field.
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*	bug 342671 - ClassCastException: org.eclipse.jdt.internal.compiler.lookup.SourceTypeBinding cannot be cast to org.eclipse.jdt.internal.compiler.lookup.ArrayBinding
*	bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*	Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*	Bug 416181 - [1.8][compiler][null] Invalid assignment
 is not rejected by the compiler
*	Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*	Bug 434600 - Incorrect null analysis error reporting on type parameters
*	Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*	Bug 456508 - Unexpected RHS PolyTypeBinding for: <code-snippet>
*	Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*	Andy Clement - Contributions for
*		Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
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* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
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* bug 186342 - [compiler][null] Using annotations for null checking
* bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* bug 388281 - [compiler][null] inheritance of null annotations as an option
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
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*	bug 186342 - [compiler][null] Using annotations for null checking
*	bug 367203 - [compiler][null] detect assigning null to nonnull argument
*	bug 365519 - editorial cleanup after bug 186342 and bug 365387
*	bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
*	bug 382353 - [1.8][compiler] Implementation property modifiers
 should be accepted on default methods.
*	bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*	bug 388281 - [compiler][null] inheritance of null annotations as an option
*	bug 401030 - [1.8][null] Null analysis support for lambda methods.
*	Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*	Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*	Bug 403216 - [1.8][null] TypeReference#captureTypeAnnotations treats type annotations as type argument annotations
*	Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*	Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*	Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*	Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize
 declaration style null annotations
*	Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
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* Stephan Herrmann - Contribution for
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredModule.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/PackageVisibilityStatement.java
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* Stephan Herrmann - Contributions for
* bug 292478 - Report potentially null across variable assignment
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 383368 - [compiler][null] syntactic null analysis for field
 references
* bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
* bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 426792 - [1.8][inference][impl] generify new type inference engine
* Bug 423505 - [1.8] Implement "18.5.4 More Specific Method Inference"
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 426996 - [1.8][inference]
 try to avoid method Expression.unresolve()?
* Bug 428274 - [1.8] [compiler] Cannot cast from Number to double
* Bug 428352 - [1.8][compiler] Resolution errors don't always surface
* Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
* Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
* Bug 473178
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* Contributors:
* tyeung@bea.com - initial API and implementation
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 407191 - [1.8] Binary access support for type annotations
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*     Stephan Herrmann - Contributions for
*         bug 186342 - [compiler][null] Using annotations for null checking
*       bug 387612 - Unreachable catch block...exception is never thrown from the try
*       bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug 401456 - Code compiles from javac/intellij, but fails from eclipse
*       bug 401271 - StackOverflowError
 when searching for a methods references
*       bug 405706 - Eclipse compiler fails to give compiler error when return type is a inferred generic
*       Bug 408441 - Type mismatch using Arrays.asList with 3 or more implementations of an interface with the
interface type as the last parameter
*       Bug 413958 - Function override returning inherited Generic Type
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 416183 - [1.8][compiler][null] Overload resolution fails with null annotations
*       Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 424710 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
*       Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
*       Bug 424415 - [1.8][compiler]
 Eventual resolution of ReferenceExpression is not seen to be happening.
*       Bug 426366 - [1.8][compiler] Type inference doesn't handle multiple candidate target types in outer overload
context
*       Bug 426290 - [1.8][compiler] Inference + overloading => wrong method resolution ?
*       Bug 426589 - [1.8][compiler] Compiler error with generic method/constructor invocation as vargs argument
*       Bug 426590 - [1.8][compiler] Compiler error with tenary operator
*       Bug 426764 - [1.8] Presence of conditional expression as method argument confuses compiler
*       Bug 426998 - [1.8][compiler] method(java.lang.Class, java.lang.String) not applicable for the arguments
(java.lang.Class, java.lang.String)
*       Bug 423505 - [1.8] Implement "18.5.4 More Specific Method Inference"
*       Bug 427196 - [1.8][compiler] Compiler error for method reference to overloaded method
*       Bug 427483 - [Java 8] Variables in lambdas sometimes can't be resolved
*       Bug
```

427728 - [1.8] Type Inference rejects calls requiring boxing/unboxing
*	Bug 427218 - [1.8][compiler] Verify error varargs + inference
*	Bug 426836 - [1.8] special handling for return type in references to method getClass()?
*	Bug 427628 - [1.8] regression : The method * is ambiguous for the type *
*	Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*	Bug 428366 - [1.8] [compiler] The method valueAt(ObservableList<Object>, int) is ambiguous for the type Bindings
*	Bug 424728 - [1.8][null] Unexpected error: The nullness annotation 'XXXX' is not applicable at this location
*	Bug 428811 - [1.8][compiler] Type witness unnecessarily required
*	Bug 429424 - [1.8][inference] Problem inferring type of method's parameter
*	Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*	Bug 434570 - Generic type mismatch for parametrized class annotation attribute with inner class
*	Bug 434483 - [1.8][compiler][inference] Type inference not picked up with method reference
*	Bug 441734 - [1.8][inference] Generic method with nested parameterized type argument fails on method reference
*	Bug 452194 - Code no longer compiles in 4.4.1, but with confusing error
*	Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*	Bug 456236 - [1.8][null] Cannot infer type when constructor argument is annotated with @Nullable
*	Bug 437072 - [compiler][null] Null analysis emits possibly incorrect warning for new int[][] despite @NonNullByDefault
*	Bug 462083 - [1.8][inference] Java 8 generic return type mismatch with interface involving type parameter.
*	Jesper S Moller - Contributions for
*	Bug 378674 - "The method can be declared as static" is wrong
*	Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
*	Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*	Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
*	Pierre-Yves B. <pyvesdev@gmail.com> - Contributions for
*	Bug 559618 - No compiler warning for import from same package
*	Bug 560630 - No warning on unused import on class from same package
**********/

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*     Stephan Herrmann - Contribution for
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
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*       Bug 440687 - [compiler][batch][null] improve command line option for external annotations
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* Contributors:
*    wharley@bea.com - initial API and implementation
*    philippe.marschall@netcetera.ch - Fix for 338370
*    IBM Corporation - Fix for validating relative name
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*     Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
*         Bug 473178
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* Benjamin Muskalla - Contribution for bug 239066
* Stephan Herrmann - Contributions for
* bug 236385 - [compiler] Warn for potential programming problem if an object is created but not used
* bug 295551 - Add option to automatically promote all warnings to errors
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug
370639 - [compiler][resource] restore the default for resource leak warnings
* bug 366063 - Compiler should not add synthetic @NonNull annotations
* bug 374605 - Unreasonable warning for enum-based switch statements
* bug 388281 - [compiler][null] inheritance of null annotations as an option
* bug 381443 - [compiler][null] Allow parameter widening from @NonNull to unannotated
* bug 383368 - [compiler][null] syntactic null analysis for field references
* Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
* Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object),
Collection#remove(Object) et al.
* Jesper Steen Moller - Contributions for
* bug 404146 - [1.7][compiler] nested try-catch-finally-blocks leads to unrunnable Java byte code
* bug 407297 - [1.8][compiler] Control generation of parameter names by option
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* Stephan Herrmann - Contribution for
* bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.

```
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*******************************************************************************/
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*     Jesper S Moller - Contributions for
*       bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
*                       Bug 384687 - [1.8] Wildcard type arguments should be rejected for lambda and reference
expressions
*       Bug 416885 - [1.8][compiler]IncompatibleClassChange error (edit)
*    Stephan Herrmann - Contribution for
*       bug 402028 - [1.8][compiler] null analysis for reference
 expressions
*       bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super via I.super.m() syntax
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*       Bug 424637 - [1.8][compiler][null] AIOOB in ReferenceExpression.resolveType with a method reference to
Files::walk
*       Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
*       Bug 424403 - [1.8][compiler] Generic method call with method reference argument fails to resolve properly.
*       Bug 427196 - [1.8][compiler] Compiler error for method reference to overloaded method
*       Bug 427438
 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*       Bug 428264 - [1.8] method reference of generic class causes problems (wrong inference result or NPE)
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 426537 - [1.8][inference] Eclipse compiler thinks I<? super J> is compatible with I<J<?>> - raw type J
involved
*       Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*       Bug 435689 - [1.8][inference] Type inference not occurring with lambda expression and method reference
*       Bug 438383 - [1.8][null] Bogus warning: Null type safety at method return type
*       Bug 434483 - [1.8][compiler][inference] Type inference not picked up with method reference
*       Bug 441734 - [1.8][inference] Generic method with nested parameterized type argument fails on method reference
*       Bug 438945 - [1.8] NullPointerException
 InferenceContext18.checkExpression in java 8 with generics, primitives, and overloading
*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*       Bug 448709 - [1.8][null] ensure we don't infer types that violate null constraints on a type parameter's bound
*       Bug 459967 - [null] compiler should know about nullness of special methods like MyEnum.valueOf()
*       Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*       Bug 470542 - NullPointerException in ReferenceExpression.isPotentiallyCompatibleWith (962)
*        Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contribution for
*                       Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
```

work)
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*   Stephan Herrmann - Contribution for
*   Bug 440687 - [compiler][batch][null] improve command line option for external annotations
*   Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
*   Bug 473178
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* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
* Jesper S Moller - Contributions for
* bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
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* Walter Harley - Patch for ensuring the parent folders are created
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* Tom Tromey - Contribution for bug 125961
* Tom Tromey - Contribution for bug 159641
* Benjamin Muskalla - Contribution for bug 239066

* Stephan Herrmann - Contributions for
* bug 236385 - [compiler] Warn for potential programming problem if an object is created but not used
* bug 295551 - Add option to automatically promote all warnings to errors
* bug 359721 - [options] add command line option
for new warning token "resource"
* bug 365208 - [compiler][batch] command line options for annotation based null analysis
* bug 374605 - Unreasonable warning for enum-based switch statements
* bug 375366 - ECJ ignores unusedParameterIncludeDocCommentReference unless enableJavadoc option is set
* bug 388281 - [compiler][null] inheritance of null annotations as an option
* bug 381443 - [compiler][null] Allow parameter widening from @NonNull to unannotated
* Bug 440477 - [null] Infrastructure for feeding external annotations into compilation
* Bug 440687 - [compiler][batch][null] improve command line option for external annotations
* Bug 408815 - [batch][null] Add CLI option for
COMPILER_PB_SYNTACTIC_NULL_ANALYSIS_FOR_FIELDS
* Jesper S Moller - Contributions for
* bug 407297 - [1.8][compiler] Control generation of parameter names by option
* Mat Booth - Contribution for bug 405176
* Frits Jalvingh -
fix for bug 533830.
**********/

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* Jesper S Moller - Contributions for
* Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
* Bug 406982 - [1.8][compiler] Generation of MethodParameters Attribute in classfile
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
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*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
*       Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*       Bug 421035 - [resource] False alarm of resource leak warning when casting a closeable in its assignment
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*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
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* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
* Bug 409246 - [1.8][compiler] Type annotations on catch parameters not handled properly
***/

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* bug 331649 - [compiler][null] consider null annotations for fields
* bug 383368 - [compiler][null] syntactic null analysis for field references
* Jesper S Moller - Contributions for
* Bug 378674 - "The method can be declared as static" is wrong
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/TextBlock.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/CompactConstructorDeclaration.java
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*        Bug 440474 - [null] textual encoding of external null annotations
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*     Stephan Herrmann - Contributions for
*       bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 358903 - Filter practically unimportant resource leak warnings
*       bug
 370639 - [compiler][resource] restore the default for resource leak warnings
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*       bug 379784 - [compiler] "Method can be static" is not getting reported
*       bug 379834 - Wrong "method can be static" in presence of qualified super and different staticness of nested super
class.
*       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*       bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
*       bug 381445 - [compiler][resource] Can the resource leak check be made aware of Closeables.closeQuietly?
*       bug 331649 - [compiler][null] consider null annotations for fields
*       bug 383368 - [compiler][null] syntactic null
 analysis for field references
*       bug 382069 - [null] Make the null analysis consider JUnit's assertNotNull similarly to assertions
*       bug 382350 - [1.8][compiler] Unable to invoke inherited default method via I.super.m() syntax
*       bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
*       bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*       Bug 405569 - Resource leak check false positive when using DbUtils.closeQuietly
*       Bug 411964 - [1.8][null] leverage null type annotation in foreach statement
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis
 to gel well with deep encoded type bindings.
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
```

```
*       Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*       Bug 424710 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
*       Bug 425152 - [1.8] [compiler] Lambda Expression not resolved but flow analyzed leading to NPE.
*       Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
*       Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
*       Bug 426366 - [1.8][compiler] Type inference doesn't handle multiple candidate target types in outer overload
context
*       Bug 426290 - [1.8][compiler] Inference + overloading => wrong method resolution ?
*       Bug 427483 - [Java 8] Variables in lambdas sometimes can't be resolved
*       Bug 427438 - [1.8][compiler]
 NPE at org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*       Bug 426996 - [1.8][inference] try to avoid method Expression.unresolve()?
*       Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*       Bug 429430 - [1.8] Lambdas and method reference infer wrong exception type with generics (RuntimeException
instead of IOException)
*       Bug 441734 - [1.8][inference] Generic method with nested parameterized type argument fails on method reference
*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*       Bug 456487 - [1.8][null] @Nullable type variant of @NonNull-constrained type parameter causes grief
*       Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
*       Bug 472618 - [compiler][null] assertNotNull vs. Assert.assertNotNull
*       Bug 470958 - [1.8] Unable to convert lambda
*       Bug 410218 - Optional warning
 for arguments of "unexpected" types to Map#get(Object), Collection#remove(Object) et al.
*     Jesper S Moller - Contributions for
*       Bug 378674 - "The method can be declared as static" is wrong
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
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*                       Bug 409245 - [1.8][compiler] Type annotations dropped when call is routed through a synthetic
bridge method
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*   bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
*   Jesper S Moller <jesper@selskabet.org> - Contributions for
*   bug 378674 - "The method can be declared as static" is wrong
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*   bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*   bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*   Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*   Bug 417295 - [1.8[[null] Massage type annotated
 null analysis to gel well with deep encoded type bindings.
*   Bug 425152 - [1.8] [compiler] Lambda Expression not resolved but flow analyzed leading to NPE.
*   Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
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*   bug 400710 - [1.8][compiler] synthetic access to default method generates wrong code
*   bug 391376 - [1.8] check interaction of default methods with bridge methods and generics
*   bug 421543 - [1.8][compiler] Compiler fails to recognize default method being turned into abstract by subtytpe
*   Jesper S Moller - Contributions for
*   Bug 405066 - [1.8][compiler][codegen] Implement
 code generation infrastructure for JSR335
*   Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*   Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
*   Bug 409247 - [1.8][compiler] Verify error with code allocating multidimensional array
*   Bug 409236 - [1.8][compiler] Type annotations on intersection cast types dropped by code
generator
*   Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
*   Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
*   Bug 449467 - [1.8][compiler] Invalid lambda deserialization with anonymous class
*   Olivier Tardieu (tardieu@us.ibm.com) - Contributions for
*   Bug 442418 - $deserializeLambda$ off-by-one error when deserializing the captured arguments
 of a lambda that also capture this
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/IMultiModuleEntry.java
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*   Bug 407191 - [1.8] Binary access support for type annotations
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* bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
* bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 415850 - [1.8] Ensure RunJDTCoreTests
can cope with null annotations enabled
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 427163 - [1.8][null] bogus error "Contradictory null specification" on varags
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 434570 - Generic type mismatch for parametrized class annotation attribute with inner class
* Bug 434600 - Incorrect null analysis error reporting on type parameters
* Bug 439516 - [1.8][null] NonNullByDefault wrongly applied to implicit type bound of binary type
* Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
* Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
* Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
* Bug 437072 - [compiler][null] Null analysis
emits possibly incorrect warning for new int[][] despite @NonNullByDefault
* Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
* Bug 409236 - [1.8][compiler] Type annotations on intersection cast types dropped by code generator
* Bug 415399 - [1.8][compiler] Type annotations on constructor results dropped by the code generator
* Jesper S Møller <jesper@selskabet.org> - Contributions for
* bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
* bug 529556 - [18.3] Add content assist support for 'var' as a type
*
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/ISourceMethod.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/IGenericField.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/IBinaryNestedType.java
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* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug 417758 - [1.8][null] Null safety compromise during array creation.
* Bug
 427163 - [1.8][null] bogus error "Contradictory null specification" on varags
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
* Bug 409247 - [1.8][compiler] Verify error with code allocating multidimensional array
**********/

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* Contributors:
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* Carmi Grushko - Bug 465048 - Binding is null for class literals in synchronized blocks
**********/

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*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
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*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 388795 - [compiler] detection of name clash depends on order of super interfaces
*       bug 388739 - [1.8][compiler] consider default methods when detecting whether
 a class needs to be declared abstract
*       bug 390883 - [1.8][compiler] Unable to override default method
*       bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug 401246 - [1.8][compiler] abstract class method should now trump conflicting default methods
```

```
*       bug 401796 - [1.8][compiler] don't treat default methods as overriding an independent inherited abstract method
*       bug 403867 - [1.8][compiler] Suspect error about duplicate default methods
*       bug 391376 - [1.8] check interaction of default methods with bridge methods and generics
*       bug 395681 - [compiler] Improve simulation of javac6 behavior from bug 317719 after fixing bug 388795
*       bug 409473 - [compiler] JDT cannot compile against JRE 1.8
*       Bug 420080 - [1.8] Overridden Default method is reported as duplicated
*       Bug 404690 - [1.8][compiler] revisit bridge generation after VM bug is fixed
 *       Bug 410325 - [1.7][compiler] Generified method override different between javac and eclipse compiler
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 390889 - [1.8][compiler] Evaluate options to support 1.7- projects against 1.8 JRE.
*       Bug 440773 - [1.8][null]DefaultLocation.RETURN_TYPE erroneously affects method parameters in
@NonNullByDefault
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 446442 - [1.8] merge null annotations from super methods
*******************************************************************************/
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*       Bug 428811 - [1.8][compiler] Type witness unnecessarily required
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* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 364890 - BinaryTypeBinding should use char constants from Util
* bug 365387 - [compiler][null] bug 186342: Issues to follow up post review and verification.
* bug 358903 - Filter practically unimportant resource leak warnings
* bug
 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
* bug 388800 - [1.8][compiler] detect default methods in class files
* bug 388281 - [compiler][null] inheritance of null annotations as an option
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 427199 - [1.8][resource] avoid resource leak warnings on Streams that have no resource
* Bug 392245 - [1.8][compiler][null] Define whether
 / how @NonNullByDefault applies to TYPE_USE locations
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 390889 - [1.8][compiler] Evaluate options to support 1.7- projects against 1.8 JRE.
* Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
* Bug 439516 - [1.8][null] NonNullByDefault wrongly applied to implicit type bound of binary type
* Bug 434602 - Possible error with inferred null annotations leading to contradictory null annotations
* Bug 440477 - [null] Infrastructure for feeding external annotations into compilation
* Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull

```
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 453475 - [1.8][null] Contradictory null annotations (4.5 M3 edition)
*       Bug 454182 - Internal compiler error when using
 1.8 compliance for simple project
*       Bug 470467 - [null] Nullness of special Enum methods not detected from .class file
*       Bug 447661 - [1.8][null] Incorrect 'expression needs unchecked conversion' warning
*    Jesper Steen Moller - Contributions for
*       Bug 412150 [1.8] [compiler] Enable reflected parameter names during annotation processing
*       Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*    Sebastian Zarnekow - Contributions for
*       bug 544921 - [performance] Poor performance with large source files
*    Alexander Lehmann - Contributions for
*       bug 566258 - Intermittent NPE in APT RoundDispatcher
*******************************************************************************/
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/BinaryTypeBinding.java
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*       bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*       bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug
 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
*       Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*       Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 425460 - [1.8] [inference] Type not inferred on stream.toArray
*       Bug 426792 - [1.8][inference][impl] generify new type inference engine
*       Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.
*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*       Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
*       Bug 441693 -
```

[1.8][null] Bogus warning for type argument annotated with @NonNull
* Jesper S Møller - Contributions for bug 381345 : [1.8] Take care of the Java 8 major version
* Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/ArrayBinding.java
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* bug 400710 - [1.8][compiler] synthetic access to default method generates wrong code
* Bug 459967 - [null] compiler should know about nullness of special methods like MyEnum.valueOf()
* Bug 470467 - [null] Nullness of special Enum methods not detected from .class file
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 405104 -
[1.8][compiler][codegen] Implement support for serializeable lambdas
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* bug 186342 - [compiler][null] Using annotations for null checking

```
*       bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
*       bug 331649 - [compiler][null] consider null annotations for fields
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 415043 - [1.8][null] Follow-up re null type annotations
 after bug 392099
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 424728 - [1.8][null] Unexpected error: The nullness annotation 'XXXX' is not applicable at this location
*       Bug 392245 - [1.8][compiler][null] Define whether / how @NonNullByDefault applies to TYPE_USE locations
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 457210 - [1.8][compiler][null] Wrong Nullness errors given on full build build but not on incremental build?
*       Bug 469584 - ClassCastException in Annotation.detectStandardAnnotation (320)
*       Andy Clement (GoPivotal,
 Inc) aclement@gopivotal.com - Contributions for
*                       Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
*                       Bug 409517 - [1.8][compiler] Type annotation problems on more elaborate array references
*                       Bug 415397 - [1.8][compiler] Type Annotations on wildcard type argument dropped
*                       Bug 414384 - [1.8] type annotation on abbreviated inner class is not marked as inner type
*     Jesper S Moller <jesper@selskabet.org> -  Contributions for
*                       Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*                       Bug 412151 - [1.8][compiler] Check repeating annotation's collection type
*                       Bug 412149 - [1.8][compiler] Emit repeated annotations into the designated container
*                       Bug 419209 - [1.8] Repeating container annotations
 should be rejected in the presence of annotation it contains
*******************************************************************************/
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*       Bug 429813 - [1.8][dom ast] IMethodBinding#getJavaElement() should return IMethod for lambda
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*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*       bug 382353 - [1.8][compiler] Implementation property modifiers should
 be accepted on default methods.
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*       Bug 438012 - [1.8][null] Bogus Warning: The nullness annotation is redundant with a default that applies to this
location
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*     Jesper S Moller <jesper@selskabet.org> - Contributions for
*       bug 378674 - "The method can be declared as static" is wrong
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* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/AssertStatement.java
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* Stephan Herrmann - Contributions for
* bug 332637 - Dead Code detection removing code that isn't dead
* bug 391517 - java.lang.VerifyError on code that runs correctly in Eclipse 3.7 and eclipse 3.6
* bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/flow/ConditionalFlowInfo.java
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* IBM Corporation - Contribution for bug 188796
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/apt/util/Options.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/tool/Archive.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/apt/util/ArchiveFileObject.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/apt/util/Util.java
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* Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* bug 185682 - Increment/decrement operators mark local variables as read

```
*       bug 331649 - [compiler][null] consider null annotations for fields
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 447088 - [null] @Nullable on fully qualified field type is ignored
*       Bug 435805 - [1.8][compiler][null]
 Java 8 compiler does not recognize declaration style null annotations
*       Bug 458396 - NPE in CodeStream.invoke()
*       Bug 446217 - [null] @NonNullByDefault in package-info.java causes bogus "null type safety" warning
*     Till Brychcy - Contribution for
*             bug 467094 - [1.8][null] TYPE_USE NullAnnotations of array contents are applied to field.
*******************************************************************************/
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/FieldBinding.java
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*     Stephan Herrmann - Contribution for
*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 370930 - NonNull annotation not considered for enhanced for loops
*       bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 393719 - [compiler] inconsistent warnings
 on iteration variables
*       Bug 411964 - [1.8][null] leverage null type annotation in foreach statement
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*       Bug 415790 - [compiler][resource]Incorrect potential resource leak warning in for loop with close in try/catch
*     Jesper S Moller -  Contribution for
*       bug 401853 - Eclipse Java compiler creates invalid bytecode (java.lang.VerifyError)
*                          bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
```

```
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*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                    Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
*                    Bug 409247 - [1.8][compiler] Verify error with code allocating multidimensional array
*                    Bug 409517 - [1.8][compiler] Type annotation problems on more elaborate array references
*
                Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
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*     Jesper S Moller - Bug 392671
*         NPE with a method with explicit this and a following incomplete parameter
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*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
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* Contributors:
* wharley@bea.com - initial API and implementation
* IBM Corporation - Fix for bug 341494
* IBM Corporation - Fix for bug 328575
* IBM Corporation - Java 8 support
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* bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
* Stephan Herrmann - Contribution for
* bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 416182 - [1.8][compiler][null]
Contradictory null annotations not rejected
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* bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
* bug 401030 - [1.8][null] Null analysis support for lambda methods.
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/ICompilationUnit.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/ClassLiteralAccess.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredField.java
*
 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/CompilationResult.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredUnit.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/batch/ClasspathLocation.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredElement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/INameEnvironment.java
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*     Stephan Herrmann - Contributions for
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       Bug 434570 - Generic type mismatch for parametrized class annotation attribute with inner class
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* bug 317046 - Exception during debugging when hover mouse over a field
* bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.

```
*       bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class
 files
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*       Bug 424712 - [1.8][compiler] NPE in TypeBinding.isProvablyDistinctTypeArgument
*       Bug 426792 - [1.8][inference][impl] generify new type inference engine
*       Bug 426764 - [1.8] Presence of conditional expression as method argument confuses compiler
*       Bug 423505 - [1.8] Implement "18.5.4 More Specific Method Inference"
*       Bug 427626 - [1.8] StackOverflow while typing new ArrayList<String>().toArray( and asking for code completion
 *       Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.
*       Bug 435962 - [RC2] StackOverFlowError when building
*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*       Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
*       Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
*       Bug 446434 - [1.8][null] Enable interned captures also when analysing null type annotations
*     Jesper S Moller <jesper@selskabet.org> -  Contributions for
*       bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
*       bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*
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*     Stephan Herrmann - Contribution for
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 434570 - Generic type mismatch for parametrized class annotation attribute with inner class
*     Sebastian Zarnekow - Contribution for
*       Bug 544921 - [performance] Poor performance with large source files
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*         Bug 328281 - visibility leaks not detected when analyzing unused field in private class
*         Bug 300576 - NPE Computing type hierarchy when compliance doesn't match libraries
*         Bug 354536 - compiling package-info.java still depends on the order of compilation units
*         Bug 349326 - [1.7] new warning for missing try-with-resources
*         Bug
 358903 - Filter practically unimportant resource leak warnings
*      Bug 395977 - [compiler][resource] Resource leak warning behavior possibly incorrect for anonymous inner class
*      Bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*      Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*      Bug 427199 - [1.8][resource] avoid resource leak warnings on Streams that have no resource
*      Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*      Bug 434570 - Generic type mismatch for parametrized class annotation attribute with inner class
*      Bug 444024 - [1.8][compiler][null] Type mismatch error in annotation generics assignment which happens
"sometimes"
*      Bug 459967 - [null] compiler should know about nullness of special methods like MyEnum.valueOf()
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com -
 Contributions for
*                       Bug 415821 - [1.8][compiler] CLASS_EXTENDS target type annotation missing for anonymous
classes
*     het@google.com - Bug 456986 - Bogus error when annotation processor generates annotation type
*     Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
*         Bug 473178
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* IBM Corporation - fix for 342598, 382590
* Jean-Marie Henaff <jmhenaff@google.com> (Google) - Bug 481555
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/CaseLabel.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/IDebugRequestor.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/FalseLiteral.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfIntValues.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/CharLiteral.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/OperatorIds.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/ProblemBinding.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/Label.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/SimpleSet.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/LongCache.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/StringLiteralConcatenation.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/classfmt/InnerClassInfo.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/classfmt/ClassFileStruct.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/JavadocReturnStatement.java
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 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/ExtendedStringLiteral.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/MagicLiteral.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/problem/AbortCompilationUnit.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/IProblemFactory.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/problem/AbortType.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/SimpleLookupTable.java

* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/TrueLiteral.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/ProblemFieldBinding.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ICompilerRequestor.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/FloatCache.java
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 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/antadapter/AntAdapterMessages.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/SyntheticArgumentBinding.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/JavadocSingleNameReference.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/InnerEmulationDependency.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/SyntheticFieldBinding.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfInt.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/ParameterizedFieldBinding.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/SubRoutineStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfLong.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/PostfixExpression.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/diagnose/RangeUtil.java
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 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/PrefixExpression.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/ObjectCache.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/AnnotationHolder.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/NLSTag.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/DoubleCache.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfType.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/problem/ShouldNotImplement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/IntegerCache.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredImport.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfObjectToIntArray.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfObjectToInt.java
*
 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/JavadocArrayQualifiedTypeReference.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/AccessRestriction.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/problem/AbortCompilation.java
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```
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*       bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
*       bug 385626 - @NonNull fails across
 loop boundaries
*       bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
*       Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*       Bug 455723 - Nonnull argument not correctly inferred in loop
*     Jesper S Moller - Contributions for
*       bug 404657 - [1.8][compiler] Analysis for effectively final variables fails to consider loops
*******************************************************************************/
```

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/flow/FinallyFlowContext.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/apt/util/Archive.java
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* bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
* Bug 416174 - [1.8][compiler][null] Bogus name clash error with null annotations
* Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
* Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
* Bug 425783 - An
internal error occurred during: "Requesting Java AST from selection". java.lang.StackOverflowError
* Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
* Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/StackMapFrameCodeStream.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/apt/util/EclipseFileManager.java
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*       bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
*       Bug 415790 - [compiler][resource]Incorrect potential resource leak warning in for loop
 with close in try/catch
*******************************************************************************/
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*           bug 349326 - [1.7] new warning for missing try-with-resources
*           bug 359362 - FUP of bug 349326: Resource leak on non-Closeable resource
*       bug 358903 - Filter practically unimportant resource leak warnings
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 400874 - [1.8][compiler] Inference infrastructure
 should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*       Bug 426676 - [1.8][compiler] Wrong generic method type inferred from lambda expression
*       Bug 427411 - [1.8][generics] JDT reports type mismatch when using method that returns generic type
*       Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.
*       Bug 435962 - [RC2] StackOverFlowError when building
*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*       Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
*       Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
*******************************************************************************/
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* Jesper S Moller - Contributions for
* Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
* Bug 406982 - [1.8][compiler] Generation of MethodParameters Attribute in classfile
* Bug 416885 - [1.8][compiler]IncompatibleClassChange error (edit)
* Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com
 - Contributions for
* Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
* Bug 439889 - [1.8][compiler] [lambda] Deserializing lambda fails with IllegalArgumentException: "Invalid lambda deserialization"
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/problem/DefaultProblem.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/Substitution.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/ITypeRequestor.java
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* bug 331649 - [compiler][null] consider null annotations for fields
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 458396 - NPE in CodeStream.invoke()
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* Bug 365992 - [builder] [null] Change of nullness for a parameter doesn't trigger a build for the files that call the method
* Bug 440477 - [null] Infrastructure for feeding external annotations into compilation
* Bug 440687 - [compiler][batch][null] improve command line option for external annotations
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*
  bug 407191 - [1.8] Binary access support for type annotations
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* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 433478 - [compiler][null] NPE in ReferenceBinding.isCompatibleWith
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* bug 332637 - Dead Code detection removing code that isn't dead
* bug 358827 - [1.7] exception analysis for t-w-r spoils null analysis
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 359334 - Analysis for resource leak warnings does not consider exceptions as method exit points
* bug 358903 - Filter practically unimportant resource
leak warnings
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
* bug 401088 - [compiler][null] Wrong warning "Redundant null check" inside nested try statement
* bug 401092 - [compiler][null] Wrong warning "Redundant null check" in outer catch of nested try
* bug 402993 - [null] Follow up of bug 401088: Missing warning about redundant null check
* bug 384380 - False positive on a ?? Potential null pointer access ?? after a continue
* Bug 415790 - [compiler][resource]Incorrect potential resource leak warning in for loop with close in try/catch
* Bug 371614 - [compiler][resource] Wrong "resource leak" problem on return/throw inside while loop
* Bug 444964 - [1.7+][resource] False resource leak warning (try-with-resources for ByteArrayOutputStream - return inside for loop)
* Jesper Steen Moller -
Contributions for
* bug 404146 - [1.7][compiler] nested try-catch-finally-blocks leads to unrunnable Java byte code
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
*
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* bug 335093 - [compiler][null] minimal hook for future null annotation support

*	bug 349326 - [1.7] new warning for missing try-with-resources
*	bug 186342 - [compiler][null] Using annotations for null checking
*	bug 365983 - [compiler][null] AIOOB with null annotation analysis and varargs
*	bug 368546 - [compiler][resource] Avoid remaining false positives found when
 compiling the Eclipse SDK
*	bug 370930 - NonNull annotation not considered for enhanced for loops
*	bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
*	bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*	bug 331649 - [compiler][null] consider null annotations for fields
*	bug 383368 - [compiler][null] syntactic null analysis for field references
*	Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*	Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*	Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
*	Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*	Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
*	Bug 417758 - [1.8][null] Null safety compromise
 during array creation.
*	Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*	Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
*	Bug 418537 - [1.8][null] Fix null type annotation analysis for poly conditional expressions
*	Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*	Bug 429430 - [1.8] Lambdas and method reference infer wrong exception type with generics (RuntimeException
instead of IOException)
*	Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*	Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*	Bug 455723 - Nonnull argument not correctly inferred in loop
*	Andy Clement - Contributions for
*		Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
 work)
*		Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
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```
*     Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
*       bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*       bug 292478 - Report potentially null across variable assignment
*       bug 335093 - [compiler][null] minimal hook for future null annotation support
*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 186342 - [compiler][null] Using annotations for null checking
 *       bug 358903 - Filter practically unimportant resource leak warnings
*       bug 370639 - [compiler][resource] restore the default for resource leak warnings
*       bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
*       bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*       bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
*       bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug 383368 - [compiler][null] syntactic null analysis for field references
*       bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
 *       Bug 430150 - [1.8][null] stricter checking against type variables
*       Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*     Jesper S Moller - Contributions for
*       Bug 378674 - "The method can be declared as static" is wrong
*       Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*       Bug 529556 - [18.3] Add content assist support for 'var' as a type
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*       Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
*       Bug 426616 - [1.8][compiler] Type Annotations, multiple problems
*******************************************************************************/
```

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*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/VoidTypeBinding.java
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* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 403147 - [compiler][null] FUP of bug 400761:
 consolidate interaction between unboxing, NPE, and deferred checking
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* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
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* Bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
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*     Perry James - nullStatus method improvement (165346)
*     Stephan Herrmann - Contribution for
*       bug 383368 - [compiler][null] syntactic null analysis for field references
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*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
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*
* Contributors:
* IBM Corporation - initial API and implementation
* Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* bug 292478 - Report potentially null across variable assignment,
* bug 185682 - Increment/decrement operators mark local variables as read
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 383368 - [compiler][null] syntactic null analysis for field references
* Bug 412203 - [compiler] Internal compiler error: java.lang.IllegalArgumentException:
 info cannot be null
* Bug 458396 - NPE in CodeStream.invoke()
* Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
* Jesper S Moller - <jesper@selskabet.org> - Contributions for
* bug 382721 - [1.8][compiler] Effectively final variables needs special treatment
* bug 378674 - "The method can be declared as static" is wrong
* bug 404657 - [1.8][compiler] Analysis for effectively final variables fails to consider loops
* bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
**********/

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* Jesper S Moller - Contributions for
* Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
* Bug 406982 - [1.8][compiler] Generation of MethodParameters Attribute in classfile
* Bug 416885 - [1.8][compiler]IncompatibleClassChange error (edit)
* Bug 412149 - [1.8][compiler] Emit repeated annotations into the designated container
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com
 - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
* Bug 409236 - [1.8][compiler] Type annotations on intersection cast types dropped by code
generator
* Bug 409246 - [1.8][compiler] Type annotations on catch parameters not handled properly
* Bug 415541 - [1.8][compiler] Type annotations in the body of static initializer get dropped

* Bug 415399 - [1.8][compiler] Type annotations on constructor results dropped by the code generator
* Bug 415470 - [1.8][compiler] Type annotations on class declaration go vanishing
* Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
* Bug 434556 - Broken class file generated for incorrect annotation usage
* Bug 442416
 - $deserializeLambda$ missing cases for nested lambdas
* Stephan Herrmann - Contribution for
* Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
* Olivier Tardieu tardieu@us.ibm.com - Contributions for
* Bug 442416 - $deserializeLambda$ missing cases for nested lambdas
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfModule.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredRequiresStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredUsesStatement.java
*
 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredModuleStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/ModuleStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredPackageVisibilityStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredModuleReference.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredExportsStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredExport.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/ExportsStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredProvidesStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredTypeReference.java
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* Stephan Herrmann - Contributions for
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
* Bug 435570 - [1.8][null] @NonNullByDefault
 illegally tries to affect "throws E"
* Bug 438012 - [1.8][null] Bogus Warning: The nullness annotation is redundant with a default that applies to this location
* Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 409246 - [1.8][compiler] Type annotations on catch parameters not handled properly
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* Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
* Bug 473178
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* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 358903 - Filter practically unimportant resource leak warnings
* bug 381445 - [compiler][resource] Can the resource leak check be made aware of Closeables.closeQuietly?
* bug 400421 - [compiler] Null analysis for fields does not take @com.google.inject.Inject into account
* bug 382069 - [null] Make
the null analysis consider JUnit's assertNotNull similarly to assertions
* Bug 405569 - Resource leak check false positive when using DbUtils.closeQuietly
* Bug 427199 - [1.8][resource] avoid resource leak warnings on Streams that have no resource
* Bug 425183 - [1.8][inference] make CaptureBinding18 safe
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object), Collection#remove(Object) et al.
* Jesper S Moller - Contributions for
* Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
* Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
* bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 405104 - [1.8][compiler][codegen]
Implement support for serializeable lambdas
* Ulrich Grave <ulrich.grave@gmx.de> - Contributions for
* bug 386692 - Missing "unused" warning on "autowired" fields
* Pierre-Yves B. <pyvesdev@gmail.com> - Contribution for
* bug 542520 - [JUnit 5] Warning The method xxx from the type X is never used locally is shown when using MethodSource
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*       bug 359334 - Analysis for resource leak warnings does not consider exceptions as method exit points
*       bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       Bug 429430 - [1.8] Lambdas and method reference infer wrong exception type with
 generics (RuntimeException instead of IOException)
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*        bug 349326 - [1.7] new warning for missing try-with-resources
*        bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*        Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*        Bug 467032 - TYPE_USE Null Annotations: IllegalStateException with annotated arrays of Enum when accessed
via BinaryTypeBinding
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*   bug 366003 - CCE in ASTNode.resolveAnnotations(ASTNode.java:639)
*   bug 383973 - [1.8][compiler] syntax recovery in the presence of default methods
**********/

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*   bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
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* bug 185682 - Increment/decrement operators mark local variables as read
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 383368 - [compiler][null] syntactic null analysis for field references
* Bug 412203 - [compiler] Internal compiler error: java.lang.IllegalArgumentException: info cannot be null
* Bug 400874 - [1.8][compiler]
 Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 458396 - NPE in CodeStream.invoke()
* Jesper S Moller - Contributions for
* Bug 378674 - "The method can be declared as static" is wrong
* Robert Roth <robert.roth.off@gmail.com> - Contributions for
* Bug 361039 - NPE in FieldReference.optimizedBooleanConstant
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*   Bug 473178
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*         Bug 407191 - [1.8] Binary access support for type annotations
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*         Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/LongLiteral.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/flow/InitializationFlowContext.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/NumberLiteral.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/FloatLiteral.java
*
 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/LongLiteralMinValue.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/IntLiteral.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/IntLiteralMinValue.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/DoubleLiteral.java
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* Bug 432977 - [1.8][null] Incorrect 'type is not visible' compiler error
* Bug 446434 - [1.8][null] Enable interned captures also when analysing null type annotations
***/
/* Taking the binding of QTR as an example, there could be different annotatable components, but we come in a
with a single binding, e.g:

 @T Z; type => Z annotations => [[@T]]
  @T Y.@T Z type => Z annotations => [[@T][@T]]

@T X.@T Y.@T Z type => Z annotations => [[@T][@T][@T]]
java.lang.@T X.@T Y.@T Z type => Z annotations => [[][][@T][@T][@T]]
in all these cases the incoming type binding is for Z, but annotations are for different levels. We need to align their layout for proper attribution.
*/

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* Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* bug 282152 - [1.5][compiler] Generics code rejected by Eclipse but accepted by javac
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 359362 - FUP of bug 349326: Resource leak on non-Closeable resource
* bug 358903 - Filter practically unimportant resource leak warnings
* bug 395002 - Self bound generic class
doesn't resolve bounds properly for wildcards for certain parametrisation.
* bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 426792 - [1.8][inference][impl] generify new type inference engine
* Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.
* Bug 429384 - [1.8][null] implement conformance rules for null-annotated lower / upper type bounds
* Bug 431269 - [1.8][compiler][null] StackOverflow in nullAnnotatedReadableName
* Bug 431408 - Java 8 (1.8) generics bug
* Bug 435962 - [RC2] StackOverFlowError when building
* Bug
438458 - [1.8][null] clean up handling of null type annotations wrt type variables
* Bug 438250 - [1.8][null] NPE trying to report bogus null annotation conflict
* Bug 438179 - [1.8][null] 'Contradictory null annotations' error on type variable with explicit null-annotation.
* Bug 440143 - [1.8][null] one more case of contradictory null annotations regarding type variables
* Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
* Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
* Bug 456497 - [1.8][null] during inference nullness from target type is lost against weaker hint from applicability analysis

*	Bug 456459 - Discrepancy between Eclipse compiler and javac - Enums, interfaces, and generics
*	Bug 456487 - [1.8][null] @Nullable type variant of @NonNull-constrained type parameter causes grief
*	Bug 462790 - [null] NPE in Expression.computeConversion()
*	Bug 456532 - [1.8][null] ReferenceBinding.appendNullAnnotation() includes phantom annotations in error messages
*	Jesper S Møller <jesper@selskabet.org> - Contributions for bug 381345 : [1.8] Take care of the Java 8 major version
*	Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/IErrorHandlingPolicy.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/flow/InsideSubRoutineFlowContext.java
*
/ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/UnresolvedAnnotationBinding.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/core/JDTCompilerAdapter.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/ReferenceContext.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/DefaultErrorHandlingPolicies.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/CompilerStats.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/Receiver.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/GenericXMLWriter.java
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* Stephan Herrmann - Contributions for
* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 186342 - [compiler][null] Using annotations for null checking

```
*       bug 361407 - Resource leak warning when resource is assigned to a field outside of constructor
*       bug 370639 - [compiler][resource] restore the default for resource leak warnings
*       bug 388996 - [compiler][resource] Incorrect
 'potential resource leak'
*       bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 424710 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
*       Bug 425152 - [1.8] [compiler] Lambda Expression not resolved but flow analyzed leading to NPE.
*       Bug 424205 - [1.8] Cannot infer type for diamond type with lambda on method invocation
*       Bug 424415 - [1.8][compiler] Eventual resolution of ReferenceExpression is not seen to be happening.
*       Bug 426366 - [1.8][compiler] Type inference doesn't handle multiple candidate target types in outer overload
context
*       Bug 426290 - [1.8][compiler] Inference + overloading => wrong method resolution ?
*       Bug 427483 - [Java 8] Variables in lambdas sometimes can't be resolved
*       Bug 427438 - [1.8][compiler]
 NPE at org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*       Bug 428352 - [1.8][compiler] Resolution errors don't always surface
*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 409245 - [1.8][compiler] Type annotations dropped when call is routed through a synthetic
bridge method
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*     Stephan Herrmann - Contributions for
*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 374605 - Unreasonable warning for enum-based switch statements
*       bug 382353 - [1.8][compiler] Implementation property modifiers should be accepted on default methods.
*       bug 382354 - [1.8][compiler] Compiler silent on conflicting modifier
*       bug 401030 - [1.8][null] Null analysis support for lambda methods.
*       Bug
 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
```

*   Jesper S Moller - Contributions for
*   bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
**********/

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* Contributors:
*   tyeung@bea.com - initial API and implementation
*   olivier_thomann@ca.ibm.com - add hashCode() and equals(..) methods
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/EnumConstantSignature.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/ClassSignature.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/ImportBinding.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/ImportReference.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/MissingTypeBinding.java
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 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/JavadocParser.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/ISourceType.java
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*   bug 185682 - Increment/decrement operators mark local variables as read
*   bug 349326 - [1.7] new warning for missing try-with-resources
*   bug 186342 - [compiler][null] Using annotations for null checking
*   bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
*   bug 331649 - [compiler][null] consider
 null annotations for fields
*   Bug 466308 - [hovering] Javadoc header for parameter is wrong with annotation-based null analysis
*   Jesper S Møller <jesper@selskabet.org> - Contributions for
*   Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/LongConstant.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/ByteConstant.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/IntConstant.java
*
 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/StringConstant.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/ShortConstant.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/HashtableOfObject.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/FloatConstant.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/AccessRuleSet.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/impl/BooleanConstant.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/JavadocArgumentExpression.java
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* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 402993 - [null] Follow up
 of bug 401088: Missing warning about redundant null check
* Bug 440282 - [resource] Resource leak detection false negative with empty finally block
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*     Lars Vogel <Lars.Vogel@vogella.com> - Contributions for
*         Bug 473178
*     IBM Corporation - Bug fixes
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*       bug 383368 - [compiler][null] syntactic null analysis for field references
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*       bug 331649 - [compiler][null] consider null annotations for fields
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*     Stephan Herrmann  - Contributions for
*           bug 236385 - [compiler] Warn for potential programming problem if an object is created but not used
*           bug 338303 - Warning about Redundant assignment conflicts with definite assignment
*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 186342 - [compiler][null] Using annotations for null checking
 *       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
*       bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
*       bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
*       bug 374605 - Unreasonable warning for enum-based switch statements
*       bug 382353 - [1.8][compiler] Implementation property modifiers should be accepted on default methods.
*       bug 382347 - [1.8][compiler] Compiler accepts incorrect default method inheritance
*       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 376053 - [compiler][resource] Strange potential resource leak problems
*       bug 381443 - [compiler][null] Allow parameter widening from @NonNull to unannotated
*       bug 393719 - [compiler] inconsistent warnings on iteration
 variables
*       bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
```

* bug 388739 - [1.8][compiler] consider default methods when detecting whether a class needs to be declared abstract
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 382789 - [compiler][null] warn when syntactically-nonnull expression is compared against null
* bug 376590 - Private fields with @Inject are ignored by unused field validation
* bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
* bug 402028 - [1.8][compiler] null analysis for reference expressions
* bug 401796 - [1.8][compiler] don't treat default methods as overriding an independent inherited abstract method
* bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
* bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
* Bug
392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
* Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
* Bug 414380 - [compiler][internal] QualifiedNameReference#indexOfFirstFieldBinding does not point to the first field
* Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
* Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 424637 - [1.8][compiler][null] AIOOB in ReferenceExpression.resolveType with a method reference to Files::walk
* Bug 428294 - [1.8][compiler] Type mismatch: cannot convert
from List<Object> to Collection<Object[]>
* Bug 428366 - [1.8] [compiler] The method valueAt(ObservableList<Object>, int) is ambiguous for the type Bindings
* Bug 416190 - [1.8][null] detect incompatible overrides due to null type annotations
* Bug 392245 - [1.8][compiler][null] Define whether / how @NonNullByDefault applies to TYPE_USE locations
* Bug 390889 - [1.8][compiler] Evaluate options to support 1.7- projects against 1.8 JRE.
* Bug 430150 - [1.8][null] stricter checking against type variables
* Bug 434600 - Incorrect null analysis error reporting on type parameters
* Bug 439516 - [1.8][null] NonNullByDefault wrongly applied to implicit type bound of binary type
* Bug 438467 - [compiler][null] Better error position for "The method _ cannot implement the corresponding method _ due to incompatible nullness constraints"
* Bug 439298 - [null] "Missing code implementation in the compiler" when using @NonNullByDefault
in package-info.java
* Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
* Bug 446442 - [1.8] merge null annotations from super methods
* Bug 455723 - Nonnull argument not correctly inferred in loop
* Bug 458361 - [1.8][null] reconciler throws NPE in ProblemReporter.illegalReturnRedefinition()
* Bug 459967 - [null] compiler should know about nullness of special methods like MyEnum.valueOf()
* Bug 461878 - [1.7][1.8][compiler][null] ECJ compiler does not allow to use null annotations on annotations
* Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object), Collection#remove(Object) et al.
* Jesper S Moller <jesper@selskabet.org> - Contributions for
* bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
* bug 382721 - [1.8][compiler] Effectively final variables needs

special treatment
*	bug 384567 - [1.5][compiler] Compiler accepts illegal modifiers on package declaration
*	bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*	bug 412151 - [1.8][compiler] Check repeating annotation's collection type
*	bug 419209 - [1.8] Repeating container annotations should be rejected in the presence of annotation it contains
*	Bug 429384 - [1.8][null] implement conformance rules for null-annotated lower / upper type bounds
*	Bug 416182 - [1.8][compiler][null] Contradictory null annotations not rejected
*	bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*	Ulrich Grave <ulrich.grave@gmx.de> - Contributions for
*	bug 386692 - Missing "unused" warning on "autowired" fields
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*	bug 186342 - [compiler][null] Using annotations for null checking

*	bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*	Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*	bug 413958 - Function override returning inherited Generic Type
*	Bug 400874 - [1.8][compiler] Inference infrastructure
should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*	Bug 424710 - [1.8][compiler] CCE in SingleNameReference.localVariableBinding
*	Bug 423505 - [1.8] Implement "18.5.4 More Specific Method Inference"
*	Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*	Bug 418743 - [1.8][null] contradictory annotations on invocation of generic method not reported
*	Bug 416182 - [1.8][compiler][null] Contradictory null annotations not rejected
*	Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*	Bug 434602 - Possible error with inferred null annotations leading to contradictory null annotations
*	Bug 434483 - [1.8][compiler][inference] Type inference not picked up with method reference
*	Bug 446442 - [1.8] merge null annotations from super methods
*	Bug 457079 - Regression: type
inference
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* Contributors:
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*	Stephan Herrmann - Contributions for
*	Bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
*	Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*	Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*	Keigo Imai - Contribution for bug 388903 - Cannot extend inner class as an anonymous class when it
extends the outer class
**********/

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* Contributors:
* IBM Corporation - initial API and implementation
* Genady Beriozkin - added support for reporting assignment with no effect
* Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 292478 - Report potentially null across variable assignment
* bug 335093 - [compiler][null] minimal hook for future null annotation support
* bug 349326 - [1.7] new warning for missing
try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 358903 - Filter practically unimportant resource leak warnings
* bug 370639 - [compiler][resource] restore the default for resource leak warnings
* bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
* bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
* bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 402993 - [null] Follow up of bug 401088: Missing
warning about redundant null check
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 427438 - [1.8][compiler] NPE at org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 453483 - [compiler][null][loop] Improve null analysis for loops
* Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
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*     Stephan Herrmann - contributions for
*          bug 337868 - [compiler][model] incomplete support for package-info.java when using SearchableEnvironment
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
*       bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       bug
 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*       Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*       Bug 416183 - [1.8][compiler][null] Overload resolution fails with null annotations
*       Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
*       Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*       Bug 416190 - [1.8][null]
 detect incompatible overrides due to null type annotations
*       Bug 424624 - [1.8][null] if a static-object with annotation @NonNull is used, a warning is shown
*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*       Bug 439516 - [1.8][null] NonNullByDefault wrongly applied to implicit type bound of binary type
*       Bug 434602 - Possible error with inferred null annotations leading to contradictory null annotations
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 453475 - [1.8][null] Contradictory null annotations (4.5 M3 edition)
*       Bug 457079 - Regression: type inference
*       Bug 440477 - [null] Infrastructure for feeding external annotations into compilation
*       Bug 455180 - IllegalStateException in AnnotatableTypeSystem.getRawType
*       Bug 470467 - [null] Nullness of special Enum methods not detected from .class file
 ********************************************************************************/
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* Stephan Herrmann - Contributions for
* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 360328 - [compiler][null] detect null problems in nested code (local class inside a loop)
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365835 - [compiler][null] inconsistent error reporting.
* bug 365519 - editorial cleanup after bug 186342 and bug 365387
* bug 358903 - Filter practically unimportant resource leak warnings
* bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
* bug 370639 - [compiler][resource] restore the default for resource leak warnings
* bug 365859 - [compiler][null] distinguish warnings based on flow analysis vs. null annotations
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
* bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
* bug 383368 - [compiler][null] syntactic null analysis for field references
* bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
* bug 401030 - [1.8][null] Null analysis support for lambda
methods.
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
* Bug 417758 - [1.8][null] Null safety compromise during array creation.
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 430150 - [1.8][null] stricter checking against type variables
* Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
* Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
* Bug 453483 - [compiler][null][loop] Improve null analysis for loops
* Bug 455723 - Nonnull argument not correctly inferred in loop
* Jesper S Moller - Contributions
for
* bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
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*       Bug 458396 - NPE in CodeStream.invoke()
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*     Stephan Herrmann - Contribution for
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
```

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*******************************************************************************/
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*       bug 384380 - False positive on a "Potential null pointer access" after a continue
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*******************************************************************************/
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*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 367203 - [compiler][null] detect assigning null to nonnull argument
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
*       bug 365531 - [compiler][null] investigate alternative strategy for internally
 encoding nullness defaults
*       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
```

*	Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*	Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*	Bug 425152 - [1.8] [compiler] Lambda Expression not resolved but flow analyzed leading to NPE.
*	Bug 423505 - [1.8] Implement "18.5.4 More Specific Method Inference"
*	Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*	Bug 438012 - [1.8][null] Bogus Warning: The nullness annotation is redundant with a default that applies to this location
*	Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
*	Bug 443347 - [1.8][null]
@NonNullByDefault should not affect constructor arguments of an anonymous instantiation
*	Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*	Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*	Bug 456584 - [1.8][null] Bogus warning for return type variable's @NonNull annotation being 'redundant'
*	Bug 471611 - Error on hover on call to generic method with null annotation
*	Jesper Steen Moller - Contributions for
*	Bug 412150 [1.8] [compiler] Enable reflected parameter names during annotation processing
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/core/compiler/InvalidInputException.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/CharArrayCache.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/codegen/VerificationTypeInfo.java
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*   bug 349326 - [1.7] new warning for missing try-with-resources
*   bug 186342 - [compiler][null] Using annotations for null checking
*   bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*   bug 370639 - [compiler][resource] restore the
 default for resource leak warnings
*   bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*   bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*   bug 395977 - [compiler][resource] Resource leak warning behavior possibly incorrect for anonymous inner class
*   bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred
checking
*   Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
*   Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*   Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
*   Bug 416267 - NPE in QualifiedAllocationExpression.resolveType
*   Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*   Bug 424415 - [1.8][compiler] Eventual
 resolution of ReferenceExpression is not seen to be happening.
*   Bug 427438 - [1.8][compiler] NPE at

org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Jesper S Moller <jesper@selskabet.org> - Contributions for
* bug 378674 - "The method can be declared as static" is wrong
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
* Bug 409245 - [1.8][compiler] Type annotations dropped when call is routed through a synthetic bridge method
* Till Brychcy - Contributions for
* bug 413460 - NonNullByDefault is not inherited to Constructors when accessed via Class File
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/diagnose/DiagnoseParser.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/BranchStatement.java
*
 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/JavadocAllocationExpression.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/TerminalTokens.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/JavadocMessageSend.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/core/compiler/CategorizedProblem.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/ParserBasicInformation.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveredStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/QualifiedTypeReference.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/classfmt/ClassFormatException.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/CaseStatement.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/ProblemPackageBinding.java
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* Stephan Herrmann - Contribution for
* bug 382350 - [1.8][compiler] Unable to invoke inherited default method via I.super.m() syntax
* bug 404649 - [1.8][compiler] detect illegal reference to indirect or redundant super
* bug 404728 - [1.8]NPE on QualifiedSuperReference error
***/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/messages.properties
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/problem/messages.properties
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*     Nick Teryaev - fix for bug (https://bugs.eclipse.org/bugs/show_bug.cgi?id=40752)
*     Stephan Herrmann - Contributions for
*       bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
*       bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
*       bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug
 383368 - [compiler][null] syntactic null analysis for field references
*       bug 401017 - [compiler][null] casted reference to @Nullable field lacks a warning
*       bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
*       Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
*       Bug 416307 - [1.8][compiler][null] subclass with type parameter substitution confuses null checking
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*       Bug 430150 - [1.8][null] stricter checking against type variables
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style
 null annotations
*       Bug 407414 - [compiler][null] Incorrect warning on a primitive type being null
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 415541 - [1.8][compiler] Type annotations in the body of static initializer get dropped
*******************************************************************************/
```

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/CastExpression.java
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* Contributors:
*   tyeung@bea.com - initial API and implementation
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/IBinaryAnnotation.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/classfmt/MethodInfoWithAnnotations.java
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*   Stephan Herrmann - Contributions for
*   bug 186342 - [compiler][null] Using annotations for null checking
*   bug 331649 - [compiler][null] consider null annotations for fields
*   bug 383368 - [compiler][null] syntactic null analysis for field references
*   bug 382069 - [null] Make the null analysis consider JUnit's assertNotNull similarly to assertions
*   bug 403086 - [compiler][null] include the effect of 'assert'
 in syntactic null analysis for fields
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* Stephan Herrmann - Contributions for
* Bug 360328 - [compiler][null] detect null problems in nested code (local class inside a loop)
* Bug 388630 - @NonNull diagnostics at line 0
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
* Bug 424727 - [compiler][null] NullPointerException
in nullAnnotationUnsupportedLocation(ProblemReporter.java:5708)
* Bug 457210 - [1.8][compiler][null] Wrong Nullness errors given on full build build but not on incremental build?
* Keigo Imai - Contribution for bug 388903 - Cannot extend inner class as an anonymous class when it extends the outer class
* Pierre-Yves B. <pyvesdev@gmail.com> - Contributions for
* Bug 542520 - [JUnit 5] Warning The method xxx from the type X is never used locally is shown when using MethodSource
* Bug 546084 - Using Junit 5s MethodSource leads to ClassCastException
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/InferenceFailureException.java
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* het@google.com - Bug 441790
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* Contributors:
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* Stephan Herrmann <stephan@cs.tu-berlin.de> - Contributions for
* bug 328281 - visibility leaks not detected when analyzing unused field in private class
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 186342 - [compiler][null] Using annotations for null checking
* bug 365836 - [compiler][null] Incomplete propagation of null defaults.
* bug 365519 - editorial cleanup after bug 186342
 and bug 365387
* bug 365662 - [compiler][null] warn on contradictory and redundant null annotations
* bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
* bug 366063 - Compiler should not add synthetic @NonNull annotations
* bug 384663 - Package Based Annotation Compilation Error in JDT 3.8/4.2 (works in 3.7.2)
* bug 386356 - Type mismatch error with annotations and generics
* bug 388281 - [compiler][null] inheritance of null annotations as an option
* bug 331649 - [compiler][null] consider null annotations for fields
* bug 380896 - [compiler][null] Enum constants not recognised as being NonNull.
* bug 391376 - [1.8] check interaction of default methods with bridge methods and generics
* Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
 * Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
* Bug 415850 - [1.8] Ensure RunJDTCoreTests can cope with null annotations enabled
* Bug 416172 - [1.8][compiler][null] null type annotation not evaluated on method return type
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 426048 - [1.8] NPE in TypeVariableBinding.internalBoundCheck when parentheses are not balanced
* Bug 392238 - [1.8][compiler][null] Detect semantically invalid null type annotations
* Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault

```
*       Bug 432348 - [1.8] Internal compiler error (NPE) after upgrade to 1.8
*       Bug 438458 - [1.8][null] clean up handling of null type annotations wrt type variables
*       Bug 435570 - [1.8][null] @NonNullByDefault illegally tries to affect "throws E"
*       Bug 441693 - [1.8][null]
 Bogus warning for type argument annotated with @NonNull
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Bug 457210 - [1.8][compiler][null] Wrong Nullness errors given on full build build but not on incremental build?
*       Bug 461250 - ArrayIndexOutOfBoundsException in SourceTypeBinding.fields
*       Bug 466713 - Null Annotations: NullPointerException using <int @Nullable []> as Type Param
*     Jesper S Moller <jesper@selskabet.org> -  Contributions for
*       Bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*     Till Brychcy - Contributions for
*          bug 415269 - NonNullByDefault is not always inherited to nested classes
*     Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                    Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
*     Sebastian Zarnekow - Contributions
 for
*       bug 544921 - [performance] Poor performance with large source files
*******************************************************************************/
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/SourceTypeBinding.java
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*     Stefan Xenos <sxenos@gmail.com> (Google) - initial API and implementation
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*   IBM Corporation - fix for 342598
*   IBM Corporation - Java 8 support
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/AnnotationBinding.java
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/env/IBinaryModule.java
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*     Stephan Herrmann - Contributions for
*       bug 368546 - [compiler][resource] Avoid remaining false positives found when compiling the Eclipse SDK
*       bug 370639 - [compiler][resource] restore the default for resource leak warnings
*       bug 388996 - [compiler][resource] Incorrect 'potential resource leak'
*       Bug 417758 - [1.8][null] Null safety compromise during array creation.
*       Bug 427438 - [1.8][compiler] NPE at
 org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
*       Bug 435805 - [1.8][compiler][null] Java 8 compiler does not recognize declaration style null annotations
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*                       Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's
work)
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/apt/model/NameImpl.java
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*       bug 349326 - [1.7] new warning for missing try-with-resources
*       bug 186342 - [compiler][null] Using annotations for null checking
*       bug 365519 - editorial cleanup after bug 186342 and bug 365387
*       bug 358903 - Filter practically unimportant resource leak warnings
*       bug 365531 - [compiler][null] investigate alternative strategy for internally encoding nullness defaults
 *       bug 388281 - [compiler][null] inheritance of null annotations as an option
*       bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug 392862 - [1.8][compiler][null] Evaluate null annotations on array types
*       bug 400421 - [compiler] Null analysis for fields does not take @com.google.inject.Inject into account
*       bug 382069 - [null] Make the null analysis consider JUnit's assertNotNull similarly to assertions
*       bug 392384 - [1.8][compiler][null] Restore nullness info from type annotations in class files
```

```
*       Bug 392099 - [1.8][compiler][null] Apply null annotation on types for null analysis
*       Bug 415291 - [1.8][null] differentiate type incompatibilities due to null annotations
*       Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
*       Bug 416176 - [1.8][compiler][null] null type annotations cause grief on type variables
*       Bug
 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 423504 - [1.8] Implement "18.5.3 Functional Interface Parameterization Inference"
*       Bug 426792 - [1.8][inference][impl] generify new type inference engine
*       Bug 428019 - [1.8][compiler] Type inference failure with nested generic invocation.
*       Bug 427199 - [1.8][resource] avoid resource leak warnings on Streams that have no resource
*       Bug 418743 - [1.8][null] contradictory annotations on invocation of generic method not reported
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
*       Bug 431581 - Eclipse compiles what it should not
*       Bug 440759 - [1.8][null] @NonNullByDefault should never affect wildcards and uses of a type variable
*       Bug 452788 - [1.8][compiler] Type not correctly inferred in lambda expression
*       Bug 446442 - [1.8] merge null annotations from
 super methods
*       Bug 456532 - [1.8][null] ReferenceBinding.appendNullAnnotation() includes phantom annotations in error
messages
*       Bug 410218 - Optional warning for arguments of "unexpected" types to Map#get(Object),
Collection#remove(Object) et al.
*      Jesper S Moller - Contributions for
*       bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
*       bug 412153 - [1.8][compiler] Check validity of annotations which may be repeatable
*       bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*     Ulrich Grave <ulrich.grave@gmx.de> - Contributions for
*                       bug 386692 - Missing "unused" warning on "autowired" fields
*     Pierre-Yves B. <pyvesdev@gmail.com> - Contribution for
*                       bug 542520 - [JUnit 5] Warning The method xxx from the type X is never used locally is shown
when using MethodSource
*     Sebastian Zarnekow - Contributions
 for
*       bug 544921 - [performance] Poor performance with large source files
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* bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
* Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
* Stephan Herrmann - Contribution for
* Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
* Bug 423504 - [1.8] Implement "18.5.3
 Functional Interface Parameterization Inference"
* Bug 425142 - [1.8][compiler] NPE in ConstraintTypeFormula.reduceSubType
* Bug 425153 - [1.8] Having wildcard allows incompatible types in a lambda expression
* Bug 425156 - [1.8] Lambda as an argument is flagged with incompatible error
* Bug 424403 - [1.8][compiler] Generic method call with method reference argument fails to resolve properly.
* Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
* Bug 428352 - [1.8][compiler] Resolution errors don't always surface
* Bug 446442 - [1.8] merge null annotations from super methods
* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 405104 - [1.8][compiler][codegen] Implement support for serializeable lambdas
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* wharley@bea.com - initial API and implementation
* (originally in org.eclipse.jdt.apt.core)
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* Bug 412149: [1.8][compiler] Emit repeated annotations into the designated container
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* Bug 407297: [1.8][compiler] Control generation of parameter names by option
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*     IBM Corporation - Bug fixes
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*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 429958 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
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*     Jesper Steen Moeller - Contribution for bug 406973 - [compiler] Parse MethodParameters attribute
*     Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*         Bug 407191 - [1.8] Binary access support for type annotations
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*    IBM Corporation - Fix for bug 328575
```

*   het@google.com - Bug 415274 - Annotation processing throws a NPE in getElementsAnnotatedWith()
***/

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*   Stephan Herrmann - Contribution for bug 295551
*   Jesper S Moller   - Contributions for
*   Bug 405066 - [1.8][compiler][codegen] Implement code generation infrastructure for JSR335
*   Frits Jalvingh   - contributions for bug 533830.
*   Red Hat Inc.   - add module-info Javadoc support
***/

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*   Stephan Herrmann - Contribution for
*   Bug 434602 - Possible error with inferred null annotations leading to contradictory null annotations
*   Bug 456497 - [1.8][null] during inference nullness from target type is lost against weaker hint from applicability analysis
*   Bug 456487 - [1.8][null] @Nullable type variant of @NonNull-constrained type parameter causes grief
*   Till Brychcy - Contribution for

```
*       Bug 473713
 - [1.8][null] Type mismatch: cannot convert from @NonNull A1 to @NonNull A1
*******************************************************************************/
/* Cache the derived type, tagging it as a derivative of both the key type and the naked type.
    E.g: int @NonNull [] would be tagged as a derived type of both int and int []. This is not
    needed for correctness, but for annotated object reuse. We provide two alternate ways to
    annotate a type:

    Taking parameterized types as an example, a call to getParamaterizedType can be made with annotations
    to create @NonNull List<@NonNull String> in one stroke. Or a parameterized type can be created first
    and then annotated via getAnnotatedType. In the former case, the tables get looked up with List as
    the key, in the latter with List<String> as the key.

    Binary vs source, substitutions, annotation re-attribution from SE7 locations etc trigger these
    alternate code paths. Unless care is exercised,
 we will end up with duplicate objects (that share
    the same TypeBinding.id => correctness is not an issue, but memory wastage is)
  */
```

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* Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
* Bug 415397 - [1.8][compiler] Type Annotations on wildcard type argument dropped
* Stephan Herrmann - Contribution for
* Bug 415043 - [1.8][null] Follow-up re null type annotations after bug 392099
* Bug 417295 - [1.8[[null] Massage type annotated null analysis to gel well with deep encoded type bindings.
* Bug 429958
 - [1.8][null] evaluate new DefaultLocation attribute of @NonNullByDefault
* Bug 440462 - [null][compiler]NPE in EJC for erroneous null annotations
* Bug 441693 - [1.8][null] Bogus warning for type argument annotated with @NonNull
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/SimpleSetOfCharArray.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/RecoveryScannerData.java
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* Contributors:
* IBM Corporation - initial API and implementation
* Tom Tromey - patch for readTable(String) as described in http://bugs.eclipse.org/bugs/show_bug.cgi?id=32196
* Stephan Herrmann - Contributions for
* bug 366003 - CCE in ASTNode.resolveAnnotations(ASTNode.java:639)
* bug 374605 - Unreasonable warning for enum-based switch statements
* bug 393719 - [compiler] inconsistent warnings on iteration variables
* bug 382353 - [1.8][compiler] Implementation property modifiers
 should be accepted on default methods.
* bug 383973 - [1.8][compiler] syntax recovery in the presence of default methods

* bug 401035 - [1.8] A few tests have started failing recently
* Jesper S Moller - Contributions for
* bug 382701 - [1.8][compiler] Implement semantic analysis of Lambda expressions & Reference expression
* bug 399695 - [1.8][compiler] [1.8][compiler] migrate parser to other syntax for default methods
* bug 384567 - [1.5][compiler] Compiler accepts illegal modifiers on package declaration
* bug 393192 - Incomplete type hierarchy with > 10 annotations
* bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
* Andy Clement - Contributions for
* Bug 383624 - [1.8][compiler] Revive code generation support for type annotations (from Olivier's work)
* Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
*
  Bug 415821 - [1.8][compiler] CLASS_EXTENDS target type annotation missing for anonymous classes
**********/

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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/Literal.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/parser/diagnose/LexStream.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/ast/NormalAnnotation.java
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* Contributors:
*    tyeung@bea.com - initial API and implementation
*    olivier_thomann@ca.ibm.com - add hashCode() and equals(..) methods
*******************************************************************************/
```

Found in path(s):
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/classfmt/ElementValuePairInfo.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/classfmt/AnnotationInfo.java
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*     Stephan Herrmann - Contribution for
*       Bug 400874 - [1.8][compiler] Inference infrastructure should evolve to meet JLS8 18.x (Part G of JSR335 spec)
*       Bug 429384 - [1.8][null] implement conformance rules for null-annotated lower / upper type bounds
*       Bug 441797 - [1.8] synchronize type annotations on capture and its wildcard
*       Bug 456497 - [1.8][null] during inference nullness from target type is lost against weaker
 hint from applicability analysis
*       Bug 456924 - StackOverflowError during compilation
```

```
*       Bug 462790 - [null] NPE in Expression.computeConversion()
*     Jesper S Møller - Contributions for bug 381345 : [1.8] Take care of the Java 8 major version
*       Bug 527554 - [18.3] Compiler support for JEP 286 Local-Variable Type
*******************************************************************************/
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* bug 319201 - [null] no warning when unboxing SingleNameReference causes NPE
* bug 403086 - [compiler][null] include the effect of 'assert' in syntactic null analysis for fields
* bug 403147 - [compiler][null] FUP of bug 400761: consolidate interaction between unboxing, NPE, and deferred checking
* Bug 422796 - [compiler][null] boxed boolean reported as potentially null after
null test in lazy disjunction
**********/

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* Stephan Herrmann - Contributions for
* bug 325755 - [compiler] wrong initialization state after conditional expression
* bug 320170 - [compiler] [null] Whitebox issues in null analysis
* bug 292478 - Report potentially null across variable assignment
* bug 332637 - Dead Code detection removing code that isn't dead
* bug 341499 - [compiler][null] allocate extra bits in all methods of UnconditionalFlowInfo
* bug 349326 - [1.7] new warning for missing try-with-resources
* bug 345305 - [compiler][null] Compiler misidentifies a case of "variable can only be null"
* bug 386181 - [compiler][null] wrong transition in UnconditionalFlowInfo.mergedWith()
* bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
* Bug 453483 - [compiler][null][loop] Improve null analysis for loops
* Bug 454031 - [compiler][null][loop] bug in null analysis; wrong "dead code" detection
* Bug 421035 - [resource] False alarm of resource leak warning when casting a closeable in its assignment

```
*******************************************************************************/

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*     Stephan Herrmann <stephan@cs.tu-berlin.de> - Contribution for bug 185682 - Increment/decrement operators
mark local variables as read
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*          bug 292478 - Report potentially null across variable assignment
*          bug 332637 - Dead Code detection removing code that isn't dead
*       bug 394768 - [compiler][resource] Incorrect resource leak warning when creating stream in conditional
*       Bug 411964 - [1.8][null] leverage null type annotation in foreach statement
*       Bug 421035 - [resource]
 False alarm of resource leak warning when casting a closeable in its assignment
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*       bug 395002 - Self bound generic class doesn't resolve bounds properly for wildcards for certain parametrisation.
*       bug 331649 - [compiler][null] consider null annotations for fields
*       bug 400761 - [compiler][null] null may be return as boolean without a diagnostic
*       Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
 *       Bug 429403 - [1.8][null] null mismatch from type arguments is not reported at field initializer
*       Bug 453483 - [compiler][null][loop] Improve null analysis for loops
*       Bug 458396 - NPE in CodeStream.invoke()
*       Andy Clement (GoPivotal, Inc) aclement@gopivotal.com - Contributions for
*       Bug 409250 - [1.8][compiler] Various loose ends in 308 code generation
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* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/util/Messages.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/batch/FileFinder.java
* /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/MemberTypeBinding.java
*
 /ecj-3-26-0-sources-jar/org/eclipse/jdt/internal/compiler/lookup/SourceTypeCollisionException.java
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*   Bug 427438 - [1.8][compiler] NPE at
org.eclipse.jdt.internal.compiler.ast.ConditionalExpression.generateCode(ConditionalExpression.java:280)
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```
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*******************************************************************************/
```

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1.3238 abseil-cpp-die-if-null 20240722.0-r0

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  * Optimize Java serialization code when writing a small message to a stream.
  * Optimize Java serialization of strings so that UTF-8 encoding happens only
    once per string per serialization call.
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  * Added atomicops for AIX (POWER)
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  * Provide a type alias field ValueType
on EnumTypeWrapper
  * Match service argument names to abstract interface

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1.3274 abseil-cpp-random-internal-randen-slow 20240722.0-r0

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  * gzip/zlib I/O support.
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    all fields (only present with certain compiler settings).

* Added generation of field number constants.
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* Small patch improving performance of in Python serialization.
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* HPUX support.
Oliver Jowett <oliver.jowett@gmail.com>
* Detect whether zlib is new enough in configure script.
* Fixes for Solaris 10 32/64-bit confusion.
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* Optimize Java serialization code when writing a small message to a stream.
* Optimize Java serialization of strings so that UTF-8 encoding happens only once per string per serialization call.
* Clean up some Java warnings.
* Fix bug with permanent callbacks that delete themselves when run.
Michael Kucharski <m.kucharski@gmail.com>
* Added CodedInputStream.getTotalBytesRead().
Kacper Kowalik <xarthisius.kk@gmail.com>
* Fixed m4/acx_pthread.m4 problem for some Linux distributions.
William Orr <will@worrbase.com>
* Fixed detection of sched_yield on Solaris.
* Added atomicops for Solaris
Andrew Paprocki <andrew@ishiboo.com>
* Fixed minor IBM xlC compiler build issues
* Added atomicops for AIX (POWER)
Nipunn Koorapati <nipunn1313@gmail.com>
* Provide a type alias field ValueType
on EnumTypeWrapper
* Match service argument names to abstract interface

1.3290 abseil-cpp-random-internal-randen-hwaes-impl 20240722.0-r0

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  * Fixes for Solaris 10 32/64-bit confusion.
Evan Jones <evanj@mit.edu>
  * Optimize Java serialization code when writing a small message to a stream.
  * Optimize Java serialization of strings so that UTF-8 encoding happens only
    once per string per serialization call.

* Clean up some Java warnings.
* Fix bug with permanent callbacks that delete themselves when run.
Michael Kucharski <m.kucharski@gmail.com>
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Kacper Kowalik <xarthisius.kk@gmail.com>
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William Orr <will@worrbase.com>
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* Added atomicops for Solaris
Andrew Paprocki <andrew@ishiboo.com>
* Fixed minor IBM xlC compiler build issues
* Added atomicops for AIX (POWER)
Nipunn Koorapati <nipunn1313@gmail.com>
* Provide a type alias field ValueType
on EnumTypeWrapper
* Match service argument names to abstract interface

1.3302 abseil-cpp-cord-internal 20240722.0-r0

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1.3308 libffi v3.4.2

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// +build go1.18

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package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-

```
manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil
 {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx,
 nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID:
to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx,
 "myResourceGroup", "{licenseName}", armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
```

```
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows. Please
 pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //
  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would
```

```
 look as follows. Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //
   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}
```

```
// Generated from example
 definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response
 code is 200 as defined in example definition, your page structure would look as follows. Please pay attention that all
the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //
     Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
```

```
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-
preview/examples/license/License_ListBySubscription.json
func ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More()
 {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //
```

```
    AssignedLicenses: to.Ptr[int32](8),
 //     Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //     ImmutableID: to.Ptr("<generated Guid>"),
 //     Processors: to.Ptr[int32](6),
 //     State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //     Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //    },
 //    LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //    TenantID: to.Ptr("{tenandId}"),
 //   },
 // }},
 // }
 }
}
```

aztemplate

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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
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package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
```

```
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:              newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
```

```
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
  newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport instead.
type LicensesServerTransport struct {
 srv                     *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate
                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method, ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case
 "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
```

```
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
```

```
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if
 !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }
```

```
 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake
 for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if
 !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
```

```
 resp, err := server.MarshalResponseAsJSON(respContent, server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches :=
 regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values
 are http.StatusOK", resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
```

```
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request) (*http.Response, error)
{
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req,
 newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if
 beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
```

```
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr,
 req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}
//go:build go1.18
// +build go1.18

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```

```
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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
```

```
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
```

```
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
```

```
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}
```

```
// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
```

```
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
```

```
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-03-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
```

```
  resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
   return client.listBySubscriptionCreateRequest(ctx, options)
  }, nil)
  if err != nil {
   return LicensesClientListBySubscriptionResponse{}, err
  }
  return client.listBySubscriptionHandleResponse(resp)
 },
 Tracer: client.internal.Tracer(),
})
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
```

```
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
```

```
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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Microsoft Corporation
One Microsoft Way
Redmond, WA 98052
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1.3310 nopt 8.1.0

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1.3311 platforms 1.0.0-rc.1

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1.3312 ttrpc 1.2.7

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1.3313 cachecontrol 0.12.10

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Metadata-Version: 2.1
Name: CacheControl
Version: 0.12.10
Summary: httplib2 caching for requests
Home-page: https://github.com/ionrock/cachecontrol
Author: Eric Larson
Author-email: eric@ionrock.org
License: UNKNOWN
Description: ..
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==========
CacheControl
==========

.. image:: https://img.shields.io/pypi/v/cachecontrol.svg
:target: https://pypi.python.org/pypi/cachecontrol
:alt: Latest Version

.. image:: https://travis-ci.org/ionrock/cachecontrol.png?branch=master
:target: https://travis-ci.org/ionrock/cachecontrol

CacheControl is a port of the caching algorithms in httplib2_ for use with
requests_ session object.

It was written because httplib2's
better support for caching is often
mitigated by its lack of thread safety. The same is true of requests in
terms of caching.

Quickstart
==========

.. code-block:: python

import requests

from cachecontrol import CacheControl

```
sess = requests.session()
cached_sess = CacheControl(sess)

response = cached_sess.get('http://google.com')
```

If the URL contains any caching based headers, it will cache the
result in a simple dictionary.

For more info, check out the docs_

.. _docs: http://cachecontrol.readthedocs.org/en/latest/
.. _httplib2: https://github.com/httplib2/httplib2
.. _requests: http://docs.python-requests.org/

Keywords: requests http caching web
Platform: UNKNOWN
Classifier: Development Status :: 4 - Beta
Classifier: Environment :: Web
Environment
Classifier: License :: OSI Approved :: Apache Software License
Classifier: Operating System :: OS Independent
Classifier: Programming Language :: Python :: 3.6
Classifier: Programming Language :: Python :: 3.7
Classifier: Programming Language :: Python :: 3.8
Classifier: Programming Language :: Python :: 3.9
Classifier: Programming Language :: Python :: 3.10
Classifier: Topic :: Internet :: WWW/HTTP
Requires-Python: >=3.6
Provides-Extra: redis
Provides-Extra: filecache

Found in path(s):
* /cachecontrol-0-12-10-1-tar-gz/CacheControl-0.12.10/CacheControl.egg-info/PKG-INFO
* /cachecontrol-0-12-10-1-tar-gz/CacheControl-0.12.10/PKG-INFO

1.3314 jboss-logging 3.3.2.Final

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1.3315 jetty-util 9.4.53.v20231009

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The following artifacts are EPL.
* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

The following artifacts are CDDL + GPLv2 with classpath exception.
https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
 * javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following
artifacts may be included in the distribution or downloaded when ALPN
module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications
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http://openjdk.java.net/legal/gplv2+ce.html

OW2

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org.ow2.asm:asm-commons
org.ow2.asm:asm

Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed.

org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api
org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

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The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies.

1.3316 jetty-servlets 9.4.53.v20231009

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* org.eclipse.jetty.orbit:javax.mail.glassfish

Oracle

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https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

* javax.servlet:javax.servlet-api
* javax.annotation:javax.annotation-api
* javax.transaction:javax.transaction-api
* javax.websocket:javax.websocket-api

Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.

* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.
http://openjdk.java.net/legal/gplv2+ce.html

OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html

org.ow2.asm:asm-commons
org.ow2.asm:asm

Apache

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org.apache.taglibs:taglibs-standard-spec
org.apache.taglibs:taglibs-standard-impl

MortBay

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org.mortbay.jasper:apache-jsp
org.apache.tomcat:tomcat-jasper
org.apache.tomcat:tomcat-juli
org.apache.tomcat:tomcat-jsp-api
org.apache.tomcat:tomcat-el-api
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-api

org.apache.tomcat:tomcat-util-scan
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el
org.apache.tomcat:tomcat-jasper-el
org.apache.tomcat:tomcat-el-api

Mortbay

The following artifacts are CDDL + GPLv2 with classpath exception.

https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html

org.eclipse.jetty.toolchain:jetty-schemas

Assorted

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OW2

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org.ow2.asm:asm-commons
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org.apache.taglibs:taglibs-standard-spec
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org.mortbay.jasper:apache-jsp
 org.apache.tomcat:tomcat-jasper
 org.apache.tomcat:tomcat-juli
 org.apache.tomcat:tomcat-jsp-api
 org.apache.tomcat:tomcat-el-api
 org.apache.tomcat:tomcat-jasper-el
 org.apache.tomcat:tomcat-api
 org.apache.tomcat:tomcat-util-scan
 org.apache.tomcat:tomcat-util

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 org.apache.tomcat:tomcat-jasper-el
 org.apache.tomcat:tomcat-el-api

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org.eclipse.jetty.toolchain:jetty-schemas

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1.3318 jetty-security 9.4.53.v20231009

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 * javax.annotation:javax.annotation-api
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* java.sun.security.ssl

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org.eclipse.jetty.toolchain:jetty-schemas

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1.3319 gosqlite 1.14.24

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1.3320 jakarta xml bind api 2.3.2

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* https://github.com/eclipse-ee4j/jaxb-api

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1.3321 xfsprogs 5.13.0-1ubuntu2.1

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1.3322 aws-sdk-go 1.55.6

1.3322.1 Available under license :

{
 "version": "2.0",
 "service": " With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances. ",
 "operations": {
   "AssociateUser": " Associates the user to an EC2 instance to utilize user-based subscriptions. <note> Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your monthly charges in the Amazon Web Services Billing User Guide. </note>",
   "DeregisterIdentityProvider": " Deregisters the identity provider from providing user-based subscriptions. ",
   "DisassociateUser": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
   "ListIdentityProviders":
 " Lists the identity providers for user-based subscriptions. ",
   "ListInstances": " Lists the EC2 instances providing user-based subscriptions. ",
   "ListProductSubscriptions": " Lists the user-based subscription products available from an identity provider. ",
   "ListUserAssociations": " Lists user associations for an identity provider. ",
   "RegisterIdentityProvider": " Registers an identity provider for user-based subscriptions. ",

"StartProductSubscription": " Starts a product subscription for a user with the specified identity provider. <note> Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your monthly charges in the Amazon Web Services Billing User Guide. </note>",
"StopProductSubscription": " Stops a product subscription for a user with the specified identity provider. ",
"UpdateIdentityProviderSettings": " Updates additional product configuration settings for the registered identity provider. "
},
"shapes": {
"AccessDeniedException": {
"base": " You don't have sufficient access to perform this action. ",
"refs": {
}
},
"ActiveDirectoryIdentityProvider": {
"base": " Details about an Active Directory identity provider. ",
"refs": {
"IdentityProvider$ActiveDirectoryIdentityProvider": " An object that details an Active Directory identity provider. "
}
},
"AssociateUserRequest": {
"base": null,
"refs": {
}
},
"AssociateUserResponse": {
"base": null,
"refs": {
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListIdentityProvidersRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListInstancesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListProductSubscriptionsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUserAssociationsRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"ConflictException": {
"base": " The request couldn't be completed because it conflicted with the current state of the resource. ",
"refs": {

}
},
"DeregisterIdentityProviderRequest": {
"base": null,
"refs": {
}
},
"DeregisterIdentityProviderResponse": {
"base": null,
"refs": {
}
},
"DisassociateUserRequest": {
"base": null,
"refs": {
}
},
"DisassociateUserResponse": {
"base": null,
"refs": {
}
},
"Filter": {
"base": " A
filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
"refs": {
"FilterList$member": null
}
},
"FilterList": {
"base": null,
"refs": {
"ListInstancesRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
"ListProductSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
"ListUserAssociationsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. "
}
},
"IdentityProvider": {
"base": " Details about an identity provider. ",
"refs": {
"AssociateUserRequest$IdentityProvider": " The identity provider of the user. ",
"DeregisterIdentityProviderRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"DisassociateUserRequest$IdentityProvider": " An object that specifies details for the identity

provider. ",
"IdentityProviderSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"InstanceUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"ListProductSubscriptionsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"ListUserAssociationsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"ProductUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"RegisterIdentityProviderRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"StartProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"StopProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"UpdateIdentityProviderSettingsRequest$IdentityProvider": null
}
},
"IdentityProviderSummary": {
"base": " Describes an identity provider. ",
"refs": {
"DeregisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"IdentityProviderSummaryList$member": null,
"RegisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"UpdateIdentityProviderSettingsResponse$IdentityProviderSummary": null

}
},
"IdentityProviderSummaryList": {
"base": null,
"refs": {
"ListIdentityProvidersResponse$IdentityProviderSummaries": " Metadata that describes the list identity providers operation. "
}
},
"InstanceSummary": {
"base": " Describes an EC2 instance providing user-based subscriptions. ",
"refs": {
"InstanceSummaryList$member": null
}
},
"InstanceSummaryList": {
"base": null,
"refs": {
"ListInstancesResponse$InstanceSummaries": " Metadata that describes the list instances operation. "
}

},
"InstanceUserSummary": {
"base": " Describes users of an EC2 instance providing user-based subscriptions. ",
"refs": {
"AssociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",
"DisassociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",

"InstanceUserSummaryList$member": null
}
},
"InstanceUserSummaryList": {
"base": null,
"refs": {
"ListUserAssociationsResponse$InstanceUserSummaries": " Metadata that describes the list user association operation. "
}
},
"InternalServerException": {
"base": " An exception occurred with the service. ",
"refs": {
}
},
"ListIdentityProvidersRequest": {
"base": null,
"refs": {
}
},
"ListIdentityProvidersResponse": {
"base": null,
"refs": {
}
},
"ListInstancesRequest": {
"base": null,
"refs": {
}
},
"ListInstancesResponse": {
"base": null,
"refs": {
}
},
"ListProductSubscriptionsRequest": {
"base": null,
"refs": {
}

},
"ListProductSubscriptionsResponse": {
"base": null,
"refs": {
}
},
"ListUserAssociationsRequest": {
"base": null,
"refs": {
}
},
"ListUserAssociationsResponse": {
"base": null,
"refs": {
}
},
"ProductUserSummary": {
"base": " The summary of the user-based subscription products for a user. ",
"refs": {
"ProductUserSummaryList$member": null,
"StartProductSubscriptionResponse$ProductUserSummary": " Metadata that describes the start product subscription operation. ",
"StopProductSubscriptionResponse$ProductUserSummary": " Metadata that describes the start product subscription operation. "
}
},
"ProductUserSummaryList": {
"base": null,
"refs": {
"ListProductSubscriptionsResponse$ProductUserSummaries": " Metadata that describes the list product subscriptions operation. "
}
},
"RegisterIdentityProviderRequest": {
"base": null,
"refs": {
}
},
"RegisterIdentityProviderResponse": {
"base": null,
"refs": {
}
},
"ResourceNotFoundException":
{
"base": " The resource couldn't be found. ",
"refs": {
}

},
"SecurityGroup": {
"base": null,
"refs": {
"Settings$SecurityGroupId": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoint for activation servers. ",
"UpdateSettings$SecurityGroupId": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for activation servers. "
}
},
"ServiceQuotaExceededException": {
"base": " The request failed because a service quota is exceeded. ",
"refs": {
}
},
"Settings": {
"base": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication
from resources in the VPC. ",
"refs": {
"IdentityProviderSummary$Settings": " An object that details the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. ",
"RegisterIdentityProviderRequest$Settings": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. "
}
},
"SettingsSubnetsList": {
"base": null,
"refs": {
"Settings$Subnets": " The subnets defined for the registered identity provider. "
}
},
"StartProductSubscriptionRequest": {
"base": null,
"refs": {
}
},
"StartProductSubscriptionResponse": {
"base": null,
"refs": {
}
},
"StopProductSubscriptionRequest": {
"base": null,
"refs": {
}
},

"StopProductSubscriptionResponse": {
"base": null,
"refs": {
}
},
"String":
{
"base": null,
"refs": {
"AccessDeniedException$message": null,
"ActiveDirectoryIdentityProvider$DirectoryId": " The directory ID for an Active Directory identity provider. ",
"AssociateUserRequest$Domain": " The domain name of the user. ",
"AssociateUserRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"AssociateUserRequest$Username": " The user name from the identity provider for the user. ",
"ConflictException$message": null,
"DeregisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
"DisassociateUserRequest$Domain": " The domain name of the user. ",
"DisassociateUserRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"DisassociateUserRequest$Username": " The user name from the identity provider for the user. ",

"Filter$Attribute": " The name of an attribute to use as a filter. ",
"Filter$Operation": " The type of search (For example, eq, geq, leq) ",
"Filter$Value": " Value of the filter. ",
"IdentityProviderSummary$FailureMessage": " The failure message associated with an identity provider. ",
"IdentityProviderSummary$Product": " The name of the user-based subscription product. ",
"IdentityProviderSummary$Status": " The status of an identity provider. ",
"InstanceSummary$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"InstanceSummary$LastStatusCheckDate": " The date of the last status check. ",
"InstanceSummary$Status": " The status of an EC2 instance resource. ",
"InstanceSummary$StatusMessage": " The status message for an EC2 instance. ",
"InstanceUserSummary$AssociationDate": " The date a user was associated with an EC2 instance. ",
"InstanceUserSummary$DisassociationDate": " The date a user was disassociated from an EC2 instance. ",
"InstanceUserSummary$Domain": " The domain name of the user. ",
"InstanceUserSummary$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"InstanceUserSummary$Status": " The status of a user associated with an EC2 instance. ",
"InstanceUserSummary$StatusMessage": " The status message for users of an EC2 instance. ",
"InstanceUserSummary$Username": " The user name from the identity provider for the user. ",
"InternalServerException$message": null,
"ListIdentityProvidersRequest$NextToken": " Token for the next set of results. ",
"ListIdentityProvidersResponse$NextToken": " Token for the next set of results. ",

"ListInstancesRequest$NextToken": " Token for the next set of results. ",
"ListInstancesResponse$NextToken":
" Token for the next set of results. ",
"ListProductSubscriptionsRequest$NextToken": " Token for the next set of results. ",
"ListProductSubscriptionsRequest$Product": " The name of the user-based subscription product. ",
"ListProductSubscriptionsResponse$NextToken": " Token for the next set of results. ",
"ListUserAssociationsRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"ListUserAssociationsRequest$NextToken": " Token for the next set of results. ",
"ListUserAssociationsResponse$NextToken": " Token for the next set of results. ",
"ProductUserSummary$Domain": " The domain name of the user. ",
"ProductUserSummary$Product": " The name of the user-based subscription product. ",
"ProductUserSummary$Status": " The status of a product for a user. ",
"ProductUserSummary$StatusMessage": " The status
message for a product for a user. ",
"ProductUserSummary$SubscriptionEndDate": " The end date of a subscription. ",
"ProductUserSummary$SubscriptionStartDate": " The start date of a subscription. ",
"ProductUserSummary$Username": " The user name from the identity provider of the user. ",
"RegisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
"ResourceNotFoundException$message": null,
"ServiceQuotaExceededException$message": null,
"StartProductSubscriptionRequest$Domain": " The domain name of the user. ",
"StartProductSubscriptionRequest$Product": " The name of the user-based subscription product. ",
"StartProductSubscriptionRequest$Username": " The user name from the identity provider of the user. ",
"StopProductSubscriptionRequest$Domain": " The domain name of the user. ",
"StopProductSubscriptionRequest$Product":
" The name of the user-based subscription product. ",
"StopProductSubscriptionRequest$Username": " The user name from the identity provider for the user. ",
"StringList$member": null,
"ThrottlingException$message": null,
"UpdateIdentityProviderSettingsRequest$Product": " The name of the user-based subscription product. ",
"ValidationException$message": null
}
},
"StringList": {
"base": null,
"refs": {
"InstanceSummary$Products": " A list of provided user-based subscription products. "
}
},
"Subnet": {
"base": null,
"refs": {
"SettingsSubnetsList$member": null,
"Subnets$member": null
}

},
"Subnets": {
"base": null,
"refs": {
"UpdateSettings$AddSubnets": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that require connectivity to activation servers. ",
"UpdateSettings$RemoveSubnets": " The ID of one or more subnets to remove. "
}
},
"ThrottlingException": {
"base": " The request was denied because of request throttling. Retry the request. ",
"refs": {
}
},
"UpdateIdentityProviderSettingsRequest": {
"base": null,
"refs": {
}
},
"UpdateIdentityProviderSettingsResponse": {
"base": null,
"refs": {
}
},
"UpdateSettings": {
"base": " Updates the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. ",
"refs": {
"UpdateIdentityProviderSettingsRequest$UpdateSettings": " Updates the registered identity providers product related configuration settings. You can update any combination of settings in a single operation such as the: <ul> Subnets which you want to add to provision VPC endpoints.   Subnets which you want to remove the VPC endpoints from.   Security group ID which permits traffic to the VPC endpoints. "
}
},
"ValidationException": {
"base": " A parameter is not valid. ",
"refs": {
}
}
}
}
{
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",

"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {

"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "aws.partition",
"argv": [
{
"ref": "Region"
}
],
"assign": "PartitionResult"
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [

```
            {
                "ref": "Endpoint"
            }
        ]
    },
    {
        "fn": "parseURL",

      "argv": [
            {
                "ref": "Endpoint"
            }
        ],
        "assign": "url"
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
     },
    {
        "conditions": [],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
```

```
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },

        {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
  ]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]

},
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
```

```
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {
                        "ref": "PartitionResult"

        },
                      "supportsFIPS"
                    ]
                  }
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {
                        "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]
                  }
                ]
              }

            ],
              "type": "tree",
              "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ]
            },
            {
              "conditions": [],
              "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
```

```
                "type": "error"
            }
        ]
    },

{
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
```

```
            }
        ]
    },
    {

"conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
  ]
},
{
  "conditions": [
    {
        "fn": "booleanEquals",
        "argv": [
            {
                "ref": "UseDualStack"
            },
            true
        ]
    }
  ],
  "type": "tree",
  "rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,

{
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
```

"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},

"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
}
{
"version": "2.0",
"service": " With License Manager, you can discover and track your commercial Linux subscriptions on running Amazon EC2 instances. ",
"operations": {
"DeregisterSubscriptionProvider": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions registered to your account. ",
"GetRegisteredSubscriptionProvider": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"GetServiceSettings": " Lists the Linux subscriptions service settings for your account. ",
"ListLinuxSubscriptionInstances": " Lists the running Amazon EC2 instances that were discovered with commercial Linux subscriptions. ",
"ListLinuxSubscriptions": " Lists the Linux subscriptions that have been discovered. If you have linked your organization, the returned results will include data aggregated across your accounts in Organizations. ",
"ListRegisteredSubscriptionProviders":
" List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"ListTagsForResource": " List the metadata tags that are assigned to the specified Amazon Web Services

resource. ",
"RegisterSubscriptionProvider": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"TagResource": " Add metadata tags to the specified Amazon Web Services resource. ",
"UntagResource": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"UpdateServiceSettings": " Updates the service settings for Linux subscriptions. "
},
"shapes": {
"Boolean": {
"base": null,
"refs": {
"UpdateServiceSettingsRequest$AllowUpdate": " Describes if updates are allowed to the service settings for Linux subscriptions. If you allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesRequest$MaxResults": " The maximum items to return in a request. ",
"ListLinuxSubscriptionsRequest$MaxResults": " The maximum items to return in a request. "
}
},
"BoxLong": {
"base": null,
"refs": {
"Subscription$InstanceCount": " The total amount of running instances using this subscription. "
}
},
"DeregisterSubscriptionProviderRequest": {
"base": null,
"refs": {
}
},
"DeregisterSubscriptionProviderResponse": {
"base": null,
"refs": {
}
},
"Filter": {
"base": " A filter object that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria. ",
"refs": {
"FilterList$member": null
}
},
"FilterList": {

"base": null,
"refs": {

"ListLinuxSubscriptionInstancesRequest$Filters": " An array of structures that you can use to filter the results by your specified criteria. For example, you can specify <code>Region</code> in the <code>Name</code>, with the <code>contains</code> operator to list all subscriptions that match a partial string in the <code>Value</code>, such as <code>us-west</code>. For each filter, you can specify one of the following values for the <code>Name</code> key to streamline results: <ul> <code>AccountID</code>   <code>AmiID</code>   <code>DualSubscription</code>   <code>InstanceID</code>   <code>InstanceType</code>   <code>ProductCode</code>   <code>Region</code>   <code>Status</code>   <code>UsageOperation</code>   For each filter, you can use one of the following <code>Operator</code> values to define the behavior of the filter: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> ",
"ListLinuxSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of <code>Subscription</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain subscription's name. The valid names for this filter are: <ul> <code>Subscription</code>   The valid Operators for this filter are: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> "
}
},
"GetRegisteredSubscriptionProviderRequest": {
"base": null,
"refs": {
}
},
"GetRegisteredSubscriptionProviderResponse": {
"base": null,
"refs": {
}
},
"GetServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"GetServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"Instance": {
"base": " Details discovered information about a running instance using Linux subscriptions. ",
"refs": {
"InstanceList$member": null

```
    }
  },
  "InstanceList": {
    "base": null,
    "refs": {
      "ListLinuxSubscriptionInstancesResponse$Instances": "<p>An array that contains instance objects.</p>"
    }
  },
  "InternalServerException": {
    "base": "<p>An exception occurred with the service.</p>",
    "refs": {
    }
  },
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      "UpdateServiceSettingsRequest$LinuxSubscriptionsDiscovery":
 "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
      "UpdateServiceSettingsResponse$LinuxSubscriptionsDiscovery": "<p>Lists if discovery has been enabled for
Linux subscriptions.</p>"
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    "refs": {
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      "UpdateServiceSettingsRequest$LinuxSubscriptionsDiscoverySettings": "<p>The settings defined for Linux
subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data
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      "UpdateServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": "<p>The settings defined
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Regions data will be aggregated from.</p>"
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    "refs": {
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"OrganizationIntegration": {
"base": null,
"refs": {
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"ProductCodeList": {
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"Instance$ProductCode": " The product code for the instance. For more information, see Usage operation values in the License Manager User Guide . "
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"RegisterSubscriptionProviderRequest": {
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"RegisterSubscriptionProviderResponse": {
"base": null,
"refs": {
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"refs": {
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"RegisterSubscriptionProviderRequest$SecretArn": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For RHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains your Red Hat Offline token. ",
"RegisteredSubscriptionProvider$SecretArn": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider access token. For RHEL account subscriptions, this is the offline token. "
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"UpdateServiceSettingsResponse$Status": " Indicates the status of Linux subscriptions settings being applied. "
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"GetRegisteredSubscriptionProviderResponse$LastSuccessfulDataRetrievalTime": " The timestamp from the last time License Manager retrieved subscription details from your registered third-party Linux subscription provider. ",
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderStatusMessage": " The detailed message from your subscription provider token status. ",
"Instance$AccountID": " The account ID which owns the instance. ",
"Instance$AmiId": " The AMI ID used to launch the instance. ",
"Instance$DualSubscription": " Indicates that you have two different license subscriptions for the same software on your instance. ",
"Instance$InstanceID": " The instance ID of the resource. ",
"Instance$InstanceType": " The instance type of the resource. ",

"Instance$LastUpdatedTime": " The time in which the last discovery updated the instance details. ",
"Instance$OsVersion":
" The operating system software version that runs on your instance. ",
"Instance$Region": " The Region the instance is running in. ",
"Instance$RegisteredWithSubscriptionProvider": " Indicates that your instance uses a BYOL license subscription from a third-party Linux subscription provider that you've registered with License Manager. ",
"Instance$Status": " The status of the instance. ",
"Instance$SubscriptionName": " The name of the license subscription that the instance uses. ",
"Instance$SubscriptionProviderCreateTime": " The timestamp when you registered the third-party Linux subscription provider for the subscription that the instance uses. ",
"Instance$SubscriptionProviderUpdateTime": " The timestamp from the last time that the instance synced with the registered third-party Linux subscription provider. ",
"Instance$UsageOperation": " The usage operation of the instance. For more information,
see For more information, see Usage operation values in the License Manager User Guide. ",
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"ListLinuxSubscriptionsResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
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"RegisteredSubscriptionProvider$LastSuccessfulDataRetrievalTime": " The timestamp from the last time that License Manager accessed third-party subscription data for your account from your registered Linux subscription provider. ",
"RegisteredSubscriptionProvider$SubscriptionProviderStatusMessage": " A detailed message that's associated with your BYOL subscription provider token status. ",
"ResourceNotFoundException$message":
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"StringMap$value": null,
"Subscription$Name": " The name of the subscription. ",
"Subscription$Type": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. ",
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"Tags$value": null,
"ThrottlingException$message": null,
"ValidationException$message": null
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"GetServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. ",
"LinuxSubscriptionsDiscoverySettings$SourceRegions": " The Regions in which to discover data for Linux subscriptions. ",
"UpdateServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. "
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"UpdateServiceSettingsResponse$StatusMessage": " A message which details the Linux subscriptions service settings current status. "
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"GetRegisteredSubscriptionProviderRequest$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderArn": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. ",
"ListTagsForResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"RegisteredSubscriptionProvider$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. ",
"TagResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified metadata tags. ",
"UntagResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. "
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"RegisterSubscriptionProviderRequest$SubscriptionProviderSource": " The supported Linux subscription provider to register. ",
"RegisterSubscriptionProviderResponse$SubscriptionProviderSource": " The Linux subscription provider that you registered. ",
"RegisteredSubscriptionProvider$SubscriptionProviderSource": " A supported third-party Linux subscription provider. License
Manager currently supports Red Hat subscriptions. ",
"SubscriptionProviderSourceList$member": null
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"SubscriptionProviderSourceList": {
"base": null,
"refs": {
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"SubscriptionProviderStatus": {
"base": null,
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"RegisterSubscriptionProviderResponse$SubscriptionProviderStatus": " Indicates the status of the registration action for the Linux subscription provider that you requested. ",
"RegisteredSubscriptionProvider$SubscriptionProviderStatus": " Indicates the status of your registered Linux subscription provider access

token from the last time License Manager retrieved subscription data. For RHEL account subscriptions, this is the status of the offline token. "
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      "RegisterSubscriptionProviderRequest$Tags": " The metadata tags to assign to your registered Linux subscription provider resource. ",
      "TagResourceRequest$tags": " The metadata tags to assign to the Amazon Web Services resource. Tags are formatted as key value pairs. "
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"refs": {
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"ValidationException": {
"base": " The provided input is not valid. Try your request again. ",
"refs": {
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AWS SDK for Go

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        "Region": "eu-west-3",
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  "serviceId":"License Manager",
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]
},
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{"shape":"RedirectException"},
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{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
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{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
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]
},
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  {"shape":"RedirectException"},
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  {"shape":"AccessDeniedException"},
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  "requestUri":"/"
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 "errors":[
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  {"shape":"ServerInternalException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"}
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  "requestUri":"/"
 },
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  "errors":[
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  {"shape":"InvalidParameterValueException"},
  {"shape":"ResourceLimitExceededException"},

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{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
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"output":{"shape":"DeleteTokenResponse"},
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{"shape":"RedirectException"}
]
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"http":{
"method":"POST",
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},
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{"shape":"RateLimitExceededException"},
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"GetAccessToken":{
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      {"shape":"AuthorizationException"},
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{"shape":"RateLimitExceededException"},
      {"shape":"ServerInternalException"}
    ]
  },
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    "http":{
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    "output":{"shape":"GetGrantResponse"},
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      {"shape":"ResourceLimitExceededException"},
      {"shape":"ServerInternalException"},
      {"shape":"AuthorizationException"},
      {"shape":"AccessDeniedException"},
      {"shape":"RateLimitExceededException"}
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      "requestUri":"/"
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    "output":{"shape":"GetLicenseResponse"},
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      {"shape":"AuthorizationException"},
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      {"shape":"RateLimitExceededException"},
      {"shape":"ServerInternalException"}
    ]
  },
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
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},
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"requestUri":"/"
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"output":{"shape":"GetLicenseConversionTaskResponse"},
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{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
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{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
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{"shape":"ResourceNotFoundException"}

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  ]
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  "output":{"shape":"GetLicenseUsageResponse"},
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    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"GetServiceSettings":{
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  "output":{"shape":"GetServiceSettingsResponse"},
  "errors":[
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    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
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  "output":{"shape":"ListAssociationsForLicenseConfigurationResponse"},
  "errors":[
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    {"shape":"FilterLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
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{"shape":"RateLimitExceededException"}
]
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{"shape":"AccessDeniedException"},
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
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"output":{"shape":"ListLicenseConfigurationsResponse"},
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{"shape":"ServerInternalException"},

{"shape":"FilterLimitExceededException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
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"output":{"shape":"ListLicenseConversionTasksResponse"},
"errors":[
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
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{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
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"output":{"shape":"ListLicenseSpecificationsForResourceResponse"},
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
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},
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"output":{"shape":"ListLicenseVersionsResponse"},
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{"shape":"AccessDeniedException"},
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    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
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    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
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    {"shape":"AuthorizationException"},
     {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
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},
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{"shape":"AccessDeniedException"},
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]
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"output":{"shape":"ListResourceInventoryResponse"},
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{"shape":"FilterLimitExceededException"},
{"shape":"FailedDependencyException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
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{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
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{"shape":"AccessDeniedException"},
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{"shape":"RateLimitExceededException"}
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"output":{"shape":"UntagResourceResponse"},
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{"shape":"AccessDeniedException"},
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"output":{"shape":"UpdateLicenseConfigurationResponse"},
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{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"}
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"},
{"shape":"ResourceLimitExceededException"}
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
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    "output":{"shape":"UpdateServiceSettingsResponse"},
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      {"shape":"RateLimitExceededException"}
     ]
  }
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    "required":["GrantArn"],
    "members":{
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    }
  },
  "AcceptGrantResponse":{
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    "members":{
      "GrantArn":{"shape":"Arn"},
      "Status":{"shape":"GrantStatus"},
      "Version":{"shape":"String"}
    }
  },
  "AccessDeniedException":{
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    "members":{
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    "exception":true
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  "ActivationOverrideBehavior":{
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    "enum":[
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      "ALL_GRANTS_PERMITTED_BY_ISSUER"
    ]
  },
  "AllowedOperation":{
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"CreateGrant",
"CheckoutLicense",
"CheckoutBorrowLicense",
"CheckInLicense",
"ExtendConsumptionLicense",
"ListPurchasedLicenses",
"CreateToken"
]
},
"AllowedOperationList":{
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"min":1
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"Arn":{
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"max":2048,
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"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"AutomatedDiscoveryInformation":{
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"members":{
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"MaxTimeToLiveInMinutes"
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"MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
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"BoxInteger":{"type":"integer"},
"BoxLong":{"type":"long"},
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"required":["LicenseConsumptionToken"],
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"LicenseConsumptionToken":{"shape":"String"},
"Beneficiary":{"shape":"String"}
}
},
"CheckInLicenseResponse":{
"type":"structure",
"members":{
}
},
"CheckoutBorrowLicenseRequest":{
"type":"structure",
"required":[
"LicenseArn",
"Entitlements",
"DigitalSignatureMethod",
"ClientToken"
],
"members":{
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"Entitlements":{"shape":"EntitlementDataList"},
"DigitalSignatureMethod":{"shape":"DigitalSignatureMethod"},
"NodeId":{"shape":"String"},
"CheckoutMetadata":{"shape":"MetadataList"},
"ClientToken":{"shape":"ClientToken"}
}
},

"CheckoutBorrowLicenseResponse":{
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"members":{
"LicenseArn":{"shape":"Arn"},
"LicenseConsumptionToken":{"shape":"String"},
"EntitlementsAllowed":{"shape":"EntitlementDataList"},
"NodeId":{"shape":"String"},
"SignedToken":{"shape":"SignedToken"},
"IssuedAt":{"shape":"ISO8601DateTime"},
"Expiration":{"shape":"ISO8601DateTime"},

"CheckoutMetadata":{"shape":"MetadataList"}
}
},
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"ProductSKU",
"CheckoutType",
"KeyFingerprint",
"Entitlements",
"ClientToken"
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"CheckoutType":{"shape":"CheckoutType"},
"KeyFingerprint":{"shape":"String"},
"Entitlements":{"shape":"EntitlementDataList"},
"ClientToken":{"shape":"ClientToken"},
"Beneficiary":{"shape":"String"},
"NodeId":{"shape":"String"}
}
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"EntitlementsAllowed":{"shape":"EntitlementDataList"},
"SignedToken":{"shape":"SignedToken"},
"NodeId":{"shape":"String"},
"IssuedAt":{"shape":"ISO8601DateTime"},
"Expiration":{"shape":"ISO8601DateTime"},
"LicenseArn":{"shape":"String"}
}
},
"CheckoutType":{
"type":"string",
"enum":[
"PROVISIONAL",
"PERPETUAL"
]
},
"ClientRequestToken":{
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"max":36,
"min":1
},
"ClientToken":{

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  "max":2048,
  "pattern":"\\S+"
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"ConflictException":{
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  "members":{
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  "exception":true
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    "ConsumedLicenses":{"shape":"BoxLong"}
  }
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"ConsumedLicenseSummaryList":{
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  "member":{"shape":"ConsumedLicenseSummary"}
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    "ProvisionalConfiguration":{"shape":"ProvisionalConfiguration"},
    "BorrowConfiguration":{"shape":"BorrowConfiguration"}
  }
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    "GrantName",
    "LicenseArn",
    "Principals",
    "HomeRegion",
    "AllowedOperations"
  ],
  "members":{
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    "GrantName":{"shape":"String"},
    "LicenseArn":{"shape":"Arn"},
    "Principals":{"shape":"PrincipalArnList"},
    "HomeRegion":{"shape":"String"},
    "AllowedOperations":{"shape":"AllowedOperationList"}
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    }
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      "Version":{"shape":"String"}
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    "required":[
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      "GrantArn"
    ],
    "members":{
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      "GrantArn":{"shape":"Arn"},
      "GrantName":{"shape":"String"},
      "AllowedOperations":{"shape":"AllowedOperationList"},
      "Status":{"shape":"GrantStatus"},
      "StatusReason":{"shape":"StatusReasonMessage"},
      "SourceVersion":{"shape":"String"},
      "Options":{"shape":"Options"}
    }
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      "Status":{"shape":"GrantStatus"},
      "Version":{"shape":"String"}
    }
  },
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      "LicenseCountingType"
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      "Description":{"shape":"String"},
      "LicenseCountingType":{"shape":"LicenseCountingType"},
      "LicenseCount":{"shape":"BoxLong"},
      "LicenseCountHardLimit":{"shape":"BoxBoolean"},
      "LicenseRules":{"shape":"StringList"},
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"SourceLicenseContext",
"DestinationLicenseContext"
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"members":{
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"SourceLicenseContext":{"shape":"LicenseConversionContext"},
"DestinationLicenseContext":{"shape":"LicenseConversionContext"}
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},
"CreateLicenseConversionTaskForResourceResponse":{
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"CreateLicenseManagerReportGeneratorRequest":{
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"Type",
"ReportContext",
"ReportFrequency",
"ClientToken"
],
"members":{
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"Type":{"shape":"ReportTypeList"},
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"ReportFrequency":{"shape":"ReportFrequency"},
"ClientToken":{"shape":"ClientRequestToken"},
"Description":{"shape":"String"},
"Tags":{"shape":"TagList"}
}

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      "ProductName",
      "ProductSKU",
      "Issuer",
      "HomeRegion",
      "Validity",
      "Entitlements",
      "Beneficiary",
      "ConsumptionConfiguration",
      "ClientToken"
    ],
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      "ProductName":{"shape":"String"},
      "ProductSKU":{"shape":"String"},
      "Issuer":{"shape":"Issuer"},
      "HomeRegion":{"shape":"String"},
      "Validity":{"shape":"DatetimeRange"},
      "Entitlements":{"shape":"EntitlementList"},
      "Beneficiary":{"shape":"String"},
      "ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
      "LicenseMetadata":{"shape":"MetadataList"},
      "ClientToken":{"shape":"ClientToken"}

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  },
  "CreateLicenseResponse":{
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      "Version":{"shape":"String"}
    }
  },
  "CreateLicenseVersionRequest":{
    "type":"structure",
    "required":[
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"Validity",
"Entitlements",
"ConsumptionConfiguration",
"Status",
"ClientToken"
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"ProductName":{"shape":"String"},
"Issuer":{"shape":"Issuer"},
"HomeRegion":{"shape":"String"},
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"LicenseMetadata":{"shape":"MetadataList"},
"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"Status":{"shape":"LicenseStatus"},
"ClientToken":{"shape":"ClientToken"},
"SourceVersion":{"shape":"String"}
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"CreateLicenseVersionResponse":{
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"Version":{"shape":"String"},
"Status":{"shape":"LicenseStatus"}
}
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"LicenseArn",
"ClientToken"
],
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"TokenProperties":{"shape":"MaxSize3StringList"},
"ClientToken":{"shape":"ClientToken"}
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"Version"
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"Version":{"shape":"String"}
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"DeleteGrantResponse":{
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"members":{
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"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
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"members":{
"LicenseConfigurationArn":{"shape":"String"}
}
},
"DeleteLicenseConfigurationResponse":{
"type":"structure",
"members":{
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"DeleteLicenseManagerReportGeneratorRequest":{
  "type":"structure",
  "required":["LicenseManagerReportGeneratorArn"],
  "members":{
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  }
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"DeleteLicenseManagerReportGeneratorResponse":{
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  "members":{
  }
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  "required":[
    "LicenseArn",
    "SourceVersion"
  ],
  "members":{
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    "SourceVersion":{"shape":"String"}
  }
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"DeleteLicenseResponse":{
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  "members":{
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    "DeletionDate":{"shape":"ISO8601DateTime"}
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"DeleteTokenRequest":{
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  "required":["TokenId"],
  "members":{
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  }
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"DeleteTokenResponse":{
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  "members":{
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    "Unit"
  ],
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    "Unit":{"shape":"EntitlementUnit"},
    "AllowCheckIn":{"shape":"BoxBoolean"}
  }
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    "Unit"
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    "Value":{"shape":"String"},
    "Unit":{"shape":"EntitlementDataUnit"}
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    "Milliseconds",
    "Bytes",
    "Kilobytes",

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    "Terabytes",
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"Terabits/Second",
"Count/Second"
]
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"Gigabytes",
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"Count/Second"
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"ConsumedValue",
"Unit"
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"MaxCount":{"shape":"String"},
"Unit":{"shape":"EntitlementDataUnit"}
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"EntitlementUsageList":{
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"ExtendLicenseConsumptionResponse":{
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"Expiration":{"shape":"ISO8601DateTime"}
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"FailedDependencyException":{
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"member":{"shape":"Filter"}
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"GetAccessTokenRequest":{
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"TokenProperties":{"shape":"MaxSize3StringList"}
}
},
"GetAccessTokenResponse":{
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}
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"GetGrantResponse":{
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},
"GetLicenseConfigurationResponse":{
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"members":{
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"LicenseConfigurationArn":{"shape":"String"},
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"LicenseCountingType":{"shape":"LicenseCountingType"},
"LicenseRules":{"shape":"StringList"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"ConsumedLicenses":{"shape":"BoxLong"},
"Status":{"shape":"String"},
"OwnerAccountId":{"shape":"String"},
"ConsumedLicenseSummaryList":{"shape":"ConsumedLicenseSummaryList"},
"ManagedResourceSummaryList":{"shape":"ManagedResourceSummaryList"},
"Tags":{"shape":"TagList"},
"ProductInformationList":{"shape":"ProductInformationList"},
"AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"}
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},
"GetLicenseConversionTaskResponse":{
  "type":"structure",
  "members":{
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    "ResourceArn":{"shape":"String"},
    "SourceLicenseContext":{"shape":"LicenseConversionContext"},
    "DestinationLicenseContext":{"shape":"LicenseConversionContext"},
    "StatusMessage":{"shape":"String"},
    "Status":{"shape":"LicenseConversionTaskStatus"},
    "StartTime":{"shape":"DateTime"},
    "LicenseConversionTime":{"shape":"DateTime"},
    "EndTime":{"shape":"DateTime"}
  }
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"GetLicenseManagerReportGeneratorRequest":{
  "type":"structure",
  "required":["LicenseManagerReportGeneratorArn"],
  "members":{
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"GetLicenseManagerReportGeneratorResponse":{
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  "members":{
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  }
},
"GetLicenseRequest":{
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  "required":["LicenseArn"],
  "members":{
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    "Version":{"shape":"String"}
  }
},
"GetLicenseResponse":{
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  "members":{
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  }
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"GetLicenseUsageRequest":{
  "type":"structure",
  "required":["LicenseArn"],
  "members":{
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  }

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"GetLicenseUsageResponse":{
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"LicenseUsage":{"shape":"LicenseUsage"}
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"SnsTopicArn":{"shape":"String"},
"OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
"EnableCrossAccountsDiscovery":{"shape":"BoxBoolean"},
"LicenseManagerResourceShareArn":{"shape":"String"}
}
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"Grant":{
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"GrantName",
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"LicenseArn",
"GranteePrincipalArn",
"HomeRegion",
"GrantStatus",
"Version",
"GrantedOperations"
],
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"GrantName":{"shape":"String"},
"ParentArn":{"shape":"Arn"},
"LicenseArn":{"shape":"Arn"},
"GranteePrincipalArn":{"shape":"Arn"},
"HomeRegion":{"shape":"String"},
"GrantStatus":{"shape":"GrantStatus"},
"StatusReason":{"shape":"StatusReasonMessage"},
"Version":{"shape":"String"},
"GrantedOperations":{"shape":"AllowedOperationList"},
"Options":{"shape":"Options"}
}

},
"GrantList":{
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  "member":{"shape":"Grant"}
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"GrantStatus":{
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  "enum":[
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    "PENDING_ACCEPT",
    "REJECTED",
    "ACTIVE",
    "FAILED_WORKFLOW",
    "DELETED",
    "PENDING_DELETE",
    "DISABLED",
    "WORKFLOW_COMPLETED"
  ]
},
"GrantedLicense":{
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  "members":{
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    "LicenseName":{"shape":"String"},
    "ProductName":{"shape":"String"},
    "ProductSKU":{"shape":"String"},
    "Issuer":{"shape":"IssuerDetails"},
    "HomeRegion":{"shape":"String"},
    "Status":{"shape":"LicenseStatus"},
    "Validity":{"shape":"DatetimeRange"},
    "Beneficiary":{"shape":"String"},
    "Entitlements":{"shape":"EntitlementList"},
    "ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},

"LicenseMetadata":{"shape":"MetadataList"},
    "CreateTime":{"shape":"ISO8601DateTime"},
    "Version":{"shape":"String"},
    "ReceivedMetadata":{"shape":"ReceivedMetadata"}
  }
},
"GrantedLicenseList":{
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  "member":{"shape":"GrantedLicense"}
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"ISO8601DateTime":{
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9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
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"members":{
"Message":{"shape":"Message"}
},
"exception":true
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"Condition"
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"Condition":{"shape":"InventoryFilterCondition"},
"Value":{"shape":"String"}
}
},
"InventoryFilterCondition":{
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"NOT_EQUALS",
"BEGINS_WITH",
"CONTAINS"
]
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"SignKey":{"shape":"String"}
}
},
"IssuerDetails":{
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"members":{
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"SignKey":{"shape":"String"},
"KeyFingerprint":{"shape":"String"}
}
},
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"LicenseName":{"shape":"String"},

"ProductName":{"shape":"String"},
"ProductSKU":{"shape":"String"},
"Issuer":{"shape":"IssuerDetails"},
"HomeRegion":{"shape":"String"},
"Status":{"shape":"LicenseStatus"},
"Validity":{"shape":"DatetimeRange"},
"Beneficiary":{"shape":"String"},
"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"LicenseMetadata":{"shape":"MetadataList"},
"CreateTime":{"shape":"ISO8601DateTime"},
"Version":{"shape":"String"}
}
},
"LicenseConfiguration":{
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"LicenseConfigurationArn":{"shape":"String"},
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"LicenseCountingType":{"shape":"LicenseCountingType"},
"LicenseRules":{"shape":"StringList"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"},
"ConsumedLicenses":{"shape":"BoxLong"},
"Status":{"shape":"String"},
"OwnerAccountId":{"shape":"String"},
"ConsumedLicenseSummaryList":{"shape":"ConsumedLicenseSummaryList"},
"ManagedResourceSummaryList":{"shape":"ManagedResourceSummaryList"},

"ProductInformationList":{"shape":"ProductInformationList"},
"AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"}
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},
"LicenseConfigurationAssociation":{
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"ResourceType":{"shape":"ResourceType"},
"ResourceOwnerId":{"shape":"String"},
"AssociationTime":{"shape":"DateTime"},
"AmiAssociationScope":{"shape":"String"}
}
},
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"LicenseConfigurationStatus":{
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"DISABLED"
]
},
"LicenseConfigurationUsage":{
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"ResourceType":{"shape":"ResourceType"},
"ResourceStatus":{"shape":"String"},
"ResourceOwnerId":{"shape":"String"},
"AssociationTime":{"shape":"DateTime"},
"ConsumedLicenses":{"shape":"BoxLong"}
}
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"LicenseConfigurationUsageList":{
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},
"LicenseConfigurations":{
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"member":{"shape":"LicenseConfiguration"}
},
"LicenseConversionContext":{
"type":"structure",
"members":{
"UsageOperation":{"shape":"UsageOperation"}

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  }
},
"LicenseConversionTask":{
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  "members":{
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     "ResourceArn":{"shape":"String"},
    "SourceLicenseContext":{"shape":"LicenseConversionContext"},
    "DestinationLicenseContext":{"shape":"LicenseConversionContext"},
    "Status":{"shape":"LicenseConversionTaskStatus"},
    "StatusMessage":{"shape":"String"},
    "StartTime":{"shape":"DateTime"},
    "LicenseConversionTime":{"shape":"DateTime"},
    "EndTime":{"shape":"DateTime"}
  }
},
"LicenseConversionTaskId":{
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  "max":50,
  "pattern":"^lct-[a-zA-Z0-9]*"
},
"LicenseConversionTaskStatus":{
  "type":"string",
  "enum":[
    "IN_PROGRESS",
    "SUCCEEDED",
    "FAILED"
  ]
},
"LicenseConversionTasks":{
  "type":"list",
  "member":{"shape":"LicenseConversionTask"}
},
"LicenseCountingType":{
  "type":"string",
  "enum":[
    "vCPU",
    "Instance",
    "Core",
    "Socket"
  ]
},
"LicenseDeletionStatus":{
   "type":"string",
  "enum":[
    "PENDING_DELETE",
    "DELETED"
  ]
```

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},
"LicenseList":{
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  "member":{"shape":"License"}
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"LicenseOperationFailure":{
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  "members":{
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    "ResourceType":{"shape":"ResourceType"},
    "ErrorMessage":{"shape":"String"},
    "FailureTime":{"shape":"DateTime"},
    "OperationName":{"shape":"String"},
    "ResourceOwnerId":{"shape":"String"},
    "OperationRequestedBy":{"shape":"String"},
    "MetadataList":{"shape":"MetadataList"}
  }
},
"LicenseOperationFailureList":{
  "type":"list",
  "member":{"shape":"LicenseOperationFailure"}
},
"LicenseSpecification":{
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  "required":["LicenseConfigurationArn"],
  "members":{
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    "AmiAssociationScope":{"shape":"String"}
  }
},
 "LicenseSpecifications":{
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  "member":{"shape":"LicenseSpecification"}
},
"LicenseStatus":{
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  "enum":[
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    "PENDING_AVAILABLE",
    "DEACTIVATED",
    "SUSPENDED",
    "EXPIRED",
    "PENDING_DELETE",
    "DELETED"
  ]
},
"LicenseUsage":{
  "type":"structure",
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  "members":{
    "EntitlementUsages":{"shape":"EntitlementUsageList"}
  }
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"LicenseUsageException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
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"ListAssociationsForLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"}
  }
},
"ListAssociationsForLicenseConfigurationResponse":{
  "type":"structure",
   "members":{
    "LicenseConfigurationAssociations":{"shape":"LicenseConfigurationAssociations"},
    "NextToken":{"shape":"String"}
  }
},
"ListDistributedGrantsRequest":{
  "type":"structure",
  "members":{
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    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListDistributedGrantsResponse":{
  "type":"structure",
  "members":{
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    "NextToken":{"shape":"String"}
  }
},
"ListFailuresForLicenseConfigurationOperationsRequest":{
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  "required":["LicenseConfigurationArn"],
  "members":{
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"MaxResults":{"shape":"BoxInteger"},
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"ListFailuresForLicenseConfigurationOperationsResponse":{
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"ListLicenseConfigurationsRequest":{
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"members":{
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"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"},
"Filters":{"shape":"Filters"}
}
},
"ListLicenseConfigurationsResponse":{
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"members":{
"LicenseConfigurations":{"shape":"LicenseConfigurations"},
"NextToken":{"shape":"String"}
}
},
"ListLicenseConversionTasksRequest":{
"type":"structure",
"members":{
"NextToken":{"shape":"String"},
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"Filters":{"shape":"Filters"}
}
},
"ListLicenseConversionTasksResponse":{
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"NextToken":{"shape":"String"}
}
},
"ListLicenseManagerReportGeneratorsRequest":{
"type":"structure",
"members":{
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}

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  }
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 "ListLicenseManagerReportGeneratorsResponse":{
  "type":"structure",
  "members":{
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    "NextToken":{"shape":"String"}
  }
 },
 "ListLicenseSpecificationsForResourceRequest":{
  "type":"structure",
  "required":["ResourceArn"],
  "members":{
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    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"}
  }
 },
 "ListLicenseSpecificationsForResourceResponse":{
  "type":"structure",
  "members":{
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    "NextToken":{"shape":"String"}

}
 },
 "ListLicenseVersionsRequest":{
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  "required":["LicenseArn"],
  "members":{
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    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
 },
 "ListLicenseVersionsResponse":{
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  "members":{
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    "NextToken":{"shape":"String"}
  }
 },
 "ListLicensesRequest":{
  "type":"structure",
  "members":{
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    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
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"MaxResults":{"shape":"MaxSize100"}
}
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"members":{
"Licenses":{"shape":"LicenseList"},
"NextToken":{"shape":"String"}
}
},
"ListReceivedGrantsForOrganizationRequest":{
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"required":["LicenseArn"],
"members":{
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"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
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"ListReceivedGrantsForOrganizationResponse":{
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"NextToken":{"shape":"String"}
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"members":{
"GrantArns":{"shape":"ArnList"},
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
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"ListReceivedGrantsResponse":{
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"members":{
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"NextToken":{"shape":"String"}
}
},
"ListReceivedLicensesForOrganizationRequest":{
"type":"structure",
"members":{
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"NextToken":{"shape":"String"},

"MaxResults":{"shape":"MaxSize100"}
}
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"ListReceivedLicensesForOrganizationResponse":{
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"members":{
"Licenses":{"shape":"GrantedLicenseList"},
"NextToken":{"shape":"String"}
}
},
"ListReceivedLicensesRequest":{
"type":"structure",
"members":{
"LicenseArns":{"shape":"ArnList"},
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListReceivedLicensesResponse":{
"type":"structure",
"members":{
"Licenses":{"shape":"GrantedLicenseList"},
"NextToken":{"shape":"String"}
}
},
"ListResourceInventoryRequest":{
"type":"structure",
"members":{
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"},
"Filters":{"shape":"InventoryFilterList"}
}
},
"ListResourceInventoryResponse":{
"type":"structure",
"members":{
"ResourceInventoryList":{"shape":"ResourceInventoryList"},
"NextToken":{"shape":"String"}
}
},
"ListTagsForResourceRequest":{
"type":"structure",
"required":["ResourceArn"],
"members":{
"ResourceArn":{"shape":"String"}
}
},

"ListTagsForResourceResponse":{
  "type":"structure",
  "members":{
    "Tags":{"shape":"TagList"}
  }
},
"ListTokensRequest":{
  "type":"structure",
  "members":{
    "TokenIds":{"shape":"StringList"},
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListTokensResponse":{
  "type":"structure",
  "members":{
    "Tokens":{"shape":"TokenList"},
    "NextToken":{"shape":"String"}
  }
},
"ListUsageForLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"},
     "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"},
    "Filters":{"shape":"Filters"}
  }
},
"ListUsageForLicenseConfigurationResponse":{
  "type":"structure",
  "members":{
    "LicenseConfigurationUsageList":{"shape":"LicenseConfigurationUsageList"},
    "NextToken":{"shape":"String"}
  }
},
"Location":{"type":"string"},
"Long":{"type":"long"},
"ManagedResourceSummary":{
  "type":"structure",
  "members":{
    "ResourceType":{"shape":"ResourceType"},
    "AssociationCount":{"shape":"BoxLong"}
  }
},

"ManagedResourceSummaryList":{
  "type":"list",
  "member":{"shape":"ManagedResourceSummary"}
},
"MaxSize100":{
  "type":"integer",
  "max":100,
  "min":1
},
"MaxSize3StringList":{
  "type":"list",
  "member":{"shape":"String"},
  "max":3
},
"Message":{"type":"string"},
"Metadata":{
  "type":"structure",
   "members":{
    "Name":{"shape":"String"},
    "Value":{"shape":"String"}
  }
},
"MetadataList":{
  "type":"list",
  "member":{"shape":"Metadata"}
},
"NoEntitlementsAllowedException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"Options":{
  "type":"structure",
  "members":{
    "ActivationOverrideBehavior":{"shape":"ActivationOverrideBehavior"}
  }
},
"OrganizationConfiguration":{
  "type":"structure",
  "required":["EnableIntegration"],
  "members":{
    "EnableIntegration":{"shape":"Boolean"}
  }
},
"PrincipalArnList":{
  "type":"list",

"member":{"shape":"Arn"},
"max":1,
"min":1
},
"ProductInformation":{
"type":"structure",
"required":[
"ResourceType",
"ProductInformationFilterList"
],
"members":{
"ResourceType":{"shape":"String"},
"ProductInformationFilterList":{"shape":"ProductInformationFilterList"}
}
},
"ProductInformationFilter":{
"type":"structure",
"required":[
"ProductInformationFilterName",
"ProductInformationFilterComparator"
],
"members":{
"ProductInformationFilterName":{"shape":"String"},
"ProductInformationFilterValue":{"shape":"StringList"},
"ProductInformationFilterComparator":{"shape":"String"}
}
},
"ProductInformationFilterList":{
"type":"list",
"member":{"shape":"ProductInformationFilter"}
},
"ProductInformationList":{
"type":"list",
"member":{"shape":"ProductInformation"}
},
"ProvisionalConfiguration":{
"type":"structure",
"required":["MaxTimeToLiveInMinutes"],
"members":{
"MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
}
},
"RateLimitExceededException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true

```
},
"ReceivedMetadata":{
  "type":"structure",
  "members":{
    "ReceivedStatus":{"shape":"ReceivedStatus"},
    "ReceivedStatusReason":{"shape":"StatusReasonMessage"},
    "AllowedOperations":{"shape":"AllowedOperationList"}
  }
},
"ReceivedStatus":{
  "type":"string",
  "enum":[
    "PENDING_WORKFLOW",
    "PENDING_ACCEPT",
    "REJECTED",
    "ACTIVE",
    "FAILED_WORKFLOW",
    "DELETED",
    "DISABLED",
    "WORKFLOW_COMPLETED"
  ]
},
"RedirectException":{
  "type":"structure",
  "members":{
    "Location":{"shape":"Location"},
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"RejectGrantRequest":{
  "type":"structure",
  "required":["GrantArn"],
  "members":{
    "GrantArn":{"shape":"Arn"}
  }
},
"RejectGrantResponse":{
  "type":"structure",
  "members":{
     "GrantArn":{"shape":"Arn"},
    "Status":{"shape":"GrantStatus"},
    "Version":{"shape":"String"}
  }
},
"RenewType":{
  "type":"string",
  "enum":[
```

"None",
"Weekly",
"Monthly"
]
},
"ReportContext":{
"type":"structure",
"required":["licenseConfigurationArns"],
"members":{
"licenseConfigurationArns":{"shape":"ArnList"}
}
},
"ReportFrequency":{
"type":"structure",
"members":{
"value":{"shape":"Integer"},
"period":{"shape":"ReportFrequencyType"}
}
},
"ReportFrequencyType":{
"type":"string",
"enum":[
"DAY",
"WEEK",
"MONTH"
]
},
"ReportGenerator":{
"type":"structure",
"members":{
"ReportGeneratorName":{"shape":"String"},
"ReportType":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"LicenseManagerReportGeneratorArn":{"shape":"String"},
"LastRunStatus":{"shape":"String"},
"LastRunFailureReason":{"shape":"String"},
"LastReportGenerationTime":{"shape":"String"},
"ReportCreatorAccount":{"shape":"String"},
"Description":{"shape":"String"},
"S3Location":{"shape":"S3Location"},
"CreateTime":{"shape":"String"},
"Tags":{"shape":"TagList"}
}
},
"ReportGeneratorList":{
"type":"list",
"member":{"shape":"ReportGenerator"}

},
"ReportGeneratorName":{
  "type":"string",
  "max":100,
  "min":1
},
"ReportType":{
  "type":"string",
  "enum":[
    "LicenseConfigurationSummaryReport",
    "LicenseConfigurationUsageReport"
  ]
},
"ReportTypeList":{
  "type":"list",
  "member":{"shape":"ReportType"}
},
"ResourceInventory":{
  "type":"structure",
  "members":{
    "ResourceId":{"shape":"String"},
     "ResourceType":{"shape":"ResourceType"},
    "ResourceArn":{"shape":"String"},
    "Platform":{"shape":"String"},
    "PlatformVersion":{"shape":"String"},
    "ResourceOwningAccountId":{"shape":"String"}
  }
},
"ResourceInventoryList":{
  "type":"list",
  "member":{"shape":"ResourceInventory"}
},
"ResourceLimitExceededException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ResourceNotFoundException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ResourceType":{
  "type":"string",

```
  "enum":[
    "EC2_INSTANCE",
    "EC2_HOST",
    "EC2_AMI",
    "RDS",
    "SYSTEMS_MANAGER_MANAGED_INSTANCE"
  ]
},
"S3Location":{
  "type":"structure",
  "members":{
    "bucket":{"shape":"String"},
    "keyPrefix":{"shape":"String"}

}
},
"ServerInternalException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true,
  "fault":true
},
"SignedToken":{
  "type":"string",
  "min":4096
},
"StatusReasonMessage":{
  "type":"string",
  "max":400,
  "pattern":"[\\s\\S]+"
},
"String":{"type":"string"},
"StringList":{
  "type":"list",
  "member":{"shape":"String"}
},
"Tag":{
  "type":"structure",
  "members":{
    "Key":{"shape":"String"},
    "Value":{"shape":"String"}
  }
},
"TagKeyList":{
  "type":"list",
  "member":{"shape":"String"}
```

},
"TagList":{
  "type":"list",
  "member":{"shape":"Tag"}
},
"TagResourceRequest":{
  "type":"structure",
  "required":[
    "ResourceArn",
    "Tags"
  ],
  "members":{
    "ResourceArn":{"shape":"String"},
    "Tags":{"shape":"TagList"}
  }
},
"TagResourceResponse":{
   "type":"structure",
  "members":{
  }
},
"TokenData":{
  "type":"structure",
  "members":{
    "TokenId":{"shape":"String"},
    "TokenType":{"shape":"String"},
    "LicenseArn":{"shape":"String"},
    "ExpirationTime":{"shape":"ISO8601DateTime"},
    "TokenProperties":{"shape":"MaxSize3StringList"},
    "RoleArns":{"shape":"ArnList"},
    "Status":{"shape":"String"}
  }
},
"TokenList":{
  "type":"list",
  "member":{"shape":"TokenData"}
},
"TokenString":{
  "type":"string",
  "max":4096,
  "pattern":"\\S+"
},
"TokenType":{
  "type":"string",
  "enum":["REFRESH_TOKEN"]
},
"UnsupportedDigitalSignatureMethodException":{
  "type":"structure",

"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"UntagResourceRequest":{
"type":"structure",
"required":[
"ResourceArn",
"TagKeys"
],
"members":{
"ResourceArn":{"shape":"String"},
"TagKeys":{"shape":"TagKeyList"}
}
},
"UntagResourceResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{"shape":"String"},
"LicenseConfigurationStatus":{"shape":"LicenseConfigurationStatus"},
"LicenseRules":{"shape":"StringList"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"ProductInformationList":{"shape":"ProductInformationList"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"}
}
},
"UpdateLicenseConfigurationResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":[
"LicenseManagerReportGeneratorArn",
"ReportGeneratorName",
"Type",
"ReportContext",

"ReportFrequency",
"ClientToken"
],
"members":{
"LicenseManagerReportGeneratorArn":{"shape":"String"},
"ReportGeneratorName":{"shape":"ReportGeneratorName"},
"Type":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"ClientToken":{"shape":"ClientRequestToken"},
"Description":{"shape":"String"}
}
},
"UpdateLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseSpecificationsForResourceRequest":{
"type":"structure",
"required":["ResourceArn"],
"members":{
"ResourceArn":{"shape":"String"},
"AddLicenseSpecifications":{"shape":"LicenseSpecifications"},
"RemoveLicenseSpecifications":{"shape":"LicenseSpecifications"}
}
},
"UpdateLicenseSpecificationsForResourceResponse":{
"type":"structure",
"members":{
}
},
"UpdateServiceSettingsRequest":{
"type":"structure",
"members":{
"S3BucketArn":{"shape":"String"},
"SnsTopicArn":{"shape":"String"},
"OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
"EnableCrossAccountsDiscovery":{"shape":"BoxBoolean"}
}
},
"UpdateServiceSettingsResponse":{
"type":"structure",
"members":{
}
},
"UsageOperation":{
"type":"string",

"max":50
},
"ValidationException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
}
}
}
{
"version": "2.0",
"service": " License Manager makes it easier to manage licenses from software vendors across multiple Amazon Web Services accounts and on-premises servers. ",
"operations": {
"AcceptGrant": " Accepts the specified grant. ",
"CheckInLicense": " Checks in the specified license. Check in a license when it is no longer in use. ",
"CheckoutBorrowLicense": " Checks out the specified license for offline use. ",
"CheckoutLicense": " Checks out the specified license. <note> If the account that created the license is the same that is performing the check out, you must specify the account as the beneficiary. </note>",
"CreateGrant": " Creates a grant for the specified license. A grant shares the use of license entitlements with a specific Amazon Web Services account, an organization, or an organizational unit (OU). For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateGrantVersion": " Creates a new version of the specified grant. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateLicense": " Creates a license. ",
"CreateLicenseConfiguration": " Creates a license configuration. A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a license must be associated with a host), and the number of licenses purchased and used. ",
"CreateLicenseConversionTaskForResource":
" Creates a new license conversion task. ",
"CreateLicenseManagerReportGenerator": " Creates a report generator. ",
"CreateLicenseVersion": " Creates a new version of the specified license. ",
"CreateToken": " Creates a long-lived token. A refresh token is a JWT token used to get an access token. With an access token, you can call AssumeRoleWithWebIdentity to get role credentials that you can use to call License Manager to manage the specified license. ",
"DeleteGrant": " Deletes the specified grant. ",
"DeleteLicense": " Deletes the specified license. ",
"DeleteLicenseConfiguration": " Deletes the specified license configuration. You cannot delete a license configuration that is in use. ",
"DeleteLicenseManagerReportGenerator": " Deletes the specified report generator. This action deletes the report generator, which stops it from generating future reports. The action cannot be reversed. It

has no effect on the previous reports from this generator. ",
"DeleteToken": " Deletes the specified token. Must be called in the license home Region. ",
"ExtendLicenseConsumption": " Extends the expiration date for license consumption. ",
"GetAccessToken": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens are valid for one hour. ",
"GetGrant": " Gets detailed information about the specified grant. ",
"GetLicense": " Gets detailed information about the specified license. ",
"GetLicenseConfiguration": " Gets detailed information about the specified license configuration. ",
"GetLicenseConversionTask": " Gets information about the specified license type conversion task. ",
"GetLicenseManagerReportGenerator": " Gets information about the specified report generator. ",
"GetLicenseUsage": " Gets detailed information about the usage of the specified license. ",
"GetServiceSettings":
" Gets the License Manager settings for the current Region. ",
"ListAssociationsForLicenseConfiguration": " Lists the resource associations for the specified license configuration. Resource associations need not consume licenses from a license configuration. For example, an AMI or a stopped instance might not consume a license (depending on the license rules). ",
"ListDistributedGrants": " Lists the grants distributed for the specified license. ",
"ListFailuresForLicenseConfigurationOperations": " Lists the license configuration operations that failed. ",
"ListLicenseConfigurations": " Lists the license configurations for your account. ",
"ListLicenseConversionTasks": " Lists the license type conversion tasks for your account. ",
"ListLicenseManagerReportGenerators": " Lists the report generators for your account. ",
"ListLicenseSpecificationsForResource": " Describes the license configurations for the specified resource. ",
"ListLicenseVersions": " Lists all versions of the specified license. ",
"ListLicenses": " Lists the licenses for your account. ",
"ListReceivedGrants": " Lists grants that are received. Received grants are grants created while specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs. ",
"ListReceivedGrantsForOrganization": " Lists the grants received for all accounts in the organization. ",
"ListReceivedLicenses": " Lists received licenses. ",
"ListReceivedLicensesForOrganization": " Lists the licenses received for all accounts in the organization. ",
"ListResourceInventory": " Lists resources managed using Systems Manager inventory. ",
"ListTagsForResource": " Lists the tags for the specified license configuration. ",
"ListTokens": " Lists your tokens. ",
"ListUsageForLicenseConfiguration":
" Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration. ",
"RejectGrant": " Rejects the specified grant. ",
"TagResource": " Adds the specified tags to the specified license configuration. ",
"UntagResource": " Removes the specified tags from the specified license configuration. ",
"UpdateLicenseConfiguration": " Modifies the attributes of an existing license configuration. ",
"UpdateLicenseManagerReportGenerator": " Updates a report generator. After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. ",
"UpdateLicenseSpecificationsForResource": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. You can update the

license specifications of AMIs, instances, and hosts. You cannot update the license specifications for launch templates and CloudFormation templates, as they send license configurations to the operation that creates the resource. ",
  "UpdateServiceSettings": " Updates License Manager settings for the current Region. "
 },
 "shapes": {
  "AcceptGrantRequest": {
   "base": null,
   "refs": {
   }
  },
  "AcceptGrantResponse": {
   "base": null,
   "refs": {
   }
  },
  "AccessDeniedException": {
   "base": " Access to resource denied. ",
   "refs": {
   }
  },
  "ActivationOverrideBehavior": {
   "base": null,
   "refs": {
    "Options$ActivationOverrideBehavior": " An activation option for your grant that determines the behavior of activating a grant. Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the <code>Status</code> parameter.   As a license administrator, you can optionally specify an <code>ActivationOverrideBehavior</code> when activating a grant.   As a grantor, you can optionally specify an <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee account in your organization.   As a grantee, if the grantor creating the distributed grant doesnt specify an <code>ActivationOverrideBehavior</code>, you can optionally specify one when you are activating the grant.   <dl> <dt>DISTRIBUTED_GRANTS_ONLY</dt> <dd> Use this value to activate a grant without replacing any member accounts active grants for the same product. </dd> <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt> <dd> Use this value to activate a grant and disable other active grants in any member accounts for the same product. This action will also replace their previously activated grants with this activated grant. </dd> </dl>"
   }
  },
  "AllowedOperation": {
   "base": null,
   "refs": {
    "AllowedOperationList$member": null
   }
  },
  "AllowedOperationList": {
   "base": null,

"refs": {
"CreateGrantRequest$AllowedOperations": " Allowed operations for the grant. ",
"CreateGrantVersionRequest$AllowedOperations": " Allowed operations for the grant. ",
"Grant$GrantedOperations": " Granted operations. ",
"ReceivedMetadata$AllowedOperations": " Allowed operations. "
}
},
"Arn": {
"base": null,
"refs": {
"AcceptGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"AcceptGrantResponse$GrantArn": " Grant ARN. ",
"ArnList$member": null,
"CheckoutBorrowLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"CheckoutBorrowLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantResponse$GrantArn": " Grant ARN. ",
"CreateGrantVersionRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"CreateGrantVersionResponse$GrantArn": " Grant ARN. ",
"CreateLicenseConversionTaskForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"CreateLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionResponse$LicenseArn": " License ARN. ",
"CreateTokenRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the JWT token. ",
"DeleteGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"DeleteGrantResponse$GrantArn": " Grant ARN. ",
"DeleteLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"GetLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetLicenseUsageRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"Grant$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"Grant$ParentArn": " Parent ARN. ",
"Grant$LicenseArn": " License ARN. ",
"Grant$GranteePrincipalArn": " The grantee principal ARN. ",
"GrantedLicense$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"License$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"ListLicenseVersionsRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"ListReceivedGrantsForOrganizationRequest$LicenseArn": " The Amazon Resource Name (ARN) of the received license. ",
"PrincipalArnList$member": null,
"RejectGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"RejectGrantResponse$GrantArn": " Grant ARN. "

```
    }
  },
  "ArnList": {
    "base": null,
    "refs": {
      "CreateTokenRequest$RoleArns": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. License Manager does not check whether the roles are in use.</p>",
      "ListDistributedGrantsRequest$GrantArns": "<p>Amazon Resource Names (ARNs) of the grants.</p>",
      "ListLicensesRequest$LicenseArns": "<p>Amazon Resource Names (ARNs) of the licenses.</p>",
      "ListReceivedGrantsRequest$GrantArns": "<p>Amazon Resource Names (ARNs) of the grants.</p>",
      "ListReceivedLicensesRequest$LicenseArns": "<p>Amazon Resource Names (ARNs) of the licenses.</p>",

    "ReportContext$licenseConfigurationArns": "<p>Amazon Resource Name (ARN) of the license configuration
that this generator reports on.</p>",
      "TokenData$RoleArns": "<p>Amazon Resource Names (ARN) of the roles included in the token.</p>"
    }
  },
  "AuthorizationException": {
    "base": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the
IAM policy associated with this account.</p>",
    "refs": {
    }
  },
  "AutomatedDiscoveryInformation": {
    "base": "<p>Describes automated discovery.</p>",
    "refs": {
      "GetLicenseConfigurationResponse$AutomatedDiscoveryInformation": "<p>Automated discovery
information.</p>",
      "LicenseConfiguration$AutomatedDiscoveryInformation": "<p>Automated discovery information.</p>"
    }
  },
  "Boolean": {
    "base": null,
    "refs": {
      "ExtendLicenseConsumptionRequest$DryRun": "<p>Checks whether you have the required permissions for the
action,
 without actually making the request. Provides an error response if you do not have the required permissions.</p>",
      "OrganizationConfiguration$EnableIntegration": "<p>Enables Organizations integration.</p>"
    }
  },
  "BorrowConfiguration": {
    "base": "<p>Details about a borrow configuration.</p>",
    "refs": {
      "ConsumptionConfiguration$BorrowConfiguration": "<p>Details about a borrow configuration.</p>"
    }
  },
  "BoxBoolean": {
    "base": null,
```

"refs": {
"BorrowConfiguration$AllowEarlyCheckIn": " Indicates whether early check-ins are allowed. ",
"CreateLicenseConfigurationRequest$LicenseCountHardLimit": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit blocks the launch of new instances. ",
"CreateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"Entitlement$Overage": " Indicates whether overages are allowed. ",
"Entitlement$AllowCheckIn": " Indicates whether check-ins are allowed. ",
"GetLicenseConfigurationResponse$LicenseCountHardLimit": " Sets the number of available licenses as a hard limit. ",
"GetLicenseConfigurationResponse$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"GetServiceSettingsResponse$EnableCrossAccountsDiscovery": " Indicates whether cross-account discovery is enabled. ",
"LicenseConfiguration$LicenseCountHardLimit": " Number of available licenses as a hard limit. ",
"LicenseConfiguration$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateLicenseConfigurationRequest$LicenseCountHardLimit": " New hard limit of the number of available licenses. ",
"UpdateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateServiceSettingsRequest$EnableCrossAccountsDiscovery": " Activates cross-account discovery. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"BorrowConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the borrow configuration, in minutes. ",
"ListAssociationsForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListFailuresForLicenseConfigurationOperationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConfigurationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConversionTasksRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseSpecificationsForResourceRequest$MaxResults": " Maximum number of results to return in a single call. ",

"ListResourceInventoryRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUsageForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ProvisionalConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the provisional configuration, in minutes. "
}

},
"BoxLong": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ConsumedLicenses": " Number of licenses consumed by the resource. ",
"CreateLicenseConfigurationRequest$LicenseCount": " Number of licenses managed by the license configuration. ",
"GetLicenseConfigurationResponse$LicenseCount": " Number of available licenses. ",
"GetLicenseConfigurationResponse$ConsumedLicenses": " Number of licenses assigned to resources. ",
"LicenseConfiguration$LicenseCount": " Number of licenses managed by the license configuration. ",
"LicenseConfiguration$ConsumedLicenses": " Number of licenses consumed. ",
"LicenseConfigurationUsage$ConsumedLicenses": " Number of licenses consumed by the resource. ",
"ManagedResourceSummary$AssociationCount": " Number of resources associated with licenses. ",
"UpdateLicenseConfigurationRequest$LicenseCount": " New number of licenses managed by the license configuration. "
}
},
"CheckInLicenseRequest": {
"base": null,
"refs": {
}
},
"CheckInLicenseResponse": {
"base": null,
"refs": {
}
},
"CheckoutBorrowLicenseRequest": {
"base": null,
"refs": {
}
},
"CheckoutBorrowLicenseResponse": {
"base": null,
"refs": {
}
},
"CheckoutLicenseRequest": {
"base": null,
"refs": {
}
},
"CheckoutLicenseResponse": {
"base": null,
"refs": {
}
},

"CheckoutType": {
"base": null,
"refs": {
"CheckoutLicenseRequest$CheckoutType": " Checkout type. ",
"CheckoutLicenseResponse$CheckoutType": " Checkout type. "
}
},
"ClientRequestToken": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"UpdateLicenseManagerReportGeneratorRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. "
}
},
"ClientToken": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CheckoutLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateGrantRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateGrantVersionRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateLicenseVersionRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateTokenRequest$ClientToken": " Idempotency token, valid for 10 minutes. "
}
},
"ConflictException": {
"base": " There was a conflict processing the request. Try your request again. ",
"refs": {
}
},
"ConsumedLicenseSummary": {
"base": " Details about license consumption. ",
"refs": {
"ConsumedLicenseSummaryList$member": null
}
},
"ConsumedLicenseSummaryList": {
"base": null,
"refs": {

"GetLicenseConfigurationResponse$ConsumedLicenseSummaryList": " Summaries of the licenses consumed by resources. ",
"LicenseConfiguration$ConsumedLicenseSummaryList": " Summaries for licenses consumed by various resources. "
}
},
"ConsumptionConfiguration": {
"base": " Details about a consumption configuration. ",
"refs": {
"CreateLicenseRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"CreateLicenseVersionRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"GrantedLicense$ConsumptionConfiguration": " Configuration for consumption of the license. ",
"License$ConsumptionConfiguration": " Configuration for consumption of the license. "
}
},
"CreateGrantRequest": {
"base": null,
"refs": {
}
},
"CreateGrantResponse": {
"base": null,
"refs": {
}
},
"CreateGrantVersionRequest": {
"base": null,
"refs": {
}
},
"CreateGrantVersionResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationResponse": {
"base": null,
"refs": {

```
  }
},
"CreateLicenseConversionTaskForResourceRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseConversionTaskForResourceResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseManagerReportGeneratorRequest": {
  "base": null,
  "refs": {

 }
},
"CreateLicenseManagerReportGeneratorResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseVersionRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseVersionResponse": {
  "base": null,
  "refs": {
  }
},
"CreateTokenRequest": {
  "base": null,
  "refs": {
  }
},
```

"CreateTokenResponse": {
"base": null,
"refs": {
}
},
"DateTime": {
"base": null,
"refs": {
"AutomatedDiscoveryInformation$LastRunTime": " Time that automated discovery last ran. ",
"GetLicenseConversionTaskResponse$StartTime": " Time at which the license type conversion task was started . ",
"GetLicenseConversionTaskResponse$LicenseConversionTime": " Amount of time to complete the license type conversion. ",
"GetLicenseConversionTaskResponse$EndTime": " Time at which the license type conversion task was completed. ",
"LicenseConfigurationAssociation$AssociationTime": " Time when the license configuration was associated with the resource. ",
"LicenseConfigurationUsage$AssociationTime": " Time when the license configuration was initially associated with the resource. ",
"LicenseConversionTask$StartTime": " The time the conversion task was started at. ",
"LicenseConversionTask$LicenseConversionTime": " The time the usage operation value of the resource was changed. ",
"LicenseConversionTask$EndTime": " The time the conversion task was completed. ",
"LicenseOperationFailure$FailureTime": " Failure time. "
}
},
"DatetimeRange": {
"base": " Describes a time range, in ISO8601-UTC format. ",
"refs": {
"CreateLicenseRequest$Validity": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"CreateLicenseVersionRequest$Validity": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"GrantedLicense$Validity": " Date and time range during which the granted license is valid, in ISO8601-UTC format. ",
"License$Validity": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"DeleteGrantRequest": {
"base": null,
"refs": {
}
},
"DeleteGrantResponse": {
"base": null,
"refs": {
}
},

"DeleteLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"DeleteLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseManagerReportGeneratorResponse": {
"base": null,
"refs": {
}
},
"DeleteLicenseRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseResponse": {
"base": null,
"refs": {
}
},
"DeleteTokenRequest": {
"base": null,
"refs": {
}
},
"DeleteTokenResponse": {
"base": null,
"refs": {
}
},
"DigitalSignatureMethod": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$DigitalSignatureMethod": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384. For more information, see RFC 7518 Digital Signature with RSASSA-PSS. "
}
},

"Entitlement": {
"base": " Describes a resource entitled for use with a license. ",
"refs": {
"EntitlementList$member": null
}
},
"EntitlementData": {
"base": " Data associated with an entitlement resource. ",

"refs": {
"EntitlementDataList$member": null
}
},
"EntitlementDataList": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$Entitlements": " License entitlements. Partial checkouts are not supported. ",
"CheckoutBorrowLicenseResponse$EntitlementsAllowed": " Allowed license entitlements. ",
"CheckoutLicenseRequest$Entitlements": " License entitlements. ",
"CheckoutLicenseResponse$EntitlementsAllowed": " Allowed license entitlements. "
}
},
"EntitlementDataUnit": {
"base": null,
"refs": {
"EntitlementData$Unit": " Entitlement data unit. ",
"EntitlementUsage$Unit": " Entitlement usage unit. "
}
},
"EntitlementList": {
"base": null,
"refs": {
"CreateLicenseRequest$Entitlements": " License entitlements. ",
"CreateLicenseVersionRequest$Entitlements": " License entitlements. ",
"GrantedLicense$Entitlements": " License entitlements. ",
"License$Entitlements": " License entitlements. "
}
},
"EntitlementNotAllowedException": {
"base": " The entitlement is not allowed. ",
"refs": {
}
},
"EntitlementUnit": {
"base": null,
"refs": {

"Entitlement$Unit": " Entitlement unit. "
}
},
"EntitlementUsage": {
"base": " Usage associated with an entitlement resource. ",
"refs": {
"EntitlementUsageList$member": null
}
},
"EntitlementUsageList": {
"base": null,
"refs": {
"LicenseUsage$EntitlementUsages": " License entitlement usages. "
}
},
"ExtendLicenseConsumptionRequest": {
"base": null,
"refs": {
}
},
"ExtendLicenseConsumptionResponse": {
"base": null,
"refs": {
}
},
"FailedDependencyException": {
"base": " A dependency required to run the API is missing. ",
"refs": {
}
},
"Filter": {
"base": " A filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
"refs": {
"FilterList$member": null,
"Filters$member": null
}
},
"FilterLimitExceededException": {
"base": " The request uses too many filters or too many filter values. ",
"refs": {
}
},
"FilterList": {
"base": null,
"refs": {
"ListDistributedGrantsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>LicenseArn</code>   <code>GrantStatus</code>

```
</li> <li> <p> <code>GranteePrincipalARN</code> </p> </li> <li> <p> <code>ProductSKU</code> </p> </li>
<li> <p> <code>LicenseIssuerName</code> </p> </li> </ul>",
      "ListLicenseManagerReportGeneratorsRequest$Filters":
 "<p>Filters to scope the results. The following filters are supported: </p> <ul> <li> <p>
<code>LicenseConfigurationArn</code> </p> </li> </ul>",
      "ListLicensesRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul>
<li> <p> <code>Beneficiary</code> </p> </li> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p>
<code>Fingerprint</code> </p> </li> <li> <p> <code>Status</code> </p> </li> </ul>",
      "ListReceivedGrantsForOrganizationRequest$Filters": "<p>Filters to scope the results. The following filters are
supported:</p> <ul> <li> <p> <code>ParentArn</code> </p> </li> <li> <p> <code>GranteePrincipalArn</code>
</p> </li> </ul>",
      "ListReceivedGrantsRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p>
<ul> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>LicenseIssuerName</code> </p> </li> <li>
<p> <code>LicenseArn</code> </p> </li> <li> <p> <code>GrantStatus</code>
 </p> </li> <li> <p> <code>GranterAccountId</code> </p> </li> </ul>",
      "ListReceivedLicensesForOrganizationRequest$Filters": "<p>Filters to scope the results. The following filters
are supported:</p> <ul> <li> <p> <code>Beneficiary</code> </p> </li> <li> <p> <code>ProductSKU</code> </p>
</li> </ul>",
      "ListReceivedLicensesRequest$Filters": "<p>Filters to scope the results. The following filters are
supported:</p> <ul> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>Status</code> </p> </li>
<li> <p> <code>Fingerprint</code> </p> </li> <li> <p> <code>IssuerName</code> </p> </li> <li> <p>
<code>Beneficiary</code> </p> </li> </ul>",
      "ListTokensRequest$Filters": "<p>Filters to scope the results. The following filter is supported:</p> <ul> <li>
<p> <code>LicenseArns</code> </p> </li> </ul>"
    }
  },
  "FilterName": {
    "base": null,
    "refs": {
      "Filter$Name": "<p>Name of the filter. Filter names are case-sensitive.</p>"
    }
  },
  "FilterValue": {
    "base": null,
    "refs": {
      "FilterValues$member": null
    }
  },
  "FilterValues": {
    "base": null,
    "refs": {
      "Filter$Values": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the
filter.</p>"
    }
  },
  "Filters": {
    "base": null,
    "refs": {
```

"ListLicenseConfigurationsRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>licenseCountingType</code> - The dimension for which licenses are counted. Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. ",
"ListLicenseConversionTasksRequest$Filters": " Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>. ",
"ListUsageForLicenseConfigurationRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>resourceArn</code> - The ARN of the license configuration resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceAccount</code> - The ID of the account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. "
}
},
"GetAccessTokenRequest": {
"base": null,
"refs": {
}
},
"GetAccessTokenResponse": {
"base": null,
"refs": {
}
},
"GetGrantRequest": {
"base": null,
"refs": {
}
},
"GetGrantResponse": {
"base": null,
"refs": {
}
},
"GetLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"GetLicenseConfigurationResponse": {

"base": null,
"refs": {
}
},
"GetLicenseConversionTaskRequest": {
"base": null,
"refs": {
}
},
"GetLicenseConversionTaskResponse": {
"base": null,
"refs": {
}
},
"GetLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
}
},
"GetLicenseManagerReportGeneratorResponse": {
"base":
null,
"refs": {
}
},
"GetLicenseRequest": {
"base": null,
"refs": {
}
},
"GetLicenseResponse": {
"base": null,
"refs": {
}
},
"GetLicenseUsageRequest": {
"base": null,
"refs": {
}
},
"GetLicenseUsageResponse": {
"base": null,
"refs": {
}
},
"GetServiceSettingsRequest": {
"base": null,
"refs": {

```
    }
  },
  "GetServiceSettingsResponse": {
    "base": null,
    "refs": {
    }
  },
  "Grant": {
    "base": "<p>Describes a grant.</p>",
    "refs": {
      "GetGrantResponse$Grant": "<p>Grant details.</p>",
      "GrantList$member": null
    }
  },
  "GrantList": {
    "base": null,
    "refs": {
      "ListDistributedGrantsResponse$Grants": "<p>Distributed grant details.</p>",
      "ListReceivedGrantsForOrganizationResponse$Grants": "<p>Lists the grants the organization has
received.</p>",
      "ListReceivedGrantsResponse$Grants":
 "<p>Received grant details.</p>"
    }
  },
  "GrantStatus": {
    "base": null,
    "refs": {
      "AcceptGrantResponse$Status": "<p>Grant status.</p>",
      "CreateGrantResponse$Status": "<p>Grant status.</p>",
      "CreateGrantVersionRequest$Status": "<p>Grant status.</p>",
      "CreateGrantVersionResponse$Status": "<p>Grant status.</p>",
      "DeleteGrantResponse$Status": "<p>Grant status.</p>",
      "Grant$GrantStatus": "<p>Grant status.</p>",
      "RejectGrantResponse$Status": "<p>Grant status.</p>"
    }
  },
  "GrantedLicense": {
    "base": "<p>Describes a license that is granted to a grantee.</p>",
    "refs": {
      "GrantedLicenseList$member": null
    }
  },
  "GrantedLicenseList": {
    "base": null,
    "refs": {
      "ListReceivedLicensesForOrganizationResponse$Licenses": "<p>Lists the licenses the organization has
received.</p>",
      "ListReceivedLicensesResponse$Licenses": "<p>Received license
```

details. "
    }
  },
  "ISO8601DateTime": {
    "base": null,
    "refs": {
      "CheckoutBorrowLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
      "CheckoutBorrowLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
      "CheckoutLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
      "CheckoutLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
      "DatetimeRange$Begin": " Start of the time range. ",
      "DatetimeRange$End": " End of the time range. ",
      "DeleteLicenseResponse$DeletionDate": " Date when the license is deleted. ",
      "ExtendLicenseConsumptionResponse$Expiration": " Date and time at which the license consumption expires. ",
      "GrantedLicense$CreateTime": " Creation time of the granted license. ",
      "License$CreateTime": " License
creation time. ",
      "TokenData$ExpirationTime": " Token expiration time, in ISO8601-UTC format. "
    }
  },
  "Integer": {
    "base": null,
    "refs": {
      "CreateTokenRequest$ExpirationInDays": " Token expiration, in days, counted from token creation. The default is 365 days. ",
      "ReportFrequency$value": " Number of times within the frequency period that a report is generated. The only supported value is <code>1</code>. "
    }
  },
  "InvalidParameterValueException": {
    "base": " One or more parameter values are not valid. ",
    "refs": {
    }
  },
  "InvalidResourceStateException": {
    "base": " License Manager cannot allocate a license to a resource because of its state. For example, you cannot allocate a license to an instance in the process of shutting down. ",
    "refs": {
    }
  },
  "InventoryFilter": {
    "base": " An inventory filter. ",
    "refs": {

"InventoryFilterList$member": null
}
},
"InventoryFilterCondition": {
"base": null,
"refs": {
"InventoryFilter$Condition": " Condition of the filter. "
}
},
"InventoryFilterList": {
"base": null,
"refs": {
"ListResourceInventoryRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>application_name</code> - The name of the application. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.   <code>license_included</code> - The type of license included. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. Possible values are <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code>
| <code>windows-server-datacenter</code>.   <code>platform</code> - The platform of the resource. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.   <code>resource_id</code> - The ID of the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>tag:<key></code> - The key/value combination of a tag assigned to the resource. Logical operators are <code>EQUALS</code> (single account) or <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). "
}
},
"Issuer": {
"base": " Details about the issuer of a license. ",
"refs": {
"CreateLicenseRequest$Issuer": " License issuer. ",
"CreateLicenseVersionRequest$Issuer": " License issuer. "
}
},
"IssuerDetails": {
"base": " Details associated with the issuer of a license. ",
"refs": {
"GrantedLicense$Issuer": " Granted
license issuer. ",
"License$Issuer": " License issuer. "
}
},
"License": {
"base": " Software license that is managed in License Manager. ",
"refs": {
"GetLicenseResponse$License": " License details. ",
"LicenseList$member": null

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    }
  },
  "LicenseConfiguration": {
    "base": "<p>A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used.</p>",
    "refs": {
      "LicenseConfigurations$member": null
    }
  },
  "LicenseConfigurationAssociation": {
    "base": "<p>Describes an association with a license configuration.</p>",
     "refs": {
      "LicenseConfigurationAssociations$member": null
    }
  },
  "LicenseConfigurationAssociations": {
    "base": null,
    "refs": {
      "ListAssociationsForLicenseConfigurationResponse$LicenseConfigurationAssociations": "<p>Information about the associations for the license configuration.</p>"
    }
  },
  "LicenseConfigurationStatus": {
    "base": null,
    "refs": {
      "UpdateLicenseConfigurationRequest$LicenseConfigurationStatus": "<p>New status of the license configuration.</p>"
    }
  },
  "LicenseConfigurationUsage": {
    "base": "<p>Details about the usage of a resource associated with a license configuration.</p>",
    "refs": {
      "LicenseConfigurationUsageList$member": null
    }
  },
  "LicenseConfigurationUsageList": {
    "base": null,
    "refs": {
      "ListUsageForLicenseConfigurationResponse$LicenseConfigurationUsageList": "<p>Information about the license configurations.</p>"
    }

  },
  "LicenseConfigurations": {
    "base": null,
    "refs": {
```

"ListLicenseConfigurationsResponse$LicenseConfigurations": " Information about the license configurations. "
}
},
"LicenseConversionContext": {
"base": " Information about a license type conversion task. ",
"refs": {
"CreateLicenseConversionTaskForResourceRequest$SourceLicenseContext": " Information that identifies the license type you are converting from. For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"CreateLicenseConversionTaskForResourceRequest$DestinationLicenseContext": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert
a license type using the CLI in the License Manager User Guide. ",
"GetLicenseConversionTaskResponse$SourceLicenseContext": " Information about the license type converted from. ",
"GetLicenseConversionTaskResponse$DestinationLicenseContext": " Information about the license type converted to. ",
"LicenseConversionTask$SourceLicenseContext": " Information about the license type this conversion task converted from. ",
"LicenseConversionTask$DestinationLicenseContext": " Information about the license type this conversion task converted to. "
}
},
"LicenseConversionTask": {
"base": " Information about a license type conversion task. ",
"refs": {
"LicenseConversionTasks$member": null
}
},
"LicenseConversionTaskId": {
"base": null,
"refs": {
"CreateLicenseConversionTaskForResourceResponse$LicenseConversionTaskId": " The ID of the created license type conversion task. ",
"GetLicenseConversionTaskRequest$LicenseConversionTaskId": " ID of the license type conversion task to retrieve information on. ",
"GetLicenseConversionTaskResponse$LicenseConversionTaskId": " ID of the license type conversion task. ",
"LicenseConversionTask$LicenseConversionTaskId": " The ID of the license type conversion task. "
}
},
"LicenseConversionTaskStatus": {
"base": null,
"refs": {
"GetLicenseConversionTaskResponse$Status": " Status of the license type conversion task. ",

"LicenseConversionTask$Status": " The status of the conversion task. "
}
},
"LicenseConversionTasks": {
"base": null,
"refs": {
"ListLicenseConversionTasksResponse$LicenseConversionTasks": " Information about the license configuration tasks for your account. "
}
},
"LicenseCountingType":
{
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$LicenseCountingType": " Dimension used to track the license inventory. ",
"GetLicenseConfigurationResponse$LicenseCountingType": " Dimension for which the licenses are counted. ",
"LicenseConfiguration$LicenseCountingType": " Dimension to use to track the license inventory. "
}
},
"LicenseDeletionStatus": {
"base": null,
"refs": {
"DeleteLicenseResponse$Status": " License status. "
}
},
"LicenseList": {
"base": null,
"refs": {
"ListLicenseVersionsResponse$Licenses": " License details. ",
"ListLicensesResponse$Licenses": " License details. "
}
},
"LicenseOperationFailure": {
"base": " Describes the failure of a license operation. ",
"refs": {
"LicenseOperationFailureList$member": null
}
},
"LicenseOperationFailureList": {
"base":
null,
"refs": {
"ListFailuresForLicenseConfigurationOperationsResponse$LicenseOperationFailureList": " License configuration operations that failed. "
}
},

"LicenseSpecification": {
"base": " Details for associating a license configuration with a resource. ",
"refs": {
"LicenseSpecifications$member": null
}
},
"LicenseSpecifications": {
"base": null,
"refs": {
"ListLicenseSpecificationsForResourceResponse$LicenseSpecifications": " License configurations associated with a resource. ",
"UpdateLicenseSpecificationsForResourceRequest$AddLicenseSpecifications": " ARNs of the license configurations to add. ",
"UpdateLicenseSpecificationsForResourceRequest$RemoveLicenseSpecifications": " ARNs of the license configurations to remove. "
}
},
"LicenseStatus": {
"base": null,
"refs": {
"CreateLicenseResponse$Status": " License status. ",
"CreateLicenseVersionRequest$Status": " License status. ",
"CreateLicenseVersionResponse$Status": " License status. ",
"GrantedLicense$Status": " Granted license status. ",
"License$Status": " License status. "
}
},
"LicenseUsage": {
"base": " Describes the entitlement usage associated with a license. ",
"refs": {
"GetLicenseUsageResponse$LicenseUsage": " License usage details. "
}
},
"LicenseUsageException": {
"base": " You do not have enough licenses available to support a new resource launch. ",
"refs": {
}
},
"ListAssociationsForLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"ListAssociationsForLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},

"ListDistributedGrantsRequest": {
"base": null,
"refs": {
}
},
"ListDistributedGrantsResponse":
{
"base": null,
"refs": {
}
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"ListFailuresForLicenseConfigurationOperationsRequest": {
"base": null,
"refs": {
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},
"ListFailuresForLicenseConfigurationOperationsResponse": {
"base": null,
"refs": {
}
},
"ListLicenseConfigurationsRequest": {
"base": null,
"refs": {
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},
"ListLicenseConfigurationsResponse": {
"base": null,
"refs": {
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},
"ListLicenseConversionTasksRequest": {
"base": null,
"refs": {
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},
"ListLicenseConversionTasksResponse": {
"base": null,
"refs": {
}
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"ListLicenseManagerReportGeneratorsRequest": {
"base": null,
"refs": {
}
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"ListLicenseManagerReportGeneratorsResponse": {
"base": null,

"refs": {
}
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"ListLicenseSpecificationsForResourceRequest": {
"base": null,
"refs": {
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"ListLicenseSpecificationsForResourceResponse":
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"base": null,
"refs": {
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},
"ListLicenseVersionsRequest": {
"base": null,
"refs": {
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},
"ListLicenseVersionsResponse": {
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"refs": {
}
},
"ListLicensesRequest": {
"base": null,
"refs": {
}
},
"ListLicensesResponse": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsForOrganizationRequest": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsForOrganizationResponse": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsRequest": {
"base": null,
"refs": {
}

```
  },
  "ListReceivedGrantsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesForOrganizationRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesForOrganizationResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesRequest":
{
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListResourceInventoryRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListResourceInventoryResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListTagsForResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListTagsForResourceResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListTokensRequest": {
```

"base": null,
"refs": {
}
},
"ListTokensResponse": {
"base": null,
"refs": {
}
},
"ListUsageForLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"ListUsageForLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"Location": {
"base": null,
"refs": {
"RedirectException$Location": null
}
},
"Long":
{
"base": null,
"refs": {
"Entitlement$MaxCount": " Maximum entitlement count. Use if the unit is not None. "
}
},
"ManagedResourceSummary": {
"base": " Summary information about a managed resource. ",
"refs": {
"ManagedResourceSummaryList$member": null
}
},
"ManagedResourceSummaryList": {
"base": null,
"refs": {
"GetLicenseConfigurationResponse$ManagedResourceSummaryList": " Summaries of the managed resources. ",
"LicenseConfiguration$ManagedResourceSummaryList": " Summaries for managed resources. "
}
},
"MaxSize100": {
"base": null,

"refs": {
"ListDistributedGrantsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseManagerReportGeneratorsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseVersionsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicensesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedGrantsForOrganizationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedGrantsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedLicensesForOrganizationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedLicensesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListTokensRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"MaxSize3StringList": {
"base": null,
"refs": {
"CreateTokenRequest$TokenProperties": " Data specified by the caller to be included in the JWT token. The data is mapped to the amr claim of the JWT token. ",

"GetAccessTokenRequest$TokenProperties": " Token properties to validate against those present in the JWT token. ",
"TokenData$TokenProperties": " Data specified by the caller. "
}
},
"Message": {
"base": null,
"refs": {
"AccessDeniedException$Message": null,
"AuthorizationException$Message": null,
"ConflictException$Message": null,
"EntitlementNotAllowedException$Message": null,
"FailedDependencyException$Message": null,
"FilterLimitExceededException$Message": null,
"InvalidParameterValueException$Message": null,
"InvalidResourceStateException$Message": null,
"LicenseUsageException$Message": null,
"NoEntitlementsAllowedException$Message": null,
"RateLimitExceededException$Message": null,
"RedirectException$Message": null,
"ResourceLimitExceededException$Message": null,
"ResourceNotFoundException$Message": null,
"ServerInternalException$Message": null,
"UnsupportedDigitalSignatureMethodException$Message": null,
"ValidationException$Message": null

```
    }
  },
  "Metadata": {
    "base": "<p>Describes key/value pairs.</p>",
    "refs": {
      "MetadataList$member": null
    }
  },
  "MetadataList": {
    "base": null,
    "refs": {
      "CheckoutBorrowLicenseRequest$CheckoutMetadata": "<p>Information about constraints.</p>",
      "CheckoutBorrowLicenseResponse$CheckoutMetadata": "<p>Information about constraints.</p>",
      "CreateLicenseRequest$LicenseMetadata": "<p>Information about the license.</p>",
      "CreateLicenseVersionRequest$LicenseMetadata": "<p>Information about the license.</p>",
      "GrantedLicense$LicenseMetadata": "<p>Granted license metadata.</p>",
      "License$LicenseMetadata": "<p>License metadata.</p>",
      "LicenseOperationFailure$MetadataList": "<p>Reserved.</p>"
    }
  },
  "NoEntitlementsAllowedException": {

    "base": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
    "refs": {
    }
  },
  "Options": {
    "base": "<p>The options you can specify when you create a new version of a grant, such as activation override
behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License
Manager User Guide</i>.</p>",
    "refs": {
      "CreateGrantVersionRequest$Options": "<p>The options specified for the grant.</p>",
      "Grant$Options": "<p>The options specified for the grant.</p>"
    }
  },
  "OrganizationConfiguration": {
    "base": "<p>Configuration information for Organizations.</p>",
    "refs": {
      "GetServiceSettingsResponse$OrganizationConfiguration": "<p>Indicates whether Organizations is integrated
with License Manager for cross-account discovery.</p>",
      "UpdateServiceSettingsRequest$OrganizationConfiguration":
 "<p>Enables integration with Organizations for cross-account discovery.</p>"
    }
  },
  "PrincipalArnList": {
    "base": null,
    "refs": {
```

"CreateGrantRequest$Principals": " The grant principals. You can specify one of the following as an Amazon Resource Name (ARN): <ul> An Amazon Web Services account, which includes only the account specified.   An organizational unit (OU), which includes all accounts in the OU.   An organization, which will include all accounts across your organization. "
    }
  },
  "ProductInformation": {
    "base": " Describes product information for a license configuration. ",
    "refs": {
      "ProductInformationList$member": null
    }
  },
  "ProductInformationFilter": {
    "base": " Describes product information filters. ",
    "refs": {
      "ProductInformationFilterList$member":
null
    }
  },
  "ProductInformationFilterList": {
    "base": null,
    "refs": {
      "ProductInformation$ProductInformationFilterList": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. The following filters and are supported when the resource type is <code>SSM_MANAGED</code>: <ul> <code>Application Name</code> - The name of the application. Logical operator is <code>EQUALS</code>.   <code>Application Publisher</code> - The publisher of the application. Logical operator is <code>EQUALS</code>.   <code>Application Version</code> - The version of the application. Logical operator is <code>EQUALS</code>.   <code>Platform Name</code> - The name of the platform. Logical operator is <code>EQUALS</code>.   <code>Platform Type</code> - The platform type. Logical operator is <code>EQUALS</code>.   <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.   <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.   <code>License Included</code> - The type of license included. Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>. Possible values are: <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code> | <code>windows-server-datacenter</code>.   The following filters and logical operators are supported when the resource type is <code>RDS</code>: <ul> <code>Engine Edition</code> - The edition of the database engine. Logical operator is <code>EQUALS</code>. Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.

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</li> <li> <p> <code>License Pack</code> - The license pack. Logical operator is <code>EQUALS</code>.
Possible values are: <code>data guard</code> | <code>diagnostic pack sqlt</code> | <code>tuning pack
sqlt</code> | <code>ols</code> | <code>olap</code>.</p> </li> </ul>"
    }
  },
  "ProductInformationList": {
    "base": null,
    "refs": {
      "CreateLicenseConfigurationRequest$ProductInformationList":
"<p>Product information.</p>",
      "GetLicenseConfigurationResponse$ProductInformationList": "<p>Product information.</p>",
      "LicenseConfiguration$ProductInformationList": "<p>Product information.</p>",
      "UpdateLicenseConfigurationRequest$ProductInformationList": "<p>New product information.</p>"
    }
  },
  "ProvisionalConfiguration": {
    "base": "<p>Details about a provisional configuration.</p>",
    "refs": {
      "ConsumptionConfiguration$ProvisionalConfiguration": "<p>Details about a provisional configuration.</p>"
    }
  },
  "RateLimitExceededException": {
    "base": "<p>Too many requests have been submitted. Try again after a brief wait.</p>",
    "refs": {
    }
  },
  "ReceivedMetadata": {
    "base": "<p>Metadata associated with received licenses and grants.</p>",
    "refs": {
      "GrantedLicense$ReceivedMetadata": "<p>Granted license received metadata.</p>"
    }
  },
  "ReceivedStatus": {
    "base": null,
    "refs": {
      "ReceivedMetadata$ReceivedStatus": "<p>Received status.</p>"
    }
  },
  "RedirectException": {
    "base": "<p>This is not the correct Region for the resource. Try again.</p>",
    "refs": {
    }
  },
  "RejectGrantRequest": {
    "base": null,
    "refs": {
    }
  },
```

"RejectGrantResponse": {
"base": null,
"refs": {
}
},
"RenewType": {
"base": null,
"refs": {
"ConsumptionConfiguration$RenewType": " Renewal frequency. "
}
},
"ReportContext": {
"base": " Details of the license configuration that this generator reports on. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportContext": " Defines the type of license configuration the report generator tracks. ",
"ReportGenerator$ReportContext": " License configuration type for this generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportContext": " The report context. "
}
},
"ReportFrequency": {
"base": " Details about how frequently reports are generated. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"ReportGenerator$ReportFrequency": " Details about how frequently reports are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. "
}
},
"ReportFrequencyType": {
"base": null,
"refs": {
"ReportFrequency$period": " Time period between each report. The period can be daily, weekly, or monthly. "
}
},
"ReportGenerator": {
"base": " Describe the details of a report generator. ",
"refs": {
"GetLicenseManagerReportGeneratorResponse$ReportGenerator": " A report generator that creates periodic reports about your license configurations. ",
"ReportGeneratorList$member": null
}
},
"ReportGeneratorList": {
"base": null,

"refs": {
"ListLicenseManagerReportGeneratorsResponse$ReportGenerators": " A report generator that creates periodic reports about your license configurations. "
}
},
"ReportGeneratorName": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. "
}
},
"ReportType": {
"base": null,
"refs": {
"ReportTypeList$member": null
}
},
"ReportTypeList": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types an
be generated: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. ",
"ReportGenerator$ReportType": " Type of reports that are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types are supported: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. "
}
},
"ResourceInventory": {
"base": " Details about a resource. ",
"refs": {
"ResourceInventoryList$member": null
}
},
"ResourceInventoryList": {
"base": null,
"refs": {
"ListResourceInventoryResponse$ResourceInventoryList": " Information about the resources. "
}
},
"ResourceLimitExceededException": {

"base": " Your resource limits have been exceeded. ",
"refs": {
}
},
"ResourceNotFoundException": {
"base": " The resource cannot be found. ",
"refs": {
}
},
"ResourceType": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ResourceType": " Resource type of the resource consuming a license. ",
"LicenseConfigurationAssociation$ResourceType": " Type of server resource. ",
"LicenseConfigurationUsage$ResourceType": " Type of resource. ",
"LicenseOperationFailure$ResourceType": " Resource type. ",
"ManagedResourceSummary$ResourceType": " Type of resource associated with a license. ",
"ResourceInventory$ResourceType": " Type of resource. "
}
},
"S3Location": {
"base":
" Details of the S3 bucket that report generator reports are published to. ",
"refs": {
"ReportGenerator$S3Location": " Details of the S3 bucket that report generator reports are published
to. "
}
},
"ServerInternalException": {
"base": " The server experienced an internal error. Try again. ",
"refs": {
}
},
"SignedToken": {
"base": null,
"refs": {
"CheckoutBorrowLicenseResponse$SignedToken": " Signed token. ",
"CheckoutLicenseResponse$SignedToken": " Signed token. "
}
},
"StatusReasonMessage": {
"base": null,
"refs": {
"CreateGrantVersionRequest$StatusReason": " Grant status reason. ",
"DeleteGrantRequest$StatusReason": " The Status reason for the delete request. ",
"Grant$StatusReason": " Grant status reason. ",
"ReceivedMetadata$ReceivedStatusReason": " Received status reason. "
}

},

"String": {
"base": null,
"refs": {
"AcceptGrantResponse$Version": " Grant version. ",
"CheckInLicenseRequest$LicenseConsumptionToken": " License consumption token. ",
"CheckInLicenseRequest$Beneficiary": " License beneficiary. ",
"CheckoutBorrowLicenseRequest$NodeId": " Node ID. ",
"CheckoutBorrowLicenseResponse$LicenseConsumptionToken": " License consumption token. ",
"CheckoutBorrowLicenseResponse$NodeId": " Node ID. ",
"CheckoutLicenseRequest$ProductSKU": " Product SKU. ",
"CheckoutLicenseRequest$KeyFingerprint": " Key fingerprint identifying the license. ",
"CheckoutLicenseRequest$Beneficiary": " License beneficiary. ",
"CheckoutLicenseRequest$NodeId": " Node ID. ",
"CheckoutLicenseResponse$LicenseConsumptionToken": " License consumption token. ",
"CheckoutLicenseResponse$NodeId": " Node ID. ",
"CheckoutLicenseResponse$LicenseArn":
" Amazon Resource Name (ARN) of the checkout license. ",
"CreateGrantRequest$GrantName": " Grant name. ",
"CreateGrantRequest$HomeRegion": " Home Region of the grant. ",
"CreateGrantResponse$Version": " Grant version. ",
"CreateGrantVersionRequest$GrantName": " Grant name. ",
"CreateGrantVersionRequest$SourceVersion": " Current version of the grant. ",
"CreateGrantVersionResponse$Version": " New version of the grant. ",
"CreateLicenseConfigurationRequest$Name": " Name of the license configuration. ",
"CreateLicenseConfigurationRequest$Description": " Description of the license configuration. ",
"CreateLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"CreateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"CreateLicenseManagerReportGeneratorResponse$LicenseManagerReportGeneratorArn":
" The Amazon Resource Name (ARN) of the new report generator. ",
"CreateLicenseRequest$LicenseName": " License name. ",
"CreateLicenseRequest$ProductName": " Product name. ",
"CreateLicenseRequest$ProductSKU": " Product SKU. ",
"CreateLicenseRequest$HomeRegion": " Home Region for the license. ",
"CreateLicenseRequest$Beneficiary": " License beneficiary. ",
"CreateLicenseResponse$Version": " License version. ",
"CreateLicenseVersionRequest$LicenseName": " License name. ",
"CreateLicenseVersionRequest$ProductName": " Product name. ",
"CreateLicenseVersionRequest$HomeRegion": " Home Region of the license. ",
"CreateLicenseVersionRequest$SourceVersion": " Current version of the license. ",
"CreateLicenseVersionResponse$Version": " New version of the license. ",
"CreateTokenResponse$TokenId":
" Token ID. ",
"DeleteGrantRequest$Version": " Current version of the grant. ",
"DeleteGrantResponse$Version": " Grant version. ",
"DeleteLicenseConfigurationRequest$LicenseConfigurationArn": " ID of the license configuration. ",

"DeleteLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"DeleteLicenseRequest$SourceVersion": " Current version of the license. ",
"DeleteTokenRequest$TokenId": " Token ID. ",
"Entitlement$Name": " Entitlement name. ",
"Entitlement$Value": " Entitlement resource. Use only if the unit is None. ",
"EntitlementData$Name": " Entitlement data name. ",
"EntitlementData$Value": " Entitlement data value. ",
"EntitlementUsage$Name": " Entitlement usage name. ",
"EntitlementUsage$ConsumedValue": " Resource usage consumed. ",
"EntitlementUsage$MaxCount": " Maximum entitlement usage count. ",
"ExtendLicenseConsumptionRequest$LicenseConsumptionToken": " License consumption token. ",
"ExtendLicenseConsumptionResponse$LicenseConsumptionToken": " License consumption token. ",
"FailedDependencyException$ErrorCode": null,
"GetGrantRequest$Version": " Grant version. ",
"GetLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationId": " Unique ID for the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"GetLicenseConfigurationResponse$Name": " Name of the license configuration. ",
"GetLicenseConfigurationResponse$Description": " Description of the license configuration. ",
"GetLicenseConfigurationResponse$Status": " License configuration status. ",
"GetLicenseConfigurationResponse$OwnerAccountId": " Account ID of the owner of the license configuration. ",
"GetLicenseConversionTaskResponse$ResourceArn": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. ",
"GetLicenseConversionTaskResponse$StatusMessage": " The status message for the conversion task. ",
"GetLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"GetLicenseRequest$Version": " License version. ",
"GetServiceSettingsResponse$S3BucketArn": " Regional S3 bucket path for storing reports, license trail event data, discovery data, and so on. ",
"GetServiceSettingsResponse$SnsTopicArn": " SNS topic configured to receive notifications from License Manager. ",
"GetServiceSettingsResponse$LicenseManagerResourceShareArn": " Amazon Resource Name (ARN) of the resource share. The License Manager management account provides member accounts with access to this share. ",
"Grant$GrantName": " Grant name. ",
"Grant$HomeRegion": " Home Region of the grant. ",
"Grant$Version": " Grant version. ",
"GrantedLicense$LicenseName": " License name. ",
"GrantedLicense$ProductName": " Product name. ",
"GrantedLicense$ProductSKU": " Product SKU. ",
"GrantedLicense$HomeRegion": " Home Region of the granted license. ",

"GrantedLicense$Beneficiary": " Granted license beneficiary. ",
"GrantedLicense$Version": " Version of the granted license. ",
"InventoryFilter$Name": " Name of the filter. ",
"InventoryFilter$Value": " Value of the filter. ",
"Issuer$Name": " Issuer name. ",
"Issuer$SignKey":
" Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$Name": " Issuer name. ",
"IssuerDetails$SignKey": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$KeyFingerprint": " Issuer key fingerprint. ",
"License$LicenseName": " License name. ",
"License$ProductName": " Product name. ",
"License$ProductSKU": " Product SKU. ",
"License$HomeRegion": " Home Region of the license. ",
"License$Beneficiary": " License beneficiary. ",
"License$Version": " License version. ",
"LicenseConfiguration$LicenseConfigurationId": " Unique ID of the license configuration. ",
"LicenseConfiguration$LicenseConfigurationArn":
" Amazon Resource Name (ARN) of the license configuration. ",
"LicenseConfiguration$Name": " Name of the license configuration. ",
"LicenseConfiguration$Description": " Description of the license configuration. ",
"LicenseConfiguration$Status": " Status of the license configuration. ",
"LicenseConfiguration$OwnerAccountId": " Account ID of the license configuration's owner. ",
"LicenseConfigurationAssociation$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationAssociation$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource consuming licenses. ",
"LicenseConfigurationAssociation$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"LicenseConfigurationUsage$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationUsage$ResourceStatus":
" Status of the resource. ",
"LicenseConfigurationUsage$ResourceOwnerId": " ID of the account that owns the resource. ",
"LicenseConversionTask$ResourceArn": " The Amazon Resource Name (ARN) of the resource associated with the license type conversion task. ",
"LicenseConversionTask$StatusMessage": " The status message for the conversion task. ",
"LicenseOperationFailure$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseOperationFailure$ErrorMessage": " Error message. ",
"LicenseOperationFailure$OperationName": " Name of the operation. ",
"LicenseOperationFailure$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource. ",
"LicenseOperationFailure$OperationRequestedBy": " The requester is \"License Manager Automated Discovery\". ",
"LicenseSpecification$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"LicenseSpecification$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",

"ListAssociationsForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of a license configuration. ",
"ListAssociationsForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListAssociationsForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListFailuresForLicenseConfigurationOperationsRequest$LicenseConfigurationArn": " Amazon Resource Name of the license configuration. ",
"ListFailuresForLicenseConfigurationOperationsRequest$NextToken": " Token for the next set of results. ",

"ListFailuresForLicenseConfigurationOperationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksResponse$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"ListLicenseSpecificationsForResourceRequest$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceResponse$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsResponse$NextToken": " Token for the next set of results. ",
"ListLicensesRequest$NextToken": " Token for the next set of results. ",
"ListLicensesResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesResponse$NextToken": " Token for the next set of results. ",
"ListResourceInventoryRequest$NextToken": " Token for the next set of results. ",
"ListResourceInventoryResponse$NextToken": " Token for the next set of results. ",
"ListTagsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListTokensRequest$NextToken": " Token for the next set of results. ",
"ListTokensResponse$NextToken": " Token for the next set of results. ",
"ListUsageForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListUsageForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListUsageForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"MaxSize3StringList$member": null,
"Metadata$Name": " The key name. ",

"Metadata$Value": " The value. ",
"ProductInformation$ResourceType": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"ProductInformationFilter$ProductInformationFilterName": " Filter name. ",
"ProductInformationFilter$ProductInformationFilterComparator": " Logical operator. ",
"RejectGrantResponse$Version": " Grant version. ",
"ReportGenerator$ReportGeneratorName": " Name of the report generator. ",
"ReportGenerator$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"ReportGenerator$LastRunStatus": " Status of the last report generation attempt. ",
"ReportGenerator$LastRunFailureReason": " Failure message for the last report generation attempt. ",
"ReportGenerator$LastReportGenerationTime": " Time the last report was generated at. ",
"ReportGenerator$ReportCreatorAccount": " The Amazon Web Services account ID used to create the report generator. ",
"ReportGenerator$Description": " Description of the report generator. ",
"ReportGenerator$CreateTime": " Time the report was created. ",
"ResourceInventory$ResourceId": " ID of the resource. ",
"ResourceInventory$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"ResourceInventory$Platform": " Platform of the resource. ",
"ResourceInventory$PlatformVersion": " Platform version of the resource in the inventory. ",
"ResourceInventory$ResourceOwningAccountId": " ID of the account that owns the resource. ",
"S3Location$bucket": " Name of the S3 bucket reports are published to. ",

"S3Location$keyPrefix": " Prefix of the S3 bucket reports are published to. ",
"StringList$member": null,
"Tag$Key": " Tag key. ",
"Tag$Value": " Tag value. ",
"TagKeyList$member": null,
"TagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"TokenData$TokenId": " Token ID. ",
"TokenData$TokenType": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. ",
"TokenData$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"TokenData$Status": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. ",
"UntagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$Name": " New name of the license configuration. ",
"UpdateLicenseConfigurationRequest$Description": " New description of the license configuration. ",
"UpdateLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to update. ",
"UpdateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"UpdateLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",

"UpdateServiceSettingsRequest$S3BucketArn": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. ",
"UpdateServiceSettingsRequest$SnsTopicArn": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"StringList": {
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$LicenseRules": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules vary by dimension, as follows.   <code>Cores</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumCores</code> | <code>minimumCores</code>   <code>Instances</code> dimension: <code>allowedTenancy</code> | <code>maximumCores</code> | <code>minimumCores</code> | <code>maximumSockets</code> | <code>minimumSockets</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   <code>Sockets</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumSockets</code> | <code>minimumSockets</code>   <code>vCPUs</code> dimension: <code>allowedTenancy</code> | <code>honorVcpuOptimization</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are <code>True</code> and <code>False</code>. ",
"GetLicenseConfigurationResponse$LicenseRules": " License rules. ",
"LicenseConfiguration$LicenseRules": " License rules. ",
"ListLicenseConfigurationsRequest$LicenseConfigurationArns": " Amazon Resource Names (ARN) of the license configurations. ",
"ListTokensRequest$TokenIds": " Token IDs. ",
"ProductInformationFilter$ProductInformationFilterValue": " Filter value. ",
"UpdateLicenseConfigurationRequest$LicenseRules": " New license rule. The only rule that you can add after you create a license configuration is licenseAffinityToHost. "
}
},
"Tag": {
"base": " Details about a tag for a license configuration. ",
"refs": {
"TagList$member": null
}
},
"TagKeyList": {
"base": null,
"refs": {
"UntagResourceRequest$TagKeys": " Keys identifying the tags to remove. "
}
},
"TagList": {

```
  "base": null,
  "refs": {
    "CreateLicenseConfigurationRequest$Tags": "<p>Tags to add to the license configuration.</p>",
    "CreateLicenseManagerReportGeneratorRequest$Tags": "<p>Tags to add to the report generator.</p>",
    "GetLicenseConfigurationResponse$Tags": "<p>Tags for the license configuration.</p>",
    "ListTagsForResourceResponse$Tags": "<p>Information about the tags.</p>",
    "ReportGenerator$Tags": "<p>Tags associated with the report generator.</p>",
    "TagResourceRequest$Tags": "<p>One or more tags.</p>"
  }
},
"TagResourceRequest": {
  "base": null,
  "refs": {
  }
},
"TagResourceResponse": {
  "base": null,
  "refs": {

  }
},
"TokenData": {
  "base": "<p>Describes a token.</p>",
  "refs": {
    "TokenList$member": null
  }
},
"TokenList": {
  "base": null,
  "refs": {
    "ListTokensResponse$Tokens": "<p>Received token details.</p>"
  }
},
"TokenString": {
  "base": null,
  "refs": {
    "CreateTokenResponse$Token": "<p>Refresh token, encoded as a JWT token.</p>",
    "GetAccessTokenRequest$Token": "<p>Refresh token, encoded as a JWT token.</p>",
    "GetAccessTokenResponse$AccessToken": "<p>Temporary access token.</p>"
  }
},
"TokenType": {
  "base": null,
  "refs": {
    "CreateTokenResponse$TokenType": "<p>Token type.</p>"
  }
},
"UnsupportedDigitalSignatureMethodException": {
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"base": " The digital signature method is unsupported. Try your request again. ",
"refs": {
}
},
"UntagResourceRequest": {
"base": null,
"refs": {
}
},
"UntagResourceResponse":
{
"base": null,
"refs": {
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"UpdateLicenseConfigurationRequest": {
"base": null,
"refs": {
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"UpdateLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"UpdateLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
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},
"UpdateLicenseManagerReportGeneratorResponse": {
"base": null,
"refs": {
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"UpdateLicenseSpecificationsForResourceRequest": {
"base": null,
"refs": {
}
},
"UpdateLicenseSpecificationsForResourceResponse": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsRequest": {
"base": null,
"refs": {

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    }
  },
  "UpdateServiceSettingsResponse": {
    "base": null,
    "refs": {
    }
  },
  "UsageOperation": {
    "base": null,
    "refs": {
      "LicenseConversionContext$UsageOperation": "<p>The Usage operation value
 that corresponds to the license type you are converting your resource from. For more information about which
platforms correspond to which usage operation values see <a
href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample
data: usage operation by platform </a> </p>"
    }
  },
  "ValidationException": {
    "base": "<p>The provided input is not valid. Try your request again.</p>",
    "refs": {
    }
  }
 }
}
{
  "testCases": [
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      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "af-south-1"
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
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"UseDualStack": false,
"Region": "ap-east-1"
}
},
{
"documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-northeast-1"
}
},
{
"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-2.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-northeast-2"
}
},
{
"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-northeast-3"
}
},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-south-1"
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack":
false,
"Region": "ap-southeast-1"
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-southeast-2"
}
},
{
"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-southeast-3"
}

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    },
    {
      "documentation":
"For region ca-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ca-central-1"
      }
    },
    {
      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "eu-central-1"
      }
    },
    {
      "documentation": "For region eu-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "eu-north-1"
      }
    },
    {
      "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
```

```
        },
        "params": {
          "UseFIPS": false,
          "UseDualStack": false,
          "Region": "eu-south-1"
        }
      },
      {
        "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.eu-west-1.amazonaws.com"
          }
        },
        "params":
{
          "UseFIPS": false,
          "UseDualStack": false,
          "Region": "eu-west-1"
        }
      },
      {
        "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.eu-west-2.amazonaws.com"
          }
        },
        "params": {
          "UseFIPS": false,
          "UseDualStack": false,
          "Region": "eu-west-2"
        }
      },
      {
        "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.eu-west-3.amazonaws.com"
          }
        },
        "params": {
          "UseFIPS": false,
          "UseDualStack": false,
          "Region": "eu-west-3"
        }
```

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},
    {
      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "me-south-1"
      }
    },
    {
      "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.sa-east-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "sa-east-1"
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {

      "endpoint": {
          "url": "https://license-manager.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-east-1"
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-1.amazonaws.com"
        }
      },
```

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      "params": {
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        "UseDualStack": false,
        "Region": "us-east-1"
      }
    },
    {
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      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-2.amazonaws.com"
        }
      },

     "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-east-2"
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-east-2"
      }
    },
    {
      "documentation": "For region us-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-west-1"

  }
    },
    {
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
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},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "us-west-1"
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-west-2.amazonaws.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "us-west-2"
}
},
{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
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"endpoint": {
"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "us-west-2"
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"UseFIPS": true,

"UseDualStack": true,
"Region": "us-east-1"
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},

"params": {
"UseFIPS": false,
"UseDualStack": true,
"Region": "us-east-1"
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "cn-north-1"
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "cn-northwest-1"
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": true,
"Region": "cn-north-1"
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "cn-north-1"
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled
and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": true,
"Region": "cn-north-1"
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "us-gov-east-1"
}

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},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
     }
  },
  "params": {
    "UseFIPS": true,
    "UseDualStack": false,
    "Region": "us-gov-east-1"
  }
},
{
  "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-gov-west-1.amazonaws.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Region": "us-gov-west-1"
  }
},
{
  "documentation": "For region us-gov-west-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
    }
  },
  "params": {

    "UseFIPS": true,
    "UseDualStack": false,
    "Region": "us-gov-west-1"
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
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    }
  },
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        "UseDualStack": true,
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      }
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    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": true,
        "Region": "us-gov-east-1"
      }

  },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-iso-east-1"
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": true,
        "Region": "us-iso-east-1"
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
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"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
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},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "us-iso-east-1"
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"UseFIPS": false,
"UseDualStack": true,
"Region": "us-iso-east-1"
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
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},
"params":
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"UseFIPS": false,
"UseDualStack": false,
"Region": "us-isob-east-1"
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"UseFIPS": true,
"UseDualStack": true,
"Region": "us-isob-east-1"
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

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    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-isob-east-1"
    }
 },
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
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        "UseDualStack": true,
        "Region": "us-isob-east-1"
    }
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    "expect": {
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        "UseDualStack": false,
        "Region": "us-east-1",
        "Endpoint": "https://example.com"
    }
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        "Endpoint": "https://example.com"
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          "UseDualStack": false,
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          "Endpoint": "https://example.com"
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          "Endpoint": "https://example.com"
        }
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        "expect": {
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        "required": false,
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        "type": "String"
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        "required": true,
        "default": false,
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"type": "Boolean"
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"type": "Boolean"
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"ref": "Endpoint"
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"type": "error"
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{

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                    "type": "error"
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                    "type": "endpoint"
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            "type": "tree"
        }
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    "conditions": [],
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}
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                                    "properties": {},
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"limit_key": "MaxResults",
"result_key": "Subscriptions"
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"result_key": "InstanceSummaries"
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"result_key": "ProductUserSummaries"
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"limit_key": "MaxResults",
"result_key": "InstanceUserSummaries"
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 "metadata":{
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   "serviceId":"License Manager User Subscriptions",
   "signatureVersion":"v4",
   "signingName":"license-manager-user-subscriptions",
   "uid":"license-manager-user-subscriptions-2018-05-10"
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       {"shape":"ValidationException"},
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       {"shape":"ResourceNotFoundException"},
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    "InstanceId",
    "Username"
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    "Username":{"shape":"String"}
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  "fault":true
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"Product"
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"Product":{"shape":"String"}
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"Username":{"shape":"String"}
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"Operation":{"shape":"String"},
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"FilterList":{
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"Product",
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"Status"
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"IdentityProvider":{"shape":"IdentityProvider"},
"Product":{"shape":"String"},
"Settings":{"shape":"Settings"},
"Status":{"shape":"String"}
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"type":"list",
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"InstanceSummary":{
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"Products",
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"LastStatusCheckDate":{"shape":"String"},
"Products":{"shape":"StringList"},
"Status":{"shape":"String"},
"StatusMessage":{"shape":"String"}
}
},
"InstanceSummaryList":{
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  "required":[
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    "Status",
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    "DisassociationDate":{"shape":"String"},
    "Domain":{"shape":"String"},
    "IdentityProvider":{"shape":"IdentityProvider"},
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"Product":{"shape":"String"}
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      "Username"
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      "Status":{"shape":"String"},
      "StatusMessage":{"shape":"String"},
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      "Username":{"shape":"String"}
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    "required":[
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      "Product"
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       "Product":{"shape":"String"},
      "Settings":{"shape":"Settings"}
    }
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"IdentityProviderSummary":{"shape":"IdentityProviderSummary"}
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"error":{
"httpStatusCode":404,
"senderFault":true
},
"exception":true
},
"SecurityGroup":{
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"max":200,
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"ServiceQuotaExceededException":{
"type":"structure",
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"Subnets"
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"Subnets":{"shape":"SettingsSubnetsList"}
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"Product",

"Username"
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"IdentityProvider":{"shape":"IdentityProvider"},
"Product":{"shape":"String"},
"Username":{"shape":"String"}
}
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"StartProductSubscriptionResponse":{
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"Product",
"Username"
],
"members":{
"Domain":{"shape":"String"},
"IdentityProvider":{"shape":"IdentityProvider"},
"Product":{"shape":"String"},
"Username":{"shape":"String"}
}
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"StopProductSubscriptionResponse":{
"type":"structure",
"required":["ProductUserSummary"],
"members":{
"ProductUserSummary":{"shape":"ProductUserSummary"}
}
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"String":{"type":"string"},
"StringList":{
"type":"list",
"member":{"shape":"String"}
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"Subnet":{
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"pattern":"subnet-[a-z0-9]{8,17}"
},
"Subnets":{
"type":"list",

```
  "member":{"shape":"Subnet"}
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"ThrottlingException":{
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  "exception":true
},
"UpdateIdentityProviderSettingsRequest":{
  "type":"structure",
  "required":[
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    "Product",
    "UpdateSettings"
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  "members":{
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     "Product":{"shape":"String"},
    "UpdateSettings":{"shape":"UpdateSettings"}
  }
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"UpdateIdentityProviderSettingsResponse":{
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  "required":["IdentityProviderSummary"],
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},
"UpdateSettings":{
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    "AddSubnets",
    "RemoveSubnets"
  ],
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    "RemoveSubnets":{"shape":"Subnets"},
    "SecurityGroupId":{"shape":"SecurityGroup"}
  }
},
"ValidationException":{
  "type":"structure",
  "members":{
    "message":{"shape":"String"}
  },
  "exception":true
}
```

}
}

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{
"version":"2.0",
"metadata":{
"apiVersion":"2018-05-10",
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"jsonVersion":"1.1",
"protocol":"rest-json",
"protocols":["rest-json"],
"serviceFullName":"AWS License Manager Linux Subscriptions",
"serviceId":"License Manager Linux Subscriptions",
"signatureVersion":"v4",
"signingName":"license-manager-linux-subscriptions",
"uid":"license-manager-linux-subscriptions-2018-05-10",
"auth":["aws.auth#sigv4"]
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"http":{
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{"shape":"ResourceNotFoundException"},
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"http":{
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"ListTagsForResource":{
"name":"ListTagsForResource",
"http":{
"method":"GET",
"requestUri":"/tags/{resourceArn}",
"responseCode":200
},
"input":{"shape":"ListTagsForResourceRequest"},
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"errors":[
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{"shape":"ResourceNotFoundException"},
{"shape":"ValidationException"}
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"http":{
"method":"PUT",
"requestUri":"/tags/{resourceArn}",
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"input":{"shape":"TagResourceRequest"},
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{"shape":"ValidationException"}
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    "box":true
  },
  "BoxLong":{
    "type":"long",
    "box":true
  },
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    "required":["SubscriptionProviderArn"],
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    }
  },
  "DeregisterSubscriptionProviderResponse":{
    "type":"structure",
    "members":{
    }
  },
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    "Operator":{"shape":"Operator"},
    "Values":{"shape":"StringList"}
  }
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"FilterList":{
  "type":"list",
  "member":{"shape":"Filter"}
 },
"GetRegisteredSubscriptionProviderRequest":{
  "type":"structure",
  "required":["SubscriptionProviderArn"],
  "members":{
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  }
},
"GetRegisteredSubscriptionProviderResponse":{
  "type":"structure",
  "members":{
    "LastSuccessfulDataRetrievalTime":{"shape":"String"},
    "SecretArn":{"shape":"SecretArn"},
    "SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"},
    "SubscriptionProviderStatusMessage":{"shape":"String"}
  }
},
"GetServiceSettingsRequest":{
  "type":"structure",
  "members":{
  }
},
"GetServiceSettingsResponse":{
  "type":"structure",
  "members":{
    "HomeRegions":{"shape":"StringList"},
    "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
     "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
    "Status":{"shape":"Status"},
    "StatusMessage":{"shape":"StringMap"}
  }
},
"Instance":{
  "type":"structure",
  "members":{

"AccountID":{"shape":"String"},
"AmiId":{"shape":"String"},
"DualSubscription":{"shape":"String"},
"InstanceID":{"shape":"String"},
"InstanceType":{"shape":"String"},
"LastUpdatedTime":{"shape":"String"},
"OsVersion":{"shape":"String"},
"ProductCode":{"shape":"ProductCodeList"},
"Region":{"shape":"String"},
"RegisteredWithSubscriptionProvider":{"shape":"String"},
"Status":{"shape":"String"},
"SubscriptionName":{"shape":"String"},
"SubscriptionProviderCreateTime":{"shape":"String"},
"SubscriptionProviderUpdateTime":{"shape":"String"},
"UsageOperation":{"shape":"String"}
}
},

"InstanceList":{
"type":"list",
"member":{"shape":"Instance"}
},
"InternalServerException":{
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"exception":true,
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},
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"LinuxSubscriptionsDiscoverySettings":{
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"required":[
"OrganizationIntegration",
"SourceRegions"
],
"members":{
"OrganizationIntegration":{"shape":"OrganizationIntegration"},
"SourceRegions":{"shape":"StringList"}
}
},

"ListLinuxSubscriptionInstancesRequest":{
  "type":"structure",
  "members":{
    "Filters":{"shape":"FilterList"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"ListLinuxSubscriptionInstancesRequestNextTokenString"}
  }
},
"ListLinuxSubscriptionInstancesRequestNextTokenString":{
   "type":"string",
  "max":16384,
  "min":1
},
"ListLinuxSubscriptionInstancesResponse":{
  "type":"structure",
  "members":{
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    "NextToken":{"shape":"String"}
  }
},
"ListLinuxSubscriptionsRequest":{
  "type":"structure",
  "members":{
    "Filters":{"shape":"FilterList"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"ListLinuxSubscriptionsRequestNextTokenString"}
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},
"ListLinuxSubscriptionsRequestNextTokenString":{
  "type":"string",
  "max":16384,
  "min":1
},
"ListLinuxSubscriptionsResponse":{
  "type":"structure",
  "members":{
    "NextToken":{"shape":"String"},
    "Subscriptions":{"shape":"SubscriptionList"}
  }
},
"ListRegisteredSubscriptionProvidersRequest":{
  "type":"structure",
  "members":{
    "MaxResults":{"shape":"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger"},
     "NextToken":{"shape":"String"},
    "SubscriptionProviderSources":{"shape":"SubscriptionProviderSourceList"}
  }
},

"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger":{
  "type":"integer",
  "box":true,
  "max":100,
  "min":1
},
"ListRegisteredSubscriptionProvidersResponse":{
  "type":"structure",
  "members":{
    "NextToken":{"shape":"String"},
    "RegisteredSubscriptionProviders":{"shape":"RegisteredSubscriptionProviderList"}
  }
},
"ListTagsForResourceRequest":{
  "type":"structure",
  "required":["resourceArn"],
  "members":{
    "resourceArn":{
      "shape":"SubscriptionProviderArn",
      "location":"uri",
      "locationName":"resourceArn"
    }
  }
},
"ListTagsForResourceResponse":{
  "type":"structure",
  "members":{
    "tags":{"shape":"Tags"}
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},
"Operator":{
  "type":"string",
   "enum":[
    "Equal",
    "NotEqual",
    "Contains"
  ],
  "max":20,
  "min":1
},
"OrganizationIntegration":{
  "type":"string",
  "enum":[
    "Enabled",
    "Disabled"
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},
"ProductCodeList":{

"type":"list",
"member":{"shape":"String"}
},
"RegisterSubscriptionProviderRequest":{
"type":"structure",
"required":[
"SecretArn",
"SubscriptionProviderSource"
],
"members":{
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"Tags":{"shape":"Tags"}
}
},
"RegisterSubscriptionProviderResponse":{
"type":"structure",
"members":{
"SubscriptionProviderArn":{"shape":"String"},
"SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
"SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"}
}
},
"RegisteredSubscriptionProvider":{
"type":"structure",
"members":{
"LastSuccessfulDataRetrievalTime":{"shape":"String"},
"SecretArn":{"shape":"SecretArn"},
"SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"},
"SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
"SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"},
"SubscriptionProviderStatusMessage":{"shape":"String"}
}
},
"RegisteredSubscriptionProviderList":{
"type":"list",
"member":{"shape":"RegisteredSubscriptionProvider"}
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"ResourceNotFoundException":{
"type":"structure",
"members":{
"message":{"shape":"String"}
},
"exception":true
},
"SecretArn":{
"type":"string",
"pattern":"^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

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  },
  "Status":{
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      "InProgress",

  "Completed",
      "Successful",
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    "max":100,
    "min":1
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  "StringListMemberString":{
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    "min":1
  },
  "StringMap":{
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    "value":{"shape":"String"}
  },
  "Subscription":{
    "type":"structure",
    "members":{
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      "Type":{"shape":"String"}
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    "member":{"shape":"Subscription"}
  },
  "SubscriptionProviderArn":{
    "type":"string",
    "pattern":"^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
  },
  "SubscriptionProviderSource":{
    "type":"string",
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 },
"SubscriptionProviderSourceList":{
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  "member":{"shape":"SubscriptionProviderSource"}
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"SubscriptionProviderStatus":{
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    "INVALID",
    "PENDING"
  ]
},
"TagKeyList":{
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  "member":{"shape":"String"},
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  "min":0,
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"TagResourceRequest":{
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    "tags"
  ],
  "members":{
    "resourceArn":{
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      "location":"uri",
      "locationName":"resourceArn"
    },
    "tags":{"shape":"Tags"}
  }
},
"TagResourceResponse":{
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  "value":{"shape":"String"},
  "max":50,
  "min":0,
  "sensitive":true
},
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    "tagKeys":{
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      "location":"querystring",
      "locationName":"tagKeys"
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"UntagResourceResponse":{
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    "LinuxSubscriptionsDiscoverySettings"
  ],
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    "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
    "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"}
  }
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"UpdateServiceSettingsResponse":{
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"LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
"Status":{"shape":"Status"},
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"ValidationException":{
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{
"version": "1.0",
"parameters": {
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"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
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"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {

"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

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            "argv": [
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              }
            ]
          }
        ],
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        "rules": [
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            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom
endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "type": "tree",
            "rules": [
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                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
```

```
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],

"endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
  ]
},
{
  "conditions": [],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",
              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
```

```
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },

true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]
                              }
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
```

```
                    true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
                {

                    "conditions": [],
                    "type": "tree",
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ]

        }
            ]
        },
        {
            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
            "type": "error"
        }
    ]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
```

```
                    {
                        "ref": "UseFIPS"
                    },
                    true

                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"

},
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    }
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                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url":
"https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ]
                    }
                ]
```

```
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"
                    }
                ]

            },
                {
                "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
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                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv":
[
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [

                {
                                "conditions": [],
                                "type": "tree",
```

```
                "rules": [
                  {
                    "conditions": [],
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                      "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ]

              }
            ]
            },
            {
              "conditions": [],
              "error": "DualStack is enabled but this partition does not support DualStack",
              "type": "error"
            }
          ]
        },
        {
          "conditions": [],
          "type": "tree",
          "rules": [
            {
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                 "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ]
        }
      ]
    }
  ]
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
]
```

```
      }
    ]
  }
  {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and
DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
```

```
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
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    "expect": {
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        }
    },
    "params": {
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        "UseFIPS": false,
        "UseDualStack": true
    }
```

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},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
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    }
  },
  "params": {
    "Region": "cn-north-1",
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    "UseDualStack": false
  }
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{
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      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
    }
  },
  "params": {
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    "UseFIPS": true,
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  }
},
{
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  "expect": {
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    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
    }
  },
  "params": {
```

```
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        "UseDualStack": true
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    },
    {
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        }
      },
      "params": {
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        "UseFIPS": false,
        "UseDualStack": false
      }
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    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
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      },
      "params": {
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        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
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        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
```

```
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        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
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{
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    "expect": {
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    },
    "params": {
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        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
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    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
```

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}
},
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}
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},
{

"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
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}
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"params": {
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"UseFIPS": false,
"UseDualStack": false,
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}
},
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}
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"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",

"expect":
{
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},
"params": {
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"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}

1.3323 sql-migrate 1.7.1

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1.3324 otiai10-copy 1.14.1

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1.3325 gonvenience-bunt 1.4.0

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1.3326 filepath-securejoin 0.3.6

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1.3327 genproto-googleapis-rpc 0.0.0-20241223144023-3abc09e42ca8

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1.3328 mime-type 1.4.8

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1.3329 github.com/gabriel-vasile/mimetype 1.4.8

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1.3330 validator 10.24.0

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1.3331 github.com/cyphar/filepath-securejoin 0.3.6

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1.3332 sean-seed 0.0.0-20170313163322-e2103e2c3529

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=====

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1.3333 github.com/containerd/errdefs/pkg 0.3.0

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1.3334 protobuf-go 1.35.1

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1.3335 google-cloud-go-iam 1.3.1

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
```

```
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
```

```
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
```

```
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
```

```
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
```

```
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}
```

```
// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string
```

```
 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
```

```
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
```

```
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
```

```
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

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package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
```

```
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
```

```
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
```

```
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
```

```
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
     connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
```

```
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
```

```
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
```

```
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
```

```
"UpdateLicensePool")
 return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}
```

```
func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()
```

```
 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
```

```
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())
```

```
 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(),
bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
  req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
  req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
  return nil, "", err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
```

```
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
```

```
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
```

```
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications
to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
for resp, err := range c.List(ctx, req).All() {
 if err != nil {
  // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
// Copyright 2024 Google LLC
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
```

```
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2024 Google LLC
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
```

```
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
```

```
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}
```

```
type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}
```

```
// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
```

```
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
```

```
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
```

```
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
```

```
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
```

```
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
 if ms.LoadMessageInfo()
 == nil {
  ms.StoreMessageInfo(mi)
 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
if x != nil {
 return x.Parent
}
return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
if x != nil {
 return x.PageSize
}
return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
if x != nil {
 return x.PageToken
}
return ""
}

// A licensed user.
type LicensedUser struct {
state         protoimpl.MessageState
sizeCache     protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Username.
// Format: `name@domain.com`.
Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
//
```

```
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
```

```
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
```

```
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
```

```
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}
```

```
func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
```

0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f,
0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a, 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f, 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a, 0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01, 0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73,
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,

0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
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0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x63, 0x6f, 0x6c, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x41, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72,
0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x3b, 0x0a,
0x17, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x15, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x75, 0x6e, 0x74, 0x12, 0x33, 0x0a, 0x13, 0x74, 0x6f,
0x74, 0x61, 0x6c, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e,
0x74, 0x18, 0x04, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03, 0xe0, 0x41, 0x03, 0x52, 0x11, 0x74, 0x6f,
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0x74, 0x3a,
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0x6d, 0x65, 0x72, 0x63, 0x65, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f,
0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61,
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0x6c, 0x2a, 0x0c, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x73, 0x32,
0x0b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x22, 0x30, 0x0a, 0x15,
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0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65,
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0x01, 0x0a, 0x18, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x12, 0x62, 0x0a, 0x0c, 0x6c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28,
0x0b, 0x32, 0x3a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d,
0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
0x41, 0x02, 0x52, 0x0b, 0x6c, 0x69, 0x63, 0x65,

0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12,
0x40, 0x0a, 0x0b, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x18, 0x02,
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0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65,
0x73, 0x74, 0x1a, 0x4d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e,
0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f,
0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,

```
 0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
 0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
 0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
 0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
 0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
 0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
```

```
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
```

```
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
```

```
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
```

```
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
```

```
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
```

```
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
```

```
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
```

```
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
```

```
  Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
 },
},
Streams:  []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```
func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
```

```
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
```

```
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.
```

```
// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
```

```
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution
This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
```

```
 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}
```

```
//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
```

```
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
m := protojson.MarshalOptions{AllowPartial: true}
body := req.GetLicenseResource()
jsonReq, err := m.Marshal(body)
if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
```

```
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
```

```
 if pageSize > math.MaxInt32
{
  req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
  req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
```

```
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())
```

```
 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
```

```
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
```

```
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
```

```
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"
```

```
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
```

```
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
```

```
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
```

```
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
```

```
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
```

0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
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0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
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0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
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0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
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0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
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0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
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0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,

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 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
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 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
```

```
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.3336 go.mongodb.org-mongo-driver 1.17.2

1.3336.1 Available under license :

```
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BSON library for Go

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1.3337 s2a-go 0.1.9

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1.3338 go-colorable 0.1.14

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1.3339 tar-split 0.11.6

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1.3340 go-securesystemslib 0.9.0

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1.3341 go-containerregistry 0.20.3

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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1.3342 stargz-snapshotter-estargz 0.16.3

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1.3346 go.opentelemetry.io/otel/exporters/otlp/otlptrace 1.34.0

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1.3354 github.com/grpc-ecosystem/grpc-gateway/v2 2.25.1

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1.3355 go.opentelemetry.io/proto/otlp 1.5.0

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# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
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pkgname=bsd-compat-headers
```

```
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
```

```
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
```

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1.3370 libmd 1.1.0-2build1.1

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1.3371 gods 1.18.1

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1.3372 alpine-baselayout-data 3.6.8-r1

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# Automatically generated by apkbuild-cpan, template 1
# Contributor: Francesco Colista <francesco.colista@gmail.com>
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pkgname=perl-software-license
_pkgreal=Software-License
pkgver=0.103004
pkgrel=0
pkgdesc="packages that provide templated software licenses"
url="http://search.cpan.org/dist/Software-License/"
arch="noarch"
license="GPL PerlArtistic"
cpandepends="perl-text-template perl-data-section perl-sub-install"
```

```
cpanmakedepends="   "
depends="$cpandepends"
makedepends="perl-dev $cpanmakedepends"
subpackages="$pkgname-doc"
source="http://search.cpan.org/CPAN/authors/id/R/RJ/RJBS/$_pkgreal-$pkgver.tar.gz"

_builddir="$srcdir/$_pkgreal-$pkgver"

prepare() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 PERL_MM_USE_DEFAULT=1 perl Makefile.PL INSTALLDIRS=vendor
}

build() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 make && make test
}

package() {
 cd "$_builddir"
 make
 DESTDIR="$pkgdir" install || return 1
 find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

md5sums="0c5fd53d93818566234578b27d667b35  Software-License-0.103004.tar.gz"
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pkgname=py-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.0
pkgrel=0
pkgdesc="Extension for flake8 which checks for copyrights"
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="flake8"
makedepends="python3-dev"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

build() {
 cd "$builddir"
 python3 setup.py build || return 1
}

package() {
 cd "$builddir"
 python3 setup.py install --prefix=/usr --root="$pkgdir" || return 1
}

md5sums="c6348990c6d74933bf5d5f6a55a14bdf  flake8-copyright-0.2.0.tar.gz"
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sha512sums="bab1bfaeed3a525ac3c7da12b1f2ec338c204cc69b72d05cd39560e528faff5d586c3b1be9570f4a977a7e
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SUCH DAMAGE.
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=5
pkgdesc="A library for high-performance 2D graphics"
url="http://www.levien.com/libart/"
arch="all"
license="LGPL"
depends=
makedepends=
subpackages="$pkgname-dev"
source="http://ftp.gnome.org/pub/GNOME/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

_builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 cd "$_builddir"
 update_config_sub || return 1
}
build() {
 cd "$_builddir"
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  || return 1
 make || return 1
}

package() {
 cd "$_builddir"
 make DESTDIR="$pkgdir" install || return 1
}

md5sums="08559ff3c67fd95d57b0c5e91a6b4302  libart_lgpl-2.3.21.tar.bz2"
# Automatically generated by apkbuild-cpan, template 1
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Valery Kartel <valery.kartel@gmail.com>
```

```
pkgname=perl-bsd-resource
_pkgreal=BSD-Resource
pkgver=1.2909
pkgrel=1
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="http://search.cpan.org/dist/BSD-Resource/"
arch="all"
license="GPL PerlArtistic"
cpandepends=""
cpanmakedepends="   "
depends="$cpandepends"
makedepends="perl-dev $cpanmakedepends"
subpackages="$pkgname-doc"
source="http://search.cpan.org/CPAN/authors/id/J/JH/JHI/$_pkgreal-$pkgver.tar.gz"

_builddir="$srcdir/$_pkgreal-$pkgver"

prepare() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 PERL_MM_USE_DEFAULT=1 perl Makefile.PL INSTALLDIRS=vendor
}

build() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 make && make test || return 1
}

package() {
 cd "$_builddir"
 make DESTDIR="$pkgdir" install || return 1
 find "$pkgdir"
 \( -name perllocal.pod -o -name .packlist \) -delete
}

md5sums="3c6dd2fa953088aa87e263f40818d012  BSD-Resource-1.2909.tar.gz"
sha256sums="c47d460e2bd00d8d049f6ff4a0f1f61957e289e8de45af5fc79e851e2e855e06  BSD-Resource-
1.2909.tar.gz"
sha512sums="5f489eaac5089e82081b7cf51d62638750e443751b49415407354da96b17771819b5e6e85529faa41ddd
85743363750157943c7f7700276cce2bd40a429fa430  BSD-Resource-1.2909.tar.gz"
```

1.3373 kmod 31+20240202-2ubuntu7.1

1.3373.1 Available under license :

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SUCH DAMAGE.

1.3375 sqlite 3.45.1-1ubuntu2.1

1.3375.1 Available under license :

No license file was found, but licenses were detected in source scan.

SQLite core and like the SQLite core are in the public domain. The
The TH3 test harness is a set of proprietary tests, written in
proprietary fuzz tester. Other fuzzers for SQLite
<p>Beginning in late 2018, SQLite has been fuzzed using a proprietary

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/testing.html
No license file was found, but licenses were detected in source scan.

public domain and so most

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/famous.html

No license file was found, but licenses were detected in source scan.

without a shared lock, other processes are free to modify the database

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/atomiccommit.html
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Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/search.d/admin
* /sqlite3-3-45-1-orig-www-tar-xz/www/search
No license file was found, but licenses were detected in source scan.

If N>0 then the connection is free to use more of the WAL file beyond

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/walformat.html
No license file was found, but licenses were detected in source scan.

SQLite is open source, and is available in the public domain

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/books.html
No license file was found, but licenses were detected in source scan.

application code is free to use these routines as well, if desired.

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/34to35.html
No license file was found, but licenses were detected in source scan.

engine. The source code to SQLite is in the public domain and is available with
SQLite as a freely accessible and public domain software asset.</p>
SQLite is in the public domain and is free for any use, commercial or private.

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/pressrelease-20071212.html
No license file was found, but licenses were detected in source scan.

other proprietary or non-standard VFSes.

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/uri.html
No license file was found, but licenses were detected in source scan.

SQLite is high-quality, public domain software. The goal of
members can also request their own private, proprietary extensions

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/consortium.html
No license file was found, but licenses were detected in source scan.

Sources are in the public domain.
or some proprietary format into

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/features.html
No license file was found, but licenses were detected in source scan.

is free to use SQLite from multiple threads, but it must make sure

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/custombuild.html
No license file was found, but licenses were detected in source scan.

Public domain
The source code for SQLite is in the public domain. No claim of copyright

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/different.html
No license file was found, but licenses were detected in source scan.

public domain. No claim of ownership is made

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/faq.html
No license file was found, but licenses were detected in source scan.

application is free to use the same database connection or the

Found in path(s):
* /sqlite3-3-45-1-orig-www-tar-xz/www/c3ref/c_config_covering_index_scan.html
No license file was found, but licenses were detected in source scan.

<html>
<head>
<title>SQLite Consortium Agreement</title>
</head>
<body bgcolor="white">

<h1 align="center">
SQLite Consortium Agreement
</h1>

This SQLite Consortium Agreement ("Agreement") is made and
entered into as of the _____ day of _____, 2007 ("Effective Date")
by and between _____ (the "Company"), and
Hipp, Wyrick & Company, Inc., a Georgia Corporation with
headquarters at 6200 Maple Cove Lane, Charlotte, NC ("Hwaci").

WHEREAS, Hwaci is the developer of a serverless, embeddable, public
domain SQL database engine available at
http://www.sqlite.org/
("SQLite"); and

WHEREAS, Company wishes to support the independent development of
the SQLite database engine to insure the continuing reliability,
vitality, and independence of SQLite, and in connection therewith,
Company wishes to provide funds for ongoing research, development,
and
 maintenance of the SQLite code base, operation of the SQLite
website, protection and maintenance of the SQLite
trademark, as well as for promotion of SQLite at conferences and
trade shows; and

WHEREAS, Company wishes to receive benefits in the form of
services from Hwaci in consideration for their support of SQLite; and

WHEREAS, Company and Hwaci each wish SQLite to be supported and
maintained as an independent, community-driven project, and to
ensure the SQLite development team remains independent.

NOW, THEREFORE, in consideration of the mutual promises contained
herein, the parties agree as follows:

<h2>1.0 Definitions</h2>

<h3>1.1 SQLite Developers</h3>
The "SQLite Developers" are the employees or contractors of Hwaci engaged
in the development of SQLite, including without limitation the
SQLite Architect.

<h3>1.2 SQLite Architect</h3>
The "SQLite Architect" is the SQLite Developer with ultimate
responsibility and authority over changes
 and maintenance of the
SQLite code. The current SQLite Architect is the original designer
and developer of SQLite, D. Richard Hipp. Hwaci may change the

SQLite Architect from time to time upon approval by Company.

<h3>1.3 Consortium Member</h3>
A "Consortium Member" is a company or organization, including
but not limited to Company, which has entered into an agreement
with Hwaci which is substantially similar to this Agreement.

<h2>2.0 Agreement<h2>

<h3>2.1 Responsibilities And Obligations Of SQLite Developers</h3>

<h4>2.1.1 General Support</h4>
The SQLite Developers shall provide, without limit,
timely and accurate answers, advice, and instruction
in response to questions and comments from Company about SQLite
submitted by email or by telephone at any time day or night.

<h4>2.1.2 Debugging Support</h4>
The SQLite Developers shall at Company's request provide
Company with direct assistance
in debugging applications that are built upon or use SQLite.
The combined
 time for Debugging Support and Custom
Development for Company is limited to 330 hours per year.

<h4>2.1.3 Custom Development</h4>
The SQLite Developers shall at the request of Company
write new extensions or enhancements
to SQLite according to Company's specifications. These extensions
and enhancements may be proprietary to Company or open source or
with the consent of both Company and the SQLite Architect may
be folded into the public domain SQLite source tree.
The time devoted to Custom Development for Company is limited 220 hours
per year.

<h4>2.1.4 Custom Builds</h4>
The SQLite Developers shall at Company's request provide Company
with specialized builds of SQLite according to Company's specifications.

<h4>2.1.5 Legacy Support</h4>
The SQLite Developers shall at Company's request provide support
and bug-fix patches for any historical version of SQLite.

<h4>2.1.6 Custom Testing</h4>
The SQLite Developers shall at Company's request set up and
run
acceptance tests according Company's specifications that are specifically
designed to exercise SQLite as configured and used by Company.
These acceptance tests shall be run and shall pass prior to any release
of SQLite.

<h4>2.1.7 Priority Bug Fixes</h4>
The SQLite Developers shall assign highest priority to fixing bugs
in SQLite that are reported by Company or in which Company has
expressed a specific interest.

<h4>2.1.8 Code Quality</h4>
The SQLite Developers shall at all times keep the SQLite source
code well commented and documented and clearly structured and
organized so that an experienced and competent programmer can
understand it and support it after no more than a few months of study.

<h4>2.1.9 Backwards Compatibility</h4>
The SQLite Developers recognize that Company uses SQLite
in mission-critical applications and therefore shall work diligently
to ensure continuing bug-free correct operation and backwards
compatibility with prior releases.

<h4>2.1.10
Test Coverage</h4>
The SQLite Developers shall maintain the SQLite test suite such
that no less than 95% source code coverage is provided.

<h4>2.1.11 Website</h4>
The SQLite Developers shall maintain the SQLite website at
http://www.sqlite.org/
in good working order and all SQLite source code shall
be made freely available at such website.

<h3>2.2 Responsibilities And Obligations Of The SQLite Architect</h3>

<h4>2.2.1 Private Briefings</h4>
The SQLite Architect shall, at the request of Company,

provide Company with private notification and briefings
of any new bugs or new features in SQLite that might
effect Company's products.

<h4>2.2.2 Direction</h4>
The SQLite Architect shall coordinate the activities of SQLite
Developers and shall publish from time to time a roadmap of
proposed future changes and enhancements to SQLite.

<h4>2.2.3 Oversight</h4>
The SQLite Architect shall personally
review all changes to
the SQLite Source Code and take responsibility for the quality
and correctness of those changes.

<h4>2.2.4 Continuity</h4>
The initial SQLite Architect shall be the original developer
of SQLite, D. Richard Hipp. The role of SQLite Architect shall
not be assigned to another during the term of this Agreement except
due to the disability of Dr. Hipp and with approval of Company.

<h3>2.3 Responsibilities And Obligations Of Hwaci</h3>

<h4>2.3.1 Employer</h4>
Hwaci shall act as the employer of the SQLite Developers and
SQLite Architect and shall make all tax and legal filings
and tax withholding required by employers. Hwaci shall provide
Company with W-9 information upon request.

<h4>2.3.2 Responsible Party</h4>
All obligations of the SQLite Developers set forth in this
agreement are deemed obligations of Hwaci. Hwaci shall recruit,
employ, and supervise SQLite Developers in such a way that the
responsibilities and obligations of the SQLite
Developers set
forth in this agreement are upheld.

<h4>2.3.3 Multiple Developers</h4>
Hwaci shall recruit and employ as many SQLite Developers for as
many hours as can be reasonably achieved using the funds received
from Consortium Members under this agreement.
So that support for SQLite will not be interrupted by the
disability or withdrawal of any one SQLite Developer, Hwaci will

keep at least two knowledgeable and competent SQLite Developers
on staff.

<h4>2.3.4 Mentorship</h4>
Hwaci shall work to encourage independent
programmers from around the world
to become familiar with SQLite internals so that there will be a
pool of talent able to support SQLite in the future.

<h4>2.3.5 Audits</h4>
Hwaci shall keep and maintain complete and accurate records
of the use of development funds provided by Company
and shall allow Company, or its representative, a certified
public accountant mutually acceptable to Hwaci and Company,
during office hours and at reasonable
intervals, no more than
once every 12 months, to inspect and make extracts or copies
of such records solely for the purpose of ascertaining Hwaci's
compliance with the objectives and requirements of this agreement.

<h4>2.3.6 Disaster Planning</h4>
Hwaci shall maintain backup copies of all
SQLite source files and documentation, current and historical,
at least two separate locations separated from each
other and from the primary on-line SQLite repository
by at least 400 kilometers.

<h4>2.3.7 Trademark</h4>
Hwaci shall maintain ownership of the SQLite trademark and
the sqlite.org domain name and shall purchase bandwidth and
server space for the
http://www.sqlite.org/ website.

<h4>2.3.8 No Take-overs or Buy-outs</h4>
Neither Hwaci nor the SQLite Architect shall relinquish development
control of SQLite during the term of this Agreement, by acquisition or merger
or by any other means,
except with the consent of Company.

<h4>2.3.9
New Consortium Members</h4>
New Consortium Members may be accepted into the consortium from
time to time under identical terms as this agreement, or under

substantially similar terms that have been approved by existing
Consortium Members.

<h4>2.3.10 Adequate Staff</h4>
Hwaci shall recruit and employ a sufficient number of qualified
SQLite Developers to easily cover all custom development,
debugging, and general support service obligations for all
Consortium Members while still providing ample time for
the SQLite Developers to engage in general maintenance
and extension of SQLite.

<h4>2.3.11 Use Of Funds</h4>
Hwaci shall use the funds provided hereunder
solely for the development and maintenance of SQLite as set forth in
this Agreement.
Interest on funds received in advance and held in trust will
be reinvested and used for the same purposes as the principal.

<h3>2.4 Responsibilities And Obligations Of Company</h3>

<h4>2.4.1 Funding</h4>
Company
 shall provide funding for the ongoing support and
maintenance of SQLite as set forth in section 3.0 "Fees".

<h4>2.4.2 Copyright Disclaimer</h4>
Company acknowledges that SQLite source code and documentation
published on the SQLite website
is in the public domain and that nothing in this agreement shall change
that fact.

<h2>3.0 Fees</h2>

In consideration of the performance
by Hwaci, the SQLite Developers, and the SQLite Architect
of the obligations described herein,
Company shall pay Hwaci at least US $75,000 per year in advance
either annually, quarterly, or monthly, at Company's discretion.

<h2>4.0 Confidentiality</h2>

<h3>4.1 Definition of Confidential Information</h3>

"Confidential Information" means any Company proprietary information,

technical data, trade secrets or know-how, including, but not limited to,
research, product plans, products, services, customers, customer lists,
markets, software, developments,
inventions, processes, formulas,
technology, designs, drawings, engineering, hardware configuration
information, marketing, finances or other business information
disclosed by Company either directly or indirectly in writing,
orally or by drawings or inspection of parts or equipment.

<h3>4.2 Non-Use and Non-Disclosure.</h3>

Hwaci shall not, during or subsequent to the term of this Agreement,
use Company's Confidential Information for any purpose whatsoever
other than the performance of the Services or disclose
Company's Confidential Information to any third party. The parties
acknowledge that Confidential Information will remain the sole
property of Company. Hwaci shall take all reasonable precautions
to prevent any unauthorized disclosure of Confidential Information
including, but not limited to, having each employee or
consultant of Hwaci, if any, with access to any
Confidential Information, execute a nondisclosure agreement
containing provisions in Company's
favor substantially similar
to this Agreement. Confidential Information does not include
information that: (i) is known to Hwaci at the time of
disclosure to Hwaci by Company as evidenced by written
records of Hwaci; (ii) has become publicly known and made
generally available through no wrongful act of Hwaci; or
(iii) has been received by Hwaci from a third party who is
authorized to make such disclosure.

<h4>4.2.1 Disclosure Required by Law</h4>
In the event any Confidential Information is required to be disclosed
by Hwaci under the terms of a valid and effective subpoena or order
issued by a court of competent jurisdiction, or by a demand or
information request from an executive or administrative agency
or other governmental authority, Hwaci shall, unless prohibited
by the terms of a subpoena, order, or demand, promptly notify
Company of the existence, terms and circumstances surrounding
such demand or request, shall consult with Company on the
advisability of taking
legally available steps to resist
or narrow such demand or request, and, if disclosure of
such Confidential Information is required, shall exercise
its reasonable best efforts to narrow the scope of disclosure
and obtain an order or other reliable assurance that
confidential treatment will be accorded to such
Confidential Information. To the extent that Hwaci

is prohibited from notifying Company of a subpoena,
order or demand, by the terms of same, Hwaci shall exercise
its reasonable efforts to narrow the scope of disclosure.

<h3>4.3 Return of Materials.</h3>

Upon the termination of this Agreement, or upon Company's
earlier request, Hwaci shall deliver to Company all of
Company's property or Confidential Information that Hwaci
may have in Hwaci's possession or control.

<h2>5.0 Intellectual Property</h2>

<h3>5.1 No Assignment</h3>

Company acknowledges that all copyrightable material, notes,
records, drawings, designs, inventions, improvements, developments,

discoveries and trade secrets made, generated, conceived, or
reduced to practice by Hwaci related to SQLite
will remain the property of Hwaci. Nothing in this Agreement
will be construed to transfer any intellectual property right
of Hwaci to Company.

<h3>5.2 Availability and Public Domain Dedication</h3>

The SQLite Developers and Hwaci shall,
subject to their discretion as to the quality
and suitability of the SQLite source code and documentation
for public release, make
the SQLite source code and documentation
publicly available as downloadable files
and make a public statement ceding all intellectual
property rights, including but not limited to copyright
and patent rights, in the SQLite source code and documentation
to the public domain.
To the extent that the SQLite Developers and Hwaci
elect not to release the SQLite
source code and documentation
publicly, they shall provide copies thereof to
Company and hereby grants to Company, under all of the
SQLite
 Developers' and Hwaci's
rights
including but not limited to copyright and patent rights,
in and to the SQLite source code and documentation,
perpetual, irrevocable,
worldwide, non-exclusive, sublicenseable license to use,

copy, prepare derivative works of, publicly perform and
display the SQLite source code and documentation
and derivative works thereof.

<h3>5.3 Trademark</h3>

Hwaci shall use the name "SQLite" only to apply to the
publicly available project known by such name as of the
Effective Date. Hwaci may in its discretion file such
trademark applications or registrations as it deems
appropriate to protect or record its rights therein,
and may set such policies as it deems appropriate for
licensing the use of the trademark.

<h2>6.0 Representations And Warranties</h3>

<h3>6.1 Intellectual Property Clearances.</h3>

Hwaci hereby represents and warrants that Hwaci shall
enter into agreements with the SQLite Developers sufficient
to enable Hwaci to undertake
 the obligations of Section 5.

<h3>6.2 Disclaimer.</h3>

THE WORK PRODUCT AND ALL MATERIAL PROVIDED BY HWACI AND
COMPANY ARE PROVIDED "AS IS." NEITHER PARTY MAKES ANY
REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER ORAL
OR WRITTEN, WHETHER EXPRESS, IMPLIED, OR ARISING BY STATUTE,
CUSTOM, COURSE OF DEALING OR TRADE USAGE, WITH RESPECT TO
THE SUBJECT MATTER HEREOF, IN CONNECTION WITH THIS AGREEMENT.
EACH PARTY SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED
WARRANTIES OR CONDITIONS OF TITLE, MERCHANTABILITY,
FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT.

<h2>7.0 Term And Termination</h2>

<h3>7.1 Term.</h3>

This Agreement will commence on the Effective Date and
will continue until 12 months after the Effective Date.
Thereafter, the parties may by mutual consent renew
this Agreement subject to agreement on fees to be paid by
Company for sponsorship for additional periods.

<h3>7.2 Termination.</h3>

If either party materially defaults in the

performance
of any of its material obligations hereunder and if any
such default is not corrected within 30 days after notice
in writing, then the non-defaulting party, at its option,
may, in addition to any other remedies it may have, thereupon
terminate this Agreement by giving written notice of
termination to the defaulting party.

<h3>7.3 Survival.</h3>

Upon such termination all rights and duties of the
parties toward each other will cease except:
Sections 4 (Confidentiality), 5 (Intellectual Property),
and 8 (Miscellaneous) will survive termination of this Agreement.

<h2>8. Miscellaneous</h2>

<h3>8.1 Nonassignment/Binding Agreement.</h3>

The parties acknowledge that the unique nature of
Hwaci's services are substantial consideration for the
parties' entering into this Agreement. Neither this
Agreement nor any rights under this Agreement may be
assigned or otherwise transferred by Hwaci, in whole
or in part, whether voluntarily or by operation of
law,
without the prior written consent of Company, which
consent will not be unreasonably withheld.
Subject to the foregoing, this Agreement will be binding
upon and will inure to the benefit of the parties and
their respective successors and assigns. Any assignment
in violation of the foregoing will be null and void.

<h3>8.2 Notices.</h3>

Any notice required or permitted under the terms of
this Agreement or required by law must be in writing
and must be: (a) delivered in person; (b) sent by first
class registered mail, or air mail, as appropriate; or
(c) sent by overnight air courier, in each case properly
posted and fully prepaid to the appropriate address set
forth in the preamble to this Agreement. Either party
may change its address for notice by notice to the other
party given in accordance with this Section. Notices
will be considered to have been given at the time of
actual delivery in person, three business days after
deposit in the mail as set forth

above, or one day after
delivery to an overnight air courier service.

<h3>8.3 Waiver.</h3>

Any waiver of the provisions of this Agreement or
of a party's rights or remedies under this Agreement
must be in writing to be effective. Failure, neglect,
or delay by a party to enforce the provisions of this
Agreement or its rights or remedies at any time, will
not be construed as a waiver of such party's rights
under this Agreement and will not in any way affect
the validity of the whole or any part of this Agreement
or prejudice such party's right to take subsequent action.
No exercise or enforcement by either party of any right
or remedy under this Agreement will preclude the
enforcement by such party of any other right or remedy
under this Agreement or that such party is entitled by
law to enforce.

<h3>8.4 Severability.</h3>

If any term, condition, or provision in this Agreement
is found to be invalid, unlawful or unenforceable to
any extent, the parties shall
endeavor in good faith
to agree to such amendments that will preserve, as far
as possible, the intentions expressed in this Agreement.
If the parties fail to agree on such an amendment,
such invalid term, condition or provision will be
severed from the remaining terms, conditions and
provisions, which will continue to be valid and
enforceable to the fullest extent permitted by law.

<h3>8.5 Integration.</h3>

This Agreement contains the entire agreement of the
parties with respect to the subject matter of this
Agreement and supersedes all previous communications,
representations, understandings and agreements,
either oral or written, between the parties with
respect to said subject matter. This Agreement
may not be amended, except by a writing signed by both parties.

<h3>8.6 Counterparts.</h3>

This Agreement may be executed in counterparts,
each of which so executed will be deemed to be an

original and such counterparts together will constitute one and
 the same agreement.

<h3>8.7 Governing Law.</h3>

This Agreement will be interpreted and construed in accordance with the laws of the State of North Carolina and the United States of America, without regard to conflict of law principles. All disputes arising out of this Agreement will be subject to the exclusive jurisdiction of the state and federal courts located in North Carolina, and each party hereby consents to the personal jurisdiction thereof.

<h3>8.8 Independent Contractors.</h3>

It is the intention of the parties that Hwaci is an independent contractor. Nothing in this Agreement will in any way be construed to constitute Hwaci or any of its employees as an agent, employee or representative of Company.

<h2>9.0 Signatures</h2>

The parties have executed this Agreement below to indicate their acceptance of its terms.

<table width="100%" border="0">
<tr><td valign="top">
HWACI
By:<hr>

Print Name:<hr>

Title:<hr>

</td><td
 width="10%"></td>
<td valign="top">
COMPANY
By:<hr>

Print Name:<hr>

Title:<hr>

</td></tr></table>

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* /sqlite3-3-45-1-orig-www-tar-xz/www/consortium_agreement-20071201.html
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Suppose the demo_data.boundary field holds some proprietary data description

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data, so do not send the ".fullschema" output of a proprietary database

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proprietary, licensed extensions to SQLite.</p>

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<html>
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<body bgcolor="white">
<h1 align="center">
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Contributions To SQLite
</h1>

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<tr>

<td width="60%" valign="top">
Signature:

</td><td valign="top" align="left">
Date:
</td></tr>
<td colspan=2>
Name
 (printed):
</td>
</tr>
</table>
</body>
</html>

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1.3376 nghttp2 1.59.0-1ubuntu0.2

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1.3377 smithy-go 1.22.2

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1.3378 github.com/aws/smithy-go 1.22.2

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1.3379 otel-sdk-metric 1.34.0

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1.3380 locafero 0.7.0

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1.3381 contrib-instrumentation-google.golang.org-grpc-otelgrpc 0.59.0

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1.3382 afero 1.12.0

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1.3383 otel-exporters-otlp-otlpmetric-otlpmetricgrpc 1.34.0

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1.3384 memory 1.8.2

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1.3385 contrib-detectors-gcp 1.34.0

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1.3386 otel-exporters-prometheus 0.56.0

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1.3387 otel-exporters-otlp-otlptrace-otlptracegrpc 1.34.0

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1.3388 modernc-mathutil 1.7.1

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1.3389 x-crypto v0.23.1-0.20240603234054-0b431c7de36a

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1.3391 github.com/elastic/lunes 0.1.0

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$dep.LicenceType }},
{{- end -}}
{{- end -}}

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{{ "-" | line }}
Dependency : {{ $dep.Name }}
Version: {{ $dep.Version }}
Licence type (autodetected): {{ $dep.LicenceType }}
{{ "-" | line }}

{{ $dep | licenceText }}
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{{ "=" | line }}

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{{ if .Indirect }}
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package mage

import (
 "fmt"
 "os"

 "github.com/magefile/mage/mg"

 "github.com/elastic/lunes/dev-tools/mage/gotool"
)

func GenerateNotice(overrides, rules, noticeTemplate string) error {
 mg.Deps(InstallGoNoticeGen,
 Deps.CheckModuleTidy)

 err := gotool.Mod.Download(gotool.Download.All())
 if err != nil {
  return fmt.Errorf("error while downloading dependencies: %w", err)
 }

 // Ensure the go.mod file is left unchanged after go mod download all runs.
 // go mod download will modify go.sum in a way that conflicts with go mod tidy.
 // https://github.com/golang/go/issues/43994#issuecomment-770053099
 defer gotool.Mod.Tidy() //nolint:errcheck // No value in handling this error.

 out, _ := gotool.ListDepsForNotice()
 depsFile, _ := os.CreateTemp("", "depsout")
 defer os.Remove(depsFile.Name())
 _, _ = depsFile.Write([]byte(out))
 depsFile.Close()

 generator := gotool.NoticeGenerator
 return generator(
```

```
  generator.Dependencies(depsFile.Name()),
  generator.IncludeIndirect(),
  generator.Overrides(overrides),
  generator.Rules(rules),
  generator.NoticeTemplate(noticeTemplate),
  generator.NoticeOutput("NOTICE.txt"),
 )
}
{
 "allowlist": [
   "Apache-2.0",
   "BSD",
   "BSD-2-Clause",
   "BSD-2-Clause-FreeBSD",
   "BSD-3-Clause",
   "CC0-1.0",
   "Elastic",
   "ISC",
   "MIT",
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Dependency : golang.org/x/tools
Version: v0.23.0
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==========
Indirect dependencies

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Dependency : github.com/davecgh/go-spew
Version: v1.1.1
Licence type (autodetected): ISC

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Version: v0.0.0-20200402202327-879cb1424de0
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Dependency : github.com/karrick/godirwalk
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Dependency : github.com/markbates/pkger
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Dependency : github.com/stretchr/testify
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Dependency : github.com/yuin/goldmark
Version:
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1.3394 github.com/open-telemetry/opentelemetry-collector-contrib/pkg/pdatautil 0.116.0

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1.3395 github.com/leodido/go-syslog/v4 4.2.0

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1.3397 opentelemetry-collector-contrib-pkg-pdatautil 0.116.0

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1.3399 aws-sdk-go 1.55.5

1.3399.1 Available under license :

{
"version": "2.0",
"service": " With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances. ",
"operations": {
"AssociateUser": " Associates the user to an EC2 instance to utilize user-based subscriptions. <note> Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your monthly charges in the Amazon Web Services Billing User Guide. </note>",
"DeregisterIdentityProvider": " Deregisters the identity provider from providing user-based subscriptions. ",
"DisassociateUser": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"ListIdentityProviders":
" Lists the identity providers for user-based subscriptions. ",
"ListInstances": " Lists the EC2 instances providing user-based subscriptions. ",
"ListProductSubscriptions": " Lists the user-based subscription products available from an identity provider. ",

"ListUserAssociations": " Lists user associations for an identity provider. ",
"RegisterIdentityProvider": " Registers an identity provider for user-based subscriptions. ",
"StartProductSubscription": " Starts a product subscription for a user with the specified identity provider. <note> Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your monthly charges in the Amazon Web Services Billing User Guide. </note>",
"StopProductSubscription": " Stops a product subscription for a user with the specified identity provider. ",
"UpdateIdentityProviderSettings": " Updates additional product configuration settings for the registered identity provider. "
},
"shapes": {
"AccessDeniedException": {
"base": " You don't have sufficient access to perform this action. ",
"refs": {
}
},
"ActiveDirectoryIdentityProvider": {
"base": " Details about an Active Directory identity provider. ",
"refs": {
"IdentityProvider$ActiveDirectoryIdentityProvider": " An object that details an Active Directory identity provider. "
}
},
"AssociateUserRequest": {
"base": null,
"refs": {
}
},
"AssociateUserResponse": {
"base": null,
"refs": {
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListIdentityProvidersRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListInstancesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListProductSubscriptionsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUserAssociationsRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"ConflictException": {

"base": " The request couldn't be completed because it conflicted with the current state of the resource. ",
"refs": {
}
},
"DeregisterIdentityProviderRequest": {
"base": null,
"refs": {
}
},
"DeregisterIdentityProviderResponse": {
"base": null,
"refs": {
}
},
"DisassociateUserRequest": {
"base": null,
"refs": {
}
},
"DisassociateUserResponse": {
"base": null,
"refs": {
}
},
"Filter": {
"base": " A
filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
"refs": {
"FilterList$member": null
}
},
"FilterList": {
"base": null,
"refs": {
"ListInstancesRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
"ListProductSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
"ListUserAssociationsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. "
}
},
"IdentityProvider": {
"base": " Details about an identity provider. ",
"refs": {
"AssociateUserRequest$IdentityProvider": " The identity provider of the user. ",
"DeregisterIdentityProviderRequest$IdentityProvider": " An object that specifies details for the identity

provider. ",
"DisassociateUserRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"IdentityProviderSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"InstanceUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"ListProductSubscriptionsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"ListUserAssociationsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"ProductUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"RegisterIdentityProviderRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"StartProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"StopProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"UpdateIdentityProviderSettingsRequest$IdentityProvider": null
}
},
"IdentityProviderSummary": {
"base": " Describes an identity provider. ",
"refs": {
"DeregisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"IdentityProviderSummaryList$member": null,
"RegisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"UpdateIdentityProviderSettingsResponse$IdentityProviderSummary": null

}
},
"IdentityProviderSummaryList": {
"base": null,
"refs": {
"ListIdentityProvidersResponse$IdentityProviderSummaries": " Metadata that describes the list identity providers operation. "
}
},
"InstanceSummary": {
"base": " Describes an EC2 instance providing user-based subscriptions. ",
"refs": {
"InstanceSummaryList$member": null
}
},
"InstanceSummaryList": {
"base": null,
"refs": {

"ListInstancesResponse$InstanceSummaries": " Metadata that describes the list instances operation. "
}
},
"InstanceUserSummary": {
"base": " Describes users of an EC2 instance providing user-based subscriptions. ",
"refs": {
"AssociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",
"DisassociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",

"InstanceUserSummaryList$member": null
}
},
"InstanceUserSummaryList": {
"base": null,
"refs": {
"ListUserAssociationsResponse$InstanceUserSummaries": " Metadata that describes the list user association operation. "
}
},
"InternalServerException": {
"base": " An exception occurred with the service. ",
"refs": {
}
},
"ListIdentityProvidersRequest": {
"base": null,
"refs": {
}
},
"ListIdentityProvidersResponse": {
"base": null,
"refs": {
}
},
"ListInstancesRequest": {
"base": null,
"refs": {
}
},
"ListInstancesResponse": {
"base": null,
"refs": {
}
},
"ListProductSubscriptionsRequest": {
"base": null,

"refs": {
}
},
"ListProductSubscriptionsResponse": {
"base": null,
"refs": {
}
},
"ListUserAssociationsRequest": {
"base": null,
"refs": {
}
},
"ListUserAssociationsResponse": {
"base": null,
"refs": {
}
},
"ProductUserSummary": {
"base": " The summary of the user-based subscription products for a user. ",
"refs": {
"ProductUserSummaryList$member": null,
"StartProductSubscriptionResponse$ProductUserSummary": " Metadata that describes the start product subscription operation. ",
"StopProductSubscriptionResponse$ProductUserSummary": " Metadata that describes the start product subscription operation. "
}
},
"ProductUserSummaryList": {
"base": null,
"refs": {
"ListProductSubscriptionsResponse$ProductUserSummaries": " Metadata that describes the list product subscriptions operation. "
}
},
"RegisterIdentityProviderRequest": {
"base": null,
"refs": {
}
},
"RegisterIdentityProviderResponse": {
"base": null,
"refs": {
}
},
"ResourceNotFoundException":
{
"base": " The resource couldn't be found. ",

"refs": {
}
},
"SecurityGroup": {
"base": null,
"refs": {
"Settings$SecurityGroupId": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoint for activation servers. ",
"UpdateSettings$SecurityGroupId": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for activation servers. "
}
},
"ServiceQuotaExceededException": {
"base": " The request failed because a service quota is exceeded. ",
"refs": {
}
},
"Settings": {
"base": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication
from resources in the VPC. ",
"refs": {
"IdentityProviderSummary$Settings": " An object that details the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. ",
"RegisterIdentityProviderRequest$Settings": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. "
}
},
"SettingsSubnetsList": {
"base": null,
"refs": {
"Settings$Subnets": " The subnets defined for the registered identity provider. "
}
},
"StartProductSubscriptionRequest": {
"base": null,
"refs": {
}
},
"StartProductSubscriptionResponse": {
"base": null,
"refs": {
}
},
"StopProductSubscriptionRequest": {
"base": null,
"refs": {

```
    }
  },
  "StopProductSubscriptionResponse": {
    "base": null,
    "refs": {
    }
  },
  "String":
 {
    "base": null,
    "refs": {
      "AccessDeniedException$message": null,
      "ActiveDirectoryIdentityProvider$DirectoryId": "<p>The directory ID for an Active Directory identity
provider.</p>",
      "AssociateUserRequest$Domain": "<p>The domain name of the user.</p>",
      "AssociateUserRequest$InstanceId": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
      "AssociateUserRequest$Username": "<p>The user name from the identity provider for the user.</p>",
      "ConflictException$message": null,
      "DeregisterIdentityProviderRequest$Product": "<p>The name of the user-based subscription product.</p>",
      "DisassociateUserRequest$Domain": "<p>The domain name of the user.</p>",
      "DisassociateUserRequest$InstanceId": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
      "DisassociateUserRequest$Username": "<p>The user name from the identity provider for the user.</p>",

   "Filter$Attribute": "<p>The name of an attribute to use as a filter.</p>",
      "Filter$Operation": "<p>The type of search (For example, eq, geq, leq)</p>",
      "Filter$Value": "<p>Value of the filter.</p>",
      "IdentityProviderSummary$FailureMessage": "<p>The failure message associated with an identity
provider.</p>",
      "IdentityProviderSummary$Product": "<p>The name of the user-based subscription product.</p>",
      "IdentityProviderSummary$Status": "<p>The status of an identity provider.</p>",
      "InstanceSummary$InstanceId": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
      "InstanceSummary$LastStatusCheckDate": "<p>The date of the last status check.</p>",
      "InstanceSummary$Status": "<p>The status of an EC2 instance resource.</p>",
      "InstanceSummary$StatusMessage": "<p>The status message for an EC2 instance.</p>",
      "InstanceUserSummary$AssociationDate": "<p>The date a user was associated with an
 EC2 instance.</p>",
      "InstanceUserSummary$DisassociationDate": "<p>The date a user was disassociated from an EC2
instance.</p>",
      "InstanceUserSummary$Domain": "<p>The domain name of the user.</p>",
      "InstanceUserSummary$InstanceId": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
      "InstanceUserSummary$Status": "<p>The status of a user associated with an EC2 instance.</p>",
      "InstanceUserSummary$StatusMessage": "<p>The status message for users of an EC2 instance.</p>",
      "InstanceUserSummary$Username": "<p>The user name from the identity provider for the user.</p>",
      "InternalServerException$message": null,
```

"ListIdentityProvidersRequest$NextToken": " Token for the next set of results. ",
"ListIdentityProvidersResponse$NextToken": " Token for the next set of results. ",
"ListInstancesRequest$NextToken": " Token for the next set of results. ",
"ListInstancesResponse$NextToken":
" Token for the next set of results. ",
"ListProductSubscriptionsRequest$NextToken": " Token for the next set of results. ",
"ListProductSubscriptionsRequest$Product": " The name of the user-based subscription product. ",
"ListProductSubscriptionsResponse$NextToken": " Token for the next set of results. ",
"ListUserAssociationsRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"ListUserAssociationsRequest$NextToken": " Token for the next set of results. ",
"ListUserAssociationsResponse$NextToken": " Token for the next set of results. ",
"ProductUserSummary$Domain": " The domain name of the user. ",
"ProductUserSummary$Product": " The name of the user-based subscription product. ",
"ProductUserSummary$Status": " The status of a product for a user. ",
"ProductUserSummary$StatusMessage": " The status
message for a product for a user. ",
"ProductUserSummary$SubscriptionEndDate": " The end date of a subscription. ",
"ProductUserSummary$SubscriptionStartDate": " The start date of a subscription. ",
"ProductUserSummary$Username": " The user name from the identity provider of the user. ",
"RegisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
"ResourceNotFoundException$message": null,
"ServiceQuotaExceededException$message": null,
"StartProductSubscriptionRequest$Domain": " The domain name of the user. ",
"StartProductSubscriptionRequest$Product": " The name of the user-based subscription product. ",
"StartProductSubscriptionRequest$Username": " The user name from the identity provider of the user. ",
"StopProductSubscriptionRequest$Domain": " The domain name of the user. ",
"StopProductSubscriptionRequest$Product":
" The name of the user-based subscription product. ",
"StopProductSubscriptionRequest$Username": " The user name from the identity provider for the user. ",
"StringList$member": null,
"ThrottlingException$message": null,
"UpdateIdentityProviderSettingsRequest$Product": " The name of the user-based subscription product. ",
"ValidationException$message": null
}
},
"StringList": {
"base": null,
"refs": {
"InstanceSummary$Products": " A list of provided user-based subscription products. "
}
},
"Subnet": {
"base": null,
"refs": {
"SettingsSubnetsList$member": null,

"Subnets$member": null
}
},
"Subnets": {
"base": null,
"refs": {
"UpdateSettings$AddSubnets": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that require connectivity to activation servers. ",
"UpdateSettings$RemoveSubnets":
" The ID of one or more subnets to remove. "
}
},
"ThrottlingException": {
"base": " The request was denied because of request throttling. Retry the request. ",
"refs": {
}
},
"UpdateIdentityProviderSettingsRequest": {
"base": null,
"refs": {
}
},
"UpdateIdentityProviderSettingsResponse": {
"base": null,
"refs": {
}
},
"UpdateSettings": {
"base": " Updates the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. ",
"refs": {
"UpdateIdentityProviderSettingsRequest$UpdateSettings": " Updates the registered identity providers product related configuration settings. You can update any combination of settings in a single operation such as the: <ul> Subnets which you want to add to provision VPC endpoints.   Subnets which you want to remove the VPC endpoints
from.   Security group ID which permits traffic to the VPC endpoints. "
}
},
"ValidationException": {
"base": " A parameter is not valid. ",
"refs": {
}
}
}
}
{
"version": "1.0",
"parameters": {

```
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {

   "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ],
          "assign": "PartitionResult"
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [
            {
```

```
            "fn": "isSet",
            "argv": [
                {
                    "ref": "Endpoint"
                }
            ]
        },
        {
            "fn": "parseURL",

            "argv": [
                {
                    "ref": "Endpoint"
                }
            ],
            "assign": "url"
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
```

```
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },

        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ]
  }
]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]

},
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
```

```
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"

        },
                                "supportsFIPS"
                            ]
                        }
                    ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }

            ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            },
            {
```

```
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
            }
        ]
    },

{
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
```

```
                },
                "type": "endpoint"
            }
        ]
    },
    {

"conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
  ]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,

{
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsDualStack"
                ]
            }
          ]
        }
      ],
      "type": "tree",
      "rules": [
```

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},

"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
}
{
"version": "2.0",
"service": " With License Manager, you can discover and track your commercial Linux subscriptions on running Amazon EC2 instances. ",
"operations": {
"DeregisterSubscriptionProvider": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions registered to your account. ",
"GetRegisteredSubscriptionProvider": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"GetServiceSettings": " Lists the Linux subscriptions service settings for your account. ",
"ListLinuxSubscriptionInstances": " Lists the running Amazon EC2 instances that were discovered with commercial Linux subscriptions. ",
"ListLinuxSubscriptions": " Lists the Linux subscriptions that have been discovered. If you have linked your organization, the returned results will include data aggregated across your accounts in Organizations. ",
"ListRegisteredSubscriptionProviders":

" List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"ListTagsForResource": " List the metadata tags that are assigned to the specified Amazon Web Services resource. ",
"RegisterSubscriptionProvider": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"TagResource": " Add metadata tags to the specified Amazon Web Services resource. ",
"UntagResource": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"UpdateServiceSettings": " Updates the service settings for Linux subscriptions. "
},
"shapes": {
"Boolean": {
"base": null,
"refs": {
"UpdateServiceSettingsRequest$AllowUpdate": " Describes if updates are allowed to the service settings for Linux subscriptions. If you allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesRequest$MaxResults": " The maximum items to return in a request. ",
"ListLinuxSubscriptionsRequest$MaxResults": " The maximum items to return in a request. "
}
},
"BoxLong": {
"base": null,
"refs": {
"Subscription$InstanceCount": " The total amount of running instances using this subscription. "
}
},
"DeregisterSubscriptionProviderRequest": {
"base": null,
"refs": {
}
},
"DeregisterSubscriptionProviderResponse": {
"base": null,
"refs": {
}
},
"Filter": {
"base": " A filter object that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria. ",
"refs": {
"FilterList$member": null
}

},
"FilterList": {
"base": null,
"refs": {

"ListLinuxSubscriptionInstancesRequest$Filters": " An array of structures that you can use to filter the results by your specified criteria. For example, you can specify <code>Region</code> in the <code>Name</code>, with the <code>contains</code> operator to list all subscriptions that match a partial string in the <code>Value</code>, such as <code>us-west</code>. For each filter, you can specify one of the following values for the <code>Name</code> key to streamline results: <ul> <code>AccountID</code>   <code>AmiID</code>   <code>DualSubscription</code>   <code>InstanceID</code>   <code>InstanceType</code>   <code>ProductCode</code>   <code>Region</code>   <code>Status</code>   <code>UsageOperation</code>   For each filter, you can use one of the following <code>Operator</code> values to define the behavior
of the filter: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> ",
"ListLinuxSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of <code>Subscription</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain subscription's name. The valid names for this filter are: <ul> <code>Subscription</code>   The valid Operators for this filter are: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> "
}
},
"GetRegisteredSubscriptionProviderRequest": {
"base": null,
"refs": {
}
},
"GetRegisteredSubscriptionProviderResponse": {
"base": null,
"refs": {
}
},
"GetServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"GetServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"Instance": {
"base": " Details discovered information about a running instance using Linux subscriptions. ",

"refs": {
"InstanceList$member": null
}
},
"InstanceList": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesResponse$Instances": " An array that contains instance objects. "
}
},
"InternalServerException": {
"base": " An exception occurred with the service. ",
"refs": {
}
},
"LinuxSubscriptionsDiscovery": {
"base": null,
"refs": {
"GetServiceSettingsResponse$LinuxSubscriptionsDiscovery": " Lists if discovery has been enabled for Linux subscriptions. ",
"UpdateServiceSettingsRequest$LinuxSubscriptionsDiscovery": " Describes if the discovery of Linux subscriptions is enabled. ",
"UpdateServiceSettingsResponse$LinuxSubscriptionsDiscovery": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"base": " Lists the settings defined for discovering Linux subscriptions. ",
"refs": {
"GetServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": " Lists the settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. ",
"UpdateServiceSettingsRequest$LinuxSubscriptionsDiscoverySettings": " The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. ",
"UpdateServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": " The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"ListLinuxSubscriptionInstancesRequest": {
"base": " NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases. ",
"refs": {
}
},
"ListLinuxSubscriptionInstancesRequestNextTokenString": {
"base": null,

"refs": {
"ListLinuxSubscriptionInstancesRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a previously truncated response. "
}
},
"ListLinuxSubscriptionInstancesResponse": {
"base": null,
"refs": {
}
},
"ListLinuxSubscriptionsRequest": {
"base": " NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases. ",
"refs": {
}
},
"ListLinuxSubscriptionsRequestNextTokenString":
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"base": null,
"refs": {
"ListLinuxSubscriptionsRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a previously truncated response. "
}
},
"ListLinuxSubscriptionsResponse": {
"base": null,
"refs": {
}
},
"ListRegisteredSubscriptionProvidersRequest": {
"base": null,
"refs": {
}
},
"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger": {
"base": null,
"refs": {
"ListRegisteredSubscriptionProvidersRequest$MaxResults": " The maximum items to return in a request. "
}
},
"ListRegisteredSubscriptionProvidersResponse": {
"base": null,
"refs": {
}
},
"ListTagsForResourceRequest": {
"base": null,

"refs": {
}
},
"ListTagsForResourceResponse": {
"base": null,
"refs": {
}
},
"Operator": {
"base": null,
"refs":
{
"Filter$Operator": " An operator for filtering results. "
}
},
"OrganizationIntegration": {
"base": null,
"refs": {
"LinuxSubscriptionsDiscoverySettings$OrganizationIntegration": " Details if you have enabled resource discovery across your accounts in Organizations. "
}
},
"ProductCodeList": {
"base": null,
"refs": {
"Instance$ProductCode": " The product code for the instance. For more information, see Usage operation values in the License Manager User Guide . "
}
},
"RegisterSubscriptionProviderRequest": {
"base": null,
"refs": {
}
},
"RegisterSubscriptionProviderResponse": {
"base": null,
"refs": {
}
},
"RegisteredSubscriptionProvider": {
"base": " A third-party provider for operating system (OS) platform software and license subscriptions, such as Red Hat. When you register a third-party Linux subscription provider, License Manager can get subscription data from the registered provider. ",
"refs": {
"RegisteredSubscriptionProviderList$member": null
}
},

"RegisteredSubscriptionProviderList": {
"base": null,
"refs": {
"ListRegisteredSubscriptionProvidersResponse$RegisteredSubscriptionProviders": " The list of BYOL registration resources that fit the criteria you specified in the request. "
}
},
"ResourceNotFoundException": {
"base": " Unable to find the requested Amazon Web Services resource. ",
"refs": {
}
},
"SecretArn": {
"base": null,
"refs": {
"GetRegisteredSubscriptionProviderResponse$SecretArn": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL registration resource specified in the request. ",
"RegisterSubscriptionProviderRequest$SecretArn": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For RHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains your Red Hat Offline token. ",
"RegisteredSubscriptionProvider$SecretArn": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider access token. For RHEL account subscriptions, this is the offline token. "
}
},
"Status": {
"base": null,
"refs": {
"GetServiceSettingsResponse$Status": " Indicates the status of Linux subscriptions settings being applied. ",
"UpdateServiceSettingsResponse$Status": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"String": {
"base": null,
"refs": {
"Filter$Name": " The type of name to filter by. ",
"GetRegisteredSubscriptionProviderResponse$LastSuccessfulDataRetrievalTime": " The timestamp from the last time License Manager retrieved subscription details from your registered third-party Linux subscription provider. ",
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderStatusMessage": " The detailed message from your subscription provider token status. ",
"Instance$AccountID": " The account ID which owns the instance. ",
"Instance$AmiId": " The AMI ID used to launch the instance. ",
"Instance$DualSubscription": " Indicates that you have two different license subscriptions for the same software on your instance. ",

"Instance$InstanceID": " The instance ID of the resource. ",
"Instance$InstanceType": " The instance type of the resource. ",
"Instance$LastUpdatedTime": " The time in which the last discovery updated the instance details. ",
"Instance$OsVersion":
" The operating system software version that runs on your instance. ",
"Instance$Region": " The Region the instance is running in. ",
"Instance$RegisteredWithSubscriptionProvider": " Indicates that your instance uses a BYOL license subscription from a third-party Linux subscription provider that you've registered with License Manager. ",
"Instance$Status": " The status of the instance. ",
"Instance$SubscriptionName": " The name of the license subscription that the instance uses. ",
"Instance$SubscriptionProviderCreateTime": " The timestamp when you registered the third-party Linux subscription provider for the subscription that the instance uses. ",
"Instance$SubscriptionProviderUpdateTime": " The timestamp from the last time that the instance synced with the registered third-party Linux subscription provider. ",
"Instance$UsageOperation": " The usage operation of the instance. For more information,
see For more information, see Usage operation values in the License Manager User Guide. ",
"InternalServerException$message": null,
"ListLinuxSubscriptionInstancesResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
"ListLinuxSubscriptionsResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
"ListRegisteredSubscriptionProvidersRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a
previously truncated response. ",
"ListRegisteredSubscriptionProvidersResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
"ProductCodeList$member": null,
"RegisterSubscriptionProviderResponse$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. ",
"RegisteredSubscriptionProvider$LastSuccessfulDataRetrievalTime": " The timestamp from the last time that License Manager accessed third-party subscription data for your account from your registered Linux subscription provider. ",
"RegisteredSubscriptionProvider$SubscriptionProviderStatusMessage": " A detailed message that's associated with your BYOL subscription provider token status. ",
"ResourceNotFoundException$message":
null,
"StringMap$key": null,
"StringMap$value": null,
"Subscription$Name": " The name of the subscription. ",
"Subscription$Type": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. ",

"TagKeyList$member": null,
"Tags$key": null,
"Tags$value": null,
"ThrottlingException$message": null,
"ValidationException$message": null
}
},
"StringList": {
"base": null,
"refs": {
"Filter$Values": " One or more values for the name to filter by. ",
"GetServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. ",
"LinuxSubscriptionsDiscoverySettings$SourceRegions": " The Regions in which to discover data for Linux subscriptions. ",
"UpdateServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. "
}
},
"StringListMemberString": {
"base": null,
"refs": {
"StringList$member": null
}
},
"StringMap": {
"base": null,
"refs": {
"GetServiceSettingsResponse$StatusMessage": " A message which details the Linux subscriptions service settings current status. ",
"UpdateServiceSettingsResponse$StatusMessage": " A message which details the Linux subscriptions service settings current status. "
}
},
"Subscription": {
"base": " An object which details a discovered Linux subscription. ",
"refs": {
"SubscriptionList$member": null
}
},
"SubscriptionList": {
"base": null,
"refs": {
"ListLinuxSubscriptionsResponse$Subscriptions": " An array that contains subscription objects. "
}
},
"SubscriptionProviderArn": {

"base": null,
"refs": {
"DeregisterSubscriptionProviderRequest$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"GetRegisteredSubscriptionProviderRequest$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderArn": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. ",
"ListTagsForResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"RegisteredSubscriptionProvider$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. ",
"TagResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified metadata tags. ",
"UntagResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. "
}
},
"SubscriptionProviderSource": {
"base": null,
"refs": {
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderSource": " The subscription provider for the BYOL registration resource specified in the request. ",
"RegisterSubscriptionProviderRequest$SubscriptionProviderSource": " The supported Linux subscription provider to register. ",
"RegisterSubscriptionProviderResponse$SubscriptionProviderSource": " The Linux subscription provider that you registered. ",
"RegisteredSubscriptionProvider$SubscriptionProviderSource": " A supported third-party Linux subscription provider. License
Manager currently supports Red Hat subscriptions. ",
"SubscriptionProviderSourceList$member": null
}
},
"SubscriptionProviderSourceList": {
"base": null,
"refs": {
"ListRegisteredSubscriptionProvidersRequest$SubscriptionProviderSources": " To filter your results, specify which subscription providers to return in the list. "
}
},
"SubscriptionProviderStatus": {
"base": null,
"refs": {
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderStatus": " The status of the Linux subscription provider access token from the last successful subscription data request. ",
"RegisterSubscriptionProviderResponse$SubscriptionProviderStatus": " Indicates the status of the registration action for the Linux subscription provider that you requested. ",
"RegisteredSubscriptionProvider$SubscriptionProviderStatus": " Indicates the status of your registered

Linux subscription provider access
 token from the last time License Manager retrieved subscription data. For RHEL account subscriptions, this is the status of the offline token. "
    }
  },
  "TagKeyList": {
    "base": null,
    "refs": {
      "UntagResourceRequest$tagKeys": " A list of metadata tag keys to remove from the requested resource. "
    }
  },
  "TagResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "TagResourceResponse": {
    "base": null,
    "refs": {
    }
  },
  "Tags": {
    "base": null,
    "refs": {
      "ListTagsForResourceResponse$tags": " The metadata tags for the requested resource. ",
      "RegisterSubscriptionProviderRequest$Tags": " The metadata tags to assign to your registered Linux subscription provider resource. ",
      "TagResourceRequest$tags": " The metadata tags to assign to the Amazon Web Services resource. Tags are formatted as key value pairs. "
    }
  },
  "ThrottlingException": {
    "base": " The request was denied due to request throttling. ",
    "refs": {
    }
  },
  "UntagResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "UntagResourceResponse": {
    "base": null,
    "refs": {
    }
  },
  "UpdateServiceSettingsRequest": {

"base": null,
"refs": {
}
},
"UpdateServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"ValidationException": {
"base": " The provided input is not valid. Try your request again. ",
"refs": {
}
}
}
}
AWS SDK for Go
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{
"testCases": [
{
"documentation": "For region ap-south-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.ap-south-1.api.aws"
}
},
"params": {
"UseFIPS": true,
"Region": "ap-south-1",
"UseDualStack": true
}
},
{
"documentation": "For region ap-south-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.ap-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": true,
"Region": "ap-south-1",
"UseDualStack": false
}
},
{

"documentation": "For region ap-south-1 with FIPS disabled
and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.ap-south-1.api.aws"
}
},
"params": {
"UseFIPS": false,
"Region": "ap-south-1",
"UseDualStack": true
}
},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.ap-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"Region": "ap-south-1",
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.eu-south-1.api.aws"
}
},
"params": {
"UseFIPS": true,
"Region": "eu-south-1",
"UseDualStack": true
}
},
{
"documentation": "For region eu-south-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.eu-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": true,

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        "Region": "eu-south-1",
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-south-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.eu-south-1.api.aws"
        }
    },

   "params": {
        "UseFIPS": false,
        "Region": "eu-south-1",
        "UseDualStack": true
    }
},
{
    "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.eu-south-1.amazonaws.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "Region": "eu-south-1",
        "UseDualStack": false
    }
},
{
    "documentation": "For region ca-central-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.ca-central-1.api.aws"
        }
    },
    "params": {
        "UseFIPS": true,
        "Region": "ca-central-1",

        "UseDualStack": true
    }
},
{
    "documentation": "For region ca-central-1 with FIPS enabled and DualStack disabled",
    "expect": {
```

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.ca-central-1.amazonaws.com"
}
},
"params": {
"UseFIPS": true,
"Region": "ca-central-1",
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.ca-central-1.api.aws"
}
},
"params": {
"UseFIPS": false,
"Region": "ca-central-1",
"UseDualStack": true
}
},
{
"documentation":
"For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.ca-central-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"Region": "ca-central-1",
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.eu-central-1.api.aws"
}
},
"params": {
"UseFIPS": true,
"Region": "eu-central-1",
"UseDualStack": true

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        }
    },
    {
        "documentation": "For region eu-central-1 with FIPS enabled and DualStack disabled",
        "expect":
{
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.eu-central-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": true,
            "Region": "eu-central-1",
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region eu-central-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.eu-central-1.api.aws"
            }
        },
        "params": {
            "UseFIPS": false,
            "Region": "eu-central-1",
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.eu-central-1.amazonaws.com"
             }
        },
        "params": {
            "UseFIPS": false,
            "Region": "eu-central-1",
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-west-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-west-1.api.aws"
            }
```

```
        },
        "params": {
          "UseFIPS": true,
          "Region": "us-west-1",
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-west-1.amazonaws.com"
          }
        },
        "params":
{
          "UseFIPS": true,
          "Region": "us-west-1",
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-west-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-west-1.api.aws"
          }
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"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"

},
"params": {
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"UseDualStack": true,
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}
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"version": "1.0"
}
{
"version":"2.0",
"metadata":{
"apiVersion":"2018-08-01",
"endpointPrefix":"license-manager",
"jsonVersion":"1.1",
"protocol":"json",
"serviceFullName":"AWS License Manager",
"serviceId":"License Manager",
"signatureVersion":"v4",
"targetPrefix":"AWSLicenseManager",
"uid":"license-manager-2018-08-01"
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"http":{
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"requestUri":"/"
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"input":{"shape":"AcceptGrantRequest"},
"output":{"shape":"AcceptGrantResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
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{"shape":"AccessDeniedException"},
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{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"}
]
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"method":"POST",
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"input":{"shape":"CheckInLicenseRequest"},
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"errors":[
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{"shape":"ResourceNotFoundException"},
{"shape":"ConflictException"},
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{"shape":"AccessDeniedException"},
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{"shape":"EntitlementNotAllowedException"},
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{"shape":"RedirectException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
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"output":{"shape":"CheckoutLicenseResponse"},
"errors":[
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]
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{"shape":"RateLimitExceededException"},
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]
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  "output":{"shape":"CreateGrantVersionResponse"},
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    {"shape":"RateLimitExceededException"}
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{"shape":"RateLimitExceededException"}
]
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"requestUri":"/"
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"output":{"shape":"CreateTokenResponse"},
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{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"ResourceNotFoundException"},
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"output":{"shape":"DeleteGrantResponse"},
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{"shape":"AccessDeniedException"},
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{"shape":"ServerInternalException"}

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  ]
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  "output":{"shape":"DeleteLicenseResponse"},
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    {"shape":"ConflictException"},

    {"shape":"ServerInternalException"},
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    {"shape":"AccessDeniedException"},
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    "requestUri":"/"
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  "output":{"shape":"DeleteLicenseConfigurationResponse"},
  "errors":[
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    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
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{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
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"requestUri":"/"
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"output":{"shape":"GetServiceSettingsResponse"},
"errors":[
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
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"output":{"shape":"ListAssociationsForLicenseConfigurationResponse"},
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{"shape":"ServerInternalException"},

{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
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{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
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"ListFailuresForLicenseConfigurationOperations":{
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"errors":[
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{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
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"name":"ListLicenseConfigurations",
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"method":"POST",
"requestUri":"/"
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"output":{"shape":"ListLicenseConfigurationsResponse"},
"errors":[

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  "output":{"shape":"ListLicenseVersionsResponse"},
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    {"shape":"AccessDeniedException"},
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{"shape":"AccessDeniedException"},
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{"shape":"AccessDeniedException"},
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{"shape":"AccessDeniedException"},
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"output":{"shape":"ListTagsForResourceResponse"},

"errors":[
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"method":"POST",

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]
},
"UpdateLicenseManagerReportGenerator":{
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"output":{"shape":"UpdateLicenseManagerReportGeneratorResponse"},
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{"shape":"AccessDeniedException"},
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"output":{"shape":"UpdateLicenseSpecificationsForResourceResponse"},
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    "output":{"shape":"UpdateServiceSettingsResponse"},
    "errors":[
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      {"shape":"RateLimitExceededException"}
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  }
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    "members":{
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    }
  },
  "AcceptGrantResponse":{
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    "members":{
      "GrantArn":{"shape":"Arn"},
      "Status":{"shape":"GrantStatus"},
      "Version":{"shape":"String"}
    }
  },
  "AccessDeniedException":{
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    "members":{
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    },
    "exception":true
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      "ALL_GRANTS_PERMITTED_BY_ISSUER"
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    ]
  },
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      "CheckoutLicense",
      "CheckoutBorrowLicense",
      "CheckInLicense",
      "ExtendConsumptionLicense",
      "ListPurchasedLicenses",
      "CreateToken"
    ]
  },
  "AllowedOperationList":{
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    "max":7,
    "min":1
  },
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    "max":2048,
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    "member":{"shape":"Arn"}
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    "members":{
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    "exception":true
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"MaxTimeToLiveInMinutes"
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"Beneficiary":{"shape":"String"}
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"CheckoutBorrowLicenseRequest":{
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"Entitlements",
"DigitalSignatureMethod",
"ClientToken"
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"Entitlements":{"shape":"EntitlementDataList"},
"DigitalSignatureMethod":{"shape":"DigitalSignatureMethod"},
"NodeId":{"shape":"String"},
"CheckoutMetadata":{"shape":"MetadataList"},
"ClientToken":{"shape":"ClientToken"}
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"CheckoutBorrowLicenseResponse":{
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"NodeId":{"shape":"String"},

"SignedToken":{"shape":"SignedToken"},
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"Entitlements",
"ClientToken"
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"NodeId":{"shape":"String"}
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    "BorrowConfiguration":{"shape":"BorrowConfiguration"}
  }
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    "LicenseArn",
    "Principals",
    "HomeRegion",
    "AllowedOperations"
  ],
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    "GrantName":{"shape":"String"},
    "LicenseArn":{"shape":"Arn"},
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"HomeRegion":{"shape":"String"},
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"GrantArn"
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"SourceVersion":{"shape":"String"},
"Options":{"shape":"Options"}
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"LicenseCountingType"
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"LicenseRules":{"shape":"StringList"},
"Tags":{"shape":"TagList"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"},
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"SourceLicenseContext",
"DestinationLicenseContext"
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"DestinationLicenseContext":{"shape":"LicenseConversionContext"}
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"CreateLicenseConversionTaskForResourceResponse":{
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"members":{
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"CreateLicenseManagerReportGeneratorRequest":{
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"Type",
"ReportContext",
"ReportFrequency",
"ClientToken"
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"Type":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"ClientToken":{"shape":"ClientRequestToken"},
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"Tags":{"shape":"TagList"}
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"CreateLicenseManagerReportGeneratorResponse":{
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"ProductName",
"ProductSKU",
"Issuer",
"HomeRegion",
"Validity",
"Entitlements",
"Beneficiary",
"ConsumptionConfiguration",
"ClientToken"
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"ProductSKU":{"shape":"String"},
"Issuer":{"shape":"Issuer"},
"HomeRegion":{"shape":"String"},
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"Beneficiary":{"shape":"String"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"LicenseMetadata":{"shape":"MetadataList"},
"ClientToken":{"shape":"ClientToken"}

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"ConsumptionConfiguration",
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"ClientToken"
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"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"Status":{"shape":"LicenseStatus"},
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"SourceVersion":{"shape":"String"}
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"Version":{"shape":"String"},
"Status":{"shape":"LicenseStatus"}
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"ClientToken"
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"RoleArns":{"shape":"ArnList"},
"ExpirationInDays":{"shape":"Integer"},
"TokenProperties":{"shape":"MaxSize3StringList"},
"ClientToken":{"shape":"ClientToken"}
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    "Version"
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    "StatusReason":{"shape":"StatusReasonMessage"},
    "Version":{"shape":"String"}
  }
},
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  "members":{
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    "Status":{"shape":"GrantStatus"},
    "Version":{"shape":"String"}
  }
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"DeleteLicenseConfigurationRequest":{
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"DeleteLicenseConfigurationResponse":{
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"DeleteLicenseManagerReportGeneratorResponse":{
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    "Unit":{"shape":"EntitlementUnit"},
    "AllowCheckIn":{"shape":"BoxBoolean"}
  }
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    "Unit"
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    "Value":{"shape":"String"},
    "Unit":{"shape":"EntitlementDataUnit"}
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    "None",
    "Seconds",
    "Microseconds",
    "Milliseconds",
    "Bytes",
    "Kilobytes",

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    "Terabytes",
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"Terabits/Second",
"Count/Second"
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"MaxCount":{"shape":"String"},
"Unit":{"shape":"EntitlementDataUnit"}
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"ExtendLicenseConsumptionResponse":{
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"members":{
"LicenseConsumptionToken":{"shape":"String"},
"Expiration":{"shape":"ISO8601DateTime"}
}
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"GetAccessTokenResponse":{
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  "members":{
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  }
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},
"GetLicenseConfigurationResponse":{
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    "LicenseConfigurationArn":{"shape":"String"},
    "Name":{"shape":"String"},
    "Description":{"shape":"String"},
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    "LicenseRules":{"shape":"StringList"},
    "LicenseCount":{"shape":"BoxLong"},
    "LicenseCountHardLimit":{"shape":"BoxBoolean"},
    "ConsumedLicenses":{"shape":"BoxLong"},
    "Status":{"shape":"String"},
    "OwnerAccountId":{"shape":"String"},
    "ConsumedLicenseSummaryList":{"shape":"ConsumedLicenseSummaryList"},
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    "Tags":{"shape":"TagList"},
    "ProductInformationList":{"shape":"ProductInformationList"},
    "AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"},
    "DisassociateWhenNotFound":{"shape":"BoxBoolean"}
  }
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"DestinationLicenseContext":{"shape":"LicenseConversionContext"},
"StatusMessage":{"shape":"String"},
"Status":{"shape":"LicenseConversionTaskStatus"},
"StartTime":{"shape":"DateTime"},
"LicenseConversionTime":{"shape":"DateTime"},
"EndTime":{"shape":"DateTime"}
}
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"GetLicenseManagerReportGeneratorResponse":{
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"GetLicenseResponse":{
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"GetServiceSettingsResponse":{
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"LicenseManagerResourceShareArn":{"shape":"String"}
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"LicenseArn",
"GranteePrincipalArn",
"HomeRegion",
"GrantStatus",
"Version",
"GrantedOperations"
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"GrantName":{"shape":"String"},
"ParentArn":{"shape":"Arn"},
"LicenseArn":{"shape":"Arn"},
"GranteePrincipalArn":{"shape":"Arn"},
"HomeRegion":{"shape":"String"},
"GrantStatus":{"shape":"GrantStatus"},
"StatusReason":{"shape":"StatusReasonMessage"},
"Version":{"shape":"String"},

"GrantedOperations":{"shape":"AllowedOperationList"},
"Options":{"shape":"Options"}
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"PENDING_ACCEPT",
"REJECTED",
"ACTIVE",
"FAILED_WORKFLOW",
"DELETED",
"PENDING_DELETE",
"DISABLED",
"WORKFLOW_COMPLETED"
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"ProductName":{"shape":"String"},
"ProductSKU":{"shape":"String"},
"Issuer":{"shape":"IssuerDetails"},
"HomeRegion":{"shape":"String"},
"Status":{"shape":"LicenseStatus"},
"Validity":{"shape":"DatetimeRange"},
"Beneficiary":{"shape":"String"},
"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},

"LicenseMetadata":{"shape":"MetadataList"},
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"Version":{"shape":"String"},
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"GrantedLicenseList":{
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"NOT_EQUALS",
"BEGINS_WITH",
"CONTAINS"
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    "SignKey":{"shape":"String"}
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"IssuerDetails":{
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  "members":{
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    "SignKey":{"shape":"String"},
    "KeyFingerprint":{"shape":"String"}
  }
},
"License":{
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"ProductName":{"shape":"String"},
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    "HomeRegion":{"shape":"String"},
    "Status":{"shape":"LicenseStatus"},
    "Validity":{"shape":"DatetimeRange"},
    "Beneficiary":{"shape":"String"},
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    "LicenseMetadata":{"shape":"MetadataList"},
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    "Version":{"shape":"String"}
  }
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    "Description":{"shape":"String"},
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    "LicenseRules":{"shape":"StringList"},
    "LicenseCount":{"shape":"BoxLong"},
    "LicenseCountHardLimit":{"shape":"BoxBoolean"},
     "DisassociateWhenNotFound":{"shape":"BoxBoolean"},
    "ConsumedLicenses":{"shape":"BoxLong"},
    "Status":{"shape":"String"},
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"OwnerAccountId":{"shape":"String"},
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"ProductInformationList":{"shape":"ProductInformationList"},
"AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"}
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"LicenseConfigurationAssociation":{
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"ResourceOwnerId":{"shape":"String"},
"AssociationTime":{"shape":"DateTime"},
"AmiAssociationScope":{"shape":"String"}
}
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"LicenseConfigurationAssociations":{
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"LicenseConfigurationStatus":{
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"DISABLED"
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"LicenseConfigurationUsage":{
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"ResourceStatus":{"shape":"String"},
"ResourceOwnerId":{"shape":"String"},
"AssociationTime":{"shape":"DateTime"},
"ConsumedLicenses":{"shape":"BoxLong"}
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"LicenseConfigurationUsageList":{
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"LicenseConfigurations":{
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"member":{"shape":"LicenseConfiguration"}
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"LicenseConversionContext":{

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"members":{
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"LicenseConversionTask":{
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"SourceLicenseContext":{"shape":"LicenseConversionContext"},
"DestinationLicenseContext":{"shape":"LicenseConversionContext"},
"Status":{"shape":"LicenseConversionTaskStatus"},
"StatusMessage":{"shape":"String"},
"StartTime":{"shape":"DateTime"},
"LicenseConversionTime":{"shape":"DateTime"},
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"LicenseConversionTaskStatus":{
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"SUCCEEDED",
"FAILED"
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},
"LicenseConversionTasks":{
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"Instance",
"Core",
"Socket"
]
},
"LicenseDeletionStatus":{
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"enum":[

"PENDING_DELETE",
"DELETED"
]
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"ResourceType":{"shape":"ResourceType"},
"ErrorMessage":{"shape":"String"},
"FailureTime":{"shape":"DateTime"},
"OperationName":{"shape":"String"},
"ResourceOwnerId":{"shape":"String"},
"OperationRequestedBy":{"shape":"String"},
"MetadataList":{"shape":"MetadataList"}
}
},
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"AmiAssociationScope":{"shape":"String"}
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"PENDING_AVAILABLE",
"DEACTIVATED",
"SUSPENDED",
"EXPIRED",
"PENDING_DELETE",
"DELETED"
]

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  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ListAssociationsForLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"}
  }
},
"ListAssociationsForLicenseConfigurationResponse":{
  "type":"structure",
   "members":{
    "LicenseConfigurationAssociations":{"shape":"LicenseConfigurationAssociations"},
    "NextToken":{"shape":"String"}
  }
},
"ListDistributedGrantsRequest":{
  "type":"structure",
  "members":{
    "GrantArns":{"shape":"ArnList"},
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListDistributedGrantsResponse":{
  "type":"structure",
  "members":{
    "Grants":{"shape":"GrantList"},
    "NextToken":{"shape":"String"}
  }
},
"ListFailuresForLicenseConfigurationOperationsRequest":{
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"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{"shape":"String"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"}
}
},
"ListFailuresForLicenseConfigurationOperationsResponse":{
"type":"structure",
"members":{
"LicenseOperationFailureList":{"shape":"LicenseOperationFailureList"},
"NextToken":{"shape":"String"}
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},
"ListLicenseConfigurationsRequest":{
"type":"structure",
"members":{
"LicenseConfigurationArns":{"shape":"StringList"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"},
"Filters":{"shape":"Filters"}
}
},
"ListLicenseConfigurationsResponse":{
"type":"structure",
"members":{
"LicenseConfigurations":{"shape":"LicenseConfigurations"},
"NextToken":{"shape":"String"}
}
},
"ListLicenseConversionTasksRequest":{
"type":"structure",
"members":{
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"BoxInteger"},
"Filters":{"shape":"Filters"}
}
},
"ListLicenseConversionTasksResponse":{
"type":"structure",
"members":{
"LicenseConversionTasks":{"shape":"LicenseConversionTasks"},
"NextToken":{"shape":"String"}
}
},
"ListLicenseManagerReportGeneratorsRequest":{
"type":"structure",
"members":{

"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListLicenseManagerReportGeneratorsResponse":{
"type":"structure",
"members":{
"ReportGenerators":{"shape":"ReportGeneratorList"},
"NextToken":{"shape":"String"}
}
},
"ListLicenseSpecificationsForResourceRequest":{
"type":"structure",
"required":["ResourceArn"],
"members":{
"ResourceArn":{"shape":"String"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"}
}
},
"ListLicenseSpecificationsForResourceResponse":{
"type":"structure",
"members":{
"LicenseSpecifications":{"shape":"LicenseSpecifications"},
"NextToken":{"shape":"String"}

}
},
"ListLicenseVersionsRequest":{
"type":"structure",
"required":["LicenseArn"],
"members":{
"LicenseArn":{"shape":"Arn"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListLicenseVersionsResponse":{
"type":"structure",
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"Licenses":{"shape":"LicenseList"},
"NextToken":{"shape":"String"}
}
},
"ListLicensesRequest":{
"type":"structure",
"members":{

"LicenseArns":{"shape":"ArnList"},
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListLicensesResponse":{
"type":"structure",
"members":{
"Licenses":{"shape":"LicenseList"},
"NextToken":{"shape":"String"}
}
},
"ListReceivedGrantsForOrganizationRequest":{
"type":"structure",
"required":["LicenseArn"],
"members":{
"LicenseArn":{"shape":"Arn"},
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListReceivedGrantsForOrganizationResponse":{
"type":"structure",
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"Grants":{"shape":"GrantList"},
"NextToken":{"shape":"String"}
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},
"ListReceivedGrantsRequest":{
"type":"structure",
"members":{
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"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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},
"ListReceivedGrantsResponse":{
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"NextToken":{"shape":"String"}
}
},
"ListReceivedLicensesForOrganizationRequest":{
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"members":{
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"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListReceivedLicensesForOrganizationResponse":{
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"members":{
"Licenses":{"shape":"GrantedLicenseList"},
"NextToken":{"shape":"String"}
}
},
"ListReceivedLicensesRequest":{
"type":"structure",
"members":{
"LicenseArns":{"shape":"ArnList"},
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListReceivedLicensesResponse":{
"type":"structure",
"members":{
"Licenses":{"shape":"GrantedLicenseList"},
"NextToken":{"shape":"String"}
}
},
"ListResourceInventoryRequest":{
"type":"structure",
"members":{
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"},
"Filters":{"shape":"InventoryFilterList"}
}
},
"ListResourceInventoryResponse":{
"type":"structure",
"members":{
"ResourceInventoryList":{"shape":"ResourceInventoryList"},
"NextToken":{"shape":"String"}
}
},
"ListTagsForResourceRequest":{
"type":"structure",
"required":["ResourceArn"],
"members":{

"ResourceArn":{"shape":"String"}
}
},
"ListTagsForResourceResponse":{
"type":"structure",
"members":{
"Tags":{"shape":"TagList"}
}
},
"ListTokensRequest":{
"type":"structure",
"members":{
"TokenIds":{"shape":"StringList"},
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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},
"ListTokensResponse":{
"type":"structure",
"members":{
"Tokens":{"shape":"TokenList"},
"NextToken":{"shape":"String"}
}
},
"ListUsageForLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{"shape":"String"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"},
"Filters":{"shape":"Filters"}
}
},
"ListUsageForLicenseConfigurationResponse":{
"type":"structure",
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"NextToken":{"shape":"String"}
}
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"Location":{"type":"string"},
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"ManagedResourceSummary":{
"type":"structure",
"members":{
"ResourceType":{"shape":"ResourceType"},

"AssociationCount":{"shape":"BoxLong"}
}
},
"ManagedResourceSummaryList":{
"type":"list",
"member":{"shape":"ManagedResourceSummary"}
},
"MaxSize100":{
"type":"integer",
"max":100,
"min":1
},
"MaxSize3StringList":{
"type":"list",
"member":{"shape":"String"},
"max":3
},
"Message":{"type":"string"},
"Metadata":{
"type":"structure",
"members":{
"Name":{"shape":"String"},
"Value":{"shape":"String"}
}
},
"MetadataList":{
"type":"list",
"member":{"shape":"Metadata"}
},
"NoEntitlementsAllowedException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"Options":{
"type":"structure",
"members":{
"ActivationOverrideBehavior":{"shape":"ActivationOverrideBehavior"}
}
},
"OrganizationConfiguration":{
"type":"structure",
"required":["EnableIntegration"],
"members":{
"EnableIntegration":{"shape":"Boolean"}
}

},
"PrincipalArnList":{
 "type":"list",
 "member":{"shape":"Arn"},
 "max":1,
 "min":1
},
"ProductInformation":{
 "type":"structure",
 "required":[
  "ResourceType",
  "ProductInformationFilterList"
 ],
 "members":{
  "ResourceType":{"shape":"String"},
  "ProductInformationFilterList":{"shape":"ProductInformationFilterList"}
 }
},
"ProductInformationFilter":{
 "type":"structure",
 "required":[
  "ProductInformationFilterName",
  "ProductInformationFilterComparator"
 ],
 "members":{
  "ProductInformationFilterName":{"shape":"String"},
  "ProductInformationFilterValue":{"shape":"StringList"},
  "ProductInformationFilterComparator":{"shape":"String"}
 }
},
"ProductInformationFilterList":{
 "type":"list",
 "member":{"shape":"ProductInformationFilter"}
},
"ProductInformationList":{
 "type":"list",
 "member":{"shape":"ProductInformation"}
},
"ProvisionalConfiguration":{
 "type":"structure",
 "required":["MaxTimeToLiveInMinutes"],
 "members":{
  "MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
 }
},
"RateLimitExceededException":{
 "type":"structure",
 "members":{

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    "Message":{"shape":"Message"}
   },
  "exception":true
},
"ReceivedMetadata":{
  "type":"structure",
  "members":{
    "ReceivedStatus":{"shape":"ReceivedStatus"},
    "ReceivedStatusReason":{"shape":"StatusReasonMessage"},
    "AllowedOperations":{"shape":"AllowedOperationList"}
  }
},
"ReceivedStatus":{
  "type":"string",
  "enum":[
    "PENDING_WORKFLOW",
    "PENDING_ACCEPT",
    "REJECTED",
    "ACTIVE",
    "FAILED_WORKFLOW",
    "DELETED",
    "DISABLED",
    "WORKFLOW_COMPLETED"
  ]
},
"RedirectException":{
  "type":"structure",
  "members":{
    "Location":{"shape":"Location"},
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"RejectGrantRequest":{
  "type":"structure",
  "required":["GrantArn"],
  "members":{
    "GrantArn":{"shape":"Arn"}
  }
},
"RejectGrantResponse":{
  "type":"structure",
  "members":{
     "GrantArn":{"shape":"Arn"},
    "Status":{"shape":"GrantStatus"},
    "Version":{"shape":"String"}
  }
},
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"RenewType":{
  "type":"string",
  "enum":[
    "None",
    "Weekly",
    "Monthly"
  ]
},
"ReportContext":{
  "type":"structure",
  "required":["licenseConfigurationArns"],
  "members":{
    "licenseConfigurationArns":{"shape":"ArnList"}
  }
},
"ReportFrequency":{
  "type":"structure",
  "members":{
    "value":{"shape":"Integer"},
    "period":{"shape":"ReportFrequencyType"}
  }
},
"ReportFrequencyType":{
  "type":"string",
  "enum":[
    "DAY",
    "WEEK",
    "MONTH"
  ]
},
"ReportGenerator":{
  "type":"structure",
  "members":{
    "ReportGeneratorName":{"shape":"String"},
    "ReportType":{"shape":"ReportTypeList"},
    "ReportContext":{"shape":"ReportContext"},
    "ReportFrequency":{"shape":"ReportFrequency"},
     "LicenseManagerReportGeneratorArn":{"shape":"String"},
    "LastRunStatus":{"shape":"String"},
    "LastRunFailureReason":{"shape":"String"},
    "LastReportGenerationTime":{"shape":"String"},
    "ReportCreatorAccount":{"shape":"String"},
    "Description":{"shape":"String"},
    "S3Location":{"shape":"S3Location"},
    "CreateTime":{"shape":"String"},
    "Tags":{"shape":"TagList"}
  }
},

"ReportGeneratorList":{
  "type":"list",
  "member":{"shape":"ReportGenerator"}
},
"ReportGeneratorName":{
  "type":"string",
  "max":100,
  "min":1
},
"ReportType":{
  "type":"string",
  "enum":[
    "LicenseConfigurationSummaryReport",
    "LicenseConfigurationUsageReport"
  ]
},
"ReportTypeList":{
  "type":"list",
  "member":{"shape":"ReportType"}
},
"ResourceInventory":{
  "type":"structure",
  "members":{
    "ResourceId":{"shape":"String"},
     "ResourceType":{"shape":"ResourceType"},
    "ResourceArn":{"shape":"String"},
    "Platform":{"shape":"String"},
    "PlatformVersion":{"shape":"String"},
    "ResourceOwningAccountId":{"shape":"String"}
  }
},
"ResourceInventoryList":{
  "type":"list",
  "member":{"shape":"ResourceInventory"}
},
"ResourceLimitExceededException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ResourceNotFoundException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true

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},
"ResourceType":{
  "type":"string",
  "enum":[
    "EC2_INSTANCE",
    "EC2_HOST",
    "EC2_AMI",
    "RDS",
    "SYSTEMS_MANAGER_MANAGED_INSTANCE"
  ]
},
"S3Location":{
  "type":"structure",
  "members":{
    "bucket":{"shape":"String"},
    "keyPrefix":{"shape":"String"}

}
},
"ServerInternalException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true,
  "fault":true
},
"SignedToken":{
  "type":"string",
  "min":4096
},
"StatusReasonMessage":{
  "type":"string",
  "max":400,
  "pattern":"[\\s\\S]+"
},
"String":{"type":"string"},
"StringList":{
  "type":"list",
  "member":{"shape":"String"}
},
"Tag":{
  "type":"structure",
  "members":{
    "Key":{"shape":"String"},
    "Value":{"shape":"String"}
  }
},
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"TagKeyList":{
  "type":"list",
  "member":{"shape":"String"}
},
"TagList":{
  "type":"list",
  "member":{"shape":"Tag"}
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"TagResourceRequest":{
  "type":"structure",
  "required":[
    "ResourceArn",
    "Tags"
  ],
  "members":{
    "ResourceArn":{"shape":"String"},
    "Tags":{"shape":"TagList"}
  }
},
"TagResourceResponse":{
   "type":"structure",
  "members":{
  }
},
"TokenData":{
  "type":"structure",
  "members":{
    "TokenId":{"shape":"String"},
    "TokenType":{"shape":"String"},
    "LicenseArn":{"shape":"String"},
    "ExpirationTime":{"shape":"ISO8601DateTime"},
    "TokenProperties":{"shape":"MaxSize3StringList"},
    "RoleArns":{"shape":"ArnList"},
    "Status":{"shape":"String"}
  }
},
"TokenList":{
  "type":"list",
  "member":{"shape":"TokenData"}
},
"TokenString":{
  "type":"string",
  "max":4096,
  "pattern":"\\S+"
},
"TokenType":{
  "type":"string",
  "enum":["REFRESH_TOKEN"]

},
"UnsupportedDigitalSignatureMethodException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"UntagResourceRequest":{
"type":"structure",
"required":[
"ResourceArn",
"TagKeys"
],
"members":{
"ResourceArn":{"shape":"String"},
"TagKeys":{"shape":"TagKeyList"}
}
},
"UntagResourceResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{"shape":"String"},
"LicenseConfigurationStatus":{"shape":"LicenseConfigurationStatus"},
"LicenseRules":{"shape":"StringList"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"ProductInformationList":{"shape":"ProductInformationList"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"}
}
},
"UpdateLicenseConfigurationResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":[
"LicenseManagerReportGeneratorArn",

"ReportGeneratorName",
"Type",
"ReportContext",
"ReportFrequency",
"ClientToken"
],
"members":{
"LicenseManagerReportGeneratorArn":{"shape":"String"},
"ReportGeneratorName":{"shape":"ReportGeneratorName"},
"Type":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"ClientToken":{"shape":"ClientRequestToken"},
"Description":{"shape":"String"}
}
},
"UpdateLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseSpecificationsForResourceRequest":{
"type":"structure",
"required":["ResourceArn"],
"members":{
"ResourceArn":{"shape":"String"},
"AddLicenseSpecifications":{"shape":"LicenseSpecifications"},
"RemoveLicenseSpecifications":{"shape":"LicenseSpecifications"}
}
},
"UpdateLicenseSpecificationsForResourceResponse":{
"type":"structure",
"members":{
}
},
"UpdateServiceSettingsRequest":{
"type":"structure",
"members":{
"S3BucketArn":{"shape":"String"},
"SnsTopicArn":{"shape":"String"},
"OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
"EnableCrossAccountsDiscovery":{"shape":"BoxBoolean"}
}
},
"UpdateServiceSettingsResponse":{
"type":"structure",
"members":{
}

},
"UsageOperation":{
"type":"string",
"max":50
},
"ValidationException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
}
}
}
{
"version": "2.0",
"service": " License Manager makes it easier to manage licenses from software vendors across multiple Amazon Web Services accounts and on-premises servers. ",
"operations": {
"AcceptGrant": " Accepts the specified grant. ",
"CheckInLicense": " Checks in the specified license. Check in a license when it is no longer in use. ",
"CheckoutBorrowLicense": " Checks out the specified license for offline use. ",
"CheckoutLicense": " Checks out the specified license. <note> If the account that created the license is the same that is performing the check out, you must specify the account as the beneficiary. </note>",
"CreateGrant": " Creates a grant for the specified license. A grant shares the use of license entitlements with a specific Amazon Web Services account, an organization, or an organizational unit (OU). For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateGrantVersion": " Creates a new version of the specified grant. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateLicense": " Creates a license. ",
"CreateLicenseConfiguration": " Creates a license configuration. A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a license must be associated with a host), and the number of licenses purchased and used. ",
"CreateLicenseConversionTaskForResource":
" Creates a new license conversion task. ",
"CreateLicenseManagerReportGenerator": " Creates a report generator. ",
"CreateLicenseVersion": " Creates a new version of the specified license. ",
"CreateToken": " Creates a long-lived token. A refresh token is a JWT token used to get an access token. With an access token, you can call AssumeRoleWithWebIdentity to get role credentials that you can use to call License Manager to manage the specified license. ",
"DeleteGrant": " Deletes the specified grant. ",
"DeleteLicense": " Deletes the specified license. ",
"DeleteLicenseConfiguration": " Deletes the specified license configuration. You cannot delete a license configuration that is in use. ",

"DeleteLicenseManagerReportGenerator": " Deletes the specified report generator. This action deletes the report generator, which stops it from generating future reports. The action cannot be reversed. It has no effect on the previous reports from this generator. ",
"DeleteToken": " Deletes the specified token. Must be called in the license home Region. ",
"ExtendLicenseConsumption": " Extends the expiration date for license consumption. ",
"GetAccessToken": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens are valid for one hour. ",
"GetGrant": " Gets detailed information about the specified grant. ",
"GetLicense": " Gets detailed information about the specified license. ",
"GetLicenseConfiguration": " Gets detailed information about the specified license configuration. ",
"GetLicenseConversionTask": " Gets information about the specified license type conversion task. ",
"GetLicenseManagerReportGenerator": " Gets information about the specified report generator. ",
"GetLicenseUsage": " Gets detailed information about the usage of the specified license. ",
"GetServiceSettings": " Gets the License Manager settings for the current Region. ",
"ListAssociationsForLicenseConfiguration": " Lists the resource associations for the specified license configuration. Resource associations need not consume licenses from a license configuration. For example, an AMI or a stopped instance might not consume a license (depending on the license rules). ",
"ListDistributedGrants": " Lists the grants distributed for the specified license. ",
"ListFailuresForLicenseConfigurationOperations": " Lists the license configuration operations that failed. ",
"ListLicenseConfigurations": " Lists the license configurations for your account. ",
"ListLicenseConversionTasks": " Lists the license type conversion tasks for your account. ",
"ListLicenseManagerReportGenerators": " Lists the report generators for your account. ",
"ListLicenseSpecificationsForResource": " Describes the license configurations for the specified resource. ",
"ListLicenseVersions": " Lists all versions of the specified license. ",
"ListLicenses": " Lists the licenses for your account. ",
"ListReceivedGrants": " Lists grants that are received. Received grants are grants created while specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs. ",
"ListReceivedGrantsForOrganization": " Lists the grants received for all accounts in the organization. ",
"ListReceivedLicenses": " Lists received licenses. ",
"ListReceivedLicensesForOrganization": " Lists the licenses received for all accounts in the organization. ",
"ListResourceInventory": " Lists resources managed using Systems Manager inventory. ",
"ListTagsForResource": " Lists the tags for the specified license configuration. ",
"ListTokens": " Lists your tokens. ",
"ListUsageForLicenseConfiguration": " Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration. ",
"RejectGrant": " Rejects the specified grant. ",
"TagResource": " Adds the specified tags to the specified license configuration. ",
"UntagResource": " Removes the specified tags from the specified license configuration. ",
"UpdateLicenseConfiguration": " Modifies the attributes of an existing license configuration. ",
"UpdateLicenseManagerReportGenerator": " Updates a report generator. After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. ",

"UpdateLicenseSpecificationsForResource": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. You can update the
license specifications of AMIs, instances, and hosts. You cannot update the license specifications for launch templates and CloudFormation templates, as they send license configurations to the operation that creates the resource. ",
"UpdateServiceSettings": " Updates License Manager settings for the current Region. "
},
"shapes": {
"AcceptGrantRequest": {
"base": null,
"refs": {
}
},
"AcceptGrantResponse": {
"base": null,
"refs": {
}
},
"AccessDeniedException": {
"base": " Access to resource denied. ",
"refs": {
}
},
"ActivationOverrideBehavior": {
"base": null,
"refs": {
"Options$ActivationOverrideBehavior": " An activation option for your grant that determines the behavior of activating a grant. Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code>
for the <code>Status</code> parameter.   As a license administrator, you can optionally specify an <code>ActivationOverrideBehavior</code> when activating a grant.   As a grantor, you can optionally specify an <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee account in your organization.   As a grantee, if the grantor creating the distributed grant doesnt specify an <code>ActivationOverrideBehavior</code>, you can optionally specify one when you are activating the grant.   <dl> <dt>DISTRIBUTED_GRANTS_ONLY</dt> <dd> Use this value to activate a grant without replacing any member accounts active grants for the same product. </dd>
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt> <dd> Use this value to activate a grant and disable other active grants in any member accounts for the same product. This action will also replace their previously activated grants with this activated grant.
</dd> </dl>"
}
},
"AllowedOperation": {
"base": null,
"refs": {
"AllowedOperationList$member": null
}
},

"AllowedOperationList": {
"base": null,
"refs": {
"CreateGrantRequest$AllowedOperations": " Allowed operations for the grant. ",
"CreateGrantVersionRequest$AllowedOperations": " Allowed operations for the grant. ",
"Grant$GrantedOperations": " Granted operations. ",
"ReceivedMetadata$AllowedOperations": " Allowed operations. "
}
},
"Arn": {
"base": null,
"refs": {
"AcceptGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"AcceptGrantResponse$GrantArn": " Grant ARN. ",
"ArnList$member": null,
"CheckoutBorrowLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"CheckoutBorrowLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantResponse$GrantArn": " Grant ARN. ",
"CreateGrantVersionRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"CreateGrantVersionResponse$GrantArn": " Grant ARN. ",
"CreateLicenseConversionTaskForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"CreateLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionResponse$LicenseArn": " License ARN. ",
"CreateTokenRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the JWT token. ",
"DeleteGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"DeleteGrantResponse$GrantArn": " Grant ARN. ",
"DeleteLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"GetLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetLicenseUsageRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"Grant$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"Grant$ParentArn": " Parent ARN. ",
"Grant$LicenseArn": " License ARN. ",
"Grant$GranteePrincipalArn": " The grantee principal ARN. ",
"GrantedLicense$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"License$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"ListLicenseVersionsRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"ListReceivedGrantsForOrganizationRequest$LicenseArn": " The Amazon Resource Name (ARN) of the received license. ",
"PrincipalArnList$member": null,

"RejectGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"RejectGrantResponse$GrantArn": " Grant ARN. "
}
},
"ArnList": {
"base": null,
"refs": {
"CreateTokenRequest$RoleArns": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. License Manager does not check whether the roles are in use. ",
"ListDistributedGrantsRequest$GrantArns": " Amazon Resource Names (ARNs) of the grants. ",
"ListLicensesRequest$LicenseArns": " Amazon Resource Names (ARNs) of the licenses. ",
"ListReceivedGrantsRequest$GrantArns": " Amazon Resource Names (ARNs) of the grants. ",
"ListReceivedLicensesRequest$LicenseArns": " Amazon Resource Names (ARNs) of the licenses. ",

"ReportContext$licenseConfigurationArns": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"TokenData$RoleArns": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"AuthorizationException": {
"base": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM policy associated with this account. ",
"refs": {
}
},
"AutomatedDiscoveryInformation": {
"base": " Describes automated discovery. ",
"refs": {
"GetLicenseConfigurationResponse$AutomatedDiscoveryInformation": " Automated discovery information. ",
"LicenseConfiguration$AutomatedDiscoveryInformation": " Automated discovery information. "
}
},
"Boolean": {
"base": null,
"refs": {
"ExtendLicenseConsumptionRequest$DryRun": " Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions. ",
"OrganizationConfiguration$EnableIntegration": " Enables Organizations integration. "
}
},
"BorrowConfiguration": {
"base": " Details about a borrow configuration. ",
"refs": {
"ConsumptionConfiguration$BorrowConfiguration": " Details about a borrow configuration. "
}
},

"BoxBoolean": {
"base": null,
"refs": {
"BorrowConfiguration$AllowEarlyCheckIn": " Indicates whether early check-ins are allowed. ",
"CreateLicenseConfigurationRequest$LicenseCountHardLimit": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit blocks the launch of new instances. ",
"CreateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"Entitlement$Overage": " Indicates whether overages are allowed. ",
"Entitlement$AllowCheckIn": " Indicates whether check-ins are allowed. ",
"GetLicenseConfigurationResponse$LicenseCountHardLimit": " Sets the number of available licenses as a hard limit. ",
"GetLicenseConfigurationResponse$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"GetServiceSettingsResponse$EnableCrossAccountsDiscovery": " Indicates whether cross-account discovery is enabled. ",
"LicenseConfiguration$LicenseCountHardLimit": " Number of available licenses as a hard limit. ",
"LicenseConfiguration$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateLicenseConfigurationRequest$LicenseCountHardLimit": " New hard limit of the number of available licenses. ",
"UpdateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateServiceSettingsRequest$EnableCrossAccountsDiscovery": " Activates cross-account discovery. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"BorrowConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the borrow configuration, in minutes. ",
"ListAssociationsForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListFailuresForLicenseConfigurationOperationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConfigurationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConversionTasksRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseSpecificationsForResourceRequest$MaxResults": " Maximum number of results to return in a single call. ",

"ListResourceInventoryRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUsageForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ProvisionalConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the provisional configuration,

in minutes. "
    }
  },
  "BoxLong": {
    "base": null,
    "refs": {
      "ConsumedLicenseSummary$ConsumedLicenses": " Number of licenses consumed by the resource. ",
      "CreateLicenseConfigurationRequest$LicenseCount": " Number of licenses managed by the license configuration. ",
      "GetLicenseConfigurationResponse$LicenseCount": " Number of available licenses. ",
      "GetLicenseConfigurationResponse$ConsumedLicenses": " Number of licenses assigned to resources. ",
      "LicenseConfiguration$LicenseCount": " Number of licenses managed by the license configuration. ",
      "LicenseConfiguration$ConsumedLicenses": " Number of licenses consumed. ",
      "LicenseConfigurationUsage$ConsumedLicenses": " Number of licenses consumed by the resource. ",
      "ManagedResourceSummary$AssociationCount": " Number of resources associated with licenses. ",
      "UpdateLicenseConfigurationRequest$LicenseCount": " New number of licenses managed by the license configuration. "
    }
  },
  "CheckInLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "CheckInLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutBorrowLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutBorrowLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutLicenseResponse": {
    "base": null,
    "refs": {

```
    }
  },
  "CheckoutType": {
    "base": null,
    "refs": {
      "CheckoutLicenseRequest$CheckoutType": "<p>Checkout type.</p>",
      "CheckoutLicenseResponse$CheckoutType": "<p>Checkout type.</p>"
    }
  },
  "ClientRequestToken": {
    "base": null,
    "refs": {
      "CreateLicenseManagerReportGeneratorRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "UpdateLicenseManagerReportGeneratorRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>"
    }
  },
  "ClientToken": {
    "base": null,
    "refs": {
      "CheckoutBorrowLicenseRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "CheckoutLicenseRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "CreateGrantRequest$ClientToken": "<p>Unique, case-sensitive
 identifier that you provide to ensure the idempotency of the request.</p>",
      "CreateGrantVersionRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "CreateLicenseRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "CreateLicenseVersionRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "CreateTokenRequest$ClientToken": "<p>Idempotency token, valid for 10 minutes.</p>"
    }
  },
  "ConflictException": {
    "base": "<p>There was a conflict processing the request. Try your request again.</p>",
    "refs": {
    }
  },
  "ConsumedLicenseSummary": {
    "base": "<p>Details about license consumption.</p>",
    "refs": {
      "ConsumedLicenseSummaryList$member": null
    }
  },
  "ConsumedLicenseSummaryList": {
```

"base": null,
"refs": {
"GetLicenseConfigurationResponse$ConsumedLicenseSummaryList": " Summaries of the licenses consumed by resources. ",
"LicenseConfiguration$ConsumedLicenseSummaryList": " Summaries for licenses consumed by various resources. "
}
},
"ConsumptionConfiguration": {
"base": " Details about a consumption configuration. ",
"refs": {
"CreateLicenseRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"CreateLicenseVersionRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"GrantedLicense$ConsumptionConfiguration": " Configuration for consumption of the license. ",
"License$ConsumptionConfiguration": " Configuration for consumption of the license. "
}
},
"CreateGrantRequest": {
"base": null,
"refs": {
}
},
"CreateGrantResponse": {
"base": null,
"refs": {
}
},
"CreateGrantVersionRequest": {
"base": null,
"refs": {
}
},
"CreateGrantVersionResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationResponse": {

"base": null,
"refs": {
}
},
"CreateLicenseConversionTaskForResourceRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseConversionTaskForResourceResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {

}
},
"CreateLicenseManagerReportGeneratorResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseVersionRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseVersionResponse": {
"base": null,
"refs": {
}
},
"CreateTokenRequest": {
"base": null,
"refs": {

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    }
  },
  "CreateTokenResponse": {
    "base": null,
    "refs": {
    }
  },
  "DateTime": {
    "base": null,
    "refs": {
      "AutomatedDiscoveryInformation$LastRunTime": "<p>Time that automated discovery last ran.</p>",
      "GetLicenseConversionTaskResponse$StartTime": "<p>Time at which the license type conversion task was started .</p>",
      "GetLicenseConversionTaskResponse$LicenseConversionTime": "<p>Amount of time to complete the license type conversion.</p>",
      "GetLicenseConversionTaskResponse$EndTime": "<p>Time at which the license type conversion task was completed.</p>",
      "LicenseConfigurationAssociation$AssociationTime": "<p>Time when the license configuration was associated with the resource.</p>",
      "LicenseConfigurationUsage$AssociationTime": "<p>Time when the license configuration was initially associated with the resource.</p>",
      "LicenseConversionTask$StartTime": "<p>The time the conversion task was started at.</p>",
      "LicenseConversionTask$LicenseConversionTime": "<p>The time the usage operation value of the resource was changed.</p>",
      "LicenseConversionTask$EndTime": "<p>The time the conversion task was completed.</p>",
      "LicenseOperationFailure$FailureTime": "<p>Failure time.</p>"
    }
  },
  "DatetimeRange": {
    "base": "<p>Describes a time range, in ISO8601-UTC format.</p>",
    "refs": {
      "CreateLicenseRequest$Validity": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
      "CreateLicenseVersionRequest$Validity": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
      "GrantedLicense$Validity": "<p>Date and time range during which the granted license is valid, in ISO8601-UTC format.</p>",
      "License$Validity": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>"
    }
  },
  "DeleteGrantRequest": {
    "base": null,
    "refs": {
    }
  },
  "DeleteGrantResponse": {
    "base": null,
    "refs": {
```

```
    }
  },
  "DeleteLicenseConfigurationRequest": {
    "base": null,
    "refs": {
    }
  },
  "DeleteLicenseConfigurationResponse": {
    "base": null,
    "refs": {
    }
  },
  "DeleteLicenseManagerReportGeneratorRequest": {
    "base": null,
    "refs": {
    }
  },
  "DeleteLicenseManagerReportGeneratorResponse": {
    "base": null,
     "refs": {
    }
  },
  "DeleteLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "DeleteLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "DeleteTokenRequest": {
    "base": null,
    "refs": {
    }
  },
  "DeleteTokenResponse": {
    "base": null,
    "refs": {
    }
  },
  "DigitalSignatureMethod": {
    "base": null,
    "refs": {
      "CheckoutBorrowLicenseRequest$DigitalSignatureMethod": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384. For more information, see <a href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>"
```

```
    }
  },
  "Entitlement": {
    "base": "<p>Describes a resource entitled for use with a license.</p>",
    "refs": {
      "EntitlementList$member": null
    }
  },
  "EntitlementData": {
    "base": "<p>Data associated with an entitlement resource.</p>",

    "refs": {
      "EntitlementDataList$member": null
    }
  },
  "EntitlementDataList": {
    "base": null,
    "refs": {
      "CheckoutBorrowLicenseRequest$Entitlements": "<p>License entitlements. Partial checkouts are not
supported.</p>",
      "CheckoutBorrowLicenseResponse$EntitlementsAllowed": "<p>Allowed license entitlements.</p>",
      "CheckoutLicenseRequest$Entitlements": "<p>License entitlements.</p>",
      "CheckoutLicenseResponse$EntitlementsAllowed": "<p>Allowed license entitlements.</p>"
    }
  },
  "EntitlementDataUnit": {
    "base": null,
    "refs": {
      "EntitlementData$Unit": "<p>Entitlement data unit.</p>",
      "EntitlementUsage$Unit": "<p>Entitlement usage unit.</p>"
    }
  },
  "EntitlementList": {
    "base": null,
    "refs": {
      "CreateLicenseRequest$Entitlements": "<p>License entitlements.</p>",
      "CreateLicenseVersionRequest$Entitlements": "<p>License entitlements.</p>",
      "GrantedLicense$Entitlements":
 "<p>License entitlements.</p>",
      "License$Entitlements": "<p>License entitlements.</p>"
    }
  },
  "EntitlementNotAllowedException": {
    "base": "<p>The entitlement is not allowed.</p>",
    "refs": {
    }
  },
  "EntitlementUnit": {
```

"base": null,
"refs": {
"Entitlement$Unit": " Entitlement unit. "
}
},
"EntitlementUsage": {
"base": " Usage associated with an entitlement resource. ",
"refs": {
"EntitlementUsageList$member": null
}
},
"EntitlementUsageList": {
"base": null,
"refs": {
"LicenseUsage$EntitlementUsages": " License entitlement usages. "
}
},
"ExtendLicenseConsumptionRequest": {
"base": null,
"refs": {
}
},
"ExtendLicenseConsumptionResponse": {
"base": null,
"refs": {
}
},
"FailedDependencyException": {
"base": " A dependency required to run the API is missing. ",
"refs": {
}
},
"Filter": {
"base": " A filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
"refs": {
"FilterList$member": null,
"Filters$member": null
}
},
"FilterLimitExceededException": {
"base": " The request uses too many filters or too many filter values. ",
"refs": {
}
},
"FilterList": {
"base": null,
"refs": {

"ListDistributedGrantsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>LicenseArn</code>   <code>GrantStatus</code>   <code>GranteePrincipalARN</code>   <code>ProductSKU</code>   <code>LicenseIssuerName</code> ",
"ListLicenseManagerReportGeneratorsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>LicenseConfigurationArn</code> ",
"ListLicensesRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>Beneficiary</code>   <code>ProductSKU</code>   <code>Fingerprint</code>   <code>Status</code> ",
"ListReceivedGrantsForOrganizationRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ParentArn</code>   <code>GranteePrincipalArn</code> ",
"ListReceivedGrantsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ProductSKU</code>   <code>LicenseIssuerName</code>   <code>LicenseArn</code>   <code>GrantStatus</code>   <code>GranterAccountId</code> ",
"ListReceivedLicensesForOrganizationRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>Beneficiary</code>   <code>ProductSKU</code> ",
"ListReceivedLicensesRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ProductSKU</code>   <code>Status</code>   <code>Fingerprint</code>   <code>IssuerName</code>   <code>Beneficiary</code> ",
"ListTokensRequest$Filters": " Filters to scope the results. The following filter is supported: <ul> <code>LicenseArns</code> "
}
},
"FilterName": {
"base": null,
"refs": {
"Filter$Name": " Name of the filter. Filter names are case-sensitive. "
}
},
"FilterValue": {
"base": null,
"refs": {
"FilterValues$member": null
}
},
"FilterValues": {
"base": null,
"refs": {
"Filter$Values": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
},
"Filters": {

"base": null,
"refs": {
"ListLicenseConfigurationsRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>licenseCountingType</code> - The dimension for which licenses are counted. Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. ",
"ListLicenseConversionTasksRequest$Filters": " Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>. ",
"ListUsageForLicenseConfigurationRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>resourceArn</code> - The ARN of the license configuration resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceAccount</code> - The ID of the account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. "
}
},
"GetAccessTokenRequest": {
"base": null,
"refs": {
}
},
"GetAccessTokenResponse": {
"base": null,
"refs": {
}
},
"GetGrantRequest": {
"base": null,
"refs": {
}
},
"GetGrantResponse": {
"base": null,
"refs": {
}
},
"GetLicenseConfigurationRequest": {
"base": null,
"refs": {
}

```
  },
  "GetLicenseConfigurationResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseConversionTaskRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseConversionTaskResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseManagerReportGeneratorRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseManagerReportGeneratorResponse": {
    "base":
null,
    "refs": {
    }
  },
  "GetLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseUsageRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseUsageResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetServiceSettingsRequest": {
```

"base": null,
"refs": {
}
},
"GetServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"Grant": {
"base": " Describes a grant. ",
"refs": {
"GetGrantResponse$Grant": " Grant details. ",
"GrantList$member": null
}
},
"GrantList": {
"base": null,
"refs": {
"ListDistributedGrantsResponse$Grants": " Distributed grant details. ",
"ListReceivedGrantsForOrganizationResponse$Grants": " Lists the grants the organization has received. ",
"ListReceivedGrantsResponse$Grants": " Received grant details. "
}
},
"GrantStatus": {
"base": null,
"refs": {
"AcceptGrantResponse$Status": " Grant status. ",
"CreateGrantResponse$Status": " Grant status. ",
"CreateGrantVersionRequest$Status": " Grant status. ",
"CreateGrantVersionResponse$Status": " Grant status. ",
"DeleteGrantResponse$Status": " Grant status. ",
"Grant$GrantStatus": " Grant status. ",
"RejectGrantResponse$Status": " Grant status. "
}
},
"GrantedLicense": {
"base": " Describes a license that is granted to a grantee. ",
"refs": {
"GrantedLicenseList$member": null
}
},
"GrantedLicenseList": {
"base": null,
"refs": {
"ListReceivedLicensesForOrganizationResponse$Licenses": " Lists the licenses the organization has

received. ",
"ListReceivedLicensesResponse$Licenses": " Received license
details. "
}
},
"ISO8601DateTime": {
"base": null,
"refs": {
"CheckoutBorrowLicenseResponse$IssuedAt": " Date and time at which the license checkout is
issued. ",
"CheckoutBorrowLicenseResponse$Expiration": " Date and time at which the license checkout
expires. ",
"CheckoutLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
"CheckoutLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
"DatetimeRange$Begin": " Start of the time range. ",
"DatetimeRange$End": " End of the time range. ",
"DeleteLicenseResponse$DeletionDate": " Date when the license is deleted. ",
"ExtendLicenseConsumptionResponse$Expiration": " Date and time at which the license consumption
expires. ",
"GrantedLicense$CreateTime": " Creation time of the granted license. ",
"License$CreateTime": " License
creation time. ",
"TokenData$ExpirationTime": " Token expiration time, in ISO8601-UTC format. "
}
},
"Integer": {
"base": null,
"refs": {
"CreateTokenRequest$ExpirationInDays": " Token expiration, in days, counted from token creation. The
default is 365 days. ",
"ReportFrequency$value": " Number of times within the frequency period that a report is generated. The
only supported value is <code>1</code>. "
}
},
"InvalidParameterValueException": {
"base": " One or more parameter values are not valid. ",
"refs": {
}
},
"InvalidResourceStateException": {
"base": " License Manager cannot allocate a license to a resource because of its state. For example,
you cannot allocate a license to an instance in the process of shutting down. ",
"refs": {
}
},
"InventoryFilter": {
"base": " An inventory filter. ",
"refs": {

"InventoryFilterList$member": null
}
},
"InventoryFilterCondition": {
"base": null,
"refs": {
"InventoryFilter$Condition": " Condition of the filter. "
}
},
"InventoryFilterList": {
"base": null,
"refs": {
"ListResourceInventoryRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>application_name</code> - The name of the application. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.   <code>license_included</code> - The type of license included. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. Possible values are <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code>
| <code>windows-server-datacenter</code>.   <code>platform</code> - The platform of the resource. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.   <code>resource_id</code> - The ID of the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>tag:<key></code> - The key/value combination of a tag assigned to the resource. Logical operators are <code>EQUALS</code> (single account) or <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). "
}
},
"Issuer": {
"base": " Details about the issuer of a license. ",
"refs": {
"CreateLicenseRequest$Issuer": " License issuer. ",
"CreateLicenseVersionRequest$Issuer": " License issuer. "
}
},
"IssuerDetails": {
"base": " Details associated with the issuer of a license. ",
"refs": {
"GrantedLicense$Issuer": " Granted
license issuer. ",
"License$Issuer": " License issuer. "
}
},
"License": {
"base": " Software license that is managed in License Manager. ",
"refs": {
"GetLicenseResponse$License": " License details. ",

"LicenseList$member": null
}
},
"LicenseConfiguration": {
"base": " A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used. ",
"refs": {
"LicenseConfigurations$member": null
}
},
"LicenseConfigurationAssociation": {
"base": " Describes an association with a license configuration. ",
"refs": {
"LicenseConfigurationAssociations$member": null
}
},
"LicenseConfigurationAssociations": {
"base": null,
"refs": {
"ListAssociationsForLicenseConfigurationResponse$LicenseConfigurationAssociations": " Information about the associations for the license configuration. "
}
},
"LicenseConfigurationStatus": {
"base": null,
"refs": {
"UpdateLicenseConfigurationRequest$LicenseConfigurationStatus": " New status of the license configuration. "
}
},
"LicenseConfigurationUsage": {
"base": " Details about the usage of a resource associated with a license configuration. ",
"refs": {
"LicenseConfigurationUsageList$member": null
}
},
"LicenseConfigurationUsageList": {
"base": null,
"refs": {
"ListUsageForLicenseConfigurationResponse$LicenseConfigurationUsageList": " Information about the license configurations. "
}

},
"LicenseConfigurations": {
"base": null,

"refs": {
"ListLicenseConfigurationsResponse$LicenseConfigurations": " Information about the license configurations. "
}
},
"LicenseConversionContext": {
"base": " Information about a license type conversion task. ",
"refs": {
"CreateLicenseConversionTaskForResourceRequest$SourceLicenseContext": " Information that identifies the license type you are converting from. For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"CreateLicenseConversionTaskForResourceRequest$DestinationLicenseContext": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert
a license type using the CLI in the License Manager User Guide. ",
"GetLicenseConversionTaskResponse$SourceLicenseContext": " Information about the license type converted from. ",
"GetLicenseConversionTaskResponse$DestinationLicenseContext": " Information about the license type converted to. ",
"LicenseConversionTask$SourceLicenseContext": " Information about the license type this conversion task converted from. ",
"LicenseConversionTask$DestinationLicenseContext": " Information about the license type this conversion task converted to. "
}
},
"LicenseConversionTask": {
"base": " Information about a license type conversion task. ",
"refs": {
"LicenseConversionTasks$member": null
}
},
"LicenseConversionTaskId": {
"base": null,
"refs": {
"CreateLicenseConversionTaskForResourceResponse$LicenseConversionTaskId": " The ID of the created license type conversion task. ",
"GetLicenseConversionTaskRequest$LicenseConversionTaskId": " ID of the license type conversion task to retrieve information on. ",
"GetLicenseConversionTaskResponse$LicenseConversionTaskId": " ID of the license type conversion task. ",
"LicenseConversionTask$LicenseConversionTaskId": " The ID of the license type conversion task. "
}
},
"LicenseConversionTaskStatus": {
"base": null,
"refs": {

"GetLicenseConversionTaskResponse$Status": " Status of the license type conversion task. ",
"LicenseConversionTask$Status": " The status of the conversion task. "
}
},
"LicenseConversionTasks": {
"base": null,
"refs": {
"ListLicenseConversionTasksResponse$LicenseConversionTasks": " Information about the license configuration tasks for your account. "
}
},
"LicenseCountingType":
{
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$LicenseCountingType": " Dimension used to track the license inventory. ",
"GetLicenseConfigurationResponse$LicenseCountingType": " Dimension for which the licenses are counted. ",
"LicenseConfiguration$LicenseCountingType": " Dimension to use to track the license inventory. "
}
},
"LicenseDeletionStatus": {
"base": null,
"refs": {
"DeleteLicenseResponse$Status": " License status. "
}
},
"LicenseList": {
"base": null,
"refs": {
"ListLicenseVersionsResponse$Licenses": " License details. ",
"ListLicensesResponse$Licenses": " License details. "
}
},
"LicenseOperationFailure": {
"base": " Describes the failure of a license operation. ",
"refs": {
"LicenseOperationFailureList$member": null
}
},
"LicenseOperationFailureList": {
"base":
null,
"refs": {
"ListFailuresForLicenseConfigurationOperationsResponse$LicenseOperationFailureList": " License configuration operations that failed. "
}

```
  },
  "LicenseSpecification": {
    "base": "<p>Details for associating a license configuration with a resource.</p>",
    "refs": {
      "LicenseSpecifications$member": null
    }
  },
  "LicenseSpecifications": {
    "base": null,
    "refs": {
      "ListLicenseSpecificationsForResourceResponse$LicenseSpecifications": "<p>License configurations
associated with a resource.</p>",
      "UpdateLicenseSpecificationsForResourceRequest$AddLicenseSpecifications": "<p>ARNs of the license
configurations to add.</p>",
      "UpdateLicenseSpecificationsForResourceRequest$RemoveLicenseSpecifications": "<p>ARNs of the license
configurations to remove.</p>"
    }
  },
  "LicenseStatus": {
    "base": null,
    "refs": {
      "CreateLicenseResponse$Status": "<p>License status.</p>",
      "CreateLicenseVersionRequest$Status": "<p>License status.</p>",
      "CreateLicenseVersionResponse$Status": "<p>License status.</p>",
      "GrantedLicense$Status": "<p>Granted license status.</p>",
      "License$Status": "<p>License status.</p>"
    }
  },
  "LicenseUsage": {
    "base": "<p>Describes the entitlement usage associated with a license.</p>",
    "refs": {
      "GetLicenseUsageResponse$LicenseUsage": "<p>License usage details.</p>"
    }
  },
  "LicenseUsageException": {
    "base": "<p>You do not have enough licenses available to support a new resource launch.</p>",
    "refs": {
    }
  },
  "ListAssociationsForLicenseConfigurationRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListAssociationsForLicenseConfigurationResponse": {
    "base": null,
    "refs": {
    }
```

},
"ListDistributedGrantsRequest": {
"base": null,
"refs": {
}
},
"ListDistributedGrantsResponse":
{
"base": null,
"refs": {
}
},
"ListFailuresForLicenseConfigurationOperationsRequest": {
"base": null,
"refs": {
}
},
"ListFailuresForLicenseConfigurationOperationsResponse": {
"base": null,
"refs": {
}
},
"ListLicenseConfigurationsRequest": {
"base": null,
"refs": {
}
},
"ListLicenseConfigurationsResponse": {
"base": null,
"refs": {
}
},
"ListLicenseConversionTasksRequest": {
"base": null,
"refs": {
}
},
"ListLicenseConversionTasksResponse": {
"base": null,
"refs": {
}
},
"ListLicenseManagerReportGeneratorsRequest": {
"base": null,
"refs": {
}
},
"ListLicenseManagerReportGeneratorsResponse": {

"base": null,
"refs": {
}
},
"ListLicenseSpecificationsForResourceRequest": {
"base": null,
"refs": {
}
},
"ListLicenseSpecificationsForResourceResponse":
{
"base": null,
"refs": {
}
},
"ListLicenseVersionsRequest": {
"base": null,
"refs": {
}
},
"ListLicenseVersionsResponse": {
"base": null,
"refs": {
}
},
"ListLicensesRequest": {
"base": null,
"refs": {
}
},
"ListLicensesResponse": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsForOrganizationRequest": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsForOrganizationResponse": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsRequest": {
"base": null,
"refs": {

```
    }
  },
  "ListReceivedGrantsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesForOrganizationRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesForOrganizationResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesRequest":
{
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListResourceInventoryRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListResourceInventoryResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListTagsForResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListTagsForResourceResponse": {
    "base": null,
    "refs": {
    }
  },
```

"ListTokensRequest": {
"base": null,
"refs": {
}
},
"ListTokensResponse": {
"base": null,
"refs": {
}
},
"ListUsageForLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"ListUsageForLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"Location": {
"base": null,
"refs": {
"RedirectException$Location": null
}
},
"Long":
{
"base": null,
"refs": {
"Entitlement$MaxCount": " Maximum entitlement count. Use if the unit is not None. "
}
},
"ManagedResourceSummary": {
"base": " Summary information about a managed resource. ",
"refs": {
"ManagedResourceSummaryList$member": null
}
},
"ManagedResourceSummaryList": {
"base": null,
"refs": {
"GetLicenseConfigurationResponse$ManagedResourceSummaryList": " Summaries of the managed resources. ",
"LicenseConfiguration$ManagedResourceSummaryList": " Summaries for managed resources. "
}
},
"MaxSize100": {

"base": null,
"refs": {
"ListDistributedGrantsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseManagerReportGeneratorsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseVersionsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicensesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedGrantsForOrganizationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedGrantsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedLicensesForOrganizationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedLicensesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListTokensRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"MaxSize3StringList": {
"base": null,
"refs": {
"CreateTokenRequest$TokenProperties": " Data specified by the caller to be included in the JWT token. The data is mapped to the amr claim of the JWT token. ",

"GetAccessTokenRequest$TokenProperties": " Token properties to validate against those present in the JWT token. ",
"TokenData$TokenProperties": " Data specified by the caller. "
}
},
"Message": {
"base": null,
"refs": {
"AccessDeniedException$Message": null,
"AuthorizationException$Message": null,
"ConflictException$Message": null,
"EntitlementNotAllowedException$Message": null,
"FailedDependencyException$Message": null,
"FilterLimitExceededException$Message": null,
"InvalidParameterValueException$Message": null,
"InvalidResourceStateException$Message": null,
"LicenseUsageException$Message": null,
"NoEntitlementsAllowedException$Message": null,
"RateLimitExceededException$Message": null,
"RedirectException$Message": null,
"ResourceLimitExceededException$Message": null,
"ResourceNotFoundException$Message": null,
"ServerInternalException$Message": null,
"UnsupportedDigitalSignatureMethodException$Message": null,

"ValidationException$Message": null
}
},
"Metadata": {
"base": " Describes key/value pairs. ",
"refs": {
"MetadataList$member": null
}
},
"MetadataList": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$CheckoutMetadata": " Information about constraints. ",
"CheckoutBorrowLicenseResponse$CheckoutMetadata": " Information about constraints. ",
"CreateLicenseRequest$LicenseMetadata": " Information about the license. ",
"CreateLicenseVersionRequest$LicenseMetadata": " Information about the license. ",
"GrantedLicense$LicenseMetadata": " Granted license metadata. ",
"License$LicenseMetadata": " License metadata. ",
"LicenseOperationFailure$MetadataList": " Reserved. "
}
},
"NoEntitlementsAllowedException": {

"base": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"refs": {
}
},
"Options": {
"base": " The options you can specify when you create a new version of a grant, such as activation override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"refs": {
"CreateGrantVersionRequest$Options": " The options specified for the grant. ",
"Grant$Options": " The options specified for the grant. "
}
},
"OrganizationConfiguration": {
"base": " Configuration information for Organizations. ",
"refs": {
"GetServiceSettingsResponse$OrganizationConfiguration": " Indicates whether Organizations is integrated with License Manager for cross-account discovery. ",
"UpdateServiceSettingsRequest$OrganizationConfiguration": " Enables integration with Organizations for cross-account discovery. "
}
},
"PrincipalArnList": {
"base": null,

"refs": {
"CreateGrantRequest$Principals": " The grant principals. You can specify one of the following as an Amazon Resource Name (ARN): <ul> An Amazon Web Services account, which includes only the account specified.   An organizational unit (OU), which includes all accounts in the OU.   An organization, which will include all accounts across your organization. "
}
},
"ProductInformation": {
"base": " Describes product information for a license configuration. ",
"refs": {
"ProductInformationList$member": null
}
},
"ProductInformationFilter": {
"base": " Describes product information filters. ",
"refs": {
"ProductInformationFilterList$member":
null
}
},
"ProductInformationFilterList": {
"base": null,
"refs": {
"ProductInformation$ProductInformationFilterList": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. The following filters and are supported when the resource type is <code>SSM_MANAGED</code>: <ul> <code>Application Name</code> - The name of the application. Logical operator is <code>EQUALS</code>.   <code>Application Publisher</code> - The publisher of the application. Logical operator is <code>EQUALS</code>.   <code>Application Version</code> - The version of the application. Logical operator is <code>EQUALS</code>.   <code>Platform Name</code> - The name of the platform. Logical operator is <code>EQUALS</code>.   <code>Platform Type</code> - The platform type. Logical operator is <code>EQUALS</code>.   <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.   <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.   <code>License Included</code> - The type of license included. Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>. Possible values are: <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code> | <code>windows-server-datacenter</code>.   The following filters and logical operators are supported when the resource type is <code>RDS</code>: <ul> <code>Engine Edition</code> - The edition of the database engine. Logical operator is <code>EQUALS</code>. Possible values

are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.   <code>License Pack</code> - The license pack. Logical operator is <code>EQUALS</code>. Possible values are: <code>data guard</code> | <code>diagnostic pack sqlt</code> | <code>tuning pack sqlt</code> | <code>ols</code> | <code>olap</code>. "
    }
  },
  "ProductInformationList": {
    "base": null,
    "refs": {
      "CreateLicenseConfigurationRequest$ProductInformationList":
 " Product information. ",
      "GetLicenseConfigurationResponse$ProductInformationList": " Product information. ",
      "LicenseConfiguration$ProductInformationList": " Product information. ",
      "UpdateLicenseConfigurationRequest$ProductInformationList": " New product information. "
    }
  },
  "ProvisionalConfiguration": {
    "base": " Details about a provisional configuration. ",
    "refs": {
      "ConsumptionConfiguration$ProvisionalConfiguration": " Details about a provisional configuration. "
    }
  },
  "RateLimitExceededException": {
    "base": " Too many requests have been submitted. Try again after a brief wait. ",
    "refs": {
    }
  },
  "ReceivedMetadata": {
    "base": " Metadata associated with received licenses and grants. ",
    "refs": {
      "GrantedLicense$ReceivedMetadata": " Granted license received metadata. "
     }
  },
  "ReceivedStatus": {
    "base": null,
    "refs": {
      "ReceivedMetadata$ReceivedStatus": " Received status. "
    }
  },
  "RedirectException": {
    "base": " This is not the correct Region for the resource. Try again. ",
    "refs": {
    }
  },
  "RejectGrantRequest": {
    "base": null,
    "refs": {
    }

},
"RejectGrantResponse": {
"base": null,
"refs": {
}
},
"RenewType": {
"base": null,
"refs": {
"ConsumptionConfiguration$RenewType": " Renewal frequency. "
}
},
"ReportContext": {
"base": " Details of the license configuration that this generator reports on. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportContext": " Defines the type of license configuration the report generator tracks. ",
"ReportGenerator$ReportContext": " License configuration type for this generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportContext": " The report context. "
}
},
"ReportFrequency": {
"base": " Details about how frequently reports are generated. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"ReportGenerator$ReportFrequency": " Details about how frequently reports are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. "
}
},
"ReportFrequencyType": {
"base": null,
"refs": {
"ReportFrequency$period": " Time period between each report. The period can be daily, weekly, or monthly. "
}
},
"ReportGenerator": {
"base": " Describe the details of a report generator. ",
"refs": {
"GetLicenseManagerReportGeneratorResponse$ReportGenerator": " A report generator that creates periodic reports about your license configurations. ",
"ReportGeneratorList$member": null
}
},
"ReportGeneratorList": {

"base": null,
"refs": {
"ListLicenseManagerReportGeneratorsResponse$ReportGenerators": " A report generator that creates periodic reports about your license configurations. "
}
},
"ReportGeneratorName": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. "
}
},
"ReportType": {
"base": null,
"refs": {
"ReportTypeList$member": null
}
},
"ReportTypeList": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types an
be generated: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. ",
"ReportGenerator$ReportType": " Type of reports that are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types are supported: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. "
}
},
"ResourceInventory": {
"base": " Details about a resource. ",
"refs": {
"ResourceInventoryList$member": null
}
},
"ResourceInventoryList": {
"base": null,
"refs": {
"ListResourceInventoryResponse$ResourceInventoryList": " Information about the resources. "
}
},

"ResourceLimitExceededException": {
"base": " Your resource limits have been exceeded. ",
"refs": {
}
},
"ResourceNotFoundException": {
"base": " The resource cannot be found. ",
"refs": {
}
},
"ResourceType": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ResourceType": " Resource type of the resource consuming a license. ",
"LicenseConfigurationAssociation$ResourceType": " Type of server resource. ",
"LicenseConfigurationUsage$ResourceType": " Type of resource. ",
"LicenseOperationFailure$ResourceType": " Resource type. ",
"ManagedResourceSummary$ResourceType": " Type of resource associated with a license. ",
"ResourceInventory$ResourceType": " Type of resource. "
}
},
"S3Location": {
"base":
" Details of the S3 bucket that report generator reports are published to. ",
"refs": {
"ReportGenerator$S3Location": " Details of the S3 bucket that report generator reports are published
to. "
}
},
"ServerInternalException": {
"base": " The server experienced an internal error. Try again. ",
"refs": {
}
},
"SignedToken": {
"base": null,
"refs": {
"CheckoutBorrowLicenseResponse$SignedToken": " Signed token. ",
"CheckoutLicenseResponse$SignedToken": " Signed token. "
}
},
"StatusReasonMessage": {
"base": null,
"refs": {
"CreateGrantVersionRequest$StatusReason": " Grant status reason. ",
"DeleteGrantRequest$StatusReason": " The Status reason for the delete request. ",
"Grant$StatusReason": " Grant status reason. ",
"ReceivedMetadata$ReceivedStatusReason": " Received status reason. "

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    }
  },

  "String": {
    "base": null,
    "refs": {
      "AcceptGrantResponse$Version": "<p>Grant version.</p>",
      "CheckInLicenseRequest$LicenseConsumptionToken": "<p>License consumption token.</p>",
      "CheckInLicenseRequest$Beneficiary": "<p>License beneficiary.</p>",
      "CheckoutBorrowLicenseRequest$NodeId": "<p>Node ID.</p>",
      "CheckoutBorrowLicenseResponse$LicenseConsumptionToken": "<p>License consumption token.</p>",
      "CheckoutBorrowLicenseResponse$NodeId": "<p>Node ID.</p>",
      "CheckoutLicenseRequest$ProductSKU": "<p>Product SKU.</p>",
      "CheckoutLicenseRequest$KeyFingerprint": "<p>Key fingerprint identifying the license.</p>",
      "CheckoutLicenseRequest$Beneficiary": "<p>License beneficiary.</p>",
      "CheckoutLicenseRequest$NodeId": "<p>Node ID.</p>",
      "CheckoutLicenseResponse$LicenseConsumptionToken": "<p>License consumption token.</p>",
      "CheckoutLicenseResponse$NodeId": "<p>Node ID.</p>",
      "CheckoutLicenseResponse$LicenseArn":
  "<p>Amazon Resource Name (ARN) of the checkout license.</p>",
      "CreateGrantRequest$GrantName": "<p>Grant name.</p>",
      "CreateGrantRequest$HomeRegion": "<p>Home Region of the grant.</p>",
      "CreateGrantResponse$Version": "<p>Grant version.</p>",
      "CreateGrantVersionRequest$GrantName": "<p>Grant name.</p>",
      "CreateGrantVersionRequest$SourceVersion": "<p>Current version of the grant.</p>",
      "CreateGrantVersionResponse$Version": "<p>New version of the grant.</p>",
      "CreateLicenseConfigurationRequest$Name": "<p>Name of the license configuration.</p>",
      "CreateLicenseConfigurationRequest$Description": "<p>Description of the license configuration.</p>",
      "CreateLicenseConfigurationResponse$LicenseConfigurationArn": "<p>Amazon Resource Name (ARN) of the
  license configuration.</p>",
      "CreateLicenseManagerReportGeneratorRequest$Description": "<p>Description of the report generator.</p>",
      "CreateLicenseManagerReportGeneratorResponse$LicenseManagerReportGeneratorArn":
  "<p>The Amazon Resource Name (ARN) of the new report generator.</p>",
      "CreateLicenseRequest$LicenseName": "<p>License name.</p>",
      "CreateLicenseRequest$ProductName": "<p>Product name.</p>",
      "CreateLicenseRequest$ProductSKU": "<p>Product SKU.</p>",
      "CreateLicenseRequest$HomeRegion": "<p>Home Region for the license.</p>",
      "CreateLicenseRequest$Beneficiary": "<p>License beneficiary.</p>",
      "CreateLicenseResponse$Version": "<p>License version.</p>",
      "CreateLicenseVersionRequest$LicenseName": "<p>License name.</p>",
      "CreateLicenseVersionRequest$ProductName": "<p>Product name.</p>",
      "CreateLicenseVersionRequest$HomeRegion": "<p>Home Region of the license.</p>",
      "CreateLicenseVersionRequest$SourceVersion": "<p>Current version of the license.</p>",
      "CreateLicenseVersionResponse$Version": "<p>New version of the license.</p>",
      "CreateTokenResponse$TokenId":
  "<p>Token ID.</p>",
      "DeleteGrantRequest$Version": "<p>Current version of the grant.</p>",
      "DeleteGrantResponse$Version": "<p>Grant version.</p>",
```

"DeleteLicenseConfigurationRequest$LicenseConfigurationArn": " ID of the license configuration. ",
"DeleteLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"DeleteLicenseRequest$SourceVersion": " Current version of the license. ",
"DeleteTokenRequest$TokenId": " Token ID. ",
"Entitlement$Name": " Entitlement name. ",
"Entitlement$Value": " Entitlement resource. Use only if the unit is None. ",
"EntitlementData$Name": " Entitlement data name. ",
"EntitlementData$Value": " Entitlement data value. ",
"EntitlementUsage$Name": " Entitlement usage name. ",
"EntitlementUsage$ConsumedValue": " Resource usage consumed. ",
"EntitlementUsage$MaxCount": " Maximum entitlement usage count. ",
"ExtendLicenseConsumptionRequest$LicenseConsumptionToken": " License consumption token. ",
"ExtendLicenseConsumptionResponse$LicenseConsumptionToken": " License consumption token. ",
"FailedDependencyException$ErrorCode": null,
"GetGrantRequest$Version": " Grant version. ",
"GetLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationId": " Unique ID for the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"GetLicenseConfigurationResponse$Name": " Name of the license configuration. ",
"GetLicenseConfigurationResponse$Description": " Description of the license configuration. ",
"GetLicenseConfigurationResponse$Status": " License configuration status. ",
"GetLicenseConfigurationResponse$OwnerAccountId": " Account ID of the owner of the license configuration. ",
"GetLicenseConversionTaskResponse$ResourceArn": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. ",
"GetLicenseConversionTaskResponse$StatusMessage": " The status message for the conversion task. ",
"GetLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"GetLicenseRequest$Version": " License version. ",
"GetServiceSettingsResponse$S3BucketArn": " Regional S3 bucket path for storing reports, license trail event data, discovery data, and so on. ",
"GetServiceSettingsResponse$SnsTopicArn": " SNS topic configured to receive notifications from License Manager. ",
"GetServiceSettingsResponse$LicenseManagerResourceShareArn": " Amazon Resource Name (ARN) of the resource share. The License Manager management account provides member accounts with access to this share. ",
"Grant$GrantName": " Grant name. ",
"Grant$HomeRegion": " Home Region of the grant. ",
"Grant$Version": " Grant version. ",
"GrantedLicense$LicenseName": " License name. ",
"GrantedLicense$ProductName": " Product name. ",
"GrantedLicense$ProductSKU": " Product SKU. ",

"GrantedLicense$HomeRegion": " Home Region of the granted license. ",
"GrantedLicense$Beneficiary": " Granted license beneficiary. ",
"GrantedLicense$Version": " Version of the granted license. ",
"InventoryFilter$Name": " Name of the filter. ",
"InventoryFilter$Value": " Value of the filter. ",
"Issuer$Name": " Issuer name. ",
"Issuer$SignKey":
" Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$Name": " Issuer name. ",
"IssuerDetails$SignKey": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$KeyFingerprint": " Issuer key fingerprint. ",
"License$LicenseName": " License name. ",
"License$ProductName": " Product name. ",
"License$ProductSKU": " Product SKU. ",
"License$HomeRegion": " Home Region of the license. ",
"License$Beneficiary": " License beneficiary. ",
"License$Version": " License version. ",
"LicenseConfiguration$LicenseConfigurationId": " Unique ID of the license configuration. ",
"LicenseConfiguration$LicenseConfigurationArn":
" Amazon Resource Name (ARN) of the license configuration. ",
"LicenseConfiguration$Name": " Name of the license configuration. ",
"LicenseConfiguration$Description": " Description of the license configuration. ",
"LicenseConfiguration$Status": " Status of the license configuration. ",
"LicenseConfiguration$OwnerAccountId": " Account ID of the license configuration's owner. ",
"LicenseConfigurationAssociation$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationAssociation$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource consuming licenses. ",
"LicenseConfigurationAssociation$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"LicenseConfigurationUsage$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationUsage$ResourceStatus":
" Status of the resource. ",
"LicenseConfigurationUsage$ResourceOwnerId": " ID of the account that owns the resource. ",
"LicenseConversionTask$ResourceArn": " The Amazon Resource Name (ARN) of the resource associated with the license type conversion task. ",
"LicenseConversionTask$StatusMessage": " The status message for the conversion task. ",
"LicenseOperationFailure$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseOperationFailure$ErrorMessage": " Error message. ",
"LicenseOperationFailure$OperationName": " Name of the operation. ",
"LicenseOperationFailure$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource. ",
"LicenseOperationFailure$OperationRequestedBy": " The requester is \"License Manager Automated Discovery\". ",
"LicenseSpecification$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",

"LicenseSpecification$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"ListAssociationsForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of a license configuration. ",
"ListAssociationsForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListAssociationsForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListFailuresForLicenseConfigurationOperationsRequest$LicenseConfigurationArn": " Amazon Resource Name of the license configuration. ",
"ListFailuresForLicenseConfigurationOperationsRequest$NextToken": " Token for the next set of results. ",

"ListFailuresForLicenseConfigurationOperationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksResponse$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"ListLicenseSpecificationsForResourceRequest$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceResponse$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsResponse$NextToken": " Token for the next set of results. ",
"ListLicensesRequest$NextToken": " Token for the next set of results. ",
"ListLicensesResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesResponse$NextToken": " Token for the next set of results. ",
"ListResourceInventoryRequest$NextToken": " Token for the next set of results. ",
"ListResourceInventoryResponse$NextToken": " Token for the next set of results. ",
"ListTagsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListTokensRequest$NextToken": " Token for the next set of results. ",
"ListTokensResponse$NextToken": " Token for the next set of results. ",
"ListUsageForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListUsageForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",

"ListUsageForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"MaxSize3StringList$member": null,
"Metadata$Name": " The key name. ",
"Metadata$Value": " The value. ",
"ProductInformation$ResourceType": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"ProductInformationFilter$ProductInformationFilterName": " Filter name. ",
"ProductInformationFilter$ProductInformationFilterComparator": " Logical operator. ",
"RejectGrantResponse$Version": " Grant version. ",
"ReportGenerator$ReportGeneratorName": " Name of the report generator. ",
"ReportGenerator$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"ReportGenerator$LastRunStatus": " Status of the last report generation attempt. ",
"ReportGenerator$LastRunFailureReason": " Failure message for the last report generation attempt. ",
"ReportGenerator$LastReportGenerationTime": " Time the last report was generated at. ",
"ReportGenerator$ReportCreatorAccount": " The Amazon Web Services account ID used to create the report generator. ",
"ReportGenerator$Description": " Description of the report generator. ",
"ReportGenerator$CreateTime": " Time the report was created. ",
"ResourceInventory$ResourceId": " ID of the resource. ",
"ResourceInventory$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"ResourceInventory$Platform": " Platform of the resource. ",
"ResourceInventory$PlatformVersion": " Platform version of the resource in the inventory. ",
"ResourceInventory$ResourceOwningAccountId": " ID of the account that owns the resource. ",
"S3Location$bucket": " Name of the S3 bucket reports are published to. ",

"S3Location$keyPrefix": " Prefix of the S3 bucket reports are published to. ",
"StringList$member": null,
"Tag$Key": " Tag key. ",
"Tag$Value": " Tag value. ",
"TagKeyList$member": null,
"TagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"TokenData$TokenId": " Token ID. ",
"TokenData$TokenType": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. ",
"TokenData$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"TokenData$Status": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. ",
"UntagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$Name": " New name of the license configuration. ",
"UpdateLicenseConfigurationRequest$Description": " New description of the license configuration. ",
"UpdateLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to update. ",

"UpdateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"UpdateLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"UpdateServiceSettingsRequest$S3BucketArn": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. ",
"UpdateServiceSettingsRequest$SnsTopicArn": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"StringList": {
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$LicenseRules":
" License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules vary by dimension, as follows.   <code>Cores</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumCores</code> | <code>minimumCores</code>   <code>Instances</code> dimension: <code>allowedTenancy</code> | <code>maximumCores</code> | <code>minimumCores</code> | <code>maximumSockets</code> | <code>minimumSockets</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   <code>Sockets</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumSockets</code> | <code>minimumSockets</code>   <code>vCPUs</code> dimension: <code>allowedTenancy</code> | <code>honorVcpuOptimization</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are <code>True</code> and <code>False</code>. ",
"GetLicenseConfigurationResponse$LicenseRules": " License rules. ",
"LicenseConfiguration$LicenseRules": " License rules. ",
"ListLicenseConfigurationsRequest$LicenseConfigurationArns": " Amazon Resource Names (ARN) of the license configurations. ",
"ListTokensRequest$TokenIds": " Token IDs. ",
"ProductInformationFilter$ProductInformationFilterValue": " Filter value. ",
"UpdateLicenseConfigurationRequest$LicenseRules": " New license rule. The only rule that you can add after you create a license configuration is licenseAffinityToHost. "
}
},
"Tag": {
"base": " Details about a tag for a license configuration. ",
"refs": {
"TagList$member": null
}
},
"TagKeyList": {
"base": null,
"refs": {
"UntagResourceRequest$TagKeys": " Keys identifying the tags to remove. "

```
  }
},
"TagList": {
  "base": null,
  "refs": {
    "CreateLicenseConfigurationRequest$Tags": "<p>Tags to add to the license configuration.</p>",
    "CreateLicenseManagerReportGeneratorRequest$Tags": "<p>Tags to add to the report generator.</p>",
    "GetLicenseConfigurationResponse$Tags": "<p>Tags for the license configuration.</p>",
    "ListTagsForResourceResponse$Tags": "<p>Information about the tags.</p>",
    "ReportGenerator$Tags": "<p>Tags associated with the report generator.</p>",
    "TagResourceRequest$Tags": "<p>One or more tags.</p>"
  }
},
"TagResourceRequest": {
  "base": null,
  "refs": {
  }
},
"TagResourceResponse": {
  "base": null,
  "refs": {

  }
},
"TokenData": {
  "base": "<p>Describes a token.</p>",
  "refs": {
    "TokenList$member": null
  }
},
"TokenList": {
  "base": null,
  "refs": {
    "ListTokensResponse$Tokens": "<p>Received token details.</p>"
  }
},
"TokenString": {
  "base": null,
  "refs": {
    "CreateTokenResponse$Token": "<p>Refresh token, encoded as a JWT token.</p>",
    "GetAccessTokenRequest$Token": "<p>Refresh token, encoded as a JWT token.</p>",
    "GetAccessTokenResponse$AccessToken": "<p>Temporary access token.</p>"
  }
},
"TokenType": {
  "base": null,
  "refs": {
    "CreateTokenResponse$TokenType": "<p>Token type.</p>"
```

```
    }
  },
  "UnsupportedDigitalSignatureMethodException": {
    "base": "<p>The digital signature method is unsupported. Try your request again.</p>",
    "refs": {
    }
  },
  "UntagResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "UntagResourceResponse":
{
    "base": null,
    "refs": {
    }
  },
  "UpdateLicenseConfigurationRequest": {
    "base": null,
    "refs": {
    }
  },
  "UpdateLicenseConfigurationResponse": {
    "base": null,
    "refs": {
    }
  },
  "UpdateLicenseManagerReportGeneratorRequest": {
    "base": null,
    "refs": {
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  },
  "UpdateLicenseManagerReportGeneratorResponse": {
    "base": null,
    "refs": {
    }
  },
  "UpdateLicenseSpecificationsForResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "UpdateLicenseSpecificationsForResourceResponse": {
    "base": null,
    "refs": {
    }
  },
```

"UpdateServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"UsageOperation": {
"base": null,
"refs": {
"LicenseConversionContext$UsageOperation": " The Usage operation value
that corresponds to the license type you are converting your resource from. For more information about which
platforms correspond to which usage operation values see <a
href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample
data: usage operation by platform "
}
},
"ValidationException": {
"base": " The provided input is not valid. Try your request again. ",
"refs": {
}
}
}
}
{
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "af-south-1"
}
},
{
"documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-east-1.amazonaws.com"
}

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      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-east-1"
      }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",

"expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-northeast-1"
      }
    },
    {
      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-northeast-2"
      }
    },
    {
      "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-3.amazonaws.com"
         }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-northeast-3"
      }
    },
    {
```

"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-south-1"
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack":
false,
"Region": "ap-southeast-1"
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-southeast-2"
}
},
{
"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Region": "ap-southeast-3"
}
},
{
"documentation":
"For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ca-central-1"
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "eu-central-1"
}
},
{
"documentation": "For region eu-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "eu-north-1"
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {

```
            "endpoint": {
                "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-south-1"
        }
    },
    {
        "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
        },
        "params":
{
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-west-1"
        }
    },
    {
        "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-west-2"
        }
    },
    {
        "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-west-3"
```

```
        }

    },
    {
        "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.me-south-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "me-south-1"
        }
    },
    {
        "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.sa-east-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "sa-east-1"
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {

        "endpoint": {
                "url": "https://license-manager.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "us-east-1"
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
```

```
        }
    },
    "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-east-1"
    }
},
{
    "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-east-2.amazonaws.com"
        }
    },

 "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-east-2"
    }
},
{
    "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
    },
    "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-east-2"
    }
},
{
    "documentation": "For region us-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-west-1.amazonaws.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-west-1"
```

```
  }
    },
    {
      "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-west-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-west-1"
      }
    },
    {
      "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-2.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-west-2"
      }
    },
    {
      "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-fips.us-west-2.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-west-2"
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-1.api.aws"
        }
```

```
    },
    "params": {
        "UseFIPS": true,
        "UseDualStack": true,
        "Region": "us-east-1"
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-east-1.api.aws"
        }
    },

 "params": {
        "UseFIPS": false,
        "UseDualStack": true,
        "Region": "us-east-1"
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "cn-north-1"
    }
},
{
    "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "cn-northwest-1"
     }
},
{
```

"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": true,
"Region": "cn-north-1"
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "cn-north-1"
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled
and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": true,
"Region": "cn-north-1"
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Region": "us-gov-east-1"
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "us-gov-east-1"
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
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}
},
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"params": {
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}

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    }
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    "expect": {
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            "Endpoint": "https://example.com"
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        "required": false,
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        "type": "String"
      },
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"type": "Boolean"
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"fn": "isSet",
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"ref": "Endpoint"
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],
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                    "type": "error"
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                        "ref": "Endpoint"
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                    "type": "endpoint"
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"type": "tree"
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"ref": "UseDualStack"
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            "conditions": [],
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},
{
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"type": "error"
}
],
"type": "tree"
}
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"output_token": "NextToken",
"limit_key": "MaxResults",
"result_key": "Instances"
},
"ListLinuxSubscriptions": {
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"limit_key": "MaxResults",
"result_key": "Subscriptions"
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"ListRegisteredSubscriptionProviders": {
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"output_token": "NextToken",
"limit_key": "MaxResults",
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}
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   "output_token": "NextToken",
   "limit_key": "MaxResults",
   "result_key": "InstanceSummaries"
  },
  "ListProductSubscriptions": {
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   "output_token": "NextToken",
   "limit_key": "MaxResults",
   "result_key": "ProductUserSummaries"
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   "output_token": "NextToken",
   "limit_key": "MaxResults",
   "result_key": "InstanceUserSummaries"
  }
 }
}
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 "metadata":{
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   "endpointPrefix":"license-manager-user-subscriptions",
   "jsonVersion":"1.1",
   "protocol":"rest-json",
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   "serviceId":"License Manager User Subscriptions",
   "signatureVersion":"v4",
   "signingName":"license-manager-user-subscriptions",
   "uid":"license-manager-user-subscriptions-2018-05-10"
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 "operations":{
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     "name":"AssociateUser",
     "http":{
       "method":"POST",
       "requestUri":"/user/AssociateUser",
       "responseCode":200
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     "input":{"shape":"AssociateUserRequest"},
     "output":{"shape":"AssociateUserResponse"},
     "errors":[
       {"shape":"ServiceQuotaExceededException"},
       {"shape":"ConflictException"},
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  "http":{
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    {"shape":"InternalServerException"},
    {"shape":"ResourceNotFoundException"},
    {"shape":"AccessDeniedException"}
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"output":{"shape":"ListIdentityProvidersResponse"},
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{"shape":"ValidationException"},
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"ListProductSubscriptions":{
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"requestUri":"/user/ListProductSubscriptions",
"responseCode":200
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"output":{"shape":"ListProductSubscriptionsResponse"},
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  {"shape":"ResourceNotFoundException"},
  {"shape":"AccessDeniedException"}
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 "input":{"shape":"RegisterIdentityProviderRequest"},
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 "errors":[
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 "http":{
  "method":"POST",
  "requestUri":"/user/StartProductSubscription",
  "responseCode":200
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 "input":{"shape":"StartProductSubscriptionRequest"},

"output":{"shape":"StartProductSubscriptionResponse"},
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]
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"StopProductSubscription":{
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"requestUri":"/user/StopProductSubscription",
"responseCode":200
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"output":{"shape":"StopProductSubscriptionResponse"},
"errors":[
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{"shape":"ValidationException"},
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{"shape":"InternalServerException"},
{"shape":"ResourceNotFoundException"},

{"shape":"AccessDeniedException"}
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"name":"UpdateIdentityProviderSettings",
"http":{
"method":"POST",
"requestUri":"/identity-provider/UpdateIdentityProviderSettings",
"responseCode":200
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"input":{"shape":"UpdateIdentityProviderSettingsRequest"},
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{"shape":"ThrottlingException"},
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{"shape":"AccessDeniedException"}
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"idempotent":true

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      "members":{
        "message":{"shape":"String"}
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      "exception":true
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      "members":{
        "DirectoryId":{"shape":"String"}
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    "AssociateUserRequest":{
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        "InstanceId",
        "Username"
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        "IdentityProvider":{"shape":"IdentityProvider"},
        "InstanceId":{"shape":"String"},
        "Username":{"shape":"String"}
      }
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    "AssociateUserResponse":{
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      "required":["InstanceUserSummary"],
      "members":{
        "InstanceUserSummary":{"shape":"InstanceUserSummary"}
      }
    },
    "BoxInteger":{
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      "box":true
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    "ConflictException":{
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      "members":{
        "message":{"shape":"String"}
      },
      "exception":true,
      "fault":true
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    "Product"
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    "Product":{"shape":"String"}
  }
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"DeregisterIdentityProviderResponse":{
  "type":"structure",
  "required":["IdentityProviderSummary"],
  "members":{
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"DisassociateUserRequest":{
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    "InstanceId",
    "Username"
  ],
  "members":{
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    "IdentityProvider":{"shape":"IdentityProvider"},
    "InstanceId":{"shape":"String"},
    "Username":{"shape":"String"}
  }
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"DisassociateUserResponse":{
  "type":"structure",
  "required":["InstanceUserSummary"],
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"Filter":{
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  "members":{
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    "Operation":{"shape":"String"},
    "Value":{"shape":"String"}
  }
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"FilterList":{
  "type":"list",
   "member":{"shape":"Filter"}
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"IdentityProvider":{
  "type":"structure",
  "members":{
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  },
  "union":true
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"IdentityProviderSummary":{
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  "required":[
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    "Product",
    "Settings",
    "Status"
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    "IdentityProvider":{"shape":"IdentityProvider"},
    "Product":{"shape":"String"},
    "Settings":{"shape":"Settings"},
    "Status":{"shape":"String"}
  }
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"IdentityProviderSummaryList":{
  "type":"list",
  "member":{"shape":"IdentityProviderSummary"}
},
"InstanceSummary":{
  "type":"structure",
  "required":[
    "InstanceId",
    "Products",
    "Status"
  ],
  "members":{
    "InstanceId":{"shape":"String"},
    "LastStatusCheckDate":{"shape":"String"},
     "Products":{"shape":"StringList"},
    "Status":{"shape":"String"},
    "StatusMessage":{"shape":"String"}
  }
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"InstanceSummaryList":{
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  "member":{"shape":"InstanceSummary"}
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"InstanceUserSummary":{
  "type":"structure",
  "required":[
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    "InstanceId",
    "Status",
    "Username"
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    "DisassociationDate":{"shape":"String"},
    "Domain":{"shape":"String"},
    "IdentityProvider":{"shape":"IdentityProvider"},
    "InstanceId":{"shape":"String"},
    "Status":{"shape":"String"},
    "StatusMessage":{"shape":"String"},
    "Username":{"shape":"String"}
  }
},
"InstanceUserSummaryList":{
  "type":"list",
  "member":{"shape":"InstanceUserSummary"}
},
"InternalServerException":{
  "type":"structure",
  "members":{

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  },
  "exception":true,
  "fault":true
},
"ListIdentityProvidersRequest":{
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  "members":{
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    "NextToken":{"shape":"String"}
  }
},
"ListIdentityProvidersResponse":{
  "type":"structure",
  "required":["IdentityProviderSummaries"],
  "members":{
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    "NextToken":{"shape":"String"}
  }
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},
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  "MaxResults":{"shape":"BoxInteger"},
  "NextToken":{"shape":"String"}
 }
},
"ListInstancesResponse":{
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  "NextToken":{"shape":"String"}
 }
},
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  "Product"
 ],
 "members":{
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  "MaxResults":{"shape":"BoxInteger"},
  "NextToken":{"shape":"String"},
  "Product":{"shape":"String"}
 }
},
"ListProductSubscriptionsResponse":{
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 }
},
"ListUserAssociationsRequest":{
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  "InstanceId"
 ],
 "members":{
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  "IdentityProvider":{"shape":"IdentityProvider"},
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  "MaxResults":{"shape":"BoxInteger"},

"NextToken":{"shape":"String"}
}
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}
},
"ProductUserSummary":{
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"Product",
"Status",
"Username"
],
"members":{
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"IdentityProvider":{"shape":"IdentityProvider"},
"Product":{"shape":"String"},
"Status":{"shape":"String"},
"StatusMessage":{"shape":"String"},
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"SubscriptionStartDate":{"shape":"String"},
"Username":{"shape":"String"}
}
},
"ProductUserSummaryList":{
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"required":[
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"Product"
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"members":{
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"Product":{"shape":"String"},
"Settings":{"shape":"Settings"}
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},
"RegisterIdentityProviderResponse":{
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"required":["IdentityProviderSummary"],
"members":{
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}
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"ResourceNotFoundException":{
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"ServiceQuotaExceededException":{
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"Settings":{
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"Subnets"
],
"members":{
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"Subnets":{"shape":"SettingsSubnetsList"}
}
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"Product",
"Username"
],
"members":{
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"IdentityProvider":{"shape":"IdentityProvider"},
"Product":{"shape":"String"},
"Username":{"shape":"String"}
}
},
"StartProductSubscriptionResponse":{
"type":"structure",
"required":["ProductUserSummary"],
"members":{
"ProductUserSummary":{"shape":"ProductUserSummary"}
}
},
"StopProductSubscriptionRequest":{
"type":"structure",
"required":[
"IdentityProvider",
"Product",
"Username"
],
"members":{
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"IdentityProvider":{"shape":"IdentityProvider"},
"Product":{"shape":"String"},
"Username":{"shape":"String"}
}
},
"StopProductSubscriptionResponse":{
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"StringList":{
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"member":{"shape":"String"}
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"Subnet":{
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},

"Subnets":{
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  "member":{"shape":"Subnet"}
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  "members":{
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},
"UpdateIdentityProviderSettingsRequest":{
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  "required":[
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    "Product",
    "UpdateSettings"
  ],
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     "Product":{"shape":"String"},
    "UpdateSettings":{"shape":"UpdateSettings"}
  }
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"UpdateIdentityProviderSettingsResponse":{
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  "required":["IdentityProviderSummary"],
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"UpdateSettings":{
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  "required":[
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    "RemoveSubnets"
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    "RemoveSubnets":{"shape":"Subnets"},
    "SecurityGroupId":{"shape":"SecurityGroup"}
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},
"ValidationException":{
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  "members":{
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  },

"exception":true
}
}
}

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"version":"2.0",
"metadata":{
"apiVersion":"2018-05-10",
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"jsonVersion":"1.1",
"protocol":"rest-json",
"protocols":["rest-json"],
"serviceFullName":"AWS License Manager Linux Subscriptions",
"serviceId":"License Manager Linux Subscriptions",
"signatureVersion":"v4",
"signingName":"license-manager-linux-subscriptions",
"uid":"license-manager-linux-subscriptions-2018-05-10",
"auth":["aws.auth#sigv4"]
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"operations":{
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"name":"DeregisterSubscriptionProvider",
"http":{
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"responseCode":200
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{"shape":"ThrottlingException"},
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"errors":[
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"idempotent":true
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"http":{
"method":"POST",
"requestUri":"/subscription/ListRegisteredSubscriptionProviders",
"responseCode":200
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"input":{"shape":"ListRegisteredSubscriptionProvidersRequest"},
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"errors":[
{"shape":"InternalServerException"},
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{"shape":"ValidationException"}
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"idempotent":true
},
"ListTagsForResource":{
"name":"ListTagsForResource",
"http":{
"method":"GET",
"requestUri":"/tags/{resourceArn}",
"responseCode":200
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"input":{"shape":"ListTagsForResourceRequest"},

"output":{"shape":"ListTagsForResourceResponse"},
"errors":[
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{"shape":"ResourceNotFoundException"},
{"shape":"ValidationException"}
]
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"RegisterSubscriptionProvider":{
"name":"RegisterSubscriptionProvider",
"http":{
"method":"POST",
"requestUri":"/subscription/RegisterSubscriptionProvider",
"responseCode":200
},
"input":{"shape":"RegisterSubscriptionProviderRequest"},
"output":{"shape":"RegisterSubscriptionProviderResponse"},
"errors":[
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{"shape":"ThrottlingException"},
{"shape":"ValidationException"}
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"TagResource":{
"name":"TagResource",
"http":{
"method":"PUT",
"requestUri":"/tags/{resourceArn}",
"responseCode":200
},

"input":{"shape":"TagResourceRequest"},
"output":{"shape":"TagResourceResponse"},
"errors":[
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{"shape":"ValidationException"}
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"idempotent":true
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"UntagResource":{
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"output":{"shape":"UntagResourceResponse"},
"errors":[
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"UpdateServiceSettings":{
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"requestUri":"/subscription/UpdateServiceSettings",
"responseCode":200
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"input":{"shape":"UpdateServiceSettingsRequest"},
"output":{"shape":"UpdateServiceSettingsResponse"},
"errors":[
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{"shape":"ThrottlingException"},
{"shape":"ValidationException"}
],
"idempotent":true
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},
"shapes":{
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"box":true
},
"BoxInteger":{
"type":"integer",
"box":true
},
"BoxLong":{
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"box":true
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"DeregisterSubscriptionProviderRequest":{
"type":"structure",
"required":["SubscriptionProviderArn"],
"members":{
"SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"}
}
},
"DeregisterSubscriptionProviderResponse":{
"type":"structure",
"members":{
}

},
"Filter":{
  "type":"structure",
  "members":{
    "Name":{"shape":"String"},
    "Operator":{"shape":"Operator"},
    "Values":{"shape":"StringList"}
  }
},
"FilterList":{
  "type":"list",
  "member":{"shape":"Filter"}
 },
"GetRegisteredSubscriptionProviderRequest":{
  "type":"structure",
  "required":["SubscriptionProviderArn"],
  "members":{
    "SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"}
  }
},
"GetRegisteredSubscriptionProviderResponse":{
  "type":"structure",
  "members":{
    "LastSuccessfulDataRetrievalTime":{"shape":"String"},
    "SecretArn":{"shape":"SecretArn"},
    "SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"},
    "SubscriptionProviderStatusMessage":{"shape":"String"}
  }
},
"GetServiceSettingsRequest":{
  "type":"structure",
  "members":{
  }
},
"GetServiceSettingsResponse":{
  "type":"structure",
  "members":{
    "HomeRegions":{"shape":"StringList"},
    "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
     "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
    "Status":{"shape":"Status"},
    "StatusMessage":{"shape":"StringMap"}
  }
},
"Instance":{
  "type":"structure",

"members":{
"AccountID":{"shape":"String"},
"AmiId":{"shape":"String"},
"DualSubscription":{"shape":"String"},
"InstanceID":{"shape":"String"},
"InstanceType":{"shape":"String"},
"LastUpdatedTime":{"shape":"String"},
"OsVersion":{"shape":"String"},
"ProductCode":{"shape":"ProductCodeList"},
"Region":{"shape":"String"},
"RegisteredWithSubscriptionProvider":{"shape":"String"},
"Status":{"shape":"String"},
"SubscriptionName":{"shape":"String"},
"SubscriptionProviderCreateTime":{"shape":"String"},
"SubscriptionProviderUpdateTime":{"shape":"String"},
"UsageOperation":{"shape":"String"}
}
},

"InstanceList":{
"type":"list",
"member":{"shape":"Instance"}
},
"InternalServerException":{
"type":"structure",
"members":{
"message":{"shape":"String"}
},
"exception":true,
"fault":true
},
"LinuxSubscriptionsDiscovery":{
"type":"string",
"enum":[
"Enabled",
"Disabled"
]
},
"LinuxSubscriptionsDiscoverySettings":{
"type":"structure",
"required":[
"OrganizationIntegration",
"SourceRegions"
],
"members":{
"OrganizationIntegration":{"shape":"OrganizationIntegration"},
"SourceRegions":{"shape":"StringList"}
}

},
"ListLinuxSubscriptionInstancesRequest":{
"type":"structure",
"members":{
"Filters":{"shape":"FilterList"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"ListLinuxSubscriptionInstancesRequestNextTokenString"}
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},
"ListLinuxSubscriptionInstancesRequestNextTokenString":{
"type":"string",
"max":16384,
"min":1
},
"ListLinuxSubscriptionInstancesResponse":{
"type":"structure",
"members":{
"Instances":{"shape":"InstanceList"},
"NextToken":{"shape":"String"}
}
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"ListLinuxSubscriptionsRequest":{
"type":"structure",
"members":{
"Filters":{"shape":"FilterList"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"ListLinuxSubscriptionsRequestNextTokenString"}
}
},
"ListLinuxSubscriptionsRequestNextTokenString":{
"type":"string",
"max":16384,
"min":1
},
"ListLinuxSubscriptionsResponse":{
"type":"structure",
"members":{
"NextToken":{"shape":"String"},
"Subscriptions":{"shape":"SubscriptionList"}
}
},
"ListRegisteredSubscriptionProvidersRequest":{
"type":"structure",
"members":{
"MaxResults":{"shape":"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger"},
"NextToken":{"shape":"String"},
"SubscriptionProviderSources":{"shape":"SubscriptionProviderSourceList"}
}

},
"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger":{
  "type":"integer",
  "box":true,
  "max":100,
  "min":1
},
"ListRegisteredSubscriptionProvidersResponse":{
  "type":"structure",
  "members":{
    "NextToken":{"shape":"String"},
    "RegisteredSubscriptionProviders":{"shape":"RegisteredSubscriptionProviderList"}
  }
},
"ListTagsForResourceRequest":{
  "type":"structure",
  "required":["resourceArn"],
  "members":{
    "resourceArn":{
      "shape":"SubscriptionProviderArn",
      "location":"uri",
      "locationName":"resourceArn"
    }
  }
},
"ListTagsForResourceResponse":{
  "type":"structure",
  "members":{
    "tags":{"shape":"Tags"}
  }
},
"Operator":{
  "type":"string",
   "enum":[
    "Equal",
    "NotEqual",
    "Contains"
  ],
  "max":20,
  "min":1
},
"OrganizationIntegration":{
  "type":"string",
  "enum":[
    "Enabled",
    "Disabled"
  ]
},

"ProductCodeList":{
  "type":"list",
  "member":{"shape":"String"}
},
"RegisterSubscriptionProviderRequest":{
  "type":"structure",
  "required":[
    "SecretArn",
    "SubscriptionProviderSource"
  ],
  "members":{
    "SecretArn":{"shape":"SecretArn"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "Tags":{"shape":"Tags"}
  }
},
"RegisterSubscriptionProviderResponse":{
  "type":"structure",
  "members":{
    "SubscriptionProviderArn":{"shape":"String"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"}
  }
},
"RegisteredSubscriptionProvider":{
   "type":"structure",
  "members":{
    "LastSuccessfulDataRetrievalTime":{"shape":"String"},
    "SecretArn":{"shape":"SecretArn"},
    "SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"},
    "SubscriptionProviderStatusMessage":{"shape":"String"}
  }
},
"RegisteredSubscriptionProviderList":{
  "type":"list",
  "member":{"shape":"RegisteredSubscriptionProvider"}
},
"ResourceNotFoundException":{
  "type":"structure",
  "members":{
    "message":{"shape":"String"}
  },
  "exception":true
},
"SecretArn":{
  "type":"string",

"pattern":"^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"
},
"Status":{
"type":"string",
"enum":[
"InProgress",

"Completed",
"Successful",
"Failed"
]
},
"String":{"type":"string"},
"StringList":{
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"member":{"shape":"StringListMemberString"},
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"type":"string",
"max":100,
"min":1
},
"StringMap":{
"type":"map",
"key":{"shape":"String"},
"value":{"shape":"String"}
},
"Subscription":{
"type":"structure",
"members":{
"InstanceCount":{"shape":"BoxLong"},
"Name":{"shape":"String"},
"Type":{"shape":"String"}
}
},
"SubscriptionList":{
"type":"list",
"member":{"shape":"Subscription"}
},
"SubscriptionProviderArn":{
"type":"string",
"pattern":"^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
},
"SubscriptionProviderSource":{
"type":"string",

"enum":["RedHat"]
},
"SubscriptionProviderSourceList":{
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"enum":[
"ACTIVE",
"INVALID",
"PENDING"
]
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"tags"
],
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"shape":"SubscriptionProviderArn",
"location":"uri",
"locationName":"resourceArn"
},
"tags":{"shape":"Tags"}
}
},
"TagResourceResponse":{
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"members":{
}
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"value":{"shape":"String"},
"max":50,
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"UntagResourceRequest":{
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"tagKeys"
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"shape":"SubscriptionProviderArn",
"location":"uri",
"locationName":"resourceArn"
},
"tagKeys":{
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"location":"querystring",
"locationName":"tagKeys"
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"members":{
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},
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"LinuxSubscriptionsDiscovery",
"LinuxSubscriptionsDiscoverySettings"
],
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"LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
"LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"}
}
},
"UpdateServiceSettingsResponse":{
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"HomeRegions":{"shape":"StringList"},

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"Status":{"shape":"Status"},
"StatusMessage":{"shape":"StringMap"}
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"version": "1.0",
"parameters": {
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"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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                        "argv": [
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                "type": "error"
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                                ]
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true
                        ]
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                                            {
                                                "ref": "PartitionResult"
                                            },
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                                        ]
                                    }
                                ]
                            },
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```

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                            "type": "endpoint"
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                                    "headers": {}
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                        "type": "endpoint"
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      "type": "error"
    }
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        "expect": {
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    "params": {
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      "UseFIPS": false,
      "UseDualStack": false
    }
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    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
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      }
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}
},
"params": {
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"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
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"params": {
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"Endpoint": "https://example.com"
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"UseFIPS": true,
"UseDualStack": false,
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"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}

1.3400 gorilla-mux 1.8.1

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1.3401 gorilla-websocket 1.5.3

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1.3402 azure-sdk-for-go-sdk-internal v1.3.0

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1.3418 github.com/secure-systems-lab/go-securesystemslib 0.9.0

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1.3419 futures 3.2

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1.3420 gorilla-mux 1.8.0

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1.3421 github.com/aws/aws-sdk-go-v2/internal/ini 1.8.2

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```
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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
```

```
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
```

```
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

```
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
```

```
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

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import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
```

```
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
```

```
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
```

{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration. "
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": " The type of Active Directory either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
          }
        }
      },
      "traits": {
        "smithy.api#documentation": " Details about an Active Directory identity
 provider. "
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",

"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"

```
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",

"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",

"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {

"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {

"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
 {
        "type": "structure",
        "members": {
            "Username": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}

        }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Value of the filter.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {

                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
```

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based

subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits":
{
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "

```
            }
          },
          "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server",
           "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
```

```
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {

          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
```

```
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
      }
    ],
    "traits": {
      "aws.api#service": {
        "sdkId": "License Manager User Subscriptions",
        "arnNamespace": "license-manager-user-subscriptions",
        "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-user-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id",
          "content-length",
          "x-api-key",

"authorization",
          "x-amz-date",
          "x-amz-security-token",
          "Access-Control-Allow-Headers",
          "Access-Control-Allow-Methods",
          "Access-Control-Allow-Origin"
        ],
        "additionalExposedHeaders": [
          "x-amzn-errortype",
          "x-amzn-requestid",
          "x-amzn-trace-id"
        ]
      },
```

"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}

```
                ],

            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [
                        {

"fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": {
                            "ref": "Endpoint"
                        },
                        "properties": {},

                    "headers": {}
                    },
                    "type": "endpoint"
                }
                ],
                "type": "tree"
```

```
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",
                      "argv":
[
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseFIPS"
                            },
                            true

            ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }
```

```
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",

                    "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]
                              }
                            ]
                          },

  {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsDualStack"
                                ]
                              }
                            ]

                          }
                        ],
                        "rules": [
                          {
                            "conditions": [],
                            "endpoint": {
                              "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                              "properties": {},
                              "headers": {}
                            },
                            "type": "endpoint"
```

```
                    }
                ],

            "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {

            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
```

```
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                             "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"
            }

        ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [

                 {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
```

"supportsDualStack"
]
}

]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",

"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}

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            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack":
false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
```

{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}

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            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,

"UseDualStack": true
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
                "endpoint": {

                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
```

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
            "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
            },
            "HealthStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
 server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
```

"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation":
" The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation":
" The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},
"CreationTime": {

"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server

endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
"type": "string",
"traits":
{
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""
},

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                {
                    "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "HEALTHY",
                    "value": "HEALTHY",
                    "documentation": ""
                },
                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {

              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>Status</p>\n            </li>\n            <li>\n              <p>InstanceId</p>\n
          </li>\n        </ul>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits":
 {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
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"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                 "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type":
 "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't

empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
"smithy.api#httpLabel": {},

```
                "smithy.api#required": {}
            }
        }
    },
    "traits": {

"smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
         {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits":

{
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider
operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":
{
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type":
"structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },

 "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],

    "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
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"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An
object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

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    }
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
    "type": "list",
     "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },

    "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
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"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes

tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"

},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the

identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",

```
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to
provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
```

```
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
```

```
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
```

```
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
```

```
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string
```

```
 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

```
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
```

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware

```
  RecordResponseTiming
  RequestResponseLogger
AWS SDK for Go
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Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
```

```
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if
err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:        region,
 ServiceID:     ServiceID,
 OperationName: "DeleteLicense",
}
}
AssociateLicense
Initialize stack step
 spanInitializeStart
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
```

ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {

"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource

specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

         },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}

```
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
                }
            },
            "LastUpdatedTime": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
                }
            },
            "SubscriptionName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
                }
            },
            "OsVersion": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
                }
            },
            "SubscriptionProviderCreateTime": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux
subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":

" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},

"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {

```
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
```

```
}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": {
                            "ref": "Endpoint"
                        },
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"

        }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "rules": [
            {
                "conditions": [
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                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
```

```
                ],
                "assign": "PartitionResult"
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {

                      "ref": "UseFIPS"
                            },
                            true
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }

],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"

},
                                            "supportsFIPS"
                                        ]
                                    }
                                ]
                            },
                            {
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"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
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"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true

]
}
],
"rules": [
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}

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                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
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but this partition does not support FIPS",
            "type": "error"
        }
    ],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true

]
        }
    ],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {

                                "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
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"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"

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                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
  }
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

 "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
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"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"

}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},

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        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
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    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
```

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    },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {

                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

 "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
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```
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
```

"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {

"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",

"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"

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            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
```

"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
```

"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

  }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this

subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"

```
            },
            {
                "name": "INVALID",
                "value": "INVALID",

"documentation": "INVALID status"
            },
            {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
            }
        ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
```

"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

     },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target":
 "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}
}

ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

ErrorCloseResponseBody

CloseResponseBody

ResponseErrorWrapper

RequestIDRetriever

OperationDeserializer

AddTimeOffsetMiddleware

RecordResponseTiming

RequestResponseLogger

CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step

ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
```

```
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

ServiceID: ServiceID,
OperationName: "AssociateLicense",
}
}

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
```

```
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
```

```
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err !=
nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
```

```
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
              "namespace": "*"
          }
      ]
  },
  "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
          "type": "service",
          "version": "2018-08-01",
          "operations": [
```

{
"target": "com.amazonaws.licensemanager#AcceptGrant"
},

{
"target": "com.amazonaws.licensemanager#CheckInLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
    },
    {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
    },
    {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
    },
    {
```

"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},

{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,

"default": false,
"documentation": "When true, send
this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{

"conditions": [
{
"fn": "booleanEquals",

```
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "endpoint": {
              "url": {
                "ref": "Endpoint"
              },
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "type": "tree",
        "rules": [
          {
            "conditions": [
              {
                "fn": "aws.partition",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
```

```
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref":
"UseFIPS"
                              },
                              true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "type": "tree",
                        "rules": [
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                                "argv": [
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                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
                                        "ref": "PartitionResult"
                                      },
                                      "supportsFIPS"
                                    ]

                              }
                                ]
                              },
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                                "fn": "booleanEquals",
                                "argv": [
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                                    {
                                        "fn": "getAttr",
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                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
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"argv": [
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"supportsDualStack"

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              "headers": {}
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    "type": "error"
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      "params": {
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      "params": {
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"params": {
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"params": {
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"expect": {
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"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
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"params": {
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"UseDualStack": false
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"params": {
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"UseDualStack": false
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}
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"params": {
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"UseFIPS": false,
"UseDualStack": false
}
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disabled and DualStack disabled",
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"UseDualStack": false
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"UseDualStack": false
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"UseDualStack": false
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"params": {
"Region": "me-south-1",
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"UseDualStack": false
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "us-east-1",
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"UseDualStack": false
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        "params": {
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            "UseDualStack": false
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        "params": {
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            "UseDualStack": false
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            "UseDualStack": false
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us-west-1 with FIPS disabled and DualStack disabled",
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        "params": {
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            "UseDualStack": false
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            "UseDualStack": false
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            "UseDualStack": false
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          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
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            }
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              "UseDualStack": true
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"https://license-manager.cn-north-1.amazonaws.com.cn"
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            "params": {
              "Region": "cn-north-1",
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              "UseDualStack": false
            }
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            "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
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                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
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            "params": {
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"params": {
"Region": "cn-north-1",
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              "UseDualStack": false
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              "UseDualStack": false
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"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseDualStack": true
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"error": "DualStack is enabled
but this partition does not support DualStack"
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"params": {
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"UseDualStack": false
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"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",

"expect": {
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"url": "https://example.com"
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"params": {
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"UseDualStack": false,
"Endpoint": "https://example.com"
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"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
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"params": {
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"UseDualStack": true,
"Endpoint": "https://example.com"
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"expect": {
"error": "Invalid Configuration: Missing Region"
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"version": "1.0"
}
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            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

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        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
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        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
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    "com.amazonaws.licensemanager#AcceptGrantRequest": {
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        "members": {
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                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
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                    "smithy.api#required": {}
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            }
        },
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"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
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"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
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"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
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"traits": {
"smithy.api#output": {}
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"Message": {
"target": "com.amazonaws.licensemanager#Message"
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"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}

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"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
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            "traits": {
                "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
        },
        "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
    "members": {
        "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateGrant"
            }
        },
        "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckoutLicense"
            }
        },
        "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
        },
        "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckInLicense"
            }
        },
        "EXTEND_CONSUMPTION_LICENSE":
```

{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"

```
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
```

"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
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            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
        },
        "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target":
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"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},

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            "SignedToken": {
              "target": "com.amazonaws.licensemanager#SignedToken",
              "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "IssuedAt": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
              }
            },
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutType": {
          "type": "enum",
          "members": {
            "PROVISIONAL": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
              }
            },
            "PERPETUAL": {
              "target": "smithy.api#Unit",
              "traits": {
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"smithy.api#enumValue": "PERPETUAL"
}
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",

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            "traits": {
                "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }
    },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
    }
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
    }
  },
  "com.amazonaws.licensemanager#ConsumptionConfiguration": {
    "type": "structure",
    "members": {
        "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
        },
        "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
             }
        },
        "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
  },
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"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },

    "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
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            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
```

"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "

```
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
            }
        },
        "LicenseRules": {
            "target":
 "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
        },
```

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                  "smithy.api#required": {}
              }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
```

"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}

        }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be
generated daily, monthly, or weekly.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientRequestToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique,
 case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

  }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
             },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
```

```
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}

```
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>"
            }
          }
        },
        "traits": {

"smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>License ARN.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateTokenResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },

      {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits":
 {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
              "smithy.api#required": {}
            }
          },
          "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {

"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DateTime": {
"type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
"type": "structure",
"members": {
"Begin": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Start of the time range. ",
"smithy.api#required": {}
}
},
"End": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " End of the time range. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a time range, in ISO8601-UTC format. "
}
},
"com.amazonaws.licensemanager#DeleteGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
```

"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>",
                "smithy.api#required":
{}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
    "members": {
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
        {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

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        }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
```

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            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
```

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    "com.amazonaws.licensemanager#EntitlementDataUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Count"
          }
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes"
          }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

    }
        },
```

"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},

"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {

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        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes"
            }
          },
          "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes"
             }
          },
          "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},

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        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Maximum entitlement usage count. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
 "<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanager#FilterValues",
                "traits": {
                    "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n        describe operation. Filters can be used
to match a set of resources by specific criteria,\n        such as tags, attributes, or IDs.</p>"
```

```
    }
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
```

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

        },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
```

"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {

"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}

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            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

    "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

    "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {

"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}

```
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

```
    },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
```

"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":

{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation": " One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",

```
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": "<p>Condition of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"
                }
            },
```

"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},

"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}

```
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
 {
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
```

```
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },

    "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
```

"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}

},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}

```
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
    "type": "string",
    "traits": {

   "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
```

```
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
```

```
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

"smithy.api#documentation": "<p>Failure time.</p>"
            }
        },
        "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"

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        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
```

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            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

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            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
                    "smithy.api#documentation": "<p>Distributed grant details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
```

"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configurations
for your account. "
}

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
```

```
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
```

"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n

```
</p>\n            </li>\n         </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
 {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are

supported: \n \n \n \n <code>ProductSKU</code>\n \n
\n \n \n <code>LicenseIssuerName</code>\n \n
\n \n \n <code>LicenseArn</code>\n \n \n
\n \n <code>GrantStatus</code>\n \n \n \n
\n
<code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
                 "traits": {
                    "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

             "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>Status</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>IssuerName</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Beneficiary</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

```
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#FailedDependencyException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
</li>\n <li>\n <p>\n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n <li>\n
```

```
    <p>\n                <code>platform</code> - The platform of the resource.\n              Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n              <p>\n
        <code>resource_id</code> - The ID of the resource. \n              Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
      <code>tag:<key></code> - The key/value combination of a tag assigned \n              to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n              <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
 about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {

"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",

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        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
        }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
        "traits": {
            "smithy.api#range": {
                "min": 1,
                "max": 100
            }
        }
    },
    "com.amazonaws.licensemanager#MaxSize3StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 3
            }
        }
    },
    "com.amazonaws.licensemanager#Message": {
```

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        "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The key name.</p>"
                }
            },

    "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }
    },
    "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Metadata"
        }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
```

"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"

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        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n <p>The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>:</p>\n
<ul>\n <li>\n <p>\n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>.</p>\n </li>\n <li>\n
<p>\n <code>Application Publisher</code> - The publisher of the application.\n Logical
operator is <code>EQUALS</code>.</p>\n </li>\n <li>\n <p>\n
<code>Application Version</code> - The version of the application.\n Logical operator is
<code>EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>Platform
Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n
<li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:
```

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 <code>sql-server-enterprise</code> | \n            <code>sql-server-standard</code> | \n            <code>sql-server-web</code> |  \n            <code>windows-server-datacenter</code>.</p>\n          </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is <code>RDS</code>:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Engine Edition</code> - The edition of the database engine.\n            Logical operator is <code>EQUALS</code>.\n            Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n          </li>\n          <li>\n            <p>\n              <code>License Pack</code> - The license pack.\n            Logical operator is <code>EQUALS</code>.\n            Possible values are: <code>data guard</code> | \n            <code>diagnostic pack sqlt</code> | \n
            <code>tuning pack sqlt</code> | \n            <code>ols</code> | \n            <code>olap</code>.</p>\n
    </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#ProductInformationFilter": {
          "type": "structure",
          "members": {
            "ProductInformationFilterName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductInformationFilterValue": {
              "target": "com.amazonaws.licensemanager#StringList",

           "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
              }
            },
            "ProductInformationFilterComparator": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes product information filters.</p>"
          }
        },
```

"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {

"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
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    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
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"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {

"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {

"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}

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        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }

}
    },
    "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

},
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
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            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportType"
        }
      },
      "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
          "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
          },
          "PlatformVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
            }
          },
          "ResourceOwningAccountId":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
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"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResource.NotFound",
"httpResponseCode": 400
},
"smithy.api#documentation": " The resource cannot be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}

```
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                 "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
    "members": {
        "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
            }
        },
        "keyPrefix": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},

"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [

```
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the
token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request

again. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",

```
            "traits": {
                "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
    },
    "output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and

resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}

```
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {

```
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UsageOperation": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            }
          }
        },
        "com.amazonaws.licensemanager#ValidationException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

       "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        }
      }
    }
```

1.3422 aws-sdk-go-v2-internal-ini 1.8.2

1.3422.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
```

```
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string
```

```
 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err !=
nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
```

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
```

```
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
```

```
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
```

```
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
          "type": "structure",
          "members": {
              "message": {
                  "target": "smithy.api#String"
              }
          },
          "traits": {
              "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
              "smithy.api#error": "client"
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
          "type": "structure",
          "members": {
              "DirectoryId": {
                  "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                  "traits": {
                      "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                  }
              },
              "ActiveDirectorySettings":
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}

```
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}

```
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
```

```
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory":
 {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
 {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"

                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
```

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}

}
}
},
"traits": {

"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation":
" Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the identity provider.</p>",

        "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
```

"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}

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            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

 "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {

       "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {

```
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
         "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
```

```
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
    },
    {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
     }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager User Subscriptions",
        "arnNamespace": "license-manager-user-subscriptions",
        "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-user-subscriptions"
    },
    "aws.protocols#restJson1": {},
```

"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,

"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],

"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [

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                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
            },
            "properties": {},

      "headers": {}
        },
        "type": "endpoint"
    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
  ],
  "rules": [
    {
        "conditions": [
            {
                "fn": "aws.partition",
                "argv":
[
                    {
                        "ref": "Region"
                    }
                ],
                "assign": "PartitionResult"
```

```
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true

]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",

                      "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsFIPS"
                                            ]
                                        }
                                    ]
                                },

{
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]

                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],

            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {

            "ref": "UseFIPS"
                                },
                                true
```

```
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {

                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                             "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"
            }

    ],
        "type": "tree"
    },
    {
        "conditions": [
```

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                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [

              {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]
                        }

            ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                   "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
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"type": "error"
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"type": "tree"
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
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],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,

"UseDualStack":
true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"

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            }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
        "expect": {
            "endpoint": {

                "url": "https://example.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
        }
    },
    {
        "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
        "expect": {
            "endpoint": {
                "url": "https://example.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint":
 "https://example.com"
        }
    },
    {
        "documentation": "For custom endpoint with fips enabled and dualstack disabled",
        "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
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```
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are
not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
 server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation":
 "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server
endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
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"smithy.api#documentation":
" The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},
"CreationTime": {

"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server
endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
"type": "string",
"traits":
{
"smithy.api#enum": [
{

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            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
          },
          {
            "name": "PROVISIONING_FAILED",
            "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
             "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
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"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },

         "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Product \n \n \n DirectoryId \n
\n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that
contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
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"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the

next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type":
"structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken

\n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags for the specified resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {

"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",

"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",

"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",

"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1

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                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 5,
            "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
    "type": "structure",
    "members": {
        "Endpoint": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
    "type": "union",
    "members": {
        "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
    }
},
```

"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type":
"structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
 {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },

 "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

```
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }

       },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
```

request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes
tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

  "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
```

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint
 for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to
provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
```

This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

```
 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

```
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {
```

```
 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string
```

```
 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
```

```
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":

"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {

"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has
been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being
applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings
current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated
data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}

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        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",

"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"argv": [
{
"ref": "Endpoint"
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],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},

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                    true
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            "type": "error"
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                            ]

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                    "type": "error"
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                            "ref": "Endpoint"
                        },
                        "properties": {},
                        "headers": {}
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            "type": "tree"

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        "conditions": [],
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```

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      "argv": [
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        }
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          "assign": "PartitionResult"
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      "rules": [
        {
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              "fn": "booleanEquals",
              "argv": [
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            "ref": "UseFIPS"
                },
                true
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            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
```

```
],
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                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"

                    },
                                  "supportsFIPS"
                                ]
                              }
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
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                              {
                                "fn": "getAttr",
                                "argv": [

                                {
                                    "ref": "PartitionResult"
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                                ]
                              }
                            ]
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                          {
                            "conditions": [],

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                                "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                  "properties": {},
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"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]

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                    true

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                    "rules": [
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                            "headers": {}
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                        "type": "endpoint"
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                    "type": "tree"
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                "type": "tree"
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                "conditions": [],
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 but this partition does not support FIPS",
                "type": "error"
            }
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        "type": "tree"
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    {
        "conditions": [
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                "argv": [
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                    "ref": "UseDualStack"
                },
                true

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            }
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                                            "argv": [
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                                                "ref": "PartitionResult"
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                                                "supportsDualStack"
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                                    "conditions": [],
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                                            "properties": {},
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                                        "type": "endpoint"
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                            "type": "error"
                        }
```

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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
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        "type": "tree"
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"type": "tree"
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    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
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"type": "tree"
}
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"smithy.rules#endpointTests": {
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            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
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"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false

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                }
            },
            {

  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
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                "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
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                    }

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                    "UseFIPS": true,
                    "UseDualStack": false
                }
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                "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
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                    }
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                    "UseFIPS": false,
                    "UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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                    "endpoint": {
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"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},

"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
```

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
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"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

    "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n  <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n <li>\n            <p>\n                <code>Subscription</code>\n            </p>\n        </li>\n        </ul>\n <p>The
 valid Operators for this filter are:</p>\n        <ul>\n        <li>\n            <p>\n <code>contains</code>\n            </p>\n        </li>\n        <li>\n            <p>\n <code>equals</code>\n            </p>\n        </li>\n        <li>\n            <p>\n <code>Notequal</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"

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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
```

```
                }
            }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

             "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
```

"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
```

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

           },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
```

"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed

third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",

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                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
```

"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",

"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}

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                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
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},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
```

"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings

current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash

setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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package grafana

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
```

```
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
```

```
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
```

```
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateToken"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteToken"
      },
      {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

    },
      {
        "target": "com.amazonaws.licensemanager#GetAccessToken"
      },
      {
        "target": "com.amazonaws.licensemanager#GetGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
      },
      {
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        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
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        "target": "com.amazonaws.licensemanager#GetLicenseUsage"
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"target": "com.amazonaws.licensemanager#GetServiceSettings"
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"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
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"aws.auth#sigv4": {
"name": "license-manager"
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"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"smithy.rules#endpointRuleSet": {
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"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"type": "String"
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              "type": "error"
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"argv": [
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"ref": "PartitionResult"
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"Region": "ap-east-1",
"UseFIPS": false,
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"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "ap-northeast-2",
"UseFIPS": false,
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            "UseDualStack": false
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"Region": "eu-north-1",
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"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
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"UseDualStack": false
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"UseDualStack": false
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"params": {
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"UseDualStack": false
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            "UseDualStack": false
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disabled",
                "expect": {
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            }
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            "UseFIPS": false,
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            }
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            "UseFIPS": true,
            "UseDualStack": false
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but this partition does not support DualStack"
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            "UseDualStack": true
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```

"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

```
    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}

```
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "

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            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
```

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            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
 account that created the license is the same that is performing the check out, you must\n            specify the account
 as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
```

"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "

```
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
```

```
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ConflictException",
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"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {

"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of

license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
"type": "structure",
"members": {

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            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
```

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    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
           "traits": {
            "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
          }
        },
        "LicenseCountHardLimit": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
          }
        },
        "LicenseRules": {
          "target":
 "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
```

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        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n          </li>\n
<li>\n
  <p>\n                <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
          },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
                    "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be

generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn":
 {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product
 name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
```

```
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
             },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
```

"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}

```
            },

  "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },

      {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT
token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n         JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n         License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n         to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
```

```
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",

       "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>"
        }
      },
      "TokenType": {
        "target": "com.amazonaws.licensemanager#TokenType",
        "traits": {
          "smithy.api#documentation": "<p>Token type.</p>"
        }
      },
      "Token": {
        "target": "com.amazonaws.licensemanager#TokenString",
        "traits": {
          "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
         "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
```

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
 {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {

"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {

"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}

```
        },
        "BYTES": {
          "target": "smithy.api#Unit",
           "traits": {
             "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Kilobytes"
          }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Megabits"
```

```
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},

"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},

"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}

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            },
            "GIGABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits"
                }
            },
            "TERABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits"
                }
            },
            "PERCENT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Percent"
                }
            },
            "BYTES_PER_SECOND": {
                "target":
"smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bytes/Second"
                }
            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
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"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
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"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {

"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {

"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
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"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {

```
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
    }
},
"LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
```

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}

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            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
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"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",

"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

          },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {

  "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
          "LicenseUsage": {
            "target":
"com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
```

"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data,

discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "

```
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
```

```
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
```

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",

"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
```

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "enum",
"members": {

"EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage

of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},

"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {

"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n

Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "

```
            }
        },
        "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
            }
        },

    "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfiguration"
    }
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
    "members": {
        "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
                "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
            }
        }
    },
```

"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation":
" The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {

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                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
```

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    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
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"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"

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            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
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"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n

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</li>\n <li>\n <p>\n <code>GrantStatus</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n            Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n            Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
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</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

         "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
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account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}

```
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {

"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while

specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}

```
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
      <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
```

```
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n              <p>\n                <code>LicenseArns</code>\n              </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100

```
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>. \n \n \n
\n <code>Application Publisher</code> - The publisher of the application.\n Logical

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

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        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
     }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
```

```
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
```

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            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
```

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        "members": {
          "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 308
        }
      },
      "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
```

{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

```
            }
          },
          "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

           "traits": {
              "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
          "DAY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DAY"
            }
          },
          "WEEK": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WEEK"
            }
          },
          "MONTH": {
            "target": "smithy.api#Unit",
            "traits":
 {
              "smithy.api#enumValue": "MONTH"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>"
            }
          },
```

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report

generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}

```
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
```

"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

```
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096

```
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
"com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
```

format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {

"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
```

"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
```

update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
```

```
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```

1.3423 npm-packlist 10.0.0

1.3423.1 Available under license :

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1.3424 walk-up-path 4.0.0

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layout: docs
page_title: 'Commands: license'
description: |
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Command: license

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Usage: `nomad license <subcommand> [options]`

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- [`license get`][get] - Get the current license from a server
- [`license inspect`][inspect] - Inspect and validate a license

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---
layout: docs
page_title: 'Commands: license get'
description: |
The license get command is used to get the current license.

Command: license get

The `license get` command is used to retrieve the current Nomad Enterprise license. The command is not forwarded to the Nomad leader, and will return the license from the specific server being contacted.

~> License commands are only available with Nomad Enterprise.

Usage

```plaintext
nomad license get [options]
```

When ACLs are enabled, this command requires a token with the 'operator:read' capability.

General Options

@include 'general_options_no_namespace.mdx'

Examples

```shell-session
$ nomad license get

Product        = nomad
License Status = valid
License ID     = e23f63b1-00ec-4e67-e926-c22e7937ceec
Customer ID    = 350356e5-8aec-bdf4-8510-b205079ccad2
Issued At      = 2021-03-31 14:21:16.969610774 +0000 UTC
Expires At     = 2020-05-09 00:00:00 +0000 UTC
Terminates At  = 2020-05-10 00:00:00 +0000 UTC
Datacenter
    = *
Modules:
      governance-policy
Licensed Features:
      Automated Upgrades
      Enhanced Read Scalability
      Redundancy Zones
      Namespaces
      Resource Quotas
      Preemption
      Audit Logging
      Setinel Policies
```

```shell-session
$ nomad license get -stale=true

Product        = nomad
License Status = valid
License ID     = 8c647f6c-1e6d-18d8-7f05-92c4d8110b2d
Customer ID    = 350356e5-8aec-bdf4-8510-b205079ccad2
Issued At      = 2021-03-31 14:21:16.969610774 +0000 UTC
Expires At     = 2022-04-01 00:00:00 +0000 UTC
```

```
Terminates At  = 2022-04-04 00:00:00 +0000 UTC
Datacenter     = *
Modules:
    governance-policy
    multicluster-and-efficiency
Licensed Features:
    Automated Upgrades
    Enhanced Read Scalability
    Redundancy Zones
    Namespaces
    Resource Quotas
    Audit Logging
    Sentinel Policies
    Multiregion Deployments
    Automated Backups
    Multi-Vault Namespaces
```

```
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package command

import (
 "fmt"
 "strings"
 "time"

 "github.com/hashicorp/nomad/api"
 "github.com/mitchellh/cli"
)

var _ cli.Command = &LicenseCommand{}

type LicenseCommand struct {
 Meta
}

func (l *LicenseCommand) Help() string {
 helpText := `
Usage: nomad license <subcommand> [options] [args]

This command has subcommands for managing the Nomad Enterprise license.
For more detailed examples see:
https://developer.hashicorp.com/nomad/docs/commands/license

Retrieve the server's license:

 $ nomad license get
```

```
`
 return strings.TrimSpace(helpText)
}

func (l *LicenseCommand) Synopsis() string {
 return "Interact with Nomad Enterprise License"
}

func (l *LicenseCommand) Name() string { return "license" }

func (l *LicenseCommand) Run(args []string) int {
 return cli.RunResultHelp
}

func OutputLicenseReply(ui cli.Ui, resp *api.LicenseReply) int {
 now := time.Now()
 expired := resp.License.ExpirationTime.Before(now)
 terminated
 := resp.License.TerminationTime.Before(now)
 outputLicenseInfo(ui, resp.License, expired, terminated)
 if expired {
  return 1
 }
 return 0
}

func outputLicenseInfo(ui cli.Ui, lic *api.License, expired, terminated bool) {
 expStr := ""
 if expired {
  expStr = fmt.Sprintf("Expired At|%s", lic.ExpirationTime.String())
 } else {
  expStr = fmt.Sprintf("Expires At|%s", lic.ExpirationTime.String())
 }
 termStr := ""
 if terminated {
  termStr = fmt.Sprintf("Terminated At|%s", lic.TerminationTime.String())
 } else {
  termStr = fmt.Sprintf("Terminates At|%s", lic.TerminationTime.String())
 }

 validity := "valid"
 if expired {
  validity = "expired!"
 }
 output := []string{
  fmt.Sprintf("Product|%s", lic.Product),
  fmt.Sprintf("License Status|%s", validity),
```

```
  fmt.Sprintf("License ID|%s", lic.LicenseID),
  fmt.Sprintf("Customer ID|%s", lic.CustomerID),
  fmt.Sprintf("Issued At|%s", lic.IssueTime),
  expStr,
  termStr,
  fmt.Sprintf("Datacenter|%s", lic.InstallationID),
 }
 ui.Output(formatKV(output))

 if
 len(lic.Modules) > 0 {
  ui.Output("Modules:")
  for _, mod := range lic.Modules {
   ui.Output(fmt.Sprintf("\t%s", mod))
  }
 }
 if len(lic.Features) > 0 {
  ui.Output("Licensed Features:")
  for _, f := range lic.Features {
   ui.Output(fmt.Sprintf("\t%s", f))
  }
 }
}
---
layout: docs
page_title: Nomad Enterprise Licensing
description: >-
 Learn about how Nomad Enterprise licensing works.
---

## Nomad Enterprise Licensing

Licensing capabilities were added to Nomad Enterprise v0.12.0. Each server in
the cluster must have a license to start. Nomad Enterprise can be downloaded from
the [releases site].

Click [here](https://www.hashicorp.com/go/nomad-enterprise) to set up a demo of Nomad Enterprise
or [here](/nomad/tutorials/enterprise/hashicorp-enterprise-license#request-a-trial-license)
for instructions on how to get a trial license.

~> **Note:** A Nomad Enterprise cluster cannot be downgraded to the open
source version of Nomad. Servers running the open source version of Nomad will
panic if they are joined to a Nomad Enterprise cluster, due to raft entries
relating to Enterprise features not being parseable by open source Nomad.

## Expiring Licenses

Nomad Enterprise licenses have an expiration time.
```

You can read and validate the license on a running
server,
on disk, or in your environment with the
[`nomad license` commands](/nomad/docs/commands/license).

Before upgrading Nomad or replacing your license with a new one, you should always run
[`nomad license inspect`](/nomad/docs/commands/license/inspect)
to ensure the license is valid with your server binary.

As a Nomad Enterprise license approaches its expiration time, Nomad servers
will periodically log a warning message about the approaching
expiration. Below shows log excerpts of the warnings.

```
  2021-03-29T15:02:28.100-0400 [WARN]  nomad.licensing: license expiring: time_left=5m0s
  2021-03-29T15:03:28.103-0400 [WARN]  nomad.licensing: license expiring: time_left=4m0s
  2021-03-29T15:04:28.106-0400 [WARN]  nomad.licensing: license expiring: time_left=3m0s
  2021-03-29T15:05:28.109-0400 [WARN]  nomad.licensing: license expiring: time_left=2m0s
  2021-03-29T15:06:28.112-0400 [WARN]  nomad.licensing: license expiring: time_left=1m0s
  2021-03-29T15:07:28.114-0400
[WARN]  nomad.licensing: license expiring: time_left=0s
  2021-03-29T15:07:58.104-0400 [ERROR] nomad.licensing: license expired, please update license: error="invalid
license or license is expired"
```

When the license expires, enterprise functionality will become limited. Only
read operations on enterprise endpoints will be supported, and write
operations will return an error.

Configuring the License

See the server [license configuration] reference documentation on all the
options to set an enterprise license. Nomad will load the license file from
disk or environment when it starts.

~> **Note:** An Enterprise license [tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license) is available
to help you install the license on the server.

In order to immediately alert operators of a bad configuration setting, if a
license configuration option is an invalid or expired license, the Nomad server
will exit with an error.

```
NOMAD_LICENSE=misconfigured nomad agent -dev
==>
No configuration files loaded
==> Starting Nomad agent...
==> Error starting agent: server setup failed: failed to initialize enterprise licensing: a file license was configured but
```

the license is invalid: error decoding version: expected integer
```

See the [License commands](/nomad/docs/commands/license) for more information on interacting with the Enterprise License.

[releases site]: https://releases.hashicorp.com/nomad
[license configuration]: /nomad/docs/configuration/server#license_path
[license endpoint]: /nomad/api-docs/operator/license#updating-the-nomad-enterprise-license
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//go:build !ent

package nomad

func (c *LicenseConfig) Validate() error {
 return nil
}
---
layout: api
page_title: License - Operator - HTTP API
description: |-
 The /operator/license endpoints allow for retrieving the Nomad Enterprise License.

License Operator HTTP API

<EnterpriseAlert />

Get Nomad Enterprise License Info

This endpoint gets information about the current license.

Method	Path	Produces
`GET`	`/v1/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/nomad/api-docs#blocking-queries) and
[required ACLs](/nomad/api-docs#acls).

Blocking Queries	ACL Required
`NO`	`operator:read`

Sample Request

```shell-session
$ curl \
  https://localhost:4646/v1/operator/license
```

Sample Response

```json
{
 "KnownLeader": false,
 "LastContact": 0,
 "LastIndex": 0,
 "License": {
   "CustomerID": "customer name",
   "ExpirationTime":
 "2020-06-01T14:50:16.581304556-04:00",
   "Features": [
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Redundancy Zones",
     "Namespaces",
     "Resource Quotas",
     "Preemption",
     "Audit Logging",
     "Setinel Policies"
   ],
   "Flags": {
     "modules": ["governance-policy"]
   },
   "InstallationID": "*",
   "IssueTime": "2020-06-01T08:50:16.581304556-04:00",
   "LicenseID": "6f706a45-bdac-4a70-968b-d93784894653",
   "Modules": ["governance-policy"],
   "Product": "nomad",
   "StartTime": "2020-06-01T08:50:16.581304556-04:00",
   "TerminationTime": "2020-06-01T14:50:16.581304556-04:00"
 },
 "RequestTime": 0
}
```

```
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package command

import (
 "fmt"
```

```
 "github.com/hashicorp/nomad/api"
 "github.com/posener/complete"
)

type LicenseGetCommand struct {
 Meta
}

func (c *LicenseGetCommand) Help() string {
 helpText := `
Usage: nomad license get [options]

 Gets the license loaded by the server. The command is not forwarded to the
 Nomad leader, and will return the license from the specific server being
 contacted.

 When ACLs are enabled, this command requires a token with the
 'operator:read' capability.

General Options:

 ` + generalOptionsUsage(usageOptsDefault|usageOptsNoNamespace)

 return helpText
}

func (c *LicenseGetCommand) AutocompleteFlags() complete.Flags {
 return complete.Flags{}
}

func (c *LicenseGetCommand) AutocompleteArgs() complete.Predictor {
 return complete.PredictNothing
}

func (c *LicenseGetCommand) Synopsis() string {
 return "Retrieve the current Nomad Enterprise License"
}

func (c *LicenseGetCommand)
 Name() string { return "license get" }

func (c *LicenseGetCommand) Run(args []string) int {
 flags := c.Meta.FlagSet(c.Name(), FlagSetClient)
 flags.Usage = func() { c.Ui.Output(c.Help()) }

 if err := flags.Parse(args); err != nil {
  c.Ui.Error(fmt.Sprintf("Error parsing flags: %s", err))
  return 1
```

```
 }

 client, err := c.Meta.Client()
 if err != nil {
  c.Ui.Error(fmt.Sprintf("Error initializing client: %s", err))
  return 1
 }

 resp, _, err := client.Operator().LicenseGet(&api.QueryOptions{})
 if err != nil {
  c.Ui.Error(fmt.Sprintf("Error getting license: %v", err))
  return 1
 }

 return OutputLicenseReply(c.Ui, resp)
}
---
layout: docs
page_title: Automated license utilization reporting
description: >-
 Learn what data HashiCorp collects to meter Enterprise license utilization. Enable or disable reporting. Review
sample payloads and logs.
---

# Automated license utilization reporting

Automated license utilization reporting sends license utilization data to HashiCorp without requiring you
to manually collect and report them. It also lets you review your license usage with the monitoring
solution you already use (for example Splunk, Datadog, or others) so you can optimize and manage your
deployments. Use these reports to understand how much more you can deploy under your current contract,
protect against overutilization, and budget for predicted consumption.

Automated reporting shares the minimum data required to validate license utilization as defined in our
contracts. They consist of mostly computed metrics and will never contain Personal Identifiable Information
(PII) or other sensitive information.
 Automated reporting shares the data with HashiCorp using a secure,
unidirectional HTTPS API and makes an auditable record in the product logs each time it submits a report.
The reporting process is GDPR compliant and submits reports roughly once every 24 hours.

## Enable automated reporting

To enable automated reporting, you need to make sure that outbound network traffic is configured correctly
and upgrade your enterprise product to a version that supports it. If your installation is air-gapped or
network settings are not in place, automated reporting will not work.

### 1. Allow outbound HTTPS traffic on port 443

Make sure that your network allows HTTPS egress on port 443 from https://reporting.hashicorp.services by
```

allow-listing the following IP addresses:

- 100.20.70.12
- 35.166.5.222
- 23.95.85.111
- 44.215.244.1

2. Upgrade

Upgrade to a release that supports license utilization reporting. These releases include:
- [Nomad v1.7.0](/nomad/downloads) and later

3. Check logs

Automatic license utilization reporting will start sending data within roughly 24 hours. Check the product logs for records that the data sent successfully.

Instructions on how to check logs.

```
[DEBUG] core.reporting: beginning snapshot export
[DEBUG] core.reporting: creating payload
[DEBUG] core.reporting: marshalling payload to json
[DEBUG] core.reporting: generating authentication headers
[DEBUG] core.reporting: creating request
[DEBUG] core.reporting: sending request
[DEBUG] core.reporting: performing request: method=POST url=https://reporting.hashicorp.services
[DEBUG] core.reporting: recording audit record
[INFO]  reporting: Report sent: auditRecord={"payload":{"payload_version":"1","license_id":"d2cdd857-4202-5a45-70a6-e4b531050c34","product":"nomad","product_version":"1.6.0","export_timestamp":"2023-05-26T20:09:13.753921087Z","snapshots":[{"snapshot_version":1,"snapshot_id":"0001J724F90F4XWQDSAA76ZQWA","process_id":"01H1CTJPC1S8H7Q45MKTJ689ZW","timestamp":"2023-05-26T20:09:13.753513962Z","schema_version":"1.0.0","service":"nomad","metrics":{"nomad.billable.nodes":{"key":"nomad.billable.nodes","kind":"counter","mode":"write","value":33}}}]}}
[DEBUG]
 completed recording audit record
[DEBUG] core.reporting: export finished successfully
```

If your installation is air-gapped or your network doesnt allow the correct egress, logs will show an error.

```
[DEBUG] core.reporting: beginning snapshot export
[DEBUG] core.reporting: creating payload
[DEBUG] core.reporting: marshalling payload to json
[DEBUG] core.reporting: generating authentication headers
```

```
[DEBUG] core.reporting: creating request
[DEBUG] core.reporting: sending request
[DEBUG] core.reporting: performing request: method=POST url=https://reporting.hashicorp.services
[DEBUG] core.reporting: error status code received: statusCode=403
```

In this case, reconfigure your network to allow egress and check back in 24 hours.

Opt out

If your installation is air-gapped or you
 want to manually collect and report on the same license
utilization metrics, you can opt-out of automated reporting.

Manually reporting these metrics can be time consuming. Opting out of automated reporting does not mean that you also opt out from sending license utilization metrics. Customers who opt out of automated reporting will still be required to manually collect and send license utilization metrics to HashiCorp.

If you are considering opting out because youre worried about the data, we strongly recommend that you review the [example payloads](#example-payloads) before opting out. If you have concerns with any of the automatically-reported data please bring them to your account manager.

You have two options to opt out of automated reporting: HCL configuration (recommended) and Environment variable (requires restart).

Opting out in your products configuration file doesnt require a system restart, and is the method we recommend. Add the following block to your `server.hcl`
 file.

```hcl
reporting {
 license {
  enabled = false
   }
}
```

If you need to, you can also opt out using an environment variable, which will provide a startup message confirming that you have disabled automated reporting. This option requires a system restart.

Set the following environment variable.

```
$ export OPTOUT_LICENSE_REPORTING=true
```

Now restart your system by following [these instructions](/nomad/docs/operations/nomad-agent).

Check your product logs roughly 24 hours after opting out to make sure that the system isnt trying to send reports.

If your configuration file and environment variable differ, the environment variable setting will take precedence.

Example payloads

HashiCorp collects the following utilization data as JSON payloads:

`billable.nodes` - Number of billable nodes in Nomad

```json
"metrics": {
  "nomad.billable.nodes": {
      "key": "nomad.billable.nodes",
      "kind": "counter",
      "mode": "write",
      "value":
 33
  }
}
```
---
layout: docs
page_title: Nomad Enterprise License FAQ
description: >-
 Frequently Asked Questions pertaining to Nomad Enterprise Licensing.

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Nomad Enterprise version v1.6.0+ent.

For license-related FAQ for earlier versions, please refer to earlier versions of this document
using the version drop-down on this page, e.g. [v1.5.x](/nomad/docs/v1.5.x/enterprise/license/faq).

Q: Can I get a quick summary of the Nomad changes?

Starting with Nomad Enterprise v1.6.0, license expiration is different.

For trial licenses, the behavior remains the same. Enterprise features will stop working
when the license expires, and a server can not start with an expired license.

For new "non-terminating" contract licenses, instead of expiration being compared to the current time, expiration time is compared to the build date of the Nomad binary, which you can find in the output of the [`nomad version`](/nomad/docs/commands/version)

command.

The practical result is that newer contract licenses will work in perpetuity for any v1.6.0+ version of Nomad built prior to the expiration time of the license. No features will stop working, and server agents can be restarted safely.

However, if you try to upgrade to a newer binary past license expiration, the server will not start. To proactively avoid that, you can test a new binary with your license using the new [`nomad license inspect`][license inspect] command before trying to upgrade your servers.

Q: What resources are available?

The list below is a great starting point for learning more about license usage in general.

- [v1.6.0 Upgrade Guide](/nomad/docs/upgrade/upgrade-specific#enterprise-license-validation-with-builddate)

- [Nomad License Documentation](/nomad/docs/enterprise/license)

- [License configuration values documentation](/nomad/docs/configuration/server#license_path)

- [Install a HashiCorp Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license)

Q: Does this affect older versions of Nomad?

This change only affects Nomad Enterprise version v1.6.0+ent and later.

Q: Does the license have to be present on Nomad client nodes?

Only Nomad server nodes need to have the license present. Nomad agents running with the `-dev` flag will also need a license.

Q: What are some pitfalls that could be experienced during an upgrade because of the license changes?

If you have an expired license that has not yet become fully nonfunctional (i.e. it is in grace period between ExpirationTime and TerminationTime), then a Nomad server will not be able to start using a new v1.6.0+ binary.

Before shutting down a server agent to replace it with a new version, be sure to run [`nomad license inspect`][license inspect] with the new binary.

Q: How can a user get their existing license?

If you are an existing HashiCorp enterprise customer you may contact your organization's customer success manager (CSM) or email support-softwaredelivery@hashicorp.com for information on how to get your organization's enterprise license.
You can use `nomad license get` to retrieve information about the license, but not the license itself.

Q: What happens when a license expires?

All features will continue to work until you attempt to upgrade Nomad that is newer than your license expiration time.
In that case, the server agent will fail to start, and you'll need to roll back to the previous working version and acquire a new license to use with the newer Nomad version before attempting the upgrade again.

Q: Are licenses cluster-specific? node-specific?

Licenses can be reused on different nodes and different clusters.

Q: Where can users get a trial license for Nomad?

Follow [these instructions](/nomad/tutorials/enterprise/hashicorp-enterprise-license#request-a-trial-license) to request and enable a free 30-day trial license.

Q: When a Nomad client agent restarts, will
 it still need a license file?

Every time `nomad agent` runs as a server (or in `-dev`), it requires a license.

Q: May I downgrade Nomad Enterprise from v1.6.0 to an earlier version?

Yes, if you upgrade a server to 1.6.0+ but it fails to start due to license expiration,
you can roll back to a previous working version with the old expiration logic.

If a server fails to start for any other reason aside from license expiration,
roll back to a previous version is not supported due to the Nomad state store
not having forward compatibility, and may result in a crash loop.

Q: Is there a tutorial available for the license configuration steps?
Please visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license).

[license inspect]: /nomad/docs/commands/license/inspect
// Copyright (c) HashiCorp, Inc.
// SPDX-License-Identifier: BUSL-1.1

```
package nomad

import (
 "slices"
 "time"
)

// LicenseConfig allows for tunable licensing config
// primarily used for enterprise testing
type LicenseConfig struct {
```

```
 // BuildDate is the time of the git commit used to build the program.
 BuildDate time.Time

 // LicenseEnvBytes is the license bytes to use for the server's license
 LicenseEnvBytes string

 // LicensePath is the path to use for the server's license
 LicensePath string

 // AdditionalPubKeys is a set of public keys to
 AdditionalPubKeys []string
}

func (c *LicenseConfig) Copy() *LicenseConfig {
 if c == nil {
  return nil
 }

 nc := *c
 nc.AdditionalPubKeys = slices.Clone(c.AdditionalPubKeys)
 return &nc
}
ISC
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package command

import (
 "testing"
 "time"

 "github.com/hashicorp/nomad/api"
 "github.com/hashicorp/nomad/ci"
 "github.com/mitchellh/cli"
 "github.com/shoenig/test/must"
)

var _ cli.Command = &LicenseGetCommand{}

func TestCommand_LicenseGet_OSSErr(t *testing.T) {
 ci.Parallel(t)

 srv, _, url := testServer(t, false, nil)
 defer srv.Shutdown()

 ui := cli.NewMockUi()
 cmd := &LicenseGetCommand{Meta: Meta{Ui: ui}}
```

```
 code := cmd.Run([]string{"-address=" + url})
 if srv.Enterprise {
  must.Zero(t, code)
 } else {
  must.One(t, code)
  must.StrContains(t, ui.ErrorWriter.String(), "Nomad Enterprise only endpoint")
 }
}

func TestOutputLicenseReply(t *testing.T) {
 ci.Parallel(t)

 now := time.Now()
 lic := &api.LicenseReply{
  License: &api.License{
   LicenseID:       "licenseID",
   CustomerID:      "customerID",
   InstallationID:  "*",
   IssueTime:       now,
   StartTime:       now,
   ExpirationTime:  now.Add(1
 * time.Hour),
   TerminationTime: now,
   Product:         "nomad",
   Flags: map[string]interface{}{
    "": nil,
   },
  },
 }

 ui := cli.NewMockUi()

 must.Zero(t, OutputLicenseReply(ui, lic))

 out := ui.OutputWriter.String()
 must.StrContains(t, out, "Customer ID")
 must.StrContains(t, out, "License ID")
}
---
layout: docs
page_title: 'Commands: license inspect'
description: |
 The license inspect command is used to inspect and validate an enterprise license.
---

# Command: license inspect
```

<EnterpriseAlert>
 This command is only present in Nomad Enterprise.
</EnterpriseAlert>

The `license inspect` command is used to inspect and validate a Nomad Enterprise license. It will read the license from a file on disk or an environment variable and exit non-0 if the license is not valid with the Nomad binary.

This command should always be run with the new binary before upgrading Nomad on a server, as the server agent will not start with an invalid license.

Usage

```plaintext
nomad license inspect [/path/to/license.hclic]
```

Examples

With a license file argument:

```shell-session
$ nomad license inspect /path/to/nomad/license.hclic
Source: /path/to/nomad/license.hclic
Product: nomad
License ID: aaaaaaaa-aaaa-aaaa-aaaa-aaaaaaaaaaaa
Customer ID: bbbbbbbb-bbbb-bbbb-bbbb-bbbbbbbbbbbb
Installation
 ID: *
Issue Time: 2021-12-01 17:49:23.021041516 +0000 UTC
Start Time: 2021-12-01 00:00:00 +0000 UTC
Expiration Time: 2023-12-01 00:00:00 +0000 UTC
Termination Time: 2024-01-01 00:00:00 +0000 UTC
Build Date: 2000-01-01 00:00:00 +0000 UTC
Flags: {
  "modules": [
    "multicluster-and-efficiency",
    "governance-policy"
  ]
}

License is valid
```

With a license file environment variable:

```shell-session
$ export NOMAD_LICENSE_PATH=/path/to/nomad/license.hclic
```

```
$ nomad license inspect
Source: /path/to/nomad/license.hclic (path from the NOMAD_LICENSE_PATH environment variable)
Product: nomad
.....
License is valid
```

With a license string environment variable:

```shell-session
$ export NOMAD_LICENSE=full-license-text-string
$ nomad license inspect
Source: NOMAD_LICENSE environment variable
.....
License is valid
```

Example error

```shell-session
$ nomad license inspect license.hclic
...
Validation Errors:
  * license is no longer valid
  * license expiration
 date is before version build date: expiration=2023-01-13T23:59:59Z build=2023-03-17T00:00:00Z
```

1.3429 go.opentelemetry.io/otel/exporters/otlp/otlptrace 1.33.0

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1.3430 go.opentelemetry.io/otel/exporters/otlp/otlptrace/otlptracegrpc 1.33.0

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1.3431 github.com/prometheus/sigv4 0.1.0

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1.3432 google-pprof 0.0.0-20241210010833-40e02aabc2ad

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1.3433 python3-http-parser 0.9.0-1build4

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util.py - IOrderedDict

IOrderedDict is based on collections.OrderedDict module, with
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py25.IOBase, py25.RawIOBase, py25.BufferedReader, py25.TextIOWrapper:

Partial implementation of io classes from python 2.7. Only read functions have been ported.

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1.3434 github.com/efficientgo/core 1.0.0-rc.3

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1.3437 github.com/dolthub/swiss 0.2.1

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1.3442 golang 1.23.2

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1.3445 dhcp 0.0.0-20240829085014-a3a4c1f04475

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1.3446 x-text 0.22.0

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1.3449 github.com/rubenv/sql-migrate 1.7.1

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
```

```
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
```

```
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
```

```
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get               []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
```

```
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}
```

```
// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
```

```
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
```

```
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)
```

```
var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:           []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
```

```
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
```

```
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
```

```
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}
```

```
 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
```

```
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
```

```
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}
```

```
func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
```

```
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
```

```
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
```

```
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
```

```
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())
```

```
 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
```

```
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
 resp := &procurementpb.EnumerateLicensedUsersResponse{}
 if
pageToken != "" {
  req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
  req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
```

```
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
```

```
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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```

```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
```

```
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
```

```
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
```

```
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}
```

```
// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
```

```
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
```

```
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}
```

```
func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
```

```
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
```

```
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
```

```
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
```

```
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
```

```
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
```

```
 return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
```

0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73,
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,
0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79,
0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75,
0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65,
0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,

0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x63, 0x6f, 0x6c, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x41, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72,
0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
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0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73,
0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x58, 0xda, 0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x3f,
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0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73,
0x2f, 0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12,

0xe7, 0x01, 0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
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0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3f, 0x2e, 0x67,
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0x3a, 0x75, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x92, 0x02, 0x0a, 0x16, 0x45, 0x6e,
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0x65, 0x6e,
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69,
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0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
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0x2a, 0x2f, 0x6f,
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0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
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0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
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0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
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0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,

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 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
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 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
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 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
```

```
 (*AssignRequest)(nil),                    // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                   // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                  // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                 // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                          // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                  // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
```

```
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
```

```
  NumServices:   1,
 },
 GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
 DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
 MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}
```

```
func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
```

```
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
```

```
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
```

```
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
```

```
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
// Copyright 2024 Google LLC
//
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
```

```
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
```

```
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
```

```
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
```

```
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string
```

```
 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}
```

```
func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
```

```
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client
and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf,
resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
```

```
 return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }
```

```
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()
```

```
// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the
```

list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
 {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from
 client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
```

```
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
```

```
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
```

```
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
```

```
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
```

```
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
```

```
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
```

```
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
}
resp, err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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```

```
// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
```

```
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
```

```
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
```

```
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
```

```
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
```

```
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54,
 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
```

```
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
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 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
```

```
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.3451 k8s-io-client-go 0.32.1

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1.3452 golang-org-x-exp 0.0.0-20250106191152-7588d65b2ba8

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1.3454 gonvenience-term 1.0.3

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1.3455 spf13-pflag 1.0.6

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1.3456 github.com/azure/azure-sdk-for-go/sdk/azcore 1.17.0

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//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"

```
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
```

```
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:              newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:              newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                    *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete              *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate              *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
```

```
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
```

```
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
```

```
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
```

```
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
```

```
 err != nil {
  return nil, err
 }
 resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
 newListByResourceGroupPager = &resp
 l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
 server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
  page.NextLink = to.Ptr(createLink())
 })
}
resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
if err != nil {
 return nil, err
}
if !contains([]int{http.StatusOK}, resp.StatusCode) {
 l.newListByResourceGroupPager.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PagerResponderMore(newListByResourceGroupPager) {
 l.newListByResourceGroupPager.remove(req)
}
return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
(*http.Response, error) {
if l.srv.NewListBySubscriptionPager == nil {
 return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
}
newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
if newListBySubscriptionPager == nil {
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
 regex := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 1 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resp := l.srv.NewListBySubscriptionPager(nil)
 newListBySubscriptionPager = &resp
 l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
 server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
  page.NextLink = to.Ptr(createLink())
 })
}
```

```
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
```

```
 l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
```

```
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
```

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```
{
 "main": "dist/src/index.js",
 "dependencies": {
   "@azure-tools/typespec-go": "0.4.2"
 },
 "devDependencies": {
   "@azure-tools/typespec-autorest": "0.54.0",
   "@azure-tools/typespec-azure-core": "0.54.0",
   "@azure-tools/typespec-azure-resource-manager": "0.54.0",
   "@azure-tools/typespec-azure-rulesets": "0.54.0",
   "@azure-tools/typespec-client-generator-core": "0.54.0",
   "@typespec/compiler": "1.0.0-rc.0",
   "@typespec/http": "1.0.0-rc.0",
   "@typespec/openapi": "1.0.0-rc.0",
   "@typespec/rest": "0.68.0",
   "@typespec/versioning": "0.68.0",
   "@typespec/streams": "0.68.0",
   "@typespec/events": "0.68.0",
   "@typespec/sse": "0.68.0",
   "@azure-tools/typespec-liftr-base": "0.8.0"
 }
}
```


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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}
```

```
// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
```

```
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
```

```
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
```

```
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
```

```
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
```

```
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
```

```
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
```

```
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-07-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
```

```
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
```

```
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
```

```
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.
// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //
    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
```

```
 log.Fatalf("failed to obtain a credential: %v", err)
}
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
"{licenseName}", armhybridcompute.License{
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
```

```
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
```

```
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
```

```
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
```

```
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
```

```
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
```

```
//      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//
    },
//     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//     TenantID: to.Ptr("{tenandId}"),
//    },
//  }},
// }
}
}
```

1.3457 go.opentelemetry.io/otel/exporters/otlp/otlpmetric/otlpmetricgrpc 1.34.0

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```
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
```

```
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
```

```
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get               []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
```

```
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
```

```
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
```

```
 return nil, err
}

callOpts := defaultLicenseCodesRESTCallOptions()
c := &licenseCodesRESTClient{
 endpoint:    endpoint,
 httpClient:  httpClient,
 CallOptions: &callOpts,
 logger:      internaloption.GetLogger(opts),
}
c.setGoogleClientInfo()

return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
```

```
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
```

```
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
```

```
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
```

```
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}
```

```
// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
```

```
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
```

```
 if err != nil {
  return nil, err
 }
 clientOpts = append(clientOpts, hookOpts...)
}

connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
if err != nil {
 return nil, err
}
client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

c := &licenseManagementGRPCClient{
 connPool:
     connPool,
 licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
 CallOptions:            &client.CallOptions,
 logger:                 internaloption.GetLogger(opts),
 operationsClient:       longrunningpb.NewOperationsClient(connPool),
}
c.setGoogleClientInfo()

client.internalClient = c

return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
```

```
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
```

```
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
```

```
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
```

```
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
```

```
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
```

```
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
```

```
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
```

```
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
```

```
m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
jsonReq, err := m.Marshal(req)
if err != nil {
 return
nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.UnassignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(),
bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
  if req.GetPageToken() != "" {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
  headers := gax.BuildHeaders(ctx, hds...)
  e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   if settings.Path != "" {
    baseUrl.Path = settings.Path
```

```
  }
  httpReq,
 err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
```

```
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
```

```
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb
```

```
import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
```

```
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
```

```
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
```

```
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}
```

```
func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
```

```
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
```

```
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
```

```
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
```

```
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
```

```
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
```

```
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}
```

```
var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
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 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
```

```
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                    // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
```

```
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
```

```
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
```

```
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
```

```
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}
```

```
func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
```

```
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
```

```
 Server:     srv,
 FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
```

```
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2024 Google LLC
//
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute
```

```
import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
```

```
    },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
```

```
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
```

```
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}
```

```
// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
```

```
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
```

```
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf,
resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
```

```
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
```

```
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
```

```
 return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
```

```
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
```

```
 nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
```

```
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
```

```
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2024 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.
```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2024 Google LLC
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// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
```

```
package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
```

```
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 //
TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
}
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
```

```
//
TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
}
resp, err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
```

```
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
```

```
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}
```

```
func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
```

```
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
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0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
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0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
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0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
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0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
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0x72, 0x6f, 0x6c, 0x65, 0x42,
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0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72,
0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
```

```
 },
 GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.3460 go.opentelemetry.io/otel/exporters/otlp/otlptrace/otlptracegrpc 1.34.0

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1.3466 otel-exporters-otlp-otlpmetric-otlpmetrichttp 1.34.0

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1.3474 go-mssqldb 1.8.0

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 - ../../enterprise/license/activate-aws-marketplace-license/
 - ../../enterprise/license/activate-aws-marketplace-license/about-ge-license-through-aws/
description: Activate your Grafana Enterprise license purchased in AWS Marketplace
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keywords:
 - grafana
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 products:
   - enterprise
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title: Activate a Grafana Enterprise license purchased through AWS Marketplace
weight: 400

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{{< section >}}

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---
aliases:
 - ../admin/view-server-settings/
 - ../admin/view-server-stats/
 - view-server/
 - view-server/view-server-settings/
 - view-server/view-server-stats/
description: How to view server settings in the Grafana UI
keywords:
 - grafana
 - configuration
 - server
 - settings
labels:
 products:
   - cloud
   - enterprise
title: View server statistics and license
weight: 400

View server statistics and license

This setting contains information about tools that Grafana Server Admins can use to learn more about their Grafana servers.

View Grafana server settings

> Refer to [Role-based access control]({{< relref "../roles-and-permissions/access-control" >}}) in Grafana Enterprise to understand how you can control access with RBAC permissions.

If you are a Grafana server administrator, use the Settings tab to view the settings that are applied to your Grafana server via the [Configuration]({{< relref "../../setup-grafana/configure-grafana#configuration-file-location" >}}) file and any environmental variables.

> **Note:** Only Grafana server administrators can access the **Server Admin** menu. For more information about about administrative permissions, refer to [Roles and permissions]({{< relref "../roles-and-permissions#grafana-server-administrators" >}}).

View server settings

1. Log in to your Grafana server with an account that has the Grafana Admin flag set.
1. Click **Administration** in the left-side menu, **General**, and then **Settings**.

Available settings

For a full list of server settings, refer to [Configuration]({{< relref "../../setup-grafana/configure-grafana#server" >}}).

View Grafana server stats

> Refer to [Role-based access control]({{< relref "../roles-and-permissions/access-control" >}}) in Grafana Enterprise to understand how you can control access with RBAC permissions.

If you are a Grafana server admin, then you can view useful statistics about your Grafana server in the Stats & Licensing tab.

>
 Note: Only Grafana server administrators can access the **Server Admin** menu. For more information about about administrative permissions, refer to [Roles and permissions]({{< relref "../roles-and-permissions#grafana-server-administrators" >}}).

View server stats

1. Log in to your Grafana server with an account that has the Grafana Admin flag set.
1. Click **Administration** in the left-side menu, **General**, and then **Stats and license**.

Available stats

The following statistics are displayed in the Stats tab:

- Total users
 Note: Total users = Total admins + Total editors + Total viewers
- Total admins
- Total editors
- Total viewers
- Active users (seen last 30 days)
 Note: Active users = Active admins + Active editors + Active viewers
- Active admins (seen last 30 days)
- Active editors (seen last 30 days)
- Active viewers (seen last 30 days)
- Active sessions
- Total dashboards
- Total orgs
- Total playlists
- Total snapshots
- Total dashboard tags
-
 Total starred dashboards
- Total alerts

Counting users

If a user belongs to several organizations, then that user is counted once as a user in the highest organization role they are assigned, regardless of how many organizations the user belongs to.

For example, if Sofia is a Viewer in two organizations, an Editor in two organizations, and Admin in three organizations, then she would be reflected in the stats as:

- Total users 1
- Total admins 1

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---
aliases:
- ../../../enterprise/activate-aws-marketplace-license/manage-license-in-aws-marketplace/
- ../../../enterprise/license/activate-aws-marketplace-license/manage-license-in-aws-marketplace/
description: Manage your Grafana Enterprise license in AWS Marketplace
keywords:
- grafana
- enterprise
- aws
- marketplace
- manage
- add
- remove
- users
labels:
products:
- enterprise

- oss
title: Manage your Grafana Enterprise license in AWS Marketplace
weight: 400

Manage your Grafana Enterprise license in AWS Marketplace

You can use AWS Marketplace to make the following modifications to your Grafana Enterprise license:

- Add active users
- Remove active users
- Cancel your subscription to Grafana Enterprise.

To modify your Grafana Enterprise subscription in AWS Marketplace:

1. Open the AWS Console and navigate to [Subscription Management](https://console.aws.amazon.com/marketplace/home/subscriptions#/subscriptions).

1. Update your license.

1. Sign in to Grafana as a Server Administrator.

1. Click **Administration** in the side navigation menu, **General**, and then **Stats and license**.

1. In the **Token** section under **Enterprise License**, click **Renew token**.

This action retrieves updated license information from AWS.

> To learn more about licensing and active users, refer to [Activate a Grafana Enterprise license purchased through AWS Marketplace]({{< relref "../" >}}).
---
aliases:
- ../../../enterprise/activate-aws-marketplace-license/activate-license-on-instance-outside-aws/
- ../../../enterprise/license/activate-aws-marketplace-license/activate-license-on-instance-outside-aws/
description: Activate a Grafana Enterprise license from AWS on an instance deployed outside of AWS
keywords:
- grafana
- enterprise
- aws
- marketplace
- activate
labels:
products:
- enterprise
- oss
title: Activate a Grafana Enterprise license from AWS on an instance deployed outside

of AWS
weight: 300

Activate a Grafana Enterprise license from AWS on an instance deployed outside of AWS

While AWS Marketplace lists ECS and EKS as the supported environments for Grafana Enterprise, you can apply a Grafana Enterprise license from AWS Marketplace to any Grafana instance with network access to the AWS licensing service.

Before you begin

- Purchase a subscription to [Grafana Enterprise from AWS Marketplace](https://aws.amazon.com/marketplace/pp/prodview-dlncd4kzt5kx6).
- Be sure that the IAM user that was used to purchase Grafana Enterprise has permission to manage subscriptions, create new IAM users, and create access policies.
- Be sure there is network access between AWS and the environment where you intend to run Grafana. Network access is required because your Grafana instance communicates with the [AWS License Manager endpoints and quotas](https://docs.aws.amazon.com/general/latest/gr/licensemanager.html) to retrieve license and subscription information. Grafana instances with access to the public internet will have access to AWS license manager.

To activate a Grafana Enterprise license from AWS on a Grafana Enterprise instance deployed outside of AWS, complete the following tasks.

Task 1: Install Grafana Enterprise

To install Grafana, refer to the documentation specific to your implementation.

- [Install Grafana]({{< relref "../../../../setup-grafana/installation/" >}}).
- [Run Grafana Docker image]({{< relref "../../../../setup-grafana/installation/docker/" >}}).
- [Deploy Grafana on Kubernetes]({{< relref "../../../../setup-grafana/installation/kubernetes/#deploy-grafana-enterprise-on-kubernetes" >}}).

Task 2: Create an AWS IAM user with access to your Grafana Enterprise license

To retrieve your license, Grafana Enterprise requires access to your AWS account and license information. To grant access, create an IAM user in AWS with access to the license, and pass its credentials as environment variables on the host or container where Grafana is running. These environment variables allow Grafana to retrieve license details from AWS.

1. In the AWS License Manager service, create an IAM policy with the following permissions:

  - `"license-manager:CheckoutLicense"`
  - `"license-manager:ListReceivedLicenses"`
  - `"license-manager:GetLicenseUsage"`
  - `"license-manager:CheckInLicense"`

For more information about creating a policy in AWS, refer to [Creating IAM policies](https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_create.html).

For more information about AWS Identity and Access Management, refer to [IAM users](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_users.html).

1. To limit the policy to obtain usage data just for Grafana Enterprise, in the **Resources** section of the policy, specify your license ARN.

You can find your license ID in the **Granted Licenses** section of [AWS License Manager](https://console.aws.amazon.com/license-manager/home).

The policy JSON should look similar to the following example:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
        "Sid": "VisualEditor0",
        "Effect": "Allow",
        "Action": "license-manager:GetLicenseUsage",
        "Resource": "arn:aws:license-manager::[YOUR_ACCOUNT]:license:[YOUR_LICENSE_ID]"
    },
    {
        "Sid": "VisualEditor1",
        "Effect": "Allow",
        "Action":
[
          "license-manager:CheckoutLicense",
          "license-manager:ListReceivedLicenses",
          "license-manager:CheckInLicense"
        ],
        "Resource": "*"
    }
  ]
}
```

1. Create an IAM user and choose access key credentials as its authentication method.

For more information about creating an IAM user, refer to [IAM users](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_users.html).

For more information about access key credentials, refer to [Managing access keys for IAM users](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_access-keys.html).

1. Attach the policy you created to the IAM user.

1. Add the following values as environment variables to the host or container running Grafana:

  - AWS region
  - IAM user's access key ID
  - IAM user's secret access key

  The environment variables should look similar to the following example:

  ```
  AWS_ACCESS_KEY_ID=ABCD5E75FGHIJKTM7
   AWS_SECRET_ACCESS_KEY=k8fhYAQVy+5NhCejhe6HeSjSphjRuy+12C06
  AWS_REGION=us-east-1
  ```

Task 3: Configure Grafana Enterprise to validate its license with AWS

In this task you configure Grafana Enterprise to validate the license with AWS instead of Grafana Labs.

Choose one of the following options to update the [license_validation_type]({{< relref "../../../../setup-grafana/configure-grafana/enterprise-configuration/#license_validation_type" >}}) configuration to `aws`:

- **Option 1:** In the `[enterprise]` section of the grafana.ini configuration file, add `license_validation_type=aws`.

  For example:

  ```
  [enterprise]
  license_validation_type=aws
  ```

- **Option 2:** Add the following environment variable to the container or host:

  ```
  GF_ENTERPRISE_LICENSE_VALIDATION_TYPE=aws
  ```

Task 4: Start or restart Grafana

To activate Grafana Enterprise features, start (or restart) Grafana.

For information about restarting Grafana, refer to [Restart
 Grafana]({{< relref "../../../../setup-grafana/start-restart-grafana/" >}}).
The icons contained in this solid icons folder were originally created
by [IconScout](https://github.com/Iconscout/unicons)

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aliases:
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title: Transfer your AWS Marketplace Grafana Enterprise license
weight: 400

Transfer your AWS Marketplace Grafana Enterprise license

You can transfer your AWS Marketplace Grafana Enterprise license to another Grafana Enterprise instance. The transfer process requires that you first remove your license from one instance, and then apply the license to another instance.

> When you remove an Enterprise license, the system immediately disables all Grafana Enterprise features.

To remove an Enterprise license from a Grafana Enterprise instance, perform one of the following steps:

- If you are using Amazon ECS or
Amazon EKS, remove the `GF_ENTERPRISE_LICENSE_VALIDATION_TYPE` environment variable from the container.
- If you have deployed Grafana Enterprise outside of AWS, remove the `aws` license_validation_type value from the grafana.ini configuration file.

It can take the system up to one hour to clear the license. After the system clears the license, you can apply the same license to another Grafana Enterprise instance.

To determine that the system has returned your license, check the license details in AWS License Manager.
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aliases:
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description: Activate a Grafana Enterprise license from AWS Marketplace on ECS
keywords:
- grafana
- ecs
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labels:
products:
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title: Activate a Grafana Enterprise license from AWS Marketplace on ECS
weight: 250

Activate a Grafana Enterprise license from AWS Marketplace on ECS

If you have purchased a Grafana Enterprise subscription through AWS Marketplace, you must activate it in order to use Grafana Enterprise data source plugins and features in Grafana.

Before you begin

- Purchase a subscription to [Grafana Enterprise from AWS Marketplace](https://aws.amazon.com/marketplace/pp/prodview-dlncd4kzt5kx6).
- Be sure that the IAM user that was used to purchase Grafana Enterprise has permission to manage subscriptions, create new IAM users and roles, and create access policies.

To activate your license, complete the following tasks.

Task 1: Deploy Grafana Enterprise on Amazon ECS

1. Deploy Grafana Enterprise on Amazon ECS.

For more information about deploying an application on Amazon ECS, refer to [Creating an Amazon ECS service](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/create-service.html).

1. As you create the Amazon ECS service, use the intended Grafana Enterprise container image version.

   For example, enter `grafana/grafana-enterprise:11.3.0`.

   > Only Grafana Enterprise versions 8.3.0 and later support licenses granted through AWS Marketplace.

Task 2: Configure Grafana for high availability

Grafana requires that you configure a database to hold dashboards, users, and other persistent data.

Before you begin

- Ensure that you have a supported Grafana database available.
  - For a list of supported databases, refer to [Supported databases]({{< relref "../../../../setup-grafana/installation/#supported-databases" >}}).
  - For information about creating a database, refer to [Creating an Amazon RDS DB instance](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_CreateDBInstance.html).
- Review the information required to connect to the RDS DB instance. For more information, refer to [Connecting to an Amazon RDS DB instance](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_CommonTasks.Connect.html).

To configure Grafana for high availability:

1. In AWS ECS, use environment variables to update the `database` parameters.

   For a list of database parameters, refer to [Configuration]({{< relref "../../../../setup-grafana/configure-grafana/#database" >}}).

1. Create a revision of the task definition for the ECS Task that runs Grafana Enterprise.

   For more information about creating a task, refer to [Updating a task definition using the classic console](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/update-task-definition.html).

1. Within the new revision, edit the Grafana Enterprise container for this task, and add the following environment variables to the container:

   ```
   GF_DATABASE_TYPE=[database type]
   GF_DATABASE_HOST=[database address and port]
   GF_DATABASE_NAME=[database name]
   GF_DATABASE_USER=[database username]
   GF_DATABASE_PASSWORD=[database password]
   ```

> For more information about how to update your ECS service with an environment variable, refer to [Updating a service using the new console](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/update-service-console-v2.html).

Task 3: Configure Grafana Enterprise to validate its license with AWS

In this task you configure Grafana Enterprise to validate the license with AWS instead of Grafana Labs.

1. In AWS IAM, create an access policy with the following permissions:

  - `"license-manager:CheckoutLicense"`
  - `"license-manager:ListReceivedLicenses"`
  - `"license-manager:GetLicenseUsage"`
  - `"license-manager:CheckInLicense"`

  For more information about creating an access policy, refer to [Creating IAM policies (console)](https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_create-console.html).

  For more information about AWS license permissions, refer to [Actions, resources, and condition keys for AWS License Manager](https://docs.aws.amazon.com/service-authorization/latest/reference/list_awslicensemanager.html).

1. Create an Elastic Container Service task role and attach the policy you created in the previous step.

  For more information about creating a task role, refer to [IAM Roles for Tasks](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/task-iam-roles.html).

1. Create a revision of the task definition for the ECS Task that runs Grafana Enterprise.

  For more information about creating a revision of the task definition, refer to [Updating a task definition using the classic console](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/update-task-definition.html).

1.
 Within the new revision, perform the following steps:

  a. Update the Task Role of your ECS Task to the role that you created, with permission to access license information.

  b. Edit the Grafana Enterprise container for this task, and add the following environment variable to the container:

  ```
  GF_ENTERPRISE_LICENSE_VALIDATION_TYPE=aws
  ```

  For more information about how to update your ECS service with an environment variable, refer to [Updating a service using the new console](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/update-service-console-v2.html).

Task 4: Start or restart Grafana

1. To restart Grafana and activate your license, update the service running Grafana to use the latest revision of the task definition that you created.
1. After you update the service, navigate to your Grafana instance, sign in with Grafana Admin credentials, and navigate to **Administration > General > Stats
 and license** to validate that your license is active.

For more information about validating that your license is active, refer to [Grafana Enterprise license restrictions]({{< relref "../../#grafana-enterprise-license-restrictions" >}}).

1.3475 go.opentelemetry.io/collector/consumer 1.24.0

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1.3481 google.golang.org/genproto/googleapis/rpc 0.0.0-20250115164207-1a7da9e5054f

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1.3482 google-golang-org-genproto-googleapis-api 0.0.0-20250115164207-1a7da9e5054f

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* /com-springsource-javax-activation-sources-1-1-1-jar/com/sun/activation/registries/MailcapFile.java
* /com-springsource-javax-activation-sources-1-1-1-jar/javax/activation/URLDataSource.java
* /com-springsource-javax-activation-sources-1-1-1-jar/javax/activation/MimetypesFileTypeMap.java
* /com-springsource-javax-activation-sources-1-1-1-jar/javax/activation/UnsupportedDataTypeException.java
* /com-springsource-javax-activation-sources-1-1-1-jar/javax/activation/MimeTypeParseException.java
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* /com-springsource-javax-activation-sources-1-1-1-jar/javax/activation/package.html

1.3486 file 1:5.41-3ubuntu0.1

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1.3490 abseil-cpp-log-internal-fnmatch 20240722.0-r0

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1.3491 x-sys 0.30.0

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1.3492 x-sync 0.11.0

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1.3493 protobuf-go 1.36.5

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1.3494 protobuf 1.36.5

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1.3495 aws-sdk-go-v2-service-ssooidc 1.28.14

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
```

```
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
```

```
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
```

```
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
```

```
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
```

```
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string
```

```
 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
```

```
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry

```
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
```

```
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
```

```
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
        "type": "integer"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
        "type": "long"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
           },
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
           },

     {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
           },
           {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",

"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's

registered to your account. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request. "
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": " The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request. "
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "

```
            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
    "type": "operation",
    "input": {
        "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",

"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {

"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the

registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{

```
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
        "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
```

"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [

```
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
                    },
                    {
                      "conditions": [],
                      "endpoint": {
```

```
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"

  }
  ],
  "type": "tree"
},
{
  "conditions": [],
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {

  "fn": "aws.partition",
              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
```

```
                "argv": [
                  {

            "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

],
              "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"

        },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [

                        {
                            "ref": "PartitionResult"
```

```
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],

        "rules": [
                                            {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],

                        "type": "tree"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {

            "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
```

```
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

        "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                    ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
```

but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-

subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}

```
            ],
            "type": "tree"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
```

{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
```

{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack

disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"

     },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
      },
```

"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n

```
<code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

      "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {

"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

           "NextToken": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",

```
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
        "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
     }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
            },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
```

"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}

```
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
```

"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {

"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",

"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {

"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
```

"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string
```

```
 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash

setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            },
            "ActiveDirectorySettings":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
```

{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables

administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

 }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
    },

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",

"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
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"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
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},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the
identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
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"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}

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            },
            "Products": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                    "smithy.api#required": {}
                }
            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
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```
            }
        },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
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                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
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},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],

"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
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"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {

"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
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{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
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{
"conditions": [
{
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"argv": [
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"ref": "UseFIPS"
},
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}
],

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                "type": "error"
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                "type": "error"
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                "conditions": [],
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                        "ref": "Endpoint"
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"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
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        "type": "tree"
    },
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        "conditions": [
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                "argv": [
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                    }
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                        "fn": "aws.partition",

                    "argv": [
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                        }
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                    "assign": "PartitionResult"
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                "rules": [
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                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },

true
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                                "argv": [
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                                        "ref": "UseDualStack"
                                    },
                                    true
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                                "conditions": [
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"fn": "booleanEquals",
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                                                "argv": [
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"supportsFIPS"
]
}
]
},

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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
},
"supportsDualStack"
]
}

]
}
],
"rules": [
{
"conditions": [],
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

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                        "fn": "booleanEquals",
                        "argv": [

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                          "ref": "UseFIPS"
                        },
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                      ]
                    }
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                  "rules": [
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                          "fn": "booleanEquals",
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                              "fn": "getAttr",
                              "argv": [

{
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                              "supportsFIPS"
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                            "headers": {}
                          },
                          "type": "endpoint"
                        }
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                      "type": "tree"
                    },
                    {
                      "conditions": [],
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"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"

}
],
"type": "tree"
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{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
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"conditions": [
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"argv": [
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"argv": [
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"ref": "PartitionResult"
},
"supportsDualStack"
]

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}
],
"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

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                    "type": "endpoint"
                }

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                "type": "tree"
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            {
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                "type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                "headers": {}
        },
        "type": "endpoint"
    }
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  "type": "tree"
}
],
"type": "tree"
},
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  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
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"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
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          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
```

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            },
            "params": {
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              "UseFIPS": true,
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            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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              }
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            "params": {
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      "UseFIPS": true,
              "UseDualStack": false
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            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
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            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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{
                "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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              "expect": {
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1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS":
true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
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              "expect": {
                "endpoint":
{
                  "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
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            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
                }
```

```
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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{
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }
        },
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          "UseDualStack": false
        }
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        "expect": {
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          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
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      },
      {
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}

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        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }

      },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
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"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",

"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},

"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""

},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},
{
"name": "UNHEALTHY",
"value": "UNHEALTHY",
"documentation": ""
},
{
"name": "NOT_APPLICABLE",
"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {

"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}

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        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
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"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next
token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

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        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                "smithy.api#range": {
                    "min": 1,
                    "max": 100
                }
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n            <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
    "type": "structure",
    "members": {
        "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
```

"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
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"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating.
This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions
operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags for the specified resource. "
}
}

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    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
```

```
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
   <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
         "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
        },
        "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
```

"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":

"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}

```
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
      "type": "structure",
      "members": {
        "SecretId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {

       "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
      "members": {
```

"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}

```
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

           "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

         },
          {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

```
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
```

"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {

```
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

    "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },

            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
    <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security
```

group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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ListReceivedLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

```
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
```

```
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
```

```
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:        region,
 ServiceID:     ServiceID,
 OperationName: "CheckInLicense",
}
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
              "namespace": "*"
          }
      ]
  },
  "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
          "type": "service",
          "version": "2018-08-01",
          "operations": [
              {
                  "target": "com.amazonaws.licensemanager#AcceptGrant"
              },

   {
                  "target": "com.amazonaws.licensemanager#CheckInLicense"
```

},
{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},

{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},

```
        "Endpoint": {
          "builtIn": "SDK::Endpoint",
          "required": false,
          "documentation": "Override the endpoint used to send this request",
          "type": "String"
        }
      },
      "rules": [
        {
          "conditions": [
            {
              "fn": "isSet",
              "argv": [
                {
                  "ref": "Endpoint"
                }
              ]

          }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {

"conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
```

```
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                 },
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ]
},
{
    "conditions": [
        {
            "fn": "isSet",
            "argv": [
                {
                    "ref": "Region"
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                     "fn": "aws.partition",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ],
                    "assign": "PartitionResult"
                }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref":
"UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]

                }
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
```

```
                                        },

    "supportsDualStack"
                                            ]
                                        }
                                    ]
                                }
                            ],
                            "type": "tree",
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}

                            },
                                    "type": "endpoint"
                                }
                            ]
                        },
                        {
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both",
                            "type": "error"
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                            "fn": "booleanEquals",

                    "argv": [
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                                    "ref": "UseFIPS"
                                },
                                true
                            ]
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                    ],
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                    "rules": [
                        {
                            "conditions": [
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                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
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            ],
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                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ]
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        {
            "conditions": [],
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partition does not support FIPS",
            "type": "error"
        }
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{
    "conditions": [
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            "argv": [
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                    "ref": "UseDualStack"
                },
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        "type": "tree",
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                        "argv": [
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },

"supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
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                        "conditions": [],
                        "endpoint": {
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}

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                        "type": "endpoint"
                    }
                ]
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            {
                "conditions": [],
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                "type": "error"
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        ]
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        "conditions": [],
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                  "properties": {},
                  "headers": {}
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                "type": "endpoint"
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            ]
          }
        ]
      },
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        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
      }
    ]
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    "testCases": [
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        "expect": {
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{
            "url": "https://license-manager.af-south-1.amazonaws.com"
          }
        },
        "params": {
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          "UseDualStack": false
        }
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        "params": {
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          "UseDualStack": false
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"expect": {
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"url": "https://license-manager.ap-northeast-1.amazonaws.com"
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"params": {
"Region": "ap-northeast-1",
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}
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"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
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"endpoint": {
"url": "https://license-manager.ap-northeast-2.amazonaws.com"
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"params": {
"Region": "ap-northeast-2",
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"UseDualStack": false
}
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"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.ap-northeast-3.amazonaws.com"
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"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "ap-south-1",

"UseFIPS": false,
"UseDualStack": false
}
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"expect": {
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"url": "https://license-manager.ap-southeast-1.amazonaws.com"

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"params": {
"Region": "ap-southeast-1",
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"UseDualStack": false
}
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{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
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"params": {
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
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"params": {
"Region": "ap-southeast-3",
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"UseDualStack": false
}
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"expect": {

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"url": "https://license-manager.ca-central-1.amazonaws.com"
}
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"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "eu-central-1",
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"UseDualStack": false
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disabled and DualStack disabled",
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"endpoint": {
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"params": {
"Region": "eu-north-1",
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"expect": {
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"params": {
"Region":

"eu-south-1",
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"UseDualStack": false
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"expect": {
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"params": {
"Region": "eu-west-1",
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"UseDualStack": false
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{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
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"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
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"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
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"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"url": "https://license-manager-fips.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false
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{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
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"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
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"params": {
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"UseDualStack": false
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"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.us-west-1.amazonaws.com"
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"params": {
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"UseDualStack": false
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"params": {

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"UseDualStack": false
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{
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"UseDualStack": false
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"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
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                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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        },
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            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
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        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
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            }
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        "params": {
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        "expect": {
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        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
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          "expect": {
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            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
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        {
          "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-west-1.amazonaws.com"
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          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
          }
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"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
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          "params": {
            "Region": "us-gov-west-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
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          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
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            }
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"url": "https://license-manager.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
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},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {

"endpoint": {
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},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": false
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"UseDualStack": true
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
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}
},

"params": {
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"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
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"url": "https://example.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
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"url": "https://example.com"
}
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"params": {

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"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
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"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
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],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

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},
        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
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                "target": "com.amazonaws.licensemanager#ValidationException"

    }
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        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
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"type": "structure",
"members": {
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"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
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"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
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"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
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"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},

"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",

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            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",

"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the account that created the license is the same that is performing the check out, you must\n            specify the account as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
```

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        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
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"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "

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            }
          }
        },

"traits": {
          "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
      },
      "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
          "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
              "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
          },
          "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
             }
          },
          "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

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    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n              <p>An Amazon Web Services
account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n
<ul>\n
        <li>\n              <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },

    "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
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            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
```

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            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the grant.</p>"
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
                }
            },

   "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
```

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    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}

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            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientRequestToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique,
 case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
 generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}

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            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
```

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            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
```

"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-

UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}

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        },
        "traits": {

"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
```

"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}
}
},
"traits": {
"smithy.api#output": {}

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    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":

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{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
```

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},

"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}

```
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes"
           }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
```

```
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target":
```

"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},

```
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
```

"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {

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            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
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"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#GetAccessTokenResponse":
{
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Gets detailed information about the specified grant. "
}
},
"com.amazonaws.licensemanager#GetGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [

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        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

    },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
```

```
        }
    },
    "LicenseCountingType": {
        "target": "com.amazonaws.licensemanager#LicenseCountingType",
        "traits": {
            "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
        }
    },
    "LicenseRules": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
        }
    },
    "LicenseCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",

       "traits": {
            "smithy.api#documentation": "<p>Number of available licenses.</p>"
        }
    },
    "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
            "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
        }
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License configuration status.</p>"
        }

},
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
        }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was

completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},

"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},

"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}

```
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

    }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Version of the granted license.</p>"
                }
            },
            "ReceivedMetadata": {
                "target": "com.amazonaws.licensemanager#ReceivedMetadata",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
```

```
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "enum",
"members": {
"EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing

algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},

"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {

"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},

"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "

```
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
agreement that can be\n        consumed and enforced by License Manager. Components include specifications for
the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n        must be associated with a
host), and the number of licenses purchased and used.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
        "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},

"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},

"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {

"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {

"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConversionTask"
}
},
"com.amazonaws.licensemanager#LicenseCountingType": {
"type": "enum",
"members": {
"VCPU": {

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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
```

"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},

"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},

```
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

      "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

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        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
                    "smithy.api#documentation": "<p>Distributed grant details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
```

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
```

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      "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
```

"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseSpecifications": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
```

```
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
            <li>\n                <p>\n                <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

```
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n

```
</li>\n <li>\n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
```

```
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n            <li>\n                <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n                <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is
<code>RDS</code>:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>License Pack</code> - The license
```

pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {

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                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
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"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}

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            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

```
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
 {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
```

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}

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},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "

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        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
```

"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
```

"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
```

"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation":
" ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3496 aws-sdk-go-v2-service-sts 1.33.14

1.3496.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
```

```
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

```
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
```

This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

```
 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
```

```
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart

setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength

```
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
```

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod
```

```
 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
```

```
            }
        },
        "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
    "type": "operation",
    "input": {
        "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
```

"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},

"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered

the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"

```
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
```

},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,

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            "documentation": "Override the endpoint used to send this request",
            "type": "String"
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    "rules": [
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            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
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            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
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                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
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}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
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                        "url": {
                            "ref": "Endpoint"
                        },
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
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            "type": "tree"

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        ],
        "type": "tree"
    },
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        "conditions": [],
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                "conditions": [
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                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
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        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
```

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                "assign": "PartitionResult"
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        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {

                    "ref": "UseFIPS"
                            },
                            true
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }

],
                "rules": [
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                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"

},
                                        "supportsFIPS"
                                        ]
                                    }
                                ]
                            },
                            {
                                "fn": "booleanEquals",
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"argv": [
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"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
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"rules": [
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"conditions": [],

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"conditions": [],
"endpoint": {
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"type": "tree"
},
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
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"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true

]
}
],
"rules": [
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"conditions": [],
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"conditions": [],
"endpoint": {
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"type": "tree"
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"conditions": [],
"error": "FIPS is enabled
but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
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{
"conditions": [
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"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [

{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"

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                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
  }
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

 "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
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"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"

}

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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
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},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},

{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true

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    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
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    },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
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                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {

                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

 "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
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                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
```

"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {

"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",

"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"

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            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
```

```
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
```

"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

  }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },

   "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this

subscription. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " An object which details a discovered Linux subscription. "
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

{
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                "name": "ACTIVE",
                "value": "ACTIVE",
                "documentation": "ACTIVE status"

```
            },
            {
                "name": "INVALID",
                "value": "INVALID",

"documentation": "INVALID status"
            },
            {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
            }
        ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
```

"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

     },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
             "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target":
 "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

```
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
```

```
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType
```

```
 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
```

```
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
```

provider. "
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The domain name for the Active Directory. "
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
        "type": "string",
        "traits": {

"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},

"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":

```
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
      "members": {
```

"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},

"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",

"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",

"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
}
},

"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
```

```
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
 {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
```

```
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [
                    {

                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
```

```
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                     "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseFIPS"
                            },

true
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }
```

```
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {

  "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]
                              }
                            ]
                          },

                      {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsDualStack"
                                ]
                              }

                  ]
                          }
                        ],
                        "rules": [
                          {
                            "conditions": [],
                            "endpoint": {
                              "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                              "properties": {},
                              "headers": {}
                            },
                            "type": "endpoint"
```

```
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

 {
                    "ref": "UseFIPS"
                },
                true
            ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

{
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                            },
                            true
                        ]
                    }
                ],
                "rules": [
```

```
                                {
                                    "conditions": [],
                                    "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS is enabled but this partition does not support FIPS",
                            "type": "error"

}
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {

        "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
```

"supportsDualStack"
]

}
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}

],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{

"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}

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            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS":
true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint":
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{
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false

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            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"

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                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-isob-east-1",

"UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {

          "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
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            {
              "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
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            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
              }
            },
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>"
              }
```

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            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

    "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

           "CreationTime": {
                "target": "smithy.api#Timestamp",
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"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",

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            "documentation": ""

        },
        {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
        }
    ]
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
        {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
        },
        {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
        },
        {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
        }
    ]
  }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
  "type": "structure",
  "members": {
    "ServerType": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
        "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
        }
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```
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
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"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {

"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}
}

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service

hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

```
    }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for this product

user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to
register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"

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            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

       "smithy.api#error": "client",
                "smithy.api#httpError": 404
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
            "type": "structure",
            "members": {
                "SecretId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                        "smithy.api#length": {
                            "min": 1
                        }
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
            "type": "string",
            "traits": {
                "smithy.api#length": {

             "min": 5,
                    "max": 200
                },
                "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
            "type": "structure",
            "members": {
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"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

           },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
```

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            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n        <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
                "smithy.api#required": {}
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }

  }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}

}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
```

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}

```
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


ListReceivedLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
           {
               "id": "HttpHeaderTrait",
               "namespace": "*"
           },
           {
               "id": "HttpUriConflict",
               "namespace": "*"
           },
           {
               "id": "Service",
               "namespace": "*"
```

```
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
            },
```

```
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
```

```
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
   "target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
   "target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
   "target": "com.amazonaws.licensemanager#ListTokens"
},
{
   "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
 },
{
   "target": "com.amazonaws.licensemanager#RejectGrant"
},
{
```

"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
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"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
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"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
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"aws.auth#sigv4": {
"name": "license-manager"
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"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"smithy.rules#endpointRuleSet": {
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"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,

"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"argv": [
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"ref": "Endpoint"
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"argv": [
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                "type": "error"
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            "type": "error"
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                    "argv": [
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
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both",
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"argv": [
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"ref": "PartitionResult"
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"supportsDualStack"

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"headers": {}

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                "type": "error"
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            "headers": {}
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        "type": "endpoint"
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"type": "error"
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"params": {
"Region": "af-south-1",
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"UseDualStack": false
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  "expect": {
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  "params": {
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    "UseFIPS": false,
    "UseDualStack": false
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  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
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  "expect": {
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  "params": {
    "Region": "ap-northeast-3",
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"UseFIPS": false,
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"params": {
"Region": "ap-south-1",
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"params": {
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"expect": {
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"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
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"params": {
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"UseFIPS": false,
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"params": {
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disabled and DualStack disabled",
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"params": {

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"UseDualStack": false
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"url": "https://license-manager.eu-west-1.amazonaws.com"
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"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

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"params": {
"Region": "eu-west-2",
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"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",

"expect": {
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"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.sa-east-1.amazonaws.com"
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
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"UseDualStack": false
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"Region": "us-east-2",
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"UseDualStack": false
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"expect": {
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"url": "https://license-manager-fips.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
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},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
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        },
        "params": {
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            "UseFIPS": false,
            "UseDualStack": false

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        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
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        "params": {
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        "params": {
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          "UseDualStack": false
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        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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        "params": {
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          "UseDualStack": false
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            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
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        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
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        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
          }
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              "UseDualStack": false
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              "UseFIPS": false,
              "UseDualStack": true
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disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
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          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            }
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          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
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          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
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      "expect": {
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        "UseFIPS": true,
        "UseDualStack": true
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      "expect": {
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        }
      },

  "params": {
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        "UseFIPS": true,
        "UseDualStack": false
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      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
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      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
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    {
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"expect": {
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      "params": {
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"UseFIPS": false,
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"Endpoint": "https://example.com"
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"params": {
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"UseDualStack": false,
"Endpoint": "https://example.com"
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},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},

"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": " The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n policy associated with this account. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time that automated discovery last ran. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes automated discovery. "
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }

```
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
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"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

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                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

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    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
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        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

```
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
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<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
                }
            },

  "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
                    "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

  }
            },
            "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
```

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
```

grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

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    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
```

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
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"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},

"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

```
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
```

"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
```

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
```

"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

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    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
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"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

```
            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

      },
        "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {

  "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

```
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

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                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with
the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

```
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
```

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
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"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

```
{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
               "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

```
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
     <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                    <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                    <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
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</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
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                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
         "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
        },
```

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

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        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

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            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
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```
                }
            },
            "WEEKLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Weekly"
                }
            },
            "MONTHLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Monthly"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
            "licenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
            "value": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

```
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

```
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

```
            }
        },
        "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }
        }
    },
    "traits": {

      "smithy.api#documentation": "<p>Describes a token.</p>"
    }
},
"com.amazonaws.licensemanager#TokenList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#TokenData"
    }
},
"com.amazonaws.licensemanager#TokenString": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 4096
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#TokenType": {
    "type": "enum",
    "members": {
        "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REFRESH_TOKEN"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3497 github.com/aws/aws-sdk-go-v2/service/sso 1.24.15

1.3497.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
```

```
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
```

```
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
```

```
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
       "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
           "type": "structure",
```

"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "

```
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
```

```
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
```

href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}

```
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",

"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {

"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity
provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
 {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
```

```
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"

             }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}

        }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
```

\n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits":
{
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},

"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {

"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",

"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],

"rules": [
{
"conditions": [

```
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [
                    {

"fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},

            "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",
                    "argv":
[
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
                          true

            ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
```

"fn": "booleanEquals",

"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
}
]
},

{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]

}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
},

```
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {

        "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
```

```
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"
}

],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [

        {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }
```

```
                    ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                     "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                 "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
```

"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint":
"https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are
not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",

"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation":

" The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation":
" The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},
"CreationTime": {

"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},

"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
"type": "string",
"traits":
{
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""
},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""

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                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "HEALTHY",
                    "value": "HEALTHY",
                    "documentation": ""
                },
                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
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"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",

"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",

"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits":
 {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},

"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

      }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": " The tags for the specified resource. "
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }

```
        ],
        "traits":
 {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline
```

results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}

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            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",

            "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory
that contains the user information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
```

```
            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
```

"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {

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            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":
 {
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
```

"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
```

| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An

object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",

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    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },

    "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
```

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
```

"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {

"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
```

```
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
```

```
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string
```

```
 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
```

```
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

```
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
```

```
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
```

```
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
```

```
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
```

operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token

status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",

"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has
been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being
applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings
current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated
data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see <a

href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"

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        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
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                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
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"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
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"rules": [
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"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
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"conditions": [
{

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                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

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              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
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                      "argv": [
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                          "ref": "UseDualStack"
                        },
                        true
                      ]

}
                ],
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                "type": "error"
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                    "ref": "Endpoint"
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                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
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            "type": "tree"

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          ],
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},
{
    "conditions": [],
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                    "argv": [
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                            "ref": "Region"
                        }
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                            "argv": [
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                                    "ref": "Region"
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```

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                    },
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                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"

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                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [

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                                        "ref": "PartitionResult"
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                                    "supportsDualStack"
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                        ]
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                ],
                "rules": [
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                        "conditions": [],

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"conditions": [],
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"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
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],
"type": "tree"
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"ref": "UseFIPS"
},
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],
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [

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but this partition does not support FIPS",
                    "type": "error"
                }
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                    "argv": [
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                            "ref": "UseDualStack"
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                                    "argv": [
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                                        },
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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                            "headers": {}
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                    }
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            }
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    "type": "tree"
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    "type": "error"
}
],
"type": "tree"
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
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}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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            },
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              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
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            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
               },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
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            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
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            },
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              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
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              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
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            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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              }

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            "params": {
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              "UseDualStack": false
            }
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            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
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                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
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{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
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}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
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"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
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"UseDualStack": true
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",

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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
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"Endpoint": "https://example.com"
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"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
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}
},
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
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},
"params": {

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"UseDualStack": true,
"Endpoint": "https://example.com"
}
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
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"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",

"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
      <code>AmiID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>DualSubscription</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceType</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>ProductCode</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Region</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Status</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n           </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n            <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n        </ul>"
                }
            },
            "MaxResults": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "

```
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
        "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
        "target":
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration
resources for your account. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": " To filter your results, specify which subscription providers to
return \n\t\t\tin the list. "
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {

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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
```

"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "

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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
```

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            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
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                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
```

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
 subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
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"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,

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                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied due to request throttling. ",
"smithy.api#error": "client"
}

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
         "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "tagKeys": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
          "traits": {

        "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}

```
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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```
package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
```

```
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {
```

```
 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
```

```
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

1.3498 github.com/aws/aws-sdk-go-v2/service/ssooidc 1.28.14

1.3498.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

```
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
```

```
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
{
   "smithy": "2.0",
```

```
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{

"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based

subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",

"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
 {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

```
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
 {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}

        }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Value of the filter.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}

```
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the identity provider.</p>",

        "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
            "traits":
{
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

 "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
```

"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},

"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {

          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",

"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],

```
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [
                        {

"fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": {
                            "ref": "Endpoint"
                        },
                        "properties": {},

                    "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
```

```
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "aws.partition",
                                "argv":
[
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseFIPS"
                                            },
                                            true

]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
                                    }
                                ],
                                "rules": [
```

```
{
    "conditions": [
        {
            "fn": "booleanEquals",

"argv": [
                true,
                {
                    "fn": "getAttr",
                    "argv": [
                        {
                            "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                    ]
                }
            ]
        },

{
            "fn": "booleanEquals",
            "argv": [
                true,
                {
                    "fn": "getAttr",
                    "argv": [
                        {
                            "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                    ]
                }
            ]

        }
    ],
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
```

"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{

"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true
]
}
],
"rules": [
{
"conditions": [],

```
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                         "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"
        }

    ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [

             {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
```

```
                    }

                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                 "type": "tree"
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
             "headers": {}
        },
        "type": "endpoint"
    }
],
"type": "tree"
}
],
"type": "tree"
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
```

```
            ]
        },
        "smithy.rules#endpointTests": {
            "testCases": [
                {
                    "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                        "endpoint":
{
                            "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,

                    "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
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"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {

"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

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            }
        },

        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                }
            },

    "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
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"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint":
"https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are
not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},

"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS \n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation":
" The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation":
" The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},
"CreationTime": {

"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
{
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""
                },
                {
```

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                "name": "DELETED",
                "value": "DELETED",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "HEALTHY",
                "value": "HEALTHY",
                "documentation": ""
            },
            {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
            },
            {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
    "type": "structure",
    "members": {
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
            }
        },
        "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
```

"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,

"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits":
 {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
```

\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",

"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to

retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}

```
        }
      },
      "traits": {

"smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
      },
      "errors": [
         {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",

"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The user name from the identity provider for this product

user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory
that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
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<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider
operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {

"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "

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                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",

"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {

"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",

"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},

"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}

```
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to
provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
```

```
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
```

```
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
```

```
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}
```

```
type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
```

```
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {
```

```
 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
```

}
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

```
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
```

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },

      {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
              }
          ],
          "traits": {
              "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
              "smithy.api#http": {
                  "code": 200,
                  "method": "POST",
```

```
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},

"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
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"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},

"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}

```
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]

```
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
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          "rules": [
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                    "argv": [
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                          "ref": "Endpoint"
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                                ]
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                        "rules": [
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                                        "argv": [
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                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]

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                                "type": "error"
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                                "conditions": [],
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                                    },
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                                    "headers": {}
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                        "argv": [
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                                "ref": "Region"
                            }
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                                "argv": [
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                                        "ref": "Region"
                                    }
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                                "assign": "PartitionResult"
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                        "rules": [
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                                        "argv": [
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                          "fn": "getAttr",
                          "argv": [
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                        }
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                      "argv": [
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                        {
                          "fn": "getAttr",
                          "argv": [

                          {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]
                        }
                      ]
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"properties": {},
"headers": {}
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"type": "error"
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"type": "tree"
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"conditions": [
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"argv": [
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"ref": "UseFIPS"
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"conditions": [
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsFIPS"
]
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"conditions": [],
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"properties": {},
"headers": {}
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"type": "endpoint"
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"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
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                                "ref": "UseDualStack"
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                            "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
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                                "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                            "headers": {}
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                "type": "tree"
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    "type": "error"
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"type": "tree"
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"smithy.rules#endpointTests": {
    "testCases": [
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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        },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
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            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
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 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
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},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

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"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack

enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
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}
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"params": {
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"UseDualStack": false
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"expect": {
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {

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"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
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"version": "1.0"
}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

```
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
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        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
      <code>AmiID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Region</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Status</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
```

values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n      organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
```

match a certain subscription's name. \n The valid names for this filter are: \n \n
\n \n <code>Subscription</code>\n \n \n \n
The
 valid Operators for this filter are: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
```

"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
```

```
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

           },
            "smithy.api#idempotent": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
```

```
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
```

"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

```
}
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },

  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "

```
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/grafana/types"

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
```

```
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
```

```
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

1.3499 aws-sdk-go-v2-credentials 1.17.59

1.3499.1 Available under license :


```
{
 "version": "2.0",
 "service": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances.</p>",
 "operations": {
   "AssociateUser": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </note>",
   "DeregisterIdentityProvider": "<p>Deregisters the identity provider from providing user-based subscriptions.</p>",
   "DisassociateUser": "<p>Disassociates the user from an EC2 instance providing user-based subscriptions.</p>",
   "ListIdentityProviders":
 "<p>Lists the identity providers for user-based subscriptions.</p>",
   "ListInstances": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
   "ListProductSubscriptions": "<p>Lists the user-based subscription products available from an identity provider.</p>",
   "ListUserAssociations": "<p>Lists user associations for an identity provider.</p>",
   "RegisterIdentityProvider": "<p>Registers an identity provider for user-based subscriptions.</p>",
   "StartProductSubscription": "<p>Starts a product subscription for a user with the specified identity provider.</p> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges</a> in the <i>Amazon Web
 Services Billing User Guide</i>.</p> </note>",
   "StopProductSubscription": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
   "UpdateIdentityProviderSettings": "<p>Updates additional product configuration settings for the registered identity provider.</p>"
 },
 "shapes": {
   "AccessDeniedException": {
     "base": "<p>You don't have sufficient access to perform this action.</p>",
     "refs": {
     }
   },
   "ActiveDirectoryIdentityProvider": {
     "base": "<p>Details about an Active Directory identity provider.</p>",
     "refs": {
       "IdentityProvider$ActiveDirectoryIdentityProvider": "<p>An object that details an Active Directory identity provider.</p>"
     }
   },
```

"AssociateUserRequest": {
"base": null,
"refs": {
}
},
"AssociateUserResponse": {
"base": null,
"refs": {
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListIdentityProvidersRequest$MaxResults":
" Maximum number of results to return in a single call. ",
"ListInstancesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListProductSubscriptionsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUserAssociationsRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"ConflictException": {
"base": " The request couldn't be completed because it conflicted with the current state of the resource. ",
"refs": {
}
},
"DeregisterIdentityProviderRequest": {
"base": null,
"refs": {
}
},
"DeregisterIdentityProviderResponse": {
"base": null,
"refs": {
}
},
"DisassociateUserRequest": {
"base": null,
"refs": {
}
},
"DisassociateUserResponse": {
"base": null,
"refs": {
}
},
"Filter": {
"base": " A

filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
    "refs": {
      "FilterList$member": null
    }
  },
  "FilterList": {
    "base": null,
    "refs": {
      "ListInstancesRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
      "ListProductSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
      "ListUserAssociationsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. "
    }
  },
  "IdentityProvider": {
    "base": " Details about an identity provider. ",
    "refs": {
      "AssociateUserRequest$IdentityProvider": " The identity provider of the user. ",
      "DeregisterIdentityProviderRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
      "DisassociateUserRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
      "IdentityProviderSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
      "InstanceUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
      "ListProductSubscriptionsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
      "ListUserAssociationsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
      "ProductUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
      "RegisterIdentityProviderRequest$IdentityProvider":
 " An object that specifies details for the identity provider. ",
      "StartProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
      "StopProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
      "UpdateIdentityProviderSettingsRequest$IdentityProvider": null
    }
  },
  "IdentityProviderSummary": {
    "base": " Describes an identity provider. ",
    "refs": {
      "DeregisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
      "IdentityProviderSummaryList$member": null,

"RegisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"UpdateIdentityProviderSettingsResponse$IdentityProviderSummary": null

}
},
"IdentityProviderSummaryList": {
"base": null,
"refs": {
"ListIdentityProvidersResponse$IdentityProviderSummaries": " Metadata that describes the list identity providers operation. "
}
},
"InstanceSummary": {
"base": " Describes an EC2 instance providing user-based subscriptions. ",
"refs": {
"InstanceSummaryList$member": null
}
},
"InstanceSummaryList": {
"base": null,
"refs": {
"ListInstancesResponse$InstanceSummaries": " Metadata that describes the list instances operation. "
}
},
"InstanceUserSummary": {
"base": " Describes users of an EC2 instance providing user-based subscriptions. ",
"refs": {
"AssociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",
"DisassociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",

"InstanceUserSummaryList$member": null
}
},
"InstanceUserSummaryList": {
"base": null,
"refs": {
"ListUserAssociationsResponse$InstanceUserSummaries": " Metadata that describes the list user association operation. "
}
},
"InternalServerException": {
"base": " An exception occurred with the service. ",
"refs": {
}
},

"ListIdentityProvidersRequest": {
"base": null,
"refs": {
}
},
"ListIdentityProvidersResponse": {
"base": null,
"refs": {
}
},
"ListInstancesRequest": {
"base": null,
"refs": {
}
},
"ListInstancesResponse": {
"base": null,
"refs": {
}
},
"ListProductSubscriptionsRequest": {
"base": null,
"refs": {
}
},
"ListProductSubscriptionsResponse": {
"base": null,
"refs": {
}
},
"ListUserAssociationsRequest": {
"base": null,
"refs": {
}
},
"ListUserAssociationsResponse": {
"base": null,
"refs": {
}
},
"ProductUserSummary": {
"base": " The summary of the user-based subscription products for a user. ",
"refs": {
"ProductUserSummaryList$member": null,
"StartProductSubscriptionResponse$ProductUserSummary": " Metadata that describes the start product subscription operation. ",
"StopProductSubscriptionResponse$ProductUserSummary": " Metadata that describes the start product subscription operation. "

}
},
"ProductUserSummaryList": {
"base": null,
"refs": {
"ListProductSubscriptionsResponse$ProductUserSummaries": " Metadata that describes the list product subscriptions operation. "
}
},
"RegisterIdentityProviderRequest": {
"base": null,
"refs": {
}
},
"RegisterIdentityProviderResponse": {
"base": null,
"refs": {
}
},
"ResourceNotFoundException":
{
"base": " The resource couldn't be found. ",
"refs": {
}
},
"SecurityGroup": {
"base": null,
"refs": {
"Settings$SecurityGroupId": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoint for activation servers. ",
"UpdateSettings$SecurityGroupId": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for activation servers. "
}
},
"ServiceQuotaExceededException": {
"base": " The request failed because a service quota is exceeded. ",
"refs": {
}
},
"Settings": {
"base": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication
from resources in the VPC. ",
"refs": {
"IdentityProviderSummary$Settings": " An object that details the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. ",
"RegisterIdentityProviderRequest$Settings": " The registered identity providers product related

configuration settings such as the subnets to provision VPC endpoints. "
    }
  },
  "SettingsSubnetsList": {
    "base": null,
    "refs": {
      "Settings$Subnets": " The subnets defined for the registered identity provider. "
    }
  },
  "StartProductSubscriptionRequest": {
    "base": null,
    "refs": {
    }
  },
  "StartProductSubscriptionResponse": {
    "base": null,
    "refs": {
    }
  },
  "StopProductSubscriptionRequest": {
    "base": null,
    "refs": {
    }
  },
  "StopProductSubscriptionResponse": {
    "base": null,
    "refs": {
    }
  },
  "String":
 {
    "base": null,
    "refs": {
      "AccessDeniedException$message": null,
      "ActiveDirectoryIdentityProvider$DirectoryId": " The directory ID for an Active Directory identity provider. ",
      "AssociateUserRequest$Domain": " The domain name of the user. ",
      "AssociateUserRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
      "AssociateUserRequest$Username": " The user name from the identity provider for the user. ",
      "ConflictException$message": null,
      "DeregisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
      "DisassociateUserRequest$Domain": " The domain name of the user. ",
      "DisassociateUserRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
      "DisassociateUserRequest$Username": " The user name from the identity provider for the user. ",

"Filter$Attribute": " The name of an attribute to use as a filter. ",
"Filter$Operation": " The type of search (For example, eq, geq, leq) ",
"Filter$Value": " Value of the filter. ",
"IdentityProviderSummary$FailureMessage": " The failure message associated with an identity provider. ",
"IdentityProviderSummary$Product": " The name of the user-based subscription product. ",
"IdentityProviderSummary$Status": " The status of an identity provider. ",
"InstanceSummary$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"InstanceSummary$LastStatusCheckDate": " The date of the last status check. ",
"InstanceSummary$Status": " The status of an EC2 instance resource. ",
"InstanceSummary$StatusMessage": " The status message for an EC2 instance. ",
"InstanceUserSummary$AssociationDate": " The date a user was associated with an EC2 instance. ",
"InstanceUserSummary$DisassociationDate": " The date a user was disassociated from an EC2 instance. ",
"InstanceUserSummary$Domain": " The domain name of the user. ",
"InstanceUserSummary$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"InstanceUserSummary$Status": " The status of a user associated with an EC2 instance. ",
"InstanceUserSummary$StatusMessage": " The status message for users of an EC2 instance. ",
"InstanceUserSummary$Username": " The user name from the identity provider for the user. ",
"InternalServerException$message": null,
"ListIdentityProvidersRequest$NextToken": " Token for the next set of results. ",
"ListIdentityProvidersResponse$NextToken": " Token for the next set of results. ",
"ListInstancesRequest$NextToken": " Token for the next set of results. ",
"ListInstancesResponse$NextToken": " Token for the next set of results. ",
"ListProductSubscriptionsRequest$NextToken": " Token for the next set of results. ",
"ListProductSubscriptionsRequest$Product": " The name of the user-based subscription product. ",
"ListProductSubscriptionsResponse$NextToken": " Token for the next set of results. ",
"ListUserAssociationsRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"ListUserAssociationsRequest$NextToken": " Token for the next set of results. ",
"ListUserAssociationsResponse$NextToken": " Token for the next set of results. ",
"ProductUserSummary$Domain": " The domain name of the user. ",
"ProductUserSummary$Product": " The name of the user-based subscription product. ",
"ProductUserSummary$Status": " The status of a product for a user. ",
"ProductUserSummary$StatusMessage": " The status message for a product for a user. ",
"ProductUserSummary$SubscriptionEndDate": " The end date of a subscription. ",
"ProductUserSummary$SubscriptionStartDate": " The start date of a subscription. ",
"ProductUserSummary$Username": " The user name from the identity provider of the user. ",
"RegisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
"ResourceNotFoundException$message": null,
"ServiceQuotaExceededException$message": null,
"StartProductSubscriptionRequest$Domain": " The domain name of the user. ",
"StartProductSubscriptionRequest$Product": " The name of the user-based subscription product. ",

"StartProductSubscriptionRequest$Username": " The user name from the identity provider of the user. ",
"StopProductSubscriptionRequest$Domain": " The domain name of the user. ",
"StopProductSubscriptionRequest$Product": " The name of the user-based subscription product. ",
"StopProductSubscriptionRequest$Username": " The user name from the identity provider for the user. ",
"StringList$member": null,
"ThrottlingException$message": null,
"UpdateIdentityProviderSettingsRequest$Product": " The name of the user-based subscription product. ",
"ValidationException$message": null
}
},
"StringList": {
"base": null,
"refs": {
"InstanceSummary$Products": " A list of provided user-based subscription products. "
}
},
"Subnet": {
"base": null,
"refs": {
"SettingsSubnetsList$member": null,
"Subnets$member": null
}
},
"Subnets": {
"base": null,
"refs": {
"UpdateSettings$AddSubnets": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that require connectivity to activation servers. ",
"UpdateSettings$RemoveSubnets": " The ID of one or more subnets to remove. "
}
},
"ThrottlingException": {
"base": " The request was denied because of request throttling. Retry the request. ",
"refs": {
}
},
"UpdateIdentityProviderSettingsRequest": {
"base": null,
"refs": {
}
},
"UpdateIdentityProviderSettingsResponse": {
"base": null,
"refs": {

```
    }
  },
  "UpdateSettings": {
    "base": "<p>Updates the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints.</p>",
    "refs": {
      "UpdateIdentityProviderSettingsRequest$UpdateSettings": "<p>Updates the registered identity providers product related configuration settings. You can update any combination of settings in a single operation such as the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets which you want to remove the VPC endpoints
 from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </ul>"
    }
  },
  "ValidationException": {
    "base": "<p>A parameter is not valid.</p>",
    "refs": {
    }
  }
 }
}
{
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {
```

```
  "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ],
          "assign": "PartitionResult"
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [
            {
              "fn": "isSet",
              "argv": [
                {
                  "ref": "Endpoint"
                }
              ]
            },
            {
              "fn": "parseURL",

             "argv": [
                {
                  "ref": "Endpoint"
                }
              ],
              "assign": "url"
            }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
```

```
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },

          {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          }
        ]
      },
      {
        "conditions": [
```

```
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]

        },
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"

          },
                        "supportsFIPS"
                      ]
                    }
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
```

```
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
            ]
        }
    ]
}

],
"type": "tree",
"rules": [
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
]
},
{
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
    "type": "error"
}
]
},

{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
```

```
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {
                        "ref": "PartitionResult"
                      },
                      "supportsFIPS"
                    ]
                  }
                ]
              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          },
          {

        "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"
          }
        ]
        },
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
```

```
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,

        {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]
                    }
                  ]
                }
              ],
              "type": "tree",
              "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},

              "headers": {}
                  },
                  "type": "endpoint"
                }
              ]
            },
            {
              "conditions": [],
              "error": "DualStack is enabled but this partition does not support DualStack",
              "type": "error"
            }
          ]
        },
        {
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
```

"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
}
{
"version": "2.0",
"service": " With License Manager, you can discover and track your commercial Linux subscriptions on running Amazon EC2 instances. ",
"operations": {
"DeregisterSubscriptionProvider": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions registered to your account. ",
"GetRegisteredSubscriptionProvider": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"GetServiceSettings": " Lists the Linux subscriptions service settings for your account. ",
"ListLinuxSubscriptionInstances": " Lists the running Amazon EC2 instances that were discovered with commercial Linux subscriptions. ",
"ListLinuxSubscriptions": " Lists the Linux subscriptions that have been discovered. If you have linked your organization, the returned results will include data aggregated across your accounts in Organizations. ",
"ListRegisteredSubscriptionProviders":
" List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"ListTagsForResource": " List the metadata tags that are assigned to the specified Amazon Web Services resource. ",
"RegisterSubscriptionProvider": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"TagResource": " Add metadata tags to the specified Amazon Web Services resource. ",
"UntagResource": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"UpdateServiceSettings": " Updates the service settings for Linux subscriptions. "
},
"shapes": {
"Boolean": {
"base": null,
"refs": {
"UpdateServiceSettingsRequest$AllowUpdate": " Describes if updates are allowed to the service settings for Linux subscriptions. If you allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesRequest$MaxResults": " The maximum items to return in a request. ",
"ListLinuxSubscriptionsRequest$MaxResults": " The maximum items to return in a request. "

```
    }
  },
  "BoxLong": {
    "base": null,
    "refs": {
      "Subscription$InstanceCount": "<p>The total amount of running instances using this subscription.</p>"
    }
  },
  "DeregisterSubscriptionProviderRequest": {
    "base": null,
    "refs": {
    }
  },
  "DeregisterSubscriptionProviderResponse": {
    "base": null,
    "refs": {
    }
  },
  "Filter": {
    "base": "<p>A filter object that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria.</p>",
    "refs": {
      "FilterList$member": null
    }
  },
  "FilterList": {
    "base": null,
    "refs": {

  "ListLinuxSubscriptionInstancesRequest$Filters": "<p>An array of structures that you can use to filter the results by your specified criteria. For example, you can specify <code>Region</code> in the <code>Name</code>, with the <code>contains</code> operator to list all subscriptions that match a partial string in the <code>Value</code>, such as <code>us-west</code>.</p> <p>For each filter, you can specify one of the following values for the <code>Name</code> key to streamline results:</p> <ul> <li> <p> <code>AccountID</code> </p> </li> <li> <p> <code>AmiID</code> </p> </li> <li> <p> <code>DualSubscription</code> </p> </li> <li> <p> <code>InstanceID</code> </p> </li> <li> <p> <code>InstanceType</code> </p> </li> <li> <p> <code>ProductCode</code> </p> </li> <li> <p> <code>Region</code> </p> </li> <li> <p> <code>Status</code> </p> </li> <li> <p> <code>UsageOperation</code> </p> </li> </ul> <p>For each filter, you can use one of the following <code>Operator</code> values to define the behavior
 of the filter:</p> <ul> <li> <p> <code>contains</code> </p> </li> <li> <p> <code>equals</code> </p> </li> <li> <p> <code>Notequal</code> </p> </li> </ul>",
      "ListLinuxSubscriptionsRequest$Filters": "<p>An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of <code>Subscription</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain subscription's name.</p> <p>The valid names for this filter are:</p> <ul> <li> <p> <code>Subscription</code> </p> </li> </ul> <p>The valid Operators for this filter are:</p> <ul> <li> <p> <code>contains</code> </p> </li> <li> <p> <code>equals</code> </p> </li> <li> <p> <code>Notequal</code> </p> </li> </ul>"
```

```
    }
  },
  "GetRegisteredSubscriptionProviderRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetRegisteredSubscriptionProviderResponse": {
     "base": null,
    "refs": {
    }
  },
  "GetServiceSettingsRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetServiceSettingsResponse": {
    "base": null,
    "refs": {
    }
  },
  "Instance": {
    "base": "<p>Details discovered information about a running instance using Linux subscriptions.</p>",
    "refs": {
      "InstanceList$member": null
    }
  },
  "InstanceList": {
    "base": null,
    "refs": {
      "ListLinuxSubscriptionInstancesResponse$Instances": "<p>An array that contains instance objects.</p>"
    }
  },
  "InternalServerException": {
    "base": "<p>An exception occurred with the service.</p>",
    "refs": {
    }
  },
  "LinuxSubscriptionsDiscovery": {
    "base": null,
    "refs": {
      "GetServiceSettingsResponse$LinuxSubscriptionsDiscovery": "<p>Lists if discovery has been enabled for
Linux subscriptions.</p>",
      "UpdateServiceSettingsRequest$LinuxSubscriptionsDiscovery":
 "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
      "UpdateServiceSettingsResponse$LinuxSubscriptionsDiscovery": "<p>Lists if discovery has been enabled for
Linux subscriptions.</p>"
```

}
},
"LinuxSubscriptionsDiscoverySettings": {
"base": " Lists the settings defined for discovering Linux subscriptions. ",
"refs": {
"GetServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": " Lists the settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. ",
"UpdateServiceSettingsRequest$LinuxSubscriptionsDiscoverySettings": " The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. ",
"UpdateServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": " The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"ListLinuxSubscriptionInstancesRequest": {
"base": " NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases. ",
"refs": {
}
},
"ListLinuxSubscriptionInstancesRequestNextTokenString": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a previously truncated response. "
}
},
"ListLinuxSubscriptionInstancesResponse": {
"base": null,
"refs": {
}
},
"ListLinuxSubscriptionsRequest": {
"base": " NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases. ",
"refs": {
}
},
"ListLinuxSubscriptionsRequestNextTokenString":
{
"base": null,
"refs": {
"ListLinuxSubscriptionsRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a previously truncated response. "
}
},

"ListLinuxSubscriptionsResponse": {
"base": null,
"refs": {
}
},
"ListRegisteredSubscriptionProvidersRequest": {
"base": null,
"refs": {
}
},
"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger": {
"base": null,
"refs": {
"ListRegisteredSubscriptionProvidersRequest$MaxResults": " The maximum items to return in a request. "
}
},
"ListRegisteredSubscriptionProvidersResponse": {
"base": null,
"refs": {
}
},
"ListTagsForResourceRequest": {
"base": null,
"refs": {
}
},
"ListTagsForResourceResponse": {
"base": null,
"refs": {
}
},
"Operator": {
"base": null,
"refs":
{
"Filter$Operator": " An operator for filtering results. "
}
},
"OrganizationIntegration": {
"base": null,
"refs": {
"LinuxSubscriptionsDiscoverySettings$OrganizationIntegration": " Details if you have enabled resource discovery across your accounts in Organizations. "
}
},
"ProductCodeList": {
"base": null,

"refs": {
"Instance$ProductCode": " The product code for the instance. For more information, see Usage operation values in the License Manager User Guide . "
}
},
"RegisterSubscriptionProviderRequest": {
"base": null,
"refs": {
}
},
"RegisterSubscriptionProviderResponse": {
"base": null,
"refs": {
}
},
"RegisteredSubscriptionProvider": {
"base": " A third-party provider for operating system (OS) platform software and license subscriptions, such as Red Hat. When you register a third-party Linux subscription provider, License Manager can get subscription data from the registered provider. ",
"refs": {
"RegisteredSubscriptionProviderList$member": null
}
},
"RegisteredSubscriptionProviderList": {
"base": null,
"refs": {
"ListRegisteredSubscriptionProvidersResponse$RegisteredSubscriptionProviders": " The list of BYOL registration resources that fit the criteria you specified in the request. "
}
},
"ResourceNotFoundException": {
"base": " Unable to find the requested Amazon Web Services resource. ",
"refs": {
}
},
"SecretArn": {
"base": null,
"refs": {
"GetRegisteredSubscriptionProviderResponse$SecretArn": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL registration resource specified in the request. ",
"RegisterSubscriptionProviderRequest$SecretArn": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For RHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains your Red Hat Offline token. ",
"RegisteredSubscriptionProvider$SecretArn": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider access token. For RHEL account subscriptions, this is the offline token. "

}
},
"Status": {
"base": null,
"refs": {
"GetServiceSettingsResponse$Status": " Indicates the status of Linux subscriptions settings being applied. ",
"UpdateServiceSettingsResponse$Status": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"String": {
"base": null,
"refs": {
"Filter$Name": " The type of name to filter by. ",
"GetRegisteredSubscriptionProviderResponse$LastSuccessfulDataRetrievalTime": " The timestamp from the last time License Manager retrieved subscription details from your registered third-party Linux subscription provider. ",
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderStatusMessage": " The detailed message from your subscription provider token status. ",
"Instance$AccountID": " The account ID which owns the instance. ",
"Instance$AmiId": " The AMI ID used to launch the instance. ",
"Instance$DualSubscription": " Indicates that you have two different license subscriptions for the same software on your instance. ",
"Instance$InstanceID": " The instance ID of the resource. ",
"Instance$InstanceType": " The instance type of the resource. ",
"Instance$LastUpdatedTime": " The time in which the last discovery updated the instance details. ",
"Instance$OsVersion":
" The operating system software version that runs on your instance. ",
"Instance$Region": " The Region the instance is running in. ",
"Instance$RegisteredWithSubscriptionProvider": " Indicates that your instance uses a BYOL license subscription from a third-party Linux subscription provider that you've registered with License Manager. ",
"Instance$Status": " The status of the instance. ",
"Instance$SubscriptionName": " The name of the license subscription that the instance uses. ",
"Instance$SubscriptionProviderCreateTime": " The timestamp when you registered the third-party Linux subscription provider for the subscription that the instance uses. ",
"Instance$SubscriptionProviderUpdateTime": " The timestamp from the last time that the instance synced with the registered third-party Linux subscription provider. ",
"Instance$UsageOperation": " The usage operation of the instance. For more information,
see For more information, see Usage operation values in the License Manager User Guide. ",
"InternalServerException$message": null,
"ListLinuxSubscriptionInstancesResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
"ListLinuxSubscriptionsResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the

next request to retrieve additional objects. ",
"ListRegisteredSubscriptionProvidersRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a
previously truncated response. ",
"ListRegisteredSubscriptionProvidersResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
"ProductCodeList$member": null,
"RegisterSubscriptionProviderResponse$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. ",
"RegisteredSubscriptionProvider$LastSuccessfulDataRetrievalTime": " The timestamp from the last time that License Manager accessed third-party subscription data for your account from your registered Linux subscription provider. ",
"RegisteredSubscriptionProvider$SubscriptionProviderStatusMessage": " A detailed message that's associated with your BYOL subscription provider token status. ",
"ResourceNotFoundException$message":
null,
"StringMap$key": null,
"StringMap$value": null,
"Subscription$Name": " The name of the subscription. ",
"Subscription$Type": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. ",
"TagKeyList$member": null,
"Tags$key": null,
"Tags$value": null,
"ThrottlingException$message": null,
"ValidationException$message": null
}
},
"StringList": {
"base": null,
"refs": {
"Filter$Values": " One or more values for the name to filter by. ",
"GetServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. ",
"LinuxSubscriptionsDiscoverySettings$SourceRegions":
" The Regions in which to discover data for Linux subscriptions. ",
"UpdateServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. "
}
},
"StringListMemberString": {
"base": null,
"refs": {
"StringList$member": null
}

},
"StringMap": {
"base": null,
"refs": {
"GetServiceSettingsResponse$StatusMessage": " A message which details the Linux subscriptions service settings current status. ",
"UpdateServiceSettingsResponse$StatusMessage": " A message which details the Linux subscriptions service settings current status. "
}
},
"Subscription": {
"base": " An object which details a discovered Linux subscription. ",
"refs": {
"SubscriptionList$member": null
}
},
"SubscriptionList": {
"base": null,
"refs": {
"ListLinuxSubscriptionsResponse$Subscriptions": " An array that contains subscription objects. "
}
},
"SubscriptionProviderArn": {
"base": null,
"refs": {
"DeregisterSubscriptionProviderRequest$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"GetRegisteredSubscriptionProviderRequest$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderArn": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. ",
"ListTagsForResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"RegisteredSubscriptionProvider$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. ",
"TagResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified metadata tags. ",
"UntagResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. "
}
},
"SubscriptionProviderSource": {
"base": null,
"refs": {
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderSource": " The subscription provider for the BYOL registration resource specified in the request. ",
"RegisterSubscriptionProviderRequest$SubscriptionProviderSource": " The supported Linux subscription

provider to register. ",
"RegisterSubscriptionProviderResponse$SubscriptionProviderSource": " The Linux subscription provider that you registered. ",
"RegisteredSubscriptionProvider$SubscriptionProviderSource": " A supported third-party Linux subscription provider. License
Manager currently supports Red Hat subscriptions. ",
"SubscriptionProviderSourceList$member": null
}
},
"SubscriptionProviderSourceList": {
"base": null,
"refs": {
"ListRegisteredSubscriptionProvidersRequest$SubscriptionProviderSources": " To filter your results, specify which subscription providers to return in the list. "
}
},
"SubscriptionProviderStatus": {
"base": null,
"refs": {
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderStatus": " The status of the Linux subscription provider access token from the last successful subscription data request. ",
"RegisterSubscriptionProviderResponse$SubscriptionProviderStatus": " Indicates the status of the registration action for the Linux subscription provider that you requested. ",
"RegisteredSubscriptionProvider$SubscriptionProviderStatus": " Indicates the status of your registered Linux subscription provider access
token from the last time License Manager retrieved subscription data. For RHEL account subscriptions, this is the status of the offline token. "
}
},
"TagKeyList": {
"base": null,
"refs": {
"UntagResourceRequest$tagKeys": " A list of metadata tag keys to remove from the requested resource. "
}
},
"TagResourceRequest": {
"base": null,
"refs": {
}
},
"TagResourceResponse": {
"base": null,
"refs": {
}
},
"Tags": {
"base": null,

"refs": {
"ListTagsForResourceResponse$tags": " The metadata tags for the requested resource. ",
"RegisterSubscriptionProviderRequest$Tags": " The metadata tags to assign to your registered Linux subscription provider resource. ",
"TagResourceRequest$tags": " The metadata tags to assign to the Amazon Web Services resource. Tags are formatted as key value pairs. "
}
},
"ThrottlingException": {
"base": " The request was denied due to request throttling. ",
"refs": {
}
},
"UntagResourceRequest": {
"base": null,
"refs": {
}
},
"UntagResourceResponse": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"ValidationException": {
"base": " The provided input is not valid. Try your request again. ",
"refs": {
}
}
}
}
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{
"version":"2.0",
"metadata":{
"apiVersion":"2018-08-01",
"endpointPrefix":"license-manager",

```
  "jsonVersion":"1.1",
  "protocol":"json",
  "serviceFullName":"AWS License Manager",
  "serviceId":"License Manager",
  "signatureVersion":"v4",
  "targetPrefix":"AWSLicenseManager",
  "uid":"license-manager-2018-08-01"
},
"operations":{
  "AcceptGrant":{
    "name":"AcceptGrant",
    "http":{
      "method":"POST",
      "requestUri":"/"
    },
    "input":{"shape":"AcceptGrantRequest"},
    "output":{"shape":"AcceptGrantResponse"},
    "errors":[
      {"shape":"ValidationException"},
      {"shape":"InvalidParameterValueException"},
      {"shape":"AuthorizationException"},
      {"shape":"AccessDeniedException"},
      {"shape":"RateLimitExceededException"},
      {"shape":"ResourceLimitExceededException"},
      {"shape":"ServerInternalException"}
    ]
  },
  "CheckInLicense":{
    "name":"CheckInLicense",
    "http":{
       "method":"POST",
      "requestUri":"/"
    },
    "input":{"shape":"CheckInLicenseRequest"},
    "output":{"shape":"CheckInLicenseResponse"},
    "errors":[
      {"shape":"ValidationException"},
      {"shape":"InvalidParameterValueException"},
      {"shape":"ResourceNotFoundException"},
      {"shape":"ConflictException"},
      {"shape":"AuthorizationException"},
      {"shape":"AccessDeniedException"},
      {"shape":"RateLimitExceededException"},
      {"shape":"ServerInternalException"}
    ]
  },
  "CheckoutBorrowLicense":{
    "name":"CheckoutBorrowLicense",
```

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  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"CheckoutBorrowLicenseRequest"},
  "output":{"shape":"CheckoutBorrowLicenseResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceNotFoundException"},
    {"shape":"NoEntitlementsAllowedException"},
     {"shape":"EntitlementNotAllowedException"},
    {"shape":"UnsupportedDigitalSignatureMethodException"},
    {"shape":"RedirectException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"CheckoutLicense":{
  "name":"CheckoutLicense",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"CheckoutLicenseRequest"},
  "output":{"shape":"CheckoutLicenseResponse"},
  "errors":[
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    {"shape":"InvalidParameterValueException"},
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    {"shape":"NoEntitlementsAllowedException"},
    {"shape":"UnsupportedDigitalSignatureMethodException"},
    {"shape":"RedirectException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
     {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"CreateGrant":{
  "name":"CreateGrant",
  "http":{
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    "requestUri":"/"
  },
  "input":{"shape":"CreateGrantRequest"},
```

"output":{"shape":"CreateGrantResponse"},
"errors":[
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{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"}
]
},
"CreateGrantVersion":{
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"requestUri":"/"
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"input":{"shape":"CreateGrantVersionRequest"},
"output":{"shape":"CreateGrantVersionResponse"},
"errors":[
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{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
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"http":{
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"errors":[
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{"shape":"RedirectException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"CreateLicenseConfiguration":{

"name":"CreateLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"CreateLicenseConfigurationRequest"},
"output":{"shape":"CreateLicenseConfigurationResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"CreateLicenseConversionTaskForResource":{
"name":"CreateLicenseConversionTaskForResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"CreateLicenseConversionTaskForResourceRequest"},
"output":{"shape":"CreateLicenseConversionTaskForResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ValidationException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"CreateLicenseManagerReportGenerator":{
"name":"CreateLicenseManagerReportGenerator",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"CreateLicenseManagerReportGeneratorRequest"},
"output":{"shape":"CreateLicenseManagerReportGeneratorResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},

{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
},
"CreateLicenseVersion":{
"name":"CreateLicenseVersion",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"CreateLicenseVersionRequest"},
"output":{"shape":"CreateLicenseVersionResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"},
{"shape":"RedirectException"},
{"shape":"ConflictException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"}
]
},
"CreateToken":{
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"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"CreateTokenRequest"},
"output":{"shape":"CreateTokenResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"ResourceNotFoundException"},
{"shape":"RedirectException"}
]
},
"DeleteGrant":{
"name":"DeleteGrant",
"http":{
"method":"POST",
"requestUri":"/"

```
  },
  "input":{"shape":"DeleteGrantRequest"},
  "output":{"shape":"DeleteGrantResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"DeleteLicense":{
  "name":"DeleteLicense",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"DeleteLicenseRequest"},
  "output":{"shape":"DeleteLicenseResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"RedirectException"},
    {"shape":"ConflictException"},

    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"DeleteLicenseConfiguration":{
  "name":"DeleteLicenseConfiguration",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"DeleteLicenseConfigurationRequest"},
  "output":{"shape":"DeleteLicenseConfigurationResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
```

},
"DeleteLicenseManagerReportGenerator":{
"name":"DeleteLicenseManagerReportGenerator",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"DeleteLicenseManagerReportGeneratorRequest"},
"output":{"shape":"DeleteLicenseManagerReportGeneratorResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
},
"DeleteToken":{
"name":"DeleteToken",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"DeleteTokenRequest"},
"output":{"shape":"DeleteTokenResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"ResourceNotFoundException"},
{"shape":"RedirectException"}
]
},
"ExtendLicenseConsumption":{
"name":"ExtendLicenseConsumption",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ExtendLicenseConsumptionRequest"},
"output":{"shape":"ExtendLicenseConsumptionResponse"},
"errors":[
{"shape":"ValidationException"},

{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"ResourceNotFoundException"}
]
},
"GetAccessToken":{
"name":"GetAccessToken",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetAccessTokenRequest"},
"output":{"shape":"GetAccessTokenResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},

{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"GetGrant":{
"name":"GetGrant",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetGrantRequest"},
"output":{"shape":"GetGrantResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"GetLicense":{
"name":"GetLicense",
"http":{
"method":"POST",
"requestUri":"/"

```
  },
  "input":{"shape":"GetLicenseRequest"},
  "output":{"shape":"GetLicenseResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
     {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"GetLicenseConfiguration":{
  "name":"GetLicenseConfiguration",
  "http":{
    "method":"POST",
    "requestUri":"/"
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  "input":{"shape":"GetLicenseConfigurationRequest"},
  "output":{"shape":"GetLicenseConfigurationResponse"},
  "errors":[
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    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"GetLicenseConversionTask":{
  "name":"GetLicenseConversionTask",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"GetLicenseConversionTaskRequest"},
  "output":{"shape":"GetLicenseConversionTaskResponse"},
  "errors":[
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     {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"GetLicenseManagerReportGenerator":{
  "name":"GetLicenseManagerReportGenerator",
  "http":{
    "method":"POST",
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"requestUri":"/"
},
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"output":{"shape":"GetLicenseManagerReportGeneratorResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
},
"GetLicenseUsage":{
"name":"GetLicenseUsage",
"http":{
"method":"POST",
"requestUri":"/"
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"output":{"shape":"GetLicenseUsageResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
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"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"GetServiceSettingsRequest"},
"output":{"shape":"GetServiceSettingsResponse"},
"errors":[
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListAssociationsForLicenseConfiguration":{

"name":"ListAssociationsForLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListAssociationsForLicenseConfigurationRequest"},
"output":{"shape":"ListAssociationsForLicenseConfigurationResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"FilterLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListDistributedGrants":{
"name":"ListDistributedGrants",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListDistributedGrantsRequest"},
"output":{"shape":"ListDistributedGrantsResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListFailuresForLicenseConfigurationOperations":{
"name":"ListFailuresForLicenseConfigurationOperations",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListFailuresForLicenseConfigurationOperationsRequest"},
"output":{"shape":"ListFailuresForLicenseConfigurationOperationsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}

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  ]
},
"ListLicenseConfigurations":{
  "name":"ListLicenseConfigurations",
  "http":{
    "method":"POST",
    "requestUri":"/"
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  "input":{"shape":"ListLicenseConfigurationsRequest"},
   "output":{"shape":"ListLicenseConfigurationsResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"FilterLimitExceededException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListLicenseConversionTasks":{
  "name":"ListLicenseConversionTasks",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListLicenseConversionTasksRequest"},
  "output":{"shape":"ListLicenseConversionTasksResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListLicenseManagerReportGenerators":{
  "name":"ListLicenseManagerReportGenerators",
   "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListLicenseManagerReportGeneratorsRequest"},
  "output":{"shape":"ListLicenseManagerReportGeneratorsResponse"},
  "errors":[
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    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
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{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
},
"ListLicenseSpecificationsForResource":{
"name":"ListLicenseSpecificationsForResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseSpecificationsForResourceRequest"},
"output":{"shape":"ListLicenseSpecificationsForResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListLicenseVersions":{
"name":"ListLicenseVersions",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseVersionsRequest"},
"output":{"shape":"ListLicenseVersionsResponse"},
"errors":[
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"ListLicenses":{
"name":"ListLicenses",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicensesRequest"},
"output":{"shape":"ListLicensesResponse"},
"errors":[
{"shape":"ValidationException"},

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    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"ListReceivedGrants":{
  "name":"ListReceivedGrants",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"ListReceivedGrantsRequest"},
  "output":{"shape":"ListReceivedGrantsResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListReceivedGrantsForOrganization":{
  "name":"ListReceivedGrantsForOrganization",
  "http":{
    "method":"POST",
    "requestUri":"/"
   },
  "input":{"shape":"ListReceivedGrantsForOrganizationRequest"},
  "output":{"shape":"ListReceivedGrantsForOrganizationResponse"},
  "errors":[
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    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListReceivedLicenses":{
  "name":"ListReceivedLicenses",
  "http":{
    "method":"POST",
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"requestUri":"/"
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"output":{"shape":"ListReceivedLicensesResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListReceivedLicensesForOrganization":{
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},
"input":{"shape":"ListReceivedLicensesForOrganizationRequest"},
"output":{"shape":"ListReceivedLicensesForOrganizationResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListResourceInventory":{
"name":"ListResourceInventory",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListResourceInventoryRequest"},
"output":{"shape":"ListResourceInventoryResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"FilterLimitExceededException"},
{"shape":"FailedDependencyException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}

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    ]
  },
  "ListTagsForResource":{
    "name":"ListTagsForResource",
    "http":{
      "method":"POST",
      "requestUri":"/"
    },
    "input":{"shape":"ListTagsForResourceRequest"},
    "output":{"shape":"ListTagsForResourceResponse"},
    "errors":[
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      {"shape":"ServerInternalException"},
      {"shape":"AuthorizationException"},
      {"shape":"AccessDeniedException"},
      {"shape":"RateLimitExceededException"}
    ]
  },
  "ListTokens":{
    "name":"ListTokens",
    "http":{
      "method":"POST",

"requestUri":"/"
    },
    "input":{"shape":"ListTokensRequest"},
    "output":{"shape":"ListTokensResponse"},
    "errors":[
      {"shape":"ValidationException"},
      {"shape":"AuthorizationException"},
      {"shape":"AccessDeniedException"},
      {"shape":"RateLimitExceededException"},
      {"shape":"ServerInternalException"}
    ]
  },
  "ListUsageForLicenseConfiguration":{
    "name":"ListUsageForLicenseConfiguration",
    "http":{
      "method":"POST",
      "requestUri":"/"
    },
    "input":{"shape":"ListUsageForLicenseConfigurationRequest"},
    "output":{"shape":"ListUsageForLicenseConfigurationResponse"},
    "errors":[
      {"shape":"InvalidParameterValueException"},
      {"shape":"FilterLimitExceededException"},
      {"shape":"ServerInternalException"},
      {"shape":"AuthorizationException"},
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{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"RejectGrant":{
"name":"RejectGrant",
"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"RejectGrantRequest"},
"output":{"shape":"RejectGrantResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"TagResource":{
"name":"TagResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"TagResourceRequest"},
"output":{"shape":"TagResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"UntagResource":{
"name":"UntagResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"UntagResourceRequest"},
"output":{"shape":"UntagResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},

{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"UpdateLicenseConfiguration":{
"name":"UpdateLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"UpdateLicenseConfigurationRequest"},
"output":{"shape":"UpdateLicenseConfigurationResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"}
]
},
"UpdateLicenseManagerReportGenerator":{
"name":"UpdateLicenseManagerReportGenerator",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"UpdateLicenseManagerReportGeneratorRequest"},
"output":{"shape":"UpdateLicenseManagerReportGeneratorResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"},
{"shape":"ResourceLimitExceededException"}
]
},
"UpdateLicenseSpecificationsForResource":{
"name":"UpdateLicenseSpecificationsForResource",
"http":{
"method":"POST",
"requestUri":"/"

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  },
    "input":{"shape":"UpdateLicenseSpecificationsForResourceRequest"},
    "output":{"shape":"UpdateLicenseSpecificationsForResourceResponse"},
    "errors":[
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      {"shape":"InvalidResourceStateException"},
      {"shape":"LicenseUsageException"},
      {"shape":"ServerInternalException"},
      {"shape":"AuthorizationException"},
      {"shape":"AccessDeniedException"},
      {"shape":"RateLimitExceededException"}
    ]
  },
  "UpdateServiceSettings":{
    "name":"UpdateServiceSettings",
    "http":{
      "method":"POST",
      "requestUri":"/"
    },
    "input":{"shape":"UpdateServiceSettingsRequest"},
    "output":{"shape":"UpdateServiceSettingsResponse"},
    "errors":[
      {"shape":"InvalidParameterValueException"},
      {"shape":"ServerInternalException"},
      {"shape":"AuthorizationException"},
      {"shape":"AccessDeniedException"},
      {"shape":"RateLimitExceededException"}
     ]
  }
},
"shapes":{
  "AcceptGrantRequest":{
    "type":"structure",
    "required":["GrantArn"],
    "members":{
      "GrantArn":{"shape":"Arn"}
    }
  },
  "AcceptGrantResponse":{
    "type":"structure",
    "members":{
      "GrantArn":{"shape":"Arn"},
      "Status":{"shape":"GrantStatus"},
      "Version":{"shape":"String"}
    }
  },
  "AccessDeniedException":{
    "type":"structure",
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"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"ActivationOverrideBehavior":{
"type":"string",
"enum":[
"DISTRIBUTED_GRANTS_ONLY",
"ALL_GRANTS_PERMITTED_BY_ISSUER"
]
},
"AllowedOperation":{
"type":"string",
"enum":[
"CreateGrant",
"CheckoutLicense",
"CheckoutBorrowLicense",
"CheckInLicense",
"ExtendConsumptionLicense",
"ListPurchasedLicenses",
"CreateToken"
]
},
"AllowedOperationList":{
"type":"list",
"member":{"shape":"AllowedOperation"},
"max":7,
"min":1
},
"Arn":{
"type":"string",
"max":2048,
"pattern":"^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
},
"ArnList":{
"type":"list",
"member":{"shape":"Arn"}
},
"AuthorizationException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"AutomatedDiscoveryInformation":{

"type":"structure",
"members":{
"LastRunTime":{"shape":"DateTime"}
}
},
"Boolean":{"type":"boolean"},
"BorrowConfiguration":{
"type":"structure",
"required":[
"AllowEarlyCheckIn",
"MaxTimeToLiveInMinutes"
],
"members":{
"AllowEarlyCheckIn":{"shape":"BoxBoolean"},
"MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
}
},
"BoxBoolean":{"type":"boolean"},
"BoxInteger":{"type":"integer"},
"BoxLong":{"type":"long"},
"CheckInLicenseRequest":{
"type":"structure",
"required":["LicenseConsumptionToken"],
"members":{
"LicenseConsumptionToken":{"shape":"String"},
"Beneficiary":{"shape":"String"}
}
},
"CheckInLicenseResponse":{
"type":"structure",
"members":{
}
},
"CheckoutBorrowLicenseRequest":{
"type":"structure",
"required":[
"LicenseArn",
"Entitlements",
"DigitalSignatureMethod",
"ClientToken"
],
"members":{
"LicenseArn":{"shape":"Arn"},
"Entitlements":{"shape":"EntitlementDataList"},
"DigitalSignatureMethod":{"shape":"DigitalSignatureMethod"},
"NodeId":{"shape":"String"},
"CheckoutMetadata":{"shape":"MetadataList"},
"ClientToken":{"shape":"ClientToken"}

```
    }
  },

  "CheckoutBorrowLicenseResponse":{
    "type":"structure",
    "members":{
      "LicenseArn":{"shape":"Arn"},
      "LicenseConsumptionToken":{"shape":"String"},
      "EntitlementsAllowed":{"shape":"EntitlementDataList"},
      "NodeId":{"shape":"String"},
      "SignedToken":{"shape":"SignedToken"},
      "IssuedAt":{"shape":"ISO8601DateTime"},
      "Expiration":{"shape":"ISO8601DateTime"},
      "CheckoutMetadata":{"shape":"MetadataList"}
    }
  },
  "CheckoutLicenseRequest":{
    "type":"structure",
    "required":[
      "ProductSKU",
      "CheckoutType",
      "KeyFingerprint",
      "Entitlements",
      "ClientToken"
    ],
    "members":{
      "ProductSKU":{"shape":"String"},
      "CheckoutType":{"shape":"CheckoutType"},
      "KeyFingerprint":{"shape":"String"},
      "Entitlements":{"shape":"EntitlementDataList"},
      "ClientToken":{"shape":"ClientToken"},
      "Beneficiary":{"shape":"String"},
      "NodeId":{"shape":"String"}
     }
  },
  "CheckoutLicenseResponse":{
    "type":"structure",
    "members":{
      "CheckoutType":{"shape":"CheckoutType"},
      "LicenseConsumptionToken":{"shape":"String"},
      "EntitlementsAllowed":{"shape":"EntitlementDataList"},
      "SignedToken":{"shape":"SignedToken"},
      "NodeId":{"shape":"String"},
      "IssuedAt":{"shape":"ISO8601DateTime"},
      "Expiration":{"shape":"ISO8601DateTime"},
      "LicenseArn":{"shape":"String"}
    }
  },
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"CheckoutType":{
  "type":"string",
  "enum":[
    "PROVISIONAL",
    "PERPETUAL"
  ]
},
"ClientRequestToken":{
  "type":"string",
  "max":36,
  "min":1
},
"ClientToken":{
  "type":"string",
  "max":2048,
  "pattern":"\\S+"
},
"ConflictException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ConsumedLicenseSummary":{
  "type":"structure",
   "members":{
    "ResourceType":{"shape":"ResourceType"},
    "ConsumedLicenses":{"shape":"BoxLong"}
  }
},
"ConsumedLicenseSummaryList":{
  "type":"list",
  "member":{"shape":"ConsumedLicenseSummary"}
},
"ConsumptionConfiguration":{
  "type":"structure",
  "members":{
    "RenewType":{"shape":"RenewType"},
    "ProvisionalConfiguration":{"shape":"ProvisionalConfiguration"},
    "BorrowConfiguration":{"shape":"BorrowConfiguration"}
  }
},
"CreateGrantRequest":{
  "type":"structure",
  "required":[
    "ClientToken",
    "GrantName",

"LicenseArn",
"Principals",
"HomeRegion",
"AllowedOperations"
],
"members":{
"ClientToken":{"shape":"ClientToken"},
"GrantName":{"shape":"String"},
"LicenseArn":{"shape":"Arn"},
"Principals":{"shape":"PrincipalArnList"},
"HomeRegion":{"shape":"String"},
"AllowedOperations":{"shape":"AllowedOperationList"}
}
},
"CreateGrantResponse":{
"type":"structure",
"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
},
"CreateGrantVersionRequest":{
"type":"structure",
"required":[
"ClientToken",
"GrantArn"
],
"members":{
"ClientToken":{"shape":"ClientToken"},
"GrantArn":{"shape":"Arn"},
"GrantName":{"shape":"String"},
"AllowedOperations":{"shape":"AllowedOperationList"},
"Status":{"shape":"GrantStatus"},
"StatusReason":{"shape":"StatusReasonMessage"},
"SourceVersion":{"shape":"String"},
"Options":{"shape":"Options"}
}
},
"CreateGrantVersionResponse":{
"type":"structure",
"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
},
"CreateLicenseConfigurationRequest":{

"type":"structure",
"required":[
"Name",
"LicenseCountingType"
],
"members":{
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"LicenseCountingType":{"shape":"LicenseCountingType"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"LicenseRules":{"shape":"StringList"},
"Tags":{"shape":"TagList"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"},
"ProductInformationList":{"shape":"ProductInformationList"}
}
},
"CreateLicenseConfigurationResponse":{
"type":"structure",
"members":{
"LicenseConfigurationArn":{"shape":"String"}
}
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"CreateLicenseConversionTaskForResourceRequest":{
"type":"structure",
"required":[
"ResourceArn",
"SourceLicenseContext",
"DestinationLicenseContext"
],
"members":{
"ResourceArn":{"shape":"Arn"},
"SourceLicenseContext":{"shape":"LicenseConversionContext"},
"DestinationLicenseContext":{"shape":"LicenseConversionContext"}
}
},
"CreateLicenseConversionTaskForResourceResponse":{
"type":"structure",
"members":{
"LicenseConversionTaskId":{"shape":"LicenseConversionTaskId"}
}
},
"CreateLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":[
"ReportGeneratorName",
"Type",
"ReportContext",

"ReportFrequency",
"ClientToken"
],
"members":{
"ReportGeneratorName":{"shape":"ReportGeneratorName"},
"Type":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"ClientToken":{"shape":"ClientRequestToken"},
"Description":{"shape":"String"},
"Tags":{"shape":"TagList"}
}
},
"CreateLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
"LicenseManagerReportGeneratorArn":{"shape":"String"}
}
},
"CreateLicenseRequest":{
"type":"structure",
"required":[
"LicenseName",
"ProductName",
"ProductSKU",
"Issuer",
"HomeRegion",
"Validity",
"Entitlements",
"Beneficiary",
"ConsumptionConfiguration",
"ClientToken"
],
"members":{
"LicenseName":{"shape":"String"},
"ProductName":{"shape":"String"},
"ProductSKU":{"shape":"String"},
"Issuer":{"shape":"Issuer"},
"HomeRegion":{"shape":"String"},
"Validity":{"shape":"DatetimeRange"},
"Entitlements":{"shape":"EntitlementList"},
"Beneficiary":{"shape":"String"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"LicenseMetadata":{"shape":"MetadataList"},
"ClientToken":{"shape":"ClientToken"}

}
},

"CreateLicenseResponse":{
  "type":"structure",
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "Status":{"shape":"LicenseStatus"},
    "Version":{"shape":"String"}
  }
},
"CreateLicenseVersionRequest":{
  "type":"structure",
  "required":[
    "LicenseArn",
    "LicenseName",
    "ProductName",
    "Issuer",
    "HomeRegion",
    "Validity",
    "Entitlements",
    "ConsumptionConfiguration",
    "Status",
    "ClientToken"
  ],
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "LicenseName":{"shape":"String"},
    "ProductName":{"shape":"String"},
    "Issuer":{"shape":"Issuer"},
    "HomeRegion":{"shape":"String"},
    "Validity":{"shape":"DatetimeRange"},
    "LicenseMetadata":{"shape":"MetadataList"},
    "Entitlements":{"shape":"EntitlementList"},
    "ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
    "Status":{"shape":"LicenseStatus"},
     "ClientToken":{"shape":"ClientToken"},
    "SourceVersion":{"shape":"String"}
  }
},
"CreateLicenseVersionResponse":{
  "type":"structure",
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "Version":{"shape":"String"},
    "Status":{"shape":"LicenseStatus"}
  }
},
"CreateTokenRequest":{
  "type":"structure",
  "required":[

"LicenseArn",
"ClientToken"
],
"members":{
"LicenseArn":{"shape":"Arn"},
"RoleArns":{"shape":"ArnList"},
"ExpirationInDays":{"shape":"Integer"},
"TokenProperties":{"shape":"MaxSize3StringList"},
"ClientToken":{"shape":"ClientToken"}
}
},
"CreateTokenResponse":{
"type":"structure",
"members":{
"TokenId":{"shape":"String"},
"TokenType":{"shape":"TokenType"},
"Token":{"shape":"TokenString"}
}
},
"DateTime":{"type":"timestamp"},
"DatetimeRange":{

"type":"structure",
"required":["Begin"],
"members":{
"Begin":{"shape":"ISO8601DateTime"},
"End":{"shape":"ISO8601DateTime"}
}
},
"DeleteGrantRequest":{
"type":"structure",
"required":[
"GrantArn",
"Version"
],
"members":{
"GrantArn":{"shape":"Arn"},
"StatusReason":{"shape":"StatusReasonMessage"},
"Version":{"shape":"String"}
}
},
"DeleteGrantResponse":{
"type":"structure",
"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}

},
"DeleteLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{"shape":"String"}
}
},
"DeleteLicenseConfigurationResponse":{
"type":"structure",
"members":{
}
},
"DeleteLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":["LicenseManagerReportGeneratorArn"],
"members":{
"LicenseManagerReportGeneratorArn":{"shape":"String"}
}
},
"DeleteLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
}
},
"DeleteLicenseRequest":{
"type":"structure",
"required":[
"LicenseArn",
"SourceVersion"
],
"members":{
"LicenseArn":{"shape":"Arn"},
"SourceVersion":{"shape":"String"}
}
},
"DeleteLicenseResponse":{
"type":"structure",
"members":{
"Status":{"shape":"LicenseDeletionStatus"},
"DeletionDate":{"shape":"ISO8601DateTime"}
}
},
"DeleteTokenRequest":{
"type":"structure",
"required":["TokenId"],
"members":{
"TokenId":{"shape":"String"}

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  }
},
"DeleteTokenResponse":{
  "type":"structure",
  "members":{
  }
},
"DigitalSignatureMethod":{

  "type":"string",
  "enum":["JWT_PS384"]
},
"Entitlement":{
  "type":"structure",
  "required":[
    "Name",
    "Unit"
  ],
  "members":{
    "Name":{"shape":"String"},
    "Value":{"shape":"String"},
    "MaxCount":{"shape":"Long"},
    "Overage":{"shape":"BoxBoolean"},
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    "Unit"
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"ExtendLicenseConsumptionResponse":{
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"GetLicenseConfigurationResponse":{
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"LicenseRules":{"shape":"StringList"},
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"LicenseCountHardLimit":{"shape":"BoxBoolean"},
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"OwnerAccountId":{"shape":"String"},
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"DestinationLicenseContext":{"shape":"LicenseConversionContext"},
"StatusMessage":{"shape":"String"},
"Status":{"shape":"LicenseConversionTaskStatus"},
"StartTime":{"shape":"DateTime"},
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"EndTime":{"shape":"DateTime"}
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},
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"members":{
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"Version":{"shape":"String"}
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"GetLicenseResponse":{
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  "members":{
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"GetLicenseUsageResponse":{
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    "OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
    "EnableCrossAccountsDiscovery":{"shape":"BoxBoolean"},
    "LicenseManagerResourceShareArn":{"shape":"String"}
  }
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    "GranteePrincipalArn",
    "HomeRegion",
    "GrantStatus",
    "Version",
    "GrantedOperations"
  ],

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    "GranteePrincipalArn":{"shape":"Arn"},
    "HomeRegion":{"shape":"String"},
    "GrantStatus":{"shape":"GrantStatus"},
    "StatusReason":{"shape":"StatusReasonMessage"},
    "Version":{"shape":"String"},
    "GrantedOperations":{"shape":"AllowedOperationList"},
     "Options":{"shape":"Options"}
  }
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"GrantList":{
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  "member":{"shape":"Grant"}
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"GrantStatus":{
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    "ACTIVE",
    "FAILED_WORKFLOW",
    "DELETED",
    "PENDING_DELETE",
    "DISABLED",
    "WORKFLOW_COMPLETED"
  ]
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    "ProductSKU":{"shape":"String"},
    "Issuer":{"shape":"IssuerDetails"},
    "HomeRegion":{"shape":"String"},
    "Status":{"shape":"LicenseStatus"},
    "Validity":{"shape":"DatetimeRange"},
    "Beneficiary":{"shape":"String"},
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"members":{
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"exception":true
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"InventoryFilter":{
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"Condition"
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"Value":{"shape":"String"}
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"InventoryFilterCondition":{
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"NOT_EQUALS",
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"IssuerDetails":{
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"KeyFingerprint":{"shape":"String"}
}
},
"License":{
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"LicenseName":{"shape":"String"},

"ProductName":{"shape":"String"},
"ProductSKU":{"shape":"String"},
"Issuer":{"shape":"IssuerDetails"},
"HomeRegion":{"shape":"String"},
"Status":{"shape":"LicenseStatus"},
"Validity":{"shape":"DatetimeRange"},
"Beneficiary":{"shape":"String"},
"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
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"CreateTime":{"shape":"ISO8601DateTime"},
"Version":{"shape":"String"}
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"LicenseRules":{"shape":"StringList"},
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"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"},
"ConsumedLicenses":{"shape":"BoxLong"},
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"OwnerAccountId":{"shape":"String"},
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"AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"}
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"ResourceOwnerId":{"shape":"String"},
"AssociationTime":{"shape":"DateTime"},
"AmiAssociationScope":{"shape":"String"}
}
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"LicenseConfigurationAssociations":{
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"ResourceType":{"shape":"ResourceType"},
"ResourceStatus":{"shape":"String"},
"ResourceOwnerId":{"shape":"String"},
"AssociationTime":{"shape":"DateTime"},
"ConsumedLicenses":{"shape":"BoxLong"}

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  "member":{"shape":"LicenseConfiguration"}
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"LicenseConversionContext":{
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"LicenseConversionTask":{
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  "members":{
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     "ResourceArn":{"shape":"String"},
    "SourceLicenseContext":{"shape":"LicenseConversionContext"},
    "DestinationLicenseContext":{"shape":"LicenseConversionContext"},
    "Status":{"shape":"LicenseConversionTaskStatus"},
    "StatusMessage":{"shape":"String"},
    "StartTime":{"shape":"DateTime"},
    "LicenseConversionTime":{"shape":"DateTime"},
    "EndTime":{"shape":"DateTime"}
  }
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"LicenseConversionTaskId":{
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"LicenseConversionTaskStatus":{
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    "SUCCEEDED",
    "FAILED"
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"LicenseConversionTasks":{
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  "member":{"shape":"LicenseConversionTask"}
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"LicenseCountingType":{
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"ErrorMessage":{"shape":"String"},
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"ResourceOwnerId":{"shape":"String"},
"OperationRequestedBy":{"shape":"String"},
"MetadataList":{"shape":"MetadataList"}
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"LicenseSpecifications":{
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    "EXPIRED",
    "PENDING_DELETE",
    "DELETED"
  ]
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"LicenseUsage":{
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  "members":{
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"LicenseUsageException":{
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  "members":{
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  "exception":true
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"ListAssociationsForLicenseConfigurationRequest":{
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  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"}
  }
},
"ListAssociationsForLicenseConfigurationResponse":{
  "type":"structure",
   "members":{
    "LicenseConfigurationAssociations":{"shape":"LicenseConfigurationAssociations"},
    "NextToken":{"shape":"String"}
  }
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"ListDistributedGrantsRequest":{
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  "members":{
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    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}

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  }
},
"ListDistributedGrantsResponse":{
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  "members":{
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    "NextToken":{"shape":"String"}
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},
"ListFailuresForLicenseConfigurationOperationsRequest":{
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  "required":["LicenseConfigurationArn"],
  "members":{
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    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"}
  }
},
"ListFailuresForLicenseConfigurationOperationsResponse":{
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   "members":{
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    "NextToken":{"shape":"String"}
  }
},
"ListLicenseConfigurationsRequest":{
  "type":"structure",
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    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"},
    "Filters":{"shape":"Filters"}
  }
},
"ListLicenseConfigurationsResponse":{
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  "members":{
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    "NextToken":{"shape":"String"}
  }
},
"ListLicenseConversionTasksRequest":{
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  "members":{
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    "MaxResults":{"shape":"BoxInteger"},
    "Filters":{"shape":"Filters"}
  }
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"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListLicenseManagerReportGeneratorsResponse":{
"type":"structure",
"members":{
"ReportGenerators":{"shape":"ReportGeneratorList"},
"NextToken":{"shape":"String"}
}
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"ListLicenseSpecificationsForResourceRequest":{
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"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"}
}
},
"ListLicenseSpecificationsForResourceResponse":{
"type":"structure",
"members":{
"LicenseSpecifications":{"shape":"LicenseSpecifications"},
"NextToken":{"shape":"String"}

}
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"ListLicenseVersionsRequest":{
"type":"structure",
"required":["LicenseArn"],
"members":{
"LicenseArn":{"shape":"Arn"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}

},
"ListLicenseVersionsResponse":{
  "type":"structure",
  "members":{
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    "NextToken":{"shape":"String"}
  }
},
"ListLicensesRequest":{
  "type":"structure",
  "members":{
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    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListLicensesResponse":{
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  "members":{
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    "NextToken":{"shape":"String"}
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},
"ListReceivedGrantsForOrganizationRequest":{
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    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
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"ListReceivedGrantsForOrganizationResponse":{
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    "NextToken":{"shape":"String"}
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},
"ListReceivedGrantsRequest":{
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  "members":{
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    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}

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  }
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"ListReceivedGrantsResponse":{
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},
"ListReceivedLicensesForOrganizationRequest":{
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  "members":{
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    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
   }
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"ListReceivedLicensesForOrganizationResponse":{
  "type":"structure",
  "members":{
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    "NextToken":{"shape":"String"}
  }
},
"ListReceivedLicensesRequest":{
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  "members":{
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    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
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"ListReceivedLicensesResponse":{
  "type":"structure",
  "members":{
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    "NextToken":{"shape":"String"}
  }
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"ListResourceInventoryRequest":{
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  "members":{
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    "NextToken":{"shape":"String"},
    "Filters":{"shape":"InventoryFilterList"}
  }
},
```

"ListResourceInventoryResponse":{
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  "members":{
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     "NextToken":{"shape":"String"}
  }
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"ListTagsForResourceRequest":{
  "type":"structure",
  "required":["ResourceArn"],
  "members":{
    "ResourceArn":{"shape":"String"}
  }
},
"ListTagsForResourceResponse":{
  "type":"structure",
  "members":{
    "Tags":{"shape":"TagList"}
  }
},
"ListTokensRequest":{
  "type":"structure",
  "members":{
    "TokenIds":{"shape":"StringList"},
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListTokensResponse":{
  "type":"structure",
  "members":{
    "Tokens":{"shape":"TokenList"},
    "NextToken":{"shape":"String"}
  }
},
"ListUsageForLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"},
     "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"},
    "Filters":{"shape":"Filters"}
  }
},
"ListUsageForLicenseConfigurationResponse":{
  "type":"structure",

```
  "members":{
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    "NextToken":{"shape":"String"}
  }
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  "type":"structure",
  "members":{
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    "AssociationCount":{"shape":"BoxLong"}
  }
},
"ManagedResourceSummaryList":{
  "type":"list",
  "member":{"shape":"ManagedResourceSummary"}
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  "max":100,
  "min":1
},
"MaxSize3StringList":{
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  "member":{"shape":"String"},
  "max":3
},
"Message":{"type":"string"},
"Metadata":{
  "type":"structure",
   "members":{
    "Name":{"shape":"String"},
    "Value":{"shape":"String"}
  }
},
"MetadataList":{
  "type":"list",
  "member":{"shape":"Metadata"}
},
"NoEntitlementsAllowedException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"Options":{
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"members":{
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"OrganizationConfiguration":{
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"required":["EnableIntegration"],
"members":{
"EnableIntegration":{"shape":"Boolean"}
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"PrincipalArnList":{
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"member":{"shape":"Arn"},
"max":1,
"min":1
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"ProductInformation":{
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"required":[
"ResourceType",
"ProductInformationFilterList"
],
"members":{
"ResourceType":{"shape":"String"},
"ProductInformationFilterList":{"shape":"ProductInformationFilterList"}
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"ProductInformationFilter":{
"type":"structure",
"required":[
"ProductInformationFilterName",
"ProductInformationFilterComparator"
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"members":{
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"ProductInformationFilterValue":{"shape":"StringList"},
"ProductInformationFilterComparator":{"shape":"String"}
}
},
"ProductInformationFilterList":{
"type":"list",
"member":{"shape":"ProductInformationFilter"}
},
"ProductInformationList":{
"type":"list",
"member":{"shape":"ProductInformation"}

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},
"ProvisionalConfiguration":{
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  "required":["MaxTimeToLiveInMinutes"],
  "members":{
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  }
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"RateLimitExceededException":{
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  "members":{
    "Message":{"shape":"Message"}
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  "exception":true
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"ReceivedMetadata":{
  "type":"structure",
  "members":{
    "ReceivedStatus":{"shape":"ReceivedStatus"},
    "ReceivedStatusReason":{"shape":"StatusReasonMessage"},
    "AllowedOperations":{"shape":"AllowedOperationList"}
  }
},
"ReceivedStatus":{
  "type":"string",
  "enum":[
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    "PENDING_ACCEPT",
    "REJECTED",
    "ACTIVE",
    "FAILED_WORKFLOW",
    "DELETED",
    "DISABLED",
    "WORKFLOW_COMPLETED"
  ]
},
"RedirectException":{
  "type":"structure",
  "members":{
    "Location":{"shape":"Location"},
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"RejectGrantRequest":{
  "type":"structure",
  "required":["GrantArn"],
  "members":{
```

"GrantArn":{"shape":"Arn"}
}
},
"RejectGrantResponse":{
"type":"structure",
"members":{
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"LastReportGenerationTime":{"shape":"String"},
"ReportCreatorAccount":{"shape":"String"},
"Description":{"shape":"String"},
"S3Location":{"shape":"S3Location"},
"CreateTime":{"shape":"String"},
"Tags":{"shape":"TagList"}
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"LicenseConfigurationUsageReport"
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"PlatformVersion":{"shape":"String"},
"ResourceOwningAccountId":{"shape":"String"}
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"EC2_HOST",
"EC2_AMI",
"RDS",
"SYSTEMS_MANAGER_MANAGED_INSTANCE"
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    "LicenseArn":{"shape":"String"},
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    "RoleArns":{"shape":"ArnList"},
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"LicenseRules":{"shape":"StringList"},
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"LicenseCountHardLimit":{"shape":"BoxBoolean"},
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"ProductInformationList":{"shape":"ProductInformationList"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"}

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    "ReportFrequency",
    "ClientToken"
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    "ReportGeneratorName":{"shape":"ReportGeneratorName"},
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    "ReportContext":{"shape":"ReportContext"},
    "ReportFrequency":{"shape":"ReportFrequency"},
    "ClientToken":{"shape":"ClientRequestToken"},
    "Description":{"shape":"String"}
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            }
```

```
        },
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          "UseDualStack": false
        }
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            "url": "https://license-manager-user-subscriptions.ap-northeast-2.api.aws"
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          "Region": "ap-northeast-2",
          "UseDualStack": true
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          "UseDualStack": false
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        }
    },
    "params": {
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        "Region": "ap-northeast-1",
        "UseDualStack": true
    }
},
{
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        "UseDualStack": false
    }
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{
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         }
    },
    "params": {
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{
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"expect": {
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}
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"UseDualStack": true
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"Region": "me-south-1",
"UseDualStack": true
}
},
{
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"expect": {

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}
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"params": {
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"Region": "me-south-1",
"UseDualStack": false
}
},
{
"documentation": "For region sa-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.sa-east-1.api.aws"
}
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"params": {
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"Region": "sa-east-1",
"UseDualStack": true
}
},
{
"documentation": "For region sa-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.sa-east-1.amazonaws.com"
}
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"params": {
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"Region": "sa-east-1",
"UseDualStack": false
}
},
{
"documentation": "For
region sa-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.sa-east-1.api.aws"
}
},
"params": {
"UseFIPS": false,
"Region": "sa-east-1",
"UseDualStack": true

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    }
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  {
    "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
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        "url": "https://license-manager-user-subscriptions.sa-east-1.amazonaws.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "Region": "sa-east-1",
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.ap-east-1.api.aws"
      }
    },
    "params": {
      "UseFIPS": true,
      "Region": "ap-east-1",
      "UseDualStack": true
    }
  },
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    "expect": {
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      }
    },
    "params": {
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      "Region": "ap-east-1",
      "UseDualStack": false
    }
  },
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    "expect": {
      "endpoint": {
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```

}
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}
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"params": {
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"Region": "ap-east-1",
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-1 with FIPS enabled and DualStack enabled",
"expect": {
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}
},
"params": {
"UseFIPS": true,
"Region":
"ap-southeast-1",
"UseDualStack": true
}
},
{
"documentation": "For region ap-southeast-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
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        "Region": "ap-southeast-1",
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        }
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        "Region": "ap-southeast-1",
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-southeast-2 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.ap-southeast-2.api.aws"
        }
      },
      "params": {
        "UseFIPS": true,
        "Region": "ap-southeast-2",
        "UseDualStack": true
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enabled and DualStack disabled",
      "expect": {
        "endpoint": {
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        }
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"UseDualStack": false
}
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"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack enabled",
"expect": {
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"params": {
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"Region": "ap-southeast-2",
"UseDualStack": true
}
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"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"UseFIPS": false,
"Region": "ap-southeast-2",
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"UseFIPS": true,
"Region": "us-east-1",
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",

"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
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"params": {
"UseFIPS": true,
"Region": "us-east-1",
"UseDualStack": false
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
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"params": {
"UseFIPS": false,
"Region": "us-east-1",
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"UseFIPS": false,

"Region": "us-east-1",
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-2.api.aws"
}
},
"params": {
"UseFIPS": true,
"Region": "us-east-2",

"UseDualStack": true
}
},
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"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
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},
"params": {
"UseFIPS": true,
"Region": "us-east-2",
"UseDualStack": false
}
},
{

"documentation": "For region us-east-2 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager-user-subscriptions.us-east-2.api.aws"
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"params": {
"UseFIPS": false,
"Region": "us-east-2",
"UseDualStack": true
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},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-2.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"Region": "us-east-2",
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack disabled",
"expect":
{
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"Region": "us-east-1",
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"UseFIPS": true,
"Region": "us-east-1",
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"

},
"params": {
"UseFIPS": false,
"Region": "us-east-1",
"UseDualStack": true,
"Endpoint": "https://example.com"
}
}
],
"version": "1.0"
}
{
"version": "2.0",
"service": " License Manager makes it easier to manage licenses from software vendors across multiple Amazon Web Services accounts and on-premises servers. ",
"operations": {
"AcceptGrant": " Accepts the specified grant. ",
"CheckInLicense": " Checks in the specified license. Check in a license when it is no longer in use. ",
"CheckoutBorrowLicense": " Checks out the specified license for offline use. ",
"CheckoutLicense": " Checks out the specified license. <note> If the account that created the license is the same that is performing the check out, you must specify the account as the beneficiary. </note>",

"CreateGrant": " Creates a grant for the specified license. A grant shares the use of license entitlements with a specific Amazon Web Services account, an organization, or an organizational unit (OU). For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateGrantVersion": " Creates a new version of the specified grant. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateLicense": " Creates a license. ",
"CreateLicenseConfiguration": " Creates a license configuration. A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a license must be associated with a host), and the number of licenses purchased and used. ",
"CreateLicenseConversionTaskForResource": " Creates a new license conversion task. ",
"CreateLicenseManagerReportGenerator": " Creates a report generator. ",
"CreateLicenseVersion": " Creates a new version of the specified license. ",
"CreateToken": " Creates a long-lived token. A refresh token is a JWT token used to get an access token. With an access token, you can call AssumeRoleWithWebIdentity to get role credentials that you can use to call License Manager to manage the specified license. ",
"DeleteGrant": " Deletes the specified grant. ",
"DeleteLicense": " Deletes the specified license. ",
"DeleteLicenseConfiguration": " Deletes the specified license configuration. You cannot delete a license configuration that is in use. ",
"DeleteLicenseManagerReportGenerator": " Deletes the specified report generator. This action deletes the report generator, which stops it from generating future reports. The action cannot be reversed. It has no effect on the previous reports from this generator. ",
"DeleteToken": " Deletes the specified token. Must be called in the license home Region. ",
"ExtendLicenseConsumption": " Extends the expiration date for license consumption. ",
"GetAccessToken": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens are valid for one hour. ",
"GetGrant": " Gets detailed information about the specified grant. ",
"GetLicense": " Gets detailed information about the specified license. ",
"GetLicenseConfiguration": " Gets detailed information about the specified license configuration. ",
"GetLicenseConversionTask": " Gets information about the specified license type conversion task. ",
"GetLicenseManagerReportGenerator": " Gets information about the specified report generator. ",
"GetLicenseUsage": " Gets detailed information about the usage of the specified license. ",
"GetServiceSettings": " Gets the License Manager settings for the current Region. ",
"ListAssociationsForLicenseConfiguration": " Lists the resource associations for the specified license configuration. Resource associations need not consume licenses from a license configuration. For example, an AMI or a stopped instance might not consume a license (depending on the license rules). ",
"ListDistributedGrants": " Lists the grants distributed for the specified license. ",
"ListFailuresForLicenseConfigurationOperations": " Lists the license configuration operations that failed. ",
"ListLicenseConfigurations": " Lists the license configurations for your account. ",
"ListLicenseConversionTasks": " Lists the license type conversion tasks for your account. ",
"ListLicenseManagerReportGenerators": " Lists the report generators for your account. ",

"ListLicenseSpecificationsForResource": " Describes the license configurations for the specified resource. ",
"ListLicenseVersions": " Lists all versions of the specified license. ",
"ListLicenses": " Lists the licenses for your account. ",
"ListReceivedGrants": " Lists grants that are received. Received grants are grants created while specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs. ",
"ListReceivedGrantsForOrganization": " Lists the grants received for all accounts in the organization. ",
"ListReceivedLicenses": " Lists received licenses. ",
"ListReceivedLicensesForOrganization": " Lists the licenses received for all accounts in the organization. ",
"ListResourceInventory": " Lists resources managed using Systems Manager inventory. ",
"ListTagsForResource": " Lists the tags for the specified license configuration. ",
"ListTokens": " Lists your tokens. ",
"ListUsageForLicenseConfiguration": " Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration. ",
"RejectGrant": " Rejects the specified grant. ",
"TagResource": " Adds the specified tags to the specified license configuration. ",
"UntagResource": " Removes the specified tags from the specified license configuration. ",
"UpdateLicenseConfiguration": " Modifies the attributes of an existing license configuration. ",
"UpdateLicenseManagerReportGenerator": " Updates a report generator. After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. ",
"UpdateLicenseSpecificationsForResource": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. You can update the license specifications of AMIs, instances, and hosts. You cannot update the license specifications for launch templates and CloudFormation templates, as they send license configurations to the operation that creates the resource. ",
"UpdateServiceSettings": " Updates License Manager settings for the current Region. "
},
"shapes": {
"AcceptGrantRequest": {
"base": null,
"refs": {
}
},
"AcceptGrantResponse": {
"base": null,
"refs": {
}
},
"AccessDeniedException": {
"base": " Access to resource denied. ",
"refs": {
}
},
"ActivationOverrideBehavior": {

"base": null,
"refs": {
"Options$ActivationOverrideBehavior": " An activation option for your grant that determines the behavior of activating a grant. Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the <code>Status</code> parameter.   As a license administrator, you can optionally specify an <code>ActivationOverrideBehavior</code> when activating a grant.   As a grantor, you can optionally specify an <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee account in your organization.   As a grantee, if the grantor creating the distributed grant doesnt specify an <code>ActivationOverrideBehavior</code>, you can optionally specify one when you are activating the grant.   <dl> <dt>DISTRIBUTED_GRANTS_ONLY</dt> <dd> Use this value to activate a grant without replacing any member accounts active grants for the same product. </dd> <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt> <dd> Use this value to activate a grant and disable other active grants in any member accounts for the same product. This action will also replace their previously activated grants with this activated grant. </dd> </dl>"
}
},
"AllowedOperation": {
"base": null,
"refs": {
"AllowedOperationList$member": null
}
},
"AllowedOperationList": {
"base": null,
"refs": {
"CreateGrantRequest$AllowedOperations": " Allowed operations for the grant. ",
"CreateGrantVersionRequest$AllowedOperations": " Allowed operations for the grant. ",
"Grant$GrantedOperations": " Granted operations. ",
"ReceivedMetadata$AllowedOperations": " Allowed operations. "
}
},
"Arn": {
"base": null,
"refs": {
"AcceptGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"AcceptGrantResponse$GrantArn": " Grant ARN. ",
"ArnList$member": null,
"CheckoutBorrowLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"CheckoutBorrowLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantResponse$GrantArn": " Grant ARN. ",
"CreateGrantVersionRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"CreateGrantVersionResponse$GrantArn": " Grant ARN. ",
"CreateLicenseConversionTaskForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of

the resource you are converting the license type for. ",
"CreateLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionResponse$LicenseArn": " License ARN. ",
"CreateTokenRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the JWT token. ",
"DeleteGrantRequest$GrantArn":
" Amazon Resource Name (ARN) of the grant. ",
"DeleteGrantResponse$GrantArn": " Grant ARN. ",
"DeleteLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"GetLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetLicenseUsageRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"Grant$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"Grant$ParentArn": " Parent ARN. ",
"Grant$LicenseArn": " License ARN. ",
"Grant$GranteePrincipalArn": " The grantee principal ARN. ",
"GrantedLicense$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"License$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"ListLicenseVersionsRequest$LicenseArn": " Amazon Resource Name (ARN) of
the license. ",
"ListReceivedGrantsForOrganizationRequest$LicenseArn": " The Amazon Resource Name (ARN) of the received license. ",
"PrincipalArnList$member": null,
"RejectGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"RejectGrantResponse$GrantArn": " Grant ARN. "
}
},
"ArnList": {
"base": null,
"refs": {
"CreateTokenRequest$RoleArns": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. License Manager does not check whether the roles are in use. ",
"ListDistributedGrantsRequest$GrantArns": " Amazon Resource Names (ARNs) of the grants. ",
"ListLicensesRequest$LicenseArns": " Amazon Resource Names (ARNs) of the licenses. ",
"ListReceivedGrantsRequest$GrantArns": " Amazon Resource Names (ARNs) of the grants. ",
"ListReceivedLicensesRequest$LicenseArns": " Amazon Resource Names (ARNs) of the licenses. ",

"ReportContext$licenseConfigurationArns": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"TokenData$RoleArns": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"AuthorizationException": {
"base": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM policy associated with this account. ",
"refs": {
}

},
"AutomatedDiscoveryInformation": {
"base": " Describes automated discovery. ",
"refs": {
"GetLicenseConfigurationResponse$AutomatedDiscoveryInformation": " Automated discovery information. ",
"LicenseConfiguration$AutomatedDiscoveryInformation": " Automated discovery information. "
}
},
"Boolean": {
"base": null,
"refs": {
"ExtendLicenseConsumptionRequest$DryRun": " Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions. ",
"OrganizationConfiguration$EnableIntegration": " Enables Organizations integration. "
}
},
"BorrowConfiguration": {
"base": " Details about a borrow configuration. ",
"refs": {
"ConsumptionConfiguration$BorrowConfiguration": " Details about a borrow configuration. "
}
},
"BoxBoolean": {
"base": null,
"refs": {
"BorrowConfiguration$AllowEarlyCheckIn": " Indicates whether early check-ins are allowed. ",
"CreateLicenseConfigurationRequest$LicenseCountHardLimit": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit blocks the launch of new instances. ",
"CreateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"Entitlement$Overage": " Indicates
whether overages are allowed. ",
"Entitlement$AllowCheckIn": " Indicates whether check-ins are allowed. ",
"GetLicenseConfigurationResponse$LicenseCountHardLimit": " Sets the number of available licenses as a hard limit. ",
"GetLicenseConfigurationResponse$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"GetServiceSettingsResponse$EnableCrossAccountsDiscovery": " Indicates whether cross-account discovery is enabled. ",
"LicenseConfiguration$LicenseCountHardLimit": " Number of available licenses as a hard limit. ",
"LicenseConfiguration$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateLicenseConfigurationRequest$LicenseCountHardLimit": " New hard limit of the number of available licenses. ",
"UpdateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates

a resource when software is uninstalled. ",
"UpdateServiceSettingsRequest$EnableCrossAccountsDiscovery": " Activates cross-account discovery. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"BorrowConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the borrow configuration, in minutes. ",
"ListAssociationsForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListFailuresForLicenseConfigurationOperationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConfigurationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConversionTasksRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseSpecificationsForResourceRequest$MaxResults": " Maximum number of results to return in a single call. ",

"ListResourceInventoryRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUsageForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ProvisionalConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the provisional configuration, in minutes. "
}
},
"BoxLong": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ConsumedLicenses": " Number of licenses consumed by the resource. ",
"CreateLicenseConfigurationRequest$LicenseCount": " Number of licenses managed by the license configuration. ",
"GetLicenseConfigurationResponse$LicenseCount": " Number of available licenses. ",
"GetLicenseConfigurationResponse$ConsumedLicenses": " Number of licenses assigned to resources. ",
"LicenseConfiguration$LicenseCount": " Number of licenses managed by the license configuration. ",
"LicenseConfiguration$ConsumedLicenses": " Number of licenses consumed. ",
"LicenseConfigurationUsage$ConsumedLicenses": " Number of licenses consumed by the resource. ",
"ManagedResourceSummary$AssociationCount": " Number of resources associated with licenses. ",
"UpdateLicenseConfigurationRequest$LicenseCount": " New number of licenses managed by the license configuration. "
}
},
"CheckInLicenseRequest": {
"base": null,
"refs": {

```
    }
  },
  "CheckInLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutBorrowLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutBorrowLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutType": {
    "base": null,
    "refs": {
      "CheckoutLicenseRequest$CheckoutType": "<p>Checkout type.</p>",
      "CheckoutLicenseResponse$CheckoutType": "<p>Checkout type.</p>"
    }
  },
  "ClientRequestToken": {
    "base": null,
    "refs": {
      "CreateLicenseManagerReportGeneratorRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "UpdateLicenseManagerReportGeneratorRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>"
    }
  },
  "ClientToken": {
    "base": null,
    "refs": {
      "CheckoutBorrowLicenseRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
```

"CheckoutLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateGrantRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateGrantVersionRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateLicenseVersionRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateTokenRequest$ClientToken": " Idempotency token, valid for 10 minutes. "
}
},
"ConflictException": {
"base": " There was a conflict processing the request. Try your request again. ",
"refs": {
}
},
"ConsumedLicenseSummary": {
"base": " Details about license consumption. ",
"refs": {
"ConsumedLicenseSummaryList$member": null
}
},
"ConsumedLicenseSummaryList": {
"base": null,
"refs": {
"GetLicenseConfigurationResponse$ConsumedLicenseSummaryList": " Summaries of the licenses consumed by resources. ",
"LicenseConfiguration$ConsumedLicenseSummaryList": " Summaries for licenses consumed by various resources. "
}
},
"ConsumptionConfiguration": {
"base": " Details about a consumption configuration. ",
"refs": {
"CreateLicenseRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"CreateLicenseVersionRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"GrantedLicense$ConsumptionConfiguration": " Configuration for consumption of the license. ",
"License$ConsumptionConfiguration": " Configuration for consumption of the license. "
}
},
"CreateGrantRequest": {

"base": null,
"refs": {
}
},
"CreateGrantResponse": {
"base": null,
"refs": {
}
},
"CreateGrantVersionRequest": {
"base": null,
"refs": {
}
},
"CreateGrantVersionResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseConversionTaskForResourceRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseConversionTaskForResourceResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {

}
},
"CreateLicenseManagerReportGeneratorResponse": {
"base": null,
"refs": {

```
    }
  },
  "CreateLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "CreateLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CreateLicenseVersionRequest": {
    "base": null,
    "refs": {
    }
  },
  "CreateLicenseVersionResponse": {
    "base": null,
    "refs": {
    }
  },
  "CreateTokenRequest": {
    "base": null,
    "refs": {
    }
  },
  "CreateTokenResponse": {
    "base": null,
    "refs": {
    }
  },
  "DateTime": {
    "base": null,
    "refs": {
      "AutomatedDiscoveryInformation$LastRunTime": "<p>Time that automated discovery last ran.</p>",
      "GetLicenseConversionTaskResponse$StartTime": "<p>Time at which the license type conversion task was started .</p>",
      "GetLicenseConversionTaskResponse$LicenseConversionTime": "<p>Amount of time to complete the license type conversion.</p>",
      "GetLicenseConversionTaskResponse$EndTime": "<p>Time at which the license type conversion task was completed.</p>",
      "LicenseConfigurationAssociation$AssociationTime": "<p>Time when the license configuration was associated with the resource.</p>",
      "LicenseConfigurationUsage$AssociationTime": "<p>Time when the license configuration was initially associated with the resource.</p>",
      "LicenseConversionTask$StartTime": "<p>The time the conversion task was started at.</p>",
      "LicenseConversionTask$LicenseConversionTime": "<p>The time the usage operation value of the resource
```

was changed. ",
"LicenseConversionTask$EndTime": " The time the conversion task was completed. ",
"LicenseOperationFailure$FailureTime": " Failure time. "
}
},
"DatetimeRange": {
"base": " Describes a time range, in ISO8601-UTC format. ",
"refs": {
"CreateLicenseRequest$Validity": " Date
and time range during which the license is valid, in ISO8601-UTC format. ",
"CreateLicenseVersionRequest$Validity": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"GrantedLicense$Validity": " Date and time range during which the granted license is valid, in ISO8601-UTC format. ",
"License$Validity": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"DeleteGrantRequest": {
"base": null,
"refs": {
}
},
"DeleteGrantResponse": {
"base": null,
"refs": {
}
},
"DeleteLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"DeleteLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseManagerReportGeneratorResponse": {
"base": null,
"refs": {
}
},
"DeleteLicenseRequest": {

"base": null,
"refs": {
}
},
"DeleteLicenseResponse": {
"base": null,
"refs": {
}
},
"DeleteTokenRequest": {
"base": null,
"refs": {
}
},
"DeleteTokenResponse": {
"base": null,
"refs": {
}
},
"DigitalSignatureMethod": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$DigitalSignatureMethod": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384. For more information, see RFC 7518 Digital Signature with RSASSA-PSS. "
}
},
"Entitlement": {
"base": " Describes a resource entitled for use with a license. ",
"refs": {
"EntitlementList$member": null
}
},
"EntitlementData": {
"base": " Data associated with an entitlement resource. ",

"refs": {
"EntitlementDataList$member": null
}
},
"EntitlementDataList": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$Entitlements": " License entitlements. Partial checkouts are not supported. ",
"CheckoutBorrowLicenseResponse$EntitlementsAllowed": " Allowed license entitlements. ",
"CheckoutLicenseRequest$Entitlements": " License entitlements. ",
"CheckoutLicenseResponse$EntitlementsAllowed": " Allowed license entitlements. "

```
    }
  },
  "EntitlementDataUnit": {
    "base": null,
    "refs": {
      "EntitlementData$Unit": "<p>Entitlement data unit.</p>",
      "EntitlementUsage$Unit": "<p>Entitlement usage unit.</p>"
    }
  },
  "EntitlementList": {
    "base": null,
    "refs": {
      "CreateLicenseRequest$Entitlements": "<p>License entitlements.</p>",
      "CreateLicenseVersionRequest$Entitlements": "<p>License entitlements.</p>",
      "GrantedLicense$Entitlements":
"<p>License entitlements.</p>",
      "License$Entitlements": "<p>License entitlements.</p>"
    }
  },
  "EntitlementNotAllowedException": {
    "base": "<p>The entitlement is not allowed.</p>",
    "refs": {
    }
  },
  "EntitlementUnit": {
    "base": null,
    "refs": {
      "Entitlement$Unit": "<p>Entitlement unit.</p>"
    }
  },
  "EntitlementUsage": {
    "base": "<p>Usage associated with an entitlement resource.</p>",
    "refs": {
      "EntitlementUsageList$member": null
    }
  },
  "EntitlementUsageList": {
    "base": null,
    "refs": {
      "LicenseUsage$EntitlementUsages": "<p>License entitlement usages.</p>"
    }
  },
  "ExtendLicenseConsumptionRequest": {
    "base": null,
    "refs": {
    }
  },
  "ExtendLicenseConsumptionResponse": {
```

"base": null,
"refs": {
}
},
"FailedDependencyException": {
"base": " A dependency required to run the API is missing. ",
"refs": {
}
},
"Filter": {
"base": " A filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
"refs": {
"FilterList$member": null,
"Filters$member": null
}
},
"FilterLimitExceededException": {
"base": " The request uses too many filters or too many filter values. ",
"refs": {
}
},
"FilterList": {
"base": null,
"refs": {
"ListDistributedGrantsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>LicenseArn</code>   <code>GrantStatus</code>   <code>GranteePrincipalARN</code>   <code>ProductSKU</code>   <code>LicenseIssuerName</code> ",
"ListLicenseManagerReportGeneratorsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>LicenseConfigurationArn</code> ",
"ListLicensesRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>Beneficiary</code>   <code>ProductSKU</code>   <code>Fingerprint</code>   <code>Status</code> ",
"ListReceivedGrantsForOrganizationRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ParentArn</code>   <code>GranteePrincipalArn</code> ",
"ListReceivedGrantsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ProductSKU</code>   <code>LicenseIssuerName</code>   <code>LicenseArn</code>   <code>GrantStatus</code>   <code>GranterAccountId</code> ",
"ListReceivedLicensesForOrganizationRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>Beneficiary</code>   <code>ProductSKU</code> ",
"ListReceivedLicensesRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ProductSKU</code>   <code>Status</code>   <code>Fingerprint</code>   <code>IssuerName</code>

<code>Beneficiary</code> ",
"ListTokensRequest$Filters": " Filters to scope the results. The following filter is supported: <ul> <code>LicenseArns</code> "
}
},
"FilterName": {
"base": null,
"refs": {
"Filter$Name": " Name of the filter. Filter names are case-sensitive. "
}
},
"FilterValue": {
"base": null,
"refs": {
"FilterValues$member": null
}
},
"FilterValues": {
"base": null,
"refs": {
"Filter$Values": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
},
"Filters": {
"base": null,
"refs": {
"ListLicenseConfigurationsRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>licenseCountingType</code> - The dimension for which licenses are counted. Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.
  <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. ",
"ListLicenseConversionTasksRequest$Filters": " Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>. ",
"ListUsageForLicenseConfigurationRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>resourceArn</code> - The ARN of the license configuration resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceAccount</code>
- The ID of the account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. "
}

},
"GetAccessTokenRequest": {
"base": null,
"refs": {
}
},
"GetAccessTokenResponse": {
"base": null,
"refs": {
}
},
"GetGrantRequest": {
"base": null,
"refs": {
}
},
"GetGrantResponse": {
"base": null,
"refs": {
}
},
"GetLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"GetLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"GetLicenseConversionTaskRequest": {
"base": null,
"refs": {
}
},
"GetLicenseConversionTaskResponse": {
"base": null,
"refs": {
}
},
"GetLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
}
},
"GetLicenseManagerReportGeneratorResponse": {
"base":

null,
"refs": {
}
},
"GetLicenseRequest": {
"base": null,
"refs": {
}
},
"GetLicenseResponse": {
"base": null,
"refs": {
}
},
"GetLicenseUsageRequest": {
"base": null,
"refs": {
}
},
"GetLicenseUsageResponse": {
"base": null,
"refs": {
}
},
"GetServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"GetServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"Grant": {
"base": " Describes a grant. ",
"refs": {
"GetGrantResponse$Grant": " Grant details. ",
"GrantList$member": null
}
},
"GrantList": {
"base": null,
"refs": {
"ListDistributedGrantsResponse$Grants": " Distributed grant details. ",
"ListReceivedGrantsForOrganizationResponse$Grants": " Lists the grants the organization has received. ",
"ListReceivedGrantsResponse$Grants":

" Received grant details. "
    }
  },
  "GrantStatus": {
    "base": null,
    "refs": {
      "AcceptGrantResponse$Status": " Grant status. ",
      "CreateGrantResponse$Status": " Grant status. ",
      "CreateGrantVersionRequest$Status": " Grant status. ",
      "CreateGrantVersionResponse$Status": " Grant status. ",
      "DeleteGrantResponse$Status": " Grant status. ",
      "Grant$GrantStatus": " Grant status. ",
      "RejectGrantResponse$Status": " Grant status. "
    }
  },
  "GrantedLicense": {
    "base": " Describes a license that is granted to a grantee. ",
    "refs": {
      "GrantedLicenseList$member": null
    }
  },
  "GrantedLicenseList": {
    "base": null,
    "refs": {
      "ListReceivedLicensesForOrganizationResponse$Licenses": " Lists the licenses the organization has received. ",
      "ListReceivedLicensesResponse$Licenses": " Received license details. "
    }
  },
  "ISO8601DateTime": {
    "base": null,
    "refs": {
      "CheckoutBorrowLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
      "CheckoutBorrowLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
      "CheckoutLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
      "CheckoutLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
      "DatetimeRange$Begin": " Start of the time range. ",
      "DatetimeRange$End": " End of the time range. ",
      "DeleteLicenseResponse$DeletionDate": " Date when the license is deleted. ",
      "ExtendLicenseConsumptionResponse$Expiration": " Date and time at which the license consumption expires. ",
      "GrantedLicense$CreateTime": " Creation time of the granted license. ",
      "License$CreateTime": " License creation time. ",
      "TokenData$ExpirationTime": " Token expiration time, in ISO8601-UTC format. "

}
},
"Integer": {
"base": null,
"refs": {
"CreateTokenRequest$ExpirationInDays": " Token expiration, in days, counted from token creation. The default is 365 days. ",
"ReportFrequency$value": " Number of times within the frequency period that a report is generated. The only supported value is <code>1</code>. "
}
},
"InvalidParameterValueException": {
"base": " One or more parameter values are not valid. ",
"refs": {
}
},
"InvalidResourceStateException": {
"base": " License Manager cannot allocate a license to a resource because of its state. For example, you cannot allocate a license to an instance in the process of shutting down. ",
"refs": {
}
},
"InventoryFilter": {
"base": " An inventory filter. ",
"refs": {

"InventoryFilterList$member": null
}
},
"InventoryFilterCondition": {
"base": null,
"refs": {
"InventoryFilter$Condition": " Condition of the filter. "
}
},
"InventoryFilterList": {
"base": null,
"refs": {
"ListResourceInventoryRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>application_name</code> - The name of the application. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.   <code>license_included</code> - The type of license included. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. Possible values are <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code>
| <code>windows-server-datacenter</code>.   <code>platform</code> - The platform of the resource. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.

<code>resource_id</code> - The ID of the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>tag:<key></code> - The key/value combination of a tag assigned to the resource. Logical operators are <code>EQUALS</code> (single account) or <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). "
    }
  },
  "Issuer": {
    "base": " Details about the issuer of a license. ",
    "refs": {
      "CreateLicenseRequest$Issuer": " License issuer. ",
      "CreateLicenseVersionRequest$Issuer": " License issuer. "
    }
  },
  "IssuerDetails": {
    "base": " Details associated with the issuer of a license. ",
    "refs": {
      "GrantedLicense$Issuer": " Granted
license issuer. ",
      "License$Issuer": " License issuer. "
    }
  },
  "License": {
    "base": " Software license that is managed in License Manager. ",
    "refs": {
      "GetLicenseResponse$License": " License details. ",
      "LicenseList$member": null
    }
  },
  "LicenseConfiguration": {
    "base": " A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used. ",
    "refs": {
      "LicenseConfigurations$member": null
    }
  },
  "LicenseConfigurationAssociation": {
    "base": " Describes an association with a license configuration. ",
    "refs": {
      "LicenseConfigurationAssociations$member": null
    }
  },
  "LicenseConfigurationAssociations": {
    "base": null,
    "refs": {
      "ListAssociationsForLicenseConfigurationResponse$LicenseConfigurationAssociations": " Information about the associations for the license configuration. "

```
    }
  },
  "LicenseConfigurationStatus": {
    "base": null,
    "refs": {
      "UpdateLicenseConfigurationRequest$LicenseConfigurationStatus": "<p>New status of the license
configuration.</p>"
    }
  },
  "LicenseConfigurationUsage": {
    "base": "<p>Details about the usage of a resource associated with a license configuration.</p>",
    "refs": {
      "LicenseConfigurationUsageList$member": null
    }
  },
  "LicenseConfigurationUsageList": {
    "base": null,
    "refs": {
      "ListUsageForLicenseConfigurationResponse$LicenseConfigurationUsageList": "<p>Information about the
license configurations.</p>"
    }

  },
  "LicenseConfigurations": {
    "base": null,
    "refs": {
      "ListLicenseConfigurationsResponse$LicenseConfigurations": "<p>Information about the license
configurations.</p>"
    }
  },
  "LicenseConversionContext": {
    "base": "<p>Information about a license type conversion task.</p>",
    "refs": {
      "CreateLicenseConversionTaskForResourceRequest$SourceLicenseContext": "<p>Information that identifies
the license type you are converting from. For the structure of the source license, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-
cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
      "CreateLicenseConversionTaskForResourceRequest$DestinationLicenseContext": "<p>Information that
identifies the license type you are converting to. For the structure of the destination license, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-
cli\">Convert
 a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
      "GetLicenseConversionTaskResponse$SourceLicenseContext": "<p>Information about the license type
converted from.</p>",
      "GetLicenseConversionTaskResponse$DestinationLicenseContext": "<p>Information about the license type
converted to.</p>",
      "LicenseConversionTask$SourceLicenseContext": "<p>Information about the license type this conversion task
converted from.</p>",
```

"LicenseConversionTask$DestinationLicenseContext": " Information about the license type this conversion task converted to. "
}
},
"LicenseConversionTask": {
"base": " Information about a license type conversion task. ",
"refs": {
"LicenseConversionTasks$member": null
}
},
"LicenseConversionTaskId": {
"base": null,
"refs": {
"CreateLicenseConversionTaskForResourceResponse$LicenseConversionTaskId": " The ID of the created license type conversion task. ",
"GetLicenseConversionTaskRequest$LicenseConversionTaskId": " ID of the license type conversion task to retrieve information on. ",
"GetLicenseConversionTaskResponse$LicenseConversionTaskId": " ID of the license type conversion task. ",
"LicenseConversionTask$LicenseConversionTaskId": " The ID of the license type conversion task. "
}
},
"LicenseConversionTaskStatus": {
"base": null,
"refs": {
"GetLicenseConversionTaskResponse$Status": " Status of the license type conversion task. ",
"LicenseConversionTask$Status": " The status of the conversion task. "
}
},
"LicenseConversionTasks": {
"base": null,
"refs": {
"ListLicenseConversionTasksResponse$LicenseConversionTasks": " Information about the license configuration tasks for your account. "
}
},
"LicenseCountingType":
{
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$LicenseCountingType": " Dimension used to track the license inventory. ",
"GetLicenseConfigurationResponse$LicenseCountingType": " Dimension for which the licenses are counted. ",
"LicenseConfiguration$LicenseCountingType": " Dimension to use to track the license inventory. "
}
},
"LicenseDeletionStatus": {

"base": null,
"refs": {
"DeleteLicenseResponse$Status": " License status. "
}
},
"LicenseList": {
"base": null,
"refs": {
"ListLicenseVersionsResponse$Licenses": " License details. ",
"ListLicensesResponse$Licenses": " License details. "
}
},
"LicenseOperationFailure": {
"base": " Describes the failure of a license operation. ",
"refs": {
"LicenseOperationFailureList$member": null
}
},
"LicenseOperationFailureList": {
"base":
null,
"refs": {
"ListFailuresForLicenseConfigurationOperationsResponse$LicenseOperationFailureList": " License configuration operations that failed. "
}
},
"LicenseSpecification": {
"base": " Details for associating a license configuration with a resource. ",
"refs": {
"LicenseSpecifications$member": null
}
},
"LicenseSpecifications": {
"base": null,
"refs": {
"ListLicenseSpecificationsForResourceResponse$LicenseSpecifications": " License configurations associated with a resource. ",
"UpdateLicenseSpecificationsForResourceRequest$AddLicenseSpecifications": " ARNs of the license configurations to add. ",
"UpdateLicenseSpecificationsForResourceRequest$RemoveLicenseSpecifications": " ARNs of the license configurations to remove. "
}
},
"LicenseStatus": {
"base": null,
"refs": {
"CreateLicenseResponse$Status": " License status. ",

"CreateLicenseVersionRequest$Status": " License status. ",
"CreateLicenseVersionResponse$Status": " License status. ",
"GrantedLicense$Status": " Granted license status. ",
"License$Status": " License status. "
}
},
"LicenseUsage": {
"base": " Describes the entitlement usage associated with a license. ",
"refs": {
"GetLicenseUsageResponse$LicenseUsage": " License usage details. "
}
},
"LicenseUsageException": {
"base": " You do not have enough licenses available to support a new resource launch. ",
"refs": {
}
},
"ListAssociationsForLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"ListAssociationsForLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"ListDistributedGrantsRequest": {
"base": null,
"refs": {
}
},
"ListDistributedGrantsResponse":
{
"base": null,
"refs": {
}
},
"ListFailuresForLicenseConfigurationOperationsRequest": {
"base": null,
"refs": {
}
},
"ListFailuresForLicenseConfigurationOperationsResponse": {
"base": null,
"refs": {
}
},

"ListLicenseConfigurationsRequest": {
"base": null,
"refs": {
}
},
"ListLicenseConfigurationsResponse": {
"base": null,
"refs": {
}
},
"ListLicenseConversionTasksRequest": {
"base": null,
"refs": {
}
},
"ListLicenseConversionTasksResponse": {
"base": null,
"refs": {
}
},
"ListLicenseManagerReportGeneratorsRequest": {
"base": null,
"refs": {
}
},
"ListLicenseManagerReportGeneratorsResponse": {
"base": null,
"refs": {
}
},
"ListLicenseSpecificationsForResourceRequest": {
"base": null,
"refs": {
}
},
"ListLicenseSpecificationsForResourceResponse":
{
"base": null,
"refs": {
}
},
"ListLicenseVersionsRequest": {
"base": null,
"refs": {
}
},
"ListLicenseVersionsResponse": {
"base": null,

"refs": {
}
},
"ListLicensesRequest": {
"base": null,
"refs": {
}
},
"ListLicensesResponse": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsForOrganizationRequest": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsForOrganizationResponse": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsRequest": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsResponse": {
"base": null,
"refs": {
}
},
"ListReceivedLicensesForOrganizationRequest": {
"base": null,
"refs": {
}
},
"ListReceivedLicensesForOrganizationResponse": {
"base": null,
"refs": {
}
},
"ListReceivedLicensesRequest":
{
"base": null,
"refs": {
}

},
"ListReceivedLicensesResponse": {
  "base": null,
  "refs": {
  }
},
"ListResourceInventoryRequest": {
  "base": null,
  "refs": {
  }
},
"ListResourceInventoryResponse": {
  "base": null,
  "refs": {
  }
},
"ListTagsForResourceRequest": {
  "base": null,
  "refs": {
  }
},
"ListTagsForResourceResponse": {
  "base": null,
  "refs": {
  }
},
"ListTokensRequest": {
  "base": null,
  "refs": {
  }
},
"ListTokensResponse": {
  "base": null,
  "refs": {
  }
},
"ListUsageForLicenseConfigurationRequest": {
  "base": null,
  "refs": {
  }
},
"ListUsageForLicenseConfigurationResponse": {
  "base": null,
  "refs": {
  }
},
"Location": {
  "base": null,

"refs": {
"RedirectException$Location": null
}
},
"Long":
{
"base": null,
"refs": {
"Entitlement$MaxCount": " Maximum entitlement count. Use if the unit is not None. "
}
},
"ManagedResourceSummary": {
"base": " Summary information about a managed resource. ",
"refs": {
"ManagedResourceSummaryList$member": null
}
},
"ManagedResourceSummaryList": {
"base": null,
"refs": {
"GetLicenseConfigurationResponse$ManagedResourceSummaryList": " Summaries of the managed resources. ",
"LicenseConfiguration$ManagedResourceSummaryList": " Summaries for managed resources. "
}
},
"MaxSize100": {
"base": null,
"refs": {
"ListDistributedGrantsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseManagerReportGeneratorsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseVersionsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicensesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedGrantsForOrganizationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedGrantsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedLicensesForOrganizationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedLicensesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListTokensRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"MaxSize3StringList": {
"base": null,
"refs": {
"CreateTokenRequest$TokenProperties": " Data specified by the caller to be included in the JWT token. The data is mapped to the amr claim of the JWT token. ",

"GetAccessTokenRequest$TokenProperties": " Token properties to validate against those present in the JWT token. ",
"TokenData$TokenProperties": " Data specified by the caller. "
}
},
"Message": {
"base": null,
"refs": {
"AccessDeniedException$Message": null,
"AuthorizationException$Message": null,
"ConflictException$Message": null,
"EntitlementNotAllowedException$Message": null,
"FailedDependencyException$Message": null,
"FilterLimitExceededException$Message": null,
"InvalidParameterValueException$Message": null,
"InvalidResourceStateException$Message": null,
"LicenseUsageException$Message": null,
"NoEntitlementsAllowedException$Message": null,
"RateLimitExceededException$Message": null,
"RedirectException$Message": null,
"ResourceLimitExceededException$Message": null,
"ResourceNotFoundException$Message": null,
"ServerInternalException$Message": null,
"UnsupportedDigitalSignatureMethodException$Message": null,
"ValidationException$Message": null
}
},
"Metadata": {
"base": " Describes key/value pairs. ",
"refs": {
"MetadataList$member": null
}
},
"MetadataList": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$CheckoutMetadata": " Information about constraints. ",
"CheckoutBorrowLicenseResponse$CheckoutMetadata": " Information about constraints. ",
"CreateLicenseRequest$LicenseMetadata": " Information about the license. ",
"CreateLicenseVersionRequest$LicenseMetadata": " Information about the license. ",
"GrantedLicense$LicenseMetadata": " Granted license metadata. ",
"License$LicenseMetadata": " License metadata. ",
"LicenseOperationFailure$MetadataList": " Reserved. "
}
},
"NoEntitlementsAllowedException": {

"base": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"refs": {
}
},
"Options": {
"base": " The options you can specify when you create a new version of a grant, such as activation override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"refs": {
"CreateGrantVersionRequest$Options": " The options specified for the grant. ",
"Grant$Options": " The options specified for the grant. "
}
},
"OrganizationConfiguration": {
"base": " Configuration information for Organizations. ",
"refs": {
"GetServiceSettingsResponse$OrganizationConfiguration": " Indicates whether Organizations is integrated with License Manager for cross-account discovery. ",
"UpdateServiceSettingsRequest$OrganizationConfiguration": " Enables integration with Organizations for cross-account discovery. "
}
},
"PrincipalArnList": {
"base": null,
"refs": {
"CreateGrantRequest$Principals": " The grant principals. You can specify one of the following as an Amazon Resource Name (ARN): <ul> An Amazon Web Services account, which includes only the account specified.   An organizational unit (OU), which includes all accounts in the OU.   An organization, which will include all accounts across your organization. "
}
},
"ProductInformation": {
"base": " Describes product information for a license configuration. ",
"refs": {
"ProductInformationList$member": null
}
},
"ProductInformationFilter": {
"base": " Describes product information filters. ",
"refs": {
"ProductInformationFilterList$member": null
}
},
"ProductInformationFilterList": {

"base": null,
"refs": {
"ProductInformation$ProductInformationFilterList": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. The following filters and are supported when the resource type is <code>SSM_MANAGED</code>: <ul> <code>Application Name</code> - The name of the application. Logical operator is <code>EQUALS</code>.   <code>Application Publisher</code> - The publisher of the application. Logical operator is <code>EQUALS</code>.   <code>Application Version</code> - The version of the application. Logical operator is <code>EQUALS</code>.   <code>Platform Name</code> - The name of the platform. Logical operator is <code>EQUALS</code>.   <code>Platform Type</code> - The platform type. Logical operator is <code>EQUALS</code>.   <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.   <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.   <code>License Included</code> - The type of license included. Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>. Possible values are: <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code> | <code>windows-server-datacenter</code>.   The following filters and logical operators are supported when the resource type is <code>RDS</code>: <ul> <code>Engine Edition</code> - The edition of the database engine. Logical operator is <code>EQUALS</code>. Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.   <code>License Pack</code> - The license pack. Logical operator is <code>EQUALS</code>. Possible values are: <code>data guard</code> | <code>diagnostic pack sqlt</code> | <code>tuning pack sqlt</code> | <code>ols</code> | <code>olap</code>. "
}
},
"ProductInformationList": {
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$ProductInformationList": " Product information. ",
"GetLicenseConfigurationResponse$ProductInformationList": " Product information. ",
"LicenseConfiguration$ProductInformationList": " Product information. ",
"UpdateLicenseConfigurationRequest$ProductInformationList": " New product information. "
}
},
"ProvisionalConfiguration": {
"base": " Details about a provisional configuration. ",
"refs": {
"ConsumptionConfiguration$ProvisionalConfiguration": " Details about a provisional configuration. "
}
},

"RateLimitExceededException": {
"base": " Too many requests have been submitted. Try again after a brief wait. ",
"refs": {
}
},
"ReceivedMetadata": {
"base": " Metadata associated with received licenses and grants. ",
"refs": {
"GrantedLicense$ReceivedMetadata": " Granted license received metadata. "
}
},
"ReceivedStatus": {
"base": null,
"refs": {
"ReceivedMetadata$ReceivedStatus": " Received status. "
}
},
"RedirectException": {
"base": " This is not the correct Region for the resource. Try again. ",
"refs": {
}
},
"RejectGrantRequest": {
"base": null,
"refs": {
}
},
"RejectGrantResponse": {
"base": null,
"refs": {
}
},
"RenewType": {
"base": null,
"refs": {
"ConsumptionConfiguration$RenewType": " Renewal frequency. "
}
},
"ReportContext": {
"base": " Details of the license configuration that this generator reports on. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportContext": " Defines the type of license configuration the report generator tracks. ",
"ReportGenerator$ReportContext": " License configuration type for this generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportContext": " The report context. "
}
},

"ReportFrequency": {
"base": " Details about how frequently reports are generated. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"ReportGenerator$ReportFrequency": " Details about how frequently reports are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. "
}
},
"ReportFrequencyType": {
"base": null,
"refs": {
"ReportFrequency$period": " Time period between each report. The period can be daily, weekly, or monthly. "
}
},
"ReportGenerator": {
"base": " Describe the details of a report generator. ",
"refs": {
"GetLicenseManagerReportGeneratorResponse$ReportGenerator": " A report generator that creates periodic reports about your license configurations. ",
"ReportGeneratorList$member": null
}
},
"ReportGeneratorList": {
"base": null,
"refs": {
"ListLicenseManagerReportGeneratorsResponse$ReportGenerators": " A report generator that creates periodic reports about your license configurations. "
}
},
"ReportGeneratorName": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. "
}
},
"ReportType": {
"base": null,
"refs": {
"ReportTypeList$member": null
}
},
"ReportTypeList": {

"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types an
be generated: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. ",
"ReportGenerator$ReportType": " Type of reports that are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types are supported: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. "
}
},
"ResourceInventory": {
"base": " Details about a resource. ",
"refs": {
"ResourceInventoryList$member": null
}
},
"ResourceInventoryList": {
"base": null,
"refs": {
"ListResourceInventoryResponse$ResourceInventoryList": " Information about the resources. "
}
},
"ResourceLimitExceededException": {
"base": " Your resource limits have been exceeded. ",
"refs": {
}
},
"ResourceNotFoundException": {
"base": " The resource cannot be found. ",
"refs": {
}
},
"ResourceType": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ResourceType": " Resource type of the resource consuming a license. ",
"LicenseConfigurationAssociation$ResourceType": " Type of server resource. ",
"LicenseConfigurationUsage$ResourceType": " Type of resource. ",
"LicenseOperationFailure$ResourceType": " Resource type. ",
"ManagedResourceSummary$ResourceType": " Type of resource associated with a license. ",
"ResourceInventory$ResourceType": " Type of resource. "
}
},
"S3Location": {

"base":
" Details of the S3 bucket that report generator reports are published to. ",
"refs": {
"ReportGenerator$S3Location": " Details of the S3 bucket that report generator reports are published to. "
}
},
"ServerInternalException": {
"base": " The server experienced an internal error. Try again. ",
"refs": {
}
},
"SignedToken": {
"base": null,
"refs": {
"CheckoutBorrowLicenseResponse$SignedToken": " Signed token. ",
"CheckoutLicenseResponse$SignedToken": " Signed token. "
}
},
"StatusReasonMessage": {
"base": null,
"refs": {
"CreateGrantVersionRequest$StatusReason": " Grant status reason. ",
"DeleteGrantRequest$StatusReason": " The Status reason for the delete request. ",
"Grant$StatusReason": " Grant status reason. ",
"ReceivedMetadata$ReceivedStatusReason": " Received status reason. "
}
},

"String": {
"base": null,
"refs": {
"AcceptGrantResponse$Version": " Grant version. ",
"CheckInLicenseRequest$LicenseConsumptionToken": " License consumption token. ",
"CheckInLicenseRequest$Beneficiary": " License beneficiary. ",
"CheckoutBorrowLicenseRequest$NodeId": " Node ID. ",
"CheckoutBorrowLicenseResponse$LicenseConsumptionToken": " License consumption token. ",
"CheckoutBorrowLicenseResponse$NodeId": " Node ID. ",
"CheckoutLicenseRequest$ProductSKU": " Product SKU. ",
"CheckoutLicenseRequest$KeyFingerprint": " Key fingerprint identifying the license. ",
"CheckoutLicenseRequest$Beneficiary": " License beneficiary. ",
"CheckoutLicenseRequest$NodeId": " Node ID. ",
"CheckoutLicenseResponse$LicenseConsumptionToken": " License consumption token. ",
"CheckoutLicenseResponse$NodeId": " Node ID. ",
"CheckoutLicenseResponse$LicenseArn":
" Amazon Resource Name (ARN) of the checkout license. ",
"CreateGrantRequest$GrantName": " Grant name. ",
"CreateGrantRequest$HomeRegion": " Home Region of the grant. ",

"CreateGrantResponse$Version": " Grant version. ",
"CreateGrantVersionRequest$GrantName": " Grant name. ",
"CreateGrantVersionRequest$SourceVersion": " Current version of the grant. ",
"CreateGrantVersionResponse$Version": " New version of the grant. ",
"CreateLicenseConfigurationRequest$Name": " Name of the license configuration. ",
"CreateLicenseConfigurationRequest$Description": " Description of the license configuration. ",
"CreateLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"CreateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"CreateLicenseManagerReportGeneratorResponse$LicenseManagerReportGeneratorArn": " The Amazon Resource Name (ARN) of the new report generator. ",
"CreateLicenseRequest$LicenseName": " License name. ",
"CreateLicenseRequest$ProductName": " Product name. ",
"CreateLicenseRequest$ProductSKU": " Product SKU. ",
"CreateLicenseRequest$HomeRegion": " Home Region for the license. ",
"CreateLicenseRequest$Beneficiary": " License beneficiary. ",
"CreateLicenseResponse$Version": " License version. ",
"CreateLicenseVersionRequest$LicenseName": " License name. ",
"CreateLicenseVersionRequest$ProductName": " Product name. ",
"CreateLicenseVersionRequest$HomeRegion": " Home Region of the license. ",
"CreateLicenseVersionRequest$SourceVersion": " Current version of the license. ",
"CreateLicenseVersionResponse$Version": " New version of the license. ",
"CreateTokenResponse$TokenId": " Token ID. ",
"DeleteGrantRequest$Version": " Current version of the grant. ",
"DeleteGrantResponse$Version": " Grant version. ",
"DeleteLicenseConfigurationRequest$LicenseConfigurationArn": " ID of the license configuration. ",
"DeleteLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"DeleteLicenseRequest$SourceVersion": " Current version of the license. ",
"DeleteTokenRequest$TokenId": " Token ID. ",
"Entitlement$Name": " Entitlement name. ",
"Entitlement$Value": " Entitlement resource. Use only if the unit is None. ",
"EntitlementData$Name": " Entitlement data name. ",
"EntitlementData$Value": " Entitlement data value. ",
"EntitlementUsage$Name": " Entitlement usage name. ",
"EntitlementUsage$ConsumedValue": " Resource usage consumed. ",
"EntitlementUsage$MaxCount": " Maximum entitlement usage count. ",
"ExtendLicenseConsumptionRequest$LicenseConsumptionToken": " License consumption token. ",
"ExtendLicenseConsumptionResponse$LicenseConsumptionToken": " License consumption token. ",
"FailedDependencyException$ErrorCode": null,
"GetGrantRequest$Version": " Grant version. ",
"GetLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationId": " Unique ID for the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the

license configuration. ",
"GetLicenseConfigurationResponse$Name": " Name of the license configuration. ",
"GetLicenseConfigurationResponse$Description": " Description of the license configuration. ",
"GetLicenseConfigurationResponse$Status": " License configuration status. ",
"GetLicenseConfigurationResponse$OwnerAccountId": " Account ID of the owner of the license configuration. ",
"GetLicenseConversionTaskResponse$ResourceArn": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. ",
"GetLicenseConversionTaskResponse$StatusMessage": " The status message for the conversion task. ",
"GetLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"GetLicenseRequest$Version": " License version. ",
"GetServiceSettingsResponse$S3BucketArn": " Regional S3 bucket path for storing reports, license trail event data, discovery data, and so on. ",
"GetServiceSettingsResponse$SnsTopicArn": " SNS topic configured to receive notifications from License Manager. ",
"GetServiceSettingsResponse$LicenseManagerResourceShareArn": " Amazon Resource Name (ARN) of the resource share. The License Manager management account provides member accounts with access to this share. ",
"Grant$GrantName": " Grant name. ",
"Grant$HomeRegion": " Home Region of the grant. ",
"Grant$Version": " Grant version. ",
"GrantedLicense$LicenseName": " License name. ",
"GrantedLicense$ProductName": " Product name. ",
"GrantedLicense$ProductSKU": " Product SKU. ",
"GrantedLicense$HomeRegion": " Home Region of the granted license. ",
"GrantedLicense$Beneficiary": " Granted license beneficiary. ",
"GrantedLicense$Version": " Version of the granted license. ",
"InventoryFilter$Name": " Name of the filter. ",
"InventoryFilter$Value": " Value of the filter. ",
"Issuer$Name": " Issuer name. ",
"Issuer$SignKey": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$Name": " Issuer name. ",
"IssuerDetails$SignKey": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$KeyFingerprint": " Issuer key fingerprint. ",
"License$LicenseName": " License name. ",
"License$ProductName": " Product name. ",
"License$ProductSKU": " Product SKU. ",
"License$HomeRegion": " Home Region of the license. ",
"License$Beneficiary": " License beneficiary. ",
"License$Version": " License version. ",
"LicenseConfiguration$LicenseConfigurationId": " Unique ID of the license configuration. ",
"LicenseConfiguration$LicenseConfigurationArn":

" Amazon Resource Name (ARN) of the license configuration. ",
"LicenseConfiguration$Name": " Name of the license configuration. ",
"LicenseConfiguration$Description": " Description of the license configuration. ",
"LicenseConfiguration$Status": " Status of the license configuration. ",
"LicenseConfiguration$OwnerAccountId": " Account ID of the license configuration's owner. ",
"LicenseConfigurationAssociation$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationAssociation$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource consuming licenses. ",
"LicenseConfigurationAssociation$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"LicenseConfigurationUsage$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationUsage$ResourceStatus":
" Status of the resource. ",
"LicenseConfigurationUsage$ResourceOwnerId": " ID of the account that owns the resource. ",
"LicenseConversionTask$ResourceArn": " The Amazon Resource Name (ARN) of the resource associated with the license type conversion task. ",
"LicenseConversionTask$StatusMessage": " The status message for the conversion task. ",
"LicenseOperationFailure$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseOperationFailure$ErrorMessage": " Error message. ",
"LicenseOperationFailure$OperationName": " Name of the operation. ",
"LicenseOperationFailure$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource. ",
"LicenseOperationFailure$OperationRequestedBy": " The requester is \"License Manager Automated Discovery\". ",
"LicenseSpecification$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"LicenseSpecification$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"ListAssociationsForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of a license configuration. ",
"ListAssociationsForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListAssociationsForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListFailuresForLicenseConfigurationOperationsRequest$LicenseConfigurationArn": " Amazon Resource Name of the license configuration. ",
"ListFailuresForLicenseConfigurationOperationsRequest$NextToken": " Token for the next set of results. ",

"ListFailuresForLicenseConfigurationOperationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksResponse$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of a

resource that has an associated license configuration. ",
"ListLicenseSpecificationsForResourceRequest$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceResponse$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsResponse$NextToken": " Token for the next set of results. ",
"ListLicensesRequest$NextToken": " Token for the next set of results. ",
"ListLicensesResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationResponse$NextToken":
" Token for the next set of results. ",
"ListReceivedLicensesRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesResponse$NextToken": " Token for the next set of results. ",
"ListResourceInventoryRequest$NextToken": " Token for the next set of results. ",
"ListResourceInventoryResponse$NextToken": " Token for the next set of results. ",
"ListTagsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListTokensRequest$NextToken": " Token for the next set of results. ",
"ListTokensResponse$NextToken": " Token for the next set of results. ",
"ListUsageForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListUsageForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListUsageForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"MaxSize3StringList$member": null,
"Metadata$Name": " The key name. ",
"Metadata$Value": " The value. ",
"ProductInformation$ResourceType": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"ProductInformationFilter$ProductInformationFilterName": " Filter name. ",
"ProductInformationFilter$ProductInformationFilterComparator": " Logical operator. ",
"RejectGrantResponse$Version": " Grant version. ",
"ReportGenerator$ReportGeneratorName": " Name of the report generator. ",
"ReportGenerator$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"ReportGenerator$LastRunStatus": " Status of the last report generation attempt. ",
"ReportGenerator$LastRunFailureReason": " Failure
message for the last report generation attempt. ",
"ReportGenerator$LastReportGenerationTime": " Time the last report was generated at. ",
"ReportGenerator$ReportCreatorAccount": " The Amazon Web Services account ID used to create the report generator. ",
"ReportGenerator$Description": " Description of the report generator. ",
"ReportGenerator$CreateTime": " Time the report was created. ",
"ResourceInventory$ResourceId": " ID of the resource. ",
"ResourceInventory$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"ResourceInventory$Platform": " Platform of the resource. ",

"ResourceInventory$PlatformVersion": " Platform version of the resource in the inventory. ",
"ResourceInventory$ResourceOwningAccountId": " ID of the account that owns the resource. ",
"S3Location$bucket": " Name of the S3 bucket reports are published to. ",

"S3Location$keyPrefix": " Prefix of the S3 bucket reports are published to. ",
"StringList$member": null,
"Tag$Key": " Tag key. ",
"Tag$Value": " Tag value. ",
"TagKeyList$member": null,
"TagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"TokenData$TokenId": " Token ID. ",
"TokenData$TokenType": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. ",
"TokenData$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"TokenData$Status": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. ",
"UntagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$Name": " New name of the license configuration. ",
"UpdateLicenseConfigurationRequest$Description": " New description of the license configuration. ",
"UpdateLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to update. ",
"UpdateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"UpdateLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"UpdateServiceSettingsRequest$S3BucketArn": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. ",
"UpdateServiceSettingsRequest$SnsTopicArn": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"StringList": {
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$LicenseRules": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules vary by dimension, as follows.   <code>Cores</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumCores</code> | <code>minimumCores</code>   <code>Instances</code> dimension: <code>allowedTenancy</code> | <code>maximumCores</code> | <code>minimumCores</code> | <code>maximumSockets</code> | <code>minimumSockets</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   <code>Sockets</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumSockets</code> | <code>minimumSockets</code>   <code>vCPUs</code> dimension: <code>allowedTenancy</code> | <code>honorVcpuOptimization</code> | <code>maximumVcpus</code> |

<code>minimumVcpus</code>   The unit for <code>licenseAffinityToHost</code>
 is days and the range is 1 to 180. The possible values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are <code>True</code> and <code>False</code>. ",
      "GetLicenseConfigurationResponse$LicenseRules": " License rules. ",
      "LicenseConfiguration$LicenseRules": " License rules. ",
      "ListLicenseConfigurationsRequest$LicenseConfigurationArns": " Amazon Resource Names (ARN) of the license configurations. ",
      "ListTokensRequest$TokenIds": " Token IDs. ",
      "ProductInformationFilter$ProductInformationFilterValue": " Filter value. ",
      "UpdateLicenseConfigurationRequest$LicenseRules": " New license rule. The only rule that you can add after you create a license configuration is licenseAffinityToHost. "
    }
  },
  "Tag": {
    "base": " Details about a tag
 for a license configuration. ",
    "refs": {
      "TagList$member": null
    }
  },
  "TagKeyList": {
    "base": null,
    "refs": {
      "UntagResourceRequest$TagKeys": " Keys identifying the tags to remove. "
    }
  },
  "TagList": {
    "base": null,
    "refs": {
      "CreateLicenseConfigurationRequest$Tags": " Tags to add to the license configuration. ",
      "CreateLicenseManagerReportGeneratorRequest$Tags": " Tags to add to the report generator. ",
      "GetLicenseConfigurationResponse$Tags": " Tags for the license configuration. ",
      "ListTagsForResourceResponse$Tags": " Information about the tags. ",
      "ReportGenerator$Tags": " Tags associated with the report generator. ",
      "TagResourceRequest$Tags": " One or more tags. "
    }
  },
  "TagResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "TagResourceResponse": {
    "base": null,
    "refs": {

```
    }
  },
  "TokenData": {
    "base": "<p>Describes a token.</p>",
    "refs": {
      "TokenList$member": null
    }
  },
  "TokenList": {
    "base": null,
    "refs": {
      "ListTokensResponse$Tokens": "<p>Received token details.</p>"
    }
  },
  "TokenString": {
    "base": null,
    "refs": {
      "CreateTokenResponse$Token": "<p>Refresh token, encoded as a JWT token.</p>",
      "GetAccessTokenRequest$Token": "<p>Refresh token, encoded as a JWT token.</p>",
      "GetAccessTokenResponse$AccessToken": "<p>Temporary access token.</p>"
    }
  },
  "TokenType": {
    "base": null,
    "refs": {
      "CreateTokenResponse$TokenType": "<p>Token type.</p>"
    }
  },
  "UnsupportedDigitalSignatureMethodException": {
    "base": "<p>The digital signature method is unsupported. Try your request again.</p>",
    "refs": {
    }
  },
  "UntagResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "UntagResourceResponse":
{
    "base": null,
    "refs": {
    }
  },
  "UpdateLicenseConfigurationRequest": {
    "base": null,
    "refs": {
    }
```

},
"UpdateLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"UpdateLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
}
},
"UpdateLicenseManagerReportGeneratorResponse": {
"base": null,
"refs": {
}
},
"UpdateLicenseSpecificationsForResourceRequest": {
"base": null,
"refs": {
}
},
"UpdateLicenseSpecificationsForResourceResponse": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"UsageOperation": {
"base": null,
"refs": {
"LicenseConversionContext$UsageOperation": " The Usage operation value
that corresponds to the license type you are converting your resource from. For more information about which
platforms correspond to which usage operation values see <a
href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample
data: usage operation by platform "
}
},
"ValidationException": {
"base": " The provided input is not valid. Try your request again. ",

```
    "refs": {
    }
  }
 }
}
{
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "af-south-1"
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-east-1"
      }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",

    "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-northeast-1"
      }
    },
    {
```

"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-2.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-northeast-2"
}
},
{
"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-northeast-3"
}
},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-south-1"
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack":

false,
            "Region": "ap-southeast-1"
        }
    },
    {
        "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "ap-southeast-2"
        }
    },
    {
        "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "ap-southeast-3"
        }
    },
    {
        "documentation":
"For region ca-central-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "ca-central-1"
        }
    },
    {
        "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {

"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "eu-central-1"
}
},
{
"documentation": "For region eu-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "eu-north-1"
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "eu-south-1"
}
},
{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params":
{
"UseFIPS": false,
"UseDualStack": false,
"Region": "eu-west-1"

```
        }
    },
    {
        "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-west-2"
        }
    },
    {
        "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-west-3"
        }

},
    {
        "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.me-south-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "me-south-1"
        }
    },
    {
        "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.sa-east-1.amazonaws.com"
            }
```

```
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "sa-east-1"
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {

    "endpoint": {
          "url": "https://license-manager.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "us-east-1"
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "UseFIPS": true,
      "UseDualStack": false,
      "Region": "us-east-1"
    }
  },
  {
    "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-2.amazonaws.com"
      }
    },

  "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "us-east-2"
    }
  },
```

```
    {
      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-east-2"
      }
    },
    {
      "documentation": "For region us-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-west-1"

  }
    },
    {
      "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-west-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-west-1"
      }
    },
    {
      "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-2.amazonaws.com"
        }
      },
      "params": {
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"UseFIPS": false,
"UseDualStack": false,
"Region": "us-west-2"
}
},
{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "us-west-2"
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": true,
"Region": "us-east-1"
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},

"params": {
"UseFIPS": false,
"UseDualStack": true,
"Region": "us-east-1"
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",

```
    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "cn-north-1"
    }
  },
  {
    "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "cn-northwest-1"
     }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "UseFIPS": true,
      "UseDualStack": true,
      "Region": "cn-north-1"
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "UseFIPS": true,
      "UseDualStack": false,
      "Region": "cn-north-1"
```

```
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled
and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": true,
        "Region": "cn-north-1"
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-gov-east-1"
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
         }
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-gov-east-1"
      }
    },
    {
      "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
```

```
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "us-gov-west-1"
    }
  },
  {
    "documentation": "For region us-gov-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
      }
    },
    "params": {

      "UseFIPS": true,
      "UseDualStack": false,
      "Region": "us-gov-west-1"
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "UseFIPS": true,
      "UseDualStack": true,
      "Region": "us-gov-east-1"
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": true,
      "Region": "us-gov-east-1"
    }
```

```
},
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "us-iso-east-1"
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "UseFIPS": true,
      "UseDualStack": true,
      "Region": "us-iso-east-1"
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {

 "endpoint": {
        "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "UseFIPS": true,
      "UseDualStack": false,
      "Region": "us-iso-east-1"
    }
  },
  {
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    "expect": {
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      "UseDualStack": true,
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        },
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            }
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        "params": {
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            "UseDualStack": false,
            "Region": "us-isob-east-1"
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          "expect": {
            "error": "Invalid Configuration: Missing Region"
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          "required": false,
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          "type": "String"
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          "default": false,
          "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
          "type": "Boolean"
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      "UseFIPS": {
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          "required": true,
          "default": false,
          "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
          "type": "Boolean"
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            "type": "error"
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        "type": "tree"
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"type": "error"
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      "result_key": "Instances"
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"limit_key": "MaxResults",
"result_key": "InstanceUserSummaries"
}
}
}
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"metadata":{
"apiVersion":"2018-05-10",
"endpointPrefix":"license-manager-user-subscriptions",
"jsonVersion":"1.1",
"protocol":"rest-json",
"serviceFullName":"AWS License Manager User Subscriptions",

"serviceId":"License Manager User Subscriptions",
"signatureVersion":"v4",
"signingName":"license-manager-user-subscriptions",
"uid":"license-manager-user-subscriptions-2018-05-10"
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"responseCode":200
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{"shape":"ValidationException"},
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"type":"structure",
"members":{
"DirectoryId":{"shape":"String"}
}
},
"AssociateUserRequest":{
"type":"structure",
"required":[
"IdentityProvider",
"InstanceId",
"Username"

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  ],
  "members":{
    "Domain":{"shape":"String"},
    "IdentityProvider":{"shape":"IdentityProvider"},
    "InstanceId":{"shape":"String"},
    "Username":{"shape":"String"}
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},
"AssociateUserResponse":{
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  "fault":true
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    "Product"
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    "Product":{"shape":"String"}
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"Operation":{"shape":"String"},
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"Product":{"shape":"String"},
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"Status":{"shape":"String"}
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"Products",
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"Products":{"shape":"StringList"},
"Status":{"shape":"String"},
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"Status",
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"IdentityProvider":{"shape":"IdentityProvider"},
"InstanceId":{"shape":"String"},
"Status":{"shape":"String"},
"StatusMessage":{"shape":"String"},
"Username":{"shape":"String"}
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  "members":{

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    "Product"
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"Settings":{"shape":"Settings"}
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"ResourceNotFoundException":{
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"exception":true
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"pattern":"^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
},

"ServiceQuotaExceededException":{
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  "exception":true
},
"Settings":{
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    "Subnets"
  ],
  "members":{
    "SecurityGroupId":{"shape":"SecurityGroup"},
     "Subnets":{"shape":"SettingsSubnetsList"}
  }
},
"SettingsSubnetsList":{
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  "member":{"shape":"Subnet"},
  "min":1
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"StartProductSubscriptionRequest":{
  "type":"structure",
  "required":[
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    "Product",
    "Username"
  ],
  "members":{
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    "IdentityProvider":{"shape":"IdentityProvider"},
    "Product":{"shape":"String"},
    "Username":{"shape":"String"}
  }
},
"StartProductSubscriptionResponse":{
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  "required":["ProductUserSummary"],
  "members":{
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  }
},
"StopProductSubscriptionRequest":{
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    "IdentityProvider",

"Product",
"Username"
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"members":{
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"Product":{"shape":"String"},
"Username":{"shape":"String"}
}
},
"StopProductSubscriptionResponse":{
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}
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"Subnet":{
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"Subnets":{
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"member":{"shape":"Subnet"}
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"ThrottlingException":{
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"UpdateIdentityProviderSettingsRequest":{
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"Product":{"shape":"String"},
"UpdateSettings":{"shape":"UpdateSettings"}

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    }
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      "RemoveSubnets"
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      "RemoveSubnets":{"shape":"Subnets"},
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  },
  "ValidationException":{
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    "members":{
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    },
    "exception":true
  }
 }
}
```


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{
"version":"2.0",
"metadata":{
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"endpointPrefix":"license-manager-linux-subscriptions",
"jsonVersion":"1.1",
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"protocols":["rest-json"],
"serviceFullName":"AWS License Manager Linux Subscriptions",
"serviceId":"License Manager Linux Subscriptions",
"signatureVersion":"v4",
"signingName":"license-manager-linux-subscriptions",
"uid":"license-manager-linux-subscriptions-2018-05-10",
"auth":["aws.auth#sigv4"]
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{"shape":"ValidationException"}
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"requestUri":"/tags/{resourceArn}",
"responseCode":200
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"input":{"shape":"ListTagsForResourceRequest"},
"output":{"shape":"ListTagsForResourceResponse"},
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{"shape":"ResourceNotFoundException"},
{"shape":"ValidationException"}
]
},
"RegisterSubscriptionProvider":{
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"responseCode":200
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{"shape":"ValidationException"}
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  "responseCode":200
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  {"shape":"ValidationException"}
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  "responseCode":200
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  {"shape":"ValidationException"}
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  "BoxLong":{
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    "box":true
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  "DeregisterSubscriptionProviderRequest":{
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    }
  },
  "DeregisterSubscriptionProviderResponse":{
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    "members":{
    }
  },
  "Filter":{
    "type":"structure",
    "members":{
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      "Operator":{"shape":"Operator"},
      "Values":{"shape":"StringList"}
    }
  },
  "FilterList":{
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    "member":{"shape":"Filter"}
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    "members":{
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  "GetRegisteredSubscriptionProviderResponse":{
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  "members":{
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    "SecretArn":{"shape":"SecretArn"},
    "SubscriptionProviderArn":{"shape":"SubscriptionProviderArn"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"},
    "SubscriptionProviderStatusMessage":{"shape":"String"}
  }
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"GetServiceSettingsRequest":{
  "type":"structure",
  "members":{
  }
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"GetServiceSettingsResponse":{
  "type":"structure",
  "members":{
    "HomeRegions":{"shape":"StringList"},
    "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
     "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
    "Status":{"shape":"Status"},
    "StatusMessage":{"shape":"StringMap"}
  }
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"Instance":{
  "type":"structure",
  "members":{
    "AccountID":{"shape":"String"},
    "AmiId":{"shape":"String"},
    "DualSubscription":{"shape":"String"},
    "InstanceID":{"shape":"String"},
    "InstanceType":{"shape":"String"},
    "LastUpdatedTime":{"shape":"String"},
    "OsVersion":{"shape":"String"},
    "ProductCode":{"shape":"ProductCodeList"},
    "Region":{"shape":"String"},
    "RegisteredWithSubscriptionProvider":{"shape":"String"},
    "Status":{"shape":"String"},
    "SubscriptionName":{"shape":"String"},
    "SubscriptionProviderCreateTime":{"shape":"String"},
    "SubscriptionProviderUpdateTime":{"shape":"String"},
    "UsageOperation":{"shape":"String"}
  }
},

"InstanceList":{
  "type":"list",
  "member":{"shape":"Instance"}
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  "exception":true,
  "fault":true
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"LinuxSubscriptionsDiscovery":{
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  "enum":[
    "Enabled",
    "Disabled"
  ]
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"LinuxSubscriptionsDiscoverySettings":{
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  "required":[
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    "SourceRegions"
  ],
  "members":{
    "OrganizationIntegration":{"shape":"OrganizationIntegration"},
    "SourceRegions":{"shape":"StringList"}
  }
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"ListLinuxSubscriptionInstancesRequest":{
  "type":"structure",
  "members":{
    "Filters":{"shape":"FilterList"},
    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"ListLinuxSubscriptionInstancesRequestNextTokenString"}
  }
},
"ListLinuxSubscriptionInstancesRequestNextTokenString":{
   "type":"string",
  "max":16384,
  "min":1
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"ListLinuxSubscriptionInstancesResponse":{
  "type":"structure",
  "members":{
    "Instances":{"shape":"InstanceList"},
    "NextToken":{"shape":"String"}
  }
},
"ListLinuxSubscriptionsRequest":{

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  "type":"structure",
  "members":{
    "Filters":{"shape":"FilterList"},
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    "NextToken":{"shape":"ListLinuxSubscriptionsRequestNextTokenString"}
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},
"ListLinuxSubscriptionsRequestNextTokenString":{
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  "max":16384,
  "min":1
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  "type":"structure",
  "members":{
    "NextToken":{"shape":"String"},
    "Subscriptions":{"shape":"SubscriptionList"}
  }
},
"ListRegisteredSubscriptionProvidersRequest":{
  "type":"structure",
  "members":{
    "MaxResults":{"shape":"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger"},
     "NextToken":{"shape":"String"},
    "SubscriptionProviderSources":{"shape":"SubscriptionProviderSourceList"}
  }
},
"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger":{
  "type":"integer",
  "box":true,
  "max":100,
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"ListRegisteredSubscriptionProvidersResponse":{
  "type":"structure",
  "members":{
    "NextToken":{"shape":"String"},
    "RegisteredSubscriptionProviders":{"shape":"RegisteredSubscriptionProviderList"}
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},
"ListTagsForResourceRequest":{
  "type":"structure",
  "required":["resourceArn"],
  "members":{
    "resourceArn":{
      "shape":"SubscriptionProviderArn",
      "location":"uri",
      "locationName":"resourceArn"
```

```
    }
  }
},
"ListTagsForResourceResponse":{
  "type":"structure",
  "members":{
    "tags":{"shape":"Tags"}
  }
},
"Operator":{
  "type":"string",
   "enum":[
    "Equal",
    "NotEqual",
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  ],
  "max":20,
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},
"OrganizationIntegration":{
  "type":"string",
  "enum":[
    "Enabled",
    "Disabled"
  ]
},
"ProductCodeList":{
  "type":"list",
  "member":{"shape":"String"}
},
"RegisterSubscriptionProviderRequest":{
  "type":"structure",
  "required":[
    "SecretArn",
    "SubscriptionProviderSource"
  ],
  "members":{
    "SecretArn":{"shape":"SecretArn"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "Tags":{"shape":"Tags"}
  }
},
"RegisterSubscriptionProviderResponse":{
  "type":"structure",
  "members":{
    "SubscriptionProviderArn":{"shape":"String"},
    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"}
```

```
  }
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  "members":{
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    "SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
    "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"},
    "SubscriptionProviderStatusMessage":{"shape":"String"}
  }
},
"RegisteredSubscriptionProviderList":{
  "type":"list",
  "member":{"shape":"RegisteredSubscriptionProvider"}
},
"ResourceNotFoundException":{
  "type":"structure",
  "members":{
    "message":{"shape":"String"}
  },
  "exception":true
},
"SecretArn":{
  "type":"string",
  "pattern":"^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"
},
"Status":{
  "type":"string",
  "enum":[
    "InProgress",

"Completed",
    "Successful",
    "Failed"
  ]
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  "member":{"shape":"StringListMemberString"},
  "max":100,
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  "max":100,
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"min":1
},
"StringMap":{
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},
"Subscription":{
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"members":{
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"Name":{"shape":"String"},
"Type":{"shape":"String"}
}
},
"SubscriptionList":{
"type":"list",
"member":{"shape":"Subscription"}
},
"SubscriptionProviderArn":{
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"pattern":"^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
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"INVALID",
"PENDING"
]
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"TagKeyList":{
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"member":{"shape":"String"},
"max":50,
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"TagResourceRequest":{

```
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    "tags"
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      "locationName":"resourceArn"
    },
    "tags":{"shape":"Tags"}
  }
},
"TagResourceResponse":{
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  "value":{"shape":"String"},
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  "min":0,
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      "location":"uri",
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```

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}
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"LinuxSubscriptionsDiscoverySettings"
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"UpdateServiceSettingsResponse":{
"type":"structure",
"members":{
"HomeRegions":{"shape":"StringList"},
"LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
"LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
"Status":{"shape":"Status"},
"StatusMessage":{"shape":"StringMap"}
}
},
"ValidationException":{
"type":"structure",
"members":{
"message":{"shape":"String"}
},
"exception":true
}
}
}
{
"pagination": {
}
}
{
"version": "1.0",
"parameters": {

"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {

"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",

```
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom
endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "type": "tree",
            "rules": [
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                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
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                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],

 "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          }
        ]
      },
      {
```

```
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        "rules": [
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                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
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            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

true

```
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
```

```
            true
        ]
    }
],
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"rules": [
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        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [

      true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {

                "conditions": [],
                "type": "tree",
                "rules": [
                    {
```

"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]

}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true

]
}
],
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{
"conditions": [
{
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"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"

```
},
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        }
                    ],
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                    "rules": [
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                            "conditions": [],
                            "type": "tree",
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
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"https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ]
                        }
                    ]
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"
                }
            ]

        },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
```

```
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                            "fn": "booleanEquals",
                            "argv":
[
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsDualStack"
                                ]
                              }
                            ]
                          }
                        ],
                        "type": "tree",
                        "rules": [

                {
                            "conditions": [],
                            "type": "tree",
                            "rules": [
                              {
                                "conditions": [],
                                "endpoint": {
                                  "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                  "properties": {},
                                  "headers": {}
                                },
                                "type": "endpoint"
                              }
                            ]

                      }
                        ]
                      },
                      {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                      }
```

```
                ]
            },
            {
                "conditions": [],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                             "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            }
        ]
    }
    ]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
}
]
}
{
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
```

```
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
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        "documentation": "For region us-east-1 with FIPS disabled and
DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
             }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
```

```
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
       }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
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      }
    },
```

```
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       "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
     }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
```

```
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
```

```
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
         "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect":
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"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,

```
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "Missing region",
          "expect": {
            "error": "Invalid Configuration: Missing Region"
          }
        }
    ],
    "version": "1.0"
}
```

1.3500 aws-sdk-go-v2-feature-ec2-imds 1.16.28

1.3500.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
```

```
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
```

```
        uses: actions/setup-python@v2
        with:
          python-version: ${{ matrix.python-version }}
      # ScanCode
      - name: Self-configure scancode
        working-directory: ./scancode-toolkit
        run: ./scancode --help
      - name: Run Scan code on target
        run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
      - name: Run Scan code on pr ref
        run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
      # compare
      - name: License test
        run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever

```
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string
```

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde

```
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
```

```
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
```

```
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
```

SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

OperationName: "GetLicense",
}
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
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AssociateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod
```

```
 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
```

```
            },

        {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
```

```
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
```

"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},

"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered

the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"

```
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
```

},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,

```
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
```

```
}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
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                            "ref": "Endpoint"
                        },
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
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            "type": "tree"

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        "conditions": [],
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                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
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                        "conditions": [
                            {

        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
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                "assign": "PartitionResult"
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        ],
        "rules": [
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                        "fn": "booleanEquals",
                        "argv": [
                            {

                    "ref": "UseFIPS"
                            },
                            true
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }

],
                "rules": [
                    {
                        "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"

},
                                        "supportsFIPS"
                                        ]
                                    }
                                ]
                            },
                            {
                                "fn": "booleanEquals",
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"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
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"rules": [
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"conditions": [],

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{
"conditions": [],
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"properties": {},
"headers": {}
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
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"type": "tree"
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"fn": "booleanEquals",
"argv": [
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},
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
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}
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but this partition does not support FIPS",
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"type": "tree"
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"conditions": [
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"argv": [
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"ref": "UseDualStack"
},
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsDualStack"
]
}
]
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"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
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"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

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],
"type": "tree"
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"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
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"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
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"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
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],
"type": "tree"

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            "type": "tree"
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        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
  }
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

 "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
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"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
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}

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"params": {
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"UseDualStack": false
}
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
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        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
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          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
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            "UseDualStack": false
          }
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          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
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    }
  },
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    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
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        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
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    },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {

            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
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            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {

 "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true,
              "Endpoint": "https://example.com"
            }
          },
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                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
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        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
```

"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {

"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",

"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"

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            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
```

"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
```

"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

  }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this

subscription. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " An object which details a discovered Linux subscription. "
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

{
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                "name": "ACTIVE",
                "value": "ACTIVE",
                "documentation": "ACTIVE status"

```
            },
            {
                "name": "INVALID",
                "value": "INVALID",

"documentation": "INVALID status"
            },
            {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
            }
        ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
```

"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

     },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
             "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target":
 "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

```
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
```

```
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType
```

```
 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
```

```
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
```

provider. "
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The domain name for the Active Directory. "
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
        "type": "string",
        "traits": {

"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},

"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":

```
 {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
      },
```

"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
      "members": {
```

"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},

"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",

"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",

"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
}
},

"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
```

```
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
 {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
```

```
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [
                    {

                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
```

```
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                     "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseFIPS"
                            },

true
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }
```

```
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {

  "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]
                              }
                            ]
                          },

                      {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsDualStack"
                                ]
                              }

                  ]
                          }
                        ],
                        "rules": [
                          {
                            "conditions": [],
                            "endpoint": {
                              "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                              "properties": {},
                              "headers": {}
                            },
                            "type": "endpoint"
```

```
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

 {
                    "ref": "UseFIPS"
                },
                true
            ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

{
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        },
                        true
                    ]
                }
            ],
            "rules": [
```

```
                                    {
                                        "conditions": [],
                                        "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS is enabled but this partition does not support FIPS",
                                "type": "error"

}
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
                                {

        "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
                                                            "ref": "PartitionResult"
                                                        },
```

"supportsDualStack"
]

}
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}

],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{

"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}

```
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS":
true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint":
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{
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false

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            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"

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            }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-isob-east-1",

"UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
        "expect": {

      "endpoint": {
                "url": "https://example.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
        }
    },
```

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            {
              "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
```

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            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
              }
            },
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>"
              }
```

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            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

    "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

            "CreationTime": {
                "target": "smithy.api#Timestamp",
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"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",

```
            "documentation": ""

        },
        {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
        }
    ]
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
        {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
        },
        {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
        },
        {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
        }
    ]
  }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
  "type": "structure",
  "members": {
    "ServerType": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
        "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
        }
```

```
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
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"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {

"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}
}

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service

hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

```
    }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for this product

user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to
register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"

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            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

       "smithy.api#error": "client",
                "smithy.api#httpError": 404
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
            "type": "structure",
            "members": {
                "SecretId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                        "smithy.api#length": {
                            "min": 1
                        }
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
            "type": "string",
            "traits": {
                "smithy.api#length": {

             "min": 5,
                    "max": 200
                },
                "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
            "type": "structure",
            "members": {
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"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

           },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {

  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n        <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }

  }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}

}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},

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        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
```

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}

```
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


ListReceivedLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
              "namespace": "*"
```

```
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
            },
```

```
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
```

},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{

"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,

"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
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"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],

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                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
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"conditions": [
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                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
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                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
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                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                     },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
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                "argv": [
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                        "ref": "Region"
                    }
                ]
            }
        ],
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                "conditions": [
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                "argv": [
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                "assign": "PartitionResult"
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            "type": "tree",
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                    "argv": [
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"UseFIPS"
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                      true
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                  {
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                    "argv": [
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                        "ref": "UseDualStack"
                      },
                      true
                    ]
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                "type": "tree",
                "rules": [
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                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
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                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
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```
                    ]

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                },
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                    "fn": "booleanEquals",
                    "argv": [
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                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },

"supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
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                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}

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                    "type": "endpoint"
                }
            ]
        },
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            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
            "type": "error"
        }
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    "conditions": [
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                                "supportsFIPS"
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                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
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                "conditions": [],
                "error": "FIPS is enabled but this
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partition does not support FIPS",
"type": "error"
}
]
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"fn": "booleanEquals",
"argv": [
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"ref": "UseDualStack"
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true
]
}
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"type": "tree",
"rules": [
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"conditions": [
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"argv": [
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{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
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"rules": [
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"endpoint": {
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

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                    },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
             "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
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"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
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"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"Region": "af-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
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  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
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  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
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  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-3",
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"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

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"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
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},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
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"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {

"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
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},
"params": {
"Region":
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"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
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"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
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{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": false
}

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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
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"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
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"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.us-west-2.amazonaws.com"
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"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

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}
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"params": {
"Region": "us-west-2",
"UseFIPS": true,

"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

}
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
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        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
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                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
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        },

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        "expect": {
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            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
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        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
          }
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        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
          }
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            },
            "params": {
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              "UseFIPS": true,
              "UseDualStack": false
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          },
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            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
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              }
            },

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            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
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            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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      },

    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },

  "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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},
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"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
}
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"version": "1.0"
}
}
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"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},

"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time that automated discovery last ran. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes automated discovery. "
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }

```
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
```

"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

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                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

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    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

```
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
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                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
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        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

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            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
```

<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

  }
            },
            "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
```

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
```

grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
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{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

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    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
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"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},

"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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            "KILOBITS_PER_SECOND": {
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                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
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                "traits": {
                    "smithy.api#enumValue":
"Megabits/Second"
                }
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            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
                }
            },
            "TERABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits/Second"
                }
            },
            "COUNT_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count/Second"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#EntitlementList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
        }
    },
    "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
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"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
```

```
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
```

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
```

"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

},
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

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    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
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"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
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"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

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            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

      },
        "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {

  "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

```
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

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                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

```
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
```

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

```
{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
               "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
```

```
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListTokensResponse": {
    "type": "structure",
    "members": {
        "Tokens": {
            "target": "com.amazonaws.licensemanager#TokenList",
            "traits": {
                "smithy.api#documentation": "<p>Received token details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
    "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
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</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilter": {
      "type": "structure",
      "members": {
        "ProductInformationFilterName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Filter name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterValue": {
          "target": "com.amazonaws.licensemanager#StringList",

        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
          }
        },
        "ProductInformationFilterComparator": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
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                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
    }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
        },
```

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

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        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

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            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
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```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
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            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
},
"com.amazonaws.licensemanager#ReportFrequency": {
    "type": "structure",
    "members": {
        "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
                "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
        },
        "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

            "traits": {
                "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

```
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

```
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

```
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
        },
        "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3501 github.com/aws/aws-sdk-go-v2/credentials 1.17.59

1.3501.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
```

```
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
```

```
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
```

```
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
       "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
           "type": "structure",
```

"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "

```
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
```

```
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
```

href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}

```
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",

"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {

"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity
provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
 {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
```

```
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"

             }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}

        }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
```

\n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits":
{
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},

"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {

"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",

"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],

"rules": [
{
"conditions": [

```
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [
                    {

"fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},

            "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",
                    "argv":
[
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
                          true

            ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
```

"fn": "booleanEquals",

"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
}
]
},

{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]

}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
},

{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",

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                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"
}

],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [

 {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }
```

```
                    ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                     "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                 "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
```

"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
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}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
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"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
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"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint":
"https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are
not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",

"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation":

" The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation":
" The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},
"CreationTime": {

"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},

"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
"type": "string",
"traits":
{
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""
},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""

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            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
            {
              "name": "NOT_APPLICABLE",
              "value": "NOT_APPLICABLE",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
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"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",

"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",

"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits":
 {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
```

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},

"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

      }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": " The tags for the specified resource. "
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }

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        ],
        "traits":
 {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline
```

results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}

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            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",

            "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory
that contains the user information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
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            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
```

"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {

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            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":
 {
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
```

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        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
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"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
```

| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
                "smithy.api#required": {}
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": " The tags that apply to the product subscription. "
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
    "type": "structure",
    "members": {
        "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
                "smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
    },

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An

object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",

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    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
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        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },

    "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
```

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
```

"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {

"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
```

```
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
```

```
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string
```

```
 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
```

```
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

```
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
```

```
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
```

```
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if
```

```
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
```

operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token

status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",

"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has
been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being
applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings
current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated
data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see <a

href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"

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        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
```

"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
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"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
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"conditions": [
{

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                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

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              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
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            {
              "conditions": [],
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                      "argv": [
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                          "ref": "UseDualStack"
                        },
                        true
                      ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
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                "conditions": [],
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                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
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            "type": "tree"

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          ],
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},
{
    "conditions": [],
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                    "argv": [
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                            "ref": "Region"
                        }
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                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
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                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
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```
                    },
                    true
                ]
            }

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                            "argv": [
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                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"

},
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [

                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

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"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
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"type": "tree"
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"ref": "UseFIPS"
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],
"rules": [
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"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [

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                                    "supportsFIPS"
                                ]
                            },
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                        }
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                    "rules": [
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                                    "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
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                                    "type": "endpoint"
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                            "type": "tree"
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                    "type": "tree"
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                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
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            "type": "tree"
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            "conditions": [
                {
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                    "argv": [
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                            "ref": "UseDualStack"
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                    },
                    true

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                                    "fn": "getAttr",
                                    "argv": [
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                            "rules": [

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                                        "headers": {}
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
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                "type": "tree"
            }
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    "type": "tree"
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    "type": "error"
}
],
"type": "tree"
}
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
```

```
}
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
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      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
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          "UseFIPS": true,
          "UseDualStack": false
        }
      },
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    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
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        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
          }

  },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
```

```
            },
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              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
               },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
```

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            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
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            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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              }

           },
            "params": {
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              "UseDualStack": false
            }
          },
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            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
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{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
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"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {

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"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",

"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
      <code>AmiID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>DualSubscription</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceType</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>ProductCode</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Region</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Status</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n           </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n            <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n        </ul>"
                }
            },
            "MaxResults": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "

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            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
        "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
        "target":
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration
resources for your account. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": " To filter your results, specify which subscription providers to
return \n\t\t\tin the list. "
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {

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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
```

"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "

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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
```

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            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
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```
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
 subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
```

"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,

"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied due to request throttling. ",
"smithy.api#error": "client"
}

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

           "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}

```
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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package grafana

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].

```
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {
```

```
 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
```

```
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

1.3502 aws-sdk-go-v2-service-sso 1.24.15

1.3502.1 Available under license :

```
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package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
```

```
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength

```
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
```

```
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
```

```
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack);
err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
```

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever

```
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
```

```
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
```

```
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
```

```
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
```

resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
```

"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}

```
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
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                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
                }
            },
            "LastUpdatedTime": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
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details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux

subscriptions. "
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
" An exception occurred with the service. ",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"

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            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
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                "conditions": [
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                        "fn": "isSet",
                        "argv": [
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                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
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                        "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref": "UseFIPS"
                                    },
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],
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                        "type": "error"
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                        "conditions": [],
                        "endpoint": {
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                                "ref": "Endpoint"
                            },
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                    "conditions": [
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        "fn": "aws.partition",
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                    "assign": "PartitionResult"
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                "rules": [
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                    "conditions": [
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                        "argv": [
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                      "ref": "UseFIPS"
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                        "fn": "booleanEquals",
                        "argv": [
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                            "ref": "UseDualStack"
                          },
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"conditions": [
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"argv": [
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"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"

},
"supportsFIPS"
]
}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
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"rules": [
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"conditions": [],

"rules": [
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"conditions": [],
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"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"

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                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
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                    "type": "tree"
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        "conditions": [
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                                    "argv": [
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                                            "fn": "getAttr",
                                            "argv": [
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                                                "supportsFIPS"
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
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                        "type": "tree"
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but this partition does not support FIPS",
                "type": "error"
            }
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        "type": "tree"
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        "conditions": [
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                "argv": [
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                        "ref": "UseDualStack"
                    },
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"argv": [
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsDualStack"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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                            "headers": {}
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              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
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          "type": "tree"
        }
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          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
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        },
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}

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            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
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            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
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            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
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          },
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"

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            }
        },
        "params": {
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false,
            "UseDualStack": false
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    },
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
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            "UseDualStack": true
        }
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    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
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            "UseFIPS": false,
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    },
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        "expect": {
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"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",

"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
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"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
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"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n <li>\n            <p>\n                <code>Subscription</code>\n            </p>\n        </li>\n        </ul>\n <p>The
 valid Operators for this filter are:</p>\n        <ul>\n        <li>\n            <p>\n <code>contains</code>\n            </p>\n        </li>\n        <li>\n            <p>\n <code>equals</code>\n            </p>\n        </li>\n        <li>\n            <p>\n <code>Notequal</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
```

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
```

"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":

```
{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

```
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}

```
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
```

```
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
```

"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

```
        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {
```

```
 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
GetLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains

details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {

"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"

},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS)

license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

 }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {

"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},

"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

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    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
```

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

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        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
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            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
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            "conditions": [
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                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseDualStack"
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                ]
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            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
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                "conditions": [],
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                "type": "endpoint"
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        "type": "tree"
    },
    {
        "conditions": [
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                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "rules": [
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                "conditions": [
                    {
                        "fn": "aws.partition",

                     "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
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                            {
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true
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                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            }
                                        ]
                                    },

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                                        "fn": "booleanEquals",
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                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
```

```
                    ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

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                    "type": "tree"
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                    "conditions": [],
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both",
                    "type": "error"
                }
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            "type": "tree"
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                    "argv": [

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                    },
                    true
                ]
                }
            ],
            "rules": [
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                            "argv": [
                                {
                                    "fn": "getAttr",
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"argv": [

{

"ref": "PartitionResult"

},

"supportsFIPS"

]

},

true

]

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"headers": {}

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"argv": [

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"ref": "UseDualStack"

},

true

]

}

],

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{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]

}
]
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],
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"endpoint": {
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
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"conditions": [],
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"type": "error"
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"type": "tree"
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}

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                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
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              "expect": {
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                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
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            },
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              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS":
true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
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            }
        },
        "params": {
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    {
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            }
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        "params": {
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            "UseFIPS": false,
            "UseDualStack": true
        }
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    {
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        "expect": {
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            }
        },
        "params": {
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            "UseFIPS": false,
             "UseDualStack": false
        }
    },
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        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
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"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
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"params": {
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"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": true
}
},
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
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"error": "DualStack is enabled but this partition does not support DualStack"
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}

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"UseDualStack": false
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
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"expect": {
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"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
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"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true,
"Endpoint": "https://example.com"
}
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {

"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "

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                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

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        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
```

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            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

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          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
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      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings
for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
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"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
the following filters to streamline results:</p>\n    <ul>\n        <li>\n            <p>Product</p>\n        </li>\n
    <li>\n            <p>DirectoryId</p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
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"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
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            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
```

\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next
token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100

```
                }
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
    "type": "structure",
    "members": {
        "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
    "type":
```

"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":

{
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating.
This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",

"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

            }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

        "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
```

```
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
        },
        "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
    "type":
 "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
    "type": "structure",
    "members": {
        "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
```

"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":

" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",

"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",

"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation":
" The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

        }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

     "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
```

"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security
group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}

```
      }
    }
  }
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
```

```
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
```

"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},

{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#ListTokens"
            },
            {
                "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#RejectGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
```

"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],

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            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {

"conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          },
          {
            "conditions": [
```

```
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
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            "rules": [
                {
                    "conditions": [
                        {
                             "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "type": "tree",
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref":
"UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "type": "tree",
```

"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]

}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"

```
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",

        "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,

{
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                }
                ],
                "type": "tree",
                "rules": [
```

```
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS is enabled but this
partition does not support FIPS",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
         "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },

"supportsDualStack"
                                ]
```

```
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                        },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
```

```
        {
          "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager.af-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "af-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-east-1",
            "UseFIPS": false,
            "UseDualStack": false
           }
        },
        {
          "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
          },
          "params": {
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"Region": "ap-northeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",

"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,

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            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }

},
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-2.amazonaws.com"
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     },
        "params": {
            "Region": "us-east-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
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    {
        "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
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"url": "https://license-manager-fips.us-east-2.amazonaws.com"
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
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},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false

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            }
        },
        {
            "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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                    "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                }
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            "params": {
                "Region": "us-west-2",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
            }
        },
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            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
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        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url":
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"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}

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    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },

  {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
       },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
      },
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}

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      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
          }
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },

    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },

"params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
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"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
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"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}

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            },
            "CHECKOUT_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutLicense"
                }
            },
            "CHECKOUT_BORROW_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutBorrowLicense"
                }
            },
            "CHECK_IN_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckInLicense"
                }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ExtendConsumptionLicense"
                }
            },
            "LIST_PURCHASED_LICENSES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
```

"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }

},
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
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"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}

```
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
```

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            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {

"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {

"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}

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        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
```

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        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
```

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            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services
account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n
<ul>\n
            <li>\n                <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                    "smithy.api#required": {}
                }
```

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        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
```

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{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
```

```
    },
    "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
        }
    },
    "GrantName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
        }
    },
    "AllowedOperations": {
        "target": "com.amazonaws.licensemanager#AllowedOperationList",
        "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
         "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "StatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
        }
    },
    "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
        }
    },
    "Options": {
        "target": "com.amazonaws.licensemanager#Options",
        "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
        }
    }
},
 "traits": {
    "smithy.api#input": {}
}
```

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    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the grant.</p>"
          }
        }
      },
      "traits":
{
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
```

all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |

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<code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n          </li>\n
<li>\n
  <p>\n              <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
          },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {

            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
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"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",

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        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
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"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {

"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for

workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT

token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
```

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        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the
grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {

"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
```

"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},

"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},

"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {

"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {

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            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

           "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"

},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": "<p>Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access

tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},

```
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
```

},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
```

```
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {

"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "

```
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
 {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
```

configurations. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
              "smithy.api#required": {}
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " License version. "
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
          "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
              "smithy.api#documentation": " License details. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },

    "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {

"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {

"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {

"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",

"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
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        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

},
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#IssuerDetails",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license issuer.</p>"
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

             }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license status.</p>"
                }
```

},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {

"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},

"com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
},
"com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Issuer name. ",
                "smithy.api#required": {}
            }
        },
        "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "

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                }
            },
            "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
```

"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}

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    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the license configuration.</p>"
        }
    },
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

   }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
        }
    },
    "ManagedResourceSummaryList": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
        }
    },
    "ProductInformationList": {
        "target": "com.amazonaws.licensemanager#ProductInformationList",
        "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
        }
    },
    "AutomatedDiscoveryInformation": {

        "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
        "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
```

agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},

"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
```

```
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
    "type": "string",
    "traits": {

   "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
```

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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
```

```
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
```

"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",

```
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",

"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

```
"com.amazonaws.licensemanager#ListDistributedGrants": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
    "members": {
        "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
```

"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
```

```
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n              <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n              Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

          "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your

account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}

```
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

```
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n              <p>\n                <code>Beneficiary</code>\n              </p>\n
        </li>\n            <li>\n              <p>\n                <code>ProductSKU</code>\n              </p>\n            </li>\n
    <li>\n              <p>\n                <code>Fingerprint</code>\n              </p>\n            </li>\n            <li>\n
<p>\n                <code>Status</code>\n              </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
```

"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while

specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}

```
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
      <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
```

"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100

```
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>. \n \n \n
\n <code>Application Publisher</code> - The publisher of the application.\n Logical

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

```
        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
     }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
```

```
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
```

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            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
```

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        "members": {
          "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 308
        }
      },
      "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
```

{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

```
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
```

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report

generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}

```
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
```

"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

```
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096

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            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
"com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>One or more tags.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#TagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#TokenData": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
```

format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {

"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
```

"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
```

update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
```

```
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3503 github.com/aws/aws-sdk-go-v2/config 1.29.6

1.3503.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

```
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
```

```
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
```

```
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil
{
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
          "type": "structure",
          "members": {
              "message": {
                  "target": "smithy.api#String"
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            },
            "ActiveDirectorySettings":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
```

{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables

administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider
specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>
resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

 }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

            "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity
provider to deregister. "
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": " Metadata that describes the results of an identity provider
operation. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
 {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {

"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}

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                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the identity provider.</p>",

        "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
```

"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits":
{
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},

"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
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"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
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"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [

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      "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
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      "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

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      "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
    },
    {

     "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
    },
    {
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"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
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"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
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"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":

"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"fn": "isSet",
"argv": [
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"ref": "Endpoint"
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]
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],

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{
"conditions": [
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"fn": "booleanEquals",
"argv": [

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                    },
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            }
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        "type": "error"
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        "conditions": [],
        "endpoint": {
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                "ref": "Endpoint"
            },
            "properties": {},

        "headers": {}
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        "type": "endpoint"
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"type": "tree"
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            "argv": [
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                    "ref": "Region"
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                        "argv":
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                        "assign": "PartitionResult"
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                                "argv": [
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                                    },
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"ref": "PartitionResult"
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"supportsFIPS"
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
},
"supportsDualStack"
]
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]

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"properties": {},
"headers": {}
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"type": "tree"
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"conditions": [],

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"type": "error"
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"type": "tree"
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"ref": "UseFIPS"
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"conditions": [
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"argv": [
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsFIPS"
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"headers": {}

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            "type": "error"
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        "type": "tree"
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        "conditions": [
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                "argv": [
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                    },
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                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }

    ]
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
},
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"conditions": [],
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"type": "error"
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"conditions": [],
"endpoint": {
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"type": "endpoint"
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"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
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"smithy.rules#endpointTests": {
"testCases": [
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
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"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
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"params": {
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"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
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}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
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"UseDualStack": true
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
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"params": {
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"params": {
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"UseDualStack": false
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"expect": {
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
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"UseDualStack": true
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}
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"params": {
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
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"params": {
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"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
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"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
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"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
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"UseDualStack": false,
"Endpoint":
"https://example.com"
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"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":

"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS \n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},
"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
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                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""
                },
                {
                     "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
            ]
        }
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    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
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                {
                    "name": "HEALTHY",
                    "value": "HEALTHY",
                    "documentation": ""
                },
                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",

            "smithy.api#required": {}
                }
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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },

         "smithy.api#paginated": {
                "inputToken": "NextToken",
```

"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},
"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits":
{
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

      }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

   "smithy.api#input": {}
        }
```

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},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
         {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits":
```

{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory
that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
                    "smithy.api#required": {}
                }
            },
```

"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

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        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":
{
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
```

servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource
contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",

"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
    "type": "structure",
    "members": {
        "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
    },

"errors": [
        {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},

"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}

```
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
```

"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
```

```
<li>\n <p>Subnets which you want to remove the VPC endpoints from.</p>\n </li>\n
<li>\n <p>Security group ID which permits traffic to the VPC endpoints.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {

  "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
    "type": "structure",
    "members": {
      "IdentityProviderSummary": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
        "traits": {
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
    "type": "structure",
    "members": {
      "AddSubnets": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint
 for products that\n\t\t\trequire connectivity to activation servers.</p>",
          "smithy.api#required": {}
        }
      },
      "RemoveSubnets": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
          "smithy.api#required": {}
        }
      },
      "SecurityGroupId": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
        "traits": {
          "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
```

communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " A parameter is not valid. ",
          "smithy.api#error": "client"
        }
      }
    }
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
```

```
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

```
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
```

```
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
```

RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string
```

```
 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
```

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },

      {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
              }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
```

```
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
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"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
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"smithy.api#idempotent": {}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
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"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},

"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

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"smithy.api#idempotent": {}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated

data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}

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            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
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        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
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        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
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"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",

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                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
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                    "fn": "booleanEquals",
                    "argv": [
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                        "ref": "UseFIPS"
                      },
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                    ]
                  }

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                "type": "error"
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                "conditions": [],
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                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
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                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
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                    "conditions": [],
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                        "ref": "Endpoint"
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    "type": "tree"
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    "conditions": [],
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                    "argv": [
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                            "ref": "Region"
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                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
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                "ref": "UseFIPS"
                },
                true
            ]
        },
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            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
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                    "argv": [
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                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"

},
                                "supportsFIPS"
                            ]
                        }
                    ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [

                        {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
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                                            }
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                                    }
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                                "rules": [
                                    {
                                        "conditions": [],

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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
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                                                "type": "endpoint"
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                                "conditions": [],
                                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                "type": "error"
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                        "type": "tree"
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            "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref": "UseFIPS"
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                                "fn": "getAttr",
                                "argv": [
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                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]
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but this partition does not support FIPS",
                        "type": "error"
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                        "argv": [
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                            },
                            true

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                                "argv": [
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                                    {
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                                        "argv": [
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                                            "ref": "PartitionResult"
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                                            "supportsDualStack"
                                        ]
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
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}
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"type": "error"
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],
"type": "tree"
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"headers": {}
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"type": "tree"
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"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"

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        }
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    "smithy.rules#endpointTests": {
      "testCases": [
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          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

      }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
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        },
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       "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
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        },
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          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {

"Region": "cn-north-1",
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}
},
{
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"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
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"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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}

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"UseDualStack": false
}
},
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},
"params": {
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"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

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            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
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                "UseDualStack": true
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        },
        {
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                }
            },
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false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
```

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"

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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
  <p>\n                <code>AccountID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
      <code>AmiID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
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<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

        "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
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next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",

"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

           "NextToken": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",

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                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
        "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
     }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
            },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
```

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
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"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}

},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",

"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {

"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",

"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {

"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
```

"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}

ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme

```
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following
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the brackets!) The text should be enclosed in the appropriate
comment syntax for the file format. We also recommend that a
file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
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```
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
```

```
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
```

```
}
```

1.3504 aws-sdk-go-v2-config 1.29.6

1.3504.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
```

```
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

```
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
```

```
  name: License Scan
  runs-on: ubuntu-latest
  strategy:
    matrix:
      python-version: [3.9]

  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
```

```
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement
```

```
 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
```

```
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions

```
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
```

```
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return
nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:     ServiceID,
 OperationName: "GetLicense",
}
}
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

```
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
```

```
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
```

"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "

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                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
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    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
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},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "

```
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"
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          "smithy.api#idempotent": {}
        }
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      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
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"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "

}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for

\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"

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    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
        "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
        ],
        "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
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"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

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                }
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                            "argv": [
                                {
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                                },
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                            ]
                        }

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                    "type": "error"
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                    "conditions": [],
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                                    "fn": "booleanEquals",
                                    "argv": [
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                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]

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                            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                            "type": "error"
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                            "conditions": [],
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                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
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                }
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            "type": "tree"

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                        "argv": [
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                                "ref": "Region"
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                    }
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                        "conditions": [
                            {

        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
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                                        "fn": "booleanEquals",
                                        "argv": [
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                                    "ref": "UseFIPS"
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                    },
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                          "argv": [
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                              "fn": "getAttr",
                              "argv": [
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                                  "ref": "PartitionResult"

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                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [

                               {
                                  "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
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"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
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"conditions": [
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"argv": [
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"argv": [
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"fn": "getAttr",
"argv": [
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},
"supportsFIPS"
]
},
true

]
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"conditions": [],
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"conditions": [],
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"properties": {},
"headers": {}
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"type": "endpoint"
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"conditions": [],
"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
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                                true

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                                            "argv": [
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                                                "ref": "PartitionResult"
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                                                "supportsDualStack"
                                            ]
                                        }
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                                    "conditions": [],
                                    "rules": [

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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
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                                        "type": "endpoint"
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"headers": {}
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},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
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"smithy.rules#endpointTests": {
"testCases": [

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    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
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      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
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  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
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      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
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      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
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        },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
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          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack

enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},

"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

```
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
      <code>AmiID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Region</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Status</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
```

values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
```

match a certain subscription's name. \n The valid names for this filter are: \n \n
\n \n <code>Subscription</code>\n \n \n \n
The
 valid Operators for this filter are: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
```

"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
```

```
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"

      },
        "smithy.api#idempotent": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
```

```
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
```

"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

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}
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },

  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "

```
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
```

```
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string
```

```
 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            },
            "ActiveDirectorySettings":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
```

"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-

zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {

"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider
specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>
resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
```

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory

domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},

"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}

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            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
    "type": "list",
    "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
            }
        },
        "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
```

"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",

"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based

subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
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"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
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"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
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"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"

},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
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"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
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"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",

"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant
regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
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]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
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"conditions": [

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                }
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            "type": "error"
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                    "ref": "Endpoint"
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"properties": {},
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            "type": "endpoint"
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        "assign": "PartitionResult"
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                "argv": [
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                    },

true
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                "fn": "booleanEquals",
                "argv": [
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                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
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                                "fn": "getAttr",
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                                        "ref": "PartitionResult"
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                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
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                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

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                    }
                ],
                "rules": [
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
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                        "type": "endpoint"
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                "conditions": [],
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both",
                "type": "error"
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        "type": "tree"
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        "conditions": [
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                "argv": [
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                                "argv": [
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                                        "fn": "getAttr",
                                        "argv": [

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                                        "supportsFIPS"
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                                    "headers": {}
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                        "type": "error"

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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
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                        "type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
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    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
]
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"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
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"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
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"params": {
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"UseDualStack": false
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"params": {
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"UseFIPS": false,
"UseDualStack": true
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"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"

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                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false

    }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},

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{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
  "expect": {

 "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack":
false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
  "expect": {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
  },
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},

"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "

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            }
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        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
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                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },

        "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
    "type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
},
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""

},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},

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                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n
        <li>\n                <p>InstanceId</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
```

token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",

"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
```

provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

         }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
```

"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {

"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits":
 {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

   "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

"target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
```

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity

provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},

"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
 {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
```

to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration

settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " A parameter is not valid. ",
          "smithy.api#error": "client"
        }
      }
    }
}
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
```

```
 }
}
{
  "smithy": "2.0",
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        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
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          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
```

"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
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"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
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"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
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{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
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"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
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{
"target": "com.amazonaws.licensemanager#DeleteGrant"
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"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
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"target": "com.amazonaws.licensemanager#DeleteToken"
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"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
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"target": "com.amazonaws.licensemanager#GetAccessToken"
},

{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
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},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

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      "target": "com.amazonaws.licensemanager#ListLicenseVersions"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
    },
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    },
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    },
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      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
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      "target": "com.amazonaws.licensemanager#RejectGrant"
    },
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      "target": "com.amazonaws.licensemanager#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
```

"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
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"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

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                    ]

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                            ]
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                    "type": "error"
                },
                {

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                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
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                    },
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                    "headers": {}
                },
                "type": "endpoint"
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                    }
                ]
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                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref":
```

"UseFIPS"

```
                    },
                    true
                ]
            },
            {
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                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
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                                    },
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                                ]

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                        ]
                    },
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                                "argv": [
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                                        "ref": "PartitionResult"
                                    },
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"supportsDualStack"

```
                                ]
```

```
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                ]
            }
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}

        },
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            }
        ]
    },
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both",
        "type": "error"
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  ]
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  "argv": [
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            true
        ]
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  "type": "tree",
  "rules": [
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        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
```

```
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                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ],
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              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
      {
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        "error": "FIPS is enabled but this
partition does not support FIPS",
        "type": "error"
      }
    ]
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        "argv": [
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        ]
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```

```
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                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

"supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
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                    "rules": [
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                        "conditions": [],
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                          "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

                },
                        "type": "endpoint"
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                    ]
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                  {
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                    "type": "error"
                  }
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                "conditions": [],
                "endpoint": {
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                   "properties": {},
                  "headers": {}
```

```
                    },
                    "type": "endpoint"
                }
            ]
        }
    ]
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    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
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        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
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            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
             }
        },
        {
            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
```

```
            }
        },
        "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }

},
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        "params": {
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            "UseFIPS": false,
            "UseDualStack": false
        }
    },
```

```
        {
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}
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          "expect": {
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            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
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        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
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            }
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```

"params": {
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"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
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"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
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"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
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            "endpoint": {
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          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
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        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
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          "params": {
            "Region": "eu-west-3",
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"UseDualStack": false
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          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
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"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
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"params": {
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"UseDualStack": false
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
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"params": {

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"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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"Region": "us-west-2",
"UseFIPS": false,
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"UseDualStack": false
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"url": "https://license-manager-fips.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
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},
"params": {
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        "params": {
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            "UseFIPS": true,
            "UseDualStack": false
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        "params": {
            "Region": "cn-north-1",
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        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
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    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation":
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"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
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"UseDualStack": false
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}
},

"params": {
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"UseDualStack": true

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            "expect": {
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                }
            },
            "params": {
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                "UseFIPS": false,
                "UseDualStack": true
            }
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            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
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        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
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"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

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            "params": {
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                        "UseDualStack": false
                    }
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                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                },
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                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
```

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            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"

}
    ],
    "traits": {
        "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant
```

ARN. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": " Grant status. "
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Grant version. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": " Access to resource denied. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
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"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
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"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

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},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
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    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
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    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

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            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the
account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

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            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
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"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

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        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

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    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

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            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}

```
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
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    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

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            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
```

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

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            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

```
            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

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        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
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```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
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        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

   },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }

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            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"

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    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

```
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
```

```
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
```

"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

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        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

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    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n
    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n
        <code>resource_id</code> - The ID of the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

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        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

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    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}

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        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
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"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
```

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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3505 github.com/aws/aws-sdk-go-v2/service/sts 1.33.14

1.3505.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData
```

```
// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
```

```
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err !=
nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

```
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
```

```
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err
!= nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
```

"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",

```
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
           },
          {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/CreateLicenseServerEndpoint"
         },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "IdentityProviderArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
```

```
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

               "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
 {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"

                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
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    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
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"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},

"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation":
" Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {

"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {

     "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
          }

  },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
```

```
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server",
             "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
```

```
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {

          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
```

```
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
      }
    ],
    "traits": {
      "aws.api#service": {
        "sdkId": "License Manager User Subscriptions",
        "arnNamespace": "license-manager-user-subscriptions",
        "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-user-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id",
          "content-length",
          "x-api-key",

"authorization",
          "x-amz-date",
          "x-amz-security-token",
          "Access-Control-Allow-Headers",
          "Access-Control-Allow-Methods",
          "Access-Control-Allow-Origin"
        ],
```

"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",

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                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],

        "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
```

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                "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv":
[
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true

    ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
```

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                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [
                {
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  "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                },

{
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]

                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
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"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
}
],

"type": "tree"
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{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{

"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsFIPS"
]

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                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [],
                "endpoint": {
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fips.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }

],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [

     {
                "fn": "booleanEquals",
                "argv": [
                    true,
```

```
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }

                        ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "DualStack is enabled but this partition does not support DualStack",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        }
```

```
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
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    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint":
{
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,

        "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },
                "params": {
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"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},

"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation":
" The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation":
" The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}

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            },
            "CreationTime": {

        "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
 {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
```

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            },
            {
                "name": "DELETION_FAILED",
                "value": "DELETION_FAILED",
                "documentation": ""
            },
            {
                 "name": "DELETED",
                "value": "DELETED",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "HEALTHY",
                "value": "HEALTHY",
                "documentation": ""
            },
            {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
            },
            {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
    "type": "structure",
    "members": {
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
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"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },

         "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
    <ul>\n        <li>\n            <p>Product</p>\n        </li>\n        <li>\n            <p>DirectoryId</p>\n
  </li>\n      </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {

              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>Status</p>\n            </li>\n            <li>\n              <p>InstanceId</p>\n
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</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When
 this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
          {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},
"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits":
{
"smithy.api#documentation": " You can use the following filters to streamline results: \n

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<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n

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</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {

                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n        <p>Status</p>\n        </li>\n        <li>\n        <p>Username</p>\n
</li>\n        <li>\n        <p>Domain</p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to
 retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

      }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags for the specified resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits":
{
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
```

"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":

"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider
operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"

```
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
            "type": "structure",
            "members": {
                "Endpoint": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
            "type": "union",
            "members": {
                "RdsSalSettings": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                    "traits": {
                        "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
            "type": "string",
            "traits": {
                "smithy.api#enum": [
                    {
                        "name": "RDS_SAL",
                        "value": "RDS_SAL",
                        "documentation": ""
                    }
                ]
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
            "type": "structure",
            "members": {
                "message": {
```

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",

"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An
object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription

operation.</p>",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },

    "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
 {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes
 tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
 to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {

 "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}

```
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n              <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n              <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n              <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

  "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint
```

```
 for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to
provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement
```

```
 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

```
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
```

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod
```

```
 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
```

"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
                "smithy.api#http": {
                    "code": 200,
                    "method": "POST",
                    "uri": "/subscription/GetServiceSettings"

             },
                "smithy.api#idempotent": {}
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
            "type": "structure",
            "members": {}
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
            "type": "structure",
            "members": {
                "LinuxSubscriptionsDiscovery": {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                    "traits": {
                        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                    }
                },
                "LinuxSubscriptionsDiscoverySettings": {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                    "traits": {
                        "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                    }
                },
                "Status": {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                    "traits": {
                        "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
```

applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}

```
            },
            "SubscriptionProviderCreateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
                }
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
```

```
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
```

"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

```
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
```

```
                    },
                    true
                ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
```

```
                {
                    "ref": "Region"
                }
            ],
            "assign": "PartitionResult"
        }
    ],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {

                  "ref": "UseFIPS"
                        },
                        true
                    ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }

],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
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                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"

},
                                        "supportsFIPS"
                                    ]
                                }
```

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                    ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
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                        {
                            "fn": "getAttr",
                            "argv": [

                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [],

        "rules": [
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                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],

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            "type": "tree"
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        {
            "conditions": [],
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one or both",

            "type": "error"
        }
    ],
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"type": "tree"
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{

"conditions": [
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"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
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],
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true

]
}
],
"rules": [
{
"conditions": [],
"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}

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{
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but this partition does not support FIPS",
    "type": "error"
}
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"type": "tree"
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{
"conditions": [
    {
        "fn": "booleanEquals",
        "argv": [
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                "ref": "UseDualStack"
            },
            true

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        "conditions": [
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                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {

                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }
```

```
                    ]
                }
            ],
            "rules": [
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                    "conditions": [],
                    "rules": [

{
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                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                    ],
                    "type": "tree"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "DualStack is enabled but this partition does not support DualStack",
            "type": "error"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [],
            "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
```

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                ],
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        ],
        "type": "tree"
    },
    {
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        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
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    },
    {
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
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"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
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}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
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"endpoint": {
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}
},
"params": {
"Region": "us-iso-east-1",
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"UseDualStack": false
}
},
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

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        "Region": "us-isob-east-1",
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        "UseDualStack": true
    }
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{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
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    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
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}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"

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                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
        {
          "name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled LinuxSubscriptionsDiscovery"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
      "SourceRegions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
        "traits": {
          "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "OrganizationIntegration": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
        "traits": {
          "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
          "smithy.api#required": {}
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
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"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {

"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
```

"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",

"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"

```
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
```

```
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "

```
            }
        },
        "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
```

"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
```

"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",

"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

```
        },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
             "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target":
 "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
```

```
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
```

"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}

ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

ErrorCloseResponseBody

CloseResponseBody

ResponseErrorWrapper

RequestIDRetriever

OperationDeserializer

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {
```

```
 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
```

```
return &awsmiddleware.RegisterServiceMetadata{
 Region:        region,
 ServiceID:     ServiceID,
 OperationName: "AssociateLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

1.3506 github.com/aws/aws-sdk-go-v2/feature/ec2/imds 1.16.28

1.3506.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {
```

```
 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

```
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
```

```
  runs-on: ubuntu-latest
  strategy:
    matrix:
      python-version: [3.9]

  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
```

```
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil
{
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
```

"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {

"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
```

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
```

"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",

"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based

subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
{
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the
user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based
subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity
provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains
information for the user to disassociate. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}

        }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
```

```
            }
        },
        "Operation": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
        },
        "Value": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation":
 "<p>Value of the filter.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
    "type": "union",
    "members": {
        "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
            "traits": {

                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
          "traits":
{
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

  "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {

      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
```

```
            }

  },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
              }
            },
            "AssociationDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
              }
            },
            "DisassociationDate": {
              "target": "smithy.api#String",
              "traits": {

            "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
```

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    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
         "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

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            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],

    "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [
                        {

"fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                },
```

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                {
                  "conditions": [],
                  "endpoint": {
                    "url": {
                      "ref": "Endpoint"
                    },
                    "properties": {},

                "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",
                      "argv":
[
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseFIPS"
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                    },
                    true

            ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",

            "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                    },

{
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
```

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                    ]

                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],

        "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {

      "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
```

"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
}

],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],

"rules": [
{
"conditions": [

{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}

]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack":
true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}

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            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url":
"https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack":
false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"

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            },
            "params": {
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              "UseDualStack": true
            }
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          {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
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                "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,

      "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
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"expect": {
"endpoint": {

"url": "https://example.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",

"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",

"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "

```
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {

      "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
      "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
      "type": "string",
      "traits":
 {
        "smithy.api#enum": [
            {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
                "documentation": ""
            },
            {
                "name": "PROVISIONING_FAILED",
                "value": "PROVISIONING_FAILED",
                "documentation": ""
            },
            {
```

"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""
},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},
{
"name": "UNHEALTHY",
"value": "UNHEALTHY",
"documentation": ""
},
{
"name": "NOT_APPLICABLE",
"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken

\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n InstanceId \n
\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When
this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},
"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100

```
                }
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits":
 {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
    "type": "structure",
    "members": {
        "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
             "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
    "type": "operation",
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"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type":

"structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {

"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"

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            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",

            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {

"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}

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            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
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"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type":
"structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {

"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,

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            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An
object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The
domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
```

"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}

```
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }

     },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
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        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes
 tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
 to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {

 "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the
identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",

"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string
```

```
 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

```
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

```
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
```

```
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

```
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
```

```
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string
```

```
 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:     ServiceID,
 OperationName: "CheckoutBorrowLicense",
}
}
GetLicense
Initialize stack step
 spanInitializeStart
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
```

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2

```
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
AWS SDK for Go
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Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
```

spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
```

"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {

"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists

the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}

},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "

}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
```

"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [],

```
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
```

```
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                    "ref": "UseFIPS"
                                            },
                                            true
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
                                    }

        ],
                                "rules": [
                                    {
                                        "conditions": [
                                            {
                                                "fn": "booleanEquals",
                                                "argv": [
                                                    true,
                                                    {
                                                        "fn": "getAttr",
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"argv": [
{
"ref": "PartitionResult"

},
"supportsFIPS"
]
}
]
},
{
"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
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"type": "tree"
}
],
"type": "tree"

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                    },
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                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
                    }
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                "type": "tree"
            },
            {

        "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true

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                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
```

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                                        {
                                            "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
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                                    ],
                                    "type": "tree"
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                        {
                            "conditions": [],
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but this partition does not support FIPS",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
```

"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

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"type": "tree"
},
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"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
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],
"type": "tree"
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"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-

subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
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"type": "tree"
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"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
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]
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},

{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false

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    }
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  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
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"UseDualStack": false
}
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}

```
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
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"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
```

linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,

"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
```

"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription

provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",

```
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {

"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
          }
        }
    }
}
```


ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware

RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter

```
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
```

```
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
```

```
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
```

```
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err !=
nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

1.3507 libunwind 1.6.2-3build1.1

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1.3508 go-git-go-billy 5.6.2

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1.3509 exponential-backoff 3.1.2

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The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License.
Of course, the
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<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

That's all there is to it!

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The End

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any
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1.3519 openssl 3.3.3-r0

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1.3521 x-sys 0.30.0

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1.3525 x-sys 0.30.0

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1.3526 plugin 1.0.0

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1.3527 nri 0.8.0

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1.3528 sqlite 3.49.0

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1.3529 github.com/opencontainers/selinux 1.11.1

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1.3530 filepath-securejoin 0.4.1

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1.3531 github.com/go-git/go-billy/v5 5.6.2

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02110-1301, USA. */

```
#ifndef __VTV_H__
#define __VTV_H__

/* We could have used an enumeration here but it just makes it more
```

```
  difficult for the compiler to generate a call to this.  These are
  used as arguments to the function __VLTChangePermission, declared
  below.  */
#define __VLTP_READ_ONLY  0
#define __VLTP_READ_WRITE 1

#ifdef __cplusplus
extern "C" void __VLTChangePermission (int);
#else
extern void __VLTChangePermission (int);
#endif

#ifdef BIG_PAGE_SIZE
/* TODO - Replace '4096' below with correct big page size.  */
#define VTV_PAGE_SIZE 4096
#else
#if defined(__sun__) && defined(__svr4__) && defined(__sparc__)
#define VTV_PAGE_SIZE 8192
#else
#define VTV_PAGE_SIZE 4096
#endif
#endif



#endif /* __VTV_H__ */
```

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/* Use the Sequent Symmetry assembler syntax.  */

/* Define the syntax of pseudo-ops, labels and comments.  */

/* Prefix for internally generated assembler
 labels.  If we aren't using
  underscores, we are using prefix `.'s to identify labels that should
  be ignored, as in `i386/gas.h' --karl@cs.umb.edu  */

#define LPREFIX "L"

/* Assembler pseudos to introduce constants of various size.  */

#define ASM_BYTE "\t.byte\t"
#define ASM_SHORT "\t.word\t"
#define ASM_LONG "\t.long\t"
#define ASM_QUAD "\t.quad\t"  /* Should not be used for 32bit compilation.  */

/* This was suggested, but it shouldn't be right for DBX output. -- RMS
  #define ASM_OUTPUT_SOURCE_FILENAME(FILE, NAME) */


/* Define the syntax of labels and symbol definitions/declarations.  */

/* This is how to output an assembler line
  that says to advance the location counter by SIZE bytes.  */

#define ASM_OUTPUT_SKIP(FILE,SIZE)  \
 fprintf (FILE, "\t.space " HOST_WIDE_INT_PRINT_UNSIGNED"\n", (SIZE))

/* Define the syntax of labels and symbol definitions/declarations.  */

/* This says how to output an assembler line
  to define a global common symbol.  */

#define
 ASM_OUTPUT_COMMON(FILE, NAME, SIZE, ROUNDED)  \
( fputs (".comm ", (FILE)),   \
 assemble_name ((FILE), (NAME)),  \
 fprintf ((FILE), ",%u\n", (int)(ROUNDED)))
```

```
/* This says how to output an assembler line
  to define a local common symbol.  */

#define ASM_OUTPUT_LOCAL(FILE, NAME, SIZE, ROUNDED)  \
( fputs (".lcomm ", (FILE)),   \
 assemble_name ((FILE), (NAME)),  \
 fprintf ((FILE), ",%u\n", (int)(ROUNDED)))

#ifdef HAVE_GAS_LCOMM_WITH_ALIGNMENT
#define ASM_OUTPUT_ALIGNED_LOCAL(FILE, NAME, SIZE, ALIGNMENT)  \
( fputs (".lcomm ", (FILE)),   \
 assemble_name ((FILE), (NAME)),  \
 fprintf ((FILE), ",%u,%u\n", (int)(SIZE), (int)(ALIGNMENT) / BITS_PER_UNIT))
#endif

/* This is how to output an assembler line
  that says to advance the location counter
  to a multiple of 2**LOG bytes.  */

#define ASM_OUTPUT_ALIGN(FILE,LOG) \
 if ((LOG)!=0) fprintf ((FILE), "\t.align %d\n", (LOG))

/* This is how to store into the string BUF
  the symbol_ref name of an internal numbered label
 where
  PREFIX is the class of label and NUM is the number within the class.
  This is suitable for output with `assemble_name'.  */

#define ASM_GENERATE_INTERNAL_LABEL(BUF,PREFIX,NUMBER) \
   sprintf ((BUF), "*%s%ld", (PREFIX), (long)(NUMBER))

/* The prefix to add to user-visible assembler symbols.  */

#define USER_LABEL_PREFIX "_"

/* Sequent has some changes in the format of DBX symbols.  */
#define DBX_NO_XREFS 1

/* Don't split DBX symbols into continuations.  */
#define DBX_CONTIN_LENGTH 0
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1.3533 go-events 0.0.0-20250114142523-c867878c5e32

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1.3534 github.com/cyphar/filepath-securejoin 0.4.1

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1.3535 sha1cd 0.3.2

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1.3536 github.com/vbatts/tar-split 0.12.1

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1.3538 github.com/skeema/knownhosts 1.3.1

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1.3539 call-bind-apply-helpers 1.0.2

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1.3540 golang-genproto 0.0.0-20250122153221-138b5a5a4fd4

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1.3541 google-cloud-go-bigtable 1.35.0

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
```

```
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}
```

```
// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}
```

```
func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
```

```
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
```

```
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
```

```
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
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 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)
```

```
func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
```

```
 MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)
```

```
func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
```

```
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
```

```
 //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)
```

```
func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
```

```
func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
```

```
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
```

```
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
```

```
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
```

```
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}
```

```
// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}
```

```
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
```

```
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}
```

```
// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
```

```
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
```

```
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
```

```
 return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}
```

```
// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }
```

```
  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
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```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
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```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
```

```
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
```

```
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}
```

```
// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
```

```
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
```

```
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
```

```
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
```

```
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
var resp *procurementpb.AssignResponse
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds
= append(c.xGoogHeaders, hds...)
ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
var resp *procurementpb.UnassignResponse
err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
```

```
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
```

```
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
```

```
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
```

```
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)
```

```
func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
```

```
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}
```

```
func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
```

```
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
```

```
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
```

```
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
```

```
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
```

```
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
```

```
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}
```

```
func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
```

```
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}
```

```
func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}
```

```
func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
```

```
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}
```

```
func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
```

```
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x64,
 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
 0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
```

0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
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0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
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0x73,
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0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,
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0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
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0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x3b, 0x0a,
0x17, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x15, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x75, 0x6e, 0x74, 0x12, 0x33, 0x0a, 0x13, 0x74, 0x6f,
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0x74, 0x61, 0x6c, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x75, 0x6e,

0x74, 0x3a,
0x9a, 0x01, 0xea, 0x41, 0x96, 0x01, 0x0a, 0x3b, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d,
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0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50,
0x6f, 0x6f, 0x6c, 0x12, 0x3c, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f,
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0x0b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x22, 0x30, 0x0a, 0x15,
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0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65,
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0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x52, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x22, 0xc0,
0x01, 0x0a, 0x18, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x12, 0x62, 0x0a, 0x0c, 0x6c,
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0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
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0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e,
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65,
0x73, 0x74, 0x1a, 0x4d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e,
0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f,
0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,
0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```
var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
```

```
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
```

```
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
```

```
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
```

```
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
```

```
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
```

```
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
```

```
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}
```

```
var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
```

```
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
```

```
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}
```

```
func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
```

```
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72,
0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
```

```
 },
 GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)
```

```
var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient
```

```
 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
```

```
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
```

```
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
```

```
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.3542 redsync 4.13.0

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1.3543 opentracing-contrib-go-grpc 0.1.1

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1.3544 gobreaker 2.1.0

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1.3545 procfs 0.15.2-0.20240603130017-1754b780536b

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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1.3546 franz-go-pkg-kadm 1.15.0

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1.3547 aliyun-aliyun-oss-go-sdk 3.0.2+incompatible

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1.3548 kamstrup-intmap 0.5.1

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1.3549 go-autorest-autorest v14.2.0+incompatible

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aliases:
- ../admin/view-server-settings/
- ../admin/view-server-stats/
- view-server/
- view-server/view-server-settings/
- view-server/view-server-stats/
description: How to view server settings in the Grafana UI
keywords:
- grafana
- configuration
- server
- settings
labels:
products:
- cloud
- enterprise
title: View server statistics and license

weight: 400

View server statistics and license

This setting contains information about tools that Grafana Server Admins can use to learn more about their Grafana servers.

View Grafana server settings

> Refer to [Role-based access control]({{< relref "../roles-and-permissions/access-control" >}}) in Grafana Enterprise to understand how you can control access with RBAC permissions.

If you are a Grafana server administrator, use the Settings tab to view the settings that are applied to your Grafana server via the [Configuration]({{< relref "../../setup-grafana/configure-grafana#configuration-file-location" >}}) file and any environmental variables.

> **Note:** Only Grafana server administrators can access the **Server Admin** menu. For more information about about administrative permissions, refer to [Roles and permissions]({{< relref "../roles-and-permissions#grafana-server-administrators" >}}).

View server settings

1. Log in to your Grafana server with an account that has the Grafana Admin flag set.
1. Click **Administration** in the left-side menu, **General**, and then **Settings**.

Available settings

For a full list of server settings, refer to [Configuration]({{< relref "../../setup-grafana/configure-grafana#server" >}}).

View Grafana server stats

> Refer to [Role-based access control]({{< relref "../roles-and-permissions/access-control" >}}) in Grafana Enterprise to understand how you can control access with RBAC permissions.

If you are a Grafana server admin, then you can view useful statistics about your Grafana server in the Stats & Licensing tab.

>
 Note: Only Grafana server administrators can access the **Server Admin** menu. For more information about about administrative permissions, refer to [Roles and permissions]({{< relref "../roles-and-permissions#grafana-server-administrators" >}}).

View server stats

1. Log in to your Grafana server with an account that has the Grafana Admin flag set.
1. Click **Administration** in the left-side menu, **General**, and then **Stats and license**.

Available stats

The following statistics are displayed in the Stats tab:

- Total users
 Note: Total users = Total admins + Total editors + Total viewers
- Total admins
- Total editors
- Total viewers
- Active users (seen last 30 days)
 Note: Active users = Active admins + Active editors + Active viewers
- Active admins (seen last 30 days)
- Active editors (seen last 30 days)
- Active viewers (seen last 30 days)
- Active sessions
- Total dashboards
- Total orgs
- Total playlists
- Total snapshots
- Total dashboard tags
-
 Total starred dashboards
- Total alerts

Counting users

If a user belongs to several organizations, then that user is counted once as a user in the highest organization role they are assigned, regardless of how many organizations the user belongs to.

For example, if Sofia is a Viewer in two organizations, an Editor in two organizations, and Admin in three organizations, then she would be reflected in the stats as:

- Total users 1
- Total admins 1
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---
aliases:
 - ../../../enterprise/activate-aws-marketplace-license/manage-license-in-aws-marketplace/
 - ../../../enterprise/license/activate-aws-marketplace-license/manage-license-in-aws-marketplace/
description: Manage your Grafana Enterprise license in AWS Marketplace
keywords:
 - grafana
 - enterprise
 - aws

- marketplace
- manage
- add
- remove
- users
labels:
 products:
   - enterprise
   - oss
title: Manage your Grafana Enterprise license in AWS Marketplace
weight: 400

Manage your Grafana Enterprise license in AWS Marketplace

You can use AWS Marketplace to make the following modifications to your Grafana Enterprise license:

- Add active users
- Remove active users
- Cancel your subscription to Grafana Enterprise.

To modify your Grafana Enterprise subscription in AWS Marketplace:

1. Open the AWS Console and navigate to [Subscription Management](https://console.aws.amazon.com/marketplace/home/subscriptions#/subscriptions).

1. Update your license.

1.
 Sign in to Grafana as a Server Administrator.

1. Click **Administration** in the side navigation menu, **General**, and then **Stats and license**.

1. In the **Token** section under **Enterprise License**, click **Renew token**.

  This action retrieves updated license information from AWS.

> To learn more about licensing and active users, refer to [Activate a Grafana Enterprise license purchased through AWS Marketplace]({{< relref "../" >}}).
---
aliases:
 - ../../../enterprise/activate-aws-marketplace-license/activate-license-on-eks/
 - ../../../enterprise/license/activate-aws-marketplace-license/activate-license-on-eks/
description: Activate a Grafana Enterprise license from AWS Marketplace on EKS
keywords:
 - grafana
 - enterprise
 - aws

- marketplace
- eks
- activate
labels:
products:
  - enterprise
  - oss
title: Activate a Grafana Enterprise license from AWS Marketplace on EKS
weight: 200

Activate a Grafana Enterprise license from AWS Marketplace on EKS

If you have purchased a Grafana Enterprise subscription through AWS Marketplace, you must activate it to use Grafana Enterprise data source plugins and features in Grafana.

Before you begin:

- Purchase a subscription to [Grafana Enterprise from AWS Marketplace](https://aws.amazon.com/marketplace/pp/prodview-dlncd4kzt5kx6).
- Be sure that the IAM user that was used to purchase Grafana Enterprise has permission to manage subscriptions, create
 new IAM users and roles, and create access policies.

To activate your license, complete the following tasks:

Task 1: Deploy Grafana Enterprise on Amazon EKS

1. Deploy Grafana Enterprise on Amazon EKS.

  For more information about deploying an application on Amazon EKS, refer to [Getting started with Amazon EKS AWS Management Console and AWS CLI](https://docs.aws.amazon.com/eks/latest/userguide/getting-started-console.html).

  For more information about installing Grafana on Kubernetes using the Helm Chart, refer to the [Grafana Helm Chart](https://github.com/grafana/helm-charts/tree/main/charts/grafana#readme).

1. Use `kubectl set image deployment/my-release grafana=grafana/grafana-enterprise:<version>` to update the container image.

  For example, enter `grafana/grafana-enterprise:11.3.0`.

> Only Grafana Enterprise versions 8.3.0 and later support licenses granted through AWS Marketplace.

Task 2: Configure Grafana for high availability

Grafana requires that you configure

a database to hold dashboards, users, and other persistent data.

Before you begin

- Ensure that you have a supported Grafana database available.
- For a list of supported databases, refer to [Supported databases]({{< relref "../../../../setup-grafana/installation/#supported-databases" >}}).
- For information about creating a database, refer to [Creating an Amazon RDS DB instance](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_CreateDBInstance.html).
- Review the information required to connect to the RDS DB instance. For more information, refer to [Connecting to an Amazon RDS DB instance](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_CommonTasks.Connect.html).

To configure Grafana for high availability, choose **one** of the following options:

- **Option 1:** Use `kubectl edit configmap grafana` to edit `grafana.ini` add the following section to the configuration:

```
[database]
type = [database type]
host = [database address and
port]
name = [database name]
user = [database username]
password = [database password]
```

- **Option 2:** use `kubectl edit deployment my-release` to edit the pod `env` variables and add the following database variables:

```
- name: GF_DATABASE_TYPE
  value: [database type]
- name: GF_DATABASE_HOST
  value: [database address and port]
- name: GF_DATABASE_NAME
  value: [database name]
- name: GF_DATABASE_USER
  value: [database username]
- name: GF_DATABASE_PASSWORD
  value: [database password]
```

For more information on Grafana High Availability setup, refer to [Set up Grafana for high availability]({{< relref "../../../../setup-grafana/set-up-for-high-availability/" >}}).

Task 3: Configure Grafana Enterprise to validate its license with AWS

In this task, you configure Grafana Enterprise to validate the license with AWS instead of Grafana Labs.

1. In AWS IAM, assign the following permissions to the Node IAM role (if you are using a Node Group), or the Pod Execution role (if you are using a Fargate profile):

  - `"license-manager:CheckoutLicense"`
  - `"license-manager:ListReceivedLicenses"`
  - `"license-manager:GetLicenseUsage"`
  - `"license-manager:CheckInLicense"`

  For more information about creating an access policy, refer to [Creating IAM policies (console)](https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_create-console.html).

  For more information about AWS license permissions, refer to [Actions, resources, and condition keys for AWS License Manager](https://docs.aws.amazon.com/service-authorization/latest/reference/list_awslicensemanager.html).

1. Choose **one** of the following options to update the [license_validation_type]({{< relref "../../../../setup-grafana/configure-grafana/enterprise-configuration/#license_validation_type" >}}) configuration to `aws`:

  - **Option 1:** Use `kubectl edit configmap grafana` to edit `grafana.ini` add the following section to the configuration:

    ```
    [enterprise]
    license_validation_type=aws
    ```

  - **Option 2:** Use `kubectl edit deployment my-release` to edit the pod `env` variables and add the following variable:

    ```
    name: GF_ENTERPRISE_LICENSE_VALIDATION_TYPE
    value: aws
    ```

Task 4: Start or restart Grafana

To activate Grafana Enterprise features, you must start (or restart) Grafana.

To restart Grafana on a Kubernetes cluster,

1. Run the command `kubectl rollout restart deployment my-release`.

1. After you update the service, navigate to your Grafana instance, sign in with Grafana Admin credentials, and navigate to **Administration > General > Stats and license** to validate that your license is active.

For more information about restarting Grafana, refer to [Restart Grafana]({{< relref "../../../../setup-grafana/start-restart-grafana/" >}}).

> If you experience issues when you update the EKS cluster, refer to [Amazon EKS troubleshooting](https://docs.aws.amazon.com/eks/latest/userguide/troubleshooting.html).
---
aliases:
 - ../../../enterprise/activate-aws-marketplace-license/activate-license-on-instance-outside-aws/
 - ../../../enterprise/license/activate-aws-marketplace-license/activate-license-on-instance-outside-aws/
description: Activate a Grafana Enterprise license from AWS on an instance deployed
 outside of AWS
keywords:
 - grafana
 - enterprise
 - aws
 - marketplace
 - activate
labels:
 products:
   - enterprise
   - oss
title: Activate a Grafana Enterprise license from AWS on an instance deployed outside
 of AWS
weight: 300

Activate a Grafana Enterprise license from AWS on an instance deployed outside of AWS

While AWS Marketplace lists ECS and EKS as the supported environments for Grafana Enterprise, you can apply a Grafana Enterprise license from AWS Marketplace to any Grafana instance with network access to the AWS licensing service.

Before you begin

- Purchase a subscription to [Grafana Enterprise from AWS Marketplace](https://aws.amazon.com/marketplace/pp/prodview-dlncd4kzt5kx6).
-
 Be sure that the IAM user that was used to purchase Grafana Enterprise has permission to manage subscriptions, create new IAM users, and create access policies.
- Be sure there is network access between AWS and the environment where you intend to run Grafana. Network access is required because your Grafana instance communicates with the [AWS License Manager endpoints and quotas](https://docs.aws.amazon.com/general/latest/gr/licensemanager.html) to retrieve license and subscription information. Grafana instances with access to the public internet will have access to AWS license manager.

To activate a Grafana Enterprise license from AWS on a Grafana Enterprise instance deployed outside of AWS, complete the following tasks.

Task 1: Install Grafana Enterprise

To install Grafana, refer to the documentation specific to your implementation.

- [Install Grafana]({{< relref "../../../../setup-grafana/installation/" >}}).
- [Run Grafana Docker image]({{< relref "../../../../setup-grafana/installation/docker/" >}}).
- [Deploy Grafana on Kubernetes]({{< relref "../../../../setup-grafana/installation/kubernetes/#deploy-grafana-enterprise-on-kubernetes" >}}).

Task 2: Create an AWS IAM user with access to your Grafana Enterprise license

To retrieve your license, Grafana Enterprise requires access to your AWS account and license information. To grant access, create an IAM user in AWS with access to the license, and pass its credentials as environment variables on the host or container where Grafana is running. These environment variables allow Grafana to retrieve license details from AWS.

1. In the AWS License Manager service, create an IAM policy with the following permissions:

  - `"license-manager:CheckoutLicense"`
  - `"license-manager:ListReceivedLicenses"`
  - `"license-manager:GetLicenseUsage"`
  - `"license-manager:CheckInLicense"`

  For more information about creating a policy in AWS, refer to [Creating IAM policies](https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_create.html).

  For more information about AWS Identity and Access Management, refer to [IAM users](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_users.html).

1. To limit the policy to obtain usage data just for Grafana Enterprise, in the **Resources** section of the policy, specify your license ARN.

  You can find your license ID in the **Granted Licenses** section of [AWS License Manager](https://console.aws.amazon.com/license-manager/home).

  The policy JSON should look similar to the following example:

  ```
  {
    "Version": "2012-10-17",
    "Statement": [
      {
          "Sid": "VisualEditor0",
          "Effect": "Allow",
          "Action": "license-manager:GetLicenseUsage",
          "Resource": "arn:aws:license-manager::[YOUR_ACCOUNT]:license:[YOUR_LICENSE_ID]"
      },
  ```

```
        {
            "Sid": "VisualEditor1",
            "Effect": "Allow",
            "Action":
[
              "license-manager:CheckoutLicense",
              "license-manager:ListReceivedLicenses",
              "license-manager:CheckInLicense"
            ],
            "Resource": "*"
        }
    ]
}
```

1. Create an IAM user and choose access key credentials as its authentication method.

  For more information about creating an IAM user, refer to [IAM users](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_users.html).

  For more information about access key credentials, refer to [Managing access keys for IAM users](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_access-keys.html).

1. Attach the policy you created to the IAM user.

1. Add the following values as environment variables to the host or container running Grafana:

  - AWS region
  - IAM user's access key ID
  - IAM user's secret access key

  The environment variables should look similar to the following example:

  ```
  AWS_ACCESS_KEY_ID=ABCD5E75FGHIJKTM7
   AWS_SECRET_ACCESS_KEY=k8fhYAQVy+5NhCejhe6HeSjSphjRuy+12C06
  AWS_REGION=us-east-1
  ```

Task 3: Configure Grafana Enterprise to validate its license with AWS

In this task you configure Grafana Enterprise to validate the license with AWS instead of Grafana Labs.

Choose one of the following options to update the [license_validation_type]({{< relref "../../../../setup-grafana/configure-grafana/enterprise-configuration/#license_validation_type" >}}) configuration to `aws`:

- **Option 1:** In the `[enterprise]` section of the grafana.ini configuration file, add `license_validation_type=aws`.

For example:

```
[enterprise]
license_validation_type=aws
```

- **Option 2:** Add the following environment variable to the container or host:

```
GF_ENTERPRISE_LICENSE_VALIDATION_TYPE=aws
```

Task 4: Start or restart Grafana

To activate Grafana Enterprise features, start (or restart) Grafana.

For information about restarting Grafana, refer to [Restart Grafana]({{< relref "../../../../setup-grafana/start-restart-grafana/" >}}).
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---
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 - ecs
 - enterprise
 - aws
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labels:
 products:
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Activate a Grafana Enterprise license from AWS Marketplace on ECS

If you have purchased a Grafana Enterprise subscription through AWS Marketplace, you must activate it in order to use Grafana Enterprise data source plugins and features in Grafana.

Before you begin

- Purchase a subscription to [Grafana Enterprise from AWS Marketplace](https://aws.amazon.com/marketplace/pp/prodview-dlncd4kzt5kx6).
- Be sure that the IAM user that was used to purchase Grafana Enterprise has permission to manage subscriptions, create new IAM users and roles, and create access policies.

To activate your license, complete the following tasks.

Task 1: Deploy Grafana Enterprise on Amazon ECS

1. Deploy Grafana Enterprise on Amazon ECS.

  For more information about deploying an application on Amazon ECS, refer to [Creating an Amazon ECS service](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/create-service.html).

1. As you create the Amazon ECS service, use the intended Grafana Enterprise container image version.

  For example, enter `grafana/grafana-enterprise:11.3.0`.

  > Only Grafana Enterprise versions 8.3.0 and later support licenses granted through AWS Marketplace.

Task 2: Configure Grafana for high availability

Grafana requires that you configure a database to hold dashboards, users, and other persistent data.

Before you begin

- Ensure that you have a supported Grafana database available.
 - For a list of supported databases, refer to [Supported databases]({{< relref "../../../../setup-grafana/installation/#supported-databases" >}}).
 - For information about creating a database, refer to [Creating an Amazon RDS DB instance](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_CreateDBInstance.html).
- Review the information required to connect to the RDS DB instance. For more information, refer to [Connecting to an Amazon RDS DB instance](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_CommonTasks.Connect.html).

To configure Grafana for high availability:

1. In AWS ECS, use environment variables to update the `database` parameters.

  For a list of database parameters, refer to [Configuration]({{< relref "../../../../setup-grafana/configure-grafana/#database" >}}).

1. Create a revision of the task definition for the ECS Task that runs Grafana Enterprise.

  For more information about creating a task, refer to [Updating a task definition using the classic console](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/update-task-definition.html).

1.
 Within the new revision, edit the Grafana Enterprise container for this task, and add the following environment variables to the container:

  ```
  GF_DATABASE_TYPE=[database type]
  GF_DATABASE_HOST=[database address and port]
  GF_DATABASE_NAME=[database name]
  GF_DATABASE_USER=[database username]
  GF_DATABASE_PASSWORD=[database password]
  ```

> For more information about how to update your ECS service with an environment variable, refer to [Updating a service using the new console](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/update-service-console-v2.html).

Task 3: Configure Grafana Enterprise to validate its license with AWS

In this task you configure Grafana Enterprise to validate the license with AWS instead of Grafana Labs.

1. In AWS IAM, create an access policy with the following permissions:

  - `"license-manager:CheckoutLicense"`
  - `"license-manager:ListReceivedLicenses"`
  - `"license-manager:GetLicenseUsage"`

- `"license-manager:CheckInLicense"`

For more information about creating an access policy, refer to [Creating IAM policies (console)](https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_create-console.html).

For more information about AWS license permissions, refer to [Actions, resources, and condition keys for AWS License Manager](https://docs.aws.amazon.com/service-authorization/latest/reference/list_awslicensemanager.html).

1. Create an Elastic Container Service task role and attach the policy you created in the previous step.

For more information about creating a task role, refer to [IAM Roles for Tasks](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/task-iam-roles.html).

1. Create a revision of the task definition for the ECS Task that runs Grafana Enterprise.

For more information about creating a revision of the task definition, refer to [Updating a task definition using the classic console](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/update-task-definition.html).

1. Within the new revision, perform the following steps:

a. Update the Task Role of your ECS Task to the role that you created, with permission to access license information.

b. Edit the Grafana Enterprise container for this task, and add the following environment variable to the container:

```
GF_ENTERPRISE_LICENSE_VALIDATION_TYPE=aws
```

For more information about how to update your ECS service with an environment variable, refer to [Updating a service using the new console](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/update-service-console-v2.html).

Task 4: Start or restart Grafana

1. To restart Grafana and activate your license, update the service running Grafana to use the latest revision of the task definition that you created.
1. After you update the service, navigate to your Grafana instance, sign in with Grafana Admin credentials, and navigate to **Administration > General > Stats and license** to validate that your license is active.

For more information about validating that your license is active, refer to [Grafana Enterprise license restrictions]({{< relref "../../#grafana-enterprise-license-restrictions" >}}).

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1.3550 argparse 0.9.0

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* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/ArgumentParsers.java
* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/inf/ArgumentParserException.java
* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/ext/java7/PathArgumentType.java
* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/ext/java7/Java7ExtensionResourceBundle.java
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* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/internal/ParseState.java
* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/inf/ArgumentAction.java
* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/impl/choice/RangeArgumentChoice.java
* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/internal/ArgumentGroupImpl.java
* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/helper/TextHelper.java
* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/impl/action/StoreTrueArgumentAction.java
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* /argparse4j-0-9-0-sources-2-jar/net/sourceforge/argparse4j/impl/action/StoreArgumentAction.java

1.3551 alpine-base 3.21.3-r0

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pkgver=3.21.3
pkgrel=0
pkgdesc="Meta package for minimal alpine base"
url="https://alpinelinux.org"
arch="noarch"
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depends="
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1.3552 musl-utils 1.2.5-r9

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1.3553 apk-tools 2.14.6-r3

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1.3554 libdrm 2.4.122-1~ubuntu0.24.04.1

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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/intel/intel_bufmgr_priv.h

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/*
* Arm Framebuffer Compression (AFBC) modifiers
*
* AFBC is a proprietary lossless image compression protocol and format.
* It provides fine-grained random access and minimizes the amount of data
* transferred between IP blocks.
*
* AFBC has several features which may be supported and/or used, which are
* represented using bits in the modifier. Not all combinations are valid,
* and different devices or use-cases may support different combinations.
*
* Further information on the use of AFBC modifiers can be found in
* Documentation/gpu/afbc.rst
*/
/*
* Arm Fixed-Rate Compression (AFRC) modifiers
*
* AFRC is a proprietary fixed rate image compression protocol and format,
* designed to provide guaranteed bandwidth and memory footprint
* reductions
 in graphics and media use-cases.
*
* AFRC buffers consist of one or more planes, with the same components
* and meaning as an uncompressed buffer using the same pixel format.
*
* Within each plane, the pixel/luma/chroma values are grouped into
* "coding unit" blocks which are individually compressed to a
* fixed size (in bytes). All coding units within a given plane of a buffer
* store the same number of values, and have the same compressed size.
*
* The coding unit size is configurable, allowing different rates of compression.
*
* The start of each AFRC buffer plane must be aligned to an alignment granule which
* depends on the coding unit size.
*
```

```
* Coding Unit Size   Plane Alignment
* ----------------   ---------------
* 16 bytes           1024 bytes
* 24 bytes           512  bytes
* 32 bytes           2048 bytes
*
* Coding units are grouped into paging tiles. AFRC buffer dimensions must be aligned
* to a multiple of the paging tile dimensions.
* The dimensions
 of each paging tile depend on whether the buffer is optimised for
* scanline (SCAN layout) or rotated (ROT layout) access.
*
* Layout   Paging Tile Width   Paging Tile Height
* ------   -----------------   ------------------
* SCAN     16 coding units     4 coding units
* ROT      8  coding units     8 coding units
*
* The dimensions of each coding unit depend on the number of components
* in the compressed plane and whether the buffer is optimised for
* scanline (SCAN layout) or rotated (ROT layout) access.
*
* Number of Components in Plane   Layout      Coding Unit Width   Coding Unit Height
* ------------------------------   ---------   -----------------   ------------------
* 1                                SCAN        16 samples          4 samples
* Example: 16x4 luma samples in a 'Y' plane
*         16x4 chroma 'V' values, in the 'V' plane of a fully-planar YUV buffer
* ------------------------------   ---------   -----------------   ------------------
* 1
                                   ROT         8 samples           8 samples
* Example: 8x8 luma samples in a 'Y' plane
*         8x8 chroma 'V' values, in the 'V' plane of a fully-planar YUV buffer
* ------------------------------   ---------   -----------------   ------------------
* 2                                DONT CARE   8 samples           4 samples
* Example: 8x4 chroma pairs in the 'UV' plane of a semi-planar YUV buffer
* ------------------------------   ---------   -----------------   ------------------
* 3                                DONT CARE   4 samples           4 samples
* Example: 4x4 pixels in an RGB buffer without alpha
* ------------------------------   ---------   -----------------   ------------------
* 4                                DONT CARE   4 samples           4 samples
* Example: 4x4 pixels in an RGB buffer with alpha
*/
/*
* Amlogic Video Framebuffer Compression modifiers
*
* Amlogic uses a proprietary lossless image compression protocol and format
 * for their hardware video codec accelerators, either video decoders or
* video input encoders.
*
```

```
* It considerably reduces memory bandwidth while writing and reading
* frames in memory.
*
* The underlying storage is considered to be 3 components, 8bit or 10-bit
* per component YCbCr 420, single plane :
* - DRM_FORMAT_YUV420_8BIT
* - DRM_FORMAT_YUV420_10BIT
*
* The first 8 bits of the mode defines the layout, then the following 8 bits
* defines the options changing the layout.
*
* Not all combinations are valid, and different SoCs may support different
* combinations of layout and options.
*/
/*
* 64K_S is the same for GFX9/GFX10/GFX10_RBPLUS and hence has GFX9 as canonical
* version.
*/
```

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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/include/drm/drm_fourcc.h
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/amdgpu/jpeg_tests.c
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/amdgpu/decode_messages.h
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/xf86drm.c
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```
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*
* Authors: Rickard E. (Rik) Faith <faith@valinux.com>
*
* DESCRIPTION
*
* This file contains a straightforward skip list implementation.n
*
* FUTURE ENHANCEMENTS
*
* REFERENCES
*
* [Pugh90] William Pugh.  Skip Lists: A Probabilistic Alternative to
* Balanced Trees. CACM 33(6), June 1990, pp. 668-676.
*
*/
```

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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/drmsl.c
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```
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*
* DESCRIPTION
*
* This file contains a straightforward skip list implementation.n
*
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* REFERENCES
*
* [Pugh90] William Pugh. Skip Lists: A Probabilistic Alternative to
* Balanced Trees. CACM 33(6), June 1990, pp. 668-676.
*
*/

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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/xf86drmSL.c
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The release criteria for libdrm is essentially "if you need a release,
make one". There is no designated release engineer or maintainer.
Anybody is free to make a release if there's a certain feature or bug
fix they need in a released version of libdrm.

When new ioctl definitions are merged into drm-next, we will add
support to libdrm, at which point we typically create a new release.
However, this is up to whoever is driving the feature in question.

Follow these steps to release a new version of libdrm:

1) Bump the version number in meson.build. We seem to have settled for
2.4.x as the versioning scheme for libdrm, so just bump the micro
version.

2) Run `ninja -C builddir/ dist` to generate the tarballs.
Make sure that the version number of the tarball name in
builddir/meson-dist/ matches the number you bumped to. Move that
tarball to the libdrm repo root for the release script to pick
up.

3) Push the updated main branch with the bumped version number:

git push origin main

assuming the remote for the upstream libdrm repo is called origin.

4) Use the release.sh script from the xorg/util/modular repo to
upload the tarballs to the freedesktop.org download area and
create an announce email template. The script takes one argument:
the path to the libdrm checkout. So, if a checkout of modular is
at the same level than the libdrm repo:

./modular/release.sh libdrm

This copies the two tarballs to freedesktop.org and creates
libdrm-2.4.16.announce which has a detailed summary of the
changes, links to the tarballs, MD5 and SHA1 sums and pre-filled
out email headers. Fill out the blank between the email headers
and the list of changes with a brief message of what changed or
what prompted this release. Send out the email and you're done!

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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/etnaviv/etnaviv_bo_cache_test.c
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tegra/job.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tegra/tegra.c
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/amdgpu/meson.build
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/intel/meson.build
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/exynos/meson.build
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/radeon/meson.build
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/meson.build
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/data/meson.build
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/meson.build
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/meson_options.txt
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/meson.build
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/amdgpu/meson.build
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/amdgpu/vm_tests.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/amdgpu/syncobj_tests.c
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/radeon/radeon_bo_gem.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/radeon/radeon_bo.c
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/etnaviv/etnaviv_2d_test.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/etnaviv/etnaviv_priv.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/etnaviv/etnaviv_drmif.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/etnaviv/etnaviv_pipe.c
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/freedreno_bo.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/freedreno_priv.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/freedreno_ringbuffer.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/freedreno_pipe.c
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/amdgpu/cs_tests.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/util_math.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/amdgpu/amdgpu_test.h
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/vic30.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/vic-clear.c
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/syncpt-wait.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/vic-flip.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/vic42.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/vic40.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/vic42.c
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/libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/syncpt-timeout.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/vic30.c
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* Gareth Hughes <gareth@valinux.com>
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/util/format.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/util/pattern.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/util/common.h
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Submitting Patches

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send-email. For patches only touching driver specific code one of the driver
mailing lists (like amd-gfx@lists.freedesktop.org) is also appropriate. See git
documentation for help:

http://git-scm.com/documentation

Since dri-devel is a very busy mailing list please use --subject-prefix="PATCH
libdrm" to make it easier to find libdrm patches. This is best done by running

```
git config --local format.subjectprefix "PATCH libdrm"
```

The first line of a commit message should contain a prefix indicating what part
is affected by the patch followed by one sentence that describes the change. For
examples:

```
amdgpu: Use uint32_t i in amdgpu_find_bo_by_cpu_mapping
```

The body of the commit message should describe what the patch changes and why,
and also note any particular
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writing commit messages, see:

http://who-t.blogspot.de/2009/12/on-commit-messages.html

Your patches should also include a Signed-off-by line with your name and email address. If you're not the patch's original author, you should also gather S-o-b's by them (and/or whomever gave the patch to you.) The significance of this is that it certifies that you created the patch, that it was created under an appropriate open source license, or provided to you under those terms. This lets us indicate a chain of responsibility for the copyright status of the code. For more details:

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Review and Merging

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Please note that kernel/userspace API header files
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Coding style in the project loosely follows the CodingStyle of the linux kernel:

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Commit Rights

Commit rights will be granted to anyone who requests them and fulfills the below criteria:

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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/drm-test-tegra.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/drm-test-tegra.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/drm-test.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/openclose.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/tegra/drm-test.c
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/msm/msm_ringbuffer.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/kgsl/kgsl_bo.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/msm/msm_priv.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/kgsl/kgsl_pipe.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/kgsl/kgsl_ringbuffer.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/msm/msm_device.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/msm/msm_pipe.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/freedreno/kgsl/kgsl_priv.h
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/xf86drmMode.c
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```
/* xf86drmHash.c -- Small hash table support for integer -> integer mapping
* Created: Sun Apr 18 09:35:45 1999 by faith@precisioninsight.com
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*
* Authors: Rickard E. (Rik) Faith <faith@valinux.com>
*
* DESCRIPTION
*
* This file contains a straightforward implementation of a fixed-sized
* hash table using self-organizing linked lists [Knuth73, pp. 398-399] for
* collision resolution.  There are two potentially interesting things
* about this implementation:
*
* 1) The table is power-of-two sized.  Prime sized tables are more
* traditional, but do not have a significant advantage over power-of-two
* sized table, especially when double hashing is not used for collision
* resolution.
*
```

```
* 2) The hash computation
 uses a table of random integers [Hanson97,
* pp. 39-41].
*
* FUTURE ENHANCEMENTS
*
* With a table size of 512, the current implementation is sufficient for a
* few hundred keys.  Since this is well above the expected size of the
* tables for which this implementation was designed, the implementation of
* dynamic hash tables was postponed until the need arises.  A common (and
* naive) approach to dynamic hash table implementation simply creates a
* new hash table when necessary, rehashes all the data into the new table,
* and destroys the old table.  The approach in [Larson88] is superior in
* two ways: 1) only a portion of the table is expanded when needed,
* distributing the expansion cost over several insertions, and 2) portions
* of the table can be locked, enabling a scalable thread-safe
* implementation.
*
* REFERENCES
*
* [Hanson97] David R. Hanson.  C Interfaces and Implementations:
* Techniques for Creating Reusable Software.  Reading, Massachusetts:
 * Addison-Wesley, 1997.
*
* [Knuth73] Donald E. Knuth. The Art of Computer Programming.  Volume 3:
* Sorting and Searching.  Reading, Massachusetts: Addison-Wesley, 1973.
*
* [Larson88] Per-Ake Larson. "Dynamic Hash Tables".  CACM 31(4), April
* 1988, pp. 446-457.
*
*/
```

Found in path(s):
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/hash.c
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/xf86drmHash.c
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```
/* xf86drmRandom.c -- "Minimal Standard" PRNG Implementation
* Created: Mon Apr 19 08:28:13 1999 by faith@precisioninsight.com
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*
* Authors: Rickard E. (Rik) Faith <faith@valinux.com>
*
* DESCRIPTION
*
* This file contains a simple, straightforward implementation of the Park
* & Miller "Minimal Standard" PRNG [PM88, PMS93], which is a Lehmer
* multiplicative linear congruential generator (MLCG) with a period of
* 2^31-1.
*
* This implementation is intended to provide a reliable, portable PRNG
* that is suitable for testing a hash table implementation and for
* implementing skip lists.
*
* FUTURE ENHANCEMENTS
*
* If initial seeds are not selected randomly, two instances of the PRNG
* can be correlated.
  [Knuth81, pp. 32-33] describes a shuffling technique
* that can eliminate this problem.
*
* If PRNGs are used for simulation, the period of the current
* implementation may be too short. [LE88] discusses methods of combining
* MLCGs to produce much longer periods, and suggests some alternative
* values for A and M. [LE90 and Sch92] also provide information on
* long-period PRNGs.
*
* REFERENCES
*
* [Knuth81] Donald E. Knuth. The Art of Computer Programming. Volume 2:
* Seminumerical Algorithms. Reading, Massachusetts: Addison-Wesley, 1981.
*
* [LE88] Pierre L'Ecuyer. "Efficient and Portable Combined Random Number
* Generators". CACM 31(6), June 1988, pp. 742-774.

```
*
* [LE90] Pierre L'Ecuyer. "Random Numbers for Simulation". CACM 33(10,
* October 1990, pp. 85-97.
*
* [PM88] Stephen K. Park and Keith W. Miller. "Random Number Generators:
* Good Ones are Hard to Find". CACM 31(10), October 1988, pp. 1192-1201.
*
* [Sch92] Bruce Schneier. "Pseudo-Ransom Sequence
 Generator for 32-Bit
* CPUs".  Dr. Dobb's Journal 17(2), February 1992, pp. 34, 37-38, 40.
*
* [PMS93] Stephen K. Park, Keith W. Miller, and Paul K. Stockmeyer.  In
* "Technical Correspondence: Remarks on Choosing and Implementing Random
* Number Generators". CACM 36(7), July 1993, pp. 105-110.
*
*/
```

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```
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/amdgpu/shader_code_gfx9.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/amdgpu/shader_code_gfx11.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/tests/amdgpu/shader_code_hang.h
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* Authors:
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/omap/omap_drmif.h
* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/omap/omap_drm.c
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- cmdstream.xml (12621 bytes, from 2016-09-06 14:44:16)
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* /libdrm-2-4-122-orig-1-tar-xz/libdrm-2.4.122/include/drm/sis_drm.h
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```
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// +build go1.18

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package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil
 {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
```

```
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.License{
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx,
nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID:
to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
```

```
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx,
 "myResourceGroup", "{licenseName}", armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please
 pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
```

```
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //
  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would
 look as follows. Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
```

```
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //
   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example
 definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
```

```
if err != nil {
 log.Fatalf("failed to obtain a credential: %v", err)
}
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
for pager.More() {
 page, err := pager.NextPage(ctx)
 if err != nil {
  log.Fatalf("failed to advance page: %v", err)
 }
 for _, v := range page.Value {
  // You could use page here. We use blank identifier for just demo purposes.
  _ = v
 }
 // If the HTTP response
 code is 200 as defined in example definition, your page structure would look as follows. Please pay attention that all
the values in the output are fake values for just demo purposes.
 // page.LicensesListResult = armhybridcompute.LicensesListResult{
 //  Value: []*armhybridcompute.License{
 //   {
 //    Name: to.Ptr("{licenseName}"),
 //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //
     Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

```
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specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-
preview/examples/license/License_ListBySubscription.json
func ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More()
 {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //
     AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
```

```
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}
```
aztemplate

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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
```

```
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]():
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]():
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]():
  newListBySubscriptionPager:
  newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]():
  beginUpdate:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]():
 }
}
```

```
// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport instead.
type LicensesServerTransport struct {
 srv                     *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete             *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate
             *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method, ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case
 "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }
```

```
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
```

```
resp.StatusCode)}
 }
 if
 !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
```

```
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake
 for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if
 !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent, server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}
```

```
func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches :=
 regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values
 are http.StatusOK", resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request) (*http.Response, error)
{
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
```

```
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req,
 newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if
 beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
```

```
 body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
 if err != nil {
  return nil, err
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
 if respErr := server.GetError(errRespr,
req); respErr != nil {
  return nil, respErr
 }
 beginUpdate = &respr
 l.beginUpdate.add(req, beginUpdate)
}

resp, err := server.PollerResponderNext(beginUpdate, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK}, resp.StatusCode) {
 l.beginUpdate.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginUpdate) {
 l.beginUpdate.remove(req)
}

return resp, nil
}
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
```

```
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
```

```
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
```

```
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
```

```
  return nil, err
 }
 poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
  Tracer: client.internal.Tracer(),
 })
 return poller, err
} else {
 return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
  Tracer: client.internal.Tracer(),
 })
}
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
```

```
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
```

```
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
```

```
//
// Generated from
 API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
```

```
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-03-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
```

```
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
```

```
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}
```

```
// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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It was downloaded from http://www.amd64.org/support/microcode.html up to
version 20120910 (now: http://www.amd64.org/microcode.html). For version
20131007 onwards, it was built from the linux-firmware git repository at:
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1.3557 libmodule-scandeps-perl 1.35-1ubuntu0.24.04.1

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```
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This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

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```
Yoyodyne, Inc., hereby disclaims all copyright interest in the
program `Gnomovision' (a program to direct compilers to make passes
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<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

That's all there is to it!

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1.3559 liblockfile 1.17-1build3

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1.3568 go-units 0.5.0

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1.3569 grub2-unsigned 2.12-1ubuntu7.1

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1.3579 github.com/ncw/swift/v2 2.0.3

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1.3580 mongo-driver 1.17.2

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1.3581 protobuf-go 1.36.5

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1.3582 mdlayher-ethtool 0.2.0

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1.3583 wifi 0.3.1

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1.3584 exporter-toolkit 0.14.0

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1.3585 ethtool 0.5.10

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1.3586 jsimonetti-rtnetlink 2.0.2

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1.3587 errs 1.4.0

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1.3588 protobuf 1.3.2

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1.3589 azure-sdk-for-go-sdk-storage-azblob v0.5.1

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1.3590 azure-sdk-for-go-sdk-azcore v1.11.1

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```
//go:build go1.18
// +build go1.18

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package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
```

```
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
```

```
 srv:                    srv,
 beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
 beginDelete:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
 newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
 newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
 beginUpdate:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
 beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                    *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
```

```
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
```

```
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
```

```
  return nil, err
 }
 respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if
respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginDelete = &respr
 l.beginDelete.add(req, beginDelete)
}

resp, err := server.PollerResponderNext(beginDelete, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
 l.beginDelete.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
}
if !server.PollerResponderMore(beginDelete) {
 l.beginDelete.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
if l.srv.Get == nil {
 return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
}
const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
regex
:= regexp.MustCompile(regexStr)
matches := regex.FindStringSubmatch(req.URL.EscapedPath())
if matches == nil || len(matches) < 3 {
 return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
}
resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
if err != nil {
 return nil, err
}
licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
if err != nil {
 return nil, err
```

```
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
```

```
 return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
```

```
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
```

```
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }
```

```
 return resp, nil
}
```

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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
```

```
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
```

```
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
```

```
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
```

```
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
```

```
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
```

```
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
```

```
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2023-06-20-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
```

```
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
```

```
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
```

```
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
```

```
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
```

```
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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//go:build go1.18
// +build go1.18

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package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
```

```
}
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err !=
nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//
   State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
```

```
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
```

```
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}", armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
```

```
 log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

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manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
```

```
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

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manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
```

```
 log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
```

```
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
    },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

1.3591 postcss-selector-parser 7.1.0

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1.3593 protoc-gen-validate 1.2.1

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The libtasn1 library is located in the lib directory, while the applications
in src/.

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1.3598 alpine-release 3.21.3-r0

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```
# Automatically generated by apkbuild-cpan, template 4
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
maintainer="Celeste <cielesti@protonmail.com>"
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
```

```
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}
```

```
build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
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SOFTWARE.
# Contributor: Dhruvin Gandhi <contact@dhru.vin>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
```

```
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
cc7cd6b5bd8ea4c99b66f074871ffd7cc78b3e8b1b0d3afd9b95efdb7147c8293db2fac977d684fc34d3d60bd79066a06
dc2bff0a38b130d9d83c63538502db1
  license_expression-30.4.0.tar.gz
"
```

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# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
```

1.3599 openssl 1.1.1zb

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```
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1.3601 libonig5 6.9.7.1-2build1

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1.3603 google.golang.org/genproto/googleapis/rpc 0.0.0-20241223144023-3abc09e42ca8

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1.3607 librtmp 2.4+20151223.gitfa8646d.1-2build4

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1.3610 liblmdb0 0.9.24-1build2

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1.3611 github.com/aws/aws-sdk-go-v2/internal/ini 1.8.3

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```
import (
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 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
```

```
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

```
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
```

```
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
        "type": "structure",
        "members": {
           "message": {
              "target": "smithy.api#String"
           }
        },
        "traits": {
           "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
           "smithy.api#error": "client"
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            },
            "ActiveDirectorySettings":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
```

"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-

zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {

"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider
specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>
resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
```

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {

"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}

},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",

"traits":
{
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"

}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"

```
            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured
 endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],

        "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
```

```
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [
            {

"fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
            },
            "properties": {},

      "headers": {}
        },
        "type": "endpoint"
    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
  ],
```

```
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "aws.partition",
                        "argv":
[
                          {
                            "ref": "Region"
                          }
                        ],
                        "assign": "PartitionResult"
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseFIPS"
                              },
                              true

]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "rules": [
                          {
                            "conditions": [
                              {
                                "fn": "booleanEquals",

                          "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
```

```
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },

    {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]

                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],

            "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                        "type": "error"
                    }
                ],
```

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                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {

        "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                                     "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
```

```
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"
                    }

],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
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                ],
                "rules": [
                    {
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                            "argv": [
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                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }

            ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"

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                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

        "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
```

```
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack":
true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url":
"https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
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```
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack":
false
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack":
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true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"

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            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,

        "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
              "endpoint": {

                "url": "https://example.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint":
```

"https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are
not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
  "type": "structure",
  "members": {
    "ProvisioningStatus": {
      "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
      "traits": {
        "smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "

```
                }
            },
            "HealthStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
 server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation":
 "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server
endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
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"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},
"CreationTime": {

"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
      "type": "string",
      "traits":
{
        "smithy.api#enum": [
          {
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
          },
          {
            "name": "PROVISIONING_FAILED",
            "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""
          },
          {
             "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
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"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},
{
"name": "UNHEALTHY",
"value": "UNHEALTHY",
"documentation": ""
},
{
"name": "NOT_APPLICABLE",
"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "

```
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
                },
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
                "smithy.api#http": {
                    "code": 200,
                    "method": "POST",
                    "uri": "/identity-provider/ListIdentityProviders"
                },

                "smithy.api#paginated": {
                    "inputToken": "NextToken",
                    "outputToken": "NextToken",
                    "pageSize": "MaxResults",
                    "items": "IdentityProviderSummaries"
                }
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
    <ul>\n        <li>\n            <p>Product</p>\n        </li>\n        <li>\n            <p>DirectoryId</p>\n
  </li>\n      </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {

        "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that
contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
```

empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "

```
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When
 this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
```

"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},
"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",

"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type":
"structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single request. "

```
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n        <p>Status</p>\n        </li>\n        <li>\n        <p>Username</p>\n
</li>\n        <li>\n        <p>Domain</p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"

        }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
    "type": "structure",
    "members": {
        "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to
 retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",

```
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits":
{
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
```

"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}

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            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",

            "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory
that contains the user information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
        },
        "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
        }
```

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        },
        "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
```

\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",

"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":
{
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains
credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more
servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {

"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource
contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1

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                },
                "smithy.api#required": {}
            }
        },
        "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n </p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],

    "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An
 object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {

```
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
        },
```

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50

```
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes
 tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}

```
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint
 for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
```

```
            "traits": {
                "smithy.api#documentation":
 "<p>Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to
provision VPC endpoints.</p>"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>A parameter is not valid.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string
```

```
 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
```

```
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
```

```
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
```

```
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

```
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
```

```
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}
```

```
type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
```

"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {

"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
```

```
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"
```

```
        },
          "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
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"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "

}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for

\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"

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    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
```

"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"rules": [
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"fn": "isSet",
"argv": [
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"ref": "Endpoint"
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                            "argv": [
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                                },
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                            ]
                        }

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                    "type": "error"
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                    "conditions": [],
                    "rules": [
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                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]

}
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                            "type": "error"
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                            "conditions": [],
                            "endpoint": {
                                "url": {
                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
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            "type": "tree"

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                        "argv": [
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                                "ref": "Region"
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                        ]
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                "rules": [
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                        "conditions": [
                            {

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                                "argv": [
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                                "assign": "PartitionResult"
                            }
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                        "rules": [
                            {
                                "conditions": [
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                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                    "ref": "UseFIPS"
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                                            true
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                    },
                    {
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                          "ref": "UseDualStack"
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                        true
                      ]
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                          "argv": [
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                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"

        },
                                "supportsFIPS"
                              ]
                            }
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                          "fn": "booleanEquals",
                          "argv": [
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                            {
                              "fn": "getAttr",
                              "argv": [

                               {
                                  "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
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"rules": [
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
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"type": "tree"
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"ref": "UseFIPS"
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"rules": [
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsFIPS"
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},
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"properties": {},
"headers": {}
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"type": "endpoint"
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"conditions": [],
"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
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"type": "tree"
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"conditions": [
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"argv": [
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"ref": "UseDualStack"
},
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"argv": [
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"ref": "PartitionResult"
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"supportsDualStack"
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "error"
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"type": "tree"
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"type": "tree"
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"type": "tree"
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"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
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"smithy.rules#endpointTests": {
"testCases": [

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    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
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      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
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    },
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  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
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      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
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            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
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          },
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            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
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 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
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}

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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack

enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS":
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"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

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            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
      <code>AmiID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Region</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Status</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
```

values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
```

match a certain subscription's name. \n The valid names for this filter are: \n \n
\n \n <code>Subscription</code>\n \n \n \n
The
 valid Operators for this filter are: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
```

"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
```

```
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

           },
            "smithy.api#idempotent": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
```

```
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
```

"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

```
}
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },

  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "

```
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/grafana/types"

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
```

```
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err !=
nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:     ServiceID,
 OperationName: "AssociateLicense",
}
}
```

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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
```

```
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
```

```
        {
          "id": "HttpMethodSemantics",
          "namespace": "*"
        },
        {
          "id": "HttpResponseCodeSemantics",
          "namespace": "*"
        },
        {
          "id": "PaginatedTrait",
          "namespace": "*"
        },
        {
          "id": "HttpHeaderTrait",
          "namespace": "*"
        },
        {
          "id": "HttpUriConflict",
          "namespace": "*"
        },
        {
          "id": "Service",
          "namespace": "*"
        }
      ]
    },
    "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
          {
            "target": "com.amazonaws.licensemanager#AcceptGrant"
          },

 {
            "target": "com.amazonaws.licensemanager#CheckInLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CheckoutLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateGrant"
          },
          {
```

"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},

{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"

```
        },
        {
            "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
        },
        {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
        },
        {
            "target": "com.amazonaws.licensemanager#ListResourceInventory"
        },
        {
            "target": "com.amazonaws.licensemanager#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanager#ListTokens"
        },
        {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
        },
        {
            "target": "com.amazonaws.licensemanager#RejectGrant"
        },
        {
            "target": "com.amazonaws.licensemanager#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanager#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager",
            "arnNamespace": "license-manager",
            "cloudFormationName": "LicenseManager",
            "cloudTrailEventSource": "licensemanager.amazonaws.com",
            "endpointPrefix": "license-manager"
```

},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{

```
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Endpoint"
                    }
                ]

            }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {

"conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": {
                            "ref": "Endpoint"
```

```
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref":
"UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]

                }
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },

"supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
```

```
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}

                }},
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",

          "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,

    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
```

```
                    },
                    "supportsFIPS"
                ]
            }
        ]
    }
],
"type": "tree",
"rules": [

{
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
]
},
{
"conditions": [],
"error": "FIPS is enabled but this
partition does not support FIPS",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
```

```
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                        },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
```

```
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager.af-south-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
               }
            },
            {
              "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.ap-northeast-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "ap-northeast-1",
                "UseFIPS": false,
                "UseDualStack": false
```

```
            }
        },
        {
            "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-2.amazonaws.com"
                 }
            },
            "params": {
                "Region": "ap-northeast-2",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-3.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-northeast-3",
                "UseFIPS": false,
                "UseDualStack": false
            }

    },
        {
            "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-1.amazonaws.com"
```

}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}

```
        },
        {
          "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-central-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-central-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-north-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region":
"eu-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
```

```
        },
        "params": {
          "Region": "eu-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
        "expect": {

        "endpoint": {
            "url": "https://license-manager.eu-west-2.amazonaws.com"
          }
        },
        "params": {
          "Region": "eu-west-2",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.eu-west-3.amazonaws.com"
          }
        },
        "params": {
          "Region": "eu-west-3",
          "UseFIPS": false,

"UseDualStack": false
        }
      },
      {
        "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.me-south-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "me-south-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
```

```
            {
              "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.sa-east-1.amazonaws.com"
                 }
              },
              "params": {
                "Region": "sa-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-2.amazonaws.com"
                }
```

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},

```
            {
              "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-west-2.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-west-2",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-west-2",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.api.aws"
                }
              },
```

"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},

{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {

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            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"

```
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
```

"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
        "members": {
            "CREATE_GRANT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateGrant"
                }
            },
            "CHECKOUT_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutLicense"
                }
            },
            "CHECKOUT_BORROW_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutBorrowLicense"
                }
            },
            "CHECK_IN_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckInLicense"
                }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ExtendConsumptionLicense"
                }
            },
            "LIST_PURCHASED_LICENSES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
{
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
```

```
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
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"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}

```
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
 use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
```

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                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {

"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "

```
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,

```
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
```

"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
```

"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},

"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}

```
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used.

Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target":
"com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n
\n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
<code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |
<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

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    "traits": {
            "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
```

"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}

```
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
             },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
```

"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

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            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output":
{}
    }
},
"com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
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{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}

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        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

         "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
```

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            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}

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            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "

```
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

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},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
    "members": {
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
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{
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
    }
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Token ID. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}

  }
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
    "type": "enum",
    "members": {
        "JWT_PS384": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "JWT_PS384"
            }
        }
    }
},
"com.amazonaws.licensemanager#Entitlement": {
    "type": "structure",
    "members": {
        "Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":

{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}

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        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue":
"Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
```

```
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
```

```
    "traits": {
        "smithy.api#enumValue": "Seconds"
    }
},
"MICROSECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Microseconds"
    }
},
"MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Milliseconds"
    }
},
"BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes"
     }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},

"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"

```
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

       "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
```

```
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
```

"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",

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        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
```

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    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

   },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
```

"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information

about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":

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{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
```

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {

"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {

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            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }

        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
```

Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},

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            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantStatus": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
```

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    "member": {
        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
```

```
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }

  },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
```

"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",

```
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

},
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                 "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
```

```
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
```

"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}

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        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
```

"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {

"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},

"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target":

"com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

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        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
      "IN_PROGRESS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "IN_PROGRESS"
        }
      },
      "SUCCEEDED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SUCCEEDED"
        }
      },
      "FAILED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "FAILED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
  },
  "com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
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            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
    },
    "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",
```

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        "traits": {
            "smithy.api#enumValue": "AVAILABLE"
        }
        },
        "PENDING_AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "PENDING_AVAILABLE"
        }
        },
        "DEACTIVATED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DEACTIVATED"
        }
        },
        "SUSPENDED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "SUSPENDED"
        }
        },
        "EXPIRED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "EXPIRED"
        }
        },

      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
        }
        },
        "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DELETED"
        }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
```

"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {

"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n            <p>\n                <code>LicenseArn</code>\n            </p>\n
        </li>\n            <li>\n            <p>\n                <code>GrantStatus</code>\n            </p>\n            </li>\n
    <li>\n            <p>\n                <code>GranteePrincipalARN</code>\n            </p>\n            </li>\n
<li>\n            <p>\n                <code>ProductSKU</code>\n            </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
```

"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {

"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configurations
for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license
configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

          "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

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    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "Filters": {
```

"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
                }
            },
            "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

    "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </p>\n
    </li>\n        <li>\n            <p>\n                <code>ProductSKU</code>\n            </p>\n        </li>\n
  <li>\n            <p>\n                <code>Fingerprint</code>\n            </p>\n        </li>\n        <li>\n
<p>\n                <code>Status</code>\n            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
```

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

```
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n        <code>resource_id</code> - The ID of the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>LicenseArns</code>\n            </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}

```
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

```
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

      "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
}
```

1.3612 aws-sdk-go-v2-internal-ini 1.8.3

1.3612.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType
```

```
 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
```

```
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
```

```
      python-version: [3.9]

  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
```

```
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
```

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>

resource. "
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
```

"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based
subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
{
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}

        }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
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"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation":
" Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",

"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",

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        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
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            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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        {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
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"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
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"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
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"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
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"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
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"traits": {
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"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
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"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
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"aws.protocols#restJson1": {},
"smithy.api#cors": {
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"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",

"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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                      }
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                          },
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                    "type": "error"
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                    "type": "error"
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                    }
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                        "assign": "PartitionResult"
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                "rules": [
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"argv": [
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsFIPS"
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"argv": [
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"ref": "PartitionResult"
},
"supportsDualStack"
]
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                            "headers": {}
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                        "type": "endpoint"
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both",
                    "type": "error"
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                                    "fn": "getAttr",
                                    "argv": [
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                                "headers": {}
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                          "type": "tree"
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                          "type": "error"
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "error"
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"endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},

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        }
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      "conditions": [],
      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
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"smithy.rules#endpointTests": {
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      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
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          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
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        "UseFIPS": true,
        "UseDualStack": true
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      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack":
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
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"params": {
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"UseFIPS": false,
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "cn-north-1",
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"UseDualStack":
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
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"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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"params": {
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
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"params": {
"Region": "us-iso-east-1",

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"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"params": {
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"UseDualStack": false
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}
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"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseDualStack": true
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"expect": {
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}
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
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"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
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"expect": {

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"params": {
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
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"url": "https://example.com"
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"params": {
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"Endpoint": "https://example.com"
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"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
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"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {

"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}

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            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {

        "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
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                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
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                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
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"value": "PROVISIONED",
"documentation": ""
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"name": "DELETING",
"value": "DELETING",
"documentation": ""
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"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""
},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},
{
"name": "UNHEALTHY",
"value": "UNHEALTHY",
"documentation": ""
},
{
"name": "NOT_APPLICABLE",
"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"

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        }
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",

            "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
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"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken

\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>Status</p>\n            </li>\n            <li>\n              <p>InstanceId</p>\n
          </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When
 this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
```

```
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits":
 {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type":

"structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {

"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"

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            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",

            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {

"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}

```
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type":
"structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {

"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,

"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An
object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}

```
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }

     },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes
tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the
identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",

"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string
```

```
 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

```
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

```
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
```

```
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

```
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
```

```
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string
```

```
 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:     ServiceID,
 OperationName: "CheckoutBorrowLicense",
}
}
GetLicense
Initialize stack step
 spanInitializeStart
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
```

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2

```
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
```

spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
```

"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {

"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

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"smithy.api#idempotent": {}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists

the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}

},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "

}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
```

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            "type": "Boolean"
        },
        "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
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            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

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                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
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                "rules": [
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                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
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                        "conditions": [],
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                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
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                "type": "tree"

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            "type": "tree"
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            "conditions": [],
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                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
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                                "argv": [
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                                    }
                                ],
                                "assign": "PartitionResult"
                            }
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                        "rules": [
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                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                      "ref": "UseFIPS"
                                            },
                                            true
                                        ]
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                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
                                    }

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                                                "argv": [
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                                                        "fn": "getAttr",
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"argv": [
{
"ref": "PartitionResult"

},
"supportsFIPS"
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]
},
{
"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
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]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
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"type": "tree"
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"type": "tree"

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                    },
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                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
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                ],
                "type": "tree"
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        "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
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                                "ref": "UseFIPS"
                            },
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                        ]
                    }
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                                "argv": [
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                                        "fn": "getAttr",
                                        "argv": [
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                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true

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                                "conditions": [],
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    "properties": {},
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                                            "type": "endpoint"
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                                    "type": "tree"
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but this partition does not support FIPS",
                            "type": "error"
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                },
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                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                ]
                        }
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                                    "fn": "booleanEquals",
                                    "argv": [
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                                        {
                                            "fn": "getAttr",
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"argv": [
{

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},
"supportsDualStack"
]
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]
}
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"headers": {}
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],
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"type": "error"
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
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},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},

{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
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"UseDualStack": false
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
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},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
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},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
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"UseDualStack": false

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    }
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      "UseDualStack": true
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        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
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    "params": {
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"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}

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                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
```

"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
```

linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,

"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
```

"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription

provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",

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                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {

"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
          }
        }
    }
}
```


ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware

RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter

SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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```
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package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
```

```
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
```

```
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err !=
nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
           {
               "id": "HttpHeaderTrait",
               "namespace": "*"
           },
           {
               "id": "HttpUriConflict",
               "namespace": "*"
           },
           {
               "id": "Service",
```

```
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
```

"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},

{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",

"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

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                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {

"conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                     },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
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                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
```

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                     "fn": "aws.partition",
                    "argv": [
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                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                    }
                  ],
                  "type": "tree",
                  "rules": [
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                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref":
"UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
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                       "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
```

"supportsFIPS"
]

}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [

```
            {
              "fn": "booleanEquals",

        "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "type": "tree",
          "rules": [
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              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,

{
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                }
              ],
              "type": "tree",
              "rules": [

{
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ]
            },
            {
              "conditions": [],
```

"error": "FIPS is enabled but this
partition does not support FIPS",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

```
                    },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"Region": "af-south-1",
"UseFIPS": false,
"UseDualStack": false
}
```

```
},
{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
```

"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {

"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
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},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
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},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
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"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-west-2.amazonaws.com"
}
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"params": {
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"UseDualStack": false
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{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
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"params": {
"Region": "us-west-2",
"UseFIPS": true,

"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

}
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
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        },

    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
          }
         },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
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        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
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            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
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        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
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"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
          }
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            },
            "params": {
              "Region": "us-gov-west-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
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            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
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              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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        },

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        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },

    "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

  "expect": {
          "endpoint": {
            "url": "https://example.com"
          }
        },
        "params": {
          "Region": "us-east-1",
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},

"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time that automated discovery last ran. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes automated discovery. "
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }

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    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
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        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
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"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

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                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
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"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

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                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

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    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
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"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

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        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
             "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
     "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
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"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
},
"traits":
{
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license. "

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        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

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            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
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<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
            }
        },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": " Tags to add to the license configuration. "
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": " Product information. "
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
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            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
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{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region for the license.</p>",
              "smithy.api#required": {}

    }
          },
          "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n        running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n        usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
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"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
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grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
```

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

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            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Bytes"
                }
            },
            "KILOBYTES": {
                "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
                }
            },
            "TERABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits/Second"
                }
            },
            "COUNT_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count/Second"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#EntitlementList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
        }
    },
    "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
```

"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
```

"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
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"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
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"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

```
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
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"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

```
            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

    },
        "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#Grant": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

```
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

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                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with
the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

```
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
```

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
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"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

```
{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
               "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
     <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                    <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                    <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
```

```
</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:  <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

        "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
         "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
        },
```

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

```
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
```

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            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
},
"com.amazonaws.licensemanager#ReportFrequency": {
    "type": "structure",
    "members": {
        "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
                "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
        },
        "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

            "traits": {
                "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

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{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

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        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

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                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
        },
        "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
```

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    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


1.3613 aws-sdk-go-v2-internal-configsources 1.3.33

1.3613.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

```
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
```

```
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
```

provider. "
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The domain name for the Active Directory. "
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
        "type": "string",
        "traits": {

"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},

"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":

```
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

               "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
 {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"

                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
```

"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},

"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation":
" Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {

"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {

     "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
          }

  },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
```

```
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server",
             "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
```

```
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {

          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
```

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      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
      }
    ],
    "traits": {
      "aws.api#service": {
        "sdkId": "License Manager User Subscriptions",
        "arnNamespace": "license-manager-user-subscriptions",
        "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-user-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id",
          "content-length",
          "x-api-key",

"authorization",
          "x-amz-date",
          "x-amz-security-token",
          "Access-Control-Allow-Headers",
          "Access-Control-Allow-Methods",
          "Access-Control-Allow-Origin"
        ],
```

"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",

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                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
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            ],

        "rules": [
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                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
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"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Region"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "aws.partition",
"argv":
[
{
"ref": "Region"
}
],
"assign": "PartitionResult"
}
],
"rules": [
{
"conditions": [
{
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"argv": [
{
"ref": "UseFIPS"
},
true

]
},
{
"fn": "booleanEquals",
"argv": [

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                {
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                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [
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                    "fn": "booleanEquals",

      "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                },

{
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]

                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
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"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsFIPS"
]

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                    },
                    true
                ]
            }
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fips.{Region}.{PartitionResult#dnsSuffix}",
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                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
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    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }

],
    "type": "tree"
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{
    "conditions": [
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            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
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                "argv": [
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                    {
                      "fn": "getAttr",
                      "argv": [
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                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]
                    }

            ]
                }
              ],
              "rules": [
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
               "type": "tree"
            },
            {
              "conditions": [],
              "error": "DualStack is enabled but this partition does not support DualStack",
              "type": "error"
            }
          ],
          "type": "tree"
        },
        {
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
             "headers": {}
          },
          "type": "endpoint"
        }
      ],
      "type": "tree"
    }
```

```
                ],
                "type": "tree"
            },
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                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint":
{
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
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                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,

        "UseDualStack": false
                }
            },
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                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
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                    }
                },
                "params": {
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"Region": "us-east-1",
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
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},
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url":
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url":
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}
},

"params": {
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"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
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}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
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},
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},

"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation":
" The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation":
" The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}

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            },
            "CreationTime": {

        "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
 {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
```

```
            },
            {
                "name": "DELETION_FAILED",
                "value": "DELETION_FAILED",
                "documentation": ""
            },
            {
                 "name": "DELETED",
                "value": "DELETED",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "HEALTHY",
                "value": "HEALTHY",
                "documentation": ""
            },
            {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
            },
            {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
    "type": "structure",
    "members": {
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
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"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },

         "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
    <ul>\n        <li>\n            <p>Product</p>\n        </li>\n        <li>\n            <p>DirectoryId</p>\n
  </li>\n      </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
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},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {

              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>Status</p>\n            </li>\n            <li>\n              <p>InstanceId</p>\n
```

```
</li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When
 this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
          {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},
"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits":
{
"smithy.api#documentation": " You can use the following filters to streamline results: \n

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<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n

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</p>"
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {

                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n        <p>Status</p>\n        </li>\n        <li>\n        <p>Username</p>\n
</li>\n        <li>\n        <p>Domain</p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
```

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to
 retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

      }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags for the specified resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits":
{
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
```

"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":

"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider
operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
```

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",

"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An
object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription

operation.</p>",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },

    "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
 {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes
 tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
 to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {

 "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}

```
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n              <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n              <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n              <p>Security group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

  "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint
```

for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
```

```
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
```

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

```
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
```

```
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
```

RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string
```

```
 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },

      {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
```

"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}

```
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
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"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",

"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {

"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the

registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{

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        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
        "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
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"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [

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                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
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                  "conditions": [],
                  "rules": [
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                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
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                      "conditions": [],
                      "endpoint": {
```

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                "url": {
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                "properties": {},
                "headers": {}
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        }
    ],
    "type": "tree"

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  ],
  "type": "tree"
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  "conditions": [],
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          "fn": "isSet",
          "argv": [
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              "ref": "Region"
            }
          ]
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  "fn": "aws.partition",
              "argv": [
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                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
```

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                "argv": [
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            "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

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                "conditions": [
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                    "fn": "booleanEquals",
                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
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                            "ref": "PartitionResult"

        },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [

                        {
                            "ref": "PartitionResult"
```

```
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],

        "rules": [
                                            {
                                                "conditions": [],
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                                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
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                        "type": "tree"
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                                "type": "tree"
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                            {
                                "conditions": [],
                                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
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            "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref": "UseFIPS"
                                    },
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            ],
            "rules": [
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"fn": "booleanEquals",
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                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

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                        }
                    ],
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                                {
                                    "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                                        "headers": {}
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                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
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                {
                    "conditions": [],
                    "error": "FIPS is enabled
```

but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

]
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{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-

subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

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],
"type": "tree"
},
{
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"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
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"rules": [
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"conditions": [],
"endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}

```
            ],
            "type": "tree"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
```

{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack

disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"

    },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
      },
```

"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n

```
<code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

      "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {

"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

           "NextToken": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",

```
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
        "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
     }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
            },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
```

"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}

```
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
```

"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {

"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",

"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {

"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
```

"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}
ListLicenses
Initialize stack step
spanInitializeStart

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string
```

```
 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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  limitations under the License.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
```

```
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
```

}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

{
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutLicense"

```
    },
    {
      "target": "com.amazonaws.licensemanager#CreateGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateGrantVersion"
    },
    {
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      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
    },
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      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
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    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
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      "target": "com.amazonaws.licensemanager#CreateToken"
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    },
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      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
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    },
    {
```

"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},

```
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListResourceInventory"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTokens"
    },
    {
      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#RejectGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
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"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"version": "1.0",
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"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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                ]
              }
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            "type": "error"
          },
          {

"conditions": [
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                "argv": [
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                  },
                  true
                ]
              }
            ],
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            "type": "error"
          },
          {
```

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                    "ref": "Endpoint"
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                  "properties": {},
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                },
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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
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                    "argv": [
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                      }
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                        "argv": [
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                            "ref":
"UseFIPS"
                          },
```

```
                    true
                ]
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                    },
                    true
                ]
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                                ]

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                        ]
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },

"supportsDualStack"
                                ]
                            }
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```

```
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                            "headers": {}

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                ]
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both",
                "type": "error"
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        ]
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                    {
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                        "argv": [
                            true,
```

```
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                  },
                  "supportsFIPS"
                ]
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            ]
          }
        ],
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              "headers": {}
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            "type": "endpoint"
          }
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partition does not support FIPS",
        "type": "error"
      }
    ]
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        ]
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                          {
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                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

"supportsDualStack"
                            ]
                          }
                        ]
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                          "headers": {}

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                        "type": "endpoint"
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                    ]
                  },
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                    "conditions": [],
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                    "type": "error"
                  }
                ]
              },
              {
                "conditions": [],
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                  "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                   "properties": {},
                  "headers": {}
```

```
                    },
                    "type": "endpoint"
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            ]
        }
    ]
},
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    "type": "error"
}
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},
"smithy.rules#endpointTests": {
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        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
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        {
            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
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                }
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
             }
        },
        {
            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
```

```
            }
        },
        "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }

},
    {
        "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
```

```
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}
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          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
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              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
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        {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
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            }
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          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
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```

"params": {
"Region": "ca-central-1",
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disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {
"Region": "eu-north-1",
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"UseDualStack": false
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            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
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            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.sa-east-1.amazonaws.com"
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
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"params": {
"Region": "us-west-2",
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"UseDualStack": false
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"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
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},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",

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            "UseFIPS": true,
            "UseDualStack": true
        }
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        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
             }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
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    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },

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        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
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    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
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"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
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"params": {
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"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
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"params": {
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"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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},

"params": {
"Region": "us-gov-east-1",
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"UseDualStack": true

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            "expect": {
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                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
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            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
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"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
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"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

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                    },

            "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false
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                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                },
                {
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant

ARN. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": " Grant status. "
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Grant version. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": " Access to resource denied. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

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},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

```
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

```
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
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"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

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        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

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    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

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            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
                }
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            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
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    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

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            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
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{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

```
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

```
            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

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        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

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        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
```

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }

```
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
        },
        "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
    }
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
    }
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
    }
},
"com.amazonaws.licensemanager#Integer": {
    "type": "integer"
```

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                 }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

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    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

```
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
```

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            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
```

"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }

        }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

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        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

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    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n        <code>resource_id</code> - The ID of the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

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        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

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    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

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            "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
    }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

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        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
```

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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

```
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

      "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
}
```

1.3614 github.com/aws/aws-sdk-go-v2/service/internal/presigned-url 1.12.14

1.3614.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {
```

```
 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

```
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
```

```
  runs-on: ubuntu-latest
  strategy:
    matrix:
      python-version: [3.9]

  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
```

```
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil
{
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
```

"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {

"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
```

"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",

"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based

subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
{
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the
user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based
subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity
provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains
information for the user to disassociate. "
}

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}

        }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
```

```
            }
        },
        "Operation": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
        },
        "Value": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation":
 "<p>Value of the filter.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
    "type": "union",
    "members": {
        "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
            "traits": {

                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "Products": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                "traits":
{
                    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                    "smithy.api#required": {}
                }
            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
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}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "

```
            }

  },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
               "traits": {

            "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
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    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
         "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

```
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],

    "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [
                        {

"fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                },
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                {
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                  "endpoint": {
                    "url": {
                      "ref": "Endpoint"
                    },
                    "properties": {},

                "headers": {}
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                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",
                      "argv":
[
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseFIPS"
```

```
                    },
                    true

            ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",

              "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        }
                      ]
                    },

{
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]
                        }
```

```
                    ]

                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],

        "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
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    "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
}

],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
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"ref": "UseDualStack"
},
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]
}
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                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsDualStack"
                            ]
                          }

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                      }
                    ],
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                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                     "type": "tree"
                  },
                  {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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"properties": {},
"headers": {}
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"type": "endpoint"
}
],
"type": "tree"
}
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"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack":
true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}

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            },
            "params": {
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              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url":
"https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack":
false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
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},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
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"params": {
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"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"

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            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,

      "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
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"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",

"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",

"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "

```
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
        "CreationTime": {

      "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
      "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
      "type": "string",
      "traits":
 {
        "smithy.api#enum": [
            {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
                "documentation": ""
            },
            {
                "name": "PROVISIONING_FAILED",
                "value": "PROVISIONING_FAILED",
                "documentation": ""
            },
            {
```

"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""
},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},
{
"name": "UNHEALTHY",
"value": "UNHEALTHY",
"documentation": ""
},
{
"name": "NOT_APPLICABLE",
"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken

\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n InstanceId \n
\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When
this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},
"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100

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                }
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits":
 {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
    "type": "structure",
    "members": {
        "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
             "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
    "type": "operation",
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"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type":

"structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {

"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"

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            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",

            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {

"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}

```
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type":
"structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {

"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,

"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An
object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}

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        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }

     },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes
tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the
identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",

"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string
```

```
 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

```
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
}
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

```
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
```

```
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

```
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
```

```
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string
```

```
 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:     ServiceID,
 OperationName: "CheckoutBorrowLicense",
}
}
GetLicense
Initialize stack step
 spanInitializeStart
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
```

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2

```
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
```

spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
```

"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {

"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists

the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}

},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "

}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
```

"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [],

```
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
```

```
                ],
                "rules": [
                    {
                        "conditions": [
                            {

            "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                      "ref": "UseFIPS"
                                            },
                                            true
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]
                                    }

    ],
                                "rules": [
                                    {
                                        "conditions": [
                                            {
                                                "fn": "booleanEquals",
                                                "argv": [
                                                    true,
                                                    {
                                                        "fn": "getAttr",
```

"argv": [
{
"ref": "PartitionResult"

},
"supportsFIPS"
]
}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"

```
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {

        "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true

                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
```

```
                                                    {
                                                        "conditions": [],
                                                        "endpoint": {
                                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                            "headers": {}
                                                        },
                                                        "type": "endpoint"
                                                    }
                                                ],
                                                "type": "tree"
                                            }
                                        ],
                                        "type": "tree"
                                    },
                                    {
                                        "conditions": [],
                                        "error": "FIPS is enabled
but this partition does not support FIPS",
                                        "type": "error"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true

                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [
                                            {
                                                "fn": "booleanEquals",
                                                "argv": [
                                                    true,
                                                    {
                                                        "fn": "getAttr",
```

"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-

subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
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"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
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]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},

{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false

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    }
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  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
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"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}

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                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
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"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
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linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,

"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
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"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription

provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",

```
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"

```
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",

"documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
       },
      "errors": [
        {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {

"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware

RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter

SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
```

```
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
```

```
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err !=
nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
           {
               "id": "HttpHeaderTrait",
               "namespace": "*"
           },
           {
               "id": "HttpUriConflict",
               "namespace": "*"
           },
           {
               "id": "Service",
```

```
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
```

"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},

{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",

"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

```
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {

"conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                     },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
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                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
```

```
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                     "fn": "aws.partition",
                    "argv": [
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                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                    }
                  ],
                  "type": "tree",
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                    "conditions": [
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                        "argv": [
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"UseFIPS"
                          },
                          true
                        ]
                      },
                      {
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                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
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                    "rules": [
                      {
                       "conditions": [
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                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
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                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
```

"supportsFIPS"
]

}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [

```
            {
              "fn": "booleanEquals",

        "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,

{
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                }
              ],
              "type": "tree",
              "rules": [

{
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ]
            },
            {
              "conditions": [],
```

"error": "FIPS is enabled but this
partition does not support FIPS",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
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},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

```
                    },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
             "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"Region": "af-south-1",
"UseFIPS": false,
"UseDualStack": false
}
```

```
},
{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
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    "UseFIPS": false,
    "UseDualStack": false
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  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
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      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
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  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
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  "params": {
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"Region": "ap-northeast-3",
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"UseDualStack": false
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"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
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"UseFIPS": false,
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"url": "https://license-manager.ap-southeast-1.amazonaws.com"

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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
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"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.ca-central-1.amazonaws.com"
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"params": {
"Region": "ca-central-1",
"UseFIPS": false,
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"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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disabled and DualStack disabled",
"expect": {
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"params": {

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"UseDualStack": false
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",

"expect": {
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"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
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"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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"url": "https://license-manager.sa-east-1.amazonaws.com"
}
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": false
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"expect": {
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"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
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"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
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us-west-1 with FIPS disabled and DualStack disabled",
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"params": {

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"UseDualStack": false
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"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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"UseFIPS": false,
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"UseFIPS": true,

"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
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        },
        "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

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    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
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                "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
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        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
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        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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        "expect": {
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          }
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        "params": {
          "Region": "us-gov-east-1",
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          "UseDualStack": false
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            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
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        "params": {
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          "UseFIPS": true,
          "UseDualStack": false
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        "expect": {
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            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
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          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
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              }
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              }
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            "params": {
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              "UseFIPS": false,
              "UseDualStack": true
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            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}

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          "UseDualStack": true
        }
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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          }
        },

    "params": {
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          "UseFIPS": true,
          "UseDualStack": false
        }
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      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

  "expect": {
          "endpoint": {
            "url": "https://example.com"
          }
        },
        "params": {
          "Region": "us-east-1",
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
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"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
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"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
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{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
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"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
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"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
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"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
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"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},

"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time that automated discovery last ran. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes automated discovery. "
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }

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    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
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    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
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        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
```

"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

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                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

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    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },

    "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

```
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
```

<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
            }
        },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": " Tags to add to the license configuration. "
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": " Product information. "
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
```

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            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
 {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}

        }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
```

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

  }
            },
            "Validity": {
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"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
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"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
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grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},

"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
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"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
```

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
```

"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

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    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
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"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
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"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

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            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

      },
        "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
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"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

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        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

```
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with
the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

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            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
```

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
        {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

```
{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
    "type": "structure",
    "members": {
        "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                    <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                    <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
```

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</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

        "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
         "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
        },
```

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

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        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
```

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            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
},
"com.amazonaws.licensemanager#ReportFrequency": {
    "type": "structure",
    "members": {
        "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
                "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
        },
        "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

            "traits": {
                "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

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{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

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        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

```
            }
        },
        "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }
        }
    },
    "traits": {

        "smithy.api#documentation": "<p>Describes a token.</p>"
    }
},
"com.amazonaws.licensemanager#TokenList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#TokenData"
    }
},
"com.amazonaws.licensemanager#TokenString": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 4096
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#TokenType": {
    "type": "enum",
    "members": {
        "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REFRESH_TOKEN"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


1.3615 klauspost-compress 1.18.0

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Files: gzhttp/*

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Files: internal/snapref/*

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1.3616 github.com/aws/aws-sdk-go-v2/internal/endpoints/v2 2.6.33

1.3616.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
```

```
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
```

```
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
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package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
```

```
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
```

```
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err
!= nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:     ServiceID,
 OperationName: "DisassociateLicense",
}
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
          "type": "structure",
          "members": {
              "message": {
                  "target": "smithy.api#String"
              }
          },
```

"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {

"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,

"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",

"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

 }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |

```
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory":
 {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",

"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}

```
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the identity provider.</p>",

        "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
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        "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
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                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                    "smithy.api#required": {}
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            "traits":
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              "smithy.api#required": {}
            }
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          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
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          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
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      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

 "type": "list",
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          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
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      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
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        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
            }
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          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
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"smithy.api#required": {}
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"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
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"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
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"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

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"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
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"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {

"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
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"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
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"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
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"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
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"operations": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
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"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
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"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
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"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
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"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
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"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"

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        },
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          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
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          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
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        "aws.protocols#restJson1": {},
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            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
            "x-api-key",

"authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
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        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
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          "parameters": {
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"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"required": true,
"default": false,
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"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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        "type": "error"
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            "type": "error"
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"type": "error"
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"params": {
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              "expect": {
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"expect": {
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"params": {
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"UseDualStack": false
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"UseDualStack": true
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"expect": {
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"Endpoint": "https://example.com"
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"UseDualStack": true,
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"expect": {
"error": "Invalid Configuration: Missing Region"
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"version": "1.0"
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}
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":

"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS \n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
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"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
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"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
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"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},
"CreationTime": {

"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
{
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""
                },
                {
                     "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
            ]
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "HEALTHY",
                    "value": "HEALTHY",
                    "documentation": ""
                },
                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",

            "smithy.api#required": {}
                }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },

         "smithy.api#paginated": {
                "inputToken": "NextToken",
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"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},
"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits":
{
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

        }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
```

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},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
         {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits":
```

{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory
that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
                    "smithy.api#required": {}
                }
            },
```

"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":
{
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
```

servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",

"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
 | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n </p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
 {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },

 "errors": [
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},

"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}

```
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
```

"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
```

```
<li>\n <p>Subnets which you want to remove the VPC endpoints from.</p>\n </li>\n
<li>\n <p>Security group ID which permits traffic to the VPC endpoints.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {

  "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
    "type": "structure",
    "members": {
      "IdentityProviderSummary": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
        "traits": {
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
    "type": "structure",
    "members": {
      "AddSubnets": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint
 for products that\n\t\t\trequire connectivity to activation servers.</p>",
          "smithy.api#required": {}
        }
      },
      "RemoveSubnets": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
        "traits": {
          "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
          "smithy.api#required": {}
        }
      },
      "SecurityGroupId": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
        "traits": {
          "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
```

communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
 " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " A parameter is not valid. ",
          "smithy.api#error": "client"
        }
      }
    }
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string
```

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.

```
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

```
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
```

```
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
```

```
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
```

SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer

Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
```

```
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
```

OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
```

"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
```

"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}

```
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}

```
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User
Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
```

}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"

```
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
```

"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

        ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

          }
          ],
```

```
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                  "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
```

```
                    },
                    true
                ]
            }

],
                "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"

},
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [

                                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],

"rules": [
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"conditions": [],
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"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
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"type": "tree"
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
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"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [

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                                    {
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                                    },
                                    "supportsFIPS"
                                ]
                            },
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                        }
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                    "rules": [
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                                {
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
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                            ],
                            "type": "tree"
                        }
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                    "type": "tree"
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                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
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                    },
                    true

                ]
                }
            ],
            "rules": [
                {
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                            "argv": [
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                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
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                            "conditions": [],
                            "rules": [

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                                    "type": "endpoint"
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                            ],
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                    "type": "tree"
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                                    "type": "error"
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                            "type": "tree"
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                            "conditions": [],
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                                {
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                                        "properties": {},
                                        "headers": {}
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        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
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    "type": "tree"
}
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"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
```

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

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            },
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              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
               },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
```

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            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                }

             },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
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            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
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{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
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"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,

"UseDualStack": true
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},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS":
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"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",

"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
      <code>AmiID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>DualSubscription</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceType</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>ProductCode</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Region</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Status</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n           </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n            <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n        </ul>"
                }
            },
            "MaxResults": {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "

```
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
        "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
        "target":
```

"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration
resources for your account. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": " To filter your results, specify which subscription providers to
return \n\t\t\tin the list. "
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
```

"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
```

```
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
 subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
```

"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,

```
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
         "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "tagKeys": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
          "traits": {

        "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}

```
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
```

```
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
```

```
        },
        {
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
     },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
```

"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},

{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",

"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

```
            }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {

"conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                   },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          },
```

```
{
  "conditions": [
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ],
          "assign": "PartitionResult"
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref":
"UseFIPS"
                },
                true
              ]
            },
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
```

```
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
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                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]

                        }
                            ]
                          },
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                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },

    "supportsDualStack"
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                              }
                            ]
                          }
                        ],
                        "type": "tree",
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                            "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                              "properties": {},
                              "headers": {}
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                    },
                        "type": "endpoint"
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            {
                "conditions": [],
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                "type": "error"
            }
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    {
        "conditions": [
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        "argv": [
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                        "ref": "UseFIPS"
                    },
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                        "argv": [
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    {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                }
                ],
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                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ]
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partition does not support FIPS",
            "type": "error"
        }
    ]
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{
    "conditions": [
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            "argv": [
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                    "ref": "UseDualStack"
                },
                true
            ]
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                            "fn": "getAttr",
                            "argv": [
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                                    "ref": "PartitionResult"
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"supportsDualStack"
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}
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"rules": [
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

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"type": "endpoint"
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"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
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"endpoint": {
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"properties": {},
"headers": {}
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"type": "endpoint"
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},
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"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
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"smithy.rules#endpointTests": {
  "testCases": [
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          "url": "https://license-manager.af-south-1.amazonaws.com"
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      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
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      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
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        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
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      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
        "UseDualStack": false
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        }
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      "params": {
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        "UseFIPS": false,
        "UseDualStack": false
      }
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      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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            }
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        "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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        "params": {
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        "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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        "params": {
            "Region": "ap-southeast-1",
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            "UseDualStack": false
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            }
          },
          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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        },
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
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            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
          },

         "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-central-1.amazonaws.com"
            }
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            },
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              "UseDualStack": false
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disabled and DualStack disabled",
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                "url": "https://license-manager.eu-north-1.amazonaws.com"
              }
            },
            "params": {
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              "UseDualStack": false
            }
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            "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
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              }
            },
            "params": {
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"eu-south-1",
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              "UseDualStack": false
            }
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                "url": "https://license-manager.eu-west-1.amazonaws.com"
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            },
            "params": {
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              "UseFIPS": false,
              "UseDualStack": false
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          },
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"expect": {

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},
"params": {
"Region": "eu-west-2",
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"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
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}
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"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
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"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
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}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-west-1.amazonaws.com"
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},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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"params": {

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"UseDualStack": false
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{
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"params": {

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"UseDualStack": false
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"params": {
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"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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},
"params": {
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            "UseFIPS": true,
            "UseDualStack": false
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        "expect": {
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                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
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{
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
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    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
            }
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        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
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    {
        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
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"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
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"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true

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            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
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            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
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        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled
but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
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"UseFIPS": false,
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},
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
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}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},

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                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
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                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
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"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
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            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
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                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
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            }
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        },
        "traits": {
          "smithy.api#output": {}
        }
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      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

     "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},

"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {

"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"

```
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>License consumption token.</p>",
                "smithy.api#required": {}
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {
```

"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible
value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS. ",

"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "

```
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
          {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},

"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},

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    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
      "type": "structure",
      "members": {
        "CheckoutType": {
          "target": "com.amazonaws.licensemanager#CheckoutType",
          "traits": {
            "smithy.api#documentation": "<p>Checkout type.</p>"
          }
        },
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
        "EntitlementsAllowed": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
          }
        },
         "SignedToken": {
          "target": "com.amazonaws.licensemanager#SignedToken",
          "traits": {
            "smithy.api#documentation": "<p>Signed token.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        },
        "IssuedAt": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
          }
        },
        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",

"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services
account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n
<ul>\n
```

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<li>\n            <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the

idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
```

"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":

```
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
```

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",

"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region for the license.</p>",
                "smithy.api#required": {}

  }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>",
                "smithy.api#required": {}
            }
         },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n        running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n        usage.</p>",
                "smithy.api#required": {}
            }
        },
```

"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},

"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}

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        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>End of the time range.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
```

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "

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            }
        },
        "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },

{
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
```

```
    }
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}

  }
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
    "type": "enum",
    "members": {
        "JWT_PS384": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "JWT_PS384"
            }
        }
    }
},
"com.amazonaws.licensemanager#Entitlement": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {

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            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes"
          }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#EntitlementList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
        }
    },
    "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
```

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    }
},
"MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Milliseconds"
    }
},
"BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes"
     }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
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"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

           "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action,

without actually making the request. Provides an error response if you do not have the required permissions. "
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " License consumption token. "
            }
          },

          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": " Date and time at which the license consumption expires. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          },
          "ErrorCode": {
            "target": "com.amazonaws.licensemanager#String"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "FailedDependency",
            "httpResponseCode": 424
          },
          "smithy.api#documentation":
" A dependency required to run the API is missing. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 424

```
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanager#FilterValues",
                "traits": {
                    "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n         describe operation. Filters can be used
to match a set of resources by specific criteria,\n         such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
```

"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n        are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
```

```
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

   },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
```

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
```

```
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",

               "traits": {
                    "smithy.api#documentation": "<p>Number of available licenses.</p>"
```

```
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License configuration status.</p>"
            }

    },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
            }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
             "traits": {
                "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
```

"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},

"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was
completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {

"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "S3BucketArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
        },
        "SnsTopicArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
          }
        },
        "OrganizationConfiguration": {
          "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
          }
        },
        "EnableCrossAccountsDiscovery": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
          }

      },
        "LicenseManagerResourceShareArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
```

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",

"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"

```
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {

"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}

```
            },
            "ReceivedMetadata": {
                "target": "com.amazonaws.licensemanager#ReceivedMetadata",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
```

"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

```
},
    "traits": {
      "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
      "EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EQUALS"
        }
      },
      "NOT_EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "NOT_EQUALS"
        }
      },
      "BEGINS_WITH": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "BEGINS_WITH"
        }
      },
      "CONTAINS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CONTAINS"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
  },
  "com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Issuer name.</p>",
          "smithy.api#required": {}
```

```
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}

```
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            },
            "Entitlements": {

  "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
                }
            }
```

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        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {

"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}

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            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

        "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
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                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
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            "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {

"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {

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            "smithy.api#enumValue": "DEACTIVATED"
          }
        },
        "SUSPENDED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "SUSPENDED"
          }
        },
        "EXPIRED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EXPIRED"
          }
        },

      "PENDING_DELETE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
      "type": "structure",
      "members": {
        "EntitlementUsages": {
          "target": "com.amazonaws.licensemanager#EntitlementUsageList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlement usages.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

      }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
      "type": "structure",
      "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n

the license rules). "
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": " Maximum number of results
to return in a single call. "
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Token for the next set of results. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": " Information about the associations for the license
configuration. "
                }
            },
            "NextToken": {

"target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Token for the next set of results. "
                }
            }

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    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
    "members": {
        "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
```

operators\n are supported: \n \n \n \n <code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {

"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
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configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all versions of the specified license. "
}
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

```
  "com.amazonaws.licensemanager#ListLicensesResponse": {
    "type": "structure",
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#LicenseList",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

"smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedGrants": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
       },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while
specifying the\n        recipient as this Amazon Web Services account, your organization, or an organizational unit\n
    (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
```

"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ParentArn</code>\n \n \n \n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
```

```
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are

supported: \n \n \n \n <code>Beneficiary</code>\n \n
\n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the
application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values
are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-
server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n
    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n
        <code>resource_id</code> - The ID of the resource. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
 about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
      "type": "structure",
      "members": {
        "TokenIds": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {

            "smithy.api#documentation": "<p>Token IDs.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
      "type": "structure",
      "members": {
        "Tokens": {
          "target": "com.amazonaws.licensemanager#TokenList",
          "traits": {
            "smithy.api#documentation": "<p>Received token details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
        }
    },
    "com.amazonaws.licensemanager#MaxSize100": {
```

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The key name. "
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The value. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes key/value pairs. "
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"

```
        }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n        Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n        <ul>\n            <li>\n                <p>As a license administrator, you can
optionally specify an\n                <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
  </li>\n            <li>\n                <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                account in your
organization.</p>\n            </li>\n            <li>\n                <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n                <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n                are activating the grant.</p>\n            </li>\n        </ul>\n        <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n            <dd>\n                <p>Use this value to activate a grant
without replacing any member accounts\n                active grants for the same product.</p>\n            </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n            <dd>\n                <p>Use this value to activate a
grant and disable other active grants in any\n                member accounts
 for the same product. This action will also replace their\n                previously activated grants with this activated
grant.</p>\n            </dd>\n        </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n        override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
```

"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for

<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}

```
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
```

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
        "members": {
            "Location": {
                "target": "com.amazonaws.licensemanager#Location",
                "traits": {
                    "smithy.api#httpHeader": "Location"
                }
            },
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {

"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},

"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {

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            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",

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        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
```

"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":

{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},

"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
```

"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},

```
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",

"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}

```
}
```

1.3617 github.com/aws/aws-sdk-go-v2/internal/configsources 1.3.33

1.3617.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
```

```
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
```

```
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

```
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
```

```
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
```

Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
```

"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",

"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

               "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
```

"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
{
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {

"smithy.api#input": {}
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"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
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"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation":
" Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information

about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
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"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
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"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
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"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
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"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
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"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",

"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},

{

"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
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"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
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"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"

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            }
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        "rules": [
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                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],

        "rules": [
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                                "argv": [
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                                    },
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                                ]
                            }
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                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                        "type": "error"
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                    {
                        "conditions": [
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"fn": "booleanEquals",
                                "argv": [
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                                        "ref": "UseDualStack"
                                    },
                                    true
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                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
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                    "ref": "Endpoint"
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                "type": "endpoint"
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                "fn": "isSet",
                "argv": [
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                    "ref": "Region"
                  }
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                "conditions": [
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                    "fn": "aws.partition",
                    "argv":
[
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
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                "rules": [
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                        "fn": "booleanEquals",
                        "argv": [
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                            "ref": "UseFIPS"
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                {
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                    "argv": [
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                            "ref": "UseDualStack"
                        },
                        true
                    ]
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                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
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                        "argv": [
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                            {
                                "fn": "getAttr",
                                "argv": [
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                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
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            "type": "tree"
                },
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                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
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            "type": "tree"
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                    "argv": [
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            "ref": "UseFIPS"
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                    ]
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            "rules": [
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                            "argv": [
                                {
                                    "fn": "getAttr",
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                            "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                    ]
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                true
            ]
        }
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fips.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
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    "type": "tree"
},
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    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"
}

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"type": "tree"
},
{
"conditions": [
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        "argv": [
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                "ref": "UseDualStack"
            },
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                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }

            ]
                        }
                    ],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
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                            "type": "endpoint"
                        }
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                     "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
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                "headers": {}
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    "type": "tree"
  }
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"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false
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{
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack":
true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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}
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"UseDualStack": false
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
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}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
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}
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"params": {
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"UseDualStack": false
}
},
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
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"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
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}
},
"params": {
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {

"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {

"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}

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            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {

        "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
 {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
```

"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""
},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},
{
"name": "UNHEALTHY",
"value": "UNHEALTHY",
"documentation": ""
},
{
"name": "NOT_APPLICABLE",
"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",

            "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken

\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {

              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>Status</p>\n            </li>\n            <li>\n              <p>InstanceId</p>\n
          </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When
 this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
```

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                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits":
 {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type":

"structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {

"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"

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            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",

            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {

"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}

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            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
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"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type":
"structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {

"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,

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            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An
object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The
domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
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"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}

```
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }

     },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
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"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes
tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the
identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",

"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
```

```
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
```

```
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
```

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
```

```
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
```

```
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
```

```
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
```

```
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

AWS SDK for Go
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Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
```

```
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
```

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},

"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
```

current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}

```
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},

"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"

```
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
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                        "type": "error"
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                        "conditions": [],
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                                "conditions": [
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                                        "fn": "booleanEquals",
                                        "argv": [
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                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]

}
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                                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
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                "type": "error"
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                    },
                    "properties": {},
                    "headers": {}
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                "type": "endpoint"
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        "type": "tree"

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                    "argv": [
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                            "ref": "Region"
                        }
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            "rules": [
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    "fn": "aws.partition",
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                                    "ref": "Region"
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                            "assign": "PartitionResult"
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                                    "argv": [
                                        {

                                "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
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],
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                                        {
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                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
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                                                            "ref": "PartitionResult"

},
                                                        "supportsFIPS"
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                                                }
                                            ]
                                        },
                                        {
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                                                {
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"fn": "getAttr",
"argv": [

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"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"type": "tree"
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"conditions": [],
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"type": "error"
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"type": "tree"
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{
"fn": "booleanEquals",

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                  },
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              {
                "conditions": [
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        "fn": "booleanEquals",
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                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                ]
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                ],
                "rules": [
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                    "conditions": [],
                    "rules": [
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                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
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                    ],
                    "type": "tree"
                  }
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but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
},
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

]
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

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{
                                                "conditions": [],
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                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
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                                            }
                                        ],
                                        "type": "tree"

                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
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                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
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                "type": "tree"
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        ],
        "type": "tree"
    },
```

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            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {

   "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
        },
        "params": {
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"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
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},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {

"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,

"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}

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                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
    }
},
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the

following values for the <code>Name</code> key \n \tto streamline results: \n \n \n
\n <code>AccountID</code>\n \n \n \n \n
<code>AmiID</code>\n \n \n \n \n
<code>DualSubscription</code>\n \n \n \n \n
<code>InstanceID</code>\n \n \n \n \n
<code>InstanceType</code>\n \n \n \n \n
<code>ProductCode</code>\n \n \n \n \n
<code>Region</code>\n \n \n \n \n
<code>Status</code>\n \n \n \n \n
<code>UsageOperation</code>\n \n \n \n For each filter, you can use
one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}

},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n
<li>\n            <p>\n                <code>Subscription</code>\n            </p>\n          </li>\n        </ul>\n
<p>The
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
```

"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",

"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}

```
            },

          "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
```

"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],

```
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is

the offline token. "
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {

"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100

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            }
          }
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
            }
          }
        },
        "traits": {
```

"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"

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            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
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```
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
```

"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",

"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}

```
  }
}
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
```

OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer

Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

```
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
```

```
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
              "namespace": "*"
          }
      ]
  },
  "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
          "type": "service",
          "version": "2018-08-01",
          "operations": [
              {
                  "target": "com.amazonaws.licensemanager#AcceptGrant"
              },

   {
                  "target": "com.amazonaws.licensemanager#CheckInLicense"
              },
```

{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"

},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {

```
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

            }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
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                    "type": "error"
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                            "argv": [
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                                    "ref": "UseDualStack"
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            "type": "error"
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                "headers": {}
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            "type": "endpoint"
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            "argv": [
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                "argv": [
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                    "argv": [
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                        "fn": "getAttr",
                        "argv": [
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                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]

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                            "ref": "PartitionResult"
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"supportsDualStack"
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                    "supportsFIPS"
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          "type": "error"
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    {
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          "argv": [
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            },
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"supportsDualStack"
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

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                        "type": "error"
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                "headers": {}
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            "type": "endpoint"
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  "type": "error"
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        }
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        "UseFIPS": false,
        "UseDualStack": false
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"params": {
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"UseFIPS": false,
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"params": {
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"UseDualStack": false
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"params": {
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"params": {
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"UseDualStack": false
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"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.ap-southeast-3.amazonaws.com"
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"params": {
"Region": "ap-southeast-3",
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"UseDualStack": false
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"url": "https://license-manager.ca-central-1.amazonaws.com"
}
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"params": {
"Region": "ca-central-1",
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"UseDualStack": false
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"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
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"UseDualStack": false
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disabled and DualStack disabled",
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"params": {
"Region": "eu-north-1",
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"UseDualStack": false
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"params": {
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"UseDualStack": false
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"params": {
"Region": "eu-west-1",
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"UseDualStack": false
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"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
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"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
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"UseDualStack": false
}
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"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
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"endpoint": {

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            }
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        "params": {
            "Region": "me-south-1",
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            "UseDualStack": false
        }
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                "url": "https://license-manager.sa-east-1.amazonaws.com"
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        },
        "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
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        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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                "url": "https://license-manager.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }

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        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
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        },
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          "expect": {
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            }

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          "params": {
            "Region": "us-east-2",
            "UseFIPS": false,
            "UseDualStack": false
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          "expect": {
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          },
          "params": {
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            "UseFIPS": true,
            "UseDualStack": false
          }
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            "UseFIPS": false,
            "UseDualStack": false
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        },
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          "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-1.amazonaws.com"
            }
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            },
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                "UseDualStack": false
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                "UseDualStack": false
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            "expect": {
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                    "url": "https://license-manager-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
            }
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                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
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              "expect": {
                "endpoint": {
                  "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
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              "expect": {
                "endpoint": {
                  "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
                }
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              "params": {
                "Region": "cn-northwest-1",
                "UseFIPS": false,
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              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
                }
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          "UseDualStack": true
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          "Region": "us-gov-east-1",
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"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
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"params": {
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"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
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"expect": {
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseDualStack": true
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"expect": {
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"UseDualStack": false
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"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
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"UseDualStack": true
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": false
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"UseDualStack": true
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}
},

"params": {
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
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"expect": {
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
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"url": "https://example.com"
}
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"params": {
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"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
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"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
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"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
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"version": "1.0"
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"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

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"output": {

"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
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"errors": [
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
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"target": "com.amazonaws.licensemanager#AuthorizationException"
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"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
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"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
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"target": "com.amazonaws.licensemanager#ServerInternalException"
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"target": "com.amazonaws.licensemanager#ValidationException"

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"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
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"com.amazonaws.licensemanager#AcceptGrantRequest": {
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"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
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"smithy.api#required": {}
}
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},
"traits": {
"smithy.api#input": {}
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"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",

```
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
    }
},
"com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Arn"
    }
},
"com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
```

```
        },
        "traits": {
          "aws.protocols#awsQueryError":
 {
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
```

"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must

use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible
value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "

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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "

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            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
         }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
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                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
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        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

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                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
```

```
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the grant.</p>"
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
```

},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
```

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    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}

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            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientRequestToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique,
 case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
 generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}

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            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
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                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-

UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}

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        },
        "traits": {

"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
```

"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}
}
},
"traits": {
"smithy.api#output": {}

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    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
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"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",

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                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
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"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":

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{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>",
                "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
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"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},

"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}

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        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes"
           }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
```

```
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target":
```

"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},

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        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
```

"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {

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            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
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"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#GetAccessTokenResponse":
{
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Gets detailed information about the specified grant. "
}
},
"com.amazonaws.licensemanager#GetGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [

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        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

    },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
```

```
        }
    },
    "LicenseCountingType": {
        "target": "com.amazonaws.licensemanager#LicenseCountingType",
        "traits": {
            "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
        }
    },
    "LicenseRules": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
        }
    },
    "LicenseCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",

       "traits": {
            "smithy.api#documentation": "<p>Number of available licenses.</p>"
        }
    },
    "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
            "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
        }
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License configuration status.</p>"
        }

},
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
        }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was

completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},

"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},

"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}

```
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

    }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Version of the granted license.</p>"
                }
            },
            "ReceivedMetadata": {
                "target": "com.amazonaws.licensemanager#ReceivedMetadata",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
```

```
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "enum",
"members": {
"EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing

algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},

"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {

"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},

"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "

```
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
agreement that can be\n        consumed and enforced by License Manager. Components include specifications for
the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n        must be associated with a
host), and the number of licenses purchased and used.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
        "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},

"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},

"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {

"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {

"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConversionTask"
}
},
"com.amazonaws.licensemanager#LicenseCountingType": {
"type": "enum",
"members": {
"VCPU": {

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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
```

"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},

"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},

```
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

      "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                    <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
                    "smithy.api#documentation": "<p>Distributed grant details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
```

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
```

```
      "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
```

"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseSpecifications": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
```

```
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n            </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n            </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n            </p>\n            </li>\n
<li>\n            <p>\n                <code>GrantStatus</code>\n            </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": "<p>Information
about the resources.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
            <li>\n                <p>\n                <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

```
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n

```
</li>\n <li>\n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
```

}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license

pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {

```
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
```

"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}

```
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {

```
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
```

```
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "

```
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
```

"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
```

"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
```

"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation":
" ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {

```
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```

1.3618 aws-sdk-go-v2 1.36.2

1.3618.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
```

```
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

```
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
```

```
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

```
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string
```

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.

```
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
```

```
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
```

```
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
```

```
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
```

```
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart

```
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
```

```
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
```

```
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
```

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
```

```
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string
```

```
 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },

    {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
```

"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {

"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},

"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "

}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux
subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"

```
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
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            "aws.api#service": {
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"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
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"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
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"aws.protocols#restJson1": {},
"smithy.api#cors": {
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"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
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"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the

configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"argv": [
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                    "argv": [
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                        "argv": [
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                            "ref": "UseDualStack"
                          },
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                            "fn": "booleanEquals",
                            "argv": [
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                                "fn": "getAttr",
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                                    "ref": "PartitionResult"

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                                  "supportsFIPS"
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                    "argv": [

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                        "ref": "PartitionResult"
                    },
                    "supportsDualStack"
                    ]
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            "conditions": [],

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                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
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                    "type": "endpoint"
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{
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one or both",
    "type": "error"
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                                        "argv": [
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                                            },
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                                        ]
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                                    true

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                                "conditions": [],
                                "rules": [
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"conditions": [],
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but this partition does not support FIPS",
"type": "error"
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"argv": [
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"ref": "UseDualStack"
},
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{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
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"supportsDualStack"

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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                        "headers": {}
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    "type": "tree"
},
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    "conditions": [],
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    "type": "error"
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    "type": "error"
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"type": "tree"
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"smithy.rules#endpointTests": {
"testCases": [
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
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}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"expect": {
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"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
"Region": "us-east-1",
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"UseDualStack": false
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}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"

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        "params": {
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            "UseDualStack": false
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                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
         },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
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        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
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                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
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        "params": {
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            "UseFIPS": false,
            "UseDualStack": false
        }
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
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            }
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            "UseDualStack": true
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"params": {
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"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
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},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"

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        "UseDualStack": true
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    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
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    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
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    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
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        }
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    "params": {
        "Region": "us-isob-east-1",
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        "UseDualStack": false
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    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
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"url": "https://example.com"
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"Endpoint": "https://example.com"
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"expect": {
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"url": "https://example.com"
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
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"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"expect": {
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"params": {

"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true,
"Endpoint": "https://example.com"
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
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"version": "1.0"
}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
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"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation":

" Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":

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{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
      <code>AmiID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Region</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Status</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n            <li>\n            <p>\n
<code>contains</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>equals</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n            </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
```

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n      organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
```

"uri": "/subscription/ListLinuxSubscriptions"
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"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},

"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration

resources for your account. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": " The maximum items to return in a request. ",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",

"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{

"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
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"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"

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            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
                "smithy.api#error": "client"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
            "type": "string",
            "traits": {
                "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
            "type": "string",
            "traits": {
                "smithy.api#enum": [
                    {
                        "name": "InProgress",
                        "value": "InProgress",
                        "documentation": "InProgress status"
                    },
                    {
                        "name": "Completed",
                        "value": "Completed",
                        "documentation": "Completed status"
                    },
                    {
                        "name": "Successful",
                        "value": "Successful",
                        "documentation": "Successful status"
                    },
                    {
                        "name": "Failed",
                        "value": "Failed",
                        "documentation": "Failed status"
                    }
                ]
            }
```

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    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
```

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            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
```

"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web
Services resource. ",

"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

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    },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
      "type": "structure",
      "members": {
         "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
            "smithy.api#required": {}
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
            "smithy.api#required": {}
          }
        },
        "AllowUpdate": {
          "target":
 "smithy.api#Boolean",
          "traits": {
            "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
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Region. "
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
            }

      },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",

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            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
```

```
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string
```

```
// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
```

"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":

```
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
```

"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",

"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#Directory": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/DisassociateUser"
      },
      "smithy.api#idempotent": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
```

"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}

```
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},

"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",

"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"

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                }
            ]
        }
    ],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {

                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
```

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                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "aws.partition",

                            "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseFIPS"
                                            },

true
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
```

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                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {

"fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },

                {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

            ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
```

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                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

  {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

    {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                            },
                            true
                        ]
                    }
```

```
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {

        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

    "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
```

"ref": "PartitionResult"
},
"supportsDualStack"
]

}
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}

],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"

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            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS":
true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {

"endpoint":
{
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}

```
            },
            {
              "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
```

"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "

```
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

    "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
 {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
```

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{

```
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

        },
        {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
        }
    ]
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
        {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
        },
        {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
        },
        {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
        }
    ]
  }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
  "type": "structure",
  "members": {
    "ServerType": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
        "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
```

"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n            <li>\n                <p>Product</p>\n            </li>\n
        <li>\n                <p>DirectoryId</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
```

"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },

        "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                 "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
```

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
```

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't

empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

```
    }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {

     "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-

\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",

"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",

"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",

"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
           {
               "id": "HttpHeaderTrait",
               "namespace": "*"
           },
           {
               "id": "HttpUriConflict",
               "namespace": "*"
           },
           {
               "id": "Service",
```

```
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
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"endpointPrefix": "license-manager"
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"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"type": "String"
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"required": true,
"default": false,
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"type": "Boolean"
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"type": "Boolean"
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"type": "error"
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"params": {
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disabled",
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                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
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            "params": {
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            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
```

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      },

    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },

  "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
```

"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},

"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": " The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n policy associated with this account. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time that automated discovery last ran. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes automated discovery. "
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }

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    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

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                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
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"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

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                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

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    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
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```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

```
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
```

"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
},
"traits":
{
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license. "

```
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
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<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
                }
            },

  "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
```

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            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

  }
            },
            "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
```

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
```

grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

```
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Bytes"
                }
            },
            "KILOBYTES": {
                "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
```

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                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
```

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
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"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

```
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
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"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

```
            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

      },
        "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {

  "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

```
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

```
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with
the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

```
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
```

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
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"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

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{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

```
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
     <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                    <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                    <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
```

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</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

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        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
```

```
            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
},
"com.amazonaws.licensemanager#ReportFrequency": {
    "type": "structure",
    "members": {
        "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
                "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
        },
        "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

            "traits": {
                "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

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{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

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                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
        },
        "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
```

},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

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        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3619 aws-sdk-go-v2-service-internal-presigned-url 1.12.14

1.3619.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
```

```
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
```

```
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
```

```
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
       "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
           "type": "structure",
```

"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "

```
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
```

```
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
```

href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}

```
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",

"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {

"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"

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            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity
provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
 {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
```

```
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"

             }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}

        }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
```

\n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits":
{
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},

"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {

"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",

"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],

"rules": [
{
"conditions": [

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                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [
                    {

"fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},

            "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
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                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",
                    "argv":
[
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
                          true

            ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
```

"fn": "booleanEquals",

"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
}
]
},

{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]

}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
},

{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",

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                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"
}

],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [

 {
            "fn": "booleanEquals",
            "argv": [
                true,
                {
                    "fn": "getAttr",
                    "argv": [
                        {
                            "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                    ]
                }
```

```
                    ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                     "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                 "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {

"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint":
"https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are
not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",

"members": {
"ProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS \n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation":

" The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation":
" The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},
"CreationTime": {

"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},

"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
"type": "string",
"traits":
{
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""
},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""

```
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "HEALTHY",
                    "value": "HEALTHY",
                    "documentation": ""
                },
                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",
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"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",

"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",

"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits":
 {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},

"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

      }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": " The tags for the specified resource. "
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }

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        ],
        "traits":
 {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline
```

results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}

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            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",

            "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory
that contains the user information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
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            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
```

"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {

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            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":
 {
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 5,
                "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
            "Endpoint": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
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"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StartProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type":
 "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
```

| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
                "smithy.api#required": {}
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": " The tags that apply to the product subscription. "
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
    "type": "structure",
    "members": {
        "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
                "smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
    },

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An

object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",

```
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },

    "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
```

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
 identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
```

"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {

"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
```

```
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
```

```
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string
```

```
 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
```

```
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

```
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
```

```
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
AWS SDK for Go
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
```

```
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
```

```
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
```

operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token

status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
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"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

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"smithy.api#idempotent": {}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",

"members": {}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has
been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being
applied. "
}
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"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings
current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated
data for Linux\n subscriptions. "
}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
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"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see <a

href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
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},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"

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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
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        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
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        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
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                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
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        "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
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"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"argv": [
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"ref": "Endpoint"
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                "type": "error"
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"properties": {},
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"fn": "booleanEquals",
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"fn": "getAttr",
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                    "type": "error"
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    "type": "error"
}
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"type": "tree"
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"smithy.rules#endpointTests": {
"testCases": [
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
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        "expect": {
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        }
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    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
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        },
        "params": {
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          "UseDualStack": true
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        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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          }

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        "params": {
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          "UseDualStack": false
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              "expect": {
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1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
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            },
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 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
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              "params": {
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              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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                }
               },
              "params": {
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                "UseDualStack": true
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                "endpoint": {
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                }
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              "UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
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                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
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            "params": {
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              "UseFIPS": true,
              "UseDualStack": true
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              }
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"params": {
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"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
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"UseDualStack": true
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"expect": {
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"expect": {
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
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"expect": {
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"url": "https://example.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
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"Endpoint": "https://example.com"
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"expect": {
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"params": {
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"expect": {
"error": "Invalid Configuration: Missing Region"
}
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"version": "1.0"
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"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",

"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
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"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
      <code>AmiID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>DualSubscription</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceType</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>ProductCode</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Region</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Status</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n           </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n            <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n        </ul>"
                }
            },
            "MaxResults": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "

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            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
        "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
        "target":
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"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration
resources for your account. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": " To filter your results, specify which subscription providers to
return \n\t\t\tin the list. "
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {

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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
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"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "

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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
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            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
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                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
```

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
 subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
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"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,

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                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied due to request throttling. ",
"smithy.api#error": "client"
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
         "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "tagKeys": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
          "traits": {

        "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}

```
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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package grafana

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].

```
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {
```

```
 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
```

```
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
```

```
        {
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
```

{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"

},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{

"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",

"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

```
            }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {

"conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                   },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          },
```

```
{
  "conditions": [
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      "fn": "isSet",
      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ],
          "assign": "PartitionResult"
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref":
"UseFIPS"
                },
                true
              ]
            },
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
```

```
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]

                        }
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },

  "supportsDualStack"
                                ]
                              }
                            ]
                          }
                        ],
                        "type": "tree",
                        "rules": [
                          {
                            "conditions": [],
                            "endpoint": {
                              "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                              "properties": {},
                              "headers": {}
```

```
                    },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",

        "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,

    {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                }
                ],
                "type": "tree",
```

```
                "rules": [

            {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
            "error": "FIPS is enabled but this
partition does not support FIPS",
            "type": "error"
        }
    ]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
     "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
```

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},

```
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
        "UseDualStack": false
       }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
```

```
            }
        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }

},
    {
        "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
        },
        "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
```

```
        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
          },

         "params": {
            "Region": "ca-central-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-central-1.amazonaws.com"
            }
```

```
            },
            "params": {
              "Region": "eu-central-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-north-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "eu-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-south-1.amazonaws.com"
              }
            },
            "params": {
              "Region":
"eu-south-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-west-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "eu-west-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
```

{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},

"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {

"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",

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            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },

{
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
            }
         },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
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"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
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}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true

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            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled
but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
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"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},

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                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

     "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "CreateGrant"
            }
        },
        "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckoutLicense"
            }
        },
        "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
        },
        "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckInLicense"
            }
        },
        "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
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"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {

"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"

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    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

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                "smithy.api#documentation": "<p>License consumption token.</p>",
                "smithy.api#required": {}
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {
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"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible
value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS. ",

"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "

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                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},

"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},

```
    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
      "type": "structure",
      "members": {
        "CheckoutType": {
          "target": "com.amazonaws.licensemanager#CheckoutType",
          "traits": {
            "smithy.api#documentation": "<p>Checkout type.</p>"
          }
        },
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
        "EntitlementsAllowed": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
          }
        },
         "SignedToken": {
          "target": "com.amazonaws.licensemanager#SignedToken",
          "traits": {
            "smithy.api#documentation": "<p>Signed token.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        },
        "IssuedAt": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
          }
        },
        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",

"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services
account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n
<ul>\n
```

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<li>\n            <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the

idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":

```
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",

"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region for the license.</p>",
                "smithy.api#required": {}

  }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>",
                "smithy.api#required": {}
            }
         },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n        running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n        usage.</p>",
                "smithy.api#required": {}
            }
        },
```

"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},

"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}

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        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
```

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                "traits": {
                    "smithy.api#documentation": "<p>End of the time range.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
```

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            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
```

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
```

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "

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            }
        },
        "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },

{
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
```

```
    }
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}

  }
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
    "type": "enum",
    "members": {
        "JWT_PS384": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "JWT_PS384"
            }
        }
    }
},
"com.amazonaws.licensemanager#Entitlement": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}

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        }
    },
    "com.amazonaws.licensemanager#EntitlementList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
        }
    },
    "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
```

```
    }
},
"MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Milliseconds"
    }
},
"BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes"
     }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
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"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}

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        }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

           "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action,

without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424

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        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanager#FilterValues",
                "traits": {
                    "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n         describe operation. Filters can be used
to match a set of resources by specific criteria,\n         such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
```

"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n         are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
```

```
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

   },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
```

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    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
```

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{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",

               "traits": {
                    "smithy.api#documentation": "<p>Number of available licenses.</p>"
```

```
        }
    },
    "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
            "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
        }
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License configuration status.</p>"
        }

},
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
        }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
        }
    },
    "ManagedResourceSummaryList": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
        }
    },
    "Tags": {
        "target": "com.amazonaws.licensemanager#TagList",
         "traits": {
            "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
        }
    },
    "ProductInformationList": {
        "target": "com.amazonaws.licensemanager#ProductInformationList",
        "traits": {
```

"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},

"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was
completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {

"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#input": {}
      }
```

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    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "S3BucketArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
        },
        "SnsTopicArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
          }
        },
        "OrganizationConfiguration": {
          "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
          }
        },
        "EnableCrossAccountsDiscovery": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
          }

      },
        "LicenseManagerResourceShareArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
```

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",

"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"

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            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
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            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#GrantedLicense": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
            }

},
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
```

"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}

```
            },
            "ReceivedMetadata": {
                "target": "com.amazonaws.licensemanager#ReceivedMetadata",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
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"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

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},
    "traits": {
      "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
      "EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EQUALS"
        }
      },
      "NOT_EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "NOT_EQUALS"
        }
      },
      "BEGINS_WITH": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "BEGINS_WITH"
        }
      },
      "CONTAINS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CONTAINS"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
  },
  "com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Issuer name.</p>",
          "smithy.api#required": {}
```

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                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}

```
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            },
            "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {

"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
                }
            }
```

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        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
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"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {

"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}

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            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

        "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConversionTask"
}
},
"com.amazonaws.licensemanager#LicenseCountingType": {
"type": "enum",
"members": {
"VCPU": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "vCPU"
}
},
"INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Instance"
}
},
"CORE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Core"
}
},
"SOCKET": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {

"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {

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            "smithy.api#enumValue": "DEACTIVATED"
          }
        },
        "SUSPENDED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "SUSPENDED"
          }
        },
        "EXPIRED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EXPIRED"
          }
        },

      "PENDING_DELETE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
      "type": "structure",
      "members": {
        "EntitlementUsages": {
          "target": "com.amazonaws.licensemanager#EntitlementUsageList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlement usages.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

      }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
      "type": "structure",
      "members": {
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"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n

the license rules). "
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": " Maximum number of results
to return in a single call. "
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Token for the next set of results. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": " Information about the associations for the license
configuration. "
                }
            },
            "NextToken": {

"target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Token for the next set of results. "
                }
            }

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    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
    "members": {
        "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
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"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
```

operators\n are supported: \n \n \n \n <code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {

"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
```

configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
"type": "operation",
"input": {

```
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

```
  "com.amazonaws.licensemanager#ListLicensesResponse": {
    "type": "structure",
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#LicenseList",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

"smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedGrants": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
       },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while
specifying the\n        recipient as this Amazon Web Services account, your organization, or an organizational unit\n
    (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
```

"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
```

```
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are

supported: \n \n \n \n <code>Beneficiary</code>\n \n
\n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the
application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values
are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-
server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n
    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n
        <code>resource_id</code> - The ID of the resource. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
 about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
      "type": "structure",
      "members": {
        "TokenIds": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {

            "smithy.api#documentation": "<p>Token IDs.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
      "type": "structure",
      "members": {
        "Tokens": {
          "target": "com.amazonaws.licensemanager#TokenList",
          "traits": {
            "smithy.api#documentation": "<p>Received token details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
        }
    },
    "com.amazonaws.licensemanager#MaxSize100": {
```

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The key name. "
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The value. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes key/value pairs. "
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"

```
        }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n        Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n        <ul>\n            <li>\n                <p>As a license administrator, you can
optionally specify an\n                <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
  </li>\n            <li>\n                <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                account in your
organization.</p>\n            </li>\n            <li>\n                <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n                <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n                are activating the grant.</p>\n            </li>\n        </ul>\n        <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n            <dd>\n                <p>Use this value to activate a grant
without replacing any member accounts\n                active grants for the same product.</p>\n            </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n            <dd>\n                <p>Use this value to activate a
grant and disable other active grants in any\n                member accounts
 for the same product. This action will also replace their\n                previously activated grants with this activated
grant.</p>\n            </dd>\n        </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n        override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
```

"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for

<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}

```
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
```

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
        "members": {
            "Location": {
                "target": "com.amazonaws.licensemanager#Location",
                "traits": {
                    "smithy.api#httpHeader": "Location"
                }
            },
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {

"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},

"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {

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            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",

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        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
```

"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified license configuration. "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits":

{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},

"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
```

"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},

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            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",

"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}

```
}
```

1.3620 github.com/aws/aws-sdk-go-v2/service/internal/accept-encoding 1.12.3

1.3620.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
```

```
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
```

```
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

```
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
```

```
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
```

Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
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```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
```

"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}

},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",

"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"

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            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

               "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
```

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
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"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
{
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation":
" Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information

about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",

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        "smithy.api#error": "server",
         "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
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    {

      "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager User Subscriptions",
      "arnNamespace": "license-manager-user-subscriptions",
      "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-user-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id",
        "content-length",
        "x-api-key",
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"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"

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            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],

        "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [
                            {

"fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
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                "conditions": [],
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                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},

              "headers": {}
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                "type": "endpoint"
              }
            ],
            "type": "tree"
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          {
            "conditions": [
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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
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                "conditions": [
                  {
                    "fn": "aws.partition",
                    "argv":
[
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
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                "rules": [
                  {
                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
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                            "ref": "UseFIPS"
                          },
```

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                    true

            ]
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                {
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                            "ref": "UseDualStack"
                        },
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                    ]
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            "rules": [
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                            "fn": "booleanEquals",

            "argv": [
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
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{
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                        "argv": [
                            true,
                            {
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                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
```

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                    }
                ],
                "rules": [
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                        "type": "endpoint"
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                    "conditions": [],
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both",
                    "type": "error"
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            "type": "tree"
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            "conditions": [
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                    "argv": [
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            "ref": "UseFIPS"
                        },
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                    ]
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            ],
            "rules": [
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                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
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                            "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                    ]
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                true
            ]
        }
    ],
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fips.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"
}

],
"type": "tree"
},
{
"conditions": [
    {
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        "argv": [
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                "ref": "UseDualStack"
            },
            true
        ]
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],
"rules": [
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                                {
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                                    "argv": [
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                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }

            ]
                        }
                    ],
                    "rules": [
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                            "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                     "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
```

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                "headers": {}
            },
            "type": "endpoint"
        }
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    "type": "tree"
  }
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"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack":
true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
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}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url":
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
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"params": {
"Region": "us-gov-east-1",
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"UseDualStack": false
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
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"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
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"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
}
},
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {

"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {

"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}

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            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {

        "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
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            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
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"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""
},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},
{
"name": "UNHEALTHY",
"value": "UNHEALTHY",
"documentation": ""
},
{
"name": "NOT_APPLICABLE",
"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",

            "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken

\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {

              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

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                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>Status</p>\n            </li>\n            <li>\n              <p>InstanceId</p>\n
          </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When
 this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
```

```
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits":
 {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type":

"structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {

"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"

```
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",

            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {

"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}

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            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type":
"structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {

"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,

"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An
object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}

```
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }

     },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes
tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the
identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",

"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
```

```
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
```

```
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
```

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
```

```
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
```

```
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
```

```
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
```

```
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

AWS SDK for Go
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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
```

```
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
```

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
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"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},

"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
```

current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}

```
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
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"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},

"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"

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            }
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                "conditions": [
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                                "ref": "Endpoint"
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                    }
                ],
                "rules": [
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                                "argv": [
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                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }

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                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                        "type": "error"
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                        "conditions": [],
                        "rules": [
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                                        "argv": [
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                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]

}
                                ],
                                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
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                "conditions": [],
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                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
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    ],
    "type": "tree"
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    "conditions": [],
    "rules": [
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                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
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                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
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                    "rules": [
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                            "conditions": [
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                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }

],
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                                            "argv": [
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                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
                                                            "ref": "PartitionResult"

                    },
                                                        "supportsFIPS"
                                                    ]
                                                }
                                            ]
                                        },
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
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"argv": [

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"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
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"properties": {},
"headers": {}
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"type": "endpoint"
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}
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"type": "tree"
},
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
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"conditions": [
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"fn": "booleanEquals",

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                "argv": [
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                  },
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                ]
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              {
                "conditions": [
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                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                ]
                  }
                ],
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fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                          "headers": {}
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                        "type": "endpoint"
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                    "type": "tree"
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but this partition does not support FIPS",
"type": "error"
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"type": "tree"
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"conditions": [
{
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"argv": [
{
"ref": "UseDualStack"
},
true

]
}
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

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{
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
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                                        "type": "tree"

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                                "type": "error"
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                        "rules": [
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                                "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
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                "type": "tree"
            }
        ],
        "type": "tree"
    },
```

```
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
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},
"smithy.rules#endpointTests": {
  "testCases": [
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
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   "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
        },
        "params": {
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"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {

"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
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"UseDualStack": false
}
},
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,

"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}

```
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
    }
},
```

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the

following values for the <code>Name</code> key \n \tto streamline results: \n \n \n
\n <code>AccountID</code>\n \n \n \n \n
<code>AmiID</code>\n \n \n \n \n
<code>DualSubscription</code>\n \n \n \n \n
<code>InstanceID</code>\n \n \n \n \n
<code>InstanceType</code>\n \n \n \n \n
<code>ProductCode</code>\n \n \n \n \n
<code>Region</code>\n \n \n \n \n
<code>Status</code>\n \n \n \n \n
<code>UsageOperation</code>\n \n \n \n For each filter, you can use
one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}

},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
```

"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",

"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}

```
            },

          "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
```

"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],

```
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is

the offline token. "
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {

"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100

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                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {

"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",

"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}

```
  }
}
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
```

OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer

Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

```
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
```

```
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
              "namespace": "*"
          }
      ]
  },
  "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
          "type": "service",
          "version": "2018-08-01",
          "operations": [
              {
                  "target": "com.amazonaws.licensemanager#AcceptGrant"
              },

   {
                  "target": "com.amazonaws.licensemanager#CheckInLicense"
              },
```

{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"

},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {

```
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

            }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {

"conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
```

```
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ]
},
{
    "conditions": [
        {
            "fn": "isSet",
            "argv": [
                {
                    "ref": "Region"
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "aws.partition",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ],
                    "assign": "PartitionResult"
                }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
```

```
                "argv": [
                  {
                    "ref":
"UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]

                }
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
```

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",

"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{

```
                "fn": "booleanEquals",
                "argv": [
                  true,

            {
                  "fn": "getAttr",
                  "argv": [
                    {
                      "ref": "PartitionResult"
                    },
                    "supportsFIPS"
                  ]
                }
              ]
            }
          ],
          "type": "tree",
          "rules": [

            {
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ]
        },
        {
          "conditions": [],
          "error": "FIPS is enabled but this
partition does not support FIPS",
          "type": "error"
        }
      ]
    },
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
```

```
                    }
                ],
                "type": "tree",
                 "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

"supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                },
                            "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
```

```
                "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ]
  }
]
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
        "UseDualStack": false
       }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
```

"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-1.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

```
                "url": "https://license-manager.me-south-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.sa-east-1.amazonaws.com"
             }
        },
        "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }

},
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
```

```
        },
        {
          "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-2.amazonaws.com"
            }

         },
          "params": {
            "Region": "us-east-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-east-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-2",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-1.amazonaws.com"
            }
```

```
        },
        "params": {

    "Region": "us-west-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-west-2.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-west-2",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

  "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-west-2.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-west-2",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,

          "UseDualStack": true
        }
```

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            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-northwest-1",
                "UseFIPS": false,
                "UseDualStack": false

    }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
                }
```

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        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
           }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },

    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {

"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",

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                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
```

```
        },
        "traits": {
          "aws.protocols#awsQueryError":
 {
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
```

"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must

use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible
value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "

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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "

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            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
         }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
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"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}

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        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

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    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services
account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n
<ul>\n
            <li>\n                <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },

    "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

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                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
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            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the grant.</p>"
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
```

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    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
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            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
                }
            },

   "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
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    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientRequestToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique,
 case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
 generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}

```
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
```

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            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
```

"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-

UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}

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        },
        "traits": {

"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
```

"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}
}
},
"traits": {
"smithy.api#output": {}

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    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
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"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":

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{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

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                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
```

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},

"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}

```
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes"
           }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
```

```
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target":
```

"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},

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        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
```

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                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
```

"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {

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            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
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"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#GetAccessTokenResponse":
{
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Gets detailed information about the specified grant. "
}
},
"com.amazonaws.licensemanager#GetGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [

```
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

    },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
```

```
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License configuration status.</p>"
            }

    },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
            }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was

completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},

"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},

"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}

```
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

    }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Version of the granted license.</p>"
                }
            },
            "ReceivedMetadata": {
                "target": "com.amazonaws.licensemanager#ReceivedMetadata",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
```

```
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "enum",
"members": {
"EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing

algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},

"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {

"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},

"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "

```
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
agreement that can be\n        consumed and enforced by License Manager. Components include specifications for
the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n        must be associated with a
host), and the number of licenses purchased and used.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
        "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},

"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},

"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {

"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {

"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConversionTask"
}
},
"com.amazonaws.licensemanager#LicenseCountingType": {
"type": "enum",
"members": {
"VCPU": {

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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
```

"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},

"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},

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"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
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"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
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        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
                    "smithy.api#documentation": "<p>Distributed grant details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
```

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
```

```
      "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
```

"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseSpecifications": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
```

```
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
            <li>\n                <p>\n                <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

```
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n

```
</li>\n <li>\n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
```

```
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n            <li>\n                <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n                <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is
<code>RDS</code>:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>License Pack</code> - The license
```

pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {

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                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
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"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}

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            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

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            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
 {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
```

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {

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            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
```

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},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "

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        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
```

"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
```

"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
```

"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation":
" ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {

```
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```

1.3621 aws-sdk-go-v2-internal-endpoints 2.6.33

1.3621.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
```

```
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string
```

```
 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
```

```
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan
```

```
on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
```

```
	run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}
```

```
type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err
 != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
          "type": "structure",
          "members": {
              "message": {
                  "target": "smithy.api#String"
              }
          },
          "traits": {
              "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
              "smithy.api#error": "client"
          }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
          "type": "structure",
```

"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}

```
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
```

{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",

```
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
 {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
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"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",

"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
```

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {

"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {

"min": 1
},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation":
" Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",

"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits":

{
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server",
             "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
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},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
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"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
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"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
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"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {

"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
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"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
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}
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{
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{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
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                "type": "error"
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                "type": "error"
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                "conditions": [],
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                        "ref": "Endpoint"
                    },
                    "properties": {},

                "headers": {}
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                    "type": "endpoint"
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            "type": "tree"
        },
        {
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                            "ref": "Region"
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                                            "ref": "UseDualStack"
                                        },
                                        true
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                                                "fn": "getAttr",
                                                "argv": [
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                                                        "ref": "PartitionResult"
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                                        "supportsFIPS"
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                        },

    {
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                                {
                                    "fn": "getAttr",
                                    "argv": [
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                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]

                        }
                    ],
                    "rules": [
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                            "conditions": [],
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                                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
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            "type": "tree"
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                        "conditions": [],
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both",
                        "type": "error"
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                "type": "tree"
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                                    true
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                        "rules": [
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                                "conditions": [
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                                        "argv": [
                                            {
                                                "fn": "getAttr",
                                                "argv": [
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                                                        "ref": "PartitionResult"
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                                                    "supportsFIPS"
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                                            true
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fips.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
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                                "type": "tree"
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"type": "error"
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"type": "tree"
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"conditions": [
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"argv": [
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"ref": "UseDualStack"
},
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"conditions": [

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"fn": "booleanEquals",
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsDualStack"
]
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"properties": {},

"headers": {}
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"type": "endpoint"
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"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"type": "tree"
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"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
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},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
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"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
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"params": {
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"UseFIPS": false,
"UseDualStack":
false
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},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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"params": {
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"UseDualStack": false
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"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
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"params": {
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"UseFIPS": false,
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true

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            }
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        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                }
            },

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                "UseDualStack": false
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            "expect": {
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                "UseFIPS": true,
                "UseDualStack": true
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            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
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"UseFIPS": false,

"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
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"url": "https://example.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
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"params": {
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"UseDualStack": false,
"Endpoint": "https://example.com"
}
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                {
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                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error": "Invalid Configuration: Dualstack and custom endpoint are
not supported"
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                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}

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            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {

        "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
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        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
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            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""
                },
                {
                     "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "HEALTHY",
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"value": "HEALTHY",
"documentation": ""
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{
"name": "UNHEALTHY",
"value": "UNHEALTHY",
"documentation": ""
},
{
"name": "NOT_APPLICABLE",
"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
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"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
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"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
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"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {

"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
```

"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",

"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
        "type":
 "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {

                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
```

"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions
operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

"smithy.api#documentation": " The tags for the specified resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {

"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
```

"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory
that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific
user. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":

```
{
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
```

"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},

"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound
TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}

```
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },

 "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],

    "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An
 object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
                }
```

```
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The
 domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
         "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
```

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}

},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",

"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "

```
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>A parameter is not valid.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string
```

```
// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}
```

```
type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

```
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
```

```
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
```

```
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
```

```
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
```

```
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string
```

```
 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
```

Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

```
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

OperationName: "DeleteLicense",
}
}
AssociateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {

"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
                 }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

         },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
```

```
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
```

"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}

},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
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"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

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],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
```

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                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

        "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {

                      "ref": "UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }

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                    "rules": [
                      {
                        "conditions": [
```

```
                                    {
                                      "fn": "booleanEquals",
                                      "argv": [
                                        true,
                                        {
                                          "fn": "getAttr",
                                          "argv": [
                                            {
                                              "ref": "PartitionResult"

                    },
                                            "supportsFIPS"
                                          ]
                                        }
                                      ]
                                    },
                                    {
                                      "fn": "booleanEquals",
                                      "argv": [
                                        true,
                                        {
                                          "fn": "getAttr",
                                          "argv": [

                                           {
                                              "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                          ]
                                        }
                                      ]
                                    }
                                  ],
                                  "rules": [
                                    {
                                      "conditions": [],

        "rules": [
                                        {
                                          "conditions": [],
                                          "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                          },
                                          "type": "endpoint"
                                        }
```

```
                                    ],

                            "type": "tree"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {

            "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
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                        "rules": [
                            {
                                "conditions": [
                                    {

                    "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            },
                                            true
```

```
                    ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS is enabled
but this partition does not support FIPS",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true

                ]
            }
        ],
        "rules": [
            {
```

"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},

```
                    {
                      "conditions": [],
                      "rules": [
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ],
          "type": "tree"
        }
      ]
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
```

{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}

```
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
             },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
```

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"

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            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {

       "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
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"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",

"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n      organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n
<li>\n              <p>\n                <code>Subscription</code>\n              </p>\n          </li>\n        </ul>\n
<p>The
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n              <p>\n
<code>contains</code>\n              </p>\n          </li>\n          <li>\n              <p>\n
<code>equals</code>\n              </p>\n          </li>\n          <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
```

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
```

"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":

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{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

```
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}

```
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
```

```
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
```

"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}

ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware

RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
           {
               "id": "HttpHeaderTrait",
               "namespace": "*"
           },
```

```
        {
          "id": "HttpUriConflict",
          "namespace": "*"
        },
        {
          "id": "Service",
          "namespace": "*"
        }
      ]
    },
    "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
          {
            "target": "com.amazonaws.licensemanager#AcceptGrant"
          },

 {
            "target": "com.amazonaws.licensemanager#CheckInLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CheckoutLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateGrant"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateGrantVersion"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
           },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
```

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},

{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",

"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [

```
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {

"conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
             },
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
},
{
  "conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
```

```
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                     "fn": "aws.partition",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ],
                    "assign": "PartitionResult"
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref":
"UseFIPS"
                                },
                                true
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "type": "tree",
                    "rules": [
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                         "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
```

```
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]

                }
                    ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },

    "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}

        },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
```

```
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",

      "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,

{
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                }
                ],
                "type": "tree",
                "rules": [

{
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
```

```
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this
partition does not support FIPS",
        "type": "error"
    }
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
     "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },

    "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
                {
```

"conditions": [],
"endpoint": {
"url": "https://license-manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
]
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.af-south-1.amazonaws.com"
}

```
    },
    "params": {
      "Region": "af-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-east-1",
      "UseFIPS": false,
      "UseDualStack": false
     }
  },
  {
    "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-northeast-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-northeast-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-northeast-2.amazonaws.com"
       }
    },
    "params": {
      "Region": "ap-northeast-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
```

"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",

"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
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},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS

disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
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"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
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"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
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"params": {

"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
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"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {

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            "endpoint": {
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            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
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        {
        "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-2.amazonaws.com"
            }

         },
        "params": {
            "Region": "us-east-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
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        "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
        "expect": {
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        "params": {
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            "UseFIPS": true,
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"UseDualStack": false
}
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"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
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"params": {

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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.us-west-2.amazonaws.com"
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

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"endpoint": {
"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
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"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",

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            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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        "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

}
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
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        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
             }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
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        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
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            "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
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        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
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    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
          }
         },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
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        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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            },
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"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-gov-west-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
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              "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-gov-east-1.api.aws"
                }
              },

    "params": {
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                "UseFIPS": true,
                "UseDualStack": true
              }
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              "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-gov-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
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            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
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"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",

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                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
  "output": {
    "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
```

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    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
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"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}

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    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
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"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
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"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
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"com.amazonaws.licensemanager#CheckoutBorrowLicense":
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"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "

```
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
```

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            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
 account that created the license is the same that is performing the check out, you must\n            specify the account
 as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
```

"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "

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            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
```

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    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ConflictException",
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"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {

"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of

license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
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"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
"type": "structure",
"members": {

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            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
```

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    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
           "traits": {
            "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
          }
        },
        "LicenseCountHardLimit": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
          }
        },
        "LicenseRules": {
          "target":
 "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
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        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n          </li>\n
<li>\n
  <p>\n                <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
          },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
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            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
                    "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
```

```
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
```

generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn":
{
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product
name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
```

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            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
             },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
```

"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}

```
            },

  "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

    {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT
token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n         JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n         License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n         to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
```

```
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",

       "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>"
        }
      },
      "TokenType": {
        "target": "com.amazonaws.licensemanager#TokenType",
        "traits": {
          "smithy.api#documentation": "<p>Token type.</p>"
        }
      },
      "Token": {
        "target": "com.amazonaws.licensemanager#TokenString",
        "traits": {
          "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
         "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
```

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
 {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
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"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {

"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {

"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}

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        },
        "BYTES": {
          "target": "smithy.api#Unit",
           "traits": {
             "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Kilobytes"
          }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "Megabits"
```

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            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},

"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},

"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}

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            },
            "GIGABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits"
                }
            },
            "TERABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits"
                }
            },
            "PERCENT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Percent"
                }
            },
            "BYTES_PER_SECOND": {
                "target":
"smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bytes/Second"
                }
            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
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"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {

"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {

"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
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"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {

```
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
    }
},
"LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
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"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}

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            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
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"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",

"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

          },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
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"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {

  "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
          "LicenseUsage": {
            "target":
"com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
```

"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data,

discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "

```
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
```

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            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
```

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",

"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
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"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "enum",
"members": {

"EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"
}
},
"CONTAINS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage

of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},

"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {

"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n

Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "

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            }
        },
        "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
            }
        },

    "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfiguration"
    }
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
    "members": {
        "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
                "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
            }
        }
    },
```

"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation":
" The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {

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                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
```

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    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
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"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"

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            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
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"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n

```
</li>\n <li>\n <p>\n <code>GrantStatus</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
```

"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
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</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

         "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
```

account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}

```
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

```
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n              <p>\n                <code>Beneficiary</code>\n              </p>\n
      </li>\n            <li>\n              <p>\n                <code>ProductSKU</code>\n              </p>\n            </li>\n
   <li>\n              <p>\n                <code>Fingerprint</code>\n              </p>\n            </li>\n            <li>\n
<p>\n                <code>Status</code>\n              </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
```

"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while

specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}

```
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
      <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n "
}
},

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
```

```
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n              <p>\n                <code>LicenseArns</code>\n              </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100

```
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>. \n \n \n
\n <code>Application Publisher</code> - The publisher of the application.\n Logical

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

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        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
     }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
```

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            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
```

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            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
```

"members": {
"Location": {
"target": "com.amazonaws.licensemanager#Location",
"traits": {
"smithy.api#httpHeader": "Location"
}
},
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " This is not the correct Region for the resource. Try again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#RejectGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
```

{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

```
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
```

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report

generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}

```
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
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"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

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"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096

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            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
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        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
"com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

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            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
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format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {

"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
```

"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
```

update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
```

```
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```

1.3622 aws-sdk-go-v2-service-internal-accept-encoding 1.12.3

1.3622.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType
```

```
 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string
```

```
 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
```

```
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
```

```
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
```

```
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err
!= nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
```

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>

resource. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider":
 {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
```

"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory":
{
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based
subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest":
{
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                 "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}

        }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation":
" Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {

"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",

"smithy.api#required": {}
}
},
"Settings": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",

"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}

},
"StatusMessage": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",

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        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
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            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

    },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
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"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",
"x-api-key",

"authorization",
"x-amz-date",

"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn":
"AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured
endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},

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"rules": [
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    "conditions": [
      {
        "fn": "isSet",
        "argv": [
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            "ref": "Endpoint"
          }
        ]
      }
    ],

"rules": [
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            "fn": "booleanEquals",
            "argv": [
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                "ref": "UseFIPS"
              },
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            ]
          }
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        "type": "error"
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      {
        "conditions": [
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"fn": "booleanEquals",
            "argv": [
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                "ref": "UseDualStack"
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            ]
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        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
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        "conditions": [],
        "endpoint": {
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        "type": "tree"
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        "conditions": [
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                "argv": [
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                        "ref": "Region"
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                        "argv":
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                        "assign": "PartitionResult"
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                "rules": [
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                                "argv": [
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"argv": [
{
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"argv": [
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
},
"supportsFIPS"
]
}
]
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{
"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsDualStack"
]
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]
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                    }
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                        "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
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                        "type": "endpoint"
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both",
                    "type": "error"
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            "type": "tree"
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            "conditions": [
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                    "argv": [
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      "ref": "UseFIPS"
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                            "argv": [
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                                    "fn": "getAttr",
                                    "argv": [
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                                    "supportsFIPS"
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                                "headers": {}
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                          "type": "error"
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"argv": [
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
},
"supportsDualStack"
]
}

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"conditions": [],
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"conditions": [],
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"type": "error"
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"type": "tree"
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"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},

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              "type": "endpoint"
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        }
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      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint":
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          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
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      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
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        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,

  "UseDualStack": false
      }
    },
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack":
true
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url":
"https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
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"params": {
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"UseDualStack": true
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack":
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack":
true
}
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition
does not support one or both"
},
"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,

"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
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}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {

"url": "https://example.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
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"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license
server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {

"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}

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            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },
            "CreationTime": {

        "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {
        "type": "string",
        "traits":
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            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
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                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
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"value": "PROVISIONED",
"documentation": ""
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"value": "DELETING",
"documentation": ""
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"value": "DELETION_FAILED",
"documentation": ""
},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
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}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},
{
"name": "UNHEALTHY",
"value": "UNHEALTHY",
"documentation": ""
},
{
"name": "NOT_APPLICABLE",
"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for your \n\t\t\tserver.</p>",

            "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken

\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
"traits": {

"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {

              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>Status</p>\n            </li>\n            <li>\n              <p>InstanceId</p>\n
          </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When
 this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token
\n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },
            "smithy.api#paginated": {

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
```

```
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits":
 {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type": "operation",
        "input": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type":

"structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {

"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {

"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to
retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"

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            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Lists user associations for an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListUserAssociations"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required":
{}
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",

            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",
"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {

"type": "string",
"traits": {
"smithy.api#length": {
"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}

```
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type":
"structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {

"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,

"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An
object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The
domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}

```
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }

     },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes
 tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
 to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {

 "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
"
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the
identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",

"members": {
"AddSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint
for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation":
" Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil
 {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
```

```
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
```

```
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
```

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
```

```
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
```

```
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
```

```
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
```

```
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
GetLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
```

```
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
```

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},

"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
```

current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}

```
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},

"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"

```
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }

        ],
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]

}
                                ],
                                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
```

```
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
```

```
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }

],
                            "rules": [
                                {
                                    "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
                                                            "ref": "PartitionResult"

                    },
                                                        "supportsFIPS"
                                                    ]
                                                }
                                            ]
                                        },
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
```

"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",

```
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

        "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [
                      {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                    "type": "tree"
                  }
                ],
```

"type": "tree"
},
{
"conditions": [],
"error": "FIPS is enabled
but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

```
{
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"

                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
```

```
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {

   "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
        },
        "params": {
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"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {

"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,

"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}

```
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
    }
},
```

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the

following values for the <code>Name</code> key \n \tto streamline results: \n \n \n
\n <code>AccountID</code>\n \n \n \n \n
<code>AmiID</code>\n \n \n \n \n
<code>DualSubscription</code>\n \n \n \n \n
<code>InstanceID</code>\n \n \n \n \n
<code>InstanceType</code>\n \n \n \n \n
<code>ProductCode</code>\n \n \n \n \n
<code>Region</code>\n \n \n \n \n
<code>Status</code>\n \n \n \n \n
<code>UsageOperation</code>\n \n \n \n For each filter, you can use
one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}

},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
```

"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",

"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}

```
            },

          "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
```

"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],

```
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is

the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100

```
                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

```
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
```

"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",

"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}

```
  }
}
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
```

OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer

Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CreateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err !=
 nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err !=
 nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
              "namespace": "*"
          }
      ]
  },
  "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
          "type": "service",
          "version": "2018-08-01",
          "operations": [
              {
                  "target": "com.amazonaws.licensemanager#AcceptGrant"
              },

   {
                  "target": "com.amazonaws.licensemanager#CheckInLicense"
              },
```

{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"

},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {

```
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

            }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {

"conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
```

```
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ]
},
{
    "conditions": [
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            "fn": "isSet",
            "argv": [
                {
                    "ref": "Region"
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [
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            "conditions": [
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                    "fn": "aws.partition",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ],
                    "assign": "PartitionResult"
                }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
```

```
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                    "ref":
"UseFIPS"
                  },
                  true
                ]
              },
              {
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                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
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            "rules": [
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                    "argv": [
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                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]

                }
                    ]
                  },
                  {
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                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
```

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",

"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{

```
                "fn": "booleanEquals",
                "argv": [
                  true,

            {
                  "fn": "getAttr",
                  "argv": [
                    {
                      "ref": "PartitionResult"
                    },
                    "supportsFIPS"
                  ]
                }
              ]
            }
          ],
          "type": "tree",
          "rules": [

            {
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ]
        },
        {
          "conditions": [],
          "error": "FIPS is enabled but this
partition does not support FIPS",
          "type": "error"
        }
      ]
    },
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
```

```
                    }
                ],
                "type": "tree",
                 "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

"supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                },
                            "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
```

```
                "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
      ]
    }
  ]
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
        "UseDualStack": false
       }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
```

"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-1.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
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"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
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"params": {
"Region": "ap-south-1",
"UseFIPS": false,

"UseDualStack": false
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"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

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"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
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"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
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"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
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"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.eu-south-1.amazonaws.com"
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"params": {
"Region":
"eu-south-1",
"UseFIPS": false,

"UseDualStack": false
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"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
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"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
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"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
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"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
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"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
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"endpoint": {

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                "url": "https://license-manager.me-south-1.amazonaws.com"
            }
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        "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
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        "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
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                "url": "https://license-manager.sa-east-1.amazonaws.com"
             }
        },
        "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
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    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-1.amazonaws.com"
            }
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        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }

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        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
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        },
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          "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-2.amazonaws.com"
            }

         },
          "params": {
            "Region": "us-east-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-east-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-2",
            "UseFIPS": true,
            "UseDualStack": false
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          "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-west-1.amazonaws.com"
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          "params": {
            "Region": "us-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-1.amazonaws.com"
            }
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            },
            "params": {

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                "UseDualStack": false
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                "UseDualStack": false
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                "UseFIPS": true,
                "UseDualStack": false
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            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
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                "UseFIPS": false,
                "UseDualStack": true
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              "expect": {
                "endpoint": {
                  "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
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              "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-northwest-1",
                "UseFIPS": false,
                "UseDualStack": false

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            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
                }
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          "UseFIPS": true,
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          "UseFIPS": false,
          "UseDualStack": true
        }
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        "expect": {
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            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
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}
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"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseFIPS": true,
"UseDualStack": true
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"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {

"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
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},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",

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                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
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        },
        "traits": {
          "aws.protocols#awsQueryError":
 {
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
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"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
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"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
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"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
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"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must

use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible
value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {

"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {

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            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
```

```
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
          "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PROVISIONAL"
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
           }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
```

"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}

```
        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
```

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            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the grant.</p>"
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
```

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            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
                }
            },

   "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
```

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientRequestToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique,
 case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
 generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}

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            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
```

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            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
```

"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-

UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}

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        },
        "traits": {

"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
```

"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}
}
},
"traits": {
"smithy.api#output": {}

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    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",

"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":

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{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>",
                "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
```

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},

"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}

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        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes"
           }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
```

```
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target":
```

"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},

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        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
```

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                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
```

"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {

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            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
```

"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#GetAccessTokenResponse":
{
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Gets detailed information about the specified grant. "
}
},
"com.amazonaws.licensemanager#GetGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [

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        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

    },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
```

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        }
    },
    "LicenseCountingType": {
        "target": "com.amazonaws.licensemanager#LicenseCountingType",
        "traits": {
            "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
        }
    },
    "LicenseRules": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
        }
    },
    "LicenseCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",

       "traits": {
            "smithy.api#documentation": "<p>Number of available licenses.</p>"
        }
    },
    "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
            "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
        }
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License configuration status.</p>"
        }

},
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
        }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
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"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was

completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},

"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},

"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}

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        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}

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            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Version of the granted license.</p>"
                }
            },
            "ReceivedMetadata": {
                "target": "com.amazonaws.licensemanager#ReceivedMetadata",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
```

```
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

    },
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
      "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
          "target": "smithy.api#Unit",
          "traits": {
```

"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing

algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},

"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {

"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},

"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "

```
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
agreement that can be\n        consumed and enforced by License Manager. Components include specifications for
the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n
Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n        must be associated with a
host), and the number of licenses purchased and used.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
        "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},

"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},

"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {

"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {

"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConversionTask"
}
},
"com.amazonaws.licensemanager#LicenseCountingType": {
"type": "enum",
"members": {
"VCPU": {

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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
```

"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},

"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},

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"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
                    "smithy.api#documentation": "<p>Distributed grant details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
```

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
```

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        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
```

"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseSpecifications": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
```

```
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": "<p>Information
about the resources.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
            <li>\n                <p>\n                <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

```
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n

```
</li>\n <li>\n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
```

```
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n            <li>\n                <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n                <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is
<code>RDS</code>:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>License Pack</code> - The license
```

pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {

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                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
```

"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}

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            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

```
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
 {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
```

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {

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            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
```

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},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "

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        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
```

"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
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"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
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"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
```

"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation":
" ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {

```
            "min": 0,
            "max": 50
          }
        }
      },
      "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

       "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
  }
```


1.3623 compress 1.18.0

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1.3624 protobuf 1.36.5

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1.3627 open-ldap 2.6.7+dfsg-1~exp1ubuntu8.2

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1.3628 openssl 3.0.2-0ubuntu1.19

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1.3634 python3.12 3.12.3-1ubuntu0.5

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Python was created in the early 1990s by Guido van Rossum at Stichting
Mathematisch Centrum (CWI, see https://www.cwi.nl) in the Netherlands
as a successor of a language called ABC. Guido remains Python's
principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for
National Research Initiatives (CNRI, see https://www.cnri.reston.va.us)
in Reston, Virginia where he released several versions of the
software.

In May 2000, Guido and the Python core development team moved to
BeOpen.com to form the BeOpen PythonLabs team. In October of the same
year, the PythonLabs team moved to Digital Creations, which became
Zope Corporation. In 2001, the Python Software Foundation (PSF, see
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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the
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Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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a) Accompany
the work with the complete corresponding
machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate
properly with a modified version of the library, if
the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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1.3642 go-autorest 0.11.30

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1.3646 foreground-child 3.3.1

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1.3647 azure-sdk-for-go-sdk-internal v1.5.2

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1.3648 grpc-gateway 2.26.1

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1.3649 dmidecode 3.5-3ubuntu0.1

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1.3651 github.com/twmb/franz-go/pkg/kmsg 1.9.0

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1.3652 go-json 0.10.5

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1.3653 github.com/goccy/go-json 0.10.5

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1.3654 kubernetes-api 0.29.0

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1.3655 aws-sdk-go 1.55.3

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{
 "version": "2.0",
 "service": " With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances. ",
 "operations": {
   "AssociateUser": " Associates the user to an EC2 instance to utilize user-based subscriptions. <note> Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your monthly charges in the Amazon Web Services Billing User Guide. </note>",
   "DeregisterIdentityProvider": " Deregisters the identity provider from providing user-based subscriptions. ",
   "DisassociateUser": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
   "ListIdentityProviders":
 " Lists the identity providers for user-based subscriptions. ",
   "ListInstances": " Lists the EC2 instances providing user-based subscriptions. ",
   "ListProductSubscriptions": " Lists the user-based subscription products available from an identity provider. ",
   "ListUserAssociations": " Lists user associations for an identity provider. ",
   "RegisterIdentityProvider": " Registers an identity provider for user-based subscriptions. ",
   "StartProductSubscription": " Starts a product subscription for a user with the specified identity provider. <note> Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges in the Amazon Web
 Services Billing User Guide. </note>",
   "StopProductSubscription": " Stops a product subscription for a user with the specified identity provider. ",
   "UpdateIdentityProviderSettings": " Updates additional product configuration settings for the registered identity provider. "
 },

"shapes": {
"AccessDeniedException": {
"base": " You don't have sufficient access to perform this action. ",
"refs": {
}
},
"ActiveDirectoryIdentityProvider": {
"base": " Details about an Active Directory identity provider. ",
"refs": {
"IdentityProvider$ActiveDirectoryIdentityProvider": " An object that details an Active Directory identity provider. "
}
},
"AssociateUserRequest": {
"base": null,
"refs": {
}
},
"AssociateUserResponse": {
"base": null,
"refs": {
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListIdentityProvidersRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListInstancesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListProductSubscriptionsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUserAssociationsRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"ConflictException": {
"base": " The request couldn't be completed because it conflicted with the current state of the resource. ",
"refs": {
}
},
"DeregisterIdentityProviderRequest": {
"base": null,
"refs": {
}
},
"DeregisterIdentityProviderResponse": {
"base": null,
"refs": {
}

},
"DisassociateUserRequest": {
"base": null,
"refs": {
}
},
"DisassociateUserResponse": {
"base": null,
"refs": {
}
},
"Filter": {
"base": " A
filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
"refs": {
"FilterList$member": null
}
},
"FilterList": {
"base": null,
"refs": {
"ListInstancesRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
"ListProductSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
"ListUserAssociationsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. "
}
},
"IdentityProvider": {
"base": " Details about an identity provider. ",
"refs": {
"AssociateUserRequest$IdentityProvider": " The identity provider of the user. ",
"DeregisterIdentityProviderRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"DisassociateUserRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"IdentityProviderSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"InstanceUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"ListProductSubscriptionsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"ListUserAssociationsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"ProductUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"RegisterIdentityProviderRequest$IdentityProvider":

" An object that specifies details for the identity provider. ",
"StartProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"StopProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"UpdateIdentityProviderSettingsRequest$IdentityProvider": null
}
},
"IdentityProviderSummary": {
"base": " Describes an identity provider. ",
"refs": {
"DeregisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"IdentityProviderSummaryList$member": null,
"RegisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"UpdateIdentityProviderSettingsResponse$IdentityProviderSummary": null

}
},
"IdentityProviderSummaryList": {
"base": null,
"refs": {
"ListIdentityProvidersResponse$IdentityProviderSummaries": " Metadata that describes the list identity providers operation. "
}
},
"InstanceSummary": {
"base": " Describes an EC2 instance providing user-based subscriptions. ",
"refs": {
"InstanceSummaryList$member": null
}
},
"InstanceSummaryList": {
"base": null,
"refs": {
"ListInstancesResponse$InstanceSummaries": " Metadata that describes the list instances operation. "
}
},
"InstanceUserSummary": {
"base": " Describes users of an EC2 instance providing user-based subscriptions. ",
"refs": {
"AssociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",
"DisassociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",

"InstanceUserSummaryList$member": null
}
},
"InstanceUserSummaryList": {
"base": null,
"refs": {
"ListUserAssociationsResponse$InstanceUserSummaries": " Metadata that describes the list user association operation. "
}
},
"InternalServerException": {
"base": " An exception occurred with the service. ",
"refs": {
}
},
"ListIdentityProvidersRequest": {
"base": null,
"refs": {
}
},
"ListIdentityProvidersResponse": {
"base": null,
"refs": {
}
},
"ListInstancesRequest": {
"base": null,
"refs": {
}
},
"ListInstancesResponse": {
"base": null,
"refs": {
}
},
"ListProductSubscriptionsRequest": {
"base": null,
"refs": {
}
},
"ListProductSubscriptionsResponse": {
"base": null,
"refs": {
}
},
"ListUserAssociationsRequest": {
"base": null,
"refs": {

```
    }
  },
  "ListUserAssociationsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ProductUserSummary": {
    "base": "<p>The summary of the user-based subscription products for a user.</p>",
    "refs": {
      "ProductUserSummaryList$member": null,
      "StartProductSubscriptionResponse$ProductUserSummary": "<p>Metadata that describes the start product subscription operation.</p>",
      "StopProductSubscriptionResponse$ProductUserSummary": "<p>Metadata that describes the start product subscription operation.</p>"
    }
  },
  "ProductUserSummaryList": {
    "base": null,
    "refs": {
      "ListProductSubscriptionsResponse$ProductUserSummaries": "<p>Metadata that describes the list product subscriptions operation.</p>"
    }
  },
  "RegisterIdentityProviderRequest": {
    "base": null,
    "refs": {
    }
  },
  "RegisterIdentityProviderResponse": {
    "base": null,
    "refs": {
    }
  },
  "ResourceNotFoundException":
 {
    "base": "<p>The resource couldn't be found.</p>",
    "refs": {
    }
  },
  "SecurityGroup": {
    "base": null,
    "refs": {
      "Settings$SecurityGroupId": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoint for activation servers.</p>",
      "UpdateSettings$SecurityGroupId": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for activation servers.</p>"
    }
```

},
"ServiceQuotaExceededException": {
"base": " The request failed because a service quota is exceeded. ",
"refs": {
}
},
"Settings": {
"base": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication
from resources in the VPC. ",
"refs": {
"IdentityProviderSummary$Settings": " An object that details the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. ",
"RegisterIdentityProviderRequest$Settings": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. "
}
},
"SettingsSubnetsList": {
"base": null,
"refs": {
"Settings$Subnets": " The subnets defined for the registered identity provider. "
}
},
"StartProductSubscriptionRequest": {
"base": null,
"refs": {
}
},
"StartProductSubscriptionResponse": {
"base": null,
"refs": {
}
},
"StopProductSubscriptionRequest": {
"base": null,
"refs": {
}
},
"StopProductSubscriptionResponse": {
"base": null,
"refs": {
}
},
"String":
{
"base": null,
"refs": {

"AccessDeniedException$message": null,
"ActiveDirectoryIdentityProvider$DirectoryId": " The directory ID for an Active Directory identity provider. ",
"AssociateUserRequest$Domain": " The domain name of the user. ",
"AssociateUserRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"AssociateUserRequest$Username": " The user name from the identity provider for the user. ",
"ConflictException$message": null,
"DeregisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
"DisassociateUserRequest$Domain": " The domain name of the user. ",
"DisassociateUserRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"DisassociateUserRequest$Username": " The user name from the identity provider for the user. ",

"Filter$Attribute": " The name of an attribute to use as a filter. ",
"Filter$Operation": " The type of search (For example, eq, geq, leq) ",
"Filter$Value": " Value of the filter. ",
"IdentityProviderSummary$FailureMessage": " The failure message associated with an identity provider. ",
"IdentityProviderSummary$Product": " The name of the user-based subscription product. ",
"IdentityProviderSummary$Status": " The status of an identity provider. ",
"InstanceSummary$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"InstanceSummary$LastStatusCheckDate": " The date of the last status check. ",
"InstanceSummary$Status": " The status of an EC2 instance resource. ",
"InstanceSummary$StatusMessage": " The status message for an EC2 instance. ",
"InstanceUserSummary$AssociationDate": " The date a user was associated with an EC2 instance. ",
"InstanceUserSummary$DisassociationDate": " The date a user was disassociated from an EC2 instance. ",
"InstanceUserSummary$Domain": " The domain name of the user. ",
"InstanceUserSummary$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"InstanceUserSummary$Status": " The status of a user associated with an EC2 instance. ",
"InstanceUserSummary$StatusMessage": " The status message for users of an EC2 instance. ",
"InstanceUserSummary$Username": " The user name from the identity provider for the user. ",
"InternalServerException$message": null,
"ListIdentityProvidersRequest$NextToken": " Token for the next set of results. ",
"ListIdentityProvidersResponse$NextToken": " Token for the next set of results. ",
"ListInstancesRequest$NextToken": " Token for the next set of results. ",
"ListInstancesResponse$NextToken": " Token for the next set of results. ",
"ListProductSubscriptionsRequest$NextToken": " Token for the next set of results. ",
"ListProductSubscriptionsRequest$Product": " The name of the user-based subscription product. ",
"ListProductSubscriptionsResponse$NextToken": " Token for the next set of results. ",
"ListUserAssociationsRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"ListUserAssociationsRequest$NextToken": " Token for the next set of results. ",

"ListUserAssociationsResponse$NextToken": " Token for the next set of results. ",
"ProductUserSummary$Domain": " The domain name of the user. ",
"ProductUserSummary$Product": " The name of the user-based subscription product. ",
"ProductUserSummary$Status": " The status of a product for a user. ",
"ProductUserSummary$StatusMessage": " The status
message for a product for a user. ",
"ProductUserSummary$SubscriptionEndDate": " The end date of a subscription. ",
"ProductUserSummary$SubscriptionStartDate": " The start date of a subscription. ",
"ProductUserSummary$Username": " The user name from the identity provider of the user. ",
"RegisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
"ResourceNotFoundException$message": null,
"ServiceQuotaExceededException$message": null,
"StartProductSubscriptionRequest$Domain": " The domain name of the user. ",
"StartProductSubscriptionRequest$Product": " The name of the user-based subscription product. ",
"StartProductSubscriptionRequest$Username": " The user name from the identity provider of the user. ",
"StopProductSubscriptionRequest$Domain": " The domain name of the user. ",
"StopProductSubscriptionRequest$Product":
" The name of the user-based subscription product. ",
"StopProductSubscriptionRequest$Username": " The user name from the identity provider for the
user. ",
"StringList$member": null,
"ThrottlingException$message": null,
"UpdateIdentityProviderSettingsRequest$Product": " The name of the user-based subscription
product. ",
"ValidationException$message": null
}
},
"StringList": {
"base": null,
"refs": {
"InstanceSummary$Products": " A list of provided user-based subscription products. "
}
},
"Subnet": {
"base": null,
"refs": {
"SettingsSubnetsList$member": null,
"Subnets$member": null
}
},
"Subnets": {
"base": null,
"refs": {
"UpdateSettings$AddSubnets": " The ID of one or more subnets in which License Manager will create a
VPC endpoint for products that require connectivity to activation servers. ",
"UpdateSettings$RemoveSubnets":
" The ID of one or more subnets to remove. "
}

```
  },
  "ThrottlingException": {
    "base": "<p>The request was denied because of request throttling. Retry the request.</p>",
    "refs": {
    }
  },
  "UpdateIdentityProviderSettingsRequest": {
    "base": null,
    "refs": {
    }
  },
  "UpdateIdentityProviderSettingsResponse": {
    "base": null,
    "refs": {
    }
  },
  "UpdateSettings": {
    "base": "<p>Updates the registered identity providers product related configuration settings such as the subnets
to provision VPC endpoints.</p>",
    "refs": {
      "UpdateIdentityProviderSettingsRequest$UpdateSettings": "<p>Updates the registered identity providers
product related configuration settings. You can update any combination of settings in a single operation such as
the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets
which you want to remove the VPC endpoints
 from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </ul>"
    }
  },
  "ValidationException": {
    "base": "<p>A parameter is not valid.</p>",
    "refs": {
    }
  }
 }
}
{
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-
```

stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {

"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "aws.partition",
"argv": [
{
"ref": "Region"
}
],
"assign": "PartitionResult"
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
},
{
"fn": "parseURL",

```
      "argv": [
          {
              "ref": "Endpoint"
          }
        ],
        "assign": "url"
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
     },
    {
        "conditions": [],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },

      {
                "conditions": [],
                "endpoint": {
```

```
                "url": {
                    "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ]
  }
]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]

},
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                    "ref": "PartitionResult"
```

```
            },
                        "supportsFIPS"
                    ]
                }
            ]
        },
        {
            "fn": "booleanEquals",
            "argv": [
                true,
                {
                    "fn": "getAttr",
                    "argv": [
                        {
                            "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                    ]
                }
            ]
        }

        ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
            "type": "error"
        }
    ]
},

{
    "conditions": [
        {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ]
              },
              {

          "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"
```

```
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,

    {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},

                "headers": {}
                        },
                        "type": "endpoint"
```

```
                }
            ]
        },
        {
            "conditions": [],
            "error": "DualStack is enabled but this partition does not support DualStack",
            "type": "error"
        }
    ]
},
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
}
]
}
{
 "version": "2.0",
 "service": "<p>With License Manager, you can discover and track your commercial Linux subscriptions on running Amazon EC2 instances.</p>",
 "operations": {
   "DeregisterSubscriptionProvider": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions registered to your account.</p>",
   "GetRegisteredSubscriptionProvider": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
   "GetServiceSettings": "<p>Lists the Linux subscriptions service settings for your account.</p>",
   "ListLinuxSubscriptionInstances": "<p>Lists the running Amazon EC2 instances that were discovered with commercial Linux subscriptions.</p>",
   "ListLinuxSubscriptions": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your organization, the returned results will include data aggregated across your accounts in Organizations.</p>",
   "ListRegisteredSubscriptionProviders":
 "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
   "ListTagsForResource": "<p>List the metadata tags that are assigned to the specified Amazon Web Services resource.</p>",
   "RegisterSubscriptionProvider": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
   "TagResource": "<p>Add metadata tags to the specified Amazon Web Services resource.</p>",
   "UntagResource": "<p>Remove one or more metadata tag from the specified Amazon Web Services resource.</p>",
   "UpdateServiceSettings": "<p>Updates the service settings for Linux subscriptions.</p>"
 },
```

"shapes": {
"Boolean": {
"base": null,
"refs": {
"UpdateServiceSettingsRequest$AllowUpdate": " Describes if updates are allowed to the service settings for Linux subscriptions. If you allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesRequest$MaxResults": " The maximum items to return in a request. ",
"ListLinuxSubscriptionsRequest$MaxResults": " The maximum items to return in a request. "
}
},
"BoxLong": {
"base": null,
"refs": {
"Subscription$InstanceCount": " The total amount of running instances using this subscription. "
}
},
"DeregisterSubscriptionProviderRequest": {
"base": null,
"refs": {
}
},
"DeregisterSubscriptionProviderResponse": {
"base": null,
"refs": {
}
},
"Filter": {
"base": " A filter object that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria. ",
"refs": {
"FilterList$member": null
}
},
"FilterList": {
"base": null,
"refs": {

"ListLinuxSubscriptionInstancesRequest$Filters": " An array of structures that you can use to filter the results by your specified criteria. For example, you can specify <code>Region</code> in the <code>Name</code>, with the <code>contains</code> operator to list all subscriptions that match a partial string in the <code>Value</code>, such as <code>us-west</code>. For each filter, you can specify one of the following values for the <code>Name</code> key to streamline results: <ul> <code>AccountID</code>

<code>AmiID</code>   <code>DualSubscription</code>   <code>InstanceID</code>   <code>InstanceType</code>   <code>ProductCode</code>   <code>Region</code>   <code>Status</code>   <code>UsageOperation</code>   For each filter, you can use one of the following <code>Operator</code> values to define the behavior of the filter: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> ",
      "ListLinuxSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of <code>Subscription</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain subscription's name. The valid names for this filter are: <ul> <code>Subscription</code>   The valid Operators for this filter are: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> "
    }
  },
  "GetRegisteredSubscriptionProviderRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetRegisteredSubscriptionProviderResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetServiceSettingsRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetServiceSettingsResponse": {
    "base": null,
    "refs": {
    }
  },
  "Instance": {
    "base": " Details discovered information about a running instance using Linux subscriptions. ",
    "refs": {
      "InstanceList$member": null
    }
  },
  "InstanceList": {
    "base": null,
    "refs": {
      "ListLinuxSubscriptionInstancesResponse$Instances": " An array that contains instance objects. "
    }
  },

"InternalServerException": {
"base": " An exception occurred with the service. ",
"refs": {
}
},
"LinuxSubscriptionsDiscovery": {
"base": null,
"refs": {
"GetServiceSettingsResponse$LinuxSubscriptionsDiscovery": " Lists if discovery has been enabled for Linux subscriptions. ",
"UpdateServiceSettingsRequest$LinuxSubscriptionsDiscovery": " Describes if the discovery of Linux subscriptions is enabled. ",
"UpdateServiceSettingsResponse$LinuxSubscriptionsDiscovery": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"base": " Lists the settings defined for discovering Linux subscriptions. ",
"refs": {
"GetServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": " Lists the settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. ",
"UpdateServiceSettingsRequest$LinuxSubscriptionsDiscoverySettings": " The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. ",
"UpdateServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": " The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"ListLinuxSubscriptionInstancesRequest": {
"base": " NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases. ",
"refs": {
}
},
"ListLinuxSubscriptionInstancesRequestNextTokenString": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a previously truncated response. "
}
},
"ListLinuxSubscriptionInstancesResponse": {
"base": null,
"refs": {
}
},

"ListLinuxSubscriptionsRequest": {
"base": " NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases. ",
"refs": {
}
},
"ListLinuxSubscriptionsRequestNextTokenString":
{
"base": null,
"refs": {
"ListLinuxSubscriptionsRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a previously truncated response. "
}
},
"ListLinuxSubscriptionsResponse": {
"base": null,
"refs": {
}
},
"ListRegisteredSubscriptionProvidersRequest": {
"base": null,
"refs": {
}
},
"ListRegisteredSubscriptionProvidersRequestMaxResultsInteger": {
"base": null,
"refs": {
"ListRegisteredSubscriptionProvidersRequest$MaxResults": " The maximum items to return in a request. "
}
},
"ListRegisteredSubscriptionProvidersResponse": {
"base": null,
"refs": {
}
},
"ListTagsForResourceRequest": {
"base": null,
"refs": {
}
},
"ListTagsForResourceResponse": {
"base": null,
"refs": {
}
},
"Operator": {
"base": null,

"refs":
{
"Filter$Operator": " An operator for filtering results. "
}
},
"OrganizationIntegration": {
"base": null,
"refs": {
"LinuxSubscriptionsDiscoverySettings$OrganizationIntegration": " Details if you have enabled resource discovery across your accounts in Organizations. "
}
},
"ProductCodeList": {
"base": null,
"refs": {
"Instance$ProductCode": " The product code for the instance. For more information, see Usage operation values in the License Manager User Guide . "
}
},
"RegisterSubscriptionProviderRequest": {
"base": null,
"refs": {
}
},
"RegisterSubscriptionProviderResponse": {
"base": null,
"refs": {
}
},
"RegisteredSubscriptionProvider": {
"base": " A third-party provider for operating system (OS) platform software and license subscriptions, such as Red Hat. When you register a third-party Linux subscription provider, License Manager can get subscription data from the registered provider. ",
"refs": {
"RegisteredSubscriptionProviderList$member": null
}
},
"RegisteredSubscriptionProviderList": {
"base": null,
"refs": {
"ListRegisteredSubscriptionProvidersResponse$RegisteredSubscriptionProviders": " The list of BYOL registration resources that fit the criteria you specified in the request. "
}
},
"ResourceNotFoundException": {
"base": " Unable to find the requested Amazon Web Services resource. ",
"refs": {

}
},
"SecretArn": {
"base": null,
"refs": {
"GetRegisteredSubscriptionProviderResponse$SecretArn": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL registration resource specified in the request. ",
"RegisterSubscriptionProviderRequest$SecretArn": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For RHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains your Red Hat Offline token. ",
"RegisteredSubscriptionProvider$SecretArn": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider access token. For RHEL account subscriptions, this is the offline token. "
}
},
"Status": {
"base": null,
"refs": {
"GetServiceSettingsResponse$Status": " Indicates the status of Linux subscriptions settings being applied. ",
"UpdateServiceSettingsResponse$Status": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"String": {
"base": null,
"refs": {
"Filter$Name": " The type of name to filter by. ",
"GetRegisteredSubscriptionProviderResponse$LastSuccessfulDataRetrievalTime": " The timestamp from the last time License Manager retrieved subscription details from your registered third-party Linux subscription provider. ",
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderStatusMessage": " The detailed message from your subscription provider token status. ",
"Instance$AccountID": " The account ID which owns the instance. ",
"Instance$AmiId": " The AMI ID used to launch the instance. ",
"Instance$DualSubscription": " Indicates that you have two different license subscriptions for the same software on your instance. ",
"Instance$InstanceID": " The instance ID of the resource. ",
"Instance$InstanceType": " The instance type of the resource. ",
"Instance$LastUpdatedTime": " The time in which the last discovery updated the instance details. ",
"Instance$OsVersion":
" The operating system software version that runs on your instance. ",
"Instance$Region": " The Region the instance is running in. ",
"Instance$RegisteredWithSubscriptionProvider": " Indicates that your instance uses a BYOL license subscription from a third-party Linux subscription provider that you've registered with License Manager. ",
"Instance$Status": " The status of the instance. ",
"Instance$SubscriptionName": " The name of the license subscription that the instance uses. ",

"Instance$SubscriptionProviderCreateTime": " The timestamp when you registered the third-party Linux subscription provider for the subscription that the instance uses. ",
"Instance$SubscriptionProviderUpdateTime": " The timestamp from the last time that the instance synced with the registered third-party Linux subscription provider. ",
"Instance$UsageOperation": " The usage operation of the instance. For more information, see For more information, see Usage operation values in the License Manager User Guide. ",
"InternalServerException$message": null,
"ListLinuxSubscriptionInstancesResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
"ListLinuxSubscriptionsResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
"ListRegisteredSubscriptionProvidersRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a previously truncated response. ",
"ListRegisteredSubscriptionProvidersResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
"ProductCodeList$member": null,
"RegisterSubscriptionProviderResponse$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. ",
"RegisteredSubscriptionProvider$LastSuccessfulDataRetrievalTime": " The timestamp from the last time that License Manager accessed third-party subscription data for your account from your registered Linux subscription provider. ",
"RegisteredSubscriptionProvider$SubscriptionProviderStatusMessage": " A detailed message that's associated with your BYOL subscription provider token status. ",
"ResourceNotFoundException$message": null,
"StringMap$key": null,
"StringMap$value": null,
"Subscription$Name": " The name of the subscription. ",
"Subscription$Type": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. ",
"TagKeyList$member": null,
"Tags$key": null,
"Tags$value": null,
"ThrottlingException$message": null,
"ValidationException$message": null
}
},
"StringList": {
"base": null,
"refs": {

"Filter$Values": " One or more values for the name to filter by. ",
"GetServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. ",
"LinuxSubscriptionsDiscoverySettings$SourceRegions": " The Regions in which to discover data for Linux subscriptions. ",
"UpdateServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. "
}
},
"StringListMemberString": {
"base": null,
"refs": {
"StringList$member": null
}
},
"StringMap": {
"base": null,
"refs": {
"GetServiceSettingsResponse$StatusMessage": " A message which details the Linux subscriptions service settings current status. ",
"UpdateServiceSettingsResponse$StatusMessage": " A message which details the Linux subscriptions service settings current status. "
}
},
"Subscription": {
"base": " An object which details a discovered Linux subscription. ",
"refs": {
"SubscriptionList$member": null
}
},
"SubscriptionList": {
"base": null,
"refs": {
"ListLinuxSubscriptionsResponse$Subscriptions": " An array that contains subscription objects. "
}
},
"SubscriptionProviderArn": {
"base": null,
"refs": {
"DeregisterSubscriptionProviderRequest$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"GetRegisteredSubscriptionProviderRequest$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderArn": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. ",
"ListTagsForResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",

"RegisteredSubscriptionProvider$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. ",
"TagResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified metadata tags. ",
"UntagResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. "
}
},
"SubscriptionProviderSource": {
"base": null,
"refs": {
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderSource": " The subscription provider for the BYOL registration resource specified in the request. ",
"RegisterSubscriptionProviderRequest$SubscriptionProviderSource": " The supported Linux subscription provider to register. ",
"RegisterSubscriptionProviderResponse$SubscriptionProviderSource": " The Linux subscription provider that you registered. ",
"RegisteredSubscriptionProvider$SubscriptionProviderSource": " A supported third-party Linux subscription provider. License
Manager currently supports Red Hat subscriptions. ",
"SubscriptionProviderSourceList$member": null
}
},
"SubscriptionProviderSourceList": {
"base": null,
"refs": {
"ListRegisteredSubscriptionProvidersRequest$SubscriptionProviderSources": " To filter your results, specify which subscription providers to return in the list. "
}
},
"SubscriptionProviderStatus": {
"base": null,
"refs": {
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderStatus": " The status of the Linux subscription provider access token from the last successful subscription data request. ",
"RegisterSubscriptionProviderResponse$SubscriptionProviderStatus": " Indicates the status of the registration action for the Linux subscription provider that you requested. ",
"RegisteredSubscriptionProvider$SubscriptionProviderStatus": " Indicates the status of your registered Linux subscription provider access
token from the last time License Manager retrieved subscription data. For RHEL account subscriptions, this is the status of the offline token. "
}
},
"TagKeyList": {
"base": null,
"refs": {
"UntagResourceRequest$tagKeys": " A list of metadata tag keys to remove from the requested resource. "

```
    }
  },
  "TagResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "TagResourceResponse": {
    "base": null,
    "refs": {
    }
  },
  "Tags": {
    "base": null,
    "refs": {
      "ListTagsForResourceResponse$tags": "<p>The metadata tags for the requested resource.</p>",
      "RegisterSubscriptionProviderRequest$Tags": "<p>The metadata tags to assign to your registered Linux subscription provider resource.</p>",
      "TagResourceRequest$tags": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are formatted as key value pairs.</p>"
    }
  },
  "ThrottlingException": {
     "base": "<p>The request was denied due to request throttling.</p>",
    "refs": {
    }
  },
  "UntagResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "UntagResourceResponse": {
    "base": null,
    "refs": {
    }
  },
  "UpdateServiceSettingsRequest": {
    "base": null,
    "refs": {
    }
  },
  "UpdateServiceSettingsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ValidationException": {
```

"base": " The provided input is not valid. Try your request again. ",
"refs": {
}
}
}
}

AWS SDK for Go

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{
"testCases": [
{
"documentation": "For region ap-south-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.ap-south-1.api.aws"
}
},
"params": {
"UseFIPS": true,
"Region": "ap-south-1",
"UseDualStack": true
}
},
{
"documentation": "For region ap-south-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.ap-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": true,
"Region": "ap-south-1",
"UseDualStack": false
}
},
{
"documentation": "For region ap-south-1 with FIPS disabled
and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.ap-south-1.api.aws"
}
},
"params": {
"UseFIPS": false,
"Region": "ap-south-1",

```
        "UseDualStack": true
    }
},
{
    "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.ap-south-1.amazonaws.com"
        }
    },
    "params": {
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"requestUri":"/"
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"input":{"shape":"ListTokensRequest"},
"output":{"shape":"ListTokensResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"ListUsageForLicenseConfiguration":{
"name":"ListUsageForLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListUsageForLicenseConfigurationRequest"},
"output":{"shape":"ListUsageForLicenseConfigurationResponse"},
"errors":[
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{"shape":"FilterLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"RejectGrant":{
"name":"RejectGrant",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"RejectGrantRequest"},
"output":{"shape":"RejectGrantResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"}

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  ]
},
"TagResource":{
  "name":"TagResource",
  "http":{
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    "requestUri":"/"
  },
  "input":{"shape":"TagResourceRequest"},
  "output":{"shape":"TagResourceResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
   ]
},
"UntagResource":{
  "name":"UntagResource",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"UntagResourceRequest"},
  "output":{"shape":"UntagResourceResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"UpdateLicenseConfiguration":{
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    "requestUri":"/"
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  "input":{"shape":"UpdateLicenseConfigurationRequest"},
  "output":{"shape":"UpdateLicenseConfigurationResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
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{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"}
]
},
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"name":"UpdateLicenseManagerReportGenerator",
"http":{
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},
"input":{"shape":"UpdateLicenseManagerReportGeneratorRequest"},
"output":{"shape":"UpdateLicenseManagerReportGeneratorResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"},
{"shape":"ResourceLimitExceededException"}
]
},
"UpdateLicenseSpecificationsForResource":{
"name":"UpdateLicenseSpecificationsForResource",
"http":{
"method":"POST",
"requestUri":"/"

},
"input":{"shape":"UpdateLicenseSpecificationsForResourceRequest"},
"output":{"shape":"UpdateLicenseSpecificationsForResourceResponse"},
"errors":[
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{"shape":"InvalidResourceStateException"},
{"shape":"LicenseUsageException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"UpdateServiceSettings":{
"name":"UpdateServiceSettings",
"http":{
"method":"POST",
"requestUri":"/"
},

"input":{"shape":"UpdateServiceSettingsRequest"},
"output":{"shape":"UpdateServiceSettingsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
}
},
"shapes":{
"AcceptGrantRequest":{
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"required":["GrantArn"],
"members":{
"GrantArn":{"shape":"Arn"}
}
},
"AcceptGrantResponse":{
"type":"structure",
"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
},
"AccessDeniedException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"ActivationOverrideBehavior":{
"type":"string",
"enum":[
"DISTRIBUTED_GRANTS_ONLY",
"ALL_GRANTS_PERMITTED_BY_ISSUER"
]
},
"AllowedOperation":{
"type":"string",
"enum":[
"CreateGrant",
"CheckoutLicense",
"CheckoutBorrowLicense",
"CheckInLicense",

"ExtendConsumptionLicense",
"ListPurchasedLicenses",
"CreateToken"
]
},
"AllowedOperationList":{
"type":"list",
"member":{"shape":"AllowedOperation"},
"max":7,
"min":1
},
"Arn":{
"type":"string",
"max":2048,
"pattern":"^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
},
"ArnList":{
"type":"list",
"member":{"shape":"Arn"}
},
"AuthorizationException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"AutomatedDiscoveryInformation":{
"type":"structure",
"members":{
"LastRunTime":{"shape":"DateTime"}
}
},
"Boolean":{"type":"boolean"},
"BorrowConfiguration":{
"type":"structure",
"required":[
"AllowEarlyCheckIn",
"MaxTimeToLiveInMinutes"
],
"members":{
"AllowEarlyCheckIn":{"shape":"BoxBoolean"},
"MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
}
},
"BoxBoolean":{"type":"boolean"},
"BoxInteger":{"type":"integer"},

"BoxLong":{"type":"long"},
"CheckInLicenseRequest":{
"type":"structure",
"required":["LicenseConsumptionToken"],
"members":{
"LicenseConsumptionToken":{"shape":"String"},
"Beneficiary":{"shape":"String"}
}
},
"CheckInLicenseResponse":{
"type":"structure",
"members":{
}
},
"CheckoutBorrowLicenseRequest":{
"type":"structure",
"required":[
"LicenseArn",
"Entitlements",
"DigitalSignatureMethod",
"ClientToken"
],
"members":{
"LicenseArn":{"shape":"Arn"},
"Entitlements":{"shape":"EntitlementDataList"},
"DigitalSignatureMethod":{"shape":"DigitalSignatureMethod"},
"NodeId":{"shape":"String"},
"CheckoutMetadata":{"shape":"MetadataList"},
"ClientToken":{"shape":"ClientToken"}
}
},

"CheckoutBorrowLicenseResponse":{
"type":"structure",
"members":{
"LicenseArn":{"shape":"Arn"},
"LicenseConsumptionToken":{"shape":"String"},
"EntitlementsAllowed":{"shape":"EntitlementDataList"},
"NodeId":{"shape":"String"},
"SignedToken":{"shape":"SignedToken"},
"IssuedAt":{"shape":"ISO8601DateTime"},
"Expiration":{"shape":"ISO8601DateTime"},
"CheckoutMetadata":{"shape":"MetadataList"}
}
},
"CheckoutLicenseRequest":{
"type":"structure",
"required":[

"ProductSKU",
"CheckoutType",
"KeyFingerprint",
"Entitlements",
"ClientToken"
],
"members":{
"ProductSKU":{"shape":"String"},
"CheckoutType":{"shape":"CheckoutType"},
"KeyFingerprint":{"shape":"String"},
"Entitlements":{"shape":"EntitlementDataList"},
"ClientToken":{"shape":"ClientToken"},
"Beneficiary":{"shape":"String"},
"NodeId":{"shape":"String"}
}
},
"CheckoutLicenseResponse":{
"type":"structure",
"members":{
"CheckoutType":{"shape":"CheckoutType"},
"LicenseConsumptionToken":{"shape":"String"},
"EntitlementsAllowed":{"shape":"EntitlementDataList"},
"SignedToken":{"shape":"SignedToken"},
"NodeId":{"shape":"String"},
"IssuedAt":{"shape":"ISO8601DateTime"},
"Expiration":{"shape":"ISO8601DateTime"},
"LicenseArn":{"shape":"String"}
}
},
"CheckoutType":{
"type":"string",
"enum":[
"PROVISIONAL",
"PERPETUAL"
]
},
"ClientRequestToken":{
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"max":36,
"min":1
},
"ClientToken":{
"type":"string",
"max":2048,
"pattern":"\\S+"
},
"ConflictException":{
"type":"structure",

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  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ConsumedLicenseSummary":{
  "type":"structure",
   "members":{
    "ResourceType":{"shape":"ResourceType"},
    "ConsumedLicenses":{"shape":"BoxLong"}
  }
},
"ConsumedLicenseSummaryList":{
  "type":"list",
  "member":{"shape":"ConsumedLicenseSummary"}
},
"ConsumptionConfiguration":{
  "type":"structure",
  "members":{
    "RenewType":{"shape":"RenewType"},
    "ProvisionalConfiguration":{"shape":"ProvisionalConfiguration"},
    "BorrowConfiguration":{"shape":"BorrowConfiguration"}
  }
},
"CreateGrantRequest":{
  "type":"structure",
  "required":[
    "ClientToken",
    "GrantName",
    "LicenseArn",
    "Principals",
    "HomeRegion",
    "AllowedOperations"
  ],
  "members":{
    "ClientToken":{"shape":"ClientToken"},
    "GrantName":{"shape":"String"},
    "LicenseArn":{"shape":"Arn"},
    "Principals":{"shape":"PrincipalArnList"},
    "HomeRegion":{"shape":"String"},
    "AllowedOperations":{"shape":"AllowedOperationList"}
   }
},
"CreateGrantResponse":{
  "type":"structure",
  "members":{
    "GrantArn":{"shape":"Arn"},
    "Status":{"shape":"GrantStatus"},
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"Version":{"shape":"String"}
}
},
"CreateGrantVersionRequest":{
"type":"structure",
"required":[
"ClientToken",
"GrantArn"
],
"members":{
"ClientToken":{"shape":"ClientToken"},
"GrantArn":{"shape":"Arn"},
"GrantName":{"shape":"String"},
"AllowedOperations":{"shape":"AllowedOperationList"},
"Status":{"shape":"GrantStatus"},
"StatusReason":{"shape":"StatusReasonMessage"},
"SourceVersion":{"shape":"String"},
"Options":{"shape":"Options"}
}
},
"CreateGrantVersionResponse":{
"type":"structure",
"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
},
"CreateLicenseConfigurationRequest":{
"type":"structure",
"required":[
"Name",
"LicenseCountingType"
],
"members":{
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"LicenseCountingType":{"shape":"LicenseCountingType"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"LicenseRules":{"shape":"StringList"},
"Tags":{"shape":"TagList"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"},
"ProductInformationList":{"shape":"ProductInformationList"}
}
},
"CreateLicenseConfigurationResponse":{
"type":"structure",

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  "members":{
    "LicenseConfigurationArn":{"shape":"String"}
  }
},
"CreateLicenseConversionTaskForResourceRequest":{
  "type":"structure",
  "required":[
    "ResourceArn",
    "SourceLicenseContext",
    "DestinationLicenseContext"
  ],
  "members":{
    "ResourceArn":{"shape":"Arn"},
     "SourceLicenseContext":{"shape":"LicenseConversionContext"},
    "DestinationLicenseContext":{"shape":"LicenseConversionContext"}
  }
},
"CreateLicenseConversionTaskForResourceResponse":{
  "type":"structure",
  "members":{
    "LicenseConversionTaskId":{"shape":"LicenseConversionTaskId"}
  }
},
"CreateLicenseManagerReportGeneratorRequest":{
  "type":"structure",
  "required":[
    "ReportGeneratorName",
    "Type",
    "ReportContext",
    "ReportFrequency",
    "ClientToken"
  ],
  "members":{
    "ReportGeneratorName":{"shape":"ReportGeneratorName"},
    "Type":{"shape":"ReportTypeList"},
    "ReportContext":{"shape":"ReportContext"},
    "ReportFrequency":{"shape":"ReportFrequency"},
    "ClientToken":{"shape":"ClientRequestToken"},
    "Description":{"shape":"String"},
    "Tags":{"shape":"TagList"}
  }
},
"CreateLicenseManagerReportGeneratorResponse":{
   "type":"structure",
  "members":{
    "LicenseManagerReportGeneratorArn":{"shape":"String"}
  }
},
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"CreateLicenseRequest":{
"type":"structure",
"required":[
"LicenseName",
"ProductName",
"ProductSKU",
"Issuer",
"HomeRegion",
"Validity",
"Entitlements",
"Beneficiary",
"ConsumptionConfiguration",
"ClientToken"
],
"members":{
"LicenseName":{"shape":"String"},
"ProductName":{"shape":"String"},
"ProductSKU":{"shape":"String"},
"Issuer":{"shape":"Issuer"},
"HomeRegion":{"shape":"String"},
"Validity":{"shape":"DatetimeRange"},
"Entitlements":{"shape":"EntitlementList"},
"Beneficiary":{"shape":"String"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"LicenseMetadata":{"shape":"MetadataList"},
"ClientToken":{"shape":"ClientToken"}

}
},
"CreateLicenseResponse":{
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"members":{
"LicenseArn":{"shape":"Arn"},
"Status":{"shape":"LicenseStatus"},
"Version":{"shape":"String"}
}
},
"CreateLicenseVersionRequest":{
"type":"structure",
"required":[
"LicenseArn",
"LicenseName",
"ProductName",
"Issuer",
"HomeRegion",
"Validity",
"Entitlements",
"ConsumptionConfiguration",

"Status",
"ClientToken"
],
"members":{
"LicenseArn":{"shape":"Arn"},
"LicenseName":{"shape":"String"},
"ProductName":{"shape":"String"},
"Issuer":{"shape":"Issuer"},
"HomeRegion":{"shape":"String"},
"Validity":{"shape":"DatetimeRange"},
"LicenseMetadata":{"shape":"MetadataList"},
"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"Status":{"shape":"LicenseStatus"},
"ClientToken":{"shape":"ClientToken"},
"SourceVersion":{"shape":"String"}
}
},
"CreateLicenseVersionResponse":{
"type":"structure",
"members":{
"LicenseArn":{"shape":"Arn"},
"Version":{"shape":"String"},
"Status":{"shape":"LicenseStatus"}
}
},
"CreateTokenRequest":{
"type":"structure",
"required":[
"LicenseArn",
"ClientToken"
],
"members":{
"LicenseArn":{"shape":"Arn"},
"RoleArns":{"shape":"ArnList"},
"ExpirationInDays":{"shape":"Integer"},
"TokenProperties":{"shape":"MaxSize3StringList"},
"ClientToken":{"shape":"ClientToken"}
}
},
"CreateTokenResponse":{
"type":"structure",
"members":{
"TokenId":{"shape":"String"},
"TokenType":{"shape":"TokenType"},
"Token":{"shape":"TokenString"}
}
},

"DateTime":{"type":"timestamp"},
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"required":["Begin"],
"members":{
"Begin":{"shape":"ISO8601DateTime"},
"End":{"shape":"ISO8601DateTime"}
}
},
"DeleteGrantRequest":{
"type":"structure",
"required":[
"GrantArn",
"Version"
],
"members":{
"GrantArn":{"shape":"Arn"},
"StatusReason":{"shape":"StatusReasonMessage"},
"Version":{"shape":"String"}
}
},
"DeleteGrantResponse":{
"type":"structure",
"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
},
"DeleteLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{"shape":"String"}
}
},
"DeleteLicenseConfigurationResponse":{
"type":"structure",
"members":{
}
},
"DeleteLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":["LicenseManagerReportGeneratorArn"],
"members":{
"LicenseManagerReportGeneratorArn":{"shape":"String"}
}

},
"DeleteLicenseManagerReportGeneratorResponse":{
  "type":"structure",
  "members":{
  }
},
"DeleteLicenseRequest":{
  "type":"structure",
  "required":[
    "LicenseArn",
    "SourceVersion"
  ],
  "members":{
    "LicenseArn":{"shape":"Arn"},
    "SourceVersion":{"shape":"String"}
  }
},
"DeleteLicenseResponse":{
  "type":"structure",
  "members":{
    "Status":{"shape":"LicenseDeletionStatus"},
    "DeletionDate":{"shape":"ISO8601DateTime"}
  }
},
"DeleteTokenRequest":{
  "type":"structure",
  "required":["TokenId"],
  "members":{
    "TokenId":{"shape":"String"}
  }
},
"DeleteTokenResponse":{
  "type":"structure",
  "members":{
  }
},
"DigitalSignatureMethod":{

  "type":"string",
  "enum":["JWT_PS384"]
},
"Entitlement":{
  "type":"structure",
  "required":[
    "Name",
    "Unit"
  ],
  "members":{

"Name":{"shape":"String"},
"Value":{"shape":"String"},
"MaxCount":{"shape":"Long"},
"Overage":{"shape":"BoxBoolean"},
"Unit":{"shape":"EntitlementUnit"},
"AllowCheckIn":{"shape":"BoxBoolean"}
}
},
"EntitlementData":{
"type":"structure",
"required":[
"Name",
"Unit"
],
"members":{
"Name":{"shape":"String"},
"Value":{"shape":"String"},
"Unit":{"shape":"EntitlementDataUnit"}
}
},
"EntitlementDataList":{
"type":"list",
"member":{"shape":"EntitlementData"}
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"EntitlementDataUnit":{
"type":"string",
"enum":[
"Count",
"None",
"Seconds",
"Microseconds",
"Milliseconds",
"Bytes",
"Kilobytes",

"Megabytes",
"Gigabytes",
"Terabytes",
"Bits",
"Kilobits",
"Megabits",
"Gigabits",
"Terabits",
"Percent",
"Bytes/Second",
"Kilobytes/Second",
"Megabytes/Second",
"Gigabytes/Second",

"Terabytes/Second",
"Bits/Second",
"Kilobits/Second",
"Megabits/Second",
"Gigabits/Second",
"Terabits/Second",
"Count/Second"
]
},
"EntitlementList":{
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"member":{"shape":"Entitlement"}
},
"EntitlementNotAllowedException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"EntitlementUnit":{
"type":"string",
"enum":[
"Count",
"None",
"Seconds",
"Microseconds",
"Milliseconds",
"Bytes",
"Kilobytes",
"Megabytes",
"Gigabytes",
"Terabytes",

"Bits",
"Kilobits",
"Megabits",
"Gigabits",
"Terabits",
"Percent",
"Bytes/Second",
"Kilobytes/Second",
"Megabytes/Second",
"Gigabytes/Second",
"Terabytes/Second",
"Bits/Second",
"Kilobits/Second",
"Megabits/Second",

"Gigabits/Second",
"Terabits/Second",
"Count/Second"
]
},
"EntitlementUsage":{
"type":"structure",
"required":[
"Name",
"ConsumedValue",
"Unit"
],
"members":{
"Name":{"shape":"String"},
"ConsumedValue":{"shape":"String"},
"MaxCount":{"shape":"String"},
"Unit":{"shape":"EntitlementDataUnit"}
}
},
"EntitlementUsageList":{
"type":"list",
"member":{"shape":"EntitlementUsage"}
},
"ExtendLicenseConsumptionRequest":{
"type":"structure",
"required":["LicenseConsumptionToken"],
"members":{
"LicenseConsumptionToken":{"shape":"String"},
"DryRun":{"shape":"Boolean"}
}
},
"ExtendLicenseConsumptionResponse":{
"type":"structure",
"members":{
"LicenseConsumptionToken":{"shape":"String"},
"Expiration":{"shape":"ISO8601DateTime"}
}
},
"FailedDependencyException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"},
"ErrorCode":{"shape":"String"}
},
"exception":true
},
"Filter":{
"type":"structure",

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  "members":{
    "Name":{"shape":"FilterName"},
    "Values":{"shape":"FilterValues"}
  }
},
"FilterLimitExceededException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"FilterList":{
  "type":"list",
  "member":{"shape":"Filter"}
},
"FilterName":{"type":"string"},
"FilterValue":{"type":"string"},
"FilterValues":{
  "type":"list",
  "member":{"shape":"FilterValue"}
 },
"Filters":{
  "type":"list",
  "member":{"shape":"Filter"}
},
"GetAccessTokenRequest":{
  "type":"structure",
  "required":["Token"],
  "members":{
    "Token":{"shape":"TokenString"},
    "TokenProperties":{"shape":"MaxSize3StringList"}
  }
},
"GetAccessTokenResponse":{
  "type":"structure",
  "members":{
    "AccessToken":{"shape":"TokenString"}
  }
},
"GetGrantRequest":{
  "type":"structure",
  "required":["GrantArn"],
  "members":{
    "GrantArn":{"shape":"Arn"},
    "Version":{"shape":"String"}
  }
},
```

"GetGrantResponse":{
  "type":"structure",
  "members":{
    "Grant":{"shape":"Grant"}
  }
},
"GetLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"}
  }
},
"GetLicenseConfigurationResponse":{
   "type":"structure",
  "members":{
    "LicenseConfigurationId":{"shape":"String"},
    "LicenseConfigurationArn":{"shape":"String"},
    "Name":{"shape":"String"},
    "Description":{"shape":"String"},
    "LicenseCountingType":{"shape":"LicenseCountingType"},
    "LicenseRules":{"shape":"StringList"},
    "LicenseCount":{"shape":"BoxLong"},
    "LicenseCountHardLimit":{"shape":"BoxBoolean"},
    "ConsumedLicenses":{"shape":"BoxLong"},
    "Status":{"shape":"String"},
    "OwnerAccountId":{"shape":"String"},
    "ConsumedLicenseSummaryList":{"shape":"ConsumedLicenseSummaryList"},
    "ManagedResourceSummaryList":{"shape":"ManagedResourceSummaryList"},
    "Tags":{"shape":"TagList"},
    "ProductInformationList":{"shape":"ProductInformationList"},
    "AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"},
    "DisassociateWhenNotFound":{"shape":"BoxBoolean"}
  }
},
"GetLicenseConversionTaskRequest":{
   "type":"structure",
  "required":["LicenseConversionTaskId"],
  "members":{
    "LicenseConversionTaskId":{"shape":"LicenseConversionTaskId"}
  }
},
"GetLicenseConversionTaskResponse":{
  "type":"structure",
  "members":{
    "LicenseConversionTaskId":{"shape":"LicenseConversionTaskId"},
    "ResourceArn":{"shape":"String"},
    "SourceLicenseContext":{"shape":"LicenseConversionContext"},

"DestinationLicenseContext":{"shape":"LicenseConversionContext"},
"StatusMessage":{"shape":"String"},
"Status":{"shape":"LicenseConversionTaskStatus"},
"StartTime":{"shape":"DateTime"},
"LicenseConversionTime":{"shape":"DateTime"},
"EndTime":{"shape":"DateTime"}
}
},
"GetLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":["LicenseManagerReportGeneratorArn"],
"members":{
"LicenseManagerReportGeneratorArn":{"shape":"String"}
}
},
"GetLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
"ReportGenerator":{"shape":"ReportGenerator"}
}
},
"GetLicenseRequest":{
"type":"structure",
"required":["LicenseArn"],
"members":{
"LicenseArn":{"shape":"Arn"},
"Version":{"shape":"String"}
}
},
"GetLicenseResponse":{
"type":"structure",
"members":{
"License":{"shape":"License"}
}
},
"GetLicenseUsageRequest":{
"type":"structure",
"required":["LicenseArn"],
"members":{
"LicenseArn":{"shape":"Arn"}
}
},
"GetLicenseUsageResponse":{
"type":"structure",
"members":{
"LicenseUsage":{"shape":"LicenseUsage"}
}
},

"GetServiceSettingsRequest":{
  "type":"structure",
  "members":{
  }
},
"GetServiceSettingsResponse":{
  "type":"structure",
  "members":{
    "S3BucketArn":{"shape":"String"},
     "SnsTopicArn":{"shape":"String"},
    "OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
    "EnableCrossAccountsDiscovery":{"shape":"BoxBoolean"},
    "LicenseManagerResourceShareArn":{"shape":"String"}
  }
},
"Grant":{
  "type":"structure",
  "required":[
    "GrantArn",
    "GrantName",
    "ParentArn",
    "LicenseArn",
    "GranteePrincipalArn",
    "HomeRegion",
    "GrantStatus",
    "Version",
    "GrantedOperations"
  ],
  "members":{
    "GrantArn":{"shape":"Arn"},
    "GrantName":{"shape":"String"},
    "ParentArn":{"shape":"Arn"},
    "LicenseArn":{"shape":"Arn"},
    "GranteePrincipalArn":{"shape":"Arn"},
    "HomeRegion":{"shape":"String"},
    "GrantStatus":{"shape":"GrantStatus"},
    "StatusReason":{"shape":"StatusReasonMessage"},
    "Version":{"shape":"String"},
    "GrantedOperations":{"shape":"AllowedOperationList"},
     "Options":{"shape":"Options"}
  }
},
"GrantList":{
  "type":"list",
  "member":{"shape":"Grant"}
},
"GrantStatus":{
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"enum":[
"PENDING_WORKFLOW",
"PENDING_ACCEPT",
"REJECTED",
"ACTIVE",
"FAILED_WORKFLOW",
"DELETED",
"PENDING_DELETE",
"DISABLED",
"WORKFLOW_COMPLETED"
]
},
"GrantedLicense":{
"type":"structure",
"members":{
"LicenseArn":{"shape":"Arn"},
"LicenseName":{"shape":"String"},
"ProductName":{"shape":"String"},
"ProductSKU":{"shape":"String"},
"Issuer":{"shape":"IssuerDetails"},
"HomeRegion":{"shape":"String"},
"Status":{"shape":"LicenseStatus"},
"Validity":{"shape":"DatetimeRange"},
"Beneficiary":{"shape":"String"},
"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},

"LicenseMetadata":{"shape":"MetadataList"},
"CreateTime":{"shape":"ISO8601DateTime"},
"Version":{"shape":"String"},
"ReceivedMetadata":{"shape":"ReceivedMetadata"}
}
},
"GrantedLicenseList":{
"type":"list",
"member":{"shape":"GrantedLicense"}
},
"ISO8601DateTime":{
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    "Value":{"shape":"String"}
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    "NOT_EQUALS",
    "BEGINS_WITH",
    "CONTAINS"
  ]
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    "SignKey":{"shape":"String"}
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},
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"Issuer":{"shape":"IssuerDetails"},
"HomeRegion":{"shape":"String"},
"Status":{"shape":"LicenseStatus"},
"Validity":{"shape":"DatetimeRange"},
"Beneficiary":{"shape":"String"},
"Entitlements":{"shape":"EntitlementList"},
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"LicenseMetadata":{"shape":"MetadataList"},
"CreateTime":{"shape":"ISO8601DateTime"},
"Version":{"shape":"String"}
}
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"Description":{"shape":"String"},
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"LicenseRules":{"shape":"StringList"},
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"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"},
"ConsumedLicenses":{"shape":"BoxLong"},
"Status":{"shape":"String"},
"OwnerAccountId":{"shape":"String"},
"ConsumedLicenseSummaryList":{"shape":"ConsumedLicenseSummaryList"},
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"ProductInformationList":{"shape":"ProductInformationList"},
"AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"}
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"AmiAssociationScope":{"shape":"String"}
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"DISABLED"
]
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"ResourceType":{"shape":"ResourceType"},
"ResourceStatus":{"shape":"String"},
"ResourceOwnerId":{"shape":"String"},
"AssociationTime":{"shape":"DateTime"},
"ConsumedLicenses":{"shape":"BoxLong"}
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"member":{"shape":"LicenseConfiguration"}
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"UsageOperation":{"shape":"UsageOperation"}
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"members":{
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    "DestinationLicenseContext":{"shape":"LicenseConversionContext"},
    "Status":{"shape":"LicenseConversionTaskStatus"},
    "StatusMessage":{"shape":"String"},
    "StartTime":{"shape":"DateTime"},
    "LicenseConversionTime":{"shape":"DateTime"},
    "EndTime":{"shape":"DateTime"}
  }
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"LicenseConversionTaskStatus":{
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  "enum":[
    "IN_PROGRESS",
    "SUCCEEDED",
    "FAILED"
  ]
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"LicenseConversionTasks":{
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  "member":{"shape":"LicenseConversionTask"}
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  "enum":[
    "vCPU",
    "Instance",
    "Core",
    "Socket"
  ]
},
"LicenseDeletionStatus":{
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  "enum":[
    "PENDING_DELETE",
    "DELETED"
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"LicenseList":{
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  "member":{"shape":"License"}
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"LicenseOperationFailure":{
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  "type":"structure",
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    "FailureTime":{"shape":"DateTime"},
    "OperationName":{"shape":"String"},
    "ResourceOwnerId":{"shape":"String"},
    "OperationRequestedBy":{"shape":"String"},
    "MetadataList":{"shape":"MetadataList"}
  }
},
"LicenseOperationFailureList":{
  "type":"list",
  "member":{"shape":"LicenseOperationFailure"}
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"LicenseSpecification":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"},
    "AmiAssociationScope":{"shape":"String"}
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 "LicenseSpecifications":{
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  "member":{"shape":"LicenseSpecification"}
},
"LicenseStatus":{
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  "enum":[
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    "PENDING_AVAILABLE",
    "DEACTIVATED",
    "SUSPENDED",
    "EXPIRED",
    "PENDING_DELETE",
    "DELETED"
  ]
},
"LicenseUsage":{
  "type":"structure",
  "members":{
    "EntitlementUsages":{"shape":"EntitlementUsageList"}
  }
},
"LicenseUsageException":{
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"exception":true
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"ListAssociationsForLicenseConfigurationRequest":{
"type":"structure",
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"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"}
}
},
"ListAssociationsForLicenseConfigurationResponse":{
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"members":{
"LicenseConfigurationAssociations":{"shape":"LicenseConfigurationAssociations"},
"NextToken":{"shape":"String"}
}
},
"ListDistributedGrantsRequest":{
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"members":{
"GrantArns":{"shape":"ArnList"},
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListDistributedGrantsResponse":{
"type":"structure",
"members":{
"Grants":{"shape":"GrantList"},
"NextToken":{"shape":"String"}
}
},
"ListFailuresForLicenseConfigurationOperationsRequest":{
"type":"structure",
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"LicenseConfigurationArn":{"shape":"String"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"}
}
},
"ListFailuresForLicenseConfigurationOperationsResponse":{
"type":"structure",

"members":{
"LicenseOperationFailureList":{"shape":"LicenseOperationFailureList"},
"NextToken":{"shape":"String"}
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},
"ListLicenseConfigurationsRequest":{
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"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"},
"Filters":{"shape":"Filters"}
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},
"ListLicenseConfigurationsResponse":{
"type":"structure",
"members":{
"LicenseConfigurations":{"shape":"LicenseConfigurations"},
"NextToken":{"shape":"String"}
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},
"ListLicenseConversionTasksRequest":{
"type":"structure",
"members":{
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"BoxInteger"},
"Filters":{"shape":"Filters"}
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},
"ListLicenseConversionTasksResponse":{
"type":"structure",
"members":{
"LicenseConversionTasks":{"shape":"LicenseConversionTasks"},
"NextToken":{"shape":"String"}
}
},
"ListLicenseManagerReportGeneratorsRequest":{
"type":"structure",
"members":{
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListLicenseManagerReportGeneratorsResponse":{
"type":"structure",
"members":{
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"NextToken":{"shape":"String"}
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},
"ListLicenseSpecificationsForResourceRequest":{
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"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"}
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"ListLicenseSpecificationsForResourceResponse":{
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"members":{
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"NextToken":{"shape":"String"}

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},
"ListLicenseVersionsRequest":{
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"members":{
"LicenseArn":{"shape":"Arn"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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"ListLicenseVersionsResponse":{
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"NextToken":{"shape":"String"}
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},
"ListLicensesRequest":{
"type":"structure",
"members":{
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"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
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"ListLicensesResponse":{
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"Licenses":{"shape":"LicenseList"},
"NextToken":{"shape":"String"}
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"ListReceivedGrantsForOrganizationRequest":{
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"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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"ListReceivedGrantsForOrganizationResponse":{
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"NextToken":{"shape":"String"}
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"members":{
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"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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},
"ListReceivedGrantsResponse":{
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"NextToken":{"shape":"String"}
}
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"ListReceivedLicensesForOrganizationRequest":{
"type":"structure",
"members":{
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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},
"ListReceivedLicensesForOrganizationResponse":{
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"Licenses":{"shape":"GrantedLicenseList"},
"NextToken":{"shape":"String"}
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"ListReceivedLicensesRequest":{
"type":"structure",
"members":{
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"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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},
"ListReceivedLicensesResponse":{
"type":"structure",
"members":{
"Licenses":{"shape":"GrantedLicenseList"},
"NextToken":{"shape":"String"}
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"ListResourceInventoryRequest":{
"type":"structure",
"members":{
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"},
"Filters":{"shape":"InventoryFilterList"}
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},
"ListResourceInventoryResponse":{
"type":"structure",
"members":{
"ResourceInventoryList":{"shape":"ResourceInventoryList"},
"NextToken":{"shape":"String"}
}
},
"ListTagsForResourceRequest":{
"type":"structure",
"required":["ResourceArn"],
"members":{
"ResourceArn":{"shape":"String"}
}
},
"ListTagsForResourceResponse":{
"type":"structure",
"members":{
"Tags":{"shape":"TagList"}
}
},

"ListTokensRequest":{
  "type":"structure",
  "members":{
    "TokenIds":{"shape":"StringList"},
    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListTokensResponse":{
  "type":"structure",
  "members":{
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    "NextToken":{"shape":"String"}
  }
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"ListUsageForLicenseConfigurationRequest":{
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    "NextToken":{"shape":"String"},
    "Filters":{"shape":"Filters"}
  }
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"ListUsageForLicenseConfigurationResponse":{
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  "members":{
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    "NextToken":{"shape":"String"}
  }
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  "members":{
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    "AssociationCount":{"shape":"BoxLong"}
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"ManagedResourceSummaryList":{
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  "member":{"shape":"ManagedResourceSummary"}
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"max":3
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"members":{
"Name":{"shape":"String"},
"Value":{"shape":"String"}
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"MetadataList":{
"type":"list",
"member":{"shape":"Metadata"}
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"NoEntitlementsAllowedException":{
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"members":{
"Message":{"shape":"Message"}
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"exception":true
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"Options":{
"type":"structure",
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"ActivationOverrideBehavior":{"shape":"ActivationOverrideBehavior"}
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"member":{"shape":"Arn"},
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"min":1
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"ProductInformationFilterList"
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"ProductInformationFilterList":{"shape":"ProductInformationFilterList"}
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"ProductInformationFilterComparator"
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"members":{
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"ProductInformationFilterValue":{"shape":"StringList"},
"ProductInformationFilterComparator":{"shape":"String"}
}
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"ProductInformationFilterList":{
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"ProductInformationList":{
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"member":{"shape":"ProductInformation"}
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"ProvisionalConfiguration":{
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"members":{
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"RateLimitExceededException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
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"exception":true
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"ReceivedMetadata":{
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"members":{
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"ReceivedStatusReason":{"shape":"StatusReasonMessage"},

"AllowedOperations":{"shape":"AllowedOperationList"}
}
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"ReceivedStatus":{
"type":"string",
"enum":[
"PENDING_WORKFLOW",
"PENDING_ACCEPT",
"REJECTED",
"ACTIVE",
"FAILED_WORKFLOW",
"DELETED",
"DISABLED",
"WORKFLOW_COMPLETED"
]
},
"RedirectException":{
"type":"structure",
"members":{
"Location":{"shape":"Location"},
"Message":{"shape":"Message"}
},
"exception":true
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"RejectGrantRequest":{
"type":"structure",
"required":["GrantArn"],
"members":{
"GrantArn":{"shape":"Arn"}
}
},
"RejectGrantResponse":{
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"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
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"RenewType":{
"type":"string",
"enum":[
"None",
"Weekly",
"Monthly"
]
},
"ReportContext":{

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  "type":"structure",
  "required":["licenseConfigurationArns"],
  "members":{
    "licenseConfigurationArns":{"shape":"ArnList"}
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},
"ReportFrequency":{
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  "members":{
    "value":{"shape":"Integer"},
    "period":{"shape":"ReportFrequencyType"}
  }
},
"ReportFrequencyType":{
  "type":"string",
  "enum":[
    "DAY",
    "WEEK",
    "MONTH"
  ]
},
"ReportGenerator":{
  "type":"structure",
  "members":{
    "ReportGeneratorName":{"shape":"String"},
    "ReportType":{"shape":"ReportTypeList"},
    "ReportContext":{"shape":"ReportContext"},
    "ReportFrequency":{"shape":"ReportFrequency"},
     "LicenseManagerReportGeneratorArn":{"shape":"String"},
    "LastRunStatus":{"shape":"String"},
    "LastRunFailureReason":{"shape":"String"},
    "LastReportGenerationTime":{"shape":"String"},
    "ReportCreatorAccount":{"shape":"String"},
    "Description":{"shape":"String"},
    "S3Location":{"shape":"S3Location"},
    "CreateTime":{"shape":"String"},
    "Tags":{"shape":"TagList"}
  }
},
"ReportGeneratorList":{
  "type":"list",
  "member":{"shape":"ReportGenerator"}
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"ReportGeneratorName":{
  "type":"string",
  "max":100,
  "min":1
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"ReportType":{
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  "enum":[
    "LicenseConfigurationSummaryReport",
    "LicenseConfigurationUsageReport"
  ]
},
"ReportTypeList":{
  "type":"list",
  "member":{"shape":"ReportType"}
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"ResourceInventory":{
  "type":"structure",
  "members":{
    "ResourceId":{"shape":"String"},
     "ResourceType":{"shape":"ResourceType"},
    "ResourceArn":{"shape":"String"},
    "Platform":{"shape":"String"},
    "PlatformVersion":{"shape":"String"},
    "ResourceOwningAccountId":{"shape":"String"}
  }
},
"ResourceInventoryList":{
  "type":"list",
  "member":{"shape":"ResourceInventory"}
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"ResourceLimitExceededException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ResourceNotFoundException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
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"ResourceType":{
  "type":"string",
  "enum":[
    "EC2_INSTANCE",
    "EC2_HOST",
    "EC2_AMI",
    "RDS",
    "SYSTEMS_MANAGER_MANAGED_INSTANCE"

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  ]
},
"S3Location":{
  "type":"structure",
  "members":{
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}
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"ServerInternalException":{
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  "members":{
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  "exception":true,
  "fault":true
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"SignedToken":{
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  "min":4096
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"StatusReasonMessage":{
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  "max":400,
  "pattern":"[\\s\\S]+"
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"String":{"type":"string"},
"StringList":{
  "type":"list",
  "member":{"shape":"String"}
},
"Tag":{
  "type":"structure",
  "members":{
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    "Value":{"shape":"String"}
  }
},
"TagKeyList":{
  "type":"list",
  "member":{"shape":"String"}
},
"TagList":{
  "type":"list",
  "member":{"shape":"Tag"}
},
"TagResourceRequest":{
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"type":"structure",
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"Tags"
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"members":{
"ResourceArn":{"shape":"String"},
"Tags":{"shape":"TagList"}
}
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"TagResourceResponse":{
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"members":{
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"members":{
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"TokenType":{"shape":"String"},
"LicenseArn":{"shape":"String"},
"ExpirationTime":{"shape":"ISO8601DateTime"},
"TokenProperties":{"shape":"MaxSize3StringList"},
"RoleArns":{"shape":"ArnList"},
"Status":{"shape":"String"}
}
},
"TokenList":{
"type":"list",
"member":{"shape":"TokenData"}
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"TokenString":{
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"max":4096,
"pattern":"\\S+"
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"TokenType":{
"type":"string",
"enum":["REFRESH_TOKEN"]
},
"UnsupportedDigitalSignatureMethodException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"UntagResourceRequest":{

"type":"structure",
"required":[
"ResourceArn",
"TagKeys"
],
"members":{
"ResourceArn":{"shape":"String"},
"TagKeys":{"shape":"TagKeyList"}
}
},
"UntagResourceResponse":{
"type":"structure",
"members":{
}
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"UpdateLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{"shape":"String"},
"LicenseConfigurationStatus":{"shape":"LicenseConfigurationStatus"},
"LicenseRules":{"shape":"StringList"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"ProductInformationList":{"shape":"ProductInformationList"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"}
}
},
"UpdateLicenseConfigurationResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":[
"LicenseManagerReportGeneratorArn",
"ReportGeneratorName",
"Type",
"ReportContext",
"ReportFrequency",
"ClientToken"
],
"members":{
"LicenseManagerReportGeneratorArn":{"shape":"String"},
"ReportGeneratorName":{"shape":"ReportGeneratorName"},

"Type":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"ClientToken":{"shape":"ClientRequestToken"},
"Description":{"shape":"String"}
}
},
"UpdateLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseSpecificationsForResourceRequest":{
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"required":["ResourceArn"],
"members":{
"ResourceArn":{"shape":"String"},
"AddLicenseSpecifications":{"shape":"LicenseSpecifications"},
"RemoveLicenseSpecifications":{"shape":"LicenseSpecifications"}
}
},
"UpdateLicenseSpecificationsForResourceResponse":{
"type":"structure",
"members":{
}
},
"UpdateServiceSettingsRequest":{
"type":"structure",
"members":{
"S3BucketArn":{"shape":"String"},
"SnsTopicArn":{"shape":"String"},
"OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
"EnableCrossAccountsDiscovery":{"shape":"BoxBoolean"}
}
},
"UpdateServiceSettingsResponse":{
"type":"structure",
"members":{
}
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"UsageOperation":{
"type":"string",
"max":50
},
"ValidationException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}

},
"exception":true
}
}
}
{
"version": "2.0",
"service": " License Manager makes it easier to manage licenses from software vendors across multiple Amazon Web Services accounts and on-premises servers. ",
"operations": {
"AcceptGrant": " Accepts the specified grant. ",
"CheckInLicense": " Checks in the specified license. Check in a license when it is no longer in use. ",
"CheckoutBorrowLicense": " Checks out the specified license for offline use. ",
"CheckoutLicense": " Checks out the specified license. <note> If the account that created the license is the same that is performing the check out, you must specify the account as the beneficiary. </note>",
"CreateGrant": " Creates a grant for the specified license. A grant shares the use of license entitlements with a specific Amazon Web Services account, an organization, or an organizational unit (OU). For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateGrantVersion": " Creates a new version of the specified grant. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateLicense": " Creates a license. ",
"CreateLicenseConfiguration": " Creates a license configuration. A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a license must be associated with a host), and the number of licenses purchased and used. ",
"CreateLicenseConversionTaskForResource":
" Creates a new license conversion task. ",
"CreateLicenseManagerReportGenerator": " Creates a report generator. ",
"CreateLicenseVersion": " Creates a new version of the specified license. ",
"CreateToken": " Creates a long-lived token. A refresh token is a JWT token used to get an access token. With an access token, you can call AssumeRoleWithWebIdentity to get role credentials that you can use to call License Manager to manage the specified license. ",
"DeleteGrant": " Deletes the specified grant. ",
"DeleteLicense": " Deletes the specified license. ",
"DeleteLicenseConfiguration": " Deletes the specified license configuration. You cannot delete a license configuration that is in use. ",
"DeleteLicenseManagerReportGenerator": " Deletes the specified report generator. This action deletes the report generator, which stops it from generating future reports. The action cannot be reversed. It has no effect on the previous reports from this generator. ",
"DeleteToken": " Deletes the specified token. Must be called in the license home Region. ",
"ExtendLicenseConsumption": " Extends the expiration date for license consumption. ",
"GetAccessToken": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens are valid for one hour. ",
"GetGrant": " Gets detailed information about the specified grant. ",
"GetLicense": " Gets detailed information about the specified license. ",

"GetLicenseConfiguration": " Gets detailed information about the specified license configuration. ",
"GetLicenseConversionTask": " Gets information about the specified license type conversion task. ",
"GetLicenseManagerReportGenerator": " Gets information about the specified report generator. ",
"GetLicenseUsage": " Gets detailed information about the usage of the specified license. ",
"GetServiceSettings":
" Gets the License Manager settings for the current Region. ",
"ListAssociationsForLicenseConfiguration": " Lists the resource associations for the specified license configuration. Resource associations need not consume licenses from a license configuration. For example, an AMI or a stopped instance might not consume a license (depending on the license rules). ",
"ListDistributedGrants": " Lists the grants distributed for the specified license. ",
"ListFailuresForLicenseConfigurationOperations": " Lists the license configuration operations that failed. ",
"ListLicenseConfigurations": " Lists the license configurations for your account. ",
"ListLicenseConversionTasks": " Lists the license type conversion tasks for your account. ",
"ListLicenseManagerReportGenerators": " Lists the report generators for your account. ",
"ListLicenseSpecificationsForResource": " Describes the license configurations for the specified resource. ",
"ListLicenseVersions": " Lists all versions of the specified license. ",
"ListLicenses": " Lists the licenses for your account. ",
"ListReceivedGrants": " Lists grants that are received. Received grants are grants created while specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs. ",
"ListReceivedGrantsForOrganization": " Lists the grants received for all accounts in the organization. ",
"ListReceivedLicenses": " Lists received licenses. ",
"ListReceivedLicensesForOrganization": " Lists the licenses received for all accounts in the organization. ",
"ListResourceInventory": " Lists resources managed using Systems Manager inventory. ",
"ListTagsForResource": " Lists the tags for the specified license configuration. ",
"ListTokens": " Lists your tokens. ",
"ListUsageForLicenseConfiguration":
" Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration. ",
"RejectGrant": " Rejects the specified grant. ",
"TagResource": " Adds the specified tags to the specified license configuration. ",
"UntagResource": " Removes the specified tags from the specified license configuration. ",
"UpdateLicenseConfiguration": " Modifies the attributes of an existing license configuration. ",
"UpdateLicenseManagerReportGenerator": " Updates a report generator. After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. ",
"UpdateLicenseSpecificationsForResource": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. You can update the license specifications of AMIs, instances, and hosts. You cannot update the license specifications for launch templates and CloudFormation templates, as they send license configurations to the operation that creates the resource. ",
"UpdateServiceSettings": " Updates License Manager settings for the current Region. "
},
"shapes": {
"AcceptGrantRequest": {

"base": null,
"refs": {
}
},
"AcceptGrantResponse": {
"base": null,
"refs": {
}
},
"AccessDeniedException": {
"base": " Access to resource denied. ",
"refs": {
}
},
"ActivationOverrideBehavior": {
"base": null,
"refs": {
"Options$ActivationOverrideBehavior": " An activation option for your grant that determines the behavior of activating a grant. Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the <code>Status</code> parameter.   As a license administrator, you can optionally specify an <code>ActivationOverrideBehavior</code> when activating a grant.   As a grantor, you can optionally specify an <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee account in your organization.   As a grantee, if the grantor creating the distributed grant doesnt specify an <code>ActivationOverrideBehavior</code>, you can optionally specify one when you are activating the grant.   <dl> <dt>DISTRIBUTED_GRANTS_ONLY</dt> <dd> Use this value to activate a grant without replacing any member accounts active grants for the same product. </dd> <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt> <dd> Use this value to activate a grant and disable other active grants in any member accounts for the same product. This action will also replace their previously activated grants with this activated grant. </dd> </dl>"
}
},
"AllowedOperation": {
"base": null,
"refs": {
"AllowedOperationList$member": null
}
},
"AllowedOperationList": {
"base": null,
"refs": {
"CreateGrantRequest$AllowedOperations": " Allowed operations for the grant. ",
"CreateGrantVersionRequest$AllowedOperations": " Allowed operations for the grant. ",
"Grant$GrantedOperations": " Granted operations. ",
"ReceivedMetadata$AllowedOperations": " Allowed operations. "
}
},

"Arn": {
"base": null,
"refs": {
"AcceptGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"AcceptGrantResponse$GrantArn": " Grant ARN. ",
"ArnList$member": null,
"CheckoutBorrowLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"CheckoutBorrowLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantResponse$GrantArn": " Grant ARN. ",
"CreateGrantVersionRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"CreateGrantVersionResponse$GrantArn": " Grant ARN. ",
"CreateLicenseConversionTaskForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"CreateLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionResponse$LicenseArn": " License ARN. ",
"CreateTokenRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the JWT token. ",
"DeleteGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"DeleteGrantResponse$GrantArn": " Grant ARN. ",
"DeleteLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"GetLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetLicenseUsageRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"Grant$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"Grant$ParentArn": " Parent ARN. ",
"Grant$LicenseArn": " License ARN. ",
"Grant$GranteePrincipalArn": " The grantee principal ARN. ",
"GrantedLicense$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"License$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"ListLicenseVersionsRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"ListReceivedGrantsForOrganizationRequest$LicenseArn": " The Amazon Resource Name (ARN) of the received license. ",
"PrincipalArnList$member": null,
"RejectGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"RejectGrantResponse$GrantArn": " Grant ARN. "
}
},
"ArnList": {
"base": null,
"refs": {
"CreateTokenRequest$RoleArns": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. License Manager does not check whether the roles are in use. ",

"ListDistributedGrantsRequest$GrantArns": " Amazon Resource Names (ARNs) of the grants. ",
"ListLicensesRequest$LicenseArns": " Amazon Resource Names (ARNs) of the licenses. ",
"ListReceivedGrantsRequest$GrantArns": " Amazon Resource Names (ARNs) of the grants. ",
"ListReceivedLicensesRequest$LicenseArns": " Amazon Resource Names (ARNs) of the licenses. ",

"ReportContext$licenseConfigurationArns": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"TokenData$RoleArns": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"AuthorizationException": {
"base": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM policy associated with this account. ",
"refs": {
}
},
"AutomatedDiscoveryInformation": {
"base": " Describes automated discovery. ",
"refs": {
"GetLicenseConfigurationResponse$AutomatedDiscoveryInformation": " Automated discovery information. ",
"LicenseConfiguration$AutomatedDiscoveryInformation": " Automated discovery information. "
}
},
"Boolean": {
"base": null,
"refs": {
"ExtendLicenseConsumptionRequest$DryRun": " Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions. ",
"OrganizationConfiguration$EnableIntegration": " Enables Organizations integration. "
}
},
"BorrowConfiguration": {
"base": " Details about a borrow configuration. ",
"refs": {
"ConsumptionConfiguration$BorrowConfiguration": " Details about a borrow configuration. "
}
},
"BoxBoolean": {
"base": null,
"refs": {
"BorrowConfiguration$AllowEarlyCheckIn": " Indicates whether early check-ins are allowed. ",
"CreateLicenseConfigurationRequest$LicenseCountHardLimit": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit blocks the launch of new instances. ",
"CreateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"Entitlement$Overage": " Indicates

whether overages are allowed. ",
"Entitlement$AllowCheckIn": " Indicates whether check-ins are allowed. ",
"GetLicenseConfigurationResponse$LicenseCountHardLimit": " Sets the number of available licenses as a hard limit. ",
"GetLicenseConfigurationResponse$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"GetServiceSettingsResponse$EnableCrossAccountsDiscovery": " Indicates whether cross-account discovery is enabled. ",
"LicenseConfiguration$LicenseCountHardLimit": " Number of available licenses as a hard limit. ",
"LicenseConfiguration$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateLicenseConfigurationRequest$LicenseCountHardLimit": " New hard limit of the number of available licenses. ",
"UpdateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateServiceSettingsRequest$EnableCrossAccountsDiscovery": " Activates cross-account discovery. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"BorrowConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the borrow configuration, in minutes. ",
"ListAssociationsForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListFailuresForLicenseConfigurationOperationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConfigurationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConversionTasksRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseSpecificationsForResourceRequest$MaxResults": " Maximum number of results to return in a single call. ",

"ListResourceInventoryRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUsageForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ProvisionalConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the provisional configuration, in minutes. "
}
},
"BoxLong": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ConsumedLicenses": " Number of licenses consumed by the resource. ",
"CreateLicenseConfigurationRequest$LicenseCount": " Number of licenses managed by the license configuration. ",

"GetLicenseConfigurationResponse$LicenseCount": " Number of available licenses. ",
"GetLicenseConfigurationResponse$ConsumedLicenses": " Number of licenses assigned to resources. ",
"LicenseConfiguration$LicenseCount": " Number of licenses managed by the license configuration. ",
"LicenseConfiguration$ConsumedLicenses":
" Number of licenses consumed. ",
"LicenseConfigurationUsage$ConsumedLicenses": " Number of licenses consumed by the resource. ",
"ManagedResourceSummary$AssociationCount": " Number of resources associated with licenses. ",
"UpdateLicenseConfigurationRequest$LicenseCount": " New number of licenses managed by the license configuration. "
}
},
"CheckInLicenseRequest": {
"base": null,
"refs": {
}
},
"CheckInLicenseResponse": {
"base": null,
"refs": {
}
},
"CheckoutBorrowLicenseRequest": {
"base": null,
"refs": {
}
},
"CheckoutBorrowLicenseResponse": {
"base": null,
"refs": {
}
},
"CheckoutLicenseRequest": {
"base": null,
"refs": {
}
},
"CheckoutLicenseResponse": {
"base": null,
"refs": {
}
},
"CheckoutType": {
"base": null,
"refs": {
"CheckoutLicenseRequest$CheckoutType": " Checkout type. ",
"CheckoutLicenseResponse$CheckoutType": " Checkout type. "
}
},

"ClientRequestToken": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"UpdateLicenseManagerReportGeneratorRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. "
}
},
"ClientToken": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CheckoutLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateGrantRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateGrantVersionRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateLicenseVersionRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateTokenRequest$ClientToken": " Idempotency token, valid for 10 minutes. "
}
},
"ConflictException": {
"base": " There was a conflict processing the request. Try your request again. ",
"refs": {
}
},
"ConsumedLicenseSummary": {
"base": " Details about license consumption. ",
"refs": {
"ConsumedLicenseSummaryList$member": null
}
},
"ConsumedLicenseSummaryList": {
"base": null,
"refs": {
"GetLicenseConfigurationResponse$ConsumedLicenseSummaryList": " Summaries of the licenses consumed by resources. ",
"LicenseConfiguration$ConsumedLicenseSummaryList": " Summaries for licenses consumed by various resources. "
}
},
"ConsumptionConfiguration": {

"base": " Details about a consumption configuration. ",
"refs": {
"CreateLicenseRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"CreateLicenseVersionRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"GrantedLicense$ConsumptionConfiguration": " Configuration for consumption of the license. ",
"License$ConsumptionConfiguration": " Configuration for consumption of the license. "
}
},
"CreateGrantRequest": {
"base": null,
"refs": {
}
},
"CreateGrantResponse": {
"base": null,
"refs": {
}
},
"CreateGrantVersionRequest": {
"base": null,
"refs": {
}
},
"CreateGrantVersionResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseConversionTaskForResourceRequest": {
"base": null,
"refs": {
}
},

"CreateLicenseConversionTaskForResourceResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseManagerReportGeneratorRequest": {
  "base": null,
  "refs": {

 }
},
"CreateLicenseManagerReportGeneratorResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseVersionRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseVersionResponse": {
  "base": null,
  "refs": {
  }
},
"CreateTokenRequest": {
  "base": null,
  "refs": {
  }
},
"CreateTokenResponse": {
  "base": null,
  "refs": {
  }
},
"DateTime": {
  "base": null,

"refs": {
"AutomatedDiscoveryInformation$LastRunTime": " Time that automated discovery last ran. ",
"GetLicenseConversionTaskResponse$StartTime": " Time at which the license type conversion task was started . ",
"GetLicenseConversionTaskResponse$LicenseConversionTime": " Amount of time to complete the license type conversion. ",
"GetLicenseConversionTaskResponse$EndTime": " Time at which the license type conversion task was completed. ",
"LicenseConfigurationAssociation$AssociationTime": " Time when the license configuration was associated with the resource. ",
"LicenseConfigurationUsage$AssociationTime": " Time when the license configuration was initially associated with the resource. ",
"LicenseConversionTask$StartTime": " The time the conversion task was started at. ",
"LicenseConversionTask$LicenseConversionTime": " The time the usage operation value of the resource was changed. ",
"LicenseConversionTask$EndTime": " The time the conversion task was completed. ",
"LicenseOperationFailure$FailureTime": " Failure time. "
}
},
"DatetimeRange": {
"base": " Describes a time range, in ISO8601-UTC format. ",
"refs": {
"CreateLicenseRequest$Validity": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"CreateLicenseVersionRequest$Validity": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"GrantedLicense$Validity": " Date and time range during which the granted license is valid, in ISO8601-UTC format. ",
"License$Validity": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"DeleteGrantRequest": {
"base": null,
"refs": {
}
},
"DeleteGrantResponse": {
"base": null,
"refs": {
}
},
"DeleteLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseConfigurationResponse": {
"base": null,

"refs": {
}
},
"DeleteLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseManagerReportGeneratorResponse": {
"base": null,
"refs": {
}
},
"DeleteLicenseRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseResponse": {
"base": null,
"refs": {
}
},
"DeleteTokenRequest": {
"base": null,
"refs": {
}
},
"DeleteTokenResponse": {
"base": null,
"refs": {
}
},
"DigitalSignatureMethod": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$DigitalSignatureMethod": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384. For more information, see RFC 7518 Digital Signature with RSASSA-PSS. "
}
},
"Entitlement": {
"base": " Describes a resource entitled for use with a license. ",
"refs": {
"EntitlementList$member": null
}
},
"EntitlementData": {

"base": " Data associated with an entitlement resource. ",

"refs": {
"EntitlementDataList$member": null
}
},
"EntitlementDataList": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$Entitlements": " License entitlements. Partial checkouts are not supported. ",
"CheckoutBorrowLicenseResponse$EntitlementsAllowed": " Allowed license entitlements. ",
"CheckoutLicenseRequest$Entitlements": " License entitlements. ",
"CheckoutLicenseResponse$EntitlementsAllowed": " Allowed license entitlements. "
}
},
"EntitlementDataUnit": {
"base": null,
"refs": {
"EntitlementData$Unit": " Entitlement data unit. ",
"EntitlementUsage$Unit": " Entitlement usage unit. "
}
},
"EntitlementList": {
"base": null,
"refs": {
"CreateLicenseRequest$Entitlements": " License entitlements. ",
"CreateLicenseVersionRequest$Entitlements": " License entitlements. ",
"GrantedLicense$Entitlements": " License entitlements. ",
"License$Entitlements": " License entitlements. "
}
},
"EntitlementNotAllowedException": {
"base": " The entitlement is not allowed. ",
"refs": {
}
},
"EntitlementUnit": {
"base": null,
"refs": {
"Entitlement$Unit": " Entitlement unit. "
}
},
"EntitlementUsage": {
"base": " Usage associated with an entitlement resource. ",
"refs": {
"EntitlementUsageList$member": null

```
    }
  },
  "EntitlementUsageList": {
    "base": null,
    "refs": {
      "LicenseUsage$EntitlementUsages": "<p>License entitlement usages.</p>"
    }
  },
  "ExtendLicenseConsumptionRequest": {
    "base": null,
    "refs": {
    }
  },
  "ExtendLicenseConsumptionResponse": {
    "base": null,
    "refs": {
    }
  },
  "FailedDependencyException": {
    "base": "<p>A dependency required to run the API is missing.</p>",
     "refs": {
    }
  },
  "Filter": {
    "base": "<p>A filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs.</p>",
    "refs": {
      "FilterList$member": null,
      "Filters$member": null
    }
  },
  "FilterLimitExceededException": {
    "base": "<p>The request uses too many filters or too many filter values.</p>",
    "refs": {
    }
  },
  "FilterList": {
    "base": null,
    "refs": {
      "ListDistributedGrantsRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>LicenseArn</code> </p> </li> <li> <p> <code>GrantStatus</code> </p> </li> <li> <p> <code>GranteePrincipalARN</code> </p> </li> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>LicenseIssuerName</code> </p> </li> </ul>",
      "ListLicenseManagerReportGeneratorsRequest$Filters": "<p>Filters to scope the results. The following filters are supported: </p> <ul> <li> <p> <code>LicenseConfigurationArn</code> </p> </li> </ul>",
      "ListLicensesRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>Beneficiary</code> </p> </li> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p>
```

<code>Fingerprint</code>   <code>Status</code> ",
"ListReceivedGrantsForOrganizationRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ParentArn</code>   <code>GranteePrincipalArn</code> ",
"ListReceivedGrantsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ProductSKU</code>   <code>LicenseIssuerName</code>   <code>LicenseArn</code>   <code>GrantStatus</code>   <code>GranterAccountId</code> ",
"ListReceivedLicensesForOrganizationRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>Beneficiary</code>   <code>ProductSKU</code> ",
"ListReceivedLicensesRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ProductSKU</code>   <code>Status</code>   <code>Fingerprint</code>   <code>IssuerName</code>   <code>Beneficiary</code> ",
"ListTokensRequest$Filters": " Filters to scope the results. The following filter is supported: <ul> <code>LicenseArns</code> "
}
},
"FilterName": {
"base": null,
"refs": {
"Filter$Name": " Name of the filter. Filter names are case-sensitive. "
}
},
"FilterValue": {
"base": null,
"refs": {
"FilterValues$member": null
}
},
"FilterValues": {
"base": null,
"refs": {
"Filter$Values": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
},
"Filters": {
"base": null,
"refs": {
"ListLicenseConfigurationsRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>licenseCountingType</code> - The dimension for which licenses are counted. Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.

  <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. ",

"ListLicenseConversionTasksRequest$Filters": " Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>. ",

"ListUsageForLicenseConfigurationRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>resourceArn</code> - The ARN of the license configuration resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceAccount</code> - The ID of the account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. "

}

},

"GetAccessTokenRequest": {

"base": null,

"refs": {

}

},

"GetAccessTokenResponse": {

"base": null,

"refs": {

}

},

"GetGrantRequest": {

"base": null,

"refs": {

}

},

"GetGrantResponse": {

"base": null,

"refs": {

}

},

"GetLicenseConfigurationRequest": {

"base": null,

"refs": {

}

},

"GetLicenseConfigurationResponse": {

"base": null,

"refs": {

}

},

"GetLicenseConversionTaskRequest": {

"base": null,

"refs": {
}
},
"GetLicenseConversionTaskResponse": {
"base": null,
"refs": {
}
},
"GetLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
}
},
"GetLicenseManagerReportGeneratorResponse": {
"base":
null,
"refs": {
}
},
"GetLicenseRequest": {
"base": null,
"refs": {
}
},
"GetLicenseResponse": {
"base": null,
"refs": {
}
},
"GetLicenseUsageRequest": {
"base": null,
"refs": {
}
},
"GetLicenseUsageResponse": {
"base": null,
"refs": {
}
},
"GetServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"GetServiceSettingsResponse": {
"base": null,
"refs": {
}

```
  },
  "Grant": {
    "base": "<p>Describes a grant.</p>",
    "refs": {
      "GetGrantResponse$Grant": "<p>Grant details.</p>",
      "GrantList$member": null
    }
  },
  "GrantList": {
    "base": null,
    "refs": {
      "ListDistributedGrantsResponse$Grants": "<p>Distributed grant details.</p>",
      "ListReceivedGrantsForOrganizationResponse$Grants": "<p>Lists the grants the organization has
received.</p>",
      "ListReceivedGrantsResponse$Grants":
 "<p>Received grant details.</p>"
    }
  },
  "GrantStatus": {
    "base": null,
    "refs": {
      "AcceptGrantResponse$Status": "<p>Grant status.</p>",
      "CreateGrantResponse$Status": "<p>Grant status.</p>",
      "CreateGrantVersionRequest$Status": "<p>Grant status.</p>",
      "CreateGrantVersionResponse$Status": "<p>Grant status.</p>",
      "DeleteGrantResponse$Status": "<p>Grant status.</p>",
      "Grant$GrantStatus": "<p>Grant status.</p>",
      "RejectGrantResponse$Status": "<p>Grant status.</p>"
    }
  },
  "GrantedLicense": {
    "base": "<p>Describes a license that is granted to a grantee.</p>",
    "refs": {
      "GrantedLicenseList$member": null
    }
  },
  "GrantedLicenseList": {
    "base": null,
    "refs": {
      "ListReceivedLicensesForOrganizationResponse$Licenses": "<p>Lists the licenses the organization has
received.</p>",
      "ListReceivedLicensesResponse$Licenses": "<p>Received license
 details.</p>"
    }
  },
  "ISO8601DateTime": {
    "base": null,
    "refs": {
```

"CheckoutBorrowLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
"CheckoutBorrowLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
"CheckoutLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
"CheckoutLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
"DatetimeRange$Begin": " Start of the time range. ",
"DatetimeRange$End": " End of the time range. ",
"DeleteLicenseResponse$DeletionDate": " Date when the license is deleted. ",
"ExtendLicenseConsumptionResponse$Expiration": " Date and time at which the license consumption expires. ",
"GrantedLicense$CreateTime": " Creation time of the granted license. ",
"License$CreateTime": " License
creation time. ",
"TokenData$ExpirationTime": " Token expiration time, in ISO8601-UTC format. "
}
},
"Integer": {
"base": null,
"refs": {
"CreateTokenRequest$ExpirationInDays": " Token expiration, in days, counted from token creation. The default is 365 days. ",
"ReportFrequency$value": " Number of times within the frequency period that a report is generated. The only supported value is <code>1</code>. "
}
},
"InvalidParameterValueException": {
"base": " One or more parameter values are not valid. ",
"refs": {
}
},
"InvalidResourceStateException": {
"base": " License Manager cannot allocate a license to a resource because of its state. For example, you cannot allocate a license to an instance in the process of shutting down. ",
"refs": {
}
},
"InventoryFilter": {
"base": " An inventory filter. ",
"refs": {

"InventoryFilterList$member": null
}
},
"InventoryFilterCondition": {
"base": null,
"refs": {
"InventoryFilter$Condition": " Condition of the filter. "

```
    }
  },
  "InventoryFilterList": {
    "base": null,
    "refs": {
      "ListResourceInventoryRequest$Filters": "<p>Filters to scope the results. The following filters and logical operators are supported:</p> <ul> <li> <p> <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>application_name</code> - The name of the application. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p> </li> <li> <p> <code>license_included</code> - The type of license included. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. Possible values are <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code>
 | <code>windows-server-datacenter</code>.</p> </li> <li> <p> <code>platform</code> - The platform of the resource. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p> </li> <li> <p> <code>resource_id</code> - The ID of the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>tag:&lt;key&gt;</code> - The key/value combination of a tag assigned to the resource. Logical operators are <code>EQUALS</code> (single account) or <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p> </li> </ul>"
    }
  },
  "Issuer": {
    "base": "<p>Details about the issuer of a license.</p>",
    "refs": {
      "CreateLicenseRequest$Issuer": "<p>License issuer.</p>",
      "CreateLicenseVersionRequest$Issuer": "<p>License issuer.</p>"
    }
  },
  "IssuerDetails": {
    "base": "<p>Details associated with the issuer of a license.</p>",
    "refs": {
      "GrantedLicense$Issuer": "<p>Granted
 license issuer.</p>",
      "License$Issuer": "<p>License issuer.</p>"
    }
  },
  "License": {
    "base": "<p>Software license that is managed in License Manager.</p>",
    "refs": {
      "GetLicenseResponse$License": "<p>License details.</p>",
      "LicenseList$member": null
    }
  },
  "LicenseConfiguration": {
    "base": "<p>A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used.</p>",
```

"refs": {
"LicenseConfigurations$member": null
}
},
"LicenseConfigurationAssociation": {
"base": " Describes an association with a license configuration. ",
"refs": {
"LicenseConfigurationAssociations$member": null
}
},
"LicenseConfigurationAssociations": {
"base": null,
"refs": {
"ListAssociationsForLicenseConfigurationResponse$LicenseConfigurationAssociations": " Information about the associations for the license configuration. "
}
},
"LicenseConfigurationStatus": {
"base": null,
"refs": {
"UpdateLicenseConfigurationRequest$LicenseConfigurationStatus": " New status of the license configuration. "
}
},
"LicenseConfigurationUsage": {
"base": " Details about the usage of a resource associated with a license configuration. ",
"refs": {
"LicenseConfigurationUsageList$member": null
}
},
"LicenseConfigurationUsageList": {
"base": null,
"refs": {
"ListUsageForLicenseConfigurationResponse$LicenseConfigurationUsageList": " Information about the license configurations. "
}

},
"LicenseConfigurations": {
"base": null,
"refs": {
"ListLicenseConfigurationsResponse$LicenseConfigurations": " Information about the license configurations. "
}
},
"LicenseConversionContext": {
"base": " Information about a license type conversion task. ",
"refs": {

"CreateLicenseConversionTaskForResourceRequest$SourceLicenseContext": " Information that identifies the license type you are converting from. For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"CreateLicenseConversionTaskForResourceRequest$DestinationLicenseContext": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert
a license type using the CLI in the License Manager User Guide. ",
"GetLicenseConversionTaskResponse$SourceLicenseContext": " Information about the license type converted from. ",
"GetLicenseConversionTaskResponse$DestinationLicenseContext": " Information about the license type converted to. ",
"LicenseConversionTask$SourceLicenseContext": " Information about the license type this conversion task converted from. ",
"LicenseConversionTask$DestinationLicenseContext": " Information about the license type this conversion task converted to. "
}
},
"LicenseConversionTask": {
"base": " Information about a license type conversion task. ",
"refs": {
"LicenseConversionTasks$member": null
}
},
"LicenseConversionTaskId": {
"base": null,
"refs": {
"CreateLicenseConversionTaskForResourceResponse$LicenseConversionTaskId":
" The ID of the created license type conversion task. ",
"GetLicenseConversionTaskRequest$LicenseConversionTaskId": " ID of the license type conversion task to retrieve information on. ",
"GetLicenseConversionTaskResponse$LicenseConversionTaskId": " ID of the license type conversion task. ",
"LicenseConversionTask$LicenseConversionTaskId": " The ID of the license type conversion task. "
}
},
"LicenseConversionTaskStatus": {
"base": null,
"refs": {
"GetLicenseConversionTaskResponse$Status": " Status of the license type conversion task. ",
"LicenseConversionTask$Status": " The status of the conversion task. "
}
},
"LicenseConversionTasks": {
"base": null,
"refs": {
"ListLicenseConversionTasksResponse$LicenseConversionTasks": " Information about the license

configuration tasks for your account. "
    }
  },
  "LicenseCountingType":
 {
    "base": null,
    "refs": {
      "CreateLicenseConfigurationRequest$LicenseCountingType": " Dimension used to track the license inventory. ",
      "GetLicenseConfigurationResponse$LicenseCountingType": " Dimension for which the licenses are counted. ",
      "LicenseConfiguration$LicenseCountingType": " Dimension to use to track the license inventory. "
    }
  },
  "LicenseDeletionStatus": {
    "base": null,
    "refs": {
      "DeleteLicenseResponse$Status": " License status. "
    }
  },
  "LicenseList": {
    "base": null,
    "refs": {
      "ListLicenseVersionsResponse$Licenses": " License details. ",
      "ListLicensesResponse$Licenses": " License details. "
    }
  },
  "LicenseOperationFailure": {
    "base": " Describes the failure of a license operation. ",
    "refs": {
      "LicenseOperationFailureList$member": null
    }
  },
  "LicenseOperationFailureList": {
    "base":
 null,
    "refs": {
      "ListFailuresForLicenseConfigurationOperationsResponse$LicenseOperationFailureList": " License configuration operations that failed. "
    }
  },
  "LicenseSpecification": {
    "base": " Details for associating a license configuration with a resource. ",
    "refs": {
      "LicenseSpecifications$member": null
    }
  },
  "LicenseSpecifications": {

"base": null,
"refs": {
"ListLicenseSpecificationsForResourceResponse$LicenseSpecifications": " License configurations associated with a resource. ",
"UpdateLicenseSpecificationsForResourceRequest$AddLicenseSpecifications": " ARNs of the license configurations to add. ",
"UpdateLicenseSpecificationsForResourceRequest$RemoveLicenseSpecifications": " ARNs of the license configurations to remove. "
}
},
"LicenseStatus": {
"base": null,
"refs": {
"CreateLicenseResponse$Status": " License status. ",
"CreateLicenseVersionRequest$Status": " License status. ",
"CreateLicenseVersionResponse$Status": " License status. ",
"GrantedLicense$Status": " Granted license status. ",
"License$Status": " License status. "
}
},
"LicenseUsage": {
"base": " Describes the entitlement usage associated with a license. ",
"refs": {
"GetLicenseUsageResponse$LicenseUsage": " License usage details. "
}
},
"LicenseUsageException": {
"base": " You do not have enough licenses available to support a new resource launch. ",
"refs": {
}
},
"ListAssociationsForLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"ListAssociationsForLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"ListDistributedGrantsRequest": {
"base": null,
"refs": {
}
},
"ListDistributedGrantsResponse":

{
  "base": null,
  "refs": {
  }
},
"ListFailuresForLicenseConfigurationOperationsRequest": {
  "base": null,
  "refs": {
  }
},
"ListFailuresForLicenseConfigurationOperationsResponse": {
  "base": null,
  "refs": {
  }
},
"ListLicenseConfigurationsRequest": {
  "base": null,
  "refs": {
  }
},
"ListLicenseConfigurationsResponse": {
  "base": null,
  "refs": {
  }
},
"ListLicenseConversionTasksRequest": {
  "base": null,
  "refs": {
  }
},
"ListLicenseConversionTasksResponse": {
  "base": null,
  "refs": {
  }
},
"ListLicenseManagerReportGeneratorsRequest": {
  "base": null,
  "refs": {
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},
"ListLicenseManagerReportGeneratorsResponse": {
  "base": null,
  "refs": {
  }
},
"ListLicenseSpecificationsForResourceRequest": {
  "base": null,
  "refs": {

```
    }
  },
  "ListLicenseSpecificationsForResourceResponse":
{
    "base": null,
    "refs": {
    }
  },
  "ListLicenseVersionsRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListLicenseVersionsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListLicensesRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListLicensesResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedGrantsForOrganizationRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedGrantsForOrganizationResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedGrantsRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedGrantsResponse": {
    "base": null,
    "refs": {
    }
  },
```

"ListReceivedLicensesForOrganizationRequest": {
"base": null,
"refs": {
}
},
"ListReceivedLicensesForOrganizationResponse": {
"base": null,
"refs": {
}
},
"ListReceivedLicensesRequest":
{
"base": null,
"refs": {
}
},
"ListReceivedLicensesResponse": {
"base": null,
"refs": {
}
},
"ListResourceInventoryRequest": {
"base": null,
"refs": {
}
},
"ListResourceInventoryResponse": {
"base": null,
"refs": {
}
},
"ListTagsForResourceRequest": {
"base": null,
"refs": {
}
},
"ListTagsForResourceResponse": {
"base": null,
"refs": {
}
},
"ListTokensRequest": {
"base": null,
"refs": {
}
},
"ListTokensResponse": {
"base": null,

"refs": {
}
},
"ListUsageForLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"ListUsageForLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"Location": {
"base": null,
"refs": {
"RedirectException$Location": null
}
},
"Long":
{
"base": null,
"refs": {
"Entitlement$MaxCount": " Maximum entitlement count. Use if the unit is not None. "
}
},
"ManagedResourceSummary": {
"base": " Summary information about a managed resource. ",
"refs": {
"ManagedResourceSummaryList$member": null
}
},
"ManagedResourceSummaryList": {
"base": null,
"refs": {
"GetLicenseConfigurationResponse$ManagedResourceSummaryList": " Summaries of the managed resources. ",
"LicenseConfiguration$ManagedResourceSummaryList": " Summaries for managed resources. "
}
},
"MaxSize100": {
"base": null,
"refs": {
"ListDistributedGrantsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseManagerReportGeneratorsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseVersionsRequest$MaxResults": " Maximum

number of results to return in a single call. ",
"ListLicensesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedGrantsForOrganizationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedGrantsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedLicensesForOrganizationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedLicensesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListTokensRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"MaxSize3StringList": {
"base": null,
"refs": {
"CreateTokenRequest$TokenProperties": " Data specified by the caller to be included in the JWT token. The data is mapped to the amr claim of the JWT token. ",

"GetAccessTokenRequest$TokenProperties": " Token properties to validate against those present in the JWT token. ",
"TokenData$TokenProperties": " Data specified by the caller. "
}
},
"Message": {
"base": null,
"refs": {
"AccessDeniedException$Message": null,
"AuthorizationException$Message": null,
"ConflictException$Message": null,
"EntitlementNotAllowedException$Message": null,
"FailedDependencyException$Message": null,
"FilterLimitExceededException$Message": null,
"InvalidParameterValueException$Message": null,
"InvalidResourceStateException$Message": null,
"LicenseUsageException$Message": null,
"NoEntitlementsAllowedException$Message": null,
"RateLimitExceededException$Message": null,
"RedirectException$Message": null,
"ResourceLimitExceededException$Message": null,
"ResourceNotFoundException$Message": null,
"ServerInternalException$Message":
null,
"UnsupportedDigitalSignatureMethodException$Message": null,
"ValidationException$Message": null
}
},
"Metadata": {
"base": " Describes key/value pairs. ",
"refs": {

"MetadataList$member": null
}
},
"MetadataList": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$CheckoutMetadata": " Information about constraints. ",
"CheckoutBorrowLicenseResponse$CheckoutMetadata": " Information about constraints. ",
"CreateLicenseRequest$LicenseMetadata": " Information about the license. ",
"CreateLicenseVersionRequest$LicenseMetadata": " Information about the license. ",
"GrantedLicense$LicenseMetadata": " Granted license metadata. ",
"License$LicenseMetadata": " License metadata. ",
"LicenseOperationFailure$MetadataList": " Reserved. "
}
},
"NoEntitlementsAllowedException": {

"base": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"refs": {
}
},
"Options": {
"base": " The options you can specify when you create a new version of a grant, such as activation override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"refs": {
"CreateGrantVersionRequest$Options": " The options specified for the grant. ",
"Grant$Options": " The options specified for the grant. "
}
},
"OrganizationConfiguration": {
"base": " Configuration information for Organizations. ",
"refs": {
"GetServiceSettingsResponse$OrganizationConfiguration": " Indicates whether Organizations is integrated with License Manager for cross-account discovery. ",
"UpdateServiceSettingsRequest$OrganizationConfiguration": " Enables integration with Organizations for cross-account discovery. "
}
},
"PrincipalArnList": {
"base": null,
"refs": {
"CreateGrantRequest$Principals": " The grant principals. You can specify one of the following as an Amazon Resource Name (ARN): <ul> An Amazon Web Services account, which includes only the account specified.   An organizational unit (OU), which includes all accounts in the OU.   An organization, which will include all accounts across your organization. "

```
    }
  },
  "ProductInformation": {
    "base": "<p>Describes product information for a license configuration.</p>",
    "refs": {
      "ProductInformationList$member": null
    }
  },
  "ProductInformationFilter": {
    "base": "<p>Describes product information filters.</p>",
    "refs": {
      "ProductInformationFilterList$member":
null
    }
  },
  "ProductInformationFilterList": {
    "base": null,
    "refs": {
      "ProductInformation$ProductInformationFilterList": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p> <p>Accepted values for
<code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p> <p>The following filters and are supported when the
resource type is <code>SSM_MANAGED</code>:</p> <ul> <li> <p> <code>Application Name</code> - The
name of the application. Logical operator is <code>EQUALS</code>.</p> </li> <li> <p> <code>Application
Publisher</code> - The publisher of the application. Logical operator is <code>EQUALS</code>.</p>
 </li> <li> <p> <code>Application Version</code> - The version of the application. Logical operator is
<code>EQUALS</code>.</p> </li> <li> <p> <code>Platform Name</code> - The name of the platform. Logical
operator is <code>EQUALS</code>.</p> </li> <li> <p> <code>Platform Type</code> - The platform type.
Logical operator is <code>EQUALS</code>.</p> </li> <li> <p> <code>Tag:key</code> - The key of a tag
attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key. </p> </li> <li> <p> <code>AccountId</code> - The 12-digit ID of an Amazon
Web Services account you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>License Included</code> -
 The type of license included. Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.
Possible values are: <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-
web</code> | <code>windows-server-datacenter</code>.</p> </li> </ul> <p>The following filters and logical
operators are supported when the resource type is <code>RDS</code>:</p> <ul> <li> <p> <code>Engine
Edition</code> - The edition of the database engine. Logical operator is <code>EQUALS</code>. Possible values
are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>
</li> <li> <p> <code>License Pack</code> - The license pack. Logical operator is <code>EQUALS</code>.
Possible values are: <code>data guard</code> | <code>diagnostic pack sqlt</code> | <code>tuning pack
sqlt</code> | <code>ols</code> | <code>olap</code>.</p> </li> </ul>"
    }
  },
```

"ProductInformationList": {
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$ProductInformationList":
" Product information. ",
"GetLicenseConfigurationResponse$ProductInformationList": " Product information. ",
"LicenseConfiguration$ProductInformationList": " Product information. ",
"UpdateLicenseConfigurationRequest$ProductInformationList": " New product information. "
}
},
"ProvisionalConfiguration": {
"base": " Details about a provisional configuration. ",
"refs": {
"ConsumptionConfiguration$ProvisionalConfiguration": " Details about a provisional configuration. "
}
},
"RateLimitExceededException": {
"base": " Too many requests have been submitted. Try again after a brief wait. ",
"refs": {
}
},
"ReceivedMetadata": {
"base": " Metadata associated with received licenses and grants. ",
"refs": {
"GrantedLicense$ReceivedMetadata": " Granted license received metadata. "
}
},
"ReceivedStatus": {
"base": null,
"refs": {
"ReceivedMetadata$ReceivedStatus": " Received status. "
}
},
"RedirectException": {
"base": " This is not the correct Region for the resource. Try again. ",
"refs": {
}
},
"RejectGrantRequest": {
"base": null,
"refs": {
}
},
"RejectGrantResponse": {
"base": null,
"refs": {
}
},

"RenewType": {
"base": null,
"refs": {
"ConsumptionConfiguration$RenewType": " Renewal frequency. "
}
},
"ReportContext": {
"base": " Details of the license configuration that this generator reports on. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportContext": " Defines the type of license configuration the report generator tracks. ",
"ReportGenerator$ReportContext": " License configuration type for this generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportContext": " The report context. "
}
},
"ReportFrequency": {
"base": " Details about how frequently reports are generated. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"ReportGenerator$ReportFrequency": " Details about how frequently reports are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. "
}
},
"ReportFrequencyType": {
"base": null,
"refs": {
"ReportFrequency$period": " Time period between each report. The period can be daily, weekly, or monthly. "
}
},
"ReportGenerator": {
"base": " Describe the details of a report generator. ",
"refs": {
"GetLicenseManagerReportGeneratorResponse$ReportGenerator": " A report generator that creates periodic reports about your license configurations. ",
"ReportGeneratorList$member": null
}
},
"ReportGeneratorList": {
"base": null,
"refs": {
"ListLicenseManagerReportGeneratorsResponse$ReportGenerators": " A report generator that creates periodic reports about your license configurations. "
}
},

"ReportGeneratorName": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. "
}
},
"ReportType": {
"base": null,
"refs": {
"ReportTypeList$member": null
}
},
"ReportTypeList": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types an
be generated: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. ",
"ReportGenerator$ReportType": " Type of reports that are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types are supported: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. "
}
},
"ResourceInventory": {
"base": " Details about a resource. ",
"refs": {
"ResourceInventoryList$member": null
}
},
"ResourceInventoryList": {
"base": null,
"refs": {
"ListResourceInventoryResponse$ResourceInventoryList": " Information about the resources. "
}
},
"ResourceLimitExceededException": {
"base": " Your resource limits have been exceeded. ",
"refs": {
}
},
"ResourceNotFoundException": {

"base": " The resource cannot be found. ",
"refs": {
}
},
"ResourceType": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ResourceType": " Resource type of the resource consuming a license. ",
"LicenseConfigurationAssociation$ResourceType": " Type of server resource. ",
"LicenseConfigurationUsage$ResourceType": " Type of resource. ",
"LicenseOperationFailure$ResourceType": " Resource type. ",
"ManagedResourceSummary$ResourceType": " Type of resource associated with a license. ",
"ResourceInventory$ResourceType": " Type of resource. "
}
},
"S3Location": {
"base":
" Details of the S3 bucket that report generator reports are published to. ",
"refs": {
"ReportGenerator$S3Location": " Details of the S3 bucket that report generator reports are published to. "
}
},
"ServerInternalException": {
"base": " The server experienced an internal error. Try again. ",
"refs": {
}
},
"SignedToken": {
"base": null,
"refs": {
"CheckoutBorrowLicenseResponse$SignedToken": " Signed token. ",
"CheckoutLicenseResponse$SignedToken": " Signed token. "
}
},
"StatusReasonMessage": {
"base": null,
"refs": {
"CreateGrantVersionRequest$StatusReason": " Grant status reason. ",
"DeleteGrantRequest$StatusReason": " The Status reason for the delete request. ",
"Grant$StatusReason": " Grant status reason. ",
"ReceivedMetadata$ReceivedStatusReason": " Received status reason. "
}
},

"String": {
"base": null,
"refs": {

"AcceptGrantResponse$Version": " Grant version. ",
"CheckInLicenseRequest$LicenseConsumptionToken": " License consumption token. ",
"CheckInLicenseRequest$Beneficiary": " License beneficiary. ",
"CheckoutBorrowLicenseRequest$NodeId": " Node ID. ",
"CheckoutBorrowLicenseResponse$LicenseConsumptionToken": " License consumption token. ",
"CheckoutBorrowLicenseResponse$NodeId": " Node ID. ",
"CheckoutLicenseRequest$ProductSKU": " Product SKU. ",
"CheckoutLicenseRequest$KeyFingerprint": " Key fingerprint identifying the license. ",
"CheckoutLicenseRequest$Beneficiary": " License beneficiary. ",
"CheckoutLicenseRequest$NodeId": " Node ID. ",
"CheckoutLicenseResponse$LicenseConsumptionToken": " License consumption token. ",
"CheckoutLicenseResponse$NodeId": " Node ID. ",
"CheckoutLicenseResponse$LicenseArn":
" Amazon Resource Name (ARN) of the checkout license. ",
"CreateGrantRequest$GrantName": " Grant name. ",
"CreateGrantRequest$HomeRegion": " Home Region of the grant. ",
"CreateGrantResponse$Version": " Grant version. ",
"CreateGrantVersionRequest$GrantName": " Grant name. ",
"CreateGrantVersionRequest$SourceVersion": " Current version of the grant. ",
"CreateGrantVersionResponse$Version": " New version of the grant. ",
"CreateLicenseConfigurationRequest$Name": " Name of the license configuration. ",
"CreateLicenseConfigurationRequest$Description": " Description of the license configuration. ",
"CreateLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"CreateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"CreateLicenseManagerReportGeneratorResponse$LicenseManagerReportGeneratorArn":
" The Amazon Resource Name (ARN) of the new report generator. ",
"CreateLicenseRequest$LicenseName": " License name. ",
"CreateLicenseRequest$ProductName": " Product name. ",
"CreateLicenseRequest$ProductSKU": " Product SKU. ",
"CreateLicenseRequest$HomeRegion": " Home Region for the license. ",
"CreateLicenseRequest$Beneficiary": " License beneficiary. ",
"CreateLicenseResponse$Version": " License version. ",
"CreateLicenseVersionRequest$LicenseName": " License name. ",
"CreateLicenseVersionRequest$ProductName": " Product name. ",
"CreateLicenseVersionRequest$HomeRegion": " Home Region of the license. ",
"CreateLicenseVersionRequest$SourceVersion": " Current version of the license. ",
"CreateLicenseVersionResponse$Version": " New version of the license. ",
"CreateTokenResponse$TokenId":
" Token ID. ",
"DeleteGrantRequest$Version": " Current version of the grant. ",
"DeleteGrantResponse$Version": " Grant version. ",
"DeleteLicenseConfigurationRequest$LicenseConfigurationArn": " ID of the license configuration. ",
"DeleteLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"DeleteLicenseRequest$SourceVersion": " Current version of the license. ",
"DeleteTokenRequest$TokenId": " Token ID. ",
"Entitlement$Name": " Entitlement name. ",

"Entitlement$Value": " Entitlement resource. Use only if the unit is None. ",
"EntitlementData$Name": " Entitlement data name. ",
"EntitlementData$Value": " Entitlement data value. ",
"EntitlementUsage$Name": " Entitlement usage name. ",
"EntitlementUsage$ConsumedValue":
" Resource usage consumed. ",
"EntitlementUsage$MaxCount": " Maximum entitlement usage count. ",
"ExtendLicenseConsumptionRequest$LicenseConsumptionToken": " License consumption token. ",
"ExtendLicenseConsumptionResponse$LicenseConsumptionToken": " License consumption token. ",
"FailedDependencyException$ErrorCode": null,
"GetGrantRequest$Version": " Grant version. ",
"GetLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationId": " Unique ID for the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"GetLicenseConfigurationResponse$Name": " Name of the license configuration. ",
"GetLicenseConfigurationResponse$Description": " Description of the license
configuration. ",
"GetLicenseConfigurationResponse$Status": " License configuration status. ",
"GetLicenseConfigurationResponse$OwnerAccountId": " Account ID of the owner of the license configuration. ",
"GetLicenseConversionTaskResponse$ResourceArn": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. ",
"GetLicenseConversionTaskResponse$StatusMessage": " The status message for the conversion task. ",
"GetLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"GetLicenseRequest$Version": " License version. ",
"GetServiceSettingsResponse$S3BucketArn": " Regional S3 bucket path for storing reports, license trail event data, discovery data, and so on. ",
"GetServiceSettingsResponse$SnsTopicArn": " SNS topic configured to receive notifications from License Manager. ",
"GetServiceSettingsResponse$LicenseManagerResourceShareArn": " Amazon Resource Name (ARN) of the resource share. The License Manager management account provides member accounts with access to this share. ",
"Grant$GrantName": " Grant name. ",
"Grant$HomeRegion": " Home Region of the grant. ",
"Grant$Version": " Grant version. ",
"GrantedLicense$LicenseName": " License name. ",
"GrantedLicense$ProductName": " Product name. ",
"GrantedLicense$ProductSKU": " Product SKU. ",
"GrantedLicense$HomeRegion": " Home Region of the granted license. ",
"GrantedLicense$Beneficiary": " Granted license beneficiary. ",
"GrantedLicense$Version": " Version of the granted license. ",
"InventoryFilter$Name": " Name of the filter. ",
"InventoryFilter$Value": " Value of the filter. ",
"Issuer$Name": " Issuer name. ",

"Issuer$SignKey":
" Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$Name": " Issuer name. ",
"IssuerDetails$SignKey": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$KeyFingerprint": " Issuer key fingerprint. ",
"License$LicenseName": " License name. ",
"License$ProductName": " Product name. ",
"License$ProductSKU": " Product SKU. ",
"License$HomeRegion": " Home Region of the license. ",
"License$Beneficiary": " License beneficiary. ",
"License$Version": " License version. ",
"LicenseConfiguration$LicenseConfigurationId": " Unique ID of the license configuration. ",
"LicenseConfiguration$LicenseConfigurationArn":
" Amazon Resource Name (ARN) of the license configuration. ",
"LicenseConfiguration$Name": " Name of the license configuration. ",
"LicenseConfiguration$Description": " Description of the license configuration. ",
"LicenseConfiguration$Status": " Status of the license configuration. ",
"LicenseConfiguration$OwnerAccountId": " Account ID of the license configuration's owner. ",
"LicenseConfigurationAssociation$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationAssociation$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource consuming licenses. ",
"LicenseConfigurationAssociation$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"LicenseConfigurationUsage$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationUsage$ResourceStatus":
" Status of the resource. ",
"LicenseConfigurationUsage$ResourceOwnerId": " ID of the account that owns the resource. ",
"LicenseConversionTask$ResourceArn": " The Amazon Resource Name (ARN) of the resource associated with the license type conversion task. ",
"LicenseConversionTask$StatusMessage": " The status message for the conversion task. ",
"LicenseOperationFailure$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseOperationFailure$ErrorMessage": " Error message. ",
"LicenseOperationFailure$OperationName": " Name of the operation. ",
"LicenseOperationFailure$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource. ",
"LicenseOperationFailure$OperationRequestedBy": " The requester is \"License Manager Automated Discovery\". ",
"LicenseSpecification$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"LicenseSpecification$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"ListAssociationsForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of a license configuration. ",
"ListAssociationsForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListAssociationsForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsRequest$NextToken": " Token for the next set of results. ",

"ListDistributedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListFailuresForLicenseConfigurationOperationsRequest$LicenseConfigurationArn": " Amazon Resource Name of the license configuration. ",
"ListFailuresForLicenseConfigurationOperationsRequest$NextToken": " Token for the next set of results. ",

"ListFailuresForLicenseConfigurationOperationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksResponse$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"ListLicenseSpecificationsForResourceRequest$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceResponse$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsResponse$NextToken": " Token for the next set of results. ",
"ListLicensesRequest$NextToken": " Token for the next set of results. ",
"ListLicensesResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesResponse$NextToken": " Token for the next set of results. ",
"ListResourceInventoryRequest$NextToken": " Token for the next set of results. ",
"ListResourceInventoryResponse$NextToken": " Token for the next set of results. ",
"ListTagsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListTokensRequest$NextToken": " Token for the next set of results. ",
"ListTokensResponse$NextToken": " Token for the next set of results. ",
"ListUsageForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListUsageForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListUsageForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"MaxSize3StringList$member": null,
"Metadata$Name": " The key name. ",
"Metadata$Value": " The value. ",
"ProductInformation$ResourceType": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"ProductInformationFilter$ProductInformationFilterName": " Filter name. ",
"ProductInformationFilter$ProductInformationFilterComparator": " Logical operator. ",

"RejectGrantResponse$Version": " Grant version. ",
"ReportGenerator$ReportGeneratorName": " Name of the report generator. ",
"ReportGenerator$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"ReportGenerator$LastRunStatus": " Status of the last report generation attempt. ",
"ReportGenerator$LastRunFailureReason": " Failure message for the last report generation attempt. ",
"ReportGenerator$LastReportGenerationTime": " Time the last report was generated at. ",
"ReportGenerator$ReportCreatorAccount": " The Amazon Web Services account ID used to create the report generator. ",
"ReportGenerator$Description": " Description of the report generator. ",
"ReportGenerator$CreateTime": " Time the report was created. ",
"ResourceInventory$ResourceId": " ID of the resource. ",
"ResourceInventory$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"ResourceInventory$Platform": " Platform of the resource. ",
"ResourceInventory$PlatformVersion": " Platform version of the resource in the inventory. ",
"ResourceInventory$ResourceOwningAccountId": " ID of the account that owns the resource. ",
"S3Location$bucket": " Name of the S3 bucket reports are published to. ",

"S3Location$keyPrefix": " Prefix of the S3 bucket reports are published to. ",
"StringList$member": null,
"Tag$Key": " Tag key. ",
"Tag$Value": " Tag value. ",
"TagKeyList$member": null,
"TagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"TokenData$TokenId": " Token ID. ",
"TokenData$TokenType": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. ",
"TokenData$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"TokenData$Status": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. ",
"UntagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$Name": " New name of the license configuration. ",
"UpdateLicenseConfigurationRequest$Description": " New description of the license configuration. ",
"UpdateLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to update. ",
"UpdateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"UpdateLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"UpdateServiceSettingsRequest$S3BucketArn": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. ",
"UpdateServiceSettingsRequest$SnsTopicArn": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}

},
"StringList": {
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$LicenseRules":
" License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules vary by dimension, as follows.   <code>Cores</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumCores</code> | <code>minimumCores</code>   <code>Instances</code> dimension: <code>allowedTenancy</code> | <code>maximumCores</code> | <code>minimumCores</code> | <code>maximumSockets</code> | <code>minimumSockets</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   <code>Sockets</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumSockets</code> | <code>minimumSockets</code>   <code>vCPUs</code> dimension: <code>allowedTenancy</code> | <code>honorVcpuOptimization</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are <code>True</code> and <code>False</code>. ",
"GetLicenseConfigurationResponse$LicenseRules": " License rules. ",
"LicenseConfiguration$LicenseRules": " License rules. ",
"ListLicenseConfigurationsRequest$LicenseConfigurationArns": " Amazon Resource Names (ARN) of the license configurations. ",
"ListTokensRequest$TokenIds": " Token IDs. ",
"ProductInformationFilter$ProductInformationFilterValue": " Filter value. ",
"UpdateLicenseConfigurationRequest$LicenseRules": " New license rule. The only rule that you can add after you create a license configuration is licenseAffinityToHost. "
}
},
"Tag": {
"base": " Details about a tag for a license configuration. ",
"refs": {
"TagList$member": null
}
},
"TagKeyList": {
"base": null,
"refs": {
"UntagResourceRequest$TagKeys": " Keys identifying the tags to remove. "
}
},
"TagList": {
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$Tags": " Tags to add to the license configuration. ",
"CreateLicenseManagerReportGeneratorRequest$Tags": " Tags to add to the report generator. ",
"GetLicenseConfigurationResponse$Tags": " Tags for the license configuration. ",

"ListTagsForResourceResponse$Tags": " Information about the tags. ",
"ReportGenerator$Tags": " Tags associated with the report generator. ",
"TagResourceRequest$Tags": " One or more tags. "
}
},
"TagResourceRequest": {
"base": null,
"refs": {
}
},
"TagResourceResponse": {
"base": null,
"refs": {

}
},
"TokenData": {
"base": " Describes a token. ",
"refs": {
"TokenList$member": null
}
},
"TokenList": {
"base": null,
"refs": {
"ListTokensResponse$Tokens": " Received token details. "
}
},
"TokenString": {
"base": null,
"refs": {
"CreateTokenResponse$Token": " Refresh token, encoded as a JWT token. ",
"GetAccessTokenRequest$Token": " Refresh token, encoded as a JWT token. ",
"GetAccessTokenResponse$AccessToken": " Temporary access token. "
}
},
"TokenType": {
"base": null,
"refs": {
"CreateTokenResponse$TokenType": " Token type. "
}
},
"UnsupportedDigitalSignatureMethodException": {
"base": " The digital signature method is unsupported. Try your request again. ",
"refs": {
}
},
"UntagResourceRequest": {

"base": null,
"refs": {
}
},
"UntagResourceResponse":
{
"base": null,
"refs": {
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"UpdateLicenseConfigurationRequest": {
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"UpdateLicenseConfigurationResponse": {
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},
"UpdateLicenseManagerReportGeneratorRequest": {
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"UpdateLicenseManagerReportGeneratorResponse": {
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"refs": {
}
},
"UpdateLicenseSpecificationsForResourceRequest": {
"base": null,
"refs": {
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},
"UpdateLicenseSpecificationsForResourceResponse": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsResponse": {
"base": null,
"refs": {

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    }
  },
  "UsageOperation": {
    "base": null,
    "refs": {
      "LicenseConversionContext$UsageOperation": "<p>The Usage operation value
 that corresponds to the license type you are converting your resource from. For more information about which
platforms correspond to which usage operation values see <a
href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample
data: usage operation by platform </a> </p>"
    }
  },
  "ValidationException": {
    "base": "<p>The provided input is not valid. Try your request again.</p>",
    "refs": {
    }
  }
 }
}
{
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "af-south-1"
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-east-1"
      }
    },
    {
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"documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-northeast-1"
}
},
{
"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-2.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-northeast-2"
}
},
{
"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-northeast-3"
}
},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Region": "ap-south-1"
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack":
false,
"Region": "ap-southeast-1"
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-southeast-2"
}
},
{
"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-southeast-3"
}
},
{
"documentation":
"For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ca-central-1"
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "eu-central-1"
}
},
{
"documentation": "For region eu-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "eu-north-1"
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "eu-south-1"

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        }
    },
    {
        "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
        },
        "params":
{
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-west-1"
        }
    },
    {
        "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-west-2"
        }
    },
    {
        "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-west-3"
        }

 },
    {
        "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.me-south-1.amazonaws.com"
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        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "me-south-1"
    }
},
{
    "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.sa-east-1.amazonaws.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "sa-east-1"
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {

    "endpoint": {
            "url": "https://license-manager.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-east-1"
    }
},
{
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-east-1"
    }
},
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```
  {
    "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
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      "params": {
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      "default": false,
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   "jsonVersion":"1.1",
   "protocol":"rest-json",
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   "serviceId":"License Manager User Subscriptions",
   "signatureVersion":"v4",
   "signingName":"license-manager-user-subscriptions",
   "uid":"license-manager-user-subscriptions-2018-05-10"
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       "responseCode":200
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  {"shape":"AccessDeniedException"}
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    "Username"
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    "InstanceId":{"shape":"String"},
    "Username":{"shape":"String"}
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    "Product":{"shape":"String"}

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    "Username":{"shape":"String"}
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    "Product"
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    "Username":{"shape":"String"}
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}
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"serviceId":"License Manager Linux Subscriptions",
"signatureVersion":"v4",
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"uid":"license-manager-linux-subscriptions-2018-05-10",
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"output":{"shape":"ListLinuxSubscriptionsResponse"},
"errors":[
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{"shape":"ValidationException"}
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"Filter":{
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"LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
"Status":{"shape":"Status"},
"StatusMessage":{"shape":"StringMap"}
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"UsageOperation":{"shape":"String"}
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"Disabled"
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"LinuxSubscriptionsDiscoverySettings":{
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"SourceRegions"
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"NotEqual",
"Contains"
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"Disabled"
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"ProductCodeList":{
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"RegisterSubscriptionProviderRequest":{
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"SubscriptionProviderSource"
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"Tags":{"shape":"Tags"}
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"SubscriptionProviderSource":{"shape":"SubscriptionProviderSource"},
"SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"},
"SubscriptionProviderStatusMessage":{"shape":"String"}
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"Completed",
"Successful",
"Failed"

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    "value":{"shape":"String"}
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      "Name":{"shape":"String"},
      "Type":{"shape":"String"}
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    "member":{"shape":"SubscriptionProviderSource"}
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"PENDING"
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"tags":{"shape":"Tags"}
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"exception":true
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    "tagKeys"
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      "location":"uri",
      "locationName":"resourceArn"
    },
    "tagKeys":{
      "shape":"TagKeyList",
      "location":"querystring",
      "locationName":"tagKeys"
    }
  }
},
"UntagResourceResponse":{
  "type":"structure",
  "members":{
  }
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"UpdateServiceSettingsRequest":{
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    "LinuxSubscriptionsDiscovery",
    "LinuxSubscriptionsDiscoverySettings"
  ],
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    "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
    "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"}
   }
},
"UpdateServiceSettingsResponse":{
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    "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
    "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
    "Status":{"shape":"Status"},
    "StatusMessage":{"shape":"StringMap"}
  }
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    "message":{"shape":"String"}
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      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
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      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
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    "UseFIPS": {
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      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
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            "type": "error"
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                    "type": "error"
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        "type": "endpoint"
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                            "type": "endpoint"
                        }
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{
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    "error": "Invalid Configuration: Missing Region",
    "type": "error"
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]
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{
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      "expect": {
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            "UseFIPS": true,
            "UseDualStack": true
        }
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        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
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            "UseDualStack": false
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DualStack enabled",
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            "UseDualStack": true
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    },
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{
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    },
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        "UseFIPS": true,
        "UseDualStack": true
    }
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    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
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            "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
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    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
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        "UseFIPS": false,
        "UseDualStack": true
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    "expect": {
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        }
    },
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        "UseFIPS": false,
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    }
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        "UseDualStack": true
    }
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        "UseDualStack": false
    }
},
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        "UseDualStack": true
    }
},
{
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    "expect": {
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}
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"params": {
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},
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"UseFIPS": false,
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}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect":
{
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,

```
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
          "expect": {
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "Missing region",
          "expect": {
            "error": "Invalid Configuration: Missing Region"
          }
        }
      ],
      "version": "1.0"
    }
```


1.3656 golang-genproto 0.0.0-20240814211410-ddb44dafa142

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1.3657 google-cloud-go-longrunning 0.5.11

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
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 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

```
func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
```

```
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
```

```
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.34.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)
```

```
const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
```

```
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
```

```
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
```

```
  ms.StoreMessageInfo(mi)
 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
```

0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67,
0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,

```
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64,
 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
```

```
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func
 file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v any, i int) any {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
    return &v.sizeCache
   case 2:
    return &v.unknownFields
   default:
    return nil
   }
  }
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:
         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
// Copyright 2024 Google LLC
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```

```
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete          []gax.CallOption
 Get             []gax.CallOption
 GetIamPolicy    []gax.CallOption
 Insert          []gax.CallOption
 List            []gax.CallOption
 SetIamPolicy    []gax.CallOption
```

```
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
[]gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
```

```
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}
```

```
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by
third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
```

```
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
```

```
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
```

```
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license",
url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf,
err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}
```

```
// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()),
 "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }
```

```
  if err
 := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and
 context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
```

```
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp);
err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId",
fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err !=
nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient)
 List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
```

```
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults",
fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return
err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only
 by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
```

```
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
// TestIamPermissions returns permissions that a caller has on
 the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
```

```
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return
nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
```

1.3658 kubernetes-client 0.29.0

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1.3659 kubernetes-apimachinery 0.29.0

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* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/JAXBIntrospector.java
* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/annotation/XmlTransient.java
* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/annotation/XmlEnumValue.java
* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/annotation/adapters/HexBinaryAdapter.java
* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/annotation/XmlID.java
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* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/annotation/XmlRootElement.java
* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/annotation/XmlIDREF.java
* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/annotation/XmlSchema.java
* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/annotation/XmlElementRef.java
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* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/annotation/XmlAnyAttribute.java
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* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/helpers/ParseConversionEventImpl.java
* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/helpers/PrintConversionEventImpl.java
* /jaxb-api-2-2-11-sources-9-jar/javax/xml/bind/util/JAXBSource.java
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* /hikaricp-java7-2-4-13-sources-7-jar/com/zaxxer/hikari/hibernate/HikariConfigurationUtil.java
* /hikaricp-java7-2-4-13-sources-7-jar/com/zaxxer/hikari/pool/ProxyCallableStatement.java
* /hikaricp-java7-2-4-13-sources-7-jar/com/zaxxer/hikari/pool/ProxyPreparedStatement.java

* /hikaricp-java7-2-4-13-sources-7-jar/com/zaxxer/hikari/pool/ProxyStatement.java
* /hikaricp-java7-2-4-13-sources-7-jar/com/zaxxer/hikari/util/UtilityElf.java
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* /hikaricp-java7-2-4-13-sources-7-jar/com/zaxxer/hikari/pool/PoolEntry.java
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1.3673 libcap 2.66-5ubuntu2.2

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1.3676 cel.dev/expr 0.19.2

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1.3683 modernc.org/memory 1.8.2

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```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
```

```
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
```

```
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
```

```
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
```

```
// This snippet has been automatically generated and should be regarded as a code template
only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
```

```
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 GetIamPolicy:
[]gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
}
```

```
//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
```

```
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
```

```
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
```

```
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
```

```
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
```

```
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf,
resp); err != nil {
  return err
 }

 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
```

```
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
```

```
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
```

```
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
```

```
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}
```

```
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken,
 nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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//
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
```

```
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
```

```
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
```

```
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
```

```
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
```

0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,

```
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
```

```
 return
}
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
  GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
  RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
  NumEnums:      2,
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)
```

```
func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)
```

```
func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto
```

```
package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
```

```
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
```

```
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
```

```
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}
```

```
var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
```

```
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
```

```
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
```

```
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
```

```
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}
```

```
// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}
```

```
func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}
```

```
func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
```

```
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}
```

```
// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
```

```
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
```

```
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}
```

```
func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}
```

```
func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
```

0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
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}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
```

```
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                  // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
```

```
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
```

```
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
```

```
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
```

```
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
```

```
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
```

```
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
```

```
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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1.3687 go-patricia 2.3.2

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1.3688 x-oauth2 0.27.0

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1.3689 cloud.google.com/go/auth 0.15.0

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)
```

```
// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32
```

```
const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
```

```
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
```

```
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}
```

```
func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
```

```
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
```

```
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
```

```
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
```

```
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp
```

```
  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

```
func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
```

```
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
```

```
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
```

```
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
```

```
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}
```

```
// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
```

```
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
```

```
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC
```

```
 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
```

```
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
```

```
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
```

```
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
```

```
baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}
```

```
// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from
```

```
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
```

```
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
```

```
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
```

```
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
```

```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
```

```
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
```

```
  ms.StoreMessageInfo(mi)
 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
```

```
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
```

```
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
```

```
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
```

```
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
```

```
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}
```

```
func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
```

```
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}
```

```
func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
```

```
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
```

```
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
```

0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73,
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,
0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79,
0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75,
0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65,
0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
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0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x22, 0x71, 0xda, 0x41, 0x18, 0x6c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x2c, 0x75, 0x70, 0x64, 0x61,
0x74, 0x65, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x50, 0x3a, 0x0c, 0x6c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x32, 0x40, 0x2f, 0x76, 0x31,
0x2f, 0x7b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x2e, 0x6e,
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0x0a, 0x06, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
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0x65,
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0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
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0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73,
0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x58, 0xda, 0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x3f,
0x3a, 0x01, 0x2a, 0x22, 0x3a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73,
0x2f, 0x2a, 0x2f, 0x6f,

0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12,
0xe7, 0x01, 0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3f, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
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0x6f, 0x6e, 0x73, 0x65, 0x22, 0x5a, 0xda,
0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d,
0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x41, 0x3a, 0x01, 0x2a, 0x22, 0x3c, 0x2f, 0x76, 0x31,
0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67,
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0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e,
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0x65, 0x6e,
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65,
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0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
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0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
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0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,
0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,

```
 0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
 0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
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 0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
 0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                    // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
```

```
 (*UpdateLicensePoolRequest)(nil),              // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                         // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                        // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                       // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                      // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),         // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                                // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),        // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                 // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                 // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                   // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
```

```
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
```

```
  NumMessages:   13,
  NumExtensions: 0,
  NumServices:   1,
 },
 GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
 DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
 MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
```

```
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
```

```
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
```

```
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
```

```
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
```

```
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)
```

```
const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
```

```
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
```

```
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
```

0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,

```
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}
```

```
func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.3690 google-cloud-go-auth 0.15.0

1.3690.1 Available under license :

```
// Copyright 2024 Google LLC
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.
```

```
// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
```

```
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
```

```
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
```

```
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
```

```
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
```

```
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
```

```
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
```

```
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleNewLicenseManagementRESTClient() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c,
err := procurement.NewLicenseManagementRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleLicenseManagementClient_Assign() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.AssignRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
}
```

```
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}
```

```
func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
```

```
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
```

```
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
```

```
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
```

```
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
```

```
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
```

```
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution
This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient
```

```
 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
```

```
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())
```

```
params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client
and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf,
resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
```

```
  project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
```

```
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
```

```
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
```

```
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
```

```
req = proto.Clone(req).(*computepb.ListLicensesRequest)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
  req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32
{
  req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
  req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
```

```
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
```

```
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
```

```
 nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
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// limitations under the License.
```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
```

```
//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
```

```
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
```

```
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}
```

```
func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}
```

```
func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
```

```
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
```

```
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
```

```
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
```

```
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
```

```
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
```

```
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
```

```
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}
```

```
func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
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 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
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```

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0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
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0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
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0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,
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0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
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0x42, 0x03, 0xe0, 0x41, 0x02, 0x52, 0x0a, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4d, 0x61, 0x73,
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0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x52, 0x09, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d,
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0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,
0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,

```
 0x64, 0x2e, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
```

```
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                  // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
```

```
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
```

```
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
```

```
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
```

```
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
```

```
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
```

```
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
```

```
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)
```

```
// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
```

```
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}
```

```
func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
```

```
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
```

```
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
```

0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,

```
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
```

```
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
  GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
  RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
  NumEnums:      2,
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.3691 x-crypto 0.35.0

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1.3692 go-jose-go-jose 4.0.5

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1.3693 smallstep-pkcs7 0.1.1

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1.3694 github.com/tchap/go-patricia/v2 2.3.2

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1.3695 github.com/containers/ocicrypt 1.2.1

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1.3696 ocicrypt 1.2.1

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1.3710 otel-log 0.10.0

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1.3726 go.opentelemetry.io/collector/processor/processortest 0.120.0

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1.3744 go.opentelemetry.io/collector/internal/telemetry 0.120.0

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1.3746 collector-exporter-exporterhelper-xexporterhelper 0.120.0

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1.3758 github.com/shirou/gopsutil/v4 4.25.1

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1.3764 hashicorp-consul-api 1.31.2

1.3764.1 Available under license :

```
{{!
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}}

<div
 ...attributes
 class="consul-intention-permission-header-form"
>
 <FormGroup
   @name={{name}}
 as |group|>

   {{yield (hash
     submit=(action 'submit' changeset)
     reset=(action 'reset' changeset)

     isDirty=(and changeset.isValid changeset.isDirty)
     changeset=changeset
   )}}

   <fieldset>
     <div>
       <group.Element
         @name="HeaderType"
         @type="select"
       as |el|>
         <el.Label>Header type</el.Label>
         <PowerSelect
           @options={{headerTypes}}
           @selected={{headerType}}
           @onChange={{action 'change' 'HeaderType' changeset}} as |Type|>
             {{get headerLabels Type}}
         </PowerSelect>
```

```
    </group.Element>


    <group.Element
      @name="Name"
      @error={{changeset-get changeset 'error.Name'}}
    as |el|>
      <el.Label>Header name</el.Label>
      <el.Text

       @value={{changeset-get changeset 'Name'}}
        oninput={{action 'change' 'Name' changeset}}
      />
      <State @state={{el.state}} @matches="error">
        <el.Error>
          {{changeset-get changeset 'error.Name.validation'}}
        </el.Error>
      </State>
    </group.Element>

{{#if shouldShowValueField}}
    <group.Element
      @name="Value"
      @error={{changeset-get changeset 'error.Value'}}
    as |el|>
      <el.Label>Header {{lowercase (get headerLabels headerType)}}</el.Label>
      <el.Text
        @value={{changeset-get changeset 'Value'}}
        oninput={{action 'change' 'Value' changeset}}
      />
      <State @state={{el.state}} @matches="error">
        <el.Error>
          {{changeset-get changeset 'error.Value.validation'}}
        </el.Error>
      </State>
    </group.Element>
{{/if}}

{{#if shouldShowIgnoreCaseField}}
    <group.Element

      @name="IgnoreCase"
      @error={{changeset-get changeset 'error.IgnoreCase'}}
    as |el|>
      <el.Label>Ignore Case</el.Label>
      <el.Checkbox
        checked={{if IgnoreCase 'checked'}}
        onchange={{action 'change' 'IgnoreCase' changeset}}
```

```
        />
      </group.Element>
 {{/if}}

    </div>
  </fieldset>
 </FormGroup>
</div>
---
layout: api
page_title: License - Operator - HTTP API
description: |-
 The /operator/license endpoint allows for retrieving the Consul
 Enterprise License.
---

# License - Operator HTTP API

<EnterpriseAlert />

The licensing functionality described here is available only in
[Consul Enterprise](https://www.hashicorp.com/products/consul/) version 1.1.0 and later.

## Getting the Consul License

This endpoint gets information about the current license.

| Method | Path                | Produces           |
| ------ | ------------------- | ------------------ |
| `GET`  | `/operator/license` | `application/json` |

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

| Blocking Queries | Consistency Modes | Agent Caching | ACL Required |
| ----------------
 | ----------------- | ------------- | ------------ |
| `NO`             | `all`             | `none`        | `none`       |

The corresponding CLI command is [`consul license get`](/consul/commands/license#get).

### Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be retrieved.
 This will default to the datacenter of the agent serving the HTTP request.
```

Sample Request

```shell-session
$ curl \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",

     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
     "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

Updating the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with the ability to manage the cluster's license via the API.

This endpoint updates the Consul license and returns some of the license contents as well as any warning messages regarding its validity.

| Method | Path | Produces |

| ------ | ---------- | ---------- |
| `PUT` | `/operator/license` | `application/json` |

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

| Blocking Queries | Consistency Modes | Agent Caching | ACL Required
|
| ---------- | ---------- | ---------- | ---------- |
| `NO` | `none` | `none` | `operator:write` |

The corresponding CLI command is [`consul license put`](/consul/commands/license#put).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Payload

The payload is the raw license blob.

Sample Request

```shell-session
$ curl \
  --request PUT \
  --data @consul.license \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
  "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
  "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
  "installation_id": "*",
  "issue_time": "2018-05-21T20:03:35.911567355Z",
  "start_time": "2018-05-21T04:00:00Z",
  "expiration_time": "2019-05-22T03:59:59.999Z",
  "product":
```

```
 "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
     "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

Resetting the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint resets the Consul license to the license included in the Enterprise binary. If the included license is not valid, the replace will fail.

Method	Path	Produces
`DELETE`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching),
 and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license reset`](/consul/commands/license#reset).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
  --request DELETE \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
    "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
     "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

/**
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* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
/**
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*/

```
.consul-intention-permission-form {
 h2 {
   padding-top: 1.4em;
   margin-top: 0.2em;
   margin-bottom: 0.6em;
 }
 .consul-intention-permission-header-form {
   margin-top: 10px;
 }
 fieldset:nth-child(2) > div,
 .consul-intention-permission-header-form fieldset > div {
   display: grid;
   grid-template-columns: repeat(auto-fit, minmax(160px, 1fr));
   grid-gap: 12px;
 }
 fieldset:nth-child(2) > div label:last-child {
   grid-column: span 2;
 }
 .ember-basic-dropdown-trigger {
   padding: 5px;
 }
 .checkbox-group {
   flex-direction: column;
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
.consul-intention-permission-list > ul > li {
 @extend %list-row-200;
}
.consul-intention-permission-list:not(.readonly) > ul > li {
 @extend %with-composite-row-intent;
}
.consul-intention-permission-list strong {
 @extend %pill-500;
}
.consul-intention-permission-list .intent-allow {
 @extend %pill-allow;
}
.consul-intention-permission-list .intent-deny {
 @extend %pill-deny;
}
```

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---
layout: docs
page_title: Enterprise License FAQ
description: >-

Review frequently asked questions (FAQs) about Consul Enterprise licenses to learn more about how licenses work, what happens when they expire, and how to get a trial license.

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Consul Enterprise version 1.10.0.
Consul Enterprise automatically loads Consul licenses when the server agent starts.

Q: Can I get a quick summary of the Consul changes?

Starting with Consul Enterprise 1.10.0, the license enablement process is different.

HashiCorp Enterprise servers will no longer start without a license. Servers require licenses to be provided from either an environment variable or file.
If the license is missing, invalid, or expired, the server will immediately exit.
This check is part of the server boot-up process.

In previous versions of HashiCorp enterprise products, one server could distribute a license to other servers via the Raft protocol.
This will no longer work since each server must be able to find a valid license during the startup process.

Q: What are the upgrade requirements?

All customers on Consul Enterprise 1.8/1.9 must first upgrade their client and server agents to the latest patch release.
During the upgrade the license file must also be configured on client agents in an environment variable or file path, otherwise the Consul agents will fail to retrieve the license with a valid agent token.
The upgrade process varies if ACLs are enabled or disabled in the cluster.
Refer to the instructions on [upgrading to 1.10.x](/consul/docs/upgrading/instructions/upgrade-to-1-10-x) for details.

Q: Is there a tutorial available for the license configuration steps?

Please visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs).

Q: What resources are available?

The list below is a great starting point for learning more about the license changes introduced in Consul Enterprise 1.10.0+ent.

- [Consul Enterprise Upgrade Documentation](/consul/docs/enterprise/upgrades)

- [Consul License Documentation](/consul/docs/enterprise/license/overview)

- [License configuration values documentation](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses)

- [Install a HashiCorp Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs)

Q: Do these changes impact all customers/licenses?

The license changes introduced in 1.10.0 only affect Consul Enterprise.
This impacts customers that have an enterprise binary (trial or non-trial licenses) downloaded from https://releases.hashicorp.com.
The license changes do not impact customers with the baked-in licensed binaries. In a later release of Consul Enterprise, baked-in binaries will be deprecated.

Q: What is the product behavior change introduced by the licensing changes?

Starting with Consul Enterprise 1.10.0,
a valid license is required on-disk (auto-loading) or as an environment variable for Consul Enterprise to successfully boot-up.
The in-storage license feature will not be supported starting with Consul Enterprise 1.10.0+ent. All Consul Enterprise clusters using 1.10.0+ent must ensure that there is a valid license on-disk (auto-loaded) or as an environment variable.

Q: What is the impact on trial licenses due to this change? ((#q-what-is-the-impact-on-evaluation-licenses-due-to-this-change))

Consul Enterprise 1.10.0+ server agents require a valid license to start.
The license can be provided on disk (auto-loaded) or as an environment variable.
There is no longer a 6-hour trial period in which Consul Enterprise server agents
can operate without a license.

Q: Is there a grace period when licenses expire?

YesConsul will continue normal operation and can be restarted after license *expiration* as defined in [`expiration_time`](/consul/api-docs/operator/license#getting-the-consul-license).
As
license expiration is approached or passed, Consul will issue warnings in the system logs.

Consul will only cease operation after license *termination*, which occurs 10 years
after license expiration and is defined in
[`termination_time`](/consul/api-docs/operator/license#getting-the-consul-license).

~> **Starting with Consul 1.14, and patch releases 1.13.3 and 1.12.6, Consul will support non-terminating licenses**:
Please contact your support representative for more details on non-terminating licenses.
An expired license will not allow Consul versions released after the expiration date to run.
It will not be possible to upgrade to a new version of Consul released after license expiration.

Q: Does this affect client agents?

There are upgrade requirements that affect Consul Enterprise clients.

Please review the [upgrade requirements](#q-what-are-the-upgrade-requirements) documentation.

Q: Does this affect snapshot agents?

Same behavior as Consul clients.
 See answer for [Does this affect client agents?](#q-does-this-affect-client-agents)

Q: What is the behavior if the license is missing?

Consul server agents will detect the absence of the license and immediately exit.

Consul client agents will attempt to retrieve the license from servers if certain conditions are met:

- ACLs are enabled.
- An ACL token is provided to the client agent.
- The client agents configuration contains `retry_join` addresses.
- The retry join addresses are addresses of the Consul servers.

Consul snapshot agents will attempt to retrieve the license from servers if certain conditions are met: ACLs are enabled, a ACL token is provided to the client agent, the client agents configuration contains `retry_join` addresses, the retry join addresses are addresses of the Consul servers.

Q: Where can users get a trial license for Consul Enterprise?

Contact your [HashiCorp Support contact](https://support.hashicorp.com/) for a development license.

~> **Trial
 install will cease operation 24 hours after 30-day license expiration**:
  Trial licenses are not meant to be used in production.
  This is unlike non-trial licenses which provide a 10 year grace period as described in
  the answer for [Q: Is there a grace period when licenses expire?](#q-is-there-a-grace-period-when-licenses-expire).

Q: How can I renew a license?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: I'm an existing enterprise customer but don't have my license, how can I get it?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: Are the license files locked to a specific cluster?

The license files are not locked to a specific cluster or cluster node. The above changes apply to all nodes in a cluster.

Q: Will this

impact HCP Consul Dedicated?

This will not impact HCP Consul Dedicated.

Q: Does this need to happen every time a node restarts, or is this a one-time check?

Consul Enterprise binaries starting with 1.10.0+ent, will be subject to EULA check. Release 1.10.0+ent introduces the EULA check for trial licenses (non-trial licenses already go through EULA check during contractual agreement).

The agreement to a EULA happens only once (when the user gets their license), Consul Enterprise **will check for the presence of a valid license every time a node restarts**.

When a customer upgrades existing clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be auto-loaded.

When a customer deploys new clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be on-disk (auto-loaded).

Q: What are the scenarios that a customer must plan for because of these changes?

New
Consul cluster deployments using 1.10.0+ent will need to have a valid license on servers to successfully deploy. This valid license must be on-disk (auto-loaded) or as an environment variable.
Please see the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?

VM

1. Run [`consul license get -signed`](/consul/commands/license#get) to extract the license from their running cluster. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have access to the required license. This could be via the client agent configuration file or an environment variable.
1. Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license
key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

NOTE: If you are not upgrading Consul or your Helm chart version then no action is required.

1. In order to use Consul Enterprise 1.10.0 or greater on Kubernetes you must use version 0.32.0 or greater of the Helm chart.
1. You should already have a Consul Enterprise license set as a Kubernetes secret. If you do not, refer to [how to obtain a copy of your license](/consul/docs/enterprise/license/faq#q-i-m-an-existing-enterprise-customer-but-don-t-have-my-license-how-can-i-get-it).

Once you have the license then create a Kubernetes secret containing the license as described in [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise).
1. Follow the [Kubernetes Upgrade Docs](/consul/docs/k8s/upgrade) to upgrade. No changes to your `values.yaml` file are needed to enable enterprise autoloading since this support is built in to consul-helm 0.32.0 and greater.

!>
 Warning: If you are upgrading the Helm chart but **not** upgrading the Consul version, you must set `server.enterpriseLicense.enableLicenseAutoload: false`. See [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise) for more details.

Q: What is the migration path for customers who want to migrate from their existing perpetually-licensed binaries to the license on disk flow?

VM

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Proceed with the `helm` [upgrade instructions](/consul/docs/k8s/upgrade)

Q: Will Consul downgrades/rollbacks work?

When downgrading
 to a version of Consul before 1.10.0+ent, customers will need to follow the previous process for applying an enterprise licenses to Consul Enterprise.

Q: Are there potential pitfalls when downgrading or upgrading Consul server instances?

~> Verify that you meet the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Assume a scenario where there are three Consul server nodes:

- Node A: v1.9.5
- Node B: v1.10.0 [Leader]
- Node C: v1.9.5

The command `consul license put` is issued from Node A. This will result in an error due to how Consul routes calls to the server node, Node B in this example.
Because Node A is a follower when the call `consul license put` is issued, the call will be redirected to Node B (leader).
The `consul license put` operation will fail due to being removed from 1.10.0.
This is a scenario that could occur if a customer downgrades from 1.10.0+ and the Consul leadership has not transferred back over to a node
 not running 1.10.0+.
This also has the potential of occurring when upgrading if scheduled license updates or autoscaling groups recoveries are in place.

Q: Any impacts to Consul Kubernetes?

If you are using a Consul Enterprise version prior to 1.10.0 and decide to upgrade the Helm chart to version 0.32.0 or newer, but not the Consul version.
You will need to add the following configuration.

```
server:
 enterpriseLicense:
   enableLicenseAutoload: false
```

```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-header-list {
 max-height: 200px;
 overflow: auto;
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-header-list"
 @items={{items}}
 @scroll="native"
 @cellHeight={{42}}
as |item|>
```

```
<BlockSlot @name="details">
  <dl>
    <dt>
      <Tooltip>
        Header
      </Tooltip>
    </dt>
    <dd>
      {{item.Name}} {{route-match item}}
    </dd>
  </dl>
</BlockSlot>
<BlockSlot @name="actions" as |Actions|>
  <Actions as |Action|>
    <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you want to delete this header?

 </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
</ListCollection>
{{/if}}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
```

```
"andRules": {
  "rules": [
    {
      "urlPath": {
        "path": {
          "exact": "/v1/secret"
        }
      }
    },
    {
      "andRules": {
        "rules": [
          {
            "metadata": {
              "filter": "envoy.filters.http.jwt_authn",
              "path": [
                {
                  "key": "jwt_payload_auth0"
                },
                {
                  "key": "iss"
                }
              ],
              "value": {
                "stringMatch": {
                  "exact": "mytest.auth0-issuer"
                }
              }
            }
          },
          {
            "metadata": {
              "filter": "envoy.filters.http.jwt_authn",
              "path": [
                {
                  "key": "jwt_payload_auth0"
                },
                {
                  "key": "perms"
                },
                {
                  "key": "role"
                }
              ],
              "value": {
                "stringMatch": {
                  "exact": "admin"
```

```
    }
              }
            }
          }
        ]
      }
    }
  ]
}
},
{
  "andRules": {
    "rules": [
      {
        "urlPath": {
          "path": {
            "exact": "/v1/admin"
          }
        }
      },
      {
        "notRule": {
          "urlPath": {
            "path": {
              "exact": "/v1/secret"
            }
          }
        }
      }
    ]
  }
}
],
"principals": [
  {
    "andIds": {
      "ids": [
        {
          "authenticated": {
            "principalName": {

          "safeRegex": {
              "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
            }
          }
        }
      },
      {
```

```
            "andIds": {
              "ids": [
                {
                  "metadata": {
                    "filter": "envoy.filters.http.jwt_authn",
                    "path": [
                      {
                        "key": "jwt_payload_okta"
                      },
                      {
                        "key": "iss"
                      }
                    ],
                    "value": {
                      "stringMatch": {
                        "exact": "mytest.okta-issuer"
                      }
                    }
                  }
                },

                {
                  "metadata": {
                    "filter": "envoy.filters.http.jwt_authn",
                    "path": [
                      {
                        "key": "jwt_payload_okta"
                      },
                      {
                        "key": "roles"
                      }
                    ],
                    "value": {
                      "stringMatch": {
                        "exact": "testing"
                      }
                    }
                  }
                }
              ]
            }
          }
        ]
      }
    }
  ]
}
}
```

```
  }
 }
}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
   "policies": {
    "consul-intentions-layer7-0": {
     "permissions": [
      {
       "andRules": {
        "rules": [
         {
          "urlPath": {
           "path": {
            "prefix": "/v1"
           }
          }
         },
         {
          "notRule": {
           "urlPath": {
            "path": {
             "exact": "/v1/secret"
            }
           }
          }
         }
        ]
       }
      },
      {
       "andRules": {
        "rules": [
         {
          "andRules": {
           "rules": [
            {

          "urlPath": {
               "path": {
                "safeRegex": {
                 "regex": "/v[123]"
                }
               }
              }
```

```
            },
            {
              "header": {
                "name": ":method",
                "stringMatch": {
                  "safeRegex": {
                    "regex": "GET|HEAD|OPTIONS"
                  }
                }
              }
            }
          ]
        }
      },
      {
        "notRule": {
          "urlPath": {
            "path": {
              "exact": "/v1/secret"
            }
          }
        }
      },

{
        "notRule": {
          "andRules": {
            "rules": [
              {
                "urlPath": {
                  "path": {
                    "exact": "/v1/admin"
                  }
                }
              },
              {
                "header": {
                  "name": ":method",
                  "stringMatch": {
                    "safeRegex": {
                      "regex": "GET"
                    }
                  }
                }
              }
            ]
          }
        }
```

```
            }
          ]
        }
      },
      {
        "andRules": {
          "rules": [
            {

"andRules": {
                "rules": [
                  {
                    "header": {
                      "name": "x-foo",
                      "presentMatch": true
                    }
                  },
                  {
                    "header": {
                      "name": "x-bar",
                      "stringMatch": {
                        "exact": "xyz"
                      }
                    }
                  },
                  {
                    "header": {
                      "name": "x-dib",
                      "stringMatch": {
                        "prefix": "gaz"
                      }
                    }
                  },
                  {
                    "header": {
                      "name": "x-gir",
                      "stringMatch": {

          "suffix": "zim"
                      }
                    }
                  },
                  {
                    "header": {
                      "name": "x-zim",
                      "stringMatch": {
                        "safeRegex": {
                          "regex": "gi[rR]"
```

```
          }
        }
      }
    },
    {
      "header": {
        "invertMatch": true,
        "name": "z-foo",
        "presentMatch": true
      }
    },
    {
      "header": {
        "invertMatch": true,
        "name": "z-bar",
        "stringMatch": {
          "exact": "xyz"

}
      }
    },
    {
      "header": {
        "invertMatch": true,
        "name": "z-dib",
        "stringMatch": {
          "prefix": "gaz"
        }
      }
    },
    {
      "header": {
        "invertMatch": true,
        "name": "z-gir",
        "stringMatch": {
          "suffix": "zim"
        }
      }
    },
    {
      "header": {
        "invertMatch": true,
        "name": "z-zim",
        "stringMatch": {
          "safeRegex": {

      "regex": "gi[rR]"
          }
```

```
                    }
                  }
                }
              ]
            }
          },
          {
            "notRule": {
              "urlPath": {
                "path": {
                  "exact": "/v1/secret"
                }
              }
            }
          },
          {
            "notRule": {
              "header": {
                "name": "x-baz",
                "presentMatch": true
              }
            }
          }
        ]
      }
    }
  ],
  "principals": [
    {
      "authenticated": {
        "principalName": {
          "safeRegex": {
            "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
          }
        }
      }
    }
  ]
 }
}
}
{
 "name": "envoy.filters.network.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.network.rbac.v3.RBAC",
  "rules": {},
```

"statPrefix": "connect_authz"
}
}
{
"Valid": true,
"License": {
"license_id": "${fake.random.uuid()}",
"customer_id": "${fake.random.uuid()}",
"installation_id": "*",
"issue_time": "2021-01-13T15:25:19.052900132Z",
"start_time": "2021-01-13T00:00:00Z",
"expiration_time": "${env('CONSUL_LICENSE_EXPIRATION', '2022-05-02T23:59:59.999Z')}",
"termination_time": "${env('CONSUL_LICENSE_TERMINATION', '2022-01-13T23:59:59.999Z')}",
"product": "consul",
"flags": {
"modules": [
"global-visibility-routing-scale",
"governance-policy"
]
},
"modules": [
"Global Visibility, Routing and Scale",
"Governance and Policy"
],
"features": [
"Automated Backups",
"Automated Upgrades",
"Enhanced Read Scalability",
"Network Segments",
"Redundancy Zone",
"Advanced Network Federation",
"Namespaces",
"SSO",
"Audit Logging",
"Admin Partitions"
]
},
"Warnings": [
]
}
{
"name": "envoy.filters.http.jwt_authn",
"typedConfig": {
"@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
"providers": {
"okta": {
"issuer": "test-issuer",
"payloadInMetadata": "jwt_payload_okta",

```
      "remoteJwks": {
        "asyncFetch": {
          "fastListener": true
        },
        "httpUri": {
          "cluster": "jwks_cluster_okta",
          "timeout": "1s",
          "uri": "https://example-okta.com/.well-known/jwks.json"
        }
      }
    }
  },
  "rules": [
    {
      "match": {
        "prefix": "/"
      },
      "requires": {
        "requiresAny": {
          "requirements": [
            {
              "providerName": "okta"
            },
            {
              "allowMissingOrFailed": {}
            }
          ]
        }
      }
    }
  ]
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
.consul-intention-permission-header-list {
 > ul > li {
   @extend %list-row-200;
 }
}
# Proprietary License

This license is temporary while a more official one is drafted. However,
```

this should make it clear:

The text contents of this website are MPL 2.0 licensed.

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or reused in any way other than to run the website locally. The license for
the design is owned solely by HashiCorp, Inc.


```
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "andRules": {
                     "rules": [
                       {
                         "urlPath": {
                           "path": {
                             "prefix": "/v1"
                           }
                         }
                       },
                       {
                         "header": {
                           "name": "x-foo",
                           "presentMatch": true
                         }
                       }
                     ]
                   }
                 },
                 {
                   "notRule": {
                     "andRules": {

                     "rules": [
                         {
                           "urlPath": {
                             "path": {
                               "exact": "/v1/secret"
                             }
                           }
```

```
            },
            {
              "header": {
                "name": "x-baz",
                "presentMatch": true
              }
            },
            {
              "header": {
                "name": "x-bar",
                "presentMatch": true
              }
            }
          ]
        }
      }
    },
    {
      "notRule": {
        "andRules": {
          "rules": [
            {

"urlPath": {
                "path": {
                  "exact": "/v1/admin"
                }
              }
            },
            {
              "header": {
                "name": "x-baz",
                "presentMatch": true
              }
            },
            {
              "header": {
                "name": "x-bar",
                "presentMatch": true
              }
            }
          ]
        }
      }
    }
  ]
 }
}
```

```
        ],
        "principals": [
          {
            "authenticated": {
              "principalName": {
                "safeRegex": {
                  "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
                }
              }
            }
          }
        ]
      }
    }
  }
 }
}
```

License

```hbs preview-template
<figure>
 <figcaption>URI: <code>/:partition/:nspace/:dc/license</code></figcaption>
 <DataSource
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition='partition'
       nspace='ns'
       dc='dc-1'
     )
   }}
   @onchange={{action (mut data) value="data"}}
 />
 <pre><code>{{json-stringify data null 4}}</code></pre>
</figure>
```

---
page_title: Automated license utilization reporting
description: >-
 Learn what data HashiCorp collects to meter Enterprise license utilization. Enable or disable reporting. Review sample payloads and logs.

Automated license utilization reporting

This topic describes how to enable automated license utilization reporting in Consul Enterprise. This feature automatically sends license utilization data to HashiCorp so that you do not have to manually collect and report it. It also enables you to review your license usage with the monitoring solution you already use, such as Splunk and

Datadog, as you optimize and manage your deployments.

Introduction

You can use automated license utilization report to understand how much additional networking infrastructure you can deploy under your current contract. This feature helps you protect against overutilization and budget for predicted consumption.

Automated reporting shares the minimum data required to validate license utilization as defined in our contracts. This data mostly consists of computed metrics, and it will never contain Personal Identifiable Information (PII) or other sensitive information. Automated reporting shares the data with HashiCorp using a secure unidirectional HTTPS API and makes an auditable record in the product logs each time it submits a report. This process is GDPR-compliant.

Requirements

Automated license utilization reporting does not support _air-gapped installations_, which are systems with no network interfaces.

The following versions of Consul Enterprise support automated license utilization reporting:

- Consul Enterprise v1.16.0 and newer.
- Patch releases of Consul Enterprise v1.15.4 and newer.
- Patch releases of Consul Enterprise v1.14.8 and newer.
- Patch releases of Consul Enterprise v1.13.9 and newer.

Download a supported release from the [Consul Versions](https://releases.hashicorp.com/consul/) page.

Enable automated reporting

Before you enable automated reporting, make sure that outbound network traffic is configured correctly and upgrade your enterprise product to a version that supports it. If your installation is air-gapped or network settings are not in place, automated reporting will not work.

To enable automated reporting, complete the following steps:

1. [Allow outbound HTTPS traffic on port 443](#allow-outbound-https-traffic)
1. [Check product logs](#check-product-logs)

Allow outbound HTTPS traffic on port 443

Make sure that your network allows HTTPS egress on port 443 from `https://reporting.hashicorp.services` by adding the following IP addresses to your allow-list:

- `100.20.70.12`
- `35.166.5.222`
- `23.95.85.111`

- `44.215.244.1`

Check product logs

Automatic license utilization reporting starts sending data within roughly 24 hours. Check the product logs for records that the data sent successfully.

<CodeBlockConfig hideClipboard>

```
[DEBUG] beginning snapshot export
[DEBUG] creating payload
[DEBUG] marshalling
 payload to json
[DEBUG] generating authentication headers
[DEBUG] creating request
[DEBUG] sending request
[DEBUG] performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] recording audit record
[INFO]  reporting: Report sent: auditRecord={"payload":{"payload_version":"1","license_id":"d2cdd857-4202-5a45-70a6-e4b531050c34","product":"consul","product_version":"1.16.0-dev+ent","export_timestamp":"2023-05-26T20:09:13.753921087Z","snapshots":[{"snapshot_version":1,"snapshot_id":"0001J724F90F4XWQDSAA76ZQWA","process_id":"01H1CTJPC1S8H7Q45MKTJ689ZW","timestamp":"2023-05-26T20:09:13.753513962Z","schema_version":"1.0.0","service":"consul","metrics":{"consul.billable.nodes":{"key":"consul.billable.nodes","kind":"counter","mode":"write","value":2},"consul.billable.service_instances":{"key":"consul.billable.service_instances","kind":"counter","mode":"write","value":2}}}],"metadata":{}}}
[DEBUG] completed recording audit record
[DEBUG] export finished successfully"
```

</CodeBlockConfig>

If
 your installation is air-gapped or your network does not allow the correct egress, the logs show an error.

<CodeBlockConfig hideClipboard>

```
[DEBUG] reporting: beginning snapshot export
[DEBUG] reporting: creating payload
[DEBUG] reporting: marshalling payload to json
[DEBUG] reporting: generating authentication headers
[DEBUG] reporting: creating request
[DEBUG] reporting: sending request
[DEBUG] reporting: performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] reporting: error status code received: statusCode=403
```

</CodeBlockConfig>

In this case, reconfigure your network to allow egress and check the logs again in roughly 24 hours to confirm that automated reporting works correctly.

Opt out

If your installation is air-gapped or you want to manually collect and report on the same license utilization metrics, you can opt out of automated reporting.

Manually reporting these metrics can be time consuming. Opting out of automated reporting does not mean that you also opt out from sending license utilization metrics. Customers who opt out of automated reporting are still required to manually collect and send license utilization metrics to HashiCorp.

If you are considering opting out because you are worried about the data, we strongly recommend that you review the [example payloads](#example-payloads) before opting out. If you have concerns with any of the automatically reported data, raise these concerns with your account manager.

There are two methods for opting out of automated reporting:

- HCL configuration (recommended)
- Environment variable (requires restart)

We recommend opting out in your product's configuration file because it does not require a system restart. Add the following block to your `configuration.hcl` or `configuration.json` file.

```hcl
reporting {
 license {
  enabled = false
 }
}
```

When opting out using an environment variable, the system provides a startup message confirming that you have disabled automated reporting. Set the following environment variable to disable automated reporting:

<CodeBlockConfig>

```shell-session
$ export OPTOUT_LICENSE_REPORTING=true
```

</CodeBlockConfig>

After you set the environment variable, restart your system to complete the process for opting out.

```shell-session
$ consul reload
```

Check your product logs roughly 24 hours after opting out to make sure that the system is not trying to send reports. Keep in mind that if your configuration file and environment variable differ, the environment variable setting takes precedence.

Example payloads

HashiCorp collects the following utilization data as JSON payloads:
`exporter_version` - The version of the licensing exporter

<CodeBlockConfig hideClipboard>

```json
{
 "payload": {
   "payload_version": "1",
   "license_id": "d2cdd857-4202-5a45-70a6-e4b531050c34",
   "product": "consul",
   "product_version": "1.16.0-dev+ent",
   "export_timestamp":
 "2023-05-26T20:09:13.753921087Z",
   "snapshots": [
     {
       "snapshot_version": 1,
       "snapshot_id": "0001J724F90F4XWQDSAA76ZQWA",
       "process_id": "01H1CTJPC1S8H7Q45MKTJ689ZW",
       "timestamp": "2023-05-26T20:09:13.753513962Z",
       "schema_version": "1.0.0",
       "service": "consul",
       "metrics": {
         "consul.billable.nodes": {
           "key": "consul.billable.nodes",
           "kind": "counter",
           "mode": "write",
           "value": 2
         },
         "consul.billable.service_instances": {
           "key": "consul.billable.service_instances",
           "kind": "counter",
           "mode": "write",
           "value": 2
         }
       }
```

```
    }
  ],
  "metadata": {}
 }
}
```

</CodeBlockConfig>
---
layout: docs
page_title: Storing the Enterprise License in Vault
description: >-
 Configuring the Consul Helm chart to use an enterprise license stored in Vault.

Storing the Enterprise License in Vault

This topic describes how to configure the Consul Helm chart to use an enterprise license stored in Vault.
Overview
Complete the steps outlined in the [Data Integration](/consul/docs/k8s/deployment-configurations/vault/data-integration) section to use an enterprise license stored in Vault.

Complete the following steps once:
 1. Store the secret in Vault.
 1. Create a Vault policy that authorizes the desired level of access to the secret.

Repeat the following steps for each datacenter in the cluster:
 1. Create Vault Kubernetes auth roles that link the policy to each Consul on Kubernetes service account that requires access.
 1. Update the Consul on Kubernetes helm chart.

Prerequisites
Prior to setting up the data integration between Vault and Consul on Kubernetes,
 you will need to have:
1. Read and completed the steps in the [Systems Integration](/consul/docs/k8s/deployment-configurations/vault/systems-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).
2. Read the [Data Integration Overview](/consul/docs/k8s/deployment-configurations/vault/data-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).

Store the Secret in Vault

First, store the enterprise license in Vault:

```shell-session
$ vault kv put consul-kv/secret/enterpriselicense key="<enterprise license>"
```

Create Vault policy

Next, you will need to create a policy that allows read access to this secret.

The path to the secret referenced in the `path` resource is the same value that you will configure in the `global.enterpriseLicense.secretName` Helm configuration (refer to [Update Consul on Kubernetes Helm chart](#update-consul-on-kubernetes-helm-chart)).

<CodeBlockConfig
 filename="license-policy.hcl">

```HCL
path "consul-kv/data/secret/enterpriselicense" {
 capabilities = ["read"]
}
```

</CodeBlockConfig>

Apply the Vault policy by issuing the `vault policy write` CLI command:

```shell-session
$ vault policy write license-policy license-policy.hcl
```

Create Vault Authorization Roles for Consul

Next, you will create Kubernetes auth roles for the Consul server and client:

```shell-session
$ vault write auth/kubernetes/role/consul-server \
   bound_service_account_names=<Consul server service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

```shell-session
$ vault write auth/kubernetes/role/consul-client \
   bound_service_account_names=<Consul client service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

To find out the service account names of the Consul server and client,
you can

run the following `helm template` commands with your Consul on Kubernetes values file:

- Generate Consul server service account name
```shell-session
$ helm template --release-name ${RELEASE_NAME} -s templates/server-serviceaccount.yaml hashicorp/consul -f values.yaml
```

- Generate Consul client service account name
```shell-session
$ helm template --release-name ${RELEASE_NAME} -s templates/client-serviceaccount.yaml hashicorp/consul -f values.yaml
```

Update Consul on Kubernetes Helm chart.

Now that you have configured Vault, you can configure the Consul Helm chart to
use the enterprise enterprise license in Vault:

<CodeBlockConfig filename="values.yaml">

```yaml
global:
 image: hashicorp/consul-enterprise:1.12.0-ent
 secretsBackend:
   vault:
     enabled: true
     consulServerRole: consul-server
     consulClientRole: consul-client
 enterpriseLicense:
   secretName: consul-kv/data/secret/enterpriselicense
   secretKey: key
```

</CodeBlockConfig>

Note
that `global.enterpriseLicense.secretName` is the path of the secret in Vault.
This should be the same path as the one you included in your Vault policy.
`global.enterpriseLicense.secretKey` is the key inside the secret data. This should be the same
as the key you passed when creating the enterprise license secret in Vault.
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}}

<Hds::Alert @type='inline' @color={{or @type "neutral"}} class='mb-2 mt-2 consul-intention-notice-custom-resource' as |A|>

```
 <A.Title>Intention Custom Resource</A.Title>
 <A.Description>Some of your intentions are being managed through an Intention Custom Resource in your Kubernetes cluster. Those managed intentions will be view only in the UI. Any intentions created in the UI will work but will not be synced to the Custom Resource Definition (CRD) datastore.</A.Description>
 <A.Link::Standalone @href="{{env 'CONSUL_DOCS_URL'}}/k8s/crds"
                @text='Learn more about CRDs'
                @icon="docs-link"
                @iconPosition="trailing"
                @size="small" />
</Hds::Alert>
/**
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*/

.consul-intention-permission-form {
 h2 {
   border-top: 1px solid var(--token-color-foreground-action);
   @extend %display-400-semibold;
 }
 button.type-submit {
   @extend %frame-blue-300;
 }
 button.type-submit:hover:not(:disabled),
 button.type-submit:focus:not(:disabled) {
   @extend %frame-blue-500;
 }
 button.type-submit:disabled {
   @extend %frame-blue-200;
 }
}

.consul-intention-view {
 h2 {
   @extend %display-400-semibold;
 }
}
```

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---
layout: docs
page_title: Consul-Terraform-Sync Enterprise License
description: >-
Consul-Terraform-Sync Enterprise License

Consul-Terraform-Sync Enterprise License

<EnterpriseAlert>
Licenses are only required for Consul-Terraform-Sync (CTS) Enterprise
</EnterpriseAlert>

CTS Enterprise binaries require a [Consul Enterprise license](/consul/docs/enterprise/license/overview) to run. There is no CTS Enterprise specific license. As a result, CTS Enterprise's licensing is very similar to Consul Enterprise.

All CTS Enterprise features are available with a valid Consul Enterprise license, regardless of your Consul Enterprise packaging or pricing model.

To get a trial license for CTS, you can sign-up for the [trial license for Consul Enterprise](/consul/docs/enterprise/license/faq#q-where-can-users-get-a-trial-license-for-consul-enterprise).

Automatic License Retrieval

CTS automatically retrieves a license from Consul on startup and then attempts to retrieve a new license once a day. If the current license is reaching its expiration date, CTS attempts to retrieve a license with increased frequency, as defined by the [License Expiration Date Handling](/consul/docs/nia/enterprise/license#license-expiration-handling).

~> Enabling automatic license retrieval is recommended when using HCP Consul Dedicated, as HCP Consul Dedicated licenses expire more frequently than Consul Enterprise licenses. Without auto-retrieval enabled, you have to restart CTS every time you load a new license.

Setting the License Manually

If a license needs to be manually set, choose one of the following methods (in order of precedence) to set the license:

1. Set the `CONSUL_LICENSE` environment variable to the license string.

  ```shell-session
  export CONSUL_LICENSE=<LICENSE_VALUE>
  ```

1. Set the `CONSUL_LICENSE_PATH` environment variable to the path of the file containing the license.

  ```shell-session
  export CONSUL_LICENSE_PATH=<PATH>/<TO>/<FILE>
  ```

1. To point to the file containing the license, in the configuration file, configure the [`license`](/consul/docs/nia/configuration#license) path option.

  ```hcl
  license {
    path = "<PATH>/<TO>/<FILE>"
  }
  ```

1. To point to the file containing the license, in the configuration file, configure the [`license_path`](/consul/docs/nia/configuration#license_path) option i. **Deprecated in CTS 0.6.0 and will be removed in a future release. Use [license block](/consul/docs/nia/configuration#license) instead.**

  ```hcl
  ```

```
license_path = "<PATH>/<TO>/<FILE>"
```

~> **Note**: the [options to set the license and the order of precedence](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses) are the same as Consul Enterprise server agents.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Updating the License Manually
To update the license
when it expires or is near the expiration date and automatic license retrieval is disabled:

1. Update the license environment variable or configuration with the new license value or path to the new license file
1. Stop and restart CTS Enterprise

Once CTS Enterprise starts again, it will pick up the new license and run the tasks with any changes that may have occurred between the stop and restart period.

License Expiration Handling

Licenses have an expiration date and a termination date. The termination date is a time at or after the license expires. CTS Enterprise will cease to function once the termination date has passed.

The time between the expiration and termination dates is a grace period. Grace periods are generally 24-hours, but you should refer to your license agreement for complete terms of your grace period.

When approaching expiration and termination, by default, CTS Enterprise will attempt to retrieve a new license. If auto-retrieval is disabled, CTS Enterprise will
provide notifications in the system logs:

Time period	Behavior - auto-retrieval enabled (default)	Behavior - auto-retrieval disabled
30 days before expiration	License retrieval attempt every 24-hours	Warning-level log every 24-hours
7 days before expiration	License retrieval attempt every 1 hour	Warning-level log every 1 hour
1 day before expiration	License retrieval attempt every 5 minutes	Warning-level log every 5 minutes
1 hour before expiration	License retrieval attempt every 1 minute	Warning-level log every 1 minute
At or after expiration (before termination)	License retrieval attempt every 1 minute	Error-level log every 1 minute
At or after termination	Error-level log and exit	Error-level log and exit

~> **Note**: Notification frequency and [grace period](/consul/docs/enterprise/license/faq#q-is-there-a-grace-period-when-licenses-expire) behavior is the same as Consul Enterprise.

```
{{!
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}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-list{{if (not onclick) ' readonly'}}"
 @scroll="native"
 @items={{items}}
 @partial={{5}}
as |item|>
 <BlockSlot @name="details">
   <div onclick={{action (optional onclick) item}}>
     <strong class={{concat 'intent-' item.Action}}>{{capitalize item.Action}}</strong>
{{#if (gt item.HTTP.Methods.length 0)}}
       <dl class="permission-methods">
         <dt>
           <Tooltip>
             Methods
           </Tooltip>
         </dt>
         <dd>
{{#each item.HTTP.Methods as |item|}}
           {{item}}
{{/each}}
         </dd>
       </dl>
{{/if}}
{{#if item.HTTP.Path}}
       <dl class="permission-path">
         <dt>
           <Tooltip>
             {{item.HTTP.PathType}}
           </Tooltip>
         </dt>
         <dd>
           {{item.HTTP.Path}}
         </dd>
       </dl>
{{/if}}
{{#each item.HTTP.Header
 as |item|}}
       <dl class="permission-header">
         <dt>
           <Tooltip>
             Header
           </Tooltip>
```

```
        </dt>
        <dd>
          {{item.Name}} {{route-match item}}
        </dd>
      </dl>
{{/each}}
  </div>
 </BlockSlot>
{{#if onclick}}
 <BlockSlot @name="actions" as |Actions|>
  <Actions as |Action|>
    <Action data-test-edit-action @onclick={{action (optional onclick) item}} @close={{true}}>
      <BlockSlot @name="label">
        Edit
      </BlockSlot>
    </Action>
    <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you
 want to delete this permission?
            </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
{{/if}}
</ListCollection>
{{/if}}
/*!
* clipboard.js v2.0.11
* https://clipboardjs.com/
*
* Licensed MIT  Zeno Rocha
*/
```

/*!
* focus-trap 6.9.4
* @license MIT, https://github.com/focus-trap/focus-trap/blob/master/LICENSE
*/

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---
layout: commands
page_title: 'Commands: License'
description: >
 The license command provides a datacenter-level view of the Consul
 Enterprise license.

Consul License

Command: `consul license`

<EnterpriseAlert />

The `license` command provides a list of all datacenters that use the Consul Enterprise license applied to the current

datacenter.

~> **Warning**: Consul 1.10.0 removed the ability to set and reset the license using the CLI.
See the [licensing documentation](/consul/docs/enterprise/license/overview) for more information about
Consul Enterprise license management.

If ACLs are enabled then a token with operator privileges may be required in
order to use this command. Requests are forwarded internally to the leader
if required, so this can be run from any Consul node in a cluster. See the
[ACL Guide](/consul/tutorials/security/access-control-setup-production) for more information.

```text
Usage: consul license <subcommand> [options] [args]

 This command has subcommands
 for managing the Consul Enterprise license
 Here are some simple examples, and more detailed examples are
 available in the subcommands or the documentation.

 Install a new license from a file:

    $ consul license put @consul.license

 Install a new license from stdin:

    $ consul license put -

 Install a new license from a string:

    $ consul license put "<license blob>"

 Retrieve the current license:

    $ consul license get

 Inspect a license:

    $ consul license inspect "<path to license file>"

 Reset the current license:

    $ consul license reset

 For more examples, ask for subcommand help or view the documentation.

Subcommands:
  get       Get the active license
  inspect   Inspect a signed license
```

```
  put       Puts a new license in the datacenter
  reset     Resets the license in the datacenter
```

inspect

This command inspects and validates a license. Just like a Consul agent it can load the license from a file on disk or from the `CONSUL_LICENSE` and `CONSUL_LICENSE_PATH` environment variables.

Usage: `consul license inspect [<options>] [<license file>]`

Inspect a license contained in a file:

```
$ consul license inspect consul.hclic
```

Inspect a license loaded from the environment:

```
$ consul license inspect
```

This will look at the CONSUL_LICENSE environment variable first and if not present then we will look for the file specified by the CONSUL_LICENSE_PATH environment variable.

The output looks like this:

```
Source: /consul/config/consul.hclic (path from the CONSUL_LICENSE_PATH environment variable)
Product: consul
License ID: 6089174b-a713-74cf-4c8d-856b86f1ce50
Customer ID: 7c020610-60a2-7ccb-c210-20d899e5f3b4
Installation ID: *
Issue Time: 2020-09-14 19:45:56.212195875 +0000 UTC
Start Time: 2020-09-14 00:00:00 +0000 UTC
Expiration Time: 2021-09-14 23:59:59.999 +0000 UTC
Termination Time: 2021-09-14 23:59:59.999 +0000 UTC
Modules:
      Global Visibility, Routing and Scale
       Governance and Policy
Features:
      Automated Backups
      Automated Upgrades
```

Enhanced Read Scalability
Network Segments
Redundancy Zone
Advanced Network Federation
Namespaces
SSO
Audit Logging
Admin Partitions

License is valid

```

## put

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[PUT\] /v1/operator/license](/consul/api-docs/operator/license#updating-the-consul-license)

This command sets the Consul Enterprise license.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be
 from the corresponding HTTP endpoint.

| ACL Required |
| --- |
| `operator:write` |

Usage: `consul license put [options] LICENSE`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
```
```

```
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

get

Corresponding HTTP API Endpoint: [\[GET\] /v1/operator/license](/consul/api-docs/operator/license#getting-the-consul-license)

This command gets the Consul Enterprise license. If the leader hasn't been updated with the newer license, the followers
will display the outdated license in their GET output.

The table below
 shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of [blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`none`

Usage: `consul license get [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

```

#### API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

## reset

-> **Deprecated** The ability to manage the cluster's license via the CLI
was
 removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[DELETE\] /v1/operator/license](/consul/api-docs/operator/license#resetting-the-consul-license)

Resets license for the datacenter to the one builtin in Consul binary, if it is still valid.
If the builtin license is invalid, the current one stays active.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication).
Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be from the corresponding HTTP endpoint.

| ACL Required |
| --- |
| `operator:write` |

Usage: `consul license reset [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires
 At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
```
```

Advanced Network Federation
```

#### API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.agentless-node-notice .hds-alert__title {
 display: flex;
 justify-content: space-between;
}
Mozilla Public License 2.0 (MPLv2.0)
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
   "policies": {
    "consul-intentions-layer7-0": {
     "permissions": [
      {
       "andRules": {
        "rules": [
         {
          "andRules": {
           "rules": [
            {
             "urlPath": {
              "path": {
               "prefix": "/v1"
              }
             }
            },
            {
             "header": {
              "name": "x-foo",
              "presentMatch": true
             }
            }
           ]
          }
         },
```

```
        {
          "notRule": {
            "andRules": {

            "rules": [
                {
                  "urlPath": {
                    "path": {
                      "exact": "/v1/secret"
                    }
                  }
                },
                {
                  "header": {
                    "name": "x-baz",
                    "presentMatch": true
                  }
                },
                {
                  "header": {
                    "name": "x-bar",
                    "presentMatch": true
                  }
                }
              ]
            }
          }
        },
        {
          "notRule": {
            "andRules": {
              "rules": [
                {

"urlPath": {
                    "path": {
                      "exact": "/v1/admin"
                    }
                  }
                },
                {
                  "header": {
                    "name": "x-baz",
                    "presentMatch": true
                  }
                },
                {
                  "header": {
```

```
                "name": "x-bar",
                "presentMatch": true
              }
            }
          ]
        }
      }
    }
  ]
}
},
{
  "andRules": {
    "rules": [
      {
        "andRules": {
          "rules": [
            {

"urlPath": {
              "path": {
                "prefix": "/v2"
              }
            }
          },
          {
            "header": {
              "name": "x-foo",
              "presentMatch": true
            }
          }
        ]
      }
    },
    {
      "notRule": {
        "andRules": {
          "rules": [
            {
              "urlPath": {
                "path": {
                  "exact": "/v2/secret"
                }
              }
            },
            {
              "header": {
                "name": "x-baz",
```

"presentMatch":
true
}
},
{
"header": {
"name": "x-bar",
"presentMatch": true
}
}
]
}
}
},
{
"notRule": {
"andRules": {
"rules": [
{
"urlPath": {
"path": {
"exact": "/v2/admin"
}
}
},
{
"header": {
"name": "x-baz",
"presentMatch": true
}
},

{
"header": {
"name": "x-bar",
"presentMatch": true
}
}
]
}
}
}
]
}
}
],
"principals": [
{

```
            "authenticated": {
              "principalName": {
                "safeRegex": {
                  "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
                }
              }
            }
          }
        ]
      }
    }
  }
}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "urlPath": {
                     "path": {
                       "prefix": "some-path"
                     }
                   }
                 },
                 {
                   "andRules": {
                     "rules": [
                       {
                         "metadata": {
                           "filter": "envoy.filters.http.jwt_authn",
                           "path": [
                             {
                               "key": "jwt_payload_okta"
                             },
                             {
                               "key": "iss"
                             }

                           ],
                           "value": {
```

```
                "stringMatch": {
                  "exact": "mytest.okta-issuer"
                }
              }
            }
          },
          {
            "metadata": {
              "filter": "envoy.filters.http.jwt_authn",
              "path": [
                {
                  "key": "jwt_payload_okta"
                },
                {
                  "key": "roles"
                }
              ],
              "value": {
                "stringMatch": {
                  "exact": "testing"
                }
              }
            }
          }

      ]
            }
          }
        ]
      }
    }
    ],
    "principals": [
      {
        "authenticated": {
          "principalName": {
            "safeRegex": {
              "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
            }
          }
        }
      }
    ]
  }
 }
}
}
```

```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

section[data-route='dc.show.license'] {
 @extend %license-route;
}
%license-route .validity {
 @extend %license-validity;
}
%license-route aside {
 @extend %license-route-learn-more;
}

%license-route h2 {
 @extend %display-400-semibold;
}

%license-validity p {
 color: var(--token-color-foreground-faint);
}
%license-validity dl {
 @extend %horizontal-kv-list;
 @extend %body-300-regular;
}
%license-validity dl .expired + dd {
 @extend %visually-hidden;
}
%license-validity dl dt::before {
 content: '';
 margin-right: 0.25rem; /* 4px */
}
%license-validity dl .expired::before {
 --icon-name: icon-x-circle;
 --icon-color: var(--token-color-foreground-critical);
}
%license-validity dl .warning::before {
 --icon-name: icon-alert-circle;
 --icon-color: var(--token-color-foreground-warning);
}
%license-validity dl .valid:not(.warning)::before {
 --icon-name: icon-check-circle;
 --icon-color: var(--token-color-foreground-success);
}

%license-route-learn-more
```

```
 {
 @extend %panel;
 box-shadow: none;
 padding: var(--padding-y) var(--padding-x);
 width: 40%;
 min-width: 413px;
 margin-top: 1rem; /* 16px */
}
%license-route-learn-more header > :first-child {
 @extend %display-300-semibold;
}
%license-route-learn-more header {
 margin-bottom: 1rem; /* 16px */
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

<Route
 @name={{routeName}}
as |route|>
 <DataLoader
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition=route.params.partition
       nspace=route.params.nspace
       dc=route.params.dc
     )
   }}
 as |loader|>

{{#let
 loader.data
as |item|}}
   <BlockSlot @name="error">
     <ErrorState
       @error={{loader.error}}
       @login={{route.model.app.login.open}}
     />
   </BlockSlot>

   <BlockSlot @name="disconnected" as |after|>
     {{#if (eq loader.error.status "404")}}
       <Hds::Toast @color='warning'
         {{notification
           sticky=true
```

```
    }} as |T|>
    <T.Title>Warning!</T.Title>
    <T.Description>This service has been deregistered and no longer exists in the catalog.</T.Description>
  </Hds::Toast>
{{else if (eq loader.error.status "403")}}
  <Hds::Toast @color='critical'
    {{notification
      sticky=true
    }} as |T|>
    <T.Title>Error!</T.Title>
    <T.Description>You no longer have access to this service.</T.Description>
  </Hds::Toast>
{{else}}
  <Hds::Toast @color='warning'
    {{notification
      sticky=true
    }} as |T|>
    <T.Title>Warning!</T.Title>
    <T.Description>An error was returned whilst loading this data, refresh to try again.</T.Description>
  </Hds::Toast>
{{/if}}
</BlockSlot>

<BlockSlot @name="loaded">
  <div class="tab-section">
    <section
      class={{class-map
        'validity'
        (array 'valid' item.Valid)
      }}
    >
      <header>
        <h2>
          {{compute (fn route.t 'expiry.header')}}
        </h2>
      </header>

      <p>
        {{compute (fn route.t 'expiry.${type}.body'
          (hash
            type=(if item.Valid 'valid' 'expired')

   date=(format-time item.License.expiration_time
              year='numeric'
              month='long'
              day='numeric'
            )
            time=(format-time item.License.expiration_time
```

```
            hour12=true
            hour='numeric'
            hourCycle='h12'
            minute='numeric'
            second='numeric'
            timeZoneName='short'
          )
          htmlSafe=true
        )
      )}}
    </p>

    <dl>
      <dt class={{class-map
          (array 'valid' item.Valid)
          (array 'expired' (not item.Valid))
          (array 'warning' (temporal-within item.License.expiration_time 2629800000))
        }}
      >
        {{compute (fn route.t 'expiry.${type}.header'
          (hash
            type=(if item.Valid 'valid' 'expired')
          )
        )}}
      </dt>

  <dd>
        {{temporal-format item.License.expiration_time}}
      </dd>
    </dl>

    <aside>
      <header>
        <h3>
          {{compute (fn route.t 'documentation.title')}}
        </h3>
      </header>
      <div class="flex gap-1.5 flex-col">
        <Hds::Link::Standalone
          @text={{compute (fn route.t 'documentation.links.license-expiration.text')}}
          @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.license-
expiration.link'))}}'
          @icon='docs-link'
          @iconPosition='trailing'
        />
        <Hds::Link::Standalone
          @text={{compute (fn route.t 'documentation.links.renewing-license.text')}}
          @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.renewing-
```

```
license.link'))}}'
            @icon='docs-link'
            @iconPosition='trailing'

        />
          <Hds::Link::Standalone
            @text={{compute (fn route.t 'documentation.links.applying-new-license.text')}}
            @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.applying-new-
license.link'))}}'
            @icon='docs-link'
            @iconPosition='trailing'
          />
        </div>
      </aside>

    </section>
  </div>
 </BlockSlot>
{{/let}}
 </DataLoader>
</Route>
// Copyright (c) HashiCorp, Inc.
// SPDX-License-Identifier: MPL-2.0

package api

import (
 "io"
 "strings"
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`

 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`
```

```
 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // Whether the license will ignore termination
 IgnoreTermination bool `json:"ignore_termination"`

 //
 The product the license is valid for
 Product string `json:"product"`

 // License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}

type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return "", err
 }
```

```
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := io.ReadAll(resp.Body)
 if
 err != nil {
  return "", err
 }

 return string(data), nil
}

// LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set
 via agent configuration instead of through the API
func (op *Operator) LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
```

```
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-header-list {
 dt::before {
   @extend %with-glyph-icon;
   content: 'H';
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-list {
 dt::before {
   @extend %with-glyph-icon;
 }
 dl.permission-methods dt::before {
   content: 'M';
 }
 dl.permission-path dt::before {
   content: 'P';
 }
 dl.permission-header dt::before {
   content: 'H';
 }
}
---
layout: docs
page_title: Enterprise Licenses
description: >-
```

Consul Enterprise server, client, and snapshot agents require a license on startup in order to use Enterprise features. Learn how to apply licenses using environment variables or configuration files.

Consul Enterprise License

Licensing Overview

All Consul Enterprise agents must be licensed when they are started. Where that license comes from will depend on which binary is in use, whether the agent is a server, client or snapshot agent, and whether ACLs have been enabled for the cluster.

-> ** Consul Enterprise 1.10.0 removed temporary licensing.** Prior to 1.10.0, Consul Enterprise agents could start without a license and then have a license applied to them later on via the CLI or API. That functionality has been removed and replaced with the ability to load licenses from the agent's configuration or environment. Also, prior to 1.10.0, server agents would automatically propagate the license between themselves.
This no longer occurs and the license must be present on each server agent when it is started.

Consul Enterprise 1.14.0, when running on Kubernetes, removed client agents and replaced these with virtual agents.
Virtual agents are nodes that Consul service mesh services run on. HashiCorp uses virtual agents to determine license entitlements for customers on per-node licensing and pricing agreements.

-> Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Applying a License

For Consul Enterprise 1.10.0 or greater, a license must be available at the time the agent starts.
For server agents this means that they must either have the [`license_path`](/consul/docs/agent/config/config-files#license_path)
configuration set or have a license configured in the servers environment with the `CONSUL_LICENSE` or `CONSUL_LICENSE_PATH` environment variables. Both the configuration
item and the `CONSUL_LICENSE_PATH`
environment variable point to a file containing the license whereas the `CONSUL_LICENSE` environment variable should contain the license as the value. If multiple variables are set,
the following order of precedence applies:

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Client agents and [snapshot agents](/consul/docs/enterprise/backups)
may also be licensed in the very same manner.
However, to avoid the need to configure the license on many client agents and snapshot agents,
those agents have the capability to retrieve the license automatically under the conditions described below.

Virtual agents do not need the license to run.

Updating the license for an agent depends on the method you used to apply the license.
- **If you used the `CONSUL_LICENSE`
environment variable**: After updating the environment variable, restart the affected agents.
- **If you used the
`CONSUL_LICENSE_PATH`
 environment variable**: Update the license file first. Then, restart the affected agents.
- **If you used the `license_path` configuration item**: Update the license file first. Then, run [`consul reload`](/consul/commands/reload) for the affected agents.

Client Agent License Retrieval

When a client agent starts without a license in its configuration or environment, it will try to retrieve the license from the servers via RPCs. That RPC always requires a valid non-anonymous ACL token to authorize the request but the token doesn't need any particular permissions. As the license is required before the client actually joins the cluster, where to make those RPC requests to is inferred from the [`retry_join`](/consul/docs/agent/config/config-files#retry_join) configuration. If `retry_join` is unset or no [`agent` token](/consul/docs/agent/config/config-files#acl_tokens_agent) is set then the client agent will immediately shut itself down.

If all preliminary checks
 pass the client agent will attempt to reach out to any server on its RPC port to
request the license. These requests will be retried for up to 5 minutes and if it is unable to retrieve a license within that time frame it will shut itself down.

If ACLs are disabled then the license must be provided to the client agent through one of the three methods listed below.
Failure in providing the client agent with a licence will prevent the client agent from joining the cluster.

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Snapshot Agent License Retrieval

The snapshot agent has similar functionality to the client agent for automatically retrieving the license. However, instead of requiring a server agent to talk to, the snapshot agent can request the license from the server or client agent it would use for all other operations. It still requires an ACL token to authorize the request. Also like client agents,
 the snapshot agent will shut itself down after being unable to retrieve the license for 5
minutes.
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

```
.consul-intention-permission-list {
 .detail > div {
   display: flex;
   width: 100%;
 }
 strong {
   margin-right: 8px;
 }
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if isVisible}}
 <Hds::Alert @type="inline" class='mb-3 mt-2 agentless-node-notice' data-test-node-agentless-notice as |A|>
   <A.Title>
     <span>{{t 'routes.dc.nodes.index.agentless.notice.header'}}</span>
     <Hds::Button
       @color='secondary'
       @text='Dismiss notice'
       {{on 'click' this.dismissAgentlessNotice}}
       @icon='x'
       @size='small'
       @isIconOnly={{true}}
     />
   </A.Title>
   <A.Description>{{t 'routes.dc.nodes.index.agentless.notice.body'}}</A.Description>
   <A.Link::Standalone @href='{{env "CONSUL_DOCS_DEVELOPER_URL"}}/connect/dataplane'
                       @text={{t 'routes.dc.nodes.index.agentless.notice.footer'}}
                       @icon='docs-link'
                       @iconPosition='trailing' />
 </Hds::Alert>
{{/if}}
/*!
* QUnit 2.19.4
* https://qunitjs.com/
*
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*/
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}}

<Hds::Alert @type="inline" class="mb-3 mt-2" as |A|>
```

```
<A.Description>{{t "components.consul.intention.notice.permissions.body"}}</A.Description>
<A.Link::Standalone
  @text={{t "components.consul.intention.notice.permissions.footer"}}
  @href="{{env 'CONSUL_DOCS_URL'}}/connect/intentions"
  @icon="docs-link"
  @iconPosition="trailing"
  @size="small"
/>
</Hds::Alert>
```

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```
{
 "name": "envoy.filters.http.jwt_authn",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
   "providers": {
     "auth0": {
       "issuer": "another-issuer",
       "payloadInMetadata": "jwt_payload_auth0",
       "remoteJwks": {
         "asyncFetch": {
           "fastListener": true
         },
         "httpUri": {
           "cluster": "jwks_cluster_auth0",
           "timeout": "1s",
           "uri": "https://example-auth0.com/.well-known/jwks.json"
         }
       }
     },
     "okta": {
       "issuer": "test-issuer",
       "payloadInMetadata": "jwt_payload_okta",
       "remoteJwks": {
         "asyncFetch": {
           "fastListener": true
         },
         "httpUri": {
           "cluster": "jwks_cluster_okta",
           "timeout": "1s",
           "uri": "https://example-okta.com/.well-known/jwks.json"
         }
       }
     }
   },
   "rules": [
     {

 "match": {
         "prefix": "/"
```

```
      },
      "requires": {
        "requiresAll": {
          "requirements": [
            {
              "requiresAny": {
                "requirements": [
                  {
                    "providerName": "okta"
                  },
                  {
                    "allowMissingOrFailed": {}
                  }
                ]
              }
            },
            {
              "requiresAny": {
                "requirements": [
                  {
                    "providerName": "auth0"
                  },
                  {
                    "allowMissingOrFailed": {}
                  }
                ]
              }
            }
          ]
        }
      }
    }
  ]
 }
}
{{!
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}}

<div
 ...attributes
 class="consul-intention-permission-form"
>
<FormGroup
 @name={{name}}
as |group|>
```

```
{{yield (hash
  submit=(action 'submit' changeset)
  reset=(action 'reset' changeset)

  isDirty=(and changeset.isValid)
  changeset=changeset
)}}

<fieldset>
  <div data-property="action">
    <span class="label">
      Should this permission allow the source connect to the destination?
    </span>
    <div role="radiogroup" class={{if changeset.error.Action ' has-error'}}>
      {{#each intents as |intent|}}
        <label>
          <span>{{capitalize intent}}</span>
          <input
            type="radio"
            name="Action"
            value={{intent}}
            checked={{if (eq changeset.Action intent) 'checked'}}
            onchange={{action (changeset-set changeset 'Action') value="target.value"}}
          />
        </label>
      {{/each}}
    </div>
  </div>
</fieldset>

<fieldset>
  <header>
    <h2>Path</h2>
  </header>
  <div>
      <group.Element
        @name="PathType"
        @type="select"
      as |el|>
        <el.Label>
          Path type
        </el.Label>
        <PowerSelect
          @options={{pathTypes}}
          @selected={{pathType}}
          @onChange={{action 'change' 'HTTP.PathType' changeset}} as |Type|>
            {{get pathLabels Type}}
        </PowerSelect>
```

```
      </group.Element>

{{#if shouldShowPathField}}
      <group.Element
        @name="Path"
        @error={{changeset-get changeset 'error.HTTP.Path'}}
      as |el|>
        <el.Label>
          {{get pathLabels pathType}}
        </el.Label>
        <el.Text
          @value={{changeset-get changeset 'HTTP.Path'}}
          oninput={{action 'change' 'HTTP.Path' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>

            {{#if (eq (changeset-get changeset 'HTTP.Path') 'Regex')}}
              Path Regex should not be blank
            {{else}}
              Path should begin with a '/'
            {{/if}}
          </el.Error>
        </State>
      </group.Element>
{{/if}}

  </div>
 </fieldset>

 <fieldset>
  <h2>Methods</h2>
  <div class="type-toggle">
    <span>All methods are applied by default unless specified</span>
    <group.Element
      @name="allMethods"
    as |el|>
      <el.Checkbox
        checked={{if allMethods 'checked'}}
        onchange={{action 'change' 'allMethods' changeset}}
      />
      <el.Label>
        All Methods
      </el.Label>
    </group.Element>
  </div>

{{#if shouldShowMethods}}
```

```
  <div class="checkbox-group" role="group">
    {{#each methods as |method|}}
      <label class="type-checkbox">
        <input
          type="checkbox"
          name="method"
          value={{method}}

  checked={{if (includes method changeset.HTTP.Methods) 'checked'}}
          onchange={{action 'change' 'method' changeset}}
        />
        <span>{{method}}</span>
      </label>
    {{/each}}
  </div>
{{/if}}
 </fieldset>

 <fieldset>
  <h2>Headers</h2>

  <Consul::Intention::Permission::Header::List
    @items={{changeset-get changeset 'HTTP.Header'}}
    @ondelete={{action 'delete' 'HTTP.Header' changeset}}
  as |headerList|>

  </Consul::Intention::Permission::Header::List>

  <Consul::Intention::Permission::Header::Form
    @onsubmit={{action 'add' 'HTTP.Header' changeset}}
  as |headerForm|>
    <Ref @target={{this}} @name="headerForm" @value={{headerForm}} />
  </Consul::Intention::Permission::Header::Form>

  <Hds::ButtonSet>
    <Hds::Button
      data-test-add-header
      @text='Add{{if (gt (get (changeset-get changeset 'HTTP.Header') 'length') 0) ' another' ''}} header'
      @color='primary'
      disabled={{if (not this.headerForm.isDirty)
 'disabled'}}
      onclick={{action this.headerForm.submit}}
    />
    <Hds::Button
      @text='Cancel'
      @color='secondary'
      onclick={{action this.headerForm.reset}}
    />
```

```
  </Hds::ButtonSet>
 </fieldset>
 </FormGroup>
</div>
```

1.3765 smithy-go 1.22.3

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1.3766 consul-api 1.31.2

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```
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}}

<div
 ...attributes
 class="consul-intention-permission-header-form"
>
 <FormGroup
   @name={{name}}
 as |group|>

   {{yield (hash
```

```
    submit=(action 'submit' changeset)
    reset=(action 'reset' changeset)

    isDirty=(and changeset.isValid changeset.isDirty)
    changeset=changeset
  )}}

  <fieldset>
    <div>
      <group.Element
        @name="HeaderType"
        @type="select"
      as |el|>
        <el.Label>Header type</el.Label>
        <PowerSelect
          @options={{headerTypes}}
          @selected={{headerType}}
          @onChange={{action 'change' 'HeaderType' changeset}} as |Type|>
            {{get headerLabels Type}}
        </PowerSelect>
      </group.Element>


      <group.Element
        @name="Name"
        @error={{changeset-get changeset 'error.Name'}}
      as |el|>
        <el.Label>Header name</el.Label>
        <el.Text

         @value={{changeset-get changeset 'Name'}}
          oninput={{action 'change' 'Name' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Name.validation'}}
          </el.Error>
        </State>
      </group.Element>

{{#if shouldShowValueField}}
      <group.Element
        @name="Value"
        @error={{changeset-get changeset 'error.Value'}}
      as |el|>
        <el.Label>Header {{lowercase (get headerLabels headerType)}}</el.Label>
        <el.Text
          @value={{changeset-get changeset 'Value'}}
```

```
          oninput={{action 'change' 'Value' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Value.validation'}}
          </el.Error>
        </State>
      </group.Element>
 {{/if}}

 {{#if shouldShowIgnoreCaseField}}
      <group.Element

        @name="IgnoreCase"
        @error={{changeset-get changeset 'error.IgnoreCase'}}
      as |el|>
        <el.Label>Ignore Case</el.Label>
        <el.Checkbox
          checked={{if IgnoreCase 'checked'}}
          onchange={{action 'change' 'IgnoreCase' changeset}}
        />
      </group.Element>
 {{/if}}

    </div>
  </fieldset>
 </FormGroup>
</div>
---
layout: api
page_title: License - Operator - HTTP API
description: |-
 The /operator/license endpoint allows for retrieving the Consul
 Enterprise License.
---

# License - Operator HTTP API

<EnterpriseAlert />

The licensing functionality described here is available only in
[Consul Enterprise](https://www.hashicorp.com/products/consul/) version 1.1.0 and later.

## Getting the Consul License

This endpoint gets information about the current license.

| Method | Path                | Produces          |
```

| ------ | ---------- | ---------- |
| `GET` | `/operator/license` | `application/json` |

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

| Blocking Queries | Consistency Modes | Agent Caching | ACL Required |
| ----------
 | ---------- | ---------- | ---------- |
| `NO` | `all` | `none` | `none` |

The corresponding CLI command is [`consul license get`](/consul/commands/license#get).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be retrieved.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
   http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
```

```
    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```

Updating the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint updates the Consul license and returns some of the
license contents as well as any warning messages regarding its validity.

Method	Path	Produces
`PUT`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license put`](/consul/commands/license#put).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Payload

The payload is the raw license blob.

Sample Request

```shell-session
```

```
$ curl \
  --request PUT \
  --data @consul.license \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product":
 "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
     "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

Resetting the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint resets the Consul license to the license included in the Enterprise binary. If the included license is not valid, the replace will fail.

Method	Path	Produces
`DELETE`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching),
 and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license reset`](/consul/commands/license#reset).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
   --request DELETE \
   http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
    "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
```

```
    "Redundancy Zone",
    "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

```
.consul-intention-permission-form {
 h2 {
  padding-top: 1.4em;
  margin-top: 0.2em;
  margin-bottom: 0.6em;
 }
 .consul-intention-permission-header-form {
  margin-top: 10px;
 }
 fieldset:nth-child(2) > div,
 .consul-intention-permission-header-form fieldset > div {
  display: grid;
  grid-template-columns: repeat(auto-fit, minmax(160px, 1fr));
  grid-gap: 12px;
 }
 fieldset:nth-child(2) > div label:last-child {
  grid-column: span 2;
 }
 .ember-basic-dropdown-trigger {
  padding: 5px;
 }
 .checkbox-group {
  flex-direction: column;
 }
}
```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1

```
*/

@import './skin';
@import './layout';
.consul-intention-permission-list > ul > li {
 @extend %list-row-200;
}
.consul-intention-permission-list:not(.readonly) > ul > li {
 @extend %with-composite-row-intent;
}
.consul-intention-permission-list strong {
 @extend %pill-500;
}
.consul-intention-permission-list .intent-allow {
 @extend %pill-allow;
}
.consul-intention-permission-list .intent-deny {
 @extend %pill-deny;
}
```

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---
layout: docs
page_title: Enterprise License FAQ
description: >-
Review frequently asked questions (FAQs) about Consul Enterprise licenses to learn more about how licenses work, what happens when they expire, and how to get a trial license.

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Consul Enterprise version 1.10.0.
Consul Enterprise automatically loads Consul licenses when the server agent starts.

Q: Can I get a quick summary of the Consul changes?

Starting with Consul Enterprise 1.10.0, the license enablement process is different.

HashiCorp Enterprise servers will no longer start without a license. Servers require licenses to be provided from either an environment variable or file.
If the license is missing, invalid, or expired, the server will immediately exit.
This check is part of the server boot-up process.

In previous versions of HashiCorp enterprise products, one server could distribute a license to other servers via the Raft protocol.
This will no longer work since each server must be able to find a valid license during the startup process.

Q: What are the upgrade requirements?

All customers on Consul Enterprise 1.8/1.9 must first upgrade their client and server agents to the latest patch release.
During the upgrade the license file must also be configured on client agents in an environment variable or file path, otherwise the Consul agents will fail to retrieve the license with a valid agent token.
The upgrade process varies if ACLs are enabled or disabled in the cluster.

Refer to the instructions on [upgrading to 1.10.x](/consul/docs/upgrading/instructions/upgrade-to-1-10-x) for details.

Q: Is there a tutorial available for the license configuration steps?

Please visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs).

Q: What resources are available?

The list below is a great starting point for learning more about the license
changes introduced in Consul Enterprise 1.10.0+ent.

- [Consul Enterprise Upgrade Documentation](/consul/docs/enterprise/upgrades)

- [Consul License Documentation](/consul/docs/enterprise/license/overview)

- [License configuration values documentation](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses)

- [Install a HashiCorp Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs)

Q: Do these changes impact all customers/licenses?

The license changes introduced in 1.10.0 only affect Consul Enterprise.
This impacts customers that have an enterprise binary (trial or non-trial licenses) downloaded from https://releases.hashicorp.com.
The license changes do not impact customers with the baked-in licensed binaries. In a later release of Consul Enterprise, baked-in binaries will be deprecated.

Q: What is the product behavior change introduced by the licensing changes?

Starting with Consul Enterprise 1.10.0,
a valid license is required on-disk (auto-loading) or as an environment variable for Consul Enterprise to successfully boot-up.
The in-storage license feature will not be supported starting with Consul Enterprise 1.10.0+ent. All Consul Enterprise clusters using 1.10.0+ent must ensure that there is a valid license on-disk (auto-loaded) or as an environment variable.

Q: What is the impact on trial licenses due to this change? ((#q-what-is-the-impact-on-evaluation-licenses-due-to-this-change))

Consul Enterprise 1.10.0+ server agents require a valid license to start.
The license can be provided on disk (auto-loaded) or as an environment variable.
There is no longer a 6-hour trial period in which Consul Enterprise server agents
can operate without a license.

Q: Is there a grace period when licenses expire?

YesConsul will continue normal operation and can be restarted after license *expiration* as defined in [`expiration_time`](/consul/api-docs/operator/license#getting-the-consul-license).
As
license expiration is approached or passed, Consul will issue warnings in the system logs.

Consul will only cease operation after license *termination*, which occurs 10 years
after license expiration and is defined in
[`termination_time`](/consul/api-docs/operator/license#getting-the-consul-license).

~> **Starting with Consul 1.14, and patch releases 1.13.3 and 1.12.6, Consul will support non-terminating licenses**:
Please contact your support representative for more details on non-terminating licenses.
An expired license will not allow Consul versions released after the expiration date to run.
It will not be possible to upgrade to a new version of Consul released after license expiration.

Q: Does this affect client agents?

There are upgrade requirements that affect Consul Enterprise clients.
Please review the [upgrade requirements](#q-what-are-the-upgrade-requirements) documentation.

Q: Does this affect snapshot agents?

Same behavior as Consul clients.
See answer for [Does this affect client agents?](#q-does-this-affect-client-agents)

Q: What is the behavior if the license is missing?

Consul server agents will detect the absence of the license and immediately exit.

Consul client agents will attempt to retrieve the license from servers if certain conditions are met:

- ACLs are enabled.
- An ACL token is provided to the client agent.
- The client agents configuration contains `retry_join` addresses.
- The retry join addresses are addresses of the Consul servers.

Consul snapshot agents will attempt to retrieve the license from servers if certain conditions are met: ACLs are enabled, a ACL token is provided to the client agent, the client agents configuration contains `retry_join` addresses, the retry join addresses are addresses of the Consul servers.

Q: Where can users get a trial license for Consul Enterprise?

Contact your [HashiCorp Support contact](https://support.hashicorp.com/) for a development license.

~> **Trial
install will cease operation 24 hours after 30-day license expiration**:
Trial licenses are not meant to be used in production.

This is unlike non-trial licenses which provide a 10 year grace period as described in
the answer for [Q: Is there a grace period when licenses expire?](#q-is-there-a-grace-period-when-licenses-expire).

Q: How can I renew a license?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: I'm an existing enterprise customer but don't have my license, how can I get it?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: Are the license files locked to a specific cluster?

The license files are not locked to a specific cluster or cluster node. The above changes apply to all nodes in a cluster.

Q: Will this
impact HCP Consul Dedicated?

This will not impact HCP Consul Dedicated.

Q: Does this need to happen every time a node restarts, or is this a one-time check?

Consul Enterprise binaries starting with 1.10.0+ent, will be subject to EULA check. Release 1.10.0+ent introduces the EULA check for trial licenses (non-trial licenses already go through EULA check during contractual agreement).

The agreement to a EULA happens only once (when the user gets their license), Consul Enterprise **will check for the presence of a valid license every time a node restarts**.

When a customer upgrades existing clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be auto-loaded.

When a customer deploys new clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be on-disk (auto-loaded).

Q: What are the scenarios that a customer must plan for because of these changes?

New
Consul cluster deployments using 1.10.0+ent will need to have a valid license on servers to successfully deploy.
This valid license must be on-disk (auto-loaded) or as an environment variable.
Please see the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?

VM

1. Run [`consul license get -signed`](/consul/commands/license#get) to extract the license from their running cluster. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have access to the required license. This could be via the client agent configuration file or an environment variable.
1. Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license
 key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

NOTE: If you are not upgrading Consul or your Helm chart version then no action is required.

1. In order to use Consul Enterprise 1.10.0 or greater on Kubernetes you must use version 0.32.0 or greater of the Helm chart.
1. You should already have a Consul Enterprise license set as a Kubernetes secret. If you do not, refer to [how to obtain a copy of your license](/consul/docs/enterprise/license/faq#q-i-m-an-existing-enterprise-customer-but-don-t-have-my-license-how-can-i-get-it).
Once you have the license then create a Kubernetes secret containing the license as described in [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise).
1. Follow the [Kubernetes Upgrade Docs](/consul/docs/k8s/upgrade) to upgrade. No changes to your `values.yaml` file are needed to enable enterprise autoloading since this support is built in to consul-helm 0.32.0 and greater.

!>
 Warning: If you are upgrading the Helm chart but **not** upgrading the Consul version, you must set `server.enterpriseLicense.enableLicenseAutoload: false`. See [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise) for more details.

Q: What is the migration path for customers who want to migrate from their existing perpetually-licensed binaries to the license on disk flow?

VM

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on

how to get your organization's enterprise license.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Proceed with the `helm` [upgrade instructions](/consul/docs/k8s/upgrade)

Q: Will Consul downgrades/rollbacks work?

When downgrading
 to a version of Consul before 1.10.0+ent, customers will need to follow the previous process for applying an enterprise licenses to Consul Enterprise.

Q: Are there potential pitfalls when downgrading or upgrading Consul server instances?

~> Verify that you meet the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Assume a scenario where there are three Consul server nodes:

- Node A: v1.9.5
- Node B: v1.10.0 [Leader]
- Node C: v1.9.5

The command `consul license put` is issued from Node A. This will result in an error due to how Consul routes calls to the server node, Node B in this example.
Because Node A is a follower when the call `consul license put` is issued, the call will be redirected to Node B (leader).
The `consul license put` operation will fail due to being removed from 1.10.0.
This is a scenario that could occur if a customer downgrades from 1.10.0+ and the Consul leadership has not transferred back over to a node
 not running 1.10.0+.
This also has the potential of occurring when upgrading if scheduled license updates or autoscaling groups recoveries are in place.

Q: Any impacts to Consul Kubernetes?

If you are using a Consul Enterprise version prior to 1.10.0 and decide to upgrade the Helm chart to version 0.32.0 or newer, but not the Consul version.
You will need to add the following configuration.

```
server:
 enterpriseLicense:
   enableLicenseAutoload: false
```
/**
* Copyright (c) HashiCorp, Inc.

```
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-header-list {
 max-height: 200px;
 overflow: auto;
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-header-list"
 @items={{items}}
 @scroll="native"
 @cellHeight={{42}}
as |item|>
 <BlockSlot @name="details">
   <dl>
     <dt>
       <Tooltip>
         Header
       </Tooltip>
     </dt>
     <dd>
       {{item.Name}} {{route-match item}}
     </dd>
   </dl>
 </BlockSlot>
 <BlockSlot @name="actions" as |Actions|>
   <Actions as |Action|>
     <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
       <BlockSlot @name="label">
         Delete
       </BlockSlot>
       <BlockSlot @name="confirmation" as |Confirmation|>
         <Confirmation class="warning">
           <BlockSlot @name="header">
             Confirm delete
           </BlockSlot>
           <BlockSlot @name="body">
             <p>
               Are you sure you want to delete this header?

  </p>
           </BlockSlot>
```

```
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
</ListCollection>
{{/if}}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "urlPath": {
                     "path": {
                       "exact": "/v1/secret"
                     }
                   }
                 },
                 {
                   "andRules": {
                     "rules": [
                       {
                         "metadata": {
                           "filter": "envoy.filters.http.jwt_authn",
                           "path": [
                             {
                               "key": "jwt_payload_auth0"
                             },
                             {
                               "key": "iss"
                             }
                           ],
                           "value": {
                             "stringMatch": {
                               "exact": "mytest.auth0-issuer"
                             }
                           }
                         }
```

```
          },
          {
            "metadata": {
              "filter": "envoy.filters.http.jwt_authn",
              "path": [
                {
                  "key": "jwt_payload_auth0"
                },
                {
                  "key": "perms"
                },
                {
                  "key": "role"
                }
              ],
              "value": {
                "stringMatch": {
                  "exact": "admin"

  }
              }
            }
          }
        ]
      }
    }
  ]
}
},
{
  "andRules": {
    "rules": [
      {
        "urlPath": {
          "path": {
            "exact": "/v1/admin"
          }
        }
      },
      {
        "notRule": {
          "urlPath": {
            "path": {
              "exact": "/v1/secret"
            }
          }
        }
      }
```

```
      ]
    }
  }
],
"principals": [
  {
    "andIds": {
      "ids": [
        {
          "authenticated": {
            "principalName": {

        "safeRegex": {
              "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
            }
          }
        }
      },
      {
        "andIds": {
          "ids": [
            {
              "metadata": {
                "filter": "envoy.filters.http.jwt_authn",
                "path": [
                  {
                    "key": "jwt_payload_okta"
                  },
                  {
                    "key": "iss"
                  }
                ],
                "value": {
                  "stringMatch": {
                    "exact": "mytest.okta-issuer"
                  }
                }
              }
            },

            {
              "metadata": {
                "filter": "envoy.filters.http.jwt_authn",
                "path": [
                  {
                    "key": "jwt_payload_okta"
                  },
                  {
```

```
                "key": "roles"
              }
            ],
            "value": {
              "stringMatch": {
                "exact": "testing"
              }
            }
          }
        }
      ]
    }
  }
 ]
}
}
}
}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
    "policies": {
      "consul-intentions-layer7-0": {
        "permissions": [
          {
            "andRules": {
              "rules": [
                {
                  "urlPath": {
                    "path": {
                      "prefix": "/v1"
                    }
                  }
                },
                {
                  "notRule": {
                    "urlPath": {
                      "path": {
                        "exact": "/v1/secret"
                      }
                    }
                  }
```

```
        }
      ]
    }
  },
  {
    "andRules": {
      "rules": [
        {
          "andRules": {
            "rules": [
              {

          "urlPath": {
                "path": {
                  "safeRegex": {
                    "regex": "/v[123]"
                  }
                }
              }
            },
            {
              "header": {
                "name": ":method",
                "stringMatch": {
                  "safeRegex": {
                    "regex": "GET|HEAD|OPTIONS"
                  }
                }
              }
            }
          ]
          }
        },
        {
          "notRule": {
            "urlPath": {
              "path": {
                "exact": "/v1/secret"
              }
            }
          }
        },

{
          "notRule": {
            "andRules": {
              "rules": [
                {
```

```
                "urlPath": {
                  "path": {
                    "exact": "/v1/admin"
                  }
                }
              },
              {
                "header": {
                  "name": ":method",
                  "stringMatch": {
                    "safeRegex": {
                      "regex": "GET"
                    }
                  }
                }
              }
            ]
          }
        }
      }
    ]
  }
},
{
  "andRules": {
    "rules": [
      {

"andRules": {
              "rules": [
                {
                  "header": {
                    "name": "x-foo",
                    "presentMatch": true
                  }
                },
                {
                  "header": {
                    "name": "x-bar",
                    "stringMatch": {
                      "exact": "xyz"
                    }
                  }
                },
                {
                  "header": {
                    "name": "x-dib",
                    "stringMatch": {
```

"prefix": "gaz"
}
}
},
{
"header": {
"name": "x-gir",
"stringMatch": {

"suffix": "zim"
}
}
},
{
"header": {
"name": "x-zim",
"stringMatch": {
"safeRegex": {
"regex": "gi[rR]"
}
}
}
},
{
"header": {
"invertMatch": true,
"name": "z-foo",
"presentMatch": true
}
},
{
"header": {
"invertMatch": true,
"name": "z-bar",
"stringMatch": {
"exact": "xyz"

}
}
},
{
"header": {
"invertMatch": true,
"name": "z-dib",
"stringMatch": {
"prefix": "gaz"
}
}

```
            },
            {
              "header": {
                "invertMatch": true,
                "name": "z-gir",
                "stringMatch": {
                  "suffix": "zim"
                }
              }
            },
            {
              "header": {
                "invertMatch": true,
                "name": "z-zim",
                "stringMatch": {
                  "safeRegex": {

             "regex": "gi[rR]"
                  }
                }
              }
            }
          ]
        }
      },
      {
        "notRule": {
          "urlPath": {
            "path": {
              "exact": "/v1/secret"
            }
          }
        }
      },
      {
        "notRule": {
          "header": {
            "name": "x-baz",
            "presentMatch": true
          }
        }
      }
    ]
  }
}
],
"principals": [
  {
```

```
            "authenticated": {
              "principalName": {
                "safeRegex": {
                  "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
                }
              }
            }
          }
        ]
      }
    }
  }
}
{
 "name": "envoy.filters.network.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.network.rbac.v3.RBAC",
   "rules": {},
   "statPrefix": "connect_authz"
 }
}
{
 "Valid": true,
 "License": {
   "license_id": "${fake.random.uuid()}",
   "customer_id": "${fake.random.uuid()}",
   "installation_id": "*",
   "issue_time": "2021-01-13T15:25:19.052900132Z",
   "start_time": "2021-01-13T00:00:00Z",
   "expiration_time": "${env('CONSUL_LICENSE_EXPIRATION', '2022-05-02T23:59:59.999Z')}",
   "termination_time": "${env('CONSUL_LICENSE_TERMINATION', '2022-01-13T23:59:59.999Z')}",
   "product": "consul",
   "flags": {
     "modules": [
       "global-visibility-routing-scale",
       "governance-policy"
     ]
   },
   "modules": [
     "Global Visibility, Routing and Scale",
     "Governance and Policy"
   ],
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
```

"Redundancy Zone",
"Advanced Network Federation",
"Namespaces",
"SSO",
"Audit Logging",
"Admin Partitions"
]
},
"Warnings": [
]
}
{
"name": "envoy.filters.http.jwt_authn",
"typedConfig": {
"@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
"providers": {
"okta": {
"issuer": "test-issuer",
"payloadInMetadata": "jwt_payload_okta",
"remoteJwks": {
"asyncFetch": {
"fastListener": true
},
"httpUri": {
"cluster": "jwks_cluster_okta",
"timeout": "1s",
"uri": "https://example-okta.com/.well-known/jwks.json"
}
}
}
},
"rules": [
{
"match": {
"prefix": "/"
},
"requires": {
"requiresAny": {
"requirements": [
{
"providerName": "okta"
},
{
"allowMissingOrFailed": {}
}
]
}
}

```
    }
  ]
 }
}
/**
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*/

@import './skin';
@import './layout';
.consul-intention-permission-header-list {
 > ul > li {
   @extend %list-row-200;
 }
}
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{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "andRules": {
                     "rules": [
                       {
                         "urlPath": {
                           "path": {
                             "prefix": "/v1"
                           }
                         }
                       },
                       {
```

```
            "header": {
              "name": "x-foo",
              "presentMatch": true
            }
          }
        ]
      }
    },
    {
      "notRule": {
        "andRules": {

        "rules": [
            {
              "urlPath": {
                "path": {
                  "exact": "/v1/secret"
                }
              }
            },
            {
              "header": {
                "name": "x-baz",
                "presentMatch": true
              }
            },
            {
              "header": {
                "name": "x-bar",
                "presentMatch": true
              }
            }
          ]
        }
      }
    },
    {
      "notRule": {
        "andRules": {
          "rules": [
            {

"urlPath": {
                "path": {
                  "exact": "/v1/admin"
                }
              }
            },
```

```
                    {
                      "header": {
                        "name": "x-baz",
                        "presentMatch": true
                      }
                    },
                    {
                      "header": {
                        "name": "x-bar",
                        "presentMatch": true
                      }
                    }
                  ]
                }
              }
            }
          ]
        }
      }
    ],
    "principals": [
      {
        "authenticated": {
          "principalName": {
            "safeRegex": {
              "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
            }
          }
        }
      }
    ]
  }
}
}
}
# License

```hbs preview-template
<figure>
 <figcaption>URI: <code>/:partition/:nspace/:dc/license</code></figcaption>
 <DataSource
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition='partition'
       nspace='ns'
       dc='dc-1'
```
```

```
    )
  }}
  @onchange={{action (mut data) value="data"}}
 />
 <pre><code>{{json-stringify data null 4}}</code></pre>
</figure>
```
---
page_title: Automated license utilization reporting
description: >-
 Learn what data HashiCorp collects to meter Enterprise license utilization. Enable or disable reporting. Review sample payloads and logs.

Automated license utilization reporting

This topic describes how to enable automated license utilization reporting in Consul Enterprise. This feature automatically sends license utilization data to HashiCorp so that you do not have to manually collect and report it. It also enables you to review your license usage with the monitoring solution you already use, such as Splunk and Datadog, as you optimize and manage your deployments.

Introduction

You can use automated license utilization report to understand how much additional networking infrastructure you can deploy under your current contract. This feature helps you protect against overutilization and budget for predicted consumption.

Automated reporting shares the minimum data required to validate license utilization
 as defined in our contracts. This data mostly consists of computed metrics, and it will never contain Personal Identifiable Information (PII) or other sensitive information. Automated reporting shares the data with HashiCorp using a secure unidirectional HTTPS API and makes an auditable record in the product logs each time it submits a report. This process is GDPR-compliant.

Requirements

Automated license utilization reporting does not support _air-gapped installations_, which are systems with no network interfaces.

The following versions of Consul Enterprise support automated license utilization reporting:

- Consul Enterprise v1.16.0 and newer.
- Patch releases of Consul Enterprise v1.15.4 and newer.
- Patch releases of Consul Enterprise v1.14.8 and newer.
- Patch releases of Consul Enterprise v1.13.9 and newer.

Download a supported release from the [Consul Versions](https://releases.hashicorp.com/consul/) page.

Enable automated reporting

Before you enable automated reporting,
 make sure that outbound network traffic is configured correctly and upgrade your enterprise product to a version that supports it. If your installation is air-gapped or network settings are not in place, automated reporting will not work.

To enable automated reporting, complete the following steps:

1. [Allow outbound HTTPS traffic on port 443](#allow-outbound-https-traffic)
1. [Check product logs](#check-product-logs)

Allow outbound HTTPS traffic on port 443

Make sure that your network allows HTTPS egress on port 443 from `https://reporting.hashicorp.services` by adding the following IP addresses to your allow-list:

- `100.20.70.12`
- `35.166.5.222`
- `23.95.85.111`
- `44.215.244.1`

Check product logs

Automatic license utilization reporting starts sending data within roughly 24 hours. Check the product logs for records that the data sent successfully.

<CodeBlockConfig hideClipboard>

```
[DEBUG] beginning snapshot export
[DEBUG] creating payload
[DEBUG] marshalling
 payload to json
[DEBUG] generating authentication headers
[DEBUG] creating request
[DEBUG] sending request
[DEBUG] performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] recording audit record
[INFO]  reporting: Report sent: auditRecord={"payload":{"payload_version":"1","license_id":"d2cdd857-4202-5a45-70a6-e4b531050c34","product":"consul","product_version":"1.16.0-dev+ent","export_timestamp":"2023-05-26T20:09:13.753921087Z","snapshots":[{"snapshot_version":1,"snapshot_id":"0001J724F90F4XWQDSAA76ZQWA","process_id":"01H1CTJPC1S8H7Q45MKTJ689ZW","timestamp":"2023-05-26T20:09:13.753513962Z","schema_version":"1.0.0","service":"consul","metrics":{"consul.billable.nodes":{"key":"consul.billable.nodes","kind":"counter","mode":"write","value":2},"consul.billable.service_instances":{"key":"consul.billable.service_instances","kind":"counter","mode":"write","value":2}}}],"metadata":{}}}
[DEBUG] completed recording audit record
[DEBUG] export finished successfully"
```

</CodeBlockConfig>

If
 your installation is air-gapped or your network does not allow the correct egress, the logs show an error.

<CodeBlockConfig hideClipboard>

```
[DEBUG] reporting: beginning snapshot export
[DEBUG] reporting: creating payload
[DEBUG] reporting: marshalling payload to json
[DEBUG] reporting: generating authentication headers
[DEBUG] reporting: creating request
[DEBUG] reporting: sending request
[DEBUG] reporting: performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] reporting: error status code received: statusCode=403
```

</CodeBlockConfig>

In this case, reconfigure your network to allow egress and check the logs again in roughly 24 hours to confirm that automated reporting works correctly.

Opt out

If your installation is air-gapped or you want to manually collect and report on the same license utilization metrics, you can opt out of automated reporting.

Manually reporting these metrics can be time consuming. Opting
 out of automated reporting does not mean that you also opt out from sending license utilization metrics. Customers who opt out of automated reporting are still required to manually collect and send license utilization metrics to HashiCorp.

If you are considering opting out because you are worried about the data, we strongly recommend that you review the [example payloads](#example-payloads) before opting out. If you have concerns with any of the automatically reported data, raise these concerns with your account manager.

There are two methods for opting out of automated reporting:

- HCL configuration (recommended)
- Environment variable (requires restart)

We recommend opting out in your product's configuration file because it does not require a system restart. Add the following block to your `configuration.hcl` or `configuration.json` file.

```hcl
reporting {
```

```
 license {
  enabled = false
 }
}
```

When opting out using an environment variable, the system provides a startup message
 confirming that you have disabled automated reporting. Set the following environment variable to disable automated reporting:

<CodeBlockConfig>

```shell-session
$ export OPTOUT_LICENSE_REPORTING=true
```

</CodeBlockConfig>

After you set the environment variable, restart your system to complete the process for opting out.

```shell-session
$ consul reload
```

Check your product logs roughly 24 hours after opting out to make sure that the system is not trying to send reports. Keep in mind that if your configuration file and environment variable differ, the environment variable setting takes precedence.

Example payloads

HashiCorp collects the following utilization data as JSON payloads:
`exporter_version` - The version of the licensing exporter

<CodeBlockConfig hideClipboard>

```json
{
 "payload": {
   "payload_version": "1",
   "license_id": "d2cdd857-4202-5a45-70a6-e4b531050c34",
   "product": "consul",
   "product_version": "1.16.0-dev+ent",
   "export_timestamp":
 "2023-05-26T20:09:13.753921087Z",
   "snapshots": [
     {
       "snapshot_version": 1,
```

```
      "snapshot_id": "0001J724F90F4XWQDSAA76ZQWA",
      "process_id": "01H1CTJPC1S8H7Q45MKTJ689ZW",
      "timestamp": "2023-05-26T20:09:13.753513962Z",
      "schema_version": "1.0.0",
      "service": "consul",
      "metrics": {
        "consul.billable.nodes": {
          "key": "consul.billable.nodes",
          "kind": "counter",
          "mode": "write",
          "value": 2
        },
        "consul.billable.service_instances": {
          "key": "consul.billable.service_instances",
          "kind": "counter",
          "mode": "write",
          "value": 2
        }
      }
    }
  ],
  "metadata": {}
 }
}
```


</CodeBlockConfig>
---
layout: docs
page_title: Storing the Enterprise License in Vault
description: >-
 Configuring the Consul Helm chart to use an enterprise license stored in Vault.

Storing the Enterprise License in Vault

This topic describes how to configure the Consul Helm chart to use an enterprise license stored in Vault.
Overview
Complete the steps outlined in the [Data Integration](/consul/docs/k8s/deployment-configurations/vault/data-integration) section to use an enterprise license stored in Vault.

Complete the following steps once:
 1. Store the secret in Vault.
 1. Create a Vault policy that authorizes the desired level of access to the secret.

Repeat the following steps for each datacenter in the cluster:
 1. Create Vault Kubernetes auth roles that link the policy to each Consul on Kubernetes service account that requires access.

1. Update the Consul on Kubernetes helm chart.

Prerequisites
Prior to setting up the data integration between Vault and Consul on Kubernetes,
you will need to have:
1. Read and completed the steps in the [Systems Integration](/consul/docs/k8s/deployment-configurations/vault/systems-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).
2. Read the [Data Integration Overview](/consul/docs/k8s/deployment-configurations/vault/data-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).

Store the Secret in Vault

First, store the enterprise license in Vault:

```shell-session
$ vault kv put consul-kv/secret/enterpriselicense key="<enterprise license>"
```

Create Vault policy

Next, you will need to create a policy that allows read access to this secret.

The path to the secret referenced in the `path` resource is the same value that you will configure in the `global.enterpriseLicense.secretName` Helm configuration (refer to [Update Consul on Kubernetes Helm chart](#update-consul-on-kubernetes-helm-chart)).

<CodeBlockConfig
 filename="license-policy.hcl">

```HCL
path "consul-kv/data/secret/enterpriselicense" {
 capabilities = ["read"]
}
```

</CodeBlockConfig>

Apply the Vault policy by issuing the `vault policy write` CLI command:

```shell-session
$ vault policy write license-policy license-policy.hcl
```

Create Vault Authorization Roles for Consul

Next, you will create Kubernetes auth roles for the Consul server and client:

```shell-session
$ vault write auth/kubernetes/role/consul-server \
   bound_service_account_names=<Consul server service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

```shell-session
$ vault write auth/kubernetes/role/consul-client \
   bound_service_account_names=<Consul client service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

To find out the service account names of the Consul server and client,
you can
 run the following `helm template` commands with your Consul on Kubernetes values file:

- Generate Consul server service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/server-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

- Generate Consul client service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/client-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

Update Consul on Kubernetes Helm chart.

Now that you have configured Vault, you can configure the Consul Helm chart to
use the enterprise enterprise license in Vault:

<CodeBlockConfig filename="values.yaml">

```yaml
global:
 image: hashicorp/consul-enterprise:1.12.0-ent
 secretsBackend:
   vault:
     enabled: true
     consulServerRole: consul-server
     consulClientRole: consul-client
 enterpriseLicense:
```

```
  secretName: consul-kv/data/secret/enterpriselicense
  secretKey: key
```

</CodeBlockConfig>

Note
 that `global.enterpriseLicense.secretName` is the path of the secret in Vault.
This should be the same path as the one you included in your Vault policy.
`global.enterpriseLicense.secretKey` is the key inside the secret data. This should be the same
as the key you passed when creating the enterprise license secret in Vault.

```
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}}

<Hds::Alert @type='inline' @color={{or @type "neutral"}} class='mb-2 mt-2 consul-intention-notice-custom-resource' as |A|>
 <A.Title>Intention Custom Resource</A.Title>
 <A.Description>Some of your intentions are being managed through an Intention Custom Resource in your Kubernetes cluster. Those managed intentions will be view only in the UI. Any intentions created in the UI will work but will not be synced to the Custom Resource Definition (CRD) datastore.</A.Description>
 <A.Link::Standalone @href="{{env 'CONSUL_DOCS_URL'}}/k8s/crds"
                @text='Learn more about CRDs'
                @icon="docs-link"
                @iconPosition="trailing"
                @size="small" />
</Hds::Alert>
/**
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*/

.consul-intention-permission-form {
 h2 {
  border-top: 1px solid var(--token-color-foreground-action);
  @extend %display-400-semibold;
 }
 button.type-submit {
  @extend %frame-blue-300;
 }
 button.type-submit:hover:not(:disabled),
 button.type-submit:focus:not(:disabled) {
  @extend %frame-blue-500;
 }
 button.type-submit:disabled {
  @extend %frame-blue-200;
 }
```

```
}

.consul-intention-view {
 h2 {
   @extend %display-400-semibold;
 }
}
```

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This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

10. Versions of the License

10.1. New Versions

Mozilla Foundation is the license steward.
Except as provided in Section
10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

10.2. Effect of New Versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

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If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses If You choose to distribute Source
Code Form that is
Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

Exhibit A - Source Code Form License Notice

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terms of the Mozilla Public License, v.
2.0. If a copy of the MPL was not
distributed with this file, You can
obtain one at
http://mozilla.org/MPL/2.0/.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

Exhibit B - "Incompatible With Secondary Licenses" Notice

This Source Code Form is "Incompatible
With Secondary Licenses", as defined by

the Mozilla Public License, v. 2.0.
---
layout: docs
page_title: Consul-Terraform-Sync Enterprise License
description: >-
Consul-Terraform-Sync Enterprise License

Consul-Terraform-Sync Enterprise License

<EnterpriseAlert>
Licenses are only required for Consul-Terraform-Sync (CTS) Enterprise
</EnterpriseAlert>

CTS Enterprise binaries require a [Consul Enterprise license](/consul/docs/enterprise/license/overview) to run. There is no CTS Enterprise specific license. As a result, CTS Enterprise's licensing is very similar to Consul Enterprise.

All CTS Enterprise features are available with a valid Consul Enterprise license, regardless of your Consul Enterprise packaging or pricing model.

To get a trial license for CTS, you can sign-up for the [trial license for Consul Enterprise](/consul/docs/enterprise/license/faq#q-where-can-users-get-a-trial-license-for-consul-enterprise).

Automatic License Retrieval
CTS automatically retrieves a license from Consul on startup and then attempts to retrieve a new license once a day. If the current license is reaching its expiration date, CTS attempts to retrieve a license with increased frequency, as defined by the [License Expiration Date Handling](/consul/docs/nia/enterprise/license#license-expiration-handling).

~> Enabling automatic license retrieval is recommended when using HCP Consul Dedicated, as HCP Consul Dedicated licenses expire more frequently than Consul Enterprise licenses. Without auto-retrieval enabled, you have to restart CTS every time you load a new license.

Setting the License Manually

If a license needs to be manually set, choose one of the following methods (in order of precedence) to set the license:

1. Set the `CONSUL_LICENSE` environment variable to the license string.

  ```shell-session
  export CONSUL_LICENSE=<LICENSE_VALUE>
  ```

1. Set the `CONSUL_LICENSE_PATH` environment variable to the path of the file containing the license.

  ```shell-session
  ```

```
export CONSUL_LICENSE_PATH=<PATH>/<TO>/<FILE>
```

1. To
 point to the file containing the license, in the configuration file, configure the
[`license`](/consul/docs/nia/configuration#license) path option.

```hcl
license {
  path = "<PATH>/<TO>/<FILE>"
}
```

1. To point to the file containing the license, in the configuration file, configure the
[`license_path`](/consul/docs/nia/configuration#license_path) option i. **Deprecated in CTS 0.6.0 and will be removed in a future release. Use [license block](/consul/docs/nia/configuration#license) instead.**

```hcl
license_path = "<PATH>/<TO>/<FILE>"
```

~> **Note**: the [options to set the license and the order of
precedence](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses) are the same as Consul Enterprise server agents.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Updating the License Manually
To update the license
 when it expires or is near the expiration date and automatic license retrieval is disabled:

1. Update the license environment variable or configuration with the new license value or path to the new license file
1. Stop and restart CTS Enterprise

Once CTS Enterprise starts again, it will pick up the new license and run the tasks with any changes that may have occurred between the stop and restart period.

License Expiration Handling

Licenses have an expiration date and a termination date. The termination date is a time at or after the license expires. CTS Enterprise will cease to function once the termination date has passed.

The time between the expiration and termination dates is a grace period. Grace periods are generally 24-hours, but you should refer to your license agreement for complete terms of your grace period.

When approaching expiration and termination, by default, CTS Enterprise will attempt to retrieve a new license. If auto-retrieval is disabled, CTS Enterprise will

provide notifications in the system logs:

Time period	Behavior - auto-retrieval enabled (default)	Behavior - auto-retrieval disabled
30 days before expiration	License retrieval attempt every 24-hours	Warning-level log every 24-hours
7 days before expiration	License retrieval attempt every 1 hour	Warning-level log every 1 hour
1 day before expiration	License retrieval attempt every 5 minutes	Warning-level log every 5 minutes
1 hour before expiration	License retrieval attempt every 1 minute	Warning-level log every 1 minute
At or after expiration (before termination)	License retrieval attempt every 1 minute	Error-level log every 1 minute
At or after termination	Error-level log and exit	Error-level log and exit

~> **Note**: Notification frequency and [grace period](/consul/docs/enterprise/license/faq#q-is-there-a-grace-period-when-licenses-expire) behavior is the same as Consul Enterprise.

```
/*!
* clipboard.js v2.0.11
* https://clipboardjs.com/
*
* Licensed MIT  Zeno Rocha
*/

/*!
* focus-trap 6.9.4
* @license MIT, https://github.com/focus-trap/focus-trap/blob/master/LICENSE
*/

/*! ******************************************************************************
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purpose with or without fee is hereby granted.

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REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY
AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT,
INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM
LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR
OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR
PERFORMANCE OF THIS SOFTWARE.
******************************************************************************
 */

/**
* @license
```

```
* Copyright 2017 Google LLC
* SPDX-License-Identifier: BSD-3-Clause
*/

/**
* @license
* Copyright 2019 Google LLC
* SPDX-License-Identifier: BSD-3-Clause
*/
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-list{{if (not onclick) ' readonly'}}"
 @scroll="native"
 @items={{items}}
 @partial={{5}}
as |item|>
 <BlockSlot @name="details">
   <div onclick={{action (optional onclick) item}}>
     <strong class={{concat 'intent-' item.Action}}>{{capitalize item.Action}}</strong>
{{#if (gt item.HTTP.Methods.length 0)}}
       <dl class="permission-methods">
         <dt>
           <Tooltip>
             Methods
           </Tooltip>
         </dt>
         <dd>
{{#each item.HTTP.Methods as |item|}}
           {{item}}
{{/each}}
         </dd>
       </dl>
{{/if}}
{{#if item.HTTP.Path}}
       <dl class="permission-path">
         <dt>
           <Tooltip>
             {{item.HTTP.PathType}}
           </Tooltip>
         </dt>
         <dd>
           {{item.HTTP.Path}}
         </dd>
```

```
      </dl>
{{/if}}
{{#each item.HTTP.Header
 as |item|}}
      <dl class="permission-header">
        <dt>
          <Tooltip>
            Header
          </Tooltip>
        </dt>
        <dd>
          {{item.Name}} {{route-match item}}
        </dd>
      </dl>
{{/each}}
  </div>
 </BlockSlot>
{{#if onclick}}
 <BlockSlot @name="actions" as |Actions|>
  <Actions as |Action|>
    <Action data-test-edit-action @onclick={{action (optional onclick) item}} @close={{true}}>
      <BlockSlot @name="label">
        Edit
      </BlockSlot>
    </Action>
    <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you
 want to delete this permission?
            </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
```

```
{{/if}}
</ListCollection>
{{/if}}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "andRules": {
                     "rules": [
                       {
                         "urlPath": {
                           "path": {
                             "prefix": "/v1"
                           }
                         }
                       },
                       {
                         "header": {
                           "name": "x-foo",
                           "presentMatch": true
                         }
                       }
                     ]
                   }
                 },
                 {
                   "notRule": {
                     "andRules": {

                     "rules": [
                       {
                         "urlPath": {
                           "path": {
                             "exact": "/v1/secret"
                           }
                         }
                       },
                       {
                         "header": {
                           "name": "x-baz",
```

```
                "presentMatch": true
              }
            },
            {
              "header": {
                "name": "x-bar",
                "presentMatch": true
              }
            }
          ]
        }
      }
    },
    {
      "notRule": {
        "andRules": {
          "rules": [
            {

"urlPath": {
                "path": {
                  "exact": "/v1/admin"
                }
              }
            },
            {
              "header": {
                "name": "x-baz",
                "presentMatch": true
              }
            },
            {
              "header": {
                "name": "x-bar",
                "presentMatch": true
              }
            }
          ]
        }
      }
    }
  ]
}
},
{
  "andRules": {
    "rules": [
      {
```

```
                "andRules": {
                  "rules": [
                    {

  "urlPath": {
                      "path": {
                        "prefix": "/v2"
                      }
                    }
                  },
                  {
                    "header": {
                      "name": "x-foo",
                      "presentMatch": true
                    }
                  }
                ]
              }
            },
            {
              "notRule": {
                "andRules": {
                  "rules": [
                    {
                      "urlPath": {
                        "path": {
                          "exact": "/v2/secret"
                        }
                      }
                    },
                    {
                      "header": {
                        "name": "x-baz",
                        "presentMatch":
true
                      }
                    },
                    {
                      "header": {
                        "name": "x-bar",
                        "presentMatch": true
                      }
                    }
                  ]
                }
              }
            },
            {
```

```
                "notRule": {
                  "andRules": {
                    "rules": [
                      {
                        "urlPath": {
                          "path": {
                            "exact": "/v2/admin"
                          }
                        }
                      },
                      {
                        "header": {
                          "name": "x-baz",
                          "presentMatch": true
                        }
                      },

            {
                        "header": {
                          "name": "x-bar",
                          "presentMatch": true
                        }
                      }
                    ]
                  }
                }
              }
            ]
          }
        }
      ],
      "principals": [
        {
          "authenticated": {
            "principalName": {
              "safeRegex": {
                "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
              }
            }
          }
        }
      ]
    }
  }
 }
}
```

/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.agentless-node-notice .hds-alert__title {
 display: flex;
 justify-content: space-between;
}
Mozilla Public License 2.0 (MPLv2.0)
---
layout: commands
page_title: 'Commands: License'
description: >
 The license command provides a datacenter-level view of the Consul
 Enterprise license.

Consul License

Command: `consul license`

<EnterpriseAlert />

The `license` command provides a list of all datacenters that use the Consul Enterprise license applied to the current datacenter.

~> **Warning**: Consul 1.10.0 removed the ability to set and reset the license using the CLI.
See the [licensing documentation](/consul/docs/enterprise/license/overview) for more information about
Consul Enterprise license management.

If ACLs are enabled then a token with operator privileges may be required in
order to use this command. Requests are forwarded internally to the leader
if required, so this can be run from any Consul node in a cluster. See the
[ACL Guide](/consul/tutorials/security/access-control-setup-production) for more information.

```text
Usage: consul license <subcommand> [options] [args]

 This command has subcommands
 for managing the Consul Enterprise license
 Here are some simple examples, and more detailed examples are
 available in the subcommands or the documentation.

 Install a new license from a file:

    $ consul license put @consul.license
```

Install a new license from stdin:

$ consul license put -

Install a new license from a string:

$ consul license put "<license blob>"

Retrieve the current license:

$ consul license get

Inspect a license:

$ consul license inspect "<path to license file>"

Reset the current license:

$ consul license reset

For more examples, ask for subcommand help or view the documentation.

Subcommands:
  get Get the active license
  inspect Inspect a signed license
  put Puts a new license in the datacenter
  reset Resets the license in the datacenter

```

## inspect

This command inspects and validates a license. Just like a Consul agent it
can load the license from a file
 on disk or from the `CONSUL_LICENSE` and
`CONSUL_LICENSE_PATH` environment variables.

Usage: `consul license inspect [<options>] [<license file>]`

Inspect a license contained in a file:

```
$ consul license inspect consul.hclic
```

Inspect a license loaded from the environment:

```

$ consul license inspect
```

This will look at the CONSUL_LICENSE environment variable first
and if not present then we will look for the file specified
by the CONSUL_LICENSE_PATH environment variable.

The output looks like this:

```
Source: /consul/config/consul.hclic (path from the CONSUL_LICENSE_PATH environment variable)
Product: consul
License ID: 6089174b-a713-74cf-4c8d-856b86f1ce50
Customer ID: 7c020610-60a2-7ccb-c210-20d899e5f3b4
Installation ID: *
Issue Time: 2020-09-14 19:45:56.212195875 +0000 UTC
Start Time: 2020-09-14 00:00:00 +0000 UTC
Expiration Time: 2021-09-14 23:59:59.999 +0000 UTC
Termination Time: 2021-09-14 23:59:59.999 +0000 UTC
Modules:
    Global Visibility, Routing and Scale
     Governance and Policy
Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
    Namespaces
    SSO
    Audit Logging
    Admin Partitions

License is valid

```

## put

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[PUT\] /v1/operator/license](/consul/api-docs/operator/license#updating-the-consul-license)

This command sets the Consul Enterprise license.
```

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be
 from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license put [options] LICENSE`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
	Automated Backups
	Automated Upgrades
	Enhanced Read Scalability
	Network Segments
	Redundancy Zone
	Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

get

Corresponding HTTP API Endpoint: [\[GET\] /v1/operator/license](/consul/api-docs/operator/license#getting-the-consul-license)

This command gets the Consul Enterprise license. If the leader hasn't been updated with the newer license, the followers
will display the outdated license in their GET output.

The table below

shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of [blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`none`

Usage: `consul license get [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

reset

-> **Deprecated** The ability to manage the cluster's license via the CLI
was
removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[DELETE\] /v1/operator/license](/consul/api-docs/operator/license#resetting-the-consul-license)

Resets license for the datacenter to the one builtin in Consul binary, if it is still valid.
If the builtin license is invalid, the current one stays active.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication).

Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license reset [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires
 At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
      Automated Backups
      Automated Upgrades
      Enhanced Read Scalability
      Network Segments
      Redundancy Zone
      Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "urlPath": {
                     "path": {

```
            "prefix": "some-path"
          }
        }
      },
      {
        "andRules": {
          "rules": [
            {
              "metadata": {
                "filter": "envoy.filters.http.jwt_authn",
                "path": [
                  {
                    "key": "jwt_payload_okta"
                  },
                  {
                    "key": "iss"
                  }

                ],
                "value": {
                  "stringMatch": {
                    "exact": "mytest.okta-issuer"
                  }
                }
              }
            },
            {
              "metadata": {
                "filter": "envoy.filters.http.jwt_authn",
                "path": [
                  {
                    "key": "jwt_payload_okta"
                  },
                  {
                    "key": "roles"
                  }
                ],
                "value": {
                  "stringMatch": {
                    "exact": "testing"
                  }
                }
              }
            }

]
        }
      }
```

```
            ]
          }
        }
      ],
      "principals": [
        {
          "authenticated": {
            "principalName": {
              "safeRegex": {
                "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
              }
            }
          }
        }
      ]
    }
  }
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

section[data-route='dc.show.license'] {
 @extend %license-route;
}
%license-route .validity {
 @extend %license-validity;
}
%license-route aside {
 @extend %license-route-learn-more;
}

%license-route h2 {
 @extend %display-400-semibold;
}

%license-validity p {
 color: var(--token-color-foreground-faint);
}
%license-validity dl {
 @extend %horizontal-kv-list;
 @extend %body-300-regular;
}
%license-validity dl .expired + dd {
 @extend %visually-hidden;
```

```
}
%license-validity dl dt::before {
 content: '';
 margin-right: 0.25rem; /* 4px */
}
%license-validity dl .expired::before {
 --icon-name: icon-x-circle;
 --icon-color: var(--token-color-foreground-critical);
}
%license-validity dl .warning::before {
 --icon-name: icon-alert-circle;
 --icon-color: var(--token-color-foreground-warning);
}
%license-validity dl .valid:not(.warning)::before {
 --icon-name: icon-check-circle;
 --icon-color: var(--token-color-foreground-success);
}

%license-route-learn-more
 {
 @extend %panel;
 box-shadow: none;
 padding: var(--padding-y) var(--padding-x);
 width: 40%;
 min-width: 413px;
 margin-top: 1rem; /* 16px */
}
%license-route-learn-more header > :first-child {
 @extend %display-300-semibold;
}
%license-route-learn-more header {
 margin-bottom: 1rem; /* 16px */
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

<Route
 @name={{routeName}}
as |route|>
 <DataLoader
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition=route.params.partition
       nspace=route.params.nspace
       dc=route.params.dc
```

```
    )
  }}
 as |loader|>

{{#let
 loader.data
as |item|}}
  <BlockSlot @name="error">
    <ErrorState
      @error={{loader.error}}
      @login={{route.model.app.login.open}}
    />
  </BlockSlot>

  <BlockSlot @name="disconnected" as |after|>
    {{#if (eq loader.error.status "404")}}
      <Hds::Toast @color='warning'
        {{notification
          sticky=true
        }} as |T|>
        <T.Title>Warning!</T.Title>
        <T.Description>This service has been deregistered and no longer exists in the catalog.</T.Description>
      </Hds::Toast>
    {{else if (eq loader.error.status "403")}}
      <Hds::Toast @color='critical'
        {{notification
           sticky=true
        }} as |T|>
        <T.Title>Error!</T.Title>
        <T.Description>You no longer have access to this service.</T.Description>
      </Hds::Toast>
    {{else}}
      <Hds::Toast @color='warning'
        {{notification
          sticky=true
        }} as |T|>
        <T.Title>Warning!</T.Title>
        <T.Description>An error was returned whilst loading this data, refresh to try again.</T.Description>
      </Hds::Toast>
    {{/if}}
  </BlockSlot>

  <BlockSlot @name="loaded">
    <div class="tab-section">
      <section
        class={{class-map
          'validity'
          (array 'valid' item.Valid)
```

```
    }}
  >
    <header>
      <h2>
        {{compute (fn route.t 'expiry.header')}}
      </h2>
    </header>

    <p>
      {{compute (fn route.t 'expiry.${type}.body'
        (hash
          type=(if item.Valid 'valid' 'expired')

  date=(format-time item.License.expiration_time
            year='numeric'
            month='long'
            day='numeric'
          )
          time=(format-time item.License.expiration_time
            hour12=true
            hour='numeric'
            hourCycle='h12'
            minute='numeric'
            second='numeric'
            timeZoneName='short'
          )
          htmlSafe=true
        )
      )}}
    </p>

    <dl>
      <dt class={{class-map
          (array 'valid' item.Valid)
          (array 'expired' (not item.Valid))
          (array 'warning' (temporal-within item.License.expiration_time 2629800000))
        }}
      >
        {{compute (fn route.t 'expiry.${type}.header'
          (hash
            type=(if item.Valid 'valid' 'expired')
          )
        )}}
      </dt>

<dd>
        {{temporal-format item.License.expiration_time}}
      </dd>
```

```
        </dl>

        <aside>
          <header>
            <h3>
              {{compute (fn route.t 'documentation.title')}}
            </h3>
          </header>
          <div class="flex gap-1.5 flex-col">
            <Hds::Link::Standalone
              @text={{compute (fn route.t 'documentation.links.license-expiration.text')}}
              @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.license-
expiration.link'))}}'
              @icon='docs-link'
              @iconPosition='trailing'
            />
            <Hds::Link::Standalone
              @text={{compute (fn route.t 'documentation.links.renewing-license.text')}}
              @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.renewing-
license.link'))}}'
              @icon='docs-link'
              @iconPosition='trailing'

          />
            <Hds::Link::Standalone
              @text={{compute (fn route.t 'documentation.links.applying-new-license.text')}}
              @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.applying-new-
license.link'))}}'
              @icon='docs-link'
              @iconPosition='trailing'
            />
          </div>
        </aside>

      </section>
    </div>
  </BlockSlot>
{{/let}}
 </DataLoader>
</Route>
// Copyright (c) HashiCorp, Inc.
// SPDX-License-Identifier: MPL-2.0

package api

import (
 "io"
 "strings"
```

```
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`

 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // Whether the license will ignore termination
 IgnoreTermination bool `json:"ignore_termination"`

 //
 The product the license is valid for
 Product string `json:"product"`

 // License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}

type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
```

```
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := io.ReadAll(resp.Body)
 if
 err != nil {
  return "", err
 }

 return string(data), nil
}

// LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
```

```
  return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set
 via agent configuration instead of through the API
func (op *Operator) LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
---
layout: docs
page_title: Enterprise Licenses
description: >-
 Consul Enterprise server, client, and snapshot agents require a license on startup in order to use Enterprise features.
Learn how to apply licenses using environment variables or configuration files.
---

# Consul Enterprise License

## Licensing Overview

All Consul Enterprise agents must be licensed when they are started. Where that license comes from will depend
on which binary is in use, whether the agent is a server, client or snapshot agent, and whether ACLs have been
enabled for the cluster.
```

-> ** Consul Enterprise 1.10.0 removed temporary licensing.** Prior to 1.10.0, Consul Enterprise agents could start without a license and then have a license applied to them later on via the CLI or API. That functionality has been removed and replaced with the ability to load licenses from the agent's configuration or environment. Also, prior to 1.10.0, server agents would automatically propagate the license between themselves.
This no longer occurs and the license must be present on each server agent when it is started.

Consul Enterprise 1.14.0, when running on Kubernetes, removed client agents and replaced these with virtual agents.
Virtual agents are nodes that Consul service mesh services run on. HashiCorp uses virtual agents to determine license entitlements for customers on per-node licensing and pricing agreements.

-> Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Applying a License

For Consul Enterprise 1.10.0 or greater, a license must be available at the time the agent starts.
For server agents this means that they must either have the [`license_path`](/consul/docs/agent/config/config-files#license_path)
configuration set or have a license configured in the servers environment with the `CONSUL_LICENSE` or `CONSUL_LICENSE_PATH` environment variables. Both the configuration item and the `CONSUL_LICENSE_PATH`
environment variable point to a file containing the license whereas the `CONSUL_LICENSE` environment variable should contain the license as the value. If multiple variables are set,
the following order of precedence applies:

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Client agents and [snapshot agents](/consul/docs/enterprise/backups)
may also be licensed in the very same manner.
However, to avoid the need to configure the license on many client agents and snapshot agents,
those agents have the capability to retrieve the license automatically under the conditions described below.

Virtual agents do not need the license to run.

Updating the license for an agent depends on the method you used to apply the license.
- **If you used the `CONSUL_LICENSE`
environment variable**: After updating the environment variable, restart the affected agents.
- **If you used the
`CONSUL_LICENSE_PATH`
environment variable**: Update the license file first. Then, restart the affected agents.
- **If you used the `license_path` configuration item**: Update the license file first. Then, run [`consul reload`](/consul/commands/reload) for the affected agents.

Client Agent License Retrieval

When a client agent starts without a license in its configuration or environment, it will try to retrieve the license from the servers via RPCs. That RPC always requires a valid non-anonymous ACL token to authorize the request but the token doesn't need any particular permissions. As the license is required before the client actually joins the cluster, where to make those RPC requests to is inferred from the [`retry_join`](/consul/docs/agent/config/config-files#retry_join) configuration. If `retry_join` is unset or no [`agent` token](/consul/docs/agent/config/config-files#acl_tokens_agent) is set then the client agent will immediately shut itself down.

If all preliminary checks
 pass the client agent will attempt to reach out to any server on its RPC port to
request the license. These requests will be retried for up to 5 minutes and if it is unable to retrieve a license within that time frame it will shut itself down.

If ACLs are disabled then the license must be provided to the client agent through one of the three methods listed below.
Failure in providing the client agent with a licence will prevent the client agent from joining the cluster.

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Snapshot Agent License Retrieval

The snapshot agent has similar functionality to the client agent for automatically retrieving the license. However, instead of requiring a server agent to talk to, the snapshot agent can request the license from the server or client agent it would use for all other operations. It still requires an ACL token to authorize the request. Also like client agents,
 the snapshot agent will shut itself down after being unable to retrieve the license for 5
minutes.

```
/**
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*/

.consul-intention-permission-header-list {
 dt::before {
   @extend %with-glyph-icon;
   content: 'H';
 }
}
/**
* Copyright (c) HashiCorp, Inc.
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*/
```

```
.consul-intention-permission-list {
 .detail > div {
   display: flex;
   width: 100%;
 }
 strong {
   margin-right: 8px;
 }
}
/**
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*/

.consul-intention-permission-list {
 dt::before {
   @extend %with-glyph-icon;
 }
 dl.permission-methods dt::before {
   content: 'M';
 }
 dl.permission-path dt::before {
   content: 'P';
 }
 dl.permission-header dt::before {
   content: 'H';
 }
}
{{!
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}}

{{#if isVisible}}
 <Hds::Alert @type="inline" class='mb-3 mt-2 agentless-node-notice' data-test-node-agentless-notice as |A|>
   <A.Title>
     <span>{{t 'routes.dc.nodes.index.agentless.notice.header'}}</span>
     <Hds::Button
       @color='secondary'
       @text='Dismiss notice'
       {{on 'click' this.dismissAgentlessNotice}}
       @icon='x'
       @size='small'
       @isIconOnly={{true}}
     />
   </A.Title>
   <A.Description>{{t 'routes.dc.nodes.index.agentless.notice.body'}}</A.Description>
   <A.Link::Standalone @href='{{env "CONSUL_DOCS_DEVELOPER_URL"}}/connect/dataplane'
```

```
                @text={{t 'routes.dc.nodes.index.agentless.notice.footer'}}
                @icon='docs-link'
                @iconPosition='trailing' />
 </Hds::Alert>
{{/if}}
/*!
* QUnit 2.19.4
* https://qunitjs.com/
*
* Copyright OpenJS Foundation and other contributors
* Released under the MIT license
* https://jquery.org/license
*/
{{!
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}}

<Hds::Alert @type="inline" class="mb-3 mt-2" as |A|>
 <A.Description>{{t "components.consul.intention.notice.permissions.body"}}</A.Description>
 <A.Link::Standalone
   @text={{t "components.consul.intention.notice.permissions.footer"}}
   @href="{{env 'CONSUL_DOCS_URL'}}/connect/intentions"
   @icon="docs-link"
   @iconPosition="trailing"
   @size="small"
 />
</Hds::Alert>
```

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```
{
 "name": "envoy.filters.http.jwt_authn",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
   "providers": {
     "auth0": {
       "issuer": "another-issuer",
       "payloadInMetadata": "jwt_payload_auth0",
       "remoteJwks": {
         "asyncFetch": {
           "fastListener": true
         },
         "httpUri": {
           "cluster": "jwks_cluster_auth0",
           "timeout": "1s",
           "uri": "https://example-auth0.com/.well-known/jwks.json"
         }
       }
     },
     "okta": {
```

```
      "issuer": "test-issuer",
      "payloadInMetadata": "jwt_payload_okta",
      "remoteJwks": {
        "asyncFetch": {
          "fastListener": true
        },
        "httpUri": {
          "cluster": "jwks_cluster_okta",
          "timeout": "1s",
          "uri": "https://example-okta.com/.well-known/jwks.json"
        }
      }
    }
  },
  "rules": [
    {

"match": {
        "prefix": "/"
      },
      "requires": {
        "requiresAll": {
          "requirements": [
            {
              "requiresAny": {
                "requirements": [
                  {
                    "providerName": "okta"
                  },
                  {
                    "allowMissingOrFailed": {}
                  }
                ]
              }
            },
            {
              "requiresAny": {
                "requirements": [
                  {
                    "providerName": "auth0"
                  },
                  {
                    "allowMissingOrFailed": {}
                  }
                ]
              }
            }
          ]
```

```
        }
      }
    }
  ]
 }
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

<div
 ...attributes
 class="consul-intention-permission-form"
>
<FormGroup
 @name={{name}}
as |group|>

 {{yield (hash
   submit=(action 'submit' changeset)
   reset=(action 'reset' changeset)

   isDirty=(and changeset.isValid)
   changeset=changeset
 )}}

 <fieldset>
   <div data-property="action">
     <span class="label">
       Should this permission allow the source connect to the destination?
     </span>
     <div role="radiogroup" class={{if changeset.error.Action ' has-error'}}>
       {{#each intents as |intent|}}
         <label>
           <span>{{capitalize intent}}</span>
           <input
             type="radio"
             name="Action"
             value={{intent}}
             checked={{if (eq changeset.Action intent) 'checked'}}
             onchange={{action (changeset-set changeset 'Action') value="target.value"}}
           />
         </label>
       {{/each}}
      </div>
   </div>
 </fieldset>
```

```
<fieldset>
  <header>
    <h2>Path</h2>
  </header>
  <div>
      <group.Element
        @name="PathType"
        @type="select"
      as |el|>
        <el.Label>
          Path type
        </el.Label>
        <PowerSelect
          @options={{pathTypes}}
          @selected={{pathType}}
          @onChange={{action 'change' 'HTTP.PathType' changeset}} as |Type|>
            {{get pathLabels Type}}
        </PowerSelect>
      </group.Element>

{{#if shouldShowPathField}}
      <group.Element
        @name="Path"
        @error={{changeset-get changeset 'error.HTTP.Path'}}
      as |el|>
        <el.Label>
          {{get pathLabels pathType}}
        </el.Label>
        <el.Text
          @value={{changeset-get changeset 'HTTP.Path'}}
          oninput={{action 'change' 'HTTP.Path' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>

            {{#if (eq (changeset-get changeset 'HTTP.Path') 'Regex')}}
              Path Regex should not be blank
            {{else}}
              Path should begin with a '/'
            {{/if}}
          </el.Error>
        </State>
      </group.Element>
{{/if}}

  </div>
</fieldset>
```

```
<fieldset>
  <h2>Methods</h2>
  <div class="type-toggle">
    <span>All methods are applied by default unless specified</span>
    <group.Element
      @name="allMethods"
    as |el|>
      <el.Checkbox
        checked={{if allMethods 'checked'}}
        onchange={{action 'change' 'allMethods' changeset}}
      />
      <el.Label>
        All Methods
      </el.Label>
    </group.Element>
  </div>

{{#if shouldShowMethods}}
  <div class="checkbox-group" role="group">
    {{#each methods as |method|}}
      <label class="type-checkbox">
        <input
          type="checkbox"
          name="method"
          value={{method}}

  checked={{if (includes method changeset.HTTP.Methods) 'checked'}}
          onchange={{action 'change' 'method' changeset}}
        />
        <span>{{method}}</span>
      </label>
    {{/each}}
  </div>
{{/if}}
</fieldset>

<fieldset>
  <h2>Headers</h2>

  <Consul::Intention::Permission::Header::List
    @items={{changeset-get changeset 'HTTP.Header'}}
    @ondelete={{action 'delete' 'HTTP.Header' changeset}}
  as |headerList|>

  </Consul::Intention::Permission::Header::List>

  <Consul::Intention::Permission::Header::Form
```

```
    @onsubmit={{action 'add' 'HTTP.Header' changeset}}
  as |headerForm|>
    <Ref @target={{this}} @name="headerForm" @value={{headerForm}} />
  </Consul::Intention::Permission::Header::Form>

  <Hds::ButtonSet>
    <Hds::Button
      data-test-add-header
      @text='Add{{if (gt (get (changeset-get changeset 'HTTP.Header') 'length') 0) ' another' ''}} header'
      @color='primary'
      disabled={{if (not this.headerForm.isDirty)
'disabled'}}
      onclick={{action this.headerForm.submit}}
    />
    <Hds::Button
      @text='Cancel'
      @color='secondary'
      onclick={{action this.headerForm.reset}}
    />
  </Hds::ButtonSet>
 </fieldset>
 </FormGroup>
</div>
```

1.3767 github.com/aws/smithy-go 1.22.3

1.3767.1 Available under license :

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1.3773 ttrpc 1.2.6

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1.3774 typeurl 2.2.2

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1.3775 opentelemetry-collector-contrib 0.120.0

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1.3776 minipass-fetch 4.0.1

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1.3777 jsonpatch 5.9.11

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1.3778 google-go-cmp 0.7.0

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1.3779 kubernetes-apiserver-extensions 0.32.2

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1.3787 prometheus-client 1.21.1

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1.3788 github.com/aws/aws-sdk-go-v2/service/internal/presigned-url 1.12.15

1.3788.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
```

```
  - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
```

```
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
```

run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
compare
- name: License test
run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi

DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
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package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
```

```
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
```

```
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
```

```
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

```
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
```

```
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

```
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
```

```
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
```

```
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
         "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

      {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
```

```
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                 }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
```

"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the

last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

```
        },
          "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
          }
        },
        "InstanceID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
          }
        },
        "InstanceType": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>The instance type of the resource.</p>"
          }
        },
        "AccountID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

  "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n      <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n      operation values</a> in the <i>License Manager User
```

Guide. "
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The time in which the last discovery updated the instance details. "
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The name of the license subscription that the instance uses. "
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The operating system software version that runs on your instance. "
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {

"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{

```
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
        "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
        ],
        "additionalExposedHeaders": [
            "x-amzn-errortype",
```

"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}

```
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
```

```
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                "ref": "UseFIPS"
                                        },
                                        true
```

```
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }

],
            "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"

},
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [

                                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
```

```
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],

        "rules": [
                                                {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                        "properties": {},
                                                        "headers": {}
                                                    },
                                                    "type": "endpoint"
                                                }
                                            ],

                                "type": "tree"
                                        }
                                    ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {

                "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [
```

```
                                        {

                                "fn": "booleanEquals",
                                            "argv": [
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsFIPS"
                                                    ]
                                                },
                                                true

                                        ]
                                            }
                                        ],
                                        "rules": [
                                            {
                                                "conditions": [],
                                                "rules": [
                                                    {
                                                        "conditions": [],
                                                        "endpoint": {
                                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                                            "headers": {}
                                                        },
                                                        "type": "endpoint"
                                                    }
                                                ],
                                                "type": "tree"
                                            }
                                        ],
                                        "type": "tree"
                                    },
                                    {
                                        "conditions": [],
                                        "error": "FIPS is enabled
 but this partition does not support FIPS",
                                        "type": "error"
                                    }
                                ],
                                "type": "tree"
                            },
```

```
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true

                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {

                                                    "ref": "PartitionResult"
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "rules": [

        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
```

```
                                    ],
                                    "type": "tree"

                        }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
                }
            ],
            "type": "tree"
            },
            {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
            }
        ],
        "type": "tree"
    }
  ]
},
"smithy.rules#endpointTests": {
```

"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

```
        },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                  }
                 },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS": false,
                  "UseDualStack": true
                }
```

```
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                }

             },
              "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                }
```

```
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {

        "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
```

enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},

"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

```
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
      <code>AmiID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Region</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Status</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
```

values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
```

match a certain subscription's name. \n The valid names for this filter are: \n \n
\n \n <code>Subscription</code>\n \n \n \n
The
 valid Operators for this filter are: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
```

"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
```

```
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"

      },
        "smithy.api#idempotent": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
```

```
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
```

"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

```
}
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },

  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "

```
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
```

```
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string
```

```
 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            },
            "ActiveDirectorySettings":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
```

"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-

zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n   <note>\n   Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n   </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {

"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider
specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>
resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
```

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory

domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},

"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}

```
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
    "type": "list",
    "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
            }
        },
        "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
```

"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",

"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based

subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"

},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",

"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant
regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [

```
                {

                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "isSet",
            "argv": [
                {
                    "ref": "Region"
                }
            ]
        }
    ],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "aws.partition",

                "argv": [
                    {
```

```
                "ref": "Region"
            }
        ],
        "assign": "PartitionResult"
    }
],
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },

true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {

"fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
```

```
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
```

```
{
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [

                {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

  }
                ],
```

```
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {

"conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                            ]

}
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
```

```
                    ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
```

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"

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                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false

    }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},

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{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
  "expect": {

 "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack":
false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
  "expect": {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
  },
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},

"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "

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                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""

},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},

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                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
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"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}

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    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n
        <li>\n                <p>InstanceId</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
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token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",

"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
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provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

         }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
```

"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {

"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

   "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

"target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
```

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity

provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},

"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
 {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
```

to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration

settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " A parameter is not valid. ",
          "smithy.api#error": "client"
        }
      }
    }
  }
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
```

```
 }
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
```

"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},

{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],

"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

```
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

            }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {

"conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
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        "rules": [
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                "conditions": [
                    {
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                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref":
```

"UseFIPS"

```
                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
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        "rules": [
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                "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]

                }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
```

"supportsDualStack"

```
                                ]
```

```
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}

        },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
        "type": "error"
    }
  ]
},
{
  "conditions": [
    {
        "fn": "booleanEquals",

  "argv": [
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                "ref": "UseFIPS"
            },
            true
        ]
    }
  ],
  "type": "tree",
  "rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
```

```
{
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ],
        "type": "tree",
        "rules": [

{
            "conditions": [],
            "endpoint": {
              "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
      {
        "conditions": [],
        "error": "FIPS is enabled but this
partition does not support FIPS",
        "type": "error"
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "type": "tree",
```

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                        "argv": [
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                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

"supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

                  },
                        "type": "endpoint"
                      }
                    ]
                  },
                  {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                  }
                ]
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              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                   "properties": {},
                  "headers": {}
```

```
                    },
                    "type": "endpoint"
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            ]
        }
    ]
},
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    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
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"smithy.rules#endpointTests": {
    "testCases": [
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            "expect": {
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{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
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            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
             }
        },
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            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
```

```
            }
        },
        "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
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            }
        },
        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }

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        "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
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}
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
          },
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"params": {
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"UseDualStack": false
}
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.eu-central-1.amazonaws.com"
}
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"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},

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        {
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          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
        },
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          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
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"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",

"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
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"params": {
"Region": "cn-north-1",
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"UseDualStack": false
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{
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"expect": {
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},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
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"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
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"Region": "us-gov-west-1",
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"UseDualStack": false
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}
},

"params": {
"Region": "us-gov-east-1",
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"UseDualStack": true

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            }
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            "params": {
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                "UseFIPS": false,
                "UseDualStack": true
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            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
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        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"error": "DualStack is enabled
but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": false
}
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{
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"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

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                    },

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                        "UseFIPS": true,
                        "UseDualStack": false
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                },
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                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
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                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
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                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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disabled",
                    "expect": {
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                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                    "params": {
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                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                    "expect": {
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"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
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                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
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                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
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            "version": "1.0"
        }
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"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

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    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
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"target": "com.amazonaws.licensemanager#AuthorizationException"
},
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"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
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"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
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"smithy.api#documentation": " Accepts the specified grant. "
}
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"com.amazonaws.licensemanager#AcceptGrantRequest": {
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"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant

ARN. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": " Grant status. "
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Grant version. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": " Access to resource denied. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

```
},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the
account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

```
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

```
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

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        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}

```
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}

```
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
```

```
    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

```
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

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            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

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            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

```
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

```
        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }

```
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

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        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

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    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
```

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            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
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"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
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"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

```
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
  </li>\n  <li>\n  <p>\n  <code>application_name</code> - The name of the application. \n  Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
  </li>\n  <li>\n  <p>\n  <code>license_included</code> - The type of license included. \n
  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n  Possible values are <code>sql-server-enterprise</code> | \n  <code>sql-server-standard</code> | \n  <code>sql-server-web</code> |  \n  <code>windows-server-datacenter</code>.</p>\n  </li>\n  <li>\n
  <p>\n  <code>platform</code> - The platform of the resource.\n  Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n  </li>\n  <li>\n  <p>\n
  <code>resource_id</code> - The ID of the resource. \n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  <li>\n  <p>\n
  <code>tag:<key></code> - The key/value combination of a tag assigned \n  to the resource. Logical operators are <code>EQUALS</code> (single account) or\n  <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n  </li>\n  </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>LicenseArns</code>\n            </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

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                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
```

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        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
```

```
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

```
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3789 aws-sdk-go-v2 1.36.3

1.3789.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
```

```
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
```

run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt

compare

- name: License test

run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi

ListLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

ErrorCloseResponseBody

CloseResponseBody

ResponseErrorWrapper

RequestIDRetriever

OperationDeserializer

AddTimeOffsetMiddleware

RecordResponseTiming

RequestResponseLogger

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
```

```
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
```

```
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

```
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go
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AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
```

```
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
         "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "

```
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
```

```
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},

"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {

"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {

"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

```
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

      ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": {
                            "ref": "Endpoint"
                        },
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"

        }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
```

```
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {

                        "ref": "UseFIPS"
                            },
                            true
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }

],
                      "rules": [
                        {
                          "conditions": [
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
                                  "argv": [
                                    {
                                      "ref": "PartitionResult"

                    },
                                    "supportsFIPS"
                                  ]
                                }
                              ]
                            },
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
```

"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [

```
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {

"fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true

                    ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
```

```
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                            "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
```

```
{
                                                "conditions": [],
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                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
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                                            }
                                        ],
                                        "type": "tree"

                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
```

```
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {

   "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-east-1",
```

"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"

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            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
```

```
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

         "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
                "url": "https://example.com"
            }

},
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
```

```
            }
        },
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {

            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {

 "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
```

```
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n

```
<p>\n <code>AccountID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>AmiID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>DualSubscription</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceType</code>\n </p>\n </li>\n <li>\n <p>\n
<code>ProductCode</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Region</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Status</code>\n </p>\n </li>\n <li>\n <p>\n
<code>UsageOperation</code>\n </p>\n </li>\n </ul>\n <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n <ul>\n <li>\n <p>\n
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
    "type": "structure",
    "members": {
        "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
        },
```

"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
```

"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {

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            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
```

"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "

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            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
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            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
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            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
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"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"

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            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
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```
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
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"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",

"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}

```
   }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
"smithy": "2.0",
"shapes": {

"com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",

"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related

costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},

"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":

{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

```
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the

user. "
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": " Metadata that describes the associate user operation. ",
                    "smithy.api#required": {}
                }
            }
        },

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {

"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the
identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

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            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "Products": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                    "smithy.api#required": {}
                }
            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
```

"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "

```
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
```

"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"

```
            },
            {

    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",

          "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region":
```

```
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
```

```
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [
            {

                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
            },

"properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
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```
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",

                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },

true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

"fn": "booleanEquals",
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                    true,
                    {
                        "fn": "getAttr",
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                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ]
            },

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                        "argv": [
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                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }

        ]
            }
        ],
        "rules": [
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                "conditions": [],
                "endpoint": {
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }

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        "type": "tree"
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        "error": "FIPS and DualStack are enabled, but this partition does not support one or
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"type": "error"
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"type": "tree"
},
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"argv": [

{
"ref": "UseFIPS"
},
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [

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"ref": "PartitionResult"
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"supportsFIPS"
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"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},

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            "type": "error"

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                    },
                    true
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                            {
                                "fn": "getAttr",
                                "argv": [
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                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

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                                        "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }

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                                        "type": "error"
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                                ],
                                "type": "tree"
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                            {
                                "conditions": [],
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                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                        "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
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                "type": "tree"
            },
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                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
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    "smithy.rules#endpointTests": {
        "testCases": [
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
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"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}

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            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
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        },
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          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
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          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {

"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
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"params": {

"UseFIPS": false,
"UseDualStack":
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"Endpoint": "https://example.com"
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{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",

"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS \n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},

"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""

                },
                {
                    "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
            ]
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            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
            "type": "string",
            "traits": {
                "smithy.api#enum": [
                    {
                        "name": "HEALTHY",
                        "value": "HEALTHY",
                        "documentation": ""
                    },
                    {
                        "name": "UNHEALTHY",
                        "value": "UNHEALTHY",
                        "documentation": ""
                    },
                    {
                        "name": "NOT_APPLICABLE",
                        "value": "NOT_APPLICABLE",
                        "documentation": ""
                    }
                ]
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
            }
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        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
            "type": "structure",
            "members": {
                "ServerType": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                    "traits": {
                        "smithy.api#documentation": "<p>The type of license server.</p>",
                        "smithy.api#required": {}
                    }
                },
                "ServerSettings": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                    "traits": {
                        "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                        "smithy.api#required": {}
                    }
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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
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"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
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"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
           "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
      "type":
 "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
```

request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating.
This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions
operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {

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        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
```

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            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n        </li>\n        <li>\n            <p>Username</p>\n        </li>\n
<li>\n            <p>Domain</p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

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                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
```

},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},

"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to
register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",

"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
```

"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}

```
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
```

"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
```

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {

"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {

"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
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              "namespace": "*"
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          "type": "service",
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"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
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"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
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"target": "com.amazonaws.licensemanager#UntagResource"
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"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"

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                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
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            "aws.auth#sigv4": {
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            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
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                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                        "type": "Boolean"
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                    "UseFIPS": {
                        "builtIn": "AWS::UseFIPS",
                        "required": true,
                        "default": false,
                        "documentation": "When true, send
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"required": false,
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"type": "String"
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"ref": "Endpoint"
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"argv": [
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"headers": {}

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"type": "endpoint"
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"type": "error"
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                "type": "error"
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                                "argv": [
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"supportsDualStack"

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                "type": "error"
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    "type": "error"
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      "expect": {
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"params": {
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"params": {
"Region": "ap-northeast-3",
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                "UseDualStack": false
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"UseDualStack": false
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},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager-fips.us-gov-east-1.api.aws"
            }
        },

    "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
        }
    },
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        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },

       {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
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                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
                    }
                },

        "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://example.com"
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                }
            },
            "params": {
                "UseFIPS": false,

        "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
 }
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
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"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
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"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"

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            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
    }
},
"com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Arn"
    }
},
"com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
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"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
```

{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
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```
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
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idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}

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            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PROVISIONAL"
                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
             }
        }
    },
```

"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {

```
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }
    },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
    }
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
    }
  },
  "com.amazonaws.licensemanager#ConsumptionConfiguration": {
    "type": "structure",
    "members": {
        "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
        },
        "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
             }
        },
        "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
```

"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",

"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
```

```
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "

```
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
 {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}

        }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
```

"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",

"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",

"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}

```
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
```

```
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members":
{
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n         <p>This action
deletes the report generator, which stops it from generating future reports.\n         The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {

"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":

"com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": " Indicates whether check-ins are allowed. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes a resource entitled for use with a license. "
    }
},
"com.amazonaws.licensemanager#EntitlementData": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement data name. ",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement
data value. "
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": " Entitlement data unit. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Data associated with an entitlement resource. "
    }
},
"com.amazonaws.licensemanager#EntitlementDataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
    }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
    "type": "enum",
    "members": {

"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}

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        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
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```
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes/Second"
    }
},
"KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
    }
},
"MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
    }
},
"GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
     "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
    }
},
"TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
    }
},
"BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits/Second"
    }
},
"KILOBITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
    }
},
"MEGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
```

"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},

```
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
```

```
        },
        "BYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },

  "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumedValue": {
          "target": "com.amazonaws.licensemanager#String",

        "traits": {
            "smithy.api#documentation": "<p>Resource usage consumed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxCount": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
          }
        },
```

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            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

  }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {

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    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

        },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
```

"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}

```
            },
            "ConsumedLicenseSummaryList": {
                "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
                }
            },
            "ManagedResourceSummaryList": {
                "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                 "traits": {
                    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            },
            "AutomatedDiscoveryInformation": {
                "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
                "traits": {
                    "smithy.api#documentation": "<p>Automated discovery information.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
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"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "

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            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
```

"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
        "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},

"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",

"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {

"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}

```
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
```

```
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
```

"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},

"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {

```
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

    },
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
      "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "

}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },

    "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
```

}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}

},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

       "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
```

```
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#License"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
```

```
            }
        },
        "MetadataList": {

            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
    }
},
"com.amazonaws.licensemanager#LicenseSpecification": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

            "smithy.api#required": {}
            }
        },
        "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
```

```
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
```

configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

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        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseConfigurationArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

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            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
 {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {

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        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
```

"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",

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        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n            </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n            </p>\n            </li>\n
    <li>\n                <p>\n                <code>Fingerprint</code>\n            </p>\n            </li>\n            <li>\n
<p>\n                <code>Status</code>\n            </p>\n            </li>\n        </ul>"
```

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            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
```

},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": "<p>Information
about the resources.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
            <li>\n                <p>\n                <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

```
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n

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</li>\n <li>\n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
```

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        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n            <li>\n                <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n                <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is
<code>RDS</code>:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>License Pack</code> - The license
```

pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {

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                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
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"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}

```
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

```
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
 {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
```

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {

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            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
```

```
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "

```
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
```

"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
```

"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
```

"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation":
" ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3790 aws-sdk-go-v2-feature-ec2-imds 1.16.30

1.3790.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
```

```
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
```

```
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
```

```
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
```

```
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
```

```
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
```

```
//   - Fingerprint
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
```

DisassociateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}
```

```
func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
```

```
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
       "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
           "type": "integer"
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
           "type": "long"
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
           "type": "operation",
           "input": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
           },
           "output": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
           },
           "errors": [
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
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"traits": {
"smithy.api#input": {}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
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"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
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"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
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"traits": {
"smithy.api#output": {}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
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"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
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"errors": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
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{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
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"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

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"smithy.api#idempotent": {}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
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"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "

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                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
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"traits": {
"smithy.api#documentation": " The status of the instance. "
}
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"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},

"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux
subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",

"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
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"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
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"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

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            "type": "Boolean"
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            "builtIn": "SDK::Endpoint",
            "required": false,
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            "type": "String"
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                            "argv": [
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                    "type": "error"
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                                    "fn": "booleanEquals",
                                    "argv": [
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                                            "ref": "UseDualStack"
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                    },
                    true
                ]

}
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                "type": "error"
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                "conditions": [],
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                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
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                "type": "endpoint"
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                    "argv": [
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                            "ref": "Region"
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                    "argv": [
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                        },
                        true
                    ]
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                            "argv": [
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                                    "argv": [
                                        {
                                            "ref": "PartitionResult"

},
                                        "supportsFIPS"
                                    ]
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                    ]
                },
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                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
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            "rules": [
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                    "conditions": [],

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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
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one or both",

            "type": "error"
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"conditions": [
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"argv": [
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"supportsFIPS"
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but this partition does not support FIPS",
    "type": "error"
}
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            },
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                        "argv": [
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                                "ref": "PartitionResult"
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                        ]
                    }
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                            "headers": {}
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            "type": "tree"
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            "type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
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    "type": "tree"
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        "type": "error"
    }
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"type": "tree"
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"smithy.rules#endpointTests": {
  "testCases": [
    {
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      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
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        }
      },
      "params": {
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        "UseFIPS": true,
        "UseDualStack": false
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    },
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
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}
},

"params": {
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}
},
"params": {
"Region": "cn-north-1",
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}
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"params": {
"Region": "cn-north-1",
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"UseDualStack": false
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
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"params": {
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}
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}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

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"UseDualStack": true
}
},
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
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"endpoint": {
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"UseDualStack": false
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"expect": {
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},
"params": {

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        "Region": "us-isob-east-1",
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        "UseDualStack": true
    }
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{
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    "expect": {
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        }
    },
    "params": {
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        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
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        "UseDualStack": true
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},
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        }
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    "params": {
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        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
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}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"

```
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
        {
          "name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled LinuxSubscriptionsDiscovery"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
      "SourceRegions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
        "traits": {
          "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "OrganizationIntegration": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
        "traits": {
          "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
          "smithy.api#required": {}
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {

"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
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"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",

"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"

```
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
```

```
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "

}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {

"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
```

"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",

```
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {

          "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
```

```
        },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
             "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target":
 "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
```

```
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
```

```
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string
```

```
// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
```

"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":

```
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
```

"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",

"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
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"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#Directory": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/DisassociateUser"
      },
      "smithy.api#idempotent": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
```

"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}

```
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},

"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                 }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
```

"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"

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"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
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        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
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            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
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            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
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            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
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"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
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"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"

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                }
            ]
        }
    ],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },
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                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {

                    "fn": "booleanEquals",
                    "argv": [
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                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
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            "conditions": [],
            "endpoint": {
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                    "ref": "Endpoint"
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"properties": {},
                "headers": {}
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            "type": "endpoint"
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                            "ref": "Region"
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                }
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                            "fn": "aws.partition",

                        "argv": [
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                                    "ref": "Region"
                                }
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                            "assign": "PartitionResult"
                        }
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                                    "fn": "booleanEquals",
                                    "argv": [
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                                            "ref": "UseFIPS"
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true
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                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
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                ]
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },

                {
                        "fn": "booleanEquals",
                        "argv": [
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                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

            ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
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                    },
                    "type": "endpoint"
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                "type": "tree"
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                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
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        "type": "tree"
    },
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        "conditions": [
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                "fn": "booleanEquals",
                "argv": [

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                    "ref": "UseFIPS"
                },
                true
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        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
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                                "fn": "getAttr",
                                "argv": [

    {
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                                "supportsFIPS"
                            ]
                            },
                            true
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                    ],
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                            "type": "endpoint"
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                    "type": "tree"
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                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

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                "type": "tree"
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                "conditions": [
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                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
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                    {

    "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
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"ref": "PartitionResult"
},
"supportsDualStack"
]

}
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"rules": [
{
"conditions": [],
"endpoint": {
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"properties": {},
"headers": {}
},
"type": "endpoint"
}

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"type": "tree"
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{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
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{
"conditions": [],
"endpoint": {
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"properties": {},
"headers": {}
},
"type": "endpoint"
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"type": "tree"
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],
"type": "tree"

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            },
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              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
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        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS":
true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
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}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {

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"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
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"UseDualStack": true
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"UseDualStack": false
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"params": {
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"UseFIPS": false,
"UseDualStack": true
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"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}

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            },
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              "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
              "expect": {
                "endpoint": {
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              },
              "params": {
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
              }
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            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
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"version": "1.0"
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}
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "

```
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

    "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
 {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
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"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{

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            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

        },
        {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
        }
    ]
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
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  "traits": {
    "smithy.api#enum": [
        {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
        },
        {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
        },
        {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
        }
    ]
  }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
  "type": "structure",
  "members": {
    "ServerType": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
        "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
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"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n            <li>\n                <p>Product</p>\n            </li>\n
        <li>\n                <p>DirectoryId</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
```

"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },

        "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                 "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
```

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
```

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't

empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

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    }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {

     "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-

\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",

"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",

"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",

"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
  limitations under the License.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
           {
               "id": "HttpHeaderTrait",
               "namespace": "*"
           },
           {
               "id": "HttpUriConflict",
               "namespace": "*"
           },
           {
               "id": "Service",
```

```
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
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                "target": "com.amazonaws.licensemanager#CreateLicense"
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                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
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                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
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                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
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            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
```

```
    },
    {
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      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
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     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
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"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
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"target": "com.amazonaws.licensemanager#ListLicenses"
},
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"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
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"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
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"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
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"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
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"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
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"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
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"target": "com.amazonaws.licensemanager#ListTagsForResource"
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"target": "com.amazonaws.licensemanager#ListTokens"
},
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"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},

{
"target": "com.amazonaws.licensemanager#TagResource"
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"target": "com.amazonaws.licensemanager#UntagResource"
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"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
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{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
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"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
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"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",

"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"fn": "isSet",
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"ref": "Endpoint"
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"ref": "UseFIPS"
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                "type": "error"
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                "conditions": [],
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                        "ref": "Endpoint"
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                    "headers": {}
                },
                "type": "endpoint"
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                "argv": [
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"UseFIPS"
                          },
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                        "argv": [
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                            "ref": "UseDualStack"
                          },
                          true
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]

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"argv": [
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{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
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"conditions": [],
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"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

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"type": "endpoint"
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
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{
"conditions": [

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{
                      "fn": "getAttr",
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                        {
                          "ref": "PartitionResult"
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                        "supportsFIPS"
                      ]
                    }
                  ]
                }
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              "rules": [

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            {
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```

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partition does not support FIPS",
"type": "error"
}
]
},
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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},
true
]
}
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"type": "tree",
"rules": [
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

```
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                    }
                ]
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
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        "conditions": [],
        "endpoint": {
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            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
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}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"Region": "af-south-1",
"UseFIPS": false,
"UseDualStack": false
}
```

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},
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  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
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  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
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  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
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"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
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"params": {
"Region": "ap-south-1",
"UseFIPS": false,
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"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
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"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
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}
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"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.ap-southeast-2.amazonaws.com"
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"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "ap-southeast-3",
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"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.ca-central-1.amazonaws.com"
}
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"params": {
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"UseFIPS": false,
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
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"params": {
"Region": "eu-central-1",
"UseFIPS": false,
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},
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"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {

"Region": "eu-north-1",
"UseFIPS": false,
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"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
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"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
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"UseDualStack": false
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"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

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"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",

"expect": {
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"UseFIPS": false,

"UseDualStack": false
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"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
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"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
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"params": {
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"UseDualStack": false
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
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"params": {
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"UseFIPS": true,

"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

}
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
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    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
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        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
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        },

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        "expect": {
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            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
          }
         },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
          }
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            },
            "params": {
              "Region": "us-gov-west-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
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            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-gov-east-1.api.aws"
              }
            },

    "params": {
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              "UseFIPS": true,
              "UseDualStack": true
            }
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            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
```

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        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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        },

      {
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        "expect": {
          "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },

    "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

  "expect": {
          "endpoint": {
            "url": "https://example.com"
          }
        },
        "params": {
          "Region": "us-east-1",
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {

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            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
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"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},

"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time that automated discovery last ran. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes automated discovery. "
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }

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    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
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"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

```
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
```

"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

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                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

```
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
```

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        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

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        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
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                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
```

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        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

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            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
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<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
                }
            },

  "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
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}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

  }
            },
            "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

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            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
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"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
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grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
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{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

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    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},

"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
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                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
```

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
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"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

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        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

```
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
```

"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

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            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

      },
        "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

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        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

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    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

```
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

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                "traits": {
                    "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

       "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
```

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        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

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            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
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"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
        {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

```
{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
               "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n        <li>\n        <p>\n        <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
```

```
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n            <p>\n                <code>LicenseArns</code>\n            </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
 {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
```

```
</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:  <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
         "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
        },
```

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

```
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
```

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            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
},
"com.amazonaws.licensemanager#ReportFrequency": {
    "type": "structure",
    "members": {
        "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
                "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
        },
        "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

            "traits": {
                "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

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    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

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{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

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            }
        },
        "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }
        }
    },
    "traits": {

      "smithy.api#documentation": "<p>Describes a token.</p>"
    }
},
"com.amazonaws.licensemanager#TokenList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#TokenData"
    }
},
"com.amazonaws.licensemanager#TokenString": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 4096
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#TokenType": {
    "type": "enum",
    "members": {
        "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REFRESH_TOKEN"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3791 aws-sdk-go-v2-internal-endpoints 2.6.34

1.3791.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
```

```
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CreateLicenseInput struct {

// License beneficiary.
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
```

```
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
```

```
 return nil, err
}

out := result.(*ListLicensesOutput)
out.ResultMetadata = metadata
return out, nil
}

type ListLicensesInput struct {

// Filters to scope the results. The following filters are supported:
//
//   - Beneficiary
//
//   - ProductSKU
//
//   - Fingerprint
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack);
err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
```

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

```
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
```

```
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
```

"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider

resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
```

"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}

```
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
                }
            },
            "LastUpdatedTime": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
```

details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux

subscriptions. "
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
" An exception occurred with the service. ",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"

```
            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
```

```
],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
```

```
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

        "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {

                      "ref": "UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }

  ],
                    "rules": [
                      {
```

"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"

},
"supportsFIPS"
]
}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"

}
],

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true

```
                    ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

                ]
                }
            ],
            "rules": [
                {
```

"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},

```
                    {
                      "conditions": [],
                      "rules": [
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ],
          "type": "tree"
        }
      ]
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
```

{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}

```
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
             },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
```

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"

```
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {

       "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
```

"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",

"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n      organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n
<li>\n            <p>\n                <code>Subscription</code>\n            </p>\n          </li>\n        </ul>\n
<p>The
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
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"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
```

"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":

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{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

```
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}

```
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

             "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
```

```
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
```

"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

```
        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {
```

```
 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
GetLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains

details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {

"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"

},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS)

license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

 }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {

"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
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"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
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"Product": {
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"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
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"Status": {
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"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
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"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
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"FailureMessage": {
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"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
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"traits": {

"smithy.api#documentation": " Describes an identity provider. "
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
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"members": {
"InstanceId": {
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"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
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"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
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"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
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"LastStatusCheckDate": {
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"traits": {
"smithy.api#documentation": " The date of the last status check. "
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"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
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"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
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"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
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"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
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"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
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"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
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"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
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"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details
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"smithy.api#required": {}
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"Status": {
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"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
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"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
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"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
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"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

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    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
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        "smithy.api#httpError": 500
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"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
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    "traits": {
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"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
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    "member": {
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    "version": "2018-05-10",
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            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
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          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
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          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
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          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
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"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
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      "traits": {
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          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
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        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
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        "aws.protocols#restJson1": {},
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            "x-amzn-platform-id",
            "x-amzn-trace-id",
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"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
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"x-amzn-requestid",
"x-amzn-trace-id"
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"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
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"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"required": false,
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                "argv": [
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            "type": "error"
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            "conditions": [
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                    "ref": "UseDualStack"
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            "type": "error"
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"type": "error"
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"testCases": [
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"expect":
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"params": {
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"UseDualStack": true
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1.api.amazonwebservices.com.cn"
            }
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          "params": {
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            }
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            }
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        "params": {
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        "expect": {
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"UseDualStack": false
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"expect": {
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
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}

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"UseDualStack": false
}
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"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"expect": {
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"params": {
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
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"expect": {
"error": "Invalid Configuration: Missing Region"
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"version": "1.0"
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {

"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "

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                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
```

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            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings
for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
the following filters to streamline results:</p>\n    <ul>\n        <li>\n            <p>Product</p>\n        </li>\n
    <li>\n            <p>DirectoryId</p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
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"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
```

\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next
token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100

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                }
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
    "type": "structure",
    "members": {
        "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
    "type":
```

"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":

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{
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
             "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
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"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

            }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
```

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                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

        "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
```

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
```

```
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
        },
        "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
    "type":
 "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
    "type": "structure",
    "members": {
        "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
```

"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":

" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",

"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",

"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation":
" The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

        }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

     "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
```

"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security
group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}

```
      }
    }
  }
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
```

"id": "PaginatedTrait",
"namespace": "*"
},
{
"id": "HttpHeaderTrait",
"namespace": "*"
},
{
"id": "HttpUriConflict",
"namespace": "*"
},
{
"id": "Service",
"namespace": "*"
}
]
},
"shapes": {
"com.amazonaws.licensemanager#AWSLicenseManager": {
"type": "service",
"version": "2018-08-01",
"operations": [
{
"target": "com.amazonaws.licensemanager#AcceptGrant"
},

{
"target": "com.amazonaws.licensemanager#CheckInLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{

"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},

{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#ListTokens"
            },
            {
                "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#RejectGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
```

"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],

```
            "type": "tree",
            "rules": [
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                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {

"conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                   },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          },
          {
            "conditions": [
```

```
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                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
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                    "conditions": [
                        {
                             "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "type": "tree",
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref":
"UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "type": "tree",
```

"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]

}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"

```
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",

        "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,

{
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                }
                ],
                "type": "tree",
                "rules": [
```

```
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS is enabled but this
partition does not support FIPS",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
         "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },

"supportsDualStack"
                                ]
```

```
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                        },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
```

```
        {
          "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager.af-south-1.amazonaws.com"
            }
          },
          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-east-1.amazonaws.com"
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          "params": {
            "Region": "ap-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-1.amazonaws.com"
            }
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          "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
          },
          "params": {
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"Region": "ap-northeast-2",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

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"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
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"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
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},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",

"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
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"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
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{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,

"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-west-1.amazonaws.com"
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"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
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}
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"params": {

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"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false

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            }
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            "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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            "params": {
                "Region": "us-west-2",
                "UseFIPS": true,
                "UseDualStack": false
            }
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            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
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            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-east-1.api.aws"
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            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
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            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
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"https://license-manager.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
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        "expect": {
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        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
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        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
          }
         },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
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      {
        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
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"UseDualStack": false
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"expect": {
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"params": {
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"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
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"params": {
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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},
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}

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        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
          }
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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    {
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        "expect": {
          "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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          "UseFIPS": true,
          "UseDualStack": true
        }
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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            "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },

"params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
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      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
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"UseDualStack": true
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
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"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}

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            },
            "CHECKOUT_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutLicense"
                }
            },
            "CHECKOUT_BORROW_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutBorrowLicense"
                }
            },
            "CHECK_IN_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckInLicense"
                }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ExtendConsumptionLicense"
                }
            },
            "LIST_PURCHASED_LICENSES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
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"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
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"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "

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            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }

},
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}

```
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
```

"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the
account that created the license is the same that is performing the check out, you must\n specify the account
as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {

"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {

"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}

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        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
```

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        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode":
 409
          },
          "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 409
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
            }
          },
          "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },

 "traits": {
          "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
      },
      "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
          "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
              "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
```

```
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services
account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n
<ul>\n
            <li>\n                <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                    "smithy.api#required": {}
                }
```

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        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
```

{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}

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    },
    "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
        }
    },
    "GrantName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
        }
    },
    "AllowedOperations": {
        "target": "com.amazonaws.licensemanager#AllowedOperationList",
        "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
         "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "StatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
        }
    },
    "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
        }
    },
    "Options": {
        "target": "com.amazonaws.licensemanager#Options",
        "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
        }
    }
},
 "traits": {
    "smithy.api#input": {}
}
```

```
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the grant.</p>"
          }
        }
      },
      "traits":
{
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
```

all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |

<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {

            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",

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        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
```

"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {

"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}

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            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target":
"com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
```

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for

workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT

token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
```

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        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
```

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            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the
grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {

"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
```

"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},

"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},

"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {

"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {

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            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

           "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
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"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"

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    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Filter",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
             "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
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tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},

```
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
```

},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
```

```
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {

"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "

```
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
                }
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
```

configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {

"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {

"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",

"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

},
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#IssuerDetails",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license issuer.</p>"
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

             }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license status.</p>"
                }
```

```
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                 "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

    }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Version of the granted license.</p>"
                }
            },
            "ReceivedMetadata": {
                "target": "com.amazonaws.licensemanager#ReceivedMetadata",
                "traits": {
```

"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},

```
"com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                 "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
},
"com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer name.</p>",
                "smithy.api#required": {}
            }
        },
        "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "Entitlements": {

  "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>License
creation time.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
```

"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}

```
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the license configuration.</p>"
        }
    },
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

   }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
        }
    },
    "ManagedResourceSummaryList": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
        }
    },
    "ProductInformationList": {
        "target": "com.amazonaws.licensemanager#ProductInformationList",
        "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
        }
    },
    "AutomatedDiscoveryInformation": {

        "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
        "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
```

agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},

"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
```

```
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
    "type": "string",
    "traits": {

   "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConversionTask"
}
},
"com.amazonaws.licensemanager#LicenseCountingType": {
"type": "enum",
"members": {
"VCPU": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "vCPU"
}
},
"INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Instance"
}
},
"CORE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Core"
}
},
"SOCKET": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Socket"
}
}
}

```
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
```

"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",

"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {

"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
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<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n              <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n              Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

          "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your

account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}

```
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

```
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
```

"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {

"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while

specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}

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                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
      <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
```

```
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n              <p>\n                <code>LicenseArns</code>\n              </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100

```
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>. \n \n \n
\n <code>Application Publisher</code> - The publisher of the application.\n Logical

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

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        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
     }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
```

```
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
```

```
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
```

```
        "members": {
          "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 308
        }
      },
      "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
```

{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

```
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
```

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report

generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}

```
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
```

"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

```
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096

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            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
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        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
"com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
```

format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {

"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
```

"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
```

update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
```

```
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3792 aws-sdk-go-v2-internal-configsources 1.3.34

1.3792.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter
```

```
 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
```

```
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]
```

```
  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
```

```
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
```

```
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string
```

```
 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
```

```
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
```

```
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
```

```
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash

setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

```
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
```

```
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
```

```
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}
```

```
type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
```

operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token

status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",

"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has
been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being
applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings
current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated
data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see <a

href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"

```
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
```

"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

        ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

          }
          ],
```

```
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
```

```
                    },
                    true
                ]
            }

],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"

},
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [

                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

"rules": [
                                {
```

"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
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"fn": "getAttr",
"argv": [

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                                    "supportsFIPS"
                                ]
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                    "rules": [
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                            "rules": [
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
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                                    "type": "endpoint"
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                        }
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                {
                    "conditions": [],
                    "error": "FIPS is enabled
 but this partition does not support FIPS",
                    "type": "error"
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            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
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                            "ref": "UseDualStack"
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                    },
                    true

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                            "argv": [
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                                    "fn": "getAttr",
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                                        "ref": "PartitionResult"
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                                        "supportsDualStack"
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{
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                                        "headers": {}
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                        "type": "error"
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                "type": "tree"
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    "conditions": [],
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    "type": "error"
}
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"type": "tree"
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
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}
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
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            },
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              "expect": {
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                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
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 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
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              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
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              "params": {
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            },
            {
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              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
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            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
              }

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            "params": {
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              "UseDualStack": false
            }
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            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
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{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

"Region": "us-iso-east-1",
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"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,

"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": true
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",

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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
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"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",

"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
      <code>AmiID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>DualSubscription</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceType</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>ProductCode</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Region</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Status</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n           </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n            <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n        </ul>"
                }
            },
            "MaxResults": {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "

```
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
        "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
        "target":
```

"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration
resources for your account. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": " To filter your results, specify which subscription providers to
return \n\t\t\tin the list. "
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
```

```
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"

      },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
    "type": "structure",
    "members": {
        "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
```

```
            "value": "InProgress",
            "documentation": "InProgress status"
          },
          {
            "name": "Completed",
            "value": "Completed",
            "documentation": "Completed status"
          },
          {
            "name": "Successful",
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },

  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
 subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
```

"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,

"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}

```
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
```

```
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
```

```
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
```

```
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
```

```
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",

"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target":

"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider
specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>
resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},

"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},

"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",

"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
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"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
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"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}

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            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
```

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    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
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            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},

"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,

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                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                 ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [
                            {

                                "fn": "booleanEquals",
                                "argv": [
                                    {
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                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
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        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
            },

"properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
  ],
  "rules": [
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        "conditions": [
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                "fn": "aws.partition",

             "argv": [
                    {
                        "ref": "Region"
                    }
                ],
                "assign": "PartitionResult"
            }
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                    ],
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                                "ref": "UseFIPS"
                              },

true
                            ]
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                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
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                            "conditions": [
                              {

"fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
                                        "ref": "PartitionResult"
                                      },
                                      "supportsFIPS"
                                    ]
                                  }
                                ]
                              },

                          {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }

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                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

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                            "type": "tree"
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                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [

  {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
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                    }
                ],
                "rules": [
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                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [

                {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
                    ],
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                            "conditions": [],
                            "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
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                "fn": "booleanEquals",
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                    "ref": "UseDualStack"
                  },
                  true
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            ],
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                    "fn": "booleanEquals",
                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]

          }
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }

            ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
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"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",

"UseFIPS":
true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {

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            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint":
{
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
```

```
                }
            },
            {
                "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
                },
                "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }
                },
                "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false

    }
            },
            {
                "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                    }

        },
                "params": {
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"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}

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            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {

          "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
```

```
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error": "Invalid Configuration:
 Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
```

{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [

```
            {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
                "documentation": ""
            },
            {
                "name": "PROVISIONING_FAILED",
                "value": "PROVISIONING_FAILED",
                "documentation": ""
            },
            {
                "name": "PROVISIONED",
                "value": "PROVISIONED",
                "documentation": ""
            },
            {
                "name": "DELETING",
                "value": "DELETING",
                "documentation": ""
            },
            {
                "name": "DELETION_FAILED",
                "value": "DELETION_FAILED",
                "documentation": ""

            },
            {
                "name": "DELETED",
                "value": "DELETED",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "HEALTHY",
                "value": "HEALTHY",
                "documentation": ""
            },
            {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
            },
```

```
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use
the following filters to streamline results: \n \n \n Product \n \n
\n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",

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    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members":
```

{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },

        "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
```

empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"

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            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n            <p>Status</p>\n            </li>\n            <li>\n            <p>Username</p>\n
</li>\n            <li>\n            <p>Domain</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
```

This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":

"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " Returns the list of tags for the specified resource. ",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

            }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": " The tags for the specified resource. "
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"

```
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The ID of the EC2 instance, which
provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n
\n Status \n \n \n Username \n \n
\n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "

```
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
```

"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {

"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}

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            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
            "type": "structure",
            "members": {
                "IdentityProviderSummary": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                    "traits": {
                        "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                        "smithy.api#required": {}
                    }
                }
            },
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
            "type": "string",
            "traits": {
                "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

       "smithy.api#error": "client",
                "smithy.api#httpError": 404
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
            "type": "structure",
            "members": {
                "SecretId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                        "smithy.api#length": {
```

"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

        },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
```

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

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            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }

    }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {

 "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {

"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

```
        }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
```

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security
group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {

"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
}

ListReceivedLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

ErrorCloseResponseBody

CloseResponseBody

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
```

```
    "suppressions": [
        {
            "id": "HttpMethodSemantics",
            "namespace": "*"
        },
        {
            "id": "HttpResponseCodeSemantics",
            "namespace": "*"
        },
        {
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
```

{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"

},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",

"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [

```
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Endpoint"
                    }
                ]

        }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {

"conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
```

```
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
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        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
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                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref":
"UseFIPS"
                                    },
                                    true
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                            {
```

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                "fn": "booleanEquals",
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                  },
                  true
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            "rules": [
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                "conditions": [
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                    "fn": "booleanEquals",
                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]

                }
                    ]
                  },
                  {
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                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },

"supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
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                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}

                }},
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",

          "argv": [
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                        "ref": "UseFIPS"
                    },
                    true
                ]
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        "type": "tree",
        "rules": [
            {
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                        "fn": "booleanEquals",
                        "argv": [
                            true,

    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
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```
                    },
                    "supportsFIPS"
                ]
            }
        ]
    }
],
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"rules": [

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            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
]
},
{
"conditions": [],
"error": "FIPS is enabled but this
partition does not support FIPS",
"type": "error"
}
]
},
{
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{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
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                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                        },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
```

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            },
            {
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              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
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              "expect": {
                "endpoint":
{
                  "url": "https://license-manager.af-south-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
               }
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              "expect": {
                "endpoint": {
                  "url": "https://license-manager.ap-northeast-1.amazonaws.com"
                }
              },
              "params": {
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                "UseFIPS": false,
                "UseDualStack": false
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            }
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            "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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            "params": {
                "Region": "ap-northeast-2",
                "UseFIPS": false,
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            "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager.ap-northeast-3.amazonaws.com"
                }
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            "params": {
                "Region": "ap-northeast-3",
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                "UseDualStack": false
            }

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        {
            "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-southeast-1.amazonaws.com"
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}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}

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        },
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          "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
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              "url": "https://license-manager.eu-central-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-central-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-north-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region":
"eu-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
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        },
        "params": {
          "Region": "eu-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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      {
        "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
        "expect": {

        "endpoint": {
            "url": "https://license-manager.eu-west-2.amazonaws.com"
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        "params": {
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          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.eu-west-3.amazonaws.com"
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        },
        "params": {
          "Region": "eu-west-3",
          "UseFIPS": false,

"UseDualStack": false
        }
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        "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.me-south-1.amazonaws.com"
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        },
        "params": {
          "Region": "me-south-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
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              "expect": {
                "endpoint": {
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                 }
              },
              "params": {
                "Region": "sa-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-2.amazonaws.com"
                }
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},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
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}
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"params": {

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"UseFIPS": true,
"UseDualStack": false
}
},

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                }
              },
              "params": {
                "Region": "us-west-2",
                "UseFIPS": false,
                "UseDualStack": false
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            },
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              "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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                  "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-west-2",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
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              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.api.aws"
                }
              },
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
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"expect": {
"endpoint": {
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},

{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-gov-east-1.amazonaws.com"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
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"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {

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                "url": "https://license-manager.us-gov-east-1.api.aws"
            }
        },
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            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"

```
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
```

"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
        "members": {
            "CREATE_GRANT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateGrant"
                }
            },
            "CHECKOUT_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutLicense"
                }
            },
            "CHECKOUT_BORROW_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutBorrowLicense"
                }
            },
            "CHECK_IN_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckInLicense"
                }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ExtendConsumptionLicense"
                }
            },
            "LIST_PURCHASED_LICENSES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
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            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
{
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
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            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
```

"com.amazonaws.licensemanager#BoxBoolean": {
    "type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
    "type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
    "type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

},
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
    }

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    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
 use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
```

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                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
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"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {

"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "

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            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
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"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,

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                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
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"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {

"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},

"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}

```
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used.

Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target":
"com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n
\n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
<code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |
<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

```
    "traits": {
            "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
```

"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}

```
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
             },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
```

"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",

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            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output":
{}
    }
},
"com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
```

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}

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        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

         "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
```

```
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}

```
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "

```
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
    "members": {
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

{
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
    }
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Token ID. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}

  }
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
    "type": "enum",
    "members": {
        "JWT_PS384": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "JWT_PS384"
            }
        }
    }
},
"com.amazonaws.licensemanager#Entitlement": {
    "type": "structure",
    "members": {
        "Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":

{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}

```
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue":
"Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
```

```
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
```

```
    "traits": {
        "smithy.api#enumValue": "Seconds"
    }
},
"MICROSECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Microseconds"
    }
},
"MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Milliseconds"
    }
},
"BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes"
     }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},

"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"

```
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

       "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
```

```
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
```

"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",

```
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

   },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
```

"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information

about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
```

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {

"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {

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            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }

        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
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Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},

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            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantStatus": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
```

```
    "member": {
        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
```

```
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }

  },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
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"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",

```
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

},
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                 "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
```

```
            }
        },
        "com.amazonaws.licensemanager#Issuer": {
            "type": "structure",
            "members": {
                "Name": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Issuer name.</p>",
                        "smithy.api#required": {}
                    }
                },
                "SignKey": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
            }
        },
        "com.amazonaws.licensemanager#IssuerDetails": {
            "type": "structure",
            "members": {
                "Name": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Issuer name.</p>"
                    }
                },
                "SignKey": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                    }
                },
                "KeyFingerprint": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                    }
                }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
```

"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}

```
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
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"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {

"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},

"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target":

"com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

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        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
      "IN_PROGRESS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "IN_PROGRESS"
        }
      },
      "SUCCEEDED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SUCCEEDED"
        }
      },
      "FAILED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "FAILED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
  },
  "com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
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            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
    },
    "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",
```

```
        "traits": {
            "smithy.api#enumValue": "AVAILABLE"
        }
        },
        "PENDING_AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "PENDING_AVAILABLE"
        }
        },
        "DEACTIVATED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DEACTIVATED"
        }
        },
        "SUSPENDED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "SUSPENDED"
        }
        },
        "EXPIRED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "EXPIRED"
        }
        },

      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
        }
        },
        "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DELETED"
        }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
```

"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {

"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
```

"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {

"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configurations
for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license
configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

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            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

          "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "Filters": {
```

"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
                }
            },
            "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },

"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
```

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

    "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>Beneficiary</code>\n            </p>\n
    </li>\n        <li>\n            <p>\n                <code>ProductSKU</code>\n            </p>\n        </li>\n
  <li>\n            <p>\n                <code>Fingerprint</code>\n            </p>\n        </li>\n        <li>\n
<p>\n                <code>Status</code>\n            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
```

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
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"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

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    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n        <code>resource_id</code> - The ID of the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

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        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

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        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}

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        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}

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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

```
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
"com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3793 github.com/aws/aws-sdk-go-v2/internal/endpoints/v2 2.6.34

1.3793.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
```

```
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
```

toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
compare
- name: License test
run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
```

```
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
```

```
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

```
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go
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AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
```

```
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },
```

{
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
    "type": "structure",
    "members": {
        "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": " The type of name to filter by. "

```
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
```

```
            }
        },
        "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
        }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
    "type": "structure",
    "members": {
        "AmiId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
        },
        "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},

"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {

"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {

"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

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        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

      ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
                },
                {
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                        "url": {
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                        },
                        "properties": {},
                        "headers": {}
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                    "type": "endpoint"
                }
            ],
            "type": "tree"

        }
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    },
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        "conditions": [],
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            {
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                        "argv": [
                            {
                                "ref": "Region"
                            }
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                    {
                        "conditions": [
                            {

        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
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                        ],
                        "rules": [
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```
                    {
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                                "argv": [
                                    {

                            "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }

],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"

},
                                                    "supportsFIPS"
                                                ]
                                            }
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
```

"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
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"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [

```
                    {
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                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {

"fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true

                    ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
```

```
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                            "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
```

```
{
                                                "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
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                                "type": "tree"
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                            {
                                "conditions": [],
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                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
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                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
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                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
```

"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",

"expect": {
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"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

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"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"

```
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
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            "UseFIPS":
false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"

```
            }
        },
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {

            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {

 "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
```

```
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n

```
<p>\n <code>AccountID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>AmiID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>DualSubscription</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceType</code>\n </p>\n </li>\n <li>\n <p>\n
<code>ProductCode</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Region</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Status</code>\n </p>\n </li>\n <li>\n <p>\n
<code>UsageOperation</code>\n </p>\n </li>\n </ul>\n <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n <ul>\n <li>\n <p>\n
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
    "type": "structure",
    "members": {
        "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
        },
```

"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
```

"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {

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            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
```

"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "

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            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
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"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}

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            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
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"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"

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            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
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```
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
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"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",

"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}

```
   }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
"smithy": "2.0",
"shapes": {

"com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",

"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related

costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},

"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":

{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

```
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the

user. "
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": " Metadata that describes the associate user operation. ",
                    "smithy.api#required": {}
                }
            }
        },

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {

"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the
identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

```
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "Products": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                    "smithy.api#required": {}
                }
            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
```

"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "

```
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
```

"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"

```
            },
            {

    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",

          "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region":
```

```
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
```

```
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [
            {

                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
            },

"properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
```

```
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",

                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },

true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

"fn": "booleanEquals",
                                        "argv": [
```

```
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ]
            },

        {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }

        ]
            }
        ],
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }

    ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
```

both",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [

{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},

```
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"

}
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {

    "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

     }
                        ]
                    }
                ],
                "rules": [
```

```
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }

                                ],
                                        "type": "tree"
                                    },
                                    {
                                        "conditions": [],
                                        "error": "DualStack is enabled but this partition does not support DualStack",
                                        "type": "error"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                        "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}

```
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
```

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        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {

"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {

"UseFIPS": false,
"UseDualStack":
false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",

"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS \n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},

"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""

                },
                {
                    "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
            ]
```

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            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
            "type": "string",
            "traits": {
                "smithy.api#enum": [
                    {
                        "name": "HEALTHY",
                        "value": "HEALTHY",
                        "documentation": ""
                    },
                    {
                        "name": "UNHEALTHY",
                        "value": "UNHEALTHY",
                        "documentation": ""
                    },
                    {
                        "name": "NOT_APPLICABLE",
                        "value": "NOT_APPLICABLE",
                        "documentation": ""
                    }
                ]
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
            "type": "structure",
            "members": {
                "ServerType": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                    "traits": {
                        "smithy.api#documentation": "<p>The type of license server.</p>",
                        "smithy.api#required": {}
                    }
                },
                "ServerSettings": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                    "traits": {
                        "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                        "smithy.api#required": {}
                    }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
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"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
```

request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating.
This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions
operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {

```
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
```

```
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n        </li>\n        <li>\n            <p>Username</p>\n        </li>\n
<li>\n            <p>Domain</p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
```

},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},

"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to
register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",

"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
```

"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}

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            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
```

"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
```

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {

"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {

"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
              "namespace": "*"
          }
      ]
  },
  "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
          "type": "service",
          "version": "2018-08-01",
          "operations": [
              {
                  "target": "com.amazonaws.licensemanager#AcceptGrant"
```

```
        },

{
        "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CheckoutLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateGrant"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateGrantVersion"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
         },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateToken"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteGrant"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
        },
        {
```

"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},

{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
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"cloudFormationName": "LicenseManager",
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"endpointPrefix": "license-manager"
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"aws.auth#sigv4": {
"name": "license-manager"
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"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"required": true,
"default": false,
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"type": "Boolean"
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"UseFIPS": {
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"required": true,
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"documentation": "When true, send

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"type": "String"
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"supportsDualStack"

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            "UseFIPS": false,
            "UseDualStack": false
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but this partition does not support DualStack"
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"UseDualStack": true

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                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://example.com"
```

```
                }
            },
            "params": {
                "UseFIPS": false,

        "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
```

"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
```

```
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

      "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
```

```
            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
    }
},
"com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Arn"
    }
},
"com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
```

"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
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{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
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            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the account that created the license is the same that is performing the check out, you must\n            specify the account as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
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idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}

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            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PROVISIONAL"
                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
             }
        }
    },
```

"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {

"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
```

```
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "

```
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
 {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}

        }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
```

"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",

"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",

"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}

```
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
```

```
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
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"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members":
{
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {

"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":

"com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": " Indicates whether check-ins are allowed. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes a resource entitled for use with a license. "
    }
},
"com.amazonaws.licensemanager#EntitlementData": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement data name. ",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement
data value. "
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": " Entitlement data unit. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Data associated with an entitlement resource. "
    }
},
"com.amazonaws.licensemanager#EntitlementDataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
    }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
    "type": "enum",
    "members": {

"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}

```
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
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          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes/Second"
    }
},
"KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
    }
},
"MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
    }
},
"GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
     "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
    }
},
"TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
    }
},
"BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits/Second"
    }
},
"KILOBITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
    }
},
"MEGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
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"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
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},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},

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"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
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    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
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    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
```

```
        },
        "BYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
```

"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},

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            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

  }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {

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    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access
tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

        },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
```

"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}

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            },
            "ConsumedLicenseSummaryList": {
                "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
                }
            },
            "ManagedResourceSummaryList": {
                "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                 "traits": {
                    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            },
            "AutomatedDiscoveryInformation": {
                "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
                "traits": {
                    "smithy.api#documentation": "<p>Automated discovery information.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
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"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "

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            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
```

"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
        "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
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"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},

"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",

"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {

"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}

```
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
```

```
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
```

"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},

"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {

```
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

    },
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
      "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
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"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "

```
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },

    "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

       "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
```

},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

       "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
```

```
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#License"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
```

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            }
        },
        "MetadataList": {

            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
    }
},
"com.amazonaws.licensemanager#LicenseSpecification": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

            "smithy.api#required": {}
            }
        },
        "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
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    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

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            }
        }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

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            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
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configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

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      "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
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"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseConfigurationArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

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            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
 {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {

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        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
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        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
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"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "

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            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
```

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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n        recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n            </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n            </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n            </p>\n            </li>\n
<li>\n                <p>\n                <code>GrantStatus</code>\n            </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

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    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
            <li>\n                <p>\n                <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

```
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n

```
</li>\n <li>\n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
```

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        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n            <li>\n                <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n                <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is
<code>RDS</code>:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>License Pack</code> - The license
```

pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {

```
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
```

"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}

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            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {

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            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
```

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},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "

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        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
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"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
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"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
```

"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation":
" ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3794 github.com/aws/aws-sdk-go-v2/feature/ec2/imds 1.16.30

1.3794.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
```

```
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
```

```
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
```

```
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
```

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
```

```
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
```

```
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
```

```
//   - Fingerprint
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
```

DisassociateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}
```

```
func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

Initialize stack step
- spanInitializeStart
- RegisterServiceMetadata
- legacyEndpointContextSetter
- SetLogger
- OperationInputValidation
- spanInitializeEnd

Serialize stack step
- spanBuildRequestStart
- setOperationInput
- ResolveEndpoint
- OperationSerializer

Build stack step
- ClientRequestID
- ComputeContentLength
- SetCredentialSourceMiddleware
- UserAgent
- AddTimeOffsetMiddleware
- RecursionDetection
- spanBuildRequestEnd

Finalize stack step
- spanRetryLoop
- Retry
- RetryMetricsHeader
- ResolveAuthScheme
- GetIdentity
- ResolveEndpointV2
- disableHTTPS
- ComputePayloadHash
- setLegacyContextSigningOptions
- Signing

Deserialize stack step
- AddRawResponseToMetadata
- ErrorCloseResponseBody
- CloseResponseBody
- ResponseErrorWrapper

```
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
```

```
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
       "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
           "type": "integer"
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
           "type": "long"
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
           "type": "operation",
           "input": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
           },
           "output": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
           },
           "errors": [
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "

```
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
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"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},

"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux
subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",

"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

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            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
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                    "fn": "isSet",
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                            "ref": "Endpoint"
                        }
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                }
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            "rules": [
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                    "conditions": [
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                            "fn": "booleanEquals",
                            "argv": [
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                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

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                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
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                    "conditions": [],
                    "rules": [
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                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
```

```
                    },
                    true
                ]

}
                ],
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                "type": "error"
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                "conditions": [],
                "endpoint": {
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                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
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                "type": "endpoint"
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},
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    "conditions": [],
    "rules": [
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                    "fn": "isSet",
                    "argv": [
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                            "ref": "Region"
                        }
                    ]
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            "rules": [
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                    "conditions": [
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    "fn": "aws.partition",
                            "argv": [
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                "assign": "PartitionResult"
            }
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        "rules": [
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                "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
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                      "ref": "UseFIPS"
                            },
                            true
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }

],
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                    {
                        "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"

},
                                            "supportsFIPS"
                                        ]
                                    }
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```
                    ]
                },
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                    "fn": "booleanEquals",
                    "argv": [
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                            "fn": "getAttr",
                            "argv": [

                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [],

        "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
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            "type": "tree"
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            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

            "type": "error"
        }
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"type": "tree"
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"ref": "UseFIPS"
},
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]
}
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"rules": [
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"conditions": [
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"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
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]
}
],
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"conditions": [],
"rules": [
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"conditions": [],
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"properties": {},
"headers": {}

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    "conditions": [],
    "error": "FIPS is enabled
but this partition does not support FIPS",
    "type": "error"
}
],
"type": "tree"
},
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"conditions": [
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        "fn": "booleanEquals",
        "argv": [
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                "ref": "UseDualStack"
            },
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        "conditions": [
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                "argv": [
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                        "fn": "getAttr",
                        "argv": [
                            {

                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }
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                    "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                    ],
                    "type": "tree"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "DualStack is enabled but this partition does not support DualStack",
            "type": "error"
        }
    ],
    "type": "tree"
},
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    "conditions": [],
    "rules": [
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            "conditions": [],
            "endpoint": {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
```

```
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                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
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        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

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        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{

    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
```

}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"

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                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
        {
          "name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled LinuxSubscriptionsDiscovery"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
      "SourceRegions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
        "traits": {
          "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "OrganizationIntegration": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
        "traits": {
          "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
          "smithy.api#required": {}
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {

"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
```

"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",

"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"

```
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
```

```
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "

}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {

"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
```

"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web
Services resource. ",
"smithy.api#http": {
"method": "DELETE",

"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

```
        },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
             "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target":
 "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
             "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }

       },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
```

```
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string
```

```
// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
```

"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":

```
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
```

"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",

"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#Directory": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/DisassociateUser"
      },
      "smithy.api#idempotent": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
```

"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}

```
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},

"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                 }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
```

"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"

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    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
```

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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
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"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"

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                        },
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            "type": "error"
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            "type": "error"
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            "conditions": [],
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                    "ref": "Endpoint"
                },

"properties": {},
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            "type": "endpoint"
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                            "fn": "aws.partition",

                        "argv": [
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                            "assign": "PartitionResult"
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                                        },
                                        true
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                                    "argv": [
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                                            "ref": "PartitionResult"
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                                        "supportsFIPS"
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                                }
                            ]
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                                        "supportsDualStack"
                                    ]
                                }

            ]
                        }
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                    "rules": [
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                            "endpoint": {
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
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                    "type": "endpoint"
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                "type": "error"
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        "type": "tree"
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                "argv": [

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                    "ref": "UseFIPS"
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                true
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                        "argv": [
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                                "fn": "getAttr",
                                "argv": [

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                                "supportsFIPS"
                            ]
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                            true
                        ]
                    }
```

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                    ],
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                                "headers": {}
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                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
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                "type": "tree"
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                            },
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                        ]
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                                        "fn": "getAttr",
                                        "argv": [
                                            {
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"ref": "PartitionResult"
},
"supportsDualStack"
]

}
]
}
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"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}

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"type": "tree"
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"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
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"type": "tree"
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"type": "tree"

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            },
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              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
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        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
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                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
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"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS":
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"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {

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"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
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"params": {
"Region": "cn-north-1",
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
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},
"params": {
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"UseDualStack": true
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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}
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"params": {
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"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
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"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}

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            },
            {
              "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
              "expect": {
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                  "url": "https://example.com"
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              },
              "params": {
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
              }
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            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
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"version": "1.0"
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}
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "

```
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

    "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
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                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
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"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{

```
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

        },
        {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
        }
    ]
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
        {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
        },
        {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
        },
        {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
        }
    ]
  }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
  "type": "structure",
  "members": {
    "ServerType": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
        "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
```

"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n            <li>\n                <p>Product</p>\n            </li>\n
        <li>\n                <p>DirectoryId</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
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"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },

        "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                 "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
```

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
```

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't

empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

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    }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {

     "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-

\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",

"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",

"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",

"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
           {
               "id": "HttpHeaderTrait",
               "namespace": "*"
           },
           {
               "id": "HttpUriConflict",
               "namespace": "*"
           },
           {
               "id": "Service",
```

```
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
```

"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},

```
            {
                "target": "com.amazonaws.licensemanager#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                 "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            },
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
```

"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

```
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {

"conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                     },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
```

```
                    {
                     "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                    }
                  ],
                  "type": "tree",
                  "rules": [
                    {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref":
"UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
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                       "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
```

"supportsFIPS"
]

}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [

```
            {
              "fn": "booleanEquals",

        "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,

{
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                }
              ],
              "type": "tree",
              "rules": [

{
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ]
            },
            {
              "conditions": [],
```

"error": "FIPS is enabled but this
partition does not support FIPS",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

```
                    },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
             "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"Region": "af-south-1",
"UseFIPS": false,
"UseDualStack": false
}
```

```
},
{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
```

"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {

"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-west-2.amazonaws.com"
}
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"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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}
},
"params": {
"Region": "us-west-2",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

}
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
             }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
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        },

    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
          }
         },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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      {
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"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
          }
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            },
            "params": {
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              "UseFIPS": true,
              "UseDualStack": false
            }
          },
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            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
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              }
            },

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              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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      },

    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },

  "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {

"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},

"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time that automated discovery last ran. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes automated discovery. "
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }

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    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
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```
        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
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"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
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"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

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                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

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    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

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        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
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                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
```

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        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

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            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
```

<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
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```
            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
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{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

  }
            },
            "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

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            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
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"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
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grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

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    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},

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    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Bytes"
                }
            },
            "KILOBYTES": {
                "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
```

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                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
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"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
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"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

```
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

},
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

```
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
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"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

```
            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

      },
        "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {

  "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
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"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

```
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

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                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with
the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

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            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
```

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
        {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

```
{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                    <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                    <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
```

```
</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:  <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
         "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
        },
```

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

```
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
```

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            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
},
"com.amazonaws.licensemanager#ReportFrequency": {
    "type": "structure",
    "members": {
        "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
                "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
        },
        "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

            "traits": {
                "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Details about how frequently reports are generated. "
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the report generator. "
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": " Type of reports that are generated. "
                }
            },
            "ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

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{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

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            }
        },
        "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }
        }
    },
    "traits": {

      "smithy.api#documentation": "<p>Describes a token.</p>"
    }
  },
  "com.amazonaws.licensemanager#TokenList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#TokenData"
    }
  },
  "com.amazonaws.licensemanager#TokenString": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 4096
        },
        "smithy.api#pattern": "^\\S+$"
    }
  },
  "com.amazonaws.licensemanager#TokenType": {
    "type": "enum",
    "members": {
        "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REFRESH_TOKEN"
            }
        }
    }
```

},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3795 aws-sdk-go-v2-service-internal-presigned-url 1.12.15

1.3795.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
```

```
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CreateLicenseInput struct {

// License beneficiary.
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
```

```
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
```

```
 return nil, err
}

out := result.(*ListLicensesOutput)
out.ResultMetadata = metadata
return out, nil
}

type ListLicensesInput struct {

// Filters to scope the results. The following filters are supported:
//
//   - Beneficiary
//
//   - ProductSKU
//
//   - Fingerprint
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack);
err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
```

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

```
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
```

```
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
```

```
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
```

resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"

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        }
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    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
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"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "

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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
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"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}

},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance

details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux

subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"

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            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
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                "conditions": [
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                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
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                                ]
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```

```
],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
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                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
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                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

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            "conditions": [],
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                {
                    "conditions": [
                        {
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                "argv": [
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                    "ref": "Region"
                  }
                ]
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            ],
            "rules": [
              {
                "conditions": [
                  {

        "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {

                      "ref": "UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }

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                    "rules": [
                      {
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"

},
"supportsFIPS"
]
}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"

}
],

"type": "tree"
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"type": "tree"
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"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
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"rules": [
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"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true

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                    ]
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                            "conditions": [],
                            "rules": [
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                                    "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
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                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

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            ],
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

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],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},

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                    {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
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                          "type": "endpoint"
                        }
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                      "type": "tree"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ],
          "type": "tree"
        }
      ]
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}

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            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
             },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"

```
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {

       "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
```

"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",

"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n <li>\n            <p>\n                <code>Subscription</code>\n            </p>\n        </li>\n        </ul>\n <p>The
 valid Operators for this filter are:</p>\n        <ul>\n        <li>\n            <p>\n <code>contains</code>\n            </p>\n        </li>\n        <li>\n            <p>\n <code>equals</code>\n            </p>\n        </li>\n        <li>\n            <p>\n <code>Notequal</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
```

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
```

"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":

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{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

```
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}

```
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
```

```
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
```

"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

```
        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {
```

```
 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
GetLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains

details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {

"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"

},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS)

license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

 }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {

"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},

"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
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"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

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    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
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"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
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"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
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    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
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            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
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            "content-type",
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            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
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"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

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        "type": "String"
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    "rules": [
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        "conditions": [
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            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
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            "type": "error"
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          {
            "conditions": [
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                "argv": [
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                    "ref": "UseDualStack"
                  },
                  true
                ]
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            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
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        "type": "tree"
    },
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                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
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                     "argv": [
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                                "ref": "Region"
                            }
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                        "assign": "PartitionResult"
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                "rules": [
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                        "conditions": [
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                                "argv": [
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                                    },
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true
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                                        },
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                                                    "argv": [
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                                                            "ref": "PartitionResult"
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                                            ]
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                                                            "ref": "PartitionResult"
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                                                        "supportsDualStack"
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                    ]
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
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                            "type": "endpoint"
                        }

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                    "conditions": [],
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both",
                    "type": "error"
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            "type": "tree"
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                    "argv": [

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                            "fn": "booleanEquals",
                            "argv": [
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"ref": "PartitionResult"

},

"supportsFIPS"

]

},

true

]

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"rules": [

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"headers": {}

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"type": "endpoint"

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"type": "tree"

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"type": "error"

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"type": "tree"

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"conditions": [

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"fn": "booleanEquals",

"argv": [

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"ref": "UseDualStack"

},

true

]

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"fn": "getAttr",
"argv": [
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

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"error": "Invalid Configuration: Missing Region",
"type": "error"
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"smithy.rules#endpointTests": {
"testCases": [
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
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"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
},
"params": {
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"UseFIPS": true,
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                }
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              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
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            },
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              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
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                  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
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              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
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              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
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                "UseFIPS":
true,
                "UseDualStack": true
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            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
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            }
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            }
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        "params": {
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        "expect": {
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            }
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            "UseFIPS": true,
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"UseDualStack": false
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"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
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"url": "https://example.com"
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"params": {
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"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
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"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
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"version": "1.0"
}
}
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {

"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
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"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "

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                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

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        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
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            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
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            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
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          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

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          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
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    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
    }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
    "type": "list",
    "member": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings
for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n            <li>\n                <p>Product</p>\n            </li>\n
        <li>\n                <p>DirectoryId</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
```

\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next
token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100

```
                }
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
    "type": "structure",
    "members": {
        "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
    "type":
```

"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":

{
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating.
This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",

"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

            }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

        "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
```

```
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
        },
        "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
    "type":
 "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
    "type": "structure",
    "members": {
        "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
```

"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":

" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",

"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",

"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation":
" The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

        }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

     "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
```

"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security
group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}

```
      }
    }
  }
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

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```
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
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            "id": "PaginatedTrait",
            "namespace": "*"
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        {
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            "namespace": "*"
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            "id": "HttpUriConflict",
            "namespace": "*"
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            "id": "Service",
            "namespace": "*"
        }
    ]
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"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
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                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
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                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
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"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
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"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
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"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
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"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
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"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},

{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
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},
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},
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"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
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"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

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"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
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},
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"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"

```
            },
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            {
                "target": "com.amazonaws.licensemanager#ListTokens"
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                "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
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            },
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                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
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                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
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                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
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            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
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        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
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"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
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"fn": "isSet",
"argv": [
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"ref": "Endpoint"
}
]

}
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                    ]
                  }
                ],
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                "type": "error"
              },
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                "type": "error"
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},
"supportsFIPS"
]

}
]
},
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"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
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"conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"

```
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            },
            {
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                "type": "error"
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    {
        "conditions": [
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                    true
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{
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                                },
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```

```
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                            "headers": {}
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                ]
            },
            {
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partition does not support FIPS",
                "type": "error"
            }
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        "conditions": [
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                "argv": [
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"supportsDualStack"
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```

```
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                            }
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                                    "headers": {}

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                                "type": "endpoint"
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                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
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                ]
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                "conditions": [],
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                "type": "endpoint"
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        ]
    }
]
},
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    "conditions": [],
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    "type": "error"
}
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"smithy.rules#endpointTests": {
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          "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
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            }
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          "params": {
            "Region": "af-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-east-1.amazonaws.com"
            }
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          "params": {
            "Region": "ap-east-1",
            "UseFIPS": false,
            "UseDualStack": false
           }
        },
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          "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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          "params": {
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"params": {
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"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
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"params": {
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"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
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{
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"expect": {
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"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {
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"UseDualStack": false
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"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,

"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
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},
"params": {
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"UseFIPS": false,
"UseDualStack": false
}
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}
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"params": {

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"UseFIPS": true,
"UseDualStack": false
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}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false

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            }
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            "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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            "params": {
                "Region": "us-west-2",
                "UseFIPS": true,
                "UseDualStack": false
            }
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            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
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            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
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        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url":
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"https://license-manager.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}

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    },
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      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },

  {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
       },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
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"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}

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        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },

      {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },

    "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
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"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
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"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}

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            },
            "CHECKOUT_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutLicense"
                }
            },
            "CHECKOUT_BORROW_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutBorrowLicense"
                }
            },
            "CHECK_IN_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckInLicense"
                }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ExtendConsumptionLicense"
                }
            },
            "LIST_PURCHASED_LICENSES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
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"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "

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            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }

},
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
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"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}

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            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
```

"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {

"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {

"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}

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        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
         }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
```

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        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
```

```
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n
<ul>\n
            <li>\n                <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                    "smithy.api#required": {}
                }
```

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        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
```

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{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
```

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    },
    "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
        }
    },
    "GrantName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
        }
    },
    "AllowedOperations": {
        "target": "com.amazonaws.licensemanager#AllowedOperationList",
        "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
         "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "StatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
        }
    },
    "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
        }
    },
    "Options": {
        "target": "com.amazonaws.licensemanager#Options",
        "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
        }
    }
},
 "traits": {
    "smithy.api#input": {}
}
```

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    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the grant.</p>"
          }
        }
      },
      "traits":
{
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
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all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |

<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {

            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
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"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",

```
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
```

"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {

"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target":
"com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
```

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for

workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT

token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation":
"<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
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"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {

"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
```

"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},

"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},

"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {

"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {

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            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

           "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"

},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": "<p>Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access

tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},

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    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
```

```
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
```

```
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {

"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "

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                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
                }
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
```

configurations. "
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

 "smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " License version. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": " License details. "
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

   "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {

"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {

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            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
```

"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",

"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

},
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#IssuerDetails",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license issuer.</p>"
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

             }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license status.</p>"
                }
```

},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {

"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},

"com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
},
"com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Issuer name. ",
                "smithy.api#required": {}
            }
        },
        "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "

```
                }
            },
            "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
```

"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}

```
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the license configuration.</p>"
        }
    },
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

   }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
        }
    },
    "ManagedResourceSummaryList": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
        }
    },
    "ProductInformationList": {
        "target": "com.amazonaws.licensemanager#ProductInformationList",
        "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
        }
    },
    "AutomatedDiscoveryInformation": {

        "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
        "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
```

agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},

"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
```

```
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
    "type": "string",
    "traits": {

   "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConversionTask"
}
},
"com.amazonaws.licensemanager#LicenseCountingType": {
"type": "enum",
"members": {
"VCPU": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "vCPU"
}
},
"INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Instance"
}
},
"CORE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Core"
}
},
"SOCKET": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Socket"
}
}
}

```
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
```

"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",

"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {

"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
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<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n              <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n              Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

          "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your

account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}

```
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
```

```
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {

"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while

specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}

```
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
      <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

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},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
```

"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100

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        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
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"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>. \n \n \n
\n <code>Application Publisher</code> - The publisher of the application.\n Logical

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

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        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
     }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
```

```
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
```

```
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
```

"members": {
"Location": {
"target": "com.amazonaws.licensemanager#Location",
"traits": {
"smithy.api#httpHeader": "Location"
}
},
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " This is not the correct Region for the resource. Try again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#RejectGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
```

{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

```
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
```

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report

generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}

```
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
```

"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

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"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096

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            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
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        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
"com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>One or more tags.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#TagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#TokenData": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
```

format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {

"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
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"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
```

update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
```

```
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3796 github.com/aws/aws-sdk-go-v2/internal/configsources 1.3.34

1.3796.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter
```

```
 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
```

```
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
```

DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

```
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string
```

```
 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
```

```
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string
```

```
 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string
```

```
 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
```

```
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
```

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},

"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",

"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"
},
"smithy.api#idempotent": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has
been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being
applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings
current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated
data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",

"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {

"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},

```
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager,
```

you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{

```
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
```

```
    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                  "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }

    ],
                "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"

        },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [

                                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
```

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
{

```
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true

                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS is enabled
 but this partition does not support FIPS",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
```

```
                    {
                        "ref": "UseDualStack"
                    },
                    true

                ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

{
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"

                }
                    ],
```

"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true

}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}

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                },
                {

                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {

"Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
                ],
                "version": "1.0"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled LinuxSubscriptionsDiscovery"
```

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
      <code>AmiID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Region</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Status</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n            <li>\n            <p>\n
<code>contains</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>equals</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n            </li>\n        </ul>"
```

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The

valid Operators for this filter are: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration
resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to
return \n\t\t\tin the list. "

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }

  },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
            }
          },

           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",

"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {

"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":

{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",

```
    "traits": {
        "smithy.api#enum": [
            {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
```

"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

{
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

 "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
```

```
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
```

"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string
```

```
 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
```

```
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
```

```
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },

"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
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"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2

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                }
            }
        },
        "DomainCredentialsProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
        },
        "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
    }
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"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
    }
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},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
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"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider
specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>
resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
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"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
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"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
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"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {

"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",

"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}

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            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
```

\n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}

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},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
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            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
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"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {

"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},

"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
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"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
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{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
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"conditions": [
{

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                  },
                  true
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              }
            ],
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            "type": "error"
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            "conditions": [],
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                "ref": "Endpoint"
              },

"properties": {},
              "headers": {}
            },
            "type": "endpoint"
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                "fn": "aws.partition",

              "argv": [
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                    "ref": "Region"
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                ],
                "assign": "PartitionResult"
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        "rules": [
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                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },

true
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
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                "rules": [
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"fn": "booleanEquals",
                                "argv": [
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                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    }
                                ]
                            },
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                        "argv": [
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                                "argv": [
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                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

                ]
                    }
                ],
                "rules": [
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                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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                "type": "tree"
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            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
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        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
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{
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                            },
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                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [

                {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
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                            ]
                            }
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                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

  }
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                "conditions": [
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                            },
                            true
                        ]
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                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
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                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

}
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                            }
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
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                    ],
                        "type": "tree"
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                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
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{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
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"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
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"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
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"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
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"params": {
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"UseDualStack": false
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"

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                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false

    }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},

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{
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  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
  "expect": {

 "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack":
false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
  "expect": {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
  },
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},

"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "

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            }
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        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
 {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },

        "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
    "type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
},
```

"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""

},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},

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                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}

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    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n
        <li>\n                <p>InstanceId</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
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token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",

"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
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provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

         }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

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},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
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"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {

"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits":
 {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

   "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

"target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
```

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity

provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},

"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
 {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
```

to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration

settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " A parameter is not valid. ",
          "smithy.api#error": "client"
        }
      }
    }
}

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ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step

```
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
```

```
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
```

}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
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          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

{
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutLicense"

```
    },
    {
      "target": "com.amazonaws.licensemanager#CreateGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateGrantVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
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      "target": "com.amazonaws.licensemanager#DeleteGrant"
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    },
    {
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    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
```

"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},

```
    {
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    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListResourceInventory"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTokens"
    },
    {
      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#RejectGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
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  "traits": {
    "aws.api#service": {
```

"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

```
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            "fn": "isSet",
            "argv": [
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              }
            ]

        }
        ],
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        "rules": [
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            "conditions": [
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                "fn": "booleanEquals",
                "argv": [
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                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {

"conditions": [
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                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
```

```
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                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          },
          {
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                "fn": "isSet",
                "argv": [
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                    "ref": "Region"
                  }
                ]
              }
            ],
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                "conditions": [
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                    "argv": [
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                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
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                "rules": [
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                    "conditions": [
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                        "argv": [
                          {
                            "ref":
"UseFIPS"
                          },
```

```
                    true
                ]
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            {
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                "argv": [
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                    },
                    true
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            }
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                                "argv": [
                                    {
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                                    },
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                                ]

                }
                        ]
                    },
                    {
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                        "argv": [
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },

"supportsDualStack"
                                ]
                            }
                        ]
```

```
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}

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                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ]
    },
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        "conditions": [
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                "fn": "booleanEquals",

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                    },
                    true
                ]
            }
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                "conditions": [
                    {
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                        "argv": [
                            true,
```

```
{
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                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ],
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        "rules": [

{
            "conditions": [],
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              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
      {
        "conditions": [],
        "error": "FIPS is enabled but this
partition does not support FIPS",
        "type": "error"
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "type": "tree",
```

```
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                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

"supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [],
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

                },
                        "type": "endpoint"
                      }
                    ]
                  },
                  {
                    "conditions": [],
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                    "type": "error"
                  }
                ]
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                   "properties": {},
                  "headers": {}
```

```
                    },
                    "type": "endpoint"
                }
            ]
        }
    ]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
             }
        },
        {
            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
```

```
            }
        },
        "params": {
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            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }

},
    {
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            }
        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
```

```
        {
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}
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          "params": {
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            "UseFIPS": false,
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            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
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          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
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"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.eu-central-1.amazonaws.com"
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"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
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"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
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            "endpoint": {
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          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
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          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
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          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
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          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
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          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
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"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
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"params": {

"Region": "us-west-1",
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"UseDualStack": false
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"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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"Region": "us-west-2",
"UseFIPS": false,
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"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
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"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
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            "UseFIPS": true,
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        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
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        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
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            }
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        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
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"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
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"params": {
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"UseDualStack": false
}
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"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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}
},

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"UseDualStack": true

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            "expect": {
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                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
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"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": true
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"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseFIPS": true,
"UseDualStack": true
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"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

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                        "UseDualStack": false
                    }
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                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
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                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                        "endpoint": {
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                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
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                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
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                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                },
                {
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
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            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"

}
    ],
    "traits": {
        "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant
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ARN. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": " Grant status. "
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Grant version. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": " Access to resource denied. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
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"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
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"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
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"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
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"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
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"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

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},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
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    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
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    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the
account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
```

```
"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

```
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

   "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
     "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

```
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

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            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
                }
```

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            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
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    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

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            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

  "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
```

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

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            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

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            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Seconds"
            }
        },
        "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
             }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

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            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
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        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
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"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

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        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

```
        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

   },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }

```
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

```
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                 }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

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    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

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            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
```

"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

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        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

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            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

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        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

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    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
  </li>\n  <li>\n  <p>\n  <code>application_name</code> - The name of the application. \n  Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
  </li>\n  <li>\n  <p>\n  <code>license_included</code> - The type of license included. \n
  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n  Possible values are <code>sql-server-enterprise</code> | \n  <code>sql-server-standard</code> | \n  <code>sql-server-web</code> |  \n  <code>windows-server-datacenter</code>.</p>\n  </li>\n  <li>\n
  <p>\n  <code>platform</code> - The platform of the resource.\n  Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n  </li>\n  <li>\n  <p>\n
  <code>resource_id</code> - The ID of the resource. \n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  <li>\n  <p>\n
  <code>tag:<key></code> - The key/value combination of a tag assigned \n  to the resource. Logical operators are <code>EQUALS</code> (single account) or\n  <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n  </li>\n  </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

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    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}

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        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}

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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.3797 x-net 0.36.0

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1.3798 github.com/azuread/microsoft-authentication-library-for-go 1.3.3

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1.3799 github.com/puzpuzpuz/xsync/v3 3.5.1

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1.3800 xsync 3.5.1

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1.3801 x-sys 0.31.0

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1.3802 go-jose 4.0.5

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1.3803 xfsprogs 6.6.0-1ubuntu2.1

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1.3804 go-restful 3.12.2

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1.3805 golang 1.24.1

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```
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package copyright

import (
 "bytes"
 "internal/testenv"
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
```

```
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
   return filepath.SkipDir
  }
  switch filepath.Ext(d.Name()) {
  default:
   return nil
  case ".s", ".go":
   // check
  }

  f, err := os.Open(path)
  if err != nil {
   t.Error(err)
   return nil
  }
  defer f.Close()
  n, err := f.Read(buf)
  if err != nil && err != io.EOF {
   t.Error(err)
   return nil
  }
  b := buf[:n]
  if bytes.Contains(b, copyright) {
   return nil
  }
  for _, ok := range permitted {
   if bytes.HasPrefix(b, ok) {
    return nil
   }
  }
  t.Errorf("%s: missing copyright notice", path)
  return nil
 })
}
```

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package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
```

```
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:              newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:              newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}
```

```
// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                    *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete            *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate            *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }
```

```
 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
```

```
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
```

```
 return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
```

```
 return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}
```

```
func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
```

```
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
```

```
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
```

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// +build go1.18

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```
// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
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package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
```

```
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
```

```
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
```

```
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
```

```
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
```

```
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
```

```
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
```

```
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2023-06-20-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
```

```
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
```

```
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
```

```
 return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
```

```
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
```

```
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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//go:build go1.18
// +build go1.18

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package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
```

```
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //
    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
```

```
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
"{licenseName}", armhybridcompute.License{
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
```

```
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
```

```
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
```

```
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
```

```
cred, err := azidentity.NewDefaultAzureCredential(nil)
if
err != nil {
 log.Fatalf("failed to obtain a credential: %v", err)
}
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
for pager.More() {
 page, err := pager.NextPage(ctx)
 if err != nil {
  log.Fatalf("failed to advance page: %v", err)
 }
 for _, v := range page.Value {
  // You could use page here. We use blank identifier for just demo purposes.
  _ = v
 }
 // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // page.LicensesListResult = armhybridcompute.LicensesListResult{
 //  Value: []*armhybridcompute.License{
 //   {
 //    Name: to.Ptr("{licenseName}"),
 //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
}
```

```
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //
```

```
    },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}
```

1.3807 go-jose-go-jose 3.0.4

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1.3808 configparser 7.2.0

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work, in isolation, is not a derivative work of the Library, and
therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library
creates an executable that is a derivative of the Library (because it
contains portions of the Library), rather than a "work that
uses the
library". The executable is therefore covered by this License.
Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file
that is part of the Library, the object code for the work may be a
derivative work of the Library even though the source code is not.
Whether this is true is especially significant if the work can be

linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the
object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany
the work with the complete corresponding
machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2)

will operate
properly with a modified version of the library, if
the user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at
least three years, to give the same user the materials
specified in Subsection 6a, above, for a charge no more
than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy
from a designated place, offer equivalent access to copy the above
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e) Verify that the user has already received a copy of these
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For an executable, the required form of the "work that uses the
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reproducing the executable from it. However, as a special exception,
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normally
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components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
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It may happen that this requirement contradicts the license
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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to

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5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

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When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables
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1.3812 x-mod 0.24.0

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1.3813 stdlib go1.24.1

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package copyright

import (
 "bytes"
 "internal/testenv"
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
```

```
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
   return filepath.SkipDir
  }
  switch filepath.Ext(d.Name()) {
  default:
   return nil
  case ".s", ".go":
   // check
  }

  f, err := os.Open(path)
  if err != nil {
   t.Error(err)
   return nil
  }
  defer f.Close()
  n, err := f.Read(buf)
  if err != nil && err != io.EOF {
   t.Error(err)
   return nil
  }
  b := buf[:n]
  if bytes.Contains(b, copyright) {
   return nil
  }
```

```
  for _, ok := range permitted {
   if bytes.HasPrefix(b, ok) {
    return nil
   }
  }
  t.Errorf("%s: missing copyright notice", path)
  return nil
 })
}
```

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1.3814 go-internal 1.14.1

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1.3815 x-sync 0.12.0

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1.3816 requests-unixsocket 0.4.1

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1.3817 libxml2 2.13.4-r5

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pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
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"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html

```
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}

build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
```

```
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
# Contributor: Dhruvin Gandhi <contact@dhru.vin>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
cc7cd6b5bd8ea4c99b66f074871ffd7cc78b3e8b1b0d3afd9b95efdb7147c8293db2fac977d684fc34d3d60bd79066a06
dc2bff0a38b130d9d83c63538502db1
```

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1.3818 x-net 0.37.0

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1.3819 term 0.30.0

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1.3822 x-oauth2 0.28.0

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1.3823 x-crypto v0.36.0

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1.3824 kubernetes-component-base 0.32.2

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1.3825 k8s-io-apiextensions-apiserver 0.32.2

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name: Reusable license checker

on:
 workflow_call:
```

```
jobs:
 check-license:
   runs-on: ubuntu-latest
   steps:
     - name: Checkout
       uses: actions/checkout@v4
     - name: Check license header
       uses: apache/skywalking-eyes/header@cd7b195c51fd3d6ad52afceb760719ddc6b3ee91

       with:
         mode: check
         config: .github/licenserc.yml
     - name: Check dependencies license
       uses:
 apache/skywalking-eyes/dependency@cd7b195c51fd3d6ad52afceb760719ddc6b3ee91
       with:
         config: .github/licenserc.yml
         flags:
           --weak-compatible=true
```

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 push:
   branches:
     - main
     - release-*
 pull_request:
   branches:
     - main
     - release-*

permissions:
 contents: write
 pull-requests: write

jobs:
 check-license:
   uses: notaryproject/notation-core-go/.github/workflows/reusable-license-checker.yml@main
```

1.3834 docker 27.5.0+incompatible

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// OtherLicense is an Other License Information section of an
// SPDX Document for version 2.2 of the spec.
type OtherLicense struct {
 // 10.1: License Identifier: "LicenseRef-[idstring]"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseIdentifier string `json:"licenseId"`

 // 10.2: Extracted Text
 // Cardinality: conditional (mandatory, one) if there is a
 //              License Identifier assigned
 ExtractedText string `json:"extractedText"`

 // 10.3: License Name: single line of text or "NOASSERTION"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseName string `json:"name,omitempty"`

 // 10.4: License Cross Reference
 // Cardinality: conditional (optional, one or many) if license
 //              is not on SPDX License List
 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 //
 10.5: License Comment
 // Cardinality: optional, one
 LicenseComment string `json:"comment,omitempty"`
}
```

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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type OtherLicense struct {
 // 6.1: License Identifier: "LicenseRef-[idstring]"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseIdentifier string `json:"licenseId"`

 // 6.2: Extracted Text
 // Cardinality: conditional (mandatory, one) if there is a
 //              License Identifier assigned
 ExtractedText string `json:"extractedText"`

 // 6.3: License Name: single line of text or "NOASSERTION"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseName string `json:"name,omitempty"`

 // 6.4: License Cross Reference
 // Cardinality: conditional (optional, one or many) if license
 //              is not on SPDX License List
 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 // 6.5:
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 // Cardinality: optional, one
 LicenseComment string `json:"comment,omitempty"`
}
```

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 LicenseIdentifier string `json:"licenseId"`

 // 10.2: Extracted Text
 // Cardinality: conditional (mandatory, one) if there is a
 //		License Identifier assigned
 ExtractedText string `json:"extractedText"`

```
 // 10.3: License Name: single line of text or "NOASSERTION"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseName string `json:"name,omitempty"`

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 // Cardinality: conditional (optional, one or many) if license
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 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 // 10.5: License Comment
 // Cardinality:
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 LicenseComment string `json:"comment,omitempty"`
}
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github.com/pelletier/go-toml:

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localtime.go, localtime_test.go:

Originals:
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Changes:
* Renamed files from civil* to localtime*.
* Package changed from civil to toml.
* 'Local' prefix added to all structs.
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1.3841 go.opentelemetry.io/collector/confmap/provider/fileprovider 1.26.0

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1.3842 github.com/jsimonetti/rtnetlink/v2 2.0.2

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1.3844 github.com/mdlayher/ethtool 0.2.0

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1.3846 npm-package-arg 12.0.2

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1.3848 jinja 3.0.3-1ubuntu0.4

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1.3849 genproto-googleapis-api 0.0.0-20250303144028-a0af3efb3deb

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1.3850 grpc-gateway 2.26.3

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1.3851 github.com/grpc-ecosystem/go-grpc-middleware/v2 2.3.1

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1.3852 genproto-googleapis-rpc 0.0.0-20250303144028-a0af3efb3deb

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1.3857 github.com/grpc-ecosystem/grpc-gateway/v2 2.26.3

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1.3858 go.mongodb.org-mongo-driver 1.17.3

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BSON library for Go

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1.3859 x-crypto 0.36.0

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1.3860 curl 8.12.1-r1

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1.3861 snappy 1.0.0

1.3862 otel-metric 1.35.0

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Found in path(s):
* /time-refs-tags-v0-11-0-rate-tar-gz/sometimes_test.go
* /time-refs-tags-v0-11-0-rate-tar-gz/sometimes.go

1.3868 go-etcd-io-bbolt 1.4.0

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1.3869 go.opentelemetry.io/otel/trace 1.35.0

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1.3870 curl 7.88.1-10+deb12u12

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1.3871 golang-genproto 0.0.0-20250303144028-a0af3efb3deb

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1.3872 structured-merge-diff 4.6.0

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1.3873 google-cloud-go-iam 1.4.1

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//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
```

```
 }
}
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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.UpdateLicensePoolRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
}
resp, err := c.UpdateLicensePool(ctx, req)
if err != nil {
 // TODO: Handle error.
}
//
TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.GetOperationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
}
resp, err := c.GetOperation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

```
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
 //
TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
}
op, err := c.Delete(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
```

```
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
```

```
ExampleLicensesClient_SetIamPolicy() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically
generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
```

_ = resp
}
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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete          []gax.CallOption
 Get             []gax.CallOption
 GetIamPolicy    []gax.CallOption
 Insert          []gax.CallOption
```

```
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
```

```
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
```

```
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}
```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.

```
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
```

```
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
```

```
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
```

```
 req.MaxResults = proto.Uint32(uint32(pageSize))
}
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, "", err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.Filter != nil {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req != nil && req.MaxResults != nil {
 params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
}
if req != nil && req.OrderBy != nil {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req != nil && req.PageToken != nil {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}
if req != nil && req.ReturnPartialSuccess != nil {
 params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from
client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }
```

```
  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
```

```
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
```

```
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
```

```
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
//
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"
```

```
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
```

```
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
```

```
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
```

```
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
```

```
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
```

0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
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0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
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0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,

```
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
```

```
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
```

```
package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
```

```
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}
```

```
// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
```

```
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string
```

```
 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
     connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}
```

```
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
```

```
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
```

```
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}
```

```
func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
```

```
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
```

```
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
```

```
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
```

```
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
```

```
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
```

```
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
```

```
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }
```

```
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
```

```
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}
```

```
func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
```

```
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
```

```
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
```

```
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
```

0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,

```
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
```

```
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)
```

```
func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
```

```
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
```

```
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
```

```
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
```

```
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
```

```
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
```

```
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
```

```
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
```

```
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
```

```
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}
```

```
func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}
```

```
func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
```

```
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}
```

```
func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
```

```
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x64,
 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
 0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
```

0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73,
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,
0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79,
0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75,
0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65,
0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
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0x74, 0x65, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x50, 0x3a, 0x0c, 0x6c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x32, 0x40, 0x2f, 0x76, 0x31,
0x2f, 0x7b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x2e, 0x6e,
0x61, 0x6d, 0x65, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75,
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0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x2f, 0x2a, 0x7d, 0x12, 0xdf, 0x01,
0x0a, 0x06, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65,
0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72,
0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52,
0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63,
0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73,
0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x58, 0xda, 0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x3f,
0x3a, 0x01, 0x2a, 0x22, 0x3a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73,
0x2f, 0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12,
0xe7, 0x01, 0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3f, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
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0x6f, 0x6e, 0x73, 0x65, 0x22, 0x5a, 0xda,
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0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x41, 0x3a, 0x01, 0x2a, 0x22, 0x3c, 0x2f, 0x76, 0x31,
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0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72,
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0x3a, 0x75, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x92, 0x02, 0x0a, 0x16, 0x45, 0x6e,
0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55,

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0x65, 0x6e,
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65,
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0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f,
0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
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0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,
0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```
var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
```

```
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
```

```
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
```

```
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
```

```
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
```

```
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
```

```
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
```

```
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}
```

```
var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
```

```
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}
```

```
//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
```

```
 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
```

```
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
```

```
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.3874 sigs.k8s.io-randfill 1.0.0

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1.3875 ibm-go-sdk-core 5.19.0

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src/gzip/zutil.h

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1.3884 libcurl 7.88.1-10+deb12u12

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1.3885 golang 1.24.1

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```
// Copyright 2024 The Go Authors. All rights reserved.
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package copyright

import (
 "bytes"
 "internal/testenv"
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
   return filepath.SkipDir
  }
  switch filepath.Ext(d.Name()) {
```

```
  default:
   return nil
  case ".s", ".go":
   // check
  }

  f, err := os.Open(path)
  if err != nil {
   t.Error(err)
   return nil
  }
  defer f.Close()
  n, err := f.Read(buf)
  if err != nil && err != io.EOF {
   t.Error(err)
   return nil
  }
  b := buf[:n]
  if bytes.Contains(b, copyright) {
   return nil
  }
  for _, ok := range permitted {
   if bytes.HasPrefix(b, ok) {
    return nil
   }
  }
  t.Errorf("%s: missing copyright notice", path)
  return nil
 })
}
```

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1.3894 protobuf-go 1.36.5

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1.3906 container-device-interface-specs-go 1.0.0

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1.3907 image-spec 1.1.1

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1.3908 kubernetes-cliruntime 0.32.2

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1.3909 kubernetes/kubectl 0.32.2

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1.3911 helm-helm 0.0.0-20250313161139-cc0bbbd6d627

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
```

```
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
```

```
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}
```

```
// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
```

```
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}
```

```
func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
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 0x4e,
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 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
```

```
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
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 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
```

```
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
```

```
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
```

```
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
```

```
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
```

```
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

// TODO: Use client.
_ = c
}

func ExampleLicensesClient_Delete() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
 //
TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
}
op, err := c.Delete(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
}
op, err := c.Insert(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_List() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template
only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
```

```
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
```

```
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
```

```
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
```

```
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}
```

```
// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
```

```
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
```

```
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client
and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf,
resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
```

```
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
```

```
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
```

```
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
```

```
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
```

Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
 {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from
 client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
  headers := gax.BuildHeaders(ctx, hds...)
  e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   if settings.Path != "" {
```

```
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
```

```
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err !=
nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
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```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
```

```
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
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```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
```

```
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
```

```
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}
```

```
// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient
```

```
 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
```

```
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
```

```
 return nil, err
}

callOpts := defaultLicenseManagementRESTCallOptions()
c := &licenseManagementRESTClient{
 endpoint:    endpoint,
 httpClient:  httpClient,
 CallOptions: &callOpts,
 logger:      internaloption.GetLogger(opts),
}
c.setGoogleClientInfo()

return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}
```

```
// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
```

```
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}
```

```
func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
```

```
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
```

```
 field, err := protojson.Marshal(req.GetUpdateMask())
 if err != nil {
  return nil, err
 }
 params.Add("updateMask", string(field[1:len(field)-1]))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers
:= gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.LicensePool{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
```

```
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
```

```
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
```

```
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
```

```
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
```

```
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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```

```
// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
```

```
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
```

```
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
```

```
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
```

```
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
```

```
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}
```

```
func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
```

```
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}
```

```
func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}
```

```
func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
```

```
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
```

```
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
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0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
```

```
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
```

-> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
0, // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
1, // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name -> google.cloud.commerce.consumer.procurement.v1.LicensePool
13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name -> google.protobuf.FieldMask
14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name -> google.protobuf.Timestamp
14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
-> google.protobuf.Timestamp
9, // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name -> google.cloud.commerce.consumer.procurement.v1.LicensedUser
15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:type_name -> google.protobuf.Duration
2, // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
3, // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type -> google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
4, // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type -> google.cloud.commerce.consumer.procurement.v1.AssignRequest
6, // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
-> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
8, // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_type -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
1, // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type -> google.cloud.commerce.consumer.procurement.v1.LicensePool
1, // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type -> google.cloud.commerce.consumer.procurement.v1.LicensePool
5, // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type -> google.cloud.commerce.consumer.procurement.v1.AssignResponse
7, // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type -> google.cloud.commerce.consumer.procurement.v1.UnassignResponse
10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_type
-> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
14, // [14:19] is the sub-list for method output_type
9, // [9:14] is the sub-list for method input_type
9, // [9:9] is the sub-list for extension type_name

```
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].OneofWrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
```

```
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
```

```
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
```

```
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
```

```
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}
```

```
func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
```

```
  MethodName: "GetLicensePool",
  Handler:    _LicenseManagementService_GetLicensePool_Handler,
 },
 {
  MethodName: "UpdateLicensePool",
  Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
 },
 {
  MethodName: "Assign",
  Handler:
   _LicenseManagementService_Assign_Handler,
 },
 {
  MethodName: "Unassign",
  Handler:    _LicenseManagementService_Unassign_Handler,
 },
 {
  MethodName: "EnumerateLicensedUsers",
  Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
 },
},
Streams:  []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)
```

```
// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32
```

```
const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
```

```
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
```

```
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}
```

```
func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
```

```
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54,
 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
```

```
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
```

```
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.
```

```
// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client
```

```
 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
```

```
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
```

```
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.3917 swag 0.23.1

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1.3918 kubernetes-apimachinery 0.32.3

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1.3927 githubcomgoopenapiswag 0.23.1

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1.3928 protobuf-go 1.36.6

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1.3929 protobuf 1.36.6

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1.3930 github.com/golang-jwt/jwt/v5 5.2.2

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1.3931 elfutils 0.186-1ubuntu0.1

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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
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package spec

import "testing"

func TestIntegrationLicense(t *testing.T) {
 license := License{Name: "the name", URL: "the url"}
 const licenseJSON = `{"name":"the name","url":"the url"}`
 const licenseYAML = "name: the name\nurl: the url\n"

 assertSerializeJSON(t, license, licenseJSON)
 assertParsesJSON(t, licenseJSON, license)
```

}

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1.3940 selinux 1.12.0

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1.3941 github.com/golang-jwt/jwt/v4 4.5.2

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1.3943 spf13-afero 1.14.0

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1.3944 afero 1.14.0

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// Code generated by Microsoft (R) AutoRest Code Generator.

```
// Changes may cause incorrect behavior and will be lost if the code is regenerated.
// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil
 {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx,
 nil)
 if err != nil {
```

```
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID:
 to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx,
 "myResourceGroup", "{licenseName}", armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows. Please
 pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //
  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
```

```
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would
 look as follows. Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //
   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
```

```
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example
 definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response
 code is 200 as defined in example definition, your page structure would look as follows. Please pay attention that all
the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
```

```
 //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //
     Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f4c6c8697c59f966db0d1e36b62df3af3bca9065/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-03-31-
preview/examples/license/License_ListBySubscription.json
func ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More()
 {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
```

```
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //
     AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}
aztemplate
```

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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
```

```
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
```

```
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport {
 return &LicensesServerTransport{
  srv:                      srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
  newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport instead.
type LicensesServerTransport struct {
 srv                      *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate
                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method, ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
```

```
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case
 "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
```

```
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginCreateOrUpdate = &respr
 l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
}

resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK}, resp.StatusCode) {
 l.beginCreateOrUpdate.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if
!server.PollerResponderMore(beginCreateOrUpdate) {
 l.beginCreateOrUpdate.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
if l.srv.BeginDelete == nil {
 return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
}
beginDelete := l.beginDelete.get(req)
if beginDelete == nil {
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
```

```
 if err != nil {
  return
nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginDelete = &respr
 l.beginDelete.add(req, beginDelete)
}

resp, err := server.PollerResponderNext(beginDelete, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
 l.beginDelete.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
}
if !server.PollerResponderMore(beginDelete) {
 l.beginDelete.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake
 for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
```

```
 return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if
 !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent, server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches :=
 regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
```

```
  page.NextLink = to.Ptr(createLink())
 })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values
 are http.StatusOK", resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request) (*http.Response, error)
{
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req,
 newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
```

```
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if
 beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr,
 req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }
```

```
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}
//go:build go1.18
// +build go1.18

// Copyright (c) Microsoft Corporation. All rights reserved.
// Licensed under the MIT License. See License.txt in the project root for license information.
// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
```

```
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
```

```
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
```

```
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
```

```
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
```

```
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
```

```
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
```

```
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-03-31-preview
```

```
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
```

```
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-03-31-preview
```

```
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-03-31-preview")
```

```
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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1.3948 go-autorest-tracing v0.6.0

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1.3950 gonum-lapack v0.12.0

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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M. Matsumoto and T. Nishimura,
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ACM Transactions on Modeling and
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software is freely granted, provided that this notice
is preserved.
A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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M. Matsumoto and T. Nishimura,
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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number

generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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 equidistributed
  uniform pseudorandom number generator"
ACM Transactions on Modeling and
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Any feedback is very welcome.

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number generator.

Before using, initialize the state by using init_genrand64(seed) or init_by_array64(init_key, key_length).

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References:
T. Nishimura, ``Tables of 64-bit Mersenne Twisters"
ACM Transactions on Modeling and
Computer Simulation 10. (2000) 348--357.
M. Matsumoto and T. Nishimura,
``Mersenne Twister: a 623-dimensionally equidistributed uniform pseudorandom number generator"
ACM Transactions on Modeling and
Computer Simulation 8. (Jan. 1998) 3--30.

Any feedback is very welcome.
http://www.math.hiroshima-u.ac.jp/~m-mat/MT/emt.html
email: m-mat @ math.sci.hiroshima-u.ac.jp (remove spaces)
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This document refers to nquad_tests.tar.gz, ntriple_tests.tar.gz and normalization tests in this directory. The original files can be obtained here:

- [nquad_tests.tar.gz](https://w3c.github.io/rdf-tests/nquads/TESTS.tar.gz)
- [ntriple_tests.tar.gz](https://w3c.github.io/rdf-tests/ntriples/TESTS.tar.gz)
- [normalization tests](https://json-ld.github.io/rdf-dataset-canonicalization/).

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1.3954 missinggo v2.1.0

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1.3955 azure-sdk-for-go-sdk-azcore v1.16.0

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```
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//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
```

```
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]():
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]():
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]():
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]():
  beginUpdate:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]():
  beginValidateLicense:
```

```
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                     *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete             *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate             *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
```

```
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }
```

```
 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }
```

```
 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
```

```
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
```

```
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
```

```
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
```

```
 return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
```

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SOFTWARE

```
{
 "main": "dist/src/index.js",
 "dependencies": {
   "@azure-tools/typespec-go": "0.3.0"
 },
 "devDependencies": {
   "@azure-tools/typespec-autorest": "0.44.1",
   "@azure-tools/typespec-azure-core": "0.44.0",
   "@azure-tools/typespec-azure-resource-manager": "0.44.0",
   "@azure-tools/typespec-azure-rulesets": "0.44.0",
   "@azure-tools/typespec-client-generator-core": "0.44.3",
   "@typespec/compiler": "0.58.1",
   "@typespec/http": "0.58.0",
   "@typespec/openapi": "0.58.0",
   "@typespec/rest": "0.58.0",
   "@typespec/versioning": "0.58.0"
 }
}
//go:build go1.18
// +build go1.18

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// Licensed under the MIT License. See License.txt in the project root for license information.
// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
```

```
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-10
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters for
 the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
```

```
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the operation
 fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-10
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates the CreateOrUpdate
 request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
```

```
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-10")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-10
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
```

```
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-10
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginDelete"
 ctx
 = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return
 nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
```

```
 return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-10")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
// If the operation fails it returns an *azcore.ResponseError
 type.
//
// Generated from API version 2024-07-10
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp,
 http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
```

```
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return
 nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-10")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-07-10
//   - resourceGroupName - The name of the
 resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
```

```
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp, err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(),
  nextLink, func(ctx context.Context) (*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if client.subscriptionID == "" {
  return nil,
 errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-10")
```

```
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses
 of a non-Azure machine
//
// Generated from API version 2024-07-10
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp, err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(),
  nextLink, func(ctx context.Context) (*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}
```

```
// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil,
 err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-10")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-10
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//
   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
```

```
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-10
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client
 *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
```

```
 return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(),
 urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-10")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-10
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken
 == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
```

```
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-10
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{},
 operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}",
 url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
```

```
 reqQP.Set("api-version", "2024-07-10")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

azwebpubsub

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aztemplate

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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.
// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f41d0c9332078cb2ef07b749081d94915255ada5/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/stable/2024-07-10/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed
 to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
```

```
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err != nil {
 log.Fatalf("failed
to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//
   State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}
```

```
// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f41d0c9332078cb2ef07b749081d94915255ada5/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/stable/2024-07-10/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup", "{licenseName}",
 armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are
 fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
```

```
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition:
 https://github.com/Azure/azure-rest-api-
specs/blob/f41d0c9332078cb2ef07b749081d94915255ada5/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/stable/2024-07-10/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
```

```
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

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specs/blob/f41d0c9332078cb2ef07b749081d94915255ada5/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/stable/2024-07-10/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
```

```
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

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specs/blob/f41d0c9332078cb2ef07b749081d94915255ada5/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/stable/2024-07-10/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
```

```
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f41d0c9332078cb2ef07b749081d94915255ada5/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/stable/2024-07-10/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed
 to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //
    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
```

```
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //      },
  //      LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //      TenantID: to.Ptr("{tenandId}"),
  //     },
  //  }},
  // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/f41d0c9332078cb2ef07b749081d94915255ada5/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/stable/2024-07-10/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output
 are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
```

```
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType:
 to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}
```

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1.3956 azure-sdk-for-go-sdk-resourcemanager-computefleet-armcomputefleet v5.7.0

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// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
```

```
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:              newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
```

```
 newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
 beginUpdate:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
 beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                       *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete               *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate               *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
```

```
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
```

```
 beginCreateOrUpdate = &respr
 l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
```

```
 }
 beginDelete = &respr
 l.beginDelete.add(req, beginDelete)
}

resp, err := server.PollerResponderNext(beginDelete, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
 l.beginDelete.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
}
if !server.PollerResponderMore(beginDelete) {
 l.beginDelete.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
if l.srv.Get == nil {
 return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
}
const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
regex
:= regexp.MustCompile(regexStr)
matches := regex.FindStringSubmatch(req.URL.EscapedPath())
if matches == nil || len(matches) < 3 {
 return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
}
resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
if err != nil {
 return nil, err
}
licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
if err != nil {
 return nil, err
}
respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
if respErr := server.GetError(errRespr, req); respErr != nil {
 return nil, respErr
}
respContent := server.GetResponseContent(respr)
```

```
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
```

```
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
```

```
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
```

```
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
//go:build go1.18
// +build go1.18

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```

```
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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
```

```
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
```

```
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
```

```
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}
```

```
// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
```

```
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
```

```
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2023-06-20-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
```

```
  resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
   return client.listBySubscriptionCreateRequest(ctx, options)
  }, nil)
  if err != nil {
   return LicensesClientListBySubscriptionResponse{}, err
  }
  return client.listBySubscriptionHandleResponse(resp)
 },
 Tracer: client.internal.Tracer(),
})
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
```

```
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
```

```
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
```

```
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}
```

```
// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

azwebpubsub

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```
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// +build go1.18

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```

```
package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
```

```
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //
    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
```

```
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
cred, err := azidentity.NewDefaultAzureCredential(nil)
if err != nil {
 log.Fatalf("failed to obtain a credential: %v", err)
}
ctx := context.Background()
```

```
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
//
  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](8),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
```

```
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
```

```
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
```

```
 for _, v := range page.Value {
  // You could use page here. We use blank identifier for just demo purposes.
  _ = v
 }
 // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // page.LicensesListResult = armhybridcompute.LicensesListResult{
 //  Value: []*armhybridcompute.License{
 //   {
 //    Name: to.Ptr("{licenseName}"),
 //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
```

```
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //
     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}
```

1.3957 gonum-matrix v0.15.1

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is preserved.
A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights", to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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M. Matsumoto and T. Nishimura,
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ACM Transactions on Modeling and
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1.3962 collector-cmd-builder v0.120.0

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package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
```

```
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
```

```
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                    *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
```

```
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
```

```
  return nil, err
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return
nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginCreateOrUpdate = &respr
 l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
```

```
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if
respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginDelete = &respr
 l.beginDelete.add(req, beginDelete)
}

resp, err := server.PollerResponderNext(beginDelete, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
 l.beginDelete.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
}
if !server.PollerResponderMore(beginDelete) {
 l.beginDelete.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
```

```
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
```

```
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
```

```
 return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }
```

```
 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }
```

```
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
```

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SOFTWARE

```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
```

```
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
```

```
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
```

```
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
```

```
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
```

```
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
```

```
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
```

```
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
```

```
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2023-06-20-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
```

```
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
```

```
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
```

```
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
```

```
  Tracer: client.internal.Tracer(),
 })
 return poller, err
} else {
 return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
  Tracer: client.internal.Tracer(),
 })
}
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2023-06-20-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
```

```
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2023-06-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

azwebpubsub

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```
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// +build go1.18

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// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)
```

```
// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//
   State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
```

```
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
```

```
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
```

```
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
```

```
 log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
```

```
 //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/bf204aab860f2eb58a9d346b00d44760f2a9b0a2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2023-06-20-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
```

```
 }
 // If the HTTP response code is 200 as defined in example definition, your page structure would look as
follows. Please pay attention that all the values in the output are fake values for just demo purposes.
 // page.LicensesListResult = armhybridcompute.LicensesListResult{
 //  Value: []*armhybridcompute.License{
 //   {
 //    Name: to.Ptr("{licenseName}"),
 //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
    },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

1.3966 azure-sdk-for-go-sdk-azcore v1.14.0

1.3966.1 Available under license :

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{
"main": "dist/src/index.js",
"dependencies": {
"@azure-tools/typespec-go": "0.3.0"
},
"devDependencies": {
"@azure-tools/typespec-autorest": "0.44.1",
"@azure-tools/typespec-azure-core": "0.44.0",
"@azure-tools/typespec-azure-resource-manager": "0.44.0",
"@azure-tools/typespec-azure-rulesets": "0.44.0",
"@azure-tools/typespec-client-generator-core": "0.44.3",
"@typespec/compiler": "0.58.1",
"@typespec/http": "0.58.0",
"@typespec/openapi": "0.58.0",
"@typespec/rest": "0.58.0",
"@typespec/versioning": "0.58.0"
}
}

azwebpubsub

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```
SOFTWARE.
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)
```

```
 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
  newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport instead.
type LicensesServerTransport struct {
 srv                    *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete            *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
```

```
 beginUpdate
                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method, ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case
 "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
```

```
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if
 !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete == nil {
```

```
 return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
```

```
 return nil, &nonRetriableError{errors.New("fake
for method Get not implemented")}
}
const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
regex := regexp.MustCompile(regexStr)
matches := regex.FindStringSubmatch(req.URL.EscapedPath())
if matches == nil || len(matches) < 3 {
 return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
}
resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
if err != nil {
 return nil, err
}
licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
if err != nil {
 return nil, err
}
respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
if respErr := server.GetError(errRespr, req); respErr != nil {
 return nil, respErr
}
respContent := server.GetResponseContent(respr)
if
!contains([]int{http.StatusOK}, respContent.HTTPStatus) {
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
}
resp, err := server.MarshalResponseAsJSON(respContent, server.GetResponse(respr).License, req)
if err != nil {
 return nil, err
}
return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
if l.srv.NewListByResourceGroupPager == nil {
 return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
}
newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
if newListByResourceGroupPager == nil {
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
 regex := regexp.MustCompile(regexStr)
 matches :=
```

```
 regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values
 are http.StatusOK", resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request) (*http.Response, error)
{
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req,
```

```
 newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if
 beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
```

```
 respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
 if respErr := server.GetError(errRespr,
req); respErr != nil {
  return nil, respErr
 }
 beginUpdate = &respr
 l.beginUpdate.add(req, beginUpdate)
}

resp, err := server.PollerResponderNext(beginUpdate, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK}, resp.StatusCode) {
 l.beginUpdate.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginUpdate) {
 l.beginUpdate.remove(req)
}

return resp, nil
}
//go:build go1.18
// +build go1.18

// Copyright (c) Microsoft Corporation. All rights reserved.
// Licensed under the MIT License. See License.txt in the project root for license information.
// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
```

```
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-05-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
```

```
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-05-20-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-05-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-05-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
```

```
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-05-20-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
```

```
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-05-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-05-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
```

```
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-05-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-05-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
```

```
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-05-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
```

```
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-05-20-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
```

```
 return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-05-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-05-20-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
```

```
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-05-20-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-05-20-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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```
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// +build go1.18

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package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/b574e2a41acda14a90ef237006e8bbdda2b63c63/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-05-20-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil
 {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.License{
```

```
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx,
nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID:
to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}
```

```
// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/b574e2a41acda14a90ef237006e8bbdda2b63c63/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-05-20-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx,
 "myResourceGroup", "{licenseName}", armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please
 pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //
  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/b574e2a41acda14a90ef237006e8bbdda2b63c63/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-05-20-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would
 look as follows. Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
```

```
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//
  TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/b574e2a41acda14a90ef237006e8bbdda2b63c63/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-05-20-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example
 definition: https://github.com/Azure/azure-rest-api-
specs/blob/b574e2a41acda14a90ef237006e8bbdda2b63c63/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-05-20-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
```

```
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response
 code is 200 as defined in example definition, your page structure would look as follows. Please pay attention that all
the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //
     Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/b574e2a41acda14a90ef237006e8bbdda2b63c63/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-05-20-
preview/examples/license/License_ListBySubscription.json
func ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
```

```
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More()
 {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //
     AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}
```

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1.3967 mattes-migrate v4.17.1

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1.3968 k8s-io-apimachinery 0.32.3

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1.3969 k8s-io-client-go 0.32.3

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1.3970 component-base 0.32.3

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1.3975 otel-exporters-otlp-otlptrace-otlptracegrpc 1.35.0

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1.3981 go-redis 9.7.3

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1.3982 controller-runtime 0.20.4

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1.3983 github.com/ncabatoff/process-exporter 0.8.5

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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
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package spec

import "testing"

func TestIntegrationLicense(t *testing.T) {
 license := License{Name: "the name", URL: "the url"}
 const licenseJSON = `{"name":"the name","url":"the url"}`
 const licenseYAML = "name: the name\nurl: the url\n"

 assertSerializeJSON(t, license, licenseJSON)
 assertParsesJSON(t, licenseJSON, license)
}
```

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1.3998 x-crypto v0.16.1-0.20231129163542-152cdb1503eb

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1.4000 balanced-match 1.0.0

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1.4001 azure-sdk-for-go-sdk-azidentity v1.3.1

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1.4003 grpc-go v1.71.0

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1.4004 prometheus-operator-pkg-client v0.79.2

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1.4009 klauspost-compress v1.17.0

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1.4010 ee-first 1.1.1

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This option is useful when you wish to copy part of the code of
the Library into a program that is not a library.

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it with the complete corresponding machine-readable source code, which
must be distributed under the terms of Sections 1 and 2 above on a
medium customarily used for software interchange.

If distribution of object code is made by offering access to copy
from a designated place, then offering equivalent access to copy the
source code from the same place satisfies the requirement to
distribute the source code, even though third parties are not
compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the
Library, but is designed to work with the Library by being compiled or
linked with it, is called a "work that uses the Library". Such a
work, in isolation, is not a derivative work of the Library, and
therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the

Library
creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the
Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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them, as well as a reference
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a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the

user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

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c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

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1.4024 botocore 1.34.46+repack-1ubuntu1

1.4024.1 Available under license :

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"serviceId":"License Manager",
"signatureVersion":"v4",
"targetPrefix":"AWSLicenseManager",
"uid":"license-manager-2018-08-01"
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{"shape":"AuthorizationException"},
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"documentation":" Accepts the specified grant. "
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"documentation":" Checks in the specified license. Check in a license when it is no longer in use. "
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"http":{
"method":"POST",
"requestUri":"/"
},
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{"shape":"RedirectException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
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"documentation":" Checks out the specified license for offline use. "
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{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
],
"documentation":" Checks out the specified license. <note> If the account that created the license is the same that is performing the check out, you must specify the account as the beneficiary. </note>"
},
"CreateGrant":{
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"requestUri":"/"
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{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"}
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"documentation":" Creates a grant for the specified license. A grant shares the use of license entitlements with a specific Amazon Web Services account, an organization, or an organizational unit (OU). For more information, see Granted licenses in License Manager in the License Manager User Guide. "
},
"CreateGrantVersion":{
"name":"CreateGrantVersion",
"http":{
"method":"POST",
"requestUri":"/"
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"documentation":" Creates a new version of the specified grant. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
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"http":{
"method":"POST",
"requestUri":"/"
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{"shape":"AccessDeniedException"},
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"documentation":" Creates a license. "
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],
"documentation":" Creates a license configuration. A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance,
Dedicated Host, or all of these), license affinity to host (how long a license must be associated with a host), and the number of licenses purchased and used. "
},
"CreateLicenseConversionTaskForResource":{
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"requestUri":"/"
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  "name":"CreateLicenseManagerReportGenerator",
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     "requestUri":"/"
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  "documentation":"<p>Creates a report generator.</p>"
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"CreateLicenseVersion":{
  "name":"CreateLicenseVersion",
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    "requestUri":"/"
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    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"RateLimitExceededException"}
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  "documentation":"<p>Creates a new version of the specified license.</p>"
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"CreateToken":{
  "name":"CreateToken",
  "http":{
    "method":"POST",
    "requestUri":"/"
```

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"input":{"shape":"CreateTokenRequest"},
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{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"ResourceNotFoundException"},
{"shape":"RedirectException"}
],
"documentation":" Creates a long-lived
token. A refresh token is a JWT token used to get an access token. With an access token, you can call AssumeRoleWithWebIdentity to get role credentials that you can use to call License Manager to manage the specified license. "
},
"DeleteGrant":{
"name":"DeleteGrant",
"http":{
"method":"POST",
"requestUri":"/"
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"output":{"shape":"DeleteGrantResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"}
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"documentation":" Deletes the specified grant. "
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"DeleteLicense":{
"name":"DeleteLicense",
"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"DeleteLicenseRequest"},
"output":{"shape":"DeleteLicenseResponse"},
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{"shape":"RedirectException"},
{"shape":"ConflictException"},
{"shape":"ServerInternalException"},
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{"shape":"RateLimitExceededException"}
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"documentation":" Deletes the specified license. "
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"DeleteLicenseConfiguration":{
"name":"DeleteLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"DeleteLicenseConfigurationRequest"},
"output":{"shape":"DeleteLicenseConfigurationResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Deletes the specified license configuration. You cannot delete a license configuration that is in use. "
},
"DeleteLicenseManagerReportGenerator":{
"name":"DeleteLicenseManagerReportGenerator",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"DeleteLicenseManagerReportGeneratorRequest"},
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{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
],
"documentation":" Deletes the specified report generator. This action deletes the report generator, which stops it from generating future reports. The action cannot be reversed. It has no effect on the previous reports from this generator. "

},
"DeleteToken":{
"name":"DeleteToken",
"http":{
"method":"POST",
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"errors":[
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"documentation":" Deletes the specified token. Must be called in the license home Region. "
},
"ExtendLicenseConsumption":{
"name":"ExtendLicenseConsumption",
"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"ExtendLicenseConsumptionRequest"},
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
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{"shape":"ResourceNotFoundException"}
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"documentation":" Extends the expiration date for license consumption. "
},
"GetAccessToken":{
"name":"GetAccessToken",
"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"GetAccessTokenRequest"},
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"errors":[

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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},

{"shape":"ServerInternalException"}
],
"documentation":" Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens are valid for one hour. "
},
"GetGrant":{
"name":"GetGrant",
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"method":"POST",
"requestUri":"/"
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"input":{"shape":"GetGrantRequest"},
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"documentation":" Gets detailed information about the specified grant. "
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"GetLicense":{
"name":"GetLicense",
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"method":"POST",
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"documentation":" Gets detailed information about the specified license. "
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"GetLicenseConfiguration":{

"name":"GetLicenseConfiguration",
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"input":{"shape":"GetLicenseConfigurationRequest"},
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"documentation":" Gets detailed
information about the specified license configuration. "
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"GetLicenseConversionTask":{
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"input":{"shape":"GetLicenseConversionTaskRequest"},
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{"shape":"ServerInternalException"},
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{"shape":"RateLimitExceededException"}
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"documentation":" Gets information about the specified license type conversion task. "
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{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},

{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
],
"documentation":" Gets information about the specified report generator. "
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"GetLicenseUsage":{
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{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
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"documentation":" Gets detailed information about the usage of the specified license. "
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"GetServiceSettings":{
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"errors":[
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],
"documentation":" Gets the License Manager settings for the current Region. "
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"documentation":" Lists the resource associations for the specified license configuration. Resource associations need not consume licenses from a license configuration. For example, an AMI or a stopped instance might not consume a license (depending on the license rules). "
},
"ListDistributedGrants":{
"name":"ListDistributedGrants",
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{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Lists the grants distributed for the specified license. "
},
"ListFailuresForLicenseConfigurationOperations":{
"name":"ListFailuresForLicenseConfigurationOperations",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListFailuresForLicenseConfigurationOperationsRequest"},
"output":{"shape":"ListFailuresForLicenseConfigurationOperationsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Lists the license configuration operations that failed. "

},
"ListLicenseConfigurations":{
"name":"ListLicenseConfigurations",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseConfigurationsRequest"},
"output":{"shape":"ListLicenseConfigurationsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"FilterLimitExceededException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Lists the license configurations for your account. "
},
"ListLicenseConversionTasks":{
"name":"ListLicenseConversionTasks",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseConversionTasksRequest"},
"output":{"shape":"ListLicenseConversionTasksResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Lists the license type conversion tasks for your account. "
},
"ListLicenseManagerReportGenerators":{
"name":"ListLicenseManagerReportGenerators",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseManagerReportGeneratorsRequest"},
"output":{"shape":"ListLicenseManagerReportGeneratorsResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},

{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
],
"documentation":" Lists the report generators for your account. "
},
"ListLicenseSpecificationsForResource":{
"name":"ListLicenseSpecificationsForResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseSpecificationsForResourceRequest"},
"output":{"shape":"ListLicenseSpecificationsForResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Describes the license configurations for the specified resource. "
},
"ListLicenseVersions":{
"name":"ListLicenseVersions",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseVersionsRequest"},
"output":{"shape":"ListLicenseVersionsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
],
"documentation":" Lists all versions of the specified license. "
},
"ListLicenses":{
"name":"ListLicenses",
"http":{
"method":"POST",
"requestUri":"/"
},

"input":{"shape":"ListLicensesRequest"},
"output":{"shape":"ListLicensesResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
],
"documentation":" Lists the licenses for your account. "
},
"ListReceivedGrants":{
"name":"ListReceivedGrants",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListReceivedGrantsRequest"},
"output":{"shape":"ListReceivedGrantsResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Lists grants that are received. Received grants are grants created while specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs. "
},
"ListReceivedGrantsForOrganization":{
"name":"ListReceivedGrantsForOrganization",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListReceivedGrantsForOrganizationRequest"},
"output":{"shape":"ListReceivedGrantsForOrganizationResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},

{"shape":"RateLimitExceededException"}
],
"documentation":" Lists the grants received for all accounts in the organization. "
},
"ListReceivedLicenses":{
"name":"ListReceivedLicenses",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListReceivedLicensesRequest"},
"output":{"shape":"ListReceivedLicensesResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Lists received licenses. "
},
"ListReceivedLicensesForOrganization":{
"name":"ListReceivedLicensesForOrganization",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListReceivedLicensesForOrganizationRequest"},
"output":{"shape":"ListReceivedLicensesForOrganizationResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Lists the licenses received for all accounts in the organization. "
},
"ListResourceInventory":{
"name":"ListResourceInventory",
"http":{
"method":"POST",
"requestUri":"/"
},

"input":{"shape":"ListResourceInventoryRequest"},
"output":{"shape":"ListResourceInventoryResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"FilterLimitExceededException"},
{"shape":"FailedDependencyException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Lists resources managed using Systems Manager inventory. "
},
"ListTagsForResource":{
"name":"ListTagsForResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListTagsForResourceRequest"},
"output":{"shape":"ListTagsForResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Lists the tags for the specified license configuration. "
},
"ListTokens":{
"name":"ListTokens",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListTokensRequest"},
"output":{"shape":"ListTokensResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
],
"documentation":" Lists your tokens. "
},
"ListUsageForLicenseConfiguration":{

"name":"ListUsageForLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListUsageForLicenseConfigurationRequest"},
"output":{"shape":"ListUsageForLicenseConfigurationResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"FilterLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration. "
},
"RejectGrant":{
"name":"RejectGrant",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"RejectGrantRequest"},
"output":{"shape":"RejectGrantResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"}
],
"documentation":" Rejects the specified grant. "
},
"TagResource":{
"name":"TagResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"TagResourceRequest"},
"output":{"shape":"TagResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},

{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Adds the specified tags to the specified license configuration. "
},
"UntagResource":{
"name":"UntagResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"UntagResourceRequest"},
"output":{"shape":"UntagResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Removes the specified tags from the specified license configuration. "
},
"UpdateLicenseConfiguration":{
"name":"UpdateLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"UpdateLicenseConfigurationRequest"},
"output":{"shape":"UpdateLicenseConfigurationResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"}
],
"documentation":" Modifies the attributes of an existing license configuration. "
},
"UpdateLicenseManagerReportGenerator":{
"name":"UpdateLicenseManagerReportGenerator",
"http":{
"method":"POST",
"requestUri":"/"
},

"input":{"shape":"UpdateLicenseManagerReportGeneratorRequest"},
"output":{"shape":"UpdateLicenseManagerReportGeneratorResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"},
{"shape":"ResourceLimitExceededException"}
],
"documentation":" Updates a report generator. After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
},
"UpdateLicenseSpecificationsForResource":{
"name":"UpdateLicenseSpecificationsForResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"UpdateLicenseSpecificationsForResourceRequest"},
"output":{"shape":"UpdateLicenseSpecificationsForResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"InvalidResourceStateException"},
{"shape":"LicenseUsageException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
],
"documentation":" Adds or removes the specified license configurations for the specified Amazon Web Services resource. You can update the license specifications of AMIs, instances, and hosts. You cannot update the license specifications
for launch templates and CloudFormation templates, as they send license configurations to the operation that creates the resource. "
},
"UpdateServiceSettings":{
"name":"UpdateServiceSettings",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"UpdateServiceSettingsRequest"},
"output":{"shape":"UpdateServiceSettingsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},

```
      {"shape":"ServerInternalException"},
      {"shape":"AuthorizationException"},
      {"shape":"AccessDeniedException"},
      {"shape":"RateLimitExceededException"}
    ],
    "documentation":"<p>Updates License Manager settings for the current Region.</p>"
  }
},
"shapes":{
  "AcceptGrantRequest":{
    "type":"structure",
    "required":["GrantArn"],
    "members":{
      "GrantArn":{
        "shape":"Arn",
        "documentation":"<p>Amazon Resource Name (ARN) of the grant.</p>"
       }
    }
  },
  "AcceptGrantResponse":{
    "type":"structure",
    "members":{
      "GrantArn":{
        "shape":"Arn",
        "documentation":"<p>Grant ARN.</p>"
      },
      "Status":{
        "shape":"GrantStatus",
        "documentation":"<p>Grant status.</p>"
      },
      "Version":{
        "shape":"String",
        "documentation":"<p>Grant version.</p>"
      }
    }
  },
  "AccessDeniedException":{
    "type":"structure",
    "members":{
      "Message":{"shape":"Message"}
    },
    "documentation":"<p>Access to resource denied.</p>",
    "exception":true
  },
  "ActivationOverrideBehavior":{
    "type":"string",
    "enum":[
      "DISTRIBUTED_GRANTS_ONLY",
```

"ALL_GRANTS_PERMITTED_BY_ISSUER"
]
},
"AllowedOperation":{
"type":"string",
"enum":[
"CreateGrant",
"CheckoutLicense",
"CheckoutBorrowLicense",
"CheckInLicense",
"ExtendConsumptionLicense",
"ListPurchasedLicenses",
"CreateToken"
]
},
"AllowedOperationList":{
"type":"list",
"member":{"shape":"AllowedOperation"},
"max":7,
"min":1
},
"Arn":{
"type":"string",
"max":2048,
"pattern":"^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
},
"ArnList":{
"type":"list",
"member":{"shape":"Arn"}
},
"AuthorizationException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"documentation":" The Amazon Web Services user account does not have permission to perform the action. Check the IAM policy associated with this account. ",
"exception":true
},
"AutomatedDiscoveryInformation":{
"type":"structure",
"members":{
"LastRunTime":{
"shape":"DateTime",
"documentation":" Time that automated discovery last ran. "
}

```
  },
  "documentation":"<p>Describes automated discovery.</p>"
},
"Boolean":{"type":"boolean"},
"BorrowConfiguration":{
  "type":"structure",
  "required":[
    "AllowEarlyCheckIn",
    "MaxTimeToLiveInMinutes"
  ],
  "members":{
    "AllowEarlyCheckIn":{
      "shape":"BoxBoolean",
      "documentation":"<p>Indicates whether early check-ins are allowed.</p>"
    },
    "MaxTimeToLiveInMinutes":{
      "shape":"BoxInteger",
      "documentation":"<p>Maximum time for the borrow configuration, in minutes.</p>"
    }
  },
  "documentation":"<p>Details about a borrow configuration.</p>"
},
"BoxBoolean":{"type":"boolean"},
"BoxInteger":{"type":"integer"},
"BoxLong":{"type":"long"},
"CheckInLicenseRequest":{
  "type":"structure",
  "required":["LicenseConsumptionToken"],
  "members":{
    "LicenseConsumptionToken":{
       "shape":"String",
      "documentation":"<p>License consumption token.</p>"
    },
    "Beneficiary":{
      "shape":"String",
      "documentation":"<p>License beneficiary.</p>"
    }
  }
},
"CheckInLicenseResponse":{
  "type":"structure",
  "members":{
  }
},
"CheckoutBorrowLicenseRequest":{
  "type":"structure",
  "required":[
    "LicenseArn",
```

"Entitlements",
"DigitalSignatureMethod",
"ClientToken"
],
"members":{
"LicenseArn":{
"shape":"Arn",
"documentation":" Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. "
},
"Entitlements":{
"shape":"EntitlementDataList",
"documentation":" License entitlements. Partial checkouts are not supported. "
},
"DigitalSignatureMethod":{
"shape":"DigitalSignatureMethod",

"documentation":" Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384. For more information, see RFC 7518 Digital Signature with RSASSA-PSS. "
},
"NodeId":{
"shape":"String",
"documentation":" Node ID. "
},
"CheckoutMetadata":{
"shape":"MetadataList",
"documentation":" Information about constraints. "
},
"ClientToken":{
"shape":"ClientToken",
"documentation":" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. "
}
}
},
"CheckoutBorrowLicenseResponse":{
"type":"structure",
"members":{
"LicenseArn":{
"shape":"Arn",
"documentation":" Amazon Resource Name (ARN) of the license. "
},
"LicenseConsumptionToken":{
"shape":"String",
"documentation":" License consumption token. "
},
"EntitlementsAllowed":{

"shape":"EntitlementDataList",
"documentation":" Allowed license entitlements. "
},
"NodeId":{
"shape":"String",
"documentation":" Node ID. "
},
"SignedToken":{
"shape":"SignedToken",
"documentation":" Signed token. "
},
"IssuedAt":{
"shape":"ISO8601DateTime",
"documentation":" Date and time at which the license checkout is issued. "
},
"Expiration":{
"shape":"ISO8601DateTime",
"documentation":" Date and time at which the license checkout expires. "
},
"CheckoutMetadata":{
"shape":"MetadataList",
"documentation":" Information about constraints. "
}
}
},
"CheckoutLicenseRequest":{
"type":"structure",
"required":[
"ProductSKU",
"CheckoutType",
"KeyFingerprint",
"Entitlements",
"ClientToken"
],
"members":{
"ProductSKU":{
"shape":"String",
"documentation":" Product SKU. "
},
"CheckoutType":{
"shape":"CheckoutType",
"documentation":" Checkout type. "
},
"KeyFingerprint":{
"shape":"String",
"documentation":" Key fingerprint identifying the license. "
},
"Entitlements":{

"shape":"EntitlementDataList",
"documentation":" License entitlements. "
},
"ClientToken":{
"shape":"ClientToken",
"documentation":" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. "
},
"Beneficiary":{
"shape":"String",
"documentation":" License beneficiary. "
},
"NodeId":{
"shape":"String",
"documentation":" Node ID. "
}
}
},
"CheckoutLicenseResponse":{
"type":"structure",
"members":{
"CheckoutType":{
"shape":"CheckoutType",
"documentation":" Checkout type. "
},
"LicenseConsumptionToken":{
"shape":"String",
"documentation":" License consumption token. "
},
"EntitlementsAllowed":{
"shape":"EntitlementDataList",
"documentation":" Allowed license entitlements. "
},
"SignedToken":{
"shape":"SignedToken",
"documentation":" Signed token. "
},
"NodeId":{
"shape":"String",
"documentation":" Node ID. "
},
"IssuedAt":{
"shape":"ISO8601DateTime",
"documentation":" Date and time at which the license checkout is issued. "
},
"Expiration":{
"shape":"ISO8601DateTime",

"documentation":" Date and time at which the license checkout expires. "
      },
      "LicenseArn":{
        "shape":"String",
        "documentation":" Amazon Resource Name (ARN) of the checkout license. "
      }
    }
  },
  "CheckoutType":{
    "type":"string",
    "enum":[
      "PROVISIONAL",
      "PERPETUAL"
    ]
  },
  "ClientRequestToken":{
    "type":"string",
    "max":36,
    "min":1
  },
  "ClientToken":{
    "type":"string",
    "max":2048,
    "pattern":"\\S+"
  },
  "ConflictException":{
    "type":"structure",
    "members":{
      "Message":{"shape":"Message"}
    },
    "documentation":" There was a conflict processing the request. Try your request again. ",
    "exception":true
  },
  "ConsumedLicenseSummary":{
    "type":"structure",
    "members":{
      "ResourceType":{
        "shape":"ResourceType",
        "documentation":" Resource type of the resource consuming a
license. "
      },
      "ConsumedLicenses":{
        "shape":"BoxLong",
        "documentation":" Number of licenses consumed by the resource. "
      }
    },
    "documentation":" Details about license consumption. "
  },

"ConsumedLicenseSummaryList":{
"type":"list",
"member":{"shape":"ConsumedLicenseSummary"}
},
"ConsumptionConfiguration":{
"type":"structure",
"members":{
"RenewType":{
"shape":"RenewType",
"documentation":" Renewal frequency. "
},
"ProvisionalConfiguration":{
"shape":"ProvisionalConfiguration",
"documentation":" Details about a provisional configuration. "
},
"BorrowConfiguration":{
"shape":"BorrowConfiguration",
"documentation":" Details about a borrow configuration. "
}
},
"documentation":" Details about a consumption configuration. "
},
"CreateGrantRequest":{
"type":"structure",
"required":[
"ClientToken",
"GrantName",
"LicenseArn",
"Principals",
"HomeRegion",
"AllowedOperations"
],
"members":{
"ClientToken":{
"shape":"ClientToken",
"documentation":" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. "
},
"GrantName":{
"shape":"String",
"documentation":" Grant name. "
},
"LicenseArn":{
"shape":"Arn",
"documentation":" Amazon Resource Name (ARN) of the license. "
},
"Principals":{
"shape":"PrincipalArnList",

"documentation":" The grant principals. You can specify one of the following as an Amazon Resource Name (ARN): <ul> An Amazon Web Services account, which includes only the account specified.   An organizational unit (OU), which includes all accounts in the OU.   An organization, which will include all accounts across your organization. "
},
"HomeRegion":{
"shape":"String",
"documentation":" Home Region of the grant. "
},
"AllowedOperations":{
"shape":"AllowedOperationList",
"documentation":" Allowed operations for the grant. "
}
}
},
"CreateGrantResponse":{
"type":"structure",
"members":{
"GrantArn":{
"shape":"Arn",
"documentation":" Grant ARN. "
},
"Status":{
"shape":"GrantStatus",
"documentation":" Grant status. "
},
"Version":{
"shape":"String",
"documentation":" Grant version. "
}
}
},
"CreateGrantVersionRequest":{
"type":"structure",
"required":[
"ClientToken",
"GrantArn"
],

"members":{
"ClientToken":{
"shape":"ClientToken",
"documentation":" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. "
},
"GrantArn":{
"shape":"Arn",

"documentation":" Amazon Resource Name (ARN) of the grant. "
},
"GrantName":{
"shape":"String",
"documentation":" Grant name. "
},
"AllowedOperations":{
"shape":"AllowedOperationList",
"documentation":" Allowed operations for the grant. "
},
"Status":{
"shape":"GrantStatus",
"documentation":" Grant status. "
},
"StatusReason":{
"shape":"StatusReasonMessage",
"documentation":" Grant status reason. "
},
"SourceVersion":{
"shape":"String",
"documentation":" Current version of the grant. "
},
"Options":{

"shape":"Options",
"documentation":" The options specified for the grant. "
}
}
},
"CreateGrantVersionResponse":{
"type":"structure",
"members":{
"GrantArn":{
"shape":"Arn",
"documentation":" Grant ARN. "
},
"Status":{
"shape":"GrantStatus",
"documentation":" Grant status. "
},
"Version":{
"shape":"String",
"documentation":" New version of the grant. "
}
}
},
"CreateLicenseConfigurationRequest":{
"type":"structure",

"required":[
"Name",
"LicenseCountingType"
],
"members":{
"Name":{
"shape":"String",
"documentation":" Name of the license configuration. "
},
"Description":{
"shape":"String",
"documentation":" Description of the license configuration. "
},
"LicenseCountingType":{
"shape":"LicenseCountingType",
"documentation":" Dimension used to track the license inventory. "
},
"LicenseCount":{
"shape":"BoxLong",
"documentation":" Number of licenses managed by the license configuration. "
},
"LicenseCountHardLimit":{
"shape":"BoxBoolean",
"documentation":" Indicates whether hard or soft license enforcement is used. Exceeding a hard limit blocks the launch of new instances. "
},
"LicenseRules":{
"shape":"StringList",
"documentation":" License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules vary by dimension, as follows.   <code>Cores</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumCores</code> | <code>minimumCores</code>   <code>Instances</code> dimension: <code>allowedTenancy</code>
| <code>maximumCores</code> | <code>minimumCores</code> | <code>maximumSockets</code> | <code>minimumSockets</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   <code>Sockets</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumSockets</code> | <code>minimumSockets</code>   <code>vCPUs</code> dimension: <code>allowedTenancy</code> | <code>honorVcpuOptimization</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are <code>True</code> and <code>False</code>. "
},
"Tags":{
"shape":"TagList",
"documentation":" Tags to add to the

license configuration. "
      },
      "DisassociateWhenNotFound":{
        "shape":"BoxBoolean",
        "documentation":" When true, disassociates a resource when software is uninstalled. "
      },
      "ProductInformationList":{
        "shape":"ProductInformationList",
        "documentation":" Product information. "
      }
    }
  },
  "CreateLicenseConfigurationResponse":{
    "type":"structure",
    "members":{
      "LicenseConfigurationArn":{
        "shape":"String",
        "documentation":" Amazon Resource Name (ARN) of the license configuration. "
      }
    }
  },
  "CreateLicenseConversionTaskForResourceRequest":{
    "type":"structure",
    "required":[
      "ResourceArn",
      "SourceLicenseContext",
      "DestinationLicenseContext"
    ],
    "members":{
      "ResourceArn":{
        "shape":"Arn",
        "documentation":" Amazon Resource Name (ARN) of the resource you are converting
the license type for. "
      },
      "SourceLicenseContext":{
        "shape":"LicenseConversionContext",
        "documentation":" Information that identifies the license type you are converting from. For the structure of
the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-
procedures.html#conversion-cli\">Convert a license type using the CLI in the License Manager User
Guide. "
      },
      "DestinationLicenseContext":{
        "shape":"LicenseConversionContext",
        "documentation":" Information that identifies the license type you are converting to. For the structure of the
destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-
procedures.html#conversion-cli\">Convert a license type using the CLI in the License Manager User
Guide. "
      }

```
    }
  },
  "CreateLicenseConversionTaskForResourceResponse":{
    "type":"structure",
    "members":{
      "LicenseConversionTaskId":{
        "shape":"LicenseConversionTaskId",
        "documentation":"<p>The ID of the created license type conversion task.</p>"
      }
    }
  },
  "CreateLicenseManagerReportGeneratorRequest":{
    "type":"structure",
    "required":[
      "ReportGeneratorName",
      "Type",
      "ReportContext",
      "ReportFrequency",
      "ClientToken"
    ],
    "members":{
      "ReportGeneratorName":{
        "shape":"ReportGeneratorName",
        "documentation":"<p>Name of the report generator.</p>"
      },
      "Type":{
        "shape":"ReportTypeList",
        "documentation":"<p>Type of reports to generate. The following report types an be generated:</p> <ul> <li>
<p>License configuration report - Reports the number and details of consumed licenses for a license
configuration.</p> </li> <li> <p>Resource report - Reports the tracked licenses and resource consumption
 for a license configuration.</p> </li> </ul>"
      },
      "ReportContext":{
        "shape":"ReportContext",
        "documentation":"<p>Defines the type of license configuration the report generator tracks.</p>"
      },
      "ReportFrequency":{
        "shape":"ReportFrequency",
        "documentation":"<p>Frequency by which reports are generated. Reports can be generated daily, monthly, or
weekly.</p>"
      },
      "ClientToken":{
        "shape":"ClientRequestToken",
        "documentation":"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the
request.</p>"
      },
      "Description":{
        "shape":"String",
```

"documentation":" Description of the report generator. "
},
"Tags":{
"shape":"TagList",
"documentation":" Tags to add to the report generator. "
}
}
},
"CreateLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
"LicenseManagerReportGeneratorArn":{
"shape":"String",
"documentation":" The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"CreateLicenseRequest":{
"type":"structure",
"required":[
"LicenseName",
"ProductName",
"ProductSKU",
"Issuer",
"HomeRegion",
"Validity",
"Entitlements",
"Beneficiary",
"ConsumptionConfiguration",
"ClientToken"
],
"members":{
"LicenseName":{
"shape":"String",
"documentation":" License name. "
},
"ProductName":{
"shape":"String",
"documentation":" Product name. "
},
"ProductSKU":{
"shape":"String",
"documentation":" Product SKU. "
},
"Issuer":{
"shape":"Issuer",
"documentation":" License issuer. "
},

"HomeRegion":{
"shape":"String",
"documentation":" Home Region for the license. "
},
"Validity":{
"shape":"DatetimeRange",
"documentation":" Date and time range during which the license is valid, in ISO8601-UTC format. "
},
"Entitlements":{
"shape":"EntitlementList",
"documentation":" License entitlements. "
},
"Beneficiary":{
"shape":"String",
"documentation":" License beneficiary. "
},
"ConsumptionConfiguration":{
"shape":"ConsumptionConfiguration",
"documentation":" Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. "
},
"LicenseMetadata":{
"shape":"MetadataList",
"documentation":" Information about the license. "
},
"ClientToken":{
"shape":"ClientToken",
"documentation":" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. "
}
}
},
"CreateLicenseResponse":{
"type":"structure",
"members":{
"LicenseArn":{
"shape":"Arn",
"documentation":" Amazon Resource Name (ARN) of the license. "
},
"Status":{
"shape":"LicenseStatus",
"documentation":" License status. "
},
"Version":{
"shape":"String",
"documentation":" License version. "

```
      }
    }
  },
  "CreateLicenseVersionRequest":{
    "type":"structure",
    "required":[
      "LicenseArn",
      "LicenseName",
      "ProductName",
      "Issuer",
      "HomeRegion",
      "Validity",
      "Entitlements",
      "ConsumptionConfiguration",
      "Status",
      "ClientToken"
    ],

"members":{
      "LicenseArn":{
        "shape":"Arn",
        "documentation":"<p>Amazon Resource Name (ARN) of the license.</p>"
      },
      "LicenseName":{
        "shape":"String",
        "documentation":"<p>License name.</p>"
      },
      "ProductName":{
        "shape":"String",
        "documentation":"<p>Product name.</p>"
      },
      "Issuer":{
        "shape":"Issuer",
        "documentation":"<p>License issuer.</p>"
      },
      "HomeRegion":{
        "shape":"String",
        "documentation":"<p>Home Region of the license.</p>"
      },
      "Validity":{
        "shape":"DatetimeRange",
        "documentation":"<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>"
      },
      "LicenseMetadata":{
        "shape":"MetadataList",
        "documentation":"<p>Information about the license.</p>"
      },
      "Entitlements":{
```

"shape":"EntitlementList",
"documentation":" License
entitlements. "
},
"ConsumptionConfiguration":{
"shape":"ConsumptionConfiguration",
"documentation":" Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. "
},
"Status":{
"shape":"LicenseStatus",
"documentation":" License status. "
},
"ClientToken":{
"shape":"ClientToken",
"documentation":" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. "
},
"SourceVersion":{
"shape":"String",
"documentation":" Current version of the license. "
}
}
},
"CreateLicenseVersionResponse":{
"type":"structure",
"members":{
"LicenseArn":{
"shape":"Arn",
"documentation":" License
ARN. "
},
"Version":{
"shape":"String",
"documentation":" New version of the license. "
},
"Status":{
"shape":"LicenseStatus",
"documentation":" License status. "
}
}
},
"CreateTokenRequest":{
"type":"structure",
"required":[
"LicenseArn",
"ClientToken"

```
    ],
    "members":{
      "LicenseArn":{
        "shape":"Arn",
        "documentation":"<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the JWT token.</p>"
      },
      "RoleArns":{
        "shape":"ArnList",
        "documentation":"<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. License Manager does not check whether the roles are in use.</p>"
      },
      "ExpirationInDays":{
        "shape":"Integer",
        "documentation":"<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
      },
      "TokenProperties":{
        "shape":"MaxSize3StringList",
        "documentation":"<p>Data specified by the caller to be included in the JWT token. The data is mapped to the amr claim of the JWT token.</p>"
      },
      "ClientToken":{
        "shape":"ClientToken",
        "documentation":"<p>Idempotency token, valid for 10 minutes.</p>"
      }
    }
  },
  "CreateTokenResponse":{
    "type":"structure",
    "members":{
      "TokenId":{
        "shape":"String",
        "documentation":"<p>Token ID.</p>"
      },
      "TokenType":{
        "shape":"TokenType",
        "documentation":"<p>Token type.</p>"
      },
      "Token":{
        "shape":"TokenString",
        "documentation":"<p>Refresh token, encoded as a JWT token.</p>"
      }
    }
  },
  "DateTime":{"type":"timestamp"},
  "DatetimeRange":{
    "type":"structure",
```

"required":["Begin"],
"members":{
"Begin":{

"shape":"ISO8601DateTime",
"documentation":" Start of the time range. "
},
"End":{
"shape":"ISO8601DateTime",
"documentation":" End of the time range. "
}
},
"documentation":" Describes a time range, in ISO8601-UTC format. "
},
"DeleteGrantRequest":{
"type":"structure",
"required":[
"GrantArn",
"Version"
],
"members":{
"GrantArn":{
"shape":"Arn",
"documentation":" Amazon Resource Name (ARN) of the grant. "
},
"StatusReason":{
"shape":"StatusReasonMessage",
"documentation":" The Status reason for the delete request. "
},
"Version":{
"shape":"String",
"documentation":" Current version of the grant. "
}
}
},
"DeleteGrantResponse":{
"type":"structure",
"members":{
"GrantArn":{
"shape":"Arn",
"documentation":" Grant ARN. "
},
"Status":{
"shape":"GrantStatus",
"documentation":" Grant status. "
},
"Version":{
"shape":"String",

"documentation":" Grant version. "
}
}
},
"DeleteLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{
"shape":"String",
"documentation":" ID of the license configuration. "
}
}
},
"DeleteLicenseConfigurationResponse":{
"type":"structure",
"members":{
}
},
"DeleteLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":["LicenseManagerReportGeneratorArn"],
"members":{
"LicenseManagerReportGeneratorArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the report generator to be deleted. "
}
}
},
"DeleteLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
}
},
"DeleteLicenseRequest":{
"type":"structure",
"required":[
"LicenseArn",
"SourceVersion"
],
"members":{
"LicenseArn":{
"shape":"Arn",
"documentation":" Amazon Resource Name (ARN) of the license. "
},
"SourceVersion":{
"shape":"String",
"documentation":" Current version of the license. "

```
    }
  }
},
"DeleteLicenseResponse":{
  "type":"structure",
  "members":{
    "Status":{
      "shape":"LicenseDeletionStatus",
      "documentation":"<p>License status.</p>"
    },
    "DeletionDate":{
      "shape":"ISO8601DateTime",
      "documentation":"<p>Date when the license is deleted.</p>"
    }
  }
},
"DeleteTokenRequest":{
  "type":"structure",
  "required":["TokenId"],
   "members":{
    "TokenId":{
      "shape":"String",
      "documentation":"<p>Token ID.</p>"
    }
  }
},
"DeleteTokenResponse":{
  "type":"structure",
  "members":{
  }
},
"DigitalSignatureMethod":{
  "type":"string",
  "enum":["JWT_PS384"]
},
"Entitlement":{
  "type":"structure",
  "required":[
    "Name",
    "Unit"
  ],
  "members":{
    "Name":{
      "shape":"String",
      "documentation":"<p>Entitlement name.</p>"
    },
    "Value":{
      "shape":"String",
```

"documentation":" Entitlement resource. Use only if the unit is None. "
},
"MaxCount":{
"shape":"Long",
"documentation":" Maximum entitlement count. Use if the unit is not None. "
},
"Overage":{
"shape":"BoxBoolean",
"documentation":" Indicates whether overages are allowed. "
},
"Unit":{
"shape":"EntitlementUnit",
"documentation":" Entitlement unit. "
},
"AllowCheckIn":{
"shape":"BoxBoolean",
"documentation":" Indicates whether check-ins are allowed. "
}
},
"documentation":" Describes a resource entitled for use with a license. "
},
"EntitlementData":{
"type":"structure",
"required":[
"Name",
"Unit"
],
"members":{
"Name":{
"shape":"String",
"documentation":" Entitlement data name. "
},
"Value":{
"shape":"String",
"documentation":" Entitlement data value. "
},
"Unit":{
"shape":"EntitlementDataUnit",
"documentation":" Entitlement data unit. "
}
},
"documentation":" Data associated with an entitlement resource. "
},
"EntitlementDataList":{
"type":"list",
"member":{"shape":"EntitlementData"}
},
"EntitlementDataUnit":{

"type":"string",
"enum":[
"Count",
"None",
"Seconds",
"Microseconds",
"Milliseconds",
"Bytes",
"Kilobytes",
"Megabytes",
"Gigabytes",
"Terabytes",
"Bits",
"Kilobits",
"Megabits",
"Gigabits",
"Terabits",
"Percent",
"Bytes/Second",
"Kilobytes/Second",
"Megabytes/Second",
"Gigabytes/Second",
"Terabytes/Second",
"Bits/Second",
"Kilobits/Second",
"Megabits/Second",
"Gigabits/Second",
"Terabits/Second",
"Count/Second"
]
},
"EntitlementList":{
"type":"list",
"member":{"shape":"Entitlement"}
},
"EntitlementNotAllowedException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"documentation":" The entitlement is not allowed. ",
"exception":true
},
"EntitlementUnit":{
"type":"string",
"enum":[
"Count",
"None",

"Seconds",
"Microseconds",
"Milliseconds",
"Bytes",
"Kilobytes",
"Megabytes",
"Gigabytes",
"Terabytes",
"Bits",
"Kilobits",
"Megabits",
"Gigabits",
"Terabits",
"Percent",
"Bytes/Second",
"Kilobytes/Second",
"Megabytes/Second",
"Gigabytes/Second",
"Terabytes/Second",
"Bits/Second",
"Kilobits/Second",
"Megabits/Second",
"Gigabits/Second",
"Terabits/Second",
"Count/Second"
]
},
"EntitlementUsage":{
"type":"structure",
"required":[
"Name",
"ConsumedValue",
"Unit"
],
"members":{
"Name":{
"shape":"String",
"documentation":" Entitlement usage name. "
},
"ConsumedValue":{
"shape":"String",
"documentation":" Resource usage consumed. "
},
"MaxCount":{
"shape":"String",
"documentation":" Maximum entitlement usage count. "
},
"Unit":{

"shape":"EntitlementDataUnit",
"documentation":" Entitlement usage unit. "
}
},
"documentation":" Usage associated with an entitlement resource. "
},
"EntitlementUsageList":{
"type":"list",
"member":{"shape":"EntitlementUsage"}
},
"ExtendLicenseConsumptionRequest":{
"type":"structure",
"required":["LicenseConsumptionToken"],
"members":{
"LicenseConsumptionToken":{
"shape":"String",
"documentation":" License consumption token. "
},
"DryRun":{
"shape":"Boolean",
"documentation":" Checks whether you have the required permissions for the action, without actually making the request. Provides
an error response if you do not have the required permissions. "
}
}
},
"ExtendLicenseConsumptionResponse":{
"type":"structure",
"members":{
"LicenseConsumptionToken":{
"shape":"String",
"documentation":" License consumption token. "
},
"Expiration":{
"shape":"ISO8601DateTime",
"documentation":" Date and time at which the license consumption expires. "
}
}
},
"FailedDependencyException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"},
"ErrorCode":{"shape":"String"}
},
"documentation":" A dependency required to run the API is missing. ",
"exception":true
},

"Filter":{
"type":"structure",
"members":{
"Name":{
"shape":"FilterName",
"documentation":" Name of the filter. Filter names are case-sensitive. "
},
"Values":{

"shape":"FilterValues",
"documentation":" The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
},
"documentation":" A filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. "
},
"FilterLimitExceededException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"documentation":" The request uses too many filters or too many filter values. ",
"exception":true
},
"FilterList":{
"type":"list",
"member":{"shape":"Filter"}
},
"FilterName":{"type":"string"},
"FilterValue":{"type":"string"},
"FilterValues":{
"type":"list",
"member":{"shape":"FilterValue"}
},
"Filters":{
"type":"list",
"member":{"shape":"Filter"}
},

"GetAccessTokenRequest":{
"type":"structure",
"required":["Token"],
"members":{
"Token":{
"shape":"TokenString",
"documentation":" Refresh token, encoded as a JWT token. "
},

```
    "TokenProperties":{
      "shape":"MaxSize3StringList",
      "documentation":"<p>Token properties to validate against those present in the JWT token.</p>"
    }
  }
},
"GetAccessTokenResponse":{
  "type":"structure",
  "members":{
    "AccessToken":{
      "shape":"TokenString",
      "documentation":"<p>Temporary access token.</p>"
    }
  }
},
"GetGrantRequest":{
  "type":"structure",
  "required":["GrantArn"],
  "members":{
    "GrantArn":{
      "shape":"Arn",
      "documentation":"<p>Amazon Resource Name (ARN) of the grant.</p>"
    },
    "Version":{
      "shape":"String",
      "documentation":"<p>Grant version.</p>"
    }
  }
},
 "GetGrantResponse":{
  "type":"structure",
  "members":{
    "Grant":{
      "shape":"Grant",
      "documentation":"<p>Grant details.</p>"
    }
  }
},
"GetLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{
      "shape":"String",
      "documentation":"<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
  }
},
```

"GetLicenseConfigurationResponse":{
 "type":"structure",
 "members":{
  "LicenseConfigurationId":{
   "shape":"String",
   "documentation":" Unique ID for the license configuration. "
  },
  "LicenseConfigurationArn":{
   "shape":"String",
   "documentation":" Amazon Resource Name (ARN) of the license configuration. "
  },
  "Name":{
   "shape":"String",
   "documentation":" Name of the license configuration. "
  },
  "Description":{
   "shape":"String",
   "documentation":" Description of the license configuration. "
  },
  "LicenseCountingType":{
   "shape":"LicenseCountingType",
   "documentation":" Dimension for which the licenses are counted. "
  },
  "LicenseRules":{
   "shape":"StringList",
   "documentation":" License rules. "
  },
  "LicenseCount":{
   "shape":"BoxLong",
   "documentation":" Number of available licenses. "
  },
  "LicenseCountHardLimit":{
   "shape":"BoxBoolean",
   "documentation":" Sets the number of available licenses as a hard limit. "
  },
  "ConsumedLicenses":{
   "shape":"BoxLong",
   "documentation":" Number of licenses assigned to resources. "
  },
  "Status":{
   "shape":"String",
   "documentation":" License configuration status. "
  },
  "OwnerAccountId":{
   "shape":"String",
   "documentation":" Account ID of the owner of the license configuration. "
  },
  "ConsumedLicenseSummaryList":{

"shape":"ConsumedLicenseSummaryList",
"documentation":" Summaries of the licenses consumed by resources. "
},
"ManagedResourceSummaryList":{
"shape":"ManagedResourceSummaryList",
"documentation":" Summaries of the managed resources. "
},
"Tags":{
"shape":"TagList",
"documentation":" Tags for the license configuration. "
},
"ProductInformationList":{
"shape":"ProductInformationList",
"documentation":" Product information. "
},
"AutomatedDiscoveryInformation":{
"shape":"AutomatedDiscoveryInformation",
"documentation":" Automated discovery information. "
},
"DisassociateWhenNotFound":{
"shape":"BoxBoolean",
"documentation":" When true, disassociates a resource when software is uninstalled. "
}
}
},
"GetLicenseConversionTaskRequest":{
"type":"structure",
"required":["LicenseConversionTaskId"],
"members":{
"LicenseConversionTaskId":{
"shape":"LicenseConversionTaskId",
"documentation":" ID of the license type conversion task to retrieve information on. "
}
}
},
"GetLicenseConversionTaskResponse":{
"type":"structure",
"members":{
"LicenseConversionTaskId":{
"shape":"LicenseConversionTaskId",
"documentation":" ID of the license type conversion task. "
},
"ResourceArn":{
"shape":"String",
"documentation":" Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
},
"SourceLicenseContext":{

"shape":"LicenseConversionContext",
"documentation":" Information about the license type converted from. "
},
"DestinationLicenseContext":{
"shape":"LicenseConversionContext",
"documentation":" Information about the license type converted to. "
},
"StatusMessage":{
"shape":"String",
"documentation":" The status message for the conversion task. "
},
"Status":{
"shape":"LicenseConversionTaskStatus",
"documentation":" Status of the license type conversion task. "
},
"StartTime":{
"shape":"DateTime",
"documentation":" Time at which the license type conversion task was started . "
},
"LicenseConversionTime":{
"shape":"DateTime",
"documentation":" Amount of time to complete the license type conversion. "
},
"EndTime":{
"shape":"DateTime",
"documentation":" Time
at which the license type conversion task was completed. "
}
}
},
"GetLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":["LicenseManagerReportGeneratorArn"],
"members":{
"LicenseManagerReportGeneratorArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the report generator. "
}
}
},
"GetLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
"ReportGenerator":{
"shape":"ReportGenerator",
"documentation":" A report generator that creates periodic reports about your license configurations. "
}
}

```
},
"GetLicenseRequest":{
  "type":"structure",
  "required":["LicenseArn"],
  "members":{
    "LicenseArn":{
      "shape":"Arn",
      "documentation":"<p>Amazon Resource Name (ARN) of the license.</p>"
    },
    "Version":{

 "shape":"String",
      "documentation":"<p>License version.</p>"
    }
  }
},
"GetLicenseResponse":{
  "type":"structure",
  "members":{
    "License":{
      "shape":"License",
      "documentation":"<p>License details.</p>"
    }
  }
},
"GetLicenseUsageRequest":{
  "type":"structure",
  "required":["LicenseArn"],
  "members":{
    "LicenseArn":{
      "shape":"Arn",
      "documentation":"<p>Amazon Resource Name (ARN) of the license.</p>"
    }
  }
},
"GetLicenseUsageResponse":{
  "type":"structure",
  "members":{
    "LicenseUsage":{
      "shape":"LicenseUsage",
      "documentation":"<p>License usage details.</p>"
    }
  }
},
"GetServiceSettingsRequest":{
  "type":"structure",
  "members":{
  }
```

},
"GetServiceSettingsResponse":{
"type":"structure",
"members":{
"S3BucketArn":{
"shape":"String",

"documentation":" Regional S3 bucket path for storing reports, license trail event data, discovery data, and so on. "
},
"SnsTopicArn":{
"shape":"String",
"documentation":" SNS topic configured to receive notifications from License Manager. "
},
"OrganizationConfiguration":{
"shape":"OrganizationConfiguration",
"documentation":" Indicates whether Organizations is integrated with License Manager for cross-account discovery. "
},
"EnableCrossAccountsDiscovery":{
"shape":"BoxBoolean",
"documentation":" Indicates whether cross-account discovery is enabled. "
},
"LicenseManagerResourceShareArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the resource share. The License Manager management account provides member accounts with access to this share. "
}
}
},
"Grant":{
"type":"structure",
"required":[
"GrantArn",
"GrantName",
"ParentArn",
"LicenseArn",
"GranteePrincipalArn",
"HomeRegion",
"GrantStatus",
"Version",
"GrantedOperations"
],
"members":{
"GrantArn":{
"shape":"Arn",
"documentation":" Amazon Resource Name (ARN) of the grant. "
},

"GrantName":{
"shape":"String",
"documentation":" Grant name. "
},
"ParentArn":{
"shape":"Arn",
"documentation":" Parent ARN. "
},
"LicenseArn":{
"shape":"Arn",
"documentation":" License ARN. "
},
"GranteePrincipalArn":{
"shape":"Arn",
"documentation":" The grantee principal ARN. "
},
"HomeRegion":{
"shape":"String",
"documentation":" Home Region of the grant. "
},
"GrantStatus":{
"shape":"GrantStatus",
"documentation":" Grant status. "
},
"StatusReason":{
"shape":"StatusReasonMessage",
"documentation":" Grant status reason. "
},
"Version":{
"shape":"String",
"documentation":" Grant version. "
},
"GrantedOperations":{
"shape":"AllowedOperationList",
"documentation":" Granted operations. "
},
"Options":{
"shape":"Options",
"documentation":" The options specified for the grant. "
}
},
"documentation":" Describes a grant. "
},
"GrantList":{
"type":"list",
"member":{"shape":"Grant"}
},
"GrantStatus":{

"type":"string",
"enum":[
"PENDING_WORKFLOW",
"PENDING_ACCEPT",
"REJECTED",
"ACTIVE",
"FAILED_WORKFLOW",
"DELETED",
"PENDING_DELETE",
"DISABLED",

"WORKFLOW_COMPLETED"
]
},
"GrantedLicense":{
"type":"structure",
"members":{
"LicenseArn":{
"shape":"Arn",
"documentation":" Amazon Resource Name (ARN) of the license. "
},
"LicenseName":{
"shape":"String",
"documentation":" License name. "
},
"ProductName":{
"shape":"String",
"documentation":" Product name. "
},
"ProductSKU":{
"shape":"String",
"documentation":" Product SKU. "
},
"Issuer":{
"shape":"IssuerDetails",
"documentation":" Granted license issuer. "
},
"HomeRegion":{
"shape":"String",
"documentation":" Home Region of the granted license. "
},
"Status":{
"shape":"LicenseStatus",
"documentation":" Granted license status. "
},
"Validity":{
"shape":"DatetimeRange",

"documentation":" Date and time range during which the granted license is valid, in ISO8601-UTC format. "
},
"Beneficiary":{
"shape":"String",
"documentation":" Granted license beneficiary. "
},
"Entitlements":{
"shape":"EntitlementList",
"documentation":" License entitlements. "
},
"ConsumptionConfiguration":{
"shape":"ConsumptionConfiguration",
"documentation":" Configuration for consumption of the license. "
},
"LicenseMetadata":{
"shape":"MetadataList",
"documentation":" Granted license metadata. "
},
"CreateTime":{
"shape":"ISO8601DateTime",
"documentation":" Creation time of the granted license. "
},
"Version":{
"shape":"String",
"documentation":" Version of the granted license. "
},
"ReceivedMetadata":{
"shape":"ReceivedMetadata",
"documentation":" Granted license received metadata. "
}
},
"documentation":" Describes a license that is granted to a grantee. "
},
"GrantedLicenseList":{
"type":"list",
"member":{"shape":"GrantedLicense"}
},
"ISO8601DateTime":{
"type":"string",
"max":50,
"pattern":"^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
},
"Integer":{"type":"integer"},
"InvalidParameterValueException":{
"type":"structure",
"members":{

"Message":{"shape":"Message"}
},
"documentation":" One or more parameter values are not valid. ",
"exception":true,
"synthetic":true
},
"InvalidResourceStateException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}

},
"documentation":" License Manager cannot allocate a license to a resource because of its state. For example, you cannot allocate a license to an instance in the process of shutting down. ",
"exception":true
},
"InventoryFilter":{
"type":"structure",
"required":[
"Name",
"Condition"
],
"members":{
"Name":{
"shape":"String",
"documentation":" Name of the filter. "
},
"Condition":{
"shape":"InventoryFilterCondition",
"documentation":" Condition of the filter. "
},
"Value":{
"shape":"String",
"documentation":" Value of the filter. "
}
},
"documentation":" An inventory filter. "
},
"InventoryFilterCondition":{
"type":"string",
"enum":[
"EQUALS",
"NOT_EQUALS",
"BEGINS_WITH",
"CONTAINS"
]
},
"InventoryFilterList":{

"type":"list",
"member":{"shape":"InventoryFilter"}
},
"Issuer":{
"type":"structure",
"required":["Name"],
"members":{
"Name":{
"shape":"String",
"documentation":" Issuer name. "
},
"SignKey":{
"shape":"String",
"documentation":" Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"documentation":" Details about the issuer of a license. "
},
"IssuerDetails":{
"type":"structure",
"members":{
"Name":{
"shape":"String",
"documentation":" Issuer name. "
},
"SignKey":{
"shape":"String",
"documentation":" Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. "
},
"KeyFingerprint":{
"shape":"String",
"documentation":" Issuer key fingerprint. "
}
},
"documentation":" Details associated with the issuer of a license. "
},
"License":{
"type":"structure",
"members":{
"LicenseArn":{
"shape":"Arn",
"documentation":" Amazon Resource Name (ARN) of the license. "
},
"LicenseName":{
"shape":"String",
"documentation":" License name. "

},
"ProductName":{
"shape":"String",
"documentation":" Product name. "
},
"ProductSKU":{
"shape":"String",
"documentation":" Product SKU. "
},
"Issuer":{
"shape":"IssuerDetails",
"documentation":" License issuer. "
},
"HomeRegion":{
"shape":"String",
"documentation":" Home Region of the license. "
},
"Status":{
"shape":"LicenseStatus",
"documentation":" License status. "
},
"Validity":{
"shape":"DatetimeRange",
"documentation":" Date and time range during which the license is valid, in ISO8601-UTC format. "
},
"Beneficiary":{
"shape":"String",
"documentation":" License beneficiary. "
},
"Entitlements":{
"shape":"EntitlementList",
"documentation":" License entitlements. "
},
"ConsumptionConfiguration":{
"shape":"ConsumptionConfiguration",
"documentation":" Configuration for consumption of the license. "
},
"LicenseMetadata":{
"shape":"MetadataList",
"documentation":" License metadata. "
},
"CreateTime":{
"shape":"ISO8601DateTime",
"documentation":" License creation time. "
},
"Version":{
"shape":"String",
"documentation":" License version. "

```
    }
  },
  "documentation":"<p>Software license that is managed in License Manager.</p>"
},
"LicenseConfiguration":{
  "type":"structure",
  "members":{
    "LicenseConfigurationId":{
      "shape":"String",
      "documentation":"<p>Unique ID of the license configuration.</p>"
    },
    "LicenseConfigurationArn":{
      "shape":"String",
      "documentation":"<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    },
    "Name":{
      "shape":"String",
      "documentation":"<p>Name of the license configuration.</p>"
    },
    "Description":{
      "shape":"String",
      "documentation":"<p>Description of the license configuration.</p>"
    },
    "LicenseCountingType":{
      "shape":"LicenseCountingType",
      "documentation":"<p>Dimension to use to track the license inventory.</p>"
     },
    "LicenseRules":{
      "shape":"StringList",
      "documentation":"<p>License rules.</p>"
    },
    "LicenseCount":{
      "shape":"BoxLong",
      "documentation":"<p>Number of licenses managed by the license configuration.</p>"
    },
    "LicenseCountHardLimit":{
      "shape":"BoxBoolean",
      "documentation":"<p>Number of available licenses as a hard limit.</p>"
    },
    "DisassociateWhenNotFound":{
      "shape":"BoxBoolean",
      "documentation":"<p>When true, disassociates a resource when software is uninstalled.</p>"
    },
    "ConsumedLicenses":{
      "shape":"BoxLong",
      "documentation":"<p>Number of licenses consumed. </p>"
    },
    "Status":{
```

"shape":"String",
"documentation":" Status of the license configuration. "
},
"OwnerAccountId":{
"shape":"String",
"documentation":" Account ID of the license configuration's owner. "
},
"ConsumedLicenseSummaryList":{
"shape":"ConsumedLicenseSummaryList",
"documentation":" Summaries for licenses consumed by various resources. "
},
"ManagedResourceSummaryList":{
"shape":"ManagedResourceSummaryList",
"documentation":" Summaries for managed resources. "
},
"ProductInformationList":{
"shape":"ProductInformationList",
"documentation":" Product information. "
},
"AutomatedDiscoveryInformation":{
"shape":"AutomatedDiscoveryInformation",
"documentation":" Automated discovery information. "
}
},
"documentation":" A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used. "
},
"LicenseConfigurationAssociation":{
"type":"structure",
"members":{
"ResourceArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the resource. "
},
"ResourceType":{
"shape":"ResourceType",
"documentation":" Type of server resource. "
},
"ResourceOwnerId":{
"shape":"String",
"documentation":" ID of the Amazon Web Services account that owns the resource consuming licenses. "
},
"AssociationTime":{

"shape":"DateTime",
"documentation":" Time when the license configuration was associated with the resource. "
},
"AmiAssociationScope":{
"shape":"String",
"documentation":" Scope of
AMI associations. The possible value is <code>cross-account</code>. "
}
},
"documentation":" Describes an association with a license configuration. "
},
"LicenseConfigurationAssociations":{
"type":"list",
"member":{"shape":"LicenseConfigurationAssociation"}
},
"LicenseConfigurationStatus":{
"type":"string",
"enum":[
"AVAILABLE",
"DISABLED"
]
},
"LicenseConfigurationUsage":{
"type":"structure",
"members":{
"ResourceArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the resource. "
},
"ResourceType":{
"shape":"ResourceType",
"documentation":" Type of resource. "
},
"ResourceStatus":{
"shape":"String",
"documentation":" Status of the resource. "
},
"ResourceOwnerId":{
"shape":"String",
"documentation":" ID of
the account that owns the resource. "
},
"AssociationTime":{
"shape":"DateTime",
"documentation":" Time when the license configuration was initially associated with the resource. "
},
"ConsumedLicenses":{
"shape":"BoxLong",

"documentation":" Number of licenses consumed by the resource. "
}
},
"documentation":" Details about the usage of a resource associated with a license configuration. "
},
"LicenseConfigurationUsageList":{
"type":"list",
"member":{"shape":"LicenseConfigurationUsage"}
},
"LicenseConfigurations":{
"type":"list",
"member":{"shape":"LicenseConfiguration"}
},
"LicenseConversionContext":{
"type":"structure",
"members":{
"UsageOperation":{
"shape":"UsageOperation",
"documentation":" The Usage operation value that corresponds to the license type you are converting your resource
from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform "
}
},
"documentation":" Information about a license type conversion task. "
},
"LicenseConversionTask":{
"type":"structure",
"members":{
"LicenseConversionTaskId":{
"shape":"LicenseConversionTaskId",
"documentation":" The ID of the license type conversion task. "
},
"ResourceArn":{
"shape":"String",
"documentation":" The Amazon Resource Name (ARN) of the resource associated with the license type conversion task. "
},
"SourceLicenseContext":{
"shape":"LicenseConversionContext",
"documentation":" Information about the license type this conversion task converted from. "
},

"DestinationLicenseContext":{
"shape":"LicenseConversionContext",
"documentation":" Information about the license type this conversion task converted to. "
},

"Status":{
"shape":"LicenseConversionTaskStatus",
"documentation":" The status of the conversion task. "
},
"StatusMessage":{
"shape":"String",
"documentation":" The status message for the conversion task. "
},
"StartTime":{
"shape":"DateTime",
"documentation":" The time the conversion task was started at. "
},
"LicenseConversionTime":{
"shape":"DateTime",
"documentation":" The time the usage operation value of the resource was changed. "
},
"EndTime":{
"shape":"DateTime",
"documentation":" The time the conversion task was completed. "
}
},
"documentation":" Information about a
license type conversion task. "
},
"LicenseConversionTaskId":{
"type":"string",
"max":50,
"pattern":"^lct-[a-zA-Z0-9]*"
},
"LicenseConversionTaskStatus":{
"type":"string",
"enum":[
"IN_PROGRESS",
"SUCCEEDED",
"FAILED"
]
},
"LicenseConversionTasks":{
"type":"list",
"member":{"shape":"LicenseConversionTask"}
},
"LicenseCountingType":{
"type":"string",
"enum":[
"vCPU",
"Instance",
"Core",
"Socket"

```
  ]
 },
 "LicenseDeletionStatus":{
  "type":"string",
  "enum":[
    "PENDING_DELETE",
    "DELETED"
  ]
 },
 "LicenseList":{
  "type":"list",
  "member":{"shape":"License"}
 },
 "LicenseOperationFailure":{
  "type":"structure",
  "members":{
    "ResourceArn":{
      "shape":"String",
      "documentation":"<p>Amazon Resource Name (ARN) of the resource.</p>"
    },

"ResourceType":{
      "shape":"ResourceType",
      "documentation":"<p>Resource type.</p>"
    },
    "ErrorMessage":{
      "shape":"String",
      "documentation":"<p>Error message.</p>"
    },
    "FailureTime":{
      "shape":"DateTime",
      "documentation":"<p>Failure time.</p>"
    },
    "OperationName":{
      "shape":"String",
      "documentation":"<p>Name of the operation.</p>"
    },
    "ResourceOwnerId":{
      "shape":"String",
      "documentation":"<p>ID of the Amazon Web Services account that owns the resource.</p>"
    },
    "OperationRequestedBy":{
      "shape":"String",
      "documentation":"<p>The requester is \"License Manager Automated Discovery\".</p>"
    },
    "MetadataList":{
      "shape":"MetadataList",
      "documentation":"<p>Reserved.</p>"
```

```
    }
  },
  "documentation":"<p>Describes the failure of a license operation.</p>"
},
 "LicenseOperationFailureList":{
  "type":"list",
  "member":{"shape":"LicenseOperationFailure"}
},
"LicenseSpecification":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{
      "shape":"String",
      "documentation":"<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    },
    "AmiAssociationScope":{
      "shape":"String",
      "documentation":"<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
    }
  },
  "documentation":"<p>Details for associating a license configuration with a resource.</p>"
},
"LicenseSpecifications":{
  "type":"list",
  "member":{"shape":"LicenseSpecification"}
},
"LicenseStatus":{
  "type":"string",
  "enum":[
    "AVAILABLE",
    "PENDING_AVAILABLE",
    "DEACTIVATED",
    "SUSPENDED",
    "EXPIRED",
    "PENDING_DELETE",
     "DELETED"
  ]
},
"LicenseUsage":{
  "type":"structure",
  "members":{
    "EntitlementUsages":{
      "shape":"EntitlementUsageList",
      "documentation":"<p>License entitlement usages.</p>"
    }
  },
  "documentation":"<p>Describes the entitlement usage associated with a license.</p>"
```

},
"LicenseUsageException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"documentation":" You do not have enough licenses available to support a new resource launch. ",
"exception":true
},
"ListAssociationsForLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of a license configuration. "
},
"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum
number of results to return in a single call. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListAssociationsForLicenseConfigurationResponse":{
"type":"structure",
"members":{
"LicenseConfigurationAssociations":{
"shape":"LicenseConfigurationAssociations",
"documentation":" Information about the associations for the license configuration. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListDistributedGrantsRequest":{
"type":"structure",
"members":{
"GrantArns":{
"shape":"ArnList",
"documentation":" Amazon Resource Names (ARNs) of the grants. "
},

"Filters":{
"shape":"FilterList",
"documentation":" Filters to scope the results.
The following filters are supported: <ul> <code>LicenseArn</code>
<code>GrantStatus</code>   <code>GranteePrincipalARN</code>
<code>ProductSKU</code>   <code>LicenseIssuerName</code> "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
},
"MaxResults":{
"shape":"MaxSize100",
"documentation":" Maximum number of results to return in a single call. "
}
}
},
"ListDistributedGrantsResponse":{
"type":"structure",
"members":{
"Grants":{
"shape":"GrantList",
"documentation":" Distributed grant details. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListFailuresForLicenseConfigurationOperationsRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{
"shape":"String",
"documentation":" Amazon Resource Name of the license configuration. "
},
"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum number of results to return in a single call. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},

"ListFailuresForLicenseConfigurationOperationsResponse":{
"type":"structure",
"members":{
"LicenseOperationFailureList":{
"shape":"LicenseOperationFailureList",
"documentation":" License configuration operations that failed. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}

},
"ListLicenseConfigurationsRequest":{
"type":"structure",
"members":{
"LicenseConfigurationArns":{
"shape":"StringList",
"documentation":" Amazon Resource Names (ARN) of the license configurations. "
},
"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum number of results to return in a single call. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
},
"Filters":{
"shape":"Filters",
"documentation":" Filters to scope the results. The following filters and logical operators are supported: <ul> <code>licenseCountingType</code> - The dimension for which licenses are counted. Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. "
}
}
},
"ListLicenseConfigurationsResponse":{
"type":"structure",
"members":{
"LicenseConfigurations":{
"shape":"LicenseConfigurations",
"documentation":" Information about the license configurations. "

},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListLicenseConversionTasksRequest":{
"type":"structure",
"members":{
"NextToken":{
"shape":"String",
"documentation":" Token
for the next set of results. "
},
"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum number of results to return in a single call. "
},
"Filters":{
"shape":"Filters",
"documentation":" Filters to scope the results. Valid filters are <code>ResourceArns</code> and
<code>Status</code>. "
}
}
},
"ListLicenseConversionTasksResponse":{
"type":"structure",
"members":{
"LicenseConversionTasks":{
"shape":"LicenseConversionTasks",
"documentation":" Information about the license configuration tasks for your account. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListLicenseManagerReportGeneratorsRequest":{
"type":"structure",
"members":{
"Filters":{
"shape":"FilterList",
"documentation":" Filters
to scope the results. The following filters are supported: <ul>
<code>LicenseConfigurationArn</code> "
},

"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
},
"MaxResults":{
"shape":"MaxSize100",
"documentation":" Maximum number of results to return in a single call. "
}
}
},
"ListLicenseManagerReportGeneratorsResponse":{
"type":"structure",
"members":{
"ReportGenerators":{
"shape":"ReportGeneratorList",
"documentation":" A report generator that creates periodic reports about your license configurations. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListLicenseSpecificationsForResourceRequest":{
"type":"structure",
"required":["ResourceArn"],
"members":{
"ResourceArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of a resource that has an associated license configuration. "
},
"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum number of results to return in a single call. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListLicenseSpecificationsForResourceResponse":{
"type":"structure",
"members":{
"LicenseSpecifications":{
"shape":"LicenseSpecifications",
"documentation":" License configurations associated with a resource. "

```
      },
      "NextToken":{
        "shape":"String",
        "documentation":"<p>Token for the next set of results.</p>"
      }
    }
  },
  "ListLicenseVersionsRequest":{
    "type":"structure",

    "required":["LicenseArn"],
    "members":{
      "LicenseArn":{
        "shape":"Arn",
        "documentation":"<p>Amazon Resource Name (ARN) of the license.</p>"
      },
      "NextToken":{
        "shape":"String",
        "documentation":"<p>Token for the next set of results.</p>"
      },
      "MaxResults":{
        "shape":"MaxSize100",
        "documentation":"<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "ListLicenseVersionsResponse":{
    "type":"structure",
    "members":{
      "Licenses":{
        "shape":"LicenseList",
        "documentation":"<p>License details.</p>"
      },
      "NextToken":{
        "shape":"String",
        "documentation":"<p>Token for the next set of results.</p>"
      }
    }
  },
  "ListLicensesRequest":{
    "type":"structure",
    "members":{
      "LicenseArns":{
        "shape":"ArnList",
        "documentation":"<p>Amazon Resource Names
(ARNs) of the licenses.</p>"
      },
      "Filters":{
```

"shape":"FilterList",
"documentation":" Filters to scope the results. The following filters are supported: <ul> <code>Beneficiary</code>   <code>ProductSKU</code>   <code>Fingerprint</code>   <code>Status</code> "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
},
"MaxResults":{
"shape":"MaxSize100",
"documentation":" Maximum number of results to return in a single call. "
}
}
},
"ListLicensesResponse":{
"type":"structure",
"members":{
"Licenses":{
"shape":"LicenseList",
"documentation":" License details. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListReceivedGrantsForOrganizationRequest":{
"type":"structure",
"required":["LicenseArn"],
"members":{
"LicenseArn":{
"shape":"Arn",
"documentation":" The Amazon Resource Name (ARN) of the received license. "
},
"Filters":{
"shape":"FilterList",
"documentation":" Filters to scope the results. The following filters are supported: <ul> <code>ParentArn</code>   <code>GranteePrincipalArn</code> "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
},
"MaxResults":{
"shape":"MaxSize100",
"documentation":" Maximum number of results to return in a single call. "

```
      }
    }
  },
  "ListReceivedGrantsForOrganizationResponse":{
    "type":"structure",
    "members":{
      "Grants":{

 "shape":"GrantList",
        "documentation":"<p>Lists the grants the organization has received.</p>"
      },
      "NextToken":{
        "shape":"String",
        "documentation":"<p>Token for the next set of results.</p>"
      }
    }
  },
  "ListReceivedGrantsRequest":{
    "type":"structure",
    "members":{
      "GrantArns":{
        "shape":"ArnList",
        "documentation":"<p>Amazon Resource Names (ARNs) of the grants.</p>"
      },
      "Filters":{
        "shape":"FilterList",
        "documentation":"<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p>
<code>ProductSKU</code> </p> </li> <li> <p> <code>LicenseIssuerName</code> </p> </li> <li> <p>
<code>LicenseArn</code> </p> </li> <li> <p> <code>GrantStatus</code> </p> </li> <li> <p>
<code>GranterAccountId</code> </p> </li> </ul>"
      },
      "NextToken":{
        "shape":"String",
        "documentation":"<p>Token for the next set of results.</p>"
       },
      "MaxResults":{
        "shape":"MaxSize100",
        "documentation":"<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "ListReceivedGrantsResponse":{
    "type":"structure",
    "members":{
      "Grants":{
        "shape":"GrantList",
        "documentation":"<p>Received grant details.</p>"
      },
```

"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListReceivedLicensesForOrganizationRequest":{
"type":"structure",
"members":{
"Filters":{
"shape":"FilterList",
"documentation":" Filters to scope the results. The following filters are supported: <ul> <code>Beneficiary</code>   <code>ProductSKU</code> "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
},
"MaxResults":{
"shape":"MaxSize100",
"documentation":" Maximum number of results to return in a single call. "
}
}
},
"ListReceivedLicensesForOrganizationResponse":{
"type":"structure",
"members":{
"Licenses":{
"shape":"GrantedLicenseList",
"documentation":" Lists the licenses the organization has received. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListReceivedLicensesRequest":{
"type":"structure",
"members":{
"LicenseArns":{
"shape":"ArnList",
"documentation":" Amazon Resource Names (ARNs) of the licenses. "
},
"Filters":{
"shape":"FilterList",
"documentation":" Filters to scope the results. The following filters are supported: <ul>

<code>ProductSKU</code>
   <code>Status</code>   <code>Fingerprint</code>   <code>IssuerName</code>   <code>Beneficiary</code> "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
},
"MaxResults":{
"shape":"MaxSize100",
"documentation":" Maximum number of results to return in a single call. "
}
}
},
"ListReceivedLicensesResponse":{
"type":"structure",
"members":{
"Licenses":{
"shape":"GrantedLicenseList",
"documentation":" Received license details. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListResourceInventoryRequest":{
"type":"structure",
"members":{
"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum number of results to return in a single call. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
},
"Filters":{
"shape":"InventoryFilterList",
"documentation":" Filters to scope the results. The following filters and logical operators are supported: <ul> <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>application_name</code> - The name of the application. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.   <code>license_included</code> - The type of license included. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. Possible values are <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code>

| <code>windows-server-datacenter</code>.   <code>platform</code> - The platform of the resource. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.   <code>resource_id</code> - The ID of the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>tag:<key></code> - The key/value combination of a tag assigned to the resource. Logical operators are <code>EQUALS</code> (single account) or <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). "
      }
    }
  },
  "ListResourceInventoryResponse":{
    "type":"structure",
    "members":{
      "ResourceInventoryList":{
        "shape":"ResourceInventoryList",
        "documentation":" Information about the resources. "
      },
      "NextToken":{
        "shape":"String",
        "documentation":" Token for the next set of results. "
      }
    }
  },
  "ListTagsForResourceRequest":{
    "type":"structure",
    "required":["ResourceArn"],
    "members":{
      "ResourceArn":{
        "shape":"String",
        "documentation":" Amazon Resource Name (ARN) of the license configuration. "
      }
    }
  },
  "ListTagsForResourceResponse":{
    "type":"structure",
    "members":{
      "Tags":{
        "shape":"TagList",
        "documentation":" Information about the tags. "
      }
    }
  },
  "ListTokensRequest":{
    "type":"structure",
    "members":{
      "TokenIds":{
        "shape":"StringList",
        "documentation":" Token IDs. "
      },

"Filters":{
"shape":"FilterList",
"documentation":" Filters to scope the results. The following filter is supported: <ul> <code>LicenseArns</code> "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
},
"MaxResults":{
"shape":"MaxSize100",
"documentation":" Maximum number of results to return in a single call. "
}
}
},
"ListTokensResponse":{
"type":"structure",
"members":{
"Tokens":{
"shape":"TokenList",
"documentation":" Received token details. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListUsageForLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the license configuration. "
},
"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum number of results to return in a single call. "
},

"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
},
"Filters":{
"shape":"Filters",

"documentation":" Filters to scope the results. The following filters and logical operators are supported: <ul> <code>resourceArn</code> - The ARN of the license configuration resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceAccount</code> - The ID of the account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. "
      }
    }
  },
  "ListUsageForLicenseConfigurationResponse":{
    "type":"structure",
    "members":{
      "LicenseConfigurationUsageList":{
        "shape":"LicenseConfigurationUsageList",
        "documentation":" Information about the license configurations. "
      },
      "NextToken":{
        "shape":"String",
        "documentation":" Token for the next set of results. "
      }
    }
  },
  "Location":{"type":"string"},
  "Long":{"type":"long"},
  "ManagedResourceSummary":{
    "type":"structure",
    "members":{
      "ResourceType":{
        "shape":"ResourceType",
        "documentation":" Type of resource associated with a license. "
      },
      "AssociationCount":{
        "shape":"BoxLong",
        "documentation":" Number of resources associated with licenses. "
      }
    },
    "documentation":" Summary information about a managed resource. "
  },
  "ManagedResourceSummaryList":{
    "type":"list",
    "member":{"shape":"ManagedResourceSummary"}
  },
  "MaxSize100":{
    "type":"integer",
    "max":100,
    "min":1

},
"MaxSize3StringList":{
"type":"list",
"member":{"shape":"String"},
"max":3
},
"Message":{"type":"string"},
"Metadata":{
"type":"structure",
"members":{
"Name":{
"shape":"String",
"documentation":" The key name. "
},
"Value":{
"shape":"String",
"documentation":" The value. "
}
},
"documentation":" Describes key/value pairs. "
},
"MetadataList":{
"type":"list",
"member":{"shape":"Metadata"}
},
"NoEntitlementsAllowedException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"documentation":" There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"exception":true
},
"Options":{
"type":"structure",
"members":{
"ActivationOverrideBehavior":{
"shape":"ActivationOverrideBehavior",
"documentation":" An activation option for your grant that determines the behavior of activating a grant. Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the <code>Status</code> parameter.   As a license administrator, you can optionally specify an <code>ActivationOverrideBehavior</code> when activating a grant.   As a grantor, you can optionally specify an <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee account in your organization.   As a grantee, if the grantor creating the distributed grant doesnt specify an <code>ActivationOverrideBehavior</code>, you can optionally specify one when you are activating the grant.   <dl> <dt>DISTRIBUTED_GRANTS_ONLY</dt> <dd> Use this value to activate

a grant without replacing any member accounts active grants for the same product. </dd> <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt> <dd> Use this value to activate a grant and disable other active grants in any member accounts for the same product. This action will also replace their previously activated grants with this activated grant. </dd> </dl>"
      }
    },
    "documentation":" The options you can specify when you create a new version of a grant, such as activation override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
  },
  "OrganizationConfiguration":{
    "type":"structure",
    "required":["EnableIntegration"],
    "members":{
      "EnableIntegration":{
        "shape":"Boolean",
        "documentation":" Enables Organizations integration. "
      }
    },

    "documentation":" Configuration information for Organizations. "
  },
  "PrincipalArnList":{
    "type":"list",
    "member":{"shape":"Arn"},
    "max":1,
    "min":1
  },
  "ProductInformation":{
    "type":"structure",
    "required":[
      "ResourceType",
      "ProductInformationFilterList"
    ],
    "members":{
      "ResourceType":{
        "shape":"String",
        "documentation":" Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. "
      },
      "ProductInformationFilterList":{
        "shape":"ProductInformationFilterList",
        "documentation":" A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. Accepted values for <code>ProductInformationFilterName</code>

are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. The following filters and are supported when the resource type is <code>SSM_MANAGED</code>: <ul> <code>Application Name</code> - The name of the application. Logical operator is <code>EQUALS</code>.   <code>Application Publisher</code> - The publisher of the application. Logical operator is <code>EQUALS</code>.   <code>Application Version</code> - The version of the application. Logical operator is <code>EQUALS</code>.   <code>Platform Name</code> - The name of the platform. Logical operator is <code>EQUALS</code>.   <code>Platform Type</code> - The platform type. Logical operator is <code>EQUALS</code>.   <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.   <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.   <code>License Included</code> - The type of license included. Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>. Possible values are: <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code> | <code>windows-server-datacenter</code>.   The following filters and logical operators are supported when the resource type is <code>RDS</code>: <ul> <code>Engine Edition</code> - The edition of the database engine. Logical operator is <code>EQUALS</code>. Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.   <code>License Pack</code> - The license pack. Logical operator is <code>EQUALS</code>. Possible values are: <code>data guard</code> | <code>diagnostic pack sqlt</code> | <code>tuning pack sqlt</code> | <code>ols</code> | <code>olap</code>. "
      }
    },
    "documentation":" Describes product information for a license configuration. "
  },
  "ProductInformationFilter":{
    "type":"structure",
    "required":[
      "ProductInformationFilterName",
      "ProductInformationFilterComparator"
    ],
    "members":{
      "ProductInformationFilterName":{
        "shape":"String",
        "documentation":" Filter name. "
      },
      "ProductInformationFilterValue":{
        "shape":"StringList",
        "documentation":" Filter value. "
      },
      "ProductInformationFilterComparator":{
        "shape":"String",
        "documentation":" Logical operator. "
      }
    },

"documentation":" Describes product information filters. "
},
"ProductInformationFilterList":{
"type":"list",
"member":{"shape":"ProductInformationFilter"}
},
"ProductInformationList":{
"type":"list",
"member":{"shape":"ProductInformation"}
},
"ProvisionalConfiguration":{
"type":"structure",
"required":["MaxTimeToLiveInMinutes"],
"members":{
"MaxTimeToLiveInMinutes":{
"shape":"BoxInteger",
"documentation":" Maximum time for the provisional configuration, in minutes. "
}
},
"documentation":" Details about a provisional configuration. "
},
"RateLimitExceededException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"documentation":" Too many requests have been submitted. Try again after
a brief wait. ",
"exception":true
},
"ReceivedMetadata":{
"type":"structure",
"members":{
"ReceivedStatus":{
"shape":"ReceivedStatus",
"documentation":" Received status. "
},
"ReceivedStatusReason":{
"shape":"StatusReasonMessage",
"documentation":" Received status reason. "
},
"AllowedOperations":{
"shape":"AllowedOperationList",
"documentation":" Allowed operations. "
}
},
"documentation":" Metadata associated with received licenses and grants. "
},

"ReceivedStatus":{
  "type":"string",
  "enum":[
    "PENDING_WORKFLOW",
    "PENDING_ACCEPT",
    "REJECTED",
    "ACTIVE",
    "FAILED_WORKFLOW",
    "DELETED",
    "DISABLED",
    "WORKFLOW_COMPLETED"
  ]
},
"RedirectException":{
  "type":"structure",
  "members":{
    "Location":{"shape":"Location"},
     "Message":{"shape":"Message"}
  },
  "documentation":" This is not the correct Region for the resource. Try again. ",
  "exception":true
},
"RejectGrantRequest":{
  "type":"structure",
  "required":["GrantArn"],
  "members":{
    "GrantArn":{
      "shape":"Arn",
      "documentation":" Amazon Resource Name (ARN) of the grant. "
    }
  }
},
"RejectGrantResponse":{
  "type":"structure",
  "members":{
    "GrantArn":{
      "shape":"Arn",
      "documentation":" Grant ARN. "
    },
    "Status":{
      "shape":"GrantStatus",
      "documentation":" Grant status. "
    },
    "Version":{
      "shape":"String",
      "documentation":" Grant version. "
    }
  }

```
  },
  "RenewType":{
    "type":"string",
    "enum":[
      "None",
      "Weekly",
      "Monthly"
    ]
  },
  "ReportContext":{
    "type":"structure",
     "required":["licenseConfigurationArns"],
    "members":{
      "licenseConfigurationArns":{
        "shape":"ArnList",
        "documentation":"<p>Amazon Resource Name (ARN) of the license configuration that this generator reports on.</p>"
      }
    },
    "documentation":"<p>Details of the license configuration that this generator reports on.</p>"
  },
  "ReportFrequency":{
    "type":"structure",
    "members":{
      "value":{
        "shape":"Integer",
        "documentation":"<p>Number of times within the frequency period that a report is generated. The only supported value is <code>1</code>.</p>"
      },
      "period":{
        "shape":"ReportFrequencyType",
        "documentation":"<p>Time period between each report. The period can be daily, weekly, or monthly.</p>"
      }
    },
    "documentation":"<p>Details about how frequently reports are generated.</p>"
  },
  "ReportFrequencyType":{
    "type":"string",
    "enum":[
      "DAY",
      "WEEK",
      "MONTH"
    ]
  },
  "ReportGenerator":{
    "type":"structure",
    "members":{
      "ReportGeneratorName":{
```

"shape":"String",
"documentation":" Name of the report generator. "
},
"ReportType":{
"shape":"ReportTypeList",
"documentation":" Type of reports that are generated. "
},
"ReportContext":{
"shape":"ReportContext",
"documentation":" License configuration type for this generator. "
},
"ReportFrequency":{
"shape":"ReportFrequency",
"documentation":" Details about how frequently reports are generated. "
},
"LicenseManagerReportGeneratorArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the report generator. "
},
"LastRunStatus":{
"shape":"String",
"documentation":" Status of the
last report generation attempt. "
},
"LastRunFailureReason":{
"shape":"String",
"documentation":" Failure message for the last report generation attempt. "
},
"LastReportGenerationTime":{
"shape":"String",
"documentation":" Time the last report was generated at. "
},
"ReportCreatorAccount":{
"shape":"String",
"documentation":" The Amazon Web Services account ID used to create the report generator. "
},
"Description":{
"shape":"String",
"documentation":" Description of the report generator. "
},
"S3Location":{
"shape":"S3Location",
"documentation":" Details of the S3 bucket that report generator reports are published to. "
},
"CreateTime":{
"shape":"String",
"documentation":" Time the report was created. "
},

"Tags":{

"shape":"TagList",
"documentation":" Tags associated with the report generator. "
}
},
"documentation":" Describe the details of a report generator. "
},
"ReportGeneratorList":{
"type":"list",
"member":{"shape":"ReportGenerator"}
},
"ReportGeneratorName":{
"type":"string",
"max":100,
"min":1
},
"ReportType":{
"type":"string",
"enum":[
"LicenseConfigurationSummaryReport",
"LicenseConfigurationUsageReport"
]
},
"ReportTypeList":{
"type":"list",
"member":{"shape":"ReportType"}
},
"ResourceInventory":{
"type":"structure",
"members":{
"ResourceId":{
"shape":"String",
"documentation":" ID of the resource. "
},
"ResourceType":{
"shape":"ResourceType",
"documentation":" Type of resource. "
},
"ResourceArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the resource. "
},
"Platform":{
"shape":"String",
"documentation":" Platform of the resource. "
},
"PlatformVersion":{

"shape":"String",
"documentation":" Platform version of the resource in the inventory. "
},
"ResourceOwningAccountId":{
"shape":"String",
"documentation":" ID of the account that owns the resource. "
}
},
"documentation":" Details about a resource. "
},
"ResourceInventoryList":{
"type":"list",
"member":{"shape":"ResourceInventory"}
},
"ResourceLimitExceededException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"documentation":" Your resource limits have been exceeded. ",
"exception":true
},
"ResourceNotFoundException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"documentation":" The resource cannot be found. ",
"exception":true
},
"ResourceType":{
"type":"string",
"enum":[
"EC2_INSTANCE",
"EC2_HOST",
"EC2_AMI",
"RDS",
"SYSTEMS_MANAGER_MANAGED_INSTANCE"
]
},
"S3Location":{
"type":"structure",
"members":{
"bucket":{
"shape":"String",
"documentation":" Name of the S3 bucket reports are published to. "
},
"keyPrefix":{

"shape":"String",
"documentation":" Prefix of the S3 bucket reports are published to. "
}
},
"documentation":" Details of the S3 bucket that report generator reports are published to. "
},
"ServerInternalException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"documentation":" The server experienced an internal error. Try again. ",
"exception":true,
"fault":true
},
"SignedToken":{
"type":"string",
"min":4096
},
"StatusReasonMessage":{
"type":"string",
"max":400,
"pattern":"[\\s\\S]+"
},
"String":{"type":"string"},
"StringList":{
"type":"list",
"member":{"shape":"String"}
},
"Tag":{
"type":"structure",
"members":{
"Key":{
"shape":"String",
"documentation":" Tag key. "
},
"Value":{
"shape":"String",
"documentation":" Tag value. "
}
},
"documentation":" Details about a tag for a license configuration. "
},
"TagKeyList":{
"type":"list",
"member":{"shape":"String"}
},
"TagList":{

"type":"list",
"member":{"shape":"Tag"}
},
"TagResourceRequest":{
"type":"structure",
"required":[
"ResourceArn",
"Tags"
],
"members":{
"ResourceArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the license configuration. "
},
"Tags":{
"shape":"TagList",
"documentation":" One or more tags. "
}
}
},
"TagResourceResponse":{
"type":"structure",
"members":{
}
},
"TokenData":{
"type":"structure",
"members":{
"TokenId":{
"shape":"String",
"documentation":" Token ID. "
},
"TokenType":{
"shape":"String",
"documentation":" Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
},
"LicenseArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the license. "
},
"ExpirationTime":{
"shape":"ISO8601DateTime",
"documentation":" Token expiration time, in ISO8601-UTC format. "
},
"TokenProperties":{
"shape":"MaxSize3StringList",
"documentation":" Data specified by the caller. "

},
"RoleArns":{
"shape":"ArnList",
"documentation":" Amazon Resource Names (ARN) of the roles included in the token. "
},
"Status":{
"shape":"String",
"documentation":" Token status. The possible values are <code>AVAILABLE</code> and
<code>DELETED</code>. "
}
},
"documentation":" Describes a token. "
},
"TokenList":{
"type":"list",
"member":{"shape":"TokenData"}
},
"TokenString":{
"type":"string",
"max":4096,
"pattern":"\\S+"
},
"TokenType":{
"type":"string",
"enum":["REFRESH_TOKEN"]
},
"UnsupportedDigitalSignatureMethodException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"documentation":" The digital signature method is unsupported.
Try your request again. ",
"exception":true
},
"UntagResourceRequest":{
"type":"structure",
"required":[
"ResourceArn",
"TagKeys"
],
"members":{
"ResourceArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the license configuration. "
},
"TagKeys":{
"shape":"TagKeyList",

"documentation":" Keys identifying the tags to remove. "
}
}
},
"UntagResourceResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the license configuration. "
},
"LicenseConfigurationStatus":{
"shape":"LicenseConfigurationStatus",
"documentation":" New
status of the license configuration. "
},
"LicenseRules":{
"shape":"StringList",
"documentation":" New license rule. The only rule that you can add after you create a license configuration
is licenseAffinityToHost. "
},
"LicenseCount":{
"shape":"BoxLong",
"documentation":" New number of licenses managed by the license configuration. "
},
"LicenseCountHardLimit":{
"shape":"BoxBoolean",
"documentation":" New hard limit of the number of available licenses. "
},
"Name":{
"shape":"String",
"documentation":" New name of the license configuration. "
},
"Description":{
"shape":"String",
"documentation":" New description of the license configuration. "
},
"ProductInformationList":{
"shape":"ProductInformationList",
"documentation":" New
product information. "
},

"DisassociateWhenNotFound":{
"shape":"BoxBoolean",
"documentation":" When true, disassociates a resource when software is uninstalled. "
}
}
},
"UpdateLicenseConfigurationResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":[
"LicenseManagerReportGeneratorArn",
"ReportGeneratorName",
"Type",
"ReportContext",
"ReportFrequency",
"ClientToken"
],
"members":{
"LicenseManagerReportGeneratorArn":{
"shape":"String",
"documentation":" Amazon Resource Name (ARN) of the report generator to update. "
},
"ReportGeneratorName":{
"shape":"ReportGeneratorName",
"documentation":" Name of the report generator. "
},
"Type":{
"shape":"ReportTypeList",
"documentation":" Type of reports to generate. The following report types are supported: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. "
},
"ReportContext":{
"shape":"ReportContext",
"documentation":" The report context. "
},
"ReportFrequency":{
"shape":"ReportFrequency",
"documentation":" Frequency by which reports are generated. "
},
"ClientToken":{
"shape":"ClientRequestToken",
"documentation":" Unique, case-sensitive identifier that you provide to ensure the idempotency of the

request. "
      },
      "Description":{
        "shape":"String",
        "documentation":" Description of the report generator. "

  }
    }
  },
  "UpdateLicenseManagerReportGeneratorResponse":{
    "type":"structure",
    "members":{
    }
  },
  "UpdateLicenseSpecificationsForResourceRequest":{
    "type":"structure",
    "required":["ResourceArn"],
    "members":{
      "ResourceArn":{
        "shape":"String",
        "documentation":" Amazon Resource Name (ARN) of the Amazon Web Services resource. "
      },
      "AddLicenseSpecifications":{
        "shape":"LicenseSpecifications",
        "documentation":" ARNs of the license configurations to add. "
      },
      "RemoveLicenseSpecifications":{
        "shape":"LicenseSpecifications",
        "documentation":" ARNs of the license configurations to remove. "
      }
    }
  },
  "UpdateLicenseSpecificationsForResourceResponse":{
    "type":"structure",
    "members":{
    }
  },
  "UpdateServiceSettingsRequest":{
    "type":"structure",
    "members":{
      "S3BucketArn":{
         "shape":"String",
        "documentation":" Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "
      },
      "SnsTopicArn":{
        "shape":"String",
        "documentation":" Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager

alerts. "
      },
      "OrganizationConfiguration":{
        "shape":"OrganizationConfiguration",
        "documentation":" Enables integration with Organizations for cross-account discovery. "
      },
      "EnableCrossAccountsDiscovery":{
        "shape":"BoxBoolean",
        "documentation":" Activates cross-account discovery. "
      }
    }
  },
  "UpdateServiceSettingsResponse":{
    "type":"structure",
    "members":{
    }
  },
  "UsageOperation":{
    "type":"string",
    "max":50
  },
  "ValidationException":{
    "type":"structure",
    "members":{
      "Message":{"shape":"Message"}
     },
    "documentation":" The provided input is not valid. Try your request again. ",
    "exception":true
  }
 },
 "documentation":" License Manager makes it easier to manage licenses from software vendors across multiple Amazon Web Services accounts and on-premises servers. "
}
{
  "testCases": [
      {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
              "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
              }
          },
          "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
          }
      },

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    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack
enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
         }
      },
      "params": {
```

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        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"

        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
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"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
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"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true

}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false

```
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",

   "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
         }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
```

```
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",

       "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "Region": "us-isob-east-1",
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"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {

"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
{
"pagination": {
"ListLinuxSubscriptionInstances": {
"input_token": "NextToken",
"output_token": "NextToken",
"limit_key": "MaxResults",
"result_key": "Instances"
},
"ListLinuxSubscriptions": {
"input_token": "NextToken",
"output_token": "NextToken",
"limit_key": "MaxResults",
"result_key": "Subscriptions"
}
}
}
{
"version":"2.0",
"metadata":{
"apiVersion":"2018-05-10",
"endpointPrefix":"license-manager-user-subscriptions",
"jsonVersion":"1.1",
"protocol":"rest-json",
"serviceFullName":"AWS License Manager User Subscriptions",
"serviceId":"License Manager User Subscriptions",
"signatureVersion":"v4",
"signingName":"license-manager-user-subscriptions",
"uid":"license-manager-user-subscriptions-2018-05-10"
},
"operations":{

"AssociateUser":{
"name":"AssociateUser",
"http":{
"method":"POST",
"requestUri":"/user/AssociateUser",
"responseCode":200
},
"input":{"shape":"AssociateUserRequest"},
"output":{"shape":"AssociateUserResponse"},
"errors":[
{"shape":"ServiceQuotaExceededException"},
{"shape":"ConflictException"},
{"shape":"ValidationException"},
{"shape":"ThrottlingException"},
{"shape":"InternalServerException"},
{"shape":"ResourceNotFoundException"},
{"shape":"AccessDeniedException"}
],
"documentation":" Associates the user to an EC2 instance to utilize user-based subscriptions. <note> Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your monthly charges in the Amazon Web Services Billing User Guide. </note>",
"idempotent":true
},
"DeregisterIdentityProvider":{
"name":"DeregisterIdentityProvider",
"http":{
"method":"POST",
"requestUri":"/identity-provider/DeregisterIdentityProvider",
"responseCode":200
},
"input":{"shape":"DeregisterIdentityProviderRequest"},
"output":{"shape":"DeregisterIdentityProviderResponse"},
"errors":[
{"shape":"ServiceQuotaExceededException"},
{"shape":"ConflictException"},
{"shape":"ValidationException"},
{"shape":"ThrottlingException"},
{"shape":"InternalServerException"},
{"shape":"ResourceNotFoundException"},
{"shape":"AccessDeniedException"}
],
"documentation":" Deregisters the identity provider from providing user-based subscriptions. ",
"idempotent":true
},
"DisassociateUser":{
"name":"DisassociateUser",

"http":{
"method":"POST",
"requestUri":"/user/DisassociateUser",
"responseCode":200
},
"input":{"shape":"DisassociateUserRequest"},
"output":{"shape":"DisassociateUserResponse"},
"errors":[
{"shape":"ServiceQuotaExceededException"},
{"shape":"ConflictException"},
{"shape":"ValidationException"},
{"shape":"ThrottlingException"},
{"shape":"InternalServerException"},
{"shape":"ResourceNotFoundException"},
{"shape":"AccessDeniedException"}
],
"documentation":" Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"idempotent":true
},
"ListIdentityProviders":{
"name":"ListIdentityProviders",
"http":{
"method":"POST",
"requestUri":"/identity-provider/ListIdentityProviders",
"responseCode":200
},
"input":{"shape":"ListIdentityProvidersRequest"},
"output":{"shape":"ListIdentityProvidersResponse"},
"errors":[
{"shape":"ServiceQuotaExceededException"},
{"shape":"ConflictException"},
{"shape":"ValidationException"},
{"shape":"ThrottlingException"},
{"shape":"InternalServerException"},
{"shape":"ResourceNotFoundException"},
{"shape":"AccessDeniedException"}
],
"documentation":" Lists the identity providers for user-based subscriptions. "
},
"ListInstances":{
"name":"ListInstances",
"http":{
"method":"POST",
"requestUri":"/instance/ListInstances",
"responseCode":200
},
"input":{"shape":"ListInstancesRequest"},
"output":{"shape":"ListInstancesResponse"},

"errors":[
{"shape":"ServiceQuotaExceededException"},
{"shape":"ConflictException"},
{"shape":"ValidationException"},
{"shape":"ThrottlingException"},
{"shape":"InternalServerException"},
{"shape":"ResourceNotFoundException"},
{"shape":"AccessDeniedException"}
],
"documentation":" Lists the EC2 instances providing user-based subscriptions. "
},
"ListProductSubscriptions":{
"name":"ListProductSubscriptions",
"http":{
"method":"POST",
"requestUri":"/user/ListProductSubscriptions",
"responseCode":200
},
"input":{"shape":"ListProductSubscriptionsRequest"},
"output":{"shape":"ListProductSubscriptionsResponse"},

"errors":[
{"shape":"ServiceQuotaExceededException"},
{"shape":"ConflictException"},
{"shape":"ValidationException"},
{"shape":"ThrottlingException"},
{"shape":"InternalServerException"},
{"shape":"ResourceNotFoundException"},
{"shape":"AccessDeniedException"}
],
"documentation":" Lists the user-based subscription products available from an identity provider. "
},
"ListUserAssociations":{
"name":"ListUserAssociations",
"http":{
"method":"POST",
"requestUri":"/user/ListUserAssociations",
"responseCode":200
},
"input":{"shape":"ListUserAssociationsRequest"},
"output":{"shape":"ListUserAssociationsResponse"},
"errors":[
{"shape":"ServiceQuotaExceededException"},
{"shape":"ConflictException"},
{"shape":"ValidationException"},
{"shape":"ThrottlingException"},
{"shape":"InternalServerException"},
{"shape":"ResourceNotFoundException"},

{"shape":"AccessDeniedException"}
],
"documentation":" Lists user associations for an identity provider. "
},
"RegisterIdentityProvider":{
"name":"RegisterIdentityProvider",
"http":{
"method":"POST",
"requestUri":"/identity-provider/RegisterIdentityProvider",
"responseCode":200
},
"input":{"shape":"RegisterIdentityProviderRequest"},
"output":{"shape":"RegisterIdentityProviderResponse"},
"errors":[
{"shape":"ServiceQuotaExceededException"},
{"shape":"ConflictException"},
{"shape":"ValidationException"},
{"shape":"ThrottlingException"},
{"shape":"InternalServerException"},
{"shape":"ResourceNotFoundException"},
{"shape":"AccessDeniedException"}
],
"documentation":" Registers an identity provider for user-based subscriptions. ",
"idempotent":true
},
"StartProductSubscription":{
"name":"StartProductSubscription",
"http":{
"method":"POST",
"requestUri":"/user/StartProductSubscription",
"responseCode":200
},
"input":{"shape":"StartProductSubscriptionRequest"},
"output":{"shape":"StartProductSubscriptionResponse"},
"errors":[
{"shape":"ServiceQuotaExceededException"},
{"shape":"ConflictException"},
{"shape":"ValidationException"},
{"shape":"ThrottlingException"},
{"shape":"InternalServerException"},
{"shape":"ResourceNotFoundException"},
{"shape":"AccessDeniedException"}
],
"documentation":" Starts a product subscription for a user with the specified identity provider. <note> Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing

your monthly charges in the Amazon Web Services Billing User Guide. </note>"
  },
  "StopProductSubscription":{
    "name":"StopProductSubscription",
    "http":{
      "method":"POST",
      "requestUri":"/user/StopProductSubscription",
      "responseCode":200
    },
    "input":{"shape":"StopProductSubscriptionRequest"},
    "output":{"shape":"StopProductSubscriptionResponse"},
    "errors":[
      {"shape":"ServiceQuotaExceededException"},
      {"shape":"ConflictException"},
      {"shape":"ValidationException"},
      {"shape":"ThrottlingException"},
      {"shape":"InternalServerException"},
      {"shape":"ResourceNotFoundException"},
      {"shape":"AccessDeniedException"}
    ],
    "documentation":" Stops a product subscription for a user with the specified identity provider. "
  },
  "UpdateIdentityProviderSettings":{
    "name":"UpdateIdentityProviderSettings",
     "http":{
      "method":"POST",
      "requestUri":"/identity-provider/UpdateIdentityProviderSettings",
      "responseCode":200
    },
    "input":{"shape":"UpdateIdentityProviderSettingsRequest"},
    "output":{"shape":"UpdateIdentityProviderSettingsResponse"},
    "errors":[
      {"shape":"ValidationException"},
      {"shape":"ThrottlingException"},
      {"shape":"InternalServerException"},
      {"shape":"AccessDeniedException"}
    ],
    "documentation":" Updates additional product configuration settings for the registered identity provider. ",
    "idempotent":true
  }
},
"shapes":{
  "AccessDeniedException":{
    "type":"structure",
    "members":{
      "message":{"shape":"String"}
    },

"documentation":" You don't have sufficient access to perform this action. ",
"exception":true
},
"ActiveDirectoryIdentityProvider":{
"type":"structure",
"members":{
"DirectoryId":{
"shape":"String",
"documentation":" The directory ID for an Active Directory identity provider. "
}
},
"documentation":" Details about an Active Directory identity provider. "
},
"AssociateUserRequest":{
"type":"structure",
"required":[
"IdentityProvider",
"InstanceId",
"Username"
],
"members":{
"Domain":{
"shape":"String",
"documentation":" The domain name of the user. "
},
"IdentityProvider":{
"shape":"IdentityProvider",
"documentation":" The identity provider of the user. "
},
"InstanceId":{
"shape":"String",
"documentation":" The ID of the EC2 instance, which provides user-based subscriptions. "
},
"Username":{
"shape":"String",
"documentation":" The user name from the identity provider for the user. "
}
}
},
"AssociateUserResponse":{
"type":"structure",
"required":["InstanceUserSummary"],
"members":{
"InstanceUserSummary":{
"shape":"InstanceUserSummary",
"documentation":" Metadata that describes the associate user operation. "
}
}

},
"BoxInteger":{
"type":"integer",
"box":true
},
"ConflictException":{
"type":"structure",
"members":{
"message":{"shape":"String"}
},
"documentation":" The request couldn't be completed because it conflicted with the current state of the resource. ",
"exception":true,
"fault":true
},
"DeregisterIdentityProviderRequest":{
"type":"structure",
"required":[
"IdentityProvider",
"Product"
],
"members":{
"IdentityProvider":{
"shape":"IdentityProvider",
"documentation":" An object that specifies details for the identity provider. "
},
"Product":{
"shape":"String",
"documentation":" The name of the user-based subscription product. "
}
}
},
"DeregisterIdentityProviderResponse":{
"type":"structure",
"required":["IdentityProviderSummary"],
"members":{
"IdentityProviderSummary":{
"shape":"IdentityProviderSummary",
"documentation":" Metadata that describes the results of an identity provider operation. "
}
}
},
"DisassociateUserRequest":{
"type":"structure",
"required":[
"IdentityProvider",
"InstanceId",
"Username"

```
  ],
  "members":{
    "Domain":{
      "shape":"String",
      "documentation":"<p>The domain name of the user.</p>"
    },
    "IdentityProvider":{
      "shape":"IdentityProvider",
      "documentation":"<p>An object that specifies details for the identity provider.</p>"
    },

 "InstanceId":{
      "shape":"String",
      "documentation":"<p>The ID of the EC2 instance, which provides user-based subscriptions.</p>"
    },
    "Username":{
      "shape":"String",
      "documentation":"<p>The user name from the identity provider for the user.</p>"
    }
  }
},
"DisassociateUserResponse":{
  "type":"structure",
  "required":["InstanceUserSummary"],
  "members":{
    "InstanceUserSummary":{
      "shape":"InstanceUserSummary",
      "documentation":"<p>Metadata that describes the associate user operation.</p>"
    }
  }
},
"Filter":{
  "type":"structure",
  "members":{
    "Attribute":{
      "shape":"String",
      "documentation":"<p>The name of an attribute to use as a filter.</p>"
    },
    "Operation":{
      "shape":"String",
      "documentation":"<p>The type of search (For example, eq, geq, leq)</p>"
    },
    "Value":{

"shape":"String",
      "documentation":"<p>Value of the filter.</p>"
    }
  },
```

"documentation":" A filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. "
},
"FilterList":{
"type":"list",
"member":{"shape":"Filter"}
},
"IdentityProvider":{
"type":"structure",
"members":{
"ActiveDirectoryIdentityProvider":{
"shape":"ActiveDirectoryIdentityProvider",
"documentation":" An object that details an Active Directory identity provider. "
}
},
"documentation":" Details about an identity provider. ",
"union":true
},
"IdentityProviderSummary":{
"type":"structure",
"required":[
"IdentityProvider",
"Product",
"Settings",
"Status"
],
"members":{
"FailureMessage":{
"shape":"String",
"documentation":" The failure message associated with an identity provider. "
},
"IdentityProvider":{
"shape":"IdentityProvider",
"documentation":" An object that specifies details for the identity provider. "
},
"Product":{
"shape":"String",
"documentation":" The name of the user-based subscription product. "
},
"Settings":{
"shape":"Settings",
"documentation":" An object that details the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. "
},
"Status":{
"shape":"String",
"documentation":" The status of an identity provider. "
}

```
  },
  "documentation":"<p>Describes an identity provider.</p>"
 },
 "IdentityProviderSummaryList":{
  "type":"list",
  "member":{"shape":"IdentityProviderSummary"}
 },
 "InstanceSummary":{
  "type":"structure",
  "required":[
    "InstanceId",
    "Products",
    "Status"
  ],
  "members":{
    "InstanceId":{
      "shape":"String",
      "documentation":"<p>The ID of the EC2 instance, which provides user-based subscriptions.</p>"
    },
    "LastStatusCheckDate":{
      "shape":"String",
      "documentation":"<p>The date of the last status check.</p>"
    },
    "Products":{
      "shape":"StringList",
      "documentation":"<p>A list of provided user-based subscription products.</p>"
    },
    "Status":{
      "shape":"String",
      "documentation":"<p>The status of an EC2 instance resource.</p>"
    },
    "StatusMessage":{
      "shape":"String",
      "documentation":"<p>The status message for an EC2 instance.</p>"
    }
  },
  "documentation":"<p>Describes an EC2 instance providing user-based subscriptions.</p>"
 },
 "InstanceSummaryList":{
  "type":"list",
  "member":{"shape":"InstanceSummary"}
 },
 "InstanceUserSummary":{
  "type":"structure",
  "required":[
    "IdentityProvider",
    "InstanceId",
    "Status",
```

"Username"
],
"members":{
"AssociationDate":{
"shape":"String",
"documentation":" The date a user was associated with an EC2 instance. "
},
"DisassociationDate":{
"shape":"String",
"documentation":" The date a user was disassociated from an EC2 instance. "
},
"Domain":{
"shape":"String",
"documentation":" The domain name of the user. "
},
"IdentityProvider":{
"shape":"IdentityProvider",
"documentation":" An object that specifies details for the identity provider. "
},
"InstanceId":{
"shape":"String",
"documentation":" The ID
of the EC2 instance, which provides user-based subscriptions. "
},
"Status":{
"shape":"String",
"documentation":" The status of a user associated with an EC2 instance. "
},
"StatusMessage":{
"shape":"String",
"documentation":" The status message for users of an EC2 instance. "
},
"Username":{
"shape":"String",
"documentation":" The user name from the identity provider for the user. "
}
},
"documentation":" Describes users of an EC2 instance providing user-based subscriptions. "
},
"InstanceUserSummaryList":{
"type":"list",
"member":{"shape":"InstanceUserSummary"}
},
"InternalServerException":{
"type":"structure",
"members":{
"message":{"shape":"String"}
},

"documentation":" An exception occurred with the service. ",
"exception":true,
"fault":true
},
"ListIdentityProvidersRequest":{
"type":"structure",
"members":{
"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum number of results to return in a single call. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListIdentityProvidersResponse":{
"type":"structure",
"required":["IdentityProviderSummaries"],
"members":{
"IdentityProviderSummaries":{
"shape":"IdentityProviderSummaryList",
"documentation":" Metadata that describes the list identity providers operation. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListInstancesRequest":{
"type":"structure",
"members":{
"Filters":{
"shape":"FilterList",
"documentation":" An
array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. "
},
"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum number of results to return in a single call. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}

```
    }
  },
  "ListInstancesResponse":{
    "type":"structure",
    "members":{
      "InstanceSummaries":{
        "shape":"InstanceSummaryList",
        "documentation":"<p>Metadata that describes the list instances operation.</p>"
      },
      "NextToken":{
        "shape":"String",
        "documentation":"<p>Token for the next set of results.</p>"
      }
    }
  },
  "ListProductSubscriptionsRequest":{
    "type":"structure",
    "required":[
      "IdentityProvider",
      "Product"
    ],
    "members":{
       "Filters":{
        "shape":"FilterList",
        "documentation":"<p>An array of structures that you can use to filter the results to those that match one or
more sets of key-value pairs that you specify.</p>"
      },
      "IdentityProvider":{
        "shape":"IdentityProvider",
        "documentation":"<p>An object that specifies details for the identity provider.</p>"
      },
      "MaxResults":{
        "shape":"BoxInteger",
        "documentation":"<p>Maximum number of results to return in a single call.</p>"
      },
      "NextToken":{
        "shape":"String",
        "documentation":"<p>Token for the next set of results.</p>"
      },
      "Product":{
        "shape":"String",
        "documentation":"<p>The name of the user-based subscription product.</p>"
      }
    }
  },
  "ListProductSubscriptionsResponse":{
    "type":"structure",
    "members":{
```

"NextToken":{
"shape":"String",
"documentation":" Token
for the next set of results. "
},
"ProductUserSummaries":{
"shape":"ProductUserSummaryList",
"documentation":" Metadata that describes the list product subscriptions operation. "
}
}
},
"ListUserAssociationsRequest":{
"type":"structure",
"required":[
"IdentityProvider",
"InstanceId"
],
"members":{
"Filters":{
"shape":"FilterList",
"documentation":" An array of structures that you can use to filter the results to those that match one or
more sets of key-value pairs that you specify. "
},
"IdentityProvider":{
"shape":"IdentityProvider",
"documentation":" An object that specifies details for the identity provider. "
},
"InstanceId":{
"shape":"String",
"documentation":" The ID of the EC2 instance, which provides user-based subscriptions. "
},

"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum number of results to return in a single call. "
},
"NextToken":{
"shape":"String",
"documentation":" Token for the next set of results. "
}
}
},
"ListUserAssociationsResponse":{
"type":"structure",
"members":{
"InstanceUserSummaries":{
"shape":"InstanceUserSummaryList",
"documentation":" Metadata that describes the list user association operation. "

```
    },
    "NextToken":{
      "shape":"String",
      "documentation":"<p>Token for the next set of results.</p>"
    }
  }
},
"ProductUserSummary":{
  "type":"structure",
  "required":[
    "IdentityProvider",
    "Product",
    "Status",
    "Username"
  ],
  "members":{
    "Domain":{
      "shape":"String",
      "documentation":"<p>The domain name of the user.</p>"
     },
    "IdentityProvider":{
      "shape":"IdentityProvider",
      "documentation":"<p>An object that specifies details for the identity provider.</p>"
    },
    "Product":{
      "shape":"String",
      "documentation":"<p>The name of the user-based subscription product.</p>"
    },
    "Status":{
      "shape":"String",
      "documentation":"<p>The status of a product for a user.</p>"
    },
    "StatusMessage":{
      "shape":"String",
      "documentation":"<p>The status message for a product for a user.</p>"
    },
    "SubscriptionEndDate":{
      "shape":"String",
      "documentation":"<p>The end date of a subscription.</p>"
    },
    "SubscriptionStartDate":{
      "shape":"String",
      "documentation":"<p>The start date of a subscription.</p>"
    },
    "Username":{
      "shape":"String",
      "documentation":"<p>The user name from the identity provider
```

of the user. "
}
},
"documentation":" The summary of the user-based subscription products for a user. "
},
"ProductUserSummaryList":{
"type":"list",
"member":{"shape":"ProductUserSummary"}
},
"RegisterIdentityProviderRequest":{
"type":"structure",
"required":[
"IdentityProvider",
"Product"
],
"members":{
"IdentityProvider":{
"shape":"IdentityProvider",
"documentation":" An object that specifies details for the identity provider. "
},
"Product":{
"shape":"String",
"documentation":" The name of the user-based subscription product. "
},
"Settings":{
"shape":"Settings",
"documentation":" The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. "
}
}
},
"RegisterIdentityProviderResponse":{

"type":"structure",
"required":["IdentityProviderSummary"],
"members":{
"IdentityProviderSummary":{
"shape":"IdentityProviderSummary",
"documentation":" Metadata that describes the results of an identity provider operation. "
}
}
},
"ResourceNotFoundException":{
"type":"structure",
"members":{
"message":{"shape":"String"}
},
"documentation":" The resource couldn't be found. ",

"error":{
"httpStatusCode":404,
"senderFault":true
},
"exception":true
},
"SecurityGroup":{
"type":"string",
"max":200,
"min":5,
"pattern":"^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
},
"ServiceQuotaExceededException":{
"type":"structure",
"members":{
"message":{"shape":"String"}
},
"documentation":" The request failed because a service quota is exceeded. ",
"exception":true
},
"Settings":{
"type":"structure",
"required":[
"SecurityGroupId",
"Subnets"
],
"members":{
"SecurityGroupId":{
"shape":"SecurityGroup",
"documentation":" A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoint for activation servers. "
},
"Subnets":{
"shape":"SettingsSubnetsList",
"documentation":" The subnets defined for the registered identity provider. "
}
},
"documentation":" The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication from resources in the VPC. "
},
"SettingsSubnetsList":{
"type":"list",
"member":{"shape":"Subnet"},
"min":1
},
"StartProductSubscriptionRequest":{

"type":"structure",
"required":[
"IdentityProvider",
"Product",
"Username"
],
"members":{
"Domain":{
"shape":"String",
"documentation":" The domain name of the user. "
},
"IdentityProvider":{
"shape":"IdentityProvider",
"documentation":" An object that specifies details for the identity provider. "
},
"Product":{
"shape":"String",
"documentation":" The name of the user-based subscription product. "
},
"Username":{
"shape":"String",
"documentation":" The user name from the identity provider of the user. "
}
}
},
"StartProductSubscriptionResponse":{
"type":"structure",
"required":["ProductUserSummary"],
"members":{
"ProductUserSummary":{
"shape":"ProductUserSummary",
"documentation":" Metadata that describes
the start product subscription operation. "
}
}
},
"StopProductSubscriptionRequest":{
"type":"structure",
"required":[
"IdentityProvider",
"Product",
"Username"
],
"members":{
"Domain":{
"shape":"String",
"documentation":" The domain name of the user. "
},

"IdentityProvider":{
"shape":"IdentityProvider",
"documentation":" An object that specifies details for the identity provider. "
},
"Product":{
"shape":"String",
"documentation":" The name of the user-based subscription product. "
},
"Username":{
"shape":"String",
"documentation":" The user name from the identity provider for the user. "
}
}
},
"StopProductSubscriptionResponse":{
"type":"structure",
"required":["ProductUserSummary"],
"members":{
"ProductUserSummary":{
"shape":"ProductUserSummary",
"documentation":" Metadata that describes the start product subscription operation. "
}
}
},
"String":{"type":"string"},
"StringList":{
"type":"list",
"member":{"shape":"String"}
},
"Subnet":{
"type":"string",
"pattern":"subnet-[a-z0-9]{8,17}"
},
"Subnets":{
"type":"list",
"member":{"shape":"Subnet"}
},
"ThrottlingException":{
"type":"structure",
"members":{
"message":{"shape":"String"}
},
"documentation":" The request was denied because of request throttling. Retry the request. ",
"exception":true
},
"UpdateIdentityProviderSettingsRequest":{
"type":"structure",
"required":[

"IdentityProvider",
"Product",
"UpdateSettings"
],
"members":{
"IdentityProvider":{"shape":"IdentityProvider"},
"Product":{
"shape":"String",

"documentation":" The name of the user-based subscription product. "
},
"UpdateSettings":{
"shape":"UpdateSettings",
"documentation":" Updates the registered identity providers product related configuration settings. You can update any combination of settings in a single operation such as the: <ul> Subnets which you want to add to provision VPC endpoints.   Subnets which you want to remove the VPC endpoints from.   Security group ID which permits traffic to the VPC endpoints. "
}
}
},
"UpdateIdentityProviderSettingsResponse":{
"type":"structure",
"required":["IdentityProviderSummary"],
"members":{
"IdentityProviderSummary":{"shape":"IdentityProviderSummary"}
}
},
"UpdateSettings":{
"type":"structure",
"required":[
"AddSubnets",
"RemoveSubnets"
],
"members":{
"AddSubnets":{
"shape":"Subnets",
"documentation":" The ID of one or more subnets in which License Manager will create a VPC endpoint for products that require connectivity to activation servers. "
},
"RemoveSubnets":{
"shape":"Subnets",
"documentation":" The ID of one or more subnets to remove. "
},
"SecurityGroupId":{
"shape":"SecurityGroup",
"documentation":" A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for activation servers. "
}

},
"documentation":" Updates the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. "
},
"ValidationException":{
"type":"structure",
"members":{
"message":{"shape":"String"}
},
"documentation":" A parameter is not valid. ",
"exception":true
}
},
"documentation":" With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances. "
}
{
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"Region": "af-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-east-1.amazonaws.com"
}
},
"params": {
"Region": "ap-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-1.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false

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        }
    },
    {
        "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-southeast-1",

      "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation":
"For region ca-central-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ca-central-1.amazonaws.com"
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            }
        },
        "params": {
            "Region": "ca-central-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-central-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "eu-central-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region eu-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint":
{
                "url": "https://license-manager.eu-north-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "eu-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "eu-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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    {
      "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-1.amazonaws.com"
        }
      },
      "params":
{
        "Region": "eu-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,
        "UseDualStack": false
      }

  },
    {
      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
```

```
    "params": {
      "Region": "me-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.sa-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "sa-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {

    "endpoint": {
        "url": "https://license-manager.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-2.amazonaws.com"
        }
      },

    "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-1",
        "UseFIPS": false,
        "UseDualStack": false

  }
    },
    {
      "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-1",
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"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
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"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
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"endpoint": {
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}
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"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager.us-east-1.api.aws"
}
},

"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack":
false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true

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        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
            }
        },
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            "UseDualStack": false
        }
    },
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        "documentation": "For region cn-north-1 with FIPS disabled
and DualStack enabled",
        "expect": {
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                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
```

```
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {

        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
```

```
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }

  },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {

     "endpoint": {
          "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
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"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params":
{
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {

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        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
 },
{
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    "expect": {
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    },
```

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]
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{
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    "type": "error"
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}
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```

```
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  ]
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{
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                },
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                    "type": "error"
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```

```
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                },
                "type": "endpoint"
            }
        ]
    }
  ]
},
{
  "conditions": [],
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  "type": "error"
}
]
}
```


AWS Signature Version 4 Test Suite

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true

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```

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```

```
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                    ]
                }
            ]
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                          "type": "endpoint"
                        }

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                ]
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            }
        ]
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                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
  ]
}
]
```

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   "output_token": "NextToken",
   "result_key": "LicenseConfigurationAssociations"
  },
  "ListLicenseConfigurations": {
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   "result_key": "InstanceUserSummaries"
  }
 }
}

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"documentation":" The type of name to filter by. "
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"Operator":{
"shape":"Operator",
"documentation":" An operator for filtering results. "
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"Values":{
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"documentation":" One or more values for the name to filter by. "
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"documentation":" The AMI ID used to launch the instance. "
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"documentation":" The instance ID of the resource. "
},
"InstanceType":{
"shape":"String",
"documentation":" The instance type of the resource. "
},
"LastUpdatedTime":{
"shape":"String",
"documentation":" The time in which the last discovery updated the instance details. "
},
"ProductCode":{
"shape":"ProductCodeList",
"documentation":" The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage operation values in the License Manager User Guide . "
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"Region":{
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"documentation":" The Region the instance is running in. "
},
"Status":{
"shape":"String",
"documentation":" The status of the instance. "
},
"SubscriptionName":{
"shape":"String",
"documentation":" The name of the subscription being used by the instance. "
},
"UsageOperation":{
"shape":"String",

"documentation":" The usage operation of the instance. For more information, see For more information, see Usage
operation values in the License Manager User Guide. "
}
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"documentation":" Details discovered information about a running instance using Linux subscriptions. "
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"SourceRegions"
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"shape":"OrganizationIntegration",
"documentation":" Details if you
have enabled resource discovery across your accounts in Organizations. "
},
"SourceRegions":{
"shape":"StringList",
"documentation":" The Regions in which to discover data for Linux subscriptions. "
}
},
"documentation":" Lists the settings defined for discovering Linux subscriptions. "
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"documentation":" An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of <code>AmiID</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain Amazon Machine Image (AMI) ID. The valid names for this filter are: <ul> <code>AmiID</code>   <code>InstanceID</code>
 <code>AccountID</code>   <code>Status</code>   <code>Region</code>   <code>UsageOperation</code>   <code>ProductCode</code>   <code>InstanceType</code>   The valid Operators for this filter are: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> "
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"MaxResults":{
"shape":"BoxInteger",
"documentation":" Maximum number of results to return in a single call. "
},
"NextToken":{
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"documentation":" Token for the next set of results. "
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"documentation":" NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases. "
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"ListLinuxSubscriptionInstancesResponse":{
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"shape":"InstanceList",
"documentation":" An array that contains instance objects. "
},
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"documentation":" Token for the next set of results. "
}
}
},
"ListLinuxSubscriptionsRequest":{
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"members":{

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"documentation":" An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of <code>Subscription</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain subscription's name. The valid names for this filter are: <ul> <code>Subscription</code>   The valid Operators for this filter are: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> "
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"key":{"shape":"String"},
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"shape":"BoxLong",
"documentation":" The total amount of running instances using this subscription. "
},
"Name":{

"shape":"String",
"documentation":" The name of the subscription. "
},
"Type":{
"shape":"String",
"documentation":" The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
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},
"documentation":" An object which details a discovered Linux subscription. "
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"type":"structure",
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"message":{"shape":"String"}
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"exception":true
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"LinuxSubscriptionsDiscoverySettings"
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"documentation":" Describes if updates are allowed to the service settings for Linux subscriptions. If you allow updates, you can aggregate Linux subscription data in more than one home Region. "
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"LinuxSubscriptionsDiscovery":{
"shape":"LinuxSubscriptionsDiscovery",
"documentation":" Describes if the discovery of Linux subscriptions is enabled. "
},
"LinuxSubscriptionsDiscoverySettings":{
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}
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"documentation":" The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled,
and which Regions data will be aggregated from. "
},
"Status":{
"shape":"Status",
"documentation":" Indicates the status of Linux subscriptions settings being applied. "
},
"StatusMessage":{
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"documentation":" A message which details the Linux subscriptions service settings current status. "
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}
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"ValidationException":{
"type":"structure",
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"message":{"shape":"String"}
},
"documentation":" The provided input is not valid. Try your request again. ",
"exception":true
}
},
"documentation":" With License Manager, you can discover and track your commercial Linux subscriptions on running Amazon EC2 instances. "
}

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"type": "String"
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"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
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"type": "Boolean"
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            ],
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"headers": {}
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"type": "endpoint"
}
]
},
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"conditions": [],
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"type": "error"
}
]
},
{
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{
"fn": "booleanEquals",

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},
true
]
}
],
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{

"ref": "PartitionResult"
},
"supportsFIPS"
]
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                },
                "type": "endpoint"
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    },
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        "type": "error"
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  ]
},
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        "fn": "booleanEquals",
        "argv": [
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            },
            true
        ]
    }
  ],
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  "rules": [
    {
        "conditions": [
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                "argv": [
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                    {
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                        "argv": [
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"supportsDualStack"
]
}
]

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"type": "error"
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"headers": {}
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}
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},
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{
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UNRECOGNIZED LICENSE; MD5 sum: c18d578d4659ffec17e3119a6752b24e


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        "UseFIPS": true,
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    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
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        "UseFIPS": true,
        "UseDualStack": true
    }
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        "UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
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}
}
],
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1.4025 fwupd 1.9.27-0ubuntu1~24.04.1

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interface-compatible with the version that the work was made with.

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other library
facilities. This must be distributed under the terms of the
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that part of it is a work based on the Library, and explaining
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* DNS resolver (dirmngr/dns.c)

dns.c - Recursive, Reentrant DNS Resolver.

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XZ Utils Licensing
==========

Different licenses apply to different files in this package. Here
is a rough summary of which licenses apply to which parts of this
package (but check the individual files to be sure!):

- liblzma is in the public domain.

- xz, xzdec, and lzmadec command line tools are in the public
domain unless GNU getopt_long had to be compiled and linked
in from the lib directory. The getopt_long code is under
GNU LGPLv2.1+.

- The scripts to grep, diff, and view compressed files have been
adapted from gzip. These scripts and their documentation are
under GNU GPLv2+.

- All the documentation in the doc directory and most of the
XZ Utils specific documentation files in other directories
are in the public domain.

Note: The JavaScript files (under the MIT license) have
been removed from the Doxygen-generated HTML version of the
liblzma API documentation.

Doxygen itself is under the GNU GPL
but the remaining files generated by Doxygen are not affected
by the licenses used in Doxygen because Doxygen licensing has
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- Translated messages are in the public domain.

- The build system contains public domain files, and files that
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- Test files and test code in the tests directory, and debugging
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binary wouldn't actually be in the public domain in its entirety
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If you have questions, don't hesitate to ask the author(s) for more information.

1.4041 aws-sdk-go-v2-service-sso 1.25.3

1.4041.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
```

```
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
```

- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi

DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

```
  RequestResponseLogger
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
```

```
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus
```

```
 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
```

```
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
```

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2

```
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
```

```
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
```

```
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return
nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

```
 SetLogger
 OperationInputValidation
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
         "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

      {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
```

License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

          "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
```

"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
```

subscriptions-usage-operation.html\">Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},

```
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
```

"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"

```
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
```

```
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                "ref": "UseFIPS"
                                        },
```

```
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }

    ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"

        },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [

                                     {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
```

```
                    }
                ],
                "rules": [
                    {
                        "conditions": [],

        "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],

                "type": "tree"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {

        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
```

"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true

]
}
],
"rules": [
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS is enabled
but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"

```
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true

]
    }
  ],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {

                "ref": "PartitionResult"
                },
                "supportsDualStack"
              ]
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [],
          "rules": [

{
            "conditions": [],
            "endpoint": {
              "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
```

```
                                        }
                                    ],
                                    "type": "tree"

                        }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
```

"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"

```
                }

        },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
             },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
```

```
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
                }

         },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
```

```
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {

        "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
```

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}

```
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {

             "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }

        },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
```

```
                    },
                    "params": {
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {

                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {

"Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
```

```
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled LinuxSubscriptionsDiscovery"

        },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled LinuxSubscriptionsDiscovery"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use

one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n      organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
```

```
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
```

```
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
```

"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "

```
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"
```

```
}
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },

  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
```

"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target":
 "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
```

from. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n   subscriptions. "
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": " The provided input is not valid. Try your request again. ",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
```

```
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
```

```
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
```

```
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",

"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",

"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {

"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}

```
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
 {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",

"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
```

```
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
```

```
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
```

"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"

```
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                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
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        "members": {
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                "traits": {
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about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
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             "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
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registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
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            },
            "Product": {
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                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
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            "Status": {
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                "traits": {
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identity provider. ",
"smithy.api#required": {}
}
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"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
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"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
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"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
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"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
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"Products": {
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"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
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"LastStatusCheckDate": {
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"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
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"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
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"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
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"Username": {
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"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
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"InstanceId": {
"target": "smithy.api#String",
"traits": {
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"smithy.api#required": {}
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"IdentityProvider": {
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"smithy.api#required": {}
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"traits": {
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"smithy.api#required": {}
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"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},

"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
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"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
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"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
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"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
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"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
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},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"

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          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
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          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
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          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
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          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
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          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
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"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
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      "traits": {
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"aws.protocols#restJson1": {},
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"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
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"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
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"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,

"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
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"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
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"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"ref": "Endpoint"
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"conditions": [
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"argv": [
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],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
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                  "type": "error"
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                  "argv": [
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                            },

true
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                        "argv": [
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                            },
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                                            "supportsFIPS"
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```

```
                    ]
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                                "ref": "PartitionResult"
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                            "supportsDualStack"
                        ]
                    }

        ]
                }
            ],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
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                    "type": "endpoint"
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both",
            "type": "error"
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                        "argv": [
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                                "fn": "getAttr",
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{
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                                "supportsFIPS"
                            ]
                        },
                        true
                    ]
                }
            ],
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                        "headers": {}
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            "type": "error"
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                                },
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                                            "argv": [
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                                            ]

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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                                        "headers": {}
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                                    "type": "endpoint"
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```

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                    "type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

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    "type": "tree"
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  "error": "Invalid Configuration: Missing Region",
  "type": "error"
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"smithy.rules#endpointTests": {
  "testCases": [
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      "expect":
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        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
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      "params": {
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"UseFIPS": true,
"UseDualStack": false
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"params": {
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"UseDualStack": false
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"expect": {
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"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"params": {
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"UseDualStack": false

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"UseDualStack": true
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}

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"params": {
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"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
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            }
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            "UseDualStack": false
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            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
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disabled",
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            }
          },
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            "UseDualStack":
false,
            "Endpoint": "https://example.com"
          }
        },
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          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error": "Invalid Configuration:
 Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
```

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            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
```

"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""

                },
                {
                    "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "HEALTHY",
                    "value": "HEALTHY",
                    "documentation": ""
```

```
                },
                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {

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        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
```

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n
        <li>\n                <p>InstanceId</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
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token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",

"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
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provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

         }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

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},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
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"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {

"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits":
 {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

"target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
```

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity

provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},

"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
 {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
```

to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration

settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " A parameter is not valid. ",
          "smithy.api#error": "client"
        }
      }
    }
  }
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
```

```
 }
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
```

"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},

{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateServiceSettings"
}
],

"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

```
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

            }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {

"conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref":
```

"UseFIPS"

```
                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]

                }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
```

"supportsDualStack"

```
                                ]
```

```
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}

        },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
        "type": "error"
    }
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",

    "argv": [
                {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
```

```
{
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ],
        "type": "tree",
        "rules": [

{
            "conditions": [],
            "endpoint": {
              "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
      {
        "conditions": [],
        "error": "FIPS is enabled but this
partition does not support FIPS",
        "type": "error"
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "type": "tree",
```

```
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

"supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

                },
                        "type": "endpoint"
                      }
                    ]
                  },
                  {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                  }
                ]
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                   "properties": {},
                  "headers": {}
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                    },
                    "type": "endpoint"
                }
            ]
        }
    ]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
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            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
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            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
             }
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            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
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            }
        },
        "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
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        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
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        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }

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    {
        "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-south-1.amazonaws.com"
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        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
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        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
          },
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"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},

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        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
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          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
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"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

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}
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"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",

"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true

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            }
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            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
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        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

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                    },

            "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                },
                {
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
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                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant

ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

```
},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

```
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

```
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

```
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}

```
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
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```
    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

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            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

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            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

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            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Seconds"
            }
        },
        "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
             }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

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            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
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            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
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        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
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"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

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        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

```
        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

   },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }

```
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

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    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
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"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

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            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
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"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }

        }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
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"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

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        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

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            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

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    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n
    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n
        <code>resource_id</code> - The ID of the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

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        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

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    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

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            "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
    }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

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        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

```
}
    },
    "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

},
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
```

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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
```

```
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4042 aws-sdk-go-v2-service-ssooidc 1.30.1

1.4042.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
```

```
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
```

run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
compare
- name: License test
run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi

ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
```

```
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
```

```
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

```
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go
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AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
```

```
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "

```
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
```

```
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},

"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {

"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {

"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

```
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

      ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
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                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
                },
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                        },
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
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            "type": "tree"

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        "type": "tree"
    },
    {
        "conditions": [],
        "rules": [
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                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
```

```
                    {
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                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {

                        "ref": "UseFIPS"
                            },
                            true
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }

],
                      "rules": [
                        {
                          "conditions": [
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
                                  "argv": [
                                    {
                                      "ref": "PartitionResult"

                  },
                                    "supportsFIPS"
                                  ]
                                }
                              ]
                            },
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
```

"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [

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                    {
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                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {

"fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true

                ]
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                ],
                "rules": [
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                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
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                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
```

```
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                            "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
```

```
{
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                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
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                                            }
                                        ],
                                        "type": "tree"

                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
```

```
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {

   "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-east-1",
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"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"

```
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"

```
            }
        },
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {

            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {

 "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
```

```
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n

```
<p>\n <code>AccountID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>AmiID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>DualSubscription</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceType</code>\n </p>\n </li>\n <li>\n <p>\n
<code>ProductCode</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Region</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Status</code>\n </p>\n </li>\n <li>\n <p>\n
<code>UsageOperation</code>\n </p>\n </li>\n </ul>\n <p>For each filter, you can use
one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter:</p>\n <ul>\n <li>\n <p>\n
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
    "type": "structure",
    "members": {
        "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
        },
```

"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
```

"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {

```
            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
```

"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "

```
            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
```

```
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
```

```
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
```

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {

"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",

"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}

```
   }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
"smithy": "2.0",
"shapes": {

"com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",

"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related

costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},

"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":

{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

```
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the

user. "
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": " Metadata that describes the associate user operation. ",
                    "smithy.api#required": {}
                }
            }
        },

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {

"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the
identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

```
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "Products": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                    "smithy.api#required": {}
                }
            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
```

"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "

```
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
```

"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"

},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":

```
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
```

```
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [
            {

                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
            },

"properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
```

```
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",

                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },

true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

"fn": "booleanEquals",
                                        "argv": [
```

```
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ]
            },

        {
            "fn": "booleanEquals",
            "argv": [
                true,
                {
                    "fn": "getAttr",
                    "argv": [
                        {
                            "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                    ]
                }

    ]
            }
        ],
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }

  ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
```

both",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [

{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},

```
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"

}
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {

    "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

     }
                        ]
                    }
                ],
                "rules": [
```

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}

],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [

{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}

```
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
```

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        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {

"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {

"UseFIPS": false,
"UseDualStack":
false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",

"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS \n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},

"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""

                },
                {
                    "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
            ]
```

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            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
            "type": "string",
            "traits": {
                "smithy.api#enum": [
                    {
                        "name": "HEALTHY",
                        "value": "HEALTHY",
                        "documentation": ""
                    },
                    {
                        "name": "UNHEALTHY",
                        "value": "UNHEALTHY",
                        "documentation": ""
                    },
                    {
                        "name": "NOT_APPLICABLE",
                        "value": "NOT_APPLICABLE",
                        "documentation": ""
                    }
                ]
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
            "type": "structure",
            "members": {
                "ServerType": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                    "traits": {
                        "smithy.api#documentation": "<p>The type of license server.</p>",
                        "smithy.api#required": {}
                    }
                },
                "ServerSettings": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                    "traits": {
                        "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                        "smithy.api#required": {}
                    }
```

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
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"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
           "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
      "type":
 "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
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request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating.
This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions
operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {

```
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
```

```
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n        </li>\n        <li>\n            <p>Username</p>\n        </li>\n
<li>\n            <p>Domain</p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
```

},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},

"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to
register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",

"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "

```
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
            "type": "union",
            "members": {
                "RdsSalSettings": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                    "traits": {
                        "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
            "type": "string",
            "traits": {
                "smithy.api#enum": [
                    {
                        "name": "RDS_SAL",
                        "value": "RDS_SAL",
                        "documentation": ""
                    }
                ]
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
            "type": "structure",
            "members": {
                "message": {

    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
                "smithy.api#error": "client"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Settings": {
            "type": "structure",
            "members": {
                "Subnets": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                    "traits": {
```

"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}

```
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
```

```
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {

"min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
```

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {

"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {

"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

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ListReceivedLicenses
Initialize stack step
spanInitializeStart

```
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
              "namespace": "*"
          }
      ]
  },
  "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
          "type": "service",
          "version": "2018-08-01",
          "operations": [
              {
                  "target": "com.amazonaws.licensemanager#AcceptGrant"
```

```
        },

{
        "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CheckoutLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateGrant"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateGrantVersion"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
         },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateToken"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteGrant"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
        },
        {
```

"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},

{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"

```
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                 "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
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                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
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                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                        "type": "Boolean"
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                    "UseFIPS": {
                        "builtIn": "AWS::UseFIPS",
                        "required": true,
                        "default": false,
                        "documentation": "When true, send
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this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
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"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
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"argv": [
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"ref": "UseFIPS"
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"type": "error"
},
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"argv": [
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  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
  "type": "error"
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      "ref": "Endpoint"
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          "argv": [
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                              },
                              true
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                                    "argv": [
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                                        "ref": "PartitionResult"
                                      },
                                      "supportsFIPS"
                                    ]

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"properties": {},
"headers": {}

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"type": "endpoint"
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"type": "error"
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                      "headers": {}
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                "type": "error"
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            "conditions": [
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                                "argv": [
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"supportsDualStack"

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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}

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                        "type": "endpoint"
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            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
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                    "headers": {}
                },
                "type": "endpoint"
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    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
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  "testCases": [
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      "expect": {
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      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
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            "UseDualStack": false
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            "endpoint": {
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            "UseFIPS": false,
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        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
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            }
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        "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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        "expect": {
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            }
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        "params": {
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        "expect": {
            "endpoint": {
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        "params": {
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            "UseDualStack": false
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
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        "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
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              "expect": {
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                }
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             "params": {
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                "UseFIPS": false,
                "UseDualStack": false
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              "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
              "expect": {
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                  "url": "https://license-manager.eu-central-1.amazonaws.com"
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              "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
              "expect": {
                "endpoint": {
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              "params": {
                "Region": "eu-north-1",
                "UseFIPS": false,
                "UseDualStack": false
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              "expect": {
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                "expect": {

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                    "UseDualStack": false
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              "params": {
                "Region": "me-south-1",
                "UseFIPS": false,
                "UseDualStack": false
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              "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
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                "endpoint": {
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              "params": {
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                "UseFIPS": false,
                "UseDualStack": false
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              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
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                "UseDualStack": false
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"url": "https://license-manager.us-east-2.amazonaws.com"
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"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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"params": {

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"UseDualStack": true
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"expect": {
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"expect": {
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"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
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"params": {
"Region": "cn-northwest-1",
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
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"params": {
"Region": "cn-north-1",
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"UseDualStack": true
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"UseDualStack": false
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"Region": "cn-north-1",
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.us-gov-east-1.amazonaws.com"
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"Region": "us-gov-east-1",

"UseFIPS": false,
"UseDualStack": false
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"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
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"params": {
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"UseDualStack": false
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"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
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"UseDualStack": false
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        },

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            "UseDualStack": true
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            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
        }
    },
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{
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": false
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"params": {
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"UseDualStack": true

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                }
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                "expect": {
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                    }
                },

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                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
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                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
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                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
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                    }
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                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
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                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://example.com"
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```
                }
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            "params": {
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    "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
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            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
```

"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
```

```
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

      "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
```

```
            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
    }
},
"com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Arn"
    }
},
"com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
```

"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},

```
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

    },
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
```

{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
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            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
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idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}

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            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PROVISIONAL"
                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
             }
        }
    },
```

"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {

"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
```

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            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
```

```
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "

```
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
 {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}

        }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
```

"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",

"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",

"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}

```
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
```

```
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members":
{
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {

"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":

"com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": " Indicates whether check-ins are allowed. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes a resource entitled for use with a license. "
    }
},
"com.amazonaws.licensemanager#EntitlementData": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement data name. ",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement
data value. "
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": " Entitlement data unit. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Data associated with an entitlement resource. "
    }
},
"com.amazonaws.licensemanager#EntitlementDataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
    }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
    "type": "enum",
    "members": {

"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}

```
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes/Second"
    }
},
"KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
    }
},
"MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
    }
},
"GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
     "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
    }
},
"TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
    }
},
"BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits/Second"
    }
},
"KILOBITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
    }
},
"MEGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
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"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},

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"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
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```
        },
        "BYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },

  "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumedValue": {
          "target": "com.amazonaws.licensemanager#String",

        "traits": {
            "smithy.api#documentation": "<p>Resource usage consumed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxCount": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
          }
        },
```

```
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

  }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {

```
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

        },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
```

"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}

```
            },
            "ConsumedLicenseSummaryList": {
                "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
                }
            },
            "ManagedResourceSummaryList": {
                "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                 "traits": {
                    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            },
            "AutomatedDiscoveryInformation": {
                "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
                "traits": {
                    "smithy.api#documentation": "<p>Automated discovery information.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "

```
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
```

"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
        "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
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"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},

"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",

"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {

"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}

```
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
```

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            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
```

"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},

"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {

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        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

    },
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
      "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
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"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "

```
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },

    "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
```

}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}

},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

       "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
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    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#License"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
```

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            }
        },
        "MetadataList": {

            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
    }
},
"com.amazonaws.licensemanager#LicenseSpecification": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

            "smithy.api#required": {}
            }
        },
        "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
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    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

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            }
        }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
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"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

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            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
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configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

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      "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
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"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseConfigurationArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

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            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
 {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {

```
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
```

```
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n            </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n            </p>\n            </li>\n
    <li>\n                <p>\n                <code>Fingerprint</code>\n            </p>\n            </li>\n            <li>\n
<p>\n                <code>Status</code>\n            </p>\n            </li>\n        </ul>"
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
```

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
            <li>\n                <p>\n                <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

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        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n

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</li>\n <li>\n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
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        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n            <li>\n                <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n                <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is
<code>RDS</code>:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>License Pack</code> - The license
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pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {

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                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
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"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}

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            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

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            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
 {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
```

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}

```
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "

```
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
```

"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
```

"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
```

"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation":
" ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4043 github.com/aws/aws-sdk-go-v2/service/ssooidc 1.30.1

1.4043.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
```

```
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
```

```
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
```

```
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
```

```
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
```

```
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
```

```
//   - Fingerprint
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
```

DisassociateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}
```

```
func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

Initialize stack step
- spanInitializeStart
- RegisterServiceMetadata
- legacyEndpointContextSetter
- SetLogger
- OperationInputValidation
- spanInitializeEnd

Serialize stack step
- spanBuildRequestStart
- setOperationInput
- ResolveEndpoint
- OperationSerializer

Build stack step
- ClientRequestID
- ComputeContentLength
- SetCredentialSourceMiddleware
- UserAgent
- AddTimeOffsetMiddleware
- RecursionDetection
- spanBuildRequestEnd

Finalize stack step
- spanRetryLoop
- Retry
- RetryMetricsHeader
- ResolveAuthScheme
- GetIdentity
- ResolveEndpointV2
- disableHTTPS
- ComputePayloadHash
- setLegacyContextSigningOptions
- Signing

Deserialize stack step
- AddRawResponseToMetadata
- ErrorCloseResponseBody
- CloseResponseBody
- ResponseErrorWrapper

```
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
```

```
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
       "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
           "type": "integer"
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
           "type": "long"
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
           "type": "operation",
           "input": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
           },
           "output": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
           },
           "errors": [
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "

```
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
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"traits": {
"smithy.api#documentation": " The status of the instance. "
}
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"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},

"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux
subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",

"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

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            "type": "Boolean"
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            "required": false,
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            "type": "String"
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                            ]
                        }

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                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
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                    "conditions": [],
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                            "conditions": [
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                                    "fn": "booleanEquals",
                                    "argv": [
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                                            "ref": "UseDualStack"
```

```
                    },
                    true
                ]

}
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                        "ref": "Endpoint"
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                    "argv": [
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                    "argv": [
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                  "ref": "UseFIPS"
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                    "argv": [
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                            "ref": "UseDualStack"
                        },
                        true
                    ]
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                            "argv": [
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                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"

},
                                        "supportsFIPS"
                                    ]
                                }
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                    "fn": "booleanEquals",
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                            "argv": [

                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [],

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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
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                            "type": "endpoint"
                        }
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one or both",

            "type": "error"
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsFIPS"
]
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"headers": {}

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but this partition does not support FIPS",
    "type": "error"
}
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"type": "tree"
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"conditions": [
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        "argv": [
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                "ref": "UseDualStack"
            },
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                "argv": [
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                        "argv": [
                            {

                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
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                    }
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
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                        "type": "endpoint"
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                    "type": "tree"

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            "type": "tree"
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            "type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
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```

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        "type": "error"
    }
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"type": "tree"
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"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
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    },
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},

"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
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}

},
"params": {
"Region": "us-gov-east-1",
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"UseDualStack": false
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

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"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
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}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
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"UseDualStack": true
}
},
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
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}
},
"params": {
"Region": "us-iso-east-1",
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"UseDualStack": false
}
},
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

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        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
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            "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
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        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
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        "UseFIPS": false,
        "UseDualStack": true
    }
},
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    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
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        }
    },
    "params": {
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        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
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}

},
"params": {
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"

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                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
        {
          "name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled LinuxSubscriptionsDiscovery"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
      "SourceRegions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
        "traits": {
          "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "OrganizationIntegration": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
        "traits": {
          "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
          "smithy.api#required": {}
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
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        "type": "structure",
        "members": {
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"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {

"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
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"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",

"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"

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            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
```

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                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "

```
            }
        },
        "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
```

"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",
"value": "Successful",
"documentation": "Successful status"
},
{
"name": "Failed",
"value": "Failed",
"documentation": "Failed status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
```

"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",

"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

```
        },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
             "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target":
 "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
```

```
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
```

```
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string
```

```
// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
```

"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":

```
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
```

"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",

"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#Directory": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/DisassociateUser"
      },
      "smithy.api#idempotent": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
```

"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}

```
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},

"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"

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    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"

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        }
    ],
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                    "fn": "booleanEquals",
                    "argv": [
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                        },
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                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
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            "conditions": [
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                    "argv": [
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                        },
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                    ]
                }
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            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
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            "conditions": [],
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                    "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
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            "type": "endpoint"
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        {
            "conditions": [
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                    "argv": [
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                            "ref": "Region"
                        }
                    ]
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            ],
            "rules": [
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                    "conditions": [
                        {
                            "fn": "aws.partition",

                        "argv": [
                                {
                                    "ref": "Region"
                                }
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                            "assign": "PartitionResult"
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                    "rules": [
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                                    "fn": "booleanEquals",
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                                            "ref": "UseFIPS"
                                        },

true
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                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
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                ]
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        "rules": [
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                        "argv": [
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },

                {
                        "fn": "booleanEquals",
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                            {
                                "fn": "getAttr",
                                "argv": [
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                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

            ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
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```
                    },
                    "type": "endpoint"
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                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
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        "type": "tree"
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        "conditions": [
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                "fn": "booleanEquals",
                "argv": [

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                    "ref": "UseFIPS"
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        "rules": [
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                        "fn": "booleanEquals",
                        "argv": [
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                                "fn": "getAttr",
                                "argv": [

    {
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                                "supportsFIPS"
                            ]
                            },
                            true
                        ]
                    }
```

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                    ],
                    "rules": [
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                                "headers": {}
                            },
                            "type": "endpoint"
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                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
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                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
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    "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
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                                        "fn": "getAttr",
                                        "argv": [
                                            {
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"ref": "PartitionResult"
},
"supportsDualStack"
]

}
]
}
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"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}

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"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
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"type": "tree"
}
],
"type": "tree"

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            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS":
true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {

"endpoint":
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"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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{
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}

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            },
            {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "UseFIPS": false,
                    "UseDualStack":
false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
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"version": "1.0"
}
}
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "

```
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

    "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
 {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
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"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{

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            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

        },
        {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
        }
    ]
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
        {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
        },
        {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
        },
        {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
        }
    ]
  }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
  "type": "structure",
  "members": {
    "ServerType": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
        "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
```

"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n            <li>\n                <p>Product</p>\n            </li>\n
        <li>\n                <p>DirectoryId</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
```

"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't

empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

```
    }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {

     "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-

\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains
credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",

"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",

"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",

"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
               "id": "PaginatedTrait",
               "namespace": "*"
           },
           {
               "id": "HttpHeaderTrait",
               "namespace": "*"
           },
           {
               "id": "HttpUriConflict",
               "namespace": "*"
           },
           {
               "id": "Service",
```

```
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
```

"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},

```
            {
                "target": "com.amazonaws.licensemanager#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                 "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            },
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
```

"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

```
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {

"conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                     },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
```

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                    {
                     "fn": "aws.partition",
                    "argv": [
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                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                    }
                  ],
                  "type": "tree",
                  "rules": [
                    {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref":
"UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                       "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
                              {
                                "fn": "getAttr",
                                "argv": [
                                  {
                                    "ref": "PartitionResult"
                                  },
```

"supportsFIPS"
]

}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [

```
            {
              "fn": "booleanEquals",

        "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,

{
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                }
              ],
              "type": "tree",
              "rules": [

{
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ]
            },
            {
              "conditions": [],
```

"error": "FIPS is enabled but this
partition does not support FIPS",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

```
                    },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
             "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
  ]
}
]
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"Region": "af-south-1",
"UseFIPS": false,
"UseDualStack": false
}
```

```
},
{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
```

"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {

"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
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"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
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"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-west-2.amazonaws.com"
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"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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"params": {
"Region": "us-west-2",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

}
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
             }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
```

```
        },

    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
          }
         },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
          }
```

```
            },
            "params": {
              "Region": "us-gov-west-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-gov-east-1.api.aws"
              }
            },

    "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
```

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        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
```

```
      },

    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
            }
        },

  "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
      },
      {
        "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
            "endpoint": {
                "url": "https://example.com"
            }
        },
        "params": {
            "Region": "us-east-1",
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {

```
                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
  "output": {
    "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"

  }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
  "type": "structure",
  "members": {
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"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant
ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},

"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-

z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
 {
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": " Time that automated discovery last ran. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Describes automated discovery. "
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }

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    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
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"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target":
"com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license for offline use. "
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
"type": "structure",
"members":
{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {

"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
```

"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"

```
                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
```

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    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n
\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}

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        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
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"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the grant. "
}
}
},
"traits":
{
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license. "

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        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
```

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            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                 "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target":
 "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
            <code>licenseAffinityToHost</code> |\n                <code>maximumCores</code> |
<code>minimumCores</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n                <code>maximumCores</code> |
<code>minimumCores</code> |\n                <code>maximumSockets</code> | <code>minimumSockets</code> |\n
            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n                </p>\n            </li>\n
<li>\n
  <p>\n                    <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n                <code>maximumSockets</code> |
<code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
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<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

       "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
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{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",

"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

  }
            },
            "Validity": {
```

"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
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"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",

"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
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grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
```

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},

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    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Bytes"
                }
            },
            "KILOBYTES": {
                "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
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},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
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"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
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"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},

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        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
```

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                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

      }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
```

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
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"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},

"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"

```
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": " Gets detailed information about the specified license. "
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

```
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
},
"LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
},
"LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
    }
},
"LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
},
"LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
},
"ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
        "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
```

"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

    },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
 {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
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"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "

```
            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

      },
        "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {

  "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {

"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " License name. "
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}

```
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

down. ",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Name of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": " Condition of the filter. ",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Value of the filter. "
                }
            }

    },
        "traits": {
            "smithy.api#documentation": " An inventory filter. "
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"

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                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "

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                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},

"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "

}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with
the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",

"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#License"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "

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            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
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"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n            </p>\n
        </li>\n            <li>\n                <p>\n                <code>GrantStatus</code>\n            </p>\n            </li>\n
    <li>\n            <p>\n                <code>GranteePrincipalARN</code>\n            </p>\n            </li>\n
<li>\n            <p>\n                <code>ProductSKU</code>\n            </p>\n            </li>\n            <li>\n
<p>\n                <code>LicenseIssuerName</code>\n
        </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
        {
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

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{
        "type": "structure",
        "members": {
           "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                 "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
           },
           "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
           "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license
configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
                },
                {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
            "type": "structure",
            "members": {
                "Filters": {
                    "target": "com.amazonaws.licensemanager#FilterList",
                    "traits": {
                        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
                </p>\n            </li>\n        </ul>"
                    }
                },
                "NextToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                    }
                },
                "MaxResults": {
```

"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
     <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},

"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                    <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                    <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
```

```
</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilter": {
      "type": "structure",
      "members": {
        "ProductInformationFilterName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Filter name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterValue": {
          "target": "com.amazonaws.licensemanager#StringList",

        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
          }
        },
        "ProductInformationFilterComparator": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
         "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
        },
```

"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}

```
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
```

```
            }
        },
        "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Weekly"
            }
        },
        "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Monthly"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportContext": {
    "type": "structure",
    "members": {
        "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
},
"com.amazonaws.licensemanager#ReportFrequency": {
    "type": "structure",
    "members": {
        "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
                "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
        },
        "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

            "traits": {
                "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

or monthly. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Details about how frequently reports are generated. "
        }
      },
      "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
          "DAY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DAY"
            }
          },
          "WEEK": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WEEK"
            }
          },
          "MONTH": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "MONTH"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Name of the report generator. "
            }
          },
          "ReportType": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": " Type of reports that are generated. "
            }
          },
          "ReportContext": {

"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},

"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}

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    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
        }
    }
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":

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{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC
format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "

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            }
        },
        "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }
        }
    },
    "traits": {

      "smithy.api#documentation": "<p>Describes a token.</p>"
    }
},
"com.amazonaws.licensemanager#TokenList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#TokenData"
    }
},
"com.amazonaws.licensemanager#TokenString": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 4096
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#TokenType": {
    "type": "enum",
    "members": {
        "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REFRESH_TOKEN"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {

"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name
of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {

"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4044 github.com/aws/aws-sdk-go-v2/service/sso 1.25.3

1.4044.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
```

```
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CreateLicenseInput struct {

// License beneficiary.
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
```

```
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
```

```
 return nil, err
}

out := result.(*ListLicensesOutput)
out.ResultMetadata = metadata
return out, nil
}

type ListLicensesInput struct {

// Filters to scope the results. The following filters are supported:
//
//   - Beneficiary
//
//   - ProductSKU
//
//   - Fingerprint
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack);
err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
```

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

```
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
```

```
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
```

"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider

resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
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"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
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"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}

```
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
                }
            },
            "LastUpdatedTime": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
```

details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux

subscriptions. "
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
" An exception occurred with the service. ",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"

```
            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
```

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],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
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                "conditions": [],
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                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

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            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
```

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                "fn": "isSet",
                "argv": [
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                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

        "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {

                      "ref": "UseFIPS"
                          },
                          true
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
                      }

  ],
                    "rules": [
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"

},
"supportsFIPS"
]
}
]
},
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"

```
                                        }
                                    ],

                        "type": "tree"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
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            "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsFIPS"
                                            ]
                                        },
                                        true
```

```
                    ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
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                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
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                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

    ]
                }
            ],
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                {
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"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
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]
}
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"rules": [
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"conditions": [],
"rules": [

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"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
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],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},

```
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                      "conditions": [],
                      "rules": [
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"
                    }
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                  "type": "tree"
                }
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              "type": "tree"
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ],
          "type": "tree"
        }
      ]
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}

```
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
             },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
```

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"

```
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {

       "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
```

"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",

"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n      organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n
<li>\n              <p>\n                <code>Subscription</code>\n              </p>\n          </li>\n        </ul>\n
<p>The
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n              <p>\n
<code>contains</code>\n              </p>\n          </li>\n          <li>\n              <p>\n
<code>equals</code>\n              </p>\n          </li>\n          <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
```

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}

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        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
```

"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":

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{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

```
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}

```
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

             "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
```

```
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
```

"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

```
        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {
```

```
 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
GetLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains

details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {

"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"

},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS)

license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

 }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {

"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},

"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
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"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
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"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

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    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
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"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
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"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
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    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
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            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
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"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

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        "type": "String"
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        "conditions": [
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            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
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            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseFIPS"
                  },
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                ]
              }
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            "type": "error"
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            "conditions": [
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                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseDualStack"
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                  true
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            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
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    },
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        "conditions": [
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                "argv": [
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                     "argv": [
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                                "ref": "Region"
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                        "assign": "PartitionResult"
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                "rules": [
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                        "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref": "UseFIPS"
                                    },
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"argv": [
{
"ref": "UseDualStack"
},
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}
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"rules": [
{
"conditions": [
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
}
]
},

{
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"argv": [
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{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}

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                    ]
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                    ],
                    "rules": [
                        {
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

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                    "conditions": [],
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both",
                    "type": "error"
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            "type": "tree"
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                    "argv": [

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"supportsFIPS"

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"headers": {}

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"type": "endpoint"

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"type": "error"

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"type": "tree"

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"argv": [

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"ref": "UseDualStack"

},

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]

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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
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"supportsDualStack"
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"type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

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"type": "endpoint"
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"error": "Invalid Configuration: Missing Region",
"type": "error"
}
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"smithy.rules#endpointTests": {
"testCases": [
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"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
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"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"params": {
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"UseFIPS": true,
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              "expect": {
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                }
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              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
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              "expect": {
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                  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
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              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS":
true,
                "UseDualStack": true
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            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
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            }
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        "params": {
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            "UseFIPS": false,
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        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
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            "UseFIPS": true,
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        }
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"params": {
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"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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"endpoint": {
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
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"url": "https://example.com"
}
},
"params": {
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"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
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"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {

"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
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"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "

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                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
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            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
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            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
    }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
    "type": "list",
    "member": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings
for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
the following filters to streamline results:</p>\n    <ul>\n        <li>\n            <p>Product</p>\n        </li>\n
    <li>\n            <p>DirectoryId</p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
```

\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next
token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100

```
                }
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
    "type": "structure",
    "members": {
        "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
    "type":
```

"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":

```
{
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n            <p>Status</p>\n            </li>\n            <li>\n            <p>Username</p>\n
</li>\n            <li>\n            <p>Domain</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
```

"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

            }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
```

```
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

        "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
```

```
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
        },
        "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
    "type":
 "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
    "type": "structure",
    "members": {
        "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
```

"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":

" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",

"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",

"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation":
" The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

        }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

     "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
```

"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security
group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}

```
      }
    }
  }
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

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```
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
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            "id": "PaginatedTrait",
            "namespace": "*"
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        {
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            "namespace": "*"
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            "id": "HttpUriConflict",
            "namespace": "*"
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            "id": "Service",
            "namespace": "*"
        }
    ]
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"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
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                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
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                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
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"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
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"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
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"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
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"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
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"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},

{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
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},
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},
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"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
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"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

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"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
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},
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"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"

```
            },
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            {
                "target": "com.amazonaws.licensemanager#ListTokens"
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                "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
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            },
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                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
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                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
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                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
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            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
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        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
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"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
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"fn": "isSet",
"argv": [
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"ref": "Endpoint"
}
]

}
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                    ]
                  }
                ],
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                "type": "error"
              },
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                "type": "error"
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},
"supportsFIPS"
]

}
]
},
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"fn": "booleanEquals",
"argv": [
true,
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
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"conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"

```
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            },
            {
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                "type": "error"
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    {
        "conditions": [
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                    true
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{
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                                },
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```

```
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                            "headers": {}
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                ]
            },
            {
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partition does not support FIPS",
                "type": "error"
            }
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        "conditions": [
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                "argv": [
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"supportsDualStack"
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```

```
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                            }
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                                    "headers": {}

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                                "type": "endpoint"
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                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
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                ]
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                "conditions": [],
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                "type": "endpoint"
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        ]
    }
]
},
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    "conditions": [],
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    "type": "error"
}
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"smithy.rules#endpointTests": {
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          "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
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            }
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          "params": {
            "Region": "af-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-east-1.amazonaws.com"
            }
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          "params": {
            "Region": "ap-east-1",
            "UseFIPS": false,
            "UseDualStack": false
           }
        },
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          "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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          "params": {
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"params": {
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"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
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"params": {
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"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
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{
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"expect": {
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"url": "https://license-manager.eu-north-1.amazonaws.com"
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"params": {
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"UseDualStack": false
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"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,

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            "UseDualStack": false
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    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-2.amazonaws.com"
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        "params": {
            "Region": "us-east-2",
            "UseFIPS": false,
            "UseDualStack": false
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        "expect": {
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"url": "https://license-manager-fips.us-east-2.amazonaws.com"
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
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}
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"params": {

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"UseDualStack": false
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"expect": {
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"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false

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            }
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            "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

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                    "url": "https://license-manager-fips.us-west-2.amazonaws.com"
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            "params": {
                "Region": "us-west-2",
                "UseFIPS": true,
                "UseDualStack": false
            }
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            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
            }
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            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-east-1.api.aws"
                }
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            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
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            "expect": {
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                    "url":
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"https://license-manager.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}

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        },
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          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },

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          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
            }
           },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
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        {
          "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-west-1.amazonaws.com"
            }
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
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"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}

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      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
          }
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },

    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },

"params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
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"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
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"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}

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            },
            "CHECKOUT_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutLicense"
                }
            },
            "CHECKOUT_BORROW_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutBorrowLicense"
                }
            },
            "CHECK_IN_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckInLicense"
                }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ExtendConsumptionLicense"
                }
            },
            "LIST_PURCHASED_LICENSES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
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"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "

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            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }

},
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
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"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}

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            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
```

"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {

"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {

"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}

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        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
```

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        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
```

```
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n <ul>\n
            <li>\n                <p>An organization, which will include all accounts across your organization.</p>\n </li>\n        </ul>",
                    "smithy.api#required": {}
                }
```

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        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
```

{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}

```
    },
    "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
        }
    },
    "GrantName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
        }
    },
    "AllowedOperations": {
        "target": "com.amazonaws.licensemanager#AllowedOperationList",
        "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
         "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "StatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
        }
    },
    "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
        }
    },
    "Options": {
        "target": "com.amazonaws.licensemanager#Options",
        "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
        }
    }
},
 "traits": {
    "smithy.api#input": {}
}
```

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    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the grant.</p>"
          }
        }
      },
      "traits":
{
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
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all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |

<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {

            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",

```
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
```

"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {

"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target":
"com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for

workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT

token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation":
"<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
```

"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
```

"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},

"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},

"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"
            }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
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"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {

"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
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"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"

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    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Filter",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
             "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
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tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},

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    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
```

```
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
```

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    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
```

```
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {

"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "

```
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

          },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
```

configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {

"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {

"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",

"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
```

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        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

},
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#IssuerDetails",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license issuer.</p>"
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

             }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license status.</p>"
                }
```

},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {

"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},

"com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
},
"com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Issuer name. ",
                "smithy.api#required": {}
            }
        },
        "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "

```
                }
            },
            "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
```

"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}

```
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the license configuration.</p>"
        }
    },
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

   }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
        }
    },
    "ManagedResourceSummaryList": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
        }
    },
    "ProductInformationList": {
        "target": "com.amazonaws.licensemanager#ProductInformationList",
        "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
        }
    },
    "AutomatedDiscoveryInformation": {

        "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
        "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
```

agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},

"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
```

```
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
    "type": "string",
    "traits": {

    "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
```

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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
```

```
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
```

"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",

"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {

"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
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<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n              <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n              Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

          "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your

account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}

```
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

```
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n              <p>\n                <code>Beneficiary</code>\n              </p>\n
      </li>\n           <li>\n              <p>\n                <code>ProductSKU</code>\n              </p>\n           </li>\n
   <li>\n              <p>\n                <code>Fingerprint</code>\n              </p>\n           </li>\n           <li>\n
<p>\n                <code>Status</code>\n              </p>\n           </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
```

"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while

specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}

```
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
      <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
```

```
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n              <p>\n                <code>LicenseArns</code>\n              </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100

```
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>. \n \n \n
\n <code>Application Publisher</code> - The publisher of the application.\n Logical

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

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        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
     }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
```

```
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
```

```
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
```

"members": {
"Location": {
"target": "com.amazonaws.licensemanager#Location",
"traits": {
"smithy.api#httpHeader": "Location"
}
},
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " This is not the correct Region for the resource. Try again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#RejectGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
```

{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

```
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
```

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report

generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}

```
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
```

"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

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"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096

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            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
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            }
        },
        "com.amazonaws.licensemanager#TagList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanager#Tag"
            }
        },
        "com.amazonaws.licensemanager#TagResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#TagResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#TagResourceResponse"
            },
            "errors": [
                {
                    "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ServerInternalException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
            }
        },
        "com.amazonaws.licensemanager#TagResourceRequest": {
            "type": "structure",
            "members": {
                "ResourceArn": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits":
 {
                        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                        "smithy.api#required": {}
```

```
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "ExpirationTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
```

format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {

"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
```

"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
```

update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
```

```
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4045 github.com/redis/go-redis/v9 9.7.3

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1.4046 grpc-go 1.71.1

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1.4047 argcomplete 3.6.2

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1.4048 liblzma 5.6.1+really5.4.5-1ubuntu0.2

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==========

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- liblzma is in the public domain.

- xz, xzdec, and lzmadec command line tools are in the public
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- The scripts to grep, diff, and view compressed files have been adapted from gzip. These scripts and their documentation are under GNU GPLv2+.

- All the documentation in the doc directory and most of the XZ Utils specific documentation files in other directories are in the public domain.

  Note: The JavaScript files (under the MIT license) have been removed from the Doxygen-generated HTML version of the liblzma API documentation.
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1.4049 google-cloud-go-pubsub 1.48.0

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```

```
//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
```

```
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
```

```
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
```

```
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
```

```
only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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```
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```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
```

```
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 GetIamPolicy:
[]gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

//
```

```
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
```

```
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
```

```
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
```

```
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
```

```
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
```

```
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf,
resp); err != nil {
  return err
 }

 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
```

```
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
```

```
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
```

```
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
```

```
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}
```

```
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken,
 nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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//
```

```
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
```

```
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
```

```
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
```

```
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
```

```
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
```

0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,

```
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
```

```
 return
}
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
  GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
  RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
  NumEnums:      2,
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)
```

```
func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
```

```
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
```

```
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:           []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:           []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient
```

```
 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
```

```
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
```

```
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
```

```
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}
```

```
func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
```

```
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
```

```
  req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
  return err
  }, opts...)
  if err != nil {
  return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
  }
  fetch := func(pageSize int,
  pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
  return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
  }

  it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
  it.pageInfo.MaxSize = int(req.GetPageSize())
  it.pageInfo.Token = req.GetPageToken()

  return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
  hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

  hds = append(c.xGoogHeaders, hds...)
  ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
  opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
  var resp *longrunningpb.Operation
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
  error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
```

```
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
```

```
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp
:= &procurementpb.AssignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
```

```
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
  if req.GetPageToken() != "" {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
  headers := gax.BuildHeaders(ctx, hds...)
  e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
```

```
}
// Copyright 2025 Google LLC
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//
//     http://www.apache.org/licenses/LICENSE-2.0
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// distributed under the License is distributed on an "AS IS" BASIS,
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
```

```
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
```

```
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}
```

```
func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
```

```
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
0x61, 0x67,
0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
```

```
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
```

```
 },
 GoTypes:          file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
= nil
file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
```

```
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
```

```
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
```

```
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}
```

```
func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
```

```
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
```

```
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
```

```
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
```

```
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
```

```
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
```

```
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
```

```
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}
```

```
// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}
```

```
func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
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 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
```

```
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                    // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
```

```
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}
```

```
func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
```

```
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
```

```
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
```

```
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
```

```
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
```

```
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
```

```
  MethodName: "UpdateLicensePool",
  Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
 },
 {
  MethodName: "Assign",
  Handler:
   _LicenseManagementService_Assign_Handler,
 },
 {
  MethodName: "Unassign",
  Handler:    _LicenseManagementService_Unassign_Handler,
 },
 {
  MethodName: "EnumerateLicensedUsers",
  Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
 },
},
Streams:  []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
```

```
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
```

```
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
```

```
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}
```

```
// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }
```

```
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.4050 jsonpointer 2.0

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1.4051 google-golang-org-grpc 1.71.1

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1.4052 libdw1t64 0.190-1.1ubuntu0.1

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1.4054 gyp-next 0.20.0

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1.4055 hashicorp-consul-api 1.32.0

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```
{{!
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}}

<div
 ...attributes
 class="consul-intention-permission-header-form"
```

```
>
 <FormGroup
   @name={{name}}
 as |group|>

   {{yield (hash
     submit=(action 'submit' changeset)
     reset=(action 'reset' changeset)

     isDirty=(and changeset.isValid changeset.isDirty)
     changeset=changeset
   )}}

   <fieldset>
     <div>
       <group.Element
         @name="HeaderType"
         @type="select"
       as |el|>
         <el.Label>Header type</el.Label>
         <PowerSelect
           @options={{headerTypes}}
           @selected={{headerType}}
           @onChange={{action 'change' 'HeaderType' changeset}} as |Type|>
             {{get headerLabels Type}}
         </PowerSelect>
       </group.Element>


       <group.Element
         @name="Name"
         @error={{changeset-get changeset 'error.Name'}}
       as |el|>
         <el.Label>Header name</el.Label>
         <el.Text

          @value={{changeset-get changeset 'Name'}}
           oninput={{action 'change' 'Name' changeset}}
         />
         <State @state={{el.state}} @matches="error">
           <el.Error>
             {{changeset-get changeset 'error.Name.validation'}}
           </el.Error>
         </State>
       </group.Element>

{{#if shouldShowValueField}}
       <group.Element
```

```
        @name="Value"
        @error={{changeset-get changeset 'error.Value'}}
      as |el|>
        <el.Label>Header {{lowercase (get headerLabels headerType)}}</el.Label>
        <el.Text
          @value={{changeset-get changeset 'Value'}}
          oninput={{action 'change' 'Value' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Value.validation'}}
          </el.Error>
        </State>
      </group.Element>
 {{/if}}

 {{#if shouldShowIgnoreCaseField}}
      <group.Element

        @name="IgnoreCase"
        @error={{changeset-get changeset 'error.IgnoreCase'}}
      as |el|>
        <el.Label>Ignore Case</el.Label>
        <el.Checkbox
          checked={{if IgnoreCase 'checked'}}
          onchange={{action 'change' 'IgnoreCase' changeset}}
        />
      </group.Element>
 {{/if}}

    </div>
  </fieldset>
 </FormGroup>
</div>
---
layout: api
page_title: License - Operator - HTTP API
description: |-
 The /operator/license endpoint allows for retrieving the Consul
 Enterprise License.
---

# License - Operator HTTP API

<EnterpriseAlert />

The licensing functionality described here is available only in
[Consul Enterprise](https://www.hashicorp.com/products/consul/) version 1.1.0 and later.
```

Getting the Consul License

This endpoint gets information about the current license.

Method	Path	Produces
`GET`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`all`	`none`	`none`

The corresponding CLI command is [`consul license get`](/consul/commands/license#get).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be retrieved.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
   http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
```

```
    "package": "premium"
  },
  "features": [
    "Automated Backups",
    "Automated Upgrades",

    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```

Updating the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint updates the Consul license and returns some of the
license contents as well as any warning messages regarding its validity.

Method	Path	Produces
`PUT`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license put`](/consul/commands/license#put).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Payload

The payload is the raw license blob.

Sample Request

```shell-session
$ curl \
  --request PUT \
  --data @consul.license \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product":
 "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
     "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

Resetting the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with the ability to manage the cluster's license via the API.

This endpoint resets the Consul license to the license included in the Enterprise binary. If the included license is not valid, the replace will fail.

Method	Path	Produces
`DELETE`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching),
 and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license reset`](/consul/commands/license#reset).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
   --request DELETE \
   http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
    "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
```

```
  },
  "features": [
    "Automated Backups",
    "Automated Upgrades",
    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```
```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-form {
 h2 {
  padding-top: 1.4em;
  margin-top: 0.2em;
  margin-bottom: 0.6em;
 }
 .consul-intention-permission-header-form {
  margin-top: 10px;
 }
 fieldset:nth-child(2) > div,
 .consul-intention-permission-header-form fieldset > div {
  display: grid;
  grid-template-columns: repeat(auto-fit, minmax(160px, 1fr));
  grid-gap: 12px;
 }
 fieldset:nth-child(2) > div label:last-child {
  grid-column: span 2;
 }
 .ember-basic-dropdown-trigger {
  padding: 5px;
 }
 .checkbox-group {
```

```
  flex-direction: column;
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
.consul-intention-permission-list > ul > li {
 @extend %list-row-200;
}
.consul-intention-permission-list:not(.readonly) > ul > li {
 @extend %with-composite-row-intent;
}
.consul-intention-permission-list strong {
 @extend %pill-500;
}
.consul-intention-permission-list .intent-allow {
 @extend %pill-allow;
}
.consul-intention-permission-list .intent-deny {
 @extend %pill-deny;
}
```

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---
layout: docs
page_title: Enterprise License FAQ
description: >-
Review frequently asked questions (FAQs) about Consul Enterprise licenses to learn more about how licenses work, what happens when they expire, and how to get a trial license.

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Consul Enterprise version 1.10.0.
Consul Enterprise automatically loads Consul licenses when the server agent starts.

Q: Can I get a quick summary of the Consul changes?

Starting with Consul Enterprise 1.10.0, the license enablement process is different.

HashiCorp Enterprise servers will no longer start without a license. Servers require licenses to be provided from either an environment variable or file.
If the license is missing, invalid, or expired, the server will immediately exit.
This check is part of the server boot-up process.

In previous versions of HashiCorp enterprise products, one server could distribute a license to other servers via the Raft protocol.
This will no longer work since each server must be able to find a valid license during the startup process.

Q: What are the upgrade requirements?

All customers on Consul Enterprise 1.8/1.9 must first upgrade their client and server agents to the latest patch release.
During the upgrade the license file must also be configured on client agents in an environment variable or file path, otherwise the Consul agents will fail to retrieve the license with a valid agent token.
The upgrade process varies if ACLs are enabled or disabled in the cluster.
Refer to the instructions on [upgrading to 1.10.x](/consul/docs/upgrading/instructions/upgrade-to-1-10-x) for details.

Q: Is there a tutorial available for the license configuration steps?

Please visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs).

Q: What resources are available?

The list below is a great starting point for learning more about the license
changes introduced in Consul Enterprise 1.10.0+ent.

- [Consul Enterprise Upgrade Documentation](/consul/docs/enterprise/upgrades)

- [Consul License Documentation](/consul/docs/enterprise/license/overview)

- [License configuration values documentation](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses)

- [Install a HashiCorp Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs)

Q: Do these changes impact all customers/licenses?

The license changes introduced in 1.10.0 only affect Consul Enterprise.
This impacts customers that have an enterprise binary (trial or non-trial licenses) downloaded from https://releases.hashicorp.com.
The license changes do not impact customers with the baked-in licensed binaries. In a later release of Consul Enterprise, baked-in binaries will be deprecated.

Q: What is the product behavior change introduced by the licensing changes?

Starting with Consul Enterprise 1.10.0,
a valid license is required on-disk (auto-loading) or as an environment variable for Consul Enterprise to successfully boot-up.
The in-storage license feature will not be supported starting with Consul Enterprise 1.10.0+ent. All Consul Enterprise clusters using 1.10.0+ent must ensure that there is a valid license on-disk (auto-loaded) or as an environment variable.

Q: What is the impact on trial licenses due to this change? ((#q-what-is-the-impact-on-evaluation-licenses-due-to-this-change))

Consul Enterprise 1.10.0+ server agents require a valid license to start.
The license can be provided on disk (auto-loaded) or as an environment variable.
There is no longer a 6-hour trial period in which Consul Enterprise server agents
can operate without a license.

Q: Is there a grace period when licenses expire?

YesConsul will continue normal operation and can be restarted after license *expiration* as defined in
[`expiration_time`](/consul/api-docs/operator/license#getting-the-consul-license).
As
license expiration is approached or passed, Consul will issue warnings in the system logs.

Consul will only cease operation after license *termination*, which occurs 10 years
after license expiration and is defined in
[`termination_time`](/consul/api-docs/operator/license#getting-the-consul-license).

~> **Starting with Consul 1.14, and patch releases 1.13.3 and 1.12.6, Consul will support non-terminating licenses**:
Please contact your support representative for more details on non-terminating licenses.
An expired license will not allow Consul versions released after the expiration date to run.
It will not be possible to upgrade to a new version of Consul released after license expiration.

Q: Does this affect client agents?

There are upgrade requirements that affect Consul Enterprise clients.
Please review the [upgrade requirements](#q-what-are-the-upgrade-requirements) documentation.

Q: Does this affect snapshot agents?

Same behavior as Consul clients.
See answer for [Does this affect client agents?](#q-does-this-affect-client-agents)

Q: What is the behavior if the license is missing?

Consul server agents will detect the absence of the license and immediately exit.

Consul client agents will attempt to retrieve the license from servers if certain conditions are met:

- ACLs are enabled.
- An ACL token is provided to the client agent.
- The client agents configuration contains `retry_join` addresses.
- The retry join addresses are addresses of the Consul servers.

Consul snapshot agents will attempt to retrieve the license from servers if certain conditions are met: ACLs are enabled, a ACL token is provided to the client agent, the client agents configuration contains `retry_join` addresses, the retry join addresses are addresses of the Consul servers.

Q: Where can users get a trial license for Consul Enterprise?

Contact your [HashiCorp Support contact](https://support.hashicorp.com/) for a development license.

~> **Trial
 install will cease operation 24 hours after 30-day license expiration**:
  Trial licenses are not meant to be used in production.
  This is unlike non-trial licenses which provide a 10 year grace period as described in
  the answer for [Q: Is there a grace period when licenses expire?](#q-is-there-a-grace-period-when-licenses-expire).

Q: How can I renew a license?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: I'm an existing enterprise customer but don't have my license, how can I get it?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: Are the license files locked to a specific cluster?

The license files are not locked to a specific cluster or cluster node. The above changes apply to all nodes in a cluster.

Q: Will this
 impact HCP Consul Dedicated?

This will not impact HCP Consul Dedicated.

Q: Does this need to happen every time a node restarts, or is this a one-time check?

Consul Enterprise binaries starting with 1.10.0+ent, will be subject to EULA check. Release 1.10.0+ent introduces the EULA check for trial licenses (non-trial licenses already go through EULA check during contractual agreement).

The agreement to a EULA happens only once (when the user gets their license), Consul Enterprise **will check for the presence of a valid license every time a node restarts**.

When a customer upgrades existing clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be auto-loaded.

When a customer deploys new clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be on-disk (auto-loaded).

Q: What are the scenarios that a customer must plan for because of these changes?

New

Consul cluster deployments using 1.10.0+ent will need to have a valid license on servers to successfully deploy. This valid license must be on-disk (auto-loaded) or as an environment variable.
Please see the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?

VM

1. Run [`consul license get -signed`](/consul/commands/license#get) to extract the license from their running cluster. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have access to the required license. This could be via the client agent configuration file or an environment variable.
1. Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license
key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

NOTE: If you are not upgrading Consul or your Helm chart version then no action is required.

1. In order to use Consul Enterprise 1.10.0 or greater on Kubernetes you must use version 0.32.0 or greater of the Helm chart.
1. You should already have a Consul Enterprise license set as a Kubernetes secret. If you do not, refer to [how to obtain a copy of your license](/consul/docs/enterprise/license/faq#q-i-m-an-existing-enterprise-customer-but-don-t-have-my-license-how-can-i-get-it).
Once you have the license then create a Kubernetes secret containing the license as described in [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise).
1. Follow the [Kubernetes Upgrade Docs](/consul/docs/k8s/upgrade) to upgrade. No changes to your `values.yaml` file are needed to enable enterprise autoloading since this support is built in to consul-helm 0.32.0 and greater.

!>
Warning: If you are upgrading the Helm chart but **not** upgrading the Consul version, you must set `server.enterpriseLicense.enableLicenseAutoload: false`. See [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise) for more details.

Q: What is the migration path for customers who want to migrate from their existing perpetually-licensed binaries to the license on disk flow?

VM

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.

Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Proceed with the `helm` [upgrade instructions](/consul/docs/k8s/upgrade)

Q: Will Consul downgrades/rollbacks work?

When downgrading
to a version of Consul before 1.10.0+ent, customers will need to follow the previous process for applying an enterprise licenses to Consul Enterprise.

Q: Are there potential pitfalls when downgrading or upgrading Consul server instances?

~> Verify that you meet the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Assume a scenario where there are three Consul server nodes:

- Node A: v1.9.5
- Node B: v1.10.0 [Leader]
- Node C: v1.9.5

The command `consul license put` is issued from Node A. This will result in an error due to how Consul routes calls to the server node, Node B in this example.
Because Node A is a follower when the call `consul license put` is issued, the call will be redirected to Node B (leader).
The `consul license put` operation will fail due to being removed from 1.10.0.
This is a scenario that could occur if a customer downgrades from 1.10.0+ and the Consul leadership has not transferred back over to a node
not running 1.10.0+.
This also has the potential of occurring when upgrading if scheduled license updates or autoscaling groups recoveries are in place.

Q: Any impacts to Consul Kubernetes?

If you are using a Consul Enterprise version prior to 1.10.0 and decide to upgrade the Helm chart to version 0.32.0 or newer, but not the Consul version.
You will need to add the following configuration.

```
server:
 enterpriseLicense:
   enableLicenseAutoload: false
```
```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-header-list {
 max-height: 200px;
 overflow: auto;
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-header-list"
 @items={{items}}
 @scroll="native"
 @cellHeight={{42}}
as |item|>
 <BlockSlot @name="details">
   <dl>
     <dt>
       <Tooltip>
         Header
       </Tooltip>
     </dt>
     <dd>
       {{item.Name}} {{route-match item}}
     </dd>
   </dl>
 </BlockSlot>
 <BlockSlot @name="actions" as |Actions|>
   <Actions as |Action|>
     <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
       <BlockSlot @name="label">
         Delete
       </BlockSlot>
       <BlockSlot @name="confirmation" as |Confirmation|>
         <Confirmation class="warning">
           <BlockSlot @name="header">
```

```
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you want to delete this header?

  </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
</ListCollection>
{{/if}}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "urlPath": {
                     "path": {
                       "exact": "/v1/secret"
                     }
                   }
                 },
                 {
                   "andRules": {
                     "rules": [
                       {
                         "metadata": {
                           "filter": "envoy.filters.http.jwt_authn",
                           "path": [
                             {
                               "key": "jwt_payload_auth0"
                             },
                             {
                               "key": "iss"
```

```
                }
                ],
                "value": {
                  "stringMatch": {
                    "exact": "mytest.auth0-issuer"
                  }
                }
              }
            },
            {
              "metadata": {
                "filter": "envoy.filters.http.jwt_authn",
                "path": [
                  {
                    "key": "jwt_payload_auth0"
                  },
                  {
                    "key": "perms"
                  },
                  {
                    "key": "role"
                  }
                ],
                "value": {
                  "stringMatch": {
                    "exact": "admin"

  }
                }
              }
            }
          ]
        }
      }
    ]
  }
},
{
  "andRules": {
    "rules": [
      {
        "urlPath": {
          "path": {
            "exact": "/v1/admin"
          }
        }
      },
      {
```

```
          "notRule": {
            "urlPath": {
              "path": {
                "exact": "/v1/secret"
              }
            }
          }
        }
      ]
    }
  }
],
"principals": [
  {
    "andIds": {
      "ids": [
        {
          "authenticated": {
            "principalName": {

          "safeRegex": {
                "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
              }
            }
          }
        },
        {
          "andIds": {
            "ids": [
              {
                "metadata": {
                  "filter": "envoy.filters.http.jwt_authn",
                  "path": [
                    {
                      "key": "jwt_payload_okta"
                    },
                    {
                      "key": "iss"
                    }
                  ],
                  "value": {
                    "stringMatch": {
                      "exact": "mytest.okta-issuer"
                    }
                  }
                }
              },
```

```
                {
                  "metadata": {
                    "filter": "envoy.filters.http.jwt_authn",
                    "path": [
                      {
                        "key": "jwt_payload_okta"
                      },
                      {
                        "key": "roles"
                      }
                    ],
                    "value": {
                      "stringMatch": {
                        "exact": "testing"
                      }
                    }
                  }
                }
              ]
            }
          }
        ]
      }
    }
  }
}
}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "urlPath": {
                     "path": {
                       "prefix": "/v1"
                     }
                   }
                 },
```

```
      {
        "notRule": {
          "urlPath": {
            "path": {
              "exact": "/v1/secret"
            }
          }
        }
      }
    ]
  }
},
{
  "andRules": {
    "rules": [
      {
        "andRules": {
          "rules": [
            {

        "urlPath": {
              "path": {
                "safeRegex": {
                  "regex": "/v[123]"
                }
              }
            }
          },
          {
            "header": {
              "name": ":method",
              "stringMatch": {
                "safeRegex": {
                  "regex": "GET|HEAD|OPTIONS"
                }
              }
            }
          }
        ]
        }
      },
      {
        "notRule": {
          "urlPath": {
            "path": {
              "exact": "/v1/secret"
            }
          }
```

```
            }
          },

      {
            "notRule": {
              "andRules": {
                "rules": [
                  {
                    "urlPath": {
                      "path": {
                        "exact": "/v1/admin"
                      }
                    }
                  },
                  {
                    "header": {
                      "name": ":method",
                      "stringMatch": {
                        "safeRegex": {
                          "regex": "GET"
                        }
                      }
                    }
                  }
                ]
              }
            }
          }
        ]
      }
    },
    {
      "andRules": {
        "rules": [
          {

"andRules": {
                "rules": [
                  {
                    "header": {
                      "name": "x-foo",
                      "presentMatch": true
                    }
                  },
                  {
                    "header": {
                      "name": "x-bar",
                      "stringMatch": {
```

"exact": "xyz"
}
}
},
{
"header": {
"name": "x-dib",
"stringMatch": {
"prefix": "gaz"
}
}
},
{
"header": {
"name": "x-gir",
"stringMatch": {

"suffix": "zim"
}
}
},
{
"header": {
"name": "x-zim",
"stringMatch": {
"safeRegex": {
"regex": "gi[rR]"
}
}
}
},
{
"header": {
"invertMatch": true,
"name": "z-foo",
"presentMatch": true
}
},
{
"header": {
"invertMatch": true,
"name": "z-bar",
"stringMatch": {
"exact": "xyz"

}
}
},

```
        {
          "header": {
            "invertMatch": true,
            "name": "z-dib",
            "stringMatch": {
              "prefix": "gaz"
            }
          }
        },
        {
          "header": {
            "invertMatch": true,
            "name": "z-gir",
            "stringMatch": {
              "suffix": "zim"
            }
          }
        },
        {
          "header": {
            "invertMatch": true,
            "name": "z-zim",
            "stringMatch": {
              "safeRegex": {

        "regex": "gi[rR]"
              }
            }
          }
        }
      ]
    }
  },
  {
    "notRule": {
      "urlPath": {
        "path": {
          "exact": "/v1/secret"
        }
      }
    }
  },
  {
    "notRule": {
      "header": {
        "name": "x-baz",
        "presentMatch": true
      }
```

```
                }
              }
            ]
          }
        }
      ],
      "principals": [
        {
          "authenticated": {
            "principalName": {
              "safeRegex": {
                "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
              }
            }
          }
        }
      ]
    }
  }
}
}
{
 "name": "envoy.filters.network.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.network.rbac.v3.RBAC",
   "rules": {},
   "statPrefix": "connect_authz"
 }
}
{
 "Valid": true,
 "License": {
   "license_id": "${fake.random.uuid()}",
   "customer_id": "${fake.random.uuid()}",
   "installation_id": "*",
   "issue_time": "2021-01-13T15:25:19.052900132Z",
   "start_time": "2021-01-13T00:00:00Z",
   "expiration_time": "${env('CONSUL_LICENSE_EXPIRATION', '2022-05-02T23:59:59.999Z')}",
   "termination_time": "${env('CONSUL_LICENSE_TERMINATION', '2022-01-13T23:59:59.999Z')}",
   "product": "consul",
   "flags": {
     "modules": [
       "global-visibility-routing-scale",
       "governance-policy"
     ]
   },
   "modules": [
```

"Global Visibility, Routing and Scale",
"Governance and Policy"
],
"features": [
"Automated Backups",
"Automated Upgrades",
"Enhanced Read Scalability",
"Network Segments",
"Redundancy Zone",
"Advanced Network Federation",
"Namespaces",
"SSO",
"Audit Logging",
"Admin Partitions"
]
},
"Warnings": [
]
}
{
"name": "envoy.filters.http.jwt_authn",
"typedConfig": {
"@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
"providers": {
"okta": {
"issuer": "test-issuer",
"payloadInMetadata": "jwt_payload_okta",
"remoteJwks": {
"asyncFetch": {
"fastListener": true
},
"httpUri": {
"cluster": "jwks_cluster_okta",
"timeout": "1s",
"uri": "https://example-okta.com/.well-known/jwks.json"
}
}
}
},
"rules": [
{
"match": {
"prefix": "/"
},
"requires": {
"requiresAny": {
"requirements": [
{

```
            "providerName": "okta"
          },
          {
            "allowMissingOrFailed": {}
          }
        ]
      }
    }
  }
 ]
}
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
.consul-intention-permission-header-list {
 > ul > li {
   @extend %list-row-200;
 }
}
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{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "andRules": {
                     "rules": [
```

```
      {
        "urlPath": {
          "path": {
            "prefix": "/v1"
          }
        }
      },
      {
        "header": {
          "name": "x-foo",
          "presentMatch": true
        }
      }
    ]
  }
},
{
  "notRule": {
    "andRules": {

    "rules": [
        {
          "urlPath": {
            "path": {
              "exact": "/v1/secret"
            }
          }
        },
        {
          "header": {
            "name": "x-baz",
            "presentMatch": true
          }
        },
        {
          "header": {
            "name": "x-bar",
            "presentMatch": true
          }
        }
      ]
    }
  }
},
{
  "notRule": {
    "andRules": {
      "rules": [
```

```
                {

        "urlPath": {
                    "path": {
                      "exact": "/v1/admin"
                    }
                  }
                },
                {
                  "header": {
                    "name": "x-baz",
                    "presentMatch": true
                  }
                },
                {
                  "header": {
                    "name": "x-bar",
                    "presentMatch": true
                  }
                }
              ]
            }
          }
        }
      }
    ],
    "principals": [
      {
        "authenticated": {
          "principalName": {
            "safeRegex": {
              "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
            }
          }
        }
      }
    ]
  }
 }
}
}
# License

```hbs preview-template
<figure>
```
```

```
 <figcaption>URI: <code>/:partition/:nspace/:dc/license</code></figcaption>
 <DataSource
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition='partition'
       nspace='ns'
       dc='dc-1'
     )
   }}
   @onchange={{action (mut data) value="data"}}
 />
 <pre><code>{{json-stringify data null 4}}</code></pre>
</figure>
```
---
page_title: Automated license utilization reporting
description: >-
 Learn what data HashiCorp collects to meter Enterprise license utilization. Enable or disable reporting. Review sample payloads and logs.

Automated license utilization reporting

This topic describes how to enable automated license utilization reporting in Consul Enterprise. This feature automatically sends license utilization data to HashiCorp so that you do not have to manually collect and report it. It also enables you to review your license usage with the monitoring solution you already use, such as Splunk and Datadog, as you optimize and manage your deployments.

Introduction

You can use automated license utilization report to understand how much additional networking infrastructure you can deploy under your current contract. This feature helps you protect against overutilization and budget for predicted consumption.

Automated reporting shares the minimum data required to validate license utilization
 as defined in our contracts. This data mostly consists of computed metrics, and it will never contain Personal Identifiable Information (PII) or other sensitive information. Automated reporting shares the data with HashiCorp using a secure unidirectional HTTPS API and makes an auditable record in the product logs each time it submits a report. This process is GDPR-compliant.

Requirements

Automated license utilization reporting does not support _air-gapped installations_, which are systems with no network interfaces.

The following versions of Consul Enterprise support automated license utilization reporting:

- Consul Enterprise v1.16.0 and newer.
- Patch releases of Consul Enterprise v1.15.4 and newer.
- Patch releases of Consul Enterprise v1.14.8 and newer.
- Patch releases of Consul Enterprise v1.13.9 and newer.

Download a supported release from the [Consul Versions](https://releases.hashicorp.com/consul/) page.

Enable automated reporting

Before you enable automated reporting,
 make sure that outbound network traffic is configured correctly and upgrade your enterprise product to a version that supports it. If your installation is air-gapped or network settings are not in place, automated reporting will not work.

To enable automated reporting, complete the following steps:

1. [Allow outbound HTTPS traffic on port 443](#allow-outbound-https-traffic)
1. [Check product logs](#check-product-logs)

Allow outbound HTTPS traffic on port 443

Make sure that your network allows HTTPS egress on port 443 from `https://reporting.hashicorp.services` by adding the following IP addresses to your allow-list:

- `100.20.70.12`
- `35.166.5.222`
- `23.95.85.111`
- `44.215.244.1`

Check product logs

Automatic license utilization reporting starts sending data within roughly 24 hours. Check the product logs for records that the data sent successfully.

<CodeBlockConfig hideClipboard>

```
[DEBUG] beginning snapshot export
[DEBUG] creating payload
[DEBUG] marshalling
 payload to json
[DEBUG] generating authentication headers
[DEBUG] creating request
[DEBUG] sending request
[DEBUG] performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] recording audit record
[INFO]  reporting: Report sent: auditRecord={"payload":{"payload_version":"1","license_id":"d2cdd857-4202-5a45-70a6-e4b531050c34","product":"consul","product_version":"1.16.0-dev+ent","export_timestamp":"2023-05-
```

26T20:09:13.753921087Z","snapshots":[{"snapshot_version":1,"snapshot_id":"0001J724F90F4XWQDSAA76ZQWA","process_id":"01H1CTJPC1S8H7Q45MKTJ689ZW","timestamp":"2023-05-26T20:09:13.753513962Z","schema_version":"1.0.0","service":"consul","metrics":{"consul.billable.nodes":{"key":"consul.billable.nodes","kind":"counter","mode":"write","value":2},"consul.billable.service_instances":{"key":"consul.billable.service_instances","kind":"counter","mode":"write","value":2}}}],"metadata":{}}}
[DEBUG] completed recording audit record
[DEBUG] export finished successfully"
```

</CodeBlockConfig>

If
 your installation is air-gapped or your network does not allow the correct egress, the logs show an error.

<CodeBlockConfig hideClipboard>

```
[DEBUG] reporting: beginning snapshot export
[DEBUG] reporting: creating payload
[DEBUG] reporting: marshalling payload to json
[DEBUG] reporting: generating authentication headers
[DEBUG] reporting: creating request
[DEBUG] reporting: sending request
[DEBUG] reporting: performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] reporting: error status code received: statusCode=403
```

</CodeBlockConfig>

In this case, reconfigure your network to allow egress and check the logs again in roughly 24 hours to confirm that automated reporting works correctly.

Opt out

If your installation is air-gapped or you want to manually collect and report on the same license utilization metrics, you can opt out of automated reporting.

Manually reporting these metrics can be time consuming. Opting
 out of automated reporting does not mean that you also opt out from sending license utilization metrics. Customers who opt out of automated reporting are still required to manually collect and send license utilization metrics to HashiCorp.

If you are considering opting out because you are worried about the data, we strongly recommend that you review the [example payloads](#example-payloads) before opting out. If you have concerns with any of the automatically reported data, raise these concerns with your account manager.

There are two methods for opting out of automated reporting:
```

- HCL configuration (recommended)
- Environment variable (requires restart)

We recommend opting out in your product's configuration file because it does not require a system restart. Add the following block to your `configuration.hcl` or `configuration.json` file.

```hcl
reporting {
 license {
  enabled = false
 }
}
```

When opting out using an environment variable, the system provides a startup message
 confirming that you have disabled automated reporting. Set the following environment variable to disable automated reporting:

<CodeBlockConfig>

```shell-session
$ export OPTOUT_LICENSE_REPORTING=true
```

</CodeBlockConfig>

After you set the environment variable, restart your system to complete the process for opting out.

```shell-session
$ consul reload
```

Check your product logs roughly 24 hours after opting out to make sure that the system is not trying to send reports. Keep in mind that if your configuration file and environment variable differ, the environment variable setting takes precedence.

Example payloads

HashiCorp collects the following utilization data as JSON payloads:
`exporter_version` - The version of the licensing exporter

<CodeBlockConfig hideClipboard>

```json
{
 "payload": {
   "payload_version": "1",
```

```
  "license_id": "d2cdd857-4202-5a45-70a6-e4b531050c34",
  "product": "consul",
  "product_version": "1.16.0-dev+ent",
  "export_timestamp":
"2023-05-26T20:09:13.753921087Z",
  "snapshots": [
    {
      "snapshot_version": 1,
      "snapshot_id": "0001J724F90F4XWQDSAA76ZQWA",
      "process_id": "01H1CTJPC1S8H7Q45MKTJ689ZW",
      "timestamp": "2023-05-26T20:09:13.753513962Z",
      "schema_version": "1.0.0",
      "service": "consul",
      "metrics": {
        "consul.billable.nodes": {
          "key": "consul.billable.nodes",
          "kind": "counter",
          "mode": "write",
          "value": 2
        },
        "consul.billable.service_instances": {
          "key": "consul.billable.service_instances",
          "kind": "counter",
          "mode": "write",
          "value": 2
        }
      }
    }
  ],
  "metadata": {}
 }
}
```


</CodeBlockConfig>
---
layout: docs
page_title: Storing the Enterprise License in Vault
description: >-
 Configuring the Consul Helm chart to use an enterprise license stored in Vault.

Storing the Enterprise License in Vault

This topic describes how to configure the Consul Helm chart to use an enterprise license stored in Vault.
Overview
Complete the steps outlined in the [Data Integration](/consul/docs/k8s/deployment-configurations/vault/data-integration) section to use an enterprise license stored in Vault.

Complete the following steps once:
1. Store the secret in Vault.
1. Create a Vault policy that authorizes the desired level of access to the secret.

Repeat the following steps for each datacenter in the cluster:
1. Create Vault Kubernetes auth roles that link the policy to each Consul on Kubernetes service account that requires access.
1. Update the Consul on Kubernetes helm chart.

Prerequisites
Prior to setting up the data integration between Vault and Consul on Kubernetes,
you will need to have:
1. Read and completed the steps in the [Systems Integration](/consul/docs/k8s/deployment-configurations/vault/systems-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).
2. Read the [Data Integration Overview](/consul/docs/k8s/deployment-configurations/vault/data-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).

Store the Secret in Vault

First, store the enterprise license in Vault:

```shell-session
$ vault kv put consul-kv/secret/enterpriselicense key="<enterprise license>"
```

Create Vault policy

Next, you will need to create a policy that allows read access to this secret.

The path to the secret referenced in the `path` resource is the same value that you will configure in the `global.enterpriseLicense.secretName` Helm configuration (refer to [Update Consul on Kubernetes Helm chart](#update-consul-on-kubernetes-helm-chart)).

<CodeBlockConfig
filename="license-policy.hcl">

```HCL
path "consul-kv/data/secret/enterpriselicense" {
capabilities = ["read"]
}
```

</CodeBlockConfig>

Apply the Vault policy by issuing the `vault policy write` CLI command:

```shell-session
$ vault policy write license-policy license-policy.hcl
```

Create Vault Authorization Roles for Consul

Next, you will create Kubernetes auth roles for the Consul server and client:

```shell-session
$ vault write auth/kubernetes/role/consul-server \
   bound_service_account_names=<Consul server service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

```shell-session
$ vault write auth/kubernetes/role/consul-client \
   bound_service_account_names=<Consul client service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

To find out the service account names of the Consul server and client,
you can
 run the following `helm template` commands with your Consul on Kubernetes values file:

- Generate Consul server service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/server-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

- Generate Consul client service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/client-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

Update Consul on Kubernetes Helm chart.

Now that you have configured Vault, you can configure the Consul Helm chart to
use the enterprise enterprise license in Vault:

<CodeBlockConfig filename="values.yaml">

```yaml
```

```
global:
 image: hashicorp/consul-enterprise:1.12.0-ent
 secretsBackend:
   vault:
     enabled: true
     consulServerRole: consul-server
     consulClientRole: consul-client
 enterpriseLicense:
   secretName: consul-kv/data/secret/enterpriselicense
   secretKey: key
```

</CodeBlockConfig>

Note
 that `global.enterpriseLicense.secretName` is the path of the secret in Vault.
This should be the same path as the one you included in your Vault policy.
`global.enterpriseLicense.secretKey` is the key inside the secret data. This should be the same
as the key you passed when creating the enterprise license secret in Vault.

```
{{!
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}}

<Hds::Alert @type='inline' @color={{or @type "neutral"}} class='mb-2 mt-2 consul-intention-notice-custom-
resource' as |A|>
 <A.Title>Intention Custom Resource</A.Title>
 <A.Description>Some of your intentions are being managed through an Intention Custom Resource in your
Kubernetes cluster. Those managed intentions will be view only in the UI. Any intentions created in the UI will
work but will not be synced to the Custom Resource Definition (CRD) datastore.</A.Description>
 <A.Link::Standalone @href="{{env 'CONSUL_DOCS_URL'}}/k8s/crds"
                 @text='Learn more about CRDs'
                 @icon="docs-link"
                 @iconPosition="trailing"
                 @size="small" />
</Hds::Alert>
/**
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*/

.consul-intention-permission-form {
 h2 {
   border-top: 1px solid var(--token-color-foreground-action);
   @extend %display-400-semibold;
 }
 button.type-submit {
   @extend %frame-blue-300;
```

```
 }
 button.type-submit:hover:not(:disabled),
 button.type-submit:focus:not(:disabled) {
   @extend %frame-blue-500;
 }
 button.type-submit:disabled {
   @extend %frame-blue-200;
 }
}

.consul-intention-view {
 h2 {
   @extend %display-400-semibold;
 }
}
```

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10. Versions of the License

10.1. New Versions

Mozilla Foundation is the license steward.
Except as provided in Section
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Code Form that is
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Exhibit A - Source Code Form License Notice

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terms of the Mozilla Public License, v.
2.0. If a copy of the MPL was not
distributed with this file, You can
obtain one at
http://mozilla.org/MPL/2.0/.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

Exhibit B - "Incompatible With Secondary Licenses" Notice

This Source Code Form is "Incompatible
With Secondary Licenses", as defined by
the Mozilla Public License, v. 2.0.

---
layout: docs
page_title: Consul-Terraform-Sync Enterprise License
description: >-
Consul-Terraform-Sync Enterprise License

Consul-Terraform-Sync Enterprise License

<EnterpriseAlert>
Licenses are only required for Consul-Terraform-Sync (CTS) Enterprise
</EnterpriseAlert>

CTS Enterprise binaries require a [Consul Enterprise license](/consul/docs/enterprise/license/overview) to run. There is no CTS Enterprise specific license. As a result, CTS Enterprise's licensing is very similar to Consul Enterprise.

All CTS Enterprise features are available with a valid Consul Enterprise license, regardless of your Consul Enterprise packaging or pricing model.

To get a trial license for CTS, you can sign-up for the [trial license for Consul Enterprise](/consul/docs/enterprise/license/faq#q-where-can-users-get-a-trial-license-for-consul-enterprise).

Automatic License Retrieval

CTS automatically retrieves a license from Consul on startup and then attempts to retrieve a new license once a day. If the current license is reaching its expiration date, CTS attempts to retrieve a license with increased frequency, as defined by the [License Expiration Date Handling](/consul/docs/nia/enterprise/license#license-expiration-handling).

~> Enabling automatic license retrieval is recommended when using HCP Consul Dedicated, as HCP Consul Dedicated licenses expire more frequently than Consul Enterprise licenses. Without auto-retrieval enabled, you have to restart CTS every time you load a new license.

Setting the License Manually

If a license needs to be manually set, choose one of the following methods (in order of precedence) to set the license:

1. Set the `CONSUL_LICENSE` environment variable to the license string.

```shell-session
export CONSUL_LICENSE=<LICENSE_VALUE>
```

1. Set the `CONSUL_LICENSE_PATH` environment variable to the path of the file containing the license.

```shell-session
export CONSUL_LICENSE_PATH=<PATH>/<TO>/<FILE>
```

1. To
 point to the file containing the license, in the configuration file, configure the
[`license`](/consul/docs/nia/configuration#license) path option.

```hcl
license {
  path = "<PATH>/<TO>/<FILE>"
}
```

1. To point to the file containing the license, in the configuration file, configure the
[`license_path`](/consul/docs/nia/configuration#license_path) option i. **Deprecated in CTS 0.6.0 and will be removed in a future release. Use [license block](/consul/docs/nia/configuration#license) instead.**

```hcl
license_path = "<PATH>/<TO>/<FILE>"
```

~> **Note**: the [options to set the license and the order of
precedence](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses) are the same as Consul Enterprise server agents.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Updating the License Manually
To update the license
 when it expires or is near the expiration date and automatic license retrieval is disabled:

1. Update the license environment variable or configuration with the new license value or path to the new license file
1. Stop and restart CTS Enterprise

Once CTS Enterprise starts again, it will pick up the new license and run the tasks with any changes that may have occurred between the stop and restart period.

License Expiration Handling

Licenses have an expiration date and a termination date. The termination date is a time at or after the license expires.

CTS Enterprise will cease to function once the termination date has passed.

The time between the expiration and termination dates is a grace period. Grace periods are generally 24-hours, but you should refer to your license agreement for complete terms of your grace period.

When approaching expiration and termination, by default, CTS Enterprise will attempt to retrieve a new license. If auto-retrieval is disabled, CTS Enterprise will
provide notifications in the system logs:

Time period	Behavior - auto-retrieval enabled (default)	Behavior - auto-retrieval disabled
30 days before expiration	License retrieval attempt every 24-hours	Warning-level log every 24-hours
7 days before expiration	License retrieval attempt every 1 hour	Warning-level log every 1 hour
1 day before expiration	License retrieval attempt every 5 minutes	Warning-level log every 5 minutes
1 hour before expiration	License retrieval attempt every 1 minute	Warning-level log every 1 minute
At or after expiration (before termination)	License retrieval attempt every 1 minute	Error-level log every 1 minute
At or after termination	Error-level log and exit	Error-level log and exit

~> **Note**: Notification frequency and [grace period](/consul/docs/enterprise/license/faq#q-is-there-a-grace-period-when-licenses-expire) behavior is the same as Consul Enterprise.

```
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-list{{if (not onclick) ' readonly'}}"
 @scroll="native"
 @items={{items}}
 @partial={{5}}
as |item|>
 <BlockSlot @name="details">
   <div onclick={{action (optional onclick) item}}>
     <strong class={{concat 'intent-' item.Action}}>{{capitalize item.Action}}</strong>
{{#if (gt item.HTTP.Methods.length 0)}}
       <dl class="permission-methods">
         <dt>
           <Tooltip>
             Methods
           </Tooltip>
         </dt>
         <dd>
```

```
{{#each item.HTTP.Methods as |item|}}
          {{item}}
{{/each}}
        </dd>
      </dl>
{{/if}}
{{#if item.HTTP.Path}}
      <dl class="permission-path">
        <dt>
          <Tooltip>
            {{item.HTTP.PathType}}
          </Tooltip>
        </dt>
        <dd>
          {{item.HTTP.Path}}
        </dd>
      </dl>
{{/if}}
{{#each item.HTTP.Header
 as |item|}}
      <dl class="permission-header">
        <dt>
          <Tooltip>
            Header
          </Tooltip>
        </dt>
        <dd>
          {{item.Name}} {{route-match item}}
        </dd>
      </dl>
{{/each}}
  </div>
 </BlockSlot>
{{#if onclick}}
 <BlockSlot @name="actions" as |Actions|>
   <Actions as |Action|>
     <Action data-test-edit-action @onclick={{action (optional onclick) item}} @close={{true}}>
       <BlockSlot @name="label">
         Edit
       </BlockSlot>
     </Action>
     <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
       <BlockSlot @name="label">
         Delete
       </BlockSlot>
       <BlockSlot @name="confirmation" as |Confirmation|>
         <Confirmation class="warning">
           <BlockSlot @name="header">
```

```
          Confirm delete
        </BlockSlot>
        <BlockSlot @name="body">
          <p>
            Are you sure you
 want to delete this permission?
          </p>
        </BlockSlot>
        <BlockSlot @name="confirm" as |Confirm|>
          <Confirm>Delete</Confirm>
        </BlockSlot>
      </Confirmation>
    </BlockSlot>
  </Action>
 </Actions>
</BlockSlot>
{{/if}}
</ListCollection>
{{/if}}
/*!
* clipboard.js v2.0.11
* https://clipboardjs.com/
*
* Licensed MIT  Zeno Rocha
*/

/*!
* focus-trap 6.9.4
* @license MIT, https://github.com/focus-trap/focus-trap/blob/master/LICENSE
*/

/*! ******************************************************************************
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INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM
LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR
OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR
PERFORMANCE OF THIS SOFTWARE.
******************************************************************************
 */

/**
```

* @license
* Copyright 2017 Google LLC
* SPDX-License-Identifier: BSD-3-Clause
*/

/**
* @license
* Copyright 2019 Google LLC
* SPDX-License-Identifier: BSD-3-Clause
*/
---
layout: commands
page_title: 'Commands: License'
description: >
 The license command provides a datacenter-level view of the Consul
 Enterprise license.

Consul License

Command: `consul license`

<EnterpriseAlert />

The `license` command provides a list of all datacenters that use the Consul Enterprise license applied to the current datacenter.

~> **Warning**: Consul 1.10.0 removed the ability to set and reset the license using the CLI.
See the [licensing documentation](/consul/docs/enterprise/license/overview) for more information about
Consul Enterprise license management.

If ACLs are enabled then a token with operator privileges may be required in
order to use this command. Requests are forwarded internally to the leader
if required, so this can be run from any Consul node in a cluster. See the
[ACL Guide](/consul/tutorials/security/access-control-setup-production) for more information.

```text
Usage: consul license <subcommand> [options] [args]

 This command has subcommands
 for managing the Consul Enterprise license
 Here are some simple examples, and more detailed examples are
 available in the subcommands or the documentation.

 Install a new license from a file:

    $ consul license put @consul.license
```

Install a new license from stdin:

$ consul license put -

Install a new license from a string:

$ consul license put "<license blob>"

Retrieve the current license:

$ consul license get

Inspect a license:

$ consul license inspect "<path to license file>"

Reset the current license:

$ consul license reset

For more examples, ask for subcommand help or view the documentation.

Subcommands:
  get Get the active license
  inspect Inspect a signed license
  put Puts a new license in the datacenter
  reset Resets the license in the datacenter

```

## inspect

This command inspects and validates a license. Just like a Consul agent it
can load the license from a file
 on disk or from the `CONSUL_LICENSE` and
`CONSUL_LICENSE_PATH` environment variables.

Usage: `consul license inspect [<options>] [<license file>]`

Inspect a license contained in a file:

```
$ consul license inspect consul.hclic
```

Inspect a license loaded from the environment:

```

$ consul license inspect
```

This will look at the CONSUL_LICENSE environment variable first
and if not present then we will look for the file specified
by the CONSUL_LICENSE_PATH environment variable.

The output looks like this:

```
Source: /consul/config/consul.hclic (path from the CONSUL_LICENSE_PATH environment variable)
Product: consul
License ID: 6089174b-a713-74cf-4c8d-856b86f1ce50
Customer ID: 7c020610-60a2-7ccb-c210-20d899e5f3b4
Installation ID: *
Issue Time: 2020-09-14 19:45:56.212195875 +0000 UTC
Start Time: 2020-09-14 00:00:00 +0000 UTC
Expiration Time: 2021-09-14 23:59:59.999 +0000 UTC
Termination Time: 2021-09-14 23:59:59.999 +0000 UTC
Modules:
    Global Visibility, Routing and Scale
     Governance and Policy
Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
    Namespaces
    SSO
    Audit Logging
    Admin Partitions

License is valid

```

## put

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[PUT\] /v1/operator/license](/consul/api-docs/operator/license#updating-the-consul-license)

This command sets the Consul Enterprise license.
```

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be
 from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license put [options] LICENSE`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
	Automated Backups
	Automated Upgrades
	Enhanced Read Scalability
	Network Segments
	Redundancy Zone
	Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

get

Corresponding HTTP API Endpoint: [\[GET\] /v1/operator/license](/consul/api-docs/operator/license#getting-the-consul-license)

This command gets the Consul Enterprise license. If the leader hasn't been updated with the newer license, the followers
will display the outdated license in their GET output.

The table below

shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of [blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`none`

Usage: `consul license get [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

reset

-> **Deprecated** The ability to manage the cluster's license via the CLI
was
removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[DELETE\] /v1/operator/license](/consul/api-docs/operator/license#resetting-the-consul-license)

Resets license for the datacenter to the one builtin in Consul binary, if it is still valid.
If the builtin license is invalid, the current one stays active.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication).

Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license reset [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires
 At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
	Automated Backups
	Automated Upgrades
	Enhanced Read Scalability
	Network Segments
	Redundancy Zone
	Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.agentless-node-notice .hds-alert__title {
 display: flex;
 justify-content: space-between;
}
Mozilla Public License 2.0 (MPLv2.0)
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",

```
"rules": {
  "policies": {
    "consul-intentions-layer7-0": {
      "permissions": [
        {
          "andRules": {
            "rules": [
              {
                "andRules": {
                  "rules": [
                    {
                      "urlPath": {
                        "path": {
                          "prefix": "/v1"
                        }
                      }
                    },
                    {
                      "header": {
                        "name": "x-foo",
                        "presentMatch": true
                      }
                    }
                  ]
                }
              },
              {
                "notRule": {
                  "andRules": {

                  "rules": [
                      {
                        "urlPath": {
                          "path": {
                            "exact": "/v1/secret"
                          }
                        }
                      },
                      {
                        "header": {
                          "name": "x-baz",
                          "presentMatch": true
                        }
                      },
                      {
                        "header": {
                          "name": "x-bar",
                          "presentMatch": true
```

```
                }
              }
            ]
          }
        }
      },
      {
        "notRule": {
          "andRules": {
            "rules": [
              {

    "urlPath": {
                  "path": {
                    "exact": "/v1/admin"
                  }
                }
              },
              {
                "header": {
                  "name": "x-baz",
                  "presentMatch": true
                }
              },
              {
                "header": {
                  "name": "x-bar",
                  "presentMatch": true
                }
              }
            ]
          }
        }
      }
    ]
  }
},
{
  "andRules": {
    "rules": [
      {
        "andRules": {
          "rules": [
            {

"urlPath": {
                "path": {
                  "prefix": "/v2"
```

```
                }
              }
            },
            {
              "header": {
                "name": "x-foo",
                "presentMatch": true
              }
            }
          ]
        }
      },
      {
        "notRule": {
          "andRules": {
            "rules": [
              {
                "urlPath": {
                  "path": {
                    "exact": "/v2/secret"
                  }
                }
              },
              {
                "header": {
                  "name": "x-baz",
                  "presentMatch":
true
                }
              },
              {
                "header": {
                  "name": "x-bar",
                  "presentMatch": true
                }
              }
            ]
          }
        }
      },
      {
        "notRule": {
          "andRules": {
            "rules": [
              {
                "urlPath": {
                  "path": {
                    "exact": "/v2/admin"
```

```
                    }
                  }
                },
                {
                  "header": {
                    "name": "x-baz",
                    "presentMatch": true
                  }
                },

          {
                  "header": {
                    "name": "x-bar",
                    "presentMatch": true
                  }
                }
              ]
            }
          }
        }
      ]
    }
  }
],
"principals": [
  {
    "authenticated": {
      "principalName": {
        "safeRegex": {
          "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
        }
      }
    }
  }
]
}
}
}
}
{
"name": "envoy.filters.http.rbac",
"typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
    "policies": {
      "consul-intentions-layer7-0": {
        "permissions": [
```

```
{
 "andRules": {
  "rules": [
   {
    "urlPath": {
     "path": {
      "prefix": "some-path"
     }
    }
   },
   {
    "andRules": {
     "rules": [
      {
       "metadata": {
        "filter": "envoy.filters.http.jwt_authn",
        "path": [
         {
          "key": "jwt_payload_okta"
         },
         {
          "key": "iss"
         }

        ],
        "value": {
         "stringMatch": {
          "exact": "mytest.okta-issuer"
         }
        }
       }
      },
      {
       "metadata": {
        "filter": "envoy.filters.http.jwt_authn",
        "path": [
         {
          "key": "jwt_payload_okta"
         },
         {
          "key": "roles"
         }
        ],
        "value": {
         "stringMatch": {
          "exact": "testing"
         }
        }
```

```
                }
              }

        ]
            }
          }
        ]
      }
    }
    ],
    "principals": [
      {
        "authenticated": {
          "principalName": {
            "safeRegex": {
              "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
            }
          }
        }
      }
    ]
  }
 }
}
```


```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

section[data-route='dc.show.license'] {
 @extend %license-route;
}
%license-route .validity {
 @extend %license-validity;
}
%license-route aside {
 @extend %license-route-learn-more;
}

%license-route h2 {
 @extend %display-400-semibold;
}

%license-validity p {
 color: var(--token-color-foreground-faint);
}
```

```
%license-validity dl {
 @extend %horizontal-kv-list;
 @extend %body-300-regular;
}
%license-validity dl .expired + dd {
 @extend %visually-hidden;
}
%license-validity dl dt::before {
 content: '';
 margin-right: 0.25rem; /* 4px */
}
%license-validity dl .expired::before {
 --icon-name: icon-x-circle;
 --icon-color: var(--token-color-foreground-critical);
}
%license-validity dl .warning::before {
 --icon-name: icon-alert-circle;
 --icon-color: var(--token-color-foreground-warning);
}
%license-validity dl .valid:not(.warning)::before {
 --icon-name: icon-check-circle;
 --icon-color: var(--token-color-foreground-success);
}

%license-route-learn-more
 {
 @extend %panel;
 box-shadow: none;
 padding: var(--padding-y) var(--padding-x);
 width: 40%;
 min-width: 413px;
 margin-top: 1rem; /* 16px */
}
%license-route-learn-more header > :first-child {
 @extend %display-300-semibold;
}
%license-route-learn-more header {
 margin-bottom: 1rem; /* 16px */
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

<Route
 @name={{routeName}}
as |route|>
 <DataLoader
```

```
  @src={{
    uri '/${partition}/${nspace}/${dc}/license'
    (hash
      partition=route.params.partition
      nspace=route.params.nspace
      dc=route.params.dc
    )
  }}
 as |loader|>

{{#let
 loader.data
as |item|}}
  <BlockSlot @name="error">
    <ErrorState
      @error={{loader.error}}
      @login={{route.model.app.login.open}}
    />
  </BlockSlot>

  <BlockSlot @name="disconnected" as |after|>
    {{#if (eq loader.error.status "404")}}
      <Hds::Toast @color='warning'
        {{notification
          sticky=true
        }} as |T|>
        <T.Title>Warning!</T.Title>
        <T.Description>This service has been deregistered and no longer exists in the catalog.</T.Description>
      </Hds::Toast>
    {{else if (eq loader.error.status "403")}}
      <Hds::Toast @color='critical'
        {{notification
          sticky=true
        }} as |T|>
        <T.Title>Error!</T.Title>
        <T.Description>You no longer have access to this service.</T.Description>
      </Hds::Toast>
    {{else}}
      <Hds::Toast @color='warning'
        {{notification
          sticky=true
        }} as |T|>
        <T.Title>Warning!</T.Title>
        <T.Description>An error was returned whilst loading this data, refresh to try again.</T.Description>
      </Hds::Toast>
    {{/if}}
  </BlockSlot>
```

```
<BlockSlot @name="loaded">
  <div class="tab-section">
    <section
      class={{class-map
        'validity'
        (array 'valid' item.Valid)
      }}
    >
      <header>
        <h2>
          {{compute (fn route.t 'expiry.header')}}
        </h2>
      </header>

      <p>
        {{compute (fn route.t 'expiry.${type}.body'
          (hash
            type=(if item.Valid 'valid' 'expired')

   date=(format-time item.License.expiration_time
              year='numeric'
              month='long'
              day='numeric'
            )
            time=(format-time item.License.expiration_time
              hour12=true
              hour='numeric'
              hourCycle='h12'
              minute='numeric'
              second='numeric'
              timeZoneName='short'
            )
            htmlSafe=true
          )
        )}}
      </p>

      <dl>
        <dt class={{class-map
            (array 'valid' item.Valid)
            (array 'expired' (not item.Valid))
            (array 'warning' (temporal-within item.License.expiration_time 2629800000))
          }}
        >
          {{compute (fn route.t 'expiry.${type}.header'
            (hash
              type=(if item.Valid 'valid' 'expired')
            )
```

```
          )}}
        </dt>

  <dd>
          {{temporal-format item.License.expiration_time}}
        </dd>
      </dl>

      <aside>
        <header>
          <h3>
            {{compute (fn route.t 'documentation.title')}}
          </h3>
        </header>
        <div class="flex gap-1.5 flex-col">
          <Hds::Link::Standalone
            @text={{compute (fn route.t 'documentation.links.license-expiration.text')}}
            @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.license-
expiration.link'))}}'
            @icon='docs-link'
            @iconPosition='trailing'
          />
          <Hds::Link::Standalone
            @text={{compute (fn route.t 'documentation.links.renewing-license.text')}}
            @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.renewing-
license.link'))}}'
            @icon='docs-link'
            @iconPosition='trailing'

        />
          <Hds::Link::Standalone
            @text={{compute (fn route.t 'documentation.links.applying-new-license.text')}}
            @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.applying-new-
license.link'))}}'
            @icon='docs-link'
            @iconPosition='trailing'
          />
        </div>
      </aside>

    </section>
  </div>
  </BlockSlot>
{{/let}}
 </DataLoader>
</Route>
// Copyright (c) HashiCorp, Inc.
// SPDX-License-Identifier: MPL-2.0
```

```
package api

import (
 "io"
 "strings"
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`

 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // Whether the license will ignore termination
 IgnoreTermination bool `json:"ignore_termination"`

 //
 The product the license is valid for
 Product string `json:"product"`

 // License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
```

```
}

type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := io.ReadAll(resp.Body)
 if
 err != nil {
  return "", err
 }

 return string(data), nil
}

// LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
```

```
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set
 via agent configuration instead of through the API
func (op *Operator) LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-header-list {
 dt::before {
   @extend %with-glyph-icon;
   content: 'H';
```

```
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-list {
 dt::before {
   @extend %with-glyph-icon;
 }
 dl.permission-methods dt::before {
   content: 'M';
 }
 dl.permission-path dt::before {
   content: 'P';
 }
 dl.permission-header dt::before {
   content: 'H';
 }
}
---
layout: docs
page_title: Enterprise Licenses
description: >-
 Consul Enterprise server, client, and snapshot agents require a license on startup in order to use Enterprise features.
Learn how to apply licenses using environment variables or configuration files.
---

# Consul Enterprise License

## Licensing Overview

All Consul Enterprise agents must be licensed when they are started. Where that license comes from will depend
on which binary is in use, whether the agent is a server, client or snapshot agent, and whether ACLs have been
enabled for the cluster.

-> ** Consul Enterprise 1.10.0 removed temporary licensing.** Prior to 1.10.0, Consul Enterprise
agents could start without a license and then have a license applied to them later on via the CLI
or API. That functionality has been removed and replaced with the ability to load licenses from the
agent's configuration or environment. Also, prior to 1.10.0, server agents would automatically propagate
the license between themselves.
 This no longer occurs and the license must be present on each server agent
when it is started.

Consul Enterprise 1.14.0, when running on Kubernetes, removed client agents and replaced these with virtual
agents.
Virtual agents are nodes that Consul service mesh services run on. HashiCorp uses virtual agents to determine
```

license entitlements for customers on per-node licensing and pricing agreements.

-> Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Applying a License

For Consul Enterprise 1.10.0 or greater, a license must be available at the time the agent starts.
For server agents this means that they must either have the [`license_path`](/consul/docs/agent/config/config-files#license_path)
configuration set or have a license configured in the servers environment with the `CONSUL_LICENSE` or `CONSUL_LICENSE_PATH` environment variables. Both the configuration
item and the `CONSUL_LICENSE_PATH`
environment variable point to a file containing the license whereas the `CONSUL_LICENSE` environment variable should contain the license as the value. If multiple variables are set,
the following order of precedence applies:

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Client agents and [snapshot agents](/consul/docs/enterprise/backups)
may also be licensed in the very same manner.
However, to avoid the need to configure the license on many client agents and snapshot agents,
those agents have the capability to retrieve the license automatically under the conditions described below.

Virtual agents do not need the license to run.

Updating the license for an agent depends on the method you used to apply the license.
- **If you used the `CONSUL_LICENSE`
environment variable**: After updating the environment variable, restart the affected agents.
- **If you used the
`CONSUL_LICENSE_PATH`
environment variable**: Update the license file first. Then, restart the affected agents.
- **If you used the `license_path` configuration item**: Update the license file first. Then, run [`consul reload`](/consul/commands/reload) for the affected agents.

Client Agent License Retrieval

When a client agent starts without a license in its configuration or environment, it will try to retrieve the license from the servers via RPCs. That RPC always requires a valid non-anonymous ACL token to authorize the request but the token doesn't need any particular permissions. As the license is required before the client actually joins the cluster, where to make those RPC requests to is inferred from the [`retry_join`](/consul/docs/agent/config/config-files#retry_join) configuration. If `retry_join` is unset or no [`agent` token](/consul/docs/agent/config/config-files#acl_tokens_agent) is set then the client agent will immediately shut itself down.

If all preliminary checks

pass the client agent will attempt to reach out to any server on its RPC port to
request the license. These requests will be retried for up to 5 minutes and if it is unable to retrieve a
license within that time frame it will shut itself down.

If ACLs are disabled then the license must be provided to the client agent through one of the three methods listed below.
Failure in providing the client agent with a licence will prevent the client agent from joining the cluster.

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Snapshot Agent License Retrieval

The snapshot agent has similar functionality to the client agent for automatically retrieving the license. However, instead of requiring a server agent to talk to, the snapshot agent can request the license from the server or client agent it would use for all other operations. It still requires an ACL token to authorize the request. Also like client agents,
the snapshot agent will shut itself down after being unable to retrieve the license for 5
minutes.

```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-list {
 .detail > div {
   display: flex;
   width: 100%;
 }
 strong {
   margin-right: 8px;
 }
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if isVisible}}
 <Hds::Alert @type="inline" class='mb-3 mt-2 agentless-node-notice' data-test-node-agentless-notice as |A|>
   <A.Title>
     <span>{{t 'routes.dc.nodes.index.agentless.notice.header'}}</span>
     <Hds::Button
       @color='secondary'
       @text='Dismiss notice'
       {{on 'click' this.dismissAgentlessNotice}}
       @icon='x'
```

```
      @size='small'
      @isIconOnly={{true}}
    />
  </A.Title>
  <A.Description>{{t 'routes.dc.nodes.index.agentless.notice.body'}}</A.Description>
  <A.Link::Standalone @href='{{env "CONSUL_DOCS_DEVELOPER_URL"}}/connect/dataplane'
                      @text={{t 'routes.dc.nodes.index.agentless.notice.footer'}}
                      @icon='docs-link'
                      @iconPosition='trailing' />
 </Hds::Alert>
{{/if}}
/*!
* QUnit 2.19.4
* https://qunitjs.com/
*
* Copyright OpenJS Foundation and other contributors
* Released under the MIT license
* https://jquery.org/license
*/
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

<Hds::Alert @type="inline" class="mb-3 mt-2" as |A|>
 <A.Description>{{t "components.consul.intention.notice.permissions.body"}}</A.Description>
 <A.Link::Standalone
   @text={{t "components.consul.intention.notice.permissions.footer"}}
   @href="{{env 'CONSUL_DOCS_URL'}}/connect/intentions"
   @icon="docs-link"
   @iconPosition="trailing"
   @size="small"
 />
</Hds::Alert>
License text copyright (c) 2020 MariaDB Corporation Ab, All Rights Reserved.
"Business Source License" is a trademark of MariaDB Corporation Ab.

Parameters

Licensor:             HashiCorp, Inc.
Licensed Work:        Consul Version 1.17.0 or later. The Licensed Work is (c) 2024
                      HashiCorp, Inc.
Additional Use Grant: You may make production use of the Licensed Work, provided
                      Your use does not include offering the Licensed Work to third
                      parties on a hosted or embedded basis in order to compete with
                      HashiCorp's paid version(s) of the Licensed Work. For purposes
                      of this license:
```

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of HashiCorp's paid version(s) of
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```
{
 "name": "envoy.filters.http.jwt_authn",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
   "providers": {
     "auth0": {
       "issuer": "another-issuer",
       "payloadInMetadata": "jwt_payload_auth0",
       "remoteJwks": {
         "asyncFetch": {
           "fastListener": true
         },
         "httpUri": {
           "cluster": "jwks_cluster_auth0",
```

```
          "timeout": "1s",
          "uri": "https://example-auth0.com/.well-known/jwks.json"
        }
      }
    },
    "okta": {
      "issuer": "test-issuer",
      "payloadInMetadata": "jwt_payload_okta",
      "remoteJwks": {
        "asyncFetch": {
          "fastListener": true
        },
        "httpUri": {
          "cluster": "jwks_cluster_okta",
          "timeout": "1s",
          "uri": "https://example-okta.com/.well-known/jwks.json"
        }
      }
    }
  },
  "rules": [
    {

"match": {
        "prefix": "/"
      },
      "requires": {
        "requiresAll": {
          "requirements": [
            {
              "requiresAny": {
                "requirements": [
                  {
                    "providerName": "okta"
                  },
                  {
                    "allowMissingOrFailed": {}
                  }
                ]
              }
            },
            {
              "requiresAny": {
                "requirements": [
                  {
                    "providerName": "auth0"
                  },
                  {
```

```
                "allowMissingOrFailed": {}
              }
            ]
          }
        }
      ]
    }
  }
  ]
 }
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

<div
 ...attributes
 class="consul-intention-permission-form"
>
<FormGroup
 @name={{name}}
as |group|>

 {{yield (hash
   submit=(action 'submit' changeset)
   reset=(action 'reset' changeset)

   isDirty=(and changeset.isValid)
   changeset=changeset
 )}}

 <fieldset>
   <div data-property="action">
     <span class="label">
       Should this permission allow the source connect to the destination?
     </span>
     <div role="radiogroup" class={{if changeset.error.Action ' has-error'}}>
       {{#each intents as |intent|}}
         <label>
           <span>{{capitalize intent}}</span>
           <input
             type="radio"
             name="Action"
             value={{intent}}
             checked={{if (eq changeset.Action intent) 'checked'}}
             onchange={{action (changeset-set changeset 'Action') value="target.value"}}
```

```
          />
        </label>
      {{/each}}
     </div>
  </div>
</fieldset>

<fieldset>
  <header>
    <h2>Path</h2>
  </header>
  <div>
      <group.Element
        @name="PathType"
        @type="select"
      as |el|>
        <el.Label>
          Path type
        </el.Label>
        <PowerSelect
          @options={{pathTypes}}
          @selected={{pathType}}
          @onChange={{action 'change' 'HTTP.PathType' changeset}} as |Type|>
            {{get pathLabels Type}}
        </PowerSelect>
      </group.Element>

{{#if shouldShowPathField}}
      <group.Element
        @name="Path"
        @error={{changeset-get changeset 'error.HTTP.Path'}}
      as |el|>
        <el.Label>
          {{get pathLabels pathType}}
        </el.Label>
        <el.Text
          @value={{changeset-get changeset 'HTTP.Path'}}
          oninput={{action 'change' 'HTTP.Path' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>

            {{#if (eq (changeset-get changeset 'HTTP.Path') 'Regex')}}
              Path Regex should not be blank
            {{else}}
              Path should begin with a '/'
            {{/if}}
          </el.Error>
```

```
        </State>
      </group.Element>
{{/if}}

  </div>
 </fieldset>

 <fieldset>
  <h2>Methods</h2>
  <div class="type-toggle">
    <span>All methods are applied by default unless specified</span>
    <group.Element
      @name="allMethods"
    as |el|>
      <el.Checkbox
        checked={{if allMethods 'checked'}}
        onchange={{action 'change' 'allMethods' changeset}}
      />
      <el.Label>
        All Methods
      </el.Label>
    </group.Element>
  </div>

{{#if shouldShowMethods}}
  <div class="checkbox-group" role="group">
    {{#each methods as |method|}}
      <label class="type-checkbox">
        <input
          type="checkbox"
          name="method"
          value={{method}}

  checked={{if (includes method changeset.HTTP.Methods) 'checked'}}
          onchange={{action 'change' 'method' changeset}}
        />
        <span>{{method}}</span>
      </label>
    {{/each}}
  </div>
{{/if}}
 </fieldset>

 <fieldset>
  <h2>Headers</h2>

  <Consul::Intention::Permission::Header::List
    @items={{changeset-get changeset 'HTTP.Header'}}
```

```
    @ondelete={{action 'delete' 'HTTP.Header' changeset}}
  as |headerList|>

  </Consul::Intention::Permission::Header::List>

  <Consul::Intention::Permission::Header::Form
    @onsubmit={{action 'add' 'HTTP.Header' changeset}}
  as |headerForm|>
    <Ref @target={{this}} @name="headerForm" @value={{headerForm}} />
  </Consul::Intention::Permission::Header::Form>

  <Hds::ButtonSet>
    <Hds::Button
      data-test-add-header
      @text='Add{{if (gt (get (changeset-get changeset 'HTTP.Header') 'length') 0) ' another' ''}} header'
      @color='primary'
      disabled={{if (not this.headerForm.isDirty)
'disabled'}}
      onclick={{action this.headerForm.submit}}
    />
    <Hds::Button
      @text='Cancel'
      @color='secondary'
      onclick={{action this.headerForm.reset}}
    />
  </Hds::ButtonSet>
 </fieldset>
 </FormGroup>
</div>
```

1.4056 consul-api 1.32.0

1.4056.1 Available under license :

```
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

<div
 ...attributes
 class="consul-intention-permission-header-form"
>
 <FormGroup
   @name={{name}}
 as |group|>

   {{yield (hash
```

```
    submit=(action 'submit' changeset)
    reset=(action 'reset' changeset)

    isDirty=(and changeset.isValid changeset.isDirty)
    changeset=changeset
  )}}

  <fieldset>
    <div>
      <group.Element
        @name="HeaderType"
        @type="select"
      as |el|>
        <el.Label>Header type</el.Label>
        <PowerSelect
          @options={{headerTypes}}
          @selected={{headerType}}
          @onChange={{action 'change' 'HeaderType' changeset}} as |Type|>
            {{get headerLabels Type}}
        </PowerSelect>
      </group.Element>


      <group.Element
        @name="Name"
        @error={{changeset-get changeset 'error.Name'}}
      as |el|>
        <el.Label>Header name</el.Label>
        <el.Text

         @value={{changeset-get changeset 'Name'}}
          oninput={{action 'change' 'Name' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Name.validation'}}
          </el.Error>
        </State>
      </group.Element>

{{#if shouldShowValueField}}
      <group.Element
        @name="Value"
        @error={{changeset-get changeset 'error.Value'}}
      as |el|>
        <el.Label>Header {{lowercase (get headerLabels headerType)}}</el.Label>
        <el.Text
          @value={{changeset-get changeset 'Value'}}
```

```
          oninput={{action 'change' 'Value' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Value.validation'}}
          </el.Error>
        </State>
      </group.Element>
 {{/if}}

 {{#if shouldShowIgnoreCaseField}}
      <group.Element

        @name="IgnoreCase"
        @error={{changeset-get changeset 'error.IgnoreCase'}}
      as |el|>
        <el.Label>Ignore Case</el.Label>
        <el.Checkbox
          checked={{if IgnoreCase 'checked'}}
          onchange={{action 'change' 'IgnoreCase' changeset}}
        />
      </group.Element>
 {{/if}}

    </div>
  </fieldset>
 </FormGroup>
</div>
---
layout: api
page_title: License - Operator - HTTP API
description: |-
 The /operator/license endpoint allows for retrieving the Consul
 Enterprise License.
---

# License - Operator HTTP API

<EnterpriseAlert />

The licensing functionality described here is available only in
[Consul Enterprise](https://www.hashicorp.com/products/consul/) version 1.1.0 and later.

## Getting the Consul License

This endpoint gets information about the current license.

| Method | Path                | Produces          |
```

| ------ | ------------------- | ------------------ |
| `GET` | `/operator/license` | `application/json` |

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

| Blocking Queries | Consistency Modes | Agent Caching | ACL Required |
| ----------------
 | ----------------- | ------------- | ------------ |
| `NO` | `all` | `none` | `none` |

The corresponding CLI command is [`consul license get`](/consul/commands/license#get).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be retrieved.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
   http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
```

```
    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```

Updating the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint updates the Consul license and returns some of the
license contents as well as any warning messages regarding its validity.

Method	Path	Produces
`PUT`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license put`](/consul/commands/license#put).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Payload

The payload is the raw license blob.

Sample Request

```shell-session
```

```
$ curl \
  --request PUT \
  --data @consul.license \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product":
 "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
     "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

Resetting the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint resets the Consul license to the license included in the Enterprise binary. If the included license is not valid, the replace will fail.

Method	Path	Produces
`DELETE`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching),
 and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license reset`](/consul/commands/license#reset).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
   --request DELETE \
   http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
    "expiration_time": "2019-05-22T03:59:59.999Z",
   "product": "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
```

```
    "Redundancy Zone",
    "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

```
.consul-intention-permission-form {
 h2 {
  padding-top: 1.4em;
  margin-top: 0.2em;
  margin-bottom: 0.6em;
 }
 .consul-intention-permission-header-form {
  margin-top: 10px;
 }
 fieldset:nth-child(2) > div,
 .consul-intention-permission-header-form fieldset > div {
  display: grid;
  grid-template-columns: repeat(auto-fit, minmax(160px, 1fr));
  grid-gap: 12px;
 }
 fieldset:nth-child(2) > div label:last-child {
  grid-column: span 2;
 }
 .ember-basic-dropdown-trigger {
  padding: 5px;
 }
 .checkbox-group {
  flex-direction: column;
 }
}
```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1

```
*/

@import './skin';
@import './layout';
.consul-intention-permission-list > ul > li {
 @extend %list-row-200;
}
.consul-intention-permission-list:not(.readonly) > ul > li {
 @extend %with-composite-row-intent;
}
.consul-intention-permission-list strong {
 @extend %pill-500;
}
.consul-intention-permission-list .intent-allow {
 @extend %pill-allow;
}
.consul-intention-permission-list .intent-deny {
 @extend %pill-deny;
}
```

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OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE
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---
layout: docs
page_title: Enterprise License FAQ
description: >-
Review frequently asked questions (FAQs) about Consul Enterprise licenses to learn more about how licenses work, what happens when they expire, and how to get a trial license.

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Consul Enterprise version 1.10.0.
Consul Enterprise automatically loads Consul licenses when the server agent starts.

Q: Can I get a quick summary of the Consul changes?

Starting with Consul Enterprise 1.10.0, the license enablement process is different.

HashiCorp Enterprise servers will no longer start without a license. Servers require licenses to be provided from either an environment variable or file.
If the license is missing, invalid, or expired, the server will immediately exit.
This check is part of the server boot-up process.

In previous versions of HashiCorp enterprise products, one server could distribute a license to other servers via the Raft protocol.
This will no longer work since each server must be able to find a valid license during the startup process.

Q: What are the upgrade requirements?

All customers on Consul Enterprise 1.8/1.9 must first upgrade their client and server agents to the latest patch release.
During the upgrade the license file must also be configured on client agents in an environment variable or file path, otherwise the Consul agents will fail to retrieve the license with a valid agent token.
The upgrade process varies if ACLs are enabled or disabled in the cluster.

Refer to the instructions on [upgrading to 1.10.x](/consul/docs/upgrading/instructions/upgrade-to-1-10-x) for details.

Q: Is there a tutorial available for the license configuration steps?

Please visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs).

Q: What resources are available?

The list below is a great starting point for learning more about the license
changes introduced in Consul Enterprise 1.10.0+ent.

- [Consul Enterprise Upgrade Documentation](/consul/docs/enterprise/upgrades)

- [Consul License Documentation](/consul/docs/enterprise/license/overview)

- [License configuration values documentation](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses)

- [Install a HashiCorp Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs)

Q: Do these changes impact all customers/licenses?

The license changes introduced in 1.10.0 only affect Consul Enterprise.
This impacts customers that have an enterprise binary (trial or non-trial licenses) downloaded from https://releases.hashicorp.com.
The license changes do not impact customers with the baked-in licensed binaries. In a later release of Consul Enterprise, baked-in binaries will be deprecated.

Q: What is the product behavior change introduced by the licensing changes?

Starting with Consul Enterprise 1.10.0,
a valid license is required on-disk (auto-loading) or as an environment variable for Consul Enterprise to successfully boot-up.
The in-storage license feature will not be supported starting with Consul Enterprise 1.10.0+ent. All Consul Enterprise clusters using 1.10.0+ent must ensure that there is a valid license on-disk (auto-loaded) or as an environment variable.

Q: What is the impact on trial licenses due to this change? ((#q-what-is-the-impact-on-evaluation-licenses-due-to-this-change))

Consul Enterprise 1.10.0+ server agents require a valid license to start.
The license can be provided on disk (auto-loaded) or as an environment variable.
There is no longer a 6-hour trial period in which Consul Enterprise server agents
can operate without a license.

Q: Is there a grace period when licenses expire?

YesConsul will continue normal operation and can be restarted after license *expiration* as defined in [`expiration_time`](/consul/api-docs/operator/license#getting-the-consul-license).
As
license expiration is approached or passed, Consul will issue warnings in the system logs.

Consul will only cease operation after license *termination*, which occurs 10 years
after license expiration and is defined in
[`termination_time`](/consul/api-docs/operator/license#getting-the-consul-license).

~> **Starting with Consul 1.14, and patch releases 1.13.3 and 1.12.6, Consul will support non-terminating licenses**:
Please contact your support representative for more details on non-terminating licenses.
An expired license will not allow Consul versions released after the expiration date to run.
It will not be possible to upgrade to a new version of Consul released after license expiration.

Q: Does this affect client agents?

There are upgrade requirements that affect Consul Enterprise clients.
Please review the [upgrade requirements](#q-what-are-the-upgrade-requirements) documentation.

Q: Does this affect snapshot agents?

Same behavior as Consul clients.
See answer for [Does this affect client agents?](#q-does-this-affect-client-agents)

Q: What is the behavior if the license is missing?

Consul server agents will detect the absence of the license and immediately exit.

Consul client agents will attempt to retrieve the license from servers if certain conditions are met:

- ACLs are enabled.
- An ACL token is provided to the client agent.
- The client agents configuration contains `retry_join` addresses.
- The retry join addresses are addresses of the Consul servers.

Consul snapshot agents will attempt to retrieve the license from servers if certain conditions are met: ACLs are enabled, a ACL token is provided to the client agent, the client agents configuration contains `retry_join` addresses, the retry join addresses are addresses of the Consul servers.

Q: Where can users get a trial license for Consul Enterprise?

Contact your [HashiCorp Support contact](https://support.hashicorp.com/) for a development license.

~> **Trial
install will cease operation 24 hours after 30-day license expiration**:
Trial licenses are not meant to be used in production.

This is unlike non-trial licenses which provide a 10 year grace period as described in
the answer for [Q: Is there a grace period when licenses expire?](#q-is-there-a-grace-period-when-licenses-expire).

Q: How can I renew a license?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: I'm an existing enterprise customer but don't have my license, how can I get it?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: Are the license files locked to a specific cluster?

The license files are not locked to a specific cluster or cluster node. The above changes apply to all nodes in a cluster.

Q: Will this
impact HCP Consul Dedicated?

This will not impact HCP Consul Dedicated.

Q: Does this need to happen every time a node restarts, or is this a one-time check?

Consul Enterprise binaries starting with 1.10.0+ent, will be subject to EULA check. Release 1.10.0+ent introduces the EULA check for trial licenses (non-trial licenses already go through EULA check during contractual agreement).

The agreement to a EULA happens only once (when the user gets their license), Consul Enterprise **will check for the presence of a valid license every time a node restarts**.

When a customer upgrades existing clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be auto-loaded.

When a customer deploys new clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be on-disk (auto-loaded).

Q: What are the scenarios that a customer must plan for because of these changes?

New
Consul cluster deployments using 1.10.0+ent will need to have a valid license on servers to successfully deploy.
This valid license must be on-disk (auto-loaded) or as an environment variable.
Please see the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?

VM

1. Run [`consul license get -signed`](/consul/commands/license#get) to extract the license from their running cluster. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have access to the required license. This could be via the client agent configuration file or an environment variable.
1. Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license
 key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

NOTE: If you are not upgrading Consul or your Helm chart version then no action is required.

1. In order to use Consul Enterprise 1.10.0 or greater on Kubernetes you must use version 0.32.0 or greater of the Helm chart.
1. You should already have a Consul Enterprise license set as a Kubernetes secret. If you do not, refer to [how to obtain a copy of your license](/consul/docs/enterprise/license/faq#q-i-m-an-existing-enterprise-customer-but-don-t-have-my-license-how-can-i-get-it).
Once you have the license then create a Kubernetes secret containing the license as described in [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise).
1. Follow the [Kubernetes Upgrade Docs](/consul/docs/k8s/upgrade) to upgrade. No changes to your `values.yaml` file are needed to enable enterprise autoloading since this support is built in to consul-helm 0.32.0 and greater.

!>
 Warning: If you are upgrading the Helm chart but **not** upgrading the Consul version, you must set `server.enterpriseLicense.enableLicenseAutoload: false`. See [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise) for more details.

Q: What is the migration path for customers who want to migrate from their existing perpetually-licensed binaries to the license on disk flow?

VM

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs)
 for detailed steps on how to install the license key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on

how to get your organization's enterprise license.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Proceed with the `helm` [upgrade instructions](/consul/docs/k8s/upgrade)

Q: Will Consul downgrades/rollbacks work?

When downgrading
 to a version of Consul before 1.10.0+ent, customers will need to follow the previous process for applying an enterprise licenses to Consul Enterprise.

Q: Are there potential pitfalls when downgrading or upgrading Consul server instances?

~> Verify that you meet the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Assume a scenario where there are three Consul server nodes:

- Node A: v1.9.5
- Node B: v1.10.0 [Leader]
- Node C: v1.9.5

The command `consul license put` is issued from Node A. This will result in an error due to how Consul routes calls to the server node, Node B in this example.
Because Node A is a follower when the call `consul license put` is issued, the call will be redirected to Node B (leader).
The `consul license put` operation will fail due to being removed from 1.10.0.
This is a scenario that could occur if a customer downgrades from 1.10.0+ and the Consul leadership has not transferred back over to a node
 not running 1.10.0+.
This also has the potential of occurring when upgrading if scheduled license updates or autoscaling groups recoveries are in place.

Q: Any impacts to Consul Kubernetes?

If you are using a Consul Enterprise version prior to 1.10.0 and decide to upgrade the Helm chart to version 0.32.0 or newer, but not the Consul version.
You will need to add the following configuration.

```
server:
 enterpriseLicense:
   enableLicenseAutoload: false
```
/**
* Copyright (c) HashiCorp, Inc.

```
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-header-list {
 max-height: 200px;
 overflow: auto;
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-header-list"
 @items={{items}}
 @scroll="native"
 @cellHeight={{42}}
as |item|>
 <BlockSlot @name="details">
   <dl>
     <dt>
       <Tooltip>
         Header
       </Tooltip>
     </dt>
     <dd>
       {{item.Name}} {{route-match item}}
     </dd>
   </dl>
 </BlockSlot>
 <BlockSlot @name="actions" as |Actions|>
   <Actions as |Action|>
     <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
       <BlockSlot @name="label">
         Delete
       </BlockSlot>
       <BlockSlot @name="confirmation" as |Confirmation|>
         <Confirmation class="warning">
           <BlockSlot @name="header">
             Confirm delete
           </BlockSlot>
           <BlockSlot @name="body">
             <p>
               Are you sure you want to delete this header?

  </p>
           </BlockSlot>
```

```
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
</ListCollection>
{{/if}}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "urlPath": {
                     "path": {
                       "exact": "/v1/secret"
                     }
                   }
                 },
                 {
                   "andRules": {
                     "rules": [
                       {
                         "metadata": {
                           "filter": "envoy.filters.http.jwt_authn",
                           "path": [
                             {
                               "key": "jwt_payload_auth0"
                             },
                             {
                               "key": "iss"
                             }
                           ],
                           "value": {
                             "stringMatch": {
                               "exact": "mytest.auth0-issuer"
                             }
                           }
                         }
```

```
          },
          {
            "metadata": {
              "filter": "envoy.filters.http.jwt_authn",
              "path": [
                {
                  "key": "jwt_payload_auth0"
                },
                {
                  "key": "perms"
                },
                {
                  "key": "role"
                }
              ],
              "value": {
                "stringMatch": {
                  "exact": "admin"

  }
              }
            }
          }
        ]
      }
    }
  ]
}
},
{
  "andRules": {
    "rules": [
      {
        "urlPath": {
          "path": {
            "exact": "/v1/admin"
          }
        }
      },
      {
        "notRule": {
          "urlPath": {
            "path": {
              "exact": "/v1/secret"
            }
          }
        }
      }
```

```
      ]
    }
  }
],
"principals": [
  {
    "andIds": {
      "ids": [
        {
          "authenticated": {
            "principalName": {

        "safeRegex": {
              "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
            }
          }
        }
      },
      {
        "andIds": {
          "ids": [
            {
              "metadata": {
                "filter": "envoy.filters.http.jwt_authn",
                "path": [
                  {
                    "key": "jwt_payload_okta"
                  },
                  {
                    "key": "iss"
                  }
                ],
                "value": {
                  "stringMatch": {
                    "exact": "mytest.okta-issuer"
                  }
                }
              }
            },

            {
              "metadata": {
                "filter": "envoy.filters.http.jwt_authn",
                "path": [
                  {
                    "key": "jwt_payload_okta"
                  },
                  {
```

```
                "key": "roles"
              }
            ],
            "value": {
              "stringMatch": {
                "exact": "testing"
              }
            }
          }
        }
      ]
    }
  }
 ]
}
}
}
}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
    "policies": {
      "consul-intentions-layer7-0": {
        "permissions": [
          {
            "andRules": {
              "rules": [
                {
                  "urlPath": {
                    "path": {
                      "prefix": "/v1"
                    }
                  }
                },
                {
                  "notRule": {
                    "urlPath": {
                      "path": {
                        "exact": "/v1/secret"
                      }
                    }
                  }
```

```
        }
      ]
    }
  },
  {
    "andRules": {
      "rules": [
        {
          "andRules": {
            "rules": [
              {

          "urlPath": {
                "path": {
                  "safeRegex": {
                    "regex": "/v[123]"
                  }
                }
              }
            },
            {
              "header": {
                "name": ":method",
                "stringMatch": {
                  "safeRegex": {
                    "regex": "GET|HEAD|OPTIONS"
                  }
                }
              }
            }
          ]
          }
        },
        {
          "notRule": {
            "urlPath": {
              "path": {
                "exact": "/v1/secret"
              }
            }
          }
        },

{
          "notRule": {
            "andRules": {
              "rules": [
                {
```

```
                "urlPath": {
                  "path": {
                    "exact": "/v1/admin"
                  }
                }
              },
              {
                "header": {
                  "name": ":method",
                  "stringMatch": {
                    "safeRegex": {
                      "regex": "GET"
                    }
                  }
                }
              }
            ]
          }
        }
      }
    ]
  }
},
{
  "andRules": {
    "rules": [
      {
```

```
"andRules": {
              "rules": [
                {
                  "header": {
                    "name": "x-foo",
                    "presentMatch": true
                  }
                },
                {
                  "header": {
                    "name": "x-bar",
                    "stringMatch": {
                      "exact": "xyz"
                    }
                  }
                },
                {
                  "header": {
                    "name": "x-dib",
                    "stringMatch": {
```

```
            "prefix": "gaz"
          }
        }
      },
      {
        "header": {
          "name": "x-gir",
          "stringMatch": {

"suffix": "zim"
          }
        }
      },
      {
        "header": {
          "name": "x-zim",
          "stringMatch": {
            "safeRegex": {
              "regex": "gi[rR]"
            }
          }
        }
      },
      {
        "header": {
          "invertMatch": true,
          "name": "z-foo",
          "presentMatch": true
        }
      },
      {
        "header": {
          "invertMatch": true,
          "name": "z-bar",
          "stringMatch": {
            "exact": "xyz"

    }
        }
      },
      {
        "header": {
          "invertMatch": true,
          "name": "z-dib",
          "stringMatch": {
            "prefix": "gaz"
          }
        }
```

```
            },
            {
              "header": {
                "invertMatch": true,
                "name": "z-gir",
                "stringMatch": {
                  "suffix": "zim"
                }
              }
            },
            {
              "header": {
                "invertMatch": true,
                "name": "z-zim",
                "stringMatch": {
                  "safeRegex": {

             "regex": "gi[rR]"
                  }
                }
              }
            }
          ]
        }
      },
      {
        "notRule": {
          "urlPath": {
            "path": {
              "exact": "/v1/secret"
            }
          }
        }
      },
      {
        "notRule": {
          "header": {
            "name": "x-baz",
            "presentMatch": true
          }
        }
      }
    ]
  }
}
],
"principals": [
  {
```

```
            "authenticated": {
              "principalName": {
                "safeRegex": {
                  "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
                }
              }
            }
          }
        ]
      }
    }
  }
 }
}
{
 "name": "envoy.filters.network.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.network.rbac.v3.RBAC",
   "rules": {},
   "statPrefix": "connect_authz"
 }
}
{
 "Valid": true,
 "License": {
   "license_id": "${fake.random.uuid()}",
   "customer_id": "${fake.random.uuid()}",
   "installation_id": "*",
   "issue_time": "2021-01-13T15:25:19.052900132Z",
   "start_time": "2021-01-13T00:00:00Z",
   "expiration_time": "${env('CONSUL_LICENSE_EXPIRATION', '2022-05-02T23:59:59.999Z')}",
   "termination_time": "${env('CONSUL_LICENSE_TERMINATION', '2022-01-13T23:59:59.999Z')}",
   "product": "consul",
   "flags": {
     "modules": [
       "global-visibility-routing-scale",
       "governance-policy"
     ]
   },
   "modules": [
     "Global Visibility, Routing and Scale",
     "Governance and Policy"
   ],
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
```

```
    "Redundancy Zone",
    "Advanced Network Federation",
    "Namespaces",
    "SSO",
    "Audit Logging",
    "Admin Partitions"
  ]
 },
 "Warnings": [
 ]
}
{
 "name": "envoy.filters.http.jwt_authn",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
  "providers": {
    "okta": {
      "issuer": "test-issuer",
      "payloadInMetadata": "jwt_payload_okta",
      "remoteJwks": {
        "asyncFetch": {
          "fastListener": true
        },
        "httpUri": {
          "cluster": "jwks_cluster_okta",
          "timeout": "1s",
          "uri": "https://example-okta.com/.well-known/jwks.json"
        }
      }
    }
  },
  "rules": [
    {
      "match": {
        "prefix": "/"
      },
      "requires": {
        "requiresAny": {
          "requirements": [
            {
              "providerName": "okta"
            },
            {
              "allowMissingOrFailed": {}
            }
          ]
        }
      }
```

```
    }
  ]
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
.consul-intention-permission-header-list {
 > ul > li {
   @extend %list-row-200;
 }
}
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{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "andRules": {
                     "rules": [
                       {
                         "urlPath": {
                           "path": {
                             "prefix": "/v1"
                           }
                         }
                       },
                       {
```

```
            "header": {
              "name": "x-foo",
              "presentMatch": true
            }
          }
        ]
      }
    },
    {
      "notRule": {
        "andRules": {

        "rules": [
            {
              "urlPath": {
                "path": {
                  "exact": "/v1/secret"
                }
              }
            },
            {
              "header": {
                "name": "x-baz",
                "presentMatch": true
              }
            },
            {
              "header": {
                "name": "x-bar",
                "presentMatch": true
              }
            }
          ]
        }
      }
    },
    {
      "notRule": {
        "andRules": {
          "rules": [
            {

"urlPath": {
                "path": {
                  "exact": "/v1/admin"
                }
              }
            },
```

```
                {
                  "header": {
                    "name": "x-baz",
                    "presentMatch": true
                  }
                },
                {
                  "header": {
                    "name": "x-bar",
                    "presentMatch": true
                  }
                }
              ]
            }
          }
        }
      }
      ],
      "principals": [
        {
          "authenticated": {
            "principalName": {
              "safeRegex": {
                "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
              }
            }
          }
        }
      ]
    }
  }
 }
}
```

License

```hbs preview-template
<figure>
 <figcaption>URI: <code>/:partition/:nspace/:dc/license</code></figcaption>
 <DataSource
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition='partition'
       nspace='ns'
       dc='dc-1'
```

```
    )
  }}
  @onchange={{action (mut data) value="data"}}
 />
 <pre><code>{{json-stringify data null 4}}</code></pre>
</figure>
```
---
page_title: Automated license utilization reporting
description: >-
 Learn what data HashiCorp collects to meter Enterprise license utilization. Enable or disable reporting. Review sample payloads and logs.

Automated license utilization reporting

This topic describes how to enable automated license utilization reporting in Consul Enterprise. This feature automatically sends license utilization data to HashiCorp so that you do not have to manually collect and report it. It also enables you to review your license usage with the monitoring solution you already use, such as Splunk and Datadog, as you optimize and manage your deployments.

Introduction

You can use automated license utilization report to understand how much additional networking infrastructure you can deploy under your current contract. This feature helps you protect against overutilization and budget for predicted consumption.

Automated reporting shares the minimum data required to validate license utilization
 as defined in our contracts. This data mostly consists of computed metrics, and it will never contain Personal Identifiable Information (PII) or other sensitive information. Automated reporting shares the data with HashiCorp using a secure unidirectional HTTPS API and makes an auditable record in the product logs each time it submits a report. This process is GDPR-compliant.

Requirements

Automated license utilization reporting does not support _air-gapped installations_, which are systems with no network interfaces.

The following versions of Consul Enterprise support automated license utilization reporting:

- Consul Enterprise v1.16.0 and newer.
- Patch releases of Consul Enterprise v1.15.4 and newer.
- Patch releases of Consul Enterprise v1.14.8 and newer.
- Patch releases of Consul Enterprise v1.13.9 and newer.

Download a supported release from the [Consul Versions](https://releases.hashicorp.com/consul/) page.

Enable automated reporting

Before you enable automated reporting,
 make sure that outbound network traffic is configured correctly and upgrade your enterprise product to a version that supports it. If your installation is air-gapped or network settings are not in place, automated reporting will not work.

To enable automated reporting, complete the following steps:

1. [Allow outbound HTTPS traffic on port 443](#allow-outbound-https-traffic)
1. [Check product logs](#check-product-logs)

Allow outbound HTTPS traffic on port 443

Make sure that your network allows HTTPS egress on port 443 from `https://reporting.hashicorp.services` by adding the following IP addresses to your allow-list:

- `100.20.70.12`
- `35.166.5.222`
- `23.95.85.111`
- `44.215.244.1`

Check product logs

Automatic license utilization reporting starts sending data within roughly 24 hours. Check the product logs for records that the data sent successfully.

<CodeBlockConfig hideClipboard>

```
[DEBUG] beginning snapshot export
[DEBUG] creating payload
[DEBUG] marshalling
 payload to json
[DEBUG] generating authentication headers
[DEBUG] creating request
[DEBUG] sending request
[DEBUG] performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] recording audit record
[INFO]  reporting: Report sent: auditRecord={"payload":{"payload_version":"1","license_id":"d2cdd857-4202-5a45-70a6-e4b531050c34","product":"consul","product_version":"1.16.0-dev+ent","export_timestamp":"2023-05-26T20:09:13.753921087Z","snapshots":[{"snapshot_version":1,"snapshot_id":"0001J724F90F4XWQDSAA76ZQWA","process_id":"01H1CTJPC1S8H7Q45MKTJ689ZW","timestamp":"2023-05-26T20:09:13.753513962Z","schema_version":"1.0.0","service":"consul","metrics":{"consul.billable.nodes":{"key":"consul.billable.nodes","kind":"counter","mode":"write","value":2},"consul.billable.service_instances":{"key":"consul.billable.service_instances","kind":"counter","mode":"write","value":2}}}],"metadata":{}}}
[DEBUG] completed recording audit record
[DEBUG] export finished successfully"
```

</CodeBlockConfig>

If
 your installation is air-gapped or your network does not allow the correct egress, the logs show an error.

<CodeBlockConfig hideClipboard>

```
[DEBUG] reporting: beginning snapshot export
[DEBUG] reporting: creating payload
[DEBUG] reporting: marshalling payload to json
[DEBUG] reporting: generating authentication headers
[DEBUG] reporting: creating request
[DEBUG] reporting: sending request
[DEBUG] reporting: performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] reporting: error status code received: statusCode=403
```

</CodeBlockConfig>

In this case, reconfigure your network to allow egress and check the logs again in roughly 24 hours to confirm that automated reporting works correctly.

Opt out

If your installation is air-gapped or you want to manually collect and report on the same license utilization metrics, you can opt out of automated reporting.

Manually reporting these metrics can be time consuming. Opting
 out of automated reporting does not mean that you also opt out from sending license utilization metrics. Customers who opt out of automated reporting are still required to manually collect and send license utilization metrics to HashiCorp.

If you are considering opting out because you are worried about the data, we strongly recommend that you review the [example payloads](#example-payloads) before opting out. If you have concerns with any of the automatically reported data, raise these concerns with your account manager.

There are two methods for opting out of automated reporting:

- HCL configuration (recommended)
- Environment variable (requires restart)

We recommend opting out in your product's configuration file because it does not require a system restart. Add the following block to your `configuration.hcl` or `configuration.json` file.

```hcl
reporting {
```

```
 license {
  enabled = false
 }
}
```

When opting out using an environment variable, the system provides a startup message
 confirming that you have disabled automated reporting. Set the following environment variable to disable automated reporting:

<CodeBlockConfig>

```shell-session
$ export OPTOUT_LICENSE_REPORTING=true
```

</CodeBlockConfig>

After you set the environment variable, restart your system to complete the process for opting out.

```shell-session
$ consul reload
```

Check your product logs roughly 24 hours after opting out to make sure that the system is not trying to send reports. Keep in mind that if your configuration file and environment variable differ, the environment variable setting takes precedence.

Example payloads

HashiCorp collects the following utilization data as JSON payloads:
`exporter_version` - The version of the licensing exporter

<CodeBlockConfig hideClipboard>

```json
{
 "payload": {
   "payload_version": "1",
   "license_id": "d2cdd857-4202-5a45-70a6-e4b531050c34",
   "product": "consul",
   "product_version": "1.16.0-dev+ent",
   "export_timestamp":
 "2023-05-26T20:09:13.753921087Z",
   "snapshots": [
     {
       "snapshot_version": 1,
```

```
      "snapshot_id": "0001J724F90F4XWQDSAA76ZQWA",
      "process_id": "01H1CTJPC1S8H7Q45MKTJ689ZW",
      "timestamp": "2023-05-26T20:09:13.753513962Z",
      "schema_version": "1.0.0",
      "service": "consul",
      "metrics": {
        "consul.billable.nodes": {
          "key": "consul.billable.nodes",
          "kind": "counter",
          "mode": "write",
          "value": 2
        },
        "consul.billable.service_instances": {
          "key": "consul.billable.service_instances",
          "kind": "counter",
          "mode": "write",
          "value": 2
        }
      }
    }
  ],
  "metadata": {}
 }
}
```


</CodeBlockConfig>
---
layout: docs
page_title: Storing the Enterprise License in Vault
description: >-
 Configuring the Consul Helm chart to use an enterprise license stored in Vault.

Storing the Enterprise License in Vault

This topic describes how to configure the Consul Helm chart to use an enterprise license stored in Vault.
Overview
Complete the steps outlined in the [Data Integration](/consul/docs/k8s/deployment-configurations/vault/data-integration) section to use an enterprise license stored in Vault.

Complete the following steps once:
 1. Store the secret in Vault.
 1. Create a Vault policy that authorizes the desired level of access to the secret.

Repeat the following steps for each datacenter in the cluster:
 1. Create Vault Kubernetes auth roles that link the policy to each Consul on Kubernetes service account that requires access.

1. Update the Consul on Kubernetes helm chart.

Prerequisites
Prior to setting up the data integration between Vault and Consul on Kubernetes,
you will need to have:
1. Read and completed the steps in the [Systems Integration](/consul/docs/k8s/deployment-configurations/vault/systems-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).
2. Read the [Data Integration Overview](/consul/docs/k8s/deployment-configurations/vault/data-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).

Store the Secret in Vault

First, store the enterprise license in Vault:

```shell-session
$ vault kv put consul-kv/secret/enterpriselicense key="<enterprise license>"
```

Create Vault policy

Next, you will need to create a policy that allows read access to this secret.

The path to the secret referenced in the `path` resource is the same value that you will configure in the `global.enterpriseLicense.secretName` Helm configuration (refer to [Update Consul on Kubernetes Helm chart](#update-consul-on-kubernetes-helm-chart)).

<CodeBlockConfig
 filename="license-policy.hcl">

```HCL
path "consul-kv/data/secret/enterpriselicense" {
 capabilities = ["read"]
}
```

</CodeBlockConfig>

Apply the Vault policy by issuing the `vault policy write` CLI command:

```shell-session
$ vault policy write license-policy license-policy.hcl
```

Create Vault Authorization Roles for Consul

Next, you will create Kubernetes auth roles for the Consul server and client:

```shell-session
$ vault write auth/kubernetes/role/consul-server \
   bound_service_account_names=<Consul server service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

```shell-session
$ vault write auth/kubernetes/role/consul-client \
   bound_service_account_names=<Consul client service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

To find out the service account names of the Consul server and client,
you can
 run the following `helm template` commands with your Consul on Kubernetes values file:

- Generate Consul server service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/server-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

- Generate Consul client service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/client-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

Update Consul on Kubernetes Helm chart.

Now that you have configured Vault, you can configure the Consul Helm chart to
use the enterprise enterprise license in Vault:

<CodeBlockConfig filename="values.yaml">

```yaml
global:
 image: hashicorp/consul-enterprise:1.12.0-ent
 secretsBackend:
   vault:
     enabled: true
     consulServerRole: consul-server
     consulClientRole: consul-client
 enterpriseLicense:
```

```
  secretName: consul-kv/data/secret/enterpriselicense
  secretKey: key
```

</CodeBlockConfig>

Note
 that `global.enterpriseLicense.secretName` is the path of the secret in Vault.
This should be the same path as the one you included in your Vault policy.
`global.enterpriseLicense.secretKey` is the key inside the secret data. This should be the same
as the key you passed when creating the enterprise license secret in Vault.

```
{{!
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}}

<Hds::Alert @type='inline' @color={{or @type "neutral"}} class='mb-2 mt-2 consul-intention-notice-custom-resource' as |A|>
 <A.Title>Intention Custom Resource</A.Title>
 <A.Description>Some of your intentions are being managed through an Intention Custom Resource in your Kubernetes cluster. Those managed intentions will be view only in the UI. Any intentions created in the UI will work but will not be synced to the Custom Resource Definition (CRD) datastore.</A.Description>
 <A.Link::Standalone @href="{{env 'CONSUL_DOCS_URL'}}/k8s/crds"
                @text='Learn more about CRDs'
                @icon="docs-link"
                @iconPosition="trailing"
                @size="small" />
</Hds::Alert>
/**
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*/

.consul-intention-permission-form {
 h2 {
  border-top: 1px solid var(--token-color-foreground-action);
  @extend %display-400-semibold;
 }
 button.type-submit {
  @extend %frame-blue-300;
 }
 button.type-submit:hover:not(:disabled),
 button.type-submit:focus:not(:disabled) {
  @extend %frame-blue-500;
 }
 button.type-submit:disabled {
  @extend %frame-blue-200;
 }
```

```
}

.consul-intention-view {
 h2 {
   @extend %display-400-semibold;
 }
}
```

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---
layout: docs
page_title: Consul-Terraform-Sync Enterprise License
description: >-
 Consul-Terraform-Sync Enterprise License

Consul-Terraform-Sync Enterprise License

<EnterpriseAlert>
 Licenses are only required for Consul-Terraform-Sync (CTS) Enterprise
</EnterpriseAlert>

CTS Enterprise binaries require a [Consul Enterprise license](/consul/docs/enterprise/license/overview) to run. There is no CTS Enterprise specific license. As a result, CTS Enterprise's licensing is very similar to Consul Enterprise.

All CTS Enterprise features are available with a valid Consul Enterprise license, regardless of your Consul Enterprise packaging or pricing model.

To get a trial license for CTS, you can sign-up for the [trial license for Consul Enterprise](/consul/docs/enterprise/license/faq#q-where-can-users-get-a-trial-license-for-consul-enterprise).

Automatic License Retrieval

CTS automatically retrieves a license from Consul on startup and then attempts to retrieve a new license once a day. If the current license is reaching its expiration date, CTS attempts to retrieve a license with increased frequency, as defined by the [License Expiration Date Handling](/consul/docs/nia/enterprise/license#license-expiration-handling).

~> Enabling automatic license retrieval is recommended when using HCP Consul Dedicated, as HCP Consul Dedicated licenses expire more frequently than Consul Enterprise licenses. Without auto-retrieval enabled, you have to restart CTS every time you load a new license.

Setting the License Manually

If a license needs to be manually set, choose one of the following methods (in order of precedence) to set the license:

1. Set the `CONSUL_LICENSE` environment variable to the license string.

  ```shell-session
  export CONSUL_LICENSE=<LICENSE_VALUE>
  ```

1. Set the `CONSUL_LICENSE_PATH` environment variable to the path of the file containing the license.

  ```shell-session
  ```

```
export CONSUL_LICENSE_PATH=<PATH>/<TO>/<FILE>
```

1. To
 point to the file containing the license, in the configuration file, configure the
[`license`](/consul/docs/nia/configuration#license) path option.

```hcl
license {
  path = "<PATH>/<TO>/<FILE>"
}
```

1. To point to the file containing the license, in the configuration file, configure the
[`license_path`](/consul/docs/nia/configuration#license_path) option i. **Deprecated in CTS 0.6.0 and will be removed in a future release. Use [license block](/consul/docs/nia/configuration#license) instead.**

```hcl
license_path = "<PATH>/<TO>/<FILE>"
```

~> **Note**: the [options to set the license and the order of
precedence](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses) are the same as Consul Enterprise server agents.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Updating the License Manually
To update the license
 when it expires or is near the expiration date and automatic license retrieval is disabled:

1. Update the license environment variable or configuration with the new license value or path to the new license file
1. Stop and restart CTS Enterprise

Once CTS Enterprise starts again, it will pick up the new license and run the tasks with any changes that may have occurred between the stop and restart period.

License Expiration Handling

Licenses have an expiration date and a termination date. The termination date is a time at or after the license expires. CTS Enterprise will cease to function once the termination date has passed.

The time between the expiration and termination dates is a grace period. Grace periods are generally 24-hours, but you should refer to your license agreement for complete terms of your grace period.

When approaching expiration and termination, by default, CTS Enterprise will attempt to retrieve a new license. If auto-retrieval is disabled, CTS Enterprise will

provide notifications in the system logs:

Time period	Behavior - auto-retrieval enabled (default)	Behavior - auto-retrieval disabled
30 days before expiration	License retrieval attempt every 24-hours	Warning-level log every 24-hours
7 days before expiration	License retrieval attempt every 1 hour	Warning-level log every 1 hour
1 day before expiration	License retrieval attempt every 5 minutes	Warning-level log every 5 minutes
1 hour before expiration	License retrieval attempt every 1 minute	Warning-level log every 1 minute
At or after expiration (before termination)	License retrieval attempt every 1 minute	Error-level log every 1 minute
At or after termination	Error-level log and exit	Error-level log and exit

~> **Note**: Notification frequency and [grace period](/consul/docs/enterprise/license/faq#q-is-there-a-grace-period-when-licenses-expire) behavior is the same as Consul Enterprise.

/*!
* clipboard.js v2.0.11
* https://clipboardjs.com/
*
* Licensed MIT Zeno Rocha
*/

/*!
* focus-trap 6.9.4
* @license MIT, https://github.com/focus-trap/focus-trap/blob/master/LICENSE
*/

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****
 */

/**
* @license

```
* Copyright 2017 Google LLC
* SPDX-License-Identifier: BSD-3-Clause
*/

/**
* @license
* Copyright 2019 Google LLC
* SPDX-License-Identifier: BSD-3-Clause
*/
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-list{{if (not onclick) ' readonly'}}"
 @scroll="native"
 @items={{items}}
 @partial={{5}}
as |item|>
 <BlockSlot @name="details">
   <div onclick={{action (optional onclick) item}}>
     <strong class={{concat 'intent-' item.Action}}>{{capitalize item.Action}}</strong>
{{#if (gt item.HTTP.Methods.length 0)}}
       <dl class="permission-methods">
         <dt>
           <Tooltip>
             Methods
           </Tooltip>
         </dt>
         <dd>
{{#each item.HTTP.Methods as |item|}}
           {{item}}
{{/each}}
         </dd>
       </dl>
{{/if}}
{{#if item.HTTP.Path}}
       <dl class="permission-path">
         <dt>
           <Tooltip>
             {{item.HTTP.PathType}}
           </Tooltip>
         </dt>
         <dd>
           {{item.HTTP.Path}}
         </dd>
```

```
      </dl>
{{/if}}
{{#each item.HTTP.Header
 as |item|}}
      <dl class="permission-header">
        <dt>
          <Tooltip>
            Header
          </Tooltip>
        </dt>
        <dd>
          {{item.Name}} {{route-match item}}
        </dd>
      </dl>
{{/each}}
  </div>
 </BlockSlot>
{{#if onclick}}
 <BlockSlot @name="actions" as |Actions|>
  <Actions as |Action|>
    <Action data-test-edit-action @onclick={{action (optional onclick) item}} @close={{true}}>
      <BlockSlot @name="label">
        Edit
      </BlockSlot>
    </Action>
    <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you
 want to delete this permission?
            </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
```

```
{{/if}}
</ListCollection>
{{/if}}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "andRules": {
                     "rules": [
                       {
                         "urlPath": {
                           "path": {
                             "prefix": "/v1"
                           }
                         }
                       },
                       {
                         "header": {
                           "name": "x-foo",
                           "presentMatch": true
                         }
                       }
                     ]
                   }
                 },
                 {
                   "notRule": {
                     "andRules": {

                     "rules": [
                       {
                         "urlPath": {
                           "path": {
                             "exact": "/v1/secret"
                           }
                         }
                       },
                       {
                         "header": {
                           "name": "x-baz",
```

```
                "presentMatch": true
              }
            },
            {
              "header": {
                "name": "x-bar",
                "presentMatch": true
              }
            }
          ]
        }
      }
    },
    {
      "notRule": {
        "andRules": {
          "rules": [
            {

"urlPath": {
                "path": {
                  "exact": "/v1/admin"
                }
              }
            },
            {
              "header": {
                "name": "x-baz",
                "presentMatch": true
              }
            },
            {
              "header": {
                "name": "x-bar",
                "presentMatch": true
              }
            }
          ]
        }
      }
    }
  ]
}
},
{
  "andRules": {
    "rules": [
      {
```

```
                "andRules": {
                  "rules": [
                    {

  "urlPath": {
                      "path": {
                        "prefix": "/v2"
                      }
                    }
                  },
                  {
                    "header": {
                      "name": "x-foo",
                      "presentMatch": true
                    }
                  }
                ]
              }
            },
            {
              "notRule": {
                "andRules": {
                  "rules": [
                    {
                      "urlPath": {
                        "path": {
                          "exact": "/v2/secret"
                        }
                      }
                    },
                    {
                      "header": {
                        "name": "x-baz",
                        "presentMatch":
true
                      }
                    },
                    {
                      "header": {
                        "name": "x-bar",
                        "presentMatch": true
                      }
                    }
                  ]
                }
              }
            },
            {
```

```
                "notRule": {
                  "andRules": {
                    "rules": [
                      {
                        "urlPath": {
                          "path": {
                            "exact": "/v2/admin"
                          }
                        }
                      },
                      {
                        "header": {
                          "name": "x-baz",
                          "presentMatch": true
                        }
                      },

            {
                        "header": {
                          "name": "x-bar",
                          "presentMatch": true
                        }
                      }
                    ]
                  }
                }
              }
            ]
          }
        }
      ],
      "principals": [
        {
          "authenticated": {
            "principalName": {
              "safeRegex": {
                "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
              }
            }
          }
        }
      ]
    }
  }
 }
}
```

/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.agentless-node-notice .hds-alert__title {
 display: flex;
 justify-content: space-between;
}
Mozilla Public License 2.0 (MPLv2.0)
---
layout: commands
page_title: 'Commands: License'
description: >
 The license command provides a datacenter-level view of the Consul
 Enterprise license.

Consul License

Command: `consul license`

<EnterpriseAlert />

The `license` command provides a list of all datacenters that use the Consul Enterprise license applied to the current datacenter.

~> **Warning**: Consul 1.10.0 removed the ability to set and reset the license using the CLI.
See the [licensing documentation](/consul/docs/enterprise/license/overview) for more information about
Consul Enterprise license management.

If ACLs are enabled then a token with operator privileges may be required in
order to use this command. Requests are forwarded internally to the leader
if required, so this can be run from any Consul node in a cluster. See the
[ACL Guide](/consul/tutorials/security/access-control-setup-production) for more information.

```text
Usage: consul license <subcommand> [options] [args]

 This command has subcommands
 for managing the Consul Enterprise license
 Here are some simple examples, and more detailed examples are
 available in the subcommands or the documentation.

 Install a new license from a file:

    $ consul license put @consul.license
```

Install a new license from stdin:

$ consul license put -

Install a new license from a string:

$ consul license put "<license blob>"

Retrieve the current license:

$ consul license get

Inspect a license:

$ consul license inspect "<path to license file>"

Reset the current license:

$ consul license reset

For more examples, ask for subcommand help or view the documentation.

Subcommands:
  get Get the active license
  inspect Inspect a signed license
  put Puts a new license in the datacenter
  reset Resets the license in the datacenter

```

## inspect

This command inspects and validates a license. Just like a Consul agent it
can load the license from a file
 on disk or from the `CONSUL_LICENSE` and
`CONSUL_LICENSE_PATH` environment variables.

Usage: `consul license inspect [<options>] [<license file>]`

Inspect a license contained in a file:

```
$ consul license inspect consul.hclic
```

Inspect a license loaded from the environment:

```

$ consul license inspect
```

This will look at the CONSUL_LICENSE environment variable first
and if not present then we will look for the file specified
by the CONSUL_LICENSE_PATH environment variable.

The output looks like this:

```
Source: /consul/config/consul.hclic (path from the CONSUL_LICENSE_PATH environment variable)
Product: consul
License ID: 6089174b-a713-74cf-4c8d-856b86f1ce50
Customer ID: 7c020610-60a2-7ccb-c210-20d899e5f3b4
Installation ID: *
Issue Time: 2020-09-14 19:45:56.212195875 +0000 UTC
Start Time: 2020-09-14 00:00:00 +0000 UTC
Expiration Time: 2021-09-14 23:59:59.999 +0000 UTC
Termination Time: 2021-09-14 23:59:59.999 +0000 UTC
Modules:
    Global Visibility, Routing and Scale
     Governance and Policy
Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
    Namespaces
    SSO
    Audit Logging
    Admin Partitions

License is valid

```

## put

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[PUT\] /v1/operator/license](/consul/api-docs/operator/license#updating-the-consul-license)

This command sets the Consul Enterprise license.
```

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be
 from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license put [options] LICENSE`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
	Automated Backups
	Automated Upgrades
	Enhanced Read Scalability
	Network Segments
	Redundancy Zone
	Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

get

Corresponding HTTP API Endpoint: [\[GET\] /v1/operator/license](/consul/api-docs/operator/license#getting-the-consul-license)

This command gets the Consul Enterprise license. If the leader hasn't been updated with the newer license, the followers
will display the outdated license in their GET output.

The table below

shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of [blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`none`

Usage: `consul license get [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

reset

-> **Deprecated** The ability to manage the cluster's license via the CLI
was
removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[DELETE\] /v1/operator/license](/consul/api-docs/operator/license#resetting-the-consul-license)

Resets license for the datacenter to the one builtin in Consul binary, if it is still valid.
If the builtin license is invalid, the current one stays active.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication).

Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license reset [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires
 At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
      Automated Backups
      Automated Upgrades
      Enhanced Read Scalability
      Network Segments
      Redundancy Zone
      Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "urlPath": {
                     "path": {

```
            "prefix": "some-path"
          }
        }
      },
      {
        "andRules": {
          "rules": [
            {
              "metadata": {
                "filter": "envoy.filters.http.jwt_authn",
                "path": [
                  {
                    "key": "jwt_payload_okta"
                  },
                  {
                    "key": "iss"
                  }

                ],
                "value": {
                  "stringMatch": {
                    "exact": "mytest.okta-issuer"
                  }
                }
              }
            },
            {
              "metadata": {
                "filter": "envoy.filters.http.jwt_authn",
                "path": [
                  {
                    "key": "jwt_payload_okta"
                  },
                  {
                    "key": "roles"
                  }
                ],
                "value": {
                  "stringMatch": {
                    "exact": "testing"
                  }
                }
              }
            }

]
        }
      }
```

```
            ]
          }
        }
      ],
      "principals": [
        {
          "authenticated": {
            "principalName": {
              "safeRegex": {
                "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
              }
            }
          }
        }
      ]
    }
  }
 }
}
/**
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*/

section[data-route='dc.show.license'] {
 @extend %license-route;
}
%license-route .validity {
 @extend %license-validity;
}
%license-route aside {
 @extend %license-route-learn-more;
}

%license-route h2 {
 @extend %display-400-semibold;
}

%license-validity p {
 color: var(--token-color-foreground-faint);
}
%license-validity dl {
 @extend %horizontal-kv-list;
 @extend %body-300-regular;
}
%license-validity dl .expired + dd {
 @extend %visually-hidden;
```

```
}
%license-validity dl dt::before {
 content: '';
 margin-right: 0.25rem; /* 4px */
}
%license-validity dl .expired::before {
 --icon-name: icon-x-circle;
 --icon-color: var(--token-color-foreground-critical);
}
%license-validity dl .warning::before {
 --icon-name: icon-alert-circle;
 --icon-color: var(--token-color-foreground-warning);
}
%license-validity dl .valid:not(.warning)::before {
 --icon-name: icon-check-circle;
 --icon-color: var(--token-color-foreground-success);
}

%license-route-learn-more
 {
 @extend %panel;
 box-shadow: none;
 padding: var(--padding-y) var(--padding-x);
 width: 40%;
 min-width: 413px;
 margin-top: 1rem; /* 16px */
}
%license-route-learn-more header > :first-child {
 @extend %display-300-semibold;
}
%license-route-learn-more header {
 margin-bottom: 1rem; /* 16px */
}
{{!
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}}

<Route
 @name={{routeName}}
as |route|>
 <DataLoader
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition=route.params.partition
       nspace=route.params.nspace
       dc=route.params.dc
```

```
    )
  }}
 as |loader|>

{{#let
 loader.data
as |item|}}
  <BlockSlot @name="error">
    <ErrorState
      @error={{loader.error}}
      @login={{route.model.app.login.open}}
    />
  </BlockSlot>

  <BlockSlot @name="disconnected" as |after|>
    {{#if (eq loader.error.status "404")}}
      <Hds::Toast @color='warning'
        {{notification
          sticky=true
        }} as |T|>
        <T.Title>Warning!</T.Title>
        <T.Description>This service has been deregistered and no longer exists in the catalog.</T.Description>
      </Hds::Toast>
    {{else if (eq loader.error.status "403")}}
      <Hds::Toast @color='critical'
        {{notification
           sticky=true
        }} as |T|>
        <T.Title>Error!</T.Title>
        <T.Description>You no longer have access to this service.</T.Description>
      </Hds::Toast>
    {{else}}
      <Hds::Toast @color='warning'
        {{notification
          sticky=true
        }} as |T|>
        <T.Title>Warning!</T.Title>
        <T.Description>An error was returned whilst loading this data, refresh to try again.</T.Description>
      </Hds::Toast>
    {{/if}}
  </BlockSlot>

  <BlockSlot @name="loaded">
    <div class="tab-section">
      <section
        class={{class-map
          'validity'
          (array 'valid' item.Valid)
```

```
    }}
  >
    <header>
      <h2>
        {{compute (fn route.t 'expiry.header')}}
      </h2>
    </header>

    <p>
      {{compute (fn route.t 'expiry.${type}.body'
        (hash
          type=(if item.Valid 'valid' 'expired')

  date=(format-time item.License.expiration_time
            year='numeric'
            month='long'
            day='numeric'
          )
          time=(format-time item.License.expiration_time
            hour12=true
            hour='numeric'
            hourCycle='h12'
            minute='numeric'
            second='numeric'
            timeZoneName='short'
          )
          htmlSafe=true
        )
      )}}
    </p>

    <dl>
      <dt class={{class-map
          (array 'valid' item.Valid)
          (array 'expired' (not item.Valid))
          (array 'warning' (temporal-within item.License.expiration_time 2629800000))
        }}
      >
        {{compute (fn route.t 'expiry.${type}.header'
          (hash
            type=(if item.Valid 'valid' 'expired')
          )
        )}}
      </dt>

<dd>
        {{temporal-format item.License.expiration_time}}
      </dd>
```

```
        </dl>

        <aside>
          <header>
            <h3>
              {{compute (fn route.t 'documentation.title')}}
            </h3>
          </header>
          <div class="flex gap-1.5 flex-col">
            <Hds::Link::Standalone
              @text={{compute (fn route.t 'documentation.links.license-expiration.text')}}
              @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.license-
expiration.link'))}}'
              @icon='docs-link'
              @iconPosition='trailing'
            />
            <Hds::Link::Standalone
              @text={{compute (fn route.t 'documentation.links.renewing-license.text')}}
              @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.renewing-
license.link'))}}'
              @icon='docs-link'
              @iconPosition='trailing'

          />
            <Hds::Link::Standalone
              @text={{compute (fn route.t 'documentation.links.applying-new-license.text')}}
              @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.applying-new-
license.link'))}}'
              @icon='docs-link'
              @iconPosition='trailing'
            />
          </div>
        </aside>

      </section>
    </div>
  </BlockSlot>
{{/let}}
 </DataLoader>
</Route>
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package api

import (
 "io"
 "strings"
```

```
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`

 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // Whether the license will ignore termination
 IgnoreTermination bool `json:"ignore_termination"`

 //
 The product the license is valid for
 Product string `json:"product"`

 // License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}

type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
```

```
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := io.ReadAll(resp.Body)
 if
 err != nil {
  return "", err
 }

 return string(data), nil
}

// LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
```

```
 return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set
 via agent configuration instead of through the API
func (op *Operator) LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
---
layout: docs
page_title: Enterprise Licenses
description: >-
 Consul Enterprise server, client, and snapshot agents require a license on startup in order to use Enterprise features.
Learn how to apply licenses using environment variables or configuration files.
---

# Consul Enterprise License

## Licensing Overview

All Consul Enterprise agents must be licensed when they are started. Where that license comes from will depend
on which binary is in use, whether the agent is a server, client or snapshot agent, and whether ACLs have been
enabled for the cluster.
```

-> ** Consul Enterprise 1.10.0 removed temporary licensing.** Prior to 1.10.0, Consul Enterprise agents could start without a license and then have a license applied to them later on via the CLI or API. That functionality has been removed and replaced with the ability to load licenses from the agent's configuration or environment. Also, prior to 1.10.0, server agents would automatically propagate the license between themselves.
This no longer occurs and the license must be present on each server agent when it is started.

Consul Enterprise 1.14.0, when running on Kubernetes, removed client agents and replaced these with virtual agents.
Virtual agents are nodes that Consul service mesh services run on. HashiCorp uses virtual agents to determine license entitlements for customers on per-node licensing and pricing agreements.

-> Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Applying a License

For Consul Enterprise 1.10.0 or greater, a license must be available at the time the agent starts.
For server agents this means that they must either have the [`license_path`](/consul/docs/agent/config/config-files#license_path)
configuration set or have a license configured in the servers environment with the `CONSUL_LICENSE` or `CONSUL_LICENSE_PATH` environment variables. Both the configuration item and the `CONSUL_LICENSE_PATH`
environment variable point to a file containing the license whereas the `CONSUL_LICENSE` environment variable should contain the license as the value. If multiple variables are set,
the following order of precedence applies:

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Client agents and [snapshot agents](/consul/docs/enterprise/backups)
may also be licensed in the very same manner.
However, to avoid the need to configure the license on many client agents and snapshot agents,
those agents have the capability to retrieve the license automatically under the conditions described below.

Virtual agents do not need the license to run.

Updating the license for an agent depends on the method you used to apply the license.
- **If you used the `CONSUL_LICENSE`
environment variable**: After updating the environment variable, restart the affected agents.
- **If you used the
`CONSUL_LICENSE_PATH`
environment variable**: Update the license file first. Then, restart the affected agents.
- **If you used the `license_path` configuration item**: Update the license file first. Then, run [`consul reload`](/consul/commands/reload) for the affected agents.

Client Agent License Retrieval

When a client agent starts without a license in its configuration or environment, it will try to retrieve the license from the servers via RPCs. That RPC always requires a valid non-anonymous ACL token to authorize the request but the token doesn't need any particular permissions. As the license is required before the client actually joins the cluster, where to make those RPC requests to is inferred from the [`retry_join`](/consul/docs/agent/config/config-files#retry_join) configuration. If `retry_join` is unset or no [`agent` token](/consul/docs/agent/config/config-files#acl_tokens_agent) is set then the client agent will immediately shut itself down.

If all preliminary checks
 pass the client agent will attempt to reach out to any server on its RPC port to
request the license. These requests will be retried for up to 5 minutes and if it is unable to retrieve a license within that time frame it will shut itself down.

If ACLs are disabled then the license must be provided to the client agent through one of the three methods listed below.
Failure in providing the client agent with a licence will prevent the client agent from joining the cluster.

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Snapshot Agent License Retrieval

The snapshot agent has similar functionality to the client agent for automatically retrieving the license. However, instead of requiring a server agent to talk to, the snapshot agent can request the license from the server or client agent it would use for all other operations. It still requires an ACL token to authorize the request. Also like client agents,
 the snapshot agent will shut itself down after being unable to retrieve the license for 5
minutes.

```
/**
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*/

.consul-intention-permission-header-list {
 dt::before {
   @extend %with-glyph-icon;
   content: 'H';
 }
}
/**
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*/
```

```
.consul-intention-permission-list {
 .detail > div {
   display: flex;
   width: 100%;
 }
 strong {
   margin-right: 8px;
 }
}
/**
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*/

.consul-intention-permission-list {
 dt::before {
   @extend %with-glyph-icon;
 }
 dl.permission-methods dt::before {
   content: 'M';
 }
 dl.permission-path dt::before {
   content: 'P';
 }
 dl.permission-header dt::before {
   content: 'H';
 }
}
{{!
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}}

{{#if isVisible}}
 <Hds::Alert @type="inline" class='mb-3 mt-2 agentless-node-notice' data-test-node-agentless-notice as |A|>
   <A.Title>
     <span>{{t 'routes.dc.nodes.index.agentless.notice.header'}}</span>
     <Hds::Button
       @color='secondary'
       @text='Dismiss notice'
       {{on 'click' this.dismissAgentlessNotice}}
       @icon='x'
       @size='small'
       @isIconOnly={{true}}
     />
   </A.Title>
   <A.Description>{{t 'routes.dc.nodes.index.agentless.notice.body'}}</A.Description>
   <A.Link::Standalone @href='{{env "CONSUL_DOCS_DEVELOPER_URL"}}/connect/dataplane'
```

```
                @text={{t 'routes.dc.nodes.index.agentless.notice.footer'}}
                @icon='docs-link'
                @iconPosition='trailing' />
 </Hds::Alert>
{{/if}}
/*!
* QUnit 2.19.4
* https://qunitjs.com/
*
* Copyright OpenJS Foundation and other contributors
* Released under the MIT license
* https://jquery.org/license
*/
{{!
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}}

<Hds::Alert @type="inline" class="mb-3 mt-2" as |A|>
 <A.Description>{{t "components.consul.intention.notice.permissions.body"}}</A.Description>
 <A.Link::Standalone
   @text={{t "components.consul.intention.notice.permissions.footer"}}
   @href="{{env 'CONSUL_DOCS_URL'}}/connect/intentions"
   @icon="docs-link"
   @iconPosition="trailing"
   @size="small"
 />
</Hds::Alert>
```

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Parameters

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```
{
 "name": "envoy.filters.http.jwt_authn",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
   "providers": {
     "auth0": {
       "issuer": "another-issuer",
       "payloadInMetadata": "jwt_payload_auth0",
       "remoteJwks": {
         "asyncFetch": {
           "fastListener": true
         },
         "httpUri": {
           "cluster": "jwks_cluster_auth0",
           "timeout": "1s",
           "uri": "https://example-auth0.com/.well-known/jwks.json"
         }
       }
     },
     "okta": {
```

```
      "issuer": "test-issuer",
      "payloadInMetadata": "jwt_payload_okta",
      "remoteJwks": {
        "asyncFetch": {
          "fastListener": true
        },
        "httpUri": {
          "cluster": "jwks_cluster_okta",
          "timeout": "1s",
          "uri": "https://example-okta.com/.well-known/jwks.json"
        }
      }
    }
  },
  "rules": [
    {

"match": {
        "prefix": "/"
      },
      "requires": {
        "requiresAll": {
          "requirements": [
            {
              "requiresAny": {
                "requirements": [
                  {
                    "providerName": "okta"
                  },
                  {
                    "allowMissingOrFailed": {}
                  }
                ]
              }
            },
            {
              "requiresAny": {
                "requirements": [
                  {
                    "providerName": "auth0"
                  },
                  {
                    "allowMissingOrFailed": {}
                  }
                ]
              }
            }
          ]
```

```
        }
      }
    }
  ]
 }
}
{{!
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}}

<div
 ...attributes
 class="consul-intention-permission-form"
>
<FormGroup
 @name={{name}}
as |group|>

 {{yield (hash
   submit=(action 'submit' changeset)
   reset=(action 'reset' changeset)

   isDirty=(and changeset.isValid)
   changeset=changeset
 )}}

 <fieldset>
   <div data-property="action">
     <span class="label">
       Should this permission allow the source connect to the destination?
     </span>
     <div role="radiogroup" class={{if changeset.error.Action ' has-error'}}>
       {{#each intents as |intent|}}
         <label>
           <span>{{capitalize intent}}</span>
           <input
             type="radio"
             name="Action"
             value={{intent}}
             checked={{if (eq changeset.Action intent) 'checked'}}
             onchange={{action (changeset-set changeset 'Action') value="target.value"}}
           />
         </label>
       {{/each}}
      </div>
   </div>
 </fieldset>
```

```
<fieldset>
  <header>
    <h2>Path</h2>
  </header>
  <div>
      <group.Element
        @name="PathType"
        @type="select"
      as |el|>
        <el.Label>
          Path type
        </el.Label>
        <PowerSelect
          @options={{pathTypes}}
          @selected={{pathType}}
          @onChange={{action 'change' 'HTTP.PathType' changeset}} as |Type|>
            {{get pathLabels Type}}
        </PowerSelect>
      </group.Element>

{{#if shouldShowPathField}}
      <group.Element
        @name="Path"
        @error={{changeset-get changeset 'error.HTTP.Path'}}
      as |el|>
        <el.Label>
          {{get pathLabels pathType}}
        </el.Label>
        <el.Text
          @value={{changeset-get changeset 'HTTP.Path'}}
          oninput={{action 'change' 'HTTP.Path' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>

            {{#if (eq (changeset-get changeset 'HTTP.Path') 'Regex')}}
              Path Regex should not be blank
            {{else}}
              Path should begin with a '/'
            {{/if}}
          </el.Error>
        </State>
      </group.Element>
{{/if}}

  </div>
</fieldset>
```

```
<fieldset>
  <h2>Methods</h2>
  <div class="type-toggle">
    <span>All methods are applied by default unless specified</span>
    <group.Element
      @name="allMethods"
    as |el|>
      <el.Checkbox
        checked={{if allMethods 'checked'}}
        onchange={{action 'change' 'allMethods' changeset}}
      />
      <el.Label>
        All Methods
      </el.Label>
    </group.Element>
  </div>

{{#if shouldShowMethods}}
  <div class="checkbox-group" role="group">
    {{#each methods as |method|}}
      <label class="type-checkbox">
        <input
          type="checkbox"
          name="method"
          value={{method}}

  checked={{if (includes method changeset.HTTP.Methods) 'checked'}}
          onchange={{action 'change' 'method' changeset}}
        />
        <span>{{method}}</span>
      </label>
    {{/each}}
  </div>
{{/if}}
</fieldset>

<fieldset>
  <h2>Headers</h2>

  <Consul::Intention::Permission::Header::List
    @items={{changeset-get changeset 'HTTP.Header'}}
    @ondelete={{action 'delete' 'HTTP.Header' changeset}}
  as |headerList|>

  </Consul::Intention::Permission::Header::List>

  <Consul::Intention::Permission::Header::Form
```

```
    @onsubmit={{action 'add' 'HTTP.Header' changeset}}
  as |headerForm|>
    <Ref @target={{this}} @name="headerForm" @value={{headerForm}} />
  </Consul::Intention::Permission::Header::Form>

  <Hds::ButtonSet>
    <Hds::Button
      data-test-add-header
      @text='Add{{if (gt (get (changeset-get changeset 'HTTP.Header') 'length') 0) ' another' ''}} header'
      @color='primary'
      disabled={{if (not this.headerForm.isDirty)
'disabled'}}
      onclick={{action this.headerForm.submit}}
    />
    <Hds::Button
      @text='Cancel'
      @color='secondary'
      onclick={{action this.headerForm.reset}}
    />
  </Hds::ButtonSet>
 </fieldset>
 </FormGroup>
</div>
```

1.4057 x-sys 0.32.0

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1.4060 binutils 2.38-4ubuntu2.8

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ftp://ftp.gnu.org/pub/gnu/binutils/

and:

cvs://:pserver:anoncvs@sources.redhat.com:/cvs/src

It was previously maintained by Christopher C. Chimelis <chris@debian.org>

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1.4061 x-sync 0.13.0

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* /wscf11-4-17-7-final-redhat-4-jar/META-INF/maven/org.jboss.jbossts.xts/wscf11/effective-pom.xml

1.4063 binutils 2.42-4ubuntu2.5

1.4063.1 Available under license :

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@c Local Variables:
@c ispell-local-pdict: "ispell-dict"
@c End:
(This file is under construction.) -*- text -*-

If you've contributed to gas and your name isn't listed here, it is
not meant as a slight. I just don't know about it. Email me,
nickc@redhat.com and I'll correct the situation.

This file will eventually be deleted: The general info will go into
the documentation, and info on specific files will go into an AUTHORS
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++++++++++++++++

Dean Elsner wrote the original gas for vax. [more details?]

Jay Fenlason maintained gas for a while, adding support for

gdb-specific debug information and the 68k series machines, most of
the preprocessing pass, and extensive changes in messages.c,
input-file.c, write.c.

K. Richard Pixley maintained gas for a while, adding various
enhancements and many bug fixes, including merging support for several
processors, breaking gas up to handle multiple object file format
backends (including heavy rewrite, testing, an integration of the coff
and b.out backends), adding configuration
including heavy testing and
verification of cross assemblers and file splits and renaming,
converted gas to strictly ansi C including full prototypes, added
support for m680[34]0 & cpu32, considerable work on i960 including a
coff port (including considerable amounts of reverse engineering), a
sparc opcode file rewrite, decstation, rs6000, and hp300hpux host
ports, updated "know" assertions and made them work, much other
reorganization, cleanup, and lint.

Ken Raeburn wrote the high-level BFD interface code to replace most of
the code in format-specific I/O modules.

The original Vax-VMS support was contributed by David L. Kashtan.
Eric Youngdale and Pat Rankin have done much work with it since.

The Intel 80386 machine description was written by Eliot Dresselhaus.

Minh Tran-Le at IntelliCorp contributed some AIX 386 support.

The Motorola 88k machine description was contributed by Devon Bowen of
Buffalo University and Torbjorn Granlund of the Swedish Institute of
Computer Science.

Keith
Knowles at the Open Software Foundation wrote the original MIPS
back end (tc-mips.c, tc-mips.h), and contributed Rose format support
that hasn't been merged in yet. Ralph Campbell worked with the MIPS
code to support a.out format.

Support for the Zilog Z8k and Hitachi H8/300, H8/500 and SH processors
(tc-z8k, tc-h8300, tc-h8500, tc-sh), and IEEE 695 object file format
(obj-ieee), was written by Steve Chamberlain of Cygnus Solutions.
Steve also modified the COFF back end (obj-coffbfd) to use BFD for
some low-level operations, for use with the Hitachi, 29k and Zilog
targets.

John Gilmore built the AMD 29000 support, added .include support, and
simplified the configuration of which versions accept which
pseudo-ops. He updated the 68k machine description so that Motorola's

opcodes always produced fixed-size instructions (e.g. jsr), while synthetic instructions remained shrinkable (jbsr). John fixed many bugs, including true tested cross-compilation support, and one bug in relaxation
that took a week and required the proverbial one-bit fix.

Ian Lance Taylor of Cygnus Solutions merged the Motorola and MIT syntaxes for the 68k, completed support for some COFF targets (68k, i386 SVR3, and SCO Unix), wrote the ECOFF support based on Michael Meissner's mips-tfile program, wrote the PowerPC and RS/6000 support, and made a few other minor patches. He handled the binutils releases for versions 2.7 through 2.9.

David Edelsohn contributed fixes for the PowerPC and AIX support.

Steve Chamberlain made gas able to generate listings.

Support for the HP9000/300 was contributed by Glenn Engel of HP.

Support for ELF format files has been worked on by Mark Eichin of Cygnus Solutions (original, incomplete implementation), Pete Hoogenboom at the University of Utah (HPPA mainly), Michael Meissner of the Open Software Foundation (i386 mainly), and Ken Raeburn of Cygnus Solutions (sparc, initial 64-bit support).

Several engineers at Cygnus Solutions have also provided many
small
bug fixes and configuration enhancements.

The initial Alpha support was contributed by Carnegie-Mellon University. Additional work was done by Ken Raeburn of Cygnus Solutions. Richard Henderson then rewrote much of the Alpha support.

Ian Dall updated the support code for the National Semiconductor 32000 series, and added support for Mach 3 and NetBSD running on the PC532.

Klaus Kaempf ported the assembler and the binutils to openVMS/Alpha.

Steve Haworth contributed the support for the Texas Instruction c30 (tms320c30).

H.J. Lu has contributed many patches and much testing.

Alan Modra reworked much of the i386 backend, improving the error checking, updating the code, and improving the 16 bit support, using patches from the work of Martynas Kunigelis and H.J. Lu.

Many others have contributed large or small bugfixes and enhancements. If

you've contributed significant work and are not mentioned on this list, and
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executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable
source code for the Library including whatever
changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the
user installs one, as long as the modified version is
interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy

from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

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and a pointer to where the full notice is found.

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Ty Coon, President of Vice

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[This is the first released version of the library GPL. It is
numbered 2 because it goes with version 2 of the ordinary GPL.]

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Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the

users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this
function must
be optional: if the application does not supply it, the square

root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition,
mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

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This option is useful when you wish to copy part of the code of the
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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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Appendix: How to Apply These Terms to Your New Libraries

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1.4066 x-crypto 0.37.0

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1.4067 otel-exporters-otlp-otlpmetric-otlpmetrichttp 1.35.0

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1.4068 zstd 1.5.7

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1.4069 gopsutil 4.25.2

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1.4070 otel-sdk-metric 1.35.0

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1.4071 otel-exporters-otlp-otlpmetric-otlpmetricgrpc 1.35.0

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1.4072 truststore 0.10.1

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1.4073 kerberos-configs 2.7

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1.4075 go-redis 9.6.3

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1.4076 github.com/fxamacker/cbor/v2 2.8.0

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_finishIntSlow();
private final void _finishIntSlow() throws IOException
return _fourBytesToIntSlow();
private final int _fourBytesToIntSlow() throws IOException

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_skipVIntSlow();
protected void _skipVIntSlow() throws IOException
return _decodeVIntSlow();
int v = _decodeVIntSlow();
protected int _decodeVIntSlow() throws IOException

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1.4079 cel-go 0.23.2

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==========
The common/types/pb/equal.go modification of proto.Equal logic
==========
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1.4081 x-term 0.31.0

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1.4082 x-oauth2 0.29.0

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1.4083 microsoft-authentication-library-for-go 1.4.2

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1.4084 google-api-go-client 0.228.0

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1.4085 opentelemetry-operations-go-exporter-metric 0.51.0

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1.4086 google-cloud-go-storage 1.51.0

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
```

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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
```

```
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically
generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
```

```
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
```

```
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}
```

```
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses,
```

```
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution
This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
```

```
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
```

```
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
```

```
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
```

```
 return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
```

```
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
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// distributed under the License is distributed on an "AS IS" BASIS,
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
```

```
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}
```

```
func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
```

```
  "READER":          3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
```

0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,

```
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
```

```
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test
```

```
import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
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// you may not use this file except in compliance with the License.
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//
//     https://www.apache.org/licenses/LICENSE-2.0
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
```

```
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}
```

```
func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
```

```
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
```

```
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}
```

```
// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
```

```
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
```

```
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
```

```
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
```

```
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
```

```
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
```

```
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
```

```
if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp
:= &procurementpb.AssignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
```

```
 return nil, e
 }
 return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
```

```
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
  if req.GetPageToken() != "" {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
```

```
 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}
```

```
// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
```

```
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
```

```
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
```

```
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
```

```
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
```

0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,

```
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
```

```
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
```

```
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}
```

```
func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
```

```
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
```

```
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
```

```
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
```

```
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
```

```
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
```

```
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}
```

```
func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
```

```
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}
```

```
func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}
```

```
func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
```

```
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}
```

```
func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
```

```
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x64,
 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
 0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
```

0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
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0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
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0x73,
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0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
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0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
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0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x3b, 0x0a,
0x17, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x15, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x75, 0x6e, 0x74, 0x12, 0x33, 0x0a, 0x13, 0x74, 0x6f,
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0x74, 0x3a,
0x9a, 0x01, 0xea, 0x41, 0x96, 0x01, 0x0a, 0x3b, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d,
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0x6f, 0x6f, 0x6c, 0x12, 0x3c, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f,
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0x0b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x22, 0x30, 0x0a, 0x15,
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0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65,
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0x01, 0x0a, 0x18, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x12, 0x62, 0x0a, 0x0c, 0x6c,
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0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e,
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65,
0x73, 0x74, 0x1a, 0x4d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e,
0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f,
0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,
0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```
var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
```

```
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
```

```
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
```

```
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
```

```
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
```

```
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
```

```
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
```

```
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}
```

```
var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
```

```
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}
```

```
//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
```

```
 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
```

```
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
```

```
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.4087 contrib-instrumentation-net-http-httptrace-otelhttptrace 0.59.0

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1.4088 github.com/azure/azure-sdk-for-go/sdk/azidentity 1.8.2

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```
{
 "main": "dist/src/index.js",
 "dependencies": {
   "@azure-tools/typespec-go": "0.3.6"
 },
 "devDependencies": {
   "@azure-tools/typespec-autorest": "0.50.0",
   "@azure-tools/typespec-azure-core": "0.50.0",
   "@azure-tools/typespec-azure-resource-manager": "0.50.0",
   "@azure-tools/typespec-azure-rulesets": "0.50.0",
   "@azure-tools/typespec-client-generator-core": "0.50.2",
   "@typespec/compiler": "0.64.0",
   "@typespec/http": "0.64.0",
   "@typespec/openapi": "0.64.0",
   "@typespec/rest": "0.64.0",
   "@typespec/versioning": "0.64.0",
   "@azure-tools/typespec-liftr-base": "0.6.0"
 }
}
```

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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
```

```
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:              newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
```

```
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                         *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                 *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate                 *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
```

```
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
```

```
  return nil, respErr
 }
 beginCreateOrUpdate = &respr
 l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
}

resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK}, resp.StatusCode) {
 l.beginCreateOrUpdate.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginCreateOrUpdate) {
 l.beginCreateOrUpdate.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
if l.srv.BeginDelete
== nil {
 return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
}
beginDelete := l.beginDelete.get(req)
if beginDelete == nil {
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if
```

```
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
```

```
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
```

```
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
```

```
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }
```

```
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
azwebpubsub
```

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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
```

```
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
```

```
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
```

```
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
```

```
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
```

```
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
```

```
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
```

```
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-07-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
```

```
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
```

```
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
```

```
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
```

```
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
```

```
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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```
//go:build go1.18
// +build go1.18

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```

```
// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
```

```
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //
    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
```

```
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
```

```
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
```

```
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
```

```
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
```

```
  log.Fatalf("failed to advance page: %v", err)
 }
 for _, v := range page.Value {
  // You could use page here. We use blank identifier for just demo purposes.
  _ = v
 }
 // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // page.LicensesListResult = armhybridcompute.LicensesListResult{
 //  Value: []*armhybridcompute.License{
 //   {
 //    Name: to.Ptr("{licenseName}"),
 //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
```

```
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
for pager.More() {
 page, err := pager.NextPage(ctx)
 if err != nil {
  log.Fatalf("failed to advance page: %v", err)
 }
 for _, v := range page.Value {
  // You could use page here. We use blank identifier for just demo purposes.
  _ = v
 }
 // If the HTTP response code is 200 as defined in example definition, your page structure would look as
follows. Please pay attention that all the values in the output are fake values for just demo purposes.
 // page.LicensesListResult = armhybridcompute.LicensesListResult{
 //  Value: []*armhybridcompute.License{
 //   {
 //    Name: to.Ptr("{licenseName}"),
 //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

1.4089 minio-go 7.0.89

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*/

package minio

import (
 "bytes"
 "context"
 "encoding/xml"
 "fmt"
 "net/http"
 "net/url"

 "github.com/minio/minio-go/v7/pkg/s3utils"
)
```

```
// objectLegalHold - object legal hold specified in
// https://docs.aws.amazon.com/AmazonS3/latest/API/archive-RESTObjectPUTLegalHold.html
type objectLegalHold struct {
 XMLNS   string          `xml:"xmlns,attr,omitempty"`
 XMLName
 xml.Name        `xml:"LegalHold"`
 Status  LegalHoldStatus `xml:"Status,omitempty"`
}

// PutObjectLegalHoldOptions represents options specified by user for PutObjectLegalHold call
type PutObjectLegalHoldOptions struct {
 VersionID string
 Status    *LegalHoldStatus
}

// GetObjectLegalHoldOptions represents options specified by user for GetObjectLegalHold call
type GetObjectLegalHoldOptions struct {
 VersionID string
}

// LegalHoldStatus - object legal hold status.
type LegalHoldStatus string

const (
 // LegalHoldEnabled indicates legal hold is enabled
 LegalHoldEnabled LegalHoldStatus = "ON"

 // LegalHoldDisabled indicates legal hold is disabled
 LegalHoldDisabled LegalHoldStatus = "OFF"
)

func (r LegalHoldStatus) String() string {
 return string(r)
}

// IsValid - check whether this legal hold status is valid or not.
func (r LegalHoldStatus) IsValid() bool {
 return r == LegalHoldEnabled || r == LegalHoldDisabled
}

func newObjectLegalHold(status *LegalHoldStatus)
 (*objectLegalHold, error) {
 if status == nil {
  return nil, fmt.Errorf("Status not set")
 }
 if !status.IsValid() {
  return nil, fmt.Errorf("invalid legal hold status `%v`", status)
```

```
 }
 legalHold := &objectLegalHold{
  Status: *status,
 }
 return legalHold, nil
}

// PutObjectLegalHold : sets object legal hold for a given object and versionID.
func (c *Client) PutObjectLegalHold(ctx context.Context, bucketName, objectName string, opts
PutObjectLegalHoldOptions) error {
 // Input validation.
 if err := s3utils.CheckValidBucketName(bucketName); err != nil {
  return err
 }

 if err := s3utils.CheckValidObjectName(objectName); err != nil {
  return err
 }

 // Get resources properly escaped and lined up before
 // using them in http request.
 urlValues := make(url.Values)
 urlValues.Set("legal-hold", "")

 if opts.VersionID != "" {
  urlValues.Set("versionId", opts.VersionID)
 }

 lh, err := newObjectLegalHold(opts.Status)
 if err != nil {
  return err
 }

 lhData, err := xml.Marshal(lh)
 if
 err != nil {
  return err
 }

 reqMetadata := requestMetadata{
  bucketName:       bucketName,
  objectName:       objectName,
  queryValues:      urlValues,
  contentBody:      bytes.NewReader(lhData),
  contentLength:    int64(len(lhData)),
  contentMD5Base64: sumMD5Base64(lhData),
  contentSHA256Hex: sum256Hex(lhData),
 }
```

```
 // Execute PUT Object Legal Hold.
 resp, err := c.executeMethod(ctx, http.MethodPut, reqMetadata)
 defer closeResponse(resp)
 if err != nil {
  return err
 }
 if resp != nil {
  if resp.StatusCode != http.StatusOK && resp.StatusCode != http.StatusNoContent {
   return httpRespToErrorResponse(resp, bucketName, objectName)
  }
 }
 return nil
}

// GetObjectLegalHold gets legal-hold status of given object.
func (c *Client) GetObjectLegalHold(ctx context.Context, bucketName, objectName string, opts
GetObjectLegalHoldOptions) (status *LegalHoldStatus, err error) {
 // Input validation.
 if err := s3utils.CheckValidBucketName(bucketName); err != nil {
  return
 nil, err
 }

 if err := s3utils.CheckValidObjectName(objectName); err != nil {
  return nil, err
 }
 urlValues := make(url.Values)
 urlValues.Set("legal-hold", "")

 if opts.VersionID != "" {
  urlValues.Set("versionId", opts.VersionID)
 }

 // Execute GET on bucket to list objects.
 resp, err := c.executeMethod(ctx, http.MethodGet, requestMetadata{
  bucketName:       bucketName,
  objectName:       objectName,
  queryValues:      urlValues,
  contentSHA256Hex: emptySHA256Hex,
 })
 defer closeResponse(resp)
 if err != nil {
  return nil, err
 }
 if resp != nil {
  if resp.StatusCode != http.StatusOK {
   return nil, httpRespToErrorResponse(resp, bucketName, objectName)
```

```
 }
 }
 lh := &objectLegalHold{}
 if err = xml.NewDecoder(resp.Body).Decode(lh); err != nil {
  return nil, err
 }

 return &lh.Status, nil
}
```

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1.4090 github.com/googlecloudplatform/opentelemetry-operations-go/exporter/metric 0.51.0

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*/
```

1.4094 perl 5.38.2-3.2ubuntu0.1

1.4094.1 Available under license :

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```
?RCS: $Id: startsh.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: startsh.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:25:31  ram
?RCS: patch61: avoid needless chatter since this is now done very early
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:startsh: sh sharpbang eunicefix
?MAKE: -pick add $@ %<
?S:startsh:
?S: This variable contains the string to put on the front of a shell
?S: script to make sure (hopefully) that it runs with sh and not some
?S: other
 shell.
?S:.
?F:!sharp
: figure out how to guarantee sh startup
?X: Avoid needless chatter since this is now done very early.
?X: echo " "
?X: echo "Checking out how to guarantee sh startup..." >&2
case "$startsh" in
") startsh=${sharpbang}${sh} ;;
*)
?X: echo "Let's see if '$startsh' works..." ;;
esac
cat >sharp <<EOSS
$startsh
set abc
test "$?abc" != 1
```

```
EOSS

chmod +x sharp
$eunicefix sharp
if ./sharp; then
 : echo "Yup, it does."
else
 echo "Hmm... '$startsh' does not guarantee sh startup..."
 echo "You may have to fix up the shell scripts to make sure $sh runs them."
fi
rm -f sharp
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/startsh.U
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Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/i_neterrno.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/sig_name.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_getpent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strftime.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/d_fd_set.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/uidsize.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_sethent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_int64_t.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/charsize.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_getpgrp.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_endsent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_time.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_wctype.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/models.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_endhent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_flexfnam.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_setsent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_scannl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_safebcpy.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/fpostype.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/cppstdin.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_csh.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/randbits.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_usleepproto.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/vendorscript.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_fd_set.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/protos/selecttype.U
```
```

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/sockopt.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_dosuid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_mmap.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/models.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/fpossize.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_htonl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_pthread_attr_ss.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_volatile.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/alignbytes.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/fflushall.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_setpent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/doublesize.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_access.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_socket.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_getnent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_NOFILE.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_neterrno.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_snprintf_l.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/protos/d_getnetprotos.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_portable.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_grp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/d_time.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_pwd.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/myhostname.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/sitearch.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_netinettcp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/otherlibdirs.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/selecttype.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_getspnam.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strtoul.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Tr.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/prefix.U
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* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_gethent.U
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* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/ccflags.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_mbrlen.U
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* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_bitfield.U
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*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/i_varhdr.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_builtin.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_attribut.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/sunscanf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_varhdr.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_const.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/protos/d_getprotoprotos.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_statblks.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/d_open3.U

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/errnolist.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/usesocks.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/d_lchown.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/sbrksmart.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/libpth.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_gai_strerror.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/errnolist.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/mallocsrc.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/protos/d_lseekproto.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Signal.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_dlopen.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_wcscmp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/alignbytes.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_keepsig.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_csh.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_malloc.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/sizetype.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/i_ndbm.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/bitpbyte.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/uidsign.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/sizesize.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_eofpipe.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/scriptdir.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/randfunc.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Findhdr.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_htonl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/ssizetype.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setpgrp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_endpent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/uidtype.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/lseektype.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/i_pthread.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/floatsize.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/gccvers.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/i_grp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_mallocmalloc.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/charorder.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_isblank.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_getespwnam.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/a_dvisory/intsize.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/vendorlib.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_flexfnam.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_snprintf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Cppsym.U

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/sbrksmart.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Signal.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/stdchar.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_endnent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/d_gnulibc.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Guess.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strctcpy.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/ptrsize.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/gidsign.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/archname.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_syscallproto.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_c99_variadic.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/bin.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Config_sh.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_attribut.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_sigprocmask.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/protos/d_getservprotos.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/floatsize.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/d_safebcpy.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_shm.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_socket.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_msg.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_dladdr.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_gethbynm.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/i_malloc.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/vendorbin.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/d_vprintf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Tr.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_casti32.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strerror.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_termio.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_gconvert.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: AAAAA.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: AAAAA.U,v $

```
?RCS: Revision 3.0.1.4  1994/06/20  06:50:26  ram
?RCS: patch30: changes from Jarkko Hietaniemi are tagged with JHI
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  14:01:39  ram
?RCS: patch23: initials for Wayne Davison are now WED
?RCS: patch23: added initials for new unit contributor Andy Dougherty
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:01:09  ram
?RCS: patch16: make metalint shut up on special unit definition for All target
?RCS:
?RCS: Revision
 3.0.1.1  1993/09/13  15:43:57  ram
?RCS: patch10: documents initials used for Wayne Davison's contributions
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:44  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this file is to supply the head of the Makefile created
?X: by metaconfig.  For this reason it must be first in alphabetical order.
?X: The leading '+' in front of the unit name is a hint for metalint, since
?X: the use of that special unit name as a "made" unit is legitimate here.
?X:
?MAKE:+All: Finish
?X:
?X: Throughout the units, the following initials are used to identify comments:
?X:
?X:  HMS: Harlan Stenn
?X:  RAM: Raphael Manfredi
?X:  WED: Wayne Davison (was WAD by mistake--RAM)
?X:  ADO: Andy Dougherty
?X:  JHI: Jarkko Hietaniemi
?X:
?X: Agreed, this is a weird place to document it, but I couldn't find a better
?X: place to do so. I've bet on the curiosity of users, who would probably
?X: want to know what's in this strangely-named file--RAM.
```

Found
 in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/AAAAA.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_passwd.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
```

```
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_passwd.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:37:21  ram
?RCS: patch61: useless unit dropped.
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:09:51  ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Useless unit dropped.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_passwd.U
No license file was found, but licenses were detected in source scan.

```
/*
* This file was produced by running the config_h.SH script, which
* gets its values from $CONFIG_SH, which is generally produced by
* running Configure.
*
* Feel free to modify any of this as the need arises.  Note, however,
* that running config_h.SH again will wipe out any changes you've made.
* For a more permanent change edit $CONFIG_SH and rerun config_h.SH.
*
* \$Id: Config_h.U 1 2006-08-24 12:32:52Z rmanfredi $
*/
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Config_h.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
```

```
?MAKE:sitehtml3dir sitehtml3direxp installsitehtml3dir: Getfile \
 Setprefixvar prefix siteprefix html3dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitehtml3dir=''
?S:sitehtml3dir:
?S: This variable contains the name of the directory in which site-specific
?S: library html source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After
 perl has been installed, users may install their own local
?S: library html pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitehtml3direxp=''
?S:sitehtml3direxp:
?S: This variable is the same as the sitehtml3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsitehtml3dir=''
?S:installsitehtml3dir:
?S: This variable is really the same as sitehtml3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: html3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsitehtml3dir
?LINT:set sitehtml3dir
?LINT:set sitehtml3direxp
: determine where add-on library html pages go
: There is no standard location, so try to copy the previously-selected
: directory structure for the core html pages.
case
 "$sitehtml3dir" in
")    dflt=`echo "$html3dir" | $sed "s#^$prefix#$siteprefix#"` ;;
*)     dflt=$sitehtml3dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname where the site-specific library html pages should be installed?'
. ./getfile
prefixvar=sitehtml3dir
```

```
. ./setprefixvar
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/sitehtml3dir.U
No license file was found, but licenses were detected in source scan.

```
/* This file was produced by running the config_h.SH script, which
* gets its values from $CONFIG_SH, which is generally produced by
* running Configure.
*
* Feel free to modify any of this as the need arises.  Note, however,
* that running config_h.SH again will wipe out any changes you've made.
* For a more permanent change edit $CONFIG_SH and rerun config_h.SH.
*/
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Config_h.U
No license file was found, but licenses were detected in source scan.

```
/*|?:[\/]*)
if test -f "$xxx"; then
: ok
else
echo "WARNING: no $xxx -- ignoring your setting for $file." >&4
xxx=`./loc $file $file $pth`
fi
;;
") xxx=`./loc $file $file $pth`;;
*) xxx=`./loc $xxx $xxx $pth`;;
esac
eval $file=$xxx$_exe
eval _$file=$xxx
case "$xxx" in
/*)
echo $file is in $xxx.
;;
?X: Under OS/2, we have PC-like paths
?:[\/]*)
echo $file is in $xxx.
;;
*)
echo "I don't know where '$file' is, and my life depends on it." >&4
echo "Go find a public domain implementation or fix your PATH setting!" >&4
exit 1
;;
esac
done
echo " "
```

```
echo "Don't worry if any of the following aren't found..."
say=offhand
for file in $trylist; do
?X: Allow them to -Dmake=pmake on the command line for instance (see above)
eval xxx=\$$file
case "$xxx" in
/*|?:[\/]*)
if test -f "$xxx"; then
: ok
else
echo "WARNING: no $xxx -- ignoring your setting for $file." >&4
xxx=`./loc $file $file $pth`
fi
;;
") xxx=`./loc $file $file $pth`;;
*)
 xxx=`./loc $xxx $xxx $pth`;;
esac
eval $file=$xxx$_exe
eval _$file=$xxx
case "$xxx" in
/*)
echo $file is in $xxx.
;;
?X: Under OS/2, we have PC-like paths
?:[\/]*)
echo $file is in $xxx.
;;
*)
echo "I don't see $file out there, $say."
say=either
;;
esac
done
case "$egrep" in
egrep)
echo "Substituting grep for egrep."
egrep=$grep
_egrep=$grep
;;
esac
@if less
case "$less" in
") ;;
*) if $less -R </dev/null >/dev/null 2>&1; then
echo "Substituting less -R for less."
less="$less -R"
_less=$less
```

```
fi
;;
esac
@end
@if ln
case "$ln" in
ln)
echo "Substituting cp for ln."
ln=$cp
_ln=$cp
;;
esac
@end
@if make || gmake
case "$make" in
make)
case "$gmake" in
gmake)
echo "I can't find make or gmake, and my life depends on it." >&4
echo "Go find a public domain implementation or fix your PATH setting!" >&4
exit 1
;;
esac
;;
esac
case "$gmake" in
gmake) ;;
*) # We can't have osname yet.
if test -f "/system/gnu_library/bin/ar.pm"; then # Stratus VOS
# Assume that gmake, if found, is definitely
 GNU make
# and prefer it over the system make.
echo "Substituting gmake for make."
make=$gmake
_make=$gmake
fi
;;
esac
@end
case "$test" in
test)
echo "Hopefully test is built into your sh."
;;
*)
if `sh -c "PATH= test true" >/dev/null 2>&1`; then
echo "Using the test built into your sh."
?X:
?X: We need to set both test and _test, since Oldconfig.U will use the _test
```

```
?X: value to systematically restore computed paths, which may be wrong if
?X: we choose to load an old config.sh generated on another platform.
?X:
test=test
_test=test
fi
;;
esac
?LINT:change n c
case "$echo" in
echo)
echo "Hopefully echo is built into your sh."
;;
?X: For those rare cases where we don't need $echo...
") ;;
*)
echo " "
echo "Checking compatibility between $echo and builtin echo (if any)..." >&4
$echo $n "hi there$c" >foo1
echo $n "hi there$c" >foo2
if cmp foo1 foo2 >/dev/null 2>&1; then
echo "They are compatible.  In fact, they may be identical."
else
case "$n" in
'-n') n=" c='\c';;
*) n='-n' c=";;
esac
cat
 <<FOO
They are not compatible!  You are probably running ksh on a non-USG system.
I'll have to use $echo instead of the builtin, since Bourne shell doesn't
have echo built in and we may have to run some Bourne shell scripts.  That
means I'll have to use '$n$c' to suppress newlines now.  Life is ridiculous.

FOO
$echo $n "The star should be here-->$c"
$echo "*"
fi
$rm -f foo1 foo2
;;
esac

?X: The next part is irrelevant to the real process
# This question was auctioned at YAPC::Europe-2007 in Vienna
# I never promised you could answer it. I only auctioned the question.
cat <<FOO
The following message is sponsored by
```

Dresden.pm<--The stars should be here.

Dear Perl user, system administrator or package
maintainer, the Perl community sends greetings to
you. Do you (emblematical) greet back [Y/n]? n

FOO

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Loc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: libc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libc.U,v $
?RCS: Revision 3.0.1.10 1997/02/28 15:56:48 ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: added support for HPUX-10 nm output
?RCS:
?RCS: Revision 3.0.1.9 1995/07/25 14:11:56 ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.8 1995/05/12 12:20:47 ram
?RCS: patch54: made sure only most recent version of shared lib is picked
?RCS: patch54: final "nm -p" check now uses xscan and xrun
 like everybody
?RCS: patch54: can now grok Linux nm output with lead __IO (ADO)
?RCS: patch54: added support for Linux ELF output, using 'W' for alias (ADO)
?RCS:
?RCS: Revision 3.0.1.7 1994/10/29 16:23:40 ram
?RCS: patch36: now looks for shared libraries before anything else (ADO)
?RCS: patch36: added new nm output format (ADO)
?RCS:
?RCS: Revision 3.0.1.6 1994/08/29 16:28:10 ram
?RCS: patch32: added I-type symbols for nm output parsing on Linux
?RCS:
?RCS: Revision 3.0.1.5 1994/06/20 07:03:24 ram
?RCS: patch30: checks are now presented by succession of if/elif
?RCS: patch30: uniformized checks for shared objects with new so symbol
?RCS:

```
?RCS: Revision 3.0.1.4  1994/05/06  15:06:33  ram
?RCS: patch23: added shared library knowledge (ADO and WED)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:12:17  ram
?RCS: patch16: can now export nm_extract as an internal-use only variable
?RCS:
?RCS: Revision 3.0.1.2  1993/09/13  16:09:03  ram
?RCS: patch10: added special handling for Apollo
 systems (WAD)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:40:03  ram
?RCS: patch7: added entry for /usr/shlib/libc.so (OSF/1 machines)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libc +nm_extract: echo n c rm test grep Getfile Myread Oldconfig Loc \
 sed libs incpath libpth ar runnm nm nm_opt nm_so_opt contains xlibpth \
 so _a _o osname trnl tr sort uniq sysroot
?MAKE: -pick add $@ %<
?S:libc:
?S: This variable contains the location of the C library.
?S:.
?S:nm_extract:
?S: This variable holds the name of the extraction command used to process
?S: the output of nm and yield the list of defined symbols. It is used
?S: internally by Configure.
?S:.
?T:thislib try libnames xxx xscan xrun thisname com tans file
?F:!libnames !libc.tmp !tmp.imp
?LINT:extern PASE
?LINT:extern libnames
?LINT:change nm_opt
?INIT:libnames=''
: Figure out where the libc is located
case "$runnm" in
true)
?X: indentation is wrong on purpose--RAM
:
 get list of predefined functions in a handy place
echo " "
case "$libc" in
'') libc=unknown
 case "$libs" in
 *-lc_s*) libc=`./loc libc_s$_a $libc $libpth`
 esac
 ;;
esac
```

```
case "$libs" in
") ;;
*)  for thislib in $libs; do
 case "$thislib" in
 -lc|-lc_s)
  : Handle C library specially below.
  ;;
 -l*)
  thislib=`echo $thislib | $sed -e 's/^-l//'`
  if try=`./loc lib$thislib.$so.'*' X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib.$so X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc Slib$thislib$_a X $xlibpth`; $test -f "$try"; then
   :
  else
   try="
  fi
  libnames="$libnames $try"
  ;;
 *) libnames="$libnames $thislib" ;;
 esac
 done
 ;;
esac
?X:
?X: Some systems (e.g. DG/UX) use
 "environmental" links, which make the test
?X: -f fail. Ditto for symbolic links. So in order to reliably check the
?X: existence of a file, we use test -r. It will still fail with DG/UX links
?X: though, but at least it will detect symbolic links. At some strategic
?X: points, we make use of (test -h), using a sub-shell in case builtin test
?X: does not implement the -h check for symbolic links. This makes it
?X: possible to preset libc in a hint file for instance and have it show up
?X: as-is in the question.
?X:
xxx=normal
case "$libc" in
unknown)
?X:
```

```
?X: The sed below transforms .so.9 .so.12 into something like .so.0009 .so.0012,
?X: then sorts on it to allow keeping .so.12 instead of .so.9 as the latest
?X: up-to-date library. The initial filename (before sed munging, saved in hold
?X: space via 'h') is appended via 'G' before sorting, then the leading munged
?X: part is removed after sorting. Nice efficient work from Tye McQueen.
?X: The initial blurfl is here to prevent the trailing
 pipe from producing an
?X: empty string, causing Configure to output all its set variables!
?X:
 set /lib/libc.$so
 for xxx in $libpth; do
  $test -r $1 || set $xxx/libc.$so
  : The messy sed command sorts on library version numbers.
  $test -r $1 || \
   set `echo blurfl; echo $xxx/libc.$so.[0-9]* | \
   tr ' ' $trnl | egrep -v '\.[A-Za-z]*$' | $sed -e '
    h
    s/[0-9][0-9]*/0000&/g
    s/0*\([0-9][0-9][0-9][0-9][0-9]\)/\1/g
    G
    s/\n/ /' | \
    $sort | $sed -e 's/^.* //'`
  eval set \$$#
 done
 $test -r $1 || set $sysroot/usr/ccs/lib/libc.$so
 $test -r $1 || set $sysroot/lib/libsys_s$_a
 ;;
*)
?X: ensure the test below for the (shared) C library will fail
 set blurfl
 ;;
esac
if $test -r "$1"; then
 echo "Your (shared) C library seems to be in $1."
 libc="$1"
elif $test -r /lib/libc && $test -r /lib/clib; then
?X:
?X: Apollo has its C library in /lib/clib AND /lib/libc
?X: not to mention its math library in /lib/syslib...
?X:
 echo "Your C library seems to be in both /lib/clib
 and /lib/libc."
 xxx=apollo
 libc='/lib/clib /lib/libc'
 if $test -r /lib/syslib; then
  echo "(Your math library is in /lib/syslib.)"
?X: Put syslib in libc -- not quite right, but won't hurt
  libc="$libc /lib/syslib"
```

```
 fi
elif $test -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 echo "Your C library seems to be in $libc, as you said before."
?X: For mips, and...
elif $test -r $incpath/usr/lib/libc$_a; then
 libc=$incpath/usr/lib/libc$_a;
 echo "Your C library seems to be in $libc.  That's fine."
elif $test -r /lib/libc$_a; then
 libc=/lib/libc$_a;
 echo "Your C library seems to be in $libc.  You're normal."
else
 if tans=`./loc libc$_a blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc libc blurfl/dyick $libpth`; $test -r "$tans"; then
  libnames="$libnames "`./loc clib blurfl/dyick $libpth`
 elif tans=`./loc clib blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Slibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 elif tans=`./loc
 Mlibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 else
  tans=`./loc Llibc$_a blurfl/dyick $xlibpth`
 fi
 if $test -r "$tans"; then
  echo "Your C library seems to be in $tans, of all places."
  libc=$tans
 else
  libc='blurfl'
 fi
fi
if $test $xxx = apollo -o -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 dflt="$libc"
 cat <<EOM

If the guess above is wrong (which it might be if you're using a strange
compiler, or your machine supports multiple models), you can override it here.

EOM
else
 dflt="
 echo $libpth | $tr ' ' $trnl | $sort | $uniq > libpath
 cat >&4 <<EOM
I can't seem to find your C library.  I've looked in the following places:

EOM
 $sed 's/^/ /' libpath
```

```
 cat <<EOM

None of these seems to contain your C library. I need to get its name...

EOM
fi
fn=f
rp='Where is your C library?'
. ./getfile
libc="$ans"

echo " "
echo $libc $libnames | $tr ' ' $trnl | $sort | $uniq > libnames
set X `cat libnames`
shift
xxx=files
case $# in 1) xxx=file; esac
echo
 "Extracting names from the following $xxx for later perusal:" >&4
echo " "
$sed 's/^/ /' libnames >&4
echo " "
$echo $n "This may take a while...$c" >&4

?X:
?X: Linux may need the special Dynamic option to nm for shared libraries.
?X: In general, this is stored in the nm_so_opt variable.
?X: Unfortunately, that option may be fatal on non-shared libraries.
?X:
for file in $*; do
 case $file in
 *$so*) $nm $nm_so_opt $nm_opt $file 2>/dev/null;;
 *) $nm $nm_opt $file 2>/dev/null;;
 esac
done >libc.tmp

$echo $n ".$c"
?X:
?X: To accelerate processing, we look at the correct 'sed' command
?X: by using a small subset of libc.tmp, i.e. fprintf function.
?X: When we know which sed command to use, do the name extraction
?X:
$grep fprintf libc.tmp > libc.ptf
?X:
?X: In order to enhance readability and save some space, we define
?X: some variables that will be "eval"ed.
?X:
xscan='eval "<libc.ptf $com >libc.list"; $echo $n ".$c" >&4'
```

```
xrun='eval "<libc.tmp $com >libc.list"; echo "done." >&4'
?X:
 BSD-like output, I and W types added for Linux
?X: Some versions of Linux include a leading __IO in the symbol name.
?X: HP-UX 10 reportedly has trailing spaces, though I'm surprised it has
?X: BSD-like output.  (AD).
?X: GNU extension: i is "indirect function"
xxx='[ADTSIWi]'
if com="$sed -n -e 's/__IO//' -e 's/^.* $xxx  *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: SYSV-like output
elif com="$sed -n -e 's/^__*//' -e 's/^\([a-zA-Z_0-9$]*\).*xtern.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/|UNDEF/d' -e '/FUNC..GL/s/^.*|__*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.* D __*//p' -e 's/^.* D //p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^_//' -e 's/^\([a-zA-Z_0-9]*\).*xtern.*text.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$'
 libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$grep '|' | $sed -n -e '/|COMMON/d' -e '/|DATA/d' \
    -e '/ file/d' -e 's/^\([^  ]*\).*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p' -e 's/^.*|FUNC |WEAK .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: mips nm output (sysV)
elif com="$sed -n -e 's/^__//' -e '/|Undef/d' -e '/|Proc/s/ .*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
```

```
elif com="$sed -n -e 's/^.*|Proc .*|Text *| *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/Def. Text/s/.* \([^ ]*\)\$/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: OS/2
 nm output
elif com="$sed -n -e 's/^[-0-9a-f ]*_\(.*\)=.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/.*\.text n\ \ \ \.//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: AIX nm output
elif com="sed -n -e 's/^__.*//' -e 's/[       ]*D[    ]*[0-9]*.*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
else
 $nm -p $* 2>/dev/null >libc.tmp
 $grep fprintf libc.tmp > libc.ptf
 if com="$sed -n -e 's/^.* [ADTSIW]  *_[_.]*//p' -e 's/^.* [ADTSIW] //p'";\
  eval $xscan; $contains '^fprintf$' libc.list >/dev/null 2>&1
 then
  nm_opt='-p'
  eval $xrun
 else
  echo " "
  echo "$nm didn't seem to work right. Trying $ar instead..." >&4
  com="
  if $ar t $libc > libc.tmp && \
   $contains '^fprintf$' libc.tmp >/dev/null 2>&1
  then
   for thisname in $libnames $libc; do
    $ar t $thisname >>libc.tmp
   done
   $sed -e "s/\\$_o\$//" < libc.tmp > libc.list
   echo
 "Ok." >&4
  elif test "X$osname" = "Xos2" && $ar tv $libc > libc.tmp; then
?X: Repeat libc to extract forwarders to DLL entries too
   for thisname in $libnames $libc; do
    $ar tv $thisname >>libc.tmp
```

```
?X: Revision 50 of EMX has bug in ar: it will not extract forwarders
?X: to DLL entries.  Use emximp which will extract exactly them.
    emximp -o tmp.imp $thisname \
        2>/dev/null && \
        $sed -e 's/^\([_a-zA-Z0-9]*\) .*$/\1/p' \
        < tmp.imp >>libc.tmp
    $rm -f tmp.imp
   done
   $sed -e "s/\\$_o\$//" -e 's/^ \+//' < libc.tmp > libc.list
   echo "Ok." >&4
  else
   echo "$ar didn't seem to work right." >&4
   echo "Maybe this is a Cray...trying bld instead..." >&4
   if  bld t $libc | \
    $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" > libc.list &&
    $test -s libc.list
   then
    for thisname in $libnames; do
     bld t $libnames | \
     $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" >>libc.list
     $ar t $thisname >>libc.tmp
    done
    echo "Ok." >&4
   else
    echo
 "That didn't work either.  Giving up." >&4
    exit 1
   fi
  fi
 fi
fi
nm_extract="$com"
case "$PASE" in
define)
   echo " "
   echo "Since you are compiling for PASE, extracting more symbols from libc.a ...">&4
   dump -Tv /lib/libc.a | awk '$7 == "/unix" {print $5 " " $8}' | grep "^SV" | awk '{print $2}' >> libc.list
   ;;
*)  if $test -f /lib/syscalls.exp; then
 echo " "
 echo "Also extracting names from /lib/syscalls.exp for good ole AIX..." >&4
 $sed -n 's/^\([^  ]*\)[  ]*syscall[0-9]*[  ]*$/\1/p' \
  /lib/syscalls.exp >>libc.list
   fi
   ;;
esac
;;
esac
```

```
$rm -f libnames libpath
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/libc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: etc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: etc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:etc etcexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:etc:
?S: This variable holds the name of the directory in which the user wants
?S: to put "administrative" executable images for the package in question.
?S: It is most often a local directory such as /usr/local/etc. Programs
?S: relying on this variable must be prepared to deal with
 ~name
?S: substitutions.
?S:.
?S:etcexp:
?S: This is the same as the etc variable, but is filename expanded at
?S: configuration time, for convenient use in makefiles.
?S:.
: determine where administrative executables go
case "$etc" in
")
 dflt=`./loc . /local/etc /usr/local/etc /local/etc /usr/etc /etc`
 ;;
*)
 dflt="$etc"
 ;;
esac
fn=d~
rp='Where should the administrative executables go?'
. ./getfile
etc="$ans"
etcexp="$ansexp"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/etc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldsym.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:06:58  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit follows the creation of the config.sh file. It adds some
?X: special symbols: defines from patchlevel.h file if any and CONFIG,
?X: which is set to true. Then, we try to keep all the new symbols that
?X: may come from a hint file or a previous config.sh file.
?X:
?MAKE:Oldsym:
 Config_sh Options test hint src sed sort uniq
?MAKE: -pick add $@ %<
?T:CONFIG sym tmp
?F:!UU
: add special variables
$test -f $src/patchlevel.h && \
awk '/^#define/ {printf "%s=%s\n",$2,$3}' $src/patchlevel.h >>config.sh
echo "CONFIG=true" >>config.sh

: propagate old symbols
if $test -f UU/config.sh; then
?X: Make sure each symbol is unique in oldconfig.sh
 <UU/config.sh $sort | $uniq >UU/oldconfig.sh
?X:
?X: All the symbols that appear twice come only from config.sh (hence the
?X: two config.sh in the command line). These symbols will be removed by
?X: the uniq -u command. The oldsyms file thus contains all the symbols
?X: that did not appear in the produced config.sh (Larry Wall).
?X:
```

```
?X: Do not touch the -u flag of uniq.  This means you too, Jarkko.
?X:
 $sed -n 's/^\([a-zA-Z_0-9]*\)=.*/\1/p' \
  config.sh config.sh UU/oldconfig.sh |\
  $sort | $uniq -u >UU/oldsyms
 set X `cat UU/oldsyms`
 shift
 case $# in
 0) ;;
 *)
  cat <<EOM
Hmm...You had some extra variables I don't know about...I'll
 try to keep 'em...
EOM
  echo ": Variables propagated from previous config.sh file." >>config.sh
  for sym in `cat UU/oldsyms`; do
   echo "    Propagating $hint variable '"$'"$sym..."
   eval 'tmp="$'"${sym}"'"'
   echo "$tmp" | \
    sed -e "s/'/'\''\''/g" -e "s/^/$sym='/" -e "s/$/'/" >>config.sh
  done
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Oldsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?X:
?X: This unit produces a shell script which can be run in order to emit
?X: an important warning to the user, which will be remembered and shown
?X: at the end of the Configure run as well.
?X:
?X: A typical use would be:
?X:
?X:  ./warn <<EOM
```

```
?X:  Problem with your C compiler: can't turn debugging on.
?X:  EOM
?X:
?X: or:
?X:
?X:  ./warn "Problem with your C compiler: can't turn debugging on."
?X:
?X: Which will both display to the user:
?X:
?X:  ***
 WARNING:
?X:  *** Problem with your C compiler: can't turn debugging on.
?X:  ***
?X:
?MAKE:Warn: startsh eunicefix
?MAKE: -pick add $@ %<
?F:./warn
: script used to emit important warnings
cat >warn <<EOS
$startsh
?X: Read the whole warning message from stdin into a temporary file
?X: when no argument was supplied.
if test \$# -gt 0; then
 echo "\$@" >msg
else
 cat >msg
fi
?X: Emit the warning, prefixing all lines with '*** '
echo "*** WARNING:" >&4
sed -e 's/^/*** /' <msg >&4
echo "*** " >&4
?X: Save the warning in the logs, which will be shown again at the end
cat msg >>config.msg
echo " " >>config.msg
rm -f msg
EOS
chmod +x warn
$eunicefix warn
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Warn.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: maildir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
```

```
?RCS: as specified in the README file that comes with the distribution.
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: maildir.U,v $
?RCS: Revision 3.0.1.1  1993/12/15  08:21:56  ram
?RCS: patch15: now also looks under /var/mail for BSD/386
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:maildir maildirexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:maildir:
?S: This variable contains the name of the directory in which mail is
?S: spooled. Programs using this variable must be prepared to deal with
?S: ~name
 substitutions.
?S:.
?S:maildirexp:
?S: This is the same as the maildir variable, but is filename expanded
?S: at configuration time, for programs not willing to deal with it at
?S: run-time.
?S:.
: determine where mail is spooled
case "$maildir" in
") dflt=`./loc . /usr/spool/mail /usr/spool/mail /usr/mail /var/mail`;;
*) dflt="$maildir";;
esac
echo " "
fn=d~
rp='Where is yet-to-be-read mail spooled?'
. ./getfile
maildir="$ans"
maildirexp="$ansexp"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/maildir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 2016 Dagfinn Ilmari Mannsker & H.Merijn Brand
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X:
?X: This unit produces a variable that is intended to be eval'ed in
```

```
?X: order to define/undefine a symbol. A consistency check is made
?X: regarding any previous value and a warning is issued if there
?X: is any discrepancy.
?X:
?X: To use it, say:
?X: set d_siginfo_si_errno siginfo_t int si_errno $d_sigaction signal.h
?X: eval $hasfield_t;
?X:
?MAKE:Hasfield_t: test Compile rm_try Setvar
?MAKE: -pick add $@ %<
?LINT:define hasfield_t
?S:hasfield_t:
?S: Internal macro for Configure
?S:.
?V:hasfield_t:
?T:varname struct type field
: Define hasfield_t macro for Configure internal use
hasfield_t='varname=$1; struct=$2; type=$3; field=$4; shift; shift; shift; shift;
while $test $# -ge 2; do
   case
 "$1" in
 $define) echo "#include <$2>";;
   esac ;
   shift 2;
done > try.c;
echo "int main () { $struct foo; $type bar = foo.$field; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/Hasfield_t.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Chk_MANI.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
```

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Chk_MANI.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:57:25  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/31  09:33:14  ram
?RCS: patch44: now lists Begin instead of Myinit in its dependencies
?RCS: patch44: leading comment now explains how this unit is included
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:45  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks the package by making sure
 every file listed in MANIFEST
?X: is present. It is systematically "included" via the Finish unit (which
?X: is always present in every Configure script), although it may result in
?X: an empty inclusion when no MANIFEST is present.
?X:
?MAKE:Chk_MANI: Begin c n rsrc
?MAKE: -pick wipe $@ %<
?T:filelist ans tmppwd
?X: This check happens at metaconfig-time, so it's ok to hard-code the path.
@if {test -f ../MANIFEST}
: Now test for existence of everything in MANIFEST
echo " "
if test -f "$rsrc/MANIFEST"; then
 echo "First let's make sure your kit is complete.  Checking..." >&4
?X:
?X: Files spelled uppercased and beginning with PACK are produced by the
?X: shell archive builder and may be removed by the user. Usually, they are
?X: not listed in the MANIFEST file, but you never know...
?X:
?X: "split -l" is the new way of running a split, but we also try the older way
?X:
 awk '$1 !~ /PACK[A-Z]+/ {print $1}' "$rsrc/MANIFEST" | \
  (split -l 50 2>/dev/null || split -50)
 rm -f missing
 tmppwd=`pwd`
 for
 filelist in x??; do
  (cd "$rsrc"; ls `cat "$tmppwd/$filelist"` \
   >/dev/null 2>>"$tmppwd/missing")
 done
 if test -s missing; then
  cat missing >&4
  cat >&4 <<'EOM'
```

```
THIS PACKAGE SEEMS TO BE INCOMPLETE.

You have the option of continuing the configuration process, despite the
distinct possibility that your kit is damaged, by typing 'y'es.  If you
do, don't blame me if something goes wrong.  I advise you to type 'n'o
and contact the author (<MAINTLOC>).

EOM
?X: Can't use $echo at this early stage
  echo $n "Continue? [n] $c" >&4
  read ans
  case "$ans" in
  y*)
   echo "Continuing..." >&4
   rm -f missing
   ;;
  *)
?X:
?X: Use kill and not exit, so that the trap gets executed to clean up
?X:
   echo "ABORTING..." >&4
   kill $$
   ;;
  esac
 else
  echo "Looks good..."
 fi
else
 echo "There is no MANIFEST file.  I hope your kit is complete !"
fi
rm -f missing x??

@end
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Chk_MANI.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Compile.U,v $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS:
?X:
```

```
?X: This unit is just a quick shorthand for the compile command
?X: to be used in all the other metaconfig units.
?X:
?MAKE:Compile: +cc +optimize +ccflags +ldflags +libs test
?MAKE: -pick wipe $@ %<
?LINT:extern usedevel maintloc
?LINT:define compile compile_ok
?V:compile compile_ok mc_file
?S:compile:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command, namely
?S: $cc $optimize $ccflags $ldflags -o $1 $1.c $libs > /dev/null 2>&1
?S: Note that the output filename does _not_ include the _exe
?S: extension.  Instead we assume that the linker will be
?S: "helpful" and automatically appending the correct suffix.
?S: OS/2
 users will apparently need to supply the -Zexe flag to
?S: get this behavior.
?S:
?S: To use this variable, say something like:
?S:  echo 'int main() { exit(0); }' > try.c
?S:  set try
?S:  if eval $compile; then
?S:   echo "success"   # and do whatever . . .
?S:  else
?S:   echo "failure"   # and do whatever . . .
?S:  fi
?S: To add extra flags cc flags (e.g. -DWHATEVER) just put them
?S: in $*, e.g.
?S:  set try -DTRY_THIS_FLAG
?S:.
?S:compile_ok:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command that you
?S: expect to work ok.  It is the same as $compile, except we
?S: deliberately let the user see any error messages.
?S:.
: define a shorthand compile call
compile='
mc_file=$1;
shift;
case "$usedevel" in $define|true|[yY]*) if $test ! -f "${mc_file}.c"; then
echo "Internal Configure script bug - compiler test file ${mc_file}.c is missing. Please report this to <$maintloc>"
>&4;
exit 1;
fi;
esac;
$cc
```

```
 -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
: define a shorthand compile call for compilations that should be ok.
compile_ok='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/Compile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extract.U,v 3.0.1.2 1997/02/28 14:58:52 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can be doted in order to extract
?X: .SH files with variable substitutions.
?X:
?X: When running
 Configure from a remote directory ($src is not '.'),
?X: then the files will be created in that directory, so beware!
?X:
?MAKE:Extract: src
?MAKE: -pick add $@ %<
?F:./extract
?T:PERL_CONFIG_SH dir file name create mkdir_p
: script used to extract .SH files with variable substitutions
cat >extract <<'EOS'
PERL_CONFIG_SH=true
echo "Doing variable substitutions on .SH files..."
if test -f MANIFEST; then
```

```
 set x `awk '{print $1}' < MANIFEST | grep '\.SH$'`
else
 echo "(Looking for .SH files under the source directory.)"
 set x `(cd "$src"; find . -name "*.SH" -print)`
fi
shift
case $# in
0) set x `(cd "$src"; echo *.SH)`; shift;;
esac
if test ! -f "$src/$1"; then
 shift
fi
?X: script to emulate mkdir -p
mkdir_p='
name=$1;
create="";
while test $name; do
 if test ! -d "$name"; then
  create="$name $create";
  name=`echo $name | sed -e "s|^[^/]*$||"`;
  name=`echo $name | sed -e "s|\(.*\)/.*|\1|"`;
 else
  name="";
 fi;
done;
for file in $create; do
 mkdir $file;
done
'
for file in $*;
 do
 case "$src" in
 ".")
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (cd "$dir" && . ./$file)
   ;;
  *)
   . ./$file
   ;;
  esac
  ;;
 *)
?X:
?X: When running Configure remotely ($src is not '.'), we cannot source
?X: the files directly, since that would wrongly cause the extraction
```

```
?X: where the source lie instead of withing the current directory. Therefore,
?X: we need to 'sh <file' then, which is okay since they will source the
?X: existing config.sh file. It's not possible to use:
?X:  ../src/Configure -S -O -Dsomething
?X: unfortunately since no new config.sh with the -Dsomething override
?X: will be created before running the .SH files. A minor buglet.
?X:
?X: Note that we must create the directory hierarchy ourselves if it does
?X: not exist already, and that is done through a shell emulation of the
?X: 'mkdir -p' command. We don't want to use the $installdir metaconfig
?X: symbol here since that would require too much to
 be configured for
?X: this simple extraction task that may happen quickly with 'Configure -S'.
?X:  -- RAM, 18/03/96
?X:
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (set x $dir; shift; eval $mkdir_p)
   sh <"$src/$dir/$file"
   ;;
  *)
   sh <"$src/$file"
   ;;
  esac
  ;;
 esac
done
if test -f "$src/config_h.SH"; then
 if test ! -f config.h; then
 : oops, they left it out of MANIFEST, probably, so do it anyway.
 . "$src/config_h.SH"
 fi
fi
EOS
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Extract.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: package.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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```

```
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: package.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:27:21  ram
?RCS: patch36: beware of non-ascii character sets when translating case
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:37:02  ram
?RCS: patch14: skip definition of spackage if not otherwise used
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:10  ram
?RCS: patch10: added spackage, suitable for starting sentences
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:28  ram
?RCS: Baseline for dist 3.0
 netwide release.
?RCS:
?MAKE:package spackage: Nothing
?MAKE: -pick wipe $@ %<
?S:package:
?S: This variable contains the name of the package being constructed.
?S: It is primarily intended for the use of later Configure units.
?S:.
?S:spackage:
?S: This variable contains the name of the package being constructed,
?S: with the first letter uppercased, i.e. suitable for starting
?S: sentences.
?S:.
?X: dist-4 has defined PACKAGE: here, which clashes with perly.h
?X:  as package is a reserved keyword in perl
?T:first last
: set package name
package='<PACKAGENAME>'
@if spackage
first=`echo $package | sed -e 's/^\(.\).*/\1/'`
last=`echo $package | sed -e 's/^.\(.*\)/\1/'`
?X:
?X: So early in the Configure script, we don't have ./tr set up and can't
?X: include Tr in our dependency or that would create a cycle. Therefore,
?X: we have to somehow duplicate the work done in Tr. That's life.
?X:
case "`echo AbyZ | tr '[:lower:]' '[:upper:]' 2>/dev/null`"-"`echo AbyZ | tr '[:upper:]' '[:lower:]'
 2>/dev/null`" in
ABYZ-abyz) spackage=`echo $first | tr '[:lower:]' '[:upper:]'`$last;;
*) spackage=`echo $first | tr '[a-z]' '[A-Z]'`$last;;
esac
@end
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/package.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: rcs_branch.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: rcs_branch.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:40  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:rcs_branch: Myread contains Loc
?MAKE: -pick add $@ %<
?S:rcs_branch:
?S: This variable will hold "true" if rcs can take the -b<revision>
?S: option, which can make Life Easier on those folks who like to run
?S: rcsdiff manually.
?S:.
?T:xxx
: Tra la la la la
echo " "
echo "Checking to see if RCS understands the -b switch..." >&4
xxx=`./loc
 rcs " $pth`
case "$xxx" in
")
 rcs_branch=false
 echo "Oh.  You don't seem to have RCS here."
 ;;
*)
 rcs > rcsbranch.out 2>&1
 if $contains 'b\[rev\]' rcsbranch.out  >/dev/null 2>&1 ; then
  rcs_branch=true
  echo "Nice!  Your RCS is spiffy!"
 else
  rcs_branch=false
 echo "Well, at least you have RCS.  You know, a newer version is available."
 fi
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/rcs_branch.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorman1dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorman1dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorman1dir vendorman1direxp installvendorman1dir: man1dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorman1dir:
?S: This variable contains the name of the directory for man1
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: man1 pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorman1direxp:
?S: This variable is the ~name expanded version of vendorman1dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorman1dir="
?S:installvendorman1dir:
?S: This variable is really the same as vendorman1direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorman1dir
: Set the vendorman1dir variables
case "$vendorprefix" in
") vendorman1dir="
 vendorman1direxp="
```

```
 ;;
*) : determine where vendor-supplied manual pages go.
 case "$vendorman1dir" in
 ") dflt=`echo "$man1dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorman1dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=nd~+
 rp='Pathname for
 the vendor-supplied manual section 1 pages?'
 . ./getfile
 vendorman1dir="$ans"
 vendorman1direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorman1dir" = "X" && vendorman1dir=' '
prefixvar=vendorman1dir
. ./installprefix
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/vendorman1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Myinit.U,v 3.0 1993/08/18 12:05:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: Myinit.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: If you want to initialize any default values, copy this unit to your
?X: personal U directory and add the assignments to the end.  This file
?X: is included after variables are initialized but before any old
?X: config.sh file is read in and before any Configure switch processing.
?X:
?MAKE:Myinit
```

```
 libswanted: Init
?MAKE: -pick add $@ %<
?S:libswanted:
?S: This variable holds a list of all the libraries we want to
?S: search.  The order is chosen to pick up the c library
?S: ahead of ucb or bsd libraries for SVR4.
?S:.
?LINT:extern usevfork glibpth
?LINT:change usevfork glibpth
: List of libraries we want.
?X: Put crypt here, even though I should really fix d_crypt.U to look
?X: for it correctly, including possible shared library versions.
: If anyone needs extra -lxxx, put those in a hint file.
libswanted="cl pthread socket bind inet ndbm gdbm dbm db malloc dl ld"
libswanted="$libswanted sun m crypt sec util c cposix posix ucb bsd BSD"
: We probably want to search /usr/shlib before most other libraries.
: This is only used by the lib/ExtUtils/MakeMaker.pm routine extliblist.
glibpth=`echo " $glibpth " | sed -e 's! /usr/shlib ! !'`
glibpth="/usr/shlib $glibpth"
: Do not use vfork unless overridden by a hint file.
usevfork=false
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Myinit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Finish.U,v $
?RCS: Revision 3.0.1.6  1995/02/15  14:09:30  ram
?RCS: patch51: now clearer about how to edit config.sh at the prompt (WED)
?RCS:
?RCS: Revision 3.0.1.5  1994/10/29  15:53:14  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  14:19:37  ram
?RCS: patch23: added blank lines around 'End of Configure'
?RCS:
?RCS: Revision 3.0.1.3  1993/10/16  13:46:09  ram
?RCS: patch12: replaced Config_h by Magic_h in the dependency line
```

```
?RCS:
?RCS:
 Revision 3.0.1.2  1993/09/13  15:45:26  ram
?RCS: patch10: fixed shell evaluation w/o shell escape while in silent mode
?RCS:
?RCS: Revision 3.0.1.1  1993/08/30  08:55:59  ram
?RCS: patch8: prevents myread from blocking on empty answers, exceptionally
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit is the very last one in the Configure script.  It runs all the
?X: SH files, which among other things produce config.h and (usually) Makefile.
?X: It offers to do a make depend if the Makefile contains that target.
?X:
?MAKE:Finish: Chk_MANI Extract Myread Oldsym Magic_h cat rm contains \
 test package make
?MAKE: -pick add $@ %<
?F:!config.sh
?T:pwd
: Finish up by extracting the .SH files
case "$alldone" in
exit)
?X: They supplied the -E switch
 echo "Stopping at your request, leaving temporary files around."
 exit 0
 ;;
cont)
 ;;
")
 dflt="
 nostick=true
 $cat <<EOM

If you'd like to make any changes to the config.sh
 file before I begin
to configure things, do it as a shell escape now (e.g. !vi config.sh).

EOM
 rp="Press return or use a shell escape to edit config.sh:"
 . UU/myread
 nostick="
 case "$ans" in
 ") ;;
 *) : in case they cannot read
  sh 1>&4 -c "$ans";;
 esac
```

```
 ;;
esac

: if this fails, just run all the .SH files by hand
. ./config.sh

?X:
?X: Turn silent mode off from now on (we want a verbose file extraction).
?X: This means we have to explicitly test for '$silent' from now on to
?X: strip off any verbose messages.
?X:
echo " "
exec 1>&4
pwd=`pwd`
. ./UU/extract
cd "$pwd"

if $contains '^depend:' [Mm]akefile >/dev/null 2>&1; then
 dflt=y
 case "$silent" in
 true) ;;
 *)
  $cat <<EOM

Now you need to generate make dependencies by running "$make depend".
You might prefer to run it in background: "$make depend > makedepend.out &"
It can take a while, so you might not want to run it right now.

EOM
  ;;
 esac
 rp="Run $make depend now?"
 . UU/myread
 case "$ans" in
 y*)
  $make depend
 && echo "Now you must run '$make'."
  ;;
 *)
  echo "You must run '$make depend' then '$make'."
  ;;
 esac
elif test -f [Mm]akefile; then
 echo " "
 echo "Now you must run a $make."
else
 echo "Configure done."
fi
```

```
if $test -f Policy.sh; then
   $cat <<EOM

If you compile $package on a different machine or from a different object
directory, copy the Policy.sh file from this object directory to the
new one before you run Configure -- this will help you with most of
the policy defaults.

EOM
fi
if $test -f UU/config.msg; then
   echo "Hmm.  I also noted the following information while running:"
   echo " "
   $cat UU/config.msg >&4
fi
?X:
?X: kit*isdone files are left over by shell archives built using the makedist
?X: script which comes from dist, while ark*isdone files are left over by
?X: the cshar archive maker.
?X:
$rm -f kit*isdone ark*isdone
$rm -rf UU

: End of Configure

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Finish.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: End.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit serves as the goal which forces make to choose all the units that
?X: ask questions.  The $W on the ?MAKE: line is the list of all symbols wanted.
?X: To force any unit to be included, copy this unit to your private U directory
```

```
?X: and add the name of the unit desired to the ?MAKE: dependency line.
?X:
?MAKE:End: $W
?MAKE: -pick add $@ %<
?LINT:use $W
: end of configuration
 questions
echo " "
echo "End of configuration questions."
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/End.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libdbm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libdbm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:56:57  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:58  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libdbm: test Loc libpth _a
?MAKE: -pick add $@ %<
?S:libdbm:
?S: This variable contains the argument to pass to the loader in order
?S: to get the dbm library routines.  If there is no dbm or ndbm
?S: library, it is null.
?S:.
?T:xxx
:
 see if we should include -ldbm
echo " "
if $test -r /usr/lib/libndbm$_a || $test -r /usr/local/lib/libndbm$_a ; then
 echo "-lndbm found." >&4
 libdbm='-lndbm'
elif $test -r /usr/lib/libdbm$_a || $test -r /usr/local/lib/libdbm$_a ; then
 echo "-ldbm found." >&4
 libdbm='-ldbm'
```

```
else
 xxx=`./loc libdbm$_a x $libpth`
 case "$xxx" in
 x)
  echo "No dbm library found." >&4
  libdbm=''
  ;;
 *)
  echo "DBM library found in $xxx." >&4
  libdbm="$xxx"
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/libdbm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Whoa.U,v 3.0.1.2 1997/02/28 15:21:21 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Whoa.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:21:21  ram
?RCS: patch61: whoa script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:01  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to warn the user in case a change into a variable
 is noticed.
?X:
?X: To use this unit, $was must hold the old value that has changed. Upon
?X: exit, the two variables $td and $tu are set to the correct value for
?X: respectively defining or undefining a variable. For instance, if $vas was
?X: $undef, but now $var is $define, after calling . whoa, you should use
?X: eval "$var=\$tu" to finally set $var to the correct value. See unit Inlibc.
```

```
?X:
?MAKE:Whoa: Myread startsh hint
?MAKE: -pick add $@ %<
?F:./whoa
?T:var was td tu hintfile
: set up the script used to warn in case of inconsistency
cat <<EOS >whoa
$startsh
EOS
cat <<'EOSC' >>whoa
dflt=y
case "$hint" in
   recommended)
 case "$hintfile" in
 ") echo "The $hint value for \$$var on this machine was \"$was\"!" >&4
  ;;
 *) echo "Hmm.  Based on the hints in hints/$hintfile.sh, " >&4
  echo "the $hint value for \$$var on this machine was \"$was\"!" >&4
  ;;
 esac
 ;;
   *) echo " "
 echo "*** WHOA THERE!!! ***" >&4
 echo "    The $hint value for \$$var on this machine was
 \"$was\"!" >&4
 ;;
esac
rp="    Keep the $hint value?"
. ./myread
case "$ans" in
y) td=$was; tu=$was;;
esac
EOSC
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Whoa.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Prefixup.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS:
```

```
?RCS: $Log: Prefixup.U,v $
?RCS: Revision 3.0.1.1  1995/01/30  14:30:40  ram
?RCS: patch49: created
?RCS:
?X:
?X: Used as: "set dflt; eval $prefixup" to set $dflt to be $prefix/dir
?X: instead of $prefixexp/dir, in case portability was involved somehow
?X: and $prefix uses ~name expansion.
?X:
?MAKE:Prefixup: prefix prefixexp
?MAKE: -pick add $@ %<
?LINT:define prefixup
?S:prefixup:
?S: This shell variable is used internally by Configure to reset
?S: the leading
 installation prefix correctly when $prefix uses
?S: ~name expansion.
?S:  set dflt
?S:  eval $prefixup
?S: That will set $dflt to $prefix/dir if it was $prefixexp/dir and
?S: $prefix differs from $prefixexp.
?S:.
?V:prefixup
: set the prefixup variable, to restore leading tilda escape
prefixup='case "$prefixexp" in
"$prefix") ;;
*) eval "$1=\`echo \$$1 | sed \"s,^$prefixexp,$prefix,\"\`";;
esac'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Prefixup.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Inhdr.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Inhdr.U,v $
?RCS: Revision 3.0.1.2  1995/05/12  12:01:31  ram
?RCS: patch54: deleted tabs that caused some /bin/sh to core dump (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:55:01  ram
```

```
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks wether a set of header files exists or not.
?X: If the first header is not
 found, the function tries to locate
?X: the next header, and so on, until one is found or there is no
?X: more header in the list.
?X:
?X: To use it, say:
?X: set header i_header [ header2 i_header2 ... ]
?X: eval $inhdr
?X:
?MAKE:Inhdr: test Findhdr Whoa
?MAKE: -pick add $@ %<
?LINT:define inhdr
?V:inhdr
?S:inhdr:
?S: This shell variable is used internally by Configure to check
?S: wether a set of headers exist or not. A typical use is:
?S:  set header i_header [ header2 i_header2 ... ]
?S:  eval $inhdr
?S: That will print a message, saying wether header was found or not
?S: and set i_header* accordingly. If the first header is not found,
?S: we try the next one, until the list is empty or one is found.
?S:.
?T:xxx xxf var td xxnf tu yyy instead was cont
: define an alternate in-header-list? function
inhdr='echo " "; td=$define; tu=$undef; yyy=$@;
cont=true; xxf="echo \"<\$1> found.\" >&4";
case $# in 2) xxnf="echo \"<\$1> NOT found.\" >&4";;
*) xxnf="echo \"<\$1> NOT found, ...\" >&4";;
esac;
case
 $# in 4) instead=instead;; *) instead="at last";; esac;
while $test "$cont"; do
 xxx=`./findhdr $1`
 var=$2; eval "was=\$$2";
 if $test "$xxx" && $test -r "$xxx";
 then eval $xxf;
?X: Next line shifted left 1 tabstop to avoid sh core dump on MachTen 2.1.1.
 eval "case \"\$$var\" in $undef) . ./whoa; esac"; eval "$var=\$td";
  cont="";
 else eval $xxnf;
?X: Likewise, the next line has been shifted left 1 tabstop -- ADO, 08/03/95
```

```
 eval "case \"\$$var\" in $define) . ./whoa; esac"; eval "$var=\$tu"; fi;
 set $yyy; shift; shift; yyy=$@;
 case $# in 0) cont="";;
 2) xxf="echo \"but I found <\$1> $instead.\" >&4";
  xxnf="echo \"and I did not find <\$1> either.\" >&4";;
 *) xxf="echo \"but I found <\$1\> instead.\" >&4";
  xxnf="echo \"there is no <\$1>, ...\" >&4";;
 esac;
done;
?X: Remaining values are set to 'undef'
while $test "$yyy";
do set $yyy; var=$2; eval "was=\$$2";
 eval "case \"\$$var\" in $define) . ./whoa; esac"; eval "$var=\$tu";
 set $yyy; shift; shift; yyy=$@;
done'
```

Found
 in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Inhdr.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?X:
?X: Useless unit dropped.  Use randfunc instead.
?X:
?LINT:empty
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/randbits.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mansrc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
```

```
?RCS:
?RCS: $Log: mansrc.U,v $
?RCS: Revision 3.0.1.9  1997/02/28  16:12:03  ram
?RCS: patch61: don't ask for AFS when they choose to not install pages
?RCS:
?RCS: Revision 3.0.1.8  1995/09/25  09:16:58  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.7  1995/02/15  14:15:31  ram
?RCS: patch51: was mistakenly duplicating /usr/local/man/man1 (ADO)
?RCS: patch51: added /opt/man/man1 to the lookpath (ADO)
?RCS:
?RCS: Revision
 3.0.1.6  1995/01/30  14:39:34  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:32:25  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:30:38  ram
?RCS: patch32: now uses installation prefix for default setting
?RCS:
?RCS: Revision 3.0.1.3  1994/05/06  15:11:10  ram
?RCS: patch23: added lint hint, assuring that nroff is used
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:14:39  ram
?RCS: patch16: now uses _nroff in case user asked for portability
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:09:31  ram
?RCS: patch10: allows for L1 man page extension (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:mansrc mansrcexp manext installmansrc: afs cat nroff Loc Oldconfig \
 sysman spackage test Getfile Prefixit prefixexp Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?S:mansrc:
?S: This variable
 contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:mansrcexp:
?S: This variable is the same as the mansrc variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
```

```
?S:.
?S:installmansrc:
?S: This variable is really the same as mansrcexp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: mansrcexp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:manext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See mansrc.
?S:.
?T:lookpath
: determine where manual pages go
set mansrc mansrc none
eval $prefixit
$cat <<EOM

$spackage has manual
 pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$mansrc" in
 ") mansrc="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$mansrc" in
")
 lookpath="$prefixexp/share/man/man1 $prefixexp/man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath /usr/local/man/man1 /opt/man/man1 /usr/man/manl"
 lookpath="$lookpath /usr/share/man/man1 /usr/local/share/man/man1"
 lookpath="$lookpath /usr/man/local/man1 /usr/man/l_man/man1"
 lookpath="$lookpath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 lookpath="$lookpath /usr/man/man.L"
 mansrc=`./loc . $prefixexp/man/man1 $lookpath`
 if $test -d "$mansrc"; then
  dflt="$mansrc"
 else
  dflt="$sysman"
 fi
 set dflt
 eval $prefixup
 ;;
' ') dflt=none;;
```

```
*)  dflt="$mansrc"
 ;;
esac
echo " "
fn=dn~
rp='Where do the manual pages (source) go?'
. ./getfile
if test
 "X$mansrcexp" != "X$ansexp"; then
 installmansrc="
fi
mansrc="$ans"
mansrcexp="$ansexp"
case "$mansrc" in
") mansrc=' '
 installmansrc=";;
esac
if $afs && $test "$mansrc"; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installmansrc" in
 ") dflt=`echo $mansrcexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installmansrc";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installmansrc="$ans"
else
 installmansrc="$mansrcexp"
fi

case "$mansrc" in
' ') manext='0';;
*l) manext=l;;
*n) manext=n;;
*o) manext=l;;
*p) manext=n;;
*C) manext=C;;
*L) manext=L;;
*L1) manext=L1;;
*) manext=1;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/mansrc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: patchlevel.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:18:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:patchlevel: package baserev test rsrc
?MAKE: -pick add $@ %<
?T:Revision
?S:patchlevel:
?S: The patchlevel level of this package.
?S: The value of patchlevel comes from the patchlevel.h file.
?S:.
: get the patchlevel
echo " "
echo "Getting the current patchlevel..." >&4
if $test -r
 $rsrc/patchlevel.h;then
 patchlevel=`awk \
  '/^#[  ]*define[  ][  ]*PATCHLEVEL/ {print $3}' \
  < $rsrc/patchlevel.h`
else
 patchlevel=0
fi
echo "(You have $package $baserev PL$patchlevel.)"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/patchlevel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Oldsym.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Oldsym.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:06:58  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit follows the creation of the config.sh file. It adds some
?X: special symbols: defines from patchlevel.h file if any and PERL_CONFIG_SH,
?X: which is set to true. Then, we try to keep all the new symbols that
?X: may come from a hint
 file or a previous config.sh file.
?X:
?MAKE:Oldsym: Config_sh cat test hint src sed sort uniq perl_patchlevel
?MAKE: -pick add $@ %<
?T:PERL_CONFIG_SH PERL_PATCHLEVEL sym tmp
?F:!UU
: add special variables
$test -f $src/patchlevel.h && \
awk '/^#define[  ]+PERL_/ {printf "%s=%s\n",$2,$3}' $src/patchlevel.h >>config.sh
echo "PERL_PATCHLEVEL='$perl_patchlevel'" >>config.sh
echo "PERL_CONFIG_SH=true" >>config.sh

: propagate old symbols
if $test -f UU/config.sh; then
?X: Make sure each symbol is unique in oldconfig.sh
 <UU/config.sh $sort | $uniq >UU/oldconfig.sh
?X:
?X: All the symbols that appear twice come only from config.sh (hence the
?X: two config.sh in the command line). These symbols will be removed by
?X: the uniq -u command. The oldsyms file thus contains all the symbols
?X: that did not appear in the produced config.sh (Larry Wall).
?X:
?X: Do not touch the -u flag of uniq.  This means you too, Jarkko.
?X:
 $sed -n 's/^\([a-zA-Z_0-9]*\)=.*/\1/p' \
  config.sh config.sh UU/oldconfig.sh
 |\
  $sort | $uniq -u >UU/oldsyms
```

```
 set X `$cat UU/oldsyms`
 shift
 case $# in
 0) ;;
 *)
  $cat <<EOM
Hmm...You had some extra variables I don't know about...I'll try to keep 'em...
EOM
  echo ": Variables propagated from previous config.sh file." >>config.sh
  for sym in `$cat UU/oldsyms`; do
   echo "    Propagating $hint variable "'$'"$sym..."
   eval 'tmp="$'"${sym}"'"'
   echo "$tmp" | \
    sed -e "s/'/'\''\''/g" -e "s/^/$sym='/" -e "s/$/'/" >>config.sh
  done
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Oldsym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999, Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:full_ar: ar
?MAKE: -pick add $@ %<
?S:full_ar:
?S: This variable contains the full pathname to 'ar', whether or
?S: not the user has specified 'portability'.  This is only used
?S: in the Makefile.SH.
?S:.
: Store the full pathname to the ar program for use in the C program
: Respect a hint or command line value for full_ar.
case "$full_ar" in
") full_ar=$ar ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/Loc_ar.U

No license file was found, but licenses were detected in source scan.

```
# $Id: makedir.sh,v 3.0.1.1 1994/01/24 14:00:08 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Larry Wall <lwall@netlabs.com>
#
# $Log: makedir.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:08  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:38  ram
# Baseline for dist 3.0 netwide release.
#
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/lib/makedir.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cf_name.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: cf_name.U,v $
?RCS: Revision 3.0.1.2  1994/05/06  14:29:36  ram
?RCS: patch23: fixed user name computation from /etc/passwd in bsd systems
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:05:11  ram
?RCS: patch16: created
?RCS:
?RCS:
?MAKE:+cf_name: cf_by passcat Filexp nametype cat test
?MAKE: -pick add $@ %<
```

```
?S:cf_name:
?S: Full name of the person who ran the Configure script and
 answered the
?S: questions. This can be used by units that require the user's full name.
?S: This variable is for internal use only.
?S:.
?T:xxx fn NAME
: figure out their full name
case "$NAME" in
") case "$nametype" in
 other)
  fn=`./filexp ~/.fullname`
  xxx=usg
  $test -f $fn && xxx=other
  ;;
 *)
  xxx="$nametype"
  ;;
 esac

 case "$xxx" in
 bsd)
  cf_name=`$passcat | grep "^$cf_by:" | \
   sed -e 's/^[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\):.*/\1/' \
   -e 's/,.*//'`
  ;;
   usg)
  cf_name=`$passcat | grep "^$cf_by:" | \
   sed -e 's/^[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\):.*/\1/' \
   -e 's/[^-]*-\(.*\)(.*)/\1/'`
  ;;
 *)
  cf_name=`$cat $fn`
  ;;
 esac
 ;;
*)
 cf_name="$NAME"
 ;;
esac
?X:
?X: In the original unit, Graham asked for the user name, in case the above
?X: code was unable to figure it out correctly. Since now cf_name has been
?X: made an internal variable only (i.e. it is not saved in config.sh), letting
?X: the user override the computed default each time would be a pain.
?X:
 Therefore, I have decided to trust the above code to get it right, and for
?X: those rare cases where it will fail, too bad :-) --RAM.
```

```
?X:
echo " "
echo "Pleased to meet you, $cf_name."
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/cf_name.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: rename.C,v 3.0.1.1 1994/01/24 13:58:42 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: rename.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:42  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/lib/C/fake/rename.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Myread.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myread.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  15:05:39  ram
?RCS: patch61: myread script now starts with a "startsh"
?RCS: patch61: miscellaneous fixes
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:14:22  ram
?RCS: patch45: added & escape allowing user to turn on -d from the prompt
?RCS:
?RCS: Revision 3.0.1.4  1994/10/31  09:48:04  ram
```

```
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29
  15:56:20  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:59  ram
?RCS: patch8: added new visible 'nostick' symbol, mainly for Finish.U
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:39:20  ram
?RCS: patch7: now sticks to the question when no default and empty answer
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a read.  It allows for shell escapes, default assignment and
?X: parameter evaluation.
?X:
?X: To use this unit, $rp and $dflt must hold the question and the
?X: default answer. The question will be printed by the script itself.
?X: Neither $rp nor $dflt is altered by the script.
?X:
?X: The myread script will stick to the question if no default is proposed
?X: and the user answer is empty, which prevents mistakes. However, at the
?X: end of Configure, there is an exception
 to this rule (Finish.U) where we
?X: set nostick to a non-empty value to allow the Return key to play its role!
?X:
?MAKE:Myread: Options startsh n c trnl
?MAKE: -pick add $@ %<
?V:ans:dflt rp nostick
?F:./myread
?T:COLUMNS xxxm rp dflt answ aok myecho
?LINT:change fastread
?X: Some shells (Ultrix) do not understand ${COLUMNS:-80}, sigh!
: compute the number of columns on the terminal for proper question formatting
case "$COLUMNS" in
") COLUMNS='80';;
esac

: set up the echo used in my read
?X:
?X: This variable is intended to be eval'ed. It will echo the two
?X: variables $rp and $dflt (provided this latter has a non null value).
?X: It is mainly used by the myread script to echo the questions.
?X:
```

```
?X: The $n and $c below are substituted before Loc does its silly echo check
?X: so don't put a $ on the echo below so we get builtin, even if $echo is
?X: pointing to /bin/echo.
?X:
myecho="case \"\$xxxm\" in
") echo $n \"\$rp $c\" >&4;;
*) case \"\$rp\" in
 ") echo $n \"[\$xxxm] $c\";;
 *)
  if
 test \`echo \"\$rp [\$xxxm]  \" | wc -c\` -ge $COLUMNS; then
   echo \"\$rp\" >&4
   echo $n \"[\$xxxm] $c\" >&4
  else
   echo $n \"\$rp [\$xxxm] $c\" >&4
  fi
  ;;
 esac;;
esac"

: now set up to do reads with possible shell escape and default assignment
cat <<EOSC >myread
$startsh
?X:
?X: Save value of default -- do not alter original in case of eval
?X:
xxxm=\$dflt
$myecho
?X:
?X: If there is no default, then stop, regardless of the value in fastread.
?X: In silent mode, no new-line is to be echoed if the question is empty,
?X: since this is used to wait for the "return" key.
?X:
ans='!'
case "\$fastread" in
yes) case "\$dflt" in
 ") ;;
 *) ans=";
  case "\$silent-\$rp" in
  true-) ;;
  *) echo " " >&4;;
  esac;;
 esac;;
*) case "\$silent" in
 true) case "\$rp" in
  ") ans=";;
  esac;;
 esac;;
```

```
esac
while expr "X\$ans" : "X!" >/dev/null; do
 read answ
?X:
?X: Run 'eval' on the answer, in order to do variable substitution, in case
?X: the user types $HOME or $WHATEVER.
 Variables must be evaluated now.
?X: Typing '\$HOME' won't currently prevent from substitution -- use '\\$HOME'
?X: The $1 .. $9 and $*, as well as $@, are available to refer to the
?X: default value.
?X:
 set x \$xxxm
 shift
 aok=''; eval "ans=\\"\$answ\\"" && aok=y
 case  "\$answ" in
?X:
?X: Use "!" and not a plain ! because of a bug in BSD 4.4 shell
?X: (reported by Wayne Davison)
?X: We must handle the shell escapes before dealing with possible variable
?X: substitution, since the shell we're launching in that case will be able
?X: to do it as well as we can -- RAM, 15/03/96
?X
 "!")
  sh 1>&4
  echo " "
  $myecho
  ;;
 !*)
  set x \`expr "X\$ans" : "X!\(.*\)\$"\`
  shift
  sh 1>&4 -c "\$*"
  echo " "
  $myecho
  ;;
 "\$ans")
  case "\$ans" in
?X:
?X: Answers starting with & are hooks allowing to dynamically turn on/off
?X: some Configure options. That's for the future. -- RAM, 09/01/95
?X: Today, we only recognize '& -d' to mean 'go on as if Configure -d, which
?X: is a hardwired
 behaviour compatible with our general scheme.
?X:
  \\&*)
   set x \`expr "X\$ans" : "X&\(.*\)\$"\`
   shift
   case "\$1" in
   -d)
```

```
    fastread=yes
    echo "(OK, I'll run with -d after this question.)" >&4
    ;;
   -*)
    echo "*** Sorry, \$1 not supported yet." >&4
    ;;
   esac
   $myecho
   ans=!
   ;;
  esac;;
 *)
  case "\$aok" in
  y)
   echo "*** Substitution done -- please confirm."
   xxxm="\$ans"
   ans=\`echo $n "\$ans$c" | tr '$trnl' ' '\`
   xxxm="\$ans"
   ans=!
   ;;
  *)
   echo "*** Error -- try again."
   ans=!
   ;;
  esac
  $myecho
  ;;
 esac
?X: Stick in myread if no default answer and nothing was answered
 case "\$ans\$xxxm\$nostick" in
 ")
  ans=!
  $myecho
  ;;
 esac
done
case "\$ans" in
") ans="\$xxxm";;
esac
EOSC
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Myread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
```

```
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasstruct string that is used internally
?X: by Configure to check if this system has a field for a
?X: particular struct (of if this system has a particular struct!)
?X:
?X: To use it, say something like:
?X:  set d_statblocks stat i_sysstat sys/stat.h
?X:  eval $hasstruct
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/foo.h
?X:  $i_sysbar sys/bar.h
?X:  $i_syszot sys/zot.h
?X:  $i_zappa zappa.h"
?X: set d_statblocks stat $hdrs
?X: eval $hasstruct
?X:
?MAKE:Hasstruct: Setvar rm_try test Compile
?MAKE: -pick add $@ %<
?T:varname struct
?V:hasstruct
: Define hasstruct macro for Configure internal use
hasstruct='varname=$1; struct=$2; shift;
 shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 esac ;
   shift 2;
done > try.c;
echo "int main () { struct $struct foo; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/protos/Hasstruct.U
No license file was found, but licenses were detected in source scan.

?RCS: Id

```
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: lib.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:16:47  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:38:08  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:27:40  ram
?RCS: patch32: now uses installation prefix to set the default
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lib libexp: Getfile
 Loc Oldconfig Prefixit Prefixup prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?S:lib:
?S: This variable holds the name of the directory in which the user wants
?S: to put public library files for the package in question.  It is most
?S: often a local directory such as /usr/local/lib. Programs using this
?S: variable must be prepared to deal with filename expansion.
?S:.
?S:libexp:
?S: This variable is the same as the lib variable, but is filename expanded
?S: at configuration time, for convenient use in your makefiles.
?S:.
: determine where public libraries go
set lib lib
eval $prefixit
case "$lib" in
")
 dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
 set dflt
 eval $prefixup
 ;;
*)  dflt="$lib";;
esac
echo " "
```

```
fn=d~
rp='Where do you want to put the public libraries?'
. ./getfile
lib="$ans"
libexp="$ansexp"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/lib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myread.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  15:05:39  ram
?RCS: patch61: myread script now starts with a "startsh"
?RCS: patch61: miscellaneous fixes
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:14:22  ram
?RCS: patch45: added & escape allowing user to turn on -d from the prompt
?RCS:
?RCS: Revision 3.0.1.4  1994/10/31  09:48:04  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision 3.0.1.3  1994/10/29  15:56:20  ram
?RCS: patch36: added ?F:
 line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.2  1993/08/30  08:57:59  ram
?RCS: patch8: added new visible 'nostick' symbol, mainly for Finish.U
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:39:20  ram
?RCS: patch7: now sticks to the question when no default and empty answer
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:08  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to do a read.  It allows for shell escapes, default assignment and
?X: parameter evaluation.
```

```
?X:
?X: To use this unit, $rp and $dflt must hold the question and the
?X: default answer. The question will be printed by the script itself.
?X: Neither $rp nor $dflt is altered by the script.
?X:
?X: The myread script will stick to the question if no default is proposed
?X: and the user answer is empty, which prevents mistakes. However, at the
?X: end of Configure, there is an exception to this rule (Finish.U) where we
?X: set
 nostick to a non-empty value to allow the Return key to play its role!
?X:
?MAKE:Myread: Options startsh n c trnl
?MAKE: -pick add $@ %<
?V:ans:dflt rp nostick
?F:./myread
?T:COLUMNS xxxm rp dflt answ aok myecho counter
?LINT:change fastread
?X: Some shells (Ultrix) do not understand ${COLUMNS:-80}, sigh!
: compute the number of columns on the terminal for proper question formatting
case "$COLUMNS" in
") COLUMNS='80';;
esac

: set up the echo used in my read
?X:
?X: This variable is intended to be eval'ed. It will echo the two
?X: variables $rp and $dflt (provided this latter has a non null value).
?X: It is mainly used by the myread script to echo the questions.
?X:
?X: The $n and $c below are substituted before Loc does its silly echo check
?X: so don't put a $ on the echo below so we get builtin, even if $echo is
?X: pointing to /bin/echo.
?X:
myecho="case \"\$xxxm\" in
") echo $n \"\$rp $c\" >&4;;
*) case \"\$rp\" in
 ") echo $n \"[\$xxxm] $c\";;
 *)
  if test \`echo \"\$rp [\$xxxm]
  \" | wc -c\` -ge $COLUMNS; then
   echo \"\$rp\" >&4
   echo $n \"[\$xxxm] $c\" >&4
  else
   echo $n \"\$rp [\$xxxm] $c\" >&4
  fi
  ;;
 esac;;
esac"
```

```
: now set up to do reads with possible shell escape and default assignment
cat <<EOSC >myread
$startsh
?X:
?X: Save value of default -- do not alter original in case of eval
?X:
xxxm=\$dflt
$myecho
?X:
?X: If there is no default, then stop, regardless of the value in fastread.
?X: In silent mode, no new-line is to be echoed if the question is empty,
?X: since this is used to wait for the "return" key.
?X:
ans='!'
counter=42
case "\$fastread" in
yes) case "\$dflt" in
 ") ;;
 *) ans=";
  case "\$silent-\$rp" in
  true-) ;;
  *) echo " " >&4;;
  esac;;
 esac;;
*) case "\$silent" in
 true) case "\$rp" in
  ") ans=";;
  esac;;
 esac;;
esac
while expr "X\$ans" : "X!" >/dev/null; do
 read answ
?X:
?X: Run 'eval' on the answer, in order to do variable substitution, in case
?X: the user types $HOME or $WHATEVER. Variables must be evaluated
 now.
?X: Typing '\$HOME' won't currently prevent from substitution -- use '\\$HOME'
?X: The $1 .. $9 and $*, as well as $@, are available to refer to the
?X: default value.
?X:
 set x \$xxxm
 shift
 aok=''; eval "ans=\\"\$answ\\"" && aok=y
 case  "\$answ" in
?X:
?X: Use "!" and not a plain ! because of a bug in BSD 4.4 shell
?X: (reported by Wayne Davison)
```

```
?X: We must handle the shell escapes before dealing with possible variable
?X: substitution, since the shell we're launching in that case will be able
?X: to do it as well as we can -- RAM, 15/03/96
?X
 "!")
  sh 1>&4
  echo " "
  $myecho
  ;;
 !*)
  set x \`expr "X\$ans" : "X!\(.*\)\$"\`
  shift
  sh 1>&4 -c "\$*"
  echo " "
  $myecho
  ;;
 "\$ans")
  case "\$ans" in
?X:
?X: Answers starting with & are hooks allowing to dynamically turn on/off
?X: some Configure options. That's for the future. -- RAM, 09/01/95
?X: Today, we only recognize '& -d' to mean 'go on as if Configure -d, which
?X: is a hardwired behaviour compatible with
 our general scheme.
?X:
  \\&*)
   set x \`expr "X\$ans" : "X&\(.*\)\$"\`
   shift
   case "\$1" in
   -d)
    fastread=yes
    echo "(OK, I'll run with -d after this question.)" >&4
    ;;
   -*)
    echo "*** Sorry, \$1 not supported yet." >&4
    ;;
   esac
   $myecho
   ans=!
   ;;
  esac;;
 *)
  case "\$aok" in
  y)
   echo "*** Substitution done -- please confirm."
   xxxm="\$ans"
   ans=\`echo $n "\$ans$c" | tr '$trnl' ' '\`
   xxxm="\$ans"
```

```
  ans=!
  ;;
 *)
  echo "*** Error -- try again."
  ans=!
  ;;
 esac
 $myecho
 ;;
esac
?X: Stick in myread if no default answer and nothing was answered
case "\$ans\$xxxm\$nostick" in
")
 ans=!
 $myecho
 ;;
esac
counter=\`echo \$counter | awk '{ print --\$0 }'\`
if [ \$counter = 0 ]; then
 echo >&4
 echo >&4 Too many attempts asking the same question.  Giving up.
 exit 1
fi
done
case "\$ans" in
") ans="\$xxxm";;
esac
EOSC
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Myread.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: usenm.U,v 3.0.1.1 1997/02/28 16:26:40 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: usenm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:26:40  ram
?RCS: patch61: don't use nm with the GNU C library
?RCS: patch61: added support for Linux shared libs
?RCS:
```

```
?RCS: Revision 3.0  1993/08/18  12:09:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usenm runnm nm_opt nm_so_opt: cat test Myread Oldconfig myuname grep \
 nm d_gnulibc osname egrep rsrc
?MAKE: -pick add $@ %<
?S:usenm:
?S: This variable contains 'true' or 'false' depending
 whether the
?S: nm extraction is wanted or not.
?S:.
?S:runnm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction should be performed or not, according to the value
?S: of usenm and the flags on the Configure command line.
?S:.
?S:nm_opt:
?S: This variable holds the options that may be necessary for nm.
?S:.
?S:nm_so_opt:
?S: This variable holds the options that may be necessary for nm
?S: to work on a shared library but that can not be used on an
?S: archive library.  Currently, this is only used by Linux, where
?S: nm --dynamic is *required* to get symbols from an ELF library which
?S: has been stripped, but nm --dynamic is *fatal* on an archive library.
?S: Maybe Linux should just always set usenm=false.
?S:.
: see if nm is to be used to determine whether a symbol is defined or not
?X: If there is enough inquiries, it might be worth to wait for the nm
?X: extraction. Otherwise, the C compilations might be a better deal.
?X:
?X: Don't bother if we're
 using GNU libc -- skimo
?LINT:extern PASE
case "$usenm" in
")
 dflt="
 case "$d_gnulibc" in
 "$define")
  echo " "
  echo "nm probably won't work on the GNU C Library." >&4
  dflt=n
  ;;
 esac
 case "$dflt" in
 ")
  if $test "$osname" = aix -a "X$PASE" != "Xdefine" -a ! -f /lib/syscalls.exp; then
   echo " "
```

```
  echo "Whoops!  This is an AIX system without /lib/syscalls.exp!" >&4
  echo "'nm' won't be sufficient on this system." >&4
  dflt=n
 fi
 ;;
esac
case "$dflt" in
") dflt=`$egrep 'inlibc|csym' $rsrc/Configure | wc -l 2>/dev/null`
 if $test $dflt -gt 20; then
  dflt=y
 else
  dflt=n
 fi
 ;;
esac
;;
*)
case "$usenm" in
true|$define) dflt=y;;
*) dflt=n;;
esac
;;
esac
$cat <<EOM

I can use $nm to extract the symbols from your C libraries. This
is a time consuming task which may generate huge output on the disk (up
to 3 megabytes) but that should make the symbols extraction faster. The
alternative is to skip the 'nm' extraction part and to compile a small
test
 program instead to determine whether each symbol is present. If
you have a fast C compiler and/or if your 'nm' output cannot be parsed,
this may be the best solution.

You probably shouldn't let me use 'nm' if you are using the GNU C Library.

EOM
rp="Shall I use $nm to extract C symbols from the libraries?"
. ./myread
case "$ans" in
[Nn]*) usenm=false;;
*) usenm=true;;
esac

?X: Name extraction is to be run if 'nm' usage is wanted and if no -r flag
?X: was provided to configure (in which case we simply re-use the previous
?X: values).
runnm=$usenm
```

```
case "$reuseval" in
true) runnm=false;;
esac

: nm options which may be necessary
case "$nm_opt" in
") if $test -f /mach_boot; then
  nm_opt=" # Mach
 elif $test -d /usr/ccs/lib; then
  nm_opt='-p' # Solaris (and SunOS?)
 elif $test -f /dgux; then
  nm_opt='-p' # DG-UX
 elif $test -f /lib64/rld; then
  nm_opt='-p' # 64-bit Irix
 else
  nm_opt="
 fi;;
esac

: nm options which may be necessary for shared libraries but illegal
: for archive
 libraries.  Thank you, Linux.
case "$nm_so_opt" in
") case "$myuname" in
 *linux*|gnu*)
  if $nm --help | $grep 'dynamic' > /dev/null 2>&1; then
   nm_so_opt='--dynamic'
  fi
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/usenm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libflex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libflex.U,v $
```

```
?RCS: Revision 3.0.1.3  1997/02/28  15:57:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:07:02  ram
?RCS: patch23: now uses full library path instead of -l notation
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:13:25  ram
?RCS: patch16: un-obsoleted this unit to allow smooth lex/flex compilations
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:59  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:libflex: Loc lex libpth _a
?MAKE: -pick add $@ %<
?S:libflex:
?S: This variable contains the argument to pass to the loader in order
?S: to get the flex/lex library routines.  If there is no flex or flex
?S: library, it is null.
?S:.
?T:xxx
: see if we should include -lfl
echo " "
case "$lex" in
*flex)
 xxx=`./loc libfl$_a x $libpth`
 case "$xxx" in
 x)
  echo "No flex library found." >&4
  libflex=''
  ;;
 *)
  echo "flex library found in $xxx." >&4
  libflex="$xxx"
  ;;
 esac
 ;;
*lex)
 xxx=`./loc libl$_a x $libpth`
 case "$xxx" in
 x)
  echo "No lex library found." >&4
  libflex=''
  ;;
 *)
  echo "lex library found in $xxx." >&4
  libflex="$xxx"
  ;;
```

```
 esac
 ;;
*)
echo "You don't seem to have lex or flex, so I won't look for libraries." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/libflex.U
No license file was found, but licenses were detected in source scan.

```
?RCS:     c) the GNU General Public License as published by the Free
?RCS:     Software Foundation; either version 1, or (at your option) any
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_builtin_overflow.U
No license file was found, but licenses were detected in source scan.

```
# $Id: errnolist.sh,v 3.0.1.1 1994/01/24 14:00:00 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Harlan Stenn <harlan@mumps.pfcs.com>
#
# $Log: errnolist.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:00  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:36  ram
# Baseline for dist 3.0 netwide release.
#
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/lib/errnolist.SH
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: getopt.C,v 3.0.1.1 1994/01/24 13:58:40 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
```

```
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* Original Author: unknown, got this off net.sources
*
* $Log: getopt.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:40  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/lib/C/fake/getopt.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Options.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:08:15  ram
?RCS: patch61: optdef.sh now starts with a "startsh"
?RCS: patch61: moved some code from Head.U
?RCS:
?RCS: Revision 3.0.1.6  1995/09/25  09:14:46  ram
?RCS: patch59: protected option parsing code against 'echo -*' option failure
?RCS:
?RCS: Revision 3.0.1.5  1995/05/12  12:04:52  ram
?RCS: patch54: added -K option for experts
?RCS:
?RCS: Revision 3.0.1.4  1995/01/30  14:27:52  ram
?RCS: patch49: this unit now exports file optdef.sh,
 not a variable
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:19:00  ram
?RCS: patch45: new -O option allowing -D and -U to override config.sh settings
?RCS: patch45: file optdef.sh is no longer removed after sourcing
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  15:58:06  ram
?RCS: patch36: ensure option definition file is removed before appending
```

```
?RCS: patch36: protect variable definitions with spaces in them
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:55:44  ram
?RCS: patch30: now uses new me symbol to tag error messages
?RCS: patch30: new -D and -U options to define/undef symbols (JHI)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Command line parsing. It is really important that the variables used here
?X: be not listed in the MAKE line, or they will be saved in config.sh and
?X: loading this file to fetch default answers would clobber the values set
?X: herein.
?X:
?MAKE:Options: startsh
?MAKE: -pick wipe $@ %<
?V:reuseval
 alldone error realsilent silent extractsh fastread \
 override knowitall: config_sh
?T:arg argn symbol config_arg0 config_args config_argc xxx yyy zzz uuu
?T:args_exp args_sep arg_exp
?F:!Configure
?F:./optdef.sh ./cmdline.opt ./posthint.sh ./cmdl.opt
: Save command line options in file UU/cmdline.opt for later use in
: generating config.sh.
?X: This temporary file will be read by Oldsym.U.  I used a temporary
?X: file to preserve all sorts of potential command line quotes and
?X: also because we don't know in advance how many variables we'll
?X: need, so I can't actually declare them on the MAKE line.
?X: The config_args variable won't be quite correct if Configure is
?X: fed something like    ./Configure -Dcc="gcc -B/usr/ccs/bin/"
?X: since the quotes are gone by the time we see them.  You'd have to
?X: reconstruct the command line from the config_arg? lines, but since
?X: I don't imagine anyone actually having to do that, I'm not going
?X: to worry too much.
cat > cmdline.opt
 <<EOSH
: Configure command line arguments.
config_arg0='$0'
config_args='$*'
config_argc=$#
EOSH
argn=1
args_exp=''
args_sep=''
for arg in "$@"; do
 cat >>cmdline.opt <<EOSH
```

```
config_arg$argn='$arg'
EOSH
?X: Extreme backslashitis: replace each ' by '''''
 cat <<EOC | sed -e "s/'/'''''''''''''''/g" > cmdl.opt
$arg
EOC
 arg_exp=`cat cmdl.opt`
 args_exp="$args_exp$args_sep'$arg_exp'"
 argn=`expr $argn + 1`
 args_sep=' '
done
?X: args_exp is good for restarting self: eval "set X $args_exp"; shift; $0 "$@"
?X: used by hints/os2.sh in Perl, for instance
rm -f cmdl.opt

: produce awk script to parse command line options
cat >options.awk <<'EOF'
BEGIN {
 optstr = "A:dD:eEf:hKOrsSU:V"; # getopt-style specification

 len = length(optstr);
 for (i = 1; i <= len; i++) {
  c = substr(optstr, i, 1);
?X: some older awk's do not have the C ?: construct
  if (i < len) a = substr(optstr, i + 1, 1); else a = "";
  if (a == ":") {
   arg[c] = 1;
   i++;
  }
  opt[c] = 1;
 }
}
{
 expect = 0;
 str = $0;
 if (substr(str,
 1, 1) != "-") {
  printf("'%s'\n", str);
  next;
 }
 len = length($0);
 for (i = 2; i <= len; i++) {
  c = substr(str, i, 1);
  if (!opt[c]) {
   printf("-%s\n", substr(str, i));
   next;
  }
  printf("-%s\n", c);
```

```
  if (arg[c]) {
   if (i < len)
    printf("'%s'\n", substr(str, i + 1));
   else
    expect = 1;
   next;
  }
 }
}
END {
 if (expect)
  print "?";
}
EOF

: process the command line options
?X: Use "$@" to keep arguments with spaces in them from being split apart.
?X: For the same reason, awk will output quoted arguments and the final eval
?X: removes them and sets a proper $* array. An 'X' is prependend to each
?X: argument before being fed to echo to guard against 'echo -x', where -x
?X: would be understood as an echo option! It is removed before feeding awk.
set X `for arg in "$@"; do echo "X$arg"; done |
 sed -e s/X// | awk -f options.awk`
eval "set $*"
shift
rm -f options.awk

: set up default values
fastread=''
reuseval=false
config_sh=''
alldone=''
error=''
silent=''
extractsh=''
override=''
knowitall=''
rm
 -f optdef.sh posthint.sh
cat >optdef.sh <<EOS
$startsh
EOS

?X:
?X: Given that we now have the possibility to execute Configure remotely
?X: thanks to the new src.U support, we have to face the possibility
?X: of having to ask where the source lie, which means we need the Myread.U
?X: stuff and possibly other things that might echo something on the
```

```
?X: screen...
?X:
?X: That's not pretty, and might be confusing in 99% of the time. So...
?X: We introduce a new realsilent variable which is set when -s is given,
?X: and we force silent=true if -S is supplied. The Extractall.U unit
?X: will then undo the >&4 redirection based on the value of the
?X: realsilent variable... -- RAM, 18/93/96
?X:

: option parsing
while test $# -gt 0; do
 case "$1" in
 -d) shift; fastread=yes;;
 -e) shift; alldone=cont;;
 -f)
  shift
  cd ..
  if test -r "$1"; then
   config_sh="$1"
  else
   echo "$me: cannot read config file $1." >&2
   error=true
  fi
  cd UU
  shift;;
 -h)
 shift; error=true;;
 -r) shift; reuseval=true;;
 -s) shift; silent=true; realsilent=true;;
 -E) shift; alldone=exit;;
 -K) shift; knowitall=true;;
 -O) shift; override=true;;
 -S) shift; silent=true; extractsh=true;;
 -D)
  shift
  case "$1" in
  *=)
   echo "$me: use '-U symbol=', not '-D symbol='." >&2
   echo "$me: ignoring -D $1" >&2
   ;;
  *=*) echo "$1" | \
    sed -e "s/'/'\''\''/g" -e "s/=\(.*\)/='\1'/" >> optdef.sh;;
  *) echo "$1='define'" >> optdef.sh;;
  esac
  shift
  ;;
 -U)
  shift
```

```
 case "$1" in
 *=) echo "$1" >> optdef.sh;;
 *=*)
  echo "$me: use '-D symbol=val', not '-U symbol=val'." >&2
  echo "$me: ignoring -U $1" >&2
  ;;
 *) echo "$1='undef'" >> optdef.sh;;
 esac
 shift
 ;;
-A)
   shift
   xxx=''
   yyy="$1"
   zzz=''
   uuu=undef
   case "$yyy" in
        *=*) zzz=`echo "$yyy"|sed 's!=.*!!'`
             case "$zzz" in
             *:*) zzz='' ;;
             *)   xxx=append
                  zzz=" "`echo
"$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             esac
             ;;
        esac
        case "$xxx" in
        '')  case "$yyy" in
             *:*) xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'`
                  zzz=`echo "$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             *)   xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'` ;;
             esac
             ;;
        esac
   case "$xxx" in
   append)
 echo "$yyy=\"\${$yyy}$zzz\"" >> posthint.sh ;;
   clear)
 echo "$yyy=''"   >> posthint.sh ;;
   define)
       case "$zzz" in
 '') zzz=define ;;
 esac
 echo "$yyy='$zzz'"  >> posthint.sh ;;
```

```
    eval)
  echo "eval \"$yyy=$zzz\"" >> posthint.sh ;;
    prepend)
  echo "$yyy=\"$zzz\${$yyy}\"" >> posthint.sh ;;
    undef)
        case "$zzz" in
  ")
 zzz="$uuu" ;;
  esac
  echo "$yyy=$zzz"  >> posthint.sh ;;
          *)  echo "$me: unknown -A command '$xxx', ignoring -A $1" >&2 ;;
    esac
    shift
    ;;
 -V) echo "$me generated by metaconfig <VERSION> PL<PATCHLEVEL>." >&2
    exit 0;;
 --) break;;
 -*) echo "$me: unknown option $1" >&2; shift; error=true;;
 *) break;;
 esac
done

case "$error" in
true)
 cat >&2 <<EOM
Usage: $me [-dehrsEKOSV] [-f config.sh] [-D symbol] [-D symbol=value]
               [-U symbol] [-U symbol=] [-A command:symbol...]
 -d : use defaults for all answers.
 -e : go on without questioning past the production of config.sh.
 -f : specify an alternate default configuration file.
 -h : print this help message and exit (with an error status).
 -r : reuse C symbols value if possible (skips costly nm extraction).
 -s : silent mode, only echoes questions and essential information.
 -D : define symbol to have some value:
       -D symbol         symbol gets the value 'define'
       -D symbol=value
   symbol gets the value 'value'
 -E : stop at the end of questions, after having produced config.sh.
 -K : do not use unless you know what you are doing.
 -O : let -D and -U override definitions from loaded configuration file.
 -S : perform variable substitutions on all .SH files (can mix with -f)
 -U : undefine symbol:
       -U symbol    symbol gets the value 'undef'
       -U symbol=   symbol gets completely empty
 -A : manipulate symbol after the platform specific hints have been applied:
  -A symbol=value  append " "value to symbol
  -A append:symbol=value  append value to symbol
  -A define:symbol=value  define symbol to have value
```

```
        -A clear:symbol  define symbol to be ''
  -A define:symbol  define symbol to be 'define'
  -A eval:symbol=value  define symbol to be eval of value
  -A prepend:symbol=value prepend value to symbol
  -A undef:symbol  define symbol to be 'undef'
  -A undef:symbol=  define symbol to be ''
 -V : print version number and exit (with
 a zero status).
EOM
 exit 1
 ;;
esac

?X:
?X: Unless they specified either -S or both -d and -e/E, make sure we're
?X: running interactively, i.e. attached to a terminal. Moved from Head.U to
?X: be able to handle batch configurations...
?X:
?X: We have to hardwire the Configure name and cannot use $me, since if they
?X: said 'sh <Configure', then $me is 'sh'...
?X:
: Sanity checks
case "$fastread$alldone" in
yescont|yesexit) ;;
*)
 case "$extractsh" in
 true) ;;
 *)
  if test ! -t 0; then
   echo "Say 'sh Configure', not 'sh <Configure'"
   exit 1
  fi
  ;;
 esac
 ;;
esac

?X: In silent mode, the standard output is closed. Questions are asked by
?X: outputing on file descriptor #4, which is the original stdout descriptor.
?X: This filters out all the "junk", since all the needed information is written
?X: on #4. Note that ksh will not let us redirect output if the file descriptor
?X: has not be defined yet, unlike sh, hence the following line...--RAM.
exec 4>&1
case "$silent" in
true)
 exec 1>/dev/null;;
esac
```

```
: run the defines and the undefines, if any, but leave the file out there...
touch optdef.sh
. ./optdef.sh
: create the posthint manipulation script and leave the file out there...
?X: this file will be perused by Oldconfig.U
touch posthint.sh
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Options.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: cc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cc.U,v $
?RCS: Revision 3.0.1.4  1995/05/12  12:06:47  ram
?RCS: patch54: may now abort Configure when cc does not work
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:20:11  ram
?RCS: patch45: changed gcc checking message to a more explicit one (WED)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:04:29  ram
?RCS: patch36: detect gcc even when not called as 'gcc' (ADO)
?RCS: patch36: simplified gcc version checking (ADO)
?RCS: patch36: added ?F: line for metalint
 file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:26:06  ram
?RCS: patch23: added support for gcc version (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:30  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:cc: Myread Oldconfig Checkcc test
?MAKE: -pick add $@ %<
?S:cc:
?S: This variable holds the name of a command to execute a C compiler which
?S: can resolve multiple global references that happen to have the same
?S: name.  Usual values are 'cc' and 'gcc'.
?S: Fervent ANSI compilers may be called 'c89'.  AIX has xlc.
?S:.
```

```
?F:!cc.cbu
?D:cc='cc'
: Determine the C compiler to be used
echo " "
case "$cc" in
") dflt=cc;;
*) dflt="$cc";;
esac
rp="Use which C compiler?"
. ./myread
cc="$ans"

: See whether they have no cc but they do have gcc
. ./trygcc
?X: Look for a hint-file generated 'call-back-unit'.  Now that the
?X: user has specified the compiler, we may need to set or change some
?X: other defaults.
if $test -f cc.cbu; then
   . ./cc.cbu
fi
. ./checkcc

Found
 in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/cc.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: Csym.U,v 3.0.1.4 1995/07/25 13:36:29 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Csym.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:36:29  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS: patch56: added quotes for OS/2 support
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:00:33  ram
?RCS: patch54: fixed C test program to bypass gcc builtin type checks (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/31  09:34:13  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
```

```
?RCS: Revision
 3.0.1.1  1993/08/25  14:00:05  ram
?RCS: patch6: added ldflags as a conditional dependency and to compile line
?RCS: patch6: a final double quote was missing in csym variable after eval
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Csym mistrustnm extern_C: Options contains libc libs runnm test \
 +cc +optimize +ccflags +ldflags run rm_try _exe d_cplusplus
?MAKE: -pick add $@ %<
?LINT:define csym
?LINT:use libc
?LINT:extern mistrustnm
?LINT:set mistrustnm
?S:csym:
?S: This shell variable is used internally by Configure to check
?S: whether a given C symbol is defined or not. A typical use is:
?S:  set symbol result [-fva] [previous]
?S:  eval $csym
?S: That will set result to 'true' if the function [-f], variable [-v]
?S: or array [-a] is defined, 'false' otherwise. If a previous value is
?S: given and the -r flag was provided on the command line, that value
?S: is reused without questioning.
?S:.
?S:extern_C:
?S: ANSI C
 requires 'extern' where C++ requires 'extern "C"'. This
?S: variable can be used in Configure to do the right thing.
?S:.
?S:mistrustnm:
?S: This variable can be used to establish a fallthrough for the cases
?S: where nm fails to find a symbol.  If usenm is false or usenm is true
?S: and mistrustnm is false, this variable has no effect.  If usenm is true
?S: and mistrustnm is "compile", a test program will be compiled to try to
?S: find any symbol that can't be located via nm lookup.  If mistrustnm is
?S: "run", the test program will be run as well as being compiled.
?S:.
?V:csym
?T:tval tx tlook tf tdc
?F:!try
: is a C symbol defined?
csym='tlook=$1;
case "$3" in
-v) tf=libc.tmp; tdc="";;
-a) tf=libc.tmp; tdc="[]";;
*) tlook="^$1\$"; tf=libc.list; tdc="()";;
esac;
```

```
case "$d_cplusplus" in
   $define) extern_C="extern \"C\"" ;;
   *)  extern_C="extern" ;;
esac;
tx=yes;
case "$reuseval-$4" in
true-) ;;
true-*) tx=no; eval "tval=\$$4"; case "$tval" in "") tx=yes;; esac;;
esac;
case "$tx"
 in
yes)
?X:
?X: Put symbol inside a printf to fool optimizing compilers...
?X:
?X: We use 'short' instead of 'int' to try to circumvent overzealous
?X: optimizing compilers using built-in prototypes for commonly used
?X: routines to complain when seeing a different external declaration. For
?X: instance, gcc 2.6.3 fails if we use 'int' and we attempt a test against
?X: memcpy() on machines where sizeof(int) == sizeof(char *) (the usual return
?X: type), the compiler assuming it's a built-in declaration given that the
?X: returned size matches. At least with 'short' we are safe! -- RAM, for ADO
?X:
?X: Let's thank GNU cc for making our lives so easy! :-)
?X: (An alternative for the future would be to use our knowledge about gcc
?X: to force a -fno-builtin option in the compile test, in case the 'short'
?X: trick is obsoleted by future gcc releases). -- RAM
?X:
 tval=false;
 if $test "$runnm" = true; then
  if $contains $tlook $tf >/dev/null 2>&1; then
   tval=true;
  elif $test "$mistrustnm"
 = compile -o "$mistrustnm" = run; then
   echo "$extern_C void *$1$tdc; void *(*(p()))$tdc { return &$1; } int main(int argc, char **argv) { if(p() && p() !=
(void *)argv[0]) return(0); else return(1); }"> try.c;
   $cc -o try $optimize $ccflags $ldflags try.c >/dev/null 2>&1 $libs && tval=true;
   $test "$mistrustnm" = run -a -x try && { $run ./try$_exe >/dev/null 2>&1 || tval=false; };
   $rm_try;
  fi;
 else
  echo "$extern_C void *$1$tdc; void *(*(p()))$tdc { return &$1; } int main(int argc, char **argv) { if(p() && p() !=
(void *)argv[0]) return(0); else return(1); }"> try.c;
  $cc -o try $optimize $ccflags $ldflags try.c $libs >/dev/null 2>&1 && tval=true;
  $rm_try;
 fi;
 ;;
*)
```

```
 case "$tval" in
 $define) tval=true;;
 *) tval=false;;
 esac;
 ;;
esac;
eval "$2=$tval"'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/Csym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: mailer.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: mailer.U,v $
?RCS: Revision 3.0.1.3  1995/01/11  15:32:11  ram
?RCS: patch45: can now use Loc variables since path stripping is deferred
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:10:04  ram
?RCS: patch23: ensure full path value is used for rmail also
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:14:18  ram
?RCS: patch16: now use _sendmail vars and friends for portability issues
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:10  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:mailer: test cat rmail mail smail sendmail Getfile Oldconfig
?MAKE: -pick add $@ %<
?S:mailer:
?S: This variable contains the full pathname of a reasonable mailer.
?S: By reasonable, we mean some program which can understand internet
?S: addresses or at least forward them to some internet router. This
?S: mailer should be invoked as "mailer [options] recipients <mail".
?S:.
: determine the name of a reasonable mailer
case "$mailer" in
")
 if $test -f "$sendmail"; then
```

```
  dflt="$sendmail"
 elif $test -f "$smail"; then
  dflt="$smail"
 elif $test -f "$rmail"; then
  dflt="$rmail"
 elif $test -f /bin/mail; then
  dflt=/bin/mail
 else
  dflt=$mail
 fi
 ;;
*)  dflt="$mailer";;
esac
$cat <<EOM

I need the full pathname of the program used to deliver mail on your system.
A typical answer would be /usr/lib/sendmail or /bin/rmail, but you may choose
any other program, as long as it can be fed from standard input and will
honour any user-supplied headers.

EOM
fn=f
rp='Mail
 transport agent to be used?'
. ./getfile
mailer="$ans"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/mailer.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: baserev.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: baserev.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:baserev: Null
?MAKE: -pick wipe $@ %<
?S:baserev:
```

```
?S: The base revision level of this package, from the .package file.
?S:.
: set the base revision
baserev=<BASEREV>
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/baserev.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?X:
?X: This unit allows the duplication of the source tree to the current
?X: directory via symbolic links.  This must be requested explicitly
?X: by them issuing a -Dmksymlinks on the command line.
?X:
?MAKE:Mksymlinks: Mkdirp lns issymlink src rsrc pkgsrc
?MAKE: -pick add $@ %<
?F:!UU
?T: dir filename tmppwd filelist
?LINT:extern mksymlinks
@if {test -f ../MANIFEST}
: Duplicate the tree with symbolic links if -Dmksymlinks was supplied
case "$mksymlinks"
 in
$define|true|[yY]*)
 echo " "
 case "$src" in
 "|'.') echo "Cannot create symlinks in the original directory." >&4
  exit 1
  ;;
 *) case "$lns:$issymlink" in
  *"ln"*" -s:"*"test -"?)
   echo "Creating the symbolic links..." >&4
   echo "(First creating the subdirectories...)" >&4
   cd ..
   awk '{print $1}' $src/MANIFEST | grep / | sed 's:/[^/]*$::' | \
    sort -u | while true
```

```
  do
   read dir
   test -z "$dir" && break
   ./UU/mkdirp $dir 2>/dev/null
   if test -d $dir; then
    : ok
   else
    echo "Failed to create '$dir'.  Aborting." >&4
    exit 1
   fi
  done
  echo "(Now creating the symlinks...)" >&4
  awk '{print $1}' $src/MANIFEST | while true; do
   read filename
   test -z "$filename" && break
   if test -f $filename; then
    if $issymlink $filename; then
     rm -f $filename
    fi
   fi
   if test -f $filename; then
    echo "$filename already exists, not symlinking."
   else
?X: Note that the following works because "$pkgsrc" is absolute
    ln
 -s $pkgsrc/$filename $filename
   fi
  done
?X: Check that everything was correctly copied
  echo "(Checking current directory...)" >&4
  cd UU
  awk '$1 !~ /PACK[A-Z]+/ {print $1}' "$rsrc/MANIFEST" | \
   (split -l 50 2>/dev/null || split -50)
  rm -f missing
  tmppwd=`pwd`
  for filelist in x??; do
   (cd ..; ls `cat "$tmppwd/$filelist"` \
    >/dev/null 2>>"$tmppwd/missing")
  done
  if test -s missing; then
   echo "Failed duplication of source tree.  Aborting." >&4
   exit 1
  fi
  ;;
 *) echo "(I cannot figure out how to do symbolic links, ignoring!)" >&4
  ;;
 esac
 ;;
```

```
 esac
 ;;
esac

@end
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Mksymlinks.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libnm.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libnm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:08:26  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:01  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libnm: test Loc libpth _a
?MAKE: -pick add $@ %<
?S:libnm:
?S: This variable contains the argument to pass to the loader in order
?S: to get the new math library routines.  If there is no new math
?S: library, it is null.
?S:.
?T:ans
?O:
 use libswanted='-lnm' instead (see libs.U).
: see if we should include -lnm
echo " "
if $test -r /usr/lib/libnm$_a || $test -r /usr/local/lib/libnm$_a ; then
 echo "New math library found." >&4
 libnm='-lnm'
else
 ans=`./loc libnm$_a x $libpth`
 case "$ans" in
 x)
  echo "No nm library found--the normal math library will have to do." >&4
  libnm=''
```

```
  ;;
 *)
  echo "New math library found in $ans." >&4
  libnm="$ans"
  ;;
 esac
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/libnm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: so.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: so.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:30:04  ram
?RCS: patch36: now tells user how he can suppress shared lib lookup (ADO)
?RCS: patch36: removed echo at the top, since it's now in the here-doc (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:07:02  ram
?RCS: patch30: created
?RCS:
?X:
?X: This unit computes the shared-object / shared-lib extension
?X:
?MAKE:so d_libname_unique: test libpth Loc Myread Oldconfig cat Setvar
?MAKE: -pick add $@ %<
?S:so:
?S: This
 variable holds the extension used to identify shared libraries
?S: (also known as shared objects) on the system. Usually set to 'so'.
?S:.
?S:d_libname_unique:
?S: This variable is defined if the target system insists on unique
?S: basenames for shared library files. This is currently true on Android,
?S: false everywhere else we know of.
?S: Defaults to 'undef'.
?S:.
?LINT:set d_libname_unique
?T: xxx
```

```
: compute shared library extension
case "$so" in
")
 if xxx=`./loc libc.sl X $libpth`; $test -f "$xxx"; then
  dflt='sl'
 else
  dflt='so'
 fi
 ;;
*) dflt="$so";;
esac
$cat <<EOM

On some systems, shared libraries may be available.  Answer 'none' if
you want to suppress searching of shared libraries for the remainder
of this configuration.

EOM
rp='What is the file extension used for shared libraries?'
. ./myread
so="$ans"

: Does target system insist that shared library basenames are unique
$cat << EOM

Some dynamic loaders assume that the *basename* of shared library
 filenames
are globally unique.  We'll default this to undef as we assume your system
is not this weird. Set to defined if you're on one of them.

EOM

dflt='n'
rp='Make shared library basenames unique?'
. ./myread
case "$ans" in
y|Y) val="$define" ;;
*)   val="$undef"  ;;
esac
set d_libname_unique
eval $setvar
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/so.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: dlsrc.U,v$
?RCS:
```

```
?RCS: Copyright (c) 1996-1998, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: dlext.U,v $
?RCS:
?X:  hpux support thanks to Jeff Okamoto <okamoto@hpcc101.corp.hp.com>
?X:
?X:  To create a shared library, you must compile ALL source files in the
?X:  library with +z (or possibly +Z if the library is whopping huge),
?X:  then link the library with -b.  Example:
?X:   cc -c +z module_a.c
?X:   cc -c +z module_b.c
?X:   ld -b module_a.o module_b.o -o module.sl
?X:
?MAKE:dlext: \
 Getfile Myread cat usedl so
?MAKE: -pick add $@ %<
?Y:BOTTOM
?S:dlext:
?S: This variable contains the extension that is to be used for the
?S: dynamically loaded modules that perl generates.
?S:.
: Check what extension to use for shared libs
case "$usedl" in
$define|y|true)
 $cat <<
 EOM

On a few systems, the dynamically loaded modules that perl generates and uses
will need a different extension than shared libs. The default will probably
be appropriate.

EOM
 case "$dlext" in
 ") dflt="$so" ;;
 *) dflt="$dlext" ;;
 esac
 rp='What is the extension of dynamically loaded modules'
 . ./myread
 dlext="$ans"
 ;;
*)
 dlext="none"
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/dlext.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorman3dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999-2000, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorman3dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorman3dir vendorman3direxp installvendorman3dir: man3dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorman3dir:
?S: This variable contains the name of the directory for man3
?S: pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing in this directory.
?S: Vendors
 who distribute perl may wish to place their own
?S: man3 pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorman3direxp:
?S: This variable is the ~name expanded version of vendorman3dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorman3dir="
?S:installvendorman3dir:
?S: This variable is really the same as vendorman3direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorman3dir
: Set the vendorman3dir variables
case "$vendorprefix" in
") vendorman3dir="
 vendorman3direxp="
```

```
 ;;
*) : determine where vendor-supplied module manual pages go.
 case "$vendorman3dir" in
 ") dflt=`echo "$man3dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorman3dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=nd~+
 rp='Pathname
 for the vendor-supplied manual section 3 pages?'
 . ./getfile
 vendorman3dir="$ans"
 vendorman3direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorman3dir" = "X" && vendorman3dir=' '
prefixvar=vendorman3dir
. ./installprefix
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/vendorman3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: d_byacc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: d_byacc.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:31:14  ram
?RCS: patch61: created
?RCS:
?MAKE:d_byacc: byacc Setvar
?MAKE: -pick add $@ %<
?S:d_byacc:
?S: This variable indicates whether byacc is available.
?S: If the user has specified 'portability', then Makefile.SH
?S: sees $byacc='byacc' whether or not the user actually has
?S: byacc.  This variable allows us to determine in a makefile
```

```
?S: if we really
 have byacc.
?S:.
?LINT:set d_byacc
: Check if we really have byacc
case "$byacc" in
"|'byacc') val="$undef" ;;
*) val="$define" ;;
esac
set d_byacc
eval $setvar
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_byacc.U
No license file was found, but licenses were detected in source scan.

?RCS: You may redistribute only under the terms of the Artistic Licence,

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_nolnbuf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_truncate.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setrgid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_inetd.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/filexp_path.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_systwgcf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/cppfilecom.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_sysparam.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_syssock.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_fgetpos.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_poll.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setpgrp2.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_newsadm.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_values.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_systable.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_system.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_perror.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/vaproto.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_tzname.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_whoami.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_sysresrc.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_fcntl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_killpg.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_sysfile.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_sysndir.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_syscall.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_flock.U

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/nametype.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_cuserid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_lockf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_systypes.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setegid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_fmod.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_memccpy.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_popen.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_systimes.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_sigvec.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_chroot.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_gdbm.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_SHM_MAC.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_select.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_mktime.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_msem_lck.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Loc_sed.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_hidnet.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_sfio.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/cpp_trad.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_seteuid.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_wait4.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_munmap.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_shmget.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_fsetpos.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_getwd.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Obsol_h.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_dbl_dig.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_accept4.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_dlerror.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_getopt.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strdup.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_charsprf.U
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/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_tcgtpgrp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_dld.U
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* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_getppid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_msgctl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/sbrktype.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_drem.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_link.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setgrps.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_raster.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_memalign.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_ffs.U

*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/ipc.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/locdist.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_limits.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_pause.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_bcopy.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setlocale.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_waitpid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_ulimit.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_chown.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_string.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_sigblock.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_arpainet.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_scandir.U
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* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_usendir.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_bsdjmp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_memmove.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_difftime.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_scorfl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/basicshell.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_syspoll.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Getfile.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/pkgsrc.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_sysioctl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_getpgrp2.U
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* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_dup3.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_usleep.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Magic_h.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_stdlib.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_sysdir.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setlnbuf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/mkdep.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_locconv.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_mbstowcs.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_mblen.U
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/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_sjis2jis.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_float.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_syswait.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_msgrcv.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_dup2.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_xdrs.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_ftime.U

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setreuid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/defeditor.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_unistd.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setregid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strtod.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_systimeb.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_siglist.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_euc2jis.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strtok.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/i_stdlib.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_dbm.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_havetlib.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_ffs.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/ilp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_uwait.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_linuxstd.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_stat.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_crypt.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_pathconf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_cbrt.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_preadv.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_sigsetmk.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_sysselct.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_setlocale.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_umask.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Obsol_sh.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_fork.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_pread.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strstr.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/i_termio.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_pwrite.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_rmdir.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setruid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_getpgid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_symlink.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_vfork.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_wctomb.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_gethid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_fchmod.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setprior.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_memset.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_shmdt.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_dlfcn.U
*

/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_stddef.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_rdchk.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_dbl_dig.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_readdir.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_mkostemp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/prefshell.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_memcpy.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_internet.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_msync.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/mboxchar.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/registers.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/rootid.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strtol.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_pidcheck.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_wcstombs.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_rename.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_pipe2.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_fenv.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Assert.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_mkfifo.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_msgget.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strxfrm.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_semctl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strchr.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_NeWS.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strcspn.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_regex.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_shmctl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_sysun.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_semget.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_locale.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_utime.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_bcmp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_math.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/mailfile.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_fcntl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_syslog.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_inetaton.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_nice.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_PORTAR.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_readlink.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_tcstpgrp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strccmp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/newslib.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_bzero.U

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_memcmp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_regcmp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_mbtowc.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_strcoll.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_itimer.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_sbrk.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_su_chown.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_sysconf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/i_sysstat.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/vaproto.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_stdint.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_chsize.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_mkdir.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_ckeypad.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_ctermid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_psignal.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_rusage.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/compiler_warning.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_semop.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_speedopt.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/newsspool.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_getlogin.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setsid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_wait3.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/orgname.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_fchown.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_getprior.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_alarm.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_getgrps.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_setpgid.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/nlist_pfx.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_normsig.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_brokstat.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_pipe.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_lstat.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_sighold.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_tminsys.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_ftrncate.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Prefixit.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_strxfrm_l.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_msgsnd.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_pwritev.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/groupstype.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sysman.U,v 3.0.1.2 1994/06/20 07:08:43 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sysman.U,v $
?RCS: Revision 3.0.1.2  1994/06/20  07:08:43  ram
?RCS: patch30: now explicitly states that /usr/man/man1 is the default
?RCS: patch30: added /usr/local/man/man1 to the search list
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:13:50  ram
?RCS: patch10: added support for /local/man/man1 (WAD)
?RCS: patch10: added temporary syspath variable to cut down on line length
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:55  ram
?RCS: Baseline for dist 3.0 netwide
 release.
?RCS:
?MAKE:sysman: test Loc Oldconfig
?MAKE: -pick add $@ %<
?S:sysman:
?S: This variable holds the place where the manual is located on this
?S: system. It is not the place where the user wants to put his manual
?S: pages. Rather it is the place where Configure may look to find manual
?S: for unix commands (section 1 of the manual usually). See mansrc.
?S:.
?T:syspath
: determine where manual pages are on this system
echo " "
case "$sysman" in
")
 syspath='/usr/share/man/man1 /usr/man/man1'
 syspath="$syspath /usr/man/mann /usr/man/manl /usr/man/local/man1"
 syspath="$syspath /usr/man/u_man/man1"
 syspath="$syspath /usr/catman/u_man/man1 /usr/man/l_man/man1"
 syspath="$syspath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 syspath="$syspath /usr/man/man.L /local/man/man1 /usr/local/man/man1"
 sysman=`./loc . /usr/man/man1 $syspath`
 ;;
esac
if $test -d "$sysman"; then
```

```
 echo "System manual is in $sysman." >&4
else
 echo "Could not find manual pages in source form."
 >&4
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/sysman.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: siteprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: siteprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:siteprefix siteprefixexp +oldsiteprefix: Getfile Loc Oldconfig cat package prefix
?MAKE: -pick add $@ %<
?S:siteprefix:
?S: This variable holds the full absolute path of the directory below
?S: which the user will install add-on packages.
?S: See INSTALL for usage and examples.
?S:.
?S:siteprefixexp:
?S: This variable holds the full absolute path of the
 directory below
?S: which the user will install add-on packages.  Derived from siteprefix.
?S:.
?S:oldsiteprefix:
?S: This variable is set non-null if the siteprefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
: Set the siteprefix variables
$cat <<EOM

After $package is installed, you may wish to install various
add-on modules and utilities.  Typically, these add-ons will
be installed under $prefix with the rest
of this package.  However, you may wish to install such add-ons
elsewhere under a different prefix.
```

```
If you do not wish to put everything under a single prefix, that's
ok.  You will be prompted for the individual locations; this siteprefix
is only used to suggest the defaults.

The default should be fine for most people.

EOM
fn=d~+
rp='Installation prefix to use for add-on modules and utilities?'
: XXX Here might be another good place for an installstyle setting.
case "$siteprefix" in
") dflt=$prefix ;;
*)  dflt=$siteprefix
 ;;
esac
. ./getfile
: XXX Prefixit unit does not yet support siteprefix and vendorprefix
oldsiteprefix=''
case "$siteprefix" in
") ;;
*) case "$ans" in
 "$prefix") ;;
 *) oldsiteprefix="$prefix";;
 esac
 ;;
esac
siteprefix="$ans"
siteprefixexp="$ansexp"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/siteprefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: nis.U,v 3.0.1.3 1997/02/28 16:17:38 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: nis.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:17:38  ram
?RCS: patch61: ensure suitable defaults for hostcat and friends
?RCS:
```

```
?RCS: Revision 3.0.1.2  1995/03/21  08:48:34  ram
?RCS: patch52: continued fix for NeXT NIS/NetInfo handling
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:16:23  ram
?RCS: patch51: now correctly handles NeXT using NIS rather than NetInfo
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:passcat
 groupcat hostcat: Myread Oldconfig test contains
?MAKE: -pick add $@ %<
?S:passcat:
?S: This variable contains a command that produces the text of the
?S: /etc/passwd file.  This is normally "cat /etc/passwd", but can be
?S: "ypcat passwd" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
?S:groupcat:
?S: This variable contains a command that produces the text of the
?S: /etc/group file.  This is normally "cat /etc/group", but can be
?S: "ypcat group" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
?S:hostcat:
?S: This variable contains a command that produces the text of the
?S: /etc/hosts file.  This is normally "cat /etc/hosts", but can be
?S: "ypcat hosts" when NIS is used.
?S: On some systems, such as os390, there may be no equivalent
?S: command, in which case this variable is unset.
?S:.
:
 see if we have to deal with yellow pages, now NIS.
?X: NeXT gives us some fun here, as always, by having both NIS (former YP)
?X: and NetInfo. But since it has both, it's ok to put the test inside the if.
?X: Contributed by Thomas Neumann <tom@smart.bo.open.de>.
if $test -d /usr/etc/yp || $test -d /etc/yp || $test -d /usr/lib/yp; then
@if passcat || groupcat
 case "$passcat" in
 nidump*) ;;
 *)
  case "$passcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
  else
```

```
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the passwd file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) passcat='ypcat passwd'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='ypcat group'
@end
   ;;
  *) passcat='cat /etc/passwd'
@if groupcat
   echo "(Assuming /etc/group is also local.)"
   groupcat='cat /etc/group'
@end
   ;;
  esac
  ;;
 esac
@end
@if hostcat
 case "$hostcat" in
 nidump*) ;;
 *)
  case
 "$hostcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the hosts file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) hostcat='ypcat hosts';;
  *) hostcat='cat /etc/hosts';;
  esac
  ;;
 esac
@end
```

```
fi
?X: Ensure suitable default -- Manoj Srivastava
case "$hostcat" in
") test -f /etc/hosts && hostcat='cat /etc/hosts';;
esac
case "$groupcat" in
") test -f /etc/group && groupcat='cat /etc/group';;
esac
case "$passcat" in
") test -f /etc/passwd && passcat='cat /etc/passwd';;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/nis.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitescript.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitescript.U,v $
?RCS:
?MAKE:sitescript sitescriptexp installsitescript : Getfile Oldconfig test \
 Setprefixvar sitebin siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitescript="
?S:sitescript:
?S: This variable holds the name of the directory in which the user wants
?S: to put add-on publicly executable files for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S: The standard
 distribution will put nothing in this directory.
?S: After perl has been installed, users may install their own local
?S: scripts in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitescriptexp="
?S:sitescriptexp:
?S: This is the same as the sitescript variable, but is filename expanded at
```

```
?S: configuration time, for use in your makefiles.
?S:.
?D:installsitescript="
?S:installsitescript:
?S: This variable is usually the same as sitescriptexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?LINT:change prefixvar
?LINT:set installsitescript
?LINT:set sitescript
?LINT:set sitescriptexp
: determine where add-on public executable scripts go
case "$sitescript" in
") dflt=$siteprefix/script
 $test -d $dflt || dflt=$sitebin ;;
*)  dflt="$sitescript" ;;
esac
fn=d~+
rp='Pathname where add-on public executable scripts
 should be installed?'
. ./getfile
prefixvar=sitescript
. ./setprefixvar
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/sitescript.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Init.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:45:59  ram
?RCS: patch44: removed Options from MAKE to prevent Init overrides
?RCS: patch44: option processing now done after Myinit thanks to new Begin.U
?RCS: patch44: moved "Beginning of configuration questions" to Begin.U
?RCS: patch44: moved signal trapping instruction to Begin.U as well
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:02  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?X:
?X: This file initializes certain default variables
 used by Configure.  They
?X: may be overridden or added to by definitions in Myinit.U.
?X:
?MAKE:Init eunicefix _exe: Null
?MAKE: -pick add $@ %<
?MAKE: -pick weed $@ ./Init
?S:eunicefix:
?S: When running under Eunice this variable contains a command which will
?S: convert a shell script to the proper form of text file for it to be
?S: executable by the shell.  On other systems it is a no-op.
?S:.
?S:_exe (exe_ext):
?S: This variable defines the extension used for executable files.
?S: For unix it is empty.  Other possible values include '.exe'.
?S: DJGPP, Cygwin and OS/2 use '.exe'.  Stratus VOS uses '.pm'.
?S: On operating systems which do not require a specific extension
?S: for executable files, this variable is empty.
?S:.
?V:define undef smallmach:rmlist
?X:
?X: Throughout the units, one may make use of $define and $undef to reference
?X: a defined symbol or an undefined one. There is no need to add them in
?X: the dependency line since this unit makes them visible via ?V:, and
?X:
 everyone inherits from those symbols since by convention Init.U is the
?X: root dependency.
?X:
?T: DJGPP
: Initialize wide constants
define='define'
undef='undef'
smallmach='pdp11 i8086 z8000 i80286 iAPX286'
rmlist=''

: We must find out about Eunice early
eunicefix=':'
if test -f /etc/unixtovms; then
 eunicefix=/etc/unixtovms
fi
if test -f /etc/unixtovms.exe; then
 eunicefix=/etc/unixtovms.exe
fi

: Set executable suffix now -- needed before hints available
if test -f "/libs/version.library"; then
```

```
 : Amiga OS
  _exe=""
elif test -f "/system/gnu_library/bin/ar.pm"; then
 : Stratus VOS
 _exe=".pm"
elif test -n "$DJGPP"; then
 : DOS DJGPP
  _exe=".exe"
elif test -d c:/. ; then
 : OS/2 or cygwin
 _exe=".exe"
else
 : All other UNIX systems
 _exe=""
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Init.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:siteman3dir siteman3direxp installsiteman3dir: Getfile \
 Setprefixvar prefix siteprefix man3dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:siteman3dir="
?S:siteman3dir:
?S: This variable contains the name of the directory in which site-specific
?S: library man source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After
 perl has been installed, users may install their own local
?S: man3 pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:siteman3direxp="
```

```
?S:siteman3direxp:
?S: This variable is the same as the siteman3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsiteman3dir="
?S:installsiteman3dir:
?S: This variable is really the same as siteman3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsiteman3dir
?LINT:set siteman3dir
?LINT:set siteman3direxp
: determine where add-on library man pages go
case "$siteman3dir" in
") dflt=`echo $man3dir | $sed "s#^$prefix#$siteprefix#"` ;;
*) dflt=$siteman3dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname
 where the site-specific library manual pages should be installed?'
. ./getfile
prefixvar=siteman3dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/siteman3dir.U
No license file was found, but licenses were detected in source scan.

Perl5 Metaconfig Units

Copyright (c) 1996-1998, Andy Dougherty
Copyright (c) 1999-2011, H.Merijn Brand
All rights reserved.

These units are the ones used to build Configure and config_h.SH
in the Perl5 distribution.

metaconfig will first look in its standard locations (specified when you
installed dist). It will then recurse through the 'U' subdirectory
and find any additional "private" units. Private units override
standard ones supplied with metaconfig.

Files in this directory:

README
This file.

Glossary.patch
The standard dist units contain some strings that make pod2man complain. This patch silences those warnings. As new units are added and Configure is regenerated, this patch may need more and more 'fuzz' to be applied. It should be freshly regenerated every once in a while. See also mkgloss.pl

ln-all.pl
Re-generate the all/ folder

mkglossary
A script
to regenerate Porting/Glossary. You have to manually edit the top of the script to point the location of your metaconfig units. It is called automatically by 'mksample'. See also mkgloss.pl

mkgloss.pl
A perl script that calls U/mkglossary from the perl source tree, sorts the list of symbols, and applies the patch mentioned in Glossary.patch. When called on its own, redirect the output to a temporary file, and compare that file to Porting/Glossary before applying.

mksample
A script to regenerate Porting/config.sh and Porting/config.H. It also calls mkglossary, if necessary.

Subdirectories:

The units and other related files have been broken up into the following directories.

a_dvisory/
These are units that have to go first in the generated config_h.SH. A word of explanation: Configure and config_h.SH are generated from 'Units' (the *.U files). Files indicate dependencies (using make(1)), and Configure is built to follow those dependencies.
However, config_h.SH is simply built by putting all the units in alphabetical order and extracting the relevant lines. (This could be fixed, I suppose, but it wasn't trivial the one time I looked.)
The a_dvisory/ directory, then, is a place to put units that need to be early in config_h.SH. (Most units are self-contained and ought to be able to go anywhere. However, some things, like

byteorder, need to have the #defines from multiarch available.)

acl/
This is an old patch to begin to detect and use ACL (access control list) file protection schemes.

all/
A folder that conveniently holds symbolic links to all the modules that are used to build the current Configure and config_h.SH.

compline/
These are similar to the standard units, but I have modified them to have a more uniform compile command line, usually using the new Compile.U unit. (The ccflags.U unit is perl-specific since it mentions -DDEBUGGING and
-DPOSIX_SOURCE, but that's the only place
it is perl-specific.)

dist_patches/
These are patches to dist that must be applied before it is built and installed. I have submitted these for inclusion in the regular dist distribution. They have already been applied to the ../dist-3.0at70b directory.

ebcdic/
These are units that had to be specially modified to work under either EBCDIC or ASCII.

installdirs/
These are units to handle perl's installation directories and related issues.

modified/
These are modified versions of the standard units. Also included in this directory are new units that are clearly derived from existing units. I have submitted these for inclusion in the regular dist distribution.

nullified/
These are null units that replace units in the standard distribution. Typically they are there because some part of the perl source accidentally uses a symbol that metaconfig thinks means we want the corresponding
unit.

perl/
These are specific to perl. Some are heavily derived from original dist units, and are marked as such. Others are original.

perl_patches/
These are patches to the perl source. This directory should ordinarily be empty, but there may have been drift between the standard version of perl and the one associated with these units.

protos/
These are units modified to use the new Hasproto.U or Protochk.U units to check for prototypes.

threads/
These are specific to threading perl.

typedefs/
These are standard units modified to use the modified Typedef.U unit to check for typedefs. (The modified Typdef.U includes a function to avoid unnecessary prompts if the typdef being searched for exists.)

Where appropriate, I submitted these units for inclusion into the regular dist distribution. However, since dist is no longer actively maintained, and the alternative is for *me* to actively maintain it, the units just
sit here.

Copyright Information:

Unless otherwise indicated, the files contained in this distribution are:

Copyright (c) 1996-1998, Andy Dougherty

The following licensing terms apply to all files contained in this distribution:

You may distribute the files contained in this distribution under the terms of either

a) the "Artistic License" which comes with Perl, or

b) the "Artistic License" which comes with dist, or

c) the GNU General Public License as published by the Free Software Foundation; either version 1, or (at your option) any later version (see the file "Copying" that comes with the Perl distribution).

Which one to use is your choice.

The units in the "modified" directory have been derived from units
associated with the metaconfig program of Raphael Manfredi's "dist"
distribution. These units list Raphael Manfredi as the Copyright holder.
dist is distributed under a modified version of the Perl Artistic License.
Clause 7 of this modified
 license as contained in dist-3.0-pl60 provides:

> 7. You may reuse parts of this Package in your own programs, provided
> that you explicitly state where you got them from, in the source code
> (and, left to your courtesy, in the documentation), duplicating
> all the associated copyright notices and disclaimers. Besides
> your changes, if any, must be clearly marked as such. Parts reused
> that way will no longer fall under this license if, and only if,
> the name of your program(s) have no immediate connection with the
> name of the Package itself or its associated programs. You may then
> apply whatever restrictions you wish on the reused parts or choose
> to place them in the Public Domain--this will apply only within the
> context of your package.

In accordance with this clause, the versions of these units
contained here are made available under the same terms as the
rest of the units.

If you have any questions about the use of these units or about
the differences
 between these units and the standard versions, please
feel free to ask.

Andy Dougherty doughera@lafayette.edu
Dept. of Physics
Lafayette College
Easton, PA 18042-1782

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/README
No license file was found, but licenses were detected in source scan.

?RCS: $Id: afs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root

```
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: afs.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:23:06  ram
?RCS: patch61: can now explicitly tell Configure whether AFS is running
?RCS:
?RCS: Revision 3.0.1.1  1993/08/24  12:24:43  ram
?RCS: patch3: created
?RCS:
?MAKE:afs afsroot: test
?MAKE: -pick add $@ %<
?S:afs:
?S: This variable is set to 'true' if AFS (Andrew File System) is used
?S: on the system, 'false' otherwise.  It is possible to override this
?S: with a hint value or command line option,
 but you'd better know
?S: what you are doing.
?S:.
?S:afsroot:
?S: This variable is by default set to '/afs'. In the unlikely case
?S: this is not the correct root, it is possible to override this with
?S: a hint value or command line option.  This will be used in subsequent
?S: tests for AFSness in the configure and test process.
?S:.
: allow them to override the AFS root
case "$afsroot" in
") afsroot=/afs ;;
*) afsroot=$afsroot ;;
esac

: is AFS running?
echo " "
case "$afs" in
$define|true) afs=true ;;
$undef|false) afs=false ;;
*) if $test -d $afsroot; then
  afs=true
 else
  afs=false
 fi
 ;;
esac
if $afs; then
 echo "AFS may be running... I'll be extra cautious then..." >&4
else
 echo "AFS does not seem to be running..." >&4
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/afs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: usenm.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:26:40  ram
?RCS: patch61: don't use nm with the GNU C library
?RCS: patch61: added support for Linux shared libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:usenm runnm nm_opt nm_so_opt: cat test Myread Oldconfig grep \
 d_gnulibc nm egrep rsrc osname Guess
?MAKE: -pick add $@ %<
?S:usenm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction is wanted
 or not.
?S:.
?S:runnm:
?S: This variable contains 'true' or 'false' depending whether the
?S: nm extraction should be performed or not, according to the value
?S: of usenm and the flags on the Configure command line.
?S:.
?S:nm_opt:
?S: This variable holds the options that may be necessary for nm.
?S:.
?S:nm_so_opt:
?S: This variable holds the options that may be necessary for nm
?S: to work on a shared library but that can not be used on an
?S: archive library.  Currently, this is only used by Linux, where
?S: nm --dynamic is *required* to get symbols from an ELF library which
?S: has been stripped, but nm --dynamic is *fatal* on an archive library.
?S: Maybe Linux should just always set usenm=false.
?S:.
: see if nm is to be used to determine whether a symbol is defined or not
?X: If there is enough inquiries, it might be worth to wait for the nm
```

```
?X: extraction. Otherwise, the C compilations might be a better deal.
?X:
?X: Don't bother if we're using GNU libc -- skimo
case "$usenm"
 in
")
 dflt="
 case "$d_gnulibc" in
 "$define")
  echo " "
  echo "$nm probably won't work on the GNU C Library." >&4
  dflt=n
  ;;
 esac
 case "$dflt" in
 ")
  if $test "$osname" = aix -a ! -f /lib/syscalls.exp; then
   echo " "
   echo "Whoops!  This is an AIX system without /lib/syscalls.exp!" >&4
   echo "'nm' won't be sufficient on this system." >&4
   dflt=n
  fi
  ;;
 esac
 case "$dflt" in
 ")
  if ./gnu; then
   echo " "
   echo "Hmm...  A GNU system without a GNU C Library?  Weird..." >&4
   dflt=n
  else
   dflt=`$egrep 'inlibc|csym' $rsrc/Configure | wc -l 2>/dev/null`
   if $test $dflt -gt 20; then
    dflt=y
   else
    dflt=n
   fi
  fi
  ;;
 esac
 ;;
*)
 case "$usenm" in
 true|$define) dflt=y;;
 *) dflt=n;;
 esac
 ;;
esac
```

```
$cat <<EOM

I can use $nm to extract the symbols from your C libraries. This
is a time consuming task which may generate huge output on the disk (up
to 3 megabytes) but that should make the symbols extraction faster. The
alternative is to skip the
 'nm' extraction part and to compile a small
test program instead to determine whether each symbol is present. If
you have a fast C compiler and/or if your 'nm' output cannot be parsed,
this may be the best solution.

EOM
rp='Shall I use nm to extract C symbols from the libraries?'
. ./myread
case "$ans" in
[Nn]*) usenm=false;;
*) usenm=true;;
esac

?X: Name extraction is to be run if 'nm' usage is wanted and if no -r flag
?X: was provided to configure (in which case we simply re-use the previous
?X: values).
runnm=$usenm
case "$reuseval" in
true) runnm=false;;
esac

: nm options which may be necessary
case "$nm_opt" in
") if $test -f /mach_boot; then
  nm_opt="  # Mach
 elif $test -d /usr/ccs/lib; then
  nm_opt='-p'  # Solaris (and SunOS?)
 elif $test -f /dgux; then
  nm_opt='-p'  # DG-UX
 elif $test -f /lib64/rld; then
  nm_opt='-p'  # 64-bit Irix
 else
  nm_opt="
 fi;;
esac

?X: nm options which may be necessary for shared libraries but illegal
?X: for archive libraries.  Thank you,
 Linux.
case "$nm_so_opt" in
") case "$osname" in
 *linux*)
```

```
  if $nm --help | $grep 'dynamic' > /dev/null 2>&1; then
   nm_so_opt='--dynamic'
  fi
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/usenm.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Null.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Null.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:10  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit ends up producing shell code to set all variables to ".  This
?X: probably isn't necessary, but I'm paranoid.  About certain things.
?X:
?MAKE:Null: Head
?MAKE: -pick add.Null $@ %<
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Null.U
No license file was found, but licenses were detected in source scan.

* Feel free to modify any of this as the need arises. Note, however,

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/metaconfig.html
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: patchlevel.U,v 3.0.1.1 1997/02/28 16:18:41 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: This file is included with or a derivative work of a file included
```

```
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: patchlevel.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:18:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:31  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:patchlevel revision version subversion \
 perl_patchlevel version_patchlevel_string \
 api_revision api_version api_subversion api_versionstring: \
 package test rsrc echo awk osname
?MAKE: -pick
 add $@ %<
?S:revision:
?S: The value of revision comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "5".
?S: In patchlevel.h, this is referred to as "PERL_REVISION".
?S:.
?S:patchlevel:
?S: The patchlevel level of this package.
?S: The value of patchlevel comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "6".
?S: In patchlevel.h, this is referred to as "PERL_VERSION".
?S:.
?S:subversion:
?S: The subversion level of this package.
?S: The value of subversion comes from the patchlevel.h file.
?S: In a version number such as 5.6.1, this is the "1".
?S: In patchlevel.h, this is referred to as "PERL_SUBVERSION".
?S: This is unique to perl.
?S:.
?S:version:
?S: The full version number of this package, such as 5.6.1 (or 5_6_1).
?S: This combines revision, patchlevel, and subversion to get the
?S: full version number, including any possible subversions.
?S: This is suitable for use as a directory name, and hence is
?S: filesystem
 dependent.
?S:.
?S:api_revision:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
```

```
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_revision is the '5'.
?S: Prior to 5.5.640, the format was a floating point number,
?S: like 5.00563.
?S:
?S: perl.c:incpush() and lib/lib.pm will automatically search in
?S: $sitelib/.. for older directories back to the limit specified
?S: by these api_ variables.  This is only useful if you have a
?S: perl library directory tree structured like the default one.
?S: See INSTALL for how this works.  The versioned site_perl
?S: directory was introduced in 5.005, so that is the lowest
?S: possible value.  The version list appropriate for the current
?S: system is determined in inc_version_list.U.
?S:
?S: XXX To do:  Since compatibility can depend on compile time
?S: options (such as bincompat, longlong, etc.) it should
?S: (perhaps) be set by
 Configure, but currently it isn't.
?S: Currently, we read a hard-wired value from patchlevel.h.
?S: Perhaps what we ought to do is take the hard-wired value from
?S: patchlevel.h but then modify it if the current Configure
?S: options warrant.  patchlevel.h then would use an #ifdef guard.
?S:.
?S:api_version:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_version is the '6'.  See api_revision for
?S: full details.  As a special case, 5.5.0 is rendered in the
?S: old-style as 5.005.  (In the 5.005_0x maintenance series,
?S: this was the only versioned directory in $sitelib.)
?S:.
?S:api_subversion:
?S: The three variables, api_revision, api_version, and
?S: api_subversion, specify the version of the oldest perl binary
?S: compatible with the present perl.  In a full version string
?S: such as '5.6.1', api_subversion is the
 '1'.  See api_revision for
?S: full details.
?S:.
?S:api_versionstring:
?S: This variable combines api_revision, api_version, and
?S: api_subversion in a format such as 5.6.1 (or 5_6_1) suitable
?S: for use as a directory name.  This is filesystem dependent.
?S:.
?S:perl_patchlevel:
?S: This is the Perl patch level, a numeric change identifier,
?S: as defined by whichever source code maintenance system
```

```
?S: is used to maintain the patches; currently Perforce.
?S: It does not correlate with the Perl version numbers or
?S: the maintenance versus development dichotomy except
?S: by also being increasing.
?S:.
?S:version_patchlevel_string:
?S: This is a string combining version, subversion and
?S: perl_patchlevel (if perl_patchlevel is non-zero).
?S: It is typically something like
?S: 'version 7 subversion 1'  or
?S: 'version 7 subversion 1 patchlevel 11224'
?S: It is computed here to avoid duplication of code in myconfig.SH
?S: and lib/Config.pm.
?S:.
?LINT:extern LC_ALL
?LINT:extern LANGUAGE
:
 get the patchlevel
echo " "
echo "Getting the current patchlevel..." >&4
if $test -r $rsrc/patchlevel.h;then
 revision=`awk '/define[  ]+PERL_REVISION/ {print $3}' $rsrc/patchlevel.h`
 patchlevel=`awk '/define[  ]+PERL_VERSION/ {print $3}' $rsrc/patchlevel.h`
 subversion=`awk '/define[  ]+PERL_SUBVERSION/ {print $3}' $rsrc/patchlevel.h`
 api_revision=`awk '/define[  ]+PERL_API_REVISION/ {print $3}' $rsrc/patchlevel.h`
 api_version=`awk '/define[  ]+PERL_API_VERSION/ {print $3}' $rsrc/patchlevel.h`
 api_subversion=`awk '/define[  ]+PERL_API_SUBVERSION/ {print $3}' $rsrc/patchlevel.h`
 perl_patchlevel=`egrep ',"(MAINT|SMOKE)[0-9][0-9]*"' $rsrc/patchlevel.h|tail -1|sed 's/[^0-9]//g'`
else
 revision=0
 patchlevel=0
 subversion=0
 api_revision=0
 api_version=0
 api_subversion=0
 perl_patchlevel=0
 $echo "(You do not have patchlevel.h.  Eek.)"
fi
: Define a handy string here to avoid duplication in myconfig.SH and configpm.
version_patchlevel_string="version $patchlevel subversion $subversion"
case
 "$perl_patchlevel" in
0|'') ;;
*)  perl_patchlevel=`echo $perl_patchlevel | sed 's/.* //'`
   version_patchlevel_string="$version_patchlevel_string patch $perl_patchlevel"
   ;;
esac
```

```
$echo "(You have $package $version_patchlevel_string.)"

case "$osname" in
dos|vms)
 : XXX Should be a Configure test for double-dots in filenames.
 version=`echo $revision $patchlevel $subversion | \
   $awk '{ printf "%d_%d_%d", $1, $2, $3 }'`
 api_versionstring=`echo $api_revision $api_version $api_subversion | \
   $awk '{ printf "%d_%d_%d", $1, $2, $3 }'`
 ;;
*)
 version=`echo $revision $patchlevel $subversion | \
   $awk '{ printf "%d.%d.%d", $1, $2, $3 }'`
 api_versionstring=`echo $api_revision $api_version $api_subversion | \
   $awk '{ printf "%d.%d.%d", $1, $2, $3 }'`
 ;;
esac
: Special case the 5.005_xx maintenance series, which used 5.005
: without any subversion label as a subdirectory in $sitelib
if test "${api_revision}${api_version}${api_subversion}" = "550"; then
 api_versionstring='5.005'
fi
```

Found
 in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/patchlevel.U
No license file was found, but licenses were detected in source scan.

Perl5 Metaconfig Units

Copyright (c) 1996-1998, Andy Dougherty
Copyright (c) 1999-2011, H.Merijn Brand
All rights reserved.

These units are the ones I used to build Configure and config_h.SH
in the Perl5 distribution.

The Configure script and config_h.SH file in the Perl distribution are
generated by a program called metaconfig. To run metaconfig, you will
need the full dist 3.0 distribution, maintained by Raphael Manfredi.
As of this writing, the current version is dist3.0, patchlevel 70.
Dist version dist-3.0@70.tar.gz is available on CPAN (the Comprehensive
Perl Archive Network) as
<http://www.perl.com/perl/CPAN/authors/id/RAM/dist-3.0@70.tar.gz>.

Instructions:

1. Unpack the full perl5 sources. Execute the following command

chmod +w Configure config_h.SH Porting/Glossary Porting/config*

2. Unpack the archive containing this file in the perl5 source directory. This will create a directory 'U' under the perl5 sources. That directory will contain the metaconfig units for perl5. This will also create two files in the perl5 source tree: MANIFEST.new and .package.

3. Apply any patches to perl in the perl_patches/ directory. (This may well be empty.)

4. Obtain and install dist-3.0pl70.

4. Apply any patches to dist under the dist_patches subdirectory.

5. From your main perl5 source directory, run packinit to regenerate the .package file. IMPORTANT: Change the name and address of the maintainer to your own name and address. I don't want bug reports intended for you coming to me.

6. From your main perl5 source directory, run

metalint (or mlint)

and repair every failure it reports.

7. From your main perl5 source directory, run

metaconfig -m (or mconfig -m)

8. Edit U/mkglossary and/or U/mkgloss.pl to point to your dist-3.0pl70 location. (See comments at the top.)

9. Run the Porting/mksample script to update the contents of the Porting/ subdirectory, or run all parts by hand. (see README)

NB: this script used to be U/mksample replaced by Porting/mksample; see Porting/pumpkin.pod instead for current documentation on its use.

10. Let me know about any changes, corrections, or enhancements.

Things to watch out for:

1. Future support of better random number generators should probably

start with the randfunc.U unit included here. It's currently broken, but well commented and probably a good place to start.

Descriptions:

The units and other related files have been broken up into the following directories:

acl/
This is an old patch to begin to detect and use ACL (access control list) file protection schemes.

compline/
These are similar to the standard units, but I have modified them to have a more uniform compile command line, usually using the new Compile.U unit. I have submitted these for inclusion into the regular dist distribution. (The ccflags.U unit is actually perl-specific since it mentions -DDEBUGGING and -DPOSIX_SOURCE, but that's the only place it is perl-specific.)

dist_patches/
These are patches to dist that must be applied before it is built and installed. I have submitted these for inclusion in the regular dist distribution.

modified/
These are modified versions of the standard units. Also included in this directory are new units that are clearly derived from existing units. I have submitted these for inclusion in the regular dist distribution.

perl/
These are specific to perl. Some are heavily derived from original dist units, and are marked as such. Others are original.

perl_patches/
These are patches to the perl source. This directory should ordinarily be empty, but there may have been drift between the standard version of perl and the one associated with these units.

protos/
These are units modified to use the new Hasproto.U or Protochk.U units to check for prototypes. I have submitted these for inclusion into the regular dist distribution.

target/

This is the very, very beginning of cross-compiler support.
It doesn't work yet, and many standard units will need
modification.

typedefs/
These are standard units modified to use the modified Typedef.U
unit to check for typedefs. (The modified Typdef.U includes a
function to avoid unnecessary prompts if the typdef being searched
for exists.) I have submitted these for inclusion into the
regular dist distribution.

threads/
These are specific to threading perl.

Copyright Information:

Unless otherwise indicated, the files contained in this
distribution are:

Copyright (c) 1996-1998, Andy Dougherty

The following licensing terms apply to all files contained in
this distribution:

You may distribute the files contained in this distribution
under the terms of either

a) the "Artistic License" which comes with Perl,
or

b) the "Artistic License" which comes with dist, or

c) the GNU General Public License as published by the Free
Software Foundation; either version 1, or (at your option) any
later version (see the file "Copying" that comes with the
Perl distribution).

Which one to use is your choice.

The units in the "modified" directory have been derived from units
associated with the metaconfig program of Raphael Manfredi's "dist"
distribution. These units list Raphael Manfredi as the Copyright holder.
dist is distributed under a modified version of the Perl Artistic License.
Clause 7 of this modified license as contained in dist-3.0-pl60 provides:

7. You may reuse parts of this Package in your own programs, provided
that you explicitly state where you got them from, in the source code
(and, left to your courtesy, in the documentation), duplicating

all the associated copyright notices and disclaimers. Besides
your changes, if any, must be clearly marked
as such. Parts reused
that way will no longer fall under this license if, and only if,
the name of your program(s) have no immediate connection with the
name of the Package itself or its associated programs. You may then
apply whatever restrictions you wish on the reused parts or choose
to place them in the Public Domain--this will apply only within the
context of your package.

In accordance with this clause, the versions of these units
contained here are made available under the same terms as the
rest of the units.

If you have any questions about the use of these units or about
the differences between these units and the standard versions, please
feel free to ask.

Andy Dougherty doughera@lafayette.edu
Dept. of Physics
Lafayette College
Easton, PA 18042-1782

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/README.dist
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extras.U,v$
?RCS:
?RCS: Copyright (c) 2001, Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:extras: Myread Oldconfig Setvar rm
?MAKE: -pick add $@ %<
?Y:TOP
?S:extras:
?S: This variable holds a list of extra modules to install.
?S:.
: See if we want extra modules installed
echo " "
case "$extras" in
") dflt='n';;
*) dflt='y';;
esac
cat <<EOM
Perl can be built with extra modules or bundles of modules which
```

```
will be fetched from the CPAN and installed alongside Perl.

Notice that you will need access to the CPAN; either via the Internet,
or a local copy, for example a CD-ROM or a local CPAN mirror.  (You will
be asked later to configure the CPAN.pm module which will in turn do
the installation of the rest of the extra modules or bundles.)

Notice also that if the modules require
 any external software such as
libraries and headers (the libz library and the zlib.h header for the
Compress::Zlib module, for example) you MUST have any such software
already installed, this configuration process will NOT install such
things for you.

If this doesn't make any sense to you, just accept the default '$dflt'.
EOM
rp='Install any extra modules (y or n)?'
. ./myread
case "$ans" in
y|Y)
 cat <<EOM

Please list any extra modules or bundles to be installed from CPAN,
with spaces between the names.  The names can be in any format the
'install' command of CPAN.pm will understand.  (Answer 'none',
without the quotes, to install no extra modules or bundles.)
EOM
 rp='Extras?'
 dflt="$extras"
 . ./myread
 extras="$ans"
esac
case "$extras" in
"|'none')
 val=''
 $rm -f ../extras.lst
 ;;
*) echo "(Saving the list of extras for later...)"
 echo "$extras" > ../extras.lst
 val="'$extras'"
 ;;
esac
set extras
eval $setvar
echo " "

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/Extras.U
```

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: man1dir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:10:29  ram
?RCS: patch61: created
?RCS:
?X:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man1 used instead of man everywhere.
?X:
?MAKE:man1dir man1direxp man1ext installman1dir: afs cat nroff Loc Oldconfig \
 spackage test Getfile Prefixit prefixexp
 Prefixup sysman Myread
?MAKE: -pick add $@ %<
?Y:TOP
?S:man1dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:man1direxp:
?S: This variable is the same as the man1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installman1dir:
?S: This variable is really the same as man1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man1ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See man1dir.
```

```
?S:.
?T:lookpath
: determine
 where manual pages go
set man1dir man1dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$man1dir" in
 ") man1dir="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$man1dir" in
' ') dflt=none
 ;;
")
 lookpath="$prefixexp/man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath $prefixexp/man/p_man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1"
 lookpath="$lookpath $prefixexp/man/man.1"
?X: Experience has shown people expect man1dir to be under prefix,
?X: so we now always put it there.  Users who want other behavior
?X: can answer interactively or use a command line option.
?X: Does user have System V-style man paths.
 case "$sysman" in
 */?_man*) dflt=`./loc . $prefixexp/l_man/man1 $lookpath` ;;
 *) dflt=`./loc . $prefixexp/man/man1 $lookpath` ;;
 esac
 set dflt
 eval $prefixup
 ;;
*)
  dflt="$man1dir"
 ;;
esac
echo " "
fn=dn+~
rp="Where do the main $spackage manual pages (source) go?"
. ./getfile
if $test "X$man1direxp" != "X$ansexp"; then
 installman1dir="
fi
```

```
man1dir="$ans"
man1direxp="$ansexp"
case "$man1dir" in
") man1dir=' '
 installman1dir=";;
esac
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installman1dir" in
 ") dflt=`echo $man1direxp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installman1dir";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installman1dir="$ans"
else
 installman1dir="$man1direxp"
fi

: What suffix to use on installed man pages

case "$man1dir" in
' ')
 man1ext='0'
 ;;
*)
 rp="What suffix should be used for the main $spackage man pages?"
 case "$man1ext" in
 ") case "$man1dir" in
  *1)  dflt=1 ;;
  *1p)
 dflt=1p ;;
  *1pm) dflt=1pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L1) dflt=L1;;
  *) dflt=1;;
```

```
  esac
  ;;
 *) dflt="$man1ext";;
 esac
 . ./myread
 man1ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/man1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: yacc.U,v $
?RCS: Revision 3.0.1.1  1994/05/13  15:28:48  ram
?RCS: patch27: added byacc as another alternative (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:yacc yaccflags: Guess Myread Loc Oldconfig byacc bison cat test
?MAKE: -pick add $@ %<
?S:yacc:
?S: This variable holds the name of the compiler compiler we
?S: want to use in the Makefile. It can be yacc, byacc, or bison -y.
?S:.
?S:yaccflags:
?S: This variable contains any
 additional yacc flags desired by the
?S: user.  It is up to the Makefile to use this.
?S:.
?T:comp
: determine compiler compiler
echo " "
comp='yacc'
if $test -f "$byacc$_exe"; then
 comp="byacc or $comp"
fi
```

```
if $test -f "$bison$_exe"; then
 comp="$comp or bison -y"
fi
case "$yacc" in
")
 yacc=`./loc yacc yacc $pth`
 if $test -f "$yacc$_exe"; then
  dflt='yacc'
 elif $test -f "$byacc$_exe"; then
  dflt='byacc'
 elif $test -f "$bison$_exe"; then
  dflt='bison'
 else
  dflt=''
 fi
 ;;
*) dflt="$yacc";;
esac
rp="Which compiler compiler ($comp) shall I use?"
. ./myread
yacc="$ans"
case "$yacc" in
*bis*)
 case "$yacc" in
 *-y*) ;;
 *)
  yacc="$yacc -y"
  echo "(Adding -y option to bison to get yacc-compatible behaviour.)"
  ;;
 esac
 ;;
esac

@if yaccflags
: see if we need extra yacc flags
dflt="$yaccflags"
case "$dflt" in
") dflt=none;;
esac
$cat <<EOH

Your yacc program may need extra flags to normally process the parser sources.
Do NOT specify any -d or -v flags here, since those are
 explicitly known
by the various Makefiles. However, if your machine has strange/undocumented
options (like -Sr# on SCO to specify the maximum number of grammar rules), then
please add them here.  To use no flags, specify the word "none".
```

```
EOH
rp="Any additional yacc flags?"
. ./myread
case "$ans" in
none) yaccflags="";;
*) yaccflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/yacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: warnflags.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: warnflags.U,v $
?RCS: Revision 3.0  1993/08/18  12:10:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:warnflags: cat cc contains Myread Guess Oldconfig Findhdr
?MAKE: -pick add $@ %<
?S:warnflags:
?S: This variable contains any additional C compiler flags to generate
?S: warnings from the compiler. It is up to the Makefile to use this.
?S:.
: offer additional
 warning flags for compilation
$cat <<EOH

You may wish to compile with extra compiler warnings enabled.
Note that doing so enhances your chance of receiving your free set of steak
knives, particularly if you find any bugs and report them.
If you don't want extra warnings, answer "none".

EOH
case "$warnflags" in
") case "$cc" in
```

```
 *gcc*)
  dflt="-Wall -Wno-comment"
  if $contains 'fprintf' `./findhdr stdio.h` >/dev/null 2>&1; then
   :
  else
   dflt="$dflt -Wno-implicit"
  fi
  ;;
 *) dflt="none";;
 esac
 ;;
' ') dflt="none";;
*) dflt="$warnflags";;
esac

rp="Any $cc flags to enable warnings?"
. ./myread
case "$ans" in
none) warnflags=' ';;
*) warnflags="$ans";;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/warnflags.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn_v7EXT.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Warn_v7EXT.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:01:42  ram
?RCS: patch36: call ./v7 explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:17  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit issues warnings to V7 sites that they are living dangerously.
?X: This unit needs to get mentioned in End.U to get included.
?X:
?MAKE:Warn_v7EXT: package Guess
```

```
?MAKE: -pick add $@ %<
: Warnings
if ./v7;
 then
 cat <<EOM

NOTE: the V7 compiler may ignore some #undefs that $package uses.  If so,
you may get messages about redefining EXT.  Some V7 compilers also have
difficulties with #defines near buffer boundaries, so beware.  You may have
to play with the spacing in some .h files, believe it or not.
EOM
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Warn_v7EXT.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Mkdirp.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can launched to create a
?X: directory path like "mkdir -p" would do.
?X:
?MAKE:Mkdirp:
 eunicefix startsh
?MAKE: -pick add $@ %<
?F:./mkdirp
?T:name create file
: script used to emulate mkdir -p
cat >mkdirp <<EOS
```

```
$startsh
EOS
cat >>mkdirp <<'EOS'
name=$1;
create="";
while test $name; do
 if test ! -d "$name"; then
  create="$name $create"
  name=`echo $name | sed -e "s|^[^/]*$||"`
  name=`echo $name | sed -e "s|\(.*\)/.*|\1|"`
 else
  name=""
 fi
done
for file in $create; do
 mkdir $file
done
EOS
chmod +x mkdirp
$eunicefix mkdirp
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Mkdirp.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: packadmin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?MAKE:packadmin: cf_email Oldconfig Myread cat spackage package
?MAKE: -pick add $@ %<
?Y:TOP
?S:packadmin:
?S: Electronic mail address of the package administrator.
?S:.
: check wehther they will act as local admin for the package
$cat <<EOM

If you or somebody else will be maintaining $package at your site, please
fill in the correct e-mail address here so that they may be contacted
if necessary.  You may enter "none"
```

```
 for no administrator.

EOM
case "$packadmin" in
") dflt="$cf_email";;
*) dflt="$packadmin";;
esac
rp="$spackage administrator e-mail address"
. ./myread
packadmin="$ans"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/packadmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libs.U,v 3.0.1.6 1997/02/28 16:09:11 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: libs.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:09:11  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.5  1995/07/25  14:12:05  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  16:24:22  ram
?RCS: patch36: removed old broken thislib/thatlib processing (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:05:44  ram
?RCS: patch30: code cleanup with if/elif by ADO and RAM
?RCS: patch30:
 undone patch23 for libswanted default setting
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:08:45  ram
?RCS: patch23: now includes ordered default libswanted variable (ADO)
?RCS: patch23: major cleanup for library lookups (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:31  ram
?RCS: patch6: added default for libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:03  ram
```

```
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libs ignore_versioned_solibs libsfound libsfiles libsdirs libspath: \
 test cat Myread Oldconfig Loc libpth package xlibpth so _a \
 usesocks sed uselongdouble
?MAKE: -pick add $@ %<
?S:libs:
?S: This variable holds the additional libraries we want to use.
?S: It is up to the Makefile to deal with it.  The list can be empty.
?S:.
?S:libsfound:
?S: This variable holds the full pathnames of the libraries
?S: we found and accepted.
?S:.
?S:libsfiles:
?S: This variable holds the filenames aka basenames of the libraries
?S: we found and accepted.
?S:.
?S:libsdirs:
?S: This
 variable holds the directory names aka dirnames of the libraries
?S: we found and accepted, duplicates are removed.
?S:.
?S:libspath:
?S: This variable holds the directory names probed for libraries.
?S:.
?S:ignore_versioned_solibs:
?S: This variable should be non-empty if non-versioned shared
?S: libraries (libfoo.so.x.y) are to be ignored (because they
?S: cannot be linked against).
?S:.
?T:xxx yyy thislib thisdir libswanted libstyle
?D:libs="
?X:
?X: This order is chosen so that libraries  -lndir, -ldir, -lucb, -lbsd,
?X: -lBSD, -lPW, and -lx only get used if there are unresolved
?X: routines at link time.  Usually, these are backwards compatibility
?X: libraries, and may not be as reliable as the standard c library.
?X:
?X: The -lsocket -linet -lnsl order has been reported to be necessary
?X: for at least one SVR4 implementation.
?X: -lc must proceed -lucb or -lbsd for most Solaris applications.
?X: -lc_s proceeds -lc so we pick up the shared library version, if
?X: it is
 available.
?X:
?X: The ordering of c, posix, and cposix is a guess and almost
?X: certainly wrong on about half of all systems.
```

```
?X:
?X: Set proper libswanted in your private Myinit.U if needed.
?X:
?X:: default ordered library list
?X:libswanted='net socket inet bind nsl nm sdbm gdbm ndbm dbm malloc dl'
?X:libswanted="$libswanted dld sun m c_s c posix cposix ndir dir ucb"
?X:libswanted="$libswanted bsd BSD PW x"
?X:
?INIT:: default library list
?INIT:libswanted="
?INIT:: some systems want to use only the non-versioned libso:s
?INIT:ignore_versioned_solibs="
?LINT:extern usecbacktrace
?LINT:extern libscheck
?LINT:extern p
?LINT:use uselongdouble
: Looking for optional libraries
echo " "
echo "Checking for optional libraries..." >&4
case "$libs" in
' '|'') dflt='';;
*) dflt="$libs";;
esac
case "$libswanted" in
'') libswanted='c_s';;
esac
?X: libsocks has nasty naming scheme.
?X: This does not work if somebody wants SOCKS 4.
case "$usesocks" in
"$define") libswanted="$libswanted socks5
 socks5_sh" ;;
esac
case "$usecbacktrace" in
"$define") libswanted="$libswanted bfd" ;;
esac
libsfound="
libsfiles="
libsdirs="
libspath="
for thisdir in $libpth $xlibpth; do
 test -d $thisdir && libspath="$libspath $thisdir"
done
for thislib in $libswanted; do
 for thisdir in $libspath; do
    xxx="
    if $test ! -f "$xxx" -a "X$ignore_versioned_solibs" = "X"; then
  xxx=`ls $thisdir/lib$thislib.$so.[0-9] 2>/dev/null|sed -n '$p'`
        $test -f "$xxx" && eval $libscheck
```

```
$test -f "$xxx" && libstyle=shared
xxx=`ls $thisdir/lib$thislib.[0-9].$so 2>/dev/null|sed -n '$p'`
      $test -f "$xxx" && eval $libscheck
$test -f "$xxx" && libstyle=shared
  fi
  if test ! -f "$xxx"; then
xxx=$thisdir/lib$thislib.$so$_a
$test -f "$xxx" && eval $libscheck
$test -f "$xxx" && libstyle="import"
  fi
  if test ! -f "$xxx"; then
xxx=$thisdir/$thislib.$so$_a
$test -f "$xxx" && eval $libscheck
$test -f "$xxx" && libstyle="import"
  fi
  if test ! -f "$xxx";
then
xxx=$thisdir/lib$thislib.$so
      $test -f "$xxx" && eval $libscheck
$test -f "$xxx" && libstyle=shared
  fi
  if test ! -f "$xxx"; then
xxx=$thisdir/lib$thislib$_a
      $test -f "$xxx" && eval $libscheck
$test -f "$xxx" && libstyle=static
  fi
  if test ! -f "$xxx"; then
xxx=$thisdir/$thislib$_a
      $test -f "$xxx" && eval $libscheck
$test -f "$xxx" && libstyle=static
  fi
  if test ! -f "$xxx"; then
xxx=$thisdir/lib${thislib}_s$_a
      $test -f "$xxx" && eval $libscheck
$test -f "$xxx" && libstyle=static
$test -f "$xxx" && thislib=${thislib}_s
  fi
  if test ! -f "$xxx"; then
xxx=$thisdir/Slib$thislib$_a
      $test -f "$xxx" && eval $libscheck
$test -f "$xxx" && libstyle=static
  fi
  if $test -f "$xxx"; then
case "$libstyle" in
shared) echo "Found -l$thislib (shared)." ;;
static) echo "Found -l$thislib." ;;
*)      echo "Found -l$thislib ($libstyle)." ;;
esac
```

```
  case " $dflt " in
  *"-l$thislib "*);;
  *)
 dflt="$dflt -l$thislib"
     libsfound="$libsfound $xxx"
     yyy=`basename $xxx`
     libsfiles="$libsfiles $yyy"
     yyy=`echo $xxx|$sed -e "s%/$yyy\\$%%"`
     case " $libsdirs " in
     *" $yyy "*) ;;
     *) libsdirs="$libsdirs $yyy" ;;
     esac
     ;;
  esac
  break
     fi
 done
 if $test ! -f "$xxx"; then
     echo "No -l$thislib."
 fi
done
set X $dflt
shift
dflt="$*"
case "$libs" in
") dflt="$dflt";;
*) dflt="$libs";;
esac
case "$dflt" in
' '|") dflt='none';;
esac

$cat <<EOM

In order to compile $package on your machine, a number of libraries
are usually needed.  Include any other special libraries here as well.
Say "none" for none.  The default list is almost always right.
EOM

echo " "
rp="What libraries to use?"
. ./myread
case "$ans" in
none) libs=' ';;
*) libs="$ans";;
esac

Found in path(s):
```

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/libs.U
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```
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?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?RCS:
?X:
?X: This unit is just a quick shorthand for the compile command
?X: to be used in all the other metaconfig units.
?X:
?MAKE:Compile: +cc +optimize +ccflags +ldflags +libs
?MAKE: -pick add $@ %<
?LINT:define compile compile_ok
?V:compile compile_ok mc_file
?S:compile:
?S: This shell variable is used internally
 by Configure to provide
?S: a convenient shorthand for the typical compile command, namely
?S: $cc $optimize $ccflags $ldflags -o $1 $1.c $libs > /dev/null 2>&1
?S: Note that the output filename does _not_ include the _exe
?S: extension.  Instead we assume that the linker will be
?S: "helpful" and automatically appending the correct suffix.
?S: OS/2 users will apparently need to supply the -Zexe flag to
?S: get this behavior.
?S:
?S: To use this variable, say something like:
?S:  echo 'int main() { exit(0); }' > try.c
?S:  set try
?S:  if eval $compile; then
?S:   echo "success"   # and do whatever . . .
?S:  else
?S:   echo "failure"   # and do whatever . . .
?S:  fi
?S: To add extra flags cc flags (e.g. -DWHATEVER) just put them
?S: in $*, e.g.
```

```
?S:  set try -DTRY_THIS_FLAG
?S:.
?S:compile_ok:
?S: This shell variable is used internally by Configure to provide
?S: a convenient shorthand for the typical compile command that you
?S: expect to work ok.  It is the same as $compile,
 except we
?S: deliberately let the user see any error messages.
?S:.
: define a shorthand compile call
compile='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs > /dev/null 2>&1;'
: define a shorthand compile call for compilations that should be ok.
compile_ok='
mc_file=$1;
shift;
$cc -o ${mc_file} $optimize $ccflags $ldflags $* ${mc_file}.c $libs;'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Compile.U
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```
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?RCS:
?RCS: Copyright (c) 2000, Jarkko Hietaniemi
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in order
?X: to make quick check on whether the current C compiler is working.
?X:
?MAKE:Checkcc ccname ccversion: Myread Warn startsh cat contains test
?MAKE: -pick add $@ %<
?S:ccname:
?S: This can set either by hints files or by Configure.  If using
?S: gcc, this is gcc, and if not, usually equal to cc, unimpressive, no?
?S: Some platforms, however, make good use of this by storing the
?S: flavor
```

```
 of the C compiler being used here.  For example if using
?S: the Sun WorkShop suite, ccname will be 'workshop'.
?S:.
?S:ccversion:
?S: This can set either by hints files or by Configure.  If using
?S: a (non-gcc) vendor cc, this variable may contain a version for
?S: the compiler.
?S:.
?F:./checkcc ./trygcc !checktmp
?V:despair
?T:trygcc
?LINT:extern cc rm ccflags ldflags
?LINT:change cc ccflags
?LINT:usefile checktmp
?INIT:ccname=''
?INIT:ccversion=''
: generate the trygcc script for later perusal
cat <<EOS >trygcc
$startsh
EOS
cat <<'EOSC' >>trygcc
case "$cc" in
'') ;;
*)  $rm -f try try.*
   $cat >try.c <<EOM
int main(int argc, char *argv[]) {
 (void) argc;
 (void) argv;
 return 0;
}
EOM
   if $cc -o try $ccflags $ldflags try.c; then
      :
   else
       echo "Uh-oh, the C compiler '$cc' doesn't seem to be working." >&4
       despair=yes
       trygcc=yes
       case "$cc" in
       *gcc*) trygcc=no ;;
       esac
       case "`$cc -v -c try.c 2>&1`" in

      *gcc*) trygcc=no ;;
       esac
       if $test X"$trygcc" = Xyes; then
           if gcc -o try -c try.c; then
               echo " "
               echo "You seem to have a working gcc, though." >&4
```

```
            rp="Would you like to use it?"
            dflt=y
            if $test -f myread; then
               . ./myread
            else
               if $test -f UU/myread; then
                  . ./UU/myread
               else
                  echo "Cannot find myread, sorry.  Aborting." >&2
                  exit 1
               fi
            fi
            case "$ans" in
            [yY]*) cc=gcc; ccname=gcc; ccflags=''; despair=no;
?X: Look whether we have 'call-back units' generated by hints that would
?X: seemingly affect the compiling environment.
                  $cat *.cbu >checktmp 2>/dev/null
                  if $contains ccflags checktmp >/dev/null; then

      ./warn <<EOM
Any previous setting of the C compiler flags has been lost.
It may be necessary to pass -Dcc=gcc to Configure right away.
EOM
                  fi;;
            esac
         fi
      fi
   fi
   $rm -f try try.*
   ;;
esac
EOSC

: generate the checkcc script for later perusal
cat <<EOS >checkcc
$startsh
EOS
cat <<'EOSC' >>checkcc
case "$cc" in
'') ;;
*)  $rm -f try try.*
   $cat >try.c <<EOM
int main(int argc, char *argv[]) {
 (void) argc;
 (void) argv;
 return 0;
}
EOM
```

```
  if $cc -o try $ccflags $ldflags try.c; then
    :
  else
    if $test X"$despair" = Xyes; then
      echo "Uh-oh, the C compiler '$cc' doesn't seem to be working." >&4
    fi
    $cat >&4 <<EOM
You need to find a working C compiler.
Either (purchase and) install the C compiler supplied by your OS vendor,
or for a free C compiler try http://gcc.gnu.org/
I cannot continue any further, aborting.
EOM
    exit 1
  fi

 $rm -f try try.*
  ;;
esac
EOSC
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Checkcc.U
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?RCS: $Log: libs.U,v $
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?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.5  1995/07/25  14:12:05  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
?RCS: Revision 3.0.1.4  1994/10/29  16:24:22  ram
?RCS: patch36: removed old broken thislib/thatlib processing (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:05:44  ram
?RCS: patch30: code cleanup with if/elif by ADO and RAM
?RCS: patch30: undone patch23 for libswanted default
```

```
 setting
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:08:45  ram
?RCS: patch23: now includes ordered default libswanted variable (ADO)
?RCS: patch23: major cleanup for library lookups (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:02:31  ram
?RCS: patch6: added default for libs
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libs libsfound libsfiles libsdirs libspath libscheck: \
 test cat Myread Oldconfig Loc libpth package xlibpth so _a \
 +usesocks sed +cc +ccflags +ldflags rm
?MAKE: -pick add $@ %<
?S:libs:
?S: This variable holds the additional libraries we want to use.
?S: It is up to the Makefile to deal with it.  The list can be empty.
?S:.
?S:libsfound:
?S: This variable holds the full pathnames of the libraries
?S: we found and accepted.
?S:.
?S:libsfiles:
?S: This variable holds the filenames aka basenames of the libraries
?S: we found and accepted.
?S:.
?S:libsdirs:
?S: This variable holds the directory
 names aka dirnames of the libraries
?S: we found and accepted, duplicates are removed.
?S:.
?S:libspath:
?S: This variable holds the directory names probed for libraries.
?S:.
?S:libscheck:
?S: This variable is intended to be set by hint files, if needed.
?S: It should contain shell code that will be eval'ed with $xxx holding
?S: some library file.  It may change $xxx if needed.
?S: For instance, on an Irix platform, you may make sure the right
?S: library file is used depending on the cc command line, so that the
?S: correct library is used depending on the selected ABI (for 32 and
?S: 64-bit compilations).
?S:
?S: Here is an example of code that could be found in a hint file on Irix
?S: when the selected compiler was for 32-bit -- that code is put in the
?S: cc.cbu call-back unit to be invoked AFTER the C compiler and its
```

```
?S: flags have been chosen:
?S:
?S:  libscheck='case "$xxx" in
?S:  *.a) /bin/ar p $xxx `/bin/ar t $xxx | sed q` >$$.o;
?S:   case "`/usr/bin/file $$.o`" in
?S:   *N32*)
 rm -f $$.o ;;
?S:   *) rm -f $$.o; xxx=/no/n32$xxx ;;
?S:   esac ;;
?S:  *) case "`/usr/bin/file $xxx`" in
?S:   *N32*) ;;
?S:   *) xxx=/no/n32$xxx ;;
?S:   esac ;;
?S:  esac'
?S:.
?D:libs="
?LINT:extern libswanted
?LINT:change libswanted
?INIT:: default library list
?INIT:libswanted="
?X: This order is chosen so that libraries  -lndir, -ldir, -lucb, -lbsd,
?X: -lBSD, -lPW, and -lx only get used if there are unresolved
?X: routines at link time.  Usually, these are backwards compatability
?X: libraries, and may not be as reliable as the standard c library.
?X:
?X: The -lsocket -linet -lnsl order has been reported to be necessary
?X: for at least one SVR4 implementation.
?X: -lc must proceed -lucb or -lbsd for most Solaris applications.
?X: -lc_s proceeds -lc so we pick up the shared library version, if
?X: it is available.
?X:
?X: The ordering of c, posix, and cposix is a guess and almost
?X: certainly wrong on about half of all systems.
?X:
?X: Set proper libswanted in your private
 Myinit.U if needed.
?X:
?X:: default ordered library list
?X:libswanted='net socket inet bind nsl nm sdbm gdbm ndbm dbm malloc dl'
?X:libswanted="$libswanted dld sun m c_s c posix cposix ndir dir ucb"
?X:libswanted="$libswanted bsd BSD PW x"
?X:
?INIT:: should be set by hint files if needed
?INIT:libscheck="
?T:xxx yyy thislib thisdir libstyle linkmsg
?F:lt.c lt
: Looking for optional libraries
echo " "
```

```
echo "Checking for optional libraries..." >&4
case "$libs" in
' '|'') dflt='';;
*) dflt="$libs";;
esac
case "$libswanted" in
'') libswanted='c_s';;
esac
?X: libsocks has nasty naming scheme.
?X: This does not work if somebody wants SOCKS 4.
case "$usesocks" in
"$define") libswanted="$libswanted socks5 socks5_sh" ;;
esac
?X: Used later for link checks
echo "extern char printf(); int main() { printf(); return 0; }" > lt.c
libsfound="
libsfiles="
libsdirs="
libspath="
for thisdir in $libpth $xlibpth; do
 test -d $thisdir && libspath="$libspath $thisdir"
done
for thislib in $libswanted;
 do
 for thisdir in $libspath; do
    xxx=''
    if $test ! -f "$xxx" ; then
   xxx=`ls $thisdir/lib$thislib.$so.[0-9]* 2>/dev/null | $sed -n '1p'`
   $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/lib$thislib.$so
   $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=shared
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/lib$thislib$_a
        $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/$thislib$_a
        $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=static
    fi
    if test ! -f "$xxx"; then
   xxx=$thisdir/lib${thislib}_s$_a
```

```
        $test -f "$xxx" && eval $libscheck
   $test -f "$xxx" && libstyle=static
   $test -f "$xxx" && thislib=${thislib}_s
     fi
     if test ! -f "$xxx"; then
   xxx=$thisdir/Slib$thislib$_a
        $test -f "$xxx" && eval $libscheck
   $test
 -f "$xxx" && libstyle=static
     fi
     if $test -f "$xxx"; then
?X:
?X: It is not sufficient to find a .so on the disk.  We must make sure
?X: that we can indeed supply the -lfoo line on the cc line to link against
?X: that library.  On Linux for instance, a versionned .so will not be
?X: implicitly linked against, whereas it will work fine on Solaris 2.6.
?X:  --RAM, 10/10/2003
?X:
   if $cc -o lt $ccflags $ldflags lt.c -l$thislib >/dev/null 2>&1;
   then
    linkmsg=""
   else
    linkmsg=" but I can't link against it"
   fi
   case "$libstyle" in
   shared) echo "Found -l$thislib (shared)$linkmsg." ;;
   static) echo "Found -l$thislib$linkmsg." ;;
   *)      echo "Found -l$thislib ($libstyle)$linkmsg." ;;
   esac
   case " $dflt " in
   *"-l$thislib "*) ;;
   *)
    case "$linkmsg" in
    ")
     dflt="$dflt -l$thislib"
     libsfound="$libsfound $xxx"
     yyy=`basename $xxx`
     libsfiles="$libsfiles $yyy"
     yyy=`echo $xxx|$sed -e "s%/$yyy\\$%%"`
     case " $libsdirs
 " in
     *" $yyy "*) ;;
     *) libsdirs="$libsdirs $yyy" ;;
     esac
       ;;
    esac
    ;;
   esac
```

```
  break
    fi
 done
 if $test ! -f "$xxx"; then
    echo "No -l$thislib."
 fi
done
set X $dflt
shift
dflt="$*"
case "$libs" in
") dflt="$dflt";;
*) dflt="$libs";;
esac
case "$dflt" in
' '|") dflt='none';;
esac
$rm -f lt.c lt

$cat <<EOM

In order to compile $package on your machine, a number of libraries
are usually needed.  Include any other special libraries here as well.
Say "none" for none.  The default list is almost always right.
EOM

echo " "
rp="Which libraries to use?"
. ./myread
case "$ans" in
none) libs=' ';;
*) libs="$ans";;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/libs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: so.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  16:30:04  ram
?RCS: patch36: now tells user how he can suppress shared lib lookup (ADO)
?RCS: patch36: removed echo at the top, since it's now in the here-doc (ADO)
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  07:07:02  ram
?RCS: patch30: created
?RCS:
?X:
?X: This unit computes the shared-object / shared-lib extension
?X:
?MAKE:so: test libpth Loc Myread Oldconfig cat
?MAKE: -pick add $@ %<
?S:so:
?S: This variable holds the extension used to identify
 shared libraries
?S: (also known as shared objects) on the system. Usually set to 'so'.
?S:.
?T: xxx
: compute shared library extension
case "$so" in
")
 if xxx=`./loc libc.sl X $libpth`; $test -f "$xxx"; then
  dflt='sl'
 else
  dflt='so'
 fi
 ;;
*) dflt="$so";;
esac
$cat <<EOM

On some systems, shared libraries may be available.  Answer 'none' if
you want to suppress searching of shared libraries for the remainder
of this configuration.

EOM
rp='What is the file extension used for shared libraries?'
. ./myread
so="$ans"

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/so.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: n.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
```

```
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: n.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:n c: contains
?MAKE: -pick add $@ %<
?S:n:
?S: This variable contains the -n flag if that is what causes the echo
?S: command to suppress newline.  Otherwise it is null.  Correct usage is
?S:     $echo $n "prompt for a question: $c".
?S:.
?S:c:
?S: This variable contains the \c string if that is what causes the echo
?S: command to suppress newline.
  Otherwise it is null.  Correct usage is
?S:     $echo $n "prompt for a question: $c".
?S:.
: first determine how to suppress newline on echo command
echo " "
echo "Checking echo to see how to suppress newlines..."
(echo "hi there\c" ; echo " ") >.echotmp
if $contains c .echotmp >/dev/null 2>&1 ; then
 echo "...using -n."
 n='-n'
 c=''
else
 cat <<'EOM'
...using \c
EOM
 n=''
 c='\c'
fi
echo $n "The star should be here-->$c"
echo '*'
rm -f .echotmp
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/n.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: lns.U,v 3.0.1.1 1994/06/20 07:05:52 ram Exp $

```
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?X:
?X: This unit checks whether symbolic links are really supported.
?X: We can't rely on d_symlink because that may be listed in the
?X: C library but unimplemented.
?X:
?MAKE:lns: ln rm touch
?MAKE: -pick add $@ %<
?S:lns:
?S: This variable holds the name of the command to make
?S: symbolic
 links (if they are supported).  It can be used
?S: in the Makefile. It is either 'ln -s' or 'ln'
?S:.
: determine whether symbolic links are supported
echo " "
$touch blurfl
if $ln -s blurfl sym > /dev/null 2>&1 ; then
 echo "Symbolic links are supported." >&4
 lns="$ln -s"
else
 echo "Symbolic links are NOT supported." >&4
 lns="$ln"
fi
$rm -f blurfl sym
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/lns.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Instruct.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:02:55  ram
?RCS: patch61: logname / whoami sequence rewritten to use case
?RCS:
?RCS: Revision 3.0.1.2  1995/02/15  14:11:34  ram
?RCS: patch51: author name now appears at the end of the paragraph (WED)
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:12:05  ram
?RCS: patch45: now documents the & escape to turn -d on at the read prompt
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:04  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X:
 This unit spew out the directions that we want everyone to read.  I try to
?X: keep the first "pagefull" much less than a page since they don't know it
?X: isn't going to go shooting off the top of the screen, and we don't want
?X: to panic them yet.
?X:
?MAKE:Instruct: Begin Myread Configdir contains
?MAKE: -pick wipe $@ %<
?T:user needman firsttime
: general instructions
needman=true
firsttime=true
user=`(logname) 2>/dev/null`
case "$user" in
") user=`whoami 2>&1`;;
esac
if $contains "^$user\$" ../.config/instruct >/dev/null 2>&1; then
 firsttime=false
 echo " "
 rp='Would you like to see the instructions?'
 dflt=n
 . ./myread
 case "$ans" in
 [yY]*) ;;
 *) needman=false;;
 esac
fi
if $needman; then
```

```
 cat <<EOH

This installation shell script will examine your system and ask you questions
to determine how the <PACKAGENAME> package should be installed. If you get
stuck on a question, you may use a ! shell escape to start a subshell or
execute a command.  Many of the questions will have
 default answers in square
brackets; typing carriage return will give you the default.

On some of the questions which ask for file or directory names you are allowed
to use the ~name construct to specify the login directory belonging to "name",
even if you don't have a shell which knows about that.  Questions where this is
allowed will be marked "(~name ok)".

EOH
 rp=''
 dflt='Type carriage return to continue'
 . ./myread
 cat <<'EOH'

The prompter used in this script allows you to use shell variables and
backticks in your answers.  You may use $1, $2, etc...  to refer to the words
in the default answer, as if the default line was a set of arguments given to a
script shell.  This means you may also use $* to repeat the whole default line,
so you do not have to re-type everything to add something to the default.

Everytime there is a substitution, you will have to confirm.  If there is an
error (e.g. an unmatched backtick), the default answer will remain unchanged
and you will be prompted
 again.

If you are in a hurry, you may run 'Configure -d'.  This will bypass nearly all
the questions and use the computed defaults (or the previous answers if there
was already a config.sh file). Type 'Configure -h' for a list of options.
You may also start interactively and then answer '& -d' at any prompt to turn
on the non-interactive behaviour for the remainder of the execution.

EOH
 . ./myread
 cat <<EOH

Much effort has been expended to ensure that this shell script will run on any
Unix system.  If despite that it blows up on yours, your best bet is to edit
Configure and run it again.  If you can't run Configure for some reason,
you'll have to generate a config.sh file by hand.  Whatever problems you
have, let me (<MAINTLOC>) know how I blew it.

This installation script affects things in two ways:
```

```
1) it may do direct variable substitutions on some of the files included
  in this kit.
2) it builds a config.h file for inclusion in C programs.  You may edit
  any of these
 files as the need arises after running this script.

If you make a mistake on a question, there is no easy way to back up to it
currently.  The easiest thing to do is to edit config.sh and rerun all the SH
files.  Configure will offer to let you do this before it runs the SH files.

EOH
?X: In case they played with the prompter...
 dflt='Type carriage return to continue'
 . ./myread
 case "$firsttime" in
 true) echo $user >>../.config/instruct;;
 esac
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Instruct.U
No license file was found, but licenses were detected in source scan.

```
*  You may redistribute only under the terms of the Artistic Licence,
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/files/Jmake.tmpl
No license file was found, but licenses were detected in source scan.

```
# $Id: errnolist.a,v 3.0 1993/08/18 12:04:35 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Harlan Stenn <harlan@mumps.pfcs.com>
#
# $Log: errnolist.a,v $
# Revision 3.0  1993/08/18 12:04:35  ram
# Baseline for dist 3.0 netwide release.
#
#
# This is a simple-minded awk script to generate an initialization for
```

```
# sys_errnolist on systems that don't have it.
# This file now depends only on sys/errno.h error numbers under maxerr being
# in order.  It will complain and die if not.  NOTE: It will still produce
# a compilable output file, even with errors, so you must
 check the output.
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/lib/errnolist.a
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extract.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  14:58:52  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  15:51:46  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:52  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which can be doted in order to extract
?X: .SH files with variable substitutions.
?X:
?X: When running Configure from a remote directory ($src
 is not '.'),
?X: then the files will be created in that directory, so beware!
?X:
?MAKE:Extract: Mkdirp src
?MAKE: -pick add $@ %<
?F:./extract
?T:CONFIG SRC dir file
: script used to extract .SH files with variable substitutions
cat >extract <<EOS
CONFIG=true
SRC="$src"
EOS
cat >>extract <<'EOS'
```

```
echo "Doing variable substitutions on .SH files..."
if test -f "$SRC/MANIFEST"; then
 set x `awk '{print $1}' <$SRC/MANIFEST | grep '\.SH'`
else
 echo "(Looking for .SH files under the source directory.)"
 set x `(cd "$SRC"; find . -name "*.SH" -print)`
fi
shift
case $# in
0) set x `(cd "$SRC"; echo *.SH)`; shift;;
esac
if test ! -f "$SRC/$1"; then
 shift
fi
for file in $*; do
 case "$SRC" in
 ".")
  case "$file" in
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   (cd $dir && . ./$file)
   ;;
  *)
   . ./$file
   ;;
  esac
  ;;
 *)
?X:
?X: When running Configure remotely ($src is not '.'), we cannot source
?X: the files directly, since that would wrongly cause
 the extraction
?X: where the source lie instead of withing the current directory. Therefore,
?X: we need to 'sh <file' then, which is okay since they will source the
?X: existing config.sh file. It's not possible to use:
?X:  ../src/Configure -S -O -Dsomething
?X: unfortunately since no new config.sh with the -Dsomething override
?X: will be created before running the .SH files. A minor buglet.
?X:
?X: Note that we must create the directory hierarchy ourselves if it does
?X: not exist already, and that is done through a shell emulation of the
?X: 'mkdir -p' command. We don't want to use the $installdir metaconfig
?X: symbol here since that would require too much to be configured for
?X: this simple extraction task that may happen quickly with 'Configure -S'.
?X:  -- RAM, 18/03/96
?X:
  case "$file" in
```

```
  */*)
   dir=`expr X$file : 'X\(.*\)/'`
   file=`expr X$file : 'X.*/\(.*\)'`
   ./mkdirp $dir
   sh <"$SRC/$dir/$file"
   ;;
  *)
   sh <"$SRC/$file"
   ;;
  esac
  ;;
 esac
done
if
 test -f "$SRC/config_h.SH"; then
 if test ! -f config.h; then
?X: oops, they left it out of MANIFEST, probably, so do it anyway.
  sh <"$SRC/config_h.SH"
 fi
fi
EOS
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Extract.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: contains.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:contains: Nothing
?MAKE: -pick add $@ %<
?S:contains:
?S: This variable holds the command to do a grep with a proper return
?S: status.  On most sane systems it is simply "grep".  On insane systems
?S: it is a grep followed by a cat followed by a test.  This variable
?S: is primarily for the use of other Configure units.
?S:.
```

```
: Some
 greps do not return status, grrr.
echo "grimblepritz" >grimble
if grep blurfldyick grimble >/dev/null 2>&1 ; then
 contains=contains
elif grep grimblepritz grimble >/dev/null 2>&1 ; then
 contains=grep
else
 contains=contains
fi
rm -f grimble
: the following should work in any shell
case "$contains" in
contains*)
 echo " "
 echo "AGH!  Grep doesn't return a status.  Attempting remedial action."
 cat >contains <<'EOSS'
grep "$1" "$2" >.greptmp && cat .greptmp && test -s .greptmp
EOSS
chmod +x contains
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/contains.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lex.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Orginal Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: lex.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:22:50  ram
?RCS: patch36: spurious single quote could cause Configure to crash
?RCS: patch36: (reported by Xavier Le Vourch <xavierl@eiffel.com>.)
?RCS:
?RCS: Revision 3.0.1.2  1994/08/29  16:27:09  ram
?RCS: patch32: added lexflags variable for lex flags setting
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:06:01  ram
?RCS: patch23: added
```

```
 trailing blank line for metalint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lex lexflags: Guess Myread Oldconfig flex test
?MAKE: -pick add $@ %<
?S:lex:
?S: This variable holds the name of the lexical analyser generator we
?S: want to use in the Makefile. It can be lex or flex.
?S:.
?S:lexflags:
?S: This variable holds any flags that should be passed to the lexical
?S: analyzer.  It is up to the Makefile to use it.
?S:.
: determine lexical analyser generator
case "$lex" in
")
 dflt=lex;;
*)
 dflt="$lex";;
esac
echo " "
if $test -f "$flex"; then
 rp='Which lexical analyser generator (lex or flex) shall I use?'
else
 rp='Which lexical analyser generator shall I use?'
fi
. ./myread
lex="$ans"

@if lexflags
: if using lex this will normally be useless, but flex frequently takes args
echo " "
case "$lexflags" in
") dflt='none';;
*) dflt="$lexflags";;
esac
rp="What flags should be given to $lex?"
. ./myread
case "$ans"
 in
none) lexflags=";;
*) lexflags="$ans";;
esac

@end
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/lex.U
No license file was found, but licenses were detected in source scan.

```
/*|?:[\\/]*)
if test -f "$xxx"; then
: ok
else
./warn "no $xxx -- ignoring your setting for $file."
xxx=`./loc $file $file $pth`
fi
;;
") xxx=`./loc $file $file $pth`;;
*) xxx=`./loc $xxx $xxx $pth`;;
esac
eval $file=$xxx$_exe
eval _$file=$xxx
case "$xxx" in
/*)
echo $file is in $xxx.
;;
?X: Under OS/2, we have PC-like paths
?:[\\/]*)
echo $file is in $xxx.
;;
*)
echo "I don't know where '$file' is, and my life depends on it." >&4
echo "Go find a public domain implementation or fix your PATH setting!" >&4
exit 1
;;
esac
done
echo " "
echo "Don't worry if any of the following aren't found..."
say=offhand
for file in $trylist; do
?X: Allow them to -Dmake=pmake on the command line for instance (see above)
eval xxx=\$$file
case "$xxx" in
/*|?:[\\/]*)
if test -f "$xxx"; then
: ok
else
./warn "no $xxx -- ignoring your setting for $file."
xxx=`./loc $file $file $pth`
fi
;;
") xxx=`./loc $file $file $pth`;;
```

```
*) xxx=`./loc $xxx
 $xxx $pth`;;
esac
eval $file=$xxx$_exe
eval _$file=$xxx
case "$xxx" in
/*)
echo $file is in $xxx.
;;
?X: Under OS/2, we have PC-like paths
?:[\\/]*)
echo $file is in $xxx.
;;
*)
echo "I don't see $file out there, $say."
say=either
;;
esac
done
case "$egrep" in
egrep)
echo "Substituting grep for egrep."
egrep=$grep
_egrep=$_grep
;;
esac
@if ln
case "$ln" in
ln)
echo "Substituting cp for ln."
ln=$cp
_ln=$_cp
;;
esac
@end
@if make || gmake
case "$make" in
make)
case "$gmake" in
gmake)
echo "I can't find make or gmake, and my life depends on it." >&4
echo "Go find a public domain implementation or fix your PATH setting!" >&4
exit 1
;;
esac
;;
esac
case "$gmake" in
```

```
gmake) ;;
*) # We can't have osname yet.
if test -f "/system/gnu_library/bin/ar.pm"; then # Stratus VOS
# Assume that gmake, if found, is definitely GNU make
# and prefer it over the system make.
echo "Substituting gmake for make."
make=$gmake
_make=$_gmake
fi
;;
esac
@end
case "$test" in
test)
echo "Hopefully test is built into
 your sh."
;;
*)
if `sh -c "PATH= test true" >/dev/null 2>&1`; then
echo "Using the test built into your sh."
?X:
?X: We need to set both test and _test, since Oldconfig.U will use the _test
?X: value to systematically restore computed paths, which may be wrong if
?X: we choose to load an old config.sh generated on another platform.
?X:
test=test
_test=test
fi
;;
esac
?LINT:change n c
case "$echo" in
echo)
echo "Hopefully echo is built into your sh."
;;
?X: For those rare cases where we don't need $echo...
") ;;
*)
echo " "
echo "Checking compatibility between $echo and builtin echo (if any)..." >&4
$echo $n "hi there$c" >foo1
echo $n "hi there$c" >foo2
if cmp foo1 foo2 >/dev/null 2>&1; then
echo "They are compatible.  In fact, they may be identical."
else
case "$n" in
'-n') n=" c='\c';;
*) n='-n' c=";;
```

```
esac
cat <<FOO
They are not compatible!  You are probably running ksh on a non-USG system.
I'll have to use $echo instead of the builtin, since Bourne shell doesn't
have echo built
 in and we may have to run some Bourne shell scripts.  That
means I'll have to use '$n$c' to suppress newlines now.  Life is ridiculous.

FOO
$echo $n "The star should be here-->$c"
$echo "*"
fi
$rm -f foo1 foo2
;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Loc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: End.U,v 3.0 1993/08/18 12:04:51 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: End.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit serves as the goal which forces make to choose all the units that
?X: ask questions.  The $W on the ?MAKE: line is the list of all symbols wanted.
?X: To force any unit to be included, copy this unit to your private U directory
?X: and add the name of the unit desired to the ?MAKE: dependency line.
?X:
?MAKE:End perllibs: $W cppstdin gzip zip
 libs usedl osname osvers
?MAKE: -pick add $@ %<
?S:perllibs:
?S: The list of libraries needed by Perl only (any libraries needed
?S: by extensions only will by dropped, if using dynamic loading).
?S:.
?INIT:perllibs="
```

```
?LINT:use $W
?LINT:use gzip zip
?LINT:change cppstdin
: Remove libraries needed only for extensions
: The appropriate ext/Foo/Makefile.PL will add them back in, if necessary.
: The exception is SunOS 4.x, which needs them.
case "${osname}X${osvers}" in
sunos*X4*)
   perllibs="$libs"
   ;;
*) case "$usedl" in
   $define|true|[yY]*)
     set X `echo " $libs " | sed -e 's@ -lndbm @ @' -e 's@ -lgdbm @ @' -e 's@ -lgdbm_compat @ @' -e 's@ -ldbm @
@' -e 's@ -ldb @ @'`
     shift
     perllibs="$*"
     ;;
   *) perllibs="$libs"
     ;;
   esac
   ;;
esac

?X: If the user has the cppstdin wrapper, perl.c will try to call
?X: CPPSTDIN, but that will point to a location in the build
?X: directory, not the installed version!.  Here, we'll just strip the
?X: name down to 'cppstdin',
 and rely on the fact that perl.c will
?X: then call SCRIPTDIR/cppstdin, but local things like 'make depend'
?X: will continue to work.
: Remove build directory name from cppstdin so it can be used from
: either the present location or the final installed location.
echo " "
: Get out of the UU directory to get correct path name.
cd ..
case "$cppstdin" in
`pwd`/cppstdin)
 echo "Stripping down cppstdin path name"
 cppstdin=cppstdin
 ;;
esac
cd UU

: end of configuration questions
echo " "
echo "End of configuration questions."
echo " "
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/End.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: shm_for.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: shm_for.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:28:37  ram
?RCS: patch36: call ./Cppsym explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:shm_for shm_att shm_lim: Cppsym Myread ipc uname
?MAKE: -pick add $@ %<
?S:shm_for:
?S: This variable tells us the type of machine we're expecting the
?S: shared memory code to run on.  The value is available to C
 programs
?S: in the C_SHM_FOR manifest.
?S:.
?S:shm_att:
?S: This variable tells us where a shared memory segment should be
?S: attached.  Good values are HIGH, LOW, and ZERO.
?S:.
?S:shm_lim:
?S: This variable tells us if shared memory attached HIGH should
?S: have an upper limit.
?S:.
?X: ----------------------------------------------------------
?X: It's a potential lose to define anything beginning with SHM...
?X: At least we can think that S_ stands for "String version of ..." -- HMS
?X: ----------------------------------------------------------
?C:S_SHM_FOR ~ %<:
?C: This symbol identifies what we chose for the target system's
?C: default shared memory configuration parameters.
?C:.
?C:S_SHM_ATT ~ %<:
?C: This symbol holds the default "place" to attach shared memory.
?C: Values are "HIGH", "ZERO", and "LOW".
```

```
?C:.
?C:S_SHM_LIM ~ %<:
?C: This symbol holds the default upper bound address limit if shared
?C: memory is attached HIGH.  If zero, there is no upper limit.
?C:.
?H:?%<:#ifdef
 SERVE_SHM
?H:?%<:#define S_SHM_FOR "$shm_for"
?H:?%<:#define S_SHM_ATT "$shm_att"
?H:?%<:#define S_SHM_LIM "$shm_lim"
?H:?%<:#endif
?H:.
?W:%<:S_SHM_FOR S_SHM_ATT S_SHM_LIM
: see how to attach shared memory
echo " "
echo "Deciding how to attach shared memory..." >&4

case "$ipc" in
shm)
 shm_for='Default case'
 shm_att='HIGH'
 shm_lim='0x0'
 if ./Cppsym tower32 tower32_600; then
  echo "NCR Towers are usually normal..."
  : echo "Oh, an NCR Tower."
  : This works for the 600
  shm_for='NCR Tower 32'
  shm_att='LOW'
 else
  case "$uname" in
  */uname)
   case "`uname -m`" in
   ACS??68*)
    echo "Oh, an Altos 3068."
    shm_for='Altos 3068:'
    shm_lim='0x800000'
    ;;
    esac
    ;;
  *)
   echo "Looks normal to me..."
   ;;
  esac
 fi

 dflt="$shm_for"
 rp='Description of shared memory configuration?'
 . ./myread
```

```
 shm_for="$ans"

 dflt="$shm_att"
 rp='Where should shared memory be attached?'
 . ./myread
 shm_att="$ans"

 case "$shm_att" in
 HIGH)
  dflt="$shm_lim"
  rp='What is
 the upper address limit for shared memory?'
  . ./myread
  shm_lim="$ans"
  ;;
 *)
  shm_lim=''
  ;;
 esac
 ;;

*)
 echo "but you aren't using shared memory so I won't bother." >&4
 shm_for='NOT CONFIGURED'
 shm_att='NONE'
 shm_lim='-1'
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/shm_for.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Typedef.U,v 3.0.1.3 1995/07/25 13:42:07 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Typedef.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  13:42:07  ram
?RCS: patch56: added backslash escapes within evals to prevent space problems
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:01:16  ram
```

```
?RCS: patch36: don't clobber visible 'val' variable, use 'varval' instead
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:05:14  ram
?RCS: patch32: created
?RCS:
?X:
?X: This unit checks for the definition of a given typedef.
?X:
?X: To use it, say:
?X: set typedef
 val_t default [includes]
?X: eval $typedef
?X:
?MAKE:Typedef: cppstdin cppminus cppflags rm sed contains Oldconfig Myread
?MAKE: -pick add $@ %<
?LINT:define typedef
?LINT:define typedef_ask
?V:typedef typedef_ask
?S:typedef:
?S: This shell variable is used internally by Configure to check
?S: whether a given typedef is defined or not. A typical use is:
?S:  set typedef val_t default [includes]
?S:  eval $typedef
?S: That will return val_t set to default if the typedef was not found,
?S: to typedef otherwise. If no includes are specified, look in sys/types.h.
?S:.
?S:typedef_ask:
?S: This shell variable is used internally by Configure to check
?S: whether a given typedef is defined or not.  If it is not defined,
?S: this will call the ./myread script to prompt for an answer.
?S: It is intended to be used to avoid unnecessary prompts.
?S: A typical use is
?S:  rp="What is the type for file position used by fsetpos()?"
?S:  set fpos_t fpostype long stdio.h sys/types.h
?S:  eval $typedef_ask
?S: This
 will set fpostype=fpos_t, if fpos_t is available.  Otherwise
?S: it will call myread with a default of 'long', and a prompt of $rp.
?S:.
?T:type var def inclist varval inc
?F:!temp.c
: define an is-a-typedef? function
typedef='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
```

```
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
?X: Maybe it's a #define instead of a typedef.
 echo "#ifdef $type" >> temp.c;
 echo "printf(\"We have $type\");" >> temp.c;
 echo "#endif" >> temp.c;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 if $contains $type temp.E >/dev/null 2>&1; then
  eval "$var=\$type";
 else
  eval "$var=\$def";
 fi;
 $rm -f temp.?;;
*) eval "$var=\$varval";;
esac'

?X: Originally, I eval'd $typedef and then checked the results against
?X: $type.  Unfortunately, it then became complicated to check
?X: whether you are re-using
 an old config.sh value, and the logic got
?X: so convoluted it became easier to just copy the function above
?X: and alter it slightly.  A.D.  3/1998
: define an is-a-typedef? function that prompts if the type is not available.
typedef_ask='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
?X: Maybe it's a #define instead of a typedef.
 echo "#ifdef $type" >> temp.c;
 echo "printf(\"We have $type\");" >> temp.c;
 echo "#endif" >> temp.c;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 echo " " ;
 echo "$rp" | $sed -e "s/What is/Looking for/" -e "s/?/./";
 if $contains $type temp.E >/dev/null 2>&1; then
  echo "$type found." >&4;
  eval "$var=\$type";
 else
```

```
  echo "$type NOT found." >&4;
  dflt="$def";
  . ./myread ;
  eval "$var=\$ans";
 fi;
 $rm -f temp.?;;
*) eval "$var=\$varval";;
esac'
```

Found
 in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/Typedef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: yacc.U,v 3.0.1.1 1994/05/13 15:28:48 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: yacc.U,v $
?RCS: Revision 3.0.1.1  1994/05/13  15:28:48  ram
?RCS: patch27: added byacc as another alternative (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:10:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:yacc yaccflags: Guess Myread Oldconfig byacc bison cat test _exe
?MAKE: -pick add $@ %<
?S:yacc:
?S: This variable holds the name of the compiler compiler we
?S: want to use in the Makefile. It can be yacc, byacc, or bison -y.
?S:.
?S:yaccflags:
?S: This
 variable contains any additional yacc flags desired by the
?S: user.  It is up to the Makefile to use this.
?S:.
?T:comp
: determine compiler compiler
case "$yacc" in
")
 dflt=yacc;;
*)
```

```
 dflt="$yacc";;
esac
echo " "
comp='yacc'
if $test -f "$byacc$_exe"; then
 dflt="$byacc"
 comp="byacc or $comp"
fi
if $test -f "$bison$_exe"; then
 comp="$comp or bison -y"
fi
rp="Which compiler compiler ($comp) shall I use?"
. ./myread
yacc="$ans"
case "$yacc" in
*bis*)
 case "$yacc" in
 *-y*) ;;
 *)
  yacc="$yacc -y"
  echo "(Adding -y option to bison to get yacc-compatible behavior.)"
  ;;
 esac
 ;;
esac

@if yaccflags
: see if we need extra yacc flags
dflt="$yaccflags"
case "$dflt" in
") dflt=none;;
esac
$cat <<EOH

Your yacc program may need extra flags to normally process the parser sources.
Do NOT specify any -d or -v flags here, since those are explicitly known
by the various Makefiles. However, if your machine has strange/undocumented
options (like -Sr# on SCO to specify the
 maximum number of grammar rules), then
please add them here.  To use no flags, specify the word "none".

EOH
rp="Any additional yacc flags?"
. ./myread
case "$ans" in
none) yaccflags=";;
*) yaccflags="$ans";;
esac
```

```
@end
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/yacc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?MAKE:perladmin: cf_email Oldconfig Myread cat
?MAKE: -pick add $@ %<
?Y:TOP
?S:perladmin:
?S: Electronic mail address of the perl5 administrator.
?S:.
: Ask e-mail of administrator
$cat <<EOM

If you or somebody else will be maintaining perl at your site, please
fill in the correct e-mail address here so that they may be contacted
if necessary. You may enter "none" for no administrator.

EOM
case "$perladmin" in
") dflt="$cf_email";;
*) dflt="$perladmin";;
esac
rp='Perl administrator e-mail address'
. ./myread
perladmin="$ans"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/perladmin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: inc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
```

```
?RCS: $Log: inc.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:51  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:inc incexp: Loc Oldconfig Getfile usrinc
?MAKE: -pick add $@ %<
?S:inc:
?S: This variable holds the name of the directory in which the user wants
?S: to put public header files for the package in question.  It is most
?S: often a local directory such as /usr/local/include.
?S:.
?S:incexp:
?S: This is the same as the inc variable, but is filename
 expaned
?S: at configuration time for convenient use in your makefiles.
?S:.
: determine where public header files go
case "$inc" in
")
 dflt=`./loc . "." /usr/local/include /usr/include/local $usrinc`
 ;;
*)  dflt="$inc"
 ;;
esac
fn=d~
rp='Where do you want to put the public header files?'
. ./getfile
inc="$ans"
incexp="$ansexp"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/inc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: install.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: install.U,v $
?RCS: Revision 3.0.1.2  1995/09/25  09:16:37  ram
?RCS: patch59: all possible install programs are now looked for
?RCS:
```

```
?RCS: Revision 3.0.1.1  1995/01/11  15:30:41  ram
?RCS: patch45: created
?RCS:
?MAKE:install installdir: Loc Oldconfig Getfile cat test startsh rm +cc \
 eunicefix package contains mkdir echo n c
?MAKE: -pick add $@ %<
?S:install:
?S: This variable contains the name of an install program that can accept
?S: BSD-style arguments.
 It must correctly support -c, -s, and -m at least.
?S: It is a fully qualified pathname when found. If you have a local
?S: install.SH file at the root directory of your package, it is assumed to
?S: be the default script emulating a BSD install and the variable will be
?S: set to ./install. Otherwise, it is set to plain 'install', relying on
?S: the user's PATH to perform miracles.
?S:.
?S:installdir:
?S: This variable contains the name of a program that can install nested
?S: directories. Often set to 'mkdir -p', it can also be 'install -d' if
?S: you have such a beast and lack the former. If you have an install.SH
?S: file at the root directory of your package, it will be used in last
?S: resort, setting the variable to './install -d'. Otherwise, it is set to
?S: plain 'mkdir', and cross your fingers!
?S:.
?T:dir file tryit prog creatdir either
?F:!tryinst
: locate a BSD compatible install program
echo " "
echo "Looking for a BSD-compatible install program..." >&4
@if installdir
creatdir="
@end
case
 "$install" in
")
 tryit="
 for dir in $pth; do
  for file in ginstall installbsd scoinst install; do
   if $test -f $dir/$file; then
    tryit="$tryit $dir/$file"
   fi
  done
 done
 $cat >try.c <<EOC
int main()
{
 printf("OK\n");
 exit(0);
```

```
}
EOC
 if $cc -o try try.c >/dev/null 2>&1; then
  cp try try.ns
  strip try >/dev/null 2>&1
 else
  echo "(I can't seem to compile a trivial C program -- bypassing.)"
  echo "try" >try
  cp try try.ns
 fi
 $cat >tryinst <<EOS
$startsh
$rm -rf foo d
@if installdir
\$1 -d foo/bar
@end
$mkdir d
\$1 -c -m 764 try.ns d
\$1 -c -s -m 642 try.ns d/try
EOS
 chmod +x tryinst
 $eunicefix tryinst
 dflt=''
 either=''
 for prog in $tryit; do
  $echo $n "Checking $prog... $c"
  ./tryinst $prog >/dev/null 2>&1
@if installdir
  if $test -d foo/bar; then
   creatdir="$prog -d"
  fi
@end
  (ls -l d/try >try.ls; ls -l d/try.ns >tryno.ls) 2>/dev/null
  if (cmp -s d/try try && cmp -s d/try.ns try.ns && \
   $contains 'rwxrw-r--' tryno.ls &&
 \
   $contains 'rw-r---w-' try.ls) >/dev/null 2>&1
  then
   dflt="$prog"
   echo "ok, that will do."
   break
  fi
  echo "not good$either."
  either=' either'
  $rm -f try*.ls
 done
 $rm -rf foo d tryinst try try*.ls try.*
 case "$dflt" in
```

```
 ")
@if {test -f ../install.SH}
  echo "Hopefully, $package comes with its own install script!"
  dflt='./install'
@else
  dflt='install'
@end
  ;;
 esac
 ;;
*) dflt="$install";;
esac
$cat <<EOM

I will be requiring a BSD-compatible install program (one that allows
options like -s to strip executables or -m to specify a file mode) to
install $package.

If the question below contains a fully qualified default path, then it
is probably ok. If it is an unqualified name such as 'install', then it
means I was unable to find out a good install program I could use. If
@if {test -f ../install.SH}
you know of one, please tell me about it. If the default is './install',
then I shall be using the install script supplied with $package.
@else
you know of one,
 please tell me about it.
@end

EOM
@if {test -f ../install.SH}
fn='/fe~(install,./install)'
@else
fn='/fe~(install)'
@end
rp='Which install program shall I use?'
. ./getfile
install="$ans"

@if installdir
: how can we create nested directories?
echo " "
echo "Ok, let's see how we can create nested directories..." >&4
case "$installdir" in
")
?X: First time, maybe we already found out a working one in $creatdir above...
?X: Prefer "mkdir -p" because of bugs in GNU install when not running as root
 $mkdir -p foo/bar >/dev/null 2>&1
```

```
 if $test -d foo/bar; then
  echo "Great, we can build them using 'mkdir -p'."
  creatdir='mkdir -p'
 else
  case "$creatdir" in
  ")
   if eval "$install -d foo/bar"; $test -d foo/bar; then
    creatdir="install -d"
    echo "It looks like '$creatdir' will do it for us."
   fi
   ;;
  *)
   eval "$creatdir foo/bar" >/dev/null 2>&1
   if $test -d foo/bar; then
    echo "Ah! We can use '$creatdir' to do just that."
   else
    creatdir="
   fi
   ;;
  esac
 fi
 $rm
 -rf foo
 case "$creatdir" in
 ")
  echo "Heck! Another ancient system lacking the comfort of modern ones!"
@if {test -f ../install.SH}
  echo "You can thank $package for bringing you its own install script!"
  installdir='./install -d'
@else
  echo "We have no choice but to use plain old 'mkdir' -- wish me luck!"
  installdir=mkdir
@end
  ;;
 *) installdir="$creatdir";;
 esac
 ;;
*) echo "As you already told me, '$installdir' should work.";;
esac

@end
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/install.U
No license file was found, but licenses were detected in source scan.

?RCS: Id
?RCS:

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Filexp.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:52:53  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS: patch36: added HOME to the ?T: line since metalint now checks ${HOME}
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:00  ram
?RCS: patch23: made sure error status from csh is propagated (WED)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:53  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a shell script which will expand filenames beginning
?X:
 with tildes.  The script is deleted at the end of Configure.
?X:
?MAKE:Filexp: startsh sed test expr eunicefix
?MAKE: -pick add $@ %<
?F:./filexp
?T:HOME LOGDIR dir me name failed
: set up shell script to do ~ expansion
cat >filexp <<EOSS
$startsh
: expand filename
?X:
?X: The case entries below escape the ~ as some shells have shown expansion
?X: of the ~ during here-doc processing.
?X:
case "\$1" in
\~/*|\~)
 echo \$1 | $sed "s|~|\${HOME-\$LOGDIR}|"
 ;;
\~*)
 if $test -f /bin/csh; then
  /bin/csh -f -c "glob \$1"
  failed=\$?
  echo ""
  exit \$failed
 else
  name=\`$expr x\$1 : '..\([^/]*\)'\`
```

```
  dir=\`$sed -n -e "/^\${name}:/{s/^[^:]*:[^:]*:[^:]*:[^:]*:[^:]*:\([^:]*\).*'''\$'''/\1/" -e p -e q -e '}' </etc/passwd\`
  if $test ! -d "\$dir"; then
   me=\`basename \$0\`
   echo "\$me: can't locate home directory for: \$name" >&2
   exit 1
  fi
  case "\$1" in
  */*)
   echo \$dir/\`$expr x\$1 : '..[^/]*/\(.*\)'\`
   ;;
  *)
   echo \$dir
   ;;
  esac
 fi
 ;;
*)
 echo \$1
 ;;
esac
EOSS
chmod
 +x filexp
$eunicefix filexp
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Filexp.U
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: lns.U,v $
?RCS: Revision 3.0.1.1  1994/06/20  07:05:52  ram
?RCS: patch30: created by ADO
?RCS:
?X:
?X: This unit checks whether symbolic links are really supported.
?X: We can't rely on d_symlink because that may be listed in the
```

```
?X: C library but unimplemented.
?X:
?MAKE:lns: ln rm touch test
?MAKE: -pick add $@ %<
?S:lns:
?S: This variable holds the name of the command to make
?S: symbolic links (if they are supported).
  It can be used
?S: in the Makefile. It is either 'ln -s' or 'ln'
?S:.
: determine whether symbolic links are supported
echo " "
$rm -f blurfl sym
$touch blurfl
if $ln -s blurfl sym > /dev/null 2>&1 && $test -f sym; then
 echo "Symbolic links are supported." >&4
 lns="$ln -s"
else
 echo "Symbolic links are NOT supported." >&4
 lns="$ln"
fi
$rm -f blurfl sym
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/lns.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cf_who.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:28:50  ram
?RCS: patch61: new computation method avoiding use of temporary file
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:42:34  ram
?RCS: patch23: login name now computed the hard way
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:32  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: Oldconfig dependency is there to ensure computation occurs after old values
?X: from config.sh have been loaded, so that we can supersede them.
?X:
?MAKE:cf_time
 cf_by: date Oldconfig
?MAKE: -pick add $@ %<
?S:cf_time:
?S: Holds the output of the "date" command when the configuration file was
?S: produced. This is used to tag both config.sh and config_h.SH.
?S:.
?S:cf_by:
?S: Login name of the person who ran the Configure script and answered the
?S: questions. This is used to tag both config.sh and config_h.SH.
?S:.
?LINT:change LC_ALL LANGUAGE
: who configured the system
?X: Ensure English date -- Jarkko Hietaniemi
cf_time=`LC_ALL=C; LANGUAGE=C; export LC_ALL; export LANGUAGE; $date 2>&1`
?X:
?X: Leave a white space between first two '(' for ksh. The sub-shell is needed
?X: on some machines to avoid the error message when logname is not found; e.g.
?X: on SUN-OS 3.2, (logname || whoami) would not execute whoami if logname was
?X: not found. Sigh!
?X:
?X: Convex had a broken logname executable which returned a non-zero status,
?X: and that broke the previous:
?X:   cf_by=`( (logname) 2>/dev/null || whoami) 2>&1`
?X: Switch to emergency
 mode... -- RAM, 19/04/94
?X:
?X: Parentheses needed to avoid error message if the program does not exist.
?X: Uses case instead of $test so it can be put before $test is defined.
?X: Don't redirect to a file because on Ultrix (under script?) logname
?X: outputs a blank line first.  This method will apparently work.
case "$cf_by" in
"")
 cf_by=`(logname) 2>/dev/null`
 case "$cf_by" in
 "")
  cf_by=`(whoami) 2>/dev/null`
  case "$cf_by" in
  "") cf_by=unknown ;;
  esac ;;
 esac ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/cf_who.U

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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Whoa.U,v $
?RCS: Revision 3.0.1.2  1997/02/28  15:21:21  ram
?RCS: patch61: whoa script now starts with leading "startsh"
?RCS:
?RCS: Revision 3.0.1.1  1994/10/29  16:02:01  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:19  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a bit of shell code that must be dotted in in order
?X: to warn the user in case a change into a variable is noticed.
?X:
?X: To use this
 unit, $was must hold the old value that has changed. Upon
?X: exit, the two variables $td and $tu are set to the correct value for
?X: respectively defining or undefining a variable. For instance, if $vas was
?X: $undef, but now $var is $define, after calling . whoa, you should use
?X: eval "$var=\$tu" to finally set $var to the correct value. See unit Inlibc.
?X:
?MAKE:Whoa: Myread startsh hint
?MAKE: -pick add $@ %<
?F:./whoa
?T:var was
?LINT:change td tu
: set up the script used to warn in case of inconsistency
cat <<EOS >whoa
$startsh
EOS
cat <<'EOSC' >>whoa
dflt=y
echo " "
echo "*** WHOA THERE!!! ***" >&4
echo "    The $hint value for \$$var on this machine was \"$was\"!" >&4
rp="    Keep the $hint value?"
```

```
. ./myread
case "$ans" in
y) td=$was; tu=$was;;
esac
EOSC
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Whoa.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:sitehtml1dir sitehtml1direxp installsitehtml1dir: Getfile \
 Setprefixvar prefix siteprefix html1dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitehtml1dir=''
?S:sitehtml1dir:
?S: This variable contains the name of the directory in which site-specific
?S: html source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After perl
 has been installed, users may install their own local
?S: html pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitehtml1direxp=''
?S:sitehtml1direxp:
?S: This variable is the same as the sitehtml1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsitehtml1dir=''
?S:installsitehtml1dir:
?S: This variable is really the same as sitehtml1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: html1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
```

```
?S:.
?LINT:change prefixvar
?LINT:set installsitehtml1dir
?LINT:set sitehtml1dir
?LINT:set sitehtml1direxp
: determine where add-on html pages go
: There is no standard location, so try to copy the previously-selected
: directory structure for the core html pages.
case "$sitehtml1dir" in
")
   dflt=`echo "$html1dir" | $sed "s#^$prefix#$siteprefix#"` ;;
*)     dflt=$sitehtml1dir ;;
esac
case "$dflt" in
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname where the site-specific html pages should be installed?'
. ./getfile
prefixvar=sitehtml1dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/sitehtml1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: sysman.U,v $
?RCS: Revision 3.0.1.2  1994/06/20  07:08:43  ram
?RCS: patch30: now explicitly states that /usr/man/man1 is the default
?RCS: patch30: added /usr/local/man/man1 to the search list
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:13:50  ram
?RCS: patch10: added support for /local/man/man1 (WAD)
?RCS: patch10: added temporary syspath variable to cut down on line length
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:55  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
```

```
?MAKE:sysman: test
 Loc Oldconfig
?MAKE: -pick add $@ %<
?S:sysman:
?S: This variable holds the place where the manual is located on this
?S: system. It is not the place where the user wants to put his manual
?S: pages. Rather it is the place where Configure may look to find manual
?S: for unix commands (section 1 of the manual usually). See mansrc.
?S:.
?T:syspath
: determine where manual pages are on this system
echo " "
case "$sysman" in
")
 syspath='/usr/share/man/man1 /usr/man/man1'
 syspath="$syspath /usr/man/mann /usr/man/manl /usr/man/local/man1"
 syspath="$syspath /usr/man/u_man/man1 /usr/share/man/man1"
 syspath="$syspath /usr/catman/u_man/man1 /usr/man/l_man/man1"
 syspath="$syspath /usr/local/man/u_man/man1 /usr/local/man/l_man/man1"
 syspath="$syspath /usr/man/man.L /local/man/man1 /usr/local/man/man1"
 sysman=`./loc . /usr/man/man1 $syspath`
 ;;
esac
if $test -d "$sysman"; then
 echo "System manual is in $sysman." >&4
else
 echo "Could not find manual pages in source form." >&4
fi

Found
 in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/sysman.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: vendorprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
```

```
?MAKE:usevendorprefix vendorprefix vendorprefixexp +oldvendorprefix: \
 Getfile Loc Oldconfig cat prefix Myread
?MAKE: -pick add $@ %<
?S:usevendorprefix:
?S: This variable tells whether the vendorprefix
?S: and consequently other vendor* paths are in use.
?S:.
?S:vendorprefix:
?S: This variable holds the full absolute path of the directory below
?S: which
 the vendor will install add-on packages.
?S: See INSTALL for usage and examples.
?S:.
?S:vendorprefixexp:
?S: This variable holds the full absolute path of the directory below
?S: which the vendor will install add-on packages.  Derived from vendorprefix.
?S:.
?S:oldvendorprefix:
?S: This variable is set non-null if the vendorprefix was previously defined
?S: and gets set to a new value. Used internally by Configure only.
?S:.
: Set the vendorprefix variables
$cat <<EOM

The installation process will also create a directory for
vendor-supplied add-ons.  Vendors who supply perl with their system
may find it convenient to place all vendor-supplied files in this
directory rather than in the main distribution directory.  This will
ease upgrades between binary-compatible maintenance versions of perl.

Of course you may also use these directories in whatever way you see
fit.  For example, you might use them to access modules shared over a
company-wide network.

The default answer should be
 fine for most people.
This causes further questions about vendor add-ons to be skipped
and no vendor-specific directories will be configured for perl.

EOM
rp='Do you want to configure vendor-specific add-on directories?'
case "$usevendorprefix" in
define|true|[yY]*) dflt=y ;;
*) : User may have set vendorprefix directly on Configure command line.
 case "$vendorprefix" in
 "|' ') dflt=n ;;
 *) dflt=y ;;
 esac
```

```
 ;;
esac
. ./myread
case "$ans" in
[yY]*) fn=d~+
 rp='Installation prefix to use for vendor-supplied add-ons?'
 case "$vendorprefix" in
 ") dflt="$prefix" ;;
 *)  dflt=$vendorprefix ;;
 esac
 . ./getfile
 : XXX Prefixit unit does not yet support siteprefix and vendorprefix
 oldvendorprefix="
 case "$vendorprefix" in
 ") ;;
 *) case "$ans" in
  "$prefix") ;;
  *) oldvendorprefix="$prefix";;
  esac
  ;;
 esac
 usevendorprefix="$define"
 vendorprefix="$ans"
 vendorprefixexp="$ansexp"
 ;;
*) usevendorprefix="$undef"
 vendorprefix="
 vendorprefixexp="
 ;;
esac
```

Found in path(s):
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/vendorprefix.U
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```
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extractall.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:00:43  ram
```

```
?RCS: patch61: created
?RCS:
?X:
?X: If extraction has been requested, load the configuration file, perform
?X: the extraction and exit.
?X:
?X: This unit was originally a part of Options.U. It had to be removed from
?X: it to prevent a dependency cycle: Extract -> src -> Options -> Extract
?X: The Begin.U unit now requires us before beginning to do anything
?X: interesting, to ensure proper semantics. -- RAM, 15/03/96
?X:
?MAKE:Extractall:
 Extract Options
?MAKE: -pick wipe $@ %<
: extract files and exit if asked to do so
case "$extractsh" in
true)
?X: Undo the forced silent=true when -S was supplied, by probing realsilent
?X: which was set iff -s was also given. See Options.U for details.
 case "$realsilent" in
 true) ;;
 *) exec 1>&4;;
 esac
 case "$config_sh" in
 '') config_sh='config.sh';;
 esac
 echo " "
 echo "Fetching answers from $config_sh..."
 cd ..
 . $config_sh
 test "$override" && . ./optdef.sh
 echo " "
?X: extract has to be run from the top directory, not within UU.
 . UU/extract
 rm -rf UU
 echo "Extraction done."
 exit 0
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Extractall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: html1dir.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: html1dir.U,v $
?RCS:
?MAKE:html1dir html1direxp installhtml1dir: cat Loc Myread \
 spackage test Getfile Setprefixvar Prefixit Prefixup
?MAKE: -pick add $@ %<
?Y:TOP
?D:html1dir=''
?S:html1dir:
?S: This variable contains the name of the directory in which html
?S: source pages are to be put.  This directory is for pages
?S: that describe whole programs, not libraries or modules.  It
?S: is intended to correspond roughly to section 1 of the Unix
?S: manuals.
?S:.
?D:html1direxp=''
?S:html1direxp:
?S: This
 variable is the same as the html1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installhtml1dir=''
?S:installhtml1dir:
?S: This variable is really the same as html1direxp, unless you are
?S: using a different installprefix.  For extra portability, you
?S: should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set html1direxp
?LINT:set installhtml1dir
: determine where html pages for programs go
set html1dir html1dir none
eval $prefixit
$cat <<EOM

If you wish to install html files for programs in $spackage, indicate
the appropriate directory here.  To skip installing html files,
answer "none".
EOM
case "$html1dir" in
''|none|$undef|' ') dflt=none ;;
*) dflt=$html1dir ;;
esac
```

```
fn=dn+~
rp="Directory for the main $spackage html pages?"
. ./getfile
prefixvar=html1dir
. ./setprefixvar
: Use ' ' for none so value is preserved next time through Configure
$test X"$html1dir" = "X" && html1dir=' '

Found
 in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/html1dir.U
No license file was found, but licenses were detected in source scan.

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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libpth.U,v $
?RCS: Revision 3.0.1.6  1997/02/28  16:08:49  ram
?RCS: patch61: new loclibpth variable
?RCS:
?RCS: Revision 3.0.1.5  1995/01/11  15:31:30  ram
?RCS: patch45: call ./mips instead of just mips (WED)
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:29:15  ram
?RCS: patch32: added /lib/pa1.1 for HP-UX specially tuned PA-RISC libs (ADO)
?RCS: patch32: fixed information message, making it clearer (ADO)
?RCS:
?RCS: Revision 3.0.1.3  1994/06/20  07:03:54  ram
?RCS: patch30: added /usr/shlib to
 glibpth for shared-only libraries
?RCS:
?RCS: Revision 3.0.1.2  1994/05/13  15:26:57  ram
?RCS: patch27: fixed a typo (libpth -> glibpth)
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  15:07:53  ram
?RCS: patch23: now asks for library directories to be searched (ADO)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
```

```
?X: This unit initializes the path for C library lookup.
?X:
?MAKE:libpth glibpth xlibpth plibpth loclibpth: \
 usrinc incpath test cat Myread Oldconfig
?MAKE: -pick add $@ %<
?S:libpth:
?S: This variable holds the general path (space-separated) used to find
?S: libraries. It is intended to be used by other units.
?S:.
?S:glibpth:
?S: This variable holds the general path (space-separated) used to
?S: find libraries.  It may contain directories that do not exist on
?S: this platform, libpth is the cleaned-up version.
?S:.
?S:xlibpth:
?S: This variable holds extra path (space-separated) used to find
?S: libraries on this platform,
 for example CPU-specific libraries
?S: (on multi-CPU platforms) may be listed here.
?S:.
?S:loclibpth:
?S: This variable holds the paths (space-separated) used to find local
?S: libraries.  It is prepended to libpth, and is intended to be easily
?S: set from the command line.
?S:.
?S:plibpth:
?S: Holds the private path used by Configure to find out the libraries.
?S: Its value is prepend to libpth. This variable takes care of special
?S: machines, like the mips.  Usually, it should be empty.
?S:.
?T: xxx dlist
?LINT:use usrinc
?INIT:: change the next line if compiling for Xenix/286 on Xenix/386
?INIT:xlibpth='/usr/lib/386 /lib/386'
?INIT:: Possible local library directories to search.
?INIT:loclibpth="/usr/local/lib /opt/local/lib /usr/gnu/lib"
?INIT:loclibpth="$loclibpth /opt/gnu/lib /usr/GNU/lib /opt/GNU/lib"
?INIT:
?INIT:: general looking path for locating libraries
?INIT:glibpth="/lib /usr/lib $xlibpth"
?INIT:glibpth="$glibpth /usr/ccs/lib /usr/ucblib /usr/local/lib"
?X: /shlib
 is for Digital Unix 4.0
?X: /usr/shlib is for OSF/1 systems.
?INIT:test -f /usr/shlib/libc.so && glibpth="/usr/shlib $glibpth"
?INIT:test -f /shlib/libc.so     && glibpth="/shlib $glibpth"
?INIT:
?INIT:: Private path used by Configure to find libraries.  Its value
```

```
?INIT:: is prepended to libpth. This variable takes care of special
?INIT:: machines, like the mips.  Usually, it should be empty.
?INIT:plibpth="
?INIT:
: Set private lib path
case "$plibpth" in
") if ./mips; then
?X: on mips, we DO NOT want /lib, and we want $incpath/usr/lib
  plibpth="$incpath/usr/lib /usr/local/lib /usr/ccs/lib"
 fi;;
esac
case "$libpth" in
' ') dlist="";;
") dlist="$loclibpth $plibpth $glibpth";;
*) dlist="$libpth";;
esac

: Now check and see which directories actually exist, avoiding duplicates
libpth="
for xxx in $dlist
do
   if $test -d $xxx; then
  case " $libpth " in
  *" $xxx "*) ;;
  *) libpth="$libpth $xxx";;
  esac
   fi
done
$cat <<'EOM'

Some systems have incompatible or broken versions
 of libraries.  Among
the directories listed in the question below, please remove any you
know not to be holding relevant libraries, and add any that are needed.
Say "none" for none.

EOM
case "$libpth" in
") dflt='none';;
*)
?X: strip leading space
 set X $libpth
 shift
 dflt=${1+"$@"}
 ;;
esac
rp="Directories to use for library searches?"
. ./myread
```

```
case "$ans" in
none) libpth=' ';;
*) libpth="$ans";;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/libpth.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: setsid.C,v 3.0.1.1 1994/01/24 13:58:47 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: setsid.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:47  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/lib/C/fake/setsid.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libc.U,v $
?RCS: Revision 3.0.1.10  1997/02/28  15:56:48  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: added support for HPUX-10 nm output
?RCS:
?RCS: Revision 3.0.1.9  1995/07/25  14:11:56  ram
?RCS: patch56: now knows about OS/2 platforms
?RCS:
```

```
?RCS: Revision 3.0.1.8  1995/05/12  12:20:47  ram
?RCS: patch54: made sure only most recent version of shared lib is picked
?RCS: patch54: final "nm -p" check now uses xscan and xrun like everybody
?RCS: patch54: can now grok
 linux nm output with lead __IO (ADO)
?RCS: patch54: added support for linux ELF output, using 'W' for alias (ADO)
?RCS:
?RCS: Revision 3.0.1.7  1994/10/29  16:23:40  ram
?RCS: patch36: now looks for shared libraries before anything else (ADO)
?RCS: patch36: added new nm output format (ADO)
?RCS:
?RCS: Revision 3.0.1.6  1994/08/29  16:28:10  ram
?RCS: patch32: added I-type symbols for nm output parsing on Linux
?RCS:
?RCS: Revision 3.0.1.5  1994/06/20  07:03:24  ram
?RCS: patch30: checks are now presented by succession of if/elif
?RCS: patch30: uniformized checks for shared objects with new so symbol
?RCS:
?RCS: Revision 3.0.1.4  1994/05/06  15:06:33  ram
?RCS: patch23: added shared library knowledge (ADO and WED)
?RCS:
?RCS: Revision 3.0.1.3  1994/01/24  14:12:17  ram
?RCS: patch16: can now export nm_extract as an internal-use only variable
?RCS:
?RCS: Revision 3.0.1.2  1993/09/13  16:09:03  ram
?RCS: patch10: added special handling for Apollo systems (WAD)
?RCS:
?RCS: Revision 3.0.1.1
  1993/08/27  14:40:03  ram
?RCS: patch7: added entry for /usr/shlib/libc.so (OSF/1 machines)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:57  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libc libnames +nm_extract: echo n c rm test grep Getfile Myread \
 Oldconfig Loc sed libs incpath libpth ar runnm nm nm_opt nm_so_opt \
 contains xlibpth so osname trnl tr sort uniq _o _a
?MAKE: -pick add $@ %<
?S:libc:
?S: This variable contains the location of the C library.
?S:.
?S:libnames:
?S: The constructed list of library names.  Normally empty, but hint files
?S: may set this for later perusal by Configure.
?S:.
?S:nm_extract:
?S: This variable holds the name of the extraction command used to process
?S: the output of nm and yield the list of defined symbols. It is used
```

```
?S: internally by Configure.
?S:.
?T:thislib try libnames xxx xscan xrun thisname com tans file
?F:!libnames !libc.tmp !tmp.imp
?LINT:change nm_opt runnm
?INIT:libnames=''
: Figure out where the libc is located
case
 "$runnm" in
true)
?X: indentation is wrong on purpose--RAM
: get list of predefined functions in a handy place
echo " "
case "$libc" in
'') libc=unknown
 case "$libs" in
 *-lc_s*) libc=`./loc libc_s$_a $libc $libpth`
 esac
 ;;
esac
case "$libs" in
'') ;;
*)  for thislib in $libs; do
 case "$thislib" in
 -lc|-lc_s)
  : Handle C library specially below.
  ;;
 -l*)
  thislib=`echo $thislib | $sed -e 's/^-l//'`
  if try=`./loc lib$thislib.$so.'*' X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib.$so X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib$_a X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc lib$thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc $thislib X $libpth`; $test -f "$try"; then
   :
  elif try=`./loc Slib$thislib$_a X $xlibpth`; $test -f "$try"; then
   :
  else
   try=''
  fi
  libnames="$libnames $try"
  ;;
```

```
 *) libnames="$libnames $thislib"
 ;;
 esac
 done
 ;;
esac
?X:
?X: Some systems (e.g. DG/UX) use "environmental" links, which make the test
?X: -f fail. Ditto for symbolic links. So in order to reliably check the
?X: existence of a file, we use test -r. It will still fail with DG/UX links
?X: though, but at least it will detect symbolic links. At some strategic
?X: points, we make use of (test -h), using a sub-shell in case builtin test
?X: does not implement the -h check for symbolic links. This makes it
?X: possible to preset libc in a hint file for instance and have it show up
?X: as-is in the question.
?X:
xxx=normal
case "$libc" in
unknown)
?X:
?X: The sed below transforms .so.9 .so.12 into something like .so.0009 .so.0012,
?X: then sorts on it to allow keeping .so.12 instead of .so.9 as the latest
?X: up-to-date library. The initial filename (before sed munging, saved in hold
?X: space via 'h') is appended via 'G' before sorting, then the leading munged
?X: part is removed after sorting. Nice efficient work
 from Tye McQueen.
?X: The initial blurfl is here to prevent the trailing pipe from producing an
?X: empty string, causing Configure to output all its set variables!
?X:
 set /lib/libc.$so
 for xxx in $libpth; do
  $test -r $1 || set $xxx/libc.$so
  : The messy sed command sorts on library version numbers.
  $test -r $1 || \
   set `echo blurfl; echo $xxx/libc.$so.[0-9]* | \
   tr ' ' $trnl | egrep -v '\.[A-Za-z]*$' | $sed -e '
    h
    s/[0-9][0-9]*/0000&/g
    s/0*\([0-9][0-9][0-9][0-9][0-9]\)/\1/g
    G
    s/\n/ /' | \
    $sort | $sed -e 's/^.* //'`
  eval set \$$#
 done
 $test -r $1 || set /usr/ccs/lib/libc.$so
 $test -r $1 || set /lib/libsys_s$_a
 ;;
*)
```

```
?X: ensure the test below for the (shared) C library will fail
 set blurfl
 ;;
esac
if $test -r "$1"; then
 echo "Your (shared) C library seems to be in $1."
 libc="$1"
elif $test -r /lib/libc && $test -r /lib/clib; then
?X:
?X: Apollo has its C library in /lib/clib AND /lib/libc
?X: not to mention its math library in /lib/syslib...
?X:
 echo
 "Your C library seems to be in both /lib/clib and /lib/libc."
 xxx=apollo
 libc='/lib/clib /lib/libc'
 if $test -r /lib/syslib; then
  echo "(Your math library is in /lib/syslib.)"
?X: Put syslib in libc -- not quite right, but won't hurt
  libc="$libc /lib/syslib"
 fi
elif $test -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 echo "Your C library seems to be in $libc, as you said before."
?X: For mips, and...
elif $test -r $incpath/usr/lib/libc$_a; then
 libc=$incpath/usr/lib/libc$_a;
 echo "Your C library seems to be in $libc.  That's fine."
elif $test -r /lib/libc$_a; then
 libc=/lib/libc$_a;
 echo "Your C library seems to be in $libc.  You're normal."
else
 if tans=`./loc libc$_a blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc libc blurfl/dyick $libpth`; $test -r "$tans"; then
  libnames="$libnames "`./loc clib blurfl/dyick $libpth`
 elif tans=`./loc clib blurfl/dyick $libpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Slibc$_a blurfl/dyick
 $xlibpth`; $test -r "$tans"; then
  :
 elif tans=`./loc Mlibc$_a blurfl/dyick $xlibpth`; $test -r "$tans"; then
  :
 else
  tans=`./loc Llibc$_a blurfl/dyick $xlibpth`
 fi
 if $test -r "$tans"; then
  echo "Your C library seems to be in $tans, of all places."
  libc=$tans
```

```
 else
  libc='blurfl'
 fi
fi
if $test $xxx = apollo -o -r "$libc" || (test -h "$libc") >/dev/null 2>&1; then
 dflt="$libc"
 cat <<EOM

If the guess above is wrong (which it might be if you're using a strange
compiler, or your machine supports multiple models), you can override it here.

EOM
else
 dflt=''
 echo $libpth | $tr ' ' $trnl | $sort | $uniq > libpath
 cat >&4 <<EOM
I can't seem to find your C library.  I've looked in the following places:

EOM
 $sed 's/^/ /' libpath
 cat <<EOM

None of these seems to contain your C library. I need to get its name...

EOM
fi
fn=f
rp='Where is your C library?'
. ./getfile
libc="$ans"

echo " "
echo $libc $libnames | $tr ' ' $trnl | $sort | $uniq > libnames
set X `cat libnames`
shift
xxx=files
case
 $# in 1) xxx=file; esac
echo "Extracting names from the following $xxx for later perusal:" >&4
echo " "
$sed 's/^/ /' libnames >&4
echo " "
$echo $n "This may take a while...$c" >&4

?X:
?X: Linux may need the special Dynamic option to nm for shared libraries.
?X: In general, this is stored in the nm_so_opt variable.
?X: Unfortunately, that option may be fatal on non-shared libraries.
```

```
?X:
for file in $*; do
 case $file in
 *$so*) $nm $nm_so_opt $nm_opt $file 2>/dev/null;;
 *) $nm $nm_opt $file 2>/dev/null;;
 esac
done >libc.tmp

$echo $n ".$c"
?X:
?X: To accelerate processing, we look at the correct 'sed' command
?X: by using a small subset of libc.tmp, i.e. fprintf function.
?X: When we know which sed command to use, do the name extraction
?X:
$grep fprintf libc.tmp > libc.ptf
?X:
?X: In order to enhance readability and save some space, we define
?X: some variables that will be "eval"ed.
?X:
xscan='eval "<libc.ptf $com >libc.list"; $echo $n ".$c" >&4'
xrun='eval
 "<libc.tmp $com >libc.list"; echo "done." >&4'
?X: BSD-like output, I and W types added for Linux
?X: Some versions of Linux include a leading __IO in the symbol name.
?X: HPUX10 reportedly has trailing spaces, though I'm surprised it has
?X: BSD-like output.  (AD).
xxx='[ADTSIW]'
if com="$sed -n -e 's/__IO//' -e 's/^.* $xxx  *_[_.]*//p' -e 's/^.* $xxx  *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: SYSV-like output
elif com="$sed -n -e 's/^__*//' -e 's/^\([a-zA-Z_0-9$]*\).*xtern.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/|UNDEF/d' -e '/FUNC..GL/s/^.*|__*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.* D __*//p' -e 's/^.* D //p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^_//' -e 's/^\([a-zA-Z_0-9]*\).*xtern.*text.*/\1/p'";\
 eval
 $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
```

```
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$grep '|' | $sed -n -e '/|COMMON/d' -e '/|DATA/d' \
    -e '/ file/d' -e 's/^\([^  ]*\).*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|FUNC |GLOB .*|//p' -e 's/^.*|FUNC |WEAK .*|//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: mips nm output (sysV)
elif com="$sed -n -e 's/^__//' -e '/|Undef/d' -e '/|Proc/s/ .*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/^.*|Proc .*|Text *| *//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e '/Def. Text/s/.* \([^ ]*\)\$/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null
 2>&1; then
  eval $xrun
?X: OS/2 nm output
elif com="$sed -n -e 's/^[-0-9a-f ]*_\(.*\)=.*/\1/p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
elif com="$sed -n -e 's/.*\.text n\ \ \ \.//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
?X: AIX nm output
elif com="sed -n -e 's/^__.*//' -e 's/[       ]*D[    ]*[0-9]*.*//p'";\
 eval $xscan;\
 $contains '^fprintf$' libc.list >/dev/null 2>&1; then
  eval $xrun
else
 $nm -p $* 2>/dev/null >libc.tmp
 $grep fprintf libc.tmp > libc.ptf
 if com="$sed -n -e 's/^.* [ADTSIW]  *_[_.]*//p' -e 's/^.* [ADTSIW] //p'";\
  eval $xscan; $contains '^fprintf$' libc.list >/dev/null 2>&1
 then
```

```
 nm_opt='-p'
 eval $xrun
else
 echo " "
 echo "$nm didn't seem to work right. Trying $ar instead..." >&4
 com=''
 if $ar t $libc > libc.tmp && \
  $contains '^fprintf$' libc.tmp >/dev/null 2>&1
 then
  for thisname in $libnames $libc; do
   $ar t $thisname >>libc.tmp
  done
  $sed
-e "s/\\$_o\$//" < libc.tmp > libc.list
  echo "Ok." >&4
 elif test "X$osname" = "Xos2" && $ar tv $libc > libc.tmp; then
?X: Repeat libc to extract forwarders to DLL entries too
  for thisname in $libnames $libc; do
   $ar tv $thisname >>libc.tmp
?X: Revision 50 of EMX has bug in ar: it will not extract forwarders
?X: to DLL entries.  Use emximp which will extract exactly them.
   emximp -o tmp.imp $thisname \
       2>/dev/null && \
       $sed -e 's/^\([_a-zA-Z0-9]*\) .*$/\1/p' \
       < tmp.imp >>libc.tmp
   $rm -f tmp.imp
  done
  $sed -e "s/\\$_o\$//" -e 's/^ \+//' < libc.tmp > libc.list
  echo "Ok." >&4
 else
  echo "$ar didn't seem to work right." >&4
  echo "Maybe this is a Cray...trying bld instead..." >&4
  if
   bld t $libc | \
    $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" > libc.list &&
   $test -s libc.list
  then
   for thisname in $libnames; do
    bld t $libnames | \
    $sed -e 's/.*\///' -e "s/\\$_o:.*\$//" >>libc.list
    $ar t $thisname >>libc.tmp
   done
   echo
"Ok." >&4
  else
   echo "That didn't work either." >&4
   echo "No problem, I'll be compiling test programs then..." >&4
   runnm=false
```

```
   fi
  fi
 fi
fi
nm_extract="$com"
if $test -f /lib/syscalls.exp; then
 echo " "
 echo "Also extracting names from /lib/syscalls.exp for good ole AIX..." >&4
 $sed -n 's/^\([^  ]*\)[  ]*syscall[0-9]*[  ]*$/\1/p' \
  /lib/syscalls.exp >>libc.list
fi
?X: remember, indentation is wrong on purpose--RAM
;;
esac
$rm -f libnames libpath
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/libc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: h_fcntl.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: h_fcntl.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:12  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:h_fcntl: Nothing
?MAKE: -pick add $@ %<
?S:h_fcntl:
?S: This is variable gets set in various places to tell i_fcntl that
?S: <fcntl.h> should be included.
?S:.
: Initialize h_fcntl
h_fcntl=false
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/h_fcntl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
```

```
?RCS:
?RCS: Copyright (c) 1999 Jarkko Hietaniemi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:siteman1dir siteman1direxp installsiteman1dir: Getfile \
 Setprefixvar prefix siteprefix man1dir sed
?MAKE: -pick add $@ %<
?Y:TOP
?D:siteman1dir=''
?S:siteman1dir:
?S: This variable contains the name of the directory in which site-specific
?S: manual source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S: The standard distribution will put nothing in this directory.
?S: After perl
 has been installed, users may install their own local
?S: man1 pages in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:siteman1direxp=''
?S:siteman1direxp:
?S: This variable is the same as the siteman1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installsiteman1dir=''
?S:installsiteman1dir:
?S: This variable is really the same as siteman1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installsiteman1dir
?LINT:set siteman1dir
?LINT:set siteman1direxp
: determine where add-on manual pages go
case "$siteman1dir" in
'') dflt=`echo $man1dir | $sed "s#^$prefix#$siteprefix#"` ;;
*) dflt=$siteman1dir ;;
esac
case "$dflt" in
```

```
"|' ') dflt=none ;;
esac
fn=dn+~
rp='Pathname
 where the site-specific manual pages should be installed?'
. ./getfile
prefixvar=siteman1dir
. ./setprefixvar
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/siteman1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Thomas Neumann <tom@smart.bo.open.de>
?RCS:
?RCS: $Log: Findhdr.U,v $
?RCS: Revision 3.0.1.2  1994/10/29  15:53:08  ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0.1.1  1994/05/06  14:03:56  ram
?RCS: patch23: cppminus must be after other cppflags, not before
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a findhdr script which is used to locate the header
?X: files
 in $usrinc or other stranger places using cpp capabilities. The
?X: script is given an include file base name, like 'stdio.h' or 'sys/file.h'
?X: and it returns the full path of the include file and a zero status or an
?X: empty string with an error status if the file could not be located.
?X:
?MAKE:Findhdr: grep test tr rm +usrinc awk cat startsh \
 cppstdin cppminus +cppflags eunicefix osname
?MAKE: -pick add $@ %<
?LINT:define fieldn
?S:fieldn:
```

```
?S: This variable is used internally by Configure. It contains the position
?S: of the included file name in cpp output. That is to say, when cpp
?S: pre-processes a #include <file> line, it replaces it by a # line which
?S: contains the original position in the input file and the full name of
?S: included file, between "quotes".
?S:.
?V:fieldn
?F:./findhdr !fieldn
?T:cline pos wanted name awkprg cppfilter testaccess status usrincdir
: determine filename position in cpp output
echo " "
echo "Computing filename position in cpp output for #include
 directives..." >&4
echo '#include <stdio.h>' > foo.c
case "$osname" in
vos)
 testaccess=-e
?X: VOS: path component separator is >
 cppfilter="tr '\\\\>' '/' |"
 ;;
*)
 testaccess=-r
 cppfilter="
 ;;
esac
$cat >fieldn <<EOF
$startsh
$cppstdin $cppflags $cppminus <foo.c 2>/dev/null | \
$grep '^[  ]*#.*stdio\.h' | \
while read cline; do
 pos=1
 set \$cline
 while $test \$# -gt 0; do
  if $test $testaccess \`echo \$1 | $tr -d '"'\`; then
   echo "\$pos"
   exit 0
  fi
  shift
  pos=\`expr \$pos + 1\`
 done
done
EOF
chmod +x fieldn
fieldn=`./fieldn`
$rm -f foo.c fieldn
case $fieldn in
") pos='???';;
1) pos=first;;
```

```
2) pos=second;;
3) pos=third;;
*) pos="${fieldn}th";;
esac
echo "Your cpp writes the filename in the $pos field of the line."

?X: To locate a header file, we cannot simply check for $usrinc/file.h, since
?X: some machine have the headers in weird places and our only hope is that
?X: the C pre-processor will know how to find those headers. Thank you NexT!
: locate header file
$cat
 >findhdr <<EOF
$startsh
wanted=\$1
name=''
for usrincdir in $usrinc; do
 if test -f \$usrincdir/\$wanted; then
  echo "\$usrincdir/\$wanted"
  exit 0
 fi
done
awkprg='{ print \$$fieldn }'
echo "#include <\$wanted>" > foo\$\$.c
$cppstdin $cppminus $cppflags < foo\$\$.c 2>/dev/null | \
$cppfilter $grep "^[  ]*#.*\$wanted" | \
while read cline; do
 name=\`echo \$cline | $awk "\$awkprg" | $tr -d '"'\`
 case "\$name" in
 *[/\\\\]\$wanted) echo "\$name"; exit 1;;
 *[\\\\/]\$wanted) echo "\$name"; exit 1;;
 *) exit 2;;
 esac
done
?X: status = 0: grep returned 0 lines, case statement not executed
?X: status = 1: headerfile found
?X: status = 2: while loop executed, no headerfile found
status=\$?
$rm -f foo\$\$.c
if test \$status -eq 1; then
 exit 0
fi
exit 1
EOF
chmod +x findhdr
$eunicefix findhdr
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Findhdr.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: contains.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: contains.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:35  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:contains: Nothing
?MAKE: -pick add $@ %<
?S:contains:
?S: This variable holds the command to do a grep with a proper return
?S: status.  On most sane systems it is simply "grep".  On insane systems
?S: it is a grep followed by a cat followed by a test.  This variable
?S: is primarily for the use of other Configure units.
?S:.
: Some
 greps do not return status, grrr.
echo "grimblepritz" >grimble
if grep blurfldyick grimble >/dev/null 2>&1 ; then
 contains=contains
elif grep grimblepritz grimble >/dev/null 2>&1 ; then
 contains=grep
else
 contains=contains
fi
rm -f grimble
: the following should work in any shell
case "$contains" in
contains*)
 echo " " >&4
 echo "AGH!  Grep doesn't return a status.  Attempting remedial action." >&4
 cat >contains <<'EOSS'
grep "$1" "$2" >.greptmp && cat .greptmp && test -s .greptmp
EOSS
contains=./contains
chmod +x $contains
esac
```

Found in path(s):

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/contains.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: man3dir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:10:34  ram
?RCS: patch61: created
?RCS:
?X:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man3 used instead of man everywhere.
?X: I then added various tests because perl5 has *lots* of man3
?X: pages with long file names. -- ADO
?X:
?MAKE:man3dir
 man3direxp man3ext installman3dir: afs cat nroff Loc Oldconfig \
 sed man1dir spackage package Getfile prefix Prefixit Prefixup \
 d_flexfnam privlib Myread
?MAKE: -pick add $@ %<
?Y:TOP
?S:man3dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?S:man3direxp:
?S: This variable is the same as the man3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?S:installman3dir:
?S: This variable is really the same as man3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
```

```
?S:man3ext:
?S: This variable contains the extension that the manual
 page should
?S: have: one of 'n', 'l', or '3'.  The Makefile must supply the '.'.
?S: See man3dir.
?S:.
: determine where library module manual pages go
set man3dir man3dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages for many of the library modules.
EOM

case "$nroff" in
nroff)
 $cat <<'EOM'
However, you don't have nroff, so they're probably useless to you.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

case "$d_flexfnam" in
undef)
 $cat <<'EOM'
However, your system can't handle the long file names like File::Basename.3.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

echo "If you don't want the manual sources installed, answer 'none'."
?X: We dont use /usr/local/man/man3 because some man programs will
?X: only show the /usr/local/man/man3 contents, and not the system ones,
?X: thus man less will show the perl module less.pm, but not the system
?X: less command.  We might also conflict with TCL man pages.
?X: However, something like /opt/perl/man/man3
 is fine.
case "$man3dir" in
") case "$prefix" in
 *$package*) dflt=`echo $man1dir |
   $sed -e 's/man1/man3/g' -e 's/man\.1/man\.3/g'` ;;
 *) dflt="$privlib/man/man3" ;;
 esac
 ;;
```

```
' ') dflt=none;;
*) dflt="$man3dir" ;;
esac
echo " "

fn=dn+~
rp="Where do the $package library man pages (source) go?"
. ./getfile
if test "X$man3direxp" != "X$ansexp"; then
 installman3dir=''
fi

man3dir="$ans"
man3direxp="$ansexp"
case "$man3dir" in
'') man3dir=' '
 installman3dir='';;
esac
if $afs; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installman3dir" in
 '') dflt=`echo $man3direxp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installman3dir";;
 esac
 fn=de~
 rp='Where will man pages be installed?'
 . ./getfile
 installman3dir="$ans"
else
 installman3dir="$man3direxp"
fi

: What suffix
 to use on installed man pages

case "$man3dir" in
' ')
 man3ext='0'
 ;;
*)
 rp="What suffix should be used for the $package library man pages?"
 case "$man3ext" in
```

```
 ") case "$man3dir" in
  *3)  dflt=3 ;;
  *3p) dflt=3p ;;
  *3pm) dflt=3pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L3) dflt=L3;;
  *) dflt=3;;
  esac
  ;;
 *) dflt="$man3ext";;
 esac
 . ./myread
 man3ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/man3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Typedef.U,v $
?RCS: Revision 3.0.1.3  1995/07/25  13:42:07  ram
?RCS: patch56: added backslash escapes within evals to prevent space problems
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:01:16  ram
?RCS: patch36: don't clobber visible 'val' variable, use 'varval' instead
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:05:14  ram
?RCS: patch32: created
?RCS:
?X:
?X: This unit checks for the definition of a given typedef.
?X:
```

```
?X: To use it, say:
?X: set typedef val_t default [includes]
?X: eval $typedef
?X:
?MAKE:Typedef:
 cppstdin cppminus cppflags rm contains Oldconfig
?MAKE: -pick add $@ %<
?F:!temp.c
?LINT:define typedef
?V:typedef
?S:typedef:
?S: This shell variable is used internally by Configure to check
?S: wether a given typedef is defined or not. A typical use is:
?S:  set typedef val_t default [includes]
?S:  eval $typedef
?S: That will return val_t set to default if the typedef was not found,
?S: to typedef otherwise. If no includes are specified, look in sys/types.h.
?S:.
?T:type var def inclist varval inc
: define an is-a-typedef? function
typedef='type=$1; var=$2; def=$3; shift; shift; shift; inclist=$@;
case "$inclist" in
"") inclist="sys/types.h";;
esac;
eval "varval=\$$var";
case "$varval" in
"")
 $rm -f temp.c;
 for inc in $inclist; do
  echo "#include <$inc>" >>temp.c;
 done;
 $cppstdin $cppflags $cppminus < temp.c >temp.E 2>/dev/null;
 if $contains $type temp.E >/dev/null 2>&1; then
  eval "$var=\$type";
 else
  eval "$var=\$def";
 fi;
 $rm -f temp.?;;
*) eval
 "$var=\$varval";;
esac'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Typedef.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Inlibc.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Inlibc.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  15:55:08  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:03  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit checks for the definition of a given function.
?X:
?X: To use it, say:
?X: set function d_func
?X: eval $inlibc
?X:
?MAKE:Inlibc: Csym Whoa Oldconfig
?MAKE: -pick add $@ %<
?LINT:define inlibc
?V:inlibc
?S:inlibc:
?S: This
 shell variable is used internally by Configure to check
?S: wether a given function is defined or not. A typical use is:
?S:  set function d_func
?S:  eval $inlibc
?S: That will print a message, saying wether function was found or
?S: not and set d_func accordingly.
?S:.
?T:was tx sym tres td tu var
: define an is-in-libc? function
inlibc='echo " "; td=$define; tu=$undef;
sym=$1; var=$2; eval "was=\$$2";
tx=yes;
case "$reuseval$was" in
true) ;;
true*) tx=no;;
esac;
case "$tx" in
yes)
 set $sym tres -f;
 eval $csym;
```

```
 case "$tres" in
 true)
  echo "$sym() found." >&4;
  case "$was" in $undef) . ./whoa; esac; eval "$var=\$td";;
 *)
  echo "$sym() NOT found." >&4;
  case "$was" in $define) . ./whoa; esac; eval "$var=\$tu";;
 esac;;
*)
 case "$was" in
 $define) echo "$sym() found." >&4;;
 *) echo "$sym() NOT found." >&4;;
 esac;;
esac'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Inlibc.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Setvar.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Setvar.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  15:58:28  ram
?RCS: patch36: call ./whoa explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:16  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit produces a variable that is intended to be eval'ed in
?X: order to define/undefine a symbol. A consistency check is made
?X: regarding any previous value and a warning is issued if there
?X: is any discrepancy.
?X:
?X:
 To use it, say:
?X: val=<value>
?X: set d_variable
?X: eval $setvar
?X:
```

```
?MAKE:Setvar: Whoa
?MAKE: -pick add $@ %<
?LINT:define setvar
?S:setvar:
?S: This shell variable is used internally by Configure to set a value
?S: to a given symbol that is defined or not. A typical use is:
?S: val=<value computed>
?S:  set d_variable
?S:  eval $setvar
?S: That will print a message in case the $val value is not the same
?S: as the previous value of $d_variable.
?S:.
?V:setvar:val
?T:var was td tu
: function used to set '$1' to '$val'
setvar='var=$1; eval "was=\$$1"; td=$define; tu=$undef;
case "$val$was" in
$define$undef) . ./whoa; eval "$var=\$td";;
$undef$define) . ./whoa; eval "$var=\$tu";;
*) eval "$var=$val";;
esac'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Setvar.U
No license file was found, but licenses were detected in source scan.

?RCS: You may distribute under the terms of either the GNU General Public

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_fsat.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_fpclass.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_truncl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_towlower.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_sockatmark.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_statfs_s.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_signbit.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_strtold.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_shadow.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_stdbool.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_endpwent.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_lgamma_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_fpclassify.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_fstatfs.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_fcntl_can_lock.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_sysstatvfs.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_ustat.U
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 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_nl_langinfo_l.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_gethbyad.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_statvfs.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_setpwent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_bfd.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_setprotoent_r.U

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_lroundl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_srandom_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_round.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_socks5_init.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/acl/d_accessx.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_strtoq.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_towupper.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_futimes.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/i_sysuio.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_setenv.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_mkdtemp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_setproctitle.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_unordered.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_strftime.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/uselfs.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_strlcpy.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_unsetenv.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_mntent.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_libm_lib_version.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_getenv_thread.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_msghdr_s.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_socks.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_getcwd.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/a_dvisory/quadtype.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_strlcat.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_sysvfs.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/infnan.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_hasmntopt.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_getspnam_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_log2.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_log1p.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_nextafter.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/perlx32f.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/usemultiplicity.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_setgrent.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_setitimer.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/quadfio.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_nan.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_getgrnam_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_getnetbyaddr_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_fp_classl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_ptrdiff_t.U
*
/perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_localtime_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_ieeefp.U

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_remainder.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_newlocale.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/gidf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_gethostbyaddr_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/d_siginfo_si.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/usefaststdio.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_isnan.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_isfinite.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_sendmsg.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_nearbyint.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_endgrent_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_ilogb.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/typedefs/uidf.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/usebacktrace.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_rint.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/protos/Protochk.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_getsrvby.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_fpclassl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/time_size.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_llroundl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_getaddrinfo.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/usesocks.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_asctime_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_pthread_atfork.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_lrint.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_off64_t.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/i_sysutsname.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_endnetent_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_hypot.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_crypt_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/usequadmath.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_longlong.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/threads/d_readdir64_r.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/d_getnbynm.U
*
 /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_strtouq.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: html3dir.U,v $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: html3dir.U,v $
?RCS:
?MAKE:html3dir html3direxp installhtml3dir: cat sed Loc Myread \
 spackage test Getfile Setprefixvar Prefixit Prefixup html1dir
?MAKE: -pick add $@ %<
?Y:TOP
?D:html3dir="
?S:html3dir:
?S: This variable contains the name of the directory in which html
?S: source pages are to be put.  This directory is for pages
?S: that describe libraries or modules.  It is intended to
?S: correspond roughly to section 3 of the Unix manuals.
?S:.
?D:html3direxp="
?S:html3direxp:
?S: This variable
 is the same as the html3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installhtml3dir="
?S:installhtml3dir:
?S: This variable is really the same as html3direxp, unless you are
?S: using a different installprefix.  For extra portability, you
?S: should only use this variable within your makefiles.
?S:.
?LINT:change prefixvar
?LINT:set html3direxp
?LINT:set installhtml3dir
: determine where html pages for libraries and modules go
set html3dir html3dir none
eval $prefixit
$cat <<EOM

If you wish to install html files for modules associated with $spackage,
indicate the appropriate directory here.  To skip installing html files,
answer "none".
EOM
: There is no obvious default.  If they have specified html1dir, then
: try to key off that, possibly changing .../html1 into .../html3.
case "$html3dir" in
") html3dir=`echo "$html1dir" | $sed 's/1$/3$/'` ;;
*) dflt=$html3dir ;;
esac
fn=dn+~
rp="Directory for the $spackage module
```

```
 html pages?"
. ./getfile
prefixvar=html3dir
. ./setprefixvar
: Use ' ' for none so value is preserved next time through Configure
$test X"$html3dir" = "X" && html3dir=' '
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/html3dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Myinit.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:47:29  ram
?RCS: patch44: leading comment states this unit comes before option processing
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:07  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: If you want to initialize any default values, copy this unit to your
?X: personal U directory and add the assignments to the end.  This file
?X: is included after variables are initialized but before any old
?X: config.sh file is read in and before
 any Configure switch processing.
?X:
?MAKE:Myinit: Init
?MAKE: -pick add $@ %<
?LINT: nocomment
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Myinit.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Hasproto.U $
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
```

```
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasproto string that is used internally
?X: by Configure to check if this system has a prototype for a
?X: particular function
?X:
?X: To use it, say something like:
?X:  set d_getnetent_proto getnetent $i_netdb netdb.h
?X:  eval $hasproto
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/types.h
?X:  $i_systime sys/time.h
?X:  $i_sysselct sys/select.h
?X:  $i_netdb netdb.h"
?X: set d_getnetent_proto getnetent $hdrs
?X: eval $hasproto
?X:
?X: There is also an 'escape' hatch built in.  If you have a pair
?X: of args   'literal 'stuff' then 'stuff' gets included literally
?X: into the test program.  See Protochk.U for more details.
?X:
?MAKE:Hasproto:
 Setvar cppstdin cppflags cppminus contains rm_try test
?MAKE: -pick add $@ %<
?T:func varname
?F:!try.c
?V:hasproto
: Define hasproto macro for Configure internal use
hasproto='varname=$1; func=$2; shift; shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 literal) echo "$2" ;;
 esac ;
   shift 2;
done > try.c;
$cppstdin $cppflags $cppminus < try.c > tryout.c 2>/dev/null;
if $contains "$func.*(" tryout.c >/dev/null 2>&1; then
 echo "$func() prototype found.";
 val="$define";
else
 echo "$func() prototype NOT found.";
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try tryout.c'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/protos/Hasproto.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Copyright (c) 1998 Andy Dougherty
?RCS:
?RCS: Original author Jarkko Hietaniemi <jhi@iki.fi>
?RCS: Merged into dist by Andy Dougherty  July 13, 1998
?RCS:
?MAKE:trnl: Nothing
?MAKE: -pick add $@ %<
?S:trnl:
?S: This variable contains the value to be passed to the tr(1)
?S: command to transliterate a newline.  Typical values are
?S: '\012' and '\n'.  This is needed for EBCDIC systems where
?S: newline is not necessarily '\012'.
?S:.
?T: DJGPP
: Find the appropriate value for a newline for tr
?X: We can't
 use $tr since that would cause a circular dependency via Myread
?X: dos djgpp uses '\015\012', but reportedly is happy with '\012' in the
?X: tr command.  I don't know why it passes the '\n' test but later
?X: refuses to work correctly with it.  --AD  6/14/98
if test -n "$DJGPP"; then
    trnl='\012'
fi
if test X"$trnl" = X; then
 case "`echo foo | tr '\n' x 2>/dev/null`" in
 foox) trnl='\n' ;;
 esac
fi
if test X"$trnl" = X; then
 case "`echo foo | tr '\012' x 2>/dev/null`" in
 foox) trnl='\012' ;;
 esac
fi
if test X"$trnl" = X; then
```

```
	case "`echo foo | tr '\r\n' xy 2>/dev/null`" in
	fooxy) trnl='\n\r' ;;
	esac
fi
if test X"$trnl" = X; then
 cat <<EOM >&2

$me: Fatal Error: cannot figure out how to translate newlines with 'tr'.

EOM
 exit 1
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/trnl.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Rcs.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Rcs.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:15  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This is a unit that helps people who write SH scripts and keep them under
?X: RCS, but don't think to protect the $Log and other $Id keywords from
?X: variable substitution (or people like me who do not like to).
?X:
?MAKE:Author Date Header Id Locker Log RCSfile Revision Source State: Oldconfig
?MAKE: -pick weed $@ %<
?LINT:describe Author
 Date Header Id Locker Log RCSfile Revision Source State
: preserve RCS keywords in files with variable substitution, grrr
?Author:Author='$Author'
?Date:Date='$Date'
?Header:Header='$Header'
?Id:Id='$Id'
?$Locker'
?Log:Log='$Log'
?RCSfile:RCSfile='$RCSfile'
```

```
?Revision:Revision='$Revision'
?Source:Source='$Source'
?State:State='$State'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Rcs.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lib.U,v 3.0.1.3 1995/09/25 09:16:47 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: lib.U,v $
?RCS: Revision 3.0.1.3  1995/09/25  09:16:47  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:38:08  ram
?RCS: patch49: can now handle installation prefix changes (from WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/08/29  16:27:40  ram
?RCS: patch32: now uses installation prefix to set the default
?RCS:
?RCS: Revision 3.0  1993/08/18  12:08:56  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?LINT:
 empty
?X:?MAKE:lib libexp: Getfile Loc Oldconfig Prefixit Prefixup prefixexp
?X:?MAKE: -pick add $@ %<
?X:?Y:TOP
?X:?S:lib:
?X:?S: This variable holds the name of the directory in which the user wants
?X:?S: to put public library files for the package in question.  It is most
?X:?S: often a local directory such as /usr/local/lib. Programs using this
?X:?S: variable must be prepared to deal with filename expansion.
?X:?S:.
?X:?S:libexp:
?X:?S: This variable is the same as the lib variable, but is filename expanded
?X:?S: at configuration time, for convenient use in your makefiles.
?X:?S:.
?X:: determine where public libraries go
?X:set lib lib
```

```
?X:eval $prefixit
?X:case "$lib" in
?X:")
?X: dflt=`./loc . "." $prefixexp/lib /usr/local/lib /usr/lib /lib`
?X: set dflt
?X: eval $prefixup
?X: ;;
?X:*)  dflt="$lib";;
?X:esac
?X:echo " "
?X:fn=d~
?X:rp='Where do you want to put the public libraries?'
?X:. ./getfile
?X:lib="$ans"
?X:libexp="$ansexp"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/nullified/lib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Begin.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Begin.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  14:56:35  ram
?RCS: patch61: added Extractall dependency
?RCS:
?RCS: Revision 3.0.1.2  1995/01/30  14:25:08  ram
?RCS: patch49: avoid an empty rmlist: systems might choke on it (WED)
?RCS:
?RCS: Revision 3.0.1.1  1994/10/31  09:32:20  ram
?RCS: patch44: created
?RCS:
?X:
?X: This file comes after option processing had been done and after all
?X: the default values have been set up. It marks the beginning
 of questions.
?X: It is important that Options be listed *after* Myinit to ensure that the
?X: default initializations performed by Init and Myinit will not clobber
?X: any setting done on the command line via -D or -U.
?X:
```

```
?MAKE:Begin: Myinit Options package Extractall
?MAKE: -pick add $@ %<
: Eunice requires " " instead of "", can you believe it
echo " "
: Here we go...
echo "Beginning of configuration questions for $package."

?X: Make sure the rm below is given a non-empty list for some systems.
?X: This is run only when within the UU directory, hence we can safely
?X: attempt to rm a non-existent 'X' file...
trap 'echo " "; test -d ../UU && rm -rf X $rmlist; exit 1' 1 2 3 15
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Begin.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: man3dir.U,v 3.1 1999/07/08 20:52:19 doughera Exp doughera $
?RCS:
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?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: man3dir.U,v $
?RCS: Revision 3.1  1999/07/08 20:52:19  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:10:34  ram
?RCS: patch61: created
?RCS:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and man3dir.  This unit is basically dist's mansrc.U with
?X: man3 used instead
 of man everywhere.
?X: I then added various tests because perl5 has *lots* of man3
?X: pages with long file names. -- ADO
?X:
?MAKE:man3dir man3direxp man3ext installman3dir: cat nroff Loc Oldconfig \
 sed man1dir spackage package Getfile Setprefixvar Prefixit Prefixup \
 d_flexfnam privlib Myread test
?MAKE: -pick add $@ %<
?Y:TOP
?D:man3dir="
```

```
?S:man3dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?D:man3direxp=''
?S:man3direxp:
?S: This variable is the same as the man3dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installman3dir=''
?S:installman3dir:
?S: This variable is really the same as man3direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man3direxp only
 points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?S:man3ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '3'.  The Makefile must supply the '.'.
?S: See man3dir.
?S:.
?T:prog tdflt
?LINT:change prefixvar
?LINT:set man3direxp
: determine where library module manual pages go
set man3dir man3dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages for many of the library modules.
EOM

case "$nroff" in
nroff)
 $cat <<'EOM'
However, you don't have nroff, so they're probably useless to you.
EOM
 case "$man3dir" in
 '') man3dir="none";;
 esac;;
esac

case "$d_flexfnam" in
undef)
 $cat <<'EOM'
```

```
However, your system can't handle the long file names like File::Basename.3.
EOM
 case "$man3dir" in
 ") man3dir="none";;
 esac;;
esac

echo "If you don't want the manual sources installed, answer 'none'."
?X: In 5.005_57 and earlier, I had the following notes:
?X:
 We do not use /usr/local/man/man3 because some man programs will
?X: only show the /usr/local/man/man3 contents, and not the system ones,
?X: thus man less will show the perl module less.pm, but not the system
?X: less command.  We might also conflict with Tcl man pages.
?X: However, something like /opt/perl/man/man3 is fine.
?X:
?X: However, opinion seems to be shifting such that 'man POSIX' ought
?X: to just work.  -- Andy Dougherty  July 8, 1999
?X:
?X: remove any trailing -3.0 or other version indication from $package
prog=`echo $package | $sed 's/-*[0-9.]*$//'`
case "$man3dir" in
") dflt=`echo "$man1dir" | $sed -e 's/man1/man3/g' -e 's/man\.1/man\.3/g'`
 if $test -d "$privlib/man/man3"; then
  cat <<EOM >&4

WARNING:  Previous versions of perl installed man3 pages into
$privlib/man/man3.  This version will suggest a
new default of $dflt.
EOM
  tdflt=$dflt
  dflt='n'
  rp='Do you wish to preserve the old behavior?(y/n)'
  . ./myread
  case "$ans" in
  y*) dflt="$privlib/man/man3"
 ;;
  *)  dflt=$tdflt ;;
  esac
   fi
 ;;
*) dflt="$man3dir" ;;
esac
case "$dflt" in
' ') dflt=none ;;
esac
echo " "
fn=dn+~
```

```
rp="Where do the $package library man pages (source) go?"
. ./getfile
prefixvar=man3dir
. ./setprefixvar

case "$man3dir" in
") man3dir=' '
 installman3dir=";;
esac

: What suffix to use on installed man pages
case "$man3dir" in
' ')
 man3ext='0'
 ;;
*)
 rp="What suffix should be used for the $package library man pages?"
 case "$man3ext" in
 ") case "$man3dir" in
  *3)  dflt=3 ;;
  *3p) dflt=3p ;;
  *3pm) dflt=3pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L3) dflt=L3;;
  *) dflt=3;;
  esac
  ;;
 *) dflt="$man3ext";;
 esac
 . ./myread
 man3ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/man3dir.U
No license file was found, but licenses were detected in source scan.

```
/* $Id: Jmake.rules 18 2006-12-27 10:35:09Z rmanfredi $
*
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*
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```

```
*  as specified in the README file that comes with the distribution.
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*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: Jmake.rules,v $
* Revision 3.0.1.7  2004/08/22 08:28:58  ram
* patch71: random cleanup
*
* Revision 3.0.1.6  1997/02/28  14:56:01  ram
* patch61: now handles USRINC for dependencies
* patch61: smarter about dependencies computation
*
* Revision 3.0.1.5  1995/09/25  09:07:19  ram
* patch59: smarter sed command to strip /usr/include dependencies
*
* Revision 3.0.1.4  1995/07/25  13:33:59  ram
* patch56: install of script man pages can now cope with missing files
* patch56: the clobber
 target now removes the .config directory as well
*
* Revision 3.0.1.3  1995/03/21  08:35:28  ram
* patch52: suppressed extra argument to NormalProgramTarget call
*
* Revision 3.0.1.2  1995/01/11  14:49:55  ram
* patch45: new macros ShellScriptTargetExt and SimpleShellScriptTargetExt
* patch45: directory installation is now made via INSTALLDIR (Configure)
*
* Revision 3.0.1.1  1994/10/29  15:46:30  ram
* patch36: added RemoteDependency rule
*
* Revision 3.0  1993/08/18  12:04:14  ram
* Baseline for dist 3.0 netwide release.
*
*/
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/files/Jmake.rules
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: sitebin.U,v $
?RCS:
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```

```
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: sitebin.U,v $
?RCS:
?MAKE:sitebin sitebinexp installsitebin : Getfile Oldconfig \
 Setprefixvar siteprefix
?MAKE: -pick add $@ %<
?Y:TOP
?D:sitebin=''
?S:sitebin:
?S: This variable holds the name of the directory in which the user wants
?S: to put add-on publicly executable files for the package in question.  It
?S: is most often a local directory such as /usr/local/bin. Programs using
?S: this variable must be prepared to deal with ~name substitution.
?S: The standard distribution will put nothing
 in this directory.
?S: After perl has been installed, users may install their own local
?S: executables in this directory with
?S:  MakeMaker Makefile.PL
?S: or equivalent.  See INSTALL for details.
?S:.
?D:sitebinexp=''
?S:sitebinexp:
?S: This is the same as the sitebin variable, but is filename expanded at
?S: configuration time, for use in your makefiles.
?S:.
?D:installsitebin=''
?S:installsitebin:
?S: This variable is usually the same as sitebinexp, unless you are on
?S: a system running AFS, in which case they may differ slightly. You
?S: should always use this variable within your makefiles for portability.
?S:.
?LINT:change prefixvar
?LINT:set installsitebin
?LINT:set sitebin
?LINT:set sitebinexp
: determine where add-on public executables go
case "$sitebin" in
'') dflt=$siteprefix/bin ;;
*) dflt=$sitebin ;;
esac
fn=d~
rp='Pathname where the add-on public executables should be installed?'
. ./getfile
prefixvar=sitebin
. ./setprefixvar
```

Found in path(s):

* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/sitebin.U
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```
?RCS: $Id$
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?MAKE:versionONLY: cat Myread Setvar Devel
?MAKE: -pick add $@ %<
?LINT:set versionONLY
?Y:TOP
?S:versionONLY:
?S: If set, this symbol indicates that only the version-specific
?S: components of a perl installation should be installed.
?S: This may be useful for making a test installation of a new
?S: version without disturbing the existing installation.
?S: Setting versionONLY is equivalent to setting installperl's -v option.
?S: In particular, the non-versioned scripts and programs such as
?S: a2p, c2ph, h2xs, pod2*, and perldoc
 are not installed
?S: (see INSTALL for a more complete list).  Nor are the man
?S: pages installed.
?S: Usually, this is undef.
?S:.
?LINT:extern inc_version_list
?LINT:change inc_version_list
?LINT:extern inc_version_list_init
?LINT:change inc_version_list_init
?LINT:extern version
: determine whether to use a version number suffix for installed binaries
echo " "
$cat <<EOM
Do you want to use a version number suffix for installed binaries? This
will install 'perl$version' instead of 'perl', and likewise for other
binaries like 'perldoc' and 'cpan'. This allows many versions of perl
to be installed side-by-side. Unless you are a developer, you probably
do *not* want to do this.
EOM
case "$versionONLY" in
"$define"|[Yy]*|true) dflt='y' ;;
*) dflt='n';
esac
```

```
rp="Do you want to use a version number suffix for installed binaries?"
. ./myread
case "$ans" in
[yY]*) val="$define";;
*) val="$undef" ;;
esac
set versionononly
eval $setvar

case "$versionononly" in
"$define") inc_version_list="
          inc_version_list_init=0
         ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/versionononly.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: prototype.U,v 3.0.1.3 1994/05/06 15:11:49 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: prototype.U,v $
?RCS: Revision 3.0.1.3  1994/05/06  15:11:49  ram
?RCS: patch23: ensure cc flags used when looking for prototype support
?RCS:
?RCS: Revision 3.0.1.2  1994/01/24  14:15:36  ram
?RCS: patch16: prototype handling macros now appear only when needed
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:03:12  ram
?RCS: patch6: defines were referring to non-existent VOID symbol
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:36  ram
?RCS: Baseline for dist
 3.0 netwide release.
?RCS:
?MAKE:prototype: Nothing
?S:prototype:
?S: This variable holds the eventual value of CAN_PROTOTYPE, which
?S: indicates the C compiler can handle function prototypes.
?S:.
```

: stub, never used
prototype=nothing

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/prototype.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: dup2.C,v 3.0.1.1 1994/01/24 13:58:37 ram Exp ram $
*
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*  of the source tree for dist 4.0.
*
* Original Author: Larry Wall <lwall@netlabs.com>
*
* $Log: dup2.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:37  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/lib/C/fake/dup2.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: spitshell.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: spitshell.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:22:12  ram
?RCS: patch61: removed useless chatter as this is now done very early
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:37:01  ram
?RCS: patch45: use 'test -f' instead of 'test -r' for exec-only cat progs (WED)
?RCS: patch45: protected "sh -c" within backquotes for Linux and SGI
?RCS:
```

```
?RCS: Revision 3.0.1.2  1994/08/29  16:33:00  ram
?RCS: patch32: don't create spitshell under the UU directory
?RCS:
 patch32: allow for cat in /bin or /usr/bin
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:12:58  ram
?RCS: patch10: made #!-failure message more friendly (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:spitshell shsharp sharpbang: eunicefix sh Head
?MAKE: -pick add $@ %<
?S:spitshell:
?S: This variable contains the command necessary to spit out a runnable
?S: shell on this system.  It is either cat or a grep -v for # comments.
?S:.
?S:shsharp:
?S: This variable tells further Configure units whether your sh can
?S: handle # comments.
?S:.
?S:sharpbang:
?S: This variable contains the string #! if this system supports that
?S: construct.
?S:.
?F:!sharp
?T:xcat p
?X: "paths" comes from Head
?LINT:extern paths _exe
: see if sh knows # comments
?X: This is loaded up early, so avoid being chatty.
?X: echo " "
?X: echo "Checking your $sh to see if it knows about # comments..." >&2
if `$sh -c '#' >/dev/null 2>&1`; then
?X: echo
 "Your $sh handles # comments correctly."
 shsharp=true
 spitshell=cat
?X: echo " "
?X: echo "Okay, let's see if #! works on this system..."
 xcat=/bin/cat
 test -f $xcat$_exe || xcat=/usr/bin/cat
 if test ! -f $xcat$_exe; then
  for p in `echo $PATH | sed -e "s/$p_/ /g"` $paths; do
   if test -f $p/cat$_exe; then
    xcat=$p/cat
    break
   fi
```

```
  done
  if test ! -f $xcat$_exe; then
   echo "Can't find cat anywhere!"
   exit 1
  fi
 fi
 echo "#!$xcat" >sharp
 $eunicefix sharp
 chmod +x sharp
 ./sharp > today 2>/dev/null
 if test -s today; then
?X:  echo "It does."
  sharpbang='#!'
 else
  echo "#! $xcat" > sharp
  $eunicefix sharp
  chmod +x sharp
  ./sharp > today 2>/dev/null
  if test -s today; then
?X:   echo "It does."
   sharpbang='#! '
  else
?X:   echo "Okay, let's see if #! works on this system..."
?X:   echo "It's just a comment."
   sharpbang=': use '
  fi
 fi
else
 echo " "
 echo "Your $sh doesn't grok # comments--I will strip them later on."
 shsharp=false
?X: The
 spitshell script will be perused, so leave it out the UU directory
 cd ..
 echo "exec grep -v '^[  ]*#'" >spitshell
 chmod +x spitshell
 $eunicefix spitshell
 spitshell=`pwd`/spitshell
 cd UU
 echo "I presume that if # doesn't work, #! won't work either!"
 sharpbang=': use '
fi
rm -f sharp today
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/spitshell.U
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```
?RCS: $Id: Instruct.U,v 3.0.1.3 1997/02/28 15:02:55 ram Exp $
?RCS:
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Instruct.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  15:02:55  ram
?RCS: patch61: logname / whoami sequence rewritten to use case
?RCS:
?RCS: Revision 3.0.1.2  1995/02/15  14:11:34  ram
?RCS: patch51: author name now appears at the end of the paragraph (WED)
?RCS:
?RCS: Revision 3.0.1.1  1995/01/11  15:12:05  ram
?RCS: patch45: now documents the & escape to turn -d on at the read prompt
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:04  ram
?RCS: Baseline for
 dist 3.0 netwide release.
?RCS:
?X:
?X: This unit spew out the directions that we want everyone to read.  I try to
?X: keep the first "pagefull" much less than a page since they don't know it
?X: isn't going to go shooting off the top of the screen, and we don't want
?X: to panic them yet.
?X:
?MAKE:Instruct: Myread Configdir Devel contains
?MAKE: -pick wipe $@ %<
?T:user needman firsttime
: general instructions
needman=true
firsttime=true
user=`(logname) 2>/dev/null`
case "$user" in
") user=`whoami 2>&1`;;
esac
if $contains "^$user\$" ../.config/instruct >/dev/null 2>&1; then
 firsttime=false
 echo " "
 rp='Would you like to see the instructions?'
 dflt=n
 . ./myread
 case "$ans" in
 [yY]*) ;;
```

```
 *) needman=false;;
 esac
fi
if $needman; then
 cat <<EOH

This installation shell script will examine your system and ask you questions
to determine how the <PACKAGENAME> package should be installed. If you get
stuck on a question, you may use a ! shell escape to start a subshell or
execute a
 command.  Many of the questions will have default answers in square
brackets; typing carriage return will give you the default.

On some of the questions which ask for file or directory names you are allowed
to use the ~name construct to specify the login directory belonging to "name",
even if you don't have a shell which knows about that.  Questions where this is
allowed will be marked "(~name ok)".

EOH
 rp="
 dflt='Type carriage return to continue'
 . ./myread
 cat <<'EOH'

The prompter used in this script allows you to use shell variables and
backticks in your answers.  You may use $1, $2, etc...  to refer to the words
in the default answer, as if the default line was a set of arguments given to a
script shell.  This means you may also use $* to repeat the whole default line,
so you do not have to re-type everything to add something to the default.

Every time there is a substitution, you will have to confirm.  If there is an
error (e.g. an unmatched backtick), the default answer
 will remain unchanged
and you will be prompted again.

If you are in a hurry, you may run 'Configure -d'.  This will bypass nearly all
the questions and use the computed defaults (or the previous answers if there
was already a config.sh file). Type 'Configure -h' for a list of options.
You may also start interactively and then answer '& -d' at any prompt to turn
on the non-interactive behaviour for the remainder of the execution.

EOH
 . ./myread
 cat <<EOH

Much effort has been expended to ensure that this shell script will run on any
Unix system.  If despite that it blows up on yours, your best bet is to edit
Configure and run it again.  If you can't run Configure for some reason,
```

```
you'll have to generate a config.sh file by hand.  Whatever problems you
have, let me (<MAINTLOC>) know how I blew it.

This installation script affects things in two ways:

1) it may do direct variable substitutions on some of the files included
  in this kit.
2) it builds a config.h file for inclusion in
 C programs.  You may edit
  any of these files as the need arises after running this script.

If you make a mistake on a question, there is no easy way to back up to it
currently.  The easiest thing to do is to edit config.sh and rerun all the SH
files.  Configure will offer to let you do this before it runs the SH files.

EOH
?X: In case they played with the prompter...
 dflt='Type carriage return to continue'
 . ./myread
 case "$firsttime" in
 true) echo $user >>../.config/instruct;;
 esac
fi

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Instruct.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: make.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: make.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:09:40  ram
?RCS: patch61: created
?RCS:
?MAKE:make_set_make : Loc rm sed make
?MAKE: -pick add $@ %<
?S:make_set_make:
?S: Some versions of 'make' set the variable MAKE.  Others do not.
?S: This variable contains the string to be included in Makefile.SH
```

```
?S: so that MAKE is set if needed, and not if not needed.
?S: Possible values are:
?S:
?S: make_set_make='#'  #
 If your make program handles this for you,
?S:
?S: make_set_make="MAKE=$make" # if it doesn't.
?S:
?S: This uses a comment character so that we can distinguish a
?S: 'set' value (from a previous config.sh or Configure -D option)
?S: from an uncomputed value.
?S:.
?LINT: extern MAKE
?LINT: change MAKE
?X: This test is based on one from an autoconf-generated configure
?X: script. Autoconf stole a lot from Configure, but now it's our
?X: turn to do so... ;-) -- RAM, 21/02/97
: check whether make sets MAKE
echo " "
echo "Checking if your $make program sets \$(MAKE)..." >&4
case "$make_set_make" in
")
?X: Use sed so we don't have a line begining with @echo.  Metaconfig
?X: will think that's a command like @if or @end.
 $sed 's/^X //' > testmake.mak << 'EOF'
Xall:
X  @echo 'maketemp="$(MAKE)"'
EOF
?X: GNU make sometimes prints "make[1]: Entering...", which would confuse us
 case "`$make -f testmake.mak 2>/dev/null`" in
 *maketemp=*) make_set_make='#' ;;
 *) make_set_make="MAKE=$make" ;;
 esac
 $rm
 -f testmake.mak
 ;;
esac
case "$make_set_make" in
'#') echo "Yup, it does.";;
*) echo "Nope, it doesn't.";;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/make.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: kernel.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: kernel.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:54  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:kernel: Getfile test
?MAKE: -pick add $@ %<
?S:kernel:
?S: This variable becomes the (fully rooted) path name of the kernel.
?S:.
: find the name of the kernel.
echo " "
case "$kernel" in
")
 if $test -r /unix; then
  dflt=/unix
 elif $test -r /vmunix; then
  dflt=/vmunix
 elif $test -r /xenix; then
  dflt=/xenix
 elif $test -r /mach; then
  dflt=/mach
 elif
 $test -r /dgux; then
  dflt=/dgux
 elif $test -r /hp-ux; then
  dflt=/hp-ux
 elif $test -r /syst; then
  dflt=/syst
 elif $test -r /arix; then
  dflt=/arix
 elif $test -r /irix; then
  dflt=/arix
 else
  dflt='unknown'
  set X /*x
  shift
  case $# in
  1)
   if $test -r "$1"; then
    dflt="$1"
```

```
   fi
   ;;
  esac
 fi
 ;;
*)
 dflt="$kernel"
 ;;
esac
fn=f
rp='What is the name of your kernel?'
. ./getfile
kernel="$ans"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/kernel.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: nis.U,v $
?RCS: Revision 3.0.1.3  1997/02/28  16:17:38  ram
?RCS: patch61: ensure suitable defaults for hostcat and friends
?RCS:
?RCS: Revision 3.0.1.2  1995/03/21  08:48:34  ram
?RCS: patch52: continued fix for NeXT NIS/NetInfo handling
?RCS:
?RCS: Revision 3.0.1.1  1995/02/15  14:16:23  ram
?RCS: patch51: now correctly handles NeXT using NIS rather than NetInfo
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:24  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:passcat groupcat hostcat:
 Myread Oldconfig test contains
?MAKE: -pick add $@ %<
?S:passcat:
?S: This variable contains a command that produces the text of the
?S: /etc/passwd file.  This is normally "cat /etc/passwd", but can be
?S: "ypcat passwd" when NIS is used.
```

```
?S:.
?S:groupcat:
?S: This variable contains a command that produces the text of the
?S: /etc/group file.  This is normally "cat /etc/group", but can be
?S: "ypcat group" when NIS is used.
?S:.
?S:hostcat:
?S: This variable contains a command that produces the text of the
?S: /etc/hosts file.  This is normally "cat /etc/hosts", but can be
?S: "ypcat hosts" when NIS is used.
?S:.
: see if we have to deal with yellow pages, now NIS.
?X: NeXT gives us some fun here, as always, by having both NIS (former YP)
?X: and NetInfo. But since it has both, it's ok to put the test inside the if.
?X: Contributed by Thomas Neumann <tom@smart.bo.open.de>.
if $test -d /usr/etc/yp || $test -d /etc/yp || $test -d /usr/lib/yp; then
 if $test -f /usr/etc/nibindd; then
  echo
 " "
  echo "I'm fairly confident you're on a NeXT."
@if passcat || groupcat
  echo " "
  rp='Do you get the passwd file via NetInfo?'
  dflt=y
  case "$passcat" in
  nidump*) ;;
  ") ;;
  *) dflt=n;;
  esac
  . ./myread
  case "$ans" in
  y*) passcat='nidump passwd .'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='nidump group .'
@end
   ;;
  *) echo "You told me, so don't blame me."
   case "$passcat" in
   nidump*) passcat="
@if groupcat
     groupcat=";;
@end
   esac
@if groupcat
   echo "(Assuming /etc/group is handled the same way.)"
@end
   ;;
```

```
  esac
@end
@if hostcat
  echo " "
  rp='Do you get the hosts file via NetInfo?'
  dflt=y
  case "$hostcat" in
  nidump*) ;;
  ") ;;
  *) dflt=n;;
  esac
  . ./myread
  case "$ans" in
  y*) hostcat='nidump hosts .';;
  *) case "$hostcat" in
   nidump*) hostcat=";;
   esac
   ;;
  esac
@end
 fi
@if passcat || groupcat
 case "$passcat" in
 nidump*) ;;
 *)
  case "$passcat" in
  *ypcat*) dflt=y;;
  ")
 if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the passwd file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) passcat='ypcat passwd'
@if groupcat
   echo "(Assuming /etc/group is also distributed.)"
   groupcat='ypcat group'
@end
   ;;
  *) passcat='cat /etc/passwd'
@if groupcat
   echo "(Assuming /etc/group is also local.)"
```

```
   groupcat='cat /etc/group'
@end
   ;;
  esac
  ;;
 esac
@end
@if hostcat
 case "$hostcat" in
 nidump*) ;;
 *)
  case "$hostcat" in
  *ypcat*) dflt=y;;
  ") if $contains '^\+' /etc/passwd >/dev/null 2>&1; then
    dflt=y
   else
    dflt=n
   fi;;
  *) dflt=n;;
  esac
  echo " "
  rp='Are you getting the hosts file via yellow pages?'
  . ./myread
  case "$ans" in
  y*) hostcat='ypcat hosts';;
  *) hostcat='cat /etc/hosts';;
  esac
  ;;
 esac
@end
fi
?X: Ensure suitable default -- Manoj Srivastava
case "$hostcat" in
") hostcat=':'
 $test -f /etc/hosts && hostcat='cat
 /etc/hosts';;
esac
case "$groupcat" in
") groupcat=':'
 $test -f /etc/group && groupcat='cat /etc/group';;
esac
case "$passcat" in
") passcat=':'
 $test -f /etc/passwd && passcat='cat /etc/passwd';;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/nis.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Extractall.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Extractall.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:00:43  ram
?RCS: patch61: created
?RCS:
?X:
?X: If extraction has been requested, load the configuration file, perform
?X: the extraction and exit.
?X:
?X: This unit was originally a part of Options.U. It had to be removed from
?X: it to prevent a dependency cycle: Extract -> src -> Options -> Extract
?X: The Begin.U unit now requires us before beginning to do anything
?X: interesting, to ensure
 proper semantics. -- RAM, 15/03/96
?X:
?MAKE:Extractall: Extract Options
?MAKE: -pick wipe $@ %<
: extract files and exit if asked to do so
case "$extractsh" in
true)
?X: Undo the forced silent=true when -S was supplied, by probing realsilent
?X: which was set iff -s was also given. See Options.U for details.
 case "$realsilent" in
 true) ;;
 *) exec 1>&4;;
 esac
 case "$config_sh" in
 ") config_sh='config.sh';;
 esac
 echo " "
 echo "Fetching answers from $config_sh..."
 cd ..
 . $config_sh
?X: extract has to be run from the top directory, not within UU.
 . UU/optdef.sh
 echo " "
?X: extract has to be run from the top directory, not within UU.
```

```
 . UU/extract
 rm -rf UU
 echo "Extraction done."
 exit 0
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Extractall.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: perl5.U,v $
?RCS:
?RCS: Copyright (c) 2000 Andrew Dougherty
?RCS:
?RCS:     You may distribute under the terms of either the GNU General Public
?RCS:     License or the Artistic License, as specified in the README file.
?RCS:
?RCS: $Log: perl5.U,v $
?RCS:
?X:
?X: The purpose of this unit is to locate a previously installed
?X: version of perl5 suitable for running inc_version_list.U.
?X: We check for 5.005 and later because inc_version_list is
?X: irrelevant for earlier versions.
?X:
?MAKE:perl5: path_sep binexp test sed exe_ext
?MAKE: -pick add $@ %<
?Y:TOP
?S:perl5:
?S: This variable contains the full path (if any) to a previously
?S: installed perl5.005 or later suitable for running the script
?S: to determine inc_version_list.
?S:.
?T: tdir
: Find perl5.005 or later.
echo "Looking for a previously installed perl5.005 or later... "
case "$perl5" in
") for tdir in `echo "$binexp$path_sep$PATH" | $sed "s/$path_sep/
 /g"`; do
  : Check if this perl is recent and can load a simple module
  if $test -x $tdir/perl$exe_ext && $tdir/perl -Mless -e 'use 5.005;' >/dev/null 2>&1; then
   perl5=$tdir/perl
   break;
  elif $test -x $tdir/perl5$exe_ext && $tdir/perl5 -Mless -e 'use 5.005;' >/dev/null 2>&1; then
   perl5=$tdir/perl5
   break;
  fi
```

```
 done
 ;;
*) perl5="$perl5"
 ;;
esac
case "$perl5" in
") echo "None found.  That's ok.";;
*) echo "Using $perl5." ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/perl5.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: package.U,v $
?RCS: Revision 3.0.1.3  1994/10/29  16:27:21  ram
?RCS: patch36: beware of non-ascii character sets when translating case
?RCS:
?RCS: Revision 3.0.1.2  1993/11/10  17:37:02  ram
?RCS: patch14: skip definition of spackage if not otherwise used
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:11:10  ram
?RCS: patch10: added spackage, suitable for starting sentences
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:28  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:package spackage:
 Nothing
?MAKE: -pick wipe $@ %<
?S:package:
?S: This variable contains the name of the package being constructed.
?S: It is primarily intended for the use of later Configure units.
?S:.
?S:spackage:
?S: This variable contains the name of the package being constructed,
?S: with the first letter uppercased, i.e. suitable for starting
?S: sentences.
```

```
?S:.
?C:PACKAGE:
?C: This variable contains the name of the package being built.
?C:.
?H:#define PACKAGE "$package"
?H:.
?T:first last
: set package name
package='<PACKAGENAME>'
@if spackage
first=`echo $package | sed -e 's/^\(.\).*/\1/'`
last=`echo $package | sed -e 's/^.\(.*\)/\1/'`
?X:
?X: So early in the Configure script, we don't have ./tr set up and can't
?X: include Tr in our dependency or that would create a cycle. Therefore,
?X: we have to somehow duplicate the work done in Tr. That's life.
?X:
case "`echo AbyZ | tr '[:lower:]' '[:upper:]' 2>/dev/null`" in
ABYZ) spackage=`echo $first | tr '[:lower:]' '[:upper:]'`$last;;
*) spackage=`echo
 $first | tr '[a-z]' '[A-Z]'`$last;;
esac
@end
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/package.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Configdir.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Configdir.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  14:58:36  ram
?RCS: patch61: have README explicitly mention the package name
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:49  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:Configdir: package
?MAKE: -pick add $@ %<
: create .config dir to save info across Configure sessions
```

```
test -d ../.config || mkdir ../.config
cat >../.config/README <<EOF
This directory created by Configure to save
 information that should
persist across sessions for $package.

You may safely delete it if you wish.
EOF
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Configdir.U
No license file was found, but licenses were detected in source scan.

```
# $Id: makedepend.sh,v 3.0.1.1 1994/01/24 14:00:05 ram Exp ram $
#
#  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
#
#  You may redistribute only under the terms of the Artistic Licence,
#  as specified in the README file that comes with the distribution.
#  You may reuse parts of this distribution only within the terms of
#  that same Artistic Licence; a copy of which may be found at the root
#  of the source tree for dist 4.0.
#
# Original Author: Larry Wall <lwall@netlabs.com>
#
# $Log: makedepend.sh,v $
# Revision 3.0.1.1  1994/01/24  14:00:05  ram
# patch16: changed top ln-style config.sh lookup into test-style one
#
# Revision 3.0  1993/08/18  12:04:37  ram
# Baseline for dist 3.0 netwide release.
#
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/lib/makedepend.SH
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Setprefixvar.U,v 3.0 2006/04/01 17:25:29 hmbrand $
?RCS:
?RCS: Copyright (c) 2006-2006, H.Merijn Brand & Nicholas Clark
?RCS:
?RCS: This file is included with or a derivative work of a file included
?RCS: with the metaconfig program of Raphael Manfredi's "dist" distribution.
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:
?RCS:   You may distribute under the terms of either the GNU General Public
?RCS:   License or the Artistic License, as specified in the README file.
?RCS:
```

```
?X:
?X: This unit sets up the scripts installprefix and setprefixvar, so code
?X: in other parts can be more simple and maintainable
?X:
?MAKE:Setprefixvar: Myread Getfile startsh eunicefix test \
 prefix prefixexp installprefix installprefixexp
?MAKE: -pick add $@ %<
?LINT:extern prefixvar
?X: metalint still sees "`\$${prefixvar}exp`" as variable :(
?T:prefixvarexp
?F:./setprefixvar
?F:./installprefix
: Perform
 the prefixexp/installprefixexp correction if necessary
cat <<EOS >installprefix
$startsh
EOS
cat <<'EOSC' >>installprefix
: Change installation prefix, if necessary.
if $test X"$prefix" != X"$installprefix"; then
   eval "install${prefixvar}=\`echo \$${prefixvar}exp | sed \"s#^\$prefixexp#\$installprefixexp#\"\`"
else
   eval "install${prefixvar}=\"\$${prefixvar}exp\""
fi
EOSC
chmod +x installprefix
$eunicefix installprefix

: Set variables such as privlib and privlibexp from the output of ./getfile
: performing the prefixexp/installprefixexp correction if necessary.
cat <<EOS >setprefixvar
$startsh
EOS
cat <<'EOSC' >>setprefixvar
eval "${prefixvar}=\"\$ans\""
eval "${prefixvar}exp=\"\$ansexp\""
. ./installprefix
EOSC
chmod +x setprefixvar
$eunicefix setprefixvar
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/Setprefixvar.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: man1dir.U,v 3.2 1999/07/08 20:57:21 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1996, 1999 Andy Dougherty
```

```
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: man1dir.U,v $
?RCS: Revision 3.2  1999/07/08 20:57:21  doughera
?RCS: Used installprefix.
?RCS:
?RCS: Revision 3.1  1999/07/08 20:52:19  doughera
?RCS: Updated for perl5.005_5x
?RCS:
?RCS: Revision 3.0.1.1  1997/02/28  16:10:29  ram
?RCS: patch61: created
?RCS:
?X: This was originally specific to perl5.  Since perl5 has man pages that
?X: go in both man1/ and man3/ directories, we need both man1dir
?X: and
 man3dir.  This unit is basically dist's mansrc.U with
?X: man1 used instead of man everywhere.
?X:
?MAKE:man1dir man1direxp man1ext installman1dir: cat nroff Loc Oldconfig \
 spackage test Getfile Setprefixvar Prefixit Prefixup sysman Myread \
 prefixexp
?MAKE: -pick add $@ %<
?Y:TOP
?D:man1dir=''
?S:man1dir:
?S: This variable contains the name of the directory in which manual
?S: source pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command.
?S: You must be prepared to do the ~name expansion yourself.
?S:.
?D:man1direxp=''
?S:man1direxp:
?S: This variable is the same as the man1dir variable, but is filename
?S: expanded at configuration time, for convenient use in makefiles.
?S:.
?D:installman1dir=''
?S:installman1dir:
?S: This variable is really the same as man1direxp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: man1direxp only points to the read-only access location.
 For extra
?S: portability, you should only use this variable within your makefiles.
```

```
?S:.
?S:man1ext:
?S: This variable contains the extension that the manual page should
?S: have: one of 'n', 'l', or '1'.  The Makefile must supply the '.'.
?S: See man1dir.
?S:.
?T:lookpath
?LINT:change prefixvar
?LINT:set man1direxp
: determine where manual pages go
set man1dir man1dir none
eval $prefixit
$cat <<EOM

$spackage has manual pages available in source form.
EOM
case "$nroff" in
nroff)
 echo "However, you don't have nroff, so they're probably useless to you."
 case "$man1dir" in
 ") man1dir="none";;
 esac;;
esac
echo "If you don't want the manual sources installed, answer 'none'."
case "$man1dir" in
' ') dflt=none
 ;;
")
 lookpath="$prefixexp/share/man/man1"
 lookpath="$lookpath $prefixexp/man/man1 $prefixexp/man/l_man/man1"
 lookpath="$lookpath $prefixexp/man/p_man/man1"
 lookpath="$lookpath $prefixexp/man/u_man/man1"
 lookpath="$lookpath $prefixexp/man/man.1"
?X: Experience has shown people
 expect man1dir to be under prefix,
?X: so we now always put it there.  Users who want other behavior
?X: can answer interactively or use a command line option.
?X: Does user have System V-style man paths.
 case "$sysman" in
 */?_man*) dflt=`./loc . $prefixexp/l_man/man1 $lookpath` ;;
 *) dflt=`./loc . $prefixexp/man/man1 $lookpath` ;;
 esac
 set dflt
 eval $prefixup
 ;;
*)  dflt="$man1dir"
 ;;
esac
```

```
echo " "
fn=dn+~
rp="Where do the main $spackage manual pages (source) go?"
. ./getfile
if $test "X$man1direxp" != "X$ansexp"; then
 installman1dir=''
fi
prefixvar=man1dir
. ./setprefixvar

case "$man1dir" in
'') man1dir=' '
 installman1dir='';;
esac

: What suffix to use on installed man pages

case "$man1dir" in
' ')
 man1ext='0'
 ;;
*)
 rp="What suffix should be used for the main $spackage man pages?"
 case "$man1ext" in
 '') case "$man1dir" in
  *1)  dflt=1 ;;
  *1p) dflt=1p ;;
  *1pm) dflt=1pm ;;
  *l) dflt=l;;
  *n) dflt=n;;
  *o) dflt=o;;
  *p) dflt=p;;
  *C) dflt=C;;
  *L) dflt=L;;
  *L1)
 dflt=L1;;
  *) dflt=1;;
  esac
  ;;
 *) dflt="$man1ext";;
 esac
 . ./myread
 man1ext="$ans"
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/man1dir.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: installstyle.U,v 1.2 1999/07/13 14:56:06 doughera Exp $
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: installstyle.U,v $
?RCS: Revision 1.2  1999/07/13 14:56:06  doughera
?RCS: Fix dependencies.  Add more comments.
?RCS:
?RCS: Revision 1.1  1999/07/12 17:30:41  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:installstyle: prefix Myread
?MAKE: -pick add $@ %<
?X: Myread dependence is for dflt.
?S:installstyle:
?S: This variable describes the "style" of the perl installation.
?S: This is intended to be useful for tools that need to
?S: manipulate entire perl
 distributions.  Perl itself doesn't use
?S: this to find its libraries -- the library directories are
?S: stored directly in Config.pm.  Currently, there are only two
?S: styles:  "lib" and "lib/perl5".  The default library locations
?S: (e.g. privlib, sitelib) are either $prefix/lib or
?S: $prefix/lib/perl5.  The former is useful if $prefix is a
?S: directory dedicated to perl (e.g. /opt/perl), while the latter
?S: is useful if $prefix is shared by many packages, e.g. if
?S: $prefix=/usr/local.
?S:
?S: Unfortunately, while this "style" variable is used to set
?S: defaults for all three directory hierarchies (core, vendor, and
?S: site), there is no guarantee that the same style is actually
?S: appropriate for all those directories.  For example, $prefix
?S: might be /opt/perl, but $siteprefix might be /usr/local.
?S: (Perhaps, in retrospect, the "lib" style should never have been
?S: supported, but it did seem like a nice idea at the time.)
?S:
?S: The situation is even less clear for
 tools such as MakeMaker
?S: that can be used to install additional modules into
```

```
?S: non-standard places.  For example, if a user intends to install
?S: a module into a private directory (perhaps by setting PREFIX on
?S: the Makefile.PL command line), then there is no reason to
?S: assume that the Configure-time $installstyle setting will be
?S: relevant for that PREFIX.
?S:
?S: This may later be extended to include other information, so
?S: be careful with pattern-matching on the results.
?S:
?S: For compatibility with perl5.005 and earlier, the default
?S: setting is based on whether or not $prefix contains the string
?S: "perl".
?S:.
: determine installation style
: For now, try to deduce it from prefix unless it is already set.
: Reproduce behavior of 5.005 and earlier, maybe drop that in 5.7.
case "$installstyle" in
") case "$prefix" in
  *perl*) dflt='lib';;
  *) dflt='lib/perl5' ;;
 esac
 ;;
*) dflt="$installstyle" ;;
esac
: Probably not worth prompting for this since we prompt
 for all
: the directories individually, and the prompt would be too long and
: confusing anyway.
installstyle=$dflt
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/installstyle.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Init.U,v 3.0.1.1 1994/10/31 09:45:59 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Init.U,v $
?RCS: Revision 3.0.1.1  1994/10/31  09:45:59  ram
?RCS: patch44: removed Options from MAKE to prevent Init overrides
?RCS: patch44: option processing now done after Myinit thanks to new Begin.U
```

```
?RCS: patch44: moved "Beginning of configuration questions" to Begin.U
?RCS: patch44: moved signal trapping instruction to Begin.U as well
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:02  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This file
 initializes certain default variables used by Configure.  They
?X: may be overridden or added to by definitions in Myinit.U.
?X:
?MAKE:Init eunicefix: Null
?MAKE: -pick add $@ %<
?MAKE: -pick weed $@ ./Init
?S:eunicefix:
?S: When running under Eunice this variable contains a command which will
?S: convert a shell script to the proper form of text file for it to be
?S: executable by the shell.  On other systems it is a no-op.
?S:.
?V:define undef smallmach:rmlist
?X:
?X: Throughout the units, one may make use of $define and $undef to reference
?X: a defined symbol or an undefined one. There is no need to add them in
?X: the dependency line since this unit makes them visible via ?V:, and
?X: everyone inherits from those symbols since by convention Init.U is the
?X: root dependency.
?X:
?LINT:extern DJGPP
?LINT:extern _exe
?LINT:change _exe
?LINT:extern is_os2
: Detect odd OSs
define='define'
undef='undef'
smallmach='pdp11 i8086 z8000 i80286 iAPX286'
rmlist=''

: We must find out about
 Eunice early
eunicefix=':'
if test -f /etc/unixtovms; then
 eunicefix=/etc/unixtovms
fi
if test -f /etc/unixtovms.exe; then
 eunicefix=/etc/unixtovms.exe
fi

: Set executable suffix now -- needed before hints available
```

```
if test -f "/libs/version.library"; then
: Amiga OS
   _exe=""
elif test -f "/system/gnu_library/bin/ar.pm"; then
: Stratus VOS
   _exe=".pm"
elif test -n "$DJGPP"; then
: DOS DJGPP
   _exe=".exe"
elif test -f /kern/cookiejar; then
: MiNT
   _exe=""
elif test -d c:/. -o -n "$is_os2" ; then
: OS/2 or cygwin
   _exe=".exe"
fi
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Init.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Options.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Options.U,v $
?RCS: Revision 3.0.1.7  1997/02/28  15:08:15  ram
?RCS: patch61: optdef.sh now starts with a "startsh"
?RCS: patch61: moved some code from Head.U
?RCS:
?RCS: Revision 3.0.1.6  1995/09/25  09:14:46  ram
?RCS: patch59: protected option parsing code against 'echo -*' option failure
?RCS:
?RCS: Revision 3.0.1.5  1995/05/12  12:04:52  ram
?RCS: patch54: added -K option for experts
?RCS:
?RCS: Revision 3.0.1.4  1995/01/30  14:27:52  ram
?RCS:
 patch49: this unit now exports file optdef.sh, not a variable
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:19:00  ram
?RCS: patch45: new -O option allowing -D and -U to override config.sh settings
```

```
?RCS: patch45: file optdef.sh is no longer removed after sourcing
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  15:58:06  ram
?RCS: patch36: ensure option definition file is removed before appending
?RCS: patch36: protect variable definitions with spaces in them
?RCS:
?RCS: Revision 3.0.1.1  1994/06/20  06:55:44  ram
?RCS: patch30: now uses new me symbol to tag error messages
?RCS: patch30: new -D and -U options to define/undef symbols (JHI)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:14  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: Command line parsing. It is really important that the variables used here
?X: be not listed in the MAKE line, or they will be saved in config.sh and
?X: loading this file to fetch default answers would clobber the values set
?X: herein.
?X:
?MAKE:Options:
 startsh
?MAKE: -pick wipe $@ %<
?V:reuseval alldone error realsilent silent extractsh fastread \
 knowitall: config_sh
?T:arg argn symbol config_arg0 config_args config_argc xxx yyy zzz uuu
?T:args_exp args_sep arg_exp ccflags
?F:!Configure
?F:./optdef.sh ./cmdline.opt ./posthint.sh ./cmdl.opt
: Save command line options in file UU/cmdline.opt for later use in
: generating config.sh.
?X: This temporary file will be read by Oldsym.U.  I used a temporary
?X: file to preserve all sorts of potential command line quotes and
?X: also because we don't know in advance how many variables we'll
?X: need, so I can't actually declare them on the MAKE line.
?X: The config_args variable won't be quite correct if Configure is
?X: fed something like    ./Configure -Dcc="gcc -B/usr/ccs/bin/"
?X: since the quotes are gone by the time we see them.  You'd have to
?X: reconstruct the command line from the config_arg? lines, but since
?X: I don't imagine anyone actually having to do that, I'm not going
?X:
 to worry too much.
cat > cmdline.opt <<EOSH
: Configure command line arguments.
config_arg0='$0'
config_args='$*'
config_argc=$#
EOSH
argn=1
```

```
args_exp=''
args_sep=''
for arg in "$@"; do
 cat >>cmdline.opt <<EOSH
config_arg$argn='$arg'
EOSH
?X: Extreme backslashitis: replace each ' by '''''
 cat <<EOC | sed -e "s/'/'''''''''''''/g" > cmdl.opt
$arg
EOC
 arg_exp=`cat cmdl.opt`
 args_exp="$args_exp$args_sep'$arg_exp'"
 argn=`expr $argn + 1`
 args_sep=' '
done
?X: args_exp is good for restarting self: eval "set X $args_exp"; shift; $0 "$@"
?X: used by hints/os2.sh in Perl, for instance
rm -f cmdl.opt

: produce awk script to parse command line options
cat >options.awk <<'EOF'
BEGIN {
 optstr = "A:dD:eEf:hKOrsSU:V"; # getopt-style specification

 len = length(optstr);
 for (i = 1; i <= len; i++) {
  c = substr(optstr, i, 1);
?X: some older awk's do not have the C ?: construct
  if (i < len) a = substr(optstr, i + 1, 1); else a = "";
  if (a == ":") {
   arg[c] = 1;
   i++;
  }
  opt[c]
 = 1;
 }
}
{
 expect = 0;
 str = $0;
 if (substr(str, 1, 1) != "-") {
  printf("'%s'\n", str);
  next;
 }
 len = length($0);
 for (i = 2; i <= len; i++) {
  c = substr(str, i, 1);
  if (!opt[c]) {
```

```
   printf("-%s\n", substr(str, i));
   next;
  }
  printf("-%s\n", c);
  if (arg[c]) {
   if (i < len)
    printf("'%s'\n", substr(str, i + 1));
   else
    expect = 1;
   next;
  }
 }
}
END {
 if (expect)
  print "?";
}
EOF

: process the command line options
?X: Use "$@" to keep arguments with spaces in them from being split apart.
?X: For the same reason, awk will output quoted arguments and the final eval
?X: removes them and sets a proper $* array. An 'X' is prepended to each
?X: argument before being fed to echo to guard against 'echo -x', where -x
?X: would be understood as an echo option! It is removed before feeding awk.
set X `for arg in "$@"; do echo "X$arg"; done |
 sed -e s/X// | awk -f options.awk`
eval "set $*"
shift
rm -f options.awk

: set up default values
fastread=''
reuseval=false
config_sh=''
alldone=''
error=''
silent=''
extractsh=''
knowitall=''
rm
 -f optdef.sh posthint.sh
cat >optdef.sh <<EOS
$startsh
EOS

?X:
?X: Given that we now have the possibility to execute Configure remotely
```

```
?X: thanks to the new src.U support, we have to face the possibility
?X: of having to ask where the source lie, which means we need the Myread.U
?X: stuff and possibly other things that might echo something on the
?X: screen...
?X:
?X: That's not pretty, and might be confusing in 99% of the time. So...
?X: We introduce a new realsilent variable which is set when -s is given,
?X: and we force silent=true if -S is supplied. The Extractall.U unit
?X: will then undo the >&4 redirection based on the value of the
?X: realsilent variable... -- RAM, 18/93/96
?X:

: option parsing
while test $# -gt 0; do
 case "$1" in
 -d) shift; fastread=yes;;
 -e) shift; alldone=cont;;
 -f)
  shift
  cd ..
  if test -r "$1"; then
   config_sh="$1"
  else
   echo "$me: cannot read config file $1."
 >&2
   error=true
  fi
  cd UU
  shift;;
 --help|\
 -h) shift; error=true;;
 -r) shift; reuseval=true;;
 -s) shift; silent=true; realsilent=true;;
 -E) shift; alldone=exit;;
 -K) shift; knowitall=true;;
 -O) shift;;
 -S) shift; silent=true; extractsh=true;;
 -D)
  shift
  case "$1" in
  *=)
   echo "$me: use '-U symbol=', not '-D symbol='." >&2
   echo "$me: ignoring -D $1" >&2
   ;;
  *=*) echo "$1" | \
    sed -e "s/'/\'"\'"/g" -e "s/=\(.*\)/='\1'/" >> optdef.sh;;
  *) echo "$1='define'" >> optdef.sh;;
  esac
```

```
 shift
 ;;
-U)
 shift
 case "$1" in
 *=) echo "$1" >> optdef.sh;;
 *=*)
  echo "$me: use '-D symbol=val', not '-U symbol=val'." >&2
  echo "$me: ignoring -U $1" >&2
  ;;
 *) echo "$1='undef'" >> optdef.sh;;
 esac
 shift
 ;;
-A)
   shift
   xxx=''
   yyy="$1"
   zzz=''
   uuu=undef
   case "$yyy" in
        *=*) zzz=`echo "$yyy"|sed 's!=.*!!'`
             case "$zzz" in
             *:*) zzz='' ;;
             *)   xxx=append

             zzz=' '`echo "$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             esac
             ;;
        esac
        case "$xxx" in
        '')  case "$yyy" in
             *:*) xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'`
                  zzz=`echo "$yyy"|sed 's!^[^=]*=!!'`
                  yyy=`echo "$yyy"|sed 's!=.*!!'` ;;
             *)   xxx=`echo "$yyy"|sed 's!:.*!!'`
                  yyy=`echo "$yyy"|sed 's!^[^:]*:!!'` ;;
             esac
             ;;
        esac
   case "$xxx" in
   append)
 echo "$yyy=\"\${$yyy}$zzz\"" >> posthint.sh ;;
   clear)
 echo "$yyy=''"   >> posthint.sh ;;
   define)
```

```
        case "$zzz" in
  ") zzz=define ;;
  esac
  echo "$yyy='$zzz'"  >> posthint.sh ;;
    eval)
  echo "eval \"$yyy=$zzz\"" >> posthint.sh ;;
    prepend)
  echo "$yyy=\"$zzz\${$yyy}\"" >> posthint.sh ;;
    undef)

      case "$zzz" in
  ") zzz="$uuu" ;;
  esac
  echo "$yyy=$zzz"  >> posthint.sh ;;
          *)  echo "$me: unknown -A command '$xxx', ignoring -A $1" >&2 ;;
    esac
    shift
    ;;
 -V) echo "$me generated by metaconfig <VERSION> PL<PATCHLEVEL>." >&2
    exit 0;;
 --) break;;
 -*) echo "$me: unknown option $1" >&2; shift; error=true;;
 *) break;;
 esac
done

case "$error" in
true)
 cat >&2 <<EOM
Usage: $me [-dehrsEKOSV] [-f config.sh] [-D symbol] [-D symbol=value]
               [-U symbol] [-U symbol=] [-A command:symbol...]
 -d : use defaults for all answers.
 -e : go on without questioning past the production of config.sh.
 -f : specify an alternate default configuration file.
 -h : print this help message and exit (with an error status).
 -r : reuse C symbols value if possible (skips costly nm extraction).
 -s : silent mode, only echoes questions and essential information.
 -D : define symbol to have some value:
        -D symbol               symbol gets the
 value 'define'
        -D symbol='some value'   symbol is set to 'some value'
      common used examples (see INSTALL for more info):
        -Duse64bitint           use 64bit integers
        -Duse64bitall           use 64bit integers and pointers
        -Dusethreads            use thread support
        -Dinc_version_list=none  do not include older perl trees in @INC
        -DEBUGGING=none         DEBUGGING options
        -Dcc=gcc                choose your compiler
```

```
        -Dprefix=/opt/perl5       choose your destination
 -E : stop at the end of questions, after having produced config.sh.
 -K : do not use unless you know what you are doing.
 -O : ignored for backward compatibility
 -S : perform variable substitutions on all .SH files (can mix with -f)
 -U : undefine symbol:
        -U symbol    symbol gets the value 'undef'
        -U symbol=   symbol gets completely empty
      e.g.:  -Uversiononly
 -A : manipulate symbol after the platform specific hints
 have been applied:
        -A append:symbol=value   append value to symbol
        -A symbol=value          like append:, but with a separating space
        -A define:symbol=value   define symbol to have value
        -A clear:symbol          define symbol to be ''
        -A define:symbol         define symbol to be 'define'
        -A eval:symbol=value     define symbol to be eval of value
        -A prepend:symbol=value  prepend value to symbol
        -A undef:symbol          define symbol to be 'undef'
        -A undef:symbol=         define symbol to be ''
      e.g.:  -A prepend:libswanted='cl pthread '
             -A ccflags=-DSOME_MACRO
 -V : print version number and exit (with a zero status).
EOM
 exit 1
 ;;
esac

?X:
?X: Unless they specified either -S or both -d and -e/E, make sure we're
?X: running interactively, i.e. attached to a terminal. Moved from Head.U to
?X: be able to handle batch configurations...
?X:
?X: We have to hardwire the Configure name and
 cannot use $me, since if they
?X: said 'sh <Configure', then $me is 'sh'...
?X:
: Sanity checks
case "$fastread$alldone" in
yescont|yesexit) ;;
*)
 case "$extractsh" in
 true) ;;
 *)
  if test ! -t 0; then
   echo "Say 'sh Configure', not 'sh <Configure'"
   exit 1
  fi
```

```
  ;;
 esac
 ;;
esac

?X: In silent mode, the standard output is closed. Questions are asked by
?X: outputing on file descriptor #4, which is the original stdout descriptor.
?X: This filters out all the "junk", since all the needed information is written
?X: on #4. Note that ksh will not let us redirect output if the file descriptor
?X: has not be defined yet, unlike sh, hence the following line...--RAM.
exec 4>&1
case "$silent" in
true) exec 1>/dev/null;;
esac

: run the defines and the undefines, if any, but leave the file out there...
touch optdef.sh
?X: -q is POSIX
?X: It does not work in SysV (solaris) or old BSD greps.
grep '\\' optdef.sh >/dev/null 2>&1
if test $? = 0; then
   echo "Configure does not support \\
 in -D arguments"
   exit 1
fi
. ./optdef.sh
: create the posthint manipulation script and leave the file out there...
?X: this file will be perused by Oldconfig.U
touch posthint.sh
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Options.U
No license file was found, but licenses were detected in source scan.

```
?RCS: In accordance with clause 7 of dist's modified Artistic License:
?RCS:     You may distribute under the terms of either the GNU General Public
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/perlpath.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/archlib.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/a_dvisory/multiarch.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/d_portable.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/perl/startperl.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/privlib.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Chk_whoami.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
```

```
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Chk_whoami.U,v $
?RCS: Revision 3.0  1993/08/18  12:04:46  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit makes sure we don't try to include whoami.h if uname() exists.
?X:
?MAKE:Chk_whoami: d_uname i_whoami
?MAKE: -pick add $@ %<
?LINT:change i_whoami
: weed out incompatibilities
case "$d_uname" in
 "$define") i_whoami="$undef" ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Chk_whoami.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: MailList.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: MailList.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:01:49  ram
?RCS: patch16: created
?RCS:
?RCS:
?X:
?X: This unit offers the user the option of subscribing to the mailing
?X: list. To force inclusion of this unit, you must add it's name to the
?X: dependancies on the MAKE line in your private copy of End.U.
```

```
?X: The address of the mailing list server must be set via a "list_request=..."
?X:
 entry in the .package file. This is usually done by running packinit and
?X: answering the proper questions.
?X:
?MAKE:MailList: cat mailer package Myread cf_name cf_email
?MAKE: -pick wipe $@ %<
?T:list_request list_sub list_unsub list_name
?X:
?X: The cf_name dependency is used through list_sub when the mailing list
?X: manager happens to be listserv, whereas cf_email is used whith majordomo
?X: or when the mailing list request address is scanned by a human. Since
?X: they do not appear within the unit itself, we need a lint hint.
?X:
?LINT:use cf_name cf_email
: offer to join the mailing list
list_request='<$list_request>'
list_sub="<$list_sub>"
list_unsub="<$list_unsub>"
list_name="<$list_name>"
$cat <<EOM

There is a mailing list for discussion about $package and related issues.
This is the preferred place to ask questions about the program and discuss
modifications and additions with the author and other users.  If you are able
to send mail to the Internet, you
 are encouraged to subscribe.  You need only
ever subscribe once, and you can unsubscribe automatically at any time in the
future.  If you have already subscribed and you wish to unsubscribe now, you
may do so by answering "unsubscribe".  Answer "subscribe" to subscribe to the
list.

EOM
rp="Subscribe to or unsubscribe from the $list_name mailing list?"
dflt=neither
. ./myread
case "$ans" in
[sS]*) $cat <<EOM

You will be sent a message from the list server to let you know when your
subscription has been successful and telling you how to submit articles and
how to unsubscribe again when necessary. You may also unsubscribe by running
this script again and asking it to do so for you.

EOM
 echo "Sending mail to subscribe you to the $list_name list..." >&4
 $mailer $list_request <<EOM >/dev/null 2>&1
Precedence: junk
```

```
To: $list_request

$list_sub
EOM
 ;;
[uU]*) echo "Sending mail to unsubscribe you from the $list_name list..." >&4
 $mailer $list_request <<EOM >/dev/null 2>&1
Precedence: junk
To:
 $list_request

$list_unsub
EOM
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/MailList.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Csym.U,v $
?RCS: Revision 3.0.1.4  1995/07/25  13:36:29  ram
?RCS: patch56: re-arranged compile line to include ldflags before objects
?RCS: patch56: added quotes for OS/2 support
?RCS:
?RCS: Revision 3.0.1.3  1995/05/12  12:00:33  ram
?RCS: patch54: fixed C test program to bypass gcc builtin type checks (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/10/31  09:34:13  ram
?RCS: patch44: added Options to the MAKE line since it's no longer in Init.U
?RCS:
?RCS: Revision 3.0.1.1  1993/08/25  14:00:05  ram
?RCS:
 patch6: added ldflags as a conditional dependency and to compile line
?RCS: patch6: a final double quote was missing in csym variable after eval
?RCS:
?RCS: Revision 3.0  1993/08/18  12:04:50  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:Csym: Options contains libc libs runnm +cc +ccflags +ldflags rm
?MAKE: -pick add $@ %<
?LINT:define csym
?LINT:use libc
?S:csym:
?S: This shell variable is used internally by Configure to check
?S: wether a given C symbol is defined or not. A typical use is:
?S:  set symbol result [-fva] [previous]
?S:  eval $csym
?S: That will set result to 'true' if the function [-f], variable [-v]
?S: or array [-a] is defined, 'false' otherwise. If a previous value is
?S: given and the -r flag was provided on the command line, that value
?S: is reused without questioning.
?S:.
?V:csym
?T:tval tx tlook tf tdc tc
: is a C symbol defined?
csym='tlook=$1;
case "$3" in
-v) tf=libc.tmp; tc=""; tdc="";;
-a) tf=libc.tmp; tc="[0]"; tdc="[]";;
*) tlook="^$1\$";
 tf=libc.list; tc=""; tdc="()";;
esac;
tx=yes;
case "$reuseval-$4" in
true-) ;;
true-*) tx=no; eval "tval=\$$4"; case "$tval" in "") tx=yes;; esac;;
esac;
case "$tx" in
yes)
 case "$runnm" in
 true)
  if $contains $tlook $tf >/dev/null 2>&1;
  then tval=true;
  else tval=false;
  fi;;
 *)
?X:
?X: We use 'char' instead of 'int' to try to circumvent overzealous
?X: optimizing compilers using built-in prototypes for commonly used
?X: routines to complain when seeing a different external declaration. For
?X: instance, gcc 2.6.3 fails if we use 'int' and we attempt a test against
?X: memcpy() on machines where sizeof(int) == sizeof(char *) (the usual return
?X: type), the compiler assuming it's a built-in declaration given that the
?X: returned size matches. At least with 'char' we are safe! -- RAM, for ADO
?X:
```

```
?X: Let's thank GNU cc for making our lifes so easy! :-)
?X: (An alternative for the future would be to use our knowledge about gcc
?X: to force a -fno-builtin option in the
 compile test, in case the 'char'
?X: trick is obsoleted by future gcc releases). -- RAM
?X:
?X: Lastly, gcc 3.4 otimizes &missing == 0 away, so we use + 2 instead now.
?X: The GNU folks like to do weird things, don't they? -- RAM, 2004-06-05
?X:
  echo "extern char $1$tdc; int main() { return &$1$tc + 2; }" > t.c;
  if $cc $ccflags $ldflags -o t t.c $libs >/dev/null 2>&1;
  then tval=true;
  else tval=false;
  fi;
  $rm -f t t.c;;
 esac;;
*)
 case "$tval" in
 $define) tval=true;;
 *) tval=false;;
 esac;;
esac;
eval "$2=$tval"'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Csym.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: manfmt.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: manfmt.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  16:11:57  ram
?RCS: patch61: don't ask for AFS when they choose to not install pages
?RCS:
?RCS: Revision 3.0.1.4  1995/09/25  09:16:52  ram
?RCS: patch59: unit is now forced to the top of Configure, if possible
?RCS:
?RCS: Revision 3.0.1.3  1995/01/30  14:39:20  ram
?RCS: patch49: new installmanfmt and AFS-lookup for formatted man pages
?RCS: patch49: can now handle installation prefix changes (from WED)
```

```
?RCS:
?RCS:
 Revision 3.0.1.2  1994/08/29  16:30:31  ram
?RCS: patch32: now uses installation prefix for default setting
?RCS:
?RCS: Revision 3.0.1.1  1993/09/13  16:09:22  ram
?RCS: patch10: allows for L1 man page extension (WAD)
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:manfmt manfmtexp installmanfmt: Getfile Loc Oldconfig cat manext \
 spackage Prefixit prefixexp Prefixup afs test
?MAKE: -pick add $@ %<
?Y:TOP
?S:manfmt:
?S: This variable contains the name of the directory in which formatted
?S: manual pages are to be put.  It is the responsibility of the
?S: Makefile.SH to get the value of this into the proper command. Note
?S: that you may have to do ~name substitution. Use manfmtexp otherwise.
?S:.
?S:manfmtexp:
?S: This is the same as the manfmt variable, but is filename expanded
?S: at configuration time, for programs not willing to deal with it at
?S: run-time.
?S:.
?S:installmanfmt:
?S: This variable is really
 the same as manfmtexp, unless you are using
?S: AFS in which case it points to the read/write location whereas
?S: mansrcexp only points to the read-only access location. For extra
?S: portability, you should only use this variable within your makefiles.
?S:.
?LINT:change manext
?T:lookpath
: determine where manual pages go
set manfmt manfmt
eval $prefixit
$cat <<EOM

$spackage has pre-formatted manual pages.  If you don't want these installed,
answer 'none' to the next question.

EOM
case "$manfmt" in
")
 lookpath="$prefixexp/catman/man1 $prefixexp/man/cat1"
 lookpath="$lookpath $prefixexp/catman/u_man/man1"
```

```
 lookpath="$lookpath $prefixexp/catman/l_man/man1"
 lookpath="$lookpath $prefixexp/catman/cat1 /usr/catman/local/man1"
 lookpath="$lookpath /usr/catman/manl /usr/man/cat1"
 lookpath="$lookpath /usr/catman/mann /usr/catman/l_man/man1"
 lookpath="$lookpath /usr/catman/u_man/man1 /usr/catman/man1"
 dflt=`./loc . none $lookpath`
 set dflt
 eval $prefixup
 ;;
*)  dflt="$manfmt"
 ;;
esac
fn=dn~
rp='Where
 do pre-formatted manual pages go?'
. ./getfile
if test "X$manfmtexp" != "X$ansexp"; then
 installmanfmt=''
fi
manfmt="$ans"
manfmtexp="$ansexp"
if $afs && $test "$manfmt"; then
 $cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
manual pages reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installmanfmt" in
 '') dflt=`echo $manfmtexp | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installmanfmt";;
 esac
 fn=de~
 rp='Where will pre-formatted man pages be installed?'
 . ./getfile
 installmanfmt="$ans"
else
 installmanfmt="$manfmtexp"
fi

case "$manfmt" in
'') manext='0';;
*l) manext=l;;
*n) manext=n;;
*o) manext=l;;
*p) manext=n;;
*C) manext=C;;
```

```
*L) manext=L;;
*L1) manext=L1;;
*) manext=1;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/manfmt.U
No license file was found, but licenses were detected in source scan.

```
# Yes, you may rip this off to use in other distribution packages. This
# script belongs to the public domain and cannot be copyrighted.
#
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Head.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Head.U
No license file was found, but licenses were detected in source scan.

```
#  You may redistribute only under the terms of the Artistic Licence,
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/files/fixcpp
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/bindex
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/makegloss
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/lib/errnolist.mk
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: vendorhtml1dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorhtml1dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorhtml1dir vendorhtml1direxp installvendorhtml1dir: html1dir Getfile \
 Setprefixvar Oldconfig Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorhtml1dir:
?S: This variable contains the name of the directory for html
?S: pages.  It may have a ~ on the front.
```

```
?S: The standard distribution will put nothing in this
 directory.
?S: Vendors who distribute perl may wish to place their own
?S: html pages in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorhtml1direxp:
?S: This variable is the ~name expanded version of vendorhtml1dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorhtml1dir=''
?S:installvendorhtml1dir:
?S: This variable is really the same as vendorhtml1direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorhtml1dir
: Set the vendorhtml1dir variables
case "$vendorprefix" in
'') vendorhtml1dir=''
 vendorhtml1direxp=''
 ;;
*) : determine where vendor-supplied html pages go.
 : There is no standard location, so try to copy the previously-selected
 : directory structure for the core html pages.
 : XXX Better default suggestions would be welcome.
 case "$vendorhtml1dir"
 in
 '') dflt=`echo "$html1dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorhtml1dir ;;
 esac
 case "$dflt" in
 '|' ') dflt=none ;;
 esac
 fn=dn+~
 rp='Pathname for the vendor-supplied html pages?'
 . ./getfile
 vendorhtml1dir="$ans"
 vendorhtml1direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorhtml1dir" = "X" && vendorhtml1dir=' '
prefixvar=vendorhtml1dir
. ./installprefix
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/vendorhtml1dir.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: libnlist.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libnlist.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  16:08:02  ram
?RCS: patch61: added usrinc and mips on the dependency line
?RCS: patch61: make sure we call ./mips
?RCS: patch61: added a ?LINT: hint
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:00  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:libnlist: Loc libpth Guess usrinc _a
?MAKE: -pick add $@ %<
?S:libnlist (libmld):
?S: This variable contains the name of the library required to
 get the
?S: definition of the nlist() function.  On a MIPS RISC/OS box, it is -lmld.
?S: Under Sys Vr4, it is -lelf.  Otherwise, its value is empty.
?S:.
?T:xxx
?LINT:use usrinc
: see if we need a special library for 'nlist()'
echo " "
: How about doing this if nlist is not in libc...
if ./mips ; then
 libnlist='-lmld'
else
 xxx=`./loc libelf$_a x $libpth`
 case "$xxx" in
 x)  ;;
 *)
  libnlist="$xxx"
  ;;
 esac
fi
case "$libnlist" in
```

```
") echo "No special library for nlist() seems necessary." >&4
 ;;
*)  echo "nlist() can be found in $libnlist." >&4
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/libnlist.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: h_sysfile.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
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?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: h_sysfile.U,v $
?RCS: Revision 3.0  1993/08/18  12:08:13  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:h_sysfile: Nothing
?MAKE: -pick add $@ %<
?S:h_sysfile:
?S: This is variable gets set in various places to tell i_sys_file that
?S: <sys/file.h> should be included.
?S:.
: Initialize h_sysfile
h_sysfile=false
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/h_sysfile.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1998 Jarkko Hietaniemi
?RCS:
?RCS: You may distribute under the terms of either the GNU General Public
?RCS: License or the Artistic License, as specified in the README file.
?RCS:
?X: This unit generates a $hasfield string that is used internally
?X: by Configure to check if this system has a field for a
?X: particular struct (of if this system has a particular struct!)
?X:
```

```
?X: To use it, say something like:
?X:  set d_statblocks stat st_blocks i_sysstat sys/stat.h
?X:  eval $hasfield
?X: Or, for more complicated sets of headers, do something like
?X: hdrs="$define sys/foo.h
?X:  $i_sysbar sys/bar.h
?X:  $i_syszot sys/zot.h
?X:  $i_zappa zappa.h"
?X: set d_statblocks stat st_blocks $hdrs
?X: eval $hasfield
?X:
?MAKE:Hasfield: Setvar rm_try test Compile
?MAKE: -pick add $@ %<
?T:varname struct field
?V:hasfield
: Define hasfield macro for Configure internal use
hasfield='varname=$1;
 struct=$2; field=$3; shift; shift; shift;
while $test $# -ge 2; do
 case "$1" in
 $define) echo "#include <$2>";;
 esac ;
   shift 2;
done > try.c;
echo "int main () { struct $struct foo; char* bar; bar = (char*)foo.$field; }" >> try.c;
set try;
if eval $compile; then
 val="$define";
else
 val="$undef";
fi;
set $varname;
eval $setvar;
$rm_try'
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/protos/Hasfield.U
No license file was found, but licenses were detected in source scan.

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?RCS: You may distribute under the terms of either the GNU General Public

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_sigsetjmp.U
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/compline/d_sigsetjmp.U
No license file was found, but licenses were detected in source scan.

?RCS: $Id: installprefix.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $

```
?RCS:
?RCS: Copyright (c) 1999 Andy Dougherty
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?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: installprefix.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?RCS:
?MAKE:installprefix installprefixexp: Getfile Loc \
 Oldconfig afs cat package prefix
?MAKE: -pick add $@ %<
?S:installprefix:
?S: This variable holds the name of the directory below which
?S: "make install" will install the package.  For most users, this
?S: is the same
 as prefix.  However, it is useful for
?S: installing the software into a different (usually temporary)
?S: location after which it can be bundled up and moved somehow
?S: to the final location specified by prefix.
?S:.
?S:installprefixexp:
?S: This variable holds the full absolute path of installprefix
?S: with all ~-expansion done.
?S:.
: determine installation prefix for where package is to be installed.
if $afs; then
$cat <<EOM

Since you are running AFS, I need to distinguish the directory in which
files will reside from the directory in which they are installed (and from
which they are presumably copied to the former directory by occult means).

EOM
 case "$installprefix" in
 ") dflt=`echo $prefix | sed 's#^/afs/#/afs/.#'`;;
 *) dflt="$installprefix";;
 esac
else
$cat <<EOM
```

```
In some special cases, particularly when building $package for distribution,
it is convenient to distinguish the directory in which files should be
installed from the directory ($prefix) in which they will
eventually
 reside.  For most users, these two directories are the same.

EOM
 case "$installprefix" in
 ") dflt=$prefix ;;
 *) dflt=$installprefix;;
 esac
fi
fn=d~
rp='What installation prefix should I use for installing files?'
. ./getfile
installprefix="$ans"
installprefixexp="$ansexp"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/installdirs/installprefix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: cf_email.U,v $
?RCS: Revision 3.0.1.1  1994/01/24  14:05:06  ram
?RCS: patch16: created
?RCS:
?RCS:
?MAKE:cf_email: cat cf_by test myhostname mydomain Oldconfig Myread
?MAKE: -pick add $@ %<
?S:cf_email:
?S: Electronic mail address of the person who ran Configure. This can be
?S: used by units that require the user's e-mail, like MailList.U.
?S:.
?T:cont maildomain
?LINT:extern MAILDOMAIN
: determine the e-mail address of the user who is running us
$cat <<EOM
```

```
I need to get your e-mail address
 in Internet format if possible, i.e.
something like user@host.domain. Please answer accurately since I have
no easy means to double check it. The default value provided below
is most probably close to reality but may not be valid from outside
your organization...

EOM
cont=x
while test "$cont"; do
 case "$MAILDOMAIN" in
 ")
  if $test -s /etc/mailname; then
   maildomain=`$cat /etc/mailname`
  else
   maildomain="$myhostname$mydomain"
  fi
  ;;
 *)  maildomain="$MAILDOMAIN";;
 esac
 case "$cf_email" in
 ") dflt="$cf_by@$maildomain";;
 *)  dflt="$cf_email";;
 esac
 rp='What is your e-mail address?'
 . ./myread
 cf_email="$ans"
 case "$cf_email" in
 *@*.*) cont=" ;;
 *)
  rp='Address does not look like an Internet one.  Use it anyway?'
  case "$fastread" in
  yes) dflt=y ;;
  *) dflt=n ;;
  esac
  . ./myread
  case "$ans" in
  y*) cont=" ;;
  *) echo " " ;;
  esac
  ;;
 esac
done
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/cf_email.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: MailAuthor.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic Licence,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic Licence; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Graham Stoney <greyham@research.canon.oz.au>
?RCS:
?RCS: $Log: MailAuthor.U,v $
?RCS: Revision 3.0.1.5  1997/02/28  15:04:41  ram
?RCS: patch61: added support for src.U
?RCS:
?RCS: Revision 3.0.1.4  1994/08/29  16:05:09  ram
?RCS: patch32: avoid message sending if they said no previously
?RCS:
?RCS: Revision 3.0.1.3  1993/10/16  13:47:30  ram
?RCS: patch12: now makes sure user-specified address is in Internet format
?RCS:
?RCS: Revision
 3.0.1.2  1993/09/13  15:48:49  ram
?RCS: patch10: reverted to original intent by the Author himself
?RCS:
?RCS: Revision 3.0.1.1  1993/08/27  14:38:38  ram
?RCS: patch7: now prompts user for its e-mail address
?RCS: patch7: no longer silent when mail has been sent
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:06  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?RCS:
?X:
?X: This unit asks the user to please send a message to the author.
?X: To force inclusion of this unit, you must add it's name to the
?X: dependancies on the MAKE line in your private copy of End.U.
?X: This allows a smart mailagent program to automatically let users know
?X: when their package is out of date, and to allow users to be notified of
?X: any future patches.
?X:
?MAKE:MailAuthor mailpatches notifypatches usermail: test cat mailer \
 package Myread patchlevel baserev rm rsrc Oldconfig Configdir
?MAKE: -pick wipe $@ %<
?S:mailpatches:
?S: Indicates whether the user would like future patches to be mailed
?S: directly
```

```
 to them.
?S:.
?S:notifypatches:
?S: Indicates whether the user would like notification of future patches
?S: mailed to them.
?S:.
?S:usermail:
?S: This variable is used internally by Configure to keep track of the
?S: user e-mail address, where notifications or patches should be sent.
?S: A '-' value means the return address will be extracted by parsing
?S: the mail headers.
?S:.
?T:opt mailpatches notifypatches atsh status
: notify author that his package is used
if $test -f ../.config/mailauthor &&
 cmp $rsrc/patchlevel.h ../.config/mailauthor >/dev/null 2>&1
then
 status="say that you're using $package";
 case "$mailpatches" in
 true) status='have patches mailed to you as they are issued';;
 esac
 case "$notifypatches" in
 true) status='be notified when new patches are issued';;
 esac
 $cat <<EOM

You have already sent the author of $package (<MAINTLOC>) mail to
$status. If you wish, you may modify
your previous request by sending a new mail with different options.

EOM
 rp='Should
 I send a status update to <MAINTLOC>?'
 dflt=n
else
 $cat <<EOM

If you are able to send mail to the Internet, the author of $package would
really appreciate you letting me send off a quick note, just to say that you've
tried it. The author is more likely to spend time maintaining $package if it's
known that many people are using it, and you can even ask to get sent new
patches automagically this way if you wish. To protect your privacy, all I'll
say in the mail is the version of $package that you're using.

EOM
 rp='Should I send mail to <MAINTLOC>?'
 dflt=y
?X: Ensure default is 'n' if question has been asked already, in case they
```

```
?X: run Configure -d next time and answered 'n' the first time. Therefore,
?X: an empty nomail will be created later on even if no mail is sent.
 $test -f ../.config/nomail && dflt=n
fi
. ./myread
case "$ans" in
[yY]*)
 echo " "
 echo "Great! Your cooperation is really appreciated."
 $cat <<EOM

Some braindead sites do not set a proper return
 address in the From: header of
their outgoing mail, making it impossible to reply to mail they generate.
If your site is broken in this way, write to your system administrator and get
it fixed!!! In the mean time, you can manually specify the Internet e-mail
address by which the author can get back to you, should there be a need to do
so. If manually specified, it should be something like "user@domain.top".
If your mail system generates addresses correctly, specify "none".

EOM
 case "$usermail" in
 '-'|'') dflt=none;;
 *) dflt="$usermail";;
 esac
 rp='Manually specify a return address to use:'
 . ./myread
 case "$ans" in
 none|*@*.*)
  case "$ans" in
  none) usermail='-';;
  *) usermail="$ans";;
  esac
  ;;
 *)
  echo "(Address does not look like an Internet one -- ignoring it.)"
?X:
?X: If we can't trust their mailer or their return address, it's highly
?X: suggested that they only register and don't ask to get anything from
?X: the author, since it's likely to bounce in null-land --
 RAM.
?X:
  usermail='-'
  mailpatches=false
  notifypatches=false
  ;;
 esac
 echo " "
```

```
 opt=''
 rp='Would you like to have new patches automatically mailed to you?'
 case "$mailpatches" in
 true) dflt=y;;
 *) dflt=n;;
 esac
 . ./myread
 case "$ans" in
 [yY]*) opt=' mailpatches'; mailpatches=true;;
 *)
  mailpatches=false
  echo " "
  rp='Ok, would you like to simply be notified of new patches?'
  case "$notifypatches" in
  false) dflt=n;;
  *) dflt=y;;
  esac
  . ./myread
  echo " "
  case "$ans" in
  [yY]*) opt=' notifypatches'; notifypatches=true;;
  *)
   echo "Fine, I'll simply say that you've tried it then."
   notifypatches=false
   ;;
  esac
  ;;
 esac
 echo "Sending mail to <MAINTLOC>..." >&4
?X: Bizarre hack here. We can't just put @SH in the hereis lines below, because
?X: metaconfig will interpret it as a command, and there's no quoting mechanism.
?X: Do it via a variable instead.
 atsh='@SH'
 $mailer <MAINTLOC> <<EOM >/dev/null 2>&1
Subject: Command
Precedence: junk
To: <MAINTLOC>

$atsh
 package $usermail $package $baserev $patchlevel$opt
EOM
 $rm -f ../.config/mailauthor ../.config/nomail
 cp $rsrc/patchlevel.h ../.config/mailauthor
 ;;
*)
 case "$dflt" in
 "y")
  echo "Oh well, maybe next time."
```

```
  cp /dev/null ../.config/nomail
  ;;
 esac
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/MailAuthor.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1996, Andy Dougherty
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Unix.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:06  ram
?RCS: patch61: created
?RCS:
?X:
?X: The purpose of this unit is to define things that are common across all
?X: known UNIX platforms. If Configure is ported/used on a non-UNIX
?X: environment, then some of the following variables can be redefined in hint
?X: files.
?X:
?MAKE:Unix _a _o firstmakefile archobjs: Oldconfig
?MAKE: -pick add $@ %<
?S:_a (lib_ext):
?S: This variable defines the extension
 used for ordinary libraries.
?S: For unix, it is '.a'.  The '.' is included.  Other possible
?S: values include '.lib'.
?S:.
?S:_o (obj_ext):
?S: This variable defines the extension used for object files.
?S: For unix, it is '.o'.  The '.' is included.  Other possible
?S: values include '.obj'.
?S:.
?S:firstmakefile:
?S: This variable defines the first file searched by make.  On unix,
?S: it is makefile (then Makefile).  On case-insensitive systems,
?S: it might be something else.  This is only used to deal with
```

```
?S: convoluted make depend tricks.
?S:.
?S:archobjs:
?S: This variable defines any additional objects that must be linked
?S: in with the program on this architecture.  On unix, it is usually
?S: empty.  It is typically used to include emulations of unix calls
?S: or other facilities.  For perl on OS/2, for example, this would
?S: include os2/os2.obj.
?S:.
?INIT:: Extra object files, if any, needed on this platform.
?INIT:archobjs="
: Define several unixisms.
: Hints files
 or command line option can be used to override them.
case "$_a" in
") _a='.a';;
esac
case "$_o" in
") _o='.o';;
esac

@if firstmakefile
: Which makefile gets called first.  This is used by make depend.
case "$firstmakefile" in
") firstmakefile='makefile';;
esac

@end
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Unix.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Unix.U,v 3.0.1.1 1997/02/28 15:20:06 ram Exp $
?RCS:
?RCS: Copyright (c) 1991-1993, Raphael Manfredi
?RCS:
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: Unix.U,v $
?RCS: Revision 3.0.1.1  1997/02/28  15:20:06  ram
?RCS: patch61: created
?RCS:
?X:
```

```
?X: The purpose of this unit is to define things that are common across all
?X: known UNIX platforms. If Configure is ported/used on a non-UNIX
?X: environment, then some of the following variables can be redefined in hint
?X: files.
?X:
?MAKE:Unix _exe _a _o exe_ext lib_ext obj_ext path_sep \
 firstmakefile archobjs rm_try: Oldconfig rm
?MAKE: -pick add $@ %<
?S:_exe:
?S: This
 variable defines the extension used for executable files.
?S: DJGPP, Cygwin and OS/2 use '.exe'.  Stratus VOS uses '.pm'.
?S: On operating systems which do not require a specific extension
?S: for executable files, this variable is empty.
?S:.
?S:_a:
?S: This variable defines the extension used for ordinary library files.
?S: For unix, it is '.a'.  The '.' is included.  Other possible
?S: values include '.lib'.
?S:.
?S:_o:
?S: This variable defines the extension used for object files.
?S: For unix, it is '.o'.  The '.' is included.  Other possible
?S: values include '.obj'.
?S:.
?S:firstmakefile:
?S: This variable defines the first file searched by make.  On unix,
?S: it is makefile (then Makefile).  On case-insensitive systems,
?S: it might be something else.  This is only used to deal with
?S: convoluted make depend tricks.
?S:.
?S:archobjs:
?S: This variable defines any additional objects that must be linked
?S: in with the program on this architecture.  On unix, it is usually
?S: empty.
  It is typically used to include emulations of unix calls
?S: or other facilities.  For perl on OS/2, for example, this would
?S: include os2/os2.obj.
?S:.
?X: Metaconfig's Obsolete symbol stuff is too over-eager.  In the
?X: perl sources, it picks up things like "P" and "FLOCK" that are
?X: not used in the way Metaconfig thinks they are.  Thus I can't
?X: just declare these obsolete and then run metaconfig -o.
?X: Instead, I'll just handle them here.
?X: Sadly, history has conspired to give us a web of definitions;
?X: this could have been much simpler.
?S:lib_ext:
?S: This is an old synonym for _a.
```

```
?S:.
?S:exe_ext:
?S: This is an old synonym for _exe.
?S:.
?S:obj_ext:
?S: This is an old synonym for _o.
?S:.
?S:path_sep:
?S: This is an old synonym for p_ in Head.U, the character
?S: used to separate elements in the command shell search PATH.
?S:.
?S:rm_try:
?S: This is a cleanup variable for try test programs.
?S: Internal Configure use only.
?S:.
?LINT: change p_
?INIT::
 Trailing extension.  Override this in a hint file, if needed.
?INIT:: Extra object files, if any, needed on this platform.
?INIT:archobjs="
: Define several unixisms.
: Hints files or command line option can be used to override them.
: The convoluted testing is in case hints files set either the old
: or the new name.
case "$_exe" in
") case "$exe_ext" in
 ") ;;
 *) _exe="$exe_ext" ;;
 esac
 ;;
esac
case "$_a" in
") case "$lib_ext" in
   ") _a='.a';;
 *) _a="$lib_ext" ;;
 esac
 ;;
esac
case "$_o" in
") case "$obj_ext" in
 ") _o='.o';;
 *) _o="$obj_ext";;
 esac
 ;;
esac
case "$p_" in
") case "$path_sep" in
 ") p_=':';;
```

```
 *) p_="$path_sep";;
 esac
 ;;
esac
exe_ext=$_exe
lib_ext=$_a
obj_ext=$_o
path_sep=$p_

rm_try="$rm -f try try$_exe a.out .out try.[cho] try.$_o core core.try* try.core*"

@if firstmakefile
: Which makefile gets called first.  This is used by make depend.
case "$firstmakefile" in
") firstmakefile='makefile';;
esac

@end
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/U/modified/Unix.U
No license file was found, but licenses were detected in source scan.

```
/*
* $Id: scandir.C,v 3.0.1.1 1994/01/24 13:58:45 ram Exp ram $
*
*  Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
*
*  You may redistribute only under the terms of the Artistic Licence,
*  as specified in the README file that comes with the distribution.
*  You may reuse parts of this distribution only within the terms of
*  that same Artistic Licence; a copy of which may be found at the root
*  of the source tree for dist 4.0.
*
* $Log: scandir.C,v $
* Revision 3.0.1.1  1994/01/24  13:58:45  ram
* patch16: created
*
*/
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/lib/C/fake/scandir.C
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id$
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
?RCS:
```

```
?RCS: You may redistribute only under the terms of the Artistic License,
?RCS: as specified in the README file that comes with the distribution.
?RCS: You may reuse parts of this distribution only within the terms of
?RCS: that same Artistic License; a copy of which may be found at the root
?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: orderlib.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:18:18  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS: patch61: likewise for .o replaced by $_o
?RCS: patch61: now uses the ar located by Loc.U
?RCS:
?RCS: Revision 3.0.1.3  1995/01/11  15:33:04  ram
?RCS: patch45: allows hint files to specify their own value for 'ranlib'
?RCS:
?RCS: Revision 3.0.1.2  1994/10/29  16:26:48  ram
?RCS: patch36: now performs a real small compile for accurate checks (ADO)
?RCS:
?RCS: Revision 3.0.1.1
  1994/08/29  16:31:17  ram
?RCS: patch32: use cc variable instead of hardwired 'cc' in 1st compile
?RCS:
?RCS: Revision 3.0  1993/08/18  12:09:26  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:orderlib ranlib: Loc ar cat test rm +cc +ccflags +ldflags +libs _a _o
?MAKE: -pick add $@ %<
?S:orderlib:
?S: This variable is "true" if the components of libraries must be ordered
?S: (with `lorder $* | tsort`) before placing them in an archive.  Set to
?S: "false" if ranlib or ar can generate random libraries.
?S:.
?S:ranlib:
?S: This variable is set to the pathname of the ranlib program, if it is
?S: needed to generate random libraries.  Set to ":" if ar can generate
?S: random libraries or if random libraries are not supported
?S:.
?F:!foobar
: see if ar generates random libraries by itself
echo " "
echo "Checking how to generate random libraries on your machine..." >&4
?X: Some systems (like MIPS) complain when running ar... Others like Ultrix
?X: need an explicit 'ar ts'
 to add the table of contents.
?X: Still others like Linux run ar ts successfully, but still need ranlib.
?X: This set of tests seems the minimum necessary to check out Linux.
?X: We need to explicitly put the entries in out-of-order so that Sun's ld
?X: will fail.  (Otherwise it complains, but gives an exit status of 0.)
```

```
echo 'int bar1() { return bar2(); }' > bar1.c
echo 'int bar2() { return 2; }' > bar2.c
$cat > foo.c <<'EOP'
int main() { printf("%d\n", bar1()); exit(0); }
EOP
$cc $ccflags -c bar1.c >/dev/null 2>&1
$cc $ccflags -c bar2.c >/dev/null 2>&1
$cc $ccflags -c foo.c >/dev/null 2>&1
$ar rc bar$_a bar2$_o bar1$_o >/dev/null 2>&1
if $cc $ccflags $ldflags -o foobar foo$_o bar$_a $libs > /dev/null 2>&1 &&
 ./foobar >/dev/null 2>&1; then
 echo "ar appears to generate random libraries itself."
 orderlib=false
 ranlib=":"
elif $ar ts bar$_a >/dev/null 2>&1 &&
 $cc $ccflags $ldflags -o foobar foo$_o bar$_a $libs > /dev/null 2>&1 &&
 ./foobar >/dev/null 2>&1; then
  echo "a table of contents
 needs to be added with 'ar ts'."
  orderlib=false
  ranlib="$ar ts"
else
?X: Allow hints to specify their own ranlib "script". For instance, on
?X: some NeXT machines, the timestamp put by ranlib is not correct, and this
?X: may raise tedious recompiles for nothing. Therefore, NeXT may add the
?X: ranlib='sleep 5; /bin/ranlib' line in their hints to "fix" that.
?X: (reported by Andreas Koenig <k@franz.ww.tu-berlin.de>)
 case "$ranlib" in
 :) ranlib=";;
 ")
  ranlib=`./loc ranlib X /usr/bin /bin /usr/local/bin`
  $test -f $ranlib || ranlib="
  ;;
 esac
 if $test -n "$ranlib"; then
  echo "your system has '$ranlib'; we'll use that."
  orderlib=false
 else
  echo "your system doesn't seem to support random libraries"
  echo "so we'll use lorder and tsort to order the libraries."
  orderlib=true
  ranlib=":"
 fi
fi
$rm -f foo* bar*
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/orderlib.U

No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: lintlib.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
?RCS: Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi
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?RCS:
?RCS: $Log: lintlib.U,v $
?RCS: Revision 3.0  1993/08/18  12:09:05  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?MAKE:lintlib lintlibexp: Getfile Loc Oldconfig
?MAKE: -pick add $@ %<
?S:lintlib:
?S: This variable holds the name of the directory in which the user wants
?S: to put public lint-library files for the package in question.  It is
?S: most often a local directory such as /usr/local/lib/lint. Programs using
?S: this variable must be prepared to
 deal with ~name expansion.
?S:.
?S:lintlibexp:
?S: This variable is the same as the lintlib variable, but is filename
?S: expanded at configuration time, for convenient use in your makefiles.
?S:.
: determine where public lint libraries go
case "$lintlib" in
") dflt=`./loc . "." /usr/local/lib/lint /usr/lib/lint /usr/lib`;;
*) dflt="$lintlib" ;;
esac
echo " "
fn=d~
rp='Where do you want to put the public lint libraries?'
. ./getfile
lintlib="$ans"
lintlibexp="$ansexp"
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/lintlib.U
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```
?RCS: $Id: vendorhtml3dir.U,v 1.1 1999/07/08 18:32:57 doughera Exp doughera $
?RCS:
?RCS: Copyright (c) 1999, Andy Dougherty
```

```
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?RCS: of the source tree for dist 3.0.
?RCS:
?RCS: $Log: vendorhtml3dir.U,v $
?RCS: Revision 1.1  1999/07/08 18:32:57  doughera
?RCS: Initial revision
?RCS:
?MAKE:vendorhtml3dir vendorhtml3direxp installvendorhtml3dir: html3dir Getfile \
 Oldconfig Setprefixvar Prefixit test vendorprefix prefix sed
?MAKE: -pick add $@ %<
?Y:TOP
?S:vendorhtml3dir:
?S: This variable contains the name of the directory for html
?S: library pages.  It may have a ~ on the front.
?S: The standard distribution will put nothing
 in this directory.
?S: Vendors who distribute perl may wish to place their own
?S: html pages for modules and extensions in this directory with
?S:  MakeMaker Makefile.PL INSTALLDIRS=vendor
?S: or equivalent.  See INSTALL for details.
?S:.
?S:vendorhtml3direxp:
?S: This variable is the ~name expanded version of vendorhtml3dir, so that you
?S: may use it directly in Makefiles or shell scripts.
?S:.
?D:installvendorhtml3dir="
?S:installvendorhtml3dir:
?S: This variable is really the same as vendorhtml3direxp but may differ on
?S: those systems using AFS. For extra portability, only this variable
?S: should be used in makefiles.
?S:.
?LINT:change prefixvar
?LINT:set installvendorhtml3dir
: Set the vendorhtml3dir variables
case "$vendorprefix" in
") vendorhtml3dir="
 vendorhtml3direxp="
 ;;
*) : determine where vendor-supplied module html pages go.
 : There is no standard location, so try to copy the previously-selected
 : directory structure for the core html pages.
 : XXX Better default
 suggestions would be welcome.
 case "$vendorhtml3dir" in
```

```
 ") dflt=`echo "$html3dir" | $sed "s#^$prefix#$vendorprefix#"` ;;
 *) dflt=$vendorhtml3dir ;;
 esac
 case "$dflt" in
 "|' ') dflt=none ;;
 esac
 fn=dn+~
 rp='Pathname for the vendor-supplied html pages?'
 . ./getfile
 vendorhtml3dir="$ans"
 vendorhtml3direxp="$ansexp"
 ;;
esac
: Use ' ' for none so value is preserved next time through Configure
$test X"$vendorhtml3dir" = "X" && vendorhtml3dir=' '
prefixvar=vendorhtml3dir
. ./installprefix
```

Found in path(s):
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```
?RCS: $Id: libyacc.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: libyacc.U,v $
?RCS: Revision 3.0.1.4  1997/02/28  16:09:19  ram
?RCS: patch61: replaced .a with $_a all over the place
?RCS:
?RCS: Revision 3.0.1.3  1994/05/13  15:27:12  ram
?RCS: patch27: added byacc case (ADO)
?RCS:
?RCS: Revision 3.0.1.2  1994/05/06  15:09:01  ram
?RCS: patch23: now uses full library path instead of -l notation
?RCS:
?RCS: Revision 3.0.1.1  1994/01/24  14:13:49  ram
?RCS: patch16: un-obsoleted this unit for smooth yacc compilations
?RCS:
?RCS:
 Revision 3.0  1993/08/18  12:09:04  ram
?RCS: Baseline for dist 3.0 netwide release.
```

```
?RCS:
?MAKE:libyacc: Loc yacc libpth _a
?MAKE: -pick add $@ %<
?S:libyacc:
?S: This variable contains the argument to pass to the loader in order
?S: to get the yacc library routines.  If there is no yacc or yacc
?S: library, it is null.
?S:.
?T:xxx
: see if we should include -ly
echo " "
case "$yacc" in
*byacc*)
 echo "You are using byacc, so I won't look for a yacc library." >&4
 libyacc=''
 ;;
*yacc)
 xxx=`./loc liby$_a x $libpth`
 case "$xxx" in
 x)
  echo "No yacc library found." >&4
  libyacc=''
  ;;
 *)
  echo "yacc library found in $xxx." >&4
  libyacc="$xxx"
  ;;
 esac
 ;;
*bison*)
 echo "You are using bison, so I won't look for a yacc library." >&4
 libyacc=''
 ;;
*)
echo "You don't seem to have yacc, so I won't look for the yacc library." >&4
 libyacc=''
 ;;
esac
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/libyacc.U
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```
?RCS: $Id: longsize.U 1 2006-08-24 12:32:52Z rmanfredi $
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```

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?RCS:
?RCS: $Log: longsize.U,v $
?RCS: Revision 3.0.1.2 1997/02/28 16:09:35 ram
?RCS: patch61: code moved to intsize.U
?RCS:
?RCS: Revision 3.0.1.1 1994/10/29 16:24:31 ram
?RCS: patch36: added ?F: line for metalint file checking
?RCS:
?RCS: Revision 3.0 1993/08/18 12:09:07 ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: 'longsize' is now defined within intsize.U
?X:
?LINT: empty

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/longsize.U
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?RCS: $Id: d_group.U 1 2006-08-24 12:32:52Z rmanfredi $
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: Original Author: Andy Dougherty <doughera@lafcol.lafayette.edu>
?RCS:
?RCS: $Log: d_group.U,v $
?RCS: Revision 3.0.1.2 1997/02/28 15:34:52 ram
?RCS: patch61: useless unit dropped.
?RCS:
?RCS: Revision 3.0.1.1 1994/08/29 16:07:48 ram
?RCS: patch32: created by ADO
?RCS:
?X:
?X: Useless unit dropped.
?X:
?LINT:empty

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/d_group.U
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```
?RCS: $Id: Nothing.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Nothing.U,v $
?RCS: Revision 3.0  1993/08/18  12:05:09  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: The purpose of this file is to supply an empty target for the private
?X: Makefile built by metaconfig to order the units.
?X:
?MAKE:Nothing: Head
```

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Nothing.U
No license file was found, but licenses were detected in source scan.

```
?RCS: $Id: Warn_v7ND.U 1 2006-08-24 12:32:52Z rmanfredi $
?RCS:
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?RCS: of the source tree for dist 4.0.
?RCS:
?RCS: $Log: Warn_v7ND.U,v $
?RCS: Revision 3.0.1.1  1994/10/29  16:01:46  ram
?RCS: patch36: call ./v7 explicitly instead of relying on PATH
?RCS:
?RCS: Revision 3.0  1993/08/18  12:05:18  ram
?RCS: Baseline for dist 3.0 netwide release.
?RCS:
?X:
?X: This unit warns V7 sites that they may not have a non-blocking read.
?X: This unit needs to be mentioned in End.U to get included.
```

```
?X:
?MAKE:Warn_v7ND: package Guess
?MAKE: -pick add $@ %<
: Warnings
if ./v7; then
 cat
 <<EOM

NOTE: many V7 systems do not have a way to do a non-blocking read.  If you
don't have any of FIONREAD, O_NDELAY, or rdchk(), the $package package
may not work as well as it might.  It might not work at all.
EOM
fi

Found in path(s):
* /perl-5-38-2-orig-regen-configure-1-tar-xz/metaconfig-5.38.0/dist/U/Warn_v7ND.U
```

1.4095 prometheus-client 1.22.0

1.4095.1 Available under license :

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1.4096 aws-sdk-go-v2-config 1.29.14

1.4096.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
```

```
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
```

```
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

```
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
```

```
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
```

```
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err
= addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
```

```
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
```

```
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string
```

```
 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
```

```
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
```

```
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

```
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type":

"list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {

"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has
been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being
applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings
current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated
data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
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"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
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"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
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"aws.protocols#restJson1": {},
"smithy.api#cors": {
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"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
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"builtIn": "AWS::Region",

"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"ref": "Endpoint"
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"argv": [
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},

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        "conditions": [],
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          "assign": "PartitionResult"
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              "argv": [
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                            "conditions": [],

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"ref": "PartitionResult"
},
"supportsFIPS"
]

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                "type": "error"
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                "argv": [
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                    "ref": "UseDualStack"
                },
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                            "type": "error"
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                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
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  "type": "error"
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"type": "tree"
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"smithy.rules#endpointTests": {
  "testCases": [
    {
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      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
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"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
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"params": {
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"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
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"params": {
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"UseDualStack": true
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"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false

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  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
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                    }
                },
                "params": {
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                    "UseDualStack": true
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                    }

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                    "UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
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"params": {
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"UseDualStack": false
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"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseDualStack": true
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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"error": "DualStack is enabled but this partition does not support DualStack"
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"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",

"expect": {
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}
},
"params": {
"Region": "us-iso-east-1",
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
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"params": {
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"UseFIPS": false,
"UseDualStack": false
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"expect": {
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"url": "https://example.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
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"UseFIPS": true,
"UseDualStack": false,
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"expect": {
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"params": {

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"UseDualStack": true,
"Endpoint": "https://example.com"
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
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"version": "1.0"
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}

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    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
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        "members": {
            "SourceRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "OrganizationIntegration": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
                "traits": {
                    "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
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    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
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"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
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"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
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            "smithy.api#paginated": {
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                "outputToken": "NextToken",
                "pageSize": "MaxResults",

    "items": "Subscriptions"
            }
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        "members": {
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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n  <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n <li>\n            <p>\n                <code>Subscription</code>\n            </p>\n        </li>\n        </ul>\n <p>The
 valid Operators for this filter are:</p>\n        <ul>\n        <li>\n            <p>\n <code>contains</code>\n            </p>\n        </li>\n        <li>\n            <p>\n <code>equals</code>\n            </p>\n        </li>\n        <li>\n            <p>\n <code>Notequal</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"

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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
```

```
                }
            }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
                }
            },

            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
```

"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

           },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
```

"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed

third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",

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                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
```

"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",

"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}

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                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

           "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

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},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
```

"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings

current status. "
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n   subscriptions. "
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": " The provided input is not valid. Try your request again. ",
            "smithy.api#error": "client"
        }
    }
  }
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
```

```
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

```
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
```

RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}

```
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}

```
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
```

```
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "

```
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}

```
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
```

```
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",

"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},

```
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [
            {

              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
```

"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [],
"endpoint": {
"url": {
"ref": "Endpoint"
},

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Region"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "aws.partition",

"argv": [
{
"ref": "Region"
}
],
"assign": "PartitionResult"
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",

```
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },

true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {

"fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        }
                      ]
                    },

                {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
```

"supportsDualStack"
]
}

]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}

],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [

{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"

}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

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                ]
            }
        ],
        "rules": [
            {

"conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

}
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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                "type": "tree"
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            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
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"conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS":
true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",

"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint":
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"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS

and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}

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        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {

         "endpoint": {
                "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
                "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack":
 false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
          "expect": {
            "error": "Invalid Configuration:
```

Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information

about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},

"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},

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            {
                "name": "PROVISIONING_FAILED",
                "value": "PROVISIONING_FAILED",
                "documentation": ""
            },
            {
                "name": "PROVISIONED",
                "value": "PROVISIONED",
                "documentation": ""
            },
            {
                "name": "DELETING",
                "value": "DELETING",
                "documentation": ""
            },
            {
                "name": "DELETION_FAILED",
                "value": "DELETION_FAILED",
                "documentation": ""

            },
            {
                "name": "DELETED",
                "value": "DELETED",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "HEALTHY",
                "value": "HEALTHY",
                "documentation": ""
            },
            {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
            },
            {
                "name": "NOT_APPLICABLE",
                "value": "NOT_APPLICABLE",
                "documentation": ""
            }
```

```
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
          "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
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{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use

the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"

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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },

    {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
{
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
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request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n
\n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next
token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {

"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating.
This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",

"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags for the specified resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
```

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}

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            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The start date of a subscription.</p>"
                }
            },
            "SubscriptionEndDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"

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            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits":
 {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
```

"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},

"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {

"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the

VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"

```
        },
        "traits": {
            "smithy.api#length": {

 "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
```

"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation":
" The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",

"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },

            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
```

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

ListReceivedLicenses

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

ErrorCloseResponseBody

CloseResponseBody

ResponseErrorWrapper

RequestIDRetriever

OperationDeserializer

AddTimeOffsetMiddleware

RecordResponseTiming

RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
```

```
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
```

```
        {
          "id": "HttpResponseCodeSemantics",
          "namespace": "*"
        },
        {
          "id": "PaginatedTrait",
          "namespace": "*"
        },
        {
          "id": "HttpHeaderTrait",
          "namespace": "*"
        },
        {
          "id": "HttpUriConflict",
          "namespace": "*"
        },
        {
          "id": "Service",
          "namespace": "*"
        }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateGrant"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateGrantVersion"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateLicense"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
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        "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
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        "cloudFormationName": "LicenseManager",
        "cloudTrailEventSource": "licensemanager.amazonaws.com",
        "endpointPrefix": "license-manager"
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"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"required": true,
"default": false,
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"type": "Boolean"
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"required": true,
"default": false,
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"type": "Boolean"
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"required": false,
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                "type": "error"
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"supportsDualStack"
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            "type": "error"
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                            "fn": "getAttr",
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"supportsDualStack"
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"type": "error"
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"headers": {}
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"type": "endpoint"
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"type": "error"

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                "UseFIPS": false,
                "UseDualStack": false
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              "expect": {
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"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
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"UseFIPS": false,
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"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
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"params": {
"Region": "ap-southeast-3",
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"params": {
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"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
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disabled and DualStack disabled",
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{
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{
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"params": {
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
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"params": {
"Region": "us-iso-east-1",
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"UseDualStack": false
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseDualStack": true
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"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {

"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"

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                }
            },
            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {

"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",

```
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }

},
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
      },
```

"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
"type": "structure",
"members": {
"LicenseConsumptionToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"

```
            },
            {
                "target":
 "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
```

value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",

"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"

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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
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SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

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    "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
        "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and
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time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"

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        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
```

"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
```

Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "

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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
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"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",

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            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},

"LicenseRules": {
"target":
"com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n
\n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
<code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |
<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
```

},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a report generator.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
    "type": "structure",
    "members": {
        "ReportGeneratorName":
```

{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}

```
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn":
 {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",

```
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
```

```
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                     "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
```

"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}

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            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

    {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {

"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",
"traits": {
"smithy.api#documentation": " Token type. "
}
},
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DateTime": {
"type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
"type": "structure",
"members": {
"Begin": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Start of the time range. ",
"smithy.api#required": {}
}

```
            },
            "End": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>End of the time range.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
```

"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":

" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {

"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {

"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}

```
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
```

"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}

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        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
```

```
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },
        "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Seconds"
            }
        },
        "MICROSECONDS": {
```

```
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Microseconds"
    }
},
"MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Milliseconds"
    }
},
"BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes"
     }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
```

"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}

```
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
                }
            },

        "TERABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits/Second"
                }
            },
            "COUNT_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
```

```
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

       "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
},
```

"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":

" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",

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    "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

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"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

   },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
```

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            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}

```
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules.</p>"
            }
          },
          "LicenseCount": {
```

"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}

```
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            },
            "AutomatedDiscoveryInformation": {
                "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
                "traits": {
                    "smithy.api#documentation": "<p>Automated discovery information.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",

"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},

"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was
completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {
        "ReportGenerator": {
          "target": "com.amazonaws.licensemanager#ReportGenerator",
          "traits": {
            "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {

 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
      "type": "structure",
      "members": {
        "License": {
          "target": "com.amazonaws.licensemanager#License",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        }
      },
```

"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
```

"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>",
            "smithy.api#required": {}
          }
        },
        "ParentArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Parent ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "GranteePrincipalArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
```

```
            "GrantStatus": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
```

"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "DISABLED"

```
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#GrantedLicense": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
            }

},
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
```

```
 }
},
"Status": {
   "target": "com.amazonaws.licensemanager#LicenseStatus",
   "traits": {
      "smithy.api#documentation": "<p>Granted license status.</p>"
   }
},
"Validity": {
   "target": "com.amazonaws.licensemanager#DatetimeRange",
   "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
   }
},
"Beneficiary": {
   "target": "com.amazonaws.licensemanager#String",
   "traits": {
      "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
   }
},
"Entitlements": {
   "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
   }
},
"ConsumptionConfiguration": {
   "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
   "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
   }
},
"LicenseMetadata": {
   "target": "com.amazonaws.licensemanager#MetadataList",
   "traits": {
      "smithy.api#documentation": "<p>Granted license metadata.</p>"
   }
},
"CreateTime": {
   "target": "com.amazonaws.licensemanager#ISO8601DateTime",
   "traits": {
      "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
},
"Version": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400

```
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": "<p>Condition of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
```

```
            }
        }

    },
        "traits": {
            "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"
                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",

"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {

"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {

"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "

```
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

       }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {
```

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-

account</code>. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Describes an association with a license configuration. "
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
          "AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "AVAILABLE"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": " Type of resource. "
            }
          },

"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {

"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",

"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation":
" The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",

```
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
          },
          "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Instance"
            }
          },
          "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Core"
            }
```

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        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
```

"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"

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        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
    },
    "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",

            "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "PENDING_AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_AVAILABLE"
                }
            },
```

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        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

      "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
```

"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Lists the resource associations for the
specified license configuration. \n Resource associations need not consume licenses from a license
configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",

"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

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                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
            {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
```

"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configurations
for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license
configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",

"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseConfigurationArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",

"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",

"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {

```
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>Status</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

"smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n
\n \n \n <code>ParentArn</code>\n \n \n
\n \n <code>GranteePrincipalArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {

```
    "type": "structure",
    "members": {
      "Grants": {
        "target": "com.amazonaws.licensemanager#GrantList",
         "traits": {
          "smithy.api#documentation": "<p>Received grant details.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
       },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
```

"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {

"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

```
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
```

"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}

```
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
```

"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",

"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},

"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "

```
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
```

<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",

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            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterValue": {
          "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
          }
        },
        "ProductInformationFilterComparator": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
      }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
```

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    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
        "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 429
      }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
      "type": "structure",
      "members": {
        "ReceivedStatus": {
          "target": "com.amazonaws.licensemanager#ReceivedStatus",
          "traits": {
            "smithy.api#documentation": "<p>Received status.</p>"
          }
        },
        "ReceivedStatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Received
status reason.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
      "type": "enum",
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        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"
            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
```

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                }
            }
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
        "members": {
            "Location": {
                "target": "com.amazonaws.licensemanager#Location",
                "traits": {
                    "smithy.api#httpHeader": "Location"
                }
            },
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
```

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "WEEKLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Weekly"
                }
            },
            "MONTHLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Monthly"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
            "licenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
```

"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {

"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "

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            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",

    "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }

    }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportGeneratorList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportGenerator"
        }
    },
    "com.amazonaws.licensemanager#ReportGeneratorName": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
          "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

      },
          "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportType"
        }
      },
      "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
          "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

```
            "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResource.NotFound",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The resource cannot be found.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#ResourceType": {
        "type": "enum",
        "members": {
            "EC2_INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EC2_INSTANCE"
                }
            },
            "EC2_HOST": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EC2_HOST"
                }
            },
            "EC2_AMI": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EC2_AMI"
                }
            },
            "RDS": {
                "target": "smithy.api#Unit",
                "traits": {
```

"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}

```
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
"com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}

```
            },
            "ExpirationTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
        },
        "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
```

```
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
```

{
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the

idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "

```
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
```

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4097 aws-sdk-go-v2-credentials 1.17.67

1.4097.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
```

```
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
```

```
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
```

```
  name: License Scan
  runs-on: ubuntu-latest
  strategy:
    matrix:
      python-version: [3.9]

  steps:
    - name: Checkout target
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
```

```
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement
```

```
 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
```

```
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions

```
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
```

```
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
```

```
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
```

```
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
         "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

      {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
               "code": 200,
```

"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
```

```
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"
```

```
        },
          "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
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"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "

}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for

\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
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"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"

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    },
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        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
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        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
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        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
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        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
        "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
        ],
        "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
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"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"fn": "isSet",
"argv": [
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"ref": "Endpoint"
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                                            "ref": "UseDualStack"
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                                    ]

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                            "type": "error"
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                                "assign": "PartitionResult"
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                              "fn": "getAttr",
                              "argv": [
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                            }
                          ]
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                          "argv": [
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                              "fn": "getAttr",
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                                  "ref": "PartitionResult"
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                              ]
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"properties": {},
"headers": {}
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"type": "endpoint"
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"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
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                                            "argv": [
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"headers": {}
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"type": "error"
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],
"type": "tree"
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"smithy.rules#endpointTests": {
"testCases": [

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      "expect": {
        "endpoint": {
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}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
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      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
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      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
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    },
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  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
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    },
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      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
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            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
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            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
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 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
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            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
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{
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"expect": {
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}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
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"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
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},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack

enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS":
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"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
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"params": {
"Region": "us-isob-east-1",
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
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"error": "DualStack is enabled but this partition does not support DualStack"
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
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}
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"UseFIPS": true,
"UseDualStack": false,
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {

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"UseDualStack": true,
"Endpoint": "https://example.com"
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
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"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
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"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

```
            },

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                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
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        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
      <code>AmiID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Region</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Status</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
```

values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n      organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
```

match a certain subscription's name. \n The valid names for this filter are: \n \n
\n \n <code>Subscription</code>\n \n \n \n
The
 valid Operators for this filter are: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
```

"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
```

```
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

           },
            "smithy.api#idempotent": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
```

```
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
```

"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

```
}
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },

  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "

```
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
```

```
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string
```

```
 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
```

ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            },
            "ActiveDirectorySettings":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
```

"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-

zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n   <note>\n   Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n   </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {

"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider
specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>
resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
```

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory

domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},

"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}

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            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
    "type": "list",
    "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
            }
        },
        "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
```

"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",

"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based

subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"

},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",

"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant
regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"rules": [
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"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
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}
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"argv": [
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"ref": "UseFIPS"
},
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]
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"type": "error"
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                            "ref": "UseDualStack"
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            "type": "error"
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            "type": "endpoint"
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            "argv": [
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                    "ref": "Region"
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        }
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                {
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                "argv": [
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                    "ref": "Region"
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            "assign": "PartitionResult"
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true
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                            "ref": "UseDualStack"
                        },
                        true
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                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },
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                                    "supportsDualStack"
                                ]
                            }

                ]
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                ],
                "rules": [
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
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                        "type": "endpoint"
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                "conditions": [],
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both",
                "type": "error"
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        "conditions": [
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                "argv": [
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                                        "argv": [

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                                        "supportsFIPS"
                                    ]
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                        "type": "error"

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                            },
                            true
                        ]
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                                        "argv": [
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                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                                    "headers": {}
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                                "type": "endpoint"
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                        "type": "error"
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                "type": "tree"
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                "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
    ],
    "type": "tree"
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{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
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"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
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"params": {
"Region": "cn-north-1",
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}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
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},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-east-1",
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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"expect": {
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                "UseFIPS": false,
                "UseDualStack": false
            }
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            "expect": {
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and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false

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        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
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        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
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"url": "https://example.com"
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"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},

"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "

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                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
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                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

            "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""

},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},

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                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
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    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
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"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
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"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}

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    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
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            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
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        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n
        <li>\n                <p>InstanceId</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
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token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",

"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
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provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

         }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

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},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
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"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {

"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits":
 {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
```

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                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "

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            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

"target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
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"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity

provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},

"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
 {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
```

to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration

settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": " A parameter is not valid. ",
                "smithy.api#error": "client"
            }
        }
    }
}
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
```

```
 }
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
```

"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},

{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

```
      "target": "com.amazonaws.licensemanager#ListLicenseVersions"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
    },
    {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
    },
    {
      "target": "com.amazonaws.licensemanager#ListResourceInventory"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTokens"
    },
    {
      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#RejectGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
```

"traits": {
"aws.api#service": {
"sdkId": "License Manager",
"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
},
"aws.auth#sigv4": {
"name": "license-manager"
},
"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

```
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

            }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {

"conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref":
```

"UseFIPS"

```
                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]

                }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
```

"supportsDualStack"

```
                                ]
```

```
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}

        },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
        "type": "error"
    }
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",

  "argv": [
            {
                "ref": "UseFIPS"
            },
            true
        ]
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
```

```
{
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ],
        "type": "tree",
        "rules": [

{
            "conditions": [],
            "endpoint": {
              "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
      {
        "conditions": [],
        "error": "FIPS is enabled but this
partition does not support FIPS",
        "type": "error"
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "type": "tree",
```

```
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

"supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

                },
                        "type": "endpoint"
                      }
                    ]
                  },
                  {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                  }
                ]
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                   "properties": {},
                  "headers": {}
```

```
                    },
                    "type": "endpoint"
                }
            ]
        }
    ]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
             }
        },
        {
            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
```

```
            }
        },
        "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }

},
    {
        "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
```

```
        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
          },
```

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},

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        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
```

"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

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}
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"params": {
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"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",

"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},

{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true

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            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

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                    },

            "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
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                },
                {
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant

ARN. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": " Grant status. "
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Grant version. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": " Access to resource denied. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

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},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the
account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

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            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

   "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

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    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

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    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

```
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
                }
```

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            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
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    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

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            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
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{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

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            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

```
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },
        "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",
```

"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

```
            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

```
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

```
        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }

```
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
```

"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

```
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n  are supported:</p>\n  <ul>\n  <li>\n  <p>\n  <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
  </li>\n  <li>\n  <p>\n  <code>application_name</code> - The name of the application. \n  Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
  </li>\n  <li>\n  <p>\n  <code>license_included</code> - The type of license included. \n
  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n  Possible values are <code>sql-server-enterprise</code> | \n  <code>sql-server-standard</code> | \n  <code>sql-server-web</code> |  \n  <code>windows-server-datacenter</code>.</p>\n  </li>\n  <li>\n
  <p>\n  <code>platform</code> - The platform of the resource.\n  Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n  </li>\n  <li>\n  <p>\n
  <code>resource_id</code> - The ID of the resource. \n  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n  </li>\n  <li>\n  <p>\n
  <code>tag:<key></code> - The key/value combination of a tag assigned \n  to the resource. Logical operators are <code>EQUALS</code> (single account) or\n  <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n  </li>\n  </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

```
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n                <p>\n                <code>LicenseArns</code>\n                </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

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            "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
    }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

```
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
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"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}
CheckoutLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4098 aws-sdk-go-v2-service-sts 1.33.19

1.4098.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
```

```
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
```

```
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
```

```
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
```

```
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

```
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go
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AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
```

```
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "

```
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "

```
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},

"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {

"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {

"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

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        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

      ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

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                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": {
                            "ref": "Endpoint"
                        },
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"

        }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
```

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                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {

                        "ref": "UseFIPS"
                            },
                            true
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]
                        }

],
                      "rules": [
                        {
                          "conditions": [
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
                                  "argv": [
                                    {
                                      "ref": "PartitionResult"

                    },
                                    "supportsFIPS"
                                  ]
                                }
                              ]
                            },
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                true,
                                {
                                  "fn": "getAttr",
```

"argv": [

{
"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [

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                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {

"fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true

                    ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
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                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

        ]
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                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                            "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [
```

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{
                                                "conditions": [],
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                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
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                                        ],
                                        "type": "tree"

                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
```

"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",

"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"

```
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
```

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            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

         "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
                "url": "https://example.com"
            }

},
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
```

```
            }
        },
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {

            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {

 "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
```

```
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n

```
<p>\n <code>AccountID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>AmiID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>DualSubscription</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceType</code>\n </p>\n </li>\n <li>\n <p>\n
<code>ProductCode</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Region</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Status</code>\n </p>\n </li>\n <li>\n <p>\n
<code>UsageOperation</code>\n </p>\n </li>\n </ul>\n <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n <ul>\n <li>\n <p>\n
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
    "type": "structure",
    "members": {
        "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
        },
```

"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
```

"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {

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            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
```

"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "

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            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
```

```
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
```

```
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
```

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

```
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
```

"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",

"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}

```
   }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
"smithy": "2.0",
"shapes": {

"com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
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"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
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"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
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"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
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"members": {
"DomainName": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
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"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",

"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related

costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},

"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":

{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

```
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
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"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
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"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
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"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the

user. "
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": " Metadata that describes the associate user operation. ",
                    "smithy.api#required": {}
                }
            }
        },

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {

"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the
identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

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            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "Products": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                    "smithy.api#required": {}
                }
            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
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"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "

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            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
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"operations": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
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"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
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"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"

},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":

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{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
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        "rules": [
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                "conditions": [
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                        "fn": "isSet",
                        "argv": [
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                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
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                    },
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                ]
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        "type": "error"
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    {
        "conditions": [
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                "fn": "booleanEquals",
                "argv": [
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                        "ref": "UseDualStack"
                    },
                    true
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            }
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        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
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        "conditions": [],
        "endpoint": {
            "url": {
                "ref": "Endpoint"
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"properties": {},
            "headers": {}
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        "type": "endpoint"
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  "type": "tree"
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  "conditions": [
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        "fn": "isSet",
        "argv": [
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                "ref": "Region"
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                        "argv": [
                            {
                                "ref": "Region"
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                        "assign": "PartitionResult"
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                "rules": [
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                        "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref": "UseFIPS"
                                    },

true
                                ]
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                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
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                        "rules": [
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                                "conditions": [
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"fn": "booleanEquals",
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                    true,
                    {
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                        "argv": [
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                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ]
            },

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                "fn": "booleanEquals",
                "argv": [
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                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }

        ]
            }
        ],
        "rules": [
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                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }

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        "type": "tree"
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        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
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"type": "tree"
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"conditions": [
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"argv": [

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"ref": "UseFIPS"
},
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"rules": [
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"conditions": [
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"fn": "booleanEquals",
"argv": [
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"fn": "getAttr",
"argv": [

{
"ref": "PartitionResult"
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"supportsFIPS"
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"conditions": [],
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"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
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            "type": "tree"
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            "type": "error"

}
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        "type": "tree"
    },
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        "conditions": [
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                "argv": [
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                        "ref": "UseDualStack"
                    },
                    true
                ]
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                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

     }
                        ]
                    }
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                "rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
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"properties": {},
"headers": {}
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"type": "endpoint"
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"type": "tree"
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"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
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},
"smithy.rules#endpointTests": {
"testCases": [

{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}

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            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
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            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
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            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
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                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
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        },
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          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
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        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
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            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
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          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
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"params": {
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {

"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
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"UseDualStack": false
}
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {

"UseFIPS": false,
"UseDualStack":
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"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",

"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS \n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},

"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""

                },
                {
                    "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
            ]
```

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            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
            "type": "string",
            "traits": {
                "smithy.api#enum": [
                    {
                        "name": "HEALTHY",
                        "value": "HEALTHY",
                        "documentation": ""
                    },
                    {
                        "name": "UNHEALTHY",
                        "value": "UNHEALTHY",
                        "documentation": ""
                    },
                    {
                        "name": "NOT_APPLICABLE",
                        "value": "NOT_APPLICABLE",
                        "documentation": ""
                    }
                ]
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
            "type": "structure",
            "members": {
                "ServerType": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                    "traits": {
                        "smithy.api#documentation": "<p>The type of license server.</p>",
                        "smithy.api#required": {}
                    }
                },
                "ServerSettings": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                    "traits": {
                        "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                        "smithy.api#required": {}
                    }
```

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
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"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                 "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
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request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating.
This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions
operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {

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        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
```

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            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n        </li>\n        <li>\n            <p>Username</p>\n        </li>\n
<li>\n            <p>Domain</p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
```

},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},

"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to
register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",

"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
```

"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}

```
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
```

"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
```

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {

"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {

"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}
ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step

spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
              "namespace": "*"
          }
      ]
  },
  "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
          "type": "service",
          "version": "2018-08-01",
          "operations": [
              {
                  "target": "com.amazonaws.licensemanager#AcceptGrant"
```

},

{
"target": "com.amazonaws.licensemanager#CheckInLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{

"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},

{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"

```
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                 "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            },
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                        "type": "Boolean"
                    },
                    "UseFIPS": {
                        "builtIn": "AWS::UseFIPS",
                        "required": true,
                        "default": false,
                        "documentation": "When true, send
```

this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
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"rules": [
{
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{
"fn": "booleanEquals",
"argv": [
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"ref": "UseFIPS"
},
true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{

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                "ref": "UseDualStack"
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            true
        ]
    }
  ],
  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
  "type": "error"
},
{
  "conditions": [],
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    "url": {
      "ref": "Endpoint"
    },
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
},
{
  "conditions": [
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      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ],
          "assign": "PartitionResult"
        }
      ],
      "type": "tree",
```

```
                    "rules": [
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                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref":
"UseFIPS"
                              },
                              true
                            ]
                          },
                          {
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                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
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                        "rules": [
                          {
                            "conditions": [
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                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
                                        "ref": "PartitionResult"
                                      },
                                      "supportsFIPS"
                                    ]

                              }
                                ]
                              },
                              {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
```

"fn": "getAttr",
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{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",

"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],

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                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,

{
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          }
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [

{
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                          "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ]
                  },
                  {
                    "conditions": [],
                    "error": "FIPS is enabled but this
partition does not support FIPS",
                    "type": "error"
                  }
                ]
              },
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
```

```
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
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                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
```

"supportsDualStack"

```
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
```

```
        },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
```

```
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
      }
    ]
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
```

"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-1.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"

```
            }
        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
        },
        "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }
```

```
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
          },

         "params": {
            "Region": "ca-central-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-central-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-central-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-north-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
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```
                },
                "params": {
                    "Region":
"eu-south-1",
                    "UseFIPS": false,
                    "UseDualStack": false
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            },
            {
                "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager.eu-west-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "eu-west-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
                "expect": {

                "endpoint": {
                        "url": "https://license-manager.eu-west-2.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "eu-west-2",
                    "UseFIPS": false,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager.eu-west-3.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "eu-west-3",
                    "UseFIPS": false,

        "UseDualStack": false
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            },
            {
              "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.me-south-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "me-south-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.sa-east-1.amazonaws.com"
                 }
              },
              "params": {
                "Region": "sa-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }

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            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-east-1.amazonaws.com"
                }
              },
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
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"params": {

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"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {

"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",

"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

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                "url": "https://license-manager-fips.us-gov-east-1.api.aws"
            }
        },

    "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
        }
    },
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        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },

       {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
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                }
            },
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                "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
                    }
                },

        "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://example.com"
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                }
            },
            "params": {
                "UseFIPS": false,

        "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
 }
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
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"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
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"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"

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            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
    }
},
"com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Arn"
    }
},
"com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
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"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
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"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
```

{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
```

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            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
```

idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}

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            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PROVISIONAL"
                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
             }
        }
    },
```

"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {

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            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }
    },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
    }
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
    }
  },
  "com.amazonaws.licensemanager#ConsumptionConfiguration": {
    "type": "structure",
    "members": {
        "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
        },
        "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
             }
        },
        "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
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"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
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            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
```

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        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "

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                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
 {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
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"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
 {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}

        }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
```

"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",

"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",

"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}

```
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
```

```
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members":
{
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {

"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":

"com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": " Indicates whether check-ins are allowed. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes a resource entitled for use with a license. "
    }
},
"com.amazonaws.licensemanager#EntitlementData": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement data name. ",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement
data value. "
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": " Entitlement data unit. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Data associated with an entitlement resource. "
    }
},
"com.amazonaws.licensemanager#EntitlementDataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
    }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
    "type": "enum",
    "members": {

"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}

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        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes/Second"
    }
},
"KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
    }
},
"MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
    }
},
"GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
     "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
    }
},
"TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
    }
},
"BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits/Second"
    }
},
"KILOBITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
    }
},
"MEGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
```

"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},

"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}

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        },
        "BYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
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"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},

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            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

  }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {

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    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access
tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

        },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
```

"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}

```
            },
            "ConsumedLicenseSummaryList": {
                "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
                }
            },
            "ManagedResourceSummaryList": {
                "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                 "traits": {
                    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            },
            "AutomatedDiscoveryInformation": {
                "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
                "traits": {
                    "smithy.api#documentation": "<p>Automated discovery information.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "

```
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
```

"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
        "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
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"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},

"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",

"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {

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                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation":
"<p>Describes a grant.</p>"
    }
},
"com.amazonaws.licensemanager#GrantList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
```

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            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
```

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            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
```

"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},

"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {

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        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

    },
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
      "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "

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            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
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"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "

```
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },

    "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

       "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
```

},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}

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        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

       "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
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    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#License"
```

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        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
```

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                }
            },
            "MetadataList": {

                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
```

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    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
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            }
        }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

```
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
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```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
```

configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

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      "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseConfigurationArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
 {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {

```
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
```

```
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n            </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n            </p>\n            </li>\n
    <li>\n                <p>\n                <code>Fingerprint</code>\n            </p>\n            </li>\n            <li>\n
<p>\n                <code>Status</code>\n            </p>\n            </li>\n        </ul>"
```

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            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
```

},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
            <li>\n                <p>\n                <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

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        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n

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</li>\n <li>\n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
```

```
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n            <li>\n                <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n                <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is
<code>RDS</code>:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>License Pack</code> - The license
```

pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {

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                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
```

"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}

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            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

```
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
 {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
```

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}

```
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "

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        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
```

"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
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"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
```

"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation":
" ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4099 viper 1.20.1

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1.4100 rsa 4.9.1

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1.4101 bcel 5.1

1.4101.1 Available under license :

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Found in path(s):
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LocalVariableGen.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/exc/VerificationException.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/Repository.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ReturnInstruction.java
*
 /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IFNULL.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FALOAD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IINC.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DUP2.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/NamedAndTyped.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/VariableLengthInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/PUTFIELD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/PopInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DADD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ISHL.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FADD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantValue.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/SASTORE.java

* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LNEG.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/statics/IntList.java
*
 /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LAND.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/Repository.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IFGE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/MONITOREXIT.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/D2F.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LRETURN.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/TransitiveHull.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantInterfaceMethodref.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/structurals/Subroutines.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ClassGenException.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/statics/Pass1Verifier.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/SyntheticRepository.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DCMPL.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ExceptionTable.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IDIV.java
*
 /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/InnerClasses.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/NEW.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/I2F.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IF_ACMPEQ.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/BREAKPOINT.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/ClassSet.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantInteger.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/CompoundInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/exc/LoadingException.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantNameAndType.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LOR.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/AASTORE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DREM.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/Method.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/L2I.java
*
 /bcel-5-1-sources-7-jar/org/apache/bcel/generic/MULTIANEWARRAY.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/ByteSequence.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/CPInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/InstructionListObserver.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LDIV.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IF_ICMPGE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/I2C.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantObject.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/GETSTATIC.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/JavaClass.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/TargetLostException.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/InvokeInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DCMPG.java

* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FDIV.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/Visitor.java
*
 /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/structurals/InstConstraintVisitor.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/statics/Pass3aVerifier.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/structurals/Subroutine.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IFNE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/Constants.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/PassVerifier.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IF_ACMPNE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/structurals/ExecutionVisitor.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/structurals/Frame.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/Signature.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/RET.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/SWITCH.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FREM.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DDIV.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/GOTO.java
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 /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IF_ICMPLT.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DSTORE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/F2D.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LCONST.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IASTORE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantLong.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LLOAD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DUP_X1.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/ConstantHTML.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/VerifierAppFrame.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/InstructionFinder.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FMUL.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/ClassLoaderRepository.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/GETFIELD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/structurals/ControlFlowGraph.java
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 /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/statics/Pass2Verifier.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/VerifyDialog.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FCMPG.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IF_ICMPEQ.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/StackInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/exc/ClassConstraintException.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FieldObserver.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/structurals/ExceptionHandlers.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DASTORE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/MethodHTML.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LocalVariableInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LASTORE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ARETURN.java

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 /bcel-5-1-sources-7-jar/org/apache/bcel/generic/InstructionComparator.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LADD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ExceptionThrower.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/INVOKEVIRTUAL.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FieldGenOrMethodGen.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IXOR.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/PMGClass.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DLOAD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/JsrInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/NEWARRAY.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/VerificationResult.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FNEG.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/INVOKEINTERFACE.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/GotoInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/Attribute.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/DescendingVisitor.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantUtf8.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DMUL.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/StoreInstruction.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ACONST_NULL.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/exc/StaticCodeInstructionOperandConstraintException.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/InstructionHandle.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/statics/LocalVariablesInfo.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/CALOAD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LSHR.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/CodeExceptionGen.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/INVOKESPECIAL.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DALOAD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/MethodGen.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantMethodref.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/InstructionList.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DUP2_X2.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LineNumberGen.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DUP2_X1.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/Type.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantString.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ICONST.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IndexedInstruction.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/Unknown.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ReturnaddressType.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DSUB.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/EmptyVisitor.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ConstantPushInstruction.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/I2L.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/exc/Utility.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IOR.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/StackMap.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/StackMapEntry.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FASTORE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LUSHR.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LDC.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/TABLESWITCH.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IFLT.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LREM.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ISUB.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/ExceptionConstants.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/BranchHandle.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/exc/AssertionViolatedException.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/INVOKESTATIC.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ClassObserver.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/INEG.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/BranchInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/SALOAD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/AALOAD.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LoadClass.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DUP_X2.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ALOAD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LOOKUPSWITCH.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/InstructionTargeter.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/Synthetic.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/JSR.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/PUSH.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LSTORE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/Instruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/CHECKCAST.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LMUL.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LDC_W.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IMUL.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ANEWARRAY.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FLOAD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/InnerClass.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/ClassStack.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IRETURN.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ArrayType.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/DNEG.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantFieldref.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LDC2_W.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/SourceFile.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/GOTO_W.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/InstructionFactory.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/D2L.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/D2I.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/POP.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantFloat.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ConstantPoolGen.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/FSUB.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ISTORE.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/GraphicalVerifier.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/BasicType.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LoadInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IF_ICMPLE.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/LineNumber.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/StackMapType.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ReferenceType.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/BIPUSH.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IALOAD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/Select.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/ArithmeticInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/BALOAD.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/PushInstruction.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantClass.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ConstantDouble.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/LineNumberTable.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/LCMP.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/F2L.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/ClassParser.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/IF_ICMPNE.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/exc/CodeConstraintException.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/exc/InvalidMethodException.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/classfile/Utility.java
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* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/AllocationInstruction.java
*

/bcel-5-1-sources-7-jar/org/apache/bcel/generic/F2I.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/generic/CASTORE.java
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*/
/**
* This class represents an uninitialized object type; see The Java
* Virtual Machine Specification, Second Edition, page 147: 4.9.4 for
* more details.
*
* @version $Id: UninitializedObjectType.java,v 1.1.1.1 2001/10/29 20:00:42 jvanzyl Exp $
* @author <A
 HREF="http://www.inf.fu-berlin.de/~ehaase"/>Enver Haase</A>
*/

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* /bcel-5-1-sources-7-jar/org/apache/bcel/verifier/structurals/UninitializedObjectType.java
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```

Found in path(s):
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/BCELifier.java
* /bcel-5-1-sources-7-jar/org/apache/bcel/util/BCELFactory.java

1.4102 netlink 1.3.0

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1.4103 mergo 1.0.0

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import: ../../../../fossene/db/schema/thing.yml
fields:
  site: string
  author: root

1.4104 dill 0.4.0

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1.4105 github.com/aws/aws-sdk-go-v2/config 1.29.14

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
```

```
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware

```
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
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import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
```

```
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
```

```
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
```

```
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware

```
  RecordResponseTiming
  RequestResponseLogger
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

```
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData
```

```
 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
   "shapes": {
       "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
```

"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
                 }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
```

```
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
```

"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}

},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
                 "arnNamespace": "license-manager-linux-subscriptions",
                "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-linux-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
```

"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

```
],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
```

```
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

        "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
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                      "ref": "UseFIPS"
                          },
                          true
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                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]
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                        "conditions": [
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                        {
                          "fn": "getAttr",
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                              "ref": "PartitionResult"

},
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                          ]
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                      ]
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                        {
                          "fn": "getAttr",
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                           {
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                            },
                            "supportsDualStack"
                          ]
                        }
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                    {
                      "conditions": [],

"rules": [
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                          "endpoint": {
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
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                                    {

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                                        "argv": [
                                            {
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                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            },
                                            true
```

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                                    "headers": {}
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but this partition does not support FIPS",
                "type": "error"
            }
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                    },
                    true

                ]
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            {
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{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
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"conditions": [],
"rules": [

{
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"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

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"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},

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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
                      "type": "tree"
                    }
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                  "type": "tree"
                }
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            },
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              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
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          "type": "tree"
        }
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    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}

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            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
             },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"

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            }
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
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            "UseFIPS": true,
            "UseDualStack": true
        }
    },
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
        },
        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
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        "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
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    },
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       "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
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"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",

"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code> values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n      organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n
<li>\n              <p>\n                <code>Subscription</code>\n              </p>\n          </li>\n        </ul>\n
<p>The
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n              <p>\n
<code>contains</code>\n              </p>\n          </li>\n          <li>\n              <p>\n
<code>equals</code>\n              </p>\n          </li>\n          <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
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"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
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"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
```

"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":

```
{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

```
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
```

"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}

```
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
```

```
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
```

"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

```
        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {
```

```
 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
```

```
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
GetLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains

details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {

"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"

},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS)

license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

 }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
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"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {

"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {

"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},

"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

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    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
```

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",

```
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [
              {

                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
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                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",

                     "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
```

```
true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

"fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            }
                                        ]
                                    },

                                {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
```

```
                    ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [

  {
                        "ref": "UseFIPS"
                    },
                    true
                ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
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"argv": [

{

"ref": "PartitionResult"

},

"supportsFIPS"

]

},

true

]

}

],

"rules": [

{

"conditions": [],

"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},

"headers": {}

},

"type": "endpoint"

}

],

"type": "tree"

},

{

"conditions": [],

"error": "FIPS is enabled but this partition does not support FIPS",

"type": "error"

}

],

"type": "tree"

},

{

"conditions": [

{

"fn": "booleanEquals",

"argv": [

{

"ref": "UseDualStack"

},

true

]

}

],

"rules": [

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                    {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]

         }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

                ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
```

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}

```
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS":
true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
```

```
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
```

{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",

"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,

"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {

"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "

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            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },

        "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
    "type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
                "documentation": ""
            },
            {
                "name": "PROVISIONING_FAILED",
                "value": "PROVISIONING_FAILED",
                "documentation": ""
            },
            {
```

```
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
    }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
    "type": "list",
    "member": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings
for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n            <li>\n                <p>Product</p>\n            </li>\n
        <li>\n                <p>DirectoryId</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
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"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
```

\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next
token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100

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                }
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
    "type": "structure",
    "members": {
        "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
    "type":
```

"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":

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{
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n            <p>Status</p>\n            </li>\n            <li>\n            <p>Username</p>\n
</li>\n            <li>\n            <p>Domain</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
```

"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

            }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
```

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                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

        "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
```

```
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
        },
        "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
    "type":
 "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
    "type": "structure",
    "members": {
        "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
```

"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {

"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":

" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",

"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {

"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",

"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation":
" The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

        }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

     "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
```

"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security
group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}

```
      }
    }
  }
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
       "suppressions": [
           {
               "id": "HttpMethodSemantics",
               "namespace": "*"
           },
           {
               "id": "HttpResponseCodeSemantics",
               "namespace": "*"
           },
           {
```

```
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
```

"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},

{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#ListTokens"
            },
            {
                "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#RejectGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
```

"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
},
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"rules": [
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"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],

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            "rules": [
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                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {

"conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
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                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
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                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
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            ]
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          {
            "conditions": [
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                            "ref": "Region"
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                             "fn": "aws.partition",
                            "argv": [
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                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "type": "tree",
                    "rules": [
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                            "conditions": [
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                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref":
"UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
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                            "type": "tree",
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"argv": [
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"fn": "getAttr",
"argv": [
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"ref": "PartitionResult"
},
"supportsFIPS"
]

}
]
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"fn": "booleanEquals",
"argv": [
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{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
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"conditions": [],
"endpoint": {
"url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"

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                    }
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            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
            }
        ]
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        "conditions": [
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        "argv": [
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        "rules": [
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                        "argv": [
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{
                            "fn": "getAttr",
                            "argv": [
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                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
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                    ]
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                "type": "tree",
                "rules": [
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                        "conditions": [],
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                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
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            {
                "conditions": [],
                "error": "FIPS is enabled but this
partition does not support FIPS",
                "type": "error"
            }
        ]
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    {
        "conditions": [
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                "fn": "booleanEquals",
                "argv": [
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                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
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                "conditions": [
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                        "argv": [
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                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },

"supportsDualStack"
                                ]
```

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                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                            },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
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          "expect": {
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              "url": "https://license-manager.af-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "af-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-east-1",
            "UseFIPS": false,
            "UseDualStack": false
           }
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          "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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        {
          "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
          },
          "params": {
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"Region": "ap-northeast-2",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-northeast-3",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
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"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
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"params": {
"Region": "eu-central-1",

"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
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"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
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"params": {
"Region": "eu-west-3",
"UseFIPS": false,

"UseDualStack": false
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"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
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"params": {
"Region": "sa-east-1",
"UseFIPS": false,

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            "UseDualStack": false
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        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }

},
    {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-2.amazonaws.com"
            }

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        "params": {
            "Region": "us-east-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
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"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
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"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager.us-west-1.amazonaws.com"
}
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"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-fips.us-west-1.amazonaws.com"
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"params": {

"Region": "us-west-1",
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"UseDualStack": false
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"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false

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            }
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        {
            "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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                    "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-west-2",
                "UseFIPS": true,
                "UseDualStack": false
            }
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            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
            }
        },
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            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url":
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"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}

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    },
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      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },

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      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
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      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
       },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
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"Region": "us-gov-west-1",
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"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
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"params": {
"Region": "us-gov-west-1",
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"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
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},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}

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      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
          }
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },

    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
          }
        },

"params": {
          "Region": "us-isob-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-isob-east-1",
          "UseFIPS": false,
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"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {

"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
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"com.amazonaws.licensemanager#AcceptGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
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"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
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"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#AccessDeniedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}

```
            },
            "CHECKOUT_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutLicense"
                }
            },
            "CHECKOUT_BORROW_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckoutBorrowLicense"
                }
            },
            "CHECK_IN_LICENSE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CheckInLicense"
                }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ExtendConsumptionLicense"
                }
            },
            "LIST_PURCHASED_LICENSES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ListPurchasedLicenses"
                }
            },
            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
```

"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }

},
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}

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            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
 {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
```

"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
SKU. ",
"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {

"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {

"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
```

```
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
```

```
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n
<ul>\n
            <li>\n                <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                    "smithy.api#required": {}
                }
```

```
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
```

```
    },
    "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
        }
    },
    "GrantName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
        }
    },
    "AllowedOperations": {
        "target": "com.amazonaws.licensemanager#AllowedOperationList",
        "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
         "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
        }
    },
    "StatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
        }
    },
    "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
        }
    },
    "Options": {
        "target": "com.amazonaws.licensemanager#Options",
        "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
        }
    }
},
 "traits": {
    "smithy.api#input": {}
}
```

```
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the grant.</p>"
          }
        }
      },
      "traits":
{
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
```

all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |

<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {

            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",

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        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
```

"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {

"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}

```
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target":
"com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
```

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits":
{
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for

workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT

token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
```

```
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation":
"<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
```

"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "DeletionDate": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
```

"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},

"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":
"com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},

"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},

"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {

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        "smithy.api#enumValue": "Milliseconds"
    }
},
"BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes"
     }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {

"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits/Second"
}
},
"MEGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {

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            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",

           "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {

"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
"type": "string"

},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": "<p>Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access

tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},

```
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
```

},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
```

```
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
```

"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {

"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "

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            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
 {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

          },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
```

configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
"type": "structure",
"members": {
"License": {
"target": "com.amazonaws.licensemanager#License",
"traits": {
"smithy.api#documentation": " License details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {

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            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
```

"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",

"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",
"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"

        }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
```

```
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

},
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#IssuerDetails",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license issuer.</p>"
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

             }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Granted license status.</p>"
                }
```

},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "

}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},
"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {

"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}

},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},

"com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
},
"com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Issuer name. ",
                "smithy.api#required": {}
            }
        },
        "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "Entitlements": {

  "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>License
creation time.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
```

"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}

```
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the license configuration.</p>"
        }
    },
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

   }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
        }
    },
    "ManagedResourceSummaryList": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
        }
    },
    "ProductInformationList": {
        "target": "com.amazonaws.licensemanager#ProductInformationList",
        "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
        }
    },
    "AutomatedDiscoveryInformation": {

        "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
        "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
```

agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},

"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
```

```
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
    "type": "string",
    "traits": {

    "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConversionTask"
}
},
"com.amazonaws.licensemanager#LicenseCountingType": {
"type": "enum",
"members": {
"VCPU": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "vCPU"
}
},
"INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Instance"
}
},
"CORE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Core"
}
},
"SOCKET": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Socket"
}
}
}

```
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
            }
        },
        "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
            }
        },
        "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
```

"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",

"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results
to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license
configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

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"com.amazonaws.licensemanager#ListDistributedGrants": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
    "members": {
        "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
```

"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
```

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<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n              <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n              Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n         </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

          "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your

account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}

```
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

```
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n              <p>\n                <code>Beneficiary</code>\n              </p>\n
      </li>\n           <li>\n              <p>\n                <code>ProductSKU</code>\n              </p>\n           </li>\n
   <li>\n              <p>\n                <code>Fingerprint</code>\n              </p>\n           </li>\n           <li>\n
<p>\n                <code>Status</code>\n              </p>\n           </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
```

"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while

specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target":
"com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}

```
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
      <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
```

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}

```
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
```

```
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n              <p>\n                <code>LicenseArns</code>\n              </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}
},
"AssociationCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of resources associated with licenses. "
}
}
},
"traits": {
"smithy.api#documentation": " Summary information about a managed resource. "
}
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummary"
}
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
"traits": {
"smithy.api#range": {
"min": 1,
"max": 100

```
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",

"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when
the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the
application.\n Logical operator is <code>EQUALS</code>. \n \n \n
\n <code>Application Publisher</code> - The publisher of the application.\n Logical

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

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        "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
     }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
```

```
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
```

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            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
```

```
        "members": {
          "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 308
        }
      },
      "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
```

{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "

```
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
```

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report

generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}

```
        }
    },
    "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
                }

    },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "LicenseConfigurationUsageReport"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
```

"Platform": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",

"httpResponseCode": 400
},
"smithy.api#documentation": " Your resource limits have been exceeded. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

```
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096

```
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
```

```
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target":
"com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
```

format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {

"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
```

"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
```

update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],

"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
```

```
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4106 github.com/aws/aws-sdk-go-v2/service/sts 1.33.19

1.4106.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter
```

```
 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
```

```
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
```

DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

```
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string
```

```
 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
```

```
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string
```

```
 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

```
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string
```

```
 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
```

```
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
```

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},

"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",

"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions service settings for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetServiceSettings"
},
"smithy.api#idempotent": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
"type": "structure",
"members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has
been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being
applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings
current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated
data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",

"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {

"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},

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    {
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    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager,
```

you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
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"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"ref": "Endpoint"
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                            },
                            "properties": {},
                            "headers": {}
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                        "type": "endpoint"
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                            "assign": "PartitionResult"
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                                        true
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                                },
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                                    "argv": [
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                        ]
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    "properties": {},
                        "headers": {}
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                      "type": "endpoint"
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              "type": "error"
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                                        "supportsDualStack"
                                    ]
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"properties": {},
"headers": {}
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"type": "endpoint"
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{
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"type": "error"
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"type": "tree"
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"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
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"UseFIPS": true,
"UseDualStack": true
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"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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"params": {
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"UseDualStack": false
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
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"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
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"params": {
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}
},
"params": {
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}
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}
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
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}

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"params": {
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"expect": {
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"UseFIPS": true,
"UseDualStack": false
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"params": {

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}
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"UseDualStack": false
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"expect": {
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"UseDualStack": true
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
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"Region": "us-isob-east-1",
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"UseDualStack": false
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"params": {
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"params": {
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"Endpoint": "https://example.com"
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                    "expect": {
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                    }
                },
                {
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                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
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            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"
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},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"

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            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
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    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
      <code>AmiID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Region</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Status</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n            <li>\n            <p>\n
<code>contains</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>equals</code>\n            </p>\n            </li>\n            <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n            </li>\n        </ul>"
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```
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
    "type": "structure",
    "members": {
        "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
        },
        "NextToken": {

     "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
    "type": "operation",
    "input": {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
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"traits": {
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"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
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"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The

valid Operators for this filter are: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration
resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to
return \n\t\t\tin the list. "

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }

  },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
            }
          },

           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
      },
      "errors": [
        {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
        "smithy.api#http": {
          "method": "GET",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#readonly": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",

"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {

"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":

{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",

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    "traits": {
        "smithy.api#enum": [
            {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
```

"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " An object which details a discovered Linux subscription. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

{
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

 "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
```

```
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
```

"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string
```

```
 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
```

```
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
```

```
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },

"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2

```
                }
            }
        },
        "DomainCredentialsProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
        },
        "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
    }
```

},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
```

"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider
specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>
resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {

"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {

"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",

"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}

```
            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
```

\n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}

```
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {

"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},

"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [
{

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "endpoint": {
              "url": {
                "ref": "Endpoint"
              },

"properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ],
        "type": "tree"
      },
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "aws.partition",

              "argv": [
                  {
                    "ref": "Region"
                  }
```

```
                ],
                "assign": "PartitionResult"
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },

true
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

"fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    }
                                ]
                            },
```

```
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
```

```
{
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [

                {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

  }
                ],
```

```
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

"conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

}
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
```

```
                    ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
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"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"

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                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false

    }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},

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{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
  "expect": {

 "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack":
false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
  "expect": {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
  },
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},

"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "

```
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
 {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },

        "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
    "type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
    }
},
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"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""

},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},

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                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
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"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}

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    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
 {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n
        <li>\n                <p>InstanceId</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
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token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",

"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}

```
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
```

provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}

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            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

         }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

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},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
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"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {

"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits":
 {
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

    "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "

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            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

"target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
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"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity

provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},

"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
 {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

         "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
```

to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration

settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": " A parameter is not valid. ",
                "smithy.api#error": "client"
            }
        }
    }
}
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
```

```
 }
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
```

"target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateGrant"
},
{
"target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateLicense"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
"target": "com.amazonaws.licensemanager#CreateToken"
},
{
"target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},

{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
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"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
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"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
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      "target": "com.amazonaws.licensemanager#UntagResource"
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      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
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"arnNamespace": "license-manager",
"cloudFormationName": "LicenseManager",
"cloudTrailEventSource": "licensemanager.amazonaws.com",
"endpointPrefix": "license-manager"
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"aws.auth#sigv4": {
"name": "license-manager"
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"aws.protocols#awsJson1_1": {},
"smithy.api#documentation": " License Manager makes it easier to manage licenses from software vendors across multiple \n Amazon Web Services accounts and on-premises servers. ",
"smithy.api#title": "AWS License Manager",
"smithy.api#xmlNamespace": {
"uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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"smithy.rules#endpointRuleSet": {
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"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
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"type": "Boolean"
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"UseFIPS": {
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"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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                            "argv": [
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                    "type": "error"
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                                },
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                    "type": "error"
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                      "ref":
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"UseFIPS"

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            {
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                    },
                    true
                ]
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                                    "supportsFIPS"
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                                "argv": [
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"supportsDualStack"

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                    "headers": {}

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both",
        "type": "error"
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                true
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                    "argv": [
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              "headers": {}
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            "type": "endpoint"
          }
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partition does not support FIPS",
        "type": "error"
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"supportsDualStack"
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

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                        "type": "endpoint"
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                    "type": "error"
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                "conditions": [],
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                  "headers": {}
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    "type": "error"
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            "params": {
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            "params": {
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                "UseDualStack": false
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            "expect": {
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                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
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        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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        "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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            "UseFIPS": false,
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            "UseDualStack": false
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          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
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          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
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"UseDualStack": false
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disabled and DualStack disabled",
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"Region": "eu-north-1",
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"UseDualStack": false
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"Region":
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"UseDualStack": false
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            "UseDualStack": false
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          "params": {
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            "UseDualStack": false
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            "UseFIPS": false,

"UseDualStack": false
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"UseDualStack": false
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"params": {
"Region": "us-east-1",
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"UseDualStack": false
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"UseDualStack": false
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"UseFIPS": false,
"UseDualStack": false
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"params": {
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"UseDualStack": false
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"UseDualStack": false
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"UseDualStack": false
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"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

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"UseDualStack": false
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}
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"params": {
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"UseFIPS": true,

"UseDualStack": true
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",

"expect": {
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"url": "https://license-manager.us-east-1.api.aws"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
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"endpoint": {
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"params": {
"Region": "cn-northwest-1",
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"expect": {
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"params": {
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"UseDualStack": false
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"params": {
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"UseDualStack": true
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
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"params": {
"Region": "us-gov-east-1",
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"UseDualStack": false
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
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"params": {
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"UseDualStack": false
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"UseDualStack": false
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"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
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"UseDualStack": false
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},

"params": {
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"UseDualStack": true

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                "UseDualStack": true
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        },
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            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
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        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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            }
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                }
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"UseDualStack": false
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"error": "DualStack is enabled
but this partition does not support DualStack"
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"params": {
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"UseFIPS": false,
"UseDualStack": true
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},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

```
                    },

            "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
```

```
                },
                {
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant

ARN. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": " Grant status. "
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Grant version. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": " Access to resource denied. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
7
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":

{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

```
},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed":
{
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout
is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the
account that created the license is the same that is performing the check out, you must\n specify the account

as the beneficiary. \n </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Product
 SKU. ",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": " Checkout type. ",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " Key fingerprint identifying the license. ",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": " License entitlements. ",

"smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": " License beneficiary. "

```
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and
time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}
}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
 409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
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```
"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},

```
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                 "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
```

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    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
```

"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "

```
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
 {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName":
{
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}

}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",

"traits": {
"smithy.api#documentation": " Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report
generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}

```
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},

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        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

```
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                    "smithy.api#required": {}
                }
            },

   "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": " License ARN. "
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " New version of the license. "
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": " License status. "
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits":
{
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}

```
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
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    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes
the specified grant. "
}
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the
grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}

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            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members":
{
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required":

{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {
"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"

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            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

    {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
```

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            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
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"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement
data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},

"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},

"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"

}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"

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            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}

```
            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

    "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}

}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},

"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

```
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

```
        "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
"type": "structure",
"members": {
"Grant": {
"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},

"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "

```
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
        }
    },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

"target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":

" Describes a grant. "
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"

            }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }

```
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
        },
        "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
    }
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
    }
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
    }
},
"com.amazonaws.licensemanager#Integer": {
    "type": "integer"
```

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
                "smithy.api#documentation": "<p>Condition of the filter.</p>",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
```

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    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {

"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}

```
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits":
{
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

     "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
        },
        "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "
}
},
"MetadataList": {

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",

"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE": {

"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EXPIRED"
}
},

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {

"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the entitlement usage associated with a license. "

}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
```

"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",

"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

```
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
```

"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported:
\n \n \n \n <code>LicenseConfigurationArn</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits":
{
"smithy.api#documentation": " Maximum number of results to return in a single call. "

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }

        }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
```

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token

for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},

```
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",

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    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>application_name</code> - The name of the application. \n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n    </li>\n            <li>\n                <p>\n                    <code>license_included</code> - The type of license included. \n            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n                Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n            <li>\n    <p>\n                    <code>platform</code> - The platform of the resource.\n                Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n        <code>resource_id</code> - The ID of the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n      <code>tag:<key></code> - The key/value combination of a tag assigned \n                to the resource. Logical operators are <code>EQUALS</code> (single account) or\n                <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information
about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified license configuration. "

```
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n            <li>\n                <p>\n                <code>LicenseArns</code>\n                </p>\n            </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n \n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n Use this value to activate a

grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. \n Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",

```
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
    }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

```
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
```

"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},

"MONTH": {
"target": "smithy.api#Unit",
"traits":
{
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},
"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License
configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}

},
"LastRunFailureReason":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory": {
"type": "structure",
"members": {

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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits":
{
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "

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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},

"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",

"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
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"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
  as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
```

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        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4107 github.com/aws/aws-sdk-go-v2/credentials 1.17.67

1.4107.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
```

```
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
```

```
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
```

```
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

```
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go
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AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
```

```
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "

```
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
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"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},

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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
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    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
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    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
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```
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
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"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},

"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
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"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
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"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {

"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {

"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}

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                    "ref": "Endpoint"
                  }
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              }
            ],
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                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
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                        "ref": "UseFIPS"
                      },
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                    ]
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                "type": "error"
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                        "argv": [
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                            "ref": "UseDualStack"
                          },
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                        ]

}
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                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
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            "type": "tree"

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                        "argv": [
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                                "ref": "Region"
                            }
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                                    }
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                                "assign": "PartitionResult"
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                        "rules": [
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                          "fn": "booleanEquals",
                          "argv": [
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                              "ref": "UseDualStack"
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                                  "argv": [
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                                      "ref": "PartitionResult"

},
                                    "supportsFIPS"
                                  ]
                                }
                              ]
                            },
                            {
                              "fn": "booleanEquals",
                              "argv": [
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                                {
                                  "fn": "getAttr",
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"argv": [

{
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},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],

"rules": [
{
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"properties": {},
"headers": {}
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"type": "endpoint"
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},
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"conditions": [],
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"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [

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                    true
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        ],
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"fn": "booleanEquals",
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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true

                        ]
                    }
                ],
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                        "rules": [
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                                "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
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                                "type": "endpoint"
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                        "type": "tree"
                    }
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                "type": "tree"
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                    },
                    {
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                        "error": "FIPS is enabled
but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
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            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true

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                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                            "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
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                            }
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                                "conditions": [],
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{
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                                "type": "error"
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                        ],
                        "type": "tree"
                    },
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                                "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
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                "type": "tree"
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        "type": "tree"
    },
    {
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"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
]
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",

"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

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"params": {
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"UseDualStack": false
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{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",

"expect": {
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"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
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}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}

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"UseDualStack": false
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"params": {
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"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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}
},
"params": {
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"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

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"UseDualStack": true
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"

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            }
        },
        "params": {
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            "UseFIPS": true,
            "UseDualStack": false
        }
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    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
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            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
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            }
        },
        "params": {
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false,
            "UseDualStack": false
        }
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            "UseDualStack": true
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        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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"endpoint": {
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"params": {
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"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
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"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"

```
            }
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        {
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disabled",
            "expect": {
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                }
            },
            "params": {
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                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
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            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
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                "Endpoint": "https://example.com"
            }
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            "expect": {
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            "params": {

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            }
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            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
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            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n

```
<p>\n <code>AccountID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>AmiID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>DualSubscription</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceID</code>\n </p>\n </li>\n <li>\n <p>\n
<code>InstanceType</code>\n </p>\n </li>\n <li>\n <p>\n
<code>ProductCode</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Region</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Status</code>\n </p>\n </li>\n <li>\n <p>\n
<code>UsageOperation</code>\n </p>\n </li>\n </ul>\n <p>For each filter, you can use
one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter:</p>\n <ul>\n <li>\n <p>\n
<code>contains</code>\n </p>\n </li>\n <li>\n <p>\n
<code>equals</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Notequal</code>\n </p>\n </li>\n </ul>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
    "type": "structure",
    "members": {
        "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
        },
```

"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}

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    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                  <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 16384
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "Subscriptions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
                "traits": {
```

"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "RegisteredSubscriptionProviders"
}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSources": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {

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            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
```

"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "

```
            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
 {
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
 {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
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            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
```

```
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",
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"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

```
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
```

"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",

"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}

```
   }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack);
err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
"smithy": "2.0",
"shapes": {

"com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",

"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related

costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},

"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":

{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "

```
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the

user. "
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": " Metadata that describes the associate user operation. ",
                    "smithy.api#required": {}
                }
            }
        },

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the
identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

```
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "Products": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                    "smithy.api#required": {}
                }
            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
```

"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "

```
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
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"operations": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"

```
            },
            {

    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",

          "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region":
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"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"fn": "isSet",
"argv": [
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"ref": "Endpoint"
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]
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"rules": [
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"conditions": [
{
"fn": "booleanEquals",
"argv": [

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                    },
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                ]
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        ],
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        "type": "error"
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                "argv": [
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                    },
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                ]
            }
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        "type": "error"
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                "ref": "Endpoint"
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        "argv": [
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                "ref": "Region"
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                        "argv": [
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                        "assign": "PartitionResult"
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                                "argv": [
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                                    },

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                                    },
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"fn": "booleanEquals",
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                        "argv": [
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                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
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                        "argv": [
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                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }

        ]
            }
        ],
        "rules": [
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                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }

    ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
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both",
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        "type": "tree"
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                        "argv": [
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                                "fn": "getAttr",
                                "argv": [

{
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                                },
                                "supportsFIPS"
                            ]
                        },
                        true
                    ]
                }
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"url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
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                        "headers": {}
                    },
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            "type": "tree"
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            "type": "error"

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        ],
        "type": "tree"
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    {
        "conditions": [
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                "argv": [
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                    },
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                                "fn": "getAttr",
                                "argv": [
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                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

     }
                        ]
                    }
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                "rules": [
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                                        "type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

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                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
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    "smithy.rules#endpointTests": {
        "testCases": [
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{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
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"params": {
"Region": "us-east-1",

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"UseDualStack": false
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}

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            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
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            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
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                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
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              "UseFIPS":
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              "UseDualStack": true
            }
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            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
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              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
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            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
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                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
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          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
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        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
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          "params": {
            "Region": "us-gov-east-1",
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            "UseDualStack": true
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          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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            }
          },
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            "UseDualStack": false
          }
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            }
          },
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
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"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {

"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
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"params": {
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"UseDualStack": false
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
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"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
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"params": {
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
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"url": "https://example.com"
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"params": {

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"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
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"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",

"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS \n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint. "
}
},

"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONING_FAILED",
                    "value": "PROVISIONING_FAILED",
                    "documentation": ""
                },
                {
                    "name": "PROVISIONED",
                    "value": "PROVISIONED",
                    "documentation": ""
                },
                {
                    "name": "DELETING",
                    "value": "DELETING",
                    "documentation": ""
                },
                {
                    "name": "DELETION_FAILED",
                    "value": "DELETION_FAILED",
                    "documentation": ""

                },
                {
                    "name": "DELETED",
                    "value": "DELETED",
                    "documentation": ""
                }
            ]
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            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
            "type": "string",
            "traits": {
                "smithy.api#enum": [
                    {
                        "name": "HEALTHY",
                        "value": "HEALTHY",
                        "documentation": ""
                    },
                    {
                        "name": "UNHEALTHY",
                        "value": "UNHEALTHY",
                        "documentation": ""
                    },
                    {
                        "name": "NOT_APPLICABLE",
                        "value": "NOT_APPLICABLE",
                        "documentation": ""
                    }
                ]
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
            "type": "structure",
            "members": {
                "ServerType": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                    "traits": {
                        "smithy.api#documentation": "<p>The type of license server.</p>",
                        "smithy.api#required": {}
                    }
                },
                "ServerSettings": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                    "traits": {
                        "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                        "smithy.api#required": {}
                    }
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```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
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        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
```

"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
           "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
      "type":
 "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single

request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n
\n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating.
This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions
operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {

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        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
```

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            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {

    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
<li>\n            <p>Status</p>\n        </li>\n        <li>\n            <p>Username</p>\n        </li>\n
<li>\n            <p>Domain</p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
```

},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},

"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to
register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",

"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
```

"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",

"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}

```
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
```

"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

```
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
```

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {

"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {

"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

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ListReceivedLicenses
Initialize stack step
spanInitializeStart

```
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
              "namespace": "*"
          }
      ]
  },
  "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
          "type": "service",
          "version": "2018-08-01",
          "operations": [
              {
                  "target": "com.amazonaws.licensemanager#AcceptGrant"
```

```
        },

{
        "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CheckoutLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateGrant"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateGrantVersion"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
         },
        {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
        },
        {
        "target": "com.amazonaws.licensemanager#CreateToken"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteGrant"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteLicense"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
        },
        {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
        },
        {
```

"target": "com.amazonaws.licensemanager#DeleteToken"
},
{
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

},
{
"target": "com.amazonaws.licensemanager#GetAccessToken"
},
{
"target": "com.amazonaws.licensemanager#GetGrant"
},
{
"target": "com.amazonaws.licensemanager#GetLicense"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
"target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
"target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},

{
"target": "com.amazonaws.licensemanager#ListLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

"target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
"target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
"target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanager#ListTokens"
},
{
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#RejectGrant"
},
{
"target": "com.amazonaws.licensemanager#TagResource"
},
{
"target": "com.amazonaws.licensemanager#UntagResource"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"

```
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                 "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            },
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                        "type": "Boolean"
                    },
                    "UseFIPS": {
                        "builtIn": "AWS::UseFIPS",
                        "required": true,
                        "default": false,
                        "documentation": "When true, send
```

this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{

```
                "ref": "UseDualStack"
            },
            true
        ]
    }
  ],
  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
  "type": "error"
},
{
  "conditions": [],
  "endpoint": {
    "url": {
      "ref": "Endpoint"
    },
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
},
{
  "conditions": [
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ],
          "assign": "PartitionResult"
        }
      ],
      "type": "tree",
```

```
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref":
"UseFIPS"
                              },
                              true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "type": "tree",
                        "rules": [
                          {
                            "conditions": [
                              {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
                                        "ref": "PartitionResult"
                                      },
                                      "supportsFIPS"
                                    ]

                              }
                                ]
                              },
                              {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
```

"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},

"supportsDualStack"
]
}
]
}
],
"type": "tree",
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}

},
"type": "endpoint"
}
]
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",

"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],

```
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,

{
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [

{
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ]
              },
              {
                "conditions": [],
                "error": "FIPS is enabled but this
partition does not support FIPS",
                "type": "error"
              }
            ]
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
```

```
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
```

"supportsDualStack"

```
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
```

```
        },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
```

```
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
      }
    ]
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
            "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
```

```
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-2.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }

},
    {
        "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-south-1.amazonaws.com"
```

```
            }
        },
        "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
        },
        "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
        },
        "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
        }
```

```
            },
            {
              "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.ca-central-1.amazonaws.com"
                }
              },

             "params": {
                "Region": "ca-central-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.eu-central-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "eu-central-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.eu-north-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "eu-north-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.eu-south-1.amazonaws.com"
                }
```

```
                    },
                    "params": {
                        "Region":
"eu-south-1",
                        "UseFIPS": false,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager.eu-west-1.amazonaws.com"
                        }
                    },
                    "params": {
                        "Region": "eu-west-1",
                        "UseFIPS": false,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
                    "expect": {

                    "endpoint": {
                            "url": "https://license-manager.eu-west-2.amazonaws.com"
                        }
                    },
                    "params": {
                        "Region": "eu-west-2",
                        "UseFIPS": false,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://license-manager.eu-west-3.amazonaws.com"
                        }
                    },
                    "params": {
                        "Region": "eu-west-3",
                        "UseFIPS": false,

            "UseDualStack": false
                    }
```

```
            },
            {
              "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.me-south-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "me-south-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.sa-east-1.amazonaws.com"
                 }
              },
              "params": {
                "Region": "sa-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-east-1.amazonaws.com"
                }
              },
```

"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {

"Region": "us-east-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
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"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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}
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"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",

"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
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"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
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},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
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"params": {
"Region": "us-gov-west-1",
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"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
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"params": {
"Region": "us-gov-east-1",
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"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},

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        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },

       {
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          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
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            {
                "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
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                        "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
                    }
                },

        "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://example.com"
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                }
            },
            "params": {
                "UseFIPS": false,

    "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips disabled and dualstack enabled",
            "expect": {
                "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "Missing region",
            "expect": {
                "error": "Invalid Configuration: Missing Region"
            }
        }
    ],
    "version": "1.0"
  }
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {
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"target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#AcceptGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Accepts the specified grant. "
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

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    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
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        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

      "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
```

```
            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
    }
},
"com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Arn"
    }
},
"com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
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"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError":
{
"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},

"com.amazonaws.licensemanager#Boolean": {
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},

"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}

},
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
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{
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed":
{
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
                }
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```
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the account that created the license is the same that is performing the check out, you must\n            specify the account as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
```

idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}

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            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PROVISIONAL"
                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
             }
        }
    },
```

"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},
"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode":
409
},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {

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            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }
    },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
    }
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
    }
  },
  "com.amazonaws.licensemanager#ConsumptionConfiguration": {
    "type": "structure",
    "members": {
        "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
        },
        "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
             }
        },
        "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
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"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target":
"com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}

}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
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            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
```

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        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
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"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n \n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> | <code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n \n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "

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            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
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"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext":
{
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in

the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
 {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}

        }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
```

"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",

"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product
name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}

}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-
UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",

```
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
             },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
```

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        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},

"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output":
{}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
                }
```

```
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
```

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
```

"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}

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    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members":
{
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action
deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It
has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {

"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement resource. Use only
if the unit is None. "
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#Long",
"traits": {
"smithy.api#documentation": " Maximum entitlement count. Use if the unit is not None. "
}
},
"Overage": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether overages are allowed. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementUnit",
"traits": {
"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target":

"com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": " Indicates whether check-ins are allowed. "
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes a resource entitled for use with a license. "
    }
},
"com.amazonaws.licensemanager#EntitlementData": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement data name. ",
                "smithy.api#required": {}
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Entitlement
data value. "
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": " Entitlement data unit. ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Data associated with an entitlement resource. "
    }
},
"com.amazonaws.licensemanager#EntitlementDataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
    }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
    "type": "enum",
    "members": {

"COUNT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}

```
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes/Second"
    }
},
"KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
    }
},
"MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
    }
},
"GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
     "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
    }
},
"TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
    }
},
"BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits/Second"
    }
},
"KILOBITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
    }
},
"MEGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
```

"smithy.api#enumValue":
"Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},
"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},

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"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
```

```
        },
        "BYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
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"smithy.api#enumValue": "Megabits/Second"
}
},
"GIGABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits/Second"
}
},

"TERABITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits/Second"
}
},
"COUNT_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement usage name. ",
"smithy.api#required": {}
}
},
"ConsumedValue": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Resource usage consumed. ",
"smithy.api#required": {}
}
},
"MaxCount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},

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            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

  }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation":
" A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only
specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter
name and value pair that is used to return more specific results from a\n describe operation. Filters can be used
to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {

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    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
```

"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

        },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
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"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",

"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}

},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}

```
            },
            "ConsumedLicenseSummaryList": {
                "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
                }
            },
            "ManagedResourceSummaryList": {
                "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                 "traits": {
                    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            },
            "AutomatedDiscoveryInformation": {
                "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
                "traits": {
                    "smithy.api#documentation": "<p>Automated discovery information.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "

```
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
```

"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Gets information about the specified report generator. "
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"ReportGenerator": {
"target": "com.amazonaws.licensemanager#ReportGenerator",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

```
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
        "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},

"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target":
"com.amazonaws.licensemanager#LicenseUsage",
"traits": {
"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "

}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},

"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}

},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. ",

"smithy.api#required": {}
}
},
"GranteePrincipalArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {

"smithy.api#documentation": " The grantee principal ARN. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"GrantStatus": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. ",
"smithy.api#required": {}
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. ",
"smithy.api#required": {}
}
},
"GrantedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Granted operations. ",
"smithy.api#required": {}
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {

"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#documentation":
" Describes a grant. "
}
},
"com.amazonaws.licensemanager#GrantList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Grant"
}
},
"com.amazonaws.licensemanager#GrantStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"

}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}

```
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "DISABLED"
                }
            },
            "WORKFLOW_COMPLETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WORKFLOW_COMPLETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }

  },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
```

}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "

}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",

```
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
        },
        "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
    }
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
    }
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
```

"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation":
" One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {

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        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

    },
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
      "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CONTAINS"
}
}
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#InventoryFilter"
}
},
"com.amazonaws.licensemanager#Issuer": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. ",
"smithy.api#required": {}
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the issuer of a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "

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            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {

    "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
```

"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License
creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "

```
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {

"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},

"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {

"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
"type": "enum",
"members":
{
"AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
}

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },

    "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {

       "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
```

},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}

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        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

       "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
```

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    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#License"
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {

    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
```

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                }
            },
            "MetadataList": {

                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
```

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    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

    "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

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            }
        }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants distributed for the specified license. "
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n
\n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

```
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
```

configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next
set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical
operators\n are supported: \n \n \n \n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n
\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>. \n
\n \n \n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

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      "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
```

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseConfigurationArn</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

```
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
 {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {

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        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
```

```
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
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```
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                <code>Status</code>\n                </p>\n            </li>\n        </ul>"
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
```

},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
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```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
                "smithy.api#documentation": "<p>Received grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
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```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>Fingerprint</code>\n \n \n \n \n <code>IssuerName</code>\n \n \n \n \n <code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },

        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n
\n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n
\n \n \n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n
<code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "

```
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
            "ResourceInventoryList": {
                "target": "com.amazonaws.licensemanager#ResourceInventoryList",
                "traits": {
                    "smithy.api#documentation": "<p>Information
about the resources.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.\n
            Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
            <li>\n                <p>\n                <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

```
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " The key name. "
}
},

"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior": {
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n

```
</li>\n <li>\n <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your
organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant
without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated
grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
```

```
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n        <p>The following filters and are supported when
the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n            <li>\n                <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n                <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is
<code>RDS</code>:</p>\n        <ul>\n            <li>\n                <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>License Pack</code> - The license
```

pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {
"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {

"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received
status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {

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            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#RedirectException": {
      "type": "structure",
      "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
      }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
      },
      "output": {
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"target": "com.amazonaws.licensemanager#RejectGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",

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        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
```

"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members": {
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}

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            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

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            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
 {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
```

"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}

}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}

},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {

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            "target": "com.amazonaws.licensemanager#ReportType"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
```

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},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
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"smithy.api#enumValue": "EC2_INSTANCE"
}
},
"EC2_HOST": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_HOST"
}
},
"EC2_AMI": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}
},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "

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        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
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"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a tag for a license configuration. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target":
"com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

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            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
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"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. "
}
}
},
"traits": {

"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request
again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified license configuration. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
```

"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and
hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
```

"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation":
" ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
Manager information is stored. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Enables integration with Organizations for cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Activates cross-account discovery. "

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",

"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

CheckoutLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4108 golang-jwt 5.2.2

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1.4109 koanf-maps 0.1.2

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1.4110 koanf 2.2.0

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1.4111 fsnotify 1.9.0

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1.4112 github.com/knadh/koanf/v2 2.2.0

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1.4113 github.com/knadh/koanf/maps 0.1.2

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1.4114 githubcomfsnotifyfsnotify 1.9.0

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1.4115 kubernetes-klog v2.130.1

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1.4116 moby-sys-atomicwriter 0.1.0

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1.4119 tonistiigi-dchapes-mode 0.0.0-20250318174251-73d941a28323

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1.4120 moby-go-archive 0.1.0

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1.4121 golang-set 2.3.0

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1.4122 clientmodel 0.6.2

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1.4123 prometheus-client-model 0.6.2

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1.4124 github.com/kamstrup/intmap 0.5.1

1.4124.1 Available under license :

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1.4125 github.com/axiomhq/hyperloglog 0.2.5

1.4125.1 Available under license :

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1.4126 docker-credential-helpers 0.9.3

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1.4127 etcd-raft 3.5.16

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1.4128 azure-sdk-for-go-sdk-azcore 1.18.0

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package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
```

```
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
```

```
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                     *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete             *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate             *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
```

```
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
```

```
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
```

```
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if
respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginDelete = &respr
 l.beginDelete.add(req, beginDelete)
}

resp, err := server.PollerResponderNext(beginDelete, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
 l.beginDelete.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
}
if !server.PollerResponderMore(beginDelete) {
 l.beginDelete.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
if l.srv.Get == nil {
 return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
}
const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
regex
:= regexp.MustCompile(regexStr)
matches := regex.FindStringSubmatch(req.URL.EscapedPath())
if matches == nil || len(matches) < 3 {
 return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
}
resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
if err != nil {
 return nil, err
}
licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
```

```
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
```

```
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
```

```
 l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
```

```
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
```

}

return resp, nil
}

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```
{
 "main": "dist/src/index.js",
 "dependencies": {
   "@azure-tools/typespec-go": "0.4.2"
 },
 "devDependencies": {
   "@azure-tools/typespec-autorest": "0.54.0",
   "@azure-tools/typespec-azure-core": "0.54.0",
   "@azure-tools/typespec-azure-resource-manager": "0.54.0",
   "@azure-tools/typespec-azure-rulesets": "0.54.0",
```

```
  "@azure-tools/typespec-client-generator-core": "0.54.0",
  "@typespec/compiler": "1.0.0-rc.0",
  "@typespec/http": "1.0.0-rc.0",
  "@typespec/openapi": "1.0.0-rc.0",
  "@typespec/rest": "0.68.0",
  "@typespec/versioning": "0.68.0",
  "@typespec/streams": "0.68.0",
  "@typespec/events": "0.68.0",
  "@typespec/sse": "0.68.0",
  "@azure-tools/typespec-liftr-base": "0.8.0"
 }
}
```

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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
```

```
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
```

```
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
```

```
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
```

```
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
```

```
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
```

```
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
```

```
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-07-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
```

```
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
```

```
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
```

```
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
```

```
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
```

```
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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```
//go:build go1.18
// +build go1.18

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```

```
// Code generated by Microsoft (R) AutoRest Code Generator.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.
// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
```

```
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //
    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
```

```
cred, err := azidentity.NewDefaultAzureCredential(nil)
if err != nil {
 log.Fatalf("failed to obtain a credential: %v", err)
}
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
//
  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](8),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
```

```
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
```

```
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
```

```
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
```

```
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //
     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}
```

1.4129 scaleway-sdk-go 1.0.0-beta.33

1.4129.1 Available under license :

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1.4130 github.com/ibm/go-sdk-core/v5 5.19.0

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"control" means (i) the power, direct or indirect, to cause the
direction or management of such entity, whether by contract or
otherwise, or (ii) ownership of fifty percent (50%) or more of the
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1.4131 google-golang-org-api 0.228.0

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1.4132 structured-merge-diff 4.7.0

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1.4133 circl 1.6.1

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1.4135 github.com/cloudflare/circl 1.6.1

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==========

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1.4136 github.com/go-jose/go-jose/v4 4.1.0

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1.4137 cloud.google.com/go/auth/oauth2adapt 0.2.8

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//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
```

```
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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package procurement_test

import (
 "context"
```

```
 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.AssignRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
}
resp, err := c.Assign(ctx, req)
if err != nil {
 // TODO: Handle error.
}
//
TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.EnumerateLicensedUsersRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
}
it := c.EnumerateLicensedUsers(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
```

```
  // TODO: Handle error.
 }
 //
TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
}
}

func ExampleLicenseManagementClient_GetLicensePool() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.GetLicensePoolRequest{
 // TODO: Fill request struct fields.
 //
See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
}
resp, err := c.GetLicensePool(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_Unassign() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
```

```
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
```

```
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
```

```
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
```

```
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
```

```
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
```

```
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution
This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
```

```
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
```

```
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
```

```
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf,
resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
```

```
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
```

```
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
 {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
```

```
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()
```

```
 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
```

```
  return err
 }

 if
err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
```

```
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
```

```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
```

```
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
```

```
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}
```

```
func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
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 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
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 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
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 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
```

```
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0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
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0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
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0x54,
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0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
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0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
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0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
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0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
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0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
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0x72,
0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
```

```
 },
 GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
```

```
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
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//     https://www.apache.org/licenses/LICENSE-2.0
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
```

```
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:           []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
```

```
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}
```

```
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}
```

```
// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
```

```
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:             &client.CallOptions,
  logger:                  internaloption.GetLogger(opts),
  operationsClient:        longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
```

```
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
```

```
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
```

```
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
```

```
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
```

```
  return nil, "", err
 }

 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}
fetch := func(pageSize int,
pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
```

```
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.LicensePool{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
```

```
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.UnassignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(),
bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
```

```
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
  if req.GetPageToken() != "" {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
  headers := gax.BuildHeaders(ctx, hds...)
  e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   if settings.Path != "" {
    baseUrl.Path = settings.Path
   }
   httpReq,
 err := http.NewRequest("GET", baseUrl.String(), nil)
   if err != nil {
    return err
   }
   httpReq.Header = headers

   buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
```

```
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
```

```
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
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```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
// Copyright 2025 Google LLC
//
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```

```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
```

```
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}
```

```
// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}
```

```
func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
```

```
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
```

```
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
```

```
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)
```

```
func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
```

```
 MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"
```

```
 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
```

```
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
```

```
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
```

```
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
```

```
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
```

```
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
```

```
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}
```

```
// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
```

```
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}
```

```
func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
```

```
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}
```

```
func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
```

```
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
```

```
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
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 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
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 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
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 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
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0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,
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0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
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0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
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0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x3b, 0x0a,
0x17, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x15, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x4c, 0x69,
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0x6f, 0x6f, 0x6c, 0x12, 0x3c, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f,
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0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65,
0x71, 0x75, 0x65, 0x73, 0x74, 0x12, 0x17, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01, 0x20,
0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x52, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x22, 0xc0,
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0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x12, 0x62, 0x0a, 0x0c, 0x6c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28,
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0x41, 0x02, 0x52, 0x0b, 0x6c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12,
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0x42, 0x03, 0xe0, 0x41, 0x02, 0x52, 0x0a, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4d, 0x61, 0x73,
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0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f,
0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,

```
 0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
 0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,
 0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
 0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
 0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
 0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
 0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
 0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}
```

```
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
```

```
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
```

```
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
```

```
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
```

```
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
```

```
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
```

```
 return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
```

```
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
```

```
  Handler:    _LicenseManagementService_Unassign_Handler,
 },
 {
  MethodName: "EnumerateLicensedUsers",
  Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
 },
},
Streams:  []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
```

```
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get               []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
```

```
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
```

```
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
```

```
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}
```

```
// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(), req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
```

```
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
```

```
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
```

1.4138 github.com/azuread/microsoft-authentication-library-for-go 1.4.2

1.4138.1 Available under license :

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1.4139 go-crypto 1.2.0

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1.4140 github.com/azure/azure-sdk-for-go/sdk/internal 1.11.1

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// +build go1.18

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package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])
```

```
 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                    *LicensesServer
 beginCreateOrUpdate
```

```
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate                *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}
```

```
func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
```

```
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
```

```
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
```

```
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
```

```
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
```

```
  return nil, err
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginUpdate = &respr
 l.beginUpdate.add(req, beginUpdate)
}

resp, err := server.PollerResponderNext(beginUpdate, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK},
resp.StatusCode) {
 l.beginUpdate.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginUpdate) {
 l.beginUpdate.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
```

```
 }
 body,
err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginValidateLicense = &respr
 l.beginValidateLicense.add(req, beginValidateLicense)
}

resp, err := server.PollerResponderNext(beginValidateLicense, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK}, resp.StatusCode) {
 l.beginValidateLicense.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginValidateLicense) {
 l.beginValidateLicense.remove(req)
}

return resp, nil
}
```

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```
{
 "main": "dist/src/index.js",
 "dependencies": {
   "@azure-tools/typespec-go": "0.4.2"
 },
 "devDependencies": {
   "@azure-tools/typespec-autorest": "0.54.0",
   "@azure-tools/typespec-azure-core": "0.54.0",
   "@azure-tools/typespec-azure-resource-manager": "0.54.0",
   "@azure-tools/typespec-azure-rulesets": "0.54.0",
   "@azure-tools/typespec-client-generator-core": "0.54.0",
   "@typespec/compiler": "1.0.0-rc.0",
   "@typespec/http": "1.0.0-rc.0",
   "@typespec/openapi": "1.0.0-rc.0",
   "@typespec/rest": "0.68.0",
   "@typespec/versioning": "0.68.0",
   "@typespec/streams": "0.68.0",
   "@typespec/events": "0.68.0",
   "@typespec/sse": "0.68.0",
   "@azure-tools/typespec-liftr-base": "0.8.0"
 }
}
```

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// +build go1.18

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package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
```

```
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
```

```
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
```

```
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
```

```
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
```

```
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
```

```
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
```

```
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
```

```
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-07-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
```

```
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
```

```
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
```

```
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
```

```
  Tracer: client.internal.Tracer(),
 })
 return poller, err
} else {
 return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
  Tracer: client.internal.Tracer(),
 })
}
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
```

```
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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  SOFTWARE
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator.
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// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
```

```
nil {
 log.Fatalf("failed to obtain a credential: %v", err)
}
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err !=
nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//
   State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
```

```
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
```

```
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
```

```
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
```

```
 log.Fatalf("failed to create client: %v", err)
}
res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
//
 Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](8),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
{
cred, err := azidentity.NewDefaultAzureCredential(nil)
if err != nil {
 log.Fatalf("failed to obtain a credential: %v", err)
}
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
```

```
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
```

```
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //     },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
```

```
 //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //    Location: to.Ptr("eastus2euap"),
 //    Properties: &armhybridcompute.LicenseProperties{
 //     LicenseDetails: &armhybridcompute.LicenseDetails{
 //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //      AssignedLicenses: to.Ptr[int32](8),
 //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
    },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

1.4141 github.com/azure/azure-sdk-for-go/sdk/azcore 1.18.0

1.4141.1 Available under license :

```
Copyright (c) Microsoft Corporation. All rights reserved.
Licensed under the MIT License.
//go:build go1.18
// +build go1.18

// Copyright (c) Microsoft Corporation. All rights reserved.
// Licensed under the MIT License. See License.txt in the project root for license information.
// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
```

```
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)
```

```
 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                    *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete             *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate             *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
```

```
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
```

```
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
  }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
```

```
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
```

```
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
```

```
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
```

```
  page.NextLink = to.Ptr(createLink())
 })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
```

```
  return nil, respErr
 }
 beginUpdate = &respr
 l.beginUpdate.add(req, beginUpdate)
}

resp, err := server.PollerResponderNext(beginUpdate, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK},
resp.StatusCode) {
 l.beginUpdate.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginUpdate) {
 l.beginUpdate.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
if l.srv.BeginValidateLicense == nil {
 return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
}
beginValidateLicense := l.beginValidateLicense.get(req)
if beginValidateLicense == nil {
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
 regex := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 1 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 body,
err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginValidateLicense = &respr
 l.beginValidateLicense.add(req, beginValidateLicense)
```

```
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
```

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```
{
 "main": "dist/src/index.js",
 "dependencies": {
   "@azure-tools/typespec-go": "0.4.2"
 },
 "devDependencies": {
   "@azure-tools/typespec-autorest": "0.54.0",
   "@azure-tools/typespec-azure-core": "0.54.0",
   "@azure-tools/typespec-azure-resource-manager": "0.54.0",
   "@azure-tools/typespec-azure-rulesets": "0.54.0",
   "@azure-tools/typespec-client-generator-core": "0.54.0",
   "@typespec/compiler": "1.0.0-rc.0",
   "@typespec/http": "1.0.0-rc.0",
   "@typespec/openapi": "1.0.0-rc.0",
   "@typespec/rest": "0.68.0",
   "@typespec/versioning": "0.68.0",
   "@typespec/streams": "0.68.0",
   "@typespec/events": "0.68.0",
   "@typespec/sse": "0.68.0",
   "@azure-tools/typespec-liftr-base": "0.8.0"
 }
}
```

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```
//go:build go1.18
// +build go1.18

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package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
```

```
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
```

```
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
```

```
 return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
```

```
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
```

```
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
```

```
  nextLink := ""
  if page != nil {
   nextLink = *page.NextLink
  }
  resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
   return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
  }, nil)
  if err != nil {
   return LicensesClientListByResourceGroupResponse{}, err
  }
  return client.listByResourceGroupHandleResponse(resp)
 },
 Tracer: client.internal.Tracer(),
})
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
```

```
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-07-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
```

```
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
```

```
  Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
```

```
 return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
```

```
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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  SOFTWARE
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.
// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //
    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
```

```
 log.Fatalf("failed to obtain a credential: %v", err)
}
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
"{licenseName}", armhybridcompute.License{
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
```

```
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
```

```
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
```

```
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
```

```
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
```

```
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
```

```
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
    },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

1.4142 go-jose-go-jose 4.1.0

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1.4143 packaging 25.0

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1.4146 protobuf-go 1.36.6

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1.4147 spf13-viper 1.20.1

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1.4148 github.com/moby/sys/user 0.4.0

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1.4149 x-oauth2 0.29.0

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1.4150 github.com/sagikazarmark/locafero 0.7.0

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1.4151 cast 1.7.1

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1.4153 x-net 0.38.0

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1.4157 pierrec-lz4 4.1.22

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1.4158 gopsutil 4.25.1

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1.4159 github.com/dlclark/regexp2 1.11.5

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1.4160 github.com/libdns/libdns 0.2.2

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1.4161 go.uber.org/zap/exp 0.3.0

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1.4162 github.com/zeebo/blake3 0.2.4

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1.4163 acmez 3.0.1

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1.4164 libdns 0.2.2

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```
package migration

import "fmt"

// Notice is a migration warning
type Notice struct {
 Plugin     string
 Option     string
 Severity   string // 'deprecated', 'removed', or 'unsupported'
 ReplacedBy string
 Additional string
 Version    string
}

func (n *Notice) ToString() string {
 s := ""
 if n.Option == "" {
  s += fmt.Sprintf(`Plugin "%v" `, n.Plugin)
 } else {
  s += fmt.Sprintf(`Option "%v" in plugin "%v" `, n.Option, n.Plugin)
 }
 if n.Severity == SevUnsupported {
  s += "is unsupported by this migration tool in " + n.Version + "."
 } else if n.Severity == SevNewDefault {
  s += "is added as a default in " + n.Version + "."
 } else {
```

```
  s += "is " + n.Severity + " in " + n.Version + "."
 }
 if n.ReplacedBy != "" {
  s += fmt.Sprintf(` It is replaced by "%v".`, n.ReplacedBy)
 }
 if n.Additional != "" {
  s += " " + n.Additional
 }
 return s
}

const (
 // The following statuses are used to indicate the state of support/deprecation in a given release.
 SevDeprecated  = "deprecated"
  // deprecated, but still completely functional
 SevIgnored     = "ignored"     // if included in the corefile, it will be ignored by CoreDNS
 SevRemoved     = "removed"     // completely removed from CoreDNS, and would cause CoreDNS to exit if present
in the Corefile
 SevNewDefault  = "newdefault"  // added to the default corefile.  CoreDNS may not function properly if it is not
present in the corefile.
 SevUnsupported = "unsupported" // the plugin/option is not supported by the migration tool

 // The following statuses are used for selecting/filtering notifications
 SevAll = "all" // show all statuses
)
```

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==========
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//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL string `json:"url,omitempty"`
}
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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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==========
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1.4182 python-decorator 5.1.1-5

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1.4183 go-yaml v3.0.1

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1.4184 kingpin 2.4.0

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1.4185 godbus 5.1.0

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1.4186 expr 0.23.1

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1.4187 cel.dev/expr 0.23.1

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1.4191 gorilla-websocket 1.5.4-0.20250319132907-e064f32e3674

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1.4192 sigs.k8s.io/kustomize/kustomize/v5 5.6.0

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:

- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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  || strcmp(license, "GPL v2") == 0
  || strcmp(license, "GPL and additional rights") == 0
  || strcmp(license, "Dual BSD/GPL") == 0
  || strcmp(license, "Dual MIT/GPL") == 0
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}

#endif
```

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  || strcmp(license, "GPL v2") == 0
  || strcmp(license, "GPL and additional rights") == 0
  || strcmp(license, "Dual BSD/GPL") == 0
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}

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1.4206 github.com/prometheus/sigv4 0.1.2

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1.4208 grpc-gateway 2.26.3

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1.4209 apparmor 4.0.1really4.0.1-0ubuntu0.24.04.4

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1.4212 grub2 2.12-1ubuntu7.3

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1.4214 kubernetes-apimachinery 0.33.0

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1.4215 aws-sdk-go 1.55.7

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"base": null,
"refs": {
}
},
"DisassociateUserRequest": {
"base": null,
"refs": {
}
},
"DisassociateUserResponse": {
"base": null,
"refs": {
}
},
"Filter": {
"base": " A filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
"refs": {
"FilterList$member": null
}
},
"FilterList": {
"base": null,
"refs": {
"ListInstancesRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
"ListProductSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
"ListUserAssociationsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. "
}

},
"IdentityProvider": {
"base": " Details about an identity provider. ",
"refs": {
"AssociateUserRequest$IdentityProvider": " The identity provider of the user. ",
"DeregisterIdentityProviderRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"DisassociateUserRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"IdentityProviderSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"InstanceUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"ListProductSubscriptionsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"ListUserAssociationsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"ProductUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"RegisterIdentityProviderRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"StartProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"StopProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"UpdateIdentityProviderSettingsRequest$IdentityProvider": null
}
},
"IdentityProviderSummary": {
"base": " Describes an identity provider. ",
"refs": {
"DeregisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"IdentityProviderSummaryList$member": null,
"RegisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"UpdateIdentityProviderSettingsResponse$IdentityProviderSummary": null

}
},
"IdentityProviderSummaryList": {
"base": null,
"refs": {
"ListIdentityProvidersResponse$IdentityProviderSummaries": " Metadata that describes the list identity providers operation. "
}
},
"InstanceSummary": {
"base": " Describes an EC2 instance providing user-based subscriptions. ",
"refs": {

"InstanceSummaryList$member": null
}
},
"InstanceSummaryList": {
"base": null,
"refs": {
"ListInstancesResponse$InstanceSummaries": " Metadata that describes the list instances operation. "
}
},
"InstanceUserSummary": {
"base": " Describes users of an EC2 instance providing user-based subscriptions. ",
"refs": {
"AssociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",
"DisassociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",

"InstanceUserSummaryList$member": null
}
},
"InstanceUserSummaryList": {
"base": null,
"refs": {
"ListUserAssociationsResponse$InstanceUserSummaries": " Metadata that describes the list user association operation. "
}
},
"InternalServerException": {
"base": " An exception occurred with the service. ",
"refs": {
}
},
"ListIdentityProvidersRequest": {
"base": null,
"refs": {
}
},
"ListIdentityProvidersResponse": {
"base": null,
"refs": {
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},
"ListInstancesRequest": {
"base": null,
"refs": {
}
},
"ListInstancesResponse": {

"base": null,
"refs": {
}
},
"ListProductSubscriptionsRequest": {
"base": null,
"refs": {
}
},
"ListProductSubscriptionsResponse": {
"base": null,
"refs": {
}
},
"ListUserAssociationsRequest": {
"base": null,
"refs": {
}
},
"ListUserAssociationsResponse": {
"base": null,
"refs": {
}
},
"ProductUserSummary": {
"base": " The summary of the user-based subscription products for a user. ",
"refs": {
"ProductUserSummaryList$member": null,
"StartProductSubscriptionResponse$ProductUserSummary": " Metadata that describes the start product subscription operation. ",
"StopProductSubscriptionResponse$ProductUserSummary": " Metadata that describes the start product subscription operation. "
}
},
"ProductUserSummaryList": {
"base": null,
"refs": {
"ListProductSubscriptionsResponse$ProductUserSummaries": " Metadata that describes the list product subscriptions operation. "
}
},
"RegisterIdentityProviderRequest": {
"base": null,
"refs": {
}
},
"RegisterIdentityProviderResponse": {
"base": null,

"refs": {
}
},
"ResourceNotFoundException":
{
"base": " The resource couldn't be found. ",
"refs": {
}
},
"SecurityGroup": {
"base": null,
"refs": {
"Settings$SecurityGroupId": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoint for activation servers. ",
"UpdateSettings$SecurityGroupId": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for activation servers. "
}
},
"ServiceQuotaExceededException": {
"base": " The request failed because a service quota is exceeded. ",
"refs": {
}
},
"Settings": {
"base": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication
from resources in the VPC. ",
"refs": {
"IdentityProviderSummary$Settings": " An object that details the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. ",
"RegisterIdentityProviderRequest$Settings": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. "
}
},
"SettingsSubnetsList": {
"base": null,
"refs": {
"Settings$Subnets": " The subnets defined for the registered identity provider. "
}
},
"StartProductSubscriptionRequest": {
"base": null,
"refs": {
}
},
"StartProductSubscriptionResponse": {
"base": null,

"refs": {
}
},
"StopProductSubscriptionRequest": {
"base": null,
"refs": {
}
},
"StopProductSubscriptionResponse": {
"base": null,
"refs": {
}
},
"String":
{
"base": null,
"refs": {
"AccessDeniedException$message": null,
"ActiveDirectoryIdentityProvider$DirectoryId": " The directory ID for an Active Directory identity provider. ",
"AssociateUserRequest$Domain": " The domain name of the user. ",
"AssociateUserRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"AssociateUserRequest$Username": " The user name from the identity provider for the user. ",
"ConflictException$message": null,
"DeregisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
"DisassociateUserRequest$Domain": " The domain name of the user. ",
"DisassociateUserRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"DisassociateUserRequest$Username": " The user name from the identity provider for the user. ",

"Filter$Attribute": " The name of an attribute to use as a filter. ",
"Filter$Operation": " The type of search (For example, eq, geq, leq) ",
"Filter$Value": " Value of the filter. ",
"IdentityProviderSummary$FailureMessage": " The failure message associated with an identity provider. ",
"IdentityProviderSummary$Product": " The name of the user-based subscription product. ",
"IdentityProviderSummary$Status": " The status of an identity provider. ",
"InstanceSummary$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"InstanceSummary$LastStatusCheckDate": " The date of the last status check. ",
"InstanceSummary$Status": " The status of an EC2 instance resource. ",
"InstanceSummary$StatusMessage": " The status message for an EC2 instance. ",
"InstanceUserSummary$AssociationDate": " The date a user was associated with an EC2 instance. ",
"InstanceUserSummary$DisassociationDate": " The date a user was disassociated from an EC2 instance. ",
"InstanceUserSummary$Domain": " The domain name of the user. ",

"InstanceUserSummary$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"InstanceUserSummary$Status": " The status of a user associated with an EC2 instance. ",
"InstanceUserSummary$StatusMessage": " The status message for users of an EC2 instance. ",
"InstanceUserSummary$Username": " The user name from the identity provider for the user. ",
"InternalServerException$message": null,
"ListIdentityProvidersRequest$NextToken": " Token for the next set of results. ",
"ListIdentityProvidersResponse$NextToken": " Token for the next set of results. ",
"ListInstancesRequest$NextToken": " Token for the next set of results. ",
"ListInstancesResponse$NextToken": " Token for the next set of results. ",
"ListProductSubscriptionsRequest$NextToken": " Token for the next set of results. ",
"ListProductSubscriptionsRequest$Product": " The name of the user-based subscription product. ",
"ListProductSubscriptionsResponse$NextToken": " Token for the next set of results. ",
"ListUserAssociationsRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"ListUserAssociationsRequest$NextToken": " Token for the next set of results. ",
"ListUserAssociationsResponse$NextToken": " Token for the next set of results. ",
"ProductUserSummary$Domain": " The domain name of the user. ",
"ProductUserSummary$Product": " The name of the user-based subscription product. ",
"ProductUserSummary$Status": " The status of a product for a user. ",
"ProductUserSummary$StatusMessage": " The status message for a product for a user. ",
"ProductUserSummary$SubscriptionEndDate": " The end date of a subscription. ",
"ProductUserSummary$SubscriptionStartDate": " The start date of a subscription. ",
"ProductUserSummary$Username": " The user name from the identity provider of the user. ",
"RegisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
"ResourceNotFoundException$message": null,
"ServiceQuotaExceededException$message": null,
"StartProductSubscriptionRequest$Domain": " The domain name of the user. ",
"StartProductSubscriptionRequest$Product": " The name of the user-based subscription product. ",
"StartProductSubscriptionRequest$Username": " The user name from the identity provider of the user. ",
"StopProductSubscriptionRequest$Domain": " The domain name of the user. ",
"StopProductSubscriptionRequest$Product": " The name of the user-based subscription product. ",
"StopProductSubscriptionRequest$Username": " The user name from the identity provider for the user. ",
"StringList$member": null,
"ThrottlingException$message": null,
"UpdateIdentityProviderSettingsRequest$Product": " The name of the user-based subscription product. ",
"ValidationException$message": null
}
},
"StringList": {
"base": null,
"refs": {
"InstanceSummary$Products": " A list of provided user-based subscription products. "

```
    }
  },
  "Subnet": {
    "base": null,
    "refs": {
      "SettingsSubnetsList$member": null,
      "Subnets$member": null
    }
  },
  "Subnets": {
    "base": null,
    "refs": {
      "UpdateSettings$AddSubnets": "<p>The ID of one or more subnets in which License Manager will create a
VPC endpoint for products that require connectivity to activation servers.</p>",
      "UpdateSettings$RemoveSubnets":
 "<p>The ID of one or more subnets to remove.</p>"
    }
  },
  "ThrottlingException": {
    "base": "<p>The request was denied because of request throttling. Retry the request.</p>",
    "refs": {
    }
  },
  "UpdateIdentityProviderSettingsRequest": {
    "base": null,
    "refs": {
    }
  },
  "UpdateIdentityProviderSettingsResponse": {
    "base": null,
    "refs": {
    }
  },
  "UpdateSettings": {
    "base": "<p>Updates the registered identity providers product related configuration settings such as the subnets
to provision VPC endpoints.</p>",
    "refs": {
      "UpdateIdentityProviderSettingsRequest$UpdateSettings": "<p>Updates the registered identity providers
product related configuration settings. You can update any combination of settings in a single operation such as
the:</p> <ul> <li> <p>Subnets which you want to add to provision VPC endpoints.</p> </li> <li> <p>Subnets
which you want to remove the VPC endpoints
 from.</p> </li> <li> <p>Security group ID which permits traffic to the VPC endpoints.</p> </li> </ul>"
    }
  },
  "ValidationException": {
    "base": "<p>A parameter is not valid.</p>",
    "refs": {
    }
```

```
  }
 }
}
{
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {

   "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ],
          "assign": "PartitionResult"
        }
```

```
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      },
      {
        "fn": "parseURL",

       "argv": [
          {
            "ref": "Endpoint"
          }
        ],
        "assign": "url"
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseFIPS"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
        "type": "tree",
        "rules": [
          {
            "conditions": [
              {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },

          {
            "conditions": [],
            "endpoint": {
              "url": {
                "ref": "Endpoint"
              },
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]

},
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
```

```
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"

        },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }

                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
```

```
                    },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
            "type": "error"
        }
    ]
},

{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                }
            ],
            "type": "tree",
            "rules": [
                {
```

"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
},
{

"conditions": [],
"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
}
]
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"type": "tree",
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
true,

{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsDualStack"
]

```
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},

        "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "DualStack is enabled but this partition does not support DualStack",
        "type": "error"
    }
  ]
},
{
  "conditions": [],
  "endpoint": {
    "url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
}
]
}
{
 "version": "2.0",
 "service": "<p>With License Manager, you can discover and track your commercial Linux subscriptions on running
Amazon EC2 instances.</p>",
 "operations": {
  "DeregisterSubscriptionProvider": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions registered to your account.</p>",
  "GetRegisteredSubscriptionProvider": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
```

"GetServiceSettings": " Lists the Linux subscriptions service settings for your account. ",
"ListLinuxSubscriptionInstances": " Lists the running Amazon EC2 instances that were discovered with commercial Linux subscriptions. ",
"ListLinuxSubscriptions": " Lists the Linux subscriptions that have been discovered. If you have linked your organization, the returned results will include data aggregated across your accounts in Organizations. ",
"ListRegisteredSubscriptionProviders": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"ListTagsForResource": " List the metadata tags that are assigned to the specified Amazon Web Services resource. ",
"RegisterSubscriptionProvider": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"TagResource": " Add metadata tags to the specified Amazon Web Services resource. ",
"UntagResource": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"UpdateServiceSettings": " Updates the service settings for Linux subscriptions. "
},
"shapes": {
"Boolean": {
"base": null,
"refs": {
"UpdateServiceSettingsRequest$AllowUpdate": " Describes if updates are allowed to the service settings for Linux subscriptions. If you allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesRequest$MaxResults": " The maximum items to return in a request. ",
"ListLinuxSubscriptionsRequest$MaxResults": " The maximum items to return in a request. "
}
},
"BoxLong": {
"base": null,
"refs": {
"Subscription$InstanceCount": " The total amount of running instances using this subscription. "
}
},
"DeregisterSubscriptionProviderRequest": {
"base": null,
"refs": {
}
},
"DeregisterSubscriptionProviderResponse": {
"base": null,
"refs": {
}
},

"Filter": {
"base": " A filter object that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria. ",
"refs": {
"FilterList$member": null
}
},
"FilterList": {
"base": null,
"refs": {

"ListLinuxSubscriptionInstancesRequest$Filters": " An array of structures that you can use to filter the results by your specified criteria. For example, you can specify <code>Region</code> in the <code>Name</code>, with the <code>contains</code> operator to list all subscriptions that match a partial string in the <code>Value</code>, such as <code>us-west</code>. For each filter, you can specify one of the following values for the <code>Name</code> key to streamline results: <ul> <code>AccountID</code>   <code>AmiID</code>   <code>DualSubscription</code>   <code>InstanceID</code>   <code>InstanceType</code>   <code>ProductCode</code>   <code>Region</code>   <code>Status</code>   <code>UsageOperation</code>   For each filter, you can use one of the following <code>Operator</code> values to define the behavior
of the filter: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> ",
"ListLinuxSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of <code>Subscription</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain subscription's name. The valid names for this filter are: <ul> <code>Subscription</code>   The valid Operators for this filter are: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> "
}
},
"GetRegisteredSubscriptionProviderRequest": {
"base": null,
"refs": {
}
},
"GetRegisteredSubscriptionProviderResponse": {
"base": null,
"refs": {
}
},
"GetServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"GetServiceSettingsResponse": {

"base": null,
"refs": {
}
},
"Instance": {
"base": " Details discovered information about a running instance using Linux subscriptions. ",
"refs": {
"InstanceList$member": null
}
},
"InstanceList": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesResponse$Instances": " An array that contains instance objects. "
}
},
"InternalServerException": {
"base": " An exception occurred with the service. ",
"refs": {
}
},
"LinuxSubscriptionsDiscovery": {
"base": null,
"refs": {
"GetServiceSettingsResponse$LinuxSubscriptionsDiscovery": " Lists if discovery has been enabled for Linux subscriptions. ",
"UpdateServiceSettingsRequest$LinuxSubscriptionsDiscovery": " Describes if the discovery of Linux subscriptions is enabled. ",
"UpdateServiceSettingsResponse$LinuxSubscriptionsDiscovery": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"base": " Lists the settings defined for discovering Linux subscriptions. ",
"refs": {
"GetServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": " Lists the settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. ",
"UpdateServiceSettingsRequest$LinuxSubscriptionsDiscoverySettings": " The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. ",
"UpdateServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": " The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"ListLinuxSubscriptionInstancesRequest": {
"base": " NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request

increases. ",
    "refs": {
    }
  },
  "ListLinuxSubscriptionInstancesRequestNextTokenString": {
    "base": null,
    "refs": {
      "ListLinuxSubscriptionInstancesRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a previously truncated response. "
    }
  },
  "ListLinuxSubscriptionInstancesResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListLinuxSubscriptionsRequest": {
    "base": " NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases. ",
    "refs": {
    }
  },
  "ListLinuxSubscriptionsRequestNextTokenString":
 {
    "base": null,
    "refs": {
      "ListLinuxSubscriptionsRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a previously truncated response. "
    }
  },
  "ListLinuxSubscriptionsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListRegisteredSubscriptionProvidersRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListRegisteredSubscriptionProvidersRequestMaxResultsInteger": {
    "base": null,
    "refs": {
      "ListRegisteredSubscriptionProvidersRequest$MaxResults": " The maximum items to return in a request. "
    }
  },
  "ListRegisteredSubscriptionProvidersResponse": {

"base": null,
"refs": {
}
},
"ListTagsForResourceRequest": {
"base": null,
"refs": {
}
},
"ListTagsForResourceResponse": {
"base": null,
"refs": {
}
},
"Operator": {
"base": null,
"refs":
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"Filter$Operator": " An operator for filtering results. "
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"base": null,
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"LinuxSubscriptionsDiscoverySettings$OrganizationIntegration": " Details if you have enabled resource discovery across your accounts in Organizations. "
}
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"ProductCodeList": {
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"Instance$ProductCode": " The product code for the instance. For more information, see Usage operation values in the License Manager User Guide . "
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"RegisterSubscriptionProviderResponse": {
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(OS) platform software and license subscriptions, such as Red Hat. When you register a third-party Linux subscription provider, License Manager can get subscription data from the registered provider. ",
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    "refs": {
    }
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      "RegisterSubscriptionProviderRequest$SecretArn": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For RHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains your Red Hat Offline token. ",
      "RegisteredSubscriptionProvider$SecretArn": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider access token. For RHEL account subscriptions, this is the offline token. "
    }
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    "refs": {
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      "UpdateServiceSettingsResponse$Status": " Indicates the status of Linux subscriptions settings being applied. "
    }
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      "GetRegisteredSubscriptionProviderResponse$LastSuccessfulDataRetrievalTime": " The timestamp from the last time License Manager retrieved subscription details from your registered third-party Linux subscription provider. ",

"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderStatusMessage": " The detailed message from your subscription provider token status. ",
"Instance$AccountID": " The account ID which owns the instance. ",
"Instance$AmiId": " The AMI ID used to launch the instance. ",
"Instance$DualSubscription": " Indicates that you have two different license subscriptions for the same software on your instance. ",
"Instance$InstanceID": " The instance ID of the resource. ",
"Instance$InstanceType": " The instance type of the resource. ",
"Instance$LastUpdatedTime": " The time in which the last discovery updated the instance details. ",
"Instance$OsVersion":
" The operating system software version that runs on your instance. ",
"Instance$Region": " The Region the instance is running in. ",
"Instance$RegisteredWithSubscriptionProvider": " Indicates that your instance uses a BYOL license subscription from a third-party Linux subscription provider that you've registered with License Manager. ",
"Instance$Status": " The status of the instance. ",
"Instance$SubscriptionName": " The name of the license subscription that the instance uses. ",
"Instance$SubscriptionProviderCreateTime": " The timestamp when you registered the third-party Linux subscription provider for the subscription that the instance uses. ",
"Instance$SubscriptionProviderUpdateTime": " The timestamp from the last time that the instance synced with the registered third-party Linux subscription provider. ",
"Instance$UsageOperation": " The usage operation of the instance. For more information,
see For more information, see Usage operation values in the License Manager User Guide. ",
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"ListLinuxSubscriptionsResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
"ListRegisteredSubscriptionProvidersRequest$NextToken": " A token to specify where to start paginating. This is the nextToken from a
previously truncated response. ",
"ListRegisteredSubscriptionProvidersResponse$NextToken": " The next token used for paginated responses. When this field isn't empty, there are additional elements that the service hasn't included in this request. Use this token with the next request to retrieve additional objects. ",
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"RegisteredSubscriptionProvider$LastSuccessfulDataRetrievalTime": " The timestamp from the last time that License Manager accessed third-party subscription data for your account from your registered Linux subscription provider. ",
"RegisteredSubscriptionProvider$SubscriptionProviderStatusMessage": " A detailed message that's associated with your BYOL subscription provider token status. ",
"ResourceNotFoundException$message":
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"StringMap$key": null,

"StringMap$value": null,
"Subscription$Name": " The name of the subscription. ",
"Subscription$Type": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. ",
"TagKeyList$member": null,
"Tags$key": null,
"Tags$value": null,
"ThrottlingException$message": null,
"ValidationException$message": null
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"Filter$Values": " One or more values for the name to filter by. ",
"GetServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. ",
"LinuxSubscriptionsDiscoverySettings$SourceRegions": " The Regions in which to discover data for Linux subscriptions. ",
"UpdateServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. "
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"StringListMemberString": {
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"StringList$member": null
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"UpdateServiceSettingsResponse$StatusMessage": " A message which details the Linux subscriptions service settings current status. "
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" An array that contains subscription objects. "
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"GetRegisteredSubscriptionProviderRequest$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"GetRegisteredSubscriptionProviderResponse$SubscriptionProviderArn": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. ",
"ListTagsForResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"RegisteredSubscriptionProvider$SubscriptionProviderArn": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. ",
"TagResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified metadata tags. ",
"UntagResourceRequest$resourceArn": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. "
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"SubscriptionProviderSource": {
"base": null,
"refs": {
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"RegisterSubscriptionProviderRequest$SubscriptionProviderSource": " The supported Linux subscription provider to register. ",
"RegisterSubscriptionProviderResponse$SubscriptionProviderSource": " The Linux subscription provider that you registered. ",
"RegisteredSubscriptionProvider$SubscriptionProviderSource": " A supported third-party Linux subscription provider. License
Manager currently supports Red Hat subscriptions. ",
"SubscriptionProviderSourceList$member": null
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"base": null,
"refs": {
"ListRegisteredSubscriptionProvidersRequest$SubscriptionProviderSources": " To filter your results, specify which subscription providers to return in the list. "
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"base": null,

"refs": {
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"RegisterSubscriptionProviderResponse$SubscriptionProviderStatus": " Indicates the status of the registration action for the Linux subscription provider that you requested. ",
"RegisteredSubscriptionProvider$SubscriptionProviderStatus": " Indicates the status of your registered Linux subscription provider access
token from the last time License Manager retrieved subscription data. For RHEL account subscriptions, this is the status of the offline token. "
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"TagResourceResponse": {
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"refs": {
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"Tags": {
"base": null,
"refs": {
"ListTagsForResourceResponse$tags": " The metadata tags for the requested resource. ",
"RegisterSubscriptionProviderRequest$Tags": " The metadata tags to assign to your registered Linux subscription provider resource. ",
"TagResourceRequest$tags": " The metadata tags to assign to the Amazon Web Services resource. Tags are formatted as key value pairs. "
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"refs": {
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"UpdateServiceSettingsResponse": {
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"refs": {
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"ValidationException": {
"base": " The provided input is not valid. Try your request again. ",
"refs": {
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}
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}

AWS SDK for Go

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            "UseDualStack": false
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        "UseDualStack": true
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and DualStack enabled",
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    {
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        "Region": "eu-north-1",
        "UseDualStack": false
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      "params": {
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        "Region": "eu-west-3",
        "UseDualStack": true
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{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
},
"DeleteToken":{
"name":"DeleteToken",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"DeleteTokenRequest"},
"output":{"shape":"DeleteTokenResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"ResourceNotFoundException"},
{"shape":"RedirectException"}
]
},
"ExtendLicenseConsumption":{
"name":"ExtendLicenseConsumption",
"http":{
"method":"POST",
"requestUri":"/"
},
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"output":{"shape":"ExtendLicenseConsumptionResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"},

{"shape":"ResourceNotFoundException"}
]
},
"GetAccessToken":{
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"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetAccessTokenRequest"},
"output":{"shape":"GetAccessTokenResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},

{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"GetGrant":{
"name":"GetGrant",
"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"GetGrantRequest"},
"output":{"shape":"GetGrantResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"GetLicense":{
"name":"GetLicense",
"http":{
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"output":{"shape":"GetLicenseResponse"},
"errors":[
{"shape":"ValidationException"},

{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"GetLicenseConfiguration":{
"name":"GetLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetLicenseConfigurationRequest"},
"output":{"shape":"GetLicenseConfigurationResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"GetLicenseConversionTask":{
"name":"GetLicenseConversionTask",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetLicenseConversionTaskRequest"},
"output":{"shape":"GetLicenseConversionTaskResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"GetLicenseManagerReportGenerator":{
"name":"GetLicenseManagerReportGenerator",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetLicenseManagerReportGeneratorRequest"},
"output":{"shape":"GetLicenseManagerReportGeneratorResponse"},
"errors":[

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{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
},
"GetLicenseUsage":{
"name":"GetLicenseUsage",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetLicenseUsageRequest"},
"output":{"shape":"GetLicenseUsageResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"GetServiceSettings":{
"name":"GetServiceSettings",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetServiceSettingsRequest"},
"output":{"shape":"GetServiceSettingsResponse"},
"errors":[
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListAssociationsForLicenseConfiguration":{
"name":"ListAssociationsForLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
},

"input":{"shape":"ListAssociationsForLicenseConfigurationRequest"},
"output":{"shape":"ListAssociationsForLicenseConfigurationResponse"},
"errors":[
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{"shape":"FilterLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListDistributedGrants":{
"name":"ListDistributedGrants",
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"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListDistributedGrantsRequest"},
"output":{"shape":"ListDistributedGrantsResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListFailuresForLicenseConfigurationOperations":{
"name":"ListFailuresForLicenseConfigurationOperations",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListFailuresForLicenseConfigurationOperationsRequest"},
"output":{"shape":"ListFailuresForLicenseConfigurationOperationsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListLicenseConfigurations":{
"name":"ListLicenseConfigurations",
"http":{

"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseConfigurationsRequest"},
"output":{"shape":"ListLicenseConfigurationsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"FilterLimitExceededException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListLicenseConversionTasks":{
"name":"ListLicenseConversionTasks",
"http":{
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"output":{"shape":"ListLicenseConversionTasksResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListLicenseManagerReportGenerators":{
"name":"ListLicenseManagerReportGenerators",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseManagerReportGeneratorsRequest"},
"output":{"shape":"ListLicenseManagerReportGeneratorsResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]

},
"ListLicenseSpecificationsForResource":{
"name":"ListLicenseSpecificationsForResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseSpecificationsForResourceRequest"},
"output":{"shape":"ListLicenseSpecificationsForResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListLicenseVersions":{
"name":"ListLicenseVersions",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseVersionsRequest"},
"output":{"shape":"ListLicenseVersionsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"ListLicenses":{
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"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicensesRequest"},
"output":{"shape":"ListLicensesResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},

{"shape":"ServerInternalException"}
]
},
"ListReceivedGrants":{
"name":"ListReceivedGrants",
"http":{
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},
"input":{"shape":"ListReceivedGrantsRequest"},
"output":{"shape":"ListReceivedGrantsResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListReceivedGrantsForOrganization":{
"name":"ListReceivedGrantsForOrganization",
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},
"input":{"shape":"ListReceivedGrantsForOrganizationRequest"},
"output":{"shape":"ListReceivedGrantsForOrganizationResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListReceivedLicenses":{
"name":"ListReceivedLicenses",
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},
"input":{"shape":"ListReceivedLicensesRequest"},
"output":{"shape":"ListReceivedLicensesResponse"},
"errors":[

{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListReceivedLicensesForOrganization":{
"name":"ListReceivedLicensesForOrganization",
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},
"input":{"shape":"ListReceivedLicensesForOrganizationRequest"},
"output":{"shape":"ListReceivedLicensesForOrganizationResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListResourceInventory":{
"name":"ListResourceInventory",
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"requestUri":"/"
},
"input":{"shape":"ListResourceInventoryRequest"},
"output":{"shape":"ListResourceInventoryResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"FilterLimitExceededException"},
{"shape":"FailedDependencyException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListTagsForResource":{
"name":"ListTagsForResource",
"http":{

"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListTagsForResourceRequest"},
"output":{"shape":"ListTagsForResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListTokens":{
"name":"ListTokens",
"http":{
"method":"POST",

"requestUri":"/"
},
"input":{"shape":"ListTokensRequest"},
"output":{"shape":"ListTokensResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"ListUsageForLicenseConfiguration":{
"name":"ListUsageForLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListUsageForLicenseConfigurationRequest"},
"output":{"shape":"ListUsageForLicenseConfigurationResponse"},
"errors":[
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{"shape":"FilterLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"RejectGrant":{

"name":"RejectGrant",
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"method":"POST",
"requestUri":"/"
},
"input":{"shape":"RejectGrantRequest"},
"output":{"shape":"RejectGrantResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"TagResource":{
"name":"TagResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"TagResourceRequest"},
"output":{"shape":"TagResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"UntagResource":{
"name":"UntagResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"UntagResourceRequest"},
"output":{"shape":"UntagResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]

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},
"UpdateLicenseConfiguration":{
  "name":"UpdateLicenseConfiguration",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"UpdateLicenseConfigurationRequest"},
  "output":{"shape":"UpdateLicenseConfigurationResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
     {"shape":"RateLimitExceededException"},
    {"shape":"ResourceLimitExceededException"}
  ]
},
"UpdateLicenseManagerReportGenerator":{
  "name":"UpdateLicenseManagerReportGenerator",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"UpdateLicenseManagerReportGeneratorRequest"},
  "output":{"shape":"UpdateLicenseManagerReportGeneratorResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"ResourceNotFoundException"},
    {"shape":"ResourceLimitExceededException"}
  ]
},
"UpdateLicenseSpecificationsForResource":{
  "name":"UpdateLicenseSpecificationsForResource",
  "http":{
    "method":"POST",
    "requestUri":"/"

},
  "input":{"shape":"UpdateLicenseSpecificationsForResourceRequest"},
  "output":{"shape":"UpdateLicenseSpecificationsForResourceResponse"},
  "errors":[
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{"shape":"InvalidResourceStateException"},
{"shape":"LicenseUsageException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"UpdateServiceSettings":{
"name":"UpdateServiceSettings",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"UpdateServiceSettingsRequest"},
"output":{"shape":"UpdateServiceSettingsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
}
},
"shapes":{
"AcceptGrantRequest":{
"type":"structure",
"required":["GrantArn"],
"members":{
"GrantArn":{"shape":"Arn"}
}
},
"AcceptGrantResponse":{
"type":"structure",
"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
},
"AccessDeniedException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},

"ActivationOverrideBehavior":{
"type":"string",
"enum":[
"DISTRIBUTED_GRANTS_ONLY",
"ALL_GRANTS_PERMITTED_BY_ISSUER"
]
},
"AllowedOperation":{
"type":"string",
"enum":[
"CreateGrant",
"CheckoutLicense",
"CheckoutBorrowLicense",
"CheckInLicense",
"ExtendConsumptionLicense",
"ListPurchasedLicenses",
"CreateToken"
]
},
"AllowedOperationList":{
"type":"list",
"member":{"shape":"AllowedOperation"},
"max":7,
"min":1
},
"Arn":{
"type":"string",
"max":2048,
"pattern":"^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
},
"ArnList":{
"type":"list",
"member":{"shape":"Arn"}
},
"AuthorizationException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"AutomatedDiscoveryInformation":{
"type":"structure",
"members":{
"LastRunTime":{"shape":"DateTime"}
}
},

"Boolean":{"type":"boolean"},
"BorrowConfiguration":{
"type":"structure",
"required":[
"AllowEarlyCheckIn",
"MaxTimeToLiveInMinutes"
],
"members":{
"AllowEarlyCheckIn":{"shape":"BoxBoolean"},
"MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
}
},
"BoxBoolean":{"type":"boolean"},
"BoxInteger":{"type":"integer"},
"BoxLong":{"type":"long"},
"CheckInLicenseRequest":{
"type":"structure",
"required":["LicenseConsumptionToken"],
"members":{
"LicenseConsumptionToken":{"shape":"String"},
"Beneficiary":{"shape":"String"}
}
},
"CheckInLicenseResponse":{
"type":"structure",
"members":{
}
},
"CheckoutBorrowLicenseRequest":{
"type":"structure",
"required":[
"LicenseArn",
"Entitlements",
"DigitalSignatureMethod",
"ClientToken"
],
"members":{
"LicenseArn":{"shape":"Arn"},
"Entitlements":{"shape":"EntitlementDataList"},
"DigitalSignatureMethod":{"shape":"DigitalSignatureMethod"},
"NodeId":{"shape":"String"},
"CheckoutMetadata":{"shape":"MetadataList"},
"ClientToken":{"shape":"ClientToken"}
}
},

"CheckoutBorrowLicenseResponse":{
"type":"structure",

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  "members":{
    "LicenseArn":{"shape":"Arn"},
    "LicenseConsumptionToken":{"shape":"String"},
    "EntitlementsAllowed":{"shape":"EntitlementDataList"},
    "NodeId":{"shape":"String"},
    "SignedToken":{"shape":"SignedToken"},
    "IssuedAt":{"shape":"ISO8601DateTime"},
    "Expiration":{"shape":"ISO8601DateTime"},
    "CheckoutMetadata":{"shape":"MetadataList"}
  }
},
"CheckoutLicenseRequest":{
  "type":"structure",
  "required":[
    "ProductSKU",
    "CheckoutType",
    "KeyFingerprint",
    "Entitlements",
    "ClientToken"
  ],
  "members":{
    "ProductSKU":{"shape":"String"},
    "CheckoutType":{"shape":"CheckoutType"},
    "KeyFingerprint":{"shape":"String"},
    "Entitlements":{"shape":"EntitlementDataList"},
    "ClientToken":{"shape":"ClientToken"},
    "Beneficiary":{"shape":"String"},
    "NodeId":{"shape":"String"}
   }
},
"CheckoutLicenseResponse":{
  "type":"structure",
  "members":{
    "CheckoutType":{"shape":"CheckoutType"},
    "LicenseConsumptionToken":{"shape":"String"},
    "EntitlementsAllowed":{"shape":"EntitlementDataList"},
    "SignedToken":{"shape":"SignedToken"},
    "NodeId":{"shape":"String"},
    "IssuedAt":{"shape":"ISO8601DateTime"},
    "Expiration":{"shape":"ISO8601DateTime"},
    "LicenseArn":{"shape":"String"}
  }
},
"CheckoutType":{
  "type":"string",
  "enum":[
    "PROVISIONAL",
    "PERPETUAL"
```

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  ]
},
"ClientRequestToken":{
  "type":"string",
  "max":36,
  "min":1
},
"ClientToken":{
  "type":"string",
  "max":2048,
  "pattern":"\\S+"
},
"ConflictException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ConsumedLicenseSummary":{
  "type":"structure",
   "members":{
    "ResourceType":{"shape":"ResourceType"},
    "ConsumedLicenses":{"shape":"BoxLong"}
  }
},
"ConsumedLicenseSummaryList":{
  "type":"list",
  "member":{"shape":"ConsumedLicenseSummary"}
},
"ConsumptionConfiguration":{
  "type":"structure",
  "members":{
    "RenewType":{"shape":"RenewType"},
    "ProvisionalConfiguration":{"shape":"ProvisionalConfiguration"},
    "BorrowConfiguration":{"shape":"BorrowConfiguration"}
  }
},
"CreateGrantRequest":{
  "type":"structure",
  "required":[
    "ClientToken",
    "GrantName",
    "LicenseArn",
    "Principals",
    "HomeRegion",
    "AllowedOperations"
  ],
```

"members":{
"ClientToken":{"shape":"ClientToken"},
"GrantName":{"shape":"String"},
"LicenseArn":{"shape":"Arn"},
"Principals":{"shape":"PrincipalArnList"},
"HomeRegion":{"shape":"String"},
"AllowedOperations":{"shape":"AllowedOperationList"}
}
},
"CreateGrantResponse":{
"type":"structure",
"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
},
"CreateGrantVersionRequest":{
"type":"structure",
"required":[
"ClientToken",
"GrantArn"
],
"members":{
"ClientToken":{"shape":"ClientToken"},
"GrantArn":{"shape":"Arn"},
"GrantName":{"shape":"String"},
"AllowedOperations":{"shape":"AllowedOperationList"},
"Status":{"shape":"GrantStatus"},
"StatusReason":{"shape":"StatusReasonMessage"},
"SourceVersion":{"shape":"String"},
"Options":{"shape":"Options"}
}
},
"CreateGrantVersionResponse":{
"type":"structure",
"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
},
"CreateLicenseConfigurationRequest":{
"type":"structure",
"required":[
"Name",
"LicenseCountingType"
],

"members":{
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"LicenseCountingType":{"shape":"LicenseCountingType"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"LicenseRules":{"shape":"StringList"},
"Tags":{"shape":"TagList"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"},
"ProductInformationList":{"shape":"ProductInformationList"}
}
},
"CreateLicenseConfigurationResponse":{
"type":"structure",
"members":{
"LicenseConfigurationArn":{"shape":"String"}
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},
"CreateLicenseConversionTaskForResourceRequest":{
"type":"structure",
"required":[
"ResourceArn",
"SourceLicenseContext",
"DestinationLicenseContext"
],
"members":{
"ResourceArn":{"shape":"Arn"},
"SourceLicenseContext":{"shape":"LicenseConversionContext"},
"DestinationLicenseContext":{"shape":"LicenseConversionContext"}
}
},
"CreateLicenseConversionTaskForResourceResponse":{
"type":"structure",
"members":{
"LicenseConversionTaskId":{"shape":"LicenseConversionTaskId"}
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},
"CreateLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":[
"ReportGeneratorName",
"Type",
"ReportContext",
"ReportFrequency",
"ClientToken"
],
"members":{
"ReportGeneratorName":{"shape":"ReportGeneratorName"},

"Type":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"ClientToken":{"shape":"ClientRequestToken"},
"Description":{"shape":"String"},
"Tags":{"shape":"TagList"}
}
},
"CreateLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
"LicenseManagerReportGeneratorArn":{"shape":"String"}
}
},
"CreateLicenseRequest":{
"type":"structure",
"required":[
"LicenseName",
"ProductName",
"ProductSKU",
"Issuer",
"HomeRegion",
"Validity",
"Entitlements",
"Beneficiary",
"ConsumptionConfiguration",
"ClientToken"
],
"members":{
"LicenseName":{"shape":"String"},
"ProductName":{"shape":"String"},
"ProductSKU":{"shape":"String"},
"Issuer":{"shape":"Issuer"},
"HomeRegion":{"shape":"String"},
"Validity":{"shape":"DatetimeRange"},
"Entitlements":{"shape":"EntitlementList"},
"Beneficiary":{"shape":"String"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"LicenseMetadata":{"shape":"MetadataList"},
"ClientToken":{"shape":"ClientToken"}

}
},
"CreateLicenseResponse":{
"type":"structure",
"members":{
"LicenseArn":{"shape":"Arn"},
"Status":{"shape":"LicenseStatus"},

"Version":{"shape":"String"}
}
},
"CreateLicenseVersionRequest":{
"type":"structure",
"required":[
"LicenseArn",
"LicenseName",
"ProductName",
"Issuer",
"HomeRegion",
"Validity",
"Entitlements",
"ConsumptionConfiguration",
"Status",
"ClientToken"
],
"members":{
"LicenseArn":{"shape":"Arn"},
"LicenseName":{"shape":"String"},
"ProductName":{"shape":"String"},
"Issuer":{"shape":"Issuer"},
"HomeRegion":{"shape":"String"},
"Validity":{"shape":"DatetimeRange"},
"LicenseMetadata":{"shape":"MetadataList"},
"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"Status":{"shape":"LicenseStatus"},
"ClientToken":{"shape":"ClientToken"},
"SourceVersion":{"shape":"String"}
}
},
"CreateLicenseVersionResponse":{
"type":"structure",
"members":{
"LicenseArn":{"shape":"Arn"},
"Version":{"shape":"String"},
"Status":{"shape":"LicenseStatus"}
}
},
"CreateTokenRequest":{
"type":"structure",
"required":[
"LicenseArn",
"ClientToken"
],
"members":{
"LicenseArn":{"shape":"Arn"},

"RoleArns":{"shape":"ArnList"},
"ExpirationInDays":{"shape":"Integer"},
"TokenProperties":{"shape":"MaxSize3StringList"},
"ClientToken":{"shape":"ClientToken"}
}
},
"CreateTokenResponse":{
"type":"structure",
"members":{
"TokenId":{"shape":"String"},
"TokenType":{"shape":"TokenType"},
"Token":{"shape":"TokenString"}
}
},
"DateTime":{"type":"timestamp"},
"DatetimeRange":{

"type":"structure",
"required":["Begin"],
"members":{
"Begin":{"shape":"ISO8601DateTime"},
"End":{"shape":"ISO8601DateTime"}
}
},
"DeleteGrantRequest":{
"type":"structure",
"required":[
"GrantArn",
"Version"
],
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"GetAccessTokenResponse":{
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    "Version":{"shape":"String"}
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  "members":{
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"GetLicenseConfigurationResponse":{
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    "LicenseConfigurationArn":{"shape":"String"},
    "Name":{"shape":"String"},
    "Description":{"shape":"String"},
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    "LicenseRules":{"shape":"StringList"},
    "LicenseCount":{"shape":"BoxLong"},
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    "ConsumedLicenses":{"shape":"BoxLong"},
    "Status":{"shape":"String"},
    "OwnerAccountId":{"shape":"String"},
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    "ManagedResourceSummaryList":{"shape":"ManagedResourceSummaryList"},
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  }

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"DestinationLicenseContext":{"shape":"LicenseConversionContext"},
"StatusMessage":{"shape":"String"},
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"EndTime":{"shape":"DateTime"}
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"GetLicenseManagerReportGeneratorResponse":{
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"Version":{"shape":"String"}
}
},
"GetLicenseResponse":{
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},
"GetLicenseUsageRequest":{
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  "members":{
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"GetLicenseUsageResponse":{
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"GetServiceSettingsResponse":{
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    "OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
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    "LicenseManagerResourceShareArn":{"shape":"String"}
  }
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    "GrantName",
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    "LicenseArn",
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    "GrantStatus",
    "Version",
    "GrantedOperations"
  ],
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    "GrantName":{"shape":"String"},
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    "LicenseArn":{"shape":"Arn"},
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"HomeRegion":{"shape":"String"},
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"Version":{"shape":"String"},
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"GrantList":{
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"REJECTED",
"ACTIVE",
"FAILED_WORKFLOW",
"DELETED",
"PENDING_DELETE",
"DISABLED",
"WORKFLOW_COMPLETED"
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"HomeRegion":{"shape":"String"},
"Status":{"shape":"LicenseStatus"},
"Validity":{"shape":"DatetimeRange"},
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"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},

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"Version":{"shape":"String"},
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    "exception":true
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"HomeRegion":{"shape":"String"},
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"Beneficiary":{"shape":"String"},
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"Version":{"shape":"String"}
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"ConsumedLicenses":{"shape":"BoxLong"},
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"OwnerAccountId":{"shape":"String"},
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"ProductInformationList":{"shape":"ProductInformationList"},
"AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"}
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"DISABLED"
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"ResourceOwnerId":{"shape":"String"},
"AssociationTime":{"shape":"DateTime"},
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"LicenseConfigurations":{

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    "DestinationLicenseContext":{"shape":"LicenseConversionContext"},
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    "StatusMessage":{"shape":"String"},
    "StartTime":{"shape":"DateTime"},
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  }
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"LicenseConversionTasks":{
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  "member":{"shape":"LicenseConversionTask"}
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    "Instance",
    "Core",
    "Socket"
  ]
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    "ErrorMessage":{"shape":"String"},
    "FailureTime":{"shape":"DateTime"},
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    "ResourceOwnerId":{"shape":"String"},
    "OperationRequestedBy":{"shape":"String"},
    "MetadataList":{"shape":"MetadataList"}
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"LicenseOperationFailureList":{
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  "member":{"shape":"LicenseOperationFailure"}
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"LicenseSpecifications":{
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"DELETED"
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"LicenseUsageException":{
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"exception":true
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"NextToken":{"shape":"String"}
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"ListAssociationsForLicenseConfigurationResponse":{
"type":"structure",
"members":{
"LicenseConfigurationAssociations":{"shape":"LicenseConfigurationAssociations"},
"NextToken":{"shape":"String"}
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"ListDistributedGrantsRequest":{
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"members":{
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"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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"ListDistributedGrantsResponse":{
"type":"structure",
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"NextToken":{"shape":"String"}

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  }
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"ListFailuresForLicenseConfigurationOperationsRequest":{
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    "MaxResults":{"shape":"BoxInteger"},
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  }
},
"ListFailuresForLicenseConfigurationOperationsResponse":{
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    "NextToken":{"shape":"String"}
  }
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"ListLicenseConfigurationsRequest":{
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  "members":{
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    "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"},
    "Filters":{"shape":"Filters"}
  }
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"ListLicenseConfigurationsResponse":{
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  "members":{
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    "NextToken":{"shape":"String"}
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"ListLicenseConversionTasksRequest":{
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  "members":{
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    "MaxResults":{"shape":"BoxInteger"},
    "Filters":{"shape":"Filters"}
  }
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"ListLicenseConversionTasksResponse":{
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  "members":{
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"MaxResults":{"shape":"MaxSize100"}
}
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"ListLicenseManagerReportGeneratorsResponse":{
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"members":{
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"NextToken":{"shape":"String"}
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"ListLicenseSpecificationsForResourceRequest":{
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"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"}
}
},
"ListLicenseSpecificationsForResourceResponse":{
"type":"structure",
"members":{
"LicenseSpecifications":{"shape":"LicenseSpecifications"},
"NextToken":{"shape":"String"}

}
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"ListLicenseVersionsRequest":{
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"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListLicenseVersionsResponse":{
"type":"structure",
"members":{
"Licenses":{"shape":"LicenseList"},
"NextToken":{"shape":"String"}
}

},
"ListLicensesRequest":{
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  "members":{
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    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
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  "members":{
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    "NextToken":{"shape":"String"}
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"ListReceivedGrantsForOrganizationRequest":{
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    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
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"ListReceivedGrantsForOrganizationResponse":{
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    "NextToken":{"shape":"String"}
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},
"ListReceivedGrantsRequest":{
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    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
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"ListReceivedGrantsResponse":{
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    "NextToken":{"shape":"String"}

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  }
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"ListReceivedLicensesForOrganizationRequest":{
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    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
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"ListReceivedLicensesForOrganizationResponse":{
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  "members":{
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    "NextToken":{"shape":"String"}
  }
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"ListReceivedLicensesRequest":{
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  "members":{
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    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
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"ListReceivedLicensesResponse":{
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  "members":{
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    "NextToken":{"shape":"String"}
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"ListResourceInventoryRequest":{
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  "members":{
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    "NextToken":{"shape":"String"},
    "Filters":{"shape":"InventoryFilterList"}
  }
},
"ListResourceInventoryResponse":{
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  "members":{
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     "NextToken":{"shape":"String"}
  }
},
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"ListTagsForResourceRequest":{
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  "members":{
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  }
},
"ListTagsForResourceResponse":{
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  "members":{
    "Tags":{"shape":"TagList"}
  }
},
"ListTokensRequest":{
  "type":"structure",
  "members":{
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    "Filters":{"shape":"FilterList"},
    "NextToken":{"shape":"String"},
    "MaxResults":{"shape":"MaxSize100"}
  }
},
"ListTokensResponse":{
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  "members":{
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    "NextToken":{"shape":"String"}
  }
},
"ListUsageForLicenseConfigurationRequest":{
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  "members":{
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     "MaxResults":{"shape":"BoxInteger"},
    "NextToken":{"shape":"String"},
    "Filters":{"shape":"Filters"}
  }
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"ListUsageForLicenseConfigurationResponse":{
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    "NextToken":{"shape":"String"}
  }
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    "AssociationCount":{"shape":"BoxLong"}
  }
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"ManagedResourceSummaryList":{
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  "member":{"shape":"ManagedResourceSummary"}
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    "Value":{"shape":"String"}
  }
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"MetadataList":{
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  "member":{"shape":"Metadata"}
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"NoEntitlementsAllowedException":{
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  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"Options":{
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  "members":{
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  }
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"OrganizationConfiguration":{
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"required":["EnableIntegration"],
"members":{
"EnableIntegration":{"shape":"Boolean"}
}
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"PrincipalArnList":{
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"min":1
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"ProductInformation":{
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"ProductInformationFilterList"
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"members":{
"ResourceType":{"shape":"String"},
"ProductInformationFilterList":{"shape":"ProductInformationFilterList"}
}
},
"ProductInformationFilter":{
"type":"structure",
"required":[
"ProductInformationFilterName",
"ProductInformationFilterComparator"
],
"members":{
"ProductInformationFilterName":{"shape":"String"},
"ProductInformationFilterValue":{"shape":"StringList"},
"ProductInformationFilterComparator":{"shape":"String"}
}
},
"ProductInformationFilterList":{
"type":"list",
"member":{"shape":"ProductInformationFilter"}
},
"ProductInformationList":{
"type":"list",
"member":{"shape":"ProductInformation"}
},
"ProvisionalConfiguration":{
"type":"structure",
"required":["MaxTimeToLiveInMinutes"],
"members":{
"MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
}

},
"RateLimitExceededException":{
 "type":"structure",
 "members":{
  "Message":{"shape":"Message"}
  },
 "exception":true
},
"ReceivedMetadata":{
 "type":"structure",
 "members":{
  "ReceivedStatus":{"shape":"ReceivedStatus"},
  "ReceivedStatusReason":{"shape":"StatusReasonMessage"},
  "AllowedOperations":{"shape":"AllowedOperationList"}
 }
},
"ReceivedStatus":{
 "type":"string",
 "enum":[
  "PENDING_WORKFLOW",
  "PENDING_ACCEPT",
  "REJECTED",
  "ACTIVE",
  "FAILED_WORKFLOW",
  "DELETED",
  "DISABLED",
  "WORKFLOW_COMPLETED"
 ]
},
"RedirectException":{
 "type":"structure",
 "members":{
  "Location":{"shape":"Location"},
  "Message":{"shape":"Message"}
 },
 "exception":true
},
"RejectGrantRequest":{
 "type":"structure",
 "required":["GrantArn"],
 "members":{
  "GrantArn":{"shape":"Arn"}
 }
},
"RejectGrantResponse":{
 "type":"structure",
 "members":{

"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
},
"RenewType":{
"type":"string",
"enum":[
"None",
"Weekly",
"Monthly"
]
},
"ReportContext":{
"type":"structure",
"required":["licenseConfigurationArns"],
"members":{
"licenseConfigurationArns":{"shape":"ArnList"}
}
},
"ReportFrequency":{
"type":"structure",
"members":{
"value":{"shape":"Integer"},
"period":{"shape":"ReportFrequencyType"}
}
},
"ReportFrequencyType":{
"type":"string",
"enum":[
"DAY",
"WEEK",
"MONTH"
]
},
"ReportGenerator":{
"type":"structure",
"members":{
"ReportGeneratorName":{"shape":"String"},
"ReportType":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"LicenseManagerReportGeneratorArn":{"shape":"String"},
"LastRunStatus":{"shape":"String"},
"LastRunFailureReason":{"shape":"String"},
"LastReportGenerationTime":{"shape":"String"},
"ReportCreatorAccount":{"shape":"String"},
"Description":{"shape":"String"},

"S3Location":{"shape":"S3Location"},
"CreateTime":{"shape":"String"},
"Tags":{"shape":"TagList"}
}
},
"ReportGeneratorList":{
"type":"list",
"member":{"shape":"ReportGenerator"}
},
"ReportGeneratorName":{
"type":"string",
"max":100,
"min":1
},
"ReportType":{
"type":"string",
"enum":[
"LicenseConfigurationSummaryReport",
"LicenseConfigurationUsageReport"
]
},
"ReportTypeList":{
"type":"list",
"member":{"shape":"ReportType"}
},
"ResourceInventory":{
"type":"structure",
"members":{
"ResourceId":{"shape":"String"},
"ResourceType":{"shape":"ResourceType"},
"ResourceArn":{"shape":"String"},
"Platform":{"shape":"String"},
"PlatformVersion":{"shape":"String"},
"ResourceOwningAccountId":{"shape":"String"}
}
},
"ResourceInventoryList":{
"type":"list",
"member":{"shape":"ResourceInventory"}
},
"ResourceLimitExceededException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"ResourceNotFoundException":{

"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"ResourceType":{
"type":"string",
"enum":[
"EC2_INSTANCE",
"EC2_HOST",
"EC2_AMI",
"RDS",
"SYSTEMS_MANAGER_MANAGED_INSTANCE"
]
},
"S3Location":{
"type":"structure",
"members":{
"bucket":{"shape":"String"},
"keyPrefix":{"shape":"String"}

}
},
"ServerInternalException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true,
"fault":true
},
"SignedToken":{
"type":"string",
"min":4096
},
"StatusReasonMessage":{
"type":"string",
"max":400,
"pattern":"[\\s\\S]+"
},
"String":{"type":"string"},
"StringList":{
"type":"list",
"member":{"shape":"String"}
},
"Tag":{
"type":"structure",

"members":{
"Key":{"shape":"String"},
"Value":{"shape":"String"}
}
},
"TagKeyList":{
"type":"list",
"member":{"shape":"String"}
},
"TagList":{
"type":"list",
"member":{"shape":"Tag"}
},
"TagResourceRequest":{
"type":"structure",
"required":[
"ResourceArn",
"Tags"
],
"members":{
"ResourceArn":{"shape":"String"},
"Tags":{"shape":"TagList"}
}
},
"TagResourceResponse":{
"type":"structure",
"members":{
}
},
"TokenData":{
"type":"structure",
"members":{
"TokenId":{"shape":"String"},
"TokenType":{"shape":"String"},
"LicenseArn":{"shape":"String"},
"ExpirationTime":{"shape":"ISO8601DateTime"},
"TokenProperties":{"shape":"MaxSize3StringList"},
"RoleArns":{"shape":"ArnList"},
"Status":{"shape":"String"}
}
},
"TokenList":{
"type":"list",
"member":{"shape":"TokenData"}
},
"TokenString":{
"type":"string",
"max":4096,

```
  "pattern":"\\S+"
},
"TokenType":{
  "type":"string",
  "enum":["REFRESH_TOKEN"]
},
"UnsupportedDigitalSignatureMethodException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"UntagResourceRequest":{
  "type":"structure",
  "required":[
    "ResourceArn",
    "TagKeys"
   ],
  "members":{
    "ResourceArn":{"shape":"String"},
    "TagKeys":{"shape":"TagKeyList"}
  }
},
"UntagResourceResponse":{
  "type":"structure",
  "members":{
  }
},
"UpdateLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"},
    "LicenseConfigurationStatus":{"shape":"LicenseConfigurationStatus"},
    "LicenseRules":{"shape":"StringList"},
    "LicenseCount":{"shape":"BoxLong"},
    "LicenseCountHardLimit":{"shape":"BoxBoolean"},
    "Name":{"shape":"String"},
    "Description":{"shape":"String"},
    "ProductInformationList":{"shape":"ProductInformationList"},
    "DisassociateWhenNotFound":{"shape":"BoxBoolean"}
  }
},
"UpdateLicenseConfigurationResponse":{
  "type":"structure",
  "members":{
  }
```

},
"UpdateLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":[
"LicenseManagerReportGeneratorArn",
"ReportGeneratorName",
"Type",
"ReportContext",
"ReportFrequency",
"ClientToken"
],
"members":{
"LicenseManagerReportGeneratorArn":{"shape":"String"},
"ReportGeneratorName":{"shape":"ReportGeneratorName"},
"Type":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"ClientToken":{"shape":"ClientRequestToken"},
"Description":{"shape":"String"}
}
},
"UpdateLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseSpecificationsForResourceRequest":{
"type":"structure",
"required":["ResourceArn"],
"members":{
"ResourceArn":{"shape":"String"},
"AddLicenseSpecifications":{"shape":"LicenseSpecifications"},
"RemoveLicenseSpecifications":{"shape":"LicenseSpecifications"}
}
},
"UpdateLicenseSpecificationsForResourceResponse":{
"type":"structure",
"members":{
}
},
"UpdateServiceSettingsRequest":{
"type":"structure",
"members":{
"S3BucketArn":{"shape":"String"},
"SnsTopicArn":{"shape":"String"},
"OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
"EnableCrossAccountsDiscovery":{"shape":"BoxBoolean"}
}

},
"UpdateServiceSettingsResponse":{
"type":"structure",
"members":{
}
},
"UsageOperation":{
"type":"string",
"max":50
},
"ValidationException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
}
}
}
{
"version": "2.0",
"service": " License Manager makes it easier to manage licenses from software vendors across multiple Amazon Web Services accounts and on-premises servers. ",
"operations": {
"AcceptGrant": " Accepts the specified grant. ",
"CheckInLicense": " Checks in the specified license. Check in a license when it is no longer in use. ",
"CheckoutBorrowLicense": " Checks out the specified license for offline use. ",
"CheckoutLicense": " Checks out the specified license. <note> If the account that created the license is the same that is performing the check out, you must specify the account as the beneficiary. </note>",
"CreateGrant": " Creates a grant for the specified license. A grant shares the use of license entitlements with a specific Amazon Web Services account, an organization, or an organizational unit (OU). For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateGrantVersion": " Creates a new version of the specified grant. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateLicense": " Creates a license. ",
"CreateLicenseConfiguration": " Creates a license configuration. A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a license must be associated with a host), and the number of licenses purchased and used. ",
"CreateLicenseConversionTaskForResource":
" Creates a new license conversion task. ",
"CreateLicenseManagerReportGenerator": " Creates a report generator. ",
"CreateLicenseVersion": " Creates a new version of the specified license. ",
"CreateToken": " Creates a long-lived token. A refresh token is a JWT token used to get an access token. With an access token, you can call AssumeRoleWithWebIdentity to get role credentials that you can use to

call License Manager to manage the specified license. ",
"DeleteGrant": " Deletes the specified grant. ",
"DeleteLicense": " Deletes the specified license. ",
"DeleteLicenseConfiguration": " Deletes the specified license configuration. You cannot delete a license configuration that is in use. ",
"DeleteLicenseManagerReportGenerator": " Deletes the specified report generator. This action deletes the report generator, which stops it from generating future reports. The action cannot be reversed. It has no effect on the previous reports from this generator. ",
"DeleteToken": " Deletes the specified token. Must be called in the license home Region. ",
"ExtendLicenseConsumption": " Extends the expiration date for license consumption. ",
"GetAccessToken": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens are valid for one hour. ",
"GetGrant": " Gets detailed information about the specified grant. ",
"GetLicense": " Gets detailed information about the specified license. ",
"GetLicenseConfiguration": " Gets detailed information about the specified license configuration. ",
"GetLicenseConversionTask": " Gets information about the specified license type conversion task. ",
"GetLicenseManagerReportGenerator": " Gets information about the specified report generator. ",
"GetLicenseUsage": " Gets detailed information about the usage of the specified license. ",
"GetServiceSettings": " Gets the License Manager settings for the current Region. ",
"ListAssociationsForLicenseConfiguration": " Lists the resource associations for the specified license configuration. Resource associations need not consume licenses from a license configuration. For example, an AMI or a stopped instance might not consume a license (depending on the license rules). ",
"ListDistributedGrants": " Lists the grants distributed for the specified license. ",
"ListFailuresForLicenseConfigurationOperations": " Lists the license configuration operations that failed. ",
"ListLicenseConfigurations": " Lists the license configurations for your account. ",
"ListLicenseConversionTasks": " Lists the license type conversion tasks for your account. ",
"ListLicenseManagerReportGenerators": " Lists the report generators for your account. ",
"ListLicenseSpecificationsForResource": " Describes the license configurations for the specified resource. ",
"ListLicenseVersions": " Lists all versions of the specified license. ",
"ListLicenses": " Lists the licenses for your account. ",
"ListReceivedGrants": " Lists grants that are received. Received grants are grants created while specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs. ",
"ListReceivedGrantsForOrganization": " Lists the grants received for all accounts in the organization. ",
"ListReceivedLicenses": " Lists received licenses. ",
"ListReceivedLicensesForOrganization": " Lists the licenses received for all accounts in the organization. ",
"ListResourceInventory": " Lists resources managed using Systems Manager inventory. ",
"ListTagsForResource": " Lists the tags for the specified license configuration. ",
"ListTokens": " Lists your tokens. ",
"ListUsageForLicenseConfiguration": " Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration. ",
"RejectGrant": " Rejects the specified grant. ",

"TagResource": " Adds the specified tags to the specified license configuration. ",
"UntagResource": " Removes the specified tags from the specified license configuration. ",
"UpdateLicenseConfiguration": " Modifies the attributes of an existing license configuration. ",
"UpdateLicenseManagerReportGenerator": " Updates a report generator. After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. ",
"UpdateLicenseSpecificationsForResource": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. You can update the
license specifications of AMIs, instances, and hosts. You cannot update the license specifications for launch templates and CloudFormation templates, as they send license configurations to the operation that creates the resource. ",
"UpdateServiceSettings": " Updates License Manager settings for the current Region. "
},
"shapes": {
"AcceptGrantRequest": {
"base": null,
"refs": {
}
},
"AcceptGrantResponse": {
"base": null,
"refs": {
}
},
"AccessDeniedException": {
"base": " Access to resource denied. ",
"refs": {
}
},
"ActivationOverrideBehavior": {
"base": null,
"refs": {
"Options$ActivationOverrideBehavior": " An activation option for your grant that determines the behavior of activating a grant. Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code>
for the <code>Status</code> parameter.   As a license administrator, you can optionally specify an <code>ActivationOverrideBehavior</code> when activating a grant.   As a grantor, you can optionally specify an <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee account in your organization.   As a grantee, if the grantor creating the distributed grant doesnt specify an <code>ActivationOverrideBehavior</code>, you can optionally specify one when you are activating the grant.   <dl> <dt>DISTRIBUTED_GRANTS_ONLY</dt> <dd> Use this value to activate a grant without replacing any member accounts active grants for the same product. </dd>
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt> <dd> Use this value to activate a grant and disable other active grants in any member accounts for the same product. This action will also replace their previously activated grants with this activated grant.
</dd> </dl>"
}
},
"AllowedOperation": {

"base": null,
"refs": {
"AllowedOperationList$member": null
}
},
"AllowedOperationList": {
"base": null,
"refs": {
"CreateGrantRequest$AllowedOperations": " Allowed operations for the grant. ",
"CreateGrantVersionRequest$AllowedOperations": " Allowed operations for the grant. ",
"Grant$GrantedOperations": " Granted operations. ",
"ReceivedMetadata$AllowedOperations": " Allowed operations. "
}
},
"Arn": {
"base": null,
"refs": {
"AcceptGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"AcceptGrantResponse$GrantArn": " Grant ARN. ",
"ArnList$member": null,
"CheckoutBorrowLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"CheckoutBorrowLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantResponse$GrantArn": " Grant ARN. ",
"CreateGrantVersionRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"CreateGrantVersionResponse$GrantArn": " Grant ARN. ",
"CreateLicenseConversionTaskForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"CreateLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionResponse$LicenseArn": " License ARN. ",
"CreateTokenRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the JWT token. ",
"DeleteGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"DeleteGrantResponse$GrantArn": " Grant ARN. ",
"DeleteLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"GetLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetLicenseUsageRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"Grant$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"Grant$ParentArn": " Parent ARN. ",
"Grant$LicenseArn": " License ARN. ",
"Grant$GranteePrincipalArn": " The grantee principal ARN. ",
"GrantedLicense$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"License$LicenseArn": " Amazon Resource Name (ARN) of the license. ",

"ListLicenseVersionsRequest$LicenseArn": " Amazon Resource Name (ARN) of
the license. ",
"ListReceivedGrantsForOrganizationRequest$LicenseArn": " The Amazon Resource Name (ARN) of the
received license. ",
"PrincipalArnList$member": null,
"RejectGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"RejectGrantResponse$GrantArn": " Grant ARN. "
}
},
"ArnList": {
"base": null,
"refs": {
"CreateTokenRequest$RoleArns": " Amazon Resource Name (ARN) of the IAM roles to embed in the
token. License Manager does not check whether the roles are in use. ",
"ListDistributedGrantsRequest$GrantArns": " Amazon Resource Names (ARNs) of the grants. ",
"ListLicensesRequest$LicenseArns": " Amazon Resource Names (ARNs) of the licenses. ",
"ListReceivedGrantsRequest$GrantArns": " Amazon Resource Names (ARNs) of the grants. ",
"ListReceivedLicensesRequest$LicenseArns": " Amazon Resource Names (ARNs) of the licenses. ",

"ReportContext$licenseConfigurationArns": " Amazon Resource Name (ARN) of the license configuration
that this generator reports on. ",
"TokenData$RoleArns": " Amazon Resource Names (ARN) of the roles included in the token. "
}
},
"AuthorizationException": {
"base": " The Amazon Web Services user account does not have permission to perform the action. Check the
IAM policy associated with this account. ",
"refs": {
}
},
"AutomatedDiscoveryInformation": {
"base": " Describes automated discovery. ",
"refs": {
"GetLicenseConfigurationResponse$AutomatedDiscoveryInformation": " Automated discovery
information. ",
"LicenseConfiguration$AutomatedDiscoveryInformation": " Automated discovery information. "
}
},
"Boolean": {
"base": null,
"refs": {
"ExtendLicenseConsumptionRequest$DryRun": " Checks whether you have the required permissions for the
action,
without actually making the request. Provides an error response if you do not have the required permissions. ",
"OrganizationConfiguration$EnableIntegration": " Enables Organizations integration. "
}
},
"BorrowConfiguration": {

"base": " Details about a borrow configuration. ",
"refs": {
"ConsumptionConfiguration$BorrowConfiguration": " Details about a borrow configuration. "
}
},
"BoxBoolean": {
"base": null,
"refs": {
"BorrowConfiguration$AllowEarlyCheckIn": " Indicates whether early check-ins are allowed. ",
"CreateLicenseConfigurationRequest$LicenseCountHardLimit": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit blocks the launch of new instances. ",
"CreateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"Entitlement$Overage": " Indicates whether overages are allowed. ",
"Entitlement$AllowCheckIn": " Indicates whether check-ins are allowed. ",
"GetLicenseConfigurationResponse$LicenseCountHardLimit": " Sets the number of available licenses as a hard limit. ",
"GetLicenseConfigurationResponse$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"GetServiceSettingsResponse$EnableCrossAccountsDiscovery": " Indicates whether cross-account discovery is enabled. ",
"LicenseConfiguration$LicenseCountHardLimit": " Number of available licenses as a hard limit. ",
"LicenseConfiguration$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateLicenseConfigurationRequest$LicenseCountHardLimit": " New hard limit of the number of available licenses. ",
"UpdateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateServiceSettingsRequest$EnableCrossAccountsDiscovery": " Activates cross-account discovery. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"BorrowConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the borrow configuration, in minutes. ",
"ListAssociationsForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListFailuresForLicenseConfigurationOperationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConfigurationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConversionTasksRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseSpecificationsForResourceRequest$MaxResults": " Maximum number of results to return in a single call. ",

"ListResourceInventoryRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUsageForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ProvisionalConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the provisional configuration, in minutes. "
}
},
"BoxLong": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ConsumedLicenses": " Number of licenses consumed by the resource. ",
"CreateLicenseConfigurationRequest$LicenseCount": " Number of licenses managed by the license configuration. ",
"GetLicenseConfigurationResponse$LicenseCount": " Number of available licenses. ",
"GetLicenseConfigurationResponse$ConsumedLicenses": " Number of licenses assigned to resources. ",
"LicenseConfiguration$LicenseCount": " Number of licenses managed by the license configuration. ",
"LicenseConfiguration$ConsumedLicenses": " Number of licenses consumed. ",
"LicenseConfigurationUsage$ConsumedLicenses": " Number of licenses consumed by the resource. ",
"ManagedResourceSummary$AssociationCount": " Number of resources associated with licenses. ",
"UpdateLicenseConfigurationRequest$LicenseCount": " New number of licenses managed by the license configuration. "
}
},
"CheckInLicenseRequest": {
"base": null,
"refs": {
}
},
"CheckInLicenseResponse": {
"base": null,
"refs": {
}
},
"CheckoutBorrowLicenseRequest": {
"base": null,
"refs": {
}
},
"CheckoutBorrowLicenseResponse": {
"base": null,
"refs": {
}
},
"CheckoutLicenseRequest": {
"base": null,
"refs": {

```
    }
  },
  "CheckoutLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutType": {
    "base": null,
    "refs": {
      "CheckoutLicenseRequest$CheckoutType": "<p>Checkout type.</p>",
      "CheckoutLicenseResponse$CheckoutType": "<p>Checkout type.</p>"
    }
  },
  "ClientRequestToken": {
    "base": null,
    "refs": {
      "CreateLicenseManagerReportGeneratorRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "UpdateLicenseManagerReportGeneratorRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>"
    }
  },
  "ClientToken": {
    "base": null,
    "refs": {
      "CheckoutBorrowLicenseRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "CheckoutLicenseRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "CreateGrantRequest$ClientToken": "<p>Unique, case-sensitive
 identifier that you provide to ensure the idempotency of the request.</p>",
      "CreateGrantVersionRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "CreateLicenseRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "CreateLicenseVersionRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "CreateTokenRequest$ClientToken": "<p>Idempotency token, valid for 10 minutes.</p>"
    }
  },
  "ConflictException": {
    "base": "<p>There was a conflict processing the request. Try your request again.</p>",
    "refs": {
    }
  },
  "ConsumedLicenseSummary": {
    "base": "<p>Details about license consumption.</p>",
```

"refs": {
"ConsumedLicenseSummaryList$member": null
}
},
"ConsumedLicenseSummaryList": {
"base": null,
"refs": {
"GetLicenseConfigurationResponse$ConsumedLicenseSummaryList": " Summaries of the licenses consumed by resources. ",
"LicenseConfiguration$ConsumedLicenseSummaryList": " Summaries for licenses consumed by various resources. "
}
},
"ConsumptionConfiguration": {
"base": " Details about a consumption configuration. ",
"refs": {
"CreateLicenseRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"CreateLicenseVersionRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"GrantedLicense$ConsumptionConfiguration": " Configuration for consumption of the license. ",
"License$ConsumptionConfiguration": " Configuration for consumption of the license. "
}
},
"CreateGrantRequest": {
"base": null,
"refs": {
}
},
"CreateGrantResponse": {
"base": null,
"refs": {
}
},
"CreateGrantVersionRequest": {
"base": null,
"refs": {
}
},
"CreateGrantVersionResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationRequest": {

```
  "base": null,
  "refs": {
  }
},
"CreateLicenseConfigurationResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseConversionTaskForResourceRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseConversionTaskForResourceResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseManagerReportGeneratorRequest": {
  "base": null,
  "refs": {

 }
},
"CreateLicenseManagerReportGeneratorResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseResponse": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseVersionRequest": {
  "base": null,
  "refs": {
  }
},
"CreateLicenseVersionResponse": {
  "base": null,
  "refs": {
```

```
    }
  },
  "CreateTokenRequest": {
    "base": null,
    "refs": {
    }
  },
  "CreateTokenResponse": {
    "base": null,
    "refs": {
    }
  },
  "DateTime": {
    "base": null,
    "refs": {
      "AutomatedDiscoveryInformation$LastRunTime": "<p>Time that automated discovery last ran.</p>",
      "GetLicenseConversionTaskResponse$StartTime": "<p>Time at which the license type conversion task was started .</p>",
      "GetLicenseConversionTaskResponse$LicenseConversionTime": "<p>Amount of time to complete the license type conversion.</p>",
      "GetLicenseConversionTaskResponse$EndTime": "<p>Time at which the license type conversion task was completed.</p>",
      "LicenseConfigurationAssociation$AssociationTime": "<p>Time when the license configuration was associated with the resource.</p>",
      "LicenseConfigurationUsage$AssociationTime": "<p>Time when the license configuration was initially associated with the resource.</p>",
      "LicenseConversionTask$StartTime": "<p>The time the conversion task was started at.</p>",
      "LicenseConversionTask$LicenseConversionTime": "<p>The time the usage operation value of the resource was changed.</p>",
      "LicenseConversionTask$EndTime": "<p>The time the conversion task was completed.</p>",
      "LicenseOperationFailure$FailureTime": "<p>Failure time.</p>"
    }
  },
  "DatetimeRange": {
    "base": "<p>Describes a time range, in ISO8601-UTC format.</p>",
    "refs": {
      "CreateLicenseRequest$Validity": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
      "CreateLicenseVersionRequest$Validity": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
      "GrantedLicense$Validity": "<p>Date and time range during which the granted license is valid, in ISO8601-UTC format.</p>",
      "License$Validity": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>"
    }
  },
  "DeleteGrantRequest": {
    "base": null,
    "refs": {
```

```
  }
},
"DeleteGrantResponse": {
  "base": null,
  "refs": {
  }
},
"DeleteLicenseConfigurationRequest": {
  "base": null,
  "refs": {
  }
},
"DeleteLicenseConfigurationResponse": {
  "base": null,
  "refs": {
  }
},
"DeleteLicenseManagerReportGeneratorRequest": {
  "base": null,
  "refs": {
  }
},
"DeleteLicenseManagerReportGeneratorResponse": {
  "base": null,
   "refs": {
  }
},
"DeleteLicenseRequest": {
  "base": null,
  "refs": {
  }
},
"DeleteLicenseResponse": {
  "base": null,
  "refs": {
  }
},
"DeleteTokenRequest": {
  "base": null,
  "refs": {
  }
},
"DeleteTokenResponse": {
  "base": null,
  "refs": {
  }
},
"DigitalSignatureMethod": {
```

"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$DigitalSignatureMethod": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384. For more information, see RFC 7518 Digital Signature with RSASSA-PSS. "
}
},
"Entitlement": {
"base": " Describes a resource entitled for use with a license. ",
"refs": {
"EntitlementList$member": null
}
},
"EntitlementData": {
"base": " Data associated with an entitlement resource. ",

"refs": {
"EntitlementDataList$member": null
}
},
"EntitlementDataList": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$Entitlements": " License entitlements. Partial checkouts are not supported. ",
"CheckoutBorrowLicenseResponse$EntitlementsAllowed": " Allowed license entitlements. ",
"CheckoutLicenseRequest$Entitlements": " License entitlements. ",
"CheckoutLicenseResponse$EntitlementsAllowed": " Allowed license entitlements. "
}
},
"EntitlementDataUnit": {
"base": null,
"refs": {
"EntitlementData$Unit": " Entitlement data unit. ",
"EntitlementUsage$Unit": " Entitlement usage unit. "
}
},
"EntitlementList": {
"base": null,
"refs": {
"CreateLicenseRequest$Entitlements": " License entitlements. ",
"CreateLicenseVersionRequest$Entitlements": " License entitlements. ",
"GrantedLicense$Entitlements": " License entitlements. ",
"License$Entitlements": " License entitlements. "
}
},
"EntitlementNotAllowedException": {

"base": " The entitlement is not allowed. ",
"refs": {
}
},
"EntitlementUnit": {
"base": null,
"refs": {
"Entitlement$Unit": " Entitlement unit. "
}
},
"EntitlementUsage": {
"base": " Usage associated with an entitlement resource. ",
"refs": {
"EntitlementUsageList$member": null
}
},
"EntitlementUsageList": {
"base": null,
"refs": {
"LicenseUsage$EntitlementUsages": " License entitlement usages. "
}
},
"ExtendLicenseConsumptionRequest": {
"base": null,
"refs": {
}
},
"ExtendLicenseConsumptionResponse": {
"base": null,
"refs": {
}
},
"FailedDependencyException": {
"base": " A dependency required to run the API is missing. ",
"refs": {
}
},
"Filter": {
"base": " A filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
"refs": {
"FilterList$member": null,
"Filters$member": null
}
},
"FilterLimitExceededException": {
"base": " The request uses too many filters or too many filter values. ",
"refs": {

```
    }
  },
  "FilterList": {
    "base": null,
    "refs": {
      "ListDistributedGrantsRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>LicenseArn</code> </p> </li> <li> <p> <code>GrantStatus</code> </p> </li> <li> <p> <code>GranteePrincipalARN</code> </p> </li> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>LicenseIssuerName</code> </p> </li> </ul>",
      "ListLicenseManagerReportGeneratorsRequest$Filters": "<p>Filters to scope the results. The following filters are supported: </p> <ul> <li> <p> <code>LicenseConfigurationArn</code> </p> </li> </ul>",
      "ListLicensesRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>Beneficiary</code> </p> </li> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>Fingerprint</code> </p> </li> <li> <p> <code>Status</code> </p> </li> </ul>",
      "ListReceivedGrantsForOrganizationRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>ParentArn</code> </p> </li> <li> <p> <code>GranteePrincipalArn</code> </p> </li> </ul>",
      "ListReceivedGrantsRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>LicenseIssuerName</code> </p> </li> <li> <p> <code>LicenseArn</code> </p> </li> <li> <p> <code>GrantStatus</code> </p> </li> <li> <p> <code>GranterAccountId</code> </p> </li> </ul>",
      "ListReceivedLicensesForOrganizationRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>Beneficiary</code> </p> </li> <li> <p> <code>ProductSKU</code> </p> </li> </ul>",
      "ListReceivedLicensesRequest$Filters": "<p>Filters to scope the results. The following filters are supported:</p> <ul> <li> <p> <code>ProductSKU</code> </p> </li> <li> <p> <code>Status</code> </p> </li> <li> <p> <code>Fingerprint</code> </p> </li> <li> <p> <code>IssuerName</code> </p> </li> <li> <p> <code>Beneficiary</code> </p> </li> </ul>",
      "ListTokensRequest$Filters": "<p>Filters to scope the results. The following filter is supported:</p> <ul> <li> <p> <code>LicenseArns</code> </p> </li> </ul>"
    }
  },
  "FilterName": {
    "base": null,
    "refs": {
      "Filter$Name": "<p>Name of the filter. Filter names are case-sensitive.</p>"
    }
  },
  "FilterValue": {
    "base": null,
    "refs": {
      "FilterValues$member": null
    }
  },
  "FilterValues": {
    "base": null,
    "refs": {
```

"Filter$Values": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
},
"Filters": {
"base": null,
"refs": {
"ListLicenseConfigurationsRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>licenseCountingType</code> - The dimension for which licenses are counted. Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.
  <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. ",
"ListLicenseConversionTasksRequest$Filters": " Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>. ",
"ListUsageForLicenseConfigurationRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>resourceArn</code> - The ARN of the license configuration resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceAccount</code>
- The ID of the account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. "
}
},
"GetAccessTokenRequest": {
"base": null,
"refs": {
}
},
"GetAccessTokenResponse": {
"base": null,
"refs": {
}
},
"GetGrantRequest": {
"base": null,
"refs": {
}
},
"GetGrantResponse": {
"base": null,
"refs": {
}

```
  },
  "GetLicenseConfigurationRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseConfigurationResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseConversionTaskRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseConversionTaskResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseManagerReportGeneratorRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseManagerReportGeneratorResponse": {
    "base":
null,
    "refs": {
    }
  },
  "GetLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseUsageRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseUsageResponse": {
```

"base": null,
"refs": {
}
},
"GetServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"GetServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"Grant": {
"base": " Describes a grant. ",
"refs": {
"GetGrantResponse$Grant": " Grant details. ",
"GrantList$member": null
}
},
"GrantList": {
"base": null,
"refs": {
"ListDistributedGrantsResponse$Grants": " Distributed grant details. ",
"ListReceivedGrantsForOrganizationResponse$Grants": " Lists the grants the organization has received. ",
"ListReceivedGrantsResponse$Grants": " Received grant details. "
}
},
"GrantStatus": {
"base": null,
"refs": {
"AcceptGrantResponse$Status": " Grant status. ",
"CreateGrantResponse$Status": " Grant status. ",
"CreateGrantVersionRequest$Status": " Grant status. ",
"CreateGrantVersionResponse$Status": " Grant status. ",
"DeleteGrantResponse$Status": " Grant status. ",
"Grant$GrantStatus": " Grant status. ",
"RejectGrantResponse$Status": " Grant status. "
}
},
"GrantedLicense": {
"base": " Describes a license that is granted to a grantee. ",
"refs": {
"GrantedLicenseList$member": null
}

},
"GrantedLicenseList": {
"base": null,
"refs": {
"ListReceivedLicensesForOrganizationResponse$Licenses": " Lists the licenses the organization has received. ",
"ListReceivedLicensesResponse$Licenses": " Received license details. "
}
},
"ISO8601DateTime": {
"base": null,
"refs": {
"CheckoutBorrowLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
"CheckoutBorrowLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
"CheckoutLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
"CheckoutLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
"DatetimeRange$Begin": " Start of the time range. ",
"DatetimeRange$End": " End of the time range. ",
"DeleteLicenseResponse$DeletionDate": " Date when the license is deleted. ",
"ExtendLicenseConsumptionResponse$Expiration": " Date and time at which the license consumption expires. ",
"GrantedLicense$CreateTime": " Creation time of the granted license. ",
"License$CreateTime": " License creation time. ",
"TokenData$ExpirationTime": " Token expiration time, in ISO8601-UTC format. "
}
},
"Integer": {
"base": null,
"refs": {
"CreateTokenRequest$ExpirationInDays": " Token expiration, in days, counted from token creation. The default is 365 days. ",
"ReportFrequency$value": " Number of times within the frequency period that a report is generated. The only supported value is <code>1</code>. "
}
},
"InvalidParameterValueException": {
"base": " One or more parameter values are not valid. ",
"refs": {
}
},
"InvalidResourceStateException": {
"base": " License Manager cannot allocate a license to a resource because of its state. For example, you cannot allocate a license to an instance in the process of shutting down. ",
"refs": {

```
    }
  },
  "InventoryFilter": {
    "base": "<p>An inventory filter.</p>",
    "refs": {

    "InventoryFilterList$member": null
    }
  },
  "InventoryFilterCondition": {
    "base": null,
    "refs": {
      "InventoryFilter$Condition": "<p>Condition of the filter.</p>"
    }
  },
  "InventoryFilterList": {
    "base": null,
    "refs": {
      "ListResourceInventoryRequest$Filters": "<p>Filters to scope the results. The following filters and logical operators are supported:</p> <ul> <li> <p> <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>application_name</code> - The name of the application. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p> </li> <li> <p> <code>license_included</code> - The type of license included. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. Possible values are <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code>
 | <code>windows-server-datacenter</code>.</p> </li> <li> <p> <code>platform</code> - The platform of the resource. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p> </li> <li> <p> <code>resource_id</code> - The ID of the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p> </li> <li> <p> <code>tag:&lt;key&gt;</code> - The key/value combination of a tag assigned to the resource. Logical operators are <code>EQUALS</code> (single account) or <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p> </li> </ul>"
    }
  },
  "Issuer": {
    "base": "<p>Details about the issuer of a license.</p>",
    "refs": {
      "CreateLicenseRequest$Issuer": "<p>License issuer.</p>",
      "CreateLicenseVersionRequest$Issuer": "<p>License issuer.</p>"
    }
  },
  "IssuerDetails": {
    "base": "<p>Details associated with the issuer of a license.</p>",
    "refs": {
      "GrantedLicense$Issuer": "<p>Granted
 license issuer.</p>",
      "License$Issuer": "<p>License issuer.</p>"
    }
```

},
"License": {
"base": " Software license that is managed in License Manager. ",
"refs": {
"GetLicenseResponse$License": " License details. ",
"LicenseList$member": null
}
},
"LicenseConfiguration": {
"base": " A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used. ",
"refs": {
"LicenseConfigurations$member": null
}
},
"LicenseConfigurationAssociation": {
"base": " Describes an association with a license configuration. ",
"refs": {
"LicenseConfigurationAssociations$member": null
}
},
"LicenseConfigurationAssociations": {
"base": null,
"refs": {
"ListAssociationsForLicenseConfigurationResponse$LicenseConfigurationAssociations": " Information about the associations for the license configuration. "
}
},
"LicenseConfigurationStatus": {
"base": null,
"refs": {
"UpdateLicenseConfigurationRequest$LicenseConfigurationStatus": " New status of the license configuration. "
}
},
"LicenseConfigurationUsage": {
"base": " Details about the usage of a resource associated with a license configuration. ",
"refs": {
"LicenseConfigurationUsageList$member": null
}
},
"LicenseConfigurationUsageList": {
"base": null,
"refs": {
"ListUsageForLicenseConfigurationResponse$LicenseConfigurationUsageList": " Information about the license configurations. "

```
    }

  },
  "LicenseConfigurations": {
    "base": null,
    "refs": {
      "ListLicenseConfigurationsResponse$LicenseConfigurations": "<p>Information about the license
configurations.</p>"
    }
  },
  "LicenseConversionContext": {
    "base": "<p>Information about a license type conversion task.</p>",
    "refs": {
      "CreateLicenseConversionTaskForResourceRequest$SourceLicenseContext": "<p>Information that identifies
the license type you are converting from. For the structure of the source license, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-
cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
      "CreateLicenseConversionTaskForResourceRequest$DestinationLicenseContext": "<p>Information that
identifies the license type you are converting to. For the structure of the destination license, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-
cli\">Convert
 a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
      "GetLicenseConversionTaskResponse$SourceLicenseContext": "<p>Information about the license type
converted from.</p>",
      "GetLicenseConversionTaskResponse$DestinationLicenseContext": "<p>Information about the license type
converted to.</p>",
      "LicenseConversionTask$SourceLicenseContext": "<p>Information about the license type this conversion task
converted from.</p>",
      "LicenseConversionTask$DestinationLicenseContext": "<p>Information about the license type this conversion
task converted to.</p>"
    }
  },
  "LicenseConversionTask": {
    "base": "<p>Information about a license type conversion task.</p>",
    "refs": {
      "LicenseConversionTasks$member": null
    }
  },
  "LicenseConversionTaskId": {
    "base": null,
    "refs": {
      "CreateLicenseConversionTaskForResourceResponse$LicenseConversionTaskId":
 "<p>The ID of the created license type conversion task.</p>",
      "GetLicenseConversionTaskRequest$LicenseConversionTaskId": "<p>ID of the license type conversion task to
retrieve information on.</p>",
      "GetLicenseConversionTaskResponse$LicenseConversionTaskId": "<p>ID of the license type conversion
task.</p>",
      "LicenseConversionTask$LicenseConversionTaskId": "<p>The ID of the license type conversion task.</p>"
```

```
    }
  },
  "LicenseConversionTaskStatus": {
    "base": null,
    "refs": {
      "GetLicenseConversionTaskResponse$Status": "<p>Status of the license type conversion task.</p>",
      "LicenseConversionTask$Status": "<p>The status of the conversion task.</p>"
    }
  },
  "LicenseConversionTasks": {
    "base": null,
    "refs": {
      "ListLicenseConversionTasksResponse$LicenseConversionTasks": "<p>Information about the license
configuration tasks for your account.</p>"
    }
  },
  "LicenseCountingType":
 {
    "base": null,
    "refs": {
      "CreateLicenseConfigurationRequest$LicenseCountingType": "<p>Dimension used to track the license
inventory.</p>",
      "GetLicenseConfigurationResponse$LicenseCountingType": "<p>Dimension for which the licenses are
counted.</p>",
      "LicenseConfiguration$LicenseCountingType": "<p>Dimension to use to track the license inventory.</p>"
    }
  },
  "LicenseDeletionStatus": {
    "base": null,
    "refs": {
      "DeleteLicenseResponse$Status": "<p>License status.</p>"
    }
  },
  "LicenseList": {
    "base": null,
    "refs": {
      "ListLicenseVersionsResponse$Licenses": "<p>License details.</p>",
      "ListLicensesResponse$Licenses": "<p>License details.</p>"
    }
  },
  "LicenseOperationFailure": {
    "base": "<p>Describes the failure of a license operation.</p>",
    "refs": {
      "LicenseOperationFailureList$member": null
    }
  },
  "LicenseOperationFailureList": {
    "base":
```

null,
"refs": {
"ListFailuresForLicenseConfigurationOperationsResponse$LicenseOperationFailureList": " License configuration operations that failed. "
}
},
"LicenseSpecification": {
"base": " Details for associating a license configuration with a resource. ",
"refs": {
"LicenseSpecifications$member": null
}
},
"LicenseSpecifications": {
"base": null,
"refs": {
"ListLicenseSpecificationsForResourceResponse$LicenseSpecifications": " License configurations associated with a resource. ",
"UpdateLicenseSpecificationsForResourceRequest$AddLicenseSpecifications": " ARNs of the license configurations to add. ",
"UpdateLicenseSpecificationsForResourceRequest$RemoveLicenseSpecifications": " ARNs of the license configurations to remove. "
}
},
"LicenseStatus": {
"base": null,
"refs": {
"CreateLicenseResponse$Status": " License status. ",
"CreateLicenseVersionRequest$Status": " License status. ",
"CreateLicenseVersionResponse$Status": " License status. ",
"GrantedLicense$Status": " Granted license status. ",
"License$Status": " License status. "
}
},
"LicenseUsage": {
"base": " Describes the entitlement usage associated with a license. ",
"refs": {
"GetLicenseUsageResponse$LicenseUsage": " License usage details. "
}
},
"LicenseUsageException": {
"base": " You do not have enough licenses available to support a new resource launch. ",
"refs": {
}
},
"ListAssociationsForLicenseConfigurationRequest": {
"base": null,
"refs": {
}

```
  },
  "ListAssociationsForLicenseConfigurationResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListDistributedGrantsRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListDistributedGrantsResponse":
{
    "base": null,
    "refs": {
    }
  },
  "ListFailuresForLicenseConfigurationOperationsRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListFailuresForLicenseConfigurationOperationsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListLicenseConfigurationsRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListLicenseConfigurationsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListLicenseConversionTasksRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListLicenseConversionTasksResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListLicenseManagerReportGeneratorsRequest": {
```

"base": null,
"refs": {
}
},
"ListLicenseManagerReportGeneratorsResponse": {
"base": null,
"refs": {
}
},
"ListLicenseSpecificationsForResourceRequest": {
"base": null,
"refs": {
}
},
"ListLicenseSpecificationsForResourceResponse":
{
"base": null,
"refs": {
}
},
"ListLicenseVersionsRequest": {
"base": null,
"refs": {
}
},
"ListLicenseVersionsResponse": {
"base": null,
"refs": {
}
},
"ListLicensesRequest": {
"base": null,
"refs": {
}
},
"ListLicensesResponse": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsForOrganizationRequest": {
"base": null,
"refs": {
}
},
"ListReceivedGrantsForOrganizationResponse": {
"base": null,
"refs": {

```
    }
  },
  "ListReceivedGrantsRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedGrantsResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesForOrganizationRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesForOrganizationResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesRequest":
{
    "base": null,
    "refs": {
    }
  },
  "ListReceivedLicensesResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListResourceInventoryRequest": {
    "base": null,
    "refs": {
    }
  },
  "ListResourceInventoryResponse": {
    "base": null,
    "refs": {
    }
  },
  "ListTagsForResourceRequest": {
    "base": null,
    "refs": {
    }
  },
```

"ListTagsForResourceResponse": {
"base": null,
"refs": {
}
},
"ListTokensRequest": {
"base": null,
"refs": {
}
},
"ListTokensResponse": {
"base": null,
"refs": {
}
},
"ListUsageForLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"ListUsageForLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"Location": {
"base": null,
"refs": {
"RedirectException$Location": null
}
},
"Long":
{
"base": null,
"refs": {
"Entitlement$MaxCount": " Maximum entitlement count. Use if the unit is not None. "
}
},
"ManagedResourceSummary": {
"base": " Summary information about a managed resource. ",
"refs": {
"ManagedResourceSummaryList$member": null
}
},
"ManagedResourceSummaryList": {
"base": null,
"refs": {
"GetLicenseConfigurationResponse$ManagedResourceSummaryList": " Summaries of the managed

resources. ",
"LicenseConfiguration$ManagedResourceSummaryList": " Summaries for managed resources. "
}
},
"MaxSize100": {
"base": null,
"refs": {
"ListDistributedGrantsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseManagerReportGeneratorsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseVersionsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicensesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedGrantsForOrganizationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedGrantsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedLicensesForOrganizationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListReceivedLicensesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListTokensRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"MaxSize3StringList": {
"base": null,
"refs": {
"CreateTokenRequest$TokenProperties": " Data specified by the caller to be included in the JWT token. The data is mapped to the amr claim of the JWT token. ",

"GetAccessTokenRequest$TokenProperties": " Token properties to validate against those present in the JWT token. ",
"TokenData$TokenProperties": " Data specified by the caller. "
}
},
"Message": {
"base": null,
"refs": {
"AccessDeniedException$Message": null,
"AuthorizationException$Message": null,
"ConflictException$Message": null,
"EntitlementNotAllowedException$Message": null,
"FailedDependencyException$Message": null,
"FilterLimitExceededException$Message": null,
"InvalidParameterValueException$Message": null,
"InvalidResourceStateException$Message": null,
"LicenseUsageException$Message": null,
"NoEntitlementsAllowedException$Message": null,
"RateLimitExceededException$Message": null,
"RedirectException$Message": null,

"ResourceLimitExceededException$Message": null,
"ResourceNotFoundException$Message": null,
"ServerInternalException$Message":
null,
"UnsupportedDigitalSignatureMethodException$Message": null,
"ValidationException$Message": null
}
},
"Metadata": {
"base": " Describes key/value pairs. ",
"refs": {
"MetadataList$member": null
}
},
"MetadataList": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$CheckoutMetadata": " Information about constraints. ",
"CheckoutBorrowLicenseResponse$CheckoutMetadata": " Information about constraints. ",
"CreateLicenseRequest$LicenseMetadata": " Information about the license. ",
"CreateLicenseVersionRequest$LicenseMetadata": " Information about the license. ",
"GrantedLicense$LicenseMetadata": " Granted license metadata. ",
"License$LicenseMetadata": " License metadata. ",
"LicenseOperationFailure$MetadataList": " Reserved. "
}
},
"NoEntitlementsAllowedException": {

"base": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"refs": {
}
},
"Options": {
"base": " The options you can specify when you create a new version of a grant, such as activation override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"refs": {
"CreateGrantVersionRequest$Options": " The options specified for the grant. ",
"Grant$Options": " The options specified for the grant. "
}
},
"OrganizationConfiguration": {
"base": " Configuration information for Organizations. ",
"refs": {
"GetServiceSettingsResponse$OrganizationConfiguration": " Indicates whether Organizations is integrated with License Manager for cross-account discovery. ",
"UpdateServiceSettingsRequest$OrganizationConfiguration":

" Enables integration with Organizations for cross-account discovery. "
    }
  },
  "PrincipalArnList": {
    "base": null,
    "refs": {
      "CreateGrantRequest$Principals": " The grant principals. You can specify one of the following as an Amazon Resource Name (ARN): <ul> An Amazon Web Services account, which includes only the account specified.   An organizational unit (OU), which includes all accounts in the OU.   An organization, which will include all accounts across your organization. "
    }
  },
  "ProductInformation": {
    "base": " Describes product information for a license configuration. ",
    "refs": {
      "ProductInformationList$member": null
    }
  },
  "ProductInformationFilter": {
    "base": " Describes product information filters. ",
    "refs": {
      "ProductInformationFilterList$member":
null
    }
  },
  "ProductInformationFilterList": {
    "base": null,
    "refs": {
      "ProductInformation$ProductInformationFilterList": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. The following filters and are supported when the resource type is <code>SSM_MANAGED</code>: <ul> <code>Application Name</code> - The name of the application. Logical operator is <code>EQUALS</code>.   <code>Application Publisher</code> - The publisher of the application. Logical operator is <code>EQUALS</code>.   <code>Application Version</code> - The version of the application. Logical operator is <code>EQUALS</code>.   <code>Platform Name</code> - The name of the platform. Logical operator is <code>EQUALS</code>.   <code>Platform Type</code> - The platform type. Logical operator is <code>EQUALS</code>.   <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.   <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.   <code>License Included</code> -

The type of license included. Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>. Possible values are: <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code> | <code>windows-server-datacenter</code>.   The following filters and logical operators are supported when the resource type is <code>RDS</code>: <ul> <code>Engine Edition</code> - The edition of the database engine. Logical operator is <code>EQUALS</code>. Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.   <code>License Pack</code> - The license pack. Logical operator is <code>EQUALS</code>. Possible values are: <code>data guard</code> | <code>diagnostic pack sqlt</code> | <code>tuning pack sqlt</code> | <code>ols</code> | <code>olap</code>. "
    }
  },
  "ProductInformationList": {
    "base": null,
    "refs": {
      "CreateLicenseConfigurationRequest$ProductInformationList":
" Product information. ",
      "GetLicenseConfigurationResponse$ProductInformationList": " Product information. ",
      "LicenseConfiguration$ProductInformationList": " Product information. ",
      "UpdateLicenseConfigurationRequest$ProductInformationList": " New product information. "
    }
  },
  "ProvisionalConfiguration": {
    "base": " Details about a provisional configuration. ",
    "refs": {
      "ConsumptionConfiguration$ProvisionalConfiguration": " Details about a provisional configuration. "
    }
  },
  "RateLimitExceededException": {
    "base": " Too many requests have been submitted. Try again after a brief wait. ",
    "refs": {
    }
  },
  "ReceivedMetadata": {
    "base": " Metadata associated with received licenses and grants. ",
    "refs": {
      "GrantedLicense$ReceivedMetadata": " Granted license received metadata. "
    }
  },
  "ReceivedStatus": {
    "base": null,
    "refs": {
      "ReceivedMetadata$ReceivedStatus": " Received status. "
    }
  },
  "RedirectException": {
    "base": " This is not the correct Region for the resource. Try again. ",
    "refs": {
    }

},
"RejectGrantRequest": {
"base": null,
"refs": {
}
},
"RejectGrantResponse": {
"base": null,
"refs": {
}
},
"RenewType": {
"base": null,
"refs": {
"ConsumptionConfiguration$RenewType": " Renewal frequency. "
}
},
"ReportContext": {
"base": " Details of the license configuration that this generator reports on. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportContext": " Defines the type of license configuration the report generator tracks. ",
"ReportGenerator$ReportContext": " License configuration type for this generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportContext": " The report context. "
}
},
"ReportFrequency": {
"base": " Details about how frequently reports are generated. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"ReportGenerator$ReportFrequency": " Details about how frequently reports are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. "
}
},
"ReportFrequencyType": {
"base": null,
"refs": {
"ReportFrequency$period": " Time period between each report. The period can be daily, weekly, or monthly. "
}
},
"ReportGenerator": {
"base": " Describe the details of a report generator. ",
"refs": {
"GetLicenseManagerReportGeneratorResponse$ReportGenerator":

" A report generator that creates periodic reports about your license configurations. ",
"ReportGeneratorList$member": null
}
},
"ReportGeneratorList": {
"base": null,
"refs": {
"ListLicenseManagerReportGeneratorsResponse$ReportGenerators": " A report generator that creates periodic reports about your license configurations. "
}
},
"ReportGeneratorName": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. "
}
},
"ReportType": {
"base": null,
"refs": {
"ReportTypeList$member": null
}
},
"ReportTypeList": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types an
be generated: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. ",
"ReportGenerator$ReportType": " Type of reports that are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types are supported: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. "
}
},
"ResourceInventory": {
"base": " Details about a resource. ",
"refs": {
"ResourceInventoryList$member": null
}
},
"ResourceInventoryList": {

"base": null,
"refs": {
"ListResourceInventoryResponse$ResourceInventoryList": " Information about the resources. "
}
},
"ResourceLimitExceededException": {
"base": " Your resource limits have been exceeded. ",
"refs": {
}
},
"ResourceNotFoundException": {
"base": " The resource cannot be found. ",
"refs": {
}
},
"ResourceType": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ResourceType": " Resource type of the resource consuming a license. ",
"LicenseConfigurationAssociation$ResourceType": " Type of server resource. ",
"LicenseConfigurationUsage$ResourceType": " Type of resource. ",
"LicenseOperationFailure$ResourceType": " Resource type. ",
"ManagedResourceSummary$ResourceType": " Type of resource associated with a license. ",
"ResourceInventory$ResourceType": " Type of resource. "
}
},
"S3Location": {
"base":
" Details of the S3 bucket that report generator reports are published to. ",
"refs": {
"ReportGenerator$S3Location": " Details of the S3 bucket that report generator reports are published
to. "
}
},
"ServerInternalException": {
"base": " The server experienced an internal error. Try again. ",
"refs": {
}
},
"SignedToken": {
"base": null,
"refs": {
"CheckoutBorrowLicenseResponse$SignedToken": " Signed token. ",
"CheckoutLicenseResponse$SignedToken": " Signed token. "
}
},
"StatusReasonMessage": {
"base": null,

"refs": {
"CreateGrantVersionRequest$StatusReason": " Grant status reason. ",
"DeleteGrantRequest$StatusReason": " The Status reason for the delete request. ",
"Grant$StatusReason": " Grant status reason. ",
"ReceivedMetadata$ReceivedStatusReason": " Received status reason. "
}
},

"String": {
"base": null,
"refs": {
"AcceptGrantResponse$Version": " Grant version. ",
"CheckInLicenseRequest$LicenseConsumptionToken": " License consumption token. ",
"CheckInLicenseRequest$Beneficiary": " License beneficiary. ",
"CheckoutBorrowLicenseRequest$NodeId": " Node ID. ",
"CheckoutBorrowLicenseResponse$LicenseConsumptionToken": " License consumption token. ",
"CheckoutBorrowLicenseResponse$NodeId": " Node ID. ",
"CheckoutLicenseRequest$ProductSKU": " Product SKU. ",
"CheckoutLicenseRequest$KeyFingerprint": " Key fingerprint identifying the license. ",
"CheckoutLicenseRequest$Beneficiary": " License beneficiary. ",
"CheckoutLicenseRequest$NodeId": " Node ID. ",
"CheckoutLicenseResponse$LicenseConsumptionToken": " License consumption token. ",
"CheckoutLicenseResponse$NodeId": " Node ID. ",
"CheckoutLicenseResponse$LicenseArn":
" Amazon Resource Name (ARN) of the checkout license. ",
"CreateGrantRequest$GrantName": " Grant name. ",
"CreateGrantRequest$HomeRegion": " Home Region of the grant. ",
"CreateGrantResponse$Version": " Grant version. ",
"CreateGrantVersionRequest$GrantName": " Grant name. ",
"CreateGrantVersionRequest$SourceVersion": " Current version of the grant. ",
"CreateGrantVersionResponse$Version": " New version of the grant. ",
"CreateLicenseConfigurationRequest$Name": " Name of the license configuration. ",
"CreateLicenseConfigurationRequest$Description": " Description of the license configuration. ",
"CreateLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"CreateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"CreateLicenseManagerReportGeneratorResponse$LicenseManagerReportGeneratorArn":
" The Amazon Resource Name (ARN) of the new report generator. ",
"CreateLicenseRequest$LicenseName": " License name. ",
"CreateLicenseRequest$ProductName": " Product name. ",
"CreateLicenseRequest$ProductSKU": " Product SKU. ",
"CreateLicenseRequest$HomeRegion": " Home Region for the license. ",
"CreateLicenseRequest$Beneficiary": " License beneficiary. ",
"CreateLicenseResponse$Version": " License version. ",
"CreateLicenseVersionRequest$LicenseName": " License name. ",
"CreateLicenseVersionRequest$ProductName": " Product name. ",
"CreateLicenseVersionRequest$HomeRegion": " Home Region of the license. ",
"CreateLicenseVersionRequest$SourceVersion": " Current version of the license. ",

"CreateLicenseVersionResponse$Version": " New version of the license. ",
"CreateTokenResponse$TokenId":
" Token ID. ",
"DeleteGrantRequest$Version": " Current version of the grant. ",
"DeleteGrantResponse$Version": " Grant version. ",
"DeleteLicenseConfigurationRequest$LicenseConfigurationArn": " ID of the license configuration. ",
"DeleteLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"DeleteLicenseRequest$SourceVersion": " Current version of the license. ",
"DeleteTokenRequest$TokenId": " Token ID. ",
"Entitlement$Name": " Entitlement name. ",
"Entitlement$Value": " Entitlement resource. Use only if the unit is None. ",
"EntitlementData$Name": " Entitlement data name. ",
"EntitlementData$Value": " Entitlement data value. ",
"EntitlementUsage$Name": " Entitlement usage name. ",
"EntitlementUsage$ConsumedValue":
" Resource usage consumed. ",
"EntitlementUsage$MaxCount": " Maximum entitlement usage count. ",
"ExtendLicenseConsumptionRequest$LicenseConsumptionToken": " License consumption token. ",
"ExtendLicenseConsumptionResponse$LicenseConsumptionToken": " License consumption token. ",
"FailedDependencyException$ErrorCode": null,
"GetGrantRequest$Version": " Grant version. ",
"GetLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationId": " Unique ID for the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"GetLicenseConfigurationResponse$Name": " Name of the license configuration. ",
"GetLicenseConfigurationResponse$Description": " Description of the license
configuration. ",
"GetLicenseConfigurationResponse$Status": " License configuration status. ",
"GetLicenseConfigurationResponse$OwnerAccountId": " Account ID of the owner of the license configuration. ",
"GetLicenseConversionTaskResponse$ResourceArn": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. ",
"GetLicenseConversionTaskResponse$StatusMessage": " The status message for the conversion task. ",
"GetLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"GetLicenseRequest$Version": " License version. ",
"GetServiceSettingsResponse$S3BucketArn": " Regional S3 bucket path for storing reports, license trail event data, discovery data, and so on. ",
"GetServiceSettingsResponse$SnsTopicArn": " SNS topic configured to receive notifications from License Manager. ",
"GetServiceSettingsResponse$LicenseManagerResourceShareArn": " Amazon Resource Name (ARN) of the resource share. The License Manager management account provides member accounts with access to this share. ",
"Grant$GrantName": " Grant name. ",

"Grant$HomeRegion": " Home Region of the grant. ",
"Grant$Version": " Grant version. ",
"GrantedLicense$LicenseName": " License name. ",
"GrantedLicense$ProductName": " Product name. ",
"GrantedLicense$ProductSKU": " Product SKU. ",
"GrantedLicense$HomeRegion": " Home Region of the granted license. ",
"GrantedLicense$Beneficiary": " Granted license beneficiary. ",
"GrantedLicense$Version": " Version of the granted license. ",
"InventoryFilter$Name": " Name of the filter. ",
"InventoryFilter$Value": " Value of the filter. ",
"Issuer$Name": " Issuer name. ",
"Issuer$SignKey":
" Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$Name": " Issuer name. ",
"IssuerDetails$SignKey": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$KeyFingerprint": " Issuer key fingerprint. ",
"License$LicenseName": " License name. ",
"License$ProductName": " Product name. ",
"License$ProductSKU": " Product SKU. ",
"License$HomeRegion": " Home Region of the license. ",
"License$Beneficiary": " License beneficiary. ",
"License$Version": " License version. ",
"LicenseConfiguration$LicenseConfigurationId": " Unique ID of the license configuration. ",
"LicenseConfiguration$LicenseConfigurationArn":
" Amazon Resource Name (ARN) of the license configuration. ",
"LicenseConfiguration$Name": " Name of the license configuration. ",
"LicenseConfiguration$Description": " Description of the license configuration. ",
"LicenseConfiguration$Status": " Status of the license configuration. ",
"LicenseConfiguration$OwnerAccountId": " Account ID of the license configuration's owner. ",
"LicenseConfigurationAssociation$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationAssociation$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource consuming licenses. ",
"LicenseConfigurationAssociation$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"LicenseConfigurationUsage$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationUsage$ResourceStatus":
" Status of the resource. ",
"LicenseConfigurationUsage$ResourceOwnerId": " ID of the account that owns the resource. ",
"LicenseConversionTask$ResourceArn": " The Amazon Resource Name (ARN) of the resource associated with the license type conversion task. ",
"LicenseConversionTask$StatusMessage": " The status message for the conversion task. ",
"LicenseOperationFailure$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseOperationFailure$ErrorMessage": " Error message. ",
"LicenseOperationFailure$OperationName": " Name of the operation. ",
"LicenseOperationFailure$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource. ",

"LicenseOperationFailure$OperationRequestedBy": " The requester is \"License Manager Automated Discovery\". ",
"LicenseSpecification$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"LicenseSpecification$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"ListAssociationsForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of a license configuration. ",
"ListAssociationsForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListAssociationsForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListFailuresForLicenseConfigurationOperationsRequest$LicenseConfigurationArn": " Amazon Resource Name of the license configuration. ",
"ListFailuresForLicenseConfigurationOperationsRequest$NextToken": " Token for the next set of results. ",

"ListFailuresForLicenseConfigurationOperationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksResponse$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"ListLicenseSpecificationsForResourceRequest$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceResponse$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsResponse$NextToken": " Token for the next set of results. ",
"ListLicensesRequest$NextToken": " Token for the next set of results. ",
"ListLicensesResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesResponse$NextToken": " Token for the next set of results. ",
"ListResourceInventoryRequest$NextToken": " Token for the next set of results. ",
"ListResourceInventoryResponse$NextToken": " Token for the next set of results. ",
"ListTagsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListTokensRequest$NextToken": " Token for the next set of results. ",
"ListTokensResponse$NextToken": " Token for the next set of results. ",

"ListUsageForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListUsageForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListUsageForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"MaxSize3StringList$member": null,
"Metadata$Name": " The key name. ",
"Metadata$Value": " The value. ",
"ProductInformation$ResourceType": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"ProductInformationFilter$ProductInformationFilterName": " Filter name. ",
"ProductInformationFilter$ProductInformationFilterComparator": " Logical operator. ",
"RejectGrantResponse$Version": " Grant version. ",
"ReportGenerator$ReportGeneratorName": " Name of the report generator. ",
"ReportGenerator$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"ReportGenerator$LastRunStatus": " Status of the last report generation attempt. ",
"ReportGenerator$LastRunFailureReason": " Failure message for the last report generation attempt. ",
"ReportGenerator$LastReportGenerationTime": " Time the last report was generated at. ",
"ReportGenerator$ReportCreatorAccount": " The Amazon Web Services account ID used to create the report generator. ",
"ReportGenerator$Description": " Description of the report generator. ",
"ReportGenerator$CreateTime": " Time the report was created. ",
"ResourceInventory$ResourceId": " ID of the resource. ",
"ResourceInventory$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"ResourceInventory$Platform": " Platform of the resource. ",
"ResourceInventory$PlatformVersion": " Platform version of the resource in the inventory. ",
"ResourceInventory$ResourceOwningAccountId": " ID of the account that owns the resource. ",
"S3Location$bucket": " Name of the S3 bucket reports are published to. ",

"S3Location$keyPrefix": " Prefix of the S3 bucket reports are published to. ",
"StringList$member": null,
"Tag$Key": " Tag key. ",
"Tag$Value": " Tag value. ",
"TagKeyList$member": null,
"TagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"TokenData$TokenId": " Token ID. ",
"TokenData$TokenType": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. ",
"TokenData$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"TokenData$Status": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. ",
"UntagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$Name":

" New name of the license configuration. ",
"UpdateLicenseConfigurationRequest$Description": " New description of the license configuration. ",
"UpdateLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to update. ",
"UpdateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"UpdateLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"UpdateServiceSettingsRequest$S3BucketArn": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. ",
"UpdateServiceSettingsRequest$SnsTopicArn": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"StringList": {
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$LicenseRules":
" License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules vary by dimension, as follows.   <code>Cores</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumCores</code> | <code>minimumCores</code>   <code>Instances</code> dimension: <code>allowedTenancy</code> | <code>maximumCores</code> | <code>minimumCores</code> | <code>maximumSockets</code> | <code>minimumSockets</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   <code>Sockets</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumSockets</code> | <code>minimumSockets</code>   <code>vCPUs</code> dimension: <code>allowedTenancy</code> | <code>honorVcpuOptimization</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are <code>True</code> and <code>False</code>. ",
"GetLicenseConfigurationResponse$LicenseRules": " License rules. ",
"LicenseConfiguration$LicenseRules": " License rules. ",
"ListLicenseConfigurationsRequest$LicenseConfigurationArns": " Amazon Resource Names (ARN) of the license configurations. ",
"ListTokensRequest$TokenIds": " Token IDs. ",
"ProductInformationFilter$ProductInformationFilterValue": " Filter value. ",
"UpdateLicenseConfigurationRequest$LicenseRules": " New license rule. The only rule that you can add after you create a license configuration is licenseAffinityToHost. "
}
},
"Tag": {
"base": " Details about a tag for a license configuration. ",
"refs": {
"TagList$member": null
}
},

"TagKeyList": {
  "base": null,
  "refs": {
    "UntagResourceRequest$TagKeys": " Keys identifying the tags to remove. "
  }
},
"TagList": {
  "base": null,
  "refs": {
    "CreateLicenseConfigurationRequest$Tags": " Tags to add to the license configuration. ",
    "CreateLicenseManagerReportGeneratorRequest$Tags": " Tags to add to the report generator. ",
    "GetLicenseConfigurationResponse$Tags": " Tags for the license configuration. ",
    "ListTagsForResourceResponse$Tags": " Information about the tags. ",
    "ReportGenerator$Tags": " Tags associated with the report generator. ",
    "TagResourceRequest$Tags": " One or more tags. "
  }
},
"TagResourceRequest": {
  "base": null,
  "refs": {
  }
},
"TagResourceResponse": {
  "base": null,
  "refs": {

  }
},
"TokenData": {
  "base": " Describes a token. ",
  "refs": {
    "TokenList$member": null
  }
},
"TokenList": {
  "base": null,
  "refs": {
    "ListTokensResponse$Tokens": " Received token details. "
  }
},
"TokenString": {
  "base": null,
  "refs": {
    "CreateTokenResponse$Token": " Refresh token, encoded as a JWT token. ",
    "GetAccessTokenRequest$Token": " Refresh token, encoded as a JWT token. ",
    "GetAccessTokenResponse$AccessToken": " Temporary access token. "
  }
},

"TokenType": {
"base": null,
"refs": {
"CreateTokenResponse$TokenType": " Token type. "
}
},
"UnsupportedDigitalSignatureMethodException": {
"base": " The digital signature method is unsupported. Try your request again. ",
"refs": {
}
},
"UntagResourceRequest": {
"base": null,
"refs": {
}
},
"UntagResourceResponse":
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"base": null,
"refs": {
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},
"UpdateLicenseConfigurationRequest": {
"base": null,
"refs": {
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"UpdateLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"UpdateLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
}
},
"UpdateLicenseManagerReportGeneratorResponse": {
"base": null,
"refs": {
}
},
"UpdateLicenseSpecificationsForResourceRequest": {
"base": null,
"refs": {
}
},
"UpdateLicenseSpecificationsForResourceResponse": {

"base": null,
"refs": {
}
},
"UpdateServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"UsageOperation": {
"base": null,
"refs": {
"LicenseConversionContext$UsageOperation": " The Usage operation value
that corresponds to the license type you are converting your resource from. For more information about which
platforms correspond to which usage operation values see <a
href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample
data: usage operation by platform "
}
},
"ValidationException": {
"base": " The provided input is not valid. Try your request again. ",
"refs": {
}
}
}
}
{
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "af-south-1"
}
},
{
"documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",

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      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-east-1"
      }
    },
    {
      "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",

"expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-northeast-1"
      }
    },
    {
      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "ap-northeast-2"
      }
    },
    {
      "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-3.amazonaws.com"
         }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
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"Region": "ap-northeast-3"
}
},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-south-1"
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack":
false,
"Region": "ap-southeast-1"
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-southeast-2"
}
},
{
"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"

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            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "ap-southeast-3"
        }
    },
    {
        "documentation":
"For region ca-central-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "ca-central-1"
        }
    },
    {
        "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-central-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-central-1"
        }
    },
    {
        "documentation": "For region eu-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint":
{
                "url": "https://license-manager.eu-north-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-north-1"
        }
```

```
    },
    {
      "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "eu-south-1"
      }
    },
    {
      "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-1.amazonaws.com"
        }
      },
      "params":
{
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "eu-west-1"
      }
    },
    {
      "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-2.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "eu-west-2"
      }
    },
    {
      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
```

```
        "params": {
          "UseFIPS": false,
          "UseDualStack": false,
          "Region": "eu-west-3"
        }

    },
      {
        "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.me-south-1.amazonaws.com"
          }
        },
        "params": {
          "UseFIPS": false,
          "UseDualStack": false,
          "Region": "me-south-1"
        }
      },
      {
        "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.sa-east-1.amazonaws.com"
          }
        },
        "params": {
          "UseFIPS": false,
          "UseDualStack": false,
          "Region": "sa-east-1"
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {

        "endpoint": {
            "url": "https://license-manager.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "UseFIPS": false,
          "UseDualStack": false,
          "Region": "us-east-1"
        }
      },
      {
```

"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "us-east-1"
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}
},

"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "us-east-2"
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "us-east-2"
}
},
{
"documentation": "For region us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Region": "us-west-1"

}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "us-west-1"
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "us-west-2"
}
},
{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
},
"params": {
"UseFIPS": true,
"UseDualStack": false,
"Region": "us-west-2"
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {

```
        "endpoint": {
            "url": "https://license-manager-fips.us-east-1.api.aws"
        }
    },
    "params": {
        "UseFIPS": true,
        "UseDualStack": true,
        "Region": "us-east-1"
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-east-1.api.aws"
        }
    },

 "params": {
        "UseFIPS": false,
        "UseDualStack": true,
        "Region": "us-east-1"
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "cn-north-1"
    }
},
{
    "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "cn-northwest-1"
```

```
        }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": true,
        "Region": "cn-north-1"
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "cn-north-1"
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled
and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": true,
        "Region": "cn-north-1"
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
```

```
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "us-gov-east-1"
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
       }
    },
    "params": {
      "UseFIPS": true,
      "UseDualStack": false,
      "Region": "us-gov-east-1"
    }
  },
  {
    "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-gov-west-1.amazonaws.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Region": "us-gov-west-1"
    }
  },
  {
    "documentation": "For region us-gov-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
      }
    },
    "params": {

      "UseFIPS": true,
      "UseDualStack": false,
      "Region": "us-gov-west-1"
    }
  },
  {
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      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": true,
        "Region": "us-gov-east-1"
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": true,
        "Region": "us-gov-east-1"
      }

  },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-iso-east-1"
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "UseFIPS": true,
        "UseDualStack": true,
        "Region": "us-iso-east-1"
```

```
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {

     "endpoint": {
            "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
        },
        "params": {
            "UseFIPS": true,
            "UseDualStack": false,
            "Region": "us-iso-east-1"
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": true,
            "Region": "us-iso-east-1"
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
        },
        "params":
{
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "us-isob-east-1"
        }
    },
    {
        "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "UseFIPS": true,
```

```
        "UseDualStack": true,
        "Region": "us-isob-east-1"
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
    "params": {
        "UseFIPS": true,
        "UseDualStack": false,
        "Region": "us-isob-east-1"
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": true,
        "Region": "us-isob-east-1"
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Region": "us-east-1",
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
```

```
        },
        "params": {
          "UseFIPS": false,
          "UseDualStack": false,
          "Endpoint": "https://example.com"
        }
      },
      {
        "documentation": "For custom endpoint with fips enabled and dualstack disabled",
        "expect": {
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
        },
        "params": {
          "UseFIPS": true,
          "UseDualStack": false,
          "Region": "us-east-1",
          "Endpoint": "https://example.com"
        }
      },
      {
        "documentation": "For custom endpoint with fips disabled and dualstack enabled",
        "expect": {
          "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
        },
         "params": {
          "UseFIPS": false,
          "UseDualStack": true,
          "Region": "us-east-1",
          "Endpoint": "https://example.com"
        }
      },
      {
        "documentation": "Missing region",
        "expect": {
          "error": "Invalid Configuration: Missing Region"
        }
      }
    ],
    "version": "1.0"
  }
  {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The AWS region used to dispatch the request.",
        "type": "String"
```

```
      },
      "UseDualStack": {
         "builtIn": "AWS::UseDualStack",
         "required": true,
         "default": false,
         "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
         "type": "Boolean"
      },
      "UseFIPS": {
         "builtIn": "AWS::UseFIPS",
         "required": true,
         "default": false,
         "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
         "type": "Boolean"
      },
      "Endpoint": {

    "builtIn": "SDK::Endpoint",
         "required": false,
         "documentation": "Override the endpoint used to send this request",
         "type": "String"
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                     "ref": "Endpoint"
                  }
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         ],
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                     "fn": "booleanEquals",
                     "argv": [
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                           "ref": "UseFIPS"
                        },
                        true
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```

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                        ]
                    }
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                "type": "error"
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  "conditions": [],
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}
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"conditions": [],
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        },
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                "supportsFIPS"
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```

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              {
                "conditions": [
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                    "argv": [
```

```
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                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }
                ]
            }
        ],
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                "conditions": [],
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        {
```

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"type": "error"
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"result_key": "Instances"
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"ListRegisteredSubscriptionProviders": {
"input_token": "NextToken",
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"result_key": "RegisteredSubscriptionProviders"

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     "result_key": "InstanceSummaries"
   },
   "ListProductSubscriptions": {
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     "limit_key": "MaxResults",
     "result_key": "ProductUserSummaries"
   },
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     "output_token": "NextToken",
     "limit_key": "MaxResults",
     "result_key": "InstanceUserSummaries"
   }
 }
}
```


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  "endpointPrefix":"license-manager-user-subscriptions",
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  "protocol":"rest-json",
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  "serviceId":"License Manager User Subscriptions",
  "signatureVersion":"v4",
  "signingName":"license-manager-user-subscriptions",
  "uid":"license-manager-user-subscriptions-2018-05-10"
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    {"shape":"InternalServerException"},
    {"shape":"ResourceNotFoundException"},
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    {"shape":"AccessDeniedException"}
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{"shape":"AccessDeniedException"}
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      "InstanceId",
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      "InstanceId":{"shape":"String"},
      "Username":{"shape":"String"}
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"Product":{"shape":"String"}
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"Username":{"shape":"String"}
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"Value":{"shape":"String"}

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    "Settings":{"shape":"Settings"},
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    "Status":{"shape":"String"},
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"Product":{"shape":"String"}
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"IdentityProvider":{"shape":"IdentityProvider"},
"Product":{"shape":"String"},
"Status":{"shape":"String"},
"StatusMessage":{"shape":"String"},
"SubscriptionEndDate":{"shape":"String"},
"SubscriptionStartDate":{"shape":"String"},
"Username":{"shape":"String"}
}
},
"ProductUserSummaryList":{
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"member":{"shape":"ProductUserSummary"}
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"Product"
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"Product":{"shape":"String"},
"Settings":{"shape":"Settings"}
}
},

"RegisterIdentityProviderResponse":{
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  "required":["IdentityProviderSummary"],
  "members":{
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  }
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"ResourceNotFoundException":{
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  "members":{
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  "error":{
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    "senderFault":true
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  "exception":true
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"SecurityGroup":{
  "type":"string",
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    "Subnets"
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     "Subnets":{"shape":"SettingsSubnetsList"}
  }
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"Username":{"shape":"String"}
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}
},
"StopProductSubscriptionRequest":{
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"Product",
"Username"
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"members":{
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"IdentityProvider":{"shape":"IdentityProvider"},
"Product":{"shape":"String"},
"Username":{"shape":"String"}
}
},
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"members":{
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"member":{"shape":"String"}
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"Product",
"UpdateSettings"
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"Product":{"shape":"String"},
"UpdateSettings":{"shape":"UpdateSettings"}
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"RemoveSubnets":{"shape":"Subnets"},
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}
}

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"signatureVersion":"v4",
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      {"shape":"ValidationException"}
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  }
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    "SubscriptionProviderStatus":{"shape":"SubscriptionProviderStatus"},
    "SubscriptionProviderStatusMessage":{"shape":"String"}
  }
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"GetServiceSettingsRequest":{
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"GetServiceSettingsResponse":{
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    "Status":{"shape":"Status"},
    "StatusMessage":{"shape":"StringMap"}
  }
},
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    "InstanceType":{"shape":"String"},
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    "OsVersion":{"shape":"String"},
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    "Region":{"shape":"String"},
    "RegisteredWithSubscriptionProvider":{"shape":"String"},
    "Status":{"shape":"String"},
    "SubscriptionName":{"shape":"String"},
    "SubscriptionProviderCreateTime":{"shape":"String"},
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"LinuxSubscriptionsDiscoverySettings":{
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"SubscriptionProviderSource"
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"RegisteredSubscriptionProviderList":{
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"ResourceNotFoundException":{
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"members":{
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"exception":true

```
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    "Type":{"shape":"String"}
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```

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    "tags":{"shape":"Tags"}
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"type": "String"
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"required": true,
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"type": "Boolean"
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"UseFIPS": {
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"required": true,
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"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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```

```
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                                }
                            ]
                        },
```

```
                    {
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                        "argv": [

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                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {

                        "conditions": [],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ]

            }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ]
    },
    {
```

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                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true

                        ]
                    }
                ],
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                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"

},
                                            "supportsFIPS"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "type": "tree",
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url":
"https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
```

```
                    }
                ]
            }
        ]
    },
    {
        "conditions": [],
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        "type": "error"
    }
]

},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
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                    "argv":
[
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                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
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            ],
            "type": "tree",
            "rules": [
```

```
{
                "conditions": [],
                "type": "tree",
                "rules": [
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                    "conditions": [],
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                      "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ]

            }
              ]
            },
            {
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              "type": "error"
            }
          ]
        },
        {
          "conditions": [],
          "type": "tree",
          "rules": [
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              "conditions": [],
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                "headers": {}
              },
              "type": "endpoint"
            }
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        }
      ]
    }
  ]
},
{
  "conditions": [],
```

```
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            "type": "error"
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        ]
      }
    ]
  }
  {
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        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
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        "expect": {
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          }
        },
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          "UseDualStack": false
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          "UseDualStack": true
        }
```

```
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      "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
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  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
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  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
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  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
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{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
  "expect": {
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    }
  },
  "params": {
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    "UseDualStack": false
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     }
  },
  "params": {
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        }
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        "UseDualStack": true
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```

```
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    },
    "params": {
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        "UseDualStack": false
    }
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        "UseFIPS": true,
        "UseDualStack": true
    }
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    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
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        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
```

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      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
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      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
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      }
    },
    "params": {
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      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
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      "UseDualStack": true
    }
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      }
    },
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      "UseDualStack": false
    }
  },
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}
},
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}
},
"params": {
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"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
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"params": {
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"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
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"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"

```
        }
      },
      {
        "documentation": "For custom endpoint with fips enabled and dualstack disabled",
        "expect":
{
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false,
          "Endpoint": "https://example.com"
        }
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        "expect": {
          "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true,
          "Endpoint": "https://example.com"
        }
      },
      {
        "documentation": "Missing region",
        "expect": {
          "error": "Invalid Configuration: Missing Region"
        }
      }
  ],
  "version": "1.0"
}
```


1.4216 libcap 1:2.44-1ubuntu0.22.04.2

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1.4222 rekor 1.3.10

1.4222.1 Available under license :

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Pull Request Process

1. Create an [issue](https://github.com/sigstore/rekor/issues)
  outlining the fix or feature.
2. Fork the rekor repository to your own github account and clone it locally.
3. Hack on your changes.
4. Update the README.md with details of changes to any interface, this includes new environment
  variables, exposed ports, useful file locations, CLI parameters and
  new or changed configuration values.
5. Correctly format your commit message see [Commit Messages](#Commit Message Guidelines)
  below.
6. Ensure that CI passes, if it fails, fix the failures.
7. Every pull request requires a review from the [core rekor
team](https://github.com/orgs/github.com/sigstore/teams/core-team)
  before merging.
8. If your pull request consists of more than one commit, please squash your
  commits as described in
 [Squash Commits](#Squash Commits)

Commit Message Guidelines

We follow the commit formatting recommendations found on [Chris Beams' How to Write a Git Commit Message
article]((https://chris.beams.io/posts/git-commit/).

Well formed commit messages not only help reviewers understand the nature of
the Pull Request, but also assists the release process where commit messages
are used to generate release notes.

A good example of a commit message would be as follows:

```
Summarize changes in around 50 characters or less

More detailed explanatory text, if necessary. Wrap it to about 72
```

characters or so. In some contexts, the first line is treated as the
subject of the commit and the rest of the text as the body. The
blank line separating the summary from the body is critical (unless
you omit the body entirely); various tools like `log`, `shortlog`
and `rebase` can get confused if you run the two together.

Explain the problem that this commit is solving. Focus on why you
are making this
 change as opposed to how (the code explains that).
Are there side effects or other unintuitive consequences of this
change? Here's the place to explain them.

Further paragraphs come after blank lines.

- Bullet points are okay, too

- Typically a hyphen or asterisk is used for the bullet, preceded
  by a single space, with blank lines in between, but conventions
  vary here

If you use an issue tracker, put references to them at the bottom,
like this:

Resolves: #123
See also: #456, #789
```

Note the `Resolves #123` tag, this references the issue raised and allows us to
ensure issues are associated and closed when a pull request is merged.

Please refer to [the github help page on message types](https://help.github.com/articles/closing-issues-using-keywords/)
for a complete list of issue references.

## Squash Commits

Should your pull request consist of more than one commit (perhaps due to
a change being requested during the review cycle), please perform a git squash
once a reviewer
 has approved your pull request.

A squash can be performed as follows. Let's say you have the following commits:

```
initial commit
second commit
final commit
```

Run the command below with the number set to the total commits you wish to
```

squash (in our case 3 commits):

```
git rebase -i HEAD~3
```

You default text editor will then open up and you will see the following::

```
pick eb36612 initial commit
pick 9ac8968 second commit
pick a760569 final commit

# Rebase eb1429f..a760569 onto eb1429f (3 commands)
```

We want to rebase on top of our first commit, so we change the other two commits
to `squash`:

```
pick eb36612 initial commit
squash 9ac8968 second commit
squash a760569 final commit
```

After this, should you wish to update your commit message to better summarise
all of your pull request, run:

```
git commit --amend
```

You will then need to force push (assuming your initial commit(s) were posted
to github):

```
git push origin your-branch --force
```

Alternatively,
a core member can squash your commits within Github.

DCO Signoff

Make sure to sign the [Developer Certificate of
Origin](https://git-scm.com/docs/git-commit#Documentation/git-commit.txt---signoff).

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre
quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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M. Matsumoto and T. Nishimura,
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equidistributed
uniform pseudorandom number generator"
ACM Transactions on Modeling and
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1.4227 x-sync 0.14.0

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1.4228 golang 1.24.3

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```
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package copyright

import (
 "bytes"
 "internal/testenv"
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
   return filepath.SkipDir
  }
  switch filepath.Ext(d.Name()) {
  default:
   return nil
  case ".s", ".go":
   // check
  }
```

```
  f, err := os.Open(path)
  if err != nil {
   t.Error(err)
   return nil
  }
  defer f.Close()
  n, err := f.Read(buf)
  if err != nil && err != io.EOF {
   t.Error(err)
   return nil
  }
  b := buf[:n]
  if bytes.Contains(b, copyright) {
   return nil
  }
  for _, ok := range permitted {
   if bytes.HasPrefix(b, ok) {
    return nil
   }
  }
  t.Errorf("%s: missing copyright notice", path)
  return nil
 })
}
```

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```
Mail Command   Description
------------------------- -------------------------------------------
t [message list]  type message(s).
more [message list]  read message(s), through the $PAGER
n    goto and type next message.
e [message list]  edit message(s).
f [message list]  give head lines of messages.
d [message list]  delete message(s).
s [message list] <file>  append message(s) to file.
u [message list]  undelete message(s).
R [message list]  reply to message sender(s).
r [message list]  reply to message sender(s) and all recipients.
p [message list]  print message list.
```

pre [message list] make messages go back to /var/mail.
m <recipient list> mail to specific recipient(s).
q quit, saving unresolved messages in mbox.
x quit, do not remove system mailbox.
h print out active message headers.
! shell escape.
| [msglist] command pipe message(s) to shell command.
pi [msglist] command pipe message(s) to shell command.
cd [directory] chdir to directory or home if none given
fi
 <file> switch to file (%=system inbox, %user=user's
  system inbox). + searches in your folder
  directory for the file.
set variable[=value] set Mail variable.

A [message list] consists of integers, ranges of same, :status, /subject, or
user names separated by spaces. If omitted, Mail uses the current message.
The pipe command doesn't accept user names or subject message list, since
that might conflict with the command string.

A <recipient list> consists of recipient addresses or aliases separated by
spaces. Aliases are defined in .mailrc in your home directory.

<file> is a full or relative pathname, +folder, % (system inbox), %user
(specified user's system inbox), # (previous file), & (mbox file), or an
expression understood by ${SHELL:-/bin/sh} -c 'echo ...'.
.\" $OpenBSD: mail3.nr,v 1.4 2004/06/04 00:04:54 jmc Exp $
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.\" @(#)mail3.nr 8.1 (Berkeley) 6/8/93
.\"
.sh 1 "Maintaining folders"
.pp
.i Mail
includes a simple facility for maintaining groups of messages together
in folders. This section describes this facility.
.pp
To use the folder facility, you must tell
.i Mail
where you wish to keep your folders. Each folder of messages
 will
be a single file. For convenience, all of your folders are kept in
a single directory of your choosing. To tell
.i Mail
where your folder directory is, put a line of the form
.(l
set folder=letters
.)l
in your
.i .mailrc
file. If, as in the example above, your folder directory does not
begin with a `/,'
.i Mail
will assume that your folder directory is to be found starting from
your home directory. Thus, if your home directory is
.b /home/person
the above example told
.i Mail
to find your folder directory in
.b /home/person/letters .
.pp
Anywhere a file name is expected, you can use a folder name, preceded
with `+.' For example, to put a message into a folder with the
.b save
command, you can use:
.(l
save +classwork
.)l
to save the current message in the

.i classwork
folder. If the
.i classwork
folder does not yet exist, it will be created. Note that messages
which are saved with the
.b save
command are automatically removed from your system mailbox.
.pp
In order to make a
 copy of a message in a folder without causing
that message to be removed from your system mailbox, use the
.b copy
command, which is identical in all other respects to the
.b save
command. For example,
.(l
copy +classwork
.)l
copies the current message into the
.i classwork
folder and leaves a copy in your system mailbox.
.pp
The
.b folder
command
can be used to direct
.i Mail
to the contents of a different folder.
For example,
.(l
folder +classwork
.)l
directs
.i Mail
to read the contents of the
.i classwork
folder. All of the commands that you can use on your system
mailbox are also applicable to folders, including
.b type ,
.b delete ,
and
.b reply .
To inquire which folder you are currently editing, use simply:
.(l
folder
.)l
.pp
To list your current set of folders, use the

.b folders
command.
.pp
To start
.i Mail
reading one of your folders, you can use the
.b \-f
option described in section 2. For example:
.(l
% Mail \-f +classwork
.)l
will cause
.i Mail
to read your
.i classwork
folder
 without looking at your system mailbox.
.\" $OpenBSD: mail7.nr,v 1.3 2003/06/03 02:56:11 millert Exp $
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.\"
.\" @(#)mail7.nr 8.1 (Berkeley) 6/8/93

.\"
.sh 1 "Format of messages"
.pp
This section describes the format of messages.
Messages begin with a
.i from
line, which consists of the word
.q From
followed by a user name, followed by anything, followed by
a date in the format returned by the
.i ctime
library routine described
 in section 3 of the Unix Programmer's
Manual. A possible
.i ctime
format date is:
.(l
Tue Dec 1 10:58:23 1981
.)l
The
.i ctime
date may be optionally followed by a single space and a
time zone indication, which
should be three capital letters, such as PDT.
.pp
Following the
.i from
line are zero or more
.i "header field"
lines.
Each header field line is of the form:
.(l
name: information
.)l
.i Name
can be anything, but only certain header fields are recognized as
having any meaning. The recognized header fields are:
.i article-id ,
.i bcc ,
.i cc ,
.i from ,
.i reply-to ,
.i sender ,
.i subject ,
and
.i to .
Other header fields are also significant to other systems; see,
for example, the current Arpanet message standard for much more

information on this topic.
A header field can be continued onto following lines by making the
first character on the following line a space or tab character.
.pp
If any headers are present, they must be followed by a blank line.
The part that follows
is called the
.i body
of the message, and must be ASCII text, not containing null characters.
Each line in the message body must be no longer than 512 characters and
terminated with an ASCII newline character.
If binary data must be passed through the mail system, it is suggested
that this data be encoded in a system which encodes six bits into
a printable character (i.e.: uuencode).
For example, one could use the upper and lower case letters, the digits,
and the characters comma and period to make up the 64 characters.
Then, one can send a 16-bit binary number
as three characters. These characters should be packed into lines,
preferably lines about 70 characters long as long lines are transmitted
more efficiently.
.pp
The message delivery system always adds a blank line to the end of
each message. This blank line must not be deleted.
.pp
The UUCP message delivery system sometimes adds a blank line to
the end of a message each time it is forwarded through a machine.
.pp
It should
be noted that some network transport protocols enforce
limits to the lengths of messages.

The following ~ escapes are defined:
~b name ... Add names to "blind" Cc: list.
~c name ... Add names to Cc: field.
~d Read dead.letter into message.
~e Invoke text editor on partial message.
~F messages Same as ~f, but includes all headers.
~f messages Read in messages.
~h Edit the header fields.
~M messages Same as ~m, but includes all headers.
~m messages Read in messages, right shifted by a tab.
~p Print (show) the message buffer.
~q Abort message; optionally save copy to ~/dead.letter.
~r file | ~< file Read a file into the message buffer.
~s string Set Subject: field to string.
~t name ... Add names to To: field.
~v Invoke display editor on message.
~w filename Write message to file.

~x Abort message; no copy is saved.
~? Print a brief summary of tilde escapes.
~!command Execute shell command.
~|command Pipe message through command.
~:command | ~_command Execute a Mail command.
~~string Quote
 a single tilde.
~. Simulate end of file on input.

.\" $OpenBSD: mail1.nr,v 1.4 2004/06/04 00:04:54 jmc Exp $
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.\"
.\" @(#)mail1.nr 8.1 (Berkeley) 6/8/93
.\"
.sh 1 Introduction
.pp
.i Mail
provides a simple and friendly environment for sending and receiving mail.
It divides incoming mail into
its constituent messages and allows the user to deal with them
in any order. In addition, it provides a set of

.i ed -\c
like commands for manipulating
 messages and sending mail.
.i Mail
offers the user simple editing capabilities to ease the composition
of outgoing messages, as well as providing the ability to define and send
to names which address groups of users. Finally,
.i Mail
is able to send and receive messages across such networks as the
ARPANET, UUCP, and Berkeley network.
.pp
This document describes how to use the
.i Mail
program to send and receive messages. The reader is not assumed to
be familiar with other message handling systems, but should be
familiar with the \s-2UNIX\s0**
.(f
** \s-1UNIX\s0 is a trademark of Bell Laboratories.
.)f
shell, the text editor, and some of the common \s-2UNIX\s0 commands.
.q "The \s-2UNIX\s0 Programmer's Manual,"
.q "An Introduction to Csh,"
and
.q "Text Editing with Ex and Vi"
can be consulted for more information on these topics.
.pp
A word of explanation is in order here concerning the name
.i Mail :
the original UNIX mail program was known as
.i /bin/mail .
The BSD mail
 program was called
.i Mail
to differentiate it from the older mail program.
.i /bin/mail
is not included in OpenBSD so there is no ambiguity and the BSD
mail program is installed as
.i /usr/bin/mail ;
.i /usr/bin/Mail
is simply a link for backwards compatibility.
To further confuse the issue, a second link was retained for
compatibility with SystemV systems,
.i mailx .
In this document, we use the original name, `Mail',
to refer to any of these.
.pp
Here is how messages are handled:
the mail system accepts incoming

.i messages
for you from other people
and collects them in a file, called your
.i "system mailbox" .
When you log in, the system notifies you if there are any messages
waiting in your system mailbox. If you are a
.i csh
user, you will be notified when new mail arrives if you inform
the shell of the location of your mailbox. On OpenBSD,
your system mailbox is located in the directory /var/mail
in a file with your login name. If your login name is
.q sam,
then you can make
.i
 csh
notify you of new mail by including the following line in your .cshrc
file:
.(l
set mail=/var/mail/sam
.)l
When you read your mail using
.i Mail ,
it reads your system mailbox and separates that file into the
individual messages that have been sent to you. You can then
read, reply to, delete, or save these messages.
Each message is marked with its author and the date they sent it.
.\" $OpenBSD: mail2.nr,v 1.5 2004/06/04 00:04:54 jmc Exp $
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.\"
.\" @(#)mail2.nr 8.2 (Berkeley) 5/16/94
.\"
.sh 1 "Common usage"
.pp
The
.i Mail
command has two distinct usages, according to whether one
wants to send or receive mail. Sending mail is simple: to send a
message to a user whose login name is, say,
(lqroot,(rq
use the shell
command:
.(l
% Mail root
.)l
then type your
 message. When you reach the end of the message, type
an EOT (Control-D) at the beginning of a line, which will cause
.i Mail
to echo *(lqEOT*(rq and return you to the Shell. When the user you sent mail
to next logs in, he will receive the message:
.(l
You have mail.
.)l
to alert him to the existence of your message.
.pp
If, while you are composing the message
you decide that you do not wish to send it after all, you can
abort the letter with a <Control-C>. Typing a single <Control-C>
causes
.i Mail
to print
.(l
(Interrupt -- one more to kill letter)
.)l
Typing a second
<Control-C> causes
.i Mail
to save your partial letter on the file
.q dead.letter

in your home directory and abort the letter.
Once you have
sent mail to someone, there is no way to undo the act, so be
careful.
.pp
The message your recipient reads will consist of the message you
typed, preceded by a line telling who sent the message (your login name)
and the date and time it
was sent.
.pp
If you want to send the
 same message to several other people, you can list
their login names on the command line.
Thus,
.(l
% Mail sam bob john
Tuition fees are due next Friday. Don't forget!!
<Control-D>
EOT
%
.)l
will send the reminder to sam, bob, and john.
.pp
If, when you log in, you see the message,
.(l
You have mail.
.)l
you can read the mail by typing simply:
.(l
% Mail
.)l
.i Mail
will respond by typing its version number and date and then listing
the messages you have waiting. Then it will type a prompt and await
your command. The messages are assigned numbers starting with 1 *- you
refer to the messages with these numbers.
.i Mail
keeps track of which messages are
.i new
(have been sent since you last read your mail) and
.i read
(have been read by you). New messages have an
.b N
next to them in the header listing and old, but unread messages have
a
.b U
next to them.
.i Mail

keeps track of new/old and read/unread messages by putting a
header field called
.q Status
into your messages.
.pp
To look
 at a specific message, use the
.b type
command, which may be abbreviated to simply
.b t .
For example, if you had the following messages:
.(l
N 1 root Wed Sep 21 09:21 "Tuition fees"
N 2 sam Tue Sep 20 22:55
.)l
you could examine the first message by giving the command:
.(l
type 1
.)l
which might cause
.i Mail
to respond with, for example:
.(l
Message 1:
From root Wed Sep 21 09:21:45 1978
Subject: Tuition fees
Status: R

Tuition fees are due next Wednesday. Don't forget!!

.)l
Many
.i Mail
commands that operate on messages take a message number as an
argument like the
.b type
command. For these commands, there is a notion of a current
message. When you enter the
.i Mail
program, the current message is initially the first one. Thus,
you can often omit the message number and use, for example,
.(l
t
.)l
to type the current message. As a further shorthand, you can type a message
by simply giving its message number. Hence,
.(l
1

.)l
would type the first message.
.pp
Frequently,
it is useful to read the messages in your mailbox in order,
one after another. You can read the next message in
.i Mail
by simply typing a newline. As a special case, you can type a newline
as your first command to
.i Mail
to type the first message.
.pp
If, after reading a message, you wish to immediately send a reply,
you can do so with the
.b reply
command.
.b Reply ,
like
.b type ,
takes a message number as an argument.
.i Mail
then begins a message addressed to the user who sent you the message.
You may then type in your letter in reply, followed by a <Control-D>
at the beginning of a line, as before.
.i Mail
will type EOT, then type the ampersand prompt to indicate its readiness
to accept another command. In our example, if, after typing the
first message, you wished to reply to it, you might give the command:
.(l
reply
.)l
.i Mail
responds by typing:
.(l
To: root
Subject: Re: Tuition fees
.)l
and waiting for you to enter your letter.
You are now in the message collection
mode described at the beginning
of this section and
.i Mail
will gather up your message up to a <Control-D>.
Note that it copies the subject
header from the original message. This is useful in that correspondence
about a particular matter will tend to retain the same subject heading,
making it easy to recognize. If there are other header fields in
the message, the information found will also be used.

For example, if the letter had a
.q "To:"
header listing several recipients,
.i Mail
would arrange to send your reply to the same people as well.
Similarly, if the original message contained a
.q "Cc:"
(carbon copies to) field,
.i Mail
would send your reply to
.i those
users, too.
.i Mail
is careful, though, not too send the message to
.i you ,
even if you appear in the
.q "To:"
or
.q "Cc:"
field, unless you ask to be included explicitly. See section 4 for more
details.
.pp
After typing in your letter, the dialog with
.i Mail
might look like the following:
.(l
reply
To: root
Subject:
 Tuition fees

Thanks for the reminder
EOT
&
.)l
.pp
The
.b reply
command is especially useful for sustaining extended conversations
over the message system, with other
.q listening
users receiving copies of the conversation. The
.b reply
command can be abbreviated to
.b r .
.pp
Sometimes you will receive a message that has been sent to
several people and wish to reply

.i only
to the person who sent it.
.b Reply
with a capital
.b R
replies to a message, but sends a copy to the sender only.
.pp
If you wish, while reading your mail, to send a message to someone,
but not as a reply to one of your messages, you can send the message
directly with the
.b mail
command, which takes as arguments the names of the recipients you wish
to send to. For example, to send a message to
.q frank,
you would do:
.(l
mail frank
This is to confirm our meeting next Friday at 4.
EOT
&
.)l
The
.b mail
command can be abbreviated to
.b m .
.pp
Normally, each message you receive is saved in the file
.i mbox
in
 your login directory at the time you leave
.i Mail .
Often,
however, you will not want to save a particular message you
have received because it is only of passing interest. To avoid
saving a message in
.i mbox
you can delete it using the
.b delete
command. In our example,
.(l
delete 1
.)l
will prevent
.i Mail
from saving message 1 (from root) in
.i mbox .
In addition to not saving deleted messages,
.i Mail

will not let
you type them, either. The effect is to make the message disappear
altogether, along with its number. The
.b delete
command can be abbreviated to simply
.b d .
.pp
Many features of
.i Mail
can be tailored to your liking with the
.b set
command. The
.b set
command has two forms, depending on whether you are setting
a
.i binary
option or a
.i valued
option.
Binary options are either on or off. For example, the
.q ask
option informs
.i Mail
that each time you send a message, you want it to prompt you for
a subject header, to be included in the message.
To set the
.q
 ask
option, you would type
.(l
set ask
.)l
.pp
Another useful
.i Mail
option is
.q hold.
Unless told otherwise,
.i Mail
moves the messages from your system mailbox to the file
.i mbox
in your home directory when you leave
.i Mail .
If you want
.i Mail
to keep your letters in the system mailbox instead, you can set the
.q hold
option.

.pp
Valued options are values which
.i Mail
uses to adapt to your tastes. For example, the
.q SHELL
option tells
.i Mail
which shell you like to use, and is specified by
.(l
set SHELL=/bin/csh
.)l
for example. Note that no spaces are allowed in
.q "SHELL=/bin/csh."
A complete list of the
.i Mail
options appears in section 5.
.pp
Another important valued option is
.q crt.
If you use a fast video terminal, you will find that when you
print long messages, they fly by too quickly for you to read them.
With the
.q crt
option, you can make
.i Mail
print any message larger than a given number of lines by sending
it through a paging program. This program is specified
 by the
valued option \fBPAGER\fP.
If \fBPAGER\fP is not set, a default paginator is used.
For example, most CRT users with 24-line screens should do:
.(l
set crt=24
.)l
to paginate messages that will not fit on their screens.
In the default state, \fImore\fP (default paginator) prints a screenful of
information, then types ``byte XXX", where `XXX' represents the number
of bytes paginated.
Type a space to see the next screenful.
.pp
Another adaptation to user needs that
.i Mail
provides is that of
.i aliases .
An alias is simply a name which stands for one or more
real user names.
.i Mail
sent to an alias is really sent to the list of real users

associated with it. For example, an alias can be defined for the
members of a project, so that you can send mail to the whole project
by sending mail to just a single name. The
.b alias
command in
.i Mail
defines an alias. Suppose that the users in a project are
named Sam, Sally, Steve, and Susan. To define an alias called
.q project
for
 them, you would use the
.i Mail
command:
.(l
alias project sam sally steve susan
.)l
The
.b alias
command can also be used to provide a convenient name for someone
whose user name is inconvenient. For example, if a user named
.q "Bob Anderson"
had the login name
.q anderson,"
you might want to use:
.(l
alias bob anderson
.)l
so that you could send mail to the shorter name,
.q bob.
.pp
While the
.b alias
and
.b set
commands allow you to customize
.i Mail ,
they have the drawback that they must be retyped each time you enter
.i Mail .
To make them more convenient to use,
.i Mail
always looks for two files when it is invoked. It first reads
a system wide file
.q /etc/mail.rc,
then a user specific file,
.q .mailrc,
which is found in the user's home directory.
The system wide file
is maintained by the system administrator and

contains
.b set
commands that are applicable to all users of the system.
The
.q .mailrc
file is usually used by each user to set options the way he likes
and define
individual aliases.
For example, my .mailrc file looks like this:
.(l
set ask nosave SHELL=/bin/csh
.)l
As you can see, it is possible to set many options in the
same
.b set
command. The
.q nosave
option is described in section 5.
.pp
Mail aliasing is implemented
at the system-wide level
by the mail delivery
system
.i sendmail .
These aliases are stored in the file /etc/mail/aliases and are
accessible to all users of the system.
The lines in /etc/mail/aliases are of
the form:
.(l
alias: name*<1*>, name*<2*>, name*<3*>
.)l
where
.i alias
is the mailing list name and the
.i name*<i*>
are the members of the list. Long lists can be continued onto the next
line by starting the next line with a space or tab. Remember that you
must execute the command
.i newaliases
(as superuser)
after editing /etc/mail/aliases since the delivery system
uses an indexed file created by
.i newaliases .
.pp
We have seen that
.i Mail
can be invoked with command line arguments which are people
to send

the message to, or with no arguments to read mail.
Specifying the
.rb -f
flag on the command line causes
.i Mail
to read messages from a file other than your system mailbox.
For example, if you have a collection of messages in
the file
.q letters
you can use
.i Mail
to read them with:
.(l
% Mail -f letters
.)l
You can use all
the
.i Mail
commands described in this document to examine, modify, or delete
messages from your
.q letters
file, which will be rewritten when you leave
.i Mail
with the
.b quit
command described below.
.pp
Since mail that you read is saved in the file
.i mbox
in your home directory by default, you can read
.i mbox
in your home directory by using simply
.(l
% Mail -f
.)l
.pp
Normally, messages that you examine using the
.b type
command are saved in the file
.q mbox
in your home directory if you leave
.i Mail
with the
.b quit
command described below.
If you wish to retain a message in your system mailbox
you can use the
.b preserve

command to tell
.i Mail
to leave
it there.
The
.b preserve
command accepts a list of message numbers, just like
.b type
and may be abbreviated to
.b pre .
.pp
Messages in your system mailbox that you do not examine are
normally retained in your system mailbox automatically.
If you wish to have such a message saved in
.i mbox
without reading it, you may use the
.b mbox
command to have them so saved. For example,
.(l
mbox 2
.)l
in our example would cause the second message (from sam)
to be saved in
.i mbox
when the
.b quit
command is executed.
.b Mbox
is also the way to direct messages to your
.i mbox
file if you have set the
.q hold
option described above.
.b Mbox
can be abbreviated to
.b mb .
.pp
When you have perused all the messages of interest, you can leave
.i Mail
with the
.b quit
command, which saves the messages you have typed but not
deleted in the file
.i mbox
in your login directory. Deleted messages are discarded irretrievably,
and messages left untouched are preserved in your system mailbox so
that you

will see them the next time you type:
.(l
% Mail
.)l
The
.b quit
command can be abbreviated to simply
.b q .
.pp
If you wish for some reason to leave
.i Mail
quickly without altering either your system mailbox or
.i mbox ,
you can type the
.b x
command (short for
.b exit),
which will immediately return you to the Shell without changing anything.
.pp
If, instead, you want to execute a Shell command without leaving
.i Mail ,
you
can type the command preceded by an exclamation point, just as in the
text editor. Thus, for instance:
.(l
!date
.)l
will print the current date without leaving
.i Mail .
.pp
Finally, the
.b help
command is available to print out a brief summary of the
.i Mail
commands, using only the single character command abbreviations.
.\" $OpenBSD: mail9.nr,v 1.8 2009/07/29 18:15:38 martynas Exp $
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.\"
.\" @(#)mail9.nr 8.2 (Berkeley) 5/16/94
.\"
.sh 1 "Summary of commands, options, and escapes"
.pp
This section gives a quick summary of the
.i Mail
commands, binary and valued options, and tilde escapes.
.pp
The following table describes the commands:
.TS
center ;
c ci
lb l.
Command Description
_
+ Same as \fBnext\fP
- Back
 up to previous message
? Print brief summary of \fIMail\fP commands
! Single command escape to shell
Print Type message with ignored fields
Reply Reply to author of message only
Respond Same as \fBReply\fP
Type Type message with ignored fields
alias Define an alias as a set of user names
alternates List other names you are known by
chdir Change working directory, home by default
copy Copy a message to a file or folder
delete Delete a list of messages
dp Same as \fBdt\fP
dt Delete current message, type next message

edit Edit a list of messages
else Start of else part of conditional; see \fBif\fP
endif End of conditional statement; see \fBif\fP
exit Leave mail without changing anything
file Interrogate/change current mail file
folder Same as \fBfile\fP
folders List the folders in your folder directory
from List headers of a list of messages
headers List current window of messages
help Same as \fB?\fP
hold Same as \fBpreserve\fP
if Conditional execution of \fIMail\fP commands
ignore Set/examine
 list of ignored header fields
inc Incorporate new messages
list List valid \fIMail\fP commands
mail Send mail to specified names
mbox Arrange to save a list of messages in \fImbox\fP
more Invoke pager on message list
next Go to next message and type it
preserve Arrange to leave list of messages in system mailbox
print Print messages
quit Leave \fIMail\fP; update system mailbox, \fImbox\fP as appropriate
reply Compose a reply to a message
respond Same as \fBreply\fP
retain Supersedes \fBignore\fP
save Append messages, headers included, on a file
saveignore List of headers to ignore when using the \fBsave\fP command
saveretain List of headers to retain when using the \fBsave\fP command
set Set binary or valued options
shell Invoke an interactive shell
size Prints out size of message list
source Read \fImail\fP commands from a file
top Print first so many (5 by default) lines of list of messages
type Same as \fBprint\fP
unalias Remove alias
undelete Undelete list of messages
unread Marks
 list of messages as not been read
unset Undo the operation of a \fBset\fP
visual Invoke visual editor on a list of messages
write Append messages to a file, don't include headers
xit Same as \fBexit\fP
z Scroll to next/previous screenful of headers
.TE
.(b
.pp
The following table describes the options. Each option is

shown as being either a binary or valued option.
.TS
center;
c ci ci
l ci l.
Option Type Description
_
EDITOR valued Pathname of editor for ~e and \fBedit\fP
LISTER valued Pathname of directory lister
MBOX valued Pathname of the \fImbox\fP file
PAGER valued Pathname of pager for \fBPrint\fP, \fBprint\fP, \fBType\fP and \fBtype\fP
SHELL valued Pathname of shell for \fBshell\fP, ~! and \fB!\fP
VISUAL valued Pathname of screen editor for ~v, \fBvisual\fP
append binary Always append messages to end of \fImbox\fP
ask binary Prompt user for Subject: field when sending
askbcc binary Prompt user for additional BCc's at end of message
askcc binary Prompt user for
additional Cc's at end of message
autoinc binary Automatically incorporate new mail
autoprint binary Print next message after \fBdelete\fP
crt valued Minimum number of lines before using \fBPAGER\fP
debug binary Print out debugging information
dot binary Accept . alone on line to terminate message input
escape valued Escape character to be used instead of\ \ ~
folder valued Directory to store folders in
hold binary Hold messages in system mailbox by default
ignore binary Ignore <Control-C> while sending mail
ignoreeof binary Don't terminate letters/command input with \fB^D\fP
indentprefix valued String used for indenting messages
keep binary Don't unlink system mailbox when empty
keepsave binary Don't delete \fBsave\fPd messages by default
metoo binary Include sending user in aliases
noheader binary Suppress initial printing of version and headers
nosave binary Don't save partial letter in \fIdead.letter\fP
Replyall binary Reverses the sense of the \fB[Rr]eply\fP commands
quiet binary Suppress
printing of \fIMail\fP version/message numbers
record valued File to save all outgoing mail in
screen valued Size of window of message headers for \fBz\fP, etc.
searchheaders binary Search string for message headers
sendmail valued Choose alternate mail delivery system
toplines valued Number of lines to print in \fBtop\fP
verbose binary Invoke sendmail with the \fB\-v\fP flag
.TE
.)b
.(b
.pp
The following table summarizes the tilde escapes available

while sending mail.
.TS
center;
c ci ci
l li l.
Escape Arguments Description
_
~b name ... Add names to "blind" Cc: list.
~c name ... Add names to Cc: field.
~d Read \fIdead.letter\fP into message.
~e Invoke text editor on partial message.
~F messages Same as ~f, but includes all headers.
~f messages Read in messages.
~h Edit the header fields.
~M messages Same as ~m, but includes all headers.
~m messages
Read in messages, right shifted by a tab.
~p Print (show) the message buffer.
~q Abort message; optionally save copy to ~/dead.letter.
~r file | ~< file Read a file into the message buffer.
~s string Set Subject: field to \fIstring\fP.
~t name ... Add names to To: field.
~v Invoke display editor on message.
~w filename Write message to file.
~x Abort message; no copy is saved.
~? Print a brief summary of tilde escapes.
~!command Execute shell command.
~|command Pipe message through \fIcommand\fP.
~:command | ~_command Execute a \fIMail\fP command.
~~string Quote a single tilde.
~. Simulate end of file on input.
.TE
.)b
.(b
.pp
The following table shows the command line flags that
.i Mail
accepts:
.TS
center;
c c
l a.
Flag Description
_
\-b \fIlist\fP Send blind carbon
copies to \fIlist\fP.
\-c \fIlist\fP Send carbon copies to \fIlist\fP
\-d Turn on debugging

```
\-f [\fIname\fP] Show messages in \fIname\fP or \fI~/mbox\fP
\-I Force \fIMail\fP to run in interactive mode
\-i Ignore tty interrupt signals
\-N Suppress the initial printing of headers
\-n Inhibit reading of /etc/mail.rc
\-s \fIsubject\fP Use \fIsubject\fP as subject in outgoing mail
\-T \fIfile\fP Article-id's of read/deleted messages to \fIfile\fP
\-u \fIuser\fP Read \fIuser\fP's mail instead of your own
\-v  Invoke sendmail with the \fB\-v\fP flag
.TE
.)b
.lp
Notes:
.b \-d
and
.b \-T
are not for human use.
.\" $OpenBSD: mail5.nr,v 1.6 2008/11/03 18:20:45 jmc Exp $
.\"
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.\"
.\" @(#)mail5.nr 8.2 (Berkeley) 5/16/94
```

.\"
.sh 1 "Additional features"
.pp
This section describes some additional commands useful for
reading your mail, setting options, and handling lists of messages.
.sh 2 "Message lists"
.pp
Several
.i Mail
commands accept a list of messages as an argument.
Along with
.b type
and
.b
 delete ,
described in section 2,
there is the
.b from
command, which prints the message headers associated with the
message list passed to it.
The
.b from
command is particularly useful in conjunction with some of the
message list features described below.
.pp
A
.i "message list"
consists of a list of message numbers, ranges, and names,
separated by spaces or tabs. Message numbers may be either
decimal numbers, which directly specify messages, or one of the
special characters
.q "^" ,
.q "." ,
or
.q "$"
to specify the first relevant, current, or last
relevant message, respectively.
.i Relevant
here means, for most commands
.q "not deleted"
and
.q "deleted"
for the
.b undelete
command.
.pp
A range of messages consists of two message numbers (of the form
described in the previous paragraph) separated by a dash.

Thus, to print the first four messages, use
.(l
type 1\-4
.)l
and to print all the messages from the current message to the last
message, use
.(l
type .\-$
.)l
.pp
A
.i name
is
 a user name. The user names given in the message list are
collected together and each message selected by other means
is checked to make sure it was sent by one of the named users.
If the message consists entirely of user names, then every
message sent by one of those users that is
.i relevant
(in the sense described earlier)
is selected. Thus, to print every message sent to you by
.q root,
do
.(l
type root
.)l
.pp
As a shorthand notation, you can specify simply
.q *
to get every
.i relevant
(same sense)
message. Thus,
.(l
type *
.)l
prints all undeleted messages,
.(l
delete *
.)l
deletes all undeleted messages, and
.(l
undelete *
.)l
undeletes all deleted messages.
.pp
You can search for the presence of a word in subject lines with
.b / .

For example, to print the headers of all messages that contain the
word
.q PASCAL,
do:
.(l
from /pascal
.)l
Note that subject searching ignores upper/lower case differences.
.sh 2 "List of commands"
.pp
This section describes all the
.i Mail
commands
 available when
receiving mail.
.ip "\fB\-\fP\ \ "
The
.rb \-
command goes to the previous message and prints it. The
.rb \-
command may be given a decimal number
.i n
as an argument, in which case the
.i n th
previous message is gone to and printed.
.ip "\fB?\fP\ \ "
Prints a brief summary of commands.
.ip "\fB!\fP\ \ "
Used to preface a command to be executed by the shell.
.ip "\fBPrint\fP\ \ "
Like
.b print ,
but also print out ignored header fields. See also
\fBprint\fP, \fBignore\fP, and \fBretain\fP.
\fBPrint\fP can be abbreviated to \fBP\fP.
.ip "\fBReply\fP or \fBRespond\fP\ \ "
Note the capital \fBR\fP in the name.
Frame a reply to one or more messages.
The reply (or replies if you are using this on multiple messages)
will be sent ONLY to the person who sent you the message
(respectively, the set of people who sent the messages you are
replying to).
You can
add people using the \fB~t\fP, \fB~c\fP, and \fB~b\fP
tilde escapes. The subject in your reply is formed by prefacing
 the
subject in the original message with
.q "Re:"

unless it already began thus.
If the original message included a
.q "reply-to"
header field, the reply will go
.i only
to the recipient named by
.q "reply-to."
You type in your message using the same conventions available to you
through the
.b mail
command.
The
.b Reply
command is especially useful for replying to messages that were sent
to enormous distribution groups when you really just want to
send a message to the originator. Use it often.
\fBReply\fP (and \fBRespond\fP) can be abbreviated to \fBR\fP.
.ip "\fBType\fP\ \ "
Identical to the
.b Print
command.
\fBType\fP can be abbreviated to \fBT\fP.
.ip "\fBalias\fP\ \ "
Define a name to stand for a set of other names.
This is used when you want to send messages to a certain
group of people and want to avoid retyping their names.
For example
.(l
alias project john sue willie kathryn
.)l
creates an alias
.i project
which expands to the four people John, Sue, Willie, and Kathryn.
If
 no arguments are given, all currently-defined aliases are printed.
If one argument is given, that alias is printed (if it exists).
\fBAlias\fP can be abbreviated to \fBa\fP.
.ip "\fBalternates\fP\ \ "
If you have accounts on several machines, you may find it convenient
to use /etc/mail/aliases on all the machines except one to direct
your mail to a single account.
The
.b alternates
command is used to inform
.i Mail
that each of these other addresses is really
.i you .
.i Alternates

takes a list of user names and remembers that they are all actually you.
When you
.b reply
to messages that were sent to one of these alternate names,
.i Mail
will not bother to send a copy of the message to this other address (which
would simply be directed back to you by the alias mechanism).
If
.i alternates
is given no argument, it lists the current set of alternate names.
.b Alternates
is usually used in the .mailrc file.
\fBAlternates\fP can be abbreviated to \fBalt\fP.
.ip "\fBchdir\fP\ \ "
The
.b chdir
command
 allows you to change your current directory.
.b Chdir
takes a single argument, which is taken to be the pathname of
the directory to change to. If no argument is given,
.b chdir
changes to your home directory.
\fBChdir\fP can be abbreviated to \fBc\fP.
.ip "\fBcopy\fP\ \ "
The
.b copy
command does the same thing that
.b save
does, except that it does not mark the messages it is used on
for deletion when you quit.
\fBCopy\fP can be abbreviated to \fBco\fP.
.ip "\fBdelete\fP\ \ "
Deletes a list of messages. Deleted messages can be reclaimed
with the
.b undelete
command.
\fBDelete\fP can be abbreviated to \fBd\fP.
.ip "\fBdp\fP or \fBdt\fP\ \ "
These
commands delete the current message and print the next message.
They are useful for quickly reading and disposing of mail.
If there is no next message, \fIMail\fP says ``No more messages."
.ip "\fBedit\fP\ \ "
To edit individual messages using the text editor, the
.b edit
command is provided. The
.b edit

command takes a list
 of messages as described under the
.b type
command and processes each by writing it into the file
Message\c
.i x
where
.i x
is the message number being edited and executing the text editor on it.
When you have edited the message to your satisfaction, write the message
out and quit, upon which
.i Mail
will read the message back and remove the file.
.b Edit
can be abbreviated to
.b e .
.ip "\fBelse\fP\ \ "
Marks the end of the then-part of an
.b if
statement and the beginning of the
part to take effect if the condition of the
.b if
statement is false.
.ip "\fBendif\fP\ \ "
Marks the end of an
.b if
statement.
.ip "\fBexit\fP or \fBxit\fP\ \ "
Leave
.i Mail
without updating the system mailbox or the file you were reading.
Thus, if you accidentally delete several messages, you can use
.b exit
to avoid scrambling your mailbox.
\fBExit\fP can be abbreviated to \fBex\fP or \fBx\fP.
.ip "\fBfile\fP\ \ "
The same as
.b folder .
\fBFile\fP can be abbreviated to \fBfi\fP.
.ip "\fBfolders\fP\ \ "
List
 the names of the folders in your folder directory.
.ip "\fBfolder\fP\ \ "
The
.b folder
command switches to a new mail file or folder. With no arguments, it
tells you which file you are currently reading. If you give
it an argument, it will write out changes (such as deletions)

you have made in the current file and read the new file.
Some special conventions are recognized for the name:
.(b
.TS
center;
c c
l a.
Name Meaning
_
Previous file read
% Your system mailbox
%name \fIName\fP's system mailbox
& Your ~/mbox file
+folder A file in your folder directory
.TE
.)b
\fBFolder\fP can be abbreviated to \fBfo\fP.
.ip "\fBfrom\fP\ \ "
The
.b from
command takes a list of messages and prints out the header lines for each one;
hence
.(l
from joe
.)l
is the easy way to display all the message headers from *(lqjoe.*(rq
\fBFrom\fP can be abbreviated to \fBf\fP.
.ip "\fBheaders\fP\ \ "
When you start up
.i Mail
to read your mail, it lists the message headers that you have.
These headers
 tell you who each message is from, when they were
received, how many lines and characters each message is, and the
.q "Subject:"
header field of each message, if present. In addition,
.i Mail
tags the message header of each message that has been the object
of the
.b preserve
command with a
.q P.
Messages that have been
.b saved
or
.b written
are flagged with a
.q *.

Finally,
.b deleted
messages are not printed at all. If you wish to reprint the current
list of message headers, you can do so with the
.b headers
command. The
.b headers
command (and thus the initial header listing)
only lists the first so many message headers.
The number of headers listed depends on the speed of your
terminal.
.i Mail
maintains a notion of the current
.q window
into your messages for the purposes of printing headers.
Use the
.b z
command to move forward a window,
and
.b z-
to move back a window.
You can move
.i Mail's
notion of the current window directly to a particular message by
using, for example,
.(l
headers
 40
.)l
to move
.i Mail's
attention to the messages around message 40.
\fBHeaders\fP can be abbreviated to \fBh\fP.
.ip "\fBhelp\fP\ \ "
Print a brief and usually out of date help message about the commands
in
.i Mail .
The
.i man
page for
.i mail
is usually more up-to-date than either the help message or this manual.
It is also a synonym for \fB?\fP.
.ip "\fBhold\fP\ \ "
Arrange to hold a list of messages in the system mailbox, instead
of moving them to the file
.i mbox
in your home directory. If you set the binary option

.i hold ,
this will happen by default.
It does not override the \fBdelete\fP command.
\fBHold\fP can be abbreviated to \fBho\fP.
.ip "\fBif\fP\ \ "
Commands in your
.q .mailrc
file can be executed conditionally depending on whether you are
sending or receiving mail with the
.b if
command. For example, you can do:
.(l
if receive
 \fIcommands\fP...
endif
.)l
An
.b else
form is also available:
.(l
if send
 \fIcommands\fP...
else
 \fIcommands\fP...
endif
.)l
Note
 that the only allowed conditions are
.b receive
and
.b send .
.ip "\fBignore\fP \ \ "
.b N.B.:
.i Ignore
has been superseded by
.i retain .
.br
Add the list of header fields named to the
.i "ignore list" .
Header fields in the ignore list are not printed on your
terminal when you print a message. This allows you to suppress
printing of certain machine-generated header fields, such as
.i Via
which are not usually of interest. The
.b Type
and
.b Print
commands can be used to print a message in its entirety, including

ignored fields.
If
.b ignore
is executed with no arguments, it lists the current set of ignored fields.
.ip "\fBinc\fP\ \ "
Incorporate any new messages that have arrived while mail is being read.
The new messages are added to the end of the message list,
and the current message is reset to be the first new mail message.
This does not renumber the existing message list, nor does it
cause any changes made so far to be saved.
.ip "\fBlist\fP\ \ "
List the valid
.i Mail
commands.
\fBList\fP
can be abbreviated to \fBl\fP.
.. .ip \fBlocal\fP
.. Define a list of local names for this host. This command is useful
.. when the host is known by more than one name. Names in the list
.. may be qualified be the domain of the host. The first name on the local
.. list is the
.. .i distinguished
.. name of the host.
.. The names on the local list are used by
.. .i Mail
.. to decide which addresses are local to the host.
.. For example:
.. .(l
.. local ucbarpa.BERKELEY.ARPA arpa.BERKELEY.ARPA \\
.. arpavax.BERKELEY.ARPA r.BERKELEY.ARPA \\
.. ucb-arpa.ARPA
.. .)l
.. From this list we see that
.. .i "fred@ucbarpa.BERKELEY.ARPA",
.. .i "harold@arpa.BERKELEY",
.. and
.. .i "larry@r"
.. are all addresses of users on the local host.
.. The
.. .b local
.. command is usually not used be general users since it is designed for
.. local configuration; it is usually found in the file /usr/lib/Mail.rc.
.ip "\fBmail\fP\ \ "
Send mail to one or more people. If you have the
.i
ask
option set,
.i Mail

will prompt you for a subject to your message. Then you
can type in your message, using tilde escapes as described in
section 4 to edit, print, or modify your message. To signal your
satisfaction with the message and send it, type <Control-D> at the
beginning of a line, or a . alone on a line if you set the option
.i dot .
To abort the message, type two interrupt characters (Control-C
by default) in a row or use the
.b ~q
or
.b ~x
escapes.
The \fBmail\fP command can be abbreviated to \fBm\fP.
.ip "\fBmbox\fP\ \ "
Indicate that a list of messages be sent to
.i mbox
in your home directory when you quit. This is the default
action for messages if you do
.i not
have the
.i hold
option set.
.ip "\fBmore\fP\ \ "
Takes a message list and invokes the pager on that list.
.ip "\fBnext\fP or \fB+\fP\ \ "
The
.b next
command goes to the next message and types it. If given a message list,
.b next
goes to the first such message and types it. Thus,
.(l
next root
.)l
goes
 to the next message sent by
.q root
and types it. The
.b next
command can be abbreviated to simply a newline, which means that one
can go to and type a message by simply giving its message number or
one of the magic characters
.q "^"
.q "."
or
.q "$".
Thus,
.(l
\&.

.)l
prints the current message and
.(l
4
.)l
prints message 4, as described previously.
\fBNext\fP can be abbreviated to \fBn\fP.
.ip "\fBpreserve\fP\ \ "
Same as
.b hold .
Cause a list of messages to be held in your system mailbox when you quit.
\fBPreserve\fP can be abbreviated to \fBpre\fP.
.ip "\fBprint\fP\ \ "
Print the specified messages. If the
.b crt
variable is set, messages longer than the number of lines it indicates
are paged through the command specified by the \fBPAGER\fP variable.
The \fBprint\fP command can be abbreviated to \fBp\fP.
.ip "\fBquit\fP\ \ "
Terminates the session, saving all undeleted, unsaved and unwritten messages
in the user's \fImbox\fP file in their login directory
(messages marked as having
been read), preserving all
messages marked with \fBhold\fP or \fBpreserve\fP or never referenced
in their system mailbox.
Any messages that were deleted, saved, written, or saved to \fImbox\fP are
removed from their system mailbox.
If new mail has arrived during the session, the message
``You have new mail'' is given. If given while editing a mailbox file
with the \fB\-f\fP flag, then the edit file is rewritten.
A return to the Shell is effected, unless the rewrite of edit file fails,
in which case the user can escape with the \fBexit\fP command.
\fBQuit\fP can be abbreviated to \fBq\fP.
.ip "\fBreply\fP or \fBrespond\fP\ \ "
Frame a reply to a single message.
The reply will be sent to the
person who sent you the message (to which you are replying), plus all
the people who received the original message, except you. You can
add people using the \fB~t\fP, \fB~c\fP, and \fB~b\fP
tilde escapes. The subject in your reply is formed by prefacing the
subject in the original message with
.q
"Re:"
unless it already began thus.
If the original message included a
.q "reply-to"
header field, the reply will go
.i only

to the recipient named by
.q "reply-to."
You type in your message using the same conventions available to you
through the
.b mail
command.
The \fBreply\fP (and \fBrespond\fP) command can be abbreviated to \fBr\fP.
.ip "\fBretain\fP\ \ "
Add the list of header fields named to the \fIretained list\fP.
Only the header fields in the retain list
are shown on your terminal when you print a message.
All other header fields are suppressed.
The
.b Type
and
.b Print
commands can be used to print a message in its entirety.
If
.b retain
is executed with no arguments, it lists the current set of
retained fields.
.ip "\fBsave\fP\ \ "
It is often useful to be able to save messages on related topics
in a file. The
.b save
command gives you the ability to do this. The
.b save
command takes as an argument a list of message numbers, followed by
the name of the file in which to
 save the messages. The messages
are appended to the named file, thus allowing one to keep several
messages in the file, stored in the order they were put there.
The filename in quotes, followed by the line
count and character count is echoed on the user's terminal.
An example of the
.b save
command relative to our running example is:
.(l
s 1 2 tuitionmail
.)l
.b Saved
messages are not automatically saved in
.i mbox
at quit time, nor are they selected by the
.b next
command described above, unless explicitly specified.
\fBSave\fP can be abbreviated to \fBs\fP.
.ip "\fBsaveignore\fP\ \ "

\fBsaveignore\fP is to \fBsave\fP what \fBignore\fP is to \fBprint\fP
and \fBtype\fR.
Header fields thus marked are filtered out when saving a message
by \fBsave\fP or when automatically saving to \fImbox\fP.
.ip "\fBsaveretain\fP\ \ "
\fBsaveretain\fP is to \fBsave\fP what \fBretain\fP is to \fBprint\fP
and \fBtype\fR.
Header fields thus marked are the only ones saved with a message
when saving by \fBsave\fP
 or when automatically saving to \fImbox\fP.
\fBsaveretain\fP overrides \fBsaveignore\fP.
.ip "\fBset\fP\ \ "
Set an option or give an option a value. Used to customize
.i Mail .
Section 5.3 contains a list of the options. Options can be
.i binary ,
in which case they are
.i on
or
.i off ,
or
.i valued .
To set a binary option
.i option
.i on ,
do
.(l
set option
.)l
To give the valued option
.i option
the value
.i value ,
do
.(l
set option=value
.)l
There must be no space before or after the ``=" sign.
If no arguments are given, all variable values are printed.
Several options can be specified in a single
.b set
command.
\fBSet\fP can be abbreviated to \fBse\fP.
.ip "\fBshell\fP\ \ "
The
.b shell
command allows you to
escape to the shell.

.b Shell
invokes an interactive shell and allows you to type commands to it.
When you leave the shell, you will return to
.i Mail .
The shell used is a default assumed by
.i Mail ;
you can override this default by setting the valued option
.q
 SHELL,
eg:
.(l
set SHELL=/bin/csh
.)l
\fBShell\fP can be abbreviated to \fBsh\fP.
.ip "\fBsize\fP\ \ "
Takes a message list and prints out the size in characters of each
message.
.ip "\fBsource\fP\ \ "
The
.b source
command reads
.i mail
commands from a file. It is useful when you are trying to fix your
.q .mailrc
file and you need to re-read it.
\fBSource\fP can be abbreviated to \fBso\fP.
.ip "\fBtop\fP\ \ "
The
.b top
command takes a message list and prints the first five lines
of each addressed message.
If you wish, you can change the number of lines that
.b top
prints out by setting the valued option
.q "toplines."
On a CRT terminal,
.(l
set toplines=10
.)l
might be preferred.
\fBTop\fP can be abbreviated to \fBto\fP.
.ip "\fBtype\fP\ \ "
Same as \fBprint\fP.
Takes a message list and types out each message on the terminal.
The \fBtype\fP command can be abbreviated to \fBt\fP.
.ip "\fBunalias\fP \ \"
Takes a list of names defined by \fBalias\fP commands and
discards the remembered

groups of users.
The group names no longer have any significance.
.ip "\fBundelete\fP \ \"
Takes a message list and marks each message as \fInot\fP
being deleted.
\fBUndelete\fP can be abbreviated to \fBu\fP.
.ip "\fBunread\fP\ \ "
Takes a message list and marks each message as
.i not
having been read.
\fBUnread\fP can be abbreviated to \fBU\fP.
.ip "\fBunset\fP\ \ "
Takes a list of option names and discards their remembered values;
the inverse of \fBset\fP.
.ip "\fBvisual\fP\ \ "
It is often useful to be able to invoke one of two editors,
based on the type of terminal one is using. To invoke
a display oriented editor, you can use the
.b visual
command. The operation of the
.b visual
command is otherwise identical to that of the
.b edit
command.
.ne 2v+\n(psu
.sp \n(psu
Both the
.b edit
and
.b visual
commands assume some default text editors.
The default for
.q EDITOR
is
.i /usr/bin/ex .
The default for
.q VISUAL
is
.i /usr/bin/vi .
These default editors can be overridden by the
valued options
.q EDITOR
and
.q VISUAL
for the standard and screen editors. You might want to do:
.(l
set EDITOR=/bin/ed VISUAL=/usr/bin/mg
.)l

\fBVisual\fP can be abbreviated to \fBv\fP.
.ip "\fBwrite\fP\ \ "
The
.b save
command always writes the entire message, including the headers,
into the file. If you want to write just the message itself, you
can use the
.b write
command. The
.b write
command has the same syntax as the
.b save
command, and can be abbreviated to simply
.b w .
Thus, we could write the second message by doing:
.(l
w 2 file.c
.)l
As suggested by this example, the
.b write
command is useful for such tasks as sending and receiving
source program text over the message system.
The filename in quotes, followed by additional file information,
is echoed on the user's terminal.
.ip "\fBz\fP\ \ "
.i Mail
presents message headers in windowfuls as described under
the
.b headers
command.
You can move
.i Mail's
attention forward to the next window by giving the
.(l
z+
.)l
command.
  Analogously, you can move to the previous window with:
.(l
z\-
.)l
.sh 2 "Custom options"
.pp
Throughout this manual, we have seen examples of binary and valued options.
This section describes each of the options in alphabetical order, including
some that you have not seen yet.
To avoid confusion, please note that the options are either
all lower case letters or all upper case letters. When I start a sentence

such as:
.q "Ask"
causes
.i Mail
to prompt you for a subject header,
I am only capitalizing
.q ask
as a courtesy to English.
.ip "\fBEDITOR\fP\ \ "
The valued option
.q EDITOR
defines the pathname of the text editor to be used in the
.b edit
command and ~e escape.
If not defined,
.i /usr/bin/ex
is used.
.ip "\fBLISTER\fP\ \ "
Pathname of the directory lister to use in the \fBfolders\fP command.
Default is \fI/bin/ls\fP.
.ip "\fBMBOX\fP\ \ "
The name of the \fImbox\fP file.
It can be the name of a folder.
The default is ``mbox'' in the user's home directory.
.ip "\fBPAGER\fP\
\ "
Pathname of the program to use for paginating output when
it exceeds \fIcrt\fP lines.
A default paginator is used if this option is not defined.
.ip "\fBSHELL\fP\ \ "
The valued option
.q SHELL
gives the path name of your shell. This shell is used for the
.b !
command and ~! escape. In addition, this shell expands
file names with shell metacharacters like * and ? in them.
.ip "\fBVISUAL\fP\ \ "
The valued option
.q VISUAL
defines the pathname of the screen editor to be used in the
.b visual
command
and ~v escape.
If not defined,
.i /usr/bin/vi
is used.
.ip "\fBappend\fP\ \ "
The

.q append
option is binary and
causes messages saved in
.i mbox
to be appended to the end rather than prepended.
Normally, \fIMail\fP will put messages in \fImbox\fP
in the same order that the system puts messages in your system mailbox.
By setting
.q append,
you are requesting that
.i mbox
be appended to regardless. It is in any event quicker to append.
.ip "\fBask\fP\ \ "
.q "Ask"
is a binary option
 which
causes
.i Mail
to prompt you for the subject of each message you send.
If you respond with simply a newline, no subject field will be sent.
.ip "\fBaskbcc\fP\ \ "
.q Askbcc
is a binary option which
causes you to be prompted for additional blind carbon copy recipients at the
end of each message. Responding with a newline shows your
satisfaction with the current list.
.ip "\fBaskcc\fP\ \ "
.q Askcc
is a binary option which
causes you to be prompted for additional carbon copy recipients at the
end of each message. Responding with a newline shows your
satisfaction with the current list.
.ip "\fBautoinc\fP\ \ "
Causes new mail to be automatically incorporated when it arrives.
Setting this is similar to issuing the \fBinc\fP command at each prompt,
except that the current message is not reset when new mail arrives.
.ip "\fBautoprint\fP\ \ "
.q Autoprint
is a binary option which
causes the
.b delete
command to behave like
.b dp
*- thus, after deleting a message, the next one will be
 typed
automatically. This is useful when quickly scanning and deleting
messages in your mailbox.
.ip "\fBcrt\fP \ \ "

The valued option
.I crt
is used as a threshold to determine how long a message must
be before
.b PAGER
is used to read it.
.ip "\fBdebug\fP \ \ "
The binary option
.q debug
causes debugging information to be displayed. Use of this
option is the same as using the \fB\-d\fP command line flag.
.ip "\fBdot\fP\ \ "
.q Dot
is a binary option which, if set, causes
.i Mail
to interpret a period alone on a line as the terminator
of the message you are sending.
.ip "\fBescape\fP\ \ "
To allow you to change the escape character used when sending
mail, you can set the valued option
.q escape.
Only the first character of the
.q escape
option is used, and it must be doubled if it is to appear as
the first character of a line of your message. If you change your escape
character, then ~ loses all its special meaning, and need no longer be doubled
at the beginning of a line.
.ip "\fBfolder\fP\
 \ "
The name of the directory to use for storing folders of messages.
If this name begins with a `/'
.i Mail
considers it to be an absolute pathname; otherwise, the folder directory
is found relative to your home directory.
.ip "\fBhold\fP\ \ "
The binary option
.q hold
causes messages that have been read but not manually dealt with
to be held in the system mailbox. This prevents such messages from
being automatically swept into your \fImbox\fP file.
.ip "\fBignore\fP\ \ "
The binary option
.q ignore
causes <Control-C> characters from your terminal to be ignored and echoed
as @'s while you are sending mail. <Control-C> characters retain their
original meaning in
.i Mail
command mode.

Setting the
.q ignore
option is equivalent to supplying the
.b \-i
flag on the command line as described in section 6.
.ip "\fBignoreeof\fP\ \ "
An option related to
.q dot
is
.q ignoreeof ,
which makes
.i Mail
refuse to accept a <Control-D> as the end of a message.
.q Ignoreeof
also applies to
.i
 Mail
command mode.
.ip "\fBindentprefix\fP\ \ "
String used by the \fB~m\fP tilde escape for indenting messages,
in place of the normal tab character (`^I').
Be sure to quote the value if it contains spaces or tabs.
.ip "\fBkeep\fP\ \ "
The
.q keep
option causes
.i Mail
to truncate your system mailbox instead of deleting it when it
is empty. This is useful if you elect to protect your mailbox, which
you would do with the shell command:
.(l
chmod 600 /var/mail/yourname
.)l
where
.i yourname
is your login name. If you do not do this, anyone can probably read
your mail, although people usually don't.
.ip "\fBkeepsave\fP\ \ "
When you
.b save
a message,
.i Mail
usually discards it when you
.b quit .
To retain all saved messages, set the
.q keepsave
option.
.ip "\fBmetoo\fP\ \ "

When sending mail to an alias,
.i Mail
makes sure that if you are included in the alias, that mail will not
be sent to you. This is useful if a single alias is being used by
all members of the group. If however,
 you wish to receive a copy of
all the messages you send to the alias, you can set the binary option
.q metoo.
.ip "\fBnoheader\fP\ \ "
The binary option
.q noheader
suppresses the printing of the version and headers when
.i Mail
is first invoked. Setting this option is the same as using
.b \-N
on the command line.
.ip "\fBnosave\fP\ \ "
Normally,
when you abort a message with two <Control-C>'s,
.i Mail
copies the partial letter to the file
.q dead.letter
in your home directory. Setting the binary option
.q nosave
prevents this.
.ip "\fBReplyall\fP\ \ "
Reverses the sense of
.i reply
and
.i Reply
commands.
.ip "\fBquiet\fP\ \ "
The binary option
.q quiet
suppresses the printing of the version when
.i Mail
is first invoked,
as well as printing the for example
.q "Message 4:"
from the
.b type
command.
.ip "\fBrecord\fP\ \ "
If you love to keep records, then the
valued option
.q record
can be set to the name of a file to save your outgoing mail.
Each new message you send is appended

to the end of the file.
.ip "\fBscreen\fP\ \ "
When
.i Mail
initially prints the message headers, it determines the number to
print by looking at the speed of your terminal. The faster your
terminal, the more it prints.
The valued option
.q screen
overrides this calculation and
specifies how many message headers you want printed.
This number is also used for scrolling with the
.b z
command.
.ip "\fBsearchheaders\fP\ \ "
If this option is set, then a message-list specifier in the form
``/x:y" will expand to all messages containing the substring
`y' in the header field `x'.
The string search is case insensitive.
If `x' is omitted, it will default to the ``Subject" header field.
The form ``/to:y" is a special case, and will expand
to all messages containing the substring `y' in the ``To", ``Cc",
or ``Bcc" header fields.
The check for ``to" is case sensitive, so that ``/To:y"
can be used to limit the search for `y' to just the ``To:" field.
.ip "\fBsendmail\fP\ \ "
To use an alternate
mail delivery system, set the
.q sendmail
option to the full pathname of the program to use. Note: this is not
for everyone! Most people should use the default delivery system.
.ip "\fBtoplines\fP\ \ "
The valued option
.q toplines
defines the number of lines that the
.q top
command will print out instead of the default five lines.
.ip "\fBverbose\fP\ \ "
The binary option "verbose" causes
.i Mail
to invoke sendmail with the
.b \-v
flag, which causes it to go into verbose mode and announce expansion
of aliases, etc. Setting the "verbose" option is equivalent to
invoking
.i Mail
with the
.b \-v

flag as described in section 6.
.\" $OpenBSD: maila.nr,v 1.3 2003/06/03 02:56:11 millert Exp $
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.\"
.\" @(#)maila.nr 8.1 (Berkeley) 6/8/93
.\"
.\" $OpenBSD: mail4.nr,v 1.6 2008/11/03 18:20:45 jmc Exp $
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.\"
.\" @(#)mail4.nr 8.2 (Berkeley) 5/16/94
.\"
.sh 1 "More about sending mail"
.sh 2 "Tilde escapes"
.pp
While typing in a message to be sent to others, it is often
useful to be able to invoke the text editor on the partial message,
print the message, execute a shell command, or do some other
auxiliary function.
.i Mail
provides
 these capabilities through
.i "tilde escapes" ,
which consist of a tilde (~) at the beginning of a line, followed by
a single character which indicates the function to be performed. For
example, to print the text of the message so far, use:
.(l
~p
.)l
which will print a line of dashes, the recipients of your message, and
the text of the message so far.
Since
.i Mail
requires two consecutive <Control-C>'s to abort a letter, you
can use a single <Control-C> to abort the output of ~p or any other
~ escape without killing your letter.
.pp
If you are dissatisfied with the message as
it stands, you can invoke the text editor on it using the escape
.(l
~e
.)l
which causes the message to be copied into a temporary file and an

instance of the editor to be spawned. After modifying the message to
your satisfaction, write it out and quit the editor.
.i Mail
will respond
by typing
.(l
(continue)
.)l
after which you may continue typing text which will be appended to your
message, or type <Control-D>
 to end the message.
A standard text editor is provided by
.i Mail .
You can override this default by setting the valued option
.q EDITOR
to something else. For example, you might prefer:
.(l
set EDITOR=/bin/ed
.)l
.pp
Many systems offer a screen editor as an alternative to the standard
text editor, such as the
.i vi
editor from UC Berkeley,
or
.i mg ,
an emacs-like editor.
To use the screen, or
.i visual
editor, on your current message, you can use the escape,
.(l
~v
.)l
~v works like ~e, except that the screen editor is invoked instead.
A default screen editor is defined by
.i Mail .
If it does not suit you, you can set the valued option
.q VISUAL
to the path name of a different editor.
.pp
It is often useful to be able to include the contents of some
file in your message; the escape
.(l
~r filename
.)l
is provided for this purpose, and causes the named file to be appended
to your current message.
.i Mail

complains if the file doesn't exist
or can't be read. If the read is
 successful, the number of lines and
characters appended to your message is printed, after which you may continue
appending text. The filename may contain shell metacharacters like * and ?
which are expanded according to the conventions of your shell.
.pp
As a special case of ~r, the escape
.(l
~d
.)l
reads in the file
.q dead.letter
in your home directory. This is often useful since
.i Mail
copies the text
of your message there when you abort a message with <Control-C>.
.pp
To save the current text of your message on a file you may use the
.(l
~w filename
.)l
escape.
.i Mail
will print out the number of lines and characters written
to the file, after which you may continue appending text to your message.
Shell metacharacters may be used in the filename, as in ~r and are expanded
with the conventions of your shell.
.pp
If you are sending mail from within
.i Mail's
command mode
you can read a message sent to you into the message
you are constructing with the escape:
.(l
~m 4
.)l
which
 will read message 4 into the current message, shifted right by
one tab stop. You can name any non-deleted message, or list of messages.
Messages can also be forwarded without shifting by a tab stop with ~f.
This is the usual way to forward a message.
.pp
If, in the process of composing a message, you decide to add additional
people to the list of message recipients, you can do so with the escape
.(l
~t name1 name2 ...
.)l

You may name as few or many additional recipients as you wish. Note
that the users originally on the recipient list will still receive
the message; you cannot remove someone from the recipient
list with ~t.
.pp
If you wish, you can associate a subject with your message by using the
escape
.(l
~s Arbitrary string of text
.)l
which replaces any previous subject with
.q "Arbitrary string of text."
The subject, if given, is sent near the
top of the message prefixed with
.q "Subject:"
You can see what the message will look like by using ~p.
.pp
For political reasons, one
 occasionally prefers to list certain
people as recipients of carbon copies of a message rather than
direct recipients. The escape
.(l
~c name1 name2 ...
.)l
adds the named people to the
.q "Cc:"
list, similar to ~t.
Again, you can execute ~p to see what the message will look like.
.pp
The escape
.(l
~b name1 name2 ...
.)l
adds the named people to the
.q "Cc:"
list, but does not make the names visible in the
.q "Cc:"
line ("blind" carbon copy).
.pp
The recipients of the message together constitute the
.q "To:"
field, the subject the
.q "Subject:"
field, and the carbon copies the
.q "Cc:"
field. If you wish to edit these in ways impossible with the ~t, ~s, ~c
and ~b escapes, you can use the escape
.(l

~h
.)l
which prints
.q "To:"
followed by the current list of recipients and leaves the cursor
(or printhead) at the end of the line. If you type in ordinary
characters, they are appended to the end of the current list of
recipients. You can also use your erase character to erase back
 into
the list of recipients, or your kill character to erase them altogether.
Thus, for example, if your erase and kill characters are the standard
(on printing terminals) <Control-H> and <Control-U> keys,
.(l
~h
To: root kurt^H^H^H^Hbill
.)l
would change the initial recipients
.q "root kurt"
to
.q "root bill."
When you type a newline,
.i Mail
advances to the
.q "Subject:"
field, where the same rules apply. Another newline brings you to
the
.q "Cc:"
field, which may be edited in the same fashion. Another newline
brings you to the
.q "Bcc:"
("blind" carbon copy) field, which follows the same rules as the "Cc:"
field. Another newline
leaves you appending text to the end of your message. You can use
~p to print the current text of the header fields and the body
of the message.
.pp
To effect a temporary escape to the shell, the escape
.(l
~!command
.)l
is used, which executes
.i command
and returns you to mailing mode without altering the text of
your message. If you wish, instead, to
 filter the body of your
message through a shell command, then you can use
.(l
~|command

.)l
which pipes your message through the command and uses the output
as the new text of your message. If the command produces no output,
.i Mail
assumes that something is amiss and retains the old version
of your message. A frequently-used filter is the command
.i fmt ,
designed to format outgoing mail.
.pp
To effect a temporary escape to
.i Mail
command mode instead, you can use the
.(l
~:\fIMail command\fP
.)l
escape. This is especially useful for retyping the message you are
replying to, using, for example:
.(l
~:t
.)l
It is also useful for setting options and modifying aliases.
.pp
If you wish abort the current message, you can use the escape
.(l
~q
.)l
This will terminate the current message and return you to the
shell (or \fIMail\fP if you were using the \fBmail\fP command).
If the \fBsave\fP option is set, the message will be copied
to the file
.q dead.letter
in your home directory.
.pp
If
 you wish to abort the current message,
without saving any copy of it whatsoever,
even if the \fBsave\fP option is set,
you can use the escape
.(l
~x
.)l
.pp
If you wish (for some reason) to send a message that contains
a line beginning with a tilde, you must double it. Thus, for example,
.(l
~~This line begins with a tilde.
.)l
sends the line

.(l
~This line begins with a tilde.
.)l
.pp
Finally, the escape
.(l
~?
.)l
prints out a brief summary of the available tilde escapes.
.pp
On some terminals (particularly ones with no lower case)
tilde's are difficult to type.
.i Mail
allows you to change the escape character with the
.q escape
option. For example, I set
.(l
set escape=]
.)l
and use a right bracket instead of a tilde. If I ever need to
send a line beginning with right bracket, I double it, just as for ~.
Changing the escape character removes the special meaning of ~.
.sh 2 "Network access"
.pp
This section describes how to send mail to people on other machines.
Recall that sending
 to a plain login name sends mail to that person
on your machine. If your machine is directly (or sometimes, even,
indirectly) connected to the Internet, you can send messages to people
on the Internet using a name of the form
.(l
name@host.domain
.)l
where
.i name
is the login name of the person you're trying to reach,
.i host
is the name of the machine on the Internet,
and
.i domain
is the higher-level scope within which the hostname is known, e.g. EDU (for educational
institutions), COM (for commercial entities), GOV (for governmental agencies),
ARPA for many other things, BITNET or CSNET for those networks.
.pp
If your recipient logs in on a machine connected to yours by
UUCP (the Bell Laboratories supplied network that communicates
over telephone lines), sending mail can be a bit more complicated.
You must know the list of machines through which your message must

travel to arrive at his site. So, if his machine is directly connected
to yours, you can send mail to him using the
syntax:
.(l
host!name
.)l
where, again,
.i host
is the name of the machine and
.i name
is the login name.
If your message must go through an intermediary machine first, you
must use the syntax:
.(l
intermediary!host!name
.)l
and so on. It is actually a feature of UUCP that the map of all
the systems in the network is not known anywhere (except where people
decide to write it down for convenience). Talk to your system administrator
about good ways to get places; the
.i uuname
command will tell you systems whose names are recognized, but not which
ones are frequently called or well-connected.
.pp
When you use the
.b reply
command to respond to a letter, there is a problem of figuring out the
names of the users in the
.q "To:"
and
.q "Cc:"
lists
.i "relative to the current machine" .
If the original letter was sent to you by someone on the local machine,
then this problem does not exist, but if the message came from a remote
machine, the problem must be dealt with.
.i Mail
uses a heuristic
to build the correct name for each user relative
to the local machine. So, when you
.b reply
to remote mail, the names in the
.q "To:"
and
.q "Cc:"
lists may change somewhat.
.sh 2 "Special recipients"
.pp

As described previously, you can send mail to either user names or
.b alias
names. It is also possible to send messages directly to files or to
programs, using special conventions. If a recipient name has a
`/' in it or begins with a `+', it is assumed to be the
path name of a file into which
to send the message. If the file already exists, the message is
appended to the end of the file. If you want to name a file in
your current directory (ie, one for which a `/' would not usually
be needed) you can precede the name with `./'
So, to send mail to the file
.q memo
in the current directory, you can give the command:
.(l
% Mail ./memo
.)l
If the name begins with a `+,' it is expanded into the full path name
of the folder name in your folder directory.
This ability to send mail
 to files can be used for a variety of
purposes, such as maintaining a journal and keeping a record of
mail sent to a certain group of users. The second example can be
done automatically by including the full pathname of the record
file in the
.b alias
command for the group. Using our previous
.b alias
example, you might give the command:
.(l
alias project sam sally steve susan /usr/project/mail_record
.)l
Then, all mail sent to "project" would be saved on the file
.q /usr/project/mail_record
as well as being sent to the members of the project. This file
can be examined using
.i "Mail \-f" .
.pp
It is sometimes useful to send mail directly to a program, for
example one might write a project billboard program and want to access
it using
.i Mail .
To send messages to the billboard program, one can send mail
to the special name `|billboard' for example.
.i Mail
treats recipient names that begin with a `|' as a program to send
the mail to. An
.b alias
can be set up to reference a `|'

prefaced name if desired.
.i Caveats :
the shell treats `|' specially, so it must be quoted on the command
line. Also, the `| program' must be presented as a single argument to
mail. The safest course is to surround the entire name with double
quotes. This also applies to usage in the
.b alias
command. For example, if we wanted to alias `rmsgs' to `rmsgs \-s'
we would need to say:
.(l
alias rmsgs "| rmsgs -s"
.)l
.\" $OpenBSD: mail8.nr,v 1.5 2004/06/04 00:04:54 jmc Exp $
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.\" @(#)mail8.nr 8.2 (Berkeley) 5/16/94
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.sh 1 "Glossary"
.pp
This section contains the definitions of a few phrases
peculiar to

.i Mail .
.ip "\fIalias\fP"
An alternative name for a person or list of people.
.ip "\fIflag\fP"
An option, given on the command line of
.i Mail ,
prefaced with a \-. For example,
.b \-f
is
 a flag.
.ip "\fIheader field\fP"
At the beginning of a message, a line which contains information
that is part of the structure of the message. Popular header fields
include
.i to ,
.i cc ,
and
.i subject .
.ip "\fImail\ \ \fP"
A collection of messages. Often used in the phrase,
.q "Have you read your mail?"
.ip "\fImailbox\fP"
The place where your mail is stored, typically in the directory
/var/mail.
.ip "\fImessage\fP"
A single letter from someone, initially stored in your
.i mailbox .
.ip "\fImessage list\fP"
A string used in
.i Mail
command mode to describe a sequence of messages.
.ip "\fIoption\fP"
A piece of special purpose information used to tailor
.i Mail
to your taste.
Options are specified with the
.b set
command.
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.\" @(#)mail0.nr 8.1 (Berkeley) 6/8/93
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.po 5n
.ll 70n
.\}
.eh 'USD:7-%''Mail Reference Manual'
.oh 'Mail Reference Manual''USD:7-%'
.if n \
.nr fs .5v
.\".he 'Mail Reference Manual'\n(mo/\n(dy/\n(yr'%'
.tp
.sp 1.0i
.sz 12
.rb
.(l C
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.)l
.sz 10
.sp 2
.i
.(l C
Kurt Shoens
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 by
.)l
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Craig Leres\ \c
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and\ \c
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Mark Andrews
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Version 5.5


\*(td
.)l
.pn 2
.\" $OpenBSD: mail6.nr,v 1.6 2006/03/04 16:18:06 miod Exp $
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.\"
.sh 1 "Command line options"
.pp
This section describes command line options for
.i Mail
and what they are used for.
.ip "\-b list\ \ "
Send blind carbon copies to list.
.ip "\-c list\ \ "
Send carbon copies to list of users.
List should be a comma separated list of names.
.ip
"\-f file\ \ "
Show the messages in
.i file
instead of your system mailbox. If
.i file
is omitted,
.i Mail
reads
.i mbox
in your home directory.
.ip \-I
Forces mail to run in interactive mode,
even when input is not a terminal.
In particular, the special \fB~\fP command character,
used when sending mail, is only available interactively.
.ip \-i
Ignore tty interrupt signals.
This is particularly useful when using mail on noisy phone lines.
.ip \-N
Suppress the initial printing of headers.
.ip \-n
Inhibit reading of /etc/mail.rc upon startup.
.ip "\-s string"
Used for sending mail.
.i String
is used as the subject of the message being composed. If
.i string
contains blanks, you must surround it with quote marks.
.ip "\-u name"
Read
.i names's
mail instead of your own. Unwitting others often neglect to protect
their mailboxes, but discretion is advised. Essentially,
.b "\-u user"
is a shorthand way of doing

.b "\-f /var/mail/user".
.ip "\-v"
Use the
.b \-v
flag when invoking sendmail.
This feature may also be enabled
by setting the option "verbose".
.pp
The following command line flags are also recognized, but are
intended for use by programs invoking
.i Mail
and not for people.
.ip \-d
Turn on debugging information. Not of general interest.
.ip "\-T file"
Arrange to print on
.i file
the contents of the
.i article-id
fields of all messages that were either read or deleted.
.b \-T
is for the
.i readnews
program and should NOT be used for reading your mail.

1.4230 postfix 3.8.6-1build2

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Included for the use of the fix_strcasecmp.c module which works
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1.4235 prometheus-client 1.21.1

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1.4246 stdlib go1.24.3

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package copyright

import (
 "bytes"
 "internal/testenv"
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
)
```

```
var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
   return filepath.SkipDir
  }
  switch filepath.Ext(d.Name()) {
  default:
   return nil
  case ".s", ".go":
   // check
  }

  f, err := os.Open(path)
  if err != nil {
   t.Error(err)
   return nil
  }
  defer f.Close()
  n, err := f.Read(buf)
  if err != nil && err != io.EOF {
   t.Error(err)
   return nil
  }
  b := buf[:n]
  if bytes.Contains(b, copyright) {
   return nil
  }
  for _, ok := range permitted {
   if bytes.HasPrefix(b, ok) {
```

```
    return nil
   }
  }
  t.Errorf("%s: missing copyright notice", path)
  return nil
 })
}
```

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1.4247 github.com/shirou/gopsutil/v4 4.25.2

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1.4248 snappy 0.0.4

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1.4249 compress 1.17.9

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1.4253 telebot 3.3.8

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1.4254 x-crypto 0.38.0

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1.4255 kustomize-api 0.19.0

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1.4256 kustomize-kustomize 5.6.0

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1.4258 etcd-server 3.5.16

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1.4259 wireguard 0.0.0-20200324154536-ceff61240acf

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1.4260 contrib-config 0.14.0

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1.4261 go-auth-oauth2adapt 0.2.8

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//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
```

```
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)
```

```
func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp
```

```
  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Insert()
```

```
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
```

```
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
```

```
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
```

```
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
```

```
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}
```

```
// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
```

```
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
```

```
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC
```

```
 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
```

```
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
```

```
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
```

```
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
```

```
baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}
```

```
// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from
```

```
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
```

```
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
```

```
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
```

```
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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//
//     https://www.apache.org/licenses/LICENSE-2.0
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
```

```
//
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)
```

```
// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32
```

```
const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
```

```
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
```

```
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}
```

```
func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
```

```
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54,
 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
```

```
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
```

```
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```
func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
```

```
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
```

```
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}
```

```
func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
```

```
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
```

```
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
```

```
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
```

0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,

```
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
```

```
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

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```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
```

```
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
```

```
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
```

```
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
```

```
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
```

```
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}
```

```
func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
```

```
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}
```

```
func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}
```

```
func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
```

```
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
```

```
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
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0x73, 0x65, 0x72, 0x73, 0x12, 0x4c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c,
0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e,
0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e,
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69,

```
0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65,
0x73, 0x74, 0x1a, 0x4d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e,
0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f,
0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,
0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
```

```
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
```

-> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
0, // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
1, // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name -> google.cloud.commerce.consumer.procurement.v1.LicensePool
13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name -> google.protobuf.FieldMask
14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name -> google.protobuf.Timestamp
14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
-> google.protobuf.Timestamp
9, // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name -> google.cloud.commerce.consumer.procurement.v1.LicensedUser
15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:type_name -> google.protobuf.Duration
2, // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
3, // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type -> google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
4, // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type -> google.cloud.commerce.consumer.procurement.v1.AssignRequest
6, // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
-> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
8, // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_type -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
1, // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type -> google.cloud.commerce.consumer.procurement.v1.LicensePool
1, // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type -> google.cloud.commerce.consumer.procurement.v1.LicensePool
5, // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type -> google.cloud.commerce.consumer.procurement.v1.AssignResponse
7, // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type -> google.cloud.commerce.consumer.procurement.v1.UnassignResponse
10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_type
-> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
14, // [14:19] is the sub-list for method output_type
9, // [9:14] is the sub-list for method input_type
9, // [9:9] is the sub-list for extension type_name

```
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].OneofWrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
```

```
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
```

```
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
```

```
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
```

```
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}
```

```
func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
```

```
  MethodName: "GetLicensePool",
  Handler:    _LicenseManagementService_GetLicensePool_Handler,
 },
 {
  MethodName: "UpdateLicensePool",
  Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
 },
 {
  MethodName: "Assign",
  Handler:
   _LicenseManagementService_Assign_Handler,
 },
 {
  MethodName: "Unassign",
  Handler:    _LicenseManagementService_Unassign_Handler,
 },
 {
  MethodName: "EnumerateLicensedUsers",
  Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
 },
},
Streams:  []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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1.4262 ghinstallation 2.15.0

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1.4263 github 71.0.0

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```
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package github

import (
 "context"
 "fmt"
 "net/http"
 "testing"

 "github.com/google/go-cmp/cmp"
)

func TestRepositoryLicense_Marshal(t *testing.T) {
 t.Parallel()
 testJSONMarshal(t, &RepositoryLicense{}, "{}")

 rl := &RepositoryLicense{
  Name:        Ptr("n"),
  Path:        Ptr("p"),
  SHA:         Ptr("s"),
  Size:        Ptr(1),
  URL:         Ptr("u"),
  HTMLURL:     Ptr("h"),
  GitURL:      Ptr("g"),
  DownloadURL: Ptr("d"),
  Type:        Ptr("t"),
  Content:     Ptr("c"),
  Encoding:    Ptr("e"),
  License: &License{
   Key:           Ptr("k"),
   Name:          Ptr("n"),
```

```
  URL:            Ptr("u"),
  SPDXID:         Ptr("s"),
  HTMLURL:        Ptr("h"),
  Featured:       Ptr(true),
  Description:    Ptr("d"),
  Implementation: Ptr("i"),
  Permissions:    &[]string{"p"},
  Conditions:     &[]string{"c"},
  Limitations:
   &[]string{"l"},
  Body:           Ptr("b"),
 },
}
want := `{
 "name": "n",
 "path": "p",
 "sha": "s",
 "size": 1,
 "url": "u",
 "html_url": "h",
 "git_url": "g",
 "download_url": "d",
 "type": "t",
 "content": "c",
 "encoding": "e",
 "license": {
  "key": "k",
  "name": "n",
  "url": "u",
  "spdx_id": "s",
  "html_url": "h",
  "featured": true,
  "description": "d",
  "implementation": "i",
  "permissions": ["p"],
  "conditions": ["c"],
  "limitations": ["l"],
  "body": "b"
 }
}`
testJSONMarshal(t, rl, want)
}

func TestLicense_Marshal(t *testing.T) {
 t.Parallel()
 testJSONMarshal(t, &License{}, "{}")

 l := &License{
```

```
 Key:            Ptr("k"),
 Name:           Ptr("n"),
 URL:            Ptr("u"),
 SPDXID:         Ptr("s"),
 HTMLURL:        Ptr("h"),
 Featured:       Ptr(true),
 Description:    Ptr("d"),
 Implementation: Ptr("i"),
 Permissions:    &[]string{"p"},
 Conditions:     &[]string{"c"},
 Limitations:    &[]string{"l"},
 Body:
         Ptr("b"),
}
want := `{
 "key": "k",
 "name": "n",
 "url": "u",
 "spdx_id": "s",
 "html_url": "h",
 "featured": true,
 "description": "d",
 "implementation": "i",
 "permissions": ["p"],
 "conditions": ["c"],
 "limitations": ["l"],
 "body": "b"
}`
testJSONMarshal(t, l, want)
}

func TestLicensesService_List(t *testing.T) {
 t.Parallel()
 client, mux, _ := setup(t)

 mux.HandleFunc("/licenses", func(w http.ResponseWriter, r *http.Request) {
  testMethod(t, r, "GET")
  fmt.Fprint(w,
`[{"key":"mit","name":"MIT","spdx_id":"MIT","url":"https://api.github.com/licenses/mit","featured":true}]`)
 })

 ctx := context.Background()
 licenses, _, err := client.Licenses.List(ctx)
 if err != nil {
  t.Errorf("Licenses.List returned error: %v", err)
 }

 want := []*License{{
```

```
 Key:      Ptr("mit"),
 Name:     Ptr("MIT"),
 SPDXID:   Ptr("MIT"),
 URL:      Ptr("https://api.github.com/licenses/mit"),
 Featured: Ptr(true),
}}
if !cmp.Equal(licenses, want)
{
 t.Errorf("Licenses.List returned %+v, want %+v", licenses, want)
}

const methodName = "List"
testNewRequestAndDoFailure(t, methodName, client, func() (*Response, error) {
 got, resp, err := client.Licenses.List(ctx)
 if got != nil {
  t.Errorf("testNewRequestAndDoFailure %v = %#v, want nil", methodName, got)
 }
 return resp, err
})
}

func TestLicensesService_Get(t *testing.T) {
t.Parallel()
client, mux, _ := setup(t)

mux.HandleFunc("/licenses/mit", func(w http.ResponseWriter, r *http.Request) {
 testMethod(t, r, "GET")
 fmt.Fprint(w, `{"key":"mit","name":"MIT"}`)
})

ctx := context.Background()
license, _, err := client.Licenses.Get(ctx, "mit")
if err != nil {
 t.Errorf("Licenses.Get returned error: %v", err)
}

want := &License{Key: Ptr("mit"), Name: Ptr("MIT")}
if !cmp.Equal(license, want) {
 t.Errorf("Licenses.Get returned %+v, want %+v", license, want)
}

const methodName = "Get"
testBadOptions(t, methodName, func() (err error) {
 _, _, err = client.Licenses.Get(ctx,
"\n")
 return err
})
```

```
 testNewRequestAndDoFailure(t, methodName, client, func() (*Response, error) {
  got, resp, err := client.Licenses.Get(ctx, "mit")
  if got != nil {
   t.Errorf("testNewRequestAndDoFailure %v = %#v, want nil", methodName, got)
  }
  return resp, err
 })
}

func TestLicensesService_Get_invalidTemplate(t *testing.T) {
 t.Parallel()
 client, _, _ := setup(t)

 ctx := context.Background()
 _, _, err := client.Licenses.Get(ctx, "%")
 testURLParseError(t, err)
}
```

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```
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package github

import (
 "context"
 "fmt"
)

// LicensesService handles communication with the license related
// methods of the GitHub API.
//
// GitHub API docs: https://docs.github.com/rest/licenses/
type LicensesService service

// RepositoryLicense represents the license for a repository.
type RepositoryLicense struct {
 Name *string `json:"name,omitempty"`
 Path *string `json:"path,omitempty"`

 SHA         *string  `json:"sha,omitempty"`
 Size        *int     `json:"size,omitempty"`
 URL         *string  `json:"url,omitempty"`
 HTMLURL     *string  `json:"html_url,omitempty"`
 GitURL      *string  `json:"git_url,omitempty"`
 DownloadURL *string  `json:"download_url,omitempty"`
 Type        *string  `json:"type,omitempty"`
 Content     *string  `json:"content,omitempty"`
 Encoding    *string  `json:"encoding,omitempty"`
 License
     *License `json:"license,omitempty"`
}

func (l RepositoryLicense) String() string {
 return Stringify(l)
}

// License represents an open source license.
type License struct {
 Key  *string `json:"key,omitempty"`
 Name *string `json:"name,omitempty"`
 URL  *string `json:"url,omitempty"`

 SPDXID         *string   `json:"spdx_id,omitempty"`
 HTMLURL        *string   `json:"html_url,omitempty"`
 Featured       *bool     `json:"featured,omitempty"`
 Description    *string   `json:"description,omitempty"`
 Implementation *string   `json:"implementation,omitempty"`
```

```
 Permissions    *[]string `json:"permissions,omitempty"`
 Conditions     *[]string `json:"conditions,omitempty"`
 Limitations    *[]string `json:"limitations,omitempty"`
 Body           *string   `json:"body,omitempty"`
}

func (l License) String() string {
 return Stringify(l)
}

// List popular open source licenses.
//
// GitHub API docs: https://docs.github.com/rest/licenses/licenses#get-all-commonly-used-licenses
//
//meta:operation
 GET /licenses
func (s *LicensesService) List(ctx context.Context) ([]*License, *Response, error) {
 req, err := s.client.NewRequest("GET", "licenses", nil)
 if err != nil {
  return nil, nil, err
 }

 var licenses []*License
 resp, err := s.client.Do(ctx, req, &licenses)
 if err != nil {
  return nil, resp, err
 }

 return licenses, resp, nil
}

// Get extended metadata for one license.
//
// GitHub API docs: https://docs.github.com/rest/licenses/licenses#get-a-license
//
//meta:operation GET /licenses/{license}
func (s *LicensesService) Get(ctx context.Context, licenseName string) (*License, *Response, error) {
 u := fmt.Sprintf("licenses/%s", licenseName)

 req, err := s.client.NewRequest("GET", u, nil)
 if err != nil {
  return nil, nil, err
 }

 license := new(License)
 resp, err := s.client.Do(ctx, req, license)
 if err != nil {
  return nil, resp, err
```

```
}

return license, resp, nil
}
```

1.4264 x-term 0.32.0

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1.4273 google-cloud-go-logging 1.9.0

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```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
```

```
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 GetIamPolicy:
[]gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000
* time.Millisecond),
 },
 }
}
```

```
// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
```

```
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
```

```
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
```

```
 httpClient:  httpClient,
 CallOptions: &callOpts,
}
c.setGoogleClientInfo()

o := []option.ClientOption{
 option.WithHTTPClient(httpClient),
 option.WithEndpoint(endpoint),
}
opC, err := NewGlobalOperationsRESTClient(ctx, o...)
if err != nil {
 return nil, err
}
c.operationClient = opC

return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
return []option.ClientOption{
 internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
 internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
 internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
 internaloption.WithDefaultScopes(DefaultAuthScopes()...),
}
}

//
setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
c.xGoogHeaders = []string{"x-goog-api-client", gax.XGoogHeader(kv...)}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
// Replace httpClient with nil to force cleanup.
c.httpClient = nil
if err := c.operationClient.Close(); err != nil {
 return err
}
return nil
}
```

```
// Connection returns a connection to the API service.
//
// Deprecated: This method always returns
 nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
```

```
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil
{
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for
 a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by
third-party partners who are creating Cloud Marketplace images.
```

```
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
```

```
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return
nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v",
 "project", url.QueryEscape(req.GetProject()))}
```

```
hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return
err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
```

```
 }
 return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm
 := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req !=
 nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }
```

```
 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return
err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
```

```
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption)
 (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e
 := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
 context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook
```

```
// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient
 interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
```

```
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode,
 error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string
```

```
 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
```

```
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{"x-goog-api-client", gax.XGoogHeader(kv...)}
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are
 mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for
use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm
 := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
```

```
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
```

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```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```
func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
```

```
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
```

```
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
```

```
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range
values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown
in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
```

```
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseCodeRequest{
 // TODO: Fill request
struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
}
resp, err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.31.0
//  protoc        v4.23.2
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
```

```
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //     tunedModels/{tuned_model}/permissions/{permission}
 //     corpora/{corpus}/permissions/{permission}
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
```

```
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}
```

```
func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67,
 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
```

```
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
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0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64,
0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []interface{}{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v interface{}, i int)
interface{} {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
    return &v.sizeCache
   case 2:
    return &v.unknownFields
```

```
  default:
   return nil
  }
 }
}
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []interface{}{}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
  GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
  RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
  NumEnums:      2,
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes:
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

1.4274 container-device-interface 1.0.1

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1.4276 x-oauth2 0.30.0

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//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
```

```
  }
  // TODO: Use resp.
  _ = resp
 }
}
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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
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 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
```

```
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
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 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
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 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
```

```
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
```

```
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
 //
TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
}
op, err := c.Delete(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
```

```
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}
```

```
func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete          []gax.CallOption
 Get             []gax.CallOption
 GetIamPolicy    []gax.CallOption
```

```
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
```

```
    http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
```

```
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}
```

```
// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution
This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}
```

```
// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
```

```
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
```

```
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
```

```
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
```

```
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
```

```
 } else if pageSize != 0 {
  req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
```

```
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
```

```
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
```

```
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
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// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
//
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
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//     http://www.apache.org/licenses/LICENSE-2.0
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// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"
```

```
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
```

```
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
```

```
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
```

```
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
```

```
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
```

0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
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0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
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0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
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0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
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0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
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0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
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0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,

```
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
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 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
```

```
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.
```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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//
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
```

```
package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
```

```
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}
```

```
// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
```

```
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string
```

```
 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
     connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}
```

```
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
```

```
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
```

```
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}
```

```
func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
```

```
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
```

```
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
```

```
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
```

```
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
```

```
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
```

```
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
```

```
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }
```

```
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
```

```
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)
```

```
const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
```

```
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
```

```
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
```

0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,

```
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}
```

```
func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
```

```
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
```

```
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
```

```
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
```

```
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
```

```
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
```

```
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
```

```
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
```

```
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
```

```
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}
```

```
func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}
```

```
func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
```

```
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}
```

```
func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
```

```
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x64,
 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
 0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
```

0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73,
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,
0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79,
0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75,
0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65,
0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x63, 0x6f, 0x6c, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x41, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72,
0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x3b, 0x0a,
0x17, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
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0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73,
0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x58, 0xda, 0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x3f,
0x3a, 0x01, 0x2a, 0x22, 0x3a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73,
0x2f, 0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12,
0xe7, 0x01, 0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3f, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
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0x6f, 0x6e, 0x73, 0x65, 0x22, 0x5a, 0xda,
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0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67,
0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72,
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0x3a, 0x75, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x92, 0x02, 0x0a, 0x16, 0x45, 0x6e,
0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55,

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0x65, 0x6e,
0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65,
0x73, 0x74, 0x1a, 0x4d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e,
0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f,
0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
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0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
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0x61, 0x75, 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66,
0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```
var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
```

```
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
```

```
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
```

```
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
```

```
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
```

```
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
```

```
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
```

```
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}
```

```
var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
```

```
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}
```

```
//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
```

```
 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
```

```
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
```

```
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.4280 semver 7.7.2

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ISC

1.4281 kubernetes-apiserver 0.33.0

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1.4282 google-cloud-go-auth 0.7.2

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
```

```
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
 //
TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
}
op, err := c.Delete(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
```

```
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}
```

```
func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
```

_ = resp
}

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```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.34.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
```

```
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
```

```
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
```

```
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67,
```

0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64,
0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x33,
}

```
var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func
 file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v any, i int) any {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
    return &v.sizeCache
```

```
  case 2:
   return &v.unknownFields
  default:
   return nil
  }
 }
}
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
  GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
  RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
  NumEnums:      2,
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:
       file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
```

```
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
```

```
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 GetIamPolicy:
[]gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000
* time.Millisecond),
 },
}
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
```

```
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}
```

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is

```
intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
```

```
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
```

```
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license",
url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
```

```
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf,
 err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()),
 "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err
 := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and
 context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp);
 err != nil {
   return err
  }
```

```
 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId",
 fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
```

```
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err !=
nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
```

```
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient)
 List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults",
 fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return
err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
```

```
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only
 by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
```

```
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on
 the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return
```

```
 nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.4283 codegangsta-cli 2.27.1

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1.4284 x-sys 0.33.0

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1.4285 x-net 0.40.0

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1.4286 fsnotify 1.9.0

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1.4287 debug 4.4.1

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1.4288 open-ldap 2.5.19+dfsg-0ubuntu0.22.04.1

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Date: Fri, 6 Jun 2003 10:18:52 -0700

From: Juan Gomez <juang@us.ibm.com>
To: Stephen Frost <sfrost@debian.org>
X-Mailer: Lotus Notes Release 5.0.2a (Intl) 23 November 1999
Subject: Re: Juan C. Gomez license in OpenLDAP Source

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 * Subject: Re: OpenLDAP Licenseing issues
 * From: "Kurt D. Zeilenga" <Kurt@OpenLDAP.org>
  * Date: Wed, 28 May 2003 10:55:44 -0700
 * Cc: Steve Langasek <vorlon@netexpress.net>,debian-legal@lists.debian.org, openldap-devel@OpenLDAP.org

* In-reply-to: <20030528162613.GB8524@ns.snowman.net>
* Message-id: <5.2.0.9.0.20030528094229.02924780@127.0.0.1>
* Old-return-path: <Kurt@OpenLDAP.org>

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1.4289 tomcat-juli 9.0.105

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1.4291 chunkio 1.5.3

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1.4295 golang-genproto v0.0.0-20241118233622-e639e219e697

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examples/functions/notify.bash
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examples/functions/sort-pos-params
examples/functions/substr*
examples/functions/substr2
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1.4297 codegangsta-cli 1.22.15

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1.4298 go.etcd.io-etcd 3.4.18

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```
// Code generated by MockGen. DO NOT EDIT.
// Source: gitlab.com/gitlab-org/api/client-go (interfaces: LicenseServiceInterface)
//
// Generated by this command:
//
// mockgen -typed -destination=license_mock.go -package=testing gitlab.com/gitlab-org/api/client-go
LicenseServiceInterface
//

// Package testing is a generated GoMock package.
package testing

import (
 reflect "reflect"

 gitlab "gitlab.com/gitlab-org/api/client-go"
 gomock "go.uber.org/mock/gomock"
)

// MockLicenseServiceInterface is a mock of LicenseServiceInterface interface.
type MockLicenseServiceInterface struct {
 ctrl     *gomock.Controller
 recorder *MockLicenseServiceInterfaceMockRecorder
 isgomock struct{}
}

// MockLicenseServiceInterfaceMockRecorder is the mock recorder for MockLicenseServiceInterface.
type MockLicenseServiceInterfaceMockRecorder struct {
 mock *MockLicenseServiceInterface
}

// NewMockLicenseServiceInterface creates a new mock instance.
```

```
func NewMockLicenseServiceInterface(ctrl *gomock.Controller)
 *MockLicenseServiceInterface {
 mock := &MockLicenseServiceInterface{ctrl: ctrl}
 mock.recorder = &MockLicenseServiceInterfaceMockRecorder{mock}
 return mock
}

// EXPECT returns an object that allows the caller to indicate expected use.
func (m *MockLicenseServiceInterface) EXPECT() *MockLicenseServiceInterfaceMockRecorder {
 return m.recorder
}

// AddLicense mocks base method.
func (m *MockLicenseServiceInterface) AddLicense(opt *gitlab.AddLicenseOptions, options
...gitlab.RequestOptionFunc) (*gitlab.License, *gitlab.Response, error) {
 m.ctrl.T.Helper()
 varargs := []any{opt}
 for _, a := range options {
  varargs = append(varargs, a)
 }
 ret := m.ctrl.Call(m, "AddLicense", varargs...)
 ret0, _ := ret[0].(*gitlab.License)
 ret1, _ := ret[1].(*gitlab.Response)
 ret2, _ := ret[2].(error)
 return ret0, ret1, ret2
}

// AddLicense indicates an expected call of AddLicense.
func (mr *MockLicenseServiceInterfaceMockRecorder) AddLicense(opt any, options ...any)
*MockLicenseServiceInterfaceAddLicenseCall
 {
 mr.mock.ctrl.T.Helper()
 varargs := append([]any{opt}, options...)
 call := mr.mock.ctrl.RecordCallWithMethodType(mr.mock, "AddLicense",
reflect.TypeOf((*MockLicenseServiceInterface)(nil).AddLicense), varargs...)
 return &MockLicenseServiceInterfaceAddLicenseCall{Call: call}
}

// MockLicenseServiceInterfaceAddLicenseCall wrap *gomock.Call
type MockLicenseServiceInterfaceAddLicenseCall struct {
 *gomock.Call
}

// Return rewrite *gomock.Call.Return
func (c *MockLicenseServiceInterfaceAddLicenseCall) Return(arg0 *gitlab.License, arg1 *gitlab.Response, arg2
error) *MockLicenseServiceInterfaceAddLicenseCall {
 c.Call = c.Call.Return(arg0, arg1, arg2)
 return c
```

```
}

// Do rewrite *gomock.Call.Do
func (c *MockLicenseServiceInterfaceAddLicenseCall) Do(f func(*gitlab.AddLicenseOptions,
...gitlab.RequestOptionFunc) (*gitlab.License, *gitlab.Response, error))
*MockLicenseServiceInterfaceAddLicenseCall {
 c.Call = c.Call.Do(f)
 return c
}

// DoAndReturn rewrite *gomock.Call.DoAndReturn
func
 (c *MockLicenseServiceInterfaceAddLicenseCall) DoAndReturn(f func(*gitlab.AddLicenseOptions,
...gitlab.RequestOptionFunc) (*gitlab.License, *gitlab.Response, error))
*MockLicenseServiceInterfaceAddLicenseCall {
 c.Call = c.Call.DoAndReturn(f)
 return c
}

// DeleteLicense mocks base method.
func (m *MockLicenseServiceInterface) DeleteLicense(licenseID int, options ...gitlab.RequestOptionFunc)
(*gitlab.Response, error) {
 m.ctrl.T.Helper()
 varargs := []any{licenseID}
 for _, a := range options {
  varargs = append(varargs, a)
 }
 ret := m.ctrl.Call(m, "DeleteLicense", varargs...)
 ret0, _ := ret[0].(*gitlab.Response)
 ret1, _ := ret[1].(error)
 return ret0, ret1
}

// DeleteLicense indicates an expected call of DeleteLicense.
func (mr *MockLicenseServiceInterfaceMockRecorder) DeleteLicense(licenseID any, options ...any)
*MockLicenseServiceInterfaceDeleteLicenseCall {
 mr.mock.ctrl.T.Helper()
 varargs := append([]any{licenseID}, options...)
 call := mr.mock.ctrl.RecordCallWithMethodType(mr.mock,
 "DeleteLicense", reflect.TypeOf((*MockLicenseServiceInterface)(nil).DeleteLicense), varargs...)
 return &MockLicenseServiceInterfaceDeleteLicenseCall{Call: call}
}

// MockLicenseServiceInterfaceDeleteLicenseCall wrap *gomock.Call
type MockLicenseServiceInterfaceDeleteLicenseCall struct {
 *gomock.Call
}
```

```
// Return rewrite *gomock.Call.Return
func (c *MockLicenseServiceInterfaceDeleteLicenseCall) Return(arg0 *gitlab.Response, arg1 error)
*MockLicenseServiceInterfaceDeleteLicenseCall {
 c.Call = c.Call.Return(arg0, arg1)
 return c
}

// Do rewrite *gomock.Call.Do
func (c *MockLicenseServiceInterfaceDeleteLicenseCall) Do(f func(int, ...gitlab.RequestOptionFunc)
(*gitlab.Response, error)) *MockLicenseServiceInterfaceDeleteLicenseCall {
 c.Call = c.Call.Do(f)
 return c
}

// DoAndReturn rewrite *gomock.Call.DoAndReturn
func (c *MockLicenseServiceInterfaceDeleteLicenseCall) DoAndReturn(f func(int, ...gitlab.RequestOptionFunc)
(*gitlab.Response, error)) *MockLicenseServiceInterfaceDeleteLicenseCall
 {
 c.Call = c.Call.DoAndReturn(f)
 return c
}

// GetLicense mocks base method.
func (m *MockLicenseServiceInterface) GetLicense(options ...gitlab.RequestOptionFunc) (*gitlab.License,
*gitlab.Response, error) {
 m.ctrl.T.Helper()
 varargs := []any{}
 for _, a := range options {
  varargs = append(varargs, a)
 }
 ret := m.ctrl.Call(m, "GetLicense", varargs...)
 ret0, _ := ret[0].(*gitlab.License)
 ret1, _ := ret[1].(*gitlab.Response)
 ret2, _ := ret[2].(error)
 return ret0, ret1, ret2
}

// GetLicense indicates an expected call of GetLicense.
func (mr *MockLicenseServiceInterfaceMockRecorder) GetLicense(options ...any)
*MockLicenseServiceInterfaceGetLicenseCall {
 mr.mock.ctrl.T.Helper()
 call := mr.mock.ctrl.RecordCallWithMethodType(mr.mock, "GetLicense",
reflect.TypeOf((*MockLicenseServiceInterface)(nil).GetLicense), options...)
 return &MockLicenseServiceInterfaceGetLicenseCall{Call: call}
}

// MockLicenseServiceInterfaceGetLicenseCall wrap *gomock.Call
type
```

```
 MockLicenseServiceInterfaceGetLicenseCall struct {
 *gomock.Call
}

// Return rewrite *gomock.Call.Return
func (c *MockLicenseServiceInterfaceGetLicenseCall) Return(arg0 *gitlab.License, arg1 *gitlab.Response, arg2
error) *MockLicenseServiceInterfaceGetLicenseCall {
 c.Call = c.Call.Return(arg0, arg1, arg2)
 return c
}

// Do rewrite *gomock.Call.Do
func (c *MockLicenseServiceInterfaceGetLicenseCall) Do(f func(...gitlab.RequestOptionFunc) (*gitlab.License,
*gitlab.Response, error)) *MockLicenseServiceInterfaceGetLicenseCall {
 c.Call = c.Call.Do(f)
 return c
}

// DoAndReturn rewrite *gomock.Call.DoAndReturn
func (c *MockLicenseServiceInterfaceGetLicenseCall) DoAndReturn(f func(...gitlab.RequestOptionFunc)
(*gitlab.License, *gitlab.Response, error)) *MockLicenseServiceInterfaceGetLicenseCall {
 c.Call = c.Call.DoAndReturn(f)
 return c
}
```

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same "printed page" as the copyright notice for easier
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{
"id": 3,
"name": "CUSTOM",
"approval_status": "blacklisted"
}

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```
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//

package gitlab

import (
 "fmt"
 "net/http"
)

type (
 // Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
 ManagedLicensesServiceInterface interface {
  // Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
  ListManagedLicenses(pid
 interface{}, options ...RequestOptionFunc) ([]*ManagedLicense, *Response, error)
  // Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
  GetManagedLicense(pid, mlid interface{}, options ...RequestOptionFunc) (*ManagedLicense, *Response, error)
  // Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
  AddManagedLicense(pid interface{}, opt *AddManagedLicenseOptions, options ...RequestOptionFunc)
(*ManagedLicense, *Response, error)
  // Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
  DeleteManagedLicense(pid, mlid interface{}, options ...RequestOptionFunc) (*Response, error)
  // Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
  EditManagedLicense(pid,
 mlid interface{}, opt *EditManagedLicenceOptions, options ...RequestOptionFunc) (*ManagedLicense,
*Response, error)
 }

 // ManagedLicensesService handles communication with the managed licenses
 // methods of the GitLab API.
```

```
 // Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
 ManagedLicensesService struct {
  client *Client
 }
)

// Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
var _ ManagedLicensesServiceInterface = (*ManagedLicensesService)(nil)

// ManagedLicense represents a managed license.
// Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
type ManagedLicense struct {
 ID            int                    `json:"id"`
 Name          string                 `json:"name"`
 ApprovalStatus LicenseApprovalStatusValue
 `json:"approval_status"`
}

// ListManagedLicenses returns a list of managed licenses from a project.
// Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
func (s *ManagedLicensesService) ListManagedLicenses(pid interface{}, options ...RequestOptionFunc)
([]*ManagedLicense, *Response, error) {
 project, err := parseID(pid)
 if err != nil {
  return nil, nil, err
 }
 u := fmt.Sprintf("projects/%s/managed_licenses", PathEscape(project))

 req, err := s.client.NewRequest(http.MethodGet, u, nil, options)
 if err != nil {
  return nil, nil, err
 }

 var mls []*ManagedLicense
 resp, err := s.client.Do(req, &mls)
 if err != nil {
  return nil, resp, err
 }

 return mls, resp, nil
}

// GetManagedLicense returns an existing managed license.
// Deprecated: Removed in 17.0; use License Approval Policies instead -
```

```
https://docs.gitlab.com/user/compliance/license_approval_policies/
func (s *ManagedLicensesService)
 GetManagedLicense(pid, mlid interface{}, options ...RequestOptionFunc) (*ManagedLicense, *Response, error) {
 project, err := parseID(pid)
 if err != nil {
  return nil, nil, err
 }
 license, err := parseID(mlid)
 if err != nil {
  return nil, nil, err
 }
 u := fmt.Sprintf("projects/%s/managed_licenses/%s", PathEscape(project), PathEscape(license))

 req, err := s.client.NewRequest(http.MethodGet, u, nil, options)
 if err != nil {
  return nil, nil, err
 }

 ml := new(ManagedLicense)
 resp, err := s.client.Do(req, ml)
 if err != nil {
  return nil, resp, err
 }

 return ml, resp, nil
}

// AddManagedLicenseOptions represents the available AddManagedLicense() options.
// Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
type AddManagedLicenseOptions struct {
 Name          *string                    `url:"name,omitempty" json:"name,omitempty"`
 ApprovalStatus *LicenseApprovalStatusValue
 `url:"approval_status,omitempty" json:"approval_status,omitempty"`
}

// AddManagedLicense adds a managed license to a project.
// Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
func (s *ManagedLicensesService) AddManagedLicense(pid interface{}, opt *AddManagedLicenseOptions,
options ...RequestOptionFunc) (*ManagedLicense, *Response, error) {
 project, err := parseID(pid)
 if err != nil {
  return nil, nil, err
 }
 u := fmt.Sprintf("projects/%s/managed_licenses", PathEscape(project))

 req, err := s.client.NewRequest(http.MethodPost, u, opt, options)
```

```
 if err != nil {
  return nil, nil, err
 }

 ml := new(ManagedLicense)
 resp, err := s.client.Do(req, ml)
 if err != nil {
  return nil, resp, err
 }

 return ml, resp, nil
}

// DeleteManagedLicense deletes a managed license with a given ID.
// Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
func
 (s *ManagedLicensesService) DeleteManagedLicense(pid, mlid interface{}, options ...RequestOptionFunc)
(*Response, error) {
 project, err := parseID(pid)
 if err != nil {
  return nil, err
 }
 license, err := parseID(mlid)
 if err != nil {
  return nil, err
 }
 u := fmt.Sprintf("projects/%s/managed_licenses/%s", PathEscape(project), PathEscape(license))

 req, err := s.client.NewRequest(http.MethodDelete, u, nil, options)
 if err != nil {
  return nil, err
 }

 return s.client.Do(req, nil)
}

// EditManagedLicenceOptions represents the available EditManagedLicense() options.
// Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
type EditManagedLicenceOptions struct {
 ApprovalStatus *LicenseApprovalStatusValue `url:"approval_status,omitempty" json:"approval_status,omitempty"`
}

// EditManagedLicense updates an existing managed license with a new approval
// status.
//
```

```
 Deprecated: Removed in 17.0; use License Approval Policies instead -
https://docs.gitlab.com/user/compliance/license_approval_policies/
func (s *ManagedLicensesService) EditManagedLicense(pid, mlid interface{}, opt *EditManagedLicenceOptions,
options ...RequestOptionFunc) (*ManagedLicense, *Response, error) {
 project, err := parseID(pid)
 if err != nil {
  return nil, nil, err
 }
 license, err := parseID(mlid)
 if err != nil {
  return nil, nil, err
 }
 u := fmt.Sprintf("projects/%s/managed_licenses/%s", PathEscape(project), PathEscape(license))

 req, err := s.client.NewRequest(http.MethodPatch, u, opt, options)
 if err != nil {
  return nil, nil, err
 }

 ml := new(ManagedLicense)
 resp, err := s.client.Do(req, ml)
 if err != nil {
  return nil, resp, err
 }

 return ml, resp, nil
}
{
 "id": 3,
 "name": "ISC",
 "approval_status": "blacklisted"
}
[
 {
   "id": 1,
   "name": "MIT",
   "approval_status": "approved"
 },
 {
   "id": 3,
   "name": "ISC",
   "approval_status": "blacklisted"
 }
]
package gitlab

import (
 "fmt"
```

```
 "net/http"
 "testing"

 "github.com/stretchr/testify/require"
)

func TestLicenseService_GetLicense(t *testing.T) {
 t.Parallel()
 mux, client := setup(t)

 mux.HandleFunc("/api/v4/license", func(w http.ResponseWriter, r *http.Request) {
  testMethod(t, r, http.MethodGet)
  fmt.Fprintf(w, `
   {
    "id": 2,
    "plan": "gold",
    "historical_max": 300,
    "maximum_user_count": 300,
    "expired": false,
    "overage": 200,
    "user_limit": 100,
    "active_users": 300,
    "licensee": {
   "Name": "Venkatesh Thalluri"
    },
    "add_ons": {
   "GitLab_FileLocks": 1,
   "GitLab_Auditor_User": 1
    }
   }
  `)
 })

 want := &License{
  ID:              2,
  Plan:            "gold",
  HistoricalMax:    300,
  MaximumUserCount: 300,
  Expired:          false,
  Overage:          200,
  UserLimit:        100,
  ActiveUsers:      300,
  Licensee: struct {
   Name    string `json:"Name"`
   Company string `json:"Company"`
   Email   string
`json:"Email"`
  }{
```

```
  Name:    "Venkatesh Thalluri",
  Company: "",
  Email:   "",
 },
 AddOns: struct {
  GitLabAuditorUser int `json:"GitLab_Auditor_User"`
  GitLabDeployBoard int `json:"GitLab_DeployBoard"`
  GitLabFileLocks   int `json:"GitLab_FileLocks"`
  GitLabGeo         int `json:"GitLab_Geo"`
  GitLabServiceDesk int `json:"GitLab_ServiceDesk"`
 }{
  GitLabAuditorUser: 1,
  GitLabDeployBoard: 0,
  GitLabFileLocks:   1,
  GitLabGeo:         0,
  GitLabServiceDesk: 0,
 },
}

l, resp, err := client.License.GetLicense()
require.NoError(t, err)
require.NotNil(t, resp)
require.Equal(t, want, l)
}

func TestLicenseService_GetLicense_StatusNotFound(t *testing.T) {
t.Parallel()
mux, client := setup(t)

mux.HandleFunc("/api/v4/license", func(w http.ResponseWriter, r *http.Request) {
 testMethod(t, r, http.MethodGet)
 w.WriteHeader(http.StatusNotFound)
})

l, resp, err := client.License.GetLicense()
require.Error(t, err)
require.Nil(t, l)
require.Equal(t,
http.StatusNotFound, resp.StatusCode)
}

func TestLicenseService_AddLicense(t *testing.T) {
t.Parallel()
mux, client := setup(t)

mux.HandleFunc("/api/v4/license", func(w http.ResponseWriter, r *http.Request) {
 testMethod(t, r, http.MethodPost)
 fmt.Fprintf(w, `
```

```
  {
    "id": 2,
    "plan": "gold",
    "historical_max": 300,
    "maximum_user_count": 300,
    "expired": false,
    "overage": 200,
    "user_limit": 100,
    "active_users": 300,
    "licensee": {
   "Name": "Venkatesh Thalluri"
    },
    "add_ons": {
   "GitLab_FileLocks": 1,
   "GitLab_Auditor_User": 1
    }
  }
 `)
})

want := &License{
 ID:               2,
 Plan:             "gold",
 HistoricalMax:    300,
 MaximumUserCount: 300,
 Expired:          false,
 Overage:          200,
 UserLimit:        100,
 ActiveUsers:      300,
 Licensee: struct {
  Name    string `json:"Name"`
  Company string `json:"Company"`
  Email   string `json:"Email"`
 }{
  Name:    "Venkatesh Thalluri",
  Company:
"",
  Email:   "",
 },
 AddOns: struct {
  GitLabAuditorUser int `json:"GitLab_Auditor_User"`
  GitLabDeployBoard int `json:"GitLab_DeployBoard"`
  GitLabFileLocks   int `json:"GitLab_FileLocks"`
  GitLabGeo         int `json:"GitLab_Geo"`
  GitLabServiceDesk int `json:"GitLab_ServiceDesk"`
 }{
  GitLabAuditorUser: 1,
  GitLabDeployBoard: 0,
```

```
  GitLabFileLocks:   1,
  GitLabGeo:         0,
  GitLabServiceDesk: 0,
 },
}

l, resp, err := client.License.AddLicense(nil)
require.NoError(t, err)
require.NotNil(t, resp)
require.Equal(t, want, l)

l, resp, err = client.License.AddLicense(nil, errorOption)
require.EqualError(t, err, "RequestOptionFunc returns an error")
require.Nil(t, resp)
require.Nil(t, l)
}

func TestLicenseService_AddLicense_StatusNotFound(t *testing.T) {
t.Parallel()
mux, client := setup(t)

mux.HandleFunc("/api/v4/license", func(w http.ResponseWriter, r *http.Request) {
 testMethod(t, r, http.MethodPost)
 w.WriteHeader(http.StatusNotFound)
})

l,
resp, err := client.License.AddLicense(nil)
require.Error(t, err)
require.Nil(t, l)
require.Equal(t, http.StatusNotFound, resp.StatusCode)
}
//
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//
```

```
package gitlab

import (
 "net/http"
 "reflect"
 "testing"
)

func TestListManagedLicenses(t *testing.T) {
 t.Parallel()
 mux, client := setup(t)

 mux.HandleFunc("/api/v4/projects/1/managed_licenses", func(w http.ResponseWriter, r *http.Request) {
  testMethod(t, r, http.MethodGet)
  mustWriteHTTPResponse(t, w, "testdata/list_project_managed_licenses.json")
 })

 licenses, _, err := client.ManagedLicenses.ListManagedLicenses(1)
 if
 err != nil {
  t.Errorf("ManagedLicenses.ListManagedLicenses returned error: %v", err)
 }

 want := []*ManagedLicense{
  {
   ID:            1,
   Name:          "MIT",
   ApprovalStatus: LicenseApproved,
  },
  {
   ID:            3,
   Name:          "ISC",
   ApprovalStatus: LicenseBlacklisted,
  },
 }

 if !reflect.DeepEqual(want, licenses) {
  t.Errorf("ManagedLicenses.ListManagedLicenses returned %+v, want %+v", licenses, want)
 }
}

func TestGetManagedLicenses(t *testing.T) {
 t.Parallel()
 mux, client := setup(t)

 mux.HandleFunc("/api/v4/projects/1/managed_licenses/3", func(w http.ResponseWriter, r *http.Request) {
  testMethod(t, r, http.MethodGet)
  mustWriteHTTPResponse(t, w, "testdata/get_project_managed_license.json")
```

```
 })

 license, _, err := client.ManagedLicenses.GetManagedLicense(1, 3)
 if err != nil {
  t.Errorf("ManagedLicenses.GetManagedLicense returned error: %v", err)
 }

 want := &ManagedLicense{
  ID:            3,
  Name:
          "ISC",
  ApprovalStatus: LicenseBlacklisted,
 }

 if !reflect.DeepEqual(want, license) {
  t.Errorf("ManagedLicenses.GetManagedLicense returned %+v, want %+v", license, want)
 }
}

func TestAddManagedLicenses(t *testing.T) {
 t.Parallel()
 mux, client := setup(t)

 mux.HandleFunc("/api/v4/projects/1/managed_licenses", func(w http.ResponseWriter, r *http.Request) {
  testMethod(t, r, http.MethodPost)
  testBody(t, r, `{"name":"MIT","approval_status":"approved"}`)
  mustWriteHTTPResponse(t, w, "testdata/add_project_managed_license.json")
 })

 ops := AddManagedLicenseOptions{
  Name:          Ptr("MIT"),
  ApprovalStatus: Ptr(LicenseApproved),
 }
 license, _, err := client.ManagedLicenses.AddManagedLicense(1, &ops)
 if err != nil {
  t.Errorf("ManagedLicenses.AddManagedLicense returned error: %v", err)
 }

 want := &ManagedLicense{
  ID:            123,
  Name:          "MIT",
  ApprovalStatus: LicenseApproved,
 }

 if !reflect.DeepEqual(want, license) {
  t.Errorf("ManagedLicenses.AddManagedLicense
 returned %+v, want %+v", license, want)
 }
```

```
}

func TestDeleteManagedLicenses(t *testing.T) {
 t.Parallel()
 mux, client := setup(t)

 mux.HandleFunc("/api/v4/projects/1/managed_licenses/3", func(w http.ResponseWriter, r *http.Request) {
  testMethod(t, r, http.MethodDelete)
 })

 _, err := client.ManagedLicenses.DeleteManagedLicense(1, 3)
 if err != nil {
  t.Errorf("ManagedLicenses.RemoveManagedLicense returned error: %v", err)
 }
}

func TestEditManagedLicenses(t *testing.T) {
 t.Parallel()
 mux, client := setup(t)

 mux.HandleFunc("/api/v4/projects/1/managed_licenses/3", func(w http.ResponseWriter, r *http.Request) {
  testMethod(t, r, http.MethodPatch)
  testBody(t, r, `{"approval_status":"blacklisted"}`)
  mustWriteHTTPResponse(t, w, "testdata/edit_project_managed_license.json")
 })

 ops := EditManagedLicenceOptions{
  ApprovalStatus: Ptr(LicenseBlacklisted),
 }
 license, _, err := client.ManagedLicenses.EditManagedLicense(1, 3, &ops)
 if err != nil {
  t.Errorf("ManagedLicenses.EditManagedLicense
 returned error: %v", err)
 }

 want := &ManagedLicense{
  ID:            3,
  Name:          "CUSTOM",
  ApprovalStatus: LicenseBlacklisted,
 }

 if !reflect.DeepEqual(want, license) {
  t.Errorf("ManagedLicenses.EditManagedLicense returned %+v, want %+v", license, want)
 }
}
package gitlab

import (
```

```
 "fmt"
 "net/http"
 "testing"

 "github.com/stretchr/testify/require"
)

func TestLicenseTemplatesService_ListLicenseTemplates(t *testing.T) {
 t.Parallel()
 mux, client := setup(t)

 mux.HandleFunc("/api/v4/templates/licenses", func(w http.ResponseWriter, r *http.Request) {
  testMethod(t, r, http.MethodGet)
  fmt.Fprintf(w, `
   [
    {
     "key": "apache-2.0",
     "name": "Apache License 2.0",
     "nickname": null,
     "featured": true,
     "html_url": "http://choosealicense.com/licenses/apache-2.0/",
     "source_url": "http://www.apache.org/licenses/LICENSE-2.0.html",
     "description": "A permissive license that also provides an express grant of patent rights from contributors to users.",
     "conditions": [
      "include-copyright",
      "document-changes"
     ],
     "permissions": [
      "commercial-use",
      "modifications",
      "distribution",
      "patent-use",
      "private-use"
     ],
     "limitations": [
      "trademark-use",
      "no-liability"
     ],
     "content":
 "Apache License\n Version 2.0, January 2004\n [...]"
    }
   ]
  `)
 })

 want := []*LicenseTemplate{{
  Key:         "apache-2.0",
  Name:        "Apache License 2.0",
```

```
 Nickname:    "",
 Featured:    true,
 HTMLURL:     "http://choosealicense.com/licenses/apache-2.0/",
 SourceURL:   "http://www.apache.org/licenses/LICENSE-2.0.html",
 Description: "A permissive license that also provides an express grant of patent rights from contributors to users.",
 Conditions:  []string{"include-copyright", "document-changes"},
 Permissions: []string{"commercial-use", "modifications", "distribution", "patent-use", "private-use"},
 Limitations: []string{"trademark-use", "no-liability"},
 Content:     "Apache License\n Version 2.0, January 2004\n [...]",
}}

lts, resp, err := client.LicenseTemplates.ListLicenseTemplates(nil)
require.NoError(t, err)
require.NotNil(t, resp)
require.Equal(t, want, lts)

lts, resp, err = client.LicenseTemplates.ListLicenseTemplates(nil,
errorOption)
require.EqualError(t, err, "RequestOptionFunc returns an error")
require.Nil(t, resp)
require.Nil(t, lts)
}

func TestLicenseTemplatesService_ListLicenseTemplates_StatusNotFound(t *testing.T) {
t.Parallel()
mux, client := setup(t)

mux.HandleFunc("/api/v4/templates/licenses", func(w http.ResponseWriter, r *http.Request) {
 testMethod(t, r, http.MethodGet)
 w.WriteHeader(http.StatusNotFound)
})

lts, resp, err := client.LicenseTemplates.ListLicenseTemplates(nil)
require.Error(t, err)
require.Nil(t, lts)
require.Equal(t, http.StatusNotFound, resp.StatusCode)
}

func TestLicenseTemplatesService_GetLicenseTemplate(t *testing.T) {
t.Parallel()
mux, client := setup(t)

mux.HandleFunc("/api/v4/templates/licenses/apache-2.0", func(w http.ResponseWriter, r *http.Request) {
 testMethod(t, r, http.MethodGet)
 fmt.Fprintf(w, `
  {
   "key": "apache-2.0",
   "name": "Apache License 2.0",
```

"nickname": null,
"featured": true,
"html_url":
"http://choosealicense.com/licenses/apache-2.0/",
"source_url": "http://www.apache.org/licenses/LICENSE-2.0.html",
"description": "A permissive license that also provides an express grant of patent rights from contributors to users.",
"conditions": [
"include-copyright",
"document-changes"
],
"permissions": [
"commercial-use",
"modifications",
"distribution",
"patent-use",
"private-use"
],
"limitations": [
"trademark-use",
"no-liability"
],
"content": "Apache License\n Version 2.0, January 2004\n [...]"
}
`)
})

```
want := &LicenseTemplate{
 Key:         "apache-2.0",
 Name:        "Apache License 2.0",
 Nickname:    "",
 Featured:    true,
 HTMLURL:     "http://choosealicense.com/licenses/apache-2.0/",
 SourceURL:   "http://www.apache.org/licenses/LICENSE-2.0.html",
 Description: "A permissive license that also provides an express grant of patent rights from contributors to users.",
 Conditions:
 []string{"include-copyright", "document-changes"},
 Permissions: []string{"commercial-use", "modifications", "distribution", "patent-use", "private-use"},
 Limitations: []string{"trademark-use", "no-liability"},
 Content:     "Apache License\n Version 2.0, January 2004\n [...]",
}

lt, resp, err := client.LicenseTemplates.GetLicenseTemplate("apache-2.0", nil)
require.NoError(t, err)
require.NotNil(t, resp)
require.Equal(t, want, lt)

lt, resp, err = client.LicenseTemplates.GetLicenseTemplate("apache-2.0", nil, errorOption)
require.EqualError(t, err, "RequestOptionFunc returns an error")
```

```
 require.Nil(t, resp)
 require.Nil(t, lt)

 lt, resp, err = client.LicenseTemplates.GetLicenseTemplate("mit", nil)
 require.Error(t, err)
 require.Nil(t, lt)
 require.Equal(t, http.StatusNotFound, resp.StatusCode)
}
// Code generated by MockGen. DO NOT EDIT.
// Source: gitlab.com/gitlab-org/api/client-go (interfaces: LicenseTemplatesServiceInterface)
//
// Generated by this command:
//
// mockgen -typed -destination=license_templates_mock.go -package=testing gitlab.com/gitlab-org/api/client-go
LicenseTemplatesServiceInterface
//

// Package testing is a generated GoMock package.
package testing

import (
 reflect "reflect"

 gitlab "gitlab.com/gitlab-org/api/client-go"
 gomock "go.uber.org/mock/gomock"
)

// MockLicenseTemplatesServiceInterface is a mock of LicenseTemplatesServiceInterface interface.
type MockLicenseTemplatesServiceInterface struct {
 ctrl     *gomock.Controller
 recorder *MockLicenseTemplatesServiceInterfaceMockRecorder
 isgomock struct{}
}

// MockLicenseTemplatesServiceInterfaceMockRecorder is the mock recorder for
MockLicenseTemplatesServiceInterface.
type MockLicenseTemplatesServiceInterfaceMockRecorder struct {
 mock *MockLicenseTemplatesServiceInterface
}

// NewMockLicenseTemplatesServiceInterface
 creates a new mock instance.
func NewMockLicenseTemplatesServiceInterface(ctrl *gomock.Controller)
*MockLicenseTemplatesServiceInterface {
 mock := &MockLicenseTemplatesServiceInterface{ctrl: ctrl}
 mock.recorder = &MockLicenseTemplatesServiceInterfaceMockRecorder{mock}
 return mock
}
```

```
// EXPECT returns an object that allows the caller to indicate expected use.
func (m *MockLicenseTemplatesServiceInterface) EXPECT()
*MockLicenseTemplatesServiceInterfaceMockRecorder {
 return m.recorder
}

// GetLicenseTemplate mocks base method.
func (m *MockLicenseTemplatesServiceInterface) GetLicenseTemplate(template string, opt
*gitlab.GetLicenseTemplateOptions, options ...gitlab.RequestOptionFunc) (*gitlab.LicenseTemplate,
*gitlab.Response, error) {
 m.ctrl.T.Helper()
 varargs := []any{template, opt}
 for _, a := range options {
  varargs = append(varargs, a)
 }
 ret := m.ctrl.Call(m, "GetLicenseTemplate", varargs...)
 ret0, _ := ret[0].(*gitlab.LicenseTemplate)
 ret1, _ :=
 ret[1].(*gitlab.Response)
 ret2, _ := ret[2].(error)
 return ret0, ret1, ret2
}

// GetLicenseTemplate indicates an expected call of GetLicenseTemplate.
func (mr *MockLicenseTemplatesServiceInterfaceMockRecorder) GetLicenseTemplate(template, opt any, options
...any) *MockLicenseTemplatesServiceInterfaceGetLicenseTemplateCall {
 mr.mock.ctrl.T.Helper()
 varargs := append([]any{template, opt}, options...)
 call := mr.mock.ctrl.RecordCallWithMethodType(mr.mock, "GetLicenseTemplate",
reflect.TypeOf((*MockLicenseTemplatesServiceInterface)(nil).GetLicenseTemplate), varargs...)
 return &MockLicenseTemplatesServiceInterfaceGetLicenseTemplateCall{Call: call}
}

// MockLicenseTemplatesServiceInterfaceGetLicenseTemplateCall wrap *gomock.Call
type MockLicenseTemplatesServiceInterfaceGetLicenseTemplateCall struct {
 *gomock.Call
}

// Return rewrite *gomock.Call.Return
func (c *MockLicenseTemplatesServiceInterfaceGetLicenseTemplateCall) Return(arg0 *gitlab.LicenseTemplate,
arg1 *gitlab.Response, arg2
 error) *MockLicenseTemplatesServiceInterfaceGetLicenseTemplateCall {
 c.Call = c.Call.Return(arg0, arg1, arg2)
 return c
}

// Do rewrite *gomock.Call.Do
```

```
func (c *MockLicenseTemplatesServiceInterfaceGetLicenseTemplateCall) Do(f func(string,
*gitlab.GetLicenseTemplateOptions, ...gitlab.RequestOptionFunc) (*gitlab.LicenseTemplate, *gitlab.Response,
error)) *MockLicenseTemplatesServiceInterfaceGetLicenseTemplateCall {
 c.Call = c.Call.Do(f)
 return c
}

// DoAndReturn rewrite *gomock.Call.DoAndReturn
func (c *MockLicenseTemplatesServiceInterfaceGetLicenseTemplateCall) DoAndReturn(f func(string,
*gitlab.GetLicenseTemplateOptions, ...gitlab.RequestOptionFunc) (*gitlab.LicenseTemplate, *gitlab.Response,
error)) *MockLicenseTemplatesServiceInterfaceGetLicenseTemplateCall {
 c.Call = c.Call.DoAndReturn(f)
 return c
}

// ListLicenseTemplates mocks base method.
func (m *MockLicenseTemplatesServiceInterface) ListLicenseTemplates(opt *gitlab.ListLicenseTemplatesOptions,
options ...gitlab.RequestOptionFunc)
 ([]*gitlab.LicenseTemplate, *gitlab.Response, error) {
 m.ctrl.T.Helper()
 varargs := []any{opt}
 for _, a := range options {
  varargs = append(varargs, a)
 }
 ret := m.ctrl.Call(m, "ListLicenseTemplates", varargs...)
 ret0, _ := ret[0].([]*gitlab.LicenseTemplate)
 ret1, _ := ret[1].(*gitlab.Response)
 ret2, _ := ret[2].(error)
 return ret0, ret1, ret2
}

// ListLicenseTemplates indicates an expected call of ListLicenseTemplates.
func (mr *MockLicenseTemplatesServiceInterfaceMockRecorder) ListLicenseTemplates(opt any, options ...any)
*MockLicenseTemplatesServiceInterfaceListLicenseTemplatesCall {
 mr.mock.ctrl.T.Helper()
 varargs := append([]any{opt}, options...)
 call := mr.mock.ctrl.RecordCallWithMethodType(mr.mock, "ListLicenseTemplates",
reflect.TypeOf((*MockLicenseTemplatesServiceInterface)(nil).ListLicenseTemplates), varargs...)
 return &MockLicenseTemplatesServiceInterfaceListLicenseTemplatesCall{Call: call}
}

// MockLicenseTemplatesServiceInterfaceListLicenseTemplatesCall
 wrap *gomock.Call
type MockLicenseTemplatesServiceInterfaceListLicenseTemplatesCall struct {
 *gomock.Call
}

// Return rewrite *gomock.Call.Return
```

```
func (c *MockLicenseTemplatesServiceInterfaceListLicenseTemplatesCall) Return(arg0 []*gitlab.LicenseTemplate,
arg1 *gitlab.Response, arg2 error) *MockLicenseTemplatesServiceInterfaceListLicenseTemplatesCall {
 c.Call = c.Call.Return(arg0, arg1, arg2)
 return c
}

// Do rewrite *gomock.Call.Do
func (c *MockLicenseTemplatesServiceInterfaceListLicenseTemplatesCall) Do(f
func(*gitlab.ListLicenseTemplatesOptions, ...gitlab.RequestOptionFunc) ([]*gitlab.LicenseTemplate,
*gitlab.Response, error)) *MockLicenseTemplatesServiceInterfaceListLicenseTemplatesCall {
 c.Call = c.Call.Do(f)
 return c
}

// DoAndReturn rewrite *gomock.Call.DoAndReturn
func (c *MockLicenseTemplatesServiceInterfaceListLicenseTemplatesCall) DoAndReturn(f
func(*gitlab.ListLicenseTemplatesOptions, ...gitlab.RequestOptionFunc) ([]*gitlab.LicenseTemplate,
*gitlab.Response,
 error)) *MockLicenseTemplatesServiceInterfaceListLicenseTemplatesCall {
 c.Call = c.Call.DoAndReturn(f)
 return c
}
{
 "id": 123,
 "name": "MIT",
 "approval_status": "approved"
}
//
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.
//

package gitlab

import (
 "fmt"
 "net/http"
```

```
 "time"
)

type (
 LicenseServiceInterface interface {
  GetLicense(options ...RequestOptionFunc) (*License, *Response, error)
  AddLicense(opt *AddLicenseOptions, options ...RequestOptionFunc) (*License, *Response, error)
  DeleteLicense(licenseID int, options ...RequestOptionFunc) (*Response, error)
 }

 // LicenseService handles communication with the
 license
 // related methods of the GitLab API.
 //
 // GitLab API docs:
 // https://docs.gitlab.com/api/license/
 LicenseService struct {
  client *Client
 }
)

var _ LicenseServiceInterface = (*LicenseService)(nil)

// License represents a GitLab license.
//
// GitLab API docs:
// https://docs.gitlab.com/api/license/
type License struct {
 ID              int        `json:"id"`
 Plan            string     `json:"plan"`
 CreatedAt       *time.Time `json:"created_at"`
 StartsAt        *ISOTime   `json:"starts_at"`
 ExpiresAt       *ISOTime   `json:"expires_at"`
 HistoricalMax   int        `json:"historical_max"`
 MaximumUserCount int       `json:"maximum_user_count"`
 Expired         bool       `json:"expired"`
 Overage         int        `json:"overage"`
 UserLimit       int        `json:"user_limit"`
 ActiveUsers     int        `json:"active_users"`
 Licensee        struct {
  Name    string `json:"Name"`
  Company string `json:"Company"`
  Email   string `json:"Email"`
 }
 `json:"licensee"`
 // Add on codes that may occur in legacy licenses that don't have a plan yet.
 // https://gitlab.com/gitlab-org/gitlab/-/blob/master/ee/app/models/license.rb
 AddOns struct {
```

```
  GitLabAuditorUser int `json:"GitLab_Auditor_User"`
  GitLabDeployBoard int `json:"GitLab_DeployBoard"`
  GitLabFileLocks   int `json:"GitLab_FileLocks"`
  GitLabGeo         int `json:"GitLab_Geo"`
  GitLabServiceDesk int `json:"GitLab_ServiceDesk"`
 } `json:"add_ons"`
}

func (l License) String() string {
 return Stringify(l)
}

// GetLicense retrieves information about the current license.
//
// GitLab API docs:
// https://docs.gitlab.com/api/license/#retrieve-information-about-the-current-license
func (s *LicenseService) GetLicense(options ...RequestOptionFunc) (*License, *Response, error) {
 req, err := s.client.NewRequest(http.MethodGet, "license", nil, options)
 if err != nil {
  return nil, nil, err
 }

 l := new(License)
 resp, err := s.client.Do(req, l)
 if err != nil {
  return nil,
 resp, err
 }

 return l, resp, nil
}

// AddLicenseOptions represents the available AddLicense() options.
//
// https://docs.gitlab.com/api/license/#add-a-new-license
type AddLicenseOptions struct {
 License *string `url:"license" json:"license"`
}

// AddLicense adds a new license.
//
// GitLab API docs:
// https://docs.gitlab.com/api/license/#add-a-new-license
func (s *LicenseService) AddLicense(opt *AddLicenseOptions, options ...RequestOptionFunc) (*License,
*Response, error) {
 req, err := s.client.NewRequest(http.MethodPost, "license", opt, options)
 if err != nil {
  return nil, nil, err
```

```
 }

 l := new(License)
 resp, err := s.client.Do(req, l)
 if err != nil {
  return nil, resp, err
 }

 return l, resp, nil
}

// DeleteLicense deletes an existing license.
//
// GitLab API docs:
// https://docs.gitlab.com/api/license/#delete-a-license
func (s *LicenseService) DeleteLicense(licenseID int, options ...RequestOptionFunc) (*Response, error) {
 u := fmt.Sprintf("license/%d", licenseID)

 req,
 err := s.client.NewRequest(http.MethodDelete, u, nil, options)
 if err != nil {
  return nil, err
 }

 return s.client.Do(req, nil)
}
//
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.
//

package gitlab

import (
 "fmt"
 "net/http"
)
```

```
// LicenseTemplate represents a license template.
//
// GitLab API docs:
// https://docs.gitlab.com/api/templates/licenses/
type LicenseTemplate struct {
 Key         string   `json:"key"`
 Name        string   `json:"name"`
 Nickname    string   `json:"nickname"`
 Featured    bool     `json:"featured"`
 HTMLURL     string   `json:"html_url"`
 SourceURL
   string   `json:"source_url"`
 Description string   `json:"description"`
 Conditions  []string `json:"conditions"`
 Permissions []string `json:"permissions"`
 Limitations []string `json:"limitations"`
 Content     string   `json:"content"`
}

type (
 LicenseTemplatesServiceInterface interface {
  ListLicenseTemplates(opt *ListLicenseTemplatesOptions, options ...RequestOptionFunc) ([]*LicenseTemplate,
*Response, error)
  GetLicenseTemplate(template string, opt *GetLicenseTemplateOptions, options ...RequestOptionFunc)
(*LicenseTemplate, *Response, error)
 }

 // LicenseTemplatesService handles communication with the license templates
 // related methods of the GitLab API.
 //
 // GitLab API docs: https://docs.gitlab.com/api/templates/licenses/
 LicenseTemplatesService struct {
  client *Client
 }
)

var _ LicenseTemplatesServiceInterface = (*LicenseTemplatesService)(nil)

// ListLicenseTemplatesOptions represents the available
// ListLicenseTemplates() options.
//
// GitLab API docs:
//
 https://docs.gitlab.com/api/templates/licenses/#list-license-templates
type ListLicenseTemplatesOptions struct {
 ListOptions
 Popular *bool `url:"popular,omitempty" json:"popular,omitempty"`
```

```
}

// ListLicenseTemplates get all license templates.
//
// GitLab API docs:
// https://docs.gitlab.com/api/templates/licenses/#list-license-templates
func (s *LicenseTemplatesService) ListLicenseTemplates(opt *ListLicenseTemplatesOptions, options
...RequestOptionFunc) ([]*LicenseTemplate, *Response, error) {
 req, err := s.client.NewRequest(http.MethodGet, "templates/licenses", opt, options)
 if err != nil {
  return nil, nil, err
 }

 var lts []*LicenseTemplate
 resp, err := s.client.Do(req, &lts)
 if err != nil {
  return nil, resp, err
 }

 return lts, resp, nil
}

// GetLicenseTemplateOptions represents the available
// GetLicenseTemplate() options.
//
// GitLab API docs:
// https://docs.gitlab.com/api/templates/licenses/#single-license-template
type GetLicenseTemplateOptions struct {
 Project
  *string `url:"project,omitempty" json:"project,omitempty"`
 Fullname *string `url:"fullname,omitempty" json:"fullname,omitempty"`
}

// GetLicenseTemplate get a single license template. You can pass parameters
// to replace the license placeholder.
//
// GitLab API docs:
// https://docs.gitlab.com/api/templates/licenses/#single-license-template
func (s *LicenseTemplatesService) GetLicenseTemplate(template string, opt *GetLicenseTemplateOptions, options
...RequestOptionFunc) (*LicenseTemplate, *Response, error) {
 u := fmt.Sprintf("templates/licenses/%s", template)

 req, err := s.client.NewRequest(http.MethodGet, u, opt, options)
 if err != nil {
  return nil, nil, err
 }

 lt := new(LicenseTemplate)
```

```
 resp, err := s.client.Do(req, lt)
 if err != nil {
  return nil, resp, err
 }

 return lt, resp, nil
}
// Code generated by MockGen. DO NOT EDIT.
// Source: gitlab.com/gitlab-org/api/client-go (interfaces: ManagedLicensesServiceInterface)
//
// Generated by this command:
//
// mockgen -typed -destination=project_managed_licenses_mock.go -package=testing gitlab.com/gitlab-
org/api/client-go ManagedLicensesServiceInterface
//

// Package testing is a generated GoMock package.
package testing

import (
 reflect "reflect"

 gitlab "gitlab.com/gitlab-org/api/client-go"
 gomock "go.uber.org/mock/gomock"
)

// MockManagedLicensesServiceInterface is a mock of ManagedLicensesServiceInterface interface.
type MockManagedLicensesServiceInterface struct {
 ctrl     *gomock.Controller
 recorder *MockManagedLicensesServiceInterfaceMockRecorder
 isgomock struct{}
}

// MockManagedLicensesServiceInterfaceMockRecorder is the mock recorder for
MockManagedLicensesServiceInterface.
type MockManagedLicensesServiceInterfaceMockRecorder struct {
 mock *MockManagedLicensesServiceInterface
}

// NewMockManagedLicensesServiceInterface
 creates a new mock instance.
func NewMockManagedLicensesServiceInterface(ctrl *gomock.Controller)
*MockManagedLicensesServiceInterface {
 mock := &MockManagedLicensesServiceInterface{ctrl: ctrl}
 mock.recorder = &MockManagedLicensesServiceInterfaceMockRecorder{mock}
 return mock
}
```

```
// EXPECT returns an object that allows the caller to indicate expected use.
func (m *MockManagedLicensesServiceInterface) EXPECT()
*MockManagedLicensesServiceInterfaceMockRecorder {
 return m.recorder
}

// AddManagedLicense mocks base method.
func (m *MockManagedLicensesServiceInterface) AddManagedLicense(pid any, opt
*gitlab.AddManagedLicenseOptions, options ...gitlab.RequestOptionFunc) (*gitlab.ManagedLicense,
*gitlab.Response, error) {
 m.ctrl.T.Helper()
 varargs := []any{pid, opt}
 for _, a := range options {
  varargs = append(varargs, a)
 }
 ret := m.ctrl.Call(m, "AddManagedLicense", varargs...)
 ret0, _ := ret[0].(*gitlab.ManagedLicense)
 ret1, _ := ret[1].(*gitlab.Response)
 ret2,
 _ := ret[2].(error)
 return ret0, ret1, ret2
}

// AddManagedLicense indicates an expected call of AddManagedLicense.
func (mr *MockManagedLicensesServiceInterfaceMockRecorder) AddManagedLicense(pid, opt any, options ...any)
*MockManagedLicensesServiceInterfaceAddManagedLicenseCall {
 mr.mock.ctrl.T.Helper()
 varargs := append([]any{pid, opt}, options...)
 call := mr.mock.ctrl.RecordCallWithMethodType(mr.mock, "AddManagedLicense",
reflect.TypeOf((*MockManagedLicensesServiceInterface)(nil).AddManagedLicense), varargs...)
 return &MockManagedLicensesServiceInterfaceAddManagedLicenseCall{Call: call}
}

// MockManagedLicensesServiceInterfaceAddManagedLicenseCall wrap *gomock.Call
type MockManagedLicensesServiceInterfaceAddManagedLicenseCall struct {
 *gomock.Call
}

// Return rewrite *gomock.Call.Return
func (c *MockManagedLicensesServiceInterfaceAddManagedLicenseCall) Return(arg0 *gitlab.ManagedLicense,
arg1 *gitlab.Response, arg2 error) *MockManagedLicensesServiceInterfaceAddManagedLicenseCall
 {
 c.Call = c.Call.Return(arg0, arg1, arg2)
 return c
}

// Do rewrite *gomock.Call.Do
func (c *MockManagedLicensesServiceInterfaceAddManagedLicenseCall) Do(f func(any,
```

```
*gitlab.AddManagedLicenseOptions, ...gitlab.RequestOptionFunc) (*gitlab.ManagedLicense, *gitlab.Response,
error)) *MockManagedLicensesServiceInterfaceAddManagedLicenseCall {
 c.Call = c.Call.Do(f)
 return c
}

// DoAndReturn rewrite *gomock.Call.DoAndReturn
func (c *MockManagedLicensesServiceInterfaceAddManagedLicenseCall) DoAndReturn(f func(any,
*gitlab.AddManagedLicenseOptions, ...gitlab.RequestOptionFunc) (*gitlab.ManagedLicense, *gitlab.Response,
error)) *MockManagedLicensesServiceInterfaceAddManagedLicenseCall {
 c.Call = c.Call.DoAndReturn(f)
 return c
}

// DeleteManagedLicense mocks base method.
func (m *MockManagedLicensesServiceInterface) DeleteManagedLicense(pid, mlid any, options
...gitlab.RequestOptionFunc) (*gitlab.Response, error) {
 m.ctrl.T.Helper()
 varargs := []any{pid, mlid}
 for _, a := range
 options {
  varargs = append(varargs, a)
 }
 ret := m.ctrl.Call(m, "DeleteManagedLicense", varargs...)
 ret0, _ := ret[0].(*gitlab.Response)
 ret1, _ := ret[1].(error)
 return ret0, ret1
}

// DeleteManagedLicense indicates an expected call of DeleteManagedLicense.
func (mr *MockManagedLicensesServiceInterfaceMockRecorder) DeleteManagedLicense(pid, mlid any, options
...any) *MockManagedLicensesServiceInterfaceDeleteManagedLicenseCall {
 mr.mock.ctrl.T.Helper()
 varargs := append([]any{pid, mlid}, options...)
 call := mr.mock.ctrl.RecordCallWithMethodType(mr.mock, "DeleteManagedLicense",
reflect.TypeOf((*MockManagedLicensesServiceInterface)(nil).DeleteManagedLicense), varargs...)
 return &MockManagedLicensesServiceInterfaceDeleteManagedLicenseCall{Call: call}
}

// MockManagedLicensesServiceInterfaceDeleteManagedLicenseCall wrap *gomock.Call
type MockManagedLicensesServiceInterfaceDeleteManagedLicenseCall struct {
 *gomock.Call
}

// Return rewrite *gomock.Call.Return
func (c *MockManagedLicensesServiceInterfaceDeleteManagedLicenseCall)
 Return(arg0 *gitlab.Response, arg1 error) *MockManagedLicensesServiceInterfaceDeleteManagedLicenseCall {
 c.Call = c.Call.Return(arg0, arg1)
```

```
 return c
}

// Do rewrite *gomock.Call.Do
func (c *MockManagedLicensesServiceInterfaceDeleteManagedLicenseCall) Do(f func(any, any,
...gitlab.RequestOptionFunc) (*gitlab.Response, error))
*MockManagedLicensesServiceInterfaceDeleteManagedLicenseCall {
 c.Call = c.Call.Do(f)
 return c
}

// DoAndReturn rewrite *gomock.Call.DoAndReturn
func (c *MockManagedLicensesServiceInterfaceDeleteManagedLicenseCall) DoAndReturn(f func(any, any,
...gitlab.RequestOptionFunc) (*gitlab.Response, error))
*MockManagedLicensesServiceInterfaceDeleteManagedLicenseCall {
 c.Call = c.Call.DoAndReturn(f)
 return c
}

// EditManagedLicense mocks base method.
func (m *MockManagedLicensesServiceInterface) EditManagedLicense(pid, mlid any, opt
*gitlab.EditManagedLicenceOptions, options ...gitlab.RequestOptionFunc) (*gitlab.ManagedLicense,
 *gitlab.Response, error) {
 m.ctrl.T.Helper()
 varargs := []any{pid, mlid, opt}
 for _, a := range options {
  varargs = append(varargs, a)
 }
 ret := m.ctrl.Call(m, "EditManagedLicense", varargs...)
 ret0, _ := ret[0].(*gitlab.ManagedLicense)
 ret1, _ := ret[1].(*gitlab.Response)
 ret2, _ := ret[2].(error)
 return ret0, ret1, ret2
}

// EditManagedLicense indicates an expected call of EditManagedLicense.
func (mr *MockManagedLicensesServiceInterfaceMockRecorder) EditManagedLicense(pid, mlid, opt any, options
...any) *MockManagedLicensesServiceInterfaceEditManagedLicenseCall {
 mr.mock.ctrl.T.Helper()
 varargs := append([]any{pid, mlid, opt}, options...)
 call := mr.mock.ctrl.RecordCallWithMethodType(mr.mock, "EditManagedLicense",
reflect.TypeOf((*MockManagedLicensesServiceInterface)(nil).EditManagedLicense), varargs...)
 return &MockManagedLicensesServiceInterfaceEditManagedLicenseCall{Call: call}
}

// MockManagedLicensesServiceInterfaceEditManagedLicenseCall wrap
 *gomock.Call
type MockManagedLicensesServiceInterfaceEditManagedLicenseCall struct {
```

```
 *gomock.Call
}

// Return rewrite *gomock.Call.Return
func (c *MockManagedLicensesServiceInterfaceEditManagedLicenseCall) Return(arg0 *gitlab.ManagedLicense,
arg1 *gitlab.Response, arg2 error) *MockManagedLicensesServiceInterfaceEditManagedLicenseCall {
 c.Call = c.Call.Return(arg0, arg1, arg2)
 return c
}

// Do rewrite *gomock.Call.Do
func (c *MockManagedLicensesServiceInterfaceEditManagedLicenseCall) Do(f func(any, any,
*gitlab.EditManagedLicenceOptions, ...gitlab.RequestOptionFunc) (*gitlab.ManagedLicense, *gitlab.Response,
error)) *MockManagedLicensesServiceInterfaceEditManagedLicenseCall {
 c.Call = c.Call.Do(f)
 return c
}

// DoAndReturn rewrite *gomock.Call.DoAndReturn
func (c *MockManagedLicensesServiceInterfaceEditManagedLicenseCall) DoAndReturn(f func(any, any,
*gitlab.EditManagedLicenceOptions, ...gitlab.RequestOptionFunc) (*gitlab.ManagedLicense, *gitlab.Response,
error)) *MockManagedLicensesServiceInterfaceEditManagedLicenseCall
 {
 c.Call = c.Call.DoAndReturn(f)
 return c
}

// GetManagedLicense mocks base method.
func (m *MockManagedLicensesServiceInterface) GetManagedLicense(pid, mlid any, options
...gitlab.RequestOptionFunc) (*gitlab.ManagedLicense, *gitlab.Response, error) {
 m.ctrl.T.Helper()
 varargs := []any{pid, mlid}
 for _, a := range options {
  varargs = append(varargs, a)
 }
 ret := m.ctrl.Call(m, "GetManagedLicense", varargs...)
 ret0, _ := ret[0].(*gitlab.ManagedLicense)
 ret1, _ := ret[1].(*gitlab.Response)
 ret2, _ := ret[2].(error)
 return ret0, ret1, ret2
}

// GetManagedLicense indicates an expected call of GetManagedLicense.
func (mr *MockManagedLicensesServiceInterfaceMockRecorder) GetManagedLicense(pid, mlid any, options
...any) *MockManagedLicensesServiceInterfaceGetManagedLicenseCall {
 mr.mock.ctrl.T.Helper()
 varargs := append([]any{pid, mlid}, options...)
 call := mr.mock.ctrl.RecordCallWithMethodType(mr.mock, "GetManagedLicense",
```

```
reflect.TypeOf((*MockManagedLicensesServiceInterface)(nil).GetManagedLicense),
 varargs...)
 return &MockManagedLicensesServiceInterfaceGetManagedLicenseCall{Call: call}
}

// MockManagedLicensesServiceInterfaceGetManagedLicenseCall wrap *gomock.Call
type MockManagedLicensesServiceInterfaceGetManagedLicenseCall struct {
 *gomock.Call
}

// Return rewrite *gomock.Call.Return
func (c *MockManagedLicensesServiceInterfaceGetManagedLicenseCall) Return(arg0 *gitlab.ManagedLicense,
arg1 *gitlab.Response, arg2 error) *MockManagedLicensesServiceInterfaceGetManagedLicenseCall {
 c.Call = c.Call.Return(arg0, arg1, arg2)
 return c
}

// Do rewrite *gomock.Call.Do
func (c *MockManagedLicensesServiceInterfaceGetManagedLicenseCall) Do(f func(any, any,
...gitlab.RequestOptionFunc) (*gitlab.ManagedLicense, *gitlab.Response, error))
*MockManagedLicensesServiceInterfaceGetManagedLicenseCall {
 c.Call = c.Call.Do(f)
 return c
}

// DoAndReturn rewrite *gomock.Call.DoAndReturn
func (c *MockManagedLicensesServiceInterfaceGetManagedLicenseCall)
 DoAndReturn(f func(any, any, ...gitlab.RequestOptionFunc) (*gitlab.ManagedLicense, *gitlab.Response, error))
*MockManagedLicensesServiceInterfaceGetManagedLicenseCall {
 c.Call = c.Call.DoAndReturn(f)
 return c
}

// ListManagedLicenses mocks base method.
func (m *MockManagedLicensesServiceInterface) ListManagedLicenses(pid any, options
...gitlab.RequestOptionFunc) ([]*gitlab.ManagedLicense, *gitlab.Response, error) {
 m.ctrl.T.Helper()
 varargs := []any{pid}
 for _, a := range options {
  varargs = append(varargs, a)
 }
 ret := m.ctrl.Call(m, "ListManagedLicenses", varargs...)
 ret0, _ := ret[0].([]*gitlab.ManagedLicense)
 ret1, _ := ret[1].(*gitlab.Response)
 ret2, _ := ret[2].(error)
 return ret0, ret1, ret2
}
```

```
// ListManagedLicenses indicates an expected call of ListManagedLicenses.
func (mr *MockManagedLicensesServiceInterfaceMockRecorder) ListManagedLicenses(pid any, options ...any)
*MockManagedLicensesServiceInterfaceListManagedLicensesCall {
 mr.mock.ctrl.T.Helper()
 varargs
 := append([]any{pid}, options...)
 call := mr.mock.ctrl.RecordCallWithMethodType(mr.mock, "ListManagedLicenses",
reflect.TypeOf((*MockManagedLicensesServiceInterface)(nil).ListManagedLicenses), varargs...)
 return &MockManagedLicensesServiceInterfaceListManagedLicensesCall{Call: call}
}

// MockManagedLicensesServiceInterfaceListManagedLicensesCall wrap *gomock.Call
type MockManagedLicensesServiceInterfaceListManagedLicensesCall struct {
 *gomock.Call
}

// Return rewrite *gomock.Call.Return
func (c *MockManagedLicensesServiceInterfaceListManagedLicensesCall) Return(arg0 []*gitlab.ManagedLicense,
arg1 *gitlab.Response, arg2 error) *MockManagedLicensesServiceInterfaceListManagedLicensesCall {
 c.Call = c.Call.Return(arg0, arg1, arg2)
 return c
}

// Do rewrite *gomock.Call.Do
func (c *MockManagedLicensesServiceInterfaceListManagedLicensesCall) Do(f func(any,
...gitlab.RequestOptionFunc) ([]*gitlab.ManagedLicense, *gitlab.Response, error))
*MockManagedLicensesServiceInterfaceListManagedLicensesCall
 {
 c.Call = c.Call.Do(f)
 return c
}

// DoAndReturn rewrite *gomock.Call.DoAndReturn
func (c *MockManagedLicensesServiceInterfaceListManagedLicensesCall) DoAndReturn(f func(any,
...gitlab.RequestOptionFunc) ([]*gitlab.ManagedLicense, *gitlab.Response, error))
*MockManagedLicensesServiceInterfaceListManagedLicensesCall {
 c.Call = c.Call.DoAndReturn(f)
 return c
}
```

1.4301 dario.cat-mergo 1.0.2

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```
{
  "import": "./thing.json",
  "fields": {
     "site": "string",
     "author": "updater"
  }
}
```

1.4302 tomcat 9.0.105

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Schemas for Java EE Deployment Descriptors:
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- javaee_web_services_client_1_2.xsd
- javaee_6.xsd
- javaee_web_services_1_3.xsd
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- jsp_2_2.xsd
- web-app_3_0.xsd
- web-common_3_0.xsd
- web-fragment_3_0.xsd
- javaee_7.xsd
- javaee_web_services_1_4.xsd
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- jsp_2_3.xsd
- web-app_3_1.xsd
- web-common_3_1.xsd
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The original XML Schemas for Java EE Deployment Descriptors:
- javaee_5.xsd
- javaee_web_services_1_2.xsd
- javaee_web_services_client_1_2.xsd
- javaee_6.xsd
- javaee_web_services_1_3.xsd
- javaee_web_services_client_1_3.xsd
- jsp_2_2.xsd

- web-app_3_0.xsd
- web-common_3_0.xsd
- web-fragment_3_0.xsd
- javaee_7.xsd
- javaee_web_services_1_4.xsd
- javaee_web_services_client_1_4.xsd
- jsp_2_3.xsd
- web-app_3_1.xsd
- web-common_3_1.xsd
- web-fragment_3_1.xsd
- javaee_8.xsd
- web-app_4_0.xsd
- web-common_4_0.xsd
- web-fragment_4_0.xsd

may be obtained from:
http://www.oracle.com/webfolder/technetwork/jsc/xml/ns/javaee/index.html
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JDT Core Batch Compiler component, which is open source software.
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org.apache.tomcat.util.json.JSONParser.jj is
 a public domain javacc grammar
for JSON written by Robert Fischer.
https://github.com/RobertFischer/json-parser

For portions of the Tomcat JNI OpenSSL API and the OpenSSL JSSE integration
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- javaee_web_services_1_2.xsd
- javaee_web_services_client_1_2.xsd
- javaee_6.xsd
- javaee_web_services_1_3.xsd
- javaee_web_services_client_1_3.xsd
- jsp_2_2.xsd
- web-app_3_0.xsd
- web-common_3_0.xsd
- web-fragment_3_0.xsd
- javaee_7.xsd
- javaee_web_services_1_4.xsd
- javaee_web_services_client_1_4.xsd
- jsp_2_3.xsd
- web-app_3_1.xsd
- web-common_3_1.xsd
- web-fragment_3_1.xsd
- javaee_8.xsd
- web-app_4_0.xsd
- web-common_4_0.xsd
- web-fragment_4_0.xsd

may be obtained from:
http://www.oracle.com/webfolder/technetwork/jsc/xml/ns/javaee/index.html

1.4303 dns-python 2.6.1-1ubuntu1

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Step 5: Writing the Code
==========

At this point, you should have:

- [x] Identified a feature or bug fix
- [x] Opened an Issue about it
- [x] Located the project's service code which validates the feature or fix
- [x] Have an OpenStack environment available to test with

Now it's time to write the actual code! We recommend reading over the [CONTRIBUTING](/.github/CONTRIBUTING.md) guide again as a refresh. Notably the [Getting Started](/.github/CONTRIBUTING.md#getting-started) section will help you set up a `git` repository correctly.

We encourage you to browse the existing Gophercloud code to find examples of similar implementations. It would be a _very_ rare occurrence for you to be implementing something that hasn't already been done.

Use the existing packages as templates and mirror the style, naming, and logic.

Types of Pull Requests

The amount of changes you plan to make will determine how much code you should submit as Pull Requests.

A Single Bug Fix

If you're implementing a single bug fix, then creating one `git` branch and submitting one Pull Request is fine.

Adding a Single Field

If you're adding a single field, then a single Pull Request is also fine. See [#662](https://github.com/gophercloud/gophercloud/pull/662) as an example of this.

If you plan to add more than one missing field, you will need to open a Pull Request for _each_ field.

Adding a Single API Call

Single API calls can also be submitted as a single Pull Request. See [#722](https://github.com/gophercloud/gophercloud/pull/722) as an example of this.

Adding a Suite of API Calls

If you're adding support for a "suite" of API calls (meaning: Create, Update, Delete, Get), then you will need to create one Pull Request for _each_ call.

The following Pull Requests are good examples of how to do this:

* https://github.com/gophercloud/gophercloud/pull/584
* https://github.com/gophercloud/gophercloud/pull/586

* https://github.com/gophercloud/gophercloud/pull/587
*
https://github.com/gophercloud/gophercloud/pull/594

You can also use the provided [template](/docs/contributor-tutorial/.template) as it contains a lot of the repeated boiler plate code seen in each resource. However, please make sure to thoroughly review and edit it as needed. Leaving templated portions in-place might be interpreted as rushing through the work and will require further rounds of review to fix.

Adding an Entire OpenStack Project

To add an entire OpenStack project, you must break each set of API calls into individual Pull Requests. Implementing an entire project can be thought of as implementing multiple API suites.

An example of this can be seen from the Pull Requests referenced in [#723](https://github.com/gophercloud/gophercloud/issues/723).

What to Include in a Pull Request

Each Pull Request should contain the following:

1. The actual Go code to implement the feature or bug fix
2. Unit tests
3.
Acceptance tests
4. Documentation

Whether you want to bundle all of the above into a single commit or multiple commits is up to you. Use your preferred style.

Unit Tests

Unit tests should provide basic validation that your code works as intended.

Please do not use JSON fixtures from the API reference documentation. Please generate your own fixtures using the OpenStack environment you're [testing](step-04-acceptance-testing.md) with.

Acceptance Tests

Since unit tests are not run against an actual OpenStack environment, acceptance tests can arguably be more important. The acceptance tests that you include in your Pull Request should confirm that your implemented code works as intended with an actual OpenStack environment.

Documentation

All documentation in Gophercloud is done through in-line `godoc`. Please make sure to document all fields, functions, and methods appropriately. In addition, each package has a `doc.go` file which should be created or amended with details
 of your Pull Request, where appropriate.

Dealing with Related Pull Requests

If you plan to open more than one Pull Request, it's only natural that code from one Pull Request will be dependent on code from the prior Pull Request.

There are two methods of handling this:

Create Independent Pull Requests

With this method, each Pull Request has all of the code to fully implement the code in question. Each Pull Request can be merged in any order because it's self contained.

Use the following `git` workflow to implement this method:

```shell
$ git checkout master
$ git pull
$ git checkout -b identityv3-regions-create
$ (write your code)
$ git add .
$ git commit -m "Implementing Regions Create"

$ git checkout master
$ git checkout -b identityv3-regions-update
$ (write your code)
$ git add .
$ git commit -m "Implementing Regions Update"
```

Advantages of this Method:

* Pull Requests can be merged in any order
* Additional commits to one Pull
 Request are independent of other Pull Requests

Disadvantages of this Method:

* There will be _a lot_ of duplicate code in each Pull Request

* You will have to rebase all other Pull Requests and resolve a good amount of
 merge conflicts.

Create a Chain of Pull Requests

With this method, each Pull Request is based off of a previous Pull Request.
Pull Requests will have to be merged in a specific order since there is a
defined relationship.

Use the following `git` workflow to implement this method:

```shell
$ git checkout master
$ git pull
$ git checkout -b identityv3-regions-create
$ (write your code)
$ git add .
$ git commit -m "Implementing Regions Create"

$ git checkout -b identityv3-regions-update
$ (write your code)
$ git add .
$ git commit -m "Implementing Regions Update"
```

Advantages of this Method:

* Each Pull Request becomes smaller since you are building off of the last

Disadvantages of this Method:

* If a Pull Request requires changes, you will have to rebase
 all child
 Pull Requests based off of the parent.

The choice of method is up to you.

Once you have your code written, submit a Pull Request to Gophercloud and
proceed to [Step 6](step-06-code-review.md).
package RESOURCE

import "github.com/gophercloud/gophercloud/v2"

func listURL(client *gophercloud.ServiceClient) string {
 return client.ServiceURL("resource")
}

```
func getURL(client *gophercloud.ServiceClient, id string) string {
 return client.ServiceURL("resource", id)
}

func createURL(client *gophercloud.ServiceClient) string {
 return client.ServiceURL("resource")
}

func deleteURL(client *gophercloud.ServiceClient, id string) string {
 return client.ServiceURL("resource", id)
}

func updateURL(client *gophercloud.ServiceClient, id string) string {
 return client.ServiceURL("resource", id)
}
package RESOURCE

import (
 "github.com/gophercloud/gophercloud/v2"
 "github.com/gophercloud/gophercloud/v2/pagination"
)

// RESOURCE represents...
type Resource struct {
}

type commonResult struct {
 gophercloud.Result
}

// GetResult is the response from a Get operation. Call its Extract method
// to interpret it as a RESOURCE.
type GetResult struct {
 commonResult
}

// CreateResult is the response from a Create operation. Call its Extract method
// to interpret it as a RESOURCE.
type CreateResult struct {
 commonResult
}

// DeleteResult is the response from a Delete operation. Call its ExtractErr to
// determine if the request succeeded or failed.
type DeleteResult struct {
 gophercloud.ErrResult
}
```

```
// UpdateResult is the result of an Update request. Call its Extract method to
// interpret it as a RESOURCE.
type UpdateResult struct {
 commonResult
}

// ResourcePage is a single page of RESOURCE results.
type ResourcePage struct {
 pagination.LinkedPageBase
}

// IsEmpty determines
 whether or not a page of RESOURCES contains any results.
func (r ResourcePage) IsEmpty() (bool, error) {
 if r.StatusCode == 204 {
  return true, nil
 }

 resources, err := ExtractResources(r)
 return len(resources) == 0, err
}

// NextPageURL extracts the "next" link from the links section of the result.
func (r ResourcePage) NextPageURL() (string, error) {
 var s struct {
  Links struct {
   Next     string `json:"next"`
   Previous string `json:"previous"`
  } `json:"links"`
 }
 err := r.ExtractInto(&s)
 if err != nil {
  return "", err
 }
 return s.Links.Next, err
}

// ExtractResources returns a slice of Resources contained in a single page of
// results.
func ExtractResources(r pagination.Page) ([]Resource, error) {
 var s struct {
  Resources []Resource `json:"resources"`
 }
 err := (r.(ResourcePage)).ExtractInto(&s)
 return s.Resources, err
}
```

```
// Extract interprets any commonResult as a Resource.
func (r commonResult) Extract() (*Resource, error) {
 var s struct {
  Resource
 *Resource `json:"resource"`
 }
 err := r.ExtractInto(&s)
 return s.Resource, err
}
package testing

import (
 "fmt"
 "net/http"
 "testing"

 "github.com/gophercloud/gophercloud/v2/openstack/service/vN/resources"
 th "github.com/gophercloud/gophercloud/v2/testhelper"
 "github.com/gophercloud/gophercloud/v2/testhelper/client"
)

// ListResult provides a single page of RESOURCE results.
const ListResult = `
{
}
`

// GetResult provides a Get result.
const GetResult = `
{
}
`

// CreateRequest provides the input to a Create request.
const CreateRequest = `
{
}
`

// UpdateRequest provides the input to as Update request.
const UpdateRequest = `
{
}
`

// UpdateResult provides an update result.
const UpdateResult = `
{
```

```
}
`

// FirstResource is the first resource in the List request.
var FirstResource = resources.Resource{}

// SecondResource is the second resource in the List request.
var SecondResource = resources.Resource{}

// SecondResourceUpdated is how SecondResource should look after an Update.
var SecondResourceUpdated = resources.Resource{}

// ExpectedResourcesSlice
 is the slice of resources expected to be returned from ListResult.
var ExpectedResourcesSlice = []resources.Resource{FirstResource, SecondResource}

// HandleListResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that responds with a list of two resources.
func HandleListResourceSuccessfully(t *testing.T) {
 th.Mux.HandleFunc("/resources", func(w http.ResponseWriter, r *http.Request) {
  th.TestMethod(t, r, "GET")
  th.TestHeader(t, r, "Accept", "application/json")
  th.TestHeader(t, r, "X-Auth-Token", client.TokenID)

  w.Header().Set("Content-Type", "application/json")
  w.WriteHeader(http.StatusOK)
  fmt.Fprintf(w, ListResult)
 })
}

// HandleGetResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that responds with a single resource.
func HandleGetResourceSuccessfully(t *testing.T) {
 th.Mux.HandleFunc("/resources/9fe1d3", func(w http.ResponseWriter, r *http.Request) {
  th.TestMethod(t, r, "GET")
  th.TestHeader(t,
 r, "Accept", "application/json")
  th.TestHeader(t, r, "X-Auth-Token", client.TokenID)

  w.Header().Set("Content-Type", "application/json")
  w.WriteHeader(http.StatusOK)
  fmt.Fprintf(w, GetResult)
 })
}

// HandleCreateResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that tests resource creation.
func HandleCreateResourceSuccessfully(t *testing.T) {
```

```
 th.Mux.HandleFunc("/resources", func(w http.ResponseWriter, r *http.Request) {
  th.TestMethod(t, r, "POST")
  th.TestHeader(t, r, "X-Auth-Token", client.TokenID)
  th.TestJSONRequest(t, r, CreateRequest)

  w.WriteHeader(http.StatusCreated)
  fmt.Fprintf(w, GetResult)
 })
}

// HandleDeleteResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that tests resource deletion.
func HandleDeleteResourceSuccessfully(t *testing.T) {
 th.Mux.HandleFunc("/resources/9fe1d3", func(w http.ResponseWriter, r *http.Request) {
  th.TestMethod(t, r, "DELETE")
  th.TestHeader(t,
 r, "X-Auth-Token", client.TokenID)

  w.WriteHeader(http.StatusNoContent)
 })
}

// HandleUpdateResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that tests resource update.
func HandleUpdateResourceSuccessfully(t *testing.T) {
 th.Mux.HandleFunc("/resources/9fe1d3", func(w http.ResponseWriter, r *http.Request) {
  th.TestMethod(t, r, "PATCH")
  th.TestHeader(t, r, "X-Auth-Token", client.TokenID)
  th.TestJSONRequest(t, r, UpdateRequest)

  w.WriteHeader(http.StatusOK)
  fmt.Fprintf(w, UpdateResult)
 })
}
Contributor Tutorial
====================

This tutorial is to help new contributors become familiar with the processes
used by the Gophercloud team when adding a new feature or fixing a bug.

While we have a defined process for working on Gophercloud, we're very mindful
that everyone is new to this in the beginning. Please reach out for help or ask
for clarification if needed. No question is ever "dumb" or not worth our time
answering.

To begin, go to [Step 1](step-01-introduction.md).
/*
Package NAME manages and retrieves RESOURCE in the OpenStack SERVICE Service.
```

Example to List RESOURCE

Example to Create a RESOURCE

Example to Update a RESOURCE

Example to Delete a RESOURCE
*/
package RESOURCE
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defend, and hold each Contributor harmless for any liability
incurred by, or claims asserted against, such Contributor by reason
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```
package testing

import (
 "context"
 "testing"

 "github.com/gophercloud/gophercloud/v2/openstack/service/vN/resources"
 "github.com/gophercloud/gophercloud/v2/pagination"
 th "github.com/gophercloud/gophercloud/v2/testhelper"
 "github.com/gophercloud/gophercloud/v2/testhelper/client"
)

func TestListResources(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleListResourcesSuccessfully(t)

 count := 0
 err := resources.List(client.ServiceClient(), nil).EachPage(context.TODO(), func(_ context.Context, page
pagination.Page) (bool, error) {
  count++

  actual, err := resources.ExtractResources(page)
  th.AssertNoErr(t, err)

  th.AssertDeepEquals(t, ExpectedResourcesSlice, actual)

  return true, nil
 })
 th.AssertNoErr(t, err)
```

```
 th.AssertEquals(t, count, 1)
}

func TestListResourcesAllPages(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleListResourcesSuccessfully(t)

 allPages, err := resources.List(client.ServiceClient(), nil).AllPages(context.TODO())
 th.AssertNoErr(t,
 err)
 actual, err := resources.ExtractResources(allPages)
 th.AssertNoErr(t, err)
 th.AssertDeepEquals(t, ExpectedResourcesSlice, actual)
}

func TestGetResource(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleGetResourceSuccessfully(t)

 actual, err := resources.Get(context.TODO(), client.ServiceClient(), "9fe1d3").Extract()
 th.AssertNoErr(t, err)
 th.AssertDeepEquals(t, SecondResource, *actual)
}

func TestCreateResource(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleCreateResourceSuccessfully(t)

 createOpts := resources.CreateOpts{
  Name: "resource two",
 }

 actual, err := resources.Create(context.TODO(), client.ServiceClient(), createOpts).Extract()
 th.AssertNoErr(t, err)
 th.AssertDeepEquals(t, SecondResource, *actual)
}

func TestDeleteResource(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleDeleteResourceSuccessfully(t)

 res := resources.Delete(context.TODO(), client.ServiceClient(), "9fe1d3")
 th.AssertNoErr(t,
```

```
 res.Err)
}

func TestUpdateResource(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleUpdateResourceSuccessfully(t)

 updateOpts := resources.UpdateOpts{
  Description: "Staging Resource",
 }

 actual, err := resources.Update(context.TODO(), client.ServiceClient(), "9fe1d3", updateOpts).Extract()
 th.AssertNoErr(t, err)
 th.AssertDeepEquals(t, SecondResourceUpdated, *actual)
}
```

Step 6: Code Review
==========

Once you've submitted a Pull Request, three things will happen automatically:

1. Travis-CI will run a set of simple tests:

   a. Unit Tests

   b. Code Formatting checks

   c. `go vet` checks

2. Coveralls will run a coverage test.
3. [OpenLab](https://openlabtesting.org/) will run acceptance tests.

Depending on the results of the above, you might need to make additional
changes to your code.

While you're working on the finishing touches to your code, it is helpful
to add a `[wip]` tag to the title of your Pull Request.

You are most welcomed to take as much time as you need to work on your Pull
Request. As well, take advantage of the automatic testing that is done to
each commit.

Travis-CI

If Travis reports code formatting issues, please make sure to run `gofmt` on all
of your code. Travis will also report errors with unit tests, so you should
ensure those are fixed, too.

Coveralls

If Coveralls reports a decrease in test coverage,
check and make sure you have
provided unit tests. A decrease in test coverage is _sometimes_ unavoidable and
ignorable.

OpenLab

OpenLab does not yet run a full suite of acceptance tests, so it's possible
that the acceptance tests you've included were not run. When this happens,
a core member for Gophercloud will run the tests manually.

There are times when a core reviewer does not have access to the resources
required to run the acceptance tests. When this happens, it is essential
that you've run them yourself (See [Step 4](step-04.md)).

Request a Code Review

When you feel your Pull Request is ready for review, please leave a comment
requesting a code review. If you don't explicitly ask for a code review, a
core member might not know the Pull Request is ready for review.

Additionally, if there are parts of your implementation that you are unsure
about, please ask for help. We're more than happy to provide advice.

During the code review process, a
core member will review the code you've
submitted and either request changes or request additional information.
Generally these requests fall under the following categories:

1. Code which needs to be reformatted (See our [Style Guide](/docs/STYLEGUIDE.md)
   for conventions used.

2. Requests for additional information about the validity of something. This
   might happen because the included supporting service code URLs don't have
   enough information.

3. Missing unit tests or acceptance tests.

Submitting Changes

If a code review requires changes to be submitted, please do not squash your
commits. Please only add new commits to the Pull Request. This is to help the
code reviewer see only the changes that were made.

It's Never Personal

Code review is a healthy exercise where a new set of eyes can sometimes spot items forgotten by the author.

Please don't take change requests personally. Our intention is to ensure the code is correct before
merging.

Once the code has been reviewed and approved, a core member will merge your Pull Request.

Please proceed to [Step 7](step-07-congratulations.md).
Step 4: Acceptance Testing
==========

If we haven't started working on the feature or bug fix, why are we talking about Acceptance Testing now?

Before you implement a feature or bug fix, you _must_ be able to test your code in a working OpenStack environment. Please do not submit code which you have only tested with offline unit tests.

Blindly submitting code is dangerous to the Gophercloud project. Developers from all over the world use Gophercloud in many different projects. If you submit code which is untested, it can cause these projects to break or become unstable.

And, to be frank, submitting untested code will inevitably cause someone else to have to spend time fixing it.

If you don't have an OpenStack environment to test with, we have lots of documentation [here](/acceptance) to help you build your own small OpenStack environment for testing.

Once you've confirmed you are able to test your code, proceed to
[Step 5](step-05-pull-requests.md) to (finally!)
start working on a Pull
Request.
Step 7: Congratulations!
==========

At this point your code is merged and you've either fixed a bug or added a new

feature to Gophercloud!

We completely understand that this has been a long process. We appreciate your patience as well as the time you have taken for working on this. You've made Gophercloud a better project with your work.

```
package RESOURCE

import (
 "context"

 "github.com/gophercloud/gophercloud/v2"
 "github.com/gophercloud/gophercloud/v2/pagination"
)

// ListOptsBuilder allows extensions to add additional parameters to
// the List request
type ListOptsBuilder interface {
 ToResourceListQuery() (string, error)
}

// ListOpts provides options to filter the List results.
type ListOpts struct {
}

// ToResourceListQuery formats a ListOpts into a query string.
func (opts ListOpts) ToResourceListQuery() (string, error) {
 q, err := gophercloud.BuildQueryString(opts)
 return q.String(), err
}

// List retrieves a list of RESOURCES.
func List(client *gophercloud.ServiceClient, opts ListOptsBuilder) pagination.Pager {
 url := listURL(client)
 if opts != nil {
  query, err := opts.ToResourceListQuery()
  if err != nil {
   return pagination.Pager{Err: err}
  }
  url += query
 }
 return pagination.NewPager(client, url, func(r pagination.PageResult) pagination.Page {
  return ResourcePage{pagination.LinkedPageBase{PageResult:
 r}}
 })
}

// Get retrieves details of a RESOURCE.
func Get(ctx context.Context, client *gophercloud.ServiceClient, id string) (r GetResult) {
```

```
 resp, err := client.Get(ctx, getURL(client, id), &r.Body, nil)
 _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
 return
}

// CreateOptsBuilder allows extensions to add additional parameters to
// the Create request.
type CreateOptsBuilder interface {
 ToResourceCreateMap() (map[string]interface{}, error)
}

// CreateOpts provides options used to create a RESOURCE.
type CreateOpts struct {
}

// ToResourceCreateMap formats a CreateOpts into a create request.
func (opts CreateOpts) ToResourceCreateMap() (map[string]interface{}, error) {
 return gophercloud.BuildRequestBody(opts, "resource")
}

// Create creates a new RESOURCE.
func Create(ctx context.Context, client *gophercloud.ServiceClient, opts CreateOptsBuilder) (r CreateResult) {
 b, err := opts.ToResourceCreateMap()
 if err != nil {
  r.Err = err
  return
 }
 resp,
 err := client.Post(ctx, createURL(client), &b, &r.Body, &gophercloud.RequestOpts{
  OkCodes: []int{201},
 })
 _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
 return
}

// Delete deletes a RESOURCE.
func Delete(ctx context.Context, client *gophercloud.ServiceClient, id string) (r DeleteResult) {
 resp, err := client.Delete(ctx, deleteURL(client, id), nil)
 _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
 return
}

// UpdateOptsBuilder allows extensions to add additional parameters to
// the Update request.
type UpdateOptsBuilder interface {
 ToResourceUpdateMap() (map[string]interface{}, error)
}
```

```go
// UpdateOpts represents parameters to update a RESOURCE.
type UpdateOpts struct {
}

// ToUpdateCreateMap formats a UpdateOpts into an update request.
func (opts UpdateOpts) ToResourceUpdateMap() (map[string]interface{}, error) {
 return gophercloud.BuildRequestBody(opts, "resource")
}

// Update modifies the attributes of a RESOURCE.
func Update(ctx context.Context, client
 *gophercloud.ServiceClient, id string, opts UpdateOptsBuilder) (r UpdateResult) {
 b, err := opts.ToResourceUpdateMap()
 if err != nil {
  r.Err = err
  return
 }
 resp, err := client.Patch(ctx, updateURL(client, id), b, &r.Body, &gophercloud.RequestOpts{
  OkCodes: []int{200},
 })
 _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
 return
}
```

Step 3: Code Hunting
==========

If you plan to submit a feature or bug fix to Gophercloud, you must be able to prove your code correctly works with the OpenStack service in question.

Let's use the following issue as an example: https://github.com/gophercloud/gophercloud/issues/621. In this issue, there's a request being made to add support for `availability_zone_hints` to the `networking/v2/networks` package. Meaning, we want to change:

```go
type Network struct {
 ID          string   `json:"id"`
 Name        string   `json:"name"`
 AdminStateUp bool     `json:"admin_state_up"`
 Status      string   `json:"status"`
 Subnets     []string `json:"subnets"`
 TenantID    string   `json:"tenant_id"`
 Shared      bool     `json:"shared"`
}
```

to look like

```go
type Network struct {
 ID                  string   `json:"id"`
 Name                string   `json:"name"`
 AdminStateUp        bool     `json:"admin_state_up"`
 Status
             string   `json:"status"`
 Subnets             []string `json:"subnets"`
 TenantID            string   `json:"tenant_id"`
 Shared              bool     `json:"shared"`

 AvailabilityZoneHints []string `json:"availability_zone_hints"`
}
```

We need to be sure that `availability_zone_hints` is a field which really does exist in the OpenStack Neutron project and it's not a field which was added as a customization to a single OpenStack cloud.

In addition, we need to ensure that `availability_zone_hints` is really a `[]string` and not a different kind of type.

One way of verifying this is through the [OpenStack API reference documentation](https://developer.openstack.org/api-ref/network/v2/). However, the API docs might either be incorrect or they might not provide all of the details we need to know in order to ensure this field is added correctly.

> Note: when we say the API docs might be incorrect, we are _not_ implying
> that the API docs aren't
 useful or that the contributors who work on the API
> docs are wrong. OpenStack moves fast. Typos happen. Forgetting to update
> documentation happens.

Since the OpenStack service itself correctly accepts and processes the fields, the best source of information on how the field works is in the service code itself.

Continuing on with using #621 as an example, we can find the definition of `availability_zone_hints` in the following piece of code:

https://github.com/openstack/neutron/blob/8e9959725eda4063a318b4ba6af1e3494cad9e35/neutron/objects/network.py#L191

The above code confirms that `availability_zone_hints` is indeed part of the `Network` object and that its type is a list of strings (`[]string`).

This example is a best-case situation: the code is relatively easy to find
and it's simple to understand. However, there will be times when proving the
implementation in the service code is difficult. Make no mistake, this is _not_
fun work. This can sometimes be more difficult than
 writing the actual patch
for Gophercloud. However, this is an essential step to ensuring the feature
or bug fix is correctly added to Gophercloud.

Examples of good code hunting can be seen here:

* https://github.com/gophercloud/gophercloud/issues/539
* https://github.com/gophercloud/gophercloud/issues/555
* https://github.com/gophercloud/gophercloud/issues/571
* https://github.com/gophercloud/gophercloud/issues/583
* https://github.com/gophercloud/gophercloud/issues/605

Code Hunting Tips

OpenStack projects differ from one to another. Code is organized in different
ways. However, the following tips should be useful across all projects.

* The logic which implements Create and Delete actions is usually either located
 in the "model" or "controller" portion of the code.

* Use Github's search box to search for the exact field you're working on.
 Review all results to gain a good understanding of everywhere the field is
 used.

* When adding a field, look for an
 object model or a schema of some sort.

Proceed to [Step 4](step-04-acceptance-testing.md) to learn about Acceptance
Testing.
Step 1: Read Our Guides
==========

There are two introductory guides you should read before proceeding:

* [CONTRIBUTING](/.github/CONTRIBUTING.md): The Contributing guide is a detailed
 document which describes the different ways you can contribute to Gophercloud
 and how to get started. This tutorial you're reading is very similar to that
 guide, but presented in a different way. We still recommend you read it over.

* [STYLE](/docs/STYLEGUIDE.md): The Style Guide documents coding conventions used
 in the Gophercloud project.

When you've finished reading those guides, proceed to [Step 2](step-02-issues.md).
Step 2: Create an Issue
==========

Every patch / Pull Request requires a corresponding issue. If you're fixing
a bug for an existing issue, then there's no need to create a new issue.

However, if no prior issue exists, you must create an issue.

Reporting a Bug

When reporting a bug, please try to provide as much information as you
can.

The following issues are good examples for reporting a bug:

* https://github.com/gophercloud/gophercloud/issues/108
* https://github.com/gophercloud/gophercloud/issues/212
* https://github.com/gophercloud/gophercloud/issues/424
* https://github.com/gophercloud/gophercloud/issues/588
* https://github.com/gophercloud/gophercloud/issues/629
* https://github.com/gophercloud/gophercloud/issues/647

Feature Request

If you've noticed that a feature is missing from Gophercloud, you'll also
need to create an issue before doing any work. This is to start a discussion
about whether or not the feature should be included
 in Gophercloud. We don't
want to see you put in hours of work only to learn that the feature is out of
scope of the project.

Feature requests can come in different forms:

Adding a Feature to Gophercloud Core

The "core" of Gophercloud is the code which supports API requests and
responses: pagination, error handling, building request bodies, and parsing
response bodies are all examples of core code.

Modifications to core will usually have the most amount of discussion than
other requests since a change to core will affect _all_ of Gophercloud.

The following issues are examples of core change discussions:

* https://github.com/gophercloud/gophercloud/issues/310
* https://github.com/gophercloud/gophercloud/issues/613
* https://github.com/gophercloud/gophercloud/issues/729
* https://github.com/gophercloud/gophercloud/issues/713

Adding a Missing Field

If you've found a missing field in an existing struct, submit an issue to
request having it added. These kinds of issues
are pretty easy to report
and resolve.

You should also provide a link to the actual service's Python code which
defines the missing field.

The following issues are examples of missing fields:

* https://github.com/gophercloud/gophercloud/issues/620
* https://github.com/gophercloud/gophercloud/issues/621
* https://github.com/gophercloud/gophercloud/issues/658

There's one situation which can make adding fields more difficult: if the field
is part of an API extension rather than the base API itself. An example of this
can be seen in [this](https://github.com/gophercloud/gophercloud/issues/749)
issue.

Here, a user reported fields missing in the `Get` function of
`networking/v2/networks`. The fields reported missing weren't missing at all,
they're just part of various Networking extensions located in
`networking/v2/extensions`.

Adding a Missing API Call

If you've found a missing API action, create an issue with details of
the action. For example:

* https://github.com/gophercloud/gophercloud/issues/715
*
https://github.com/gophercloud/gophercloud/issues/719

You'll want to make sure the API call is part of the upstream OpenStack project
and not an extension created by a third-party or vendor. Gophercloud only
supports the OpenStack projects proper.

Adding a Missing API Suite

Adding support to a missing suite of API calls will require more than one Pull Request. However, you can use a single issue for all PRs.

Examples of issues which track the addition of a missing API suite are:

* https://github.com/gophercloud/gophercloud/issues/539
* https://github.com/gophercloud/gophercloud/issues/555
* https://github.com/gophercloud/gophercloud/issues/571
* https://github.com/gophercloud/gophercloud/issues/583
* https://github.com/gophercloud/gophercloud/issues/605

Note how the issue breaks down the implementation by request types (Create, Update, Delete, Get, List).

Also note how these issues provide links to the service's Python code. These links are not required
 for _issues_, but it's usually a good idea to provide
them, anyway. These links _are required_ for PRs and that will be covered in detail in a later step of this tutorial.

Adding a Missing OpenStack Project

These kinds of feature additions are large undertakings. Adding support for an entire OpenStack project is something the Gophercloud team very much appreciates, but you should be prepared for several weeks of work and interaction with the Gophercloud team.

An example of how to create an issue for an entire project can be seen here:

* https://github.com/gophercloud/gophercloud/issues/723

With all of the above in mind, proceed to [Step 3](step-03-code-hunting.md) to learn about Code Hunting.

1.4309 github.com/gophercloud/gophercloud/v2 2.7.0

1.4309.1 Available under license :

Step 5: Writing the Code
==========

At this point, you should have:

- [x] Identified a feature or bug fix
- [x] Opened an Issue about it
- [x] Located the project's service code which validates the feature or fix
- [x] Have an OpenStack environment available to test with

Now it's time to write the actual code! We recommend reading over the
[CONTRIBUTING](/.github/CONTRIBUTING.md) guide again as a refresh. Notably
the [Getting Started](/.github/CONTRIBUTING.md#getting-started) section will
help you set up a `git` repository correctly.

We encourage you to browse the existing Gophercloud code to find examples
of similar implementations. It would be a _very_ rare occurrence for you
to be implementing something that hasn't already been done.

Use the existing packages as templates and mirror the style, naming, and
logic.

Types of Pull Requests

The amount of changes you plan to make will determine how much code you should
submit as Pull Requests.

###
 A Single Bug Fix

If you're implementing a single bug fix, then creating one `git` branch and
submitting one Pull Request is fine.

Adding a Single Field

If you're adding a single field, then a single Pull Request is also fine. See
[#662](https://github.com/gophercloud/gophercloud/pull/662) as an example of
this.

If you plan to add more than one missing field, you will need to open a Pull
Request for _each_ field.

Adding a Single API Call

Single API calls can also be submitted as a single Pull Request. See
[#722](https://github.com/gophercloud/gophercloud/pull/722) as an example of

this.

Adding a Suite of API Calls

If you're adding support for a "suite" of API calls (meaning: Create, Update, Delete, Get), then you will need to create one Pull Request for _each_ call.

The following Pull Requests are good examples of how to do this:

* https://github.com/gophercloud/gophercloud/pull/584
* https://github.com/gophercloud/gophercloud/pull/586
* https://github.com/gophercloud/gophercloud/pull/587
* https://github.com/gophercloud/gophercloud/pull/594

You can also use the provided [template](/docs/contributor-tutorial/.template) as it contains a lot of the repeated boiler plate code seen in each resource. However, please make sure to thoroughly review and edit it as needed. Leaving templated portions in-place might be interpreted as rushing through the work and will require further rounds of review to fix.

Adding an Entire OpenStack Project

To add an entire OpenStack project, you must break each set of API calls into individual Pull Requests. Implementing an entire project can be thought of as implementing multiple API suites.

An example of this can be seen from the Pull Requests referenced in [#723](https://github.com/gophercloud/gophercloud/issues/723).

What to Include in a Pull Request

Each Pull Request should contain the following:

1. The actual Go code to implement the feature or bug fix
2. Unit tests
3. Acceptance tests
4. Documentation

Whether you want to bundle all of the above into a single commit or multiple commits is up to you. Use your preferred style.

Unit Tests

Unit tests should provide basic validation that your code works as intended.

Please do not use JSON fixtures from the API reference documentation. Please generate your own fixtures using the OpenStack environment you're [testing](step-04-acceptance-testing.md) with.

Acceptance Tests

Since unit tests are not run against an actual OpenStack environment, acceptance tests can arguably be more important. The acceptance tests that you include in your Pull Request should confirm that your implemented code works as intended with an actual OpenStack environment.

Documentation

All documentation in Gophercloud is done through in-line `godoc`. Please make sure to document all fields, functions, and methods appropriately. In addition, each package has a `doc.go` file which should be created or amended with details
 of your Pull Request, where appropriate.

Dealing with Related Pull Requests

If you plan to open more than one Pull Request, it's only natural that code from one Pull Request will be dependent on code from the prior Pull Request.

There are two methods of handling this:

Create Independent Pull Requests

With this method, each Pull Request has all of the code to fully implement the code in question. Each Pull Request can be merged in any order because it's self contained.

Use the following `git` workflow to implement this method:

```shell
$ git checkout master
$ git pull
$ git checkout -b identityv3-regions-create
$ (write your code)
$ git add .
$ git commit -m "Implementing Regions Create"

$ git checkout master
$ git checkout -b identityv3-regions-update
$ (write your code)
$ git add .
$ git commit -m "Implementing Regions Update"
```

```

Advantages of this Method:

* Pull Requests can be merged in any order
* Additional commits to one Pull
 Request are independent of other Pull Requests

Disadvantages of this Method:

* There will be _a lot_ of duplicate code in each Pull Request
* You will have to rebase all other Pull Requests and resolve a good amount of
 merge conflicts.

### Create a Chain of Pull Requests

With this method, each Pull Request is based off of a previous Pull Request.
Pull Requests will have to be merged in a specific order since there is a
defined relationship.

Use the following `git` workflow to implement this method:

```shell
$ git checkout master
$ git pull
$ git checkout -b identityv3-regions-create
$ (write your code)
$ git add .
$ git commit -m "Implementing Regions Create"

$ git checkout -b identityv3-regions-update
$ (write your code)
$ git add .
$ git commit -m "Implementing Regions Update"
```

Advantages of this Method:

* Each Pull Request becomes smaller since you are building off of the last

Disadvantages of this Method:

* If a Pull Request requires changes, you will have to rebase
 all child
 Pull Requests based off of the parent.

The choice of method is up to you.
```

Once you have your code written, submit a Pull Request to Gophercloud and
proceed to [Step 6](step-06-code-review.md).

```
package RESOURCE

import "github.com/gophercloud/gophercloud/v2"

func listURL(client *gophercloud.ServiceClient) string {
 return client.ServiceURL("resource")
}

func getURL(client *gophercloud.ServiceClient, id string) string {
 return client.ServiceURL("resource", id)
}

func createURL(client *gophercloud.ServiceClient) string {
 return client.ServiceURL("resource")
}

func deleteURL(client *gophercloud.ServiceClient, id string) string {
 return client.ServiceURL("resource", id)
}

func updateURL(client *gophercloud.ServiceClient, id string) string {
 return client.ServiceURL("resource", id)
}
package RESOURCE

import (
 "github.com/gophercloud/gophercloud/v2"
 "github.com/gophercloud/gophercloud/v2/pagination"
)

// RESOURCE represents...
type Resource struct {
}

type commonResult struct {
 gophercloud.Result
}

// GetResult is the response from a Get operation. Call its Extract method
// to interpret it as a RESOURCE.
type GetResult struct {
 commonResult
}
```

```
// CreateResult is the response from a Create operation. Call its Extract method
// to interpret it as a RESOURCE.
type CreateResult struct {
 commonResult
}

// DeleteResult is the response from a Delete operation. Call its ExtractErr to
// determine if the request succeeded or failed.
type DeleteResult struct {
 gophercloud.ErrResult
}

// UpdateResult is the result of an Update request. Call its Extract method to
// interpret it as a RESOURCE.
type UpdateResult struct {
 commonResult
}

// ResourcePage is a single page of RESOURCE results.
type ResourcePage struct {
 pagination.LinkedPageBase
}

// IsEmpty determines
 whether or not a page of RESOURCES contains any results.
func (r ResourcePage) IsEmpty() (bool, error) {
 if r.StatusCode == 204 {
  return true, nil
 }

 resources, err := ExtractResources(r)
 return len(resources) == 0, err
}

// NextPageURL extracts the "next" link from the links section of the result.
func (r ResourcePage) NextPageURL() (string, error) {
 var s struct {
  Links struct {
   Next     string `json:"next"`
   Previous string `json:"previous"`
  } `json:"links"`
 }
 err := r.ExtractInto(&s)
 if err != nil {
  return "", err
 }
 return s.Links.Next, err
}
```

```
// ExtractResources returns a slice of Resources contained in a single page of
// results.
func ExtractResources(r pagination.Page) ([]Resource, error) {
 var s struct {
  Resources []Resource `json:"resources"`
 }
 err := (r.(ResourcePage)).ExtractInto(&s)
 return s.Resources, err
}

// Extract interprets any commonResult as a Resource.
func (r commonResult) Extract() (*Resource, error) {
 var s struct {
  Resource
 *Resource `json:"resource"`
 }
 err := r.ExtractInto(&s)
 return s.Resource, err
}
package testing

import (
 "fmt"
 "net/http"
 "testing"

 "github.com/gophercloud/gophercloud/v2/openstack/service/vN/resources"
 th "github.com/gophercloud/gophercloud/v2/testhelper"
 "github.com/gophercloud/gophercloud/v2/testhelper/client"
)

// ListResult provides a single page of RESOURCE results.
const ListResult = `
{
}
`

// GetResult provides a Get result.
const GetResult = `
{
}
`

// CreateRequest provides the input to a Create request.
const CreateRequest = `
{
}
```

```
`

// UpdateRequest provides the input to as Update request.
const UpdateRequest = `
{
}
`

// UpdateResult provides an update result.
const UpdateResult = `
{
}
`

// FirstResource is the first resource in the List request.
var FirstResource = resources.Resource{}

// SecondResource is the second resource in the List request.
var SecondResource = resources.Resource{}

// SecondResourceUpdated is how SecondResource should look after an Update.
var SecondResourceUpdated = resources.Resource{}

// ExpectedResourcesSlice
 is the slice of resources expected to be returned from ListResult.
var ExpectedResourcesSlice = []resources.Resource{FirstResource, SecondResource}

// HandleListResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that responds with a list of two resources.
func HandleListResourceSuccessfully(t *testing.T) {
 th.Mux.HandleFunc("/resources", func(w http.ResponseWriter, r *http.Request) {
  th.TestMethod(t, r, "GET")
  th.TestHeader(t, r, "Accept", "application/json")
  th.TestHeader(t, r, "X-Auth-Token", client.TokenID)

  w.Header().Set("Content-Type", "application/json")
  w.WriteHeader(http.StatusOK)
  fmt.Fprintf(w, ListResult)
 })
}

// HandleGetResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that responds with a single resource.
func HandleGetResourceSuccessfully(t *testing.T) {
 th.Mux.HandleFunc("/resources/9fe1d3", func(w http.ResponseWriter, r *http.Request) {
  th.TestMethod(t, r, "GET")
  th.TestHeader(t,
```

```
 r, "Accept", "application/json")
  th.TestHeader(t, r, "X-Auth-Token", client.TokenID)

  w.Header().Set("Content-Type", "application/json")
  w.WriteHeader(http.StatusOK)
  fmt.Fprintf(w, GetResult)
 })
}

// HandleCreateResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that tests resource creation.
func HandleCreateResourceSuccessfully(t *testing.T) {
 th.Mux.HandleFunc("/resources", func(w http.ResponseWriter, r *http.Request) {
  th.TestMethod(t, r, "POST")
  th.TestHeader(t, r, "X-Auth-Token", client.TokenID)
  th.TestJSONRequest(t, r, CreateRequest)

  w.WriteHeader(http.StatusCreated)
  fmt.Fprintf(w, GetResult)
 })
}

// HandleDeleteResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that tests resource deletion.
func HandleDeleteResourceSuccessfully(t *testing.T) {
 th.Mux.HandleFunc("/resources/9fe1d3", func(w http.ResponseWriter, r *http.Request) {
  th.TestMethod(t, r, "DELETE")
  th.TestHeader(t,
 r, "X-Auth-Token", client.TokenID)

  w.WriteHeader(http.StatusNoContent)
 })
}

// HandleUpdateResourceSuccessfully creates an HTTP handler at `/resources` on the
// test handler mux that tests resource update.
func HandleUpdateResourceSuccessfully(t *testing.T) {
 th.Mux.HandleFunc("/resources/9fe1d3", func(w http.ResponseWriter, r *http.Request) {
  th.TestMethod(t, r, "PATCH")
  th.TestHeader(t, r, "X-Auth-Token", client.TokenID)
  th.TestJSONRequest(t, r, UpdateRequest)

  w.WriteHeader(http.StatusOK)
  fmt.Fprintf(w, UpdateResult)
 })
}
Contributor Tutorial
====================
```

This tutorial is to help new contributors become familiar with the processes
used by the Gophercloud team when adding a new feature or fixing a bug.

While we have a defined process for working on Gophercloud, we're very mindful
that everyone is new to this in the beginning. Please reach out for help or ask
for clarification if needed. No question is ever "dumb" or not worth our time
answering.

To begin, go to [Step 1](step-01-introduction.md).
/*
Package NAME manages and retrieves RESOURCE in the OpenStack SERVICE Service.

Example to List RESOURCE

Example to Create a RESOURCE

Example to Update a RESOURCE

Example to Delete a RESOURCE
*/
package RESOURCE
package testing

```
import (
 "context"
 "testing"

 "github.com/gophercloud/gophercloud/v2/openstack/service/vN/resources"
 "github.com/gophercloud/gophercloud/v2/pagination"
 th "github.com/gophercloud/gophercloud/v2/testhelper"
 "github.com/gophercloud/gophercloud/v2/testhelper/client"
)

func TestListResources(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleListResourcesSuccessfully(t)

 count := 0
 err := resources.List(client.ServiceClient(), nil).EachPage(context.TODO(), func(_ context.Context, page
pagination.Page) (bool, error) {
  count++

  actual, err := resources.ExtractResources(page)
  th.AssertNoErr(t, err)

  th.AssertDeepEquals(t, ExpectedResourcesSlice, actual)
```

```
  return true, nil
 })
 th.AssertNoErr(t, err)
 th.AssertEquals(t, count, 1)
}

func TestListResourcesAllPages(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleListResourcesSuccessfully(t)

 allPages, err := resources.List(client.ServiceClient(), nil).AllPages(context.TODO())
 th.AssertNoErr(t,
 err)
 actual, err := resources.ExtractResources(allPages)
 th.AssertNoErr(t, err)
 th.AssertDeepEquals(t, ExpectedResourcesSlice, actual)
}

func TestGetResource(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleGetResourceSuccessfully(t)

 actual, err := resources.Get(context.TODO(), client.ServiceClient(), "9fe1d3").Extract()
 th.AssertNoErr(t, err)
 th.AssertDeepEquals(t, SecondResource, *actual)
}

func TestCreateResource(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleCreateResourceSuccessfully(t)

 createOpts := resources.CreateOpts{
  Name: "resource two",
 }

 actual, err := resources.Create(context.TODO(), client.ServiceClient(), createOpts).Extract()
 th.AssertNoErr(t, err)
 th.AssertDeepEquals(t, SecondResource, *actual)
}

func TestDeleteResource(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleDeleteResourceSuccessfully(t)
```

```
 res := resources.Delete(context.TODO(), client.ServiceClient(), "9fe1d3")
 th.AssertNoErr(t,
 res.Err)
}

func TestUpdateResource(t *testing.T) {
 th.SetupHTTP()
 defer th.TeardownHTTP()
 HandleUpdateResourceSuccessfully(t)

 updateOpts := resources.UpdateOpts{
  Description: "Staging Resource",
 }

 actual, err := resources.Update(context.TODO(), client.ServiceClient(), "9fe1d3", updateOpts).Extract()
 th.AssertNoErr(t, err)
 th.AssertDeepEquals(t, SecondResourceUpdated, *actual)
}
```

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Step 6: Code Review
==========

Once you've submitted a Pull Request, three things will happen automatically:

1. Travis-CI will run a set of simple tests:

a. Unit Tests

b. Code Formatting checks

c. `go vet` checks

2. Coveralls will run a coverage test.
3. [OpenLab](https://openlabtesting.org/) will run acceptance tests.

Depending on the results of the above, you might need to make additional
changes to your code.

While you're working on the finishing touches to your code, it is helpful

to add a `[wip]` tag to the title of your Pull Request.

You are most welcomed to take as much time as you need to work on your Pull Request. As well, take advantage of the automatic testing that is done to each commit.

Travis-CI

If Travis reports code formatting issues, please make sure to run `gofmt` on all of your code. Travis will also report errors with unit tests, so you should ensure those are fixed, too.

Coveralls

If Coveralls reports a decrease in test coverage,
 check and make sure you have
provided unit tests. A decrease in test coverage is _sometimes_ unavoidable and ignorable.

OpenLab

OpenLab does not yet run a full suite of acceptance tests, so it's possible that the acceptance tests you've included were not run. When this happens, a core member for Gophercloud will run the tests manually.

There are times when a core reviewer does not have access to the resources required to run the acceptance tests. When this happens, it is essential that you've run them yourself (See [Step 4](step-04.md)).

Request a Code Review

When you feel your Pull Request is ready for review, please leave a comment requesting a code review. If you don't explicitly ask for a code review, a core member might not know the Pull Request is ready for review.

Additionally, if there are parts of your implementation that you are unsure about, please ask for help. We're more than happy to provide advice.

During the code review process, a
 core member will review the code you've
submitted and either request changes or request additional information. Generally these requests fall under the following categories:

1. Code which needs to be reformatted (See our [Style Guide](/docs/STYLEGUIDE.md)
  for conventions used.

2. Requests for additional information about the validity of something. This

might happen because the included supporting service code URLs don't have enough information.

3. Missing unit tests or acceptance tests.

Submitting Changes

If a code review requires changes to be submitted, please do not squash your commits. Please only add new commits to the Pull Request. This is to help the code reviewer see only the changes that were made.

It's Never Personal

Code review is a healthy exercise where a new set of eyes can sometimes spot items forgotten by the author.

Please don't take change requests personally. Our intention is to ensure the code is correct before
merging.

Once the code has been reviewed and approved, a core member will merge your Pull Request.

Please proceed to [Step 7](step-07-congratulations.md).
Step 7: Congratulations!
==========

At this point your code is merged and you've either fixed a bug or added a new feature to Gophercloud!

We completely understand that this has been a long process. We appreciate your patience as well as the time you have taken for working on this. You've made Gophercloud a better project with your work.
Step 4: Acceptance Testing
==========

If we haven't started working on the feature or bug fix, why are we talking about Acceptance Testing now?

Before you implement a feature or bug fix, you _must_ be able to test your code in a working OpenStack environment. Please do not submit code which you have only tested with offline unit tests.

Blindly submitting code is dangerous to the Gophercloud project. Developers

from all over the world use Gophercloud in many different projects. If you submit code which is untested, it can cause these projects to break or become unstable.

And, to be frank, submitting untested code will inevitably cause someone else to have to spend time fixing it.

If you don't have an OpenStack environment to test with, we have lots of documentation [here](/acceptance) to help you build your own small OpenStack environment for testing.

Once you've confirmed you are able to test your code, proceed to [Step 5](step-05-pull-requests.md) to (finally!) start working on a Pull Request.

```
package RESOURCE

import (
 "context"

 "github.com/gophercloud/gophercloud/v2"
 "github.com/gophercloud/gophercloud/v2/pagination"
)

// ListOptsBuilder allows extensions to add additional parameters to
// the List request
type ListOptsBuilder interface {
 ToResourceListQuery() (string, error)
}

// ListOpts provides options to filter the List results.
type ListOpts struct {
}

// ToResourceListQuery formats a ListOpts into a query string.
func (opts ListOpts) ToResourceListQuery() (string, error) {
 q, err := gophercloud.BuildQueryString(opts)
 return q.String(), err
}

// List retrieves a list of RESOURCES.
func List(client *gophercloud.ServiceClient, opts ListOptsBuilder) pagination.Pager {
 url := listURL(client)
 if opts != nil {
  query, err := opts.ToResourceListQuery()
  if err != nil {
```

```
  return pagination.Pager{Err: err}
 }
 url += query
}
return pagination.NewPager(client, url, func(r pagination.PageResult) pagination.Page {
 return ResourcePage{pagination.LinkedPageBase{PageResult:
r}}
})
}

// Get retrieves details of a RESOURCE.
func Get(ctx context.Context, client *gophercloud.ServiceClient, id string) (r GetResult) {
 resp, err := client.Get(ctx, getURL(client, id), &r.Body, nil)
 _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
 return
}

// CreateOptsBuilder allows extensions to add additional parameters to
// the Create request.
type CreateOptsBuilder interface {
 ToResourceCreateMap() (map[string]interface{}, error)
}

// CreateOpts provides options used to create a RESOURCE.
type CreateOpts struct {
}

// ToResourceCreateMap formats a CreateOpts into a create request.
func (opts CreateOpts) ToResourceCreateMap() (map[string]interface{}, error) {
 return gophercloud.BuildRequestBody(opts, "resource")
}

// Create creates a new RESOURCE.
func Create(ctx context.Context, client *gophercloud.ServiceClient, opts CreateOptsBuilder) (r CreateResult) {
 b, err := opts.ToResourceCreateMap()
 if err != nil {
  r.Err = err
  return
 }
 resp,
 err := client.Post(ctx, createURL(client), &b, &r.Body, &gophercloud.RequestOpts{
  OkCodes: []int{201},
 })
 _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
 return
}

// Delete deletes a RESOURCE.
```

```
func Delete(ctx context.Context, client *gophercloud.ServiceClient, id string) (r DeleteResult) {
 resp, err := client.Delete(ctx, deleteURL(client, id), nil)
 _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
 return
}

// UpdateOptsBuilder allows extensions to add additional parameters to
// the Update request.
type UpdateOptsBuilder interface {
 ToResourceUpdateMap() (map[string]interface{}, error)
}

// UpdateOpts represents parameters to update a RESOURCE.
type UpdateOpts struct {
}

// ToUpdateCreateMap formats a UpdateOpts into an update request.
func (opts UpdateOpts) ToResourceUpdateMap() (map[string]interface{}, error) {
 return gophercloud.BuildRequestBody(opts, "resource")
}

// Update modifies the attributes of a RESOURCE.
func Update(ctx context.Context, client
 *gophercloud.ServiceClient, id string, opts UpdateOptsBuilder) (r UpdateResult) {
 b, err := opts.ToResourceUpdateMap()
 if err != nil {
  r.Err = err
  return
 }
 resp, err := client.Patch(ctx, updateURL(client, id), b, &r.Body, &gophercloud.RequestOpts{
  OkCodes: []int{200},
 })
 _, r.Header, r.Err = gophercloud.ParseResponse(resp, err)
 return
}
```

Step 2: Create an Issue
==========

Every patch / Pull Request requires a corresponding issue. If you're fixing
a bug for an existing issue, then there's no need to create a new issue.

However, if no prior issue exists, you must create an issue.

Reporting a Bug

When reporting a bug, please try to provide as much information as you
can.

The following issues are good examples for reporting a bug:

* https://github.com/gophercloud/gophercloud/issues/108
* https://github.com/gophercloud/gophercloud/issues/212
* https://github.com/gophercloud/gophercloud/issues/424
* https://github.com/gophercloud/gophercloud/issues/588
* https://github.com/gophercloud/gophercloud/issues/629
* https://github.com/gophercloud/gophercloud/issues/647

Feature Request

If you've noticed that a feature is missing from Gophercloud, you'll also need to create an issue before doing any work. This is to start a discussion about whether or not the feature should be included in Gophercloud. We don't want to see you put in hours of work only to learn that the feature is out of scope of the project.

Feature requests can come in different forms:

Adding a Feature to Gophercloud Core

The "core" of Gophercloud is the code which supports API requests and responses: pagination, error handling, building request bodies, and parsing response bodies are all examples of core code.

Modifications to core will usually have the most amount of discussion than other requests since a change to core will affect _all_ of Gophercloud.

The following issues are examples of core change discussions:

* https://github.com/gophercloud/gophercloud/issues/310
* https://github.com/gophercloud/gophercloud/issues/613
* https://github.com/gophercloud/gophercloud/issues/729
* https://github.com/gophercloud/gophercloud/issues/713

Adding a Missing Field

If you've found a missing field in an existing struct, submit an issue to request having it added. These kinds of issues are pretty easy to report and resolve.

You should also provide a link to the actual service's Python code which defines the missing field.

The following issues are examples of missing fields:

* https://github.com/gophercloud/gophercloud/issues/620
* https://github.com/gophercloud/gophercloud/issues/621
* https://github.com/gophercloud/gophercloud/issues/658

There's one situation which can make adding fields more difficult: if the field is part of an API extension rather than the base API itself. An example of this can be seen in [this](https://github.com/gophercloud/gophercloud/issues/749) issue.

Here, a user reported fields missing in the `Get` function of `networking/v2/networks`. The fields reported missing weren't missing at all, they're just part of various Networking extensions located in `networking/v2/extensions`.

Adding a Missing API Call

If you've found a missing API action, create an issue with details of the action. For example:

* https://github.com/gophercloud/gophercloud/issues/715
* https://github.com/gophercloud/gophercloud/issues/719

You'll want to make sure the API call is part of the upstream OpenStack project and not an extension created by a third-party or vendor. Gophercloud only supports the OpenStack projects proper.

Adding a Missing API Suite

Adding support to a missing suite of API calls will require more than one Pull Request. However, you can use a single issue for all PRs.

Examples of issues which track the addition of a missing API suite are:

* https://github.com/gophercloud/gophercloud/issues/539
* https://github.com/gophercloud/gophercloud/issues/555
* https://github.com/gophercloud/gophercloud/issues/571
* https://github.com/gophercloud/gophercloud/issues/583
* https://github.com/gophercloud/gophercloud/issues/605

Note how the issue breaks down the implementation by request types (Create, Update, Delete, Get, List).

Also note how these issues provide links to the service's Python code. These links are not required

for _issues_, but it's usually a good idea to provide
them, anyway. These links _are required_ for PRs and that will be covered in
detail in a later step of this tutorial.

Adding a Missing OpenStack Project

These kinds of feature additions are large undertakings. Adding support for
an entire OpenStack project is something the Gophercloud team very much
appreciates, but you should be prepared for several weeks of work and
interaction with the Gophercloud team.

An example of how to create an issue for an entire project can be seen
here:

* https://github.com/gophercloud/gophercloud/issues/723

With all of the above in mind, proceed to [Step 3](step-03-code-hunting.md) to
learn about Code Hunting.
Step 3: Code Hunting
==========

If you plan to submit a feature or bug fix to Gophercloud, you must be
able to prove your code correctly works with the OpenStack service in
question.

Let's use the following issue as an example:
https://github.com/gophercloud/gophercloud/issues/621.
In this issue, there's a request being made to add support for
`availability_zone_hints` to the `networking/v2/networks` package.
Meaning, we want to change:

```go
type Network struct {
 ID          string   `json:"id"`
 Name        string   `json:"name"`
 AdminStateUp bool     `json:"admin_state_up"`
 Status      string   `json:"status"`
 Subnets     []string `json:"subnets"`
 TenantID    string   `json:"tenant_id"`
 Shared      bool     `json:"shared"`
}
```

to look like

```go
```

```
type Network struct {
 ID                  string   `json:"id"`
 Name                string   `json:"name"`
 AdminStateUp        bool     `json:"admin_state_up"`
 Status
             string   `json:"status"`
 Subnets             []string `json:"subnets"`
 TenantID            string   `json:"tenant_id"`
 Shared              bool     `json:"shared"`

 AvailabilityZoneHints []string `json:"availability_zone_hints"`
}
```

We need to be sure that `availability_zone_hints` is a field which really does exist in the OpenStack Neutron project and it's not a field which was added as a customization to a single OpenStack cloud.

In addition, we need to ensure that `availability_zone_hints` is really a `[]string` and not a different kind of type.

One way of verifying this is through the [OpenStack API reference documentation](https://developer.openstack.org/api-ref/network/v2/). However, the API docs might either be incorrect or they might not provide all of the details we need to know in order to ensure this field is added correctly.

> Note: when we say the API docs might be incorrect, we are _not_ implying
> that the API docs aren't
 useful or that the contributors who work on the API
> docs are wrong. OpenStack moves fast. Typos happen. Forgetting to update
> documentation happens.

Since the OpenStack service itself correctly accepts and processes the fields, the best source of information on how the field works is in the service code itself.

Continuing on with using #621 as an example, we can find the definition of `availability_zone_hints` in the following piece of code:

https://github.com/openstack/neutron/blob/8e9959725eda4063a318b4ba6af1e3494cad9e35/neutron/objects/network.py#L191

The above code confirms that `availability_zone_hints` is indeed part of the `Network` object and that its type is a list of strings (`[]string`).

This example is a best-case situation: the code is relatively easy to find and it's simple to understand. However, there will be times when proving the implementation in the service code is difficult. Make no mistake, this is _not_

fun work. This can sometimes be more difficult than
writing the actual patch
for Gophercloud. However, this is an essential step to ensuring the feature
or bug fix is correctly added to Gophercloud.

Examples of good code hunting can be seen here:

* https://github.com/gophercloud/gophercloud/issues/539
* https://github.com/gophercloud/gophercloud/issues/555
* https://github.com/gophercloud/gophercloud/issues/571
* https://github.com/gophercloud/gophercloud/issues/583
* https://github.com/gophercloud/gophercloud/issues/605

Code Hunting Tips

OpenStack projects differ from one to another. Code is organized in different
ways. However, the following tips should be useful across all projects.

* The logic which implements Create and Delete actions is usually either located
in the "model" or "controller" portion of the code.

* Use Github's search box to search for the exact field you're working on.
Review all results to gain a good understanding of everywhere the field is
used.

* When adding a field, look for an
object model or a schema of some sort.

Proceed to [Step 4](step-04-acceptance-testing.md) to learn about Acceptance
Testing.
Step 1: Read Our Guides
==========

There are two introductory guides you should read before proceeding:

* [CONTRIBUTING](/.github/CONTRIBUTING.md): The Contributing guide is a detailed
document which describes the different ways you can contribute to Gophercloud
and how to get started. This tutorial you're reading is very similar to that
guide, but presented in a different way. We still recommend you read it over.

* [STYLE](/docs/STYLEGUIDE.md): The Style Guide documents coding conventions used
in the Gophercloud project.

When you've finished reading those guides, proceed to [Step 2](step-02-issues.md).

1.4310 netlink 1.3.1

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1.4311 k8s-io-apiserver 0.33.0

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1.4312 kubernetes-component-base 0.33.0

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1.4319 kubernetes-client 0.33.1

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  limitations under the License.
package migration

import "fmt"

// Notice is a migration warning
type Notice struct {
 Plugin     string
 Option     string
 Severity   string // 'deprecated', 'removed', or 'unsupported'
 ReplacedBy string
 Additional string
 Version    string
}

func (n *Notice) ToString() string {
 s := ""
 if n.Option == "" {
  s += fmt.Sprintf(`Plugin "%v" `, n.Plugin)
 } else {
  s += fmt.Sprintf(`Option "%v" in plugin "%v" `, n.Option, n.Plugin)
 }
 if n.Severity == SevUnsupported {
  s += "is unsupported by this migration tool in " + n.Version + "."
 } else if n.Severity == SevNewDefault {
  s += "is added as a default in " + n.Version + "."
 } else {
  s += "is " + n.Severity + " in " + n.Version + "."
 }
 if n.ReplacedBy != "" {
  s += fmt.Sprintf(` It is replaced by "%v".`, n.ReplacedBy)
 }
 if n.Additional != "" {
  s += " " + n.Additional
 }
 return s
}

const (
 // The following statuses are used to indicate the state of support/deprecation in a given release.
 SevDeprecated  = "deprecated"
  // deprecated, but still completely functional
 SevIgnored     = "ignored"     // if included in the corefile, it will be ignored by CoreDNS
 SevRemoved     = "removed"     // completely removed from CoreDNS, and would cause CoreDNS to exit if present
```

in the Corefile
 SevNewDefault = "newdefault" // added to the default corefile. CoreDNS may not function properly if it is not present in the corefile.
 SevUnsupported = "unsupported" // the plugin/option is not supported by the migration tool

 // The following statuses are used for selecting/filtering notifications
 SevAll = "all" // show all statuses
)
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==========

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==========
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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
```

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Protocol Buffers for Go with Gadgets

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procfs provides functions to retrieve system, kernel and process
metrics from the pseudo-filesystem proc.

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==========
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1.4327 codegangsta-cli 1.22.16

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1.4328 dario.cat/mergo 1.0.2

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```
{
  "import": "./thing.json",
  "fields": {
     "site": "string",
     "author": "updater"
  }
}
```

1.4329 tomcat-jni 9.0.105

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1.4331 tomcat-dbcp 9.0.105

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1.4334 google-cloud-go-kms 1.18.4

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
```

```
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
```

```
// This snippet has been automatically generated and should be regarded as a code template
only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
```

```
 // TODO: Fill request
struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
resp, err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
 }
// TODO: Use resp.
_ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
 }
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
 }
// TODO: Use resp.
_ = resp
}
```

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```
// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.34.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
```

```
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
```

```
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}
```

```
// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
```

```
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
```

```
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67,
 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
```

```
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64,
 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}
```

```
var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func
 file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v any, i int) any {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
    return &v.sizeCache
   case 2:
    return &v.unknownFields
   default:
    return nil
   }
  }
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
```

```
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:
        file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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//
//     https://www.apache.org/licenses/LICENSE-2.0
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
```

```
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient
 interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
```

```
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode,
 error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
```

```
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
```

```
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
//
 Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}
```

```
hds = append(c.xGoogHeaders, hds...)
hds
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.LicenseCode{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return
nil, e
}
return resp, nil
}
```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
```

```
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if
err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"
```

```
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
```

```
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000
* time.Millisecond),
 },
}
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
```

```
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
```

who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
 list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with

```
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
```

```
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
```

```
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license",
url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf,
```

```
 err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()),
 "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err
 := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
```

```
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and
 context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp);
 err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId",
 fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
```

```
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err !=
nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}
```

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

func (c *licensesRESTClient)

```
List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
it := &LicenseIterator{}
req = proto.Clone(req).(*computepb.ListLicensesRequest)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
  req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
  req.MaxResults = proto.Uint32(math.MaxInt32)
 } else if pageSize != 0 {
  req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults",
fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
```

```
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return
err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
```

```
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only
 by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
```

```
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on
 the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return
 nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.4335 google-cloud-go-iam 1.1.12

1.4335.1 Available under license :

```
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/grpc/metadata"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicensesClientHook clientHook
```

```
// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier:
 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
```

```
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions:
[]gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest,
 ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}
```

```
// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy
 gets the access control policy for a resource. May be empty if no such policy or resource exists. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
```

```
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like
 Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective
image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party
partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution
 This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* metadata to be sent with each request.
 xGoogMetadata metadata.MD

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}
```

```
// NewLicensesRESTClient creates a new licenses rest client.
//
//
 The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
```

```
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogMetadata = metadata.Pairs("x-goog-api-client", gax.XGoogHeader(kv...))
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
//
 Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 md := metadata.Pairs("x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense())))

 headers
 := buildHeaders(ctx, c.xGoogMetadata, md, metadata.Pairs("Content-Type", "application/json"))
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if
e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
```

```
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 md := metadata.Pairs("x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense())))

 headers := buildHeaders(ctx, c.xGoogMetadata, md, metadata.Pairs("Content-Type", "application/json"))
 opts
 = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource.
 May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party
partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 md := metadata.Pairs("x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource())))

 headers
 := buildHeaders(ctx, c.xGoogMetadata, md, metadata.Pairs("Content-Type", "application/json"))
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if
e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
```

```
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
md := metadata.Pairs("x-goog-request-params", fmt.Sprintf("%s=%v", "project",
url.QueryEscape(req.GetProject())))

headers := buildHeaders(ctx, c.xGoogMetadata, md, metadata.Pairs("Content-Type", "application/json"))
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err !=
nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
```

```
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true,
 DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
```

```
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v",
req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 headers := buildHeaders(ctx, c.xGoogMetadata, metadata.Pairs("Content-Type", "application/json"))
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return
err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
```

```
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial:
 true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 md := metadata.Pairs("x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource())))

 headers := buildHeaders(ctx, c.xGoogMetadata, md, metadata.Pairs("Content-Type", "application/json"))
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
```

```
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path
 != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
 error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
```

```
 return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 md := metadata.Pairs("x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource())))

 headers := buildHeaders(ctx, c.xGoogMetadata, md, metadata.Pairs("Content-Type", "application/json"))
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e
 := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
```

```
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// LicenseIterator manages a stream of *computepb.License.
type LicenseIterator struct {
 items    []*computepb.License
 pageInfo *iterator.PageInfo
 nextFunc func() error

 // Response is the raw response for the current page.
 // It
 must be cast to the RPC response type.
 // Calling Next() or InternalFetch() updates this value.
 Response interface{}

 // InternalFetch is for use by the Google Cloud Libraries only.
 // It is not part of the stable interface of this package.
 //
 // InternalFetch returns results from a single call to the underlying RPC.
 // The number of results is no greater than pageSize.
 // If there are no more results, nextPageToken is empty and err is nil.
 InternalFetch func(pageSize int, pageToken string) (results []*computepb.License, nextPageToken string, err error)
}

// PageInfo supports pagination. See the google.golang.org/api/iterator package for details.
func (it *LicenseIterator) PageInfo() *iterator.PageInfo {
 return it.pageInfo
}

// Next returns the next result. Its second return value is iterator.Done if there are no more
// results. Once Next returns Done, all subsequent calls will return Done.
func (it *LicenseIterator) Next() (*computepb.License, error) {
 var item *computepb.License
 if
 err := it.nextFunc(); err != nil {
  return item, err
 }
 item = it.items[0]
 it.items = it.items[1:]
 return item, nil
```

```
}

func (it *LicenseIterator) bufLen() int {
 return len(it.items)
}

func (it *LicenseIterator) takeBuf() interface{} {
 b := it.items
 it.items = nil
 return b
}
```

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```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
```

```
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp
 }
```

```
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range
 values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown
 in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
```

```
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/grpc/metadata"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
```

```
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google
 Compute Engine API.
type internalLicenseCodesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}
```

```
// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func
 (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption)
 (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
```

```
 httpClient *http.Client

 // The x-goog-* metadata to be sent with each request.
 xGoogMetadata metadata.MD

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
}

//
 NewLicenseCodesRESTClient creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogMetadata = metadata.Pairs("x-goog-api-client", gax.XGoogHeader(kv...))
```

```
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return
 a specified license code. License codes are mirrored across all projects that have permissions to read the License
Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 md := metadata.Pairs("x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode())))

 headers := buildHeaders(ctx, c.xGoogMetadata, md, metadata.Pairs("Content-Type", "application/json"))
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
```

```
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by
 third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())
```

```
 // Build HTTP headers from client and context metadata.
 md := metadata.Pairs("x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource())))

 headers := buildHeaders(ctx, c.xGoogMetadata, md, metadata.Pairs("Content-Type", "application/json"))
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
```

```
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseCodeRequest{
 // TODO: Fill request
struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
}
resp, err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

1.4336 prometheus 1.8.2-0.20221021121301-51a44e6657c3

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Go support for leveled logs, analogous to
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Support for streaming Protocol Buffer messages for the Go language (golang).
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DNS library in Go
https://miek.nl/2014/august/16/go-dns-package/

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go-zookeeper - Native ZooKeeper client for Go
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We also use code from a large number of npm packages. For details, see:
- https://github.com/prometheus/prometheus/blob/main/web/ui/react-app/package.json
- https://github.com/prometheus/prometheus/blob/main/web/ui/react-app/package-lock.json
- The individual package licenses as copied from the node_modules directory can be found in
the npm_licenses.tar.bz2 archive in release tarballs and Docker images.

1.4337 sqlite 3.49.1

1.4337.1 Available under license :

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1.4338 go-autorest-autorest-validation 0.3.1

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1.4339 x-text 0.25.0

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1.4340 x-crypto 0.38.0

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1.4341 gax-go 2.14.2

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1.4342 go-compute-metadata 0.7.0

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]

package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "google.golang.org/api/iterator"
)

func main() {
 ctx := context.Background()
 // This snippet
 has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 it := c.ListUserLicenses(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
```

```
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove
 this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
 }
}

// [END discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]
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package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
```

```
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:           []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
```

```
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
```

```
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
```

```
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }
```

```
 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}
```

```
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context,
 opts ...option.ClientOption) (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
```

```
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
```

```
 },
 opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient)
 Assign(ctx context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption)
(*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
```

```
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts
 =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)], opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
```

```
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(),
 nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}
```

```
// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
```

```
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx
 context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func
 (c *licenseManagementRESTClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
```

```
 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial:
 true, DiscardUnknown: true}
 resp := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err :=
 m.Marshal(req)
 if err != nil {
  return nil, err
```

```
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.UnassignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq,
err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
```

```
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
  if req.GetPageToken() != "" {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
  headers := gax.BuildHeaders(ctx, hds...)
  e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   if settings.Path != "" {
    baseUrl.Path
= settings.Path
   }
   httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
   if err != nil {
    return err
```

```
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from
 google.longrunning.Operations.
func (c *licenseManagementRESTClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
```

```
 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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```

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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update            []gax.CallOption
}
```

```
func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier:
1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
```

```
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
  Update: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}
```

```
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed
 on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req
 *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the
 specified project. This method does not get any licenses that belong to other projects, including licenses attached to
publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to
```

make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}
```

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}
```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}
```

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}
```

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.

```
type
 licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
```

```
 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:
   internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}
```

```
// setGoogleClientInfo sets the name and version of the application in
//
 the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating
```

```
 Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
 {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if
 settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
```

```
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
 }
 httpReq, err
:= http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for
 use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
```

```
 if pageSize > math.MaxInt32 {
  req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
  req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter",
fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header
= headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
```

```
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace
 images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
 context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
```

```
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
```

```
 return nil, e
 }
 return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Update(ctx context.Context,
 req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
  params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
```

```
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return
op, nil
}
```

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"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the

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```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
```

```
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}
```

```
//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
```

```
 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
```

```
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a
 caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds =
```

```
 append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get                 []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
```

```
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface
 {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return
 c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
```

```
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }
```

```
 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
```

```
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v", req.GetProject(), req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that
 a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
```

```
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
```

```
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}
```

```
func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
```

```
  "READER":          3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
```

0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,

```
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
```

```
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23
```

```
package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewUserLicenseClient() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewUserLicenseRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseRESTClient(ctx)
 if
 err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
```

```
}

func ExampleUserLicenseClient_BatchUpdateUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque
st.
 }
 op, err := c.BatchUpdateUserLicenses(ctx, req)
 if err != nil {
  //
 TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &discoveryenginepb.ListUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 it := c.ListUserLicenses(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done
  {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
 }
}

func ExampleUserLicenseClient_CancelOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.CancelOperationRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#CancelOperationRequest.
 }
 err = c.CancelOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
}
```

```
func ExampleUserLicenseClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp,
 err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListOperations() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.ListOperationsRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
 }
 it := c.ListOperations(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
```

```
  break
 }
 if err != nil {
  //
TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*longrunningpb.ListOperationsResponse)
}
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/discoveryengine/v1/user_license_service.proto

package discoveryenginepb

import (
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 status "google.golang.org/genproto/googleapis/rpc/status"
 grpc
 "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status1 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
```

```
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Request message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type ListUserLicensesRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The parent [UserStore][] resource name,
 format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. Requested page size. Server may return fewer items than
 // requested. If unspecified, defaults to 10. The maximum value is 50; values
 // above 50 will be coerced to 50.
 //
 // If this field is negative, an INVALID_ARGUMENT error is returned.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3" json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `ListUserLicenses` call.
 // Provide this to retrieve the subsequent page.
 //
 // When paginating, all other parameters provided to `ListUserLicenses`
 // must match the call that provided the page token.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
 // Optional. Filter for the list request.
 //
 // Supported fields:
 //
 // * `license_assignment_state`
 //
 //
 Examples:
 //
 // * `license_assignment_state = ASSIGNED` to list assigned user licenses.
 // * `license_assignment_state = NO_LICENSE` to list not licensed users.
```

```
 // * `license_assignment_state = NO_LICENSE_ATTEMPTED_LOGIN` to list users
 // who attempted login but no license assigned.
 // * `license_assignment_state != NO_LICENSE_ATTEMPTED_LOGIN` to filter
 // out users who attempted login but no license assigned.
 Filter string `protobuf:"bytes,4,opt,name=filter,proto3" json:"filter,omitempty"`
}

func (x *ListUserLicensesRequest) Reset() {
 *x = ListUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*ListUserLicensesRequest) ProtoMessage() {}

func (x *ListUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*ListUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{0}
}

func (x *ListUserLicensesRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *ListUserLicensesRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
```

```
 }
 return 0
}

func (x *ListUserLicensesRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

func (x *ListUserLicensesRequest) GetFilter() string {
 if x != nil {
  return x.Filter
 }
 return ""
}

// Response message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type
 ListUserLicensesResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // All the customer's
 // [UserLicense][google.cloud.discoveryengine.v1.UserLicense]s.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // A token, which can be sent as `page_token` to retrieve the next page. If
 // this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *ListUserLicensesResponse) Reset() {
 *x = ListUserLicensesResponse{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func
```

```
 (*ListUserLicensesResponse) ProtoMessage() {}

func (x *ListUserLicensesResponse) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*ListUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{1}
}

func (x *ListUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
 return nil
}

func (x *ListUserLicensesResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Request message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
//
 method.
type BatchUpdateUserLicensesRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The source of the input.
 //
 // Types that are assignable to Source:
 //
```

```
 // *BatchUpdateUserLicensesRequest_InlineSource_
 Source isBatchUpdateUserLicensesRequest_Source `protobuf_oneof:"source"`
 // Required. The parent [UserStore][] resource name, format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. If true, if user licenses removed associated license config, the
 // user license will be deleted. By default which is false, the user license
 // will be updated to unassigned state.
 DeleteUnassignedUserLicenses bool
`protobuf:"varint,4,opt,name=delete_unassigned_user_licenses,json=deleteUnassignedUserLicenses,proto3"
json:"delete_unassigned_user_licenses,omitempty"`
}

func
 (x *BatchUpdateUserLicensesRequest) Reset() {
 *x = BatchUpdateUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest) ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(),
 []int{2}
}

func (m *BatchUpdateUserLicensesRequest) GetSource() isBatchUpdateUserLicensesRequest_Source {
 if m != nil {
  return m.Source
```

```
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetInlineSource() *BatchUpdateUserLicensesRequest_InlineSource {
 if x, ok := x.GetSource().(*BatchUpdateUserLicensesRequest_InlineSource_); ok {
  return x.InlineSource
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *BatchUpdateUserLicensesRequest) GetDeleteUnassignedUserLicenses() bool {
 if x != nil {
  return x.DeleteUnassignedUserLicenses
 }
 return false
}

type isBatchUpdateUserLicensesRequest_Source interface {
 isBatchUpdateUserLicensesRequest_Source()
}

type BatchUpdateUserLicensesRequest_InlineSource_ struct {
 // The inline source for the input content for document embeddings.
 InlineSource *BatchUpdateUserLicensesRequest_InlineSource
`protobuf:"bytes,2,opt,name=inline_source,json=inlineSource,proto3,oneof"`
}

func
 (*BatchUpdateUserLicensesRequest_InlineSource_) isBatchUpdateUserLicensesRequest_Source() {}

// Metadata related to the progress of the
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// operation. This will be returned by the google.longrunning.Operation.metadata
// field.
type BatchUpdateUserLicensesMetadata struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // Operation create time.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,1,opt,name=create_time,json=createTime,proto3"
json:"create_time,omitempty"`
 // Operation last update time. If the operation is done, this is also the
 // finish time.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=update_time,json=updateTime,proto3"
json:"update_time,omitempty"`
 // Count of user licenses successfully updated.
 SuccessCount
 int64 `protobuf:"varint,3,opt,name=success_count,json=successCount,proto3" json:"success_count,omitempty"`
 // Count of user licenses that failed to be updated.
 FailureCount int64 `protobuf:"varint,4,opt,name=failure_count,json=failureCount,proto3"
json:"failure_count,omitempty"`
}

func (x *BatchUpdateUserLicensesMetadata) Reset() {
 *x = BatchUpdateUserLicensesMetadata{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesMetadata) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesMetadata) ProtoMessage() {}

func (x *BatchUpdateUserLicensesMetadata) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return
 ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesMetadata.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesMetadata) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{3}
}

func (x *BatchUpdateUserLicensesMetadata) GetCreateTime() *timestamppb.Timestamp {
```

```
 if x != nil {
  return x.CreateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.UpdateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetSuccessCount() int64 {
 if x != nil {
  return x.SuccessCount
 }
 return 0
}

func (x *BatchUpdateUserLicensesMetadata) GetFailureCount() int64 {
 if x != nil {
  return x.FailureCount
 }
 return 0
}

// Response message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// method.
type
 BatchUpdateUserLicensesResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // UserLicenses successfully updated.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // A sample of errors encountered while processing the request.
 ErrorSamples []*status.Status `protobuf:"bytes,2,rep,name=error_samples,json=errorSamples,proto3"
json:"error_samples,omitempty"`
}

func (x *BatchUpdateUserLicensesResponse) Reset() {
 *x = BatchUpdateUserLicensesResponse{}
```

```
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesResponse) ProtoMessage() {}

func (x *BatchUpdateUserLicensesResponse) ProtoReflect()
 protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{4}
}

func (x *BatchUpdateUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
 return nil
}

func (x *BatchUpdateUserLicensesResponse) GetErrorSamples() []*status.Status {
 if x != nil {
  return x.ErrorSamples
 }
 return nil
}

// The inline source for the input config for BatchUpdateUserLicenses
// method.
type BatchUpdateUserLicensesRequest_InlineSource struct {
 state         protoimpl.MessageState
 sizeCache
```

```
    protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. A list of user licenses to update. Each user license
 // must have a valid
 // [UserLicense.user_principal][google.cloud.discoveryengine.v1.UserLicense.user_principal].
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // Optional. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) Reset() {
 *x = BatchUpdateUserLicensesRequest_InlineSource{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest_InlineSource)
 ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest_InlineSource) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest_InlineSource.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest_InlineSource) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{2, 0}
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
```

```
 return nil
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_service_proto
 protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = []byte{
 0x0a, 0x3a, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x73,
 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f,
 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1c, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f, 0x74, 0x61,
 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x1a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
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 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x6c, 0x6f, 0x6e,
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 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
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 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64,
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 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x72, 0x70, 0x63, 0x2f, 0x73, 0x74, 0x61, 0x74, 0x75, 0x73, 0x2e,
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 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73,
 0x74, 0x12, 0x48, 0x0a, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x18, 0x01, 0x20, 0x01, 0x28,
 0x09, 0x42, 0x30, 0xe0, 0x41, 0x02, 0xfa, 0x41, 0x2a, 0x0a, 0x28, 0x64, 0x69, 0x73, 0x63, 0x6f,
 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
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 0x6d, 0x2f, 0x55, 0x73, 0x65, 0x72, 0x53, 0x74,
 0x6f, 0x72, 0x65, 0x52, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x12, 0x20, 0x0a, 0x09, 0x70,
```

0x61, 0x67, 0x65, 0x5f, 0x73, 0x69, 0x7a, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
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0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x09, 0x70, 0x61, 0x67, 0x65, 0x54, 0x6f, 0x6b, 0x65,
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0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x06, 0x66, 0x69, 0x6c, 0x74, 0x65, 0x72, 0x22, 0x95,
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0x69, 0x6e, 0x65, 0x5f, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b,
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0xe0, 0x41, 0x02, 0xfa, 0x41, 0x2a, 0x0a, 0x28, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
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0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x18, 0x04, 0x20, 0x01, 0x28,
0x08, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x1c, 0x64, 0x65, 0x6c, 0x65, 0x74, 0x65, 0x55, 0x6e,
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0x0c, 0x75, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x12, 0x40, 0x0a,
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0xe0, 0x41, 0x01, 0x52, 0x0a, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4d, 0x61, 0x73, 0x6b, 0x42,
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0x66, 0x61, 0x69, 0x6c, 0x75, 0x72, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x04, 0x20,
0x01, 0x28, 0x03, 0x52, 0x0c, 0x66, 0x61, 0x69, 0x6c, 0x75, 0x72, 0x65, 0x43, 0x6f, 0x75, 0x6e,
0x74, 0x22, 0xad, 0x01, 0x0a, 0x1f,
0x42, 0x61, 0x74, 0x63, 0x68, 0x55, 0x70, 0x64, 0x61, 0x74,
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0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x12, 0x37, 0x0a, 0x0d, 0x65, 0x72, 0x72, 0x6f,
0x72, 0x5f, 0x73, 0x61, 0x6d, 0x70, 0x6c, 0x65, 0x73, 0x18, 0x02, 0x20, 0x03, 0x28, 0x0b, 0x32,
0x12, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x72, 0x70, 0x63, 0x2e, 0x53, 0x74, 0x61,
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0x61, 0x6d, 0x70, 0x6c, 0x65,
0x73, 0x32, 0x9a, 0x05, 0x0a, 0x12, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73,
0x65, 0x53, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x12, 0xd7, 0x01, 0x0a, 0x10, 0x4c, 0x69, 0x73,
0x74, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x12, 0x38, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73,
0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x2e,
0x4c, 0x69, 0x73, 0x74, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73,
0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x39, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65,
0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79,
0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x2e, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73,
0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e,
0x73,
0x65, 0x22, 0x4e, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4,
0x93, 0x02, 0x3f, 0x12, 0x3d, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x3d, 0x70, 0x72, 0x6f, 0x6a, 0x65, 0x63, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x6f, 0x63, 0x61,
0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x2a, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x53, 0x74, 0x6f, 0x72,
0x65, 0x73, 0x2f, 0x2a, 0x7d, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73,
0x65, 0x73, 0x12, 0xd5, 0x02, 0x0a, 0x17, 0x42, 0x61, 0x74, 0x63, 0x68, 0x55, 0x70, 0x64, 0x61,
0x74, 0x65, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x12, 0x3f,

0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69,
0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31,
0x2e, 0x42, 0x61, 0x74, 0x63, 0x68, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x55, 0x73, 0x65, 0x72,
0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a,
0x1d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x6c, 0x6f, 0x6e, 0x67, 0x72, 0x75, 0x6e,
0x6e, 0x69, 0x6e, 0x67, 0x2e, 0x4f, 0x70, 0x65, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x22, 0xd9,
0x01, 0xca, 0x41, 0x82, 0x01, 0x0a, 0x3f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c,
0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67,
0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x2e, 0x42, 0x61, 0x74, 0x63, 0x68, 0x55, 0x70, 0x64, 0x61,
0x74, 0x65, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x52, 0x65,
0x73, 0x70, 0x6f, 0x6e, 0x73, 0x65, 0x12, 0x3f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63,
0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e,
0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x2e, 0x42, 0x61, 0x74, 0x63, 0x68, 0x55, 0x70, 0x64,
0x61, 0x74, 0x65, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x4d,
0x65, 0x74, 0x61, 0x64, 0x61, 0x74, 0x61, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x4d, 0x3a, 0x01, 0x2a,
0x22, 0x48, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x70, 0x72,
0x6f, 0x6a, 0x65, 0x63, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x6f, 0x63, 0x61, 0x74, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x2a, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x53, 0x74, 0x6f, 0x72, 0x65, 0x73, 0x2f,
0x2a, 0x7d, 0x3a, 0x62, 0x61, 0x74, 0x63, 0x68, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x55, 0x73,
0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x1a, 0x52, 0xca, 0x41, 0x1e, 0x64,
0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0xd2, 0x41, 0x2e,
0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x61, 0x75, 0x74,
0x68, 0x2f,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66, 0x6f, 0x72, 0x6d, 0x42, 0x8a,
0x02, 0x0a, 0x23, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c,
0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67,
0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x42, 0x17, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x53, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50,
0x01, 0x5a, 0x4d, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79,
0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x2f, 0x64, 0x69, 0x73,
0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x70, 0x62, 0x3b, 0x64,
0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x70, 0x62,
0xa2, 0x02, 0x0f,
0x44, 0x49, 0x53, 0x43, 0x4f, 0x56, 0x45, 0x52, 0x59, 0x45, 0x4e, 0x47, 0x49,
0x4e, 0x45, 0xaa, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e,
0x65, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c,
0x6f, 0x75, 0x64, 0x5c, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67,
0x69, 0x6e, 0x65, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x22, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a,
0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x33,
}

```
var (
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc
)

func
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce.Do(func() {
  file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 6)
var file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = []any{
 (*ListUserLicensesRequest)(nil),                    // 0: google.cloud.discoveryengine.v1.ListUserLicensesRequest
 (*ListUserLicensesResponse)(nil),                    // 1: google.cloud.discoveryengine.v1.ListUserLicensesResponse
 (*BatchUpdateUserLicensesRequest)(nil),              // 2:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 (*BatchUpdateUserLicensesMetadata)(nil),
            // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata
 (*BatchUpdateUserLicensesResponse)(nil),             // 4:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse
 (*BatchUpdateUserLicensesRequest_InlineSource)(nil), // 5:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 (*UserLicense)(nil),                                 // 6: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil),                       // 7: google.protobuf.Timestamp
 (*status.Status)(nil),                               // 8: google.rpc.Status
 (*fieldmaskpb.FieldMask)(nil),                       // 9: google.protobuf.FieldMask
 (*longrunningpb.Operation)(nil),                     // 10: google.longrunning.Operation
}
var file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = []int32{
 6,  // 0: google.cloud.discoveryengine.v1.ListUserLicensesResponse.user_licenses:type_name
 -> google.cloud.discoveryengine.v1.UserLicense
 5,  // 1: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.inline_source:type_name ->
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 7,  // 2: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.create_time:type_name ->
google.protobuf.Timestamp
 7,  // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.update_time:type_name ->
google.protobuf.Timestamp
 6,  // 4: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.user_licenses:type_name ->
google.cloud.discoveryengine.v1.UserLicense
 8,  // 5: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.error_samples:type_name ->
google.rpc.Status
```

```
 6,  // 6: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.user_licenses:type_name -
> google.cloud.discoveryengine.v1.UserLicense
 9,  // 7: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.update_mask:type_name
 -> google.protobuf.FieldMask
 0,  // 8: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:input_type ->
google.cloud.discoveryengine.v1.ListUserLicensesRequest
 2,  // 9: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:input_type ->
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 1,  // 10: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:output_type ->
google.cloud.discoveryengine.v1.ListUserLicensesResponse
 10, // 11: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:output_type ->
google.longrunning.Operation
 10, // [10:12] is the sub-list for method output_type
 8,  // [8:10] is the sub-list for method input_type
 8,  // [8:8] is the sub-list for extension type_name
 8,  // [8:8] is the sub-list for extension extendee
 0,  // [0:8] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_service_proto_init()
 }
func file_google_cloud_discoveryengine_v1_user_license_service_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_service_proto != nil {
  return
 }
 file_google_cloud_discoveryengine_v1_user_license_proto_init()
 file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2].OneofWrappers = []any{
  (*BatchUpdateUserLicensesRequest_InlineSource_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   6,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:           file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes,
  DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs,
  MessageInfos:      file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes,
 }.Build()
 File_google_cloud_discoveryengine_v1_user_license_service_proto
 = out.File
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = nil
 file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = nil
 file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = nil
```

```
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// UserLicenseServiceClient is the client API for UserLicenseService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type UserLicenseServiceClient interface {
 // Lists the User Licenses.
 ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest,
 opts ...grpc.CallOption) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(ctx context.Context, in *BatchUpdateUserLicensesRequest, opts ...grpc.CallOption)
(*longrunningpb.Operation, error)
}

type userLicenseServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewUserLicenseServiceClient(cc grpc.ClientConnInterface) UserLicenseServiceClient {
 return &userLicenseServiceClient{cc}
}

func (c *userLicenseServiceClient) ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest, opts
...grpc.CallOption) (*ListUserLicensesResponse, error) {
 out := new(ListUserLicensesResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *userLicenseServiceClient) BatchUpdateUserLicenses(ctx context.Context, in
*BatchUpdateUserLicensesRequest,
 opts ...grpc.CallOption) (*longrunningpb.Operation, error) {
 out := new(longrunningpb.Operation)
 err := c.cc.Invoke(ctx, "/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses", in, out,
opts...)
```

```
 if err != nil {
  return nil, err
 }
 return out, nil
}

// UserLicenseServiceServer is the server API for UserLicenseService service.
type UserLicenseServiceServer interface {
 // Lists the User Licenses.
 ListUserLicenses(context.Context, *ListUserLicensesRequest) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(context.Context, *BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error)
}

// UnimplementedUserLicenseServiceServer can be embedded to have forward compatible implementations.
type UnimplementedUserLicenseServiceServer struct {
}

func (*UnimplementedUserLicenseServiceServer) ListUserLicenses(context.Context, *ListUserLicensesRequest)
 (*ListUserLicensesResponse, error) {
 return nil, status1.Errorf(codes.Unimplemented, "method ListUserLicenses not implemented")
}
func (*UnimplementedUserLicenseServiceServer) BatchUpdateUserLicenses(context.Context,
*BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error) {
 return nil, status1.Errorf(codes.Unimplemented, "method BatchUpdateUserLicenses not implemented")
}

func RegisterUserLicenseServiceServer(s *grpc.Server, srv UserLicenseServiceServer) {
 s.RegisterService(&_UserLicenseService_serviceDesc, srv)
}

func _UserLicenseService_ListUserLicenses_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(ListUserLicensesRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, req.(*ListUserLicensesRequest))
```

```
 }
 return interceptor(ctx, in, info, handler)
}

func _UserLicenseService_BatchUpdateUserLicenses_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(BatchUpdateUserLicensesRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, req.(*BatchUpdateUserLicensesRequest))
 }
 return interceptor(ctx,
 in, info, handler)
}

var _UserLicenseService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.discoveryengine.v1.UserLicenseService",
 HandlerType: (*UserLicenseServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "ListUserLicenses",
   Handler:    _UserLicenseService_ListUserLicenses_Handler,
  },
  {
   MethodName: "BatchUpdateUserLicenses",
   Handler:    _UserLicenseService_BatchUpdateUserLicenses_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/discoveryengine/v1/user_license_service.proto",
}

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```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}
```

```
func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO:
 Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
```

```
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/discoveryengine/v1/user_license.proto

package discoveryenginepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
```

```
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect
 "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// License assignment state enumeration.
type UserLicense_LicenseAssignmentState int32

const (
 // Default value.
 UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED UserLicense_LicenseAssignmentState = 0
 // License assigned to the user.
 UserLicense_ASSIGNED UserLicense_LicenseAssignmentState = 1
 // No license assigned to the user.
 // Deprecated, translated to NO_LICENSE.
 UserLicense_UNASSIGNED UserLicense_LicenseAssignmentState = 2
 // No license assigned to the user.
 UserLicense_NO_LICENSE UserLicense_LicenseAssignmentState = 3
 // User attempted to login but no license assigned to the user.
 // This state is only used for no user first time login attempt
 but cannot
 // get license assigned.
 // Users already logged in but cannot get license assigned will be assigned
 // NO_LICENSE state(License could be unassigned by admin).
 UserLicense_NO_LICENSE_ATTEMPTED_LOGIN UserLicense_LicenseAssignmentState = 4
)

// Enum value maps for UserLicense_LicenseAssignmentState.
var (
 UserLicense_LicenseAssignmentState_name = map[int32]string{
  0: "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED",
  1: "ASSIGNED",
  2: "UNASSIGNED",
  3: "NO_LICENSE",
  4: "NO_LICENSE_ATTEMPTED_LOGIN",
 }
 UserLicense_LicenseAssignmentState_value = map[string]int32{
  "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED": 0,
  "ASSIGNED":                             1,
```

```
  "UNASSIGNED":                    2,
  "NO_LICENSE":                    3,
  "NO_LICENSE_ATTEMPTED_LOGIN":    4,
 }
)

func (x UserLicense_LicenseAssignmentState) Enum() *UserLicense_LicenseAssignmentState {
 p := new(UserLicense_LicenseAssignmentState)
 *p = x
 return p
}

func (x UserLicense_LicenseAssignmentState)
 String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (UserLicense_LicenseAssignmentState) Descriptor() protoreflect.EnumDescriptor {
 return file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0].Descriptor()
}

func (UserLicense_LicenseAssignmentState) Type() protoreflect.EnumType {
 return &file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0]
}

func (x UserLicense_LicenseAssignmentState) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use UserLicense_LicenseAssignmentState.Descriptor instead.
func (UserLicense_LicenseAssignmentState) EnumDescriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0, 0}
}

// User License information assigned by the admin.
type UserLicense struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 //
 Required. Immutable. The user principal of the User, could be email address
 // or other prinical identifier. This field is immutable. Admin assign
 // licenses based on the user principal.
 UserPrincipal string `protobuf:"bytes,1,opt,name=user_principal,json=userPrincipal,proto3"
json:"user_principal,omitempty"`
 // Optional. The user profile.
 // We user user full name(First name + Last name) as user profile.
```

```
 UserProfile string `protobuf:"bytes,3,opt,name=user_profile,json=userProfile,proto3"
json:"user_profile,omitempty"`
 // Output only. License assignment state of the user.
 // If the user is assigned with a license config, the user loggin will be
 // assigned with the license;
 // If the user's license assignment state is unassigned or unspecified, no
 // license config will be associated to the user;
 LicenseAssignmentState UserLicense_LicenseAssignmentState
`protobuf:"varint,4,opt,name=license_assignment_state,json=licenseAssignmentState,proto3,enum=google.cloud.dis
coveryengine.v1.UserLicense_LicenseAssignmentState"
 json:"license_assignment_state,omitempty"`
 // Optional. The full resource name of the Subscription(LicenseConfig)
 // assigned to the user.
 LicenseConfig string `protobuf:"bytes,5,opt,name=license_config,json=licenseConfig,proto3"
json:"license_config,omitempty"`
 // Output only. User created timestamp.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,6,opt,name=create_time,json=createTime,proto3"
json:"create_time,omitempty"`
 // Output only. User update timestamp.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,7,opt,name=update_time,json=updateTime,proto3"
json:"update_time,omitempty"`
 // Output only. User last logged in time.
 // If the user has not logged in yet, this field will be empty.
 LastLoginTime *timestamppb.Timestamp
`protobuf:"bytes,8,opt,name=last_login_time,json=lastLoginTime,proto3" json:"last_login_time,omitempty"`
}

func (x *UserLicense) Reset() {
 *x = UserLicense{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UserLicense) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UserLicense) ProtoMessage() {}

func (x *UserLicense) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UserLicense.ProtoReflect.Descriptor instead.
func (*UserLicense) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0}
}

func (x *UserLicense) GetUserPrincipal() string {
 if x != nil {
  return x.UserPrincipal
 }
 return ""
}

func (x *UserLicense) GetUserProfile() string {
 if x != nil {
  return x.UserProfile
 }
 return ""
}

func (x *UserLicense) GetLicenseAssignmentState()
 UserLicense_LicenseAssignmentState {
 if x != nil {
  return x.LicenseAssignmentState
 }
 return UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED
}

func (x *UserLicense) GetLicenseConfig() string {
 if x != nil {
  return x.LicenseConfig
 }
 return ""
}

func (x *UserLicense) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.CreateTime
 }
 return nil
}

func (x *UserLicense) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
```

```
  return x.UpdateTime
 }
 return nil
}

func (x *UserLicense) GetLastLoginTime() *timestamppb.Timestamp {
 if x != nil {
  return x.LastLoginTime
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_proto protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = []byte{
 0x0a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31,
 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f,
 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,
 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,
 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x22, 0xa6, 0x05, 0x0a, 0x0b, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x12, 0x2d, 0x0a, 0x0e,
 0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x69, 0x6e, 0x63,
 0x69, 0x70, 0x61, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x05, 0xe0,
 0x41, 0x02, 0x52, 0x0d, 0x75, 0x73, 0x65, 0x72, 0x50, 0x72, 0x69, 0x6e, 0x63, 0x69, 0x70, 0x61,
 0x6c, 0x12, 0x26, 0x0a, 0x0c, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x6f, 0x66, 0x69, 0x6c,
 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x0b, 0x75, 0x73,
 0x65, 0x72, 0x50, 0x72, 0x6f, 0x66, 0x69, 0x6c, 0x65, 0x12, 0x82, 0x01, 0x0a, 0x18, 0x6c, 0x69,
 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74,
 0x5f, 0x73, 0x74, 0x61, 0x74, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x43, 0x2e, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63,
 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x2e, 0x55,
 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e,
 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74, 0x61, 0x74,
 0x65, 0x42, 0x03, 0xe0, 0x41, 0x03, 0x52, 0x16, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41,
 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74, 0x61, 0x74, 0x65, 0x12, 0x5b,
 0x0a, 0x0e, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x63, 0x6f, 0x6e, 0x66, 0x69, 0x67,
 0x18, 0x05, 0x20, 0x01, 0x28, 0x09, 0x42, 0x34, 0xe0, 0x41, 0x01, 0xfa, 0x41, 0x2e, 0x0a, 0x2c,
 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e,
 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x4c,
```

```
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x6e, 0x66, 0x69, 0x67, 0x52, 0x0d, 0x6c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x6e, 0x66, 0x69, 0x67, 0x12, 0x40, 0x0a, 0x0b, 0x63,
0x72, 0x65, 0x61, 0x74, 0x65, 0x5f, 0x74, 0x69, 0x6d, 0x65, 0x18, 0x06, 0x20, 0x01, 0x28, 0x0b,
0x32,
0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,
0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x42, 0x03, 0xe0, 0x41,
0x03, 0x52, 0x0a, 0x63, 0x72, 0x65, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12, 0x40, 0x0a,
0x0b, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x5f, 0x74, 0x69, 0x6d, 0x65, 0x18, 0x07, 0x20, 0x01,
0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x62, 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x0a, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12,
0x47, 0x0a, 0x0f, 0x6c, 0x61, 0x73, 0x74, 0x5f, 0x6c, 0x6f, 0x67, 0x69, 0x6e, 0x5f, 0x74, 0x69,
0x6d, 0x65, 0x18, 0x08, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73,
0x74, 0x61, 0x6d, 0x70, 0x42,
0x03, 0xe0, 0x41, 0x03, 0x52, 0x0d, 0x6c, 0x61, 0x73, 0x74, 0x4c,
0x6f, 0x67, 0x69, 0x6e, 0x54, 0x69, 0x6d, 0x65, 0x22, 0x90, 0x01, 0x0a, 0x16, 0x4c, 0x69, 0x63,
0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74,
0x61, 0x74, 0x65, 0x12, 0x28, 0x0a, 0x24, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41,
0x53, 0x53, 0x49, 0x47, 0x4e, 0x4d, 0x45, 0x4e, 0x54, 0x5f, 0x53, 0x54, 0x41, 0x54, 0x45, 0x5f,
0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x0c, 0x0a,
0x08, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x01, 0x12, 0x0e, 0x0a, 0x0a, 0x55,
0x4e, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x02, 0x12, 0x0e, 0x0a, 0x0a, 0x4e,
0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x10, 0x03, 0x12, 0x1e, 0x0a, 0x1a, 0x4e,
0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41, 0x54, 0x54, 0x45, 0x4d, 0x50,
0x54, 0x45, 0x44, 0x5f, 0x4c, 0x4f, 0x47, 0x49, 0x4e, 0x10,
0x04, 0x42, 0x83, 0x02, 0x0a, 0x23,
0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65,
0x2e, 0x76, 0x31, 0x42, 0x10, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x4d, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x64, 0x69, 0x73,
0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x76, 0x31, 0x2f, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,
0x6e, 0x65, 0x70, 0x62, 0x3b, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e,
0x67, 0x69, 0x6e, 0x65, 0x70, 0x62, 0xa2, 0x02, 0x0f, 0x44, 0x49, 0x53, 0x43, 0x4f, 0x56, 0x45,
0x52, 0x59, 0x45, 0x4e, 0x47, 0x49, 0x4e, 0x45, 0xaa, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67,
0x6c,
0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x1f, 0x47, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76,
0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x22, 0x47,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69,
0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56,
0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
```

```
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc
)

func file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce.Do(func()
 {
  file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes = make([]protoimpl.EnumInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = []any{
 (UserLicense_LicenseAssignmentState)(0), // 0:
google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 (*UserLicense)(nil),                    // 1: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil),          // 2: google.protobuf.Timestamp
}
var file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = []int32{
 0, // 0: google.cloud.discoveryengine.v1.UserLicense.license_assignment_state:type_name
 -> google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 2, // 1: google.cloud.discoveryengine.v1.UserLicense.create_time:type_name -> google.protobuf.Timestamp
 2, // 2: google.cloud.discoveryengine.v1.UserLicense.update_time:type_name -> google.protobuf.Timestamp
 2, // 3: google.cloud.discoveryengine.v1.UserLicense.last_login_time:type_name -> google.protobuf.Timestamp
 4, // [4:4] is the sub-list for method output_type
 4, // [4:4] is the sub-list for method input_type
 4, // [4:4] is the sub-list for extension type_name
 4, // [4:4] is the sub-list for extension extendee
 0, // [0:4] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_proto_init() }
func file_google_cloud_discoveryengine_v1_user_license_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_proto != nil {
  return
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc,
   NumEnums:      1,
   NumMessages:   1,
```

```
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:          file_google_cloud_discoveryengine_v1_user_license_proto_goTypes,
 DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs,
 EnumInfos:         file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes,
 MessageInfos:      file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes,
}.Build()
File_google_cloud_discoveryengine_v1_user_license_proto = out.File
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = nil
file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = nil
file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
```

```
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
```

```
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
```

```
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 //
 It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
```

```
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded
 as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp
```

```
 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _
= it.Response.(*computepb.LicensesListResponse)
 }
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package discoveryengine

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "cloud.google.com/go/longrunning"
 lroauto "cloud.google.com/go/longrunning/autogen"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax
 "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/grpc/codes"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newUserLicenseClientHook clientHook

// UserLicenseCallOptions contains the retry settings for each method of UserLicenseClient.
type UserLicenseCallOptions struct {
 ListUserLicenses        []gax.CallOption
 BatchUpdateUserLicenses []gax.CallOption
```

```
 CancelOperation        []gax.CallOption
 GetOperation           []gax.CallOption
 ListOperations         []gax.CallOption
}

func defaultUserLicenseGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("discoveryengine.googleapis.com:443"),
  internaloption.WithDefaultEndpointTemplate("discoveryengine.UNIVERSE_DOMAIN:443"),
  internaloption.WithDefaultMTLSEndpoint("discoveryengine.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultUserLicenseCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
  ListUserLicenses:        []gax.CallOption{},
  BatchUpdateUserLicenses: []gax.CallOption{},
  CancelOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier:
 1.30,
    })
   }),
  },
  GetOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    })
```

```
  }),
 },
 ListOperations: []gax.CallOption{
  gax.WithTimeout(300000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnCodes([]codes.Code{
    codes.Unavailable,
   }, gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        30000 * time.Millisecond,
    Multiplier: 1.30,
   })
  }),
 },
}
}

func defaultUserLicenseRESTCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
  ListUserLicenses:        []gax.CallOption{},
  BatchUpdateUserLicenses: []gax.CallOption{},
  CancelOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer
  {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusServiceUnavailable)
   }),
  },
  GetOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusServiceUnavailable)
   }),
  },
  ListOperations: []gax.CallOption{
   gax.WithTimeout(300000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
```

```
    Initial:    1000 * time.Millisecond,
    Max:        30000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusServiceUnavailable)
  }),
 },
}
}

// internalUserLicenseClient is an interface that defines the methods available from Discovery Engine API.
type internalUserLicenseClient
 interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 ListUserLicenses(context.Context, *discoveryenginepb.ListUserLicensesRequest, ...gax.CallOption)
*UserLicenseIterator
 BatchUpdateUserLicenses(context.Context, *discoveryenginepb.BatchUpdateUserLicensesRequest,
...gax.CallOption) (*BatchUpdateUserLicensesOperation, error)
 BatchUpdateUserLicensesOperation(name string) *BatchUpdateUserLicensesOperation
 CancelOperation(context.Context, *longrunningpb.CancelOperationRequest, ...gax.CallOption) error
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
 ListOperations(context.Context, *longrunningpb.ListOperationsRequest, ...gax.CallOption) *OperationIterator
}

// UserLicenseClient is a client for interacting with Discovery Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing
 User Licenses.
type UserLicenseClient struct {
 // The internal transport-dependent client.
 internalClient internalUserLicenseClient

 // The call options for this service.
 CallOptions *UserLicenseCallOptions

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient *lroauto.OperationsClient
}

// Wrapper methods routed to the internal client.
```

```
// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *UserLicenseClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *UserLicenseClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns
 a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *UserLicenseClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// ListUserLicenses lists the User Licenses.
func (c *UserLicenseClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 return c.internalClient.ListUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *UserLicenseClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 return c.internalClient.BatchUpdateUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
//
 The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *UserLicenseClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return c.internalClient.BatchUpdateUserLicensesOperation(name)
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest,
opts ...gax.CallOption) error {
```

```
 return c.internalClient.CancelOperation(ctx, req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) ListOperations(ctx context.Context,
 req *longrunningpb.ListOperationsRequest, opts ...gax.CallOption) *OperationIterator {
 return c.internalClient.ListOperations(ctx, req, opts...)
}

// userLicenseGRPCClient is a client for interacting with Discovery Engine API over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type userLicenseGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing UserLicenseClient
 CallOptions **UserLicenseCallOptions

 // The gRPC API client.
 userLicenseClient discoveryenginepb.UserLicenseServiceClient

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 operationsClient longrunningpb.OperationsClient

 // The x-goog-* metadata
 to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewUserLicenseClient creates a new user license service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing User Licenses.
func NewUserLicenseClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
```

```
 clientOpts := defaultUserLicenseGRPCClientOptions()
 if newUserLicenseClientHook != nil {
  hookOpts, err := newUserLicenseClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := UserLicenseClient{CallOptions: defaultUserLicenseCallOptions()}

 c := &userLicenseGRPCClient{
  connPool:         connPool,
  userLicenseClient: discoveryenginepb.NewUserLicenseServiceClient(connPool),
  CallOptions:
      &client.CallOptions,
  logger:           internaloption.GetLogger(opts),
  operationsClient:  longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 client.LROClient, err = lroauto.NewOperationsClient(ctx, gtransport.WithConnPool(connPool))
 if err != nil {
  // This error "should not happen", since we are just reusing old connection pool
  // and never actually need to dial.
  // If this does happen, we could leak connp. However, we cannot close conn:
  // If the user invoked the constructor with option.WithGRPCConn,
  // we would close a connection that's still in use.
  // TODO: investigate error conditions.
  return nil, err
 }
 c.LROClient = &client.LROClient
 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *userLicenseGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}
```

```
//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc", grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type userLicenseRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // LROClient is used internally
 to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing UserLicenseClient
 CallOptions **UserLicenseCallOptions

 logger *slog.Logger
}

// NewUserLicenseRESTClient creates a new user license service rest client.
//
// Service for managing User Licenses.
func NewUserLicenseRESTClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := append(defaultUserLicenseRESTClientOptions(), opts...)
```

```
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultUserLicenseRESTCallOptions()
 c := &userLicenseRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 lroOpts
 := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opClient, err := lroauto.NewOperationsRESTClient(ctx, lroOpts...)
 if err != nil {
  return nil, err
 }
 c.LROClient = &opClient

 return &UserLicenseClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultUserLicenseRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://discoveryengine.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://discoveryengine.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://discoveryengine.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo
 sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
```

```
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *userLicenseRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *userLicenseGRPCClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest,
 opts ...gax.CallOption) *UserLicenseIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListUserLicenses[0:len((*c.CallOptions).ListUserLicenses):len((*c.CallOptions).ListUser
Licenses)], opts...)
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
  resp := &discoveryenginepb.ListUserLicensesResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx,
 c.userLicenseClient.ListUserLicenses, req, settings.GRPC, c.logger, "ListUserLicenses")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
```

```
  }

  it.Response = resp
  return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *userLicenseGRPCClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders,
 hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).BatchUpdateUserLicenses[0:len((*c.CallOptions).BatchUpdateUserLicenses):len((*c.Call
Options).BatchUpdateUserLicenses)], opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.userLicenseClient.BatchUpdateUserLicenses, req, settings.GRPC, c.logger,
"BatchUpdateUserLicenses")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return &BatchUpdateUserLicensesOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 }, nil
}

func (c *userLicenseGRPCClient) CancelOperation(ctx context.Context, req
```

```
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx,
 hds...)
 opts =
append((*c.CallOptions).CancelOperation[0:len((*c.CallOptions).CancelOperation):len((*c.CallOptions).CancelOp
eration)], opts...)
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  _, err = executeRPC(ctx, c.operationsClient.CancelOperation, req, settings.GRPC, c.logger, "CancelOperation")
  return err
 }, opts...)
 return err
}

func (c *userLicenseGRPCClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context,
 settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *userLicenseGRPCClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListOperations[0:len((*c.CallOptions).ListOperations):len((*c.CallOptions).ListOperations
)], opts...)
```

```
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
  resp := &longrunningpb.ListOperationsResponse{}
  if pageToken !=
 "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.operationsClient.ListOperations, req, settings.GRPC, c.logger, "ListOperations")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetOperations(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// ListUserLicenses lists the
 User Licenses.
func (c *userLicenseRESTClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
 resp := &discoveryenginepb.ListUserLicensesResponse{}
 if pageToken != "" {
  req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
  req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/userLicenses", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
  params.Add("filter", fmt.Sprintf("%v",
req.GetFilter()))
 }
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListUserLicenses")
  if err != nil {
   return err
  }
```

```
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response
= resp
 return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *userLicenseRESTClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:batchUpdateUserLicenses", req.GetParent())
```

```
 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err
 := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "BatchUpdateUserLicenses")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }

 override := fmt.Sprintf("/v1/%s", resp.GetName())
 return &BatchUpdateUserLicensesOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, resp),
  pollPath: override,
 }, nil
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) CancelOperation(ctx context.Context, req
```

```
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:cancel", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery
 = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  _, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CancelOperation")
  return err
 }, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption)
 (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET",
 baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
// ListOperations is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
  resp := &longrunningpb.ListOperationsResponse{}
  if pageToken != "" {
   req.PageToken
 = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v/operations", req.GetName())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetFilter() != "" {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
  if req.GetPageToken() != "" {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
  headers := gax.BuildHeaders(ctx, hds...)
  e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   if settings.Path != "" {
    baseUrl.Path
 = settings.Path
   }
   httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
   if err != nil {
    return err
```

```
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListOperations")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetOperations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// BatchUpdateUserLicensesOperation returns a new
 BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *userLicenseGRPCClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return &BatchUpdateUserLicensesOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
```

```
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *userLicenseRESTClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &BatchUpdateUserLicensesOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
  pollPath: override,
 }
}
// Copyright 2025 Google LLC
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)
```

```
var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update             []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier:
 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
```

```
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
  Update: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
```

```
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header
 passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context,
 req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
```

Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available
 in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.

```
type
 licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:
     internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
```

```
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application
 in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for
```

```
 use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
```

```
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
```

```
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
```

```
 {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err
 := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
```

```
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq,
err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
```

```
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter !=
 nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return
err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
```

```
resource is intended for use only by third-party partners who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
 TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts
...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
 Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
  params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project:
 req.GetProject(),
  },
 }
 return op, nil
}
```

```
// Copyright 2025 Google LLC
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
```

```
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
```

```
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
```

```
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
```

```
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
```

```
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
```

```
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54, 0x59,
 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
```

```
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
```

```
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
)

func ExampleUserLicenseClient_ListUserLicenses_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 for resp, err := range c.ListUserLicenses(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

func ExampleUserLicenseClient_ListOperations_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.ListOperationsRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
 }
 for resp, err := range c.ListOperations(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
```

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END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
 protoreflect
 "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
```

```
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
```

```
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
```

```
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
```

```
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
```

```
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
```

```
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}
```

```
func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
```

```
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}
```

```
func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
```

```
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
```

```
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
```

0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73,
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,
0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79,
0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75,
0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65,
0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,

0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x63, 0x6f, 0x6c, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x41, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72,
0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x3b, 0x0a,
0x17, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x15, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x75, 0x6e, 0x74, 0x12, 0x33, 0x0a, 0x13, 0x74, 0x6f,
0x74, 0x61, 0x6c, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e,
0x74, 0x18, 0x04, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03, 0xe0, 0x41, 0x03, 0x52, 0x11, 0x74, 0x6f,
0x74, 0x61, 0x6c, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x75, 0x6e,
0x74, 0x3a,
0x9a, 0x01, 0xea, 0x41, 0x96, 0x01, 0x0a, 0x3b, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f,
0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61,
0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50,
0x6f, 0x6f, 0x6c, 0x12, 0x3c, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f,
0x75, 0x6e, 0x74, 0x73, 0x2f, 0x7b, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x5f, 0x61, 0x63,
0x63, 0x6f, 0x75, 0x6e, 0x74, 0x7d, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x7b, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x7d, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f,
0x6c, 0x2a, 0x0c, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x73, 0x32,
0x0b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x22, 0x30, 0x0a, 0x15,
0x47, 0x65, 0x74,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65,
0x71, 0x75, 0x65, 0x73, 0x74, 0x12, 0x17, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01, 0x20,
0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x52, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x22, 0xc0,
0x01, 0x0a, 0x18, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x12, 0x62, 0x0a, 0x0c, 0x6c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28,
0x0b, 0x32, 0x3a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d,
0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x42, 0x03, 0xe0,
0x41, 0x02, 0x52, 0x0b, 0x6c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12,
0x40, 0x0a, 0x0b, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x18, 0x02,
0x20, 0x01, 0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,
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0x42, 0x03, 0xe0, 0x41, 0x02, 0x52, 0x0a, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4d, 0x61, 0x73,
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0x1a, 0x4d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e,
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31,
0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73,
0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22,
0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x4c,
0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69,
0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f,
0x6f, 0x72, 0x64,
0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63, 0xca, 0x41,
0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x63, 0x6f,
0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e,
0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x61, 0x75,
0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66, 0x6f, 0x72,
0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65,
0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65,
0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,

```
 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76, 0x69, 0x63,
 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e,
 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x63, 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2f,
 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70, 0x69, 0x76,
 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0x3b,
 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa, 0x02, 0x2d,
 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x2e,
 0x43, 0x6f, 0x6d,
 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x50,
 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x2d,
 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43, 0x6f, 0x6d,
 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x5c, 0x50,
 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x32,
 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x3a, 0x3a,
 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
        // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
```

```
 (*UpdateLicensePoolRequest)(nil),              // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                         // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                        // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                       // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                      // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),         // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                                // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),        // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                 // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                 // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                   // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
```

```
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
```

```
  NumMessages:   13,
  NumExtensions: 0,
  NumServices:   1,
 },
 GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
 DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
 MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx context.Context,
 in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
```

```
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func
 (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest,
opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
```

```
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest) (*AssignResponse,
 error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
```

```
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in); err != nil
 {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
```

```
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
```

```
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor
 == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName:
 "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]

package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
)

func main() {
 ctx := context.Background()
 // This snippet has been automatically generated
 and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque
st.
 }
 op, err := c.BatchUpdateUserLicenses(ctx, req)
```

```
 if err != nil {
  // TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

// [END discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
}
op, err := c.Insert(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_List() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template
only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
}
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may
 require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
```

1.4343 prometheus-common 0.64.0

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1.4344 github.com/azure/azure-sdk-for-go/sdk/storage/azblob 1.6.1

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```
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// +build go1.18

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package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)
```

```
 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
```

```
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                         *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                 *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate                 *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
```

```
 resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
```

```
 l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
```

```
 beginDelete = &respr
 l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
```

```
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
```

```
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
```

```
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}
```

```
func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
```

azwebpubsub

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{
 "main": "dist/src/index.js",
 "dependencies": {
   "@azure-tools/typespec-go": "0.4.10"
 },
 "devDependencies": {
   "@azure-tools/typespec-autorest": "0.56.0",

```
  "@azure-tools/typespec-azure-core": "0.56.0",
  "@azure-tools/typespec-azure-resource-manager": "0.56.2",
  "@azure-tools/typespec-azure-rulesets": "0.56.0",
  "@azure-tools/typespec-client-generator-core": "0.56.2",
  "@azure-tools/typespec-liftr-base": "0.8.0",
  "@typespec/compiler": "1.0.0",
  "@typespec/events": "0.70.0",
  "@typespec/http": "1.0.1",
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  "@typespec/sse": "0.70.0",
  "@typespec/streams": "0.70.0",
  "@typespec/versioning": "0.70.0"
 }
}
```

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```
//go:build go1.18
// +build go1.18

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// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
```

```
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
```

```
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
```

```
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
```

```
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
```

```
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
```

```
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
```

```
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-07-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
```

```
 return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
```

```
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
```

```
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
```

```
 }
 return req, nil
}
```

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  SOFTWARE
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.
// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
```

```
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err !=
nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//
   State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_CreateOrUpdate.json
```

```
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
```

```
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
```

```
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
```

```
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
//
  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](8),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}
```

```
// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
```

```
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
```

```
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
    },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

1.4345 tuned 2.22.1-1ubuntu4

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1.4347 glib 2.80.0-6ubuntu3.4

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1.4350 python-setuptools 80.9.0

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The code contained in this directory was automatically generated using the
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python -m validate_pyproject.pre_compile --output-dir=setuptools/config/_validate_pyproject --enable-plugins setuptools distutils --very-verbose -t setuptools=setuptools/config/setuptools.schema.json -t distutils=setuptools/config/distutils.schema.json

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`fastjsonschema`
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A. HISTORY OF THE SOFTWARE
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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see https://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for

National Research Initiatives (CNRI, see https://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All Python releases are Open Source (see https://opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
```

```
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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
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 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
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```

```
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
```

```
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically
generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
```

```
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
```

```
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}
```

```
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses,
```

use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}
```

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}
```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.

```
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}
```

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.

```
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}
```

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.

```
func NewLicensesRESTClient(ctx
```

```
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
```

```
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
```

```
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
```

```
 return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
```

```
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
// Copyright 2025 Google LLC
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//
//     https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     http://www.apache.org/licenses/LICENSE-2.0
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// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
```

```
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}
```

```
func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
```

```
  "READER":          3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
```

0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,

```
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
```

```
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
// Copyright 2025 Google LLC
//
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test
```

```
import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
```

```
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}
```

```
func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
```

```
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
```

```
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}
```

```
// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
```

```
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
```

```
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
```

```
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
```

```
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
```

```
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
```

```
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
```

```
if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp
:= &procurementpb.AssignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
```

```
 return nil, e
 }
 return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
```

```
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
  if req.GetPageToken() != "" {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
```

```
 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}
```

```
// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32
```

```
const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}
```

```
func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
```

```
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
```

```
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}
```

```
func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
```

0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,

```
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
```

```
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
```

```
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
```

```
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
```

```
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
```

```
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
```

```
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}
```

```
func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}
```

```
func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}
```

```
// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
```

```
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
```

```
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}
```

```
func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
```

```
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
```

```
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
```

```
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x64,
 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
 0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
```

0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73,
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,
0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79,
0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75,
0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65,
0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x63, 0x6f, 0x6c, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x41, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72,
0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
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0x65,
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0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73,
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0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x3f,
0x3a, 0x01, 0x2a, 0x22, 0x3a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73,
0x2f, 0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12,
0xe7, 0x01, 0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3f, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73, 0x70,
0x6f, 0x6e, 0x73, 0x65, 0x22, 0x5a, 0xda,
0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d,
0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x41, 0x3a, 0x01, 0x2a, 0x22, 0x3c, 0x2f, 0x76, 0x31,
0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67,
0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72,
0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d,
0x3a, 0x75, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x92, 0x02, 0x0a, 0x16, 0x45, 0x6e,
0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55,
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```
0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
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0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73,
0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93,
0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
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0x2a, 0x2f, 0x6f,
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0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
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0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f,
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0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
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0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
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0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
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0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
```

```
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
```

```
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
```

```
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].OneofWrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
```

```
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
```

```
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
```

```
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
```

```
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
```

```
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
```

```
ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
HandlerType: (*LicenseManagementServiceServer)(nil),
Methods: []grpc.MethodDesc{
 {
  MethodName: "GetLicensePool",
  Handler:    _LicenseManagementService_GetLicensePool_Handler,
 },
 {
  MethodName: "UpdateLicensePool",
  Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
 },
 {
  MethodName: "Assign",
  Handler:
   _LicenseManagementService_Assign_Handler,
 },
 {
  MethodName: "Unassign",
  Handler:    _LicenseManagementService_Unassign_Handler,
 },
 {
  MethodName: "EnumerateLicensedUsers",
  Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
 },
},
Streams:  []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
```

```
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
```

```
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
```

```
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}
```

```
// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
```

```
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.4354 grafana-objstore 0.0.0-20250210100727-533688b5600d

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1.4359 parquet-go-parquet-go 0.25.0

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1.4362 franz-go 1.18.1

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==========
The common/types/pb/equal.go modification of proto.Equal logic
==========
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1.4365 github.com/knadh/koanf/providers/confmap 1.0.0

1.4365.1 Available under license :

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1.4366 googlecloudgocomputemetadata 0.7.0

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]

package main
```

```
import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "google.golang.org/api/iterator"
)

func main() {
 ctx := context.Background()
 // This snippet
 has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 it := c.ListUserLicenses(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove
 this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
 }
}

// [END discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool        []gax.CallOption
 UpdateLicensePool     []gax.CallOption
 Assign                []gax.CallOption
```

```
 Unassign              []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation          []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
```

```
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
```

```
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
```

```
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
```

```
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions
```

```
 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context,
 opts ...option.ClientOption) (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
```

```
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 },
 opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient)
 Assign(ctx context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption)
(*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
```

```
 resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts
 =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)], opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(),
 nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
```

```
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx
 context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
```

```
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
```

```
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Assign assigns a license to a user.
func
 (c *licenseManagementRESTClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial:
 true, DiscardUnknown: true}
 resp := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
```

```
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err :=
 m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
```

```
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
```

```
 }
 if pageSize > math.MaxInt32 {
  req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path
= settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
```

```
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from
 google.longrunning.Operations.
func (c *licenseManagementRESTClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
```

```
 e := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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//     https://www.apache.org/licenses/LICENSE-2.0
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
```

```
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update            []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier:
 1.30,
    },
```

```
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
  Update: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
```

```
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed
 on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
```

```
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req
 *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the
 specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}
```

```
// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
 licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }
```

```
 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:
   internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application in
//
 the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
```

```
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
 {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
```

```
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if
 settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
```

```
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err
 := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for
 use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter",
```

```
fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header
= headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}
```

```
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace
 images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
 context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
```

```
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Update(ctx context.Context,
 req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
```

```
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
  params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return
op, nil
}
```

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```

```
package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get               []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
```

```
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface
 {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return
 c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
```

```
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }
```

```
 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
```

```
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v", req.GetProject(), req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
```

```
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that
 a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
```

```
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
```

```
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get               []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
 }

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
```

```
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
```

```
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
```

```
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
```

```
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a
 caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
```

```
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds =
 append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// you may not use this file except in compliance with the License.
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
```

```
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}
```

```
// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}
```

```
func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
```

```
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
```

```
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
```

```
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
0x61, 0x67,
0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}
```

```
var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
```

```
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:          file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
= nil
file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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//
//     https://www.apache.org/licenses/LICENSE-2.0
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
}
for resp, err := range c.List(ctx, req).All() {
 if err != nil {
  // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
// Copyright 2025 Google LLC
//
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewUserLicenseClient() {
```

```
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewUserLicenseRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseRESTClient(ctx)
 if
 err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleUserLicenseClient_BatchUpdateUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque
st.
 }
 op, err := c.BatchUpdateUserLicenses(ctx, req)
 if err != nil {
  //
 TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 it := c.ListUserLicenses(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done
  {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
```

```
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
}
}

func ExampleUserLicenseClient_CancelOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.CancelOperationRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#CancelOperationRequest.
 }
 err = c.CancelOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleUserLicenseClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
```

```
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp,
 err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListOperations() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.ListOperationsRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
 }
 it := c.ListOperations(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   //
 TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*longrunningpb.ListOperationsResponse)
 }
```

```
}
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/discoveryengine/v1/user_license_service.proto

package discoveryenginepb

import (
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 status "google.golang.org/genproto/googleapis/rpc/status"
 grpc
 "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status1 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Request message for
```

```
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type ListUserLicensesRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The parent [UserStore][] resource name,
 format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. Requested page size. Server may return fewer items than
 // requested. If unspecified, defaults to 10. The maximum value is 50; values
 // above 50 will be coerced to 50.
 //
 // If this field is negative, an INVALID_ARGUMENT error is returned.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3" json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `ListUserLicenses` call.
 // Provide this to retrieve the subsequent page.
 //
 // When paginating, all other parameters provided to `ListUserLicenses`
 // must match the call that provided the page token.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
 // Optional. Filter for the list request.
 //
 // Supported fields:
 //
 // * `license_assignment_state`
 //
 //
 Examples:
 //
 // * `license_assignment_state = ASSIGNED` to list assigned user licenses.
 // * `license_assignment_state = NO_LICENSE` to list not licensed users.
 // * `license_assignment_state = NO_LICENSE_ATTEMPTED_LOGIN` to list users
 // who attempted login but no license assigned.
 // * `license_assignment_state != NO_LICENSE_ATTEMPTED_LOGIN` to filter
 // out users who attempted login but no license assigned.
 Filter string `protobuf:"bytes,4,opt,name=filter,proto3" json:"filter,omitempty"`
}

func (x *ListUserLicensesRequest) Reset() {
 *x = ListUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesRequest) String() string {
```

```
 return protoimpl.X.MessageStringOf(x)
}

func (*ListUserLicensesRequest) ProtoMessage() {}

func (x *ListUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*ListUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{0}
}

func (x *ListUserLicensesRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *ListUserLicensesRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *ListUserLicensesRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

func (x *ListUserLicensesRequest) GetFilter() string {
 if x != nil {
  return x.Filter
 }
```

```
 return ""
}

// Response message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type
 ListUserLicensesResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // All the customer's
 // [UserLicense][google.cloud.discoveryengine.v1.UserLicense]s.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // A token, which can be sent as `page_token` to retrieve the next page. If
 // this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *ListUserLicensesResponse) Reset() {
 *x = ListUserLicensesResponse{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func
 (*ListUserLicensesResponse) ProtoMessage() {}

func (x *ListUserLicensesResponse) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesResponse.ProtoReflect.Descriptor instead.
```

```
func (*ListUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{1}
}

func (x *ListUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
 return nil
}

func (x *ListUserLicensesResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Request message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
//
 method.
type BatchUpdateUserLicensesRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The source of the input.
 //
 // Types that are assignable to Source:
 //
 // *BatchUpdateUserLicensesRequest_InlineSource_
 Source isBatchUpdateUserLicensesRequest_Source `protobuf_oneof:"source"`
 // Required. The parent [UserStore][] resource name, format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. If true, if user licenses removed associated license config, the
 // user license will be deleted. By default which is false, the user license
 // will be updated to unassigned state.
 DeleteUnassignedUserLicenses bool
`protobuf:"varint,4,opt,name=delete_unassigned_user_licenses,json=deleteUnassignedUserLicenses,proto3"
json:"delete_unassigned_user_licenses,omitempty"`
}

func
```

```
 (x *BatchUpdateUserLicensesRequest) Reset() {
 *x = BatchUpdateUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest) ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(),
 []int{2}
}

func (m *BatchUpdateUserLicensesRequest) GetSource() isBatchUpdateUserLicensesRequest_Source {
 if m != nil {
  return m.Source
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetInlineSource() *BatchUpdateUserLicensesRequest_InlineSource {
 if x, ok := x.GetSource().(*BatchUpdateUserLicensesRequest_InlineSource_); ok {
  return x.InlineSource
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetParent() string {
 if x != nil {
  return x.Parent
```

```
 }
 return ""
}

func (x *BatchUpdateUserLicensesRequest) GetDeleteUnassignedUserLicenses() bool {
 if x != nil {
  return x.DeleteUnassignedUserLicenses
 }
 return false
}

type isBatchUpdateUserLicensesRequest_Source interface {
 isBatchUpdateUserLicensesRequest_Source()
}

type BatchUpdateUserLicensesRequest_InlineSource_ struct {
 // The inline source for the input content for document embeddings.
 InlineSource *BatchUpdateUserLicensesRequest_InlineSource
`protobuf:"bytes,2,opt,name=inline_source,json=inlineSource,proto3,oneof"`
}

func
 (*BatchUpdateUserLicensesRequest_InlineSource_) isBatchUpdateUserLicensesRequest_Source() {}

// Metadata related to the progress of the
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// operation. This will be returned by the google.longrunning.Operation.metadata
// field.
type BatchUpdateUserLicensesMetadata struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Operation create time.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,1,opt,name=create_time,json=createTime,proto3"
json:"create_time,omitempty"`
 // Operation last update time. If the operation is done, this is also the
 // finish time.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=update_time,json=updateTime,proto3"
json:"update_time,omitempty"`
 // Count of user licenses successfully updated.
 SuccessCount
 int64 `protobuf:"varint,3,opt,name=success_count,json=successCount,proto3" json:"success_count,omitempty"`
 // Count of user licenses that failed to be updated.
 FailureCount int64 `protobuf:"varint,4,opt,name=failure_count,json=failureCount,proto3"
json:"failure_count,omitempty"`
```

```
}

func (x *BatchUpdateUserLicensesMetadata) Reset() {
 *x = BatchUpdateUserLicensesMetadata{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesMetadata) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesMetadata) ProtoMessage() {}

func (x *BatchUpdateUserLicensesMetadata) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return
 ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesMetadata.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesMetadata) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{3}
}

func (x *BatchUpdateUserLicensesMetadata) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.CreateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.UpdateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetSuccessCount() int64 {
```

```
 if x != nil {
  return x.SuccessCount
 }
 return 0
}

func (x *BatchUpdateUserLicensesMetadata) GetFailureCount() int64 {
 if x != nil {
  return x.FailureCount
 }
 return 0
}

// Response message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// method.
type
 BatchUpdateUserLicensesResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // UserLicenses successfully updated.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // A sample of errors encountered while processing the request.
 ErrorSamples []*status.Status `protobuf:"bytes,2,rep,name=error_samples,json=errorSamples,proto3"
json:"error_samples,omitempty"`
}

func (x *BatchUpdateUserLicensesResponse) Reset() {
 *x = BatchUpdateUserLicensesResponse{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesResponse) ProtoMessage() {}

func (x *BatchUpdateUserLicensesResponse) ProtoReflect()
 protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
```

```
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{4}
}

func (x *BatchUpdateUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
 return nil
}

func (x *BatchUpdateUserLicensesResponse) GetErrorSamples() []*status.Status {
 if x != nil {
  return x.ErrorSamples
 }
 return nil
}

// The inline source for the input config for BatchUpdateUserLicenses
// method.
type BatchUpdateUserLicensesRequest_InlineSource struct {
 state         protoimpl.MessageState
 sizeCache
     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. A list of user licenses to update. Each user license
 // must have a valid
 // [UserLicense.user_principal][google.cloud.discoveryengine.v1.UserLicense.user_principal].
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // Optional. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) Reset() {
```

```
 *x = BatchUpdateUserLicensesRequest_InlineSource{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest_InlineSource)
 ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest_InlineSource) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest_InlineSource.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest_InlineSource) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{2, 0}
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_service_proto
 protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = []byte{
```

0x0a, 0x3a, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x73,
0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f,
0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1c, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f, 0x74, 0x61,
0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x1a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x6c, 0x6f, 0x6e,
0x67, 0x72, 0x75, 0x6e, 0x6e, 0x69, 0x6e, 0x67, 0x2f, 0x6f, 0x70, 0x65, 0x72, 0x61, 0x74, 0x69,
0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2f, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64,
0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d,
0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x72, 0x70, 0x63, 0x2f, 0x73, 0x74, 0x61, 0x74, 0x75, 0x73, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc6, 0x01, 0x0a, 0x17, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73,
0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73,
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 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0xd2, 0x41, 0x2e,
 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x61, 0x75, 0x74,
 0x68, 0x2f,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66, 0x6f, 0x72, 0x6d, 0x42, 0x8a,
 0x02, 0x0a, 0x23, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c,
 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67,
 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x42, 0x17, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65,
 0x6e, 0x73, 0x65, 0x53, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50,
 0x01, 0x5a, 0x4d, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79,
 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x2f, 0x64, 0x69, 0x73,
 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x70, 0x62, 0x3b, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x70, 0x62,
 0xa2, 0x02, 0x0f,
 0x44, 0x49, 0x53, 0x43, 0x4f, 0x56, 0x45, 0x52, 0x59, 0x45, 0x4e, 0x47, 0x49,
 0x4e, 0x45, 0xaa, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e,
 0x65, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c,
 0x6f, 0x75, 0x64, 0x5c, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67,
 0x69, 0x6e, 0x65, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x22, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a,
 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc
)

func
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce.Do(func() {
  file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData
```

```
}

var file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 6)
var file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = []any{
 (*ListUserLicensesRequest)(nil),                    // 0: google.cloud.discoveryengine.v1.ListUserLicensesRequest
 (*ListUserLicensesResponse)(nil),                   // 1: google.cloud.discoveryengine.v1.ListUserLicensesResponse
 (*BatchUpdateUserLicensesRequest)(nil),             // 2:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 (*BatchUpdateUserLicensesMetadata)(nil),
            // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata
 (*BatchUpdateUserLicensesResponse)(nil),            // 4:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse
 (*BatchUpdateUserLicensesRequest_InlineSource)(nil), // 5:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 (*UserLicense)(nil),                                // 6: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil),                      // 7: google.protobuf.Timestamp
 (*status.Status)(nil),                              // 8: google.rpc.Status
 (*fieldmaskpb.FieldMask)(nil),                      // 9: google.protobuf.FieldMask
 (*longrunningpb.Operation)(nil),                    // 10: google.longrunning.Operation
}
var file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = []int32{
 6,  // 0: google.cloud.discoveryengine.v1.ListUserLicensesResponse.user_licenses:type_name
 -> google.cloud.discoveryengine.v1.UserLicense
 5,  // 1: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.inline_source:type_name ->
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 7,  // 2: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.create_time:type_name ->
google.protobuf.Timestamp
 7,  // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.update_time:type_name ->
google.protobuf.Timestamp
 6,  // 4: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.user_licenses:type_name ->
google.cloud.discoveryengine.v1.UserLicense
 8,  // 5: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.error_samples:type_name ->
google.rpc.Status
 6,  // 6: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.user_licenses:type_name -
> google.cloud.discoveryengine.v1.UserLicense
 9,  // 7: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.update_mask:type_name
 -> google.protobuf.FieldMask
 0,  // 8: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:input_type ->
google.cloud.discoveryengine.v1.ListUserLicensesRequest
 2,  // 9: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:input_type ->
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 1,  // 10: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:output_type ->
google.cloud.discoveryengine.v1.ListUserLicensesResponse
 10, // 11: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:output_type ->
google.longrunning.Operation
 10, // [10:12] is the sub-list for method output_type
 8,  // [8:10] is the sub-list for method input_type
```

```
 8,  // [8:8] is the sub-list for extension type_name
 8,  // [8:8] is the sub-list for extension extendee
 0,  // [0:8] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_service_proto_init()
 }
func file_google_cloud_discoveryengine_v1_user_license_service_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_service_proto != nil {
  return
 }
 file_google_cloud_discoveryengine_v1_user_license_proto_init()
 file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2].OneofWrappers = []any{
  (*BatchUpdateUserLicensesRequest_InlineSource_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   6,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:           file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes,
  DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs,
  MessageInfos:      file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes,
 }.Build()
 File_google_cloud_discoveryengine_v1_user_license_service_proto
 = out.File
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = nil
 file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = nil
 file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// UserLicenseServiceClient is the client API for UserLicenseService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
```

```
type UserLicenseServiceClient interface {
 // Lists the User Licenses.
 ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest,
 opts ...grpc.CallOption) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(ctx context.Context, in *BatchUpdateUserLicensesRequest, opts ...grpc.CallOption)
(*longrunningpb.Operation, error)
}

type userLicenseServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewUserLicenseServiceClient(cc grpc.ClientConnInterface) UserLicenseServiceClient {
 return &userLicenseServiceClient{cc}
}

func (c *userLicenseServiceClient) ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest, opts
...grpc.CallOption) (*ListUserLicensesResponse, error) {
 out := new(ListUserLicensesResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *userLicenseServiceClient) BatchUpdateUserLicenses(ctx context.Context, in
*BatchUpdateUserLicensesRequest,
 opts ...grpc.CallOption) (*longrunningpb.Operation, error) {
 out := new(longrunningpb.Operation)
 err := c.cc.Invoke(ctx, "/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// UserLicenseServiceServer is the server API for UserLicenseService service.
type UserLicenseServiceServer interface {
 // Lists the User Licenses.
 ListUserLicenses(context.Context, *ListUserLicensesRequest) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(context.Context, *BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error)
}
```

```
// UnimplementedUserLicenseServiceServer can be embedded to have forward compatible implementations.
type UnimplementedUserLicenseServiceServer struct {
}

func (*UnimplementedUserLicenseServiceServer) ListUserLicenses(context.Context, *ListUserLicensesRequest)
 (*ListUserLicensesResponse, error) {
 return nil, status1.Errorf(codes.Unimplemented, "method ListUserLicenses not implemented")
}
func (*UnimplementedUserLicenseServiceServer) BatchUpdateUserLicenses(context.Context,
*BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error) {
 return nil, status1.Errorf(codes.Unimplemented, "method BatchUpdateUserLicenses not implemented")
}

func RegisterUserLicenseServiceServer(s *grpc.Server, srv UserLicenseServiceServer) {
 s.RegisterService(&_UserLicenseService_serviceDesc, srv)
}

func _UserLicenseService_ListUserLicenses_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(ListUserLicensesRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, req.(*ListUserLicensesRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _UserLicenseService_BatchUpdateUserLicenses_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(BatchUpdateUserLicensesRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
```

```
  Server:     srv,
  FullMethod: "/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, req.(*BatchUpdateUserLicensesRequest))
 }
 return interceptor(ctx,
 in, info, handler)
}

var _UserLicenseService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.discoveryengine.v1.UserLicenseService",
 HandlerType: (*UserLicenseServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "ListUserLicenses",
   Handler:    _UserLicenseService_ListUserLicenses_Handler,
  },
  {
   MethodName: "BatchUpdateUserLicenses",
   Handler:    _UserLicenseService_BatchUpdateUserLicenses_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/discoveryengine/v1/user_license_service.proto",
}

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```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.GetLicenseCodeRequest{
  // TODO:
 Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
```

```
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/discoveryengine/v1/user_license.proto

package discoveryenginepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect
 "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)
```

```
// License assignment state enumeration.
type UserLicense_LicenseAssignmentState int32

const (
 // Default value.
 UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED UserLicense_LicenseAssignmentState = 0
 // License assigned to the user.
 UserLicense_ASSIGNED UserLicense_LicenseAssignmentState = 1
 // No license assigned to the user.
 // Deprecated, translated to NO_LICENSE.
 UserLicense_UNASSIGNED UserLicense_LicenseAssignmentState = 2
 // No license assigned to the user.
 UserLicense_NO_LICENSE UserLicense_LicenseAssignmentState = 3
 // User attempted to login but no license assigned to the user.
 // This state is only used for no user first time login attempt
 but cannot
 // get license assigned.
 // Users already logged in but cannot get license assigned will be assigned
 // NO_LICENSE state(License could be unassigned by admin).
 UserLicense_NO_LICENSE_ATTEMPTED_LOGIN UserLicense_LicenseAssignmentState = 4
)

// Enum value maps for UserLicense_LicenseAssignmentState.
var (
 UserLicense_LicenseAssignmentState_name = map[int32]string{
  0: "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED",
  1: "ASSIGNED",
  2: "UNASSIGNED",
  3: "NO_LICENSE",
  4: "NO_LICENSE_ATTEMPTED_LOGIN",
 }
 UserLicense_LicenseAssignmentState_value = map[string]int32{
  "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED": 0,
  "ASSIGNED":                             1,
  "UNASSIGNED":                           2,
  "NO_LICENSE":                           3,
  "NO_LICENSE_ATTEMPTED_LOGIN":           4,
 }
)

func (x UserLicense_LicenseAssignmentState) Enum() *UserLicense_LicenseAssignmentState {
 p := new(UserLicense_LicenseAssignmentState)
 *p = x
 return p
}

func (x UserLicense_LicenseAssignmentState)
```

```
 String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (UserLicense_LicenseAssignmentState) Descriptor() protoreflect.EnumDescriptor {
 return file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0].Descriptor()
}

func (UserLicense_LicenseAssignmentState) Type() protoreflect.EnumType {
 return &file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0]
}

func (x UserLicense_LicenseAssignmentState) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use UserLicense_LicenseAssignmentState.Descriptor instead.
func (UserLicense_LicenseAssignmentState) EnumDescriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0, 0}
}

// User License information assigned by the admin.
type UserLicense struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 //
 Required. Immutable. The user principal of the User, could be email address
 // or other prinical identifier. This field is immutable. Admin assign
 // licenses based on the user principal.
 UserPrincipal string `protobuf:"bytes,1,opt,name=user_principal,json=userPrincipal,proto3"
json:"user_principal,omitempty"`
 // Optional. The user profile.
 // We user user full name(First name + Last name) as user profile.
 UserProfile string `protobuf:"bytes,3,opt,name=user_profile,json=userProfile,proto3"
json:"user_profile,omitempty"`
 // Output only. License assignment state of the user.
 // If the user is assigned with a license config, the user loggin will be
 // assigned with the license;
 // If the user's license assignment state is unassigned or unspecified, no
 // license config will be associated to the user;
 LicenseAssignmentState UserLicense_LicenseAssignmentState
`protobuf:"varint,4,opt,name=license_assignment_state,json=licenseAssignmentState,proto3,enum=google.cloud.dis
coveryengine.v1.UserLicense_LicenseAssignmentState"
 json:"license_assignment_state,omitempty"`
 // Optional. The full resource name of the Subscription(LicenseConfig)
 // assigned to the user.
```

```
 LicenseConfig string `protobuf:"bytes,5,opt,name=license_config,json=licenseConfig,proto3"
json:"license_config,omitempty"`
 // Output only. User created timestamp.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,6,opt,name=create_time,json=createTime,proto3"
json:"create_time,omitempty"`
 // Output only. User update timestamp.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,7,opt,name=update_time,json=updateTime,proto3"
json:"update_time,omitempty"`
 // Output only. User last logged in time.
 // If the user has not logged in yet, this field will be empty.
 LastLoginTime *timestamppb.Timestamp
`protobuf:"bytes,8,opt,name=last_login_time,json=lastLoginTime,proto3" json:"last_login_time,omitempty"`
}

func (x *UserLicense) Reset() {
 *x = UserLicense{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UserLicense) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UserLicense) ProtoMessage() {}

func (x *UserLicense) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UserLicense.ProtoReflect.Descriptor instead.
func (*UserLicense) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0}
}

func (x *UserLicense) GetUserPrincipal() string {
 if x != nil {
  return x.UserPrincipal
```

```
 }
 return ""
}

func (x *UserLicense) GetUserProfile() string {
 if x != nil {
  return x.UserProfile
 }
 return ""
}

func (x *UserLicense) GetLicenseAssignmentState()
 UserLicense_LicenseAssignmentState {
 if x != nil {
  return x.LicenseAssignmentState
 }
 return UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED
}

func (x *UserLicense) GetLicenseConfig() string {
 if x != nil {
  return x.LicenseConfig
 }
 return ""
}

func (x *UserLicense) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.CreateTime
 }
 return nil
}

func (x *UserLicense) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.UpdateTime
 }
 return nil
}

func (x *UserLicense) GetLastLoginTime() *timestamppb.Timestamp {
 if x != nil {
  return x.LastLoginTime
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_proto protoreflect.FileDescriptor
```

```
var file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = []byte{
 0x0a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31,
 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f,
 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,
 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,
 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x22, 0xa6, 0x05, 0x0a, 0x0b, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x12, 0x2d, 0x0a, 0x0e,
 0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x69, 0x6e, 0x63,
 0x69, 0x70, 0x61, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x05, 0xe0,
 0x41, 0x02, 0x52, 0x0d, 0x75, 0x73, 0x65, 0x72, 0x50, 0x72, 0x69, 0x6e, 0x63, 0x69, 0x70, 0x61,
 0x6c, 0x12, 0x26, 0x0a, 0x0c, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x6f, 0x66, 0x69, 0x6c,
 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x0b, 0x75, 0x73,
 0x65, 0x72, 0x50, 0x72, 0x6f, 0x66, 0x69, 0x6c, 0x65, 0x12, 0x82, 0x01, 0x0a, 0x18, 0x6c, 0x69,
 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74,
 0x5f, 0x73, 0x74, 0x61, 0x74, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x43, 0x2e, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63,
 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x2e, 0x55,
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 0x0a, 0x0e, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x63, 0x6f, 0x6e, 0x66, 0x69, 0x67,
 0x18, 0x05, 0x20, 0x01, 0x28, 0x09, 0x42, 0x34, 0xe0, 0x41, 0x01, 0xfa, 0x41, 0x2e, 0x0a, 0x2c,
 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e,
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 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x42, 0x03, 0xe0, 0x41,
 0x03, 0x52, 0x0a, 0x63, 0x72, 0x65, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12, 0x40, 0x0a,
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 0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x42, 0x03,
 0xe0, 0x41, 0x03, 0x52, 0x0a, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12,
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 0x6d, 0x65, 0x18, 0x08, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
```

```
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73,
 0x74, 0x61, 0x6d, 0x70, 0x42,
 0x03, 0xe0, 0x41, 0x03, 0x52, 0x0d, 0x6c, 0x61, 0x73, 0x74, 0x4c,
 0x6f, 0x67, 0x69, 0x6e, 0x54, 0x69, 0x6d, 0x65, 0x22, 0x90, 0x01, 0x0a, 0x16, 0x4c, 0x69, 0x63,
 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74,
 0x61, 0x74, 0x65, 0x12, 0x28, 0x0a, 0x24, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41,
 0x53, 0x53, 0x49, 0x47, 0x4e, 0x4d, 0x45, 0x4e, 0x54, 0x5f, 0x53, 0x54, 0x41, 0x54, 0x45, 0x5f,
 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x0c, 0x0a,
 0x08, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x01, 0x12, 0x0e, 0x0a, 0x0a, 0x55,
 0x4e, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x02, 0x12, 0x0e, 0x0a, 0x0a, 0x4e,
 0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x10, 0x03, 0x12, 0x1e, 0x0a, 0x1a, 0x4e,
 0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41, 0x54, 0x54, 0x45, 0x4d, 0x50,
 0x54, 0x45, 0x44, 0x5f, 0x4c, 0x4f, 0x47, 0x49, 0x4e, 0x10,
 0x04, 0x42, 0x83, 0x02, 0x0a, 0x23,
 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65,
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 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x4d, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x64, 0x69, 0x73,
 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x76, 0x31, 0x2f, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,
 0x6e, 0x65, 0x70, 0x62, 0x3b, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e,
 0x67, 0x69, 0x6e, 0x65, 0x70, 0x62, 0xa2, 0x02, 0x0f, 0x44, 0x49, 0x53, 0x43, 0x4f, 0x56, 0x45,
 0x52, 0x59, 0x45, 0x4e, 0x47, 0x49, 0x4e, 0x45, 0xaa, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67,
 0x6c,
 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x1f, 0x47, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76,
 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x22, 0x47,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69,
 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56,
 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc
)

func file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce.Do(func()
 {
  file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData
}
```

```
var file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes = make([]protoimpl.EnumInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = []any{
 (UserLicense_LicenseAssignmentState)(0), // 0:
google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 (*UserLicense)(nil),                    // 1: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil),          // 2: google.protobuf.Timestamp
}
var file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = []int32{
 0, // 0: google.cloud.discoveryengine.v1.UserLicense.license_assignment_state:type_name
 -> google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 2, // 1: google.cloud.discoveryengine.v1.UserLicense.create_time:type_name -> google.protobuf.Timestamp
 2, // 2: google.cloud.discoveryengine.v1.UserLicense.update_time:type_name -> google.protobuf.Timestamp
 2, // 3: google.cloud.discoveryengine.v1.UserLicense.last_login_time:type_name -> google.protobuf.Timestamp
 4, // [4:4] is the sub-list for method output_type
 4, // [4:4] is the sub-list for method input_type
 4, // [4:4] is the sub-list for extension type_name
 4, // [4:4] is the sub-list for extension extendee
 0, // [0:4] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_proto_init() }
func file_google_cloud_discoveryengine_v1_user_license_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_proto != nil {
  return
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc,
   NumEnums:      1,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_cloud_discoveryengine_v1_user_license_proto_goTypes,
  DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs,
  EnumInfos:         file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes,
  MessageInfos:      file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes,
 }.Build()
 File_google_cloud_discoveryengine_v1_user_license_proto = out.File
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = nil
 file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = nil
 file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = nil
}
```

```
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
```

```
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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//go:build go1.23

package compute_test
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 //
 It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded
 as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _
 = it.Response.(*computepb.LicensesListResponse)
 }
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
//
This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Update() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"
```

```
 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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//go:build go1.23

package procurement_test

import (
 "context"
```

```
 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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```

```
package discoveryengine

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "cloud.google.com/go/longrunning"
 lroauto "cloud.google.com/go/longrunning/autogen"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax
 "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/grpc/codes"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newUserLicenseClientHook clientHook

// UserLicenseCallOptions contains the retry settings for each method of UserLicenseClient.
type UserLicenseCallOptions struct {
 ListUserLicenses        []gax.CallOption
 BatchUpdateUserLicenses []gax.CallOption
 CancelOperation         []gax.CallOption
 GetOperation            []gax.CallOption
 ListOperations          []gax.CallOption
}

func defaultUserLicenseGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("discoveryengine.googleapis.com:443"),
  internaloption.WithDefaultEndpointTemplate("discoveryengine.UNIVERSE_DOMAIN:443"),
  internaloption.WithDefaultMTLSEndpoint("discoveryengine.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
```

```
 internaloption.EnableJwtWithScope(),
 internaloption.EnableNewAuthLibrary(),
 option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
  grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultUserLicenseCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
  ListUserLicenses:        []gax.CallOption{},
  BatchUpdateUserLicenses: []gax.CallOption{},
  CancelOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier:
 1.30,
    })
   }),
  },
  GetOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    })
   }),
  },
  ListOperations: []gax.CallOption{
   gax.WithTimeout(300000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        30000 * time.Millisecond,
     Multiplier: 1.30,
    })
   }),
```

```
  },
 }
}

func defaultUserLicenseRESTCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
  ListUserLicenses:        []gax.CallOption{},
  BatchUpdateUserLicenses: []gax.CallOption{},
  CancelOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer
  {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusServiceUnavailable)
   }),
  },
  GetOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusServiceUnavailable)
   }),
  },
  ListOperations: []gax.CallOption{
   gax.WithTimeout(300000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        30000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusServiceUnavailable)
   }),
  },
 }
}

// internalUserLicenseClient is an interface that defines the methods available from Discovery Engine API.
type internalUserLicenseClient
```

```
 interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 ListUserLicenses(context.Context, *discoveryenginepb.ListUserLicensesRequest, ...gax.CallOption)
*UserLicenseIterator
 BatchUpdateUserLicenses(context.Context, *discoveryenginepb.BatchUpdateUserLicensesRequest,
...gax.CallOption) (*BatchUpdateUserLicensesOperation, error)
 BatchUpdateUserLicensesOperation(name string) *BatchUpdateUserLicensesOperation
 CancelOperation(context.Context, *longrunningpb.CancelOperationRequest, ...gax.CallOption) error
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
 ListOperations(context.Context, *longrunningpb.ListOperationsRequest, ...gax.CallOption) *OperationIterator
}

// UserLicenseClient is a client for interacting with Discovery Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing
 User Licenses.
type UserLicenseClient struct {
 // The internal transport-dependent client.
 internalClient internalUserLicenseClient

 // The call options for this service.
 CallOptions *UserLicenseCallOptions

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient *lroauto.OperationsClient
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *UserLicenseClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *UserLicenseClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}
```

```
// Connection returns
 a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *UserLicenseClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// ListUserLicenses lists the User Licenses.
func (c *UserLicenseClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 return c.internalClient.ListUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *UserLicenseClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 return c.internalClient.BatchUpdateUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
//
 The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *UserLicenseClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return c.internalClient.BatchUpdateUserLicensesOperation(name)
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest,
opts ...gax.CallOption) error {
 return c.internalClient.CancelOperation(ctx, req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) ListOperations(ctx context.Context,
```

```
 req *longrunningpb.ListOperationsRequest, opts ...gax.CallOption) *OperationIterator {
 return c.internalClient.ListOperations(ctx, req, opts...)
}

// userLicenseGRPCClient is a client for interacting with Discovery Engine API over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type userLicenseGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing UserLicenseClient
 CallOptions **UserLicenseCallOptions

 // The gRPC API client.
 userLicenseClient discoveryenginepb.UserLicenseServiceClient

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 operationsClient longrunningpb.OperationsClient

 // The x-goog-* metadata
 to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewUserLicenseClient creates a new user license service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing User Licenses.
func NewUserLicenseClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := defaultUserLicenseGRPCClientOptions()
 if newUserLicenseClientHook != nil {
  hookOpts, err := newUserLicenseClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
```

```
 return nil, err
}
client := UserLicenseClient{CallOptions: defaultUserLicenseCallOptions()}

c := &userLicenseGRPCClient{
 connPool:         connPool,
 userLicenseClient: discoveryenginepb.NewUserLicenseServiceClient(connPool),
 CallOptions:
     &client.CallOptions,
 logger:           internaloption.GetLogger(opts),
 operationsClient:  longrunningpb.NewOperationsClient(connPool),
}
c.setGoogleClientInfo()

client.internalClient = c

client.LROClient, err = lroauto.NewOperationsClient(ctx, gtransport.WithConnPool(connPool))
if err != nil {
 // This error "should not happen", since we are just reusing old connection pool
 // and never actually need to dial.
 // If this does happen, we could leak connp. However, we cannot close conn:
 // If the user invoked the constructor with option.WithGRPCConn,
 // we would close a connection that's still in use.
 // TODO: investigate error conditions.
 return nil, err
}
c.LROClient = &client.LROClient
return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *userLicenseGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc", grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
```

```
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type userLicenseRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // LROClient is used internally
 to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing UserLicenseClient
 CallOptions **UserLicenseCallOptions

 logger *slog.Logger
}

// NewUserLicenseRESTClient creates a new user license service rest client.
//
// Service for managing User Licenses.
func NewUserLicenseRESTClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := append(defaultUserLicenseRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultUserLicenseRESTCallOptions()
 c := &userLicenseRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
```

```
 }
 c.setGoogleClientInfo()

 lroOpts
 := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opClient, err := lroauto.NewOperationsRESTClient(ctx, lroOpts...)
 if err != nil {
  return nil, err
 }
 c.LROClient = &opClient

 return &UserLicenseClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultUserLicenseRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://discoveryengine.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://discoveryengine.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://discoveryengine.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo
 sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}
```

```
// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *userLicenseRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *userLicenseGRPCClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest,
 opts ...gax.CallOption) *UserLicenseIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListUserLicenses[0:len((*c.CallOptions).ListUserLicenses):len((*c.CallOptions).ListUser
Licenses)], opts...)
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
  resp := &discoveryenginepb.ListUserLicensesResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx,
 c.userLicenseClient.ListUserLicenses, req, settings.GRPC, c.logger, "ListUserLicenses")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
```

```
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *userLicenseGRPCClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders,
 hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).BatchUpdateUserLicenses[0:len((*c.CallOptions).BatchUpdateUserLicenses):len((*c.Call
Options).BatchUpdateUserLicenses)], opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.userLicenseClient.BatchUpdateUserLicenses, req, settings.GRPC, c.logger,
"BatchUpdateUserLicenses")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return &BatchUpdateUserLicensesOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 }, nil
}

func (c *userLicenseGRPCClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx,
 hds...)
 opts =
append((*c.CallOptions).CancelOperation[0:len((*c.CallOptions).CancelOperation):len((*c.CallOptions).CancelOp
eration)], opts...)
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
```

```
  _, err = executeRPC(ctx, c.operationsClient.CancelOperation, req, settings.GRPC, c.logger, "CancelOperation")
  return err
 }, opts...)
 return err
}

func (c *userLicenseGRPCClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context,
 settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *userLicenseGRPCClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListOperations[0:len((*c.CallOptions).ListOperations):len((*c.CallOptions).ListOperations
)], opts...)
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
  resp := &longrunningpb.ListOperationsResponse{}
  if pageToken !=
 "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
```

```
  req.PageSize = int32(pageSize)
 }
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.ListOperations, req, settings.GRPC, c.logger, "ListOperations")
  return err
 }, opts...)
 if err != nil {
  return nil, "", err
 }

 it.Response = resp
 return resp.GetOperations(), resp.GetNextPageToken(), nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// ListUserLicenses lists the
 User Licenses.
func (c *userLicenseRESTClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
  resp := &discoveryenginepb.ListUserLicensesResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/userLicenses", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
  params.Add("filter", fmt.Sprintf("%v",
req.GetFilter()))
 }
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListUserLicenses")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response
```

```
= resp
 return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *userLicenseRESTClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:batchUpdateUserLicenses", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
```

```
headers := gax.BuildHeaders(ctx, hds...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err
:= executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "BatchUpdateUserLicenses")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &BatchUpdateUserLicensesOperation{
 lro:      longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:cancel", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery
 = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  _, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CancelOperation")
  return err
 }, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption)
 (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET",
 baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
  resp := &longrunningpb.ListOperationsResponse{}
  if pageToken != "" {
   req.PageToken
```

```
= pageToken
 }
 if pageSize > math.MaxInt32 {
  req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/operations", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path
= settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListOperations")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetOperations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// BatchUpdateUserLicensesOperation returns a new
 BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *userLicenseGRPCClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return &BatchUpdateUserLicensesOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *userLicenseRESTClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &BatchUpdateUserLicensesOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
  pollPath: override,
 }
}
```

```
// Copyright 2025 Google LLC
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete          []gax.CallOption
 Get             []gax.CallOption
 GetIamPolicy    []gax.CallOption
 Insert          []gax.CallOption
```

```
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update            []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier:
 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
```

```
    http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
  Update: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.
```

```
// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header
 passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context,
 req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
```

```
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available
 in the specified project. This method does not get any licenses that belong to other projects, including licenses
attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this
method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
 licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient
```

```
 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:
      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
```

```
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application
 in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for
 use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
```

```
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
```

```
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
 {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err
 := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
```

```
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
  req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
  req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
  req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter !=
nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return
```

```
 err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
 TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts
...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
 Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
  params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
```

```
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project:
 req.GetProject(),
  },
 }
 return op, nil
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     http://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
```

```
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
```

```
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
```

```
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}
```

```
// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
```

```
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}
```

```
func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54, 0x59,
 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
```

```
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
```

```
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
)

func ExampleUserLicenseClient_ListUserLicenses_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 for resp, err := range c.ListUserLicenses(ctx, req).All() {
  if err != nil {
```

```
  // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}

func ExampleUserLicenseClient_ListOperations_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.ListOperationsRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
 }
 for resp, err := range c.ListOperations(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
 protoreflect
 "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)
```

```
// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
```

```
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
```

```
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
```

```
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
```

```
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
```

```
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
```

```
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}
```

```
func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
```

```
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
```

```
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x64,
```

0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
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}

var (
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sync.Once
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 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
        // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                     // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                    // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                   // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
```

```
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                   // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                     // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
```

```
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
```

```
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx context.Context,
 in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
```

```
 if err != nil {
  return nil, err
 }
 return out, nil
}

func
 (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest,
opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
```

```
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest) (*AssignResponse,
 error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
```

```
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in); err != nil
 {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
```

```
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor
 == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
```

```
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName:
 "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
// Copyright 2025 Google LLC
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
```

```
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]

package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
)

func main() {
 ctx := context.Background()
 // This snippet has been automatically generated
 and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque
st.
 }
 op, err := c.BatchUpdateUserLicenses(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
// [END discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]
// Copyright 2025 Google LLC
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
```

```
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
 //
TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
}
op, err := c.Delete(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
```

```
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}
```

```
func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may
 require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
```

1.4367 gonum 0.16.0

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A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using init_genrand(seed)
or init_by_array(init_key, key_length).

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This software package is based on the paper
I. Bogaert, "Iteration-Free Computation of Gauss-Legendre Quadrature Nodes and Weights",
to be published in the SIAM Journal of Scientific Computing.

The main features of this software are:
- Speed: due to the simple formulas and the O(1) complexity computation of individual Gauss-Legendre quadrature nodes and weights. This makes it compatible with parallel computing paradigms.
- Accuracy: the error on the nodes and weights is within a few ulps (see the paper for details).

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A C-program for MT19937-64 (2004/9/29 version).
Coded by Takuji Nishimura and Makoto Matsumoto.

This is a 64-bit version of Mersenne Twister pseudorandom number
generator.

Before using, initialize the state by using init_genrand64(seed)
or init_by_array64(init_key, key_length).

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M. Matsumoto and T. Nishimura,
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1.4368 koanf-providers-confmap 1.0.0

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1.4369 google-golang-org-genproto 0.0.0-20250303144028-a0af3efb3deb

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1.4370 googlecloudgopubsub 1.48.0

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)
```

```
func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
```

```
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
```

```
 //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)
```

```
func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
```

```
func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
```

```
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
```

```
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
```

```
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
```

```
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}
```

```
// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}
```

```
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
```

```
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}
```

```
// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
```

```
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
```

```
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
```

```
 return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
  if req != nil && req.ReturnPartialSuccess != nil {
   params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
  }

  baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}
```

```
// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }
```

```
  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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// You may obtain a copy of the License at
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
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// you may not use this file except in compliance with the License.
```

```
// You may obtain a copy of the License at
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
```

```
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
```

```
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}
```

```
func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
```

```
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
```

```
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
```

```
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54,
 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
```

```
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
```

```
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
```

```
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook
```

```
// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:           []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:           []gax.CallOption{},
 }
```

```
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
```

```
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}
```

```
// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
```

```
    connPool,
 licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
 CallOptions:             &client.CallOptions,
 logger:                  internaloption.GetLogger(opts),
 operationsClient:        longrunningpb.NewOperationsClient(connPool),
}
c.setGoogleClientInfo()

client.internalClient = c

return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client
```

```
 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
```

```
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
```

```
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
```

```
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
```

```
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())
```

```
 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
```

```
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
```

```
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
```

```
 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
```

```
 resp := &procurementpb.EnumerateLicensedUsersResponse{}
 if
pageToken != "" {
  req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
  req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
```

```
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
```

```
//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     http://www.apache.org/licenses/LICENSE-2.0
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```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
```

```
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
```

```
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
```

```
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}
```

```
func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
```

```
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
```

```
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
```

```
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
```

```
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
```

```
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
```

```
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}
```

```
type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}
```

```
// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
```

```
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
```

```
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
```

```
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
```

```
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
```

```
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
 if ms.LoadMessageInfo()
 == nil {
  ms.StoreMessageInfo(mi)
 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
if x != nil {
 return x.Parent
}
return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
if x != nil {
 return x.PageSize
}
return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
if x != nil {
 return x.PageToken
}
return ""
}

// A licensed user.
type LicensedUser struct {
state         protoimpl.MessageState
sizeCache     protoimpl.SizeCache
unknownFields protoimpl.UnknownFields

// Username.
// Format: `name@domain.com`.
Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
//
```

```
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
```

```
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
```

```
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
```

```
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}
```

```
func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
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0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f,
0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a, 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f, 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x64,
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 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
 0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
 0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
 0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
 0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
 0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
 0x64, 0x2e, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
```

```
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
```

```
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
```

```
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
```

```
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
```

```
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
```

```
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
```

```
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
```

```
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
```

```
  Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
 },
},
Streams:  []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
```

```
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get               []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
```

```
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
```

```
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()
```

```
 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
```

```
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
```

resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
```

1.4371 ory-fosite 0.49.0

1.4371.1 Available under license :

```
name: Licenses

on:
 pull_request:
 push:
   branches:
     - main
     - master

jobs:
 check:
   runs-on: ubuntu-latest
   steps:
     - uses: actions/checkout@v2
     - uses: actions/setup-go@v2
       with:
         go-version: "1.21"
     - uses: actions/setup-node@v2
       with:
         node-version: "18"
     - run: make licenses
```

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1.4373 ory-x 0.0.665

1.4373.1 Available under license :

```
name: Licenses

on:
 pull_request:
 push:
   branches:
     - main
     - master

jobs:
 check:
   runs-on: ubuntu-latest
   steps:
     - uses: actions/checkout@v2
```

```
- uses: actions/setup-go@v2
  with:
    go-version: "1.23.2"
- uses: actions/setup-node@v2
  with:
    node-version: "18"
- run: make licenses
```

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```
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package configx

import (
 "os"
 "os/user"
 "strconv"
)

type UnixPermission struct {
 Owner string
 Group string
 Mode  os.FileMode
}

func (p *UnixPermission) SetPermission(file string) error {
 var e error
 e = os.Chmod(file, p.Mode)
 if e != nil {
  return e
 }
```

```
 gid := -1
 uid := -1

 if p.Owner != "" {
  var userObj *user.User
  userObj, e = user.Lookup(p.Owner)
  if e != nil {
   return e
  }
  uid, e = strconv.Atoi(userObj.Uid)
  if e != nil {
   return e
  }
 }
 if p.Group != "" {
  var group *user.Group
  group, e := user.LookupGroup(p.Group)
  if e != nil {
   return e
  }
  gid, e = strconv.Atoi(group.Gid)
  if e != nil {
   return e
  }
 }

 e = os.Chown(file, uid, gid)
 if e != nil {
  return e
 }
 return nil
}
```

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1.4374 grafana-alerting 0.0.0-20250228212120-8dc9701ba5f4

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1.4376 grpc-gateway 2.26.1

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1.4377 glibc 2.35-0ubuntu3.10

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lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
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lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
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lib/gssapi/mechglue/g_unseal.c
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lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including
the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c

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lib/libgss/g_unseal.c
lib/libgss/g_userok.c
lib/libgss/g_utils.c
lib/libgss/g_verify.c
lib/libgss/gssd_pname_to_uid.c
uts/common/gssapi/include/gssapi_err_generic.h
uts/common/gssapi/include/mechglueP.h

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lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c

lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
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lib/gssapi/mechglue/g_sign.c
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lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
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lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
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lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
slave/kpropd_rpc.c
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lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
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lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
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lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
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The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in
"src/lib/gssapi", including the following files:

lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c

lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
slave/kpropd_rpc.c
slave/kproplog.c

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The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in "src/lib/gssapi", including the following files:

lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c

lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
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lib/gssapi/mechglue/g_inquire_names.c
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lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
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lib/gssapi/mechglue/g_unseal.c
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lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c

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lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
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lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
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lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
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lib/gss_mechs/mech_krb5/et/kdb5_err.c
lib/gss_mechs/mech_spnego/mech/gssapiP_spnego.h

lib/gss_mechs/mech_spnego/mech/spnego_mech.c
lib/krb5/kadm5/kadm_host_srv_names.c
lib/krb5/kdb/kdb_convert.c
lib/krb5/kdb/kdb_hdr.h
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lib/libgss/g_compare_name.c
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lib/libgss/g_dsp_status.c
lib/libgss/g_dup_name.c
lib/libgss/g_exp_sec_context.c
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lib/libgss/g_verify.c
lib/libgss/gssd_pname_to_uid.c
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lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
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lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
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kprop/kpropd_rpc.c
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@item
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lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
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lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c

lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including
the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
slave/kpropd_rpc.c
slave/kproplog.c

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The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in
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lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c

lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mgluePh
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c

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lib/libgss/g_verify.c
lib/libgss/gssd_pname_to_uid.c
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lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c

lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including
the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c

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lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
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lib/gssapi/mechglue/g_exp_sec_context.c
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lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
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lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c

lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including
the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c

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lib/gss_mechs/mech_spnego/mech/spnego_mech.c
lib/krb5/kadm5/kadm_host_srv_names.c
lib/krb5/kdb/kdb_convert.c
lib/krb5/kdb/kdb_hdr.h

lib/krb5/kdb/kdb_log.c
lib/krb5/kdb/kdb_log.h
lib/libgss/g_accept_sec_context.c
lib/libgss/g_acquire_cred.c
lib/libgss/g_canon_name.c
lib/libgss/g_compare_name.c
lib/libgss/g_context_time.c
lib/libgss/g_delete_sec_context.c
lib/libgss/g_dsp_name.c
lib/libgss/g_dsp_status.c
lib/libgss/g_dup_name.c
lib/libgss/g_exp_sec_context.c
lib/libgss/g_export_name.c
lib/libgss/g_glue.c
lib/libgss/g_imp_name.c
lib/libgss/g_imp_sec_context.c
lib/libgss/g_init_sec_context.c
lib/libgss/g_initialize.c
lib/libgss/g_inquire_context.c
lib/libgss/g_inquire_cred.c
lib/libgss/g_inquire_names.c
lib/libgss/g_process_context.c
lib/libgss/g_rel_buffer.c
lib/libgss/g_rel_cred.c
lib/libgss/g_rel_name.c
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lib/libgss/g_store_cred.c
lib/libgss/g_unseal.c
lib/libgss/g_userok.c
lib/libgss/g_utils.c
lib/libgss/g_verify.c
lib/libgss/gssd_pname_to_uid.c
uts/common/gssapi/include/gssapi_err_generic.h
uts/common/gssapi/include/mechglueP.h

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lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c
lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c

lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including
the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
kprop/kpropd_rpc.c
kprop/kproplog.c

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Format: https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/
Upstream-Name: GLib
Source: https://download.gnome.org/sources/glib/
Comment:
Some files are mechanically derived from Unicode data.
We do not use the Debian unicode-data package as source for these, because
GLib's Unicode data is part of its upstream API/ABI, and the Debian
unicode-data package does not necessarily match the version used in GLib.
.
The files excluded here are not currently needed for GLib.
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Blocks.txt
CJK*.txt
DerivedAge.txt
DerivedCoreProperties.txt
DerivedNormalizationProps.txt
Emoji*.txt
EquivalentUnifiedIdeograph.txt
Hangul*.txt
Index.txt
Indic*.txt
Jamo.txt
Name*.html

Name*.txt
Normalization*.txt
Nushu*.txt
Prop*.txt
ScriptExtensions.txt
StandardizedVariants.txt
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"Source code" for a work means the preferred form of the work for making modifications
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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

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1.4409 python-setuptools 59.6.0-1.2ubuntu0.22.04.3

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1.4411 net-tools 2.10-0.1ubuntu4.4

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it
  under certain conditions; type `show c' for details.
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1.4412 aws-sdk-go-v2-service-ecrpublic 1.33.0

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
```

```
      uses: actions/checkout@v2
      with:
        path: sdkbase
        ref: ${{ github.base_ref }}
    - name: Checkout this ref
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
```

setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware

```
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
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package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
```

```
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
```

```
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}
```

```
type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
```

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash

```
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
```

```
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
```

```
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
```

```
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
```

```
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
```

```
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

```
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

```
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
```

```
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {
```

```
 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

ServiceID: ServiceID,
OperationName: "CheckoutBorrowLicense",
}
}
{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {

"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
```

"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}

```
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}

```
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
                "target": "smithy.api#String",

    "traits": {
                    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
                }
            },
            "ProductCode": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
                "traits": {
                    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
```

}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"

```
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
            "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
                "x-amz-user-agent",
                "x-amzn-platform-id",
                "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
```

"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

        ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"

          }
          ],
```

```
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
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    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
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                            "conditions": [
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                                    "fn": "booleanEquals",
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                                "ref": "UseFIPS"
                                        },
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                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
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```
                    },
                    true
                ]
            }

],
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                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"

},
                                        "supportsFIPS"
                                    ]
                                }
                            ]
                        },
                        {
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                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [

                                      {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

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                                {
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"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [

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                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true

                        ]
                        }
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                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
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                            ],
                            "type": "tree"
                        }
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                    "type": "tree"
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                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
```

```
                    },
                    true

                ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
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                                        "headers": {}
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                                    "type": "endpoint"
                                }
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                    "type": "tree"
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```
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                                    "conditions": [],
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                                    "type": "error"
                                }
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                            "type": "tree"
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                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
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                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
```

```
}
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
          }

  },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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```
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
               },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                }
```

```
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
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{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
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},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
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},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
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"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,

"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
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"UseDualStack": false
}
},
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
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{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
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},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",

"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
      <code>AmiID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>DualSubscription</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceID</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>InstanceType</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>ProductCode</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Region</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Status</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n           </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n        </ul>"
                }
            },
            "MaxResults": {
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "

```
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
        "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
        "target":
```

"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration
resources for your account. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": " To filter your results, specify which subscription providers to
return \n\t\t\tin the list. "
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",

"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
```

"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
```

```
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
 subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
```

"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,

"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied due to request throttling. ",
"smithy.api#error": "client"
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
         "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}

```
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
```

```
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
```

```
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
```

```
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
```

```
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",

"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target":

"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider
specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>
resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},

"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},

"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",

"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}

```
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
```

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    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},

"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,

"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
{

```
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
    "type": "error"
},
{
    "conditions": [],
    "endpoint": {
        "url": {
            "ref": "Endpoint"
        },

"properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
"type": "tree"
},
{
"conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
],
"rules": [
    {
        "conditions": [
            {
                "fn": "aws.partition",

            "argv": [
                {
                    "ref": "Region"
                }
            ],
            "assign": "PartitionResult"
        }
```

```
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseFIPS"
                              },

true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "rules": [
                          {
                            "conditions": [
                              {

"fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
                                        "ref": "PartitionResult"
                                      },
                                      "supportsFIPS"
                                    ]
                                  }
                                ]
                              },

                          {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
```

```
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }

                            ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

    ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [

  {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
```

```
                    }
                ],
                "rules": [
                    {
                        "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "fn": "getAttr",
                                        "argv": [

                {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

        "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]

          }
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }

            ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
```

"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",

"UseFIPS":
true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {

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            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint":
{
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
```

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            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false

    }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                }

        },
            "params": {
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"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}

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            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {

          "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
```

```
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error": "Invalid Configuration:
 Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
```

{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [

```
            {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
                "documentation": ""
            },
            {
                "name": "PROVISIONING_FAILED",
                "value": "PROVISIONING_FAILED",
                "documentation": ""
            },
            {
                "name": "PROVISIONED",
                "value": "PROVISIONED",
                "documentation": ""
            },
            {
                "name": "DELETING",
                "value": "DELETING",
                "documentation": ""
            },
            {
                "name": "DELETION_FAILED",
                "value": "DELETION_FAILED",
                "documentation": ""

            },
            {
                "name": "DELETED",
                "value": "DELETED",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "HEALTHY",
                "value": "HEALTHY",
                "documentation": ""
            },
            {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
            },
```

```
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use
the following filters to streamline results: \n \n \n Product \n \n
\n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",

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    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members":
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{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },

        "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
```

empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"

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            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n            <p>Status</p>\n            </li>\n            <li>\n            <p>Username</p>\n
</li>\n            <li>\n            <p>Domain</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
```

This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":

"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags for the specified resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"

```
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The ID of the EC2 instance, which
provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n
\n Status \n \n \n Username \n \n
\n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "

```
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
```

"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {

"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}

```
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
            "type": "structure",
            "members": {
                "IdentityProviderSummary": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                    "traits": {
                        "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                        "smithy.api#required": {}
                    }
                }
            },
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
            "type": "string",
            "traits": {
                "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

       "smithy.api#error": "client",
                "smithy.api#httpError": 404
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
            "type": "structure",
            "members": {
                "SecretId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                        "smithy.api#length": {
```

"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

        },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs
will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status)
in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
```

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
```

```
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }

  }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {

 "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {

"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

```
        }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
```

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security
group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent

```
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.4413 attr 1:2.5.2-1build1.1

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Note:

- If you are happy with Vim, please express that by reading the rest of this file and consider helping needy children in Uganda.

- If you want to support further Vim development consider becoming a |sponsor|. The money goes to Uganda anyway.

- According to Richard Stallman the Vim license is GNU GPL compatible. A few minor changes have been made since he checked it, but that should not make a difference.

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==========

Kibaale Children's Centre *kcc* *Kibaale* *charity*

Kibaale Children's Centre (KCC) is located in Kibaale, a small town in the south of Uganda, near Tanzania, in East Africa. The area is known as Rakai District. The population is mostly farmers. Although people are poor, there usually is enough food. But this district is suffering from AIDS more than any other part of the world. Some say that it started there. Estimations are that in the past 10 to 30% of the Ugandans are infected with HIV. Because parents die, there are many orphans. In this district about 60,000 children have lost one or both parents, out of a population of 350,000. Although AIDS is now mostly under control, the problems are still continuing.

The children need a lot of help. The KCC is working hard to provide the needy with food, medical care and education. Food and medical care to keep them healthy now, and education so that they can take care of themselves in the future. KCC works on a Christian base, but help is given to children of any religion.

The key to solving the problems in this area is education. This has been neglected in the past years with president Idi Amin and the following civil wars. Now that the government is stable again, the children and parents have

to learn how to take care of themselves and how to avoid infections. There is also help for people who are ill and hungry, but the primary goal is to prevent people from getting ill and to teach them how to grow healthy food.

Most of the orphans are living in an extended family. An uncle or older sister is taking care of them. Because these families are big and the income (if any) is low, a child is lucky if it gets healthy food. Clothes, medical care and schooling is beyond its reach. To help these needy children, a sponsorship program was put into place. A child can be financially adopted. For a few dollars a month KCC sees to it that the child gets indispensable items, is healthy, goes to school and KCC takes care of anything else that needs to be done for the child and the family that supports it.

Besides helping the child directly, the environment where the child grows up needs to be improved. KCC helps schools to improve their teaching methods. There is a demonstration school at the centre and teacher trainings are given. Health workers are being trained, hygiene education is carried out and households are stimulated to build a proper latrine. I helped setting up a production site for cement slabs. These are used to build a good latrine. They are sold below cost price.

There is a clinic at the project, which provides children and their family medical help. Since 2020 a maternity ward was added and 24/7 service is available. When needed, transport to a hospital is offered. Immunization programs are carried out and help is provided when an epidemic is breaking out (measles and cholera have been a problem).

donate

Summer 1994 to summer 1995 I spent a whole year at the centre, working as a volunteer. I have helped to expand the centre and worked in the area of water and sanitation. I learned that the help that the KCC provides really helps. When I came back to Holland, I wanted to continue supporting KCC. To do this I'm raising funds and organizing the sponsorship program. Please consider one of these possibilities:

1. Sponsor a child in primary school: 17 euro a month (or more).
2. Sponsor a child in secondary school: 25 euro a month (or more).
3. Sponsor the clinic: Any amount a month or quarter
4. A one-time donation

Compared with other organizations that do child sponsorship the amounts are very low. This is because the money goes directly to the centre. Less than 5% is used for administration. This is possible because this is a small organization that works with volunteers. If you would like to sponsor a child, you should have the intention to do this for at least one year.

How do you know that the money will be spent right? First of all you have my personal guarantee as the author of Vim. I trust the people that are working at the centre, I know them personally. Furthermore, the centre has been co-sponsored and inspected by World Vision, Save the Children Fund and is now under the supervision of Pacific Academy Outreach Society. The centre is visited about once a year to check the progress (at our own cost). I have visited the centre myself many times, starting in 1993. The visit reports are on
the ICCF web site.

If you have any further questions, send me e-mail: <Bram@vim.org>.

The address of the centre is:
Kibaale Children's Centre
p.o. box 1658
Masaka, Uganda, East Africa

Sending money: *iccf-donations*

Check the ICCF web site for the latest information! See |iccf| for the URL.

USA: The methods mentioned below can be used.
If you must send a check send it to our Canadian partner:
https://www.kuwasha.net/

Canada: Contact Kuwasha in Surrey, Canada. They take care of the Canadian sponsors for the children in Kibaale. Kuwasha forwards 100% of the money to the project in Uganda. You can send them a one time donation directly.
Please send me a note so that I know what has been donated because of Vim. Look on their site for information about sponsorship: https://www.kuwasha.net/
If you make a donation to Kuwasha you will receive a tax receipt which can be submitted with your tax return.

Holland: Transfer to the account of "Stichting ICCF Holland" in Amersfoort. This will allow for tax deduction if you live in Holland. ING bank, IBAN: NL95 INGB 0004 5487 74

Germany: It is possible to make donations that allow for a tax return.
Check the ICCF web site for the latest information:
https://iccf-holland.org/germany.html

Europe: Use a bank transfer if possible. See "Others" below for the swift code and IBAN number.
Any other method should work. Ask for information about

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The e-mail address for sending the money to is:
Bram@iccf-holland.org

Others: Transfer to this account if possible:
ING bank: IBAN: NL95 INGB 0004 5487 74
Swift code: INGBNL2A
under the name "stichting ICCF Holland", Amersfoort
Checks are
not accepted.

vim:tw=78:ts=8:noet:ft=help:norl:

1.4415 xz 5.6.1+really5.4.5-1ubuntu0.2

1.4415.1 Available under license :

Format: https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/
Upstream-Name: XZ Utils
Upstream-Contact:
Lasse Collin <lasse.collin@tukaani.org>
https://tukaani.org/xz/lists.html
Source:
https://tukaani.org/xz
https://git.tukaani.org/xz.git
Comment:
XZ Utils is developed and maintained upstream by Lasse Collin. Major
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Comment:
From: Lasse Collin <lasse.collin@tukaani.org>
To: Jonathan Nieder <jrnieder@gmail.com>
Subject: Re: XZ utils for Debian
Date: Sun, 19 Jul 2009 13:28:23 +0300
Message-Id: <200907191328.23816.lasse.collin@tukaani.org>
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[...]
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Files: Doxyfile.in

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Files: src/liblzma/check/crc32_table_?e.h
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changelog.gz (commit 975d8fd) explains:
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Recreated the BCJ test files for x86 and SPARC. The old files
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Copyright: 1992, 1993, 1994, 1999, 2000, 2001, 2002, 2005
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Other-Authors: Roland McGrath, Akim Demaille, Paul Eggert,
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Origin: configure.ac from XZ Utils,
visibility.m4 serial 1 (gettext-0.15),
Autoconf 2.52g
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dos/config.h was generated with autoheader, which tells Autoconf to
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Origin: gettext-runtime/po/Makevars (gettext-0.12)
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1.4416 intel-microcode 3.20250211.0ubuntu0.24.04.1

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Wed, 20 Feb 2008 07:43:49 +0100, and heavily modified by Henrique de
Moraes Holschuh <hmh@debian.org> on Fri, 13 Jul 2012 15:23:23 -0300.

It was downloaded through https://downloadcenter.intel.com/search?keyword=linux+microcode
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1.4417 libcap 1:2.66-5ubuntu2.2

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the version number 2.1.]

Preamble

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Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.
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*
*/

#ifndef _BSD_WAITPID_H
#define _BSD_WAITPID_H

#ifndef HAVE_WAITPID
/* Clean out any potential issues */
#undef WIFEXITED
#undef WIFSTOPPED
#undef WIFSIGNALED

/* Define required functions to mimic a POSIX look and feel */
#define _W_INT(w) (*(int*)&(w)) /* convert union wait to int */
#define WIFEXITED(w) (!((_W_INT(w)) & 0377))
#define WIFSTOPPED(w) ((_W_INT(w)) & 0100)
#define WIFSIGNALED(w) (!WIFEXITED(w) && !WIFSTOPPED(w))
#define WEXITSTATUS(w) (int)(WIFEXITED(w) ? ((_W_INT(w) >> 8) & 0377) : -1)
#define WTERMSIG(w) (int)(WIFSIGNALED(w) ? (_W_INT(w) & 0177) : -1)
#define WCOREFLAG 0x80
#define WCOREDUMP(w) ((_W_INT(w)) & WCOREFLAG)
```

```
/* Prototype */
pid_t waitpid(int,
 int *, int);

#endif /* !HAVE_WAITPID */
#endif /* _BSD_WAITPID_H */
/* $OpenBSD: poll.h,v 1.11 2003/12/10 23:10:08 millert Exp $ */

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/* OPENBSD ORIGINAL: sys/sys/poll.h */

#ifndef _COMPAT_POLL_H_
#define _COMPAT_POLL_H_

#include <sys/types.h>
#ifdef HAVE_POLL_H
# include <poll.h>
#elif HAVE_SYS_POLL_H
# include <sys/poll.h>
#endif

#ifndef HAVE_STRUCT_POLLFD_FD
typedef struct pollfd {
```

```
 int fd;
 short events;
 short revents;
} pollfd_t;

#ifndef POLLIN
# define POLLIN  0x0001
#endif
#ifndef POLLPRI
# define POLLPRI 0x0002
#endif
#ifndef POLLOUT
# define POLLOUT 0x0004
#endif
#ifndef POLLERR
# define POLLERR 0x0008
#endif
#ifndef POLLHUP
# define POLLHUP 0x0010
#endif
#ifndef POLLNVAL
# define POLLNVAL 0x0020
#endif

#if 0
/* the following are
 currently not implemented */
#define POLLRDNORM 0x0040
#define POLLNORM POLLRDNORM
#define POLLWRNORM      POLLOUT
#define POLLRDBAND 0x0080
#define POLLWRBAND 0x0100
#endif

#define INFTIM  (-1) /* not standard */
#endif /* !HAVE_STRUCT_POLLFD_FD */

#ifndef HAVE_NFDS_T
typedef unsigned int nfds_t;
#endif

#ifndef HAVE_POLL
int   poll(struct pollfd *, nfds_t, int);
#endif

#ifndef HAVE_PPOLL
int   ppoll(struct pollfd *, nfds_t, const struct timespec *, const sigset_t *);
#endif
```

```
#endif /* !_COMPAT_POLL_H_ */
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#ifndef _BSD_MISC_H
#define _BSD_MISC_H

#include "includes.h"

char *ssh_get_progname(char *);
int seed_from_prngd(unsigned char *, size_t);

#ifndef HAVE_SETSID
#define setsid() setpgrp(0, getpid())
#endif
 /* !HAVE_SETSID */

#ifndef HAVE_SETENV
int setenv(const char *, const char *, int);
#endif /* !HAVE_SETENV */

#ifndef HAVE_SETLOGIN
int setlogin(const char *);
#endif /* !HAVE_SETLOGIN */

#ifndef HAVE_INNETGR
int innetgr(const char *, const char *, const char *, const char *);
#endif /* HAVE_INNETGR */

#if !defined(HAVE_SETEUID) && defined(HAVE_SETREUID)
int seteuid(uid_t);
#endif /* !defined(HAVE_SETEUID) && defined(HAVE_SETREUID) */

#if !defined(HAVE_SETEGID) && defined(HAVE_SETRESGID)
```

```
int setegid(uid_t);
#endif /* !defined(HAVE_SETEGID) && defined(HAVE_SETRESGID) */

#if !defined(HAVE_STRERROR) && defined(HAVE_SYS_ERRLIST) && defined(HAVE_SYS_NERR)
const char *strerror(int);
#endif

#if !defined(HAVE_SETLINEBUF)
#define setlinebuf(a) (setvbuf((a), NULL, _IOLBF, 0))
#endif

#ifndef HAVE_UTIMES
#ifndef HAVE_STRUCT_TIMEVAL
struct timeval {
 long tv_sec;
 long tv_usec;
}
#endif /* HAVE_STRUCT_TIMEVAL */

int utimes(const char *, struct timeval *);
#endif /* HAVE_UTIMES */

#ifndef
 AT_FDCWD
# define AT_FDCWD (-2)
#endif

#ifndef HAVE_FCHMODAT
int fchmodat(int, const char *, mode_t, int);
#endif

#ifndef HAVE_FCHOWNAT
int fchownat(int, const char *, uid_t, gid_t, int);
#endif

#ifndef HAVE_TRUNCATE
int truncate (const char *, off_t);
#endif /* HAVE_TRUNCATE */

#ifndef HAVE_STRUCT_TIMESPEC
struct timespec {
 time_t tv_sec;
 long tv_nsec;
};
#endif /* !HAVE_STRUCT_TIMESPEC */

#if !defined(HAVE_NANOSLEEP) && !defined(HAVE_NSLEEP)
# include <time.h>
```

```
int nanosleep(const struct timespec *, struct timespec *);
#endif

#ifndef HAVE_UTIMENSAT
# include <time.h>
/* start with the high bits and work down to minimise risk of overlap */
# ifndef AT_SYMLINK_NOFOLLOW
#  define AT_SYMLINK_NOFOLLOW 0x80000000
# endif
int utimensat(int, const char *, const struct timespec[2], int);
#endif /* !HAVE_UTIMENSAT */

#ifndef HAVE_USLEEP
int usleep(unsigned int useconds);
#endif

#ifndef HAVE_TCGETPGRP
pid_t tcgetpgrp(int);
#endif

#ifndef HAVE_TCSENDBREAK
int tcsendbreak(int, int);
#endif

#ifndef
 HAVE_UNSETENV
int unsetenv(const char *);
#endif

#ifndef HAVE_ISBLANK
int isblank(int);
#endif

#ifndef HAVE_GETPGID
pid_t getpgid(pid_t);
#endif

#ifndef HAVE_PSELECT
int pselect(int, fd_set *, fd_set *, fd_set *, const struct timespec *,
   const sigset_t *);
#endif

#ifndef HAVE_ENDGRENT
# define endgrent() do { } while(0)
#endif

#ifndef HAVE_KRB5_GET_ERROR_MESSAGE
# define krb5_get_error_message krb5_get_err_text
```

```
#endif

#ifndef HAVE_KRB5_FREE_ERROR_MESSAGE
# define krb5_free_error_message(a,b) do { } while(0)
#endif

#ifndef HAVE_PLEDGE
int pledge(const char *promises, const char *paths[]);
#endif

/* bsd-err.h */
#ifndef HAVE_ERR
void err(int, const char *, ...) __attribute__((format(printf, 2, 3)));
#endif
#ifndef HAVE_ERRX
void errx(int, const char *, ...) __attribute__((format(printf, 2, 3)));
#endif
#ifndef HAVE_WARN
void warn(const char *, ...) __attribute__((format(printf, 1, 2)));
#endif

#ifndef HAVE_LLABS
long long llabs(long long);
#endif

#if defined(HAVE_DECL_BZERO)
 && HAVE_DECL_BZERO == 0
void bzero(void *, size_t);
#endif

#ifndef HAVE_RAISE
int raise(int);
#endif

#ifndef HAVE_GETSID
pid_t getsid(pid_t);
#endif

#ifndef HAVE_FLOCK
# define LOCK_SH  0x01
# define LOCK_EX  0x02
# define LOCK_NB  0x04
# define LOCK_UN  0x08
int flock(int, int);
#endif

#ifdef FFLUSH_NULL_BUG
# define fflush(x) (_ssh_compat_fflush(x))
```

```
#endif

#ifndef HAVE_LOCALTIME_R
struct tm *localtime_r(const time_t *, struct tm *);
#endif

#ifndef HAVE_REALPATH
#define realpath(x, y) (sftp_realpath((x), (y)))
#endif

#endif /* _BSD_MISC_H */
/*
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*/

#include "includes.h"

#if !defined(HAVE_STATVFS) || !defined(HAVE_FSTATVFS)

#include <sys/types.h>

#ifdef HAVE_SYS_MOUNT_H
#include <sys/mount.h>
#endif
#ifdef HAVE_SYS_STATFS_H
#include <sys/statfs.h>
#endif
#ifdef
 HAVE_SYS_VFS_H
#include <sys/vfs.h>
#endif

#ifndef HAVE_FSBLKCNT_T
typedef unsigned long fsblkcnt_t;
#endif
#ifndef HAVE_FSFILCNT_T
```

```
typedef unsigned long fsfilcnt_t;
#endif

#ifndef ST_RDONLY
#define ST_RDONLY 1
#endif
#ifndef ST_NOSUID
#define ST_NOSUID 2
#endif

 /* as defined in IEEE Std 1003.1, 2004 Edition */
struct statvfs {
 unsigned long f_bsize; /* File system block size. */
 unsigned long f_frsize; /* Fundamental file system block size. */
 fsblkcnt_t f_blocks; /* Total number of blocks on file system in */
    /* units of f_frsize. */
 fsblkcnt_t    f_bfree; /* Total number of free blocks. */
 fsblkcnt_t    f_bavail; /* Number of free blocks available to  */
    /* non-privileged process.  */
 fsfilcnt_t    f_files; /* Total number of file serial numbers. */
 fsfilcnt_t    f_ffree; /* Total number of free file serial numbers. */
 fsfilcnt_t    f_favail; /* Number of file serial numbers available to */
    /* non-privileged process. */
 unsigned long f_fsid; /*
 File system ID. */
 unsigned long f_flag; /* BBit mask of f_flag values. */
 unsigned long f_namemax;/*  Maximum filename length. */
};
#endif

#ifndef HAVE_STATVFS
int statvfs(const char *, struct statvfs *);
#endif

#ifndef HAVE_FSTATVFS
int fstatvfs(int, struct statvfs *);
#endif
```

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```
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*
* Optimised ANSI C code for the Rijndael cipher (now AES)
*
* @author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>
* @author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>
* @author Paulo Barreto <paulo.barreto@terra.com.br>
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#ifndef _BSD_SIGNAL_H
#define _BSD_SIGNAL_H

#include "includes.h"

#include <signal.h>

#ifndef _NSIG
# ifdef NSIG
#  define _NSIG NSIG
# else
#  define _NSIG 128
# endif
#endif

#if !defined(HAVE_STRSIGNAL)
char
 *strsignal(int);
#endif

#endif /* _BSD_SIGNAL_H */
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* Created: Sat Sep 02 12:17:00 2000 cv
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* This file contains functions for forcing opened file descriptors to
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*/

#ifndef _BSD_CYGWIN_UTIL_H
#define _BSD_CYGWIN_UTIL_H

#ifdef HAVE_CYGWIN

#undef ERROR

/* Avoid including windows headers. */
typedef void *HANDLE;
#define INVALID_HANDLE_VALUE ((HANDLE) -1)
#define DNLEN 16
#define UNLEN 256

/* Cygwin functions for which declarations are only available when including
  windows headers, so we have to define them here explicitly. */
extern HANDLE cygwin_logon_user (const struct passwd *, const char *);
extern void cygwin_set_impersonation_token (const HANDLE);

#include
 <sys/cygwin.h>
#include <io.h>

#define CYGWIN_SSH_PRIVSEP_USER (cygwin_ssh_privsep_user())
const char *cygwin_ssh_privsep_user();

int binary_open(const char *, int , ...);
int check_ntsec(const char *);
char **fetch_windows_environment(void);
void free_windows_environment(char **);
int cygwin_ug_match_pattern_list(const char *, const char *);

#ifndef NO_BINARY_OPEN
#define open binary_open
#endif

#endif /* HAVE_CYGWIN */
```

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#ifndef _NEXT_POSIX_H
#define _NEXT_POSIX_H

#ifdef HAVE_NEXT
#include <sys/dir.h>

/* NGROUPS_MAX is behind -lposix.  Use the BSD version which is NGROUPS */
#undef NGROUPS_MAX
#define NGROUPS_MAX NGROUPS

/* NeXT's readdir() is BSD (struct direct) not POSIX (struct dirent) */
#define dirent direct

/* Swap out NeXT's BSD wait() for a more POSIX compliant one */
pid_t posix_wait(int *);
#define wait(a) posix_wait(a)

/* #ifdef wrapped functions that need defining for clean compiling */
pid_t getppid(void);
void vhangup(void);
```

```
int innetgr(const char *, const char *, const char *, const char *);

/* TERMCAP */
int tcgetattr(int, struct termios *);
int tcsetattr(int, int,
 const struct termios *);
int tcsetpgrp(int, pid_t);
speed_t cfgetospeed(const struct termios *);
speed_t cfgetispeed(const struct termios *);
int cfsetospeed(struct termios *, int);
int cfsetispeed(struct termios *, int);
#endif /* HAVE_NEXT */
#endif /* _NEXT_POSIX_H */
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#ifndef HAVE_SETRESGID
int setresgid(gid_t, gid_t, gid_t);
#endif
#ifndef HAVE_SETRESUID
int setresuid(uid_t, uid_t, uid_t);
#endif
```

1.4425 util-linux 1:2.39.3-9ubuntu6.2

1.4425.1 Available under license :

```
NR START   END SECTORS SIZE NAME UUID
1    32  7679    7648 3.7M      8f8378c0-01
2  7680 16383    8704 4.3M      8f8378c0-02
5  7936 12799    4864 2.4M
6 12544 16127    3584 1.8M
```

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any

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Any executables containing that work also fall under Section 6,
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```

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```
/*
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*/
#ifndef UTIL_LINUX_PT_BSD_H
#define UTIL_LINUX_PT_BSD_H

#define BSD_MAXPARTITIONS 16
#define BSD_FS_UNUSED  0

#ifndef BSD_DISKMAGIC
# define BSD_DISKMAGIC     ((uint32_t) 0x82564557)
#endif

#define BSD_LINUX_BOOTDIR "/usr/ucb/mdec"

#if defined (__alpha__) || defined (__powerpc__) || \
   defined (__ia64__) || defined (__hppa__)
# define BSD_LABELSECTOR   0
# define BSD_LABELOFFSET   64
#else
# define BSD_LABELSECTOR   1
# define BSD_LABELOFFSET   0
#endif

#define BSD_BBSIZE        8192  /* size of boot area, with label */
#define BSD_SBSIZE        8192  /* max size of fs superblock */

struct bsd_disklabel {
 uint32_t d_magic;  /* the magic number */
 int16_t  d_type;   /* drive type */
```

```
int16_t  d_subtype;  /* controller/d_type specific */
char  d_typename[16];  /* type name, e.g. "eagle" */
char  d_packname[16];  /* pack identifier */

  /* disk geometry: */
uint32_t d_secsize;  /*
# of bytes per sector */
uint32_t d_nsectors;  /* # of data sectors per track */
uint32_t d_ntracks;  /* # of tracks per cylinder */
uint32_t d_ncylinders;  /* # of data cylinders per unit */
uint32_t d_secpercyl;  /* # of data sectors per cylinder */
uint32_t d_secperunit;  /* # of data sectors per unit */

/*
 * Spares (bad sector replacements) below
 * are not counted in d_nsectors or d_secpercyl.
 * Spare sectors are assumed to be physical sectors
 * which occupy space at the end of each track and/or cylinder.
 */
uint16_t d_sparespertrack; /* # of spare sectors per track */
uint16_t d_sparespercyl;  /* # of spare sectors per cylinder */

/*
 * Alternate cylinders include maintenance, replacement,
 * configuration description areas, etc.
 */
uint32_t d_acylinders;  /* # of alt. cylinders per unit */

  /* hardware characteristics: */
/*
 * d_interleave, d_trackskew and d_cylskew describe perturbations
 * in the media format used to compensate for a slow
controller.
 * Interleave is physical sector interleave, set up by the formatter
 * or controller when formatting.  When interleaving is in use,
 * logically adjacent sectors are not physically contiguous,
 * but instead are separated by some number of sectors.
 * It is specified as the ratio of physical sectors traversed
 * per logical sector.  Thus an interleave of 1:1 implies contiguous
 * layout, while 2:1 implies that logical sector 0 is separated
 * by one sector from logical sector 1.
 * d_trackskew is the offset of sector 0 on track N
 * relative to sector 0 on track N-1 on the same cylinder.
 * Finally, d_cylskew is the offset of sector 0 on cylinder N
 * relative to sector 0 on cylinder N-1.
 */
uint16_t d_rpm;   /* rotational speed */
uint16_t d_interleave;  /* hardware sector interleave */
```

```
 uint16_t d_trackskew;  /* sector 0 skew, per track */
 uint16_t d_cylskew;  /* sector 0 skew, per cylinder */
 uint32_t d_headswitch;  /* head switch time, usec */
 uint32_t d_trkseek;  /*
 track-to-track seek, usec */
 uint32_t d_flags;  /* generic flags */
 uint32_t d_drivedata[5];  /* drive-type specific information */
 uint32_t d_spare[5];  /* reserved for future use */
 uint32_t d_magic2;  /* the magic number (again) */
 uint16_t d_checksum;  /* xor of data incl. partitions */

   /* filesystem and partition information: */
 uint16_t d_npartitions;        /* number of partitions in following */
 uint32_t d_bbsize;        /* size of boot area at sn0, bytes */
 uint32_t d_sbsize;        /* max size of fs superblock, bytes */

 struct bsd_partition  {  /* the partition table */
  uint32_t p_size;        /* number of sectors in partition */
  uint32_t p_offset;       /* starting sector */
  uint32_t p_fsize;        /* filesystem basic fragment size */
  uint8_t  p_fstype; /* filesystem type, see below */
  uint8_t  p_frag;  /* filesystem fragments per block */
  uint16_t p_cpg;        /* filesystem cylinders per group */
 } __attribute__((packed))
 d_partitions[BSD_MAXPARTITIONS]; /* actually may be more */
} __attribute__((packed));


/* d_type values: */
#define BSD_DTYPE_SMD  1  /* SMD, XSMD; VAX hp/up */
#define BSD_DTYPE_MSCP  2  /* MSCP */
#define BSD_DTYPE_DEC  3  /* other DEC (rk, rl) */
#define BSD_DTYPE_SCSI  4  /* SCSI */
#define BSD_DTYPE_ESDI  5  /* ESDI interface */
#define BSD_DTYPE_ST506  6  /* ST506 etc. */
#define BSD_DTYPE_HPIB  7  /* CS/80 on HP-IB */
#define BSD_DTYPE_HPFL  8  /* HP Fiber-link */
#define BSD_DTYPE_FLOPPY 10  /* floppy */

/* d_subtype values: */
#define BSD_DSTYPE_INDOSPART 0x8  /* is inside dos partition */
#define BSD_DSTYPE_DOSPART(s) ((s) & 3) /* dos partition number */
#define BSD_DSTYPE_GEOMETRY 0x10  /* drive params in label */

/*
* Filesystem type and version.
* Used to interpret other filesystem-specific
* per-partition information.
```

```
*/
#define BSD_FS_UNUSED 0  /* unused */
#define BSD_FS_SWAP     1  /* swap */
#define BSD_FS_V6       2  /* Sixth Edition */
#define BSD_FS_V7
   3  /* Seventh Edition */
#define BSD_FS_SYSV     4  /* System V */
#define BSD_FS_V71K     5  /* V7 with 1K blocks (4.1, 2.9) */
#define BSD_FS_V8       6  /* Eighth Edition, 4K blocks */
#define BSD_FS_BSDFFS 7  /* 4.2BSD fast file system */
#define BSD_FS_BSDLFS 9  /* 4.4BSD log-structured file system */
#define BSD_FS_OTHER 10  /* in use, but unknown/unsupported */
#define BSD_FS_HPFS 11  /* OS/2 high-performance file system */
#define BSD_FS_ISO9660 12  /* ISO-9660 filesystem (cdrom) */
#define BSD_FS_ISOFS BSD_FS_ISO9660
#define BSD_FS_BOOT 13  /* partition contains bootstrap */
#define BSD_FS_ADOS 14  /* AmigaDOS fast file system */
#define BSD_FS_HFS 15  /* Macintosh HFS */
#define BSD_FS_ADVFS 16  /* Digital Unix AdvFS */

/* this is annoying, but it's also the way it is :-( */
#ifdef __alpha__
#define BSD_FS_EXT2 8  /* ext2 file system */
#else
#define BSD_FS_MSDOS 8  /* MS-DOS file system */
#endif

/*
* flags shared by various drives:
*/
#define BSD_D_REMOVABLE 0x01  /*
 removable media */
#define BSD_D_ECC       0x02  /* supports ECC */
#define BSD_D_BADSECT 0x04  /* supports bad sector forw. */
#define BSD_D_RAMDISK 0x08  /* disk emulator */
#define BSD_D_CHAIN     0x10  /* can do back-back transfers */
#define BSD_D_DOSPART 0x20  /* within MSDOS partition */

#endif /* UTIL_LINUX_PT_BSD_H */
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1.4426 audit 1:3.1.2-2.1build1.1

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copy the object code is a network server, the Corresponding Source
may be on a different server (operated by you or a third party)
that supports equivalent copying facilities, provided you maintain
clear directions next to the object code saying where to find the
Corresponding Source. Regardless of what server hosts the
Corresponding Source, you remain obligated to ensure that it is
available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided
you inform other peers where the object code and Corresponding
Source of the work are being offered to the general public at no
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A separable portion of the object code, whose source code is excluded
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```

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```
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This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
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under certain conditions; type `show c' for details.
```

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1.4428 github.com/sigstore/rekor 1.3.10

1.4428.1 Available under license :

Contributing

When contributing to this repository, please first discuss the change you wish
to make via an [issue](https://github.com/sigstore/rekor/issues).

Pull Request Process

1. Create an [issue](https://github.com/sigstore/rekor/issues)
  outlining the fix or feature.
2. Fork the rekor repository to your own github account and clone it locally.
3. Hack on your changes.
4. Update the README.md with details of changes to any interface, this includes new environment
  variables, exposed ports, useful file locations, CLI parameters and
  new or changed configuration values.
5. Correctly format your commit message see [Commit Messages](#Commit Message Guidelines)
  below.
6. Ensure that CI passes, if it fails, fix the failures.
7. Every pull request requires a review from the [core rekor
team](https://github.com/orgs/github.com/sigstore/teams/core-team)
  before merging.
8. If your pull request consists of more than one commit, please squash your
  commits as described in
 [Squash Commits](#Squash Commits)

Commit Message Guidelines

We follow the commit formatting recommendations found on [Chris Beams' How to Write a Git Commit Message
article]((https://chris.beams.io/posts/git-commit/).

Well formed commit messages not only help reviewers understand the nature of
the Pull Request, but also assists the release process where commit messages
are used to generate release notes.

A good example of a commit message would be as follows:

```
Summarize changes in around 50 characters or less

More detailed explanatory text, if necessary. Wrap it to about 72
characters or so. In some contexts, the first line is treated as the
subject of the commit and the rest of the text as the body. The
blank line separating the summary from the body is critical (unless
you omit the body entirely); various tools like `log`, `shortlog`
and `rebase` can get confused if you run the two together.

Explain the problem that this commit is solving. Focus on why you
are making this
 change as opposed to how (the code explains that).
Are there side effects or other unintuitive consequences of this
change? Here's the place to explain them.

Further paragraphs come after blank lines.

- Bullet points are okay, too

- Typically a hyphen or asterisk is used for the bullet, preceded
  by a single space, with blank lines in between, but conventions
  vary here

If you use an issue tracker, put references to them at the bottom,
like this:

Resolves: #123
See also: #456, #789
```

Note the `Resolves #123` tag, this references the issue raised and allows us to
ensure issues are associated and closed when a pull request is merged.

Please refer to [the github help page on message types](https://help.github.com/articles/closing-issues-using-keywords/)
for a complete list of issue references.

Squash Commits

Should your pull request consist of more than one commit (perhaps due to
a change being requested during the review cycle), please perform a git squash
once a reviewer
 has approved your pull request.

A squash can be performed as follows. Let's say you have the following commits:

```
  initial commit
```

```
second commit
final commit
```

Run the command below with the number set to the total commits you wish to squash (in our case 3 commits):

```
git rebase -i HEAD~3
```

You default text editor will then open up and you will see the following::

```
pick eb36612 initial commit
pick 9ac8968 second commit
pick a760569 final commit

# Rebase eb1429f..a760569 onto eb1429f (3 commands)
```

We want to rebase on top of our first commit, so we change the other two commits to `squash`:

```
pick eb36612 initial commit
squash 9ac8968 second commit
squash a760569 final commit
```

After this, should you wish to update your commit message to better summarise all of your pull request, run:

```
git commit --amend
```

You will then need to force push (assuming your initial commit(s) were posted to github):

```
git push origin your-branch --force
```

Alternatively,
a core member can squash your commits within Github.

DCO Signoff

Make sure to sign the [Developer Certificate of Origin](https://git-scm.com/docs/git-commit#Documentation/git-commit.txt---signoff).

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1.4429 prometheus-client 1.22.0

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1.4430 github.com/containerd/containerd/api 1.9.0

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Go support for Protocol Buffers - Google's data interchange format

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1.4431 golang 1.24.3

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package copyright

import (
 "bytes"
 "internal/testenv"
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
```

```
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
   return filepath.SkipDir
  }
  switch filepath.Ext(d.Name()) {
  default:
   return nil
  case ".s", ".go":
   // check
  }

  f, err := os.Open(path)
  if err != nil {
   t.Error(err)
   return nil
  }
  defer f.Close()
  n, err := f.Read(buf)
  if err != nil && err != io.EOF {
   t.Error(err)
   return nil
  }
  b := buf[:n]
  if bytes.Contains(b, copyright) {
   return nil
  }
  for _, ok := range permitted {
   if bytes.HasPrefix(b, ok) {
    return nil
   }
  }
  t.Errorf("%s: missing copyright notice", path)
  return nil
 })
```

}
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1.4434 k8s-io-client-go 0.33.1

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1.4435 k8s-io-apimachinery 0.33.1

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1.4436 github.com/rubenv/sql-migrate 1.8.0

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1.4437 gosqlite 1.14.28

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1.4438 go-fsnotify-fsnotify 1.4.7

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1.4439 googlecloudgoiam 1.4.1

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//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
```

```
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
```

```
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.GetLicensePoolRequest{
 // TODO: Fill request struct fields.
 //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
}
resp, err := c.GetLicensePool(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseManagementClient_Unassign() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := procurement.NewLicenseManagementClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &procurementpb.UnassignRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
}
resp,
err := c.Unassign(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
```

```
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
```

```
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
```

```
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
```

```
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
```

```
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
```

```
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
```

```
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
```

```
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}
```

```
// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string
```

```
 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
```

```
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
```

```
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
```

```
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
```

```
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
```

```
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
```

```
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
```

```
 resp := &computepb.LicensesListResponse{}
 if pageToken != "" {
  req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32
{
  req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
  req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers
```

```
  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
```

```
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }
```

```
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     http://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
```

```
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
```

```
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
```

```
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
```

```
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
```

```
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
```

```
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54,
 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
```

```
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
```

```
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
```

```
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
```

```
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
```

```
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
```

```
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
```

```
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
     connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
```

```
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
```

```
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
```

```
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
```

```
"UpdateLicensePool")
 return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}
```

```
func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()
```

```
 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
```

```
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())
```

```
 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(),
bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
  req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
  req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
  return nil, "", err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
```

```
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
```

```
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
```

```
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb
```

```
import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)
```

```
func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
```

```
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":           1,
  "WRITER":          2,
  "READER":          3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
```

```
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}
```

```
func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
```

File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

```
var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
```

```
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
```

```
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
```

```
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
```

```
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
```

```
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
```

```
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
```

```
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
```

```
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
```

```
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
```

```
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
```

```
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
```

```
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
```

```
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
```

0x62, 0x75, 0x66, 0x2f, 0x64,
0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73,
0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73,
0x73,
0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x2e,
0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79,
0x70, 0x65, 0x48, 0x00, 0x52, 0x12, 0x61, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x1a, 0x16, 0x0a, 0x14, 0x4d, 0x61, 0x6e, 0x75,
0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65,
0x1a, 0x66, 0x0a, 0x12, 0x41, 0x75, 0x74, 0x6f, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x50, 0x0a, 0x14, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69,
0x76, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x74, 0x74, 0x6c, 0x18, 0x01,
0x20, 0x01, 0x28, 0x0b, 0x32, 0x19, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72,
0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x44, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x42,
0x03, 0xe0, 0x41, 0x01,
0x52, 0x12, 0x69, 0x6e, 0x61, 0x63, 0x74, 0x69, 0x76, 0x65, 0x4c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x54, 0x74, 0x6c, 0x42, 0x11, 0x0a, 0x0f, 0x61, 0x73, 0x73, 0x69,
0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x22, 0xbe, 0x03, 0x0a, 0x0b,
0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x17, 0x0a, 0x04, 0x6e,
0x61, 0x6d, 0x65, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x86, 0x01, 0x0a, 0x1b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x5f, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x63, 0x6f, 0x6c, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x41, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72,
0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63,
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x42, 0x03, 0xe0,

0x41, 0x02, 0x52, 0x19, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67,
0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x3b, 0x0a,
0x17, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x5f, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x18, 0x03, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x15, 0x61, 0x76, 0x61, 0x69, 0x6c, 0x61, 0x62, 0x6c, 0x65, 0x4c, 0x69,
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0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x58, 0xda, 0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x3f,
0x3a, 0x01, 0x2a, 0x22, 0x3a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74,
0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73,
0x2f, 0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12,
0xe7, 0x01, 0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3f, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61,

0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73, 0x70,
0x6f, 0x6e, 0x73, 0x65, 0x22, 0x5a, 0xda,
0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d,
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0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67,
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0x3a, 0x75, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x92, 0x02, 0x0a, 0x16, 0x45, 0x6e,
0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55,
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0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d,
0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f,
0x2a, 0x2f, 0x6f,
0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74,
0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63,
0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65,
0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63,
0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77,
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0x6f, 0x72, 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
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0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
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0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,

```
 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
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 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
```

```
                    // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),          // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                   // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                     // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
```

```
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
```

```
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
```

```
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
```

```
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}
```

```
func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
```

```
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
```

```
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook
```

```
// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
```

```
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string
```

```
 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}
```

```
//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

1.4440 @npmcli/package-json 6.2.0

1.4440.1 Available under license :

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1.4441 @npmcli/run-script 9.1.0

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1.4442 hosted-git-info 8.1.0

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1.4443 npmcli-git 6.0.3

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1.4444 github.com/sony/gobreaker/v2 2.1.0

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1.4445 googlecloudgostorage 1.51.0

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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]

package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "google.golang.org/api/iterator"
)
```

```
func main() {
 ctx := context.Background()
 // This snippet
 has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 it := c.ListUserLicenses(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove
 this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
 }
}

// [END discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
```

```
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
```

```
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
```

```
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions
```

```
 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}
```

```
// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
```

```
func NewLicenseManagementRESTClient(ctx context.Context,
 opts ...option.ClientOption) (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
```

```
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 },
 opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
```

```
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient)
 Assign(ctx context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption)
(*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
```

```
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts
 =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)], opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(),
 nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
```

```
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
```

```
 hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx
 context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func
 (c *licenseManagementRESTClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial:
 true, DiscardUnknown: true}
 resp := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
```

```
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err :=
 m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path
= settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
```

```
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// GetOperation is a utility method from
 google.longrunning.Operations.
func (c *licenseManagementRESTClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
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//     https://www.apache.org/licenses/LICENSE-2.0
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"
```

```
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete             []gax.CallOption
 Get                []gax.CallOption
 GetIamPolicy       []gax.CallOption
 Insert             []gax.CallOption
 List               []gax.CallOption
 SetIamPolicy       []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update             []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier:
 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
```

```
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
  Update: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
```

```
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed
 on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
```

```
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req
 *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the
 specified project. This method does not get any licenses that belong to other projects, including licenses attached to
publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to
make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
```

```
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
 licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:
```

```
  internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application in
//
 the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
```

```
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
```

```
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
```

```
{
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
```

```
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if
 settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
```

```
}

baseUrl, err := url.Parse(c.endpoint)
if
err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err
:= http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
```

```
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for
 use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter",
fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
```

```
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header
= headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
```

```
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace
 images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
```

```
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
 context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
```

```
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Update(ctx context.Context,
 req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}
if req != nil && req.UpdateMask != nil {
 params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds,
"Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
```

```
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return
op, nil
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
```

```
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
```

```
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
```

```
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
```

```
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
```

License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
```

```
}

// TestIamPermissions returns permissions that a
 caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds =
 append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
```

```
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
```

```
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface
 {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
```

```
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return
 c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}
```

```
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
```

```
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}
```

```
 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that
 a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
```

```
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
```

```
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
```

```
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
```

```
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
```

```
 return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
```

```
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
```

```
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
```

```
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/discoveryengine/v1/user_license_service.proto

package discoveryenginepb

import (
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 status "google.golang.org/genproto/googleapis/rpc/status"
 grpc
 "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status1 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
```

```
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Request message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type ListUserLicensesRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The parent [UserStore][] resource name,
 format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. Requested page size. Server may return fewer items than
 // requested. If unspecified, defaults to 10. The maximum value is 50; values
 // above 50 will be coerced to 50.
 //
 // If this field is negative, an INVALID_ARGUMENT error is returned.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3" json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `ListUserLicenses` call.
 // Provide this to retrieve the subsequent page.
 //
 // When paginating, all other parameters provided to `ListUserLicenses`
 // must match the call that provided the page token.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
 // Optional. Filter for the list request.
 //
 // Supported fields:
 //
 // * `license_assignment_state`
 //
 //
 Examples:
 //
 // * `license_assignment_state = ASSIGNED` to list assigned user licenses.
 // * `license_assignment_state = NO_LICENSE` to list not licensed users.
 // * `license_assignment_state = NO_LICENSE_ATTEMPTED_LOGIN` to list users
```

```
 // who attempted login but no license assigned.
 // * `license_assignment_state != NO_LICENSE_ATTEMPTED_LOGIN` to filter
 // out users who attempted login but no license assigned.
 Filter string `protobuf:"bytes,4,opt,name=filter,proto3" json:"filter,omitempty"`
}

func (x *ListUserLicensesRequest) Reset() {
 *x = ListUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*ListUserLicensesRequest) ProtoMessage() {}

func (x *ListUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*ListUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{0}
}

func (x *ListUserLicensesRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *ListUserLicensesRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
```

```
 return 0
}

func (x *ListUserLicensesRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

func (x *ListUserLicensesRequest) GetFilter() string {
 if x != nil {
  return x.Filter
 }
 return ""
}

// Response message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type
 ListUserLicensesResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // All the customer's
 // [UserLicense][google.cloud.discoveryengine.v1.UserLicense]s.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // A token, which can be sent as `page_token` to retrieve the next page. If
 // this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *ListUserLicensesResponse) Reset() {
 *x = ListUserLicensesResponse{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func
```

```
 (*ListUserLicensesResponse) ProtoMessage() {}

func (x *ListUserLicensesResponse) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*ListUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{1}
}

func (x *ListUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
 return nil
}

func (x *ListUserLicensesResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Request message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
//
 method.
type BatchUpdateUserLicensesRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The source of the input.
 //
 // Types that are assignable to Source:
 //
```

```
 // *BatchUpdateUserLicensesRequest_InlineSource_
 Source isBatchUpdateUserLicensesRequest_Source `protobuf_oneof:"source"`
 // Required. The parent [UserStore][] resource name, format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. If true, if user licenses removed associated license config, the
 // user license will be deleted. By default which is false, the user license
 // will be updated to unassigned state.
 DeleteUnassignedUserLicenses bool
`protobuf:"varint,4,opt,name=delete_unassigned_user_licenses,json=deleteUnassignedUserLicenses,proto3"
json:"delete_unassigned_user_licenses,omitempty"`
}

func
 (x *BatchUpdateUserLicensesRequest) Reset() {
 *x = BatchUpdateUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest) ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(),
 []int{2}
}

func (m *BatchUpdateUserLicensesRequest) GetSource() isBatchUpdateUserLicensesRequest_Source {
 if m != nil {
  return m.Source
```

```
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetInlineSource() *BatchUpdateUserLicensesRequest_InlineSource {
 if x, ok := x.GetSource().(*BatchUpdateUserLicensesRequest_InlineSource_); ok {
  return x.InlineSource
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *BatchUpdateUserLicensesRequest) GetDeleteUnassignedUserLicenses() bool {
 if x != nil {
  return x.DeleteUnassignedUserLicenses
 }
 return false
}

type isBatchUpdateUserLicensesRequest_Source interface {
 isBatchUpdateUserLicensesRequest_Source()
}

type BatchUpdateUserLicensesRequest_InlineSource_ struct {
 // The inline source for the input content for document embeddings.
 InlineSource *BatchUpdateUserLicensesRequest_InlineSource
`protobuf:"bytes,2,opt,name=inline_source,json=inlineSource,proto3,oneof"`
}

func
 (*BatchUpdateUserLicensesRequest_InlineSource_) isBatchUpdateUserLicensesRequest_Source() {}

// Metadata related to the progress of the
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// operation. This will be returned by the google.longrunning.Operation.metadata
// field.
type BatchUpdateUserLicensesMetadata struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // Operation create time.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,1,opt,name=create_time,json=createTime,proto3"
json:"create_time,omitempty"`
 // Operation last update time. If the operation is done, this is also the
 // finish time.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=update_time,json=updateTime,proto3"
json:"update_time,omitempty"`
 // Count of user licenses successfully updated.
 SuccessCount
 int64 `protobuf:"varint,3,opt,name=success_count,json=successCount,proto3" json:"success_count,omitempty"`
 // Count of user licenses that failed to be updated.
 FailureCount int64 `protobuf:"varint,4,opt,name=failure_count,json=failureCount,proto3"
json:"failure_count,omitempty"`
}

func (x *BatchUpdateUserLicensesMetadata) Reset() {
 *x = BatchUpdateUserLicensesMetadata{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesMetadata) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesMetadata) ProtoMessage() {}

func (x *BatchUpdateUserLicensesMetadata) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return
 ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesMetadata.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesMetadata) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{3}
}

func (x *BatchUpdateUserLicensesMetadata) GetCreateTime() *timestamppb.Timestamp {
```

```
 if x != nil {
  return x.CreateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.UpdateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetSuccessCount() int64 {
 if x != nil {
  return x.SuccessCount
 }
 return 0
}

func (x *BatchUpdateUserLicensesMetadata) GetFailureCount() int64 {
 if x != nil {
  return x.FailureCount
 }
 return 0
}

// Response message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// method.
type
 BatchUpdateUserLicensesResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // UserLicenses successfully updated.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // A sample of errors encountered while processing the request.
 ErrorSamples []*status.Status `protobuf:"bytes,2,rep,name=error_samples,json=errorSamples,proto3"
json:"error_samples,omitempty"`
}

func (x *BatchUpdateUserLicensesResponse) Reset() {
 *x = BatchUpdateUserLicensesResponse{}
```

```
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesResponse) ProtoMessage() {}

func (x *BatchUpdateUserLicensesResponse) ProtoReflect()
 protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{4}
}

func (x *BatchUpdateUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
 return nil
}

func (x *BatchUpdateUserLicensesResponse) GetErrorSamples() []*status.Status {
 if x != nil {
  return x.ErrorSamples
 }
 return nil
}

// The inline source for the input config for BatchUpdateUserLicenses
// method.
type BatchUpdateUserLicensesRequest_InlineSource struct {
 state         protoimpl.MessageState
 sizeCache
```

```
    protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. A list of user licenses to update. Each user license
 // must have a valid
 // [UserLicense.user_principal][google.cloud.discoveryengine.v1.UserLicense.user_principal].
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // Optional. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) Reset() {
 *x = BatchUpdateUserLicensesRequest_InlineSource{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest_InlineSource)
 ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest_InlineSource) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest_InlineSource.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest_InlineSource) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{2, 0}
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
```

```
 return nil
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_service_proto
 protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = []byte{
 0x0a, 0x3a, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x73,
 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f,
 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1c, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f, 0x74, 0x61,
 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x1a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x6c, 0x6f, 0x6e,
 0x67, 0x72, 0x75, 0x6e, 0x6e, 0x69, 0x6e, 0x67, 0x2f, 0x6f, 0x70, 0x65, 0x72, 0x61, 0x74, 0x69,
 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64,
 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d,
 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x72, 0x70, 0x63, 0x2f, 0x73, 0x74, 0x61, 0x74, 0x75, 0x73, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc6, 0x01, 0x0a, 0x17, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73,
 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73,
 0x74, 0x12, 0x48, 0x0a, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x18, 0x01, 0x20, 0x01, 0x28,
 0x09, 0x42, 0x30, 0xe0, 0x41, 0x02, 0xfa, 0x41, 0x2a, 0x0a, 0x28, 0x64, 0x69, 0x73, 0x63, 0x6f,
 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f,
 0x6d, 0x2f, 0x55, 0x73, 0x65, 0x72, 0x53, 0x74,
 0x6f, 0x72, 0x65, 0x52, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x12, 0x20, 0x0a, 0x09, 0x70,
```

0x61, 0x67, 0x65, 0x5f, 0x73, 0x69, 0x7a, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
0xe0, 0x41, 0x01, 0x52, 0x08, 0x70, 0x61, 0x67, 0x65, 0x53, 0x69, 0x7a, 0x65, 0x12, 0x22, 0x0a,
0x0a, 0x70, 0x61, 0x67, 0x65, 0x5f, 0x74, 0x6f, 0x6b, 0x65, 0x6e, 0x18, 0x03, 0x20, 0x01, 0x28,
0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x09, 0x70, 0x61, 0x67, 0x65, 0x54, 0x6f, 0x6b, 0x65,
0x6e, 0x12, 0x1b, 0x0a, 0x06, 0x66, 0x69, 0x6c, 0x74, 0x65, 0x72, 0x18, 0x04, 0x20, 0x01, 0x28,
0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x06, 0x66, 0x69, 0x6c, 0x74, 0x65, 0x72, 0x22, 0x95,
0x01, 0x0a, 0x18, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73, 0x65, 0x12, 0x51, 0x0a, 0x0d, 0x75,
0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x18,
0x01, 0x20, 0x03,
0x28, 0x0b, 0x32, 0x2c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e,
0x65, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x52, 0x0c, 0x75, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x12, 0x26,
0x0a, 0x0f, 0x6e, 0x65, 0x78, 0x74, 0x5f, 0x70, 0x61, 0x67, 0x65, 0x5f, 0x74, 0x6f, 0x6b, 0x65,
0x6e, 0x18, 0x02, 0x20, 0x01, 0x28, 0x09, 0x52, 0x0d, 0x6e, 0x65, 0x78, 0x74, 0x50, 0x61, 0x67,
0x65, 0x54, 0x6f, 0x6b, 0x65, 0x6e, 0x22, 0xe0, 0x03, 0x0a, 0x1e, 0x42, 0x61, 0x74, 0x63, 0x68,
0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73,
0x65, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x12, 0x73, 0x0a, 0x0d, 0x69, 0x6e, 0x6c,
0x69, 0x6e, 0x65, 0x5f, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b,
0x32, 0x4c,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e,
0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e,
0x76, 0x31, 0x2e, 0x42, 0x61, 0x74, 0x63, 0x68, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x55, 0x73,
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0x74, 0x6f, 0x33,
}

```
var (
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc
)

func
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce.Do(func() {
  file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 6)
var file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = []any{
 (*ListUserLicensesRequest)(nil),                    // 0: google.cloud.discoveryengine.v1.ListUserLicensesRequest
 (*ListUserLicensesResponse)(nil),                   // 1: google.cloud.discoveryengine.v1.ListUserLicensesResponse
 (*BatchUpdateUserLicensesRequest)(nil),             // 2:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 (*BatchUpdateUserLicensesMetadata)(nil),
            // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata
 (*BatchUpdateUserLicensesResponse)(nil),            // 4:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse
 (*BatchUpdateUserLicensesRequest_InlineSource)(nil), // 5:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 (*UserLicense)(nil),                                // 6: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil),                      // 7: google.protobuf.Timestamp
 (*status.Status)(nil),                              // 8: google.rpc.Status
 (*fieldmaskpb.FieldMask)(nil),                      // 9: google.protobuf.FieldMask
 (*longrunningpb.Operation)(nil),                    // 10: google.longrunning.Operation
}
var file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = []int32{
 6,  // 0: google.cloud.discoveryengine.v1.ListUserLicensesResponse.user_licenses:type_name
 -> google.cloud.discoveryengine.v1.UserLicense
 5,  // 1: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.inline_source:type_name ->
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 7,  // 2: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.create_time:type_name ->
google.protobuf.Timestamp
 7,  // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.update_time:type_name ->
google.protobuf.Timestamp
 6,  // 4: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.user_licenses:type_name ->
google.cloud.discoveryengine.v1.UserLicense
 8,  // 5: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.error_samples:type_name ->
google.rpc.Status
```

```
 6,  // 6: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.user_licenses:type_name -
> google.cloud.discoveryengine.v1.UserLicense
 9,  // 7: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.update_mask:type_name
 -> google.protobuf.FieldMask
 0,  // 8: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:input_type ->
google.cloud.discoveryengine.v1.ListUserLicensesRequest
 2,  // 9: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:input_type ->
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 1,  // 10: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:output_type ->
google.cloud.discoveryengine.v1.ListUserLicensesResponse
 10, // 11: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:output_type ->
google.longrunning.Operation
 10, // [10:12] is the sub-list for method output_type
 8,  // [8:10] is the sub-list for method input_type
 8,  // [8:8] is the sub-list for extension type_name
 8,  // [8:8] is the sub-list for extension extendee
 0,  // [0:8] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_service_proto_init()
 }
func file_google_cloud_discoveryengine_v1_user_license_service_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_service_proto != nil {
  return
 }
 file_google_cloud_discoveryengine_v1_user_license_proto_init()
 file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2].OneofWrappers = []any{
  (*BatchUpdateUserLicensesRequest_InlineSource_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   6,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:           file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes,
  DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs,
  MessageInfos:      file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes,
 }.Build()
 File_google_cloud_discoveryengine_v1_user_license_service_proto
 = out.File
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc = nil
 file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = nil
 file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = nil
```

```
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// UserLicenseServiceClient is the client API for UserLicenseService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type UserLicenseServiceClient interface {
 // Lists the User Licenses.
 ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest,
 opts ...grpc.CallOption) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(ctx context.Context, in *BatchUpdateUserLicensesRequest, opts ...grpc.CallOption)
(*longrunningpb.Operation, error)
}

type userLicenseServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewUserLicenseServiceClient(cc grpc.ClientConnInterface) UserLicenseServiceClient {
 return &userLicenseServiceClient{cc}
}

func (c *userLicenseServiceClient) ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest, opts
...grpc.CallOption) (*ListUserLicensesResponse, error) {
 out := new(ListUserLicensesResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *userLicenseServiceClient) BatchUpdateUserLicenses(ctx context.Context, in
*BatchUpdateUserLicensesRequest,
 opts ...grpc.CallOption) (*longrunningpb.Operation, error) {
 out := new(longrunningpb.Operation)
 err := c.cc.Invoke(ctx, "/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses", in, out,
opts...)
```

```
 if err != nil {
  return nil, err
 }
 return out, nil
}

// UserLicenseServiceServer is the server API for UserLicenseService service.
type UserLicenseServiceServer interface {
 // Lists the User Licenses.
 ListUserLicenses(context.Context, *ListUserLicensesRequest) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(context.Context, *BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error)
}

// UnimplementedUserLicenseServiceServer can be embedded to have forward compatible implementations.
type UnimplementedUserLicenseServiceServer struct {
}

func (*UnimplementedUserLicenseServiceServer) ListUserLicenses(context.Context, *ListUserLicensesRequest)
 (*ListUserLicensesResponse, error) {
 return nil, status1.Errorf(codes.Unimplemented, "method ListUserLicenses not implemented")
}
func (*UnimplementedUserLicenseServiceServer) BatchUpdateUserLicenses(context.Context,
*BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error) {
 return nil, status1.Errorf(codes.Unimplemented, "method BatchUpdateUserLicenses not implemented")
}

func RegisterUserLicenseServiceServer(s *grpc.Server, srv UserLicenseServiceServer) {
 s.RegisterService(&_UserLicenseService_serviceDesc, srv)
}

func _UserLicenseService_ListUserLicenses_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(ListUserLicensesRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, req.(*ListUserLicensesRequest))
```

```
 }
 return interceptor(ctx, in, info, handler)
}

func _UserLicenseService_BatchUpdateUserLicenses_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(BatchUpdateUserLicensesRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, req.(*BatchUpdateUserLicensesRequest))
 }
 return interceptor(ctx,
 in, info, handler)
}

var _UserLicenseService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.discoveryengine.v1.UserLicenseService",
 HandlerType: (*UserLicenseServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "ListUserLicenses",
   Handler:    _UserLicenseService_ListUserLicenses_Handler,
  },
  {
   MethodName: "BatchUpdateUserLicenses",
   Handler:    _UserLicenseService_BatchUpdateUserLicenses_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/discoveryengine/v1/user_license_service.proto",
}
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```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewUserLicenseClient() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewUserLicenseRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseRESTClient(ctx)
 if
 err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleUserLicenseClient_BatchUpdateUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque
st.
 }
 op, err := c.BatchUpdateUserLicenses(ctx, req)
 if err != nil {
  //
 TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
```

```
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &discoveryenginepb.ListUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
}
it := c.ListUserLicenses(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done
 {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
}
}

func ExampleUserLicenseClient_CancelOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.CancelOperationRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#CancelOperationRequest.
 }
```

```
 err = c.CancelOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleUserLicenseClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp,
 err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListOperations() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.ListOperationsRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
```

```
 }
 it := c.ListOperations(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   //
 TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*longrunningpb.ListOperationsResponse)
 }
}

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```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO:
 Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetLicenseCodeRequest.
 }
```

```
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
```

```
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/discoveryengine/v1/user_license.proto

package discoveryenginepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect
 "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// License assignment state enumeration.
type UserLicense_LicenseAssignmentState int32

const (
```

```
 // Default value.
 UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED UserLicense_LicenseAssignmentState = 0
 // License assigned to the user.
 UserLicense_ASSIGNED UserLicense_LicenseAssignmentState = 1
 // No license assigned to the user.
 // Deprecated, translated to NO_LICENSE.
 UserLicense_UNASSIGNED UserLicense_LicenseAssignmentState = 2
 // No license assigned to the user.
 UserLicense_NO_LICENSE UserLicense_LicenseAssignmentState = 3
 // User attempted to login but no license assigned to the user.
 // This state is only used for no user first time login attempt
 but cannot
 // get license assigned.
 // Users already logged in but cannot get license assigned will be assigned
 // NO_LICENSE state(License could be unassigned by admin).
 UserLicense_NO_LICENSE_ATTEMPTED_LOGIN UserLicense_LicenseAssignmentState = 4
)

// Enum value maps for UserLicense_LicenseAssignmentState.
var (
 UserLicense_LicenseAssignmentState_name = map[int32]string{
  0: "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED",
  1: "ASSIGNED",
  2: "UNASSIGNED",
  3: "NO_LICENSE",
  4: "NO_LICENSE_ATTEMPTED_LOGIN",
 }
 UserLicense_LicenseAssignmentState_value = map[string]int32{
  "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED": 0,
  "ASSIGNED":                             1,
  "UNASSIGNED":                           2,
  "NO_LICENSE":                           3,
  "NO_LICENSE_ATTEMPTED_LOGIN":           4,
 }
)

func (x UserLicense_LicenseAssignmentState) Enum() *UserLicense_LicenseAssignmentState {
 p := new(UserLicense_LicenseAssignmentState)
 *p = x
 return p
}

func (x UserLicense_LicenseAssignmentState)
 String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
 }

func (UserLicense_LicenseAssignmentState) Descriptor() protoreflect.EnumDescriptor {
```

```
 return file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0].Descriptor()
}

func (UserLicense_LicenseAssignmentState) Type() protoreflect.EnumType {
 return &file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0]
}

func (x UserLicense_LicenseAssignmentState) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use UserLicense_LicenseAssignmentState.Descriptor instead.
func (UserLicense_LicenseAssignmentState) EnumDescriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0, 0}
}

// User License information assigned by the admin.
type UserLicense struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 //
 Required. Immutable. The user principal of the User, could be email address
 // or other prinical identifier. This field is immutable. Admin assign
 // licenses based on the user principal.
 UserPrincipal string `protobuf:"bytes,1,opt,name=user_principal,json=userPrincipal,proto3"
json:"user_principal,omitempty"`
 // Optional. The user profile.
 // We user user full name(First name + Last name) as user profile.
 UserProfile string `protobuf:"bytes,3,opt,name=user_profile,json=userProfile,proto3"
json:"user_profile,omitempty"`
 // Output only. License assignment state of the user.
 // If the user is assigned with a license config, the user loggin will be
 // assigned with the license;
 // If the user's license assignment state is unassigned or unspecified, no
 // license config will be associated to the user;
 LicenseAssignmentState UserLicense_LicenseAssignmentState
`protobuf:"varint,4,opt,name=license_assignment_state,json=licenseAssignmentState,proto3,enum=google.cloud.dis
coveryengine.v1.UserLicense_LicenseAssignmentState"
 json:"license_assignment_state,omitempty"`
 // Optional. The full resource name of the Subscription(LicenseConfig)
 // assigned to the user.
 LicenseConfig string `protobuf:"bytes,5,opt,name=license_config,json=licenseConfig,proto3"
json:"license_config,omitempty"`
 // Output only. User created timestamp.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,6,opt,name=create_time,json=createTime,proto3"
json:"create_time,omitempty"`
```

```
 // Output only. User update timestamp.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,7,opt,name=update_time,json=updateTime,proto3"
json:"update_time,omitempty"`
 // Output only. User last logged in time.
 // If the user has not logged in yet, this field will be empty.
 LastLoginTime *timestamppb.Timestamp
`protobuf:"bytes,8,opt,name=last_login_time,json=lastLoginTime,proto3" json:"last_login_time,omitempty"`
}

func (x *UserLicense) Reset() {
 *x = UserLicense{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UserLicense) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UserLicense) ProtoMessage() {}

func (x *UserLicense) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UserLicense.ProtoReflect.Descriptor instead.
func (*UserLicense) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0}
}

func (x *UserLicense) GetUserPrincipal() string {
 if x != nil {
  return x.UserPrincipal
 }
 return ""
}

func (x *UserLicense) GetUserProfile() string {
```

```
 if x != nil {
  return x.UserProfile
 }
 return ""
}

func (x *UserLicense) GetLicenseAssignmentState()
 UserLicense_LicenseAssignmentState {
 if x != nil {
  return x.LicenseAssignmentState
 }
 return UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED
}

func (x *UserLicense) GetLicenseConfig() string {
 if x != nil {
  return x.LicenseConfig
 }
 return ""
}

func (x *UserLicense) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.CreateTime
 }
 return nil
}

func (x *UserLicense) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.UpdateTime
 }
 return nil
}

func (x *UserLicense) GetLastLoginTime() *timestamppb.Timestamp {
 if x != nil {
  return x.LastLoginTime
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_proto protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = []byte{
 0x0a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31,
```

0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f,
0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,
0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,
0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x22, 0xa6, 0x05, 0x0a, 0x0b, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x12, 0x2d, 0x0a, 0x0e,
0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x69, 0x6e, 0x63,
0x69, 0x70, 0x61, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x05, 0xe0,
0x41, 0x02, 0x52, 0x0d, 0x75, 0x73, 0x65, 0x72, 0x50, 0x72, 0x69, 0x6e, 0x63, 0x69, 0x70, 0x61,
0x6c, 0x12, 0x26, 0x0a, 0x0c, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x6f, 0x66, 0x69, 0x6c,
0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x0b, 0x75, 0x73,
0x65, 0x72, 0x50, 0x72, 0x6f, 0x66, 0x69, 0x6c, 0x65, 0x12, 0x82, 0x01, 0x0a, 0x18, 0x6c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74,
0x5f, 0x73, 0x74, 0x61, 0x74, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x43, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63,
0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x2e, 0x55,
0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e,
0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74, 0x61, 0x74,
0x65, 0x42, 0x03, 0xe0, 0x41, 0x03, 0x52, 0x16, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74, 0x61, 0x74, 0x65, 0x12, 0x5b,
0x0a, 0x0e, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x63, 0x6f, 0x6e, 0x66, 0x69, 0x67,
0x18, 0x05, 0x20, 0x01, 0x28, 0x09, 0x42, 0x34, 0xe0, 0x41, 0x01, 0xfa, 0x41, 0x2e, 0x0a, 0x2c,
0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x4c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x6e, 0x66, 0x69, 0x67, 0x52, 0x0d, 0x6c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x6e, 0x66, 0x69, 0x67, 0x12, 0x40, 0x0a, 0x0b, 0x63,
0x72, 0x65, 0x61, 0x74, 0x65, 0x5f, 0x74, 0x69, 0x6d, 0x65, 0x18, 0x06, 0x20, 0x01, 0x28, 0x0b,
0x32,
0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,
0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x42, 0x03, 0xe0, 0x41,
0x03, 0x52, 0x0a, 0x63, 0x72, 0x65, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12, 0x40, 0x0a,
0x0b, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x5f, 0x74, 0x69, 0x6d, 0x65, 0x18, 0x07, 0x20, 0x01,
0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x62, 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x0a, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12,
0x47, 0x0a, 0x0f, 0x6c, 0x61, 0x73, 0x74, 0x5f, 0x6c, 0x6f, 0x67, 0x69, 0x6e, 0x5f, 0x74, 0x69,
0x6d, 0x65, 0x18, 0x08, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73,
0x74, 0x61, 0x6d, 0x70, 0x42,
0x03, 0xe0, 0x41, 0x03, 0x52, 0x0d, 0x6c, 0x61, 0x73, 0x74, 0x4c,
0x6f, 0x67, 0x69, 0x6e, 0x54, 0x69, 0x6d, 0x65, 0x22, 0x90, 0x01, 0x0a, 0x16, 0x4c, 0x69, 0x63,
0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74,

```
 0x61, 0x74, 0x65, 0x12, 0x28, 0x0a, 0x24, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41,
 0x53, 0x53, 0x49, 0x47, 0x4e, 0x4d, 0x45, 0x4e, 0x54, 0x5f, 0x53, 0x54, 0x41, 0x54, 0x45, 0x5f,
 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x0c, 0x0a,
 0x08, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x01, 0x12, 0x0e, 0x0a, 0x0a, 0x55,
 0x4e, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x02, 0x12, 0x0e, 0x0a, 0x0a, 0x4e,
 0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x10, 0x03, 0x12, 0x1e, 0x0a, 0x1a, 0x4e,
 0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41, 0x54, 0x54, 0x45, 0x4d, 0x50,
 0x54, 0x45, 0x44, 0x5f, 0x4c, 0x4f, 0x47, 0x49, 0x4e, 0x10,
 0x04, 0x42, 0x83, 0x02, 0x0a, 0x23,
 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65,
 0x2e, 0x76, 0x31, 0x42, 0x10, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x4d, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x64, 0x69, 0x73,
 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x76, 0x31, 0x2f, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,
 0x6e, 0x65, 0x70, 0x62, 0x3b, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e,
 0x67, 0x69, 0x6e, 0x65, 0x70, 0x62, 0xa2, 0x02, 0x0f, 0x44, 0x49, 0x53, 0x43, 0x4f, 0x56, 0x45,
 0x52, 0x59, 0x45, 0x4e, 0x47, 0x49, 0x4e, 0x45, 0xaa, 0x02, 0x1f, 0x47, 0x6f, 0x6f, 0x67,
 0x6c,
 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x1f, 0x47, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76,
 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x22, 0x47,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69,
 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56,
 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc
)

func file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce.Do(func()
 {
  file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes = make([]protoimpl.EnumInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = []any{
 (UserLicense_LicenseAssignmentState)(0), // 0:
```

```
google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 (*UserLicense)(nil),                    // 1: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil),          // 2: google.protobuf.Timestamp
}
var file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = []int32{
 0, // 0: google.cloud.discoveryengine.v1.UserLicense.license_assignment_state:type_name
 -> google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 2, // 1: google.cloud.discoveryengine.v1.UserLicense.create_time:type_name -> google.protobuf.Timestamp
 2, // 2: google.cloud.discoveryengine.v1.UserLicense.update_time:type_name -> google.protobuf.Timestamp
 2, // 3: google.cloud.discoveryengine.v1.UserLicense.last_login_time:type_name -> google.protobuf.Timestamp
 4, // [4:4] is the sub-list for method output_type
 4, // [4:4] is the sub-list for method input_type
 4, // [4:4] is the sub-list for extension type_name
 4, // [4:4] is the sub-list for extension extendee
 0, // [0:4] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_proto_init() }
func file_google_cloud_discoveryengine_v1_user_license_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_proto != nil {
  return
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc,
   NumEnums:      1,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_cloud_discoveryengine_v1_user_license_proto_goTypes,
  DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs,
  EnumInfos:         file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes,
  MessageInfos:      file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes,
 }.Build()
 File_google_cloud_discoveryengine_v1_user_license_proto = out.File
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = nil
 file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = nil
 file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = nil
}
// Copyright 2025 Google LLC
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```

```
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
```

```
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
```

```
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 //
 It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Insert()
{
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#InsertLicenseRequest.
}
op, err := c.Insert(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}
```

```
func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded
 as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _
 = it.Response.(*computepb.LicensesListResponse)
 }
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
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package discoveryengine

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"
```

```
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "cloud.google.com/go/longrunning"
 lroauto "cloud.google.com/go/longrunning/autogen"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax
 "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/grpc/codes"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newUserLicenseClientHook clientHook

// UserLicenseCallOptions contains the retry settings for each method of UserLicenseClient.
type UserLicenseCallOptions struct {
 ListUserLicenses        []gax.CallOption
 BatchUpdateUserLicenses []gax.CallOption
 CancelOperation         []gax.CallOption
 GetOperation            []gax.CallOption
 ListOperations          []gax.CallOption
}

func defaultUserLicenseGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("discoveryengine.googleapis.com:443"),
  internaloption.WithDefaultEndpointTemplate("discoveryengine.UNIVERSE_DOMAIN:443"),
  internaloption.WithDefaultMTLSEndpoint("discoveryengine.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultUserLicenseCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
  ListUserLicenses:        []gax.CallOption{},
  BatchUpdateUserLicenses: []gax.CallOption{},
```

```
  CancelOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier:
 1.30,
    })
   }),
  },
  GetOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    })
   }),
  },
  ListOperations: []gax.CallOption{
   gax.WithTimeout(300000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        30000 * time.Millisecond,
     Multiplier: 1.30,
    })
   }),
  },
 }
}

func defaultUserLicenseRESTCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
  ListUserLicenses:        []gax.CallOption{},
  BatchUpdateUserLicenses: []gax.CallOption{},
  CancelOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer
```

```
 {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        10000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusServiceUnavailable)
  }),
 },
 GetOperation: []gax.CallOption{
  gax.WithTimeout(30000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        10000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusServiceUnavailable)
  }),
 },
 ListOperations: []gax.CallOption{
  gax.WithTimeout(300000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        30000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusServiceUnavailable)
  }),
 },
}
}

// internalUserLicenseClient is an interface that defines the methods available from Discovery Engine API.
type internalUserLicenseClient
 interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 ListUserLicenses(context.Context, *discoveryenginepb.ListUserLicensesRequest, ...gax.CallOption)
*UserLicenseIterator
 BatchUpdateUserLicenses(context.Context, *discoveryenginepb.BatchUpdateUserLicensesRequest,
...gax.CallOption) (*BatchUpdateUserLicensesOperation, error)
 BatchUpdateUserLicensesOperation(name string) *BatchUpdateUserLicensesOperation
 CancelOperation(context.Context, *longrunningpb.CancelOperationRequest, ...gax.CallOption) error
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
```

```
 ListOperations(context.Context, *longrunningpb.ListOperationsRequest, ...gax.CallOption) *OperationIterator
}

// UserLicenseClient is a client for interacting with Discovery Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing
 User Licenses.
type UserLicenseClient struct {
 // The internal transport-dependent client.
 internalClient internalUserLicenseClient

 // The call options for this service.
 CallOptions *UserLicenseCallOptions

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient *lroauto.OperationsClient
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *UserLicenseClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *UserLicenseClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns
 a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *UserLicenseClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// ListUserLicenses lists the User Licenses.
func (c *UserLicenseClient) ListUserLicenses(ctx context.Context, req
```

```
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 return c.internalClient.ListUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *UserLicenseClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 return c.internalClient.BatchUpdateUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
//
 The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *UserLicenseClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return c.internalClient.BatchUpdateUserLicensesOperation(name)
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest,
opts ...gax.CallOption) error {
 return c.internalClient.CancelOperation(ctx, req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) ListOperations(ctx context.Context,
 req *longrunningpb.ListOperationsRequest, opts ...gax.CallOption) *OperationIterator {
 return c.internalClient.ListOperations(ctx, req, opts...)
}

// userLicenseGRPCClient is a client for interacting with Discovery Engine API over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type userLicenseGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing UserLicenseClient
```

```
 CallOptions **UserLicenseCallOptions

 // The gRPC API client.
 userLicenseClient discoveryenginepb.UserLicenseServiceClient

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 operationsClient longrunningpb.OperationsClient

 // The x-goog-* metadata
 to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewUserLicenseClient creates a new user license service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing User Licenses.
func NewUserLicenseClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := defaultUserLicenseGRPCClientOptions()
 if newUserLicenseClientHook != nil {
  hookOpts, err := newUserLicenseClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := UserLicenseClient{CallOptions: defaultUserLicenseCallOptions()}

 c := &userLicenseGRPCClient{
  connPool:         connPool,
  userLicenseClient: discoveryenginepb.NewUserLicenseServiceClient(connPool),
  CallOptions:
      &client.CallOptions,
  logger:           internaloption.GetLogger(opts),
  operationsClient:  longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()
```

```
 client.internalClient = c

 client.LROClient, err = lroauto.NewOperationsClient(ctx, gtransport.WithConnPool(connPool))
 if err != nil {
  // This error "should not happen", since we are just reusing old connection pool
  // and never actually need to dial.
  // If this does happen, we could leak connp. However, we cannot close conn:
  // If the user invoked the constructor with option.WithGRPCConn,
  // we would close a connection that's still in use.
  // TODO: investigate error conditions.
  return nil, err
 }
 c.LROClient = &client.LROClient
 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *userLicenseGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc", grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type userLicenseRESTClient struct {
 // The http endpoint to connect to.
 endpoint string
```

```
 // The http client.
 httpClient *http.Client

 // LROClient is used internally
 to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing UserLicenseClient
 CallOptions **UserLicenseCallOptions

 logger *slog.Logger
}

// NewUserLicenseRESTClient creates a new user license service rest client.
//
// Service for managing User Licenses.
func NewUserLicenseRESTClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := append(defaultUserLicenseRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultUserLicenseRESTCallOptions()
 c := &userLicenseRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 lroOpts
 := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opClient, err := lroauto.NewOperationsRESTClient(ctx, lroOpts...)
 if err != nil {
  return nil, err
 }
 c.LROClient = &opClient
```

```
 return &UserLicenseClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultUserLicenseRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://discoveryengine.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://discoveryengine.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://discoveryengine.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo
 sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *userLicenseRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *userLicenseGRPCClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest,
 opts ...gax.CallOption) *UserLicenseIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListUserLicenses[0:len((*c.CallOptions).ListUserLicenses):len((*c.CallOptions).ListUser
Licenses)], opts...)
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
  resp := &discoveryenginepb.ListUserLicensesResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx,
 c.userLicenseClient.ListUserLicenses, req, settings.GRPC, c.logger, "ListUserLicenses")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *userLicenseGRPCClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
```

```
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders,
 hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).BatchUpdateUserLicenses[0:len((*c.CallOptions).BatchUpdateUserLicenses):len((*c.Call
Options).BatchUpdateUserLicenses)], opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.userLicenseClient.BatchUpdateUserLicenses, req, settings.GRPC, c.logger,
"BatchUpdateUserLicenses")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return &BatchUpdateUserLicensesOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 }, nil
}

func (c *userLicenseGRPCClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx,
 hds...)
 opts =
append((*c.CallOptions).CancelOperation[0:len((*c.CallOptions).CancelOperation):len((*c.CallOptions).CancelOp
eration)], opts...)
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  _, err = executeRPC(ctx, c.operationsClient.CancelOperation, req, settings.GRPC, c.logger, "CancelOperation")
  return err
 }, opts...)
 return err
}

func (c *userLicenseGRPCClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
```

```
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context,
 settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *userLicenseGRPCClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListOperations[0:len((*c.CallOptions).ListOperations):len((*c.CallOptions).ListOperations
)], opts...)
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
  resp := &longrunningpb.ListOperationsResponse{}
  if pageToken !=
 "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.operationsClient.ListOperations, req, settings.GRPC, c.logger, "ListOperations")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetOperations(), resp.GetNextPageToken(), nil
```

```
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// ListUserLicenses lists the
 User Licenses.
func (c *userLicenseRESTClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
  resp := &discoveryenginepb.ListUserLicensesResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v/userLicenses", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetFilter() != "" {
   params.Add("filter", fmt.Sprintf("%v",
req.GetFilter()))
  }
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
```

```
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListUserLicenses")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response
= resp
 return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
```

```
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *userLicenseRESTClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:batchUpdateUserLicenses", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 buf, err
:= executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "BatchUpdateUserLicenses")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &BatchUpdateUserLicensesOperation{
 lro:      longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:cancel", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery
 = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
```

```
 headers := gax.BuildHeaders(ctx, hds...)
 return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  _, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CancelOperation")
  return err
 }, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption)
 (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET",
```

```
 baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
  resp := &longrunningpb.ListOperationsResponse{}
  if pageToken != "" {
   req.PageToken
 = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v/operations", req.GetName())

  params := url.Values{}
```

```
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path
= settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListOperations")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetOperations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
```

```
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// BatchUpdateUserLicensesOperation returns a new
 BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *userLicenseGRPCClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return &BatchUpdateUserLicensesOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *userLicenseRESTClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &BatchUpdateUserLicensesOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
  pollPath: override,
 }
}
// Copyright 2025 Google LLC
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// limitations under the License.
```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
```

```
//
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update            []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
```

```
return &LicensesCallOptions{
 Delete: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 Get: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier:
1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 GetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
```

```
  gax.WithTimeout(600000
 * time.Millisecond),
  },
  Update: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}
```

```
// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header
 passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context,
 req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available
 in the specified project. This method does not get any licenses that belong to other projects, including licenses
attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this
method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This
```

```
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
 licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
```

```
 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:
     internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}
```

```
// setGoogleClientInfo sets the name and version of the application
 in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for
 use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
```

```
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating
```

```
 Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
 {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
```

```
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err
 := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
 }
 httpReq,
err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
```

```
 if pageSize > math.MaxInt32 {
  req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
  req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter !=
nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return
err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
```

```
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
 TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts
...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
```

```
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
```

```
  return nil, e
 }
 return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
 Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
  params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
```

```
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project:
 req.GetProject(),
  },
 }
 return op, nil
}
// Copyright 2025 Google LLC
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//     http://www.apache.org/licenses/LICENSE-2.0
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
```

```
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
```

```
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
```

```
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
```

```
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}
```

```
var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54, 0x59,
 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
```

```
 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
```

```
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
)

func ExampleUserLicenseClient_ListUserLicenses_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 for resp, err := range c.ListUserLicenses(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

func ExampleUserLicenseClient_ListOperations_all() {
```

```
ctx := context.Background()
//
This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.ListOperationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
}
for resp, err := range c.ListOperations(ctx, req).All() {
 if err != nil {
  // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
 protoreflect
 "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
```

```
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
```

```
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
```

```
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
```

```
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
```

```
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
```

```
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}
```

```
func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
```

```
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}
```

```
func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
```

```
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
```

```
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
```

```
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
```

```
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
```

```
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x64,
 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
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}

var (
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sync.Once
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 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
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file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
        // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
```

```
 (*timestamppb.Timestamp)(nil),                    // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                      // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
```

```
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}
```

```
// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx context.Context,
 in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}
```

```
func
 (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest,
opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
```

```
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest) (*AssignResponse,
 error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
```

```
 if err := dec(in); err != nil
 {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
```

```
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor
 == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
```

```
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName:
 "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]
```

```
package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
)

func main() {
 ctx := context.Background()
 // This snippet has been automatically generated
 and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque
st.
 }
 op, err := c.BatchUpdateUserLicenses(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

// [END discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]
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// you may not use this file except in compliance with the License.
```

```
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically
generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Update() {
```

```
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may
require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.UpdateLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#UpdateLicenseRequest.
}
op, err := c.Update(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}
```

1.4446 grpc-go 1.72.2

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1.4447 google-golang-org-grpc 1.72.2

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1.4448 kubernetes-apiserver-extensions v0.32.3

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1.4460 google-auth 2.40.3

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1.4461 otel 1.36.0

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//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
```

```
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:           []gax.CallOption{},
 }
}
```

```
func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
```

```
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
```

```
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
```

```
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}
```

```
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context,
 opts ...option.ClientOption) (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
```

```
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
```

```
 return err
 },
 opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient)
 Assign(ctx context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption)
(*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
```

```
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts
 =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)], opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
```

```
  resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
  return err
 }, opts...)
 if err != nil {
  return nil, "", err
 }

 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(),
nil
}
fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
```

```
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx
 context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
```

```
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func
 (c *licenseManagementRESTClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
```

```
 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial:
 true, DiscardUnknown: true}
 resp := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err :=
 m.Marshal(req)
 if err != nil {
```

```
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.UnassignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq,
err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
```

```
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
  if req.GetPageToken() != "" {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
  headers := gax.BuildHeaders(ctx, hds...)
  e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   if settings.Path != "" {
    baseUrl.Path
 = settings.Path
   }
   httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
   if err != nil {
```

```
    return err
   }
   httpReq.Header = headers

   buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
   if err != nil {
    return err
   }
   if err := unm.Unmarshal(buf, resp); err != nil {
    return err
   }

   return nil
  }, opts...)
  if e != nil {
   return nil, "", e
  }
  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }

 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// GetOperation is a utility method from
 google.longrunning.Operations.
func (c *licenseManagementRESTClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
```

```
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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```

```
//
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update            []gax.CallOption
}
```

```
func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier:
 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
```

```
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
  Update: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
```

```
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed
 on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req
 *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the
```

specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}
```

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}
```

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}
```

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.

```
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}
```

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.

```
type
 licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string
```

```
 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:
   internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
```

```
 }
}

// setGoogleClientInfo sets the name and version of the application in
//
 the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
```

```
 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}
```

```
// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
 {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
```

```
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if
 settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err
:= http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for
 use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
```

```
 req.PageToken = proto.String(pageToken)
 }
 if pageSize > math.MaxInt32 {
  req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
 } else if pageSize != 0 {
  req.MaxResults = proto.Uint32(uint32(pageSize))
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter",
fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header
= headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
```

```
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace
 images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
 context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
```

```
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
```

```
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Update(ctx context.Context,
 req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
  params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return
 op, nil
}
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```

```
package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
```

```
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
```

```
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 //
TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
}
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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//go:build go1.23

package compute_test
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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
```

```
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
```

```
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
```

```
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}
```

```
// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
```

```
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a
 caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds =
 append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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//     https://www.apache.org/licenses/LICENSE-2.0
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// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
```

```
package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}
```

```
// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface
 {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return
 c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}
```

```
// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
```

```
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
```

```
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v", req.GetProject(), req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that
 a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
```

```
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)
```

```
const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
```

```
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
```

```
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
```

```
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
```

```
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
```

0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
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0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
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0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
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0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,

```
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
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 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}
```

```
func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// you may not use this file except in compliance with the License.
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//     https://www.apache.org/licenses/LICENSE-2.0
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// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
```

```
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 //
 It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetIamPolicyLicenseRequest.
```

```
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded
 as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _
= it.Response.(*computepb.LicensesListResponse)
}
}

func ExampleLicensesClient_SetIamPolicy() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
```

```
 // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
  // TODO: Fill request struct fields.
```

```
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
```

```
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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```

```
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package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update            []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
```

```
 Get: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier:
1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 GetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000
* time.Millisecond),
 },
 Update: []gax.CallOption{
```

```
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header
 passed on each request. Intended for
// use by Google-written clients.
```

```
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context,
 req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available
 in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
```

```
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
 licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
```

```
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:
      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application
 in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
```

```
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for
 use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
 {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
```

```
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err
 := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
```

```
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter !=
nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return
err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
 TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts
...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
 Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }
 if req != nil && req.UpdateMask != nil {
  params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project:
 req.GetProject(),
  },
 }
 return op, nil
}
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
```

```
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
```

```
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
```

```
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
```

```
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
```

```
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor
```

```
var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
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 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
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 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
```

```
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
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 0x6f, 0x6c, 0x65, 0x42,
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 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
```

```
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
 protoreflect
 "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
```

```
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
```

```
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}
```

```
// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}
```

```
func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}
```

```
func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
```

```
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}
```

```
// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
```

```
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
```

```
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
```

```
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}
```

```
func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}
```

```
func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
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0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76, 0x69, 0x63,
0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x63, 0x6f,
0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2f,
0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70, 0x69, 0x76,
0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0x3b,
0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa, 0x02, 0x2d,

```
 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x2e,
 0x43, 0x6f, 0x6d,
 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x50,
 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x2d,
 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43, 0x6f, 0x6d,
 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x5c, 0x50,
 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x32,
 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x3a, 0x3a,
 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
        // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                    // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
```

```
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),        // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                 // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                 // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                   // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
```

```
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
```

```
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx context.Context,
 in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
```

```
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func
 (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest,
opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
```

```
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest) (*AssignResponse,
 error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
```

```
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in); err != nil
 {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
```

```
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor
 == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
```

```
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName:
 "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
```

```
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.GetLicenseCodeRequest{
  // TODO:
 Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Insert()
{
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
}
op, err := c.Insert(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}
```

```
func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may
```

```
require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.UpdateLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#UpdateLicenseRequest.
}
op, err := c.Update(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}
```

1.4463 google.golang.org/genproto/googleapis/rpc 0.0.0-20250603155806-513f23925822

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1.4464 go.opentelemetry.io/otel/trace 1.36.0

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1.4465 google-cloud-go-auth 0.16.2

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// [START discoveryengine_v1_generated_UserLicenseService_ListUserLicenses_sync]

package main
```

```
import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "google.golang.org/api/iterator"
)

func main() {
 ctx := context.Background()
 // This snippet
 has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 it := c.ListUserLicenses(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove
 this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
 }
}
```

```
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 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool        []gax.CallOption
 UpdateLicensePool      []gax.CallOption
```

```
 Assign                []gax.CallOption
 Unassign              []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation          []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
```

```
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
```

```
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
```

```
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
```

```
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
```

```
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context,
 opts ...option.ClientOption) (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
```

```
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 },
 opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient)
 Assign(ctx context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption)
(*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 var err error
 resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
 return err
}, opts...)
if err != nil {
 return nil, err
}
return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts
 =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)], opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(),
 nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
```

```
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
```

```
 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx
 context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
```

```
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
```

```
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Assign assigns a license to a user.
func
 (c *licenseManagementRESTClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial:
 true, DiscardUnknown: true}
 resp := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
jsonReq, err :=
m.Marshal(req)
if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
```

```
pageToken != "" {
 req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
  req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path
= settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
```

```
  }, opts...)
  if e != nil {
   return nil, "", e
  }
  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }

 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// GetOperation is a utility method from
 google.longrunning.Operations.
func (c *licenseManagementRESTClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
```

```
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute
```

```
import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update            []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier:
```

```
 1.30,
    },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 GetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
    },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
    },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000
* time.Millisecond),
 },
 Update: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
```

```
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed
 on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
```

```
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req
 *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the
 specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return
```

```
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
 licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
```

```
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:
   internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application in
//
 the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}
```

```
// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
 {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy",
 req.GetProject(), req.GetResource())

 params := url.Values{}
```

```
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if
 settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
```

party partners who are creating Cloud Marketplace images.

```
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err
 := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
  if err != nil {
   return err
```

```
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for
 use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
```

```
 if req != nil && req.Filter != nil {
  params.Add("filter",
fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header
= headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
```

```
 }

 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace
 images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx
 context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Update(ctx context.Context,
 req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
```

```
if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}
if req != nil && req.UpdateMask != nil {
 params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds,
"Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
```

```
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return
op, nil
}
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// Code generated by protoc-gen-go-grpc. DO NOT EDIT.
// versions:
// - protoc-gen-go-grpc v1.3.0
// - protoc             v4.25.7
// source: google/cloud/discoveryengine/v1/user_license_service.proto

package discoveryenginepb

import (
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 context "context"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
)
```

```
//
 This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
// Requires gRPC-Go v1.32.0 or later.
const _ = grpc.SupportPackageIsVersion7

const (
 UserLicenseService_ListUserLicenses_FullMethodName        =
"/google.cloud.discoveryengine.v1.UserLicenseService/ListUserLicenses"
 UserLicenseService_BatchUpdateUserLicenses_FullMethodName =
"/google.cloud.discoveryengine.v1.UserLicenseService/BatchUpdateUserLicenses"
)

// UserLicenseServiceClient is the client API for UserLicenseService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://pkg.go.dev/google.golang.org/grpc/?tab=doc#ClientConn.NewStream.
type UserLicenseServiceClient interface {
 // Lists the User Licenses.
 ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest, opts ...grpc.CallOption)
(*ListUserLicensesResponse, error)
 // Updates the User License.
 // This
 method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(ctx context.Context, in *BatchUpdateUserLicensesRequest, opts ...grpc.CallOption)
(*longrunningpb.Operation, error)
}

type userLicenseServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewUserLicenseServiceClient(cc grpc.ClientConnInterface) UserLicenseServiceClient {
 return &userLicenseServiceClient{cc}
}

func (c *userLicenseServiceClient) ListUserLicenses(ctx context.Context, in *ListUserLicensesRequest, opts
...grpc.CallOption) (*ListUserLicensesResponse, error) {
 out := new(ListUserLicensesResponse)
 err := c.cc.Invoke(ctx, UserLicenseService_ListUserLicenses_FullMethodName, in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *userLicenseServiceClient) BatchUpdateUserLicenses(ctx context.Context, in
*BatchUpdateUserLicensesRequest, opts ...grpc.CallOption) (*longrunningpb.Operation, error) {
```

```
 out := new(longrunningpb.Operation)
 err := c.cc.Invoke(ctx,
 UserLicenseService_BatchUpdateUserLicenses_FullMethodName, in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// UserLicenseServiceServer is the server API for UserLicenseService service.
// All implementations should embed UnimplementedUserLicenseServiceServer
// for forward compatibility
type UserLicenseServiceServer interface {
 // Lists the User Licenses.
 ListUserLicenses(context.Context, *ListUserLicensesRequest) (*ListUserLicensesResponse, error)
 // Updates the User License.
 // This method is used for batch assign/unassign licenses to users.
 BatchUpdateUserLicenses(context.Context, *BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error)
}

// UnimplementedUserLicenseServiceServer should be embedded to have forward compatible implementations.
type UnimplementedUserLicenseServiceServer struct {
}

func (UnimplementedUserLicenseServiceServer) ListUserLicenses(context.Context, *ListUserLicensesRequest)
(*ListUserLicensesResponse, error) {
 return
 nil, status.Errorf(codes.Unimplemented, "method ListUserLicenses not implemented")
}
func (UnimplementedUserLicenseServiceServer) BatchUpdateUserLicenses(context.Context,
*BatchUpdateUserLicensesRequest) (*longrunningpb.Operation, error) {
 return nil, status.Errorf(codes.Unimplemented, "method BatchUpdateUserLicenses not implemented")
}

// UnsafeUserLicenseServiceServer may be embedded to opt out of forward compatibility for this service.
// Use of this interface is not recommended, as added methods to UserLicenseServiceServer will
// result in compilation errors.
type UnsafeUserLicenseServiceServer interface {
 mustEmbedUnimplementedUserLicenseServiceServer()
}

func RegisterUserLicenseServiceServer(s grpc.ServiceRegistrar, srv UserLicenseServiceServer) {
 s.RegisterService(&UserLicenseService_ServiceDesc, srv)
}

func _UserLicenseService_ListUserLicenses_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{},
```

```
 error) {
 in := new(ListUserLicensesRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: UserLicenseService_ListUserLicenses_FullMethodName,
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(UserLicenseServiceServer).ListUserLicenses(ctx, req.(*ListUserLicensesRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _UserLicenseService_BatchUpdateUserLicenses_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(BatchUpdateUserLicensesRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: UserLicenseService_BatchUpdateUserLicenses_FullMethodName,
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(UserLicenseServiceServer).BatchUpdateUserLicenses(ctx, req.(*BatchUpdateUserLicensesRequest))
 }
 return interceptor(ctx, in, info, handler)
}

// UserLicenseService_ServiceDesc is the grpc.ServiceDesc for UserLicenseService service.
// It's only intended for direct use with grpc.RegisterService,
// and not to be introspected or modified (even as a copy)
var UserLicenseService_ServiceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.discoveryengine.v1.UserLicenseService",
 HandlerType: (*UserLicenseServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "ListUserLicenses",
   Handler:    _UserLicenseService_ListUserLicenses_Handler,
```

```
  },
  {
   MethodName: "BatchUpdateUserLicenses",
   Handler:    _UserLicenseService_BatchUpdateUserLicenses_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/discoveryengine/v1/user_license_service.proto",
}
```

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package compute

import (
 "bytes"
 "context"
 "fmt"
```

```
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
```

```
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
```

```
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
```

```
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
```

```
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
```

```
// TestIamPermissions returns permissions that a
 caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds =
 append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }
```

```
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)
```

```
var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface
 {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient
```

```
 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return
 c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
```

```
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
```

```
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return
 nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
```

```
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that
 a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
//
```

```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
```

```
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}
```

```
// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}
```

```
func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
```

```
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
```

```
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
 0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
 0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
```

```
 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
 0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
 0x4e,
 0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
 0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
 0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
 0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
 0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
 0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
 0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
 0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
 0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
 0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
 0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
 0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
 0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)
```

```
func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
```

```
 MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go-grpc. DO NOT EDIT.
// versions:
// - protoc-gen-go-grpc v1.3.0
// - protoc             v4.25.7
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status "google.golang.org/grpc/status"
)

// This is a compile-time assertion
 to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
// Requires gRPC-Go v1.32.0 or later.
const _ = grpc.SupportPackageIsVersion7

const (
 LicenseManagementService_GetLicensePool_FullMethodName         =
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool"
 LicenseManagementService_UpdateLicensePool_FullMethodName      =
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool"
```

```
 LicenseManagementService_Assign_FullMethodName              =
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign"
 LicenseManagementService_Unassign_FullMethodName            =
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign"
 LicenseManagementService_EnumerateLicensedUsers_FullMethodName =
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers"
)

// LicenseManagementServiceClient
 is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://pkg.go.dev/google.golang.org/grpc/?tab=doc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
 (*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx, LicenseManagementService_GetLicensePool_FullMethodName, in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
```

```
 out := new(LicensePool)
 err := c.cc.Invoke(ctx, LicenseManagementService_UpdateLicensePool_FullMethodName, in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, LicenseManagementService_Assign_FullMethodName, in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, LicenseManagementService_Unassign_FullMethodName, in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx, LicenseManagementService_EnumerateLicensedUsers_FullMethodName, in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer
 is the server API for LicenseManagementService service.
// All implementations should embed UnimplementedLicenseManagementServiceServer
// for forward compatibility
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
```

```
 Assign(context.Context, *AssignRequest) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer should be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer
 struct {
}

func (UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
(*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest)
 (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

// UnsafeLicenseManagementServiceServer may be embedded to opt out of forward compatibility for this service.
// Use of this interface is not recommended, as added methods to LicenseManagementServiceServer will
// result in compilation errors.
type UnsafeLicenseManagementServiceServer interface {
 mustEmbedUnimplementedLicenseManagementServiceServer()
}

func RegisterLicenseManagementServiceServer(s grpc.ServiceRegistrar, srv LicenseManagementServiceServer) {
 s.RegisterService(&LicenseManagementService_ServiceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
```

```
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx,
 in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: LicenseManagementService_GetLicensePool_FullMethodName,
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: LicenseManagementService_UpdateLicensePool_FullMethodName,
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return
 srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
```

```
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: LicenseManagementService_Assign_FullMethodName,
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in
 := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: LicenseManagementService_Unassign_FullMethodName,
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: LicenseManagementService_EnumerateLicensedUsers_FullMethodName,
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
```

```
 return interceptor(ctx, in, info, handler)
}

// LicenseManagementService_ServiceDesc is the grpc.ServiceDesc for LicenseManagementService service.
// It's only intended for direct use with grpc.RegisterService,
// and not to be introspected or modified (even as a copy)
var LicenseManagementService_ServiceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName:
 "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
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// distributed under the License is distributed on an "AS IS" BASIS,
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// limitations under the License.
```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
// +build ignore

package ignore
// Copyright 2025 Google LLC
//
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
```

```
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewUserLicenseClient() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewUserLicenseRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseRESTClient(ctx)
```

```
 if
 err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleUserLicenseClient_BatchUpdateUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque
st.
 }
 op, err := c.BatchUpdateUserLicenses(ctx, req)
 if err != nil {
  //
 TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListUserLicenses() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &discoveryenginepb.ListUserLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
}
it := c.ListUserLicenses(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done
 {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*discoveryenginepb.ListUserLicensesResponse)
}
}

func ExampleUserLicenseClient_CancelOperation() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := discoveryengine.NewUserLicenseClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.CancelOperationRequest{
 //
```

```
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#CancelOperationRequest.
 }
 err = c.CancelOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleUserLicenseClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp,
 err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleUserLicenseClient_ListOperations() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &longrunningpb.ListOperationsRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
 }
 it := c.ListOperations(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   //
 TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*longrunningpb.ListOperationsResponse)
 }
}
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
```

```
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb
 "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
```

```
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType
 {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
```

```
}

type AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments
 triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
json:"license_assignment_protocol,omitempty"`
 //
 Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
```

```
 return 0
}

// Request message for getting a license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields
 protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
```

```
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 // Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
 json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
```

```
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms
```

```
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil
 {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
```

```
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return
 ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset() {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return x.Parent
```

```
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return
 nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return
```

```
 mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3" json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 //
 call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
```

```
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor
 instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 // Output only. Timestamp when the license was assigned.
```

```
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
 json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
```

```
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 //
 The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func
 (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
```

```
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor()
 ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
```

```
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func
 (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration
 {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
```

0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x70, 0x72, 0x6f, 0x63,
0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f,
0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f,
0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x1e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x64, 0x75, 0x72, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65,
0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f,
0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70,
0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e,
0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc3, 0x03, 0x0a, 0x12, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e,
0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c, 0x12, 0x8e, 0x01, 0x0a,
0x16, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65,
0x6e, 0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x56, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d,
0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70,
0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41,
0x73,
0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x63, 0x6f, 0x6c,
0x2e, 0x4d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x54, 0x79, 0x70, 0x65, 0x48, 0x00, 0x52, 0x14, 0x6d, 0x61, 0x6e, 0x75, 0x61, 0x6c, 0x41,
0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x54, 0x79, 0x70, 0x65, 0x12, 0x88, 0x01,
0x0a, 0x14, 0x61, 0x75, 0x74, 0x6f, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e,
0x74, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x54, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d,
0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72,
0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73,
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0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72, 0x73,
0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50,
0x6f, 0x6f, 0x6c, 0x7d, 0x12,
0x89, 0x02, 0x0a, 0x11, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73,
0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x12, 0x47, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63,
0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f,
0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65,
0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x70, 0x64, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65,
0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3a,
0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f,
0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e,
0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x4c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x22, 0x6f, 0xda, 0x41, 0x18, 0x6c,
0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x2c, 0x75, 0x70, 0x64, 0x61,
0x74, 0x65, 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x4e, 0x3a, 0x0c, 0x6c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x32, 0x3e, 0x2f, 0x76, 0x31,
0x2f, 0x7b, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x70, 0x6f, 0x6f, 0x6c, 0x2e, 0x6e,
0x61, 0x6d, 0x65, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75,
0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x12, 0xdf, 0x01, 0x0a, 0x06,
0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63,
0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d,
0x65, 0x6e, 0x74, 0x2e, 0x76,
0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71,
0x75, 0x65, 0x73, 0x74, 0x1a, 0x3d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c,
0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e,

0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x58, 0xda, 0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65, 0x73, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x3f, 0x3a, 0x01, 0x2a, 0x22, 0x3a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x61, 0x73, 0x73,
0x69, 0x67, 0x6e, 0x12, 0xe7, 0x01,
0x0a, 0x08, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x3e, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x1a, 0x3f, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x5a, 0xda, 0x41, 0x10, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x2c, 0x75, 0x73, 0x65, 0x72, 0x6e, 0x61, 0x6d, 0x65,
0x73,
0x82, 0xd3, 0xe4, 0x93, 0x02, 0x41, 0x3a, 0x01, 0x2a, 0x22, 0x3c, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x75, 0x6e, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x12, 0x92, 0x02, 0x0a, 0x16, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x12, 0x4c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74,
0x1a, 0x4d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x2e, 0x45, 0x6e, 0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x5b, 0xda, 0x41, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x82, 0xd3, 0xe4, 0x93, 0x02, 0x4c, 0x12, 0x4a, 0x2f, 0x76, 0x31, 0x2f, 0x7b, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x3d, 0x62, 0x69, 0x6c, 0x6c, 0x69, 0x6e, 0x67, 0x41, 0x63, 0x63, 0x6f, 0x75, 0x6e, 0x74, 0x73, 0x2f, 0x2a, 0x2f, 0x6f, 0x72, 0x64, 0x65, 0x72, 0x73, 0x2f, 0x2a, 0x2f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x50, 0x6f, 0x6f, 0x6c, 0x7d, 0x3a, 0x65, 0x6e,
0x75, 0x6d, 0x65, 0x72, 0x61, 0x74, 0x65, 0x4c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x64, 0x55, 0x73, 0x65, 0x72, 0x73, 0x1a, 0x63, 0xca, 0x41, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0xd2, 0x41, 0x2e, 0x68, 0x74, 0x74, 0x70, 0x73, 0x3a, 0x2f, 0x2f, 0x77, 0x77, 0x77, 0x2e, 0x67,

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 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x61, 0x75,
 0x74, 0x68, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2d, 0x70, 0x6c, 0x61, 0x74, 0x66, 0x6f, 0x72,
 0x6d, 0x42, 0xbe, 0x02, 0x0a, 0x31, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65,
 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e,
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 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
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 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e,
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 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2f,
 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70, 0x69, 0x76,
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 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa, 0x02, 0x2d,
 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x43, 0x6f, 0x6d,
 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x50,
 0x72, 0x6f,
 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x2d,
 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43, 0x6f, 0x6d,
 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x5c, 0x50,
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 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x3a, 0x3a,
 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
```

```
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),                    // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),
  // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                 // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),              // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                         // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                        // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                       // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                      // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),         // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),                          // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),
        // 10: google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                 // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                 // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                   // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12,
 // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name ->
google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name
```

```
 -> google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14,
 // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
```

```
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:
     0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs = nil
}

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```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package licensemanager_test

import (
 "context"

 licensemanager "cloud.google.com/go/licensemanager/apiv1"
 licensemanagerpb "cloud.google.com/go/licensemanager/apiv1/licensemanagerpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
 locationpb "google.golang.org/genproto/googleapis/cloud/location"
)

func
 ExampleNewClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := licensemanager.NewRESTClient(ctx)
 if err != nil {
```

```
 // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleClient_AggregateUsage() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.AggregateUsageRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#AggregateUsageRequest.
 }
 it := c.AggregateUsage(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if
 err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*licensemanagerpb.AggregateUsageResponse)
 }
}

func ExampleClient_CreateConfiguration() {
 ctx := context.Background()
```

```
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.CreateConfigurationRequest{
  // TODO: Fill request
 struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#CreateConfigurationRequest.
 }
 op, err := c.CreateConfiguration(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleClient_DeactivateConfiguration() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.DeactivateConfigurationRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#DeactivateConfigurationRequest.
 }
```

```
 op,
 err := c.DeactivateConfiguration(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleClient_DeleteConfiguration() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.DeleteConfigurationRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#DeleteConfigurationRequest.
 }
 op,
 err := c.DeleteConfiguration(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleClient_GetConfiguration() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &licensemanagerpb.GetConfigurationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#GetConfigurationRequest.
}
resp, err := c.GetConfiguration(ctx,
req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleClient_GetInstance() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &licensemanagerpb.GetInstanceRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#GetInstanceRequest.
}
resp, err := c.GetInstance(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleClient_GetProduct() {
```

```
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.GetProductRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#GetProductRequest.
 }
 resp, err := c.GetProduct(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleClient_ListConfigurations() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to
 work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.ListConfigurationsRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListConfigurationsRequest.
 }
 it := c.ListConfigurations(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
```

```
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*licensemanagerpb.ListConfigurationsResponse)
}
}

func
 ExampleClient_ListInstances() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.ListInstancesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListInstancesRequest.
 }
 it := c.ListInstances(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the
 underlying RPC response,
  // you can do so by casting the `Response` as below.
```

```
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*licensemanagerpb.ListInstancesResponse)
 }
}

func ExampleClient_ListProducts() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.ListProductsRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListProductsRequest.
 }
 it
 := c.ListProducts(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*licensemanagerpb.ListProductsResponse)
 }
}

func ExampleClient_QueryConfigurationLicenseUsage() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO:
Handle error.
}
defer c.Close()

req := &licensemanagerpb.QueryConfigurationLicenseUsageRequest{
 // TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#QueryConfigurationLicenseUsage
Request.
}
resp, err := c.QueryConfigurationLicenseUsage(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleClient_ReactivateConfiguration() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &licensemanagerpb.ReactivateConfigurationRequest{
 //
TODO: Fill request struct fields.
 // See
https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ReactivateConfigurationRequest.
}
op, err := c.ReactivateConfiguration(ctx, req)
if err != nil {
 // TODO: Handle error.
}
```

```
 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleClient_UpdateConfiguration() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.UpdateConfigurationRequest{
  // TODO: Fill request
 struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#UpdateConfigurationRequest.
 }
 op, err := c.UpdateConfiguration(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleClient_GetLocation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
```

```
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &locationpb.GetLocationRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/location#GetLocationRequest.
}
resp,
err := c.GetLocation(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleClient_ListLocations() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &locationpb.ListLocationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/location#ListLocationsRequest.
}
it := c.ListLocations(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if
err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
```

```
 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _ = it.Response.(*locationpb.ListLocationsResponse)
 }
}

func ExampleClient_CancelOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.CancelOperationRequest{
  // TODO: Fill request struct
 fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#CancelOperationRequest.
 }
 err = c.CancelOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleClient_DeleteOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.DeleteOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#DeleteOperationRequest.
```

```
 }
 err = c.DeleteOperation(ctx, req)
 if err != nil {
  //
 TODO: Handle error.
 }
}

func ExampleClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleClient_ListOperations() {
 ctx := context.Background()
 // This snippet has been automatically generated and
 should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.ListOperationsRequest{
```

```
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
 }
 it := c.ListOperations(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next().
 Not safe for concurrent access.
  _ = it.Response.(*longrunningpb.ListOperationsResponse)
 }
}
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
)
```

```
func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO:
 Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
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//     https://www.apache.org/licenses/LICENSE-2.0
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package licensemanager

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
```

```
 "time"

 licensemanagerpb "cloud.google.com/go/licensemanager/apiv1/licensemanagerpb"
 "cloud.google.com/go/longrunning"
 lroauto "cloud.google.com/go/longrunning/autogen"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 locationpb "google.golang.org/genproto/googleapis/cloud/location"
 "google.golang.org/grpc"
 "google.golang.org/grpc/codes"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newClientHook clientHook

// CallOptions contains the retry settings for each method of Client.
type CallOptions struct {
 ListConfigurations            []gax.CallOption
 GetConfiguration              []gax.CallOption
 CreateConfiguration           []gax.CallOption
 UpdateConfiguration           []gax.CallOption
 DeleteConfiguration           []gax.CallOption
 ListInstances                 []gax.CallOption
 GetInstance                   []gax.CallOption
 DeactivateConfiguration       []gax.CallOption
 ReactivateConfiguration
       []gax.CallOption
 QueryConfigurationLicenseUsage []gax.CallOption
 AggregateUsage                []gax.CallOption
 ListProducts                  []gax.CallOption
 GetProduct                    []gax.CallOption
 GetLocation                   []gax.CallOption
 ListLocations                 []gax.CallOption
 CancelOperation               []gax.CallOption
 DeleteOperation               []gax.CallOption
 GetOperation                  []gax.CallOption
 ListOperations                []gax.CallOption
}

func defaultGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
```

```
  internaloption.WithDefaultEndpoint("licensemanager.googleapis.com:443"),
  internaloption.WithDefaultEndpointTemplate("licensemanager.UNIVERSE_DOMAIN:443"),
  internaloption.WithDefaultMTLSEndpoint("licensemanager.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://licensemanager.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultCallOptions() *CallOptions {
 return &CallOptions{
  ListConfigurations: []gax.CallOption{
   gax.WithTimeout(60000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    })
   }),
  },
  GetConfiguration: []gax.CallOption{
   gax.WithTimeout(60000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    })
   }),
  },
  CreateConfiguration: []gax.CallOption{
   gax.WithTimeout(60000
 * time.Millisecond),
  },
  UpdateConfiguration: []gax.CallOption{
   gax.WithTimeout(60000 * time.Millisecond),
  },
  DeleteConfiguration: []gax.CallOption{
```

```
 gax.WithTimeout(60000 * time.Millisecond),
},
ListInstances: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
  return gax.OnCodes([]codes.Code{
   codes.Unavailable,
  }, gax.Backoff{
   Initial:    1000 * time.Millisecond,
   Max:        10000 * time.Millisecond,
   Multiplier: 1.30,
  })
 }),
},
GetInstance: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
  return gax.OnCodes([]codes.Code{
   codes.Unavailable,
  }, gax.Backoff{
   Initial:    1000 * time.Millisecond,
   Max:        10000 * time.Millisecond,
   Multiplier: 1.30,
  })
 }),
},
DeactivateConfiguration: []gax.CallOption{},
ReactivateConfiguration: []gax.CallOption{},
QueryConfigurationLicenseUsage:
[]gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
  return gax.OnCodes([]codes.Code{
   codes.Unavailable,
  }, gax.Backoff{
   Initial:    1000 * time.Millisecond,
   Max:        10000 * time.Millisecond,
   Multiplier: 1.30,
  })
 }),
},
AggregateUsage: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
},
ListProducts: []gax.CallOption{
 gax.WithTimeout(60000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
  return gax.OnCodes([]codes.Code{
```

```
    codes.Unavailable,
   }, gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        10000 * time.Millisecond,
    Multiplier: 1.30,
   })
  }),
 },
 GetProduct: []gax.CallOption{
  gax.WithTimeout(60000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnCodes([]codes.Code{
    codes.Unavailable,
   }, gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:
 10000 * time.Millisecond,
    Multiplier: 1.30,
   })
  }),
 },
 GetLocation:     []gax.CallOption{},
 ListLocations:   []gax.CallOption{},
 CancelOperation: []gax.CallOption{},
 DeleteOperation: []gax.CallOption{},
 GetOperation:    []gax.CallOption{},
 ListOperations:  []gax.CallOption{},
}
}

func defaultRESTCallOptions() *CallOptions {
 return &CallOptions{
  ListConfigurations: []gax.CallOption{
   gax.WithTimeout(60000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusServiceUnavailable)
   }),
  },
  GetConfiguration: []gax.CallOption{
   gax.WithTimeout(60000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    1000 * time.Millisecond,
```

```
    Max:        10000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusServiceUnavailable)
  }),
 },
 CreateConfiguration:
[]gax.CallOption{
  gax.WithTimeout(60000 * time.Millisecond),
 },
 UpdateConfiguration: []gax.CallOption{
  gax.WithTimeout(60000 * time.Millisecond),
 },
 DeleteConfiguration: []gax.CallOption{
  gax.WithTimeout(60000 * time.Millisecond),
 },
 ListInstances: []gax.CallOption{
  gax.WithTimeout(60000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        10000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusServiceUnavailable)
  }),
 },
 GetInstance: []gax.CallOption{
  gax.WithTimeout(60000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        10000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusServiceUnavailable)
  }),
 },
 DeactivateConfiguration: []gax.CallOption{},
 ReactivateConfiguration:
[]gax.CallOption{},
 QueryConfigurationLicenseUsage: []gax.CallOption{
  gax.WithTimeout(60000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        10000 * time.Millisecond,
    Multiplier: 1.30,
```

```
    },
    http.StatusServiceUnavailable)
   }),
  },
  AggregateUsage: []gax.CallOption{
   gax.WithTimeout(60000 * time.Millisecond),
  },
  ListProducts: []gax.CallOption{
   gax.WithTimeout(60000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    },
    http.StatusServiceUnavailable)
   }),
  },
  GetProduct: []gax.CallOption{
   gax.WithTimeout(60000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:
   10000 * time.Millisecond,
     Multiplier: 1.30,
    },
    http.StatusServiceUnavailable)
   }),
  },
  GetLocation:     []gax.CallOption{},
  ListLocations:   []gax.CallOption{},
  CancelOperation: []gax.CallOption{},
  DeleteOperation: []gax.CallOption{},
  GetOperation:    []gax.CallOption{},
  ListOperations:  []gax.CallOption{},
 }
}

// internalClient is an interface that defines the methods available from License Manager API.
type internalClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 ListConfigurations(context.Context, *licensemanagerpb.ListConfigurationsRequest, ...gax.CallOption)
*ConfigurationIterator
 GetConfiguration(context.Context, *licensemanagerpb.GetConfigurationRequest, ...gax.CallOption)
(*licensemanagerpb.Configuration, error)
```

```
 CreateConfiguration(context.Context, *licensemanagerpb.CreateConfigurationRequest, ...gax.CallOption)
(*CreateConfigurationOperation, error)
 CreateConfigurationOperation(name string) *CreateConfigurationOperation
 UpdateConfiguration(context.Context,
 *licensemanagerpb.UpdateConfigurationRequest, ...gax.CallOption) (*UpdateConfigurationOperation, error)
 UpdateConfigurationOperation(name string) *UpdateConfigurationOperation
 DeleteConfiguration(context.Context, *licensemanagerpb.DeleteConfigurationRequest, ...gax.CallOption)
(*DeleteConfigurationOperation, error)
 DeleteConfigurationOperation(name string) *DeleteConfigurationOperation
 ListInstances(context.Context, *licensemanagerpb.ListInstancesRequest, ...gax.CallOption) *InstanceIterator
 GetInstance(context.Context, *licensemanagerpb.GetInstanceRequest, ...gax.CallOption)
(*licensemanagerpb.Instance, error)
 DeactivateConfiguration(context.Context, *licensemanagerpb.DeactivateConfigurationRequest, ...gax.CallOption)
(*DeactivateConfigurationOperation, error)
 DeactivateConfigurationOperation(name string) *DeactivateConfigurationOperation
 ReactivateConfiguration(context.Context, *licensemanagerpb.ReactivateConfigurationRequest,
 ...gax.CallOption) (*ReactivateConfigurationOperation, error)
 ReactivateConfigurationOperation(name string) *ReactivateConfigurationOperation
 QueryConfigurationLicenseUsage(context.Context, *licensemanagerpb.QueryConfigurationLicenseUsageRequest,
...gax.CallOption) (*licensemanagerpb.QueryConfigurationLicenseUsageResponse, error)
 AggregateUsage(context.Context, *licensemanagerpb.AggregateUsageRequest, ...gax.CallOption) *UsageIterator
 ListProducts(context.Context, *licensemanagerpb.ListProductsRequest, ...gax.CallOption) *ProductIterator
 GetProduct(context.Context, *licensemanagerpb.GetProductRequest, ...gax.CallOption)
(*licensemanagerpb.Product, error)
 GetLocation(context.Context, *locationpb.GetLocationRequest, ...gax.CallOption) (*locationpb.Location, error)
 ListLocations(context.Context, *locationpb.ListLocationsRequest, ...gax.CallOption) *LocationIterator
 CancelOperation(context.Context, *longrunningpb.CancelOperationRequest, ...gax.CallOption) error
 DeleteOperation(context.Context,
 *longrunningpb.DeleteOperationRequest, ...gax.CallOption) error
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
 ListOperations(context.Context, *longrunningpb.ListOperationsRequest, ...gax.CallOption) *OperationIterator
}

// Client is a client for interacting with License Manager API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service describing handlers for resources
type Client struct {
 // The internal transport-dependent client.
 internalClient internalClient

 // The call options for this service.
 CallOptions *CallOptions

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
```

```
 // Users should not Close this client.
 LROClient *lroauto.OperationsClient
}

// Wrapper methods routed to the internal client.

// Close
 closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *Client) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *Client) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *Client) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// ListConfigurations lists Configurations in a given project and location.
func (c *Client) ListConfigurations(ctx context.Context, req *licensemanagerpb.ListConfigurationsRequest, opts
...gax.CallOption) *ConfigurationIterator {
 return c.internalClient.ListConfigurations(ctx,
 req, opts...)
}

// GetConfiguration gets details of a single Configuration.
func (c *Client) GetConfiguration(ctx context.Context, req *licensemanagerpb.GetConfigurationRequest, opts
...gax.CallOption) (*licensemanagerpb.Configuration, error) {
 return c.internalClient.GetConfiguration(ctx, req, opts...)
}

// CreateConfiguration creates a new Configuration in a given project and location.
func (c *Client) CreateConfiguration(ctx context.Context, req *licensemanagerpb.CreateConfigurationRequest, opts
...gax.CallOption) (*CreateConfigurationOperation, error) {
 return c.internalClient.CreateConfiguration(ctx, req, opts...)
}

// CreateConfigurationOperation returns a new CreateConfigurationOperation from a given name.
```

```
// The name must be that of a previously created CreateConfigurationOperation, possibly from a different process.
func (c *Client) CreateConfigurationOperation(name string) *CreateConfigurationOperation {
 return c.internalClient.CreateConfigurationOperation(name)
}

//
 UpdateConfiguration updates the parameters of a single Configuration.
func (c *Client) UpdateConfiguration(ctx context.Context, req *licensemanagerpb.UpdateConfigurationRequest,
opts ...gax.CallOption) (*UpdateConfigurationOperation, error) {
 return c.internalClient.UpdateConfiguration(ctx, req, opts...)
}

// UpdateConfigurationOperation returns a new UpdateConfigurationOperation from a given name.
// The name must be that of a previously created UpdateConfigurationOperation, possibly from a different process.
func (c *Client) UpdateConfigurationOperation(name string) *UpdateConfigurationOperation {
 return c.internalClient.UpdateConfigurationOperation(name)
}

// DeleteConfiguration deletes a single Configuration.
func (c *Client) DeleteConfiguration(ctx context.Context, req *licensemanagerpb.DeleteConfigurationRequest, opts
...gax.CallOption) (*DeleteConfigurationOperation, error) {
 return c.internalClient.DeleteConfiguration(ctx, req, opts...)
}

// DeleteConfigurationOperation returns
 a new DeleteConfigurationOperation from a given name.
// The name must be that of a previously created DeleteConfigurationOperation, possibly from a different process.
func (c *Client) DeleteConfigurationOperation(name string) *DeleteConfigurationOperation {
 return c.internalClient.DeleteConfigurationOperation(name)
}

// ListInstances lists Instances in a given project and location.
func (c *Client) ListInstances(ctx context.Context, req *licensemanagerpb.ListInstancesRequest, opts
...gax.CallOption) *InstanceIterator {
 return c.internalClient.ListInstances(ctx, req, opts...)
}

// GetInstance gets details of a single Instance.
func (c *Client) GetInstance(ctx context.Context, req *licensemanagerpb.GetInstanceRequest, opts
...gax.CallOption) (*licensemanagerpb.Instance, error) {
 return c.internalClient.GetInstance(ctx, req, opts...)
}

// DeactivateConfiguration deactivates the given configuration.
func (c *Client) DeactivateConfiguration(ctx context.Context, req
*licensemanagerpb.DeactivateConfigurationRequest,
 opts ...gax.CallOption) (*DeactivateConfigurationOperation, error) {
 return c.internalClient.DeactivateConfiguration(ctx, req, opts...)
```

```
}

// DeactivateConfigurationOperation returns a new DeactivateConfigurationOperation from a given name.
// The name must be that of a previously created DeactivateConfigurationOperation, possibly from a different
process.
func (c *Client) DeactivateConfigurationOperation(name string) *DeactivateConfigurationOperation {
 return c.internalClient.DeactivateConfigurationOperation(name)
}

// ReactivateConfiguration reactivates the given configuration.
func (c *Client) ReactivateConfiguration(ctx context.Context, req
*licensemanagerpb.ReactivateConfigurationRequest, opts ...gax.CallOption) (*ReactivateConfigurationOperation,
error) {
 return c.internalClient.ReactivateConfiguration(ctx, req, opts...)
}

// ReactivateConfigurationOperation returns a new ReactivateConfigurationOperation from a given name.
// The name must
 be that of a previously created ReactivateConfigurationOperation, possibly from a different process.
func (c *Client) ReactivateConfigurationOperation(name string) *ReactivateConfigurationOperation {
 return c.internalClient.ReactivateConfigurationOperation(name)
}

// QueryConfigurationLicenseUsage license Usage information for a Configuration.
func (c *Client) QueryConfigurationLicenseUsage(ctx context.Context, req
*licensemanagerpb.QueryConfigurationLicenseUsageRequest, opts ...gax.CallOption)
(*licensemanagerpb.QueryConfigurationLicenseUsageResponse, error) {
 return c.internalClient.QueryConfigurationLicenseUsage(ctx, req, opts...)
}

// AggregateUsage aggregates Usage per Instance for a Configuration.
func (c *Client) AggregateUsage(ctx context.Context, req *licensemanagerpb.AggregateUsageRequest, opts
...gax.CallOption) *UsageIterator {
 return c.internalClient.AggregateUsage(ctx, req, opts...)
}

// ListProducts lists Products in a given project and location.
func (c *Client)
 ListProducts(ctx context.Context, req *licensemanagerpb.ListProductsRequest, opts ...gax.CallOption)
*ProductIterator {
 return c.internalClient.ListProducts(ctx, req, opts...)
}

// GetProduct gets details of a single Product.
func (c *Client) GetProduct(ctx context.Context, req *licensemanagerpb.GetProductRequest, opts ...gax.CallOption)
(*licensemanagerpb.Product, error) {
 return c.internalClient.GetProduct(ctx, req, opts...)
}
```

```
// GetLocation gets information about a location.
func (c *Client) GetLocation(ctx context.Context, req *locationpb.GetLocationRequest, opts ...gax.CallOption)
(*locationpb.Location, error) {
 return c.internalClient.GetLocation(ctx, req, opts...)
}

// ListLocations lists information about the supported locations for this service.
func (c *Client) ListLocations(ctx context.Context, req *locationpb.ListLocationsRequest, opts ...gax.CallOption)
*LocationIterator {
 return c.internalClient.ListLocations(ctx, req, opts...)
}

// CancelOperation is a utility
 method from google.longrunning.Operations.
func (c *Client) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest, opts
...gax.CallOption) error {
 return c.internalClient.CancelOperation(ctx, req, opts...)
}

// DeleteOperation is a utility method from google.longrunning.Operations.
func (c *Client) DeleteOperation(ctx context.Context, req *longrunningpb.DeleteOperationRequest, opts
...gax.CallOption) error {
 return c.internalClient.DeleteOperation(ctx, req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *Client) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *Client) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest, opts
...gax.CallOption) *OperationIterator {
 return
 c.internalClient.ListOperations(ctx, req, opts...)
}

// gRPCClient is a client for interacting with License Manager API over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type gRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing Client
```

```
 CallOptions **CallOptions

 // The gRPC API client.
 client licensemanagerpb.LicenseManagerClient

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 operationsClient longrunningpb.OperationsClient

 locationsClient locationpb.LocationsClient

 // The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewClient creates a new license
 manager client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service describing handlers for resources
func NewClient(ctx context.Context, opts ...option.ClientOption) (*Client, error) {
 clientOpts := defaultGRPCClientOptions()
 if newClientHook != nil {
  hookOpts, err := newClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := Client{CallOptions: defaultCallOptions()}

 c := &gRPCClient{
  connPool:        connPool,
  client:          licensemanagerpb.NewLicenseManagerClient(connPool),
  CallOptions:     &client.CallOptions,
  logger:          internaloption.GetLogger(opts),
  operationsClient: longrunningpb.NewOperationsClient(connPool),
  locationsClient:  locationpb.NewLocationsClient(connPool),
```

```
 }
 c.setGoogleClientInfo()

 client.internalClient
 = c

 client.LROClient, err = lroauto.NewOperationsClient(ctx, gtransport.WithConnPool(connPool))
 if err != nil {
  // This error "should not happen", since we are just reusing old connection pool
  // and never actually need to dial.
  // If this does happen, we could leak connp. However, we cannot close conn:
  // If the user invoked the constructor with option.WithGRPCConn,
  // we would close a connection that's still in use.
  // TODO: investigate error conditions.
  return nil, err
 }
 c.LROClient = &client.LROClient
 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *gRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written
 clients.
func (c *gRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc", grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *gRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
```

```
type restClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 // The x-goog-*
 headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing Client
 CallOptions **CallOptions

 logger *slog.Logger
}

// NewRESTClient creates a new license manager rest client.
//
// Service describing handlers for resources
func NewRESTClient(ctx context.Context, opts ...option.ClientOption) (*Client, error) {
 clientOpts := append(defaultRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultRESTCallOptions()
 c := &restClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 lroOpts := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opClient, err := lroauto.NewOperationsRESTClient(ctx, lroOpts...)
 if err != nil {
  return nil, err
```

```
 }
 c.LROClient = &opClient

 return
 &Client{internalClient: c, CallOptions: callOpts}, nil
}

func defaultRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://licensemanager.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://licensemanager.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://licensemanager.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://licensemanager.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *restClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(),
 "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *restClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *restClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *gRPCClient) ListConfigurations(ctx context.Context, req *licensemanagerpb.ListConfigurationsRequest,
opts ...gax.CallOption) *ConfigurationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListConfigurations[0:len((*c.CallOptions).ListConfigurations):len((*c.CallOptions).ListCo
nfigurations)],
 opts...)
 it := &ConfigurationIterator{}
 req = proto.Clone(req).(*licensemanagerpb.ListConfigurationsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Configuration, string, error) {
  resp := &licensemanagerpb.ListConfigurationsResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.client.ListConfigurations, req, settings.GRPC, c.logger, "ListConfigurations")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetConfigurations(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize,
 pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}
```

```
func (c *gRPCClient) GetConfiguration(ctx context.Context, req *licensemanagerpb.GetConfigurationRequest, opts
...gax.CallOption) (*licensemanagerpb.Configuration, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetConfiguration[0:len((*c.CallOptions).GetConfiguration):len((*c.CallOptions).GetConfi
guration)], opts...)
 var resp *licensemanagerpb.Configuration
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx,
 c.client.GetConfiguration, req, settings.GRPC, c.logger, "GetConfiguration")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *gRPCClient) CreateConfiguration(ctx context.Context, req
*licensemanagerpb.CreateConfigurationRequest, opts ...gax.CallOption) (*CreateConfigurationOperation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).CreateConfiguration[0:len((*c.CallOptions).CreateConfiguration):len((*c.CallOptions).Cre
ateConfiguration)], opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.client.CreateConfiguration, req, settings.GRPC, c.logger, "CreateConfiguration")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return &CreateConfigurationOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 }, nil
}

func (c *gRPCClient) UpdateConfiguration(ctx context.Context, req
*licensemanagerpb.UpdateConfigurationRequest, opts ...gax.CallOption) (*UpdateConfigurationOperation, error) {
```

```
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "configuration.name",
url.QueryEscape(req.GetConfiguration().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateConfiguration[0:len((*c.CallOptions).UpdateConfiguration):len((*c.CallOptions).U
pdateConfiguration)], opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.client.UpdateConfiguration, req, settings.GRPC, c.logger, "UpdateConfiguration")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return
 &UpdateConfigurationOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 }, nil
}

func (c *gRPCClient) DeleteConfiguration(ctx context.Context, req
*licensemanagerpb.DeleteConfigurationRequest, opts ...gax.CallOption) (*DeleteConfigurationOperation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).DeleteConfiguration[0:len((*c.CallOptions).DeleteConfiguration):len((*c.CallOptions).Del
eteConfiguration)], opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.client.DeleteConfiguration, req, settings.GRPC, c.logger, "DeleteConfiguration")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return &DeleteConfigurationOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient,
 resp),
 }, nil
}

func (c *gRPCClient) ListInstances(ctx context.Context, req *licensemanagerpb.ListInstancesRequest, opts
```

```
...gax.CallOption) *InstanceIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListInstances[0:len((*c.CallOptions).ListInstances):len((*c.CallOptions).ListInstances)],
opts...)
 it := &InstanceIterator{}
 req = proto.Clone(req).(*licensemanagerpb.ListInstancesRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Instance, string, error) {
  resp := &licensemanagerpb.ListInstancesResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx,
 func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.client.ListInstances, req, settings.GRPC, c.logger, "ListInstances")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetInstances(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}
```

```
func (c *gRPCClient) GetInstance(ctx context.Context, req *licensemanagerpb.GetInstanceRequest, opts
...gax.CallOption) (*licensemanagerpb.Instance, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetInstance[0:len((*c.CallOptions).GetInstance):len((*c.CallOptions).GetInstance)],
opts...)
 var resp *licensemanagerpb.Instance
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.client.GetInstance, req, settings.GRPC, c.logger, "GetInstance")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *gRPCClient) DeactivateConfiguration(ctx context.Context, req
*licensemanagerpb.DeactivateConfigurationRequest, opts ...gax.CallOption) (*DeactivateConfigurationOperation,
error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).DeactivateConfiguration[0:len((*c.CallOptions).DeactivateConfiguration):len((*c.CallOpti
ons).DeactivateConfiguration)],
 opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.client.DeactivateConfiguration, req, settings.GRPC, c.logger,
"DeactivateConfiguration")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return &DeactivateConfigurationOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 }, nil
}
```

```
func (c *gRPCClient) ReactivateConfiguration(ctx context.Context, req
*licensemanagerpb.ReactivateConfigurationRequest, opts ...gax.CallOption) (*ReactivateConfigurationOperation,
error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ReactivateConfiguration[0:len((*c.CallOptions).ReactivateConfiguration):len((*c.CallOpti
ons).ReactivateConfiguration)],
 opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.client.ReactivateConfiguration, req, settings.GRPC, c.logger,
"ReactivateConfiguration")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return &ReactivateConfigurationOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 }, nil
}

func (c *gRPCClient) QueryConfigurationLicenseUsage(ctx context.Context, req
*licensemanagerpb.QueryConfigurationLicenseUsageRequest, opts ...gax.CallOption)
(*licensemanagerpb.QueryConfigurationLicenseUsageResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).QueryConfigurationLicenseUsage[0:len((*c.CallOptions).QueryConfigurationLicenseUsag
e):len((*c.CallOptions).QueryConfigurationLicenseUsage)],
 opts...)
 var resp *licensemanagerpb.QueryConfigurationLicenseUsageResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.client.QueryConfigurationLicenseUsage, req, settings.GRPC, c.logger,
"QueryConfigurationLicenseUsage")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
```

```
 return resp, nil
}

func (c *gRPCClient) AggregateUsage(ctx context.Context, req *licensemanagerpb.AggregateUsageRequest, opts
...gax.CallOption) *UsageIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).AggregateUsage[0:len((*c.CallOptions).AggregateUsage):len((*c.CallOptions).Aggregate
Usage)],
 opts...)
 it := &UsageIterator{}
 req = proto.Clone(req).(*licensemanagerpb.AggregateUsageRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Usage, string, error) {
  resp := &licensemanagerpb.AggregateUsageResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.client.AggregateUsage, req, settings.GRPC, c.logger, "AggregateUsage")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetUsages(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items,
 items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
```

```
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *gRPCClient) ListProducts(ctx context.Context, req *licensemanagerpb.ListProductsRequest, opts
...gax.CallOption) *ProductIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListProducts[0:len((*c.CallOptions).ListProducts):len((*c.CallOptions).ListProducts)],
opts...)
 it := &ProductIterator{}
 req = proto.Clone(req).(*licensemanagerpb.ListProductsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Product, string, error) {
  resp := &licensemanagerpb.ListProductsResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if
 pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.client.ListProducts, req, settings.GRPC, c.logger, "ListProducts")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetProducts(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }
```

```
 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *gRPCClient) GetProduct(ctx context.Context, req *licensemanagerpb.GetProductRequest,
 opts ...gax.CallOption) (*licensemanagerpb.Product, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).GetProduct[0:len((*c.CallOptions).GetProduct):len((*c.CallOptions).GetProduct)],
opts...)
 var resp *licensemanagerpb.Product
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.client.GetProduct, req, settings.GRPC, c.logger, "GetProduct")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *gRPCClient) GetLocation(ctx context.Context, req *locationpb.GetLocationRequest, opts
...gax.CallOption) (*locationpb.Location, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders,
 hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLocation[0:len((*c.CallOptions).GetLocation):len((*c.CallOptions).GetLocation)],
opts...)
 var resp *locationpb.Location
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.locationsClient.GetLocation, req, settings.GRPC, c.logger, "GetLocation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
```

```
}

func (c *gRPCClient) ListLocations(ctx context.Context, req *locationpb.ListLocationsRequest, opts
...gax.CallOption) *LocationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListLocations[0:len((*c.CallOptions).ListLocations):len((*c.CallOptions).ListLocations)],
opts...)
 it := &LocationIterator{}
 req
 = proto.Clone(req).(*locationpb.ListLocationsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*locationpb.Location, string, error) {
  resp := &locationpb.ListLocationsResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.locationsClient.ListLocations, req, settings.GRPC, c.logger, "ListLocations")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLocations(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken,
 nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
```

```
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *gRPCClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest, opts
...gax.CallOption) error {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).CancelOperation[0:len((*c.CallOptions).CancelOperation):len((*c.CallOptions).CancelOp
eration)], opts...)
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  _, err = executeRPC(ctx, c.operationsClient.CancelOperation, req, settings.GRPC, c.logger, "CancelOperation")
  return err
 }, opts...)
 return err
}

func (c *gRPCClient) DeleteOperation(ctx context.Context, req *longrunningpb.DeleteOperationRequest,
 opts ...gax.CallOption) error {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).DeleteOperation[0:len((*c.CallOptions).DeleteOperation):len((*c.CallOptions).DeleteOper
ation)], opts...)
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  _, err = executeRPC(ctx, c.operationsClient.DeleteOperation, req, settings.GRPC, c.logger, "DeleteOperation")
  return err
 }, opts...)
 return err
}

func (c *gRPCClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx,
 hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
```

```
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *gRPCClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest, opts
...gax.CallOption) *OperationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListOperations[0:len((*c.CallOptions).ListOperations):len((*c.CallOptions).ListOperations
)], opts...)
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 it.InternalFetch
 = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
  resp := &longrunningpb.ListOperationsResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.operationsClient.ListOperations, req, settings.GRPC, c.logger, "ListOperations")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetOperations(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
```

```
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo,
it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// ListConfigurations lists Configurations in a given project and location.
func (c *restClient) ListConfigurations(ctx context.Context, req *licensemanagerpb.ListConfigurationsRequest, opts
...gax.CallOption) *ConfigurationIterator {
 it := &ConfigurationIterator{}
 req = proto.Clone(req).(*licensemanagerpb.ListConfigurationsRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Configuration, string, error) {
  resp := &licensemanagerpb.ListConfigurationsResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return
 nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v/configurations", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetFilter() != "" {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req.GetOrderBy() != "" {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req.GetPageSize() != 0 {
```

```
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil
 {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListConfigurations")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetConfigurations(), resp.GetNextPageToken(), nil
 }

 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }
```

```
 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// GetConfiguration gets details of a single Configuration.
func (c *restClient) GetConfiguration(ctx context.Context, req *licensemanagerpb.GetConfigurationRequest,
 opts ...gax.CallOption) (*licensemanagerpb.Configuration, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetConfiguration[0:len((*c.CallOptions).GetConfiguration):len((*c.CallOptions).GetConfi
guration)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &licensemanagerpb.Configuration{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path
 = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetConfiguration")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// CreateConfiguration creates a new Configuration in a given project and location.
func (c *restClient) CreateConfiguration(ctx context.Context, req *licensemanagerpb.CreateConfigurationRequest,
opts ...gax.CallOption) (*CreateConfigurationOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetConfiguration()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path
 += fmt.Sprintf("/v1/%v/configurations", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 params.Add("configurationId", fmt.Sprintf("%v", req.GetConfigurationId()))
 if req.GetRequestId() != "" {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err !=
nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CreateConfiguration")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &CreateConfigurationOperation{
 lro:      longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// UpdateConfiguration updates the parameters of a single Configuration.
func (c *restClient) UpdateConfiguration(ctx context.Context, req *licensemanagerpb.UpdateConfigurationRequest,
opts ...gax.CallOption) (*UpdateConfigurationOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetConfiguration()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetConfiguration().GetName())
```

```
params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")
if req.GetRequestId() != "" {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}
if req.GetUpdateMask() != nil {
 field, err := protojson.Marshal(req.GetUpdateMask())
 if err != nil {
  return nil, err
 }
 params.Add("updateMask", string(field[1:len(field)-1]))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "configuration.name",
url.QueryEscape(req.GetConfiguration().GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context,
settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateConfiguration")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
```

```
 return nil, e
 }

 override := fmt.Sprintf("/v1/%s", resp.GetName())
 return &UpdateConfigurationOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, resp),
  pollPath: override,
 }, nil
}

// DeleteConfiguration deletes a single Configuration.
func (c *restClient) DeleteConfiguration(ctx context.Context, req *licensemanagerpb.DeleteConfigurationRequest,
opts ...gax.CallOption) (*DeleteConfigurationOperation, error) {
 baseUrl,
 err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetRequestId() != "" {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq
 = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "DeleteConfiguration")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &DeleteConfigurationOperation{
 lro:      longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// ListInstances lists Instances in a given project and location.
func (c *restClient) ListInstances(ctx context.Context, req *licensemanagerpb.ListInstancesRequest, opts
...gax.CallOption) *InstanceIterator {
 it := &InstanceIterator{}
 req = proto.Clone(req).(*licensemanagerpb.ListInstancesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*licensemanagerpb.Instance, string, error) {
  resp
 := &licensemanagerpb.ListInstancesResponse{}
 if pageToken != "" {
  req.PageToken = pageToken
 }
 if pageSize > math.MaxInt32 {
  req.PageSize = math.MaxInt32
 } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
 }
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/instances", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
```

```
 }
 if req.GetOrderBy() != "" {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers
:= gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListInstances")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetInstances(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
```

```
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen,
 it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// GetInstance gets details of a single Instance.
func (c *restClient) GetInstance(ctx context.Context, req *licensemanagerpb.GetInstanceRequest, opts
...gax.CallOption) (*licensemanagerpb.Instance, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetInstance[0:len((*c.CallOptions).GetInstance):len((*c.CallOptions).GetInstance)],
opts...)
 unm :=
 protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &licensemanagerpb.Instance{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
```

```
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetInstance")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// DeactivateConfiguration deactivates the given configuration.
func (c *restClient) DeactivateConfiguration(ctx context.Context, req
*licensemanagerpb.DeactivateConfigurationRequest, opts ...gax.CallOption) (*DeactivateConfigurationOperation,
error) {
 m := protojson.MarshalOptions{AllowPartial: true,
 UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:deactivate", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil
 {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "DeactivateConfiguration")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }

 override := fmt.Sprintf("/v1/%s", resp.GetName())
 return &DeactivateConfigurationOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, resp),
  pollPath: override,
 }, nil
}

// ReactivateConfiguration reactivates the given configuration.
func (c *restClient) ReactivateConfiguration(ctx context.Context, req
*licensemanagerpb.ReactivateConfigurationRequest, opts ...gax.CallOption) (*ReactivateConfigurationOperation,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err !=
 nil {
  return nil, err
```

```
}
baseUrl.Path += fmt.Sprintf("/v1/%v:reactivate", req.GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &longrunningpb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq,
c.logger, jsonReq, "ReactivateConfiguration")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &ReactivateConfigurationOperation{
 lro:      longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}
```

```
// QueryConfigurationLicenseUsage license Usage information for a Configuration.
func (c *restClient) QueryConfigurationLicenseUsage(ctx context.Context, req
*licensemanagerpb.QueryConfigurationLicenseUsageRequest, opts ...gax.CallOption)
(*licensemanagerpb.QueryConfigurationLicenseUsageResponse, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:queryLicenseUsage", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetEndTime() != nil {
  field, err := protojson.Marshal(req.GetEndTime())
  if
 err != nil {
   return nil, err
  }
  params.Add("endTime", string(field[1:len(field)-1]))
 }
 if req.GetStartTime() != nil {
  field, err := protojson.Marshal(req.GetStartTime())
  if err != nil {
   return nil, err
  }
  params.Add("startTime", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).QueryConfigurationLicenseUsage[0:len((*c.CallOptions).QueryConfigurationLicenseUsag
e):len((*c.CallOptions).QueryConfigurationLicenseUsage)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &licensemanagerpb.QueryConfigurationLicenseUsageResponse{}
 e := gax.Invoke(ctx, func(ctx
 context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
```

```
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "QueryConfigurationLicenseUsage")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// AggregateUsage aggregates Usage per Instance for a Configuration.
func (c *restClient) AggregateUsage(ctx context.Context, req *licensemanagerpb.AggregateUsageRequest, opts
...gax.CallOption) *UsageIterator {
 it := &UsageIterator{}
 req = proto.Clone(req).(*licensemanagerpb.AggregateUsageRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken
 string) ([]*licensemanagerpb.Usage, string, error) {
  resp := &licensemanagerpb.AggregateUsageResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:aggregateUsage", req.GetName())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
```

```
if req.GetEndTime() != nil {
 field, err := protojson.Marshal(req.GetEndTime())
 if err != nil {
  return nil, "", err
 }
 params.Add("endTime", string(field[1:len(field)-1]))
}
if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req.GetOrderBy() != "" {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
}
if
req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}
if req.GetStartTime() != nil {
 field, err := protojson.Marshal(req.GetStartTime())
 if err != nil {
  return nil, "", err
 }
 params.Add("startTime", string(field[1:len(field)-1]))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "AggregateUsage")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
```

```
    return err
   }

   return
  nil
   }, opts...)
   if e != nil {
    return nil, "", e
   }
   it.Response = resp
   return resp.GetUsages(), resp.GetNextPageToken(), nil
  }

  fetch := func(pageSize int, pageToken string) (string, error) {
   items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
   if err != nil {
    return "", err
   }
   it.items = append(it.items, items...)
   return nextPageToken, nil
  }

  it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
  it.pageInfo.MaxSize = int(req.GetPageSize())
  it.pageInfo.Token = req.GetPageToken()

  return it
 }

 // ListProducts lists Products in a given project and location.
 func (c *restClient) ListProducts(ctx context.Context, req *licensemanagerpb.ListProductsRequest, opts
 ...gax.CallOption) *ProductIterator {
  it := &ProductIterator{}
  req = proto.Clone(req).(*licensemanagerpb.ListProductsRequest)
  unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
  it.InternalFetch = func(pageSize int, pageToken
  string) ([]*licensemanagerpb.Product, string, error) {
   resp := &licensemanagerpb.ListProductsResponse{}
   if pageToken != "" {
    req.PageToken = pageToken
   }
   if pageSize > math.MaxInt32 {
    req.PageSize = math.MaxInt32
   } else if pageSize != 0 {
    req.PageSize = int32(pageSize)
   }
   baseUrl, err := url.Parse(c.endpoint)
   if err != nil {
```

```
 return nil, "", err
}
baseUrl.Path += fmt.Sprintf("/v1/%v/products", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")
if req.GetFilter() != "" {
 params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
}
if req.GetOrderBy() != "" {
 params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
}
if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
}
if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds
:= append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListProducts")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
}
```

```
 it.Response = resp
 return resp.GetProducts(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo,
it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetProduct gets details of a single Product.
func (c *restClient) GetProduct(ctx context.Context, req *licensemanagerpb.GetProductRequest, opts
...gax.CallOption) (*licensemanagerpb.Product, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).GetProduct[0:len((*c.CallOptions).GetProduct):len((*c.CallOptions).GetProduct)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &licensemanagerpb.Product{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetProduct")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetLocation gets information about a location.
func (c *restClient) GetLocation(ctx context.Context, req *locationpb.GetLocationRequest, opts ...gax.CallOption)
(*locationpb.Location, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return
 nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLocation[0:len((*c.CallOptions).GetLocation):len((*c.CallOptions).GetLocation)],
```

```
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &locationpb.Location{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header
 = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLocation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// ListLocations lists information about the supported locations for this service.
func (c *restClient) ListLocations(ctx context.Context, req *locationpb.ListLocationsRequest, opts
...gax.CallOption) *LocationIterator {
 it := &LocationIterator{}
 req = proto.Clone(req).(*locationpb.ListLocationsRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*locationpb.Location, string, error) {
  resp := &locationpb.ListLocationsResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
```

```
 baseUrl,
err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v/locations", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header
= headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListLocations")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
```

```
 it.Response = resp
 return resp.GetLocations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *restClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest, opts
...gax.CallOption)
 error {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:cancel", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header
= headers

 _, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CancelOperation")
 return err
}, opts...)
}

// DeleteOperation is a utility method from google.longrunning.Operations.
func (c *restClient) DeleteOperation(ctx context.Context, req *longrunningpb.DeleteOperationRequest, opts
...gax.CallOption) error {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path !=
 "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
  _, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "DeleteOperation")
  return err
 }, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *restClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
```

```
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// ListOperations is a utility method from google.longrunning.Operations.
func
 (c *restClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest, opts
...gax.CallOption) *OperationIterator {
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
  resp := &longrunningpb.ListOperationsResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v/operations", req.GetName())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetFilter() != "" {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req.GetPageSize() != 0 {
   params.Add("pageSize",
 fmt.Sprintf("%v", req.GetPageSize()))
  }
  if req.GetPageToken() != "" {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }

  baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListOperations")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetOperations(), resp.GetNextPageToken(),
nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}
```

```
// CreateConfigurationOperation returns a new CreateConfigurationOperation from a given name.
// The name must be that of a previously created CreateConfigurationOperation, possibly from a different process.
func (c *gRPCClient) CreateConfigurationOperation(name string) *CreateConfigurationOperation {
 return &CreateConfigurationOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// CreateConfigurationOperation returns a new CreateConfigurationOperation from a given name.
// The name must
 be that of a previously created CreateConfigurationOperation, possibly from a different process.
func (c *restClient) CreateConfigurationOperation(name string) *CreateConfigurationOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &CreateConfigurationOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
  pollPath: override,
 }
}

// DeactivateConfigurationOperation returns a new DeactivateConfigurationOperation from a given name.
// The name must be that of a previously created DeactivateConfigurationOperation, possibly from a different
process.
func (c *gRPCClient) DeactivateConfigurationOperation(name string) *DeactivateConfigurationOperation {
 return &DeactivateConfigurationOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// DeactivateConfigurationOperation returns a new DeactivateConfigurationOperation from a given name.
// The name must be that of a previously
 created DeactivateConfigurationOperation, possibly from a different process.
func (c *restClient) DeactivateConfigurationOperation(name string) *DeactivateConfigurationOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &DeactivateConfigurationOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
  pollPath: override,
 }
}

// DeleteConfigurationOperation returns a new DeleteConfigurationOperation from a given name.
// The name must be that of a previously created DeleteConfigurationOperation, possibly from a different process.
func (c *gRPCClient) DeleteConfigurationOperation(name string) *DeleteConfigurationOperation {
 return &DeleteConfigurationOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// DeleteConfigurationOperation returns a new DeleteConfigurationOperation from a given name.
```

```
// The name must be that of a previously created DeleteConfigurationOperation,
 possibly from a different process.
func (c *restClient) DeleteConfigurationOperation(name string) *DeleteConfigurationOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &DeleteConfigurationOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
  pollPath: override,
 }
}

// ReactivateConfigurationOperation returns a new ReactivateConfigurationOperation from a given name.
// The name must be that of a previously created ReactivateConfigurationOperation, possibly from a different
process.
func (c *gRPCClient) ReactivateConfigurationOperation(name string) *ReactivateConfigurationOperation {
 return &ReactivateConfigurationOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// ReactivateConfigurationOperation returns a new ReactivateConfigurationOperation from a given name.
// The name must be that of a previously created ReactivateConfigurationOperation, possibly
 from a different process.
func (c *restClient) ReactivateConfigurationOperation(name string) *ReactivateConfigurationOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &ReactivateConfigurationOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
  pollPath: override,
 }
}

// UpdateConfigurationOperation returns a new UpdateConfigurationOperation from a given name.
// The name must be that of a previously created UpdateConfigurationOperation, possibly from a different process.
func (c *gRPCClient) UpdateConfigurationOperation(name string) *UpdateConfigurationOperation {
 return &UpdateConfigurationOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// UpdateConfigurationOperation returns a new UpdateConfigurationOperation from a given name.
// The name must be that of a previously created UpdateConfigurationOperation, possibly from a different process.
func (c
 *restClient) UpdateConfigurationOperation(name string) *UpdateConfigurationOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &UpdateConfigurationOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
  pollPath: override,
 }
}
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
```

```
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
// Copyright 2025 Google LLC
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//     http://www.apache.org/licenses/LICENSE-2.0
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/discoveryengine/v1/user_license_service.proto

package discoveryenginepb

import (
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 _ "google.golang.org/genproto/googleapis/api/annotations"
 status "google.golang.org/genproto/googleapis/rpc/status"
 protoreflect
 "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
```

```
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Request message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type ListUserLicensesRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The parent [UserStore][] resource name, format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3"
 json:"parent,omitempty"`
 // Optional. Requested page size. Server may return fewer items than
 // requested. If unspecified, defaults to 10. The maximum value is 50; values
 // above 50 will be coerced to 50.
 //
 // If this field is negative, an INVALID_ARGUMENT error is returned.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3" json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `ListUserLicenses` call.
 // Provide this to retrieve the subsequent page.
 //
 // When paginating, all other parameters provided to `ListUserLicenses`
 // must match the call that provided the page token.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
 // Optional. Filter for the list request.
 //
 // Supported fields:
 //
 // * `license_assignment_state`
 //
 // Examples:
 //
 // * `license_assignment_state = ASSIGNED` to list assigned user licenses.
 // * `license_assignment_state
 = NO_LICENSE` to list not licensed users.
 // * `license_assignment_state = NO_LICENSE_ATTEMPTED_LOGIN` to list users
 // who attempted login but no license assigned.
```

```
 // * `license_assignment_state != NO_LICENSE_ATTEMPTED_LOGIN` to filter
 // out users who attempted login but no license assigned.
 Filter string `protobuf:"bytes,4,opt,name=filter,proto3" json:"filter,omitempty"`
}

func (x *ListUserLicensesRequest) Reset() {
 *x = ListUserLicensesRequest{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*ListUserLicensesRequest) ProtoMessage() {}

func (x *ListUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*ListUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{0}
}

func (x *ListUserLicensesRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *ListUserLicensesRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
```

```
}

func (x *ListUserLicensesRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

func (x *ListUserLicensesRequest) GetFilter() string {
 if x != nil {
  return x.Filter
 }
 return ""
}

// Response message for
// [UserLicenseService.ListUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses].
type ListUserLicensesResponse struct {
 state         protoimpl.MessageState
 sizeCache
     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // All the customer's
 // [UserLicense][google.cloud.discoveryengine.v1.UserLicense]s.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // A token, which can be sent as `page_token` to retrieve the next page. If
 // this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *ListUserLicensesResponse) Reset() {
 *x = ListUserLicensesResponse{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *ListUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*ListUserLicensesResponse) ProtoMessage() {}

func (x *ListUserLicensesResponse) ProtoReflect() protoreflect.Message
```

```
 {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[1]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use ListUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*ListUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{1}
}

func (x *ListUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
 return nil
}

func (x *ListUserLicensesResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Request message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// method.
type BatchUpdateUserLicensesRequest struct {
 state         protoimpl.MessageState
 sizeCache
     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The source of the input.
 //
 // Types that are assignable to Source:
 //
 // *BatchUpdateUserLicensesRequest_InlineSource_
 Source isBatchUpdateUserLicensesRequest_Source `protobuf_oneof:"source"`
```

```
 // Required. The parent [UserStore][] resource name, format:
 // `projects/{project}/locations/{location}/userStores/{user_store_id}`.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. If true, if user licenses removed associated license config, the
 // user license will be deleted. By default which is false, the user license
 // will be updated to unassigned state.
 DeleteUnassignedUserLicenses bool
`protobuf:"varint,4,opt,name=delete_unassigned_user_licenses,json=deleteUnassignedUserLicenses,proto3"
json:"delete_unassigned_user_licenses,omitempty"`
}

func (x *BatchUpdateUserLicensesRequest) Reset() {
 *x = BatchUpdateUserLicensesRequest{}
 mi
 := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest) ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{2}
}

func (m *BatchUpdateUserLicensesRequest) GetSource() isBatchUpdateUserLicensesRequest_Source
 {
 if m != nil {
  return m.Source
 }
 return nil
```

```
}

func (x *BatchUpdateUserLicensesRequest) GetInlineSource() *BatchUpdateUserLicensesRequest_InlineSource {
 if x, ok := x.GetSource().(*BatchUpdateUserLicensesRequest_InlineSource_); ok {
  return x.InlineSource
 }
 return nil
}

func (x *BatchUpdateUserLicensesRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *BatchUpdateUserLicensesRequest) GetDeleteUnassignedUserLicenses() bool {
 if x != nil {
  return x.DeleteUnassignedUserLicenses
 }
 return false
}

type isBatchUpdateUserLicensesRequest_Source interface {
 isBatchUpdateUserLicensesRequest_Source()
}

type BatchUpdateUserLicensesRequest_InlineSource_ struct {
 // The inline source for the input content for document embeddings.
 InlineSource *BatchUpdateUserLicensesRequest_InlineSource
`protobuf:"bytes,2,opt,name=inline_source,json=inlineSource,proto3,oneof"`
}

func (*BatchUpdateUserLicensesRequest_InlineSource_) isBatchUpdateUserLicensesRequest_Source()
 {}

// Metadata related to the progress of the
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// operation. This will be returned by the google.longrunning.Operation.metadata
// field.
type BatchUpdateUserLicensesMetadata struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Operation create time.
```

```
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,1,opt,name=create_time,json=createTime,proto3"
json:"create_time,omitempty"`
 // Operation last update time. If the operation is done, this is also the
 // finish time.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=update_time,json=updateTime,proto3"
json:"update_time,omitempty"`
 // Count of user licenses successfully updated.
 SuccessCount int64 `protobuf:"varint,3,opt,name=success_count,json=successCount,proto3"
json:"success_count,omitempty"`
 // Count
 of user licenses that failed to be updated.
 FailureCount int64 `protobuf:"varint,4,opt,name=failure_count,json=failureCount,proto3"
json:"failure_count,omitempty"`
}

func (x *BatchUpdateUserLicensesMetadata) Reset() {
 *x = BatchUpdateUserLicensesMetadata{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesMetadata) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesMetadata) ProtoMessage() {}

func (x *BatchUpdateUserLicensesMetadata) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesMetadata.ProtoReflect.Descriptor
 instead.
func (*BatchUpdateUserLicensesMetadata) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{3}
}

func (x *BatchUpdateUserLicensesMetadata) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
```

```
  return x.CreateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.UpdateTime
 }
 return nil
}

func (x *BatchUpdateUserLicensesMetadata) GetSuccessCount() int64 {
 if x != nil {
  return x.SuccessCount
 }
 return 0
}

func (x *BatchUpdateUserLicensesMetadata) GetFailureCount() int64 {
 if x != nil {
  return x.FailureCount
 }
 return 0
}

// Response message for
//
[UserLicenseService.BatchUpdateUserLicenses][google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdat
eUserLicenses]
// method.
type BatchUpdateUserLicensesResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields
 protoimpl.UnknownFields

 // UserLicenses successfully updated.
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // A sample of errors encountered while processing the request.
 ErrorSamples []*status.Status `protobuf:"bytes,2,rep,name=error_samples,json=errorSamples,proto3"
json:"error_samples,omitempty"`
}

func (x *BatchUpdateUserLicensesResponse) Reset() {
 *x = BatchUpdateUserLicensesResponse{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
```

```
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesResponse) ProtoMessage() {}

func (x *BatchUpdateUserLicensesResponse) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[4]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesResponse.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesResponse) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{4}
}

func (x *BatchUpdateUserLicensesResponse) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
 return nil
}

func (x *BatchUpdateUserLicensesResponse) GetErrorSamples() []*status.Status {
 if x != nil {
  return x.ErrorSamples
 }
 return nil
}

// The inline source for the input config for BatchUpdateUserLicenses
// method.
type BatchUpdateUserLicensesRequest_InlineSource struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // Required. A list of user licenses to update. Each user license
 //
 must have a valid
 // [UserLicense.user_principal][google.cloud.discoveryengine.v1.UserLicense.user_principal].
 UserLicenses []*UserLicense `protobuf:"bytes,1,rep,name=user_licenses,json=userLicenses,proto3"
json:"user_licenses,omitempty"`
 // Optional. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) Reset() {
 *x = BatchUpdateUserLicensesRequest_InlineSource{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*BatchUpdateUserLicensesRequest_InlineSource) ProtoMessage() {}

func (x *BatchUpdateUserLicensesRequest_InlineSource) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[5]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use BatchUpdateUserLicensesRequest_InlineSource.ProtoReflect.Descriptor instead.
func (*BatchUpdateUserLicensesRequest_InlineSource) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP(), []int{2, 0}
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUserLicenses() []*UserLicense {
 if x != nil {
  return x.UserLicenses
 }
 return nil
```

```
}

func (x *BatchUpdateUserLicensesRequest_InlineSource) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_service_proto protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc
 = []byte{
 0x0a, 0x3a, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x73,
 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f,
 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1c, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f, 0x74, 0x61,
 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x66, 0x69,
 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x1a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31, 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x6c, 0x6f, 0x6e,
 0x67, 0x72, 0x75, 0x6e, 0x6e, 0x69, 0x6e, 0x67, 0x2f, 0x6f, 0x70, 0x65, 0x72, 0x61, 0x74, 0x69,
 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x20, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64,
 0x5f, 0x6d, 0x61, 0x73, 0x6b, 0x2e, 0x70, 0x72,
 0x6f, 0x74, 0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d,
 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x72, 0x70, 0x63, 0x2f, 0x73, 0x74, 0x61, 0x74, 0x75, 0x73, 0x2e,
 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0xc6, 0x01, 0x0a, 0x17, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73,
 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x52, 0x65, 0x71, 0x75, 0x65, 0x73,
 0x74, 0x12, 0x48, 0x0a, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x18, 0x01, 0x20, 0x01, 0x28,
 0x09, 0x42, 0x30, 0xe0, 0x41, 0x02, 0xfa, 0x41, 0x2a, 0x0a, 0x28, 0x64, 0x69, 0x73, 0x63, 0x6f,
 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x55, 0x73, 0x65, 0x72, 0x53, 0x74,
 0x6f, 0x72, 0x65, 0x52, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e, 0x74, 0x12, 0x20,
 0x0a, 0x09, 0x70,
 0x61, 0x67, 0x65, 0x5f, 0x73, 0x69, 0x7a, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x05, 0x42, 0x03,
```

0xe0, 0x41, 0x01, 0x52, 0x08, 0x70, 0x61, 0x67, 0x65, 0x53, 0x69, 0x7a, 0x65, 0x12, 0x22, 0x0a,
0x0a, 0x70, 0x61, 0x67, 0x65, 0x5f, 0x74, 0x6f, 0x6b, 0x65, 0x6e, 0x18, 0x03, 0x20, 0x01, 0x28,
0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x09, 0x70, 0x61, 0x67, 0x65, 0x54, 0x6f, 0x6b, 0x65,
0x6e, 0x12, 0x1b, 0x0a, 0x06, 0x66, 0x69, 0x6c, 0x74, 0x65, 0x72, 0x18, 0x04, 0x20, 0x01, 0x28,
0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x06, 0x66, 0x69, 0x6c, 0x74, 0x65, 0x72, 0x22, 0x95,
0x01, 0x0a, 0x18, 0x4c, 0x69, 0x73, 0x74, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x73, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73, 0x65, 0x12, 0x51, 0x0a, 0x0d, 0x75,
0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x18, 0x01, 0x20, 0x03,
0x28, 0x0b, 0x32, 0x2c, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e,
0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e,
0x65, 0x2e, 0x76, 0x31, 0x2e, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65,
0x52, 0x0c, 0x75, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x73, 0x12, 0x26,
0x0a, 0x0f, 0x6e, 0x65, 0x78, 0x74, 0x5f, 0x70, 0x61, 0x67, 0x65, 0x5f, 0x74, 0x6f, 0x6b, 0x65,
0x6e, 0x18, 0x02, 0x20, 0x01, 0x28, 0x09, 0x52, 0x0d, 0x6e, 0x65, 0x78, 0x74, 0x50, 0x61, 0x67,
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0x69, 0x6e, 0x65, 0x5c, 0x56, 0x31, 0xea, 0x02, 0x22, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a,
0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72,
0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x33,
}

```
var (
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc
)

func file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescOnce.Do(func()
 {
  file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 6)
var file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = []any{
 (*ListUserLicensesRequest)(nil),                    // 0: google.cloud.discoveryengine.v1.ListUserLicensesRequest
 (*ListUserLicensesResponse)(nil),                   // 1: google.cloud.discoveryengine.v1.ListUserLicensesResponse
 (*BatchUpdateUserLicensesRequest)(nil),             // 2:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 (*BatchUpdateUserLicensesMetadata)(nil),            // 3:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata
 (*BatchUpdateUserLicensesResponse)(nil),
            // 4: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse
 (*BatchUpdateUserLicensesRequest_InlineSource)(nil), // 5:
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 (*UserLicense)(nil),                                // 6: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil),                      // 7: google.protobuf.Timestamp
 (*status.Status)(nil),                              // 8: google.rpc.Status
 (*fieldmaskpb.FieldMask)(nil),                      // 9: google.protobuf.FieldMask
 (*longrunningpb.Operation)(nil),                    // 10: google.longrunning.Operation
}
var file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = []int32{
 6,  // 0: google.cloud.discoveryengine.v1.ListUserLicensesResponse.user_licenses:type_name ->
google.cloud.discoveryengine.v1.UserLicense
 5,  // 1: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.inline_source:type_name
 -> google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource
 7,  // 2: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.create_time:type_name ->
google.protobuf.Timestamp
 7,  // 3: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesMetadata.update_time:type_name ->
google.protobuf.Timestamp
 6,  // 4: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.user_licenses:type_name ->
google.cloud.discoveryengine.v1.UserLicense
 8,  // 5: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesResponse.error_samples:type_name ->
google.rpc.Status
 6,  // 6: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.user_licenses:type_name -
```

```
> google.cloud.discoveryengine.v1.UserLicense
 9,  // 7: google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest.InlineSource.update_mask:type_name -
> google.protobuf.FieldMask
 0,  // 8: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:input_type
 -> google.cloud.discoveryengine.v1.ListUserLicensesRequest
 2,  // 9: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:input_type ->
google.cloud.discoveryengine.v1.BatchUpdateUserLicensesRequest
 1,  // 10: google.cloud.discoveryengine.v1.UserLicenseService.ListUserLicenses:output_type ->
google.cloud.discoveryengine.v1.ListUserLicensesResponse
 10, // 11: google.cloud.discoveryengine.v1.UserLicenseService.BatchUpdateUserLicenses:output_type ->
google.longrunning.Operation
 10, // [10:12] is the sub-list for method output_type
 8,  // [8:10] is the sub-list for method input_type
 8,  // [8:8] is the sub-list for extension type_name
 8,  // [8:8] is the sub-list for extension extendee
 0,  // [0:8] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_service_proto_init() }
func file_google_cloud_discoveryengine_v1_user_license_service_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_service_proto
 != nil {
  return
 }
 file_google_cloud_discoveryengine_v1_user_license_proto_init()
 file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes[2].OneofWrappers = []any{
  (*BatchUpdateUserLicensesRequest_InlineSource_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   6,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:           file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes,
  DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs,
  MessageInfos:      file_google_cloud_discoveryengine_v1_user_license_service_proto_msgTypes,
 }.Build()
 File_google_cloud_discoveryengine_v1_user_license_service_proto = out.File
 file_google_cloud_discoveryengine_v1_user_license_service_proto_rawDesc
 = nil
 file_google_cloud_discoveryengine_v1_user_license_service_proto_goTypes = nil
 file_google_cloud_discoveryengine_v1_user_license_service_proto_depIdxs = nil
}
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package licensemanager_test

import (
 "context"

 licensemanager "cloud.google.com/go/licensemanager/apiv1"
 licensemanagerpb "cloud.google.com/go/licensemanager/apiv1/licensemanagerpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 locationpb "google.golang.org/genproto/googleapis/cloud/location"
)

func ExampleClient_AggregateUsage_all()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.AggregateUsageRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#AggregateUsageRequest.
 }
 for resp, err := range c.AggregateUsage(ctx, req).All() {
```

```
 if err != nil {
  // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}

func ExampleClient_ListConfigurations_all() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.ListConfigurationsRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListConfigurationsRequest.
 }
 for resp, err := range c.ListConfigurations(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

func ExampleClient_ListInstances_all() {
 ctx := context.Background()
 // This
 snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &licensemanagerpb.ListInstancesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListInstancesRequest.
 }
 for resp, err := range c.ListInstances(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

func ExampleClient_ListProducts_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and
 should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := licensemanager.NewClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &licensemanagerpb.ListProductsRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/licensemanager/apiv1/licensemanagerpb#ListProductsRequest.
 }
 for resp, err := range c.ListProducts(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

func ExampleClient_ListLocations_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It
 will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &locationpb.ListLocationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/google.golang.org/genproto/googleapis/cloud/location#ListLocationsRequest.
}
for resp, err := range c.ListLocations(ctx, req).All() {
 if err != nil {
  // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}

func ExampleClient_ListOperations_all() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require
correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := licensemanager.NewClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.ListOperationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
}
for resp, err := range c.ListOperations(ctx, req).All() {
 if err != nil {
  // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
// Copyright 2025 Google LLC
//
```

```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/cloud/discoveryengine/v1/user_license.proto

package discoveryenginepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
 reflect
 "reflect"
 sync "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// License assignment state enumeration.
type UserLicense_LicenseAssignmentState int32

const (
 // Default value.
 UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED UserLicense_LicenseAssignmentState = 0
 // License assigned to the user.
 UserLicense_ASSIGNED UserLicense_LicenseAssignmentState = 1
 // No license assigned to the user.
 // Deprecated, translated to NO_LICENSE.
 UserLicense_UNASSIGNED UserLicense_LicenseAssignmentState = 2
```

```
 // No license assigned to the user.
 UserLicense_NO_LICENSE UserLicense_LicenseAssignmentState = 3
 // User attempted to login but no license assigned to the user.
 // This state is only used for no user first time login attempt
 but cannot
 // get license assigned.
 // Users already logged in but cannot get license assigned will be assigned
 // NO_LICENSE state(License could be unassigned by admin).
 UserLicense_NO_LICENSE_ATTEMPTED_LOGIN UserLicense_LicenseAssignmentState = 4
)

// Enum value maps for UserLicense_LicenseAssignmentState.
var (
 UserLicense_LicenseAssignmentState_name = map[int32]string{
  0: "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED",
  1: "ASSIGNED",
  2: "UNASSIGNED",
  3: "NO_LICENSE",
  4: "NO_LICENSE_ATTEMPTED_LOGIN",
 }
 UserLicense_LicenseAssignmentState_value = map[string]int32{
  "LICENSE_ASSIGNMENT_STATE_UNSPECIFIED": 0,
  "ASSIGNED":                             1,
  "UNASSIGNED":                           2,
  "NO_LICENSE":                           3,
  "NO_LICENSE_ATTEMPTED_LOGIN":           4,
 }
)

func (x UserLicense_LicenseAssignmentState) Enum() *UserLicense_LicenseAssignmentState {
 p := new(UserLicense_LicenseAssignmentState)
 *p = x
 return p
}

func (x UserLicense_LicenseAssignmentState)
 String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (UserLicense_LicenseAssignmentState) Descriptor() protoreflect.EnumDescriptor {
 return file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0].Descriptor()
}

func (UserLicense_LicenseAssignmentState) Type() protoreflect.EnumType {
 return &file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes[0]
}
```

```
func (x UserLicense_LicenseAssignmentState) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use UserLicense_LicenseAssignmentState.Descriptor instead.
func (UserLicense_LicenseAssignmentState) EnumDescriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0, 0}
}

// User License information assigned by the admin.
type UserLicense struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 //
 Required. Immutable. The user principal of the User, could be email address
 // or other prinical identifier. This field is immutable. Admin assign
 // licenses based on the user principal.
 UserPrincipal string `protobuf:"bytes,1,opt,name=user_principal,json=userPrincipal,proto3"
json:"user_principal,omitempty"`
 // Optional. The user profile.
 // We user user full name(First name + Last name) as user profile.
 UserProfile string `protobuf:"bytes,3,opt,name=user_profile,json=userProfile,proto3"
json:"user_profile,omitempty"`
 // Output only. License assignment state of the user.
 // If the user is assigned with a license config, the user loggin will be
 // assigned with the license;
 // If the user's license assignment state is unassigned or unspecified, no
 // license config will be associated to the user;
 LicenseAssignmentState UserLicense_LicenseAssignmentState
`protobuf:"varint,4,opt,name=license_assignment_state,json=licenseAssignmentState,proto3,enum=google.cloud.dis
coveryengine.v1.UserLicense_LicenseAssignmentState"
 json:"license_assignment_state,omitempty"`
 // Optional. The full resource name of the Subscription(LicenseConfig)
 // assigned to the user.
 LicenseConfig string `protobuf:"bytes,5,opt,name=license_config,json=licenseConfig,proto3"
json:"license_config,omitempty"`
 // Output only. User created timestamp.
 CreateTime *timestamppb.Timestamp `protobuf:"bytes,6,opt,name=create_time,json=createTime,proto3"
json:"create_time,omitempty"`
 // Output only. User update timestamp.
 UpdateTime *timestamppb.Timestamp `protobuf:"bytes,7,opt,name=update_time,json=updateTime,proto3"
json:"update_time,omitempty"`
 // Output only. User last logged in time.
 // If the user has not logged in yet, this field will be empty.
 LastLoginTime *timestamppb.Timestamp
`protobuf:"bytes,8,opt,name=last_login_time,json=lastLoginTime,proto3" json:"last_login_time,omitempty"`
```

```
}

func (x *UserLicense) Reset() {
 *x = UserLicense{}
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UserLicense) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UserLicense) ProtoMessage() {}

func (x *UserLicense) ProtoReflect() protoreflect.Message {
 mi := &file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UserLicense.ProtoReflect.Descriptor instead.
func (*UserLicense) Descriptor() ([]byte, []int) {
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP(), []int{0}
}

func (x *UserLicense) GetUserPrincipal() string {
 if x != nil {
  return x.UserPrincipal
 }
 return ""
}

func (x *UserLicense) GetUserProfile() string {
 if x != nil {
  return x.UserProfile
 }
 return ""
}

func (x *UserLicense) GetLicenseAssignmentState()
```

```
 UserLicense_LicenseAssignmentState {
 if x != nil {
  return x.LicenseAssignmentState
 }
 return UserLicense_LICENSE_ASSIGNMENT_STATE_UNSPECIFIED
}

func (x *UserLicense) GetLicenseConfig() string {
 if x != nil {
  return x.LicenseConfig
 }
 return ""
}

func (x *UserLicense) GetCreateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.CreateTime
 }
 return nil
}

func (x *UserLicense) GetUpdateTime() *timestamppb.Timestamp {
 if x != nil {
  return x.UpdateTime
 }
 return nil
}

func (x *UserLicense) GetLastLoginTime() *timestamppb.Timestamp {
 if x != nil {
  return x.LastLoginTime
 }
 return nil
}

var File_google_cloud_discoveryengine_v1_user_license_proto protoreflect.FileDescriptor

var file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = []byte{
 0x0a, 0x32, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x64,
 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x76,
 0x31,
 0x2f, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x2e, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f,
 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69,
 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70,
 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61,
 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
```

0x6f, 0x1a, 0x1f, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,
0x75, 0x66, 0x2f, 0x74, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x2e, 0x70, 0x72, 0x6f,
0x74, 0x6f, 0x22, 0xa6, 0x05, 0x0a, 0x0b, 0x55, 0x73, 0x65, 0x72, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x12, 0x2d, 0x0a, 0x0e,
0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x69, 0x6e, 0x63,
0x69, 0x70, 0x61, 0x6c, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x05, 0xe0,
0x41, 0x02, 0x52, 0x0d, 0x75, 0x73, 0x65, 0x72, 0x50, 0x72, 0x69, 0x6e, 0x63, 0x69, 0x70, 0x61,
0x6c, 0x12, 0x26, 0x0a, 0x0c, 0x75, 0x73, 0x65, 0x72, 0x5f, 0x70, 0x72, 0x6f, 0x66, 0x69, 0x6c,
0x65, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x01, 0x52, 0x0b, 0x75, 0x73,
0x65, 0x72, 0x50, 0x72, 0x6f, 0x66, 0x69, 0x6c, 0x65, 0x12, 0x82, 0x01, 0x0a, 0x18, 0x6c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x61, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74,
0x5f, 0x73, 0x74, 0x61, 0x74, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x43, 0x2e, 0x67,
0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x64, 0x69, 0x73, 0x63,
0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x76, 0x31, 0x2e, 0x55,
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0x4c, 0x69, 0x63, 0x65, 0x6e,
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0x65, 0x42, 0x03, 0xe0, 0x41, 0x03, 0x52, 0x16, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x41,
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0x0a, 0x0e, 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x63, 0x6f, 0x6e, 0x66, 0x69, 0x67,
0x18, 0x05, 0x20, 0x01, 0x28, 0x09, 0x42, 0x34, 0xe0, 0x41, 0x01, 0xfa, 0x41, 0x2e, 0x0a, 0x2c,
0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e,
0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x4c,
0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x6e, 0x66, 0x69, 0x67, 0x52, 0x0d, 0x6c, 0x69,
0x63, 0x65, 0x6e, 0x73, 0x65, 0x43, 0x6f, 0x6e, 0x66, 0x69, 0x67, 0x12, 0x40, 0x0a, 0x0b, 0x63,
0x72, 0x65, 0x61, 0x74, 0x65, 0x5f, 0x74, 0x69, 0x6d, 0x65, 0x18, 0x06, 0x20, 0x01, 0x28, 0x0b,
0x32,
0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62,
0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x42, 0x03, 0xe0, 0x41,
0x03, 0x52, 0x0a, 0x63, 0x72, 0x65, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12, 0x40, 0x0a,
0x0b, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x5f, 0x74, 0x69, 0x6d, 0x65, 0x18, 0x07, 0x20, 0x01,
0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74,
0x6f, 0x62, 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73, 0x74, 0x61, 0x6d, 0x70, 0x42, 0x03,
0xe0, 0x41, 0x03, 0x52, 0x0a, 0x75, 0x70, 0x64, 0x61, 0x74, 0x65, 0x54, 0x69, 0x6d, 0x65, 0x12,
0x47, 0x0a, 0x0f, 0x6c, 0x61, 0x73, 0x74, 0x5f, 0x6c, 0x6f, 0x67, 0x69, 0x6e, 0x5f, 0x74, 0x69,
0x6d, 0x65, 0x18, 0x08, 0x20, 0x01, 0x28, 0x0b, 0x32, 0x1a, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x62, 0x75, 0x66, 0x2e, 0x54, 0x69, 0x6d, 0x65, 0x73,
0x74, 0x61, 0x6d, 0x70, 0x42,
0x03, 0xe0, 0x41, 0x03, 0x52, 0x0d, 0x6c, 0x61, 0x73, 0x74, 0x4c,
0x6f, 0x67, 0x69, 0x6e, 0x54, 0x69, 0x6d, 0x65, 0x22, 0x90, 0x01, 0x0a, 0x16, 0x4c, 0x69, 0x63,
0x65, 0x6e, 0x73, 0x65, 0x41, 0x73, 0x73, 0x69, 0x67, 0x6e, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x74,
0x61, 0x74, 0x65, 0x12, 0x28, 0x0a, 0x24, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41,
0x53, 0x53, 0x49, 0x47, 0x4e, 0x4d, 0x45, 0x4e, 0x54, 0x5f, 0x53, 0x54, 0x41, 0x54, 0x45, 0x5f,
0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x0c, 0x0a,
0x08, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x01, 0x12, 0x0e, 0x0a, 0x0a, 0x55,
0x4e, 0x41, 0x53, 0x53, 0x49, 0x47, 0x4e, 0x45, 0x44, 0x10, 0x02, 0x12, 0x0e, 0x0a, 0x0a, 0x4e,
0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x10, 0x03, 0x12, 0x1e, 0x0a, 0x1a, 0x4e,
0x4f, 0x5f, 0x4c, 0x49, 0x43, 0x45, 0x4e, 0x53, 0x45, 0x5f, 0x41, 0x54, 0x54, 0x45, 0x4d, 0x50,

```
 0x54, 0x45, 0x44, 0x5f, 0x4c, 0x4f, 0x47, 0x49, 0x4e, 0x10,
 0x04, 0x42, 0x83, 0x02, 0x0a, 0x23,
 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
 0x2e, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65,
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 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2f, 0x61, 0x70, 0x69,
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 0x6e, 0x65, 0x70, 0x62, 0x3b, 0x64, 0x69, 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x65, 0x6e,
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 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x2e, 0x56, 0x31, 0xca, 0x02, 0x1f, 0x47, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x44, 0x69, 0x73, 0x63, 0x6f, 0x76,
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 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a, 0x3a, 0x44, 0x69,
 0x73, 0x63, 0x6f, 0x76, 0x65, 0x72, 0x79, 0x45, 0x6e, 0x67, 0x69, 0x6e, 0x65, 0x3a, 0x3a, 0x56,
 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce sync.Once
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc
)

func file_google_cloud_discoveryengine_v1_user_license_proto_rawDescGZIP() []byte {
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDescOnce.Do(func()
 {
  file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData)
 })
 return file_google_cloud_discoveryengine_v1_user_license_proto_rawDescData
}

var file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes = make([]protoimpl.EnumInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = []any{
 (UserLicense_LicenseAssignmentState)(0), // 0:
google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 (*UserLicense)(nil),                    // 1: google.cloud.discoveryengine.v1.UserLicense
 (*timestamppb.Timestamp)(nil),          // 2: google.protobuf.Timestamp
}
var file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = []int32{
 0, // 0: google.cloud.discoveryengine.v1.UserLicense.license_assignment_state:type_name
```

```
 -> google.cloud.discoveryengine.v1.UserLicense.LicenseAssignmentState
 2, // 1: google.cloud.discoveryengine.v1.UserLicense.create_time:type_name -> google.protobuf.Timestamp
 2, // 2: google.cloud.discoveryengine.v1.UserLicense.update_time:type_name -> google.protobuf.Timestamp
 2, // 3: google.cloud.discoveryengine.v1.UserLicense.last_login_time:type_name -> google.protobuf.Timestamp
 4, // [4:4] is the sub-list for method output_type
 4, // [4:4] is the sub-list for method input_type
 4, // [4:4] is the sub-list for extension type_name
 4, // [4:4] is the sub-list for extension extendee
 0, // [0:4] is the sub-list for field type_name
}

func init() { file_google_cloud_discoveryengine_v1_user_license_proto_init() }
func file_google_cloud_discoveryengine_v1_user_license_proto_init() {
 if File_google_cloud_discoveryengine_v1_user_license_proto != nil {
  return
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc,
   NumEnums:      1,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_cloud_discoveryengine_v1_user_license_proto_goTypes,
  DependencyIndexes: file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs,
  EnumInfos:         file_google_cloud_discoveryengine_v1_user_license_proto_enumTypes,
  MessageInfos:      file_google_cloud_discoveryengine_v1_user_license_proto_msgTypes,
 }.Build()
 File_google_cloud_discoveryengine_v1_user_license_proto = out.File
 file_google_cloud_discoveryengine_v1_user_license_proto_rawDesc = nil
 file_google_cloud_discoveryengine_v1_user_license_proto_goTypes = nil
 file_google_cloud_discoveryengine_v1_user_license_proto_depIdxs = nil
}
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```

```
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
```

```
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
```

```
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
```

```
package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1beta"
 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 //
 It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
```

```
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded
 as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.ListLicensesRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#ListLicensesRequest.
}
it := c.List(ctx, req)
for {
 resp, err := it.Next()
 if err == iterator.Done {
  break
 }
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp

 // If you need to access the underlying RPC response,
 // you can do so by casting the `Response` as below.
 // Otherwise, remove this line. Only populated after
 // first call to Next(). Not safe for concurrent access.
 _
= it.Response.(*computepb.LicensesListResponse)
 }
}

func ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
```

```
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require
 modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1beta/computepb#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
```

```
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package discoveryengine

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"
```

```
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 "cloud.google.com/go/longrunning"
 lroauto "cloud.google.com/go/longrunning/autogen"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax
 "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/grpc/codes"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newUserLicenseClientHook clientHook

// UserLicenseCallOptions contains the retry settings for each method of UserLicenseClient.
type UserLicenseCallOptions struct {
 ListUserLicenses        []gax.CallOption
 BatchUpdateUserLicenses []gax.CallOption
 CancelOperation         []gax.CallOption
 GetOperation            []gax.CallOption
 ListOperations          []gax.CallOption
}

func defaultUserLicenseGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("discoveryengine.googleapis.com:443"),
  internaloption.WithDefaultEndpointTemplate("discoveryengine.UNIVERSE_DOMAIN:443"),
  internaloption.WithDefaultMTLSEndpoint("discoveryengine.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultUserLicenseCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
  ListUserLicenses:        []gax.CallOption{},
```

```
  BatchUpdateUserLicenses: []gax.CallOption{},
  CancelOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier:
 1.30,
    })
   }),
  },
  GetOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        10000 * time.Millisecond,
     Multiplier: 1.30,
    })
   }),
  },
  ListOperations: []gax.CallOption{
   gax.WithTimeout(300000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnCodes([]codes.Code{
     codes.Unavailable,
    }, gax.Backoff{
     Initial:    1000 * time.Millisecond,
     Max:        30000 * time.Millisecond,
     Multiplier: 1.30,
    })
   }),
  },
 }
}

func defaultUserLicenseRESTCallOptions() *UserLicenseCallOptions {
 return &UserLicenseCallOptions{
  ListUserLicenses:        []gax.CallOption{},
  BatchUpdateUserLicenses: []gax.CallOption{},
  CancelOperation: []gax.CallOption{
   gax.WithTimeout(30000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer
```

```
 {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        10000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusServiceUnavailable)
  }),
 },
 GetOperation: []gax.CallOption{
  gax.WithTimeout(30000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        10000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusServiceUnavailable)
  }),
 },
 ListOperations: []gax.CallOption{
  gax.WithTimeout(300000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    1000 * time.Millisecond,
    Max:        30000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusServiceUnavailable)
  }),
 },
}
}

// internalUserLicenseClient is an interface that defines the methods available from Discovery Engine API.
type internalUserLicenseClient
 interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 ListUserLicenses(context.Context, *discoveryenginepb.ListUserLicensesRequest, ...gax.CallOption)
*UserLicenseIterator
 BatchUpdateUserLicenses(context.Context, *discoveryenginepb.BatchUpdateUserLicensesRequest,
...gax.CallOption) (*BatchUpdateUserLicensesOperation, error)
 BatchUpdateUserLicensesOperation(name string) *BatchUpdateUserLicensesOperation
 CancelOperation(context.Context, *longrunningpb.CancelOperationRequest, ...gax.CallOption) error
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
```

```
 ListOperations(context.Context, *longrunningpb.ListOperationsRequest, ...gax.CallOption) *OperationIterator
}

// UserLicenseClient is a client for interacting with Discovery Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing
 User Licenses.
type UserLicenseClient struct {
 // The internal transport-dependent client.
 internalClient internalUserLicenseClient

 // The call options for this service.
 CallOptions *UserLicenseCallOptions

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient *lroauto.OperationsClient
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *UserLicenseClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *UserLicenseClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns
 a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *UserLicenseClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// ListUserLicenses lists the User Licenses.
func (c *UserLicenseClient) ListUserLicenses(ctx context.Context, req
```

```
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 return c.internalClient.ListUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *UserLicenseClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 return c.internalClient.BatchUpdateUserLicenses(ctx, req, opts...)
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
//
 The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *UserLicenseClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return c.internalClient.BatchUpdateUserLicensesOperation(name)
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) CancelOperation(ctx context.Context, req *longrunningpb.CancelOperationRequest,
opts ...gax.CallOption) error {
 return c.internalClient.CancelOperation(ctx, req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest, opts
...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *UserLicenseClient) ListOperations(ctx context.Context,
 req *longrunningpb.ListOperationsRequest, opts ...gax.CallOption) *OperationIterator {
 return c.internalClient.ListOperations(ctx, req, opts...)
}

// userLicenseGRPCClient is a client for interacting with Discovery Engine API over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type userLicenseGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing UserLicenseClient
```

```
 CallOptions **UserLicenseCallOptions

 // The gRPC API client.
 userLicenseClient discoveryenginepb.UserLicenseServiceClient

 // LROClient is used internally to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 operationsClient longrunningpb.OperationsClient

 // The x-goog-* metadata
 to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewUserLicenseClient creates a new user license service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing User Licenses.
func NewUserLicenseClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := defaultUserLicenseGRPCClientOptions()
 if newUserLicenseClientHook != nil {
  hookOpts, err := newUserLicenseClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := UserLicenseClient{CallOptions: defaultUserLicenseCallOptions()}

 c := &userLicenseGRPCClient{
  connPool:         connPool,
  userLicenseClient: discoveryenginepb.NewUserLicenseServiceClient(connPool),
  CallOptions:
      &client.CallOptions,
  logger:           internaloption.GetLogger(opts),
  operationsClient:  longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()
```

```
 client.internalClient = c

 client.LROClient, err = lroauto.NewOperationsClient(ctx, gtransport.WithConnPool(connPool))
 if err != nil {
  // This error "should not happen", since we are just reusing old connection pool
  // and never actually need to dial.
  // If this does happen, we could leak connp. However, we cannot close conn:
  // If the user invoked the constructor with option.WithGRPCConn,
  // we would close a connection that's still in use.
  // TODO: investigate error conditions.
  return nil, err
 }
 c.LROClient = &client.LROClient
 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *userLicenseGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc", grpc.Version, "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type userLicenseRESTClient struct {
 // The http endpoint to connect to.
 endpoint string
```

```
 // The http client.
 httpClient *http.Client

 // LROClient is used internally
 to handle long-running operations.
 // It is exposed so that its CallOptions can be modified if required.
 // Users should not Close this client.
 LROClient **lroauto.OperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing UserLicenseClient
 CallOptions **UserLicenseCallOptions

 logger *slog.Logger
}

// NewUserLicenseRESTClient creates a new user license service rest client.
//
// Service for managing User Licenses.
func NewUserLicenseRESTClient(ctx context.Context, opts ...option.ClientOption) (*UserLicenseClient, error) {
 clientOpts := append(defaultUserLicenseRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultUserLicenseRESTCallOptions()
 c := &userLicenseRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 lroOpts
 := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opClient, err := lroauto.NewOperationsRESTClient(ctx, lroOpts...)
 if err != nil {
  return nil, err
 }
 c.LROClient = &opClient
```

```
 return &UserLicenseClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultUserLicenseRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://discoveryengine.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://discoveryengine.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://discoveryengine.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://discoveryengine.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo
 sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *userLicenseRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *userLicenseRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *userLicenseRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *userLicenseGRPCClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest,
 opts ...gax.CallOption) *UserLicenseIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListUserLicenses[0:len((*c.CallOptions).ListUserLicenses):len((*c.CallOptions).ListUser
Licenses)], opts...)
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
  resp := &discoveryenginepb.ListUserLicensesResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx,
 c.userLicenseClient.ListUserLicenses, req, settings.GRPC, c.logger, "ListUserLicenses")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *userLicenseGRPCClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
```

```
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders,
 hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).BatchUpdateUserLicenses[0:len((*c.CallOptions).BatchUpdateUserLicenses):len((*c.Call
Options).BatchUpdateUserLicenses)], opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.userLicenseClient.BatchUpdateUserLicenses, req, settings.GRPC, c.logger,
"BatchUpdateUserLicenses")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return &BatchUpdateUserLicensesOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, resp),
 }, nil
}

func (c *userLicenseGRPCClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx,
 hds...)
 opts =
append((*c.CallOptions).CancelOperation[0:len((*c.CallOptions).CancelOperation):len((*c.CallOptions).CancelOp
eration)], opts...)
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  _, err = executeRPC(ctx, c.operationsClient.CancelOperation, req, settings.GRPC, c.logger, "CancelOperation")
  return err
 }, opts...)
 return err
}

func (c *userLicenseGRPCClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
```

```
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context,
 settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *userLicenseGRPCClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).ListOperations[0:len((*c.CallOptions).ListOperations):len((*c.CallOptions).ListOperations
)], opts...)
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
  resp := &longrunningpb.ListOperationsResponse{}
  if pageToken !=
 "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.operationsClient.ListOperations, req, settings.GRPC, c.logger, "ListOperations")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetOperations(), resp.GetNextPageToken(), nil
```

```
 }
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// ListUserLicenses lists the
 User Licenses.
func (c *userLicenseRESTClient) ListUserLicenses(ctx context.Context, req
*discoveryenginepb.ListUserLicensesRequest, opts ...gax.CallOption) *UserLicenseIterator {
 it := &UserLicenseIterator{}
 req = proto.Clone(req).(*discoveryenginepb.ListUserLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*discoveryenginepb.UserLicense, string, error) {
  resp := &discoveryenginepb.ListUserLicensesResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v/userLicenses", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetFilter() != "" {
   params.Add("filter", fmt.Sprintf("%v",
req.GetFilter()))
  }
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
```

```
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListUserLicenses")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response
= resp
 return resp.GetUserLicenses(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
```

```
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// BatchUpdateUserLicenses updates the User License.
// This method is used for batch assign/unassign licenses to users.
func (c *userLicenseRESTClient) BatchUpdateUserLicenses(ctx context.Context, req
*discoveryenginepb.BatchUpdateUserLicensesRequest, opts ...gax.CallOption)
(*BatchUpdateUserLicensesOperation, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if
 err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:batchUpdateUserLicenses", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 buf, err
:= executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "BatchUpdateUserLicenses")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}

override := fmt.Sprintf("/v1/%s", resp.GetName())
return &BatchUpdateUserLicensesOperation{
 lro:      longrunning.InternalNewOperation(*c.LROClient, resp),
 pollPath: override,
}, nil
}

// CancelOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) CancelOperation(ctx context.Context, req
*longrunningpb.CancelOperationRequest, opts ...gax.CallOption) error {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:cancel", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery
 = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
```

```
 headers := gax.BuildHeaders(ctx, hds...)
 return gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  _, err = executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "CancelOperation")
  return err
 }, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption)
 (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET",
```

```
 baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// ListOperations is a utility method from google.longrunning.Operations.
func (c *userLicenseRESTClient) ListOperations(ctx context.Context, req *longrunningpb.ListOperationsRequest,
opts ...gax.CallOption) *OperationIterator {
 it := &OperationIterator{}
 req = proto.Clone(req).(*longrunningpb.ListOperationsRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*longrunningpb.Operation, string, error) {
  resp := &longrunningpb.ListOperationsResponse{}
  if pageToken != "" {
   req.PageToken
 = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v/operations", req.GetName())

  params := url.Values{}
```

```
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetFilter() != "" {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req.GetPageSize() != 0 {
  params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
 }
 if req.GetPageToken() != "" {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path
= settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "ListOperations")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetOperations(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
```

```
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// BatchUpdateUserLicensesOperation returns a new
 BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *userLicenseGRPCClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 return &BatchUpdateUserLicensesOperation{
  lro: longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
 }
}

// BatchUpdateUserLicensesOperation returns a new BatchUpdateUserLicensesOperation from a given name.
// The name must be that of a previously created BatchUpdateUserLicensesOperation, possibly from a different
process.
func (c *userLicenseRESTClient) BatchUpdateUserLicensesOperation(name string)
*BatchUpdateUserLicensesOperation {
 override := fmt.Sprintf("/v1/%s", name)
 return &BatchUpdateUserLicensesOperation{
  lro:      longrunning.InternalNewOperation(*c.LROClient, &longrunningpb.Operation{Name: name}),
  pollPath: override,
 }
}
// Copyright 2025 Google LLC
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//     https://www.apache.org/licenses/LICENSE-2.0
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.
```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1beta/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
 Update            []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
```

```
  return gax.OnHTTPCodes(gax.Backoff{
   Initial:    100 * time.Millisecond,
   Max:        60000 * time.Millisecond,
   Multiplier:
1.30,
  },
   http.StatusGatewayTimeout,
   http.StatusServiceUnavailable)
 }),
},
GetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
  return gax.OnHTTPCodes(gax.Backoff{
   Initial:    100 * time.Millisecond,
   Max:        60000 * time.Millisecond,
   Multiplier: 1.30,
  },
   http.StatusGatewayTimeout,
   http.StatusServiceUnavailable)
 }),
},
Insert: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
List: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
 gax.WithRetry(func() gax.Retryer {
  return gax.OnHTTPCodes(gax.Backoff{
   Initial:    100 * time.Millisecond,
   Max:        60000 * time.Millisecond,
   Multiplier: 1.30,
  },
   http.StatusGatewayTimeout,
   http.StatusServiceUnavailable)
 }),
},
SetIamPolicy: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
TestIamPermissions: []gax.CallOption{
 gax.WithTimeout(600000
* time.Millisecond),
},
Update: []gax.CallOption{
 gax.WithTimeout(600000 * time.Millisecond),
},
}
```

```
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context,
 *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption) (*computepb.TestPermissionsResponse, error)
 Update(context.Context, *computepb.UpdateLicenseRequest, ...gax.CallOption) (*Operation, error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header
 passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}
```

```
// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context,
 req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available
 in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
```

```
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return
 c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 return c.internalClient.Update(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type
 licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
```

```
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:
      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

// setGoogleClientInfo sets the name and version of the application
 in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN", "pb", protoVersion)
```

```
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for
 use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)],
```

```
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
```

```
baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/getIamPolicy",
req.GetProject(), req.GetResource())

params := url.Values{}
if req != nil && req.OptionsRequestedPolicyVersion != nil {
 params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Policy{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error
{
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
```

```
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err
 := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
 err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter !=
nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return
err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
```

```
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating
 Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
 TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts
...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Update updates a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient)
```

```
Update(ctx context.Context, req *computepb.UpdateLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
m := protojson.MarshalOptions{AllowPartial: true}
body := req.GetLicenseResource()
jsonReq, err := m.Marshal(body)
if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/beta/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}
if req != nil && req.UpdateMask != nil {
 params.Add("updateMask", fmt.Sprintf("%v", req.GetUpdateMask()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds
= append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Update[0:len((*c.CallOptions).Update):len((*c.CallOptions).Update)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Update")
 if err != nil {
```

```
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project:
req.GetProject(),
 },
}
return op, nil
}
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
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//     http://www.apache.org/licenses/LICENSE-2.0
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.7
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
```

```
 reflect "reflect"
 sync
 "sync"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
```

```
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
```

```
  "OWNER":          1,
  "WRITER":         2,
  "READER":         3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
```

```
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
```

0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54, 0x59,
0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,

```
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
```

```
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     https://www.apache.org/licenses/LICENSE-2.0
//
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// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.
```

```
//go:build go1.23

package discoveryengine_test

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
)

func ExampleUserLicenseClient_ListUserLicenses_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.ListUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#ListUserLicensesRequest.
 }
 for resp, err := range c.ListUserLicenses(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

func ExampleUserLicenseClient_ListOperations_all() {
 ctx := context.Background()
 //
 This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
```

```
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &longrunningpb.ListOperationsRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#ListOperationsRequest.
}
for resp, err := range c.ListOperations(ctx, req).All() {
 if err != nil {
  // TODO: Handle error and break/return/continue. Iteration will stop after any error.
 }
 // TODO: Use resp.
 _ = resp
}
}
```

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```

```
// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

// [START discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]

package main

import (
 "context"

 discoveryengine "cloud.google.com/go/discoveryengine/apiv1"
 discoveryenginepb "cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb"
)

func main() {
 ctx := context.Background()
 // This snippet has been automatically generated
 and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := discoveryengine.NewUserLicenseClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &discoveryenginepb.BatchUpdateUserLicensesRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/discoveryengine/apiv1/discoveryenginepb#BatchUpdateUserLicensesReque
st.
 }
 op, err := c.BatchUpdateUserLicenses(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 resp, err := op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

// [END discoveryengine_v1_generated_UserLicenseService_BatchUpdateUserLicenses_sync]
```

```
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.DeleteLicenseRequest{
 //
TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
}
op, err := c.Delete(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}

func ExampleLicensesClient_Get() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
}
resp,
err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
```

```
 // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
```

```
ExampleLicensesClient_SetIamPolicy() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.SetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
}
resp, err := c.SetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically
generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
}
resp, err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
```

```
 _ = resp
}

func ExampleLicensesClient_Update() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may
 require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.UpdateLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#UpdateLicenseRequest.
 }
 op, err := c.Update(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
```

1.4466 otel-metric 1.36.0

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1.4473 genproto-googleapis-api 0.0.0-20250603155806-513f23925822

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1.4474 x-sync 0.15.0

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1.4475 google-golang-org-genproto-googleapis-api 0.0.0-20250603155806-513f23925822

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// OtherLicense is an Other License Information section of an
// SPDX Document for version 2.2 of the spec.
type OtherLicense struct {
 // 10.1: License Identifier: "LicenseRef-[idstring]"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseIdentifier string `json:"licenseId"`

 // 10.2: Extracted Text
 // Cardinality: conditional (mandatory, one) if there is a
 //              License Identifier assigned
 ExtractedText string `json:"extractedText"`

 // 10.3: License Name: single line of text or "NOASSERTION"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseName string `json:"name,omitempty"`

 // 10.4: License Cross Reference
 // Cardinality: conditional (optional, one or many) if license
 //              is not on SPDX License List
 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 //
 10.5: License Comment
 // Cardinality: optional, one
 LicenseComment string `json:"comment,omitempty"`
}
```

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Go support for Protocol Buffers - Google's data interchange format

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// OtherLicense is an Other License Information section of an
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type OtherLicense struct {
 // 6.1: License Identifier: "LicenseRef-[idstring]"
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 LicenseIdentifier string `json:"licenseId"`

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 // Cardinality: conditional (mandatory, one) if there is a
 //              License Identifier assigned
 ExtractedText string `json:"extractedText"`

 // 6.3: License Name: single line of text or "NOASSERTION"
 // Cardinality: conditional (mandatory, one) if license is not
 //              on SPDX License List
 LicenseName string `json:"name,omitempty"`

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 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 // 6.5:
 License Comment
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 LicenseComment string `json:"comment,omitempty"`
}
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 // 10.2: Extracted Text
 // Cardinality: conditional (mandatory, one) if there is a
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 ExtractedText string `json:"extractedText"`

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 LicenseName string `json:"name,omitempty"`

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```

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 // Cardinality: conditional (optional, one or many) if license
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 LicenseCrossReferences []string `json:"seeAlsos,omitempty"`

 // 10.5: License Comment
 // Cardinality:
 optional, one
 LicenseComment string `json:"comment,omitempty"`
}
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github.com/pelletier/go-toml:

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localtime.go, localtime_test.go:

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Changes:
  * Renamed files from civil* to localtime*.
  * Package changed from civil to toml.
  * 'Local' prefix added to all structs.
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1.4478 pb 3.1.6

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```
/*
*
* IP-address/hostname to country converter.
*
* Problem; you want to know where IP a.b.c.d is located.
```

*
* Use ares_gethostbyname ("d.c.b.a.zz.countries.nerd.dk")
* and get the CNAME (host->h_name). Result will be:
*   CNAME = zz<CC>.countries.nerd.dk with address 127.0.x.y (ver 1) or
*   CNAME = <a.b.c.d>.zz.countries.nerd.dk with address 127.0.x.y (ver 2)
*
* The 2 letter country code is in <CC> and the ISO-3166 country
* number is in x.y (number = x*256 + y). Version 2 of the protocol is missing
* the <CC> number.
*
* Ref: http://countries.nerd.dk/more.html
*
* Written by G. Vanem <gvanem@broadpark.no> 2006, 2007
*
* NB! This program may not be big-endian aware.
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* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_strcasecmp.h
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_fds.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_getenv.h
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_parse_ptr_reply.c

*
 /c-ares-1-8-0-tar/c-ares-1.8.0/ares_query.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_mkquery.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_timeout.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_strdup.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_strerror.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_parse_ns_reply.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_writev.h
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_strcasecmp.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_search.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares__read_line.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_gethostbyaddr.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_llist.h
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_strdup.h
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_expand_string.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_getenv.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_llist.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_free_hostent.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_writev.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_parse_a_reply.c
* /c-ares-1-8-0-tar/c-ares-1.8.0/ares__close_sockets.c
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```
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* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_gethostbyname.c
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* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_process.c
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* /c-ares-1-8-0-tar/c-ares-1.8.0/ares_ipv6.h
* /c-ares-1-8-0-tar/c-ares-1.8.0/inet_ntop.h
* /c-ares-1-8-0-tar/c-ares-1.8.0/bitncmp.h
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1.4482 nghttp2 1.8.4

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1.4483 stdlib go1.24.4

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```
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package copyright

import (
 "bytes"
 "internal/testenv"
```

```
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
   return filepath.SkipDir
  }
  switch filepath.Ext(d.Name()) {
  default:
   return nil
  case ".s", ".go":
   // check
  }

  f, err := os.Open(path)
  if err != nil {
   t.Error(err)
   return nil
  }
  defer f.Close()
  n, err := f.Read(buf)
  if err != nil && err != io.EOF {
   t.Error(err)
   return nil
```

```
  }
  b := buf[:n]
  if bytes.Contains(b, copyright) {
   return nil
  }
  for _, ok := range permitted {
   if bytes.HasPrefix(b, ok) {
    return nil
   }
  }
  t.Errorf("%s: missing copyright notice", path)
  return nil
 })
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
```

```
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
```

```
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()
```

```
 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
```

```
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetIamPolicyLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
}
resp, err := c.GetIamPolicy(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicensesClient_Insert()
{
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicensesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.InsertLicenseRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
}
op, err := c.Insert(ctx, req)
if err != nil {
 // TODO: Handle error.
}

err = op.Wait(ctx)
if err != nil {
 // TODO: Handle error.
}
}
```

```
func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
```

```
 },
 Get: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 GetIamPolicy:
[]gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 Insert: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 List: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
  gax.WithRetry(func() gax.Retryer {
   return gax.OnHTTPCodes(gax.Backoff{
    Initial:    100 * time.Millisecond,
    Max:        60000 * time.Millisecond,
    Multiplier: 1.30,
   },
    http.StatusGatewayTimeout,
    http.StatusServiceUnavailable)
  }),
 },
 SetIamPolicy: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
 TestIamPermissions: []gax.CallOption{
  gax.WithTimeout(600000 * time.Millisecond),
 },
}
```

```
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}
```

```
// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption) (*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}
```

```
// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }
```

```
 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
```

```
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
```

```
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf,
resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}
```

```
 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
```

```
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
```

```
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx,
 hds...)
 opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
  if err != nil {
   return err
  }
```

```
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
```

```
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}
```

```
 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken,
 nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
```

```
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
// Copyright 2025 Google LLC
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//
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test
// Copyright 2025 Google LLC
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
```

```
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
```

```
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
```

```
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
```

```
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}
```

```
// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
```

0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,

```
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72,
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
```

```
 return
}
file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
type x struct{}
out := protoimpl.TypeBuilder{
 File: protoimpl.DescBuilder{
  GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
  RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
  NumEnums:      2,
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)
```

```
func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseCodeRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
 }
 resp,
 err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
// Copyright 2025 Google LLC
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
```

```
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool         []gax.CallOption
 UpdateLicensePool      []gax.CallOption
 Assign                 []gax.CallOption
 Unassign               []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation           []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
```

```
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:           []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:         []gax.CallOption{},
  UpdateLicensePool:      []gax.CallOption{},
  Assign:                 []gax.CallOption{},
  Unassign:               []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:           []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient
```

```
 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
```

```
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
```

```
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
```

```
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}
```

```
func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
```

```
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger, "GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name", url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).UpdateLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger, "UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
```

```
  req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
  req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
  return err
  }, opts...)
  if err != nil {
  return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
  }
  fetch := func(pageSize int,
  pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
  return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
  }

  it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
  it.pageInfo.MaxSize = int(req.GetPageSize())
  it.pageInfo.Token = req.GetPageToken()

  return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
  hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

  hds = append(c.xGoogHeaders, hds...)
  ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
  opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
  var resp *longrunningpb.Operation
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
  error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
```

```
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
```

```
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")
 if req.GetUpdateMask() != nil {
  field, err := protojson.Marshal(req.GetUpdateMask())
  if err != nil {
   return nil, err
  }
  params.Add("updateMask", string(field[1:len(field)-1]))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 hds = append(hds, "Content-Type", "application/json")
 headers
 := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp
:= &procurementpb.AssignResponse{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
```

```
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
```

```
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

  params := url.Values{}
  params.Add("$alt", "json;enum-encoding=int")
  if req.GetPageSize() != 0 {
   params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
  }
  if req.GetPageToken() != "" {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }

  baseUrl.RawQuery = params.Encode()

  // Build HTTP headers from client and context metadata.
  hds := append(c.xGoogHeaders, "Content-Type", "application/json")
  headers := gax.BuildHeaders(ctx, hds...)
  e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
```

```
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetPageSize())
it.pageInfo.Token = req.GetPageToken()

return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
```

```
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
```

```
}
// Copyright 2025 Google LLC
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//
//     https://www.apache.org/licenses/LICENSE-2.0
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
```

```
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
// Copyright 2025 Google LLC
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// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
//     http://www.apache.org/licenses/LICENSE-2.0
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// limitations under the License.

// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
```

```
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}
```

```
func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
```

```
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
```

```
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}
```

```
func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
```

0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68,
0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,

```
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
 0x61, 0x67,
 0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
```

```
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:          file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:         file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}

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// Code generated by protoc-gen-go. DO NOT EDIT.
```

```
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
```

```
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}

func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
```

```
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}
```

```
func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
```

```
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
```

```
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
```

```
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
```

```
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
```

```
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
```

```
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}

// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
```

```
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
```

```
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}
```

```
// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}
```

```
func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
 0x6e, 0x74, 0x5f, 0x73, 0x65, 0x72, 0x76, 0x69, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f,
 0x12, 0x2d, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x63,
 0x6f,
 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x1a,
 0x1c, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x61, 0x6e, 0x6e, 0x6f,
 0x74, 0x61, 0x74, 0x69, 0x6f, 0x6e, 0x73, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x17, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x63, 0x6c, 0x69, 0x65, 0x6e, 0x74,
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 0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
 0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,
 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
```

```
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                  // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                    // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
```

```
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}
```

```
func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
```

```
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
```

```
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
```

```
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}

func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
```

```
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
```

```
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
```

```
  MethodName: "UpdateLicensePool",
  Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
 },
 {
  MethodName: "Assign",
  Handler:
   _LicenseManagementService_Assign_Handler,
 },
 {
  MethodName: "Unassign",
  Handler:    _LicenseManagementService_Unassign_Handler,
 },
 {
  MethodName: "EnumerateLicensedUsers",
  Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
 },
},
Streams:  []grpc.StreamDesc{},
Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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comment syntax for the file format. We also recommend that a
file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
```

```
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
```

```
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts ...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
```

```
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}
```

```
// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }
```

```
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
```

1.4485 azure-sdk-for-go-sdk-internal v1.11.1

1.4485.1 Available under license :

```
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//go:build go1.18
// +build go1.18

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// Licensed under the MIT License. See License.txt in the project root for license information.
// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
```

```
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
```

```
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                    *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete            *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate            *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
```

```
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
```

```
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
 if err != nil {
  return nil, err
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return
nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginCreateOrUpdate = &respr
 l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
```

```
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginDelete = &respr
  l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
```

```
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
```

```
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
```

```
 })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
```

```
 }
 beginUpdate = &respr
 l.beginUpdate.add(req, beginUpdate)
}

resp, err := server.PollerResponderNext(beginUpdate, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK},
resp.StatusCode) {
 l.beginUpdate.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
}
if !server.PollerResponderMore(beginUpdate) {
 l.beginUpdate.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
if l.srv.BeginValidateLicense == nil {
 return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
}
beginValidateLicense := l.beginValidateLicense.get(req)
if beginValidateLicense == nil {
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
 regex := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 1 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 body,
err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginValidateLicense = &respr
 l.beginValidateLicense.add(req, beginValidateLicense)
}
```

```
 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
```

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```
{
 "main": "dist/src/index.js",
 "dependencies": {
   "@azure-tools/typespec-go": "0.4.2"
 },
 "devDependencies": {
   "@azure-tools/typespec-autorest": "0.54.0",
   "@azure-tools/typespec-azure-core": "0.54.0",
   "@azure-tools/typespec-azure-resource-manager": "0.54.0",
   "@azure-tools/typespec-azure-rulesets": "0.54.0",
   "@azure-tools/typespec-client-generator-core": "0.54.0",
   "@typespec/compiler": "1.0.0-rc.0",
   "@typespec/http": "1.0.0-rc.0",
   "@typespec/openapi": "1.0.0-rc.0",
   "@typespec/rest": "0.68.0",
   "@typespec/versioning": "0.68.0",
   "@typespec/streams": "0.68.0",
   "@typespec/events": "0.68.0",
   "@typespec/sse": "0.68.0",
   "@azure-tools/typespec-liftr-base": "0.8.0"
 }
}
```

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```
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// +build go1.18

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package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
```

```
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
```

```
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
```

```
 return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
```

```
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
```

```
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
```

```
  nextLink := ""
  if page != nil {
   nextLink = *page.NextLink
  }
  resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
   return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
  }, nil)
  if err != nil {
   return LicensesClientListByResourceGroupResponse{}, err
  }
  return client.listByResourceGroupHandleResponse(resp)
 },
 Tracer: client.internal.Tracer(),
})
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
```

```
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-07-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
```

```
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
```

```
  Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
```

```
 return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
```

```
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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  SOFTWARE
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.
// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //
    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
```

```
 log.Fatalf("failed to obtain a credential: %v", err)
}
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
"{licenseName}", armhybridcompute.License{
 Location: to.Ptr("eastus2euap"),
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//    State: to.Ptr(armhybridcompute.LicenseStateActivated),
```

```
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
```

```
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
```

```
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
```

```
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
```

```
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
```

```
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
    },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

1.4486 azure-sdk-for-go-sdk-azcore v1.18.0

1.4486.1 Available under license :

```
Copyright (c) Microsoft Corporation. All rights reserved.
Licensed under the MIT License.
//go:build go1.18
// +build go1.18

// Copyright (c) Microsoft Corporation. All rights reserved.
// Licensed under the MIT License. See License.txt in the project root for license information.
// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
```

```
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)

 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
```

```
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]](),
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]](),
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]](),
  newListBySubscriptionPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                     *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete             *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate             *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
```

```
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
  resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
```

```
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
  l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
```

```
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if
respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 beginDelete = &respr
 l.beginDelete.add(req, beginDelete)
}

resp, err := server.PollerResponderNext(beginDelete, req)
if err != nil {
 return nil, err
}

if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
 l.beginDelete.remove(req)
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
}
if !server.PollerResponderMore(beginDelete) {
 l.beginDelete.remove(req)
}

return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
if l.srv.Get == nil {
 return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
}
const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
regex
:= regexp.MustCompile(regexStr)
matches := regex.FindStringSubmatch(req.URL.EscapedPath())
if matches == nil || len(matches) < 3 {
 return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
}
resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
if err != nil {
 return nil, err
}
licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
```

```
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
```

```
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
```

```
 l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
```

```
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
```

```
 }

 return resp, nil
}
```

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```
{
 "main": "dist/src/index.js",
 "dependencies": {
   "@azure-tools/typespec-go": "0.4.2"
 },
 "devDependencies": {
   "@azure-tools/typespec-autorest": "0.54.0",
   "@azure-tools/typespec-azure-core": "0.54.0",
   "@azure-tools/typespec-azure-resource-manager": "0.54.0",
   "@azure-tools/typespec-azure-rulesets": "0.54.0",
```

```
  "@azure-tools/typespec-client-generator-core": "0.54.0",
  "@typespec/compiler": "1.0.0-rc.0",
  "@typespec/http": "1.0.0-rc.0",
  "@typespec/openapi": "1.0.0-rc.0",
  "@typespec/rest": "0.68.0",
  "@typespec/versioning": "0.68.0",
  "@typespec/streams": "0.68.0",
  "@typespec/events": "0.68.0",
  "@typespec/sse": "0.68.0",
  "@azure-tools/typespec-liftr-base": "0.8.0"
 }
}
```

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```
//go:build go1.18
// +build go1.18

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package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
```

```
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
```

```
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
```

```
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
```

```
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
```

```
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
```

```
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
```

```
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-07-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
```

```
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
```

```
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
```

```
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
```

```
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
```

```
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}
```

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```
//go:build go1.18
// +build go1.18

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```

```
// Code generated by Microsoft (R) AutoRest Code Generator.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.
// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err !=
```

```
 nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //
    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_CreateOrUpdate.json
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
```

```
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
```

```
cred, err := azidentity.NewDefaultAzureCredential(nil)
if err != nil {
 log.Fatalf("failed to obtain a credential: %v", err)
}
ctx := context.Background()
clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
if err != nil {
 log.Fatalf("failed to create client: %v", err)
}
poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err != nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
//
  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](8),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
```

```
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
```

```
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
```

```
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
```

```
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //
     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  //     TenantID: to.Ptr("{tenandId}"),
  //    },
  //  }},
  // }
 }
}
```

1.4487 apiserver-network-proxy-konnectivity-client 0.31.2

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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
```

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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1.4488 gomega 1.37.0

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1.4489 golang 1.24.4

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package copyright

```
import (
 "bytes"
 "internal/testenv"
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
   return filepath.SkipDir
  }
  switch filepath.Ext(d.Name()) {
  default:
   return nil
  case ".s", ".go":
   // check
  }

  f, err := os.Open(path)
  if err != nil {
   t.Error(err)
   return nil
  }
  defer f.Close()
```

```
  n, err := f.Read(buf)
  if err != nil && err != io.EOF {
   t.Error(err)
   return nil
  }
  b := buf[:n]
  if bytes.Contains(b, copyright) {
   return nil
  }
  for _, ok := range permitted {
   if bytes.HasPrefix(b, ok) {
    return nil
   }
  }
  t.Errorf("%s: missing copyright notice", path)
  return nil
 })
}
```

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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
```

```
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}
```

```
func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
```

```
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
```

```
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

```
func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
```

```
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseCodeRequest{
  // TODO: Fill request
 struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
 }
 resp, err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
```

```
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

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```
// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.34.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"
```

```
 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
```

```
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
```

```
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
```

```
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Pe
rmission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 if protoimpl.UnsafeEnabled {
  mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  ms.StoreMessageInfo(mi)
 }
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission)
```

```
 ProtoReflect() protoreflect.Message {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if protoimpl.UnsafeEnabled && x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role
 != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor
```

```
var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a,
 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
 0x0b, 0x67,
 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88, 0x01, 0x01, 0x12,
 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
 0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
 0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a,
 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
```

```
 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
 0x64,
 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72, 0x6f, 0x6c, 0x65, 0x42,
 0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
 0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
```

```
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func
 file_google_ai_generativelanguage_v1beta_permission_proto_init() {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 if !protoimpl.UnsafeEnabled {
  file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].Exporter = func(v any, i int) any {
   switch v := v.(*Permission); i {
   case 0:
    return &v.state
   case 1:
    return &v.sizeCache
   case 2:
    return &v.unknownFields
   default:
    return nil
   }
  }
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
  },
  GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
  EnumInfos:
         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
  MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1beta_permission_proto = out.File
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
 file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = nil
```

```
 file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get              []gax.CallOption
 TestIamPermissions []gax.CallOption
}
```

```
func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient
 interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
```

```
func (c *LicenseCodesClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode,
 error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string
```

```
 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
```

```
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection returns a connection to the API service.
//
//
 Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds = append(c.xGoogHeaders, hds...)
 hds
 = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
```

```
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return
nil, e
}
return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
```

```
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if
 err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
 return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "io"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/googleapi"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport
 "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)
```

```
var newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
```

```
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000
 * time.Millisecond),
  },
 }
}

// internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
```

```
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

//
 Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy
 for a resource. May be empty if no such policy or resource exists. Caution This resource is intended for use only by
third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}
```

```
// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption) (*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts ...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is intended for use
 only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req *computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse, error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string
```

```
 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
  option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}
```

```
//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient
 = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()
```

```
// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params",
fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "license",
url.QueryEscape(req.GetLicense()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf,
err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
```

```
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()),
 "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()
```

```
  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err
 := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource exists.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and
 context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
```

```
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp);
 err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
```

```
m := protojson.MarshalOptions{AllowPartial: true}
body := req.GetLicenseResource()
jsonReq, err := m.Marshal(body)
if err != nil {
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId",
fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err !=
nil {
  return err
 }
 defer httpRsp.Body.Close()
```

```
 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
 },
}
return op, nil
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses, use this method to make a request to the respective image project, such as debian-
cloud or windows-cloud. Caution This resource is intended for use only by third-party partners who are creating
Cloud Marketplace images.
func (c *licensesRESTClient)
 List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32 {
   req.MaxResults = proto.Uint32(math.MaxInt32)
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, "", err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

 params := url.Values{}
 if req != nil && req.Filter != nil {
  params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
 }
 if req != nil && req.MaxResults != nil {
  params.Add("maxResults",
fmt.Sprintf("%v", req.GetMaxResults()))
 }
 if req != nil && req.OrderBy != nil {
  params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
 }
 if req != nil && req.PageToken != nil {
  params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
 }
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return
err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
```

```
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken, nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
it.pageInfo.MaxSize = int(req.GetMaxResults())
it.pageInfo.Token = req.GetPageToken()

return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only
 by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }
```

```
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  httpRsp, err := c.httpClient.Do(httpReq)
  if err != nil {
   return err
  }
  defer httpRsp.Body.Close()

  if err = googleapi.CheckResponse(httpRsp); err != nil {
   return err
  }

  buf, err := io.ReadAll(httpRsp.Body)
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }
```

```
  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on
 the specified resource. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
```

```
 return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 httpRsp, err := c.httpClient.Do(httpReq)
 if err != nil {
  return err
 }
 defer httpRsp.Body.Close()

 if err = googleapi.CheckResponse(httpRsp); err != nil {
  return err
 }

 buf, err := io.ReadAll(httpRsp.Body)
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return
nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}
```

1.4492 x-text 0.26.0

1.4492.1 Available under license :

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1.4493 aws-sdk-go-v2-credentials 1.17.68

1.4493.1 Available under license :

GetLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop

```
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
```

```
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer
```

```
 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning

```
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
```

```
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
```

```
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
```

```
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
```

```
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
```

"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
```

```
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"
```

```
        },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
              "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "

}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for

\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"

```
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
        "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
        ],
        "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]

```
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

        ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]

}
                            ],
                            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                            "type": "error"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": {
                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
```

```
                }
            ],
            "type": "tree"

        }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {

        "fn": "aws.partition",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {

                                    "ref": "UseFIPS"
                                            },
                                            true
                                        ]
```

```
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }

  ],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"

        },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [

                               {
                                  "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
```

"rules": [
{
"conditions": [],

"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true

]
}
],
"rules": [
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
},
{

```
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true

                ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {

                                                "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                            ]
                                        }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "rules": [

        {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                    ],
```

"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [

```
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
```

```
        },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
```

{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack

enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},

"params": {
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{

"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {

"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
"type": "string",
"traits": {
"smithy.api#enum": [
{

"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled LinuxSubscriptionsDiscovery"

},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled LinuxSubscriptionsDiscovery"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
"type": "structure",
"members": {
"SourceRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

```
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n            <li>\n
   <p>\n                <code>AccountID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
      <code>AmiID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>DualSubscription</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>InstanceID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>InstanceType</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>ProductCode</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>Region</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>Status</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>UsageOperation</code>\n              </p>\n            </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
```

values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}
}
}

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
```

match a certain subscription's name. \n The valid names for this filter are: \n \n
\n \n <code>Subscription</code>\n \n \n \n
The
 valid Operators for this filter are: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects. "
}

```
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
```

"traits": {
"smithy.api#documentation": " To filter your results, specify which subscription providers to return \n\t\t\tin the list. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}

},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource for which to list metadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags for the requested resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [

```
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

           },
            "smithy.api#idempotent": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
```

```
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
```

"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

```
}
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },

  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
```

"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
"type": "string",
"traits": {
"smithy.api#enum": [

{
"name": "RedHat",
"value": "RedHat",
"documentation": "RedHat subscription provider namespace"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "ACTIVE",
"value": "ACTIVE",
"documentation": "ACTIVE status"
},
{
"name": "INVALID",
"value": "INVALID",

"documentation": "INVALID status"
},
{
"name": "PENDING",
"value": "PENDING",
"documentation": "PENDING status"
}
]
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",

"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},

"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target": "smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "

```
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
```

```
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
```

```
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
```

```
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
```

```
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:        region,
 ServiceID:     ServiceID,
 OperationName: "DeleteLicense",
}
}
CheckInLicense
Initialize stack step
 spanInitializeStart
 InterceptExecution
 RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",

"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}
},
"DomainIpv4List": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
"smithy.api#length": {
"min": 1,
"max": 2
}
}
},
"DomainCredentialsProvider": {
"target":

"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
}
},
"DomainNetworkSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
"traits": {
"smithy.api#documentation": " The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the user association. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider
specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code>
resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {
"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user
\n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
"type": "structure",
"members": {
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete. ",
"smithy.api#required": {}
}
},

"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of License Server that the delete request refers to. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
"traits": {
"smithy.api#documentation": " Shows details from the <code>LicenseServerEndpoint</code> resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},

"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "
}
},
"Value": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
"type": "union",
"members": {
"ActiveDirectoryIdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",

"traits": {
"smithy.api#documentation": " The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Refers to an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider. ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {

"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides user-based
subscriptions. ",
"smithy.api#required": {}
}
},

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}

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            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
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    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
```

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
},
"aws.protocols#restJson1": {},

"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,

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                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                 ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [
                            {

                                "fn": "booleanEquals",
                                "argv": [
                                    {
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                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
    "type": "error"
},
{
    "conditions": [],
    "endpoint": {
        "url": {
            "ref": "Endpoint"
        },

"properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
"type": "tree"
},
{
"conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
],
"rules": [
    {
        "conditions": [
            {
                "fn": "aws.partition",

            "argv": [
                {
                    "ref": "Region"
                }
            ],
            "assign": "PartitionResult"
        }
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                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
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                                "ref": "UseFIPS"
                              },

true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
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                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
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                          {
                            "conditions": [
                              {

"fn": "booleanEquals",
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                                  {
                                    "fn": "getAttr",
                                    "argv": [
                                      {
                                        "ref": "PartitionResult"
                                      },
                                      "supportsFIPS"
                                    ]
                                  }
                                ]
                              },

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                                "argv": [
                                  true,
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                                    {
                                        "fn": "getAttr",
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                                            {
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                                            },
                                            "supportsDualStack"
                                        ]
                                    }

                            ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

    ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
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                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [

  {
                                    "ref": "UseFIPS"
                                },
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                                "fn": "booleanEquals",
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                                        "fn": "getAttr",
                                        "argv": [

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                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
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            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
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                "fn": "booleanEquals",
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                    "ref": "UseDualStack"
                  },
                  true
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            ],
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                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]

          }
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }

            ],
                "type": "tree"
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              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
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"type": "error"
}
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"type": "tree"
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"conditions": [],
"endpoint": {
"url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
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"type": "endpoint"
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{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":
{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",

"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",

"UseFIPS":
true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {

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            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
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        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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{
                "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
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        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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            }
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        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false

    }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                }

        },
            "params": {
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"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}

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            },
            "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {

          "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://example.com"
                }
            },
            "params": {
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
            }
        },
        {
            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
            }
```

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                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error": "Invalid Configuration:
 Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
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{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [

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            {
                "name": "PROVISIONING",
                "value": "PROVISIONING",
                "documentation": ""
            },
            {
                "name": "PROVISIONING_FAILED",
                "value": "PROVISIONING_FAILED",
                "documentation": ""
            },
            {
                "name": "PROVISIONED",
                "value": "PROVISIONED",
                "documentation": ""
            },
            {
                "name": "DELETING",
                "value": "DELETING",
                "documentation": ""
            },
            {
                "name": "DELETION_FAILED",
                "value": "DELETION_FAILED",
                "documentation": ""

            },
            {
                "name": "DELETED",
                "value": "DELETED",
                "documentation": ""
            }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "HEALTHY",
                "value": "HEALTHY",
                "documentation": ""
            },
            {
                "name": "UNHEALTHY",
                "value": "UNHEALTHY",
                "documentation": ""
            },
```

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                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
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"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use
the following filters to streamline results: \n \n \n Product \n \n
\n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",

```
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members":
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{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },

        "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoints": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
```

empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"

```
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n            <p>Status</p>\n            </li>\n            <li>\n            <p>Username</p>\n
</li>\n            <li>\n            <p>Domain</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
```

This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":

"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " Returns the list of tags for the specified resource. ",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve. ",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

            }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": " The tags for the specified resource. "
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"

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    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
```

"smithy.api#documentation": " The ID of the EC2 instance, which
provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n
\n Status \n \n \n Username \n \n
\n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "

```
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
```

"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type":
"list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {

"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Registers an identity provider for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/RegisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider to register. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}

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            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
            "type": "structure",
            "members": {
                "IdentityProviderSummary": {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                    "traits": {
                        "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                        "smithy.api#required": {}
                    }
                }
            },
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
            "type": "string",
            "traits": {
                "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

       "smithy.api#error": "client",
                "smithy.api#httpError": 404
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
            "type": "structure",
            "members": {
                "SecretId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                        "smithy.api#length": {
```

"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "

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        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
```

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }

    }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {

 "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
"type": "structure",
"members": {

"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

```
            }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {
```

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to
update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security
group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {

```
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>A parameter is not valid.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
```

```
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err !=
nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
```

```
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
```

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation

spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
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"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {

"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,

"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},

{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"

}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-gov-east-1.api.aws"
}
},

"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true

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            }
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        {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
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"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}

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                    },

            "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false
                    }
                },
                {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                        "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                        "Region": "us-isob-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true
                    }
                },
                {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

      "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                    "expect": {
                        "endpoint": {
                            "url": "https://example.com"
                        }
                    },
                    "params": {
                        "UseFIPS": false,

        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
```

```
                },
                {
                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                        "Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
```

```
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"

}
    ],
    "traits": {
        "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant
```

ARN. "
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": " Grant status. "
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Grant version. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": " Access to resource denied. ",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},

"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
8
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws[a-zA-Z-]*:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},
"com.amazonaws.licensemanager#Boolean":
{
"type": "boolean",
"traits": {
"smithy.api#default": false
}
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
"type": "structure",
"members": {
"AllowEarlyCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}
},

"traits":
{
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest": {
        "type":
 "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn":
{
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
```

"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature
(JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive
identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "

```
        }
    },
    "LicenseConsumptionToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
        }
    },
    "EntitlementsAllowed": {
         "target": "com.amazonaws.licensemanager#EntitlementDataList",
        "traits": {
            "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
        }
    },
    "NodeId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
        }
    },
    "SignedToken": {
        "target": "com.amazonaws.licensemanager#SignedToken",
        "traits": {
            "smithy.api#documentation": "<p>Signed token.</p>"
        }
    },
    "IssuedAt": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"

      }
    },
    "Expiration": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
        }
    },
    "CheckoutMetadata": {
        "target": "com.amazonaws.licensemanager#MetadataList",
        "traits": {
            "smithy.api#documentation": "<p>Information about constraints.</p>"
        }
    }
},
"traits": {
    "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the account that created the license is the same that is performing the check out, you must\n            specify the account as the beneficiary.</p>\n        </note>"
        }
    },
```

"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",

"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required":
{}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {
"smithy.api#input":
{}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken":
{
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {
"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {

"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license
checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}

}
},
"com.amazonaws.licensemanager#ClientRequestToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 36
}
}
},

"com.amazonaws.licensemanager#ClientToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#ConflictException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ConflictException",
"httpResponseCode": 409

},
"smithy.api#documentation": " There was a conflict processing the request. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {

"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "

}
},
"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more information, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/granted-licenses.html\">Granted
 licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }

  },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the grant. For more information about tagging support in\n License Manager, see the TagResource operation. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {

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        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
             }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
         {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},

"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "

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            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",

            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
```

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    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {

      "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
```

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits":
 {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration
is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager.
Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU),
allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to
host (how long a \n        license must be associated with a host), and the number of licenses purchased and
used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",

     "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
```

"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n
\n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n
\n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n
\n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code>
are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}

```
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",

               "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {

        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n        For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert
 a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
```

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            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
 "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
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{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for
a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}

},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license. For more information about tagging support in\n License Manager, see the TagResource operation. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {

"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}

}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},

"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",

"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required":
{}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",

"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New version of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateTokenRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}

}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n
to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#TokenType",

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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

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            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the grant.</p>",
                    "smithy.api#required": {}
                }
```

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type":
"operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },

        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator,
 which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output":
 {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
```

```
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
          "smithy.api#required": {}
        }
      },
      "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Current version of the license.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
     "members": {
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
        "traits": {
          "smithy.api#documentation": "<p>License status.</p>"
        }
      },
      "DeletionDate": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
```

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        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license
home Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
```

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        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "JWT_PS384"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation":
"<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
```

"smithy.api#documentation": " Entitlement unit. ",
"smithy.api#required": {}
}
},
"AllowCheckIn": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether check-ins are allowed. "
}
}
},

"traits": {
"smithy.api#documentation": " Describes a resource entitled for use with a license. "
}
},
"com.amazonaws.licensemanager#EntitlementData": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data name. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement data value. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation":
" Entitlement data unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Data associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementDataList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#EntitlementData"
}
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"

}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},
"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {

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            "smithy.api#enumValue": "Terabits"
          }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Percent"
          }
        },

    "BYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",

         "traits": {
            "smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
             }
        },
        "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits":
{
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
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            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target":
"smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bytes"
                }
            },
            "KILOBYTES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes"
                }
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            },
            "MEGABYTES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes"
                }

        },
            "GIGABYTES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes"
                }
            },
            "TERABYTES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabytes"
                }
            },
            "BITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits"
                }
            },
            "KILOBITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits"
                }
            },
            "MEGABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"Megabits"
                }
            },
            "GIGABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits"
                }
            },
            "TERABITS": {
                "target": "smithy.api#Unit",
                "traits": {
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"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},
"BITS_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Bits/Second"
}
},
"KILOBITS_PER_SECOND": {
"target": "smithy.api#Unit",

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            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
            }
        },
        "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
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"MaxCount": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Maximum entitlement usage count. "
}
},
"Unit": {
"target": "com.amazonaws.licensemanager#EntitlementDataUnit",
"traits": {
"smithy.api#documentation": " Entitlement usage unit. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Usage associated with an entitlement resource. "
}
},
"com.amazonaws.licensemanager#EntitlementUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#EntitlementUsage"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumption": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",

"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation": " A dependency required to run the API is missing. ",
"smithy.api#error": "client",
"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type":
"structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {

"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue":
{
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",

"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {
"Token": {

"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {

"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

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            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },

      "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
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    },
    "com.amazonaws.licensemanager#GetLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about
the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
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"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the specified license configuration. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationId": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}

},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description
of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "

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            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
             }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
            }
        },
        "ProductInformationList": {

         "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {
            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        }
    },
    "traits": {
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"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits":
{
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information
on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

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        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                 "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type converted from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits":
{
                    "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

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            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output":
{
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"

        },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {

 "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

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                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"

  }
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
    "type": "structure",
    "members": {
        "LicenseUsage": {
            "target": "com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
                "smithy.api#documentation": "<p>License usage details.</p>"
            }
        }
    },
    "traits": {
         "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetServiceSettings": {
    "type": "operation",
    "input": {
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"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets
the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n and so on. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications
from License Manager. "
}
},

"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}
},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}
},
"ParentArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Parent ARN. ",
"smithy.api#required": {}

```
    }
},
"LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
        "smithy.api#documentation": "<p>License ARN.</p>",
        "smithy.api#required": {}
    }
},
"GranteePrincipalArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
        "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
        "smithy.api#required": {}
    }
},
"HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
     "traits": {
        "smithy.api#documentation": "<p>Home Region of the grant.</p>",
        "smithy.api#required": {}
    }
},
"GrantStatus": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>",
        "smithy.api#required": {}
    }
},
"StatusReason": {
    "target": "com.amazonaws.licensemanager#StatusReasonMessage",
    "traits": {
        "smithy.api#documentation": "<p>Grant status reason.</p>"
    }
},
"Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>",
         "smithy.api#required": {}
    }
},
"GrantedOperations": {
    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
        "smithy.api#documentation": "<p>Granted operations.</p>",
        "smithy.api#required": {}
```

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            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a grant.</p>"
    }
},
"com.amazonaws.licensemanager#GrantList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Grant"

  }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
```

"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}

},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "

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            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
        },
        "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
    }
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
    }
},
"com.amazonaws.licensemanager#ISO8601DateTime": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
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                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[
 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException":
 {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InventoryFilter": {
```

"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "enum",
"members":
{
"EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EQUALS"
}
},
"NOT_EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "NOT_EQUALS"
}
},
"BEGINS_WITH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "BEGINS_WITH"

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                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {

     "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n          and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of
 a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
```

```
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n          and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key
 fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>"
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

               "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits":
{
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration":
{
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
```

"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License
version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target":
"com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {

"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation":
" Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}

}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}

```
    },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of server resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was associated with the
resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
```

```
            },
            "DISABLED":
 {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",

  "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
```

"smithy.api#documentation": " Number of licenses consumed by the resource. "

}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
"type": "structure",
"members": {
"UsageOperation": {
"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
},
"ProductCodes": {
"target": "com.amazonaws.licensemanager#ProductCodeList",
"traits": {
"smithy.api#documentation": " Product codes referred to in the license conversion process. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",

"members":
{
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},

"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},

"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}
},
"SUCCEEDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUCCEEDED"
}
},
"FAILED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED"
}

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        }
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
      }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
      "type": "enum",
      "members": {
        "VCPU": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "vCPU"
          }
        },
        "INSTANCE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Instance"
          }
        },
        "CORE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Core"
          }
        },

      "SOCKET": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Socket"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
      "type": "enum",
      "members": {
        "PENDING_DELETE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
          }
```

```
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#License"
        }
    },

"com.amazonaws.licensemanager#LicenseOperationFailure": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                 "traits": {
                    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
```

```
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"

    }
            },
            "MetadataList": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource
 Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
      },
      "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
          "AVAILABLE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "AVAILABLE"
            }
          },
          "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
          },
          "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DEACTIVATED"
            }
          },
          "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUSPENDED"
            }
          },
          "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"EXPIRED"
            }
          },
```

"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes
the entitlement usage associated with a license. "
}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource
launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation":
" Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}

},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n<ul>\n<li>\n<p>\n<code>LicenseArn</code>\n</p>\n
</li>\n<li>\n<p>\n<code>GrantStatus</code>\n</p>\n</li>\n
<li>\n<p>\n<code>GranteePrincipalARN</code>\n</p>\n</li>\n
<li>\n<p>\n<code>ProductSKU</code>\n</p>\n</li>\n<li>\n
<p>\n<code>LicenseIssuerName</code>\n</p>\n</li>\n</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target":
"com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
         "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
```

"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Lists the license configurations for your account. "
}

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArns": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

       "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#Filters",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.</p>\n            </li>\n
        <li>\n                <p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates
whether hard license enforcement is used.</p>\n            </li>\n            <li>\n                <p>\n
<code>usagelimitExceeded</code> - A Boolean
 value that indicates whether the available licenses have been exceeded.</p>\n            </li>\n        </ul>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
      "type": "structure",
      "members": {
        "LicenseConfigurations": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurations",
          "traits": {
```

"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits":
{
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license type conversion tasks for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
"type": "structure",
"members": {
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"Filters": {
"target":
"com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " \n Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
"type": "structure",
"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your
account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",

```
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

        },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n        <li>\n        <p>\n        <code>LicenseConfigurationArn</code>\n
</p>\n        </li>\n        </ul>"
                }
            },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
"type": "structure",
"members": {
"ReportGenerators": {
"target": "com.amazonaws.licensemanager#ReportGeneratorList",
"traits": {
"smithy.api#documentation": " A report generator that creates periodic reports about your license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {

     "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target":
 "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                 }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"

},
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

     },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of
results.</p>"
                }
            }
```

```
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
         {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
```

"traits": {
"smithy.api#documentation": " Filters to scope
the results. The following filters are supported: \n \n \n \n
<code>Beneficiary</code>\n \n \n \n \n
<code>ProductSKU</code>\n \n \n \n \n
<code>Fingerprint</code>\n \n \n \n \n
<code>Status</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",

"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}

}
},

"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts
in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the received license. ",
"smithy.api#required": {}
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are
supported: \n \n \n \n <code>ParentArn</code>\n \n
\n \n \n <code>GranteePrincipalArn</code>\n
\n \n "
}
},
"NextToken": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Lists the grants the organization has received. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",

"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
},
"output":
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

        }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n <ul>\n <li>\n <p>\n <code>Beneficiary</code>\n </p>\n
</li>\n <li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
                }

            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to
 scope the results. The following filters are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>IssuerName</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Beneficiary</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
```

```
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

    },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>Received license details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the
next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FailedDependencyException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }

    },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#InventoryFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are
```

<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified resource. For more information about tagging support in\n License Manager, see the TagResource operation. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {

"smithy.api#documentation": " Information about the tags. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists your tokens. "
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
"type": "structure",
"members": {
"TokenIds": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {

"smithy.api#documentation": " Token IDs. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filter is supported: \n
\n \n \n <code>LicenseArns</code>\n \n \n
"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation":
" Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },

 {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults":
```

{
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | \n \t<code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}

```
    }
  },
  "com.amazonaws.licensemanager#Location": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#Long": {
    "type": "long"
  },
  "com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
        }

},
      "AssociationCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
  },
  "com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
      "smithy.api#range": {
        "min": 1,
        "max": 100
      }
    }
  },
  "com.amazonaws.licensemanager#MaxSize3StringList": {

  "type": "list",
    "member": {
```

"target": "com.amazonaws.licensemanager#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 3
}
}
},
"com.amazonaws.licensemanager#Message": {
"type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The key name. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The value. "
}
}
},
"traits":
{
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement

maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior":
{
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n
\n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n
<dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {

"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration
information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductCodeId": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^[A-Za-z0-9]{1,25}$"
        }
    },
    "com.amazonaws.licensemanager#ProductCodeList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ProductCodeListItem"
        }
    },
    "com.amazonaws.licensemanager#ProductCodeListItem": {
        "type": "structure",
        "members": {
            "ProductCodeId": {
                "target":
"com.amazonaws.licensemanager#ProductCodeId",
                "traits": {
                    "smithy.api#documentation": "<p>The product code ID</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductCodeType": {
                "target": "com.amazonaws.licensemanager#ProductCodeType",
                "traits": {
                    "smithy.api#documentation": "<p>The product code type</p>",
                    "smithy.api#required": {}
```

```
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A list item that contains a product code.</p>"
        }
    },
    "com.amazonaws.licensemanager#ProductCodeType": {
        "type": "enum",
        "members": {
            "MARKETPLACE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
 "marketplace"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The possible values are
<code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of
 filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on.
</p>\n        <p>Accepted values for <code>ProductInformationFilterName</code> are listed here along with
descriptions and valid options for <code>ProductInformationFilterComparator</code>. </p>\n        <p>The
following filters and are supported when the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
<ul>\n            <li>\n                <p>\n                <code>Application Name</code> - The name of the application.\n
        Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Publisher</code> - The publisher of the application.\n            Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Application
Version</code> - The version of the application.\n            Logical operator
 is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                <code>Platform
Name</code> - The name of the platform.\n            Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                <code>Platform Type</code> - The platform type.\n
```

Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code> \n \t| <code>db2-se</code> | <code>db2-ae</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation":
" Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",

"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {

"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
"type": "enum",
"members": {
"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#RedirectException": {
"type": "structure",
"members": {
"Location":
{
"target": "com.amazonaws.licensemanager#Location",
"traits": {

```
            "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
      }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
      }
    },
```

"com.amazonaws.licensemanager#RejectGrantRequest":
{
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {

"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType": {
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members":
{
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",

"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "

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            }
        },
        "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
                "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
            }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
        },
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",

    "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
             }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}
}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {

"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}
},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory":
{
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Platform of the resource. "
}

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            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {

"target": "com.amazonaws.licensemanager#ResourceInventory"
        }
    },
    "com.amazonaws.licensemanager#ResourceLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ResourceLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
```

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}

},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",

"traits": {
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag":
{
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The tag key. "
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the tags for a resource. For more information about tagging support in\n License Manager, see the TagResource operation. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified resource. The following resources support\n tagging in License Manager: \n \n \n Licenses \n \n \n Grants \n \n \n License configurations \n \n \n Report generators \n \n "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. The following examples provide an example\n ARN for each supported resource in License Manager: \n \n \n Licenses -\n <code>arn:aws:license-manager::111122223333:license:l-EXAMPLE2da7646d6861033667f20e895</code>\n \n \n \n Grants

-\n <code>arn:aws:license-manager::111122223333:grant:g-EXAMPLE7b19f4a0ab73679b0beb52707</code>\n \n \n \n License configurations -\n <code>arn:aws:license-manager:us-east-1:111122223333:license-configuration:lic-EXAMPLE6a788d4c8acd4264ff0ecf2ed2d</code>\n \n \n \n Report generators -\n <code>arn:aws:license-manager:us-east-1:111122223333:report-generator:r-EXAMPLE825b4a4f8fe5a3e0c88824e5fc6</code>\n \n \n ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#TokenData": {
"type": "structure",
"members": {

"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. "
}
},
"TokenType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"ExpirationTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation":
" Token expiration time, in ISO8601-UTC format. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller. "
}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the roles included in the
token. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>. "
}

}
},
"traits": {
"smithy.api#documentation": " Describes a token. "
}
},
"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,

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                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
    },

    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
             {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name
(ARN) of the resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
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"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},

"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to

a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {

"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}

},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n        <p>You can update the license specifications
 of AMIs, instances, and hosts.\n        You cannot update the license specifications for launch templates and
CloudFormation templates, \n        as they send license configurations to the operation that creates the
resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations
 to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
"type": "structure",
"members":
{
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. "

```
            }
        },
        "SnsTopicArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
            }
        },
        "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
            }
        },
         "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UsageOperation": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        }
    }
},
"com.amazonaws.licensemanager#ValidationException": {
    "type": "structure",
    "members": {
```

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

ListLicenses

Initialize stack step

spanInitializeStart

InterceptExecution

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

InterceptBeforeSerialization

OperationSerializer

InterceptAfterSerialization

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

InterceptBeforeRetryLoop

Retry

InterceptAttempt

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

InterceptBeforeSigning

Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.4494 x-net 0.41.0

1.4494.1 Available under license :

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1.4495 aws-sdk-go-v2-service-sts 1.33.20

1.4495.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody

```
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
       uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
```

```
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
```

// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.

```
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return
 err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
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RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step

spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
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Deserialize stack step
AddRawResponseToMetadata
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RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter

SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
```

```
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if
 err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

```
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
```

```
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
```

```
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
```

DisassociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string
```

```
 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options);
err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
```

```
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
```

```
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string
```

```
 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go

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```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
```

"type": "long"
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Get details for a Bring Your Own License (BYOL) subscription that's registered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/GetRegisteredSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation":
" The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {

"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
```

"traits": {
"smithy.api#documentation": " Lists
the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}
},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
"type": "structure",
"members": {
"AmiId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The AMI ID used to launch the instance. "
}
},
"InstanceID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The instance ID of the resource. "
}
},
"InstanceType": {
"target": "smithy.api#String",
"traits":

{
"smithy.api#documentation": " The instance type of the resource. "
}
},
"AccountID": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The account ID which owns the instance. "
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {

"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"

```
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager Linux Subscriptions",
           "arnNamespace": "license-manager-linux-subscriptions",
          "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
```

"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}

],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"

```
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
                                        ]

}
                                ],
                                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                                "type": "error"
                            },
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": {
                                        "ref": "Endpoint"
                                    },
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"

                    }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "isSet",
                                    "argv": [
                                        {
                                            "ref": "Region"
```

```
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {

"fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {

                              "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }

],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
```

```
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"

                    },
                                                "supportsFIPS"
                                            ]
                                        }
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [

                                          {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                        }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],

        "rules": [
                                        {
                                            "conditions": [],
                                            "endpoint": {
                                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
```

"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS and DualStack are enabled, but this partition does not support one or both",
"type": "error"
}
],
"type": "tree"
},
{

"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true
]
}
],
"rules": [
{
"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true

]
}
],

"rules": [
{
"conditions": [],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"
},
{
"conditions": [],
"error": "FIPS is enabled but this partition does not support FIPS",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true

]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",

"argv": [
true,
{
"fn": "getAttr",
"argv": [
{

"ref": "PartitionResult"
},
"supportsDualStack"
]
}
]
}
],
"rules": [
{
"conditions": [],
"rules": [

{
"conditions": [],
"endpoint": {
"url": "https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"

}
],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"rules": [

```
                                    {
                                      "conditions": [],
                                      "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                      },
                                      "type": "endpoint"
                                    }
                                  ],
                                  "type": "tree"
                                }
                              ],
                              "type": "tree"
                            }
                          ],
                          "type": "tree"
                        },
                        {
                          "conditions": [],
                          "error": "Invalid Configuration: Missing Region",
                          "type": "error"
                        }
                      ],
                      "type": "tree"
                    }
                  ]
                },
                "smithy.rules#endpointTests": {
                  "testCases": [
                    {
                      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                      "expect": {
                        "endpoint": {
                          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

                    }
                      },
                      "params": {
                        "Region": "us-east-1",
                        "UseFIPS": true,
                        "UseDualStack": true
                      }
                    },
                    {
                      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                      "expect": {
```

"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{

"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",

"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {

"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
}
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS":
false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}

```
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }

    },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {
            "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
          },
          {

            "documentation": "For custom endpoint with fips enabled and dualstack disabled",
            "expect": {
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
```

```
                },
                {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {

"Region": "us-east-1",
                        "UseFIPS": false,
                        "UseDualStack": true,
                        "Endpoint": "https://example.com"
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
```

"traits": {
"smithy.api#documentation": " The Regions in which to discover data for Linux subscriptions. ",
"smithy.api#required": {}
}
},
"OrganizationIntegration": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
"traits": {
"smithy.api#documentation": " Details if you have enabled resource discovery across your accounts in Organizations. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Lists the settings defined for discovering Linux subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the running Amazon EC2 instances that were discovered with commercial Linux\n subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptionInstances"
},
"smithy.api#idempotent": {},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "Instances"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {

"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {
"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n      organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n              <p>\n                <code>Subscription</code>\n              </p>\n           </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n           <li>\n              <p>\n
<code>contains</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>equals</code>\n              </p>\n           </li>\n           <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n           </li>\n         </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
```

"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
"type": "structure",
"members": {
"RegisteredSubscriptionProviders": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "EQUAL",
"value": "Equal",
"documentation": "Equal operator"
},
{
"name": "NOT_EQUAL",
"value": "NotEqual",
"documentation": "Not equal operator"
},
{
"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

           },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
```

Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
"type": "structure",

"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {

"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " Unable to find the requested Amazon Web Services resource. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "InProgress",
"value": "InProgress",
"documentation": "InProgress status"
},
{
"name": "Completed",
"value": "Completed",
"documentation": "Completed status"
},
{
"name": "Successful",

```
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name":
{
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
```

```
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
            }
        },
        "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this
 subscription.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
        ]
    }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
```

"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}

```
            }

        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
            "type": "structure",
            "members": {},
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
            "type": "map",
            "key": {
                "target": "smithy.api#String"
            },
            "value": {
                "target": "smithy.api#String"
            },
            "traits": {
                "smithy.api#length": {
                    "min": 0,
                    "max": 50
                },
                "smithy.api#sensitive": {}
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
                "smithy.api#error": "client"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
            },
            "errors": [
```

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to remove the metadata tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tagKeys": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
"traits": {

"smithy.api#documentation": " A list of metadata tag keys to remove from the requested \n\t\t\tresource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates the service settings for Linux subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/UpdateServiceSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Describes if the discovery of Linux subscriptions is enabled. ",
"smithy.api#required": {}
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated

from. ",
"smithy.api#required": {}
}
},
"AllowUpdate": {
"target":
"smithy.api#Boolean",
"traits": {
"smithy.api#documentation": " Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client"
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
```

```
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return
 err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
```

```
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
```

```
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack,
options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
```

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
 {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
```

"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "SELF_MANAGED",
"value": "SELF_MANAGED",
"documentation": "SELF_MANAGED type of Active Directory"
},
{
"name": "AWS_MANAGED",
"value": "AWS_MANAGED",
"documentation": "AWS_MANAGED type of Active Directory"
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#Arn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Associates the user to an EC2 instance to utilize user-based subscriptions. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}

```
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
                }
            }
        },
        "traits": {

    "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
```

state of the\n\t\t\tresource. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a network endpoint for the Remote Desktop Services (RDS) license server. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/CreateLicenseServerEndpoint"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {

"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details. ",
"smithy.api#required": {}
}
},
"LicenseServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "

```
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
 {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
```

resource that was deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
 {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
```

"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {

"type": "structure",
"members": {
"InstanceUserSummary":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " Contains a list of subnets that apply for the Active Directory domain. ",
"smithy.api#length": {
"min": 1
},

"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Contains network settings for the Active Directory domain. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#Filter": {
"type": "structure",
"members": {
"Attribute": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of an attribute to use as a filter. "
}
},
"Operation": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of search (For example, eq, geq, leq) "

```
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
```

"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits": {
"smithy.api#documentation": " The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of the identity provider. ",
"smithy.api#required": {}
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider. "
}
},
"FailureMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The failure message associated with an identity provider. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
}
},

"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
}

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    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                 }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
```

"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
```

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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
{
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
},
"rules": [
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Endpoint"

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                }
            ]
        }
    ],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {

                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
```

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                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "aws.partition",

                            "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ],
                                "assign": "PartitionResult"
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseFIPS"
                                            },

true
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "ref": "UseDualStack"
                                            },
                                            true
```

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                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {

"fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },

                {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }

            ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
```

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                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

  {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

    {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                            },
                            true
                        ]
                    }
```

```
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {

        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

    "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
```

"ref": "PartitionResult"
},
"supportsDualStack"
]

}
]
}
],
"rules": [
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
"properties": {},
"headers": {}
},
"type": "endpoint"
}

],
"type": "tree"
},
{
"conditions": [],
"error": "DualStack is enabled but this partition does not support DualStack",
"type": "error"
}
],
"type": "tree"
},
{
"conditions": [],
"endpoint": {
"url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
},
"type": "endpoint"
}
],
"type": "tree"
}
],
"type": "tree"

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            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
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"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS":
true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {

"endpoint":
{
"url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint":
{
"url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": true,

"UseDualStack": false
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},

"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
"expect": {
"endpoint": {

"url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",

"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {

"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}

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            },
            {
              "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
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"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS
\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "

```
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

    "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
 {
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
        },
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"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{

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            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

        },
        {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
        }
    ]
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
        {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
        },
        {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
        },
        {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
        }
    ]
  }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
  "type": "structure",
  "members": {
    "ServerType": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
        "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
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"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n            <li>\n                <p>Product</p>\n            </li>\n
        <li>\n                <p>DirectoryId</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
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"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n IdentityProviderArn \n \n "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
```

"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
"type": "structure",
"members": {
"ProductUserSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list product subscriptions operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't

empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Returns the list of tags for the specified resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#readonly": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

```
    }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
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"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
"type": "structure",
"members": {
"InstanceUserSummaries": {

"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
"traits": {
"smithy.api#documentation": " Metadata that describes the list user association operation. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
"type": "structure",
"members": {
"Username":
{
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The user name from the identity provider for this product user. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific user. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
"type": "structure",
"members": {
"RdsSalCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
"traits": {
"smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {

     "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Settings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
"traits":
{
"smithy.api#documentation": " The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation":
" Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-

\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",

"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
"type": "union",
"members": {
"RdsSalSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
"traits": {
"smithy.api#documentation": " The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains settings for a specific server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerType": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "RDS_SAL",
"value": "RDS_SAL",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
"type": "structure",
"members": {
"message": {

"target": "smithy.api#String"
}
},

"traits": {
"smithy.api#documentation": " The request failed because a service quota is exceeded. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
"type": "structure",
"members": {
"Subnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The subnets defined for the registered identity provider. ",
"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",

"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the product subscription. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
```

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",

"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},

{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want to remove tags from. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}

}
},
"TagKeys": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
"traits": {
"smithy.api#documentation": " The tag keys to remove from the resource. ",
"smithy.api#httpQuery": "tagKeys",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n \n \n Subnets which you want to add to provision VPC endpoints. \n \n \n Subnets which you want to remove the VPC endpoints from. \n \n \n Security group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",

"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
 nil {
  return err
```

```
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


```
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
          {
              "id": "PaginatedTrait",
              "namespace": "*"
          },
          {
              "id": "HttpHeaderTrait",
              "namespace": "*"
          },
          {
              "id": "HttpUriConflict",
              "namespace": "*"
          },
          {
              "id": "Service",
```

```
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
```

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"endpointPrefix": "license-manager"
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"type": "Boolean"
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {

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                "url": "https://example.com"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
        }
    },
    {
        "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
        "expect": {
            "endpoint": {
                "url": "https://example.com"
            }
        },
        "params": {
            "UseFIPS": false,

    "UseDualStack": false,
            "Endpoint": "https://example.com"
        }
    },
    {
        "documentation": "For custom endpoint with fips enabled and dualstack disabled",
        "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
        }
    },
    {
        "documentation": "For custom endpoint with fips disabled and dualstack enabled",
        "expect": {
            "error":
 "Invalid Configuration: Dualstack and custom endpoint are not supported"
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true,
            "Endpoint": "https://example.com"
```

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                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
    }
  }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"

  }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
```

"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
"httpResponseCode": 401
},
"smithy.api#documentation": " Access to resource denied. ",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
"type": "enum",
"members": {
"DISTRIBUTED_GRANTS_ONLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
}
},
"ALL_GRANTS_PERMITTED_BY_ISSUER": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperation": {

"type": "enum",
"members": {
"CREATE_GRANT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateGrant"
}
},
"CHECKOUT_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutLicense"
}
},
"CHECKOUT_BORROW_LICENSE": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckoutBorrowLicense"
}
},
"CHECK_IN_LICENSE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CheckInLicense"
}
},
"EXTEND_CONSUMPTION_LICENSE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
8
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {

"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws[a-zA-Z-]*:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
}
},
"com.amazonaws.licensemanager#AuthorizationException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "AuthorizationFailure",
"httpResponseCode": 403
},
"smithy.api#documentation": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n policy associated with this account. ",
"smithy.api#error": "client",
"smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
"type": "structure",
"members": {
"LastRunTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time that automated discovery last ran. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes automated discovery. "
}
},
"com.amazonaws.licensemanager#Boolean":

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{
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks in the specified license. Check in a license when it is no longer in use. "
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
}
},

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        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn":
 {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web
Signature
 (JWS) algorithm PS384.\n        For more information, see <a href=\"https://tools.ietf.org/html/rfc7518#section-
3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
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            "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive
identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
             "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
```

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            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"

            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
        },
        "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {
```

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",

"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}

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            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input":
 {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
        "type": "structure",
        "members": {
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
```

```
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
        "SignedToken":
{
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license
checkout expires.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
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        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }

    }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode": 409

      },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
```

again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 409
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type of the resource consuming a license. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "
}
}
},
"traits": {

"smithy.api#documentation": " Details about license consumption. "
}
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
}
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
"type": "structure",
"members": {
"RenewType": {
"target": "com.amazonaws.licensemanager#RenewType",
"traits": {
"smithy.api#documentation": " Renewal frequency. "
}
},
"ProvisionalConfiguration": {
"target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "

}
},

"BorrowConfiguration": {
"target": "com.amazonaws.licensemanager#BorrowConfiguration",
"traits": {
"smithy.api#documentation": " Details about a borrow configuration. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a consumption configuration. "
}
},
"com.amazonaws.licensemanager#CreateGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more information, see Granted

licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. ",
"smithy.api#required": {}
}

},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"Principals": {
"target": "com.amazonaws.licensemanager#PrincipalArnList",
"traits": {
"smithy.api#documentation": " The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN): \n \n \n An Amazon Web Services account, which includes only the account specified. \n \n \n \n \n An organizational unit (OU), which includes all accounts in the OU. \n \n \n \n \n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}

```
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the grant. For more information about tagging support in\n        License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a new version of the specified grant. For more information, see\n Granted licenses in License Manager in the License Manager User Guide. "
}
},

"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},

"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation":
" Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}
},
"traits": {
"smithy.api#input": {}

```
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",

            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {

      "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits":
{
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration
```

is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",

"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example,

#allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n
\n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
<code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |
<code>minimumCores</code>\n
\n \n \n \n <code>Instances</code> dimension:
<code>allowedTenancy</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n
\n \n \n \n <code>Sockets</code> dimension:
<code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n
<code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n
\n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code>
are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-
DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {

  "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",

"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for
a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}

}
},

"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
"type": "structure",
"members": {
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}

}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region for the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}

},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Information about the license. "
}
},

"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license. For more information about tagging support in\n License Manager, see the TagResource operation. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},

"traits": {
"smithy.api#output": {}
}

```
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
```

}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. ",
"smithy.api#required": {}
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",

"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. ",
"smithy.api#required":
{}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " License ARN. "

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            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
    },

"output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
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"target": "com.amazonaws.licensemanager#ServerInternalException"
},

{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a long-lived token. \n A refresh token is a JWT token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license. "
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}

}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n
to the amr claim of the JWT token. "
}
},
"ClientToken": {

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            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",

          "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
```

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            "smithy.api#required": {}
          }
        },
        "End": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>End of the time range.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
      }
```

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    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse":
{
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
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```
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteLicense": {
    "type":
"operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },

        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license.</p>"
    }
},
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"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator,
which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",

"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
"type": "structure",
"members": {
"Status": {

"target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"DeletionDate": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date when the license is deleted. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],

"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
"type": "enum",
"members": {
"JWT_PS384": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "JWT_PS384"
}
}
}
},
"com.amazonaws.licensemanager#Entitlement": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Entitlement name. ",
"smithy.api#required": {}
}

```
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement resource. Use only if the unit is None.</p>"
                }
            },
            "MaxCount": {
                "target": "com.amazonaws.licensemanager#Long",
                "traits": {
                    "smithy.api#documentation":
"<p>Maximum entitlement count. Use if the unit is not None.</p>"
                }
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
```

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            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation":
"<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"

        }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
```

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"MICROSECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Microseconds"
    }
},
"MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Milliseconds"
    }
},
"BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {

    "smithy.api#enumValue": "Kilobytes"
    }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
```

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        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"
            }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },

    "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
```

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    }
},
"GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
    }
},
"TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",

   "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
    }
},
"BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits/Second"
    }
},
"KILOBITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
    }
},
"MEGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits/Second"
    }
},
"GIGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits/Second"
     }
},
"TERABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits/Second"
    }
},
"COUNT_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
```

"smithy.api#enumValue": "Count/Second"
}
}
}
},
"com.amazonaws.licensemanager#EntitlementList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Entitlement"
}
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits":
{
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target":

"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}

},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},

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            "KILOBITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits"
                }
            },
            "MEGABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"Megabits"
                }
            },
            "GIGABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits"
                }
            },
            "TERABITS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits"
                }
            },
            "PERCENT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Percent"
                }
            },
            "BYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bytes/Second"
                }
            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
```

```
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue":
"Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND":
{
          "target": "smithy.api#Unit",
          "traits": {
```

```
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumedValue": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Resource usage consumed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxCount": {

 "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
          }
        },
        "Unit": {
          "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#EntitlementUsage"
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
```

"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {

"smithy.api#default": false,
"smithy.api#documentation":
" Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license consumption expires. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#FailedDependencyException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
},
"ErrorCode": {
"target": "com.amazonaws.licensemanager#String"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FailedDependency",
"httpResponseCode": 424
},
"smithy.api#documentation": " A dependency required to run the API is missing. ",
"smithy.api#error": "client",

"smithy.api#httpError": 424
}
},
"com.amazonaws.licensemanager#Filter": {
"type":
"structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#FilterName",
"traits": {
"smithy.api#documentation": " Name of the filter. Filter names are case-sensitive. "
}
},
"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"

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        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue":
{
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Filter",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [

      {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {

  "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse": {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation":
 "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

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"com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },

      "Version": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about
 the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {

            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description
of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules.</p>"
            }
          },
```

"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},

"ProductInformationList": {

"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits":
{
"smithy.api#documentation": " Gets information about the specified license type conversion task. "
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",

"traits":
{
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "

}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was
completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output":

{
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"

        },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " Gets information about the specified report generator. "
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. ",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

```
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {

 "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
},
"output": {
"target":
"com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "

}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target": "com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
             "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets
the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
```

"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}
},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

```
"com.amazonaws.licensemanager#Grant": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
            }
        },
        "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Parent ARN.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>",
                "smithy.api#required": {}
            }
        },
        "GranteePrincipalArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantStatus": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
```

```
            "smithy.api#documentation": "<p>Grant status.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>",
             "smithy.api#required": {}
          }
        },
        "GrantedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Granted operations.</p>",
            "smithy.api#required": {}
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Grant"

    }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
      "type": "enum",
      "members": {
        "PENDING_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
```

"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},

"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",

"traits": {

"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}

},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Granted license beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Granted license metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Creation time of the granted license. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Version of the granted license. "
}
},

"ReceivedMetadata": {
"target": "com.amazonaws.licensemanager#ReceivedMetadata",
"traits": {
"smithy.api#documentation": " Granted license received metadata. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes a license that is granted to a grantee. "
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation": " One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}

```
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

                "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": "<p>Condition of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An inventory filter.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members":
{
            "EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "EQUALS"
                }
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"
                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {

     "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of
 a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key
 fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
```

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits":
{
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "

```
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration":
{
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>License creation time.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License
version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
```

"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target":
"com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension to use to track the license inventory. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Number of available licenses as a hard limit. "
}

},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ConsumedLicenses": {

"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",

"traits": {
"smithy.api#documentation": " Automated discovery information. "
}

}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}

},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-

account</code>. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Describes an association with a license configuration. "
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members": {
          "AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "AVAILABLE"
            }
          },
          "DISABLED":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": " Type of resource. "
            }
          },
          "ResourceStatus": {

"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Status of the resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was initially associated with the resource. "
}
},
"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed by the resource. "

}
}
},
"traits": {
"smithy.api#documentation": " Details about the usage of a resource associated with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
}
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseConfiguration"
}
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
"type": "structure",
"members": {
"UsageOperation": {

"target": "com.amazonaws.licensemanager#UsageOperation",
"traits": {
"smithy.api#documentation": " The
Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform\n \n "
}
},
"ProductCodes": {
"target": "com.amazonaws.licensemanager#ProductCodeList",
"traits": {
"smithy.api#documentation": " Product codes referred to in the license conversion process. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members":
{
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},

"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {

"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"

```
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }

        }
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },

    "SOCKET": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
  },
  "com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
  },

"com.amazonaws.licensemanager#LicenseOperationFailure": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
```

"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Resource type. "
}
},
"ErrorMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Error message. "
}
},
"FailureTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Failure time. "
}
},
"OperationName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the operation. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource. "
}
},
"OperationRequestedBy": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The requester is \"License Manager Automated Discovery\". "

}
},
"MetadataList": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Reserved. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes the failure of a license operation. "
}
},

"com.amazonaws.licensemanager#LicenseOperationFailureList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailure"
}
},
"com.amazonaws.licensemanager#LicenseSpecification": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource
Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-
account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"EXPIRED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes

the entitlement usage associated with a license. "
}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}

```
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Lists the resource associations for the specified license configuration.</p>\n        <p>Resource associations
need not consume licenses from a license configuration. \n        For example, an AMI or a stopped instance might
not consume a license (depending on \n        the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }

     },
            "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },

    {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
```

"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},

"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
"type": "structure",
"members": {
"LicenseOperationFailureList": {
"target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
"traits": {
"smithy.api#documentation": " License configuration operations that failed. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Lists the license configurations for your account. "
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the license configurations. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",

"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>. \n \n \n \n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. \n \n \n \n <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
"type": "structure",
"members": {
"LicenseConfigurations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurations",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

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            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target":
 "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
```

"members": {
"LicenseConversionTasks": {
"target": "com.amazonaws.licensemanager#LicenseConversionTasks",
"traits": {
"smithy.api#documentation": " Information about the license configuration tasks for your account. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits":
 {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
```

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            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
     "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {

 "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {
"LicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " License configurations associated with a resource. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"

},
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

     },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of
results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope
 the results. The following filters are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>Beneficiary</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",

    "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}

    }
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
        {
```

"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the grants received for all accounts in the organization. "
}

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
            "smithy.api#required": {}
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>ParentArn</code>\n                </p>\n
    </li>\n            <li>\n                <p>\n                    <code>GranteePrincipalArn</code>\n
        </p>\n            </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": " Received grant details. "
            }
        },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Token for the next set of results. "
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {

   "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output":
{
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

        }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
```

"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Lists the licenses the organization has received. "
}

},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the licenses. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to
scope the results. The following filters are supported: \n \n \n \n
<code>ProductSKU</code>\n \n \n \n \n
<code>Status</code>\n \n \n \n \n
<code>Fingerprint</code>\n \n \n \n \n
<code>IssuerName</code>\n \n \n \n \n
<code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventory": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FailedDependencyException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists resources managed using Systems Manager inventory. "
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {

"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}

},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {

"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the tags for the specified resource. For more information about tagging support in\n License Manager, see the TagResource operation. "
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {

"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. ",
"smithy.api#required":
{}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
"type": "structure",
"members": {
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Information about the tags. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListTokensRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListTokensResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
```

"type": "structure",
"members": {
"Tokens": {
"target": "com.amazonaws.licensemanager#TokenList",
"traits": {
"smithy.api#documentation": " Received token details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults":
 {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>resourceArn</code> - The ARN of the license configuration resource.</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | \n            \t<code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).</p>\n            </li>\n            <li>\n                <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationUsageList": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                 }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }

},
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
```

"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {

"type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The key name. "
            }
        },
        "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " The value. "
            }
        }
    },
    "traits":

{
"smithy.api#documentation": " Describes key/value pairs. "
}
},
"com.amazonaws.licensemanager#MetadataList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Metadata"
}
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior":
{
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n
\n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n
<dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}

```
            }
        },
        "traits": {

        "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n        override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration
 information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductCodeId": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^[A-Za-z0-9]{1,25}$"
        }
    },
    "com.amazonaws.licensemanager#ProductCodeList": {
        "type": "list",
        "member": {
```

"target": "com.amazonaws.licensemanager#ProductCodeListItem"
}
},
"com.amazonaws.licensemanager#ProductCodeListItem": {
"type": "structure",
"members": {
"ProductCodeId": {
"target":
"com.amazonaws.licensemanager#ProductCodeId",
"traits": {
"smithy.api#documentation": " The product code ID ",
"smithy.api#required": {}
}
},
"ProductCodeType": {
"target": "com.amazonaws.licensemanager#ProductCodeType",
"traits": {
"smithy.api#documentation": " The product code type ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " A list item that contains a product code. "
}
},
"com.amazonaws.licensemanager#ProductCodeType": {
"type": "enum",
"members": {
"MARKETPLACE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"marketplace"
}
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The possible values are
<code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}

```
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of
 filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on.
</p>\n        <p>Accepted values for <code>ProductInformationFilterName</code> are listed here along with
descriptions and valid options for <code>ProductInformationFilterComparator</code>. </p>\n        <p>The
following filters and are supported when the resource type \n        is <code>SSM_MANAGED</code>:</p>\n
<ul>\n            <li>\n                <p>\n                    <code>Application Name</code> - The name of the application.\n
        Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Application Publisher</code> - The publisher of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>Application
Version</code> - The version of the application.\n                Logical operator
 is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n                <p>\n                    <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from
automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The key for your tag must be appended
to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>.
<code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>AccountId</code> - The
 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n                Logical
operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>License Included</code> - The type of license included.\n                Logical operators are
<code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are: <code>sql-server-
enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-web</code> |  \n
        <code>windows-server-datacenter</code>.</p>\n            </li>\n        </ul>\n        <p>The following filters
and logical operators are supported when the resource type\n        is <code>RDS</code>:</p>\n        <ul>\n
<li>\n                <p>\n                    <code>Engine Edition</code> - The edition of the database engine.\n
Logical operator is <code>EQUALS</code>.\n                Possible
 values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code> \n            \t| <code>db2-se</code> | <code>db2-ae</code>.</p>\n            </li>\n            <li>\n
<p>\n                    <code>License Pack</code> - The license pack.\n                Logical operator is
<code>EQUALS</code>.\n                Possible values are: <code>data guard</code> | \n                <code>diagnostic
pack sqlt</code> | \n                <code>tuning pack sqlt</code> | \n                <code>ols</code> | \n
<code>olap</code>.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
        }
    },
```

"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation":
" Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",

"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {

"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus":
{
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                 "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED_WORKFLOW"
                }
            },
            "DELETED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DELETED"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location":
{
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
```

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Rejects the specified grant. "
}
},
"com.amazonaws.licensemanager#RejectGrantRequest":
{
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {

"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType": {
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}

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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members":
 {
            "value": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",
                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {

            "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits": {
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"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "
}
},
"ReportCreatorAccount": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Web Services account ID used to create the report generator. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"S3Location": {
"target": "com.amazonaws.licensemanager#S3Location",
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the report was created. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags associated with the report generator. "
}
}
},
"traits": {
"smithy.api#documentation": " Describe the details of a report generator. "
}
},

"com.amazonaws.licensemanager#ReportGeneratorList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportGenerator"
}
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
"type": "string",
"traits": {
"smithy.api#length":
{
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}
},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory":
{
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}

```
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",

    "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {

"target": "com.amazonaws.licensemanager#ResourceInventory"
        }
    },
    "com.amazonaws.licensemanager#ResourceLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
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```
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "EC2_AMI"
}
},
"RDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "RDS"
}
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
}
}
}
},
"com.amazonaws.licensemanager#S3Location": {
"type": "structure",
"members": {
"bucket": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the S3 bucket reports are published to. "
}

},
"keyPrefix": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Prefix of the S3 bucket reports are published to. "
}
}
},
"traits": {
"smithy.api#documentation": " Details of the S3 bucket that report generator reports are published to. "
}
},
"com.amazonaws.licensemanager#ServerInternalException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {

"aws.protocols#awsQueryError": {
"code": "InternalError",
"httpResponseCode": 500
},
"smithy.api#documentation": " The server experienced an internal error. Try again. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
},
"com.amazonaws.licensemanager#SignedToken": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 4096
}
}
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 400
},
"smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
"type": "string"
},
"com.amazonaws.licensemanager#StringList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#Tag": {
"type": "structure",
"members": {
"Key": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The tag key. "
}
},
"Value": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The tag value. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about the tags for a resource. For more information about tagging support in\n License Manager, see the TagResource operation. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified resource. The following resources support\n tagging in License Manager: \n \n \n Licenses \n \n \n Grants \n \n \n License configurations \n \n \n Report generators \n \n "
}
},
"com.amazonaws.licensemanager#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. The following examples provide an example\n ARN for each supported resource in License Manager: \n \n \n Licenses -\n <code>arn:aws:license-manager::111122223333:license:l-EXAMPLE2da7646d6861033667f20e895</code>\n \n \n \n Grants -\n <code>arn:aws:license-manager::111122223333:grant:g-EXAMPLE7b19f4a0ab73679b0beb52707</code>\n \n \n \n License configurations -\n <code>arn:aws:license-manager:us-east-1:111122223333:license-configuration:lic-EXAMPLE6a788d4c8acd4264ff0ecf2ed2d</code>\n \n \n \n Report generators -\n <code>arn:aws:license-manager:us-east-1:111122223333:report-generator:r-EXAMPLE825b4a4f8fe5a3e0c88824e5fc6</code>\n \n \n ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " One or more tags. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}

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    },
    "com.amazonaws.licensemanager#TokenData": {
      "type": "structure",
      "members": {

      "TokenId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>"
          }
        },
        "TokenType": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "ExpirationTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation":
 "<p>Token expiration time, in ISO8601-UTC format.</p>"
          }
        },
        "TokenProperties": {
          "target": "com.amazonaws.licensemanager#MaxSize3StringList",
          "traits": {
            "smithy.api#documentation": "<p>Data specified by the caller.</p>"
          }
        },
        "RoleArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token status. The possible values are
```

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<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }

            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
    },

    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
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"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified resource. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name
(ARN) of the resource. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },

    "output": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

      }
        ],
        "traits": {
```

"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},

"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},

"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {

"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource

report - Reports the tracked licenses and resource consumption for a license configuration. \n \n
",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}

},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members":
 {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
                }
            },
             "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
```

"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UsageOperation": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}
ListLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.4496 aws-sdk-go-v2-config 1.29.15

1.4496.1 Available under license :

GetLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd

Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
name: License Scan

on: [pull_request]

jobs:

```
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
```

```
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag
```

```
 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
```

```
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return
err
}
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
ListReceivedLicenses
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit
CheckoutLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength

```
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
```

```
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
```

```
err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if
err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
```

```
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
```

```
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack,
options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
```

```
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
```

```
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
  InterceptAfterSigning
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  InterceptAfterDeserialization
  OperationDeserializer
  InterceptBeforeDeserialization
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
  InterceptTransmit
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
```

```
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string
```

```
 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack,
options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:
       region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData
```

```
// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
```

```
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
```

AWS SDK for Go

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```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
              {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},

{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/DeregisterSubscriptionProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the subscription provider resource to deregister. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {

"type": "structure",
"members": {
"Name": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of name to filter by. "
}
},
"Values": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " One or more values for the name to filter by. "
}
},
"Operator": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
"traits": {
"smithy.api#documentation": " An operator for filtering results. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter object that is used to return more specific results from a describe operation.\n Filters can be used to match a set of resources by specific criteria. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
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"traits": {
"smithy.api#documentation": " The subscription provider for the BYOL registration resource specified \n\t\t\tin the request. "
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The detailed message from your subscription provider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
"type": "operation",
"input": {
"target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
},
"errors": [

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            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

         },
            "smithy.api#idempotent": {}
        }
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    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
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            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
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"smithy.api#documentation": " The status of the instance. "
}
},
"Region": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Region the instance is running in. "
}
},
"UsageOperation": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The usage operation of the instance. For more information, see For more information, see\n Usage\n operation values in the License Manager User Guide. "
}
},
"ProductCode": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
"traits": {
"smithy.api#documentation": " The product code for the instance. For more information, see Usage\n operation values in the License Manager User Guide . "
}
},
"LastUpdatedTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The time in which the last discovery updated the instance details. "
}
},
"SubscriptionName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the license subscription that the instance uses. "
}
},
"OsVersion": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The operating system software version that runs on your instance. "
}
},
"SubscriptionProviderCreateTime": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp when you registered
the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
}
},
"SubscriptionProviderUpdateTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider. "
}
},
"DualSubscription": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance. "
}
},
"RegisteredWithSubscriptionProvider": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager. "
}
}
},
"traits": {
"smithy.api#documentation": " Details discovered information about a running instance using Linux
subscriptions. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {

"smithy.api#documentation":
" An exception occurred with the service. ",
"smithy.api#error": "server"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
"type": "service",
"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
}
],
"traits": {
"aws.api#service": {
"sdkId": "License Manager Linux Subscriptions",
"arnNamespace": "license-manager-linux-subscriptions",
"cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"

},
"aws.auth#sigv4": {
"name": "license-manager-linux-subscriptions"
},
"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
"*",
"content-type",
"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager,
you can discover and track your commercial Linux subscriptions on running\n Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region": {
"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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          "required": false,
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          "type": "String"
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              "argv": [
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                  "ref": "Endpoint"
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
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                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }

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              "type": "error"
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              "conditions": [],
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                  "conditions": [
                    {
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                      "argv": [
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                          "ref": "UseDualStack"
                        },
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                    ]

}
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                    "type": "error"
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                        },
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                        "headers": {}
                    },
                    "type": "endpoint"
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                        "argv": [
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                                "ref": "Region"
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                                "argv": [
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                                        "ref": "Region"
```

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                        "argv": [
                            {

                      "ref": "UseFIPS"
                            },
                            true
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                    {
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                        "argv": [
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                                "ref": "UseDualStack"
                            },
                            true
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                                "argv": [
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                                        "argv": [
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                                                "ref": "PartitionResult"

},
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                                        ]
                                    }
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                            },
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                                        {
                                          "fn": "booleanEquals",
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                                            {
                                              "fn": "getAttr",
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                                                },
                                                "supportsDualStack"
                                              ]
                                            }
                                          ]
                                        }
                                      ],
                                      "rules": [
                                        {
                                          "conditions": [],

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                                              "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
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                                              "type": "endpoint"
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                                          ],

                              "type": "tree"
                                        }
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                                      "type": "tree"
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                                      "conditions": [],
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one or both",

                                      "type": "error"
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{

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"rules": [
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"conditions": [
{

"fn": "booleanEquals",
"argv": [
{
"fn": "getAttr",
"argv": [
{
"ref": "PartitionResult"
},
"supportsFIPS"
]
},
true

]
}
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"conditions": [],
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"conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
"headers": {}
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but this partition does not support FIPS",
        "type": "error"
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"type": "tree"
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        "argv": [
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                "ref": "UseDualStack"
            },
            true

]
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                "argv": [
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                    {
                        "fn": "getAttr",
                        "argv": [
                            {

                                "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                        ]
                    }
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                        }
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"error": "Invalid Configuration: Missing Region",
"type": "error"
}
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
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"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
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"params": {
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"UseDualStack": false
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},
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"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {

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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
}

},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
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}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "cn-north-1",

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"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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"url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
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}
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{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
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{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
}
},
"params": {
"Region": "us-gov-east-1",
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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}

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"url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
}
},
"params": {
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"UseFIPS": false,
"UseDualStack": true
}
},
{

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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}
},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {

"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}

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        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
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            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
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          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
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            "UseFIPS":
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            "UseDualStack": false
          }
        },
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          },
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"UseDualStack": true
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{
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"expect": {
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"url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
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"UseDualStack": false
}
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"error": "DualStack is enabled but this partition does not support DualStack"
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"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}

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    },
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                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
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disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {

                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

 "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
```

```
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

 },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
    "members": {
        "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
```

"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results by your specified criteria. \n \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>. \n For each filter, you can specify one of the following values for the <code>Name</code> key \n \tto streamline results: \n \n \n \n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
"type": "structure",
"members": {

"Instances": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
"traits": {
"smithy.api#documentation": " An array that contains instance objects. "
}
},
"NextToken": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
"inputToken": "NextToken",

"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "Subscriptions"
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n partially match, or don't match a certain subscription's name. \n The valid names for this filter are: \n \n \n \n <code>Subscription</code>\n \n \n \n The
valid Operators for this filter are: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum items to return in a request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This \n\tis
the nextToken from a previously truncated response. ",
"smithy.api#length": {
"min": 1,
"max": 16384
}
}
}
},
"traits": {
"smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
"type": "structure",
"members": {
"Subscriptions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
"traits": {
"smithy.api#documentation": " An array that contains subscription objects. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List Bring Your Own License (BYOL) subscription registration resources for your account. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/ListRegisteredSubscriptionProviders"

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            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }

  },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
```

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
"traits": {
"smithy.api#documentation": " The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request. "
}
},

"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "GET",
"uri": "/tags/{resourceArn}"
},
"smithy.api#readonly": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
```

"name": "CONTAINS",
"value": "Contains",
"documentation": "Contains operator"
}
],
"smithy.api#length": {
"min": 1,
"max": 20
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "Enabled",
"value": "Enabled",
"documentation": "Enabled OrganizationIntegration"
},
{
"name": "Disabled",
"value": "Disabled",
"documentation": "Disabled OrganizationIntegration"
}
]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/subscription/RegisterSubscriptionProvider"

},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " The supported Linux subscription provider to register. ",
"smithy.api#required": {}
}
},
"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource. "
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
"type": "structure",
"members": {
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation":
" The Linux subscription provider that you registered. "
}
},
"SubscriptionProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
"type": "structure",
"members": {
"SubscriptionProviderArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered. "
}
},
"SubscriptionProviderSource": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
"traits": {
"smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
}
},

"SecretArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
}
},
"SubscriptionProviderStatus": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
"traits": {
"smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
}
},
"SubscriptionProviderStatusMessage": {
"target": "smithy.api#String",
"traits":
{
"smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
}
},
"LastSuccessfulDataRetrievalTime": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
}
}
},
"traits": {
"smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {

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            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

  }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
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"target": "smithy.api#String",
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
}
}
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 100
},
"smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
"type": "structure",
"members": {
"Name":
{
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the subscription. "
}
},
"Type": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. "
}
},
"InstanceCount": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
"traits": {
"smithy.api#documentation": " The total amount of running instances using this

subscription. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " An object which details a discovered Linux subscription. "
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

{
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                "name": "ACTIVE",
                "value": "ACTIVE",
                "documentation": "ACTIVE status"

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            },
            {
                "name": "INVALID",
                "value": "INVALID",

"documentation": "INVALID status"
            },
            {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
            }
        ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
```

"smithy.api#documentation": " Add metadata tags to the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
"type": "structure",
"members":
{
"resourceArn": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"tags": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

},
"com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},

"value": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation":
" The request was denied due to request throttling. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Remove one or more metadata tag from the specified Amazon Web Services resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{resourceArn}"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

     },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
             "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target":
 "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }
        }
    },
```

"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
"type": "structure",
"members": {
"LinuxSubscriptionsDiscovery": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
"traits": {
"smithy.api#documentation": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
"traits": {
"smithy.api#documentation": " The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from. "
}
},
"Status": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
"traits": {
"smithy.api#documentation": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
"traits": {
"smithy.api#documentation": " A message which details the Linux subscriptions service settings current status. "
}

},
"HomeRegions": {
"target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
"traits": {
"smithy.api#documentation": " The Region in which License Manager displays the aggregated data for Linux\n subscriptions. "
}
}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},

```
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
```

```
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string
```

```
 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err != nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return
err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack,
 options); err != nil {
  return err
 }
```

```
 if err = addInterceptBeforeSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string
```

```
 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
```

```
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
 return err
}
if err = addInterceptAttempt(stack, options); err !=
nil {
 return err
}
if err = addInterceptExecution(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSerialization(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeSigning(stack, options); err != nil {
 return err
}
if err = addInterceptAfterSigning(stack, options); err != nil {
 return err
}
if err = addInterceptTransmit(stack, options); err != nil {
 return err
}
if err = addInterceptBeforeDeserialization(stack, options); err != nil {
 return err
}
if err = addInterceptAfterDeserialization(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
CheckInLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  InterceptBeforeRetryLoop
  Retry
  InterceptAttempt
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  InterceptBeforeSigning
  Signing
```

InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
```

"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " You don't have sufficient access to perform this action. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
"type": "structure",
"members": {
"DirectoryId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
"traits": {
"smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
}
},
"ActiveDirectorySettings":
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
"traits": {
"smithy.api#documentation": " The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
}
},
"ActiveDirectoryType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
"traits": {
"smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about an Active Directory identity provider. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
"type": "structure",
"members": {
"DomainName": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name for the Active Directory. "
}

```
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
```

```
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
```

charges in the Amazon Web Services Billing User Guide. \n </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The user name from the identity provider. ",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": " The identity provider for the user. ",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": " The tags that apply for the user association. "
                }
            }

```
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
```

"traits": {
"smithy.api#documentation": " The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply for the license server endpoint. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider specified in the request. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The ARN of the <code>LicenseServerEndpoint</code> resource. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
"type": "union",
"members": {
"SecretsManagerCredentialsProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
"traits": {

"smithy.api#documentation": " Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains information about the credential provider for user \n\t\t\tadministration. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Deletes a <code>LicenseServerEndpoint</code> resource. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/DeleteLicenseServerEndpoint"

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deregisters the Active Directory identity provider from License Manager user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/DeregisterIdentityProvider"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"Product": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity
provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider
operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},

"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Disassociates the user from an EC2 instance providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/DisassociateUser"
},
"smithy.api#idempotent": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the Active Directory identity provider for the user. "
}
},

"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance which provides user-based subscriptions. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the Active Directory identity provider. "
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to disassociate. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
"type": "structure",
"members": {
"InstanceUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the associate user operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
      "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
            "smithy.api#length": {
              "min": 1
            },

   "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Attribute": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
          }
        },
        "Operation": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
          }
        },
        "Value": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
```

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
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            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
                "smithy.api#required": {}
            }
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        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
    }
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"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
    "type": "list",
    "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
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"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
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"smithy.api#documentation": " The status of an EC2 instance resource. ",
"smithy.api#required": {}
}
},
"Products": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
"traits": {
"smithy.api#documentation": " A list of provided user-based subscription products. ",
"smithy.api#required": {}
}
},
"LastStatusCheckDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date of the last status check. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
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"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The ID of the EC2 instance that provides user-based subscriptions. ",
"smithy.api#required": {}
}
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"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The <code>IdentityProvider</code> resource specifies details \n\t\t\tabout the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a user associated with an EC2 instance. ",
"smithy.api#required": {}
}
},
"InstanceUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the instance user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for users of an EC2 instance. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"AssociationDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was associated with an EC2 instance. "
}
},
"DisassociationDate": {

"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The date a user was disassociated from an EC2 instance. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes users of an EC2 instance providing user-based subscriptions. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " An exception occurred with the service. ",
"smithy.api#error": "server",
"smithy.api#httpError": 500
}
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"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
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"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
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"version": "2018-05-10",
"operations": [
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"target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"

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{
"target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
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{
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
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"target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
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"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
},
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"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
}
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"traits": {
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"sdkId": "License Manager User Subscriptions",
"arnNamespace": "license-manager-user-subscriptions",
"cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
},
"aws.auth#sigv4": {
"name": "license-manager-user-subscriptions"
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"aws.protocols#restJson1": {},
"smithy.api#cors": {
"additionalAllowedHeaders": [
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"x-amz-content-sha256",
"x-amz-user-agent",
"x-amzn-platform-id",
"x-amzn-trace-id",
"content-length",

"x-api-key",
"authorization",
"x-amz-date",
"x-amz-security-token",
"Access-Control-Allow-Headers",
"Access-Control-Allow-Methods",
"Access-Control-Allow-Origin"
],
"additionalExposedHeaders": [
"x-amzn-errortype",
"x-amzn-requestid",
"x-amzn-trace-id"
]
},
"smithy.api#documentation": " With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances. ",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
"version": "1.0",
"parameters": {
"Region":
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"builtIn": "AWS::Region",
"required": false,
"documentation": "The AWS region used to dispatch the request.",

"type": "String"
},
"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
},
"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
},
"Endpoint": {
"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
}
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"fn": "isSet",
"argv": [
{
"ref": "Endpoint"
}
]
}
],
"rules": [
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseFIPS"
},
true

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                ]
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        ],
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        "type": "error"
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        "type": "error"
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        "conditions": [],
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                "ref": "Endpoint"
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"properties": {},
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  "type": "tree"
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        "argv": [
            {
                "ref": "Region"
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                    "rules": [
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                            "argv": [
                              {
                                "ref": "UseFIPS"
                              },

true
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                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
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                              {

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                                    "argv": [
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                "fn": "getAttr",
                "argv": [
                    {
                        "ref": "PartitionResult"
                    },
                    "supportsDualStack"
                ]
            }

    ]
        }
    ],
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            "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
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            "type": "endpoint"
        }

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both",
    "type": "error"
  }
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                        true
                    ]
                }
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                "rules": [
                    {
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                                "fn": "booleanEquals",
                                "argv": [
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                                        "fn": "getAttr",
                                        "argv": [

{
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
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                                "conditions": [],
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                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
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                    },
                    {
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                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

}
                ],
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                        "argv": [
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                            },
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"type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

"properties": {},
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"type": "tree"
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{
"conditions": [],
"error": "Invalid Configuration: Missing Region",
"type": "error"
}
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"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect":

{
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
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"UseDualStack": true
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"UseDualStack": false
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
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}
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
}
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"params": {
"Region": "us-east-1",

"UseFIPS": false,
"UseDualStack": false
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
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"url": "https://license-manager-user-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
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"UseDualStack": true
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"expect": {
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}
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{
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}
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}
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"UseDualStack": false
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},
{
"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
"expect": {
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}
},
"params": {
"Region": "us-gov-east-1",
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"UseDualStack": true
}
},
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"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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"UseDualStack": false
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"UseDualStack": true
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},
"params": {
"Region": "us-gov-east-1",
"UseFIPS": false,
"UseDualStack": false
}
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{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false

}
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{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {

"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
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"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
"expect": {
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"url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
}

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"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": false
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"expect": {
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"UseFIPS": true,
"UseDualStack": true
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
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}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
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{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"

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                        "UseDualStack": true
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                },
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                        "UseDualStack": false
                    }
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                    "expect": {

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                        }
                    },
                    "params": {
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                        "UseFIPS": false,
                        "UseDualStack": false,
                        "Endpoint": "https://example.com"
                    }
                },
                {
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disabled",
                    "expect": {
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                        }
                    },
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"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
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"expect": {
"error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
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"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
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"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
"type": "structure",
"members": {
"ProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": "<p>The current state of the provisioning process for the RDS

\n\t\t\tlicense server. "
}
},
"HealthStatus": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
"traits": {
"smithy.api#documentation": " The health status of the RDS license server. "
}
},
"Ipv4Address": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server. "
}
}
},
"traits": {
"smithy.api#documentation": " Information
about a Remote Desktop Services (RDS) license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
"type": "structure",
"members": {
"IdentityProviderArn": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint. "
}
},
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. "
}
},
"ServerEndpoint": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

"traits": {
"smithy.api#documentation": " The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint. "
}
},
"StatusMessage": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The message associated with the provisioning status, if there is one. "
}
},
"LicenseServerEndpointId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
"traits": {
"smithy.api#documentation": " The ID of the license server endpoint. "
}
},
"LicenseServerEndpointArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits":
{
"smithy.api#documentation": " The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server. "
}
},
"LicenseServerEndpointProvisioningStatus": {
"target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
"traits": {
"smithy.api#documentation": " The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint "
}
},
"LicenseServers": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint. "
}
},

"CreationTime": {
"target": "smithy.api#Timestamp",
"traits": {
"smithy.api#documentation": " The timestamp when License Manager created the license server endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server. "
}
},

"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
"type": "string"
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "PROVISIONING",
"value": "PROVISIONING",
"documentation": ""
},
{
"name": "PROVISIONING_FAILED",
"value": "PROVISIONING_FAILED",
"documentation": ""
},
{
"name": "PROVISIONED",
"value": "PROVISIONED",
"documentation": ""
},
{
"name": "DELETING",
"value": "DELETING",
"documentation": ""
},
{
"name": "DELETION_FAILED",
"value": "DELETION_FAILED",
"documentation": ""

},
{
"name": "DELETED",
"value": "DELETED",
"documentation": ""
}
]
}
},

"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
"type": "string",
"traits": {
"smithy.api#enum": [
{
"name": "HEALTHY",
"value": "HEALTHY",
"documentation": ""
},
{
"name": "UNHEALTHY",
"value": "UNHEALTHY",
"documentation": ""
},
{
"name": "NOT_APPLICABLE",
"value": "NOT_APPLICABLE",
"documentation": ""
}
]
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
}
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
"type": "structure",
"members": {
"ServerType": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
"traits": {
"smithy.api#documentation": " The type of license server. ",
"smithy.api#required": {}
}
},
"ServerSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
"traits": {
"smithy.api#documentation": " The <code>ServerSettings</code> resource contains the settings for
your \n\t\t\tserver. ",
"smithy.api#required": {}
}
}
},

"traits": {
"smithy.api#documentation": " The settings to configure your license server. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the Active Directory identity providers for user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/identity-provider/ListIdentityProviders"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",

"items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Product \n \n \n DirectoryId \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
"type": "structure",
"members": {
"IdentityProviderSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

"traits": {
"smithy.api#documentation": " An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria. ",
"smithy.api#required": {}
}
},
"NextToken": {
"target": "smithy.api#String",

"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},

{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the EC2 instances providing user-based subscriptions. ",
"smithy.api#http": {
"code": 200,
"method": "POST",

"uri": "/instance/ListInstances"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
"type": "structure",
"members":
{
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single
request. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n
\n \n Status \n \n
\n InstanceId \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
"type": "structure",
"members": {
"InstanceSummaries": {
"target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
"traits": {
"smithy.api#documentation": " An array of <code>InstanceSummary</code> resources that

contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next
token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",

"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "LicenseServerEndpoints"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
"type": "structure",
"members": {
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. ",
"smithy.api#range": {
"min": 1,
"max": 100
}
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {
"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n IdentityProviderArn \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {

"type": "structure",
"members": {
"LicenseServerEndpoints": {
"target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
"traits": {
"smithy.api#documentation": " An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria. "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/ListProductSubscriptions"
},
"smithy.api#paginated": {
"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "ProductUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
"type": "structure",
"members": {
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}

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            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n            <p>Status</p>\n            </li>\n            <li>\n            <p>Username</p>\n
</li>\n            <li>\n            <p>Domain</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

         }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
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            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
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"inputToken": "NextToken",
"outputToken": "NextToken",
"pageSize": "MaxResults",
"items": "InstanceUserSummaries"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
"type": "structure",
"members": {
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
"traits": {
"smithy.api#documentation": " The maximum number of results to return from a single request. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
"traits": {

"smithy.api#documentation": " You can use the following filters to streamline results: \n \n \n Status \n \n \n Username \n \n \n Domain \n \n "
}
},
"NextToken": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response. "
}
}

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummaries": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
            "Username":
 {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
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"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Status": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status of a product for this user. ",
"smithy.api#required": {}
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) for this product user. "
}
},
"StatusMessage": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The status message for a product for this user. "
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The domain name of the Active Directory that contains the user information for the product subscription. "
}
},
"SubscriptionStartDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The start date of a subscription. "
}
},
"SubscriptionEndDate": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The end date of a subscription. "
}
}
},
"traits": {
"smithy.api#documentation": " A summary of the user-based subscription products for a specific

user. "
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": " The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration. ",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Server settings that are specific to a Remote Desktop Services (RDS)
license server. "
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"

```
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits":
```

{
"smithy.api#documentation": " The registered identity providers product related configuration \n\t\t\tsettings such as the subnets to provision VPC endpoints. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation": " The tags that apply to the identity provider's registration. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
"type": "string",
"traits": {
"smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The resource couldn't be found. ",

"smithy.api#error": "client",
"smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
"type": "structure",
"members": {
"SecretId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the Secrets Manager secret that contains credentials. ",
"smithy.api#length": {
"min": 1
}
}
}
},
"traits": {
"smithy.api#documentation": " Contains a credentials secret that's stored in Secrets Manager. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
"type": "string",
"traits": {
"smithy.api#length": {

"min": 5,
"max": 200
},
"smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
"type": "structure",
"members": {
"Endpoint": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The network address of the endpoint. "
}
}
},
"traits": {
"smithy.api#documentation": " A network endpoint through which you can access one or more servers. "
}

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
            "RdsSalSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "RDS_SAL",
                    "value": "RDS_SAL",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
            "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
```

"smithy.api#length": {
"min": 1
},
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}

```
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }

  }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Stops a product subscription for a user with the specified identity provider. ",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StopProductSubscription"
}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider for the user. "
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. "
}
},

"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n
Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {

"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
"type": "string",
"traits": {
"smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
"type": "list",
"member": {
"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {

"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],

"traits": {
"smithy.api#documentation":
" Adds tags to a resource. ",
"smithy.api#http": {
"method": "PUT",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource that you want
to tag. ",
"smithy.api#httpLabel": {},
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {
"smithy.api#documentation":
" The tags to apply to the specified resource. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#Tags": {
"type": "map",
"key": {
"target": "smithy.api#String"
},
"value": {

"target": "smithy.api#String"
},
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#sensitive": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " The request was denied because of request throttling. Retry the
request. ",
"smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{

"target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
}
],
"traits": {
"smithy.api#documentation": " Removes tags from a resource. ",
"smithy.api#http": {
"method": "DELETE",
"uri": "/tags/{ResourceArn}"
},
"smithy.api#idempotent": {}

```
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

        }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates additional product configuration settings for the registered identity\n\t\t\tprovider. ",
"smithy.api#http": {

"code": 200,
"method": "POST",
"uri": "/identity-provider/UpdateIdentityProviderSettings"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
"type": "structure",
"members": {
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
},
"Product": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},

"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the identity provider to update. "
}
},
"UpdateSettings": {
"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related

configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the: \n
\n \n Subnets which you want to add to provision VPC endpoints. \n \n
\n Subnets which you want to remove the VPC endpoints from. \n \n
\n Security
group ID which permits traffic to the VPC endpoints. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
"type": "structure",
"members": {
"AddSubnets": {

"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers. ",
"smithy.api#required": {}
}
},
"RemoveSubnets": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
"traits": {
"smithy.api#documentation": " The ID of one or more subnets to remove. ",
"smithy.api#required": {}
}
},
"SecurityGroupId": {
"target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

"traits": {
"smithy.api#documentation": " A security group ID that
allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers. "
}
}
},
"traits": {
"smithy.api#documentation": " Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
}
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
"type": "structure",
"members": {
"message": {
"target": "smithy.api#String"
}
},
"traits": {
"smithy.api#documentation": " A parameter is not valid. ",
"smithy.api#error": "client"
}
}
}
}

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
```

```
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addInterceptAttempt(stack, options); err != nil {
  return err
 }
 if err = addInterceptExecution(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSerialization(stack, options); err !=
 nil {
  return err
 }
 if err = addInterceptAfterSerialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptBeforeSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterSigning(stack, options); err != nil {
  return err
 }
 if err = addInterceptTransmit(stack, options); err != nil {
```

```
 return err
 }
 if err = addInterceptBeforeDeserialization(stack, options); err != nil {
  return err
 }
 if err = addInterceptAfterDeserialization(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:
     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  InterceptExecution
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  InterceptBeforeSerialization
  OperationSerializer
  InterceptAfterSerialization
```

Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

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AssociateLicense
Initialize stack step
spanInitializeStart
InterceptExecution
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
InterceptBeforeSerialization
OperationSerializer
InterceptAfterSerialization
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
InterceptBeforeRetryLoop
Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit


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          },
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      ]
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"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"

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                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "license-manager.amazonaws.com",
                "endpointPrefix": "license-manager"
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            "aws.auth#sigv4": {
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            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
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            "smithy.rules#endpointRuleSet": {
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                        "type": "String"
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                        "builtIn": "AWS::UseDualStack",
                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                        "type": "Boolean"
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                    "UseFIPS": {
                        "builtIn": "AWS::UseFIPS",
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```

send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"type": "String"
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"type": "error"
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{
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{
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```
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        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
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```

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                                    },

                true
                                ]
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                        ],
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                                        ]

            },
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                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
```

"argv": [
{
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},
"supportsDualStack"
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]
}
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},
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```
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                        "fn": "getAttr",
                        "argv": [

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                        "supportsFIPS"
                      ]
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                    true
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                }
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            {
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              "type": "error"
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        },
        {
          "conditions": [
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              "argv": [
```

```
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}
                        ]
                    }
                ],
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                    }

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            {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
            }
```

```
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},

                       "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager.af-south-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
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```
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-northeast-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-2.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-northeast-2",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-3.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-northeast-3",
                "UseFIPS": false,
                "UseDualStack": false
            }

    },
        {
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"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"Region": "ap-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
},
"params": {
"Region": "ap-southeast-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"
}
},
"params": {
"Region": "ap-southeast-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-3.amazonaws.com"
}
},
"params": {

"Region": "ap-southeast-3",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ca-central-1.amazonaws.com"
}
},

"params": {
"Region": "ca-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-central-1.amazonaws.com"
}
},
"params": {
"Region": "eu-central-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-north-1 with
FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-north-1.amazonaws.com"
}
},
"params": {
"Region": "eu-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.eu-south-1.amazonaws.com"
}
},
"params": {
"Region":
"eu-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-1.amazonaws.com"
}
},
"params": {
"Region": "eu-west-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager.eu-west-2.amazonaws.com"
}
},
"params": {
"Region": "eu-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.eu-west-3.amazonaws.com"
}
},
"params": {
"Region": "eu-west-3",

"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.me-south-1.amazonaws.com"
}
},
"params": {
"Region": "me-south-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.sa-east-1.amazonaws.com"
}
},
"params": {
"Region": "sa-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false
}

},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {

"endpoint": {
"url": "https://license-manager-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-2.amazonaws.com"
}

},
"params": {
"Region": "us-east-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-east-2.amazonaws.com"
}
},
"params": {
"Region": "us-east-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-1.amazonaws.com"
}
},
"params": {
"Region": "us-west-1",
"UseFIPS": false,

"UseDualStack": false
}
},
{
"documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-1.amazonaws.com"
}
},
"params": {

"Region": "us-west-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-west-2.amazonaws.com"
}
},
"params": {
"Region": "us-west-2",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {

"url": "https://license-manager-fips.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-east-1.api.aws"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": false
}
},
{
"documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-northwest-1",
"UseFIPS": false,
"UseDualStack": false

}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
}
},
"params": {
"Region": "cn-north-1",
"UseFIPS": false,
"UseDualStack": true
}
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{
"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-gov-east-1.amazonaws.com"
}

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            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"

}
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-gov-west-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-gov-west-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-gov-west-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
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            {
              "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-gov-east-1.api.aws"
                }
              },

    "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-gov-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
              },
              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
              },
              "params": {
                "Region": "us-iso-east-1",
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"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
}
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled
but this partition does not support DualStack"
},
"params": {
"Region": "us-iso-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
}
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": false
}
},

{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
}
},

"params": {
"Region": "us-isob-east-1",
"UseFIPS": true,
"UseDualStack": false
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
"Region": "us-isob-east-1",
"UseFIPS": false,
"UseDualStack": true
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with region not set and fips disabled and dualstack

disabled",
"expect": {
"endpoint": {
"url": "https://example.com"
}
},
"params": {
"UseFIPS": false,

"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips enabled and dualstack disabled",
"expect": {
"error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": false,
"Endpoint": "https://example.com"
}
},
{
"documentation": "For custom endpoint with fips disabled and dualstack enabled",
"expect": {
"error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
"Region": "us-east-1",
"UseFIPS": false,
"UseDualStack": true,
"Endpoint": "https://example.com"
}
},
{
"documentation": "Missing region",
"expect": {
"error": "Invalid Configuration: Missing Region"
}
}
],
"version": "1.0"
}
}

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    },
    "com.amazonaws.licensemanager#AcceptGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
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```
    }
  },
  "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
    "type": "enum",
    "members": {
      "DISTRIBUTED_GRANTS_ONLY": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
        }
      },
      "ALL_GRANTS_PERMITTED_BY_ISSUER": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#AllowedOperation": {

  "type": "enum",
    "members": {
      "CREATE_GRANT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CreateGrant"
        }
      },
      "CHECKOUT_LICENSE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CheckoutLicense"
        }
      },
      "CHECKOUT_BORROW_LICENSE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CheckoutBorrowLicense"
        }
      },
      "CHECK_IN_LICENSE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CheckInLicense"
        }
      },
      "EXTEND_CONSUMPTION_LICENSE":
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{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ExtendConsumptionLicense"
}
},
"LIST_PURCHASED_LICENSES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ListPurchasedLicenses"
}
},
"CREATE_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "CreateToken"
}
}
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#AllowedOperation"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max":
8
}
}
},
"com.amazonaws.licensemanager#Arn": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 2048
},
"smithy.api#pattern": "^arn:aws[a-zA-Z-]*:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
}
},
"com.amazonaws.licensemanager#ArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"

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            }
        },
        "com.amazonaws.licensemanager#AuthorizationException": {
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "aws.protocols#awsQueryError": {

 "code": "AuthorizationFailure",
                    "httpResponseCode": 403
                },
                "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
                "smithy.api#error": "client",
                "smithy.api#httpError": 403
            }
        },
        "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
            "type": "structure",
            "members": {
                "LastRunTime": {
                    "target": "com.amazonaws.licensemanager#DateTime",
                    "traits": {
                        "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>Describes automated discovery.</p>"
            }
        },
        "com.amazonaws.licensemanager#Boolean":
 {
            "type": "boolean",
            "traits": {
                "smithy.api#default": false
            }
        },
        "com.amazonaws.licensemanager#BorrowConfiguration": {
            "type": "structure",
            "members": {
                "AllowEarlyCheckIn": {
                    "target": "com.amazonaws.licensemanager#BoxBoolean",
                    "traits": {
```

"smithy.api#documentation": " Indicates whether early check-ins are allowed. ",
"smithy.api#required": {}
}
},
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the borrow configuration, in minutes. ",
"smithy.api#required": {}
}
}
},
"traits":
{
"smithy.api#documentation": " Details about a borrow configuration. "
}
},
"com.amazonaws.licensemanager#BoxBoolean": {
"type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
"type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
"type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest": {
        "type":
 "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
```

```
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
```

"type": "structure",
"members": {
"LicenseArn":
{
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible value is JSON Web Signature
(JWS) algorithm PS384.\n For more information, see RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive
identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
             "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"

          }
        },
        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
```

"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{

"target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Checks out the specified license. \n <note>\n If the account that created the license is the same that is performing the check out, you must\n specify the account as the beneficiary. \n </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
"type": "structure",
"members": {
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. ",

"smithy.api#required": {}
}
},
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. ",
"smithy.api#required": {}
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Key fingerprint identifying the license. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required":
{}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {

"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
"type": "structure",
"members": {
"CheckoutType": {
"target": "com.amazonaws.licensemanager#CheckoutType",
"traits": {
"smithy.api#documentation": " Checkout type. "
}
},
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. "
}
},
"EntitlementsAllowed": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " Allowed license entitlements. "
}
},
"SignedToken": {
"target": "com.amazonaws.licensemanager#SignedToken",
"traits": {

"smithy.api#documentation": " Signed token. "
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"IssuedAt": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout is issued. "
}
},
"Expiration": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " Date and time at which the license checkout expires. "
}
},
"LicenseArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the checkout license. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
"type": "enum",
"members": {
"PROVISIONAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PROVISIONAL"
}
},
"PERPETUAL": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PERPETUAL"
}
}

```
 }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode": 409

  },
        "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 409
    }
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
```

```
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }
    },
    "traits": {

 "smithy.api#documentation": "<p>Details about license consumption.</p>"
    }
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
    }
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
    "type": "structure",
    "members": {
        "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
        },
        "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"

}
        },
        "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
},
"com.amazonaws.licensemanager#CreateGrant": {
```

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Creates a grant for the specified license. A grant shares the use of license\n entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
"type": "structure",
"members": {
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}

```
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }

  },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services
account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n
<ul>\n            <li>\n
        <p>An organization, which will include all accounts across your organization.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the grant. For more information about tagging
support in\n        License Manager, see the <a href=\"https://docs.aws.amazon.com/license-
```

manager/latest/APIReference/API_TagResource.html\">TagResource operation. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

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            },
             {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },

    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Grant name.</p>"
                }
```

```
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {

      "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
```

"traits": {
"smithy.api#documentation": " Creates a license. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits":
{
"smithy.api#documentation": " Creates a license configuration. \n A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Name of the license configuration. ",

"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> | <code>minimumCores</code>\n
\n \n \n \n <code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n
\n \n \n \n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n <code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code>\n \n \n \n
\n <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n <code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n \n The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for

<code>allowedTenancy</code>
are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license configuration. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",

"traits": {
"smithy.api#documentation": " Product information. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
"type": "operation",
"input": {

"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {

"smithy.api#documentation": " Creates a new license conversion task. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"smithy.api#required": {}
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting from. \n\n For the structure of the source license, see Convert

a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},

{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits":
{
"smithy.api#documentation": " Creates a report generator. "
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types an be generated: \n \n \n License configuration report - Reports the number and details of consumed licenses for
a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {

"smithy.api#documentation": " Defines the type of license configuration the report generator tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",

"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the new report generator. "

```
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
    "type": "structure",
    "members": {
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>",
                 "smithy.api#required": {}
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>",
                "smithy.api#required": {}
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
        },
         "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region for the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
```

"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}

},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {

"smithy.api#documentation": " Information about the license. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the license. For more information about tagging

support in\n License Manager, see the TagResource operation. "
}
}
},
"traits":
{
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " License status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License version. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"

```
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}

}
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

"smithy.api#documentation": " Product name. ",
"smithy.api#required": {}
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#Issuer",
"traits": {
"smithy.api#documentation": " License issuer. ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. ",
"smithy.api#required": {}
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"smithy.api#required": {}
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about the license. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",

"traits": {
"smithy.api#documentation": " License entitlements. ",
"smithy.api#required": {}
}
},
"ConsumptionConfiguration": {
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage. ",
"smithy.api#required": {}
}

```
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required":
 {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
```

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            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

     {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n          <p>A refresh token is a JWT
token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
    },
```

"com.amazonaws.licensemanager#CreateTokenRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token. ",
"smithy.api#required": {}

}
},
"RoleArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use. "
}
},
"ExpirationInDays": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Token expiration, in days, counted from token creation. The default is 365 days. "
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Data specified by the caller to be included in the JWT token. The data is mapped\n
to the amr claim of the JWT token. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation": " Idempotency token, valid for 10 minutes. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
"type": "structure",

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    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>"
        }
      },
      "TokenType": {
        "target": "com.amazonaws.licensemanager#TokenType",

       "traits": {
          "smithy.api#documentation": "<p>Token type.</p>"
        }
      },
      "Token": {
        "target": "com.amazonaws.licensemanager#TokenString",
        "traits": {
          "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
         }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
```

```
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
```

"traits": {
"smithy.api#documentation": " The Status reason for the delete request. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse":
{
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicense": {
"type":
"operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseRequest"

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    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },

        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified license configuration. \n You cannot delete a license configuration that is in use. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the license configuration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified report generator. \n This action deletes the report generator,
which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator. "
}
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output":
{}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
       "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#DeleteTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#DeleteTokenResponse"
},

"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#RedirectException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Deletes the specified token. Must be called in the license home Region. "
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
"type": "structure",
"members": {
"TokenId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token ID. ",
"smithy.api#required": {}

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
          "JWT_PS384": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "JWT_PS384"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement resource. Use only if the unit is None.</p>"
            }
          },
          "MaxCount": {
            "target": "com.amazonaws.licensemanager#Long",
            "traits": {
              "smithy.api#documentation":
"<p>Maximum entitlement count. Use if the unit is not None.</p>"
            }
```

```
            },
            "Overage": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation":
"<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
```

```
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementDataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
    }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"

    }
        },
        "SECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Seconds"
            }
        },
        "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
```

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}
},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabits"
}
},

```
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"
            }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },

    "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",

            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
```

```
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
             }
        },
        "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
    "type": "structure",
```

"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits":
{
"smithy.api#documentation": " The entitlement is not allowed. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#EntitlementUnit": {
"type": "enum",
"members": {
"COUNT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Count"
}
},
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"SECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Seconds"
}
},
"MICROSECONDS": {
"target":
"smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Microseconds"
}
},
"MILLISECONDS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Milliseconds"
}
},
"BYTES": {
"target": "smithy.api#Unit",

"traits": {
"smithy.api#enumValue": "Bytes"
}
},
"KILOBYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes"
}
},
"MEGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes"
}

},
"GIGABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes"
}
},
"TERABYTES": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes"
}
},
"BITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bits"
}
},
"KILOBITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobits"
}
},
"MEGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"Megabits"
}
},

"GIGABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabits"
}
},
"TERABITS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabits"
}
},
"PERCENT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Percent"
}
},
"BYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Bytes/Second"
}
},
"KILOBYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Kilobytes/Second"
}
},
"MEGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Megabytes/Second"
}
},
"GIGABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Gigabytes/Second"
}
},
"TERABYTES_PER_SECOND": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Terabytes/Second"
}
},

```
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
                }
            },
            "MEGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabits/Second"
                }
            },
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
                }
            },
            "TERABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits/Second"
                }
            },
            "COUNT_PER_SECOND":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count/Second"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource usage consumed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxCount": {

      "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementUsageList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
      },
      "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type":
"operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Extends the expiration date for license consumption. "
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
"type": "structure",
"members": {
"LicenseConsumptionToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License consumption token. ",
"smithy.api#required": {}
}
},
"DryRun": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
"type": "structure",

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        "members": {
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
             }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          },
          "ErrorCode": {
            "target": "com.amazonaws.licensemanager#String"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "FailedDependency",
            "httpResponseCode": 424
          },
          "smithy.api#documentation": "<p>A dependency required to run the API is missing.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 424
        }
      },
      "com.amazonaws.licensemanager#Filter": {
        "type":
"structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#FilterName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
            }
          },
```

"Values": {
"target": "com.amazonaws.licensemanager#FilterValues",
"traits": {
"smithy.api#documentation": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs. "
}
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "FilterLimitExceeded",
"httpResponseCode": 400
},
"smithy.api#documentation": " The request uses too many filters or too many filter values. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter"
}
},
"com.amazonaws.licensemanager#FilterName": {
"type": "string"
},
"com.amazonaws.licensemanager#FilterValue":
{
"type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#FilterValue",

"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#Filters": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Filter",
"traits": {
"smithy.api#xmlName": "item"
}
}
},
"com.amazonaws.licensemanager#GetAccessToken": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [

{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens\n are valid for one hour. "
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
"type": "structure",
"members": {

"Token": {

"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Refresh token, encoded as a JWT token. ",
"smithy.api#required": {}
}
},
"TokenProperties": {
"target": "com.amazonaws.licensemanager#MaxSize3StringList",
"traits": {
"smithy.api#documentation": " Token properties to validate against those present in the JWT token. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetAccessTokenResponse": {
"type": "structure",
"members": {
"AccessToken": {
"target": "com.amazonaws.licensemanager#TokenString",
"traits": {
"smithy.api#documentation": " Temporary access token. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetGrant": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetGrantRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetGrantResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

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            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },

      "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
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"target": "com.amazonaws.licensemanager#Grant",
"traits": {
"smithy.api#documentation": " Grant details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicense": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseRequest"

},
"output": {
"target": "com.amazonaws.licensemanager#GetLicenseResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about
the specified license. "
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
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"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID for the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}
},
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description
of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension for which the licenses are counted. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of available licenses. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Sets the number of available licenses as a hard limit. "
}
},

"ConsumedLicenses": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses assigned to resources. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License configuration status. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the owner of the license configuration. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the licenses consumed by resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries of the managed resources. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags for the license configuration. "
}
},
"ProductInformationList": {

"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}

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            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits":
{
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
```

"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task to retrieve information on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type converted from. "
}
},
"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits":
{
"smithy.api#documentation": " Information about the license type converted to. "
}
},
"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"Status": {

"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " Status of the license type conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was started . "

}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Amount of time to complete the license type conversion. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time at which the license type conversion task was
completed. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
},
"output":
{
"target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"

           },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {

 "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
```

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    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
        "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
        "target":
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"com.amazonaws.licensemanager#GetLicenseUsageResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Gets detailed information about the usage of the specified license. "

}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
"type": "structure",
"members": {
"LicenseUsage": {
"target": "com.amazonaws.licensemanager#LicenseUsage",
"traits": {

"smithy.api#documentation": " License usage details. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Gets
the License Manager settings for the current Region. "
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
"type": "structure",
"members": {
"S3BucketArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Regional S3 bucket path for storing reports, license trail event data, discovery data,\n and so on. "
}
},
"SnsTopicArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " SNS topic configured to receive notifications from License Manager. "
}
},
"OrganizationConfiguration": {
"target": "com.amazonaws.licensemanager#OrganizationConfiguration",
"traits": {
"smithy.api#documentation": " Indicates whether Organizations is integrated with License Manager for\n cross-account discovery. "
}
},
"EnableCrossAccountsDiscovery": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether cross-account discovery is enabled. "
}
},
"LicenseManagerResourceShareArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource share. The License Manager management account \n provides member accounts with access to this share. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>",
        "smithy.api#required": {}
    }
},
 "ParentArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
        "smithy.api#documentation": "<p>Parent ARN.</p>",
        "smithy.api#required": {}
    }
},
"LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
        "smithy.api#documentation": "<p>License ARN.</p>",
        "smithy.api#required": {}
    }
},
"GranteePrincipalArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
        "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
        "smithy.api#required": {}
    }
},
"HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
     "traits": {
        "smithy.api#documentation": "<p>Home Region of the grant.</p>",
        "smithy.api#required": {}
    }
},
"GrantStatus": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>",
        "smithy.api#required": {}
    }
},
"StatusReason": {
    "target": "com.amazonaws.licensemanager#StatusReasonMessage",
    "traits": {
        "smithy.api#documentation": "<p>Grant status reason.</p>"
    }
},
"Version": {
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            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>",
                 "smithy.api#required": {}
            }
        },
        "GrantedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Granted operations.</p>",
                "smithy.api#required": {}
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a grant.</p>"
    }
},
"com.amazonaws.licensemanager#GrantList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Grant"

  }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
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"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},

"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {

"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}
}
},
"com.amazonaws.licensemanager#GrantedLicense": {
"type": "structure",
"members": {
"LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},
"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product name. "
}

},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " Granted license issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the granted license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits": {
"smithy.api#documentation": " Granted license status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the granted license is valid, in ISO8601-UTC format. "
}

```
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
             "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Version of the granted license.</p>"
             }
        },
        "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
    }
},
```

"com.amazonaws.licensemanager#GrantedLicenseList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#GrantedLicense"
}
},
"com.amazonaws.licensemanager#ISO8601DateTime": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
}
},
"com.amazonaws.licensemanager#Integer": {
"type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "InvalidParameterValueProvided",
"httpResponseCode": 400
},
"smithy.api#documentation": " One or more parameter values are not valid. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {

"code": "InvalidResourceState",
"httpResponseCode": 400
},
"smithy.api#documentation": " License Manager cannot allocate a license to a resource because of its state. \n For example, you cannot allocate a license to an instance in the process of shutting\n down. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#InventoryFilter": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Name of the filter. ",
"smithy.api#required": {}
}
},
"Condition": {
"target": "com.amazonaws.licensemanager#InventoryFilterCondition",
"traits": {
"smithy.api#documentation": " Condition of the filter. ",
"smithy.api#required": {}
}
},
"Value": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Value of the filter. "
}
}
},
"traits": {
"smithy.api#documentation": " An inventory filter. "
}
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
"type": "enum",
"members":
{
"EQUALS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "EQUALS"
}

```
            },
            "NOT_EQUALS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "NOT_EQUALS"
                }
            },
            "BEGINS_WITH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "BEGINS_WITH"
                }
            },
            "CONTAINS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {

     "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
```

"smithy.api#documentation": " Details about the issuer of
a license. "
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer name. "
}
},
"SignKey": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing
algorithm. "
}
},
"KeyFingerprint": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Issuer key
fingerprint. "
}
}
},
"traits": {
"smithy.api#documentation": " Details associated with the issuer of a license. "
}
},
"com.amazonaws.licensemanager#License": {
"type": "structure",
"members": {
"LicenseArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license. "
}
},
"LicenseName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License name. "
}
},

"ProductName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Product name. "
}
},
"ProductSKU": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Product SKU. "
}
},
"Issuer": {
"target": "com.amazonaws.licensemanager#IssuerDetails",
"traits": {
"smithy.api#documentation": " License issuer. "
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the license. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseStatus",
"traits":
{
"smithy.api#documentation": " License status. "
}
},
"Validity": {
"target": "com.amazonaws.licensemanager#DatetimeRange",
"traits": {
"smithy.api#documentation": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"Beneficiary": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License beneficiary. "
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementList",
"traits": {

"smithy.api#documentation": " License entitlements. "
}
},
"ConsumptionConfiguration":
{
"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
"traits": {
"smithy.api#documentation": " Configuration for consumption of the license. "
}
},
"LicenseMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " License metadata. "
}
},
"CreateTime": {
"target": "com.amazonaws.licensemanager#ISO8601DateTime",
"traits": {
"smithy.api#documentation": " License creation time. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " License
version. "
}
}
},
"traits": {
"smithy.api#documentation": " Software license that is managed in License Manager. "
}
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
"type": "structure",
"members": {
"LicenseConfigurationId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Unique ID of the license configuration. "
}
},
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
}

```
            },
            "Name": {
                "target":
 "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules.</p>"
                 }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ConsumedLicenses": {
```

"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses consumed. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the license configuration. "
}
},
"OwnerAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Account ID of the license configuration's owner. "
}
},
"ConsumedLicenseSummaryList": {
"target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
"traits": {
"smithy.api#documentation":
" Summaries for licenses consumed by various resources. "
}
},
"ManagedResourceSummaryList": {
"target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
"traits": {
"smithy.api#documentation": " Summaries for managed resources. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {
"smithy.api#documentation": " Product information. "
}
},
"AutomatedDiscoveryInformation": {
"target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
"traits": {
"smithy.api#documentation": " Automated discovery information. "
}

}
},
"traits": {
"smithy.api#documentation": " A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n

Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}

},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of server resource. "
}
},
"ResourceOwnerId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the Amazon Web Services account that owns the resource consuming licenses. "
}
},
"AssociationTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " Time when the license configuration was associated with the resource. "
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes an association with a license configuration. "
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
"type": "list",

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        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED":
{
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",

 "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
```

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                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"

        }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {
        "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The
 Usage operation value that corresponds to the license type you are converting your resource from.  For more
information about which platforms correspond to which usage operation values see <a
href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample
data: usage operation by platform\n      </a>\n         </p>"
                }
            },
            "ProductCodes": {
```

"target": "com.amazonaws.licensemanager#ProductCodeList",
"traits": {
"smithy.api#documentation": " Product codes referred to in the license conversion process. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
"type": "structure",
"members":
{
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the license type conversion task. "
}
},
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the resource associated with the license type\n conversion task. "
}
},
"SourceLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted from. "
}
},

"DestinationLicenseContext": {
"target": "com.amazonaws.licensemanager#LicenseConversionContext",
"traits": {
"smithy.api#documentation": " Information about the license type this conversion task converted to. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
"traits": {
"smithy.api#documentation": " The status of the conversion task. "
}
},

"StatusMessage": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " The status message for the conversion task. "
}
},
"StartTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was started at. "
}
},
"LicenseConversionTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the usage operation value of the resource was changed. "
}
},
"EndTime": {
"target": "com.amazonaws.licensemanager#DateTime",
"traits": {
"smithy.api#documentation": " The time the conversion task was completed. "
}
}
},
"traits": {
"smithy.api#documentation": " Information about a license type conversion task. "
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 50
},
"smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
"type": "enum",
"members": {
"IN_PROGRESS": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "IN_PROGRESS"
}

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        },
        "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }

       }
    }
},
"com.amazonaws.licensemanager#LicenseConversionTasks": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },

   "SOCKET": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Socket"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#License"
        }
      },

    "com.amazonaws.licensemanager#LicenseOperationFailure": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type.</p>"
            }
          },
          "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Error message.</p>"
            }
```

```
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                 "traits": {
                    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"

    }
            },
            "MetadataList": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource
Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"AmiAssociationScope": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Scope of AMI associations. The possible value is <code>cross-
account</code>. "
}
}
},
"traits": {
"smithy.api#documentation": " Details for associating a license configuration with a resource. "
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#LicenseSpecification"
}
},
"com.amazonaws.licensemanager#LicenseStatus": {
"type": "enum",
"members": {
"AVAILABLE":
{
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "AVAILABLE"
}
},
"PENDING_AVAILABLE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_AVAILABLE"
}
},
"DEACTIVATED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DEACTIVATED"
}
},
"SUSPENDED": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "SUSPENDED"
}
},
"EXPIRED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"EXPIRED"
}
},
"PENDING_DELETE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_DELETE"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
}
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
"type": "structure",
"members": {
"EntitlementUsages": {
"target": "com.amazonaws.licensemanager#EntitlementUsageList",
"traits": {
"smithy.api#documentation": " License entitlement usages. "
}
}
},
"traits": {
"smithy.api#documentation": " Describes
the entitlement usage associated with a license. "
}
},
"com.amazonaws.licensemanager#LicenseUsageException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},

"traits": {
"aws.protocols#awsQueryError": {
"code": "LicenseUsageFailure",
"httpResponseCode": 412
},
"smithy.api#documentation": " You do not have enough licenses available to support a new resource launch. ",
"smithy.api#error": "client",
"smithy.api#httpError": 412
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the resource associations for the specified license configuration. \n Resource associations need not consume licenses from a license configuration. \n For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules). "
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",

"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {

"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationAssociations": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
"traits": {
"smithy.api#documentation": " Information about the associations for the license configuration. "
}

},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},

```
"com.amazonaws.licensemanager#ListDistributedGrants": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },

    {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
    "members": {
        "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
```

"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranteePrincipalARN</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Distributed grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",

"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists the license configuration operations that failed. "
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn":
{
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {

    "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.</p>\n            </li>\n
        <li>\n                <p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates
whether hard license enforcement is used.</p>\n            </li>\n            <li>\n                <p>\n
<code>usagelimitExceeded</code> - A Boolean
 value that indicates whether the available licenses have been exceeded.</p>\n            </li>\n        </ul>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target":
 "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
```

"traits": {

"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the report generators for your account. "
}

```
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n      <ul>\n        <li>\n          <p>\n            <code>LicenseConfigurationArn</code>\n
</p>\n        </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits":
 {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
      "type": "structure",
      "members": {
        "ReportGenerators": {
          "target": "com.amazonaws.licensemanager#ReportGeneratorList",
          "traits": {
            "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
```

"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {

"smithy.api#documentation": " Describes the license configurations for the specified resource. "
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "

```
            }
          },
          "NextToken": {
            "target":
"com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
              "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
             }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"

},
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

     },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
```

"target": "com.amazonaws.licensemanager#LicenseList",
"traits": {
"smithy.api#documentation": " License details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of
results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists the licenses for your account. "
}

```
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope
 the results. The following filters are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>Beneficiary</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n                <p>\n
<code>Status</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",

    "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
```

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs. "

```
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts
in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                <code>ParentArn</code>\n                </p>\n
    </li>\n            <li>\n                <p>\n                <code>GranteePrincipalArn</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                 "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
```

"type": "structure",
"members": {
"GrantArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Names (ARNs) of the grants. "
}
},

"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>ProductSKU</code>\n \n \n \n \n <code>LicenseIssuerName</code>\n \n \n \n \n <code>LicenseArn</code>\n \n \n \n \n <code>GrantStatus</code>\n \n \n \n \n <code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},

"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{

"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Lists received licenses. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization": {

"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
},
"output":
{
"target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"

}
],
"traits": {
"smithy.api#documentation": " Lists the licenses received for all accounts in the organization. "
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
"type": "structure",
"members": {
"Filters": {
"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters are supported: \n \n \n \n <code>Beneficiary</code>\n \n \n \n \n <code>ProductSKU</code>\n \n \n "
}
},

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }

        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
        "Filters": {
```

"target": "com.amazonaws.licensemanager#FilterList",
"traits": {
"smithy.api#documentation": " Filters to
scope the results. The following filters are supported: \n \n \n \n
<code>ProductSKU</code>\n \n \n \n \n
<code>Status</code>\n \n \n \n \n
<code>Fingerprint</code>\n \n \n \n \n
<code>IssuerName</code>\n \n \n \n \n
<code>Beneficiary</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}

},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": " Received license details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the
next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}

```
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FailedDependencyException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }

},
            "NextToken": {
```

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#InventoryFilterList",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
"type": "structure",
"members": {
"ResourceInventoryList": {
"target": "com.amazonaws.licensemanager#ResourceInventoryList",
"traits": {
"smithy.api#documentation": " Information about the resources. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

  {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified resource. For more information about
tagging support in\n        License Manager, see the <a href=\"https://docs.aws.amazon.com/license-
manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>",
                    "smithy.api#required":
 {}
                }
            }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors": [

{
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
      "type": "structure",
      "members": {
        "TokenIds": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {

  "smithy.api#documentation": "<p>Token IDs.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
      "type": "structure",
      "members": {
        "Tokens": {
          "target": "com.amazonaws.licensemanager#TokenList",
          "traits": {
            "smithy.api#documentation": "<p>Received token details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
```

"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#FilterLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},

{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration. "
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
"type": "structure",
"members": {

"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"Filters": {
"target": "com.amazonaws.licensemanager#Filters",
"traits": {
"smithy.api#documentation": " Filters to scope the results. The following filters and logical operators\n are supported: \n \n \n \n <code>resourceArn</code> - The ARN of the license configuration resource. \n \n \n \n <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | \n \t<code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n \n \n \n <code>resourceAccount</code> - The ID of the account that owns the resource. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {
"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#Location": {
    "type": "string"
},
"com.amazonaws.licensemanager#Long": {
    "type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }

},
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#range": {
```

```
            "min": 1,
            "max": 100
          }
        }
      },
      "com.amazonaws.licensemanager#MaxSize3StringList": {

      "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 3
          }
        }
      },
      "com.amazonaws.licensemanager#Message": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#Metadata": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The key name.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The value.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }
      },
      "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Metadata"
        }
      },
```

"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#Options": {
"type": "structure",
"members": {
"ActivationOverrideBehavior":
{
"target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
"traits": {
"smithy.api#documentation": " An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter. \n \n \n As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant. \n \n \n As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization. \n \n
\n As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant. \n \n \n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n Use this value to activate a grant without replacing any member accounts\n active grants for the same product. \n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n
<dd>\n Use this value to activate a grant and disable other active grants in any\n member accounts for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {

"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},

"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductCodeId": {
"type": "string",
"traits": {
"smithy.api#pattern": "^[A-Za-z0-9]{1,25}$"
}
},
"com.amazonaws.licensemanager#ProductCodeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductCodeListItem"
}
},
"com.amazonaws.licensemanager#ProductCodeListItem": {
"type": "structure",
"members": {
"ProductCodeId": {
"target": "com.amazonaws.licensemanager#ProductCodeId",
"traits": {

"smithy.api#documentation": " The product code ID ",
"smithy.api#required": {}
}
},
"ProductCodeType": {
"target": "com.amazonaws.licensemanager#ProductCodeType",
"traits": {
"smithy.api#documentation": " The product code type ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " A list item that contains a product code. "
}
},
"com.amazonaws.licensemanager#ProductCodeType": {
"type": "enum",
"members": {
"MARKETPLACE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue":
"marketplace"
}
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Resource type. The possible values are
<code>SSM_MANAGED</code> | <code>RDS</code>. ",
"smithy.api#required": {}
}
},
"ProductInformationFilterList": {
"target": "com.amazonaws.licensemanager#ProductInformationFilterList",
"traits": {
"smithy.api#documentation": " A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of
filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on.
\n Accepted values for <code>ProductInformationFilterName</code> are listed here along with
descriptions and valid options for <code>ProductInformationFilterComparator</code>. \n The

following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n \n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code> \n \t| <code>db2-se</code> | <code>db2-ae</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}
},

"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " Filter value. "
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Logical operator. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation":
" Describes product information filters. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformationFilter"
}
},
"com.amazonaws.licensemanager#ProductInformationList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ProductInformation"
}
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
"type": "structure",
"members": {
"MaxTimeToLiveInMinutes": {
"target": "com.amazonaws.licensemanager#BoxInteger",
"traits": {
"smithy.api#documentation": " Maximum time for the provisional configuration, in minutes. ",
"smithy.api#required": {}

}
}
},
"traits": {
"smithy.api#documentation": " Details about a provisional configuration. "
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {

"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "RateLimitExceeded",
"httpResponseCode": 429
},
"smithy.api#documentation": " Too many requests have been submitted. Try again after a brief wait. ",
"smithy.api#error": "client",
"smithy.api#httpError": 429
}
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
"type": "structure",
"members": {

"ReceivedStatus": {
"target": "com.amazonaws.licensemanager#ReceivedStatus",
"traits": {
"smithy.api#documentation": " Received status. "
}
},
"ReceivedStatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Received status reason. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations. "
}
}
},
"traits": {
"smithy.api#documentation": " Metadata associated with received licenses and grants. "
}
},
"com.amazonaws.licensemanager#ReceivedStatus":
{
"type": "enum",
"members": {

"PENDING_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_WORKFLOW"
}
},
"PENDING_ACCEPT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "PENDING_ACCEPT"
}
},
"REJECTED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REJECTED"
}
},
"ACTIVE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "ACTIVE"
}
},
"FAILED_WORKFLOW": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "FAILED_WORKFLOW"
}
},
"DELETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DELETED"
}
},
"DISABLED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DISABLED"
}
},
"WORKFLOW_COMPLETED": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WORKFLOW_COMPLETED"
}
}

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        }
    },
    "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
        "members": {
            "Location":
{
                "target": "com.amazonaws.licensemanager#Location",
                "traits": {
                    "smithy.api#httpHeader": "Location"
                }
            },
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {

         "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
```

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType": {
"type": "enum",
"members": {
"NONE": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "None"
}
},
"WEEKLY": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Weekly"
}
},
"MONTHLY": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "Monthly"
}
}
}
},
"com.amazonaws.licensemanager#ReportContext": {
"type": "structure",
"members": {
"licenseConfigurationArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Details of the license configuration that this generator reports on. "
}
},
"com.amazonaws.licensemanager#ReportFrequency": {
"type": "structure",
"members":

{
"value": {
"target": "com.amazonaws.licensemanager#Integer",
"traits": {
"smithy.api#documentation": " Number of times within the frequency period that a report is generated. \n The only supported value is <code>1</code>. "
}
},
"period": {
"target": "com.amazonaws.licensemanager#ReportFrequencyType",
"traits": {
"smithy.api#documentation": " Time period between each report. The period can be daily, weekly, or monthly. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
"type": "enum",
"members": {
"DAY": {

"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "DAY"
}
},
"WEEK": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "WEEK"
}
},
"MONTH": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "MONTH"
}
}
}
},
"com.amazonaws.licensemanager#ReportGenerator": {
"type": "structure",
"members": {
"ReportGeneratorName": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the report generator. "
}
},

"ReportType": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports that are generated. "
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " License configuration type for this generator. "
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Details about how frequently reports are generated. "
}
},
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator. "
}
},
"LastRunStatus": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Status of the last report generation attempt. "
}
},
"LastRunFailureReason": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Failure message for the last report generation attempt. "
}
},
"LastReportGenerationTime": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Time the last report was generated at. "

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                }
            },
            "ReportCreatorAccount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "S3Location": {
                "target": "com.amazonaws.licensemanager#S3Location",
                "traits": {
                    "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
                }
            },
            "CreateTime": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Time the report was created.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportGeneratorList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportGenerator"
        }
    },
    "com.amazonaws.licensemanager#ReportGeneratorName": {
        "type": "string",
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"traits": {
"smithy.api#length":
{
"min": 1,
"max": 100
}
}
},
"com.amazonaws.licensemanager#ReportType": {
"type": "enum",
"members": {
"LICENSE_CONFIGURATION_SUMMARY_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationSummaryReport"
}
},
"LICENSE_CONFIGURATION_USAGE_REPORT": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "LicenseConfigurationUsageReport"
}
}
}
},
"com.amazonaws.licensemanager#ReportTypeList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#ReportType"
}
},
"com.amazonaws.licensemanager#ResourceInventory":
{
"type": "structure",
"members": {
"ResourceId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the resource. "
}
},
"ResourceType": {
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource. "
}
},
"ResourceArn": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the resource. "
}
},
"Platform": {
"target": "com.amazonaws.licensemanager#String",

"traits": {
"smithy.api#documentation": " Platform of the resource. "
}
},
"PlatformVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Platform version of the resource in the inventory. "
}
},
"ResourceOwningAccountId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " ID of the account that owns the resource. "
}
}
},
"traits": {
"smithy.api#documentation": " Details about a resource. "
}
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
"type": "list",
"member": {

"target": "com.amazonaws.licensemanager#ResourceInventory"
}
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"aws.protocols#awsQueryError": {
"code": "ResourceLimitExceeded",
"httpResponseCode": 400
},

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        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
```

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            },
            "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
            "bucket": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
                }

            },
            "keyPrefix": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal
 error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
```

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    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag":
{
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the tags for a resource. For more information about
tagging support in\n        License Manager, see the <a href=\"https://docs.aws.amazon.com/license-
```

manager/latest/APIReference/API_TagResource.html\">TagResource operation. "
}
},
"com.amazonaws.licensemanager#TagKeyList": {
"type": "list",

"member": {
"target": "com.amazonaws.licensemanager#String"
}
},
"com.amazonaws.licensemanager#TagList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Tag"
}
},
"com.amazonaws.licensemanager#TagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#TagResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#TagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds the specified tags to the specified resource. The following resources support\n tagging in License Manager: \n \n \n Licenses \n \n \n Grants \n \n \n License configurations \n \n \n Report generators \n \n "
}

```
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource. The following
examples provide an example\n        ARN for each supported resource in License Manager:</p>\n        <ul>\n
<li>\n            <p>Licenses -\n                <code>arn:aws:license-manager::111122223333:license:l-
EXAMPLE2da7646d6861033667f20e895</code>\n            </p>\n        </li>\n        <li>\n            <p>Grants
-\n                <code>arn:aws:license-manager::111122223333:grant:g-
EXAMPLE7b19f4a0ab73679b0beb52707</code>\n            </p>\n        </li>\n        <li>\n
<p>License configurations -\n                <code>arn:aws:license-manager:us-east-1:111122223333:license-
configuration:lic-EXAMPLE6a788d4c8acd4264ff0ecf2ed2d</code>\n            </p>\n        </li>\n        <li>\n
        <p>Report generators -\n
        <code>arn:aws:license-manager:us-east-1:111122223333:report-generator:r-
EXAMPLE825b4a4f8fe5a3e0c88824e5fc6</code>\n            </p>\n        </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {

        "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
```

```
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation":
 "<p>Token expiration time, in ISO8601-UTC format.</p>"
            }
        },
        "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
            }
        },
        "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }

        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a token.</p>"
    }
},
```

"com.amazonaws.licensemanager#TokenList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#TokenData"
}
},
"com.amazonaws.licensemanager#TokenString": {
"type": "string",
"traits": {
"smithy.api#length": {
"min": 0,
"max": 4096
},
"smithy.api#pattern": "^\\S+$"
}
},
"com.amazonaws.licensemanager#TokenType": {
"type": "enum",
"members": {
"REFRESH_TOKEN": {
"target": "smithy.api#Unit",
"traits": {
"smithy.api#enumValue": "REFRESH_TOKEN"
}
}
}
},

"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
"type": "structure",
"members": {
"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The digital signature method is unsupported. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#UntagResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {

"target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Removes the specified tags from the specified resource. "
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name
(ARN) of the resource. ",
"smithy.api#required": {}
}
},
"TagKeys": {
"target": "com.amazonaws.licensemanager#TagKeyList",
"traits": {
"smithy.api#documentation": " Keys identifying the tags to remove. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
"type": "structure",

"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
},

"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"

}
],
"traits": {
"smithy.api#documentation": " Modifies the attributes of an existing license configuration. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"LicenseConfigurationArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

"smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. ",
"smithy.api#required": {}
}
},
"LicenseConfigurationStatus": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
"traits": {
"smithy.api#documentation": " New status of the license configuration. "
}
},

"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost. "
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " New number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " New hard limit of the number of available licenses. "
}
},
"Name": {

"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New name of the license configuration. "
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " New description of the license configuration. "
}
},
"ProductInformationList": {
"target": "com.amazonaws.licensemanager#ProductInformationList",
"traits": {

"smithy.api#documentation": " New product information. "
}
},
"DisassociateWhenNotFound": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " When
true, disassociates a resource when software is uninstalled. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{

"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
},
{

"target": "com.amazonaws.licensemanager#ResourceNotFoundException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
},
{
"target": "com.amazonaws.licensemanager#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " Updates a report generator. \n After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
"type": "structure",
"members": {
"LicenseManagerReportGeneratorArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the report generator to update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {

"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation": " Type of reports to generate. The following report types are supported: \n \n \n License configuration report - Reports the number and details of consumed licenses for a license configuration. \n \n \n Resource report - Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",

"smithy.api#required": {}
}

},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}

}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
},
"errors": [
{

"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"

},
{
"target": "com.amazonaws.licensemanager#ConflictException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#InvalidResourceStateException"
},
{
"target": "com.amazonaws.licensemanager#LicenseUsageException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. \n You can update the license specifications of AMIs, instances, and hosts.\n You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource. "
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
"type": "structure",
"members": {
"ResourceArn": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"smithy.api#required": {}
}
},
"AddLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations

to add. "
}
},
"RemoveLicenseSpecifications": {
"target": "com.amazonaws.licensemanager#LicenseSpecifications",
"traits": {
"smithy.api#documentation": " ARNs of the license configurations to remove. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
"type": "structure",
"members": {},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{
"target": "com.amazonaws.licensemanager#ServerInternalException"
}
],
"traits": {
"smithy.api#documentation": " Updates License Manager settings for the current Region. "

```
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members":
 {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
                }
            },
             "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
```

"smithy.api#length": {
"min": 0,
"max": 50
}
}
},
"com.amazonaws.licensemanager#ValidationException": {
"type": "structure",
"members": {

"Message": {
"target": "com.amazonaws.licensemanager#Message"
}
},
"traits": {
"smithy.api#documentation": " The provided input is not valid. Try your request again. ",
"smithy.api#error": "client",
"smithy.api#httpError": 400
}
}
}
}

ListLicenses

Initialize stack step

spanInitializeStart

InterceptExecution

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

InterceptBeforeSerialization

OperationSerializer

InterceptAfterSerialization

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

InterceptBeforeRetryLoop

Retry
InterceptAttempt
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
InterceptBeforeSigning
Signing
InterceptAfterSigning
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
InterceptAfterDeserialization
OperationDeserializer
InterceptBeforeDeserialization
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
InterceptTransmit

1.4497 systemd 249.11-0ubuntu3.16

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src/udev/mtd_probe/mtd_probe.c
src/udev/mtd_probe/mtd_probe.h
src/udev/mtd_probe/probe_smartmedia.c
src/udev/scsi_id/scsi.h
src/udev/scsi_id/scsi_id.c
src/udev/scsi_id/scsi_id.h
src/udev/scsi_id/scsi_serial.c
src/udev/udevadm.c
src/udev/udevadm-control.c
src/udev/udevadm.h
src/udev/udevadm-info.c
src/udev/udevadm-monitor.c
src/udev/udevadm-settle.c
src/udev/udevadm-test-builtin.c
src/udev/udevadm-test.c
src/udev/udevadm-trigger.c
src/udev/udevadm-util.c
src/udev/udevadm-util.h
src/udev/udev-builtin-blkid.c
src/udev/udev-builtin.h
src/udev/udev-builtin-input_id.c
src/udev/udev-builtin-kmod.c
src/udev/udev-builtin-path_id.c
src/udev/udev-builtin-uaccess.c
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src/udev/udev-ctrl.h
src/udev/udevd.c
src/udev/udev-event.c
src/udev/udev-event.h
src/udev/udev-node.c
src/udev/udev-node.h

src/udev/udev-rules.c
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1alpha/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
```

```
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
```

```
 []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string
 {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1].Descriptor()
}
```

```
func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service
 accounts, you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1alpha.P
ermission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
```

```
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1alpha.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}
```

```
func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1alpha_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc = []byte{
 0x0a, 0x35, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
 0x6e, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x24, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e,
 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x1a, 0x1f, 0x67,
 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f,
 0x62, 0x65, 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19,
 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75,
 0x72, 0x63, 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x87, 0x05, 0x0a, 0x0a, 0x50, 0x65,
 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65,
 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04,
 0x6e, 0x61, 0x6d, 0x65, 0x12, 0x6c, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
 0x74, 0x79, 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3c, 0x2e, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
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 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61,
 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05,
 0x48, 0x00, 0x52, 0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
 0x01, 0x01, 0x12, 0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72,
 0x65, 0x73, 0x73, 0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41,
```

```
0x05, 0x48, 0x01, 0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x88, 0x01, 0x01, 0x12, 0x53, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01,
0x28, 0x0e, 0x32, 0x35, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73,
0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02,
0x52, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61,
0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41,
0x4e,
0x54, 0x45, 0x45, 0x5f, 0x54, 0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49,
0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01,
0x12, 0x09, 0x0a, 0x05, 0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45,
0x56, 0x45, 0x52, 0x59, 0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c,
0x65, 0x12, 0x14, 0x0a, 0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43,
0x49, 0x46, 0x49, 0x45, 0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52,
0x10, 0x01, 0x12, 0x0a, 0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a,
0x0a, 0x06, 0x52, 0x45, 0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6,
0x01, 0x0a, 0x2c, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e,
0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73,
0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12,
0x32, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75,
0x6e, 0x65, 0x64, 0x5f, 0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69,
0x6f, 0x6e, 0x7d, 0x12, 0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f,
0x72, 0x70, 0x75, 0x73, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b,
0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e,
0x74, 0x65, 0x65, 0x5f, 0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61,
0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73,
0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f, 0x72,
0x6f, 0x6c, 0x65, 0x42, 0x9d, 0x01, 0x0a, 0x28, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67,
0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65,
0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61,
0x42, 0x0f, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74,
0x6f, 0x50, 0x01, 0x5a, 0x5e, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61,
0x70, 0x69, 0x76, 0x31, 0x61, 0x6c, 0x70, 0x68, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61,
0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75,
0x61, 0x67,
0x65, 0x70, 0x62, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce sync.Once
```

```
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1alpha_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes
 = []any{
 (Permission_GranteeType)(0), // 0: google.ai.generativelanguage.v1alpha.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1alpha.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1alpha.Permission
}
var file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1alpha.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1alpha.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1alpha.Permission.role:type_name ->
google.ai.generativelanguage.v1alpha.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1alpha_permission_proto_init()
 }
func file_google_ai_generativelanguage_v1alpha_permission_proto_init() {
 if File_google_ai_generativelanguage_v1alpha_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor: file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc,
   NumEnums:      2,
   NumMessages:   1,
   NumExtensions: 0,
   NumServices:   0,
```

```
  },
  GoTypes:          file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes,
  DependencyIndexes: file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs,
  EnumInfos:        file_google_ai_generativelanguage_v1alpha_permission_proto_enumTypes,
  MessageInfos:     file_google_ai_generativelanguage_v1alpha_permission_proto_msgTypes,
 }.Build()
 File_google_ai_generativelanguage_v1alpha_permission_proto = out.File
 file_google_ai_generativelanguage_v1alpha_permission_proto_rawDesc
 = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_goTypes = nil
 file_google_ai_generativelanguage_v1alpha_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package compute_test

import (
 "context"
```

```
 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleLicensesClient_List_all() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications
 to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 for resp, err := range c.List(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement_test
```

```
import (
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicenseManagementClient() {
 ctx
 := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleNewLicenseManagementRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c,
 err := procurement.NewLicenseManagementRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseManagementClient_Assign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
```

```
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.AssignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#AssignRequest.
 }
 resp, err := c.Assign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_EnumerateLicensedUsers() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 it := c.EnumerateLicensedUsers(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
```

```
  }
  if err != nil {
   // TODO: Handle error.
  }
  //
 TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*procurementpb.EnumerateLicensedUsersResponse)
 }
}

func ExampleLicenseManagementClient_GetLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.GetLicensePoolRequest{
  // TODO: Fill request struct fields.
  //
 See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#GetLicensePoolRe
quest.
 }
 resp, err := c.GetLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_Unassign() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UnassignRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UnassignRequest.
 }
 resp,
 err := c.Unassign(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_UpdateLicensePool() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.UpdateLicensePoolRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#UpdateLicensePoo
lRequest.
 }
 resp, err := c.UpdateLicensePool(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 //
```

```
 TODO: Use resp.
 _ = resp
}

func ExampleLicenseManagementClient_GetOperation() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &longrunningpb.GetOperationRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/longrunning/autogen/longrunningpb#GetOperationRequest.
 }
 resp, err := c.GetOperation(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"
```

```
 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
 "google.golang.org/api/iterator"
)

func ExampleNewLicensesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will
 require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicensesClient_Delete() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.DeleteLicenseRequest{
  //
 TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#DeleteLicenseRequest.
 }
 op, err := c.Delete(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
```

```
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseRequest.
 }
 resp,
 err := c.Get(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_GetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.GetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetIamPolicyLicenseRequest.
 }
```

```
 resp, err := c.GetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_Insert()
 {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.InsertLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#InsertLicenseRequest.
 }
 op, err := c.Insert(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }

 err = op.Wait(ctx)
 if err != nil {
  // TODO: Handle error.
 }
}

func ExampleLicensesClient_List() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template
 only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 defer c.Close()

 req := &computepb.ListLicensesRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#ListLicensesRequest.
 }
 it := c.List(ctx, req)
 for {
  resp, err := it.Next()
  if err == iterator.Done {
   break
  }
  if err != nil {
   // TODO: Handle error.
  }
  // TODO: Use resp.
  _ = resp

  // If you need to access the underlying RPC response,
  // you can do so by casting the `Response` as below.
  // Otherwise, remove this line. Only populated after
  // first call to Next(). Not safe for concurrent access.
  _ = it.Response.(*computepb.LicensesListResponse)
 }
}

func
 ExampleLicensesClient_SetIamPolicy() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.SetIamPolicyLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#SetIamPolicyLicenseRequest.
 }
 resp, err := c.SetIamPolicy(ctx, req)
 if err != nil {
  // TODO: Handle error.
```

```
 }
 // TODO: Use resp.
 _ = resp
}

func ExampleLicensesClient_TestIamPermissions() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicensesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &computepb.TestIamPermissionsLicenseRequest{
  // TODO: Fill request struct fields.
  // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseRequest.
 }
 resp, err := c.TestIamPermissions(ctx, req)
 if err != nil {
  // TODO: Handle error.
 }
 // TODO: Use resp.
 _ = resp
}
```

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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
```

```
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var
 newLicensesClientHook clientHook

// LicensesCallOptions contains the retry settings for each method of LicensesClient.
type LicensesCallOptions struct {
 Delete            []gax.CallOption
 Get               []gax.CallOption
 GetIamPolicy      []gax.CallOption
 Insert            []gax.CallOption
 List              []gax.CallOption
 SetIamPolicy      []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicensesRESTCallOptions() *LicensesCallOptions {
 return &LicensesCallOptions{
  Delete: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
```

```
  },
  GetIamPolicy:
 []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  Insert: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  List: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  SetIamPolicy: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

//
 internalLicensesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicensesClient interface {
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Delete(context.Context, *computepb.DeleteLicenseRequest, ...gax.CallOption) (*Operation, error)
 Get(context.Context, *computepb.GetLicenseRequest, ...gax.CallOption) (*computepb.License, error)
 GetIamPolicy(context.Context, *computepb.GetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
```

```
 Insert(context.Context, *computepb.InsertLicenseRequest, ...gax.CallOption) (*Operation, error)
 List(context.Context, *computepb.ListLicensesRequest, ...gax.CallOption) *LicenseIterator
 SetIamPolicy(context.Context, *computepb.SetIamPolicyLicenseRequest, ...gax.CallOption) (*computepb.Policy,
error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse,
 error)
}

// LicensesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// The Licenses API.
type LicensesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicensesClient

 // The call options for this service.
 CallOptions *LicensesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicensesClient) Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicensesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection
 to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicensesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
```

```
func (c *LicensesClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Delete(ctx, req, opts...)
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *LicensesClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 return c.internalClient.Get(ctx, req, opts...)
}

// GetIamPolicy gets the access control policy for a resource. May be empty
 if no such policy or resource exists. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *LicensesClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.GetIamPolicy(ctx, req, opts...)
}

// Insert create a License resource in the specified project. Caution This resource is intended for use only by third-
party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts ...gax.CallOption)
(*Operation, error) {
 return c.internalClient.Insert(ctx, req, opts...)
}

// List retrieves the list of licenses available in the specified project. This method does not get any licenses that
belong to other projects, including licenses attached to publicly-available images, like Debian 9. If you want to get a
list of publicly-available licenses,
 use this method to make a request to the respective image project, such as debian-cloud or windows-cloud. Caution
This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts ...gax.CallOption)
*LicenseIterator {
 return c.internalClient.List(ctx, req, opts...)
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicensesClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest, opts
...gax.CallOption) (*computepb.Policy, error) {
 return c.internalClient.SetIamPolicy(ctx, req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners
 who are creating Cloud Marketplace images.
func (c *LicensesClient) TestIamPermissions(ctx context.Context, req
```

```
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licensesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // operationClient is used to call the operation-specific management service.
 operationClient *GlobalOperationsClient

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicensesClient
 CallOptions **LicensesCallOptions

 logger *slog.Logger
}

// NewLicensesRESTClient creates a new licenses rest client.
//
// The Licenses API.
func NewLicensesRESTClient(ctx
 context.Context, opts ...option.ClientOption) (*LicensesClient, error) {
 clientOpts := append(defaultLicensesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicensesRESTCallOptions()
 c := &licensesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 o := []option.ClientOption{
  option.WithHTTPClient(httpClient),
```

```
 option.WithEndpoint(endpoint),
 }
 opC, err := NewGlobalOperationsRESTClient(ctx, o...)
 if err != nil {
  return nil, err
 }
 c.operationClient = opC

 return &LicensesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicensesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licensesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licensesRESTClient) Close() error {
 // Replace httpClient
 with nil to force cleanup.
 c.httpClient = nil
 if err := c.operationClient.Close(); err != nil {
  return err
 }
 return nil
}

// Connection returns a connection to the API service.
```

```
//
// Deprecated: This method always returns nil.
func (c *licensesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Delete deletes the specified license. Caution This resource is intended for use only by third-party partners who are
creating Cloud Marketplace images.
func (c *licensesRESTClient) Delete(ctx context.Context, req *computepb.DeleteLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 params := url.Values{}
 if req != nil && req.RequestId != nil {
  params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client
 and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Delete[0:len((*c.CallOptions).Delete):len((*c.CallOptions).Delete)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("DELETE", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Delete")
  if err != nil {
   return err
```

```
  }

  if err := unm.Unmarshal(buf,
 resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 op := &Operation{
  &globalOperationsHandle{
   c:       c.operationClient,
   proto:   resp,
   project: req.GetProject(),
  },
 }
 return op, nil
}

// Get returns the specified License resource. Caution This resource is intended for use only by third-party partners
who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseRequest, opts ...gax.CallOption)
(*computepb.License, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v", req.GetProject(), req.GetLicense())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license", url.QueryEscape(req.GetLicense()))}

 hds = append(c.xGoogHeaders,
 hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.License{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
```

```
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// GetIamPolicy gets the access control policy for a resource. May be empty if no such policy or resource
 exists. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licensesRESTClient) GetIamPolicy(ctx context.Context, req *computepb.GetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/getIamPolicy", req.GetProject(),
req.GetResource())

 params := url.Values{}
 if req != nil && req.OptionsRequestedPolicyVersion != nil {
  params.Add("optionsRequestedPolicyVersion", fmt.Sprintf("%v", req.GetOptionsRequestedPolicyVersion()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds,
```

```
 "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetIamPolicy[0:len((*c.CallOptions).GetIamPolicy):len((*c.CallOptions).GetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetIamPolicy")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Insert create a License resource in the specified project. Caution This resource is intended
 for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) Insert(ctx context.Context, req *computepb.InsertLicenseRequest, opts
...gax.CallOption) (*Operation, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetLicenseResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
```

```
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

params := url.Values{}
if req != nil && req.RequestId != nil {
 params.Add("requestId", fmt.Sprintf("%v", req.GetRequestId()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "project", url.QueryEscape(req.GetProject()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx,
hds...)
opts = append((*c.CallOptions).Insert[0:len((*c.CallOptions).Insert):len((*c.CallOptions).Insert)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &computepb.Operation{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Insert")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
op := &Operation{
 &globalOperationsHandle{
```

```
  c:       c.operationClient,
  proto:   resp,
  project: req.GetProject(),
  },
 }
 return op, nil
}

// List retrieves the
 list of licenses available in the specified project. This method does not get any licenses that belong to other projects,
including licenses attached to publicly-available images, like Debian 9. If you want to get a list of publicly-available
licenses, use this method to make a request to the respective image project, such as debian-cloud or windows-cloud.
Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) List(ctx context.Context, req *computepb.ListLicensesRequest, opts
...gax.CallOption) *LicenseIterator {
 it := &LicenseIterator{}
 req = proto.Clone(req).(*computepb.ListLicensesRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*computepb.License, string, error) {
  resp := &computepb.LicensesListResponse{}
  if pageToken != "" {
   req.PageToken = proto.String(pageToken)
  }
  if pageSize > math.MaxInt32
  {
   req.MaxResults = proto.Uint32(uint32(math.MaxInt32))
  } else if pageSize != 0 {
   req.MaxResults = proto.Uint32(uint32(pageSize))
  }
  baseUrl, err := url.Parse(c.endpoint)
  if err != nil {
   return nil, "", err
  }
  baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses", req.GetProject())

  params := url.Values{}
  if req != nil && req.Filter != nil {
   params.Add("filter", fmt.Sprintf("%v", req.GetFilter()))
  }
  if req != nil && req.MaxResults != nil {
   params.Add("maxResults", fmt.Sprintf("%v", req.GetMaxResults()))
  }
  if req != nil && req.OrderBy != nil {
   params.Add("orderBy", fmt.Sprintf("%v", req.GetOrderBy()))
  }
  if req != nil && req.PageToken != nil {
   params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
  }
```

```
 if req != nil && req.ReturnPartialSuccess != nil {
  params.Add("returnPartialSuccess", fmt.Sprintf("%v", req.GetReturnPartialSuccess()))
 }

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from
client and context metadata.
 hds := append(c.xGoogHeaders, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "List")
  if err != nil {
   return err
  }
  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, "", e
 }
 it.Response = resp
 return resp.GetItems(), resp.GetNextPageToken(), nil
}

fetch := func(pageSize int, pageToken string) (string, error) {
 items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
 if err != nil {
  return "", err
 }
 it.items = append(it.items, items...)
 return nextPageToken,
nil
}

it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
```

```
 it.pageInfo.MaxSize = int(req.GetMaxResults())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// SetIamPolicy sets the access control policy on the specified resource. Replaces any existing policy. Caution This
resource is intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) SetIamPolicy(ctx context.Context, req *computepb.SetIamPolicyLicenseRequest,
opts ...gax.CallOption) (*computepb.Policy, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetGlobalSetPolicyRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/setIamPolicy", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds
 := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()),
"resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).SetIamPolicy[0:len((*c.CallOptions).SetIamPolicy):len((*c.CallOptions).SetIamPolicy)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.Policy{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers
```

```
  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "SetIamPolicy")
  if err != nil {
   return err
  }

  if
 err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *licensesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseRequest, opts ...gax.CallOption) (*computepb.TestPermissionsResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenses/%v/testIamPermissions", req.GetProject(),
req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params",
 fmt.Sprintf("%s=%v&%s=%v", "project", url.QueryEscape(req.GetProject()), "resource",
url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
```

```
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err !=
 nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23
```

```
package compute_test
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// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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// limitations under the License.

// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute_test

import (
 "context"

 compute "cloud.google.com/go/compute/apiv1"
 computepb "cloud.google.com/go/compute/apiv1/computepb"
)

func ExampleNewLicenseCodesRESTClient() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
 //
 - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := compute.NewLicenseCodesRESTClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 // TODO: Use client.
 _ = c
}

func ExampleLicenseCodesClient_Get() {
 ctx := context.Background()
 // This snippet has been automatically generated and should be regarded as a code template only.
 // It will require modifications to work:
```

```
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.GetLicenseCodeRequest{
 // TODO: Fill request
struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#GetLicenseCodeRequest.
}
resp, err := c.Get(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}

func ExampleLicenseCodesClient_TestIamPermissions() {
ctx := context.Background()
// This snippet has been automatically generated and should be regarded as a code template only.
// It will require modifications to work:
// - It may require correct/in-range values for request initialization.
// - It may require specifying regional endpoints when creating the service client as shown in:
//   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
c, err := compute.NewLicenseCodesRESTClient(ctx)
if err != nil {
 // TODO: Handle error.
}
defer c.Close()

req := &computepb.TestIamPermissionsLicenseCodeRequest{
 // TODO: Fill request struct fields.
 // See https://pkg.go.dev/cloud.google.com/go/compute/apiv1/computepb#TestIamPermissionsLicenseCodeRequest.
}
resp,
err := c.TestIamPermissions(ctx, req)
if err != nil {
 // TODO: Handle error.
}
// TODO: Use resp.
_ = resp
}
```

```
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package procurement

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "math"
 "net/http"
 "net/url"

 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
 longrunningpb "cloud.google.com/go/longrunning/autogen/longrunningpb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/iterator"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
 gtransport
 "google.golang.org/api/transport/grpc"
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
 "google.golang.org/protobuf/proto"
)

var newLicenseManagementClientHook clientHook

// LicenseManagementCallOptions contains the retry settings for each method of LicenseManagementClient.
type LicenseManagementCallOptions struct {
 GetLicensePool        []gax.CallOption
 UpdateLicensePool     []gax.CallOption
 Assign                []gax.CallOption
```

```
 Unassign              []gax.CallOption
 EnumerateLicensedUsers []gax.CallOption
 GetOperation          []gax.CallOption
}

func defaultLicenseManagementGRPCClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("cloudcommerceconsumerprocurement.googleapis.com:443"),
internaloption.WithDefaultEndpointTemplate("cloudcommerceconsumerprocurement.UNIVERSE_DOMAIN:443")
,
  internaloption.WithDefaultMTLSEndpoint("cloudcommerceconsumerprocurement.mtls.googleapis.com:443"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableJwtWithScope(),
  internaloption.EnableNewAuthLibrary(),
  option.WithGRPCDialOption(grpc.WithDefaultCallOptions(
   grpc.MaxCallRecvMsgSize(math.MaxInt32))),
 }
}

func
 defaultLicenseManagementCallOptions() *LicenseManagementCallOptions {
 return &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

func defaultLicenseManagementRESTCallOptions() *LicenseManagementCallOptions {
 return
 &LicenseManagementCallOptions{
  GetLicensePool:        []gax.CallOption{},
  UpdateLicensePool:     []gax.CallOption{},
  Assign:                []gax.CallOption{},
  Unassign:              []gax.CallOption{},
  EnumerateLicensedUsers: []gax.CallOption{},
  GetOperation:          []gax.CallOption{},
 }
}

// internalLicenseManagementClient is an interface that defines the methods available from Cloud Commerce
Consumer Procurement API.
type internalLicenseManagementClient interface {
```

```
 Close() error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 GetLicensePool(context.Context, *procurementpb.GetLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 UpdateLicensePool(context.Context, *procurementpb.UpdateLicensePoolRequest, ...gax.CallOption)
(*procurementpb.LicensePool, error)
 Assign(context.Context, *procurementpb.AssignRequest, ...gax.CallOption) (*procurementpb.AssignResponse,
error)
 Unassign(context.Context, *procurementpb.UnassignRequest,
 ...gax.CallOption) (*procurementpb.UnassignResponse, error)
 EnumerateLicensedUsers(context.Context, *procurementpb.EnumerateLicensedUsersRequest, ...gax.CallOption)
*LicensedUserIterator
 GetOperation(context.Context, *longrunningpb.GetOperationRequest, ...gax.CallOption)
(*longrunningpb.Operation, error)
}

// LicenseManagementClient is a client for interacting with Cloud Commerce Consumer Procurement API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
//
// Service for managing licenses.
type LicenseManagementClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseManagementClient

 // The call options for this service.
 CallOptions *LicenseManagementCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseManagementClient)
 Close() error {
 return c.internalClient.Close()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseManagementClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
```

```
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseManagementClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// GetLicensePool gets the license pool.
func (c *LicenseManagementClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 return c.internalClient.GetLicensePool(ctx, req, opts...)
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *LicenseManagementClient)
 UpdateLicensePool(ctx context.Context, req *procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption)
(*procurementpb.LicensePool, error) {
 return c.internalClient.UpdateLicensePool(ctx, req, opts...)
}

// Assign assigns a license to a user.
func (c *LicenseManagementClient) Assign(ctx context.Context, req *procurementpb.AssignRequest, opts
...gax.CallOption) (*procurementpb.AssignResponse, error) {
 return c.internalClient.Assign(ctx, req, opts...)
}

// Unassign unassigns a license from a user.
func (c *LicenseManagementClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest, opts
...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 return c.internalClient.Unassign(ctx, req, opts...)
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *LicenseManagementClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 return c.internalClient.EnumerateLicensedUsers(ctx,
 req, opts...)
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c *LicenseManagementClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 return c.internalClient.GetOperation(ctx, req, opts...)
}

// licenseManagementGRPCClient is a client for interacting with Cloud Commerce Consumer Procurement API
over gRPC transport.
//
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
```

```
method calls.
type licenseManagementGRPCClient struct {
 // Connection pool of gRPC connections to the service.
 connPool gtransport.ConnPool

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions

 // The gRPC API client.
 licenseManagementClient procurementpb.LicenseManagementServiceClient

 operationsClient longrunningpb.OperationsClient

 //
 The x-goog-* metadata to be sent with each request.
 xGoogHeaders []string

 logger *slog.Logger
}

// NewLicenseManagementClient creates a new license management service client based on gRPC.
// The returned client must be Closed when it is done being used to clean up its underlying connections.
//
// Service for managing licenses.
func NewLicenseManagementClient(ctx context.Context, opts ...option.ClientOption) (*LicenseManagementClient,
error) {
 clientOpts := defaultLicenseManagementGRPCClientOptions()
 if newLicenseManagementClientHook != nil {
  hookOpts, err := newLicenseManagementClientHook(ctx, clientHookParams{})
  if err != nil {
   return nil, err
  }
  clientOpts = append(clientOpts, hookOpts...)
 }

 connPool, err := gtransport.DialPool(ctx, append(clientOpts, opts...)...)
 if err != nil {
  return nil, err
 }
 client := LicenseManagementClient{CallOptions: defaultLicenseManagementCallOptions()}

 c := &licenseManagementGRPCClient{
  connPool:
      connPool,
  licenseManagementClient: procurementpb.NewLicenseManagementServiceClient(connPool),
  CallOptions:            &client.CallOptions,
  logger:                 internaloption.GetLogger(opts),
  operationsClient:       longrunningpb.NewOperationsClient(connPool),
```

```
 }
 c.setGoogleClientInfo()

 client.internalClient = c

 return &client, nil
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *licenseManagementGRPCClient) Connection() *grpc.ClientConn {
 return c.connPool.Conn()
}

// setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementGRPCClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "grpc",
 grpc.Version)
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementGRPCClient) Close() error {
 return c.connPool.Close()
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseManagementRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseManagementClient
 CallOptions **LicenseManagementCallOptions
```

```
 logger *slog.Logger
}

// NewLicenseManagementRESTClient creates a new license management service rest client.
//
// Service for managing licenses.
func NewLicenseManagementRESTClient(ctx context.Context, opts ...option.ClientOption)
 (*LicenseManagementClient, error) {
 clientOpts := append(defaultLicenseManagementRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseManagementRESTCallOptions()
 c := &licenseManagementRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseManagementClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseManagementRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://cloudcommerceconsumerprocurement.googleapis.com"),
internaloption.WithDefaultEndpointTemplate("https://cloudcommerceconsumerprocurement.UNIVERSE_DOMAI
N"),
  internaloption.WithDefaultMTLSEndpoint("https://cloudcommerceconsumerprocurement.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://cloudcommerceconsumerprocurement.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseManagementRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
```

```
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseManagementRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseManagementRESTClient) Connection() *grpc.ClientConn {
 return nil
}
func (c *licenseManagementGRPCClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.GetLicensePool, req, settings.GRPC, c.logger,
"GetLicensePool")
  return err
 }, opts...)
 if err != nil {
  return
 nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

 hds = append(c.xGoogHeaders, hds...)
```

```
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
 var resp *procurementpb.LicensePool
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.UpdateLicensePool, req, settings.GRPC, c.logger,
"UpdateLicensePool")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Assign(ctx context.Context,
 req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 var resp *procurementpb.AssignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Assign, req, settings.GRPC, c.logger, "Assign")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds
 = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 var resp *procurementpb.UnassignResponse
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  var err error
  resp, err = executeRPC(ctx, c.licenseManagementClient.Unassign, req, settings.GRPC, c.logger, "Unassign")
```

```
 return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (c *licenseManagementGRPCClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).EnumerateLicensedUsers[0:len((*c.CallOptions).EnumerateLicensedUsers):len((*c.CallOp
tions).EnumerateLicensedUsers)],
 opts...)
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if pageToken != "" {
   req.PageToken = pageToken
  }
  if pageSize > math.MaxInt32 {
   req.PageSize = math.MaxInt32
  } else if pageSize != 0 {
   req.PageSize = int32(pageSize)
  }
  err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
   var err error
   resp, err = executeRPC(ctx, c.licenseManagementClient.EnumerateLicensedUsers, req, settings.GRPC, c.logger,
"EnumerateLicensedUsers")
   return err
  }, opts...)
  if err != nil {
   return nil, "", err
  }

  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }
 fetch := func(pageSize int,
 pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
```

```
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

func (c *licenseManagementGRPCClient) GetOperation(ctx context.Context, req
*longrunningpb.GetOperationRequest, opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 ctx = gax.InsertMetadataIntoOutgoingContext(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 var resp *longrunningpb.Operation
 err := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
 error {
  var err error
  resp, err = executeRPC(ctx, c.operationsClient.GetOperation, req, settings.GRPC, c.logger, "GetOperation")
  return err
 }, opts...)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

// GetLicensePool gets the license pool.
func (c *licenseManagementRESTClient) GetLicensePool(ctx context.Context, req
*procurementpb.GetLicensePoolRequest, opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetLicensePool[0:len((*c.CallOptions).GetLicensePool):len((*c.CallOptions).GetLicenseP
ool)],
 opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.LicensePool{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetLicensePool")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// UpdateLicensePool updates the license pool if one exists for this Order.
func (c *licenseManagementRESTClient) UpdateLicensePool(ctx context.Context, req
*procurementpb.UpdateLicensePoolRequest,
 opts ...gax.CallOption) (*procurementpb.LicensePool, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 body := req.GetLicensePool()
 jsonReq, err := m.Marshal(body)
 if err != nil {
```

```
 return nil, err
}

baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, err
}
baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetLicensePool().GetName())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")
if req.GetUpdateMask() != nil {
 field, err := protojson.Marshal(req.GetUpdateMask())
 if err != nil {
  return nil, err
 }
 params.Add("updateMask", string(field[1:len(field)-1]))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "license_pool.name",
url.QueryEscape(req.GetLicensePool().GetName()))}

hds = append(c.xGoogHeaders, hds...)
hds = append(hds, "Content-Type", "application/json")
headers
:= gax.BuildHeaders(ctx, hds...)
opts =
append((*c.CallOptions).UpdateLicensePool[0:len((*c.CallOptions).UpdateLicensePool):len((*c.CallOptions).Upda
teLicensePool)], opts...)
unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
resp := &procurementpb.LicensePool{}
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq, err := http.NewRequest("PATCH", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "UpdateLicensePool")
 if err != nil {
  return err
```

```
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// Assign assigns a license to a user.
func (c *licenseManagementRESTClient) Assign(ctx
 context.Context, req *procurementpb.AssignRequest, opts ...gax.CallOption) (*procurementpb.AssignResponse,
error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:assign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Assign[0:len((*c.CallOptions).Assign):len((*c.CallOptions).Assign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp
 := &procurementpb.AssignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
```

```
 }
 httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
 if err != nil {
  return err
 }
 httpReq = httpReq.WithContext(ctx)
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Assign")
 if err != nil {
  return err
 }

 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, e
}
return resp, nil
}

// Unassign unassigns a license from a user.
func (c *licenseManagementRESTClient) Unassign(ctx context.Context, req *procurementpb.UnassignRequest,
opts ...gax.CallOption) (*procurementpb.UnassignResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true, UseEnumNumbers: true}
 jsonReq, err := m.Marshal(req)
 if err != nil {
  return
 nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v:unassign", req.GetParent())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "parent", url.QueryEscape(req.GetParent()))}
```

```
 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Unassign[0:len((*c.CallOptions).Unassign):len((*c.CallOptions).Unassign)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &procurementpb.UnassignResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(),
 bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "Unassign")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// EnumerateLicensedUsers enumerates all users assigned a license.
func (c *licenseManagementRESTClient) EnumerateLicensedUsers(ctx context.Context, req
*procurementpb.EnumerateLicensedUsersRequest, opts ...gax.CallOption) *LicensedUserIterator {
 it := &LicensedUserIterator{}
 req = proto.Clone(req).(*procurementpb.EnumerateLicensedUsersRequest)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 it.InternalFetch = func(pageSize int, pageToken string) ([]*procurementpb.LicensedUser, string, error) {
  resp := &procurementpb.EnumerateLicensedUsersResponse{}
  if
 pageToken != "" {
   req.PageToken = pageToken
  }
```

```
if pageSize > math.MaxInt32 {
 req.PageSize = math.MaxInt32
} else if pageSize != 0 {
 req.PageSize = int32(pageSize)
}
baseUrl, err := url.Parse(c.endpoint)
if err != nil {
 return nil, "", err
}
baseUrl.Path += fmt.Sprintf("/v1/%v:enumerateLicensedUsers", req.GetParent())

params := url.Values{}
params.Add("$alt", "json;enum-encoding=int")
if req.GetPageSize() != 0 {
 params.Add("pageSize", fmt.Sprintf("%v", req.GetPageSize()))
}
if req.GetPageToken() != "" {
 params.Add("pageToken", fmt.Sprintf("%v", req.GetPageToken()))
}

baseUrl.RawQuery = params.Encode()

// Build HTTP headers from client and context metadata.
hds := append(c.xGoogHeaders, "Content-Type", "application/json")
headers := gax.BuildHeaders(ctx, hds...)
e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
 if settings.Path != "" {
  baseUrl.Path = settings.Path
 }
 httpReq,
err := http.NewRequest("GET", baseUrl.String(), nil)
 if err != nil {
  return err
 }
 httpReq.Header = headers

 buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "EnumerateLicensedUsers")
 if err != nil {
  return err
 }
 if err := unm.Unmarshal(buf, resp); err != nil {
  return err
 }

 return nil
}, opts...)
if e != nil {
 return nil, "", e
```

```
  }
  it.Response = resp
  return resp.GetLicensedUsers(), resp.GetNextPageToken(), nil
 }

 fetch := func(pageSize int, pageToken string) (string, error) {
  items, nextPageToken, err := it.InternalFetch(pageSize, pageToken)
  if err != nil {
   return "", err
  }
  it.items = append(it.items, items...)
  return nextPageToken, nil
 }

 it.pageInfo, it.nextFunc = iterator.NewPageInfo(fetch, it.bufLen, it.takeBuf)
 it.pageInfo.MaxSize = int(req.GetPageSize())
 it.pageInfo.Token = req.GetPageToken()

 return it
}

// GetOperation is a utility method from google.longrunning.Operations.
func (c
 *licenseManagementRESTClient) GetOperation(ctx context.Context, req *longrunningpb.GetOperationRequest,
opts ...gax.CallOption) (*longrunningpb.Operation, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/v1/%v", req.GetName())

 params := url.Values{}
 params.Add("$alt", "json;enum-encoding=int")

 baseUrl.RawQuery = params.Encode()

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v", "name", url.QueryEscape(req.GetName()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).GetOperation[0:len((*c.CallOptions).GetOperation):len((*c.CallOptions).GetOperation)],
opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &longrunningpb.Operation{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings)
```

```
 error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "GetOperation")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

//go:build go1.23

package procurement_test

import (
```

```
 "context"

 procurement "cloud.google.com/go/commerce/consumer/procurement/apiv1"
 procurementpb "cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb"
)

func ExampleLicenseManagementClient_EnumerateLicensedUsers_all() {
 ctx := context.Background()
 // This snippet has been automatically
 generated and should be regarded as a code template only.
 // It will require modifications to work:
 // - It may require correct/in-range values for request initialization.
 // - It may require specifying regional endpoints when creating the service client as shown in:
 //   https://pkg.go.dev/cloud.google.com/go#hdr-Client_Options
 c, err := procurement.NewLicenseManagementClient(ctx)
 if err != nil {
  // TODO: Handle error.
 }
 defer c.Close()

 req := &procurementpb.EnumerateLicensedUsersRequest{
  // TODO: Fill request struct fields.
  // See
https://pkg.go.dev/cloud.google.com/go/commerce/consumer/procurement/apiv1/procurementpb#EnumerateLicense
dUsersRequest.
 }
 for resp, err := range c.EnumerateLicensedUsers(ctx, req).All() {
  if err != nil {
   // TODO: Handle error and break/return/continue. Iteration will stop after any error.
  }
  // TODO: Use resp.
  _ = resp
 }
}

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```

```
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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/cloud/commerce/consumer/procurement/v1/license_management_service.proto

package procurementpb

import (
 context "context"
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 grpc "google.golang.org/grpc"
 codes "google.golang.org/grpc/codes"
 status
 "google.golang.org/grpc/status"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
 durationpb "google.golang.org/protobuf/types/known/durationpb"
 fieldmaskpb "google.golang.org/protobuf/types/known/fieldmaskpb"
 timestamppb "google.golang.org/protobuf/types/known/timestamppb"
)

const (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Assignment protocol for a license pool.
type AssignmentProtocol struct {
```

```
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The type of assignment protocol.
 //
 // Types that are assignable to AssignmentType:
 //
 // *AssignmentProtocol_ManualAssignmentType_
 // *AssignmentProtocol_AutoAssignmentType_
 AssignmentType
 isAssignmentProtocol_AssignmentType `protobuf_oneof:"assignment_type"`
}

func (x *AssignmentProtocol) Reset() {
 *x = AssignmentProtocol{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol) ProtoMessage() {}

func (x *AssignmentProtocol) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0}
}
```

```
func (m *AssignmentProtocol) GetAssignmentType() isAssignmentProtocol_AssignmentType {
 if m != nil {
  return m.AssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetManualAssignmentType() *AssignmentProtocol_ManualAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_ManualAssignmentType_); ok {
  return x.ManualAssignmentType
 }
 return nil
}

func (x *AssignmentProtocol) GetAutoAssignmentType() *AssignmentProtocol_AutoAssignmentType {
 if x, ok := x.GetAssignmentType().(*AssignmentProtocol_AutoAssignmentType_); ok {
  return x.AutoAssignmentType
 }
 return nil
}

type isAssignmentProtocol_AssignmentType interface {
 isAssignmentProtocol_AssignmentType()
}

type AssignmentProtocol_ManualAssignmentType_ struct {
 // Allow manual assignments triggered by administrative operations only.
 ManualAssignmentType *AssignmentProtocol_ManualAssignmentType
`protobuf:"bytes,2,opt,name=manual_assignment_type,json=manualAssignmentType,proto3,oneof"`
}

type
 AssignmentProtocol_AutoAssignmentType_ struct {
 // Allow automatic assignments triggered by data plane operations.
 AutoAssignmentType *AssignmentProtocol_AutoAssignmentType
`protobuf:"bytes,3,opt,name=auto_assignment_type,json=autoAssignmentType,proto3,oneof"`
}

func (*AssignmentProtocol_ManualAssignmentType_) isAssignmentProtocol_AssignmentType() {}

func (*AssignmentProtocol_AutoAssignmentType_) isAssignmentProtocol_AssignmentType() {}

// A license pool represents a pool of licenses that can be assigned to users.
type LicensePool struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // Identifier. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Required. Assignment protocol for the license pool.
 LicenseAssignmentProtocol *AssignmentProtocol
`protobuf:"bytes,2,opt,name=license_assignment_protocol,json=licenseAssignmentProtocol,proto3"
 json:"license_assignment_protocol,omitempty"`
 // Output only. Licenses count that are available to be assigned.
 AvailableLicenseCount int32
`protobuf:"varint,3,opt,name=available_license_count,json=availableLicenseCount,proto3"
json:"available_license_count,omitempty"`
 // Output only. Total number of licenses in the pool.
 TotalLicenseCount int32 `protobuf:"varint,4,opt,name=total_license_count,json=totalLicenseCount,proto3"
json:"total_license_count,omitempty"`
}

func (x *LicensePool) Reset() {
 *x = LicensePool{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *LicensePool) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensePool) ProtoMessage() {}

func (x *LicensePool) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[1]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensePool.ProtoReflect.Descriptor instead.
func (*LicensePool) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
```

```
[]int{1}
}

func (x *LicensePool) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

func (x *LicensePool) GetLicenseAssignmentProtocol() *AssignmentProtocol {
 if x != nil {
  return x.LicenseAssignmentProtocol
 }
 return nil
}

func (x *LicensePool) GetAvailableLicenseCount() int32 {
 if x != nil {
  return x.AvailableLicenseCount
 }
 return 0
}

func (x *LicensePool) GetTotalLicenseCount() int32 {
 if x != nil {
  return x.TotalLicenseCount
 }
 return 0
}

// Request message for getting a
 license pool.
type GetLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The name of the license pool to get.
 // Format: `billingAccounts/{billing_account}/orders/{order}/licensePool`
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
}

func (x *GetLicensePoolRequest) Reset() {
 *x = GetLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
 ms.StoreMessageInfo(mi)
}

func (x *GetLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*GetLicensePoolRequest) ProtoMessage() {}

func (x *GetLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[2]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if
 ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use GetLicensePoolRequest.ProtoReflect.Descriptor instead.
func (*GetLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{2}
}

func (x *GetLicensePoolRequest) GetName() string {
 if x != nil {
  return x.Name
 }
 return ""
}

// Request message for updating a license pool.
type UpdateLicensePoolRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. The license pool to update.
 //
 // The license pool's name field is used to identify the license pool to
 // update. Format:
 // `billingAccounts/{billing_account}/orders/{order}/licensePool`.
```

```
 LicensePool *LicensePool `protobuf:"bytes,1,opt,name=license_pool,json=licensePool,proto3"
json:"license_pool,omitempty"`
 //
 Required. The list of fields to update.
 UpdateMask *fieldmaskpb.FieldMask `protobuf:"bytes,2,opt,name=update_mask,json=updateMask,proto3"
json:"update_mask,omitempty"`
}

func (x *UpdateLicensePoolRequest) Reset() {
 *x = UpdateLicensePoolRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UpdateLicensePoolRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UpdateLicensePoolRequest) ProtoMessage() {}

func (x *UpdateLicensePoolRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[3]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UpdateLicensePoolRequest.ProtoReflect.Descriptor
 instead.
func (*UpdateLicensePoolRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{3}
}

func (x *UpdateLicensePoolRequest) GetLicensePool() *LicensePool {
 if x != nil {
  return x.LicensePool
 }
 return nil
```

```
}

func (x *UpdateLicensePoolRequest) GetUpdateMask() *fieldmaskpb.FieldMask {
 if x != nil {
  return x.UpdateMask
 }
 return nil
}

// Request message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func
 (x *AssignRequest) Reset() {
 *x = AssignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignRequest) ProtoMessage() {}

func (x *AssignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[4]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
```

```
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignRequest.ProtoReflect.Descriptor instead.
func (*AssignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{4}
}

func (x *AssignRequest) GetParent()
 string {
 if x != nil {
  return x.Parent
 }
 return ""
}

func (x *AssignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Assign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementServic
e.Assign].
type AssignResponse struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignResponse) Reset() {
 *x = AssignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}
```

```
func (*AssignResponse) ProtoMessage() {}

func (x *AssignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[5]
 if x
 != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignResponse.ProtoReflect.Descriptor instead.
func (*AssignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{5}
}

// Request message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Required. Username.
 // Format: `name@domain.com`.
 Usernames []string `protobuf:"bytes,2,rep,name=usernames,proto3" json:"usernames,omitempty"`
}

func (x *UnassignRequest) Reset()
 {
 *x = UnassignRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *UnassignRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignRequest) ProtoMessage() {}

func (x *UnassignRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[6]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignRequest.ProtoReflect.Descriptor instead.
func (*UnassignRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{6}
}

func (x *UnassignRequest) GetParent() string {
 if x != nil {
  return
 x.Parent
 }
 return ""
}

func (x *UnassignRequest) GetUsernames() []string {
 if x != nil {
  return x.Usernames
 }
 return nil
}

// Response message for
//
[LicenseManagementService.Unassign][google.cloud.commerce.consumer.procurement.v1.LicenseManagementSer
vice.Unassign].
type UnassignResponse struct {
 state         protoimpl.MessageState
```

```
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *UnassignResponse) Reset() {
 *x = UnassignResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *UnassignResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*UnassignResponse) ProtoMessage() {}

func (x *UnassignResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[7]
 if x != nil {
  ms
 := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use UnassignResponse.ProtoReflect.Descriptor instead.
func (*UnassignResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{7}
}

// Request message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersRequest struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
```

```
 // Required. License pool name.
 Parent string `protobuf:"bytes,1,opt,name=parent,proto3" json:"parent,omitempty"`
 // Optional. The maximum number of users to return. The service may return
 // fewer than this value.
 PageSize int32 `protobuf:"varint,2,opt,name=page_size,json=pageSize,proto3"
 json:"page_size,omitempty"`
 // Optional. A page token, received from a previous `EnumerateLicensedUsers`
 // call. Provide this to retrieve the subsequent page.
 PageToken string `protobuf:"bytes,3,opt,name=page_token,json=pageToken,proto3" json:"page_token,omitempty"`
}

func (x *EnumerateLicensedUsersRequest) Reset() {
 *x = EnumerateLicensedUsersRequest{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersRequest) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersRequest) ProtoMessage() {}

func (x *EnumerateLicensedUsersRequest) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[8]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo()
 == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersRequest.ProtoReflect.Descriptor instead.
func (*EnumerateLicensedUsersRequest) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{8}
}

func (x *EnumerateLicensedUsersRequest) GetParent() string {
 if x != nil {
```

```
  return x.Parent
 }
 return ""
}

func (x *EnumerateLicensedUsersRequest) GetPageSize() int32 {
 if x != nil {
  return x.PageSize
 }
 return 0
}

func (x *EnumerateLicensedUsersRequest) GetPageToken() string {
 if x != nil {
  return x.PageToken
 }
 return ""
}

// A licensed user.
type LicensedUser struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Username.
 // Format: `name@domain.com`.
 Username string `protobuf:"bytes,1,opt,name=username,proto3" json:"username,omitempty"`
 //
 Output only. Timestamp when the license was assigned.
 AssignTime *timestamppb.Timestamp `protobuf:"bytes,2,opt,name=assign_time,json=assignTime,proto3"
json:"assign_time,omitempty"`
 // Output only. Timestamp when the license was recently used. This may not be
 // the most recent usage time, and will be updated regularly (within 24
 // hours).
 RecentUsageTime *timestamppb.Timestamp
`protobuf:"bytes,3,opt,name=recent_usage_time,json=recentUsageTime,proto3"
json:"recent_usage_time,omitempty"`
}

func (x *LicensedUser) Reset() {
 *x = LicensedUser{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}
```

```
func (x *LicensedUser) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*LicensedUser) ProtoMessage() {}

func (x *LicensedUser) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[9]
 if
 x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use LicensedUser.ProtoReflect.Descriptor instead.
func (*LicensedUser) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{9}
}

func (x *LicensedUser) GetUsername() string {
 if x != nil {
  return x.Username
 }
 return ""
}

func (x *LicensedUser) GetAssignTime() *timestamppb.Timestamp {
 if x != nil {
  return x.AssignTime
 }
 return nil
}

func (x *LicensedUser) GetRecentUsageTime() *timestamppb.Timestamp {
 if x != nil {
  return x.RecentUsageTime
 }
 return nil
}
```

```
// Response message for
//
[LicenseManagementService.EnumerateLicensedUsers][google.cloud.commerce.consumer.procurement.v1.License
ManagementService.EnumerateLicensedUsers].
type EnumerateLicensedUsersResponse
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // The list of licensed users.
 LicensedUsers []*LicensedUser `protobuf:"bytes,1,rep,name=licensed_users,json=licensedUsers,proto3"
json:"licensed_users,omitempty"`
 // A token that can be sent as `page_token` to retrieve the next page.
 // If this field is omitted, there are no subsequent pages.
 NextPageToken string `protobuf:"bytes,2,opt,name=next_page_token,json=nextPageToken,proto3"
json:"next_page_token,omitempty"`
}

func (x *EnumerateLicensedUsersResponse) Reset() {
 *x = EnumerateLicensedUsersResponse{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *EnumerateLicensedUsersResponse) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*EnumerateLicensedUsersResponse) ProtoMessage() {}

func
 (x *EnumerateLicensedUsersResponse) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[10]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use EnumerateLicensedUsersResponse.ProtoReflect.Descriptor instead.
```

```
func (*EnumerateLicensedUsersResponse) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{10}
}

func (x *EnumerateLicensedUsersResponse) GetLicensedUsers() []*LicensedUser {
 if x != nil {
  return x.LicensedUsers
 }
 return nil
}

func (x *EnumerateLicensedUsersResponse) GetNextPageToken() string {
 if x != nil {
  return x.NextPageToken
 }
 return ""
}

// Allow manual assignments triggered by administrative operations only.
type AssignmentProtocol_ManualAssignmentType
 struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields
}

func (x *AssignmentProtocol_ManualAssignmentType) Reset() {
 *x = AssignmentProtocol_ManualAssignmentType{}
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_ManualAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_ManualAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_ManualAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[11]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
```

```
  ms.StoreMessageInfo(mi)
 }
 return ms
}
return mi.MessageOf(x)
}

// Deprecated:
 Use AssignmentProtocol_ManualAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_ManualAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
[]int{0, 0}
}

// Configuration for automatic assignments handled by data plane operations.
type AssignmentProtocol_AutoAssignmentType struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Optional. The time to live for an inactive license. After this time has
 // passed, the license will be automatically unassigned from the user. Must
 // be at least 7 days, if set. If unset, the license will never expire.
 InactiveLicenseTtl *durationpb.Duration
`protobuf:"bytes,1,opt,name=inactive_license_ttl,json=inactiveLicenseTtl,proto3"
json:"inactive_license_ttl,omitempty"`
}

func (x *AssignmentProtocol_AutoAssignmentType) Reset() {
 *x = AssignmentProtocol_AutoAssignmentType{}
 mi
 := &file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *AssignmentProtocol_AutoAssignmentType) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*AssignmentProtocol_AutoAssignmentType) ProtoMessage() {}

func (x *AssignmentProtocol_AutoAssignmentType) ProtoReflect() protoreflect.Message {
 mi :=
&file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[12]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
```

```
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use AssignmentProtocol_AutoAssignmentType.ProtoReflect.Descriptor instead.
func (*AssignmentProtocol_AutoAssignmentType) Descriptor() ([]byte, []int) {
 return
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP(),
 []int{0, 1}
}

func (x *AssignmentProtocol_AutoAssignmentType) GetInactiveLicenseTtl() *durationpb.Duration {
 if x != nil {
  return x.InactiveLicenseTtl
 }
 return nil
}

var File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto
protoreflect.FileDescriptor

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc =
[]byte{
 0x0a, 0x4e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2f, 0x63,
 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x76, 0x31, 0x2f,
 0x6c, 0x69, 0x63, 0x65, 0x6e, 0x73, 0x65, 0x5f, 0x6d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65,
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 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
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0x52, 0x65, 0x71, 0x75, 0x65, 0x73, 0x74, 0x12, 0x1b, 0x0a, 0x06, 0x70, 0x61, 0x72, 0x65, 0x6e,
0x74, 0x18, 0x01, 0x20, 0x01, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x52, 0x06, 0x70, 0x61,
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0x73, 0x18, 0x02, 0x20, 0x03, 0x28, 0x09, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x52, 0x09, 0x75, 0x73,
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0x69, 0x67, 0x6e, 0x52, 0x65, 0x73, 0x70, 0x6f, 0x6e, 0x73, 0x65, 0x22, 0x82, 0x01, 0x0a, 0x1d,
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0x6c, 0x65, 0x2e, 0x63, 0x6c, 0x6f, 0x75, 0x64,
0x2e, 0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63,
0x65, 0x2e, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x63, 0x75,
0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x76, 0x31, 0x42, 0x1d, 0x4c, 0x69, 0x63, 0x65, 0x6e,
0x73, 0x65, 0x4d, 0x61, 0x6e, 0x61, 0x67, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x53, 0x65, 0x72, 0x76,
0x69, 0x63, 0x65, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x53, 0x63, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d, 0x2f, 0x67, 0x6f, 0x2f,
0x63, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2f, 0x63, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65,
0x72, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2f, 0x61, 0x70,
0x69, 0x76, 0x31, 0x2f, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70,
0x62, 0x3b, 0x70, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x70, 0x62, 0xaa,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x43, 0x6c, 0x6f, 0x75,
0x64, 0x2e, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x2e, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x2e, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x2e, 0x56, 0x31, 0xca,
0x02, 0x2d, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x5c, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x5c, 0x43,
0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x5c, 0x43, 0x6f, 0x6e, 0x73, 0x75, 0x6d, 0x65, 0x72,
0x5c, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74, 0x5c, 0x56, 0x31, 0xea,

```
 0x02, 0x32, 0x47, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x3a, 0x3a, 0x43, 0x6c, 0x6f, 0x75, 0x64, 0x3a,
 0x3a, 0x43, 0x6f, 0x6d, 0x6d, 0x65, 0x72, 0x63, 0x65, 0x3a, 0x3a, 0x43, 0x6f, 0x6e, 0x73, 0x75,
 0x6d, 0x65, 0x72, 0x3a, 0x3a, 0x50, 0x72, 0x6f, 0x63, 0x75, 0x72, 0x65, 0x6d, 0x65, 0x6e, 0x74,
 0x3a, 0x3a, 0x56, 0x31, 0x62, 0x06, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce
sync.Once
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
 = file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc
)

func
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescGZIP()
[]byte {
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescOnce.Do(f
unc() {
  file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_cloud_commerce_consumer_procurement_v1_license_management_servi
ce_proto_rawDescData)
 })
 return file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDescData
}

var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes =
make([]protoimpl.MessageInfo, 13)
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes =
[]any{
 (*AssignmentProtocol)(nil),
                    // 0: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 (*LicensePool)(nil),                        // 1: google.cloud.commerce.consumer.procurement.v1.LicensePool
 (*GetLicensePoolRequest)(nil),                  // 2:
google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 (*UpdateLicensePoolRequest)(nil),               // 3:
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 (*AssignRequest)(nil),                      // 4: google.cloud.commerce.consumer.procurement.v1.AssignRequest
 (*AssignResponse)(nil),                      // 5: google.cloud.commerce.consumer.procurement.v1.AssignResponse
 (*UnassignRequest)(nil),                     // 6: google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 (*UnassignResponse)(nil),                     // 7: google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 (*EnumerateLicensedUsersRequest)(nil),          // 8:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 (*LicensedUser)(nil),
                        // 9: google.cloud.commerce.consumer.procurement.v1.LicensedUser
 (*EnumerateLicensedUsersResponse)(nil),         // 10:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 (*AssignmentProtocol_ManualAssignmentType)(nil), // 11:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
```

```
 (*AssignmentProtocol_AutoAssignmentType)(nil),   // 12:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 (*fieldmaskpb.FieldMask)(nil),                   // 13: google.protobuf.FieldMask
 (*timestamppb.Timestamp)(nil),                   // 14: google.protobuf.Timestamp
 (*durationpb.Duration)(nil),                     // 15: google.protobuf.Duration
}
var file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs =
[]int32{
 11, // 0:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.manual_assignment_type:type_name
 -> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.ManualAssignmentType
 12, // 1: google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.auto_assignment_type:type_name -
> google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType
 0,  // 2: google.cloud.commerce.consumer.procurement.v1.LicensePool.license_assignment_protocol:type_name ->
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol
 1,  // 3: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.license_pool:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 13, // 4: google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest.update_mask:type_name ->
google.protobuf.FieldMask
 14, // 5: google.cloud.commerce.consumer.procurement.v1.LicensedUser.assign_time:type_name ->
google.protobuf.Timestamp
 14, // 6: google.cloud.commerce.consumer.procurement.v1.LicensedUser.recent_usage_time:type_name
 -> google.protobuf.Timestamp
 9,  // 7:
google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse.licensed_users:type_name ->
google.cloud.commerce.consumer.procurement.v1.LicensedUser
 15, // 8:
google.cloud.commerce.consumer.procurement.v1.AssignmentProtocol.AutoAssignmentType.inactive_license_ttl:t
ype_name -> google.protobuf.Duration
 2,  // 9: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:input_type -
> google.cloud.commerce.consumer.procurement.v1.GetLicensePoolRequest
 3,  // 10:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:input_type ->
google.cloud.commerce.consumer.procurement.v1.UpdateLicensePoolRequest
 4,  // 11: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:input_type ->
google.cloud.commerce.consumer.procurement.v1.AssignRequest
 6,  // 12: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:input_type
 -> google.cloud.commerce.consumer.procurement.v1.UnassignRequest
 8,  // 13:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:input_typ
e -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersRequest
 1,  // 14:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.GetLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 1,  // 15:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.UpdateLicensePool:output_type ->
google.cloud.commerce.consumer.procurement.v1.LicensePool
 5,  // 16: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Assign:output_type ->
```

```
google.cloud.commerce.consumer.procurement.v1.AssignResponse
 7,  // 17: google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.Unassign:output_type ->
google.cloud.commerce.consumer.procurement.v1.UnassignResponse
 10, // 18:
google.cloud.commerce.consumer.procurement.v1.LicenseManagementService.EnumerateLicensedUsers:output_ty
pe
 -> google.cloud.commerce.consumer.procurement.v1.EnumerateLicensedUsersResponse
 14, // [14:19] is the sub-list for method output_type
 9,  // [9:14] is the sub-list for method input_type
 9,  // [9:9] is the sub-list for extension type_name
 9,  // [9:9] is the sub-list for extension extendee
 0,  // [0:9] is the sub-list for field type_name
}

func init() {
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init()
}
func file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_init() {
 if File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto != nil {
  return
 }
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes[0].Oneof
Wrappers = []any{
  (*AssignmentProtocol_ManualAssignmentType_)(nil),
  (*AssignmentProtocol_AutoAssignmentType_)(nil),
 }
 type x struct{}
 out := protoimpl.TypeBuilder{
  File:
 protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
   RawDescriptor:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc,
   NumEnums:      0,
   NumMessages:   13,
   NumExtensions: 0,
   NumServices:   1,
  },
  GoTypes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes,
  DependencyIndexes:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs,
  MessageInfos:
file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_msgTypes,
 }.Build()
 File_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto = out.File
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_rawDesc = nil
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_goTypes = nil
```

```
 file_google_cloud_commerce_consumer_procurement_v1_license_management_service_proto_depIdxs
 = nil
}

// Reference imports to suppress errors if they are not otherwise used.
var _ context.Context
var _ grpc.ClientConnInterface

// This is a compile-time assertion to ensure that this generated file
// is compatible with the grpc package it is being compiled against.
const _ = grpc.SupportPackageIsVersion6

// LicenseManagementServiceClient is the client API for LicenseManagementService service.
//
// For semantics around ctx use and closing/ending streaming RPCs, please refer to
https://godoc.org/google.golang.org/grpc#ClientConn.NewStream.
type LicenseManagementServiceClient interface {
 // Gets the license pool.
 GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(ctx context.Context, in *UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool,
error)
 // Assigns a license to a user.
 Assign(ctx
 context.Context, in *AssignRequest, opts ...grpc.CallOption) (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(ctx context.Context, in *UnassignRequest, opts ...grpc.CallOption) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(ctx context.Context, in *EnumerateLicensedUsersRequest, opts ...grpc.CallOption)
(*EnumerateLicensedUsersResponse, error)
}

type licenseManagementServiceClient struct {
 cc grpc.ClientConnInterface
}

func NewLicenseManagementServiceClient(cc grpc.ClientConnInterface) LicenseManagementServiceClient {
 return &licenseManagementServiceClient{cc}
}

func (c *licenseManagementServiceClient) GetLicensePool(ctx context.Context, in *GetLicensePoolRequest, opts
...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool", in, out, opts...)
 if err != nil {
  return nil, err
 }
```

```
 return
 out, nil
}

func (c *licenseManagementServiceClient) UpdateLicensePool(ctx context.Context, in
*UpdateLicensePoolRequest, opts ...grpc.CallOption) (*LicensePool, error) {
 out := new(LicensePool)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Assign(ctx context.Context, in *AssignRequest, opts ...grpc.CallOption)
(*AssignResponse, error) {
 out := new(AssignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign", in,
out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) Unassign(ctx context.Context, in *UnassignRequest, opts
...grpc.CallOption) (*UnassignResponse, error) {
 out := new(UnassignResponse)
 err := c.cc.Invoke(ctx, "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 in, out, opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
}

func (c *licenseManagementServiceClient) EnumerateLicensedUsers(ctx context.Context, in
*EnumerateLicensedUsersRequest, opts ...grpc.CallOption) (*EnumerateLicensedUsersResponse, error) {
 out := new(EnumerateLicensedUsersResponse)
 err := c.cc.Invoke(ctx,
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers", in, out,
opts...)
 if err != nil {
  return nil, err
 }
 return out, nil
```

```
}

// LicenseManagementServiceServer is the server API for LicenseManagementService service.
type LicenseManagementServiceServer interface {
 // Gets the license pool.
 GetLicensePool(context.Context, *GetLicensePoolRequest) (*LicensePool, error)
 // Updates the license pool if one exists for this Order.
 UpdateLicensePool(context.Context, *UpdateLicensePoolRequest) (*LicensePool, error)
 // Assigns a license to a user.
 Assign(context.Context, *AssignRequest)
 (*AssignResponse, error)
 // Unassigns a license from a user.
 Unassign(context.Context, *UnassignRequest) (*UnassignResponse, error)
 // Enumerates all users assigned a license.
 EnumerateLicensedUsers(context.Context, *EnumerateLicensedUsersRequest)
(*EnumerateLicensedUsersResponse, error)
}

// UnimplementedLicenseManagementServiceServer can be embedded to have forward compatible
implementations.
type UnimplementedLicenseManagementServiceServer struct {
}

func (*UnimplementedLicenseManagementServiceServer) GetLicensePool(context.Context,
*GetLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method GetLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) UpdateLicensePool(context.Context,
*UpdateLicensePoolRequest) (*LicensePool, error) {
 return nil, status.Errorf(codes.Unimplemented, "method UpdateLicensePool not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Assign(context.Context, *AssignRequest)
 (*AssignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Assign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) Unassign(context.Context, *UnassignRequest)
(*UnassignResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method Unassign not implemented")
}
func (*UnimplementedLicenseManagementServiceServer) EnumerateLicensedUsers(context.Context,
*EnumerateLicensedUsersRequest) (*EnumerateLicensedUsersResponse, error) {
 return nil, status.Errorf(codes.Unimplemented, "method EnumerateLicensedUsers not implemented")
}

func RegisterLicenseManagementServiceServer(s *grpc.Server, srv LicenseManagementServiceServer) {
 s.RegisterService(&_LicenseManagementService_serviceDesc, srv)
}
```

```
func _LicenseManagementService_GetLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(GetLicensePoolRequest)
 if err := dec(in);
 err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/GetLicensePool",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).GetLicensePool(ctx, req.(*GetLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_UpdateLicensePool_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(UpdateLicensePoolRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/UpdateLicensePool",
 }
 handler
 := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).UpdateLicensePool(ctx, req.(*UpdateLicensePoolRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Assign_Handler(srv interface{}, ctx context.Context, dec func(interface{})
error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(AssignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Assign(ctx, in)
```

```
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Assign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Assign(ctx, req.(*AssignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_Unassign_Handler(srv
 interface{}, ctx context.Context, dec func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{},
error) {
 in := new(UnassignRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if interceptor == nil {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod: "/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/Unassign",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).Unassign(ctx, req.(*UnassignRequest))
 }
 return interceptor(ctx, in, info, handler)
}

func _LicenseManagementService_EnumerateLicensedUsers_Handler(srv interface{}, ctx context.Context, dec
func(interface{}) error, interceptor grpc.UnaryServerInterceptor) (interface{}, error) {
 in := new(EnumerateLicensedUsersRequest)
 if err := dec(in); err != nil {
  return nil, err
 }
 if
 interceptor == nil {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx, in)
 }
 info := &grpc.UnaryServerInfo{
  Server:     srv,
  FullMethod:
"/google.cloud.commerce.consumer.procurement.v1.LicenseManagementService/EnumerateLicensedUsers",
 }
 handler := func(ctx context.Context, req interface{}) (interface{}, error) {
  return srv.(LicenseManagementServiceServer).EnumerateLicensedUsers(ctx,
```

```
req.(*EnumerateLicensedUsersRequest))
 }
 return interceptor(ctx, in, info, handler)
}

var _LicenseManagementService_serviceDesc = grpc.ServiceDesc{
 ServiceName: "google.cloud.commerce.consumer.procurement.v1.LicenseManagementService",
 HandlerType: (*LicenseManagementServiceServer)(nil),
 Methods: []grpc.MethodDesc{
  {
   MethodName: "GetLicensePool",
   Handler:    _LicenseManagementService_GetLicensePool_Handler,
  },
  {
   MethodName: "UpdateLicensePool",
   Handler:    _LicenseManagementService_UpdateLicensePool_Handler,
  },
  {
   MethodName: "Assign",
   Handler:
    _LicenseManagementService_Assign_Handler,
  },
  {
   MethodName: "Unassign",
   Handler:    _LicenseManagementService_Unassign_Handler,
  },
  {
   MethodName: "EnumerateLicensedUsers",
   Handler:    _LicenseManagementService_EnumerateLicensedUsers_Handler,
  },
 },
 Streams:  []grpc.StreamDesc{},
 Metadata: "google/cloud/commerce/consumer/procurement/v1/license_management_service.proto",
}
```

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// Code generated by protoc-gen-go. DO NOT EDIT.
// versions:
//  protoc-gen-go v1.35.2
//  protoc        v4.25.3
// source: google/ai/generativelanguage/v1beta/permission.proto

package generativelanguagepb

import (
 reflect "reflect"
 sync "sync"

 _ "google.golang.org/genproto/googleapis/api/annotations"
 protoreflect "google.golang.org/protobuf/reflect/protoreflect"
 protoimpl "google.golang.org/protobuf/runtime/protoimpl"
)

const
 (
 // Verify that this generated code is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(20 - protoimpl.MinVersion)
 // Verify that runtime/protoimpl is sufficiently up-to-date.
 _ = protoimpl.EnforceVersion(protoimpl.MaxVersion - 20)
)

// Defines types of the grantee of this permission.
type Permission_GranteeType int32

const (
```

```
 // The default value. This value is unused.
 Permission_GRANTEE_TYPE_UNSPECIFIED Permission_GranteeType = 0
 // Represents a user. When set, you must provide email_address for the user.
 Permission_USER Permission_GranteeType = 1
 // Represents a group. When set, you must provide email_address for the
 // group.
 Permission_GROUP Permission_GranteeType = 2
 // Represents access to everyone. No extra information is required.
 Permission_EVERYONE Permission_GranteeType = 3
)

// Enum value maps for Permission_GranteeType.
var (
 Permission_GranteeType_name = map[int32]string{
  0: "GRANTEE_TYPE_UNSPECIFIED",
  1: "USER",
  2:
 "GROUP",
  3: "EVERYONE",
 }
 Permission_GranteeType_value = map[string]int32{
  "GRANTEE_TYPE_UNSPECIFIED": 0,
  "USER":                     1,
  "GROUP":                    2,
  "EVERYONE":                 3,
 }
)

func (x Permission_GranteeType) Enum() *Permission_GranteeType {
 p := new(Permission_GranteeType)
 *p = x
 return p
}

func (x Permission_GranteeType) String() string {
 return protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}

func (Permission_GranteeType) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0].Descriptor()
}

func (Permission_GranteeType) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[0]
}

func (x Permission_GranteeType) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
```

```
}

// Deprecated: Use Permission_GranteeType.Descriptor instead.
func (Permission_GranteeType) EnumDescriptor() ([]byte,
 []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 0}
}

// Defines the role granted by this permission.
type Permission_Role int32

const (
 // The default value. This value is unused.
 Permission_ROLE_UNSPECIFIED Permission_Role = 0
 // Owner can use, update, share and delete the resource.
 Permission_OWNER Permission_Role = 1
 // Writer can use, update and share the resource.
 Permission_WRITER Permission_Role = 2
 // Reader can use the resource.
 Permission_READER Permission_Role = 3
)

// Enum value maps for Permission_Role.
var (
 Permission_Role_name = map[int32]string{
  0: "ROLE_UNSPECIFIED",
  1: "OWNER",
  2: "WRITER",
  3: "READER",
 }
 Permission_Role_value = map[string]int32{
  "ROLE_UNSPECIFIED": 0,
  "OWNER":            1,
  "WRITER":           2,
  "READER":           3,
 }
)

func (x Permission_Role) Enum() *Permission_Role {
 p := new(Permission_Role)
 *p = x
 return p
}

func (x Permission_Role) String() string {
 return
 protoimpl.X.EnumStringOf(x.Descriptor(), protoreflect.EnumNumber(x))
}
```

```
func (Permission_Role) Descriptor() protoreflect.EnumDescriptor {
 return file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1].Descriptor()
}

func (Permission_Role) Type() protoreflect.EnumType {
 return &file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes[1]
}

func (x Permission_Role) Number() protoreflect.EnumNumber {
 return protoreflect.EnumNumber(x)
}

// Deprecated: Use Permission_Role.Descriptor instead.
func (Permission_Role) EnumDescriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0, 1}
}

// Permission resource grants user, group or the rest of the world access to the
// PaLM API resource (e.g. a tuned model, corpus).
//
// A role is a collection of permitted operations that allows users to perform
// specific actions on PaLM API resources. To make them available to users,
// groups, or service accounts,
 you assign roles. When you assign a role, you
// grant permissions that the role contains.
//
// There are three concentric roles. Each role is a superset of the previous
// role's permitted operations:
//
// - reader can use the resource (e.g. tuned model, corpus) for inference
// - writer has reader's permissions and additionally can edit and share
// - owner has writer's permissions and additionally can delete
type Permission struct {
 state         protoimpl.MessageState
 sizeCache     protoimpl.SizeCache
 unknownFields protoimpl.UnknownFields

 // Output only. Identifier. The permission name. A unique name will be
 // generated on create. Examples:
 //
 // tunedModels/{tuned_model}/permissions/{permission}
 // corpora/{corpus}/permissions/{permission}
 //
 // Output only.
 Name string `protobuf:"bytes,1,opt,name=name,proto3" json:"name,omitempty"`
 // Optional. Immutable. The type of the grantee.
 GranteeType *Permission_GranteeType
```

```
`protobuf:"varint,2,opt,name=grantee_type,json=granteeType,proto3,enum=google.ai.generativelanguage.v1beta.Permission_GranteeType,oneof"
 json:"grantee_type,omitempty"`
 // Optional. Immutable. The email address of the user of group which this
 // permission refers. Field is not set when permission's grantee type is
 // EVERYONE.
 EmailAddress *string `protobuf:"bytes,3,opt,name=email_address,json=emailAddress,proto3,oneof"
json:"email_address,omitempty"`
 // Required. The role granted by this permission.
 Role *Permission_Role
`protobuf:"varint,4,opt,name=role,proto3,enum=google.ai.generativelanguage.v1beta.Permission_Role,oneof"
json:"role,omitempty"`
}

func (x *Permission) Reset() {
 *x = Permission{}
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
 ms.StoreMessageInfo(mi)
}

func (x *Permission) String() string {
 return protoimpl.X.MessageStringOf(x)
}

func (*Permission) ProtoMessage() {}

func (x *Permission) ProtoReflect() protoreflect.Message
 {
 mi := &file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0]
 if x != nil {
  ms := protoimpl.X.MessageStateOf(protoimpl.Pointer(x))
  if ms.LoadMessageInfo() == nil {
   ms.StoreMessageInfo(mi)
  }
  return ms
 }
 return mi.MessageOf(x)
}

// Deprecated: Use Permission.ProtoReflect.Descriptor instead.
func (*Permission) Descriptor() ([]byte, []int) {
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP(), []int{0}
}

func (x *Permission) GetName() string {
 if x != nil {
  return x.Name
```

```
 }
 return ""
}

func (x *Permission) GetGranteeType() Permission_GranteeType {
 if x != nil && x.GranteeType != nil {
  return *x.GranteeType
 }
 return Permission_GRANTEE_TYPE_UNSPECIFIED
}

func (x *Permission) GetEmailAddress() string {
 if x != nil && x.EmailAddress != nil {
  return *x.EmailAddress
 }
 return ""
}

func (x *Permission) GetRole() Permission_Role {
 if x != nil && x.Role != nil {
  return *x.Role
 }
 return Permission_ROLE_UNSPECIFIED
}

var
 File_google_ai_generativelanguage_v1beta_permission_proto protoreflect.FileDescriptor

var file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = []byte{
 0x0a, 0x34, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65,
 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x76,
 0x31, 0x62, 0x65, 0x74, 0x61, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x12, 0x23, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x1a, 0x1f, 0x67, 0x6f, 0x6f,
 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x2f, 0x66, 0x69, 0x65, 0x6c, 0x64, 0x5f, 0x62, 0x65,
 0x68, 0x61, 0x76, 0x69, 0x6f, 0x72, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x1a, 0x19, 0x67, 0x6f,
 0x6f, 0x67, 0x6c, 0x65, 0x2f, 0x61, 0x70, 0x69,
 0x2f, 0x72, 0x65, 0x73, 0x6f, 0x75, 0x72, 0x63,
 0x65, 0x2e, 0x70, 0x72, 0x6f, 0x74, 0x6f, 0x22, 0x85, 0x05, 0x0a, 0x0a, 0x50, 0x65, 0x72, 0x6d,
 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x1a, 0x0a, 0x04, 0x6e, 0x61, 0x6d, 0x65, 0x18, 0x01,
 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x03, 0xe0, 0x41, 0x08, 0x52, 0x04, 0x6e, 0x61,
 0x6d, 0x65, 0x12, 0x6b, 0x0a, 0x0c, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f, 0x74, 0x79,
 0x70, 0x65, 0x18, 0x02, 0x20, 0x01, 0x28, 0x0e, 0x32, 0x3b, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c,
 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c,
 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50,
 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x2e, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65,
 0x65, 0x54, 0x79, 0x70, 0x65, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x00, 0x52,
```

0x0b, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x54, 0x79, 0x70, 0x65, 0x88,
0x01, 0x01, 0x12,
0x30, 0x0a, 0x0d, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73,
0x18, 0x03, 0x20, 0x01, 0x28, 0x09, 0x42, 0x06, 0xe0, 0x41, 0x01, 0xe0, 0x41, 0x05, 0x48, 0x01,
0x52, 0x0c, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x41, 0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x88, 0x01,
0x01, 0x12, 0x52, 0x0a, 0x04, 0x72, 0x6f, 0x6c, 0x65, 0x18, 0x04, 0x20, 0x01, 0x28, 0x0e, 0x32,
0x34, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61, 0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65,
0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2e, 0x76,
0x31, 0x62, 0x65, 0x74, 0x61, 0x2e, 0x50, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e,
0x2e, 0x52, 0x6f, 0x6c, 0x65, 0x42, 0x03, 0xe0, 0x41, 0x02, 0x48, 0x02, 0x52, 0x04, 0x72, 0x6f,
0x6c, 0x65, 0x88, 0x01, 0x01, 0x22, 0x4e, 0x0a, 0x0b, 0x47, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65,
0x54, 0x79, 0x70, 0x65, 0x12, 0x1c, 0x0a, 0x18, 0x47, 0x52, 0x41, 0x4e, 0x54, 0x45, 0x45, 0x5f,
0x54,
0x59, 0x50, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45, 0x44,
0x10, 0x00, 0x12, 0x08, 0x0a, 0x04, 0x55, 0x53, 0x45, 0x52, 0x10, 0x01, 0x12, 0x09, 0x0a, 0x05,
0x47, 0x52, 0x4f, 0x55, 0x50, 0x10, 0x02, 0x12, 0x0c, 0x0a, 0x08, 0x45, 0x56, 0x45, 0x52, 0x59,
0x4f, 0x4e, 0x45, 0x10, 0x03, 0x22, 0x3f, 0x0a, 0x04, 0x52, 0x6f, 0x6c, 0x65, 0x12, 0x14, 0x0a,
0x10, 0x52, 0x4f, 0x4c, 0x45, 0x5f, 0x55, 0x4e, 0x53, 0x50, 0x45, 0x43, 0x49, 0x46, 0x49, 0x45,
0x44, 0x10, 0x00, 0x12, 0x09, 0x0a, 0x05, 0x4f, 0x57, 0x4e, 0x45, 0x52, 0x10, 0x01, 0x12, 0x0a,
0x0a, 0x06, 0x57, 0x52, 0x49, 0x54, 0x45, 0x52, 0x10, 0x02, 0x12, 0x0a, 0x0a, 0x06, 0x52, 0x45,
0x41, 0x44, 0x45, 0x52, 0x10, 0x03, 0x3a, 0xaa, 0x01, 0xea, 0x41, 0xa6, 0x01, 0x0a, 0x2c, 0x67,
0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67,
0x65, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x61, 0x70, 0x69, 0x73, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x50, 0x65, 0x72, 0x6d, 0x69,
0x73, 0x73, 0x69, 0x6f, 0x6e, 0x12, 0x32, 0x74, 0x75, 0x6e,
0x65, 0x64, 0x4d, 0x6f, 0x64, 0x65, 0x6c, 0x73, 0x2f, 0x7b, 0x74, 0x75, 0x6e, 0x65, 0x64, 0x5f,
0x6d, 0x6f, 0x64, 0x65, 0x6c, 0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f,
0x6e, 0x73, 0x2f, 0x7b, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x12,
0x29, 0x63, 0x6f, 0x72, 0x70, 0x6f, 0x72, 0x61, 0x2f, 0x7b, 0x63, 0x6f, 0x72, 0x70, 0x75, 0x73,
0x7d, 0x2f, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x2f, 0x7b, 0x70,
0x65, 0x72, 0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x7d, 0x2a, 0x0b, 0x70, 0x65, 0x72, 0x6d,
0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x73, 0x32, 0x0a, 0x70, 0x65, 0x72, 0x6d, 0x69, 0x73, 0x73,
0x69, 0x6f, 0x6e, 0x42, 0x0f, 0x0a, 0x0d, 0x5f, 0x67, 0x72, 0x61, 0x6e, 0x74, 0x65, 0x65, 0x5f,
0x74, 0x79, 0x70, 0x65, 0x42, 0x10, 0x0a, 0x0e, 0x5f, 0x65, 0x6d, 0x61, 0x69, 0x6c, 0x5f, 0x61,
0x64, 0x64, 0x72, 0x65, 0x73, 0x73, 0x42, 0x07, 0x0a, 0x05, 0x5f,
0x72, 0x6f, 0x6c, 0x65, 0x42,
0x9b, 0x01, 0x0a, 0x27, 0x63, 0x6f, 0x6d, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x61,
0x69, 0x2e, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67,
0x75, 0x61, 0x67, 0x65, 0x2e, 0x76, 0x31, 0x62, 0x65, 0x74, 0x61, 0x42, 0x0f, 0x50, 0x65, 0x72,
0x6d, 0x69, 0x73, 0x73, 0x69, 0x6f, 0x6e, 0x50, 0x72, 0x6f, 0x74, 0x6f, 0x50, 0x01, 0x5a, 0x5d,
0x63, 0x6c, 0x6f, 0x75, 0x64, 0x2e, 0x67, 0x6f, 0x6f, 0x67, 0x6c, 0x65, 0x2e, 0x63, 0x6f, 0x6d,
0x2f, 0x67, 0x6f, 0x2f, 0x61, 0x69, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76,
0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x2f, 0x61, 0x70, 0x69, 0x76, 0x31, 0x62,
0x65, 0x74, 0x61, 0x2f, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74, 0x69, 0x76, 0x65, 0x6c, 0x61,
0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x3b, 0x67, 0x65, 0x6e, 0x65, 0x72, 0x61, 0x74,
0x69, 0x76, 0x65, 0x6c, 0x61, 0x6e, 0x67, 0x75, 0x61, 0x67, 0x65, 0x70, 0x62, 0x62, 0x06, 0x70,
0x72,

```
 0x6f, 0x74, 0x6f, 0x33,
}

var (
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce sync.Once
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc
)

func file_google_ai_generativelanguage_v1beta_permission_proto_rawDescGZIP() []byte {
 file_google_ai_generativelanguage_v1beta_permission_proto_rawDescOnce.Do(func() {
  file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData =
protoimpl.X.CompressGZIP(file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData)
 })
 return file_google_ai_generativelanguage_v1beta_permission_proto_rawDescData
}

var file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes = make([]protoimpl.EnumInfo, 2)
var file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes = make([]protoimpl.MessageInfo, 1)
var file_google_ai_generativelanguage_v1beta_permission_proto_goTypes = []any{
 (Permission_GranteeType)(0),
 // 0: google.ai.generativelanguage.v1beta.Permission.GranteeType
 (Permission_Role)(0),        // 1: google.ai.generativelanguage.v1beta.Permission.Role
 (*Permission)(nil),          // 2: google.ai.generativelanguage.v1beta.Permission
}
var file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = []int32{
 0, // 0: google.ai.generativelanguage.v1beta.Permission.grantee_type:type_name ->
google.ai.generativelanguage.v1beta.Permission.GranteeType
 1, // 1: google.ai.generativelanguage.v1beta.Permission.role:type_name ->
google.ai.generativelanguage.v1beta.Permission.Role
 2, // [2:2] is the sub-list for method output_type
 2, // [2:2] is the sub-list for method input_type
 2, // [2:2] is the sub-list for extension type_name
 2, // [2:2] is the sub-list for extension extendee
 0, // [0:2] is the sub-list for field type_name
}

func init() { file_google_ai_generativelanguage_v1beta_permission_proto_init() }
func file_google_ai_generativelanguage_v1beta_permission_proto_init()
 {
 if File_google_ai_generativelanguage_v1beta_permission_proto != nil {
  return
 }
 file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes[0].OneofWrappers = []any{}
 type x struct{}
 out := protoimpl.TypeBuilder{
  File: protoimpl.DescBuilder{
   GoPackagePath: reflect.TypeOf(x{}).PkgPath(),
```

```
  RawDescriptor: file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc,
  NumEnums:      2,
  NumMessages:   1,
  NumExtensions: 0,
  NumServices:   0,
 },
 GoTypes:           file_google_ai_generativelanguage_v1beta_permission_proto_goTypes,
 DependencyIndexes: file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs,
 EnumInfos:         file_google_ai_generativelanguage_v1beta_permission_proto_enumTypes,
 MessageInfos:      file_google_ai_generativelanguage_v1beta_permission_proto_msgTypes,
}.Build()
File_google_ai_generativelanguage_v1beta_permission_proto = out.File
file_google_ai_generativelanguage_v1beta_permission_proto_rawDesc = nil
file_google_ai_generativelanguage_v1beta_permission_proto_goTypes
= nil
file_google_ai_generativelanguage_v1beta_permission_proto_depIdxs = nil
}
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// Code generated by protoc-gen-go_gapic. DO NOT EDIT.

package compute

import (
 "bytes"
 "context"
 "fmt"
 "log/slog"
 "net/http"
 "net/url"
 "time"

 computepb "cloud.google.com/go/compute/apiv1/computepb"
 gax "github.com/googleapis/gax-go/v2"
 "google.golang.org/api/option"
 "google.golang.org/api/option/internaloption"
```

```
 httptransport "google.golang.org/api/transport/http"
 "google.golang.org/grpc"
 "google.golang.org/protobuf/encoding/protojson"
)

var
 newLicenseCodesClientHook clientHook

// LicenseCodesCallOptions contains the retry settings for each method of LicenseCodesClient.
type LicenseCodesCallOptions struct {
 Get               []gax.CallOption
 TestIamPermissions []gax.CallOption
}

func defaultLicenseCodesRESTCallOptions() *LicenseCodesCallOptions {
 return &LicenseCodesCallOptions{
  Get: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
   gax.WithRetry(func() gax.Retryer {
    return gax.OnHTTPCodes(gax.Backoff{
     Initial:    100 * time.Millisecond,
     Max:        60000 * time.Millisecond,
     Multiplier: 1.30,
    },
     http.StatusGatewayTimeout,
     http.StatusServiceUnavailable)
   }),
  },
  TestIamPermissions: []gax.CallOption{
   gax.WithTimeout(600000 * time.Millisecond),
  },
 }
}

// internalLicenseCodesClient is an interface that defines the methods available from Google Compute Engine API.
type internalLicenseCodesClient interface {
 Close()
 error
 setGoogleClientInfo(...string)
 Connection() *grpc.ClientConn
 Get(context.Context, *computepb.GetLicenseCodeRequest, ...gax.CallOption) (*computepb.LicenseCode, error)
 TestIamPermissions(context.Context, *computepb.TestIamPermissionsLicenseCodeRequest, ...gax.CallOption)
(*computepb.TestPermissionsResponse, error)
}

// LicenseCodesClient is a client for interacting with Google Compute Engine API.
// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
```

```
//
// The LicenseCodes API.
type LicenseCodesClient struct {
 // The internal transport-dependent client.
 internalClient internalLicenseCodesClient

 // The call options for this service.
 CallOptions *LicenseCodesCallOptions
}

// Wrapper methods routed to the internal client.

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *LicenseCodesClient) Close() error {
 return c.internalClient.Close()
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *LicenseCodesClient) setGoogleClientInfo(keyval ...string) {
 c.internalClient.setGoogleClientInfo(keyval...)
}

// Connection returns a connection to the API service.
//
// Deprecated: Connections are now pooled so this method does not always
// return the same resource.
func (c *LicenseCodesClient) Connection() *grpc.ClientConn {
 return c.internalClient.Connection()
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *LicenseCodesClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 return c.internalClient.Get(ctx,
 req, opts...)
}

// TestIamPermissions returns permissions that a caller has on the specified resource. Caution This resource is
intended for use only by third-party partners who are creating Cloud Marketplace images.
func (c *LicenseCodesClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
```

```
 return c.internalClient.TestIamPermissions(ctx, req, opts...)
}

// Methods, except Close, may be called concurrently. However, fields must not be modified concurrently with
method calls.
type licenseCodesRESTClient struct {
 // The http endpoint to connect to.
 endpoint string

 // The http client.
 httpClient *http.Client

 // The x-goog-* headers to be sent with each request.
 xGoogHeaders []string

 // Points back to the CallOptions field of the containing LicenseCodesClient
 CallOptions **LicenseCodesCallOptions

 logger *slog.Logger
}

// NewLicenseCodesRESTClient
 creates a new license codes rest client.
//
// The LicenseCodes API.
func NewLicenseCodesRESTClient(ctx context.Context, opts ...option.ClientOption) (*LicenseCodesClient, error) {
 clientOpts := append(defaultLicenseCodesRESTClientOptions(), opts...)
 httpClient, endpoint, err := httptransport.NewClient(ctx, clientOpts...)
 if err != nil {
  return nil, err
 }

 callOpts := defaultLicenseCodesRESTCallOptions()
 c := &licenseCodesRESTClient{
  endpoint:    endpoint,
  httpClient:  httpClient,
  CallOptions: &callOpts,
  logger:      internaloption.GetLogger(opts),
 }
 c.setGoogleClientInfo()

 return &LicenseCodesClient{internalClient: c, CallOptions: callOpts}, nil
}

func defaultLicenseCodesRESTClientOptions() []option.ClientOption {
 return []option.ClientOption{
  internaloption.WithDefaultEndpoint("https://compute.googleapis.com"),
  internaloption.WithDefaultEndpointTemplate("https://compute.UNIVERSE_DOMAIN"),
```

```
  internaloption.WithDefaultMTLSEndpoint("https://compute.mtls.googleapis.com"),
  internaloption.WithDefaultUniverseDomain("googleapis.com"),
  internaloption.WithDefaultAudience("https://compute.googleapis.com/"),
  internaloption.WithDefaultScopes(DefaultAuthScopes()...),
  internaloption.EnableNewAuthLibrary(),
 }
}

//
 setGoogleClientInfo sets the name and version of the application in
// the `x-goog-api-client` header passed on each request. Intended for
// use by Google-written clients.
func (c *licenseCodesRESTClient) setGoogleClientInfo(keyval ...string) {
 kv := append([]string{"gl-go", gax.GoVersion}, keyval...)
 kv = append(kv, "gapic", getVersionClient(), "gax", gax.Version, "rest", "UNKNOWN")
 c.xGoogHeaders = []string{
  "x-goog-api-client", gax.XGoogHeader(kv...),
 }
}

// Close closes the connection to the API service. The user should invoke this when
// the client is no longer required.
func (c *licenseCodesRESTClient) Close() error {
 // Replace httpClient with nil to force cleanup.
 c.httpClient = nil
 return nil
}

// Connection
 returns a connection to the API service.
//
// Deprecated: This method always returns nil.
func (c *licenseCodesRESTClient) Connection() *grpc.ClientConn {
 return nil
}

// Get return a specified license code. License codes are mirrored across all projects that have permissions to read the
License Code. Caution This resource is intended for use only by third-party partners who are creating Cloud
Marketplace images.
func (c *licenseCodesRESTClient) Get(ctx context.Context, req *computepb.GetLicenseCodeRequest, opts
...gax.CallOption) (*computepb.LicenseCode, error) {
 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v", req.GetProject(),
req.GetLicenseCode())
```

```
 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "license_code", url.QueryEscape(req.GetLicenseCode()))}

 hds
 = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type", "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts = append((*c.CallOptions).Get[0:len((*c.CallOptions).Get):len((*c.CallOptions).Get)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.LicenseCode{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("GET", baseUrl.String(), nil)
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, nil, "Get")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
 }
 return resp, nil
}

// TestIamPermissions returns permissions that a caller has on the specified
 resource. Caution This resource is intended for use only by third-party partners who are creating Cloud Marketplace
images.
func (c *licenseCodesRESTClient) TestIamPermissions(ctx context.Context, req
*computepb.TestIamPermissionsLicenseCodeRequest, opts ...gax.CallOption)
(*computepb.TestPermissionsResponse, error) {
 m := protojson.MarshalOptions{AllowPartial: true}
 body := req.GetTestPermissionsRequestResource()
 jsonReq, err := m.Marshal(body)
```

```
 if err != nil {
  return nil, err
 }

 baseUrl, err := url.Parse(c.endpoint)
 if err != nil {
  return nil, err
 }
 baseUrl.Path += fmt.Sprintf("/compute/v1/projects/%v/global/licenseCodes/%v/testIamPermissions",
req.GetProject(), req.GetResource())

 // Build HTTP headers from client and context metadata.
 hds := []string{"x-goog-request-params", fmt.Sprintf("%s=%v&%s=%v", "project",
url.QueryEscape(req.GetProject()), "resource", url.QueryEscape(req.GetResource()))}

 hds = append(c.xGoogHeaders, hds...)
 hds = append(hds, "Content-Type",
 "application/json")
 headers := gax.BuildHeaders(ctx, hds...)
 opts =
append((*c.CallOptions).TestIamPermissions[0:len((*c.CallOptions).TestIamPermissions):len((*c.CallOptions).Tes
tIamPermissions)], opts...)
 unm := protojson.UnmarshalOptions{AllowPartial: true, DiscardUnknown: true}
 resp := &computepb.TestPermissionsResponse{}
 e := gax.Invoke(ctx, func(ctx context.Context, settings gax.CallSettings) error {
  if settings.Path != "" {
   baseUrl.Path = settings.Path
  }
  httpReq, err := http.NewRequest("POST", baseUrl.String(), bytes.NewReader(jsonReq))
  if err != nil {
   return err
  }
  httpReq = httpReq.WithContext(ctx)
  httpReq.Header = headers

  buf, err := executeHTTPRequest(ctx, c.httpClient, httpReq, c.logger, jsonReq, "TestIamPermissions")
  if err != nil {
   return err
  }

  if err := unm.Unmarshal(buf, resp); err != nil {
   return err
  }

  return nil
 }, opts...)
 if e != nil {
  return nil, e
```

```
 }
 return resp, nil
}
```

1.4502 fdir 6.4.6

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1.4503 github.com/grpc-ecosystem/go-grpc-middleware/v2 2.3.2

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1.4504 kubernetes 33.1.0

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1.4505 x-mod 0.25.0

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1.4506 x-tools 0.34.0

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const Text = `
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`

```
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import (
 "go/ast"
 "go/parser"
 "go/token"
 "io/fs"
 "os"
 "path/filepath"
 "regexp"
 "strings"
)

// (used only by tests)
func checkCopyright(dir string) ([]string, error) {
 var files []string
 err := filepath.WalkDir(dir, func(path string, d fs.DirEntry, err error) error {
  if err != nil {
   return err
  }
  if d.IsDir() {
   // Skip directories like ".git".
   if strings.HasPrefix(d.Name(), ".") && d.Name() != "." && d.Name() != ".." {
    return filepath.SkipDir
   }
   // Skip any directory that starts with an underscore, as the go
   // command would.
   if strings.HasPrefix(d.Name(), "_") {
    return filepath.SkipDir
   }
   return nil
  }
  needsCopyright, err := checkFile(dir, path)
  if err != nil {
   return err
  }
  if
 needsCopyright {
   files = append(files, path)
  }
```

```
 return nil
 })
 return files, err
}

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func checkFile(toolsDir, filename string) (bool, error) {
 // Only check Go files.
 if !strings.HasSuffix(filename, ".go") {
  return false, nil
 }
 // Don't check testdata files.
 normalized := strings.TrimPrefix(filepath.ToSlash(filename), filepath.ToSlash(toolsDir))
 if strings.Contains(normalized, "/testdata/") {
  return false, nil
 }
 // goyacc is the only file with a different copyright header.
 if strings.HasSuffix(normalized, "cmd/goyacc/yacc.go") {
  return false, nil
 }
 content, err := os.ReadFile(filename)
 if err != nil {
  return false, err
 }
 fset := token.NewFileSet()
 parsed, err := parser.ParseFile(fset, filename, content, parser.ParseComments)
 if err != nil {
  return false, err
 }
 //
 Don't require headers on generated files.
 if ast.IsGenerated(parsed) {
  return false, nil
 }
 shouldAddCopyright := true
 for _, c := range parsed.Comments {
  // The copyright should appear before the package declaration.
  if c.Pos() > parsed.Package {
   break
  }
  if copyrightRe.MatchString(c.Text()) {
   shouldAddCopyright = false
   break
  }
 }
```

```
 return shouldAddCopyright, nil
}
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package licenses_test

import (
 "bytes"
 "os"
 "os/exec"
 "runtime"
 "testing"
)

func TestLicenses(t *testing.T) {
 if runtime.GOOS != "linux" && runtime.GOOS != "darwin" {
  t.Skip("generating licenses only works on Unixes")
 }
 tmp, err := os.CreateTemp("", "")
 if err != nil {
  t.Fatal(err)
 }
 tmp.Close() // ignore error

 if out, err := exec.Command("./gen-licenses.sh", tmp.Name()).CombinedOutput(); err != nil {
  t.Fatalf("generating licenses failed: %q, %v", out, err)
 }

 got, err := os.ReadFile(tmp.Name())
 if err != nil {
  t.Fatal(err)
 }
 want, err := os.ReadFile("licenses.go")
 if err != nil {
  t.Fatal(err)
 }
 if !bytes.Equal(got, want) {
  t.Error("combined license text needs updating. Run: `go generate ./internal/licenses` from the gopls module.")
 }
}
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package copyright
```

```
import (
 "strings"
 "testing"
)

func TestToolsCopyright(t *testing.T) {
 files, err := checkCopyright("..")
 if err != nil {
  t.Fatal(err)
 }
 if len(files) > 0 {
  t.Errorf("The following files are missing copyright notices:\n%s", strings.Join(files, "\n"))
 }
}
```

1.4507 mod 0.25.0

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1.4508 x-crypto 0.39.0

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1.4509 x-time-rate 0.12.0

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1.4510 brace-expansion 2.0.2

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1.4511 dracut 060+5-1ubuntu3.3

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1.4512 libvirt-python 10.0.0-1build1

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be
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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may

distribute the
object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or
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directing the user to the copy of this License. Also, you must do one
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a) Accompany
the work with the complete corresponding
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changes were used in the work (which must be distributed under
Sections 1 and 2 above); and, if the work is an executable linked
with the Library, with the complete machine-readable "work that
uses the Library", as object code and/or source code, so that the
user can modify the Library and then relink to produce a modified
executable containing the modified Library. (It is understood
that the user who changes the contents of definitions files in the
Library will not necessarily be able to recompile the application
to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the
Library. A suitable mechanism is one that (1) uses at run time a
copy of the library already present on the user's computer system,
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will operate
properly with a modified version of the library, if
the user installs one, as long as the modified version is
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least three years, to give the same user the materials
specified in Subsection 6a, above, for a charge no more
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In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any

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If distribution of object code is made by offering access to copy
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object code for the work under the terms of Section 6.
Any executables containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or
link a "work that uses the Library" with the Library to produce a
work containing portions of the Library, and distribute that work
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modification of the work for the customer's own use and reverse

engineering for debugging such modifications.

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

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e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is

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components (compiler, kernel, and so on) of the operating system on
which the executable runs, unless that component itself accompanies
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It may happen that this requirement contradicts the license
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use both them and the Library together in an executable that you
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A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

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limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means

all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

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d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has

a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves,
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5. A program that contains no derivative of any portion of the
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However, linking a "work that uses the Library" with the Library
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threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data
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functions (ten lines or less in length), then the use of the object
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work. (Executables containing this object code plus portions of the
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Otherwise, if the work is a derivative of the Library, you may
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containing that work also fall under Section 6,
whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or
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modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

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d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception,

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When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits

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(For example, a function in a library to compute square roots has
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Schemas for Java EE Deployment Descriptors:
- javaee_5.xsd
- javaee_web_services_1_2.xsd
- javaee_web_services_client_1_2.xsd
- javaee_6.xsd
- javaee_web_services_1_3.xsd
- javaee_web_services_client_1_3.xsd
- jsp_2_2.xsd
- web-app_3_0.xsd
- web-common_3_0.xsd
- web-fragment_3_0.xsd
- javaee_7.xsd
- javaee_web_services_1_4.xsd
- javaee_web_services_client_1_4.xsd
- jsp_2_3.xsd
- web-app_3_1.xsd
- web-common_3_1.xsd
- web-fragment_3_1.xsd
- javaee_8.xsd

- web-app_4_0.xsd
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- javaee_web_services_client_1_2.xsd
- javaee_6.xsd
- javaee_web_services_1_3.xsd
- javaee_web_services_client_1_3.xsd
- jsp_2_2.xsd
- web-app_3_0.xsd
- web-common_3_0.xsd
- web-fragment_3_0.xsd
- javaee_7.xsd
- javaee_web_services_1_4.xsd
- javaee_web_services_client_1_4.xsd
- jsp_2_3.xsd
- web-app_3_1.xsd
- web-common_3_1.xsd
- web-fragment_3_1.xsd
- javaee_8.xsd
- web-app_4_0.xsd
- web-common_4_0.xsd
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- javaee_web_services_1_2.xsd
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- javaee_web_services_client_1_3.xsd
- jsp_2_2.xsd
- web-app_3_0.xsd
- web-common_3_0.xsd
- web-fragment_3_0.xsd
- javaee_7.xsd
 - javaee_web_services_1_4.xsd
- javaee_web_services_client_1_4.xsd
- jsp_2_3.xsd

- web-app_3_1.xsd
- web-common_3_1.xsd
- web-fragment_3_1.xsd
- javaee_8.xsd
- web-app_4_0.xsd
- web-common_4_0.xsd
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1.4522 github.com/knadh/koanf/v2 2.2.1

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1.4524 openssh 1:8.9p1-3ubuntu0.13

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*
*/

#ifndef _BSD_WAITPID_H
#define _BSD_WAITPID_H

#ifndef HAVE_WAITPID
/* Clean out any potential issues */
#undef WIFEXITED
#undef WIFSTOPPED
#undef WIFSIGNALED

/* Define required functions to mimic a POSIX look and feel */
#define _W_INT(w) (*(int*)&(w)) /* convert union wait to int */
#define WIFEXITED(w) (!((_W_INT(w)) & 0377))
#define WIFSTOPPED(w) ((_W_INT(w)) & 0100)
#define WIFSIGNALED(w) (!WIFEXITED(w) && !WIFSTOPPED(w))
#define WEXITSTATUS(w) (int)(WIFEXITED(w) ? ((_W_INT(w) >> 8) & 0377) : -1)
#define WTERMSIG(w) (int)(WIFSIGNALED(w) ? (_W_INT(w) & 0177) : -1)
#define WCOREFLAG 0x80
#define WCOREDUMP(w) ((_W_INT(w)) & WCOREFLAG)

/* Prototype */
pid_t waitpid(int,
 int *, int);

#endif /* !HAVE_WAITPID */
#endif /* _BSD_WAITPID_H */
```

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 * @version 3.0 (December 2000)
 *
 * Optimised ANSI C code for the Rijndael cipher (now AES)
 *
 * @author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>
 * @author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>
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*
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```
------
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#include "includes.h"

#if !defined(HAVE_STATVFS) || !defined(HAVE_FSTATVFS)

#include <sys/types.h>

#ifdef HAVE_SYS_MOUNT_H
#include <sys/mount.h>
#endif
#ifdef HAVE_SYS_STATFS_H
#include <sys/statfs.h>
#endif
#ifdef
 HAVE_SYS_VFS_H
#include <sys/vfs.h>
#endif

#ifndef HAVE_FSBLKCNT_T
typedef unsigned long fsblkcnt_t;
#endif
#ifndef HAVE_FSFILCNT_T
typedef unsigned long fsfilcnt_t;
#endif

#ifndef ST_RDONLY
#define ST_RDONLY 1
#endif
#ifndef ST_NOSUID
#define ST_NOSUID 2
```

```
#endif

 /* as defined in IEEE Std 1003.1, 2004 Edition */
struct statvfs {
 unsigned long f_bsize; /* File system block size. */
 unsigned long f_frsize; /* Fundamental file system block size. */
 fsblkcnt_t f_blocks; /* Total number of blocks on file system in */
    /* units of f_frsize. */
 fsblkcnt_t    f_bfree; /* Total number of free blocks. */
 fsblkcnt_t    f_bavail; /* Number of free blocks available to  */
    /* non-privileged process.  */
 fsfilcnt_t    f_files; /* Total number of file serial numbers. */
 fsfilcnt_t    f_ffree; /* Total number of free file serial numbers. */
 fsfilcnt_t    f_favail; /* Number of file serial numbers available to */
    /* non-privileged process. */
 unsigned long f_fsid; /*
 File system ID. */
 unsigned long f_flag; /* BBit mask of f_flag values. */
 unsigned long f_namemax;/*  Maximum filename length. */
};
#endif

#ifndef HAVE_STATVFS
int statvfs(const char *, struct statvfs *);
#endif

#ifndef HAVE_FSTATVFS
int fstatvfs(int, struct statvfs *);
#endif
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*/

#ifndef _BSD_MISC_H
#define _BSD_MISC_H
```

```
#include "includes.h"

char *ssh_get_progname(char *);
int seed_from_prngd(unsigned char *, size_t);

#ifndef HAVE_SETSID
#define setsid() setpgrp(0, getpid())
#endif
 /* !HAVE_SETSID */

#ifndef HAVE_SETENV
int setenv(const char *, const char *, int);
#endif /* !HAVE_SETENV */

#ifndef HAVE_SETLOGIN
int setlogin(const char *);
#endif /* !HAVE_SETLOGIN */

#ifndef HAVE_INNETGR
int innetgr(const char *, const char *, const char *, const char *);
#endif /* HAVE_INNETGR */

#if !defined(HAVE_SETEUID) && defined(HAVE_SETREUID)
int seteuid(uid_t);
#endif /* !defined(HAVE_SETEUID) && defined(HAVE_SETREUID) */

#if !defined(HAVE_SETEGID) && defined(HAVE_SETRESGID)
int setegid(uid_t);
#endif /* !defined(HAVE_SETEGID) && defined(HAVE_SETRESGID) */

#if !defined(HAVE_STRERROR) && defined(HAVE_SYS_ERRLIST) && defined(HAVE_SYS_NERR)
const char *strerror(int);
#endif

#if !defined(HAVE_SETLINEBUF)
#define setlinebuf(a) (setvbuf((a), NULL, _IOLBF, 0))
#endif

#ifndef HAVE_UTIMES
#ifndef HAVE_STRUCT_TIMEVAL
struct timeval {
 long tv_sec;
 long tv_usec;
}
#endif /* HAVE_STRUCT_TIMEVAL */

int utimes(char *, struct timeval *);
#endif /* HAVE_UTIMES */
```

```
#ifndef AT_FDCWD
#
 define AT_FDCWD (-2)
#endif

#ifndef HAVE_FCHMODAT
int fchmodat(int, const char *, mode_t, int);
#endif

#ifndef HAVE_FCHOWNAT
int fchownat(int, const char *, uid_t, gid_t, int);
#endif

#ifndef HAVE_TRUNCATE
int truncate (const char *, off_t);
#endif /* HAVE_TRUNCATE */

#ifndef HAVE_STRUCT_TIMESPEC
struct timespec {
 time_t tv_sec;
 long tv_nsec;
};
#endif /* !HAVE_STRUCT_TIMESPEC */

#if !defined(HAVE_NANOSLEEP) && !defined(HAVE_NSLEEP)
# include <time.h>
int nanosleep(const struct timespec *, struct timespec *);
#endif

#ifndef HAVE_UTIMENSAT
# include <time.h>
/* start with the high bits and work down to minimise risk of overlap */
# ifndef AT_SYMLINK_NOFOLLOW
#  define AT_SYMLINK_NOFOLLOW 0x80000000
# endif
int utimensat(int, const char *, const struct timespec[2], int);
#endif /* !HAVE_UTIMENSAT */

#ifndef HAVE_USLEEP
int usleep(unsigned int useconds);
#endif

#ifndef HAVE_TCGETPGRP
pid_t tcgetpgrp(int);
#endif

#ifndef HAVE_TCSENDBREAK
```

```
int tcsendbreak(int, int);
#endif

#ifndef
 HAVE_UNSETENV
int unsetenv(const char *);
#endif

#ifndef HAVE_ISBLANK
int isblank(int);
#endif

#ifndef HAVE_GETPGID
pid_t getpgid(pid_t);
#endif

#ifndef HAVE_PSELECT
int pselect(int, fd_set *, fd_set *, fd_set *, const struct timespec *,
   const sigset_t *);
#endif

#ifndef HAVE_ENDGRENT
# define endgrent() do { } while(0)
#endif

#ifndef HAVE_KRB5_GET_ERROR_MESSAGE
# define krb5_get_error_message krb5_get_err_text
#endif

#ifndef HAVE_KRB5_FREE_ERROR_MESSAGE
# define krb5_free_error_message(a,b) do { } while(0)
#endif

#ifndef HAVE_PLEDGE
int pledge(const char *promises, const char *paths[]);
#endif

/* bsd-err.h */
#ifndef HAVE_ERR
void err(int, const char *, ...) __attribute__((format(printf, 2, 3)));
#endif
#ifndef HAVE_ERRX
void errx(int, const char *, ...) __attribute__((format(printf, 2, 3)));
#endif
#ifndef HAVE_WARN
void warn(const char *, ...) __attribute__((format(printf, 1, 2)));
#endif
```

```
#ifndef HAVE_LLABS
long long llabs(long long);
#endif

#if defined(HAVE_DECL_BZERO)
 && HAVE_DECL_BZERO == 0
void bzero(void *, size_t);
#endif

#ifndef HAVE_RAISE
int raise(int);
#endif

#ifndef HAVE_GETSID
pid_t getsid(pid_t);
#endif

#ifndef HAVE_FLOCK
# define LOCK_SH  0x01
# define LOCK_EX  0x02
# define LOCK_NB  0x04
# define LOCK_UN  0x08
int flock(int, int);
#endif

#ifdef FFLUSH_NULL_BUG
# define fflush(x) (_ssh_compat_fflush(x))
#endif

#ifndef HAVE_LOCALTIME_R
struct tm *localtime_r(const time_t *, struct tm *);
#endif

#ifndef HAVE_REALPATH
#define realpath(x, y) (sftp_realpath((x), (y)))
#endif

#endif /* _BSD_MISC_H */
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*/

#ifndef _BSD_SIGNAL_H
#define _BSD_SIGNAL_H

#include "includes.h"

#include <signal.h>

#ifndef _NSIG
# ifdef NSIG
#  define _NSIG NSIG
# else
#  define _NSIG 128
# endif
#endif

#if !defined(HAVE_STRSIGNAL)
char
 *strsignal(int);
#endif

#endif /* _BSD_SIGNAL_H */
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*
* Created: Sat Sep 02 12:17:00 2000 cv
*
* This file contains functions for forcing opened file descriptors to
* binary mode on Windows systems.
*/

#ifndef _BSD_CYGWIN_UTIL_H
#define _BSD_CYGWIN_UTIL_H

#ifdef HAVE_CYGWIN

#undef ERROR

/* Avoid including windows headers. */
typedef void *HANDLE;
#define INVALID_HANDLE_VALUE ((HANDLE) -1)
#define DNLEN 16
#define UNLEN 256

/* Cygwin functions for which declarations are only available when including
  windows headers, so we have to define them here explicitly. */
extern HANDLE cygwin_logon_user (const struct passwd *, const char *);
extern void cygwin_set_impersonation_token (const HANDLE);

#include
 <sys/cygwin.h>
#include <io.h>

#define CYGWIN_SSH_PRIVSEP_USER (cygwin_ssh_privsep_user())
const char *cygwin_ssh_privsep_user();

int binary_open(const char *, int , ...);
int check_ntsec(const char *);
char **fetch_windows_environment(void);
void free_windows_environment(char **);
int cygwin_ug_match_pattern_list(const char *, const char *);

#ifndef NO_BINARY_OPEN
#define open binary_open
#endif

#endif /* HAVE_CYGWIN */

#endif /* _BSD_CYGWIN_UTIL_H */
```

```
/* $OpenBSD: poll.h,v 1.11 2003/12/10 23:10:08 millert Exp $ */

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/* OPENBSD ORIGINAL: sys/sys/poll.h */

#ifndef _COMPAT_POLL_H_
#define _COMPAT_POLL_H_

#include <sys/types.h>
#ifdef HAVE_POLL_H
# include <poll.h>
#elif HAVE_SYS_POLL_H
# include <sys/poll.h>
#endif

#ifndef HAVE_STRUCT_POLLFD_FD
typedef struct pollfd {
 int fd;
 short events;
 short revents;
} pollfd_t;

#define POLLIN  0x0001
```

```
#define POLLPRI  0x0002
#define POLLOUT  0x0004
#define POLLERR  0x0008
#define POLLHUP  0x0010
#define POLLNVAL 0x0020
#if 0
/* the following are currently not implemented */
#define POLLRDNORM 0x0040
#define POLLNORM POLLRDNORM
#define POLLWRNORM      POLLOUT
#define POLLRDBAND 0x0080
#define POLLWRBAND 0x0100
#endif

#define
 INFTIM  (-1) /* not standard */
#endif /* !HAVE_STRUCT_POLLFD_FD */

#ifndef HAVE_NFDS_T
typedef unsigned int nfds_t;
#endif

#ifndef HAVE_POLL
int   poll(struct pollfd *, nfds_t, int);
#endif

#ifndef HAVE_PPOLL
int   ppoll(struct pollfd *, nfds_t, const struct timespec *, const sigset_t *);
#endif

#endif /* !_COMPAT_POLL_H_ */
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*/

#ifndef _NEXT_POSIX_H
#define _NEXT_POSIX_H

#ifdef HAVE_NEXT
#include <sys/dir.h>

/* NGROUPS_MAX is behind -lposix.  Use the BSD version which is NGROUPS */
#undef NGROUPS_MAX
#define NGROUPS_MAX NGROUPS

/* NeXT's readdir() is BSD (struct direct) not POSIX (struct dirent) */
#define dirent direct

/* Swap out NeXT's BSD wait() for a more POSIX compliant one */
pid_t posix_wait(int *);
#define wait(a) posix_wait(a)

/* #ifdef wrapped functions that need defining for clean compiling */
pid_t getppid(void);
void vhangup(void);
int innetgr(const char *, const char *, const char *, const char *);

/* TERMCAP */
int tcgetattr(int, struct termios *);
int tcsetattr(int, int,
 const struct termios *);
int tcsetpgrp(int, pid_t);
speed_t cfgetospeed(const struct termios *);
speed_t cfgetispeed(const struct termios *);
int cfsetospeed(struct termios *, int);
int cfsetispeed(struct termios *, int);
#endif /* HAVE_NEXT */
#endif /* _NEXT_POSIX_H */
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#ifndef HAVE_SETRESGID
int setresgid(gid_t, gid_t, gid_t);
#endif
#ifndef HAVE_SETRESUID
int setresuid(uid_t, uid_t, uid_t);
#endif
```

1.4525 busybox 1:1.30.1-7ubuntu3.1

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```
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Julian Seward, Cambridge, UK.
jseward@bzip.org
bzip2/libbzip2 version 1.0.4 of 20 December 2006
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To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and
a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

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Also add information on how to contact you by electronic and paper mail.

You should also
get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the

library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!
uganda.txt For Vim version 8.2. Last change: 2020 Jan 08

VIM REFERENCE MANUAL by Bram Moolenaar

uganda *Uganda* *copying* *copyright* *license*
SUMMARY
iccf *ICCF*
Vim is Charityware. You can use and copy it as much as you like, but you are encouraged to make a donation for needy children in Uganda. Please see |kcc| below or visit the ICCF web site, available at these URLs:

http://iccf-holland.org/
http://www.vim.org/iccf/
http://www.iccf.nl/

You can also sponsor the development of Vim. Vim sponsors can vote for features. See |sponsor|. The money goes to Uganda anyway.

The Open Publication License applies to the Vim documentation, see |manual-copyright|.

=== begin of license ===

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I) There are no restrictions on distributing unmodified copies of Vim except that they must include this license text. You can also distribute unmodified parts of Vim, likewise unrestricted except that they must include this license text. You
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2) The modified Vim must be distributed in one of the following five ways:
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(in any way) for a copy of the modified Vim you distributed, you
must make your changes, including source code, available to the
maintainer without fee. The maintainer reserves the right to
include your changes in the official version of Vim. What the
maintainer will do with your changes and under what license they
will be distributed is negotiable. If there has been no negotiation

then this license, or a later version, also applies to your changes.
The current maintainer is Bram Moolenaar <Bram@vim.org>. If this
changes it will be announced in appropriate places (most likely
vim.sf.net, www.vim.org and/or comp.editors). When it is completely
impossible to contact the maintainer, the obligation to send him
your changes ceases. Once the maintainer has confirmed that he has
received your changes they will not have to be sent again.

b) If you have received a modified Vim that was distributed as
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unmodified, as mentioned at I). If you make additional changes the
text under a) applies to those changes.

c) Provide all the changes, including source code, with every copy of
the modified Vim you distribute. This may be done in the form of a
context diff. You can choose what license to use for new code you
add. The changes and their license must not restrict
others from
making their own changes to the official version of Vim.

d) When you have a modified Vim which includes changes as mentioned
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  permits the Vim maintainer to include the changes in the official
  version of Vim without fee or restriction.
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  any way) for the changes within this period, you must make them
  available to him.
- You clearly describe in the distribution how to contact you. This
  contact information must remain valid for at least three years
  after last distributing the corresponding
modified Vim, or as long
  as possible.

e) When the GNU General Public License (GPL) applies to the changes,
you can distribute the modified Vim under the GNU GPL version 2 or
any later version.

3) A message must be added, at least in the output of the ":version"
command and in the intro screen, such that the user of the modified Vim
is able to see that it was modified. When distributing as mentioned
under 2)e) adding the message is only required for as far as this does

not conflict with the license used for the changes.
4) The contact information as required under 2)a) and 2)d) must not be removed or changed, except that the person himself can make corrections.

III) If you distribute a modified version of Vim, you are encouraged to use the Vim license for your changes and make them available to the maintainer, including the source code. The preferred way to do this is by e-mail or by uploading
the files to a server and e-mailing the URL.
If the number of changes is small (e.g., a modified Makefile) e-mailing a context diff will do. The e-mail address to be used is <maintainer@vim.org>

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=== end of license ===

Note:

- If you are happy with Vim, please express that by reading the rest of this file and consider helping needy children in Uganda.

- If you want to support further Vim development consider becoming a |sponsor|. The money goes to Uganda anyway.

- According to Richard Stallman the Vim license is GNU GPL compatible. A few minor changes have been made since he checked it, but that should not make a difference.

- If you link Vim with a library that goes under the GNU GPL, this limits further
distribution to the GNU GPL. Also when you didn't actually change anything in Vim.

- Once a change is included that goes under the GNU GPL, this forces all further changes to also be made under the GNU GPL or a compatible license.

- If you distribute a modified version of Vim, you can include your name and contact information with the "--with-modified-by" configure argument or the MODIFIED_BY define.

==========
Kibaale Children's Centre *kcc* *Kibaale* *charity*

Kibaale Children's Centre (KCC) is located in Kibaale, a small town in the south of Uganda, near Tanzania, in East Africa. The area is known as Rakai District. The population is mostly farmers. Although people are poor, there is enough food. But this district is suffering from AIDS more than any other part of the world. Some say that it started there. Estimations are that 10 to 30% of the Ugandans are infected with HIV. Because parents die, there are many orphans. In this district about 60,000 children have lost one or both parents, out of a population of 350,000. And this is still continuing.

The children need a lot of help. The KCC is working hard to provide the needy with food, medical care and education. Food and medical care to keep them healthy now, and education so that they can take care of themselves in the future. KCC works on a Christian base, but help is given to children of any religion.

The key to solving the problems in this area is education. This has been neglected in the past years with president Idi Amin and the following civil wars. Now that the government is stable again, the children and parents have to learn how to take care of themselves and how to avoid infections. There is also help for people who are ill and hungry, but the primary goal is to prevent people from getting ill and to teach them how to grow healthy food.

Most of the orphans are living in an extended family. An uncle or older sister is taking care of them. Because these families are big and the income (if any) is low, a child is lucky if it gets healthy food. Clothes, medical care and schooling is beyond its reach. To help these needy children, a sponsorship program was put into place. A child can be financially adopted. For a few dollars a month KCC sees to it that the child gets indispensable items, is healthy, goes to school and KCC takes care of anything else that needs to be done for the child and the family that supports it.

Besides helping the child directly, the environment where the child grows up needs to be improved. KCC helps schools to improve their teaching methods. There is a demonstration school at the centre and teacher trainings are given. Health workers are being trained, hygiene education is carried out and households are stimulated to build a proper latrine. I helped setting up a production site for cement slabs. These are used to build a good latrine. They are sold below cost price.

There is a small clinic at the project, which provides children and their family with medical help. When needed, transport to a hospital is offered. Immunization programs are carried out and help is provided when an epidemic is breaking out (measles and cholera have been a problem).

donate

Summer 1994 to summer 1995 I spent a whole year at the centre, working as a

volunteer. I have helped to expand the centre and worked in the area of water and sanitation. I learned that the help that the KCC provides really helps. When I came back to Holland, I wanted to continue supporting KCC. To do this I'm raising funds and organizing the sponsorship program. Please consider one of these possibilities:

1. Sponsor a child in primary school: 17 euro a month (or more).
2. Sponsor a child in secondary school: 25 euro a month (or more).
3. Sponsor the clinic: Any amount a month or quarter
4. A one-time donation

Compared with other organizations that do child sponsorship
the amounts are
very low. This is because the money goes directly to the centre. Less than 5% is used for administration. This is possible because this is a small organization that works with volunteers. If you would like to sponsor a child, you should have the intention to do this for at least one year.

How do you know that the money will be spent right? First of all you have my personal guarantee as the author of Vim. I trust the people that are working at the centre, I know them personally. Furthermore, the centre has been co-sponsored and inspected by World Vision, Save the Children Fund and is now under the supervision of Pacific Academy Outreach Society. The centre is visited about once a year to check the progress (at our own cost). I have visited the centre myself many times, starting in 1993. The visit reports are on the ICCF web site.

If you have any further questions, send me e-mail: <Bram@vim.org>.

The address of the centre is:
Kibaale Children's Centre
p.o.
box 1658
Masaka, Uganda, East Africa

Sending money: *iccf-donations*

Check the ICCF web site for the latest information! See |iccf| for the URL.

USA: The methods mentioned below can be used.
Sending a check to the Nehemiah Group Outreach Society (NGOS) is no longer possible, unfortunately. We are looking for another way to get you an IRS tax receipt.
For sponsoring a child contact KCF in Canada (see below). US checks can be sent to them to lower banking costs.

Canada: Contact Kibaale Children's Fund (KCF) in Surrey, Canada. They

take care of the Canadian sponsors for the children in
Kibaale. KCF forwards 100% of the money to the project in
Uganda. You can send them a one time donation directly.
Please send me a note so that I know what has been donated
because of Vim. Ask KCF for information about sponsorship.

Kibaale Children's Fund c/o Pacific Academy
10238-168 Street
Surrey, B.C. V4N 1Z4
Canada
Phone: 604-581-5353

If
you make a donation to Kibaale Children's Fund (KCF) you
will receive a tax receipt which can be submitted with your
tax return.

Holland: Transfer to the account of "Stichting ICCF Holland" in Lisse.
This will allow for tax deduction if you live in Holland.
Postbank, nr. 4548774
IBAN: NL95 INGB 0004 5487 74

Germany: It is possible to make donations that allow for a tax return.
Check the ICCF web site for the latest information:
http://iccf-holland.org/germany.html

World: Use a postal money order. That should be possible from any
country, mostly from the post office. Use this name (which is
in my passport): "Abraham Moolenaar". Use Euro for the
currency if possible.

Europe: Use a bank transfer if possible. Your bank should have a form
that you can use for this. See "Others" below for the swift
code and IBAN number.
Any other method should work. Ask for information about
sponsorship.

Credit Card: You can use PayPal to send money with a Credit
card. This is
the most widely used Internet based payment system. It's
really simple to use. Use this link to find more info:
https://www.paypal.com/en_US/mrb/pal=XAC62PML3GF8Q
The e-mail address for sending the money to is:
Bram@iccf-holland.org
For amounts above 400 Euro ($500) sending a check is
preferred.

Others: Transfer to one of these accounts if possible:
Postbank, account 4548774
Swift code: INGB NL 2A

IBAN: NL95 INGB 0004 5487 74
under the name "stichting ICCF Holland", Lisse
If that doesn't work:
Rabobank Lisse, account 3765.05.117
Swift code: RABO NL 2U
under the name "Bram Moolenaar", Lisse
Otherwise, send a check in euro or US dollars to the address
below. Minimal amount: $70 (my bank does not accept smaller
amounts for foreign check, sorry)

Address to send checks to:
Bram Moolenaar
Finsterruetihof 1
8134 Adliswil
Switzerland

This address is expected to be valid for a long time.

vim:tw=78:ts=8:noet:ft=help:norl:

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Surface Mail: Arnaud LE HORS, INRIA - Sophia Antipolis,
2004, route des Lucioles, 06565 Valbonne Cedex -- FRANCE
Voice phone: (33) 93.65.77.71, Fax: (33) 93 65 77 66, Telex: 97 00 50 F

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include your changes in the official version of Vim. What the

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- You

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If the number of changes is small (e.g., a modified Makefile) e-mailing a
context diff will do. The e-mail address to be used is
<maintainer@vim.org>

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with, at your option.

Format: https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/
Upstream-Name: vim
Source: https://github.com/vim/vim

Files: *
Copyright: 2001-2022 Bram Moolenaar <Bram@vim.org>
2006 Benji Fisher <benji@member.ams.org>
1999-2021 Charles E. Campbell, Jr. <drchip@campbellfamily.biz>
2003 Fred Barnes
2003 Mario Schweigler
2004-2008 Michael Geddes
2006 Martin Krischik
2015 Christian Brabandt
2014 David Necas (Yeti)
2009-2013 Steven Oliver
2012 Hong Xu
2001-2016 MURAOKA Taro <koron.kaoriya@gmail.com>
2001 Bohdan Vlasyuk <bohdan@vstu.edu.ua>
2003-2017 Ernest Adrogu <eadrogue@gmx.net>
2005,2006,2008,2010 Kevin Patrick Scannell <kscanne@gmail.com>
1997 Olaf Seibert
1997 Heiko Erhardt
2002 E. I. DuPont de Nemours and Company, Inc
Pablo Ariel Kohan
2017 Eugene Ciurana

2017 Ken Takata
License: Vim

Files: runtime/doc/*
Copyright: 1988-2003 Bram Moolenaar <Bram@vim.org>
License: OPL-1+
Comment: No license options are exercised. See https://bugs.debian.org/384019
for discussions confirming DFSG-ness of this license when no options are
exercised.

Files:
runtime/indent/cmake.vim
runtime/indent/elm.vim
runtime/syntax/cmake.vim
runtime/syntax/elm.vim
runtime/syntax/go.vim
runtime/syntax/proto.vim
runtime/syntax/tpp.vim
Copyright: Andy Cedilnik <andy.cedilnik@kitware.com>
Karthik Krishnan <kartik.krishnan@kitware.com>
Dimitri Merejkowsky <d.merej@gmail.com>
Gerfried Fuchs <alfie@ist.org>
Joseph Hager <ajhager@gmail.com>
2008 Google Inc.
2009 The Go Authors
License: BSD-3-clause

Files:
runtime/ftplugin/jsonc.vim
runtime/ftplugin/julia.vim
runtime/ftplugin/wast.vim
runtime/indent/julia.vim
runtime/indent/wast.vim
runtime/syntax/json.vim
runtime/syntax/jsonc.vim
runtime/syntax/julia.vim
runtime/syntax/wast.vim
Copyright:
2013, Jeroen Ruigrok van der Werven, Eli Parra
2016 rhysd
2021 Izhak Jakov
2012-2016 Carlo Baldassi
License: Expat

Files: runtime/syntax/tmux.vim
Copyright: Eric Pruitt <eric.pruitt@gmail.com>
License: BSD-2-clause

Files: runtime/syntax/rust.vim
runtime/autoload/rust.vim
runtime/autoload/rustfmt.vim
runtime/ftplugin/rust.vim
runtime/indent/rust.vim
runtime/compiler/cargo.vim
Copyright: 2015 The Rust Project Developers
License: Apache or Expat

Files: runtime/tools/efm_perl.pl
Copyright: 2001 Joerg Ziefle <joerg.ziefle@gmx.de>
License: GPL-1+ or Artistic-1

Files: src/libvterm/*
Copyright: 2008 Paul Evans <leonerd@leonerd.org.uk>
License: Expat

Files: src/regexp_bt.c
Copyright: 1986 University of Toronto
License: Vim-Regexp

Files: src/if_xcmdsrv.c
Copyright: Copyright (c) 1989-1993 The Regents of the University of California.
License: UC

Files: src/tee/tee.c
Copyright: 1996, Paul Slootman
License:
 public-domain

Files: src/xxd/*
Copyright: 1990-1998 by Juergen Weigert (jnweiger@informatik.uni-erlangen.de)
License: Expat or GPL-2

Files: src/gui_at_fs.c
Copyright: 1989 Software Research Associates, Inc., Tokyo, Japan
License: SRA

Files: src/gui_at_sb.* src/install-sh
Copyright: 1987, 1988, 1994 X Consortium
License: X11

Files: src/gui_gtk_vms.h
Copyright: 2000 Compaq Computer Corporation
License: Compaq

Files: src/pty.c
Copyright: 1993 Juergen Weigert (jnweiger@immd4.informatik.uni-erlangen.de)
    1993 Michael Schroeder (mlschroe@immd4.informatik.uni-erlangen.de)
    1987 Oliver Laumann
License: GPL-2+

Files: src/iscygpty.*
Copyright: 2015-2017 K.Takata
License: Expat or Vim

Files: src/xpm/*

Copyright: 1989-95 GROUPE BULL
License: XPM

Files: src/xdiff/*
Copyright: 2003-2016 Davide Libenzi, Johannes E. Schindelin
License: LGPL-2.1+

Files: src/xdiff/xhistogram.c
Copyright: 2010 Google Inc. and other copyright owners as documented in JGit's IP log
License: EDL-1

Files:
runtime/compiler/powershell.vim
runtime/doc/ft_ps1.txt
runtime/ftplugin/ps1.vim
runtime/ftplugin/ps1xml.vim
runtime/ftplugin/swift.vim
runtime/ftplugin/swiftgyb.vim
runtime/indent/ps1.vim
runtime/syntax/ps1.vim
runtime/syntax/ps1xml.vim
runtime/syntax/sil.vim
runtime/syntax/swift.vim
runtime/syntax/swiftgyb.vim
Copyright:
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Files: runtime/syntax/poke.vim
Copyright: 2021 Matthew T. Ihlenfield
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1.4532 python3.10 3.10.12-1~22.04.10

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A. HISTORY OF THE SOFTWARE
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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see https://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see https://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

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Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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include::include-html.ad[]

[cols="10%,90%",frame="none",grid="none",style="verse"]
|==========
|image:pic/sheepb.jpg[]|
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***********************************************************************
```

The
following individuals have contributed significantly to
NTPsec:

* mailto:esr@thyrsus.com[Eric S. Raymond <esr@thyrsus.com>] Massive
code reduction/refactoring/hardening, documentation cleanup and update,
new refclock configuration syntax.
* mailto:gem@rellim.com[Gary E. Miller <gem@rellim.com>] Code
ANSIfication, testing, ntpviz
* mailto:dfranke@dfranke.us[Daniel Fox Franke <dfranke@dfranke.us>]
CVE fixes, protocol machine refactoring.
* mailto:hmurray@megapathdsl.net[Hal Murray <hmurray@megapathdsl.net>]
Code cleanups, bug hunting, sage advice.
* mailto:verm@darkbeer.org[Amar Takhar <verm@darkbeer.org>] waf build recipe.
* mailto:matthew.selsky@twosigma.com[Matt Selsky
<matthew.selsky@twosigma.com>] Documentation corrections,
compiler warning and port cleanup.

The following individuals contributed in part to the Network Time
Protocol Distribution Version 4
("NTP Classic") and are acknowledged
as authors of this work.

* mailto:takao_abe@xurb.jp[Takao Abe <takao_abe@xurb.jp>] Clock
driver for JJY receivers
* mailto:karl@owl.HQ.ileaf.com[Karl Berry <karl@owl.HQ.ileaf.com>]
syslog to file option
* mailto:Marc.Brett@westgeo.com[Marc Brett
<Marc.Brett@westgeo.com>] Magnavox GPS clock driver (removed in NTPsec)
* mailto:Piete.Brooks@cl.cam.ac.uk[Piete Brooks
<Piete.Brooks@cl.cam.ac.uk>] Trimble PARSE support

* mailto:nelson@bolyard.me[Nelson B Bolyard <nelson@bolyard.me>]
update and complete broadcast and crypto features in sntp
* mailto:Jean-Francois.Boudreault@viagenie.qc.ca[Jean-Francois
Boudreault <Jean-Francois.Boudreault@viagenie.qc.ca>] IPv6 support
* mailto:reg@dwf.com[Reg Clemens <reg@dwf.com>] Oncore driver
(Current maintainer)
* mailto:Sven_Dietrich@trimble.COM[Sven Dietrich
<sven_dietrich@trimble.com>] Palisade reference clock driver
* mailto:duwe@immd4.informatik.uni-erlangen.de[Torsten Duwe
<duwe@immd4.informatik.uni-erlangen.de>]
Linux port
* mailto:dennis@mrbill.canet.ca[Dennis Ferguson
<dennis@mrbill.canet.ca>] foundation code for NTP Version 2 as specified
in RFC 1119
* mailto:jhay@icomtek.csir.co.za[John Hay
<jhay@icomtek.csir.co.za>] IPv6 support and testing
* mailto:davehart@davehart.com[Dave Hart <davehart@davehart.com>]
General maintenance
* mailto:glenn@herald.usask.ca[Glenn Hollinger
<glenn@herald.usask.ca>] GOES clock driver (removed in NTPsec)
* mailto:jbj@chatham.usdesign.com[Jeff Johnson
<jbj@chatham.usdesign.com>] massive prototyping overhaul
* mailto:Hans.Lambermont@nl.origin-it.com[Hans Lambermont
<Hans.Lambermont@nl.origin-it.com>] or
mailto:H.Lambermont@chello.nl[<H.Lambermont@chello.nl>] ntpsweep
* mailto:phk@FreeBSD.ORG[Poul-Henning Kamp <phk@FreeBSD.ORG>]
Oncore driver (Original author)
* https://www4.informatik.uni-erlangen.de/%7ekardel[Frank Kardel]
mailto:kardel@ntp.org[<kardel (at) ntp
(dot) org>] PARSE <GENERIC> (driver 14 reference clocks),
STREAMS
modules for PARSE, support scripts, syslog cleanup, dynamic interface
handling
* mailto:kuehn@ntp.org[Johannes Maximilian Kuehn <kuehn@ntp.org>]
Rewrote +sntp+ to comply with NTPv4 specification
* mailto:leres@ee.lbl.gov[Craig Leres <leres@ee.lbl.gov>] 4.4BSD
port, ppsclock, Magnavox GPS clock driver
* mailto:louie@ni.umd.edu[Louis A. Mamakos <louie@ni.umd.edu>]
MD5-based authentication
* mailto:thorinn@diku.dk[Lars H. Mathiesen <thorinn@diku.dk>]
adaptation of foundation code for Version 3 as specified in RFC 1305
* mailto:mayer@ntp.org[Danny Mayer <mayer@ntp.org>]Network I/O,
Windows Port, Code Maintenance
* mailto:mills@udel.edu[David L. Mills <mills@udel.edu>] Version 4
foundation, precision kernel; clock drivers: 1, 3, 4, 6, 7, 11, 13, 18,
19, 22, 36
* mailto:mogul@pa.dec.com[Jeffrey Mogul <mogul@pa.dec.com>] ntptrace utility
* mailto:neal@ntp.org[Rob Neal <neal@ntp.org>] config/parse code maintenance

* mailto:jack@innovativeinternet.com[Jack Sasportas

<jack@innovativeinternet.com>] Saved a Lot of space on the stuff in the
html/pic/ subdirectory
* mailto:shields@tembel.org[Michael Shields <shields@tembel.org>]
USNO clock driver
* mailto:harlan@pfcs.com[Harlan Stenn <harlan@pfcs.com>]
General maintenance (see the ChangeLog)
* mailto:ajit@ee.udel.edu[Ajit Thyagarajan <ajit@ee.udel.edu>]IP
multicast/anycast support
* mailto:brian.utterback@oracle.com[Brian Utterback
<brian.utterback@oracle.com>] General codebase
* mailto:loganaden@gmail.com[Loganaden Velvindron
<loganaden@gmail.com>] Sandboxing (libseccomp) support
* mailto:vixie@vix.com[Paul A Vixie <vixie@vix.com>] TrueTime GPS
driver, generic TrueTime clock driver

The following people contributed code to NTP Classic which has since
been removed:

* mailto:mark_andrews@isc.org[Mark Andrews <mark_andrews@isc.org>]
Leitch atomic clock controller
* mailto:altmeier@atlsoft.de[Bernd Altmeier <altmeier@atlsoft.de>]
hopf Elektronik serial line and PCI-bus devices
* mailto:vbais@mailman1.intel.com[Viraj
Bais <vbais@mailman1.intel.com>] and
mailto:kirkwood@striderfm.intel.com[Clayton Kirkwood
<kirkwood@striderfm.intel.com>] port to WindowsNT 3.5
* mailto:michael.barone@lmco.com[Michael Barone
<michael,barone@lmco.com>] GPSVME fixes
* mailto:greg.brackley@bigfoot.com[Greg Brackley
<greg.brackley@bigfoot.com>] Major rework of WINNT port. Clean up
recvbuf and iosignal code into separate modules.
* mailto:Piete.Brooks@cl.cam.ac.uk[Piete Brooks
<Piete.Brooks@cl.cam.ac.uk>] MSF clock driver
* mailto:clift@ml.csiro.au[Steve Clift <clift@ml.csiro.au>] OMEGA clock driver
* mailto:casey@csc.co.za[Casey Crellin <casey@csc.co.za>] vxWorks
(Tornado) port and help with target configuration
* mailto:Sven_Dietrich@trimble.COM[Sven Dietrich
<sven_dietrich@trimble.com>] NT adj. residuals, integrated Greg's Winnt port.
* mailto:dundas@salt.jpl.nasa.gov[John A. Dundas III
<dundas@salt.jpl.nasa.gov>] Apple A/UX port
* mailto:davehart@davehart.com[Dave Hart <davehart@davehart.com>]
Windows port interpolation rewrite
* mailto:iglesias@uci.edu[Mike Iglesias <iglesias@uci.edu>] DEC Alpha port
* mailto:jim@jagubox.gsfc.nasa.gov[Jim Jagielski
<jim@jagubox.gsfc.nasa.gov>] A/UX port
* mailto:kuehn@ntp.org[Johannes Maximilian Kuehn <kuehn@ntp.org>]

+ntpq saveconfig+
* mailto:jones@hermes.chpc.utexas.edu[William L. Jones
<jones@hermes.chpc.utexas.edu>] RS/6000 AIX modifications, HPUX
modifications
* mailto:dkatz@cisco.com[Dave Katz <dkatz@cisco.com>] RS/6000 AIX port
* mailto:lindholm@ucs.ubc.ca[George Lindholm <lindholm@ucs.ubc.ca>]
SunOS 5.1 port
* mailto:moeller@gwdgv1.dnet.gwdg.de[Wolfgang Moeller
<moeller@gwdgv1.dnet.gwdg.de>] VMS port
* mailto:tmoore@fievel.daytonoh.ncr.com[Tom Moore
<tmoore@fievel.daytonoh.ncr.com>] i386 svr4 port
* mailto:kamal@whence.com[Kamal A Mostafa <kamal@whence.com>] SCO OpenServer port
* mailto:derek@toybox.demon.co.uk[Derek Mulcahy
<derek@toybox.demon.co.uk>] and mailto:d@hd.org[Damon Hart-Davis
<d@hd.org>] ARCRON MSF clock driver
* mailto:neal@ntp.org[Rob Neal <neal@ntp.org>] Bancomm refclock
* mailto:Rainer.Pruy@informatik.uni-erlangen.de[Rainer Pruy
<Rainer.Pruy@informatik.uni-erlangen.de>] monitoring/trap scripts,
statistics file handling
* mailto:dirce@zk3.dec.com[Dirce Richards <dirce@zk3.dec.com>]
Digital UNIX V4.0 port
* mailto:wsanchez@apple.com[Wilfredo Snchez <wsanchez@apple.com>]
added support for NetInfo
* mailto:mrapple@quack.kfu.com[Nick Sayer <mrapple@quack.kfu.com>]
SunOS streams modules
* mailto:schnitz@unipress.com[Ray Schnitzler <schnitz@unipress.com>]
Unixware1 port
* mailto:jss@pebbles.jpl.nasa.gov[Jeff Steinman
<jss@pebbles.jpl.nasa.gov>] Datum PTS clock driver
* mailto:harlan@pfcs.com[Harlan Stenn <harlan@pfcs.com>] GNU
automake/autoconfigure makeover
* mailto:ken@sdd.hp.com[Kenneth Stone <ken@sdd.hp.com>] HP-UX port
* mailto:tsuruoka@nc.fukuoka-u.ac.jp[Tomoaki TSURUOKA
<tsuruoka@nc.fukuoka-u.ac.jp>]TRAK clock driver
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Utterback
<brian.utterback@oracle.com>] Solaris issues
* mailto:Ulrich.Windl@rz.uni-regensburg.de[Ulrich Windl
<Ulrich.Windl@rz.uni-regensburg.de>] corrected and validated HTML
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1.4536 github.com/mholt/acmez 1.2.0

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1.4537 github.com/twmb/franz-go/plugin/kprom 1.1.0

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1.4538 github.com/workiva/go-datastructures 1.1.5

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1.4539 grafana-loki 1.6.2-0.20250410135257-26fcedb3d39a

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```
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*/

package minio

import (
 "bytes"
 "context"
 "encoding/xml"
 "fmt"
 "net/http"
 "net/url"

 "github.com/minio/minio-go/v7/pkg/s3utils"
)

// objectLegalHold - object legal hold specified in
// https://docs.aws.amazon.com/AmazonS3/latest/API/archive-RESTObjectPUTLegalHold.html
type objectLegalHold struct {
 XMLNS   string          `xml:"xmlns,attr,omitempty"`
 XMLName
 xml.Name        `xml:"LegalHold"`
 Status  LegalHoldStatus `xml:"Status,omitempty"`
}

// PutObjectLegalHoldOptions represents options specified by user for PutObjectLegalHold call
type PutObjectLegalHoldOptions struct {
 VersionID string
 Status    *LegalHoldStatus
}

// GetObjectLegalHoldOptions represents options specified by user for GetObjectLegalHold call
type GetObjectLegalHoldOptions struct {
 VersionID string
}

// LegalHoldStatus - object legal hold status.
type LegalHoldStatus string

const (
 // LegalHoldEnabled indicates legal hold is enabled
 LegalHoldEnabled LegalHoldStatus = "ON"

 // LegalHoldDisabled indicates legal hold is disabled
 LegalHoldDisabled LegalHoldStatus = "OFF"
)

func (r LegalHoldStatus) String() string {
```

```
 return string(r)
}

// IsValid - check whether this legal hold status is valid or not.
func (r LegalHoldStatus) IsValid() bool {
 return r == LegalHoldEnabled || r == LegalHoldDisabled
}

func newObjectLegalHold(status *LegalHoldStatus)
 (*objectLegalHold, error) {
 if status == nil {
  return nil, fmt.Errorf("Status not set")
 }
 if !status.IsValid() {
  return nil, fmt.Errorf("invalid legal hold status `%v`", status)
 }
 legalHold := &objectLegalHold{
  Status: *status,
 }
 return legalHold, nil
}

// PutObjectLegalHold : sets object legal hold for a given object and versionID.
func (c *Client) PutObjectLegalHold(ctx context.Context, bucketName, objectName string, opts
PutObjectLegalHoldOptions) error {
 // Input validation.
 if err := s3utils.CheckValidBucketName(bucketName); err != nil {
  return err
 }

 if err := s3utils.CheckValidObjectName(objectName); err != nil {
  return err
 }

 // Get resources properly escaped and lined up before
 // using them in http request.
 urlValues := make(url.Values)
 urlValues.Set("legal-hold", "")

 if opts.VersionID != "" {
  urlValues.Set("versionId", opts.VersionID)
 }

 lh, err := newObjectLegalHold(opts.Status)
 if err != nil {
  return err
 }
```

```
 lhData, err := xml.Marshal(lh)
 if
 err != nil {
  return err
 }

 reqMetadata := requestMetadata{
  bucketName:       bucketName,
  objectName:       objectName,
  queryValues:      urlValues,
  contentBody:      bytes.NewReader(lhData),
  contentLength:    int64(len(lhData)),
  contentMD5Base64: sumMD5Base64(lhData),
  contentSHA256Hex: sum256Hex(lhData),
 }

 // Execute PUT Object Legal Hold.
 resp, err := c.executeMethod(ctx, http.MethodPut, reqMetadata)
 defer closeResponse(resp)
 if err != nil {
  return err
 }
 if resp != nil {
  if resp.StatusCode != http.StatusOK && resp.StatusCode != http.StatusNoContent {
   return httpRespToErrorResponse(resp, bucketName, objectName)
  }
 }
 return nil
}

// GetObjectLegalHold gets legal-hold status of given object.
func (c *Client) GetObjectLegalHold(ctx context.Context, bucketName, objectName string, opts
GetObjectLegalHoldOptions) (status *LegalHoldStatus, err error) {
 // Input validation.
 if err := s3utils.CheckValidBucketName(bucketName); err != nil {
  return
 nil, err
 }

 if err := s3utils.CheckValidObjectName(objectName); err != nil {
  return nil, err
 }
 urlValues := make(url.Values)
 urlValues.Set("legal-hold", "")

 if opts.VersionID != "" {
  urlValues.Set("versionId", opts.VersionID)
 }
```

```
 // Execute GET on bucket to list objects.
 resp, err := c.executeMethod(ctx, http.MethodGet, requestMetadata{
  bucketName:       bucketName,
  objectName:       objectName,
  queryValues:      urlValues,
  contentSHA256Hex: emptySHA256Hex,
 })
 defer closeResponse(resp)
 if err != nil {
  return nil, err
 }
 if resp != nil {
  if resp.StatusCode != http.StatusOK {
   return nil, httpRespToErrorResponse(resp, bucketName, objectName)
  }
 }
 lh := &objectLegalHold{}
 if err = xml.NewDecoder(resp.Body).Decode(lh); err != nil {
  return nil, err
 }

 return &lh.Status, nil
}
```

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```
# The list of people who have contributed code to the cmux repository.
#
```

Auto-generated with:
git log --oneline --pretty=format:'%an <%aE>' | sort -u
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Portions of the client are based on code at:
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```
package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
```

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package spec

import (
 "encoding/json"

 "github.com/go-openapi/swag"
)

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 LicenseProps
 VendorExtensible
}

// LicenseProps holds the properties of a License object

```
type LicenseProps struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}

// UnmarshalJSON
 hydrates License from json
func (l *License) UnmarshalJSON(data []byte) error {
 if err := json.Unmarshal(data, &l.LicenseProps); err != nil {
  return err
 }
 return json.Unmarshal(data, &l.VendorExtensible)
}

// MarshalJSON produces License as json
func (l License) MarshalJSON() ([]byte, error) {
 b1, err := json.Marshal(l.LicenseProps)
 if err != nil {
  return nil, err
 }
 b2, err := json.Marshal(l.VendorExtensible)
 if err != nil {
  return nil, err
 }
 return swag.ConcatJSON(b1, b2), nil
}
```

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```
package api

import (
 "io"
 "strings"
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`
```

```
 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // Whether the license will ignore termination
 IgnoreTermination bool `json:"ignore_termination"`

 // The product the license is valid for
 Product string `json:"product"`

 //
 License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}

type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
```

```
 return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := io.ReadAll(resp.Body)
 if err != nil {
  return "", err
 }

 return string(data), nil
}

//
 LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator)
 LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
```

```
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
```

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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apiVersion: v1
kind: Secret
metadata:
 name: enterprise-logs-license
 namespace: {{ $.Release.Namespace }}
 labels:
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data:
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```
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*/

package minio

import (
 "bytes"
 "context"
 "encoding/xml"
 "fmt"
```

```
 "net/http"
 "net/url"

 "github.com/minio/minio-go/v7/pkg/s3utils"
)

// objectLegalHold - object legal hold specified in
// https://docs.aws.amazon.com/AmazonS3/latest/API/archive-RESTObjectPUTLegalHold.html
type objectLegalHold struct {
 XMLNS   string          `xml:"xmlns,attr,omitempty"`
 XMLName
 xml.Name        `xml:"LegalHold"`
 Status  LegalHoldStatus `xml:"Status,omitempty"`
}

// PutObjectLegalHoldOptions represents options specified by user for PutObjectLegalHold call
type PutObjectLegalHoldOptions struct {
 VersionID string
 Status    *LegalHoldStatus
}

// GetObjectLegalHoldOptions represents options specified by user for GetObjectLegalHold call
type GetObjectLegalHoldOptions struct {
 VersionID string
}

// LegalHoldStatus - object legal hold status.
type LegalHoldStatus string

const (
 // LegalHoldEnabled indicates legal hold is enabled
 LegalHoldEnabled LegalHoldStatus = "ON"

 // LegalHoldDisabled indicates legal hold is disabled
 LegalHoldDisabled LegalHoldStatus = "OFF"
)

func (r LegalHoldStatus) String() string {
 return string(r)
}

// IsValid - check whether this legal hold status is valid or not.
func (r LegalHoldStatus) IsValid() bool {
 return r == LegalHoldEnabled || r == LegalHoldDisabled
}

func newObjectLegalHold(status *LegalHoldStatus)
```

```
(*objectLegalHold, error) {
 if status == nil {
  return nil, fmt.Errorf("Status not set")
 }
 if !status.IsValid() {
  return nil, fmt.Errorf("invalid legal hold status `%v`", status)
 }
 legalHold := &objectLegalHold{
  Status: *status,
 }
 return legalHold, nil
}

// PutObjectLegalHold : sets object legal hold for a given object and versionID.
func (c *Client) PutObjectLegalHold(ctx context.Context, bucketName, objectName string, opts
PutObjectLegalHoldOptions) error {
 // Input validation.
 if err := s3utils.CheckValidBucketName(bucketName); err != nil {
  return err
 }

 if err := s3utils.CheckValidObjectName(objectName); err != nil {
  return err
 }

 // Get resources properly escaped and lined up before
 // using them in http request.
 urlValues := make(url.Values)
 urlValues.Set("legal-hold", "")

 if opts.VersionID != "" {
  urlValues.Set("versionId", opts.VersionID)
 }

 lh, err := newObjectLegalHold(opts.Status)
 if err != nil {
  return err
 }

 lhData, err := xml.Marshal(lh)
 if
 err != nil {
  return err
 }

 reqMetadata := requestMetadata{
  bucketName:       bucketName,
  objectName:       objectName,
```

```
 queryValues:      urlValues,
 contentBody:      bytes.NewReader(lhData),
 contentLength:    int64(len(lhData)),
 contentMD5Base64: sumMD5Base64(lhData),
 contentSHA256Hex: sum256Hex(lhData),
}

// Execute PUT Object Legal Hold.
resp, err := c.executeMethod(ctx, http.MethodPut, reqMetadata)
defer closeResponse(resp)
if err != nil {
 return err
}
if resp != nil {
 if resp.StatusCode != http.StatusOK && resp.StatusCode != http.StatusNoContent {
  return httpRespToErrorResponse(resp, bucketName, objectName)
 }
}
return nil
}

// GetObjectLegalHold gets legal-hold status of given object.
func (c *Client) GetObjectLegalHold(ctx context.Context, bucketName, objectName string, opts
GetObjectLegalHoldOptions) (status *LegalHoldStatus, err error) {
 // Input validation.
 if err := s3utils.CheckValidBucketName(bucketName); err != nil {
  return
 nil, err
 }

 if err := s3utils.CheckValidObjectName(objectName); err != nil {
  return nil, err
 }
 urlValues := make(url.Values)
 urlValues.Set("legal-hold", "")

 if opts.VersionID != "" {
  urlValues.Set("versionId", opts.VersionID)
 }

 // Execute GET on bucket to list objects.
 resp, err := c.executeMethod(ctx, http.MethodGet, requestMetadata{
  bucketName:       bucketName,
  objectName:       objectName,
  queryValues:      urlValues,
  contentSHA256Hex: emptySHA256Hex,
 })
 defer closeResponse(resp)
```

```
 if err != nil {
  return nil, err
 }
 if resp != nil {
  if resp.StatusCode != http.StatusOK {
   return nil, httpRespToErrorResponse(resp, bucketName, objectName)
  }
 }
 lh := &objectLegalHold{}
 if err = xml.NewDecoder(resp.Body).Decode(lh); err != nil {
  return nil, err
 }

 return &lh.Status, nil
}
```

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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL string `json:"url,omitempty"`
}

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import (
 "encoding/json"

 "github.com/go-openapi/swag"
)

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 LicenseProps
 VendorExtensible
}

// LicenseProps holds the properties of a License object
type LicenseProps struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}

// UnmarshalJSON
 hydrates License from json
func (l *License) UnmarshalJSON(data []byte) error {
 if err := json.Unmarshal(data, &l.LicenseProps); err != nil {
```

```
  return err
 }
 return json.Unmarshal(data, &l.VendorExtensible)
}

// MarshalJSON produces License as json
func (l License) MarshalJSON() ([]byte, error) {
 b1, err := json.Marshal(l.LicenseProps)
 if err != nil {
  return nil, err
 }
 b2, err := json.Marshal(l.VendorExtensible)
 if err != nil {
  return nil, err
 }
 return swag.ConcatJSON(b1, b2), nil
}
```

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package api

import (
 "io"
 "strings"
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`

 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`
```

```
 // Whether the license will ignore termination
 IgnoreTermination bool `json:"ignore_termination"`

 // The product the license is valid for
 Product string `json:"product"`

 //
 License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}

type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := io.ReadAll(resp.Body)
 if err != nil {
```

```
 return "", err
 }

 return string(data), nil
}

//
 LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator)
 LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }
```

```
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
```

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```
{{- if and (not .Values.enterprise.useExternalLicense) .Values.enterprise.enabled -}}
apiVersion: v1
kind: Secret
metadata:
 name: enterprise-logs-license
 namespace: {{ $.Release.Namespace }}
 labels:
   {{- include "loki.labels" . | nindent 4 }}
data:
```

license.jwt: {{ .Values.enterprise.license.contents | b64enc }}
{{- end }}
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1.4543 aws-sdk-go 1.44.321

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```
{
 "version": "2.0",
 "service": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances.</p>",
 "operations": {
   "AssociateUser": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p> </note>",
   "DeregisterIdentityProvider": "<p>Deregisters the identity provider from providing user-based subscriptions.</p>",
   "DisassociateUser": "<p>Disassociates the user from an EC2 instance providing user-based subscriptions.</p>",
   "ListIdentityProviders":
 "<p>Lists the identity providers for user-based subscriptions.</p>",
   "ListInstances": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
   "ListProductSubscriptions": "<p>Lists the user-based subscription products available from an identity provider.</p>",
   "ListUserAssociations": "<p>Lists user associations for an identity provider.</p>",
   "RegisterIdentityProvider": "<p>Registers an identity provider for user-based subscriptions.</p>",
   "StartProductSubscription": "<p>Starts a product subscription for a user with the specified identity provider.</p> <note> <p>Your estimated bill for charges on the number of users and related costs will take 48 hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your monthly charges</a> in the <i>Amazon Web
 Services Billing User Guide</i>.</p> </note>",
   "StopProductSubscription": "<p>Stops a product subscription for a user with the specified identity provider.</p>",
   "UpdateIdentityProviderSettings": "<p>Updates additional product configuration settings for the registered identity provider.</p>"
 },
 "shapes": {
   "AccessDeniedException": {
     "base": "<p>You don't have sufficient access to perform this action.</p>",
     "refs": {
     }
   },
```

"ActiveDirectoryIdentityProvider": {
"base": " Details about an Active Directory identity provider. ",
"refs": {
"IdentityProvider$ActiveDirectoryIdentityProvider": " An object that details an Active Directory identity provider. "
}
},
"AssociateUserRequest": {
"base": null,
"refs": {
}
},
"AssociateUserResponse": {
"base": null,
"refs": {
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListIdentityProvidersRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListInstancesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListProductSubscriptionsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUserAssociationsRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"ConflictException": {
"base": " The request couldn't be completed because it conflicted with the current state of the resource. ",
"refs": {
}
},
"DeregisterIdentityProviderRequest": {
"base": null,
"refs": {
}
},
"DeregisterIdentityProviderResponse": {
"base": null,
"refs": {
}
},
"DisassociateUserRequest": {
"base": null,
"refs": {
}
},

"DisassociateUserResponse": {
"base": null,
"refs": {
}
},
"Filter": {
"base": " A
filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
"refs": {
"FilterList$member": null
}
},
"FilterList": {
"base": null,
"refs": {
"ListInstancesRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
"ListProductSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. ",
"ListUserAssociationsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. "
}
},
"IdentityProvider": {
"base": " Details about an identity provider. ",
"refs": {
"AssociateUserRequest$IdentityProvider": " The identity provider of the user. ",
"DeregisterIdentityProviderRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"DisassociateUserRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"IdentityProviderSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"InstanceUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"ListProductSubscriptionsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"ListUserAssociationsRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"ProductUserSummary$IdentityProvider": " An object that specifies details for the identity provider. ",
"RegisterIdentityProviderRequest$IdentityProvider":
" An object that specifies details for the identity provider. ",
"StartProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"StopProductSubscriptionRequest$IdentityProvider": " An object that specifies details for the identity provider. ",
"UpdateIdentityProviderSettingsRequest$IdentityProvider": null
}

},
"IdentityProviderSummary": {
"base": " Describes an identity provider. ",
"refs": {
"DeregisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"IdentityProviderSummaryList$member": null,
"RegisterIdentityProviderResponse$IdentityProviderSummary": " Metadata that describes the results of an identity provider operation. ",
"UpdateIdentityProviderSettingsResponse$IdentityProviderSummary": null

}
},
"IdentityProviderSummaryList": {
"base": null,
"refs": {
"ListIdentityProvidersResponse$IdentityProviderSummaries": " Metadata that describes the list identity providers operation. "
}
},
"InstanceSummary": {
"base": " Describes an EC2 instance providing user-based subscriptions. ",
"refs": {
"InstanceSummaryList$member": null
}
},
"InstanceSummaryList": {
"base": null,
"refs": {
"ListInstancesResponse$InstanceSummaries": " Metadata that describes the list instances operation. "
}
},
"InstanceUserSummary": {
"base": " Describes users of an EC2 instance providing user-based subscriptions. ",
"refs": {
"AssociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",
"DisassociateUserResponse$InstanceUserSummary": " Metadata that describes the associate user operation. ",

"InstanceUserSummaryList$member": null
}
},
"InstanceUserSummaryList": {
"base": null,
"refs": {
"ListUserAssociationsResponse$InstanceUserSummaries": " Metadata that describes the list user association operation. "

```
  }
},
"InternalServerException": {
  "base": "<p>An exception occurred with the service.</p>",
  "refs": {
  }
},
"ListIdentityProvidersRequest": {
  "base": null,
  "refs": {
  }
},
"ListIdentityProvidersResponse": {
  "base": null,
  "refs": {
  }
},
"ListInstancesRequest": {
  "base": null,
  "refs": {
  }
},
"ListInstancesResponse": {
  "base": null,
  "refs": {
  }
},
"ListProductSubscriptionsRequest": {
  "base": null,
  "refs": {
  }
},
"ListProductSubscriptionsResponse": {
  "base": null,
  "refs": {
  }
},
"ListUserAssociationsRequest": {
  "base": null,
  "refs": {
   }
},
"ListUserAssociationsResponse": {
  "base": null,
  "refs": {
  }
},
"ProductUserSummary": {
```

"base": " The summary of the user-based subscription products for a user. ",
"refs": {
"ProductUserSummaryList$member": null,
"StartProductSubscriptionResponse$ProductUserSummary": " Metadata that describes the start product subscription operation. ",
"StopProductSubscriptionResponse$ProductUserSummary": " Metadata that describes the start product subscription operation. "
}
},
"ProductUserSummaryList": {
"base": null,
"refs": {
"ListProductSubscriptionsResponse$ProductUserSummaries": " Metadata that describes the list product subscriptions operation. "
}
},
"RegisterIdentityProviderRequest": {
"base": null,
"refs": {
}
},
"RegisterIdentityProviderResponse": {
"base": null,
"refs": {
}
},
"ResourceNotFoundException":
{
"base": " The resource couldn't be found. ",
"refs": {
}
},
"SecurityGroup": {
"base": null,
"refs": {
"Settings$SecurityGroupId": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoint for activation servers. ",
"UpdateSettings$SecurityGroupId": " A security group ID that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for activation servers. "
}
},
"ServiceQuotaExceededException": {
"base": " The request failed because a service quota is exceeded. ",
"refs": {
}
},
"Settings": {
"base": " The registered identity providers product related configuration settings such as the subnets to

provision VPC endpoints, and the security group ID that is associated with the VPC endpoints. The security group should permit inbound TCP port 1688 communication
from resources in the VPC. ",
    "refs": {
      "IdentityProviderSummary$Settings": " An object that details the registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. ",
      "RegisterIdentityProviderRequest$Settings": " The registered identity providers product related configuration settings such as the subnets to provision VPC endpoints. "
    }
  },
  "SettingsSubnetsList": {
    "base": null,
    "refs": {
      "Settings$Subnets": " The subnets defined for the registered identity provider. "
    }
  },
  "StartProductSubscriptionRequest": {
    "base": null,
    "refs": {
    }
  },
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    "refs": {
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      "ActiveDirectoryIdentityProvider$DirectoryId": " The directory ID for an Active Directory identity provider. ",
      "AssociateUserRequest$Domain": " The domain name of the user. ",
      "AssociateUserRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
      "AssociateUserRequest$Username": " The user name from the identity provider for the user. ",
      "ConflictException$message": null,

"DeregisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
"DisassociateUserRequest$Domain": " The domain name of the user. ",
"DisassociateUserRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"DisassociateUserRequest$Username": " The user name from the identity provider for the user. ",

"Filter$Attribute": " The name of an attribute to use as a filter. ",
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"IdentityProviderSummary$Product": " The name of the user-based subscription product. ",
"IdentityProviderSummary$Status": " The status of an identity provider. ",
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"InstanceSummary$Status": " The status of an EC2 instance resource. ",
"InstanceSummary$StatusMessage": " The status message for an EC2 instance. ",
"InstanceUserSummary$AssociationDate": " The date a user was associated with an EC2 instance. ",
"InstanceUserSummary$DisassociationDate": " The date a user was disassociated from an EC2 instance. ",
"InstanceUserSummary$Domain": " The domain name of the user. ",
"InstanceUserSummary$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"InstanceUserSummary$Status": " The status of a user associated with an EC2 instance. ",
"InstanceUserSummary$StatusMessage": " The status message for users of an EC2 instance. ",
"InstanceUserSummary$Username": " The user name from the identity provider for the user. ",
"InternalServerException$message": null,
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"ListIdentityProvidersResponse$NextToken": " Token for the next set of results. ",
"ListInstancesRequest$NextToken": " Token for the next set of results. ",
"ListInstancesResponse$NextToken": " Token for the next set of results. ",
"ListProductSubscriptionsRequest$NextToken": " Token for the next set of results. ",
"ListProductSubscriptionsRequest$Product": " The name of the user-based subscription product. ",
"ListProductSubscriptionsResponse$NextToken": " Token for the next set of results. ",
"ListUserAssociationsRequest$InstanceId": " The ID of the EC2 instance, which provides user-based subscriptions. ",
"ListUserAssociationsRequest$NextToken": " Token for the next set of results. ",
"ListUserAssociationsResponse$NextToken": " Token for the next set of results. ",
"ProductUserSummary$Domain": " The domain name of the user. ",
"ProductUserSummary$Product": " The name of the user-based subscription product. ",
"ProductUserSummary$Status": " The status of a product for a user. ",
"ProductUserSummary$StatusMessage": " The status message for a product for a user. ",
"ProductUserSummary$SubscriptionEndDate": " The end date of a subscription. ",
"ProductUserSummary$SubscriptionStartDate": " The start date of a subscription. ",

"ProductUserSummary$Username": " The user name from the identity provider of the user. ",
"RegisterIdentityProviderRequest$Product": " The name of the user-based subscription product. ",
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"ServiceQuotaExceededException$message": null,
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"StopProductSubscriptionRequest$Product":
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"StringList$member": null,
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"UpdateIdentityProviderSettingsRequest$Product": " The name of the user-based subscription product. ",
"ValidationException$message": null
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"Subnets$member": null
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"UpdateSettings$RemoveSubnets":
" The ID of one or more subnets to remove. "
}
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"refs": {
}
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"UpdateIdentityProviderSettingsRequest": {
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"refs": {
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"UpdateIdentityProviderSettingsResponse": {
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"refs": {
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"refs": {
"UpdateIdentityProviderSettingsRequest$UpdateSettings": " Updates the registered identity providers product related configuration settings. You can update any combination of settings in a single operation such as the: <ul> Subnets which you want to add to provision VPC endpoints.   Subnets which you want to remove the VPC endpoints
from.   Security group ID which permits traffic to the VPC endpoints. "
}
},
"ValidationException": {
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"required": true,
"default": false,
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"type": "Boolean"
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"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured

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        "type": "Boolean"
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    "type": "error"
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            "argv": [
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        "type": "error"
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                        "headers": {}
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            "type": "error"
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                "type": "error"
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            "type": "endpoint"
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    "type": "error"
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                    "headers": {}
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                "type": "endpoint"
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    }
  ]
}
```


AWS SDK for Go

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     "output_token": "NextToken",
     "limit_key": "MaxResults",
     "result_key": "Instances"
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   "ListLinuxSubscriptions": {
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     "output_token": "NextToken",
     "limit_key": "MaxResults",
     "result_key": "Subscriptions"
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"url": "https://license-manager-user-subscriptions.us-west-2.api.aws"
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},
"params": {

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        "UseDualStack": true
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}
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"params": {
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        "expect": {
            "endpoint": {
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},
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"output":{"shape":"CreateLicenseManagerReportGeneratorResponse"},
"errors":[

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{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
},
"CreateLicenseVersion":{
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"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"CreateLicenseVersionRequest"},
"output":{"shape":"CreateLicenseVersionResponse"},
"errors":[
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{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"},
{"shape":"RedirectException"},
{"shape":"ConflictException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"}
]
},
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"name":"CreateToken",
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"output":{"shape":"CreateTokenResponse"},
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{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"ResourceNotFoundException"},
{"shape":"RedirectException"}
]
},

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  "input":{"shape":"DeleteGrantRequest"},
  "output":{"shape":"DeleteGrantResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"DeleteLicense":{
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  "http":{
    "method":"POST",
    "requestUri":"/"
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  "input":{"shape":"DeleteLicenseRequest"},
  "output":{"shape":"DeleteLicenseResponse"},
  "errors":[
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    {"shape":"InvalidParameterValueException"},
    {"shape":"RedirectException"},
    {"shape":"ConflictException"},

    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"DeleteLicenseConfiguration":{
  "name":"DeleteLicenseConfiguration",
  "http":{
    "method":"POST",
    "requestUri":"/"
  },
  "input":{"shape":"DeleteLicenseConfigurationRequest"},
  "output":{"shape":"DeleteLicenseConfigurationResponse"},
  "errors":[
    {"shape":"InvalidParameterValueException"},

{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
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"name":"DeleteLicenseManagerReportGenerator",
"http":{
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"requestUri":"/"
},
"input":{"shape":"DeleteLicenseManagerReportGeneratorRequest"},
"output":{"shape":"DeleteLicenseManagerReportGeneratorResponse"},
"errors":[
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{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
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"DeleteToken":{
"name":"DeleteToken",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"DeleteTokenRequest"},
"output":{"shape":"DeleteTokenResponse"},
"errors":[
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{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"ResourceNotFoundException"},
{"shape":"RedirectException"}
]
},
"ExtendLicenseConsumption":{
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"http":{
"method":"POST",
"requestUri":"/"

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"input":{"shape":"ExtendLicenseConsumptionRequest"},
"output":{"shape":"ExtendLicenseConsumptionResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"ResourceNotFoundException"}
]
},
"GetAccessToken":{
"name":"GetAccessToken",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetAccessTokenRequest"},
"output":{"shape":"GetAccessTokenResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},

{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"GetGrant":{
"name":"GetGrant",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetGrantRequest"},
"output":{"shape":"GetGrantResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},

"GetLicense":{
"name":"GetLicense",
"http":{
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"output":{"shape":"GetLicenseResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
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"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetLicenseConfigurationRequest"},
"output":{"shape":"GetLicenseConfigurationResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"GetLicenseConversionTask":{
"name":"GetLicenseConversionTask",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetLicenseConversionTaskRequest"},
"output":{"shape":"GetLicenseConversionTaskResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]

},
"GetLicenseManagerReportGenerator":{
"name":"GetLicenseManagerReportGenerator",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetLicenseManagerReportGeneratorRequest"},
"output":{"shape":"GetLicenseManagerReportGeneratorResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
},
"GetLicenseUsage":{
"name":"GetLicenseUsage",
"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"GetLicenseUsageRequest"},
"output":{"shape":"GetLicenseUsageResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"GetServiceSettings":{
"name":"GetServiceSettings",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"GetServiceSettingsRequest"},
"output":{"shape":"GetServiceSettingsResponse"},
"errors":[
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},

{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListAssociationsForLicenseConfiguration":{
"name":"ListAssociationsForLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListAssociationsForLicenseConfigurationRequest"},
"output":{"shape":"ListAssociationsForLicenseConfigurationResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"FilterLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListDistributedGrants":{
"name":"ListDistributedGrants",
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},
"input":{"shape":"ListDistributedGrantsRequest"},
"output":{"shape":"ListDistributedGrantsResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListFailuresForLicenseConfigurationOperations":{
"name":"ListFailuresForLicenseConfigurationOperations",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListFailuresForLicenseConfigurationOperationsRequest"},
"output":{"shape":"ListFailuresForLicenseConfigurationOperationsResponse"},
"errors":[

{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListLicenseConfigurations":{
"name":"ListLicenseConfigurations",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseConfigurationsRequest"},
"output":{"shape":"ListLicenseConfigurationsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"FilterLimitExceededException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListLicenseConversionTasks":{
"name":"ListLicenseConversionTasks",
"http":{
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"requestUri":"/"
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"output":{"shape":"ListLicenseConversionTasksResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListLicenseManagerReportGenerators":{
"name":"ListLicenseManagerReportGenerators",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseManagerReportGeneratorsRequest"},
"output":{"shape":"ListLicenseManagerReportGeneratorsResponse"},

"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"RateLimitExceededException"},
{"shape":"AccessDeniedException"},
{"shape":"ResourceNotFoundException"}
]
},
"ListLicenseSpecificationsForResource":{
"name":"ListLicenseSpecificationsForResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseSpecificationsForResourceRequest"},
"output":{"shape":"ListLicenseSpecificationsForResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListLicenseVersions":{
"name":"ListLicenseVersions",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListLicenseVersionsRequest"},
"output":{"shape":"ListLicenseVersionsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"ListLicenses":{
"name":"ListLicenses",
"http":{
"method":"POST",
"requestUri":"/"

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  },
  "input":{"shape":"ListLicensesRequest"},
  "output":{"shape":"ListLicensesResponse"},
  "errors":[
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    {"shape":"InvalidParameterValueException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"}
  ]
},
"ListReceivedGrants":{
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  "http":{
    "method":"POST",
    "requestUri":"/"
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  "input":{"shape":"ListReceivedGrantsRequest"},
  "output":{"shape":"ListReceivedGrantsResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"ListReceivedGrantsForOrganization":{
  "name":"ListReceivedGrantsForOrganization",
  "http":{
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    "requestUri":"/"
   },
  "input":{"shape":"ListReceivedGrantsForOrganizationRequest"},
  "output":{"shape":"ListReceivedGrantsForOrganizationResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"ResourceLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
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},
"ListReceivedLicenses":{
 "name":"ListReceivedLicenses",
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  "requestUri":"/"
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 "output":{"shape":"ListReceivedLicensesResponse"},
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  {"shape":"InvalidParameterValueException"},
  {"shape":"ResourceLimitExceededException"},
  {"shape":"ServerInternalException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"}
 ]
},
"ListReceivedLicensesForOrganization":{
 "name":"ListReceivedLicensesForOrganization",
 "http":{
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  "requestUri":"/"
 },
 "input":{"shape":"ListReceivedLicensesForOrganizationRequest"},
 "output":{"shape":"ListReceivedLicensesForOrganizationResponse"},
 "errors":[
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  {"shape":"InvalidParameterValueException"},
  {"shape":"ResourceLimitExceededException"},
  {"shape":"ServerInternalException"},
  {"shape":"AuthorizationException"},
  {"shape":"AccessDeniedException"},
  {"shape":"RateLimitExceededException"}
 ]
},
"ListResourceInventory":{
 "name":"ListResourceInventory",
 "http":{
  "method":"POST",
  "requestUri":"/"
 },
 "input":{"shape":"ListResourceInventoryRequest"},
 "output":{"shape":"ListResourceInventoryResponse"},
 "errors":[
  {"shape":"InvalidParameterValueException"},
  {"shape":"ServerInternalException"},

{"shape":"FilterLimitExceededException"},
{"shape":"FailedDependencyException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListTagsForResource":{
"name":"ListTagsForResource",
"http":{
"method":"POST",
"requestUri":"/"
},
"input":{"shape":"ListTagsForResourceRequest"},
"output":{"shape":"ListTagsForResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"ListTokens":{
"name":"ListTokens",
"http":{
"method":"POST",

"requestUri":"/"
},
"input":{"shape":"ListTokensRequest"},
"output":{"shape":"ListTokensResponse"},
"errors":[
{"shape":"ValidationException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"ListUsageForLicenseConfiguration":{
"name":"ListUsageForLicenseConfiguration",
"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"ListUsageForLicenseConfigurationRequest"},
"output":{"shape":"ListUsageForLicenseConfigurationResponse"},

"errors":[
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{"shape":"FilterLimitExceededException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"RejectGrant":{
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"output":{"shape":"RejectGrantResponse"},
"errors":[
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{"shape":"InvalidParameterValueException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"},
{"shape":"ResourceLimitExceededException"},
{"shape":"ServerInternalException"}
]
},
"TagResource":{
"name":"TagResource",
"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"TagResourceRequest"},
"output":{"shape":"TagResourceResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"UntagResource":{
"name":"UntagResource",
"http":{
"method":"POST",
"requestUri":"/"

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  },
  "input":{"shape":"UntagResourceRequest"},
  "output":{"shape":"UntagResourceResponse"},
  "errors":[
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    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"RateLimitExceededException"}
  ]
},
"UpdateLicenseConfiguration":{
  "name":"UpdateLicenseConfiguration",
  "http":{
    "method":"POST",
    "requestUri":"/"
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  "input":{"shape":"UpdateLicenseConfigurationRequest"},
  "output":{"shape":"UpdateLicenseConfigurationResponse"},
  "errors":[
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    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
     {"shape":"RateLimitExceededException"},
    {"shape":"ResourceLimitExceededException"}
  ]
},
"UpdateLicenseManagerReportGenerator":{
  "name":"UpdateLicenseManagerReportGenerator",
  "http":{
    "method":"POST",
    "requestUri":"/"
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  "input":{"shape":"UpdateLicenseManagerReportGeneratorRequest"},
  "output":{"shape":"UpdateLicenseManagerReportGeneratorResponse"},
  "errors":[
    {"shape":"ValidationException"},
    {"shape":"InvalidParameterValueException"},
    {"shape":"RateLimitExceededException"},
    {"shape":"ServerInternalException"},
    {"shape":"AuthorizationException"},
    {"shape":"AccessDeniedException"},
    {"shape":"ResourceNotFoundException"},
    {"shape":"ResourceLimitExceededException"}
  ]
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"UpdateLicenseSpecificationsForResource":{
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"method":"POST",
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"output":{"shape":"UpdateLicenseSpecificationsForResourceResponse"},
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{"shape":"InvalidResourceStateException"},
{"shape":"LicenseUsageException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
},
"UpdateServiceSettings":{
"name":"UpdateServiceSettings",
"http":{
"method":"POST",
"requestUri":"/"
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"input":{"shape":"UpdateServiceSettingsRequest"},
"output":{"shape":"UpdateServiceSettingsResponse"},
"errors":[
{"shape":"InvalidParameterValueException"},
{"shape":"ServerInternalException"},
{"shape":"AuthorizationException"},
{"shape":"AccessDeniedException"},
{"shape":"RateLimitExceededException"}
]
}
},
"shapes":{
"AcceptGrantRequest":{
"type":"structure",
"required":["GrantArn"],
"members":{
"GrantArn":{"shape":"Arn"}
}
},
"AcceptGrantResponse":{
"type":"structure",
"members":{
"GrantArn":{"shape":"Arn"},
"Status":{"shape":"GrantStatus"},

"Version":{"shape":"String"}
}
},
"AccessDeniedException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"ActivationOverrideBehavior":{
"type":"string",
"enum":[
"DISTRIBUTED_GRANTS_ONLY",
"ALL_GRANTS_PERMITTED_BY_ISSUER"
]
},
"AllowedOperation":{
"type":"string",
"enum":[
"CreateGrant",
"CheckoutLicense",
"CheckoutBorrowLicense",
"CheckInLicense",
"ExtendConsumptionLicense",
"ListPurchasedLicenses",
"CreateToken"
]
},
"AllowedOperationList":{
"type":"list",
"member":{"shape":"AllowedOperation"},
"max":7,
"min":1
},
"Arn":{
"type":"string",
"max":2048,
"pattern":"^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
},
"ArnList":{
"type":"list",
"member":{"shape":"Arn"}
},
"AuthorizationException":{
"type":"structure",
"members":{

"Message":{"shape":"Message"}
},
"exception":true
},
"AutomatedDiscoveryInformation":{
"type":"structure",
"members":{
"LastRunTime":{"shape":"DateTime"}
}
},
"Boolean":{"type":"boolean"},
"BorrowConfiguration":{
"type":"structure",
"required":[
"AllowEarlyCheckIn",
"MaxTimeToLiveInMinutes"
],
"members":{
"AllowEarlyCheckIn":{"shape":"BoxBoolean"},
"MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
}
},
"BoxBoolean":{"type":"boolean"},
"BoxInteger":{"type":"integer"},
"BoxLong":{"type":"long"},
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"required":["LicenseConsumptionToken"],
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"LicenseConsumptionToken":{"shape":"String"},
"Beneficiary":{"shape":"String"}
}
},
"CheckInLicenseResponse":{
"type":"structure",
"members":{
}
},
"CheckoutBorrowLicenseRequest":{
"type":"structure",
"required":[
"LicenseArn",
"Entitlements",
"DigitalSignatureMethod",
"ClientToken"
],
"members":{
"LicenseArn":{"shape":"Arn"},

"Entitlements":{"shape":"EntitlementDataList"},
"DigitalSignatureMethod":{"shape":"DigitalSignatureMethod"},
"NodeId":{"shape":"String"},
"CheckoutMetadata":{"shape":"MetadataList"},
"ClientToken":{"shape":"ClientToken"}
}
},

"CheckoutBorrowLicenseResponse":{
"type":"structure",
"members":{
"LicenseArn":{"shape":"Arn"},
"LicenseConsumptionToken":{"shape":"String"},
"EntitlementsAllowed":{"shape":"EntitlementDataList"},
"NodeId":{"shape":"String"},
"SignedToken":{"shape":"SignedToken"},
"IssuedAt":{"shape":"ISO8601DateTime"},
"Expiration":{"shape":"ISO8601DateTime"},
"CheckoutMetadata":{"shape":"MetadataList"}
}
},
"CheckoutLicenseRequest":{
"type":"structure",
"required":[
"ProductSKU",
"CheckoutType",
"KeyFingerprint",
"Entitlements",
"ClientToken"
],
"members":{
"ProductSKU":{"shape":"String"},
"CheckoutType":{"shape":"CheckoutType"},
"KeyFingerprint":{"shape":"String"},
"Entitlements":{"shape":"EntitlementDataList"},
"ClientToken":{"shape":"ClientToken"},
"Beneficiary":{"shape":"String"},
"NodeId":{"shape":"String"}
}
},
"CheckoutLicenseResponse":{
"type":"structure",
"members":{
"CheckoutType":{"shape":"CheckoutType"},
"LicenseConsumptionToken":{"shape":"String"},
"EntitlementsAllowed":{"shape":"EntitlementDataList"},
"SignedToken":{"shape":"SignedToken"},
"NodeId":{"shape":"String"},

"IssuedAt":{"shape":"ISO8601DateTime"},
"Expiration":{"shape":"ISO8601DateTime"},
"LicenseArn":{"shape":"String"}
}
},
"CheckoutType":{
"type":"string",
"enum":[
"PROVISIONAL",
"PERPETUAL"
]
},
"ClientRequestToken":{
"type":"string",
"max":36,
"min":1
},
"ClientToken":{
"type":"string",
"max":2048,
"pattern":"\\S+"
},
"ConflictException":{
"type":"structure",
"members":{
"Message":{"shape":"Message"}
},
"exception":true
},
"ConsumedLicenseSummary":{
"type":"structure",
"members":{
"ResourceType":{"shape":"ResourceType"},
"ConsumedLicenses":{"shape":"BoxLong"}
}
},
"ConsumedLicenseSummaryList":{
"type":"list",
"member":{"shape":"ConsumedLicenseSummary"}
},
"ConsumptionConfiguration":{
"type":"structure",
"members":{
"RenewType":{"shape":"RenewType"},
"ProvisionalConfiguration":{"shape":"ProvisionalConfiguration"},
"BorrowConfiguration":{"shape":"BorrowConfiguration"}
}
},

"CreateGrantRequest":{
  "type":"structure",
  "required":[
    "ClientToken",
    "GrantName",
    "LicenseArn",
    "Principals",
    "HomeRegion",
    "AllowedOperations"
  ],
  "members":{
    "ClientToken":{"shape":"ClientToken"},
    "GrantName":{"shape":"String"},
    "LicenseArn":{"shape":"Arn"},
    "Principals":{"shape":"PrincipalArnList"},
    "HomeRegion":{"shape":"String"},
    "AllowedOperations":{"shape":"AllowedOperationList"}
   }
},
"CreateGrantResponse":{
  "type":"structure",
  "members":{
    "GrantArn":{"shape":"Arn"},
    "Status":{"shape":"GrantStatus"},
    "Version":{"shape":"String"}
  }
},
"CreateGrantVersionRequest":{
  "type":"structure",
  "required":[
    "ClientToken",
    "GrantArn"
  ],
  "members":{
    "ClientToken":{"shape":"ClientToken"},
    "GrantArn":{"shape":"Arn"},
    "GrantName":{"shape":"String"},
    "AllowedOperations":{"shape":"AllowedOperationList"},
    "Status":{"shape":"GrantStatus"},
    "StatusReason":{"shape":"StatusReasonMessage"},
    "SourceVersion":{"shape":"String"},
    "Options":{"shape":"Options"}
  }
},
"CreateGrantVersionResponse":{
  "type":"structure",
  "members":{
    "GrantArn":{"shape":"Arn"},

"Status":{"shape":"GrantStatus"},
"Version":{"shape":"String"}
}
},
"CreateLicenseConfigurationRequest":{
"type":"structure",
"required":[
"Name",
"LicenseCountingType"
],
"members":{
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"LicenseCountingType":{"shape":"LicenseCountingType"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},
"LicenseRules":{"shape":"StringList"},
"Tags":{"shape":"TagList"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"},
"ProductInformationList":{"shape":"ProductInformationList"}
}
},
"CreateLicenseConfigurationResponse":{
"type":"structure",
"members":{
"LicenseConfigurationArn":{"shape":"String"}
}
},
"CreateLicenseConversionTaskForResourceRequest":{
"type":"structure",
"required":[
"ResourceArn",
"SourceLicenseContext",
"DestinationLicenseContext"
],
"members":{
"ResourceArn":{"shape":"Arn"},
"SourceLicenseContext":{"shape":"LicenseConversionContext"},
"DestinationLicenseContext":{"shape":"LicenseConversionContext"}
}
},
"CreateLicenseConversionTaskForResourceResponse":{
"type":"structure",
"members":{
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"ReportGeneratorName",
"Type",
"ReportContext",
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"ClientToken"
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"Type":{"shape":"ReportTypeList"},
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"ReportFrequency":{"shape":"ReportFrequency"},
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"Tags":{"shape":"TagList"}
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"ProductName",
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"Issuer",
"HomeRegion",
"Validity",
"Entitlements",
"Beneficiary",
"ConsumptionConfiguration",
"ClientToken"
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"ProductSKU":{"shape":"String"},
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"HomeRegion":{"shape":"String"},
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"LicenseMetadata":{"shape":"MetadataList"},
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"ProductName",
"Issuer",
"HomeRegion",
"Validity",
"Entitlements",
"ConsumptionConfiguration",
"Status",
"ClientToken"
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"ProductName":{"shape":"String"},
"Issuer":{"shape":"Issuer"},
"HomeRegion":{"shape":"String"},
"Validity":{"shape":"DatetimeRange"},
"LicenseMetadata":{"shape":"MetadataList"},
"Entitlements":{"shape":"EntitlementList"},
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"Version":{"shape":"String"},
"Status":{"shape":"LicenseStatus"}

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      "ClientToken"
    ],
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      "RoleArns":{"shape":"ArnList"},
      "ExpirationInDays":{"shape":"Integer"},
      "TokenProperties":{"shape":"MaxSize3StringList"},
      "ClientToken":{"shape":"ClientToken"}
    }
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      "Version"
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      "Version":{"shape":"String"}
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  },
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"Version":{"shape":"String"}
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"SourceVersion":{"shape":"String"}
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    "Unit"
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    "Value":{"shape":"String"},
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    "Unit":{"shape":"EntitlementUnit"},
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    "Milliseconds",
    "Bytes",
    "Kilobytes",

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    "Terabytes",
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    "Count/Second"
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"Count/Second"
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"Version":{"shape":"String"}
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"GetGrantResponse":{
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"members":{
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"GetLicenseConfigurationResponse":{
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"LicenseConfigurationArn":{"shape":"String"},
"Name":{"shape":"String"},
"Description":{"shape":"String"},
"LicenseCountingType":{"shape":"LicenseCountingType"},
"LicenseRules":{"shape":"StringList"},
"LicenseCount":{"shape":"BoxLong"},
"LicenseCountHardLimit":{"shape":"BoxBoolean"},

"ConsumedLicenses":{"shape":"BoxLong"},
"Status":{"shape":"String"},
"OwnerAccountId":{"shape":"String"},
"ConsumedLicenseSummaryList":{"shape":"ConsumedLicenseSummaryList"},
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"Tags":{"shape":"TagList"},
"ProductInformationList":{"shape":"ProductInformationList"},
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"DestinationLicenseContext":{"shape":"LicenseConversionContext"},
"StatusMessage":{"shape":"String"},
"Status":{"shape":"LicenseConversionTaskStatus"},
"StartTime":{"shape":"DateTime"},
"LicenseConversionTime":{"shape":"DateTime"},
"EndTime":{"shape":"DateTime"}
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"SnsTopicArn":{"shape":"String"},
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"LicenseManagerResourceShareArn":{"shape":"String"}
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"LicenseArn",
"GranteePrincipalArn",
"HomeRegion",

"GrantStatus",
"Version",
"GrantedOperations"
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"ParentArn":{"shape":"Arn"},
"LicenseArn":{"shape":"Arn"},
"GranteePrincipalArn":{"shape":"Arn"},
"HomeRegion":{"shape":"String"},
"GrantStatus":{"shape":"GrantStatus"},
"StatusReason":{"shape":"StatusReasonMessage"},
"Version":{"shape":"String"},
"GrantedOperations":{"shape":"AllowedOperationList"},
"Options":{"shape":"Options"}
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"PENDING_ACCEPT",
"REJECTED",
"ACTIVE",
"FAILED_WORKFLOW",
"DELETED",
"PENDING_DELETE",
"DISABLED",
"WORKFLOW_COMPLETED"
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"ProductSKU":{"shape":"String"},
"Issuer":{"shape":"IssuerDetails"},
"HomeRegion":{"shape":"String"},
"Status":{"shape":"LicenseStatus"},
"Validity":{"shape":"DatetimeRange"},
"Beneficiary":{"shape":"String"},

"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},

"LicenseMetadata":{"shape":"MetadataList"},
"CreateTime":{"shape":"ISO8601DateTime"},
"Version":{"shape":"String"},
"ReceivedMetadata":{"shape":"ReceivedMetadata"}
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"ProductSKU":{"shape":"String"},
"Issuer":{"shape":"IssuerDetails"},
"HomeRegion":{"shape":"String"},
"Status":{"shape":"LicenseStatus"},
"Validity":{"shape":"DatetimeRange"},
"Beneficiary":{"shape":"String"},
"Entitlements":{"shape":"EntitlementList"},
"ConsumptionConfiguration":{"shape":"ConsumptionConfiguration"},
"LicenseMetadata":{"shape":"MetadataList"},
"CreateTime":{"shape":"ISO8601DateTime"},
"Version":{"shape":"String"}
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    "Name":{"shape":"String"},
    "Description":{"shape":"String"},
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    "LicenseRules":{"shape":"StringList"},
    "LicenseCount":{"shape":"BoxLong"},
    "LicenseCountHardLimit":{"shape":"BoxBoolean"},
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    "ConsumedLicenses":{"shape":"BoxLong"},
    "Status":{"shape":"String"},
    "OwnerAccountId":{"shape":"String"},
    "ConsumedLicenseSummaryList":{"shape":"ConsumedLicenseSummaryList"},
    "ManagedResourceSummaryList":{"shape":"ManagedResourceSummaryList"},
    "ProductInformationList":{"shape":"ProductInformationList"},
    "AutomatedDiscoveryInformation":{"shape":"AutomatedDiscoveryInformation"}
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    "AmiAssociationScope":{"shape":"String"}
  }
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  "member":{"shape":"LicenseConfigurationAssociation"}
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    "DISABLED"
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"members":{
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"ResourceArn":{"shape":"String"},
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"DestinationLicenseContext":{"shape":"LicenseConversionContext"},
"Status":{"shape":"LicenseConversionTaskStatus"},
"StatusMessage":{"shape":"String"},
"StartTime":{"shape":"DateTime"},
"LicenseConversionTime":{"shape":"DateTime"},
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"SUCCEEDED",
"FAILED"
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},
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  "member":{"shape":"LicenseConversionTask"}
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    "Instance",
    "Core",
    "Socket"
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"LicenseDeletionStatus":{
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  "enum":[
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    "DELETED"
  ]
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    "ResourceType":{"shape":"ResourceType"},
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    "FailureTime":{"shape":"DateTime"},
    "OperationName":{"shape":"String"},
    "ResourceOwnerId":{"shape":"String"},
    "OperationRequestedBy":{"shape":"String"},
    "MetadataList":{"shape":"MetadataList"}
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"LicenseOperationFailureList":{
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  "member":{"shape":"LicenseOperationFailure"}
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"LicenseSpecification":{
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  "members":{
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"PENDING_AVAILABLE",
"DEACTIVATED",
"SUSPENDED",
"EXPIRED",
"PENDING_DELETE",
"DELETED"
]
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"LicenseUsage":{
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"members":{
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"members":{
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"NextToken":{"shape":"String"}
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"ListAssociationsForLicenseConfigurationResponse":{
"type":"structure",
"members":{
"LicenseConfigurationAssociations":{"shape":"LicenseConfigurationAssociations"},
"NextToken":{"shape":"String"}
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"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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"ListDistributedGrantsResponse":{
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"NextToken":{"shape":"String"}
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"ListFailuresForLicenseConfigurationOperationsResponse":{
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"Filters":{"shape":"Filters"}
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"ListLicenseConversionTasksResponse":{
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"NextToken":{"shape":"String"}
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"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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"ListLicenseManagerReportGeneratorsResponse":{
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"NextToken":{"shape":"String"}
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"NextToken":{"shape":"String"}
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"NextToken":{"shape":"String"},
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"NextToken":{"shape":"String"}
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"MaxResults":{"shape":"MaxSize100"}
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"NextToken":{"shape":"String"}
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"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
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"NextToken":{"shape":"String"}
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"NextToken":{"shape":"String"},
"Filters":{"shape":"InventoryFilterList"}
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"ListResourceInventoryResponse":{
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"ResourceInventoryList":{"shape":"ResourceInventoryList"},
"NextToken":{"shape":"String"}
}
},
"ListTagsForResourceRequest":{
"type":"structure",
"required":["ResourceArn"],
"members":{
"ResourceArn":{"shape":"String"}
}
},
"ListTagsForResourceResponse":{
"type":"structure",
"members":{
"Tags":{"shape":"TagList"}
}
},
"ListTokensRequest":{
"type":"structure",
"members":{
"TokenIds":{"shape":"StringList"},
"Filters":{"shape":"FilterList"},
"NextToken":{"shape":"String"},
"MaxResults":{"shape":"MaxSize100"}
}
},
"ListTokensResponse":{
"type":"structure",
"members":{
"Tokens":{"shape":"TokenList"},
"NextToken":{"shape":"String"}
}
},
"ListUsageForLicenseConfigurationRequest":{
"type":"structure",
"required":["LicenseConfigurationArn"],
"members":{
"LicenseConfigurationArn":{"shape":"String"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"String"},
"Filters":{"shape":"Filters"}

```
  }
},
"ListUsageForLicenseConfigurationResponse":{
  "type":"structure",
  "members":{
    "LicenseConfigurationUsageList":{"shape":"LicenseConfigurationUsageList"},
    "NextToken":{"shape":"String"}
  }
},
"Location":{"type":"string"},
"Long":{"type":"long"},
"ManagedResourceSummary":{
  "type":"structure",
  "members":{
    "ResourceType":{"shape":"ResourceType"},
    "AssociationCount":{"shape":"BoxLong"}
  }
},
"ManagedResourceSummaryList":{
  "type":"list",
  "member":{"shape":"ManagedResourceSummary"}
},
"MaxSize100":{
  "type":"integer",
  "max":100,
  "min":1
},
"MaxSize3StringList":{
  "type":"list",
  "member":{"shape":"String"},
  "max":3
},
"Message":{"type":"string"},
"Metadata":{
  "type":"structure",
   "members":{
    "Name":{"shape":"String"},
    "Value":{"shape":"String"}
  }
},
"MetadataList":{
  "type":"list",
  "member":{"shape":"Metadata"}
},
"NoEntitlementsAllowedException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
```

```
  },
  "exception":true
},
"Options":{
  "type":"structure",
  "members":{
    "ActivationOverrideBehavior":{"shape":"ActivationOverrideBehavior"}
  }
},
"OrganizationConfiguration":{
  "type":"structure",
  "required":["EnableIntegration"],
  "members":{
    "EnableIntegration":{"shape":"Boolean"}
  }
},
"PrincipalArnList":{
  "type":"list",
  "member":{"shape":"Arn"},
  "max":1,
  "min":1
},
"ProductInformation":{
  "type":"structure",
  "required":[
    "ResourceType",
    "ProductInformationFilterList"
  ],
  "members":{
    "ResourceType":{"shape":"String"},
     "ProductInformationFilterList":{"shape":"ProductInformationFilterList"}
  }
},
"ProductInformationFilter":{
  "type":"structure",
  "required":[
    "ProductInformationFilterName",
    "ProductInformationFilterComparator"
  ],
  "members":{
    "ProductInformationFilterName":{"shape":"String"},
    "ProductInformationFilterValue":{"shape":"StringList"},
    "ProductInformationFilterComparator":{"shape":"String"}
  }
},
"ProductInformationFilterList":{
  "type":"list",
  "member":{"shape":"ProductInformationFilter"}
```

},
"ProductInformationList":{
  "type":"list",
  "member":{"shape":"ProductInformation"}
},
"ProvisionalConfiguration":{
  "type":"structure",
  "required":["MaxTimeToLiveInMinutes"],
  "members":{
    "MaxTimeToLiveInMinutes":{"shape":"BoxInteger"}
  }
},
"RateLimitExceededException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
   },
  "exception":true
},
"ReceivedMetadata":{
  "type":"structure",
  "members":{
    "ReceivedStatus":{"shape":"ReceivedStatus"},
    "ReceivedStatusReason":{"shape":"StatusReasonMessage"},
    "AllowedOperations":{"shape":"AllowedOperationList"}
  }
},
"ReceivedStatus":{
  "type":"string",
  "enum":[
    "PENDING_WORKFLOW",
    "PENDING_ACCEPT",
    "REJECTED",
    "ACTIVE",
    "FAILED_WORKFLOW",
    "DELETED",
    "DISABLED",
    "WORKFLOW_COMPLETED"
  ]
},
"RedirectException":{
  "type":"structure",
  "members":{
    "Location":{"shape":"Location"},
    "Message":{"shape":"Message"}
  },
  "exception":true
},

"RejectGrantRequest":{
  "type":"structure",
  "required":["GrantArn"],
  "members":{
    "GrantArn":{"shape":"Arn"}
  }
},
"RejectGrantResponse":{
  "type":"structure",
  "members":{
     "GrantArn":{"shape":"Arn"},
    "Status":{"shape":"GrantStatus"},
    "Version":{"shape":"String"}
  }
},
"RenewType":{
  "type":"string",
  "enum":[
    "None",
    "Weekly",
    "Monthly"
  ]
},
"ReportContext":{
  "type":"structure",
  "required":["licenseConfigurationArns"],
  "members":{
    "licenseConfigurationArns":{"shape":"ArnList"}
  }
},
"ReportFrequency":{
  "type":"structure",
  "members":{
    "value":{"shape":"Integer"},
    "period":{"shape":"ReportFrequencyType"}
  }
},
"ReportFrequencyType":{
  "type":"string",
  "enum":[
    "DAY",
    "WEEK",
    "MONTH"
  ]
},
"ReportGenerator":{
  "type":"structure",
  "members":{

"ReportGeneratorName":{"shape":"String"},
"ReportType":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"LicenseManagerReportGeneratorArn":{"shape":"String"},
"LastRunStatus":{"shape":"String"},
"LastRunFailureReason":{"shape":"String"},
"LastReportGenerationTime":{"shape":"String"},
"ReportCreatorAccount":{"shape":"String"},
"Description":{"shape":"String"},
"S3Location":{"shape":"S3Location"},
"CreateTime":{"shape":"String"},
"Tags":{"shape":"TagList"}
}
},
"ReportGeneratorList":{
"type":"list",
"member":{"shape":"ReportGenerator"}
},
"ReportGeneratorName":{
"type":"string",
"max":100,
"min":1
},
"ReportType":{
"type":"string",
"enum":[
"LicenseConfigurationSummaryReport",
"LicenseConfigurationUsageReport"
]
},
"ReportTypeList":{
"type":"list",
"member":{"shape":"ReportType"}
},
"ResourceInventory":{
"type":"structure",
"members":{
"ResourceId":{"shape":"String"},
"ResourceType":{"shape":"ResourceType"},
"ResourceArn":{"shape":"String"},
"Platform":{"shape":"String"},
"PlatformVersion":{"shape":"String"},
"ResourceOwningAccountId":{"shape":"String"}
}
},
"ResourceInventoryList":{
"type":"list",

```
  "member":{"shape":"ResourceInventory"}
},
"ResourceLimitExceededException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ResourceNotFoundException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"ResourceType":{
  "type":"string",
  "enum":[
    "EC2_INSTANCE",
    "EC2_HOST",
    "EC2_AMI",
    "RDS",
    "SYSTEMS_MANAGER_MANAGED_INSTANCE"
  ]
},
"S3Location":{
  "type":"structure",
  "members":{
    "bucket":{"shape":"String"},
    "keyPrefix":{"shape":"String"}

}
},
"ServerInternalException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true,
  "fault":true
},
"SignedToken":{
  "type":"string",
  "min":4096
},
"StatusReasonMessage":{
  "type":"string",
```

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  "max":400,
  "pattern":"[\\s\\S]+"
},
"String":{"type":"string"},
"StringList":{
  "type":"list",
  "member":{"shape":"String"}
},
"Tag":{
  "type":"structure",
  "members":{
    "Key":{"shape":"String"},
    "Value":{"shape":"String"}
  }
},
"TagKeyList":{
  "type":"list",
  "member":{"shape":"String"}
},
"TagList":{
  "type":"list",
  "member":{"shape":"Tag"}
},
"TagResourceRequest":{
  "type":"structure",
  "required":[
    "ResourceArn",
    "Tags"
  ],
  "members":{
    "ResourceArn":{"shape":"String"},
    "Tags":{"shape":"TagList"}
  }
},
"TagResourceResponse":{
   "type":"structure",
  "members":{
  }
},
"TokenData":{
  "type":"structure",
  "members":{
    "TokenId":{"shape":"String"},
    "TokenType":{"shape":"String"},
    "LicenseArn":{"shape":"String"},
    "ExpirationTime":{"shape":"ISO8601DateTime"},
    "TokenProperties":{"shape":"MaxSize3StringList"},
    "RoleArns":{"shape":"ArnList"},
```

```
    "Status":{"shape":"String"}
  }
},
"TokenList":{
  "type":"list",
  "member":{"shape":"TokenData"}
},
"TokenString":{
  "type":"string",
  "max":4096,
  "pattern":"\\S+"
},
"TokenType":{
  "type":"string",
  "enum":["REFRESH_TOKEN"]
},
"UnsupportedDigitalSignatureMethodException":{
  "type":"structure",
  "members":{
    "Message":{"shape":"Message"}
  },
  "exception":true
},
"UntagResourceRequest":{
  "type":"structure",
  "required":[
    "ResourceArn",
    "TagKeys"
   ],
  "members":{
    "ResourceArn":{"shape":"String"},
    "TagKeys":{"shape":"TagKeyList"}
  }
},
"UntagResourceResponse":{
  "type":"structure",
  "members":{
  }
},
"UpdateLicenseConfigurationRequest":{
  "type":"structure",
  "required":["LicenseConfigurationArn"],
  "members":{
    "LicenseConfigurationArn":{"shape":"String"},
    "LicenseConfigurationStatus":{"shape":"LicenseConfigurationStatus"},
    "LicenseRules":{"shape":"StringList"},
    "LicenseCount":{"shape":"BoxLong"},
    "LicenseCountHardLimit":{"shape":"BoxBoolean"},
```

"Name":{"shape":"String"},
"Description":{"shape":"String"},
"ProductInformationList":{"shape":"ProductInformationList"},
"DisassociateWhenNotFound":{"shape":"BoxBoolean"}
}
},
"UpdateLicenseConfigurationResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseManagerReportGeneratorRequest":{
"type":"structure",
"required":[
"LicenseManagerReportGeneratorArn",
"ReportGeneratorName",
"Type",
"ReportContext",
"ReportFrequency",
"ClientToken"
],
"members":{
"LicenseManagerReportGeneratorArn":{"shape":"String"},
"ReportGeneratorName":{"shape":"ReportGeneratorName"},
"Type":{"shape":"ReportTypeList"},
"ReportContext":{"shape":"ReportContext"},
"ReportFrequency":{"shape":"ReportFrequency"},
"ClientToken":{"shape":"ClientRequestToken"},
"Description":{"shape":"String"}
}
},
"UpdateLicenseManagerReportGeneratorResponse":{
"type":"structure",
"members":{
}
},
"UpdateLicenseSpecificationsForResourceRequest":{
"type":"structure",
"required":["ResourceArn"],
"members":{
"ResourceArn":{"shape":"String"},
"AddLicenseSpecifications":{"shape":"LicenseSpecifications"},
"RemoveLicenseSpecifications":{"shape":"LicenseSpecifications"}
}
},
"UpdateLicenseSpecificationsForResourceResponse":{
"type":"structure",
"members":{

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      }
    },
    "UpdateServiceSettingsRequest":{
      "type":"structure",
      "members":{
        "S3BucketArn":{"shape":"String"},
        "SnsTopicArn":{"shape":"String"},
        "OrganizationConfiguration":{"shape":"OrganizationConfiguration"},
        "EnableCrossAccountsDiscovery":{"shape":"BoxBoolean"}
      }
    },
    "UpdateServiceSettingsResponse":{
      "type":"structure",
      "members":{
      }
    },
    "UsageOperation":{
      "type":"string",
      "max":50
    },
    "ValidationException":{
      "type":"structure",
      "members":{
        "Message":{"shape":"Message"}
      },
      "exception":true
    }
  }
}
{
  "version":"2.0",
  "metadata":{
    "apiVersion":"2018-05-10",
    "endpointPrefix":"license-manager-linux-subscriptions",
    "jsonVersion":"1.1",
    "protocol":"rest-json",
    "serviceFullName":"AWS License Manager Linux Subscriptions",
    "serviceId":"License Manager Linux Subscriptions",
    "signatureVersion":"v4",
    "signingName":"license-manager-linux-subscriptions",
    "uid":"license-manager-linux-subscriptions-2018-05-10"
  },
  "operations":{
    "GetServiceSettings":{
      "name":"GetServiceSettings",
      "http":{
        "method":"POST",
        "requestUri":"/subscription/GetServiceSettings",
```

"responseCode":200
},
"input":{"shape":"GetServiceSettingsRequest"},
"output":{"shape":"GetServiceSettingsResponse"},
"errors":[
{"shape":"InternalServerException"},
{"shape":"ThrottlingException"},
{"shape":"ValidationException"}
],
"idempotent":true
},
"ListLinuxSubscriptionInstances":{
"name":"ListLinuxSubscriptionInstances",
"http":{
"method":"POST",
"requestUri":"/subscription/ListLinuxSubscriptionInstances",
"responseCode":200
},
"input":{"shape":"ListLinuxSubscriptionInstancesRequest"},
"output":{"shape":"ListLinuxSubscriptionInstancesResponse"},
"errors":[
{"shape":"InternalServerException"},
{"shape":"ThrottlingException"},
{"shape":"ValidationException"}
],
"idempotent":true
},
"ListLinuxSubscriptions":{
"name":"ListLinuxSubscriptions",
"http":{
"method":"POST",
"requestUri":"/subscription/ListLinuxSubscriptions",
"responseCode":200
},
"input":{"shape":"ListLinuxSubscriptionsRequest"},
"output":{"shape":"ListLinuxSubscriptionsResponse"},
"errors":[
{"shape":"InternalServerException"},
{"shape":"ThrottlingException"},
{"shape":"ValidationException"}
],
"idempotent":true

},
"UpdateServiceSettings":{
"name":"UpdateServiceSettings",
"http":{
"method":"POST",

"requestUri":"/subscription/UpdateServiceSettings",
"responseCode":200
},
"input":{"shape":"UpdateServiceSettingsRequest"},
"output":{"shape":"UpdateServiceSettingsResponse"},
"errors":[
{"shape":"InternalServerException"},
{"shape":"ThrottlingException"},
{"shape":"ValidationException"}
],
"idempotent":true
}
},
"shapes":{
"Boolean":{
"type":"boolean",
"box":true
},
"BoxInteger":{
"type":"integer",
"box":true
},
"BoxLong":{
"type":"long",
"box":true
},
"Filter":{
"type":"structure",
"members":{
"Name":{"shape":"String"},
"Operator":{"shape":"Operator"},
"Values":{"shape":"StringList"}
}
},
"FilterList":{
"type":"list",
"member":{"shape":"Filter"}
},
"GetServiceSettingsRequest":{
"type":"structure",
"members":{
}
},
"GetServiceSettingsResponse":{
"type":"structure",
"members":{
"HomeRegions":{"shape":"StringList"},
"LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},

"LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
"Status":{"shape":"Status"},
"StatusMessage":{"shape":"StringMap"}
}
},
"Instance":{
"type":"structure",
"members":{
"AccountID":{"shape":"String"},
"AmiId":{"shape":"String"},
"InstanceID":{"shape":"String"},
"InstanceType":{"shape":"String"},
"LastUpdatedTime":{"shape":"String"},
"ProductCode":{"shape":"ProductCodeList"},
"Region":{"shape":"String"},
"Status":{"shape":"String"},
"SubscriptionName":{"shape":"String"},
"UsageOperation":{"shape":"String"}
}
},
"InstanceList":{

"type":"list",
"member":{"shape":"Instance"}
},
"InternalServerException":{
"type":"structure",
"members":{
"message":{"shape":"String"}
},
"exception":true,
"fault":true
},
"LinuxSubscriptionsDiscovery":{
"type":"string",
"enum":[
"Enabled",
"Disabled"
]
},
"LinuxSubscriptionsDiscoverySettings":{
"type":"structure",
"required":[
"OrganizationIntegration",
"SourceRegions"
],
"members":{
"OrganizationIntegration":{"shape":"OrganizationIntegration"},

"SourceRegions":{"shape":"StringList"}
}
},
"ListLinuxSubscriptionInstancesRequest":{
"type":"structure",
"members":{
"Filters":{"shape":"FilterList"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"ListLinuxSubscriptionInstancesRequestNextTokenString"}
}
},
"ListLinuxSubscriptionInstancesRequestNextTokenString":{
"type":"string",
"max":16384,
"min":1
},
"ListLinuxSubscriptionInstancesResponse":{
"type":"structure",
"members":{
"Instances":{"shape":"InstanceList"},
"NextToken":{"shape":"String"}
}
},
"ListLinuxSubscriptionsRequest":{
"type":"structure",
"members":{
"Filters":{"shape":"FilterList"},
"MaxResults":{"shape":"BoxInteger"},
"NextToken":{"shape":"ListLinuxSubscriptionsRequestNextTokenString"}
}
},
"ListLinuxSubscriptionsRequestNextTokenString":{
"type":"string",
"max":16384,
"min":1
},
"ListLinuxSubscriptionsResponse":{
"type":"structure",
"members":{
"NextToken":{"shape":"String"},
"Subscriptions":{"shape":"SubscriptionList"}
}
},
"Operator":{
"type":"string",
"enum":[
"Equal",
"NotEqual",

"Contains"
],
"max":20,
"min":1
},
"OrganizationIntegration":{
"type":"string",
"enum":[
"Enabled",
"Disabled"
]
},
"ProductCodeList":{
"type":"list",
"member":{"shape":"String"}
},
"Status":{
"type":"string",
"enum":[
"InProgress",
"Completed",
"Successful",
"Failed"
]
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"String":{"type":"string"},
"StringList":{
"type":"list",
"member":{"shape":"StringListMemberString"},
"max":100,
"min":1
},
"StringListMemberString":{
"type":"string",
"max":100,
"min":1
},
"StringMap":{
"type":"map",
"key":{"shape":"String"},
"value":{"shape":"String"}
},
"Subscription":{
"type":"structure",
"members":{
"InstanceCount":{"shape":"BoxLong"},
"Name":{"shape":"String"},
"Type":{"shape":"String"}

```
    }
  },
  "SubscriptionList":{
    "type":"list",
    "member":{"shape":"Subscription"}
  },
  "ThrottlingException":{
     "type":"structure",
    "members":{
      "message":{"shape":"String"}
    },
    "exception":true
  },
  "UpdateServiceSettingsRequest":{
    "type":"structure",
    "required":[
      "LinuxSubscriptionsDiscovery",
      "LinuxSubscriptionsDiscoverySettings"
    ],
    "members":{
      "AllowUpdate":{"shape":"Boolean"},
      "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
      "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"}
    }
  },
  "UpdateServiceSettingsResponse":{
    "type":"structure",
    "members":{
      "HomeRegions":{"shape":"StringList"},
      "LinuxSubscriptionsDiscovery":{"shape":"LinuxSubscriptionsDiscovery"},
      "LinuxSubscriptionsDiscoverySettings":{"shape":"LinuxSubscriptionsDiscoverySettings"},
      "Status":{"shape":"Status"},
      "StatusMessage":{"shape":"StringMap"}
    }
  },
  "ValidationException":{
    "type":"structure",
     "members":{
      "message":{"shape":"String"}
    },
    "exception":true
  }
 }
}
{
 "version": "2.0",
 "service": "<p>License Manager makes it easier to manage licenses from software vendors across multiple Amazon Web Services accounts and on-premises servers.</p>",
```

"operations": {
"AcceptGrant": " Accepts the specified grant. ",
"CheckInLicense": " Checks in the specified license. Check in a license when it is no longer in use. ",
"CheckoutBorrowLicense": " Checks out the specified license for offline use. ",
"CheckoutLicense": " Checks out the specified license. <note> If the account that created the license is the same that is performing the check out, you must specify the account as the beneficiary. </note>",
"CreateGrant": " Creates a grant for the specified license. A grant shares the use of license entitlements with a specific Amazon Web Services account, an organization, or an organizational unit (OU). For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateGrantVersion": " Creates a new version of the specified grant. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"CreateLicense": " Creates a license. ",
"CreateLicenseConfiguration": " Creates a license configuration. A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a license must be associated with a host), and the number of licenses purchased and used. ",
"CreateLicenseConversionTaskForResource": " Creates a new license conversion task. ",
"CreateLicenseManagerReportGenerator": " Creates a report generator. ",
"CreateLicenseVersion": " Creates a new version of the specified license. ",
"CreateToken": " Creates a long-lived token. A refresh token is a JWT token used to get an access token. With an access token, you can call AssumeRoleWithWebIdentity to get role credentials that you can use to call License Manager to manage the specified license. ",
"DeleteGrant": " Deletes the specified grant. ",
"DeleteLicense": " Deletes the specified license. ",
"DeleteLicenseConfiguration": " Deletes the specified license configuration. You cannot delete a license configuration that is in use. ",
"DeleteLicenseManagerReportGenerator": " Deletes the specified report generator. This action deletes the report generator, which stops it from generating future reports. The action cannot be reversed. It has no effect on the previous reports from this generator. ",
"DeleteToken": " Deletes the specified token. Must be called in the license home Region. ",
"ExtendLicenseConsumption": " Extends the expiration date for license consumption. ",
"GetAccessToken": " Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access tokens are valid for one hour. ",
"GetGrant": " Gets detailed information about the specified grant. ",
"GetLicense": " Gets detailed information about the specified license. ",
"GetLicenseConfiguration": " Gets detailed information about the specified license configuration. ",
"GetLicenseConversionTask": " Gets information about the specified license type conversion task. ",
"GetLicenseManagerReportGenerator": " Gets information about the specified report generator. ",
"GetLicenseUsage": " Gets detailed information about the usage of the specified license. ",
"GetServiceSettings": " Gets the License Manager settings for the current Region. ",
"ListAssociationsForLicenseConfiguration": " Lists the resource associations for the specified license configuration. Resource associations need not consume licenses from a license configuration. For example, an AMI or a stopped instance might not consume a license (depending on the license rules). ",

"ListDistributedGrants": " Lists the grants distributed for the specified license. ",
"ListFailuresForLicenseConfigurationOperations": " Lists the license configuration operations that failed. ",
"ListLicenseConfigurations": " Lists the license configurations for your account. ",
"ListLicenseConversionTasks": " Lists the license type conversion tasks for your account. ",
"ListLicenseManagerReportGenerators": " Lists the report generators for your account. ",
"ListLicenseSpecificationsForResource": " Describes the license configurations for the specified resource. ",
"ListLicenseVersions": " Lists all versions of the specified license. ",
"ListLicenses": " Lists the licenses for your account. ",
"ListReceivedGrants": " Lists grants that are received. Received grants are grants created while specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs. ",
"ListReceivedGrantsForOrganization": " Lists the grants received for all accounts in the organization. ",
"ListReceivedLicenses": " Lists received licenses. ",
"ListReceivedLicensesForOrganization": " Lists the licenses received for all accounts in the organization. ",
"ListResourceInventory": " Lists resources managed using Systems Manager inventory. ",
"ListTagsForResource": " Lists the tags for the specified license configuration. ",
"ListTokens": " Lists your tokens. ",
"ListUsageForLicenseConfiguration": " Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration. ",
"RejectGrant": " Rejects the specified grant. ",
"TagResource": " Adds the specified tags to the specified license configuration. ",
"UntagResource": " Removes the specified tags from the specified license configuration. ",
"UpdateLicenseConfiguration": " Modifies the attributes of an existing license configuration. ",
"UpdateLicenseManagerReportGenerator": " Updates a report generator. After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated. ",
"UpdateLicenseSpecificationsForResource": " Adds or removes the specified license configurations for the specified Amazon Web Services resource. You can update the license specifications of AMIs, instances, and hosts. You cannot update the license specifications for launch templates and CloudFormation templates, as they send license configurations to the operation that creates the resource. ",
"UpdateServiceSettings": " Updates License Manager settings for the current Region. "
},
"shapes": {
"AcceptGrantRequest": {
"base": null,
"refs": {
}
},
"AcceptGrantResponse": {
"base": null,
"refs": {
}
},

"AccessDeniedException": {
"base": " Access to resource denied. ",
"refs": {
}
},
"ActivationOverrideBehavior": {
"base": null,
"refs": {
"Options$ActivationOverrideBehavior": " An activation option for your grant that determines the behavior of activating a grant. Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the <code>Status</code> parameter.   As a license administrator, you can optionally specify an <code>ActivationOverrideBehavior</code> when activating a grant.   As a grantor, you can optionally specify an <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee account in your organization.   As a grantee, if the grantor creating the distributed grant doesnt specify an <code>ActivationOverrideBehavior</code>, you can optionally specify one when you are activating the grant.   <dl> <dt>DISTRIBUTED_GRANTS_ONLY</dt> <dd> Use this value to activate a grant without replacing any member accounts active grants for the same product. </dd> <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt> <dd> Use this value to activate a grant and disable other active grants in any member accounts for the same product. This action will also replace their previously activated grants with this activated grant. </dd> </dl>"
}
},
"AllowedOperation": {
"base": null,
"refs": {
"AllowedOperationList$member": null
}
},
"AllowedOperationList": {
"base": null,
"refs": {
"CreateGrantRequest$AllowedOperations": " Allowed operations for the grant. ",
"CreateGrantVersionRequest$AllowedOperations": " Allowed operations for the grant. ",
"Grant$GrantedOperations": " Granted operations. ",
"ReceivedMetadata$AllowedOperations": " Allowed operations. "
}
},
"Arn": {
"base": null,
"refs": {
"AcceptGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"AcceptGrantResponse$GrantArn": " Grant ARN. ",
"ArnList$member": null,
"CheckoutBorrowLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration. ",
"CheckoutBorrowLicenseResponse$LicenseArn":

" Amazon Resource Name (ARN) of the license. ",
"CreateGrantRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateGrantResponse$GrantArn": " Grant ARN. ",
"CreateGrantVersionRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"CreateGrantVersionResponse$GrantArn": " Grant ARN. ",
"CreateLicenseConversionTaskForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the resource you are converting the license type for. ",
"CreateLicenseResponse$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"CreateLicenseVersionResponse$LicenseArn": " License ARN. ",
"CreateTokenRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the JWT token. ",
"DeleteGrantRequest$GrantArn":
" Amazon Resource Name (ARN) of the grant. ",
"DeleteGrantResponse$GrantArn": " Grant ARN. ",
"DeleteLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"GetLicenseRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"GetLicenseUsageRequest$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"Grant$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"Grant$ParentArn": " Parent ARN. ",
"Grant$LicenseArn": " License ARN. ",
"Grant$GranteePrincipalArn": " The grantee principal ARN. ",
"GrantedLicense$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"License$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"ListLicenseVersionsRequest$LicenseArn": " Amazon Resource Name (ARN) of
the license. ",
"ListReceivedGrantsForOrganizationRequest$LicenseArn": " The Amazon Resource Name (ARN) of the received license. ",
"PrincipalArnList$member": null,
"RejectGrantRequest$GrantArn": " Amazon Resource Name (ARN) of the grant. ",
"RejectGrantResponse$GrantArn": " Grant ARN. "
}
},
"ArnList": {
"base": null,
"refs": {
"CreateTokenRequest$RoleArns": " Amazon Resource Name (ARN) of the IAM roles to embed in the token. License Manager does not check whether the roles are in use. ",
"ListDistributedGrantsRequest$GrantArns": " Amazon Resource Names (ARNs) of the grants. ",
"ListLicensesRequest$LicenseArns": " Amazon Resource Names (ARNs) of the licenses. ",
"ListReceivedGrantsRequest$GrantArns": " Amazon Resource Names (ARNs) of the grants. ",
"ListReceivedLicensesRequest$LicenseArns": " Amazon Resource Names (ARNs) of the licenses. ",

"ReportContext$licenseConfigurationArns": " Amazon Resource Name (ARN) of the license configuration that this generator reports on. ",
"TokenData$RoleArns": " Amazon Resource Names (ARN) of the roles included in the token. "
}

},
"AuthorizationException": {
"base": " The Amazon Web Services user account does not have permission to perform the action. Check the IAM policy associated with this account. ",
"refs": {
}
},
"AutomatedDiscoveryInformation": {
"base": " Describes automated discovery. ",
"refs": {
"GetLicenseConfigurationResponse$AutomatedDiscoveryInformation": " Automated discovery information. ",
"LicenseConfiguration$AutomatedDiscoveryInformation": " Automated discovery information. "
}
},
"Boolean": {
"base": null,
"refs": {
"ExtendLicenseConsumptionRequest$DryRun": " Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions. ",
"OrganizationConfiguration$EnableIntegration": " Enables Organizations integration. "
}
},
"BorrowConfiguration": {
"base": " Details about a borrow configuration. ",
"refs": {
"ConsumptionConfiguration$BorrowConfiguration": " Details about a borrow configuration. "
}
},
"BoxBoolean": {
"base": null,
"refs": {
"BorrowConfiguration$AllowEarlyCheckIn": " Indicates whether early check-ins are allowed. ",
"CreateLicenseConfigurationRequest$LicenseCountHardLimit": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit blocks the launch of new instances. ",
"CreateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"Entitlement$Overage": " Indicates
whether overages are allowed. ",
"Entitlement$AllowCheckIn": " Indicates whether check-ins are allowed. ",
"GetLicenseConfigurationResponse$LicenseCountHardLimit": " Sets the number of available licenses as a hard limit. ",
"GetLicenseConfigurationResponse$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"GetServiceSettingsResponse$EnableCrossAccountsDiscovery": " Indicates whether cross-account discovery is enabled. ",
"LicenseConfiguration$LicenseCountHardLimit": " Number of available licenses as a hard limit. ",

"LicenseConfiguration$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateLicenseConfigurationRequest$LicenseCountHardLimit": " New hard limit of the number of available licenses. ",
"UpdateLicenseConfigurationRequest$DisassociateWhenNotFound": " When true, disassociates a resource when software is uninstalled. ",
"UpdateServiceSettingsRequest$EnableCrossAccountsDiscovery": " Activates cross-account discovery. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"BorrowConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the borrow configuration, in minutes. ",
"ListAssociationsForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListFailuresForLicenseConfigurationOperationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConfigurationsRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseConversionTasksRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLicenseSpecificationsForResourceRequest$MaxResults": " Maximum number of results to return in a single call. ",

"ListResourceInventoryRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListUsageForLicenseConfigurationRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ProvisionalConfiguration$MaxTimeToLiveInMinutes": " Maximum time for the provisional configuration, in minutes. "
}
},
"BoxLong": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ConsumedLicenses": " Number of licenses consumed by the resource. ",
"CreateLicenseConfigurationRequest$LicenseCount": " Number of licenses managed by the license configuration. ",
"GetLicenseConfigurationResponse$LicenseCount": " Number of available licenses. ",
"GetLicenseConfigurationResponse$ConsumedLicenses": " Number of licenses assigned to resources. ",
"LicenseConfiguration$LicenseCount": " Number of licenses managed by the license configuration. ",
"LicenseConfiguration$ConsumedLicenses": " Number of licenses consumed. ",
"LicenseConfigurationUsage$ConsumedLicenses": " Number of licenses consumed by the resource. ",
"ManagedResourceSummary$AssociationCount": " Number of resources associated with licenses. ",
"UpdateLicenseConfigurationRequest$LicenseCount": " New number of licenses managed by the license configuration. "

```
    }
  },
  "CheckInLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "CheckInLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutBorrowLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutBorrowLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CheckoutType": {
    "base": null,
    "refs": {
      "CheckoutLicenseRequest$CheckoutType": "<p>Checkout type.</p>",
      "CheckoutLicenseResponse$CheckoutType": "<p>Checkout type.</p>"
    }
  },
  "ClientRequestToken": {
    "base": null,
    "refs": {
      "CreateLicenseManagerReportGeneratorRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "UpdateLicenseManagerReportGeneratorRequest$ClientToken": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>"
    }
  },
```

"ClientToken": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CheckoutLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateGrantRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateGrantVersionRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateLicenseRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateLicenseVersionRequest$ClientToken": " Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"CreateTokenRequest$ClientToken": " Idempotency token, valid for 10 minutes. "
}
},
"ConflictException": {
"base": " There was a conflict processing the request. Try your request again. ",
"refs": {
}
},
"ConsumedLicenseSummary": {
"base": " Details about license consumption. ",
"refs": {
"ConsumedLicenseSummaryList$member": null
}
},
"ConsumedLicenseSummaryList": {
"base": null,
"refs": {
"GetLicenseConfigurationResponse$ConsumedLicenseSummaryList": " Summaries of the licenses consumed by resources. ",
"LicenseConfiguration$ConsumedLicenseSummaryList": " Summaries for licenses consumed by various resources. "
}
},
"ConsumptionConfiguration": {
"base": " Details about a consumption configuration. ",
"refs": {
"CreateLicenseRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"CreateLicenseVersionRequest$ConsumptionConfiguration": " Configuration for consumption of the license. Choose a provisional configuration for workloads running with continuous connectivity. Choose a borrow configuration for workloads with offline usage. ",
"GrantedLicense$ConsumptionConfiguration":

" Configuration for consumption of the license. ",
"License$ConsumptionConfiguration": " Configuration for consumption of the license. "
}
},
"CreateGrantRequest": {
"base": null,
"refs": {
}
},
"CreateGrantResponse": {
"base": null,
"refs": {
}
},
"CreateGrantVersionRequest": {
"base": null,
"refs": {
}
},
"CreateGrantVersionResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseConversionTaskForResourceRequest": {
"base": null,
"refs": {
}
},
"CreateLicenseConversionTaskForResourceResponse": {
"base": null,
"refs": {
}
},
"CreateLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {

```
    }
  },
  "CreateLicenseManagerReportGeneratorResponse": {
    "base": null,
    "refs": {
    }
  },
  "CreateLicenseRequest": {
    "base": null,
    "refs": {
    }
  },
  "CreateLicenseResponse": {
    "base": null,
    "refs": {
    }
  },
  "CreateLicenseVersionRequest": {
    "base": null,
    "refs": {
    }
  },
  "CreateLicenseVersionResponse": {
    "base": null,
    "refs": {
    }
  },
  "CreateTokenRequest": {
    "base": null,
    "refs": {
    }
  },
  "CreateTokenResponse": {
    "base": null,
    "refs": {
    }
  },
  "DateTime": {
    "base": null,
    "refs": {
      "AutomatedDiscoveryInformation$LastRunTime": "<p>Time that automated discovery last ran.</p>",
      "GetLicenseConversionTaskResponse$StartTime": "<p>Time at which the license type conversion task was started .</p>",
      "GetLicenseConversionTaskResponse$LicenseConversionTime": "<p>Amount of time to complete the license type conversion.</p>",
      "GetLicenseConversionTaskResponse$EndTime": "<p>Time at which the license type conversion task was completed.</p>",
      "LicenseConfigurationAssociation$AssociationTime": "<p>Time when the license configuration was associated
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with the resource. ",
"LicenseConfigurationUsage$AssociationTime": " Time when the license configuration was initially associated with the resource. ",
"LicenseConversionTask$StartTime": " The time the conversion task was started at. ",
"LicenseConversionTask$LicenseConversionTime": " The time the usage operation value of the resource was changed. ",
"LicenseConversionTask$EndTime": " The time the conversion task was completed. ",
"LicenseOperationFailure$FailureTime": " Failure time. "
}
},
"DatetimeRange": {
"base": " Describes a time range, in ISO8601-UTC format. ",
"refs": {
"CreateLicenseRequest$Validity": " Date
and time range during which the license is valid, in ISO8601-UTC format. ",
"CreateLicenseVersionRequest$Validity": " Date and time range during which the license is valid, in ISO8601-UTC format. ",
"GrantedLicense$Validity": " Date and time range during which the granted license is valid, in ISO8601-UTC format. ",
"License$Validity": " Date and time range during which the license is valid, in ISO8601-UTC format. "
}
},
"DeleteGrantRequest": {
"base": null,
"refs": {
}
},
"DeleteGrantResponse": {
"base": null,
"refs": {
}
},
"DeleteLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"DeleteLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseManagerReportGeneratorResponse": {

"base": null,
"refs": {
}
},
"DeleteLicenseRequest": {
"base": null,
"refs": {
}
},
"DeleteLicenseResponse": {
"base": null,
"refs": {
}
},
"DeleteTokenRequest": {
"base": null,
"refs": {
}
},
"DeleteTokenResponse": {
"base": null,
"refs": {
}
},
"DigitalSignatureMethod": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$DigitalSignatureMethod": " Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384. For more information, see RFC 7518 Digital Signature with RSASSA-PSS. "
}
},
"Entitlement": {
"base": " Describes a resource entitled for use with a license. ",
"refs": {
"EntitlementList$member": null
}
},
"EntitlementData": {
"base": " Data associated with an entitlement resource. ",

"refs": {
"EntitlementDataList$member": null
}
},
"EntitlementDataList": {
"base": null,
"refs": {

"CheckoutBorrowLicenseRequest$Entitlements": " License entitlements. Partial checkouts are not supported. ",
"CheckoutBorrowLicenseResponse$EntitlementsAllowed": " Allowed license entitlements. ",
"CheckoutLicenseRequest$Entitlements": " License entitlements. ",
"CheckoutLicenseResponse$EntitlementsAllowed": " Allowed license entitlements. "
}
},
"EntitlementDataUnit": {
"base": null,
"refs": {
"EntitlementData$Unit": " Entitlement data unit. ",
"EntitlementUsage$Unit": " Entitlement usage unit. "
}
},
"EntitlementList": {
"base": null,
"refs": {
"CreateLicenseRequest$Entitlements": " License entitlements. ",
"CreateLicenseVersionRequest$Entitlements": " License entitlements. ",
"GrantedLicense$Entitlements": " License entitlements. ",
"License$Entitlements": " License entitlements. "
}
},
"EntitlementNotAllowedException": {
"base": " The entitlement is not allowed. ",
"refs": {
}
},
"EntitlementUnit": {
"base": null,
"refs": {
"Entitlement$Unit": " Entitlement unit. "
}
},
"EntitlementUsage": {
"base": " Usage associated with an entitlement resource. ",
"refs": {
"EntitlementUsageList$member": null
}
},
"EntitlementUsageList": {
"base": null,
"refs": {
"LicenseUsage$EntitlementUsages": " License entitlement usages. "
}
},
"ExtendLicenseConsumptionRequest": {

"base": null,
"refs": {
}
},
"ExtendLicenseConsumptionResponse": {
"base": null,
"refs": {
}
},
"FailedDependencyException": {
"base": " A dependency required to run the API is missing. ",
"refs": {
}
},
"Filter": {
"base": " A filter name and value pair that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria, such as tags, attributes, or IDs. ",
"refs": {
"FilterList$member": null,
"Filters$member": null
}
},
"FilterLimitExceededException": {
"base": " The request uses too many filters or too many filter values. ",
"refs": {
}
},
"FilterList": {
"base": null,
"refs": {
"ListDistributedGrantsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>LicenseArn</code>   <code>GrantStatus</code>   <code>GranteePrincipalARN</code>   <code>ProductSKU</code>   <code>LicenseIssuerName</code> ",
"ListLicenseManagerReportGeneratorsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>LicenseConfigurationArn</code> ",
"ListLicensesRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>Beneficiary</code>   <code>ProductSKU</code>   <code>Fingerprint</code>   <code>Status</code> ",
"ListReceivedGrantsForOrganizationRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ParentArn</code>   <code>GranteePrincipalArn</code> ",
"ListReceivedGrantsRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ProductSKU</code>   <code>LicenseIssuerName</code>   <code>LicenseArn</code>   <code>GrantStatus</code>   <code>GranterAccountId</code> ",
"ListReceivedLicensesForOrganizationRequest$Filters": " Filters to scope the results. The following filters

are supported: <ul> <code>Beneficiary</code>   <code>ProductSKU</code> ",
"ListReceivedLicensesRequest$Filters": " Filters to scope the results. The following filters are supported: <ul> <code>ProductSKU</code>   <code>Status</code>   <code>Fingerprint</code>   <code>IssuerName</code>   <code>Beneficiary</code> ",
"ListTokensRequest$Filters": " Filters to scope the results. The following filter is supported: <ul> <code>LicenseArns</code> "
}
},
"FilterName": {
"base": null,
"refs": {
"Filter$Name": " Name of the filter. Filter names are case-sensitive. "
}
},
"FilterValue": {
"base": null,
"refs": {
"FilterValues$member": null
}
},
"FilterValues": {
"base": null,
"refs": {
"Filter$Values": " The value of the filter, which is case-sensitive. You can only specify one value for the filter. "
}
},
"Filters": {
"base": null,
"refs": {
"ListLicenseConfigurationsRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>licenseCountingType</code> - The dimension for which licenses are counted. Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is used. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>usagelimitExceeded</code> - A Boolean value that indicates whether the available licenses have been exceeded. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. ",
"ListLicenseConversionTasksRequest$Filters": " Filters to scope the results. Valid filters are <code>ResourceArns</code> and <code>Status</code>. ",
"ListUsageForLicenseConfigurationRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>resourceArn</code> - The ARN of the license configuration resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |

<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>resourceAccount</code> - The ID of the account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. "
    }
  },
  "GetAccessTokenRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetAccessTokenResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetGrantRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetGrantResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseConfigurationRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseConfigurationResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseConversionTaskRequest": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseConversionTaskResponse": {
    "base": null,
    "refs": {
    }
  },
  "GetLicenseManagerReportGeneratorRequest": {
    "base": null,

"refs": {
}
},
"GetLicenseManagerReportGeneratorResponse": {
"base":
null,
"refs": {
}
},
"GetLicenseRequest": {
"base": null,
"refs": {
}
},
"GetLicenseResponse": {
"base": null,
"refs": {
}
},
"GetLicenseUsageRequest": {
"base": null,
"refs": {
}
},
"GetLicenseUsageResponse": {
"base": null,
"refs": {
}
},
"GetServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"GetServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"Grant": {
"base": " Describes a grant. ",
"refs": {
"GetGrantResponse$Grant": " Grant details. ",
"GrantList$member": null
}
},
"GrantList": {
"base": null,

"refs": {
"ListDistributedGrantsResponse$Grants": " Distributed grant details. ",
"ListReceivedGrantsForOrganizationResponse$Grants": " Lists the grants the organization has received. ",
"ListReceivedGrantsResponse$Grants": " Received grant details. "
}
},
"GrantStatus": {
"base": null,
"refs": {
"AcceptGrantResponse$Status": " Grant status. ",
"CreateGrantResponse$Status": " Grant status. ",
"CreateGrantVersionRequest$Status": " Grant status. ",
"CreateGrantVersionResponse$Status": " Grant status. ",
"DeleteGrantResponse$Status": " Grant status. ",
"Grant$GrantStatus": " Grant status. ",
"RejectGrantResponse$Status": " Grant status. "
}
},
"GrantedLicense": {
"base": " Describes a license that is granted to a grantee. ",
"refs": {
"GrantedLicenseList$member": null
}
},
"GrantedLicenseList": {
"base": null,
"refs": {
"ListReceivedLicensesForOrganizationResponse$Licenses": " Lists the licenses the organization has received. ",
"ListReceivedLicensesResponse$Licenses": " Received license details. "
}
},
"ISO8601DateTime": {
"base": null,
"refs": {
"CheckoutBorrowLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
"CheckoutBorrowLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
"CheckoutLicenseResponse$IssuedAt": " Date and time at which the license checkout is issued. ",
"CheckoutLicenseResponse$Expiration": " Date and time at which the license checkout expires. ",
"DatetimeRange$Begin": " Start of the time range. ",
"DatetimeRange$End": " End of the time range. ",
"DeleteLicenseResponse$DeletionDate": " Date when the license is deleted. ",
"ExtendLicenseConsumptionResponse$Expiration": " Date and time at which the license consumption

expires. ",
"GrantedLicense$CreateTime": " Creation time of the granted license. ",
"License$CreateTime": " License
creation time. ",
"TokenData$ExpirationTime": " Token expiration time, in ISO8601-UTC format. "
}
},
"Integer": {
"base": null,
"refs": {
"CreateTokenRequest$ExpirationInDays": " Token expiration, in days, counted from token creation. The default is 365 days. ",
"ReportFrequency$value": " Number of times within the frequency period that a report is generated. The only supported value is <code>1</code>. "
}
},
"InvalidParameterValueException": {
"base": " One or more parameter values are not valid. ",
"refs": {
}
},
"InvalidResourceStateException": {
"base": " License Manager cannot allocate a license to a resource because of its state. For example, you cannot allocate a license to an instance in the process of shutting down. ",
"refs": {
}
},
"InventoryFilter": {
"base": " An inventory filter. ",
"refs": {

"InventoryFilterList$member": null
}
},
"InventoryFilterCondition": {
"base": null,
"refs": {
"InventoryFilter$Condition": " Condition of the filter. "
}
},
"InventoryFilterList": {
"base": null,
"refs": {
"ListResourceInventoryRequest$Filters": " Filters to scope the results. The following filters and logical operators are supported: <ul> <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>application_name</code> - The name of the application. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.

<code>license_included</code> - The type of license included. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. Possible values are <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code>
| <code>windows-server-datacenter</code>.   <code>platform</code> - The platform of the resource. Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.   <code>resource_id</code> - The ID of the resource. Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.   <code>tag:<key></code> - The key/value combination of a tag assigned to the resource. Logical operators are <code>EQUALS</code> (single account) or <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). "
    }
  },
  "Issuer": {
    "base": " Details about the issuer of a license. ",
    "refs": {
      "CreateLicenseRequest$Issuer": " License issuer. ",
      "CreateLicenseVersionRequest$Issuer": " License issuer. "
    }
  },
  "IssuerDetails": {
    "base": " Details associated with the issuer of a license. ",
    "refs": {
      "GrantedLicense$Issuer": " Granted
license issuer. ",
      "License$Issuer": " License issuer. "
    }
  },
  "License": {
    "base": " Software license that is managed in License Manager. ",
    "refs": {
      "GetLicenseResponse$License": " License details. ",
      "LicenseList$member": null
    }
  },
  "LicenseConfiguration": {
    "base": " A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used. ",
    "refs": {
      "LicenseConfigurations$member": null
    }
  },
  "LicenseConfigurationAssociation": {
    "base": " Describes an association with a license configuration. ",
    "refs": {
      "LicenseConfigurationAssociations$member": null
    }
  },

"LicenseConfigurationAssociations": {
"base": null,
"refs": {
"ListAssociationsForLicenseConfigurationResponse$LicenseConfigurationAssociations": " Information about the associations for the license configuration. "
}
},
"LicenseConfigurationStatus": {
"base": null,
"refs": {
"UpdateLicenseConfigurationRequest$LicenseConfigurationStatus": " New status of the license configuration. "
}
},
"LicenseConfigurationUsage": {
"base": " Details about the usage of a resource associated with a license configuration. ",
"refs": {
"LicenseConfigurationUsageList$member": null
}
},
"LicenseConfigurationUsageList": {
"base": null,
"refs": {
"ListUsageForLicenseConfigurationResponse$LicenseConfigurationUsageList": " Information about the license configurations. "
}

},
"LicenseConfigurations": {
"base": null,
"refs": {
"ListLicenseConfigurationsResponse$LicenseConfigurations": " Information about the license configurations. "
}
},
"LicenseConversionContext": {
"base": " Information about a license type conversion task. ",
"refs": {
"CreateLicenseConversionTaskForResourceRequest$SourceLicenseContext": " Information that identifies the license type you are converting from. For the structure of the source license, see Convert a license type using the CLI in the License Manager User Guide. ",
"CreateLicenseConversionTaskForResourceRequest$DestinationLicenseContext": " Information that identifies the license type you are converting to. For the structure of the destination license, see Convert
a license type using the CLI in the License Manager User Guide. ",
"GetLicenseConversionTaskResponse$SourceLicenseContext": " Information about the license type

converted from. ",
"GetLicenseConversionTaskResponse$DestinationLicenseContext": " Information about the license type converted to. ",
"LicenseConversionTask$SourceLicenseContext": " Information about the license type this conversion task converted from. ",
"LicenseConversionTask$DestinationLicenseContext": " Information about the license type this conversion task converted to. "
}
},
"LicenseConversionTask": {
"base": " Information about a license type conversion task. ",
"refs": {
"LicenseConversionTasks$member": null
}
},
"LicenseConversionTaskId": {
"base": null,
"refs": {
"CreateLicenseConversionTaskForResourceResponse$LicenseConversionTaskId":
" The ID of the created license type conversion task. ",
"GetLicenseConversionTaskRequest$LicenseConversionTaskId": " ID of the license type conversion task to retrieve information on. ",
"GetLicenseConversionTaskResponse$LicenseConversionTaskId": " ID of the license type conversion task. ",
"LicenseConversionTask$LicenseConversionTaskId": " The ID of the license type conversion task. "
}
},
"LicenseConversionTaskStatus": {
"base": null,
"refs": {
"GetLicenseConversionTaskResponse$Status": " Status of the license type conversion task. ",
"LicenseConversionTask$Status": " The status of the conversion task. "
}
},
"LicenseConversionTasks": {
"base": null,
"refs": {
"ListLicenseConversionTasksResponse$LicenseConversionTasks": " Information about the license configuration tasks for your account. "
}
},
"LicenseCountingType":
{
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$LicenseCountingType": " Dimension used to track the license inventory. ",
"GetLicenseConfigurationResponse$LicenseCountingType": " Dimension for which the licenses are

counted. ",
      "LicenseConfiguration$LicenseCountingType": " Dimension to use to track the license inventory. "
    }
  },
  "LicenseDeletionStatus": {
    "base": null,
    "refs": {
      "DeleteLicenseResponse$Status": " License status. "
    }
  },
  "LicenseList": {
    "base": null,
    "refs": {
      "ListLicenseVersionsResponse$Licenses": " License details. ",
      "ListLicensesResponse$Licenses": " License details. "
    }
  },
  "LicenseOperationFailure": {
    "base": " Describes the failure of a license operation. ",
    "refs": {
      "LicenseOperationFailureList$member": null
    }
  },
  "LicenseOperationFailureList": {
    "base":
 null,
    "refs": {
      "ListFailuresForLicenseConfigurationOperationsResponse$LicenseOperationFailureList": " License configuration operations that failed. "
    }
  },
  "LicenseSpecification": {
    "base": " Details for associating a license configuration with a resource. ",
    "refs": {
      "LicenseSpecifications$member": null
    }
  },
  "LicenseSpecifications": {
    "base": null,
    "refs": {
      "ListLicenseSpecificationsForResourceResponse$LicenseSpecifications": " License configurations associated with a resource. ",
      "UpdateLicenseSpecificationsForResourceRequest$AddLicenseSpecifications": " ARNs of the license configurations to add. ",
      "UpdateLicenseSpecificationsForResourceRequest$RemoveLicenseSpecifications": " ARNs of the license configurations to remove. "
    }
  },

"LicenseStatus": {
"base": null,
"refs": {
"CreateLicenseResponse$Status": " License status. ",
"CreateLicenseVersionRequest$Status": " License status. ",
"CreateLicenseVersionResponse$Status": " License status. ",
"GrantedLicense$Status": " Granted license status. ",
"License$Status": " License status. "
}
},
"LicenseUsage": {
"base": " Describes the entitlement usage associated with a license. ",
"refs": {
"GetLicenseUsageResponse$LicenseUsage": " License usage details. "
}
},
"LicenseUsageException": {
"base": " You do not have enough licenses available to support a new resource launch. ",
"refs": {
}
},
"ListAssociationsForLicenseConfigurationRequest": {
"base": null,
"refs": {
}
},
"ListAssociationsForLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"ListDistributedGrantsRequest": {
"base": null,
"refs": {
}
},
"ListDistributedGrantsResponse":
{
"base": null,
"refs": {
}
},
"ListFailuresForLicenseConfigurationOperationsRequest": {
"base": null,
"refs": {
}
},
"ListFailuresForLicenseConfigurationOperationsResponse": {

"base": null,
"refs": {
}
},
"ListLicenseConfigurationsRequest": {
"base": null,
"refs": {
}
},
"ListLicenseConfigurationsResponse": {
"base": null,
"refs": {
}
},
"ListLicenseConversionTasksRequest": {
"base": null,
"refs": {
}
},
"ListLicenseConversionTasksResponse": {
"base": null,
"refs": {
}
},
"ListLicenseManagerReportGeneratorsRequest": {
"base": null,
"refs": {
}
},
"ListLicenseManagerReportGeneratorsResponse": {
"base": null,
"refs": {
}
},
"ListLicenseSpecificationsForResourceRequest": {
"base": null,
"refs": {
}
},
"ListLicenseSpecificationsForResourceResponse":
{
"base": null,
"refs": {
}
},
"ListLicenseVersionsRequest": {
"base": null,
"refs": {

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  }
},
"ListLicenseVersionsResponse": {
  "base": null,
  "refs": {
  }
},
"ListLicensesRequest": {
  "base": null,
  "refs": {
  }
},
"ListLicensesResponse": {
  "base": null,
  "refs": {
  }
},
"ListReceivedGrantsForOrganizationRequest": {
  "base": null,
  "refs": {
  }
},
"ListReceivedGrantsForOrganizationResponse": {
  "base": null,
  "refs": {
  }
},
"ListReceivedGrantsRequest": {
  "base": null,
  "refs": {
  }
},
"ListReceivedGrantsResponse": {
  "base": null,
  "refs": {
  }
},
"ListReceivedLicensesForOrganizationRequest": {
  "base": null,
  "refs": {
  }
},
"ListReceivedLicensesForOrganizationResponse": {
  "base": null,
  "refs": {
  }
},
"ListReceivedLicensesRequest":
```

{
  "base": null,
  "refs": {
  }
},
"ListReceivedLicensesResponse": {
  "base": null,
  "refs": {
  }
},
"ListResourceInventoryRequest": {
  "base": null,
  "refs": {
  }
},
"ListResourceInventoryResponse": {
  "base": null,
  "refs": {
  }
},
"ListTagsForResourceRequest": {
  "base": null,
  "refs": {
  }
},
"ListTagsForResourceResponse": {
  "base": null,
  "refs": {
  }
},
"ListTokensRequest": {
  "base": null,
  "refs": {
  }
},
"ListTokensResponse": {
  "base": null,
  "refs": {
  }
},
"ListUsageForLicenseConfigurationRequest": {
  "base": null,
  "refs": {
  }
},
"ListUsageForLicenseConfigurationResponse": {
  "base": null,
  "refs": {

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    }
  },
  "Location": {
    "base": null,
    "refs": {
      "RedirectException$Location": null
    }
  },
  "Long":
 {
    "base": null,
    "refs": {
      "Entitlement$MaxCount": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
    }
  },
  "ManagedResourceSummary": {
    "base": "<p>Summary information about a managed resource.</p>",
    "refs": {
      "ManagedResourceSummaryList$member": null
    }
  },
  "ManagedResourceSummaryList": {
    "base": null,
    "refs": {
      "GetLicenseConfigurationResponse$ManagedResourceSummaryList": "<p>Summaries of the managed
resources.</p>",
      "LicenseConfiguration$ManagedResourceSummaryList": "<p>Summaries for managed resources.</p>"
    }
  },
  "MaxSize100": {
    "base": null,
    "refs": {
      "ListDistributedGrantsRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>",
      "ListLicenseManagerReportGeneratorsRequest$MaxResults": "<p>Maximum number of results to return in a
single call.</p>",
      "ListLicenseVersionsRequest$MaxResults": "<p>Maximum
 number of results to return in a single call.</p>",
      "ListLicensesRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>",
      "ListReceivedGrantsForOrganizationRequest$MaxResults": "<p>Maximum number of results to return in a
single call.</p>",
      "ListReceivedGrantsRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>",
      "ListReceivedLicensesForOrganizationRequest$MaxResults": "<p>Maximum number of results to return in a
single call.</p>",
      "ListReceivedLicensesRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>",
      "ListTokensRequest$MaxResults": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "MaxSize3StringList": {
```

"base": null,
"refs": {
"CreateTokenRequest$TokenProperties": " Data specified by the caller to be included in the JWT token. The data is mapped to the amr claim of the JWT token. ",

"GetAccessTokenRequest$TokenProperties": " Token properties to validate against those present in the JWT token. ",
"TokenData$TokenProperties": " Data specified by the caller. "
}
},
"Message": {
"base": null,
"refs": {
"AccessDeniedException$Message": null,
"AuthorizationException$Message": null,
"ConflictException$Message": null,
"EntitlementNotAllowedException$Message": null,
"FailedDependencyException$Message": null,
"FilterLimitExceededException$Message": null,
"InvalidParameterValueException$Message": null,
"InvalidResourceStateException$Message": null,
"LicenseUsageException$Message": null,
"NoEntitlementsAllowedException$Message": null,
"RateLimitExceededException$Message": null,
"RedirectException$Message": null,
"ResourceLimitExceededException$Message": null,
"ResourceNotFoundException$Message": null,
"ServerInternalException$Message":
null,
"UnsupportedDigitalSignatureMethodException$Message": null,
"ValidationException$Message": null
}
},
"Metadata": {
"base": " Describes key/value pairs. ",
"refs": {
"MetadataList$member": null
}
},
"MetadataList": {
"base": null,
"refs": {
"CheckoutBorrowLicenseRequest$CheckoutMetadata": " Information about constraints. ",
"CheckoutBorrowLicenseResponse$CheckoutMetadata": " Information about constraints. ",
"CreateLicenseRequest$LicenseMetadata": " Information about the license. ",
"CreateLicenseVersionRequest$LicenseMetadata": " Information about the license. ",
"GrantedLicense$LicenseMetadata": " Granted license metadata. ",
"License$LicenseMetadata": " License metadata. ",

"LicenseOperationFailure$MetadataList": " Reserved. "
}
},
"NoEntitlementsAllowedException": {

"base": " There are no entitlements found for this license, or the entitlement maximum count is reached. ",
"refs": {
}
},
"Options": {
"base": " The options you can specify when you create a new version of a grant, such as activation override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. ",
"refs": {
"CreateGrantVersionRequest$Options": " The options specified for the grant. ",
"Grant$Options": " The options specified for the grant. "
}
},
"OrganizationConfiguration": {
"base": " Configuration information for Organizations. ",
"refs": {
"GetServiceSettingsResponse$OrganizationConfiguration": " Indicates whether Organizations is integrated with License Manager for cross-account discovery. ",
"UpdateServiceSettingsRequest$OrganizationConfiguration": " Enables integration with Organizations for cross-account discovery. "
}
},
"PrincipalArnList": {
"base": null,
"refs": {
"CreateGrantRequest$Principals": " The grant principals. You can specify one of the following as an Amazon Resource Name (ARN): <ul> An Amazon Web Services account, which includes only the account specified.   An organizational unit (OU), which includes all accounts in the OU.   An organization, which will include all accounts across your organization. "
}
},
"ProductInformation": {
"base": " Describes product information for a license configuration. ",
"refs": {
"ProductInformationList$member": null
}
},
"ProductInformationFilter": {
"base": " Describes product information filters. ",
"refs": {
"ProductInformationFilterList$member":

null
    }
  },
  "ProductInformationFilterList": {
    "base": null,
    "refs": {
      "ProductInformation$ProductInformationFilterList": " A Product information filter consists of a <code>ProductInformationFilterComparator</code> which is a logical operator, a <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies the value to filter on. Accepted values for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. The following filters and are supported when the resource type is <code>SSM_MANAGED</code>: <ul> <code>Application Name</code> - The name of the application. Logical operator is <code>EQUALS</code>.   <code>Application Publisher</code> - The publisher of the application. Logical operator is <code>EQUALS</code>.   <code>Application Version</code> - The version of the application. Logical operator is <code>EQUALS</code>.   <code>Platform Name</code> - The name of the platform. Logical operator is <code>EQUALS</code>.   <code>Platform Type</code> - The platform type. Logical operator is <code>EQUALS</code>.   <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.   <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.   <code>License Included</code> - The type of license included. Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>. Possible values are: <code>sql-server-enterprise</code> | <code>sql-server-standard</code> | <code>sql-server-web</code> | <code>windows-server-datacenter</code>.   The following filters and logical operators are supported when the resource type is <code>RDS</code>: <ul> <code>Engine Edition</code> - The edition of the database engine. Logical operator is <code>EQUALS</code>. Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.   <code>License Pack</code> - The license pack. Logical operator is <code>EQUALS</code>. Possible values are: <code>data guard</code> | <code>diagnostic pack sqlt</code> | <code>tuning pack sqlt</code> | <code>ols</code> | <code>olap</code>. "
    }
  },
  "ProductInformationList": {
    "base": null,
    "refs": {
      "CreateLicenseConfigurationRequest$ProductInformationList": " Product information. ",
      "GetLicenseConfigurationResponse$ProductInformationList": " Product information. ",
      "LicenseConfiguration$ProductInformationList": " Product information. ",
      "UpdateLicenseConfigurationRequest$ProductInformationList": " New product information. "
    }
  },
  "ProvisionalConfiguration": {
    "base": " Details about a provisional configuration. ",

"refs": {
"ConsumptionConfiguration$ProvisionalConfiguration": " Details about a provisional configuration. "
}
},
"RateLimitExceededException": {
"base": " Too many requests have been submitted. Try again after a brief wait. ",
"refs": {
}
},
"ReceivedMetadata": {
"base": " Metadata associated with received licenses and grants. ",
"refs": {
"GrantedLicense$ReceivedMetadata": " Granted license received metadata. "
}
},
"ReceivedStatus": {
"base": null,
"refs": {
"ReceivedMetadata$ReceivedStatus": " Received status. "
}
},
"RedirectException": {
"base": " This is not the correct Region for the resource. Try again. ",
"refs": {
}
},
"RejectGrantRequest": {
"base": null,
"refs": {
}
},
"RejectGrantResponse": {
"base": null,
"refs": {
}
},
"RenewType": {
"base": null,
"refs": {
"ConsumptionConfiguration$RenewType": " Renewal frequency. "
}
},
"ReportContext": {
"base": " Details of the license configuration that this generator reports on. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportContext": " Defines the type of license configuration the report generator tracks. ",
"ReportGenerator$ReportContext": " License configuration type for this generator. ",

"UpdateLicenseManagerReportGeneratorRequest$ReportContext":
" The report context. "
}
},
"ReportFrequency": {
"base": " Details about how frequently reports are generated. ",
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. Reports can be generated daily, monthly, or weekly. ",
"ReportGenerator$ReportFrequency": " Details about how frequently reports are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportFrequency": " Frequency by which reports are generated. "
}
},
"ReportFrequencyType": {
"base": null,
"refs": {
"ReportFrequency$period": " Time period between each report. The period can be daily, weekly, or monthly. "
}
},
"ReportGenerator": {
"base": " Describe the details of a report generator. ",
"refs": {
"GetLicenseManagerReportGeneratorResponse$ReportGenerator":
" A report generator that creates periodic reports about your license configurations. ",
"ReportGeneratorList$member": null
}
},
"ReportGeneratorList": {
"base": null,
"refs": {
"ListLicenseManagerReportGeneratorsResponse$ReportGenerators": " A report generator that creates periodic reports about your license configurations. "
}
},
"ReportGeneratorName": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. ",
"UpdateLicenseManagerReportGeneratorRequest$ReportGeneratorName": " Name of the report generator. "
}
},
"ReportType": {
"base": null,
"refs": {

"ReportTypeList$member": null
}
},
"ReportTypeList": {
"base": null,
"refs": {
"CreateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types an
be generated: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. ",
"ReportGenerator$ReportType": " Type of reports that are generated. ",
"UpdateLicenseManagerReportGeneratorRequest$Type": " Type of reports to generate. The following report types are supported: <ul> License configuration report - Reports the number and details of consumed licenses for a license configuration.   Resource report - Reports the tracked licenses and resource consumption for a license configuration. "
}
},
"ResourceInventory": {
"base": " Details about a resource. ",
"refs": {
"ResourceInventoryList$member": null
}
},
"ResourceInventoryList": {
"base": null,
"refs": {
"ListResourceInventoryResponse$ResourceInventoryList": " Information about the resources. "
}
},
"ResourceLimitExceededException": {
"base": " Your resource limits have been exceeded. ",
"refs": {
}
},
"ResourceNotFoundException": {
"base": " The resource cannot be found. ",
"refs": {
}
},
"ResourceType": {
"base": null,
"refs": {
"ConsumedLicenseSummary$ResourceType": " Resource type of the resource consuming a license. ",
"LicenseConfigurationAssociation$ResourceType": " Type of server resource. ",
"LicenseConfigurationUsage$ResourceType": " Type of resource. ",
"LicenseOperationFailure$ResourceType": " Resource type. ",
"ManagedResourceSummary$ResourceType": " Type of resource associated with a license. ",

"ResourceInventory$ResourceType": " Type of resource. "
}
},
"S3Location": {
"base":
" Details of the S3 bucket that report generator reports are published to. ",
"refs": {
"ReportGenerator$S3Location": " Details of the S3 bucket that report generator reports are published to. "
}
},
"ServerInternalException": {
"base": " The server experienced an internal error. Try again. ",
"refs": {
}
},
"SignedToken": {
"base": null,
"refs": {
"CheckoutBorrowLicenseResponse$SignedToken": " Signed token. ",
"CheckoutLicenseResponse$SignedToken": " Signed token. "
}
},
"StatusReasonMessage": {
"base": null,
"refs": {
"CreateGrantVersionRequest$StatusReason": " Grant status reason. ",
"DeleteGrantRequest$StatusReason": " The Status reason for the delete request. ",
"Grant$StatusReason": " Grant status reason. ",
"ReceivedMetadata$ReceivedStatusReason": " Received status reason. "
}
},

"String": {
"base": null,
"refs": {
"AcceptGrantResponse$Version": " Grant version. ",
"CheckInLicenseRequest$LicenseConsumptionToken": " License consumption token. ",
"CheckInLicenseRequest$Beneficiary": " License beneficiary. ",
"CheckoutBorrowLicenseRequest$NodeId": " Node ID. ",
"CheckoutBorrowLicenseResponse$LicenseConsumptionToken": " License consumption token. ",
"CheckoutBorrowLicenseResponse$NodeId": " Node ID. ",
"CheckoutLicenseRequest$ProductSKU": " Product SKU. ",
"CheckoutLicenseRequest$KeyFingerprint": " Key fingerprint identifying the license. ",
"CheckoutLicenseRequest$Beneficiary": " License beneficiary. ",
"CheckoutLicenseRequest$NodeId": " Node ID. ",
"CheckoutLicenseResponse$LicenseConsumptionToken": " License consumption token. ",
"CheckoutLicenseResponse$NodeId": " Node ID. ",

"CheckoutLicenseResponse$LicenseArn":
" Amazon Resource Name (ARN) of the checkout license. ",
"CreateGrantRequest$GrantName": " Grant name. ",
"CreateGrantRequest$HomeRegion": " Home Region of the grant. ",
"CreateGrantResponse$Version": " Grant version. ",
"CreateGrantVersionRequest$GrantName": " Grant name. ",
"CreateGrantVersionRequest$SourceVersion": " Current version of the grant. ",
"CreateGrantVersionResponse$Version": " New version of the grant. ",
"CreateLicenseConfigurationRequest$Name": " Name of the license configuration. ",
"CreateLicenseConfigurationRequest$Description": " Description of the license configuration. ",
"CreateLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"CreateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"CreateLicenseManagerReportGeneratorResponse$LicenseManagerReportGeneratorArn":
" The Amazon Resource Name (ARN) of the new report generator. ",
"CreateLicenseRequest$LicenseName": " License name. ",
"CreateLicenseRequest$ProductName": " Product name. ",
"CreateLicenseRequest$ProductSKU": " Product SKU. ",
"CreateLicenseRequest$HomeRegion": " Home Region for the license. ",
"CreateLicenseRequest$Beneficiary": " License beneficiary. ",
"CreateLicenseResponse$Version": " License version. ",
"CreateLicenseVersionRequest$LicenseName": " License name. ",
"CreateLicenseVersionRequest$ProductName": " Product name. ",
"CreateLicenseVersionRequest$HomeRegion": " Home Region of the license. ",
"CreateLicenseVersionRequest$SourceVersion": " Current version of the license. ",
"CreateLicenseVersionResponse$Version": " New version of the license. ",
"CreateTokenResponse$TokenId":
" Token ID. ",
"DeleteGrantRequest$Version": " Current version of the grant. ",
"DeleteGrantResponse$Version": " Grant version. ",
"DeleteLicenseConfigurationRequest$LicenseConfigurationArn": " ID of the license configuration. ",
"DeleteLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to be deleted. ",
"DeleteLicenseRequest$SourceVersion": " Current version of the license. ",
"DeleteTokenRequest$TokenId": " Token ID. ",
"Entitlement$Name": " Entitlement name. ",
"Entitlement$Value": " Entitlement resource. Use only if the unit is None. ",
"EntitlementData$Name": " Entitlement data name. ",
"EntitlementData$Value": " Entitlement data value. ",
"EntitlementUsage$Name": " Entitlement usage name. ",
"EntitlementUsage$ConsumedValue":
" Resource usage consumed. ",
"EntitlementUsage$MaxCount": " Maximum entitlement usage count. ",
"ExtendLicenseConsumptionRequest$LicenseConsumptionToken": " License consumption token. ",
"ExtendLicenseConsumptionResponse$LicenseConsumptionToken": " License consumption token. ",
"FailedDependencyException$ErrorCode": null,
"GetGrantRequest$Version": " Grant version. ",
"GetLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the

license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationId": " Unique ID for the license configuration. ",
"GetLicenseConfigurationResponse$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"GetLicenseConfigurationResponse$Name": " Name of the license configuration. ",
"GetLicenseConfigurationResponse$Description": " Description of the license configuration. ",
"GetLicenseConfigurationResponse$Status": " License configuration status. ",
"GetLicenseConfigurationResponse$OwnerAccountId": " Account ID of the owner of the license configuration. ",
"GetLicenseConversionTaskResponse$ResourceArn": " Amazon Resource Names (ARN) of the resources the license conversion task is associated with. ",
"GetLicenseConversionTaskResponse$StatusMessage": " The status message for the conversion task. ",
"GetLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"GetLicenseRequest$Version": " License version. ",
"GetServiceSettingsResponse$S3BucketArn": " Regional S3 bucket path for storing reports, license trail event data, discovery data, and so on. ",
"GetServiceSettingsResponse$SnsTopicArn": " SNS topic configured to receive notifications from License Manager. ",
"GetServiceSettingsResponse$LicenseManagerResourceShareArn": " Amazon Resource Name (ARN) of the resource share. The License Manager management account provides member accounts with access to this share. ",
"Grant$GrantName": " Grant name. ",
"Grant$HomeRegion": " Home Region of the grant. ",
"Grant$Version": " Grant version. ",
"GrantedLicense$LicenseName": " License name. ",
"GrantedLicense$ProductName": " Product name. ",
"GrantedLicense$ProductSKU": " Product SKU. ",
"GrantedLicense$HomeRegion": " Home Region of the granted license. ",
"GrantedLicense$Beneficiary": " Granted license beneficiary. ",
"GrantedLicense$Version": " Version of the granted license. ",
"InventoryFilter$Name": " Name of the filter. ",
"InventoryFilter$Value": " Value of the filter. ",
"Issuer$Name": " Issuer name. ",
"Issuer$SignKey": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$Name": " Issuer name. ",
"IssuerDetails$SignKey": " Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, and support the RSASSA-PSS SHA-256 signing algorithm. ",
"IssuerDetails$KeyFingerprint": " Issuer key fingerprint. ",
"License$LicenseName": " License name. ",
"License$ProductName": " Product name. ",
"License$ProductSKU": " Product SKU. ",
"License$HomeRegion": " Home Region of the license. ",
"License$Beneficiary": " License beneficiary. ",

"License$Version": " License version. ",
"LicenseConfiguration$LicenseConfigurationId": " Unique ID of the license configuration. ",
"LicenseConfiguration$LicenseConfigurationArn":
" Amazon Resource Name (ARN) of the license configuration. ",
"LicenseConfiguration$Name": " Name of the license configuration. ",
"LicenseConfiguration$Description": " Description of the license configuration. ",
"LicenseConfiguration$Status": " Status of the license configuration. ",
"LicenseConfiguration$OwnerAccountId": " Account ID of the license configuration's owner. ",
"LicenseConfigurationAssociation$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationAssociation$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource consuming licenses. ",
"LicenseConfigurationAssociation$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"LicenseConfigurationUsage$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseConfigurationUsage$ResourceStatus":
" Status of the resource. ",
"LicenseConfigurationUsage$ResourceOwnerId": " ID of the account that owns the resource. ",
"LicenseConversionTask$ResourceArn": " The Amazon Resource Name (ARN) of the resource associated with the license type conversion task. ",
"LicenseConversionTask$StatusMessage": " The status message for the conversion task. ",
"LicenseOperationFailure$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"LicenseOperationFailure$ErrorMessage": " Error message. ",
"LicenseOperationFailure$OperationName": " Name of the operation. ",
"LicenseOperationFailure$ResourceOwnerId": " ID of the Amazon Web Services account that owns the resource. ",
"LicenseOperationFailure$OperationRequestedBy": " The requester is \"License Manager Automated Discovery\". ",
"LicenseSpecification$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"LicenseSpecification$AmiAssociationScope": " Scope of AMI associations. The possible value is <code>cross-account</code>. ",
"ListAssociationsForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of a license configuration. ",
"ListAssociationsForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListAssociationsForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListDistributedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListFailuresForLicenseConfigurationOperationsRequest$LicenseConfigurationArn": " Amazon Resource Name of the license configuration. ",
"ListFailuresForLicenseConfigurationOperationsRequest$NextToken": " Token for the next set of results. ",

"ListFailuresForLicenseConfigurationOperationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConfigurationsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksRequest$NextToken": " Token for the next set of results. ",
"ListLicenseConversionTasksResponse$NextToken": " Token for the next set of results. ",

"ListLicenseManagerReportGeneratorsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseManagerReportGeneratorsResponse$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of a resource that has an associated license configuration. ",
"ListLicenseSpecificationsForResourceRequest$NextToken": " Token for the next set of results. ",
"ListLicenseSpecificationsForResourceResponse$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsRequest$NextToken": " Token for the next set of results. ",
"ListLicenseVersionsResponse$NextToken": " Token for the next set of results. ",
"ListLicensesRequest$NextToken": " Token for the next set of results. ",
"ListLicensesResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsRequest$NextToken": " Token for the next set of results. ",
"ListReceivedGrantsResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesForOrganizationResponse$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesRequest$NextToken": " Token for the next set of results. ",
"ListReceivedLicensesResponse$NextToken": " Token for the next set of results. ",
"ListResourceInventoryRequest$NextToken": " Token for the next set of results. ",
"ListResourceInventoryResponse$NextToken": " Token for the next set of results. ",
"ListTagsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListTokensRequest$NextToken": " Token for the next set of results. ",
"ListTokensResponse$NextToken": " Token for the next set of results. ",
"ListUsageForLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"ListUsageForLicenseConfigurationRequest$NextToken": " Token for the next set of results. ",
"ListUsageForLicenseConfigurationResponse$NextToken": " Token for the next set of results. ",
"MaxSize3StringList$member": null,
"Metadata$Name": " The key name. ",
"Metadata$Value": " The value. ",
"ProductInformation$ResourceType": " Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>. ",
"ProductInformationFilter$ProductInformationFilterName": " Filter name. ",
"ProductInformationFilter$ProductInformationFilterComparator": " Logical operator. ",
"RejectGrantResponse$Version": " Grant version. ",
"ReportGenerator$ReportGeneratorName": " Name of the report generator. ",
"ReportGenerator$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator. ",
"ReportGenerator$LastRunStatus": " Status of the last report generation attempt. ",
"ReportGenerator$LastRunFailureReason": " Failure message for the last report generation attempt. ",
"ReportGenerator$LastReportGenerationTime": " Time the last report was generated at. ",
"ReportGenerator$ReportCreatorAccount": " The Amazon Web Services account ID used to create the report generator. ",
"ReportGenerator$Description": " Description of the report generator. ",
"ReportGenerator$CreateTime": " Time the report was created. ",

"ResourceInventory$ResourceId": " ID of the resource. ",
"ResourceInventory$ResourceArn": " Amazon Resource Name (ARN) of the resource. ",
"ResourceInventory$Platform": " Platform of the resource. ",
"ResourceInventory$PlatformVersion": " Platform version of the resource in the inventory. ",
"ResourceInventory$ResourceOwningAccountId": " ID of the account that owns the resource. ",
"S3Location$bucket": " Name of the S3 bucket reports are published to. ",

"S3Location$keyPrefix": " Prefix of the S3 bucket reports are published to. ",
"StringList$member": null,
"Tag$Key": " Tag key. ",
"Tag$Value": " Tag value. ",
"TagKeyList$member": null,
"TagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"TokenData$TokenId": " Token ID. ",
"TokenData$TokenType": " Type of token generated. The supported value is <code>REFRESH_TOKEN</code>. ",
"TokenData$LicenseArn": " Amazon Resource Name (ARN) of the license. ",
"TokenData$Status": " Token status. The possible values are <code>AVAILABLE</code> and <code>DELETED</code>. ",
"UntagResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$LicenseConfigurationArn": " Amazon Resource Name (ARN) of the license configuration. ",
"UpdateLicenseConfigurationRequest$Name": " New name of the license configuration. ",
"UpdateLicenseConfigurationRequest$Description": " New description of the license configuration. ",
"UpdateLicenseManagerReportGeneratorRequest$LicenseManagerReportGeneratorArn": " Amazon Resource Name (ARN) of the report generator to update. ",
"UpdateLicenseManagerReportGeneratorRequest$Description": " Description of the report generator. ",
"UpdateLicenseSpecificationsForResourceRequest$ResourceArn": " Amazon Resource Name (ARN) of the Amazon Web Services resource. ",
"UpdateServiceSettingsRequest$S3BucketArn": " Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored. ",
"UpdateServiceSettingsRequest$SnsTopicArn": " Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts. "
}
},
"StringList": {
"base": null,
"refs": {
"CreateLicenseConfigurationRequest$LicenseRules": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules vary by dimension, as follows.   <code>Cores</code> dimension: <code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumCores</code> | <code>minimumCores</code>   <code>Instances</code> dimension: <code>allowedTenancy</code> | <code>maximumCores</code> | <code>minimumCores</code> | <code>maximumSockets</code> | <code>minimumSockets</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   <code>Sockets</code> dimension:

<code>allowedTenancy</code> | <code>licenseAffinityToHost</code> | <code>maximumSockets</code> | <code>minimumSockets</code>   <code>vCPUs</code> dimension: <code>allowedTenancy</code> | <code>honorVcpuOptimization</code> | <code>maximumVcpus</code> | <code>minimumVcpus</code>   The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and <code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are <code>True</code> and <code>False</code>. ",
      "GetLicenseConfigurationResponse$LicenseRules": " License rules. ",
      "LicenseConfiguration$LicenseRules": " License rules. ",
      "ListLicenseConfigurationsRequest$LicenseConfigurationArns": " Amazon Resource Names (ARN) of the license configurations. ",
      "ListTokensRequest$TokenIds": " Token IDs. ",
      "ProductInformationFilter$ProductInformationFilterValue": " Filter value. ",
      "UpdateLicenseConfigurationRequest$LicenseRules": " New license rule. The only rule that you can add after you create a license configuration is licenseAffinityToHost. "
    }
  },
  "Tag": {
    "base": " Details about a tag for a license configuration. ",
    "refs": {
      "TagList$member": null
    }
  },
  "TagKeyList": {
    "base": null,
    "refs": {
      "UntagResourceRequest$TagKeys": " Keys identifying the tags to remove. "
    }
  },
  "TagList": {
    "base": null,
    "refs": {
      "CreateLicenseConfigurationRequest$Tags": " Tags to add to the license configuration. ",
      "CreateLicenseManagerReportGeneratorRequest$Tags": " Tags to add to the report generator. ",
      "GetLicenseConfigurationResponse$Tags": " Tags for the license configuration. ",
      "ListTagsForResourceResponse$Tags": " Information about the tags. ",
      "ReportGenerator$Tags": " Tags associated with the report generator. ",
      "TagResourceRequest$Tags": " One or more tags. "
    }
  },
  "TagResourceRequest": {
    "base": null,
    "refs": {
    }
  },
  "TagResourceResponse": {
    "base": null,

"refs": {

}
},
"TokenData": {
"base": " Describes a token. ",
"refs": {
"TokenList$member": null
}
},
"TokenList": {
"base": null,
"refs": {
"ListTokensResponse$Tokens": " Received token details. "
}
},
"TokenString": {
"base": null,
"refs": {
"CreateTokenResponse$Token": " Refresh token, encoded as a JWT token. ",
"GetAccessTokenRequest$Token": " Refresh token, encoded as a JWT token. ",
"GetAccessTokenResponse$AccessToken": " Temporary access token. "
}
},
"TokenType": {
"base": null,
"refs": {
"CreateTokenResponse$TokenType": " Token type. "
}
},
"UnsupportedDigitalSignatureMethodException": {
"base": " The digital signature method is unsupported. Try your request again. ",
"refs": {
}
},
"UntagResourceRequest": {
"base": null,
"refs": {
}
},
"UntagResourceResponse":
{
"base": null,
"refs": {
}
},
"UpdateLicenseConfigurationRequest": {
"base": null,

"refs": {
}
},
"UpdateLicenseConfigurationResponse": {
"base": null,
"refs": {
}
},
"UpdateLicenseManagerReportGeneratorRequest": {
"base": null,
"refs": {
}
},
"UpdateLicenseManagerReportGeneratorResponse": {
"base": null,
"refs": {
}
},
"UpdateLicenseSpecificationsForResourceRequest": {
"base": null,
"refs": {
}
},
"UpdateLicenseSpecificationsForResourceResponse": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"UsageOperation": {
"base": null,
"refs": {
"LicenseConversionContext$UsageOperation": " The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see Sample data: usage operation by platform "
}
},

"ValidationException": {
"base": " The provided input is not valid. Try your request again. ",
"refs": {
}
}
}
}
{
"version": "2.0",
"service": " With License Manager, you can discover and track your commercial Linux subscriptions on running Amazon EC2 instances. ",
"operations": {
"GetServiceSettings": " Lists the Linux subscriptions service settings. ",
"ListLinuxSubscriptionInstances": " Lists the running Amazon EC2 instances that were discovered with commercial Linux subscriptions. ",
"ListLinuxSubscriptions": " Lists the Linux subscriptions that have been discovered. If you have linked your organization, the returned results will include data aggregated across your accounts in Organizations. ",
"UpdateServiceSettings": " Updates the service settings for Linux subscriptions. "
},
"shapes": {
"Boolean": {
"base": null,
"refs": {
"UpdateServiceSettingsRequest$AllowUpdate": " Describes if updates are allowed to the service settings for Linux subscriptions. If you allow updates, you can aggregate Linux subscription data in
more than one home Region. "
}
},
"BoxInteger": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesRequest$MaxResults": " Maximum number of results to return in a single call. ",
"ListLinuxSubscriptionsRequest$MaxResults": " Maximum number of results to return in a single call. "
}
},
"BoxLong": {
"base": null,
"refs": {
"Subscription$InstanceCount": " The total amount of running instances using this subscription. "
}
},
"Filter": {
"base": " A filter object that is used to return more specific results from a describe operation. Filters can be used to match a set of resources by specific criteria. ",
"refs": {
"FilterList$member": null
}

},
"FilterList": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesRequest$Filters": " An array of structures that you can use to filter the results to those that match one
or more sets of key-value pairs that you specify. For example, you can filter by the name of <code>AmiID</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain Amazon Machine Image (AMI) ID. The valid names for this filter are: <ul> <code>AmiID</code>   <code>InstanceID</code>   <code>AccountID</code>   <code>Status</code>   <code>Region</code>   <code>UsageOperation</code>   <code>ProductCode</code>   <code>InstanceType</code>   The valid Operators for this filter are: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> ",
"ListLinuxSubscriptionsRequest$Filters": " An array of structures that you can use to filter the results to those that match one or more sets of key-value
pairs that you specify. For example, you can filter by the name of <code>Subscription</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain subscription's name. The valid names for this filter are: <ul> <code>Subscription</code>   The valid Operators for this filter are: <ul> <code>contains</code>   <code>equals</code>   <code>Notequal</code> "
}
},
"GetServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"GetServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"Instance": {
"base": " Details discovered information about a running instance using Linux subscriptions. ",
"refs": {
"InstanceList$member": null
}
},
"InstanceList": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesResponse$Instances":
" An array that contains instance objects. "
}
},
"InternalServerException": {

"base": " An exception occurred with the service. ",
"refs": {
}
},
"LinuxSubscriptionsDiscovery": {
"base": null,
"refs": {
"GetServiceSettingsResponse$LinuxSubscriptionsDiscovery": " Lists if discovery has been enabled for Linux subscriptions. ",
"UpdateServiceSettingsRequest$LinuxSubscriptionsDiscovery": " Describes if the discovery of Linux subscriptions is enabled. ",
"UpdateServiceSettingsResponse$LinuxSubscriptionsDiscovery": " Lists if discovery has been enabled for Linux subscriptions. "
}
},
"LinuxSubscriptionsDiscoverySettings": {
"base": " Lists the settings defined for discovering Linux subscriptions. ",
"refs": {
"GetServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": " Lists the settings defined for Linux subscriptions discovery. The settings
include if Organizations integration has been enabled, and which Regions data will be aggregated from. ",
"UpdateServiceSettingsRequest$LinuxSubscriptionsDiscoverySettings": " The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. ",
"UpdateServiceSettingsResponse$LinuxSubscriptionsDiscoverySettings": " The settings defined for Linux subscriptions discovery. The settings include if Organizations integration has been enabled, and which Regions data will be aggregated from. "
}
},
"ListLinuxSubscriptionInstancesRequest": {
"base": " NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases. ",
"refs": {
}
},
"ListLinuxSubscriptionInstancesRequestNextTokenString": {
"base": null,
"refs": {
"ListLinuxSubscriptionInstancesRequest$NextToken":
" Token for the next set of results. "
}
},
"ListLinuxSubscriptionInstancesResponse": {
"base": null,
"refs": {
}
},
"ListLinuxSubscriptionsRequest": {

"base": " NextToken length limit is half of ddb accepted limit. Increase this limit if parameters in request increases. ",
"refs": {
}
},
"ListLinuxSubscriptionsRequestNextTokenString": {
"base": null,
"refs": {
"ListLinuxSubscriptionsRequest$NextToken": " Token for the next set of results. "
}
},
"ListLinuxSubscriptionsResponse": {
"base": null,
"refs": {
}
},
"Operator": {
"base": null,
"refs": {
"Filter$Operator": " An operator for filtering results. "
}
},
"OrganizationIntegration": {
"base": null,
"refs": {
"LinuxSubscriptionsDiscoverySettings$OrganizationIntegration": " Details if you have enabled resource discovery across
your accounts in Organizations. "
}
},
"ProductCodeList": {
"base": null,
"refs": {
"Instance$ProductCode": " The product code for the instance. For more information, see Usage operation values in the License Manager User Guide . "
}
},
"Status": {
"base": null,
"refs": {
"GetServiceSettingsResponse$Status": " Indicates the status of Linux subscriptions settings being applied. ",
"UpdateServiceSettingsResponse$Status": " Indicates the status of Linux subscriptions settings being applied. "
}
},
"String": {

"base": null,
"refs": {
"Filter$Name": " The type of name to filter by. ",
"Instance$AccountID": " The account ID which owns the instance. ",
"Instance$AmiId": " The AMI ID used to launch the instance. ",
"Instance$InstanceID": " The instance ID of the resource. ",
"Instance$InstanceType": " The instance type of the resource. ",
"Instance$LastUpdatedTime": " The time in which the last discovery updated the instance details. ",
"Instance$Region": " The Region the instance is running in. ",
"Instance$Status": " The status of the instance. ",
"Instance$SubscriptionName": " The name of the subscription being used by the instance. ",
"Instance$UsageOperation": " The usage operation of the instance. For more information, see For more information, see Usage operation values in the License Manager User Guide. ",
"InternalServerException$message": null,
"ListLinuxSubscriptionInstancesResponse$NextToken": " Token for the next set of results. ",
"ListLinuxSubscriptionsResponse$NextToken": " Token for the next set of results. ",
"ProductCodeList$member": null,
"StringMap$key": null,
"StringMap$value": null,
"Subscription$Name": " The name of the subscription. ",
"Subscription$Type": " The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS. ",
"ThrottlingException$message": null,
"ValidationException$message": null
}
},
"StringList": {
"base": null,
"refs": {
"Filter$Values": " One or more values for the name to filter by. ",
"GetServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. ",
"LinuxSubscriptionsDiscoverySettings$SourceRegions": " The Regions in which to discover data for Linux subscriptions. ",
"UpdateServiceSettingsResponse$HomeRegions": " The Region in which License Manager displays the aggregated data for Linux subscriptions. "
}
},
"StringListMemberString": {
"base": null,
"refs": {
"StringList$member": null
}
},

"StringMap": {
"base": null,
"refs": {
"GetServiceSettingsResponse$StatusMessage": " A message which details the Linux subscriptions service settings current status. ",
"UpdateServiceSettingsResponse$StatusMessage": " A message which details the Linux subscriptions service settings current status. "
}
},
"Subscription": {
"base": " An object which details a discovered Linux subscription. ",
"refs": {
"SubscriptionList$member": null
}
},
"SubscriptionList": {
"base": null,
"refs": {

"ListLinuxSubscriptionsResponse$Subscriptions": " An array that contains subscription objects. "
}
},
"ThrottlingException": {
"base": " The request was denied due to request throttling. ",
"refs": {
}
},
"UpdateServiceSettingsRequest": {
"base": null,
"refs": {
}
},
"UpdateServiceSettingsResponse": {
"base": null,
"refs": {
}
},
"ValidationException": {
"base": " The provided input is not valid. Try your request again. ",
"refs": {
}
}
}
}
{
"testCases": [
{
"documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.af-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "af-south-1"
}
},
{
"documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-east-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-east-1"
}
},
{
"documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",

"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-northeast-1"
}
},
{
"documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-2.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,

"Region": "ap-northeast-2"
}
},
{
"documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-northeast-3.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-northeast-3"
}
},
{
"documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-south-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack": false,
"Region": "ap-south-1"
}
},
{
"documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-1.amazonaws.com"
}
},
"params": {
"UseFIPS": false,
"UseDualStack":
false,
"Region": "ap-southeast-1"
}
},
{
"documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager.ap-southeast-2.amazonaws.com"

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            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "ap-southeast-2"
        }
    },
    {
        "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "ap-southeast-3"
        }
    },
    {
        "documentation":
"For region ca-central-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "ca-central-1"
        }
    },
    {
        "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.eu-central-1.amazonaws.com"
            }
        },
        "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Region": "eu-central-1"
        }
    },
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```
    {
      "documentation": "For region eu-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
            "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
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"UseDualStack": true,
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"Region": "us-iso-east-1"
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"endpoint": {
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"UseDualStack": false,
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"UseDualStack": true,
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"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
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}
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"params": {
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"Region": "us-isob-east-1"
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"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
"error": "DualStack is enabled but this partition does not support DualStack"
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"params": {
"UseFIPS": false,
"UseDualStack": true,
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"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
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    "params": {
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      "UseDualStack": false,
      "Region": "us-east-1",
      "Endpoint": "https://example.com"
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      "UseDualStack": true,
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      "Endpoint": "https://example.com"
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    "expect": {
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with FIPS disabled and DualStack enabled",
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        "UseFIPS": false
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        }
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        "UseDualStack": true,
        "UseFIPS": true
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"UseFIPS": true
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"UseFIPS": false
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"error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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"UseDualStack": true,
"UseFIPS": true
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}
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"params": {
"Region": "us-isob-east-1",
"UseDualStack": false,
"UseFIPS": true
}

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        "UseFIPS": false
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        }
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      "params": {
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        "UseDualStack": false,
        "UseFIPS": false
      }
    },
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        }
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      "params": {
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        "UseDualStack": false,
        "UseFIPS": false,
        "Endpoint": "https://example.com"
      }
    },
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      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
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        "UseDualStack": false,
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"UseFIPS": false,
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"output_token": "NextToken",
"limit_key": "MaxResults",
"result_key": "IdentityProviderSummaries"
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"ListInstances": {
"input_token": "NextToken",
"output_token": "NextToken",
"limit_key": "MaxResults",
"result_key": "InstanceSummaries"
},
"ListProductSubscriptions": {
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"output_token": "NextToken",
"limit_key": "MaxResults",
"result_key": "ProductUserSummaries"
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"output_token": "NextToken",
"limit_key": "MaxResults",

"result_key": "InstanceUserSummaries"
}
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"version": "1.0",
"parameters": {
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"builtIn": "AWS::Region",
"required": true,
"documentation": "The AWS region used to dispatch the request.",
"type": "String"
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"UseDualStack": {
"builtIn": "AWS::UseDualStack",
"required": true,
"default": false,
"documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
"type": "Boolean"
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"UseFIPS": {
"builtIn": "AWS::UseFIPS",
"required": true,
"default": false,
"documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
"type": "Boolean"
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"builtIn": "SDK::Endpoint",
"required": false,
"documentation": "Override the endpoint used to send this request",
"type": "String"
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"fn": "aws.partition",
"argv": [
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"ref": "Region"
}
],
"assign": "PartitionResult"

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    "type": "tree",
    "rules": [
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                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
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                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
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                    "type": "error"
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            "fn": "booleanEquals",
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                                ]
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```
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                "conditions": [],
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            }
        ]
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        },
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```

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                ]
              }
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            "rules": [
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          {
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```

```
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            ]
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                        true

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```

```
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        {
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]
}
]
}
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 "metadata":{
  "apiVersion":"2018-05-10",
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    "Username":{"shape":"String"}
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"StatusMessage":{"shape":"String"}
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      "Product"
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    }
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"Username"
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"Username":{"shape":"String"}
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"Product",
"Username"
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"members":{
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"IdentityProvider":{"shape":"IdentityProvider"},
"Product":{"shape":"String"},
"Username":{"shape":"String"}
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"member":{"shape":"String"}
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    "RemoveSubnets"
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    "RemoveSubnets":{"shape":"Subnets"},
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}
}

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      "required": false,
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      "required": true,
      "default": false,
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      "type": "Boolean"
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                            },

true
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                                        ]
```

```
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},
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```

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        {
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            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"
        }
    ]

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                },
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```

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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                              "headers": {}
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                        ]

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              ]
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          ]
```

```
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    }
  ]
}
```


1.4544 pljava-api 1.6.8

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1.4547 gorilla-websocket 1.5.4-0.20250319132907-e064f32e3674

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1.4548 workerpool 1.3.0

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- helm.sh/helm/v3

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#define UV_PLATFORM_FS_EVENT_FIELDS                                   \
 uv__io_t event_watcher;                                              \

#define UV_IO_PRIVATE_PLATFORM_FIELDS                                 \
 int rcount;                                                          \
 int wcount;                                                          \

#define UV_HAVE_KQUEUE 1
```

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Written by: Philip Hazel
Email local part: ph10
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A. HISTORY OF THE SOFTWARE
==========

Python was created in the early 1990s by Guido van Rossum at Stichting
Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands
as a successor of a language called ABC. Guido remains Python's
principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for
National Research Initiatives (CNRI, see http://www.cnri.reston.va.us)
in Reston, Virginia where he released several versions of the
software.

In May 2000, Guido and the Python core development team moved to
BeOpen.com to form the BeOpen PythonLabs team. In October of the same
year, the PythonLabs team moved to Digital Creations, which became
Zope Corporation. In 2001, the Python Software Foundation (PSF, see
https://www.python.org/psf/) was formed, a non-profit organization
created specifically to own Python-related Intellectual Property.

Zope Corporation was a sponsoring member of the PSF.

All
Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

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```
#ifndef V8_COMPILER_TURBOSHAFT_COPYING_PHASE_H_
#define V8_COMPILER_TURBOSHAFT_COPYING_PHASE_H_

#include <algorithm>
#include <cstddef>
#include <cstdint>
#include <optional>
#include <utility>

#include "src/base/iterator.h"
#include "src/base/logging.h"
#include "src/base/small-vector.h"
#include "src/base/vector.h"
#include "src/codegen/optimized-compilation-info.h"
#include "src/codegen/source-position.h"
#include "src/compiler/node-origin-table.h"
#include "src/compiler/turboshaft/assembler.h"
#include "src/compiler/turboshaft/graph.h"
#include "src/compiler/turboshaft/index.h"
#include "src/compiler/turboshaft/operations.h"
#include "src/compiler/turboshaft/phase.h"
#include "src/compiler/turboshaft/reducer-traits.h"
#include "src/compiler/turboshaft/representations.h"
#include "src/compiler/turboshaft/snapshot-table.h"
#include
 "src/compiler/turboshaft/variable-reducer.h"
#include "src/zone/zone-containers.h"

namespace v8::internal::compiler::turboshaft {

using MaybeVariable = std::optional<Variable>;

V8_EXPORT_PRIVATE int CountDecimalDigits(uint32_t value);
struct PaddingSpace {
 int spaces;
```

```
};
V8_EXPORT_PRIVATE std::ostream& operator<<(std::ostream& os,
                                           PaddingSpace padding);

template <typename Next>
class ReducerBaseForwarder;
template <typename Next>
class WasmRevecReducer;

template <typename Derived, typename Base>
class OutputGraphAssembler : public Base {
#define FRIEND(op) friend struct op##Op;
 TURBOSHAFT_OPERATION_LIST(FRIEND)
#undef FRIEND
 template <size_t I, class D>
 friend struct FixedArityOperationT;

 OpIndex Map(OpIndex index) { return derived_this()->MapToNewGraph(index); }

 OptionalOpIndex Map(OptionalOpIndex index) {
   return derived_this()->MapToNewGraph(index);
 }

 template <size_t N>
 base::SmallVector<OpIndex,
 N> Map(base::Vector<const OpIndex> indices) {
   return derived_this()->template MapToNewGraph<N>(indices);
 }

public:
#define ASSEMBLE(operation)                                          \
 OpIndex AssembleOutputGraph##operation(const operation##Op& op) { \
   return op.Explode(                                          \
       [a = assembler()](auto... args) {                       \
         return a->Reduce##operation(args...);                 \
       },                                                      \
       *this);                                                 \
 }
 TURBOSHAFT_OPERATION_LIST(ASSEMBLE)
#undef ASSEMBLE

private:
 Derived* derived_this() { return static_cast<Derived*>(this); }
 Assembler<typename Base::ReducerList>* assembler() {
   return &derived_this()->Asm();
 }
};
```

```
template <class AfterNext>
class GraphVisitor : public OutputGraphAssembler<GraphVisitor<AfterNext>,
                                    VariableReducer<AfterNext>>
 {
 template <typename N>
 friend class ReducerBaseForwarder;
 template <typename N>
 friend class WasmRevecReducer;

public:
 using Next = VariableReducer<AfterNext>;
 TURBOSHAFT_REDUCER_BOILERPLATE(CopyingPhase)

 GraphVisitor()
     : input_graph_(Asm().modifiable_input_graph()),
       current_input_block_(nullptr),
       op_mapping_(Asm().input_graph().op_id_count(), OpIndex::Invalid(),
                   Asm().phase_zone(), &Asm().input_graph()),
       block_mapping_(Asm().input_graph().block_count(), nullptr,
                      Asm().phase_zone()),
       blocks_needing_variables_(Asm().input_graph().block_count(),
                                 Asm().phase_zone()),
       old_opindex_to_variables(Asm().input_graph().op_id_count(),
                                Asm().phase_zone(), &Asm().input_graph()),
       blocks_to_clone_(Asm().phase_zone()) {
   Asm().output_graph().Reset();
 }

 // `trace_reduction` is a template parameter
 to avoid paying for tracing at
 // runtime.
 template <bool trace_reduction>
 void VisitGraph() {
   Asm().Analyze();

   // Creating initial old-to-new Block mapping.
   for (Block& input_block : Asm().modifiable_input_graph().blocks()) {
     block_mapping_[input_block.index()] = Asm().output_graph().NewBlock(
         input_block.IsLoop() ? Block::Kind::kLoopHeader : Block::Kind::kMerge,
         &input_block);
   }

   // Visiting the graph.
   VisitAllBlocks<trace_reduction>();

   Finalize();
 }
```

```
void Bind(Block* block) {
  Next::Bind(block);
  block->SetOrigin(current_input_block());
}

void Finalize() {
  // Updating the source_positions.
  if (!Asm().input_graph().source_positions().empty()) {
    for (OpIndex index : Asm().output_graph().AllOperationIndices()) {
      OpIndex origin = Asm().output_graph().operation_origins()[index];
      Asm().output_graph().source_positions()[index] =
          origin.valid() ? Asm().input_graph().source_positions()[origin]
                         : SourcePosition::Unknown();
    }
  }
  // Updating the operation origins.
  NodeOriginTable* origins = Asm().data()->node_origins();
  if (origins) {
    for (OpIndex index : Asm().output_graph().AllOperationIndices()) {
      OpIndex origin = Asm().output_graph().operation_origins()[index];
      if (origin.valid()) {
        origins->SetNodeOrigin(index.id(), origin.id());
      }
    }
  }

  input_graph_.SwapWithCompanion();
}

const Block* current_input_block() { return current_input_block_; }

bool* turn_loop_without_backedge_into_merge() {
  return &turn_loop_without_backedge_into_merge_;
}

// Emits a Goto to a cloned version of {input_block}, assuming that the only
// predecessor of this cloned copy will be the current block. {input_block} is
// not cloned right away (because this would recursively call VisitBlockBody,
// which could cause stack overflows), and is instead added to
the
// {blocks_to_clone_} stack, whose blocks will be cloned once the current
// block has been fully visited.
void CloneBlockAndGoto(const Block* input_block) {
  Block* new_block =
      Asm().output_graph().NewBlock(input_block->kind(), input_block);

  // Computing which input of Phi operations to use when visiting
  // {input_block} (since {input_block} doesn't really have predecessors
```

```
  // anymore).
  int added_block_phi_input = input_block->GetPredecessorIndex(
      Asm().current_block()->OriginForBlockEnd());

  // There is no guarantees that {input_block} will be entirely removed just
  // because it's cloned/inlined, since it's possible that it has predecessors
  // for which this optimization didn't apply. As a result, we add it to
  // {blocks_needing_variables_}, so that if it's ever generated
  // normally, Variables are used when emitting its content, so that
  // they can later be merged when control flow merges with the current
  //
 version of {input_block} that we just cloned.
  blocks_needing_variables_.Add(input_block->index().id());

  Asm().Goto(new_block);

  blocks_to_clone_.push_back({input_block, added_block_phi_input, new_block});
 }

 // Visits and emits {input_block} right now (ie, in the current block). This
 // should not be called recursively in order to avoid stack overflow (ie,
 // processing {input_block} should never lead to calling CloneAndInlingBlock).
 void CloneAndInlineBlock(const Block* input_block) {
  if (Asm().generating_unreachable_operations()) return;

#ifdef DEBUG
  // Making sure that we didn't call CloneAndInlineBlock recursively.
  DCHECK(!is_in_recursive_inlining_);
  ScopedModification<bool> recursive_guard(&is_in_recursive_inlining_, true);
#endif

  // Computing which input of Phi operations to use when visiting
  // {input_block} (since {input_block} doesn't really have predecessors
  // anymore).
  int added_block_phi_input = input_block->GetPredecessorIndex(
      Asm().current_block()->OriginForBlockEnd());

  // There is no guarantees that {input_block} will be entirely removed just
  // because it's cloned/inlined, since it's possible that it has predecessors
  // for which this optimization didn't apply. As a result, we add it to
  // {blocks_needing_variables_}, so that if it's ever generated
  // normally, Variables are used when emitting its content, so that
  // they can later be merged when control flow merges with the current
  // version of {input_block} that we just cloned.
  blocks_needing_variables_.Add(input_block->index().id());

  ScopedModification<bool> set_true(&current_block_needs_variables_, true);
  VisitBlockBody<CanHavePhis::kYes, ForCloning::kYes, false>(
```

```
    input_block, added_block_phi_input);
}

// {InlineOp} introduces two limitations unlike {CloneAndInlineBlock}:
// 1. The input operation must not be emitted anymore as part of its
// regular input block;
// 2.
{InlineOp} must not be used multiple times for the same input op.
bool InlineOp(OpIndex index, const Block* input_block) {
  return VisitOpAndUpdateMapping<false>(index, input_block);
}

template <bool can_be_invalid = false>
OpIndex MapToNewGraph(OpIndex old_index, int predecessor_index = -1) {
  DCHECK(old_index.valid());
  OpIndex result = op_mapping_[old_index];

  if (!result.valid()) {
    // {op_mapping} doesn't have a mapping for {old_index}. The
    // VariableReducer should provide the mapping.
    MaybeVariable var = GetVariableFor(old_index);
    if constexpr (can_be_invalid) {
      if (!var.has_value()) {
        return OpIndex::Invalid();
      }
    }
    DCHECK(var.has_value());
    if (predecessor_index == -1) {
      result = Asm().GetVariable(var.value());
    } else {
      result = Asm().GetPredecessorValue(var.value(), predecessor_index);
    }
  }

  DCHECK_IMPLIES(!can_be_invalid, result.valid());
  return result;
 }

template <bool can_be_invalid = false, typename T>
V<T> MapToNewGraph(V<T> old_index, int predecessor_index = -1) {
  return V<T>::Cast(MapToNewGraph(static_cast<OpIndex>(old_index), -1));
}

Block* MapToNewGraph(const Block* block) const {
  Block* new_block = block_mapping_[block->index()];
  DCHECK_NOT_NULL(new_block);
  return new_block;
}
```

```
template <typename FunctionType>
OpIndex ResolvePhi(const PhiOp& op, FunctionType&& map,
                   RegisterRepresentation rep) {
  if (op.input_count == 1) {
    // If, in the previous CopyingPhase, a loop header was turned into a
    // regular blocks, its PendingLoopPhis became Phis with a single input. We
    // can now just get rid of these Phis.
    return map(op.input(0), -1);
  }

  OpIndex ig_index = Asm().input_graph().Index(op);
  if (Asm().current_block()->IsLoop()) {
    DCHECK_EQ(op.input_count, 2);
    OpIndex og_index = map(op.input(0), -1);
    if (ig_index == op.input(PhiOp::kLoopPhiBackEdgeIndex))
{
      // Avoid emitting a Loop Phi which points to itself, instead
      // emit it's 0'th input.
      return og_index;
    }
    return Asm().PendingLoopPhi(og_index, rep);
  }

  base::Vector<const OpIndex> old_inputs = op.inputs();
  base::SmallVector<OpIndex, 64> new_inputs;
  int predecessor_count = Asm().current_block()->PredecessorCount();
  Block* old_pred = current_input_block_->LastPredecessor();
  Block* new_pred = Asm().current_block()->LastPredecessor();
  // Control predecessors might be missing after the optimization phase. So we
  // need to skip phi inputs that belong to control predecessors that have no
  // equivalent in the new graph.

  // We first assume that the order if the predecessors of the current block
  // did not change. If it did, {new_pred} won't be nullptr at the end of this
  // loop, and we'll instead fall back to the slower code below to compute the
  // inputs of the Phi.

int predecessor_index = predecessor_count - 1;
  for (OpIndex input : base::Reversed(old_inputs)) {
    if (new_pred && new_pred->OriginForBlockEnd() == old_pred) {
      // Phis inputs have to come from predecessors. We thus have to
      // MapToNewGraph with {predecessor_index} so that we get an OpIndex that
      // is from a predecessor rather than one that comes from a Variable
      // merged in the current block.
      new_inputs.push_back(map(input, predecessor_index));
      new_pred = new_pred->NeighboringPredecessor();
      predecessor_index--;
```

```
    }
    old_pred = old_pred->NeighboringPredecessor();
  }
  DCHECK_IMPLIES(new_pred == nullptr, old_pred == nullptr);

  if (new_pred != nullptr) {
    // If {new_pred} is not nullptr, then the order of the predecessors
    // changed. This should only happen with blocks that were introduced in
    // the previous graph. For instance, consider this (partial) dominator
    // tree:
    //

  //      7
    //       8
    //       10
    //      9
    //      11
    //
    // Where the predecessors of block 11 are blocks 9 and 10 (in that order).
    // In dominator visit order, block 10 will be visited before block 9.
    // Since blocks are added to predecessors when the predecessors are
    // visited, it means that in the new graph, the predecessors of block 11
    // are [10, 9] rather than [9, 10].
    // To account for this, we reorder the inputs of the Phi, and get rid of
    // inputs from blocks that vanished.

#ifdef DEBUG
    // To check that indices are set properly, we zap them in debug builds.
    for (auto& block : Asm().modifiable_input_graph().blocks()) {
      block.clear_custom_data();
    }
#endif
    uint32_t pos = current_input_block_->PredecessorCount() - 1;
    for (old_pred = current_input_block_->LastPredecessor();
         old_pred != nullptr; old_pred = old_pred->NeighboringPredecessor()) {
      // Store
 the current index of the {old_pred}.
      old_pred->set_custom_data(pos--, Block::CustomDataKind::kPhiInputIndex);
    }

    // Filling {new_inputs}: we iterate the new predecessors, and, for each
    // predecessor, we check the index of the input corresponding to the old
    // predecessor, and we put it next in {new_inputs}.
    new_inputs.clear();
    int predecessor_index = predecessor_count - 1;
    for (new_pred = Asm().current_block()->LastPredecessor();
         new_pred != nullptr; new_pred = new_pred->NeighboringPredecessor()) {
      const Block* origin = new_pred->OriginForBlockEnd();
```

```
      DCHECK_NOT_NULL(origin);
      OpIndex input = old_inputs[origin->get_custom_data(
          Block::CustomDataKind::kPhiInputIndex)];
      // Phis inputs have to come from predecessors. We thus have to
      // MapToNewGraph with {predecessor_index} so that we get an OpIndex that
      // is from a predecessor rather than one that comes from a Variable
       // merged in the current block.
      new_inputs.push_back(map(input, predecessor_index));
      predecessor_index--;
    }
  }

  DCHECK_EQ(new_inputs.size(), Asm().current_block()->PredecessorCount());

  if (new_inputs.size() == 1) {
    // This Operation used to be a Phi in a Merge, but since one (or more) of
    // the inputs of the merge have been removed, there is no need for a Phi
    // anymore.
    return new_inputs[0];
  }

  std::reverse(new_inputs.begin(), new_inputs.end());
  return Asm().ReducePhi(base::VectorOf(new_inputs), rep);
}

// The block from the input graph that corresponds to the current block as a
// branch destination. Such a block might not exist, and this function uses a
// trick to compute such a block in almost all cases, but might rarely fail
// and return `nullptr` instead.
const Block* OriginForBlockStart(Block* block) const {
  // Check that `block->origin_` is still valid as a block start and was not
   // changed to a semantically different block when inlining blocks.
  const Block* origin = block->origin_;
  if (origin && MapToNewGraph(origin) == block) return origin;
  return nullptr;
}

// Clone all of the blocks in {sub_graph} (which should be Blocks of the input
// graph). If `keep_loop_kinds` is true, the loop headers are preserved, and
// otherwise they are marked as Merge. An initial GotoOp jumping to the 1st
// block of `sub_graph` is always emitted. The output Block corresponding to
// the 1st block of `sub_graph` is returned.
template <class Set>
Block* CloneSubGraph(Set sub_graph, bool keep_loop_kinds,
                     bool is_loop_after_peeling = false) {
  // The BlockIndex of the blocks of `sub_graph` should be sorted so that
  // visiting them in order is correct (all of the predecessors of a block
  // should always be visited before the block itself).
```

```
  DCHECK(std::is_sorted(sub_graph.begin(), sub_graph.end(),

          [](const Block* a, const Block* b) {
                    return a->index().id() <= b->index().id();
                  }));

  // 1. Create new blocks, and update old->new mapping. This is required to
  // emit multiple times the blocks of {sub_graph}: if a block `B1` in
  // {sub_graph} ends with a Branch/Goto to a block `B2` that is also in
  // {sub_graph}, then this Branch/Goto should go to the version of `B2` that
  // this CloneSubGraph will insert, rather than to a version inserted by a
  // previous call to CloneSubGraph or the version that the regular
  // VisitAllBlock function will emit.
  ZoneVector<Block*> old_mappings(sub_graph.size(), Asm().phase_zone());
  for (auto&& [input_block, old_mapping] :
      base::zip(sub_graph, old_mappings)) {
    old_mapping = block_mapping_[input_block->index()];
    Block::Kind kind = keep_loop_kinds && input_block->IsLoop()
                       ? Block::Kind::kLoopHeader

                     : Block::Kind::kMerge;
    block_mapping_[input_block->index()] =
        Asm().output_graph().NewBlock(kind, input_block);
  }

  // 2. Visit block in correct order (begin to end)

  // Emit a goto to 1st block.
  Block* start = block_mapping_[(*sub_graph.begin())->index()];
#ifdef DEBUG
  if (is_loop_after_peeling) start->set_has_peeled_iteration();
#endif
  Asm().Goto(start);
  // Visiting `sub_graph`.
  for (const Block* block : sub_graph) {
    blocks_needing_variables_.Add(block->index().id());
    VisitBlock<false>(block);
    ProcessWaitingCloningAndInlining<false>();
  }

  // 3. Restore initial old->new mapping
  for (auto&& [input_block, old_mapping] :
      base::zip(sub_graph, old_mappings)) {
    block_mapping_[input_block->index()] = old_mapping;
  }

  return start;
}
```

```
 template <bool can_be_invalid = false>
 OptionalOpIndex MapToNewGraph(OptionalOpIndex old_index,
                               int predecessor_index
 = -1) {
   if (!old_index.has_value()) return OptionalOpIndex::Nullopt();
   return MapToNewGraph<can_be_invalid>(old_index.value(), predecessor_index);
 }

 template <size_t expected_size>
 base::SmallVector<OpIndex, expected_size> MapToNewGraph(
     base::Vector<const OpIndex> inputs) {
   base::SmallVector<OpIndex, expected_size> result;
   for (OpIndex input : inputs) {
     result.push_back(MapToNewGraph(input));
   }
   return result;
 }

private:
 template <bool trace_reduction>
 void VisitAllBlocks() {
   base::SmallVector<const Block*, 128> visit_stack;

   visit_stack.push_back(&Asm().input_graph().StartBlock());
   while (!visit_stack.empty()) {
     const Block* block = visit_stack.back();
     visit_stack.pop_back();
     VisitBlock<trace_reduction>(block);
     ProcessWaitingCloningAndInlining<trace_reduction>();

     for (Block* child = block->LastChild(); child != nullptr;
          child = child->NeighboringChild()) {
       visit_stack.push_back(child);
      }
   }
 }

 template <bool trace_reduction>
 void VisitBlock(const Block* input_block) {
   Asm().SetCurrentOrigin(OpIndex::Invalid());
   current_block_needs_variables_ =
       blocks_needing_variables_.Contains(input_block->index().id());
   if constexpr (trace_reduction) {
     std::cout << "\nold " << PrintAsBlockHeader{*input_block} << "\n";
     std::cout << "new "
               << PrintAsBlockHeader{*MapToNewGraph(input_block),
                                     Asm().output_graph().next_block_index()}
```

```
            << "\n";
  }
  Block* new_block = MapToNewGraph(input_block);
  if (Asm().Bind(new_block)) {
    VisitBlockBody<CanHavePhis::kYes, ForCloning::kNo, trace_reduction>(
        input_block);
    if constexpr (trace_reduction) TraceBlockFinished();
  } else {
    if constexpr (trace_reduction) TraceBlockUnreachable();
  }

  // If we eliminate a loop backedge, we need to turn the loop into a
  // single-predecessor
merge block.
  if (!turn_loop_without_backedge_into_merge_) return;
  const Operation& last_op = input_block->LastOperation(Asm().input_graph());
  if (auto* final_goto = last_op.TryCast<GotoOp>()) {
    if (final_goto->destination->IsLoop()) {
      if (input_block->index() >= final_goto->destination->index()) {
        Asm().FinalizeLoop(MapToNewGraph(final_goto->destination));
      } else {
        // We have a forward jump to a loop, rather than a backedge. We
        // don't need to do anything.
      }
    }
  }
}

enum class CanHavePhis { kNo, kYes };
enum class ForCloning { kNo, kYes };

template <CanHavePhis can_have_phis, ForCloning for_cloning,
          bool trace_reduction>
void VisitBlockBody(const Block* input_block,
                    int added_block_phi_input = -1) {
  DCHECK_NOT_NULL(Asm().current_block());
  current_input_block_ = input_block;

  // Phis could be mutually recursive, for instance (in a loop
header):
  //
  //     p1 = phi(a, p2)
  //     p2 = phi(b, p1)
  //
  // In this case, if we are currently unrolling the loop and visiting this
  // loop header that is now part of the loop body, then if we visit Phis
  // and emit new mapping (with CreateOldToNewMapping) as we go along, we
  // would visit p1 and emit a mapping saying "p1 = p2", and use this
```

```
  // mapping when visiting p2, then we'd map p2 to p2 instead of p1. To
  // overcome this issue, we first visit the Phis of the loop, emit the new
  // phis, and record the new mapping in a side-table ({new_phi_values}).
  // Then, we visit all of the operations of the loop and commit the new
  // mappings: phis were emitted before using the old mapping, and all of
  // the other operations will use the new mapping (as they should).
  //
  // Note that Phis are not always at the begining of blocks, but when they
  // aren't, they can't have inputs from the current block (except on their

// backedge for loop phis, but they start as PendingLoopPhis without
  // backedge input), so visiting all Phis first is safe.

  // Visiting Phis and collecting their new OpIndices.
  base::SmallVector<OpIndex, 64> new_phi_values;
  if constexpr (can_have_phis == CanHavePhis::kYes) {
    for (OpIndex index : Asm().input_graph().OperationIndices(*input_block)) {
      if (ShouldSkipOperation(Asm().input_graph().Get(index))) continue;
      DCHECK_NOT_NULL(Asm().current_block());
      if (Asm().input_graph().Get(index).template Is<PhiOp>()) {
        OpIndex new_index;
        if constexpr (for_cloning == ForCloning::kYes) {
          // When cloning a block, it only has a single predecessor, and Phis
          // should therefore be removed and be replaced by the input
          // corresponding to this predecessor.
          DCHECK_NE(added_block_phi_input, -1);
          // This Phi has been cloned/inlined, and has thus now a single
          // predecessor,
and shouldn't be a Phi anymore.
          new_index = MapToNewGraph(
              Asm().input_graph().Get(index).input(added_block_phi_input));
        } else {
          new_index =
              VisitOpNoMappingUpdate<trace_reduction>(index, input_block);
        }
        new_phi_values.push_back(new_index);
        if (!Asm().current_block()) {
          // A reducer has detected, based on the Phis of the block that were
          // visited so far, that we are in unreachable code (or, less likely,
          // decided, based on some Phis only, to jump away from this block?).
          return;
        }
      }
    }
  }
  DCHECK_NOT_NULL(Asm().current_block());

  // Visiting everything, updating Phi mappings, and emitting non-phi
```

```
  // operations.
  int phi_num = 0;
  bool stopped_early = false;
  for (OpIndex index : base::IterateWithoutLast(
          Asm().input_graph().OperationIndices(*input_block))) {
    if (ShouldSkipOperation(Asm().input_graph().Get(index)))
continue;
    const Operation& op = Asm().input_graph().Get(index);
    if constexpr (can_have_phis == CanHavePhis::kYes) {
      if (op.Is<PhiOp>()) {
        CreateOldToNewMapping(index, new_phi_values[phi_num++]);
        continue;
      }
    }
    // Blocks with a single predecessor (for which CanHavePhis might be kNo)
    // can still have phis if they used to be loop header that were turned
    // into regular blocks.
    DCHECK_IMPLIES(op.Is<PhiOp>(), op.input_count == 1);

    if (!VisitOpAndUpdateMapping<trace_reduction>(index, input_block)) {
      stopped_early = true;
      break;
    }
  }
  // If the last operation of the loop above (= the one-before-last operation
  // of the block) was lowered to an unconditional deopt/trap/something like
  // that, then current_block will now be null, and there is no need visit the
  // last operation of the block.
  if (stopped_early || Asm().current_block()
== nullptr) return;

  // The final operation (which should be a block terminator) of the block
  // is processed separately, because if it's a Goto to a block with a
  // single predecessor, we'll inline it. (we could have had a check `if (op
  // is a Goto)` in the loop above, but since this can only be true for the
  // last operation, we instead extracted it here to make things faster).
  const Operation& terminator =
      input_block->LastOperation(Asm().input_graph());
  DCHECK(terminator.IsBlockTerminator());
  VisitBlockTerminator<trace_reduction>(terminator, input_block);
}

template <bool trace_reduction>
bool VisitOpAndUpdateMapping(OpIndex index, const Block* input_block) {
  if (Asm().current_block() == nullptr) return false;
  OpIndex new_index =
      VisitOpNoMappingUpdate<trace_reduction>(index, input_block);
  const Operation& op = Asm().input_graph().Get(index);
```

```
  if (CanBeUsedAsInput(op) && new_index.valid()) {
    CreateOldToNewMapping(index,
 new_index);
  }
  return true;
}

template <bool trace_reduction>
OpIndex VisitOpNoMappingUpdate(OpIndex index, const Block* input_block) {
  Block* current_block = Asm().current_block();
  DCHECK_NOT_NULL(current_block);
  Asm().SetCurrentOrigin(index);
  current_block->SetOrigin(input_block);
  OpIndex first_output_index = Asm().output_graph().next_operation_index();
  USE(first_output_index);
  const Operation& op = Asm().input_graph().Get(index);
  if constexpr (trace_reduction) TraceReductionStart(index);
  if (ShouldSkipOperation(op)) {
    if constexpr (trace_reduction) TraceOperationSkipped();
    return OpIndex::Invalid();
  }
  OpIndex new_index;
  switch (op.opcode) {
#define EMIT_INSTR_CASE(Name)                                    \
 case Opcode::k##Name:                                           \
  if (MayThrow(Opcode::k##Name)) return OpIndex::Invalid();      \
  new_index = Asm().ReduceInputGraph##Name(index,
 op.Cast<Name##Op>()); \
  break;
    TURBOSHAFT_OPERATION_LIST(EMIT_INSTR_CASE)
#undef EMIT_INSTR_CASE
  }
  if constexpr (trace_reduction) {
    if (CanBeUsedAsInput(op) && !new_index.valid()) {
      TraceOperationSkipped();
    } else {
      TraceReductionResult(current_block, first_output_index, new_index);
    }
  }
#ifdef DEBUG
  DCHECK_IMPLIES(new_index.valid(),
                 Asm().output_graph().BelongsToThisGraph(new_index));
  if (V8_UNLIKELY(v8_flags.turboshaft_verify_reductions)) {
    if (new_index.valid()) {
      const Operation& new_op = Asm().output_graph().Get(new_index);
      if (!new_op.Is<TupleOp>()) {
        // Checking that the outputs_rep of the new operation are the same as
        // the old operation. (except for tuples, since they don't have
```

```
        // outputs_rep)
        DCHECK_EQ(new_op.outputs_rep().size(), op.outputs_rep().size());
        for (size_t i = 0; i < new_op.outputs_rep().size();
 ++i) {
          DCHECK(new_op.outputs_rep()[i].AllowImplicitRepresentationChangeTo(
              op.outputs_rep()[i],
              Asm().output_graph().IsCreatedFromTurbofan()));
        }
      }
      Asm().Verify(index, new_index);
    }
  }
#endif  // DEBUG
  return new_index;
 }

 template <bool trace_reduction>
 void VisitBlockTerminator(const Operation& terminator,
                           const Block* input_block) {
  if (Asm().CanAutoInlineBlocksWithSinglePredecessor() &&
      terminator.Is<GotoOp>()) {
    Block* destination = terminator.Cast<GotoOp>().destination;
    if (destination->PredecessorCount() == 1) {
      block_to_inline_now_ = destination;
      return;
    }
  }
  // Just going through the regular VisitOp function.
  OpIndex index = Asm().input_graph().Index(terminator);
  VisitOpAndUpdateMapping<trace_reduction>(index, input_block);
 }

 template <bool trace_reduction>
 void ProcessWaitingCloningAndInlining()
 {
  InlineWaitingBlock<trace_reduction>();
  while (!blocks_to_clone_.empty()) {
    BlockToClone item = blocks_to_clone_.back();
    blocks_to_clone_.pop_back();
    DoCloneBlock<trace_reduction>(
        item.input_block, item.added_block_phi_input, item.new_output_block);
    InlineWaitingBlock<trace_reduction>();
  }
 }

 template <bool trace_reduction>
 void InlineWaitingBlock() {
  while (block_to_inline_now_) {
```

```
    Block* input_block = block_to_inline_now_;
    block_to_inline_now_ = nullptr;
    ScopedModification<bool> set_true(&current_block_needs_variables_, true);
    if constexpr (trace_reduction) {
      std::cout << "Inlining " << PrintAsBlockHeader{*input_block} << "\n";
    }
    VisitBlockBody<CanHavePhis::kNo, ForCloning::kNo, trace_reduction>(
        input_block);
  }
}

template <bool trace_reduction>
void DoCloneBlock(const Block* input_block, int added_block_phi_input,
                  Block* output_block)
{
  DCHECK_EQ(output_block->PredecessorCount(), 1);
  if constexpr (trace_reduction) {
    std::cout << "\nCloning old " << PrintAsBlockHeader{*input_block} << "\n";
    std::cout << "As new "
              << PrintAsBlockHeader{*output_block,
                                    Asm().output_graph().next_block_index()}
              << "\n";
  }

  ScopedModification<bool> set_true(&current_block_needs_variables_, true);

  Asm().BindReachable(output_block);
  VisitBlockBody<CanHavePhis::kYes, ForCloning::kYes, trace_reduction>(
      input_block, added_block_phi_input);

  if constexpr (trace_reduction) TraceBlockFinished();
}

void TraceReductionStart(OpIndex index) {
  std::cout << " o" << index.id() << ": "
            << PaddingSpace{5 - CountDecimalDigits(index.id())}
            << OperationPrintStyle{Asm().input_graph().Get(index), "#o"}
            << "\n";
}
void TraceOperationSkipped() { std::cout << "> skipped\n\n"; }
void
TraceBlockUnreachable() { std::cout << "> unreachable\n\n"; }
void TraceReductionResult(Block* current_block, OpIndex first_output_index,
                          OpIndex new_index) {
  if (new_index < first_output_index) {
    // The operation was replaced with an already existing one.
    std::cout << "> #n" << new_index.id() << "\n";
  }
```

```
  bool before_arrow = new_index >= first_output_index;
  for (const Operation& op : Asm().output_graph().operations(
          first_output_index, Asm().output_graph().next_operation_index())) {
    OpIndex index = Asm().output_graph().Index(op);
    const char* prefix;
    if (index == new_index) {
      prefix = ">";
      before_arrow = false;
    } else if (before_arrow) {
      prefix = "  ";
    } else {
      prefix = "   ";
    }
    std::cout << prefix << " n" << index.id() << ": "
              << PaddingSpace{5 - CountDecimalDigits(index.id())}
              << OperationPrintStyle{Asm().output_graph().Get(index),
"#n"}
              << "\n";
    if (op.IsBlockTerminator() && Asm().current_block() &&
        Asm().current_block() != current_block) {
      current_block = &Asm().output_graph().Get(
          BlockIndex(current_block->index().id() + 1));
      std::cout << "new " << PrintAsBlockHeader{*current_block} << "\n";
    }
  }
  std::cout << "\n";
}
void TraceBlockFinished() { std::cout << "\n"; }

// These functions take an operation from the old graph and use the assembler
// to emit a corresponding operation in the new graph, translating inputs and
// blocks accordingly.
V8_INLINE OpIndex AssembleOutputGraphGoto(const GotoOp& op) {
  Block* destination = MapToNewGraph(op.destination);
  if (op.is_backedge) {
    DCHECK(destination->IsBound());
    DCHECK(destination->IsLoop());
    FixLoopPhis(op.destination);
  }
  // It is important that we first fix loop phis and then reduce the `Goto`,
  // because reducing the
`Goto` can have side effects, in particular, it can
  // modify affect the SnapshotTable of `VariableReducer`, which is also used
  // by `FixLoopPhis()`.
  Asm().ReduceGoto(destination, op.is_backedge);
  return OpIndex::Invalid();
}
V8_INLINE OpIndex AssembleOutputGraphBranch(const BranchOp& op) {
```

```
  Block* if_true = MapToNewGraph(op.if_true);
  Block* if_false = MapToNewGraph(op.if_false);
  return Asm().ReduceBranch(MapToNewGraph(op.condition()), if_true, if_false,
                            op.hint);
}
OpIndex AssembleOutputGraphSwitch(const SwitchOp& op) {
  base::SmallVector<SwitchOp::Case, 16> cases;
  for (SwitchOp::Case c : op.cases) {
    cases.emplace_back(c.value, MapToNewGraph(c.destination), c.hint);
  }
  return Asm().ReduceSwitch(
      MapToNewGraph(op.input()),
      Asm().graph_zone()->CloneVector(base::VectorOf(cases)),
      MapToNewGraph(op.default_case), op.default_hint);
}
OpIndex AssembleOutputGraphPhi(const PhiOp& op)
{
  return ResolvePhi(
      op,
      [this](OpIndex ind, int predecessor_index) {
        return MapToNewGraph(ind, predecessor_index);
      },
      op.rep);
}
OpIndex AssembleOutputGraphPendingLoopPhi(const PendingLoopPhiOp& op) {
  UNREACHABLE();
}
V8_INLINE OpIndex AssembleOutputGraphFrameState(const FrameStateOp& op) {
  auto inputs = MapToNewGraph<32>(op.inputs());
  return Asm().ReduceFrameState(base::VectorOf(inputs), op.inlined, op.data);
}
OpIndex AssembleOutputGraphCall(const CallOp& op) {
  OpIndex callee = MapToNewGraph(op.callee());
  OptionalOpIndex frame_state = MapToNewGraph(op.frame_state());
  auto arguments = MapToNewGraph<16>(op.arguments());
  return Asm().ReduceCall(callee, frame_state, base::VectorOf(arguments),
                          op.descriptor, op.Effects());
}
OpIndex AssembleOutputGraphDidntThrow(const DidntThrowOp& op) {
  const Operation& throwing_operation =
      Asm().input_graph().Get(op.throwing_operation());
   OpIndex result;
  switch (throwing_operation.opcode) {
#define CASE(Name)                                          \
 case Opcode::k##Name:                                      \
  result = Asm().ReduceInputGraph##Name(                    \
      op.throwing_operation(), throwing_operation.Cast<Name##Op>()); \
  break;
```

```
    TURBOSHAFT_THROWING_OPERATIONS_LIST(CASE)
#undef CASE
    default:
      UNREACHABLE();
  }
  return result;
}

V<None> AssembleOutputGraphCheckException(const CheckExceptionOp& op) {
  Graph::OpIndexIterator it(op.didnt_throw_block->begin(),
                            &Asm().input_graph());
  Graph::OpIndexIterator end(op.didnt_throw_block->end(),
                             &Asm().input_graph());
  // To translate `CheckException` to the new graph, we reduce the throwing
  // operation (actually it's `DidntThrow` operation, but that triggers the
  // actual reduction) with a
catch scope. If the reduction replaces the
  // throwing operation with other throwing operations, all of them will be
  // connected to the provided catch block. The reduction should automatically
  // bind a block that represents non-throwing control flow of the original
  // operation, so we can inline the rest of the `didnt_throw` block.
  {
    CatchScope scope(Asm(), MapToNewGraph(op.catch_block));
    DCHECK(Asm().input_graph().Get(*it).template Is<DidntThrowOp>());
    if (!Asm().InlineOp(*it, op.didnt_throw_block)) {
      return V<None>::Invalid();
    }
    ++it;
  }
  for (; it != end; ++it) {
    // Using `InlineOp` requires that the inlined operation is not emitted
    // multiple times. This is the case here because we just removed the
    // single predecessor of `didnt_throw_block`.
    if (!Asm().InlineOp(*it, op.didnt_throw_block)) {
      break;
    }
  }
  return V<None>::Invalid();
}

void CreateOldToNewMapping(OpIndex
old_index, OpIndex new_index) {
  DCHECK(old_index.valid());
  DCHECK(Asm().input_graph().BelongsToThisGraph(old_index));
  DCHECK_IMPLIES(new_index.valid(),
                 Asm().output_graph().BelongsToThisGraph(new_index));

  if (current_block_needs_variables_) {
```

```
    MaybeVariable var = GetVariableFor(old_index);
    if (!var.has_value()) {
      MaybeRegisterRepresentation rep =
          Asm().input_graph().Get(old_index).outputs_rep().size() == 1
              ? static_cast<const MaybeRegisterRepresentation&>(
                    Asm().input_graph().Get(old_index).outputs_rep()[0])
              : MaybeRegisterRepresentation::None();
      var = Asm().NewLoopInvariantVariable(rep);
      SetVariableFor(old_index, *var);
    }
    Asm().SetVariable(*var, new_index);
    return;
  }

  DCHECK(!op_mapping_[old_index].valid());
  op_mapping_[old_index] = new_index;
}

MaybeVariable GetVariableFor(OpIndex old_index) const {
  return old_opindex_to_variables[old_index];
 }

void SetVariableFor(OpIndex old_index, MaybeVariable var) {
  DCHECK(!old_opindex_to_variables[old_index].has_value());
  old_opindex_to_variables[old_index] = var;
}

void FixLoopPhis(Block* input_graph_loop) {
  DCHECK(input_graph_loop->IsLoop());
  Block* output_graph_loop = MapToNewGraph(input_graph_loop);
  DCHECK(output_graph_loop->IsLoop());
  for (const Operation& op : Asm().input_graph().operations(
           input_graph_loop->begin(), input_graph_loop->end())) {
    if (auto* input_phi = op.TryCast<PhiOp>()) {
      OpIndex phi_index =
          MapToNewGraph<true>(Asm().input_graph().Index(*input_phi));
      if (!phi_index.valid() || !output_graph_loop->Contains(phi_index)) {
        // Unused phis are skipped, so they are not be mapped to anything in
        // the new graph. If the phi is reduced to an operation from a
        // different block, then there is no loop phi in the current loop

   // header to take care of.
        continue;
      }
      Asm().FixLoopPhi(*input_phi, phi_index, output_graph_loop);
    }
  }
}
```

```
Graph& input_graph_;

const Block* current_input_block_;

// Mappings from old OpIndices to new OpIndices.
FixedOpIndexSidetable<OpIndex> op_mapping_;

// Mappings from old blocks to new blocks.
FixedBlockSidetable<Block*> block_mapping_;

// {current_block_needs_variables_} is set to true if the current block should
// use Variables to map old to new OpIndex rather than just {op_mapping}. This
// is typically the case when the block has been cloned.
bool current_block_needs_variables_ = false;

// When {turn_loop_without_backedge_into_merge_} is true (the default), when
// processing an input block that ended with a loop backedge but doesn't
// anymore, the loop header is turned into a regular merge. This can be turned
// off when unrolling a loop for instance.
bool turn_loop_without_backedge_into_merge_ = true;

 // Set of Blocks for which Variables should be used rather than
// {op_mapping}.
BitVector blocks_needing_variables_;

// Mapping from old OpIndex to Variables.
FixedOpIndexSidetable<MaybeVariable> old_opindex_to_variables;

// When the last operation of a Block is a Goto to a Block with a single
// predecessor, we always inline the destination into the current block. To
// avoid making this process recursive (which could lead to stack overflows),
// we set the variable {block_to_inline_now_} instead. Right after we're done
// visiting a Block, the function ProcessWaitingCloningAndInlining will inline
// {block_to_inline_now_} (if it's set) in a non-recursive way.
Block* block_to_inline_now_ = nullptr;

// When a Reducer wants to clone a block (for instance,
// BranchEliminationReducer, in order to remove Phis or to replace a Branch by
// a Goto), this block is not cloned right away, in order to avoid recursion
// (which could lead to stack overflows).
Instead, we add this block to
// {blocks_to_clone_}. Right after we're done visiting a Block, the function
// ProcessWaitingCloningAndInlining will actually clone the blocks in
// {blocks_to_clone_} in a non-recursive way.
struct BlockToClone {
  const Block* input_block;
  int added_block_phi_input;
```

```
  Block* new_output_block;
 };
 ZoneVector<BlockToClone> blocks_to_clone_;

#ifdef DEBUG
 // Recursively inlining blocks is still allowed (mainly for
 // LoopUnrollingReducer), but it shouldn't be actually recursive. This is
 // checked by the {is_in_recursive_inlining_}, which is set to true while
 // recursively inlining a block. Trying to inline a block while
 // {is_in_recursive_inlining_} is true will lead to a DCHECK failure.
 bool is_in_recursive_inlining_ = false;
#endif
};

template <template <class> class... Reducers>
class TSAssembler;

template <template <class> class... Reducers>
class CopyingPhaseImpl {
public:
 static void Run(PipelineData* data, Graph&
 input_graph, Zone* phase_zone,
                 bool trace_reductions = false) {
   TSAssembler<GraphVisitor, Reducers...> phase(
       data, input_graph, input_graph.GetOrCreateCompanion(), phase_zone);
#ifdef DEBUG
   if (trace_reductions) {
     phase.template VisitGraph<true>();
   } else {
     phase.template VisitGraph<false>();
   }
#else
   phase.template VisitGraph<false>();
#endif  // DEBUG
 }
};

template <template <typename> typename... Reducers>
class CopyingPhase {
public:
 static void Run(PipelineData* data, Zone* phase_zone) {
   Graph& input_graph = data->graph();
   CopyingPhaseImpl<Reducers...>::Run(
       data, input_graph, phase_zone,
       data->info()->turboshaft_trace_reduction());
 }
};
```

} // namespace v8::internal::compiler::turboshaft

#endif // V8_COMPILER_TURBOSHAFT_COPYING_PHASE_H_

1.4558 c-ares 1.50.0

1.4558.1 Available under license :

AUTOCONF CONFIGURE SCRIPT EXCEPTION

Version 3.0, 18 August 2009

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Version 3, 29 June 2007

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Version 2.1, February 1999

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```
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/ui.h.in
*
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* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_UI_H
# define OPENSSL_UI_H
# pragma once

# include <openssl/macros.h>
```

```
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_UI_H
# endif

# include <openssl/opensslconf.h>

# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  include <openssl/crypto.h>
# endif
# include <openssl/safestack.h>
# include <openssl/pem.h>
# include <openssl/types.h>
# include <openssl/uierr.h>

/* For compatibility reasons, the macro OPENSSL_NO_UI is currently retained */
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  ifdef OPENSSL_NO_UI_CONSOLE
#   define OPENSSL_NO_UI
#  endif
# endif

# ifdef  __cplusplus
extern
 "C" {
# endif

/*
* All the following functions return -1 or NULL on error and in some cases
* (UI_process()) -2 if interrupted or in some other way cancelled. When
* everything is fine, they return 0, a positive value or a non-NULL pointer,
* all depending on their purpose.
*/

/* Creators and destructor.   */
UI *UI_new(void);
UI *UI_new_method(const UI_METHOD *method);
void UI_free(UI *ui);

/*-
  The following functions are used to add strings to be printed and prompt
  strings to prompt for data.  The names are UI_{add,dup}_<function>_string
  and UI_{add,dup}_input_boolean.

  UI_{add,dup}_<function>_string have the following meanings:
      add     add a text or prompt string.  The pointers given to these
              functions are used verbatim, no copying is done.
      dup     make a copy of the text or prompt string, then add the copy
              to the collection of strings in the user interface.
```

```
    <function>
        The function
 is a name for the functionality that the given
        string shall be used for.  It can be one of:
            input   use the string as data prompt.
            verify  use the string as verification prompt.  This
                is used to verify a previous input.
            info    use the string for informational output.
            error   use the string for error output.
 Honestly, there's currently no difference between info and error for the
 moment.

 UI_{add,dup}_input_boolean have the same semantics for "add" and "dup",
 and are typically used when one wants to prompt for a yes/no response.

 All of the functions in this group take a UI and a prompt string.
 The string input and verify addition functions also take a flag argument,
 a buffer for the result to end up with, a minimum input size and a maximum
 input size (the result buffer MUST be large enough to be able to contain
 the
maximum number of characters).  Additionally, the verify addition
 functions takes another buffer to compare the result against.
 The boolean input functions take an action description string (which should
 be safe to ignore if the expected user action is obvious, for example with
 a dialog box with an OK button and a Cancel button), a string of acceptable
 characters to mean OK and to mean Cancel.  The two last strings are checked
 to make sure they don't have common characters.  Additionally, the same
 flag argument as for the string input is taken, as well as a result buffer.
 The result buffer is required to be at least one byte long.  Depending on
 the answer, the first character from the OK or the Cancel character strings
 will be stored in the first byte of the result buffer.  No NUL will be
 added, so the result is *not* a string.

 On success, the all return an index of the added information.  That index
 is useful when retrieving results with UI_get0_result().
 */
int UI_add_input_string(UI *ui, const char *prompt, int flags,
            char *result_buf, int minsize, int maxsize);
int UI_dup_input_string(UI *ui, const char *prompt, int flags,
            char *result_buf, int minsize, int maxsize);
int UI_add_verify_string(UI *ui, const char *prompt, int flags,
             char *result_buf, int minsize, int maxsize,
             const char *test_buf);
int UI_dup_verify_string(UI *ui, const char *prompt, int flags,
             char *result_buf, int minsize, int maxsize,
             const char *test_buf);
int UI_add_input_boolean(UI *ui, const char *prompt, const char *action_desc,
             const char *ok_chars, const char *cancel_chars,
```

```
                    int flags, char *result_buf);
int UI_dup_input_boolean(UI *ui, const char *prompt, const char *action_desc,
                    const char *ok_chars, const char *cancel_chars,
                     int flags, char *result_buf);
int UI_add_info_string(UI *ui, const char *text);
int UI_dup_info_string(UI *ui, const char *text);
int UI_add_error_string(UI *ui, const char *text);
int UI_dup_error_string(UI *ui, const char *text);

/* These are the possible flags.  They can be or'ed together. */
/* Use to have echoing of input */
# define UI_INPUT_FLAG_ECHO             0x01
/*
* Use a default password.  Where that password is found is completely up to
* the application, it might for example be in the user data set with
* UI_add_user_data().  It is not recommended to have more than one input in
* each UI being marked with this flag, or the application might get
* confused.
*/
# define UI_INPUT_FLAG_DEFAULT_PWD       0x02

/*-
* The user of these routines may want to define flags of their own.  The core
* UI won't look at those, but will pass them on to the method routines.  They
* must use higher bits so they don't get confused with the UI bits above.
 * UI_INPUT_FLAG_USER_BASE tells which is the lowest bit to use.  A good
* example of use is this:
*
*    #define MY_UI_FLAG1       (0x01 << UI_INPUT_FLAG_USER_BASE)
*
*/
# define UI_INPUT_FLAG_USER_BASE 16

/*-
* The following function helps construct a prompt.
* phrase_desc is a textual short description of the phrase to enter,
* for example "pass phrase", and
* object_name is the name of the object
* (which might be a card name or a file name) or NULL.
* The returned string shall always be allocated on the heap with
* OPENSSL_malloc(), and need to be free'd with OPENSSL_free().
*
* If the ui_method doesn't contain a pointer to a user-defined prompt
* constructor, a default string is built, looking like this:
*
*       "Enter {phrase_desc} for {object_name}:"
*
* So, if phrase_desc has the value "pass phrase" and object_name has
```

```
* the value "foo.key", the resulting string is:
*
*       "Enter pass phrase for foo.key:"
*/
char *UI_construct_prompt(UI *ui_method,
                          const char *phrase_desc, const char *object_name);

/*
* The following function is used to store a pointer to user-specific data.
* Any previous such pointer will be returned and replaced.
*
* For callback purposes, this function makes a lot more sense than using
* ex_data, since the latter requires that different parts of OpenSSL or
* applications share the same ex_data index.
*
* Note that the UI_OpenSSL() method completely ignores the user data. Other
* methods may not, however.
*/
void *UI_add_user_data(UI *ui, void *user_data);
/*
* Alternatively, this function is used to duplicate the user data.
* This uses the duplicator method function.  The destroy function will
* be used to free the user data in this case.
*/
int UI_dup_user_data(UI *ui, void *user_data);
/* We need a user data retrieving function as well.  */
void *UI_get0_user_data(UI *ui);

/* Return the result associated with a prompt given with the index i. */
const char *UI_get0_result(UI
 *ui, int i);
int UI_get_result_length(UI *ui, int i);

/* When all strings have been added, process the whole thing. */
int UI_process(UI *ui);

/*
* Give a user interface parameterised control commands.  This can be used to
* send down an integer, a data pointer or a function pointer, as well as be
* used to get information from a UI.
*/
int UI_ctrl(UI *ui, int cmd, long i, void *p, void (*f) (void));

/* The commands */
/*
* Use UI_CONTROL_PRINT_ERRORS with the value 1 to have UI_process print the
* OpenSSL error stack before printing any info or added error messages and
* before any prompting.
```

```
*/
# define UI_CTRL_PRINT_ERRORS           1
/*
* Check if a UI_process() is possible to do again with the same instance of
* a user interface.  This makes UI_ctrl() return 1 if it is redoable, and 0
* if not.
*/
# define UI_CTRL_IS_REDOABLE            2

/* Some methods may use extra data */
# define UI_set_app_data(s,arg)         UI_set_ex_data(s,0,arg)
# define UI_get_app_data(s)
            UI_get_ex_data(s,0)

# define UI_get_ex_new_index(l, p, newf, dupf, freef) \
   CRYPTO_get_ex_new_index(CRYPTO_EX_INDEX_UI, l, p, newf, dupf, freef)
int UI_set_ex_data(UI *r, int idx, void *arg);
void *UI_get_ex_data(const UI *r, int idx);

/* Use specific methods instead of the built-in one */
void UI_set_default_method(const UI_METHOD *meth);
const UI_METHOD *UI_get_default_method(void);
const UI_METHOD *UI_get_method(UI *ui);
const UI_METHOD *UI_set_method(UI *ui, const UI_METHOD *meth);

# ifndef OPENSSL_NO_UI_CONSOLE

/* The method with all the built-in thingies */
UI_METHOD *UI_OpenSSL(void);

# endif

/*
* NULL method.  Literally does nothing, but may serve as a placeholder
* to avoid internal default.
*/
const UI_METHOD *UI_null(void);

/* ---------- For method writers ---------- */
/*-
  A method contains a number of functions that implement the low level
  of the User Interface.  The functions are:

      an opener       This function starts a
 session, maybe by opening
                    a channel to a tty, or by opening a window.
      a writer        This function is called to write a given string,
                    maybe to the tty, maybe as a field label in a
```

```
                window.
     a flusher      This function is called to flush everything that
                has been output so far.  It can be used to actually
                display a dialog box after it has been built.
     a reader       This function is called to read a given prompt,
                maybe from the tty, maybe from a field in a
                window.  Note that it's called with all string
                structures, not only the prompt ones, so it must
                check such things itself.
     a closer       This function closes the session, maybe by closing
                the channel to the tty, or closing the window.

 All these functions are expected
to return:

     0       on error.
     1       on success.
     -1       on out-of-band events, for example if some prompting has
             been canceled (by pressing Ctrl-C, for example).  This is
             only checked when returned by the flusher or the reader.

 The way this is used, the opener is first called, then the writer for all
 strings, then the flusher, then the reader for all strings and finally the
 closer.  Note that if you want to prompt from a terminal or other command
 line interface, the best is to have the reader also write the prompts
 instead of having the writer do it.  If you want to prompt from a dialog
 box, the writer can be used to build up the contents of the box, and the
 flusher to actually display the box and run the event loop until all data
 has been given, after which the reader only grabs the given data and puts
 them back into the UI strings.

 All method functions take a UI as argument.  Additionally,
the writer and
 the reader take a UI_STRING.
*/

/*
* The UI_STRING type is the data structure that contains all the needed info
* about a string or a prompt, including test data for a verification prompt.
*/
typedef struct ui_string_st UI_STRING;

SKM_DEFINE_STACK_OF_INTERNAL(UI_STRING, UI_STRING, UI_STRING)
#define sk_UI_STRING_num(sk) OPENSSL_sk_num(ossl_check_const_UI_STRING_sk_type(sk))
#define sk_UI_STRING_value(sk, idx) ((UI_STRING
*)OPENSSL_sk_value(ossl_check_const_UI_STRING_sk_type(sk), (idx)))
#define sk_UI_STRING_new(cmp) ((STACK_OF(UI_STRING)
*)OPENSSL_sk_new(ossl_check_UI_STRING_compfunc_type(cmp)))
```

```
#define sk_UI_STRING_new_null() ((STACK_OF(UI_STRING) *)OPENSSL_sk_new_null())
#define sk_UI_STRING_new_reserve(cmp, n) ((STACK_OF(UI_STRING)
*)OPENSSL_sk_new_reserve(ossl_check_UI_STRING_compfunc_type(cmp), (n)))
#define sk_UI_STRING_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_UI_STRING_sk_type(sk), (n))
#define sk_UI_STRING_free(sk) OPENSSL_sk_free(ossl_check_UI_STRING_sk_type(sk))
#define
 sk_UI_STRING_zero(sk) OPENSSL_sk_zero(ossl_check_UI_STRING_sk_type(sk))
#define sk_UI_STRING_delete(sk, i) ((UI_STRING *)OPENSSL_sk_delete(ossl_check_UI_STRING_sk_type(sk),
(i)))
#define sk_UI_STRING_delete_ptr(sk, ptr) ((UI_STRING
*)OPENSSL_sk_delete_ptr(ossl_check_UI_STRING_sk_type(sk), ossl_check_UI_STRING_type(ptr)))
#define sk_UI_STRING_push(sk, ptr) OPENSSL_sk_push(ossl_check_UI_STRING_sk_type(sk),
ossl_check_UI_STRING_type(ptr))
#define sk_UI_STRING_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_UI_STRING_sk_type(sk),
ossl_check_UI_STRING_type(ptr))
#define sk_UI_STRING_pop(sk) ((UI_STRING *)OPENSSL_sk_pop(ossl_check_UI_STRING_sk_type(sk)))
#define sk_UI_STRING_shift(sk) ((UI_STRING *)OPENSSL_sk_shift(ossl_check_UI_STRING_sk_type(sk)))
#define sk_UI_STRING_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_UI_STRING_sk_type(sk),ossl_check_UI_STRING_freefunc_type(freefunc))
#define sk_UI_STRING_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_UI_STRING_sk_type(sk),
 ossl_check_UI_STRING_type(ptr), (idx))
#define sk_UI_STRING_set(sk, idx, ptr) ((UI_STRING *)OPENSSL_sk_set(ossl_check_UI_STRING_sk_type(sk),
(idx), ossl_check_UI_STRING_type(ptr)))
#define sk_UI_STRING_find(sk, ptr) OPENSSL_sk_find(ossl_check_UI_STRING_sk_type(sk),
ossl_check_UI_STRING_type(ptr))
#define sk_UI_STRING_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_UI_STRING_sk_type(sk),
ossl_check_UI_STRING_type(ptr))
#define sk_UI_STRING_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_UI_STRING_sk_type(sk),
ossl_check_UI_STRING_type(ptr), pnum)
#define sk_UI_STRING_sort(sk) OPENSSL_sk_sort(ossl_check_UI_STRING_sk_type(sk))
#define sk_UI_STRING_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_UI_STRING_sk_type(sk))
#define sk_UI_STRING_dup(sk) ((STACK_OF(UI_STRING)
*)OPENSSL_sk_dup(ossl_check_const_UI_STRING_sk_type(sk)))
#define sk_UI_STRING_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(UI_STRING)
*)OPENSSL_sk_deep_copy(ossl_check_const_UI_STRING_sk_type(sk),
ossl_check_UI_STRING_copyfunc_type(copyfunc),
 ossl_check_UI_STRING_freefunc_type(freefunc)))
#define sk_UI_STRING_set_cmp_func(sk, cmp)
((sk_UI_STRING_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_UI_STRING_sk_type(sk),
ossl_check_UI_STRING_compfunc_type(cmp)))


/*
* The different types of strings that are currently supported. This is only
* needed by method authors.
*/
enum UI_string_types {
   UIT_NONE = 0,
```

```
  UIT_PROMPT,             /* Prompt for a string */
  UIT_VERIFY,             /* Prompt for a string and verify */
  UIT_BOOLEAN,            /* Prompt for a yes/no response */
  UIT_INFO,               /* Send info to the user */
  UIT_ERROR               /* Send an error message to the user */
};

/* Create and manipulate methods */
UI_METHOD *UI_create_method(const char *name);
void UI_destroy_method(UI_METHOD *ui_method);
int UI_method_set_opener(UI_METHOD *method, int (*opener) (UI *ui));
int UI_method_set_writer(UI_METHOD *method,

        int (*writer) (UI *ui, UI_STRING *uis));
int UI_method_set_flusher(UI_METHOD *method, int (*flusher) (UI *ui));
int UI_method_set_reader(UI_METHOD *method,
                    int (*reader) (UI *ui, UI_STRING *uis));
int UI_method_set_closer(UI_METHOD *method, int (*closer) (UI *ui));
int UI_method_set_data_duplicator(UI_METHOD *method,
                          void *(*duplicator) (UI *ui, void *ui_data),
                          void (*destructor)(UI *ui, void *ui_data));
int UI_method_set_prompt_constructor(UI_METHOD *method,
                            char *(*prompt_constructor) (UI *ui,
                                                         const char
                                                         *phrase_desc,
                                                         const char
                                                         *object_name));
int UI_method_set_ex_data(UI_METHOD *method,
 int idx, void *data);
int (*UI_method_get_opener(const UI_METHOD *method)) (UI *);
int (*UI_method_get_writer(const UI_METHOD *method)) (UI *, UI_STRING *);
int (*UI_method_get_flusher(const UI_METHOD *method)) (UI *);
int (*UI_method_get_reader(const UI_METHOD *method)) (UI *, UI_STRING *);
int (*UI_method_get_closer(const UI_METHOD *method)) (UI *);
char *(*UI_method_get_prompt_constructor(const UI_METHOD *method))
  (UI *, const char *, const char *);
void *(*UI_method_get_data_duplicator(const UI_METHOD *method)) (UI *, void *);
void (*UI_method_get_data_destructor(const UI_METHOD *method)) (UI *, void *);
const void *UI_method_get_ex_data(const UI_METHOD *method, int idx);

/*
* The following functions are helpers for method writers to access relevant
* data from a UI_STRING.
*/

/* Return type of the UI_STRING */
enum UI_string_types UI_get_string_type(UI_STRING *uis);
/* Return input flags of the UI_STRING */
```

```
int UI_get_input_flags(UI_STRING *uis);
/* Return the actual string
 to output (the prompt, info or error) */
const char *UI_get0_output_string(UI_STRING *uis);
/*
* Return the optional action string to output (the boolean prompt
* instruction)
*/
const char *UI_get0_action_string(UI_STRING *uis);
/* Return the result of a prompt */
const char *UI_get0_result_string(UI_STRING *uis);
int UI_get_result_string_length(UI_STRING *uis);
/*
* Return the string to test the result against.  Only useful with verifies.
*/
const char *UI_get0_test_string(UI_STRING *uis);
/* Return the required minimum size of the result */
int UI_get_result_minsize(UI_STRING *uis);
/* Return the required maximum size of the result */
int UI_get_result_maxsize(UI_STRING *uis);
/* Set the result of a UI_STRING. */
int UI_set_result(UI *ui, UI_STRING *uis, const char *result);
int UI_set_result_ex(UI *ui, UI_STRING *uis, const char *result, int len);

/* A couple of popular utility functions */
int UI_UTIL_read_pw_string(char *buf, int length, const char *prompt,

                int verify);
int UI_UTIL_read_pw(char *buf, char *buff, int size, const char *prompt,
                  int verify);
UI_METHOD *UI_UTIL_wrap_read_pem_callback(pem_password_cb *cb, int rwflag);


# ifdef  __cplusplus
}
# endif
#endif
#ifndef SRC_PERMISSION_WORKER_PERMISSION_H_
#define SRC_PERMISSION_WORKER_PERMISSION_H_

#if defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS

#include <vector>
#include "permission/permission_base.h"

namespace node {

namespace permission {
```

```
class WorkerPermission final : public PermissionBase {
public:
 void Apply(Environment* env,
            const std::vector<std::string>& allow,
            PermissionScope scope) override;
 bool is_granted(Environment* env,
                 PermissionScope perm,
                 const std::string_view& param = "") const override;

private:
 bool deny_all_;
};

}  // namespace permission

}  // namespace node

#endif  // defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS
#endif  // SRC_PERMISSION_WORKER_PERMISSION_H_
#ifndef SRC_PERMISSION_CHILD_PROCESS_PERMISSION_H_
#define SRC_PERMISSION_CHILD_PROCESS_PERMISSION_H_

#if defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS

#include <vector>
#include "permission/permission_base.h"

namespace node {

namespace permission {

class ChildProcessPermission final : public PermissionBase {
public:
 void Apply(Environment* env,
            const std::vector<std::string>& allow,
            PermissionScope scope) override;
 bool is_granted(Environment* env,
                 PermissionScope perm,
                 const std::string_view& param = "") const override;

private:
 bool deny_all_;
};

}  // namespace permission

}  // namespace node
```

#endif // defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS
#endif // SRC_PERMISSION_CHILD_PROCESS_PERMISSION_H_
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"""
/*
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* in the file LICENSE in the source distribution or at

```
* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_ERR_H
# define OPENSSL_ERR_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_ERR_H
# endif

# include <openssl/e_os2.h>

# ifndef OPENSSL_NO_STDIO
#  include <stdio.h>
#  include <stdlib.h>
# endif

# include <openssl/types.h>
# include <openssl/bio.h>
# include <openssl/lhash.h>
# include <openssl/cryptoerr_legacy.h>

#ifdef  __cplusplus
extern "C" {
#endif

# ifndef OPENSSL_NO_DEPRECATED_3_0
#  ifndef OPENSSL_NO_FILENAMES
#   define ERR_PUT_error(l,f,r,fn,ln)      ERR_put_error(l,f,r,fn,ln)
#  else
#   define ERR_PUT_error(l,f,r,fn,ln)      ERR_put_error(l,f,r,NULL,0)
#  endif
# endif

# include
 <limits.h>
# include <errno.h>

# define ERR_TXT_MALLOCED        0x01
# define ERR_TXT_STRING          0x02

# if !defined(OPENSSL_NO_DEPRECATED_3_0) || defined(OSSL_FORCE_ERR_STATE)
#  define ERR_FLAG_MARK           0x01
#  define ERR_FLAG_CLEAR          0x02
```

```
#  define ERR_NUM_ERRORS  16
struct err_state_st {
   int err_flags[ERR_NUM_ERRORS];
   int err_marks[ERR_NUM_ERRORS];
   unsigned long err_buffer[ERR_NUM_ERRORS];
   char *err_data[ERR_NUM_ERRORS];
   size_t err_data_size[ERR_NUM_ERRORS];
   int err_data_flags[ERR_NUM_ERRORS];
   char *err_file[ERR_NUM_ERRORS];
   int err_line[ERR_NUM_ERRORS];
   char *err_func[ERR_NUM_ERRORS];
   int top, bottom;
};
# endif

/* library */
# define ERR_LIB_NONE           1
# define ERR_LIB_SYS            2
# define ERR_LIB_BN             3
# define ERR_LIB_RSA            4
# define ERR_LIB_DH             5
# define ERR_LIB_EVP            6
# define ERR_LIB_BUF            7
# define ERR_LIB_OBJ            8
# define ERR_LIB_PEM
            9
# define ERR_LIB_DSA            10
# define ERR_LIB_X509           11
/* #define ERR_LIB_METH         12 */
# define ERR_LIB_ASN1           13
# define ERR_LIB_CONF           14
# define ERR_LIB_CRYPTO         15
# define ERR_LIB_EC             16
# define ERR_LIB_SSL            20
/* #define ERR_LIB_SSL23        21 */
/* #define ERR_LIB_SSL2         22 */
/* #define ERR_LIB_SSL3         23 */
/* #define ERR_LIB_RSAREF       30 */
/* #define ERR_LIB_PROXY        31 */
# define ERR_LIB_BIO            32
# define ERR_LIB_PKCS7          33
# define ERR_LIB_X509V3         34
# define ERR_LIB_PKCS12         35
# define ERR_LIB_RAND           36
# define ERR_LIB_DSO            37
# define ERR_LIB_ENGINE         38
# define ERR_LIB_OCSP           39
```

```
# define ERR_LIB_UI             40
# define ERR_LIB_COMP           41
# define ERR_LIB_ECDSA          42
# define ERR_LIB_ECDH           43
# define ERR_LIB_OSSL_STORE     44
# define ERR_LIB_FIPS
   45
# define ERR_LIB_CMS            46
# define ERR_LIB_TS             47
# define ERR_LIB_HMAC           48
/* # define ERR_LIB_JPAKE       49 */
# define ERR_LIB_CT             50
# define ERR_LIB_ASYNC          51
# define ERR_LIB_KDF            52
# define ERR_LIB_SM2            53
# define ERR_LIB_ESS            54
# define ERR_LIB_PROP           55
# define ERR_LIB_CRMF           56
# define ERR_LIB_PROV           57
# define ERR_LIB_CMP            58
# define ERR_LIB_OSSL_ENCODER   59
# define ERR_LIB_OSSL_DECODER   60
# define ERR_LIB_HTTP           61

# define ERR_LIB_USER           128

# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define ASN1err(f, r) ERR_raise_data(ERR_LIB_ASN1, (r), NULL)
#  define ASYNCerr(f, r) ERR_raise_data(ERR_LIB_ASYNC, (r), NULL)
#  define BIOerr(f, r) ERR_raise_data(ERR_LIB_BIO, (r), NULL)
#  define BNerr(f, r)  ERR_raise_data(ERR_LIB_BN, (r), NULL)
#  define BUFerr(f, r) ERR_raise_data(ERR_LIB_BUF, (r), NULL)
#  define CMPerr(f, r) ERR_raise_data(ERR_LIB_CMP,
 (r), NULL)
#  define CMSerr(f, r) ERR_raise_data(ERR_LIB_CMS, (r), NULL)
#  define COMPerr(f, r) ERR_raise_data(ERR_LIB_COMP, (r), NULL)
#  define CONFerr(f, r) ERR_raise_data(ERR_LIB_CONF, (r), NULL)
#  define CRMFerr(f, r) ERR_raise_data(ERR_LIB_CRMF, (r), NULL)
#  define CRYPTOerr(f, r) ERR_raise_data(ERR_LIB_CRYPTO, (r), NULL)
#  define CTerr(f, r) ERR_raise_data(ERR_LIB_CT, (r), NULL)
#  define DHerr(f, r)  ERR_raise_data(ERR_LIB_DH, (r), NULL)
#  define DSAerr(f, r) ERR_raise_data(ERR_LIB_DSA, (r), NULL)
#  define DSOerr(f, r) ERR_raise_data(ERR_LIB_DSO, (r), NULL)
#  define ECDHerr(f, r) ERR_raise_data(ERR_LIB_ECDH, (r), NULL)
#  define ECDSAerr(f, r) ERR_raise_data(ERR_LIB_ECDSA, (r), NULL)
#  define ECerr(f, r)  ERR_raise_data(ERR_LIB_EC, (r), NULL)
#  define ENGINEerr(f, r) ERR_raise_data(ERR_LIB_ENGINE, (r), NULL)
#  define ESSerr(f, r) ERR_raise_data(ERR_LIB_ESS, (r), NULL)
```

```
#  define EVPerr(f, r) ERR_raise_data(ERR_LIB_EVP, (r), NULL)
#  define FIPSerr(f,
 r) ERR_raise_data(ERR_LIB_FIPS, (r), NULL)
#  define HMACerr(f, r) ERR_raise_data(ERR_LIB_HMAC, (r), NULL)
#  define HTTPerr(f, r) ERR_raise_data(ERR_LIB_HTTP, (r), NULL)
#  define KDFerr(f, r) ERR_raise_data(ERR_LIB_KDF, (r), NULL)
#  define OBJerr(f, r) ERR_raise_data(ERR_LIB_OBJ, (r), NULL)
#  define OCSPerr(f, r) ERR_raise_data(ERR_LIB_OCSP, (r), NULL)
#  define OSSL_STOREerr(f, r) ERR_raise_data(ERR_LIB_OSSL_STORE, (r), NULL)
#  define PEMerr(f, r) ERR_raise_data(ERR_LIB_PEM, (r), NULL)
#  define PKCS12err(f, r) ERR_raise_data(ERR_LIB_PKCS12, (r), NULL)
#  define PKCS7err(f, r) ERR_raise_data(ERR_LIB_PKCS7, (r), NULL)
#  define PROPerr(f, r) ERR_raise_data(ERR_LIB_PROP, (r), NULL)
#  define PROVerr(f, r) ERR_raise_data(ERR_LIB_PROV, (r), NULL)
#  define RANDerr(f, r) ERR_raise_data(ERR_LIB_RAND, (r), NULL)
#  define RSAerr(f, r) ERR_raise_data(ERR_LIB_RSA, (r), NULL)
#  define KDFerr(f, r) ERR_raise_data(ERR_LIB_KDF, (r), NULL)
#  define SM2err(f, r) ERR_raise_data(ERR_LIB_SM2,
 (r), NULL)
#  define SSLerr(f, r) ERR_raise_data(ERR_LIB_SSL, (r), NULL)
#  define SYSerr(f, r) ERR_raise_data(ERR_LIB_SYS, (r), NULL)
#  define TSerr(f, r) ERR_raise_data(ERR_LIB_TS, (r), NULL)
#  define UIerr(f, r) ERR_raise_data(ERR_LIB_UI, (r), NULL)
#  define X509V3err(f, r) ERR_raise_data(ERR_LIB_X509V3, (r), NULL)
#  define X509err(f, r) ERR_raise_data(ERR_LIB_X509, (r), NULL)
# endif

/*-
* The error code packs differently depending on if it records a system
* error or an OpenSSL error.
*
* A system error packs like this (we follow POSIX and only allow positive
* numbers that fit in an |int|):
*
* +-+-----------------------------------------------------------+
* |1|                    system error number                    |
* +-+-----------------------------------------------------------+
*
* An OpenSSL error packs like this:
*
* <---------------------------- 32 bits --------------------------->
*    <--- 8 bits --->< ------------------ 23 bits ------------------>
 * +-+---------------+---------------------------------------------+
* |0|    library    |                    reason                   |
* +-+---------------+---------------------------------------------+
*
* A few of the reason bits are reserved as flags with special meaning:
*
```

```
*                <5 bits-<>--------- 19 bits ----------------->
*               +-------+-+-----------------------------------+
*               | rflags| |         reason                    |
*               +-------+-+-----------------------------------+
*                     ^
*                     |
*                     ERR_RFLAG_FATAL = ERR_R_FATAL
*
* The reason flags are part of the overall reason code for practical
* reasons, as they provide an easy way to place different types of
* reason codes in different numeric ranges.
*
* The currently known reason flags are:
*
* ERR_RFLAG_FATAL      Flags that the reason code is considered fatal.
*
                  For backward compatibility reasons, this flag
*                   is also the code for ERR_R_FATAL (that reason
*                   code served the dual purpose of flag and reason
*                   code in one in pre-3.0 OpenSSL).
* ERR_RFLAG_COMMON     Flags that the reason code is common to all
*                   libraries.  All ERR_R_ macros must use this flag,
*                   and no other _R_ macro is allowed to use it.
*/

/* Macros to help decode recorded system errors */
# define ERR_SYSTEM_FLAG              ((unsigned int)INT_MAX + 1)
# define ERR_SYSTEM_MASK              ((unsigned int)INT_MAX)

/*
* Macros to help decode recorded OpenSSL errors
* As expressed above, RFLAGS and REASON overlap by one bit to allow
* ERR_R_FATAL to use ERR_RFLAG_FATAL as its reason code.
*/
# define ERR_LIB_OFFSET               23L
# define ERR_LIB_MASK                 0xFF
# define ERR_RFLAGS_OFFSET            18L
# define ERR_RFLAGS_MASK
            0x1F
# define ERR_REASON_MASK              0X7FFFFF

/*
* Reason flags are defined pre-shifted to easily combine with the reason
* number.
*/
# define ERR_RFLAG_FATAL              (0x1 << ERR_RFLAGS_OFFSET)
# define ERR_RFLAG_COMMON             (0x2 << ERR_RFLAGS_OFFSET)
```

```
# define ERR_SYSTEM_ERROR(errcode)      (((errcode) & ERR_SYSTEM_FLAG) != 0)

static ossl_unused ossl_inline int ERR_GET_LIB(unsigned long errcode)
{
  if (ERR_SYSTEM_ERROR(errcode))
      return ERR_LIB_SYS;
  return (errcode >> ERR_LIB_OFFSET) & ERR_LIB_MASK;
}

static ossl_unused ossl_inline int ERR_GET_RFLAGS(unsigned long errcode)
{
  if (ERR_SYSTEM_ERROR(errcode))
      return 0;
  return errcode & (ERR_RFLAGS_MASK << ERR_RFLAGS_OFFSET);
}

static ossl_unused ossl_inline int ERR_GET_REASON(unsigned long errcode)
{
  if (ERR_SYSTEM_ERROR(errcode))
      return errcode & ERR_SYSTEM_MASK;
  return errcode & ERR_REASON_MASK;
}

static ossl_unused ossl_inline int ERR_FATAL_ERROR(unsigned
 long errcode)
{
  return (ERR_GET_RFLAGS(errcode) & ERR_RFLAG_FATAL) != 0;
}

static ossl_unused ossl_inline int ERR_COMMON_ERROR(unsigned long errcode)
{
  return (ERR_GET_RFLAGS(errcode) & ERR_RFLAG_COMMON) != 0;
}

/*
* ERR_PACK is a helper macro to properly pack OpenSSL error codes and may
* only be used for that purpose.  System errors are packed internally.
* ERR_PACK takes reason flags and reason code combined in |reason|.
* ERR_PACK ignores |func|, that parameter is just legacy from pre-3.0 OpenSSL.
*/
# define ERR_PACK(lib,func,reason)                                \
  ( (((unsigned long)(lib)    & ERR_LIB_MASK   ) << ERR_LIB_OFFSET) | \
    (((unsigned long)(reason) & ERR_REASON_MASK)) )

# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define SYS_F_FOPEN             0
#  define SYS_F_CONNECT           0
#  define SYS_F_GETSERVBYNAME     0
```

```
#  define SYS_F_SOCKET           0
#  define SYS_F_IOCTLSOCKET       0
#  define SYS_F_BIND             0
#
  define SYS_F_LISTEN           0
#  define SYS_F_ACCEPT           0
#  define SYS_F_WSASTARTUP        0
#  define SYS_F_OPENDIR           0
#  define SYS_F_FREAD            0
#  define SYS_F_GETADDRINFO       0
#  define SYS_F_GETNAMEINFO       0
#  define SYS_F_SETSOCKOPT        0
#  define SYS_F_GETSOCKOPT        0
#  define SYS_F_GETSOCKNAME       0
#  define SYS_F_GETHOSTBYNAME     0
#  define SYS_F_FFLUSH           0
#  define SYS_F_OPEN             0
#  define SYS_F_CLOSE            0
#  define SYS_F_IOCTL            0
#  define SYS_F_STAT             0
#  define SYS_F_FCNTL            0
#  define SYS_F_FSTAT            0
#  define SYS_F_SENDFILE          0
# endif

/*
* All ERR_R_ codes must be combined with ERR_RFLAG_COMMON.
*/

/* "we came from here" global reason codes, range 1..255 */
# define ERR_R_SYS_LIB         (ERR_LIB_SYS/* 2 */ | ERR_RFLAG_COMMON)
# define ERR_R_BN_LIB          (ERR_LIB_BN/* 3 */ | ERR_RFLAG_COMMON)
# define ERR_R_RSA_LIB         (ERR_LIB_RSA/*
 4 */ | ERR_RFLAG_COMMON)
# define ERR_R_DH_LIB          (ERR_LIB_DH/* 5 */ | ERR_RFLAG_COMMON)
# define ERR_R_EVP_LIB         (ERR_LIB_EVP/* 6 */ | ERR_RFLAG_COMMON)
# define ERR_R_BUF_LIB         (ERR_LIB_BUF/* 7 */ | ERR_RFLAG_COMMON)
# define ERR_R_OBJ_LIB         (ERR_LIB_OBJ/* 8 */ | ERR_RFLAG_COMMON)
# define ERR_R_PEM_LIB         (ERR_LIB_PEM/* 9 */ | ERR_RFLAG_COMMON)
# define ERR_R_DSA_LIB         (ERR_LIB_DSA/* 10 */ | ERR_RFLAG_COMMON)
# define ERR_R_X509_LIB        (ERR_LIB_X509/* 11 */ | ERR_RFLAG_COMMON)
# define ERR_R_ASN1_LIB        (ERR_LIB_ASN1/* 13 */ | ERR_RFLAG_COMMON)
# define ERR_R_CONF_LIB        (ERR_LIB_CONF/* 14 */ | ERR_RFLAG_COMMON)
# define ERR_R_CRYPTO_LIB      (ERR_LIB_CRYPTO/* 15 */ | ERR_RFLAG_COMMON)
# define ERR_R_EC_LIB          (ERR_LIB_EC/* 16 */ | ERR_RFLAG_COMMON)
# define ERR_R_SSL_LIB         (ERR_LIB_SSL/* 20 */ | ERR_RFLAG_COMMON)
# define ERR_R_BIO_LIB         (ERR_LIB_BIO/* 32 */ | ERR_RFLAG_COMMON)
# define ERR_R_PKCS7_LIB
```

```
        (ERR_LIB_PKCS7/* 33 */ | ERR_RFLAG_COMMON)
# define ERR_R_X509V3_LIB       (ERR_LIB_X509V3/* 34 */ | ERR_RFLAG_COMMON)
# define ERR_R_PKCS12_LIB       (ERR_LIB_PKCS12/* 35 */ | ERR_RFLAG_COMMON)
# define ERR_R_RAND_LIB         (ERR_LIB_RAND/* 36 */ | ERR_RFLAG_COMMON)
# define ERR_R_DSO_LIB          (ERR_LIB_DSO/* 37 */ | ERR_RFLAG_COMMON)
# define ERR_R_ENGINE_LIB       (ERR_LIB_ENGINE/* 38 */ | ERR_RFLAG_COMMON)
# define ERR_R_UI_LIB           (ERR_LIB_UI/* 40 */ | ERR_RFLAG_COMMON)
# define ERR_R_ECDSA_LIB        (ERR_LIB_ECDSA/* 42 */ | ERR_RFLAG_COMMON)
# define ERR_R_OSSL_STORE_LIB   (ERR_LIB_OSSL_STORE/* 44 */ | ERR_RFLAG_COMMON)
# define ERR_R_CMS_LIB          (ERR_LIB_CMS/* 46 */ | ERR_RFLAG_COMMON)
# define ERR_R_TS_LIB           (ERR_LIB_TS/* 47 */ | ERR_RFLAG_COMMON)
# define ERR_R_CT_LIB           (ERR_LIB_CT/* 50 */ | ERR_RFLAG_COMMON)
# define ERR_R_PROV_LIB         (ERR_LIB_PROV/* 57 */ | ERR_RFLAG_COMMON)
# define ERR_R_ESS_LIB          (ERR_LIB_ESS/* 54
 */ | ERR_RFLAG_COMMON)
# define ERR_R_CMP_LIB          (ERR_LIB_CMP/* 58 */ | ERR_RFLAG_COMMON)
# define ERR_R_OSSL_ENCODER_LIB (ERR_LIB_OSSL_ENCODER/* 59 */ | ERR_RFLAG_COMMON)
# define ERR_R_OSSL_DECODER_LIB (ERR_LIB_OSSL_DECODER/* 60 */ | ERR_RFLAG_COMMON)

/* Other common error codes, range 256..2^ERR_RFLAGS_OFFSET-1 */
# define ERR_R_FATAL                        (ERR_RFLAG_FATAL|ERR_RFLAG_COMMON)
# define ERR_R_MALLOC_FAILURE               (256|ERR_R_FATAL)
# define ERR_R_SHOULD_NOT_HAVE_BEEN_CALLED  (257|ERR_R_FATAL)
# define ERR_R_PASSED_NULL_PARAMETER        (258|ERR_R_FATAL)
# define ERR_R_INTERNAL_ERROR               (259|ERR_R_FATAL)
# define ERR_R_DISABLED                     (260|ERR_R_FATAL)
# define ERR_R_INIT_FAIL                    (261|ERR_R_FATAL)
# define ERR_R_PASSED_INVALID_ARGUMENT      (262|ERR_RFLAG_COMMON)
# define ERR_R_OPERATION_FAIL               (263|ERR_R_FATAL)
# define ERR_R_INVALID_PROVIDER_FUNCTIONS
   (264|ERR_R_FATAL)
# define ERR_R_INTERRUPTED_OR_CANCELLED     (265|ERR_RFLAG_COMMON)
# define ERR_R_NESTED_ASN1_ERROR            (266|ERR_RFLAG_COMMON)
# define ERR_R_MISSING_ASN1_EOS             (267|ERR_RFLAG_COMMON)
# define ERR_R_UNSUPPORTED                  (268|ERR_RFLAG_COMMON)
# define ERR_R_FETCH_FAILED                 (269|ERR_RFLAG_COMMON)
# define ERR_R_INVALID_PROPERTY_DEFINITION  (270|ERR_RFLAG_COMMON)
# define ERR_R_UNABLE_TO_GET_READ_LOCK      (271|ERR_R_FATAL)
# define ERR_R_UNABLE_TO_GET_WRITE_LOCK     (272|ERR_R_FATAL)

typedef struct ERR_string_data_st {
   unsigned long error;
   const char *string;
} ERR_STRING_DATA;

DEFINE_LHASH_OF_INTERNAL(ERR_STRING_DATA);
#define lh_ERR_STRING_DATA_new(hfn, cmp) ((LHASH_OF(ERR_STRING_DATA)
*)OPENSSL_LH_new(ossl_check_ERR_STRING_DATA_lh_hashfunc_type(hfn),
```

```
ossl_check_ERR_STRING_DATA_lh_compfunc_type(cmp)))
#define lh_ERR_STRING_DATA_free(lh) OPENSSL_LH_free(ossl_check_ERR_STRING_DATA_lh_type(lh))
#define
 lh_ERR_STRING_DATA_flush(lh) OPENSSL_LH_flush(ossl_check_ERR_STRING_DATA_lh_type(lh))
#define lh_ERR_STRING_DATA_insert(lh, ptr) ((ERR_STRING_DATA
*)OPENSSL_LH_insert(ossl_check_ERR_STRING_DATA_lh_type(lh),
ossl_check_ERR_STRING_DATA_lh_plain_type(ptr)))
#define lh_ERR_STRING_DATA_delete(lh, ptr) ((ERR_STRING_DATA
*)OPENSSL_LH_delete(ossl_check_ERR_STRING_DATA_lh_type(lh),
ossl_check_const_ERR_STRING_DATA_lh_plain_type(ptr)))
#define lh_ERR_STRING_DATA_retrieve(lh, ptr) ((ERR_STRING_DATA
*)OPENSSL_LH_retrieve(ossl_check_ERR_STRING_DATA_lh_type(lh),
ossl_check_const_ERR_STRING_DATA_lh_plain_type(ptr)))
#define lh_ERR_STRING_DATA_error(lh) OPENSSL_LH_error(ossl_check_ERR_STRING_DATA_lh_type(lh))
#define lh_ERR_STRING_DATA_num_items(lh)
OPENSSL_LH_num_items(ossl_check_ERR_STRING_DATA_lh_type(lh))
#define lh_ERR_STRING_DATA_node_stats_bio(lh, out)
OPENSSL_LH_node_stats_bio(ossl_check_const_ERR_STRING_DATA_lh_type(lh), out)
#define lh_ERR_STRING_DATA_node_usage_stats_bio(lh,
 out) OPENSSL_LH_node_usage_stats_bio(ossl_check_const_ERR_STRING_DATA_lh_type(lh), out)
#define lh_ERR_STRING_DATA_stats_bio(lh, out)
OPENSSL_LH_stats_bio(ossl_check_const_ERR_STRING_DATA_lh_type(lh), out)
#define lh_ERR_STRING_DATA_get_down_load(lh)
OPENSSL_LH_get_down_load(ossl_check_ERR_STRING_DATA_lh_type(lh))
#define lh_ERR_STRING_DATA_set_down_load(lh, dl)
OPENSSL_LH_set_down_load(ossl_check_ERR_STRING_DATA_lh_type(lh), dl)
#define lh_ERR_STRING_DATA_doall(lh, dfn)
OPENSSL_LH_doall(ossl_check_ERR_STRING_DATA_lh_type(lh),
ossl_check_ERR_STRING_DATA_lh_doallfunc_type(dfn))


/* 12 lines and some on an 80 column terminal */
#define ERR_MAX_DATA_SIZE       1024

/* Building blocks */
void ERR_new(void);
void ERR_set_debug(const char *file, int line, const char *func);
void ERR_set_error(int lib, int reason, const char *fmt, ...);
void ERR_vset_error(int lib, int reason, const char *fmt, va_list args);

/* Main error raising functions */
# define ERR_raise(lib, reason) ERR_raise_data((lib),(reason),NULL)
#
 define ERR_raise_data                                  \
   (ERR_new(),                                         \
    ERR_set_debug(OPENSSL_FILE,OPENSSL_LINE,OPENSSL_FUNC),     \
    ERR_set_error)
```

```
# ifndef OPENSSL_NO_DEPRECATED_3_0
/* Backward compatibility */
#  define ERR_put_error(lib, func, reason, file, line)          \
   (ERR_new(),                                                  \
    ERR_set_debug((file), (line), OPENSSL_FUNC),                \
    ERR_set_error((lib), (reason), NULL))
# endif

void ERR_set_error_data(char *data, int flags);

unsigned long ERR_get_error(void);
unsigned long ERR_get_error_all(const char **file, int *line,
                                const char **func,
                                const char **data, int *flags);
# ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0
unsigned long ERR_get_error_line(const char **file, int *line);
OSSL_DEPRECATEDIN_3_0
unsigned long ERR_get_error_line_data(const
 char **file, int *line,
                                      const char **data, int *flags);
#endif
unsigned long ERR_peek_error(void);
unsigned long ERR_peek_error_line(const char **file, int *line);
unsigned long ERR_peek_error_func(const char **func);
unsigned long ERR_peek_error_data(const char **data, int *flags);
unsigned long ERR_peek_error_all(const char **file, int *line,
                                 const char **func,
                                 const char **data, int *flags);
# ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0
unsigned long ERR_peek_error_line_data(const char **file, int *line,
                                       const char **data, int *flags);
# endif
unsigned long ERR_peek_last_error(void);
unsigned long ERR_peek_last_error_line(const char **file, int *line);
unsigned long ERR_peek_last_error_func(const char **func);
unsigned long ERR_peek_last_error_data(const char **data, int *flags);
unsigned long ERR_peek_last_error_all(const
 char **file, int *line,
                                      const char **func,
                                      const char **data, int *flags);
# ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0
unsigned long ERR_peek_last_error_line_data(const char **file, int *line,
                                            const char **data, int *flags);
# endif
```

```
void ERR_clear_error(void);

char *ERR_error_string(unsigned long e, char *buf);
void ERR_error_string_n(unsigned long e, char *buf, size_t len);
const char *ERR_lib_error_string(unsigned long e);
# ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 const char *ERR_func_error_string(unsigned long e);
# endif
const char *ERR_reason_error_string(unsigned long e);

void ERR_print_errors_cb(int (*cb) (const char *str, size_t len, void *u),
                         void *u);
# ifndef OPENSSL_NO_STDIO
void ERR_print_errors_fp(FILE *fp);
# endif
void ERR_print_errors(BIO *bp);

void ERR_add_error_data(int num, ...);
void ERR_add_error_vdata(int
 num, va_list args);
void ERR_add_error_txt(const char *sepr, const char *txt);
void ERR_add_error_mem_bio(const char *sep, BIO *bio);

int ERR_load_strings(int lib, ERR_STRING_DATA *str);
int ERR_load_strings_const(const ERR_STRING_DATA *str);
int ERR_unload_strings(int lib, ERR_STRING_DATA *str);

#ifndef OPENSSL_NO_DEPRECATED_1_1_0
# define ERR_load_crypto_strings() \
   OPENSSL_init_crypto(OPENSSL_INIT_LOAD_CRYPTO_STRINGS, NULL)
# define ERR_free_strings() while(0) continue
#endif
#ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 void ERR_remove_thread_state(void *);
#endif
#ifndef OPENSSL_NO_DEPRECATED_1_0_0
OSSL_DEPRECATEDIN_1_0_0 void ERR_remove_state(unsigned long pid);
#endif
#ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 ERR_STATE *ERR_get_state(void);
#endif

int ERR_get_next_error_library(void);

int ERR_set_mark(void);
int ERR_pop_to_mark(void);
int ERR_clear_last_mark(void);
```

#ifdef __cplusplus
}
#endif

#endif
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* https://www.openssl.org/source/license.html
*/

```
/*
* Header for dynamic hash table routines Author - Eric Young
*/

#ifndef OPENSSL_LHASH_H
# define OPENSSL_LHASH_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_LHASH_H
# endif

# include <openssl/e_os2.h>
# include <openssl/bio.h>

#ifdef  __cplusplus
extern "C" {
#endif

typedef struct lhash_node_st OPENSSL_LH_NODE;
typedef int (*OPENSSL_LH_COMPFUNC) (const void *, const void *);
typedef unsigned long (*OPENSSL_LH_HASHFUNC) (const void *);
typedef void (*OPENSSL_LH_DOALL_FUNC) (void *);
typedef void (*OPENSSL_LH_DOALL_FUNCARG) (void *, void *);
typedef struct lhash_st OPENSSL_LHASH;

/*
* Macros for
 declaring and implementing type-safe wrappers for LHASH
* callbacks. This way, callbacks can be provided to LHASH structures without
* function pointer casting and the macro-defined callbacks provide
* per-variable casting before deferring to the underlying type-specific
* callbacks. NB: It is possible to place a "static" in front of both the
* DECLARE and IMPLEMENT macros if the functions are strictly internal.
*/

/* First: "hash" functions */
# define DECLARE_LHASH_HASH_FN(name, o_type) \
      unsigned long name##_LHASH_HASH(const void *);
# define IMPLEMENT_LHASH_HASH_FN(name, o_type) \
      unsigned long name##_LHASH_HASH(const void *arg) { \
            const o_type *a = arg; \
            return name##_hash(a); }
# define LHASH_HASH_FN(name) name##_LHASH_HASH
```

```
/* Second: "compare" functions */
# define DECLARE_LHASH_COMP_FN(name, o_type) \
      int name##_LHASH_COMP(const void *, const void *);
# define IMPLEMENT_LHASH_COMP_FN(name, o_type) \
      int
 name##_LHASH_COMP(const void *arg1, const void *arg2) { \
            const o_type *a = arg1;            \
            const o_type *b = arg2; \
            return name##_cmp(a,b); }
# define LHASH_COMP_FN(name) name##_LHASH_COMP

/* Fourth: "doall_arg" functions */
# define DECLARE_LHASH_DOALL_ARG_FN(name, o_type, a_type) \
      void name##_LHASH_DOALL_ARG(void *, void *);
# define IMPLEMENT_LHASH_DOALL_ARG_FN(name, o_type, a_type) \
      void name##_LHASH_DOALL_ARG(void *arg1, void *arg2) { \
            o_type *a = arg1; \
            a_type *b = arg2; \
            name##_doall_arg(a, b); }
# define LHASH_DOALL_ARG_FN(name) name##_LHASH_DOALL_ARG


# define LH_LOAD_MULT    256

int OPENSSL_LH_error(OPENSSL_LHASH *lh);
OPENSSL_LHASH *OPENSSL_LH_new(OPENSSL_LH_HASHFUNC h, OPENSSL_LH_COMPFUNC c);
void OPENSSL_LH_free(OPENSSL_LHASH *lh);
void OPENSSL_LH_flush(OPENSSL_LHASH *lh);
void *OPENSSL_LH_insert(OPENSSL_LHASH *lh, void *data);
void *OPENSSL_LH_delete(OPENSSL_LHASH
 *lh, const void *data);
void *OPENSSL_LH_retrieve(OPENSSL_LHASH *lh, const void *data);
void OPENSSL_LH_doall(OPENSSL_LHASH *lh, OPENSSL_LH_DOALL_FUNC func);
void OPENSSL_LH_doall_arg(OPENSSL_LHASH *lh, OPENSSL_LH_DOALL_FUNCARG func, void *arg);
unsigned long OPENSSL_LH_strhash(const char *c);
unsigned long OPENSSL_LH_num_items(const OPENSSL_LHASH *lh);
unsigned long OPENSSL_LH_get_down_load(const OPENSSL_LHASH *lh);
void OPENSSL_LH_set_down_load(OPENSSL_LHASH *lh, unsigned long down_load);

# ifndef OPENSSL_NO_STDIO
void OPENSSL_LH_stats(const OPENSSL_LHASH *lh, FILE *fp);
void OPENSSL_LH_node_stats(const OPENSSL_LHASH *lh, FILE *fp);
void OPENSSL_LH_node_usage_stats(const OPENSSL_LHASH *lh, FILE *fp);
# endif
void OPENSSL_LH_stats_bio(const OPENSSL_LHASH *lh, BIO *out);
void OPENSSL_LH_node_stats_bio(const OPENSSL_LHASH *lh, BIO *out);
void OPENSSL_LH_node_usage_stats_bio(const OPENSSL_LHASH *lh, BIO *out);
```

```
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define _LHASH OPENSSL_LHASH
#
  define LHASH_NODE OPENSSL_LH_NODE
#  define lh_error OPENSSL_LH_error
#  define lh_new OPENSSL_LH_new
#  define lh_free OPENSSL_LH_free
#  define lh_insert OPENSSL_LH_insert
#  define lh_delete OPENSSL_LH_delete
#  define lh_retrieve OPENSSL_LH_retrieve
#  define lh_doall OPENSSL_LH_doall
#  define lh_doall_arg OPENSSL_LH_doall_arg
#  define lh_strhash OPENSSL_LH_strhash
#  define lh_num_items OPENSSL_LH_num_items
#  ifndef OPENSSL_NO_STDIO
#   define lh_stats OPENSSL_LH_stats
#   define lh_node_stats OPENSSL_LH_node_stats
#   define lh_node_usage_stats OPENSSL_LH_node_usage_stats
#  endif
#  define lh_stats_bio OPENSSL_LH_stats_bio
#  define lh_node_stats_bio OPENSSL_LH_node_stats_bio
#  define lh_node_usage_stats_bio OPENSSL_LH_node_usage_stats_bio
# endif

/* Type checking... */

# define LHASH_OF(type) struct lhash_st_##type

/* Helper macro for internal use */
# define DEFINE_LHASH_OF_INTERNAL(type) \
   LHASH_OF(type) { union lh_##type##_dummy { void* d1; unsigned long
 d2; int d3; } dummy; }; \
   typedef int (*lh_##type##_compfunc)(const type *a, const type *b); \
   typedef unsigned long (*lh_##type##_hashfunc)(const type *a); \
   typedef void (*lh_##type##_doallfunc)(type *a); \
   static ossl_unused ossl_inline type *ossl_check_##type##_lh_plain_type(type *ptr) \
   { \
       return ptr; \
   } \
   static ossl_unused ossl_inline const type *ossl_check_const_##type##_lh_plain_type(const type *ptr) \
   { \
       return ptr; \
   } \
   static ossl_unused ossl_inline const OPENSSL_LHASH *ossl_check_const_##type##_lh_type(const
LHASH_OF(type) *lh) \
   { \
       return (const OPENSSL_LHASH *)lh; \
```

```
  } \
  static ossl_unused ossl_inline OPENSSL_LHASH *ossl_check_##type##_lh_type(LHASH_OF(type) *lh) \
  { \
     return (OPENSSL_LHASH *)lh; \
  } \
  static ossl_unused ossl_inline OPENSSL_LH_COMPFUNC
ossl_check_##type##_lh_compfunc_type(lh_##type##_compfunc cmp) \
  { \
     return (OPENSSL_LH_COMPFUNC)cmp; \

  } \
  static ossl_unused ossl_inline OPENSSL_LH_HASHFUNC
ossl_check_##type##_lh_hashfunc_type(lh_##type##_hashfunc hfn) \
  { \
     return (OPENSSL_LH_HASHFUNC)hfn; \
  } \
  static ossl_unused ossl_inline OPENSSL_LH_DOALL_FUNC
ossl_check_##type##_lh_doallfunc_type(lh_##type##_doallfunc dfn) \
  { \
     return (OPENSSL_LH_DOALL_FUNC)dfn; \
  } \
  LHASH_OF(type)

# define DEFINE_LHASH_OF(type) \
  LHASH_OF(type) { union lh_##type##_dummy { void* d1; unsigned long d2; int d3; } dummy; }; \
  static ossl_unused ossl_inline LHASH_OF(type) *lh_##type##_new(unsigned long (*hfn)(const type *), \
                                                int (*cfn)(const type *, const type *)) \
  { \
     return (LHASH_OF(type) *) \
        OPENSSL_LH_new((OPENSSL_LH_HASHFUNC)hfn, (OPENSSL_LH_COMPFUNC)cfn); \
  } \
  static ossl_unused ossl_inline void lh_##type##_free(LHASH_OF(type) *lh) \
  { \
     OPENSSL_LH_free((OPENSSL_LHASH *)lh);
 \
  } \
  static ossl_unused ossl_inline void lh_##type##_flush(LHASH_OF(type) *lh) \
  { \
     OPENSSL_LH_flush((OPENSSL_LHASH *)lh); \
  } \
  static ossl_unused ossl_inline type *lh_##type##_insert(LHASH_OF(type) *lh, type *d) \
  { \
     return (type *)OPENSSL_LH_insert((OPENSSL_LHASH *)lh, d); \
  } \
  static ossl_unused ossl_inline type *lh_##type##_delete(LHASH_OF(type) *lh, const type *d) \
  { \
     return (type *)OPENSSL_LH_delete((OPENSSL_LHASH *)lh, d); \
  } \
```

```
static ossl_unused ossl_inline type *lh_##type##_retrieve(LHASH_OF(type) *lh, const type *d) \
{ \
    return (type *)OPENSSL_LH_retrieve((OPENSSL_LHASH *)lh, d); \
} \
static ossl_unused ossl_inline int lh_##type##_error(LHASH_OF(type) *lh) \
{ \
    return OPENSSL_LH_error((OPENSSL_LHASH *)lh); \
} \
static ossl_unused ossl_inline unsigned long lh_##type##_num_items(LHASH_OF(type) *lh) \
{ \
    return OPENSSL_LH_num_items((OPENSSL_LHASH
*)lh); \
} \
static ossl_unused ossl_inline void lh_##type##_node_stats_bio(const LHASH_OF(type) *lh, BIO *out) \
{ \
    OPENSSL_LH_node_stats_bio((const OPENSSL_LHASH *)lh, out); \
} \
static ossl_unused ossl_inline void lh_##type##_node_usage_stats_bio(const LHASH_OF(type) *lh, BIO *out) \
{ \
    OPENSSL_LH_node_usage_stats_bio((const OPENSSL_LHASH *)lh, out); \
} \
static ossl_unused ossl_inline void lh_##type##_stats_bio(const LHASH_OF(type) *lh, BIO *out) \
{ \
    OPENSSL_LH_stats_bio((const OPENSSL_LHASH *)lh, out); \
} \
static ossl_unused ossl_inline unsigned long lh_##type##_get_down_load(LHASH_OF(type) *lh) \
{ \
    return OPENSSL_LH_get_down_load((OPENSSL_LHASH *)lh); \
} \
static ossl_unused ossl_inline void lh_##type##_set_down_load(LHASH_OF(type) *lh, unsigned long dl) \
{ \
    OPENSSL_LH_set_down_load((OPENSSL_LHASH *)lh, dl); \
} \
static ossl_unused ossl_inline void lh_##type##_doall(LHASH_OF(type)
*lh, \
                                        void (*doall)(type *)) \
{ \
    OPENSSL_LH_doall((OPENSSL_LHASH *)lh, (OPENSSL_LH_DOALL_FUNC)doall); \
} \
static ossl_unused ossl_inline void lh_##type##_doall_arg(LHASH_OF(type) *lh, \
                                          void (*doallarg)(type *, void *), \
                                          void *arg) \
{ \
    OPENSSL_LH_doall_arg((OPENSSL_LHASH *)lh, \
                         (OPENSSL_LH_DOALL_FUNCARG)doallarg, arg); \
} \
LHASH_OF(type)
```

```
#define IMPLEMENT_LHASH_DOALL_ARG_CONST(type, argtype) \
   int_implement_lhash_doall(type, argtype, const type)

#define IMPLEMENT_LHASH_DOALL_ARG(type, argtype) \
   int_implement_lhash_doall(type, argtype, type)

#define int_implement_lhash_doall(type, argtype, cbargtype) \
   static ossl_unused ossl_inline void \
      lh_##type##_doall_##argtype(LHASH_OF(type) *lh,
 \
                              void (*fn)(cbargtype *, argtype *), \
                              argtype *arg) \
   { \
      OPENSSL_LH_doall_arg((OPENSSL_LHASH *)lh, (OPENSSL_LH_DOALL_FUNCARG)fn, (void *)arg); \
   } \
   LHASH_OF(type)

DEFINE_LHASH_OF_INTERNAL(OPENSSL_STRING);
#define lh_OPENSSL_STRING_new(hfn, cmp) ((LHASH_OF(OPENSSL_STRING)
*)OPENSSL_LH_new(ossl_check_OPENSSL_STRING_lh_hashfunc_type(hfn),
ossl_check_OPENSSL_STRING_lh_compfunc_type(cmp)))
#define lh_OPENSSL_STRING_free(lh) OPENSSL_LH_free(ossl_check_OPENSSL_STRING_lh_type(lh))
#define lh_OPENSSL_STRING_flush(lh) OPENSSL_LH_flush(ossl_check_OPENSSL_STRING_lh_type(lh))
#define lh_OPENSSL_STRING_insert(lh, ptr) ((OPENSSL_STRING
*)OPENSSL_LH_insert(ossl_check_OPENSSL_STRING_lh_type(lh),
ossl_check_OPENSSL_STRING_lh_plain_type(ptr)))
#define lh_OPENSSL_STRING_delete(lh, ptr) ((OPENSSL_STRING
*)OPENSSL_LH_delete(ossl_check_OPENSSL_STRING_lh_type(lh),
ossl_check_const_OPENSSL_STRING_lh_plain_type(ptr)))
#define
 lh_OPENSSL_STRING_retrieve(lh, ptr) ((OPENSSL_STRING
*)OPENSSL_LH_retrieve(ossl_check_OPENSSL_STRING_lh_type(lh),
ossl_check_const_OPENSSL_STRING_lh_plain_type(ptr)))
#define lh_OPENSSL_STRING_error(lh) OPENSSL_LH_error(ossl_check_OPENSSL_STRING_lh_type(lh))
#define lh_OPENSSL_STRING_num_items(lh)
OPENSSL_LH_num_items(ossl_check_OPENSSL_STRING_lh_type(lh))
#define lh_OPENSSL_STRING_node_stats_bio(lh, out)
OPENSSL_LH_node_stats_bio(ossl_check_const_OPENSSL_STRING_lh_type(lh), out)
#define lh_OPENSSL_STRING_node_usage_stats_bio(lh, out)
OPENSSL_LH_node_usage_stats_bio(ossl_check_const_OPENSSL_STRING_lh_type(lh), out)
#define lh_OPENSSL_STRING_stats_bio(lh, out)
OPENSSL_LH_stats_bio(ossl_check_const_OPENSSL_STRING_lh_type(lh), out)
#define lh_OPENSSL_STRING_get_down_load(lh)
OPENSSL_LH_get_down_load(ossl_check_OPENSSL_STRING_lh_type(lh))
#define lh_OPENSSL_STRING_set_down_load(lh, dl)
OPENSSL_LH_set_down_load(ossl_check_OPENSSL_STRING_lh_type(lh), dl)
#define lh_OPENSSL_STRING_doall(lh,
```

```
 dfn) OPENSSL_LH_doall(ossl_check_OPENSSL_STRING_lh_type(lh),
ossl_check_OPENSSL_STRING_lh_doallfunc_type(dfn))
DEFINE_LHASH_OF_INTERNAL(OPENSSL_CSTRING);
#define lh_OPENSSL_CSTRING_new(hfn, cmp) ((LHASH_OF(OPENSSL_CSTRING)
*)OPENSSL_LH_new(ossl_check_OPENSSL_CSTRING_lh_hashfunc_type(hfn),
ossl_check_OPENSSL_CSTRING_lh_compfunc_type(cmp)))
#define lh_OPENSSL_CSTRING_free(lh) OPENSSL_LH_free(ossl_check_OPENSSL_CSTRING_lh_type(lh))
#define lh_OPENSSL_CSTRING_flush(lh) OPENSSL_LH_flush(ossl_check_OPENSSL_CSTRING_lh_type(lh))
#define lh_OPENSSL_CSTRING_insert(lh, ptr) ((OPENSSL_CSTRING
*)OPENSSL_LH_insert(ossl_check_OPENSSL_CSTRING_lh_type(lh),
ossl_check_OPENSSL_CSTRING_lh_plain_type(ptr)))
#define lh_OPENSSL_CSTRING_delete(lh, ptr) ((OPENSSL_CSTRING
*)OPENSSL_LH_delete(ossl_check_OPENSSL_CSTRING_lh_type(lh),
ossl_check_const_OPENSSL_CSTRING_lh_plain_type(ptr)))
#define lh_OPENSSL_CSTRING_retrieve(lh, ptr) ((OPENSSL_CSTRING
*)OPENSSL_LH_retrieve(ossl_check_OPENSSL_CSTRING_lh_type(lh),
 ossl_check_const_OPENSSL_CSTRING_lh_plain_type(ptr)))
#define lh_OPENSSL_CSTRING_error(lh) OPENSSL_LH_error(ossl_check_OPENSSL_CSTRING_lh_type(lh))
#define lh_OPENSSL_CSTRING_num_items(lh)
OPENSSL_LH_num_items(ossl_check_OPENSSL_CSTRING_lh_type(lh))
#define lh_OPENSSL_CSTRING_node_stats_bio(lh, out)
OPENSSL_LH_node_stats_bio(ossl_check_const_OPENSSL_CSTRING_lh_type(lh), out)
#define lh_OPENSSL_CSTRING_node_usage_stats_bio(lh, out)
OPENSSL_LH_node_usage_stats_bio(ossl_check_const_OPENSSL_CSTRING_lh_type(lh), out)
#define lh_OPENSSL_CSTRING_stats_bio(lh, out)
OPENSSL_LH_stats_bio(ossl_check_const_OPENSSL_CSTRING_lh_type(lh), out)
#define lh_OPENSSL_CSTRING_get_down_load(lh)
OPENSSL_LH_get_down_load(ossl_check_OPENSSL_CSTRING_lh_type(lh))
#define lh_OPENSSL_CSTRING_set_down_load(lh, dl)
OPENSSL_LH_set_down_load(ossl_check_OPENSSL_CSTRING_lh_type(lh), dl)
#define lh_OPENSSL_CSTRING_doall(lh, dfn)
OPENSSL_LH_doall(ossl_check_OPENSSL_CSTRING_lh_type(lh),
ossl_check_OPENSSL_CSTRING_lh_doallfunc_type(dfn))


#ifdef
  __cplusplus
}
#endif

#endif
{
 'variables': {
   'openssl_sources': [
     'openssl/ssl/bio_ssl.c',
     'openssl/ssl/d1_lib.c',
     'openssl/ssl/d1_msg.c',
     'openssl/ssl/d1_srtp.c',
```

'openssl/ssl/methods.c',
'openssl/ssl/pqueue.c',
'openssl/ssl/s3_enc.c',
'openssl/ssl/s3_lib.c',
'openssl/ssl/s3_msg.c',
'openssl/ssl/ssl_asn1.c',
'openssl/ssl/ssl_cert.c',
'openssl/ssl/ssl_ciph.c',
'openssl/ssl/ssl_conf.c',
'openssl/ssl/ssl_err.c',
'openssl/ssl/ssl_err_legacy.c',
'openssl/ssl/ssl_init.c',
'openssl/ssl/ssl_lib.c',
'openssl/ssl/ssl_mcnf.c',
'openssl/ssl/ssl_rsa.c',
'openssl/ssl/ssl_rsa_legacy.c',
'openssl/ssl/ssl_sess.c',
'openssl/ssl/ssl_stat.c',
'openssl/ssl/ssl_txt.c',
'openssl/ssl/ssl_utst.c',
'openssl/ssl/t1_enc.c',
'openssl/ssl/t1_lib.c',
'openssl/ssl/t1_trce.c',
'openssl/ssl/tls13_enc.c',
'openssl/ssl/tls_depr.c',
'openssl/ssl/tls_srp.c',
'openssl/ssl/record/dtls1_bitmap.c',
'openssl/ssl/record/rec_layer_d1.c',
'openssl/ssl/record/rec_layer_s3.c',
'openssl/ssl/record/ssl3_buffer.c',
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'openssl/ssl/record/ssl3_record_tls13.c',
'openssl/ssl/statem/extensions.c',
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'openssl/ssl/statem/extensions_cust.c',
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'openssl/ssl/statem/statem_srvr.c',
'openssl/crypto/aes/aes_cfb.c',
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'openssl/crypto/aes/aes_ofb.c',
'openssl/crypto/aes/aes_wrap.c',
'openssl/crypto/aria/aria.c',

'openssl/crypto/asn1/a_bitstr.c',
'openssl/crypto/asn1/a_d2i_fp.c',
'openssl/crypto/asn1/a_digest.c',
'openssl/crypto/asn1/a_dup.c',
'openssl/crypto/asn1/a_gentm.c',
'openssl/crypto/asn1/a_i2d_fp.c',
'openssl/crypto/asn1/a_int.c',
'openssl/crypto/asn1/a_mbstr.c',
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'openssl/crypto/asn1/a_octet.c',
'openssl/crypto/asn1/a_print.c',
'openssl/crypto/asn1/a_sign.c',
'openssl/crypto/asn1/a_strex.c',
'openssl/crypto/asn1/a_strnid.c',
'openssl/crypto/asn1/a_time.c',
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'openssl/crypto/asn1/asn1_err.c',
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'openssl/crypto/asn1/asn1_item_list.c',
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'openssl/crypto/asn1/d2i_pr.c',
'openssl/crypto/asn1/d2i_pu.c',
'openssl/crypto/asn1/evp_asn1.c',
'openssl/crypto/asn1/f_int.c',
'openssl/crypto/asn1/f_string.c',
'openssl/crypto/asn1/i2d_evp.c',
'openssl/crypto/asn1/n_pkey.c',
'openssl/crypto/asn1/nsseq.c',
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'openssl/crypto/asn1/tasn_enc.c',
'openssl/crypto/asn1/tasn_fre.c',
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'openssl/crypto/asn1/tasn_prn.c',
'openssl/crypto/asn1/tasn_scn.c',
'openssl/crypto/asn1/tasn_typ.c',
'openssl/crypto/asn1/tasn_utl.c',
'openssl/crypto/asn1/x_algor.c',
'openssl/crypto/asn1/x_bignum.c',
'openssl/crypto/asn1/x_info.c',
'openssl/crypto/asn1/x_int64.c',
'openssl/crypto/asn1/x_long.c',
'openssl/crypto/asn1/x_pkey.c',
'openssl/crypto/asn1/x_sig.c',
'openssl/crypto/asn1/x_spki.c',
'openssl/crypto/asn1/x_val.c',
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'openssl/crypto/async/async_wait.c',
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'openssl/crypto/bf/bf_ecb.c',
'openssl/crypto/bf/bf_enc.c',
'openssl/crypto/bf/bf_ofb64.c',
'openssl/crypto/bf/bf_skey.c',
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'openssl/crypto/bio/bio_lib.c',
'openssl/crypto/bio/bio_meth.c',
'openssl/crypto/bio/bio_print.c',
'openssl/crypto/bio/bio_sock.c',
'openssl/crypto/bio/bio_sock2.c',
'openssl/crypto/bio/bss_acpt.c',
'openssl/crypto/bio/bss_bio.c',
'openssl/crypto/bio/bss_conn.c',
'openssl/crypto/bio/bss_core.c',
'openssl/crypto/bio/bss_dgram.c',
'openssl/crypto/bio/bss_fd.c',

'openssl/crypto/bio/bss_file.c',
'openssl/crypto/bio/bss_log.c',
'openssl/crypto/bio/bss_mem.c',
'openssl/crypto/bio/bss_null.c',
'openssl/crypto/bio/bss_sock.c',
'openssl/crypto/bio/ossl_core_bio.c',
'openssl/crypto/bn/asm/x86_64-gcc.c',
'openssl/crypto/bn/bn_add.c',
'openssl/crypto/bn/bn_blind.c',
'openssl/crypto/bn/bn_const.c',
'openssl/crypto/bn/bn_conv.c',
'openssl/crypto/bn/bn_ctx.c',
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'openssl/crypto/bn/bn_sqrt.c',
'openssl/crypto/bn/bn_srp.c',
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'openssl/crypto/camellia/cmll_ecb.c',
'openssl/crypto/camellia/cmll_misc.c',
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'openssl/crypto/cms/cms_cd.c',
'openssl/crypto/cms/cms_dd.c',
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'openssl/crypto/cms/cms_env.c',
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'openssl/crypto/conf/conf_err.c',

'openssl/crypto/conf/conf_lib.c',
'openssl/crypto/conf/conf_mall.c',
'openssl/crypto/conf/conf_mod.c',
'openssl/crypto/conf/conf_sap.c',
'openssl/crypto/conf/conf_ssl.c',
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'openssl/crypto/crmf/crmf_lib.c',
'openssl/crypto/crmf/crmf_pbm.c',

'openssl/crypto/ct/ct_b64.c',
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  './config/archs/BSD-x86_64/asm_avx2/crypto/aes/aesni-sha1-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/aes/aesni-sha256-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/aes/aesni-x86_64.s',
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  'OPENSSL_BN_ASM_MONT',
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  'defines': ['<@(openssl_defines_BSD-x86_64)'],
 },
}
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/ct.h.in
*
* Copyright 2016-2020 The OpenSSL Project Authors. All Rights Reserved.
*
* Licensed under the Apache License 2.0 (the "License").  You may not use
* this file except in compliance with the License.  You can obtain a copy
* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/
```

```
#ifndef OPENSSL_CT_H
# define OPENSSL_CT_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_CT_H
# endif

# include <openssl/opensslconf.h>

# ifndef OPENSSL_NO_CT
# include <openssl/types.h>
# include <openssl/safestack.h>
# include <openssl/x509.h>
# include <openssl/cterr.h>
# ifdef  __cplusplus
extern "C" {
# endif


/* Minimum RSA key size, from RFC6962 */
# define SCT_MIN_RSA_BITS 2048

/* All hashes are SHA256 in v1 of Certificate Transparency */
# define CT_V1_HASHLEN SHA256_DIGEST_LENGTH

SKM_DEFINE_STACK_OF_INTERNAL(SCT,
 SCT, SCT)
#define sk_SCT_num(sk) OPENSSL_sk_num(ossl_check_const_SCT_sk_type(sk))
#define sk_SCT_value(sk, idx) ((SCT *)OPENSSL_sk_value(ossl_check_const_SCT_sk_type(sk), (idx)))
#define sk_SCT_new(cmp) ((STACK_OF(SCT) *)OPENSSL_sk_new(ossl_check_SCT_compfunc_type(cmp)))
#define sk_SCT_new_null() ((STACK_OF(SCT) *)OPENSSL_sk_new_null())
#define sk_SCT_new_reserve(cmp, n) ((STACK_OF(SCT)
*)OPENSSL_sk_new_reserve(ossl_check_SCT_compfunc_type(cmp), (n)))
#define sk_SCT_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_SCT_sk_type(sk), (n))
#define sk_SCT_free(sk) OPENSSL_sk_free(ossl_check_SCT_sk_type(sk))
#define sk_SCT_zero(sk) OPENSSL_sk_zero(ossl_check_SCT_sk_type(sk))
#define sk_SCT_delete(sk, i) ((SCT *)OPENSSL_sk_delete(ossl_check_SCT_sk_type(sk), (i)))
#define sk_SCT_delete_ptr(sk, ptr) ((SCT *)OPENSSL_sk_delete_ptr(ossl_check_SCT_sk_type(sk),
ossl_check_SCT_type(ptr)))
#define sk_SCT_push(sk, ptr) OPENSSL_sk_push(ossl_check_SCT_sk_type(sk), ossl_check_SCT_type(ptr))
#define sk_SCT_unshift(sk,
 ptr) OPENSSL_sk_unshift(ossl_check_SCT_sk_type(sk), ossl_check_SCT_type(ptr))
#define sk_SCT_pop(sk) ((SCT *)OPENSSL_sk_pop(ossl_check_SCT_sk_type(sk)))
#define sk_SCT_shift(sk) ((SCT *)OPENSSL_sk_shift(ossl_check_SCT_sk_type(sk)))
```

```
#define sk_SCT_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_SCT_sk_type(sk),ossl_check_SCT_freefunc_type(freefunc))
#define sk_SCT_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_SCT_sk_type(sk), ossl_check_SCT_type(ptr),
(idx))
#define sk_SCT_set(sk, idx, ptr) ((SCT *)OPENSSL_sk_set(ossl_check_SCT_sk_type(sk), (idx),
ossl_check_SCT_type(ptr)))
#define sk_SCT_find(sk, ptr) OPENSSL_sk_find(ossl_check_SCT_sk_type(sk), ossl_check_SCT_type(ptr))
#define sk_SCT_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_SCT_sk_type(sk), ossl_check_SCT_type(ptr))
#define sk_SCT_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_SCT_sk_type(sk),
ossl_check_SCT_type(ptr), pnum)
#define sk_SCT_sort(sk) OPENSSL_sk_sort(ossl_check_SCT_sk_type(sk))
#define
 sk_SCT_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_SCT_sk_type(sk))
#define sk_SCT_dup(sk) ((STACK_OF(SCT) *)OPENSSL_sk_dup(ossl_check_const_SCT_sk_type(sk)))
#define sk_SCT_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(SCT)
*)OPENSSL_sk_deep_copy(ossl_check_const_SCT_sk_type(sk), ossl_check_SCT_copyfunc_type(copyfunc),
ossl_check_SCT_freefunc_type(freefunc)))
#define sk_SCT_set_cmp_func(sk, cmp)
((sk_SCT_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_SCT_sk_type(sk),
ossl_check_SCT_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(CTLOG, CTLOG, CTLOG)
#define sk_CTLOG_num(sk) OPENSSL_sk_num(ossl_check_const_CTLOG_sk_type(sk))
#define sk_CTLOG_value(sk, idx) ((CTLOG *)OPENSSL_sk_value(ossl_check_const_CTLOG_sk_type(sk),
(idx)))
#define sk_CTLOG_new(cmp) ((STACK_OF(CTLOG)
*)OPENSSL_sk_new(ossl_check_CTLOG_compfunc_type(cmp)))
#define sk_CTLOG_new_null() ((STACK_OF(CTLOG) *)OPENSSL_sk_new_null())
#define sk_CTLOG_new_reserve(cmp, n) ((STACK_OF(CTLOG)
*)OPENSSL_sk_new_reserve(ossl_check_CTLOG_compfunc_type(cmp),
 (n)))
#define sk_CTLOG_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_CTLOG_sk_type(sk), (n))
#define sk_CTLOG_free(sk) OPENSSL_sk_free(ossl_check_CTLOG_sk_type(sk))
#define sk_CTLOG_zero(sk) OPENSSL_sk_zero(ossl_check_CTLOG_sk_type(sk))
#define sk_CTLOG_delete(sk, i) ((CTLOG *)OPENSSL_sk_delete(ossl_check_CTLOG_sk_type(sk), (i)))
#define sk_CTLOG_delete_ptr(sk, ptr) ((CTLOG *)OPENSSL_sk_delete_ptr(ossl_check_CTLOG_sk_type(sk),
ossl_check_CTLOG_type(ptr)))
#define sk_CTLOG_push(sk, ptr) OPENSSL_sk_push(ossl_check_CTLOG_sk_type(sk),
ossl_check_CTLOG_type(ptr))
#define sk_CTLOG_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_CTLOG_sk_type(sk),
ossl_check_CTLOG_type(ptr))
#define sk_CTLOG_pop(sk) ((CTLOG *)OPENSSL_sk_pop(ossl_check_CTLOG_sk_type(sk)))
#define sk_CTLOG_shift(sk) ((CTLOG *)OPENSSL_sk_shift(ossl_check_CTLOG_sk_type(sk)))
#define sk_CTLOG_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_CTLOG_sk_type(sk),ossl_check_CTLOG_freefunc_type(freefunc))
#define
 sk_CTLOG_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_CTLOG_sk_type(sk),
ossl_check_CTLOG_type(ptr), (idx))
#define sk_CTLOG_set(sk, idx, ptr) ((CTLOG *)OPENSSL_sk_set(ossl_check_CTLOG_sk_type(sk), (idx),
```

```
ossl_check_CTLOG_type(ptr)))
#define sk_CTLOG_find(sk, ptr) OPENSSL_sk_find(ossl_check_CTLOG_sk_type(sk),
ossl_check_CTLOG_type(ptr))
#define sk_CTLOG_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_CTLOG_sk_type(sk),
ossl_check_CTLOG_type(ptr))
#define sk_CTLOG_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_CTLOG_sk_type(sk),
ossl_check_CTLOG_type(ptr), pnum)
#define sk_CTLOG_sort(sk) OPENSSL_sk_sort(ossl_check_CTLOG_sk_type(sk))
#define sk_CTLOG_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_CTLOG_sk_type(sk))
#define sk_CTLOG_dup(sk) ((STACK_OF(CTLOG)
*)OPENSSL_sk_dup(ossl_check_const_CTLOG_sk_type(sk)))
#define sk_CTLOG_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(CTLOG)
*)OPENSSL_sk_deep_copy(ossl_check_const_CTLOG_sk_type(sk),
ossl_check_CTLOG_copyfunc_type(copyfunc),
 ossl_check_CTLOG_freefunc_type(freefunc)))
#define sk_CTLOG_set_cmp_func(sk, cmp)
((sk_CTLOG_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_CTLOG_sk_type(sk),
ossl_check_CTLOG_compfunc_type(cmp)))



typedef enum {
  CT_LOG_ENTRY_TYPE_NOT_SET = -1,
  CT_LOG_ENTRY_TYPE_X509 = 0,
  CT_LOG_ENTRY_TYPE_PRECERT = 1
} ct_log_entry_type_t;

typedef enum {
  SCT_VERSION_NOT_SET = -1,
  SCT_VERSION_V1 = 0
} sct_version_t;

typedef enum {
  SCT_SOURCE_UNKNOWN,
  SCT_SOURCE_TLS_EXTENSION,
  SCT_SOURCE_X509V3_EXTENSION,
  SCT_SOURCE_OCSP_STAPLED_RESPONSE
} sct_source_t;

typedef enum {
  SCT_VALIDATION_STATUS_NOT_SET,
  SCT_VALIDATION_STATUS_UNKNOWN_LOG,
  SCT_VALIDATION_STATUS_VALID,
  SCT_VALIDATION_STATUS_INVALID,
  SCT_VALIDATION_STATUS_UNVERIFIED,
  SCT_VALIDATION_STATUS_UNKNOWN_VERSION
} sct_validation_status_t;
```

```
/******************************************
* CT policy evaluation context functions *
******************************************/

/*
 * Creates a new, empty policy evaluation context associated with the given
* library context and property query string.
* The caller is responsible for calling CT_POLICY_EVAL_CTX_free when finished
* with the CT_POLICY_EVAL_CTX.
*/
CT_POLICY_EVAL_CTX *CT_POLICY_EVAL_CTX_new_ex(OSSL_LIB_CTX *libctx,
                                              const char *propq);

/*
* The same as CT_POLICY_EVAL_CTX_new_ex() but the default library
* context and property query string is used.
*/
CT_POLICY_EVAL_CTX *CT_POLICY_EVAL_CTX_new(void);

/* Deletes a policy evaluation context and anything it owns. */
void CT_POLICY_EVAL_CTX_free(CT_POLICY_EVAL_CTX *ctx);

/* Gets the peer certificate that the SCTs are for */
X509* CT_POLICY_EVAL_CTX_get0_cert(const CT_POLICY_EVAL_CTX *ctx);

/*
* Sets the certificate associated with the received SCTs.
* Increments the reference count of cert.
* Returns 1 on success, 0 otherwise.
*/
int CT_POLICY_EVAL_CTX_set1_cert(CT_POLICY_EVAL_CTX
 *ctx, X509 *cert);

/* Gets the issuer of the aforementioned certificate */
X509* CT_POLICY_EVAL_CTX_get0_issuer(const CT_POLICY_EVAL_CTX *ctx);

/*
* Sets the issuer of the certificate associated with the received SCTs.
* Increments the reference count of issuer.
* Returns 1 on success, 0 otherwise.
*/
int CT_POLICY_EVAL_CTX_set1_issuer(CT_POLICY_EVAL_CTX *ctx, X509 *issuer);

/* Gets the CT logs that are trusted sources of SCTs */
const CTLOG_STORE *CT_POLICY_EVAL_CTX_get0_log_store(const CT_POLICY_EVAL_CTX *ctx);

/* Sets the log store that is in use. It must outlive the CT_POLICY_EVAL_CTX. */
void CT_POLICY_EVAL_CTX_set_shared_CTLOG_STORE(CT_POLICY_EVAL_CTX *ctx,
```

```
                                CTLOG_STORE *log_store);

/*
* Gets the time, in milliseconds since the Unix epoch, that will be used as the
* current time when checking whether an SCT was issued in the future.
* Such SCTs will fail validation, as required by RFC6962.
 */
uint64_t CT_POLICY_EVAL_CTX_get_time(const CT_POLICY_EVAL_CTX *ctx);

/*
* Sets the time to evaluate SCTs against, in milliseconds since the Unix epoch.
* If an SCT's timestamp is after this time, it will be interpreted as having
* been issued in the future. RFC6962 states that "TLS clients MUST reject SCTs
* whose timestamp is in the future", so an SCT will not validate in this case.
*/
void CT_POLICY_EVAL_CTX_set_time(CT_POLICY_EVAL_CTX *ctx, uint64_t time_in_ms);

/*****************
* SCT functions *
*****************/

/*
* Creates a new, blank SCT.
* The caller is responsible for calling SCT_free when finished with the SCT.
*/
SCT *SCT_new(void);

/*
* Creates a new SCT from some base64-encoded strings.
* The caller is responsible for calling SCT_free when finished with the SCT.
*/
SCT *SCT_new_from_base64(unsigned char version,
                         const char *logid_base64,
                         ct_log_entry_type_t entry_type,

  uint64_t timestamp,
                         const char *extensions_base64,
                         const char *signature_base64);

/*
* Frees the SCT and the underlying data structures.
*/
void SCT_free(SCT *sct);

/*
* Free a stack of SCTs, and the underlying SCTs themselves.
* Intended to be compatible with X509V3_EXT_FREE.
*/
```

```
void SCT_LIST_free(STACK_OF(SCT) *a);

/*
* Returns the version of the SCT.
*/
sct_version_t SCT_get_version(const SCT *sct);

/*
* Set the version of an SCT.
* Returns 1 on success, 0 if the version is unrecognized.
*/
__owur int SCT_set_version(SCT *sct, sct_version_t version);

/*
* Returns the log entry type of the SCT.
*/
ct_log_entry_type_t SCT_get_log_entry_type(const SCT *sct);

/*
* Set the log entry type of an SCT.
* Returns 1 on success, 0 otherwise.
*/
__owur int SCT_set_log_entry_type(SCT *sct, ct_log_entry_type_t entry_type);

/*
* Gets the ID of the log that an SCT came from.
* Ownership of the log ID remains with the SCT.
*
 Returns the length of the log ID.
*/
size_t SCT_get0_log_id(const SCT *sct, unsigned char **log_id);

/*
* Set the log ID of an SCT to point directly to the *log_id specified.
* The SCT takes ownership of the specified pointer.
* Returns 1 on success, 0 otherwise.
*/
__owur int SCT_set0_log_id(SCT *sct, unsigned char *log_id, size_t log_id_len);

/*
* Set the log ID of an SCT.
* This makes a copy of the log_id.
* Returns 1 on success, 0 otherwise.
*/
__owur int SCT_set1_log_id(SCT *sct, const unsigned char *log_id,
                           size_t log_id_len);

/*
```

```
* Returns the timestamp for the SCT (epoch time in milliseconds).
*/
uint64_t SCT_get_timestamp(const SCT *sct);

/*
* Set the timestamp of an SCT (epoch time in milliseconds).
*/
void SCT_set_timestamp(SCT *sct, uint64_t timestamp);

/*
* Return the NID for the signature used by the SCT.
* For CT v1, this will be either NID_sha256WithRSAEncryption or
* NID_ecdsa_with_SHA256 (or NID_undef if incorrect/unset).
 */
int SCT_get_signature_nid(const SCT *sct);

/*
* Set the signature type of an SCT
* For CT v1, this should be either NID_sha256WithRSAEncryption or
* NID_ecdsa_with_SHA256.
* Returns 1 on success, 0 otherwise.
*/
__owur int SCT_set_signature_nid(SCT *sct, int nid);

/*
* Set *ext to point to the extension data for the SCT. ext must not be NULL.
* The SCT retains ownership of this pointer.
* Returns length of the data pointed to.
*/
size_t SCT_get0_extensions(const SCT *sct, unsigned char **ext);

/*
* Set the extensions of an SCT to point directly to the *ext specified.
* The SCT takes ownership of the specified pointer.
*/
void SCT_set0_extensions(SCT *sct, unsigned char *ext, size_t ext_len);

/*
* Set the extensions of an SCT.
* This takes a copy of the ext.
* Returns 1 on success, 0 otherwise.
*/
__owur int SCT_set1_extensions(SCT *sct, const unsigned char *ext,
                               size_t ext_len);

/*
* Set *sig to point to the signature for the SCT.
```

```
 sig must not be NULL.
* The SCT retains ownership of this pointer.
* Returns length of the data pointed to.
*/
size_t SCT_get0_signature(const SCT *sct, unsigned char **sig);

/*
* Set the signature of an SCT to point directly to the *sig specified.
* The SCT takes ownership of the specified pointer.
*/
void SCT_set0_signature(SCT *sct, unsigned char *sig, size_t sig_len);

/*
* Set the signature of an SCT to be a copy of the *sig specified.
* Returns 1 on success, 0 otherwise.
*/
__owur int SCT_set1_signature(SCT *sct, const unsigned char *sig,
                              size_t sig_len);

/*
* The origin of this SCT, e.g. TLS extension, OCSP response, etc.
*/
sct_source_t SCT_get_source(const SCT *sct);

/*
* Set the origin of this SCT, e.g. TLS extension, OCSP response, etc.
* Returns 1 on success, 0 otherwise.
*/
__owur int SCT_set_source(SCT *sct, sct_source_t source);

/*
* Returns a text string describing the validation status of |sct|.
*/
const char *SCT_validation_status_string(const
 SCT *sct);

/*
* Pretty-prints an |sct| to |out|.
* It will be indented by the number of spaces specified by |indent|.
* If |logs| is not NULL, it will be used to lookup the CT log that the SCT came
* from, so that the log name can be printed.
*/
void SCT_print(const SCT *sct, BIO *out, int indent, const CTLOG_STORE *logs);

/*
* Pretty-prints an |sct_list| to |out|.
* It will be indented by the number of spaces specified by |indent|.
* SCTs will be delimited by |separator|.
```

```
* If |logs| is not NULL, it will be used to lookup the CT log that each SCT
* came from, so that the log names can be printed.
*/
void SCT_LIST_print(const STACK_OF(SCT) *sct_list, BIO *out, int indent,
                    const char *separator, const CTLOG_STORE *logs);

/*
* Gets the last result of validating this SCT.
* If it has not been validated yet, returns SCT_VALIDATION_STATUS_NOT_SET.
*/
sct_validation_status_t SCT_get_validation_status(const SCT *sct);

/*
* Validates
 the given SCT with the provided context.
* Sets the "validation_status" field of the SCT.
* Returns 1 if the SCT is valid and the signature verifies.
* Returns 0 if the SCT is invalid or could not be verified.
* Returns -1 if an error occurs.
*/
__owur int SCT_validate(SCT *sct, const CT_POLICY_EVAL_CTX *ctx);

/*
* Validates the given list of SCTs with the provided context.
* Sets the "validation_status" field of each SCT.
* Returns 1 if there are no invalid SCTs and all signatures verify.
* Returns 0 if at least one SCT is invalid or could not be verified.
* Returns a negative integer if an error occurs.
*/
__owur int SCT_LIST_validate(const STACK_OF(SCT) *scts,
                             CT_POLICY_EVAL_CTX *ctx);


/**********************************
* SCT parsing and serialization *
**********************************/

/*
* Serialize (to TLS format) a stack of SCTs and return the length.
* "a" must not be NULL.
* If "pp" is NULL, just return the length of what
 would have been serialized.
* If "pp" is not NULL and "*pp" is null, function will allocate a new pointer
* for data that caller is responsible for freeing (only if function returns
* successfully).
* If "pp" is NULL and "*pp" is not NULL, caller is responsible for ensuring
* that "*pp" is large enough to accept all of the serialized data.
* Returns < 0 on error, >= 0 indicating bytes written (or would have been)
```

```
* on success.
*/
__owur int i2o_SCT_LIST(const STACK_OF(SCT) *a, unsigned char **pp);

/*
* Convert TLS format SCT list to a stack of SCTs.
* If "a" or "*a" is NULL, a new stack will be created that the caller is
* responsible for freeing (by calling SCT_LIST_free).
* "**pp" and "*pp" must not be NULL.
* Upon success, "*pp" will point to after the last bytes read, and a stack
* will be returned.
* Upon failure, a NULL pointer will be returned, and the position of "*pp" is
* not defined.
*/
STACK_OF(SCT) *o2i_SCT_LIST(STACK_OF(SCT) **a, const unsigned char
 **pp,
                        size_t len);

/*
* Serialize (to DER format) a stack of SCTs and return the length.
* "a" must not be NULL.
* If "pp" is NULL, just returns the length of what would have been serialized.
* If "pp" is not NULL and "*pp" is null, function will allocate a new pointer
* for data that caller is responsible for freeing (only if function returns
* successfully).
* If "pp" is NULL and "*pp" is not NULL, caller is responsible for ensuring
* that "*pp" is large enough to accept all of the serialized data.
* Returns < 0 on error, >= 0 indicating bytes written (or would have been)
* on success.
*/
__owur int i2d_SCT_LIST(const STACK_OF(SCT) *a, unsigned char **pp);

/*
* Parses an SCT list in DER format and returns it.
* If "a" or "*a" is NULL, a new stack will be created that the caller is
* responsible for freeing (by calling SCT_LIST_free).
* "**pp" and "*pp" must not be NULL.
* Upon success, "*pp" will point to after the last bytes read, and a
 stack
* will be returned.
* Upon failure, a NULL pointer will be returned, and the position of "*pp" is
* not defined.
*/
STACK_OF(SCT) *d2i_SCT_LIST(STACK_OF(SCT) **a, const unsigned char **pp,
                        long len);

/*
* Serialize (to TLS format) an |sct| and write it to |out|.
```

```
* If |out| is null, no SCT will be output but the length will still be returned.
* If |out| points to a null pointer, a string will be allocated to hold the
* TLS-format SCT. It is the responsibility of the caller to free it.
* If |out| points to an allocated string, the TLS-format SCT will be written
* to it.
* The length of the SCT in TLS format will be returned.
*/
__owur int i2o_SCT(const SCT *sct, unsigned char **out);

/*
* Parses an SCT in TLS format and returns it.
* If |psct| is not null, it will end up pointing to the parsed SCT. If it
* already points to a non-null pointer, the pointer will be free'd.
* |in| should be a pointer to a string containing the TLS-format SCT.
 * |in| will be advanced to the end of the SCT if parsing succeeds.
* |len| should be the length of the SCT in |in|.
* Returns NULL if an error occurs.
* If the SCT is an unsupported version, only the SCT's 'sct' and 'sct_len'
* fields will be populated (with |in| and |len| respectively).
*/
SCT *o2i_SCT(SCT **psct, const unsigned char **in, size_t len);

/*********************
* CT log functions *
********************/

/*
* Creates a new CT log instance with the given |public_key| and |name| and
* associates it with the give library context |libctx| and property query
* string |propq|.
* Takes ownership of |public_key| but copies |name|.
* Returns NULL if malloc fails or if |public_key| cannot be converted to DER.
* Should be deleted by the caller using CTLOG_free when no longer needed.
*/
CTLOG *CTLOG_new_ex(EVP_PKEY *public_key, const char *name, OSSL_LIB_CTX *libctx,
                    const char *propq);

/*
* The same as CTLOG_new_ex except that the default library
 context and
* property query string are used.
*/
CTLOG *CTLOG_new(EVP_PKEY *public_key, const char *name);

/*
* Creates a new CTLOG instance with the base64-encoded SubjectPublicKeyInfo DER
* in |pkey_base64| and associated with the given library context |libctx| and
* property query string |propq|. The |name| is a string to help users identify
```

```
* this log.
* Returns 1 on success, 0 on failure.
* Should be deleted by the caller using CTLOG_free when no longer needed.
*/
int CTLOG_new_from_base64_ex(CTLOG **ct_log, const char *pkey_base64,
                             const char *name, OSSL_LIB_CTX *libctx,
                             const char *propq);

/*
* The same as CTLOG_new_from_base64_ex() except that the default
* library context and property query string are used.
* Returns 1 on success, 0 on failure.
*/
int CTLOG_new_from_base64(CTLOG ** ct_log,
                          const char *pkey_base64, const char *name);

/*
* Deletes a CT log instance and its
 fields.
*/
void CTLOG_free(CTLOG *log);

/* Gets the name of the CT log */
const char *CTLOG_get0_name(const CTLOG *log);
/* Gets the ID of the CT log */
void CTLOG_get0_log_id(const CTLOG *log, const uint8_t **log_id,
                       size_t *log_id_len);
/* Gets the public key of the CT log */
EVP_PKEY *CTLOG_get0_public_key(const CTLOG *log);

/***************************
* CT log store functions *
***************************/

/*
* Creates a new CT log store and associates it with the given libctx and
* property query string.
* Should be deleted by the caller using CTLOG_STORE_free when no longer needed.
*/
CTLOG_STORE *CTLOG_STORE_new_ex(OSSL_LIB_CTX *libctx, const char *propq);

/*
* Same as CTLOG_STORE_new_ex except that the default libctx and
* property query string are used.
* Should be deleted by the caller using CTLOG_STORE_free when no longer needed.
*/
CTLOG_STORE *CTLOG_STORE_new(void);
```

```
/*
* Deletes a CT log store and all of the CT log instances held within.
 */
void CTLOG_STORE_free(CTLOG_STORE *store);

/*
* Finds a CT log in the store based on its log ID.
* Returns the CT log, or NULL if no match is found.
*/
const CTLOG *CTLOG_STORE_get0_log_by_id(const CTLOG_STORE *store,
                                        const uint8_t *log_id,
                                        size_t log_id_len);

/*
* Loads a CT log list into a |store| from a |file|.
* Returns 1 if loading is successful, or 0 otherwise.
*/
__owur int CTLOG_STORE_load_file(CTLOG_STORE *store, const char *file);

/*
* Loads the default CT log list into a |store|.
* Returns 1 if loading is successful, or 0 otherwise.
*/
__owur int CTLOG_STORE_load_default_file(CTLOG_STORE *store);

#  ifdef  __cplusplus
}
#  endif
# endif
#endif
```

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```
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/pkcs12.h.in
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* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_PKCS12_H
# define OPENSSL_PKCS12_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_PKCS12_H
# endif

# include <openssl/bio.h>
# include <openssl/core.h>
# include <openssl/x509.h>
# include <openssl/pkcs12err.h>

#ifdef __cplusplus
extern "C" {
#endif

# define PKCS12_KEY_ID   1
# define PKCS12_IV_ID    2
# define PKCS12_MAC_ID   3

/* Default iteration count */
# ifndef PKCS12_DEFAULT_ITER
#  define PKCS12_DEFAULT_ITER     PKCS5_DEFAULT_ITER
```

```
# endif

# define PKCS12_MAC_KEY_LENGTH 20

# define PKCS12_SALT_LEN
 8

/* It's not clear if these are actually needed... */
# define PKCS12_key_gen PKCS12_key_gen_utf8
# define PKCS12_add_friendlyname PKCS12_add_friendlyname_utf8

/* MS key usage constants */

# define KEY_EX  0x10
# define KEY_SIG 0x80

typedef struct PKCS12_MAC_DATA_st PKCS12_MAC_DATA;

typedef struct PKCS12_st PKCS12;

typedef struct PKCS12_SAFEBAG_st PKCS12_SAFEBAG;

SKM_DEFINE_STACK_OF_INTERNAL(PKCS12_SAFEBAG, PKCS12_SAFEBAG, PKCS12_SAFEBAG)
#define sk_PKCS12_SAFEBAG_num(sk)
OPENSSL_sk_num(ossl_check_const_PKCS12_SAFEBAG_sk_type(sk))
#define sk_PKCS12_SAFEBAG_value(sk, idx) ((PKCS12_SAFEBAG
*)OPENSSL_sk_value(ossl_check_const_PKCS12_SAFEBAG_sk_type(sk), (idx)))
#define sk_PKCS12_SAFEBAG_new(cmp) ((STACK_OF(PKCS12_SAFEBAG)
*)OPENSSL_sk_new(ossl_check_PKCS12_SAFEBAG_compfunc_type(cmp)))
#define sk_PKCS12_SAFEBAG_new_null() ((STACK_OF(PKCS12_SAFEBAG) *)OPENSSL_sk_new_null())
#define sk_PKCS12_SAFEBAG_new_reserve(cmp, n) ((STACK_OF(PKCS12_SAFEBAG)
*)OPENSSL_sk_new_reserve(ossl_check_PKCS12_SAFEBAG_compfunc_type(cmp),
 (n)))
#define sk_PKCS12_SAFEBAG_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_PKCS12_SAFEBAG_sk_type(sk), (n))
#define sk_PKCS12_SAFEBAG_free(sk) OPENSSL_sk_free(ossl_check_PKCS12_SAFEBAG_sk_type(sk))
#define sk_PKCS12_SAFEBAG_zero(sk) OPENSSL_sk_zero(ossl_check_PKCS12_SAFEBAG_sk_type(sk))
#define sk_PKCS12_SAFEBAG_delete(sk, i) ((PKCS12_SAFEBAG
*)OPENSSL_sk_delete(ossl_check_PKCS12_SAFEBAG_sk_type(sk), (i)))
#define sk_PKCS12_SAFEBAG_delete_ptr(sk, ptr) ((PKCS12_SAFEBAG
*)OPENSSL_sk_delete_ptr(ossl_check_PKCS12_SAFEBAG_sk_type(sk),
ossl_check_PKCS12_SAFEBAG_type(ptr)))
#define sk_PKCS12_SAFEBAG_push(sk, ptr) OPENSSL_sk_push(ossl_check_PKCS12_SAFEBAG_sk_type(sk),
ossl_check_PKCS12_SAFEBAG_type(ptr))
#define sk_PKCS12_SAFEBAG_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_PKCS12_SAFEBAG_sk_type(sk), ossl_check_PKCS12_SAFEBAG_type(ptr))
#define sk_PKCS12_SAFEBAG_pop(sk) ((PKCS12_SAFEBAG
*)OPENSSL_sk_pop(ossl_check_PKCS12_SAFEBAG_sk_type(sk)))
```

```
#define
 sk_PKCS12_SAFEBAG_shift(sk) ((PKCS12_SAFEBAG
*)OPENSSL_sk_shift(ossl_check_PKCS12_SAFEBAG_sk_type(sk)))
#define sk_PKCS12_SAFEBAG_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_PKCS12_SAFEBAG_sk_type(sk),ossl_check_PKCS12_SAFEBAG_freefunc_
type(freefunc))
#define sk_PKCS12_SAFEBAG_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_PKCS12_SAFEBAG_sk_type(sk), ossl_check_PKCS12_SAFEBAG_type(ptr),
(idx))
#define sk_PKCS12_SAFEBAG_set(sk, idx, ptr) ((PKCS12_SAFEBAG
*)OPENSSL_sk_set(ossl_check_PKCS12_SAFEBAG_sk_type(sk), (idx),
ossl_check_PKCS12_SAFEBAG_type(ptr)))
#define sk_PKCS12_SAFEBAG_find(sk, ptr) OPENSSL_sk_find(ossl_check_PKCS12_SAFEBAG_sk_type(sk),
ossl_check_PKCS12_SAFEBAG_type(ptr))
#define sk_PKCS12_SAFEBAG_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_PKCS12_SAFEBAG_sk_type(sk), ossl_check_PKCS12_SAFEBAG_type(ptr))
#define sk_PKCS12_SAFEBAG_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_PKCS12_SAFEBAG_sk_type(sk), ossl_check_PKCS12_SAFEBAG_type(ptr),
pnum)
#define
 sk_PKCS12_SAFEBAG_sort(sk) OPENSSL_sk_sort(ossl_check_PKCS12_SAFEBAG_sk_type(sk))
#define sk_PKCS12_SAFEBAG_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_PKCS12_SAFEBAG_sk_type(sk))
#define sk_PKCS12_SAFEBAG_dup(sk) ((STACK_OF(PKCS12_SAFEBAG)
*)OPENSSL_sk_dup(ossl_check_const_PKCS12_SAFEBAG_sk_type(sk)))
#define sk_PKCS12_SAFEBAG_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(PKCS12_SAFEBAG)
*)OPENSSL_sk_deep_copy(ossl_check_const_PKCS12_SAFEBAG_sk_type(sk),
ossl_check_PKCS12_SAFEBAG_copyfunc_type(copyfunc),
ossl_check_PKCS12_SAFEBAG_freefunc_type(freefunc)))
#define sk_PKCS12_SAFEBAG_set_cmp_func(sk, cmp)
((sk_PKCS12_SAFEBAG_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_PKCS12_SAFEBAG_sk_type(sk),
ossl_check_PKCS12_SAFEBAG_compfunc_type(cmp)))


typedef struct pkcs12_bag_st PKCS12_BAGS;

# define PKCS12_ERROR    0
# define PKCS12_OK       1

/* Compatibility macros */

#ifndef OPENSSL_NO_DEPRECATED_1_1_0

# define M_PKCS12_bag_type PKCS12_bag_type
# define M_PKCS12_cert_bag_type
 PKCS12_cert_bag_type
# define M_PKCS12_crl_bag_type PKCS12_cert_bag_type
```

```
# define PKCS12_certbag2x509 PKCS12_SAFEBAG_get1_cert
# define PKCS12_certbag2scrl PKCS12_SAFEBAG_get1_crl
# define PKCS12_bag_type PKCS12_SAFEBAG_get_nid
# define PKCS12_cert_bag_type PKCS12_SAFEBAG_get_bag_nid
# define PKCS12_x5092certbag PKCS12_SAFEBAG_create_cert
# define PKCS12_x509crl2certbag PKCS12_SAFEBAG_create_crl
# define PKCS12_MAKE_KEYBAG PKCS12_SAFEBAG_create0_p8inf
# define PKCS12_MAKE_SHKEYBAG PKCS12_SAFEBAG_create_pkcs8_encrypt

#endif
#ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 ASN1_TYPE *PKCS12_get_attr(const PKCS12_SAFEBAG *bag,
                                int attr_nid);
#endif

ASN1_TYPE *PKCS8_get_attr(PKCS8_PRIV_KEY_INFO *p8, int attr_nid);
int PKCS12_mac_present(const PKCS12 *p12);
void PKCS12_get0_mac(const ASN1_OCTET_STRING **pmac,
            const X509_ALGOR **pmacalg,
            const ASN1_OCTET_STRING **psalt,

    const ASN1_INTEGER **piter,
            const PKCS12 *p12);

const ASN1_TYPE *PKCS12_SAFEBAG_get0_attr(const PKCS12_SAFEBAG *bag,
                            int attr_nid);
const ASN1_OBJECT *PKCS12_SAFEBAG_get0_type(const PKCS12_SAFEBAG *bag);
int PKCS12_SAFEBAG_get_nid(const PKCS12_SAFEBAG *bag);
int PKCS12_SAFEBAG_get_bag_nid(const PKCS12_SAFEBAG *bag);
const ASN1_TYPE *PKCS12_SAFEBAG_get0_bag_obj(const PKCS12_SAFEBAG *bag);
const ASN1_OBJECT *PKCS12_SAFEBAG_get0_bag_type(const PKCS12_SAFEBAG *bag);

X509 *PKCS12_SAFEBAG_get1_cert(const PKCS12_SAFEBAG *bag);
X509_CRL *PKCS12_SAFEBAG_get1_crl(const PKCS12_SAFEBAG *bag);
const STACK_OF(PKCS12_SAFEBAG) *
PKCS12_SAFEBAG_get0_safes(const PKCS12_SAFEBAG *bag);
const PKCS8_PRIV_KEY_INFO *PKCS12_SAFEBAG_get0_p8inf(const PKCS12_SAFEBAG *bag);
const X509_SIG *PKCS12_SAFEBAG_get0_pkcs8(const PKCS12_SAFEBAG *bag);

PKCS12_SAFEBAG *PKCS12_SAFEBAG_create_cert(X509 *x509);
PKCS12_SAFEBAG *PKCS12_SAFEBAG_create_crl(X509_CRL
 *crl);
PKCS12_SAFEBAG *PKCS12_SAFEBAG_create_secret(int type, int vtype, const unsigned char *value, int len);
PKCS12_SAFEBAG *PKCS12_SAFEBAG_create0_p8inf(PKCS8_PRIV_KEY_INFO *p8);
PKCS12_SAFEBAG *PKCS12_SAFEBAG_create0_pkcs8(X509_SIG *p8);
PKCS12_SAFEBAG *PKCS12_SAFEBAG_create_pkcs8_encrypt(int pbe_nid,
                                const char *pass,
                                int passlen,
```

```
                                    unsigned char *salt,
                                    int saltlen, int iter,
                                    PKCS8_PRIV_KEY_INFO *p8inf);
PKCS12_SAFEBAG *PKCS12_SAFEBAG_create_pkcs8_encrypt_ex(int pbe_nid,
                                      const char *pass,
                                      int passlen,
                                      unsigned char *salt,

            int saltlen, int iter,
                                      PKCS8_PRIV_KEY_INFO *p8inf,
                                      OSSL_LIB_CTX *ctx,
                                      const char *propq);

PKCS12_SAFEBAG *PKCS12_item_pack_safebag(void *obj, const ASN1_ITEM *it,
                              int nid1, int nid2);
PKCS8_PRIV_KEY_INFO *PKCS8_decrypt(const X509_SIG *p8, const char *pass,
                         int passlen);
PKCS8_PRIV_KEY_INFO *PKCS8_decrypt_ex(const X509_SIG *p8, const char *pass,
                            int passlen, OSSL_LIB_CTX *ctx,
                            const char *propq);
PKCS8_PRIV_KEY_INFO *PKCS12_decrypt_skey(const PKCS12_SAFEBAG *bag,
                              const char *pass, int passlen);
PKCS8_PRIV_KEY_INFO *PKCS12_decrypt_skey_ex(const PKCS12_SAFEBAG *bag,
                                 const char *pass,
 int passlen,
                                 OSSL_LIB_CTX *ctx,
                                 const char *propq);
X509_SIG *PKCS8_encrypt(int pbe_nid, const EVP_CIPHER *cipher,
                  const char *pass, int passlen, unsigned char *salt,
                  int saltlen, int iter, PKCS8_PRIV_KEY_INFO *p8);
X509_SIG *PKCS8_encrypt_ex(int pbe_nid, const EVP_CIPHER *cipher,
                    const char *pass, int passlen, unsigned char *salt,
                    int saltlen, int iter, PKCS8_PRIV_KEY_INFO *p8,
                    OSSL_LIB_CTX *ctx, const char *propq);
X509_SIG *PKCS8_set0_pbe(const char *pass, int passlen,
                  PKCS8_PRIV_KEY_INFO *p8inf, X509_ALGOR *pbe);
X509_SIG *PKCS8_set0_pbe_ex(const char *pass, int passlen,
                     PKCS8_PRIV_KEY_INFO *p8inf, X509_ALGOR *pbe,
                     OSSL_LIB_CTX *ctx, const char *propq);
PKCS7 *PKCS12_pack_p7data(STACK_OF(PKCS12_SAFEBAG)
 *sk);
STACK_OF(PKCS12_SAFEBAG) *PKCS12_unpack_p7data(PKCS7 *p7);
PKCS7 *PKCS12_pack_p7encdata(int pbe_nid, const char *pass, int passlen,
                      unsigned char *salt, int saltlen, int iter,
                      STACK_OF(PKCS12_SAFEBAG) *bags);
PKCS7 *PKCS12_pack_p7encdata_ex(int pbe_nid, const char *pass, int passlen,
                        unsigned char *salt, int saltlen, int iter,
                        STACK_OF(PKCS12_SAFEBAG) *bags,
```

```
                        OSSL_LIB_CTX *ctx, const char *propq);

STACK_OF(PKCS12_SAFEBAG) *PKCS12_unpack_p7encdata(PKCS7 *p7, const char *pass,
                                  int passlen);

int PKCS12_pack_authsafes(PKCS12 *p12, STACK_OF(PKCS7) *safes);
STACK_OF(PKCS7) *PKCS12_unpack_authsafes(const PKCS12 *p12);

int PKCS12_add_localkeyid(PKCS12_SAFEBAG *bag, unsigned char *name,
                    int namelen);
int PKCS12_add_friendlyname_asc(PKCS12_SAFEBAG
 *bag, const char *name,
                        int namelen);
int PKCS12_add_friendlyname_utf8(PKCS12_SAFEBAG *bag, const char *name,
                         int namelen);
int PKCS12_add_CSPName_asc(PKCS12_SAFEBAG *bag, const char *name,
                    int namelen);
int PKCS12_add_friendlyname_uni(PKCS12_SAFEBAG *bag,
                        const unsigned char *name, int namelen);
int PKCS12_add1_attr_by_NID(PKCS12_SAFEBAG *bag, int nid, int type,
                    const unsigned char *bytes, int len);
int PKCS12_add1_attr_by_txt(PKCS12_SAFEBAG *bag, const char *attrname, int type,
                    const unsigned char *bytes, int len);
int PKCS8_add_keyusage(PKCS8_PRIV_KEY_INFO *p8, int usage);
ASN1_TYPE *PKCS12_get_attr_gen(const STACK_OF(X509_ATTRIBUTE) *attrs,
                      int attr_nid);
char *PKCS12_get_friendlyname(PKCS12_SAFEBAG *bag);
const STACK_OF(X509_ATTRIBUTE) *
PKCS12_SAFEBAG_get0_attrs(const
 PKCS12_SAFEBAG *bag);
unsigned char *PKCS12_pbe_crypt(const X509_ALGOR *algor,
                        const char *pass, int passlen,
                        const unsigned char *in, int inlen,
                        unsigned char **data, int *datalen,
                        int en_de);
unsigned char *PKCS12_pbe_crypt_ex(const X509_ALGOR *algor,
                           const char *pass, int passlen,
                           const unsigned char *in, int inlen,
                           unsigned char **data, int *datalen,
                           int en_de, OSSL_LIB_CTX *libctx,
                           const char *propq);
void *PKCS12_item_decrypt_d2i(const X509_ALGOR *algor, const ASN1_ITEM *it,
                      const char *pass, int passlen,
                      const ASN1_OCTET_STRING *oct, int zbuf);
void *PKCS12_item_decrypt_d2i_ex(const X509_ALGOR *algor, const ASN1_ITEM *it,
                         const char *pass, int passlen,
                         const ASN1_OCTET_STRING *oct, int zbuf,
                         OSSL_LIB_CTX *libctx,
```

```
                        const char *propq);
ASN1_OCTET_STRING *PKCS12_item_i2d_encrypt(X509_ALGOR *algor,
                                const ASN1_ITEM *it,
                                const char *pass, int passlen,
                                void *obj, int zbuf);
ASN1_OCTET_STRING *PKCS12_item_i2d_encrypt_ex(X509_ALGOR *algor,
                                  const ASN1_ITEM *it,
                                  const char *pass, int passlen,
                                  void *obj, int zbuf,
                                  OSSL_LIB_CTX *ctx,
                                  const char *propq);
PKCS12 *PKCS12_init(int mode);
PKCS12 *PKCS12_init_ex(int mode, OSSL_LIB_CTX *ctx,
 const char *propq);

int PKCS12_key_gen_asc(const char *pass, int passlen, unsigned char *salt,
                  int saltlen, int id, int iter, int n,
                  unsigned char *out, const EVP_MD *md_type);
int PKCS12_key_gen_asc_ex(const char *pass, int passlen, unsigned char *salt,
                    int saltlen, int id, int iter, int n,
                    unsigned char *out, const EVP_MD *md_type,
                    OSSL_LIB_CTX *ctx, const char *propq);
int PKCS12_key_gen_uni(unsigned char *pass, int passlen, unsigned char *salt,
                  int saltlen, int id, int iter, int n,
                  unsigned char *out, const EVP_MD *md_type);
int PKCS12_key_gen_uni_ex(unsigned char *pass, int passlen, unsigned char *salt,
                    int saltlen, int id, int iter, int n,
                    unsigned char *out, const EVP_MD *md_type,
                    OSSL_LIB_CTX *ctx, const char *propq);
int PKCS12_key_gen_utf8(const
 char *pass, int passlen, unsigned char *salt,
                   int saltlen, int id, int iter, int n,
                   unsigned char *out, const EVP_MD *md_type);
int PKCS12_key_gen_utf8_ex(const char *pass, int passlen, unsigned char *salt,
                     int saltlen, int id, int iter, int n,
                     unsigned char *out, const EVP_MD *md_type,
                     OSSL_LIB_CTX *ctx, const char *propq);

int PKCS12_PBE_keyivgen(EVP_CIPHER_CTX *ctx, const char *pass, int passlen,
                   ASN1_TYPE *param, const EVP_CIPHER *cipher,
                   const EVP_MD *md_type, int en_de);
int PKCS12_PBE_keyivgen_ex(EVP_CIPHER_CTX *ctx, const char *pass, int passlen,
                     ASN1_TYPE *param, const EVP_CIPHER *cipher,
                     const EVP_MD *md_type, int en_de,
                     OSSL_LIB_CTX *libctx, const char *propq);
int PKCS12_gen_mac(PKCS12 *p12, const char
 *pass, int passlen,
                unsigned char *mac, unsigned int *maclen);
```

```
int PKCS12_verify_mac(PKCS12 *p12, const char *pass, int passlen);
int PKCS12_set_mac(PKCS12 *p12, const char *pass, int passlen,
                unsigned char *salt, int saltlen, int iter,
                const EVP_MD *md_type);
int PKCS12_setup_mac(PKCS12 *p12, int iter, unsigned char *salt,
                  int saltlen, const EVP_MD *md_type);
unsigned char *OPENSSL_asc2uni(const char *asc, int asclen,
                        unsigned char **uni, int *unilen);
char *OPENSSL_uni2asc(const unsigned char *uni, int unilen);
unsigned char *OPENSSL_utf82uni(const char *asc, int asclen,
                         unsigned char **uni, int *unilen);
char *OPENSSL_uni2utf8(const unsigned char *uni, int unilen);

DECLARE_ASN1_FUNCTIONS(PKCS12)
DECLARE_ASN1_FUNCTIONS(PKCS12_MAC_DATA)
DECLARE_ASN1_FUNCTIONS(PKCS12_SAFEBAG)
DECLARE_ASN1_FUNCTIONS(PKCS12_BAGS)

DECLARE_ASN1_ITEM(PKCS12_SAFEBAGS)
DECLARE_ASN1_ITEM(PKCS12_AUTHSAFES)

void
 PKCS12_PBE_add(void);
int PKCS12_parse(PKCS12 *p12, const char *pass, EVP_PKEY **pkey, X509 **cert,
             STACK_OF(X509) **ca);
PKCS12 *PKCS12_create(const char *pass, const char *name, EVP_PKEY *pkey,
                 X509 *cert, STACK_OF(X509) *ca, int nid_key, int nid_cert,
                 int iter, int mac_iter, int keytype);
PKCS12 *PKCS12_create_ex(const char *pass, const char *name, EVP_PKEY *pkey,
                    X509 *cert, STACK_OF(X509) *ca, int nid_key, int nid_cert,
                    int iter, int mac_iter, int keytype,
                    OSSL_LIB_CTX *ctx, const char *propq);

PKCS12_SAFEBAG *PKCS12_add_cert(STACK_OF(PKCS12_SAFEBAG) **pbags, X509 *cert);
PKCS12_SAFEBAG *PKCS12_add_key(STACK_OF(PKCS12_SAFEBAG) **pbags,
                        EVP_PKEY *key, int key_usage, int iter,
                        int key_nid, const char *pass);
PKCS12_SAFEBAG *PKCS12_add_key_ex(STACK_OF(PKCS12_SAFEBAG)
 **pbags,
                           EVP_PKEY *key, int key_usage, int iter,
                           int key_nid, const char *pass,
                           OSSL_LIB_CTX *ctx, const char *propq);

PKCS12_SAFEBAG *PKCS12_add_secret(STACK_OF(PKCS12_SAFEBAG) **pbags,
                           int nid_type, const unsigned char *value, int len);
int PKCS12_add_safe(STACK_OF(PKCS7) **psafes, STACK_OF(PKCS12_SAFEBAG) *bags,
                int safe_nid, int iter, const char *pass);
int PKCS12_add_safe_ex(STACK_OF(PKCS7) **psafes, STACK_OF(PKCS12_SAFEBAG) *bags,
```

```
                int safe_nid, int iter, const char *pass,
                OSSL_LIB_CTX *ctx, const char *propq);

PKCS12 *PKCS12_add_safes(STACK_OF(PKCS7) *safes, int p7_nid);
PKCS12 *PKCS12_add_safes_ex(STACK_OF(PKCS7) *safes, int p7_nid,
                    OSSL_LIB_CTX *ctx, const char *propq);

int i2d_PKCS12_bio(BIO *bp, const PKCS12 *p12);
# ifndef
 OPENSSL_NO_STDIO
int i2d_PKCS12_fp(FILE *fp, const PKCS12 *p12);
# endif
PKCS12 *d2i_PKCS12_bio(BIO *bp, PKCS12 **p12);
# ifndef OPENSSL_NO_STDIO
PKCS12 *d2i_PKCS12_fp(FILE *fp, PKCS12 **p12);
# endif
int PKCS12_newpass(PKCS12 *p12, const char *oldpass, const char *newpass);

# ifdef  __cplusplus
}
# endif
#endif
<!-- This file is automatically added by @npmcli/template-oss. Do not edit. -->
```

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```
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/ocsp.h.in
*
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*
```

```
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* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_OCSP_H
# define OPENSSL_OCSP_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_OCSP_H
# endif

# include <openssl/opensslconf.h>
# include <openssl/http.h>
# include <openssl/asn1.h>

/*
* These definitions are outside the OPENSSL_NO_OCSP guard because although for
* historical reasons they have OCSP_* names, they can actually be used
* independently of OCSP. E.g. see RFC5280
*/
/*-
*   CRLReason ::= ENUMERATED {
*       unspecified             (0),
*       keyCompromise           (1),
*       cACompromise
          (2),
*       affiliationChanged      (3),
*       superseded              (4),
*       cessationOfOperation    (5),
*       certificateHold         (6),
*       -- value 7 is not used
*       removeFromCRL           (8),
*       privilegeWithdrawn      (9),
*       aACompromise            (10) }
*/
# define OCSP_REVOKED_STATUS_NOSTATUS               -1
# define OCSP_REVOKED_STATUS_UNSPECIFIED            0
# define OCSP_REVOKED_STATUS_KEYCOMPROMISE          1
# define OCSP_REVOKED_STATUS_CACOMPROMISE           2
# define OCSP_REVOKED_STATUS_AFFILIATIONCHANGED     3
# define OCSP_REVOKED_STATUS_SUPERSEDED             4
# define OCSP_REVOKED_STATUS_CESSATIONOFOPERATION   5
```

```
# define OCSP_REVOKED_STATUS_CERTIFICATEHOLD        6
# define OCSP_REVOKED_STATUS_REMOVEFROMCRL          8
# define OCSP_REVOKED_STATUS_PRIVILEGEWITHDRAWN     9
# define OCSP_REVOKED_STATUS_AACOMPROMISE           10


# ifndef OPENSSL_NO_OCSP

#  include <openssl/x509.h>
#
  include <openssl/x509v3.h>
#  include <openssl/safestack.h>
#  include <openssl/ocsperr.h>

#  ifdef __cplusplus
extern "C" {
#  endif

/* Various flags and values */

#  define OCSP_DEFAULT_NONCE_LENGTH       16

#  define OCSP_NOCERTS                    0x1
#  define OCSP_NOINTERN                   0x2
#  define OCSP_NOSIGS                     0x4
#  define OCSP_NOCHAIN                    0x8
#  define OCSP_NOVERIFY                   0x10
#  define OCSP_NOEXPLICIT                 0x20
#  define OCSP_NOCASIGN                   0x40
#  define OCSP_NODELEGATED                0x80
#  define OCSP_NOCHECKS                   0x100
#  define OCSP_TRUSTOTHER                 0x200
#  define OCSP_RESPID_KEY                 0x400
#  define OCSP_NOTIME                     0x800
#  define OCSP_PARTIAL_CHAIN              0x1000

typedef struct ocsp_cert_id_st OCSP_CERTID;
typedef struct ocsp_one_request_st OCSP_ONEREQ;
typedef struct ocsp_req_info_st OCSP_REQINFO;
typedef struct ocsp_signature_st
 OCSP_SIGNATURE;
typedef struct ocsp_request_st OCSP_REQUEST;

SKM_DEFINE_STACK_OF_INTERNAL(OCSP_CERTID, OCSP_CERTID, OCSP_CERTID)
#define sk_OCSP_CERTID_num(sk) OPENSSL_sk_num(ossl_check_const_OCSP_CERTID_sk_type(sk))
#define sk_OCSP_CERTID_value(sk, idx) ((OCSP_CERTID
*)OPENSSL_sk_value(ossl_check_const_OCSP_CERTID_sk_type(sk), (idx)))
#define sk_OCSP_CERTID_new(cmp) ((STACK_OF(OCSP_CERTID)
```

```
*)OPENSSL_sk_new(ossl_check_OCSP_CERTID_compfunc_type(cmp)))
#define sk_OCSP_CERTID_new_null() ((STACK_OF(OCSP_CERTID) *)OPENSSL_sk_new_null())
#define sk_OCSP_CERTID_new_reserve(cmp, n) ((STACK_OF(OCSP_CERTID)
*)OPENSSL_sk_new_reserve(ossl_check_OCSP_CERTID_compfunc_type(cmp), (n)))
#define sk_OCSP_CERTID_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_OCSP_CERTID_sk_type(sk), (n))
#define sk_OCSP_CERTID_free(sk) OPENSSL_sk_free(ossl_check_OCSP_CERTID_sk_type(sk))
#define sk_OCSP_CERTID_zero(sk) OPENSSL_sk_zero(ossl_check_OCSP_CERTID_sk_type(sk))
#define sk_OCSP_CERTID_delete(sk, i) ((OCSP_CERTID
*)OPENSSL_sk_delete(ossl_check_OCSP_CERTID_sk_type(sk),
 (i)))
#define sk_OCSP_CERTID_delete_ptr(sk, ptr) ((OCSP_CERTID
*)OPENSSL_sk_delete_ptr(ossl_check_OCSP_CERTID_sk_type(sk), ossl_check_OCSP_CERTID_type(ptr)))
#define sk_OCSP_CERTID_push(sk, ptr) OPENSSL_sk_push(ossl_check_OCSP_CERTID_sk_type(sk),
ossl_check_OCSP_CERTID_type(ptr))
#define sk_OCSP_CERTID_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_OCSP_CERTID_sk_type(sk),
ossl_check_OCSP_CERTID_type(ptr))
#define sk_OCSP_CERTID_pop(sk) ((OCSP_CERTID
*)OPENSSL_sk_pop(ossl_check_OCSP_CERTID_sk_type(sk)))
#define sk_OCSP_CERTID_shift(sk) ((OCSP_CERTID
*)OPENSSL_sk_shift(ossl_check_OCSP_CERTID_sk_type(sk)))
#define sk_OCSP_CERTID_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OCSP_CERTID_sk_type(sk),ossl_check_OCSP_CERTID_freefunc_type(freef
unc))
#define sk_OCSP_CERTID_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_OCSP_CERTID_sk_type(sk),
ossl_check_OCSP_CERTID_type(ptr), (idx))
#define sk_OCSP_CERTID_set(sk, idx, ptr) ((OCSP_CERTID
 *)OPENSSL_sk_set(ossl_check_OCSP_CERTID_sk_type(sk), (idx), ossl_check_OCSP_CERTID_type(ptr)))
#define sk_OCSP_CERTID_find(sk, ptr) OPENSSL_sk_find(ossl_check_OCSP_CERTID_sk_type(sk),
ossl_check_OCSP_CERTID_type(ptr))
#define sk_OCSP_CERTID_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_OCSP_CERTID_sk_type(sk),
ossl_check_OCSP_CERTID_type(ptr))
#define sk_OCSP_CERTID_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OCSP_CERTID_sk_type(sk), ossl_check_OCSP_CERTID_type(ptr), pnum)
#define sk_OCSP_CERTID_sort(sk) OPENSSL_sk_sort(ossl_check_OCSP_CERTID_sk_type(sk))
#define sk_OCSP_CERTID_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OCSP_CERTID_sk_type(sk))
#define sk_OCSP_CERTID_dup(sk) ((STACK_OF(OCSP_CERTID)
*)OPENSSL_sk_dup(ossl_check_const_OCSP_CERTID_sk_type(sk)))
#define sk_OCSP_CERTID_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(OCSP_CERTID)
*)OPENSSL_sk_deep_copy(ossl_check_const_OCSP_CERTID_sk_type(sk),
ossl_check_OCSP_CERTID_copyfunc_type(copyfunc), ossl_check_OCSP_CERTID_freefunc_type(freefunc)))
#define
 sk_OCSP_CERTID_set_cmp_func(sk, cmp)
((sk_OCSP_CERTID_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OCSP_CERTID_sk_type(sk),
ossl_check_OCSP_CERTID_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(OCSP_ONEREQ, OCSP_ONEREQ, OCSP_ONEREQ)
#define sk_OCSP_ONEREQ_num(sk) OPENSSL_sk_num(ossl_check_const_OCSP_ONEREQ_sk_type(sk))
#define sk_OCSP_ONEREQ_value(sk, idx) ((OCSP_ONEREQ
```

```
*)OPENSSL_sk_value(ossl_check_const_OCSP_ONEREQ_sk_type(sk), (idx)))
#define sk_OCSP_ONEREQ_new(cmp) ((STACK_OF(OCSP_ONEREQ)
*)OPENSSL_sk_new(ossl_check_OCSP_ONEREQ_compfunc_type(cmp)))
#define sk_OCSP_ONEREQ_new_null() ((STACK_OF(OCSP_ONEREQ) *)OPENSSL_sk_new_null())
#define sk_OCSP_ONEREQ_new_reserve(cmp, n) ((STACK_OF(OCSP_ONEREQ)
*)OPENSSL_sk_new_reserve(ossl_check_OCSP_ONEREQ_compfunc_type(cmp), (n)))
#define sk_OCSP_ONEREQ_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_OCSP_ONEREQ_sk_type(sk), (n))
#define sk_OCSP_ONEREQ_free(sk) OPENSSL_sk_free(ossl_check_OCSP_ONEREQ_sk_type(sk))
#define
 sk_OCSP_ONEREQ_zero(sk) OPENSSL_sk_zero(ossl_check_OCSP_ONEREQ_sk_type(sk))
#define sk_OCSP_ONEREQ_delete(sk, i) ((OCSP_ONEREQ
*)OPENSSL_sk_delete(ossl_check_OCSP_ONEREQ_sk_type(sk), (i)))
#define sk_OCSP_ONEREQ_delete_ptr(sk, ptr) ((OCSP_ONEREQ
*)OPENSSL_sk_delete_ptr(ossl_check_OCSP_ONEREQ_sk_type(sk), ossl_check_OCSP_ONEREQ_type(ptr)))
#define sk_OCSP_ONEREQ_push(sk, ptr) OPENSSL_sk_push(ossl_check_OCSP_ONEREQ_sk_type(sk),
ossl_check_OCSP_ONEREQ_type(ptr))
#define sk_OCSP_ONEREQ_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_OCSP_ONEREQ_sk_type(sk),
ossl_check_OCSP_ONEREQ_type(ptr))
#define sk_OCSP_ONEREQ_pop(sk) ((OCSP_ONEREQ
*)OPENSSL_sk_pop(ossl_check_OCSP_ONEREQ_sk_type(sk)))
#define sk_OCSP_ONEREQ_shift(sk) ((OCSP_ONEREQ
*)OPENSSL_sk_shift(ossl_check_OCSP_ONEREQ_sk_type(sk)))
#define sk_OCSP_ONEREQ_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OCSP_ONEREQ_sk_type(sk),ossl_check_OCSP_ONEREQ_freefunc_type(fr
eefunc))
#define sk_OCSP_ONEREQ_insert(sk,
 ptr, idx) OPENSSL_sk_insert(ossl_check_OCSP_ONEREQ_sk_type(sk), ossl_check_OCSP_ONEREQ_type(ptr),
(idx))
#define sk_OCSP_ONEREQ_set(sk, idx, ptr) ((OCSP_ONEREQ
*)OPENSSL_sk_set(ossl_check_OCSP_ONEREQ_sk_type(sk), (idx), ossl_check_OCSP_ONEREQ_type(ptr)))
#define sk_OCSP_ONEREQ_find(sk, ptr) OPENSSL_sk_find(ossl_check_OCSP_ONEREQ_sk_type(sk),
ossl_check_OCSP_ONEREQ_type(ptr))
#define sk_OCSP_ONEREQ_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_OCSP_ONEREQ_sk_type(sk),
ossl_check_OCSP_ONEREQ_type(ptr))
#define sk_OCSP_ONEREQ_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OCSP_ONEREQ_sk_type(sk), ossl_check_OCSP_ONEREQ_type(ptr), pnum)
#define sk_OCSP_ONEREQ_sort(sk) OPENSSL_sk_sort(ossl_check_OCSP_ONEREQ_sk_type(sk))
#define sk_OCSP_ONEREQ_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OCSP_ONEREQ_sk_type(sk))
#define sk_OCSP_ONEREQ_dup(sk) ((STACK_OF(OCSP_ONEREQ)
*)OPENSSL_sk_dup(ossl_check_const_OCSP_ONEREQ_sk_type(sk)))
#define sk_OCSP_ONEREQ_deep_copy(sk, copyfunc, freefunc)
 ((STACK_OF(OCSP_ONEREQ) *)OPENSSL_sk_deep_copy(ossl_check_const_OCSP_ONEREQ_sk_type(sk),
ossl_check_OCSP_ONEREQ_copyfunc_type(copyfunc), ossl_check_OCSP_ONEREQ_freefunc_type(freefunc)))
#define sk_OCSP_ONEREQ_set_cmp_func(sk, cmp)
((sk_OCSP_ONEREQ_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OCSP_ONEREQ_sk_type(sk),
ossl_check_OCSP_ONEREQ_compfunc_type(cmp)))
```

```
#  define OCSP_RESPONSE_STATUS_SUCCESSFUL          0
#  define OCSP_RESPONSE_STATUS_MALFORMEDREQUEST     1
#  define OCSP_RESPONSE_STATUS_INTERNALERROR        2
#  define OCSP_RESPONSE_STATUS_TRYLATER             3
#  define OCSP_RESPONSE_STATUS_SIGREQUIRED          5
#  define OCSP_RESPONSE_STATUS_UNAUTHORIZED         6

typedef struct ocsp_resp_bytes_st OCSP_RESPBYTES;

#  define V_OCSP_RESPID_NAME 0
#  define V_OCSP_RESPID_KEY  1

SKM_DEFINE_STACK_OF_INTERNAL(OCSP_RESPID, OCSP_RESPID, OCSP_RESPID)
#define sk_OCSP_RESPID_num(sk) OPENSSL_sk_num(ossl_check_const_OCSP_RESPID_sk_type(sk))
#define sk_OCSP_RESPID_value(sk, idx)
 ((OCSP_RESPID *)OPENSSL_sk_value(ossl_check_const_OCSP_RESPID_sk_type(sk), (idx)))
#define sk_OCSP_RESPID_new(cmp) ((STACK_OF(OCSP_RESPID)
*)OPENSSL_sk_new(ossl_check_OCSP_RESPID_compfunc_type(cmp)))
#define sk_OCSP_RESPID_new_null() ((STACK_OF(OCSP_RESPID) *)OPENSSL_sk_new_null())
#define sk_OCSP_RESPID_new_reserve(cmp, n) ((STACK_OF(OCSP_RESPID)
*)OPENSSL_sk_new_reserve(ossl_check_OCSP_RESPID_compfunc_type(cmp), (n)))
#define sk_OCSP_RESPID_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_OCSP_RESPID_sk_type(sk), (n))
#define sk_OCSP_RESPID_free(sk) OPENSSL_sk_free(ossl_check_OCSP_RESPID_sk_type(sk))
#define sk_OCSP_RESPID_zero(sk) OPENSSL_sk_zero(ossl_check_OCSP_RESPID_sk_type(sk))
#define sk_OCSP_RESPID_delete(sk, i) ((OCSP_RESPID
*)OPENSSL_sk_delete(ossl_check_OCSP_RESPID_sk_type(sk), (i)))
#define sk_OCSP_RESPID_delete_ptr(sk, ptr) ((OCSP_RESPID
*)OPENSSL_sk_delete_ptr(ossl_check_OCSP_RESPID_sk_type(sk), ossl_check_OCSP_RESPID_type(ptr)))
#define sk_OCSP_RESPID_push(sk, ptr) OPENSSL_sk_push(ossl_check_OCSP_RESPID_sk_type(sk),
 ossl_check_OCSP_RESPID_type(ptr))
#define sk_OCSP_RESPID_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_OCSP_RESPID_sk_type(sk),
ossl_check_OCSP_RESPID_type(ptr))
#define sk_OCSP_RESPID_pop(sk) ((OCSP_RESPID
*)OPENSSL_sk_pop(ossl_check_OCSP_RESPID_sk_type(sk)))
#define sk_OCSP_RESPID_shift(sk) ((OCSP_RESPID
*)OPENSSL_sk_shift(ossl_check_OCSP_RESPID_sk_type(sk)))
#define sk_OCSP_RESPID_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OCSP_RESPID_sk_type(sk),ossl_check_OCSP_RESPID_freefunc_type(freef
unc))
#define sk_OCSP_RESPID_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_OCSP_RESPID_sk_type(sk),
ossl_check_OCSP_RESPID_type(ptr), (idx))
#define sk_OCSP_RESPID_set(sk, idx, ptr) ((OCSP_RESPID
*)OPENSSL_sk_set(ossl_check_OCSP_RESPID_sk_type(sk), (idx), ossl_check_OCSP_RESPID_type(ptr)))
#define sk_OCSP_RESPID_find(sk, ptr) OPENSSL_sk_find(ossl_check_OCSP_RESPID_sk_type(sk),
ossl_check_OCSP_RESPID_type(ptr))
#define sk_OCSP_RESPID_find_ex(sk,
```

```
 ptr) OPENSSL_sk_find_ex(ossl_check_OCSP_RESPID_sk_type(sk), ossl_check_OCSP_RESPID_type(ptr))
#define sk_OCSP_RESPID_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OCSP_RESPID_sk_type(sk), ossl_check_OCSP_RESPID_type(ptr), pnum)
#define sk_OCSP_RESPID_sort(sk) OPENSSL_sk_sort(ossl_check_OCSP_RESPID_sk_type(sk))
#define sk_OCSP_RESPID_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_OCSP_RESPID_sk_type(sk))
#define sk_OCSP_RESPID_dup(sk) ((STACK_OF(OCSP_RESPID)
*)OPENSSL_sk_dup(ossl_check_const_OCSP_RESPID_sk_type(sk)))
#define sk_OCSP_RESPID_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(OCSP_RESPID)
*)OPENSSL_sk_deep_copy(ossl_check_const_OCSP_RESPID_sk_type(sk),
ossl_check_OCSP_RESPID_copyfunc_type(copyfunc), ossl_check_OCSP_RESPID_freefunc_type(freefunc)))
#define sk_OCSP_RESPID_set_cmp_func(sk, cmp)
((sk_OCSP_RESPID_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OCSP_RESPID_sk_type(sk),
ossl_check_OCSP_RESPID_compfunc_type(cmp)))


typedef struct ocsp_revoked_info_st
 OCSP_REVOKEDINFO;

#  define V_OCSP_CERTSTATUS_GOOD    0
#  define V_OCSP_CERTSTATUS_REVOKED 1
#  define V_OCSP_CERTSTATUS_UNKNOWN 2

typedef struct ocsp_cert_status_st OCSP_CERTSTATUS;
typedef struct ocsp_single_response_st OCSP_SINGLERESP;

SKM_DEFINE_STACK_OF_INTERNAL(OCSP_SINGLERESP, OCSP_SINGLERESP, OCSP_SINGLERESP)
#define sk_OCSP_SINGLERESP_num(sk)
OPENSSL_sk_num(ossl_check_const_OCSP_SINGLERESP_sk_type(sk))
#define sk_OCSP_SINGLERESP_value(sk, idx) ((OCSP_SINGLERESP
*)OPENSSL_sk_value(ossl_check_const_OCSP_SINGLERESP_sk_type(sk), (idx)))
#define sk_OCSP_SINGLERESP_new(cmp) ((STACK_OF(OCSP_SINGLERESP)
*)OPENSSL_sk_new(ossl_check_OCSP_SINGLERESP_compfunc_type(cmp)))
#define sk_OCSP_SINGLERESP_new_null() ((STACK_OF(OCSP_SINGLERESP) *)OPENSSL_sk_new_null())
#define sk_OCSP_SINGLERESP_new_reserve(cmp, n) ((STACK_OF(OCSP_SINGLERESP)
*)OPENSSL_sk_new_reserve(ossl_check_OCSP_SINGLERESP_compfunc_type(cmp), (n)))
#define sk_OCSP_SINGLERESP_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_OCSP_SINGLERESP_sk_type(sk),
 (n))
#define sk_OCSP_SINGLERESP_free(sk) OPENSSL_sk_free(ossl_check_OCSP_SINGLERESP_sk_type(sk))
#define sk_OCSP_SINGLERESP_zero(sk) OPENSSL_sk_zero(ossl_check_OCSP_SINGLERESP_sk_type(sk))
#define sk_OCSP_SINGLERESP_delete(sk, i) ((OCSP_SINGLERESP
*)OPENSSL_sk_delete(ossl_check_OCSP_SINGLERESP_sk_type(sk), (i)))
#define sk_OCSP_SINGLERESP_delete_ptr(sk, ptr) ((OCSP_SINGLERESP
*)OPENSSL_sk_delete_ptr(ossl_check_OCSP_SINGLERESP_sk_type(sk),
ossl_check_OCSP_SINGLERESP_type(ptr)))
#define sk_OCSP_SINGLERESP_push(sk, ptr)
OPENSSL_sk_push(ossl_check_OCSP_SINGLERESP_sk_type(sk), ossl_check_OCSP_SINGLERESP_type(ptr))
#define sk_OCSP_SINGLERESP_unshift(sk, ptr)
```

```
OPENSSL_sk_unshift(ossl_check_OCSP_SINGLERESP_sk_type(sk),
ossl_check_OCSP_SINGLERESP_type(ptr))
#define sk_OCSP_SINGLERESP_pop(sk) ((OCSP_SINGLERESP
*)OPENSSL_sk_pop(ossl_check_OCSP_SINGLERESP_sk_type(sk)))
#define sk_OCSP_SINGLERESP_shift(sk) ((OCSP_SINGLERESP
*)OPENSSL_sk_shift(ossl_check_OCSP_SINGLERESP_sk_type(sk)))
#define
 sk_OCSP_SINGLERESP_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OCSP_SINGLERESP_sk_type(sk),ossl_check_OCSP_SINGLERESP_freefun
c_type(freefunc))
#define sk_OCSP_SINGLERESP_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_OCSP_SINGLERESP_sk_type(sk), ossl_check_OCSP_SINGLERESP_type(ptr),
(idx))
#define sk_OCSP_SINGLERESP_set(sk, idx, ptr) ((OCSP_SINGLERESP
*)OPENSSL_sk_set(ossl_check_OCSP_SINGLERESP_sk_type(sk), (idx),
ossl_check_OCSP_SINGLERESP_type(ptr)))
#define sk_OCSP_SINGLERESP_find(sk, ptr) OPENSSL_sk_find(ossl_check_OCSP_SINGLERESP_sk_type(sk),
ossl_check_OCSP_SINGLERESP_type(ptr))
#define sk_OCSP_SINGLERESP_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OCSP_SINGLERESP_sk_type(sk),
ossl_check_OCSP_SINGLERESP_type(ptr))
#define sk_OCSP_SINGLERESP_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OCSP_SINGLERESP_sk_type(sk),
ossl_check_OCSP_SINGLERESP_type(ptr), pnum)
#define sk_OCSP_SINGLERESP_sort(sk) OPENSSL_sk_sort(ossl_check_OCSP_SINGLERESP_sk_type(sk))
#define
 sk_OCSP_SINGLERESP_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OCSP_SINGLERESP_sk_type(sk))
#define sk_OCSP_SINGLERESP_dup(sk) ((STACK_OF(OCSP_SINGLERESP)
*)OPENSSL_sk_dup(ossl_check_const_OCSP_SINGLERESP_sk_type(sk)))
#define sk_OCSP_SINGLERESP_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(OCSP_SINGLERESP)
*)OPENSSL_sk_deep_copy(ossl_check_const_OCSP_SINGLERESP_sk_type(sk),
ossl_check_OCSP_SINGLERESP_copyfunc_type(copyfunc),
ossl_check_OCSP_SINGLERESP_freefunc_type(freefunc)))
#define sk_OCSP_SINGLERESP_set_cmp_func(sk, cmp)
((sk_OCSP_SINGLERESP_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OCSP_SINGLERESP_sk_type(sk
), ossl_check_OCSP_SINGLERESP_compfunc_type(cmp)))


typedef struct ocsp_response_data_st OCSP_RESPDATA;

typedef struct ocsp_basic_response_st OCSP_BASICRESP;

typedef struct ocsp_crl_id_st OCSP_CRLID;
typedef struct ocsp_service_locator_st OCSP_SERVICELOC;

#  define PEM_STRING_OCSP_REQUEST "OCSP REQUEST"
#  define PEM_STRING_OCSP_RESPONSE "OCSP
```

```
 RESPONSE"

# define d2i_OCSP_REQUEST_bio(bp,p)
ASN1_d2i_bio_of(OCSP_REQUEST,OCSP_REQUEST_new,d2i_OCSP_REQUEST,bp,p)

# define d2i_OCSP_RESPONSE_bio(bp,p)
ASN1_d2i_bio_of(OCSP_RESPONSE,OCSP_RESPONSE_new,d2i_OCSP_RESPONSE,bp,p)

# define PEM_read_bio_OCSP_REQUEST(bp,x,cb) (OCSP_REQUEST *)PEM_ASN1_read_bio( \
   (char *(*)())d2i_OCSP_REQUEST,PEM_STRING_OCSP_REQUEST, \
   bp,(char **)(x),cb,NULL)

# define PEM_read_bio_OCSP_RESPONSE(bp,x,cb) (OCSP_RESPONSE *)PEM_ASN1_read_bio(\
   (char *(*)())d2i_OCSP_RESPONSE,PEM_STRING_OCSP_RESPONSE, \
   bp,(char **)(x),cb,NULL)

# define PEM_write_bio_OCSP_REQUEST(bp,o) \
  PEM_ASN1_write_bio((int (*)())i2d_OCSP_REQUEST,PEM_STRING_OCSP_REQUEST,\
                bp,(char *)(o), NULL,NULL,0,NULL,NULL)

# define PEM_write_bio_OCSP_RESPONSE(bp,o) \
  PEM_ASN1_write_bio((int (*)())i2d_OCSP_RESPONSE,PEM_STRING_OCSP_RESPONSE,\
                bp,(char *)(o), NULL,NULL,0,NULL,NULL)

# define i2d_OCSP_RESPONSE_bio(bp,o) ASN1_i2d_bio_of(OCSP_RESPONSE,i2d_OCSP_RESPONSE,bp,o)

#
 define i2d_OCSP_REQUEST_bio(bp,o) ASN1_i2d_bio_of(OCSP_REQUEST,i2d_OCSP_REQUEST,bp,o)

# define ASN1_BIT_STRING_digest(data,type,md,len) \
     ASN1_item_digest(ASN1_ITEM_rptr(ASN1_BIT_STRING),type,data,md,len)

# define OCSP_CERTSTATUS_dup(cs)\
          (OCSP_CERTSTATUS*)ASN1_dup((i2d_of_void *)i2d_OCSP_CERTSTATUS,\
          (d2i_of_void *)d2i_OCSP_CERTSTATUS,(char *)(cs))

DECLARE_ASN1_DUP_FUNCTION(OCSP_CERTID)

OSSL_HTTP_REQ_CTX *OCSP_sendreq_new(BIO *io, const char *path,
                        const OCSP_REQUEST *req, int buf_size);
OCSP_RESPONSE *OCSP_sendreq_bio(BIO *b, const char *path, OCSP_REQUEST *req);

# ifndef OPENSSL_NO_DEPRECATED_3_0
typedef OSSL_HTTP_REQ_CTX OCSP_REQ_CTX;
#  define OCSP_REQ_CTX_new(io, buf_size) \
     OSSL_HTTP_REQ_CTX_new(io, io, buf_size)
#  define OCSP_REQ_CTX_free OSSL_HTTP_REQ_CTX_free
#  define OCSP_REQ_CTX_http(rctx, op, path) \
```

```
    (OSSL_HTTP_REQ_CTX_set_expected(rctx,
 NULL, 1 /* asn1 */, 0, 0) && \
     OSSL_HTTP_REQ_CTX_set_request_line(rctx, strcmp(op, "POST") == 0, \
                                NULL, NULL, path))
#   define OCSP_REQ_CTX_add1_header OSSL_HTTP_REQ_CTX_add1_header
#   define OCSP_REQ_CTX_i2d(r, it, req) \
    OSSL_HTTP_REQ_CTX_set1_req(r, "application/ocsp-request", it, req)
#   define OCSP_REQ_CTX_set1_req(r, req) \
    OCSP_REQ_CTX_i2d(r, ASN1_ITEM_rptr(OCSP_REQUEST), (ASN1_VALUE *)(req))
#   define OCSP_REQ_CTX_nbio OSSL_HTTP_REQ_CTX_nbio
#   define OCSP_REQ_CTX_nbio_d2i OSSL_HTTP_REQ_CTX_nbio_d2i
#   define OCSP_sendreq_nbio(p, r) \
    OSSL_HTTP_REQ_CTX_nbio_d2i(r, (ASN1_VALUE **)(p), \
                        ASN1_ITEM_rptr(OCSP_RESPONSE))
#   define OCSP_REQ_CTX_get0_mem_bio OSSL_HTTP_REQ_CTX_get0_mem_bio
#   define OCSP_set_max_response_length OSSL_HTTP_REQ_CTX_set_max_response_length
#  endif

OCSP_CERTID *OCSP_cert_to_id(const EVP_MD *dgst, const X509 *subject,
                     const X509 *issuer);

OCSP_CERTID *OCSP_cert_id_new(const EVP_MD *dgst,
                     const X509_NAME *issuerName,
                     const ASN1_BIT_STRING *issuerKey,
                     const ASN1_INTEGER *serialNumber);

OCSP_ONEREQ *OCSP_request_add0_id(OCSP_REQUEST *req, OCSP_CERTID *cid);

int OCSP_request_add1_nonce(OCSP_REQUEST *req, unsigned char *val, int len);
int OCSP_basic_add1_nonce(OCSP_BASICRESP *resp, unsigned char *val, int len);
int OCSP_check_nonce(OCSP_REQUEST *req, OCSP_BASICRESP *bs);
int OCSP_copy_nonce(OCSP_BASICRESP *resp, OCSP_REQUEST *req);

int OCSP_request_set1_name(OCSP_REQUEST *req, const X509_NAME *nm);
int OCSP_request_add1_cert(OCSP_REQUEST *req, X509 *cert);

int OCSP_request_sign(OCSP_REQUEST *req,
                X509 *signer,
                EVP_PKEY *key,
                const EVP_MD *dgst,
                STACK_OF(X509) *certs, unsigned long flags);

int
 OCSP_response_status(OCSP_RESPONSE *resp);
OCSP_BASICRESP *OCSP_response_get1_basic(OCSP_RESPONSE *resp);

const ASN1_OCTET_STRING *OCSP_resp_get0_signature(const OCSP_BASICRESP *bs);
const X509_ALGOR *OCSP_resp_get0_tbs_sigalg(const OCSP_BASICRESP *bs);
```

```
const OCSP_RESPDATA *OCSP_resp_get0_respdata(const OCSP_BASICRESP *bs);
int OCSP_resp_get0_signer(OCSP_BASICRESP *bs, X509 **signer,
                    STACK_OF(X509) *extra_certs);

int OCSP_resp_count(OCSP_BASICRESP *bs);
OCSP_SINGLERESP *OCSP_resp_get0(OCSP_BASICRESP *bs, int idx);
const ASN1_GENERALIZEDTIME *OCSP_resp_get0_produced_at(const OCSP_BASICRESP* bs);
const STACK_OF(X509) *OCSP_resp_get0_certs(const OCSP_BASICRESP *bs);
int OCSP_resp_get0_id(const OCSP_BASICRESP *bs,
                const ASN1_OCTET_STRING **pid,
                const X509_NAME **pname);
int OCSP_resp_get1_id(const OCSP_BASICRESP *bs,
                ASN1_OCTET_STRING **pid,
                X509_NAME **pname);

int OCSP_resp_find(OCSP_BASICRESP
 *bs, OCSP_CERTID *id, int last);
int OCSP_single_get0_status(OCSP_SINGLERESP *single, int *reason,
                      ASN1_GENERALIZEDTIME **revtime,
                      ASN1_GENERALIZEDTIME **thisupd,
                      ASN1_GENERALIZEDTIME **nextupd);
int OCSP_resp_find_status(OCSP_BASICRESP *bs, OCSP_CERTID *id, int *status,
                    int *reason,
                    ASN1_GENERALIZEDTIME **revtime,
                    ASN1_GENERALIZEDTIME **thisupd,
                    ASN1_GENERALIZEDTIME **nextupd);
int OCSP_check_validity(ASN1_GENERALIZEDTIME *thisupd,
                  ASN1_GENERALIZEDTIME *nextupd, long sec, long maxsec);

int OCSP_request_verify(OCSP_REQUEST *req, STACK_OF(X509) *certs,
                  X509_STORE *store, unsigned long flags);

#  define OCSP_parse_url(url, host, port, path, ssl) \
   OSSL_HTTP_parse_url(url, ssl, NULL, host, port, NULL, path, NULL, NULL)

int OCSP_id_issuer_cmp(const
 OCSP_CERTID *a, const OCSP_CERTID *b);
int OCSP_id_cmp(const OCSP_CERTID *a, const OCSP_CERTID *b);

int OCSP_request_onereq_count(OCSP_REQUEST *req);
OCSP_ONEREQ *OCSP_request_onereq_get0(OCSP_REQUEST *req, int i);
OCSP_CERTID *OCSP_onereq_get0_id(OCSP_ONEREQ *one);
int OCSP_id_get0_info(ASN1_OCTET_STRING **piNameHash, ASN1_OBJECT **pmd,
                ASN1_OCTET_STRING **pikeyHash,
                ASN1_INTEGER **pserial, OCSP_CERTID *cid);
int OCSP_request_is_signed(OCSP_REQUEST *req);
OCSP_RESPONSE *OCSP_response_create(int status, OCSP_BASICRESP *bs);
OCSP_SINGLERESP *OCSP_basic_add1_status(OCSP_BASICRESP *rsp,
```

```
                                OCSP_CERTID *cid,
                                int status, int reason,
                                ASN1_TIME *revtime,
                                ASN1_TIME *thisupd,
                                ASN1_TIME *nextupd);
int OCSP_basic_add1_cert(OCSP_BASICRESP *resp,
 X509 *cert);
int OCSP_basic_sign(OCSP_BASICRESP *brsp,
                X509 *signer, EVP_PKEY *key, const EVP_MD *dgst,
                STACK_OF(X509) *certs, unsigned long flags);
int OCSP_basic_sign_ctx(OCSP_BASICRESP *brsp,
                  X509 *signer, EVP_MD_CTX *ctx,
                  STACK_OF(X509) *certs, unsigned long flags);
int OCSP_RESPID_set_by_name(OCSP_RESPID *respid, X509 *cert);
int OCSP_RESPID_set_by_key_ex(OCSP_RESPID *respid, X509 *cert,
                      OSSL_LIB_CTX *libctx, const char *propq);
int OCSP_RESPID_set_by_key(OCSP_RESPID *respid, X509 *cert);
int OCSP_RESPID_match_ex(OCSP_RESPID *respid, X509 *cert, OSSL_LIB_CTX *libctx,
                    const char *propq);
int OCSP_RESPID_match(OCSP_RESPID *respid, X509 *cert);

X509_EXTENSION *OCSP_crlID_new(const char *url, long *n, char *tim);

X509_EXTENSION *OCSP_accept_responses_new(char **oids);

X509_EXTENSION *OCSP_archive_cutoff_new(char *tim);

X509_EXTENSION *OCSP_url_svcloc_new(const
 X509_NAME *issuer, const char **urls);

int OCSP_REQUEST_get_ext_count(OCSP_REQUEST *x);
int OCSP_REQUEST_get_ext_by_NID(OCSP_REQUEST *x, int nid, int lastpos);
int OCSP_REQUEST_get_ext_by_OBJ(OCSP_REQUEST *x, const ASN1_OBJECT *obj,
                        int lastpos);
int OCSP_REQUEST_get_ext_by_critical(OCSP_REQUEST *x, int crit, int lastpos);
X509_EXTENSION *OCSP_REQUEST_get_ext(OCSP_REQUEST *x, int loc);
X509_EXTENSION *OCSP_REQUEST_delete_ext(OCSP_REQUEST *x, int loc);
void *OCSP_REQUEST_get1_ext_d2i(OCSP_REQUEST *x, int nid, int *crit,
                        int *idx);
int OCSP_REQUEST_add1_ext_i2d(OCSP_REQUEST *x, int nid, void *value, int crit,
                      unsigned long flags);
int OCSP_REQUEST_add_ext(OCSP_REQUEST *x, X509_EXTENSION *ex, int loc);

int OCSP_ONEREQ_get_ext_count(OCSP_ONEREQ *x);
int OCSP_ONEREQ_get_ext_by_NID(OCSP_ONEREQ *x, int nid, int lastpos);
int OCSP_ONEREQ_get_ext_by_OBJ(OCSP_ONEREQ *x, const
 ASN1_OBJECT *obj, int lastpos);
int OCSP_ONEREQ_get_ext_by_critical(OCSP_ONEREQ *x, int crit, int lastpos);
```

```
X509_EXTENSION *OCSP_ONEREQ_get_ext(OCSP_ONEREQ *x, int loc);
X509_EXTENSION *OCSP_ONEREQ_delete_ext(OCSP_ONEREQ *x, int loc);
void *OCSP_ONEREQ_get1_ext_d2i(OCSP_ONEREQ *x, int nid, int *crit, int *idx);
int OCSP_ONEREQ_add1_ext_i2d(OCSP_ONEREQ *x, int nid, void *value, int crit,
                             unsigned long flags);
int OCSP_ONEREQ_add_ext(OCSP_ONEREQ *x, X509_EXTENSION *ex, int loc);

int OCSP_BASICRESP_get_ext_count(OCSP_BASICRESP *x);
int OCSP_BASICRESP_get_ext_by_NID(OCSP_BASICRESP *x, int nid, int lastpos);
int OCSP_BASICRESP_get_ext_by_OBJ(OCSP_BASICRESP *x, const ASN1_OBJECT *obj,
                                  int lastpos);
int OCSP_BASICRESP_get_ext_by_critical(OCSP_BASICRESP *x, int crit,
                                       int lastpos);
X509_EXTENSION *OCSP_BASICRESP_get_ext(OCSP_BASICRESP *x, int loc);
X509_EXTENSION *OCSP_BASICRESP_delete_ext(OCSP_BASICRESP
 *x, int loc);
void *OCSP_BASICRESP_get1_ext_d2i(OCSP_BASICRESP *x, int nid, int *crit,
                                  int *idx);
int OCSP_BASICRESP_add1_ext_i2d(OCSP_BASICRESP *x, int nid, void *value,
                                int crit, unsigned long flags);
int OCSP_BASICRESP_add_ext(OCSP_BASICRESP *x, X509_EXTENSION *ex, int loc);

int OCSP_SINGLERESP_get_ext_count(OCSP_SINGLERESP *x);
int OCSP_SINGLERESP_get_ext_by_NID(OCSP_SINGLERESP *x, int nid, int lastpos);
int OCSP_SINGLERESP_get_ext_by_OBJ(OCSP_SINGLERESP *x, const ASN1_OBJECT *obj,
                                   int lastpos);
int OCSP_SINGLERESP_get_ext_by_critical(OCSP_SINGLERESP *x, int crit,
                                        int lastpos);
X509_EXTENSION *OCSP_SINGLERESP_get_ext(OCSP_SINGLERESP *x, int loc);
X509_EXTENSION *OCSP_SINGLERESP_delete_ext(OCSP_SINGLERESP *x, int loc);
void *OCSP_SINGLERESP_get1_ext_d2i(OCSP_SINGLERESP *x, int nid, int *crit,
                                   int
 *idx);
int OCSP_SINGLERESP_add1_ext_i2d(OCSP_SINGLERESP *x, int nid, void *value,
                                 int crit, unsigned long flags);
int OCSP_SINGLERESP_add_ext(OCSP_SINGLERESP *x, X509_EXTENSION *ex, int loc);
const OCSP_CERTID *OCSP_SINGLERESP_get0_id(const OCSP_SINGLERESP *x);

DECLARE_ASN1_FUNCTIONS(OCSP_SINGLERESP)
DECLARE_ASN1_FUNCTIONS(OCSP_CERTSTATUS)
DECLARE_ASN1_FUNCTIONS(OCSP_REVOKEDINFO)
DECLARE_ASN1_FUNCTIONS(OCSP_BASICRESP)
DECLARE_ASN1_FUNCTIONS(OCSP_RESPDATA)
DECLARE_ASN1_FUNCTIONS(OCSP_RESPID)
DECLARE_ASN1_FUNCTIONS(OCSP_RESPONSE)
DECLARE_ASN1_FUNCTIONS(OCSP_RESPBYTES)
DECLARE_ASN1_FUNCTIONS(OCSP_ONEREQ)
DECLARE_ASN1_FUNCTIONS(OCSP_CERTID)
```

```
DECLARE_ASN1_FUNCTIONS(OCSP_REQUEST)
DECLARE_ASN1_FUNCTIONS(OCSP_SIGNATURE)
DECLARE_ASN1_FUNCTIONS(OCSP_REQINFO)
DECLARE_ASN1_FUNCTIONS(OCSP_CRLID)
DECLARE_ASN1_FUNCTIONS(OCSP_SERVICELOC)

const char *OCSP_response_status_str(long s);
const char *OCSP_cert_status_str(long s);
const char *OCSP_crl_reason_str(long s);

int
 OCSP_REQUEST_print(BIO *bp, OCSP_REQUEST *a, unsigned long flags);
int OCSP_RESPONSE_print(BIO *bp, OCSP_RESPONSE *o, unsigned long flags);

int OCSP_basic_verify(OCSP_BASICRESP *bs, STACK_OF(X509) *certs,
                      X509_STORE *st, unsigned long flags);



#  ifdef  __cplusplus
}
#  endif
# endif /* !defined(OPENSSL_NO_OCSP) */
#endif
```

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/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/pkcs7.h.in
*
* Copyright 1995-2023 The OpenSSL Project Authors. All Rights Reserved.
*
* Licensed under the Apache License 2.0 (the "License").  You may not use
* this file except in compliance with the License.  You can obtain a copy
* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_PKCS7_H
# define OPENSSL_PKCS7_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_PKCS7_H
# endif

# include <openssl/asn1.h>
# include <openssl/bio.h>
# include <openssl/e_os2.h>

# include <openssl/symhacks.h>
# include <openssl/types.h>
# include <openssl/pkcs7err.h>

#ifdef  __cplusplus
extern "C" {
#endif


/*-
Encryption_ID           DES-CBC
Digest_ID               MD5
Digest_Encryption_ID    rsaEncryption
Key_Encryption_ID       rsaEncryption
*/

typedef struct PKCS7_CTX_st {
   OSSL_LIB_CTX *libctx;
```

```
    char *propq;
} PKCS7_CTX;

typedef struct pkcs7_issuer_and_serial_st {
   X509_NAME *issuer;
   ASN1_INTEGER *serial;
} PKCS7_ISSUER_AND_SERIAL;

typedef struct pkcs7_signer_info_st {
   ASN1_INTEGER *version;      /* version 1 */
   PKCS7_ISSUER_AND_SERIAL *issuer_and_serial;
   X509_ALGOR *digest_alg;
   STACK_OF(X509_ATTRIBUTE) *auth_attr; /* [ 0 ] */
   X509_ALGOR *digest_enc_alg; /* confusing name, actually used for signing */
   ASN1_OCTET_STRING *enc_digest; /* confusing name, actually signature */
   STACK_OF(X509_ATTRIBUTE) *unauth_attr; /* [ 1 ] */
   /* The private key to sign with */
   EVP_PKEY *pkey;
   const PKCS7_CTX *ctx;
} PKCS7_SIGNER_INFO;
SKM_DEFINE_STACK_OF_INTERNAL(PKCS7_SIGNER_INFO, PKCS7_SIGNER_INFO,
PKCS7_SIGNER_INFO)
#define sk_PKCS7_SIGNER_INFO_num(sk)
OPENSSL_sk_num(ossl_check_const_PKCS7_SIGNER_INFO_sk_type(sk))
#define sk_PKCS7_SIGNER_INFO_value(sk, idx) ((PKCS7_SIGNER_INFO
*)OPENSSL_sk_value(ossl_check_const_PKCS7_SIGNER_INFO_sk_type(sk),
 (idx)))
#define sk_PKCS7_SIGNER_INFO_new(cmp) ((STACK_OF(PKCS7_SIGNER_INFO)
*)OPENSSL_sk_new(ossl_check_PKCS7_SIGNER_INFO_compfunc_type(cmp)))
#define sk_PKCS7_SIGNER_INFO_new_null() ((STACK_OF(PKCS7_SIGNER_INFO)
*)OPENSSL_sk_new_null())
#define sk_PKCS7_SIGNER_INFO_new_reserve(cmp, n) ((STACK_OF(PKCS7_SIGNER_INFO)
*)OPENSSL_sk_new_reserve(ossl_check_PKCS7_SIGNER_INFO_compfunc_type(cmp), (n)))
#define sk_PKCS7_SIGNER_INFO_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk), (n))
#define sk_PKCS7_SIGNER_INFO_free(sk)
OPENSSL_sk_free(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk))
#define sk_PKCS7_SIGNER_INFO_zero(sk)
OPENSSL_sk_zero(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk))
#define sk_PKCS7_SIGNER_INFO_delete(sk, i) ((PKCS7_SIGNER_INFO
*)OPENSSL_sk_delete(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk), (i)))
#define sk_PKCS7_SIGNER_INFO_delete_ptr(sk, ptr) ((PKCS7_SIGNER_INFO
*)OPENSSL_sk_delete_ptr(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk),
ossl_check_PKCS7_SIGNER_INFO_type(ptr)))
#define
 sk_PKCS7_SIGNER_INFO_push(sk, ptr) OPENSSL_sk_push(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk),
ossl_check_PKCS7_SIGNER_INFO_type(ptr))
#define sk_PKCS7_SIGNER_INFO_unshift(sk, ptr)
```

```
OPENSSL_sk_unshift(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk),
ossl_check_PKCS7_SIGNER_INFO_type(ptr))
#define sk_PKCS7_SIGNER_INFO_pop(sk) ((PKCS7_SIGNER_INFO
*)OPENSSL_sk_pop(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk)))
#define sk_PKCS7_SIGNER_INFO_shift(sk) ((PKCS7_SIGNER_INFO
*)OPENSSL_sk_shift(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk)))
#define sk_PKCS7_SIGNER_INFO_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk),ossl_check_PKCS7_SIGNER_INFO_fr
eefunc_type(freefunc))
#define sk_PKCS7_SIGNER_INFO_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk),
ossl_check_PKCS7_SIGNER_INFO_type(ptr), (idx))
#define sk_PKCS7_SIGNER_INFO_set(sk, idx, ptr) ((PKCS7_SIGNER_INFO
*)OPENSSL_sk_set(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk), (idx),
ossl_check_PKCS7_SIGNER_INFO_type(ptr)))
#define
 sk_PKCS7_SIGNER_INFO_find(sk, ptr) OPENSSL_sk_find(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk),
ossl_check_PKCS7_SIGNER_INFO_type(ptr))
#define sk_PKCS7_SIGNER_INFO_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk),
ossl_check_PKCS7_SIGNER_INFO_type(ptr))
#define sk_PKCS7_SIGNER_INFO_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk),
ossl_check_PKCS7_SIGNER_INFO_type(ptr), pnum)
#define sk_PKCS7_SIGNER_INFO_sort(sk) OPENSSL_sk_sort(ossl_check_PKCS7_SIGNER_INFO_sk_type(sk))
#define sk_PKCS7_SIGNER_INFO_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_PKCS7_SIGNER_INFO_sk_type(sk))
#define sk_PKCS7_SIGNER_INFO_dup(sk) ((STACK_OF(PKCS7_SIGNER_INFO)
*)OPENSSL_sk_dup(ossl_check_const_PKCS7_SIGNER_INFO_sk_type(sk)))
#define sk_PKCS7_SIGNER_INFO_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(PKCS7_SIGNER_INFO)
*)OPENSSL_sk_deep_copy(ossl_check_const_PKCS7_SIGNER_INFO_sk_type(sk),
ossl_check_PKCS7_SIGNER_INFO_copyfunc_type(copyfunc),
 ossl_check_PKCS7_SIGNER_INFO_freefunc_type(freefunc)))
#define sk_PKCS7_SIGNER_INFO_set_cmp_func(sk, cmp)
((sk_PKCS7_SIGNER_INFO_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_PKCS7_SIGNER_INFO_sk_ty
pe(sk), ossl_check_PKCS7_SIGNER_INFO_compfunc_type(cmp)))


typedef struct pkcs7_recip_info_st {
   ASN1_INTEGER *version;      /* version 0 */
   PKCS7_ISSUER_AND_SERIAL *issuer_and_serial;
   X509_ALGOR *key_enc_algor;
   ASN1_OCTET_STRING *enc_key;
   X509 *cert;                 /* get the pub-key from this */
   const PKCS7_CTX *ctx;
} PKCS7_RECIP_INFO;
SKM_DEFINE_STACK_OF_INTERNAL(PKCS7_RECIP_INFO, PKCS7_RECIP_INFO, PKCS7_RECIP_INFO)
#define sk_PKCS7_RECIP_INFO_num(sk)
```

```
OPENSSL_sk_num(ossl_check_const_PKCS7_RECIP_INFO_sk_type(sk))
#define sk_PKCS7_RECIP_INFO_value(sk, idx) ((PKCS7_RECIP_INFO
*)OPENSSL_sk_value(ossl_check_const_PKCS7_RECIP_INFO_sk_type(sk), (idx)))
#define sk_PKCS7_RECIP_INFO_new(cmp) ((STACK_OF(PKCS7_RECIP_INFO)
*)OPENSSL_sk_new(ossl_check_PKCS7_RECIP_INFO_compfunc_type(cmp)))
#define
 sk_PKCS7_RECIP_INFO_new_null() ((STACK_OF(PKCS7_RECIP_INFO) *)OPENSSL_sk_new_null())
#define sk_PKCS7_RECIP_INFO_new_reserve(cmp, n) ((STACK_OF(PKCS7_RECIP_INFO)
*)OPENSSL_sk_new_reserve(ossl_check_PKCS7_RECIP_INFO_compfunc_type(cmp), (n)))
#define sk_PKCS7_RECIP_INFO_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_PKCS7_RECIP_INFO_sk_type(sk), (n))
#define sk_PKCS7_RECIP_INFO_free(sk) OPENSSL_sk_free(ossl_check_PKCS7_RECIP_INFO_sk_type(sk))
#define sk_PKCS7_RECIP_INFO_zero(sk) OPENSSL_sk_zero(ossl_check_PKCS7_RECIP_INFO_sk_type(sk))
#define sk_PKCS7_RECIP_INFO_delete(sk, i) ((PKCS7_RECIP_INFO
*)OPENSSL_sk_delete(ossl_check_PKCS7_RECIP_INFO_sk_type(sk), (i)))
#define sk_PKCS7_RECIP_INFO_delete_ptr(sk, ptr) ((PKCS7_RECIP_INFO
*)OPENSSL_sk_delete_ptr(ossl_check_PKCS7_RECIP_INFO_sk_type(sk),
ossl_check_PKCS7_RECIP_INFO_type(ptr)))
#define sk_PKCS7_RECIP_INFO_push(sk, ptr)
OPENSSL_sk_push(ossl_check_PKCS7_RECIP_INFO_sk_type(sk), ossl_check_PKCS7_RECIP_INFO_type(ptr))
#define
 sk_PKCS7_RECIP_INFO_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_PKCS7_RECIP_INFO_sk_type(sk),
ossl_check_PKCS7_RECIP_INFO_type(ptr))
#define sk_PKCS7_RECIP_INFO_pop(sk) ((PKCS7_RECIP_INFO
*)OPENSSL_sk_pop(ossl_check_PKCS7_RECIP_INFO_sk_type(sk)))
#define sk_PKCS7_RECIP_INFO_shift(sk) ((PKCS7_RECIP_INFO
*)OPENSSL_sk_shift(ossl_check_PKCS7_RECIP_INFO_sk_type(sk)))
#define sk_PKCS7_RECIP_INFO_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_PKCS7_RECIP_INFO_sk_type(sk),ossl_check_PKCS7_RECIP_INFO_freefu
nc_type(freefunc))
#define sk_PKCS7_RECIP_INFO_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_PKCS7_RECIP_INFO_sk_type(sk),
ossl_check_PKCS7_RECIP_INFO_type(ptr), (idx))
#define sk_PKCS7_RECIP_INFO_set(sk, idx, ptr) ((PKCS7_RECIP_INFO
*)OPENSSL_sk_set(ossl_check_PKCS7_RECIP_INFO_sk_type(sk), (idx),
ossl_check_PKCS7_RECIP_INFO_type(ptr)))
#define sk_PKCS7_RECIP_INFO_find(sk, ptr)
OPENSSL_sk_find(ossl_check_PKCS7_RECIP_INFO_sk_type(sk), ossl_check_PKCS7_RECIP_INFO_type(ptr))
#define
 sk_PKCS7_RECIP_INFO_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_PKCS7_RECIP_INFO_sk_type(sk),
ossl_check_PKCS7_RECIP_INFO_type(ptr))
#define sk_PKCS7_RECIP_INFO_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_PKCS7_RECIP_INFO_sk_type(sk),
ossl_check_PKCS7_RECIP_INFO_type(ptr), pnum)
#define sk_PKCS7_RECIP_INFO_sort(sk) OPENSSL_sk_sort(ossl_check_PKCS7_RECIP_INFO_sk_type(sk))
#define sk_PKCS7_RECIP_INFO_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_PKCS7_RECIP_INFO_sk_type(sk))
```

```
#define sk_PKCS7_RECIP_INFO_dup(sk) ((STACK_OF(PKCS7_RECIP_INFO)
*)OPENSSL_sk_dup(ossl_check_const_PKCS7_RECIP_INFO_sk_type(sk)))
#define sk_PKCS7_RECIP_INFO_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(PKCS7_RECIP_INFO)
*)OPENSSL_sk_deep_copy(ossl_check_const_PKCS7_RECIP_INFO_sk_type(sk),
ossl_check_PKCS7_RECIP_INFO_copyfunc_type(copyfunc),
ossl_check_PKCS7_RECIP_INFO_freefunc_type(freefunc)))
#define sk_PKCS7_RECIP_INFO_set_cmp_func(sk, cmp)
((sk_PKCS7_RECIP_INFO_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_PKCS7_RECIP_INFO_sk_type(s
k),
 ossl_check_PKCS7_RECIP_INFO_compfunc_type(cmp)))



typedef struct pkcs7_signed_st {
   ASN1_INTEGER *version;      /* version 1 */
   STACK_OF(X509_ALGOR) *md_algs; /* md used */
   STACK_OF(X509) *cert;       /* [ 0 ] */
   STACK_OF(X509_CRL) *crl;    /* [ 1 ] */
   STACK_OF(PKCS7_SIGNER_INFO) *signer_info;
   struct pkcs7_st *contents;
} PKCS7_SIGNED;
/*
* The above structure is very very similar to PKCS7_SIGN_ENVELOPE. How about
* merging the two
*/

typedef struct pkcs7_enc_content_st {
   ASN1_OBJECT *content_type;
   X509_ALGOR *algorithm;
   ASN1_OCTET_STRING *enc_data; /* [ 0 ] */
   const EVP_CIPHER *cipher;
   const PKCS7_CTX *ctx;
} PKCS7_ENC_CONTENT;

typedef struct pkcs7_enveloped_st {
   ASN1_INTEGER *version;      /* version 0 */
   STACK_OF(PKCS7_RECIP_INFO) *recipientinfo;
   PKCS7_ENC_CONTENT *enc_data;
} PKCS7_ENVELOPE;

typedef struct pkcs7_signedandenveloped_st {
    ASN1_INTEGER *version;      /* version 1 */
   STACK_OF(X509_ALGOR) *md_algs; /* md used */
   STACK_OF(X509) *cert;       /* [ 0 ] */
   STACK_OF(X509_CRL) *crl;    /* [ 1 ] */
   STACK_OF(PKCS7_SIGNER_INFO) *signer_info;
   PKCS7_ENC_CONTENT *enc_data;
   STACK_OF(PKCS7_RECIP_INFO) *recipientinfo;
```

```
} PKCS7_SIGN_ENVELOPE;

typedef struct pkcs7_digest_st {
   ASN1_INTEGER *version;      /* version 0 */
   X509_ALGOR *md;             /* md used */
   struct pkcs7_st *contents;
   ASN1_OCTET_STRING *digest;
} PKCS7_DIGEST;

typedef struct pkcs7_encrypted_st {
   ASN1_INTEGER *version;      /* version 0 */
   PKCS7_ENC_CONTENT *enc_data;
} PKCS7_ENCRYPT;

typedef struct pkcs7_st {
   /*
    * The following is non NULL if it contains ASN1 encoding of this
    * structure
    */
   unsigned char *asn1;
   long length;
# define PKCS7_S_HEADER  0
# define PKCS7_S_BODY    1
# define PKCS7_S_TAIL    2
   int state;                  /* used during processing */
   int detached;
    ASN1_OBJECT *type;
   /* content as defined by the type */
   /*
    * all encryption/message digests are applied to the 'contents', leaving
    * out the 'type' field.
    */
   union {
      char *ptr;
      /* NID_pkcs7_data */
      ASN1_OCTET_STRING *data;
      /* NID_pkcs7_signed */
      PKCS7_SIGNED *sign;
      /* NID_pkcs7_enveloped */
      PKCS7_ENVELOPE *enveloped;
      /* NID_pkcs7_signedAndEnveloped */
      PKCS7_SIGN_ENVELOPE *signed_and_enveloped;
      /* NID_pkcs7_digest */
      PKCS7_DIGEST *digest;
      /* NID_pkcs7_encrypted */
      PKCS7_ENCRYPT *encrypted;
      /* Anything else */
      ASN1_TYPE *other;
```

```
  } d;
  PKCS7_CTX ctx;
} PKCS7;
SKM_DEFINE_STACK_OF_INTERNAL(PKCS7, PKCS7, PKCS7)
#define sk_PKCS7_num(sk) OPENSSL_sk_num(ossl_check_const_PKCS7_sk_type(sk))
#define sk_PKCS7_value(sk, idx) ((PKCS7 *)OPENSSL_sk_value(ossl_check_const_PKCS7_sk_type(sk), (idx)))
#define sk_PKCS7_new(cmp) ((STACK_OF(PKCS7)
*)OPENSSL_sk_new(ossl_check_PKCS7_compfunc_type(cmp)))
#define
 sk_PKCS7_new_null() ((STACK_OF(PKCS7) *)OPENSSL_sk_new_null())
#define sk_PKCS7_new_reserve(cmp, n) ((STACK_OF(PKCS7)
*)OPENSSL_sk_new_reserve(ossl_check_PKCS7_compfunc_type(cmp), (n)))
#define sk_PKCS7_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_PKCS7_sk_type(sk), (n))
#define sk_PKCS7_free(sk) OPENSSL_sk_free(ossl_check_PKCS7_sk_type(sk))
#define sk_PKCS7_zero(sk) OPENSSL_sk_zero(ossl_check_PKCS7_sk_type(sk))
#define sk_PKCS7_delete(sk, i) ((PKCS7 *)OPENSSL_sk_delete(ossl_check_PKCS7_sk_type(sk), (i)))
#define sk_PKCS7_delete_ptr(sk, ptr) ((PKCS7 *)OPENSSL_sk_delete_ptr(ossl_check_PKCS7_sk_type(sk),
ossl_check_PKCS7_type(ptr)))
#define sk_PKCS7_push(sk, ptr) OPENSSL_sk_push(ossl_check_PKCS7_sk_type(sk),
ossl_check_PKCS7_type(ptr))
#define sk_PKCS7_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_PKCS7_sk_type(sk),
ossl_check_PKCS7_type(ptr))
#define sk_PKCS7_pop(sk) ((PKCS7 *)OPENSSL_sk_pop(ossl_check_PKCS7_sk_type(sk)))
#define
 sk_PKCS7_shift(sk) ((PKCS7 *)OPENSSL_sk_shift(ossl_check_PKCS7_sk_type(sk)))
#define sk_PKCS7_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_PKCS7_sk_type(sk),ossl_check_PKCS7_freefunc_type(freefunc))
#define sk_PKCS7_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_PKCS7_sk_type(sk),
ossl_check_PKCS7_type(ptr), (idx))
#define sk_PKCS7_set(sk, idx, ptr) ((PKCS7 *)OPENSSL_sk_set(ossl_check_PKCS7_sk_type(sk), (idx),
ossl_check_PKCS7_type(ptr)))
#define sk_PKCS7_find(sk, ptr) OPENSSL_sk_find(ossl_check_PKCS7_sk_type(sk),
ossl_check_PKCS7_type(ptr))
#define sk_PKCS7_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_PKCS7_sk_type(sk),
ossl_check_PKCS7_type(ptr))
#define sk_PKCS7_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_PKCS7_sk_type(sk),
ossl_check_PKCS7_type(ptr), pnum)
#define sk_PKCS7_sort(sk) OPENSSL_sk_sort(ossl_check_PKCS7_sk_type(sk))
#define sk_PKCS7_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_PKCS7_sk_type(sk))
#define sk_PKCS7_dup(sk) ((STACK_OF(PKCS7)
 *)OPENSSL_sk_dup(ossl_check_const_PKCS7_sk_type(sk)))
#define sk_PKCS7_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(PKCS7)
*)OPENSSL_sk_deep_copy(ossl_check_const_PKCS7_sk_type(sk),
ossl_check_PKCS7_copyfunc_type(copyfunc), ossl_check_PKCS7_freefunc_type(freefunc)))
#define sk_PKCS7_set_cmp_func(sk, cmp)
((sk_PKCS7_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_PKCS7_sk_type(sk),
ossl_check_PKCS7_compfunc_type(cmp)))
```

```
# define PKCS7_OP_SET_DETACHED_SIGNATURE 1
# define PKCS7_OP_GET_DETACHED_SIGNATURE 2

# define PKCS7_get_signed_attributes(si) ((si)->auth_attr)
# define PKCS7_get_attributes(si)        ((si)->unauth_attr)

# define PKCS7_type_is_signed(a) (OBJ_obj2nid((a)->type) == NID_pkcs7_signed)
# define PKCS7_type_is_encrypted(a) (OBJ_obj2nid((a)->type) == NID_pkcs7_encrypted)
# define PKCS7_type_is_enveloped(a) (OBJ_obj2nid((a)->type) == NID_pkcs7_enveloped)
# define PKCS7_type_is_signedAndEnveloped(a) \
            (OBJ_obj2nid((a)->type) == NID_pkcs7_signedAndEnveloped)
#
 define PKCS7_type_is_data(a)   (OBJ_obj2nid((a)->type) == NID_pkcs7_data)
# define PKCS7_type_is_digest(a)   (OBJ_obj2nid((a)->type) == NID_pkcs7_digest)

# define PKCS7_set_detached(p,v) \
            PKCS7_ctrl(p,PKCS7_OP_SET_DETACHED_SIGNATURE,v,NULL)
# define PKCS7_get_detached(p) \
            PKCS7_ctrl(p,PKCS7_OP_GET_DETACHED_SIGNATURE,0,NULL)

# define PKCS7_is_detached(p7) (PKCS7_type_is_signed(p7) && PKCS7_get_detached(p7))

/* S/MIME related flags */

# define PKCS7_TEXT             0x1
# define PKCS7_NOCERTS          0x2
# define PKCS7_NOSIGS           0x4
# define PKCS7_NOCHAIN          0x8
# define PKCS7_NOINTERN         0x10
# define PKCS7_NOVERIFY         0x20
# define PKCS7_DETACHED         0x40
# define PKCS7_BINARY           0x80
# define PKCS7_NOATTR           0x100
# define PKCS7_NOSMIMECAP       0x200
# define PKCS7_NOOLDMIMETYPE    0x400
# define PKCS7_CRLFEOL          0x800
# define PKCS7_STREAM           0x1000
# define PKCS7_NOCRL
      0x2000
# define PKCS7_PARTIAL          0x4000
# define PKCS7_REUSE_DIGEST     0x8000
# define PKCS7_NO_DUAL_CONTENT   0x10000

/* Flags: for compatibility with older code */

# define SMIME_TEXT      PKCS7_TEXT
```

```
# define SMIME_NOCERTS   PKCS7_NOCERTS
# define SMIME_NOSIGS    PKCS7_NOSIGS
# define SMIME_NOCHAIN   PKCS7_NOCHAIN
# define SMIME_NOINTERN  PKCS7_NOINTERN
# define SMIME_NOVERIFY  PKCS7_NOVERIFY
# define SMIME_DETACHED  PKCS7_DETACHED
# define SMIME_BINARY    PKCS7_BINARY
# define SMIME_NOATTR    PKCS7_NOATTR

/* CRLF ASCII canonicalisation */
# define SMIME_ASCIICRLF        0x80000

DECLARE_ASN1_FUNCTIONS(PKCS7_ISSUER_AND_SERIAL)

int PKCS7_ISSUER_AND_SERIAL_digest(PKCS7_ISSUER_AND_SERIAL *data,
                                   const EVP_MD *type, unsigned char *md,
                                   unsigned int *len);
# ifndef OPENSSL_NO_STDIO
PKCS7 *d2i_PKCS7_fp(FILE *fp, PKCS7 **p7);
int i2d_PKCS7_fp(FILE *fp, const PKCS7 *p7);
# endif
DECLARE_ASN1_DUP_FUNCTION(PKCS7)
PKCS7
 *d2i_PKCS7_bio(BIO *bp, PKCS7 **p7);
int i2d_PKCS7_bio(BIO *bp, const PKCS7 *p7);
int i2d_PKCS7_bio_stream(BIO *out, PKCS7 *p7, BIO *in, int flags);
int PEM_write_bio_PKCS7_stream(BIO *out, PKCS7 *p7, BIO *in, int flags);

DECLARE_ASN1_FUNCTIONS(PKCS7_SIGNER_INFO)
DECLARE_ASN1_FUNCTIONS(PKCS7_RECIP_INFO)
DECLARE_ASN1_FUNCTIONS(PKCS7_SIGNED)
DECLARE_ASN1_FUNCTIONS(PKCS7_ENC_CONTENT)
DECLARE_ASN1_FUNCTIONS(PKCS7_ENVELOPE)
DECLARE_ASN1_FUNCTIONS(PKCS7_SIGN_ENVELOPE)
DECLARE_ASN1_FUNCTIONS(PKCS7_DIGEST)
DECLARE_ASN1_FUNCTIONS(PKCS7_ENCRYPT)
DECLARE_ASN1_FUNCTIONS(PKCS7)
PKCS7 *PKCS7_new_ex(OSSL_LIB_CTX *libctx, const char *propq);

DECLARE_ASN1_ITEM(PKCS7_ATTR_SIGN)
DECLARE_ASN1_ITEM(PKCS7_ATTR_VERIFY)

DECLARE_ASN1_NDEF_FUNCTION(PKCS7)
DECLARE_ASN1_PRINT_FUNCTION(PKCS7)

long PKCS7_ctrl(PKCS7 *p7, int cmd, long larg, char *parg);

int PKCS7_type_is_other(PKCS7 *p7);
```

```
int PKCS7_set_type(PKCS7 *p7, int type);
int PKCS7_set0_type_other(PKCS7 *p7, int type, ASN1_TYPE *other);
int
 PKCS7_set_content(PKCS7 *p7, PKCS7 *p7_data);
int PKCS7_SIGNER_INFO_set(PKCS7_SIGNER_INFO *p7i, X509 *x509, EVP_PKEY *pkey,
                    const EVP_MD *dgst);
int PKCS7_SIGNER_INFO_sign(PKCS7_SIGNER_INFO *si);
int PKCS7_add_signer(PKCS7 *p7, PKCS7_SIGNER_INFO *p7i);
int PKCS7_add_certificate(PKCS7 *p7, X509 *x509);
int PKCS7_add_crl(PKCS7 *p7, X509_CRL *x509);
int PKCS7_content_new(PKCS7 *p7, int nid);
int PKCS7_dataVerify(X509_STORE *cert_store, X509_STORE_CTX *ctx,
                BIO *bio, PKCS7 *p7, PKCS7_SIGNER_INFO *si);
int PKCS7_signatureVerify(BIO *bio, PKCS7 *p7, PKCS7_SIGNER_INFO *si,
                    X509 *x509);

BIO *PKCS7_dataInit(PKCS7 *p7, BIO *bio);
int PKCS7_dataFinal(PKCS7 *p7, BIO *bio);
BIO *PKCS7_dataDecode(PKCS7 *p7, EVP_PKEY *pkey, BIO *in_bio, X509 *pcert);

PKCS7_SIGNER_INFO *PKCS7_add_signature(PKCS7 *p7, X509 *x509,
                            EVP_PKEY *pkey, const EVP_MD *dgst);
X509 *PKCS7_cert_from_signer_info(PKCS7 *p7,
 PKCS7_SIGNER_INFO *si);
int PKCS7_set_digest(PKCS7 *p7, const EVP_MD *md);
STACK_OF(PKCS7_SIGNER_INFO) *PKCS7_get_signer_info(PKCS7 *p7);

PKCS7_RECIP_INFO *PKCS7_add_recipient(PKCS7 *p7, X509 *x509);
void PKCS7_SIGNER_INFO_get0_algs(PKCS7_SIGNER_INFO *si, EVP_PKEY **pk,
                        X509_ALGOR **pdig, X509_ALGOR **psig);
void PKCS7_RECIP_INFO_get0_alg(PKCS7_RECIP_INFO *ri, X509_ALGOR **penc);
int PKCS7_add_recipient_info(PKCS7 *p7, PKCS7_RECIP_INFO *ri);
int PKCS7_RECIP_INFO_set(PKCS7_RECIP_INFO *p7i, X509 *x509);
int PKCS7_set_cipher(PKCS7 *p7, const EVP_CIPHER *cipher);
int PKCS7_stream(unsigned char ***boundary, PKCS7 *p7);

PKCS7_ISSUER_AND_SERIAL *PKCS7_get_issuer_and_serial(PKCS7 *p7, int idx);
ASN1_OCTET_STRING *PKCS7_get_octet_string(PKCS7 *p7);
ASN1_OCTET_STRING *PKCS7_digest_from_attributes(STACK_OF(X509_ATTRIBUTE) *sk);
int PKCS7_add_signed_attribute(PKCS7_SIGNER_INFO *p7si, int nid, int type,
                    void *data);
int PKCS7_add_attribute(PKCS7_SIGNER_INFO
 *p7si, int nid, int atrtype,
                void *value);
ASN1_TYPE *PKCS7_get_attribute(const PKCS7_SIGNER_INFO *si, int nid);
ASN1_TYPE *PKCS7_get_signed_attribute(const PKCS7_SIGNER_INFO *si, int nid);
int PKCS7_set_signed_attributes(PKCS7_SIGNER_INFO *p7si,
                        STACK_OF(X509_ATTRIBUTE) *sk);
```

```
int PKCS7_set_attributes(PKCS7_SIGNER_INFO *p7si,
                         STACK_OF(X509_ATTRIBUTE) *sk);

PKCS7 *PKCS7_sign(X509 *signcert, EVP_PKEY *pkey, STACK_OF(X509) *certs,
                  BIO *data, int flags);
PKCS7 *PKCS7_sign_ex(X509 *signcert, EVP_PKEY *pkey, STACK_OF(X509) *certs,
                     BIO *data, int flags, OSSL_LIB_CTX *libctx,
                     const char *propq);

PKCS7_SIGNER_INFO *PKCS7_sign_add_signer(PKCS7 *p7,
                                         X509 *signcert, EVP_PKEY *pkey,
                                         const EVP_MD *md, int flags);

int PKCS7_final(PKCS7 *p7, BIO *data,
 int flags);
int PKCS7_verify(PKCS7 *p7, STACK_OF(X509) *certs, X509_STORE *store,
                 BIO *indata, BIO *out, int flags);
STACK_OF(X509) *PKCS7_get0_signers(PKCS7 *p7, STACK_OF(X509) *certs,
                                   int flags);
PKCS7 *PKCS7_encrypt(STACK_OF(X509) *certs, BIO *in, const EVP_CIPHER *cipher,
                     int flags);
PKCS7 *PKCS7_encrypt_ex(STACK_OF(X509) *certs, BIO *in,
                        const EVP_CIPHER *cipher, int flags,
                        OSSL_LIB_CTX *libctx, const char *propq);
int PKCS7_decrypt(PKCS7 *p7, EVP_PKEY *pkey, X509 *cert, BIO *data,
                  int flags);

int PKCS7_add_attrib_smimecap(PKCS7_SIGNER_INFO *si,
                              STACK_OF(X509_ALGOR) *cap);
STACK_OF(X509_ALGOR) *PKCS7_get_smimecap(PKCS7_SIGNER_INFO *si);
int PKCS7_simple_smimecap(STACK_OF(X509_ALGOR) *sk, int nid, int arg);

int PKCS7_add_attrib_content_type(PKCS7_SIGNER_INFO *si, ASN1_OBJECT *coid);
int PKCS7_add0_attrib_signing_time(PKCS7_SIGNER_INFO
 *si, ASN1_TIME *t);
int PKCS7_add1_attrib_digest(PKCS7_SIGNER_INFO *si,
                             const unsigned char *md, int mdlen);

int SMIME_write_PKCS7(BIO *bio, PKCS7 *p7, BIO *data, int flags);
PKCS7 *SMIME_read_PKCS7_ex(BIO *bio, BIO **bcont, PKCS7 **p7);
PKCS7 *SMIME_read_PKCS7(BIO *bio, BIO **bcont);

BIO *BIO_new_PKCS7(BIO *out, PKCS7 *p7);

# ifdef  __cplusplus
}
# endif
#endif
```

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SOFTWARE.
#ifndef SRC_PERMISSION_PERMISSION_H_
#define SRC_PERMISSION_PERMISSION_H_

```
#if defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS

#include "debug_utils.h"
#include "node_options.h"
#include "permission/child_process_permission.h"
#include "permission/fs_permission.h"
#include "permission/inspector_permission.h"
#include "permission/permission_base.h"
#include "permission/wasi_permission.h"
#include "permission/worker_permission.h"
#include "v8.h"

#include <string_view>
#include <unordered_map>

namespace node {

class Environment;

namespace fs {
class FSReqBase;
}

namespace permission {

#define THROW_IF_INSUFFICIENT_PERMISSIONS(env, perm_, resource_, ...)          \
 do {                                                                          \
   if (!env->permission()->is_granted(env, perm_, resource_)) [[unlikely]] {  \
     node::permission::Permission::ThrowAccessDenied(                          \
         (env), perm_, resource_);
   \
     return __VA_ARGS__;                                                       \
   }                                                                           \
 } while (0)

#define ASYNC_THROW_IF_INSUFFICIENT_PERMISSIONS(                               \
   env, wrap, perm_, resource_, ...)                                           \
 do {                                                                          \
   if (!env->permission()->is_granted(env, perm_, resource_)) [[unlikely]] {  \
     node::permission::Permission::AsyncThrowAccessDenied(                     \
         (env), wrap, perm_, resource_);                                       \
     return __VA_ARGS__;                                                       \
   }                                                                           \
 } while (0)

class Permission {
public:
 Permission();
```

```
 FORCE_INLINE bool is_granted(Environment* env,
                              const PermissionScope permission,
                              const std::string_view& res = "") const {
   if (!enabled_) [[likely]] {
     return true;
   }
   return is_scope_granted(env, permission, res);
 }

 FORCE_INLINE bool enabled() const { return enabled_; }

 static PermissionScope StringToPermission(const std::string& perm);
 static const char* PermissionToString(PermissionScope perm);
 static void ThrowAccessDenied(Environment* env,
                               PermissionScope perm,
                               const std::string_view& res);
 static void AsyncThrowAccessDenied(Environment* env,
                                    fs::FSReqBase* req_wrap,
                                    PermissionScope perm,
                                    const std::string_view& res);

 // CLI Call
 void Apply(Environment* env,
            const std::vector<std::string>& allow,
            PermissionScope scope);
 void EnablePermissions();

private:
 COLD_NOINLINE bool is_scope_granted(Environment*
 env,
                                     const PermissionScope permission,
                                     const std::string_view& res = "") const {
   auto perm_node = nodes_.find(permission);
   if (perm_node != nodes_.end()) {
     return perm_node->second->is_granted(env, permission, res);
   }
   return false;
 }

 std::unordered_map<PermissionScope, std::shared_ptr<PermissionBase>> nodes_;
 bool enabled_;
};

}  // namespace permission

}  // namespace node
```

#endif // defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS
#endif // SRC_PERMISSION_PERMISSION_H_
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```
/*
* WARNING: do not edit!
* Generated by util/mkbuildinf.pl
*
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*
* Licensed under the Apache License 2.0 (the "License").  You may not use
* this file except in compliance with the License.  You can obtain a copy
* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/

#define PLATFORM "platform: BSD-x86"
#define DATE "built on: Wed Mar  5 20:59:15 2025 UTC"

/*
* Generate compiler_flags as an array of individual characters. This is a
* workaround for the situation where CFLAGS gets too long for a C90 string
* literal
*/
static const char compiler_flags[] = {
   'c','o','m','p','i','l','e','r',':',' ','.','.','/','c','o','n',
   'f','i','g','/','f','a','k','e','_','g','c','c','.','p','l',' ',
   '-','f','P','I','C',' ','-','p','t','h','r','e','a','d',' ','-',
   'W','a',',',',-','-','n','o','e','x','e','c','s','t','a','c','k',
   ' ','-','W','a','l','l','
 ','-','O','3',' ','-','f','o','m','i',
   't','-','f','r','a','m','e','-','p','o','i','n','t','e','r',' ',
```

```
  '-','D','L','_','E','N','D','I','A','N',' ','-','D','O','P','E',
  'N','S','S','L','_','P','I','C',' ','-','D','_','T','H','R','E',
  'A','D','_','S','A','F','E',' ','-','D','_','R','E','E','N','T',
  'R','A','N','T',' ','-','D','O','P','E','N','S','S','L','_','B',
  'U','I','L','D','I','N','G','_','O','P','E','N','S','S','L',' ',
  '-','D','N','D','E','B','U','G','\0'
};
[
 "AGPL-1.0",
 "AGPL-3.0",
 "BSD-2-Clause-FreeBSD",
 "BSD-2-Clause-NetBSD",
 "GFDL-1.1",
 "GFDL-1.2",
 "GFDL-1.3",
 "GPL-1.0",
 "GPL-2.0",
 "GPL-2.0-with-GCC-exception",
 "GPL-2.0-with-autoconf-exception",
 "GPL-2.0-with-bison-exception",
 "GPL-2.0-with-classpath-exception",
 "GPL-2.0-with-font-exception",
 "GPL-3.0",
 "GPL-3.0-with-GCC-exception",
 "GPL-3.0-with-autoconf-exception",
 "LGPL-2.0",
 "LGPL-2.1",
 "LGPL-3.0",
 "Net-SNMP",
 "Nunit",
 "StandardML-NJ",
 "bzip2-1.0.5",
 "eCos-2.0",
 "wxWindows"
]
```

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```
{
 'variables': {
   'openssl_sources': [
     'openssl/ssl/bio_ssl.c',
     'openssl/ssl/d1_lib.c',
     'openssl/ssl/d1_msg.c',
     'openssl/ssl/d1_srtp.c',
     'openssl/ssl/methods.c',
     'openssl/ssl/pqueue.c',
     'openssl/ssl/s3_enc.c',
     'openssl/ssl/s3_lib.c',
     'openssl/ssl/s3_msg.c',
     'openssl/ssl/ssl_asn1.c',
     'openssl/ssl/ssl_cert.c',
     'openssl/ssl/ssl_ciph.c',
     'openssl/ssl/ssl_conf.c',
     'openssl/ssl/ssl_err.c',
     'openssl/ssl/ssl_err_legacy.c',
```

'openssl/ssl/ssl_init.c',
'openssl/ssl/ssl_lib.c',
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  './config/archs/BSD-x86_64/no-asm/providers/common/der/der_dsa_gen.c',
  './config/archs/BSD-x86_64/no-asm/providers/common/der/der_ec_gen.c',
  './config/archs/BSD-x86_64/no-asm/providers/common/der/der_ecx_gen.c',
  './config/archs/BSD-x86_64/no-asm/providers/common/der/der_rsa_gen.c',
  './config/archs/BSD-x86_64/no-asm/providers/common/der/der_wrap_gen.c',
   './config/archs/BSD-x86_64/no-asm/providers/legacy.ld',
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],
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  'include_dirs': ['./include', '.'],
  'defines': ['<@(openssl_defines_BSD-x86_64)'],
 },
}
/*
* WARNING: do not edit!
* Generated by Makefile from providers/common/include/prov/der_wrap.h.in
*
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*/

#include "internal/der.h"

/* Well known OIDs precompiled */

/*
* id-alg-CMS3DESwrap OBJECT IDENTIFIER ::= {
*     iso(1) member-body(2) us(840) rsadsi(113549) pkcs(1) pkcs-9(9) smime(16) alg(3) 6
* }
*/
#define DER_OID_V_id_alg_CMS3DESwrap DER_P_OBJECT, 11, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01,
0x09, 0x10, 0x03, 0x06
#define DER_OID_SZ_id_alg_CMS3DESwrap 13
```

```
extern const unsigned char ossl_der_oid_id_alg_CMS3DESwrap[DER_OID_SZ_id_alg_CMS3DESwrap];

/*
* id-aes128-wrap OBJECT IDENTIFIER ::= { aes 5 }
*/
#define DER_OID_V_id_aes128_wrap DER_P_OBJECT,
 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x01, 0x05
#define DER_OID_SZ_id_aes128_wrap 11
extern const unsigned char ossl_der_oid_id_aes128_wrap[DER_OID_SZ_id_aes128_wrap];

/*
* id-aes192-wrap OBJECT IDENTIFIER ::= { aes 25 }
*/
#define DER_OID_V_id_aes192_wrap DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x01, 0x19
#define DER_OID_SZ_id_aes192_wrap 11
extern const unsigned char ossl_der_oid_id_aes192_wrap[DER_OID_SZ_id_aes192_wrap];

/*
* id-aes256-wrap OBJECT IDENTIFIER ::= { aes 45 }
*/
#define DER_OID_V_id_aes256_wrap DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x01,
0x2D
#define DER_OID_SZ_id_aes256_wrap 11
extern const unsigned char ossl_der_oid_id_aes256_wrap[DER_OID_SZ_id_aes256_wrap];
```

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'openssl/crypto/x509/x_attrib.c',
'openssl/crypto/x509/x_crl.c',
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  'openssl/providers/implementations/digests/wp_prov.c',
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  'openssl/providers/legacyprov.c',
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  './config/archs/BSD-x86/asm_avx2/crypto/aes/aesni-x86.S',
  './config/archs/BSD-x86/asm_avx2/crypto/aes/vpaes-x86.S',
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  './config/archs/BSD-x86/asm_avx2/crypto/bn/co-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/bn/x86-gf2m.S',
  './config/archs/BSD-x86/asm_avx2/crypto/bn/x86-mont.S',
  './config/archs/BSD-x86/asm_avx2/crypto/camellia/cmll-x86.S',
  './config/archs/BSD-x86/asm_avx2/crypto/chacha/chacha-x86.S',
  './config/archs/BSD-x86/asm_avx2/crypto/des/crypt586.S',
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    './config/archs/BSD-x86/asm_avx2/crypto/x86cpuid.S',
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    './config/archs/BSD-x86/asm_avx2/crypto/modes/ghash-x86.S',
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    './config/archs/BSD-x86/asm_avx2/crypto/rc4/rc4-586.S',
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    './config/archs/BSD-x86/asm_avx2/providers/common/der/der_sm2_gen.c',
    './config/archs/BSD-x86/asm_avx2/providers/common/der/der_digests_gen.c',
    './config/archs/BSD-x86/asm_avx2/providers/common/der/der_dsa_gen.c',
    './config/archs/BSD-x86/asm_avx2/providers/common/der/der_ec_gen.c',
    './config/archs/BSD-x86/asm_avx2/providers/common/der/der_ecx_gen.c',
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    'CMLL_ASM',
    'DES_ASM',
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    'GHASH_ASM',
    'MD5_ASM',
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    'OPENSSL_BN_ASM_MONT',
    'OPENSSL_BN_ASM_PART_WORDS',
    'OPENSSL_CPUID_OBJ',
    'OPENSSL_IA32_SSE2',
    'PADLOCK_ASM',
    'POLY1305_ASM',
    'RC4_ASM',
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  ],
  'openssl_ex_libs_BSD-x86': [
    '-pthread',
  ],
 },
 'include_dirs':
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  './include',
  './crypto',
  './crypto/include/internal',
  './providers/common/include',
 ],
 'defines': ['<@(openssl_defines_BSD-x86)'],
 'cflags' : ['<@(openssl_cflags_BSD-x86)'],
 'libraries': ['<@(openssl_ex_libs_BSD-x86)'],
 'sources': ['<@(openssl_sources)', '<@(openssl_sources_BSD-x86)'],
 'direct_dependent_settings': {
  'include_dirs': ['./include', '.'],
  'defines': ['<@(openssl_defines_BSD-x86)'],
 },
}
```

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/*
* WARNING: do not edit!
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* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_ESS_H
# define OPENSSL_ESS_H
# pragma once

# include <openssl/opensslconf.h>

# include <openssl/safestack.h>
# include <openssl/x509.h>
# include <openssl/esserr.h>

# ifdef  __cplusplus
extern "C" {
# endif


typedef struct ESS_issuer_serial ESS_ISSUER_SERIAL;
typedef struct ESS_cert_id ESS_CERT_ID;
typedef struct ESS_signing_cert ESS_SIGNING_CERT;

SKM_DEFINE_STACK_OF_INTERNAL(ESS_CERT_ID, ESS_CERT_ID, ESS_CERT_ID)
#define sk_ESS_CERT_ID_num(sk) OPENSSL_sk_num(ossl_check_const_ESS_CERT_ID_sk_type(sk))
#define sk_ESS_CERT_ID_value(sk, idx) ((ESS_CERT_ID
 *)OPENSSL_sk_value(ossl_check_const_ESS_CERT_ID_sk_type(sk), (idx)))
#define sk_ESS_CERT_ID_new(cmp) ((STACK_OF(ESS_CERT_ID)
*)OPENSSL_sk_new(ossl_check_ESS_CERT_ID_compfunc_type(cmp)))
#define sk_ESS_CERT_ID_new_null() ((STACK_OF(ESS_CERT_ID) *)OPENSSL_sk_new_null())
#define sk_ESS_CERT_ID_new_reserve(cmp, n) ((STACK_OF(ESS_CERT_ID)
*)OPENSSL_sk_new_reserve(ossl_check_ESS_CERT_ID_compfunc_type(cmp), (n)))
```

```
#define sk_ESS_CERT_ID_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_ESS_CERT_ID_sk_type(sk), (n))
#define sk_ESS_CERT_ID_free(sk) OPENSSL_sk_free(ossl_check_ESS_CERT_ID_sk_type(sk))
#define sk_ESS_CERT_ID_zero(sk) OPENSSL_sk_zero(ossl_check_ESS_CERT_ID_sk_type(sk))
#define sk_ESS_CERT_ID_delete(sk, i) ((ESS_CERT_ID
*)OPENSSL_sk_delete(ossl_check_ESS_CERT_ID_sk_type(sk), (i)))
#define sk_ESS_CERT_ID_delete_ptr(sk, ptr) ((ESS_CERT_ID
*)OPENSSL_sk_delete_ptr(ossl_check_ESS_CERT_ID_sk_type(sk), ossl_check_ESS_CERT_ID_type(ptr)))
#define sk_ESS_CERT_ID_push(sk, ptr) OPENSSL_sk_push(ossl_check_ESS_CERT_ID_sk_type(sk),
 ossl_check_ESS_CERT_ID_type(ptr))
#define sk_ESS_CERT_ID_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_ESS_CERT_ID_sk_type(sk),
ossl_check_ESS_CERT_ID_type(ptr))
#define sk_ESS_CERT_ID_pop(sk) ((ESS_CERT_ID
*)OPENSSL_sk_pop(ossl_check_ESS_CERT_ID_sk_type(sk)))
#define sk_ESS_CERT_ID_shift(sk) ((ESS_CERT_ID
*)OPENSSL_sk_shift(ossl_check_ESS_CERT_ID_sk_type(sk)))
#define sk_ESS_CERT_ID_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ESS_CERT_ID_sk_type(sk),ossl_check_ESS_CERT_ID_freefunc_type(freefu
nc))
#define sk_ESS_CERT_ID_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_ESS_CERT_ID_sk_type(sk),
ossl_check_ESS_CERT_ID_type(ptr), (idx))
#define sk_ESS_CERT_ID_set(sk, idx, ptr) ((ESS_CERT_ID
*)OPENSSL_sk_set(ossl_check_ESS_CERT_ID_sk_type(sk), (idx), ossl_check_ESS_CERT_ID_type(ptr)))
#define sk_ESS_CERT_ID_find(sk, ptr) OPENSSL_sk_find(ossl_check_ESS_CERT_ID_sk_type(sk),
ossl_check_ESS_CERT_ID_type(ptr))
#define sk_ESS_CERT_ID_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_ESS_CERT_ID_sk_type(sk),
 ossl_check_ESS_CERT_ID_type(ptr))
#define sk_ESS_CERT_ID_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_ESS_CERT_ID_sk_type(sk), ossl_check_ESS_CERT_ID_type(ptr), pnum)
#define sk_ESS_CERT_ID_sort(sk) OPENSSL_sk_sort(ossl_check_ESS_CERT_ID_sk_type(sk))
#define sk_ESS_CERT_ID_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_ESS_CERT_ID_sk_type(sk))
#define sk_ESS_CERT_ID_dup(sk) ((STACK_OF(ESS_CERT_ID)
*)OPENSSL_sk_dup(ossl_check_const_ESS_CERT_ID_sk_type(sk)))
#define sk_ESS_CERT_ID_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ESS_CERT_ID)
*)OPENSSL_sk_deep_copy(ossl_check_const_ESS_CERT_ID_sk_type(sk),
ossl_check_ESS_CERT_ID_copyfunc_type(copyfunc), ossl_check_ESS_CERT_ID_freefunc_type(freefunc)))
#define sk_ESS_CERT_ID_set_cmp_func(sk, cmp)
((sk_ESS_CERT_ID_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ESS_CERT_ID_sk_type(sk),
ossl_check_ESS_CERT_ID_compfunc_type(cmp)))



typedef struct ESS_signing_cert_v2_st ESS_SIGNING_CERT_V2;
typedef
 struct ESS_cert_id_v2_st ESS_CERT_ID_V2;

SKM_DEFINE_STACK_OF_INTERNAL(ESS_CERT_ID_V2, ESS_CERT_ID_V2, ESS_CERT_ID_V2)
#define sk_ESS_CERT_ID_V2_num(sk) OPENSSL_sk_num(ossl_check_const_ESS_CERT_ID_V2_sk_type(sk))
#define sk_ESS_CERT_ID_V2_value(sk, idx) ((ESS_CERT_ID_V2
```

```
*)OPENSSL_sk_value(ossl_check_const_ESS_CERT_ID_V2_sk_type(sk), (idx)))
#define sk_ESS_CERT_ID_V2_new(cmp) ((STACK_OF(ESS_CERT_ID_V2)
*)OPENSSL_sk_new(ossl_check_ESS_CERT_ID_V2_compfunc_type(cmp)))
#define sk_ESS_CERT_ID_V2_new_null() ((STACK_OF(ESS_CERT_ID_V2) *)OPENSSL_sk_new_null())
#define sk_ESS_CERT_ID_V2_new_reserve(cmp, n) ((STACK_OF(ESS_CERT_ID_V2)
*)OPENSSL_sk_new_reserve(ossl_check_ESS_CERT_ID_V2_compfunc_type(cmp), (n)))
#define sk_ESS_CERT_ID_V2_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_ESS_CERT_ID_V2_sk_type(sk),
(n))
#define sk_ESS_CERT_ID_V2_free(sk) OPENSSL_sk_free(ossl_check_ESS_CERT_ID_V2_sk_type(sk))
#define sk_ESS_CERT_ID_V2_zero(sk) OPENSSL_sk_zero(ossl_check_ESS_CERT_ID_V2_sk_type(sk))
#define
 sk_ESS_CERT_ID_V2_delete(sk, i) ((ESS_CERT_ID_V2
*)OPENSSL_sk_delete(ossl_check_ESS_CERT_ID_V2_sk_type(sk), (i)))
#define sk_ESS_CERT_ID_V2_delete_ptr(sk, ptr) ((ESS_CERT_ID_V2
*)OPENSSL_sk_delete_ptr(ossl_check_ESS_CERT_ID_V2_sk_type(sk),
ossl_check_ESS_CERT_ID_V2_type(ptr)))
#define sk_ESS_CERT_ID_V2_push(sk, ptr) OPENSSL_sk_push(ossl_check_ESS_CERT_ID_V2_sk_type(sk),
ossl_check_ESS_CERT_ID_V2_type(ptr))
#define sk_ESS_CERT_ID_V2_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_ESS_CERT_ID_V2_sk_type(sk), ossl_check_ESS_CERT_ID_V2_type(ptr))
#define sk_ESS_CERT_ID_V2_pop(sk) ((ESS_CERT_ID_V2
*)OPENSSL_sk_pop(ossl_check_ESS_CERT_ID_V2_sk_type(sk)))
#define sk_ESS_CERT_ID_V2_shift(sk) ((ESS_CERT_ID_V2
*)OPENSSL_sk_shift(ossl_check_ESS_CERT_ID_V2_sk_type(sk)))
#define sk_ESS_CERT_ID_V2_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ESS_CERT_ID_V2_sk_type(sk),ossl_check_ESS_CERT_ID_V2_freefunc_ty
pe(freefunc))
#define sk_ESS_CERT_ID_V2_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_ESS_CERT_ID_V2_sk_type(sk),
 ossl_check_ESS_CERT_ID_V2_type(ptr), (idx))
#define sk_ESS_CERT_ID_V2_set(sk, idx, ptr) ((ESS_CERT_ID_V2
*)OPENSSL_sk_set(ossl_check_ESS_CERT_ID_V2_sk_type(sk), (idx),
ossl_check_ESS_CERT_ID_V2_type(ptr)))
#define sk_ESS_CERT_ID_V2_find(sk, ptr) OPENSSL_sk_find(ossl_check_ESS_CERT_ID_V2_sk_type(sk),
ossl_check_ESS_CERT_ID_V2_type(ptr))
#define sk_ESS_CERT_ID_V2_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_ESS_CERT_ID_V2_sk_type(sk), ossl_check_ESS_CERT_ID_V2_type(ptr))
#define sk_ESS_CERT_ID_V2_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_ESS_CERT_ID_V2_sk_type(sk), ossl_check_ESS_CERT_ID_V2_type(ptr),
pnum)
#define sk_ESS_CERT_ID_V2_sort(sk) OPENSSL_sk_sort(ossl_check_ESS_CERT_ID_V2_sk_type(sk))
#define sk_ESS_CERT_ID_V2_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_ESS_CERT_ID_V2_sk_type(sk))
#define sk_ESS_CERT_ID_V2_dup(sk) ((STACK_OF(ESS_CERT_ID_V2)
*)OPENSSL_sk_dup(ossl_check_const_ESS_CERT_ID_V2_sk_type(sk)))
#define
 sk_ESS_CERT_ID_V2_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ESS_CERT_ID_V2)
*)OPENSSL_sk_deep_copy(ossl_check_const_ESS_CERT_ID_V2_sk_type(sk),
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```
ossl_check_ESS_CERT_ID_V2_copyfunc_type(copyfunc),
ossl_check_ESS_CERT_ID_V2_freefunc_type(freefunc)))
#define sk_ESS_CERT_ID_V2_set_cmp_func(sk, cmp)
((sk_ESS_CERT_ID_V2_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ESS_CERT_ID_V2_sk_type(sk),
ossl_check_ESS_CERT_ID_V2_compfunc_type(cmp)))


DECLARE_ASN1_ALLOC_FUNCTIONS(ESS_ISSUER_SERIAL)
DECLARE_ASN1_ENCODE_FUNCTIONS_only(ESS_ISSUER_SERIAL, ESS_ISSUER_SERIAL)
DECLARE_ASN1_DUP_FUNCTION(ESS_ISSUER_SERIAL)

DECLARE_ASN1_ALLOC_FUNCTIONS(ESS_CERT_ID)
DECLARE_ASN1_ENCODE_FUNCTIONS_only(ESS_CERT_ID, ESS_CERT_ID)
DECLARE_ASN1_DUP_FUNCTION(ESS_CERT_ID)

DECLARE_ASN1_FUNCTIONS(ESS_SIGNING_CERT)
DECLARE_ASN1_DUP_FUNCTION(ESS_SIGNING_CERT)

DECLARE_ASN1_ALLOC_FUNCTIONS(ESS_CERT_ID_V2)
DECLARE_ASN1_ENCODE_FUNCTIONS_only(ESS_CERT_ID_V2, ESS_CERT_ID_V2)
DECLARE_ASN1_DUP_FUNCTION(ESS_CERT_ID_V2)

DECLARE_ASN1_FUNCTIONS(ESS_SIGNING_CERT_V2)
DECLARE_ASN1_DUP_FUNCTION(ESS_SIGNING_CERT_V2)

ESS_SIGNING_CERT
 *OSSL_ESS_signing_cert_new_init(const X509 *signcert,
                                const STACK_OF(X509) *certs,
                                int set_issuer_serial);
ESS_SIGNING_CERT_V2 *OSSL_ESS_signing_cert_v2_new_init(const EVP_MD *hash_alg,
                                    const X509 *signcert,
                                    const
                                    STACK_OF(X509) *certs,
                                    int set_issuer_serial);
int OSSL_ESS_check_signing_certs(const ESS_SIGNING_CERT *ss,
                        const ESS_SIGNING_CERT_V2 *ssv2,
                        const STACK_OF(X509) *chain,
                        int require_signing_cert);

# ifdef  __cplusplus
}
# endif
#endif
ISC
{
 'variables': {
   'openssl_sources': [
     'openssl/ssl/bio_ssl.c',
```

'openssl/ssl/d1_lib.c',
'openssl/ssl/d1_msg.c',
'openssl/ssl/d1_srtp.c',
'openssl/ssl/methods.c',
'openssl/ssl/pqueue.c',
'openssl/ssl/s3_enc.c',
'openssl/ssl/s3_lib.c',
'openssl/ssl/s3_msg.c',
'openssl/ssl/ssl_asn1.c',
'openssl/ssl/ssl_cert.c',
'openssl/ssl/ssl_ciph.c',
'openssl/ssl/ssl_conf.c',
'openssl/ssl/ssl_err.c',
'openssl/ssl/ssl_err_legacy.c',
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'openssl/ssl/ssl_lib.c',
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'openssl/ssl/tls_depr.c',
'openssl/ssl/tls_srp.c',
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'openssl/crypto/aes/aes_misc.c',

'openssl/crypto/aes/aes_ofb.c',
'openssl/crypto/aes/aes_wrap.c',
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'openssl/crypto/asn1/a_gentm.c',
'openssl/crypto/asn1/a_i2d_fp.c',
'openssl/crypto/asn1/a_int.c',
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'openssl/crypto/asn1/asn1_err.c',
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'openssl/crypto/asn1/asn1_parse.c',
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'openssl/crypto/asn1/asn_moid.c',
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'openssl/crypto/asn1/asn_pack.c',
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'openssl/crypto/asn1/d2i_pr.c',
'openssl/crypto/asn1/d2i_pu.c',
'openssl/crypto/asn1/evp_asn1.c',
'openssl/crypto/asn1/f_int.c',
'openssl/crypto/asn1/f_string.c',
'openssl/crypto/asn1/i2d_evp.c',
'openssl/crypto/asn1/n_pkey.c',
'openssl/crypto/asn1/nsseq.c',
'openssl/crypto/asn1/p5_pbe.c',
'openssl/crypto/asn1/p5_pbev2.c',
'openssl/crypto/asn1/p5_scrypt.c',
'openssl/crypto/asn1/p8_pkey.c',
'openssl/crypto/asn1/t_bitst.c',

'openssl/crypto/asn1/t_pkey.c',
'openssl/crypto/asn1/t_spki.c',
'openssl/crypto/asn1/tasn_dec.c',
'openssl/crypto/asn1/tasn_enc.c',
'openssl/crypto/asn1/tasn_fre.c',
'openssl/crypto/asn1/tasn_new.c',
'openssl/crypto/asn1/tasn_prn.c',
'openssl/crypto/asn1/tasn_scn.c',
'openssl/crypto/asn1/tasn_typ.c',
'openssl/crypto/asn1/tasn_utl.c',
'openssl/crypto/asn1/x_algor.c',
'openssl/crypto/asn1/x_bignum.c',
'openssl/crypto/asn1/x_info.c',
'openssl/crypto/asn1/x_int64.c',
'openssl/crypto/asn1/x_long.c',
'openssl/crypto/asn1/x_pkey.c',
'openssl/crypto/asn1/x_sig.c',
'openssl/crypto/asn1/x_spki.c',
'openssl/crypto/asn1/x_val.c',
'openssl/crypto/async/arch/async_null.c',
'openssl/crypto/async/arch/async_posix.c',
'openssl/crypto/async/arch/async_win.c',
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'openssl/crypto/async/async_err.c',
'openssl/crypto/async/async_wait.c',
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'openssl/crypto/bf/bf_ecb.c',
'openssl/crypto/bf/bf_ofb64.c',
'openssl/crypto/bf/bf_skey.c',
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'openssl/crypto/bio/bf_nbio.c',
'openssl/crypto/bio/bf_null.c',
'openssl/crypto/bio/bf_prefix.c',
'openssl/crypto/bio/bf_readbuff.c',
'openssl/crypto/bio/bio_addr.c',
'openssl/crypto/bio/bio_cb.c',
'openssl/crypto/bio/bio_dump.c',
'openssl/crypto/bio/bio_err.c',
'openssl/crypto/bio/bio_lib.c',
'openssl/crypto/bio/bio_meth.c',
'openssl/crypto/bio/bio_print.c',
'openssl/crypto/bio/bio_sock.c',
'openssl/crypto/bio/bio_sock2.c',
'openssl/crypto/bio/bss_acpt.c',
'openssl/crypto/bio/bss_bio.c',
'openssl/crypto/bio/bss_conn.c',
'openssl/crypto/bio/bss_core.c',

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  'openssl/crypto/bio/bss_dgram.c',
  'openssl/crypto/bio/bss_fd.c',
  'openssl/crypto/bio/bss_file.c',
  'openssl/crypto/bio/bss_log.c',
  'openssl/crypto/bio/bss_mem.c',
  'openssl/crypto/bio/bss_null.c',
  'openssl/crypto/bio/bss_sock.c',
  'openssl/crypto/bio/ossl_core_bio.c',
  'openssl/crypto/bn/bn_add.c',
  'openssl/crypto/bn/bn_blind.c',
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  'openssl/crypto/bn/bn_srp.c',

'openssl/crypto/bn/bn_word.c',
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  'openssl/crypto/buffer/buffer.c',
  'openssl/crypto/camellia/cmll_cfb.c',
  'openssl/crypto/camellia/cmll_ctr.c',
  'openssl/crypto/camellia/cmll_ecb.c',
  'openssl/crypto/camellia/cmll_ofb.c',
```

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'openssl/crypto/cast/c_ofb64.c',
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'openssl/crypto/ct/ct_b64.c',

'openssl/crypto/ct/ct_err.c',
'openssl/crypto/ct/ct_log.c',
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'openssl/crypto/ct/ct_policy.c',
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  'openssl/providers/implementations/digests/mdc2_prov.c',
  'openssl/providers/implementations/digests/ripemd_prov.c',
  'openssl/providers/implementations/digests/wp_prov.c',
  'openssl/providers/implementations/kdfs/pbkdf1.c',
  'openssl/providers/prov_running.c',
  'openssl/providers/legacyprov.c',
],
'openssl_sources_BSD-x86': [
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  './config/archs/BSD-x86/asm/crypto/aes/aesni-x86.S',
  './config/archs/BSD-x86/asm/crypto/aes/vpaes-x86.S',
  './config/archs/BSD-x86/asm/crypto/bf/bf-586.S',
  './config/archs/BSD-x86/asm/crypto/bn/bn-586.S',
  './config/archs/BSD-x86/asm/crypto/bn/co-586.S',
  './config/archs/BSD-x86/asm/crypto/bn/x86-gf2m.S',
  './config/archs/BSD-x86/asm/crypto/bn/x86-mont.S',
  './config/archs/BSD-x86/asm/crypto/camellia/cmll-x86.S',
  './config/archs/BSD-x86/asm/crypto/chacha/chacha-x86.S',
  './config/archs/BSD-x86/asm/crypto/des/crypt586.S',
  './config/archs/BSD-x86/asm/crypto/des/des-586.S',
  './config/archs/BSD-x86/asm/crypto/ec/ecp_nistz256-x86.S',
  './config/archs/BSD-x86/asm/crypto/x86cpuid.S',
  './config/archs/BSD-x86/asm/crypto/md5/md5-586.S',
  './config/archs/BSD-x86/asm/crypto/modes/ghash-x86.S',
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```
  './config/archs/BSD-x86/asm/crypto/poly1305/poly1305-x86.S',
   './config/archs/BSD-x86/asm/crypto/rc4/rc4-586.S',
  './config/archs/BSD-x86/asm/crypto/ripemd/rmd-586.S',
  './config/archs/BSD-x86/asm/crypto/sha/sha1-586.S',
  './config/archs/BSD-x86/asm/crypto/sha/sha256-586.S',
  './config/archs/BSD-x86/asm/crypto/sha/sha512-586.S',
  './config/archs/BSD-x86/asm/crypto/whrlpool/wp-mmx.S',
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  './config/archs/BSD-x86/asm/providers/common/der/der_sm2_gen.c',
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  './config/archs/BSD-x86/asm/providers/legacy.ld',
  './config/archs/BSD-x86/asm/providers/fips.ld',
 ],
'openssl_defines_BSD-x86': [
  'NDEBUG',
  'L_ENDIAN',
  'OPENSSL_BUILDING_OPENSSL',
  'AES_ASM',
  'CMLL_ASM',
  'DES_ASM',
  'ECP_NISTZ256_ASM',
  'GHASH_ASM',
  'MD5_ASM',
  'OPENSSL_BN_ASM_GF2m',
  'OPENSSL_BN_ASM_MONT',
  'OPENSSL_BN_ASM_PART_WORDS',
  'OPENSSL_CPUID_OBJ',
  'OPENSSL_IA32_SSE2',
  'PADLOCK_ASM',
  'POLY1305_ASM',
  'RC4_ASM',
  'RMD160_ASM',
  'SHA1_ASM',
  'SHA256_ASM',
  'SHA512_ASM',
  'VPAES_ASM',
  'WHIRLPOOL_ASM',
  'OPENSSL_PIC',
 ],
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  '-Wa,--noexecstack',
  '-Wall -O3 -fomit-frame-pointer',
  '-pthread',
```

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  ],
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    '-pthread',
  ],
 },
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  './crypto',
  './crypto/include/internal',
  './providers/common/include',
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  'cflags' : ['<@(openssl_cflags_BSD-x86)'],
 'libraries': ['<@(openssl_ex_libs_BSD-x86)'],
 'sources': ['<@(openssl_sources)', '<@(openssl_sources_BSD-x86)'],
 'direct_dependent_settings': {
  'include_dirs': ['./include', '.'],
  'defines': ['<@(openssl_defines_BSD-x86)'],
 },
}
```

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```
#ifndef SRC_PERMISSION_PERMISSION_BASE_H_
#define SRC_PERMISSION_PERMISSION_BASE_H_

#if defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS

#include <map>
#include <string>
#include <string_view>
#include "v8.h"

namespace node {

class Environment;

namespace permission {

#define FILESYSTEM_PERMISSIONS(V)                                    \
 V(FileSystem, "fs", PermissionsRoot)                          \
 V(FileSystemRead, "fs.read", FileSystem)                        \
 V(FileSystemWrite, "fs.write", FileSystem)

#define CHILD_PROCESS_PERMISSIONS(V) V(ChildProcess, "child", PermissionsRoot)
```

```
#define WASI_PERMISSIONS(V) V(WASI, "wasi", PermissionsRoot)

#define WORKER_THREADS_PERMISSIONS(V)                                   \
 V(WorkerThreads, "worker", PermissionsRoot)

#define INSPECTOR_PERMISSIONS(V) V(Inspector, "inspector", PermissionsRoot)

#define PERMISSIONS(V)                                          \
 FILESYSTEM_PERMISSIONS(V)
                                        \
 CHILD_PROCESS_PERMISSIONS(V)                                   \
 WASI_PERMISSIONS(V)                                            \
 WORKER_THREADS_PERMISSIONS(V)                                  \
 INSPECTOR_PERMISSIONS(V)

#define V(name, _, __) k##name,
enum class PermissionScope {
 kPermissionsRoot = -1,
 PERMISSIONS(V) kPermissionsCount
};
#undef V

class PermissionBase {
public:
 virtual void Apply(Environment* env,
                    const std::vector<std::string>& allow,
                    PermissionScope scope) = 0;
 virtual bool is_granted(Environment* env,
                         PermissionScope perm,
                         const std::string_view& param = "") const = 0;
};

}  // namespace permission

}  // namespace node

#endif  // defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS
#endif  // SRC_PERMISSION_PERMISSION_BASE_H_
```


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    '-Wall -O3',
  ],
  'openssl_ex_libs_BSD-x86_64': [
    '-pthread',
  ],
  'linker_script': ''
 },
 'include_dirs': [
  '.',
  './include',
  './crypto',
   './crypto/include/internal',
  './providers/common/include',
 ],
 'defines': ['<@(openssl_defines_BSD-x86_64)'],
 'cflags': ['<@(openssl_cflags_BSD-x86_64)'],
 'libraries': ['<@(openssl_ex_libs_BSD-x86_64)'],

 'sources': ['<@(openssl_sources)', '<@(openssl_sources_BSD-x86_64)'],
 'direct_dependent_settings': {
  'include_dirs': ['./include', '.'],
  'defines': ['<@(openssl_defines_BSD-x86_64)'],
 },
}
```

version 1.2.12, March 27th, 2022

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/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/x509.h.in
*
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* https://www.openssl.org/source/license.html
*/

```
#ifndef OPENSSL_X509_H
# define OPENSSL_X509_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_X509_H
# endif

# include <openssl/e_os2.h>
# include <openssl/types.h>
# include <openssl/symhacks.h>
# include <openssl/buffer.h>
# include <openssl/evp.h>
# include <openssl/bio.h>
# include <openssl/asn1.h>
# include <openssl/safestack.h>
# include <openssl/ec.h>

# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  include <openssl/rsa.h>
#  include <openssl/dsa.h>
#
  include <openssl/dh.h>
# endif

# include <openssl/sha.h>
# include <openssl/x509err.h>

#ifdef  __cplusplus
extern "C" {
#endif

/* Needed stacks for types defined in other headers */
SKM_DEFINE_STACK_OF_INTERNAL(X509_NAME, X509_NAME, X509_NAME)
#define sk_X509_NAME_num(sk) OPENSSL_sk_num(ossl_check_const_X509_NAME_sk_type(sk))
#define sk_X509_NAME_value(sk, idx) ((X509_NAME
*)OPENSSL_sk_value(ossl_check_const_X509_NAME_sk_type(sk), (idx)))
#define sk_X509_NAME_new(cmp) ((STACK_OF(X509_NAME)
*)OPENSSL_sk_new(ossl_check_X509_NAME_compfunc_type(cmp)))
#define sk_X509_NAME_new_null() ((STACK_OF(X509_NAME) *)OPENSSL_sk_new_null())
#define sk_X509_NAME_new_reserve(cmp, n) ((STACK_OF(X509_NAME)
*)OPENSSL_sk_new_reserve(ossl_check_X509_NAME_compfunc_type(cmp), (n)))
#define sk_X509_NAME_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_X509_NAME_sk_type(sk), (n))
#define sk_X509_NAME_free(sk) OPENSSL_sk_free(ossl_check_X509_NAME_sk_type(sk))
#define sk_X509_NAME_zero(sk) OPENSSL_sk_zero(ossl_check_X509_NAME_sk_type(sk))
#define
```

```
 sk_X509_NAME_delete(sk, i) ((X509_NAME *)OPENSSL_sk_delete(ossl_check_X509_NAME_sk_type(sk),
(i)))
#define sk_X509_NAME_delete_ptr(sk, ptr) ((X509_NAME
*)OPENSSL_sk_delete_ptr(ossl_check_X509_NAME_sk_type(sk), ossl_check_X509_NAME_type(ptr)))
#define sk_X509_NAME_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_NAME_sk_type(sk),
ossl_check_X509_NAME_type(ptr))
#define sk_X509_NAME_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_NAME_sk_type(sk),
ossl_check_X509_NAME_type(ptr))
#define sk_X509_NAME_pop(sk) ((X509_NAME *)OPENSSL_sk_pop(ossl_check_X509_NAME_sk_type(sk)))
#define sk_X509_NAME_shift(sk) ((X509_NAME *)OPENSSL_sk_shift(ossl_check_X509_NAME_sk_type(sk)))
#define sk_X509_NAME_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_NAME_sk_type(sk),ossl_check_X509_NAME_freefunc_type(freefunc)
)
#define sk_X509_NAME_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_NAME_sk_type(sk),
ossl_check_X509_NAME_type(ptr), (idx))
#define sk_X509_NAME_set(sk,
 idx, ptr) ((X509_NAME *)OPENSSL_sk_set(ossl_check_X509_NAME_sk_type(sk), (idx),
ossl_check_X509_NAME_type(ptr)))
#define sk_X509_NAME_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_NAME_sk_type(sk),
ossl_check_X509_NAME_type(ptr))
#define sk_X509_NAME_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_X509_NAME_sk_type(sk),
ossl_check_X509_NAME_type(ptr))
#define sk_X509_NAME_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_X509_NAME_sk_type(sk),
ossl_check_X509_NAME_type(ptr), pnum)
#define sk_X509_NAME_sort(sk) OPENSSL_sk_sort(ossl_check_X509_NAME_sk_type(sk))
#define sk_X509_NAME_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_X509_NAME_sk_type(sk))
#define sk_X509_NAME_dup(sk) ((STACK_OF(X509_NAME)
*)OPENSSL_sk_dup(ossl_check_const_X509_NAME_sk_type(sk)))
#define sk_X509_NAME_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_NAME)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_NAME_sk_type(sk),
ossl_check_X509_NAME_copyfunc_type(copyfunc), ossl_check_X509_NAME_freefunc_type(freefunc)))
#define
 sk_X509_NAME_set_cmp_func(sk, cmp)
((sk_X509_NAME_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_NAME_sk_type(sk),
ossl_check_X509_NAME_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(X509, X509, X509)
#define sk_X509_num(sk) OPENSSL_sk_num(ossl_check_const_X509_sk_type(sk))
#define sk_X509_value(sk, idx) ((X509 *)OPENSSL_sk_value(ossl_check_const_X509_sk_type(sk), (idx)))
#define sk_X509_new(cmp) ((STACK_OF(X509) *)OPENSSL_sk_new(ossl_check_X509_compfunc_type(cmp)))
#define sk_X509_new_null() ((STACK_OF(X509) *)OPENSSL_sk_new_null())
#define sk_X509_new_reserve(cmp, n) ((STACK_OF(X509)
*)OPENSSL_sk_new_reserve(ossl_check_X509_compfunc_type(cmp), (n)))
#define sk_X509_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_X509_sk_type(sk), (n))
#define sk_X509_free(sk) OPENSSL_sk_free(ossl_check_X509_sk_type(sk))
#define sk_X509_zero(sk) OPENSSL_sk_zero(ossl_check_X509_sk_type(sk))
#define sk_X509_delete(sk, i) ((X509 *)OPENSSL_sk_delete(ossl_check_X509_sk_type(sk),
 (i)))
#define sk_X509_delete_ptr(sk, ptr) ((X509 *)OPENSSL_sk_delete_ptr(ossl_check_X509_sk_type(sk),
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```
ossl_check_X509_type(ptr)))
#define sk_X509_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_sk_type(sk), ossl_check_X509_type(ptr))
#define sk_X509_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_sk_type(sk),
ossl_check_X509_type(ptr))
#define sk_X509_pop(sk) ((X509 *)OPENSSL_sk_pop(ossl_check_X509_sk_type(sk)))
#define sk_X509_shift(sk) ((X509 *)OPENSSL_sk_shift(ossl_check_X509_sk_type(sk)))
#define sk_X509_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_sk_type(sk),ossl_check_X509_freefunc_type(freefunc))
#define sk_X509_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_sk_type(sk),
ossl_check_X509_type(ptr), (idx))
#define sk_X509_set(sk, idx, ptr) ((X509 *)OPENSSL_sk_set(ossl_check_X509_sk_type(sk), (idx),
ossl_check_X509_type(ptr)))
#define sk_X509_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_sk_type(sk), ossl_check_X509_type(ptr))
#define sk_X509_find_ex(sk,
 ptr) OPENSSL_sk_find_ex(ossl_check_X509_sk_type(sk), ossl_check_X509_type(ptr))
#define sk_X509_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_X509_sk_type(sk),
ossl_check_X509_type(ptr), pnum)
#define sk_X509_sort(sk) OPENSSL_sk_sort(ossl_check_X509_sk_type(sk))
#define sk_X509_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_X509_sk_type(sk))
#define sk_X509_dup(sk) ((STACK_OF(X509) *)OPENSSL_sk_dup(ossl_check_const_X509_sk_type(sk)))
#define sk_X509_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_sk_type(sk), ossl_check_X509_copyfunc_type(copyfunc),
ossl_check_X509_freefunc_type(freefunc)))
#define sk_X509_set_cmp_func(sk, cmp)
((sk_X509_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_sk_type(sk),
ossl_check_X509_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(X509_REVOKED, X509_REVOKED, X509_REVOKED)
#define sk_X509_REVOKED_num(sk) OPENSSL_sk_num(ossl_check_const_X509_REVOKED_sk_type(sk))
#define sk_X509_REVOKED_value(sk,
 idx) ((X509_REVOKED *)OPENSSL_sk_value(ossl_check_const_X509_REVOKED_sk_type(sk), (idx)))
#define sk_X509_REVOKED_new(cmp) ((STACK_OF(X509_REVOKED)
*)OPENSSL_sk_new(ossl_check_X509_REVOKED_compfunc_type(cmp)))
#define sk_X509_REVOKED_new_null() ((STACK_OF(X509_REVOKED) *)OPENSSL_sk_new_null())
#define sk_X509_REVOKED_new_reserve(cmp, n) ((STACK_OF(X509_REVOKED)
*)OPENSSL_sk_new_reserve(ossl_check_X509_REVOKED_compfunc_type(cmp), (n)))
#define sk_X509_REVOKED_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_X509_REVOKED_sk_type(sk),
(n))
#define sk_X509_REVOKED_free(sk) OPENSSL_sk_free(ossl_check_X509_REVOKED_sk_type(sk))
#define sk_X509_REVOKED_zero(sk) OPENSSL_sk_zero(ossl_check_X509_REVOKED_sk_type(sk))
#define sk_X509_REVOKED_delete(sk, i) ((X509_REVOKED
*)OPENSSL_sk_delete(ossl_check_X509_REVOKED_sk_type(sk), (i)))
#define sk_X509_REVOKED_delete_ptr(sk, ptr) ((X509_REVOKED
*)OPENSSL_sk_delete_ptr(ossl_check_X509_REVOKED_sk_type(sk), ossl_check_X509_REVOKED_type(ptr)))
#define sk_X509_REVOKED_push(sk,
 ptr) OPENSSL_sk_push(ossl_check_X509_REVOKED_sk_type(sk), ossl_check_X509_REVOKED_type(ptr))
#define sk_X509_REVOKED_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_REVOKED_sk_type(sk),
ossl_check_X509_REVOKED_type(ptr))
#define sk_X509_REVOKED_pop(sk) ((X509_REVOKED
```

```
*)OPENSSL_sk_pop(ossl_check_X509_REVOKED_sk_type(sk)))
#define sk_X509_REVOKED_shift(sk) ((X509_REVOKED
*)OPENSSL_sk_shift(ossl_check_X509_REVOKED_sk_type(sk)))
#define sk_X509_REVOKED_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_REVOKED_sk_type(sk),ossl_check_X509_REVOKED_freefunc_type(
freefunc))
#define sk_X509_REVOKED_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_REVOKED_sk_type(sk),
ossl_check_X509_REVOKED_type(ptr), (idx))
#define sk_X509_REVOKED_set(sk, idx, ptr) ((X509_REVOKED
*)OPENSSL_sk_set(ossl_check_X509_REVOKED_sk_type(sk), (idx), ossl_check_X509_REVOKED_type(ptr)))
#define sk_X509_REVOKED_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_REVOKED_sk_type(sk),
ossl_check_X509_REVOKED_type(ptr))
#define
 sk_X509_REVOKED_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_X509_REVOKED_sk_type(sk),
ossl_check_X509_REVOKED_type(ptr))
#define sk_X509_REVOKED_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_X509_REVOKED_sk_type(sk), ossl_check_X509_REVOKED_type(ptr),
pnum)
#define sk_X509_REVOKED_sort(sk) OPENSSL_sk_sort(ossl_check_X509_REVOKED_sk_type(sk))
#define sk_X509_REVOKED_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_X509_REVOKED_sk_type(sk))
#define sk_X509_REVOKED_dup(sk) ((STACK_OF(X509_REVOKED)
*)OPENSSL_sk_dup(ossl_check_const_X509_REVOKED_sk_type(sk)))
#define sk_X509_REVOKED_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_REVOKED)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_REVOKED_sk_type(sk),
ossl_check_X509_REVOKED_copyfunc_type(copyfunc),
ossl_check_X509_REVOKED_freefunc_type(freefunc)))
#define sk_X509_REVOKED_set_cmp_func(sk, cmp)
((sk_X509_REVOKED_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_REVOKED_sk_type(sk),
ossl_check_X509_REVOKED_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(X509_CRL,
 X509_CRL, X509_CRL)
#define sk_X509_CRL_num(sk) OPENSSL_sk_num(ossl_check_const_X509_CRL_sk_type(sk))
#define sk_X509_CRL_value(sk, idx) ((X509_CRL
*)OPENSSL_sk_value(ossl_check_const_X509_CRL_sk_type(sk), (idx)))
#define sk_X509_CRL_new(cmp) ((STACK_OF(X509_CRL)
*)OPENSSL_sk_new(ossl_check_X509_CRL_compfunc_type(cmp)))
#define sk_X509_CRL_new_null() ((STACK_OF(X509_CRL) *)OPENSSL_sk_new_null())
#define sk_X509_CRL_new_reserve(cmp, n) ((STACK_OF(X509_CRL)
*)OPENSSL_sk_new_reserve(ossl_check_X509_CRL_compfunc_type(cmp), (n)))
#define sk_X509_CRL_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_X509_CRL_sk_type(sk), (n))
#define sk_X509_CRL_free(sk) OPENSSL_sk_free(ossl_check_X509_CRL_sk_type(sk))
#define sk_X509_CRL_zero(sk) OPENSSL_sk_zero(ossl_check_X509_CRL_sk_type(sk))
#define sk_X509_CRL_delete(sk, i) ((X509_CRL *)OPENSSL_sk_delete(ossl_check_X509_CRL_sk_type(sk),
(i)))
#define sk_X509_CRL_delete_ptr(sk, ptr) ((X509_CRL
 *)OPENSSL_sk_delete_ptr(ossl_check_X509_CRL_sk_type(sk), ossl_check_X509_CRL_type(ptr)))
#define sk_X509_CRL_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_CRL_sk_type(sk),
```

```
ossl_check_X509_CRL_type(ptr))
#define sk_X509_CRL_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_CRL_sk_type(sk),
ossl_check_X509_CRL_type(ptr))
#define sk_X509_CRL_pop(sk) ((X509_CRL *)OPENSSL_sk_pop(ossl_check_X509_CRL_sk_type(sk)))
#define sk_X509_CRL_shift(sk) ((X509_CRL *)OPENSSL_sk_shift(ossl_check_X509_CRL_sk_type(sk)))
#define sk_X509_CRL_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_CRL_sk_type(sk),ossl_check_X509_CRL_freefunc_type(freefunc))
#define sk_X509_CRL_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_CRL_sk_type(sk),
ossl_check_X509_CRL_type(ptr), (idx))
#define sk_X509_CRL_set(sk, idx, ptr) ((X509_CRL *)OPENSSL_sk_set(ossl_check_X509_CRL_sk_type(sk),
(idx), ossl_check_X509_CRL_type(ptr)))
#define sk_X509_CRL_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_CRL_sk_type(sk),
 ossl_check_X509_CRL_type(ptr))
#define sk_X509_CRL_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_X509_CRL_sk_type(sk),
ossl_check_X509_CRL_type(ptr))
#define sk_X509_CRL_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_X509_CRL_sk_type(sk),
ossl_check_X509_CRL_type(ptr), pnum)
#define sk_X509_CRL_sort(sk) OPENSSL_sk_sort(ossl_check_X509_CRL_sk_type(sk))
#define sk_X509_CRL_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_X509_CRL_sk_type(sk))
#define sk_X509_CRL_dup(sk) ((STACK_OF(X509_CRL)
*)OPENSSL_sk_dup(ossl_check_const_X509_CRL_sk_type(sk)))
#define sk_X509_CRL_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_CRL)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_CRL_sk_type(sk),
ossl_check_X509_CRL_copyfunc_type(copyfunc), ossl_check_X509_CRL_freefunc_type(freefunc)))
#define sk_X509_CRL_set_cmp_func(sk, cmp)
((sk_X509_CRL_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_CRL_sk_type(sk),
ossl_check_X509_CRL_compfunc_type(cmp)))


/* Flags for X509_get_signature_info()
 */
/* Signature info is valid */
# define X509_SIG_INFO_VALID     0x1
/* Signature is suitable for TLS use */
# define X509_SIG_INFO_TLS       0x2

# define X509_FILETYPE_PEM       1
# define X509_FILETYPE_ASN1      2
# define X509_FILETYPE_DEFAULT   3

# define X509v3_KU_DIGITAL_SIGNATURE     0x0080
# define X509v3_KU_NON_REPUDIATION       0x0040
# define X509v3_KU_KEY_ENCIPHERMENT      0x0020
# define X509v3_KU_DATA_ENCIPHERMENT     0x0010
# define X509v3_KU_KEY_AGREEMENT         0x0008
# define X509v3_KU_KEY_CERT_SIGN         0x0004
# define X509v3_KU_CRL_SIGN              0x0002
# define X509v3_KU_ENCIPHER_ONLY         0x0001
```

```
# define X509v3_KU_DECIPHER_ONLY         0x8000
# define X509v3_KU_UNDEF                 0xffff

struct X509_algor_st {
   ASN1_OBJECT *algorithm;
   ASN1_TYPE *parameter;
} /* X509_ALGOR */ ;

typedef STACK_OF(X509_ALGOR) X509_ALGORS;

typedef struct X509_val_st {
   ASN1_TIME *notBefore;
   ASN1_TIME *notAfter;
} X509_VAL;

typedef struct X509_sig_st
 X509_SIG;

typedef struct X509_name_entry_st X509_NAME_ENTRY;

SKM_DEFINE_STACK_OF_INTERNAL(X509_NAME_ENTRY, X509_NAME_ENTRY,
X509_NAME_ENTRY)
#define sk_X509_NAME_ENTRY_num(sk)
OPENSSL_sk_num(ossl_check_const_X509_NAME_ENTRY_sk_type(sk))
#define sk_X509_NAME_ENTRY_value(sk, idx) ((X509_NAME_ENTRY
*)OPENSSL_sk_value(ossl_check_const_X509_NAME_ENTRY_sk_type(sk), (idx)))
#define sk_X509_NAME_ENTRY_new(cmp) ((STACK_OF(X509_NAME_ENTRY)
*)OPENSSL_sk_new(ossl_check_X509_NAME_ENTRY_compfunc_type(cmp)))
#define sk_X509_NAME_ENTRY_new_null() ((STACK_OF(X509_NAME_ENTRY)
*)OPENSSL_sk_new_null())
#define sk_X509_NAME_ENTRY_new_reserve(cmp, n) ((STACK_OF(X509_NAME_ENTRY)
*)OPENSSL_sk_new_reserve(ossl_check_X509_NAME_ENTRY_compfunc_type(cmp), (n)))
#define sk_X509_NAME_ENTRY_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_X509_NAME_ENTRY_sk_type(sk), (n))
#define sk_X509_NAME_ENTRY_free(sk) OPENSSL_sk_free(ossl_check_X509_NAME_ENTRY_sk_type(sk))
#define sk_X509_NAME_ENTRY_zero(sk) OPENSSL_sk_zero(ossl_check_X509_NAME_ENTRY_sk_type(sk))
#define
 sk_X509_NAME_ENTRY_delete(sk, i) ((X509_NAME_ENTRY
*)OPENSSL_sk_delete(ossl_check_X509_NAME_ENTRY_sk_type(sk), (i)))
#define sk_X509_NAME_ENTRY_delete_ptr(sk, ptr) ((X509_NAME_ENTRY
*)OPENSSL_sk_delete_ptr(ossl_check_X509_NAME_ENTRY_sk_type(sk),
ossl_check_X509_NAME_ENTRY_type(ptr)))
#define sk_X509_NAME_ENTRY_push(sk, ptr)
OPENSSL_sk_push(ossl_check_X509_NAME_ENTRY_sk_type(sk),
ossl_check_X509_NAME_ENTRY_type(ptr))
#define sk_X509_NAME_ENTRY_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_X509_NAME_ENTRY_sk_type(sk),
ossl_check_X509_NAME_ENTRY_type(ptr))
```

```
#define sk_X509_NAME_ENTRY_pop(sk) ((X509_NAME_ENTRY
*)OPENSSL_sk_pop(ossl_check_X509_NAME_ENTRY_sk_type(sk)))
#define sk_X509_NAME_ENTRY_shift(sk) ((X509_NAME_ENTRY
*)OPENSSL_sk_shift(ossl_check_X509_NAME_ENTRY_sk_type(sk)))
#define sk_X509_NAME_ENTRY_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_NAME_ENTRY_sk_type(sk),ossl_check_X509_NAME_ENTRY_freef
unc_type(freefunc))
#define sk_X509_NAME_ENTRY_insert(sk,
 ptr, idx) OPENSSL_sk_insert(ossl_check_X509_NAME_ENTRY_sk_type(sk),
ossl_check_X509_NAME_ENTRY_type(ptr), (idx))
#define sk_X509_NAME_ENTRY_set(sk, idx, ptr) ((X509_NAME_ENTRY
*)OPENSSL_sk_set(ossl_check_X509_NAME_ENTRY_sk_type(sk), (idx),
ossl_check_X509_NAME_ENTRY_type(ptr)))
#define sk_X509_NAME_ENTRY_find(sk, ptr)
OPENSSL_sk_find(ossl_check_X509_NAME_ENTRY_sk_type(sk),
ossl_check_X509_NAME_ENTRY_type(ptr))
#define sk_X509_NAME_ENTRY_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_X509_NAME_ENTRY_sk_type(sk),
ossl_check_X509_NAME_ENTRY_type(ptr))
#define sk_X509_NAME_ENTRY_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_X509_NAME_ENTRY_sk_type(sk),
ossl_check_X509_NAME_ENTRY_type(ptr), pnum)
#define sk_X509_NAME_ENTRY_sort(sk) OPENSSL_sk_sort(ossl_check_X509_NAME_ENTRY_sk_type(sk))
#define sk_X509_NAME_ENTRY_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_X509_NAME_ENTRY_sk_type(sk))
#define sk_X509_NAME_ENTRY_dup(sk) ((STACK_OF(X509_NAME_ENTRY)
 *)OPENSSL_sk_dup(ossl_check_const_X509_NAME_ENTRY_sk_type(sk)))
#define sk_X509_NAME_ENTRY_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_NAME_ENTRY)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_NAME_ENTRY_sk_type(sk),
ossl_check_X509_NAME_ENTRY_copyfunc_type(copyfunc),
ossl_check_X509_NAME_ENTRY_freefunc_type(freefunc)))
#define sk_X509_NAME_ENTRY_set_cmp_func(sk, cmp)
((sk_X509_NAME_ENTRY_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_NAME_ENTRY_sk_type
(sk), ossl_check_X509_NAME_ENTRY_compfunc_type(cmp)))


# define X509_EX_V_NETSCAPE_HACK        0x8000
# define X509_EX_V_INIT                 0x0001
typedef struct X509_extension_st X509_EXTENSION;
SKM_DEFINE_STACK_OF_INTERNAL(X509_EXTENSION, X509_EXTENSION, X509_EXTENSION)
#define sk_X509_EXTENSION_num(sk) OPENSSL_sk_num(ossl_check_const_X509_EXTENSION_sk_type(sk))
#define sk_X509_EXTENSION_value(sk, idx) ((X509_EXTENSION
*)OPENSSL_sk_value(ossl_check_const_X509_EXTENSION_sk_type(sk), (idx)))
#define sk_X509_EXTENSION_new(cmp)
 ((STACK_OF(X509_EXTENSION)
*)OPENSSL_sk_new(ossl_check_X509_EXTENSION_compfunc_type(cmp)))
#define sk_X509_EXTENSION_new_null() ((STACK_OF(X509_EXTENSION) *)OPENSSL_sk_new_null())
#define sk_X509_EXTENSION_new_reserve(cmp, n) ((STACK_OF(X509_EXTENSION)
```

```
*)OPENSSL_sk_new_reserve(ossl_check_X509_EXTENSION_compfunc_type(cmp), (n)))
#define sk_X509_EXTENSION_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_X509_EXTENSION_sk_type(sk), (n))
#define sk_X509_EXTENSION_free(sk) OPENSSL_sk_free(ossl_check_X509_EXTENSION_sk_type(sk))
#define sk_X509_EXTENSION_zero(sk) OPENSSL_sk_zero(ossl_check_X509_EXTENSION_sk_type(sk))
#define sk_X509_EXTENSION_delete(sk, i) ((X509_EXTENSION
*)OPENSSL_sk_delete(ossl_check_X509_EXTENSION_sk_type(sk), (i)))
#define sk_X509_EXTENSION_delete_ptr(sk, ptr) ((X509_EXTENSION
*)OPENSSL_sk_delete_ptr(ossl_check_X509_EXTENSION_sk_type(sk),
ossl_check_X509_EXTENSION_type(ptr)))
#define sk_X509_EXTENSION_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_EXTENSION_sk_type(sk),
ossl_check_X509_EXTENSION_type(ptr))
#define
 sk_X509_EXTENSION_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_EXTENSION_sk_type(sk),
ossl_check_X509_EXTENSION_type(ptr))
#define sk_X509_EXTENSION_pop(sk) ((X509_EXTENSION
*)OPENSSL_sk_pop(ossl_check_X509_EXTENSION_sk_type(sk)))
#define sk_X509_EXTENSION_shift(sk) ((X509_EXTENSION
*)OPENSSL_sk_shift(ossl_check_X509_EXTENSION_sk_type(sk)))
#define sk_X509_EXTENSION_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_EXTENSION_sk_type(sk),ossl_check_X509_EXTENSION_freefunc_t
ype(freefunc))
#define sk_X509_EXTENSION_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_X509_EXTENSION_sk_type(sk), ossl_check_X509_EXTENSION_type(ptr),
(idx))
#define sk_X509_EXTENSION_set(sk, idx, ptr) ((X509_EXTENSION
*)OPENSSL_sk_set(ossl_check_X509_EXTENSION_sk_type(sk), (idx),
ossl_check_X509_EXTENSION_type(ptr)))
#define sk_X509_EXTENSION_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_EXTENSION_sk_type(sk),
ossl_check_X509_EXTENSION_type(ptr))
#define
 sk_X509_EXTENSION_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_X509_EXTENSION_sk_type(sk),
ossl_check_X509_EXTENSION_type(ptr))
#define sk_X509_EXTENSION_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_X509_EXTENSION_sk_type(sk), ossl_check_X509_EXTENSION_type(ptr),
pnum)
#define sk_X509_EXTENSION_sort(sk) OPENSSL_sk_sort(ossl_check_X509_EXTENSION_sk_type(sk))
#define sk_X509_EXTENSION_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_X509_EXTENSION_sk_type(sk))
#define sk_X509_EXTENSION_dup(sk) ((STACK_OF(X509_EXTENSION)
*)OPENSSL_sk_dup(ossl_check_const_X509_EXTENSION_sk_type(sk)))
#define sk_X509_EXTENSION_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_EXTENSION)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_EXTENSION_sk_type(sk),
ossl_check_X509_EXTENSION_copyfunc_type(copyfunc),
ossl_check_X509_EXTENSION_freefunc_type(freefunc)))
#define sk_X509_EXTENSION_set_cmp_func(sk, cmp)
((sk_X509_EXTENSION_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_EXTENSION_sk_type(sk),
```

```
 ossl_check_X509_EXTENSION_compfunc_type(cmp)))

typedef STACK_OF(X509_EXTENSION) X509_EXTENSIONS;
typedef struct x509_attributes_st X509_ATTRIBUTE;
SKM_DEFINE_STACK_OF_INTERNAL(X509_ATTRIBUTE, X509_ATTRIBUTE, X509_ATTRIBUTE)
#define sk_X509_ATTRIBUTE_num(sk) OPENSSL_sk_num(ossl_check_const_X509_ATTRIBUTE_sk_type(sk))
#define sk_X509_ATTRIBUTE_value(sk, idx) ((X509_ATTRIBUTE
*)OPENSSL_sk_value(ossl_check_const_X509_ATTRIBUTE_sk_type(sk), (idx)))
#define sk_X509_ATTRIBUTE_new(cmp) ((STACK_OF(X509_ATTRIBUTE)
*)OPENSSL_sk_new(ossl_check_X509_ATTRIBUTE_compfunc_type(cmp)))
#define sk_X509_ATTRIBUTE_new_null() ((STACK_OF(X509_ATTRIBUTE) *)OPENSSL_sk_new_null())
#define sk_X509_ATTRIBUTE_new_reserve(cmp, n) ((STACK_OF(X509_ATTRIBUTE)
*)OPENSSL_sk_new_reserve(ossl_check_X509_ATTRIBUTE_compfunc_type(cmp), (n)))
#define sk_X509_ATTRIBUTE_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_X509_ATTRIBUTE_sk_type(sk), (n))
#define sk_X509_ATTRIBUTE_free(sk) OPENSSL_sk_free(ossl_check_X509_ATTRIBUTE_sk_type(sk))
#define
 sk_X509_ATTRIBUTE_zero(sk) OPENSSL_sk_zero(ossl_check_X509_ATTRIBUTE_sk_type(sk))
#define sk_X509_ATTRIBUTE_delete(sk, i) ((X509_ATTRIBUTE
*)OPENSSL_sk_delete(ossl_check_X509_ATTRIBUTE_sk_type(sk), (i)))
#define sk_X509_ATTRIBUTE_delete_ptr(sk, ptr) ((X509_ATTRIBUTE
*)OPENSSL_sk_delete_ptr(ossl_check_X509_ATTRIBUTE_sk_type(sk),
ossl_check_X509_ATTRIBUTE_type(ptr)))
#define sk_X509_ATTRIBUTE_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_ATTRIBUTE_sk_type(sk),
ossl_check_X509_ATTRIBUTE_type(ptr))
#define sk_X509_ATTRIBUTE_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_X509_ATTRIBUTE_sk_type(sk), ossl_check_X509_ATTRIBUTE_type(ptr))
#define sk_X509_ATTRIBUTE_pop(sk) ((X509_ATTRIBUTE
*)OPENSSL_sk_pop(ossl_check_X509_ATTRIBUTE_sk_type(sk)))
#define sk_X509_ATTRIBUTE_shift(sk) ((X509_ATTRIBUTE
*)OPENSSL_sk_shift(ossl_check_X509_ATTRIBUTE_sk_type(sk)))
#define sk_X509_ATTRIBUTE_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_ATTRIBUTE_sk_type(sk),ossl_check_X509_ATTRIBUTE_freefunc_t
ype(freefunc))
#define
 sk_X509_ATTRIBUTE_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_ATTRIBUTE_sk_type(sk),
ossl_check_X509_ATTRIBUTE_type(ptr), (idx))
#define sk_X509_ATTRIBUTE_set(sk, idx, ptr) ((X509_ATTRIBUTE
*)OPENSSL_sk_set(ossl_check_X509_ATTRIBUTE_sk_type(sk), (idx),
ossl_check_X509_ATTRIBUTE_type(ptr)))
#define sk_X509_ATTRIBUTE_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_ATTRIBUTE_sk_type(sk),
ossl_check_X509_ATTRIBUTE_type(ptr))
#define sk_X509_ATTRIBUTE_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_X509_ATTRIBUTE_sk_type(sk), ossl_check_X509_ATTRIBUTE_type(ptr))
#define sk_X509_ATTRIBUTE_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_X509_ATTRIBUTE_sk_type(sk), ossl_check_X509_ATTRIBUTE_type(ptr),
pnum)
#define sk_X509_ATTRIBUTE_sort(sk) OPENSSL_sk_sort(ossl_check_X509_ATTRIBUTE_sk_type(sk))
```

```
#define sk_X509_ATTRIBUTE_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_X509_ATTRIBUTE_sk_type(sk))
#define sk_X509_ATTRIBUTE_dup(sk) ((STACK_OF(X509_ATTRIBUTE)
 *)OPENSSL_sk_dup(ossl_check_const_X509_ATTRIBUTE_sk_type(sk)))
#define sk_X509_ATTRIBUTE_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_ATTRIBUTE)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_ATTRIBUTE_sk_type(sk),
ossl_check_X509_ATTRIBUTE_copyfunc_type(copyfunc),
ossl_check_X509_ATTRIBUTE_freefunc_type(freefunc)))
#define sk_X509_ATTRIBUTE_set_cmp_func(sk, cmp)
((sk_X509_ATTRIBUTE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_ATTRIBUTE_sk_type(sk),
ossl_check_X509_ATTRIBUTE_compfunc_type(cmp)))

typedef struct X509_req_info_st X509_REQ_INFO;
typedef struct X509_req_st X509_REQ;
typedef struct x509_cert_aux_st X509_CERT_AUX;
typedef struct x509_cinf_st X509_CINF;

/* Flags for X509_print_ex() */

# define X509_FLAG_COMPAT              0
# define X509_FLAG_NO_HEADER           1L
# define X509_FLAG_NO_VERSION          (1L << 1)
# define X509_FLAG_NO_SERIAL           (1L << 2)
# define X509_FLAG_NO_SIGNAME          (1L << 3)
# define X509_FLAG_NO_ISSUER
          (1L << 4)
# define X509_FLAG_NO_VALIDITY         (1L << 5)
# define X509_FLAG_NO_SUBJECT          (1L << 6)
# define X509_FLAG_NO_PUBKEY           (1L << 7)
# define X509_FLAG_NO_EXTENSIONS       (1L << 8)
# define X509_FLAG_NO_SIGDUMP          (1L << 9)
# define X509_FLAG_NO_AUX              (1L << 10)
# define X509_FLAG_NO_ATTRIBUTES       (1L << 11)
# define X509_FLAG_NO_IDS              (1L << 12)
# define X509_FLAG_EXTENSIONS_ONLY_KID   (1L << 13)

/* Flags specific to X509_NAME_print_ex() */

/* The field separator information */

# define XN_FLAG_SEP_MASK       (0xf << 16)

# define XN_FLAG_COMPAT         0/* Traditional; use old X509_NAME_print */
# define XN_FLAG_SEP_COMMA_PLUS  (1 << 16)/* RFC2253 ,+ */
# define XN_FLAG_SEP_CPLUS_SPC   (2 << 16)/* ,+ spaced: more readable */
# define XN_FLAG_SEP_SPLUS_SPC   (3 << 16)/* ;+ spaced */
# define XN_FLAG_SEP_MULTILINE   (4 << 16)/* One line per field */
```

```
# define XN_FLAG_DN_REV          (1 << 20)/*
 Reverse DN order */

/* How the field name is shown */

# define XN_FLAG_FN_MASK         (0x3 << 21)

# define XN_FLAG_FN_SN           0/* Object short name */
# define XN_FLAG_FN_LN           (1 << 21)/* Object long name */
# define XN_FLAG_FN_OID          (2 << 21)/* Always use OIDs */
# define XN_FLAG_FN_NONE         (3 << 21)/* No field names */

# define XN_FLAG_SPC_EQ          (1 << 23)/* Put spaces round '=' */

/*
* This determines if we dump fields we don't recognise: RFC2253 requires
* this.
*/

# define XN_FLAG_DUMP_UNKNOWN_FIELDS (1 << 24)

# define XN_FLAG_FN_ALIGN        (1 << 25)/* Align field names to 20
                                 * characters */

/* Complete set of RFC2253 flags */

# define XN_FLAG_RFC2253 (ASN1_STRFLGS_RFC2253 | \
                    XN_FLAG_SEP_COMMA_PLUS | \
                    XN_FLAG_DN_REV | \
                    XN_FLAG_FN_SN | \
                    XN_FLAG_DUMP_UNKNOWN_FIELDS)

/* readable oneline form */

#
 define XN_FLAG_ONELINE (ASN1_STRFLGS_RFC2253 | \
                    ASN1_STRFLGS_ESC_QUOTE | \
                    XN_FLAG_SEP_CPLUS_SPC | \
                    XN_FLAG_SPC_EQ | \
                    XN_FLAG_FN_SN)

/* readable multiline form */

# define XN_FLAG_MULTILINE (ASN1_STRFLGS_ESC_CTRL | \
                    ASN1_STRFLGS_ESC_MSB | \
                    XN_FLAG_SEP_MULTILINE | \
                    XN_FLAG_SPC_EQ | \
                    XN_FLAG_FN_LN | \
```

```
                    XN_FLAG_FN_ALIGN)

typedef struct X509_crl_info_st X509_CRL_INFO;

typedef struct private_key_st {
   int version;
   /* The PKCS#8 data types */
   X509_ALGOR *enc_algor;
   ASN1_OCTET_STRING *enc_pkey; /* encrypted pub key */
   /* When decrypted, the following will not be NULL */
   EVP_PKEY *dec_pkey;
   /* used to encrypt and decrypt */
   int key_length;
   char *key_data;
   int key_free;              /* true if we should auto free key_data */
   /*
 expanded version of 'enc_algor' */
   EVP_CIPHER_INFO cipher;
} X509_PKEY;

typedef struct X509_info_st {
   X509 *x509;
   X509_CRL *crl;
   X509_PKEY *x_pkey;
   EVP_CIPHER_INFO enc_cipher;
   int enc_len;
   char *enc_data;
} X509_INFO;
SKM_DEFINE_STACK_OF_INTERNAL(X509_INFO, X509_INFO, X509_INFO)
#define sk_X509_INFO_num(sk) OPENSSL_sk_num(ossl_check_const_X509_INFO_sk_type(sk))
#define sk_X509_INFO_value(sk, idx) ((X509_INFO
*)OPENSSL_sk_value(ossl_check_const_X509_INFO_sk_type(sk), (idx)))
#define sk_X509_INFO_new(cmp) ((STACK_OF(X509_INFO)
*)OPENSSL_sk_new(ossl_check_X509_INFO_compfunc_type(cmp)))
#define sk_X509_INFO_new_null() ((STACK_OF(X509_INFO) *)OPENSSL_sk_new_null())
#define sk_X509_INFO_new_reserve(cmp, n) ((STACK_OF(X509_INFO)
*)OPENSSL_sk_new_reserve(ossl_check_X509_INFO_compfunc_type(cmp), (n)))
#define sk_X509_INFO_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_X509_INFO_sk_type(sk), (n))
#define sk_X509_INFO_free(sk) OPENSSL_sk_free(ossl_check_X509_INFO_sk_type(sk))
#define
 sk_X509_INFO_zero(sk) OPENSSL_sk_zero(ossl_check_X509_INFO_sk_type(sk))
#define sk_X509_INFO_delete(sk, i) ((X509_INFO *)OPENSSL_sk_delete(ossl_check_X509_INFO_sk_type(sk),
(i)))
#define sk_X509_INFO_delete_ptr(sk, ptr) ((X509_INFO
*)OPENSSL_sk_delete_ptr(ossl_check_X509_INFO_sk_type(sk), ossl_check_X509_INFO_type(ptr)))
#define sk_X509_INFO_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_INFO_sk_type(sk),
ossl_check_X509_INFO_type(ptr))
#define sk_X509_INFO_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_INFO_sk_type(sk),
```

```
ossl_check_X509_INFO_type(ptr))
#define sk_X509_INFO_pop(sk) ((X509_INFO *)OPENSSL_sk_pop(ossl_check_X509_INFO_sk_type(sk)))
#define sk_X509_INFO_shift(sk) ((X509_INFO *)OPENSSL_sk_shift(ossl_check_X509_INFO_sk_type(sk)))
#define sk_X509_INFO_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_INFO_sk_type(sk),ossl_check_X509_INFO_freefunc_type(freefunc))
#define sk_X509_INFO_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_INFO_sk_type(sk),
 ossl_check_X509_INFO_type(ptr), (idx))
#define sk_X509_INFO_set(sk, idx, ptr) ((X509_INFO *)OPENSSL_sk_set(ossl_check_X509_INFO_sk_type(sk),
(idx), ossl_check_X509_INFO_type(ptr)))
#define sk_X509_INFO_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_INFO_sk_type(sk),
ossl_check_X509_INFO_type(ptr))
#define sk_X509_INFO_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_X509_INFO_sk_type(sk),
ossl_check_X509_INFO_type(ptr))
#define sk_X509_INFO_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_X509_INFO_sk_type(sk),
ossl_check_X509_INFO_type(ptr), pnum)
#define sk_X509_INFO_sort(sk) OPENSSL_sk_sort(ossl_check_X509_INFO_sk_type(sk))
#define sk_X509_INFO_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_X509_INFO_sk_type(sk))
#define sk_X509_INFO_dup(sk) ((STACK_OF(X509_INFO)
*)OPENSSL_sk_dup(ossl_check_const_X509_INFO_sk_type(sk)))
#define sk_X509_INFO_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_INFO)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_INFO_sk_type(sk),
ossl_check_X509_INFO_copyfunc_type(copyfunc),
 ossl_check_X509_INFO_freefunc_type(freefunc)))
#define sk_X509_INFO_set_cmp_func(sk, cmp)
((sk_X509_INFO_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_INFO_sk_type(sk),
ossl_check_X509_INFO_compfunc_type(cmp)))


/*
* The next 2 structures and their 8 routines are used to manipulate Netscape's
* spki structures - useful if you are writing a CA web page
*/
typedef struct Netscape_spkac_st {
   X509_PUBKEY *pubkey;
   ASN1_IA5STRING *challenge;  /* challenge sent in atlas >= PR2 */
} NETSCAPE_SPKAC;

typedef struct Netscape_spki_st {
   NETSCAPE_SPKAC *spkac;      /* signed public key and challenge */
   X509_ALGOR sig_algor;
   ASN1_BIT_STRING *signature;
} NETSCAPE_SPKI;

/* Netscape certificate sequence structure */
typedef struct Netscape_certificate_sequence {
   ASN1_OBJECT *type;
   STACK_OF(X509) *certs;
} NETSCAPE_CERT_SEQUENCE;
```

```
/*- Unused (and iv length is wrong)
typedef struct CBCParameter_st
      {
      unsigned char iv[8];
       } CBC_PARAM;
*/

/* Password based encryption structure */

typedef struct PBEPARAM_st {
   ASN1_OCTET_STRING *salt;
   ASN1_INTEGER *iter;
} PBEPARAM;

/* Password based encryption V2 structures */

typedef struct PBE2PARAM_st {
   X509_ALGOR *keyfunc;
   X509_ALGOR *encryption;
} PBE2PARAM;

typedef struct PBKDF2PARAM_st {
/* Usually OCTET STRING but could be anything */
   ASN1_TYPE *salt;
   ASN1_INTEGER *iter;
   ASN1_INTEGER *keylength;
   X509_ALGOR *prf;
} PBKDF2PARAM;

#ifndef OPENSSL_NO_SCRYPT
typedef struct SCRYPT_PARAMS_st {
   ASN1_OCTET_STRING *salt;
   ASN1_INTEGER *costParameter;
   ASN1_INTEGER *blockSize;
   ASN1_INTEGER *parallelizationParameter;
   ASN1_INTEGER *keyLength;
} SCRYPT_PARAMS;
#endif

#ifdef  __cplusplus
}
#endif

# include <openssl/x509_vfy.h>
# include <openssl/pkcs7.h>

#ifdef  __cplusplus
```

```
extern "C" {
#endif

# define X509_EXT_PACK_UNKNOWN   1
# define X509_EXT_PACK_STRING    2

# define        X509_extract_key(x)     X509_get_pubkey(x)/*****/
#
 define        X509_REQ_extract_key(a) X509_REQ_get_pubkey(a)
# define        X509_name_cmp(a,b)      X509_NAME_cmp((a),(b))

void X509_CRL_set_default_method(const X509_CRL_METHOD *meth);
X509_CRL_METHOD *X509_CRL_METHOD_new(int (*crl_init) (X509_CRL *crl),
                                     int (*crl_free) (X509_CRL *crl),
                                     int (*crl_lookup) (X509_CRL *crl,
                                                        X509_REVOKED **ret,
                                                        const
                                                        ASN1_INTEGER *serial,
                                                        const
                                                        X509_NAME *issuer),
                                     int (*crl_verify) (X509_CRL *crl,
                                                        EVP_PKEY *pk));
void X509_CRL_METHOD_free(X509_CRL_METHOD *m);

void X509_CRL_set_meth_data(X509_CRL
 *crl, void *dat);
void *X509_CRL_get_meth_data(X509_CRL *crl);

const char *X509_verify_cert_error_string(long n);

int X509_verify(X509 *a, EVP_PKEY *r);
int X509_self_signed(X509 *cert, int verify_signature);

int X509_REQ_verify_ex(X509_REQ *a, EVP_PKEY *r, OSSL_LIB_CTX *libctx,
                       const char *propq);
int X509_REQ_verify(X509_REQ *a, EVP_PKEY *r);
int X509_CRL_verify(X509_CRL *a, EVP_PKEY *r);
int NETSCAPE_SPKI_verify(NETSCAPE_SPKI *a, EVP_PKEY *r);

NETSCAPE_SPKI *NETSCAPE_SPKI_b64_decode(const char *str, int len);
char *NETSCAPE_SPKI_b64_encode(NETSCAPE_SPKI *x);
EVP_PKEY *NETSCAPE_SPKI_get_pubkey(NETSCAPE_SPKI *x);
int NETSCAPE_SPKI_set_pubkey(NETSCAPE_SPKI *x, EVP_PKEY *pkey);

int NETSCAPE_SPKI_print(BIO *out, NETSCAPE_SPKI *spki);

int X509_signature_dump(BIO *bp, const ASN1_STRING *sig, int indent);
int X509_signature_print(BIO *bp, const X509_ALGOR *alg,
```

```
                    const ASN1_STRING *sig);

int X509_sign(X509 *x, EVP_PKEY *pkey, const EVP_MD
 *md);
int X509_sign_ctx(X509 *x, EVP_MD_CTX *ctx);
int X509_REQ_sign(X509_REQ *x, EVP_PKEY *pkey, const EVP_MD *md);
int X509_REQ_sign_ctx(X509_REQ *x, EVP_MD_CTX *ctx);
int X509_CRL_sign(X509_CRL *x, EVP_PKEY *pkey, const EVP_MD *md);
int X509_CRL_sign_ctx(X509_CRL *x, EVP_MD_CTX *ctx);
int NETSCAPE_SPKI_sign(NETSCAPE_SPKI *x, EVP_PKEY *pkey, const EVP_MD *md);

int X509_pubkey_digest(const X509 *data, const EVP_MD *type,
                  unsigned char *md, unsigned int *len);
int X509_digest(const X509 *data, const EVP_MD *type,
            unsigned char *md, unsigned int *len);
ASN1_OCTET_STRING *X509_digest_sig(const X509 *cert,
                           EVP_MD **md_used, int *md_is_fallback);
int X509_CRL_digest(const X509_CRL *data, const EVP_MD *type,
                unsigned char *md, unsigned int *len);
int X509_REQ_digest(const X509_REQ *data, const EVP_MD *type,
                unsigned char *md, unsigned int *len);
int X509_NAME_digest(const
 X509_NAME *data, const EVP_MD *type,
                 unsigned char *md, unsigned int *len);

X509 *X509_load_http(const char *url, BIO *bio, BIO *rbio, int timeout);
X509_CRL *X509_CRL_load_http(const char *url, BIO *bio, BIO *rbio, int timeout);
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  include <openssl/http.h> /* OSSL_HTTP_REQ_CTX_nbio_d2i */
#  define X509_http_nbio(rctx, pcert) \
    OSSL_HTTP_REQ_CTX_nbio_d2i(rctx, pcert, ASN1_ITEM_rptr(X509))
#  define X509_CRL_http_nbio(rctx, pcrl) \
    OSSL_HTTP_REQ_CTX_nbio_d2i(rctx, pcrl, ASN1_ITEM_rptr(X509_CRL))
# endif

# ifndef OPENSSL_NO_STDIO
X509 *d2i_X509_fp(FILE *fp, X509 **x509);
int i2d_X509_fp(FILE *fp, const X509 *x509);
X509_CRL *d2i_X509_CRL_fp(FILE *fp, X509_CRL **crl);
int i2d_X509_CRL_fp(FILE *fp, const X509_CRL *crl);
X509_REQ *d2i_X509_REQ_fp(FILE *fp, X509_REQ **req);
int i2d_X509_REQ_fp(FILE *fp, const X509_REQ *req);
#  ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 RSA *d2i_RSAPrivateKey_fp(FILE *fp, RSA
 **rsa);
OSSL_DEPRECATEDIN_3_0 int i2d_RSAPrivateKey_fp(FILE *fp, const RSA *rsa);
OSSL_DEPRECATEDIN_3_0 RSA *d2i_RSAPublicKey_fp(FILE *fp, RSA **rsa);
OSSL_DEPRECATEDIN_3_0 int i2d_RSAPublicKey_fp(FILE *fp, const RSA *rsa);
```

```
OSSL_DEPRECATEDIN_3_0 RSA *d2i_RSA_PUBKEY_fp(FILE *fp, RSA **rsa);
OSSL_DEPRECATEDIN_3_0 int i2d_RSA_PUBKEY_fp(FILE *fp, const RSA *rsa);
#  endif
#  ifndef OPENSSL_NO_DEPRECATED_3_0
#   ifndef OPENSSL_NO_DSA
OSSL_DEPRECATEDIN_3_0 DSA *d2i_DSA_PUBKEY_fp(FILE *fp, DSA **dsa);
OSSL_DEPRECATEDIN_3_0 int i2d_DSA_PUBKEY_fp(FILE *fp, const DSA *dsa);
OSSL_DEPRECATEDIN_3_0 DSA *d2i_DSAPrivateKey_fp(FILE *fp, DSA **dsa);
OSSL_DEPRECATEDIN_3_0 int i2d_DSAPrivateKey_fp(FILE *fp, const DSA *dsa);
#   endif
#  endif
#  ifndef OPENSSL_NO_DEPRECATED_3_0
#   ifndef OPENSSL_NO_EC
OSSL_DEPRECATEDIN_3_0 EC_KEY *d2i_EC_PUBKEY_fp(FILE *fp, EC_KEY **eckey);
OSSL_DEPRECATEDIN_3_0 int i2d_EC_PUBKEY_fp(FILE *fp, const EC_KEY *eckey);
OSSL_DEPRECATEDIN_3_0 EC_KEY *d2i_ECPrivateKey_fp(FILE *fp,
 EC_KEY **eckey);
OSSL_DEPRECATEDIN_3_0 int i2d_ECPrivateKey_fp(FILE *fp, const EC_KEY *eckey);
#   endif /* OPENSSL_NO_EC */
#  endif /* OPENSSL_NO_DEPRECATED_3_0 */
X509_SIG *d2i_PKCS8_fp(FILE *fp, X509_SIG **p8);
int i2d_PKCS8_fp(FILE *fp, const X509_SIG *p8);
X509_PUBKEY *d2i_X509_PUBKEY_fp(FILE *fp, X509_PUBKEY **xpk);
int i2d_X509_PUBKEY_fp(FILE *fp, const X509_PUBKEY *xpk);
PKCS8_PRIV_KEY_INFO *d2i_PKCS8_PRIV_KEY_INFO_fp(FILE *fp,
                                PKCS8_PRIV_KEY_INFO **p8inf);
int i2d_PKCS8_PRIV_KEY_INFO_fp(FILE *fp, const PKCS8_PRIV_KEY_INFO *p8inf);
int i2d_PKCS8PrivateKeyInfo_fp(FILE *fp, const EVP_PKEY *key);
int i2d_PrivateKey_fp(FILE *fp, const EVP_PKEY *pkey);
EVP_PKEY *d2i_PrivateKey_ex_fp(FILE *fp, EVP_PKEY **a, OSSL_LIB_CTX *libctx,
                       const char *propq);
EVP_PKEY *d2i_PrivateKey_fp(FILE *fp, EVP_PKEY **a);
int i2d_PUBKEY_fp(FILE *fp, const EVP_PKEY *pkey);
EVP_PKEY *d2i_PUBKEY_fp(FILE *fp, EVP_PKEY **a);
#
 endif

X509 *d2i_X509_bio(BIO *bp, X509 **x509);
int i2d_X509_bio(BIO *bp, const X509 *x509);
X509_CRL *d2i_X509_CRL_bio(BIO *bp, X509_CRL **crl);
int i2d_X509_CRL_bio(BIO *bp, const X509_CRL *crl);
X509_REQ *d2i_X509_REQ_bio(BIO *bp, X509_REQ **req);
int i2d_X509_REQ_bio(BIO *bp, const X509_REQ *req);
#  ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 RSA *d2i_RSAPrivateKey_bio(BIO *bp, RSA **rsa);
OSSL_DEPRECATEDIN_3_0 int i2d_RSAPrivateKey_bio(BIO *bp, const RSA *rsa);
OSSL_DEPRECATEDIN_3_0 RSA *d2i_RSAPublicKey_bio(BIO *bp, RSA **rsa);
OSSL_DEPRECATEDIN_3_0 int i2d_RSAPublicKey_bio(BIO *bp, const RSA *rsa);
```

```
OSSL_DEPRECATEDIN_3_0 RSA *d2i_RSA_PUBKEY_bio(BIO *bp, RSA **rsa);
OSSL_DEPRECATEDIN_3_0 int i2d_RSA_PUBKEY_bio(BIO *bp, const RSA *rsa);
#  endif
#  ifndef OPENSSL_NO_DEPRECATED_3_0
#   ifndef OPENSSL_NO_DSA
OSSL_DEPRECATEDIN_3_0 DSA *d2i_DSA_PUBKEY_bio(BIO *bp, DSA **dsa);
OSSL_DEPRECATEDIN_3_0 int i2d_DSA_PUBKEY_bio(BIO *bp, const DSA *dsa);
OSSL_DEPRECATEDIN_3_0 DSA *d2i_DSAPrivateKey_bio(BIO
 *bp, DSA **dsa);
OSSL_DEPRECATEDIN_3_0 int i2d_DSAPrivateKey_bio(BIO *bp, const DSA *dsa);
#   endif
#  endif

#  ifndef OPENSSL_NO_DEPRECATED_3_0
#   ifndef OPENSSL_NO_EC
OSSL_DEPRECATEDIN_3_0 EC_KEY *d2i_EC_PUBKEY_bio(BIO *bp, EC_KEY **eckey);
OSSL_DEPRECATEDIN_3_0 int i2d_EC_PUBKEY_bio(BIO *bp, const EC_KEY *eckey);
OSSL_DEPRECATEDIN_3_0 EC_KEY *d2i_ECPrivateKey_bio(BIO *bp, EC_KEY **eckey);
OSSL_DEPRECATEDIN_3_0 int i2d_ECPrivateKey_bio(BIO *bp, const EC_KEY *eckey);
#   endif /* OPENSSL_NO_EC */
#  endif /* OPENSSL_NO_DEPRECATED_3_0 */

X509_SIG *d2i_PKCS8_bio(BIO *bp, X509_SIG **p8);
int i2d_PKCS8_bio(BIO *bp, const X509_SIG *p8);
X509_PUBKEY *d2i_X509_PUBKEY_bio(BIO *bp, X509_PUBKEY **xpk);
int i2d_X509_PUBKEY_bio(BIO *bp, const X509_PUBKEY *xpk);
PKCS8_PRIV_KEY_INFO *d2i_PKCS8_PRIV_KEY_INFO_bio(BIO *bp,
                                 PKCS8_PRIV_KEY_INFO **p8inf);
int i2d_PKCS8_PRIV_KEY_INFO_bio(BIO *bp, const PKCS8_PRIV_KEY_INFO *p8inf);
int
 i2d_PKCS8PrivateKeyInfo_bio(BIO *bp, const EVP_PKEY *key);
int i2d_PrivateKey_bio(BIO *bp, const EVP_PKEY *pkey);
EVP_PKEY *d2i_PrivateKey_ex_bio(BIO *bp, EVP_PKEY **a, OSSL_LIB_CTX *libctx,
                        const char *propq);
EVP_PKEY *d2i_PrivateKey_bio(BIO *bp, EVP_PKEY **a);
int i2d_PUBKEY_bio(BIO *bp, const EVP_PKEY *pkey);
EVP_PKEY *d2i_PUBKEY_bio(BIO *bp, EVP_PKEY **a);

DECLARE_ASN1_DUP_FUNCTION(X509)
DECLARE_ASN1_DUP_FUNCTION(X509_ALGOR)
DECLARE_ASN1_DUP_FUNCTION(X509_ATTRIBUTE)
DECLARE_ASN1_DUP_FUNCTION(X509_CRL)
DECLARE_ASN1_DUP_FUNCTION(X509_EXTENSION)
DECLARE_ASN1_DUP_FUNCTION(X509_PUBKEY)
DECLARE_ASN1_DUP_FUNCTION(X509_REQ)
DECLARE_ASN1_DUP_FUNCTION(X509_REVOKED)
int X509_ALGOR_set0(X509_ALGOR *alg, ASN1_OBJECT *aobj, int ptype,
                void *pval);
```

```
void X509_ALGOR_get0(const ASN1_OBJECT **paobj, int *pptype,
                     const void **ppval, const X509_ALGOR *algor);
void X509_ALGOR_set_md(X509_ALGOR *alg, const EVP_MD *md);
int
 X509_ALGOR_cmp(const X509_ALGOR *a, const X509_ALGOR *b);
int X509_ALGOR_copy(X509_ALGOR *dest, const X509_ALGOR *src);

DECLARE_ASN1_DUP_FUNCTION(X509_NAME)
DECLARE_ASN1_DUP_FUNCTION(X509_NAME_ENTRY)

int X509_cmp_time(const ASN1_TIME *s, time_t *t);
int X509_cmp_current_time(const ASN1_TIME *s);
int X509_cmp_timeframe(const X509_VERIFY_PARAM *vpm,
                       const ASN1_TIME *start, const ASN1_TIME *end);
ASN1_TIME *X509_time_adj(ASN1_TIME *s, long adj, time_t *t);
ASN1_TIME *X509_time_adj_ex(ASN1_TIME *s,
                            int offset_day, long offset_sec, time_t *t);
ASN1_TIME *X509_gmtime_adj(ASN1_TIME *s, long adj);

const char *X509_get_default_cert_area(void);
const char *X509_get_default_cert_dir(void);
const char *X509_get_default_cert_file(void);
const char *X509_get_default_cert_dir_env(void);
const char *X509_get_default_cert_file_env(void);
const char *X509_get_default_private_dir(void);

X509_REQ *X509_to_X509_REQ(X509 *x, EVP_PKEY *pkey, const EVP_MD
 *md);
X509 *X509_REQ_to_X509(X509_REQ *r, int days, EVP_PKEY *pkey);

DECLARE_ASN1_FUNCTIONS(X509_ALGOR)
DECLARE_ASN1_ENCODE_FUNCTIONS(X509_ALGORS, X509_ALGORS, X509_ALGORS)
DECLARE_ASN1_FUNCTIONS(X509_VAL)

DECLARE_ASN1_FUNCTIONS(X509_PUBKEY)

X509_PUBKEY *X509_PUBKEY_new_ex(OSSL_LIB_CTX *libctx, const char *propq);
int X509_PUBKEY_set(X509_PUBKEY **x, EVP_PKEY *pkey);
EVP_PKEY *X509_PUBKEY_get0(const X509_PUBKEY *key);
EVP_PKEY *X509_PUBKEY_get(const X509_PUBKEY *key);
int X509_get_pubkey_parameters(EVP_PKEY *pkey, STACK_OF(X509) *chain);
long X509_get_pathlen(X509 *x);
DECLARE_ASN1_ENCODE_FUNCTIONS_only(EVP_PKEY, PUBKEY)
EVP_PKEY *d2i_PUBKEY_ex(EVP_PKEY **a, const unsigned char **pp, long length,
                        OSSL_LIB_CTX *libctx, const char *propq);
# ifndef OPENSSL_NO_DEPRECATED_3_0
DECLARE_ASN1_ENCODE_FUNCTIONS_only_attr(OSSL_DEPRECATEDIN_3_0,RSA, RSA_PUBKEY)
# endif
```

```
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  ifndef OPENSSL_NO_DSA
DECLARE_ASN1_ENCODE_FUNCTIONS_only_attr(OSSL_DEPRECATEDIN_3_0,DSA,
 DSA_PUBKEY)
#  endif
# endif
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  ifndef OPENSSL_NO_EC
DECLARE_ASN1_ENCODE_FUNCTIONS_only_attr(OSSL_DEPRECATEDIN_3_0, EC_KEY, EC_PUBKEY)
#  endif
# endif

DECLARE_ASN1_FUNCTIONS(X509_SIG)
void X509_SIG_get0(const X509_SIG *sig, const X509_ALGOR **palg,
                   const ASN1_OCTET_STRING **pdigest);
void X509_SIG_getm(X509_SIG *sig, X509_ALGOR **palg,
                   ASN1_OCTET_STRING **pdigest);

DECLARE_ASN1_FUNCTIONS(X509_REQ_INFO)
DECLARE_ASN1_FUNCTIONS(X509_REQ)
X509_REQ *X509_REQ_new_ex(OSSL_LIB_CTX *libctx, const char *propq);

DECLARE_ASN1_FUNCTIONS(X509_ATTRIBUTE)
X509_ATTRIBUTE *X509_ATTRIBUTE_create(int nid, int atrtype, void *value);

DECLARE_ASN1_FUNCTIONS(X509_EXTENSION)
DECLARE_ASN1_ENCODE_FUNCTIONS(X509_EXTENSIONS, X509_EXTENSIONS, X509_EXTENSIONS)

DECLARE_ASN1_FUNCTIONS(X509_NAME_ENTRY)

DECLARE_ASN1_FUNCTIONS(X509_NAME)

int X509_NAME_set(X509_NAME **xn, const X509_NAME *name);

DECLARE_ASN1_FUNCTIONS(X509_CINF)
DECLARE_ASN1_FUNCTIONS(X509)
X509
 *X509_new_ex(OSSL_LIB_CTX *libctx, const char *propq);
DECLARE_ASN1_FUNCTIONS(X509_CERT_AUX)

#define X509_get_ex_new_index(l, p, newf, dupf, freef) \
   CRYPTO_get_ex_new_index(CRYPTO_EX_INDEX_X509, l, p, newf, dupf, freef)
int X509_set_ex_data(X509 *r, int idx, void *arg);
void *X509_get_ex_data(const X509 *r, int idx);
DECLARE_ASN1_ENCODE_FUNCTIONS_only(X509,X509_AUX)

int i2d_re_X509_tbs(X509 *x, unsigned char **pp);
```

```
int X509_SIG_INFO_get(const X509_SIG_INFO *siginf, int *mdnid, int *pknid,
                      int *secbits, uint32_t *flags);
void X509_SIG_INFO_set(X509_SIG_INFO *siginf, int mdnid, int pknid,
                       int secbits, uint32_t flags);

int X509_get_signature_info(X509 *x, int *mdnid, int *pknid, int *secbits,
                            uint32_t *flags);

void X509_get0_signature(const ASN1_BIT_STRING **psig,
                         const X509_ALGOR **palg, const X509 *x);
int X509_get_signature_nid(const
 X509 *x);

void X509_set0_distinguishing_id(X509 *x, ASN1_OCTET_STRING *d_id);
ASN1_OCTET_STRING *X509_get0_distinguishing_id(X509 *x);
void X509_REQ_set0_distinguishing_id(X509_REQ *x, ASN1_OCTET_STRING *d_id);
ASN1_OCTET_STRING *X509_REQ_get0_distinguishing_id(X509_REQ *x);

int X509_alias_set1(X509 *x, const unsigned char *name, int len);
int X509_keyid_set1(X509 *x, const unsigned char *id, int len);
unsigned char *X509_alias_get0(X509 *x, int *len);
unsigned char *X509_keyid_get0(X509 *x, int *len);

DECLARE_ASN1_FUNCTIONS(X509_REVOKED)
DECLARE_ASN1_FUNCTIONS(X509_CRL_INFO)
DECLARE_ASN1_FUNCTIONS(X509_CRL)
X509_CRL *X509_CRL_new_ex(OSSL_LIB_CTX *libctx, const char *propq);

int X509_CRL_add0_revoked(X509_CRL *crl, X509_REVOKED *rev);
int X509_CRL_get0_by_serial(X509_CRL *crl,
                            X509_REVOKED **ret, const ASN1_INTEGER *serial);
int X509_CRL_get0_by_cert(X509_CRL *crl, X509_REVOKED **ret, X509 *x);

X509_PKEY *X509_PKEY_new(void);
void X509_PKEY_free(X509_PKEY
 *a);

DECLARE_ASN1_FUNCTIONS(NETSCAPE_SPKI)
DECLARE_ASN1_FUNCTIONS(NETSCAPE_SPKAC)
DECLARE_ASN1_FUNCTIONS(NETSCAPE_CERT_SEQUENCE)

X509_INFO *X509_INFO_new(void);
void X509_INFO_free(X509_INFO *a);
char *X509_NAME_oneline(const X509_NAME *a, char *buf, int size);

#ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0
int ASN1_verify(i2d_of_void *i2d, X509_ALGOR *algor1,
```

```
            ASN1_BIT_STRING *signature, char *data, EVP_PKEY *pkey);
OSSL_DEPRECATEDIN_3_0
int ASN1_digest(i2d_of_void *i2d, const EVP_MD *type, char *data,
            unsigned char *md, unsigned int *len);
OSSL_DEPRECATEDIN_3_0
int ASN1_sign(i2d_of_void *i2d, X509_ALGOR *algor1, X509_ALGOR *algor2,
           ASN1_BIT_STRING *signature, char *data, EVP_PKEY *pkey,
           const EVP_MD *type);
#endif
int ASN1_item_digest(const ASN1_ITEM *it, const EVP_MD *type, void *data,
                unsigned char *md, unsigned int *len);
int ASN1_item_verify(const ASN1_ITEM *it, const X509_ALGOR *alg,
                 const ASN1_BIT_STRING *signature, const void *data,
                EVP_PKEY *pkey);
int ASN1_item_verify_ctx(const ASN1_ITEM *it, const X509_ALGOR *alg,
                    const ASN1_BIT_STRING *signature, const void *data,
                    EVP_MD_CTX *ctx);
int ASN1_item_sign(const ASN1_ITEM *it, X509_ALGOR *algor1, X509_ALGOR *algor2,
               ASN1_BIT_STRING *signature, const void *data,
               EVP_PKEY *pkey, const EVP_MD *md);
int ASN1_item_sign_ctx(const ASN1_ITEM *it, X509_ALGOR *algor1,
                  X509_ALGOR *algor2, ASN1_BIT_STRING *signature,
                  const void *data, EVP_MD_CTX *ctx);

#define X509_VERSION_1 0
#define X509_VERSION_2 1
#define X509_VERSION_3 2

long X509_get_version(const X509 *x);
int X509_set_version(X509 *x, long version);
int X509_set_serialNumber(X509 *x, ASN1_INTEGER *serial);
ASN1_INTEGER *X509_get_serialNumber(X509 *x);
const ASN1_INTEGER *X509_get0_serialNumber(const
 X509 *x);
int X509_set_issuer_name(X509 *x, const X509_NAME *name);
X509_NAME *X509_get_issuer_name(const X509 *a);
int X509_set_subject_name(X509 *x, const X509_NAME *name);
X509_NAME *X509_get_subject_name(const X509 *a);
const ASN1_TIME * X509_get0_notBefore(const X509 *x);
ASN1_TIME *X509_getm_notBefore(const X509 *x);
int X509_set1_notBefore(X509 *x, const ASN1_TIME *tm);
const ASN1_TIME *X509_get0_notAfter(const X509 *x);
ASN1_TIME *X509_getm_notAfter(const X509 *x);
int X509_set1_notAfter(X509 *x, const ASN1_TIME *tm);
int X509_set_pubkey(X509 *x, EVP_PKEY *pkey);
int X509_up_ref(X509 *x);
int X509_get_signature_type(const X509 *x);
```

```
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define X509_get_notBefore X509_getm_notBefore
#  define X509_get_notAfter X509_getm_notAfter
#  define X509_set_notBefore X509_set1_notBefore
#  define X509_set_notAfter X509_set1_notAfter
#endif


/*
* This one is only used so that a binary form can output, as in
* i2d_X509_PUBKEY(X509_get_X509_PUBKEY(x),
 &buf)
*/
X509_PUBKEY *X509_get_X509_PUBKEY(const X509 *x);
const STACK_OF(X509_EXTENSION) *X509_get0_extensions(const X509 *x);
void X509_get0_uids(const X509 *x, const ASN1_BIT_STRING **piuid,
                const ASN1_BIT_STRING **psuid);
const X509_ALGOR *X509_get0_tbs_sigalg(const X509 *x);

EVP_PKEY *X509_get0_pubkey(const X509 *x);
EVP_PKEY *X509_get_pubkey(X509 *x);
ASN1_BIT_STRING *X509_get0_pubkey_bitstr(const X509 *x);

#define X509_REQ_VERSION_1 0

long X509_REQ_get_version(const X509_REQ *req);
int X509_REQ_set_version(X509_REQ *x, long version);
X509_NAME *X509_REQ_get_subject_name(const X509_REQ *req);
int X509_REQ_set_subject_name(X509_REQ *req, const X509_NAME *name);
void X509_REQ_get0_signature(const X509_REQ *req, const ASN1_BIT_STRING **psig,
                        const X509_ALGOR **palg);
void X509_REQ_set0_signature(X509_REQ *req, ASN1_BIT_STRING *psig);
int X509_REQ_set1_signature_algo(X509_REQ *req, X509_ALGOR *palg);
int X509_REQ_get_signature_nid(const
 X509_REQ *req);
int i2d_re_X509_REQ_tbs(X509_REQ *req, unsigned char **pp);
int X509_REQ_set_pubkey(X509_REQ *x, EVP_PKEY *pkey);
EVP_PKEY *X509_REQ_get_pubkey(X509_REQ *req);
EVP_PKEY *X509_REQ_get0_pubkey(X509_REQ *req);
X509_PUBKEY *X509_REQ_get_X509_PUBKEY(X509_REQ *req);
int X509_REQ_extension_nid(int nid);
int *X509_REQ_get_extension_nids(void);
void X509_REQ_set_extension_nids(int *nids);
STACK_OF(X509_EXTENSION) *X509_REQ_get_extensions(X509_REQ *req);
int X509_REQ_add_extensions_nid(X509_REQ *req,
                         const STACK_OF(X509_EXTENSION) *exts, int nid);
int X509_REQ_add_extensions(X509_REQ *req, const STACK_OF(X509_EXTENSION) *ext);
int X509_REQ_get_attr_count(const X509_REQ *req);
```

```
int X509_REQ_get_attr_by_NID(const X509_REQ *req, int nid, int lastpos);
int X509_REQ_get_attr_by_OBJ(const X509_REQ *req, const ASN1_OBJECT *obj,
                             int lastpos);
X509_ATTRIBUTE *X509_REQ_get_attr(const X509_REQ *req, int loc);
X509_ATTRIBUTE
 *X509_REQ_delete_attr(X509_REQ *req, int loc);
int X509_REQ_add1_attr(X509_REQ *req, X509_ATTRIBUTE *attr);
int X509_REQ_add1_attr_by_OBJ(X509_REQ *req,
                              const ASN1_OBJECT *obj, int type,
                              const unsigned char *bytes, int len);
int X509_REQ_add1_attr_by_NID(X509_REQ *req,
                              int nid, int type,
                              const unsigned char *bytes, int len);
int X509_REQ_add1_attr_by_txt(X509_REQ *req,
                              const char *attrname, int type,
                              const unsigned char *bytes, int len);

#define X509_CRL_VERSION_1 0
#define X509_CRL_VERSION_2 1

int X509_CRL_set_version(X509_CRL *x, long version);
int X509_CRL_set_issuer_name(X509_CRL *x, const X509_NAME *name);
int X509_CRL_set1_lastUpdate(X509_CRL *x, const ASN1_TIME *tm);
int X509_CRL_set1_nextUpdate(X509_CRL *x, const ASN1_TIME *tm);
int X509_CRL_sort(X509_CRL *crl);
int X509_CRL_up_ref(X509_CRL *crl);

#
 ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define X509_CRL_set_lastUpdate X509_CRL_set1_lastUpdate
#  define X509_CRL_set_nextUpdate X509_CRL_set1_nextUpdate
#endif

long X509_CRL_get_version(const X509_CRL *crl);
const ASN1_TIME *X509_CRL_get0_lastUpdate(const X509_CRL *crl);
const ASN1_TIME *X509_CRL_get0_nextUpdate(const X509_CRL *crl);
#ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 ASN1_TIME *X509_CRL_get_lastUpdate(X509_CRL *crl);
OSSL_DEPRECATEDIN_1_1_0 ASN1_TIME *X509_CRL_get_nextUpdate(X509_CRL *crl);
#endif
X509_NAME *X509_CRL_get_issuer(const X509_CRL *crl);
const STACK_OF(X509_EXTENSION) *X509_CRL_get0_extensions(const X509_CRL *crl);
STACK_OF(X509_REVOKED) *X509_CRL_get_REVOKED(X509_CRL *crl);
void X509_CRL_get0_signature(const X509_CRL *crl, const ASN1_BIT_STRING **psig,
                             const X509_ALGOR **palg);
int X509_CRL_get_signature_nid(const X509_CRL *crl);
int i2d_re_X509_CRL_tbs(X509_CRL *req, unsigned char **pp);
```

```
const ASN1_INTEGER *X509_REVOKED_get0_serialNumber(const
 X509_REVOKED *x);
int X509_REVOKED_set_serialNumber(X509_REVOKED *x, ASN1_INTEGER *serial);
const ASN1_TIME *X509_REVOKED_get0_revocationDate(const X509_REVOKED *x);
int X509_REVOKED_set_revocationDate(X509_REVOKED *r, ASN1_TIME *tm);
const STACK_OF(X509_EXTENSION) *
X509_REVOKED_get0_extensions(const X509_REVOKED *r);

X509_CRL *X509_CRL_diff(X509_CRL *base, X509_CRL *newer,
                EVP_PKEY *skey, const EVP_MD *md, unsigned int flags);

int X509_REQ_check_private_key(X509_REQ *x509, EVP_PKEY *pkey);

int X509_check_private_key(const X509 *x509, const EVP_PKEY *pkey);
int X509_chain_check_suiteb(int *perror_depth,
                    X509 *x, STACK_OF(X509) *chain,
                    unsigned long flags);
int X509_CRL_check_suiteb(X509_CRL *crl, EVP_PKEY *pk, unsigned long flags);
STACK_OF(X509) *X509_chain_up_ref(STACK_OF(X509) *chain);

int X509_issuer_and_serial_cmp(const X509 *a, const X509 *b);
unsigned long X509_issuer_and_serial_hash(X509
 *a);

int X509_issuer_name_cmp(const X509 *a, const X509 *b);
unsigned long X509_issuer_name_hash(X509 *a);

int X509_subject_name_cmp(const X509 *a, const X509 *b);
unsigned long X509_subject_name_hash(X509 *x);

# ifndef OPENSSL_NO_MD5
unsigned long X509_issuer_name_hash_old(X509 *a);
unsigned long X509_subject_name_hash_old(X509 *x);
# endif

# define X509_ADD_FLAG_DEFAULT  0
# define X509_ADD_FLAG_UP_REF   0x1
# define X509_ADD_FLAG_PREPEND  0x2
# define X509_ADD_FLAG_NO_DUP   0x4
# define X509_ADD_FLAG_NO_SS    0x8
int X509_add_cert(STACK_OF(X509) *sk, X509 *cert, int flags);
int X509_add_certs(STACK_OF(X509) *sk, STACK_OF(X509) *certs, int flags);

int X509_cmp(const X509 *a, const X509 *b);
int X509_NAME_cmp(const X509_NAME *a, const X509_NAME *b);
#ifndef OPENSSL_NO_DEPRECATED_3_0
# define X509_NAME_hash(x) X509_NAME_hash_ex(x, NULL, NULL, NULL)
OSSL_DEPRECATEDIN_3_0 int X509_certificate_type(const X509 *x,
```

```
        const EVP_PKEY *pubkey);
#endif
unsigned long X509_NAME_hash_ex(const X509_NAME *x, OSSL_LIB_CTX *libctx,
                                const char *propq, int *ok);
unsigned long X509_NAME_hash_old(const X509_NAME *x);

int X509_CRL_cmp(const X509_CRL *a, const X509_CRL *b);
int X509_CRL_match(const X509_CRL *a, const X509_CRL *b);
int X509_aux_print(BIO *out, X509 *x, int indent);
# ifndef OPENSSL_NO_STDIO
int X509_print_ex_fp(FILE *bp, X509 *x, unsigned long nmflag,
                     unsigned long cflag);
int X509_print_fp(FILE *bp, X509 *x);
int X509_CRL_print_fp(FILE *bp, X509_CRL *x);
int X509_REQ_print_fp(FILE *bp, X509_REQ *req);
int X509_NAME_print_ex_fp(FILE *fp, const X509_NAME *nm, int indent,
                          unsigned long flags);
# endif

int X509_NAME_print(BIO *bp, const X509_NAME *name, int obase);
int X509_NAME_print_ex(BIO *out, const X509_NAME *nm, int indent,
                       unsigned long flags);
int X509_print_ex(BIO *bp, X509 *x, unsigned
 long nmflag,
                  unsigned long cflag);
int X509_print(BIO *bp, X509 *x);
int X509_ocspid_print(BIO *bp, X509 *x);
int X509_CRL_print_ex(BIO *out, X509_CRL *x, unsigned long nmflag);
int X509_CRL_print(BIO *bp, X509_CRL *x);
int X509_REQ_print_ex(BIO *bp, X509_REQ *x, unsigned long nmflag,
                      unsigned long cflag);
int X509_REQ_print(BIO *bp, X509_REQ *req);

int X509_NAME_entry_count(const X509_NAME *name);
int X509_NAME_get_text_by_NID(const X509_NAME *name, int nid,
                              char *buf, int len);
int X509_NAME_get_text_by_OBJ(const X509_NAME *name, const ASN1_OBJECT *obj,
                              char *buf, int len);

/*
* NOTE: you should be passing -1, not 0 as lastpos. The functions that use
* lastpos, search after that position on.
*/
int X509_NAME_get_index_by_NID(const X509_NAME *name, int nid, int lastpos);
int X509_NAME_get_index_by_OBJ(const X509_NAME *name, const ASN1_OBJECT *obj,
```

```
 int lastpos);
X509_NAME_ENTRY *X509_NAME_get_entry(const X509_NAME *name, int loc);
X509_NAME_ENTRY *X509_NAME_delete_entry(X509_NAME *name, int loc);
int X509_NAME_add_entry(X509_NAME *name, const X509_NAME_ENTRY *ne,
                int loc, int set);
int X509_NAME_add_entry_by_OBJ(X509_NAME *name, const ASN1_OBJECT *obj, int type,
                      const unsigned char *bytes, int len, int loc,
                      int set);
int X509_NAME_add_entry_by_NID(X509_NAME *name, int nid, int type,
                      const unsigned char *bytes, int len, int loc,
                      int set);
X509_NAME_ENTRY *X509_NAME_ENTRY_create_by_txt(X509_NAME_ENTRY **ne,
                                const char *field, int type,
                                const unsigned char *bytes,
                                int len);
X509_NAME_ENTRY *X509_NAME_ENTRY_create_by_NID(X509_NAME_ENTRY **ne, int nid,
                                 int type,
                                const unsigned char *bytes,
                                int len);
int X509_NAME_add_entry_by_txt(X509_NAME *name, const char *field, int type,
                      const unsigned char *bytes, int len, int loc,
                      int set);
X509_NAME_ENTRY *X509_NAME_ENTRY_create_by_OBJ(X509_NAME_ENTRY **ne,
                                const ASN1_OBJECT *obj, int type,
                                const unsigned char *bytes,
                                int len);
int X509_NAME_ENTRY_set_object(X509_NAME_ENTRY *ne, const ASN1_OBJECT *obj);
int X509_NAME_ENTRY_set_data(X509_NAME_ENTRY *ne, int type,
                    const unsigned char *bytes, int len);
ASN1_OBJECT *X509_NAME_ENTRY_get_object(const X509_NAME_ENTRY *ne);
ASN1_STRING * X509_NAME_ENTRY_get_data(const X509_NAME_ENTRY
 *ne);
int X509_NAME_ENTRY_set(const X509_NAME_ENTRY *ne);

int X509_NAME_get0_der(const X509_NAME *nm, const unsigned char **pder,
                size_t *pderlen);

int X509v3_get_ext_count(const STACK_OF(X509_EXTENSION) *x);
int X509v3_get_ext_by_NID(const STACK_OF(X509_EXTENSION) *x,
                int nid, int lastpos);
int X509v3_get_ext_by_OBJ(const STACK_OF(X509_EXTENSION) *x,
                const ASN1_OBJECT *obj, int lastpos);
int X509v3_get_ext_by_critical(const STACK_OF(X509_EXTENSION) *x,
                      int crit, int lastpos);
X509_EXTENSION *X509v3_get_ext(const STACK_OF(X509_EXTENSION) *x, int loc);
X509_EXTENSION *X509v3_delete_ext(STACK_OF(X509_EXTENSION) *x, int loc);
STACK_OF(X509_EXTENSION) *X509v3_add_ext(STACK_OF(X509_EXTENSION) **x,
                            X509_EXTENSION *ex, int loc);
```

```
int X509_get_ext_count(const X509 *x);
int X509_get_ext_by_NID(const X509 *x, int nid, int lastpos);
int X509_get_ext_by_OBJ(const
 X509 *x, const ASN1_OBJECT *obj, int lastpos);
int X509_get_ext_by_critical(const X509 *x, int crit, int lastpos);
X509_EXTENSION *X509_get_ext(const X509 *x, int loc);
X509_EXTENSION *X509_delete_ext(X509 *x, int loc);
int X509_add_ext(X509 *x, X509_EXTENSION *ex, int loc);
void *X509_get_ext_d2i(const X509 *x, int nid, int *crit, int *idx);
int X509_add1_ext_i2d(X509 *x, int nid, void *value, int crit,
                      unsigned long flags);

int X509_CRL_get_ext_count(const X509_CRL *x);
int X509_CRL_get_ext_by_NID(const X509_CRL *x, int nid, int lastpos);
int X509_CRL_get_ext_by_OBJ(const X509_CRL *x, const ASN1_OBJECT *obj,
                            int lastpos);
int X509_CRL_get_ext_by_critical(const X509_CRL *x, int crit, int lastpos);
X509_EXTENSION *X509_CRL_get_ext(const X509_CRL *x, int loc);
X509_EXTENSION *X509_CRL_delete_ext(X509_CRL *x, int loc);
int X509_CRL_add_ext(X509_CRL *x, X509_EXTENSION *ex, int loc);
void *X509_CRL_get_ext_d2i(const X509_CRL
 *x, int nid, int *crit, int *idx);
int X509_CRL_add1_ext_i2d(X509_CRL *x, int nid, void *value, int crit,
                          unsigned long flags);

int X509_REVOKED_get_ext_count(const X509_REVOKED *x);
int X509_REVOKED_get_ext_by_NID(const X509_REVOKED *x, int nid, int lastpos);
int X509_REVOKED_get_ext_by_OBJ(const X509_REVOKED *x, const ASN1_OBJECT *obj,
                                int lastpos);
int X509_REVOKED_get_ext_by_critical(const X509_REVOKED *x, int crit,
                                     int lastpos);
X509_EXTENSION *X509_REVOKED_get_ext(const X509_REVOKED *x, int loc);
X509_EXTENSION *X509_REVOKED_delete_ext(X509_REVOKED *x, int loc);
int X509_REVOKED_add_ext(X509_REVOKED *x, X509_EXTENSION *ex, int loc);
void *X509_REVOKED_get_ext_d2i(const X509_REVOKED *x, int nid, int *crit,
                               int *idx);
int X509_REVOKED_add1_ext_i2d(X509_REVOKED *x, int nid, void *value, int crit,
                              unsigned long flags);

X509_EXTENSION
 *X509_EXTENSION_create_by_NID(X509_EXTENSION **ex,
                               int nid, int crit,
                               ASN1_OCTET_STRING *data);
X509_EXTENSION *X509_EXTENSION_create_by_OBJ(X509_EXTENSION **ex,
                               const ASN1_OBJECT *obj, int crit,
                               ASN1_OCTET_STRING *data);
int X509_EXTENSION_set_object(X509_EXTENSION *ex, const ASN1_OBJECT *obj);
```

```
int X509_EXTENSION_set_critical(X509_EXTENSION *ex, int crit);
int X509_EXTENSION_set_data(X509_EXTENSION *ex, ASN1_OCTET_STRING *data);
ASN1_OBJECT *X509_EXTENSION_get_object(X509_EXTENSION *ex);
ASN1_OCTET_STRING *X509_EXTENSION_get_data(X509_EXTENSION *ne);
int X509_EXTENSION_get_critical(const X509_EXTENSION *ex);

int X509at_get_attr_count(const STACK_OF(X509_ATTRIBUTE) *x);
int X509at_get_attr_by_NID(const STACK_OF(X509_ATTRIBUTE) *x, int nid,
                    int lastpos);
int X509at_get_attr_by_OBJ(const
 STACK_OF(X509_ATTRIBUTE) *sk,
                    const ASN1_OBJECT *obj, int lastpos);
X509_ATTRIBUTE *X509at_get_attr(const STACK_OF(X509_ATTRIBUTE) *x, int loc);
X509_ATTRIBUTE *X509at_delete_attr(STACK_OF(X509_ATTRIBUTE) *x, int loc);
STACK_OF(X509_ATTRIBUTE) *X509at_add1_attr(STACK_OF(X509_ATTRIBUTE) **x,
                              X509_ATTRIBUTE *attr);
STACK_OF(X509_ATTRIBUTE) *X509at_add1_attr_by_OBJ(STACK_OF(X509_ATTRIBUTE)
                                  **x, const ASN1_OBJECT *obj,
                                  int type,
                                  const unsigned char *bytes,
                                  int len);
STACK_OF(X509_ATTRIBUTE) *X509at_add1_attr_by_NID(STACK_OF(X509_ATTRIBUTE)
                                  **x, int nid, int type,
                                  const unsigned char *bytes,

                    int len);
STACK_OF(X509_ATTRIBUTE) *X509at_add1_attr_by_txt(STACK_OF(X509_ATTRIBUTE)
                                  **x, const char *attrname,
                                  int type,
                                  const unsigned char *bytes,
                                  int len);
void *X509at_get0_data_by_OBJ(const STACK_OF(X509_ATTRIBUTE) *x,
                      const ASN1_OBJECT *obj, int lastpos, int type);
X509_ATTRIBUTE *X509_ATTRIBUTE_create_by_NID(X509_ATTRIBUTE **attr, int nid,
                              int atrtype, const void *data,
                              int len);
X509_ATTRIBUTE *X509_ATTRIBUTE_create_by_OBJ(X509_ATTRIBUTE **attr,
                              const ASN1_OBJECT *obj,
                              int atrtype, const void *data,
                              int len);
X509_ATTRIBUTE
 *X509_ATTRIBUTE_create_by_txt(X509_ATTRIBUTE **attr,
                              const char *atrname, int type,
                              const unsigned char *bytes,
                              int len);
int X509_ATTRIBUTE_set1_object(X509_ATTRIBUTE *attr, const ASN1_OBJECT *obj);
int X509_ATTRIBUTE_set1_data(X509_ATTRIBUTE *attr, int attrtype,
                      const void *data, int len);
```

```
void *X509_ATTRIBUTE_get0_data(X509_ATTRIBUTE *attr, int idx, int atrtype,
                               void *data);
int X509_ATTRIBUTE_count(const X509_ATTRIBUTE *attr);
ASN1_OBJECT *X509_ATTRIBUTE_get0_object(X509_ATTRIBUTE *attr);
ASN1_TYPE *X509_ATTRIBUTE_get0_type(X509_ATTRIBUTE *attr, int idx);

int EVP_PKEY_get_attr_count(const EVP_PKEY *key);
int EVP_PKEY_get_attr_by_NID(const EVP_PKEY *key, int nid, int lastpos);
int EVP_PKEY_get_attr_by_OBJ(const EVP_PKEY *key, const ASN1_OBJECT *obj,

       int lastpos);
X509_ATTRIBUTE *EVP_PKEY_get_attr(const EVP_PKEY *key, int loc);
X509_ATTRIBUTE *EVP_PKEY_delete_attr(EVP_PKEY *key, int loc);
int EVP_PKEY_add1_attr(EVP_PKEY *key, X509_ATTRIBUTE *attr);
int EVP_PKEY_add1_attr_by_OBJ(EVP_PKEY *key,
                              const ASN1_OBJECT *obj, int type,
                              const unsigned char *bytes, int len);
int EVP_PKEY_add1_attr_by_NID(EVP_PKEY *key,
                              int nid, int type,
                              const unsigned char *bytes, int len);
int EVP_PKEY_add1_attr_by_txt(EVP_PKEY *key,
                              const char *attrname, int type,
                              const unsigned char *bytes, int len);

/* lookup a cert from a X509 STACK */
X509 *X509_find_by_issuer_and_serial(STACK_OF(X509) *sk, const X509_NAME *name,
                                     const ASN1_INTEGER *serial);
X509 *X509_find_by_subject(STACK_OF(X509) *sk, const X509_NAME *name);

DECLARE_ASN1_FUNCTIONS(PBEPARAM)
DECLARE_ASN1_FUNCTIONS(PBE2PARAM)
DECLARE_ASN1_FUNCTIONS(PBKDF2PARAM)
#ifndef
 OPENSSL_NO_SCRYPT
DECLARE_ASN1_FUNCTIONS(SCRYPT_PARAMS)
#endif

int PKCS5_pbe_set0_algor(X509_ALGOR *algor, int alg, int iter,
                         const unsigned char *salt, int saltlen);
int PKCS5_pbe_set0_algor_ex(X509_ALGOR *algor, int alg, int iter,
                            const unsigned char *salt, int saltlen,
                            OSSL_LIB_CTX *libctx);

X509_ALGOR *PKCS5_pbe_set(int alg, int iter,
                          const unsigned char *salt, int saltlen);
X509_ALGOR *PKCS5_pbe_set_ex(int alg, int iter,
                             const unsigned char *salt, int saltlen,
                             OSSL_LIB_CTX *libctx);
```

```
X509_ALGOR *PKCS5_pbe2_set(const EVP_CIPHER *cipher, int iter,
                    unsigned char *salt, int saltlen);
X509_ALGOR *PKCS5_pbe2_set_iv(const EVP_CIPHER *cipher, int iter,
                      unsigned char *salt, int saltlen,
                      unsigned char *aiv, int prf_nid);
X509_ALGOR *PKCS5_pbe2_set_iv_ex(const EVP_CIPHER *cipher, int iter,
                        unsigned char *salt, int saltlen,
                        unsigned char *aiv, int prf_nid,
                        OSSL_LIB_CTX *libctx);

#ifndef OPENSSL_NO_SCRYPT
X509_ALGOR *PKCS5_pbe2_set_scrypt(const EVP_CIPHER *cipher,
                          const unsigned char *salt, int saltlen,
                          unsigned char *aiv, uint64_t N, uint64_t r,
                          uint64_t p);
#endif

X509_ALGOR *PKCS5_pbkdf2_set(int iter, unsigned char *salt, int saltlen,
                     int prf_nid, int keylen);
X509_ALGOR *PKCS5_pbkdf2_set_ex(int iter, unsigned char *salt, int saltlen,
                       int prf_nid, int keylen,
                       OSSL_LIB_CTX *libctx);

/* PKCS#8 utilities */

DECLARE_ASN1_FUNCTIONS(PKCS8_PRIV_KEY_INFO)

EVP_PKEY
 *EVP_PKCS82PKEY(const PKCS8_PRIV_KEY_INFO *p8);
EVP_PKEY *EVP_PKCS82PKEY_ex(const PKCS8_PRIV_KEY_INFO *p8, OSSL_LIB_CTX *libctx,
                    const char *propq);
PKCS8_PRIV_KEY_INFO *EVP_PKEY2PKCS8(const EVP_PKEY *pkey);

int PKCS8_pkey_set0(PKCS8_PRIV_KEY_INFO *priv, ASN1_OBJECT *aobj,
               int version, int ptype, void *pval,
               unsigned char *penc, int penclen);
int PKCS8_pkey_get0(const ASN1_OBJECT **ppkalg,
               const unsigned char **pk, int *ppklen,
               const X509_ALGOR **pa, const PKCS8_PRIV_KEY_INFO *p8);

const STACK_OF(X509_ATTRIBUTE) *
PKCS8_pkey_get0_attrs(const PKCS8_PRIV_KEY_INFO *p8);
int PKCS8_pkey_add1_attr(PKCS8_PRIV_KEY_INFO *p8, X509_ATTRIBUTE *attr);
int PKCS8_pkey_add1_attr_by_NID(PKCS8_PRIV_KEY_INFO *p8, int nid, int type,
                       const unsigned char *bytes, int len);
int PKCS8_pkey_add1_attr_by_OBJ(PKCS8_PRIV_KEY_INFO *p8, const ASN1_OBJECT *obj,
```

```
                        int type, const unsigned char *bytes, int len);


int X509_PUBKEY_set0_param(X509_PUBKEY *pub, ASN1_OBJECT *aobj,
                    int ptype, void *pval,
                    unsigned char *penc, int penclen);
int X509_PUBKEY_get0_param(ASN1_OBJECT **ppkalg,
                    const unsigned char **pk, int *ppklen,
                    X509_ALGOR **pa, const X509_PUBKEY *pub);
int X509_PUBKEY_eq(const X509_PUBKEY *a, const X509_PUBKEY *b);

# ifdef  __cplusplus
}
# endif
#endif
```

BSD-2-Clause

Recognizing Contributors

The project looks to recognize and thank contributors for their contributions as one of the ways we can help them continue to contribute to the project.

This document captures some of the processes we have in place to do that.

Some of the benefits we hope to achieve through these programs include:

* Ensuring people know that the project appreciates their work
* Encouraging people to repeat/grow their contributions
* Helping people demonstrate to their managers the value of the contributions they are making, which in terms helps their manager support their employer investing in the project (unfortunately this is something that matters)
* Highlighting the new features in Node.js and showing that they are being added by individuals like those mentioned. This should encourage other people to get involved and make similar contributions.
* Highlighting those leading efforts/initiatives and they are being done by individuals or teams like those mentioned. This should encourage other people to get involved and make similar contributions

Sponsorship link on nodejs/node README.md

Collaborators may add a single link beside their name on the nodejs/node [`README.md`](../../README.md) file in the section titled `Collaborators` named `Support me`. This link may be:

1. a direct link to one of the sponsorship platforms listed below,
2. a page that has text explaining how to support the collaborator including zero or more links to the sponsorship platforms listed below.

The page should not have any outgoing links other than to the
sponsorship platforms. We expect and trust collaborators to ensure that
the text is professional and respectful.

The sponsorship platforms to which links can be made currently
includes (in alphabetical order):

* [GitHub Sponsors](https://github.com/sponsors)
* [Polar](https://polar.sh/)
* thanks.dev

Amplification of posts announcing talks by collaborators

When a collaborator
is speaking at a public event they may request amplification
by the Node.js social media accounts. They can request that a post highlighting
that they are speaking at the event be amplified by the Node.js accounts by
making a request in the #nodejs-social channel in the OpenJS Foundation slack.
We trust that collaborators will only request amplification when they believe
the event is relevant to the Node.js community and the content of the post is
in line with the norms of the project.

Bi-monthly contributor spotlight

The contributor spotlight program showcases individual(s) or teams who have
made signification contributions to the project. Anybody who is not
a member of the Technical Steering Committee (TSC) and has made a
notable contribution to the project can be nominated. They DO NOT need
to be a collaborator, team member etc.

The work of the team or individual(s) will be showcased on the
Node.js social channels and, if warranted, through a blog post created by the
OpenJS
marketing staff along with the team or individual(s) which will
be published on openjsf.org.

Nominations can be made through this web form:
[Contributor Spotlight nomination](https://forms.gle/dXBXZn8yu83HLJ57A)

Nominations will be reviewed/approved by the Technical Steering Committee (TSC)
on a regular basis as scheduled by the TSC chair. The TSC will also
recommend the order in which approved nominations are processed
by the OpenJS marketing staff.

Before any work proceeds on an approved nomination the individual(s)
or team will be contacted to confirm they want to participate. Social
content and or spotlight blog post will only be published after the
team or individual(s) have confirmed they are happy with the content.

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    'GHASH_ASM',
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    'OPENSSL_BN_ASM_PART_WORDS',
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  'include_dirs': ['./include', '.'],
```

```
  'defines': ['<@(openssl_defines_BSD-x86)'],
 },
}
```

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```
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/opensslv.h.in
*
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* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/

#ifndef OPENSSL_OPENSSLV_H
# define OPENSSL_OPENSSLV_H
# pragma once

# ifdef  __cplusplus
extern "C" {
# endif

/*
* SECTION 1: VERSION DATA.  These will change for each release
*/

/*
* Base version macros
*
* These macros express version number MAJOR.MINOR.PATCH exactly
*/
# define OPENSSL_VERSION_MAJOR  3
```

```
# define OPENSSL_VERSION_MINOR  0
# define OPENSSL_VERSION_PATCH  16

/*
* Additional version information
*
* These are also part of the new version scheme, but aren't part
* of the version number itself.
*/

/* Could be: #define OPENSSL_VERSION_PRE_RELEASE
 "-alpha.1" */
# define OPENSSL_VERSION_PRE_RELEASE ""
/* Could be: #define OPENSSL_VERSION_BUILD_METADATA "+fips" */
/* Could be: #define OPENSSL_VERSION_BUILD_METADATA "+vendor.1" */
# define OPENSSL_VERSION_BUILD_METADATA ""

/*
* Note: The OpenSSL Project will never define OPENSSL_VERSION_BUILD_METADATA
* to be anything but the empty string.  Its use is entirely reserved for
* others
*/

/*
* Shared library version
*
* This is strictly to express ABI version, which may or may not
* be related to the API version expressed with the macros above.
* This is defined in free form.
*/
# define OPENSSL_SHLIB_VERSION 3

/*
* SECTION 2: USEFUL MACROS
*/

/* For checking general API compatibility when preprocessing */
# define OPENSSL_VERSION_PREREQ(maj,min)                          \
   ((OPENSSL_VERSION_MAJOR << 16) + OPENSSL_VERSION_MINOR >= ((maj) << 16) + (min))

/*
* Macros to get the version in easily digested string form, both the short
* "MAJOR.MINOR.PATCH" variant
 (where MAJOR, MINOR and PATCH are replaced
* with the values from the corresponding OPENSSL_VERSION_ macros) and the
* longer variant with OPENSSL_VERSION_PRE_RELEASE_STR and
* OPENSSL_VERSION_BUILD_METADATA_STR appended.
*/
```

```
# define OPENSSL_VERSION_STR "3.0.16"
# define OPENSSL_FULL_VERSION_STR "3.0.16"

/*
* SECTION 3: ADDITIONAL METADATA
*
* These strings are defined separately to allow them to be parsable.
*/
# define OPENSSL_RELEASE_DATE "11 Feb 2025"

/*
* SECTION 4: BACKWARD COMPATIBILITY
*/

# define OPENSSL_VERSION_TEXT "OpenSSL 3.0.16 11 Feb 2025"

/* Synthesize OPENSSL_VERSION_NUMBER with the layout 0xMNN00PPSL */
# ifdef OPENSSL_VERSION_PRE_RELEASE
#  define _OPENSSL_VERSION_PRE_RELEASE 0x0L
# else
#  define _OPENSSL_VERSION_PRE_RELEASE 0xfL
# endif
# define OPENSSL_VERSION_NUMBER         \
   ( (OPENSSL_VERSION_MAJOR<<28)        \
    |(OPENSSL_VERSION_MINOR<<20)        \
    |(OPENSSL_VERSION_PATCH<<4)         \
    |_OPENSSL_VERSION_PRE_RELEASE )

#
 ifdef  __cplusplus
}
# endif

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_OPENSSLV_H
# endif

#endif                          /* OPENSSL_OPENSSLV_H */
```

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```
{
 'variables': {
   'openssl_defines_BSD-x86': [
     'NDEBUG',
     'L_ENDIAN',
     'OPENSSL_BUILDING_OPENSSL',
     'AES_ASM',
     'CMLL_ASM',
     'DES_ASM',
     'ECP_NISTZ256_ASM',
     'GHASH_ASM',
     'MD5_ASM',
     'OPENSSL_BN_ASM_GF2m',
     'OPENSSL_BN_ASM_MONT',
     'OPENSSL_BN_ASM_PART_WORDS',
     'OPENSSL_CPUID_OBJ',
     'OPENSSL_IA32_SSE2',
     'PADLOCK_ASM',
     'POLY1305_ASM',
     'RC4_ASM',
     'RMD160_ASM',
     'SHA1_ASM',
     'SHA256_ASM',
```

```
  'SHA512_ASM',
  'VPAES_ASM',
  'WHIRLPOOL_ASM',
  'OPENSSL_PIC',
],
'openssl_cflags_BSD-x86': [
  '-Wa,--noexecstack',
  '-Wall -O3 -fomit-frame-pointer',
  '-pthread',
  '-Wall -O3 -fomit-frame-pointer',
],
'openssl_ex_libs_BSD-x86': [
  '-pthread',
],
'openssl_cli_srcs_BSD-x86': [
  'openssl/apps/lib/cmp_mock_srv.c',
  'openssl/apps/asn1parse.c',
  'openssl/apps/ca.c',
  'openssl/apps/ciphers.c',
  'openssl/apps/cmp.c',
   'openssl/apps/cms.c',
  'openssl/apps/crl.c',
  'openssl/apps/crl2pkcs7.c',
  'openssl/apps/dgst.c',
  'openssl/apps/dhparam.c',
  'openssl/apps/dsa.c',
  'openssl/apps/dsaparam.c',
  'openssl/apps/ec.c',
  'openssl/apps/ecparam.c',
  'openssl/apps/enc.c',
  'openssl/apps/engine.c',
  'openssl/apps/errstr.c',
  'openssl/apps/fipsinstall.c',
  'openssl/apps/gendsa.c',
  'openssl/apps/genpkey.c',
  'openssl/apps/genrsa.c',
  'openssl/apps/info.c',
  'openssl/apps/kdf.c',
  'openssl/apps/list.c',
  'openssl/apps/mac.c',
  'openssl/apps/nseq.c',
  'openssl/apps/ocsp.c',
  'openssl/apps/openssl.c',
  'openssl/apps/passwd.c',
  'openssl/apps/pkcs12.c',
  'openssl/apps/pkcs7.c',
  'openssl/apps/pkcs8.c',
  'openssl/apps/pkey.c',
```

```
    'openssl/apps/pkeyparam.c',
    'openssl/apps/pkeyutl.c',
    'openssl/apps/prime.c',
    './config/archs/BSD-x86/asm_avx2/apps/progs.c',
     'openssl/apps/rand.c',
    'openssl/apps/rehash.c',
    'openssl/apps/req.c',
    'openssl/apps/rsa.c',
    'openssl/apps/rsautl.c',
    'openssl/apps/s_client.c',
    'openssl/apps/s_server.c',
    'openssl/apps/s_time.c',
    'openssl/apps/sess_id.c',
    'openssl/apps/smime.c',
    'openssl/apps/speed.c',
    'openssl/apps/spkac.c',
    'openssl/apps/srp.c',
    'openssl/apps/storeutl.c',
    'openssl/apps/ts.c',
    'openssl/apps/verify.c',
    'openssl/apps/version.c',
    'openssl/apps/x509.c',
    'openssl/apps/lib/app_libctx.c',
    'openssl/apps/lib/app_params.c',
    'openssl/apps/lib/app_provider.c',
    'openssl/apps/lib/app_rand.c',
    'openssl/apps/lib/app_x509.c',
    'openssl/apps/lib/apps.c',
    'openssl/apps/lib/apps_ui.c',
    'openssl/apps/lib/columns.c',
    'openssl/apps/lib/engine.c',
    'openssl/apps/lib/engine_loader.c',
    'openssl/apps/lib/fmt.c',
    'openssl/apps/lib/http_server.c',

 'openssl/apps/lib/names.c',
    'openssl/apps/lib/opt.c',
    'openssl/apps/lib/s_cb.c',
    'openssl/apps/lib/s_socket.c',
    'openssl/apps/lib/tlssrp_depr.c',
  ],
},
'defines': ['<@(openssl_defines_BSD-x86)'],
'include_dirs': [
  './include',
],
'cflags' : ['<@(openssl_cflags_BSD-x86)'],
'libraries': ['<@(openssl_ex_libs_BSD-x86)'],
```

'sources': ['<@(openssl_cli_srcs_BSD-x86)'],
}
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Version 1.0.0

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```
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/cmp.h.in
*
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* this file except in compliance with the License.  You can obtain a copy
* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_CMP_H
# define OPENSSL_CMP_H

# include <openssl/opensslconf.h>
# ifndef OPENSSL_NO_CMP

#  include <openssl/crmf.h>
#  include <openssl/cmperr.h>
#  include <openssl/cmp_util.h>
#  include <openssl/http.h>

/* explicit #includes not strictly needed since implied by the above: */
#  include <openssl/types.h>
#  include <openssl/safestack.h>
#  include <openssl/x509.h>
#  include <openssl/x509v3.h>

#  ifdef __cplusplus
extern "C" {
#  endif

#  define OSSL_CMP_PVNO 2
```

```
/*-
*   PKIFailureInfo ::=
 BIT STRING {
*   -- since we can fail in more than one way!
*   -- More codes may be added in the future if/when required.
*       badAlg              (0),
*       -- unrecognized or unsupported Algorithm Identifier
*       badMessageCheck     (1),
*       -- integrity check failed (e.g., signature did not verify)
*       badRequest          (2),
*       -- transaction not permitted or supported
*       badTime             (3),
*       -- messageTime was not sufficiently close to the system time,
*       -- as defined by local policy
*       badCertId           (4),
*       -- no certificate could be found matching the provided criteria
*       badDataFormat       (5),
*       -- the data submitted has the wrong format
*       wrongAuthority      (6),
*       -- the authority indicated in the request is different from the
*       -- one creating the response token
*       incorrectData       (7),
*       -- the requester's data is incorrect (for notary services)
*
        missingTimeStamp    (8),
*       -- when the timestamp is missing but should be there
*       -- (by policy)
*       badPOP              (9),
*       -- the proof-of-possession failed
*       certRevoked         (10),
*         -- the certificate has already been revoked
*       certConfirmed       (11),
*         -- the certificate has already been confirmed
*       wrongIntegrity      (12),
*         -- invalid integrity, password based instead of signature or
*         -- vice versa
*       badRecipientNonce   (13),
*         -- invalid recipient nonce, either missing or wrong value
*       timeNotAvailable    (14),
*         -- the TSA's time source is not available
*       unacceptedPolicy    (15),
*         -- the requested TSA policy is not supported by the TSA.
*       unacceptedExtension (16),
*         -- the requested extension is not supported by the TSA.
*       addInfoNotAvailable (17),
*         -- the additional information requested
```

```
 could not be
*         -- understood or is not available
*      badSenderNonce      (18),
*         -- invalid sender nonce, either missing or wrong size
*      badCertTemplate     (19),
*         -- invalid cert. template or missing mandatory information
*      signerNotTrusted    (20),
*         -- signer of the message unknown or not trusted
*      transactionIdInUse  (21),
*         -- the transaction identifier is already in use
*      unsupportedVersion  (22),
*         -- the version of the message is not supported
*      notAuthorized       (23),
*         -- the sender was not authorized to make the preceding
*         -- request or perform the preceding action
*      systemUnavail       (24),
*      -- the request cannot be handled due to system unavailability
*      systemFailure       (25),
*      -- the request cannot be handled due to system failure
*      duplicateCertReq    (26)
*      -- certificate cannot be issued because a duplicate
 *      -- certificate already exists
*   }
*/
#  define OSSL_CMP_PKIFAILUREINFO_badAlg 0
#  define OSSL_CMP_PKIFAILUREINFO_badMessageCheck 1
#  define OSSL_CMP_PKIFAILUREINFO_badRequest 2
#  define OSSL_CMP_PKIFAILUREINFO_badTime 3
#  define OSSL_CMP_PKIFAILUREINFO_badCertId 4
#  define OSSL_CMP_PKIFAILUREINFO_badDataFormat 5
#  define OSSL_CMP_PKIFAILUREINFO_wrongAuthority 6
#  define OSSL_CMP_PKIFAILUREINFO_incorrectData 7
#  define OSSL_CMP_PKIFAILUREINFO_missingTimeStamp 8
#  define OSSL_CMP_PKIFAILUREINFO_badPOP 9
#  define OSSL_CMP_PKIFAILUREINFO_certRevoked 10
#  define OSSL_CMP_PKIFAILUREINFO_certConfirmed 11
#  define OSSL_CMP_PKIFAILUREINFO_wrongIntegrity 12
#  define OSSL_CMP_PKIFAILUREINFO_badRecipientNonce 13
#  define OSSL_CMP_PKIFAILUREINFO_timeNotAvailable 14
#  define OSSL_CMP_PKIFAILUREINFO_unacceptedPolicy 15
#  define OSSL_CMP_PKIFAILUREINFO_unacceptedExtension 16
#  define OSSL_CMP_PKIFAILUREINFO_addInfoNotAvailable 17
#  define OSSL_CMP_PKIFAILUREINFO_badSenderNonce
 18
#  define OSSL_CMP_PKIFAILUREINFO_badCertTemplate 19
#  define OSSL_CMP_PKIFAILUREINFO_signerNotTrusted 20
#  define OSSL_CMP_PKIFAILUREINFO_transactionIdInUse 21
#  define OSSL_CMP_PKIFAILUREINFO_unsupportedVersion 22
```

```
#  define OSSL_CMP_PKIFAILUREINFO_notAuthorized 23
#  define OSSL_CMP_PKIFAILUREINFO_systemUnavail 24
#  define OSSL_CMP_PKIFAILUREINFO_systemFailure 25
#  define OSSL_CMP_PKIFAILUREINFO_duplicateCertReq 26
#  define OSSL_CMP_PKIFAILUREINFO_MAX 26
#  define OSSL_CMP_PKIFAILUREINFO_MAX_BIT_PATTERN \
   ((1 << (OSSL_CMP_PKIFAILUREINFO_MAX + 1)) - 1)
#  if OSSL_CMP_PKIFAILUREINFO_MAX_BIT_PATTERN > INT_MAX
#   error CMP_PKIFAILUREINFO_MAX bit pattern does not fit in type int
#  endif

typedef ASN1_BIT_STRING OSSL_CMP_PKIFAILUREINFO;

#  define OSSL_CMP_CTX_FAILINFO_badAlg (1 << 0)
#  define OSSL_CMP_CTX_FAILINFO_badMessageCheck (1 << 1)
#  define OSSL_CMP_CTX_FAILINFO_badRequest (1 << 2)
#  define OSSL_CMP_CTX_FAILINFO_badTime (1 << 3)
#  define OSSL_CMP_CTX_FAILINFO_badCertId
 (1 << 4)
#  define OSSL_CMP_CTX_FAILINFO_badDataFormat (1 << 5)
#  define OSSL_CMP_CTX_FAILINFO_wrongAuthority (1 << 6)
#  define OSSL_CMP_CTX_FAILINFO_incorrectData (1 << 7)
#  define OSSL_CMP_CTX_FAILINFO_missingTimeStamp (1 << 8)
#  define OSSL_CMP_CTX_FAILINFO_badPOP (1 << 9)
#  define OSSL_CMP_CTX_FAILINFO_certRevoked (1 << 10)
#  define OSSL_CMP_CTX_FAILINFO_certConfirmed (1 << 11)
#  define OSSL_CMP_CTX_FAILINFO_wrongIntegrity (1 << 12)
#  define OSSL_CMP_CTX_FAILINFO_badRecipientNonce (1 << 13)
#  define OSSL_CMP_CTX_FAILINFO_timeNotAvailable (1 << 14)
#  define OSSL_CMP_CTX_FAILINFO_unacceptedPolicy (1 << 15)
#  define OSSL_CMP_CTX_FAILINFO_unacceptedExtension (1 << 16)
#  define OSSL_CMP_CTX_FAILINFO_addInfoNotAvailable (1 << 17)
#  define OSSL_CMP_CTX_FAILINFO_badSenderNonce (1 << 18)
#  define OSSL_CMP_CTX_FAILINFO_badCertTemplate (1 << 19)
#  define OSSL_CMP_CTX_FAILINFO_signerNotTrusted (1 << 20)
#  define OSSL_CMP_CTX_FAILINFO_transactionIdInUse (1
 << 21)
#  define OSSL_CMP_CTX_FAILINFO_unsupportedVersion (1 << 22)
#  define OSSL_CMP_CTX_FAILINFO_notAuthorized (1 << 23)
#  define OSSL_CMP_CTX_FAILINFO_systemUnavail (1 << 24)
#  define OSSL_CMP_CTX_FAILINFO_systemFailure (1 << 25)
#  define OSSL_CMP_CTX_FAILINFO_duplicateCertReq (1 << 26)

/*-
*   PKIStatus ::= INTEGER {
*       accepted                (0),
*       -- you got exactly what you asked for
*       grantedWithMods         (1),
```

```
*       -- you got something like what you asked for; the
*       -- requester is responsible for ascertaining the differences
*       rejection             (2),
*       -- you don't get it, more information elsewhere in the message
*       waiting               (3),
*       -- the request body part has not yet been processed; expect to
*       -- hear more later (note: proper handling of this status
*       -- response MAY use the polling req/rep PKIMessages specified
*       -- in Section 5.3.22; alternatively, polling in the underlying
 *       -- transport layer MAY have some utility in this regard)
*       revocationWarning      (4),
*       -- this message contains a warning that a revocation is
*       -- imminent
*       revocationNotification (5),
*       -- notification that a revocation has occurred
*       keyUpdateWarning       (6)
*       -- update already done for the oldCertId specified in
*       -- CertReqMsg
*   }
*/
#  define OSSL_CMP_PKISTATUS_request               -3
#  define OSSL_CMP_PKISTATUS_trans                 -2
#  define OSSL_CMP_PKISTATUS_unspecified           -1
#  define OSSL_CMP_PKISTATUS_accepted              0
#  define OSSL_CMP_PKISTATUS_grantedWithMods       1
#  define OSSL_CMP_PKISTATUS_rejection             2
#  define OSSL_CMP_PKISTATUS_waiting               3
#  define OSSL_CMP_PKISTATUS_revocationWarning     4
#  define OSSL_CMP_PKISTATUS_revocationNotification 5
#  define OSSL_CMP_PKISTATUS_keyUpdateWarning      6

typedef ASN1_INTEGER OSSL_CMP_PKISTATUS;
DECLARE_ASN1_ITEM(OSSL_CMP_PKISTATUS)

#
  define OSSL_CMP_CERTORENCCERT_CERTIFICATE 0
#  define OSSL_CMP_CERTORENCCERT_ENCRYPTEDCERT 1

/* data type declarations */
typedef struct ossl_cmp_ctx_st OSSL_CMP_CTX;
typedef struct ossl_cmp_pkiheader_st OSSL_CMP_PKIHEADER;
DECLARE_ASN1_FUNCTIONS(OSSL_CMP_PKIHEADER)
typedef struct ossl_cmp_msg_st OSSL_CMP_MSG;
DECLARE_ASN1_DUP_FUNCTION(OSSL_CMP_MSG)
DECLARE_ASN1_ENCODE_FUNCTIONS(OSSL_CMP_MSG, OSSL_CMP_MSG, OSSL_CMP_MSG)
typedef struct ossl_cmp_certstatus_st OSSL_CMP_CERTSTATUS;
SKM_DEFINE_STACK_OF_INTERNAL(OSSL_CMP_CERTSTATUS, OSSL_CMP_CERTSTATUS,
OSSL_CMP_CERTSTATUS)
```

```
#define sk_OSSL_CMP_CERTSTATUS_num(sk)
OPENSSL_sk_num(ossl_check_const_OSSL_CMP_CERTSTATUS_sk_type(sk))
#define sk_OSSL_CMP_CERTSTATUS_value(sk, idx) ((OSSL_CMP_CERTSTATUS
*)OPENSSL_sk_value(ossl_check_const_OSSL_CMP_CERTSTATUS_sk_type(sk), (idx)))
#define sk_OSSL_CMP_CERTSTATUS_new(cmp) ((STACK_OF(OSSL_CMP_CERTSTATUS)
*)OPENSSL_sk_new(ossl_check_OSSL_CMP_CERTSTATUS_compfunc_type(cmp)))
#define
 sk_OSSL_CMP_CERTSTATUS_new_null() ((STACK_OF(OSSL_CMP_CERTSTATUS)
*)OPENSSL_sk_new_null())
#define sk_OSSL_CMP_CERTSTATUS_new_reserve(cmp, n) ((STACK_OF(OSSL_CMP_CERTSTATUS)
*)OPENSSL_sk_new_reserve(ossl_check_OSSL_CMP_CERTSTATUS_compfunc_type(cmp), (n)))
#define sk_OSSL_CMP_CERTSTATUS_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk), (n))
#define sk_OSSL_CMP_CERTSTATUS_free(sk)
OPENSSL_sk_free(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk))
#define sk_OSSL_CMP_CERTSTATUS_zero(sk)
OPENSSL_sk_zero(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk))
#define sk_OSSL_CMP_CERTSTATUS_delete(sk, i) ((OSSL_CMP_CERTSTATUS
*)OPENSSL_sk_delete(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk), (i)))
#define sk_OSSL_CMP_CERTSTATUS_delete_ptr(sk, ptr) ((OSSL_CMP_CERTSTATUS
*)OPENSSL_sk_delete_ptr(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk),
ossl_check_OSSL_CMP_CERTSTATUS_type(ptr)))
#define sk_OSSL_CMP_CERTSTATUS_push(sk, ptr)
OPENSSL_sk_push(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk),
 ossl_check_OSSL_CMP_CERTSTATUS_type(ptr))
#define sk_OSSL_CMP_CERTSTATUS_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk),
ossl_check_OSSL_CMP_CERTSTATUS_type(ptr))
#define sk_OSSL_CMP_CERTSTATUS_pop(sk) ((OSSL_CMP_CERTSTATUS
*)OPENSSL_sk_pop(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk)))
#define sk_OSSL_CMP_CERTSTATUS_shift(sk) ((OSSL_CMP_CERTSTATUS
*)OPENSSL_sk_shift(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk)))
#define sk_OSSL_CMP_CERTSTATUS_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk),ossl_check_OSSL_CMP_CERTST
ATUS_freefunc_type(freefunc))
#define sk_OSSL_CMP_CERTSTATUS_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk),
ossl_check_OSSL_CMP_CERTSTATUS_type(ptr), (idx))
#define sk_OSSL_CMP_CERTSTATUS_set(sk, idx, ptr) ((OSSL_CMP_CERTSTATUS
*)OPENSSL_sk_set(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk), (idx),
ossl_check_OSSL_CMP_CERTSTATUS_type(ptr)))
#define sk_OSSL_CMP_CERTSTATUS_find(sk,
 ptr) OPENSSL_sk_find(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk),
ossl_check_OSSL_CMP_CERTSTATUS_type(ptr))
#define sk_OSSL_CMP_CERTSTATUS_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk),
ossl_check_OSSL_CMP_CERTSTATUS_type(ptr))
#define sk_OSSL_CMP_CERTSTATUS_find_all(sk, ptr, pnum)
```

```
OPENSSL_sk_find_all(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk),
ossl_check_OSSL_CMP_CERTSTATUS_type(ptr), pnum)
#define sk_OSSL_CMP_CERTSTATUS_sort(sk)
OPENSSL_sk_sort(ossl_check_OSSL_CMP_CERTSTATUS_sk_type(sk))
#define sk_OSSL_CMP_CERTSTATUS_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OSSL_CMP_CERTSTATUS_sk_type(sk))
#define sk_OSSL_CMP_CERTSTATUS_dup(sk) ((STACK_OF(OSSL_CMP_CERTSTATUS)
*)OPENSSL_sk_dup(ossl_check_const_OSSL_CMP_CERTSTATUS_sk_type(sk)))
#define sk_OSSL_CMP_CERTSTATUS_deep_copy(sk, copyfunc, freefunc)
((STACK_OF(OSSL_CMP_CERTSTATUS)
*)OPENSSL_sk_deep_copy(ossl_check_const_OSSL_CMP_CERTSTATUS_sk_type(sk),
ossl_check_OSSL_CMP_CERTSTATUS_copyfunc_type(copyfunc),
 ossl_check_OSSL_CMP_CERTSTATUS_freefunc_type(freefunc)))
#define sk_OSSL_CMP_CERTSTATUS_set_cmp_func(sk, cmp)
((sk_OSSL_CMP_CERTSTATUS_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OSSL_CMP_CERTSTAT
US_sk_type(sk), ossl_check_OSSL_CMP_CERTSTATUS_compfunc_type(cmp)))

typedef struct ossl_cmp_itav_st OSSL_CMP_ITAV;
DECLARE_ASN1_DUP_FUNCTION(OSSL_CMP_ITAV)
SKM_DEFINE_STACK_OF_INTERNAL(OSSL_CMP_ITAV, OSSL_CMP_ITAV, OSSL_CMP_ITAV)
#define sk_OSSL_CMP_ITAV_num(sk) OPENSSL_sk_num(ossl_check_const_OSSL_CMP_ITAV_sk_type(sk))
#define sk_OSSL_CMP_ITAV_value(sk, idx) ((OSSL_CMP_ITAV
*)OPENSSL_sk_value(ossl_check_const_OSSL_CMP_ITAV_sk_type(sk), (idx)))
#define sk_OSSL_CMP_ITAV_new(cmp) ((STACK_OF(OSSL_CMP_ITAV)
*)OPENSSL_sk_new(ossl_check_OSSL_CMP_ITAV_compfunc_type(cmp)))
#define sk_OSSL_CMP_ITAV_new_null() ((STACK_OF(OSSL_CMP_ITAV) *)OPENSSL_sk_new_null())
#define sk_OSSL_CMP_ITAV_new_reserve(cmp, n) ((STACK_OF(OSSL_CMP_ITAV)
*)OPENSSL_sk_new_reserve(ossl_check_OSSL_CMP_ITAV_compfunc_type(cmp),
 (n)))
#define sk_OSSL_CMP_ITAV_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_OSSL_CMP_ITAV_sk_type(sk),
(n))
#define sk_OSSL_CMP_ITAV_free(sk) OPENSSL_sk_free(ossl_check_OSSL_CMP_ITAV_sk_type(sk))
#define sk_OSSL_CMP_ITAV_zero(sk) OPENSSL_sk_zero(ossl_check_OSSL_CMP_ITAV_sk_type(sk))
#define sk_OSSL_CMP_ITAV_delete(sk, i) ((OSSL_CMP_ITAV
*)OPENSSL_sk_delete(ossl_check_OSSL_CMP_ITAV_sk_type(sk), (i)))
#define sk_OSSL_CMP_ITAV_delete_ptr(sk, ptr) ((OSSL_CMP_ITAV
*)OPENSSL_sk_delete_ptr(ossl_check_OSSL_CMP_ITAV_sk_type(sk),
ossl_check_OSSL_CMP_ITAV_type(ptr)))
#define sk_OSSL_CMP_ITAV_push(sk, ptr) OPENSSL_sk_push(ossl_check_OSSL_CMP_ITAV_sk_type(sk),
ossl_check_OSSL_CMP_ITAV_type(ptr))
#define sk_OSSL_CMP_ITAV_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_OSSL_CMP_ITAV_sk_type(sk), ossl_check_OSSL_CMP_ITAV_type(ptr))
#define sk_OSSL_CMP_ITAV_pop(sk) ((OSSL_CMP_ITAV
*)OPENSSL_sk_pop(ossl_check_OSSL_CMP_ITAV_sk_type(sk)))
#define sk_OSSL_CMP_ITAV_shift(sk) ((OSSL_CMP_ITAV
 *)OPENSSL_sk_shift(ossl_check_OSSL_CMP_ITAV_sk_type(sk)))
#define sk_OSSL_CMP_ITAV_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OSSL_CMP_ITAV_sk_type(sk),ossl_check_OSSL_CMP_ITAV_freefunc_ty
```

```
pe(freefunc))
#define sk_OSSL_CMP_ITAV_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_OSSL_CMP_ITAV_sk_type(sk), ossl_check_OSSL_CMP_ITAV_type(ptr),
(idx))
#define sk_OSSL_CMP_ITAV_set(sk, idx, ptr) ((OSSL_CMP_ITAV
*)OPENSSL_sk_set(ossl_check_OSSL_CMP_ITAV_sk_type(sk), (idx),
ossl_check_OSSL_CMP_ITAV_type(ptr)))
#define sk_OSSL_CMP_ITAV_find(sk, ptr) OPENSSL_sk_find(ossl_check_OSSL_CMP_ITAV_sk_type(sk),
ossl_check_OSSL_CMP_ITAV_type(ptr))
#define sk_OSSL_CMP_ITAV_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OSSL_CMP_ITAV_sk_type(sk), ossl_check_OSSL_CMP_ITAV_type(ptr))
#define sk_OSSL_CMP_ITAV_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OSSL_CMP_ITAV_sk_type(sk), ossl_check_OSSL_CMP_ITAV_type(ptr),
pnum)
#define sk_OSSL_CMP_ITAV_sort(sk) OPENSSL_sk_sort(ossl_check_OSSL_CMP_ITAV_sk_type(sk))
#define
 sk_OSSL_CMP_ITAV_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_OSSL_CMP_ITAV_sk_type(sk))
#define sk_OSSL_CMP_ITAV_dup(sk) ((STACK_OF(OSSL_CMP_ITAV)
*)OPENSSL_sk_dup(ossl_check_const_OSSL_CMP_ITAV_sk_type(sk)))
#define sk_OSSL_CMP_ITAV_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(OSSL_CMP_ITAV)
*)OPENSSL_sk_deep_copy(ossl_check_const_OSSL_CMP_ITAV_sk_type(sk),
ossl_check_OSSL_CMP_ITAV_copyfunc_type(copyfunc),
ossl_check_OSSL_CMP_ITAV_freefunc_type(freefunc)))
#define sk_OSSL_CMP_ITAV_set_cmp_func(sk, cmp)
((sk_OSSL_CMP_ITAV_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OSSL_CMP_ITAV_sk_type(sk),
ossl_check_OSSL_CMP_ITAV_compfunc_type(cmp)))

typedef struct ossl_cmp_revrepcontent_st OSSL_CMP_REVREPCONTENT;
typedef struct ossl_cmp_pkisi_st OSSL_CMP_PKISI;
DECLARE_ASN1_FUNCTIONS(OSSL_CMP_PKISI)
DECLARE_ASN1_DUP_FUNCTION(OSSL_CMP_PKISI)
SKM_DEFINE_STACK_OF_INTERNAL(OSSL_CMP_PKISI, OSSL_CMP_PKISI, OSSL_CMP_PKISI)
#define sk_OSSL_CMP_PKISI_num(sk) OPENSSL_sk_num(ossl_check_const_OSSL_CMP_PKISI_sk_type(sk))
#define
 sk_OSSL_CMP_PKISI_value(sk, idx) ((OSSL_CMP_PKISI
*)OPENSSL_sk_value(ossl_check_const_OSSL_CMP_PKISI_sk_type(sk), (idx)))
#define sk_OSSL_CMP_PKISI_new(cmp) ((STACK_OF(OSSL_CMP_PKISI)
*)OPENSSL_sk_new(ossl_check_OSSL_CMP_PKISI_compfunc_type(cmp)))
#define sk_OSSL_CMP_PKISI_new_null() ((STACK_OF(OSSL_CMP_PKISI) *)OPENSSL_sk_new_null())
#define sk_OSSL_CMP_PKISI_new_reserve(cmp, n) ((STACK_OF(OSSL_CMP_PKISI)
*)OPENSSL_sk_new_reserve(ossl_check_OSSL_CMP_PKISI_compfunc_type(cmp), (n)))
#define sk_OSSL_CMP_PKISI_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_OSSL_CMP_PKISI_sk_type(sk),
(n))
#define sk_OSSL_CMP_PKISI_free(sk) OPENSSL_sk_free(ossl_check_OSSL_CMP_PKISI_sk_type(sk))
#define sk_OSSL_CMP_PKISI_zero(sk) OPENSSL_sk_zero(ossl_check_OSSL_CMP_PKISI_sk_type(sk))
#define sk_OSSL_CMP_PKISI_delete(sk, i) ((OSSL_CMP_PKISI
*)OPENSSL_sk_delete(ossl_check_OSSL_CMP_PKISI_sk_type(sk), (i)))
#define sk_OSSL_CMP_PKISI_delete_ptr(sk, ptr)
```

```
 ((OSSL_CMP_PKISI *)OPENSSL_sk_delete_ptr(ossl_check_OSSL_CMP_PKISI_sk_type(sk),
ossl_check_OSSL_CMP_PKISI_type(ptr)))
#define sk_OSSL_CMP_PKISI_push(sk, ptr) OPENSSL_sk_push(ossl_check_OSSL_CMP_PKISI_sk_type(sk),
ossl_check_OSSL_CMP_PKISI_type(ptr))
#define sk_OSSL_CMP_PKISI_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_OSSL_CMP_PKISI_sk_type(sk), ossl_check_OSSL_CMP_PKISI_type(ptr))
#define sk_OSSL_CMP_PKISI_pop(sk) ((OSSL_CMP_PKISI
*)OPENSSL_sk_pop(ossl_check_OSSL_CMP_PKISI_sk_type(sk)))
#define sk_OSSL_CMP_PKISI_shift(sk) ((OSSL_CMP_PKISI
*)OPENSSL_sk_shift(ossl_check_OSSL_CMP_PKISI_sk_type(sk)))
#define sk_OSSL_CMP_PKISI_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OSSL_CMP_PKISI_sk_type(sk),ossl_check_OSSL_CMP_PKISI_freefunc_ty
pe(freefunc))
#define sk_OSSL_CMP_PKISI_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_OSSL_CMP_PKISI_sk_type(sk), ossl_check_OSSL_CMP_PKISI_type(ptr),
(idx))
#define sk_OSSL_CMP_PKISI_set(sk, idx, ptr) ((OSSL_CMP_PKISI
*)OPENSSL_sk_set(ossl_check_OSSL_CMP_PKISI_sk_type(sk),
 (idx), ossl_check_OSSL_CMP_PKISI_type(ptr)))
#define sk_OSSL_CMP_PKISI_find(sk, ptr) OPENSSL_sk_find(ossl_check_OSSL_CMP_PKISI_sk_type(sk),
ossl_check_OSSL_CMP_PKISI_type(ptr))
#define sk_OSSL_CMP_PKISI_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OSSL_CMP_PKISI_sk_type(sk), ossl_check_OSSL_CMP_PKISI_type(ptr))
#define sk_OSSL_CMP_PKISI_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OSSL_CMP_PKISI_sk_type(sk), ossl_check_OSSL_CMP_PKISI_type(ptr),
pnum)
#define sk_OSSL_CMP_PKISI_sort(sk) OPENSSL_sk_sort(ossl_check_OSSL_CMP_PKISI_sk_type(sk))
#define sk_OSSL_CMP_PKISI_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OSSL_CMP_PKISI_sk_type(sk))
#define sk_OSSL_CMP_PKISI_dup(sk) ((STACK_OF(OSSL_CMP_PKISI)
*)OPENSSL_sk_dup(ossl_check_const_OSSL_CMP_PKISI_sk_type(sk)))
#define sk_OSSL_CMP_PKISI_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(OSSL_CMP_PKISI)
*)OPENSSL_sk_deep_copy(ossl_check_const_OSSL_CMP_PKISI_sk_type(sk),
ossl_check_OSSL_CMP_PKISI_copyfunc_type(copyfunc),
 ossl_check_OSSL_CMP_PKISI_freefunc_type(freefunc)))
#define sk_OSSL_CMP_PKISI_set_cmp_func(sk, cmp)
((sk_OSSL_CMP_PKISI_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OSSL_CMP_PKISI_sk_type(sk),
ossl_check_OSSL_CMP_PKISI_compfunc_type(cmp)))

typedef struct ossl_cmp_certrepmessage_st OSSL_CMP_CERTREPMESSAGE;
SKM_DEFINE_STACK_OF_INTERNAL(OSSL_CMP_CERTREPMESSAGE,
OSSL_CMP_CERTREPMESSAGE, OSSL_CMP_CERTREPMESSAGE)
#define sk_OSSL_CMP_CERTREPMESSAGE_num(sk)
OPENSSL_sk_num(ossl_check_const_OSSL_CMP_CERTREPMESSAGE_sk_type(sk))
#define sk_OSSL_CMP_CERTREPMESSAGE_value(sk, idx) ((OSSL_CMP_CERTREPMESSAGE
*)OPENSSL_sk_value(ossl_check_const_OSSL_CMP_CERTREPMESSAGE_sk_type(sk), (idx)))
#define sk_OSSL_CMP_CERTREPMESSAGE_new(cmp) ((STACK_OF(OSSL_CMP_CERTREPMESSAGE)
*)OPENSSL_sk_new(ossl_check_OSSL_CMP_CERTREPMESSAGE_compfunc_type(cmp)))
```

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#define sk_OSSL_CMP_CERTREPMESSAGE_new_null() ((STACK_OF(OSSL_CMP_CERTREPMESSAGE)
*)OPENSSL_sk_new_null())
#define sk_OSSL_CMP_CERTREPMESSAGE_new_reserve(cmp,
 n) ((STACK_OF(OSSL_CMP_CERTREPMESSAGE)
*)OPENSSL_sk_new_reserve(ossl_check_OSSL_CMP_CERTREPMESSAGE_compfunc_type(cmp), (n)))
#define sk_OSSL_CMP_CERTREPMESSAGE_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk), (n))
#define sk_OSSL_CMP_CERTREPMESSAGE_free(sk)
OPENSSL_sk_free(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk))
#define sk_OSSL_CMP_CERTREPMESSAGE_zero(sk)
OPENSSL_sk_zero(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk))
#define sk_OSSL_CMP_CERTREPMESSAGE_delete(sk, i) ((OSSL_CMP_CERTREPMESSAGE
*)OPENSSL_sk_delete(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk), (i)))
#define sk_OSSL_CMP_CERTREPMESSAGE_delete_ptr(sk, ptr) ((OSSL_CMP_CERTREPMESSAGE
*)OPENSSL_sk_delete_ptr(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk),
ossl_check_OSSL_CMP_CERTREPMESSAGE_type(ptr)))
#define sk_OSSL_CMP_CERTREPMESSAGE_push(sk, ptr)
OPENSSL_sk_push(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk),
ossl_check_OSSL_CMP_CERTREPMESSAGE_type(ptr))
#define sk_OSSL_CMP_CERTREPMESSAGE_unshift(sk,
 ptr) OPENSSL_sk_unshift(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk),
ossl_check_OSSL_CMP_CERTREPMESSAGE_type(ptr))
#define sk_OSSL_CMP_CERTREPMESSAGE_pop(sk) ((OSSL_CMP_CERTREPMESSAGE
*)OPENSSL_sk_pop(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk)))
#define sk_OSSL_CMP_CERTREPMESSAGE_shift(sk) ((OSSL_CMP_CERTREPMESSAGE
*)OPENSSL_sk_shift(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk)))
#define sk_OSSL_CMP_CERTREPMESSAGE_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk),ossl_check_OSSL_CMP_CE
RTREPMESSAGE_freefunc_type(freefunc))
#define sk_OSSL_CMP_CERTREPMESSAGE_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk),
ossl_check_OSSL_CMP_CERTREPMESSAGE_type(ptr), (idx))
#define sk_OSSL_CMP_CERTREPMESSAGE_set(sk, idx, ptr) ((OSSL_CMP_CERTREPMESSAGE
*)OPENSSL_sk_set(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk), (idx),
ossl_check_OSSL_CMP_CERTREPMESSAGE_type(ptr)))
#define sk_OSSL_CMP_CERTREPMESSAGE_find(sk,
 ptr) OPENSSL_sk_find(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk),
ossl_check_OSSL_CMP_CERTREPMESSAGE_type(ptr))
#define sk_OSSL_CMP_CERTREPMESSAGE_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk),
ossl_check_OSSL_CMP_CERTREPMESSAGE_type(ptr))
#define sk_OSSL_CMP_CERTREPMESSAGE_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk),
ossl_check_OSSL_CMP_CERTREPMESSAGE_type(ptr), pnum)
#define sk_OSSL_CMP_CERTREPMESSAGE_sort(sk)
OPENSSL_sk_sort(ossl_check_OSSL_CMP_CERTREPMESSAGE_sk_type(sk))
#define sk_OSSL_CMP_CERTREPMESSAGE_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OSSL_CMP_CERTREPMESSAGE_sk_type(sk))
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#define sk_OSSL_CMP_CERTREPMESSAGE_dup(sk) ((STACK_OF(OSSL_CMP_CERTREPMESSAGE)
*)OPENSSL_sk_dup(ossl_check_const_OSSL_CMP_CERTREPMESSAGE_sk_type(sk)))
#define sk_OSSL_CMP_CERTREPMESSAGE_deep_copy(sk, copyfunc, freefunc)
((STACK_OF(OSSL_CMP_CERTREPMESSAGE)
*)OPENSSL_sk_deep_copy(ossl_check_const_OSSL_CMP_CERTREPMESSAGE_sk_type(sk),
 ossl_check_OSSL_CMP_CERTREPMESSAGE_copyfunc_type(copyfunc),
ossl_check_OSSL_CMP_CERTREPMESSAGE_freefunc_type(freefunc)))
#define sk_OSSL_CMP_CERTREPMESSAGE_set_cmp_func(sk, cmp)
((sk_OSSL_CMP_CERTREPMESSAGE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OSSL_CMP_CERT
REPMESSAGE_sk_type(sk), ossl_check_OSSL_CMP_CERTREPMESSAGE_compfunc_type(cmp)))

typedef struct ossl_cmp_pollrep_st OSSL_CMP_POLLREP;
typedef STACK_OF(OSSL_CMP_POLLREP) OSSL_CMP_POLLREPCONTENT;
typedef struct ossl_cmp_certresponse_st OSSL_CMP_CERTRESPONSE;
SKM_DEFINE_STACK_OF_INTERNAL(OSSL_CMP_CERTRESPONSE, OSSL_CMP_CERTRESPONSE,
OSSL_CMP_CERTRESPONSE)
#define sk_OSSL_CMP_CERTRESPONSE_num(sk)
OPENSSL_sk_num(ossl_check_const_OSSL_CMP_CERTRESPONSE_sk_type(sk))
#define sk_OSSL_CMP_CERTRESPONSE_value(sk, idx) ((OSSL_CMP_CERTRESPONSE
*)OPENSSL_sk_value(ossl_check_const_OSSL_CMP_CERTRESPONSE_sk_type(sk), (idx)))
#define sk_OSSL_CMP_CERTRESPONSE_new(cmp) ((STACK_OF(OSSL_CMP_CERTRESPONSE)
 *)OPENSSL_sk_new(ossl_check_OSSL_CMP_CERTRESPONSE_compfunc_type(cmp)))
#define sk_OSSL_CMP_CERTRESPONSE_new_null() ((STACK_OF(OSSL_CMP_CERTRESPONSE)
*)OPENSSL_sk_new_null())
#define sk_OSSL_CMP_CERTRESPONSE_new_reserve(cmp, n) ((STACK_OF(OSSL_CMP_CERTRESPONSE)
*)OPENSSL_sk_new_reserve(ossl_check_OSSL_CMP_CERTRESPONSE_compfunc_type(cmp), (n)))
#define sk_OSSL_CMP_CERTRESPONSE_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk), (n))
#define sk_OSSL_CMP_CERTRESPONSE_free(sk)
OPENSSL_sk_free(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk))
#define sk_OSSL_CMP_CERTRESPONSE_zero(sk)
OPENSSL_sk_zero(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk))
#define sk_OSSL_CMP_CERTRESPONSE_delete(sk, i) ((OSSL_CMP_CERTRESPONSE
*)OPENSSL_sk_delete(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk), (i)))
#define sk_OSSL_CMP_CERTRESPONSE_delete_ptr(sk, ptr) ((OSSL_CMP_CERTRESPONSE
*)OPENSSL_sk_delete_ptr(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk),
ossl_check_OSSL_CMP_CERTRESPONSE_type(ptr)))
#define
 sk_OSSL_CMP_CERTRESPONSE_push(sk, ptr)
OPENSSL_sk_push(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk),
ossl_check_OSSL_CMP_CERTRESPONSE_type(ptr))
#define sk_OSSL_CMP_CERTRESPONSE_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk),
ossl_check_OSSL_CMP_CERTRESPONSE_type(ptr))
#define sk_OSSL_CMP_CERTRESPONSE_pop(sk) ((OSSL_CMP_CERTRESPONSE
*)OPENSSL_sk_pop(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk)))
#define sk_OSSL_CMP_CERTRESPONSE_shift(sk) ((OSSL_CMP_CERTRESPONSE
*)OPENSSL_sk_shift(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk)))
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#define sk_OSSL_CMP_CERTRESPONSE_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk),ossl_check_OSSL_CMP_CERT
RESPONSE_freefunc_type(freefunc))
#define sk_OSSL_CMP_CERTRESPONSE_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk),
ossl_check_OSSL_CMP_CERTRESPONSE_type(ptr), (idx))
#define sk_OSSL_CMP_CERTRESPONSE_set(sk, idx, ptr) ((OSSL_CMP_CERTRESPONSE
 *)OPENSSL_sk_set(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk), (idx),
ossl_check_OSSL_CMP_CERTRESPONSE_type(ptr)))
#define sk_OSSL_CMP_CERTRESPONSE_find(sk, ptr)
OPENSSL_sk_find(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk),
ossl_check_OSSL_CMP_CERTRESPONSE_type(ptr))
#define sk_OSSL_CMP_CERTRESPONSE_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk),
ossl_check_OSSL_CMP_CERTRESPONSE_type(ptr))
#define sk_OSSL_CMP_CERTRESPONSE_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk),
ossl_check_OSSL_CMP_CERTRESPONSE_type(ptr), pnum)
#define sk_OSSL_CMP_CERTRESPONSE_sort(sk)
OPENSSL_sk_sort(ossl_check_OSSL_CMP_CERTRESPONSE_sk_type(sk))
#define sk_OSSL_CMP_CERTRESPONSE_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OSSL_CMP_CERTRESPONSE_sk_type(sk))
#define sk_OSSL_CMP_CERTRESPONSE_dup(sk) ((STACK_OF(OSSL_CMP_CERTRESPONSE)
*)OPENSSL_sk_dup(ossl_check_const_OSSL_CMP_CERTRESPONSE_sk_type(sk)))
#define sk_OSSL_CMP_CERTRESPONSE_deep_copy(sk,
 copyfunc, freefunc) ((STACK_OF(OSSL_CMP_CERTRESPONSE)
*)OPENSSL_sk_deep_copy(ossl_check_const_OSSL_CMP_CERTRESPONSE_sk_type(sk),
ossl_check_OSSL_CMP_CERTRESPONSE_copyfunc_type(copyfunc),
ossl_check_OSSL_CMP_CERTRESPONSE_freefunc_type(freefunc)))
#define sk_OSSL_CMP_CERTRESPONSE_set_cmp_func(sk, cmp)
((sk_OSSL_CMP_CERTRESPONSE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OSSL_CMP_CERTRE
SPONSE_sk_type(sk), ossl_check_OSSL_CMP_CERTRESPONSE_compfunc_type(cmp)))

typedef STACK_OF(ASN1_UTF8STRING) OSSL_CMP_PKIFREETEXT;

/*
* function DECLARATIONS
*/

/* from cmp_asn.c */
OSSL_CMP_ITAV *OSSL_CMP_ITAV_create(ASN1_OBJECT *type, ASN1_TYPE *value);
void OSSL_CMP_ITAV_set0(OSSL_CMP_ITAV *itav, ASN1_OBJECT *type,
                        ASN1_TYPE *value);
ASN1_OBJECT *OSSL_CMP_ITAV_get0_type(const OSSL_CMP_ITAV *itav);
ASN1_TYPE *OSSL_CMP_ITAV_get0_value(const OSSL_CMP_ITAV *itav);
int OSSL_CMP_ITAV_push0_stack_item(STACK_OF(OSSL_CMP_ITAV) **itav_sk_p,
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                OSSL_CMP_ITAV *itav);
void OSSL_CMP_ITAV_free(OSSL_CMP_ITAV *itav);
void OSSL_CMP_MSG_free(OSSL_CMP_MSG *msg);

/* from cmp_ctx.c */
OSSL_CMP_CTX *OSSL_CMP_CTX_new(OSSL_LIB_CTX *libctx, const char *propq);
void OSSL_CMP_CTX_free(OSSL_CMP_CTX *ctx);
int OSSL_CMP_CTX_reinit(OSSL_CMP_CTX *ctx);
/* CMP general options: */
#  define OSSL_CMP_OPT_LOG_VERBOSITY 0
/* CMP transfer options: */
#  define OSSL_CMP_OPT_KEEP_ALIVE 10
#  define OSSL_CMP_OPT_MSG_TIMEOUT 11
#  define OSSL_CMP_OPT_TOTAL_TIMEOUT 12
/* CMP request options: */
#  define OSSL_CMP_OPT_VALIDITY_DAYS 20
#  define OSSL_CMP_OPT_SUBJECTALTNAME_NODEFAULT 21
#  define OSSL_CMP_OPT_SUBJECTALTNAME_CRITICAL 22
#  define OSSL_CMP_OPT_POLICIES_CRITICAL 23
#  define OSSL_CMP_OPT_POPO_METHOD 24
#  define OSSL_CMP_OPT_IMPLICIT_CONFIRM 25
#  define OSSL_CMP_OPT_DISABLE_CONFIRM 26
#  define OSSL_CMP_OPT_REVOCATION_REASON 27
/* CMP protection options: */
#  define OSSL_CMP_OPT_UNPROTECTED_SEND 30
#  define OSSL_CMP_OPT_UNPROTECTED_ERRORS
 31
#  define OSSL_CMP_OPT_OWF_ALGNID 32
#  define OSSL_CMP_OPT_MAC_ALGNID 33
#  define OSSL_CMP_OPT_DIGEST_ALGNID 34
#  define OSSL_CMP_OPT_IGNORE_KEYUSAGE 35
#  define OSSL_CMP_OPT_PERMIT_TA_IN_EXTRACERTS_FOR_IR 36
int OSSL_CMP_CTX_set_option(OSSL_CMP_CTX *ctx, int opt, int val);
int OSSL_CMP_CTX_get_option(const OSSL_CMP_CTX *ctx, int opt);
/* CMP-specific callback for logging and outputting the error queue: */
int OSSL_CMP_CTX_set_log_cb(OSSL_CMP_CTX *ctx, OSSL_CMP_log_cb_t cb);
#  define OSSL_CMP_CTX_set_log_verbosity(ctx, level) \
   OSSL_CMP_CTX_set_option(ctx, OSSL_CMP_OPT_LOG_VERBOSITY, level)
void OSSL_CMP_CTX_print_errors(const OSSL_CMP_CTX *ctx);
/* message transfer: */
int OSSL_CMP_CTX_set1_serverPath(OSSL_CMP_CTX *ctx, const char *path);
int OSSL_CMP_CTX_set1_server(OSSL_CMP_CTX *ctx, const char *address);
int OSSL_CMP_CTX_set_serverPort(OSSL_CMP_CTX *ctx, int port);
int OSSL_CMP_CTX_set1_proxy(OSSL_CMP_CTX *ctx, const char *name);
int OSSL_CMP_CTX_set1_no_proxy(OSSL_CMP_CTX
 *ctx, const char *names);
int OSSL_CMP_CTX_set_http_cb(OSSL_CMP_CTX *ctx, OSSL_HTTP_bio_cb_t cb);
int OSSL_CMP_CTX_set_http_cb_arg(OSSL_CMP_CTX *ctx, void *arg);
```

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void *OSSL_CMP_CTX_get_http_cb_arg(const OSSL_CMP_CTX *ctx);
typedef OSSL_CMP_MSG *(*OSSL_CMP_transfer_cb_t) (OSSL_CMP_CTX *ctx,
                                const OSSL_CMP_MSG *req);
int OSSL_CMP_CTX_set_transfer_cb(OSSL_CMP_CTX *ctx, OSSL_CMP_transfer_cb_t cb);
int OSSL_CMP_CTX_set_transfer_cb_arg(OSSL_CMP_CTX *ctx, void *arg);
void *OSSL_CMP_CTX_get_transfer_cb_arg(const OSSL_CMP_CTX *ctx);
/* server authentication: */
int OSSL_CMP_CTX_set1_srvCert(OSSL_CMP_CTX *ctx, X509 *cert);
int OSSL_CMP_CTX_set1_expected_sender(OSSL_CMP_CTX *ctx, const X509_NAME *name);
int OSSL_CMP_CTX_set0_trustedStore(OSSL_CMP_CTX *ctx, X509_STORE *store);
X509_STORE *OSSL_CMP_CTX_get0_trustedStore(const OSSL_CMP_CTX *ctx);
int OSSL_CMP_CTX_set1_untrusted(OSSL_CMP_CTX *ctx, STACK_OF(X509) *certs);
STACK_OF(X509)
 *OSSL_CMP_CTX_get0_untrusted(const OSSL_CMP_CTX *ctx);
/* client authentication: */
int OSSL_CMP_CTX_set1_cert(OSSL_CMP_CTX *ctx, X509 *cert);
int OSSL_CMP_CTX_build_cert_chain(OSSL_CMP_CTX *ctx, X509_STORE *own_trusted,
                        STACK_OF(X509) *candidates);
int OSSL_CMP_CTX_set1_pkey(OSSL_CMP_CTX *ctx, EVP_PKEY *pkey);
int OSSL_CMP_CTX_set1_referenceValue(OSSL_CMP_CTX *ctx,
                         const unsigned char *ref, int len);
int OSSL_CMP_CTX_set1_secretValue(OSSL_CMP_CTX *ctx,
                        const unsigned char *sec, int len);
/* CMP message header and extra certificates: */
int OSSL_CMP_CTX_set1_recipient(OSSL_CMP_CTX *ctx, const X509_NAME *name);
int OSSL_CMP_CTX_push0_geninfo_ITAV(OSSL_CMP_CTX *ctx, OSSL_CMP_ITAV *itav);
int OSSL_CMP_CTX_reset_geninfo_ITAVs(OSSL_CMP_CTX *ctx);
int OSSL_CMP_CTX_set1_extraCertsOut(OSSL_CMP_CTX *ctx,
                         STACK_OF(X509) *extraCertsOut);
/* certificate template:
 */
int OSSL_CMP_CTX_set0_newPkey(OSSL_CMP_CTX *ctx, int priv, EVP_PKEY *pkey);
EVP_PKEY *OSSL_CMP_CTX_get0_newPkey(const OSSL_CMP_CTX *ctx, int priv);
int OSSL_CMP_CTX_set1_issuer(OSSL_CMP_CTX *ctx, const X509_NAME *name);
int OSSL_CMP_CTX_set1_subjectName(OSSL_CMP_CTX *ctx, const X509_NAME *name);
int OSSL_CMP_CTX_push1_subjectAltName(OSSL_CMP_CTX *ctx,
                         const GENERAL_NAME *name);
int OSSL_CMP_CTX_set0_reqExtensions(OSSL_CMP_CTX *ctx, X509_EXTENSIONS *exts);
int OSSL_CMP_CTX_reqExtensions_have_SAN(OSSL_CMP_CTX *ctx);
int OSSL_CMP_CTX_push0_policy(OSSL_CMP_CTX *ctx, POLICYINFO *pinfo);
int OSSL_CMP_CTX_set1_oldCert(OSSL_CMP_CTX *ctx, X509 *cert);
int OSSL_CMP_CTX_set1_p10CSR(OSSL_CMP_CTX *ctx, const X509_REQ *csr);
/* misc body contents: */
int OSSL_CMP_CTX_push0_genm_ITAV(OSSL_CMP_CTX *ctx, OSSL_CMP_ITAV *itav);
/* certificate confirmation: */
typedef int (*OSSL_CMP_certConf_cb_t) (OSSL_CMP_CTX *ctx, X509 *cert,
```

```
        int fail_info, const char **txt);
int OSSL_CMP_certConf_cb(OSSL_CMP_CTX *ctx, X509 *cert, int fail_info,
                    const char **text);
int OSSL_CMP_CTX_set_certConf_cb(OSSL_CMP_CTX *ctx, OSSL_CMP_certConf_cb_t cb);
int OSSL_CMP_CTX_set_certConf_cb_arg(OSSL_CMP_CTX *ctx, void *arg);
void *OSSL_CMP_CTX_get_certConf_cb_arg(const OSSL_CMP_CTX *ctx);
/* result fetching: */
int OSSL_CMP_CTX_get_status(const OSSL_CMP_CTX *ctx);
OSSL_CMP_PKIFREETEXT *OSSL_CMP_CTX_get0_statusString(const OSSL_CMP_CTX *ctx);
int OSSL_CMP_CTX_get_failInfoCode(const OSSL_CMP_CTX *ctx);
#  define OSSL_CMP_PKISI_BUFLEN 1024
X509 *OSSL_CMP_CTX_get0_newCert(const OSSL_CMP_CTX *ctx);
STACK_OF(X509) *OSSL_CMP_CTX_get1_newChain(const OSSL_CMP_CTX *ctx);
STACK_OF(X509) *OSSL_CMP_CTX_get1_caPubs(const OSSL_CMP_CTX *ctx);
STACK_OF(X509) *OSSL_CMP_CTX_get1_extraCertsIn(const OSSL_CMP_CTX *ctx);
int OSSL_CMP_CTX_set1_transactionID(OSSL_CMP_CTX *ctx,
                           const ASN1_OCTET_STRING
 *id);
int OSSL_CMP_CTX_set1_senderNonce(OSSL_CMP_CTX *ctx,
                          const ASN1_OCTET_STRING *nonce);

/* from cmp_status.c */
char *OSSL_CMP_CTX_snprint_PKIStatus(const OSSL_CMP_CTX *ctx, char *buf,
                            size_t bufsize);
char *OSSL_CMP_snprint_PKIStatusInfo(const OSSL_CMP_PKISI *statusInfo,
                            char *buf, size_t bufsize);
OSSL_CMP_PKISI *
OSSL_CMP_STATUSINFO_new(int status, int fail_info, const char *text);

/* from cmp_hdr.c */
ASN1_OCTET_STRING *OSSL_CMP_HDR_get0_transactionID(const
                                     OSSL_CMP_PKIHEADER *hdr);
ASN1_OCTET_STRING *OSSL_CMP_HDR_get0_recipNonce(const OSSL_CMP_PKIHEADER *hdr);

/* from cmp_msg.c */
OSSL_CMP_PKIHEADER *OSSL_CMP_MSG_get0_header(const OSSL_CMP_MSG *msg);
int OSSL_CMP_MSG_get_bodytype(const OSSL_CMP_MSG *msg);
int OSSL_CMP_MSG_update_transactionID(OSSL_CMP_CTX *ctx, OSSL_CMP_MSG *msg);
int OSSL_CMP_MSG_update_recipNonce(OSSL_CMP_CTX
 *ctx, OSSL_CMP_MSG *msg);
OSSL_CRMF_MSG *OSSL_CMP_CTX_setup_CRM(OSSL_CMP_CTX *ctx, int for_KUR, int rid);
OSSL_CMP_MSG *OSSL_CMP_MSG_read(const char *file, OSSL_LIB_CTX *libctx,
                         const char *propq);
int OSSL_CMP_MSG_write(const char *file, const OSSL_CMP_MSG *msg);
OSSL_CMP_MSG *d2i_OSSL_CMP_MSG_bio(BIO *bio, OSSL_CMP_MSG **msg);
int i2d_OSSL_CMP_MSG_bio(BIO *bio, const OSSL_CMP_MSG *msg);

/* from cmp_vfy.c */
```

```
int OSSL_CMP_validate_msg(OSSL_CMP_CTX *ctx, const OSSL_CMP_MSG *msg);
int OSSL_CMP_validate_cert_path(const OSSL_CMP_CTX *ctx,
                        X509_STORE *trusted_store, X509 *cert);

/* from cmp_http.c */
OSSL_CMP_MSG *OSSL_CMP_MSG_http_perform(OSSL_CMP_CTX *ctx,
                              const OSSL_CMP_MSG *req);

/* from cmp_server.c */
typedef struct ossl_cmp_srv_ctx_st OSSL_CMP_SRV_CTX;
OSSL_CMP_MSG *OSSL_CMP_SRV_process_request(OSSL_CMP_SRV_CTX *srv_ctx,

   const OSSL_CMP_MSG *req);
OSSL_CMP_MSG * OSSL_CMP_CTX_server_perform(OSSL_CMP_CTX *client_ctx,
                               const OSSL_CMP_MSG *req);
OSSL_CMP_SRV_CTX *OSSL_CMP_SRV_CTX_new(OSSL_LIB_CTX *libctx, const char *propq);
void OSSL_CMP_SRV_CTX_free(OSSL_CMP_SRV_CTX *srv_ctx);
typedef OSSL_CMP_PKISI *(*OSSL_CMP_SRV_cert_request_cb_t)
  (OSSL_CMP_SRV_CTX *srv_ctx, const OSSL_CMP_MSG *req, int certReqId,
   const OSSL_CRMF_MSG *crm, const X509_REQ *p10cr,
   X509 **certOut, STACK_OF(X509) **chainOut, STACK_OF(X509) **caPubs);
typedef OSSL_CMP_PKISI *(*OSSL_CMP_SRV_rr_cb_t)(OSSL_CMP_SRV_CTX *srv_ctx,
                                  const OSSL_CMP_MSG *req,
                                  const X509_NAME *issuer,
                                  const ASN1_INTEGER *serial);
typedef int (*OSSL_CMP_SRV_genm_cb_t)(OSSL_CMP_SRV_CTX *srv_ctx,
                            const OSSL_CMP_MSG *req,

                     const STACK_OF(OSSL_CMP_ITAV) *in,
                            STACK_OF(OSSL_CMP_ITAV) **out);
typedef void (*OSSL_CMP_SRV_error_cb_t)(OSSL_CMP_SRV_CTX *srv_ctx,
                              const OSSL_CMP_MSG *req,
                              const OSSL_CMP_PKISI *statusInfo,
                              const ASN1_INTEGER *errorCode,
                              const OSSL_CMP_PKIFREETEXT *errDetails);
typedef int (*OSSL_CMP_SRV_certConf_cb_t)(OSSL_CMP_SRV_CTX *srv_ctx,
                                const OSSL_CMP_MSG *req,
                                int certReqId,
                                const ASN1_OCTET_STRING *certHash,
                                const OSSL_CMP_PKISI *si);
typedef int (*OSSL_CMP_SRV_pollReq_cb_t)(OSSL_CMP_SRV_CTX *srv_ctx,
                               const OSSL_CMP_MSG *req, int certReqId,

               OSSL_CMP_MSG **certReq,
                               int64_t *check_after);
int OSSL_CMP_SRV_CTX_init(OSSL_CMP_SRV_CTX *srv_ctx, void *custom_ctx,
                    OSSL_CMP_SRV_cert_request_cb_t process_cert_request,
                    OSSL_CMP_SRV_rr_cb_t process_rr,
```

```
                    OSSL_CMP_SRV_genm_cb_t process_genm,
                    OSSL_CMP_SRV_error_cb_t process_error,
                    OSSL_CMP_SRV_certConf_cb_t process_certConf,
                    OSSL_CMP_SRV_pollReq_cb_t process_pollReq);
OSSL_CMP_CTX *OSSL_CMP_SRV_CTX_get0_cmp_ctx(const OSSL_CMP_SRV_CTX *srv_ctx);
void *OSSL_CMP_SRV_CTX_get0_custom_ctx(const OSSL_CMP_SRV_CTX *srv_ctx);
int OSSL_CMP_SRV_CTX_set_send_unprotected_errors(OSSL_CMP_SRV_CTX *srv_ctx,
                                  int val);
int OSSL_CMP_SRV_CTX_set_accept_unprotected(OSSL_CMP_SRV_CTX *srv_ctx, int val);
int OSSL_CMP_SRV_CTX_set_accept_raverified(OSSL_CMP_SRV_CTX
 *srv_ctx, int val);
int OSSL_CMP_SRV_CTX_set_grant_implicit_confirm(OSSL_CMP_SRV_CTX *srv_ctx,
                                 int val);

/* from cmp_client.c */
X509 *OSSL_CMP_exec_certreq(OSSL_CMP_CTX *ctx, int req_type,
                    const OSSL_CRMF_MSG *crm);
#  define OSSL_CMP_IR    0
#  define OSSL_CMP_CR    2
#  define OSSL_CMP_P10CR 4
#  define OSSL_CMP_KUR   7
#  define OSSL_CMP_exec_IR_ses(ctx) \
   OSSL_CMP_exec_certreq(ctx, OSSL_CMP_IR, NULL)
#  define OSSL_CMP_exec_CR_ses(ctx) \
   OSSL_CMP_exec_certreq(ctx, OSSL_CMP_CR, NULL)
#  define OSSL_CMP_exec_P10CR_ses(ctx) \
   OSSL_CMP_exec_certreq(ctx, OSSL_CMP_P10CR, NULL)
#  define OSSL_CMP_exec_KUR_ses(ctx) \
   OSSL_CMP_exec_certreq(ctx, OSSL_CMP_KUR, NULL)
int OSSL_CMP_try_certreq(OSSL_CMP_CTX *ctx, int req_type,
                   const OSSL_CRMF_MSG *crm, int *checkAfter);
int OSSL_CMP_exec_RR_ses(OSSL_CMP_CTX *ctx);
STACK_OF(OSSL_CMP_ITAV) *OSSL_CMP_exec_GENM_ses(OSSL_CMP_CTX
 *ctx);

#  ifdef  __cplusplus
}
#  endif
# endif /* !defined(OPENSSL_NO_CMP) */
#endif /* !defined(OPENSSL_CMP_H) */
```

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```
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/* Generated by Makefile from include/crypto/dso_conf.h.in */
```

```
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* https://www.openssl.org/source/license.html
*/

#ifndef OSSL_CRYPTO_DSO_CONF_H
# define OSSL_CRYPTO_DSO_CONF_H
# pragma once

# define DSO_DLFCN
# define HAVE_DLFCN_H
# define DSO_EXTENSION ".so"
#endif
```

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```
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/x509_vfy.h.in
*
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*/



#ifndef OPENSSL_X509_VFY_H
# define OPENSSL_X509_VFY_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_X509_VFY_H
# endif

/*
* Protect against recursion, x509.h and x509_vfy.h each include the other.
*/
# ifndef OPENSSL_X509_H
#  include <openssl/x509.h>
# endif

# include <openssl/opensslconf.h>
# include <openssl/lhash.h>
# include <openssl/bio.h>
# include <openssl/crypto.h>
# include <openssl/symhacks.h>

#ifdef  __cplusplus
extern "C" {
#endif

/*-
SSL_CTX -> X509_STORE
            -> X509_LOOKUP

           ->X509_LOOKUP_METHOD
            -> X509_LOOKUP
```

```
                ->X509_LOOKUP_METHOD

SSL     -> X509_STORE_CTX
            ->X509_STORE

The X509_STORE holds the tables etc for verification stuff.
A X509_STORE_CTX is used while validating a single certificate.
The X509_STORE has X509_LOOKUPs for looking up certs.
The X509_STORE then calls a function to actually verify the
certificate chain.
*/

typedef enum {
   X509_LU_NONE = 0,
   X509_LU_X509, X509_LU_CRL
} X509_LOOKUP_TYPE;

#ifndef OPENSSL_NO_DEPRECATED_1_1_0
#define X509_LU_RETRY   -1
#define X509_LU_FAIL    0
#endif

SKM_DEFINE_STACK_OF_INTERNAL(X509_LOOKUP, X509_LOOKUP, X509_LOOKUP)
#define sk_X509_LOOKUP_num(sk) OPENSSL_sk_num(ossl_check_const_X509_LOOKUP_sk_type(sk))
#define sk_X509_LOOKUP_value(sk, idx) ((X509_LOOKUP
*)OPENSSL_sk_value(ossl_check_const_X509_LOOKUP_sk_type(sk), (idx)))
#define sk_X509_LOOKUP_new(cmp) ((STACK_OF(X509_LOOKUP)
*)OPENSSL_sk_new(ossl_check_X509_LOOKUP_compfunc_type(cmp)))
#define
 sk_X509_LOOKUP_new_null() ((STACK_OF(X509_LOOKUP) *)OPENSSL_sk_new_null())
#define sk_X509_LOOKUP_new_reserve(cmp, n) ((STACK_OF(X509_LOOKUP)
*)OPENSSL_sk_new_reserve(ossl_check_X509_LOOKUP_compfunc_type(cmp), (n)))
#define sk_X509_LOOKUP_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_X509_LOOKUP_sk_type(sk), (n))
#define sk_X509_LOOKUP_free(sk) OPENSSL_sk_free(ossl_check_X509_LOOKUP_sk_type(sk))
#define sk_X509_LOOKUP_zero(sk) OPENSSL_sk_zero(ossl_check_X509_LOOKUP_sk_type(sk))
#define sk_X509_LOOKUP_delete(sk, i) ((X509_LOOKUP
*)OPENSSL_sk_delete(ossl_check_X509_LOOKUP_sk_type(sk), (i)))
#define sk_X509_LOOKUP_delete_ptr(sk, ptr) ((X509_LOOKUP
*)OPENSSL_sk_delete_ptr(ossl_check_X509_LOOKUP_sk_type(sk), ossl_check_X509_LOOKUP_type(ptr)))
#define sk_X509_LOOKUP_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_LOOKUP_sk_type(sk),
ossl_check_X509_LOOKUP_type(ptr))
#define sk_X509_LOOKUP_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_LOOKUP_sk_type(sk),
ossl_check_X509_LOOKUP_type(ptr))
#define
 sk_X509_LOOKUP_pop(sk) ((X509_LOOKUP *)OPENSSL_sk_pop(ossl_check_X509_LOOKUP_sk_type(sk)))
#define sk_X509_LOOKUP_shift(sk) ((X509_LOOKUP
*)OPENSSL_sk_shift(ossl_check_X509_LOOKUP_sk_type(sk)))
#define sk_X509_LOOKUP_pop_free(sk, freefunc)
```

```
OPENSSL_sk_pop_free(ossl_check_X509_LOOKUP_sk_type(sk),ossl_check_X509_LOOKUP_freefunc_type(free
func))
#define sk_X509_LOOKUP_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_LOOKUP_sk_type(sk),
ossl_check_X509_LOOKUP_type(ptr), (idx))
#define sk_X509_LOOKUP_set(sk, idx, ptr) ((X509_LOOKUP
*)OPENSSL_sk_set(ossl_check_X509_LOOKUP_sk_type(sk), (idx), ossl_check_X509_LOOKUP_type(ptr)))
#define sk_X509_LOOKUP_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_LOOKUP_sk_type(sk),
ossl_check_X509_LOOKUP_type(ptr))
#define sk_X509_LOOKUP_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_X509_LOOKUP_sk_type(sk),
ossl_check_X509_LOOKUP_type(ptr))
#define sk_X509_LOOKUP_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_X509_LOOKUP_sk_type(sk),
 ossl_check_X509_LOOKUP_type(ptr), pnum)
#define sk_X509_LOOKUP_sort(sk) OPENSSL_sk_sort(ossl_check_X509_LOOKUP_sk_type(sk))
#define sk_X509_LOOKUP_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_X509_LOOKUP_sk_type(sk))
#define sk_X509_LOOKUP_dup(sk) ((STACK_OF(X509_LOOKUP)
*)OPENSSL_sk_dup(ossl_check_const_X509_LOOKUP_sk_type(sk)))
#define sk_X509_LOOKUP_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_LOOKUP)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_LOOKUP_sk_type(sk),
ossl_check_X509_LOOKUP_copyfunc_type(copyfunc), ossl_check_X509_LOOKUP_freefunc_type(freefunc)))
#define sk_X509_LOOKUP_set_cmp_func(sk, cmp)
((sk_X509_LOOKUP_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_LOOKUP_sk_type(sk),
ossl_check_X509_LOOKUP_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(X509_OBJECT, X509_OBJECT, X509_OBJECT)
#define sk_X509_OBJECT_num(sk) OPENSSL_sk_num(ossl_check_const_X509_OBJECT_sk_type(sk))
#define sk_X509_OBJECT_value(sk, idx) ((X509_OBJECT
*)OPENSSL_sk_value(ossl_check_const_X509_OBJECT_sk_type(sk),
 (idx)))
#define sk_X509_OBJECT_new(cmp) ((STACK_OF(X509_OBJECT)
*)OPENSSL_sk_new(ossl_check_X509_OBJECT_compfunc_type(cmp)))
#define sk_X509_OBJECT_new_null() ((STACK_OF(X509_OBJECT) *)OPENSSL_sk_new_null())
#define sk_X509_OBJECT_new_reserve(cmp, n) ((STACK_OF(X509_OBJECT)
*)OPENSSL_sk_new_reserve(ossl_check_X509_OBJECT_compfunc_type(cmp), (n)))
#define sk_X509_OBJECT_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_X509_OBJECT_sk_type(sk), (n))
#define sk_X509_OBJECT_free(sk) OPENSSL_sk_free(ossl_check_X509_OBJECT_sk_type(sk))
#define sk_X509_OBJECT_zero(sk) OPENSSL_sk_zero(ossl_check_X509_OBJECT_sk_type(sk))
#define sk_X509_OBJECT_delete(sk, i) ((X509_OBJECT
*)OPENSSL_sk_delete(ossl_check_X509_OBJECT_sk_type(sk), (i)))
#define sk_X509_OBJECT_delete_ptr(sk, ptr) ((X509_OBJECT
*)OPENSSL_sk_delete_ptr(ossl_check_X509_OBJECT_sk_type(sk), ossl_check_X509_OBJECT_type(ptr)))
#define sk_X509_OBJECT_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_OBJECT_sk_type(sk),
 ossl_check_X509_OBJECT_type(ptr))
#define sk_X509_OBJECT_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_OBJECT_sk_type(sk),
ossl_check_X509_OBJECT_type(ptr))
#define sk_X509_OBJECT_pop(sk) ((X509_OBJECT
*)OPENSSL_sk_pop(ossl_check_X509_OBJECT_sk_type(sk)))
#define sk_X509_OBJECT_shift(sk) ((X509_OBJECT
```

```
*)OPENSSL_sk_shift(ossl_check_X509_OBJECT_sk_type(sk)))
#define sk_X509_OBJECT_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_OBJECT_sk_type(sk),ossl_check_X509_OBJECT_freefunc_type(freef
unc))
#define sk_X509_OBJECT_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_OBJECT_sk_type(sk),
ossl_check_X509_OBJECT_type(ptr), (idx))
#define sk_X509_OBJECT_set(sk, idx, ptr) ((X509_OBJECT
*)OPENSSL_sk_set(ossl_check_X509_OBJECT_sk_type(sk), (idx), ossl_check_X509_OBJECT_type(ptr)))
#define sk_X509_OBJECT_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_OBJECT_sk_type(sk),
ossl_check_X509_OBJECT_type(ptr))
#define sk_X509_OBJECT_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_X509_OBJECT_sk_type(sk),
 ossl_check_X509_OBJECT_type(ptr))
#define sk_X509_OBJECT_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_X509_OBJECT_sk_type(sk), ossl_check_X509_OBJECT_type(ptr), pnum)
#define sk_X509_OBJECT_sort(sk) OPENSSL_sk_sort(ossl_check_X509_OBJECT_sk_type(sk))
#define sk_X509_OBJECT_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_X509_OBJECT_sk_type(sk))
#define sk_X509_OBJECT_dup(sk) ((STACK_OF(X509_OBJECT)
*)OPENSSL_sk_dup(ossl_check_const_X509_OBJECT_sk_type(sk)))
#define sk_X509_OBJECT_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_OBJECT)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_OBJECT_sk_type(sk),
ossl_check_X509_OBJECT_copyfunc_type(copyfunc), ossl_check_X509_OBJECT_freefunc_type(freefunc)))
#define sk_X509_OBJECT_set_cmp_func(sk, cmp)
((sk_X509_OBJECT_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_OBJECT_sk_type(sk),
ossl_check_X509_OBJECT_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(X509_VERIFY_PARAM, X509_VERIFY_PARAM,
X509_VERIFY_PARAM)
#define
 sk_X509_VERIFY_PARAM_num(sk)
OPENSSL_sk_num(ossl_check_const_X509_VERIFY_PARAM_sk_type(sk))
#define sk_X509_VERIFY_PARAM_value(sk, idx) ((X509_VERIFY_PARAM
*)OPENSSL_sk_value(ossl_check_const_X509_VERIFY_PARAM_sk_type(sk), (idx)))
#define sk_X509_VERIFY_PARAM_new(cmp) ((STACK_OF(X509_VERIFY_PARAM)
*)OPENSSL_sk_new(ossl_check_X509_VERIFY_PARAM_compfunc_type(cmp)))
#define sk_X509_VERIFY_PARAM_new_null() ((STACK_OF(X509_VERIFY_PARAM)
*)OPENSSL_sk_new_null())
#define sk_X509_VERIFY_PARAM_new_reserve(cmp, n) ((STACK_OF(X509_VERIFY_PARAM)
*)OPENSSL_sk_new_reserve(ossl_check_X509_VERIFY_PARAM_compfunc_type(cmp), (n)))
#define sk_X509_VERIFY_PARAM_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_X509_VERIFY_PARAM_sk_type(sk), (n))
#define sk_X509_VERIFY_PARAM_free(sk)
OPENSSL_sk_free(ossl_check_X509_VERIFY_PARAM_sk_type(sk))
#define sk_X509_VERIFY_PARAM_zero(sk)
OPENSSL_sk_zero(ossl_check_X509_VERIFY_PARAM_sk_type(sk))
#define sk_X509_VERIFY_PARAM_delete(sk, i) ((X509_VERIFY_PARAM
*)OPENSSL_sk_delete(ossl_check_X509_VERIFY_PARAM_sk_type(sk),
 (i)))
#define sk_X509_VERIFY_PARAM_delete_ptr(sk, ptr) ((X509_VERIFY_PARAM
*)OPENSSL_sk_delete_ptr(ossl_check_X509_VERIFY_PARAM_sk_type(sk),
```

```
ossl_check_X509_VERIFY_PARAM_type(ptr)))
#define sk_X509_VERIFY_PARAM_push(sk, ptr)
OPENSSL_sk_push(ossl_check_X509_VERIFY_PARAM_sk_type(sk),
ossl_check_X509_VERIFY_PARAM_type(ptr))
#define sk_X509_VERIFY_PARAM_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_X509_VERIFY_PARAM_sk_type(sk),
ossl_check_X509_VERIFY_PARAM_type(ptr))
#define sk_X509_VERIFY_PARAM_pop(sk) ((X509_VERIFY_PARAM
*)OPENSSL_sk_pop(ossl_check_X509_VERIFY_PARAM_sk_type(sk)))
#define sk_X509_VERIFY_PARAM_shift(sk) ((X509_VERIFY_PARAM
*)OPENSSL_sk_shift(ossl_check_X509_VERIFY_PARAM_sk_type(sk)))
#define sk_X509_VERIFY_PARAM_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_VERIFY_PARAM_sk_type(sk),ossl_check_X509_VERIFY_PARAM_
freefunc_type(freefunc))
#define sk_X509_VERIFY_PARAM_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_X509_VERIFY_PARAM_sk_type(sk),
 ossl_check_X509_VERIFY_PARAM_type(ptr), (idx))
#define sk_X509_VERIFY_PARAM_set(sk, idx, ptr) ((X509_VERIFY_PARAM
*)OPENSSL_sk_set(ossl_check_X509_VERIFY_PARAM_sk_type(sk), (idx),
ossl_check_X509_VERIFY_PARAM_type(ptr)))
#define sk_X509_VERIFY_PARAM_find(sk, ptr)
OPENSSL_sk_find(ossl_check_X509_VERIFY_PARAM_sk_type(sk),
ossl_check_X509_VERIFY_PARAM_type(ptr))
#define sk_X509_VERIFY_PARAM_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_X509_VERIFY_PARAM_sk_type(sk),
ossl_check_X509_VERIFY_PARAM_type(ptr))
#define sk_X509_VERIFY_PARAM_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_X509_VERIFY_PARAM_sk_type(sk),
ossl_check_X509_VERIFY_PARAM_type(ptr), pnum)
#define sk_X509_VERIFY_PARAM_sort(sk)
OPENSSL_sk_sort(ossl_check_X509_VERIFY_PARAM_sk_type(sk))
#define sk_X509_VERIFY_PARAM_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_X509_VERIFY_PARAM_sk_type(sk))
#define sk_X509_VERIFY_PARAM_dup(sk) ((STACK_OF(X509_VERIFY_PARAM)
*)OPENSSL_sk_dup(ossl_check_const_X509_VERIFY_PARAM_sk_type(sk)))
#define
 sk_X509_VERIFY_PARAM_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_VERIFY_PARAM)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_VERIFY_PARAM_sk_type(sk),
ossl_check_X509_VERIFY_PARAM_copyfunc_type(copyfunc),
ossl_check_X509_VERIFY_PARAM_freefunc_type(freefunc)))
#define sk_X509_VERIFY_PARAM_set_cmp_func(sk, cmp)
((sk_X509_VERIFY_PARAM_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_VERIFY_PARAM_sk_
type(sk), ossl_check_X509_VERIFY_PARAM_compfunc_type(cmp)))


/* This is used for a table of trust checking functions */
typedef struct x509_trust_st {
   int trust;
```

```
  int flags;
  int (*check_trust) (struct x509_trust_st *, X509 *, int);
  char *name;
  int arg1;
  void *arg2;
} X509_TRUST;
SKM_DEFINE_STACK_OF_INTERNAL(X509_TRUST, X509_TRUST, X509_TRUST)
#define sk_X509_TRUST_num(sk) OPENSSL_sk_num(ossl_check_const_X509_TRUST_sk_type(sk))
#define sk_X509_TRUST_value(sk, idx) ((X509_TRUST
*)OPENSSL_sk_value(ossl_check_const_X509_TRUST_sk_type(sk),
 (idx)))
#define sk_X509_TRUST_new(cmp) ((STACK_OF(X509_TRUST)
*)OPENSSL_sk_new(ossl_check_X509_TRUST_compfunc_type(cmp)))
#define sk_X509_TRUST_new_null() ((STACK_OF(X509_TRUST) *)OPENSSL_sk_new_null())
#define sk_X509_TRUST_new_reserve(cmp, n) ((STACK_OF(X509_TRUST)
*)OPENSSL_sk_new_reserve(ossl_check_X509_TRUST_compfunc_type(cmp), (n)))
#define sk_X509_TRUST_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_X509_TRUST_sk_type(sk), (n))
#define sk_X509_TRUST_free(sk) OPENSSL_sk_free(ossl_check_X509_TRUST_sk_type(sk))
#define sk_X509_TRUST_zero(sk) OPENSSL_sk_zero(ossl_check_X509_TRUST_sk_type(sk))
#define sk_X509_TRUST_delete(sk, i) ((X509_TRUST
*)OPENSSL_sk_delete(ossl_check_X509_TRUST_sk_type(sk), (i)))
#define sk_X509_TRUST_delete_ptr(sk, ptr) ((X509_TRUST
*)OPENSSL_sk_delete_ptr(ossl_check_X509_TRUST_sk_type(sk), ossl_check_X509_TRUST_type(ptr)))
#define sk_X509_TRUST_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_TRUST_sk_type(sk),
ossl_check_X509_TRUST_type(ptr))
#define
 sk_X509_TRUST_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_TRUST_sk_type(sk),
ossl_check_X509_TRUST_type(ptr))
#define sk_X509_TRUST_pop(sk) ((X509_TRUST *)OPENSSL_sk_pop(ossl_check_X509_TRUST_sk_type(sk)))
#define sk_X509_TRUST_shift(sk) ((X509_TRUST
*)OPENSSL_sk_shift(ossl_check_X509_TRUST_sk_type(sk)))
#define sk_X509_TRUST_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_TRUST_sk_type(sk),ossl_check_X509_TRUST_freefunc_type(freefunc
))
#define sk_X509_TRUST_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_TRUST_sk_type(sk),
ossl_check_X509_TRUST_type(ptr), (idx))
#define sk_X509_TRUST_set(sk, idx, ptr) ((X509_TRUST
*)OPENSSL_sk_set(ossl_check_X509_TRUST_sk_type(sk), (idx), ossl_check_X509_TRUST_type(ptr)))
#define sk_X509_TRUST_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_TRUST_sk_type(sk),
ossl_check_X509_TRUST_type(ptr))
#define sk_X509_TRUST_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_X509_TRUST_sk_type(sk),
ossl_check_X509_TRUST_type(ptr))
#define
 sk_X509_TRUST_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_X509_TRUST_sk_type(sk),
ossl_check_X509_TRUST_type(ptr), pnum)
#define sk_X509_TRUST_sort(sk) OPENSSL_sk_sort(ossl_check_X509_TRUST_sk_type(sk))
#define sk_X509_TRUST_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_X509_TRUST_sk_type(sk))
#define sk_X509_TRUST_dup(sk) ((STACK_OF(X509_TRUST)
```

```
*)OPENSSL_sk_dup(ossl_check_const_X509_TRUST_sk_type(sk)))
#define sk_X509_TRUST_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_TRUST)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_TRUST_sk_type(sk),
ossl_check_X509_TRUST_copyfunc_type(copyfunc), ossl_check_X509_TRUST_freefunc_type(freefunc)))
#define sk_X509_TRUST_set_cmp_func(sk, cmp)
((sk_X509_TRUST_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_TRUST_sk_type(sk),
ossl_check_X509_TRUST_compfunc_type(cmp)))


/* standard trust ids */
# define X509_TRUST_DEFAULT      0 /* Only valid in purpose settings */
# define X509_TRUST_COMPAT       1
# define X509_TRUST_SSL_CLIENT
   2
# define X509_TRUST_SSL_SERVER   3
# define X509_TRUST_EMAIL        4
# define X509_TRUST_OBJECT_SIGN  5
# define X509_TRUST_OCSP_SIGN    6
# define X509_TRUST_OCSP_REQUEST 7
# define X509_TRUST_TSA          8
/* Keep these up to date! */
# define X509_TRUST_MIN          1
# define X509_TRUST_MAX          8

/* trust_flags values */
# define X509_TRUST_DYNAMIC      (1U << 0)
# define X509_TRUST_DYNAMIC_NAME (1U << 1)
/* No compat trust if self-signed, preempts "DO_SS" */
# define X509_TRUST_NO_SS_COMPAT (1U << 2)
/* Compat trust if no explicit accepted trust EKUs */
# define X509_TRUST_DO_SS_COMPAT (1U << 3)
/* Accept "anyEKU" as a wildcard rejection OID and as a wildcard trust OID */
# define X509_TRUST_OK_ANY_EKU   (1U << 4)

/* check_trust return codes */
# define X509_TRUST_TRUSTED      1
# define X509_TRUST_REJECTED     2
# define X509_TRUST_UNTRUSTED    3

int X509_TRUST_set(int *t, int trust);
int X509_TRUST_get_count(void);
X509_TRUST *X509_TRUST_get0(int idx);
int
 X509_TRUST_get_by_id(int id);
int X509_TRUST_add(int id, int flags, int (*ck) (X509_TRUST *, X509 *, int),
                   const char *name, int arg1, void *arg2);
void X509_TRUST_cleanup(void);
int X509_TRUST_get_flags(const X509_TRUST *xp);
```

```
char *X509_TRUST_get0_name(const X509_TRUST *xp);
int X509_TRUST_get_trust(const X509_TRUST *xp);

int X509_trusted(const X509 *x);
int X509_add1_trust_object(X509 *x, const ASN1_OBJECT *obj);
int X509_add1_reject_object(X509 *x, const ASN1_OBJECT *obj);
void X509_trust_clear(X509 *x);
void X509_reject_clear(X509 *x);
STACK_OF(ASN1_OBJECT) *X509_get0_trust_objects(X509 *x);
STACK_OF(ASN1_OBJECT) *X509_get0_reject_objects(X509 *x);

int (*X509_TRUST_set_default(int (*trust) (int, X509 *, int))) (int, X509 *,
                                                                int);
int X509_check_trust(X509 *x, int id, int flags);

int X509_verify_cert(X509_STORE_CTX *ctx);
int X509_STORE_CTX_verify(X509_STORE_CTX *ctx);
STACK_OF(X509) *X509_build_chain(X509
 *target, STACK_OF(X509) *certs,
                         X509_STORE *store, int with_self_signed,
                         OSSL_LIB_CTX *libctx, const char *propq);

int X509_STORE_set_depth(X509_STORE *store, int depth);

typedef int (*X509_STORE_CTX_verify_cb)(int, X509_STORE_CTX *);
int X509_STORE_CTX_print_verify_cb(int ok, X509_STORE_CTX *ctx);
typedef int (*X509_STORE_CTX_verify_fn)(X509_STORE_CTX *);
typedef int (*X509_STORE_CTX_get_issuer_fn)(X509 **issuer,
                                 X509_STORE_CTX *ctx, X509 *x);
typedef int (*X509_STORE_CTX_check_issued_fn)(X509_STORE_CTX *ctx,
                                  X509 *x, X509 *issuer);
typedef int (*X509_STORE_CTX_check_revocation_fn)(X509_STORE_CTX *ctx);
typedef int (*X509_STORE_CTX_get_crl_fn)(X509_STORE_CTX *ctx,
                                X509_CRL **crl, X509 *x);
typedef int (*X509_STORE_CTX_check_crl_fn)(X509_STORE_CTX *ctx, X509_CRL *crl);
typedef
 int (*X509_STORE_CTX_cert_crl_fn)(X509_STORE_CTX *ctx,
                                 X509_CRL *crl, X509 *x);
typedef int (*X509_STORE_CTX_check_policy_fn)(X509_STORE_CTX *ctx);
typedef STACK_OF(X509)
   *(*X509_STORE_CTX_lookup_certs_fn)(X509_STORE_CTX *ctx,
                              const X509_NAME *nm);
typedef STACK_OF(X509_CRL)
   *(*X509_STORE_CTX_lookup_crls_fn)(const X509_STORE_CTX *ctx,
                             const X509_NAME *nm);
typedef int (*X509_STORE_CTX_cleanup_fn)(X509_STORE_CTX *ctx);

void X509_STORE_CTX_set_depth(X509_STORE_CTX *ctx, int depth);
```

```
# define X509_STORE_CTX_set_app_data(ctx,data) \
      X509_STORE_CTX_set_ex_data(ctx,0,data)
# define X509_STORE_CTX_get_app_data(ctx) \
      X509_STORE_CTX_get_ex_data(ctx,0)

# define X509_L_FILE_LOAD        1
# define X509_L_ADD_DIR          2
# define X509_L_ADD_STORE        3
# define X509_L_LOAD_STORE       4

# define X509_LOOKUP_load_file(x,name,type) \

  X509_LOOKUP_ctrl((x),X509_L_FILE_LOAD,(name),(long)(type),NULL)

# define X509_LOOKUP_add_dir(x,name,type) \
            X509_LOOKUP_ctrl((x),X509_L_ADD_DIR,(name),(long)(type),NULL)

# define X509_LOOKUP_add_store(x,name) \
            X509_LOOKUP_ctrl((x),X509_L_ADD_STORE,(name),0,NULL)

# define X509_LOOKUP_load_store(x,name) \
            X509_LOOKUP_ctrl((x),X509_L_LOAD_STORE,(name),0,NULL)

# define X509_LOOKUP_load_file_ex(x, name, type, libctx, propq)       \
X509_LOOKUP_ctrl_ex((x), X509_L_FILE_LOAD, (name), (long)(type), NULL,\
                (libctx), (propq))

# define X509_LOOKUP_load_store_ex(x, name, libctx, propq)           \
X509_LOOKUP_ctrl_ex((x), X509_L_LOAD_STORE, (name), 0, NULL,          \
                (libctx), (propq))

# define X509_LOOKUP_add_store_ex(x, name, libctx, propq)            \
X509_LOOKUP_ctrl_ex((x), X509_L_ADD_STORE, (name), 0, NULL,           \
                (libctx), (propq))

# define X509_V_OK
                    0
# define X509_V_ERR_UNSPECIFIED                        1
# define X509_V_ERR_UNABLE_TO_GET_ISSUER_CERT          2
# define X509_V_ERR_UNABLE_TO_GET_CRL                  3
# define X509_V_ERR_UNABLE_TO_DECRYPT_CERT_SIGNATURE     4
# define X509_V_ERR_UNABLE_TO_DECRYPT_CRL_SIGNATURE      5
# define X509_V_ERR_UNABLE_TO_DECODE_ISSUER_PUBLIC_KEY   6
# define X509_V_ERR_CERT_SIGNATURE_FAILURE               7
# define X509_V_ERR_CRL_SIGNATURE_FAILURE                8
# define X509_V_ERR_CERT_NOT_YET_VALID                   9
# define X509_V_ERR_CERT_HAS_EXPIRED                    10
```

```
# define X509_V_ERR_CRL_NOT_YET_VALID                    11
# define X509_V_ERR_CRL_HAS_EXPIRED                      12
# define X509_V_ERR_ERROR_IN_CERT_NOT_BEFORE_FIELD       13
# define X509_V_ERR_ERROR_IN_CERT_NOT_AFTER_FIELD        14
# define X509_V_ERR_ERROR_IN_CRL_LAST_UPDATE_FIELD       15
# define X509_V_ERR_ERROR_IN_CRL_NEXT_UPDATE_FIELD       16
# define X509_V_ERR_OUT_OF_MEM
                    17
# define X509_V_ERR_DEPTH_ZERO_SELF_SIGNED_CERT          18
# define X509_V_ERR_SELF_SIGNED_CERT_IN_CHAIN            19
# define X509_V_ERR_UNABLE_TO_GET_ISSUER_CERT_LOCALLY    20
# define X509_V_ERR_UNABLE_TO_VERIFY_LEAF_SIGNATURE      21
# define X509_V_ERR_CERT_CHAIN_TOO_LONG                  22
# define X509_V_ERR_CERT_REVOKED                         23
# define X509_V_ERR_NO_ISSUER_PUBLIC_KEY                 24
# define X509_V_ERR_PATH_LENGTH_EXCEEDED                 25
# define X509_V_ERR_INVALID_PURPOSE                      26
# define X509_V_ERR_CERT_UNTRUSTED                       27
# define X509_V_ERR_CERT_REJECTED                        28

/* These are 'informational' when looking for issuer cert */
# define X509_V_ERR_SUBJECT_ISSUER_MISMATCH              29
# define X509_V_ERR_AKID_SKID_MISMATCH                   30
# define X509_V_ERR_AKID_ISSUER_SERIAL_MISMATCH          31
# define X509_V_ERR_KEYUSAGE_NO_CERTSIGN                 32
# define
 X509_V_ERR_UNABLE_TO_GET_CRL_ISSUER                    33
# define X509_V_ERR_UNHANDLED_CRITICAL_EXTENSION         34
# define X509_V_ERR_KEYUSAGE_NO_CRL_SIGN                 35
# define X509_V_ERR_UNHANDLED_CRITICAL_CRL_EXTENSION     36
# define X509_V_ERR_INVALID_NON_CA                       37
# define X509_V_ERR_PROXY_PATH_LENGTH_EXCEEDED           38
# define X509_V_ERR_KEYUSAGE_NO_DIGITAL_SIGNATURE        39
# define X509_V_ERR_PROXY_CERTIFICATES_NOT_ALLOWED       40
# define X509_V_ERR_INVALID_EXTENSION                    41
# define X509_V_ERR_INVALID_POLICY_EXTENSION             42
# define X509_V_ERR_NO_EXPLICIT_POLICY                   43
# define X509_V_ERR_DIFFERENT_CRL_SCOPE                  44
# define X509_V_ERR_UNSUPPORTED_EXTENSION_FEATURE        45
# define X509_V_ERR_UNNESTED_RESOURCE                    46
# define X509_V_ERR_PERMITTED_VIOLATION                  47
# define X509_V_ERR_EXCLUDED_VIOLATION                   48
# define X509_V_ERR_SUBTREE_MINMAX
            49
/* The application is not happy */
# define X509_V_ERR_APPLICATION_VERIFICATION             50
# define X509_V_ERR_UNSUPPORTED_CONSTRAINT_TYPE          51
# define X509_V_ERR_UNSUPPORTED_CONSTRAINT_SYNTAX        52
```

```
# define X509_V_ERR_UNSUPPORTED_NAME_SYNTAX            53
# define X509_V_ERR_CRL_PATH_VALIDATION_ERROR          54
/* Another issuer check debug option */
# define X509_V_ERR_PATH_LOOP                          55
/* Suite B mode algorithm violation */
# define X509_V_ERR_SUITE_B_INVALID_VERSION            56
# define X509_V_ERR_SUITE_B_INVALID_ALGORITHM          57
# define X509_V_ERR_SUITE_B_INVALID_CURVE              58
# define X509_V_ERR_SUITE_B_INVALID_SIGNATURE_ALGORITHM  59
# define X509_V_ERR_SUITE_B_LOS_NOT_ALLOWED            60
# define X509_V_ERR_SUITE_B_CANNOT_SIGN_P_384_WITH_P_256 61
/* Host, email and IP check errors */
# define X509_V_ERR_HOSTNAME_MISMATCH                  62
# define X509_V_ERR_EMAIL_MISMATCH
      63
# define X509_V_ERR_IP_ADDRESS_MISMATCH                64
/* DANE TLSA errors */
# define X509_V_ERR_DANE_NO_MATCH                      65
/* security level errors */
# define X509_V_ERR_EE_KEY_TOO_SMALL                   66
# define X509_V_ERR_CA_KEY_TOO_SMALL                   67
# define X509_V_ERR_CA_MD_TOO_WEAK                     68
/* Caller error */
# define X509_V_ERR_INVALID_CALL                       69
/* Issuer lookup error */
# define X509_V_ERR_STORE_LOOKUP                       70
/* Certificate transparency */
# define X509_V_ERR_NO_VALID_SCTS                      71

# define X509_V_ERR_PROXY_SUBJECT_NAME_VIOLATION       72
/* OCSP status errors */
# define X509_V_ERR_OCSP_VERIFY_NEEDED                 73  /* Need OCSP verification */
# define X509_V_ERR_OCSP_VERIFY_FAILED                 74  /* Couldn't verify cert through OCSP */
# define X509_V_ERR_OCSP_CERT_UNKNOWN                  75  /* Certificate wasn't recognized by the OCSP
responder
 */

# define X509_V_ERR_UNSUPPORTED_SIGNATURE_ALGORITHM    76
# define X509_V_ERR_SIGNATURE_ALGORITHM_MISMATCH       77

/* Errors in case a check in X509_V_FLAG_X509_STRICT mode fails */
# define X509_V_ERR_SIGNATURE_ALGORITHM_INCONSISTENCY  78
# define X509_V_ERR_INVALID_CA                         79
# define X509_V_ERR_PATHLEN_INVALID_FOR_NON_CA         80
# define X509_V_ERR_PATHLEN_WITHOUT_KU_KEY_CERT_SIGN   81
# define X509_V_ERR_KU_KEY_CERT_SIGN_INVALID_FOR_NON_CA  82
# define X509_V_ERR_ISSUER_NAME_EMPTY                  83
# define X509_V_ERR_SUBJECT_NAME_EMPTY                 84
```

```
# define X509_V_ERR_MISSING_AUTHORITY_KEY_IDENTIFIER     85
# define X509_V_ERR_MISSING_SUBJECT_KEY_IDENTIFIER       86
# define X509_V_ERR_EMPTY_SUBJECT_ALT_NAME               87
# define X509_V_ERR_EMPTY_SUBJECT_SAN_NOT_CRITICAL       88
# define X509_V_ERR_CA_BCONS_NOT_CRITICAL                89
# define X509_V_ERR_AUTHORITY_KEY_IDENTIFIER_CRITICAL    90
# define X509_V_ERR_SUBJECT_KEY_IDENTIFIER_CRITICAL
     91
# define X509_V_ERR_CA_CERT_MISSING_KEY_USAGE            92
# define X509_V_ERR_EXTENSIONS_REQUIRE_VERSION_3         93
# define X509_V_ERR_EC_KEY_EXPLICIT_PARAMS               94

/* Certificate verify flags */
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define X509_V_FLAG_CB_ISSUER_CHECK            0x0   /* Deprecated */
# endif
/* Use check time instead of current time */
# define X509_V_FLAG_USE_CHECK_TIME              0x2
/* Lookup CRLs */
# define X509_V_FLAG_CRL_CHECK                   0x4
/* Lookup CRLs for whole chain */
# define X509_V_FLAG_CRL_CHECK_ALL               0x8
/* Ignore unhandled critical extensions */
# define X509_V_FLAG_IGNORE_CRITICAL             0x10
/* Disable workarounds for broken certificates */
# define X509_V_FLAG_X509_STRICT                 0x20
/* Enable proxy certificate validation */
# define X509_V_FLAG_ALLOW_PROXY_CERTS           0x40
/* Enable policy checking */
# define X509_V_FLAG_POLICY_CHECK
   0x80
/* Policy variable require-explicit-policy */
# define X509_V_FLAG_EXPLICIT_POLICY             0x100
/* Policy variable inhibit-any-policy */
# define X509_V_FLAG_INHIBIT_ANY                 0x200
/* Policy variable inhibit-policy-mapping */
# define X509_V_FLAG_INHIBIT_MAP                 0x400
/* Notify callback that policy is OK */
# define X509_V_FLAG_NOTIFY_POLICY               0x800
/* Extended CRL features such as indirect CRLs, alternate CRL signing keys */
# define X509_V_FLAG_EXTENDED_CRL_SUPPORT        0x1000
/* Delta CRL support */
# define X509_V_FLAG_USE_DELTAS                  0x2000
/* Check self-signed CA signature */
# define X509_V_FLAG_CHECK_SS_SIGNATURE          0x4000
/* Use trusted store first */
# define X509_V_FLAG_TRUSTED_FIRST               0x8000
/* Suite B 128 bit only mode: not normally used */
```

```
# define X509_V_FLAG_SUITEB_128_LOS_ONLY        0x10000
/* Suite B 192 bit only mode */
# define X509_V_FLAG_SUITEB_192_LOS             0x20000
/* Suite B
 128 bit mode allowing 192 bit algorithms */
# define X509_V_FLAG_SUITEB_128_LOS             0x30000
/* Allow partial chains if at least one certificate is in trusted store */
# define X509_V_FLAG_PARTIAL_CHAIN              0x80000
/*
* If the initial chain is not trusted, do not attempt to build an alternative
* chain. Alternate chain checking was introduced in 1.1.0. Setting this flag
* will force the behaviour to match that of previous versions.
*/
# define X509_V_FLAG_NO_ALT_CHAINS              0x100000
/* Do not check certificate/CRL validity against current time */
# define X509_V_FLAG_NO_CHECK_TIME              0x200000

# define X509_VP_FLAG_DEFAULT                   0x1
# define X509_VP_FLAG_OVERWRITE                 0x2
# define X509_VP_FLAG_RESET_FLAGS               0x4
# define X509_VP_FLAG_LOCKED                    0x8
# define X509_VP_FLAG_ONCE                      0x10

/* Internal use: mask of policy related options */
# define X509_V_FLAG_POLICY_MASK (X509_V_FLAG_POLICY_CHECK
 \
                        | X509_V_FLAG_EXPLICIT_POLICY \
                        | X509_V_FLAG_INHIBIT_ANY \
                        | X509_V_FLAG_INHIBIT_MAP)

int X509_OBJECT_idx_by_subject(STACK_OF(X509_OBJECT) *h, X509_LOOKUP_TYPE type,
                       const X509_NAME *name);
X509_OBJECT *X509_OBJECT_retrieve_by_subject(STACK_OF(X509_OBJECT) *h,
                                 X509_LOOKUP_TYPE type,
                                 const X509_NAME *name);
X509_OBJECT *X509_OBJECT_retrieve_match(STACK_OF(X509_OBJECT) *h,
                               X509_OBJECT *x);
int X509_OBJECT_up_ref_count(X509_OBJECT *a);
X509_OBJECT *X509_OBJECT_new(void);
void X509_OBJECT_free(X509_OBJECT *a);
X509_LOOKUP_TYPE X509_OBJECT_get_type(const X509_OBJECT *a);
X509 *X509_OBJECT_get0_X509(const X509_OBJECT *a);
int X509_OBJECT_set1_X509(X509_OBJECT *a, X509 *obj);
X509_CRL *X509_OBJECT_get0_X509_CRL(const
 X509_OBJECT *a);
int X509_OBJECT_set1_X509_CRL(X509_OBJECT *a, X509_CRL *obj);
X509_STORE *X509_STORE_new(void);
void X509_STORE_free(X509_STORE *v);
```

```
int X509_STORE_lock(X509_STORE *ctx);
int X509_STORE_unlock(X509_STORE *ctx);
int X509_STORE_up_ref(X509_STORE *v);
STACK_OF(X509_OBJECT) *X509_STORE_get0_objects(const X509_STORE *v);
STACK_OF(X509) *X509_STORE_get1_all_certs(X509_STORE *st);
STACK_OF(X509) *X509_STORE_CTX_get1_certs(X509_STORE_CTX *st,
                                const X509_NAME *nm);
STACK_OF(X509_CRL) *X509_STORE_CTX_get1_crls(const X509_STORE_CTX *st,
                                 const X509_NAME *nm);
int X509_STORE_set_flags(X509_STORE *ctx, unsigned long flags);
int X509_STORE_set_purpose(X509_STORE *ctx, int purpose);
int X509_STORE_set_trust(X509_STORE *ctx, int trust);
int X509_STORE_set1_param(X509_STORE *ctx, const X509_VERIFY_PARAM *pm);
X509_VERIFY_PARAM *X509_STORE_get0_param(const X509_STORE *ctx);

void X509_STORE_set_verify(X509_STORE
 *ctx, X509_STORE_CTX_verify_fn verify);
#define X509_STORE_set_verify_func(ctx, func) \
        X509_STORE_set_verify((ctx),(func))
void X509_STORE_CTX_set_verify(X509_STORE_CTX *ctx,
                       X509_STORE_CTX_verify_fn verify);
X509_STORE_CTX_verify_fn X509_STORE_get_verify(const X509_STORE *ctx);
void X509_STORE_set_verify_cb(X509_STORE *ctx,
                      X509_STORE_CTX_verify_cb verify_cb);
# define X509_STORE_set_verify_cb_func(ctx,func) \
        X509_STORE_set_verify_cb((ctx),(func))
X509_STORE_CTX_verify_cb X509_STORE_get_verify_cb(const X509_STORE *ctx);
void X509_STORE_set_get_issuer(X509_STORE *ctx,
                       X509_STORE_CTX_get_issuer_fn get_issuer);
X509_STORE_CTX_get_issuer_fn X509_STORE_get_get_issuer(const X509_STORE *ctx);
void X509_STORE_set_check_issued(X509_STORE *ctx,
                         X509_STORE_CTX_check_issued_fn check_issued);
X509_STORE_CTX_check_issued_fn X509_STORE_get_check_issued(const
 X509_STORE *ctx);
void X509_STORE_set_check_revocation(X509_STORE *ctx,
                           X509_STORE_CTX_check_revocation_fn check_revocation);
X509_STORE_CTX_check_revocation_fn
   X509_STORE_get_check_revocation(const X509_STORE *ctx);
void X509_STORE_set_get_crl(X509_STORE *ctx,
                     X509_STORE_CTX_get_crl_fn get_crl);
X509_STORE_CTX_get_crl_fn X509_STORE_get_get_crl(const X509_STORE *ctx);
void X509_STORE_set_check_crl(X509_STORE *ctx,
                      X509_STORE_CTX_check_crl_fn check_crl);
X509_STORE_CTX_check_crl_fn X509_STORE_get_check_crl(const X509_STORE *ctx);
void X509_STORE_set_cert_crl(X509_STORE *ctx,
                     X509_STORE_CTX_cert_crl_fn cert_crl);
X509_STORE_CTX_cert_crl_fn X509_STORE_get_cert_crl(const X509_STORE *ctx);
void X509_STORE_set_check_policy(X509_STORE *ctx,
```

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                        X509_STORE_CTX_check_policy_fn check_policy);
X509_STORE_CTX_check_policy_fn
 X509_STORE_get_check_policy(const X509_STORE *ctx);
void X509_STORE_set_lookup_certs(X509_STORE *ctx,
                        X509_STORE_CTX_lookup_certs_fn lookup_certs);
X509_STORE_CTX_lookup_certs_fn X509_STORE_get_lookup_certs(const X509_STORE *ctx);
void X509_STORE_set_lookup_crls(X509_STORE *ctx,
                       X509_STORE_CTX_lookup_crls_fn lookup_crls);
#define X509_STORE_set_lookup_crls_cb(ctx, func) \
   X509_STORE_set_lookup_crls((ctx), (func))
X509_STORE_CTX_lookup_crls_fn X509_STORE_get_lookup_crls(const X509_STORE *ctx);
void X509_STORE_set_cleanup(X509_STORE *ctx,
                     X509_STORE_CTX_cleanup_fn cleanup);
X509_STORE_CTX_cleanup_fn X509_STORE_get_cleanup(const X509_STORE *ctx);

#define X509_STORE_get_ex_new_index(l, p, newf, dupf, freef) \
   CRYPTO_get_ex_new_index(CRYPTO_EX_INDEX_X509_STORE, l, p, newf, dupf, freef)
int X509_STORE_set_ex_data(X509_STORE *ctx, int idx, void *data);
void *X509_STORE_get_ex_data(const X509_STORE
 *ctx, int idx);

X509_STORE_CTX *X509_STORE_CTX_new_ex(OSSL_LIB_CTX *libctx, const char *propq);
X509_STORE_CTX *X509_STORE_CTX_new(void);

int X509_STORE_CTX_get1_issuer(X509 **issuer, X509_STORE_CTX *ctx, X509 *x);

void X509_STORE_CTX_free(X509_STORE_CTX *ctx);
int X509_STORE_CTX_init(X509_STORE_CTX *ctx, X509_STORE *trust_store,
                  X509 *target, STACK_OF(X509) *untrusted);
void X509_STORE_CTX_set0_trusted_stack(X509_STORE_CTX *ctx, STACK_OF(X509) *sk);
void X509_STORE_CTX_cleanup(X509_STORE_CTX *ctx);

X509_STORE *X509_STORE_CTX_get0_store(const X509_STORE_CTX *ctx);
X509 *X509_STORE_CTX_get0_cert(const X509_STORE_CTX *ctx);
STACK_OF(X509)* X509_STORE_CTX_get0_untrusted(const X509_STORE_CTX *ctx);
void X509_STORE_CTX_set0_untrusted(X509_STORE_CTX *ctx, STACK_OF(X509) *sk);
void X509_STORE_CTX_set_verify_cb(X509_STORE_CTX *ctx,
                        X509_STORE_CTX_verify_cb verify);
X509_STORE_CTX_verify_cb X509_STORE_CTX_get_verify_cb(const
 X509_STORE_CTX *ctx);
X509_STORE_CTX_verify_fn X509_STORE_CTX_get_verify(const X509_STORE_CTX *ctx);
X509_STORE_CTX_get_issuer_fn X509_STORE_CTX_get_get_issuer(const X509_STORE_CTX *ctx);
X509_STORE_CTX_check_issued_fn X509_STORE_CTX_get_check_issued(const X509_STORE_CTX *ctx);
X509_STORE_CTX_check_revocation_fn X509_STORE_CTX_get_check_revocation(const X509_STORE_CTX
*ctx);
X509_STORE_CTX_get_crl_fn X509_STORE_CTX_get_get_crl(const X509_STORE_CTX *ctx);
X509_STORE_CTX_check_crl_fn X509_STORE_CTX_get_check_crl(const X509_STORE_CTX *ctx);
X509_STORE_CTX_cert_crl_fn X509_STORE_CTX_get_cert_crl(const X509_STORE_CTX *ctx);
```

```
X509_STORE_CTX_check_policy_fn X509_STORE_CTX_get_check_policy(const X509_STORE_CTX *ctx);
X509_STORE_CTX_lookup_certs_fn X509_STORE_CTX_get_lookup_certs(const X509_STORE_CTX *ctx);
X509_STORE_CTX_lookup_crls_fn X509_STORE_CTX_get_lookup_crls(const X509_STORE_CTX *ctx);
X509_STORE_CTX_cleanup_fn X509_STORE_CTX_get_cleanup(const X509_STORE_CTX *ctx);

#ifndef OPENSSL_NO_DEPRECATED_1_1_0
#
 define X509_STORE_CTX_get_chain X509_STORE_CTX_get0_chain
# define X509_STORE_CTX_set_chain X509_STORE_CTX_set0_untrusted
# define X509_STORE_CTX_trusted_stack X509_STORE_CTX_set0_trusted_stack
# define X509_STORE_get_by_subject X509_STORE_CTX_get_by_subject
# define X509_STORE_get1_certs X509_STORE_CTX_get1_certs
# define X509_STORE_get1_crls X509_STORE_CTX_get1_crls
/* the following macro is misspelled; use X509_STORE_get1_certs instead */
# define X509_STORE_get1_cert X509_STORE_CTX_get1_certs
/* the following macro is misspelled; use X509_STORE_get1_crls instead */
# define X509_STORE_get1_crl X509_STORE_CTX_get1_crls
#endif

X509_LOOKUP *X509_STORE_add_lookup(X509_STORE *v, X509_LOOKUP_METHOD *m);
X509_LOOKUP_METHOD *X509_LOOKUP_hash_dir(void);
X509_LOOKUP_METHOD *X509_LOOKUP_file(void);
X509_LOOKUP_METHOD *X509_LOOKUP_store(void);

typedef int (*X509_LOOKUP_ctrl_fn)(X509_LOOKUP *ctx, int cmd, const char *argc,
                           long argl, char **ret);
typedef
 int (*X509_LOOKUP_ctrl_ex_fn)(
   X509_LOOKUP *ctx, int cmd, const char *argc, long argl, char **ret,
   OSSL_LIB_CTX *libctx, const char *propq);

typedef int (*X509_LOOKUP_get_by_subject_fn)(X509_LOOKUP *ctx,
                                 X509_LOOKUP_TYPE type,
                                 const X509_NAME *name,
                                 X509_OBJECT *ret);
typedef int (*X509_LOOKUP_get_by_subject_ex_fn)(X509_LOOKUP *ctx,
                                       X509_LOOKUP_TYPE type,
                                       const X509_NAME *name,
                                       X509_OBJECT *ret,
                                       OSSL_LIB_CTX *libctx,
                                       const char *propq);
typedef int (*X509_LOOKUP_get_by_issuer_serial_fn)(X509_LOOKUP *ctx,

     X509_LOOKUP_TYPE type,
                                     const X509_NAME *name,
                                     const ASN1_INTEGER *serial,
                                     X509_OBJECT *ret);
typedef int (*X509_LOOKUP_get_by_fingerprint_fn)(X509_LOOKUP *ctx,
```

```
                                X509_LOOKUP_TYPE type,
                                const unsigned char* bytes,
                                int len,
                                X509_OBJECT *ret);
typedef int (*X509_LOOKUP_get_by_alias_fn)(X509_LOOKUP *ctx,
                            X509_LOOKUP_TYPE type,
                            const char *str,
                            int len,
                            X509_OBJECT *ret);

X509_LOOKUP_METHOD *X509_LOOKUP_meth_new(const char *name);
void X509_LOOKUP_meth_free(X509_LOOKUP_METHOD
 *method);

int X509_LOOKUP_meth_set_new_item(X509_LOOKUP_METHOD *method,
                        int (*new_item) (X509_LOOKUP *ctx));
int (*X509_LOOKUP_meth_get_new_item(const X509_LOOKUP_METHOD* method))
   (X509_LOOKUP *ctx);

int X509_LOOKUP_meth_set_free(X509_LOOKUP_METHOD *method,
                      void (*free_fn) (X509_LOOKUP *ctx));
void (*X509_LOOKUP_meth_get_free(const X509_LOOKUP_METHOD* method))
   (X509_LOOKUP *ctx);

int X509_LOOKUP_meth_set_init(X509_LOOKUP_METHOD *method,
                      int (*init) (X509_LOOKUP *ctx));
int (*X509_LOOKUP_meth_get_init(const X509_LOOKUP_METHOD* method))
   (X509_LOOKUP *ctx);

int X509_LOOKUP_meth_set_shutdown(X509_LOOKUP_METHOD *method,
                        int (*shutdown) (X509_LOOKUP *ctx));
int (*X509_LOOKUP_meth_get_shutdown(const X509_LOOKUP_METHOD* method))
   (X509_LOOKUP *ctx);

int X509_LOOKUP_meth_set_ctrl(X509_LOOKUP_METHOD *method,
                      X509_LOOKUP_ctrl_fn
 ctrl_fn);
X509_LOOKUP_ctrl_fn X509_LOOKUP_meth_get_ctrl(const X509_LOOKUP_METHOD *method);

int X509_LOOKUP_meth_set_get_by_subject(X509_LOOKUP_METHOD *method,
                            X509_LOOKUP_get_by_subject_fn fn);
X509_LOOKUP_get_by_subject_fn X509_LOOKUP_meth_get_get_by_subject(
   const X509_LOOKUP_METHOD *method);

int X509_LOOKUP_meth_set_get_by_issuer_serial(X509_LOOKUP_METHOD *method,
   X509_LOOKUP_get_by_issuer_serial_fn fn);
X509_LOOKUP_get_by_issuer_serial_fn X509_LOOKUP_meth_get_get_by_issuer_serial(
   const X509_LOOKUP_METHOD *method);
```

```
int X509_LOOKUP_meth_set_get_by_fingerprint(X509_LOOKUP_METHOD *method,
  X509_LOOKUP_get_by_fingerprint_fn fn);
X509_LOOKUP_get_by_fingerprint_fn X509_LOOKUP_meth_get_get_by_fingerprint(
  const X509_LOOKUP_METHOD *method);

int X509_LOOKUP_meth_set_get_by_alias(X509_LOOKUP_METHOD *method,
                              X509_LOOKUP_get_by_alias_fn fn);
X509_LOOKUP_get_by_alias_fn X509_LOOKUP_meth_get_get_by_alias(
   const X509_LOOKUP_METHOD *method);


int X509_STORE_add_cert(X509_STORE *ctx, X509 *x);
int X509_STORE_add_crl(X509_STORE *ctx, X509_CRL *x);

int X509_STORE_CTX_get_by_subject(const X509_STORE_CTX *vs,
                          X509_LOOKUP_TYPE type,
                          const X509_NAME *name, X509_OBJECT *ret);
X509_OBJECT *X509_STORE_CTX_get_obj_by_subject(X509_STORE_CTX *vs,
                                   X509_LOOKUP_TYPE type,
                                   const X509_NAME *name);

int X509_LOOKUP_ctrl(X509_LOOKUP *ctx, int cmd, const char *argc,
                long argl, char **ret);
int X509_LOOKUP_ctrl_ex(X509_LOOKUP *ctx, int cmd, const char *argc, long argl,
                  char **ret, OSSL_LIB_CTX *libctx, const char *propq);

int X509_load_cert_file(X509_LOOKUP *ctx, const char *file, int type);
int X509_load_cert_file_ex(X509_LOOKUP *ctx, const char *file, int type,

        OSSL_LIB_CTX *libctx, const char *propq);
int X509_load_crl_file(X509_LOOKUP *ctx, const char *file, int type);
int X509_load_cert_crl_file(X509_LOOKUP *ctx, const char *file, int type);
int X509_load_cert_crl_file_ex(X509_LOOKUP *ctx, const char *file, int type,
                       OSSL_LIB_CTX *libctx, const char *propq);

X509_LOOKUP *X509_LOOKUP_new(X509_LOOKUP_METHOD *method);
void X509_LOOKUP_free(X509_LOOKUP *ctx);
int X509_LOOKUP_init(X509_LOOKUP *ctx);
int X509_LOOKUP_by_subject(X509_LOOKUP *ctx, X509_LOOKUP_TYPE type,
                    const X509_NAME *name, X509_OBJECT *ret);
int X509_LOOKUP_by_subject_ex(X509_LOOKUP *ctx, X509_LOOKUP_TYPE type,
                      const X509_NAME *name, X509_OBJECT *ret,
                      OSSL_LIB_CTX *libctx, const char *propq);
int X509_LOOKUP_by_issuer_serial(X509_LOOKUP *ctx, X509_LOOKUP_TYPE type,
                         const X509_NAME *name,
```

```
 const ASN1_INTEGER *serial,
                          X509_OBJECT *ret);
int X509_LOOKUP_by_fingerprint(X509_LOOKUP *ctx, X509_LOOKUP_TYPE type,
                        const unsigned char *bytes, int len,
                        X509_OBJECT *ret);
int X509_LOOKUP_by_alias(X509_LOOKUP *ctx, X509_LOOKUP_TYPE type,
                    const char *str, int len, X509_OBJECT *ret);
int X509_LOOKUP_set_method_data(X509_LOOKUP *ctx, void *data);
void *X509_LOOKUP_get_method_data(const X509_LOOKUP *ctx);
X509_STORE *X509_LOOKUP_get_store(const X509_LOOKUP *ctx);
int X509_LOOKUP_shutdown(X509_LOOKUP *ctx);

int X509_STORE_load_file(X509_STORE *ctx, const char *file);
int X509_STORE_load_path(X509_STORE *ctx, const char *path);
int X509_STORE_load_store(X509_STORE *ctx, const char *store);
int X509_STORE_load_locations(X509_STORE *ctx,
                                  const char *file,
                                  const char *dir);
int X509_STORE_set_default_paths(X509_STORE
 *ctx);

int X509_STORE_load_file_ex(X509_STORE *ctx, const char *file,
                     OSSL_LIB_CTX *libctx, const char *propq);
int X509_STORE_load_store_ex(X509_STORE *ctx, const char *store,
                     OSSL_LIB_CTX *libctx, const char *propq);
int X509_STORE_load_locations_ex(X509_STORE *ctx, const char *file,
                          const char *dir, OSSL_LIB_CTX *libctx,
                          const char *propq);
int X509_STORE_set_default_paths_ex(X509_STORE *ctx, OSSL_LIB_CTX *libctx,
                            const char *propq);

#define X509_STORE_CTX_get_ex_new_index(l, p, newf, dupf, freef) \
   CRYPTO_get_ex_new_index(CRYPTO_EX_INDEX_X509_STORE_CTX, l, p, newf, dupf, freef)
int X509_STORE_CTX_set_ex_data(X509_STORE_CTX *ctx, int idx, void *data);
void *X509_STORE_CTX_get_ex_data(const X509_STORE_CTX *ctx, int idx);
int X509_STORE_CTX_get_error(const X509_STORE_CTX *ctx);
void X509_STORE_CTX_set_error(X509_STORE_CTX
 *ctx, int s);
int X509_STORE_CTX_get_error_depth(const X509_STORE_CTX *ctx);
void X509_STORE_CTX_set_error_depth(X509_STORE_CTX *ctx, int depth);
X509 *X509_STORE_CTX_get_current_cert(const X509_STORE_CTX *ctx);
void X509_STORE_CTX_set_current_cert(X509_STORE_CTX *ctx, X509 *x);
X509 *X509_STORE_CTX_get0_current_issuer(const X509_STORE_CTX *ctx);
X509_CRL *X509_STORE_CTX_get0_current_crl(const X509_STORE_CTX *ctx);
X509_STORE_CTX *X509_STORE_CTX_get0_parent_ctx(const X509_STORE_CTX *ctx);
STACK_OF(X509) *X509_STORE_CTX_get0_chain(const X509_STORE_CTX *ctx);
STACK_OF(X509) *X509_STORE_CTX_get1_chain(const X509_STORE_CTX *ctx);
void X509_STORE_CTX_set_cert(X509_STORE_CTX *ctx, X509 *target);
```

```
void X509_STORE_CTX_set0_verified_chain(X509_STORE_CTX *c, STACK_OF(X509) *sk);
void X509_STORE_CTX_set0_crls(X509_STORE_CTX *ctx, STACK_OF(X509_CRL) *sk);
int X509_STORE_CTX_set_purpose(X509_STORE_CTX *ctx, int purpose);
int X509_STORE_CTX_set_trust(X509_STORE_CTX
 *ctx, int trust);
int X509_STORE_CTX_purpose_inherit(X509_STORE_CTX *ctx, int def_purpose,
                           int purpose, int trust);
void X509_STORE_CTX_set_flags(X509_STORE_CTX *ctx, unsigned long flags);
void X509_STORE_CTX_set_time(X509_STORE_CTX *ctx, unsigned long flags,
                       time_t t);

X509_POLICY_TREE *X509_STORE_CTX_get0_policy_tree(const X509_STORE_CTX *ctx);
int X509_STORE_CTX_get_explicit_policy(const X509_STORE_CTX *ctx);
int X509_STORE_CTX_get_num_untrusted(const X509_STORE_CTX *ctx);

X509_VERIFY_PARAM *X509_STORE_CTX_get0_param(const X509_STORE_CTX *ctx);
void X509_STORE_CTX_set0_param(X509_STORE_CTX *ctx, X509_VERIFY_PARAM *param);
int X509_STORE_CTX_set_default(X509_STORE_CTX *ctx, const char *name);

/*
* Bridge opacity barrier between libcrypt and libssl, also needed to support
* offline testing in test/danetest.c
*/
void X509_STORE_CTX_set0_dane(X509_STORE_CTX *ctx, SSL_DANE *dane);
#define DANE_FLAG_NO_DANE_EE_NAMECHECKS
 (1L << 0)

/* X509_VERIFY_PARAM functions */

X509_VERIFY_PARAM *X509_VERIFY_PARAM_new(void);
void X509_VERIFY_PARAM_free(X509_VERIFY_PARAM *param);
int X509_VERIFY_PARAM_inherit(X509_VERIFY_PARAM *to,
                        const X509_VERIFY_PARAM *from);
int X509_VERIFY_PARAM_set1(X509_VERIFY_PARAM *to,
                     const X509_VERIFY_PARAM *from);
int X509_VERIFY_PARAM_set1_name(X509_VERIFY_PARAM *param, const char *name);
int X509_VERIFY_PARAM_set_flags(X509_VERIFY_PARAM *param,
                         unsigned long flags);
int X509_VERIFY_PARAM_clear_flags(X509_VERIFY_PARAM *param,
                           unsigned long flags);
unsigned long X509_VERIFY_PARAM_get_flags(const X509_VERIFY_PARAM *param);
int X509_VERIFY_PARAM_set_purpose(X509_VERIFY_PARAM *param, int purpose);
int X509_VERIFY_PARAM_set_trust(X509_VERIFY_PARAM *param, int trust);
void X509_VERIFY_PARAM_set_depth(X509_VERIFY_PARAM *param, int depth);
void X509_VERIFY_PARAM_set_auth_level(X509_VERIFY_PARAM
 *param, int auth_level);
time_t X509_VERIFY_PARAM_get_time(const X509_VERIFY_PARAM *param);
void X509_VERIFY_PARAM_set_time(X509_VERIFY_PARAM *param, time_t t);
```

```
int X509_VERIFY_PARAM_add0_policy(X509_VERIFY_PARAM *param,
                          ASN1_OBJECT *policy);
int X509_VERIFY_PARAM_set1_policies(X509_VERIFY_PARAM *param,
                           STACK_OF(ASN1_OBJECT) *policies);

int X509_VERIFY_PARAM_set_inh_flags(X509_VERIFY_PARAM *param,
                           uint32_t flags);
uint32_t X509_VERIFY_PARAM_get_inh_flags(const X509_VERIFY_PARAM *param);

char *X509_VERIFY_PARAM_get0_host(X509_VERIFY_PARAM *param, int idx);
int X509_VERIFY_PARAM_set1_host(X509_VERIFY_PARAM *param,
                         const char *name, size_t namelen);
int X509_VERIFY_PARAM_add1_host(X509_VERIFY_PARAM *param,
                         const char *name, size_t namelen);
void X509_VERIFY_PARAM_set_hostflags(X509_VERIFY_PARAM
 *param,
                           unsigned int flags);
unsigned int X509_VERIFY_PARAM_get_hostflags(const X509_VERIFY_PARAM *param);
char *X509_VERIFY_PARAM_get0_peername(const X509_VERIFY_PARAM *param);
void X509_VERIFY_PARAM_move_peername(X509_VERIFY_PARAM *, X509_VERIFY_PARAM *);
char *X509_VERIFY_PARAM_get0_email(X509_VERIFY_PARAM *param);
int X509_VERIFY_PARAM_set1_email(X509_VERIFY_PARAM *param,
                         const char *email, size_t emaillen);
char *X509_VERIFY_PARAM_get1_ip_asc(X509_VERIFY_PARAM *param);
int X509_VERIFY_PARAM_set1_ip(X509_VERIFY_PARAM *param,
                        const unsigned char *ip, size_t iplen);
int X509_VERIFY_PARAM_set1_ip_asc(X509_VERIFY_PARAM *param,
                          const char *ipasc);

int X509_VERIFY_PARAM_get_depth(const X509_VERIFY_PARAM *param);
int X509_VERIFY_PARAM_get_auth_level(const X509_VERIFY_PARAM *param);
const char *X509_VERIFY_PARAM_get0_name(const X509_VERIFY_PARAM *param);

int
 X509_VERIFY_PARAM_add0_table(X509_VERIFY_PARAM *param);
int X509_VERIFY_PARAM_get_count(void);
const X509_VERIFY_PARAM *X509_VERIFY_PARAM_get0(int id);
const X509_VERIFY_PARAM *X509_VERIFY_PARAM_lookup(const char *name);
void X509_VERIFY_PARAM_table_cleanup(void);

/* Non positive return values are errors */
#define X509_PCY_TREE_FAILURE  -2 /* Failure to satisfy explicit policy */
#define X509_PCY_TREE_INVALID  -1 /* Inconsistent or invalid extensions */
#define X509_PCY_TREE_INTERNAL  0 /* Internal error, most likely malloc */

/*
* Positive return values form a bit mask, all but the first are internal to
* the library and don't appear in results from X509_policy_check().
```

```
*/
#define X509_PCY_TREE_VALID     1 /* The policy tree is valid */
#define X509_PCY_TREE_EMPTY     2 /* The policy tree is empty */
#define X509_PCY_TREE_EXPLICIT  4 /* Explicit policy required */

int X509_policy_check(X509_POLICY_TREE **ptree, int *pexplicit_policy,
                      STACK_OF(X509)
 *certs,
                      STACK_OF(ASN1_OBJECT) *policy_oids, unsigned int flags);

void X509_policy_tree_free(X509_POLICY_TREE *tree);

int X509_policy_tree_level_count(const X509_POLICY_TREE *tree);
X509_POLICY_LEVEL *X509_policy_tree_get0_level(const X509_POLICY_TREE *tree,
                                               int i);

STACK_OF(X509_POLICY_NODE)
   *X509_policy_tree_get0_policies(const X509_POLICY_TREE *tree);

STACK_OF(X509_POLICY_NODE)
   *X509_policy_tree_get0_user_policies(const X509_POLICY_TREE *tree);

int X509_policy_level_node_count(X509_POLICY_LEVEL *level);

X509_POLICY_NODE *X509_policy_level_get0_node(const X509_POLICY_LEVEL *level,
                                              int i);

const ASN1_OBJECT *X509_policy_node_get0_policy(const X509_POLICY_NODE *node);

STACK_OF(POLICYQUALINFO)
   *X509_policy_node_get0_qualifiers(const X509_POLICY_NODE *node);
const X509_POLICY_NODE
   *X509_policy_node_get0_parent(const X509_POLICY_NODE *node);

#ifdef  __cplusplus
}
#endif
#endif
```

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import './required-module.mjs';
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```
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/*
* WARNING: do not edit!
* Generated by configdata.pm from Configurations/common0.tmpl, Configurations/unix-Makefile.tmpl
* via Makefile.in
*
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* https://www.openssl.org/source/license.html
*/

#ifndef OPENSSL_CONFIGURATION_H
# define OPENSSL_CONFIGURATION_H
# pragma once

# ifdef  __cplusplus
extern "C" {
# endif

# ifdef OPENSSL_ALGORITHM_DEFINES
#  error OPENSSL_ALGORITHM_DEFINES no longer supported
# endif

/*
* OpenSSL was configured with the following options:
*/

# define OPENSSL_CONFIGURED_API 30000
# ifndef OPENSSL_RAND_SEED_OS
#  define OPENSSL_RAND_SEED_OS
# endif
# ifndef OPENSSL_THREADS
#  define OPENSSL_THREADS
# endif
# ifndef OPENSSL_NO_AFALGENG
#  define OPENSSL_NO_AFALGENG
# endif
# ifndef
 OPENSSL_NO_ASAN
#  define OPENSSL_NO_ASAN
# endif
# ifndef OPENSSL_NO_COMP
#  define OPENSSL_NO_COMP
```

```
# endif
# ifndef OPENSSL_NO_CRYPTO_MDEBUG
#  define OPENSSL_NO_CRYPTO_MDEBUG
# endif
# ifndef OPENSSL_NO_CRYPTO_MDEBUG_BACKTRACE
#  define OPENSSL_NO_CRYPTO_MDEBUG_BACKTRACE
# endif
# ifndef OPENSSL_NO_EC_NISTP_64_GCC_128
#  define OPENSSL_NO_EC_NISTP_64_GCC_128
# endif
# ifndef OPENSSL_NO_EGD
#  define OPENSSL_NO_EGD
# endif
# ifndef OPENSSL_NO_EXTERNAL_TESTS
#  define OPENSSL_NO_EXTERNAL_TESTS
# endif
# ifndef OPENSSL_NO_FUZZ_AFL
#  define OPENSSL_NO_FUZZ_AFL
# endif
# ifndef OPENSSL_NO_FUZZ_LIBFUZZER
#  define OPENSSL_NO_FUZZ_LIBFUZZER
# endif
# ifndef OPENSSL_NO_KTLS
#  define OPENSSL_NO_KTLS
# endif
# ifndef OPENSSL_NO_LOADERENG
#  define OPENSSL_NO_LOADERENG
# endif
# ifndef OPENSSL_NO_MD2
#  define OPENSSL_NO_MD2
# endif
# ifndef OPENSSL_NO_MSAN
#  define OPENSSL_NO_MSAN
# endif
# ifndef OPENSSL_NO_RC5
#  define OPENSSL_NO_RC5
# endif
# ifndef OPENSSL_NO_SCTP
#  define OPENSSL_NO_SCTP
#
 endif
# ifndef OPENSSL_NO_SSL3
#  define OPENSSL_NO_SSL3
# endif
# ifndef OPENSSL_NO_SSL3_METHOD
#  define OPENSSL_NO_SSL3_METHOD
# endif
# ifndef OPENSSL_NO_TRACE
```

```
#  define OPENSSL_NO_TRACE
# endif
# ifndef OPENSSL_NO_UBSAN
#  define OPENSSL_NO_UBSAN
# endif
# ifndef OPENSSL_NO_UNIT_TEST
#  define OPENSSL_NO_UNIT_TEST
# endif
# ifndef OPENSSL_NO_UPLINK
#  define OPENSSL_NO_UPLINK
# endif
# ifndef OPENSSL_NO_WEAK_SSL_CIPHERS
#  define OPENSSL_NO_WEAK_SSL_CIPHERS
# endif
# ifndef OPENSSL_NO_DYNAMIC_ENGINE
#  define OPENSSL_NO_DYNAMIC_ENGINE
# endif


/* Generate 80386 code? */
# undef I386_ONLY

/*
* The following are cipher-specific, but are part of the public API.
*/
# if !defined(OPENSSL_SYS_UEFI)
#  define BN_LLONG
/* Only one for the following should be defined */
#  undef SIXTY_FOUR_BIT_LONG
#  undef SIXTY_FOUR_BIT
#  define THIRTY_TWO_BIT
# endif

# define RC4_INT unsigned int

# ifdef  __cplusplus
}
# endif

#endif                          /* OPENSSL_CONFIGURATION_H
 */
```

Tests included here are based on build output generated by the six-speed benchmark suite.

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```
/*
* WARNING: do not edit!
* Generated by Makefile from providers/common/include/prov/der_dsa.h.in
*
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* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/

#include "internal/der.h"

/* Well known OIDs precompiled */

/*
* id-dsa OBJECT IDENTIFIER ::= {
*      iso(1) member-body(2) us(840) x9-57(10040) x9algorithm(4) 1 }
*/
#define DER_OID_V_id_dsa DER_P_OBJECT, 7, 0x2A, 0x86, 0x48, 0xCE, 0x38, 0x04, 0x01
#define DER_OID_SZ_id_dsa 9
extern const unsigned char ossl_der_oid_id_dsa[DER_OID_SZ_id_dsa];

/*
* id-dsa-with-sha1 OBJECT IDENTIFIER ::=  {
*      iso(1) member-body(2) us(840) x9-57 (10040) x9algorithm(4) 3 }
*/
#define DER_OID_V_id_dsa_with_sha1 DER_P_OBJECT, 7, 0x2A, 0x86, 0x48, 0xCE, 0x38, 0x04,
 0x03
#define DER_OID_SZ_id_dsa_with_sha1 9
extern const unsigned char ossl_der_oid_id_dsa_with_sha1[DER_OID_SZ_id_dsa_with_sha1];
```

```
/*
* id-dsa-with-sha224 OBJECT IDENTIFIER ::= { sigAlgs 1 }
*/
#define DER_OID_V_id_dsa_with_sha224 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x03,
0x01
#define DER_OID_SZ_id_dsa_with_sha224 11
extern const unsigned char ossl_der_oid_id_dsa_with_sha224[DER_OID_SZ_id_dsa_with_sha224];

/*
* id-dsa-with-sha256 OBJECT IDENTIFIER ::= { sigAlgs 2 }
*/
#define DER_OID_V_id_dsa_with_sha256 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x03,
0x02
#define DER_OID_SZ_id_dsa_with_sha256 11
extern const unsigned char ossl_der_oid_id_dsa_with_sha256[DER_OID_SZ_id_dsa_with_sha256];

/*
* id-dsa-with-sha384 OBJECT IDENTIFIER ::= { sigAlgs 3 }
*/
#define DER_OID_V_id_dsa_with_sha384 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x03,
0x03
#define DER_OID_SZ_id_dsa_with_sha384 11
extern const unsigned char ossl_der_oid_id_dsa_with_sha384[DER_OID_SZ_id_dsa_with_sha384];

/*
 * id-dsa-with-sha512 OBJECT IDENTIFIER ::= { sigAlgs 4 }
*/
#define DER_OID_V_id_dsa_with_sha512 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x03,
0x04
#define DER_OID_SZ_id_dsa_with_sha512 11
extern const unsigned char ossl_der_oid_id_dsa_with_sha512[DER_OID_SZ_id_dsa_with_sha512];

/*
* id-dsa-with-sha3-224 OBJECT IDENTIFIER ::= { sigAlgs 5 }
*/
#define DER_OID_V_id_dsa_with_sha3_224 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04,
0x03, 0x05
#define DER_OID_SZ_id_dsa_with_sha3_224 11
extern const unsigned char ossl_der_oid_id_dsa_with_sha3_224[DER_OID_SZ_id_dsa_with_sha3_224];

/*
* id-dsa-with-sha3-256 OBJECT IDENTIFIER ::= { sigAlgs 6 }
*/
#define DER_OID_V_id_dsa_with_sha3_256 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04,
0x03, 0x06
#define DER_OID_SZ_id_dsa_with_sha3_256 11
extern const unsigned char ossl_der_oid_id_dsa_with_sha3_256[DER_OID_SZ_id_dsa_with_sha3_256];
```

```
/*
* id-dsa-with-sha3-384
 OBJECT IDENTIFIER ::= { sigAlgs 7 }
*/
#define DER_OID_V_id_dsa_with_sha3_384 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04,
0x03, 0x07
#define DER_OID_SZ_id_dsa_with_sha3_384 11
extern const unsigned char ossl_der_oid_id_dsa_with_sha3_384[DER_OID_SZ_id_dsa_with_sha3_384];

/*
* id-dsa-with-sha3-512 OBJECT IDENTIFIER ::= { sigAlgs 8 }
*/
#define DER_OID_V_id_dsa_with_sha3_512 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04,
0x03, 0x08
#define DER_OID_SZ_id_dsa_with_sha3_512 11
extern const unsigned char ossl_der_oid_id_dsa_with_sha3_512[DER_OID_SZ_id_dsa_with_sha3_512];


/* Subject Public Key Info */
int ossl_DER_w_algorithmIdentifier_DSA(WPACKET *pkt, int tag, DSA *dsa);
/* Signature */
int ossl_DER_w_algorithmIdentifier_DSA_with_MD(WPACKET *pkt, int tag,
                                               DSA *dsa, int mdnid);
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/crypto.h.in
*
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* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_CRYPTO_H
# define OPENSSL_CRYPTO_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_CRYPTO_H
# endif
```

```
# include <stdlib.h>
# include <time.h>

# include <openssl/e_os2.h>

# ifndef OPENSSL_NO_STDIO
#  include <stdio.h>
# endif

# include <openssl/safestack.h>
# include <openssl/opensslv.h>
# include <openssl/types.h>
# include <openssl/opensslconf.h>
# include <openssl/cryptoerr.h>
# include <openssl/core.h>

# ifdef CHARSET_EBCDIC
#  include
 <openssl/ebcdic.h>
# endif

/*
* Resolve problems on some operating systems with symbol names that clash
* one way or another
*/
# include <openssl/symhacks.h>

# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  include <openssl/opensslv.h>
# endif

#ifdef  __cplusplus
extern "C" {
#endif

# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define SSLeay                  OpenSSL_version_num
#  define SSLeay_version          OpenSSL_version
#  define SSLEAY_VERSION_NUMBER   OPENSSL_VERSION_NUMBER
#  define SSLEAY_VERSION          OPENSSL_VERSION
#  define SSLEAY_CFLAGS           OPENSSL_CFLAGS
#  define SSLEAY_BUILT_ON         OPENSSL_BUILT_ON
#  define SSLEAY_PLATFORM         OPENSSL_PLATFORM
#  define SSLEAY_DIR              OPENSSL_DIR

/*
* Old type for allocating dynamic locks. No longer used. Use the new thread
* API instead.
```

```
*/
typedef struct {
   int dummy;
} CRYPTO_dynlock;

# endif /* OPENSSL_NO_DEPRECATED_1_1_0 */

typedef void CRYPTO_RWLOCK;

CRYPTO_RWLOCK *CRYPTO_THREAD_lock_new(void);
__owur
 int CRYPTO_THREAD_read_lock(CRYPTO_RWLOCK *lock);
__owur int CRYPTO_THREAD_write_lock(CRYPTO_RWLOCK *lock);
int CRYPTO_THREAD_unlock(CRYPTO_RWLOCK *lock);
void CRYPTO_THREAD_lock_free(CRYPTO_RWLOCK *lock);

int CRYPTO_atomic_add(int *val, int amount, int *ret, CRYPTO_RWLOCK *lock);
int CRYPTO_atomic_or(uint64_t *val, uint64_t op, uint64_t *ret,
                     CRYPTO_RWLOCK *lock);
int CRYPTO_atomic_load(uint64_t *val, uint64_t *ret, CRYPTO_RWLOCK *lock);

/* No longer needed, so this is a no-op */
#define OPENSSL_malloc_init() while(0) continue

# define OPENSSL_malloc(num) \
      CRYPTO_malloc(num, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_zalloc(num) \
      CRYPTO_zalloc(num, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_realloc(addr, num) \
      CRYPTO_realloc(addr, num, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_clear_realloc(addr, old_num, num) \
      CRYPTO_clear_realloc(addr, old_num, num, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_clear_free(addr,
 num) \
      CRYPTO_clear_free(addr, num, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_free(addr) \
      CRYPTO_free(addr, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_memdup(str, s) \
      CRYPTO_memdup((str), s, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_strdup(str) \
      CRYPTO_strdup(str, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_strndup(str, n) \
      CRYPTO_strndup(str, n, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_secure_malloc(num) \
      CRYPTO_secure_malloc(num, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_secure_zalloc(num) \
      CRYPTO_secure_zalloc(num, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_secure_free(addr) \
```

```
    CRYPTO_secure_free(addr, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_secure_clear_free(addr, num) \
    CRYPTO_secure_clear_free(addr, num, OPENSSL_FILE, OPENSSL_LINE)
# define OPENSSL_secure_actual_size(ptr) \
    CRYPTO_secure_actual_size(ptr)

size_t OPENSSL_strlcpy(char *dst, const char *src, size_t siz);
size_t
 OPENSSL_strlcat(char *dst, const char *src, size_t siz);
size_t OPENSSL_strnlen(const char *str, size_t maxlen);
int OPENSSL_buf2hexstr_ex(char *str, size_t str_n, size_t *strlength,
                    const unsigned char *buf, size_t buflen,
                    const char sep);
char *OPENSSL_buf2hexstr(const unsigned char *buf, long buflen);
int OPENSSL_hexstr2buf_ex(unsigned char *buf, size_t buf_n, size_t *buflen,
                    const char *str, const char sep);
unsigned char *OPENSSL_hexstr2buf(const char *str, long *buflen);
int OPENSSL_hexchar2int(unsigned char c);
int OPENSSL_strcasecmp(const char *s1, const char *s2);
int OPENSSL_strncasecmp(const char *s1, const char *s2, size_t n);

# define OPENSSL_MALLOC_MAX_NELEMS(type)  (((1U<<(sizeof(int)*8-1))-1)/sizeof(type))

/*
* These functions return the values of OPENSSL_VERSION_MAJOR,
* OPENSSL_VERSION_MINOR, OPENSSL_VERSION_PATCH, OPENSSL_VERSION_PRE_RELEASE
* and OPENSSL_VERSION_BUILD_METADATA,
 respectively.
*/
unsigned int OPENSSL_version_major(void);
unsigned int OPENSSL_version_minor(void);
unsigned int OPENSSL_version_patch(void);
const char *OPENSSL_version_pre_release(void);
const char *OPENSSL_version_build_metadata(void);

unsigned long OpenSSL_version_num(void);
const char *OpenSSL_version(int type);
# define OPENSSL_VERSION            0
# define OPENSSL_CFLAGS             1
# define OPENSSL_BUILT_ON           2
# define OPENSSL_PLATFORM           3
# define OPENSSL_DIR                4
# define OPENSSL_ENGINES_DIR        5
# define OPENSSL_VERSION_STRING     6
# define OPENSSL_FULL_VERSION_STRING    7
# define OPENSSL_MODULES_DIR        8
# define OPENSSL_CPU_INFO           9
```

```
const char *OPENSSL_info(int type);
/*
* The series starts at 1001 to avoid confusion with the OpenSSL_version
* types.
*/
# define OPENSSL_INFO_CONFIG_DIR                1001
# define OPENSSL_INFO_ENGINES_DIR               1002
# define OPENSSL_INFO_MODULES_DIR
            1003
# define OPENSSL_INFO_DSO_EXTENSION             1004
# define OPENSSL_INFO_DIR_FILENAME_SEPARATOR    1005
# define OPENSSL_INFO_LIST_SEPARATOR            1006
# define OPENSSL_INFO_SEED_SOURCE               1007
# define OPENSSL_INFO_CPU_SETTINGS              1008

int OPENSSL_issetugid(void);

struct crypto_ex_data_st {
  OSSL_LIB_CTX *ctx;
  STACK_OF(void) *sk;
};

SKM_DEFINE_STACK_OF_INTERNAL(void, void, void)
#define sk_void_num(sk) OPENSSL_sk_num(ossl_check_const_void_sk_type(sk))
#define sk_void_value(sk, idx) ((void *)OPENSSL_sk_value(ossl_check_const_void_sk_type(sk), (idx)))
#define sk_void_new(cmp) ((STACK_OF(void) *)OPENSSL_sk_new(ossl_check_void_compfunc_type(cmp)))
#define sk_void_new_null() ((STACK_OF(void) *)OPENSSL_sk_new_null())
#define sk_void_new_reserve(cmp, n) ((STACK_OF(void)
*)OPENSSL_sk_new_reserve(ossl_check_void_compfunc_type(cmp), (n)))
#define sk_void_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_void_sk_type(sk), (n))
#define
 sk_void_free(sk) OPENSSL_sk_free(ossl_check_void_sk_type(sk))
#define sk_void_zero(sk) OPENSSL_sk_zero(ossl_check_void_sk_type(sk))
#define sk_void_delete(sk, i) ((void *)OPENSSL_sk_delete(ossl_check_void_sk_type(sk), (i)))
#define sk_void_delete_ptr(sk, ptr) ((void *)OPENSSL_sk_delete_ptr(ossl_check_void_sk_type(sk),
ossl_check_void_type(ptr)))
#define sk_void_push(sk, ptr) OPENSSL_sk_push(ossl_check_void_sk_type(sk), ossl_check_void_type(ptr))
#define sk_void_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_void_sk_type(sk), ossl_check_void_type(ptr))
#define sk_void_pop(sk) ((void *)OPENSSL_sk_pop(ossl_check_void_sk_type(sk)))
#define sk_void_shift(sk) ((void *)OPENSSL_sk_shift(ossl_check_void_sk_type(sk)))
#define sk_void_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_void_sk_type(sk),ossl_check_void_freefunc_type(freefunc))
#define sk_void_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_void_sk_type(sk), ossl_check_void_type(ptr),
(idx))
#define sk_void_set(sk, idx, ptr) ((void
 *)OPENSSL_sk_set(ossl_check_void_sk_type(sk), (idx), ossl_check_void_type(ptr)))
#define sk_void_find(sk, ptr) OPENSSL_sk_find(ossl_check_void_sk_type(sk), ossl_check_void_type(ptr))
#define sk_void_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_void_sk_type(sk), ossl_check_void_type(ptr))
```

```
#define sk_void_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_void_sk_type(sk),
ossl_check_void_type(ptr), pnum)
#define sk_void_sort(sk) OPENSSL_sk_sort(ossl_check_void_sk_type(sk))
#define sk_void_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_void_sk_type(sk))
#define sk_void_dup(sk) ((STACK_OF(void) *)OPENSSL_sk_dup(ossl_check_const_void_sk_type(sk)))
#define sk_void_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(void)
*)OPENSSL_sk_deep_copy(ossl_check_const_void_sk_type(sk), ossl_check_void_copyfunc_type(copyfunc),
ossl_check_void_freefunc_type(freefunc)))
#define sk_void_set_cmp_func(sk, cmp)
((sk_void_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_void_sk_type(sk),
ossl_check_void_compfunc_type(cmp)))



/*
 * Per class, we have a STACK of function pointers.
*/
# define CRYPTO_EX_INDEX_SSL            0
# define CRYPTO_EX_INDEX_SSL_CTX        1
# define CRYPTO_EX_INDEX_SSL_SESSION    2
# define CRYPTO_EX_INDEX_X509           3
# define CRYPTO_EX_INDEX_X509_STORE     4
# define CRYPTO_EX_INDEX_X509_STORE_CTX 5
# define CRYPTO_EX_INDEX_DH             6
# define CRYPTO_EX_INDEX_DSA            7
# define CRYPTO_EX_INDEX_EC_KEY         8
# define CRYPTO_EX_INDEX_RSA            9
# define CRYPTO_EX_INDEX_ENGINE         10
# define CRYPTO_EX_INDEX_UI             11
# define CRYPTO_EX_INDEX_BIO            12
# define CRYPTO_EX_INDEX_APP            13
# define CRYPTO_EX_INDEX_UI_METHOD      14
# define CRYPTO_EX_INDEX_RAND_DRBG      15
# define CRYPTO_EX_INDEX_DRBG           CRYPTO_EX_INDEX_RAND_DRBG
# define CRYPTO_EX_INDEX_OSSL_LIB_CTX   16
# define CRYPTO_EX_INDEX_EVP_PKEY       17
# define CRYPTO_EX_INDEX__COUNT         18

typedef void
 CRYPTO_EX_new (void *parent, void *ptr, CRYPTO_EX_DATA *ad,
                int idx, long argl, void *argp);
typedef void CRYPTO_EX_free (void *parent, void *ptr, CRYPTO_EX_DATA *ad,
                int idx, long argl, void *argp);
typedef int CRYPTO_EX_dup (CRYPTO_EX_DATA *to, const CRYPTO_EX_DATA *from,
                void **from_d, int idx, long argl, void *argp);
__owur int CRYPTO_get_ex_new_index(int class_index, long argl, void *argp,
                        CRYPTO_EX_new *new_func,
                        CRYPTO_EX_dup *dup_func,
```

```
                                CRYPTO_EX_free *free_func);
/* No longer use an index. */
int CRYPTO_free_ex_index(int class_index, int idx);

/*
* Initialise/duplicate/free CRYPTO_EX_DATA variables corresponding to a
* given class (invokes whatever per-class callbacks are applicable)
*/
int CRYPTO_new_ex_data(int class_index, void *obj, CRYPTO_EX_DATA *ad);
int CRYPTO_dup_ex_data(int class_index,
 CRYPTO_EX_DATA *to,
                    const CRYPTO_EX_DATA *from);

void CRYPTO_free_ex_data(int class_index, void *obj, CRYPTO_EX_DATA *ad);

/* Allocate a single item in the CRYPTO_EX_DATA variable */
int CRYPTO_alloc_ex_data(int class_index, void *obj, CRYPTO_EX_DATA *ad,
                     int idx);

/*
* Get/set data in a CRYPTO_EX_DATA variable corresponding to a particular
* index (relative to the class type involved)
*/
int CRYPTO_set_ex_data(CRYPTO_EX_DATA *ad, int idx, void *val);
void *CRYPTO_get_ex_data(const CRYPTO_EX_DATA *ad, int idx);

# ifndef OPENSSL_NO_DEPRECATED_1_1_0
/*
* This function cleans up all "ex_data" state. It mustn't be called under
* potential race-conditions.
*/
# define CRYPTO_cleanup_all_ex_data() while(0) continue

/*
* The old locking functions have been removed completely without compatibility
* macros. This is because the old functions either could not properly report
* errors, or the returned error values were not clearly
 documented.
* Replacing the locking functions with no-ops would cause race condition
* issues in the affected applications. It is far better for them to fail at
* compile time.
* On the other hand, the locking callbacks are no longer used.  Consequently,
* the callback management functions can be safely replaced with no-op macros.
*/
#  define CRYPTO_num_locks()            (1)
#  define CRYPTO_set_locking_callback(func)
#  define CRYPTO_get_locking_callback()         (NULL)
#  define CRYPTO_set_add_lock_callback(func)
```

```
# define CRYPTO_get_add_lock_callback()        (NULL)

/*
* These defines where used in combination with the old locking callbacks,
* they are not called anymore, but old code that's not called might still
* use them.
*/
# define CRYPTO_LOCK            1
# define CRYPTO_UNLOCK          2
# define CRYPTO_READ            4
# define CRYPTO_WRITE           8

/* This structure is no longer used */
typedef struct crypto_threadid_st {
   int dummy;
}
 CRYPTO_THREADID;
/* Only use CRYPTO_THREADID_set_[numeric|pointer]() within callbacks */
# define CRYPTO_THREADID_set_numeric(id, val)
# define CRYPTO_THREADID_set_pointer(id, ptr)
# define CRYPTO_THREADID_set_callback(threadid_func)   (0)
# define CRYPTO_THREADID_get_callback()               (NULL)
# define CRYPTO_THREADID_current(id)
# define CRYPTO_THREADID_cmp(a, b)                    (-1)
# define CRYPTO_THREADID_cpy(dest, src)
# define CRYPTO_THREADID_hash(id)                     (0UL)

# ifndef OPENSSL_NO_DEPRECATED_1_0_0
#   define CRYPTO_set_id_callback(func)
#   define CRYPTO_get_id_callback()                    (NULL)
#   define CRYPTO_thread_id()                          (0UL)
# endif /* OPENSSL_NO_DEPRECATED_1_0_0 */

# define CRYPTO_set_dynlock_create_callback(dyn_create_function)
# define CRYPTO_set_dynlock_lock_callback(dyn_lock_function)
# define CRYPTO_set_dynlock_destroy_callback(dyn_destroy_function)
# define CRYPTO_get_dynlock_create_callback()
        (NULL)
# define CRYPTO_get_dynlock_lock_callback()           (NULL)
# define CRYPTO_get_dynlock_destroy_callback()        (NULL)
# endif /* OPENSSL_NO_DEPRECATED_1_1_0 */

typedef void *(*CRYPTO_malloc_fn)(size_t num, const char *file, int line);
typedef void *(*CRYPTO_realloc_fn)(void *addr, size_t num, const char *file,
                                   int line);
typedef void (*CRYPTO_free_fn)(void *addr, const char *file, int line);
int CRYPTO_set_mem_functions(CRYPTO_malloc_fn malloc_fn,
                             CRYPTO_realloc_fn realloc_fn,
```

```
                        CRYPTO_free_fn free_fn);
void CRYPTO_get_mem_functions(CRYPTO_malloc_fn *malloc_fn,
                         CRYPTO_realloc_fn *realloc_fn,
                         CRYPTO_free_fn *free_fn);

void *CRYPTO_malloc(size_t num, const char *file, int line);
void *CRYPTO_zalloc(size_t num, const char *file, int line);
void *CRYPTO_memdup(const void *str, size_t siz, const char *file, int line);
char
 *CRYPTO_strdup(const char *str, const char *file, int line);
char *CRYPTO_strndup(const char *str, size_t s, const char *file, int line);
void CRYPTO_free(void *ptr, const char *file, int line);
void CRYPTO_clear_free(void *ptr, size_t num, const char *file, int line);
void *CRYPTO_realloc(void *addr, size_t num, const char *file, int line);
void *CRYPTO_clear_realloc(void *addr, size_t old_num, size_t num,
                       const char *file, int line);

int CRYPTO_secure_malloc_init(size_t sz, size_t minsize);
int CRYPTO_secure_malloc_done(void);
void *CRYPTO_secure_malloc(size_t num, const char *file, int line);
void *CRYPTO_secure_zalloc(size_t num, const char *file, int line);
void CRYPTO_secure_free(void *ptr, const char *file, int line);
void CRYPTO_secure_clear_free(void *ptr, size_t num,
                         const char *file, int line);
int CRYPTO_secure_allocated(const void *ptr);
int CRYPTO_secure_malloc_initialized(void);
size_t CRYPTO_secure_actual_size(void
 *ptr);
size_t CRYPTO_secure_used(void);

void OPENSSL_cleanse(void *ptr, size_t len);

# ifndef OPENSSL_NO_CRYPTO_MDEBUG
/*
* The following can be used to detect memory leaks in the library. If
* used, it turns on malloc checking
*/
# define CRYPTO_MEM_CHECK_OFF     0x0   /* Control only */
# define CRYPTO_MEM_CHECK_ON      0x1   /* Control and mode bit */
# define CRYPTO_MEM_CHECK_ENABLE  0x2   /* Control and mode bit */
# define CRYPTO_MEM_CHECK_DISABLE 0x3   /* Control only */

void CRYPTO_get_alloc_counts(int *mcount, int *rcount, int *fcount);
#  ifndef OPENSSL_NO_DEPRECATED_3_0
#    define OPENSSL_mem_debug_push(info) \
       CRYPTO_mem_debug_push(info, OPENSSL_FILE, OPENSSL_LINE)
#    define OPENSSL_mem_debug_pop() \
       CRYPTO_mem_debug_pop()
```

```
#  endif
#  ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 int CRYPTO_set_mem_debug(int flag);
OSSL_DEPRECATEDIN_3_0 int CRYPTO_mem_ctrl(int mode);
OSSL_DEPRECATEDIN_3_0 int CRYPTO_mem_debug_push(const char *info,
                                                const char *file, int line);
OSSL_DEPRECATEDIN_3_0 int CRYPTO_mem_debug_pop(void);
OSSL_DEPRECATEDIN_3_0 void CRYPTO_mem_debug_malloc(void *addr, size_t num,
                                                   int flag,
                                                   const char *file, int line);
OSSL_DEPRECATEDIN_3_0 void CRYPTO_mem_debug_realloc(void *addr1, void *addr2,
                                                    size_t num, int flag,
                                                    const char *file, int line);
OSSL_DEPRECATEDIN_3_0 void CRYPTO_mem_debug_free(void *addr, int flag,
                                                 const char *file, int line);
OSSL_DEPRECATEDIN_3_0
int CRYPTO_mem_leaks_cb(int (*cb)(const char *str, size_t len, void *u),
                        void *u);
#  endif
#  ifndef OPENSSL_NO_STDIO
#  ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 int CRYPTO_mem_leaks_fp(FILE *);
#  endif
#
 endif
# ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 int CRYPTO_mem_leaks(BIO *bio);
# endif
# endif /* OPENSSL_NO_CRYPTO_MDEBUG */

/* die if we have to */
ossl_noreturn void OPENSSL_die(const char *assertion, const char *file, int line);
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define OpenSSLDie(f,l,a) OPENSSL_die((a),(f),(l))
# endif
# define OPENSSL_assert(e) \
   (void)((e) ? 0 : (OPENSSL_die("assertion failed: " #e, OPENSSL_FILE, OPENSSL_LINE), 1))

int OPENSSL_isservice(void);

void OPENSSL_init(void);
# ifdef OPENSSL_SYS_UNIX
#  ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 void OPENSSL_fork_prepare(void);
OSSL_DEPRECATEDIN_3_0 void OPENSSL_fork_parent(void);
OSSL_DEPRECATEDIN_3_0 void OPENSSL_fork_child(void);
#  endif
# endif
```

```
struct tm *OPENSSL_gmtime(const time_t *timer, struct tm *result);
int OPENSSL_gmtime_adj(struct tm *tm, int offset_day, long offset_sec);
int OPENSSL_gmtime_diff(int *pday, int *psec,
                        const struct tm *from, const
 struct tm *to);

/*
* CRYPTO_memcmp returns zero iff the |len| bytes at |a| and |b| are equal.
* It takes an amount of time dependent on |len|, but independent of the
* contents of |a| and |b|. Unlike memcmp, it cannot be used to put elements
* into a defined order as the return value when a != b is undefined, other
* than to be non-zero.
*/
int CRYPTO_memcmp(const void * in_a, const void * in_b, size_t len);

/* Standard initialisation options */
# define OPENSSL_INIT_NO_LOAD_CRYPTO_STRINGS 0x00000001L
# define OPENSSL_INIT_LOAD_CRYPTO_STRINGS    0x00000002L
# define OPENSSL_INIT_ADD_ALL_CIPHERS        0x00000004L
# define OPENSSL_INIT_ADD_ALL_DIGESTS        0x00000008L
# define OPENSSL_INIT_NO_ADD_ALL_CIPHERS     0x00000010L
# define OPENSSL_INIT_NO_ADD_ALL_DIGESTS     0x00000020L
# define OPENSSL_INIT_LOAD_CONFIG            0x00000040L
# define OPENSSL_INIT_NO_LOAD_CONFIG         0x00000080L
# define OPENSSL_INIT_ASYNC                  0x00000100L
# define OPENSSL_INIT_ENGINE_RDRAND
        0x00000200L
# define OPENSSL_INIT_ENGINE_DYNAMIC         0x00000400L
# define OPENSSL_INIT_ENGINE_OPENSSL         0x00000800L
# define OPENSSL_INIT_ENGINE_CRYPTODEV       0x00001000L
# define OPENSSL_INIT_ENGINE_CAPI            0x00002000L
# define OPENSSL_INIT_ENGINE_PADLOCK         0x00004000L
# define OPENSSL_INIT_ENGINE_AFALG           0x00008000L
/* FREE:                                     0x00010000L */
# define OPENSSL_INIT_ATFORK                 0x00020000L
/* OPENSSL_INIT_BASE_ONLY                    0x00040000L */
# define OPENSSL_INIT_NO_ATEXIT              0x00080000L
/* OPENSSL_INIT flag range 0x03f00000 reserved for OPENSSL_init_ssl() */
/* FREE: 0x04000000L */
/* FREE: 0x08000000L */
/* FREE: 0x10000000L */
/* FREE: 0x20000000L */
/* FREE: 0x40000000L */
/* FREE: 0x80000000L */
/* Max OPENSSL_INIT flag value is 0x80000000 */

/* openssl and dasync not counted as builtin */
```

```
# define OPENSSL_INIT_ENGINE_ALL_BUILTIN \
   (OPENSSL_INIT_ENGINE_RDRAND | OPENSSL_INIT_ENGINE_DYNAMIC
 \
   | OPENSSL_INIT_ENGINE_CRYPTODEV | OPENSSL_INIT_ENGINE_CAPI | \
   OPENSSL_INIT_ENGINE_PADLOCK)

/* Library initialisation functions */
void OPENSSL_cleanup(void);
int OPENSSL_init_crypto(uint64_t opts, const OPENSSL_INIT_SETTINGS *settings);
int OPENSSL_atexit(void (*handler)(void));
void OPENSSL_thread_stop(void);
void OPENSSL_thread_stop_ex(OSSL_LIB_CTX *ctx);

/* Low-level control of initialization */
OPENSSL_INIT_SETTINGS *OPENSSL_INIT_new(void);
# ifndef OPENSSL_NO_STDIO
int OPENSSL_INIT_set_config_filename(OPENSSL_INIT_SETTINGS *settings,
                                     const char *config_filename);
void OPENSSL_INIT_set_config_file_flags(OPENSSL_INIT_SETTINGS *settings,
                                        unsigned long flags);
int OPENSSL_INIT_set_config_appname(OPENSSL_INIT_SETTINGS *settings,
                                    const char *config_appname);
# endif
void OPENSSL_INIT_free(OPENSSL_INIT_SETTINGS *settings);

# if defined(OPENSSL_THREADS)
 && !defined(CRYPTO_TDEBUG)
#  if defined(_WIN32)
#   if defined(BASETYPES) || defined(_WINDEF_H)
/* application has to include <windows.h> in order to use this */
typedef DWORD CRYPTO_THREAD_LOCAL;
typedef DWORD CRYPTO_THREAD_ID;

typedef LONG CRYPTO_ONCE;
#    define CRYPTO_ONCE_STATIC_INIT 0
#   endif
#  else
#   if defined(__TANDEM) && defined(_SPT_MODEL_)
#    define  SPT_THREAD_SIGNAL 1
#    define  SPT_THREAD_AWARE 1
#    include <spthread.h>
#   else
#    include <pthread.h>
#   endif
typedef pthread_once_t CRYPTO_ONCE;
typedef pthread_key_t CRYPTO_THREAD_LOCAL;
typedef pthread_t CRYPTO_THREAD_ID;
```

```
#   define CRYPTO_ONCE_STATIC_INIT PTHREAD_ONCE_INIT
#  endif
# endif

# if !defined(CRYPTO_ONCE_STATIC_INIT)
typedef unsigned int CRYPTO_ONCE;
typedef unsigned int CRYPTO_THREAD_LOCAL;
typedef unsigned int CRYPTO_THREAD_ID;
#  define CRYPTO_ONCE_STATIC_INIT 0
# endif

int CRYPTO_THREAD_run_once(CRYPTO_ONCE *once, void (*init)(void));

int CRYPTO_THREAD_init_local(CRYPTO_THREAD_LOCAL
 *key, void (*cleanup)(void *));
void *CRYPTO_THREAD_get_local(CRYPTO_THREAD_LOCAL *key);
int CRYPTO_THREAD_set_local(CRYPTO_THREAD_LOCAL *key, void *val);
int CRYPTO_THREAD_cleanup_local(CRYPTO_THREAD_LOCAL *key);

CRYPTO_THREAD_ID CRYPTO_THREAD_get_current_id(void);
int CRYPTO_THREAD_compare_id(CRYPTO_THREAD_ID a, CRYPTO_THREAD_ID b);

OSSL_LIB_CTX *OSSL_LIB_CTX_new(void);
OSSL_LIB_CTX *OSSL_LIB_CTX_new_from_dispatch(const OSSL_CORE_HANDLE *handle,
                                             const OSSL_DISPATCH *in);
OSSL_LIB_CTX *OSSL_LIB_CTX_new_child(const OSSL_CORE_HANDLE *handle,
                                     const OSSL_DISPATCH *in);
int OSSL_LIB_CTX_load_config(OSSL_LIB_CTX *ctx, const char *config_file);
void OSSL_LIB_CTX_free(OSSL_LIB_CTX *);
OSSL_LIB_CTX *OSSL_LIB_CTX_get0_global_default(void);
OSSL_LIB_CTX *OSSL_LIB_CTX_set0_default(OSSL_LIB_CTX *libctx);

# ifdef  __cplusplus
}
# endif
#endif
```

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attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
Copyright (C) 19yy <name of author>

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Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this
when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19xx name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the
appropriate parts of the General Public License. Of course, the
commands you use may be called something other than `show w' and `show
c'; they could even be mouse-clicks or menu items--whatever suits your
program.

You should also get your employer (if you work as a programmer) or your
school, if any, to sign a "copyright disclaimer" for the program, if
necessary. Here a sample; alter
the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the
program `Gnomovision' (a program to direct compilers to make passes
at assemblers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

That's all there is to it!

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The End

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"""
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  './config/archs/BSD-x86/no-asm/providers/common/der/der_dsa_gen.c',
  './config/archs/BSD-x86/no-asm/providers/common/der/der_ec_gen.c',
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/*
* WARNING: do not edit!
* Generated by Makefile from providers/common/include/prov/der_digests.h.in
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* https://www.openssl.org/source/license.html
*/

#include "internal/der.h"

/* Well known OIDs precompiled */

/*
* sigAlgs OBJECT IDENTIFIER ::= { nistAlgorithms 3 }

```
*/
#define DER_OID_V_sigAlgs DER_P_OBJECT, 8, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x03
#define DER_OID_SZ_sigAlgs 10
extern const unsigned char ossl_der_oid_sigAlgs[DER_OID_SZ_sigAlgs];

/*
* id-sha1  OBJECT IDENTIFIER  ::=  { iso(1)
*                    identified-organization(3) oiw(14)
*                    secsig(3) algorithms(2) 26 }
*/
#define DER_OID_V_id_sha1 DER_P_OBJECT, 5, 0x2B, 0x0E, 0x03, 0x02, 0x1A
#define DER_OID_SZ_id_sha1
 7
extern const unsigned char ossl_der_oid_id_sha1[DER_OID_SZ_id_sha1];

/*
* id-md2  OBJECT IDENTIFIER ::= {
*   iso(1) member-body(2) us(840) rsadsi(113549) digestAlgorithm(2) 2 }
*/
#define DER_OID_V_id_md2 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x02, 0x02
#define DER_OID_SZ_id_md2 10
extern const unsigned char ossl_der_oid_id_md2[DER_OID_SZ_id_md2];

/*
* id-md5  OBJECT IDENTIFIER ::= {
*   iso(1) member-body(2) us(840) rsadsi(113549) digestAlgorithm(2) 5 }
*/
#define DER_OID_V_id_md5 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x02, 0x05
#define DER_OID_SZ_id_md5 10
extern const unsigned char ossl_der_oid_id_md5[DER_OID_SZ_id_md5];

/*
* id-sha256 OBJECT IDENTIFIER ::= { hashAlgs 1 }
*/
#define DER_OID_V_id_sha256 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x01
#define DER_OID_SZ_id_sha256 11
extern const unsigned char ossl_der_oid_id_sha256[DER_OID_SZ_id_sha256];

/*
* id-sha384 OBJECT IDENTIFIER ::= { hashAlgs
 2 }
*/
#define DER_OID_V_id_sha384 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x02
#define DER_OID_SZ_id_sha384 11
extern const unsigned char ossl_der_oid_id_sha384[DER_OID_SZ_id_sha384];

/*
* id-sha512 OBJECT IDENTIFIER ::= { hashAlgs 3 }
```

```
*/
#define DER_OID_V_id_sha512 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x03
#define DER_OID_SZ_id_sha512 11
extern const unsigned char ossl_der_oid_id_sha512[DER_OID_SZ_id_sha512];

/*
* id-sha224 OBJECT IDENTIFIER ::= { hashAlgs 4 }
*/
#define DER_OID_V_id_sha224 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x04
#define DER_OID_SZ_id_sha224 11
extern const unsigned char ossl_der_oid_id_sha224[DER_OID_SZ_id_sha224];

/*
* id-sha512-224 OBJECT IDENTIFIER ::= { hashAlgs 5 }
*/
#define DER_OID_V_id_sha512_224 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x05
#define DER_OID_SZ_id_sha512_224 11
extern const unsigned char ossl_der_oid_id_sha512_224[DER_OID_SZ_id_sha512_224];

/*
 * id-sha512-256 OBJECT IDENTIFIER ::= { hashAlgs 6 }
*/
#define DER_OID_V_id_sha512_256 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x06
#define DER_OID_SZ_id_sha512_256 11
extern const unsigned char ossl_der_oid_id_sha512_256[DER_OID_SZ_id_sha512_256];

/*
* id-sha3-224 OBJECT IDENTIFIER ::= { hashAlgs 7 }
*/
#define DER_OID_V_id_sha3_224 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x07
#define DER_OID_SZ_id_sha3_224 11
extern const unsigned char ossl_der_oid_id_sha3_224[DER_OID_SZ_id_sha3_224];

/*
* id-sha3-256 OBJECT IDENTIFIER ::= { hashAlgs 8 }
*/
#define DER_OID_V_id_sha3_256 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x08
#define DER_OID_SZ_id_sha3_256 11
extern const unsigned char ossl_der_oid_id_sha3_256[DER_OID_SZ_id_sha3_256];

/*
* id-sha3-384 OBJECT IDENTIFIER ::= { hashAlgs 9 }
*/
#define DER_OID_V_id_sha3_384 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x09
#define
 DER_OID_SZ_id_sha3_384 11
extern const unsigned char ossl_der_oid_id_sha3_384[DER_OID_SZ_id_sha3_384];
```

```
/*
* id-sha3-512 OBJECT IDENTIFIER ::= { hashAlgs 10 }
*/
#define DER_OID_V_id_sha3_512 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x0A
#define DER_OID_SZ_id_sha3_512 11
extern const unsigned char ossl_der_oid_id_sha3_512[DER_OID_SZ_id_sha3_512];

/*
* id-shake128 OBJECT IDENTIFIER ::= { hashAlgs 11 }
*/
#define DER_OID_V_id_shake128 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x0B
#define DER_OID_SZ_id_shake128 11
extern const unsigned char ossl_der_oid_id_shake128[DER_OID_SZ_id_shake128];

/*
* id-shake256 OBJECT IDENTIFIER ::= { hashAlgs 12 }
*/
#define DER_OID_V_id_shake256 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x0C
#define DER_OID_SZ_id_shake256 11
extern const unsigned char ossl_der_oid_id_shake256[DER_OID_SZ_id_shake256];

/*
* id-shake128-len OBJECT IDENTIFIER ::= { hashAlgs 17 }
*/
#define DER_OID_V_id_shake128_len
 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02, 0x11
#define DER_OID_SZ_id_shake128_len 11
extern const unsigned char ossl_der_oid_id_shake128_len[DER_OID_SZ_id_shake128_len];

/*
* id-shake256-len OBJECT IDENTIFIER ::= { hashAlgs 18 }
*/
#define DER_OID_V_id_shake256_len DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02,
0x12
#define DER_OID_SZ_id_shake256_len 11
extern const unsigned char ossl_der_oid_id_shake256_len[DER_OID_SZ_id_shake256_len];

/*
* id-KMACWithSHAKE128 OBJECT IDENTIFIER ::={hashAlgs 19}
*/
#define DER_OID_V_id_KMACWithSHAKE128 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04,
0x02, 0x13
#define DER_OID_SZ_id_KMACWithSHAKE128 11
extern const unsigned char ossl_der_oid_id_KMACWithSHAKE128[DER_OID_SZ_id_KMACWithSHAKE128];

/*
* id-KMACWithSHAKE256 OBJECT IDENTIFIER ::={ hashAlgs 20}
*/
```

```
#define DER_OID_V_id_KMACWithSHAKE256 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04,
0x02, 0x14
#define
 DER_OID_SZ_id_KMACWithSHAKE256 11
extern const unsigned char ossl_der_oid_id_KMACWithSHAKE256[DER_OID_SZ_id_KMACWithSHAKE256];
```

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```
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*/

#include "internal/der.h"
#include "crypto/ecx.h"

/* Well known OIDs precompiled */

/*
* id-X25519       OBJECT IDENTIFIER ::= { id-edwards-curve-algs 110 }
*/
#define DER_OID_V_id_X25519 DER_P_OBJECT, 3, 0x2B, 0x65, 0x6E
#define DER_OID_SZ_id_X25519 5
extern const unsigned char ossl_der_oid_id_X25519[DER_OID_SZ_id_X25519];

/*
* id-X448         OBJECT IDENTIFIER ::= { id-edwards-curve-algs 111 }
*/
#define DER_OID_V_id_X448 DER_P_OBJECT, 3, 0x2B, 0x65, 0x6F
#define DER_OID_SZ_id_X448 5
extern const unsigned char ossl_der_oid_id_X448[DER_OID_SZ_id_X448];
```

```
/*
 * id-Ed25519       OBJECT IDENTIFIER ::= { id-edwards-curve-algs 112 }
*/
#define DER_OID_V_id_Ed25519 DER_P_OBJECT, 3, 0x2B, 0x65, 0x70
#define DER_OID_SZ_id_Ed25519 5
extern const unsigned char ossl_der_oid_id_Ed25519[DER_OID_SZ_id_Ed25519];

/*
* id-Ed448         OBJECT IDENTIFIER ::= { id-edwards-curve-algs 113 }
*/
#define DER_OID_V_id_Ed448 DER_P_OBJECT, 3, 0x2B, 0x65, 0x71
#define DER_OID_SZ_id_Ed448 5
extern const unsigned char ossl_der_oid_id_Ed448[DER_OID_SZ_id_Ed448];


int ossl_DER_w_algorithmIdentifier_ED25519(WPACKET *pkt, int cont, ECX_KEY *ec);
int ossl_DER_w_algorithmIdentifier_ED448(WPACKET *pkt, int cont, ECX_KEY *ec);
int ossl_DER_w_algorithmIdentifier_X25519(WPACKET *pkt, int cont, ECX_KEY *ec);
int ossl_DER_w_algorithmIdentifier_X448(WPACKET *pkt, int cont, ECX_KEY *ec);
```

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```
name: License update
on:
 schedule:
   # 00:00:00 every Monday
   # https://crontab.guru/#0_0_*_*_1
   - cron: 0 0 * * 1
 workflow_dispatch:

permissions:
 contents: read

jobs:
 update_license:
   permissions:
     contents: write  # for gr2m/create-or-update-pull-request-action to push local changes
```

```
    pull-requests: write  # for gr2m/create-or-update-pull-request-action to create a PR
  if: github.repository == 'nodejs/node'
  runs-on: ubuntu-latest
  steps:
    - uses: actions/checkout@11bd71901bbe5b1630ceea73d27597364c9af683  # v4.2.2
      with:
        persist-credentials: false
    - run: ./tools/license-builder.sh  # Run the license builder tool
    - uses: gr2m/create-or-update-pull-request-action@86ec1766034c8173518f61d2075cc2a173fb8c97  # v1.9.4
      # Creates a PR or update the Action's existing PR, or
      # no-op if the base branch is already up-to-date.
      env:
        GITHUB_TOKEN: ${{ secrets.GITHUB_TOKEN }}
      with:

    author: Node.js GitHub Bot <github-bot@iojs.org>
        branch: actions/license-builder
        title: 'doc: run license-builder'
        body: >
          License is likely out of date. This is an automatically generated PR by
          the `license-builder.yml` GitHub Action, which runs `license-builder.sh`
          and submits a new PR or updates an existing PR.
        commit-message: 'doc: run license-builder'
        labels: meta
```

A. HISTORY OF THE SOFTWARE
==========

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All
 Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python

releases have also been GPL-compatible; the table below summarizes
the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2 and above	2.1.1	2001-now	PSF	yes

Footnotes:

(1) GPL-compatible doesn't mean that we're distributing Python under
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other software that is released under the GPL; the others don't.

(2) According to Richard Stallman, 1.6.1 is not GPL-compatible,
because its license has a choice of law clause. According to
CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1
is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's
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/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/ssl.h.in
*
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* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_SSL_H
# define OPENSSL_SSL_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_SSL_H
# endif

# include <openssl/e_os2.h>
# include <openssl/opensslconf.h>
# include <openssl/comp.h>
# include <openssl/bio.h>
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  include <openssl/x509.h>
#  include <openssl/crypto.h>
#  include <openssl/buffer.h>
# endif
# include <openssl/lhash.h>
# include <openssl/pem.h>
#
 include <openssl/hmac.h>
# include <openssl/async.h>

# include <openssl/safestack.h>
# include <openssl/symhacks.h>
# include <openssl/ct.h>
# include <openssl/sslerr.h>
# include <openssl/prov_ssl.h>
```

```
#ifdef  __cplusplus
extern "C" {
#endif

/* OpenSSL version number for ASN.1 encoding of the session information */
/*-
* Version 0 - initial version
* Version 1 - added the optional peer certificate
*/
# define SSL_SESSION_ASN1_VERSION 0x0001

# define SSL_MAX_SSL_SESSION_ID_LENGTH          32
# define SSL_MAX_SID_CTX_LENGTH                 32

# define SSL_MIN_RSA_MODULUS_LENGTH_IN_BYTES     (512/8)
# define SSL_MAX_KEY_ARG_LENGTH                  8
/* SSL_MAX_MASTER_KEY_LENGTH is defined in prov_ssl.h */

/* The maximum number of encrypt/decrypt pipelines we can support */
# define SSL_MAX_PIPELINES  32

/* text strings for the ciphers */

/* These are used to specify which ciphers to use and not to use */

# define SSL_TXT_LOW            "LOW"
# define SSL_TXT_MEDIUM
 "MEDIUM"
# define SSL_TXT_HIGH           "HIGH"
# define SSL_TXT_FIPS           "FIPS"

# define SSL_TXT_aNULL          "aNULL"
# define SSL_TXT_eNULL          "eNULL"
# define SSL_TXT_NULL           "NULL"

# define SSL_TXT_kRSA           "kRSA"
# define SSL_TXT_kDHr           "kDHr"/* this cipher class has been removed */
# define SSL_TXT_kDHd           "kDHd"/* this cipher class has been removed */
# define SSL_TXT_kDH            "kDH"/* this cipher class has been removed */
# define SSL_TXT_kEDH           "kEDH"/* alias for kDHE */
# define SSL_TXT_kDHE           "kDHE"
# define SSL_TXT_kECDHr         "kECDHr"/* this cipher class has been removed */
# define SSL_TXT_kECDHe         "kECDHe"/* this cipher class has been removed */
# define SSL_TXT_kECDH          "kECDH"/* this cipher class has been removed */
# define SSL_TXT_kEECDH         "kEECDH"/* alias for kECDHE */
# define SSL_TXT_kECDHE         "kECDHE"
# define SSL_TXT_kPSK           "kPSK"
# define SSL_TXT_kRSAPSK
```

```
        "kRSAPSK"
# define SSL_TXT_kECDHEPSK       "kECDHEPSK"
# define SSL_TXT_kDHEPSK         "kDHEPSK"
# define SSL_TXT_kGOST           "kGOST"
# define SSL_TXT_kGOST18         "kGOST18"
# define SSL_TXT_kSRP            "kSRP"

# define SSL_TXT_aRSA            "aRSA"
# define SSL_TXT_aDSS            "aDSS"
# define SSL_TXT_aDH             "aDH"/* this cipher class has been removed */
# define SSL_TXT_aECDH           "aECDH"/* this cipher class has been removed */
# define SSL_TXT_aECDSA          "aECDSA"
# define SSL_TXT_aPSK            "aPSK"
# define SSL_TXT_aGOST94         "aGOST94"
# define SSL_TXT_aGOST01         "aGOST01"
# define SSL_TXT_aGOST12         "aGOST12"
# define SSL_TXT_aGOST           "aGOST"
# define SSL_TXT_aSRP            "aSRP"

# define SSL_TXT_DSS             "DSS"
# define SSL_TXT_DH              "DH"
# define SSL_TXT_DHE             "DHE"/* same as "kDHE:-ADH" */
# define SSL_TXT_EDH             "EDH"/* alias for DHE */
# define SSL_TXT_ADH
    "ADH"
# define SSL_TXT_RSA             "RSA"
# define SSL_TXT_ECDH            "ECDH"
# define SSL_TXT_EECDH           "EECDH"/* alias for ECDHE" */
# define SSL_TXT_ECDHE           "ECDHE"/* same as "kECDHE:-AECDH" */
# define SSL_TXT_AECDH           "AECDH"
# define SSL_TXT_ECDSA           "ECDSA"
# define SSL_TXT_PSK             "PSK"
# define SSL_TXT_SRP             "SRP"

# define SSL_TXT_DES             "DES"
# define SSL_TXT_3DES            "3DES"
# define SSL_TXT_RC4             "RC4"
# define SSL_TXT_RC2             "RC2"
# define SSL_TXT_IDEA            "IDEA"
# define SSL_TXT_SEED            "SEED"
# define SSL_TXT_AES128          "AES128"
# define SSL_TXT_AES256          "AES256"
# define SSL_TXT_AES             "AES"
# define SSL_TXT_AES_GCM         "AESGCM"
# define SSL_TXT_AES_CCM         "AESCCM"
# define SSL_TXT_AES_CCM_8       "AESCCM8"
# define SSL_TXT_CAMELLIA128     "CAMELLIA128"
# define SSL_TXT_CAMELLIA256     "CAMELLIA256"
```

```
# define SSL_TXT_CAMELLIA        "CAMELLIA"
#
 define SSL_TXT_CHACHA20        "CHACHA20"
# define SSL_TXT_GOST            "GOST89"
# define SSL_TXT_ARIA            "ARIA"
# define SSL_TXT_ARIA_GCM        "ARIAGCM"
# define SSL_TXT_ARIA128         "ARIA128"
# define SSL_TXT_ARIA256         "ARIA256"
# define SSL_TXT_GOST2012_GOST8912_GOST8912 "GOST2012-GOST8912-GOST8912"
# define SSL_TXT_CBC             "CBC"

# define SSL_TXT_MD5             "MD5"
# define SSL_TXT_SHA1            "SHA1"
# define SSL_TXT_SHA             "SHA"/* same as "SHA1" */
# define SSL_TXT_GOST94          "GOST94"
# define SSL_TXT_GOST89MAC       "GOST89MAC"
# define SSL_TXT_GOST12          "GOST12"
# define SSL_TXT_GOST89MAC12     "GOST89MAC12"
# define SSL_TXT_SHA256          "SHA256"
# define SSL_TXT_SHA384          "SHA384"

# define SSL_TXT_SSLV3           "SSLv3"
# define SSL_TXT_TLSV1           "TLSv1"
# define SSL_TXT_TLSV1_1         "TLSv1.1"
# define SSL_TXT_TLSV1_2         "TLSv1.2"

# define SSL_TXT_ALL             "ALL"

/*-
* COMPLEMENTOF*
 definitions. These identifiers are used to (de-select)
* ciphers normally not being used.
* Example: "RC4" will activate all ciphers using RC4 including ciphers
* without authentication, which would normally disabled by DEFAULT (due
* the "!ADH" being part of default). Therefore "RC4:!COMPLEMENTOFDEFAULT"
* will make sure that it is also disabled in the specific selection.
* COMPLEMENTOF* identifiers are portable between version, as adjustments
* to the default cipher setup will also be included here.
*
* COMPLEMENTOFDEFAULT does not experience the same special treatment that
* DEFAULT gets, as only selection is being done and no sorting as needed
* for DEFAULT.
*/
# define SSL_TXT_CMPALL          "COMPLEMENTOFALL"
# define SSL_TXT_CMPDEF          "COMPLEMENTOFDEFAULT"

/*
* The following cipher list is used by default. It also is substituted when
```

```
* an application-defined cipher list string starts with 'DEFAULT'.
* This applies to ciphersuites for TLSv1.2 and below.
 * DEPRECATED IN 3.0.0, in favor of OSSL_default_cipher_list()
* Update both macro and function simultaneously
*/
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define SSL_DEFAULT_CIPHER_LIST "ALL:!COMPLEMENTOFDEFAULT:!eNULL"
/*
* This is the default set of TLSv1.3 ciphersuites
* DEPRECATED IN 3.0.0, in favor of OSSL_default_ciphersuites()
* Update both macro and function simultaneously
*/
#  define TLS_DEFAULT_CIPHERSUITES "TLS_AES_256_GCM_SHA384:" \
                                   "TLS_CHACHA20_POLY1305_SHA256:" \
                                   "TLS_AES_128_GCM_SHA256"
# endif
/*
* As of OpenSSL 1.0.0, ssl_create_cipher_list() in ssl/ssl_ciph.c always
* starts with a reasonable order, and all we have to do for DEFAULT is
* throwing out anonymous and unencrypted ciphersuites! (The latter are not
* actually enabled by ALL, but "ALL:RSA" would enable some of them.)
*/

/* Used in SSL_set_shutdown()/SSL_get_shutdown(); */
# define SSL_SENT_SHUTDOWN       1
# define SSL_RECEIVED_SHUTDOWN
   2

#ifdef __cplusplus
}
#endif

#ifdef  __cplusplus
extern "C" {
#endif

# define SSL_FILETYPE_ASN1       X509_FILETYPE_ASN1
# define SSL_FILETYPE_PEM        X509_FILETYPE_PEM

/*
* This is needed to stop compilers complaining about the 'struct ssl_st *'
* function parameters used to prototype callbacks in SSL_CTX.
*/
typedef struct ssl_st *ssl_crock_st;
typedef struct tls_session_ticket_ext_st TLS_SESSION_TICKET_EXT;
typedef struct ssl_method_st SSL_METHOD;
typedef struct ssl_cipher_st SSL_CIPHER;
typedef struct ssl_session_st SSL_SESSION;
```

```
typedef struct tls_sigalgs_st TLS_SIGALGS;
typedef struct ssl_conf_ctx_st SSL_CONF_CTX;
typedef struct ssl_comp_st SSL_COMP;

STACK_OF(SSL_CIPHER);
STACK_OF(SSL_COMP);

/* SRTP protection profiles for use with the use_srtp extension (RFC 5764)*/
typedef struct srtp_protection_profile_st {
  const char *name;
  unsigned long id;
} SRTP_PROTECTION_PROFILE;
SKM_DEFINE_STACK_OF_INTERNAL(SRTP_PROTECTION_PROFILE, SRTP_PROTECTION_PROFILE,
 SRTP_PROTECTION_PROFILE)
#define sk_SRTP_PROTECTION_PROFILE_num(sk)
OPENSSL_sk_num(ossl_check_const_SRTP_PROTECTION_PROFILE_sk_type(sk))
#define sk_SRTP_PROTECTION_PROFILE_value(sk, idx) ((SRTP_PROTECTION_PROFILE
*)OPENSSL_sk_value(ossl_check_const_SRTP_PROTECTION_PROFILE_sk_type(sk), (idx)))
#define sk_SRTP_PROTECTION_PROFILE_new(cmp) ((STACK_OF(SRTP_PROTECTION_PROFILE)
*)OPENSSL_sk_new(ossl_check_SRTP_PROTECTION_PROFILE_compfunc_type(cmp)))
#define sk_SRTP_PROTECTION_PROFILE_new_null() ((STACK_OF(SRTP_PROTECTION_PROFILE)
*)OPENSSL_sk_new_null())
#define sk_SRTP_PROTECTION_PROFILE_new_reserve(cmp, n)
((STACK_OF(SRTP_PROTECTION_PROFILE)
*)OPENSSL_sk_new_reserve(ossl_check_SRTP_PROTECTION_PROFILE_compfunc_type(cmp), (n)))
#define sk_SRTP_PROTECTION_PROFILE_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk), (n))
#define sk_SRTP_PROTECTION_PROFILE_free(sk)
OPENSSL_sk_free(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk))
#define sk_SRTP_PROTECTION_PROFILE_zero(sk)
 OPENSSL_sk_zero(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk))
#define sk_SRTP_PROTECTION_PROFILE_delete(sk, i) ((SRTP_PROTECTION_PROFILE
*)OPENSSL_sk_delete(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk), (i)))
#define sk_SRTP_PROTECTION_PROFILE_delete_ptr(sk, ptr) ((SRTP_PROTECTION_PROFILE
*)OPENSSL_sk_delete_ptr(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk),
ossl_check_SRTP_PROTECTION_PROFILE_type(ptr)))
#define sk_SRTP_PROTECTION_PROFILE_push(sk, ptr)
OPENSSL_sk_push(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk),
ossl_check_SRTP_PROTECTION_PROFILE_type(ptr))
#define sk_SRTP_PROTECTION_PROFILE_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk),
ossl_check_SRTP_PROTECTION_PROFILE_type(ptr))
#define sk_SRTP_PROTECTION_PROFILE_pop(sk) ((SRTP_PROTECTION_PROFILE
*)OPENSSL_sk_pop(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk)))
#define sk_SRTP_PROTECTION_PROFILE_shift(sk) ((SRTP_PROTECTION_PROFILE
*)OPENSSL_sk_shift(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk)))
#define
```

```
 sk_SRTP_PROTECTION_PROFILE_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk),ossl_check_SRTP_PROTECTI
ON_PROFILE_freefunc_type(freefunc))
#define sk_SRTP_PROTECTION_PROFILE_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk),
ossl_check_SRTP_PROTECTION_PROFILE_type(ptr), (idx))
#define sk_SRTP_PROTECTION_PROFILE_set(sk, idx, ptr) ((SRTP_PROTECTION_PROFILE
*)OPENSSL_sk_set(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk), (idx),
ossl_check_SRTP_PROTECTION_PROFILE_type(ptr)))
#define sk_SRTP_PROTECTION_PROFILE_find(sk, ptr)
OPENSSL_sk_find(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk),
ossl_check_SRTP_PROTECTION_PROFILE_type(ptr))
#define sk_SRTP_PROTECTION_PROFILE_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk),
ossl_check_SRTP_PROTECTION_PROFILE_type(ptr))
#define sk_SRTP_PROTECTION_PROFILE_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk),
 ossl_check_SRTP_PROTECTION_PROFILE_type(ptr), pnum)
#define sk_SRTP_PROTECTION_PROFILE_sort(sk)
OPENSSL_sk_sort(ossl_check_SRTP_PROTECTION_PROFILE_sk_type(sk))
#define sk_SRTP_PROTECTION_PROFILE_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_SRTP_PROTECTION_PROFILE_sk_type(sk))
#define sk_SRTP_PROTECTION_PROFILE_dup(sk) ((STACK_OF(SRTP_PROTECTION_PROFILE)
*)OPENSSL_sk_dup(ossl_check_const_SRTP_PROTECTION_PROFILE_sk_type(sk)))
#define sk_SRTP_PROTECTION_PROFILE_deep_copy(sk, copyfunc, freefunc)
((STACK_OF(SRTP_PROTECTION_PROFILE)
*)OPENSSL_sk_deep_copy(ossl_check_const_SRTP_PROTECTION_PROFILE_sk_type(sk),
ossl_check_SRTP_PROTECTION_PROFILE_copyfunc_type(copyfunc),
ossl_check_SRTP_PROTECTION_PROFILE_freefunc_type(freefunc)))
#define sk_SRTP_PROTECTION_PROFILE_set_cmp_func(sk, cmp)
((sk_SRTP_PROTECTION_PROFILE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_SRTP_PROTECTION
_PROFILE_sk_type(sk), ossl_check_SRTP_PROTECTION_PROFILE_compfunc_type(cmp)))



typedef int
 (*tls_session_ticket_ext_cb_fn)(SSL *s, const unsigned char *data,
                                 int len, void *arg);
typedef int (*tls_session_secret_cb_fn)(SSL *s, void *secret, int *secret_len,
                                STACK_OF(SSL_CIPHER) *peer_ciphers,
                                const SSL_CIPHER **cipher, void *arg);

/* Extension context codes */
/* This extension is only allowed in TLS */
#define SSL_EXT_TLS_ONLY                    0x0001
/* This extension is only allowed in DTLS */
#define SSL_EXT_DTLS_ONLY                    0x0002
/* Some extensions may be allowed in DTLS but we don't implement them for it */
```

```
#define SSL_EXT_TLS_IMPLEMENTATION_ONLY         0x0004
/* Most extensions are not defined for SSLv3 but EXT_TYPE_renegotiate is */
#define SSL_EXT_SSL3_ALLOWED                    0x0008
/* Extension is only defined for TLS1.2 and below */
#define SSL_EXT_TLS1_2_AND_BELOW_ONLY           0x0010
/* Extension is only defined
 for TLS1.3 and above */
#define SSL_EXT_TLS1_3_ONLY                     0x0020
/* Ignore this extension during parsing if we are resuming */
#define SSL_EXT_IGNORE_ON_RESUMPTION            0x0040
#define SSL_EXT_CLIENT_HELLO                    0x0080
/* Really means TLS1.2 or below */
#define SSL_EXT_TLS1_2_SERVER_HELLO             0x0100
#define SSL_EXT_TLS1_3_SERVER_HELLO             0x0200
#define SSL_EXT_TLS1_3_ENCRYPTED_EXTENSIONS     0x0400
#define SSL_EXT_TLS1_3_HELLO_RETRY_REQUEST      0x0800
#define SSL_EXT_TLS1_3_CERTIFICATE              0x1000
#define SSL_EXT_TLS1_3_NEW_SESSION_TICKET       0x2000
#define SSL_EXT_TLS1_3_CERTIFICATE_REQUEST      0x4000

/* Typedefs for handling custom extensions */

typedef int (*custom_ext_add_cb)(SSL *s, unsigned int ext_type,
                                 const unsigned char **out, size_t *outlen,
                                 int *al, void *add_arg);

typedef void (*custom_ext_free_cb)(SSL *s, unsigned int ext_type,

                        const unsigned char *out, void *add_arg);

typedef int (*custom_ext_parse_cb)(SSL *s, unsigned int ext_type,
                                   const unsigned char *in, size_t inlen,
                                   int *al, void *parse_arg);


typedef int (*SSL_custom_ext_add_cb_ex)(SSL *s, unsigned int ext_type,
                                        unsigned int context,
                                        const unsigned char **out,
                                        size_t *outlen, X509 *x,
                                        size_t chainidx,
                                        int *al, void *add_arg);

typedef void (*SSL_custom_ext_free_cb_ex)(SSL *s, unsigned int ext_type,
                                          unsigned int context,
                                          const unsigned char *out,
                                          void *add_arg);

typedef int (*SSL_custom_ext_parse_cb_ex)(SSL *s, unsigned int ext_type,
```

```
                                unsigned int context,
                                    const unsigned char *in,
                                    size_t inlen, X509 *x,
                                    size_t chainidx,
                                    int *al, void *parse_arg);

/* Typedef for verification callback */
typedef int (*SSL_verify_cb)(int preverify_ok, X509_STORE_CTX *x509_ctx);

/* Typedef for SSL async callback */
typedef int (*SSL_async_callback_fn)(SSL *s, void *arg);

#define SSL_OP_BIT(n)  ((uint64_t)1 << (uint64_t)n)

/*
* SSL/TLS connection options.
*/
   /* Disable Extended master secret */
# define SSL_OP_NO_EXTENDED_MASTER_SECRET              SSL_OP_BIT(0)
   /* Cleanse plaintext copies of data delivered to the application */
# define SSL_OP_CLEANSE_PLAINTEXT                      SSL_OP_BIT(1)
   /* Allow initial connection to servers that don't support RI */
# define SSL_OP_LEGACY_SERVER_CONNECT                  SSL_OP_BIT(2)
    /* Enable support for Kernel TLS */
# define SSL_OP_ENABLE_KTLS                            SSL_OP_BIT(3)
# define SSL_OP_TLSEXT_PADDING                         SSL_OP_BIT(4)
# define SSL_OP_SAFARI_ECDHE_ECDSA_BUG                 SSL_OP_BIT(6)
# define SSL_OP_IGNORE_UNEXPECTED_EOF                  SSL_OP_BIT(7)
# define SSL_OP_ALLOW_CLIENT_RENEGOTIATION             SSL_OP_BIT(8)
# define SSL_OP_DISABLE_TLSEXT_CA_NAMES                SSL_OP_BIT(9)
   /* In TLSv1.3 allow a non-(ec)dhe based kex_mode */
# define SSL_OP_ALLOW_NO_DHE_KEX                       SSL_OP_BIT(10)
   /*
    * Disable SSL 3.0/TLS 1.0 CBC vulnerability workaround that was added
    * in OpenSSL 0.9.6d.  Usually (depending on the application protocol)
    * the workaround is not needed.  Unfortunately some broken SSL/TLS
    * implementations cannot handle it at all, which is why we include it
    * in SSL_OP_ALL. Added in 0.9.6e
    */
# define SSL_OP_DONT_INSERT_EMPTY_FRAGMENTS
            SSL_OP_BIT(11)
   /* DTLS options */
# define SSL_OP_NO_QUERY_MTU                           SSL_OP_BIT(12)
   /* Turn on Cookie Exchange (on relevant for servers) */
# define SSL_OP_COOKIE_EXCHANGE                        SSL_OP_BIT(13)
   /* Don't use RFC4507 ticket extension */
# define SSL_OP_NO_TICKET                              SSL_OP_BIT(14)
```

```
# ifndef OPENSSL_NO_DTLS1_METHOD
   /*
    * Use Cisco's version identifier of DTLS_BAD_VER
    * (only with deprecated DTLSv1_client_method())
    */
#  define SSL_OP_CISCO_ANYCONNECT                      SSL_OP_BIT(15)
# endif
   /* As server, disallow session resumption on renegotiation */
# define SSL_OP_NO_SESSION_RESUMPTION_ON_RENEGOTIATION   SSL_OP_BIT(16)
   /* Don't use compression even if supported */
# define SSL_OP_NO_COMPRESSION                         SSL_OP_BIT(17)
   /* Permit unsafe legacy renegotiation */
# define SSL_OP_ALLOW_UNSAFE_LEGACY_RENEGOTIATION        SSL_OP_BIT(18)
   /* Disable
 encrypt-then-mac */
# define SSL_OP_NO_ENCRYPT_THEN_MAC                    SSL_OP_BIT(19)
   /*
    * Enable TLSv1.3 Compatibility mode. This is on by default. A future
    * version of OpenSSL may have this disabled by default.
    */
# define SSL_OP_ENABLE_MIDDLEBOX_COMPAT                SSL_OP_BIT(20)
   /*
    * Prioritize Chacha20Poly1305 when client does.
    * Modifies SSL_OP_CIPHER_SERVER_PREFERENCE
    */
# define SSL_OP_PRIORITIZE_CHACHA                      SSL_OP_BIT(21)
   /*
    * Set on servers to choose the cipher according to server's preferences.
    */
# define SSL_OP_CIPHER_SERVER_PREFERENCE               SSL_OP_BIT(22)
   /*
    * If set, a server will allow a client to issue a SSLv3.0 version
    * number as latest version supported in the premaster secret, even when
    * TLSv1.0 (version 3.1) was announced in the client hello. Normally
    * this is forbidden to prevent version rollback attacks.
    */
# define SSL_OP_TLS_ROLLBACK_BUG
                    SSL_OP_BIT(23)
   /*
    * Switches off automatic TLSv1.3 anti-replay protection for early data.
    * This is a server-side option only (no effect on the client).
    */
# define SSL_OP_NO_ANTI_REPLAY                         SSL_OP_BIT(24)
# define SSL_OP_NO_SSLv3                               SSL_OP_BIT(25)
# define SSL_OP_NO_TLSv1                               SSL_OP_BIT(26)
# define SSL_OP_NO_TLSv1_2                             SSL_OP_BIT(27)
# define SSL_OP_NO_TLSv1_1                             SSL_OP_BIT(28)
# define SSL_OP_NO_TLSv1_3                             SSL_OP_BIT(29)
```

```
# define SSL_OP_NO_DTLSv1                        SSL_OP_BIT(26)
# define SSL_OP_NO_DTLSv1_2                      SSL_OP_BIT(27)
   /* Disallow all renegotiation */
# define SSL_OP_NO_RENEGOTIATION                 SSL_OP_BIT(30)
   /*
    * Make server add server-hello extension from early version of
    * cryptopro draft, when GOST ciphersuite
 is negotiated. Required for
    * interoperability with CryptoPro CSP 3.x
    */
# define SSL_OP_CRYPTOPRO_TLSEXT_BUG             SSL_OP_BIT(31)

/*
* Option "collections."
*/
# define SSL_OP_NO_SSL_MASK \
      ( SSL_OP_NO_SSLv3 | SSL_OP_NO_TLSv1 | SSL_OP_NO_TLSv1_1 \
        | SSL_OP_NO_TLSv1_2 | SSL_OP_NO_TLSv1_3 )
# define SSL_OP_NO_DTLS_MASK \
      ( SSL_OP_NO_DTLSv1 | SSL_OP_NO_DTLSv1_2 )

/* Various bug workarounds that should be rather harmless. */
# define SSL_OP_ALL \
      ( SSL_OP_CRYPTOPRO_TLSEXT_BUG | SSL_OP_DONT_INSERT_EMPTY_FRAGMENTS \
        | SSL_OP_TLSEXT_PADDING | SSL_OP_SAFARI_ECDHE_ECDSA_BUG )

/*
* OBSOLETE OPTIONS retained for compatibility
*/

# define SSL_OP_MICROSOFT_SESS_ID_BUG            0x0
# define SSL_OP_NETSCAPE_CHALLENGE_BUG           0x0
# define SSL_OP_NETSCAPE_REUSE_CIPHER_CHANGE_BUG 0x0
# define SSL_OP_SSLREF2_REUSE_CERT_TYPE_BUG      0x0
# define SSL_OP_MICROSOFT_BIG_SSLV3_BUFFER
       0x0
# define SSL_OP_MSIE_SSLV2_RSA_PADDING           0x0
# define SSL_OP_SSLEAY_080_CLIENT_DH_BUG         0x0
# define SSL_OP_TLS_D5_BUG                       0x0
# define SSL_OP_TLS_BLOCK_PADDING_BUG            0x0
# define SSL_OP_SINGLE_ECDH_USE                  0x0
# define SSL_OP_SINGLE_DH_USE                    0x0
# define SSL_OP_EPHEMERAL_RSA                    0x0
# define SSL_OP_NO_SSLv2                         0x0
# define SSL_OP_PKCS1_CHECK_1                    0x0
# define SSL_OP_PKCS1_CHECK_2                    0x0
# define SSL_OP_NETSCAPE_CA_DN_BUG               0x0
# define SSL_OP_NETSCAPE_DEMO_CIPHER_CHANGE_BUG  0x0
```

```
/*
* Allow SSL_write(..., n) to return r with 0 < r < n (i.e. report success
* when just a single record has been written):
*/
# define SSL_MODE_ENABLE_PARTIAL_WRITE       0x00000001U
/*
* Make it possible to retry SSL_write() with changed buffer location
 (buffer
* contents must stay the same!); this is not the default to avoid the
* misconception that non-blocking SSL_write() behaves like non-blocking
* write():
*/
# define SSL_MODE_ACCEPT_MOVING_WRITE_BUFFER 0x00000002U
/*
* Never bother the application with retries if the transport is blocking:
*/
# define SSL_MODE_AUTO_RETRY 0x00000004U
/* Don't attempt to automatically build certificate chain */
# define SSL_MODE_NO_AUTO_CHAIN 0x00000008U
/*
* Save RAM by releasing read and write buffers when they're empty. (SSL3 and
* TLS only.) Released buffers are freed.
*/
# define SSL_MODE_RELEASE_BUFFERS 0x00000010U
/*
* Send the current time in the Random fields of the ClientHello and
* ServerHello records for compatibility with hypothetical implementations
* that require it.
*/
# define SSL_MODE_SEND_CLIENTHELLO_TIME 0x00000020U
# define SSL_MODE_SEND_SERVERHELLO_TIME 0x00000040U
/*
* Send TLS_FALLBACK_SCSV in the ClientHello. To be set only by applications
* that reconnect
 with a downgraded protocol version; see
* draft-ietf-tls-downgrade-scsv-00 for details. DO NOT ENABLE THIS if your
* application attempts a normal handshake. Only use this in explicit
* fallback retries, following the guidance in
* draft-ietf-tls-downgrade-scsv-00.
*/
# define SSL_MODE_SEND_FALLBACK_SCSV 0x00000080U
/*
* Support Asynchronous operation
*/
# define SSL_MODE_ASYNC 0x00000100U

/*
```

```
* When using DTLS/SCTP, include the terminating zero in the label
* used for computing the endpoint-pair shared secret. Required for
* interoperability with implementations having this bug like these
* older version of OpenSSL:
* - OpenSSL 1.0.0 series
* - OpenSSL 1.0.1 series
* - OpenSSL 1.0.2 series
* - OpenSSL 1.1.0 series
* - OpenSSL 1.1.1 and 1.1.1a
*/
# define SSL_MODE_DTLS_SCTP_LABEL_LENGTH_BUG 0x00000400U

/* Cert related flags */
/*
* Many implementations ignore some aspects of the TLS standards such as
* enforcing certificate chain algorithms. When this is set we enforce
 them.
*/
# define SSL_CERT_FLAG_TLS_STRICT               0x00000001U

/* Suite B modes, takes same values as certificate verify flags */
# define SSL_CERT_FLAG_SUITEB_128_LOS_ONLY       0x10000
/* Suite B 192 bit only mode */
# define SSL_CERT_FLAG_SUITEB_192_LOS            0x20000
/* Suite B 128 bit mode allowing 192 bit algorithms */
# define SSL_CERT_FLAG_SUITEB_128_LOS            0x30000

/* Perform all sorts of protocol violations for testing purposes */
# define SSL_CERT_FLAG_BROKEN_PROTOCOL           0x10000000

/* Flags for building certificate chains */
/* Treat any existing certificates as untrusted CAs */
# define SSL_BUILD_CHAIN_FLAG_UNTRUSTED          0x1
/* Don't include root CA in chain */
# define SSL_BUILD_CHAIN_FLAG_NO_ROOT            0x2
/* Just check certificates already there */
# define SSL_BUILD_CHAIN_FLAG_CHECK              0x4
/* Ignore verification errors */
# define SSL_BUILD_CHAIN_FLAG_IGNORE_ERROR       0x8
/* Clear verification errors from queue */
#
 define SSL_BUILD_CHAIN_FLAG_CLEAR_ERROR        0x10

/* Flags returned by SSL_check_chain */
/* Certificate can be used with this session */
# define CERT_PKEY_VALID         0x1
/* Certificate can also be used for signing */
# define CERT_PKEY_SIGN          0x2
```

```
/* EE certificate signing algorithm OK */
# define CERT_PKEY_EE_SIGNATURE  0x10
/* CA signature algorithms OK */
# define CERT_PKEY_CA_SIGNATURE  0x20
/* EE certificate parameters OK */
# define CERT_PKEY_EE_PARAM      0x40
/* CA certificate parameters OK */
# define CERT_PKEY_CA_PARAM      0x80
/* Signing explicitly allowed as opposed to SHA1 fallback */
# define CERT_PKEY_EXPLICIT_SIGN 0x100
/* Client CA issuer names match (always set for server cert) */
# define CERT_PKEY_ISSUER_NAME   0x200
/* Cert type matches client types (always set for server cert) */
# define CERT_PKEY_CERT_TYPE     0x400
/* Cert chain suitable to Suite B */
# define CERT_PKEY_SUITEB        0x800

# define SSL_CONF_FLAG_CMDLINE           0x1
# define
 SSL_CONF_FLAG_FILE             0x2
# define SSL_CONF_FLAG_CLIENT            0x4
# define SSL_CONF_FLAG_SERVER            0x8
# define SSL_CONF_FLAG_SHOW_ERRORS       0x10
# define SSL_CONF_FLAG_CERTIFICATE       0x20
# define SSL_CONF_FLAG_REQUIRE_PRIVATE   0x40
/* Configuration value types */
# define SSL_CONF_TYPE_UNKNOWN           0x0
# define SSL_CONF_TYPE_STRING            0x1
# define SSL_CONF_TYPE_FILE              0x2
# define SSL_CONF_TYPE_DIR               0x3
# define SSL_CONF_TYPE_NONE              0x4
# define SSL_CONF_TYPE_STORE             0x5

/* Maximum length of the application-controlled segment of a a TLSv1.3 cookie */
# define SSL_COOKIE_LENGTH                      4096

/*
* Note: SSL[_CTX]_set_{options,mode} use |= op on the previous value, they
* cannot be used to clear bits.
*/

uint64_t SSL_CTX_get_options(const SSL_CTX *ctx);
uint64_t SSL_get_options(const SSL *s);
uint64_t SSL_CTX_clear_options(SSL_CTX *ctx, uint64_t op);
uint64_t SSL_clear_options(SSL
 *s, uint64_t op);
uint64_t SSL_CTX_set_options(SSL_CTX *ctx, uint64_t op);
uint64_t SSL_set_options(SSL *s, uint64_t op);
```

```
# define SSL_CTX_set_mode(ctx,op) \
      SSL_CTX_ctrl((ctx),SSL_CTRL_MODE,(op),NULL)
# define SSL_CTX_clear_mode(ctx,op) \
      SSL_CTX_ctrl((ctx),SSL_CTRL_CLEAR_MODE,(op),NULL)
# define SSL_CTX_get_mode(ctx) \
      SSL_CTX_ctrl((ctx),SSL_CTRL_MODE,0,NULL)
# define SSL_clear_mode(ssl,op) \
      SSL_ctrl((ssl),SSL_CTRL_CLEAR_MODE,(op),NULL)
# define SSL_set_mode(ssl,op) \
      SSL_ctrl((ssl),SSL_CTRL_MODE,(op),NULL)
# define SSL_get_mode(ssl) \
      SSL_ctrl((ssl),SSL_CTRL_MODE,0,NULL)
# define SSL_set_mtu(ssl, mtu) \
      SSL_ctrl((ssl),SSL_CTRL_SET_MTU,(mtu),NULL)
# define DTLS_set_link_mtu(ssl, mtu) \
      SSL_ctrl((ssl),DTLS_CTRL_SET_LINK_MTU,(mtu),NULL)
# define DTLS_get_link_min_mtu(ssl) \
      SSL_ctrl((ssl),DTLS_CTRL_GET_LINK_MIN_MTU,0,NULL)

# define SSL_get_secure_renegotiation_support(ssl) \
      SSL_ctrl((ssl), SSL_CTRL_GET_RI_SUPPORT,
 0, NULL)

# define SSL_CTX_set_cert_flags(ctx,op) \
      SSL_CTX_ctrl((ctx),SSL_CTRL_CERT_FLAGS,(op),NULL)
# define SSL_set_cert_flags(s,op) \
      SSL_ctrl((s),SSL_CTRL_CERT_FLAGS,(op),NULL)
# define SSL_CTX_clear_cert_flags(ctx,op) \
      SSL_CTX_ctrl((ctx),SSL_CTRL_CLEAR_CERT_FLAGS,(op),NULL)
# define SSL_clear_cert_flags(s,op) \
      SSL_ctrl((s),SSL_CTRL_CLEAR_CERT_FLAGS,(op),NULL)

void SSL_CTX_set_msg_callback(SSL_CTX *ctx,
                        void (*cb) (int write_p, int version,
                                int content_type, const void *buf,
                                size_t len, SSL *ssl, void *arg));
void SSL_set_msg_callback(SSL *ssl,
                      void (*cb) (int write_p, int version,
                              int content_type, const void *buf,
                              size_t len, SSL *ssl, void *arg));
# define SSL_CTX_set_msg_callback_arg(ctx, arg) SSL_CTX_ctrl((ctx),
SSL_CTRL_SET_MSG_CALLBACK_ARG,
 0, (arg))
# define SSL_set_msg_callback_arg(ssl, arg) SSL_ctrl((ssl), SSL_CTRL_SET_MSG_CALLBACK_ARG, 0, (arg))

# define SSL_get_extms_support(s) \
      SSL_ctrl((s),SSL_CTRL_GET_EXTMS_SUPPORT,0,NULL)
```

```
# ifndef OPENSSL_NO_SRP
/* see tls_srp.c */
#  ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 __owur int SSL_SRP_CTX_init(SSL *s);
OSSL_DEPRECATEDIN_3_0 __owur int SSL_CTX_SRP_CTX_init(SSL_CTX *ctx);
OSSL_DEPRECATEDIN_3_0 int SSL_SRP_CTX_free(SSL *ctx);
OSSL_DEPRECATEDIN_3_0 int SSL_CTX_SRP_CTX_free(SSL_CTX *ctx);
OSSL_DEPRECATEDIN_3_0 __owur int SSL_srp_server_param_with_username(SSL *s,
                                                int *ad);
OSSL_DEPRECATEDIN_3_0 __owur int SRP_Calc_A_param(SSL *s);
#  endif
# endif

/* 100k max cert list */
# define SSL_MAX_CERT_LIST_DEFAULT (1024*100)

# define SSL_SESSION_CACHE_MAX_SIZE_DEFAULT      (1024*20)

/*
* This callback type is used inside SSL_CTX, SSL, and in the functions that
 * set them. It is used to override the generation of SSL/TLS session IDs in
* a server. Return value should be zero on an error, non-zero to proceed.
* Also, callbacks should themselves check if the id they generate is unique
* otherwise the SSL handshake will fail with an error - callbacks can do
* this using the 'ssl' value they're passed by;
* SSL_has_matching_session_id(ssl, id, *id_len) The length value passed in
* is set at the maximum size the session ID can be. In SSLv3/TLSv1 it is 32
* bytes. The callback can alter this length to be less if desired. It is
* also an error for the callback to set the size to zero.
*/
typedef int (*GEN_SESSION_CB) (SSL *ssl, unsigned char *id,
                               unsigned int *id_len);

# define SSL_SESS_CACHE_OFF                      0x0000
# define SSL_SESS_CACHE_CLIENT                   0x0001
# define SSL_SESS_CACHE_SERVER                   0x0002
# define SSL_SESS_CACHE_BOTH     (SSL_SESS_CACHE_CLIENT|SSL_SESS_CACHE_SERVER)
#
 define SSL_SESS_CACHE_NO_AUTO_CLEAR            0x0080
/* enough comments already ... see SSL_CTX_set_session_cache_mode(3) */
# define SSL_SESS_CACHE_NO_INTERNAL_LOOKUP       0x0100
# define SSL_SESS_CACHE_NO_INTERNAL_STORE        0x0200
# define SSL_SESS_CACHE_NO_INTERNAL \
      (SSL_SESS_CACHE_NO_INTERNAL_LOOKUP|SSL_SESS_CACHE_NO_INTERNAL_STORE)
# define SSL_SESS_CACHE_UPDATE_TIME              0x0400

LHASH_OF(SSL_SESSION) *SSL_CTX_sessions(SSL_CTX *ctx);
```

```
# define SSL_CTX_sess_number(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_NUMBER,0,NULL)
# define SSL_CTX_sess_connect(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_CONNECT,0,NULL)
# define SSL_CTX_sess_connect_good(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_CONNECT_GOOD,0,NULL)
# define SSL_CTX_sess_connect_renegotiate(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_CONNECT_RENEGOTIATE,0,NULL)
# define SSL_CTX_sess_accept(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_ACCEPT,0,NULL)
# define SSL_CTX_sess_accept_renegotiate(ctx)
 \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_ACCEPT_RENEGOTIATE,0,NULL)
# define SSL_CTX_sess_accept_good(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_ACCEPT_GOOD,0,NULL)
# define SSL_CTX_sess_hits(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_HIT,0,NULL)
# define SSL_CTX_sess_cb_hits(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_CB_HIT,0,NULL)
# define SSL_CTX_sess_misses(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_MISSES,0,NULL)
# define SSL_CTX_sess_timeouts(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_TIMEOUTS,0,NULL)
# define SSL_CTX_sess_cache_full(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SESS_CACHE_FULL,0,NULL)

void SSL_CTX_sess_set_new_cb(SSL_CTX *ctx,
                        int (*new_session_cb) (struct ssl_st *ssl,
                                               SSL_SESSION *sess));
int (*SSL_CTX_sess_get_new_cb(SSL_CTX *ctx)) (struct ssl_st *ssl,
                                              SSL_SESSION *sess);
void SSL_CTX_sess_set_remove_cb(SSL_CTX *ctx,
                        void (*remove_session_cb) (struct ssl_ctx_st
                                                   *ctx,
                                                   SSL_SESSION *sess));
void (*SSL_CTX_sess_get_remove_cb(SSL_CTX *ctx)) (struct ssl_ctx_st *ctx,
                                              SSL_SESSION *sess);
void SSL_CTX_sess_set_get_cb(SSL_CTX *ctx,
                        SSL_SESSION *(*get_session_cb) (struct ssl_st
                                                        *ssl,
                                                        const unsigned char
                                                        *data, int len,
                                                        int *copy));
SSL_SESSION *(*SSL_CTX_sess_get_get_cb(SSL_CTX *ctx)) (struct ssl_st *ssl,
                                                       const unsigned char *data,
                                                       int len,
 int *copy);
void SSL_CTX_set_info_callback(SSL_CTX *ctx,
```

```
                        void (*cb) (const SSL *ssl, int type, int val));
void (*SSL_CTX_get_info_callback(SSL_CTX *ctx)) (const SSL *ssl, int type,
                                 int val);
void SSL_CTX_set_client_cert_cb(SSL_CTX *ctx,
                        int (*client_cert_cb) (SSL *ssl, X509 **x509,
                                               EVP_PKEY **pkey));
int (*SSL_CTX_get_client_cert_cb(SSL_CTX *ctx)) (SSL *ssl, X509 **x509,
                                 EVP_PKEY **pkey);
# ifndef OPENSSL_NO_ENGINE
__owur int SSL_CTX_set_client_cert_engine(SSL_CTX *ctx, ENGINE *e);
# endif
void SSL_CTX_set_cookie_generate_cb(SSL_CTX *ctx,
                            int (*app_gen_cookie_cb) (SSL *ssl,
                                                      unsigned char
                                                      *cookie,

                                      unsigned int
                                                      *cookie_len));
void SSL_CTX_set_cookie_verify_cb(SSL_CTX *ctx,
                           int (*app_verify_cookie_cb) (SSL *ssl,
                                                        const unsigned
                                                        char *cookie,
                                                        unsigned int
                                                        cookie_len));

void SSL_CTX_set_stateless_cookie_generate_cb(
  SSL_CTX *ctx,
  int (*gen_stateless_cookie_cb) (SSL *ssl,
                            unsigned char *cookie,
                            size_t *cookie_len));
void SSL_CTX_set_stateless_cookie_verify_cb(
  SSL_CTX *ctx,
  int (*verify_stateless_cookie_cb) (SSL *ssl,
                              const unsigned char *cookie,

           size_t cookie_len));
# ifndef OPENSSL_NO_NEXTPROTONEG

typedef int (*SSL_CTX_npn_advertised_cb_func)(SSL *ssl,
                                    const unsigned char **out,
                                    unsigned int *outlen,
                                    void *arg);
void SSL_CTX_set_next_protos_advertised_cb(SSL_CTX *s,
                                 SSL_CTX_npn_advertised_cb_func cb,
                                 void *arg);
#  define SSL_CTX_set_npn_advertised_cb SSL_CTX_set_next_protos_advertised_cb

typedef int (*SSL_CTX_npn_select_cb_func)(SSL *s,
```

```
                                unsigned char **out,
                                unsigned char *outlen,
                                const unsigned char *in,
                                unsigned int inlen,
                                void *arg);
void SSL_CTX_set_next_proto_select_cb(SSL_CTX *s,
                                SSL_CTX_npn_select_cb_func cb,
                                void *arg);
#  define SSL_CTX_set_npn_select_cb SSL_CTX_set_next_proto_select_cb

void SSL_get0_next_proto_negotiated(const SSL *s, const unsigned char **data,
                                unsigned *len);
#  define SSL_get0_npn_negotiated SSL_get0_next_proto_negotiated
# endif

__owur int SSL_select_next_proto(unsigned char **out, unsigned char *outlen,
                                const unsigned char *in, unsigned int inlen,
                                const unsigned char *client,
                                unsigned int client_len);

# define OPENSSL_NPN_UNSUPPORTED 0
# define OPENSSL_NPN_NEGOTIATED  1
# define OPENSSL_NPN_NO_OVERLAP  2

__owur int SSL_CTX_set_alpn_protos(SSL_CTX *ctx, const unsigned char *protos,
                                unsigned int protos_len);
__owur int SSL_set_alpn_protos(SSL *ssl, const unsigned char *protos,

                unsigned int protos_len);
typedef int (*SSL_CTX_alpn_select_cb_func)(SSL *ssl,
                                const unsigned char **out,
                                unsigned char *outlen,
                                const unsigned char *in,
                                unsigned int inlen,
                                void *arg);
void SSL_CTX_set_alpn_select_cb(SSL_CTX *ctx,
                                SSL_CTX_alpn_select_cb_func cb,
                                void *arg);
void SSL_get0_alpn_selected(const SSL *ssl, const unsigned char **data,
                        unsigned int *len);

# ifndef OPENSSL_NO_PSK
/*
* the maximum length of the buffer given to callbacks containing the
* resulting identity/psk
*/
#  define PSK_MAX_IDENTITY_LEN 256
#  define PSK_MAX_PSK_LEN 512
```

```
typedef unsigned int (*SSL_psk_client_cb_func)(SSL *ssl,
                                               const char
 *hint,
                                               char *identity,
                                               unsigned int max_identity_len,
                                               unsigned char *psk,
                                               unsigned int max_psk_len);
void SSL_CTX_set_psk_client_callback(SSL_CTX *ctx, SSL_psk_client_cb_func cb);
void SSL_set_psk_client_callback(SSL *ssl, SSL_psk_client_cb_func cb);

typedef unsigned int (*SSL_psk_server_cb_func)(SSL *ssl,
                                               const char *identity,
                                               unsigned char *psk,
                                               unsigned int max_psk_len);
void SSL_CTX_set_psk_server_callback(SSL_CTX *ctx, SSL_psk_server_cb_func cb);
void SSL_set_psk_server_callback(SSL *ssl, SSL_psk_server_cb_func cb);

__owur int SSL_CTX_use_psk_identity_hint(SSL_CTX *ctx, const char *identity_hint);
__owur int SSL_use_psk_identity_hint(SSL *s, const char *identity_hint);
const
 char *SSL_get_psk_identity_hint(const SSL *s);
const char *SSL_get_psk_identity(const SSL *s);
# endif

typedef int (*SSL_psk_find_session_cb_func)(SSL *ssl,
                                            const unsigned char *identity,
                                            size_t identity_len,
                                            SSL_SESSION **sess);
typedef int (*SSL_psk_use_session_cb_func)(SSL *ssl, const EVP_MD *md,
                                           const unsigned char **id,
                                           size_t *idlen,
                                           SSL_SESSION **sess);

void SSL_set_psk_find_session_callback(SSL *s, SSL_psk_find_session_cb_func cb);
void SSL_CTX_set_psk_find_session_callback(SSL_CTX *ctx,
                                           SSL_psk_find_session_cb_func cb);
void SSL_set_psk_use_session_callback(SSL *s, SSL_psk_use_session_cb_func cb);
void SSL_CTX_set_psk_use_session_callback(SSL_CTX *ctx,

                                          SSL_psk_use_session_cb_func cb);

/* Register callbacks to handle custom TLS Extensions for client or server. */

__owur int SSL_CTX_has_client_custom_ext(const SSL_CTX *ctx,
                                         unsigned int ext_type);

__owur int SSL_CTX_add_client_custom_ext(SSL_CTX *ctx,
                                         unsigned int ext_type,
```

```
                                custom_ext_add_cb add_cb,
                                custom_ext_free_cb free_cb,
                                void *add_arg,
                                custom_ext_parse_cb parse_cb,
                                void *parse_arg);

__owur int SSL_CTX_add_server_custom_ext(SSL_CTX *ctx,
                                unsigned int ext_type,
                                custom_ext_add_cb add_cb,
                                custom_ext_free_cb free_cb,

                void *add_arg,
                                custom_ext_parse_cb parse_cb,
                                void *parse_arg);

__owur int SSL_CTX_add_custom_ext(SSL_CTX *ctx, unsigned int ext_type,
                        unsigned int context,
                        SSL_custom_ext_add_cb_ex add_cb,
                        SSL_custom_ext_free_cb_ex free_cb,
                        void *add_arg,
                        SSL_custom_ext_parse_cb_ex parse_cb,
                        void *parse_arg);

__owur int SSL_extension_supported(unsigned int ext_type);

# define SSL_NOTHING            1
# define SSL_WRITING            2
# define SSL_READING            3
# define SSL_X509_LOOKUP        4
# define SSL_ASYNC_PAUSED       5
# define SSL_ASYNC_NO_JOBS      6
# define SSL_CLIENT_HELLO_CB    7
# define SSL_RETRY_VERIFY       8

/* These will only be used when doing non-blocking IO */
# define SSL_want_nothing(s)
        (SSL_want(s) == SSL_NOTHING)
# define SSL_want_read(s)           (SSL_want(s) == SSL_READING)
# define SSL_want_write(s)          (SSL_want(s) == SSL_WRITING)
# define SSL_want_x509_lookup(s)    (SSL_want(s) == SSL_X509_LOOKUP)
# define SSL_want_retry_verify(s)   (SSL_want(s) == SSL_RETRY_VERIFY)
# define SSL_want_async(s)          (SSL_want(s) == SSL_ASYNC_PAUSED)
# define SSL_want_async_job(s)      (SSL_want(s) == SSL_ASYNC_NO_JOBS)
# define SSL_want_client_hello_cb(s) (SSL_want(s) == SSL_CLIENT_HELLO_CB)

# define SSL_MAC_FLAG_READ_MAC_STREAM 1
# define SSL_MAC_FLAG_WRITE_MAC_STREAM 2
# define SSL_MAC_FLAG_READ_MAC_TLSTREE 4
```

```
# define SSL_MAC_FLAG_WRITE_MAC_TLSTREE 8

/*
* A callback for logging out TLS key material. This callback should log out
* |line| followed by a newline.
*/
typedef void (*SSL_CTX_keylog_cb_func)(const SSL *ssl, const char *line);

/*
* SSL_CTX_set_keylog_callback configures a callback to log key material. This
* is intended
 for debugging use with tools like Wireshark. The cb function
* should log line followed by a newline.
*/
void SSL_CTX_set_keylog_callback(SSL_CTX *ctx, SSL_CTX_keylog_cb_func cb);

/*
* SSL_CTX_get_keylog_callback returns the callback configured by
* SSL_CTX_set_keylog_callback.
*/
SSL_CTX_keylog_cb_func SSL_CTX_get_keylog_callback(const SSL_CTX *ctx);

int SSL_CTX_set_max_early_data(SSL_CTX *ctx, uint32_t max_early_data);
uint32_t SSL_CTX_get_max_early_data(const SSL_CTX *ctx);
int SSL_set_max_early_data(SSL *s, uint32_t max_early_data);
uint32_t SSL_get_max_early_data(const SSL *s);
int SSL_CTX_set_recv_max_early_data(SSL_CTX *ctx, uint32_t recv_max_early_data);
uint32_t SSL_CTX_get_recv_max_early_data(const SSL_CTX *ctx);
int SSL_set_recv_max_early_data(SSL *s, uint32_t recv_max_early_data);
uint32_t SSL_get_recv_max_early_data(const SSL *s);

#ifdef __cplusplus
}
#endif

# include <openssl/ssl2.h>
# include <openssl/ssl3.h>
# include <openssl/tls1.h>      /* This is mostly sslv3
 with a few tweaks */
# include <openssl/dtls1.h>     /* Datagram TLS */
# include <openssl/srtp.h>      /* Support for the use_srtp extension */

#ifdef  __cplusplus
extern "C" {
#endif

/*
* These need to be after the above set of includes due to a compiler bug
```

```
* in VisualStudio 2015
*/
SKM_DEFINE_STACK_OF_INTERNAL(SSL_CIPHER, const SSL_CIPHER, SSL_CIPHER)
#define sk_SSL_CIPHER_num(sk) OPENSSL_sk_num(ossl_check_const_SSL_CIPHER_sk_type(sk))
#define sk_SSL_CIPHER_value(sk, idx) ((const SSL_CIPHER
*)OPENSSL_sk_value(ossl_check_const_SSL_CIPHER_sk_type(sk), (idx)))
#define sk_SSL_CIPHER_new(cmp) ((STACK_OF(SSL_CIPHER)
*)OPENSSL_sk_new(ossl_check_SSL_CIPHER_compfunc_type(cmp)))
#define sk_SSL_CIPHER_new_null() ((STACK_OF(SSL_CIPHER) *)OPENSSL_sk_new_null())
#define sk_SSL_CIPHER_new_reserve(cmp, n) ((STACK_OF(SSL_CIPHER)
*)OPENSSL_sk_new_reserve(ossl_check_SSL_CIPHER_compfunc_type(cmp), (n)))
#define sk_SSL_CIPHER_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_SSL_CIPHER_sk_type(sk),
 (n))
#define sk_SSL_CIPHER_free(sk) OPENSSL_sk_free(ossl_check_SSL_CIPHER_sk_type(sk))
#define sk_SSL_CIPHER_zero(sk) OPENSSL_sk_zero(ossl_check_SSL_CIPHER_sk_type(sk))
#define sk_SSL_CIPHER_delete(sk, i) ((const SSL_CIPHER
*)OPENSSL_sk_delete(ossl_check_SSL_CIPHER_sk_type(sk), (i)))
#define sk_SSL_CIPHER_delete_ptr(sk, ptr) ((const SSL_CIPHER
*)OPENSSL_sk_delete_ptr(ossl_check_SSL_CIPHER_sk_type(sk), ossl_check_SSL_CIPHER_type(ptr)))
#define sk_SSL_CIPHER_push(sk, ptr) OPENSSL_sk_push(ossl_check_SSL_CIPHER_sk_type(sk),
ossl_check_SSL_CIPHER_type(ptr))
#define sk_SSL_CIPHER_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_SSL_CIPHER_sk_type(sk),
ossl_check_SSL_CIPHER_type(ptr))
#define sk_SSL_CIPHER_pop(sk) ((const SSL_CIPHER
*)OPENSSL_sk_pop(ossl_check_SSL_CIPHER_sk_type(sk)))
#define sk_SSL_CIPHER_shift(sk) ((const SSL_CIPHER
*)OPENSSL_sk_shift(ossl_check_SSL_CIPHER_sk_type(sk)))
#define sk_SSL_CIPHER_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_SSL_CIPHER_sk_type(sk),ossl_check_SSL_CIPHER_freefunc_type(freefunc
))
#define
 sk_SSL_CIPHER_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_SSL_CIPHER_sk_type(sk),
ossl_check_SSL_CIPHER_type(ptr), (idx))
#define sk_SSL_CIPHER_set(sk, idx, ptr) ((const SSL_CIPHER
*)OPENSSL_sk_set(ossl_check_SSL_CIPHER_sk_type(sk), (idx), ossl_check_SSL_CIPHER_type(ptr)))
#define sk_SSL_CIPHER_find(sk, ptr) OPENSSL_sk_find(ossl_check_SSL_CIPHER_sk_type(sk),
ossl_check_SSL_CIPHER_type(ptr))
#define sk_SSL_CIPHER_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_SSL_CIPHER_sk_type(sk),
ossl_check_SSL_CIPHER_type(ptr))
#define sk_SSL_CIPHER_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_SSL_CIPHER_sk_type(sk),
ossl_check_SSL_CIPHER_type(ptr), pnum)
#define sk_SSL_CIPHER_sort(sk) OPENSSL_sk_sort(ossl_check_SSL_CIPHER_sk_type(sk))
#define sk_SSL_CIPHER_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_SSL_CIPHER_sk_type(sk))
#define sk_SSL_CIPHER_dup(sk) ((STACK_OF(SSL_CIPHER)
*)OPENSSL_sk_dup(ossl_check_const_SSL_CIPHER_sk_type(sk)))
#define
 sk_SSL_CIPHER_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(SSL_CIPHER)
*)OPENSSL_sk_deep_copy(ossl_check_const_SSL_CIPHER_sk_type(sk),
```

```
ossl_check_SSL_CIPHER_copyfunc_type(copyfunc), ossl_check_SSL_CIPHER_freefunc_type(freefunc)))
#define sk_SSL_CIPHER_set_cmp_func(sk, cmp)
((sk_SSL_CIPHER_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_SSL_CIPHER_sk_type(sk),
ossl_check_SSL_CIPHER_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(SSL_COMP, SSL_COMP, SSL_COMP)
#define sk_SSL_COMP_num(sk) OPENSSL_sk_num(ossl_check_const_SSL_COMP_sk_type(sk))
#define sk_SSL_COMP_value(sk, idx) ((SSL_COMP
*)OPENSSL_sk_value(ossl_check_const_SSL_COMP_sk_type(sk), (idx)))
#define sk_SSL_COMP_new(cmp) ((STACK_OF(SSL_COMP)
*)OPENSSL_sk_new(ossl_check_SSL_COMP_compfunc_type(cmp)))
#define sk_SSL_COMP_new_null() ((STACK_OF(SSL_COMP) *)OPENSSL_sk_new_null())
#define sk_SSL_COMP_new_reserve(cmp, n) ((STACK_OF(SSL_COMP)
*)OPENSSL_sk_new_reserve(ossl_check_SSL_COMP_compfunc_type(cmp), (n)))
#define sk_SSL_COMP_reserve(sk,
 n) OPENSSL_sk_reserve(ossl_check_SSL_COMP_sk_type(sk), (n))
#define sk_SSL_COMP_free(sk) OPENSSL_sk_free(ossl_check_SSL_COMP_sk_type(sk))
#define sk_SSL_COMP_zero(sk) OPENSSL_sk_zero(ossl_check_SSL_COMP_sk_type(sk))
#define sk_SSL_COMP_delete(sk, i) ((SSL_COMP *)OPENSSL_sk_delete(ossl_check_SSL_COMP_sk_type(sk),
(i)))
#define sk_SSL_COMP_delete_ptr(sk, ptr) ((SSL_COMP
*)OPENSSL_sk_delete_ptr(ossl_check_SSL_COMP_sk_type(sk), ossl_check_SSL_COMP_type(ptr)))
#define sk_SSL_COMP_push(sk, ptr) OPENSSL_sk_push(ossl_check_SSL_COMP_sk_type(sk),
ossl_check_SSL_COMP_type(ptr))
#define sk_SSL_COMP_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_SSL_COMP_sk_type(sk),
ossl_check_SSL_COMP_type(ptr))
#define sk_SSL_COMP_pop(sk) ((SSL_COMP *)OPENSSL_sk_pop(ossl_check_SSL_COMP_sk_type(sk)))
#define sk_SSL_COMP_shift(sk) ((SSL_COMP *)OPENSSL_sk_shift(ossl_check_SSL_COMP_sk_type(sk)))
#define sk_SSL_COMP_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_SSL_COMP_sk_type(sk),ossl_check_SSL_COMP_freefunc_type(freefunc))
#define
 sk_SSL_COMP_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_SSL_COMP_sk_type(sk),
ossl_check_SSL_COMP_type(ptr), (idx))
#define sk_SSL_COMP_set(sk, idx, ptr) ((SSL_COMP *)OPENSSL_sk_set(ossl_check_SSL_COMP_sk_type(sk),
(idx), ossl_check_SSL_COMP_type(ptr)))
#define sk_SSL_COMP_find(sk, ptr) OPENSSL_sk_find(ossl_check_SSL_COMP_sk_type(sk),
ossl_check_SSL_COMP_type(ptr))
#define sk_SSL_COMP_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_SSL_COMP_sk_type(sk),
ossl_check_SSL_COMP_type(ptr))
#define sk_SSL_COMP_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_SSL_COMP_sk_type(sk),
ossl_check_SSL_COMP_type(ptr), pnum)
#define sk_SSL_COMP_sort(sk) OPENSSL_sk_sort(ossl_check_SSL_COMP_sk_type(sk))
#define sk_SSL_COMP_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_SSL_COMP_sk_type(sk))
#define sk_SSL_COMP_dup(sk) ((STACK_OF(SSL_COMP)
*)OPENSSL_sk_dup(ossl_check_const_SSL_COMP_sk_type(sk)))
#define sk_SSL_COMP_deep_copy(sk, copyfunc, freefunc)
 ((STACK_OF(SSL_COMP) *)OPENSSL_sk_deep_copy(ossl_check_const_SSL_COMP_sk_type(sk),
ossl_check_SSL_COMP_copyfunc_type(copyfunc), ossl_check_SSL_COMP_freefunc_type(freefunc)))
#define sk_SSL_COMP_set_cmp_func(sk, cmp)
```

```
((sk_SSL_COMP_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_SSL_COMP_sk_type(sk),
ossl_check_SSL_COMP_compfunc_type(cmp)))


/* compatibility */
# define SSL_set_app_data(s,arg)         (SSL_set_ex_data(s,0,(char *)(arg)))
# define SSL_get_app_data(s)             (SSL_get_ex_data(s,0))
# define SSL_SESSION_set_app_data(s,a)   (SSL_SESSION_set_ex_data(s,0, \
                                          (char *)(a)))
# define SSL_SESSION_get_app_data(s)     (SSL_SESSION_get_ex_data(s,0))
# define SSL_CTX_get_app_data(ctx)       (SSL_CTX_get_ex_data(ctx,0))
# define SSL_CTX_set_app_data(ctx,arg)   (SSL_CTX_set_ex_data(ctx,0, \
                                         (char *)(arg)))
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0
 void SSL_set_debug(SSL *s, int debug);
# endif

/* TLSv1.3 KeyUpdate message types */
/* -1 used so that this is an invalid value for the on-the-wire protocol */
#define SSL_KEY_UPDATE_NONE            -1
/* Values as defined for the on-the-wire protocol */
#define SSL_KEY_UPDATE_NOT_REQUESTED     0
#define SSL_KEY_UPDATE_REQUESTED         1

/*
* The valid handshake states (one for each type message sent and one for each
* type of message received). There are also two "special" states:
* TLS = TLS or DTLS state
* DTLS = DTLS specific state
* CR/SR = Client Read/Server Read
* CW/SW = Client Write/Server Write
*
* The "special" states are:
* TLS_ST_BEFORE = No handshake has been initiated yet
* TLS_ST_OK = A handshake has been successfully completed
*/
typedef enum {
   TLS_ST_BEFORE,
   TLS_ST_OK,
   DTLS_ST_CR_HELLO_VERIFY_REQUEST,
   TLS_ST_CR_SRVR_HELLO,
   TLS_ST_CR_CERT,
   TLS_ST_CR_CERT_STATUS,
   TLS_ST_CR_KEY_EXCH,
   TLS_ST_CR_CERT_REQ,
   TLS_ST_CR_SRVR_DONE,
```

```
 TLS_ST_CR_SESSION_TICKET,
 TLS_ST_CR_CHANGE,
 TLS_ST_CR_FINISHED,
 TLS_ST_CW_CLNT_HELLO,
 TLS_ST_CW_CERT,
 TLS_ST_CW_KEY_EXCH,
 TLS_ST_CW_CERT_VRFY,
 TLS_ST_CW_CHANGE,
 TLS_ST_CW_NEXT_PROTO,
 TLS_ST_CW_FINISHED,
 TLS_ST_SW_HELLO_REQ,
 TLS_ST_SR_CLNT_HELLO,
 DTLS_ST_SW_HELLO_VERIFY_REQUEST,
 TLS_ST_SW_SRVR_HELLO,
 TLS_ST_SW_CERT,
 TLS_ST_SW_KEY_EXCH,
 TLS_ST_SW_CERT_REQ,
 TLS_ST_SW_SRVR_DONE,
 TLS_ST_SR_CERT,
 TLS_ST_SR_KEY_EXCH,
 TLS_ST_SR_CERT_VRFY,
 TLS_ST_SR_NEXT_PROTO,
 TLS_ST_SR_CHANGE,
 TLS_ST_SR_FINISHED,
 TLS_ST_SW_SESSION_TICKET,
 TLS_ST_SW_CERT_STATUS,
 TLS_ST_SW_CHANGE,
 TLS_ST_SW_FINISHED,
 TLS_ST_SW_ENCRYPTED_EXTENSIONS,
 TLS_ST_CR_ENCRYPTED_EXTENSIONS,
 TLS_ST_CR_CERT_VRFY,
 TLS_ST_SW_CERT_VRFY,
 TLS_ST_CR_HELLO_REQ,
 TLS_ST_SW_KEY_UPDATE,
 TLS_ST_CW_KEY_UPDATE,
 TLS_ST_SR_KEY_UPDATE,
 TLS_ST_CR_KEY_UPDATE,
 TLS_ST_EARLY_DATA,
 TLS_ST_PENDING_EARLY_DATA_END,
  TLS_ST_CW_END_OF_EARLY_DATA,
 TLS_ST_SR_END_OF_EARLY_DATA
} OSSL_HANDSHAKE_STATE;

/*
* Most of the following state values are no longer used and are defined to be
* the closest equivalent value in the current state machine code. Not all
* defines have an equivalent and are set to a dummy value (-1). SSL_ST_CONNECT
* and SSL_ST_ACCEPT are still in use in the definition of SSL_CB_ACCEPT_LOOP,
```

```
* SSL_CB_ACCEPT_EXIT, SSL_CB_CONNECT_LOOP and SSL_CB_CONNECT_EXIT.
*/

# define SSL_ST_CONNECT                0x1000
# define SSL_ST_ACCEPT                 0x2000

# define SSL_ST_MASK                   0x0FFF

# define SSL_CB_LOOP                   0x01
# define SSL_CB_EXIT                   0x02
# define SSL_CB_READ                   0x04
# define SSL_CB_WRITE                  0x08
# define SSL_CB_ALERT                  0x4000/* used in callback */
# define SSL_CB_READ_ALERT             (SSL_CB_ALERT|SSL_CB_READ)
# define SSL_CB_WRITE_ALERT
    (SSL_CB_ALERT|SSL_CB_WRITE)
# define SSL_CB_ACCEPT_LOOP            (SSL_ST_ACCEPT|SSL_CB_LOOP)
# define SSL_CB_ACCEPT_EXIT            (SSL_ST_ACCEPT|SSL_CB_EXIT)
# define SSL_CB_CONNECT_LOOP           (SSL_ST_CONNECT|SSL_CB_LOOP)
# define SSL_CB_CONNECT_EXIT           (SSL_ST_CONNECT|SSL_CB_EXIT)
# define SSL_CB_HANDSHAKE_START        0x10
# define SSL_CB_HANDSHAKE_DONE         0x20

/* Is the SSL_connection established? */
# define SSL_in_connect_init(a)        (SSL_in_init(a) && !SSL_is_server(a))
# define SSL_in_accept_init(a)         (SSL_in_init(a) && SSL_is_server(a))
int SSL_in_init(const SSL *s);
int SSL_in_before(const SSL *s);
int SSL_is_init_finished(const SSL *s);

/*
* The following 3 states are kept in ssl->rlayer.rstate when reads fail, you
* should not need these
*/
# define SSL_ST_READ_HEADER            0xF0
# define SSL_ST_READ_BODY              0xF1
# define SSL_ST_READ_DONE              0xF2

/*-
* Obtain latest
 Finished message
*   -- that we sent (SSL_get_finished)
*   -- that we expected from peer (SSL_get_peer_finished).
* Returns length (0 == no Finished so far), copies up to 'count' bytes.
*/
size_t SSL_get_finished(const SSL *s, void *buf, size_t count);
size_t SSL_get_peer_finished(const SSL *s, void *buf, size_t count);
```

```
/*
* use either SSL_VERIFY_NONE or SSL_VERIFY_PEER, the last 3 options are
* 'ored' with SSL_VERIFY_PEER if they are desired
*/
# define SSL_VERIFY_NONE                 0x00
# define SSL_VERIFY_PEER                 0x01
# define SSL_VERIFY_FAIL_IF_NO_PEER_CERT 0x02
# define SSL_VERIFY_CLIENT_ONCE          0x04
# define SSL_VERIFY_POST_HANDSHAKE       0x08

# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define OpenSSL_add_ssl_algorithms()   SSL_library_init()
#  define SSLeay_add_ssl_algorithms()    SSL_library_init()
# endif

/* More backward compatibility */
# define SSL_get_cipher(s) \
            SSL_CIPHER_get_name(SSL_get_current_cipher(s))
# define SSL_get_cipher_bits(s,np)
 \
            SSL_CIPHER_get_bits(SSL_get_current_cipher(s),np)
# define SSL_get_cipher_version(s) \
            SSL_CIPHER_get_version(SSL_get_current_cipher(s))
# define SSL_get_cipher_name(s) \
            SSL_CIPHER_get_name(SSL_get_current_cipher(s))
# define SSL_get_time(a)        SSL_SESSION_get_time(a)
# define SSL_set_time(a,b)      SSL_SESSION_set_time((a),(b))
# define SSL_get_timeout(a)     SSL_SESSION_get_timeout(a)
# define SSL_set_timeout(a,b)   SSL_SESSION_set_timeout((a),(b))

# define d2i_SSL_SESSION_bio(bp,s_id)
ASN1_d2i_bio_of(SSL_SESSION,SSL_SESSION_new,d2i_SSL_SESSION,bp,s_id)
# define i2d_SSL_SESSION_bio(bp,s_id) ASN1_i2d_bio_of(SSL_SESSION,i2d_SSL_SESSION,bp,s_id)

DECLARE_PEM_rw(SSL_SESSION, SSL_SESSION)
# define SSL_AD_REASON_OFFSET           1000/* offset to get SSL_R_... value
                                 * from SSL_AD_... */
/* These alert types are for SSLv3 and TLSv1 */
# define SSL_AD_CLOSE_NOTIFY
     SSL3_AD_CLOSE_NOTIFY
/* fatal */
# define SSL_AD_UNEXPECTED_MESSAGE      SSL3_AD_UNEXPECTED_MESSAGE
/* fatal */
# define SSL_AD_BAD_RECORD_MAC          SSL3_AD_BAD_RECORD_MAC
# define SSL_AD_DECRYPTION_FAILED       TLS1_AD_DECRYPTION_FAILED
# define SSL_AD_RECORD_OVERFLOW         TLS1_AD_RECORD_OVERFLOW
/* fatal */
# define SSL_AD_DECOMPRESSION_FAILURE   SSL3_AD_DECOMPRESSION_FAILURE
```

```
/* fatal */
# define SSL_AD_HANDSHAKE_FAILURE       SSL3_AD_HANDSHAKE_FAILURE
/* Not for TLS */
# define SSL_AD_NO_CERTIFICATE          SSL3_AD_NO_CERTIFICATE
# define SSL_AD_BAD_CERTIFICATE         SSL3_AD_BAD_CERTIFICATE
# define SSL_AD_UNSUPPORTED_CERTIFICATE  SSL3_AD_UNSUPPORTED_CERTIFICATE
# define SSL_AD_CERTIFICATE_REVOKED      SSL3_AD_CERTIFICATE_REVOKED
# define SSL_AD_CERTIFICATE_EXPIRED      SSL3_AD_CERTIFICATE_EXPIRED
# define SSL_AD_CERTIFICATE_UNKNOWN      SSL3_AD_CERTIFICATE_UNKNOWN
/* fatal */
# define SSL_AD_ILLEGAL_PARAMETER       SSL3_AD_ILLEGAL_PARAMETER
/* fatal */
# define
 SSL_AD_UNKNOWN_CA              TLS1_AD_UNKNOWN_CA
/* fatal */
# define SSL_AD_ACCESS_DENIED           TLS1_AD_ACCESS_DENIED
/* fatal */
# define SSL_AD_DECODE_ERROR            TLS1_AD_DECODE_ERROR
# define SSL_AD_DECRYPT_ERROR           TLS1_AD_DECRYPT_ERROR
/* fatal */
# define SSL_AD_EXPORT_RESTRICTION      TLS1_AD_EXPORT_RESTRICTION
/* fatal */
# define SSL_AD_PROTOCOL_VERSION        TLS1_AD_PROTOCOL_VERSION
/* fatal */
# define SSL_AD_INSUFFICIENT_SECURITY    TLS1_AD_INSUFFICIENT_SECURITY
/* fatal */
# define SSL_AD_INTERNAL_ERROR          TLS1_AD_INTERNAL_ERROR
# define SSL_AD_USER_CANCELLED          TLS1_AD_USER_CANCELLED
# define SSL_AD_NO_RENEGOTIATION         TLS1_AD_NO_RENEGOTIATION
# define SSL_AD_MISSING_EXTENSION        TLS13_AD_MISSING_EXTENSION
# define SSL_AD_CERTIFICATE_REQUIRED     TLS13_AD_CERTIFICATE_REQUIRED
# define SSL_AD_UNSUPPORTED_EXTENSION    TLS1_AD_UNSUPPORTED_EXTENSION
# define SSL_AD_CERTIFICATE_UNOBTAINABLE TLS1_AD_CERTIFICATE_UNOBTAINABLE
#
 define SSL_AD_UNRECOGNIZED_NAME        TLS1_AD_UNRECOGNIZED_NAME
# define SSL_AD_BAD_CERTIFICATE_STATUS_RESPONSE
TLS1_AD_BAD_CERTIFICATE_STATUS_RESPONSE
# define SSL_AD_BAD_CERTIFICATE_HASH_VALUE TLS1_AD_BAD_CERTIFICATE_HASH_VALUE
/* fatal */
# define SSL_AD_UNKNOWN_PSK_IDENTITY     TLS1_AD_UNKNOWN_PSK_IDENTITY
/* fatal */
# define SSL_AD_INAPPROPRIATE_FALLBACK   TLS1_AD_INAPPROPRIATE_FALLBACK
# define SSL_AD_NO_APPLICATION_PROTOCOL  TLS1_AD_NO_APPLICATION_PROTOCOL
# define SSL_ERROR_NONE                  0
# define SSL_ERROR_SSL                   1
# define SSL_ERROR_WANT_READ             2
# define SSL_ERROR_WANT_WRITE            3
# define SSL_ERROR_WANT_X509_LOOKUP      4
```

```
# define SSL_ERROR_SYSCALL              5/* look at error stack/return
                                 * value/errno */
# define SSL_ERROR_ZERO_RETURN          6
# define SSL_ERROR_WANT_CONNECT         7
# define SSL_ERROR_WANT_ACCEPT          8
# define SSL_ERROR_WANT_ASYNC           9
# define SSL_ERROR_WANT_ASYNC_JOB
      10
# define SSL_ERROR_WANT_CLIENT_HELLO_CB 11
# define SSL_ERROR_WANT_RETRY_VERIFY    12

# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define SSL_CTRL_SET_TMP_DH                  3
#  define SSL_CTRL_SET_TMP_ECDH                4
#  define SSL_CTRL_SET_TMP_DH_CB               6
# endif

# define SSL_CTRL_GET_CLIENT_CERT_REQUEST       9
# define SSL_CTRL_GET_NUM_RENEGOTIATIONS        10
# define SSL_CTRL_CLEAR_NUM_RENEGOTIATIONS      11
# define SSL_CTRL_GET_TOTAL_RENEGOTIATIONS      12
# define SSL_CTRL_GET_FLAGS                     13
# define SSL_CTRL_EXTRA_CHAIN_CERT              14
# define SSL_CTRL_SET_MSG_CALLBACK              15
# define SSL_CTRL_SET_MSG_CALLBACK_ARG          16
/* only applies to datagram connections */
# define SSL_CTRL_SET_MTU               17
/* Stats */
# define SSL_CTRL_SESS_NUMBER                   20
# define SSL_CTRL_SESS_CONNECT                  21
# define SSL_CTRL_SESS_CONNECT_GOOD             22
# define SSL_CTRL_SESS_CONNECT_RENEGOTIATE
      23
# define SSL_CTRL_SESS_ACCEPT                   24
# define SSL_CTRL_SESS_ACCEPT_GOOD              25
# define SSL_CTRL_SESS_ACCEPT_RENEGOTIATE       26
# define SSL_CTRL_SESS_HIT                      27
# define SSL_CTRL_SESS_CB_HIT                   28
# define SSL_CTRL_SESS_MISSES                   29
# define SSL_CTRL_SESS_TIMEOUTS                 30
# define SSL_CTRL_SESS_CACHE_FULL               31
# define SSL_CTRL_MODE                          33
# define SSL_CTRL_GET_READ_AHEAD                40
# define SSL_CTRL_SET_READ_AHEAD                41
# define SSL_CTRL_SET_SESS_CACHE_SIZE           42
# define SSL_CTRL_GET_SESS_CACHE_SIZE           43
# define SSL_CTRL_SET_SESS_CACHE_MODE           44
# define SSL_CTRL_GET_SESS_CACHE_MODE           45
```

```
# define SSL_CTRL_GET_MAX_CERT_LIST             50
# define SSL_CTRL_SET_MAX_CERT_LIST             51
# define SSL_CTRL_SET_MAX_SEND_FRAGMENT         52
/* see tls1.h for macros based
 on these */
# define SSL_CTRL_SET_TLSEXT_SERVERNAME_CB       53
# define SSL_CTRL_SET_TLSEXT_SERVERNAME_ARG      54
# define SSL_CTRL_SET_TLSEXT_HOSTNAME            55
# define SSL_CTRL_SET_TLSEXT_DEBUG_CB            56
# define SSL_CTRL_SET_TLSEXT_DEBUG_ARG           57
# define SSL_CTRL_GET_TLSEXT_TICKET_KEYS         58
# define SSL_CTRL_SET_TLSEXT_TICKET_KEYS         59
/*# define SSL_CTRL_SET_TLSEXT_OPAQUE_PRF_INPUT    60 */
/*# define SSL_CTRL_SET_TLSEXT_OPAQUE_PRF_INPUT_CB 61 */
/*# define SSL_CTRL_SET_TLSEXT_OPAQUE_PRF_INPUT_CB_ARG 62 */
# define SSL_CTRL_SET_TLSEXT_STATUS_REQ_CB       63
# define SSL_CTRL_SET_TLSEXT_STATUS_REQ_CB_ARG   64
# define SSL_CTRL_SET_TLSEXT_STATUS_REQ_TYPE     65
# define SSL_CTRL_GET_TLSEXT_STATUS_REQ_EXTS     66
# define SSL_CTRL_SET_TLSEXT_STATUS_REQ_EXTS     67
# define SSL_CTRL_GET_TLSEXT_STATUS_REQ_IDS      68
# define SSL_CTRL_SET_TLSEXT_STATUS_REQ_IDS      69
# define SSL_CTRL_GET_TLSEXT_STATUS_REQ_OCSP_RESP        70
# define SSL_CTRL_SET_TLSEXT_STATUS_REQ_OCSP_RESP
        71
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define SSL_CTRL_SET_TLSEXT_TICKET_KEY_CB      72
# endif
# define SSL_CTRL_SET_TLS_EXT_SRP_USERNAME_CB    75
# define SSL_CTRL_SET_SRP_VERIFY_PARAM_CB              76
# define SSL_CTRL_SET_SRP_GIVE_CLIENT_PWD_CB           77
# define SSL_CTRL_SET_SRP_ARG           78
# define SSL_CTRL_SET_TLS_EXT_SRP_USERNAME             79
# define SSL_CTRL_SET_TLS_EXT_SRP_STRENGTH             80
# define SSL_CTRL_SET_TLS_EXT_SRP_PASSWORD             81
# define DTLS_CTRL_GET_TIMEOUT          73
# define DTLS_CTRL_HANDLE_TIMEOUT        74
# define SSL_CTRL_GET_RI_SUPPORT               76
# define SSL_CTRL_CLEAR_MODE                   78
# define SSL_CTRL_SET_NOT_RESUMABLE_SESS_CB      79
# define SSL_CTRL_GET_EXTRA_CHAIN_CERTS         82
# define SSL_CTRL_CLEAR_EXTRA_CHAIN_CERTS        83
# define SSL_CTRL_CHAIN                       88
# define SSL_CTRL_CHAIN_CERT                   89
# define SSL_CTRL_GET_GROUPS
                 90
# define SSL_CTRL_SET_GROUPS                   91
# define SSL_CTRL_SET_GROUPS_LIST              92
```

```
# define SSL_CTRL_GET_SHARED_GROUP             93
# define SSL_CTRL_SET_SIGALGS                  97
# define SSL_CTRL_SET_SIGALGS_LIST             98
# define SSL_CTRL_CERT_FLAGS                   99
# define SSL_CTRL_CLEAR_CERT_FLAGS             100
# define SSL_CTRL_SET_CLIENT_SIGALGS           101
# define SSL_CTRL_SET_CLIENT_SIGALGS_LIST      102
# define SSL_CTRL_GET_CLIENT_CERT_TYPES        103
# define SSL_CTRL_SET_CLIENT_CERT_TYPES        104
# define SSL_CTRL_BUILD_CERT_CHAIN             105
# define SSL_CTRL_SET_VERIFY_CERT_STORE        106
# define SSL_CTRL_SET_CHAIN_CERT_STORE         107
# define SSL_CTRL_GET_PEER_SIGNATURE_NID       108
# define SSL_CTRL_GET_PEER_TMP_KEY             109
# define SSL_CTRL_GET_RAW_CIPHERLIST           110
# define SSL_CTRL_GET_EC_POINT_FORMATS         111
# define SSL_CTRL_GET_CHAIN_CERTS
            115
# define SSL_CTRL_SELECT_CURRENT_CERT          116
# define SSL_CTRL_SET_CURRENT_CERT             117
# define SSL_CTRL_SET_DH_AUTO                  118
# define DTLS_CTRL_SET_LINK_MTU                120
# define DTLS_CTRL_GET_LINK_MIN_MTU            121
# define SSL_CTRL_GET_EXTMS_SUPPORT            122
# define SSL_CTRL_SET_MIN_PROTO_VERSION        123
# define SSL_CTRL_SET_MAX_PROTO_VERSION        124
# define SSL_CTRL_SET_SPLIT_SEND_FRAGMENT      125
# define SSL_CTRL_SET_MAX_PIPELINES            126
# define SSL_CTRL_GET_TLSEXT_STATUS_REQ_TYPE   127
# define SSL_CTRL_GET_TLSEXT_STATUS_REQ_CB     128
# define SSL_CTRL_GET_TLSEXT_STATUS_REQ_CB_ARG 129
# define SSL_CTRL_GET_MIN_PROTO_VERSION        130
# define SSL_CTRL_GET_MAX_PROTO_VERSION        131
# define SSL_CTRL_GET_SIGNATURE_NID            132
# define SSL_CTRL_GET_TMP_KEY                  133
# define SSL_CTRL_GET_NEGOTIATED_GROUP         134
# define SSL_CTRL_SET_RETRY_VERIFY
            136
# define SSL_CTRL_GET_VERIFY_CERT_STORE        137
# define SSL_CTRL_GET_CHAIN_CERT_STORE         138
# define SSL_CERT_SET_FIRST                    1
# define SSL_CERT_SET_NEXT                     2
# define SSL_CERT_SET_SERVER                   3
# define DTLSv1_get_timeout(ssl, arg) \
     SSL_ctrl(ssl,DTLS_CTRL_GET_TIMEOUT,0, (void *)(arg))
# define DTLSv1_handle_timeout(ssl) \
     SSL_ctrl(ssl,DTLS_CTRL_HANDLE_TIMEOUT,0, NULL)
# define SSL_num_renegotiations(ssl) \
```

```
    SSL_ctrl((ssl),SSL_CTRL_GET_NUM_RENEGOTIATIONS,0,NULL)
# define SSL_clear_num_renegotiations(ssl) \
    SSL_ctrl((ssl),SSL_CTRL_CLEAR_NUM_RENEGOTIATIONS,0,NULL)
# define SSL_total_renegotiations(ssl) \
    SSL_ctrl((ssl),SSL_CTRL_GET_TOTAL_RENEGOTIATIONS,0,NULL)
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define SSL_CTX_set_tmp_dh(ctx,dh) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_SET_TMP_DH,0,(char *)(dh))
# endif
# define SSL_CTX_set_dh_auto(ctx, onoff) \
     SSL_CTX_ctrl(ctx,SSL_CTRL_SET_DH_AUTO,onoff,NULL)
# define SSL_set_dh_auto(s, onoff) \
    SSL_ctrl(s,SSL_CTRL_SET_DH_AUTO,onoff,NULL)
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define SSL_set_tmp_dh(ssl,dh) \
    SSL_ctrl(ssl,SSL_CTRL_SET_TMP_DH,0,(char *)(dh))
# endif
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define SSL_CTX_set_tmp_ecdh(ctx,ecdh) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_SET_TMP_ECDH,0,(char *)(ecdh))
#  define SSL_set_tmp_ecdh(ssl,ecdh) \
    SSL_ctrl(ssl,SSL_CTRL_SET_TMP_ECDH,0,(char *)(ecdh))
# endif
# define SSL_CTX_add_extra_chain_cert(ctx,x509) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_EXTRA_CHAIN_CERT,0,(char *)(x509))
# define SSL_CTX_get_extra_chain_certs(ctx,px509) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_GET_EXTRA_CHAIN_CERTS,0,px509)
# define SSL_CTX_get_extra_chain_certs_only(ctx,px509) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_GET_EXTRA_CHAIN_CERTS,1,px509)
# define SSL_CTX_clear_extra_chain_certs(ctx) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_CLEAR_EXTRA_CHAIN_CERTS,0,NULL)
#
 define SSL_CTX_set0_chain(ctx,sk) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_CHAIN,0,(char *)(sk))
# define SSL_CTX_set1_chain(ctx,sk) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_CHAIN,1,(char *)(sk))
# define SSL_CTX_add0_chain_cert(ctx,x509) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_CHAIN_CERT,0,(char *)(x509))
# define SSL_CTX_add1_chain_cert(ctx,x509) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_CHAIN_CERT,1,(char *)(x509))
# define SSL_CTX_get0_chain_certs(ctx,px509) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_GET_CHAIN_CERTS,0,px509)
# define SSL_CTX_clear_chain_certs(ctx) \
    SSL_CTX_set0_chain(ctx,NULL)
# define SSL_CTX_build_cert_chain(ctx, flags) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_BUILD_CERT_CHAIN, flags, NULL)
# define SSL_CTX_select_current_cert(ctx,x509) \
    SSL_CTX_ctrl(ctx,SSL_CTRL_SELECT_CURRENT_CERT,0,(char *)(x509))
```

```
# define SSL_CTX_set_current_cert(ctx, op) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_CURRENT_CERT, op, NULL)
# define SSL_CTX_set0_verify_cert_store(ctx,st) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_VERIFY_CERT_STORE,0,(char
 *)(st))
# define SSL_CTX_set1_verify_cert_store(ctx,st) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_VERIFY_CERT_STORE,1,(char *)(st))
# define SSL_CTX_get0_verify_cert_store(ctx,st) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_GET_VERIFY_CERT_STORE,0,(char *)(st))
# define SSL_CTX_set0_chain_cert_store(ctx,st) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_CHAIN_CERT_STORE,0,(char *)(st))
# define SSL_CTX_set1_chain_cert_store(ctx,st) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_CHAIN_CERT_STORE,1,(char *)(st))
# define SSL_CTX_get0_chain_cert_store(ctx,st) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_GET_CHAIN_CERT_STORE,0,(char *)(st))
# define SSL_set0_chain(s,sk) \
      SSL_ctrl(s,SSL_CTRL_CHAIN,0,(char *)(sk))
# define SSL_set1_chain(s,sk) \
      SSL_ctrl(s,SSL_CTRL_CHAIN,1,(char *)(sk))
# define SSL_add0_chain_cert(s,x509) \
      SSL_ctrl(s,SSL_CTRL_CHAIN_CERT,0,(char *)(x509))
# define SSL_add1_chain_cert(s,x509) \
      SSL_ctrl(s,SSL_CTRL_CHAIN_CERT,1,(char
 *)(x509))
# define SSL_get0_chain_certs(s,px509) \
      SSL_ctrl(s,SSL_CTRL_GET_CHAIN_CERTS,0,px509)
# define SSL_clear_chain_certs(s) \
      SSL_set0_chain(s,NULL)
# define SSL_build_cert_chain(s, flags) \
      SSL_ctrl(s,SSL_CTRL_BUILD_CERT_CHAIN, flags, NULL)
# define SSL_select_current_cert(s,x509) \
      SSL_ctrl(s,SSL_CTRL_SELECT_CURRENT_CERT,0,(char *)(x509))
# define SSL_set_current_cert(s,op) \
      SSL_ctrl(s,SSL_CTRL_SET_CURRENT_CERT, op, NULL)
# define SSL_set0_verify_cert_store(s,st) \
      SSL_ctrl(s,SSL_CTRL_SET_VERIFY_CERT_STORE,0,(char *)(st))
# define SSL_set1_verify_cert_store(s,st) \
      SSL_ctrl(s,SSL_CTRL_SET_VERIFY_CERT_STORE,1,(char *)(st))
#define SSL_get0_verify_cert_store(s,st) \
      SSL_ctrl(s,SSL_CTRL_GET_VERIFY_CERT_STORE,0,(char *)(st))
# define SSL_set0_chain_cert_store(s,st) \
      SSL_ctrl(s,SSL_CTRL_SET_CHAIN_CERT_STORE,0,(char *)(st))
# define SSL_set1_chain_cert_store(s,st) \
      SSL_ctrl(s,SSL_CTRL_SET_CHAIN_CERT_STORE,1,(char
 *)(st))
#define SSL_get0_chain_cert_store(s,st) \
      SSL_ctrl(s,SSL_CTRL_GET_CHAIN_CERT_STORE,0,(char *)(st))
```

```
# define SSL_get1_groups(s, glist) \
      SSL_ctrl(s,SSL_CTRL_GET_GROUPS,0,(int*)(glist))
# define SSL_CTX_set1_groups(ctx, glist, glistlen) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_GROUPS,glistlen,(int *)(glist))
# define SSL_CTX_set1_groups_list(ctx, s) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_GROUPS_LIST,0,(char *)(s))
# define SSL_set1_groups(s, glist, glistlen) \
      SSL_ctrl(s,SSL_CTRL_SET_GROUPS,glistlen,(char *)(glist))
# define SSL_set1_groups_list(s, str) \
      SSL_ctrl(s,SSL_CTRL_SET_GROUPS_LIST,0,(char *)(str))
# define SSL_get_shared_group(s, n) \
      SSL_ctrl(s,SSL_CTRL_GET_SHARED_GROUP,n,NULL)
# define SSL_get_negotiated_group(s) \
      SSL_ctrl(s,SSL_CTRL_GET_NEGOTIATED_GROUP,0,NULL)
# define SSL_CTX_set1_sigalgs(ctx, slist, slistlen) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_SIGALGS,slistlen,(int *)(slist))
# define SSL_CTX_set1_sigalgs_list(ctx,
 s) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_SIGALGS_LIST,0,(char *)(s))
# define SSL_set1_sigalgs(s, slist, slistlen) \
      SSL_ctrl(s,SSL_CTRL_SET_SIGALGS,slistlen,(int *)(slist))
# define SSL_set1_sigalgs_list(s, str) \
      SSL_ctrl(s,SSL_CTRL_SET_SIGALGS_LIST,0,(char *)(str))
# define SSL_CTX_set1_client_sigalgs(ctx, slist, slistlen) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_CLIENT_SIGALGS,slistlen,(int *)(slist))
# define SSL_CTX_set1_client_sigalgs_list(ctx, s) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_CLIENT_SIGALGS_LIST,0,(char *)(s))
# define SSL_set1_client_sigalgs(s, slist, slistlen) \
      SSL_ctrl(s,SSL_CTRL_SET_CLIENT_SIGALGS,slistlen,(int *)(slist))
# define SSL_set1_client_sigalgs_list(s, str) \
      SSL_ctrl(s,SSL_CTRL_SET_CLIENT_SIGALGS_LIST,0,(char *)(str))
# define SSL_get0_certificate_types(s, clist) \
      SSL_ctrl(s, SSL_CTRL_GET_CLIENT_CERT_TYPES, 0, (char *)(clist))
# define SSL_CTX_set1_client_certificate_types(ctx, clist, clistlen)
 \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_CLIENT_CERT_TYPES,clistlen, \
                (char *)(clist))
# define SSL_set1_client_certificate_types(s, clist, clistlen) \
      SSL_ctrl(s,SSL_CTRL_SET_CLIENT_CERT_TYPES,clistlen,(char *)(clist))
# define SSL_get_signature_nid(s, pn) \
      SSL_ctrl(s,SSL_CTRL_GET_SIGNATURE_NID,0,pn)
# define SSL_get_peer_signature_nid(s, pn) \
      SSL_ctrl(s,SSL_CTRL_GET_PEER_SIGNATURE_NID,0,pn)
# define SSL_get_peer_tmp_key(s, pk) \
      SSL_ctrl(s,SSL_CTRL_GET_PEER_TMP_KEY,0,pk)
# define SSL_get_tmp_key(s, pk) \
      SSL_ctrl(s,SSL_CTRL_GET_TMP_KEY,0,pk)
# define SSL_get0_raw_cipherlist(s, plst) \
```

```
    SSL_ctrl(s,SSL_CTRL_GET_RAW_CIPHERLIST,0,plst)
# define SSL_get0_ec_point_formats(s, plst) \
    SSL_ctrl(s,SSL_CTRL_GET_EC_POINT_FORMATS,0,plst)
# define SSL_CTX_set_min_proto_version(ctx, version) \
    SSL_CTX_ctrl(ctx, SSL_CTRL_SET_MIN_PROTO_VERSION, version, NULL)
# define SSL_CTX_set_max_proto_version(ctx, version)
 \
    SSL_CTX_ctrl(ctx, SSL_CTRL_SET_MAX_PROTO_VERSION, version, NULL)
# define SSL_CTX_get_min_proto_version(ctx) \
    SSL_CTX_ctrl(ctx, SSL_CTRL_GET_MIN_PROTO_VERSION, 0, NULL)
# define SSL_CTX_get_max_proto_version(ctx) \
    SSL_CTX_ctrl(ctx, SSL_CTRL_GET_MAX_PROTO_VERSION, 0, NULL)
# define SSL_set_min_proto_version(s, version) \
    SSL_ctrl(s, SSL_CTRL_SET_MIN_PROTO_VERSION, version, NULL)
# define SSL_set_max_proto_version(s, version) \
    SSL_ctrl(s, SSL_CTRL_SET_MAX_PROTO_VERSION, version, NULL)
# define SSL_get_min_proto_version(s) \
    SSL_ctrl(s, SSL_CTRL_GET_MIN_PROTO_VERSION, 0, NULL)
# define SSL_get_max_proto_version(s) \
    SSL_ctrl(s, SSL_CTRL_GET_MAX_PROTO_VERSION, 0, NULL)

const char *SSL_group_to_name(SSL *s, int id);

/* Backwards compatibility, original 1.1.0 names */
# define SSL_CTRL_GET_SERVER_TMP_KEY \
     SSL_CTRL_GET_PEER_TMP_KEY
# define SSL_get_server_tmp_key(s, pk) \
     SSL_get_peer_tmp_key(s, pk)

int SSL_set0_tmp_dh_pkey(SSL
 *s, EVP_PKEY *dhpkey);
int SSL_CTX_set0_tmp_dh_pkey(SSL_CTX *ctx, EVP_PKEY *dhpkey);

/*
* The following symbol names are old and obsolete. They are kept
* for compatibility reasons only and should not be used anymore.
*/
# define SSL_CTRL_GET_CURVES          SSL_CTRL_GET_GROUPS
# define SSL_CTRL_SET_CURVES          SSL_CTRL_SET_GROUPS
# define SSL_CTRL_SET_CURVES_LIST     SSL_CTRL_SET_GROUPS_LIST
# define SSL_CTRL_GET_SHARED_CURVE    SSL_CTRL_GET_SHARED_GROUP

# define SSL_get1_curves              SSL_get1_groups
# define SSL_CTX_set1_curves          SSL_CTX_set1_groups
# define SSL_CTX_set1_curves_list     SSL_CTX_set1_groups_list
# define SSL_set1_curves              SSL_set1_groups
# define SSL_set1_curves_list         SSL_set1_groups_list
# define SSL_get_shared_curve         SSL_get_shared_group
```

```
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
/* Provide some compatibility macros for removed functionality. */
#  define SSL_CTX_need_tmp_RSA(ctx)
      0
#  define SSL_CTX_set_tmp_rsa(ctx,rsa)            1
#  define SSL_need_tmp_RSA(ssl)                   0
#  define SSL_set_tmp_rsa(ssl,rsa)                1
#  define SSL_CTX_set_ecdh_auto(dummy, onoff)      ((onoff) != 0)
#  define SSL_set_ecdh_auto(dummy, onoff)          ((onoff) != 0)
/*
* We "pretend" to call the callback to avoid warnings about unused static
* functions.
*/
#  define SSL_CTX_set_tmp_rsa_callback(ctx, cb)    while(0) (cb)(NULL, 0, 0)
#  define SSL_set_tmp_rsa_callback(ssl, cb)        while(0) (cb)(NULL, 0, 0)
# endif
__owur const BIO_METHOD *BIO_f_ssl(void);
__owur BIO *BIO_new_ssl(SSL_CTX *ctx, int client);
__owur BIO *BIO_new_ssl_connect(SSL_CTX *ctx);
__owur BIO *BIO_new_buffer_ssl_connect(SSL_CTX *ctx);
__owur int BIO_ssl_copy_session_id(BIO *to, BIO *from);
void BIO_ssl_shutdown(BIO *ssl_bio);

__owur int SSL_CTX_set_cipher_list(SSL_CTX *, const char *str);
__owur SSL_CTX *SSL_CTX_new(const SSL_METHOD *meth);
__owur SSL_CTX *SSL_CTX_new_ex(OSSL_LIB_CTX
 *libctx, const char *propq,
                         const SSL_METHOD *meth);
int SSL_CTX_up_ref(SSL_CTX *ctx);
void SSL_CTX_free(SSL_CTX *);
__owur long SSL_CTX_set_timeout(SSL_CTX *ctx, long t);
__owur long SSL_CTX_get_timeout(const SSL_CTX *ctx);
__owur X509_STORE *SSL_CTX_get_cert_store(const SSL_CTX *);
void SSL_CTX_set_cert_store(SSL_CTX *, X509_STORE *);
void SSL_CTX_set1_cert_store(SSL_CTX *, X509_STORE *);
__owur int SSL_want(const SSL *s);
__owur int SSL_clear(SSL *s);

void SSL_CTX_flush_sessions(SSL_CTX *ctx, long tm);

__owur const SSL_CIPHER *SSL_get_current_cipher(const SSL *s);
__owur const SSL_CIPHER *SSL_get_pending_cipher(const SSL *s);
__owur int SSL_CIPHER_get_bits(const SSL_CIPHER *c, int *alg_bits);
__owur const char *SSL_CIPHER_get_version(const SSL_CIPHER *c);
__owur const char *SSL_CIPHER_get_name(const SSL_CIPHER *c);
__owur const char *SSL_CIPHER_standard_name(const SSL_CIPHER *c);
```

```
__owur const char *OPENSSL_cipher_name(const char *rfc_name);
__owur
 uint32_t SSL_CIPHER_get_id(const SSL_CIPHER *c);
__owur uint16_t SSL_CIPHER_get_protocol_id(const SSL_CIPHER *c);
__owur int SSL_CIPHER_get_kx_nid(const SSL_CIPHER *c);
__owur int SSL_CIPHER_get_auth_nid(const SSL_CIPHER *c);
__owur const EVP_MD *SSL_CIPHER_get_handshake_digest(const SSL_CIPHER *c);
__owur int SSL_CIPHER_is_aead(const SSL_CIPHER *c);

__owur int SSL_get_fd(const SSL *s);
__owur int SSL_get_rfd(const SSL *s);
__owur int SSL_get_wfd(const SSL *s);
__owur const char *SSL_get_cipher_list(const SSL *s, int n);
__owur char *SSL_get_shared_ciphers(const SSL *s, char *buf, int size);
__owur int SSL_get_read_ahead(const SSL *s);
__owur int SSL_pending(const SSL *s);
__owur int SSL_has_pending(const SSL *s);
# ifndef OPENSSL_NO_SOCK
__owur int SSL_set_fd(SSL *s, int fd);
__owur int SSL_set_rfd(SSL *s, int fd);
__owur int SSL_set_wfd(SSL *s, int fd);
# endif
void SSL_set0_rbio(SSL *s, BIO *rbio);
void SSL_set0_wbio(SSL *s, BIO *wbio);
void SSL_set_bio(SSL *s, BIO *rbio, BIO *wbio);
__owur
 BIO *SSL_get_rbio(const SSL *s);
__owur BIO *SSL_get_wbio(const SSL *s);
__owur int SSL_set_cipher_list(SSL *s, const char *str);
__owur int SSL_CTX_set_ciphersuites(SSL_CTX *ctx, const char *str);
__owur int SSL_set_ciphersuites(SSL *s, const char *str);
void SSL_set_read_ahead(SSL *s, int yes);
__owur int SSL_get_verify_mode(const SSL *s);
__owur int SSL_get_verify_depth(const SSL *s);
__owur SSL_verify_cb SSL_get_verify_callback(const SSL *s);
void SSL_set_verify(SSL *s, int mode, SSL_verify_cb callback);
void SSL_set_verify_depth(SSL *s, int depth);
void SSL_set_cert_cb(SSL *s, int (*cb) (SSL *ssl, void *arg), void *arg);
# ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 __owur int SSL_use_RSAPrivateKey(SSL *ssl, RSA *rsa);
OSSL_DEPRECATEDIN_3_0
__owur int SSL_use_RSAPrivateKey_ASN1(SSL *ssl,
                              const unsigned char *d, long len);
# endif
__owur int SSL_use_PrivateKey(SSL *ssl, EVP_PKEY *pkey);
__owur int SSL_use_PrivateKey_ASN1(int
 pk, SSL *ssl, const unsigned char *d,
                             long len);
```

```
__owur int SSL_use_certificate(SSL *ssl, X509 *x);
__owur int SSL_use_certificate_ASN1(SSL *ssl, const unsigned char *d, int len);
__owur int SSL_use_cert_and_key(SSL *ssl, X509 *x509, EVP_PKEY *privatekey,
                                STACK_OF(X509) *chain, int override);


/* serverinfo file format versions */
# define SSL_SERVERINFOV1   1
# define SSL_SERVERINFOV2   2

/* Set serverinfo data for the current active cert. */
__owur int SSL_CTX_use_serverinfo(SSL_CTX *ctx, const unsigned char *serverinfo,
                                  size_t serverinfo_length);
__owur int SSL_CTX_use_serverinfo_ex(SSL_CTX *ctx, unsigned int version,
                                     const unsigned char *serverinfo,
                                     size_t serverinfo_length);
__owur int SSL_CTX_use_serverinfo_file(SSL_CTX *ctx, const char *file);

#ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0
__owur
 int SSL_use_RSAPrivateKey_file(SSL *ssl, const char *file, int type);
#endif

__owur int SSL_use_PrivateKey_file(SSL *ssl, const char *file, int type);
__owur int SSL_use_certificate_file(SSL *ssl, const char *file, int type);

#ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0
__owur int SSL_CTX_use_RSAPrivateKey_file(SSL_CTX *ctx, const char *file,
                                          int type);
#endif
__owur int SSL_CTX_use_PrivateKey_file(SSL_CTX *ctx, const char *file,
                                       int type);
__owur int SSL_CTX_use_certificate_file(SSL_CTX *ctx, const char *file,
                                        int type);
/* PEM type */
__owur int SSL_CTX_use_certificate_chain_file(SSL_CTX *ctx, const char *file);
__owur int SSL_use_certificate_chain_file(SSL *ssl, const char *file);
__owur STACK_OF(X509_NAME) *SSL_load_client_CA_file(const char *file);
__owur STACK_OF(X509_NAME)
*SSL_load_client_CA_file_ex(const char *file, OSSL_LIB_CTX *libctx,
                            const char *propq);
__owur int SSL_add_file_cert_subjects_to_stack(STACK_OF(X509_NAME) *stackCAs,
                                               const char *file);
int SSL_add_dir_cert_subjects_to_stack(STACK_OF(X509_NAME) *stackCAs,
                                       const char *dir);
int SSL_add_store_cert_subjects_to_stack(STACK_OF(X509_NAME) *stackCAs,
```

```
                                const char *uri);

# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define SSL_load_error_strings() \
   OPENSSL_init_ssl(OPENSSL_INIT_LOAD_SSL_STRINGS \
                    | OPENSSL_INIT_LOAD_CRYPTO_STRINGS, NULL)
# endif

__owur const char *SSL_state_string(const SSL *s);
__owur const char *SSL_rstate_string(const SSL *s);
__owur const char *SSL_state_string_long(const SSL *s);
__owur const char *SSL_rstate_string_long(const SSL *s);
__owur long SSL_SESSION_get_time(const SSL_SESSION *s);
__owur long SSL_SESSION_set_time(SSL_SESSION *s, long t);
__owur long SSL_SESSION_get_timeout(const
 SSL_SESSION *s);
__owur long SSL_SESSION_set_timeout(SSL_SESSION *s, long t);
__owur int SSL_SESSION_get_protocol_version(const SSL_SESSION *s);
__owur int SSL_SESSION_set_protocol_version(SSL_SESSION *s, int version);

__owur const char *SSL_SESSION_get0_hostname(const SSL_SESSION *s);
__owur int SSL_SESSION_set1_hostname(SSL_SESSION *s, const char *hostname);
void SSL_SESSION_get0_alpn_selected(const SSL_SESSION *s,
                                    const unsigned char **alpn,
                                    size_t *len);
__owur int SSL_SESSION_set1_alpn_selected(SSL_SESSION *s,
                                          const unsigned char *alpn,
                                          size_t len);
__owur const SSL_CIPHER *SSL_SESSION_get0_cipher(const SSL_SESSION *s);
__owur int SSL_SESSION_set_cipher(SSL_SESSION *s, const SSL_CIPHER *cipher);
__owur int SSL_SESSION_has_ticket(const SSL_SESSION *s);
__owur unsigned long SSL_SESSION_get_ticket_lifetime_hint(const
 SSL_SESSION *s);
void SSL_SESSION_get0_ticket(const SSL_SESSION *s, const unsigned char **tick,
                             size_t *len);
__owur uint32_t SSL_SESSION_get_max_early_data(const SSL_SESSION *s);
__owur int SSL_SESSION_set_max_early_data(SSL_SESSION *s,
                                          uint32_t max_early_data);
__owur int SSL_copy_session_id(SSL *to, const SSL *from);
__owur X509 *SSL_SESSION_get0_peer(SSL_SESSION *s);
__owur int SSL_SESSION_set1_id_context(SSL_SESSION *s,
                                       const unsigned char *sid_ctx,
                                       unsigned int sid_ctx_len);
__owur int SSL_SESSION_set1_id(SSL_SESSION *s, const unsigned char *sid,
                               unsigned int sid_len);
__owur int SSL_SESSION_is_resumable(const SSL_SESSION *s);

__owur SSL_SESSION *SSL_SESSION_new(void);
```

```
__owur SSL_SESSION *SSL_SESSION_dup(const SSL_SESSION *src);
const unsigned char *SSL_SESSION_get_id(const SSL_SESSION *s,

                                unsigned int *len);
const unsigned char *SSL_SESSION_get0_id_context(const SSL_SESSION *s,
                                     unsigned int *len);
__owur unsigned int SSL_SESSION_get_compress_id(const SSL_SESSION *s);
# ifndef OPENSSL_NO_STDIO
int SSL_SESSION_print_fp(FILE *fp, const SSL_SESSION *ses);
# endif
int SSL_SESSION_print(BIO *fp, const SSL_SESSION *ses);
int SSL_SESSION_print_keylog(BIO *bp, const SSL_SESSION *x);
int SSL_SESSION_up_ref(SSL_SESSION *ses);
void SSL_SESSION_free(SSL_SESSION *ses);
__owur int i2d_SSL_SESSION(const SSL_SESSION *in, unsigned char **pp);
__owur int SSL_set_session(SSL *to, SSL_SESSION *session);
int SSL_CTX_add_session(SSL_CTX *ctx, SSL_SESSION *session);
int SSL_CTX_remove_session(SSL_CTX *ctx, SSL_SESSION *session);
__owur int SSL_CTX_set_generate_session_id(SSL_CTX *ctx, GEN_SESSION_CB cb);
__owur int SSL_set_generate_session_id(SSL *s, GEN_SESSION_CB cb);
__owur int SSL_has_matching_session_id(const
 SSL *s,
                                const unsigned char *id,
                                unsigned int id_len);
SSL_SESSION *d2i_SSL_SESSION(SSL_SESSION **a, const unsigned char **pp,
                        long length);

# ifdef OPENSSL_X509_H
__owur X509 *SSL_get0_peer_certificate(const SSL *s);
__owur X509 *SSL_get1_peer_certificate(const SSL *s);
/* Deprecated in 3.0.0 */
#  ifndef OPENSSL_NO_DEPRECATED_3_0
#   define SSL_get_peer_certificate SSL_get1_peer_certificate
#  endif
# endif

__owur STACK_OF(X509) *SSL_get_peer_cert_chain(const SSL *s);

__owur int SSL_CTX_get_verify_mode(const SSL_CTX *ctx);
__owur int SSL_CTX_get_verify_depth(const SSL_CTX *ctx);
__owur SSL_verify_cb SSL_CTX_get_verify_callback(const SSL_CTX *ctx);
void SSL_CTX_set_verify(SSL_CTX *ctx, int mode, SSL_verify_cb callback);
void SSL_CTX_set_verify_depth(SSL_CTX *ctx, int depth);
void SSL_CTX_set_cert_verify_callback(SSL_CTX *ctx,
                               int (*cb)
 (X509_STORE_CTX *, void *),
                               void *arg);
void SSL_CTX_set_cert_cb(SSL_CTX *c, int (*cb) (SSL *ssl, void *arg),
```

```
                void *arg);
# ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0
__owur int SSL_CTX_use_RSAPrivateKey(SSL_CTX *ctx, RSA *rsa);
OSSL_DEPRECATEDIN_3_0
__owur int SSL_CTX_use_RSAPrivateKey_ASN1(SSL_CTX *ctx, const unsigned char *d,
                                          long len);
# endif
__owur int SSL_CTX_use_PrivateKey(SSL_CTX *ctx, EVP_PKEY *pkey);
__owur int SSL_CTX_use_PrivateKey_ASN1(int pk, SSL_CTX *ctx,
                                       const unsigned char *d, long len);
__owur int SSL_CTX_use_certificate(SSL_CTX *ctx, X509 *x);
__owur int SSL_CTX_use_certificate_ASN1(SSL_CTX *ctx, int len,
                                        const unsigned char *d);
__owur int SSL_CTX_use_cert_and_key(SSL_CTX *ctx, X509 *x509, EVP_PKEY *privatekey,
                                    STACK_OF(X509) *chain,
 int override);

void SSL_CTX_set_default_passwd_cb(SSL_CTX *ctx, pem_password_cb *cb);
void SSL_CTX_set_default_passwd_cb_userdata(SSL_CTX *ctx, void *u);
pem_password_cb *SSL_CTX_get_default_passwd_cb(SSL_CTX *ctx);
void *SSL_CTX_get_default_passwd_cb_userdata(SSL_CTX *ctx);
void SSL_set_default_passwd_cb(SSL *s, pem_password_cb *cb);
void SSL_set_default_passwd_cb_userdata(SSL *s, void *u);
pem_password_cb *SSL_get_default_passwd_cb(SSL *s);
void *SSL_get_default_passwd_cb_userdata(SSL *s);

__owur int SSL_CTX_check_private_key(const SSL_CTX *ctx);
__owur int SSL_check_private_key(const SSL *ctx);

__owur int SSL_CTX_set_session_id_context(SSL_CTX *ctx,
                                          const unsigned char *sid_ctx,
                                          unsigned int sid_ctx_len);

SSL *SSL_new(SSL_CTX *ctx);
int SSL_up_ref(SSL *s);
int SSL_is_dtls(const SSL *s);
__owur int SSL_set_session_id_context(SSL *ssl, const unsigned char *sid_ctx,

     unsigned int sid_ctx_len);

__owur int SSL_CTX_set_purpose(SSL_CTX *ctx, int purpose);
__owur int SSL_set_purpose(SSL *ssl, int purpose);
__owur int SSL_CTX_set_trust(SSL_CTX *ctx, int trust);
__owur int SSL_set_trust(SSL *ssl, int trust);

__owur int SSL_set1_host(SSL *s, const char *hostname);
__owur int SSL_add1_host(SSL *s, const char *hostname);
```

```
__owur const char *SSL_get0_peername(SSL *s);
void SSL_set_hostflags(SSL *s, unsigned int flags);

__owur int SSL_CTX_dane_enable(SSL_CTX *ctx);
__owur int SSL_CTX_dane_mtype_set(SSL_CTX *ctx, const EVP_MD *md,
                                  uint8_t mtype, uint8_t ord);
__owur int SSL_dane_enable(SSL *s, const char *basedomain);
__owur int SSL_dane_tlsa_add(SSL *s, uint8_t usage, uint8_t selector,
                             uint8_t mtype, const unsigned char *data, size_t dlen);
__owur int SSL_get0_dane_authority(SSL *s, X509 **mcert, EVP_PKEY **mspki);
__owur int SSL_get0_dane_tlsa(SSL *s, uint8_t *usage, uint8_t *selector,

                              uint8_t *mtype, const unsigned char **data,
                               size_t *dlen);
/*
* Bridge opacity barrier between libcrypt and libssl, also needed to support
* offline testing in test/danetest.c
*/
SSL_DANE *SSL_get0_dane(SSL *ssl);
/*
* DANE flags
*/
unsigned long SSL_CTX_dane_set_flags(SSL_CTX *ctx, unsigned long flags);
unsigned long SSL_CTX_dane_clear_flags(SSL_CTX *ctx, unsigned long flags);
unsigned long SSL_dane_set_flags(SSL *ssl, unsigned long flags);
unsigned long SSL_dane_clear_flags(SSL *ssl, unsigned long flags);

__owur int SSL_CTX_set1_param(SSL_CTX *ctx, X509_VERIFY_PARAM *vpm);
__owur int SSL_set1_param(SSL *ssl, X509_VERIFY_PARAM *vpm);

__owur X509_VERIFY_PARAM *SSL_CTX_get0_param(SSL_CTX *ctx);
__owur X509_VERIFY_PARAM *SSL_get0_param(SSL *ssl);

# ifndef OPENSSL_NO_SRP
#  ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 int SSL_CTX_set_srp_username(SSL_CTX *ctx, char *name);
OSSL_DEPRECATEDIN_3_0 int SSL_CTX_set_srp_password(SSL_CTX
 *ctx, char *password);
OSSL_DEPRECATEDIN_3_0 int SSL_CTX_set_srp_strength(SSL_CTX *ctx, int strength);
OSSL_DEPRECATEDIN_3_0
int SSL_CTX_set_srp_client_pwd_callback(SSL_CTX *ctx,
                                        char *(*cb) (SSL *, void *));
OSSL_DEPRECATEDIN_3_0
int SSL_CTX_set_srp_verify_param_callback(SSL_CTX *ctx,
                                          int (*cb) (SSL *, void *));
OSSL_DEPRECATEDIN_3_0
int SSL_CTX_set_srp_username_callback(SSL_CTX *ctx,
                                      int (*cb) (SSL *, int *, void *));
```

```
OSSL_DEPRECATEDIN_3_0 int SSL_CTX_set_srp_cb_arg(SSL_CTX *ctx, void *arg);

OSSL_DEPRECATEDIN_3_0
int SSL_set_srp_server_param(SSL *s, const BIGNUM *N, const BIGNUM *g,
                             BIGNUM *sa, BIGNUM *v, char *info);
OSSL_DEPRECATEDIN_3_0
int SSL_set_srp_server_param_pw(SSL *s, const char *user, const char *pass,
                                const char *grp);

OSSL_DEPRECATEDIN_3_0 __owur BIGNUM *SSL_get_srp_g(SSL *s);
OSSL_DEPRECATEDIN_3_0
 __owur BIGNUM *SSL_get_srp_N(SSL *s);

OSSL_DEPRECATEDIN_3_0 __owur char *SSL_get_srp_username(SSL *s);
OSSL_DEPRECATEDIN_3_0 __owur char *SSL_get_srp_userinfo(SSL *s);
#  endif
# endif

/*
* ClientHello callback and helpers.
*/

# define SSL_CLIENT_HELLO_SUCCESS 1
# define SSL_CLIENT_HELLO_ERROR   0
# define SSL_CLIENT_HELLO_RETRY   (-1)

typedef int (*SSL_client_hello_cb_fn) (SSL *s, int *al, void *arg);
void SSL_CTX_set_client_hello_cb(SSL_CTX *c, SSL_client_hello_cb_fn cb,
                                 void *arg);
int SSL_client_hello_isv2(SSL *s);
unsigned int SSL_client_hello_get0_legacy_version(SSL *s);
size_t SSL_client_hello_get0_random(SSL *s, const unsigned char **out);
size_t SSL_client_hello_get0_session_id(SSL *s, const unsigned char **out);
size_t SSL_client_hello_get0_ciphers(SSL *s, const unsigned char **out);
size_t SSL_client_hello_get0_compression_methods(SSL *s,
                                         const unsigned char **out);
int
 SSL_client_hello_get1_extensions_present(SSL *s, int **out, size_t *outlen);
int SSL_client_hello_get0_ext(SSL *s, unsigned int type,
                              const unsigned char **out, size_t *outlen);

void SSL_certs_clear(SSL *s);
void SSL_free(SSL *ssl);
# ifdef OSSL_ASYNC_FD
/*
* Windows application developer has to include windows.h to use these.
*/
__owur int SSL_waiting_for_async(SSL *s);
```

```
__owur int SSL_get_all_async_fds(SSL *s, OSSL_ASYNC_FD *fds, size_t *numfds);
__owur int SSL_get_changed_async_fds(SSL *s, OSSL_ASYNC_FD *addfd,
                                     size_t *numaddfds, OSSL_ASYNC_FD *delfd,
                                     size_t *numdelfds);
__owur int SSL_CTX_set_async_callback(SSL_CTX *ctx, SSL_async_callback_fn callback);
__owur int SSL_CTX_set_async_callback_arg(SSL_CTX *ctx, void *arg);
__owur int SSL_set_async_callback(SSL *s, SSL_async_callback_fn callback);
__owur int SSL_set_async_callback_arg(SSL *s, void *arg);
__owur int SSL_get_async_status(SSL
 *s, int *status);

# endif
__owur int SSL_accept(SSL *ssl);
__owur int SSL_stateless(SSL *s);
__owur int SSL_connect(SSL *ssl);
__owur int SSL_read(SSL *ssl, void *buf, int num);
__owur int SSL_read_ex(SSL *ssl, void *buf, size_t num, size_t *readbytes);

# define SSL_READ_EARLY_DATA_ERROR   0
# define SSL_READ_EARLY_DATA_SUCCESS 1
# define SSL_READ_EARLY_DATA_FINISH  2

__owur int SSL_read_early_data(SSL *s, void *buf, size_t num,
                               size_t *readbytes);
__owur int SSL_peek(SSL *ssl, void *buf, int num);
__owur int SSL_peek_ex(SSL *ssl, void *buf, size_t num, size_t *readbytes);
__owur ossl_ssize_t SSL_sendfile(SSL *s, int fd, off_t offset, size_t size,
                                 int flags);
__owur int SSL_write(SSL *ssl, const void *buf, int num);
__owur int SSL_write_ex(SSL *s, const void *buf, size_t num, size_t *written);
__owur int SSL_write_early_data(SSL *s, const void *buf, size_t num,
                                size_t *written);
long
 SSL_ctrl(SSL *ssl, int cmd, long larg, void *parg);
long SSL_callback_ctrl(SSL *, int, void (*)(void));
long SSL_CTX_ctrl(SSL_CTX *ctx, int cmd, long larg, void *parg);
long SSL_CTX_callback_ctrl(SSL_CTX *, int, void (*)(void));

# define SSL_EARLY_DATA_NOT_SENT    0
# define SSL_EARLY_DATA_REJECTED    1
# define SSL_EARLY_DATA_ACCEPTED    2

__owur int SSL_get_early_data_status(const SSL *s);

__owur int SSL_get_error(const SSL *s, int ret_code);
__owur const char *SSL_get_version(const SSL *s);

/* This sets the 'default' SSL version that SSL_new() will create */
```

```
# ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0
__owur int SSL_CTX_set_ssl_version(SSL_CTX *ctx, const SSL_METHOD *meth);
# endif

# ifndef OPENSSL_NO_SSL3_METHOD
#  ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *SSLv3_method(void); /* SSLv3 */
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *SSLv3_server_method(void);
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *SSLv3_client_method(void);
#
  endif
# endif

#define SSLv23_method           TLS_method
#define SSLv23_server_method    TLS_server_method
#define SSLv23_client_method    TLS_client_method

/* Negotiate highest available SSL/TLS version */
__owur const SSL_METHOD *TLS_method(void);
__owur const SSL_METHOD *TLS_server_method(void);
__owur const SSL_METHOD *TLS_client_method(void);

# ifndef OPENSSL_NO_TLS1_METHOD
#  ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *TLSv1_method(void); /* TLSv1.0 */
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *TLSv1_server_method(void);
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *TLSv1_client_method(void);
#  endif
# endif

# ifndef OPENSSL_NO_TLS1_1_METHOD
#  ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *TLSv1_1_method(void); /* TLSv1.1 */
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *TLSv1_1_server_method(void);
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *TLSv1_1_client_method(void);
#
  endif
# endif

# ifndef OPENSSL_NO_TLS1_2_METHOD
#  ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *TLSv1_2_method(void); /* TLSv1.2 */
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *TLSv1_2_server_method(void);
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *TLSv1_2_client_method(void);
#  endif
# endif
```

```
# ifndef OPENSSL_NO_DTLS1_METHOD
#  ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *DTLSv1_method(void); /* DTLSv1.0 */
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *DTLSv1_server_method(void);
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *DTLSv1_client_method(void);
#  endif
# endif

# ifndef OPENSSL_NO_DTLS1_2_METHOD
/* DTLSv1.2 */
#  ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *DTLSv1_2_method(void);
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *DTLSv1_2_server_method(void);
OSSL_DEPRECATEDIN_1_1_0 __owur const SSL_METHOD *DTLSv1_2_client_method(void);
#
  endif
# endif

__owur const SSL_METHOD *DTLS_method(void); /* DTLS 1.0 and 1.2 */
__owur const SSL_METHOD *DTLS_server_method(void); /* DTLS 1.0 and 1.2 */
__owur const SSL_METHOD *DTLS_client_method(void); /* DTLS 1.0 and 1.2 */

__owur size_t DTLS_get_data_mtu(const SSL *s);

__owur STACK_OF(SSL_CIPHER) *SSL_get_ciphers(const SSL *s);
__owur STACK_OF(SSL_CIPHER) *SSL_CTX_get_ciphers(const SSL_CTX *ctx);
__owur STACK_OF(SSL_CIPHER) *SSL_get_client_ciphers(const SSL *s);
__owur STACK_OF(SSL_CIPHER) *SSL_get1_supported_ciphers(SSL *s);

__owur int SSL_do_handshake(SSL *s);
int SSL_key_update(SSL *s, int updatetype);
int SSL_get_key_update_type(const SSL *s);
int SSL_renegotiate(SSL *s);
int SSL_renegotiate_abbreviated(SSL *s);
__owur int SSL_renegotiate_pending(const SSL *s);
int SSL_new_session_ticket(SSL *s);
int SSL_shutdown(SSL *s);
__owur int SSL_verify_client_post_handshake(SSL *s);
void SSL_CTX_set_post_handshake_auth(SSL_CTX *ctx, int val);
void SSL_set_post_handshake_auth(SSL
 *s, int val);

__owur const SSL_METHOD *SSL_CTX_get_ssl_method(const SSL_CTX *ctx);
__owur const SSL_METHOD *SSL_get_ssl_method(const SSL *s);
__owur int SSL_set_ssl_method(SSL *s, const SSL_METHOD *method);
__owur const char *SSL_alert_type_string_long(int value);
__owur const char *SSL_alert_type_string(int value);
__owur const char *SSL_alert_desc_string_long(int value);
```

```
__owur const char *SSL_alert_desc_string(int value);

void SSL_set0_CA_list(SSL *s, STACK_OF(X509_NAME) *name_list);
void SSL_CTX_set0_CA_list(SSL_CTX *ctx, STACK_OF(X509_NAME) *name_list);
__owur const STACK_OF(X509_NAME) *SSL_get0_CA_list(const SSL *s);
__owur const STACK_OF(X509_NAME) *SSL_CTX_get0_CA_list(const SSL_CTX *ctx);
__owur int SSL_add1_to_CA_list(SSL *ssl, const X509 *x);
__owur int SSL_CTX_add1_to_CA_list(SSL_CTX *ctx, const X509 *x);
__owur const STACK_OF(X509_NAME) *SSL_get0_peer_CA_list(const SSL *s);

void SSL_set_client_CA_list(SSL *s, STACK_OF(X509_NAME) *name_list);
void SSL_CTX_set_client_CA_list(SSL_CTX
 *ctx, STACK_OF(X509_NAME) *name_list);
__owur STACK_OF(X509_NAME) *SSL_get_client_CA_list(const SSL *s);
__owur STACK_OF(X509_NAME) *SSL_CTX_get_client_CA_list(const SSL_CTX *s);
__owur int SSL_add_client_CA(SSL *ssl, X509 *x);
__owur int SSL_CTX_add_client_CA(SSL_CTX *ctx, X509 *x);

void SSL_set_connect_state(SSL *s);
void SSL_set_accept_state(SSL *s);

__owur long SSL_get_default_timeout(const SSL *s);

# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define SSL_library_init() OPENSSL_init_ssl(0, NULL)
# endif

__owur char *SSL_CIPHER_description(const SSL_CIPHER *, char *buf, int size);
__owur STACK_OF(X509_NAME) *SSL_dup_CA_list(const STACK_OF(X509_NAME) *sk);

__owur SSL *SSL_dup(SSL *ssl);

__owur X509 *SSL_get_certificate(const SSL *ssl);
/*
* EVP_PKEY
*/
struct evp_pkey_st *SSL_get_privatekey(const SSL *ssl);

__owur X509 *SSL_CTX_get0_certificate(const SSL_CTX *ctx);
__owur EVP_PKEY *SSL_CTX_get0_privatekey(const SSL_CTX *ctx);

void SSL_CTX_set_quiet_shutdown(SSL_CTX
 *ctx, int mode);
__owur int SSL_CTX_get_quiet_shutdown(const SSL_CTX *ctx);
void SSL_set_quiet_shutdown(SSL *ssl, int mode);
__owur int SSL_get_quiet_shutdown(const SSL *ssl);
void SSL_set_shutdown(SSL *ssl, int mode);
__owur int SSL_get_shutdown(const SSL *ssl);
```

```
__owur int SSL_version(const SSL *ssl);
__owur int SSL_client_version(const SSL *s);
__owur int SSL_CTX_set_default_verify_paths(SSL_CTX *ctx);
__owur int SSL_CTX_set_default_verify_dir(SSL_CTX *ctx);
__owur int SSL_CTX_set_default_verify_file(SSL_CTX *ctx);
__owur int SSL_CTX_set_default_verify_store(SSL_CTX *ctx);
__owur int SSL_CTX_load_verify_file(SSL_CTX *ctx, const char *CAfile);
__owur int SSL_CTX_load_verify_dir(SSL_CTX *ctx, const char *CApath);
__owur int SSL_CTX_load_verify_store(SSL_CTX *ctx, const char *CAstore);
__owur int SSL_CTX_load_verify_locations(SSL_CTX *ctx,
                                         const char *CAfile,
                                         const
 char *CApath);
# define SSL_get0_session SSL_get_session/* just peek at pointer */
__owur SSL_SESSION *SSL_get_session(const SSL *ssl);
__owur SSL_SESSION *SSL_get1_session(SSL *ssl); /* obtain a reference count */
__owur SSL_CTX *SSL_get_SSL_CTX(const SSL *ssl);
SSL_CTX *SSL_set_SSL_CTX(SSL *ssl, SSL_CTX *ctx);
void SSL_set_info_callback(SSL *ssl,
                           void (*cb) (const SSL *ssl, int type, int val));
void (*SSL_get_info_callback(const SSL *ssl)) (const SSL *ssl, int type,
                                               int val);
__owur OSSL_HANDSHAKE_STATE SSL_get_state(const SSL *ssl);

void SSL_set_verify_result(SSL *ssl, long v);
__owur long SSL_get_verify_result(const SSL *ssl);
__owur STACK_OF(X509) *SSL_get0_verified_chain(const SSL *s);

__owur size_t SSL_get_client_random(const SSL *ssl, unsigned char *out,
                                    size_t outlen);
__owur size_t SSL_get_server_random(const SSL *ssl, unsigned char *out,

            size_t outlen);
__owur size_t SSL_SESSION_get_master_key(const SSL_SESSION *sess,
                                         unsigned char *out, size_t outlen);
__owur int SSL_SESSION_set1_master_key(SSL_SESSION *sess,
                                       const unsigned char *in, size_t len);
uint8_t SSL_SESSION_get_max_fragment_length(const SSL_SESSION *sess);

#define SSL_get_ex_new_index(l, p, newf, dupf, freef) \
   CRYPTO_get_ex_new_index(CRYPTO_EX_INDEX_SSL, l, p, newf, dupf, freef)
__owur int SSL_set_ex_data(SSL *ssl, int idx, void *data);
void *SSL_get_ex_data(const SSL *ssl, int idx);
#define SSL_SESSION_get_ex_new_index(l, p, newf, dupf, freef) \
   CRYPTO_get_ex_new_index(CRYPTO_EX_INDEX_SSL_SESSION, l, p, newf, dupf, freef)
__owur int SSL_SESSION_set_ex_data(SSL_SESSION *ss, int idx, void *data);
void *SSL_SESSION_get_ex_data(const SSL_SESSION *ss, int idx);
#define SSL_CTX_get_ex_new_index(l, p, newf, dupf, freef) \
```

```
   CRYPTO_get_ex_new_index(CRYPTO_EX_INDEX_SSL_CTX,
 l, p, newf, dupf, freef)
__owur int SSL_CTX_set_ex_data(SSL_CTX *ssl, int idx, void *data);
void *SSL_CTX_get_ex_data(const SSL_CTX *ssl, int idx);

__owur int SSL_get_ex_data_X509_STORE_CTX_idx(void);

# define SSL_CTX_sess_set_cache_size(ctx,t) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_SESS_CACHE_SIZE,t,NULL)
# define SSL_CTX_sess_get_cache_size(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_GET_SESS_CACHE_SIZE,0,NULL)
# define SSL_CTX_set_session_cache_mode(ctx,m) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_SESS_CACHE_MODE,m,NULL)
# define SSL_CTX_get_session_cache_mode(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_GET_SESS_CACHE_MODE,0,NULL)

# define SSL_CTX_get_default_read_ahead(ctx) SSL_CTX_get_read_ahead(ctx)
# define SSL_CTX_set_default_read_ahead(ctx,m) SSL_CTX_set_read_ahead(ctx,m)
# define SSL_CTX_get_read_ahead(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_GET_READ_AHEAD,0,NULL)
# define SSL_CTX_set_read_ahead(ctx,m) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_READ_AHEAD,m,NULL)
# define
 SSL_CTX_get_max_cert_list(ctx) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_GET_MAX_CERT_LIST,0,NULL)
# define SSL_CTX_set_max_cert_list(ctx,m) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_MAX_CERT_LIST,m,NULL)
# define SSL_get_max_cert_list(ssl) \
      SSL_ctrl(ssl,SSL_CTRL_GET_MAX_CERT_LIST,0,NULL)
# define SSL_set_max_cert_list(ssl,m) \
      SSL_ctrl(ssl,SSL_CTRL_SET_MAX_CERT_LIST,m,NULL)

# define SSL_CTX_set_max_send_fragment(ctx,m) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_MAX_SEND_FRAGMENT,m,NULL)
# define SSL_set_max_send_fragment(ssl,m) \
      SSL_ctrl(ssl,SSL_CTRL_SET_MAX_SEND_FRAGMENT,m,NULL)
# define SSL_CTX_set_split_send_fragment(ctx,m) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_SPLIT_SEND_FRAGMENT,m,NULL)
# define SSL_set_split_send_fragment(ssl,m) \
      SSL_ctrl(ssl,SSL_CTRL_SET_SPLIT_SEND_FRAGMENT,m,NULL)
# define SSL_CTX_set_max_pipelines(ctx,m) \
      SSL_CTX_ctrl(ctx,SSL_CTRL_SET_MAX_PIPELINES,m,NULL)
# define SSL_set_max_pipelines(ssl,m) \
      SSL_ctrl(ssl,SSL_CTRL_SET_MAX_PIPELINES,m,NULL)
#
 define SSL_set_retry_verify(ssl) \
      (SSL_ctrl(ssl,SSL_CTRL_SET_RETRY_VERIFY,0,NULL) > 0)
```

```
void SSL_CTX_set_default_read_buffer_len(SSL_CTX *ctx, size_t len);
void SSL_set_default_read_buffer_len(SSL *s, size_t len);

# ifndef OPENSSL_NO_DH
#  ifndef OPENSSL_NO_DEPRECATED_3_0
/* NB: the |keylength| is only applicable when is_export is true */
OSSL_DEPRECATEDIN_3_0
void SSL_CTX_set_tmp_dh_callback(SSL_CTX *ctx,
                                 DH *(*dh) (SSL *ssl, int is_export,
                                           int keylength));
OSSL_DEPRECATEDIN_3_0
void SSL_set_tmp_dh_callback(SSL *ssl,
                             DH *(*dh) (SSL *ssl, int is_export,
                                        int keylength));
#  endif
# endif

__owur const COMP_METHOD *SSL_get_current_compression(const SSL *s);
__owur const COMP_METHOD *SSL_get_current_expansion(const SSL *s);
__owur const char *SSL_COMP_get_name(const COMP_METHOD *comp);
__owur const char *SSL_COMP_get0_name(const
 SSL_COMP *comp);
__owur int SSL_COMP_get_id(const SSL_COMP *comp);
STACK_OF(SSL_COMP) *SSL_COMP_get_compression_methods(void);
__owur STACK_OF(SSL_COMP) *SSL_COMP_set0_compression_methods(STACK_OF(SSL_COMP)
                                                             *meths);
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define SSL_COMP_free_compression_methods() while(0) continue
# endif
__owur int SSL_COMP_add_compression_method(int id, COMP_METHOD *cm);

const SSL_CIPHER *SSL_CIPHER_find(SSL *ssl, const unsigned char *ptr);
int SSL_CIPHER_get_cipher_nid(const SSL_CIPHER *c);
int SSL_CIPHER_get_digest_nid(const SSL_CIPHER *c);
int SSL_bytes_to_cipher_list(SSL *s, const unsigned char *bytes, size_t len,
                             int isv2format, STACK_OF(SSL_CIPHER) **sk,
                             STACK_OF(SSL_CIPHER) **scsvs);

/* TLS extensions functions */
__owur int SSL_set_session_ticket_ext(SSL *s, void *ext_data, int ext_len);

__owur int SSL_set_session_ticket_ext_cb(SSL
 *s,
                                         tls_session_ticket_ext_cb_fn cb,
                                         void *arg);

/* Pre-shared secret session resumption functions */
__owur int SSL_set_session_secret_cb(SSL *s,
```

```
                                tls_session_secret_cb_fn session_secret_cb,
                                void *arg);

void SSL_CTX_set_not_resumable_session_callback(SSL_CTX *ctx,
                                        int (*cb) (SSL *ssl,
                                                   int
                                                   is_forward_secure));

void SSL_set_not_resumable_session_callback(SSL *ssl,
                                      int (*cb) (SSL *ssl,
                                                 int is_forward_secure));

void SSL_CTX_set_record_padding_callback(SSL_CTX *ctx,
                                     size_t (*cb) (SSL *ssl, int type,

                                      size_t len, void *arg));
void SSL_CTX_set_record_padding_callback_arg(SSL_CTX *ctx, void *arg);
void *SSL_CTX_get_record_padding_callback_arg(const SSL_CTX *ctx);
int SSL_CTX_set_block_padding(SSL_CTX *ctx, size_t block_size);

int SSL_set_record_padding_callback(SSL *ssl,
                                size_t (*cb) (SSL *ssl, int type,
                                              size_t len, void *arg));
void SSL_set_record_padding_callback_arg(SSL *ssl, void *arg);
void *SSL_get_record_padding_callback_arg(const SSL *ssl);
int SSL_set_block_padding(SSL *ssl, size_t block_size);

int SSL_set_num_tickets(SSL *s, size_t num_tickets);
size_t SSL_get_num_tickets(const SSL *s);
int SSL_CTX_set_num_tickets(SSL_CTX *ctx, size_t num_tickets);
size_t SSL_CTX_get_num_tickets(const SSL_CTX *ctx);

# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define SSL_cache_hit(s) SSL_session_reused(s)
# endif

__owur int SSL_session_reused(const SSL *s);
__owur int
 SSL_is_server(const SSL *s);

__owur __owur SSL_CONF_CTX *SSL_CONF_CTX_new(void);
int SSL_CONF_CTX_finish(SSL_CONF_CTX *cctx);
void SSL_CONF_CTX_free(SSL_CONF_CTX *cctx);
unsigned int SSL_CONF_CTX_set_flags(SSL_CONF_CTX *cctx, unsigned int flags);
__owur unsigned int SSL_CONF_CTX_clear_flags(SSL_CONF_CTX *cctx,
                                     unsigned int flags);
__owur int SSL_CONF_CTX_set1_prefix(SSL_CONF_CTX *cctx, const char *pre);
```

```
void SSL_CONF_CTX_set_ssl(SSL_CONF_CTX *cctx, SSL *ssl);
void SSL_CONF_CTX_set_ssl_ctx(SSL_CONF_CTX *cctx, SSL_CTX *ctx);

__owur int SSL_CONF_cmd(SSL_CONF_CTX *cctx, const char *cmd, const char *value);
__owur int SSL_CONF_cmd_argv(SSL_CONF_CTX *cctx, int *pargc, char ***pargv);
__owur int SSL_CONF_cmd_value_type(SSL_CONF_CTX *cctx, const char *cmd);

void SSL_add_ssl_module(void);
int SSL_config(SSL *s, const char *name);
int SSL_CTX_config(SSL_CTX *ctx, const char *name);

# ifndef OPENSSL_NO_SSL_TRACE
void SSL_trace(int write_p, int version,
 int content_type,
            const void *buf, size_t len, SSL *ssl, void *arg);
# endif

# ifndef OPENSSL_NO_SOCK
int DTLSv1_listen(SSL *s, BIO_ADDR *client);
# endif

# ifndef OPENSSL_NO_CT

/*
* A callback for verifying that the received SCTs are sufficient.
* Expected to return 1 if they are sufficient, otherwise 0.
* May return a negative integer if an error occurs.
* A connection should be aborted if the SCTs are deemed insufficient.
*/
typedef int (*ssl_ct_validation_cb)(const CT_POLICY_EVAL_CTX *ctx,
                            const STACK_OF(SCT) *scts, void *arg);

/*
* Sets a |callback| that is invoked upon receipt of ServerHelloDone to validate
* the received SCTs.
* If the callback returns a non-positive result, the connection is terminated.
* Call this function before beginning a handshake.
* If a NULL |callback| is provided, SCT validation is disabled.
* |arg| is arbitrary userdata that will be passed to the callback whenever it
* is invoked.
 Ownership of |arg| remains with the caller.
*
* NOTE: A side-effect of setting a CT callback is that an OCSP stapled response
*       will be requested.
*/
int SSL_set_ct_validation_callback(SSL *s, ssl_ct_validation_cb callback,
                            void *arg);
int SSL_CTX_set_ct_validation_callback(SSL_CTX *ctx,
```

```
                                ssl_ct_validation_cb callback,
                                void *arg);
#define SSL_disable_ct(s) \
      ((void) SSL_set_validation_callback((s), NULL, NULL))
#define SSL_CTX_disable_ct(ctx) \
      ((void) SSL_CTX_set_validation_callback((ctx), NULL, NULL))

/*
* The validation type enumerates the available behaviours of the built-in SSL
* CT validation callback selected via SSL_enable_ct() and SSL_CTX_enable_ct().
* The underlying callback is a static function in libssl.
*/
enum {
   SSL_CT_VALIDATION_PERMISSIVE = 0,
   SSL_CT_VALIDATION_STRICT
};

/*
* Enable CT by setting up a callback that implements
 one of the built-in
* validation variants.  The SSL_CT_VALIDATION_PERMISSIVE variant always
* continues the handshake, the application can make appropriate decisions at
* handshake completion.  The SSL_CT_VALIDATION_STRICT variant requires at
* least one valid SCT, or else handshake termination will be requested.  The
* handshake may continue anyway if SSL_VERIFY_NONE is in effect.
*/
int SSL_enable_ct(SSL *s, int validation_mode);
int SSL_CTX_enable_ct(SSL_CTX *ctx, int validation_mode);

/*
* Report whether a non-NULL callback is enabled.
*/
int SSL_ct_is_enabled(const SSL *s);
int SSL_CTX_ct_is_enabled(const SSL_CTX *ctx);

/* Gets the SCTs received from a connection */
const STACK_OF(SCT) *SSL_get0_peer_scts(SSL *s);

/*
* Loads the CT log list from the default location.
* If a CTLOG_STORE has previously been set using SSL_CTX_set_ctlog_store,
* the log information loaded from this file will be appended to the
* CTLOG_STORE.
* Returns 1 on success, 0 otherwise.
 */
int SSL_CTX_set_default_ctlog_list_file(SSL_CTX *ctx);

/*
```

```
* Loads the CT log list from the specified file path.
* If a CTLOG_STORE has previously been set using SSL_CTX_set_ctlog_store,
* the log information loaded from this file will be appended to the
* CTLOG_STORE.
* Returns 1 on success, 0 otherwise.
*/
int SSL_CTX_set_ctlog_list_file(SSL_CTX *ctx, const char *path);

/*
* Sets the CT log list used by all SSL connections created from this SSL_CTX.
* Ownership of the CTLOG_STORE is transferred to the SSL_CTX.
*/
void SSL_CTX_set0_ctlog_store(SSL_CTX *ctx, CTLOG_STORE *logs);

/*
* Gets the CT log list used by all SSL connections created from this SSL_CTX.
* This will be NULL unless one of the following functions has been called:
* - SSL_CTX_set_default_ctlog_list_file
* - SSL_CTX_set_ctlog_list_file
* - SSL_CTX_set_ctlog_store
*/
const CTLOG_STORE *SSL_CTX_get0_ctlog_store(const SSL_CTX *ctx);

# endif /* OPENSSL_NO_CT */

/* What the "other" parameter contains
 in security callback */
/* Mask for type */
# define SSL_SECOP_OTHER_TYPE    0xffff0000
# define SSL_SECOP_OTHER_NONE    0
# define SSL_SECOP_OTHER_CIPHER  (1 << 16)
# define SSL_SECOP_OTHER_CURVE   (2 << 16)
# define SSL_SECOP_OTHER_DH      (3 << 16)
# define SSL_SECOP_OTHER_PKEY    (4 << 16)
# define SSL_SECOP_OTHER_SIGALG  (5 << 16)
# define SSL_SECOP_OTHER_CERT    (6 << 16)

/* Indicated operation refers to peer key or certificate */
# define SSL_SECOP_PEER          0x1000

/* Values for "op" parameter in security callback */

/* Called to filter ciphers */
/* Ciphers client supports */
# define SSL_SECOP_CIPHER_SUPPORTED      (1 | SSL_SECOP_OTHER_CIPHER)
/* Cipher shared by client/server */
# define SSL_SECOP_CIPHER_SHARED         (2 | SSL_SECOP_OTHER_CIPHER)
/* Sanity check of cipher server selects */
```

```
# define SSL_SECOP_CIPHER_CHECK          (3 | SSL_SECOP_OTHER_CIPHER)
/* Curves supported by client */
# define SSL_SECOP_CURVE_SUPPORTED       (4 | SSL_SECOP_OTHER_CURVE)
/* Curves
 shared by client/server */
# define SSL_SECOP_CURVE_SHARED          (5 | SSL_SECOP_OTHER_CURVE)
/* Sanity check of curve server selects */
# define SSL_SECOP_CURVE_CHECK           (6 | SSL_SECOP_OTHER_CURVE)
/* Temporary DH key */
# define SSL_SECOP_TMP_DH                (7 | SSL_SECOP_OTHER_PKEY)
/* SSL/TLS version */
# define SSL_SECOP_VERSION               (9 | SSL_SECOP_OTHER_NONE)
/* Session tickets */
# define SSL_SECOP_TICKET                (10 | SSL_SECOP_OTHER_NONE)
/* Supported signature algorithms sent to peer */
# define SSL_SECOP_SIGALG_SUPPORTED      (11 | SSL_SECOP_OTHER_SIGALG)
/* Shared signature algorithm */
# define SSL_SECOP_SIGALG_SHARED         (12 | SSL_SECOP_OTHER_SIGALG)
/* Sanity check signature algorithm allowed */
# define SSL_SECOP_SIGALG_CHECK          (13 | SSL_SECOP_OTHER_SIGALG)
/* Used to get mask of supported public key signature algorithms */
# define SSL_SECOP_SIGALG_MASK           (14 | SSL_SECOP_OTHER_SIGALG)
/* Use to see if compression is allowed
 */
# define SSL_SECOP_COMPRESSION           (15 | SSL_SECOP_OTHER_NONE)
/* EE key in certificate */
# define SSL_SECOP_EE_KEY                (16 | SSL_SECOP_OTHER_CERT)
/* CA key in certificate */
# define SSL_SECOP_CA_KEY                (17 | SSL_SECOP_OTHER_CERT)
/* CA digest algorithm in certificate */
# define SSL_SECOP_CA_MD                 (18 | SSL_SECOP_OTHER_CERT)
/* Peer EE key in certificate */
# define SSL_SECOP_PEER_EE_KEY           (SSL_SECOP_EE_KEY | SSL_SECOP_PEER)
/* Peer CA key in certificate */
# define SSL_SECOP_PEER_CA_KEY           (SSL_SECOP_CA_KEY | SSL_SECOP_PEER)
/* Peer CA digest algorithm in certificate */
# define SSL_SECOP_PEER_CA_MD            (SSL_SECOP_CA_MD | SSL_SECOP_PEER)

void SSL_set_security_level(SSL *s, int level);
__owur int SSL_get_security_level(const SSL *s);
void SSL_set_security_callback(SSL *s,
                               int (*cb) (const SSL *s, const SSL_CTX *ctx,
                                          int op, int bits, int nid,
                                          void *other, void *ex));
int (*SSL_get_security_callback(const SSL *s)) (const SSL *s,
                                                const SSL_CTX *ctx, int op,
                                                int bits, int nid, void *other,
                                                void *ex);
```

```
void SSL_set0_security_ex_data(SSL *s, void *ex);
__owur void *SSL_get0_security_ex_data(const SSL *s);

void SSL_CTX_set_security_level(SSL_CTX *ctx, int level);
__owur int SSL_CTX_get_security_level(const SSL_CTX *ctx);
void SSL_CTX_set_security_callback(SSL_CTX *ctx,
                                   int (*cb) (const SSL *s, const SSL_CTX *ctx,
                                              int op, int bits, int nid,
                                              void *other, void *ex));
int (*SSL_CTX_get_security_callback(const SSL_CTX *ctx)) (const SSL *s,
                                                          const SSL_CTX *ctx,

                                                         int op, int bits,
                                                          int nid,
                                                          void *other,
                                                          void *ex);
void SSL_CTX_set0_security_ex_data(SSL_CTX *ctx, void *ex);
__owur void *SSL_CTX_get0_security_ex_data(const SSL_CTX *ctx);

/* OPENSSL_INIT flag 0x010000 reserved for internal use */
# define OPENSSL_INIT_NO_LOAD_SSL_STRINGS    0x00100000L
# define OPENSSL_INIT_LOAD_SSL_STRINGS       0x00200000L

# define OPENSSL_INIT_SSL_DEFAULT \
      (OPENSSL_INIT_LOAD_SSL_STRINGS | OPENSSL_INIT_LOAD_CRYPTO_STRINGS)

int OPENSSL_init_ssl(uint64_t opts, const OPENSSL_INIT_SETTINGS *settings);

# ifndef OPENSSL_NO_UNIT_TEST
__owur const struct openssl_ssl_test_functions *SSL_test_functions(void);
# endif

__owur int SSL_free_buffers(SSL *ssl);
__owur int SSL_alloc_buffers(SSL *ssl);

/* Status codes passed to the decrypt session
 ticket callback. Some of these
* are for internal use only and are never passed to the callback. */
typedef int SSL_TICKET_STATUS;

/* Support for ticket appdata */
/* fatal error, malloc failure */
# define SSL_TICKET_FATAL_ERR_MALLOC 0
/* fatal error, either from parsing or decrypting the ticket */
# define SSL_TICKET_FATAL_ERR_OTHER  1
/* No ticket present */
# define SSL_TICKET_NONE             2
/* Empty ticket present */
```

```
# define SSL_TICKET_EMPTY            3
/* the ticket couldn't be decrypted */
# define SSL_TICKET_NO_DECRYPT       4
/* a ticket was successfully decrypted */
# define SSL_TICKET_SUCCESS          5
/* same as above but the ticket needs to be renewed */
# define SSL_TICKET_SUCCESS_RENEW    6

/* Return codes for the decrypt session ticket callback */
typedef int SSL_TICKET_RETURN;

/* An error occurred */
#define SSL_TICKET_RETURN_ABORT            0
/* Do not use the ticket, do not send a renewed ticket to the client */
#define SSL_TICKET_RETURN_IGNORE
     1
/* Do not use the ticket, send a renewed ticket to the client */
#define SSL_TICKET_RETURN_IGNORE_RENEW      2
/* Use the ticket, do not send a renewed ticket to the client */
#define SSL_TICKET_RETURN_USE              3
/* Use the ticket, send a renewed ticket to the client */
#define SSL_TICKET_RETURN_USE_RENEW        4

typedef int (*SSL_CTX_generate_session_ticket_fn)(SSL *s, void *arg);
typedef SSL_TICKET_RETURN (*SSL_CTX_decrypt_session_ticket_fn)(SSL *s, SSL_SESSION *ss,
                                          const unsigned char *keyname,
                                          size_t keyname_length,
                                          SSL_TICKET_STATUS status,
                                          void *arg);
int SSL_CTX_set_session_ticket_cb(SSL_CTX *ctx,
                          SSL_CTX_generate_session_ticket_fn gen_cb,
                          SSL_CTX_decrypt_session_ticket_fn
 dec_cb,
                          void *arg);
int SSL_SESSION_set1_ticket_appdata(SSL_SESSION *ss, const void *data, size_t len);
int SSL_SESSION_get0_ticket_appdata(SSL_SESSION *ss, void **data, size_t *len);

typedef unsigned int (*DTLS_timer_cb)(SSL *s, unsigned int timer_us);

void DTLS_set_timer_cb(SSL *s, DTLS_timer_cb cb);


typedef int (*SSL_allow_early_data_cb_fn)(SSL *s, void *arg);
void SSL_CTX_set_allow_early_data_cb(SSL_CTX *ctx,
                            SSL_allow_early_data_cb_fn cb,
                            void *arg);
void SSL_set_allow_early_data_cb(SSL *s,
                         SSL_allow_early_data_cb_fn cb,
```

```
                        void *arg);

/* store the default cipher strings inside the library */
const char *OSSL_default_cipher_list(void);
const char *OSSL_default_ciphersuites(void);

# ifdef  __cplusplus
}
# endif
#endif
```

Protected File

Example of a protected file to be used in the PolicyDenyFs module

(The MIT License)

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```
{
 'variables': {
   'openssl_defines_BSD-x86_64': [
     'NDEBUG',
     'L_ENDIAN',
     'OPENSSL_BUILDING_OPENSSL',
     'AES_ASM',
     'BSAES_ASM',
     'CMLL_ASM',
     'ECP_NISTZ256_ASM',
     'GHASH_ASM',
     'KECCAK1600_ASM',
     'MD5_ASM',
     'OPENSSL_BN_ASM_GF2m',
     'OPENSSL_BN_ASM_MONT',
     'OPENSSL_BN_ASM_MONT5',
     'OPENSSL_CPUID_OBJ',
     'OPENSSL_IA32_SSE2',
     'PADLOCK_ASM',
     'POLY1305_ASM',
     'RC4_ASM',
     'SHA1_ASM',
     'SHA256_ASM',
     'SHA512_ASM',
     'VPAES_ASM',
     'WHIRLPOOL_ASM',
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'openssl/providers/implementations/kdfs/x942kdf.c',
'openssl/providers/implementations/kem/rsa_kem.c',
'openssl/providers/implementations/keymgmt/dh_kmgmt.c',
'openssl/providers/implementations/keymgmt/dsa_kmgmt.c',
'openssl/providers/implementations/keymgmt/ec_kmgmt.c',
'openssl/providers/implementations/keymgmt/ecx_kmgmt.c',
'openssl/providers/implementations/keymgmt/kdf_legacy_kmgmt.c',
'openssl/providers/implementations/keymgmt/mac_legacy_kmgmt.c',
'openssl/providers/implementations/keymgmt/rsa_kmgmt.c',
'openssl/providers/implementations/macs/blake2b_mac.c',
'openssl/providers/implementations/macs/blake2s_mac.c',
'openssl/providers/implementations/macs/cmac_prov.c',
'openssl/providers/implementations/macs/gmac_prov.c',
'openssl/providers/implementations/macs/hmac_prov.c',
'openssl/providers/implementations/macs/kmac_prov.c',
'openssl/providers/implementations/macs/poly1305_prov.c',
'openssl/providers/implementations/macs/siphash_prov.c',
'openssl/providers/implementations/rands/crngt.c',
'openssl/providers/implementations/rands/drbg.c',
'openssl/providers/implementations/rands/drbg_ctr.c',
'openssl/providers/implementations/rands/drbg_hash.c',
'openssl/providers/implementations/rands/drbg_hmac.c',
'openssl/providers/implementations/rands/seed_src.c',
'openssl/providers/implementations/rands/test_rng.c',
'openssl/providers/implementations/rands/seeding/rand_cpu_x86.c',
'openssl/providers/implementations/rands/seeding/rand_tsc.c',
'openssl/providers/implementations/rands/seeding/rand_unix.c',
'openssl/providers/implementations/rands/seeding/rand_win.c',
'openssl/providers/implementations/signature/dsa_sig.c',
'openssl/providers/implementations/signature/ecdsa_sig.c',
'openssl/providers/implementations/signature/eddsa_sig.c',
'openssl/providers/implementations/signature/mac_legacy_sig.c',
'openssl/providers/implementations/signature/rsa_sig.c',

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  'openssl/providers/implementations/signature/sm2_sig.c',
  'openssl/providers/implementations/storemgmt/file_store.c',
  'openssl/providers/implementations/storemgmt/file_store_any2obj.c',
  'openssl/ssl/s3_cbc.c',
  'openssl/providers/common/der/der_dsa_key.c',
  'openssl/providers/common/der/der_dsa_sig.c',
  'openssl/providers/common/der/der_ec_key.c',
  'openssl/providers/common/der/der_ec_sig.c',
  'openssl/providers/common/der/der_ecx_key.c',
  'openssl/providers/common/der/der_rsa_key.c',
  'openssl/providers/common/provider_ctx.c',
  'openssl/providers/common/provider_err.c',
  'openssl/providers/implementations/ciphers/ciphercommon.c',
  'openssl/providers/implementations/ciphers/ciphercommon_block.c',
   'openssl/providers/implementations/ciphers/ciphercommon_ccm.c',
  'openssl/providers/implementations/ciphers/ciphercommon_ccm_hw.c',
  'openssl/providers/implementations/ciphers/ciphercommon_gcm.c',
  'openssl/providers/implementations/ciphers/ciphercommon_gcm_hw.c',
  'openssl/providers/implementations/ciphers/ciphercommon_hw.c',
  'openssl/providers/implementations/digests/digestcommon.c',
  'openssl/ssl/record/tls_pad.c',
  'openssl/providers/implementations/ciphers/cipher_blowfish.c',
  'openssl/providers/implementations/ciphers/cipher_blowfish_hw.c',
  'openssl/providers/implementations/ciphers/cipher_cast5.c',
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  'openssl/providers/implementations/ciphers/cipher_des_hw.c',
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  'openssl/providers/implementations/digests/mdc2_prov.c',
  'openssl/providers/implementations/digests/ripemd_prov.c',
  'openssl/providers/implementations/digests/wp_prov.c',
   'openssl/providers/implementations/kdfs/pbkdf1.c',
  'openssl/providers/prov_running.c',
  'openssl/providers/legacyprov.c',
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  './config/archs/BSD-x86_64/asm/crypto/aes/aesni-sha1-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/aes/aesni-sha256-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/aes/aesni-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/aes/bsaes-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/aes/vpaes-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/bn/rsaz-avx2.s',
  './config/archs/BSD-x86_64/asm/crypto/bn/rsaz-avx512.s',
  './config/archs/BSD-x86_64/asm/crypto/bn/rsaz-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/bn/x86_64-gf2m.s',
  './config/archs/BSD-x86_64/asm/crypto/bn/x86_64-mont.s',
  './config/archs/BSD-x86_64/asm/crypto/bn/x86_64-mont5.s',
   './config/archs/BSD-x86_64/asm/crypto/camellia/cmll-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/chacha/chacha-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/ec/ecp_nistz256-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/ec/x25519-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/x86_64cpuid.s',
  './config/archs/BSD-x86_64/asm/crypto/md5/md5-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/modes/aesni-gcm-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/modes/ghash-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/poly1305/poly1305-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/rc4/rc4-md5-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/rc4/rc4-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/sha/keccak1600-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/sha/sha1-mb-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/sha/sha1-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/sha/sha256-mb-x86_64.s',
   './config/archs/BSD-x86_64/asm/crypto/sha/sha256-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/sha/sha512-x86_64.s',
  './config/archs/BSD-x86_64/asm/crypto/whrlpool/wp-x86_64.s',
  './config/archs/BSD-x86_64/asm/engines/e_padlock-x86_64.s',
  './config/archs/BSD-x86_64/asm/providers/common/der/der_sm2_gen.c',
  './config/archs/BSD-x86_64/asm/providers/common/der/der_digests_gen.c',
  './config/archs/BSD-x86_64/asm/providers/common/der/der_dsa_gen.c',
  './config/archs/BSD-x86_64/asm/providers/common/der/der_ec_gen.c',
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  './config/archs/BSD-x86_64/asm/providers/common/der/der_wrap_gen.c',
  './config/archs/BSD-x86_64/asm/providers/legacy.ld',
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'openssl_defines_BSD-x86_64': [

  'NDEBUG',
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    'AES_ASM',
    'BSAES_ASM',
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    'GHASH_ASM',
    'KECCAK1600_ASM',
    'MD5_ASM',
    'OPENSSL_BN_ASM_GF2m',
    'OPENSSL_BN_ASM_MONT',
    'OPENSSL_BN_ASM_MONT5',
    'OPENSSL_CPUID_OBJ',
    'OPENSSL_IA32_SSE2',
    'PADLOCK_ASM',
    'POLY1305_ASM',
    'RC4_ASM',
    'SHA1_ASM',
    'SHA256_ASM',
    'SHA512_ASM',
    'VPAES_ASM',
    'WHIRLPOOL_ASM',
    'X25519_ASM',
    'OPENSSL_PIC',
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  'openssl_cflags_BSD-x86_64': [
    '-Wa,--noexecstack',
    '-Wall -O3',
    '-pthread',
    '-Wall -O3',
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  'openssl_ex_libs_BSD-x86_64': [
    '-pthread',
  ],
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  './include',
  './crypto',
  './crypto/include/internal',
  './providers/common/include',
],
'defines': ['<@(openssl_defines_BSD-x86_64)'],
'cflags' : ['<@(openssl_cflags_BSD-x86_64)'],
'libraries': ['<@(openssl_ex_libs_BSD-x86_64)'],
 'sources': ['<@(openssl_sources)', '<@(openssl_sources_BSD-x86_64)'],
'direct_dependent_settings': {
  'include_dirs': ['./include', '.'],
  'defines': ['<@(openssl_defines_BSD-x86_64)'],
},
```

}
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#

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JSON parsing library (nlohmann/json)

File: vendor/json/upstream/single_include/nlohmann/json.hpp (only for ICU4C)

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File: aclocal.m4 (only for ICU4C)
Section: pkg.m4 - Macros to locate and utilise pkg-config.

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```
#ifndef SRC_PERMISSION_FS_PERMISSION_H_
#define SRC_PERMISSION_FS_PERMISSION_H_

#if defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS

#include "v8.h"

#include <unordered_map>
#include "permission/permission_base.h"
#include "util.h"

namespace node {

namespace permission {

class FSPermission final : public PermissionBase {
public:
 void Apply(Environment* env,
            const std::vector<std::string>& allow,
            PermissionScope scope) override;
 bool is_granted(Environment* env,
                 PermissionScope perm,
                 const std::string_view& param) const override;

 struct RadixTree {
   struct Node {
     std::string prefix;
     std::unordered_map<char, Node*> children;
     Node* wildcard_child;
     bool is_leaf;

     explicit Node(const std::string& pre)
```

```
      : prefix(pre), wildcard_child(nullptr), is_leaf(false) {}

  Node() : wildcard_child(nullptr), is_leaf(false) {}

  Node* CreateChild(const std::string& path_prefix)
{
    if (path_prefix.empty() && !is_leaf) {
      is_leaf = true;
      return this;
    }

    CHECK(!path_prefix.empty());
    char label = path_prefix[0];

    Node* child = children[label];
    if (child == nullptr) {
      children[label] = new Node(path_prefix);
      return children[label];
    }

    // swap prefix
    size_t i = 0;
    size_t prefix_len = path_prefix.length();
    for (; i < child->prefix.length(); ++i) {
      if (i > prefix_len || path_prefix[i] != child->prefix[i]) {
        std::string parent_prefix = child->prefix.substr(0, i);
        std::string child_prefix = child->prefix.substr(i);

        child->prefix = child_prefix;
        Node* split_child = new Node(parent_prefix);
        split_child->children[child_prefix[0]] = child;
        children[parent_prefix[0]] = split_child;

        return split_child->CreateChild(path_prefix.substr(i));
      }

  }
    child->is_leaf = true;
    return child->CreateChild(path_prefix.substr(i));
  }

  Node* CreateWildcardChild() {
    if (wildcard_child != nullptr) {
      return wildcard_child;
    }
    wildcard_child = new Node();
    return wildcard_child;
  }
```

```
  Node* NextNode(const std::string& path, size_t idx) const {
    if (idx >= path.length()) {
      return nullptr;
    }

    // wildcard node takes precedence
    if (children.size() > 1) {
      auto it = children.find('*');
      if (it != children.end()) {
        return it->second;
      }
    }

    auto it = children.find(path[idx]);
    if (it == children.end()) {
      return nullptr;
    }
    auto child = it->second;
    // match prefix
    size_t prefix_len = child->prefix.length();
    for (size_t i = 0; i < path.length(); ++i) {
      if (i >= prefix_len || child->prefix[i] == '*') {
        return
child;
      }

      // Handle optional trailing
      // path = /home/subdirectory
      // child = subdirectory/*
      if (idx >= path.length() &&
          child->prefix[i] == node::kPathSeparator) {
        continue;
      }

      if (path[idx++] != child->prefix[i]) {
        return nullptr;
      }
    }
    return child;
  }

  // A node can be a *end* node and have children
  // E.g: */slower*, */slown* are inserted:
  // /slow
  // ---> er
  // ---> n
  // If */slow* is inserted right after, it will create an
```

```
    // empty node
    // /slow
    // ---> '\000' ASCII (0) || \0
    // ---> er
    // ---> n
    bool IsEndNode() const {
      if (children.empty()) {
        return true;
      }
      return is_leaf;
    }
  };

  RadixTree();
  ~RadixTree();
  void Insert(const std::string& s);
  bool Lookup(const std::string_view& s) const { return Lookup(s, false);
 }
  bool Lookup(const std::string_view& s, bool when_empty_return) const;

  private:
  Node* root_node_;
 };

private:
 void GrantAccess(PermissionScope scope, const std::string& param);
 // fs granted on startup
 RadixTree granted_in_fs_;
 RadixTree granted_out_fs_;

 bool deny_all_in_ = true;
 bool deny_all_out_ = true;

 bool allow_all_in_ = false;
 bool allow_all_out_ = false;
};

}  // namespace permission

}  // namespace node

#endif  // defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS
#endif  // SRC_PERMISSION_FS_PERMISSION_H_
```

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*/

#define PLATFORM "platform: BSD-x86_64"
#define DATE "built on: Wed Mar  5 20:59:54 2025 UTC"

/*
* Generate compiler_flags as an array of individual characters. This is a
* workaround for the situation where CFLAGS gets too long for a C90 string
* literal
*/
static const char compiler_flags[] = {
```

```
  'c','o','m','p','i','l','e','r',':',' ','.','.','/','c','o','n',
  'f','i','g','/','f','a','k','e','_','g','c','c','.','p','l',' ',
  '-','f','P','I','C',' ','-','p','t','h','r','e','a','d',' ','-',
  'W','a','.','-','-','n','o','e','x','e','c','s','t','a','c','k',
  ' ','-','W','a','l','l','
 ','-','O','3',' ','-','D','L','_','E',
  'N','D','I','A','N',' ','-','D','O','P','E','N','S','S','L','_',
  'P','I','C',' ','-','D','_','T','H','R','E','A','D','_','S','A',
  'F','E',' ','-','D','_','R','E','E','N','T','R','A','N','T',' ',
  '-','D','O','P','E','N','S','S','L','_','B','U','I','L','D','I',
  'N','G','_','O','P','E','N','S','S','L',' ','-','D','N','D','E',
  'B','U','G','\0'
};
```

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*/

#define PLATFORM "platform: BSD-x86_64"
#define DATE "built on: Wed Mar  5 21:00:10 2025 UTC"

/*
* Generate compiler_flags as an array of individual characters. This is a
* workaround for the situation where CFLAGS gets too long for a C90 string
* literal
*/
static const char compiler_flags[] = {
   'c','o','m','p','i','l','e','r',':',' ','c','c',' ','-','f','P',
   'I','C',' ','-','p','t','h','r','e','a','d',' ','-','W','a','l',
   'l',' ','-','O','3',' ','-','D','L','_','E','N','D','I','A','N',
   ' ','-','D','O','P','E','N','S','S','L','_','P','I','C',' ','-',
   'D','_','T','H','R','E','A','D','_','S','A','F','E','
 ','-','D',
   '_','R','E','E','N','T','R','A','N','T',' ','-','D','O','P','E',
   'N','S','S','L','_','B','U','I','L','D','I','N','G','_','O','P',
   'E','N','S','S','L',' ','-','D','N','D','E','B','U','G','\0'
};
```

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```
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*/



#ifndef  OPENSSL_CONF_H
# define OPENSSL_CONF_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_CONF_H
# endif

# include <openssl/bio.h>
# include <openssl/lhash.h>
# include <openssl/safestack.h>
# include <openssl/e_os2.h>
# include <openssl/types.h>
# include <openssl/conferr.h>

#ifdef  __cplusplus
```

```
extern "C" {
#endif

typedef struct {
   char *section;
   char *name;
   char *value;
} CONF_VALUE;

SKM_DEFINE_STACK_OF_INTERNAL(CONF_VALUE, CONF_VALUE, CONF_VALUE)
#define sk_CONF_VALUE_num(sk) OPENSSL_sk_num(ossl_check_const_CONF_VALUE_sk_type(sk))
#define
 sk_CONF_VALUE_value(sk, idx) ((CONF_VALUE
*)OPENSSL_sk_value(ossl_check_const_CONF_VALUE_sk_type(sk), (idx)))
#define sk_CONF_VALUE_new(cmp) ((STACK_OF(CONF_VALUE)
*)OPENSSL_sk_new(ossl_check_CONF_VALUE_compfunc_type(cmp)))
#define sk_CONF_VALUE_new_null() ((STACK_OF(CONF_VALUE) *)OPENSSL_sk_new_null())
#define sk_CONF_VALUE_new_reserve(cmp, n) ((STACK_OF(CONF_VALUE)
*)OPENSSL_sk_new_reserve(ossl_check_CONF_VALUE_compfunc_type(cmp), (n)))
#define sk_CONF_VALUE_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_CONF_VALUE_sk_type(sk), (n))
#define sk_CONF_VALUE_free(sk) OPENSSL_sk_free(ossl_check_CONF_VALUE_sk_type(sk))
#define sk_CONF_VALUE_zero(sk) OPENSSL_sk_zero(ossl_check_CONF_VALUE_sk_type(sk))
#define sk_CONF_VALUE_delete(sk, i) ((CONF_VALUE
*)OPENSSL_sk_delete(ossl_check_CONF_VALUE_sk_type(sk), (i)))
#define sk_CONF_VALUE_delete_ptr(sk, ptr) ((CONF_VALUE
*)OPENSSL_sk_delete_ptr(ossl_check_CONF_VALUE_sk_type(sk), ossl_check_CONF_VALUE_type(ptr)))
#define
 sk_CONF_VALUE_push(sk, ptr) OPENSSL_sk_push(ossl_check_CONF_VALUE_sk_type(sk),
ossl_check_CONF_VALUE_type(ptr))
#define sk_CONF_VALUE_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_CONF_VALUE_sk_type(sk),
ossl_check_CONF_VALUE_type(ptr))
#define sk_CONF_VALUE_pop(sk) ((CONF_VALUE
*)OPENSSL_sk_pop(ossl_check_CONF_VALUE_sk_type(sk)))
#define sk_CONF_VALUE_shift(sk) ((CONF_VALUE
*)OPENSSL_sk_shift(ossl_check_CONF_VALUE_sk_type(sk)))
#define sk_CONF_VALUE_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_CONF_VALUE_sk_type(sk),ossl_check_CONF_VALUE_freefunc_type(freef
unc))
#define sk_CONF_VALUE_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_CONF_VALUE_sk_type(sk),
ossl_check_CONF_VALUE_type(ptr), (idx))
#define sk_CONF_VALUE_set(sk, idx, ptr) ((CONF_VALUE
*)OPENSSL_sk_set(ossl_check_CONF_VALUE_sk_type(sk), (idx), ossl_check_CONF_VALUE_type(ptr)))
#define sk_CONF_VALUE_find(sk, ptr) OPENSSL_sk_find(ossl_check_CONF_VALUE_sk_type(sk),
ossl_check_CONF_VALUE_type(ptr))
#define sk_CONF_VALUE_find_ex(sk,
 ptr) OPENSSL_sk_find_ex(ossl_check_CONF_VALUE_sk_type(sk), ossl_check_CONF_VALUE_type(ptr))
#define sk_CONF_VALUE_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_CONF_VALUE_sk_type(sk), ossl_check_CONF_VALUE_type(ptr), pnum)
```

```
#define sk_CONF_VALUE_sort(sk) OPENSSL_sk_sort(ossl_check_CONF_VALUE_sk_type(sk))
#define sk_CONF_VALUE_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_CONF_VALUE_sk_type(sk))
#define sk_CONF_VALUE_dup(sk) ((STACK_OF(CONF_VALUE)
*)OPENSSL_sk_dup(ossl_check_const_CONF_VALUE_sk_type(sk)))
#define sk_CONF_VALUE_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(CONF_VALUE)
*)OPENSSL_sk_deep_copy(ossl_check_const_CONF_VALUE_sk_type(sk),
ossl_check_CONF_VALUE_copyfunc_type(copyfunc), ossl_check_CONF_VALUE_freefunc_type(freefunc)))
#define sk_CONF_VALUE_set_cmp_func(sk, cmp)
((sk_CONF_VALUE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_CONF_VALUE_sk_type(sk),
ossl_check_CONF_VALUE_compfunc_type(cmp)))
DEFINE_LHASH_OF_INTERNAL(CONF_VALUE);
#define
 lh_CONF_VALUE_new(hfn, cmp) ((LHASH_OF(CONF_VALUE)
*)OPENSSL_LH_new(ossl_check_CONF_VALUE_lh_hashfunc_type(hfn),
ossl_check_CONF_VALUE_lh_compfunc_type(cmp)))
#define lh_CONF_VALUE_free(lh) OPENSSL_LH_free(ossl_check_CONF_VALUE_lh_type(lh))
#define lh_CONF_VALUE_flush(lh) OPENSSL_LH_flush(ossl_check_CONF_VALUE_lh_type(lh))
#define lh_CONF_VALUE_insert(lh, ptr) ((CONF_VALUE
*)OPENSSL_LH_insert(ossl_check_CONF_VALUE_lh_type(lh),
ossl_check_CONF_VALUE_lh_plain_type(ptr)))
#define lh_CONF_VALUE_delete(lh, ptr) ((CONF_VALUE
*)OPENSSL_LH_delete(ossl_check_CONF_VALUE_lh_type(lh),
ossl_check_const_CONF_VALUE_lh_plain_type(ptr)))
#define lh_CONF_VALUE_retrieve(lh, ptr) ((CONF_VALUE
*)OPENSSL_LH_retrieve(ossl_check_CONF_VALUE_lh_type(lh),
ossl_check_const_CONF_VALUE_lh_plain_type(ptr)))
#define lh_CONF_VALUE_error(lh) OPENSSL_LH_error(ossl_check_CONF_VALUE_lh_type(lh))
#define lh_CONF_VALUE_num_items(lh) OPENSSL_LH_num_items(ossl_check_CONF_VALUE_lh_type(lh))
#define lh_CONF_VALUE_node_stats_bio(lh,
 out) OPENSSL_LH_node_stats_bio(ossl_check_const_CONF_VALUE_lh_type(lh), out)
#define lh_CONF_VALUE_node_usage_stats_bio(lh, out)
OPENSSL_LH_node_usage_stats_bio(ossl_check_const_CONF_VALUE_lh_type(lh), out)
#define lh_CONF_VALUE_stats_bio(lh, out)
OPENSSL_LH_stats_bio(ossl_check_const_CONF_VALUE_lh_type(lh), out)
#define lh_CONF_VALUE_get_down_load(lh)
OPENSSL_LH_get_down_load(ossl_check_CONF_VALUE_lh_type(lh))
#define lh_CONF_VALUE_set_down_load(lh, dl)
OPENSSL_LH_set_down_load(ossl_check_CONF_VALUE_lh_type(lh), dl)
#define lh_CONF_VALUE_doall(lh, dfn) OPENSSL_LH_doall(ossl_check_CONF_VALUE_lh_type(lh),
ossl_check_CONF_VALUE_lh_doallfunc_type(dfn))


struct conf_st;
struct conf_method_st;
typedef struct conf_method_st CONF_METHOD;

# ifndef OPENSSL_NO_DEPRECATED_3_0
```

```
#  include <openssl/conftypes.h>
# endif

/* Module definitions */
typedef struct conf_imodule_st CONF_IMODULE;
typedef struct conf_module_st CONF_MODULE;

STACK_OF(CONF_MODULE);
STACK_OF(CONF_IMODULE);

/* DSO module
 function typedefs */
typedef int conf_init_func (CONF_IMODULE *md, const CONF *cnf);
typedef void conf_finish_func (CONF_IMODULE *md);

# define CONF_MFLAGS_IGNORE_ERRORS       0x1
# define CONF_MFLAGS_IGNORE_RETURN_CODES 0x2
# define CONF_MFLAGS_SILENT              0x4
# define CONF_MFLAGS_NO_DSO              0x8
# define CONF_MFLAGS_IGNORE_MISSING_FILE 0x10
# define CONF_MFLAGS_DEFAULT_SECTION     0x20

int CONF_set_default_method(CONF_METHOD *meth);
void CONF_set_nconf(CONF *conf, LHASH_OF(CONF_VALUE) *hash);
LHASH_OF(CONF_VALUE) *CONF_load(LHASH_OF(CONF_VALUE) *conf, const char *file,
                        long *eline);
# ifndef OPENSSL_NO_STDIO
LHASH_OF(CONF_VALUE) *CONF_load_fp(LHASH_OF(CONF_VALUE) *conf, FILE *fp,
                          long *eline);
# endif
LHASH_OF(CONF_VALUE) *CONF_load_bio(LHASH_OF(CONF_VALUE) *conf, BIO *bp,
                           long *eline);
STACK_OF(CONF_VALUE) *CONF_get_section(LHASH_OF(CONF_VALUE) *conf,

                          const char *section);
char *CONF_get_string(LHASH_OF(CONF_VALUE) *conf, const char *group,
                  const char *name);
long CONF_get_number(LHASH_OF(CONF_VALUE) *conf, const char *group,
                 const char *name);
void CONF_free(LHASH_OF(CONF_VALUE) *conf);
#ifndef OPENSSL_NO_STDIO
int CONF_dump_fp(LHASH_OF(CONF_VALUE) *conf, FILE *out);
#endif
int CONF_dump_bio(LHASH_OF(CONF_VALUE) *conf, BIO *out);
#ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 void OPENSSL_config(const char *config_name);
#endif
```

```
#ifndef OPENSSL_NO_DEPRECATED_1_1_0
# define OPENSSL_no_config() \
   OPENSSL_init_crypto(OPENSSL_INIT_NO_LOAD_CONFIG, NULL)
#endif

/*
* New conf code.  The semantics are different from the functions above. If
* that wasn't the case, the above functions would have been replaced
*/

CONF *NCONF_new_ex(OSSL_LIB_CTX *libctx, CONF_METHOD *meth);
OSSL_LIB_CTX *NCONF_get0_libctx(const CONF *conf);
CONF *NCONF_new(CONF_METHOD
 *meth);
CONF_METHOD *NCONF_default(void);
#ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 CONF_METHOD *NCONF_WIN32(void);
#endif
void NCONF_free(CONF *conf);
void NCONF_free_data(CONF *conf);

int NCONF_load(CONF *conf, const char *file, long *eline);
# ifndef OPENSSL_NO_STDIO
int NCONF_load_fp(CONF *conf, FILE *fp, long *eline);
# endif
int NCONF_load_bio(CONF *conf, BIO *bp, long *eline);
STACK_OF(OPENSSL_CSTRING) *NCONF_get_section_names(const CONF *conf);
STACK_OF(CONF_VALUE) *NCONF_get_section(const CONF *conf,
                                        const char *section);
char *NCONF_get_string(const CONF *conf, const char *group, const char *name);
int NCONF_get_number_e(const CONF *conf, const char *group, const char *name,
                       long *result);
#ifndef OPENSSL_NO_STDIO
int NCONF_dump_fp(const CONF *conf, FILE *out);
#endif
int NCONF_dump_bio(const CONF *conf, BIO *out);

#define NCONF_get_number(c,g,n,r) NCONF_get_number_e(c,g,n,r)

/* Module functions
 */

int CONF_modules_load(const CONF *cnf, const char *appname,
                      unsigned long flags);
int CONF_modules_load_file_ex(OSSL_LIB_CTX *libctx, const char *filename,
                              const char *appname, unsigned long flags);
int CONF_modules_load_file(const char *filename, const char *appname,
                           unsigned long flags);
```

```
void CONF_modules_unload(int all);
void CONF_modules_finish(void);
#ifndef OPENSSL_NO_DEPRECATED_1_1_0
# define CONF_modules_free() while(0) continue
#endif
int CONF_module_add(const char *name, conf_init_func *ifunc,
                    conf_finish_func *ffunc);

const char *CONF_imodule_get_name(const CONF_IMODULE *md);
const char *CONF_imodule_get_value(const CONF_IMODULE *md);
void *CONF_imodule_get_usr_data(const CONF_IMODULE *md);
void CONF_imodule_set_usr_data(CONF_IMODULE *md, void *usr_data);
CONF_MODULE *CONF_imodule_get_module(const CONF_IMODULE *md);
unsigned long CONF_imodule_get_flags(const CONF_IMODULE
 *md);
void CONF_imodule_set_flags(CONF_IMODULE *md, unsigned long flags);
void *CONF_module_get_usr_data(CONF_MODULE *pmod);
void CONF_module_set_usr_data(CONF_MODULE *pmod, void *usr_data);

char *CONF_get1_default_config_file(void);

int CONF_parse_list(const char *list, int sep, int nospc,
                    int (*list_cb) (const char *elem, int len, void *usr),
                    void *arg);

void OPENSSL_load_builtin_modules(void);


# ifdef  __cplusplus
}
# endif
#endif
```

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JSON parsing library (nlohmann/json)

File: vendor/json/upstream/single_include/nlohmann/json.hpp (only for ICU4C)

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File: aclocal.m4 (only for ICU4C)
Section: pkg.m4 - Macros to locate and utilise pkg-config.

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```
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/safestack.h.in
*
* Copyright 1999-2021 The OpenSSL Project Authors. All Rights Reserved.
*
* Licensed under the Apache License 2.0 (the "License").  You may not use
* this file except in compliance with the License.  You can obtain a copy
* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_SAFESTACK_H
# define OPENSSL_SAFESTACK_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_SAFESTACK_H
# endif

# include <openssl/stack.h>
# include <openssl/e_os2.h>

#ifdef __cplusplus
extern "C" {
#endif

# define STACK_OF(type) struct stack_st_##type

/* Helper macro for internal use */
# define SKM_DEFINE_STACK_OF_INTERNAL(t1, t2, t3) \
   STACK_OF(t1); \
   typedef int (*sk_##t1##_compfunc)(const t3 * const *a, const t3 *const *b); \
   typedef void (*sk_##t1##_freefunc)(t3 *a); \
   typedef t3
 * (*sk_##t1##_copyfunc)(const t3 *a); \
   static ossl_unused ossl_inline t2 *ossl_check_##t1##_type(t2 *ptr) \
   { \
       return ptr; \
   } \
   static ossl_unused ossl_inline const OPENSSL_STACK *ossl_check_const_##t1##_sk_type(const
STACK_OF(t1) *sk) \
   { \
       return (const OPENSSL_STACK *)sk; \
   } \
```

```
  static ossl_unused ossl_inline OPENSSL_STACK *ossl_check_##t1##_sk_type(STACK_OF(t1) *sk) \
  { \
      return (OPENSSL_STACK *)sk; \
  } \
  static ossl_unused ossl_inline OPENSSL_sk_compfunc ossl_check_##t1##_compfunc_type(sk_##t1##_compfunc
cmp) \
  { \
      return (OPENSSL_sk_compfunc)cmp; \
  } \
  static ossl_unused ossl_inline OPENSSL_sk_copyfunc ossl_check_##t1##_copyfunc_type(sk_##t1##_copyfunc
cpy) \
  { \
      return (OPENSSL_sk_copyfunc)cpy; \
  } \
  static ossl_unused ossl_inline OPENSSL_sk_freefunc ossl_check_##t1##_freefunc_type(sk_##t1##_freefunc fr) \
  { \
      return (OPENSSL_sk_freefunc)fr; \
  }

# define SKM_DEFINE_STACK_OF(t1,
 t2, t3) \
  STACK_OF(t1); \
  typedef int (*sk_##t1##_compfunc)(const t3 * const *a, const t3 *const *b); \
  typedef void (*sk_##t1##_freefunc)(t3 *a); \
  typedef t3 * (*sk_##t1##_copyfunc)(const t3 *a); \
  static ossl_unused ossl_inline int sk_##t1##_num(const STACK_OF(t1) *sk) \
  { \
      return OPENSSL_sk_num((const OPENSSL_STACK *)sk); \
  } \
  static ossl_unused ossl_inline t2 *sk_##t1##_value(const STACK_OF(t1) *sk, int idx) \
  { \
      return (t2 *)OPENSSL_sk_value((const OPENSSL_STACK *)sk, idx); \
  } \
  static ossl_unused ossl_inline STACK_OF(t1) *sk_##t1##_new(sk_##t1##_compfunc compare) \
  { \
      return (STACK_OF(t1) *)OPENSSL_sk_new((OPENSSL_sk_compfunc)compare); \
  } \
  static ossl_unused ossl_inline STACK_OF(t1) *sk_##t1##_new_null(void) \
  { \
      return (STACK_OF(t1) *)OPENSSL_sk_new_null(); \
  } \
  static ossl_unused ossl_inline STACK_OF(t1) *sk_##t1##_new_reserve(sk_##t1##_compfunc compare,
 int n) \
  { \
      return (STACK_OF(t1) *)OPENSSL_sk_new_reserve((OPENSSL_sk_compfunc)compare, n); \
  } \
  static ossl_unused ossl_inline int sk_##t1##_reserve(STACK_OF(t1) *sk, int n) \
  { \
```

```
    return OPENSSL_sk_reserve((OPENSSL_STACK *)sk, n); \
  } \
  static ossl_unused ossl_inline void sk_##t1##_free(STACK_OF(t1) *sk) \
  { \
    OPENSSL_sk_free((OPENSSL_STACK *)sk); \
  } \
  static ossl_unused ossl_inline void sk_##t1##_zero(STACK_OF(t1) *sk) \
  { \
    OPENSSL_sk_zero((OPENSSL_STACK *)sk); \
  } \
  static ossl_unused ossl_inline t2 *sk_##t1##_delete(STACK_OF(t1) *sk, int i) \
  { \
    return (t2 *)OPENSSL_sk_delete((OPENSSL_STACK *)sk, i); \
  } \
  static ossl_unused ossl_inline t2 *sk_##t1##_delete_ptr(STACK_OF(t1) *sk, t2 *ptr) \
  { \
    return (t2 *)OPENSSL_sk_delete_ptr((OPENSSL_STACK *)sk, \
                                       (const void *)ptr); \
  } \
  static ossl_unused ossl_inline int
sk_##t1##_push(STACK_OF(t1) *sk, t2 *ptr) \
  { \
    return OPENSSL_sk_push((OPENSSL_STACK *)sk, (const void *)ptr); \
  } \
  static ossl_unused ossl_inline int sk_##t1##_unshift(STACK_OF(t1) *sk, t2 *ptr) \
  { \
    return OPENSSL_sk_unshift((OPENSSL_STACK *)sk, (const void *)ptr); \
  } \
  static ossl_unused ossl_inline t2 *sk_##t1##_pop(STACK_OF(t1) *sk) \
  { \
    return (t2 *)OPENSSL_sk_pop((OPENSSL_STACK *)sk); \
  } \
  static ossl_unused ossl_inline t2 *sk_##t1##_shift(STACK_OF(t1) *sk) \
  { \
    return (t2 *)OPENSSL_sk_shift((OPENSSL_STACK *)sk); \
  } \
  static ossl_unused ossl_inline void sk_##t1##_pop_free(STACK_OF(t1) *sk, sk_##t1##_freefunc freefunc) \
  { \
    OPENSSL_sk_pop_free((OPENSSL_STACK *)sk, (OPENSSL_sk_freefunc)freefunc); \
  } \
  static ossl_unused ossl_inline int sk_##t1##_insert(STACK_OF(t1) *sk, t2 *ptr, int idx) \
  { \
    return OPENSSL_sk_insert((OPENSSL_STACK *)sk, (const void *)ptr, idx);
\
  } \
  static ossl_unused ossl_inline t2 *sk_##t1##_set(STACK_OF(t1) *sk, int idx, t2 *ptr) \
  { \
    return (t2 *)OPENSSL_sk_set((OPENSSL_STACK *)sk, idx, (const void *)ptr); \
```

```
  } \
  static ossl_unused ossl_inline int sk_##t1##_find(STACK_OF(t1) *sk, t2 *ptr) \
  { \
     return OPENSSL_sk_find((OPENSSL_STACK *)sk, (const void *)ptr); \
  } \
  static ossl_unused ossl_inline int sk_##t1##_find_ex(STACK_OF(t1) *sk, t2 *ptr) \
  { \
     return OPENSSL_sk_find_ex((OPENSSL_STACK *)sk, (const void *)ptr); \
  } \
  static ossl_unused ossl_inline int sk_##t1##_find_all(STACK_OF(t1) *sk, t2 *ptr, int *pnum) \
  { \
     return OPENSSL_sk_find_all((OPENSSL_STACK *)sk, (const void *)ptr, pnum); \
  } \
  static ossl_unused ossl_inline void sk_##t1##_sort(STACK_OF(t1) *sk) \
  { \
     OPENSSL_sk_sort((OPENSSL_STACK *)sk); \
  } \
  static ossl_unused ossl_inline int sk_##t1##_is_sorted(const STACK_OF(t1) *sk) \
  { \
     return
 OPENSSL_sk_is_sorted((const OPENSSL_STACK *)sk); \
  } \
  static ossl_unused ossl_inline STACK_OF(t1) * sk_##t1##_dup(const STACK_OF(t1) *sk) \
  { \
     return (STACK_OF(t1) *)OPENSSL_sk_dup((const OPENSSL_STACK *)sk); \
  } \
  static ossl_unused ossl_inline STACK_OF(t1) *sk_##t1##_deep_copy(const STACK_OF(t1) *sk, \
                                 sk_##t1##_copyfunc copyfunc, \
                                 sk_##t1##_freefunc freefunc) \
  { \
     return (STACK_OF(t1) *)OPENSSL_sk_deep_copy((const OPENSSL_STACK *)sk, \
                              (OPENSSL_sk_copyfunc)copyfunc, \
                              (OPENSSL_sk_freefunc)freefunc); \
  } \
  static ossl_unused ossl_inline sk_##t1##_compfunc sk_##t1##_set_cmp_func(STACK_OF(t1) *sk,
sk_##t1##_compfunc compare) \
  { \
     return (sk_##t1##_compfunc)OPENSSL_sk_set_cmp_func((OPENSSL_STACK *)sk,
(OPENSSL_sk_compfunc)compare); \
   }

# define DEFINE_STACK_OF(t) SKM_DEFINE_STACK_OF(t, t, t)
# define DEFINE_STACK_OF_CONST(t) SKM_DEFINE_STACK_OF(t, const t, t)
# define DEFINE_SPECIAL_STACK_OF(t1, t2) SKM_DEFINE_STACK_OF(t1, t2, t2)
# define DEFINE_SPECIAL_STACK_OF_CONST(t1, t2) \
        SKM_DEFINE_STACK_OF(t1, const t2, t2)

/*-
```

```
* Strings are special: normally an lhash entry will point to a single
* (somewhat) mutable object. In the case of strings:
*
* a) Instead of a single char, there is an array of chars, NUL-terminated.
* b) The string may have be immutable.
*
* So, they need their own declarations. Especially important for
* type-checking tools, such as Deputy.
*
* In practice, however, it appears to be hard to have a const
* string. For now, I'm settling for dealing with the fact it is a
* string at all.
*/
typedef char *OPENSSL_STRING;
typedef const char *OPENSSL_CSTRING;

/*-
* Confusingly, LHASH_OF(STRING) deals with char ** throughout, but
* STACK_OF(STRING) is really more like STACK_OF(char),
 only, as mentioned
* above, instead of a single char each entry is a NUL-terminated array of
* chars. So, we have to implement STRING specially for STACK_OF. This is
* dealt with in the autogenerated macros below.
*/
SKM_DEFINE_STACK_OF_INTERNAL(OPENSSL_STRING, char, char)
#define sk_OPENSSL_STRING_num(sk)
OPENSSL_sk_num(ossl_check_const_OPENSSL_STRING_sk_type(sk))
#define sk_OPENSSL_STRING_value(sk, idx) ((char
*)OPENSSL_sk_value(ossl_check_const_OPENSSL_STRING_sk_type(sk), (idx)))
#define sk_OPENSSL_STRING_new(cmp) ((STACK_OF(OPENSSL_STRING)
*)OPENSSL_sk_new(ossl_check_OPENSSL_STRING_compfunc_type(cmp)))
#define sk_OPENSSL_STRING_new_null() ((STACK_OF(OPENSSL_STRING) *)OPENSSL_sk_new_null())
#define sk_OPENSSL_STRING_new_reserve(cmp, n) ((STACK_OF(OPENSSL_STRING)
*)OPENSSL_sk_new_reserve(ossl_check_OPENSSL_STRING_compfunc_type(cmp), (n)))
#define sk_OPENSSL_STRING_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_OPENSSL_STRING_sk_type(sk), (n))
#define sk_OPENSSL_STRING_free(sk)
 OPENSSL_sk_free(ossl_check_OPENSSL_STRING_sk_type(sk))
#define sk_OPENSSL_STRING_zero(sk) OPENSSL_sk_zero(ossl_check_OPENSSL_STRING_sk_type(sk))
#define sk_OPENSSL_STRING_delete(sk, i) ((char
*)OPENSSL_sk_delete(ossl_check_OPENSSL_STRING_sk_type(sk), (i)))
#define sk_OPENSSL_STRING_delete_ptr(sk, ptr) ((char
*)OPENSSL_sk_delete_ptr(ossl_check_OPENSSL_STRING_sk_type(sk),
ossl_check_OPENSSL_STRING_type(ptr)))
#define sk_OPENSSL_STRING_push(sk, ptr) OPENSSL_sk_push(ossl_check_OPENSSL_STRING_sk_type(sk),
ossl_check_OPENSSL_STRING_type(ptr))
#define sk_OPENSSL_STRING_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_OPENSSL_STRING_sk_type(sk), ossl_check_OPENSSL_STRING_type(ptr))
```

```
#define sk_OPENSSL_STRING_pop(sk) ((char
*)OPENSSL_sk_pop(ossl_check_OPENSSL_STRING_sk_type(sk)))
#define sk_OPENSSL_STRING_shift(sk) ((char
*)OPENSSL_sk_shift(ossl_check_OPENSSL_STRING_sk_type(sk)))
#define sk_OPENSSL_STRING_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OPENSSL_STRING_sk_type(sk),ossl_check_OPENSSL_STRING_freefunc_
type(freefunc))
#define
 sk_OPENSSL_STRING_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_OPENSSL_STRING_sk_type(sk),
ossl_check_OPENSSL_STRING_type(ptr), (idx))
#define sk_OPENSSL_STRING_set(sk, idx, ptr) ((char
*)OPENSSL_sk_set(ossl_check_OPENSSL_STRING_sk_type(sk), (idx),
ossl_check_OPENSSL_STRING_type(ptr)))
#define sk_OPENSSL_STRING_find(sk, ptr) OPENSSL_sk_find(ossl_check_OPENSSL_STRING_sk_type(sk),
ossl_check_OPENSSL_STRING_type(ptr))
#define sk_OPENSSL_STRING_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OPENSSL_STRING_sk_type(sk), ossl_check_OPENSSL_STRING_type(ptr))
#define sk_OPENSSL_STRING_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OPENSSL_STRING_sk_type(sk), ossl_check_OPENSSL_STRING_type(ptr),
pnum)
#define sk_OPENSSL_STRING_sort(sk) OPENSSL_sk_sort(ossl_check_OPENSSL_STRING_sk_type(sk))
#define sk_OPENSSL_STRING_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OPENSSL_STRING_sk_type(sk))
#define sk_OPENSSL_STRING_dup(sk)
 ((STACK_OF(OPENSSL_STRING) *)OPENSSL_sk_dup(ossl_check_const_OPENSSL_STRING_sk_type(sk)))
#define sk_OPENSSL_STRING_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(OPENSSL_STRING)
*)OPENSSL_sk_deep_copy(ossl_check_const_OPENSSL_STRING_sk_type(sk),
ossl_check_OPENSSL_STRING_copyfunc_type(copyfunc),
ossl_check_OPENSSL_STRING_freefunc_type(freefunc)))
#define sk_OPENSSL_STRING_set_cmp_func(sk, cmp)
((sk_OPENSSL_STRING_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OPENSSL_STRING_sk_type(sk),
ossl_check_OPENSSL_STRING_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(OPENSSL_CSTRING, const char, char)
#define sk_OPENSSL_CSTRING_num(sk)
OPENSSL_sk_num(ossl_check_const_OPENSSL_CSTRING_sk_type(sk))
#define sk_OPENSSL_CSTRING_value(sk, idx) ((const char
*)OPENSSL_sk_value(ossl_check_const_OPENSSL_CSTRING_sk_type(sk), (idx)))
#define sk_OPENSSL_CSTRING_new(cmp) ((STACK_OF(OPENSSL_CSTRING)
*)OPENSSL_sk_new(ossl_check_OPENSSL_CSTRING_compfunc_type(cmp)))
#define sk_OPENSSL_CSTRING_new_null() ((STACK_OF(OPENSSL_CSTRING)
 *)OPENSSL_sk_new_null())
#define sk_OPENSSL_CSTRING_new_reserve(cmp, n) ((STACK_OF(OPENSSL_CSTRING)
*)OPENSSL_sk_new_reserve(ossl_check_OPENSSL_CSTRING_compfunc_type(cmp), (n)))
#define sk_OPENSSL_CSTRING_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_OPENSSL_CSTRING_sk_type(sk), (n))
#define sk_OPENSSL_CSTRING_free(sk) OPENSSL_sk_free(ossl_check_OPENSSL_CSTRING_sk_type(sk))
#define sk_OPENSSL_CSTRING_zero(sk) OPENSSL_sk_zero(ossl_check_OPENSSL_CSTRING_sk_type(sk))
#define sk_OPENSSL_CSTRING_delete(sk, i) ((const char
```

```
*)OPENSSL_sk_delete(ossl_check_OPENSSL_CSTRING_sk_type(sk), (i)))
#define sk_OPENSSL_CSTRING_delete_ptr(sk, ptr) ((const char
*)OPENSSL_sk_delete_ptr(ossl_check_OPENSSL_CSTRING_sk_type(sk),
ossl_check_OPENSSL_CSTRING_type(ptr)))
#define sk_OPENSSL_CSTRING_push(sk, ptr)
OPENSSL_sk_push(ossl_check_OPENSSL_CSTRING_sk_type(sk), ossl_check_OPENSSL_CSTRING_type(ptr))
#define sk_OPENSSL_CSTRING_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_OPENSSL_CSTRING_sk_type(sk),
 ossl_check_OPENSSL_CSTRING_type(ptr))
#define sk_OPENSSL_CSTRING_pop(sk) ((const char
*)OPENSSL_sk_pop(ossl_check_OPENSSL_CSTRING_sk_type(sk)))
#define sk_OPENSSL_CSTRING_shift(sk) ((const char
*)OPENSSL_sk_shift(ossl_check_OPENSSL_CSTRING_sk_type(sk)))
#define sk_OPENSSL_CSTRING_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OPENSSL_CSTRING_sk_type(sk),ossl_check_OPENSSL_CSTRING_freefu
nc_type(freefunc))
#define sk_OPENSSL_CSTRING_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_OPENSSL_CSTRING_sk_type(sk), ossl_check_OPENSSL_CSTRING_type(ptr),
(idx))
#define sk_OPENSSL_CSTRING_set(sk, idx, ptr) ((const char
*)OPENSSL_sk_set(ossl_check_OPENSSL_CSTRING_sk_type(sk), (idx),
ossl_check_OPENSSL_CSTRING_type(ptr)))
#define sk_OPENSSL_CSTRING_find(sk, ptr)
OPENSSL_sk_find(ossl_check_OPENSSL_CSTRING_sk_type(sk), ossl_check_OPENSSL_CSTRING_type(ptr))
#define sk_OPENSSL_CSTRING_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OPENSSL_CSTRING_sk_type(sk),
ossl_check_OPENSSL_CSTRING_type(ptr))
#define
 sk_OPENSSL_CSTRING_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OPENSSL_CSTRING_sk_type(sk),
ossl_check_OPENSSL_CSTRING_type(ptr), pnum)
#define sk_OPENSSL_CSTRING_sort(sk) OPENSSL_sk_sort(ossl_check_OPENSSL_CSTRING_sk_type(sk))
#define sk_OPENSSL_CSTRING_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OPENSSL_CSTRING_sk_type(sk))
#define sk_OPENSSL_CSTRING_dup(sk) ((STACK_OF(OPENSSL_CSTRING)
*)OPENSSL_sk_dup(ossl_check_const_OPENSSL_CSTRING_sk_type(sk)))
#define sk_OPENSSL_CSTRING_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(OPENSSL_CSTRING)
*)OPENSSL_sk_deep_copy(ossl_check_const_OPENSSL_CSTRING_sk_type(sk),
ossl_check_OPENSSL_CSTRING_copyfunc_type(copyfunc),
ossl_check_OPENSSL_CSTRING_freefunc_type(freefunc)))
#define sk_OPENSSL_CSTRING_set_cmp_func(sk, cmp)
((sk_OPENSSL_CSTRING_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OPENSSL_CSTRING_sk_type(s
k), ossl_check_OPENSSL_CSTRING_compfunc_type(cmp)))


#if !defined(OPENSSL_NO_DEPRECATED_3_0)
/*
* This
```

```
 is not used by OpenSSL.  A block of bytes,  NOT nul-terminated.
* These should also be distinguished from "normal" stacks.
*/
typedef void *OPENSSL_BLOCK;
SKM_DEFINE_STACK_OF_INTERNAL(OPENSSL_BLOCK, void, void)
#define sk_OPENSSL_BLOCK_num(sk) OPENSSL_sk_num(ossl_check_const_OPENSSL_BLOCK_sk_type(sk))
#define sk_OPENSSL_BLOCK_value(sk, idx) ((void
*)OPENSSL_sk_value(ossl_check_const_OPENSSL_BLOCK_sk_type(sk), (idx)))
#define sk_OPENSSL_BLOCK_new(cmp) ((STACK_OF(OPENSSL_BLOCK)
*)OPENSSL_sk_new(ossl_check_OPENSSL_BLOCK_compfunc_type(cmp)))
#define sk_OPENSSL_BLOCK_new_null() ((STACK_OF(OPENSSL_BLOCK) *)OPENSSL_sk_new_null())
#define sk_OPENSSL_BLOCK_new_reserve(cmp, n) ((STACK_OF(OPENSSL_BLOCK)
*)OPENSSL_sk_new_reserve(ossl_check_OPENSSL_BLOCK_compfunc_type(cmp), (n)))
#define sk_OPENSSL_BLOCK_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_OPENSSL_BLOCK_sk_type(sk), (n))
#define sk_OPENSSL_BLOCK_free(sk) OPENSSL_sk_free(ossl_check_OPENSSL_BLOCK_sk_type(sk))
#define sk_OPENSSL_BLOCK_zero(sk)
 OPENSSL_sk_zero(ossl_check_OPENSSL_BLOCK_sk_type(sk))
#define sk_OPENSSL_BLOCK_delete(sk, i) ((void
*)OPENSSL_sk_delete(ossl_check_OPENSSL_BLOCK_sk_type(sk), (i)))
#define sk_OPENSSL_BLOCK_delete_ptr(sk, ptr) ((void
*)OPENSSL_sk_delete_ptr(ossl_check_OPENSSL_BLOCK_sk_type(sk),
ossl_check_OPENSSL_BLOCK_type(ptr)))
#define sk_OPENSSL_BLOCK_push(sk, ptr) OPENSSL_sk_push(ossl_check_OPENSSL_BLOCK_sk_type(sk),
ossl_check_OPENSSL_BLOCK_type(ptr))
#define sk_OPENSSL_BLOCK_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_OPENSSL_BLOCK_sk_type(sk), ossl_check_OPENSSL_BLOCK_type(ptr))
#define sk_OPENSSL_BLOCK_pop(sk) ((void
*)OPENSSL_sk_pop(ossl_check_OPENSSL_BLOCK_sk_type(sk)))
#define sk_OPENSSL_BLOCK_shift(sk) ((void
*)OPENSSL_sk_shift(ossl_check_OPENSSL_BLOCK_sk_type(sk)))
#define sk_OPENSSL_BLOCK_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OPENSSL_BLOCK_sk_type(sk),ossl_check_OPENSSL_BLOCK_freefunc_t
ype(freefunc))
#define sk_OPENSSL_BLOCK_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_OPENSSL_BLOCK_sk_type(sk),
 ossl_check_OPENSSL_BLOCK_type(ptr), (idx))
#define sk_OPENSSL_BLOCK_set(sk, idx, ptr) ((void
*)OPENSSL_sk_set(ossl_check_OPENSSL_BLOCK_sk_type(sk), (idx),
ossl_check_OPENSSL_BLOCK_type(ptr)))
#define sk_OPENSSL_BLOCK_find(sk, ptr) OPENSSL_sk_find(ossl_check_OPENSSL_BLOCK_sk_type(sk),
ossl_check_OPENSSL_BLOCK_type(ptr))
#define sk_OPENSSL_BLOCK_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OPENSSL_BLOCK_sk_type(sk), ossl_check_OPENSSL_BLOCK_type(ptr))
#define sk_OPENSSL_BLOCK_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OPENSSL_BLOCK_sk_type(sk), ossl_check_OPENSSL_BLOCK_type(ptr),
pnum)
#define sk_OPENSSL_BLOCK_sort(sk) OPENSSL_sk_sort(ossl_check_OPENSSL_BLOCK_sk_type(sk))
```

```
#define sk_OPENSSL_BLOCK_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OPENSSL_BLOCK_sk_type(sk))
#define sk_OPENSSL_BLOCK_dup(sk) ((STACK_OF(OPENSSL_BLOCK)
*)OPENSSL_sk_dup(ossl_check_const_OPENSSL_BLOCK_sk_type(sk)))
#define sk_OPENSSL_BLOCK_deep_copy(sk, copyfunc,
 freefunc) ((STACK_OF(OPENSSL_BLOCK)
*)OPENSSL_sk_deep_copy(ossl_check_const_OPENSSL_BLOCK_sk_type(sk),
ossl_check_OPENSSL_BLOCK_copyfunc_type(copyfunc),
ossl_check_OPENSSL_BLOCK_freefunc_type(freefunc)))
#define sk_OPENSSL_BLOCK_set_cmp_func(sk, cmp)
((sk_OPENSSL_BLOCK_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OPENSSL_BLOCK_sk_type(sk),
ossl_check_OPENSSL_BLOCK_compfunc_type(cmp)))

#endif

# ifdef  __cplusplus
}
# endif
#endif
```

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```
{
 'variables': {
   'openssl_defines_BSD-x86': [
     'NDEBUG',
     'L_ENDIAN',
     'OPENSSL_BUILDING_OPENSSL',
     'AES_ASM',
     'CMLL_ASM',
     'DES_ASM',
     'ECP_NISTZ256_ASM',
     'GHASH_ASM',
     'MD5_ASM',
     'OPENSSL_BN_ASM_GF2m',
     'OPENSSL_BN_ASM_MONT',
     'OPENSSL_BN_ASM_PART_WORDS',
     'OPENSSL_CPUID_OBJ',
     'OPENSSL_IA32_SSE2',
     'PADLOCK_ASM',
```

```
  'POLY1305_ASM',
  'RC4_ASM',
  'RMD160_ASM',
  'SHA1_ASM',
  'SHA256_ASM',
  'SHA512_ASM',
  'VPAES_ASM',
  'WHIRLPOOL_ASM',
  'OPENSSL_PIC',
],
'openssl_cflags_BSD-x86': [
  '-Wa,--noexecstack',
  '-Wall -O3 -fomit-frame-pointer',
  '-pthread',
  '-Wall -O3 -fomit-frame-pointer',
],
'openssl_ex_libs_BSD-x86': [
  '-pthread',
],
'openssl_cli_srcs_BSD-x86': [
  'openssl/apps/lib/cmp_mock_srv.c',
  'openssl/apps/asn1parse.c',
  'openssl/apps/ca.c',
  'openssl/apps/ciphers.c',
  'openssl/apps/cmp.c',
   'openssl/apps/cms.c',
  'openssl/apps/crl.c',
  'openssl/apps/crl2pkcs7.c',
  'openssl/apps/dgst.c',
  'openssl/apps/dhparam.c',
  'openssl/apps/dsa.c',
  'openssl/apps/dsaparam.c',
  'openssl/apps/ec.c',
  'openssl/apps/ecparam.c',
  'openssl/apps/enc.c',
  'openssl/apps/engine.c',
  'openssl/apps/errstr.c',
  'openssl/apps/fipsinstall.c',
  'openssl/apps/gendsa.c',
  'openssl/apps/genpkey.c',
  'openssl/apps/genrsa.c',
  'openssl/apps/info.c',
  'openssl/apps/kdf.c',
  'openssl/apps/list.c',
  'openssl/apps/mac.c',
  'openssl/apps/nseq.c',
  'openssl/apps/ocsp.c',
  'openssl/apps/openssl.c',
```

```
    'openssl/apps/passwd.c',
    'openssl/apps/pkcs12.c',
    'openssl/apps/pkcs7.c',
    'openssl/apps/pkcs8.c',
    'openssl/apps/pkey.c',
    'openssl/apps/pkeyparam.c',
    'openssl/apps/pkeyutl.c',
    'openssl/apps/prime.c',
    './config/archs/BSD-x86/asm/apps/progs.c',

   'openssl/apps/rand.c',
    'openssl/apps/rehash.c',
    'openssl/apps/req.c',
    'openssl/apps/rsa.c',
    'openssl/apps/rsautl.c',
    'openssl/apps/s_client.c',
    'openssl/apps/s_server.c',
    'openssl/apps/s_time.c',
    'openssl/apps/sess_id.c',
    'openssl/apps/smime.c',
    'openssl/apps/speed.c',
    'openssl/apps/spkac.c',
    'openssl/apps/srp.c',
    'openssl/apps/storeutl.c',
    'openssl/apps/ts.c',
    'openssl/apps/verify.c',
    'openssl/apps/version.c',
    'openssl/apps/x509.c',
    'openssl/apps/lib/app_libctx.c',
    'openssl/apps/lib/app_params.c',
    'openssl/apps/lib/app_provider.c',
    'openssl/apps/lib/app_rand.c',
    'openssl/apps/lib/app_x509.c',
    'openssl/apps/lib/apps.c',
    'openssl/apps/lib/apps_ui.c',
    'openssl/apps/lib/columns.c',
    'openssl/apps/lib/engine.c',
    'openssl/apps/lib/engine_loader.c',
    'openssl/apps/lib/fmt.c',
    'openssl/apps/lib/http_server.c',
    'openssl/apps/lib/names.c',
     'openssl/apps/lib/opt.c',
    'openssl/apps/lib/s_cb.c',
    'openssl/apps/lib/s_socket.c',
    'openssl/apps/lib/tlssrp_depr.c',
  ],
},
'defines': ['<@(openssl_defines_BSD-x86)'],
```

```
 'include_dirs': [
   './include',
 ],
 'cflags' : ['<@(openssl_cflags_BSD-x86)'],
 'libraries': ['<@(openssl_ex_libs_BSD-x86)'],
 'sources': ['<@(openssl_cli_srcs_BSD-x86)'],
}
/*-
* WARNING: do not edit!
* Generated by Makefile from include/openssl/crmf.h.in
*
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* Copyright Nokia 2007-2019
* Copyright Siemens AG 2015-2019
*
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* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*
* CRMF (RFC 4211) implementation by M. Peylo, M. Viljanen, and D. von Oheimb.
*/



#ifndef OPENSSL_CRMF_H
# define OPENSSL_CRMF_H

# include <openssl/opensslconf.h>

# ifndef OPENSSL_NO_CRMF
#  include <openssl/opensslv.h>
#  include <openssl/safestack.h>
#  include <openssl/crmferr.h>
#  include <openssl/x509v3.h> /* for GENERAL_NAME etc. */

/* explicit #includes not strictly needed since implied by the above: */
#  include <openssl/types.h>
#  include <openssl/x509.h>

#  ifdef __cplusplus
extern "C" {
#  endif

#
  define OSSL_CRMF_POPOPRIVKEY_THISMESSAGE         0
#  define OSSL_CRMF_POPOPRIVKEY_SUBSEQUENTMESSAGE    1
#  define OSSL_CRMF_POPOPRIVKEY_DHMAC                2
```

```
# define OSSL_CRMF_POPOPRIVKEY_AGREEMAC           3
# define OSSL_CRMF_POPOPRIVKEY_ENCRYPTEDKEY        4

# define OSSL_CRMF_SUBSEQUENTMESSAGE_ENCRCERT      0
# define OSSL_CRMF_SUBSEQUENTMESSAGE_CHALLENGERESP  1

typedef struct ossl_crmf_encryptedvalue_st OSSL_CRMF_ENCRYPTEDVALUE;
DECLARE_ASN1_FUNCTIONS(OSSL_CRMF_ENCRYPTEDVALUE)
typedef struct ossl_crmf_msg_st OSSL_CRMF_MSG;
DECLARE_ASN1_FUNCTIONS(OSSL_CRMF_MSG)
DECLARE_ASN1_DUP_FUNCTION(OSSL_CRMF_MSG)
SKM_DEFINE_STACK_OF_INTERNAL(OSSL_CRMF_MSG, OSSL_CRMF_MSG, OSSL_CRMF_MSG)
#define sk_OSSL_CRMF_MSG_num(sk)
OPENSSL_sk_num(ossl_check_const_OSSL_CRMF_MSG_sk_type(sk))
#define sk_OSSL_CRMF_MSG_value(sk, idx) ((OSSL_CRMF_MSG
*)OPENSSL_sk_value(ossl_check_const_OSSL_CRMF_MSG_sk_type(sk), (idx)))
#define sk_OSSL_CRMF_MSG_new(cmp) ((STACK_OF(OSSL_CRMF_MSG)
*)OPENSSL_sk_new(ossl_check_OSSL_CRMF_MSG_compfunc_type(cmp)))
#define
 sk_OSSL_CRMF_MSG_new_null() ((STACK_OF(OSSL_CRMF_MSG) *)OPENSSL_sk_new_null())
#define sk_OSSL_CRMF_MSG_new_reserve(cmp, n) ((STACK_OF(OSSL_CRMF_MSG)
*)OPENSSL_sk_new_reserve(ossl_check_OSSL_CRMF_MSG_compfunc_type(cmp), (n)))
#define sk_OSSL_CRMF_MSG_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_OSSL_CRMF_MSG_sk_type(sk), (n))
#define sk_OSSL_CRMF_MSG_free(sk) OPENSSL_sk_free(ossl_check_OSSL_CRMF_MSG_sk_type(sk))
#define sk_OSSL_CRMF_MSG_zero(sk) OPENSSL_sk_zero(ossl_check_OSSL_CRMF_MSG_sk_type(sk))
#define sk_OSSL_CRMF_MSG_delete(sk, i) ((OSSL_CRMF_MSG
*)OPENSSL_sk_delete(ossl_check_OSSL_CRMF_MSG_sk_type(sk), (i)))
#define sk_OSSL_CRMF_MSG_delete_ptr(sk, ptr) ((OSSL_CRMF_MSG
*)OPENSSL_sk_delete_ptr(ossl_check_OSSL_CRMF_MSG_sk_type(sk),
ossl_check_OSSL_CRMF_MSG_type(ptr)))
#define sk_OSSL_CRMF_MSG_push(sk, ptr) OPENSSL_sk_push(ossl_check_OSSL_CRMF_MSG_sk_type(sk),
ossl_check_OSSL_CRMF_MSG_type(ptr))
#define sk_OSSL_CRMF_MSG_unshift(sk,
 ptr) OPENSSL_sk_unshift(ossl_check_OSSL_CRMF_MSG_sk_type(sk),
ossl_check_OSSL_CRMF_MSG_type(ptr))
#define sk_OSSL_CRMF_MSG_pop(sk) ((OSSL_CRMF_MSG
*)OPENSSL_sk_pop(ossl_check_OSSL_CRMF_MSG_sk_type(sk)))
#define sk_OSSL_CRMF_MSG_shift(sk) ((OSSL_CRMF_MSG
*)OPENSSL_sk_shift(ossl_check_OSSL_CRMF_MSG_sk_type(sk)))
#define sk_OSSL_CRMF_MSG_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OSSL_CRMF_MSG_sk_type(sk),ossl_check_OSSL_CRMF_MSG_freefunc_t
ype(freefunc))
#define sk_OSSL_CRMF_MSG_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_OSSL_CRMF_MSG_sk_type(sk), ossl_check_OSSL_CRMF_MSG_type(ptr),
(idx))
#define sk_OSSL_CRMF_MSG_set(sk, idx, ptr) ((OSSL_CRMF_MSG
*)OPENSSL_sk_set(ossl_check_OSSL_CRMF_MSG_sk_type(sk), (idx),
```

```
ossl_check_OSSL_CRMF_MSG_type(ptr)))
#define sk_OSSL_CRMF_MSG_find(sk, ptr) OPENSSL_sk_find(ossl_check_OSSL_CRMF_MSG_sk_type(sk),
ossl_check_OSSL_CRMF_MSG_type(ptr))
#define sk_OSSL_CRMF_MSG_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OSSL_CRMF_MSG_sk_type(sk),
 ossl_check_OSSL_CRMF_MSG_type(ptr))
#define sk_OSSL_CRMF_MSG_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_OSSL_CRMF_MSG_sk_type(sk), ossl_check_OSSL_CRMF_MSG_type(ptr),
pnum)
#define sk_OSSL_CRMF_MSG_sort(sk) OPENSSL_sk_sort(ossl_check_OSSL_CRMF_MSG_sk_type(sk))
#define sk_OSSL_CRMF_MSG_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OSSL_CRMF_MSG_sk_type(sk))
#define sk_OSSL_CRMF_MSG_dup(sk) ((STACK_OF(OSSL_CRMF_MSG)
*)OPENSSL_sk_dup(ossl_check_const_OSSL_CRMF_MSG_sk_type(sk)))
#define sk_OSSL_CRMF_MSG_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(OSSL_CRMF_MSG)
*)OPENSSL_sk_deep_copy(ossl_check_const_OSSL_CRMF_MSG_sk_type(sk),
ossl_check_OSSL_CRMF_MSG_copyfunc_type(copyfunc),
ossl_check_OSSL_CRMF_MSG_freefunc_type(freefunc)))
#define sk_OSSL_CRMF_MSG_set_cmp_func(sk, cmp)
((sk_OSSL_CRMF_MSG_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OSSL_CRMF_MSG_sk_type(sk),
ossl_check_OSSL_CRMF_MSG_compfunc_type(cmp)))

typedef struct ossl_crmf_attributetypeandvalue_st OSSL_CRMF_ATTRIBUTETYPEANDVALUE;
typedef
 struct ossl_crmf_pbmparameter_st OSSL_CRMF_PBMPARAMETER;
DECLARE_ASN1_FUNCTIONS(OSSL_CRMF_PBMPARAMETER)
typedef struct ossl_crmf_poposigningkey_st OSSL_CRMF_POPOSIGNINGKEY;
typedef struct ossl_crmf_certrequest_st OSSL_CRMF_CERTREQUEST;
typedef struct ossl_crmf_certid_st OSSL_CRMF_CERTID;
DECLARE_ASN1_FUNCTIONS(OSSL_CRMF_CERTID)
DECLARE_ASN1_DUP_FUNCTION(OSSL_CRMF_CERTID)
SKM_DEFINE_STACK_OF_INTERNAL(OSSL_CRMF_CERTID, OSSL_CRMF_CERTID,
OSSL_CRMF_CERTID)
#define sk_OSSL_CRMF_CERTID_num(sk)
OPENSSL_sk_num(ossl_check_const_OSSL_CRMF_CERTID_sk_type(sk))
#define sk_OSSL_CRMF_CERTID_value(sk, idx) ((OSSL_CRMF_CERTID
*)OPENSSL_sk_value(ossl_check_const_OSSL_CRMF_CERTID_sk_type(sk), (idx)))
#define sk_OSSL_CRMF_CERTID_new(cmp) ((STACK_OF(OSSL_CRMF_CERTID)
*)OPENSSL_sk_new(ossl_check_OSSL_CRMF_CERTID_compfunc_type(cmp)))
#define sk_OSSL_CRMF_CERTID_new_null() ((STACK_OF(OSSL_CRMF_CERTID)
*)OPENSSL_sk_new_null())
#define sk_OSSL_CRMF_CERTID_new_reserve(cmp, n) ((STACK_OF(OSSL_CRMF_CERTID)
 *)OPENSSL_sk_new_reserve(ossl_check_OSSL_CRMF_CERTID_compfunc_type(cmp), (n)))
#define sk_OSSL_CRMF_CERTID_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_OSSL_CRMF_CERTID_sk_type(sk), (n))
#define sk_OSSL_CRMF_CERTID_free(sk) OPENSSL_sk_free(ossl_check_OSSL_CRMF_CERTID_sk_type(sk))
#define sk_OSSL_CRMF_CERTID_zero(sk)
OPENSSL_sk_zero(ossl_check_OSSL_CRMF_CERTID_sk_type(sk))
```

```
#define sk_OSSL_CRMF_CERTID_delete(sk, i) ((OSSL_CRMF_CERTID
*)OPENSSL_sk_delete(ossl_check_OSSL_CRMF_CERTID_sk_type(sk), (i)))
#define sk_OSSL_CRMF_CERTID_delete_ptr(sk, ptr) ((OSSL_CRMF_CERTID
*)OPENSSL_sk_delete_ptr(ossl_check_OSSL_CRMF_CERTID_sk_type(sk),
ossl_check_OSSL_CRMF_CERTID_type(ptr)))
#define sk_OSSL_CRMF_CERTID_push(sk, ptr)
OPENSSL_sk_push(ossl_check_OSSL_CRMF_CERTID_sk_type(sk),
ossl_check_OSSL_CRMF_CERTID_type(ptr))
#define sk_OSSL_CRMF_CERTID_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_OSSL_CRMF_CERTID_sk_type(sk),
ossl_check_OSSL_CRMF_CERTID_type(ptr))
#define sk_OSSL_CRMF_CERTID_pop(sk)
 ((OSSL_CRMF_CERTID *)OPENSSL_sk_pop(ossl_check_OSSL_CRMF_CERTID_sk_type(sk)))
#define sk_OSSL_CRMF_CERTID_shift(sk) ((OSSL_CRMF_CERTID
*)OPENSSL_sk_shift(ossl_check_OSSL_CRMF_CERTID_sk_type(sk)))
#define sk_OSSL_CRMF_CERTID_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_OSSL_CRMF_CERTID_sk_type(sk),ossl_check_OSSL_CRMF_CERTID_fre
efunc_type(freefunc))
#define sk_OSSL_CRMF_CERTID_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_OSSL_CRMF_CERTID_sk_type(sk),
ossl_check_OSSL_CRMF_CERTID_type(ptr), (idx))
#define sk_OSSL_CRMF_CERTID_set(sk, idx, ptr) ((OSSL_CRMF_CERTID
*)OPENSSL_sk_set(ossl_check_OSSL_CRMF_CERTID_sk_type(sk), (idx),
ossl_check_OSSL_CRMF_CERTID_type(ptr)))
#define sk_OSSL_CRMF_CERTID_find(sk, ptr)
OPENSSL_sk_find(ossl_check_OSSL_CRMF_CERTID_sk_type(sk),
ossl_check_OSSL_CRMF_CERTID_type(ptr))
#define sk_OSSL_CRMF_CERTID_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_OSSL_CRMF_CERTID_sk_type(sk),
ossl_check_OSSL_CRMF_CERTID_type(ptr))
#define sk_OSSL_CRMF_CERTID_find_all(sk,
 ptr, pnum) OPENSSL_sk_find_all(ossl_check_OSSL_CRMF_CERTID_sk_type(sk),
ossl_check_OSSL_CRMF_CERTID_type(ptr), pnum)
#define sk_OSSL_CRMF_CERTID_sort(sk) OPENSSL_sk_sort(ossl_check_OSSL_CRMF_CERTID_sk_type(sk))
#define sk_OSSL_CRMF_CERTID_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_OSSL_CRMF_CERTID_sk_type(sk))
#define sk_OSSL_CRMF_CERTID_dup(sk) ((STACK_OF(OSSL_CRMF_CERTID)
*)OPENSSL_sk_dup(ossl_check_const_OSSL_CRMF_CERTID_sk_type(sk)))
#define sk_OSSL_CRMF_CERTID_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(OSSL_CRMF_CERTID)
*)OPENSSL_sk_deep_copy(ossl_check_const_OSSL_CRMF_CERTID_sk_type(sk),
ossl_check_OSSL_CRMF_CERTID_copyfunc_type(copyfunc),
ossl_check_OSSL_CRMF_CERTID_freefunc_type(freefunc)))
#define sk_OSSL_CRMF_CERTID_set_cmp_func(sk, cmp)
((sk_OSSL_CRMF_CERTID_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_OSSL_CRMF_CERTID_sk_typ
e(sk), ossl_check_OSSL_CRMF_CERTID_compfunc_type(cmp)))


typedef struct ossl_crmf_pkipublicationinfo_st OSSL_CRMF_PKIPUBLICATIONINFO;
```

```
DECLARE_ASN1_FUNCTIONS(OSSL_CRMF_PKIPUBLICATIONINFO)
typedef
 struct ossl_crmf_singlepubinfo_st OSSL_CRMF_SINGLEPUBINFO;
DECLARE_ASN1_FUNCTIONS(OSSL_CRMF_SINGLEPUBINFO)
typedef struct ossl_crmf_certtemplate_st OSSL_CRMF_CERTTEMPLATE;
DECLARE_ASN1_FUNCTIONS(OSSL_CRMF_CERTTEMPLATE)
typedef STACK_OF(OSSL_CRMF_MSG) OSSL_CRMF_MSGS;
DECLARE_ASN1_FUNCTIONS(OSSL_CRMF_MSGS)

typedef struct ossl_crmf_optionalvalidity_st OSSL_CRMF_OPTIONALVALIDITY;

/* crmf_pbm.c */
OSSL_CRMF_PBMPARAMETER *OSSL_CRMF_pbmp_new(OSSL_LIB_CTX *libctx, size_t slen,
                                           int owfnid, size_t itercnt,
                                           int macnid);
int OSSL_CRMF_pbm_new(OSSL_LIB_CTX *libctx, const char *propq,
                      const OSSL_CRMF_PBMPARAMETER *pbmp,
                      const unsigned char *msg, size_t msglen,
                      const unsigned char *sec, size_t seclen,
                      unsigned char **mac, size_t *maclen);

/* crmf_lib.c
 */
int OSSL_CRMF_MSG_set1_regCtrl_regToken(OSSL_CRMF_MSG *msg,
                                        const ASN1_UTF8STRING *tok);
ASN1_UTF8STRING
*OSSL_CRMF_MSG_get0_regCtrl_regToken(const OSSL_CRMF_MSG *msg);
int OSSL_CRMF_MSG_set1_regCtrl_authenticator(OSSL_CRMF_MSG *msg,
                                             const ASN1_UTF8STRING *auth);
ASN1_UTF8STRING
*OSSL_CRMF_MSG_get0_regCtrl_authenticator(const OSSL_CRMF_MSG *msg);
int
OSSL_CRMF_MSG_PKIPublicationInfo_push0_SinglePubInfo(OSSL_CRMF_PKIPUBLICATIONINFO *pi,
                                                     OSSL_CRMF_SINGLEPUBINFO *spi);
#  define OSSL_CRMF_PUB_METHOD_DONTCARE 0
#  define OSSL_CRMF_PUB_METHOD_X500     1
#  define OSSL_CRMF_PUB_METHOD_WEB      2
#  define OSSL_CRMF_PUB_METHOD_LDAP     3
int OSSL_CRMF_MSG_set0_SinglePubInfo(OSSL_CRMF_SINGLEPUBINFO *spi,
                                     int method, GENERAL_NAME *nm);
#  define OSSL_CRMF_PUB_ACTION_DONTPUBLISH   0
#  define OSSL_CRMF_PUB_ACTION_PLEASEPUBLISH
 1
int OSSL_CRMF_MSG_set_PKIPublicationInfo_action(OSSL_CRMF_PKIPUBLICATIONINFO *pi,
                                                int action);
int OSSL_CRMF_MSG_set1_regCtrl_pkiPublicationInfo(OSSL_CRMF_MSG *msg,
                                                  const OSSL_CRMF_PKIPUBLICATIONINFO *pi);
OSSL_CRMF_PKIPUBLICATIONINFO
```

```
*OSSL_CRMF_MSG_get0_regCtrl_pkiPublicationInfo(const OSSL_CRMF_MSG *msg);
int OSSL_CRMF_MSG_set1_regCtrl_protocolEncrKey(OSSL_CRMF_MSG *msg,
                                const X509_PUBKEY *pubkey);
X509_PUBKEY
*OSSL_CRMF_MSG_get0_regCtrl_protocolEncrKey(const OSSL_CRMF_MSG *msg);
int OSSL_CRMF_MSG_set1_regCtrl_oldCertID(OSSL_CRMF_MSG *msg,
                              const OSSL_CRMF_CERTID *cid);
OSSL_CRMF_CERTID
*OSSL_CRMF_MSG_get0_regCtrl_oldCertID(const OSSL_CRMF_MSG *msg);
OSSL_CRMF_CERTID *OSSL_CRMF_CERTID_gen(const X509_NAME *issuer,
                             const ASN1_INTEGER *serial);

int OSSL_CRMF_MSG_set1_regInfo_utf8Pairs(OSSL_CRMF_MSG
 *msg,
                              const ASN1_UTF8STRING *utf8pairs);
ASN1_UTF8STRING
*OSSL_CRMF_MSG_get0_regInfo_utf8Pairs(const OSSL_CRMF_MSG *msg);
int OSSL_CRMF_MSG_set1_regInfo_certReq(OSSL_CRMF_MSG *msg,
                             const OSSL_CRMF_CERTREQUEST *cr);
OSSL_CRMF_CERTREQUEST
*OSSL_CRMF_MSG_get0_regInfo_certReq(const OSSL_CRMF_MSG *msg);

int OSSL_CRMF_MSG_set0_validity(OSSL_CRMF_MSG *crm,
                        ASN1_TIME *notBefore, ASN1_TIME *notAfter);
int OSSL_CRMF_MSG_set_certReqId(OSSL_CRMF_MSG *crm, int rid);
int OSSL_CRMF_MSG_get_certReqId(const OSSL_CRMF_MSG *crm);
int OSSL_CRMF_MSG_set0_extensions(OSSL_CRMF_MSG *crm, X509_EXTENSIONS *exts);

int OSSL_CRMF_MSG_push0_extension(OSSL_CRMF_MSG *crm, X509_EXTENSION *ext);
#  define OSSL_CRMF_POPO_NONE       -1
#  define OSSL_CRMF_POPO_RAVERIFIED 0
#  define OSSL_CRMF_POPO_SIGNATURE  1
#  define OSSL_CRMF_POPO_KEYENC     2
#  define OSSL_CRMF_POPO_KEYAGREE
   3
int OSSL_CRMF_MSG_create_popo(int meth, OSSL_CRMF_MSG *crm,
                       EVP_PKEY *pkey, const EVP_MD *digest,
                       OSSL_LIB_CTX *libctx, const char *propq);
int OSSL_CRMF_MSGS_verify_popo(const OSSL_CRMF_MSGS *reqs,
                        int rid, int acceptRAVerified,
                        OSSL_LIB_CTX *libctx, const char *propq);
OSSL_CRMF_CERTTEMPLATE *OSSL_CRMF_MSG_get0_tmpl(const OSSL_CRMF_MSG *crm);
const ASN1_INTEGER
*OSSL_CRMF_CERTTEMPLATE_get0_serialNumber(const OSSL_CRMF_CERTTEMPLATE *tmpl);
const X509_NAME
*OSSL_CRMF_CERTTEMPLATE_get0_subject(const OSSL_CRMF_CERTTEMPLATE *tmpl);
const X509_NAME
*OSSL_CRMF_CERTTEMPLATE_get0_issuer(const OSSL_CRMF_CERTTEMPLATE *tmpl);
```

```
X509_EXTENSIONS
*OSSL_CRMF_CERTTEMPLATE_get0_extensions(const OSSL_CRMF_CERTTEMPLATE *tmpl);
const X509_NAME
*OSSL_CRMF_CERTID_get0_issuer(const OSSL_CRMF_CERTID *cid);
const ASN1_INTEGER
*OSSL_CRMF_CERTID_get0_serialNumber(const
 OSSL_CRMF_CERTID *cid);
int OSSL_CRMF_CERTTEMPLATE_fill(OSSL_CRMF_CERTTEMPLATE *tmpl,
                        EVP_PKEY *pubkey,
                        const X509_NAME *subject,
                        const X509_NAME *issuer,
                        const ASN1_INTEGER *serial);
X509
*OSSL_CRMF_ENCRYPTEDVALUE_get1_encCert(const OSSL_CRMF_ENCRYPTEDVALUE *ecert,
                            OSSL_LIB_CTX *libctx, const char *propq,
                            EVP_PKEY *pkey);

#  ifdef __cplusplus
}
#  endif
# endif /* !defined(OPENSSL_NO_CRMF) */
#endif /* !defined(OPENSSL_CRMF_H) */
```

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<!-- DO NOT EDIT! Generated by `%(generating_script_filename)s --spec %(spec_directory)s/` -->
```
{
 'variables': {
   'openssl_sources': [
     'openssl/crypto/aes/aes_cbc.c',
     'openssl/crypto/aes/aes_core.c',
     'openssl/crypto/aes/aes_ecb.c',
     'openssl/crypto/aes/aes_misc.c',
     'openssl/crypto/bn/bn_add.c',
     'openssl/crypto/bn/bn_asm.c',
     'openssl/crypto/bn/bn_blind.c',
     'openssl/crypto/bn/bn_const.c',
     'openssl/crypto/bn/bn_conv.c',
     'openssl/crypto/bn/bn_ctx.c',
     'openssl/crypto/bn/bn_dh.c',
     'openssl/crypto/bn/bn_div.c',
     'openssl/crypto/bn/bn_exp.c',
     'openssl/crypto/bn/bn_exp2.c',
     'openssl/crypto/bn/bn_gcd.c',
     'openssl/crypto/bn/bn_gf2m.c',
     'openssl/crypto/bn/bn_intern.c',
     'openssl/crypto/bn/bn_kron.c',
     'openssl/crypto/bn/bn_lib.c',
     'openssl/crypto/bn/bn_mod.c',
     'openssl/crypto/bn/bn_mont.c',
     'openssl/crypto/bn/bn_mpi.c',
     'openssl/crypto/bn/bn_mul.c',
     'openssl/crypto/bn/bn_nist.c',
```

'openssl/crypto/bn/bn_prime.c',
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'openssl/crypto/bn/bn_shift.c',
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'openssl/crypto/des/des_enc.c',
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'openssl/crypto/des/fcrypt_b.c',
'openssl/crypto/des/set_key.c',
'openssl/crypto/dh/dh_backend.c',
'openssl/crypto/dh/dh_check.c',
'openssl/crypto/dh/dh_gen.c',
'openssl/crypto/dh/dh_group_params.c',
'openssl/crypto/dh/dh_kdf.c',
'openssl/crypto/dh/dh_key.c',
'openssl/crypto/dh/dh_lib.c',
'openssl/crypto/dsa/dsa_backend.c',
'openssl/crypto/dsa/dsa_check.c',
'openssl/crypto/dsa/dsa_gen.c',
'openssl/crypto/dsa/dsa_key.c',
'openssl/crypto/dsa/dsa_lib.c',
'openssl/crypto/dsa/dsa_ossl.c',
'openssl/crypto/dsa/dsa_sign.c',
'openssl/crypto/dsa/dsa_vrf.c',
'openssl/crypto/ec/curve448/arch_32/f_impl32.c',
'openssl/crypto/ec/curve448/arch_64/f_impl64.c',
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'openssl/crypto/ec/curve448/curve448_tables.c',
'openssl/crypto/ec/curve448/eddsa.c',
'openssl/crypto/ec/curve448/f_generic.c',
'openssl/crypto/ec/curve448/scalar.c',
'openssl/crypto/ec/curve25519.c',
'openssl/crypto/ec/ec2_oct.c',
'openssl/crypto/ec/ec2_smpl.c',
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'openssl/crypto/ec/ec_backend.c',
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'openssl/crypto/ec/ec_mult.c',

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'openssl/crypto/ec/ecdsa_ossl.c',

'openssl/crypto/ec/ecdsa_sign.c',
'openssl/crypto/ec/ecdsa_vrf.c',
'openssl/crypto/ec/ecp_mont.c',
'openssl/crypto/ec/ecp_nist.c',
'openssl/crypto/ec/ecp_oct.c',
'openssl/crypto/ec/ecp_smpl.c',
'openssl/crypto/ec/ecx_backend.c',
'openssl/crypto/ec/ecx_key.c',
'openssl/crypto/evp/asymcipher.c',
'openssl/crypto/evp/dh_support.c',
'openssl/crypto/evp/digest.c',
'openssl/crypto/evp/ec_support.c',
'openssl/crypto/evp/evp_enc.c',
'openssl/crypto/evp/evp_fetch.c',
'openssl/crypto/evp/evp_lib.c',
'openssl/crypto/evp/evp_rand.c',
'openssl/crypto/evp/evp_utils.c',
'openssl/crypto/evp/exchange.c',
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'openssl/crypto/evp/kem.c',
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'openssl/crypto/evp/keymgmt_meth.c',
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'openssl/crypto/evp/mac_meth.c',
'openssl/crypto/evp/p_lib.c',
'openssl/crypto/evp/pmeth_check.c',
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'openssl/crypto/ffc/ffc_key_generate.c',
'openssl/crypto/ffc/ffc_key_validate.c',
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'openssl/crypto/hmac/hmac.c',
'openssl/crypto/lhash/lhash.c',
'openssl/crypto/asn1_dsa.c',
'openssl/crypto/bsearch.c',
'openssl/crypto/context.c',

'openssl/crypto/core_algorithm.c',
'openssl/crypto/core_fetch.c',
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'openssl/crypto/der_writer.c',
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'openssl/crypto/param_build.c',
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'openssl/crypto/params_from_text.c',
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'openssl/crypto/modes/cbc128.c',
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'openssl/crypto/modes/ctr128.c',
'openssl/crypto/modes/gcm128.c',
'openssl/crypto/modes/ofb128.c',
'openssl/crypto/modes/wrap128.c',
'openssl/crypto/modes/xts128.c',
'openssl/crypto/property/defn_cache.c',

'openssl/crypto/property/property.c',
'openssl/crypto/property/property_parse.c',
'openssl/crypto/property/property_query.c',
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'openssl/crypto/rand/rand_lib.c',
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'openssl/crypto/rsa/rsa_backend.c',
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'openssl/providers/common/der/der_rsa_sig.c',
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'openssl/providers/common/provider_util.c',
'openssl/providers/common/securitycheck.c',
'openssl/providers/common/securitycheck_fips.c',
'openssl/providers/fips/fipsprov.c',
'openssl/providers/fips/self_test.c',
'openssl/providers/fips/self_test_kats.c',
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'openssl/providers/implementations/ciphers/cipher_aes_xts.c',
'openssl/providers/implementations/ciphers/cipher_aes_xts_fips.c',
'openssl/providers/implementations/ciphers/cipher_aes_xts_hw.c',
'openssl/providers/implementations/ciphers/cipher_cts.c',
'openssl/providers/implementations/ciphers/cipher_tdes.c',
'openssl/providers/implementations/ciphers/cipher_tdes_common.c',
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'openssl/providers/implementations/kdfs/pbkdf2_fips.c',
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'openssl/providers/implementations/kem/rsa_kem.c',

'openssl/providers/implementations/keymgmt/dh_kmgmt.c',
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'openssl/providers/implementations/keymgmt/ecx_kmgmt.c',
'openssl/providers/implementations/keymgmt/kdf_legacy_kmgmt.c',
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'openssl/providers/implementations/ciphers/ciphercommon_block.c',
'openssl/providers/implementations/ciphers/ciphercommon_ccm.c',

```
    'openssl/providers/implementations/ciphers/ciphercommon_ccm_hw.c',
    'openssl/providers/implementations/ciphers/ciphercommon_gcm.c',
    'openssl/providers/implementations/ciphers/ciphercommon_gcm_hw.c',
    'openssl/providers/implementations/ciphers/ciphercommon_hw.c',
    'openssl/providers/implementations/digests/digestcommon.c',
    'openssl/ssl/record/tls_pad.c',
    'openssl/providers/fips/fips_entry.c',

  ],
  'openssl_sources_BSD-x86': [
    './config/archs/BSD-x86/no-asm/providers/common/der/der_sm2_gen.c',
    './config/archs/BSD-x86/no-asm/providers/common/der/der_digests_gen.c',
    './config/archs/BSD-x86/no-asm/providers/common/der/der_dsa_gen.c',
    './config/archs/BSD-x86/no-asm/providers/common/der/der_ec_gen.c',
    './config/archs/BSD-x86/no-asm/providers/common/der/der_ecx_gen.c',
    './config/archs/BSD-x86/no-asm/providers/common/der/der_rsa_gen.c',
    './config/archs/BSD-x86/no-asm/providers/common/der/der_wrap_gen.c',
     './config/archs/BSD-x86/no-asm/providers/legacy.ld',
    './config/archs/BSD-x86/no-asm/providers/fips.ld',

  ],
  'openssl_defines_BSD-x86': [
    'NDEBUG',
    'L_ENDIAN',
    'OPENSSL_BUILDING_OPENSSL',
    'FIPS_MODULE',
    'FIPS_MODULE',
  ],
  'openssl_cflags_BSD-x86': [
    '-Wall -O3 -fomit-frame-pointer',
    '-pthread',
    '-Wall -O3 -fomit-frame-pointer',
  ],
  'openssl_ex_libs_BSD-x86': [
    '-pthread',
  ],
  'linker_script': ''
},
'include_dirs': [
  '.',
  './include',
  './crypto',
  './crypto/include/internal',
  './providers/common/include',
],
'defines': ['<@(openssl_defines_BSD-x86)'],
'cflags': ['<@(openssl_cflags_BSD-x86)'],
'libraries': ['<@(openssl_ex_libs_BSD-x86)'],
```

```
 'sources': ['<@(openssl_sources)', '<@(openssl_sources_BSD-x86)'],
 'direct_dependent_settings': {
   'include_dirs': ['./include', '.'],
   'defines': ['<@(openssl_defines_BSD-x86)'],
 },
}
```

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====

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```
{
 'variables': {
   'openssl_defines_BSD-x86_64': [
     'NDEBUG',
```

```
  'L_ENDIAN',
  'OPENSSL_BUILDING_OPENSSL',
  'AES_ASM',
  'BSAES_ASM',
  'CMLL_ASM',
  'ECP_NISTZ256_ASM',
  'GHASH_ASM',
  'KECCAK1600_ASM',
  'MD5_ASM',
  'OPENSSL_BN_ASM_GF2m',
  'OPENSSL_BN_ASM_MONT',
  'OPENSSL_BN_ASM_MONT5',
  'OPENSSL_CPUID_OBJ',
  'OPENSSL_IA32_SSE2',
  'PADLOCK_ASM',
  'POLY1305_ASM',
  'RC4_ASM',
  'SHA1_ASM',
  'SHA256_ASM',
  'SHA512_ASM',
  'VPAES_ASM',
  'WHIRLPOOL_ASM',
  'X25519_ASM',
  'OPENSSL_PIC',
],
'openssl_cflags_BSD-x86_64': [
  '-Wa,--noexecstack',
  '-Wall -O3',
  '-pthread',
  '-Wall -O3',
],
'openssl_ex_libs_BSD-x86_64': [
  '-pthread',
],
'openssl_cli_srcs_BSD-x86_64': [
  'openssl/apps/lib/cmp_mock_srv.c',
  'openssl/apps/asn1parse.c',
  'openssl/apps/ca.c',
  'openssl/apps/ciphers.c',
  'openssl/apps/cmp.c',

 'openssl/apps/cms.c',
  'openssl/apps/crl.c',
  'openssl/apps/crl2pkcs7.c',
  'openssl/apps/dgst.c',
  'openssl/apps/dhparam.c',
  'openssl/apps/dsa.c',
  'openssl/apps/dsaparam.c',
```

```
  'openssl/apps/ec.c',
  'openssl/apps/ecparam.c',
  'openssl/apps/enc.c',
  'openssl/apps/engine.c',
  'openssl/apps/errstr.c',
  'openssl/apps/fipsinstall.c',
  'openssl/apps/gendsa.c',
  'openssl/apps/genpkey.c',
  'openssl/apps/genrsa.c',
  'openssl/apps/info.c',
  'openssl/apps/kdf.c',
  'openssl/apps/list.c',
  'openssl/apps/mac.c',
  'openssl/apps/nseq.c',
  'openssl/apps/ocsp.c',
  'openssl/apps/openssl.c',
  'openssl/apps/passwd.c',
  'openssl/apps/pkcs12.c',
  'openssl/apps/pkcs7.c',
  'openssl/apps/pkcs8.c',
  'openssl/apps/pkey.c',
  'openssl/apps/pkeyparam.c',
  'openssl/apps/pkeyutl.c',
  'openssl/apps/prime.c',
  './config/archs/BSD-x86_64/asm_avx2/apps/progs.c',

'openssl/apps/rand.c',
  'openssl/apps/rehash.c',
  'openssl/apps/req.c',
  'openssl/apps/rsa.c',
  'openssl/apps/rsautl.c',
  'openssl/apps/s_client.c',
  'openssl/apps/s_server.c',
  'openssl/apps/s_time.c',
  'openssl/apps/sess_id.c',
  'openssl/apps/smime.c',
  'openssl/apps/speed.c',
  'openssl/apps/spkac.c',
  'openssl/apps/srp.c',
  'openssl/apps/storeutl.c',
  'openssl/apps/ts.c',
  'openssl/apps/verify.c',
  'openssl/apps/version.c',
  'openssl/apps/x509.c',
  'openssl/apps/lib/app_libctx.c',
  'openssl/apps/lib/app_params.c',
  'openssl/apps/lib/app_provider.c',
  'openssl/apps/lib/app_rand.c',
```

```
    'openssl/apps/lib/app_x509.c',
    'openssl/apps/lib/apps.c',
    'openssl/apps/lib/apps_ui.c',
    'openssl/apps/lib/columns.c',
    'openssl/apps/lib/engine.c',
    'openssl/apps/lib/engine_loader.c',
    'openssl/apps/lib/fmt.c',
    'openssl/apps/lib/http_server.c',
    'openssl/apps/lib/names.c',
     'openssl/apps/lib/opt.c',
    'openssl/apps/lib/s_cb.c',
    'openssl/apps/lib/s_socket.c',
    'openssl/apps/lib/tlssrp_depr.c',
  ],
 },
 'defines': ['<@(openssl_defines_BSD-x86_64)'],
 'include_dirs': [
  './include',
 ],
 'cflags' : ['<@(openssl_cflags_BSD-x86_64)'],
 'libraries': ['<@(openssl_ex_libs_BSD-x86_64)'],
 'sources': ['<@(openssl_cli_srcs_BSD-x86_64)'],
}
```

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```
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```

```
*/

#define PLATFORM "platform: BSD-x86"
#define DATE "built on: Wed Mar  5 20:59:02 2025 UTC"

/*
* Generate compiler_flags as an array of individual characters. This is a
* workaround for the situation where CFLAGS gets too long for a C90 string
* literal
*/
static const char compiler_flags[] = {
   'c','o','m','p','i','l','e','r',':',' ','g','c','c',' ','-','f',
   'P','I','C',' ','-','p','t','h','r','e','a','d',' ','-','W','a',
   ',','-','-','n','o','e','x','e','c','s','t','a','c','k',' ','-',
   'W','a','l','l',' ','-','O','3',' ','-','f','o','m','i','t','-',
   'f','r','a','m','e','-','p','o','i','n','t','e','r','
 ','-','D',
   'L','_','E','N','D','I','A','N',' ','-','D','O','P','E','N','S',
   'S','L','_','P','I','C',' ','-','D','_','T','H','R','E','A','D',
   '_','S','A','F','E',' ','-','D','_','R','E','E','N','T','R','A',
   'N','T',' ','-','D','O','P','E','N','S','S','L','_','B','U','I',
   'L','D','I','N','G','_','O','P','E','N','S','S','L',' ','-','D',
   'N','D','E','B','U','G','\0'
};
```

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*/

#define PLATFORM "platform: BSD-x86"
#define DATE "built on: Wed Mar  5 20:59:28 2025 UTC"

/*
* Generate compiler_flags as an array of individual characters. This is a
* workaround for the situation where CFLAGS gets too long for a C90 string
* literal
*/
static const char compiler_flags[] = {
   'c','o','m','p','i','l','e','r',':',' ','c','c',' ','-','f','P',
   'I','C',' ','-','p','t','h','r','e','a','d',' ','-','W','a','l',
   'l',' ','-','O','3',' ','-','f','o','m','i','t','-','f','r','a',
   'm','e','-','p','o','i','n','t','e','r',' ','-','D','L','_','E',
   'N','D','I','A','N','
 ','-','D','O','P','E','N','S','S','L','_',
   'P','I','C',' ','-','D','_','T','H','R','E','A','D','_','S','A',
   'F','E',' ','-','D','_','R','E','E','N','T','R','A','N','T',' ',
   '-','D','O','P','E','N','S','S','L','_','B','U','I','L','D','I',
   'N','G','_','O','P','E','N','S','S','L',' ','-','D','N','D','E',
   'B','U','G','\0'
};
```

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* this file except in compliance with the License.  You can obtain a copy
* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/

#ifndef OPENSSL_CONFIGURATION_H
# define OPENSSL_CONFIGURATION_H
# pragma once

# ifdef  __cplusplus
extern "C" {
# endif

# ifdef OPENSSL_ALGORITHM_DEFINES
#  error OPENSSL_ALGORITHM_DEFINES no longer supported
# endif

/*
* OpenSSL was configured with the following options:
*/

# define OPENSSL_CONFIGURED_API 30000
# ifndef OPENSSL_RAND_SEED_OS
#  define OPENSSL_RAND_SEED_OS
# endif
```

```
# ifndef OPENSSL_THREADS
#  define OPENSSL_THREADS
# endif
# ifndef OPENSSL_NO_AFALGENG
#  define OPENSSL_NO_AFALGENG
# endif
# ifndef
 OPENSSL_NO_ASAN
#  define OPENSSL_NO_ASAN
# endif
# ifndef OPENSSL_NO_COMP
#  define OPENSSL_NO_COMP
# endif
# ifndef OPENSSL_NO_CRYPTO_MDEBUG
#  define OPENSSL_NO_CRYPTO_MDEBUG
# endif
# ifndef OPENSSL_NO_CRYPTO_MDEBUG_BACKTRACE
#  define OPENSSL_NO_CRYPTO_MDEBUG_BACKTRACE
# endif
# ifndef OPENSSL_NO_EC_NISTP_64_GCC_128
#  define OPENSSL_NO_EC_NISTP_64_GCC_128
# endif
# ifndef OPENSSL_NO_EGD
#  define OPENSSL_NO_EGD
# endif
# ifndef OPENSSL_NO_EXTERNAL_TESTS
#  define OPENSSL_NO_EXTERNAL_TESTS
# endif
# ifndef OPENSSL_NO_FUZZ_AFL
#  define OPENSSL_NO_FUZZ_AFL
# endif
# ifndef OPENSSL_NO_FUZZ_LIBFUZZER
#  define OPENSSL_NO_FUZZ_LIBFUZZER
# endif
# ifndef OPENSSL_NO_KTLS
#  define OPENSSL_NO_KTLS
# endif
# ifndef OPENSSL_NO_LOADERENG
#  define OPENSSL_NO_LOADERENG
# endif
# ifndef OPENSSL_NO_MD2
#  define OPENSSL_NO_MD2
# endif
# ifndef OPENSSL_NO_MSAN
#  define OPENSSL_NO_MSAN
# endif
# ifndef OPENSSL_NO_RC5
#  define OPENSSL_NO_RC5
```

```
# endif
# ifndef OPENSSL_NO_SCTP
#  define OPENSSL_NO_SCTP
#
 endif
# ifndef OPENSSL_NO_SSL3
#  define OPENSSL_NO_SSL3
# endif
# ifndef OPENSSL_NO_SSL3_METHOD
#  define OPENSSL_NO_SSL3_METHOD
# endif
# ifndef OPENSSL_NO_TRACE
#  define OPENSSL_NO_TRACE
# endif
# ifndef OPENSSL_NO_UBSAN
#  define OPENSSL_NO_UBSAN
# endif
# ifndef OPENSSL_NO_UNIT_TEST
#  define OPENSSL_NO_UNIT_TEST
# endif
# ifndef OPENSSL_NO_UPLINK
#  define OPENSSL_NO_UPLINK
# endif
# ifndef OPENSSL_NO_WEAK_SSL_CIPHERS
#  define OPENSSL_NO_WEAK_SSL_CIPHERS
# endif
# ifndef OPENSSL_NO_DYNAMIC_ENGINE
#  define OPENSSL_NO_DYNAMIC_ENGINE
# endif


/* Generate 80386 code? */
# undef I386_ONLY

/*
* The following are cipher-specific, but are part of the public API.
*/
# if !defined(OPENSSL_SYS_UEFI)
#  undef BN_LLONG
/* Only one for the following should be defined */
#  define SIXTY_FOUR_BIT_LONG
#  undef SIXTY_FOUR_BIT
#  undef THIRTY_TWO_BIT
# endif

# define RC4_INT unsigned int

# ifdef  __cplusplus
```

```
}
# endif

#endif                    /* OPENSSL_CONFIGURATION_H
 */
```

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```
{
 'variables': {
   'openssl_sources': [
     'openssl/crypto/aes/aes_ecb.c',
     'openssl/crypto/aes/aes_misc.c',
     'openssl/crypto/bn/bn_add.c',
     'openssl/crypto/bn/bn_blind.c',
     'openssl/crypto/bn/bn_const.c',
     'openssl/crypto/bn/bn_conv.c',
     'openssl/crypto/bn/bn_ctx.c',
     'openssl/crypto/bn/bn_dh.c',
     'openssl/crypto/bn/bn_div.c',
     'openssl/crypto/bn/bn_exp.c',
     'openssl/crypto/bn/bn_exp2.c',
     'openssl/crypto/bn/bn_gcd.c',
     'openssl/crypto/bn/bn_gf2m.c',
     'openssl/crypto/bn/bn_intern.c',
     'openssl/crypto/bn/bn_kron.c',
     'openssl/crypto/bn/bn_lib.c',
     'openssl/crypto/bn/bn_mod.c',
     'openssl/crypto/bn/bn_mont.c',
     'openssl/crypto/bn/bn_mpi.c',
     'openssl/crypto/bn/bn_mul.c',
     'openssl/crypto/bn/bn_nist.c',
     'openssl/crypto/bn/bn_prime.c',
```

'openssl/crypto/bn/bn_rand.c',
'openssl/crypto/bn/bn_recp.c',
'openssl/crypto/bn/bn_rsa_fips186_4.c',
'openssl/crypto/bn/bn_shift.c',
'openssl/crypto/bn/bn_sqr.c',
'openssl/crypto/bn/bn_sqrt.c',
'openssl/crypto/bn/bn_word.c',
'openssl/crypto/buffer/buffer.c',
'openssl/crypto/cmac/cmac.c',
'openssl/crypto/des/ecb3_enc.c',
'openssl/crypto/des/set_key.c',
'openssl/crypto/dh/dh_backend.c',
'openssl/crypto/dh/dh_check.c',
'openssl/crypto/dh/dh_gen.c',
'openssl/crypto/dh/dh_group_params.c',
'openssl/crypto/dh/dh_kdf.c',
'openssl/crypto/dh/dh_key.c',
'openssl/crypto/dh/dh_lib.c',
'openssl/crypto/dsa/dsa_backend.c',
'openssl/crypto/dsa/dsa_check.c',
'openssl/crypto/dsa/dsa_gen.c',
'openssl/crypto/dsa/dsa_key.c',
'openssl/crypto/dsa/dsa_lib.c',
'openssl/crypto/dsa/dsa_ossl.c',
'openssl/crypto/dsa/dsa_sign.c',
'openssl/crypto/dsa/dsa_vrf.c',
'openssl/crypto/ec/curve448/arch_32/f_impl32.c',
'openssl/crypto/ec/curve448/arch_64/f_impl64.c',
'openssl/crypto/ec/curve448/curve448.c',
'openssl/crypto/ec/curve448/curve448_tables.c',
'openssl/crypto/ec/curve448/eddsa.c',
'openssl/crypto/ec/curve448/f_generic.c',
'openssl/crypto/ec/curve448/scalar.c',
'openssl/crypto/ec/curve25519.c',
'openssl/crypto/ec/ec2_oct.c',
'openssl/crypto/ec/ec2_smpl.c',
'openssl/crypto/ec/ec_asn1.c',
'openssl/crypto/ec/ec_backend.c',
'openssl/crypto/ec/ec_check.c',
'openssl/crypto/ec/ec_curve.c',
'openssl/crypto/ec/ec_cvt.c',
'openssl/crypto/ec/ec_key.c',
'openssl/crypto/ec/ec_kmeth.c',
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'openssl/crypto/ec/ec_mult.c',
'openssl/crypto/ec/ec_oct.c',
'openssl/crypto/ec/ecdh_kdf.c',
'openssl/crypto/ec/ecdh_ossl.c',

'openssl/crypto/ec/ecdsa_ossl.c',
'openssl/crypto/ec/ecdsa_sign.c',
'openssl/crypto/ec/ecdsa_vrf.c',
'openssl/crypto/ec/ecp_mont.c',
'openssl/crypto/ec/ecp_nist.c',
'openssl/crypto/ec/ecp_nistz256.c',
'openssl/crypto/ec/ecp_oct.c',
'openssl/crypto/ec/ecp_smpl.c',
'openssl/crypto/ec/ecx_backend.c',
'openssl/crypto/ec/ecx_key.c',
'openssl/crypto/evp/asymcipher.c',
'openssl/crypto/evp/dh_support.c',
'openssl/crypto/evp/digest.c',
'openssl/crypto/evp/ec_support.c',
'openssl/crypto/evp/evp_enc.c',
'openssl/crypto/evp/evp_fetch.c',
'openssl/crypto/evp/evp_lib.c',
'openssl/crypto/evp/evp_rand.c',
'openssl/crypto/evp/evp_utils.c',
'openssl/crypto/evp/exchange.c',
'openssl/crypto/evp/kdf_lib.c',
'openssl/crypto/evp/kdf_meth.c',
'openssl/crypto/evp/kem.c',
'openssl/crypto/evp/keymgmt_lib.c',
'openssl/crypto/evp/keymgmt_meth.c',
'openssl/crypto/evp/m_sigver.c',
'openssl/crypto/evp/mac_lib.c',
'openssl/crypto/evp/mac_meth.c',
'openssl/crypto/evp/p_lib.c',
'openssl/crypto/evp/pmeth_check.c',
'openssl/crypto/evp/pmeth_gn.c',
'openssl/crypto/evp/pmeth_lib.c',
'openssl/crypto/evp/signature.c',
'openssl/crypto/ffc/ffc_backend.c',
'openssl/crypto/ffc/ffc_dh.c',
'openssl/crypto/ffc/ffc_key_generate.c',
'openssl/crypto/ffc/ffc_key_validate.c',
'openssl/crypto/ffc/ffc_params.c',
'openssl/crypto/ffc/ffc_params_generate.c',
'openssl/crypto/ffc/ffc_params_validate.c',
'openssl/crypto/hmac/hmac.c',
'openssl/crypto/lhash/lhash.c',
'openssl/crypto/asn1_dsa.c',
'openssl/crypto/bsearch.c',
'openssl/crypto/context.c',
'openssl/crypto/core_algorithm.c',
'openssl/crypto/core_fetch.c',
'openssl/crypto/core_namemap.c',

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'openssl/crypto/ctype.c',
'openssl/crypto/der_writer.c',
'openssl/crypto/ex_data.c',
'openssl/crypto/initthread.c',
'openssl/crypto/o_str.c',
'openssl/crypto/packet.c',
'openssl/crypto/param_build.c',
'openssl/crypto/param_build_set.c',
'openssl/crypto/params.c',
'openssl/crypto/params_dup.c',
'openssl/crypto/params_from_text.c',
'openssl/crypto/provider_core.c',
'openssl/crypto/provider_predefined.c',
'openssl/crypto/self_test_core.c',
'openssl/crypto/sparse_array.c',
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'openssl/crypto/threads_none.c',
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'openssl/crypto/modes/cfb128.c',
'openssl/crypto/modes/ctr128.c',
'openssl/crypto/modes/gcm128.c',
'openssl/crypto/modes/ofb128.c',
'openssl/crypto/modes/wrap128.c',
'openssl/crypto/modes/xts128.c',
'openssl/crypto/property/defn_cache.c',
'openssl/crypto/property/property.c',
'openssl/crypto/property/property_parse.c',
'openssl/crypto/property/property_query.c',
'openssl/crypto/property/property_string.c',
'openssl/crypto/rand/rand_lib.c',
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'openssl/crypto/rsa/rsa_backend.c',
'openssl/crypto/rsa/rsa_chk.c',
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'openssl/crypto/rsa/rsa_sp800_56b_check.c',
'openssl/crypto/rsa/rsa_sp800_56b_gen.c',
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'openssl/crypto/sha/keccak1600.c',
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'openssl/crypto/sha/sha256.c',
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'openssl/crypto/sha/sha512.c',
'openssl/crypto/stack/stack.c',
'openssl/providers/common/der/der_rsa_sig.c',
'openssl/providers/common/bio_prov.c',
'openssl/providers/common/capabilities.c',
'openssl/providers/common/digest_to_nid.c',
'openssl/providers/common/provider_seeding.c',
'openssl/providers/common/provider_util.c',
'openssl/providers/common/securitycheck.c',
'openssl/providers/common/securitycheck_fips.c',
'openssl/providers/fips/fipsprov.c',
'openssl/providers/fips/self_test.c',
'openssl/providers/fips/self_test_kats.c',
'openssl/providers/implementations/asymciphers/rsa_enc.c',
'openssl/providers/implementations/ciphers/cipher_aes.c',
'openssl/providers/implementations/ciphers/cipher_aes_cbc_hmac_sha.c',
'openssl/providers/implementations/ciphers/cipher_aes_cbc_hmac_sha1_hw.c',
'openssl/providers/implementations/ciphers/cipher_aes_cbc_hmac_sha256_hw.c',
'openssl/providers/implementations/ciphers/cipher_aes_ccm.c',
'openssl/providers/implementations/ciphers/cipher_aes_ccm_hw.c',
'openssl/providers/implementations/ciphers/cipher_aes_gcm.c',
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'openssl/providers/implementations/ciphers/cipher_aes_ocb.c',
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'openssl/providers/implementations/ciphers/cipher_tdes_hw.c',
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'openssl/providers/implementations/digests/sha3_prov.c',
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'openssl/providers/implementations/exchange/kdf_exch.c',
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'openssl/providers/implementations/kdfs/pbkdf2.c',
'openssl/providers/implementations/kdfs/pbkdf2_fips.c',
'openssl/providers/implementations/kdfs/sshkdf.c',
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'openssl/providers/implementations/kdfs/x942kdf.c',
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'openssl/providers/implementations/keymgmt/dh_kmgmt.c',
'openssl/providers/implementations/keymgmt/dsa_kmgmt.c',
'openssl/providers/implementations/keymgmt/ec_kmgmt.c',
'openssl/providers/implementations/keymgmt/ecx_kmgmt.c',
'openssl/providers/implementations/keymgmt/kdf_legacy_kmgmt.c',
'openssl/providers/implementations/keymgmt/mac_legacy_kmgmt.c',
'openssl/providers/implementations/keymgmt/rsa_kmgmt.c',
'openssl/providers/implementations/macs/cmac_prov.c',
'openssl/providers/implementations/macs/gmac_prov.c',
'openssl/providers/implementations/macs/hmac_prov.c',
'openssl/providers/implementations/macs/kmac_prov.c',
'openssl/providers/implementations/rands/crngt.c',
'openssl/providers/implementations/rands/drbg.c',
'openssl/providers/implementations/rands/drbg_ctr.c',
'openssl/providers/implementations/rands/drbg_hash.c',
'openssl/providers/implementations/rands/drbg_hmac.c',
'openssl/providers/implementations/rands/test_rng.c',
'openssl/providers/implementations/signature/dsa_sig.c',
'openssl/providers/implementations/signature/ecdsa_sig.c',
'openssl/providers/implementations/signature/eddsa_sig.c',
'openssl/providers/implementations/signature/mac_legacy_sig.c',
'openssl/providers/implementations/signature/rsa_sig.c',
'openssl/ssl/s3_cbc.c',
'openssl/providers/common/der/der_dsa_key.c',
'openssl/providers/common/der/der_dsa_sig.c',
'openssl/providers/common/der/der_ec_key.c',
'openssl/providers/common/der/der_ec_sig.c',
'openssl/providers/common/der/der_ecx_key.c',
'openssl/providers/common/der/der_rsa_key.c',
'openssl/providers/common/provider_ctx.c',
'openssl/providers/common/provider_err.c',
'openssl/providers/implementations/ciphers/ciphercommon.c',
'openssl/providers/implementations/ciphers/ciphercommon_block.c',
'openssl/providers/implementations/ciphers/ciphercommon_ccm.c',
'openssl/providers/implementations/ciphers/ciphercommon_ccm_hw.c',
'openssl/providers/implementations/ciphers/ciphercommon_gcm.c',
'openssl/providers/implementations/ciphers/ciphercommon_gcm_hw.c',
'openssl/providers/implementations/ciphers/ciphercommon_hw.c',
'openssl/providers/implementations/digests/digestcommon.c',
'openssl/ssl/record/tls_pad.c',

```
  'openssl/providers/fips/fips_entry.c',

],
'openssl_sources_BSD-x86': [
  './config/archs/BSD-x86/asm_avx2/crypto/aes/aes-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/aes/aesni-x86.S',
  './config/archs/BSD-x86/asm_avx2/crypto/aes/vpaes-x86.S',
  './config/archs/BSD-x86/asm_avx2/crypto/bf/bf-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/bn/bn-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/bn/co-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/bn/x86-gf2m.S',
  './config/archs/BSD-x86/asm_avx2/crypto/bn/x86-mont.S',
  './config/archs/BSD-x86/asm_avx2/crypto/camellia/cmll-x86.S',
  './config/archs/BSD-x86/asm_avx2/crypto/chacha/chacha-x86.S',
  './config/archs/BSD-x86/asm_avx2/crypto/des/crypt586.S',
   './config/archs/BSD-x86/asm_avx2/crypto/des/des-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/ec/ecp_nistz256-x86.S',
  './config/archs/BSD-x86/asm_avx2/crypto/x86cpuid.S',
  './config/archs/BSD-x86/asm_avx2/crypto/md5/md5-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/modes/ghash-x86.S',
  './config/archs/BSD-x86/asm_avx2/crypto/poly1305/poly1305-x86.S',
  './config/archs/BSD-x86/asm_avx2/crypto/rc4/rc4-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/ripemd/rmd-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/sha/sha1-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/sha/sha256-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/sha/sha512-586.S',
  './config/archs/BSD-x86/asm_avx2/crypto/whrlpool/wp-mmx.S',
  './config/archs/BSD-x86/asm_avx2/engines/e_padlock-x86.S',
  './config/archs/BSD-x86/asm_avx2/providers/common/der/der_sm2_gen.c',
  './config/archs/BSD-x86/asm_avx2/providers/common/der/der_digests_gen.c',
   './config/archs/BSD-x86/asm_avx2/providers/common/der/der_dsa_gen.c',
  './config/archs/BSD-x86/asm_avx2/providers/common/der/der_ec_gen.c',
  './config/archs/BSD-x86/asm_avx2/providers/common/der/der_ecx_gen.c',
  './config/archs/BSD-x86/asm_avx2/providers/common/der/der_rsa_gen.c',
  './config/archs/BSD-x86/asm_avx2/providers/common/der/der_wrap_gen.c',
  './config/archs/BSD-x86/asm_avx2/providers/legacy.ld',
  './config/archs/BSD-x86/asm_avx2/providers/fips.ld',

],
'openssl_defines_BSD-x86': [
  'NDEBUG',
  'L_ENDIAN',
  'OPENSSL_BUILDING_OPENSSL',
  'AES_ASM',
  'DES_ASM',
  'ECP_NISTZ256_ASM',
  'FIPS_MODULE',
  'GHASH_ASM',
```

```
    'OPENSSL_BN_ASM_GF2m',
    'OPENSSL_BN_ASM_MONT',
    'OPENSSL_BN_ASM_PART_WORDS',
    'OPENSSL_CPUID_OBJ',
    'OPENSSL_IA32_SSE2',
    'SHA1_ASM',
    'SHA256_ASM',
    'SHA512_ASM',
    'VPAES_ASM',
    'FIPS_MODULE',
  ],
  'openssl_cflags_BSD-x86': [
    '-Wa,--noexecstack',
     '-Wall -O3 -fomit-frame-pointer',
    '-pthread',
    '-Wall -O3 -fomit-frame-pointer',
  ],
  'openssl_ex_libs_BSD-x86': [
    '-pthread',
  ],
  'linker_script': ''
 },
 'include_dirs': [
  '.',
  './include',
  './crypto',
  './crypto/include/internal',
  './providers/common/include',
 ],
 'defines': ['<@(openssl_defines_BSD-x86)'],
 'cflags': ['<@(openssl_cflags_BSD-x86)'],
 'libraries': ['<@(openssl_ex_libs_BSD-x86)'],

 'sources': ['<@(openssl_sources)', '<@(openssl_sources_BSD-x86)'],
 'direct_dependent_settings': {
  'include_dirs': ['./include', '.'],
  'defines': ['<@(openssl_defines_BSD-x86)'],
 },
}
```

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*/

#ifndef UV_BSD_H
#define UV_BSD_H

#define UV_PLATFORM_FS_EVENT_FIELDS                                   \
 uv__io_t event_watcher;                                              \

#define UV_IO_PRIVATE_PLATFORM_FIELDS                                 \
 int rcount;                                                          \
 int wcount;                                                          \

#define UV_HAVE_KQUEUE 1

#endif /* UV_BSD_H */
```

This license applies to all parts of V8 that are not externally
maintained libraries. The externally maintained libraries used by V8
are:

- PCRE test suite, located in
  test/mjsunit/third_party/regexp-pcre/regexp-pcre.js. This is based on the
  test suite from PCRE-7.3, which is copyrighted by the University
  of Cambridge and Google, Inc. The copyright notice and license
  are embedded in regexp-pcre.js.

- Layout tests, located in test/mjsunit/third_party/object-keys. These are
  based on layout tests from webkit.org which are copyrighted by
  Apple Computer, Inc. and released under a 3-clause BSD license.

- Strongtalk assembler, the basis of the files assembler-arm-inl.h,
  assembler-arm.cc, assembler-arm.h, assembler-ia32-inl.h,
  assembler-ia32.cc, assembler-ia32.h, assembler-x64-inl.h,
  assembler-x64.cc, assembler-x64.h, assembler.cc and assembler.h.
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  under a 3-clause BSD license.

- Valgrind client API header, located at src/third_party/valgrind/valgrind.h
  This is released under the BSD license.

- The Wasm C/C++ API headers, located at third_party/wasm-api/wasm.{h,hh}
  This is released under the Apache license. The API's upstream prototype
  implementation also formed the basis of V8's implementation in
  src/wasm/c-api.cc.

These libraries have their own licenses; we recommend you read them,
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```
#ifndef SRC_PERMISSION_WASI_PERMISSION_H_
#define SRC_PERMISSION_WASI_PERMISSION_H_

#if defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS

#include <vector>
#include "permission/permission_base.h"

namespace node {

namespace permission {

class WASIPermission final : public PermissionBase {
public:
 void Apply(Environment* env,
            const std::vector<std::string>& allow,
            PermissionScope scope) override;
 bool is_granted(Environment* env,
                 PermissionScope perm,
                 const std::string_view& param = "") const override;

private:
 bool deny_all_;
};

}  // namespace permission

}  // namespace node

#endif  // defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS
#endif  // SRC_PERMISSION_WASI_PERMISSION_H_
// Copyright 2016 The Chromium Authors
//
```

```
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// THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
// (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
// OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
{
 'variables': {
   'openssl_defines_BSD-x86_64': [
     'NDEBUG',
     'L_ENDIAN',
     'OPENSSL_BUILDING_OPENSSL',
     'OPENSSL_PIC',
   ],
   'openssl_cflags_BSD-x86_64': [
     '-Wall -O3',
     '-pthread',
     '-Wall -O3',
   ],
   'openssl_ex_libs_BSD-x86_64': [
     '-pthread',
   ],
   'openssl_cli_srcs_BSD-x86_64': [
     'openssl/apps/lib/cmp_mock_srv.c',
     'openssl/apps/asn1parse.c',
     'openssl/apps/ca.c',
     'openssl/apps/ciphers.c',
     'openssl/apps/cmp.c',
```

'openssl/apps/cms.c',
'openssl/apps/crl.c',
'openssl/apps/crl2pkcs7.c',
'openssl/apps/dgst.c',
'openssl/apps/dhparam.c',
'openssl/apps/dsa.c',
'openssl/apps/dsaparam.c',
'openssl/apps/ec.c',
'openssl/apps/ecparam.c',
'openssl/apps/enc.c',
'openssl/apps/engine.c',
'openssl/apps/errstr.c',
'openssl/apps/fipsinstall.c',
'openssl/apps/gendsa.c',
'openssl/apps/genpkey.c',
'openssl/apps/genrsa.c',
'openssl/apps/info.c',
'openssl/apps/kdf.c',
'openssl/apps/list.c',
'openssl/apps/mac.c',
'openssl/apps/nseq.c',
'openssl/apps/ocsp.c',
'openssl/apps/openssl.c',
'openssl/apps/passwd.c',
'openssl/apps/pkcs12.c',
'openssl/apps/pkcs7.c',
'openssl/apps/pkcs8.c',
'openssl/apps/pkey.c',
'openssl/apps/pkeyparam.c',
'openssl/apps/pkeyutl.c',
'openssl/apps/prime.c',
'./config/archs/BSD-x86_64/no-asm/apps/progs.c',
'openssl/apps/rand.c',
'openssl/apps/rehash.c',
'openssl/apps/req.c',
'openssl/apps/rsa.c',
'openssl/apps/rsautl.c',
'openssl/apps/s_client.c',
'openssl/apps/s_server.c',
'openssl/apps/s_time.c',
'openssl/apps/sess_id.c',
'openssl/apps/smime.c',
'openssl/apps/speed.c',
'openssl/apps/spkac.c',
'openssl/apps/srp.c',
'openssl/apps/storeutl.c',
'openssl/apps/ts.c',
'openssl/apps/verify.c',

```
    'openssl/apps/version.c',
     'openssl/apps/x509.c',
    'openssl/apps/lib/app_libctx.c',
    'openssl/apps/lib/app_params.c',
    'openssl/apps/lib/app_provider.c',
    'openssl/apps/lib/app_rand.c',
    'openssl/apps/lib/app_x509.c',
    'openssl/apps/lib/apps.c',
    'openssl/apps/lib/apps_ui.c',
    'openssl/apps/lib/columns.c',
    'openssl/apps/lib/engine.c',
    'openssl/apps/lib/engine_loader.c',
    'openssl/apps/lib/fmt.c',
    'openssl/apps/lib/http_server.c',
    'openssl/apps/lib/names.c',
    'openssl/apps/lib/opt.c',
    'openssl/apps/lib/s_cb.c',
    'openssl/apps/lib/s_socket.c',
    'openssl/apps/lib/tlssrp_depr.c',
  ],
 },
 'defines': ['<@(openssl_defines_BSD-x86_64)'],
 'include_dirs': [
  './include',
 ],
 'cflags' : ['<@(openssl_cflags_BSD-x86_64)'],
 'libraries': ['<@(openssl_ex_libs_BSD-x86_64)'],
 'sources': ['<@(openssl_cli_srcs_BSD-x86_64)'],
}
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/cms.h.in
*
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* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_CMS_H
# define OPENSSL_CMS_H
# pragma once

# include <openssl/macros.h>
```

```
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_CMS_H
# endif

# include <openssl/opensslconf.h>

# ifndef OPENSSL_NO_CMS
# include <openssl/x509.h>
# include <openssl/x509v3.h>
# include <openssl/cmserr.h>
# ifdef __cplusplus
extern "C" {
# endif

typedef struct CMS_ContentInfo_st CMS_ContentInfo;
typedef struct CMS_SignerInfo_st CMS_SignerInfo;
typedef struct CMS_CertificateChoices CMS_CertificateChoices;
typedef struct CMS_RevocationInfoChoice_st CMS_RevocationInfoChoice;
typedef
 struct CMS_RecipientInfo_st CMS_RecipientInfo;
typedef struct CMS_ReceiptRequest_st CMS_ReceiptRequest;
typedef struct CMS_Receipt_st CMS_Receipt;
typedef struct CMS_RecipientEncryptedKey_st CMS_RecipientEncryptedKey;
typedef struct CMS_OtherKeyAttribute_st CMS_OtherKeyAttribute;

SKM_DEFINE_STACK_OF_INTERNAL(CMS_SignerInfo, CMS_SignerInfo, CMS_SignerInfo)
#define sk_CMS_SignerInfo_num(sk) OPENSSL_sk_num(ossl_check_const_CMS_SignerInfo_sk_type(sk))
#define sk_CMS_SignerInfo_value(sk, idx) ((CMS_SignerInfo
*)OPENSSL_sk_value(ossl_check_const_CMS_SignerInfo_sk_type(sk), (idx)))
#define sk_CMS_SignerInfo_new(cmp) ((STACK_OF(CMS_SignerInfo)
*)OPENSSL_sk_new(ossl_check_CMS_SignerInfo_compfunc_type(cmp)))
#define sk_CMS_SignerInfo_new_null() ((STACK_OF(CMS_SignerInfo) *)OPENSSL_sk_new_null())
#define sk_CMS_SignerInfo_new_reserve(cmp, n) ((STACK_OF(CMS_SignerInfo)
*)OPENSSL_sk_new_reserve(ossl_check_CMS_SignerInfo_compfunc_type(cmp), (n)))
#define sk_CMS_SignerInfo_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_CMS_SignerInfo_sk_type(sk),
 (n))
#define sk_CMS_SignerInfo_free(sk) OPENSSL_sk_free(ossl_check_CMS_SignerInfo_sk_type(sk))
#define sk_CMS_SignerInfo_zero(sk) OPENSSL_sk_zero(ossl_check_CMS_SignerInfo_sk_type(sk))
#define sk_CMS_SignerInfo_delete(sk, i) ((CMS_SignerInfo
*)OPENSSL_sk_delete(ossl_check_CMS_SignerInfo_sk_type(sk), (i)))
#define sk_CMS_SignerInfo_delete_ptr(sk, ptr) ((CMS_SignerInfo
*)OPENSSL_sk_delete_ptr(ossl_check_CMS_SignerInfo_sk_type(sk), ossl_check_CMS_SignerInfo_type(ptr)))
#define sk_CMS_SignerInfo_push(sk, ptr) OPENSSL_sk_push(ossl_check_CMS_SignerInfo_sk_type(sk),
ossl_check_CMS_SignerInfo_type(ptr))
#define sk_CMS_SignerInfo_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_CMS_SignerInfo_sk_type(sk),
ossl_check_CMS_SignerInfo_type(ptr))
#define sk_CMS_SignerInfo_pop(sk) ((CMS_SignerInfo
*)OPENSSL_sk_pop(ossl_check_CMS_SignerInfo_sk_type(sk)))
```

```
#define sk_CMS_SignerInfo_shift(sk) ((CMS_SignerInfo
*)OPENSSL_sk_shift(ossl_check_CMS_SignerInfo_sk_type(sk)))
#define
 sk_CMS_SignerInfo_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_CMS_SignerInfo_sk_type(sk),ossl_check_CMS_SignerInfo_freefunc_type(fre
efunc))
#define sk_CMS_SignerInfo_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_CMS_SignerInfo_sk_type(sk),
ossl_check_CMS_SignerInfo_type(ptr), (idx))
#define sk_CMS_SignerInfo_set(sk, idx, ptr) ((CMS_SignerInfo
*)OPENSSL_sk_set(ossl_check_CMS_SignerInfo_sk_type(sk), (idx), ossl_check_CMS_SignerInfo_type(ptr)))
#define sk_CMS_SignerInfo_find(sk, ptr) OPENSSL_sk_find(ossl_check_CMS_SignerInfo_sk_type(sk),
ossl_check_CMS_SignerInfo_type(ptr))
#define sk_CMS_SignerInfo_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_CMS_SignerInfo_sk_type(sk),
ossl_check_CMS_SignerInfo_type(ptr))
#define sk_CMS_SignerInfo_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_CMS_SignerInfo_sk_type(sk), ossl_check_CMS_SignerInfo_type(ptr), pnum)
#define sk_CMS_SignerInfo_sort(sk) OPENSSL_sk_sort(ossl_check_CMS_SignerInfo_sk_type(sk))
#define sk_CMS_SignerInfo_is_sorted(sk)
 OPENSSL_sk_is_sorted(ossl_check_const_CMS_SignerInfo_sk_type(sk))
#define sk_CMS_SignerInfo_dup(sk) ((STACK_OF(CMS_SignerInfo)
*)OPENSSL_sk_dup(ossl_check_const_CMS_SignerInfo_sk_type(sk)))
#define sk_CMS_SignerInfo_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(CMS_SignerInfo)
*)OPENSSL_sk_deep_copy(ossl_check_const_CMS_SignerInfo_sk_type(sk),
ossl_check_CMS_SignerInfo_copyfunc_type(copyfunc), ossl_check_CMS_SignerInfo_freefunc_type(freefunc)))
#define sk_CMS_SignerInfo_set_cmp_func(sk, cmp)
((sk_CMS_SignerInfo_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_CMS_SignerInfo_sk_type(sk),
ossl_check_CMS_SignerInfo_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(CMS_RecipientEncryptedKey, CMS_RecipientEncryptedKey,
CMS_RecipientEncryptedKey)
#define sk_CMS_RecipientEncryptedKey_num(sk)
OPENSSL_sk_num(ossl_check_const_CMS_RecipientEncryptedKey_sk_type(sk))
#define sk_CMS_RecipientEncryptedKey_value(sk, idx) ((CMS_RecipientEncryptedKey
*)OPENSSL_sk_value(ossl_check_const_CMS_RecipientEncryptedKey_sk_type(sk),
 (idx)))
#define sk_CMS_RecipientEncryptedKey_new(cmp) ((STACK_OF(CMS_RecipientEncryptedKey)
*)OPENSSL_sk_new(ossl_check_CMS_RecipientEncryptedKey_compfunc_type(cmp)))
#define sk_CMS_RecipientEncryptedKey_new_null() ((STACK_OF(CMS_RecipientEncryptedKey)
*)OPENSSL_sk_new_null())
#define sk_CMS_RecipientEncryptedKey_new_reserve(cmp, n) ((STACK_OF(CMS_RecipientEncryptedKey)
*)OPENSSL_sk_new_reserve(ossl_check_CMS_RecipientEncryptedKey_compfunc_type(cmp), (n)))
#define sk_CMS_RecipientEncryptedKey_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk), (n))
#define sk_CMS_RecipientEncryptedKey_free(sk)
OPENSSL_sk_free(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk))
#define sk_CMS_RecipientEncryptedKey_zero(sk)
OPENSSL_sk_zero(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk))
#define sk_CMS_RecipientEncryptedKey_delete(sk, i) ((CMS_RecipientEncryptedKey
*)OPENSSL_sk_delete(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk),
```

```
 (i)))
#define sk_CMS_RecipientEncryptedKey_delete_ptr(sk, ptr) ((CMS_RecipientEncryptedKey
*)OPENSSL_sk_delete_ptr(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk),
ossl_check_CMS_RecipientEncryptedKey_type(ptr)))
#define sk_CMS_RecipientEncryptedKey_push(sk, ptr)
OPENSSL_sk_push(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk),
ossl_check_CMS_RecipientEncryptedKey_type(ptr))
#define sk_CMS_RecipientEncryptedKey_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk),
ossl_check_CMS_RecipientEncryptedKey_type(ptr))
#define sk_CMS_RecipientEncryptedKey_pop(sk) ((CMS_RecipientEncryptedKey
*)OPENSSL_sk_pop(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk)))
#define sk_CMS_RecipientEncryptedKey_shift(sk) ((CMS_RecipientEncryptedKey
*)OPENSSL_sk_shift(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk)))
#define sk_CMS_RecipientEncryptedKey_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk),ossl_check_CMS_RecipientEncry
ptedKey_freefunc_type(freefunc))
#define
 sk_CMS_RecipientEncryptedKey_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk),
ossl_check_CMS_RecipientEncryptedKey_type(ptr), (idx))
#define sk_CMS_RecipientEncryptedKey_set(sk, idx, ptr) ((CMS_RecipientEncryptedKey
*)OPENSSL_sk_set(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk), (idx),
ossl_check_CMS_RecipientEncryptedKey_type(ptr)))
#define sk_CMS_RecipientEncryptedKey_find(sk, ptr)
OPENSSL_sk_find(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk),
ossl_check_CMS_RecipientEncryptedKey_type(ptr))
#define sk_CMS_RecipientEncryptedKey_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk),
ossl_check_CMS_RecipientEncryptedKey_type(ptr))
#define sk_CMS_RecipientEncryptedKey_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk),
ossl_check_CMS_RecipientEncryptedKey_type(ptr), pnum)
#define sk_CMS_RecipientEncryptedKey_sort(sk)
OPENSSL_sk_sort(ossl_check_CMS_RecipientEncryptedKey_sk_type(sk))
#define
 sk_CMS_RecipientEncryptedKey_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_CMS_RecipientEncryptedKey_sk_type(sk))
#define sk_CMS_RecipientEncryptedKey_dup(sk) ((STACK_OF(CMS_RecipientEncryptedKey)
*)OPENSSL_sk_dup(ossl_check_const_CMS_RecipientEncryptedKey_sk_type(sk)))
#define sk_CMS_RecipientEncryptedKey_deep_copy(sk, copyfunc, freefunc)
((STACK_OF(CMS_RecipientEncryptedKey)
*)OPENSSL_sk_deep_copy(ossl_check_const_CMS_RecipientEncryptedKey_sk_type(sk),
ossl_check_CMS_RecipientEncryptedKey_copyfunc_type(copyfunc),
ossl_check_CMS_RecipientEncryptedKey_freefunc_type(freefunc)))
#define sk_CMS_RecipientEncryptedKey_set_cmp_func(sk, cmp)
((sk_CMS_RecipientEncryptedKey_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_CMS_RecipientEncrypted
Key_sk_type(sk), ossl_check_CMS_RecipientEncryptedKey_compfunc_type(cmp)))
```

```
SKM_DEFINE_STACK_OF_INTERNAL(CMS_RecipientInfo, CMS_RecipientInfo, CMS_RecipientInfo)
#define sk_CMS_RecipientInfo_num(sk)
 OPENSSL_sk_num(ossl_check_const_CMS_RecipientInfo_sk_type(sk))
#define sk_CMS_RecipientInfo_value(sk, idx) ((CMS_RecipientInfo
*)OPENSSL_sk_value(ossl_check_const_CMS_RecipientInfo_sk_type(sk), (idx)))
#define sk_CMS_RecipientInfo_new(cmp) ((STACK_OF(CMS_RecipientInfo)
*)OPENSSL_sk_new(ossl_check_CMS_RecipientInfo_compfunc_type(cmp)))
#define sk_CMS_RecipientInfo_new_null() ((STACK_OF(CMS_RecipientInfo) *)OPENSSL_sk_new_null())
#define sk_CMS_RecipientInfo_new_reserve(cmp, n) ((STACK_OF(CMS_RecipientInfo)
*)OPENSSL_sk_new_reserve(ossl_check_CMS_RecipientInfo_compfunc_type(cmp), (n)))
#define sk_CMS_RecipientInfo_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_CMS_RecipientInfo_sk_type(sk),
(n))
#define sk_CMS_RecipientInfo_free(sk) OPENSSL_sk_free(ossl_check_CMS_RecipientInfo_sk_type(sk))
#define sk_CMS_RecipientInfo_zero(sk) OPENSSL_sk_zero(ossl_check_CMS_RecipientInfo_sk_type(sk))
#define sk_CMS_RecipientInfo_delete(sk, i) ((CMS_RecipientInfo
*)OPENSSL_sk_delete(ossl_check_CMS_RecipientInfo_sk_type(sk),
 (i)))
#define sk_CMS_RecipientInfo_delete_ptr(sk, ptr) ((CMS_RecipientInfo
*)OPENSSL_sk_delete_ptr(ossl_check_CMS_RecipientInfo_sk_type(sk),
ossl_check_CMS_RecipientInfo_type(ptr)))
#define sk_CMS_RecipientInfo_push(sk, ptr) OPENSSL_sk_push(ossl_check_CMS_RecipientInfo_sk_type(sk),
ossl_check_CMS_RecipientInfo_type(ptr))
#define sk_CMS_RecipientInfo_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_CMS_RecipientInfo_sk_type(sk), ossl_check_CMS_RecipientInfo_type(ptr))
#define sk_CMS_RecipientInfo_pop(sk) ((CMS_RecipientInfo
*)OPENSSL_sk_pop(ossl_check_CMS_RecipientInfo_sk_type(sk)))
#define sk_CMS_RecipientInfo_shift(sk) ((CMS_RecipientInfo
*)OPENSSL_sk_shift(ossl_check_CMS_RecipientInfo_sk_type(sk)))
#define sk_CMS_RecipientInfo_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_CMS_RecipientInfo_sk_type(sk),ossl_check_CMS_RecipientInfo_freefunc_ty
pe(freefunc))
#define sk_CMS_RecipientInfo_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_CMS_RecipientInfo_sk_type(sk),
 ossl_check_CMS_RecipientInfo_type(ptr), (idx))
#define sk_CMS_RecipientInfo_set(sk, idx, ptr) ((CMS_RecipientInfo
*)OPENSSL_sk_set(ossl_check_CMS_RecipientInfo_sk_type(sk), (idx),
ossl_check_CMS_RecipientInfo_type(ptr)))
#define sk_CMS_RecipientInfo_find(sk, ptr) OPENSSL_sk_find(ossl_check_CMS_RecipientInfo_sk_type(sk),
ossl_check_CMS_RecipientInfo_type(ptr))
#define sk_CMS_RecipientInfo_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_CMS_RecipientInfo_sk_type(sk), ossl_check_CMS_RecipientInfo_type(ptr))
#define sk_CMS_RecipientInfo_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_CMS_RecipientInfo_sk_type(sk), ossl_check_CMS_RecipientInfo_type(ptr),
pnum)
#define sk_CMS_RecipientInfo_sort(sk) OPENSSL_sk_sort(ossl_check_CMS_RecipientInfo_sk_type(sk))
#define sk_CMS_RecipientInfo_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_CMS_RecipientInfo_sk_type(sk))
#define sk_CMS_RecipientInfo_dup(sk) ((STACK_OF(CMS_RecipientInfo)
```

```
*)OPENSSL_sk_dup(ossl_check_const_CMS_RecipientInfo_sk_type(sk)))
#define
 sk_CMS_RecipientInfo_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(CMS_RecipientInfo)
*)OPENSSL_sk_deep_copy(ossl_check_const_CMS_RecipientInfo_sk_type(sk),
ossl_check_CMS_RecipientInfo_copyfunc_type(copyfunc),
ossl_check_CMS_RecipientInfo_freefunc_type(freefunc)))
#define sk_CMS_RecipientInfo_set_cmp_func(sk, cmp)
((sk_CMS_RecipientInfo_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_CMS_RecipientInfo_sk_type(sk),
ossl_check_CMS_RecipientInfo_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(CMS_RevocationInfoChoice, CMS_RevocationInfoChoice,
CMS_RevocationInfoChoice)
#define sk_CMS_RevocationInfoChoice_num(sk)
OPENSSL_sk_num(ossl_check_const_CMS_RevocationInfoChoice_sk_type(sk))
#define sk_CMS_RevocationInfoChoice_value(sk, idx) ((CMS_RevocationInfoChoice
*)OPENSSL_sk_value(ossl_check_const_CMS_RevocationInfoChoice_sk_type(sk), (idx)))
#define sk_CMS_RevocationInfoChoice_new(cmp) ((STACK_OF(CMS_RevocationInfoChoice)
*)OPENSSL_sk_new(ossl_check_CMS_RevocationInfoChoice_compfunc_type(cmp)))
#define
 sk_CMS_RevocationInfoChoice_new_null() ((STACK_OF(CMS_RevocationInfoChoice)
*)OPENSSL_sk_new_null())
#define sk_CMS_RevocationInfoChoice_new_reserve(cmp, n) ((STACK_OF(CMS_RevocationInfoChoice)
*)OPENSSL_sk_new_reserve(ossl_check_CMS_RevocationInfoChoice_compfunc_type(cmp), (n)))
#define sk_CMS_RevocationInfoChoice_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_CMS_RevocationInfoChoice_sk_type(sk), (n))
#define sk_CMS_RevocationInfoChoice_free(sk)
OPENSSL_sk_free(ossl_check_CMS_RevocationInfoChoice_sk_type(sk))
#define sk_CMS_RevocationInfoChoice_zero(sk)
OPENSSL_sk_zero(ossl_check_CMS_RevocationInfoChoice_sk_type(sk))
#define sk_CMS_RevocationInfoChoice_delete(sk, i) ((CMS_RevocationInfoChoice
*)OPENSSL_sk_delete(ossl_check_CMS_RevocationInfoChoice_sk_type(sk), (i)))
#define sk_CMS_RevocationInfoChoice_delete_ptr(sk, ptr) ((CMS_RevocationInfoChoice
*)OPENSSL_sk_delete_ptr(ossl_check_CMS_RevocationInfoChoice_sk_type(sk),
ossl_check_CMS_RevocationInfoChoice_type(ptr)))
#define
 sk_CMS_RevocationInfoChoice_push(sk, ptr)
OPENSSL_sk_push(ossl_check_CMS_RevocationInfoChoice_sk_type(sk),
ossl_check_CMS_RevocationInfoChoice_type(ptr))
#define sk_CMS_RevocationInfoChoice_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_CMS_RevocationInfoChoice_sk_type(sk),
ossl_check_CMS_RevocationInfoChoice_type(ptr))
#define sk_CMS_RevocationInfoChoice_pop(sk) ((CMS_RevocationInfoChoice
*)OPENSSL_sk_pop(ossl_check_CMS_RevocationInfoChoice_sk_type(sk)))
#define sk_CMS_RevocationInfoChoice_shift(sk) ((CMS_RevocationInfoChoice
*)OPENSSL_sk_shift(ossl_check_CMS_RevocationInfoChoice_sk_type(sk)))
#define sk_CMS_RevocationInfoChoice_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_CMS_RevocationInfoChoice_sk_type(sk),ossl_check_CMS_RevocationInfoC
hoice_freefunc_type(freefunc))
#define sk_CMS_RevocationInfoChoice_insert(sk, ptr, idx)
```

```
OPENSSL_sk_insert(ossl_check_CMS_RevocationInfoChoice_sk_type(sk),
ossl_check_CMS_RevocationInfoChoice_type(ptr), (idx))
#define
 sk_CMS_RevocationInfoChoice_set(sk, idx, ptr) ((CMS_RevocationInfoChoice
*)OPENSSL_sk_set(ossl_check_CMS_RevocationInfoChoice_sk_type(sk), (idx),
ossl_check_CMS_RevocationInfoChoice_type(ptr)))
#define sk_CMS_RevocationInfoChoice_find(sk, ptr)
OPENSSL_sk_find(ossl_check_CMS_RevocationInfoChoice_sk_type(sk),
ossl_check_CMS_RevocationInfoChoice_type(ptr))
#define sk_CMS_RevocationInfoChoice_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_CMS_RevocationInfoChoice_sk_type(sk),
ossl_check_CMS_RevocationInfoChoice_type(ptr))
#define sk_CMS_RevocationInfoChoice_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_CMS_RevocationInfoChoice_sk_type(sk),
ossl_check_CMS_RevocationInfoChoice_type(ptr), pnum)
#define sk_CMS_RevocationInfoChoice_sort(sk)
OPENSSL_sk_sort(ossl_check_CMS_RevocationInfoChoice_sk_type(sk))
#define sk_CMS_RevocationInfoChoice_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_CMS_RevocationInfoChoice_sk_type(sk))
#define sk_CMS_RevocationInfoChoice_dup(sk) ((STACK_OF(CMS_RevocationInfoChoice)
 *)OPENSSL_sk_dup(ossl_check_const_CMS_RevocationInfoChoice_sk_type(sk)))
#define sk_CMS_RevocationInfoChoice_deep_copy(sk, copyfunc, freefunc)
((STACK_OF(CMS_RevocationInfoChoice)
*)OPENSSL_sk_deep_copy(ossl_check_const_CMS_RevocationInfoChoice_sk_type(sk),
ossl_check_CMS_RevocationInfoChoice_copyfunc_type(copyfunc),
ossl_check_CMS_RevocationInfoChoice_freefunc_type(freefunc)))
#define sk_CMS_RevocationInfoChoice_set_cmp_func(sk, cmp)
((sk_CMS_RevocationInfoChoice_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_CMS_RevocationInfoChoi
ce_sk_type(sk), ossl_check_CMS_RevocationInfoChoice_compfunc_type(cmp)))


DECLARE_ASN1_FUNCTIONS(CMS_ContentInfo)
DECLARE_ASN1_FUNCTIONS(CMS_ReceiptRequest)
DECLARE_ASN1_PRINT_FUNCTION(CMS_ContentInfo)

CMS_ContentInfo *CMS_ContentInfo_new_ex(OSSL_LIB_CTX *libctx, const char *propq);

# define CMS_SIGNERINFO_ISSUER_SERIAL    0
# define CMS_SIGNERINFO_KEYIDENTIFIER    1

# define CMS_RECIPINFO_NONE             -1
# define CMS_RECIPINFO_TRANS
            0
# define CMS_RECIPINFO_AGREE            1
# define CMS_RECIPINFO_KEK              2
# define CMS_RECIPINFO_PASS             3
# define CMS_RECIPINFO_OTHER            4
```

```
/* S/MIME related flags */

# define CMS_TEXT                        0x1
# define CMS_NOCERTS                     0x2
# define CMS_NO_CONTENT_VERIFY           0x4
# define CMS_NO_ATTR_VERIFY              0x8
# define CMS_NOSIGS                      \
                (CMS_NO_CONTENT_VERIFY|CMS_NO_ATTR_VERIFY)
# define CMS_NOINTERN                    0x10
# define CMS_NO_SIGNER_CERT_VERIFY       0x20
# define CMS_NOVERIFY                    0x20
# define CMS_DETACHED                    0x40
# define CMS_BINARY                      0x80
# define CMS_NOATTR                      0x100
# define CMS_NOSMIMECAP                  0x200
# define CMS_NOOLDMIMETYPE               0x400
# define CMS_CRLFEOL                     0x800
# define CMS_STREAM                      0x1000
# define CMS_NOCRL
              0x2000
# define CMS_PARTIAL                     0x4000
# define CMS_REUSE_DIGEST                0x8000
# define CMS_USE_KEYID                   0x10000
# define CMS_DEBUG_DECRYPT               0x20000
# define CMS_KEY_PARAM                   0x40000
# define CMS_ASCIICRLF                   0x80000
# define CMS_CADES                       0x100000
# define CMS_USE_ORIGINATOR_KEYID        0x200000

const ASN1_OBJECT *CMS_get0_type(const CMS_ContentInfo *cms);

BIO *CMS_dataInit(CMS_ContentInfo *cms, BIO *icont);
int CMS_dataFinal(CMS_ContentInfo *cms, BIO *bio);

ASN1_OCTET_STRING **CMS_get0_content(CMS_ContentInfo *cms);
int CMS_is_detached(CMS_ContentInfo *cms);
int CMS_set_detached(CMS_ContentInfo *cms, int detached);

# ifdef OPENSSL_PEM_H
DECLARE_PEM_rw(CMS, CMS_ContentInfo)
# endif
int CMS_stream(unsigned char ***boundary, CMS_ContentInfo *cms);
CMS_ContentInfo *d2i_CMS_bio(BIO *bp, CMS_ContentInfo **cms);
int i2d_CMS_bio(BIO *bp, CMS_ContentInfo *cms);

BIO *BIO_new_CMS(BIO
 *out, CMS_ContentInfo *cms);
int i2d_CMS_bio_stream(BIO *out, CMS_ContentInfo *cms, BIO *in, int flags);
```

```
int PEM_write_bio_CMS_stream(BIO *out, CMS_ContentInfo *cms, BIO *in,
                             int flags);
CMS_ContentInfo *SMIME_read_CMS(BIO *bio, BIO **bcont);
CMS_ContentInfo *SMIME_read_CMS_ex(BIO *bio, int flags, BIO **bcont, CMS_ContentInfo **ci);
int SMIME_write_CMS(BIO *bio, CMS_ContentInfo *cms, BIO *data, int flags);

int CMS_final(CMS_ContentInfo *cms, BIO *data, BIO *dcont,
              unsigned int flags);

CMS_ContentInfo *CMS_sign(X509 *signcert, EVP_PKEY *pkey,
                          STACK_OF(X509) *certs, BIO *data,
                          unsigned int flags);
CMS_ContentInfo *CMS_sign_ex(X509 *signcert, EVP_PKEY *pkey,
                             STACK_OF(X509) *certs, BIO *data,
                             unsigned int flags, OSSL_LIB_CTX *ctx,
                             const char *propq);

CMS_ContentInfo *CMS_sign_receipt(CMS_SignerInfo
 *si,
                                  X509 *signcert, EVP_PKEY *pkey,
                                  STACK_OF(X509) *certs, unsigned int flags);

int CMS_data(CMS_ContentInfo *cms, BIO *out, unsigned int flags);
CMS_ContentInfo *CMS_data_create(BIO *in, unsigned int flags);
CMS_ContentInfo *CMS_data_create_ex(BIO *in, unsigned int flags,
                                    OSSL_LIB_CTX *ctx, const char *propq);

int CMS_digest_verify(CMS_ContentInfo *cms, BIO *dcont, BIO *out,
                      unsigned int flags);
CMS_ContentInfo *CMS_digest_create(BIO *in, const EVP_MD *md,
                                   unsigned int flags);
CMS_ContentInfo *CMS_digest_create_ex(BIO *in, const EVP_MD *md,
                                      unsigned int flags, OSSL_LIB_CTX *ctx,
                                      const char *propq);

int CMS_EncryptedData_decrypt(CMS_ContentInfo *cms,
                              const unsigned char *key, size_t keylen,

    BIO *dcont, BIO *out, unsigned int flags);

CMS_ContentInfo *CMS_EncryptedData_encrypt(BIO *in, const EVP_CIPHER *cipher,
                                           const unsigned char *key,
                                           size_t keylen, unsigned int flags);
CMS_ContentInfo *CMS_EncryptedData_encrypt_ex(BIO *in, const EVP_CIPHER *cipher,
                                              const unsigned char *key,
                                              size_t keylen, unsigned int flags,
                                              OSSL_LIB_CTX *ctx,
                                              const char *propq);
```

```
int CMS_EncryptedData_set1_key(CMS_ContentInfo *cms, const EVP_CIPHER *ciph,
                               const unsigned char *key, size_t keylen);

int CMS_verify(CMS_ContentInfo *cms, STACK_OF(X509) *certs,
               X509_STORE *store, BIO *dcont, BIO *out, unsigned int flags);

int CMS_verify_receipt(CMS_ContentInfo *rcms, CMS_ContentInfo *ocms,

                       STACK_OF(X509) *certs,
                       X509_STORE *store, unsigned int flags);

STACK_OF(X509) *CMS_get0_signers(CMS_ContentInfo *cms);

CMS_ContentInfo *CMS_encrypt(STACK_OF(X509) *certs, BIO *in,
                             const EVP_CIPHER *cipher, unsigned int flags);
CMS_ContentInfo *CMS_encrypt_ex(STACK_OF(X509) *certs, BIO *in,
                                const EVP_CIPHER *cipher, unsigned int flags,
                                OSSL_LIB_CTX *ctx, const char *propq);

int CMS_decrypt(CMS_ContentInfo *cms, EVP_PKEY *pkey, X509 *cert,
                BIO *dcont, BIO *out, unsigned int flags);

int CMS_decrypt_set1_pkey(CMS_ContentInfo *cms, EVP_PKEY *pk, X509 *cert);
int CMS_decrypt_set1_pkey_and_peer(CMS_ContentInfo *cms, EVP_PKEY *pk,
                                   X509 *cert, X509 *peer);
int CMS_decrypt_set1_key(CMS_ContentInfo *cms,
                         unsigned char *key, size_t keylen,
                         const unsigned char
 *id, size_t idlen);
int CMS_decrypt_set1_password(CMS_ContentInfo *cms,
                              unsigned char *pass, ossl_ssize_t passlen);

STACK_OF(CMS_RecipientInfo) *CMS_get0_RecipientInfos(CMS_ContentInfo *cms);
int CMS_RecipientInfo_type(CMS_RecipientInfo *ri);
EVP_PKEY_CTX *CMS_RecipientInfo_get0_pkey_ctx(CMS_RecipientInfo *ri);
CMS_ContentInfo *CMS_AuthEnvelopedData_create(const EVP_CIPHER *cipher);
CMS_ContentInfo *
CMS_AuthEnvelopedData_create_ex(const EVP_CIPHER *cipher, OSSL_LIB_CTX *ctx,
                                const char *propq);
CMS_ContentInfo *CMS_EnvelopedData_create(const EVP_CIPHER *cipher);
CMS_ContentInfo *CMS_EnvelopedData_create_ex(const EVP_CIPHER *cipher,
                                             OSSL_LIB_CTX *ctx,
                                             const char *propq);

CMS_RecipientInfo *CMS_add1_recipient_cert(CMS_ContentInfo *cms,
                                           X509 *recip, unsigned int flags);
CMS_RecipientInfo *CMS_add1_recipient(CMS_ContentInfo
```

```
 *cms, X509 *recip,
    EVP_PKEY *originatorPrivKey, X509 * originator, unsigned int flags);
int CMS_RecipientInfo_set0_pkey(CMS_RecipientInfo *ri, EVP_PKEY *pkey);
int CMS_RecipientInfo_ktri_cert_cmp(CMS_RecipientInfo *ri, X509 *cert);
int CMS_RecipientInfo_ktri_get0_algs(CMS_RecipientInfo *ri,
                              EVP_PKEY **pk, X509 **recip,
                              X509_ALGOR **palg);
int CMS_RecipientInfo_ktri_get0_signer_id(CMS_RecipientInfo *ri,
                                  ASN1_OCTET_STRING **keyid,
                                  X509_NAME **issuer,
                                  ASN1_INTEGER **sno);

CMS_RecipientInfo *CMS_add0_recipient_key(CMS_ContentInfo *cms, int nid,
                                  unsigned char *key, size_t keylen,
                                  unsigned char *id, size_t idlen,
                                  ASN1_GENERALIZEDTIME *date,
                                   ASN1_OBJECT *otherTypeId,
                                  ASN1_TYPE *otherType);

int CMS_RecipientInfo_kekri_get0_id(CMS_RecipientInfo *ri,
                             X509_ALGOR **palg,
                             ASN1_OCTET_STRING **pid,
                             ASN1_GENERALIZEDTIME **pdate,
                             ASN1_OBJECT **potherid,
                             ASN1_TYPE **pothertype);

int CMS_RecipientInfo_set0_key(CMS_RecipientInfo *ri,
                          unsigned char *key, size_t keylen);

int CMS_RecipientInfo_kekri_id_cmp(CMS_RecipientInfo *ri,
                            const unsigned char *id, size_t idlen);

int CMS_RecipientInfo_set0_password(CMS_RecipientInfo *ri,
                             unsigned char *pass,
                             ossl_ssize_t passlen);

CMS_RecipientInfo *CMS_add0_recipient_password(CMS_ContentInfo *cms,
                                   int iter, int wrap_nid,
                                  int pbe_nid,
                                  unsigned char *pass,
                                  ossl_ssize_t passlen,
                                  const EVP_CIPHER *kekciph);

int CMS_RecipientInfo_decrypt(CMS_ContentInfo *cms, CMS_RecipientInfo *ri);
int CMS_RecipientInfo_encrypt(const CMS_ContentInfo *cms, CMS_RecipientInfo *ri);

int CMS_uncompress(CMS_ContentInfo *cms, BIO *dcont, BIO *out,
                unsigned int flags);
```

```
CMS_ContentInfo *CMS_compress(BIO *in, int comp_nid, unsigned int flags);

int CMS_set1_eContentType(CMS_ContentInfo *cms, const ASN1_OBJECT *oid);
const ASN1_OBJECT *CMS_get0_eContentType(CMS_ContentInfo *cms);

CMS_CertificateChoices *CMS_add0_CertificateChoices(CMS_ContentInfo *cms);
int CMS_add0_cert(CMS_ContentInfo *cms, X509 *cert);
int CMS_add1_cert(CMS_ContentInfo *cms, X509 *cert);
STACK_OF(X509)
 *CMS_get1_certs(CMS_ContentInfo *cms);

CMS_RevocationInfoChoice *CMS_add0_RevocationInfoChoice(CMS_ContentInfo *cms);
int CMS_add0_crl(CMS_ContentInfo *cms, X509_CRL *crl);
int CMS_add1_crl(CMS_ContentInfo *cms, X509_CRL *crl);
STACK_OF(X509_CRL) *CMS_get1_crls(CMS_ContentInfo *cms);

int CMS_SignedData_init(CMS_ContentInfo *cms);
CMS_SignerInfo *CMS_add1_signer(CMS_ContentInfo *cms,
                        X509 *signer, EVP_PKEY *pk, const EVP_MD *md,
                        unsigned int flags);
EVP_PKEY_CTX *CMS_SignerInfo_get0_pkey_ctx(CMS_SignerInfo *si);
EVP_MD_CTX *CMS_SignerInfo_get0_md_ctx(CMS_SignerInfo *si);
STACK_OF(CMS_SignerInfo) *CMS_get0_SignerInfos(CMS_ContentInfo *cms);

void CMS_SignerInfo_set1_signer_cert(CMS_SignerInfo *si, X509 *signer);
int CMS_SignerInfo_get0_signer_id(CMS_SignerInfo *si,
                         ASN1_OCTET_STRING **keyid,
                         X509_NAME **issuer, ASN1_INTEGER **sno);
int CMS_SignerInfo_cert_cmp(CMS_SignerInfo
 *si, X509 *cert);
int CMS_set1_signers_certs(CMS_ContentInfo *cms, STACK_OF(X509) *certs,
                    unsigned int flags);
void CMS_SignerInfo_get0_algs(CMS_SignerInfo *si, EVP_PKEY **pk,
                       X509 **signer, X509_ALGOR **pdig,
                       X509_ALGOR **psig);
ASN1_OCTET_STRING *CMS_SignerInfo_get0_signature(CMS_SignerInfo *si);
int CMS_SignerInfo_sign(CMS_SignerInfo *si);
int CMS_SignerInfo_verify(CMS_SignerInfo *si);
int CMS_SignerInfo_verify_content(CMS_SignerInfo *si, BIO *chain);

int CMS_add_smimecap(CMS_SignerInfo *si, STACK_OF(X509_ALGOR) *algs);
int CMS_add_simple_smimecap(STACK_OF(X509_ALGOR) **algs,
                     int algnid, int keysize);
int CMS_add_standard_smimecap(STACK_OF(X509_ALGOR) **smcap);

int CMS_signed_get_attr_count(const CMS_SignerInfo *si);
int CMS_signed_get_attr_by_NID(const CMS_SignerInfo *si, int nid,
                        int lastpos);
```

```
int CMS_signed_get_attr_by_OBJ(const
 CMS_SignerInfo *si, const ASN1_OBJECT *obj,
                        int lastpos);
X509_ATTRIBUTE *CMS_signed_get_attr(const CMS_SignerInfo *si, int loc);
X509_ATTRIBUTE *CMS_signed_delete_attr(CMS_SignerInfo *si, int loc);
int CMS_signed_add1_attr(CMS_SignerInfo *si, X509_ATTRIBUTE *attr);
int CMS_signed_add1_attr_by_OBJ(CMS_SignerInfo *si,
                        const ASN1_OBJECT *obj, int type,
                        const void *bytes, int len);
int CMS_signed_add1_attr_by_NID(CMS_SignerInfo *si,
                        int nid, int type,
                        const void *bytes, int len);
int CMS_signed_add1_attr_by_txt(CMS_SignerInfo *si,
                        const char *attrname, int type,
                        const void *bytes, int len);
void *CMS_signed_get0_data_by_OBJ(const CMS_SignerInfo *si,
                         const ASN1_OBJECT *oid,

   int lastpos, int type);

int CMS_unsigned_get_attr_count(const CMS_SignerInfo *si);
int CMS_unsigned_get_attr_by_NID(const CMS_SignerInfo *si, int nid,
                         int lastpos);
int CMS_unsigned_get_attr_by_OBJ(const CMS_SignerInfo *si,
                         const ASN1_OBJECT *obj, int lastpos);
X509_ATTRIBUTE *CMS_unsigned_get_attr(const CMS_SignerInfo *si, int loc);
X509_ATTRIBUTE *CMS_unsigned_delete_attr(CMS_SignerInfo *si, int loc);
int CMS_unsigned_add1_attr(CMS_SignerInfo *si, X509_ATTRIBUTE *attr);
int CMS_unsigned_add1_attr_by_OBJ(CMS_SignerInfo *si,
                         const ASN1_OBJECT *obj, int type,
                         const void *bytes, int len);
int CMS_unsigned_add1_attr_by_NID(CMS_SignerInfo *si,
                         int nid, int type,
                         const void *bytes, int len);
int CMS_unsigned_add1_attr_by_txt(CMS_SignerInfo *si,
                         const char
 *attrname, int type,
                         const void *bytes, int len);
void *CMS_unsigned_get0_data_by_OBJ(CMS_SignerInfo *si, ASN1_OBJECT *oid,
                          int lastpos, int type);

int CMS_get1_ReceiptRequest(CMS_SignerInfo *si, CMS_ReceiptRequest **prr);
CMS_ReceiptRequest *CMS_ReceiptRequest_create0(
   unsigned char *id, int idlen, int allorfirst,
   STACK_OF(GENERAL_NAMES) *receiptList,
   STACK_OF(GENERAL_NAMES) *receiptsTo);
CMS_ReceiptRequest *CMS_ReceiptRequest_create0_ex(
   unsigned char *id, int idlen, int allorfirst,
```

```
  STACK_OF(GENERAL_NAMES) *receiptList,
  STACK_OF(GENERAL_NAMES) *receiptsTo,
  OSSL_LIB_CTX *ctx);

int CMS_add1_ReceiptRequest(CMS_SignerInfo *si, CMS_ReceiptRequest *rr);
void CMS_ReceiptRequest_get0_values(CMS_ReceiptRequest *rr,
                            ASN1_STRING **pcid,
                            int *pallorfirst,
                            STACK_OF(GENERAL_NAMES) **plist,

                           STACK_OF(GENERAL_NAMES) **prto);
int CMS_RecipientInfo_kari_get0_alg(CMS_RecipientInfo *ri,
                            X509_ALGOR **palg,
                            ASN1_OCTET_STRING **pukm);
STACK_OF(CMS_RecipientEncryptedKey)
*CMS_RecipientInfo_kari_get0_reks(CMS_RecipientInfo *ri);

int CMS_RecipientInfo_kari_get0_orig_id(CMS_RecipientInfo *ri,
                              X509_ALGOR **pubalg,
                              ASN1_BIT_STRING **pubkey,
                              ASN1_OCTET_STRING **keyid,
                              X509_NAME **issuer,
                              ASN1_INTEGER **sno);

int CMS_RecipientInfo_kari_orig_id_cmp(CMS_RecipientInfo *ri, X509 *cert);

int CMS_RecipientEncryptedKey_get0_id(CMS_RecipientEncryptedKey *rek,
                              ASN1_OCTET_STRING **keyid,
                              ASN1_GENERALIZEDTIME **tm,

                           CMS_OtherKeyAttribute **other,
                              X509_NAME **issuer, ASN1_INTEGER **sno);
int CMS_RecipientEncryptedKey_cert_cmp(CMS_RecipientEncryptedKey *rek,
                               X509 *cert);
int CMS_RecipientInfo_kari_set0_pkey(CMS_RecipientInfo *ri, EVP_PKEY *pk);
int CMS_RecipientInfo_kari_set0_pkey_and_peer(CMS_RecipientInfo *ri, EVP_PKEY *pk, X509 *peer);
EVP_CIPHER_CTX *CMS_RecipientInfo_kari_get0_ctx(CMS_RecipientInfo *ri);
int CMS_RecipientInfo_kari_decrypt(CMS_ContentInfo *cms,
                           CMS_RecipientInfo *ri,
                           CMS_RecipientEncryptedKey *rek);

int CMS_SharedInfo_encode(unsigned char **pder, X509_ALGOR *kekalg,
                     ASN1_OCTET_STRING *ukm, int keylen);

/* Backward compatibility for spelling errors. */
# define CMS_R_UNKNOWN_DIGEST_ALGORITM CMS_R_UNKNOWN_DIGEST_ALGORITHM
# define CMS_R_UNSUPPORTED_RECPIENTINFO_TYPE \
  CMS_R_UNSUPPORTED_RECIPIENTINFO_TYPE
```

```
#
  ifdef  __cplusplus
}
#  endif
# endif
#endif
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/asn1.h.in
*
* Copyright 1995-2021 The OpenSSL Project Authors. All Rights Reserved.
*
* Licensed under the Apache License 2.0 (the "License").  You may not use
* this file except in compliance with the License.  You can obtain a copy
* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_ASN1_H
# define OPENSSL_ASN1_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_ASN1_H
# endif

# include <time.h>
# include <openssl/e_os2.h>
# include <openssl/opensslconf.h>
# include <openssl/bio.h>
# include <openssl/safestack.h>
# include <openssl/asn1err.h>
# include <openssl/symhacks.h>

# include <openssl/types.h>
# include <openssl/bn.h>

# ifdef OPENSSL_BUILD_SHLIBCRYPTO
#  undef OPENSSL_EXTERN
#  define OPENSSL_EXTERN OPENSSL_EXPORT
# endif

#ifdef  __cplusplus
extern "C" {
```

```
#endif

# define V_ASN1_UNIVERSAL
            0x00
# define V_ASN1_APPLICATION            0x40
# define V_ASN1_CONTEXT_SPECIFIC       0x80
# define V_ASN1_PRIVATE                0xc0

# define V_ASN1_CONSTRUCTED            0x20
# define V_ASN1_PRIMITIVE_TAG          0x1f
# define V_ASN1_PRIMATIVE_TAG /*compat*/ V_ASN1_PRIMITIVE_TAG

# define V_ASN1_APP_CHOOSE             -2/* let the recipient choose */
# define V_ASN1_OTHER                  -3/* used in ASN1_TYPE */
# define V_ASN1_ANY                    -4/* used in ASN1 template code */

# define V_ASN1_UNDEF                  -1
/* ASN.1 tag values */
# define V_ASN1_EOC                    0
# define V_ASN1_BOOLEAN                1 /**/
# define V_ASN1_INTEGER                2
# define V_ASN1_BIT_STRING             3
# define V_ASN1_OCTET_STRING           4
# define V_ASN1_NULL                   5
# define V_ASN1_OBJECT                 6
# define V_ASN1_OBJECT_DESCRIPTOR      7
# define V_ASN1_EXTERNAL               8
#
 define V_ASN1_REAL                   9
# define V_ASN1_ENUMERATED             10
# define V_ASN1_UTF8STRING             12
# define V_ASN1_SEQUENCE               16
# define V_ASN1_SET                    17
# define V_ASN1_NUMERICSTRING          18 /**/
# define V_ASN1_PRINTABLESTRING        19
# define V_ASN1_T61STRING              20
# define V_ASN1_TELETEXSTRING          20/* alias */
# define V_ASN1_VIDEOTEXSTRING         21 /**/
# define V_ASN1_IA5STRING              22
# define V_ASN1_UTCTIME                23
# define V_ASN1_GENERALIZEDTIME        24 /**/
# define V_ASN1_GRAPHICSTRING          25 /**/
# define V_ASN1_ISO64STRING            26 /**/
# define V_ASN1_VISIBLESTRING          26/* alias */
# define V_ASN1_GENERALSTRING          27 /**/
# define V_ASN1_UNIVERSALSTRING        28 /**/
# define V_ASN1_BMPSTRING              30
```

```
/*
* NB the constants below are used internally by ASN1_INTEGER
* and ASN1_ENUMERATED to indicate the sign.
 They are *not* on
* the wire tag values.
*/

# define V_ASN1_NEG                    0x100
# define V_ASN1_NEG_INTEGER            (2 | V_ASN1_NEG)
# define V_ASN1_NEG_ENUMERATED         (10 | V_ASN1_NEG)

/* For use with d2i_ASN1_type_bytes() */
# define B_ASN1_NUMERICSTRING    0x0001
# define B_ASN1_PRINTABLESTRING  0x0002
# define B_ASN1_T61STRING        0x0004
# define B_ASN1_TELETEXSTRING    0x0004
# define B_ASN1_VIDEOTEXSTRING   0x0008
# define B_ASN1_IA5STRING        0x0010
# define B_ASN1_GRAPHICSTRING    0x0020
# define B_ASN1_ISO64STRING      0x0040
# define B_ASN1_VISIBLESTRING    0x0040
# define B_ASN1_GENERALSTRING    0x0080
# define B_ASN1_UNIVERSALSTRING  0x0100
# define B_ASN1_OCTET_STRING     0x0200
# define B_ASN1_BIT_STRING       0x0400
# define B_ASN1_BMPSTRING        0x0800
# define B_ASN1_UNKNOWN          0x1000
# define B_ASN1_UTF8STRING       0x2000
# define B_ASN1_UTCTIME          0x4000
# define B_ASN1_GENERALIZEDTIME  0x8000
# define B_ASN1_SEQUENCE
        0x10000
/* For use with ASN1_mbstring_copy() */
# define MBSTRING_FLAG           0x1000
# define MBSTRING_UTF8           (MBSTRING_FLAG)
# define MBSTRING_ASC            (MBSTRING_FLAG|1)
# define MBSTRING_BMP            (MBSTRING_FLAG|2)
# define MBSTRING_UNIV           (MBSTRING_FLAG|4)
# define SMIME_OLDMIME           0x400
# define SMIME_CRLFEOL           0x800
# define SMIME_STREAM            0x1000

/* Stacks for types not otherwise defined in this header */
SKM_DEFINE_STACK_OF_INTERNAL(X509_ALGOR, X509_ALGOR, X509_ALGOR)
#define sk_X509_ALGOR_num(sk) OPENSSL_sk_num(ossl_check_const_X509_ALGOR_sk_type(sk))
#define sk_X509_ALGOR_value(sk, idx) ((X509_ALGOR
*)OPENSSL_sk_value(ossl_check_const_X509_ALGOR_sk_type(sk), (idx)))
#define sk_X509_ALGOR_new(cmp) ((STACK_OF(X509_ALGOR)
```

```
*)OPENSSL_sk_new(ossl_check_X509_ALGOR_compfunc_type(cmp)))
#define sk_X509_ALGOR_new_null() ((STACK_OF(X509_ALGOR) *)OPENSSL_sk_new_null())
#define sk_X509_ALGOR_new_reserve(cmp, n) ((STACK_OF(X509_ALGOR)
 *)OPENSSL_sk_new_reserve(ossl_check_X509_ALGOR_compfunc_type(cmp), (n)))
#define sk_X509_ALGOR_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_X509_ALGOR_sk_type(sk), (n))
#define sk_X509_ALGOR_free(sk) OPENSSL_sk_free(ossl_check_X509_ALGOR_sk_type(sk))
#define sk_X509_ALGOR_zero(sk) OPENSSL_sk_zero(ossl_check_X509_ALGOR_sk_type(sk))
#define sk_X509_ALGOR_delete(sk, i) ((X509_ALGOR
*)OPENSSL_sk_delete(ossl_check_X509_ALGOR_sk_type(sk), (i)))
#define sk_X509_ALGOR_delete_ptr(sk, ptr) ((X509_ALGOR
*)OPENSSL_sk_delete_ptr(ossl_check_X509_ALGOR_sk_type(sk), ossl_check_X509_ALGOR_type(ptr)))
#define sk_X509_ALGOR_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_ALGOR_sk_type(sk),
ossl_check_X509_ALGOR_type(ptr))
#define sk_X509_ALGOR_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_ALGOR_sk_type(sk),
ossl_check_X509_ALGOR_type(ptr))
#define sk_X509_ALGOR_pop(sk) ((X509_ALGOR
*)OPENSSL_sk_pop(ossl_check_X509_ALGOR_sk_type(sk)))
#define sk_X509_ALGOR_shift(sk) ((X509_ALGOR
*)OPENSSL_sk_shift(ossl_check_X509_ALGOR_sk_type(sk)))
#define
 sk_X509_ALGOR_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_ALGOR_sk_type(sk),ossl_check_X509_ALGOR_freefunc_type(freefu
nc))
#define sk_X509_ALGOR_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_ALGOR_sk_type(sk),
ossl_check_X509_ALGOR_type(ptr), (idx))
#define sk_X509_ALGOR_set(sk, idx, ptr) ((X509_ALGOR
*)OPENSSL_sk_set(ossl_check_X509_ALGOR_sk_type(sk), (idx), ossl_check_X509_ALGOR_type(ptr)))
#define sk_X509_ALGOR_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_ALGOR_sk_type(sk),
ossl_check_X509_ALGOR_type(ptr))
#define sk_X509_ALGOR_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_X509_ALGOR_sk_type(sk),
ossl_check_X509_ALGOR_type(ptr))
#define sk_X509_ALGOR_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_X509_ALGOR_sk_type(sk),
ossl_check_X509_ALGOR_type(ptr), pnum)
#define sk_X509_ALGOR_sort(sk) OPENSSL_sk_sort(ossl_check_X509_ALGOR_sk_type(sk))
#define sk_X509_ALGOR_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_X509_ALGOR_sk_type(sk))
#define
 sk_X509_ALGOR_dup(sk) ((STACK_OF(X509_ALGOR)
*)OPENSSL_sk_dup(ossl_check_const_X509_ALGOR_sk_type(sk)))
#define sk_X509_ALGOR_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_ALGOR)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_ALGOR_sk_type(sk),
ossl_check_X509_ALGOR_copyfunc_type(copyfunc), ossl_check_X509_ALGOR_freefunc_type(freefunc)))
#define sk_X509_ALGOR_set_cmp_func(sk, cmp)
((sk_X509_ALGOR_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_ALGOR_sk_type(sk),
ossl_check_X509_ALGOR_compfunc_type(cmp)))
```

```
# define ASN1_STRING_FLAG_BITS_LEFT 0x08/* Set if 0x07 has bits left value */
```

```
/*
* This indicates that the ASN1_STRING is not a real value but just a place
* holder for the location where indefinite length constructed data should be
* inserted in the memory buffer
*/
# define ASN1_STRING_FLAG_NDEF 0x010

/*
* This flag is used by the CMS code to indicate that a string is not
* complete and is a place holder for content when it had
 all been accessed.
* The flag will be reset when content has been written to it.
*/

# define ASN1_STRING_FLAG_CONT 0x020
/*
* This flag is used by ASN1 code to indicate an ASN1_STRING is an MSTRING
* type.
*/
# define ASN1_STRING_FLAG_MSTRING 0x040
/* String is embedded and only content should be freed */
# define ASN1_STRING_FLAG_EMBED 0x080
/* String should be parsed in RFC 5280's time format */
# define ASN1_STRING_FLAG_X509_TIME 0x100
/* This is the base type that holds just about everything :-) */
struct asn1_string_st {
   int length;
   int type;
   unsigned char *data;
   /*
    * The value of the following field depends on the type being held.  It
    * is mostly being used for BIT_STRING so if the input data has a
    * non-zero 'unused bits' value, it will be handled correctly
    */
   long flags;
};

/*
* ASN1_ENCODING structure: this is used to save the received encoding of an
* ASN1 type. This is useful to get round problems with invalid encodings
* which
 can break signatures.
*/

typedef struct ASN1_ENCODING_st {
   unsigned char *enc;        /* DER encoding */
   long len;                  /* Length of encoding */
   int modified;              /* set to 1 if 'enc' is invalid */
```

```
} ASN1_ENCODING;

/* Used with ASN1 LONG type: if a long is set to this it is omitted */
# define ASN1_LONG_UNDEF 0x7fffffffL

# define STABLE_FLAGS_MALLOC     0x01
/*
* A zero passed to ASN1_STRING_TABLE_new_add for the flags is interpreted
* as "don't change" and STABLE_FLAGS_MALLOC is always set. By setting
* STABLE_FLAGS_MALLOC only we can clear the existing value. Use the alias
* STABLE_FLAGS_CLEAR to reflect this.
*/
# define STABLE_FLAGS_CLEAR      STABLE_FLAGS_MALLOC
# define STABLE_NO_MASK          0x02
# define DIRSTRING_TYPE  \
(B_ASN1_PRINTABLESTRING|B_ASN1_T61STRING|B_ASN1_BMPSTRING|B_ASN1_UTF8STRING)
# define PKCS9STRING_TYPE (DIRSTRING_TYPE|B_ASN1_IA5STRING)

struct asn1_string_table_st {
   int nid;
   long minsize;
   long maxsize;
    unsigned long mask;
   unsigned long flags;
};

SKM_DEFINE_STACK_OF_INTERNAL(ASN1_STRING_TABLE, ASN1_STRING_TABLE,
ASN1_STRING_TABLE)
#define sk_ASN1_STRING_TABLE_num(sk)
OPENSSL_sk_num(ossl_check_const_ASN1_STRING_TABLE_sk_type(sk))
#define sk_ASN1_STRING_TABLE_value(sk, idx) ((ASN1_STRING_TABLE
*)OPENSSL_sk_value(ossl_check_const_ASN1_STRING_TABLE_sk_type(sk), (idx)))
#define sk_ASN1_STRING_TABLE_new(cmp) ((STACK_OF(ASN1_STRING_TABLE)
*)OPENSSL_sk_new(ossl_check_ASN1_STRING_TABLE_compfunc_type(cmp)))
#define sk_ASN1_STRING_TABLE_new_null() ((STACK_OF(ASN1_STRING_TABLE)
*)OPENSSL_sk_new_null())
#define sk_ASN1_STRING_TABLE_new_reserve(cmp, n) ((STACK_OF(ASN1_STRING_TABLE)
*)OPENSSL_sk_new_reserve(ossl_check_ASN1_STRING_TABLE_compfunc_type(cmp), (n)))
#define sk_ASN1_STRING_TABLE_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_ASN1_STRING_TABLE_sk_type(sk), (n))
#define sk_ASN1_STRING_TABLE_free(sk)
OPENSSL_sk_free(ossl_check_ASN1_STRING_TABLE_sk_type(sk))
#define sk_ASN1_STRING_TABLE_zero(sk)
 OPENSSL_sk_zero(ossl_check_ASN1_STRING_TABLE_sk_type(sk))
#define sk_ASN1_STRING_TABLE_delete(sk, i) ((ASN1_STRING_TABLE
*)OPENSSL_sk_delete(ossl_check_ASN1_STRING_TABLE_sk_type(sk), (i)))
#define sk_ASN1_STRING_TABLE_delete_ptr(sk, ptr) ((ASN1_STRING_TABLE
*)OPENSSL_sk_delete_ptr(ossl_check_ASN1_STRING_TABLE_sk_type(sk),
```

```
ossl_check_ASN1_STRING_TABLE_type(ptr)))
#define sk_ASN1_STRING_TABLE_push(sk, ptr)
OPENSSL_sk_push(ossl_check_ASN1_STRING_TABLE_sk_type(sk),
ossl_check_ASN1_STRING_TABLE_type(ptr))
#define sk_ASN1_STRING_TABLE_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_ASN1_STRING_TABLE_sk_type(sk),
ossl_check_ASN1_STRING_TABLE_type(ptr))
#define sk_ASN1_STRING_TABLE_pop(sk) ((ASN1_STRING_TABLE
*)OPENSSL_sk_pop(ossl_check_ASN1_STRING_TABLE_sk_type(sk)))
#define sk_ASN1_STRING_TABLE_shift(sk) ((ASN1_STRING_TABLE
*)OPENSSL_sk_shift(ossl_check_ASN1_STRING_TABLE_sk_type(sk)))
#define sk_ASN1_STRING_TABLE_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ASN1_STRING_TABLE_sk_type(sk),ossl_check_ASN1_STRING_TABLE_
freefunc_type(freefunc))
#define
 sk_ASN1_STRING_TABLE_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_ASN1_STRING_TABLE_sk_type(sk),
ossl_check_ASN1_STRING_TABLE_type(ptr), (idx))
#define sk_ASN1_STRING_TABLE_set(sk, idx, ptr) ((ASN1_STRING_TABLE
*)OPENSSL_sk_set(ossl_check_ASN1_STRING_TABLE_sk_type(sk), (idx),
ossl_check_ASN1_STRING_TABLE_type(ptr)))
#define sk_ASN1_STRING_TABLE_find(sk, ptr)
OPENSSL_sk_find(ossl_check_ASN1_STRING_TABLE_sk_type(sk),
ossl_check_ASN1_STRING_TABLE_type(ptr))
#define sk_ASN1_STRING_TABLE_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_ASN1_STRING_TABLE_sk_type(sk),
ossl_check_ASN1_STRING_TABLE_type(ptr))
#define sk_ASN1_STRING_TABLE_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_ASN1_STRING_TABLE_sk_type(sk),
ossl_check_ASN1_STRING_TABLE_type(ptr), pnum)
#define sk_ASN1_STRING_TABLE_sort(sk)
OPENSSL_sk_sort(ossl_check_ASN1_STRING_TABLE_sk_type(sk))
#define sk_ASN1_STRING_TABLE_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_ASN1_STRING_TABLE_sk_type(sk))
#define
 sk_ASN1_STRING_TABLE_dup(sk) ((STACK_OF(ASN1_STRING_TABLE)
*)OPENSSL_sk_dup(ossl_check_const_ASN1_STRING_TABLE_sk_type(sk)))
#define sk_ASN1_STRING_TABLE_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ASN1_STRING_TABLE)
*)OPENSSL_sk_deep_copy(ossl_check_const_ASN1_STRING_TABLE_sk_type(sk),
ossl_check_ASN1_STRING_TABLE_copyfunc_type(copyfunc),
ossl_check_ASN1_STRING_TABLE_freefunc_type(freefunc)))
#define sk_ASN1_STRING_TABLE_set_cmp_func(sk, cmp)
((sk_ASN1_STRING_TABLE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ASN1_STRING_TABLE_sk_t
ype(sk), ossl_check_ASN1_STRING_TABLE_compfunc_type(cmp)))


/* size limits: this stuff is taken straight from RFC2459 */
```

```
# define ub_name                    32768
# define ub_common_name                64
# define ub_locality_name             128
# define ub_state_name                128
# define ub_organization_name          64
# define ub_organization_unit_name     64
#
 define ub_title                    64
# define ub_email_address             128

/*
* Declarations for template structures: for full definitions see asn1t.h
*/
typedef struct ASN1_TEMPLATE_st ASN1_TEMPLATE;
typedef struct ASN1_TLC_st ASN1_TLC;
/* This is just an opaque pointer */
typedef struct ASN1_VALUE_st ASN1_VALUE;

/* Declare ASN1 functions: the implement macro in in asn1t.h */

/*
* The mysterious 'extern' that's passed to some macros is innocuous,
* and is there to quiet pre-C99 compilers that may complain about empty
* arguments in macro calls.
*/

# define DECLARE_ASN1_FUNCTIONS_attr(attr, type)                    \
   DECLARE_ASN1_FUNCTIONS_name_attr(attr, type, type)
# define DECLARE_ASN1_FUNCTIONS(type)                               \
   DECLARE_ASN1_FUNCTIONS_attr(extern, type)

# define DECLARE_ASN1_ALLOC_FUNCTIONS_attr(attr, type)              \
   DECLARE_ASN1_ALLOC_FUNCTIONS_name_attr(attr, type, type)
# define DECLARE_ASN1_ALLOC_FUNCTIONS(type)
                            \
   DECLARE_ASN1_ALLOC_FUNCTIONS_attr(extern, type)

# define DECLARE_ASN1_FUNCTIONS_name_attr(attr, type, name)         \
   DECLARE_ASN1_ALLOC_FUNCTIONS_name_attr(attr, type, name)          \
   DECLARE_ASN1_ENCODE_FUNCTIONS_name_attr(attr, type, name)
# define DECLARE_ASN1_FUNCTIONS_name(type, name)                    \
   DECLARE_ASN1_FUNCTIONS_name_attr(extern, type, name)

# define DECLARE_ASN1_ENCODE_FUNCTIONS_attr(attr, type, itname, name)      \
   DECLARE_ASN1_ENCODE_FUNCTIONS_only_attr(attr, type, name)          \
   DECLARE_ASN1_ITEM_attr(attr, itname)
# define DECLARE_ASN1_ENCODE_FUNCTIONS(type, itname, name)          \
   DECLARE_ASN1_ENCODE_FUNCTIONS_attr(extern, type, itname, name)
```

```
# define DECLARE_ASN1_ENCODE_FUNCTIONS_name_attr(attr, type, name)          \
   DECLARE_ASN1_ENCODE_FUNCTIONS_attr(attr, type, name, name)
# define DECLARE_ASN1_ENCODE_FUNCTIONS_name(type, name)
 \
   DECLARE_ASN1_ENCODE_FUNCTIONS_name_attr(extern, type, name)

# define DECLARE_ASN1_ENCODE_FUNCTIONS_only_attr(attr, type, name)          \
   attr type *d2i_##name(type **a, const unsigned char **in, long len);    \
   attr int i2d_##name(const type *a, unsigned char **out);
# define DECLARE_ASN1_ENCODE_FUNCTIONS_only(type, name)                     \
   DECLARE_ASN1_ENCODE_FUNCTIONS_only_attr(extern, type, name)

# define DECLARE_ASN1_NDEF_FUNCTION_attr(attr, name)                        \
   attr int i2d_##name##_NDEF(const name *a, unsigned char **out);
# define DECLARE_ASN1_NDEF_FUNCTION(name)                                   \
   DECLARE_ASN1_NDEF_FUNCTION_attr(extern, name)

# define DECLARE_ASN1_ALLOC_FUNCTIONS_name_attr(attr, type, name)           \
   attr type *name##_new(void);                                             \
   attr void name##_free(type *a);
# define DECLARE_ASN1_ALLOC_FUNCTIONS_name(type, name)                      \
   DECLARE_ASN1_ALLOC_FUNCTIONS_name_attr(extern,
 type, name)

# define DECLARE_ASN1_DUP_FUNCTION_attr(attr, type)                         \
   DECLARE_ASN1_DUP_FUNCTION_name_attr(attr, type, type)
# define DECLARE_ASN1_DUP_FUNCTION(type)                                    \
   DECLARE_ASN1_DUP_FUNCTION_attr(extern, type)

# define DECLARE_ASN1_DUP_FUNCTION_name_attr(attr, type, name)              \
   attr type *name##_dup(const type *a);
# define DECLARE_ASN1_DUP_FUNCTION_name(type, name)                         \
   DECLARE_ASN1_DUP_FUNCTION_name_attr(extern, type, name)

# define DECLARE_ASN1_PRINT_FUNCTION_attr(attr, stname)                     \
   DECLARE_ASN1_PRINT_FUNCTION_fname_attr(attr, stname, stname)
# define DECLARE_ASN1_PRINT_FUNCTION(stname)                                \
   DECLARE_ASN1_PRINT_FUNCTION_attr(extern, stname)

# define DECLARE_ASN1_PRINT_FUNCTION_fname_attr(attr, stname, fname)        \
   attr int fname##_print_ctx(BIO *out, const stname *x, int indent,       \

                      const ASN1_PCTX *pctx);
# define DECLARE_ASN1_PRINT_FUNCTION_fname(stname, fname)                   \
   DECLARE_ASN1_PRINT_FUNCTION_fname_attr(extern, stname, fname)

# define D2I_OF(type) type *(*)(type **,const unsigned char **,long)
```

```
# define I2D_OF(type) int (*)(const type *,unsigned char **)

# define CHECKED_D2I_OF(type, d2i) \
   ((d2i_of_void*) (1 ? d2i : ((D2I_OF(type))0)))
# define CHECKED_I2D_OF(type, i2d) \
   ((i2d_of_void*) (1 ? i2d : ((I2D_OF(type))0)))
# define CHECKED_NEW_OF(type, xnew) \
   ((void *(*)(void)) (1 ? xnew : ((type *(*)(void))0)))
# define CHECKED_PTR_OF(type, p) \
   ((void*) (1 ? p : (type*)0))
# define CHECKED_PPTR_OF(type, p) \
   ((void**) (1 ? p : (type**)0))

# define TYPEDEF_D2I_OF(type) typedef type *d2i_of_##type(type **,const unsigned char **,long)
# define TYPEDEF_I2D_OF(type) typedef int i2d_of_##type(const type *,unsigned char **)
# define TYPEDEF_D2I2D_OF(type) TYPEDEF_D2I_OF(type); TYPEDEF_I2D_OF(type)

typedef
 void *d2i_of_void(void **, const unsigned char **, long);
typedef int i2d_of_void(const void *, unsigned char **);

/*-
* The following macros and typedefs allow an ASN1_ITEM
* to be embedded in a structure and referenced. Since
* the ASN1_ITEM pointers need to be globally accessible
* (possibly from shared libraries) they may exist in
* different forms. On platforms that support it the
* ASN1_ITEM structure itself will be globally exported.
* Other platforms will export a function that returns
* an ASN1_ITEM pointer.
*
* To handle both cases transparently the macros below
* should be used instead of hard coding an ASN1_ITEM
* pointer in a structure.
*
* The structure will look like this:
*
* typedef struct SOMETHING_st {
*      ...
*      ASN1_ITEM_EXP *iptr;
*      ...
* } SOMETHING;
*
* It would be initialised as e.g.:
*
* SOMETHING somevar = {...,ASN1_ITEM_ref(X509),...};
*
* and the actual pointer extracted with:
```

```
*
* const ASN1_ITEM *it = ASN1_ITEM_ptr(somevar.iptr);
 *
* Finally an ASN1_ITEM pointer can be extracted from an
* appropriate reference with: ASN1_ITEM_rptr(X509). This
* would be used when a function takes an ASN1_ITEM * argument.
*
*/



/*
* Platforms that can't easily handle shared global variables are declared as
* functions returning ASN1_ITEM pointers.
*/

/* ASN1_ITEM pointer exported type */
typedef const ASN1_ITEM *ASN1_ITEM_EXP (void);

/* Macro to obtain ASN1_ITEM pointer from exported type */
# define ASN1_ITEM_ptr(iptr) (iptr())

/* Macro to include ASN1_ITEM pointer from base type */
# define ASN1_ITEM_ref(iptr) (iptr##_it)

# define ASN1_ITEM_rptr(ref) (ref##_it())

# define DECLARE_ASN1_ITEM_attr(attr, name)                              \
   attr const ASN1_ITEM * name##_it(void);
# define DECLARE_ASN1_ITEM(name)                                         \
   DECLARE_ASN1_ITEM_attr(extern, name)

/* Parameters used by ASN1_STRING_print_ex() */

/*
* These determine which characters to escape:
 RFC2253 special characters,
* control characters and MSB set characters
*/

# define ASN1_STRFLGS_ESC_2253           1
# define ASN1_STRFLGS_ESC_CTRL           2
# define ASN1_STRFLGS_ESC_MSB            4

/* Lower 8 bits are reserved as an output type specifier */
# define ASN1_DTFLGS_TYPE_MASK    0x0FUL
# define ASN1_DTFLGS_RFC822       0x00UL
# define ASN1_DTFLGS_ISO8601      0x01UL
```

```
/*
* This flag determines how we do escaping: normally RC2253 backslash only,
* set this to use backslash and quote.
*/

# define ASN1_STRFLGS_ESC_QUOTE          8

/* These three flags are internal use only. */

/* Character is a valid PrintableString character */
# define CHARTYPE_PRINTABLESTRING        0x10
/* Character needs escaping if it is the first character */
# define CHARTYPE_FIRST_ESC_2253         0x20
/* Character needs escaping if it is the last character */
# define CHARTYPE_LAST_ESC_2253          0x40

/*
* NB the internal flags are safely reused below by flags handled at the top
 * level.
*/

/*
* If this is set we convert all character strings to UTF8 first
*/

# define ASN1_STRFLGS_UTF8_CONVERT       0x10

/*
* If this is set we don't attempt to interpret content: just assume all
* strings are 1 byte per character. This will produce some pretty odd
* looking output!
*/

# define ASN1_STRFLGS_IGNORE_TYPE        0x20

/* If this is set we include the string type in the output */
# define ASN1_STRFLGS_SHOW_TYPE          0x40

/*
* This determines which strings to display and which to 'dump' (hex dump of
* content octets or DER encoding). We can only dump non character strings or
* everything. If we don't dump 'unknown' they are interpreted as character
* strings with 1 octet per character and are subject to the usual escaping
* options.
*/

# define ASN1_STRFLGS_DUMP_ALL           0x80
# define ASN1_STRFLGS_DUMP_UNKNOWN       0x100
```

```
/*
* These determine what 'dumping' does, we can dump the content octets or the
* DER encoding: both use the RFC2253
 #XXXXX notation.
*/

# define ASN1_STRFLGS_DUMP_DER          0x200

/*
* This flag specifies that RC2254 escaping shall be performed.
*/
#define ASN1_STRFLGS_ESC_2254          0x400

/*
* All the string flags consistent with RFC2253, escaping control characters
* isn't essential in RFC2253 but it is advisable anyway.
*/

# define ASN1_STRFLGS_RFC2253    (ASN1_STRFLGS_ESC_2253 | \
                            ASN1_STRFLGS_ESC_CTRL | \
                            ASN1_STRFLGS_ESC_MSB | \
                            ASN1_STRFLGS_UTF8_CONVERT | \
                            ASN1_STRFLGS_DUMP_UNKNOWN | \
                            ASN1_STRFLGS_DUMP_DER)


struct asn1_type_st {
   int type;
   union {
       char *ptr;
       ASN1_BOOLEAN boolean;
       ASN1_STRING *asn1_string;
       ASN1_OBJECT *object;
       ASN1_INTEGER *integer;
       ASN1_ENUMERATED *enumerated;
       ASN1_BIT_STRING *bit_string;
       ASN1_OCTET_STRING *octet_string;

      ASN1_PRINTABLESTRING *printablestring;
       ASN1_T61STRING *t61string;
       ASN1_IA5STRING *ia5string;
       ASN1_GENERALSTRING *generalstring;
       ASN1_BMPSTRING *bmpstring;
       ASN1_UNIVERSALSTRING *universalstring;
       ASN1_UTCTIME *utctime;
       ASN1_GENERALIZEDTIME *generalizedtime;
       ASN1_VISIBLESTRING *visiblestring;
```

```
      ASN1_UTF8STRING *utf8string;
      /*
       * set and sequence are left complete and still contain the set or
       * sequence bytes
       */
      ASN1_STRING *set;
      ASN1_STRING *sequence;
      ASN1_VALUE *asn1_value;
   } value;
};

SKM_DEFINE_STACK_OF_INTERNAL(ASN1_TYPE, ASN1_TYPE, ASN1_TYPE)
#define sk_ASN1_TYPE_num(sk) OPENSSL_sk_num(ossl_check_const_ASN1_TYPE_sk_type(sk))
#define sk_ASN1_TYPE_value(sk, idx) ((ASN1_TYPE
*)OPENSSL_sk_value(ossl_check_const_ASN1_TYPE_sk_type(sk), (idx)))
#define sk_ASN1_TYPE_new(cmp) ((STACK_OF(ASN1_TYPE)
*)OPENSSL_sk_new(ossl_check_ASN1_TYPE_compfunc_type(cmp)))
#define
 sk_ASN1_TYPE_new_null() ((STACK_OF(ASN1_TYPE) *)OPENSSL_sk_new_null())
#define sk_ASN1_TYPE_new_reserve(cmp, n) ((STACK_OF(ASN1_TYPE)
*)OPENSSL_sk_new_reserve(ossl_check_ASN1_TYPE_compfunc_type(cmp), (n)))
#define sk_ASN1_TYPE_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_ASN1_TYPE_sk_type(sk), (n))
#define sk_ASN1_TYPE_free(sk) OPENSSL_sk_free(ossl_check_ASN1_TYPE_sk_type(sk))
#define sk_ASN1_TYPE_zero(sk) OPENSSL_sk_zero(ossl_check_ASN1_TYPE_sk_type(sk))
#define sk_ASN1_TYPE_delete(sk, i) ((ASN1_TYPE
*)OPENSSL_sk_delete(ossl_check_ASN1_TYPE_sk_type(sk), (i)))
#define sk_ASN1_TYPE_delete_ptr(sk, ptr) ((ASN1_TYPE
*)OPENSSL_sk_delete_ptr(ossl_check_ASN1_TYPE_sk_type(sk), ossl_check_ASN1_TYPE_type(ptr)))
#define sk_ASN1_TYPE_push(sk, ptr) OPENSSL_sk_push(ossl_check_ASN1_TYPE_sk_type(sk),
ossl_check_ASN1_TYPE_type(ptr))
#define sk_ASN1_TYPE_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_ASN1_TYPE_sk_type(sk),
ossl_check_ASN1_TYPE_type(ptr))
#define sk_ASN1_TYPE_pop(sk) ((ASN1_TYPE *)OPENSSL_sk_pop(ossl_check_ASN1_TYPE_sk_type(sk)))
#define
 sk_ASN1_TYPE_shift(sk) ((ASN1_TYPE *)OPENSSL_sk_shift(ossl_check_ASN1_TYPE_sk_type(sk)))
#define sk_ASN1_TYPE_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ASN1_TYPE_sk_type(sk),ossl_check_ASN1_TYPE_freefunc_type(freefunc))
#define sk_ASN1_TYPE_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_ASN1_TYPE_sk_type(sk),
ossl_check_ASN1_TYPE_type(ptr), (idx))
#define sk_ASN1_TYPE_set(sk, idx, ptr) ((ASN1_TYPE
*)OPENSSL_sk_set(ossl_check_ASN1_TYPE_sk_type(sk), (idx), ossl_check_ASN1_TYPE_type(ptr)))
#define sk_ASN1_TYPE_find(sk, ptr) OPENSSL_sk_find(ossl_check_ASN1_TYPE_sk_type(sk),
ossl_check_ASN1_TYPE_type(ptr))
#define sk_ASN1_TYPE_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_ASN1_TYPE_sk_type(sk),
ossl_check_ASN1_TYPE_type(ptr))
#define sk_ASN1_TYPE_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_ASN1_TYPE_sk_type(sk),
ossl_check_ASN1_TYPE_type(ptr), pnum)
#define sk_ASN1_TYPE_sort(sk) OPENSSL_sk_sort(ossl_check_ASN1_TYPE_sk_type(sk))
```

```
#define
 sk_ASN1_TYPE_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_ASN1_TYPE_sk_type(sk))
#define sk_ASN1_TYPE_dup(sk) ((STACK_OF(ASN1_TYPE)
*)OPENSSL_sk_dup(ossl_check_const_ASN1_TYPE_sk_type(sk)))
#define sk_ASN1_TYPE_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ASN1_TYPE)
*)OPENSSL_sk_deep_copy(ossl_check_const_ASN1_TYPE_sk_type(sk),
ossl_check_ASN1_TYPE_copyfunc_type(copyfunc), ossl_check_ASN1_TYPE_freefunc_type(freefunc)))
#define sk_ASN1_TYPE_set_cmp_func(sk, cmp)
((sk_ASN1_TYPE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ASN1_TYPE_sk_type(sk),
ossl_check_ASN1_TYPE_compfunc_type(cmp)))


typedef STACK_OF(ASN1_TYPE) ASN1_SEQUENCE_ANY;

DECLARE_ASN1_ENCODE_FUNCTIONS_name(ASN1_SEQUENCE_ANY, ASN1_SEQUENCE_ANY)
DECLARE_ASN1_ENCODE_FUNCTIONS_name(ASN1_SEQUENCE_ANY, ASN1_SET_ANY)

/* This is used to contain a list of bit names */
typedef struct BIT_STRING_BITNAME_st {
   int bitnum;
   const char *lname;
   const char *sname;
} BIT_STRING_BITNAME;

# define
 B_ASN1_TIME \
                B_ASN1_UTCTIME | \
                B_ASN1_GENERALIZEDTIME

# define B_ASN1_PRINTABLE \
                B_ASN1_NUMERICSTRING| \
                B_ASN1_PRINTABLESTRING| \
                B_ASN1_T61STRING| \
                B_ASN1_IA5STRING| \
                B_ASN1_BIT_STRING| \
                B_ASN1_UNIVERSALSTRING|\
                B_ASN1_BMPSTRING|\
                B_ASN1_UTF8STRING|\
                B_ASN1_SEQUENCE|\
                B_ASN1_UNKNOWN

# define B_ASN1_DIRECTORYSTRING \
                B_ASN1_PRINTABLESTRING| \
                B_ASN1_TELETEXSTRING|\
                B_ASN1_BMPSTRING|\
                B_ASN1_UNIVERSALSTRING|\
                B_ASN1_UTF8STRING
```

```
# define B_ASN1_DISPLAYTEXT \
                B_ASN1_IA5STRING| \
                B_ASN1_VISIBLESTRING| \
                B_ASN1_BMPSTRING|\
                 B_ASN1_UTF8STRING

DECLARE_ASN1_ALLOC_FUNCTIONS_name(ASN1_TYPE, ASN1_TYPE)
DECLARE_ASN1_ENCODE_FUNCTIONS(ASN1_TYPE, ASN1_ANY, ASN1_TYPE)

int ASN1_TYPE_get(const ASN1_TYPE *a);
void ASN1_TYPE_set(ASN1_TYPE *a, int type, void *value);
int ASN1_TYPE_set1(ASN1_TYPE *a, int type, const void *value);
int ASN1_TYPE_cmp(const ASN1_TYPE *a, const ASN1_TYPE *b);

ASN1_TYPE *ASN1_TYPE_pack_sequence(const ASN1_ITEM *it, void *s, ASN1_TYPE **t);
void *ASN1_TYPE_unpack_sequence(const ASN1_ITEM *it, const ASN1_TYPE *t);

SKM_DEFINE_STACK_OF_INTERNAL(ASN1_OBJECT, ASN1_OBJECT, ASN1_OBJECT)
#define sk_ASN1_OBJECT_num(sk) OPENSSL_sk_num(ossl_check_const_ASN1_OBJECT_sk_type(sk))
#define sk_ASN1_OBJECT_value(sk, idx) ((ASN1_OBJECT
*)OPENSSL_sk_value(ossl_check_const_ASN1_OBJECT_sk_type(sk), (idx)))
#define sk_ASN1_OBJECT_new(cmp) ((STACK_OF(ASN1_OBJECT)
*)OPENSSL_sk_new(ossl_check_ASN1_OBJECT_compfunc_type(cmp)))
#define sk_ASN1_OBJECT_new_null() ((STACK_OF(ASN1_OBJECT)
 *)OPENSSL_sk_new_null())
#define sk_ASN1_OBJECT_new_reserve(cmp, n) ((STACK_OF(ASN1_OBJECT)
*)OPENSSL_sk_new_reserve(ossl_check_ASN1_OBJECT_compfunc_type(cmp), (n)))
#define sk_ASN1_OBJECT_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_ASN1_OBJECT_sk_type(sk), (n))
#define sk_ASN1_OBJECT_free(sk) OPENSSL_sk_free(ossl_check_ASN1_OBJECT_sk_type(sk))
#define sk_ASN1_OBJECT_zero(sk) OPENSSL_sk_zero(ossl_check_ASN1_OBJECT_sk_type(sk))
#define sk_ASN1_OBJECT_delete(sk, i) ((ASN1_OBJECT
*)OPENSSL_sk_delete(ossl_check_ASN1_OBJECT_sk_type(sk), (i)))
#define sk_ASN1_OBJECT_delete_ptr(sk, ptr) ((ASN1_OBJECT
*)OPENSSL_sk_delete_ptr(ossl_check_ASN1_OBJECT_sk_type(sk), ossl_check_ASN1_OBJECT_type(ptr)))
#define sk_ASN1_OBJECT_push(sk, ptr) OPENSSL_sk_push(ossl_check_ASN1_OBJECT_sk_type(sk),
ossl_check_ASN1_OBJECT_type(ptr))
#define sk_ASN1_OBJECT_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_ASN1_OBJECT_sk_type(sk),
ossl_check_ASN1_OBJECT_type(ptr))
#define sk_ASN1_OBJECT_pop(sk) ((ASN1_OBJECT
*)OPENSSL_sk_pop(ossl_check_ASN1_OBJECT_sk_type(sk)))
#define
 sk_ASN1_OBJECT_shift(sk) ((ASN1_OBJECT *)OPENSSL_sk_shift(ossl_check_ASN1_OBJECT_sk_type(sk)))
#define sk_ASN1_OBJECT_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ASN1_OBJECT_sk_type(sk),ossl_check_ASN1_OBJECT_freefunc_type(free
func))
#define sk_ASN1_OBJECT_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_ASN1_OBJECT_sk_type(sk),
ossl_check_ASN1_OBJECT_type(ptr), (idx))
#define sk_ASN1_OBJECT_set(sk, idx, ptr) ((ASN1_OBJECT
```

```
*)OPENSSL_sk_set(ossl_check_ASN1_OBJECT_sk_type(sk), (idx), ossl_check_ASN1_OBJECT_type(ptr)))
#define sk_ASN1_OBJECT_find(sk, ptr) OPENSSL_sk_find(ossl_check_ASN1_OBJECT_sk_type(sk),
ossl_check_ASN1_OBJECT_type(ptr))
#define sk_ASN1_OBJECT_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_ASN1_OBJECT_sk_type(sk),
ossl_check_ASN1_OBJECT_type(ptr))
#define sk_ASN1_OBJECT_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_ASN1_OBJECT_sk_type(sk), ossl_check_ASN1_OBJECT_type(ptr), pnum)
#define sk_ASN1_OBJECT_sort(sk)
 OPENSSL_sk_sort(ossl_check_ASN1_OBJECT_sk_type(sk))
#define sk_ASN1_OBJECT_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_ASN1_OBJECT_sk_type(sk))
#define sk_ASN1_OBJECT_dup(sk) ((STACK_OF(ASN1_OBJECT)
*)OPENSSL_sk_dup(ossl_check_const_ASN1_OBJECT_sk_type(sk)))
#define sk_ASN1_OBJECT_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ASN1_OBJECT)
*)OPENSSL_sk_deep_copy(ossl_check_const_ASN1_OBJECT_sk_type(sk),
ossl_check_ASN1_OBJECT_copyfunc_type(copyfunc), ossl_check_ASN1_OBJECT_freefunc_type(freefunc)))
#define sk_ASN1_OBJECT_set_cmp_func(sk, cmp)
((sk_ASN1_OBJECT_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ASN1_OBJECT_sk_type(sk),
ossl_check_ASN1_OBJECT_compfunc_type(cmp)))


DECLARE_ASN1_FUNCTIONS(ASN1_OBJECT)

ASN1_STRING *ASN1_STRING_new(void);
void ASN1_STRING_free(ASN1_STRING *a);
void ASN1_STRING_clear_free(ASN1_STRING *a);
int ASN1_STRING_copy(ASN1_STRING *dst, const ASN1_STRING *str);
DECLARE_ASN1_DUP_FUNCTION(ASN1_STRING)
ASN1_STRING *ASN1_STRING_type_new(int
 type);
int ASN1_STRING_cmp(const ASN1_STRING *a, const ASN1_STRING *b);
 /*
  * Since this is used to store all sorts of things, via macros, for now,
  * make its data void *
  */
int ASN1_STRING_set(ASN1_STRING *str, const void *data, int len);
void ASN1_STRING_set0(ASN1_STRING *str, void *data, int len);
int ASN1_STRING_length(const ASN1_STRING *x);
# ifndef OPENSSL_NO_DEPRECATED_3_0
OSSL_DEPRECATEDIN_3_0 void ASN1_STRING_length_set(ASN1_STRING *x, int n);
# endif
int ASN1_STRING_type(const ASN1_STRING *x);
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 unsigned char *ASN1_STRING_data(ASN1_STRING *x);
# endif
const unsigned char *ASN1_STRING_get0_data(const ASN1_STRING *x);

DECLARE_ASN1_FUNCTIONS(ASN1_BIT_STRING)
```

```
int ASN1_BIT_STRING_set(ASN1_BIT_STRING *a, unsigned char *d, int length);
int ASN1_BIT_STRING_set_bit(ASN1_BIT_STRING *a, int n, int value);
int ASN1_BIT_STRING_get_bit(const ASN1_BIT_STRING *a, int n);
int ASN1_BIT_STRING_check(const ASN1_BIT_STRING
 *a,
                    const unsigned char *flags, int flags_len);

int ASN1_BIT_STRING_name_print(BIO *out, ASN1_BIT_STRING *bs,
                      BIT_STRING_BITNAME *tbl, int indent);
int ASN1_BIT_STRING_num_asc(const char *name, BIT_STRING_BITNAME *tbl);
int ASN1_BIT_STRING_set_asc(ASN1_BIT_STRING *bs, const char *name, int value,
                     BIT_STRING_BITNAME *tbl);

SKM_DEFINE_STACK_OF_INTERNAL(ASN1_INTEGER, ASN1_INTEGER, ASN1_INTEGER)
#define sk_ASN1_INTEGER_num(sk) OPENSSL_sk_num(ossl_check_const_ASN1_INTEGER_sk_type(sk))
#define sk_ASN1_INTEGER_value(sk, idx) ((ASN1_INTEGER
*)OPENSSL_sk_value(ossl_check_const_ASN1_INTEGER_sk_type(sk), (idx)))
#define sk_ASN1_INTEGER_new(cmp) ((STACK_OF(ASN1_INTEGER)
*)OPENSSL_sk_new(ossl_check_ASN1_INTEGER_compfunc_type(cmp)))
#define sk_ASN1_INTEGER_new_null() ((STACK_OF(ASN1_INTEGER) *)OPENSSL_sk_new_null())
#define sk_ASN1_INTEGER_new_reserve(cmp, n) ((STACK_OF(ASN1_INTEGER)
*)OPENSSL_sk_new_reserve(ossl_check_ASN1_INTEGER_compfunc_type(cmp),
 (n)))
#define sk_ASN1_INTEGER_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_ASN1_INTEGER_sk_type(sk),
(n))
#define sk_ASN1_INTEGER_free(sk) OPENSSL_sk_free(ossl_check_ASN1_INTEGER_sk_type(sk))
#define sk_ASN1_INTEGER_zero(sk) OPENSSL_sk_zero(ossl_check_ASN1_INTEGER_sk_type(sk))
#define sk_ASN1_INTEGER_delete(sk, i) ((ASN1_INTEGER
*)OPENSSL_sk_delete(ossl_check_ASN1_INTEGER_sk_type(sk), (i)))
#define sk_ASN1_INTEGER_delete_ptr(sk, ptr) ((ASN1_INTEGER
*)OPENSSL_sk_delete_ptr(ossl_check_ASN1_INTEGER_sk_type(sk), ossl_check_ASN1_INTEGER_type(ptr)))
#define sk_ASN1_INTEGER_push(sk, ptr) OPENSSL_sk_push(ossl_check_ASN1_INTEGER_sk_type(sk),
ossl_check_ASN1_INTEGER_type(ptr))
#define sk_ASN1_INTEGER_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_ASN1_INTEGER_sk_type(sk),
ossl_check_ASN1_INTEGER_type(ptr))
#define sk_ASN1_INTEGER_pop(sk) ((ASN1_INTEGER
*)OPENSSL_sk_pop(ossl_check_ASN1_INTEGER_sk_type(sk)))
#define sk_ASN1_INTEGER_shift(sk) ((ASN1_INTEGER
 *)OPENSSL_sk_shift(ossl_check_ASN1_INTEGER_sk_type(sk)))
#define sk_ASN1_INTEGER_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ASN1_INTEGER_sk_type(sk),ossl_check_ASN1_INTEGER_freefunc_type(f
reefunc))
#define sk_ASN1_INTEGER_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_ASN1_INTEGER_sk_type(sk),
ossl_check_ASN1_INTEGER_type(ptr), (idx))
#define sk_ASN1_INTEGER_set(sk, idx, ptr) ((ASN1_INTEGER
*)OPENSSL_sk_set(ossl_check_ASN1_INTEGER_sk_type(sk), (idx), ossl_check_ASN1_INTEGER_type(ptr)))
#define sk_ASN1_INTEGER_find(sk, ptr) OPENSSL_sk_find(ossl_check_ASN1_INTEGER_sk_type(sk),
ossl_check_ASN1_INTEGER_type(ptr))
```

```
#define sk_ASN1_INTEGER_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_ASN1_INTEGER_sk_type(sk),
ossl_check_ASN1_INTEGER_type(ptr))
#define sk_ASN1_INTEGER_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_ASN1_INTEGER_sk_type(sk), ossl_check_ASN1_INTEGER_type(ptr), pnum)
#define sk_ASN1_INTEGER_sort(sk) OPENSSL_sk_sort(ossl_check_ASN1_INTEGER_sk_type(sk))
#define
 sk_ASN1_INTEGER_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_ASN1_INTEGER_sk_type(sk))
#define sk_ASN1_INTEGER_dup(sk) ((STACK_OF(ASN1_INTEGER)
*)OPENSSL_sk_dup(ossl_check_const_ASN1_INTEGER_sk_type(sk)))
#define sk_ASN1_INTEGER_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ASN1_INTEGER)
*)OPENSSL_sk_deep_copy(ossl_check_const_ASN1_INTEGER_sk_type(sk),
ossl_check_ASN1_INTEGER_copyfunc_type(copyfunc), ossl_check_ASN1_INTEGER_freefunc_type(freefunc)))
#define sk_ASN1_INTEGER_set_cmp_func(sk, cmp)
((sk_ASN1_INTEGER_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ASN1_INTEGER_sk_type(sk),
ossl_check_ASN1_INTEGER_compfunc_type(cmp)))



DECLARE_ASN1_FUNCTIONS(ASN1_INTEGER)
ASN1_INTEGER *d2i_ASN1_UINTEGER(ASN1_INTEGER **a, const unsigned char **pp,
                         long length);
DECLARE_ASN1_DUP_FUNCTION(ASN1_INTEGER)
int ASN1_INTEGER_cmp(const ASN1_INTEGER *x, const ASN1_INTEGER *y);

DECLARE_ASN1_FUNCTIONS(ASN1_ENUMERATED)

int ASN1_UTCTIME_check(const ASN1_UTCTIME *a);
ASN1_UTCTIME
 *ASN1_UTCTIME_set(ASN1_UTCTIME *s, time_t t);
ASN1_UTCTIME *ASN1_UTCTIME_adj(ASN1_UTCTIME *s, time_t t,
                         int offset_day, long offset_sec);
int ASN1_UTCTIME_set_string(ASN1_UTCTIME *s, const char *str);
int ASN1_UTCTIME_cmp_time_t(const ASN1_UTCTIME *s, time_t t);

int ASN1_GENERALIZEDTIME_check(const ASN1_GENERALIZEDTIME *a);
ASN1_GENERALIZEDTIME *ASN1_GENERALIZEDTIME_set(ASN1_GENERALIZEDTIME *s,
                                 time_t t);
ASN1_GENERALIZEDTIME *ASN1_GENERALIZEDTIME_adj(ASN1_GENERALIZEDTIME *s,
                                 time_t t, int offset_day,
                                 long offset_sec);
int ASN1_GENERALIZEDTIME_set_string(ASN1_GENERALIZEDTIME *s, const char *str);

int ASN1_TIME_diff(int *pday, int *psec,
                const ASN1_TIME *from, const ASN1_TIME *to);

DECLARE_ASN1_FUNCTIONS(ASN1_OCTET_STRING)
DECLARE_ASN1_DUP_FUNCTION(ASN1_OCTET_STRING)
int ASN1_OCTET_STRING_cmp(const
```

```
 ASN1_OCTET_STRING *a,
                    const ASN1_OCTET_STRING *b);
int ASN1_OCTET_STRING_set(ASN1_OCTET_STRING *str, const unsigned char *data,
                    int len);

SKM_DEFINE_STACK_OF_INTERNAL(ASN1_UTF8STRING, ASN1_UTF8STRING, ASN1_UTF8STRING)
#define sk_ASN1_UTF8STRING_num(sk)
OPENSSL_sk_num(ossl_check_const_ASN1_UTF8STRING_sk_type(sk))
#define sk_ASN1_UTF8STRING_value(sk, idx) ((ASN1_UTF8STRING
*)OPENSSL_sk_value(ossl_check_const_ASN1_UTF8STRING_sk_type(sk), (idx)))
#define sk_ASN1_UTF8STRING_new(cmp) ((STACK_OF(ASN1_UTF8STRING)
*)OPENSSL_sk_new(ossl_check_ASN1_UTF8STRING_compfunc_type(cmp)))
#define sk_ASN1_UTF8STRING_new_null() ((STACK_OF(ASN1_UTF8STRING) *)OPENSSL_sk_new_null())
#define sk_ASN1_UTF8STRING_new_reserve(cmp, n) ((STACK_OF(ASN1_UTF8STRING)
*)OPENSSL_sk_new_reserve(ossl_check_ASN1_UTF8STRING_compfunc_type(cmp), (n)))
#define sk_ASN1_UTF8STRING_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_ASN1_UTF8STRING_sk_type(sk), (n))
#define
 sk_ASN1_UTF8STRING_free(sk) OPENSSL_sk_free(ossl_check_ASN1_UTF8STRING_sk_type(sk))
#define sk_ASN1_UTF8STRING_zero(sk) OPENSSL_sk_zero(ossl_check_ASN1_UTF8STRING_sk_type(sk))
#define sk_ASN1_UTF8STRING_delete(sk, i) ((ASN1_UTF8STRING
*)OPENSSL_sk_delete(ossl_check_ASN1_UTF8STRING_sk_type(sk), (i)))
#define sk_ASN1_UTF8STRING_delete_ptr(sk, ptr) ((ASN1_UTF8STRING
*)OPENSSL_sk_delete_ptr(ossl_check_ASN1_UTF8STRING_sk_type(sk),
ossl_check_ASN1_UTF8STRING_type(ptr)))
#define sk_ASN1_UTF8STRING_push(sk, ptr)
OPENSSL_sk_push(ossl_check_ASN1_UTF8STRING_sk_type(sk), ossl_check_ASN1_UTF8STRING_type(ptr))
#define sk_ASN1_UTF8STRING_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_ASN1_UTF8STRING_sk_type(sk),
ossl_check_ASN1_UTF8STRING_type(ptr))
#define sk_ASN1_UTF8STRING_pop(sk) ((ASN1_UTF8STRING
*)OPENSSL_sk_pop(ossl_check_ASN1_UTF8STRING_sk_type(sk)))
#define sk_ASN1_UTF8STRING_shift(sk) ((ASN1_UTF8STRING
*)OPENSSL_sk_shift(ossl_check_ASN1_UTF8STRING_sk_type(sk)))
#define sk_ASN1_UTF8STRING_pop_free(sk,
 freefunc)
OPENSSL_sk_pop_free(ossl_check_ASN1_UTF8STRING_sk_type(sk),ossl_check_ASN1_UTF8STRING_freefun
c_type(freefunc))
#define sk_ASN1_UTF8STRING_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_ASN1_UTF8STRING_sk_type(sk), ossl_check_ASN1_UTF8STRING_type(ptr),
(idx))
#define sk_ASN1_UTF8STRING_set(sk, idx, ptr) ((ASN1_UTF8STRING
*)OPENSSL_sk_set(ossl_check_ASN1_UTF8STRING_sk_type(sk), (idx),
ossl_check_ASN1_UTF8STRING_type(ptr)))
#define sk_ASN1_UTF8STRING_find(sk, ptr) OPENSSL_sk_find(ossl_check_ASN1_UTF8STRING_sk_type(sk),
ossl_check_ASN1_UTF8STRING_type(ptr))
#define sk_ASN1_UTF8STRING_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_ASN1_UTF8STRING_sk_type(sk),
```

```
ossl_check_ASN1_UTF8STRING_type(ptr))
#define sk_ASN1_UTF8STRING_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_ASN1_UTF8STRING_sk_type(sk),
ossl_check_ASN1_UTF8STRING_type(ptr), pnum)
#define sk_ASN1_UTF8STRING_sort(sk) OPENSSL_sk_sort(ossl_check_ASN1_UTF8STRING_sk_type(sk))
#define sk_ASN1_UTF8STRING_is_sorted(sk)
 OPENSSL_sk_is_sorted(ossl_check_const_ASN1_UTF8STRING_sk_type(sk))
#define sk_ASN1_UTF8STRING_dup(sk) ((STACK_OF(ASN1_UTF8STRING)
*)OPENSSL_sk_dup(ossl_check_const_ASN1_UTF8STRING_sk_type(sk)))
#define sk_ASN1_UTF8STRING_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ASN1_UTF8STRING)
*)OPENSSL_sk_deep_copy(ossl_check_const_ASN1_UTF8STRING_sk_type(sk),
ossl_check_ASN1_UTF8STRING_copyfunc_type(copyfunc),
ossl_check_ASN1_UTF8STRING_freefunc_type(freefunc)))
#define sk_ASN1_UTF8STRING_set_cmp_func(sk, cmp)
((sk_ASN1_UTF8STRING_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ASN1_UTF8STRING_sk_type(sk
), ossl_check_ASN1_UTF8STRING_compfunc_type(cmp)))


DECLARE_ASN1_FUNCTIONS(ASN1_VISIBLESTRING)
DECLARE_ASN1_FUNCTIONS(ASN1_UNIVERSALSTRING)
DECLARE_ASN1_FUNCTIONS(ASN1_UTF8STRING)
DECLARE_ASN1_FUNCTIONS(ASN1_NULL)
DECLARE_ASN1_FUNCTIONS(ASN1_BMPSTRING)

int UTF8_getc(const unsigned char *str, int len, unsigned long *val);
int UTF8_putc(unsigned char *str, int len, unsigned long value);

SKM_DEFINE_STACK_OF_INTERNAL(ASN1_GENERALSTRING,
 ASN1_GENERALSTRING, ASN1_GENERALSTRING)
#define sk_ASN1_GENERALSTRING_num(sk)
OPENSSL_sk_num(ossl_check_const_ASN1_GENERALSTRING_sk_type(sk))
#define sk_ASN1_GENERALSTRING_value(sk, idx) ((ASN1_GENERALSTRING
*)OPENSSL_sk_value(ossl_check_const_ASN1_GENERALSTRING_sk_type(sk), (idx)))
#define sk_ASN1_GENERALSTRING_new(cmp) ((STACK_OF(ASN1_GENERALSTRING)
*)OPENSSL_sk_new(ossl_check_ASN1_GENERALSTRING_compfunc_type(cmp)))
#define sk_ASN1_GENERALSTRING_new_null() ((STACK_OF(ASN1_GENERALSTRING)
*)OPENSSL_sk_new_null())
#define sk_ASN1_GENERALSTRING_new_reserve(cmp, n) ((STACK_OF(ASN1_GENERALSTRING)
*)OPENSSL_sk_new_reserve(ossl_check_ASN1_GENERALSTRING_compfunc_type(cmp), (n)))
#define sk_ASN1_GENERALSTRING_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_ASN1_GENERALSTRING_sk_type(sk), (n))
#define sk_ASN1_GENERALSTRING_free(sk)
OPENSSL_sk_free(ossl_check_ASN1_GENERALSTRING_sk_type(sk))
#define sk_ASN1_GENERALSTRING_zero(sk)
OPENSSL_sk_zero(ossl_check_ASN1_GENERALSTRING_sk_type(sk))
#define
 sk_ASN1_GENERALSTRING_delete(sk, i) ((ASN1_GENERALSTRING
*)OPENSSL_sk_delete(ossl_check_ASN1_GENERALSTRING_sk_type(sk), (i)))
```

```
#define sk_ASN1_GENERALSTRING_delete_ptr(sk, ptr) ((ASN1_GENERALSTRING
*)OPENSSL_sk_delete_ptr(ossl_check_ASN1_GENERALSTRING_sk_type(sk),
ossl_check_ASN1_GENERALSTRING_type(ptr)))
#define sk_ASN1_GENERALSTRING_push(sk, ptr)
OPENSSL_sk_push(ossl_check_ASN1_GENERALSTRING_sk_type(sk),
ossl_check_ASN1_GENERALSTRING_type(ptr))
#define sk_ASN1_GENERALSTRING_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_ASN1_GENERALSTRING_sk_type(sk),
ossl_check_ASN1_GENERALSTRING_type(ptr))
#define sk_ASN1_GENERALSTRING_pop(sk) ((ASN1_GENERALSTRING
*)OPENSSL_sk_pop(ossl_check_ASN1_GENERALSTRING_sk_type(sk)))
#define sk_ASN1_GENERALSTRING_shift(sk) ((ASN1_GENERALSTRING
*)OPENSSL_sk_shift(ossl_check_ASN1_GENERALSTRING_sk_type(sk)))
#define sk_ASN1_GENERALSTRING_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ASN1_GENERALSTRING_sk_type(sk),ossl_check_ASN1_GENERALSTRI
NG_freefunc_type(freefunc))
#define
 sk_ASN1_GENERALSTRING_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_ASN1_GENERALSTRING_sk_type(sk),
ossl_check_ASN1_GENERALSTRING_type(ptr), (idx))
#define sk_ASN1_GENERALSTRING_set(sk, idx, ptr) ((ASN1_GENERALSTRING
*)OPENSSL_sk_set(ossl_check_ASN1_GENERALSTRING_sk_type(sk), (idx),
ossl_check_ASN1_GENERALSTRING_type(ptr)))
#define sk_ASN1_GENERALSTRING_find(sk, ptr)
OPENSSL_sk_find(ossl_check_ASN1_GENERALSTRING_sk_type(sk),
ossl_check_ASN1_GENERALSTRING_type(ptr))
#define sk_ASN1_GENERALSTRING_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_ASN1_GENERALSTRING_sk_type(sk),
ossl_check_ASN1_GENERALSTRING_type(ptr))
#define sk_ASN1_GENERALSTRING_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_ASN1_GENERALSTRING_sk_type(sk),
ossl_check_ASN1_GENERALSTRING_type(ptr), pnum)
#define sk_ASN1_GENERALSTRING_sort(sk)
OPENSSL_sk_sort(ossl_check_ASN1_GENERALSTRING_sk_type(sk))
#define sk_ASN1_GENERALSTRING_is_sorted(sk)
 OPENSSL_sk_is_sorted(ossl_check_const_ASN1_GENERALSTRING_sk_type(sk))
#define sk_ASN1_GENERALSTRING_dup(sk) ((STACK_OF(ASN1_GENERALSTRING)
*)OPENSSL_sk_dup(ossl_check_const_ASN1_GENERALSTRING_sk_type(sk)))
#define sk_ASN1_GENERALSTRING_deep_copy(sk, copyfunc, freefunc)
((STACK_OF(ASN1_GENERALSTRING)
*)OPENSSL_sk_deep_copy(ossl_check_const_ASN1_GENERALSTRING_sk_type(sk),
ossl_check_ASN1_GENERALSTRING_copyfunc_type(copyfunc),
ossl_check_ASN1_GENERALSTRING_freefunc_type(freefunc)))
#define sk_ASN1_GENERALSTRING_set_cmp_func(sk, cmp)
((sk_ASN1_GENERALSTRING_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ASN1_GENERALSTRING
_sk_type(sk), ossl_check_ASN1_GENERALSTRING_compfunc_type(cmp)))
```

```
DECLARE_ASN1_FUNCTIONS_name(ASN1_STRING, ASN1_PRINTABLE)

DECLARE_ASN1_FUNCTIONS_name(ASN1_STRING, DIRECTORYSTRING)
DECLARE_ASN1_FUNCTIONS_name(ASN1_STRING, DISPLAYTEXT)
DECLARE_ASN1_FUNCTIONS(ASN1_PRINTABLESTRING)
DECLARE_ASN1_FUNCTIONS(ASN1_T61STRING)
DECLARE_ASN1_FUNCTIONS(ASN1_IA5STRING)
DECLARE_ASN1_FUNCTIONS(ASN1_GENERALSTRING)
DECLARE_ASN1_FUNCTIONS(ASN1_UTCTIME)
DECLARE_ASN1_FUNCTIONS(ASN1_GENERALIZEDTIME)
DECLARE_ASN1_FUNCTIONS(ASN1_TIME)

DECLARE_ASN1_DUP_FUNCTION(ASN1_TIME)
DECLARE_ASN1_DUP_FUNCTION(ASN1_UTCTIME)
DECLARE_ASN1_DUP_FUNCTION(ASN1_GENERALIZEDTIME)

DECLARE_ASN1_ITEM(ASN1_OCTET_STRING_NDEF)

ASN1_TIME
 *ASN1_TIME_set(ASN1_TIME *s, time_t t);
ASN1_TIME *ASN1_TIME_adj(ASN1_TIME *s, time_t t,
                    int offset_day, long offset_sec);
int ASN1_TIME_check(const ASN1_TIME *t);
ASN1_GENERALIZEDTIME *ASN1_TIME_to_generalizedtime(const ASN1_TIME *t,
                                    ASN1_GENERALIZEDTIME **out);
int ASN1_TIME_set_string(ASN1_TIME *s, const char *str);
int ASN1_TIME_set_string_X509(ASN1_TIME *s, const char *str);
int ASN1_TIME_to_tm(const ASN1_TIME *s, struct tm *tm);
int ASN1_TIME_normalize(ASN1_TIME *s);
int ASN1_TIME_cmp_time_t(const ASN1_TIME *s, time_t t);
int ASN1_TIME_compare(const ASN1_TIME *a, const ASN1_TIME *b);

int
 i2a_ASN1_INTEGER(BIO *bp, const ASN1_INTEGER *a);
int a2i_ASN1_INTEGER(BIO *bp, ASN1_INTEGER *bs, char *buf, int size);
int i2a_ASN1_ENUMERATED(BIO *bp, const ASN1_ENUMERATED *a);
int a2i_ASN1_ENUMERATED(BIO *bp, ASN1_ENUMERATED *bs, char *buf, int size);
int i2a_ASN1_OBJECT(BIO *bp, const ASN1_OBJECT *a);
int a2i_ASN1_STRING(BIO *bp, ASN1_STRING *bs, char *buf, int size);
int i2a_ASN1_STRING(BIO *bp, const ASN1_STRING *a, int type);
int i2t_ASN1_OBJECT(char *buf, int buf_len, const ASN1_OBJECT *a);

int a2d_ASN1_OBJECT(unsigned char *out, int olen, const char *buf, int num);
ASN1_OBJECT *ASN1_OBJECT_create(int nid, unsigned char *data, int len,
                    const char *sn, const char *ln);

int ASN1_INTEGER_get_int64(int64_t *pr, const ASN1_INTEGER *a);
int ASN1_INTEGER_set_int64(ASN1_INTEGER *a, int64_t r);
```

```
int ASN1_INTEGER_get_uint64(uint64_t *pr, const ASN1_INTEGER *a);
int ASN1_INTEGER_set_uint64(ASN1_INTEGER *a, uint64_t r);

int ASN1_INTEGER_set(ASN1_INTEGER
 *a, long v);
long ASN1_INTEGER_get(const ASN1_INTEGER *a);
ASN1_INTEGER *BN_to_ASN1_INTEGER(const BIGNUM *bn, ASN1_INTEGER *ai);
BIGNUM *ASN1_INTEGER_to_BN(const ASN1_INTEGER *ai, BIGNUM *bn);

int ASN1_ENUMERATED_get_int64(int64_t *pr, const ASN1_ENUMERATED *a);
int ASN1_ENUMERATED_set_int64(ASN1_ENUMERATED *a, int64_t r);


int ASN1_ENUMERATED_set(ASN1_ENUMERATED *a, long v);
long ASN1_ENUMERATED_get(const ASN1_ENUMERATED *a);
ASN1_ENUMERATED *BN_to_ASN1_ENUMERATED(const BIGNUM *bn, ASN1_ENUMERATED *ai);
BIGNUM *ASN1_ENUMERATED_to_BN(const ASN1_ENUMERATED *ai, BIGNUM *bn);

/* General */
/* given a string, return the correct type, max is the maximum length */
int ASN1_PRINTABLE_type(const unsigned char *s, int max);

unsigned long ASN1_tag2bit(int tag);

/* SPECIALS */
int ASN1_get_object(const unsigned char **pp, long *plength, int *ptag,
                int *pclass, long omax);
int ASN1_check_infinite_end(unsigned char **p, long len);
int ASN1_const_check_infinite_end(const unsigned
 char **p, long len);
void ASN1_put_object(unsigned char **pp, int constructed, int length,
                int tag, int xclass);
int ASN1_put_eoc(unsigned char **pp);
int ASN1_object_size(int constructed, int length, int tag);

/* Used to implement other functions */
void *ASN1_dup(i2d_of_void *i2d, d2i_of_void *d2i, const void *x);

# define ASN1_dup_of(type,i2d,d2i,x) \
   ((type*)ASN1_dup(CHECKED_I2D_OF(type, i2d), \
                CHECKED_D2I_OF(type, d2i), \
                CHECKED_PTR_OF(const type, x)))

void *ASN1_item_dup(const ASN1_ITEM *it, const void *x);
int ASN1_item_sign_ex(const ASN1_ITEM *it, X509_ALGOR *algor1,
                 X509_ALGOR *algor2, ASN1_BIT_STRING *signature,
                 const void *data, const ASN1_OCTET_STRING *id,
                 EVP_PKEY *pkey, const EVP_MD *md, OSSL_LIB_CTX *libctx,
```

```
                const char *propq);
int ASN1_item_verify_ex(const ASN1_ITEM *it, const X509_ALGOR *alg,

          const ASN1_BIT_STRING *signature, const void *data,
                const ASN1_OCTET_STRING *id, EVP_PKEY *pkey,
                OSSL_LIB_CTX *libctx, const char *propq);

/* ASN1 alloc/free macros for when a type is only used internally */

# define M_ASN1_new_of(type) (type *)ASN1_item_new(ASN1_ITEM_rptr(type))
# define M_ASN1_free_of(x, type) \
           ASN1_item_free(CHECKED_PTR_OF(type, x), ASN1_ITEM_rptr(type))

# ifndef OPENSSL_NO_STDIO
void *ASN1_d2i_fp(void *(*xnew) (void), d2i_of_void *d2i, FILE *in, void **x);

#  define ASN1_d2i_fp_of(type,xnew,d2i,in,x) \
  ((type*)ASN1_d2i_fp(CHECKED_NEW_OF(type, xnew), \
                CHECKED_D2I_OF(type, d2i), \
                in, \
                CHECKED_PPTR_OF(type, x)))

void *ASN1_item_d2i_fp_ex(const ASN1_ITEM *it, FILE *in, void *x,
                  OSSL_LIB_CTX *libctx, const char *propq);
void *ASN1_item_d2i_fp(const ASN1_ITEM *it, FILE *in, void *x);
int
 ASN1_i2d_fp(i2d_of_void *i2d, FILE *out, const void *x);

#  define ASN1_i2d_fp_of(type,i2d,out,x) \
  (ASN1_i2d_fp(CHECKED_I2D_OF(type, i2d), \
           out, \
           CHECKED_PTR_OF(const type, x)))

int ASN1_item_i2d_fp(const ASN1_ITEM *it, FILE *out, const void *x);
int ASN1_STRING_print_ex_fp(FILE *fp, const ASN1_STRING *str, unsigned long flags);
# endif

int ASN1_STRING_to_UTF8(unsigned char **out, const ASN1_STRING *in);

void *ASN1_d2i_bio(void *(*xnew) (void), d2i_of_void *d2i, BIO *in, void **x);

#  define ASN1_d2i_bio_of(type,xnew,d2i,in,x) \
  ((type*)ASN1_d2i_bio( CHECKED_NEW_OF(type, xnew), \
                  CHECKED_D2I_OF(type, d2i), \
                  in, \
                  CHECKED_PPTR_OF(type, x)))

void *ASN1_item_d2i_bio_ex(const ASN1_ITEM *it, BIO *in, void *pval,
```

```
                    OSSL_LIB_CTX *libctx, const char *propq);
void *ASN1_item_d2i_bio(const ASN1_ITEM *it, BIO *in, void *pval);
int ASN1_i2d_bio(i2d_of_void
 *i2d, BIO *out, const void *x);

#  define ASN1_i2d_bio_of(type,i2d,out,x) \
   (ASN1_i2d_bio(CHECKED_I2D_OF(type, i2d), \
             out, \
             CHECKED_PTR_OF(const type, x)))

int ASN1_item_i2d_bio(const ASN1_ITEM *it, BIO *out, const void *x);
BIO *ASN1_item_i2d_mem_bio(const ASN1_ITEM *it, const ASN1_VALUE *val);
int ASN1_UTCTIME_print(BIO *fp, const ASN1_UTCTIME *a);
int ASN1_GENERALIZEDTIME_print(BIO *fp, const ASN1_GENERALIZEDTIME *a);
int ASN1_TIME_print(BIO *bp, const ASN1_TIME *tm);
int ASN1_TIME_print_ex(BIO *bp, const ASN1_TIME *tm, unsigned long flags);
int ASN1_STRING_print(BIO *bp, const ASN1_STRING *v);
int ASN1_STRING_print_ex(BIO *out, const ASN1_STRING *str, unsigned long flags);
int ASN1_buf_print(BIO *bp, const unsigned char *buf, size_t buflen, int off);
int ASN1_bn_print(BIO *bp, const char *number, const BIGNUM *num,
             unsigned char *buf, int off);
int ASN1_parse(BIO *bp, const unsigned char *pp, long len, int indent);
int
 ASN1_parse_dump(BIO *bp, const unsigned char *pp, long len, int indent,
               int dump);
const char *ASN1_tag2str(int tag);

/* Used to load and write Netscape format cert */

int ASN1_UNIVERSALSTRING_to_string(ASN1_UNIVERSALSTRING *s);

int ASN1_TYPE_set_octetstring(ASN1_TYPE *a, unsigned char *data, int len);
int ASN1_TYPE_get_octetstring(const ASN1_TYPE *a, unsigned char *data, int max_len);
int ASN1_TYPE_set_int_octetstring(ASN1_TYPE *a, long num,
                         unsigned char *data, int len);
int ASN1_TYPE_get_int_octetstring(const ASN1_TYPE *a, long *num,
                         unsigned char *data, int max_len);

void *ASN1_item_unpack(const ASN1_STRING *oct, const ASN1_ITEM *it);

ASN1_STRING *ASN1_item_pack(void *obj, const ASN1_ITEM *it,
                    ASN1_OCTET_STRING **oct);

void ASN1_STRING_set_default_mask(unsigned long mask);
int ASN1_STRING_set_default_mask_asc(const char *p);
unsigned long ASN1_STRING_get_default_mask(void);
int
```

```
 ASN1_mbstring_copy(ASN1_STRING **out, const unsigned char *in, int len,
                    int inform, unsigned long mask);
int ASN1_mbstring_ncopy(ASN1_STRING **out, const unsigned char *in, int len,
                     int inform, unsigned long mask,
                     long minsize, long maxsize);

ASN1_STRING *ASN1_STRING_set_by_NID(ASN1_STRING **out,
                            const unsigned char *in, int inlen,
                            int inform, int nid);
ASN1_STRING_TABLE *ASN1_STRING_TABLE_get(int nid);
int ASN1_STRING_TABLE_add(int, long, long, unsigned long, unsigned long);
void ASN1_STRING_TABLE_cleanup(void);

/* ASN1 template functions */

/* Old API compatible functions */
ASN1_VALUE *ASN1_item_new(const ASN1_ITEM *it);
ASN1_VALUE *ASN1_item_new_ex(const ASN1_ITEM *it, OSSL_LIB_CTX *libctx,
                         const char *propq);
void ASN1_item_free(ASN1_VALUE *val, const ASN1_ITEM *it);
ASN1_VALUE *ASN1_item_d2i_ex(ASN1_VALUE
 **val, const unsigned char **in,
                         long len, const ASN1_ITEM *it,
                         OSSL_LIB_CTX *libctx, const char *propq);
ASN1_VALUE *ASN1_item_d2i(ASN1_VALUE **val, const unsigned char **in,
                       long len, const ASN1_ITEM *it);
int ASN1_item_i2d(const ASN1_VALUE *val, unsigned char **out, const ASN1_ITEM *it);
int ASN1_item_ndef_i2d(const ASN1_VALUE *val, unsigned char **out,
                    const ASN1_ITEM *it);

void ASN1_add_oid_module(void);
void ASN1_add_stable_module(void);

ASN1_TYPE *ASN1_generate_nconf(const char *str, CONF *nconf);
ASN1_TYPE *ASN1_generate_v3(const char *str, X509V3_CTX *cnf);
int ASN1_str2mask(const char *str, unsigned long *pmask);

/* ASN1 Print flags */

/* Indicate missing OPTIONAL fields */
# define ASN1_PCTX_FLAGS_SHOW_ABSENT            0x001
/* Mark start and end of SEQUENCE */
# define ASN1_PCTX_FLAGS_SHOW_SEQUENCE          0x002
/* Mark start and end
 of SEQUENCE/SET OF */
# define ASN1_PCTX_FLAGS_SHOW_SSOF              0x004
/* Show the ASN1 type of primitives */
# define ASN1_PCTX_FLAGS_SHOW_TYPE              0x008
```

```
/* Don't show ASN1 type of ANY */
# define ASN1_PCTX_FLAGS_NO_ANY_TYPE            0x010
/* Don't show ASN1 type of MSTRINGs */
# define ASN1_PCTX_FLAGS_NO_MSTRING_TYPE        0x020
/* Don't show field names in SEQUENCE */
# define ASN1_PCTX_FLAGS_NO_FIELD_NAME          0x040
/* Show structure names of each SEQUENCE field */
# define ASN1_PCTX_FLAGS_SHOW_FIELD_STRUCT_NAME  0x080
/* Don't show structure name even at top level */
# define ASN1_PCTX_FLAGS_NO_STRUCT_NAME         0x100

int ASN1_item_print(BIO *out, const ASN1_VALUE *ifld, int indent,
                    const ASN1_ITEM *it, const ASN1_PCTX *pctx);
ASN1_PCTX *ASN1_PCTX_new(void);
void ASN1_PCTX_free(ASN1_PCTX *p);
unsigned long ASN1_PCTX_get_flags(const ASN1_PCTX *p);
void ASN1_PCTX_set_flags(ASN1_PCTX *p, unsigned long flags);
unsigned long ASN1_PCTX_get_nm_flags(const
 ASN1_PCTX *p);
void ASN1_PCTX_set_nm_flags(ASN1_PCTX *p, unsigned long flags);
unsigned long ASN1_PCTX_get_cert_flags(const ASN1_PCTX *p);
void ASN1_PCTX_set_cert_flags(ASN1_PCTX *p, unsigned long flags);
unsigned long ASN1_PCTX_get_oid_flags(const ASN1_PCTX *p);
void ASN1_PCTX_set_oid_flags(ASN1_PCTX *p, unsigned long flags);
unsigned long ASN1_PCTX_get_str_flags(const ASN1_PCTX *p);
void ASN1_PCTX_set_str_flags(ASN1_PCTX *p, unsigned long flags);

ASN1_SCTX *ASN1_SCTX_new(int (*scan_cb) (ASN1_SCTX *ctx));
void ASN1_SCTX_free(ASN1_SCTX *p);
const ASN1_ITEM *ASN1_SCTX_get_item(ASN1_SCTX *p);
const ASN1_TEMPLATE *ASN1_SCTX_get_template(ASN1_SCTX *p);
unsigned long ASN1_SCTX_get_flags(ASN1_SCTX *p);
void ASN1_SCTX_set_app_data(ASN1_SCTX *p, void *data);
void *ASN1_SCTX_get_app_data(ASN1_SCTX *p);

const BIO_METHOD *BIO_f_asn1(void);

/* cannot constify val because of CMS_stream() */
BIO *BIO_new_NDEF(BIO *out, ASN1_VALUE *val, const ASN1_ITEM *it);

int i2d_ASN1_bio_stream(BIO
 *out, ASN1_VALUE *val, BIO *in, int flags,
                        const ASN1_ITEM *it);
int PEM_write_bio_ASN1_stream(BIO *out, ASN1_VALUE *val, BIO *in, int flags,
                              const char *hdr, const ASN1_ITEM *it);
/* cannot constify val because of CMS_dataFinal() */
int SMIME_write_ASN1(BIO *bio, ASN1_VALUE *val, BIO *data, int flags,
                     int ctype_nid, int econt_nid,
```

```
                STACK_OF(X509_ALGOR) *mdalgs, const ASN1_ITEM *it);
int SMIME_write_ASN1_ex(BIO *bio, ASN1_VALUE *val, BIO *data, int flags,
                  int ctype_nid, int econt_nid,
                  STACK_OF(X509_ALGOR) *mdalgs, const ASN1_ITEM *it,
                  OSSL_LIB_CTX *libctx, const char *propq);
ASN1_VALUE *SMIME_read_ASN1(BIO *bio, BIO **bcont, const ASN1_ITEM *it);
ASN1_VALUE *SMIME_read_ASN1_ex(BIO *bio, int flags, BIO **bcont,
                      const ASN1_ITEM *it, ASN1_VALUE **x,
                      OSSL_LIB_CTX
 *libctx, const char *propq);
int SMIME_crlf_copy(BIO *in, BIO *out, int flags);
int SMIME_text(BIO *in, BIO *out);

const ASN1_ITEM *ASN1_ITEM_lookup(const char *name);
const ASN1_ITEM *ASN1_ITEM_get(size_t i);

/* Legacy compatibility */
# define DECLARE_ASN1_FUNCTIONS_fname(type, itname, name) \
      DECLARE_ASN1_ALLOC_FUNCTIONS_name(type, name) \
      DECLARE_ASN1_ENCODE_FUNCTIONS(type, itname, name)
# define DECLARE_ASN1_FUNCTIONS_const(type) DECLARE_ASN1_FUNCTIONS(type)
# define DECLARE_ASN1_ENCODE_FUNCTIONS_const(type, name) \
      DECLARE_ASN1_ENCODE_FUNCTIONS(type, name)
# define I2D_OF_const(type) I2D_OF(type)
# define ASN1_dup_of_const(type,i2d,d2i,x) ASN1_dup_of(type,i2d,d2i,x)
# define ASN1_i2d_fp_of_const(type,i2d,out,x) ASN1_i2d_fp_of(type,i2d,out,x)
# define ASN1_i2d_bio_of_const(type,i2d,out,x) ASN1_i2d_bio_of(type,i2d,out,x)

# ifdef  __cplusplus
}
# endif
#endif
```

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```
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* WARNING: do not edit!
* Generated by util/mkbuildinf.pl
*
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* this file except in compliance with the License.  You can obtain a copy
* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/

#define PLATFORM "platform: BSD-x86_64"
#define DATE "built on: Wed Mar  5 20:59:39 2025 UTC"

/*
* Generate compiler_flags as an array of individual characters. This is a
* workaround for the situation where CFLAGS gets too long for a C90 string
* literal
*/
static const char compiler_flags[] = {
   'c','o','m','p','i','l','e','r',':',' ','g','c','c',' ','-','f',
   'P','I','C',' ','-','p','t','h','r','e','a','d',' ','-','W','a',
   ',','-','-','n','o','e','x','e','c','s','t','a','c','k',' ','-',
   'W','a','l','l',' ','-','O','3',' ','-','D','L','_','E','N','D',
   'I','A','N',' ','-','D','O','P','E','N','S','S','L','_','P','I',
    'C',' ','-','D','_','T','H','R','E','A','D','_','S','A','F','E',
   ' ','-','D','_','R','E','E','N','T','R','A','N','T',' ','-','D',
   'O','P','E','N','S','S','L','_','B','U','I','L','D','I','N','G',
   '_','O','P','E','N','S','S','L',' ','-','D','N','D','E','B','U',
```

```
  'G','\0'
};
```

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```
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// found in the LICENSE file.

#ifndef V8_COMPILER_TURBOSHAFT_COPYING_PHASE_H_
#define V8_COMPILER_TURBOSHAFT_COPYING_PHASE_H_

#include <algorithm>
#include <cstddef>
#include <cstdint>
#include <optional>
#include <utility>

#include "src/base/iterator.h"
#include "src/base/logging.h"
#include "src/base/small-vector.h"
#include "src/base/vector.h"
#include "src/codegen/optimized-compilation-info.h"
#include "src/codegen/source-position.h"
#include "src/compiler/node-origin-table.h"
#include "src/compiler/turboshaft/assembler.h"
#include "src/compiler/turboshaft/graph.h"
#include "src/compiler/turboshaft/index.h"
#include "src/compiler/turboshaft/operations.h"
#include "src/compiler/turboshaft/phase.h"
#include "src/compiler/turboshaft/reducer-traits.h"
#include "src/compiler/turboshaft/representations.h"
#include "src/compiler/turboshaft/snapshot-table.h"
#include
 "src/compiler/turboshaft/variable-reducer.h"
#include "src/zone/zone-containers.h"

namespace v8::internal::compiler::turboshaft {

using MaybeVariable = std::optional<Variable>;

V8_EXPORT_PRIVATE int CountDecimalDigits(uint32_t value);
struct PaddingSpace {
```

```
 int spaces;
};
V8_EXPORT_PRIVATE std::ostream& operator<<(std::ostream& os,
                                           PaddingSpace padding);

template <typename Next>
class ReducerBaseForwarder;
template <typename Next>
class WasmRevecReducer;

template <typename Derived, typename Base>
class OutputGraphAssembler : public Base {
#define FRIEND(op) friend struct op##Op;
 TURBOSHAFT_OPERATION_LIST(FRIEND)
#undef FRIEND
 template <size_t I, class D>
 friend struct FixedArityOperationT;

 OpIndex Map(OpIndex index) { return derived_this()->MapToNewGraph(index); }

 OptionalOpIndex Map(OptionalOpIndex index) {
   return derived_this()->MapToNewGraph(index);
 }

 template <size_t N>
 base::SmallVector<OpIndex,
 N> Map(base::Vector<const OpIndex> indices) {
   return derived_this()->template MapToNewGraph<N>(indices);
 }

public:
#define ASSEMBLE(operation)                                          \
 OpIndex AssembleOutputGraph##operation(const operation##Op& op) { \
   return op.Explode(                                          \
       [a = assembler()](auto... args) {                       \
         return a->Reduce##operation(args...);                 \
       },                                                      \
       *this);                                                 \
 }
 TURBOSHAFT_OPERATION_LIST(ASSEMBLE)
#undef ASSEMBLE

private:
 Derived* derived_this() { return static_cast<Derived*>(this); }
 Assembler<typename Base::ReducerList>* assembler() {
   return &derived_this()->Asm();
 }
};
```

```
template <class AfterNext>
class GraphVisitor : public OutputGraphAssembler<GraphVisitor<AfterNext>,
                                    VariableReducer<AfterNext>>
 {
 template <typename N>
 friend class ReducerBaseForwarder;
 template <typename N>
 friend class WasmRevecReducer;

public:
 using Next = VariableReducer<AfterNext>;
 TURBOSHAFT_REDUCER_BOILERPLATE(CopyingPhase)

 GraphVisitor()
     : input_graph_(Asm().modifiable_input_graph()),
       current_input_block_(nullptr),
       op_mapping_(Asm().input_graph().op_id_count(), OpIndex::Invalid(),
                   Asm().phase_zone(), &Asm().input_graph()),
       block_mapping_(Asm().input_graph().block_count(), nullptr,
                      Asm().phase_zone()),
       blocks_needing_variables_(Asm().input_graph().block_count(),
                                 Asm().phase_zone()),
       old_opindex_to_variables(Asm().input_graph().op_id_count(),
                                Asm().phase_zone(), &Asm().input_graph()),
       blocks_to_clone_(Asm().phase_zone()) {
   Asm().output_graph().Reset();
 }

 // `trace_reduction` is a template parameter
 to avoid paying for tracing at
 // runtime.
 template <bool trace_reduction>
 void VisitGraph() {
   Asm().Analyze();

   // Creating initial old-to-new Block mapping.
   for (Block& input_block : Asm().modifiable_input_graph().blocks()) {
     block_mapping_[input_block.index()] = Asm().output_graph().NewBlock(
         input_block.IsLoop() ? Block::Kind::kLoopHeader : Block::Kind::kMerge,
         &input_block);
   }

   // Visiting the graph.
   VisitAllBlocks<trace_reduction>();

   Finalize();
 }
```

```
void Bind(Block* block) {
  Next::Bind(block);
  block->SetOrigin(current_input_block());
}

void Finalize() {
  // Updating the source_positions.
  if (!Asm().input_graph().source_positions().empty()) {
    for (OpIndex index : Asm().output_graph().AllOperationIndices()) {
      OpIndex origin = Asm().output_graph().operation_origins()[index];
      Asm().output_graph().source_positions()[index] =
          origin.valid() ? Asm().input_graph().source_positions()[origin]
                         : SourcePosition::Unknown();
    }
  }
  // Updating the operation origins.
  NodeOriginTable* origins = Asm().data()->node_origins();
  if (origins) {
    for (OpIndex index : Asm().output_graph().AllOperationIndices()) {
      OpIndex origin = Asm().output_graph().operation_origins()[index];
      if (origin.valid()) {
        origins->SetNodeOrigin(index.id(), origin.id());
      }
    }
  }

  input_graph_.SwapWithCompanion();
}

const Block* current_input_block() { return current_input_block_; }

bool* turn_loop_without_backedge_into_merge() {
  return &turn_loop_without_backedge_into_merge_;
}

// Emits a Goto to a cloned version of {input_block}, assuming that the only
// predecessor of this cloned copy will be the current block. {input_block} is
// not cloned right away (because this would recursively call VisitBlockBody,
// which could cause stack overflows), and is instead added to
the
// {blocks_to_clone_} stack, whose blocks will be cloned once the current
// block has been fully visited.
void CloneBlockAndGoto(const Block* input_block) {
  Block* new_block =
      Asm().output_graph().NewBlock(input_block->kind(), input_block);

  // Computing which input of Phi operations to use when visiting
```

```
  // {input_block} (since {input_block} doesn't really have predecessors
  // anymore).
  int added_block_phi_input = input_block->GetPredecessorIndex(
      Asm().current_block()->OriginForBlockEnd());

  // There is no guarantees that {input_block} will be entirely removed just
  // because it's cloned/inlined, since it's possible that it has predecessors
  // for which this optimization didn't apply. As a result, we add it to
  // {blocks_needing_variables_}, so that if it's ever generated
  // normally, Variables are used when emitting its content, so that
  // they can later be merged when control flow merges with the current
  //
 version of {input_block} that we just cloned.
  blocks_needing_variables_.Add(input_block->index().id());

  Asm().Goto(new_block);

  blocks_to_clone_.push_back({input_block, added_block_phi_input, new_block});
 }

 // Visits and emits {input_block} right now (ie, in the current block). This
 // should not be called recursively in order to avoid stack overflow (ie,
 // processing {input_block} should never lead to calling CloneAndInlingBlock).
 void CloneAndInlineBlock(const Block* input_block) {
  if (Asm().generating_unreachable_operations()) return;

#ifdef DEBUG
  // Making sure that we didn't call CloneAndInlineBlock recursively.
  DCHECK(!is_in_recursive_inlining_);
  ScopedModification<bool> recursive_guard(&is_in_recursive_inlining_, true);
#endif

  // Computing which input of Phi operations to use when visiting
  // {input_block} (since {input_block} doesn't really have predecessors
  // anymore).
  int added_block_phi_input = input_block->GetPredecessorIndex(
      Asm().current_block()->OriginForBlockEnd());

  // There is no guarantees that {input_block} will be entirely removed just
  // because it's cloned/inlined, since it's possible that it has predecessors
  // for which this optimization didn't apply. As a result, we add it to
  // {blocks_needing_variables_}, so that if it's ever generated
  // normally, Variables are used when emitting its content, so that
  // they can later be merged when control flow merges with the current
  // version of {input_block} that we just cloned.
  blocks_needing_variables_.Add(input_block->index().id());

  ScopedModification<bool> set_true(&current_block_needs_variables_, true);
```

```
  VisitBlockBody<CanHavePhis::kYes, ForCloning::kYes, false>(
      input_block, added_block_phi_input);
}

// {InlineOp} introduces two limitations unlike {CloneAndInlineBlock}:
// 1. The input operation must not be emitted anymore as part of its
// regular input block;
// 2.
{InlineOp} must not be used multiple times for the same input op.
bool InlineOp(OpIndex index, const Block* input_block) {
  return VisitOpAndUpdateMapping<false>(index, input_block);
}

template <bool can_be_invalid = false>
OpIndex MapToNewGraph(OpIndex old_index, int predecessor_index = -1) {
  DCHECK(old_index.valid());
  OpIndex result = op_mapping_[old_index];

  if (!result.valid()) {
    // {op_mapping} doesn't have a mapping for {old_index}. The
    // VariableReducer should provide the mapping.
    MaybeVariable var = GetVariableFor(old_index);
    if constexpr (can_be_invalid) {
      if (!var.has_value()) {
        return OpIndex::Invalid();
      }
    }
    DCHECK(var.has_value());
    if (predecessor_index == -1) {
      result = Asm().GetVariable(var.value());
    } else {
      result = Asm().GetPredecessorValue(var.value(), predecessor_index);
    }
  }

  DCHECK_IMPLIES(!can_be_invalid, result.valid());
  return result;
 }

template <bool can_be_invalid = false, typename T>
V<T> MapToNewGraph(V<T> old_index, int predecessor_index = -1) {
  return V<T>::Cast(MapToNewGraph(static_cast<OpIndex>(old_index), -1));
}

Block* MapToNewGraph(const Block* block) const {
  Block* new_block = block_mapping_[block->index()];
  DCHECK_NOT_NULL(new_block);
  return new_block;
```

```
}

template <typename FunctionType>
OpIndex ResolvePhi(const PhiOp& op, FunctionType&& map,
                   RegisterRepresentation rep) {
  if (op.input_count == 1) {
    // If, in the previous CopyingPhase, a loop header was turned into a
    // regular blocks, its PendingLoopPhis became Phis with a single input. We
    // can now just get rid of these Phis.
    return map(op.input(0), -1);
  }

  OpIndex ig_index = Asm().input_graph().Index(op);
  if (Asm().current_block()->IsLoop()) {
    DCHECK_EQ(op.input_count, 2);
    OpIndex og_index = map(op.input(0), -1);
    if (ig_index == op.input(PhiOp::kLoopPhiBackEdgeIndex))
{
      // Avoid emitting a Loop Phi which points to itself, instead
      // emit it's 0'th input.
      return og_index;
    }
    return Asm().PendingLoopPhi(og_index, rep);
  }

  base::Vector<const OpIndex> old_inputs = op.inputs();
  base::SmallVector<OpIndex, 64> new_inputs;
  int predecessor_count = Asm().current_block()->PredecessorCount();
  Block* old_pred = current_input_block_->LastPredecessor();
  Block* new_pred = Asm().current_block()->LastPredecessor();
  // Control predecessors might be missing after the optimization phase. So we
  // need to skip phi inputs that belong to control predecessors that have no
  // equivalent in the new graph.

  // We first assume that the order if the predecessors of the current block
  // did not change. If it did, {new_pred} won't be nullptr at the end of this
  // loop, and we'll instead fall back to the slower code below to compute the
  // inputs of the Phi.

int predecessor_index = predecessor_count - 1;
  for (OpIndex input : base::Reversed(old_inputs)) {
    if (new_pred && new_pred->OriginForBlockEnd() == old_pred) {
      // Phis inputs have to come from predecessors. We thus have to
      // MapToNewGraph with {predecessor_index} so that we get an OpIndex that
      // is from a predecessor rather than one that comes from a Variable
      // merged in the current block.
      new_inputs.push_back(map(input, predecessor_index));
      new_pred = new_pred->NeighboringPredecessor();
```

```
      predecessor_index--;
    }
    old_pred = old_pred->NeighboringPredecessor();
  }
  DCHECK_IMPLIES(new_pred == nullptr, old_pred == nullptr);

  if (new_pred != nullptr) {
    // If {new_pred} is not nullptr, then the order of the predecessors
    // changed. This should only happen with blocks that were introduced in
    // the previous graph. For instance, consider this (partial) dominator
    // tree:
    //

  //      7
    //       8
    //       10
    //      9
    //      11
    //
    // Where the predecessors of block 11 are blocks 9 and 10 (in that order).
    // In dominator visit order, block 10 will be visited before block 9.
    // Since blocks are added to predecessors when the predecessors are
    // visited, it means that in the new graph, the predecessors of block 11
    // are [10, 9] rather than [9, 10].
    // To account for this, we reorder the inputs of the Phi, and get rid of
    // inputs from blocks that vanished.

#ifdef DEBUG
    // To check that indices are set properly, we zap them in debug builds.
    for (auto& block : Asm().modifiable_input_graph().blocks()) {
      block.clear_custom_data();
    }
#endif
    uint32_t pos = current_input_block_->PredecessorCount() - 1;
    for (old_pred = current_input_block_->LastPredecessor();
         old_pred != nullptr; old_pred = old_pred->NeighboringPredecessor()) {
      // Store
 the current index of the {old_pred}.
      old_pred->set_custom_data(pos--, Block::CustomDataKind::kPhiInputIndex);
    }

    // Filling {new_inputs}: we iterate the new predecessors, and, for each
    // predecessor, we check the index of the input corresponding to the old
    // predecessor, and we put it next in {new_inputs}.
    new_inputs.clear();
    int predecessor_index = predecessor_count - 1;
    for (new_pred = Asm().current_block()->LastPredecessor();
         new_pred != nullptr; new_pred = new_pred->NeighboringPredecessor()) {
```

```
      const Block* origin = new_pred->OriginForBlockEnd();
      DCHECK_NOT_NULL(origin);
      OpIndex input = old_inputs[origin->get_custom_data(
          Block::CustomDataKind::kPhiInputIndex)];
      // Phis inputs have to come from predecessors. We thus have to
      // MapToNewGraph with {predecessor_index} so that we get an OpIndex that
      // is from a predecessor rather than one that comes from a Variable
       // merged in the current block.
      new_inputs.push_back(map(input, predecessor_index));
      predecessor_index--;
    }
  }

  DCHECK_EQ(new_inputs.size(), Asm().current_block()->PredecessorCount());

  if (new_inputs.size() == 1) {
    // This Operation used to be a Phi in a Merge, but since one (or more) of
    // the inputs of the merge have been removed, there is no need for a Phi
    // anymore.
    return new_inputs[0];
  }

  std::reverse(new_inputs.begin(), new_inputs.end());
  return Asm().ReducePhi(base::VectorOf(new_inputs), rep);
}

// The block from the input graph that corresponds to the current block as a
// branch destination. Such a block might not exist, and this function uses a
// trick to compute such a block in almost all cases, but might rarely fail
// and return `nullptr` instead.
const Block* OriginForBlockStart(Block* block) const {
  // Check that `block->origin_` is still valid as a block start and was not
   // changed to a semantically different block when inlining blocks.
  const Block* origin = block->origin_;
  if (origin && MapToNewGraph(origin) == block) return origin;
  return nullptr;
}

// Clone all of the blocks in {sub_graph} (which should be Blocks of the input
// graph). If `keep_loop_kinds` is true, the loop headers are preserved, and
// otherwise they are marked as Merge. An initial GotoOp jumping to the 1st
// block of `sub_graph` is always emitted. The output Block corresponding to
// the 1st block of `sub_graph` is returned.
template <class Set>
Block* CloneSubGraph(Set sub_graph, bool keep_loop_kinds,
                     bool is_loop_after_peeling = false) {
  // The BlockIndex of the blocks of `sub_graph` should be sorted so that
  // visiting them in order is correct (all of the predecessors of a block
```

```
  // should always be visited before the block itself).
  DCHECK(std::is_sorted(sub_graph.begin(), sub_graph.end(),

         [](const Block* a, const Block* b) {
                 return a->index().id() <= b->index().id();
                }));

  // 1. Create new blocks, and update old->new mapping. This is required to
  // emit multiple times the blocks of {sub_graph}: if a block `B1` in
  // {sub_graph} ends with a Branch/Goto to a block `B2` that is also in
  // {sub_graph}, then this Branch/Goto should go to the version of `B2` that
  // this CloneSubGraph will insert, rather than to a version inserted by a
  // previous call to CloneSubGraph or the version that the regular
  // VisitAllBlock function will emit.
  ZoneVector<Block*> old_mappings(sub_graph.size(), Asm().phase_zone());
  for (auto&& [input_block, old_mapping] :
      base::zip(sub_graph, old_mappings)) {
    old_mapping = block_mapping_[input_block->index()];
    Block::Kind kind = keep_loop_kinds && input_block->IsLoop()
                     ? Block::Kind::kLoopHeader

                  : Block::Kind::kMerge;
    block_mapping_[input_block->index()] =
        Asm().output_graph().NewBlock(kind, input_block);
  }

  // 2. Visit block in correct order (begin to end)

  // Emit a goto to 1st block.
  Block* start = block_mapping_[(*sub_graph.begin())->index()];
#ifdef DEBUG
  if (is_loop_after_peeling) start->set_has_peeled_iteration();
#endif
  Asm().Goto(start);
  // Visiting `sub_graph`.
  for (const Block* block : sub_graph) {
    blocks_needing_variables_.Add(block->index().id());
    VisitBlock<false>(block);
    ProcessWaitingCloningAndInlining<false>();
  }

  // 3. Restore initial old->new mapping
  for (auto&& [input_block, old_mapping] :
      base::zip(sub_graph, old_mappings)) {
    block_mapping_[input_block->index()] = old_mapping;
  }

  return start;
```

```
 }

 template <bool can_be_invalid = false>
 OptionalOpIndex MapToNewGraph(OptionalOpIndex old_index,
                               int predecessor_index
 = -1) {
   if (!old_index.has_value()) return OptionalOpIndex::Nullopt();
   return MapToNewGraph<can_be_invalid>(old_index.value(), predecessor_index);
 }

 template <size_t expected_size>
 base::SmallVector<OpIndex, expected_size> MapToNewGraph(
     base::Vector<const OpIndex> inputs) {
   base::SmallVector<OpIndex, expected_size> result;
   for (OpIndex input : inputs) {
     result.push_back(MapToNewGraph(input));
   }
   return result;
 }

private:
 template <bool trace_reduction>
 void VisitAllBlocks() {
   base::SmallVector<const Block*, 128> visit_stack;

   visit_stack.push_back(&Asm().input_graph().StartBlock());
   while (!visit_stack.empty()) {
     const Block* block = visit_stack.back();
     visit_stack.pop_back();
     VisitBlock<trace_reduction>(block);
     ProcessWaitingCloningAndInlining<trace_reduction>();

     for (Block* child = block->LastChild(); child != nullptr;
          child = child->NeighboringChild()) {
       visit_stack.push_back(child);
     }
   }
 }

 template <bool trace_reduction>
 void VisitBlock(const Block* input_block) {
   Asm().SetCurrentOrigin(OpIndex::Invalid());
   current_block_needs_variables_ =
       blocks_needing_variables_.Contains(input_block->index().id());
   if constexpr (trace_reduction) {
     std::cout << "\nold " << PrintAsBlockHeader{*input_block} << "\n";
     std::cout << "new "
               << PrintAsBlockHeader{*MapToNewGraph(input_block),
```

```
                                Asm().output_graph().next_block_index()}
            << "\n";
  }
  Block* new_block = MapToNewGraph(input_block);
  if (Asm().Bind(new_block)) {
    VisitBlockBody<CanHavePhis::kYes, ForCloning::kNo, trace_reduction>(
        input_block);
    if constexpr (trace_reduction) TraceBlockFinished();
  } else {
    if constexpr (trace_reduction) TraceBlockUnreachable();
  }

  // If we eliminate a loop backedge, we need to turn the loop into a
  // single-predecessor
merge block.
  if (!turn_loop_without_backedge_into_merge_) return;
  const Operation& last_op = input_block->LastOperation(Asm().input_graph());
  if (auto* final_goto = last_op.TryCast<GotoOp>()) {
    if (final_goto->destination->IsLoop()) {
      if (input_block->index() >= final_goto->destination->index()) {
        Asm().FinalizeLoop(MapToNewGraph(final_goto->destination));
      } else {
        // We have a forward jump to a loop, rather than a backedge. We
        // don't need to do anything.
      }
    }
  }
}

enum class CanHavePhis { kNo, kYes };
enum class ForCloning { kNo, kYes };

template <CanHavePhis can_have_phis, ForCloning for_cloning,
          bool trace_reduction>
void VisitBlockBody(const Block* input_block,
                    int added_block_phi_input = -1) {
  DCHECK_NOT_NULL(Asm().current_block());
  current_input_block_ = input_block;

  // Phis could be mutually recursive, for instance (in a loop
header):
  //
  //     p1 = phi(a, p2)
  //     p2 = phi(b, p1)
  //
  // In this case, if we are currently unrolling the loop and visiting this
  // loop header that is now part of the loop body, then if we visit Phis
  // and emit new mapping (with CreateOldToNewMapping) as we go along, we
```

```
  // would visit p1 and emit a mapping saying "p1 = p2", and use this
  // mapping when visiting p2, then we'd map p2 to p2 instead of p1. To
  // overcome this issue, we first visit the Phis of the loop, emit the new
  // phis, and record the new mapping in a side-table ({new_phi_values}).
  // Then, we visit all of the operations of the loop and commit the new
  // mappings: phis were emitted before using the old mapping, and all of
  // the other operations will use the new mapping (as they should).
  //
  // Note that Phis are not always at the begining of blocks, but when they
  // aren't, they can't have inputs from the current block (except on their

// backedge for loop phis, but they start as PendingLoopPhis without
  // backedge input), so visiting all Phis first is safe.

  // Visiting Phis and collecting their new OpIndices.
  base::SmallVector<OpIndex, 64> new_phi_values;
  if constexpr (can_have_phis == CanHavePhis::kYes) {
    for (OpIndex index : Asm().input_graph().OperationIndices(*input_block)) {
      if (ShouldSkipOperation(Asm().input_graph().Get(index))) continue;
      DCHECK_NOT_NULL(Asm().current_block());
      if (Asm().input_graph().Get(index).template Is<PhiOp>()) {
        OpIndex new_index;
        if constexpr (for_cloning == ForCloning::kYes) {
          // When cloning a block, it only has a single predecessor, and Phis
          // should therefore be removed and be replaced by the input
          // corresponding to this predecessor.
          DCHECK_NE(added_block_phi_input, -1);
          // This Phi has been cloned/inlined, and has thus now a single
          // predecessor,
and shouldn't be a Phi anymore.
          new_index = MapToNewGraph(
              Asm().input_graph().Get(index).input(added_block_phi_input));
        } else {
          new_index =
              VisitOpNoMappingUpdate<trace_reduction>(index, input_block);
        }
        new_phi_values.push_back(new_index);
        if (!Asm().current_block()) {
          // A reducer has detected, based on the Phis of the block that were
          // visited so far, that we are in unreachable code (or, less likely,
          // decided, based on some Phis only, to jump away from this block?).
          return;
        }
      }
    }
  }
  DCHECK_NOT_NULL(Asm().current_block());
```

```
  // Visiting everything, updating Phi mappings, and emitting non-phi
  // operations.
  int phi_num = 0;
  bool stopped_early = false;
  for (OpIndex index : base::IterateWithoutLast(
          Asm().input_graph().OperationIndices(*input_block))) {
    if (ShouldSkipOperation(Asm().input_graph().Get(index)))
continue;
    const Operation& op = Asm().input_graph().Get(index);
    if constexpr (can_have_phis == CanHavePhis::kYes) {
      if (op.Is<PhiOp>()) {
        CreateOldToNewMapping(index, new_phi_values[phi_num++]);
        continue;
      }
    }
    // Blocks with a single predecessor (for which CanHavePhis might be kNo)
    // can still have phis if they used to be loop header that were turned
    // into regular blocks.
    DCHECK_IMPLIES(op.Is<PhiOp>(), op.input_count == 1);

    if (!VisitOpAndUpdateMapping<trace_reduction>(index, input_block)) {
      stopped_early = true;
      break;
    }
  }
  // If the last operation of the loop above (= the one-before-last operation
  // of the block) was lowered to an unconditional deopt/trap/something like
  // that, then current_block will now be null, and there is no need visit the
  // last operation of the block.
  if (stopped_early || Asm().current_block()
== nullptr) return;

  // The final operation (which should be a block terminator) of the block
  // is processed separately, because if it's a Goto to a block with a
  // single predecessor, we'll inline it. (we could have had a check `if (op
  // is a Goto)` in the loop above, but since this can only be true for the
  // last operation, we instead extracted it here to make things faster).
  const Operation& terminator =
      input_block->LastOperation(Asm().input_graph());
  DCHECK(terminator.IsBlockTerminator());
  VisitBlockTerminator<trace_reduction>(terminator, input_block);
}

template <bool trace_reduction>
bool VisitOpAndUpdateMapping(OpIndex index, const Block* input_block) {
  if (Asm().current_block() == nullptr) return false;
  OpIndex new_index =
      VisitOpNoMappingUpdate<trace_reduction>(index, input_block);
```

```
  const Operation& op = Asm().input_graph().Get(index);
  if (CanBeUsedAsInput(op) && new_index.valid()) {
    CreateOldToNewMapping(index,
 new_index);
  }
  return true;
 }

 template <bool trace_reduction>
 OpIndex VisitOpNoMappingUpdate(OpIndex index, const Block* input_block) {
  Block* current_block = Asm().current_block();
  DCHECK_NOT_NULL(current_block);
  Asm().SetCurrentOrigin(index);
  current_block->SetOrigin(input_block);
  OpIndex first_output_index = Asm().output_graph().next_operation_index();
  USE(first_output_index);
  const Operation& op = Asm().input_graph().Get(index);
  if constexpr (trace_reduction) TraceReductionStart(index);
  if (ShouldSkipOperation(op)) {
    if constexpr (trace_reduction) TraceOperationSkipped();
    return OpIndex::Invalid();
  }
  OpIndex new_index;
  switch (op.opcode) {
#define EMIT_INSTR_CASE(Name)                                    \
 case Opcode::k##Name:                                    \
  if (MayThrow(Opcode::k##Name)) return OpIndex::Invalid();            \
  new_index = Asm().ReduceInputGraph##Name(index,
 op.Cast<Name##Op>()); \
  break;
    TURBOSHAFT_OPERATION_LIST(EMIT_INSTR_CASE)
#undef EMIT_INSTR_CASE
  }
  if constexpr (trace_reduction) {
    if (CanBeUsedAsInput(op) && !new_index.valid()) {
      TraceOperationSkipped();
    } else {
      TraceReductionResult(current_block, first_output_index, new_index);
    }
  }
#ifdef DEBUG
  DCHECK_IMPLIES(new_index.valid(),
                 Asm().output_graph().BelongsToThisGraph(new_index));
  if (V8_UNLIKELY(v8_flags.turboshaft_verify_reductions)) {
    if (new_index.valid()) {
      const Operation& new_op = Asm().output_graph().Get(new_index);
      if (!new_op.Is<TupleOp>()) {
        // Checking that the outputs_rep of the new operation are the same as
```

```
        // the old operation. (except for tuples, since they don't have
        // outputs_rep)
        DCHECK_EQ(new_op.outputs_rep().size(), op.outputs_rep().size());
        for (size_t i = 0; i < new_op.outputs_rep().size();
 ++i) {
          DCHECK(new_op.outputs_rep()[i].AllowImplicitRepresentationChangeTo(
              op.outputs_rep()[i],
              Asm().output_graph().IsCreatedFromTurbofan()));
        }
      }
      Asm().Verify(index, new_index);
    }
  }
#endif  // DEBUG
  return new_index;
 }

 template <bool trace_reduction>
 void VisitBlockTerminator(const Operation& terminator,
                           const Block* input_block) {
  if (Asm().CanAutoInlineBlocksWithSinglePredecessor() &&
      terminator.Is<GotoOp>()) {
    Block* destination = terminator.Cast<GotoOp>().destination;
    if (destination->PredecessorCount() == 1) {
      block_to_inline_now_ = destination;
      return;
    }
  }
  // Just going through the regular VisitOp function.
  OpIndex index = Asm().input_graph().Index(terminator);
  VisitOpAndUpdateMapping<trace_reduction>(index, input_block);
 }

 template <bool trace_reduction>
 void ProcessWaitingCloningAndInlining()
 {
  InlineWaitingBlock<trace_reduction>();
  while (!blocks_to_clone_.empty()) {
    BlockToClone item = blocks_to_clone_.back();
    blocks_to_clone_.pop_back();
    DoCloneBlock<trace_reduction>(
        item.input_block, item.added_block_phi_input, item.new_output_block);
    InlineWaitingBlock<trace_reduction>();
  }
 }

 template <bool trace_reduction>
 void InlineWaitingBlock() {
```

```
  while (block_to_inline_now_) {
    Block* input_block = block_to_inline_now_;
    block_to_inline_now_ = nullptr;
    ScopedModification<bool> set_true(&current_block_needs_variables_, true);
    if constexpr (trace_reduction) {
      std::cout << "Inlining " << PrintAsBlockHeader{*input_block} << "\n";
    }
    VisitBlockBody<CanHavePhis::kNo, ForCloning::kNo, trace_reduction>(
        input_block);
  }
}

template <bool trace_reduction>
void DoCloneBlock(const Block* input_block, int added_block_phi_input,
                  Block* output_block)
{
  DCHECK_EQ(output_block->PredecessorCount(), 1);
  if constexpr (trace_reduction) {
    std::cout << "\nCloning old " << PrintAsBlockHeader{*input_block} << "\n";
    std::cout << "As new "
              << PrintAsBlockHeader{*output_block,
                                    Asm().output_graph().next_block_index()}
              << "\n";
  }

  ScopedModification<bool> set_true(&current_block_needs_variables_, true);

  Asm().BindReachable(output_block);
  VisitBlockBody<CanHavePhis::kYes, ForCloning::kYes, trace_reduction>(
      input_block, added_block_phi_input);

  if constexpr (trace_reduction) TraceBlockFinished();
}

void TraceReductionStart(OpIndex index) {
  std::cout << " o" << index.id() << ": "
            << PaddingSpace{5 - CountDecimalDigits(index.id())}
            << OperationPrintStyle{Asm().input_graph().Get(index), "#o"}
            << "\n";
}
void TraceOperationSkipped() { std::cout << "> skipped\n\n"; }
void
TraceBlockUnreachable() { std::cout << "> unreachable\n\n"; }
void TraceReductionResult(Block* current_block, OpIndex first_output_index,
                          OpIndex new_index) {
  if (new_index < first_output_index) {
    // The operation was replaced with an already existing one.
    std::cout << "> #n" << new_index.id() << "\n";
```

```
  }
  bool before_arrow = new_index >= first_output_index;
  for (const Operation& op : Asm().output_graph().operations(
          first_output_index, Asm().output_graph().next_operation_index())) {
    OpIndex index = Asm().output_graph().Index(op);
    const char* prefix;
    if (index == new_index) {
      prefix = ">";
      before_arrow = false;
    } else if (before_arrow) {
      prefix = "  ";
    } else {
      prefix = "   ";
    }
    std::cout << prefix << " n" << index.id() << ": "
              << PaddingSpace{5 - CountDecimalDigits(index.id())}
              << OperationPrintStyle{Asm().output_graph().Get(index),
"#n"}
              << "\n";
    if (op.IsBlockTerminator() && Asm().current_block() &&
        Asm().current_block() != current_block) {
      current_block = &Asm().output_graph().Get(
          BlockIndex(current_block->index().id() + 1));
      std::cout << "new " << PrintAsBlockHeader{*current_block} << "\n";
    }
  }
  std::cout << "\n";
}
void TraceBlockFinished() { std::cout << "\n"; }

// These functions take an operation from the old graph and use the assembler
// to emit a corresponding operation in the new graph, translating inputs and
// blocks accordingly.
V8_INLINE OpIndex AssembleOutputGraphGoto(const GotoOp& op) {
  Block* destination = MapToNewGraph(op.destination);
  if (op.is_backedge) {
    DCHECK(destination->IsBound());
    DCHECK(destination->IsLoop());
    FixLoopPhis(op.destination);
  }
  // It is important that we first fix loop phis and then reduce the `Goto`,
  // because reducing the
`Goto` can have side effects, in particular, it can
  // modify affect the SnapshotTable of `VariableReducer`, which is also used
  // by `FixLoopPhis()`.
  Asm().ReduceGoto(destination, op.is_backedge);
  return OpIndex::Invalid();
}
```

```
V8_INLINE OpIndex AssembleOutputGraphBranch(const BranchOp& op) {
  Block* if_true = MapToNewGraph(op.if_true);
  Block* if_false = MapToNewGraph(op.if_false);
  return Asm().ReduceBranch(MapToNewGraph(op.condition()), if_true, if_false,
                            op.hint);
}
OpIndex AssembleOutputGraphSwitch(const SwitchOp& op) {
  base::SmallVector<SwitchOp::Case, 16> cases;
  for (SwitchOp::Case c : op.cases) {
    cases.emplace_back(c.value, MapToNewGraph(c.destination), c.hint);
  }
  return Asm().ReduceSwitch(
      MapToNewGraph(op.input()),
      Asm().graph_zone()->CloneVector(base::VectorOf(cases)),
      MapToNewGraph(op.default_case), op.default_hint);
}
OpIndex AssembleOutputGraphPhi(const PhiOp& op)
{
  return ResolvePhi(
      op,
      [this](OpIndex ind, int predecessor_index) {
        return MapToNewGraph(ind, predecessor_index);
      },
      op.rep);
}
OpIndex AssembleOutputGraphPendingLoopPhi(const PendingLoopPhiOp& op) {
  UNREACHABLE();
}
V8_INLINE OpIndex AssembleOutputGraphFrameState(const FrameStateOp& op) {
  auto inputs = MapToNewGraph<32>(op.inputs());
  return Asm().ReduceFrameState(base::VectorOf(inputs), op.inlined, op.data);
}
OpIndex AssembleOutputGraphCall(const CallOp& op) {
  OpIndex callee = MapToNewGraph(op.callee());
  OptionalOpIndex frame_state = MapToNewGraph(op.frame_state());
  auto arguments = MapToNewGraph<16>(op.arguments());
  return Asm().ReduceCall(callee, frame_state, base::VectorOf(arguments),
                          op.descriptor, op.Effects());
}
OpIndex AssembleOutputGraphDidntThrow(const DidntThrowOp& op) {
  const Operation& throwing_operation =
      Asm().input_graph().Get(op.throwing_operation());
   OpIndex result;
  switch (throwing_operation.opcode) {
#define CASE(Name)                                          \
 case Opcode::k##Name:                                      \
  result = Asm().ReduceInputGraph##Name(                    \
      op.throwing_operation(), throwing_operation.Cast<Name##Op>()); \
```

```
  break;
    TURBOSHAFT_THROWING_OPERATIONS_LIST(CASE)
#undef CASE
    default:
      UNREACHABLE();
  }
  return result;
}

V<None> AssembleOutputGraphCheckException(const CheckExceptionOp& op) {
  Graph::OpIndexIterator it(op.didnt_throw_block->begin(),
                            &Asm().input_graph());
  Graph::OpIndexIterator end(op.didnt_throw_block->end(),
                             &Asm().input_graph());
  // To translate `CheckException` to the new graph, we reduce the throwing
  // operation (actually it's `DidntThrow` operation, but that triggers the
  // actual reduction) with a
catch scope. If the reduction replaces the
  // throwing operation with other throwing operations, all of them will be
  // connected to the provided catch block. The reduction should automatically
  // bind a block that represents non-throwing control flow of the original
  // operation, so we can inline the rest of the `didnt_throw` block.
  {
    CatchScope scope(Asm(), MapToNewGraph(op.catch_block));
    DCHECK(Asm().input_graph().Get(*it).template Is<DidntThrowOp>());
    if (!Asm().InlineOp(*it, op.didnt_throw_block)) {
      return V<None>::Invalid();
    }
    ++it;
  }
  for (; it != end; ++it) {
    // Using `InlineOp` requires that the inlined operation is not emitted
    // multiple times. This is the case here because we just removed the
    // single predecessor of `didnt_throw_block`.
    if (!Asm().InlineOp(*it, op.didnt_throw_block)) {
      break;
    }
  }
  return V<None>::Invalid();
}

void CreateOldToNewMapping(OpIndex
old_index, OpIndex new_index) {
  DCHECK(old_index.valid());
  DCHECK(Asm().input_graph().BelongsToThisGraph(old_index));
  DCHECK_IMPLIES(new_index.valid(),
                 Asm().output_graph().BelongsToThisGraph(new_index));
```

```
  if (current_block_needs_variables_) {
    MaybeVariable var = GetVariableFor(old_index);
    if (!var.has_value()) {
      MaybeRegisterRepresentation rep =
          Asm().input_graph().Get(old_index).outputs_rep().size() == 1
              ? static_cast<const MaybeRegisterRepresentation&>(
                    Asm().input_graph().Get(old_index).outputs_rep()[0])
              : MaybeRegisterRepresentation::None();
      var = Asm().NewLoopInvariantVariable(rep);
      SetVariableFor(old_index, *var);
    }
    Asm().SetVariable(*var, new_index);
    return;
  }

  DCHECK(!op_mapping_[old_index].valid());
  op_mapping_[old_index] = new_index;
}

MaybeVariable GetVariableFor(OpIndex old_index) const {
  return old_opindex_to_variables[old_index];
 }

void SetVariableFor(OpIndex old_index, MaybeVariable var) {
  DCHECK(!old_opindex_to_variables[old_index].has_value());
  old_opindex_to_variables[old_index] = var;
}

void FixLoopPhis(Block* input_graph_loop) {
  DCHECK(input_graph_loop->IsLoop());
  Block* output_graph_loop = MapToNewGraph(input_graph_loop);
  DCHECK(output_graph_loop->IsLoop());
  for (const Operation& op : Asm().input_graph().operations(
           input_graph_loop->begin(), input_graph_loop->end())) {
    if (auto* input_phi = op.TryCast<PhiOp>()) {
      OpIndex phi_index =
          MapToNewGraph<true>(Asm().input_graph().Index(*input_phi));
      if (!phi_index.valid() || !output_graph_loop->Contains(phi_index)) {
        // Unused phis are skipped, so they are not be mapped to anything in
        // the new graph. If the phi is reduced to an operation from a
        // different block, then there is no loop phi in the current loop

   // header to take care of.
        continue;
      }
      Asm().FixLoopPhi(*input_phi, phi_index, output_graph_loop);
    }
  }
```

```
}

Graph& input_graph_;

const Block* current_input_block_;

// Mappings from old OpIndices to new OpIndices.
FixedOpIndexSidetable<OpIndex> op_mapping_;

// Mappings from old blocks to new blocks.
FixedBlockSidetable<Block*> block_mapping_;

// {current_block_needs_variables_} is set to true if the current block should
// use Variables to map old to new OpIndex rather than just {op_mapping}. This
// is typically the case when the block has been cloned.
bool current_block_needs_variables_ = false;

// When {turn_loop_without_backedge_into_merge_} is true (the default), when
// processing an input block that ended with a loop backedge but doesn't
// anymore, the loop header is turned into a regular merge. This can be turned
// off when unrolling a loop for instance.
bool turn_loop_without_backedge_into_merge_ = true;

 // Set of Blocks for which Variables should be used rather than
// {op_mapping}.
BitVector blocks_needing_variables_;

// Mapping from old OpIndex to Variables.
FixedOpIndexSidetable<MaybeVariable> old_opindex_to_variables;

// When the last operation of a Block is a Goto to a Block with a single
// predecessor, we always inline the destination into the current block. To
// avoid making this process recursive (which could lead to stack overflows),
// we set the variable {block_to_inline_now_} instead. Right after we're done
// visiting a Block, the function ProcessWaitingCloningAndInlining will inline
// {block_to_inline_now_} (if it's set) in a non-recursive way.
Block* block_to_inline_now_ = nullptr;

// When a Reducer wants to clone a block (for instance,
// BranchEliminationReducer, in order to remove Phis or to replace a Branch by
// a Goto), this block is not cloned right away, in order to avoid recursion
// (which could lead to stack overflows).
Instead, we add this block to
// {blocks_to_clone_}. Right after we're done visiting a Block, the function
// ProcessWaitingCloningAndInlining will actually clone the blocks in
// {blocks_to_clone_} in a non-recursive way.
struct BlockToClone {
  const Block* input_block;
```

```
  int added_block_phi_input;
  Block* new_output_block;
 };
 ZoneVector<BlockToClone> blocks_to_clone_;

#ifdef DEBUG
 // Recursively inlining blocks is still allowed (mainly for
 // LoopUnrollingReducer), but it shouldn't be actually recursive. This is
 // checked by the {is_in_recursive_inlining_}, which is set to true while
 // recursively inlining a block. Trying to inline a block while
 // {is_in_recursive_inlining_} is true will lead to a DCHECK failure.
 bool is_in_recursive_inlining_ = false;
#endif
};

template <template <class> class... Reducers>
class TSAssembler;

template <template <class> class... Reducers>
class CopyingPhaseImpl {
public:
 static void Run(PipelineData* data, Graph&
 input_graph, Zone* phase_zone,
                 bool trace_reductions = false) {
  TSAssembler<GraphVisitor, Reducers...> phase(
      data, input_graph, input_graph.GetOrCreateCompanion(), phase_zone);
#ifdef DEBUG
  if (trace_reductions) {
    phase.template VisitGraph<true>();
  } else {
    phase.template VisitGraph<false>();
  }
#else
  phase.template VisitGraph<false>();
#endif  // DEBUG
 }
};

template <template <typename> typename... Reducers>
class CopyingPhase {
public:
 static void Run(PipelineData* data, Zone* phase_zone) {
  Graph& input_graph = data->graph();
  CopyingPhaseImpl<Reducers...>::Run(
      data, input_graph, phase_zone,
      data->info()->turboshaft_trace_reduction());
 }
};
```

```
}  // namespace v8::internal::compiler::turboshaft

#endif  // V8_COMPILER_TURBOSHAFT_COPYING_PHASE_H_
/* WARNING: do not edit! */
/* Generated by Makefile from include/crypto/bn_conf.h.in */
/*
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* this file except in compliance with the License.  You can obtain a copy
* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/

#ifndef OSSL_CRYPTO_BN_CONF_H
# define OSSL_CRYPTO_BN_CONF_H
# pragma once

/*
* The contents of this file are not used in the UEFI build, as
* both 32-bit and 64-bit builds are supported from a single run
* of the Configure script.
*/

/* Should we define BN_DIV2W here? */

/* Only one for the following should be defined */
#undef SIXTY_FOUR_BIT_LONG
#undef SIXTY_FOUR_BIT
#define THIRTY_TWO_BIT

#endif
/*
* WARNING: do not edit!
* Generated by Makefile from providers/common/include/prov/der_rsa.h.in
*
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* https://www.openssl.org/source/license.html
*/

#include "crypto/rsa.h"
#include "internal/der.h"
```

```
/* Well known OIDs precompiled */

/*
* hashAlgs OBJECT IDENTIFIER ::= { nistAlgorithms 2 }
*/
#define DER_OID_V_hashAlgs DER_P_OBJECT, 8, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04, 0x02
#define DER_OID_SZ_hashAlgs 10
extern const unsigned char ossl_der_oid_hashAlgs[DER_OID_SZ_hashAlgs];

/*
* rsaEncryption    OBJECT IDENTIFIER ::= { pkcs-1 1 }
*/
#define DER_OID_V_rsaEncryption DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01, 0x01, 0x01
#define DER_OID_SZ_rsaEncryption 11
extern const unsigned
 char ossl_der_oid_rsaEncryption[DER_OID_SZ_rsaEncryption];

/*
* id-RSAES-OAEP    OBJECT IDENTIFIER ::= { pkcs-1 7 }
*/
#define DER_OID_V_id_RSAES_OAEP DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01, 0x01,
0x07
#define DER_OID_SZ_id_RSAES_OAEP 11
extern const unsigned char ossl_der_oid_id_RSAES_OAEP[DER_OID_SZ_id_RSAES_OAEP];

/*
* id-pSpecified    OBJECT IDENTIFIER ::= { pkcs-1 9 }
*/
#define DER_OID_V_id_pSpecified DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01, 0x01, 0x09
#define DER_OID_SZ_id_pSpecified 11
extern const unsigned char ossl_der_oid_id_pSpecified[DER_OID_SZ_id_pSpecified];

/*
* id-RSASSA-PSS    OBJECT IDENTIFIER ::= { pkcs-1 10 }
*/
#define DER_OID_V_id_RSASSA_PSS DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01, 0x01,
0x0A
#define DER_OID_SZ_id_RSASSA_PSS 11
extern const unsigned char ossl_der_oid_id_RSASSA_PSS[DER_OID_SZ_id_RSASSA_PSS];

/*
* md2WithRSAEncryption         OBJECT IDENTIFIER ::= { pkcs-1 2 }
*/
#define DER_OID_V_md2WithRSAEncryption
 DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01, 0x01, 0x02
#define DER_OID_SZ_md2WithRSAEncryption 11
extern const unsigned char ossl_der_oid_md2WithRSAEncryption[DER_OID_SZ_md2WithRSAEncryption];
```

```
/*
* md5WithRSAEncryption        OBJECT IDENTIFIER ::= { pkcs-1 4 }
*/
#define DER_OID_V_md5WithRSAEncryption DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01,
0x01, 0x04
#define DER_OID_SZ_md5WithRSAEncryption 11
extern const unsigned char ossl_der_oid_md5WithRSAEncryption[DER_OID_SZ_md5WithRSAEncryption];

/*
* sha1WithRSAEncryption       OBJECT IDENTIFIER ::= { pkcs-1 5 }
*/
#define DER_OID_V_sha1WithRSAEncryption DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01,
0x01, 0x05
#define DER_OID_SZ_sha1WithRSAEncryption 11
extern const unsigned char ossl_der_oid_sha1WithRSAEncryption[DER_OID_SZ_sha1WithRSAEncryption];

/*
* sha224WithRSAEncryption     OBJECT IDENTIFIER ::= { pkcs-1 14 }
*/
#define DER_OID_V_sha224WithRSAEncryption DER_P_OBJECT,
 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01, 0x01, 0x0E
#define DER_OID_SZ_sha224WithRSAEncryption 11
extern const unsigned char ossl_der_oid_sha224WithRSAEncryption[DER_OID_SZ_sha224WithRSAEncryption];

/*
* sha256WithRSAEncryption     OBJECT IDENTIFIER ::= { pkcs-1 11 }
*/
#define DER_OID_V_sha256WithRSAEncryption DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D,
0x01, 0x01, 0x0B
#define DER_OID_SZ_sha256WithRSAEncryption 11
extern const unsigned char ossl_der_oid_sha256WithRSAEncryption[DER_OID_SZ_sha256WithRSAEncryption];

/*
* sha384WithRSAEncryption     OBJECT IDENTIFIER ::= { pkcs-1 12 }
*/
#define DER_OID_V_sha384WithRSAEncryption DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D,
0x01, 0x01, 0x0C
#define DER_OID_SZ_sha384WithRSAEncryption 11
extern const unsigned char ossl_der_oid_sha384WithRSAEncryption[DER_OID_SZ_sha384WithRSAEncryption];

/*
* sha512WithRSAEncryption     OBJECT IDENTIFIER ::= { pkcs-1 13 }
*/
#define DER_OID_V_sha512WithRSAEncryption
 DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01, 0x01, 0x0D
#define DER_OID_SZ_sha512WithRSAEncryption 11
extern const unsigned char ossl_der_oid_sha512WithRSAEncryption[DER_OID_SZ_sha512WithRSAEncryption];
```

```
/*
* sha512-224WithRSAEncryption  OBJECT IDENTIFIER ::= { pkcs-1 15 }
*/
#define DER_OID_V_sha512_224WithRSAEncryption DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D,
0x01, 0x01, 0x0F
#define DER_OID_SZ_sha512_224WithRSAEncryption 11
extern const unsigned char
ossl_der_oid_sha512_224WithRSAEncryption[DER_OID_SZ_sha512_224WithRSAEncryption];

/*
* sha512-256WithRSAEncryption  OBJECT IDENTIFIER ::= { pkcs-1 16 }
*/
#define DER_OID_V_sha512_256WithRSAEncryption DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D,
0x01, 0x01, 0x10
#define DER_OID_SZ_sha512_256WithRSAEncryption 11
extern const unsigned char
ossl_der_oid_sha512_256WithRSAEncryption[DER_OID_SZ_sha512_256WithRSAEncryption];

/*
* id-mgf1    OBJECT IDENTIFIER ::= { pkcs-1 8 }
*/
#define DER_OID_V_id_mgf1
 DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01, 0x01, 0x08
#define DER_OID_SZ_id_mgf1 11
extern const unsigned char ossl_der_oid_id_mgf1[DER_OID_SZ_id_mgf1];

/*
* id-rsassa-pkcs1-v1_5-with-sha3-224 OBJECT IDENTIFIER ::= { sigAlgs 13 }
*/
#define DER_OID_V_id_rsassa_pkcs1_v1_5_with_sha3_224 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65,
0x03, 0x04, 0x03, 0x0D
#define DER_OID_SZ_id_rsassa_pkcs1_v1_5_with_sha3_224 11
extern const unsigned char
ossl_der_oid_id_rsassa_pkcs1_v1_5_with_sha3_224[DER_OID_SZ_id_rsassa_pkcs1_v1_5_with_sha3_224];

/*
* id-rsassa-pkcs1-v1_5-with-sha3-256 OBJECT IDENTIFIER ::= { sigAlgs 14 }
*/
#define DER_OID_V_id_rsassa_pkcs1_v1_5_with_sha3_256 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65,
0x03, 0x04, 0x03, 0x0E
#define DER_OID_SZ_id_rsassa_pkcs1_v1_5_with_sha3_256 11
extern const unsigned char
ossl_der_oid_id_rsassa_pkcs1_v1_5_with_sha3_256[DER_OID_SZ_id_rsassa_pkcs1_v1_5_with_sha3_256];

/*
* id-rsassa-pkcs1-v1_5-with-sha3-384 OBJECT IDENTIFIER
 ::= { sigAlgs 15 }
*/
```

```
#define DER_OID_V_id_rsassa_pkcs1_v1_5_with_sha3_384 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65,
0x03, 0x04, 0x03, 0x0F
#define DER_OID_SZ_id_rsassa_pkcs1_v1_5_with_sha3_384 11
extern const unsigned char
ossl_der_oid_id_rsassa_pkcs1_v1_5_with_sha3_384[DER_OID_SZ_id_rsassa_pkcs1_v1_5_with_sha3_384];

/*
* id-rsassa-pkcs1-v1_5-with-sha3-512 OBJECT IDENTIFIER ::= { sigAlgs 16 }
*/
#define DER_OID_V_id_rsassa_pkcs1_v1_5_with_sha3_512 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65,
0x03, 0x04, 0x03, 0x10
#define DER_OID_SZ_id_rsassa_pkcs1_v1_5_with_sha3_512 11
extern const unsigned char
ossl_der_oid_id_rsassa_pkcs1_v1_5_with_sha3_512[DER_OID_SZ_id_rsassa_pkcs1_v1_5_with_sha3_512];

/*
* md4WithRSAEncryption OBJECT IDENTIFIER ::= { pkcs-1 3 }
*/
#define DER_OID_V_md4WithRSAEncryption DER_P_OBJECT, 9, 0x2A, 0x86, 0x48, 0x86, 0xF7, 0x0D, 0x01,
0x01, 0x03
#define DER_OID_SZ_md4WithRSAEncryption 11
extern const unsigned char ossl_der_oid_md4WithRSAEncryption[DER_OID_SZ_md4WithRSAEncryption];

/*
 * ripemd160WithRSAEncryption    OBJECT IDENTIFIER ::= {
*     iso(1) identified-organization(3) teletrust(36) algorithm(3) signatureAlgorithm(3) rsaSignature(1) 2
* }
*/
#define DER_OID_V_ripemd160WithRSAEncryption DER_P_OBJECT, 6, 0x2B, 0x24, 0x03, 0x03, 0x01, 0x02
#define DER_OID_SZ_ripemd160WithRSAEncryption 8
extern const unsigned char
ossl_der_oid_ripemd160WithRSAEncryption[DER_OID_SZ_ripemd160WithRSAEncryption];

/*
* mdc2WithRSASignature OBJECT IDENTIFIER ::= {
*     iso(1) identified-organization(3) oiw(14) secsig(3) algorithms(2) mdc2WithRSASignature(14)
* }
*/
#define DER_OID_V_mdc2WithRSASignature DER_P_OBJECT, 5, 0x2B, 0x0E, 0x03, 0x02, 0x0E
#define DER_OID_SZ_mdc2WithRSASignature 7
extern const unsigned char ossl_der_oid_mdc2WithRSASignature[DER_OID_SZ_mdc2WithRSASignature];


/* PSS parameters */
int ossl_DER_w_RSASSA_PSS_params(WPACKET *pkt, int tag,
                                 const RSA_PSS_PARAMS_30 *pss);
/* Subject Public
```

```
 Key Info */
int ossl_DER_w_algorithmIdentifier_RSA(WPACKET *pkt, int tag, RSA *rsa);
int ossl_DER_w_algorithmIdentifier_RSA_PSS(WPACKET *pkt, int tag,
                                int rsa_type,
                                const RSA_PSS_PARAMS_30 *pss);
/* Signature */
int ossl_DER_w_algorithmIdentifier_MDWithRSAEncryption(WPACKET *pkt, int tag,
                                        int mdnid);
```

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```
{
  global:
      OSSL_provider_init;
  local: *;
};
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/x509v3.h.in
*
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*
* Licensed under the Apache License 2.0 (the "License").  You may not use
* this file except in compliance with the License.  You can obtain a copy
* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_X509V3_H
# define OPENSSL_X509V3_H
# pragma once
```

```
# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_X509V3_H
# endif

# include <openssl/bio.h>
# include <openssl/x509.h>
# include <openssl/conf.h>
# include <openssl/x509v3err.h>

#ifdef __cplusplus
extern "C" {
#endif

/* Forward reference */
struct v3_ext_method;
struct v3_ext_ctx;

/* Useful typedefs */

typedef void *(*X509V3_EXT_NEW)(void);
typedef void (*X509V3_EXT_FREE) (void *);
typedef void *(*X509V3_EXT_D2I)(void *, const unsigned char **, long);
typedef int (*X509V3_EXT_I2D)
 (const void *, unsigned char **);
typedef STACK_OF(CONF_VALUE) *
   (*X509V3_EXT_I2V) (const struct v3_ext_method *method, void *ext,
                      STACK_OF(CONF_VALUE) *extlist);
typedef void *(*X509V3_EXT_V2I)(const struct v3_ext_method *method,
                                struct v3_ext_ctx *ctx,
                                STACK_OF(CONF_VALUE) *values);
typedef char *(*X509V3_EXT_I2S)(const struct v3_ext_method *method,
                                void *ext);
typedef void *(*X509V3_EXT_S2I)(const struct v3_ext_method *method,
                                struct v3_ext_ctx *ctx, const char *str);
typedef int (*X509V3_EXT_I2R) (const struct v3_ext_method *method, void *ext,
                               BIO *out, int indent);
typedef void *(*X509V3_EXT_R2I)(const struct v3_ext_method *method,
                                struct v3_ext_ctx *ctx, const char *str);

/* V3 extension structure */

struct v3_ext_method {
   int ext_nid;
   int ext_flags;
/*
 If this is set the following four fields are ignored */
   ASN1_ITEM_EXP *it;
```

```
/* Old style ASN1 calls */
   X509V3_EXT_NEW ext_new;
   X509V3_EXT_FREE ext_free;
   X509V3_EXT_D2I d2i;
   X509V3_EXT_I2D i2d;
/* The following pair is used for string extensions */
   X509V3_EXT_I2S i2s;
   X509V3_EXT_S2I s2i;
/* The following pair is used for multi-valued extensions */
   X509V3_EXT_I2V i2v;
   X509V3_EXT_V2I v2i;
/* The following are used for raw extensions */
   X509V3_EXT_I2R i2r;
   X509V3_EXT_R2I r2i;
   void *usr_data;            /* Any extension specific data */
};

typedef struct X509V3_CONF_METHOD_st {
   char *(*get_string) (void *db, const char *section, const char *value);
   STACK_OF(CONF_VALUE) *(*get_section) (void *db, const char *section);
   void (*free_string) (void *db, char *string);
   void (*free_section) (void *db, STACK_OF(CONF_VALUE) *section);
} X509V3_CONF_METHOD;

/* Context specific info for producing X509 v3 extensions*/
struct v3_ext_ctx
 {
# define X509V3_CTX_TEST 0x1
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define CTX_TEST X509V3_CTX_TEST
# endif
# define X509V3_CTX_REPLACE 0x2
   int flags;
   X509 *issuer_cert;
   X509 *subject_cert;
   X509_REQ *subject_req;
   X509_CRL *crl;
   X509V3_CONF_METHOD *db_meth;
   void *db;
   EVP_PKEY *issuer_pkey;
/* Maybe more here */
};

typedef struct v3_ext_method X509V3_EXT_METHOD;

SKM_DEFINE_STACK_OF_INTERNAL(X509V3_EXT_METHOD, X509V3_EXT_METHOD,
X509V3_EXT_METHOD)
#define sk_X509V3_EXT_METHOD_num(sk)
```

```
OPENSSL_sk_num(ossl_check_const_X509V3_EXT_METHOD_sk_type(sk))
#define sk_X509V3_EXT_METHOD_value(sk, idx) ((X509V3_EXT_METHOD
*)OPENSSL_sk_value(ossl_check_const_X509V3_EXT_METHOD_sk_type(sk), (idx)))
#define sk_X509V3_EXT_METHOD_new(cmp) ((STACK_OF(X509V3_EXT_METHOD)
*)OPENSSL_sk_new(ossl_check_X509V3_EXT_METHOD_compfunc_type(cmp)))
#define sk_X509V3_EXT_METHOD_new_null() ((STACK_OF(X509V3_EXT_METHOD)
*)OPENSSL_sk_new_null())
#define sk_X509V3_EXT_METHOD_new_reserve(cmp,
 n) ((STACK_OF(X509V3_EXT_METHOD)
*)OPENSSL_sk_new_reserve(ossl_check_X509V3_EXT_METHOD_compfunc_type(cmp), (n)))
#define sk_X509V3_EXT_METHOD_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_X509V3_EXT_METHOD_sk_type(sk), (n))
#define sk_X509V3_EXT_METHOD_free(sk)
OPENSSL_sk_free(ossl_check_X509V3_EXT_METHOD_sk_type(sk))
#define sk_X509V3_EXT_METHOD_zero(sk)
OPENSSL_sk_zero(ossl_check_X509V3_EXT_METHOD_sk_type(sk))
#define sk_X509V3_EXT_METHOD_delete(sk, i) ((X509V3_EXT_METHOD
*)OPENSSL_sk_delete(ossl_check_X509V3_EXT_METHOD_sk_type(sk), (i)))
#define sk_X509V3_EXT_METHOD_delete_ptr(sk, ptr) ((X509V3_EXT_METHOD
*)OPENSSL_sk_delete_ptr(ossl_check_X509V3_EXT_METHOD_sk_type(sk),
ossl_check_X509V3_EXT_METHOD_type(ptr)))
#define sk_X509V3_EXT_METHOD_push(sk, ptr)
OPENSSL_sk_push(ossl_check_X509V3_EXT_METHOD_sk_type(sk),
ossl_check_X509V3_EXT_METHOD_type(ptr))
#define sk_X509V3_EXT_METHOD_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_X509V3_EXT_METHOD_sk_type(sk),
ossl_check_X509V3_EXT_METHOD_type(ptr))
#define
 sk_X509V3_EXT_METHOD_pop(sk) ((X509V3_EXT_METHOD
*)OPENSSL_sk_pop(ossl_check_X509V3_EXT_METHOD_sk_type(sk)))
#define sk_X509V3_EXT_METHOD_shift(sk) ((X509V3_EXT_METHOD
*)OPENSSL_sk_shift(ossl_check_X509V3_EXT_METHOD_sk_type(sk)))
#define sk_X509V3_EXT_METHOD_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509V3_EXT_METHOD_sk_type(sk),ossl_check_X509V3_EXT_METHOD
_freefunc_type(freefunc))
#define sk_X509V3_EXT_METHOD_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_X509V3_EXT_METHOD_sk_type(sk),
ossl_check_X509V3_EXT_METHOD_type(ptr), (idx))
#define sk_X509V3_EXT_METHOD_set(sk, idx, ptr) ((X509V3_EXT_METHOD
*)OPENSSL_sk_set(ossl_check_X509V3_EXT_METHOD_sk_type(sk), (idx),
ossl_check_X509V3_EXT_METHOD_type(ptr)))
#define sk_X509V3_EXT_METHOD_find(sk, ptr)
OPENSSL_sk_find(ossl_check_X509V3_EXT_METHOD_sk_type(sk),
ossl_check_X509V3_EXT_METHOD_type(ptr))
#define sk_X509V3_EXT_METHOD_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_X509V3_EXT_METHOD_sk_type(sk),
 ossl_check_X509V3_EXT_METHOD_type(ptr))
#define sk_X509V3_EXT_METHOD_find_all(sk, ptr, pnum)
```

```
OPENSSL_sk_find_all(ossl_check_X509V3_EXT_METHOD_sk_type(sk),
ossl_check_X509V3_EXT_METHOD_type(ptr), pnum)
#define sk_X509V3_EXT_METHOD_sort(sk)
OPENSSL_sk_sort(ossl_check_X509V3_EXT_METHOD_sk_type(sk))
#define sk_X509V3_EXT_METHOD_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_X509V3_EXT_METHOD_sk_type(sk))
#define sk_X509V3_EXT_METHOD_dup(sk) ((STACK_OF(X509V3_EXT_METHOD)
*)OPENSSL_sk_dup(ossl_check_const_X509V3_EXT_METHOD_sk_type(sk)))
#define sk_X509V3_EXT_METHOD_deep_copy(sk, copyfunc, freefunc)
((STACK_OF(X509V3_EXT_METHOD)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509V3_EXT_METHOD_sk_type(sk),
ossl_check_X509V3_EXT_METHOD_copyfunc_type(copyfunc),
ossl_check_X509V3_EXT_METHOD_freefunc_type(freefunc)))
#define sk_X509V3_EXT_METHOD_set_cmp_func(sk, cmp)
((sk_X509V3_EXT_METHOD_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509V3_EXT_METHOD_sk
_type(sk), ossl_check_X509V3_EXT_METHOD_compfunc_type(cmp)))


/*
 ext_flags values */
# define X509V3_EXT_DYNAMIC      0x1
# define X509V3_EXT_CTX_DEP      0x2
# define X509V3_EXT_MULTILINE    0x4

typedef BIT_STRING_BITNAME ENUMERATED_NAMES;

typedef struct BASIC_CONSTRAINTS_st {
   int ca;
   ASN1_INTEGER *pathlen;
} BASIC_CONSTRAINTS;

typedef struct PKEY_USAGE_PERIOD_st {
   ASN1_GENERALIZEDTIME *notBefore;
   ASN1_GENERALIZEDTIME *notAfter;
} PKEY_USAGE_PERIOD;

typedef struct otherName_st {
   ASN1_OBJECT *type_id;
   ASN1_TYPE *value;
} OTHERNAME;

typedef struct EDIPartyName_st {
   ASN1_STRING *nameAssigner;
   ASN1_STRING *partyName;
} EDIPARTYNAME;

typedef struct GENERAL_NAME_st {
# define GEN_OTHERNAME   0
```

```
# define GEN_EMAIL       1
# define GEN_DNS         2
# define GEN_X400        3
# define GEN_DIRNAME     4
# define GEN_EDIPARTY    5
# define GEN_URI         6
# define GEN_IPADD       7
# define GEN_RID         8
  int type;
  union {
     char *ptr;
     OTHERNAME *otherName;   /* otherName */
      ASN1_IA5STRING *rfc822Name;
     ASN1_IA5STRING *dNSName;
     ASN1_STRING *x400Address;
     X509_NAME *directoryName;
     EDIPARTYNAME *ediPartyName;
     ASN1_IA5STRING *uniformResourceIdentifier;
     ASN1_OCTET_STRING *iPAddress;
     ASN1_OBJECT *registeredID;
     /* Old names */
     ASN1_OCTET_STRING *ip;  /* iPAddress */
     X509_NAME *dirn;        /* dirn */
     ASN1_IA5STRING *ia5;    /* rfc822Name, dNSName,
                              * uniformResourceIdentifier */
     ASN1_OBJECT *rid;       /* registeredID */
     ASN1_TYPE *other;       /* x400Address */
  } d;
} GENERAL_NAME;

typedef struct ACCESS_DESCRIPTION_st {
  ASN1_OBJECT *method;
  GENERAL_NAME *location;
} ACCESS_DESCRIPTION;

SKM_DEFINE_STACK_OF_INTERNAL(ACCESS_DESCRIPTION, ACCESS_DESCRIPTION,
ACCESS_DESCRIPTION)
#define sk_ACCESS_DESCRIPTION_num(sk)
OPENSSL_sk_num(ossl_check_const_ACCESS_DESCRIPTION_sk_type(sk))
#define sk_ACCESS_DESCRIPTION_value(sk,
 idx) ((ACCESS_DESCRIPTION
*)OPENSSL_sk_value(ossl_check_const_ACCESS_DESCRIPTION_sk_type(sk), (idx)))
#define sk_ACCESS_DESCRIPTION_new(cmp) ((STACK_OF(ACCESS_DESCRIPTION)
*)OPENSSL_sk_new(ossl_check_ACCESS_DESCRIPTION_compfunc_type(cmp)))
#define sk_ACCESS_DESCRIPTION_new_null() ((STACK_OF(ACCESS_DESCRIPTION)
*)OPENSSL_sk_new_null())
#define sk_ACCESS_DESCRIPTION_new_reserve(cmp, n) ((STACK_OF(ACCESS_DESCRIPTION)
*)OPENSSL_sk_new_reserve(ossl_check_ACCESS_DESCRIPTION_compfunc_type(cmp), (n)))
```

```
#define sk_ACCESS_DESCRIPTION_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_ACCESS_DESCRIPTION_sk_type(sk), (n))
#define sk_ACCESS_DESCRIPTION_free(sk)
OPENSSL_sk_free(ossl_check_ACCESS_DESCRIPTION_sk_type(sk))
#define sk_ACCESS_DESCRIPTION_zero(sk)
OPENSSL_sk_zero(ossl_check_ACCESS_DESCRIPTION_sk_type(sk))
#define sk_ACCESS_DESCRIPTION_delete(sk, i) ((ACCESS_DESCRIPTION
*)OPENSSL_sk_delete(ossl_check_ACCESS_DESCRIPTION_sk_type(sk), (i)))
#define sk_ACCESS_DESCRIPTION_delete_ptr(sk, ptr) ((ACCESS_DESCRIPTION
 *)OPENSSL_sk_delete_ptr(ossl_check_ACCESS_DESCRIPTION_sk_type(sk),
ossl_check_ACCESS_DESCRIPTION_type(ptr)))
#define sk_ACCESS_DESCRIPTION_push(sk, ptr)
OPENSSL_sk_push(ossl_check_ACCESS_DESCRIPTION_sk_type(sk),
ossl_check_ACCESS_DESCRIPTION_type(ptr))
#define sk_ACCESS_DESCRIPTION_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_ACCESS_DESCRIPTION_sk_type(sk),
ossl_check_ACCESS_DESCRIPTION_type(ptr))
#define sk_ACCESS_DESCRIPTION_pop(sk) ((ACCESS_DESCRIPTION
*)OPENSSL_sk_pop(ossl_check_ACCESS_DESCRIPTION_sk_type(sk)))
#define sk_ACCESS_DESCRIPTION_shift(sk) ((ACCESS_DESCRIPTION
*)OPENSSL_sk_shift(ossl_check_ACCESS_DESCRIPTION_sk_type(sk)))
#define sk_ACCESS_DESCRIPTION_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ACCESS_DESCRIPTION_sk_type(sk),ossl_check_ACCESS_DESCRIPTIO
N_freefunc_type(freefunc))
#define sk_ACCESS_DESCRIPTION_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_ACCESS_DESCRIPTION_sk_type(sk),
ossl_check_ACCESS_DESCRIPTION_type(ptr), (idx))
#define
 sk_ACCESS_DESCRIPTION_set(sk, idx, ptr) ((ACCESS_DESCRIPTION
*)OPENSSL_sk_set(ossl_check_ACCESS_DESCRIPTION_sk_type(sk), (idx),
ossl_check_ACCESS_DESCRIPTION_type(ptr)))
#define sk_ACCESS_DESCRIPTION_find(sk, ptr)
OPENSSL_sk_find(ossl_check_ACCESS_DESCRIPTION_sk_type(sk),
ossl_check_ACCESS_DESCRIPTION_type(ptr))
#define sk_ACCESS_DESCRIPTION_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_ACCESS_DESCRIPTION_sk_type(sk),
ossl_check_ACCESS_DESCRIPTION_type(ptr))
#define sk_ACCESS_DESCRIPTION_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_ACCESS_DESCRIPTION_sk_type(sk),
ossl_check_ACCESS_DESCRIPTION_type(ptr), pnum)
#define sk_ACCESS_DESCRIPTION_sort(sk)
OPENSSL_sk_sort(ossl_check_ACCESS_DESCRIPTION_sk_type(sk))
#define sk_ACCESS_DESCRIPTION_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_ACCESS_DESCRIPTION_sk_type(sk))
#define sk_ACCESS_DESCRIPTION_dup(sk) ((STACK_OF(ACCESS_DESCRIPTION)
*)OPENSSL_sk_dup(ossl_check_const_ACCESS_DESCRIPTION_sk_type(sk)))
#define sk_ACCESS_DESCRIPTION_deep_copy(sk,
```

```
 copyfunc, freefunc) ((STACK_OF(ACCESS_DESCRIPTION)
*)OPENSSL_sk_deep_copy(ossl_check_const_ACCESS_DESCRIPTION_sk_type(sk),
ossl_check_ACCESS_DESCRIPTION_copyfunc_type(copyfunc),
ossl_check_ACCESS_DESCRIPTION_freefunc_type(freefunc)))
#define sk_ACCESS_DESCRIPTION_set_cmp_func(sk, cmp)
((sk_ACCESS_DESCRIPTION_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ACCESS_DESCRIPTION_s
k_type(sk), ossl_check_ACCESS_DESCRIPTION_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(GENERAL_NAME, GENERAL_NAME, GENERAL_NAME)
#define sk_GENERAL_NAME_num(sk) OPENSSL_sk_num(ossl_check_const_GENERAL_NAME_sk_type(sk))
#define sk_GENERAL_NAME_value(sk, idx) ((GENERAL_NAME
*)OPENSSL_sk_value(ossl_check_const_GENERAL_NAME_sk_type(sk), (idx)))
#define sk_GENERAL_NAME_new(cmp) ((STACK_OF(GENERAL_NAME)
*)OPENSSL_sk_new(ossl_check_GENERAL_NAME_compfunc_type(cmp)))
#define sk_GENERAL_NAME_new_null() ((STACK_OF(GENERAL_NAME) *)OPENSSL_sk_new_null())
#define sk_GENERAL_NAME_new_reserve(cmp, n) ((STACK_OF(GENERAL_NAME)
 *)OPENSSL_sk_new_reserve(ossl_check_GENERAL_NAME_compfunc_type(cmp), (n)))
#define sk_GENERAL_NAME_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_GENERAL_NAME_sk_type(sk),
(n))
#define sk_GENERAL_NAME_free(sk) OPENSSL_sk_free(ossl_check_GENERAL_NAME_sk_type(sk))
#define sk_GENERAL_NAME_zero(sk) OPENSSL_sk_zero(ossl_check_GENERAL_NAME_sk_type(sk))
#define sk_GENERAL_NAME_delete(sk, i) ((GENERAL_NAME
*)OPENSSL_sk_delete(ossl_check_GENERAL_NAME_sk_type(sk), (i)))
#define sk_GENERAL_NAME_delete_ptr(sk, ptr) ((GENERAL_NAME
*)OPENSSL_sk_delete_ptr(ossl_check_GENERAL_NAME_sk_type(sk),
ossl_check_GENERAL_NAME_type(ptr)))
#define sk_GENERAL_NAME_push(sk, ptr) OPENSSL_sk_push(ossl_check_GENERAL_NAME_sk_type(sk),
ossl_check_GENERAL_NAME_type(ptr))
#define sk_GENERAL_NAME_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_GENERAL_NAME_sk_type(sk), ossl_check_GENERAL_NAME_type(ptr))
#define sk_GENERAL_NAME_pop(sk) ((GENERAL_NAME
*)OPENSSL_sk_pop(ossl_check_GENERAL_NAME_sk_type(sk)))
#define
 sk_GENERAL_NAME_shift(sk) ((GENERAL_NAME
*)OPENSSL_sk_shift(ossl_check_GENERAL_NAME_sk_type(sk)))
#define sk_GENERAL_NAME_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_GENERAL_NAME_sk_type(sk),ossl_check_GENERAL_NAME_freefunc_ty
pe(freefunc))
#define sk_GENERAL_NAME_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_GENERAL_NAME_sk_type(sk), ossl_check_GENERAL_NAME_type(ptr),
(idx))
#define sk_GENERAL_NAME_set(sk, idx, ptr) ((GENERAL_NAME
*)OPENSSL_sk_set(ossl_check_GENERAL_NAME_sk_type(sk), (idx),
ossl_check_GENERAL_NAME_type(ptr)))
#define sk_GENERAL_NAME_find(sk, ptr) OPENSSL_sk_find(ossl_check_GENERAL_NAME_sk_type(sk),
ossl_check_GENERAL_NAME_type(ptr))
#define sk_GENERAL_NAME_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_GENERAL_NAME_sk_type(sk), ossl_check_GENERAL_NAME_type(ptr))
#define sk_GENERAL_NAME_find_all(sk, ptr, pnum)
```

```
OPENSSL_sk_find_all(ossl_check_GENERAL_NAME_sk_type(sk), ossl_check_GENERAL_NAME_type(ptr),
pnum)
#define sk_GENERAL_NAME_sort(sk) OPENSSL_sk_sort(ossl_check_GENERAL_NAME_sk_type(sk))
#define
 sk_GENERAL_NAME_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_GENERAL_NAME_sk_type(sk))
#define sk_GENERAL_NAME_dup(sk) ((STACK_OF(GENERAL_NAME)
*)OPENSSL_sk_dup(ossl_check_const_GENERAL_NAME_sk_type(sk)))
#define sk_GENERAL_NAME_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(GENERAL_NAME)
*)OPENSSL_sk_deep_copy(ossl_check_const_GENERAL_NAME_sk_type(sk),
ossl_check_GENERAL_NAME_copyfunc_type(copyfunc),
ossl_check_GENERAL_NAME_freefunc_type(freefunc)))
#define sk_GENERAL_NAME_set_cmp_func(sk, cmp)
((sk_GENERAL_NAME_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_GENERAL_NAME_sk_type(sk),
ossl_check_GENERAL_NAME_compfunc_type(cmp)))


typedef STACK_OF(ACCESS_DESCRIPTION) AUTHORITY_INFO_ACCESS;
typedef STACK_OF(ASN1_OBJECT) EXTENDED_KEY_USAGE;
typedef STACK_OF(ASN1_INTEGER) TLS_FEATURE;
typedef STACK_OF(GENERAL_NAME) GENERAL_NAMES;

SKM_DEFINE_STACK_OF_INTERNAL(GENERAL_NAMES, GENERAL_NAMES, GENERAL_NAMES)
#define sk_GENERAL_NAMES_num(sk)
OPENSSL_sk_num(ossl_check_const_GENERAL_NAMES_sk_type(sk))
#define
 sk_GENERAL_NAMES_value(sk, idx) ((GENERAL_NAMES
*)OPENSSL_sk_value(ossl_check_const_GENERAL_NAMES_sk_type(sk), (idx)))
#define sk_GENERAL_NAMES_new(cmp) ((STACK_OF(GENERAL_NAMES)
*)OPENSSL_sk_new(ossl_check_GENERAL_NAMES_compfunc_type(cmp)))
#define sk_GENERAL_NAMES_new_null() ((STACK_OF(GENERAL_NAMES) *)OPENSSL_sk_new_null())
#define sk_GENERAL_NAMES_new_reserve(cmp, n) ((STACK_OF(GENERAL_NAMES)
*)OPENSSL_sk_new_reserve(ossl_check_GENERAL_NAMES_compfunc_type(cmp), (n)))
#define sk_GENERAL_NAMES_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_GENERAL_NAMES_sk_type(sk), (n))
#define sk_GENERAL_NAMES_free(sk) OPENSSL_sk_free(ossl_check_GENERAL_NAMES_sk_type(sk))
#define sk_GENERAL_NAMES_zero(sk) OPENSSL_sk_zero(ossl_check_GENERAL_NAMES_sk_type(sk))
#define sk_GENERAL_NAMES_delete(sk, i) ((GENERAL_NAMES
*)OPENSSL_sk_delete(ossl_check_GENERAL_NAMES_sk_type(sk), (i)))
#define sk_GENERAL_NAMES_delete_ptr(sk, ptr) ((GENERAL_NAMES
 *)OPENSSL_sk_delete_ptr(ossl_check_GENERAL_NAMES_sk_type(sk),
ossl_check_GENERAL_NAMES_type(ptr)))
#define sk_GENERAL_NAMES_push(sk, ptr) OPENSSL_sk_push(ossl_check_GENERAL_NAMES_sk_type(sk),
ossl_check_GENERAL_NAMES_type(ptr))
#define sk_GENERAL_NAMES_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_GENERAL_NAMES_sk_type(sk), ossl_check_GENERAL_NAMES_type(ptr))
#define sk_GENERAL_NAMES_pop(sk) ((GENERAL_NAMES
*)OPENSSL_sk_pop(ossl_check_GENERAL_NAMES_sk_type(sk)))
```

```
#define sk_GENERAL_NAMES_shift(sk) ((GENERAL_NAMES
*)OPENSSL_sk_shift(ossl_check_GENERAL_NAMES_sk_type(sk)))
#define sk_GENERAL_NAMES_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_GENERAL_NAMES_sk_type(sk),ossl_check_GENERAL_NAMES_freefunc
_type(freefunc))
#define sk_GENERAL_NAMES_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_GENERAL_NAMES_sk_type(sk), ossl_check_GENERAL_NAMES_type(ptr),
(idx))
#define sk_GENERAL_NAMES_set(sk, idx, ptr) ((GENERAL_NAMES
*)OPENSSL_sk_set(ossl_check_GENERAL_NAMES_sk_type(sk), (idx),
ossl_check_GENERAL_NAMES_type(ptr)))
#define
 sk_GENERAL_NAMES_find(sk, ptr) OPENSSL_sk_find(ossl_check_GENERAL_NAMES_sk_type(sk),
ossl_check_GENERAL_NAMES_type(ptr))
#define sk_GENERAL_NAMES_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_GENERAL_NAMES_sk_type(sk), ossl_check_GENERAL_NAMES_type(ptr))
#define sk_GENERAL_NAMES_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_GENERAL_NAMES_sk_type(sk), ossl_check_GENERAL_NAMES_type(ptr),
pnum)
#define sk_GENERAL_NAMES_sort(sk) OPENSSL_sk_sort(ossl_check_GENERAL_NAMES_sk_type(sk))
#define sk_GENERAL_NAMES_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_GENERAL_NAMES_sk_type(sk))
#define sk_GENERAL_NAMES_dup(sk) ((STACK_OF(GENERAL_NAMES)
*)OPENSSL_sk_dup(ossl_check_const_GENERAL_NAMES_sk_type(sk)))
#define sk_GENERAL_NAMES_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(GENERAL_NAMES)
*)OPENSSL_sk_deep_copy(ossl_check_const_GENERAL_NAMES_sk_type(sk),
ossl_check_GENERAL_NAMES_copyfunc_type(copyfunc),
ossl_check_GENERAL_NAMES_freefunc_type(freefunc)))
#define
 sk_GENERAL_NAMES_set_cmp_func(sk, cmp)
((sk_GENERAL_NAMES_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_GENERAL_NAMES_sk_type(sk),
ossl_check_GENERAL_NAMES_compfunc_type(cmp)))


typedef struct DIST_POINT_NAME_st {
   int type;
   union {
      GENERAL_NAMES *fullname;
      STACK_OF(X509_NAME_ENTRY) *relativename;
   } name;
/* If relativename then this contains the full distribution point name */
   X509_NAME *dpname;
} DIST_POINT_NAME;
/* All existing reasons */
# define CRLDP_ALL_REASONS       0x807f

# define CRL_REASON_NONE                    -1
# define CRL_REASON_UNSPECIFIED                0
```

```
# define CRL_REASON_KEY_COMPROMISE              1
# define CRL_REASON_CA_COMPROMISE               2
# define CRL_REASON_AFFILIATION_CHANGED         3
# define CRL_REASON_SUPERSEDED                  4
# define CRL_REASON_CESSATION_OF_OPERATION      5
# define CRL_REASON_CERTIFICATE_HOLD            6
# define CRL_REASON_REMOVE_FROM_CRL             8
#
 define CRL_REASON_PRIVILEGE_WITHDRAWN          9
# define CRL_REASON_AA_COMPROMISE               10

struct DIST_POINT_st {
   DIST_POINT_NAME *distpoint;
   ASN1_BIT_STRING *reasons;
   GENERAL_NAMES *CRLissuer;
   int dp_reasons;
};

SKM_DEFINE_STACK_OF_INTERNAL(DIST_POINT, DIST_POINT, DIST_POINT)
#define sk_DIST_POINT_num(sk) OPENSSL_sk_num(ossl_check_const_DIST_POINT_sk_type(sk))
#define sk_DIST_POINT_value(sk, idx) ((DIST_POINT
*)OPENSSL_sk_value(ossl_check_const_DIST_POINT_sk_type(sk), (idx)))
#define sk_DIST_POINT_new(cmp) ((STACK_OF(DIST_POINT)
*)OPENSSL_sk_new(ossl_check_DIST_POINT_compfunc_type(cmp)))
#define sk_DIST_POINT_new_null() ((STACK_OF(DIST_POINT) *)OPENSSL_sk_new_null())
#define sk_DIST_POINT_new_reserve(cmp, n) ((STACK_OF(DIST_POINT)
*)OPENSSL_sk_new_reserve(ossl_check_DIST_POINT_compfunc_type(cmp), (n)))
#define sk_DIST_POINT_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_DIST_POINT_sk_type(sk), (n))
#define sk_DIST_POINT_free(sk) OPENSSL_sk_free(ossl_check_DIST_POINT_sk_type(sk))
#define
 sk_DIST_POINT_zero(sk) OPENSSL_sk_zero(ossl_check_DIST_POINT_sk_type(sk))
#define sk_DIST_POINT_delete(sk, i) ((DIST_POINT
*)OPENSSL_sk_delete(ossl_check_DIST_POINT_sk_type(sk), (i)))
#define sk_DIST_POINT_delete_ptr(sk, ptr) ((DIST_POINT
*)OPENSSL_sk_delete_ptr(ossl_check_DIST_POINT_sk_type(sk), ossl_check_DIST_POINT_type(ptr)))
#define sk_DIST_POINT_push(sk, ptr) OPENSSL_sk_push(ossl_check_DIST_POINT_sk_type(sk),
ossl_check_DIST_POINT_type(ptr))
#define sk_DIST_POINT_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_DIST_POINT_sk_type(sk),
ossl_check_DIST_POINT_type(ptr))
#define sk_DIST_POINT_pop(sk) ((DIST_POINT *)OPENSSL_sk_pop(ossl_check_DIST_POINT_sk_type(sk)))
#define sk_DIST_POINT_shift(sk) ((DIST_POINT *)OPENSSL_sk_shift(ossl_check_DIST_POINT_sk_type(sk)))
#define sk_DIST_POINT_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_DIST_POINT_sk_type(sk),ossl_check_DIST_POINT_freefunc_type(freefunc)
)
#define sk_DIST_POINT_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_DIST_POINT_sk_type(sk),
 ossl_check_DIST_POINT_type(ptr), (idx))
#define sk_DIST_POINT_set(sk, idx, ptr) ((DIST_POINT
*)OPENSSL_sk_set(ossl_check_DIST_POINT_sk_type(sk), (idx), ossl_check_DIST_POINT_type(ptr)))
```

```
#define sk_DIST_POINT_find(sk, ptr) OPENSSL_sk_find(ossl_check_DIST_POINT_sk_type(sk),
ossl_check_DIST_POINT_type(ptr))
#define sk_DIST_POINT_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_DIST_POINT_sk_type(sk),
ossl_check_DIST_POINT_type(ptr))
#define sk_DIST_POINT_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_DIST_POINT_sk_type(sk),
ossl_check_DIST_POINT_type(ptr), pnum)
#define sk_DIST_POINT_sort(sk) OPENSSL_sk_sort(ossl_check_DIST_POINT_sk_type(sk))
#define sk_DIST_POINT_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_DIST_POINT_sk_type(sk))
#define sk_DIST_POINT_dup(sk) ((STACK_OF(DIST_POINT)
*)OPENSSL_sk_dup(ossl_check_const_DIST_POINT_sk_type(sk)))
#define sk_DIST_POINT_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(DIST_POINT)
*)OPENSSL_sk_deep_copy(ossl_check_const_DIST_POINT_sk_type(sk),
 ossl_check_DIST_POINT_copyfunc_type(copyfunc), ossl_check_DIST_POINT_freefunc_type(freefunc)))
#define sk_DIST_POINT_set_cmp_func(sk, cmp)
((sk_DIST_POINT_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_DIST_POINT_sk_type(sk),
ossl_check_DIST_POINT_compfunc_type(cmp)))


typedef STACK_OF(DIST_POINT) CRL_DIST_POINTS;

struct AUTHORITY_KEYID_st {
   ASN1_OCTET_STRING *keyid;
   GENERAL_NAMES *issuer;
   ASN1_INTEGER *serial;
};

/* Strong extranet structures */

typedef struct SXNET_ID_st {
   ASN1_INTEGER *zone;
   ASN1_OCTET_STRING *user;
} SXNETID;

SKM_DEFINE_STACK_OF_INTERNAL(SXNETID, SXNETID, SXNETID)
#define sk_SXNETID_num(sk) OPENSSL_sk_num(ossl_check_const_SXNETID_sk_type(sk))
#define sk_SXNETID_value(sk, idx) ((SXNETID
*)OPENSSL_sk_value(ossl_check_const_SXNETID_sk_type(sk), (idx)))
#define sk_SXNETID_new(cmp) ((STACK_OF(SXNETID)
*)OPENSSL_sk_new(ossl_check_SXNETID_compfunc_type(cmp)))
#define sk_SXNETID_new_null() ((STACK_OF(SXNETID)
 *)OPENSSL_sk_new_null())
#define sk_SXNETID_new_reserve(cmp, n) ((STACK_OF(SXNETID)
*)OPENSSL_sk_new_reserve(ossl_check_SXNETID_compfunc_type(cmp), (n)))
#define sk_SXNETID_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_SXNETID_sk_type(sk), (n))
#define sk_SXNETID_free(sk) OPENSSL_sk_free(ossl_check_SXNETID_sk_type(sk))
#define sk_SXNETID_zero(sk) OPENSSL_sk_zero(ossl_check_SXNETID_sk_type(sk))
#define sk_SXNETID_delete(sk, i) ((SXNETID *)OPENSSL_sk_delete(ossl_check_SXNETID_sk_type(sk), (i)))
#define sk_SXNETID_delete_ptr(sk, ptr) ((SXNETID
```

```
*)OPENSSL_sk_delete_ptr(ossl_check_SXNETID_sk_type(sk), ossl_check_SXNETID_type(ptr)))
#define sk_SXNETID_push(sk, ptr) OPENSSL_sk_push(ossl_check_SXNETID_sk_type(sk),
ossl_check_SXNETID_type(ptr))
#define sk_SXNETID_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_SXNETID_sk_type(sk),
ossl_check_SXNETID_type(ptr))
#define sk_SXNETID_pop(sk) ((SXNETID *)OPENSSL_sk_pop(ossl_check_SXNETID_sk_type(sk)))
#define sk_SXNETID_shift(sk) ((SXNETID *)OPENSSL_sk_shift(ossl_check_SXNETID_sk_type(sk)))
#define
 sk_SXNETID_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_SXNETID_sk_type(sk),ossl_check_SXNETID_freefunc_type(freefunc))
#define sk_SXNETID_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_SXNETID_sk_type(sk),
ossl_check_SXNETID_type(ptr), (idx))
#define sk_SXNETID_set(sk, idx, ptr) ((SXNETID *)OPENSSL_sk_set(ossl_check_SXNETID_sk_type(sk), (idx),
ossl_check_SXNETID_type(ptr)))
#define sk_SXNETID_find(sk, ptr) OPENSSL_sk_find(ossl_check_SXNETID_sk_type(sk),
ossl_check_SXNETID_type(ptr))
#define sk_SXNETID_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_SXNETID_sk_type(sk),
ossl_check_SXNETID_type(ptr))
#define sk_SXNETID_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_SXNETID_sk_type(sk),
ossl_check_SXNETID_type(ptr), pnum)
#define sk_SXNETID_sort(sk) OPENSSL_sk_sort(ossl_check_SXNETID_sk_type(sk))
#define sk_SXNETID_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_SXNETID_sk_type(sk))
#define sk_SXNETID_dup(sk)
 ((STACK_OF(SXNETID) *)OPENSSL_sk_dup(ossl_check_const_SXNETID_sk_type(sk)))
#define sk_SXNETID_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(SXNETID)
*)OPENSSL_sk_deep_copy(ossl_check_const_SXNETID_sk_type(sk),
ossl_check_SXNETID_copyfunc_type(copyfunc), ossl_check_SXNETID_freefunc_type(freefunc)))
#define sk_SXNETID_set_cmp_func(sk, cmp)
((sk_SXNETID_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_SXNETID_sk_type(sk),
ossl_check_SXNETID_compfunc_type(cmp)))



typedef struct SXNET_st {
  ASN1_INTEGER *version;
  STACK_OF(SXNETID) *ids;
} SXNET;

typedef struct ISSUER_SIGN_TOOL_st {
  ASN1_UTF8STRING *signTool;
  ASN1_UTF8STRING *cATool;
  ASN1_UTF8STRING *signToolCert;
  ASN1_UTF8STRING *cAToolCert;
} ISSUER_SIGN_TOOL;

typedef struct NOTICEREF_st {
  ASN1_STRING *organization;
  STACK_OF(ASN1_INTEGER) *noticenos;
```

```
} NOTICEREF;

typedef struct USERNOTICE_st {
  NOTICEREF *noticeref;
  ASN1_STRING *exptext;
} USERNOTICE;

typedef struct POLICYQUALINFO_st {
  ASN1_OBJECT
 *pqualid;
  union {
     ASN1_IA5STRING *cpsuri;
     USERNOTICE *usernotice;
     ASN1_TYPE *other;
  } d;
} POLICYQUALINFO;

SKM_DEFINE_STACK_OF_INTERNAL(POLICYQUALINFO, POLICYQUALINFO, POLICYQUALINFO)
#define sk_POLICYQUALINFO_num(sk)
OPENSSL_sk_num(ossl_check_const_POLICYQUALINFO_sk_type(sk))
#define sk_POLICYQUALINFO_value(sk, idx) ((POLICYQUALINFO
*)OPENSSL_sk_value(ossl_check_const_POLICYQUALINFO_sk_type(sk), (idx)))
#define sk_POLICYQUALINFO_new(cmp) ((STACK_OF(POLICYQUALINFO)
*)OPENSSL_sk_new(ossl_check_POLICYQUALINFO_compfunc_type(cmp)))
#define sk_POLICYQUALINFO_new_null() ((STACK_OF(POLICYQUALINFO) *)OPENSSL_sk_new_null())
#define sk_POLICYQUALINFO_new_reserve(cmp, n) ((STACK_OF(POLICYQUALINFO)
*)OPENSSL_sk_new_reserve(ossl_check_POLICYQUALINFO_compfunc_type(cmp), (n)))
#define sk_POLICYQUALINFO_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_POLICYQUALINFO_sk_type(sk), (n))
#define sk_POLICYQUALINFO_free(sk) OPENSSL_sk_free(ossl_check_POLICYQUALINFO_sk_type(sk))
#define
 sk_POLICYQUALINFO_zero(sk) OPENSSL_sk_zero(ossl_check_POLICYQUALINFO_sk_type(sk))
#define sk_POLICYQUALINFO_delete(sk, i) ((POLICYQUALINFO
*)OPENSSL_sk_delete(ossl_check_POLICYQUALINFO_sk_type(sk), (i)))
#define sk_POLICYQUALINFO_delete_ptr(sk, ptr) ((POLICYQUALINFO
*)OPENSSL_sk_delete_ptr(ossl_check_POLICYQUALINFO_sk_type(sk),
ossl_check_POLICYQUALINFO_type(ptr)))
#define sk_POLICYQUALINFO_push(sk, ptr) OPENSSL_sk_push(ossl_check_POLICYQUALINFO_sk_type(sk),
ossl_check_POLICYQUALINFO_type(ptr))
#define sk_POLICYQUALINFO_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_POLICYQUALINFO_sk_type(sk), ossl_check_POLICYQUALINFO_type(ptr))
#define sk_POLICYQUALINFO_pop(sk) ((POLICYQUALINFO
*)OPENSSL_sk_pop(ossl_check_POLICYQUALINFO_sk_type(sk)))
#define sk_POLICYQUALINFO_shift(sk) ((POLICYQUALINFO
*)OPENSSL_sk_shift(ossl_check_POLICYQUALINFO_sk_type(sk)))
#define sk_POLICYQUALINFO_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_POLICYQUALINFO_sk_type(sk),ossl_check_POLICYQUALINFO_freefunc
_type(freefunc))
```

```
#define
 sk_POLICYQUALINFO_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_POLICYQUALINFO_sk_type(sk),
ossl_check_POLICYQUALINFO_type(ptr), (idx))
#define sk_POLICYQUALINFO_set(sk, idx, ptr) ((POLICYQUALINFO
*)OPENSSL_sk_set(ossl_check_POLICYQUALINFO_sk_type(sk), (idx),
ossl_check_POLICYQUALINFO_type(ptr)))
#define sk_POLICYQUALINFO_find(sk, ptr) OPENSSL_sk_find(ossl_check_POLICYQUALINFO_sk_type(sk),
ossl_check_POLICYQUALINFO_type(ptr))
#define sk_POLICYQUALINFO_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_POLICYQUALINFO_sk_type(sk),
ossl_check_POLICYQUALINFO_type(ptr))
#define sk_POLICYQUALINFO_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_POLICYQUALINFO_sk_type(sk), ossl_check_POLICYQUALINFO_type(ptr),
pnum)
#define sk_POLICYQUALINFO_sort(sk) OPENSSL_sk_sort(ossl_check_POLICYQUALINFO_sk_type(sk))
#define sk_POLICYQUALINFO_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_POLICYQUALINFO_sk_type(sk))
#define sk_POLICYQUALINFO_dup(sk) ((STACK_OF(POLICYQUALINFO)
 *)OPENSSL_sk_dup(ossl_check_const_POLICYQUALINFO_sk_type(sk)))
#define sk_POLICYQUALINFO_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(POLICYQUALINFO)
*)OPENSSL_sk_deep_copy(ossl_check_const_POLICYQUALINFO_sk_type(sk),
ossl_check_POLICYQUALINFO_copyfunc_type(copyfunc),
ossl_check_POLICYQUALINFO_freefunc_type(freefunc)))
#define sk_POLICYQUALINFO_set_cmp_func(sk, cmp)
((sk_POLICYQUALINFO_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_POLICYQUALINFO_sk_type(sk),
ossl_check_POLICYQUALINFO_compfunc_type(cmp)))



typedef struct POLICYINFO_st {
   ASN1_OBJECT *policyid;
   STACK_OF(POLICYQUALINFO) *qualifiers;
} POLICYINFO;

SKM_DEFINE_STACK_OF_INTERNAL(POLICYINFO, POLICYINFO, POLICYINFO)
#define sk_POLICYINFO_num(sk) OPENSSL_sk_num(ossl_check_const_POLICYINFO_sk_type(sk))
#define sk_POLICYINFO_value(sk, idx) ((POLICYINFO
*)OPENSSL_sk_value(ossl_check_const_POLICYINFO_sk_type(sk), (idx)))
#define sk_POLICYINFO_new(cmp) ((STACK_OF(POLICYINFO)
*)OPENSSL_sk_new(ossl_check_POLICYINFO_compfunc_type(cmp)))
#define
 sk_POLICYINFO_new_null() ((STACK_OF(POLICYINFO) *)OPENSSL_sk_new_null())
#define sk_POLICYINFO_new_reserve(cmp, n) ((STACK_OF(POLICYINFO)
*)OPENSSL_sk_new_reserve(ossl_check_POLICYINFO_compfunc_type(cmp), (n)))
#define sk_POLICYINFO_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_POLICYINFO_sk_type(sk), (n))
#define sk_POLICYINFO_free(sk) OPENSSL_sk_free(ossl_check_POLICYINFO_sk_type(sk))
#define sk_POLICYINFO_zero(sk) OPENSSL_sk_zero(ossl_check_POLICYINFO_sk_type(sk))
#define sk_POLICYINFO_delete(sk, i) ((POLICYINFO
```

```
*)OPENSSL_sk_delete(ossl_check_POLICYINFO_sk_type(sk), (i)))
#define sk_POLICYINFO_delete_ptr(sk, ptr) ((POLICYINFO
*)OPENSSL_sk_delete_ptr(ossl_check_POLICYINFO_sk_type(sk), ossl_check_POLICYINFO_type(ptr)))
#define sk_POLICYINFO_push(sk, ptr) OPENSSL_sk_push(ossl_check_POLICYINFO_sk_type(sk),
ossl_check_POLICYINFO_type(ptr))
#define sk_POLICYINFO_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_POLICYINFO_sk_type(sk),
ossl_check_POLICYINFO_type(ptr))
#define
 sk_POLICYINFO_pop(sk) ((POLICYINFO *)OPENSSL_sk_pop(ossl_check_POLICYINFO_sk_type(sk)))
#define sk_POLICYINFO_shift(sk) ((POLICYINFO
*)OPENSSL_sk_shift(ossl_check_POLICYINFO_sk_type(sk)))
#define sk_POLICYINFO_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_POLICYINFO_sk_type(sk),ossl_check_POLICYINFO_freefunc_type(freefun
c))
#define sk_POLICYINFO_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_POLICYINFO_sk_type(sk),
ossl_check_POLICYINFO_type(ptr), (idx))
#define sk_POLICYINFO_set(sk, idx, ptr) ((POLICYINFO
*)OPENSSL_sk_set(ossl_check_POLICYINFO_sk_type(sk), (idx), ossl_check_POLICYINFO_type(ptr)))
#define sk_POLICYINFO_find(sk, ptr) OPENSSL_sk_find(ossl_check_POLICYINFO_sk_type(sk),
ossl_check_POLICYINFO_type(ptr))
#define sk_POLICYINFO_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_POLICYINFO_sk_type(sk),
ossl_check_POLICYINFO_type(ptr))
#define sk_POLICYINFO_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_POLICYINFO_sk_type(sk),
ossl_check_POLICYINFO_type(ptr),
 pnum)
#define sk_POLICYINFO_sort(sk) OPENSSL_sk_sort(ossl_check_POLICYINFO_sk_type(sk))
#define sk_POLICYINFO_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_POLICYINFO_sk_type(sk))
#define sk_POLICYINFO_dup(sk) ((STACK_OF(POLICYINFO)
*)OPENSSL_sk_dup(ossl_check_const_POLICYINFO_sk_type(sk)))
#define sk_POLICYINFO_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(POLICYINFO)
*)OPENSSL_sk_deep_copy(ossl_check_const_POLICYINFO_sk_type(sk),
ossl_check_POLICYINFO_copyfunc_type(copyfunc), ossl_check_POLICYINFO_freefunc_type(freefunc)))
#define sk_POLICYINFO_set_cmp_func(sk, cmp)
((sk_POLICYINFO_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_POLICYINFO_sk_type(sk),
ossl_check_POLICYINFO_compfunc_type(cmp)))


typedef STACK_OF(POLICYINFO) CERTIFICATEPOLICIES;

typedef struct POLICY_MAPPING_st {
   ASN1_OBJECT *issuerDomainPolicy;
   ASN1_OBJECT *subjectDomainPolicy;
} POLICY_MAPPING;

SKM_DEFINE_STACK_OF_INTERNAL(POLICY_MAPPING, POLICY_MAPPING, POLICY_MAPPING)
#define sk_POLICY_MAPPING_num(sk)
 OPENSSL_sk_num(ossl_check_const_POLICY_MAPPING_sk_type(sk))
#define sk_POLICY_MAPPING_value(sk, idx) ((POLICY_MAPPING
```

```
*)OPENSSL_sk_value(ossl_check_const_POLICY_MAPPING_sk_type(sk), (idx)))
#define sk_POLICY_MAPPING_new(cmp) ((STACK_OF(POLICY_MAPPING)
*)OPENSSL_sk_new(ossl_check_POLICY_MAPPING_compfunc_type(cmp)))
#define sk_POLICY_MAPPING_new_null() ((STACK_OF(POLICY_MAPPING) *)OPENSSL_sk_new_null())
#define sk_POLICY_MAPPING_new_reserve(cmp, n) ((STACK_OF(POLICY_MAPPING)
*)OPENSSL_sk_new_reserve(ossl_check_POLICY_MAPPING_compfunc_type(cmp), (n)))
#define sk_POLICY_MAPPING_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_POLICY_MAPPING_sk_type(sk), (n))
#define sk_POLICY_MAPPING_free(sk) OPENSSL_sk_free(ossl_check_POLICY_MAPPING_sk_type(sk))
#define sk_POLICY_MAPPING_zero(sk) OPENSSL_sk_zero(ossl_check_POLICY_MAPPING_sk_type(sk))
#define sk_POLICY_MAPPING_delete(sk, i) ((POLICY_MAPPING
*)OPENSSL_sk_delete(ossl_check_POLICY_MAPPING_sk_type(sk), (i)))
#define sk_POLICY_MAPPING_delete_ptr(sk,
 ptr) ((POLICY_MAPPING *)OPENSSL_sk_delete_ptr(ossl_check_POLICY_MAPPING_sk_type(sk),
ossl_check_POLICY_MAPPING_type(ptr)))
#define sk_POLICY_MAPPING_push(sk, ptr) OPENSSL_sk_push(ossl_check_POLICY_MAPPING_sk_type(sk),
ossl_check_POLICY_MAPPING_type(ptr))
#define sk_POLICY_MAPPING_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_POLICY_MAPPING_sk_type(sk), ossl_check_POLICY_MAPPING_type(ptr))
#define sk_POLICY_MAPPING_pop(sk) ((POLICY_MAPPING
*)OPENSSL_sk_pop(ossl_check_POLICY_MAPPING_sk_type(sk)))
#define sk_POLICY_MAPPING_shift(sk) ((POLICY_MAPPING
*)OPENSSL_sk_shift(ossl_check_POLICY_MAPPING_sk_type(sk)))
#define sk_POLICY_MAPPING_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_POLICY_MAPPING_sk_type(sk),ossl_check_POLICY_MAPPING_freefunc
_type(freefunc))
#define sk_POLICY_MAPPING_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_POLICY_MAPPING_sk_type(sk), ossl_check_POLICY_MAPPING_type(ptr),
(idx))
#define sk_POLICY_MAPPING_set(sk, idx, ptr) ((POLICY_MAPPING
*)OPENSSL_sk_set(ossl_check_POLICY_MAPPING_sk_type(sk),
 (idx), ossl_check_POLICY_MAPPING_type(ptr)))
#define sk_POLICY_MAPPING_find(sk, ptr) OPENSSL_sk_find(ossl_check_POLICY_MAPPING_sk_type(sk),
ossl_check_POLICY_MAPPING_type(ptr))
#define sk_POLICY_MAPPING_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_POLICY_MAPPING_sk_type(sk), ossl_check_POLICY_MAPPING_type(ptr))
#define sk_POLICY_MAPPING_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_POLICY_MAPPING_sk_type(sk), ossl_check_POLICY_MAPPING_type(ptr),
pnum)
#define sk_POLICY_MAPPING_sort(sk) OPENSSL_sk_sort(ossl_check_POLICY_MAPPING_sk_type(sk))
#define sk_POLICY_MAPPING_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_POLICY_MAPPING_sk_type(sk))
#define sk_POLICY_MAPPING_dup(sk) ((STACK_OF(POLICY_MAPPING)
*)OPENSSL_sk_dup(ossl_check_const_POLICY_MAPPING_sk_type(sk)))
#define sk_POLICY_MAPPING_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(POLICY_MAPPING)
*)OPENSSL_sk_deep_copy(ossl_check_const_POLICY_MAPPING_sk_type(sk),
ossl_check_POLICY_MAPPING_copyfunc_type(copyfunc),
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```
 ossl_check_POLICY_MAPPING_freefunc_type(freefunc)))
#define sk_POLICY_MAPPING_set_cmp_func(sk, cmp)
((sk_POLICY_MAPPING_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_POLICY_MAPPING_sk_type(sk),
ossl_check_POLICY_MAPPING_compfunc_type(cmp)))


typedef STACK_OF(POLICY_MAPPING) POLICY_MAPPINGS;

typedef struct GENERAL_SUBTREE_st {
   GENERAL_NAME *base;
   ASN1_INTEGER *minimum;
   ASN1_INTEGER *maximum;
} GENERAL_SUBTREE;

SKM_DEFINE_STACK_OF_INTERNAL(GENERAL_SUBTREE, GENERAL_SUBTREE,
GENERAL_SUBTREE)
#define sk_GENERAL_SUBTREE_num(sk)
OPENSSL_sk_num(ossl_check_const_GENERAL_SUBTREE_sk_type(sk))
#define sk_GENERAL_SUBTREE_value(sk, idx) ((GENERAL_SUBTREE
*)OPENSSL_sk_value(ossl_check_const_GENERAL_SUBTREE_sk_type(sk), (idx)))
#define sk_GENERAL_SUBTREE_new(cmp) ((STACK_OF(GENERAL_SUBTREE)
*)OPENSSL_sk_new(ossl_check_GENERAL_SUBTREE_compfunc_type(cmp)))
#define sk_GENERAL_SUBTREE_new_null() ((STACK_OF(GENERAL_SUBTREE)
*)OPENSSL_sk_new_null())
#define
 sk_GENERAL_SUBTREE_new_reserve(cmp, n) ((STACK_OF(GENERAL_SUBTREE)
*)OPENSSL_sk_new_reserve(ossl_check_GENERAL_SUBTREE_compfunc_type(cmp), (n)))
#define sk_GENERAL_SUBTREE_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_GENERAL_SUBTREE_sk_type(sk), (n))
#define sk_GENERAL_SUBTREE_free(sk) OPENSSL_sk_free(ossl_check_GENERAL_SUBTREE_sk_type(sk))
#define sk_GENERAL_SUBTREE_zero(sk) OPENSSL_sk_zero(ossl_check_GENERAL_SUBTREE_sk_type(sk))
#define sk_GENERAL_SUBTREE_delete(sk, i) ((GENERAL_SUBTREE
*)OPENSSL_sk_delete(ossl_check_GENERAL_SUBTREE_sk_type(sk), (i)))
#define sk_GENERAL_SUBTREE_delete_ptr(sk, ptr) ((GENERAL_SUBTREE
*)OPENSSL_sk_delete_ptr(ossl_check_GENERAL_SUBTREE_sk_type(sk),
ossl_check_GENERAL_SUBTREE_type(ptr)))
#define sk_GENERAL_SUBTREE_push(sk, ptr)
OPENSSL_sk_push(ossl_check_GENERAL_SUBTREE_sk_type(sk),
ossl_check_GENERAL_SUBTREE_type(ptr))
#define sk_GENERAL_SUBTREE_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_GENERAL_SUBTREE_sk_type(sk),
ossl_check_GENERAL_SUBTREE_type(ptr))
#define
 sk_GENERAL_SUBTREE_pop(sk) ((GENERAL_SUBTREE
*)OPENSSL_sk_pop(ossl_check_GENERAL_SUBTREE_sk_type(sk)))
#define sk_GENERAL_SUBTREE_shift(sk) ((GENERAL_SUBTREE
*)OPENSSL_sk_shift(ossl_check_GENERAL_SUBTREE_sk_type(sk)))
#define sk_GENERAL_SUBTREE_pop_free(sk, freefunc)
```

```
OPENSSL_sk_pop_free(ossl_check_GENERAL_SUBTREE_sk_type(sk),ossl_check_GENERAL_SUBTREE_free
func_type(freefunc))
#define sk_GENERAL_SUBTREE_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_GENERAL_SUBTREE_sk_type(sk),
ossl_check_GENERAL_SUBTREE_type(ptr), (idx))
#define sk_GENERAL_SUBTREE_set(sk, idx, ptr) ((GENERAL_SUBTREE
*)OPENSSL_sk_set(ossl_check_GENERAL_SUBTREE_sk_type(sk), (idx),
ossl_check_GENERAL_SUBTREE_type(ptr)))
#define sk_GENERAL_SUBTREE_find(sk, ptr)
OPENSSL_sk_find(ossl_check_GENERAL_SUBTREE_sk_type(sk),
ossl_check_GENERAL_SUBTREE_type(ptr))
#define sk_GENERAL_SUBTREE_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_GENERAL_SUBTREE_sk_type(sk),
ossl_check_GENERAL_SUBTREE_type(ptr))
#define sk_GENERAL_SUBTREE_find_all(sk,
 ptr, pnum) OPENSSL_sk_find_all(ossl_check_GENERAL_SUBTREE_sk_type(sk),
ossl_check_GENERAL_SUBTREE_type(ptr), pnum)
#define sk_GENERAL_SUBTREE_sort(sk) OPENSSL_sk_sort(ossl_check_GENERAL_SUBTREE_sk_type(sk))
#define sk_GENERAL_SUBTREE_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_GENERAL_SUBTREE_sk_type(sk))
#define sk_GENERAL_SUBTREE_dup(sk) ((STACK_OF(GENERAL_SUBTREE)
*)OPENSSL_sk_dup(ossl_check_const_GENERAL_SUBTREE_sk_type(sk)))
#define sk_GENERAL_SUBTREE_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(GENERAL_SUBTREE)
*)OPENSSL_sk_deep_copy(ossl_check_const_GENERAL_SUBTREE_sk_type(sk),
ossl_check_GENERAL_SUBTREE_copyfunc_type(copyfunc),
ossl_check_GENERAL_SUBTREE_freefunc_type(freefunc)))
#define sk_GENERAL_SUBTREE_set_cmp_func(sk, cmp)
((sk_GENERAL_SUBTREE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_GENERAL_SUBTREE_sk_type
(sk), ossl_check_GENERAL_SUBTREE_compfunc_type(cmp)))


struct NAME_CONSTRAINTS_st {
  STACK_OF(GENERAL_SUBTREE) *permittedSubtrees;
   STACK_OF(GENERAL_SUBTREE) *excludedSubtrees;
};

typedef struct POLICY_CONSTRAINTS_st {
  ASN1_INTEGER *requireExplicitPolicy;
  ASN1_INTEGER *inhibitPolicyMapping;
} POLICY_CONSTRAINTS;

/* Proxy certificate structures, see RFC 3820 */
typedef struct PROXY_POLICY_st {
  ASN1_OBJECT *policyLanguage;
  ASN1_OCTET_STRING *policy;
} PROXY_POLICY;

typedef struct PROXY_CERT_INFO_EXTENSION_st {
```

```
  ASN1_INTEGER *pcPathLengthConstraint;
  PROXY_POLICY *proxyPolicy;
} PROXY_CERT_INFO_EXTENSION;

DECLARE_ASN1_FUNCTIONS(PROXY_POLICY)
DECLARE_ASN1_FUNCTIONS(PROXY_CERT_INFO_EXTENSION)

struct ISSUING_DIST_POINT_st {
  DIST_POINT_NAME *distpoint;
  int onlyuser;
  int onlyCA;
  ASN1_BIT_STRING *onlysomereasons;
  int indirectCRL;
  int onlyattr;
};

/* Values in idp_flags field */
/* IDP present */
# define IDP_PRESENT     0x1
/* IDP values inconsistent */
# define IDP_INVALID     0x2
/* onlyuser true */
# define IDP_ONLYUSER    0x4
/* onlyCA true */
# define IDP_ONLYCA
     0x8
/* onlyattr true */
# define IDP_ONLYATTR    0x10
/* indirectCRL true */
# define IDP_INDIRECT    0x20
/* onlysomereasons present */
# define IDP_REASONS     0x40

# define X509V3_conf_err(val) ERR_add_error_data(6, \
                "section:", (val)->section, \
                ",name:", (val)->name, ",value:", (val)->value)

# define X509V3_set_ctx_test(ctx) \
  X509V3_set_ctx(ctx, NULL, NULL, NULL, NULL, X509V3_CTX_TEST)
# define X509V3_set_ctx_nodb(ctx) (ctx)->db = NULL;

# define EXT_BITSTRING(nid, table) { nid, 0, ASN1_ITEM_ref(ASN1_BIT_STRING), \
                0,0,0,0, \
                0,0, \
                (X509V3_EXT_I2V)i2v_ASN1_BIT_STRING, \
                (X509V3_EXT_V2I)v2i_ASN1_BIT_STRING, \
                NULL, NULL, \
                table}
```

```
# define EXT_IA5STRING(nid) { nid, 0, ASN1_ITEM_ref(ASN1_IA5STRING), \
                0,0,0,0, \
                (X509V3_EXT_I2S)i2s_ASN1_IA5STRING,
 \
                (X509V3_EXT_S2I)s2i_ASN1_IA5STRING, \
                0,0,0,0, \
                NULL}

#define EXT_UTF8STRING(nid) { nid, 0, ASN1_ITEM_ref(ASN1_UTF8STRING), \
                0,0,0,0, \
                (X509V3_EXT_I2S)i2s_ASN1_UTF8STRING, \
                (X509V3_EXT_S2I)s2i_ASN1_UTF8STRING, \
                0,0,0,0, \
                NULL}

# define EXT_END { -1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0}

/* X509_PURPOSE stuff */

# define EXFLAG_BCONS           0x1
# define EXFLAG_KUSAGE          0x2
# define EXFLAG_XKUSAGE         0x4
# define EXFLAG_NSCERT          0x8

# define EXFLAG_CA              0x10
# define EXFLAG_SI              0x20 /* self-issued, maybe not self-signed */
# define EXFLAG_V1              0x40
# define EXFLAG_INVALID         0x80
/* EXFLAG_SET is set to indicate that some values have been precomputed */
# define EXFLAG_SET             0x100
# define
 EXFLAG_CRITICAL        0x200
# define EXFLAG_PROXY           0x400

# define EXFLAG_INVALID_POLICY   0x800
# define EXFLAG_FRESHEST        0x1000
# define EXFLAG_SS              0x2000 /* cert is apparently self-signed */

# define EXFLAG_BCONS_CRITICAL   0x10000
# define EXFLAG_AKID_CRITICAL    0x20000
# define EXFLAG_SKID_CRITICAL    0x40000
# define EXFLAG_SAN_CRITICAL     0x80000
# define EXFLAG_NO_FINGERPRINT   0x100000

# define KU_DIGITAL_SIGNATURE    0x0080
# define KU_NON_REPUDIATION      0x0040
# define KU_KEY_ENCIPHERMENT     0x0020
```

```
# define KU_DATA_ENCIPHERMENT    0x0010
# define KU_KEY_AGREEMENT        0x0008
# define KU_KEY_CERT_SIGN        0x0004
# define KU_CRL_SIGN             0x0002
# define KU_ENCIPHER_ONLY        0x0001
# define KU_DECIPHER_ONLY        0x8000

# define NS_SSL_CLIENT           0x80
# define NS_SSL_SERVER           0x40
# define NS_SMIME                0x20
# define NS_OBJSIGN              0x10
# define NS_SSL_CA               0x04
# define NS_SMIME_CA
            0x02
# define NS_OBJSIGN_CA           0x01
# define NS_ANY_CA               (NS_SSL_CA|NS_SMIME_CA|NS_OBJSIGN_CA)

# define XKU_SSL_SERVER          0x1
# define XKU_SSL_CLIENT          0x2
# define XKU_SMIME               0x4
# define XKU_CODE_SIGN           0x8
# define XKU_SGC                 0x10 /* Netscape or MS Server-Gated Crypto */
# define XKU_OCSP_SIGN           0x20
# define XKU_TIMESTAMP           0x40
# define XKU_DVCS                0x80
# define XKU_ANYEKU              0x100

# define X509_PURPOSE_DYNAMIC    0x1
# define X509_PURPOSE_DYNAMIC_NAME       0x2

typedef struct x509_purpose_st {
   int purpose;
   int trust;                  /* Default trust ID */
   int flags;
   int (*check_purpose) (const struct x509_purpose_st *, const X509 *, int);
   char *name;
   char *sname;
   void *usr_data;
} X509_PURPOSE;

SKM_DEFINE_STACK_OF_INTERNAL(X509_PURPOSE, X509_PURPOSE, X509_PURPOSE)
#define sk_X509_PURPOSE_num(sk) OPENSSL_sk_num(ossl_check_const_X509_PURPOSE_sk_type(sk))
#define
 sk_X509_PURPOSE_value(sk, idx) ((X509_PURPOSE
*)OPENSSL_sk_value(ossl_check_const_X509_PURPOSE_sk_type(sk), (idx)))
#define sk_X509_PURPOSE_new(cmp) ((STACK_OF(X509_PURPOSE)
*)OPENSSL_sk_new(ossl_check_X509_PURPOSE_compfunc_type(cmp)))
#define sk_X509_PURPOSE_new_null() ((STACK_OF(X509_PURPOSE) *)OPENSSL_sk_new_null())
```

```
#define sk_X509_PURPOSE_new_reserve(cmp, n) ((STACK_OF(X509_PURPOSE)
*)OPENSSL_sk_new_reserve(ossl_check_X509_PURPOSE_compfunc_type(cmp), (n)))
#define sk_X509_PURPOSE_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_X509_PURPOSE_sk_type(sk), (n))
#define sk_X509_PURPOSE_free(sk) OPENSSL_sk_free(ossl_check_X509_PURPOSE_sk_type(sk))
#define sk_X509_PURPOSE_zero(sk) OPENSSL_sk_zero(ossl_check_X509_PURPOSE_sk_type(sk))
#define sk_X509_PURPOSE_delete(sk, i) ((X509_PURPOSE
*)OPENSSL_sk_delete(ossl_check_X509_PURPOSE_sk_type(sk), (i)))
#define sk_X509_PURPOSE_delete_ptr(sk, ptr) ((X509_PURPOSE
*)OPENSSL_sk_delete_ptr(ossl_check_X509_PURPOSE_sk_type(sk),
 ossl_check_X509_PURPOSE_type(ptr)))
#define sk_X509_PURPOSE_push(sk, ptr) OPENSSL_sk_push(ossl_check_X509_PURPOSE_sk_type(sk),
ossl_check_X509_PURPOSE_type(ptr))
#define sk_X509_PURPOSE_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_X509_PURPOSE_sk_type(sk),
ossl_check_X509_PURPOSE_type(ptr))
#define sk_X509_PURPOSE_pop(sk) ((X509_PURPOSE
*)OPENSSL_sk_pop(ossl_check_X509_PURPOSE_sk_type(sk)))
#define sk_X509_PURPOSE_shift(sk) ((X509_PURPOSE
*)OPENSSL_sk_shift(ossl_check_X509_PURPOSE_sk_type(sk)))
#define sk_X509_PURPOSE_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_PURPOSE_sk_type(sk),ossl_check_X509_PURPOSE_freefunc_type(fr
eefunc))
#define sk_X509_PURPOSE_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_X509_PURPOSE_sk_type(sk),
ossl_check_X509_PURPOSE_type(ptr), (idx))
#define sk_X509_PURPOSE_set(sk, idx, ptr) ((X509_PURPOSE
*)OPENSSL_sk_set(ossl_check_X509_PURPOSE_sk_type(sk), (idx), ossl_check_X509_PURPOSE_type(ptr)))
#define sk_X509_PURPOSE_find(sk, ptr) OPENSSL_sk_find(ossl_check_X509_PURPOSE_sk_type(sk),
 ossl_check_X509_PURPOSE_type(ptr))
#define sk_X509_PURPOSE_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_X509_PURPOSE_sk_type(sk),
ossl_check_X509_PURPOSE_type(ptr))
#define sk_X509_PURPOSE_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_X509_PURPOSE_sk_type(sk), ossl_check_X509_PURPOSE_type(ptr), pnum)
#define sk_X509_PURPOSE_sort(sk) OPENSSL_sk_sort(ossl_check_X509_PURPOSE_sk_type(sk))
#define sk_X509_PURPOSE_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_X509_PURPOSE_sk_type(sk))
#define sk_X509_PURPOSE_dup(sk) ((STACK_OF(X509_PURPOSE)
*)OPENSSL_sk_dup(ossl_check_const_X509_PURPOSE_sk_type(sk)))
#define sk_X509_PURPOSE_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_PURPOSE)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_PURPOSE_sk_type(sk),
ossl_check_X509_PURPOSE_copyfunc_type(copyfunc), ossl_check_X509_PURPOSE_freefunc_type(freefunc)))
#define sk_X509_PURPOSE_set_cmp_func(sk, cmp)
((sk_X509_PURPOSE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_PURPOSE_sk_type(sk),
 ossl_check_X509_PURPOSE_compfunc_type(cmp)))
```

```
# define X509_PURPOSE_SSL_CLIENT        1
# define X509_PURPOSE_SSL_SERVER        2
# define X509_PURPOSE_NS_SSL_SERVER     3
```

```
# define X509_PURPOSE_SMIME_SIGN        4
# define X509_PURPOSE_SMIME_ENCRYPT      5
# define X509_PURPOSE_CRL_SIGN           6
# define X509_PURPOSE_ANY                7
# define X509_PURPOSE_OCSP_HELPER        8
# define X509_PURPOSE_TIMESTAMP_SIGN     9

# define X509_PURPOSE_MIN                1
# define X509_PURPOSE_MAX                9

/* Flags for X509V3_EXT_print() */

# define X509V3_EXT_UNKNOWN_MASK         (0xfL << 16)
/* Return error for unknown extensions */
# define X509V3_EXT_DEFAULT              0
/* Print error for unknown extensions */
# define X509V3_EXT_ERROR_UNKNOWN        (1L << 16)
/* ASN1 parse unknown extensions */
# define X509V3_EXT_PARSE_UNKNOWN        (2L << 16)
/* BIO_dump unknown extensions */
# define X509V3_EXT_DUMP_UNKNOWN
        (3L << 16)

/* Flags for X509V3_add1_i2d */

# define X509V3_ADD_OP_MASK              0xfL
# define X509V3_ADD_DEFAULT              0L
# define X509V3_ADD_APPEND               1L
# define X509V3_ADD_REPLACE              2L
# define X509V3_ADD_REPLACE_EXISTING     3L
# define X509V3_ADD_KEEP_EXISTING        4L
# define X509V3_ADD_DELETE               5L
# define X509V3_ADD_SILENT               0x10

DECLARE_ASN1_FUNCTIONS(BASIC_CONSTRAINTS)

DECLARE_ASN1_FUNCTIONS(SXNET)
DECLARE_ASN1_FUNCTIONS(SXNETID)

DECLARE_ASN1_FUNCTIONS(ISSUER_SIGN_TOOL)

int SXNET_add_id_asc(SXNET **psx, const char *zone, const char *user, int userlen);
int SXNET_add_id_ulong(SXNET **psx, unsigned long lzone, const char *user,
                       int userlen);
int SXNET_add_id_INTEGER(SXNET **psx, ASN1_INTEGER *izone, const char *user,
                         int userlen);

ASN1_OCTET_STRING *SXNET_get_id_asc(SXNET *sx, const char *zone);
```

```
ASN1_OCTET_STRING *SXNET_get_id_ulong(SXNET *sx, unsigned long lzone);
ASN1_OCTET_STRING
 *SXNET_get_id_INTEGER(SXNET *sx, ASN1_INTEGER *zone);

DECLARE_ASN1_FUNCTIONS(AUTHORITY_KEYID)

DECLARE_ASN1_FUNCTIONS(PKEY_USAGE_PERIOD)

DECLARE_ASN1_FUNCTIONS(GENERAL_NAME)
DECLARE_ASN1_DUP_FUNCTION(GENERAL_NAME)
int GENERAL_NAME_cmp(GENERAL_NAME *a, GENERAL_NAME *b);

ASN1_BIT_STRING *v2i_ASN1_BIT_STRING(X509V3_EXT_METHOD *method,
                            X509V3_CTX *ctx,
                            STACK_OF(CONF_VALUE) *nval);
STACK_OF(CONF_VALUE) *i2v_ASN1_BIT_STRING(X509V3_EXT_METHOD *method,
                              ASN1_BIT_STRING *bits,
                              STACK_OF(CONF_VALUE) *extlist);
char *i2s_ASN1_IA5STRING(X509V3_EXT_METHOD *method, ASN1_IA5STRING *ia5);
ASN1_IA5STRING *s2i_ASN1_IA5STRING(X509V3_EXT_METHOD *method,
                           X509V3_CTX *ctx, const char *str);
char *i2s_ASN1_UTF8STRING(X509V3_EXT_METHOD *method, ASN1_UTF8STRING *utf8);
ASN1_UTF8STRING *s2i_ASN1_UTF8STRING(X509V3_EXT_METHOD
 *method,
                           X509V3_CTX *ctx, const char *str);

STACK_OF(CONF_VALUE) *i2v_GENERAL_NAME(X509V3_EXT_METHOD *method,
                               GENERAL_NAME *gen,
                               STACK_OF(CONF_VALUE) *ret);
int GENERAL_NAME_print(BIO *out, GENERAL_NAME *gen);

DECLARE_ASN1_FUNCTIONS(GENERAL_NAMES)

STACK_OF(CONF_VALUE) *i2v_GENERAL_NAMES(X509V3_EXT_METHOD *method,
                                GENERAL_NAMES *gen,
                                STACK_OF(CONF_VALUE) *extlist);
GENERAL_NAMES *v2i_GENERAL_NAMES(const X509V3_EXT_METHOD *method,
                         X509V3_CTX *ctx, STACK_OF(CONF_VALUE) *nval);

DECLARE_ASN1_FUNCTIONS(OTHERNAME)
DECLARE_ASN1_FUNCTIONS(EDIPARTYNAME)
int OTHERNAME_cmp(OTHERNAME *a, OTHERNAME *b);
void GENERAL_NAME_set0_value(GENERAL_NAME *a, int type, void *value);
void *GENERAL_NAME_get0_value(const GENERAL_NAME *a, int *ptype);
int GENERAL_NAME_set0_othername(GENERAL_NAME
 *gen,
                         ASN1_OBJECT *oid, ASN1_TYPE *value);
int GENERAL_NAME_get0_otherName(const GENERAL_NAME *gen,
```

```
                        ASN1_OBJECT **poid, ASN1_TYPE **pvalue);

char *i2s_ASN1_OCTET_STRING(X509V3_EXT_METHOD *method,
                    const ASN1_OCTET_STRING *ia5);
ASN1_OCTET_STRING *s2i_ASN1_OCTET_STRING(X509V3_EXT_METHOD *method,
                            X509V3_CTX *ctx, const char *str);

DECLARE_ASN1_FUNCTIONS(EXTENDED_KEY_USAGE)
int i2a_ACCESS_DESCRIPTION(BIO *bp, const ACCESS_DESCRIPTION *a);

DECLARE_ASN1_ALLOC_FUNCTIONS(TLS_FEATURE)

DECLARE_ASN1_FUNCTIONS(CERTIFICATEPOLICIES)
DECLARE_ASN1_FUNCTIONS(POLICYINFO)
DECLARE_ASN1_FUNCTIONS(POLICYQUALINFO)
DECLARE_ASN1_FUNCTIONS(USERNOTICE)
DECLARE_ASN1_FUNCTIONS(NOTICEREF)

DECLARE_ASN1_FUNCTIONS(CRL_DIST_POINTS)
DECLARE_ASN1_FUNCTIONS(DIST_POINT)
DECLARE_ASN1_FUNCTIONS(DIST_POINT_NAME)
DECLARE_ASN1_FUNCTIONS(ISSUING_DIST_POINT)

int
 DIST_POINT_set_dpname(DIST_POINT_NAME *dpn, const X509_NAME *iname);

int NAME_CONSTRAINTS_check(X509 *x, NAME_CONSTRAINTS *nc);
int NAME_CONSTRAINTS_check_CN(X509 *x, NAME_CONSTRAINTS *nc);

DECLARE_ASN1_FUNCTIONS(ACCESS_DESCRIPTION)
DECLARE_ASN1_FUNCTIONS(AUTHORITY_INFO_ACCESS)

DECLARE_ASN1_ITEM(POLICY_MAPPING)
DECLARE_ASN1_ALLOC_FUNCTIONS(POLICY_MAPPING)
DECLARE_ASN1_ITEM(POLICY_MAPPINGS)

DECLARE_ASN1_ITEM(GENERAL_SUBTREE)
DECLARE_ASN1_ALLOC_FUNCTIONS(GENERAL_SUBTREE)

DECLARE_ASN1_ITEM(NAME_CONSTRAINTS)
DECLARE_ASN1_ALLOC_FUNCTIONS(NAME_CONSTRAINTS)

DECLARE_ASN1_ALLOC_FUNCTIONS(POLICY_CONSTRAINTS)
DECLARE_ASN1_ITEM(POLICY_CONSTRAINTS)

GENERAL_NAME *a2i_GENERAL_NAME(GENERAL_NAME *out,
                        const X509V3_EXT_METHOD *method,
                        X509V3_CTX *ctx, int gen_type,
```

```
                        const char *value, int is_nc);

# ifdef OPENSSL_CONF_H
GENERAL_NAME *v2i_GENERAL_NAME(const X509V3_EXT_METHOD *method,

            X509V3_CTX *ctx, CONF_VALUE *cnf);
GENERAL_NAME *v2i_GENERAL_NAME_ex(GENERAL_NAME *out,
                          const X509V3_EXT_METHOD *method,
                          X509V3_CTX *ctx, CONF_VALUE *cnf,
                          int is_nc);

void X509V3_conf_free(CONF_VALUE *val);

X509_EXTENSION *X509V3_EXT_nconf_nid(CONF *conf, X509V3_CTX *ctx, int ext_nid,
                            const char *value);
X509_EXTENSION *X509V3_EXT_nconf(CONF *conf, X509V3_CTX *ctx, const char *name,
                         const char *value);
int X509V3_EXT_add_nconf_sk(CONF *conf, X509V3_CTX *ctx, const char *section,
                     STACK_OF(X509_EXTENSION) **sk);
int X509V3_EXT_add_nconf(CONF *conf, X509V3_CTX *ctx, const char *section,
                   X509 *cert);
int X509V3_EXT_REQ_add_nconf(CONF *conf, X509V3_CTX *ctx, const char *section,
                      X509_REQ *req);
int X509V3_EXT_CRL_add_nconf(CONF
 *conf, X509V3_CTX *ctx, const char *section,
                      X509_CRL *crl);

X509_EXTENSION *X509V3_EXT_conf_nid(LHASH_OF(CONF_VALUE) *conf,
                            X509V3_CTX *ctx, int ext_nid,
                            const char *value);
X509_EXTENSION *X509V3_EXT_conf(LHASH_OF(CONF_VALUE) *conf, X509V3_CTX *ctx,
                         const char *name, const char *value);
int X509V3_EXT_add_conf(LHASH_OF(CONF_VALUE) *conf, X509V3_CTX *ctx,
                   const char *section, X509 *cert);
int X509V3_EXT_REQ_add_conf(LHASH_OF(CONF_VALUE) *conf, X509V3_CTX *ctx,
                      const char *section, X509_REQ *req);
int X509V3_EXT_CRL_add_conf(LHASH_OF(CONF_VALUE) *conf, X509V3_CTX *ctx,
                      const char *section, X509_CRL *crl);

int X509V3_add_value_bool_nf(const char *name, int asn1_bool,
                      STACK_OF(CONF_VALUE) **extlist);
int X509V3_get_value_bool(const CONF_VALUE *value,
 int *asn1_bool);
int X509V3_get_value_int(const CONF_VALUE *value, ASN1_INTEGER **aint);
void X509V3_set_nconf(X509V3_CTX *ctx, CONF *conf);
void X509V3_set_conf_lhash(X509V3_CTX *ctx, LHASH_OF(CONF_VALUE) *lhash);
# endif
```

```
char *X509V3_get_string(X509V3_CTX *ctx, const char *name, const char *section);
STACK_OF(CONF_VALUE) *X509V3_get_section(X509V3_CTX *ctx, const char *section);
void X509V3_string_free(X509V3_CTX *ctx, char *str);
void X509V3_section_free(X509V3_CTX *ctx, STACK_OF(CONF_VALUE) *section);
void X509V3_set_ctx(X509V3_CTX *ctx, X509 *issuer, X509 *subject,
                    X509_REQ *req, X509_CRL *crl, int flags);
/* For API backward compatibility, this is separate from X509V3_set_ctx(): */
int X509V3_set_issuer_pkey(X509V3_CTX *ctx, EVP_PKEY *pkey);

int X509V3_add_value(const char *name, const char *value,
                     STACK_OF(CONF_VALUE) **extlist);
int X509V3_add_value_uchar(const char *name, const unsigned char *value,
                           STACK_OF(CONF_VALUE)
 **extlist);
int X509V3_add_value_bool(const char *name, int asn1_bool,
                          STACK_OF(CONF_VALUE) **extlist);
int X509V3_add_value_int(const char *name, const ASN1_INTEGER *aint,
                         STACK_OF(CONF_VALUE) **extlist);
char *i2s_ASN1_INTEGER(X509V3_EXT_METHOD *meth, const ASN1_INTEGER *aint);
ASN1_INTEGER *s2i_ASN1_INTEGER(X509V3_EXT_METHOD *meth, const char *value);
char *i2s_ASN1_ENUMERATED(X509V3_EXT_METHOD *meth, const ASN1_ENUMERATED *aint);
char *i2s_ASN1_ENUMERATED_TABLE(X509V3_EXT_METHOD *meth,
                                const ASN1_ENUMERATED *aint);
int X509V3_EXT_add(X509V3_EXT_METHOD *ext);
int X509V3_EXT_add_list(X509V3_EXT_METHOD *extlist);
int X509V3_EXT_add_alias(int nid_to, int nid_from);
void X509V3_EXT_cleanup(void);

const X509V3_EXT_METHOD *X509V3_EXT_get(X509_EXTENSION *ext);
const X509V3_EXT_METHOD *X509V3_EXT_get_nid(int nid);
int X509V3_add_standard_extensions(void);
STACK_OF(CONF_VALUE) *X509V3_parse_list(const
 char *line);
void *X509V3_EXT_d2i(X509_EXTENSION *ext);
void *X509V3_get_d2i(const STACK_OF(X509_EXTENSION) *x, int nid, int *crit,
                     int *idx);

X509_EXTENSION *X509V3_EXT_i2d(int ext_nid, int crit, void *ext_struc);
int X509V3_add1_i2d(STACK_OF(X509_EXTENSION) **x, int nid, void *value,
                    int crit, unsigned long flags);

#ifndef OPENSSL_NO_DEPRECATED_1_1_0
/* The new declarations are in crypto.h, but the old ones were here. */
# define hex_to_string OPENSSL_buf2hexstr
# define string_to_hex OPENSSL_hexstr2buf
#endif

void X509V3_EXT_val_prn(BIO *out, STACK_OF(CONF_VALUE) *val, int indent,
```

```
                int ml);
int X509V3_EXT_print(BIO *out, X509_EXTENSION *ext, unsigned long flag,
             int indent);
#ifndef OPENSSL_NO_STDIO
int X509V3_EXT_print_fp(FILE *out, X509_EXTENSION *ext, int flag, int indent);
#endif
int X509V3_extensions_print(BIO *out, const char *title,
                    const STACK_OF(X509_EXTENSION)
 *exts,
                    unsigned long flag, int indent);

int X509_check_ca(X509 *x);
int X509_check_purpose(X509 *x, int id, int ca);
int X509_supported_extension(X509_EXTENSION *ex);
int X509_PURPOSE_set(int *p, int purpose);
int X509_check_issued(X509 *issuer, X509 *subject);
int X509_check_akid(const X509 *issuer, const AUTHORITY_KEYID *akid);
void X509_set_proxy_flag(X509 *x);
void X509_set_proxy_pathlen(X509 *x, long l);
long X509_get_proxy_pathlen(X509 *x);

uint32_t X509_get_extension_flags(X509 *x);
uint32_t X509_get_key_usage(X509 *x);
uint32_t X509_get_extended_key_usage(X509 *x);
const ASN1_OCTET_STRING *X509_get0_subject_key_id(X509 *x);
const ASN1_OCTET_STRING *X509_get0_authority_key_id(X509 *x);
const GENERAL_NAMES *X509_get0_authority_issuer(X509 *x);
const ASN1_INTEGER *X509_get0_authority_serial(X509 *x);

int X509_PURPOSE_get_count(void);
X509_PURPOSE *X509_PURPOSE_get0(int idx);
int X509_PURPOSE_get_by_sname(const char *sname);
int X509_PURPOSE_get_by_id(int
 id);
int X509_PURPOSE_add(int id, int trust, int flags,
             int (*ck) (const X509_PURPOSE *, const X509 *, int),
             const char *name, const char *sname, void *arg);
char *X509_PURPOSE_get0_name(const X509_PURPOSE *xp);
char *X509_PURPOSE_get0_sname(const X509_PURPOSE *xp);
int X509_PURPOSE_get_trust(const X509_PURPOSE *xp);
void X509_PURPOSE_cleanup(void);
int X509_PURPOSE_get_id(const X509_PURPOSE *);

STACK_OF(OPENSSL_STRING) *X509_get1_email(X509 *x);
STACK_OF(OPENSSL_STRING) *X509_REQ_get1_email(X509_REQ *x);
void X509_email_free(STACK_OF(OPENSSL_STRING) *sk);
STACK_OF(OPENSSL_STRING) *X509_get1_ocsp(X509 *x);
/* Flags for X509_check_* functions */
```

```
/*
* Always check subject name for host match even if subject alt names present
*/
# define X509_CHECK_FLAG_ALWAYS_CHECK_SUBJECT    0x1
/* Disable wildcard matching for dnsName fields and common name. */
# define X509_CHECK_FLAG_NO_WILDCARDS    0x2
/* Wildcards must not match a partial
 label. */
# define X509_CHECK_FLAG_NO_PARTIAL_WILDCARDS 0x4
/* Allow (non-partial) wildcards to match multiple labels. */
# define X509_CHECK_FLAG_MULTI_LABEL_WILDCARDS 0x8
/* Constraint verifier subdomain patterns to match a single labels. */
# define X509_CHECK_FLAG_SINGLE_LABEL_SUBDOMAINS 0x10
/* Never check the subject CN */
# define X509_CHECK_FLAG_NEVER_CHECK_SUBJECT    0x20
/*
* Match reference identifiers starting with "." to any sub-domain.
* This is a non-public flag, turned on implicitly when the subject
* reference identity is a DNS name.
*/
# define _X509_CHECK_FLAG_DOT_SUBDOMAINS 0x8000

int X509_check_host(X509 *x, const char *chk, size_t chklen,
                    unsigned int flags, char **peername);
int X509_check_email(X509 *x, const char *chk, size_t chklen,
                     unsigned int flags);
int X509_check_ip(X509 *x, const unsigned char *chk, size_t chklen,
                  unsigned int flags);
int X509_check_ip_asc(X509 *x, const char *ipasc, unsigned
 int flags);

ASN1_OCTET_STRING *a2i_IPADDRESS(const char *ipasc);
ASN1_OCTET_STRING *a2i_IPADDRESS_NC(const char *ipasc);
int X509V3_NAME_from_section(X509_NAME *nm, STACK_OF(CONF_VALUE) *dn_sk,
                             unsigned long chtype);

void X509_POLICY_NODE_print(BIO *out, X509_POLICY_NODE *node, int indent);
SKM_DEFINE_STACK_OF_INTERNAL(X509_POLICY_NODE, X509_POLICY_NODE,
X509_POLICY_NODE)
#define sk_X509_POLICY_NODE_num(sk)
OPENSSL_sk_num(ossl_check_const_X509_POLICY_NODE_sk_type(sk))
#define sk_X509_POLICY_NODE_value(sk, idx) ((X509_POLICY_NODE
*)OPENSSL_sk_value(ossl_check_const_X509_POLICY_NODE_sk_type(sk), (idx)))
#define sk_X509_POLICY_NODE_new(cmp) ((STACK_OF(X509_POLICY_NODE)
*)OPENSSL_sk_new(ossl_check_X509_POLICY_NODE_compfunc_type(cmp)))
#define sk_X509_POLICY_NODE_new_null() ((STACK_OF(X509_POLICY_NODE)
*)OPENSSL_sk_new_null())
```

```
#define sk_X509_POLICY_NODE_new_reserve(cmp, n) ((STACK_OF(X509_POLICY_NODE)
*)OPENSSL_sk_new_reserve(ossl_check_X509_POLICY_NODE_compfunc_type(cmp),
 (n)))
#define sk_X509_POLICY_NODE_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_X509_POLICY_NODE_sk_type(sk), (n))
#define sk_X509_POLICY_NODE_free(sk) OPENSSL_sk_free(ossl_check_X509_POLICY_NODE_sk_type(sk))
#define sk_X509_POLICY_NODE_zero(sk) OPENSSL_sk_zero(ossl_check_X509_POLICY_NODE_sk_type(sk))
#define sk_X509_POLICY_NODE_delete(sk, i) ((X509_POLICY_NODE
*)OPENSSL_sk_delete(ossl_check_X509_POLICY_NODE_sk_type(sk), (i)))
#define sk_X509_POLICY_NODE_delete_ptr(sk, ptr) ((X509_POLICY_NODE
*)OPENSSL_sk_delete_ptr(ossl_check_X509_POLICY_NODE_sk_type(sk),
ossl_check_X509_POLICY_NODE_type(ptr)))
#define sk_X509_POLICY_NODE_push(sk, ptr)
OPENSSL_sk_push(ossl_check_X509_POLICY_NODE_sk_type(sk),
ossl_check_X509_POLICY_NODE_type(ptr))
#define sk_X509_POLICY_NODE_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_X509_POLICY_NODE_sk_type(sk),
ossl_check_X509_POLICY_NODE_type(ptr))
#define sk_X509_POLICY_NODE_pop(sk) ((X509_POLICY_NODE
*)OPENSSL_sk_pop(ossl_check_X509_POLICY_NODE_sk_type(sk)))
#define
 sk_X509_POLICY_NODE_shift(sk) ((X509_POLICY_NODE
*)OPENSSL_sk_shift(ossl_check_X509_POLICY_NODE_sk_type(sk)))
#define sk_X509_POLICY_NODE_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_X509_POLICY_NODE_sk_type(sk),ossl_check_X509_POLICY_NODE_free
func_type(freefunc))
#define sk_X509_POLICY_NODE_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_X509_POLICY_NODE_sk_type(sk),
ossl_check_X509_POLICY_NODE_type(ptr), (idx))
#define sk_X509_POLICY_NODE_set(sk, idx, ptr) ((X509_POLICY_NODE
*)OPENSSL_sk_set(ossl_check_X509_POLICY_NODE_sk_type(sk), (idx),
ossl_check_X509_POLICY_NODE_type(ptr)))
#define sk_X509_POLICY_NODE_find(sk, ptr)
OPENSSL_sk_find(ossl_check_X509_POLICY_NODE_sk_type(sk),
ossl_check_X509_POLICY_NODE_type(ptr))
#define sk_X509_POLICY_NODE_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_X509_POLICY_NODE_sk_type(sk),
ossl_check_X509_POLICY_NODE_type(ptr))
#define sk_X509_POLICY_NODE_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_X509_POLICY_NODE_sk_type(sk),
 ossl_check_X509_POLICY_NODE_type(ptr), pnum)
#define sk_X509_POLICY_NODE_sort(sk) OPENSSL_sk_sort(ossl_check_X509_POLICY_NODE_sk_type(sk))
#define sk_X509_POLICY_NODE_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_X509_POLICY_NODE_sk_type(sk))
#define sk_X509_POLICY_NODE_dup(sk) ((STACK_OF(X509_POLICY_NODE)
*)OPENSSL_sk_dup(ossl_check_const_X509_POLICY_NODE_sk_type(sk)))
#define sk_X509_POLICY_NODE_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(X509_POLICY_NODE)
*)OPENSSL_sk_deep_copy(ossl_check_const_X509_POLICY_NODE_sk_type(sk),
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ossl_check_X509_POLICY_NODE_copyfunc_type(copyfunc),
ossl_check_X509_POLICY_NODE_freefunc_type(freefunc)))
#define sk_X509_POLICY_NODE_set_cmp_func(sk, cmp)
((sk_X509_POLICY_NODE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_X509_POLICY_NODE_sk_type
(sk), ossl_check_X509_POLICY_NODE_compfunc_type(cmp)))



#ifndef OPENSSL_NO_RFC3779
typedef struct ASRange_st {
  ASN1_INTEGER *min, *max;
} ASRange;

# define ASIdOrRange_id          0
# define
 ASIdOrRange_range       1

typedef struct ASIdOrRange_st {
  int type;
  union {
      ASN1_INTEGER *id;
      ASRange *range;
  } u;
} ASIdOrRange;

SKM_DEFINE_STACK_OF_INTERNAL(ASIdOrRange, ASIdOrRange, ASIdOrRange)
#define sk_ASIdOrRange_num(sk) OPENSSL_sk_num(ossl_check_const_ASIdOrRange_sk_type(sk))
#define sk_ASIdOrRange_value(sk, idx) ((ASIdOrRange
*)OPENSSL_sk_value(ossl_check_const_ASIdOrRange_sk_type(sk), (idx)))
#define sk_ASIdOrRange_new(cmp) ((STACK_OF(ASIdOrRange)
*)OPENSSL_sk_new(ossl_check_ASIdOrRange_compfunc_type(cmp)))
#define sk_ASIdOrRange_new_null() ((STACK_OF(ASIdOrRange) *)OPENSSL_sk_new_null())
#define sk_ASIdOrRange_new_reserve(cmp, n) ((STACK_OF(ASIdOrRange)
*)OPENSSL_sk_new_reserve(ossl_check_ASIdOrRange_compfunc_type(cmp), (n)))
#define sk_ASIdOrRange_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_ASIdOrRange_sk_type(sk), (n))
#define sk_ASIdOrRange_free(sk) OPENSSL_sk_free(ossl_check_ASIdOrRange_sk_type(sk))
#define sk_ASIdOrRange_zero(sk) OPENSSL_sk_zero(ossl_check_ASIdOrRange_sk_type(sk))
#define
 sk_ASIdOrRange_delete(sk, i) ((ASIdOrRange *)OPENSSL_sk_delete(ossl_check_ASIdOrRange_sk_type(sk),
(i)))
#define sk_ASIdOrRange_delete_ptr(sk, ptr) ((ASIdOrRange
*)OPENSSL_sk_delete_ptr(ossl_check_ASIdOrRange_sk_type(sk), ossl_check_ASIdOrRange_type(ptr)))
#define sk_ASIdOrRange_push(sk, ptr) OPENSSL_sk_push(ossl_check_ASIdOrRange_sk_type(sk),
ossl_check_ASIdOrRange_type(ptr))
#define sk_ASIdOrRange_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_ASIdOrRange_sk_type(sk),
ossl_check_ASIdOrRange_type(ptr))
#define sk_ASIdOrRange_pop(sk) ((ASIdOrRange *)OPENSSL_sk_pop(ossl_check_ASIdOrRange_sk_type(sk)))
#define sk_ASIdOrRange_shift(sk) ((ASIdOrRange *)OPENSSL_sk_shift(ossl_check_ASIdOrRange_sk_type(sk)))
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#define sk_ASIdOrRange_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ASIdOrRange_sk_type(sk),ossl_check_ASIdOrRange_freefunc_type(freefunc)
)
#define sk_ASIdOrRange_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_ASIdOrRange_sk_type(sk),
 ossl_check_ASIdOrRange_type(ptr), (idx))
#define sk_ASIdOrRange_set(sk, idx, ptr) ((ASIdOrRange
*)OPENSSL_sk_set(ossl_check_ASIdOrRange_sk_type(sk), (idx), ossl_check_ASIdOrRange_type(ptr)))
#define sk_ASIdOrRange_find(sk, ptr) OPENSSL_sk_find(ossl_check_ASIdOrRange_sk_type(sk),
ossl_check_ASIdOrRange_type(ptr))
#define sk_ASIdOrRange_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_ASIdOrRange_sk_type(sk),
ossl_check_ASIdOrRange_type(ptr))
#define sk_ASIdOrRange_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_ASIdOrRange_sk_type(sk),
ossl_check_ASIdOrRange_type(ptr), pnum)
#define sk_ASIdOrRange_sort(sk) OPENSSL_sk_sort(ossl_check_ASIdOrRange_sk_type(sk))
#define sk_ASIdOrRange_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_ASIdOrRange_sk_type(sk))
#define sk_ASIdOrRange_dup(sk) ((STACK_OF(ASIdOrRange)
*)OPENSSL_sk_dup(ossl_check_const_ASIdOrRange_sk_type(sk)))
#define sk_ASIdOrRange_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ASIdOrRange)
*)OPENSSL_sk_deep_copy(ossl_check_const_ASIdOrRange_sk_type(sk),
 ossl_check_ASIdOrRange_copyfunc_type(copyfunc), ossl_check_ASIdOrRange_freefunc_type(freefunc)))
#define sk_ASIdOrRange_set_cmp_func(sk, cmp)
((sk_ASIdOrRange_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ASIdOrRange_sk_type(sk),
ossl_check_ASIdOrRange_compfunc_type(cmp)))


typedef STACK_OF(ASIdOrRange) ASIdOrRanges;

# define ASIdentifierChoice_inherit             0
# define ASIdentifierChoice_asIdsOrRanges       1

typedef struct ASIdentifierChoice_st {
   int type;
   union {
       ASN1_NULL *inherit;
       ASIdOrRanges *asIdsOrRanges;
   } u;
} ASIdentifierChoice;

typedef struct ASIdentifiers_st {
   ASIdentifierChoice *asnum, *rdi;
} ASIdentifiers;

DECLARE_ASN1_FUNCTIONS(ASRange)
DECLARE_ASN1_FUNCTIONS(ASIdOrRange)
DECLARE_ASN1_FUNCTIONS(ASIdentifierChoice)
DECLARE_ASN1_FUNCTIONS(ASIdentifiers)

typedef struct IPAddressRange_st {
```

```
   ASN1_BIT_STRING *min, *max;
} IPAddressRange;

# define IPAddressOrRange_addressPrefix  0
# define
 IPAddressOrRange_addressRange   1

typedef struct IPAddressOrRange_st {
   int type;
   union {
       ASN1_BIT_STRING *addressPrefix;
       IPAddressRange *addressRange;
   } u;
} IPAddressOrRange;

SKM_DEFINE_STACK_OF_INTERNAL(IPAddressOrRange, IPAddressOrRange, IPAddressOrRange)
#define sk_IPAddressOrRange_num(sk) OPENSSL_sk_num(ossl_check_const_IPAddressOrRange_sk_type(sk))
#define sk_IPAddressOrRange_value(sk, idx) ((IPAddressOrRange
*)OPENSSL_sk_value(ossl_check_const_IPAddressOrRange_sk_type(sk), (idx)))
#define sk_IPAddressOrRange_new(cmp) ((STACK_OF(IPAddressOrRange)
*)OPENSSL_sk_new(ossl_check_IPAddressOrRange_compfunc_type(cmp)))
#define sk_IPAddressOrRange_new_null() ((STACK_OF(IPAddressOrRange) *)OPENSSL_sk_new_null())
#define sk_IPAddressOrRange_new_reserve(cmp, n) ((STACK_OF(IPAddressOrRange)
*)OPENSSL_sk_new_reserve(ossl_check_IPAddressOrRange_compfunc_type(cmp), (n)))
#define sk_IPAddressOrRange_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_IPAddressOrRange_sk_type(sk),
 (n))
#define sk_IPAddressOrRange_free(sk) OPENSSL_sk_free(ossl_check_IPAddressOrRange_sk_type(sk))
#define sk_IPAddressOrRange_zero(sk) OPENSSL_sk_zero(ossl_check_IPAddressOrRange_sk_type(sk))
#define sk_IPAddressOrRange_delete(sk, i) ((IPAddressOrRange
*)OPENSSL_sk_delete(ossl_check_IPAddressOrRange_sk_type(sk), (i)))
#define sk_IPAddressOrRange_delete_ptr(sk, ptr) ((IPAddressOrRange
*)OPENSSL_sk_delete_ptr(ossl_check_IPAddressOrRange_sk_type(sk),
ossl_check_IPAddressOrRange_type(ptr)))
#define sk_IPAddressOrRange_push(sk, ptr) OPENSSL_sk_push(ossl_check_IPAddressOrRange_sk_type(sk),
ossl_check_IPAddressOrRange_type(ptr))
#define sk_IPAddressOrRange_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_IPAddressOrRange_sk_type(sk),
ossl_check_IPAddressOrRange_type(ptr))
#define sk_IPAddressOrRange_pop(sk) ((IPAddressOrRange
*)OPENSSL_sk_pop(ossl_check_IPAddressOrRange_sk_type(sk)))
#define sk_IPAddressOrRange_shift(sk) ((IPAddressOrRange
*)OPENSSL_sk_shift(ossl_check_IPAddressOrRange_sk_type(sk)))
#define
 sk_IPAddressOrRange_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_IPAddressOrRange_sk_type(sk),ossl_check_IPAddressOrRange_freefunc_typ
e(freefunc))
#define sk_IPAddressOrRange_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_IPAddressOrRange_sk_type(sk), ossl_check_IPAddressOrRange_type(ptr), (idx))
#define sk_IPAddressOrRange_set(sk, idx, ptr) ((IPAddressOrRange
```

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*)OPENSSL_sk_set(ossl_check_IPAddressOrRange_sk_type(sk), (idx), ossl_check_IPAddressOrRange_type(ptr)))
#define sk_IPAddressOrRange_find(sk, ptr) OPENSSL_sk_find(ossl_check_IPAddressOrRange_sk_type(sk),
ossl_check_IPAddressOrRange_type(ptr))
#define sk_IPAddressOrRange_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_IPAddressOrRange_sk_type(sk), ossl_check_IPAddressOrRange_type(ptr))
#define sk_IPAddressOrRange_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_IPAddressOrRange_sk_type(sk), ossl_check_IPAddressOrRange_type(ptr),
pnum)
#define sk_IPAddressOrRange_sort(sk) OPENSSL_sk_sort(ossl_check_IPAddressOrRange_sk_type(sk))
#define
 sk_IPAddressOrRange_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_IPAddressOrRange_sk_type(sk))
#define sk_IPAddressOrRange_dup(sk) ((STACK_OF(IPAddressOrRange)
*)OPENSSL_sk_dup(ossl_check_const_IPAddressOrRange_sk_type(sk)))
#define sk_IPAddressOrRange_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(IPAddressOrRange)
*)OPENSSL_sk_deep_copy(ossl_check_const_IPAddressOrRange_sk_type(sk),
ossl_check_IPAddressOrRange_copyfunc_type(copyfunc),
ossl_check_IPAddressOrRange_freefunc_type(freefunc)))
#define sk_IPAddressOrRange_set_cmp_func(sk, cmp)
((sk_IPAddressOrRange_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_IPAddressOrRange_sk_type(sk),
ossl_check_IPAddressOrRange_compfunc_type(cmp)))


typedef STACK_OF(IPAddressOrRange) IPAddressOrRanges;

# define IPAddressChoice_inherit                0
# define IPAddressChoice_addressesOrRanges       1

typedef struct IPAddressChoice_st {
   int type;
   union {
       ASN1_NULL *inherit;

    IPAddressOrRanges *addressesOrRanges;
   } u;
} IPAddressChoice;

typedef struct IPAddressFamily_st {
   ASN1_OCTET_STRING *addressFamily;
   IPAddressChoice *ipAddressChoice;
} IPAddressFamily;

SKM_DEFINE_STACK_OF_INTERNAL(IPAddressFamily, IPAddressFamily, IPAddressFamily)
#define sk_IPAddressFamily_num(sk) OPENSSL_sk_num(ossl_check_const_IPAddressFamily_sk_type(sk))
#define sk_IPAddressFamily_value(sk, idx) ((IPAddressFamily
*)OPENSSL_sk_value(ossl_check_const_IPAddressFamily_sk_type(sk), (idx)))
#define sk_IPAddressFamily_new(cmp) ((STACK_OF(IPAddressFamily)
*)OPENSSL_sk_new(ossl_check_IPAddressFamily_compfunc_type(cmp)))
#define sk_IPAddressFamily_new_null() ((STACK_OF(IPAddressFamily) *)OPENSSL_sk_new_null())
```

```
#define sk_IPAddressFamily_new_reserve(cmp, n) ((STACK_OF(IPAddressFamily)
*)OPENSSL_sk_new_reserve(ossl_check_IPAddressFamily_compfunc_type(cmp), (n)))
#define sk_IPAddressFamily_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_IPAddressFamily_sk_type(sk), (n))
#define sk_IPAddressFamily_free(sk)
 OPENSSL_sk_free(ossl_check_IPAddressFamily_sk_type(sk))
#define sk_IPAddressFamily_zero(sk) OPENSSL_sk_zero(ossl_check_IPAddressFamily_sk_type(sk))
#define sk_IPAddressFamily_delete(sk, i) ((IPAddressFamily
*)OPENSSL_sk_delete(ossl_check_IPAddressFamily_sk_type(sk), (i)))
#define sk_IPAddressFamily_delete_ptr(sk, ptr) ((IPAddressFamily
*)OPENSSL_sk_delete_ptr(ossl_check_IPAddressFamily_sk_type(sk), ossl_check_IPAddressFamily_type(ptr)))
#define sk_IPAddressFamily_push(sk, ptr) OPENSSL_sk_push(ossl_check_IPAddressFamily_sk_type(sk),
ossl_check_IPAddressFamily_type(ptr))
#define sk_IPAddressFamily_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_IPAddressFamily_sk_type(sk),
ossl_check_IPAddressFamily_type(ptr))
#define sk_IPAddressFamily_pop(sk) ((IPAddressFamily
*)OPENSSL_sk_pop(ossl_check_IPAddressFamily_sk_type(sk)))
#define sk_IPAddressFamily_shift(sk) ((IPAddressFamily
*)OPENSSL_sk_shift(ossl_check_IPAddressFamily_sk_type(sk)))
#define sk_IPAddressFamily_pop_free(sk,
 freefunc)
OPENSSL_sk_pop_free(ossl_check_IPAddressFamily_sk_type(sk),ossl_check_IPAddressFamily_freefunc_type(fre
efunc))
#define sk_IPAddressFamily_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_IPAddressFamily_sk_type(sk),
ossl_check_IPAddressFamily_type(ptr), (idx))
#define sk_IPAddressFamily_set(sk, idx, ptr) ((IPAddressFamily
*)OPENSSL_sk_set(ossl_check_IPAddressFamily_sk_type(sk), (idx), ossl_check_IPAddressFamily_type(ptr)))
#define sk_IPAddressFamily_find(sk, ptr) OPENSSL_sk_find(ossl_check_IPAddressFamily_sk_type(sk),
ossl_check_IPAddressFamily_type(ptr))
#define sk_IPAddressFamily_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_IPAddressFamily_sk_type(sk),
ossl_check_IPAddressFamily_type(ptr))
#define sk_IPAddressFamily_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_IPAddressFamily_sk_type(sk), ossl_check_IPAddressFamily_type(ptr), pnum)
#define sk_IPAddressFamily_sort(sk) OPENSSL_sk_sort(ossl_check_IPAddressFamily_sk_type(sk))
#define sk_IPAddressFamily_is_sorted(sk)
 OPENSSL_sk_is_sorted(ossl_check_const_IPAddressFamily_sk_type(sk))
#define sk_IPAddressFamily_dup(sk) ((STACK_OF(IPAddressFamily)
*)OPENSSL_sk_dup(ossl_check_const_IPAddressFamily_sk_type(sk)))
#define sk_IPAddressFamily_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(IPAddressFamily)
*)OPENSSL_sk_deep_copy(ossl_check_const_IPAddressFamily_sk_type(sk),
ossl_check_IPAddressFamily_copyfunc_type(copyfunc), ossl_check_IPAddressFamily_freefunc_type(freefunc)))
#define sk_IPAddressFamily_set_cmp_func(sk, cmp)
((sk_IPAddressFamily_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_IPAddressFamily_sk_type(sk),
ossl_check_IPAddressFamily_compfunc_type(cmp)))
```

```
typedef STACK_OF(IPAddressFamily) IPAddrBlocks;
```

```
DECLARE_ASN1_FUNCTIONS(IPAddressRange)
DECLARE_ASN1_FUNCTIONS(IPAddressOrRange)
DECLARE_ASN1_FUNCTIONS(IPAddressChoice)
DECLARE_ASN1_FUNCTIONS(IPAddressFamily)

/*
* API tag for elements of the ASIdentifer SEQUENCE.
*/
# define V3_ASID_ASNUM   0
# define V3_ASID_RDI     1

/*
* AFI values,
 assigned by IANA.  It'd be nice to make the AFI
* handling code totally generic, but there are too many little things
* that would need to be defined for other address families for it to
* be worth the trouble.
*/
# define IANA_AFI_IPV4   1
# define IANA_AFI_IPV6   2

/*
* Utilities to construct and extract values from RFC3779 extensions,
* since some of the encodings (particularly for IP address prefixes
* and ranges) are a bit tedious to work with directly.
*/
int X509v3_asid_add_inherit(ASIdentifiers *asid, int which);
int X509v3_asid_add_id_or_range(ASIdentifiers *asid, int which,
                        ASN1_INTEGER *min, ASN1_INTEGER *max);
int X509v3_addr_add_inherit(IPAddrBlocks *addr,
                      const unsigned afi, const unsigned *safi);
int X509v3_addr_add_prefix(IPAddrBlocks *addr,
                     const unsigned afi, const unsigned *safi,
                     unsigned char *a, const int prefixlen);
int X509v3_addr_add_range(IPAddrBlocks
 *addr,
                    const unsigned afi, const unsigned *safi,
                    unsigned char *min, unsigned char *max);
unsigned X509v3_addr_get_afi(const IPAddressFamily *f);
int X509v3_addr_get_range(IPAddressOrRange *aor, const unsigned afi,
                    unsigned char *min, unsigned char *max,
                    const int length);

/*
* Canonical forms.
*/
int X509v3_asid_is_canonical(ASIdentifiers *asid);
int X509v3_addr_is_canonical(IPAddrBlocks *addr);
```

```
int X509v3_asid_canonize(ASIdentifiers *asid);
int X509v3_addr_canonize(IPAddrBlocks *addr);

/*
* Tests for inheritance and containment.
*/
int X509v3_asid_inherits(ASIdentifiers *asid);
int X509v3_addr_inherits(IPAddrBlocks *addr);
int X509v3_asid_subset(ASIdentifiers *a, ASIdentifiers *b);
int X509v3_addr_subset(IPAddrBlocks *a, IPAddrBlocks *b);

/*
* Check whether RFC 3779 extensions nest properly in chains.
*/
int X509v3_asid_validate_path(X509_STORE_CTX *);
int
 X509v3_addr_validate_path(X509_STORE_CTX *);
int X509v3_asid_validate_resource_set(STACK_OF(X509) *chain,
                              ASIdentifiers *ext,
                              int allow_inheritance);
int X509v3_addr_validate_resource_set(STACK_OF(X509) *chain,
                              IPAddrBlocks *ext, int allow_inheritance);

#endif                     /* OPENSSL_NO_RFC3779 */

SKM_DEFINE_STACK_OF_INTERNAL(ASN1_STRING, ASN1_STRING, ASN1_STRING)
#define sk_ASN1_STRING_num(sk) OPENSSL_sk_num(ossl_check_const_ASN1_STRING_sk_type(sk))
#define sk_ASN1_STRING_value(sk, idx) ((ASN1_STRING
*)OPENSSL_sk_value(ossl_check_const_ASN1_STRING_sk_type(sk), (idx)))
#define sk_ASN1_STRING_new(cmp) ((STACK_OF(ASN1_STRING)
*)OPENSSL_sk_new(ossl_check_ASN1_STRING_compfunc_type(cmp)))
#define sk_ASN1_STRING_new_null() ((STACK_OF(ASN1_STRING) *)OPENSSL_sk_new_null())
#define sk_ASN1_STRING_new_reserve(cmp, n) ((STACK_OF(ASN1_STRING)
*)OPENSSL_sk_new_reserve(ossl_check_ASN1_STRING_compfunc_type(cmp),
 (n)))
#define sk_ASN1_STRING_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_ASN1_STRING_sk_type(sk), (n))
#define sk_ASN1_STRING_free(sk) OPENSSL_sk_free(ossl_check_ASN1_STRING_sk_type(sk))
#define sk_ASN1_STRING_zero(sk) OPENSSL_sk_zero(ossl_check_ASN1_STRING_sk_type(sk))
#define sk_ASN1_STRING_delete(sk, i) ((ASN1_STRING
*)OPENSSL_sk_delete(ossl_check_ASN1_STRING_sk_type(sk), (i)))
#define sk_ASN1_STRING_delete_ptr(sk, ptr) ((ASN1_STRING
*)OPENSSL_sk_delete_ptr(ossl_check_ASN1_STRING_sk_type(sk), ossl_check_ASN1_STRING_type(ptr)))
#define sk_ASN1_STRING_push(sk, ptr) OPENSSL_sk_push(ossl_check_ASN1_STRING_sk_type(sk),
ossl_check_ASN1_STRING_type(ptr))
#define sk_ASN1_STRING_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_ASN1_STRING_sk_type(sk),
ossl_check_ASN1_STRING_type(ptr))
#define sk_ASN1_STRING_pop(sk) ((ASN1_STRING
*)OPENSSL_sk_pop(ossl_check_ASN1_STRING_sk_type(sk)))
```

```
#define sk_ASN1_STRING_shift(sk) ((ASN1_STRING
*)OPENSSL_sk_shift(ossl_check_ASN1_STRING_sk_type(sk)))
#define
 sk_ASN1_STRING_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ASN1_STRING_sk_type(sk),ossl_check_ASN1_STRING_freefunc_type(freef
unc))
#define sk_ASN1_STRING_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_ASN1_STRING_sk_type(sk),
ossl_check_ASN1_STRING_type(ptr), (idx))
#define sk_ASN1_STRING_set(sk, idx, ptr) ((ASN1_STRING
*)OPENSSL_sk_set(ossl_check_ASN1_STRING_sk_type(sk), (idx), ossl_check_ASN1_STRING_type(ptr)))
#define sk_ASN1_STRING_find(sk, ptr) OPENSSL_sk_find(ossl_check_ASN1_STRING_sk_type(sk),
ossl_check_ASN1_STRING_type(ptr))
#define sk_ASN1_STRING_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_ASN1_STRING_sk_type(sk),
ossl_check_ASN1_STRING_type(ptr))
#define sk_ASN1_STRING_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_ASN1_STRING_sk_type(sk), ossl_check_ASN1_STRING_type(ptr), pnum)
#define sk_ASN1_STRING_sort(sk) OPENSSL_sk_sort(ossl_check_ASN1_STRING_sk_type(sk))
#define sk_ASN1_STRING_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_ASN1_STRING_sk_type(sk))
#define
 sk_ASN1_STRING_dup(sk) ((STACK_OF(ASN1_STRING)
*)OPENSSL_sk_dup(ossl_check_const_ASN1_STRING_sk_type(sk)))
#define sk_ASN1_STRING_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ASN1_STRING)
*)OPENSSL_sk_deep_copy(ossl_check_const_ASN1_STRING_sk_type(sk),
ossl_check_ASN1_STRING_copyfunc_type(copyfunc), ossl_check_ASN1_STRING_freefunc_type(freefunc)))
#define sk_ASN1_STRING_set_cmp_func(sk, cmp)
((sk_ASN1_STRING_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ASN1_STRING_sk_type(sk),
ossl_check_ASN1_STRING_compfunc_type(cmp)))


/*
* Admission Syntax
*/
typedef struct NamingAuthority_st NAMING_AUTHORITY;
typedef struct ProfessionInfo_st PROFESSION_INFO;
typedef struct Admissions_st ADMISSIONS;
typedef struct AdmissionSyntax_st ADMISSION_SYNTAX;
DECLARE_ASN1_FUNCTIONS(NAMING_AUTHORITY)
DECLARE_ASN1_FUNCTIONS(PROFESSION_INFO)
DECLARE_ASN1_FUNCTIONS(ADMISSIONS)
DECLARE_ASN1_FUNCTIONS(ADMISSION_SYNTAX)
SKM_DEFINE_STACK_OF_INTERNAL(PROFESSION_INFO,
 PROFESSION_INFO, PROFESSION_INFO)
#define sk_PROFESSION_INFO_num(sk)
OPENSSL_sk_num(ossl_check_const_PROFESSION_INFO_sk_type(sk))
#define sk_PROFESSION_INFO_value(sk, idx) ((PROFESSION_INFO
*)OPENSSL_sk_value(ossl_check_const_PROFESSION_INFO_sk_type(sk), (idx)))
#define sk_PROFESSION_INFO_new(cmp) ((STACK_OF(PROFESSION_INFO)
```

```
*)OPENSSL_sk_new(ossl_check_PROFESSION_INFO_compfunc_type(cmp)))
#define sk_PROFESSION_INFO_new_null() ((STACK_OF(PROFESSION_INFO) *)OPENSSL_sk_new_null())
#define sk_PROFESSION_INFO_new_reserve(cmp, n) ((STACK_OF(PROFESSION_INFO)
*)OPENSSL_sk_new_reserve(ossl_check_PROFESSION_INFO_compfunc_type(cmp), (n)))
#define sk_PROFESSION_INFO_reserve(sk, n)
OPENSSL_sk_reserve(ossl_check_PROFESSION_INFO_sk_type(sk), (n))
#define sk_PROFESSION_INFO_free(sk) OPENSSL_sk_free(ossl_check_PROFESSION_INFO_sk_type(sk))
#define sk_PROFESSION_INFO_zero(sk) OPENSSL_sk_zero(ossl_check_PROFESSION_INFO_sk_type(sk))
#define sk_PROFESSION_INFO_delete(sk, i) ((PROFESSION_INFO
*)OPENSSL_sk_delete(ossl_check_PROFESSION_INFO_sk_type(sk),
 (i)))
#define sk_PROFESSION_INFO_delete_ptr(sk, ptr) ((PROFESSION_INFO
*)OPENSSL_sk_delete_ptr(ossl_check_PROFESSION_INFO_sk_type(sk),
ossl_check_PROFESSION_INFO_type(ptr)))
#define sk_PROFESSION_INFO_push(sk, ptr)
OPENSSL_sk_push(ossl_check_PROFESSION_INFO_sk_type(sk), ossl_check_PROFESSION_INFO_type(ptr))
#define sk_PROFESSION_INFO_unshift(sk, ptr)
OPENSSL_sk_unshift(ossl_check_PROFESSION_INFO_sk_type(sk), ossl_check_PROFESSION_INFO_type(ptr))
#define sk_PROFESSION_INFO_pop(sk) ((PROFESSION_INFO
*)OPENSSL_sk_pop(ossl_check_PROFESSION_INFO_sk_type(sk)))
#define sk_PROFESSION_INFO_shift(sk) ((PROFESSION_INFO
*)OPENSSL_sk_shift(ossl_check_PROFESSION_INFO_sk_type(sk)))
#define sk_PROFESSION_INFO_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_PROFESSION_INFO_sk_type(sk),ossl_check_PROFESSION_INFO_freefun
c_type(freefunc))
#define sk_PROFESSION_INFO_insert(sk, ptr, idx)
OPENSSL_sk_insert(ossl_check_PROFESSION_INFO_sk_type(sk), ossl_check_PROFESSION_INFO_type(ptr),
 (idx))
#define sk_PROFESSION_INFO_set(sk, idx, ptr) ((PROFESSION_INFO
*)OPENSSL_sk_set(ossl_check_PROFESSION_INFO_sk_type(sk), (idx),
ossl_check_PROFESSION_INFO_type(ptr)))
#define sk_PROFESSION_INFO_find(sk, ptr) OPENSSL_sk_find(ossl_check_PROFESSION_INFO_sk_type(sk),
ossl_check_PROFESSION_INFO_type(ptr))
#define sk_PROFESSION_INFO_find_ex(sk, ptr)
OPENSSL_sk_find_ex(ossl_check_PROFESSION_INFO_sk_type(sk),
ossl_check_PROFESSION_INFO_type(ptr))
#define sk_PROFESSION_INFO_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_PROFESSION_INFO_sk_type(sk),
ossl_check_PROFESSION_INFO_type(ptr), pnum)
#define sk_PROFESSION_INFO_sort(sk) OPENSSL_sk_sort(ossl_check_PROFESSION_INFO_sk_type(sk))
#define sk_PROFESSION_INFO_is_sorted(sk)
OPENSSL_sk_is_sorted(ossl_check_const_PROFESSION_INFO_sk_type(sk))
#define sk_PROFESSION_INFO_dup(sk) ((STACK_OF(PROFESSION_INFO)
*)OPENSSL_sk_dup(ossl_check_const_PROFESSION_INFO_sk_type(sk)))
#define sk_PROFESSION_INFO_deep_copy(sk,
 copyfunc, freefunc) ((STACK_OF(PROFESSION_INFO)
*)OPENSSL_sk_deep_copy(ossl_check_const_PROFESSION_INFO_sk_type(sk),
ossl_check_PROFESSION_INFO_copyfunc_type(copyfunc),
```

```
ossl_check_PROFESSION_INFO_freefunc_type(freefunc)))
#define sk_PROFESSION_INFO_set_cmp_func(sk, cmp)
((sk_PROFESSION_INFO_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_PROFESSION_INFO_sk_type(sk)
, ossl_check_PROFESSION_INFO_compfunc_type(cmp)))
SKM_DEFINE_STACK_OF_INTERNAL(ADMISSIONS, ADMISSIONS, ADMISSIONS)
#define sk_ADMISSIONS_num(sk) OPENSSL_sk_num(ossl_check_const_ADMISSIONS_sk_type(sk))
#define sk_ADMISSIONS_value(sk, idx) ((ADMISSIONS
*)OPENSSL_sk_value(ossl_check_const_ADMISSIONS_sk_type(sk), (idx)))
#define sk_ADMISSIONS_new(cmp) ((STACK_OF(ADMISSIONS)
*)OPENSSL_sk_new(ossl_check_ADMISSIONS_compfunc_type(cmp)))
#define sk_ADMISSIONS_new_null() ((STACK_OF(ADMISSIONS) *)OPENSSL_sk_new_null())
#define sk_ADMISSIONS_new_reserve(cmp, n) ((STACK_OF(ADMISSIONS)
*)OPENSSL_sk_new_reserve(ossl_check_ADMISSIONS_compfunc_type(cmp),
 (n)))
#define sk_ADMISSIONS_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_ADMISSIONS_sk_type(sk), (n))
#define sk_ADMISSIONS_free(sk) OPENSSL_sk_free(ossl_check_ADMISSIONS_sk_type(sk))
#define sk_ADMISSIONS_zero(sk) OPENSSL_sk_zero(ossl_check_ADMISSIONS_sk_type(sk))
#define sk_ADMISSIONS_delete(sk, i) ((ADMISSIONS
*)OPENSSL_sk_delete(ossl_check_ADMISSIONS_sk_type(sk), (i)))
#define sk_ADMISSIONS_delete_ptr(sk, ptr) ((ADMISSIONS
*)OPENSSL_sk_delete_ptr(ossl_check_ADMISSIONS_sk_type(sk), ossl_check_ADMISSIONS_type(ptr)))
#define sk_ADMISSIONS_push(sk, ptr) OPENSSL_sk_push(ossl_check_ADMISSIONS_sk_type(sk),
ossl_check_ADMISSIONS_type(ptr))
#define sk_ADMISSIONS_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_ADMISSIONS_sk_type(sk),
ossl_check_ADMISSIONS_type(ptr))
#define sk_ADMISSIONS_pop(sk) ((ADMISSIONS
*)OPENSSL_sk_pop(ossl_check_ADMISSIONS_sk_type(sk)))
#define sk_ADMISSIONS_shift(sk) ((ADMISSIONS
*)OPENSSL_sk_shift(ossl_check_ADMISSIONS_sk_type(sk)))
#define sk_ADMISSIONS_pop_free(sk,
 freefunc)
OPENSSL_sk_pop_free(ossl_check_ADMISSIONS_sk_type(sk),ossl_check_ADMISSIONS_freefunc_type(freefun
c))
#define sk_ADMISSIONS_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_ADMISSIONS_sk_type(sk),
ossl_check_ADMISSIONS_type(ptr), (idx))
#define sk_ADMISSIONS_set(sk, idx, ptr) ((ADMISSIONS
*)OPENSSL_sk_set(ossl_check_ADMISSIONS_sk_type(sk), (idx), ossl_check_ADMISSIONS_type(ptr)))
#define sk_ADMISSIONS_find(sk, ptr) OPENSSL_sk_find(ossl_check_ADMISSIONS_sk_type(sk),
ossl_check_ADMISSIONS_type(ptr))
#define sk_ADMISSIONS_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_ADMISSIONS_sk_type(sk),
ossl_check_ADMISSIONS_type(ptr))
#define sk_ADMISSIONS_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_ADMISSIONS_sk_type(sk),
ossl_check_ADMISSIONS_type(ptr), pnum)
#define sk_ADMISSIONS_sort(sk) OPENSSL_sk_sort(ossl_check_ADMISSIONS_sk_type(sk))
#define sk_ADMISSIONS_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_ADMISSIONS_sk_type(sk))
#define sk_ADMISSIONS_dup(sk)
 ((STACK_OF(ADMISSIONS) *)OPENSSL_sk_dup(ossl_check_const_ADMISSIONS_sk_type(sk)))
#define sk_ADMISSIONS_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ADMISSIONS)
```

```
*)OPENSSL_sk_deep_copy(ossl_check_const_ADMISSIONS_sk_type(sk),
ossl_check_ADMISSIONS_copyfunc_type(copyfunc), ossl_check_ADMISSIONS_freefunc_type(freefunc)))
#define sk_ADMISSIONS_set_cmp_func(sk, cmp)
((sk_ADMISSIONS_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ADMISSIONS_sk_type(sk),
ossl_check_ADMISSIONS_compfunc_type(cmp)))

typedef STACK_OF(PROFESSION_INFO) PROFESSION_INFOS;

const ASN1_OBJECT *NAMING_AUTHORITY_get0_authorityId(
  const NAMING_AUTHORITY *n);
const ASN1_IA5STRING *NAMING_AUTHORITY_get0_authorityURL(
  const NAMING_AUTHORITY *n);
const ASN1_STRING *NAMING_AUTHORITY_get0_authorityText(
  const NAMING_AUTHORITY *n);
void NAMING_AUTHORITY_set0_authorityId(NAMING_AUTHORITY *n,
  ASN1_OBJECT* namingAuthorityId);
void NAMING_AUTHORITY_set0_authorityURL(NAMING_AUTHORITY *n,
  ASN1_IA5STRING* namingAuthorityUrl);
void
 NAMING_AUTHORITY_set0_authorityText(NAMING_AUTHORITY *n,
  ASN1_STRING* namingAuthorityText);

const GENERAL_NAME *ADMISSION_SYNTAX_get0_admissionAuthority(
  const ADMISSION_SYNTAX *as);
void ADMISSION_SYNTAX_set0_admissionAuthority(
  ADMISSION_SYNTAX *as, GENERAL_NAME *aa);
const STACK_OF(ADMISSIONS) *ADMISSION_SYNTAX_get0_contentsOfAdmissions(
  const ADMISSION_SYNTAX *as);
void ADMISSION_SYNTAX_set0_contentsOfAdmissions(
  ADMISSION_SYNTAX *as, STACK_OF(ADMISSIONS) *a);
const GENERAL_NAME *ADMISSIONS_get0_admissionAuthority(const ADMISSIONS *a);
void ADMISSIONS_set0_admissionAuthority(ADMISSIONS *a, GENERAL_NAME *aa);
const NAMING_AUTHORITY *ADMISSIONS_get0_namingAuthority(const ADMISSIONS *a);
void ADMISSIONS_set0_namingAuthority(ADMISSIONS *a, NAMING_AUTHORITY *na);
const PROFESSION_INFOS *ADMISSIONS_get0_professionInfos(const ADMISSIONS *a);
void ADMISSIONS_set0_professionInfos(ADMISSIONS *a, PROFESSION_INFOS *pi);
const ASN1_OCTET_STRING *PROFESSION_INFO_get0_addProfessionInfo(
   const PROFESSION_INFO *pi);
void PROFESSION_INFO_set0_addProfessionInfo(
  PROFESSION_INFO *pi, ASN1_OCTET_STRING *aos);
const NAMING_AUTHORITY *PROFESSION_INFO_get0_namingAuthority(
  const PROFESSION_INFO *pi);
void PROFESSION_INFO_set0_namingAuthority(
  PROFESSION_INFO *pi, NAMING_AUTHORITY *na);
const STACK_OF(ASN1_STRING) *PROFESSION_INFO_get0_professionItems(
  const PROFESSION_INFO *pi);
void PROFESSION_INFO_set0_professionItems(
  PROFESSION_INFO *pi, STACK_OF(ASN1_STRING) *as);
```

```
const STACK_OF(ASN1_OBJECT) *PROFESSION_INFO_get0_professionOIDs(
   const PROFESSION_INFO *pi);
void PROFESSION_INFO_set0_professionOIDs(
   PROFESSION_INFO *pi, STACK_OF(ASN1_OBJECT) *po);
const ASN1_PRINTABLESTRING *PROFESSION_INFO_get0_registrationNumber(
   const PROFESSION_INFO *pi);
void PROFESSION_INFO_set0_registrationNumber(
   PROFESSION_INFO *pi, ASN1_PRINTABLESTRING *rn);

# ifdef  __cplusplus
}
# endif
#endif
```

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```
/*
* WARNING: do not edit!
* Generated by Makefile from providers/common/include/prov/der_ec.h.in
*
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* https://www.openssl.org/source/license.html
*/

#include "crypto/ec.h"
#include "internal/der.h"

/* Well known OIDs precompiled */

/*
* ecdsa-with-SHA1 OBJECT IDENTIFIER ::= { id-ecSigType 1 }
*/
#define DER_OID_V_ecdsa_with_SHA1 DER_P_OBJECT, 7, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x04, 0x01
#define DER_OID_SZ_ecdsa_with_SHA1 9
extern const unsigned char ossl_der_oid_ecdsa_with_SHA1[DER_OID_SZ_ecdsa_with_SHA1];
```

```
/*
* id-ecPublicKey OBJECT IDENTIFIER ::= { id-publicKeyType 1 }
*/
#define DER_OID_V_id_ecPublicKey DER_P_OBJECT, 7, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x02, 0x01
#define DER_OID_SZ_id_ecPublicKey 9
extern
 const unsigned char ossl_der_oid_id_ecPublicKey[DER_OID_SZ_id_ecPublicKey];

/*
* c2pnb163v1  OBJECT IDENTIFIER  ::=  { c-TwoCurve  1 }
*/
#define DER_OID_V_c2pnb163v1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x01
#define DER_OID_SZ_c2pnb163v1 10
extern const unsigned char ossl_der_oid_c2pnb163v1[DER_OID_SZ_c2pnb163v1];

/*
* c2pnb163v2  OBJECT IDENTIFIER  ::=  { c-TwoCurve  2 }
*/
#define DER_OID_V_c2pnb163v2 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x02
#define DER_OID_SZ_c2pnb163v2 10
extern const unsigned char ossl_der_oid_c2pnb163v2[DER_OID_SZ_c2pnb163v2];

/*
* c2pnb163v3  OBJECT IDENTIFIER  ::=  { c-TwoCurve  3 }
*/
#define DER_OID_V_c2pnb163v3 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x03
#define DER_OID_SZ_c2pnb163v3 10
extern const unsigned char ossl_der_oid_c2pnb163v3[DER_OID_SZ_c2pnb163v3];

/*
* c2pnb176w1  OBJECT IDENTIFIER  ::=  { c-TwoCurve  4 }
*/
#define DER_OID_V_c2pnb176w1 DER_P_OBJECT, 8, 0x2A, 0x86,
 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x04
#define DER_OID_SZ_c2pnb176w1 10
extern const unsigned char ossl_der_oid_c2pnb176w1[DER_OID_SZ_c2pnb176w1];

/*
* c2tnb191v1  OBJECT IDENTIFIER  ::=  { c-TwoCurve  5 }
*/
#define DER_OID_V_c2tnb191v1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x05
#define DER_OID_SZ_c2tnb191v1 10
extern const unsigned char ossl_der_oid_c2tnb191v1[DER_OID_SZ_c2tnb191v1];

/*
* c2tnb191v2  OBJECT IDENTIFIER  ::=  { c-TwoCurve  6 }
*/
#define DER_OID_V_c2tnb191v2 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x06
```

```
#define DER_OID_SZ_c2tnb191v2 10
extern const unsigned char ossl_der_oid_c2tnb191v2[DER_OID_SZ_c2tnb191v2];

/*
* c2tnb191v3  OBJECT IDENTIFIER  ::=  { c-TwoCurve  7 }
*/
#define DER_OID_V_c2tnb191v3 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x07
#define DER_OID_SZ_c2tnb191v3 10
extern const unsigned char ossl_der_oid_c2tnb191v3[DER_OID_SZ_c2tnb191v3];

/*
* c2onb191v4  OBJECT IDENTIFIER  ::=  { c-TwoCurve
  8 }
*/
#define DER_OID_V_c2onb191v4 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x08
#define DER_OID_SZ_c2onb191v4 10
extern const unsigned char ossl_der_oid_c2onb191v4[DER_OID_SZ_c2onb191v4];

/*
* c2onb191v5  OBJECT IDENTIFIER  ::=  { c-TwoCurve  9 }
*/
#define DER_OID_V_c2onb191v5 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x09
#define DER_OID_SZ_c2onb191v5 10
extern const unsigned char ossl_der_oid_c2onb191v5[DER_OID_SZ_c2onb191v5];

/*
* c2pnb208w1  OBJECT IDENTIFIER  ::=  { c-TwoCurve 10 }
*/
#define DER_OID_V_c2pnb208w1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x0A
#define DER_OID_SZ_c2pnb208w1 10
extern const unsigned char ossl_der_oid_c2pnb208w1[DER_OID_SZ_c2pnb208w1];

/*
* c2tnb239v1  OBJECT IDENTIFIER  ::=  { c-TwoCurve 11 }
*/
#define DER_OID_V_c2tnb239v1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x0B
#define DER_OID_SZ_c2tnb239v1 10
extern const unsigned char ossl_der_oid_c2tnb239v1[DER_OID_SZ_c2tnb239v1];

/*
 * c2tnb239v2  OBJECT IDENTIFIER  ::=  { c-TwoCurve 12 }
*/
#define DER_OID_V_c2tnb239v2 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x0C
#define DER_OID_SZ_c2tnb239v2 10
extern const unsigned char ossl_der_oid_c2tnb239v2[DER_OID_SZ_c2tnb239v2];

/*
* c2tnb239v3  OBJECT IDENTIFIER  ::=  { c-TwoCurve 13 }
```

```
*/
#define DER_OID_V_c2tnb239v3 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x0D
#define DER_OID_SZ_c2tnb239v3 10
extern const unsigned char ossl_der_oid_c2tnb239v3[DER_OID_SZ_c2tnb239v3];

/*
* c2onb239v4  OBJECT IDENTIFIER  ::=  { c-TwoCurve 14 }
*/
#define DER_OID_V_c2onb239v4 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x0E
#define DER_OID_SZ_c2onb239v4 10
extern const unsigned char ossl_der_oid_c2onb239v4[DER_OID_SZ_c2onb239v4];

/*
* c2onb239v5  OBJECT IDENTIFIER  ::=  { c-TwoCurve 15 }
*/
#define DER_OID_V_c2onb239v5 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x0F
#define DER_OID_SZ_c2onb239v5 10
extern
 const unsigned char ossl_der_oid_c2onb239v5[DER_OID_SZ_c2onb239v5];

/*
* c2pnb272w1  OBJECT IDENTIFIER  ::=  { c-TwoCurve 16 }
*/
#define DER_OID_V_c2pnb272w1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x10
#define DER_OID_SZ_c2pnb272w1 10
extern const unsigned char ossl_der_oid_c2pnb272w1[DER_OID_SZ_c2pnb272w1];

/*
* c2pnb304w1  OBJECT IDENTIFIER  ::=  { c-TwoCurve 17 }
*/
#define DER_OID_V_c2pnb304w1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x11
#define DER_OID_SZ_c2pnb304w1 10
extern const unsigned char ossl_der_oid_c2pnb304w1[DER_OID_SZ_c2pnb304w1];

/*
* c2tnb359v1  OBJECT IDENTIFIER  ::=  { c-TwoCurve 18 }
*/
#define DER_OID_V_c2tnb359v1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x12
#define DER_OID_SZ_c2tnb359v1 10
extern const unsigned char ossl_der_oid_c2tnb359v1[DER_OID_SZ_c2tnb359v1];

/*
* c2pnb368w1  OBJECT IDENTIFIER  ::=  { c-TwoCurve 19 }
*/
#define DER_OID_V_c2pnb368w1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48,
 0xCE, 0x3D, 0x03, 0x00, 0x13
#define DER_OID_SZ_c2pnb368w1 10
extern const unsigned char ossl_der_oid_c2pnb368w1[DER_OID_SZ_c2pnb368w1];
```

```
/*
* c2tnb431r1  OBJECT IDENTIFIER  ::=  { c-TwoCurve 20 }
*/
#define DER_OID_V_c2tnb431r1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x00, 0x14
#define DER_OID_SZ_c2tnb431r1 10
extern const unsigned char ossl_der_oid_c2tnb431r1[DER_OID_SZ_c2tnb431r1];

/*
* prime192v1  OBJECT IDENTIFIER  ::=  { primeCurve  1 }
*/
#define DER_OID_V_prime192v1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x01, 0x01
#define DER_OID_SZ_prime192v1 10
extern const unsigned char ossl_der_oid_prime192v1[DER_OID_SZ_prime192v1];

/*
* prime192v2  OBJECT IDENTIFIER  ::=  { primeCurve  2 }
*/
#define DER_OID_V_prime192v2 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x01, 0x02
#define DER_OID_SZ_prime192v2 10
extern const unsigned char ossl_der_oid_prime192v2[DER_OID_SZ_prime192v2];

/*
* prime192v3  OBJECT IDENTIFIER  ::=  { primeCurve  3 }
*/
#define
 DER_OID_V_prime192v3 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x01, 0x03
#define DER_OID_SZ_prime192v3 10
extern const unsigned char ossl_der_oid_prime192v3[DER_OID_SZ_prime192v3];

/*
* prime239v1  OBJECT IDENTIFIER  ::=  { primeCurve  4 }
*/
#define DER_OID_V_prime239v1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x01, 0x04
#define DER_OID_SZ_prime239v1 10
extern const unsigned char ossl_der_oid_prime239v1[DER_OID_SZ_prime239v1];

/*
* prime239v2  OBJECT IDENTIFIER  ::=  { primeCurve  5 }
*/
#define DER_OID_V_prime239v2 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x01, 0x05
#define DER_OID_SZ_prime239v2 10
extern const unsigned char ossl_der_oid_prime239v2[DER_OID_SZ_prime239v2];

/*
* prime239v3  OBJECT IDENTIFIER  ::=  { primeCurve  6 }
*/
#define DER_OID_V_prime239v3 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x01, 0x06
```

```
#define DER_OID_SZ_prime239v3 10
extern const unsigned char ossl_der_oid_prime239v3[DER_OID_SZ_prime239v3];

/*
 * prime256v1  OBJECT IDENTIFIER  ::=  { primeCurve  7 }
*/
#define DER_OID_V_prime256v1 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x03, 0x01, 0x07
#define DER_OID_SZ_prime256v1 10
extern const unsigned char ossl_der_oid_prime256v1[DER_OID_SZ_prime256v1];

/*
* ecdsa-with-SHA224 OBJECT IDENTIFIER ::= { iso(1) member-body(2)
*      us(840) ansi-X9-62(10045) signatures(4) ecdsa-with-SHA2(3) 1 }
*/
#define DER_OID_V_ecdsa_with_SHA224 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x04, 0x03,
0x01
#define DER_OID_SZ_ecdsa_with_SHA224 10
extern const unsigned char ossl_der_oid_ecdsa_with_SHA224[DER_OID_SZ_ecdsa_with_SHA224];

/*
* ecdsa-with-SHA256 OBJECT IDENTIFIER ::= { iso(1) member-body(2)
*      us(840) ansi-X9-62(10045) signatures(4) ecdsa-with-SHA2(3) 2 }
*/
#define DER_OID_V_ecdsa_with_SHA256 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x04, 0x03,
0x02
#define DER_OID_SZ_ecdsa_with_SHA256 10
extern const unsigned char ossl_der_oid_ecdsa_with_SHA256[DER_OID_SZ_ecdsa_with_SHA256];

/*
 * ecdsa-with-SHA384 OBJECT IDENTIFIER ::= { iso(1) member-body(2)
*      us(840) ansi-X9-62(10045) signatures(4) ecdsa-with-SHA2(3) 3 }
*/
#define DER_OID_V_ecdsa_with_SHA384 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x04, 0x03,
0x03
#define DER_OID_SZ_ecdsa_with_SHA384 10
extern const unsigned char ossl_der_oid_ecdsa_with_SHA384[DER_OID_SZ_ecdsa_with_SHA384];

/*
* ecdsa-with-SHA512 OBJECT IDENTIFIER ::= { iso(1) member-body(2)
*      us(840) ansi-X9-62(10045) signatures(4) ecdsa-with-SHA2(3) 4 }
*/
#define DER_OID_V_ecdsa_with_SHA512 DER_P_OBJECT, 8, 0x2A, 0x86, 0x48, 0xCE, 0x3D, 0x04, 0x03,
0x04
#define DER_OID_SZ_ecdsa_with_SHA512 10
extern const unsigned char ossl_der_oid_ecdsa_with_SHA512[DER_OID_SZ_ecdsa_with_SHA512];

/*
* id-ecdsa-with-sha3-224 OBJECT IDENTIFIER ::= { sigAlgs 9 }
```

```
*/
#define DER_OID_V_id_ecdsa_with_sha3_224 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04,
0x03, 0x09
#define DER_OID_SZ_id_ecdsa_with_sha3_224 11
extern const
 unsigned char ossl_der_oid_id_ecdsa_with_sha3_224[DER_OID_SZ_id_ecdsa_with_sha3_224];

/*
* id-ecdsa-with-sha3-256 OBJECT IDENTIFIER ::= { sigAlgs 10 }
*/
#define DER_OID_V_id_ecdsa_with_sha3_256 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04,
0x03, 0x0A
#define DER_OID_SZ_id_ecdsa_with_sha3_256 11
extern const unsigned char ossl_der_oid_id_ecdsa_with_sha3_256[DER_OID_SZ_id_ecdsa_with_sha3_256];

/*
* id-ecdsa-with-sha3-384 OBJECT IDENTIFIER ::= { sigAlgs 11 }
*/
#define DER_OID_V_id_ecdsa_with_sha3_384 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04,
0x03, 0x0B
#define DER_OID_SZ_id_ecdsa_with_sha3_384 11
extern const unsigned char ossl_der_oid_id_ecdsa_with_sha3_384[DER_OID_SZ_id_ecdsa_with_sha3_384];

/*
* id-ecdsa-with-sha3-512 OBJECT IDENTIFIER ::= { sigAlgs 12 }
*/
#define DER_OID_V_id_ecdsa_with_sha3_512 DER_P_OBJECT, 9, 0x60, 0x86, 0x48, 0x01, 0x65, 0x03, 0x04,
0x03, 0x0C
#define DER_OID_SZ_id_ecdsa_with_sha3_512 11
extern const unsigned char ossl_der_oid_id_ecdsa_with_sha3_512[DER_OID_SZ_id_ecdsa_with_sha3_512];


/*
 Subject Public Key Info */
int ossl_DER_w_algorithmIdentifier_EC(WPACKET *pkt, int cont, EC_KEY *ec);
/* Signature */
int ossl_DER_w_algorithmIdentifier_ECDSA_with_MD(WPACKET *pkt, int cont,
                                EC_KEY *ec, int mdnid);
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/* Generated by Makefile from include/crypto/bn_conf.h.in */
/*

```
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*/

#ifndef OSSL_CRYPTO_BN_CONF_H
# define OSSL_CRYPTO_BN_CONF_H
# pragma once

/*
* The contents of this file are not used in the UEFI build, as
* both 32-bit and 64-bit builds are supported from a single run
* of the Configure script.
*/

/* Should we define BN_DIV2W here? */

/* Only one for the following should be defined */
#define SIXTY_FOUR_BIT_LONG
#undef SIXTY_FOUR_BIT
#undef THIRTY_TWO_BIT

#endif
```

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* via Makefile.in
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*/

#ifndef OPENSSL_CONFIGURATION_H
# define OPENSSL_CONFIGURATION_H
# pragma once

# ifdef  __cplusplus
extern "C" {
# endif

# ifdef OPENSSL_ALGORITHM_DEFINES
#  error OPENSSL_ALGORITHM_DEFINES no longer supported
# endif

/*
* OpenSSL was configured with the following options:
*/

# define OPENSSL_CONFIGURED_API 30000
# ifndef OPENSSL_RAND_SEED_OS
#  define OPENSSL_RAND_SEED_OS
# endif
# ifndef OPENSSL_THREADS
#  define OPENSSL_THREADS
# endif
# ifndef OPENSSL_NO_AFALGENG
#  define OPENSSL_NO_AFALGENG
# endif
```

```
# ifndef
 OPENSSL_NO_ASAN
#  define OPENSSL_NO_ASAN
# endif
# ifndef OPENSSL_NO_ASM
#  define OPENSSL_NO_ASM
# endif
# ifndef OPENSSL_NO_COMP
#  define OPENSSL_NO_COMP
# endif
# ifndef OPENSSL_NO_CRYPTO_MDEBUG
#  define OPENSSL_NO_CRYPTO_MDEBUG
# endif
# ifndef OPENSSL_NO_CRYPTO_MDEBUG_BACKTRACE
#  define OPENSSL_NO_CRYPTO_MDEBUG_BACKTRACE
# endif
# ifndef OPENSSL_NO_EC_NISTP_64_GCC_128
#  define OPENSSL_NO_EC_NISTP_64_GCC_128
# endif
# ifndef OPENSSL_NO_EGD
#  define OPENSSL_NO_EGD
# endif
# ifndef OPENSSL_NO_EXTERNAL_TESTS
#  define OPENSSL_NO_EXTERNAL_TESTS
# endif
# ifndef OPENSSL_NO_FUZZ_AFL
#  define OPENSSL_NO_FUZZ_AFL
# endif
# ifndef OPENSSL_NO_FUZZ_LIBFUZZER
#  define OPENSSL_NO_FUZZ_LIBFUZZER
# endif
# ifndef OPENSSL_NO_KTLS
#  define OPENSSL_NO_KTLS
# endif
# ifndef OPENSSL_NO_LOADERENG
#  define OPENSSL_NO_LOADERENG
# endif
# ifndef OPENSSL_NO_MD2
#  define OPENSSL_NO_MD2
# endif
# ifndef OPENSSL_NO_MSAN
#  define OPENSSL_NO_MSAN
# endif
# ifndef OPENSSL_NO_RC5
#  define OPENSSL_NO_RC5
#
 endif
# ifndef OPENSSL_NO_SCTP
```

```
#  define OPENSSL_NO_SCTP
# endif
# ifndef OPENSSL_NO_SSL3
#  define OPENSSL_NO_SSL3
# endif
# ifndef OPENSSL_NO_SSL3_METHOD
#  define OPENSSL_NO_SSL3_METHOD
# endif
# ifndef OPENSSL_NO_TRACE
#  define OPENSSL_NO_TRACE
# endif
# ifndef OPENSSL_NO_UBSAN
#  define OPENSSL_NO_UBSAN
# endif
# ifndef OPENSSL_NO_UNIT_TEST
#  define OPENSSL_NO_UNIT_TEST
# endif
# ifndef OPENSSL_NO_UPLINK
#  define OPENSSL_NO_UPLINK
# endif
# ifndef OPENSSL_NO_WEAK_SSL_CIPHERS
#  define OPENSSL_NO_WEAK_SSL_CIPHERS
# endif
# ifndef OPENSSL_NO_DYNAMIC_ENGINE
#  define OPENSSL_NO_DYNAMIC_ENGINE
# endif


/* Generate 80386 code? */
# undef I386_ONLY

/*
* The following are cipher-specific, but are part of the public API.
*/
# if !defined(OPENSSL_SYS_UEFI)
#  undef BN_LLONG
/* Only one for the following should be defined */
#  define SIXTY_FOUR_BIT_LONG
#  undef SIXTY_FOUR_BIT
#  undef THIRTY_TWO_BIT
# endif

# define RC4_INT unsigned int

# ifdef  __cplusplus
}
# endif
```

```
#endif
                    /* OPENSSL_CONFIGURATION_H */
/*
* WARNING: do not edit!
* Generated by Makefile from providers/common/include/prov/der_sm2.h.in
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*/

#include "crypto/ec.h"
#include "internal/der.h"

/* Well known OIDs precompiled */

/*
* sm2-with-SM3 OBJECT IDENTIFIER ::= { sm-scheme 501 }
*/
#define DER_OID_V_sm2_with_SM3 DER_P_OBJECT, 8, 0x2A, 0x81, 0x1C, 0xCF, 0x55, 0x01, 0x83, 0x75
#define DER_OID_SZ_sm2_with_SM3 10
extern const unsigned char ossl_der_oid_sm2_with_SM3[DER_OID_SZ_sm2_with_SM3];

/*
* curveSM2 OBJECT IDENTIFIER ::= { sm-scheme 301 }
*/
#define DER_OID_V_curveSM2 DER_P_OBJECT, 8, 0x2A, 0x81, 0x1C, 0xCF, 0x55, 0x01, 0x82, 0x2D
#define DER_OID_SZ_curveSM2 10
extern const unsigned char
 ossl_der_oid_curveSM2[DER_OID_SZ_curveSM2];


/* Subject Public Key Info */
int ossl_DER_w_algorithmIdentifier_SM2(WPACKET *pkt, int cont, EC_KEY *ec);
/* Signature */
int ossl_DER_w_algorithmIdentifier_SM2_with_MD(WPACKET *pkt, int cont,
                                EC_KEY *ec, int mdnid);
```

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*/

#include "function.h"

extern int asn1parse_main(int argc, char *argv[]);
extern int ca_main(int argc, char *argv[]);
extern int ciphers_main(int argc, char *argv[]);
extern int cmp_main(int argc, char *argv[]);
extern int cms_main(int argc, char *argv[]);
extern int crl_main(int argc, char *argv[]);
extern int crl2pkcs7_main(int argc, char *argv[]);
extern int dgst_main(int argc, char *argv[]);
extern int dhparam_main(int argc, char *argv[]);
extern int dsa_main(int argc, char *argv[]);
extern int dsaparam_main(int argc, char *argv[]);
extern int ec_main(int argc, char *argv[]);
extern int ecparam_main(int
 argc, char *argv[]);
extern int enc_main(int argc, char *argv[]);
extern int engine_main(int argc, char *argv[]);
extern int errstr_main(int argc, char *argv[]);
extern int fipsinstall_main(int argc, char *argv[]);
extern int gendsa_main(int argc, char *argv[]);
extern int genpkey_main(int argc, char *argv[]);
extern int genrsa_main(int argc, char *argv[]);
extern int help_main(int argc, char *argv[]);
extern int info_main(int argc, char *argv[]);
extern int kdf_main(int argc, char *argv[]);
extern int list_main(int argc, char *argv[]);
extern int mac_main(int argc, char *argv[]);
extern int nseq_main(int argc, char *argv[]);
extern int ocsp_main(int argc, char *argv[]);
extern int passwd_main(int argc, char *argv[]);
extern int pkcs12_main(int argc, char *argv[]);
extern int pkcs7_main(int argc, char *argv[]);
extern int pkcs8_main(int argc, char *argv[]);
extern int pkey_main(int argc, char *argv[]);
extern int pkeyparam_main(int argc, char *argv[]);
extern int pkeyutl_main(int
 argc, char *argv[]);
extern int prime_main(int argc, char *argv[]);
extern int rand_main(int argc, char *argv[]);
extern int rehash_main(int argc, char *argv[]);
```

```
extern int req_main(int argc, char *argv[]);
extern int rsa_main(int argc, char *argv[]);
extern int rsautl_main(int argc, char *argv[]);
extern int s_client_main(int argc, char *argv[]);
extern int s_server_main(int argc, char *argv[]);
extern int s_time_main(int argc, char *argv[]);
extern int sess_id_main(int argc, char *argv[]);
extern int smime_main(int argc, char *argv[]);
extern int speed_main(int argc, char *argv[]);
extern int spkac_main(int argc, char *argv[]);
extern int srp_main(int argc, char *argv[]);
extern int storeutl_main(int argc, char *argv[]);
extern int ts_main(int argc, char *argv[]);
extern int verify_main(int argc, char *argv[]);
extern int version_main(int argc, char *argv[]);
extern int x509_main(int argc, char *argv[]);

extern const OPTIONS asn1parse_options[];
extern const OPTIONS ca_options[];
extern
 const OPTIONS ciphers_options[];
extern const OPTIONS cmp_options[];
extern const OPTIONS cms_options[];
extern const OPTIONS crl_options[];
extern const OPTIONS crl2pkcs7_options[];
extern const OPTIONS dgst_options[];
extern const OPTIONS dhparam_options[];
extern const OPTIONS dsa_options[];
extern const OPTIONS dsaparam_options[];
extern const OPTIONS ec_options[];
extern const OPTIONS ecparam_options[];
extern const OPTIONS enc_options[];
extern const OPTIONS engine_options[];
extern const OPTIONS errstr_options[];
extern const OPTIONS fipsinstall_options[];
extern const OPTIONS gendsa_options[];
extern const OPTIONS genpkey_options[];
extern const OPTIONS genrsa_options[];
extern const OPTIONS help_options[];
extern const OPTIONS info_options[];
extern const OPTIONS kdf_options[];
extern const OPTIONS list_options[];
extern const OPTIONS mac_options[];
extern const OPTIONS nseq_options[];
extern const OPTIONS ocsp_options[];
extern const OPTIONS passwd_options[];
extern
```

```
 const OPTIONS pkcs12_options[];
extern const OPTIONS pkcs7_options[];
extern const OPTIONS pkcs8_options[];
extern const OPTIONS pkey_options[];
extern const OPTIONS pkeyparam_options[];
extern const OPTIONS pkeyutl_options[];
extern const OPTIONS prime_options[];
extern const OPTIONS rand_options[];
extern const OPTIONS rehash_options[];
extern const OPTIONS req_options[];
extern const OPTIONS rsa_options[];
extern const OPTIONS rsautl_options[];
extern const OPTIONS s_client_options[];
extern const OPTIONS s_server_options[];
extern const OPTIONS s_time_options[];
extern const OPTIONS sess_id_options[];
extern const OPTIONS smime_options[];
extern const OPTIONS speed_options[];
extern const OPTIONS spkac_options[];
extern const OPTIONS srp_options[];
extern const OPTIONS storeutl_options[];
extern const OPTIONS ts_options[];
extern const OPTIONS verify_options[];
extern const OPTIONS version_options[];
extern const OPTIONS x509_options[];

extern FUNCTION functions[];
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/bio.h.in
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*/


#ifndef OPENSSL_BIO_H
# define OPENSSL_BIO_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_BIO_H
# endif
```

```
# include <openssl/e_os2.h>

# ifndef OPENSSL_NO_STDIO
#  include <stdio.h>
# endif
# include <stdarg.h>

# include <openssl/crypto.h>
# include <openssl/bioerr.h>
# include <openssl/core.h>

#ifdef  __cplusplus
extern "C" {
#endif

/* There are the classes of BIOs */
# define BIO_TYPE_DESCRIPTOR     0x0100 /* socket, fd, connect or accept */
# define BIO_TYPE_FILTER         0x0200
# define BIO_TYPE_SOURCE_SINK    0x0400

/*
 These are the 'types' of BIOs */
# define BIO_TYPE_NONE           0
# define BIO_TYPE_MEM            ( 1|BIO_TYPE_SOURCE_SINK)
# define BIO_TYPE_FILE           ( 2|BIO_TYPE_SOURCE_SINK)

# define BIO_TYPE_FD             ( 4|BIO_TYPE_SOURCE_SINK|BIO_TYPE_DESCRIPTOR)
# define BIO_TYPE_SOCKET         ( 5|BIO_TYPE_SOURCE_SINK|BIO_TYPE_DESCRIPTOR)
# define BIO_TYPE_NULL           ( 6|BIO_TYPE_SOURCE_SINK)
# define BIO_TYPE_SSL            ( 7|BIO_TYPE_FILTER)
# define BIO_TYPE_MD             ( 8|BIO_TYPE_FILTER)
# define BIO_TYPE_BUFFER         ( 9|BIO_TYPE_FILTER)
# define BIO_TYPE_CIPHER         (10|BIO_TYPE_FILTER)
# define BIO_TYPE_BASE64         (11|BIO_TYPE_FILTER)
# define BIO_TYPE_CONNECT        (12|BIO_TYPE_SOURCE_SINK|BIO_TYPE_DESCRIPTOR)
# define BIO_TYPE_ACCEPT         (13|BIO_TYPE_SOURCE_SINK|BIO_TYPE_DESCRIPTOR)

# define BIO_TYPE_NBIO_TEST      (16|BIO_TYPE_FILTER)/* server proxy BIO */
# define BIO_TYPE_NULL_FILTER    (17|BIO_TYPE_FILTER)
# define BIO_TYPE_BIO
    (19|BIO_TYPE_SOURCE_SINK)/* half a BIO pair */
# define BIO_TYPE_LINEBUFFER     (20|BIO_TYPE_FILTER)
# define BIO_TYPE_DGRAM          (21|BIO_TYPE_SOURCE_SINK|BIO_TYPE_DESCRIPTOR)
# define BIO_TYPE_ASN1           (22|BIO_TYPE_FILTER)
# define BIO_TYPE_COMP           (23|BIO_TYPE_FILTER)
# ifndef OPENSSL_NO_SCTP
#  define BIO_TYPE_DGRAM_SCTP    (24|BIO_TYPE_SOURCE_SINK|BIO_TYPE_DESCRIPTOR)
```

```
# endif
# define BIO_TYPE_CORE_TO_PROV   (25|BIO_TYPE_SOURCE_SINK)

#define BIO_TYPE_START          128

/*
* BIO_FILENAME_READ|BIO_CLOSE to open or close on free.
* BIO_set_fp(in,stdin,BIO_NOCLOSE);
*/
# define BIO_NOCLOSE            0x00
# define BIO_CLOSE              0x01

/*
* These are used in the following macros and are passed to BIO_ctrl()
*/
# define BIO_CTRL_RESET         1/* opt - rewind/zero etc */
# define BIO_CTRL_EOF           2/* opt - are we at the eof */
# define BIO_CTRL_INFO          3/* opt - extra tit-bits */
# define BIO_CTRL_SET           4/* man - set the 'IO'
 type */
# define BIO_CTRL_GET           5/* man - get the 'IO' type */
# define BIO_CTRL_PUSH          6/* opt - internal, used to signify change */
# define BIO_CTRL_POP           7/* opt - internal, used to signify change */
# define BIO_CTRL_GET_CLOSE     8/* man - set the 'close' on free */
# define BIO_CTRL_SET_CLOSE     9/* man - set the 'close' on free */
# define BIO_CTRL_PENDING       10/* opt - is their more data buffered */
# define BIO_CTRL_FLUSH         11/* opt - 'flush' buffered output */
# define BIO_CTRL_DUP           12/* man - extra stuff for 'duped' BIO */
# define BIO_CTRL_WPENDING      13/* opt - number of bytes still to write */
# define BIO_CTRL_SET_CALLBACK   14/* opt - set callback function */
# define BIO_CTRL_GET_CALLBACK   15/* opt - set callback function */

# define BIO_CTRL_PEEK          29/* BIO_f_buffer special */
# define BIO_CTRL_SET_FILENAME   30/* BIO_s_file special */

/* dgram BIO stuff */
# define BIO_CTRL_DGRAM_CONNECT       31/* BIO
 dgram special */
# define BIO_CTRL_DGRAM_SET_CONNECTED 32/* allow for an externally connected
                                 * socket to be passed in */
# define BIO_CTRL_DGRAM_SET_RECV_TIMEOUT 33/* setsockopt, essentially */
# define BIO_CTRL_DGRAM_GET_RECV_TIMEOUT 34/* getsockopt, essentially */
# define BIO_CTRL_DGRAM_SET_SEND_TIMEOUT 35/* setsockopt, essentially */
# define BIO_CTRL_DGRAM_GET_SEND_TIMEOUT 36/* getsockopt, essentially */

# define BIO_CTRL_DGRAM_GET_RECV_TIMER_EXP 37/* flag whether the last */
# define BIO_CTRL_DGRAM_GET_SEND_TIMER_EXP 38/* I/O operation timed out */
```

```
/* #ifdef IP_MTU_DISCOVER */
# define BIO_CTRL_DGRAM_MTU_DISCOVER       39/* set DF bit on egress packets */
/* #endif */

# define BIO_CTRL_DGRAM_QUERY_MTU         40/* as kernel for current MTU */
# define BIO_CTRL_DGRAM_GET_FALLBACK_MTU   47
# define BIO_CTRL_DGRAM_GET_MTU           41/* get cached value for MTU */
# define BIO_CTRL_DGRAM_SET_MTU           42/* set cached value for MTU.
                                           * want to use this if asking
                                           * the kernel fails */

# define BIO_CTRL_DGRAM_MTU_EXCEEDED       43/* check whether the MTU was
                                           * exceed in the previous write
                                           * operation */

# define BIO_CTRL_DGRAM_GET_PEER           46
# define BIO_CTRL_DGRAM_SET_PEER           44/* Destination for the data */

# define BIO_CTRL_DGRAM_SET_NEXT_TIMEOUT   45/* Next DTLS handshake timeout
                                           * to adjust socket timeouts */
# define BIO_CTRL_DGRAM_SET_DONT_FRAG      48

# define BIO_CTRL_DGRAM_GET_MTU_OVERHEAD   49

/* Deliberately outside of OPENSSL_NO_SCTP - used in bss_dgram.c */
#  define BIO_CTRL_DGRAM_SCTP_SET_IN_HANDSHAKE    50
# ifndef OPENSSL_NO_SCTP
/* SCTP stuff */
#  define BIO_CTRL_DGRAM_SCTP_ADD_AUTH_KEY              51
#  define BIO_CTRL_DGRAM_SCTP_NEXT_AUTH_KEY
        52
#  define BIO_CTRL_DGRAM_SCTP_AUTH_CCS_RCVD             53
#  define BIO_CTRL_DGRAM_SCTP_GET_SNDINFO        60
#  define BIO_CTRL_DGRAM_SCTP_SET_SNDINFO        61
#  define BIO_CTRL_DGRAM_SCTP_GET_RCVINFO        62
#  define BIO_CTRL_DGRAM_SCTP_SET_RCVINFO        63
#  define BIO_CTRL_DGRAM_SCTP_GET_PRINFO                 64
#  define BIO_CTRL_DGRAM_SCTP_SET_PRINFO                 65
#  define BIO_CTRL_DGRAM_SCTP_SAVE_SHUTDOWN              70
# endif

# define BIO_CTRL_DGRAM_SET_PEEK_MODE      71

/*
* internal BIO:
* # define BIO_CTRL_SET_KTLS_SEND               72
* # define BIO_CTRL_SET_KTLS_SEND_CTRL_MSG       74
* # define BIO_CTRL_CLEAR_KTLS_CTRL_MSG          75
```

```
*/

# define BIO_CTRL_GET_KTLS_SEND                73
# define BIO_CTRL_GET_KTLS_RECV                76

# define BIO_CTRL_DGRAM_SCTP_WAIT_FOR_DRY       77
# define BIO_CTRL_DGRAM_SCTP_MSG_WAITING        78

/* BIO_f_prefix controls */
# define BIO_CTRL_SET_PREFIX                    79
# define
 BIO_CTRL_SET_INDENT                    80
# define BIO_CTRL_GET_INDENT                    81

# ifndef OPENSSL_NO_KTLS
#  define BIO_get_ktls_send(b)        \
   (BIO_ctrl(b, BIO_CTRL_GET_KTLS_SEND, 0, NULL) > 0)
#  define BIO_get_ktls_recv(b)        \
   (BIO_ctrl(b, BIO_CTRL_GET_KTLS_RECV, 0, NULL) > 0)
# else
#  define BIO_get_ktls_send(b)  (0)
#  define BIO_get_ktls_recv(b)  (0)
# endif

/* modifiers */
# define BIO_FP_READ            0x02
# define BIO_FP_WRITE           0x04
# define BIO_FP_APPEND          0x08
# define BIO_FP_TEXT            0x10

# define BIO_FLAGS_READ         0x01
# define BIO_FLAGS_WRITE        0x02
# define BIO_FLAGS_IO_SPECIAL    0x04
# define BIO_FLAGS_RWS (BIO_FLAGS_READ|BIO_FLAGS_WRITE|BIO_FLAGS_IO_SPECIAL)
# define BIO_FLAGS_SHOULD_RETRY  0x08
# ifndef OPENSSL_NO_DEPRECATED_3_0
/* This #define was replaced by an internal constant and should not be used. */
#  define BIO_FLAGS_UPLINK       0
# endif

# define BIO_FLAGS_BASE64_NO_NL  0x100

/*
 * This is used with memory BIOs:
* BIO_FLAGS_MEM_RDONLY means we shouldn't free up or change the data in any way;
* BIO_FLAGS_NONCLEAR_RST means we shouldn't clear data on reset.
*/
# define BIO_FLAGS_MEM_RDONLY    0x200
```

```
# define BIO_FLAGS_NONCLEAR_RST  0x400
# define BIO_FLAGS_IN_EOF        0x800

/* the BIO FLAGS values 0x1000 to 0x4000 are reserved for internal KTLS flags */

typedef union bio_addr_st BIO_ADDR;
typedef struct bio_addrinfo_st BIO_ADDRINFO;

int BIO_get_new_index(void);
void BIO_set_flags(BIO *b, int flags);
int BIO_test_flags(const BIO *b, int flags);
void BIO_clear_flags(BIO *b, int flags);

# define BIO_get_flags(b) BIO_test_flags(b, ~(0x0))
# define BIO_set_retry_special(b) \
            BIO_set_flags(b, (BIO_FLAGS_IO_SPECIAL|BIO_FLAGS_SHOULD_RETRY))
# define BIO_set_retry_read(b) \
            BIO_set_flags(b, (BIO_FLAGS_READ|BIO_FLAGS_SHOULD_RETRY))
# define BIO_set_retry_write(b) \
            BIO_set_flags(b, (BIO_FLAGS_WRITE|BIO_FLAGS_SHOULD_RETRY))

/*
 These are normally used internally in BIOs */
# define BIO_clear_retry_flags(b) \
            BIO_clear_flags(b, (BIO_FLAGS_RWS|BIO_FLAGS_SHOULD_RETRY))
# define BIO_get_retry_flags(b) \
            BIO_test_flags(b, (BIO_FLAGS_RWS|BIO_FLAGS_SHOULD_RETRY))

/* These should be used by the application to tell why we should retry */
# define BIO_should_read(a)             BIO_test_flags(a, BIO_FLAGS_READ)
# define BIO_should_write(a)            BIO_test_flags(a, BIO_FLAGS_WRITE)
# define BIO_should_io_special(a)       BIO_test_flags(a, BIO_FLAGS_IO_SPECIAL)
# define BIO_retry_type(a)              BIO_test_flags(a, BIO_FLAGS_RWS)
# define BIO_should_retry(a)            BIO_test_flags(a, BIO_FLAGS_SHOULD_RETRY)

/*
* The next three are used in conjunction with the BIO_should_io_special()
* condition.  After this returns true, BIO *BIO_get_retry_BIO(BIO *bio, int
* *reason); will walk the BIO stack and return the 'reason' for the special
* and the offending
 BIO. Given a BIO, BIO_get_retry_reason(bio) will return
* the code.
*/
/*
* Returned from the SSL bio when the certificate retrieval code had an error
*/
# define BIO_RR_SSL_X509_LOOKUP         0x01
/* Returned from the connect BIO when a connect would have blocked */
```

```
# define BIO_RR_CONNECT                  0x02
/* Returned from the accept BIO when an accept would have blocked */
# define BIO_RR_ACCEPT                   0x03

/* These are passed by the BIO callback */
# define BIO_CB_FREE     0x01
# define BIO_CB_READ     0x02
# define BIO_CB_WRITE    0x03
# define BIO_CB_PUTS     0x04
# define BIO_CB_GETS     0x05
# define BIO_CB_CTRL     0x06

/*
* The callback is called before and after the underling operation, The
* BIO_CB_RETURN flag indicates if it is after the call
*/
# define BIO_CB_RETURN   0x80
# define BIO_CB_return(a) ((a)|BIO_CB_RETURN)
# define BIO_cb_pre(a)   (!((a)&BIO_CB_RETURN))
# define BIO_cb_post(a)  ((a)&BIO_CB_RETURN)

# ifndef OPENSSL_NO_DEPRECATED_3_0
typedef
 long (*BIO_callback_fn)(BIO *b, int oper, const char *argp, int argi,
                         long argl, long ret);
OSSL_DEPRECATEDIN_3_0 BIO_callback_fn BIO_get_callback(const BIO *b);
OSSL_DEPRECATEDIN_3_0 void BIO_set_callback(BIO *b, BIO_callback_fn callback);
OSSL_DEPRECATEDIN_3_0 long BIO_debug_callback(BIO *bio, int cmd,
                                    const char *argp, int argi,
                                    long argl, long ret);
# endif

typedef long (*BIO_callback_fn_ex)(BIO *b, int oper, const char *argp,
                            size_t len, int argi,
                            long argl, int ret, size_t *processed);
BIO_callback_fn_ex BIO_get_callback_ex(const BIO *b);
void BIO_set_callback_ex(BIO *b, BIO_callback_fn_ex callback);
long BIO_debug_callback_ex(BIO *bio, int oper, const char *argp, size_t len,
                      int argi, long argl, int ret, size_t *processed);

char *BIO_get_callback_arg(const
 BIO *b);
void BIO_set_callback_arg(BIO *b, char *arg);

typedef struct bio_method_st BIO_METHOD;

const char *BIO_method_name(const BIO *b);
int BIO_method_type(const BIO *b);
```

```
typedef int BIO_info_cb(BIO *, int, int);
typedef BIO_info_cb bio_info_cb;  /* backward compatibility */

SKM_DEFINE_STACK_OF_INTERNAL(BIO, BIO, BIO)
#define sk_BIO_num(sk) OPENSSL_sk_num(ossl_check_const_BIO_sk_type(sk))
#define sk_BIO_value(sk, idx) ((BIO *)OPENSSL_sk_value(ossl_check_const_BIO_sk_type(sk), (idx)))
#define sk_BIO_new(cmp) ((STACK_OF(BIO) *)OPENSSL_sk_new(ossl_check_BIO_compfunc_type(cmp)))
#define sk_BIO_new_null() ((STACK_OF(BIO) *)OPENSSL_sk_new_null())
#define sk_BIO_new_reserve(cmp, n) ((STACK_OF(BIO)
*)OPENSSL_sk_new_reserve(ossl_check_BIO_compfunc_type(cmp), (n)))
#define sk_BIO_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_BIO_sk_type(sk), (n))
#define sk_BIO_free(sk) OPENSSL_sk_free(ossl_check_BIO_sk_type(sk))
#define sk_BIO_zero(sk) OPENSSL_sk_zero(ossl_check_BIO_sk_type(sk))
#define
 sk_BIO_delete(sk, i) ((BIO *)OPENSSL_sk_delete(ossl_check_BIO_sk_type(sk), (i)))
#define sk_BIO_delete_ptr(sk, ptr) ((BIO *)OPENSSL_sk_delete_ptr(ossl_check_BIO_sk_type(sk),
ossl_check_BIO_type(ptr)))
#define sk_BIO_push(sk, ptr) OPENSSL_sk_push(ossl_check_BIO_sk_type(sk), ossl_check_BIO_type(ptr))
#define sk_BIO_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_BIO_sk_type(sk), ossl_check_BIO_type(ptr))
#define sk_BIO_pop(sk) ((BIO *)OPENSSL_sk_pop(ossl_check_BIO_sk_type(sk)))
#define sk_BIO_shift(sk) ((BIO *)OPENSSL_sk_shift(ossl_check_BIO_sk_type(sk)))
#define sk_BIO_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_BIO_sk_type(sk),ossl_check_BIO_freefunc_type(freefunc))
#define sk_BIO_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_BIO_sk_type(sk), ossl_check_BIO_type(ptr),
(idx))
#define sk_BIO_set(sk, idx, ptr) ((BIO *)OPENSSL_sk_set(ossl_check_BIO_sk_type(sk), (idx),
ossl_check_BIO_type(ptr)))
#define sk_BIO_find(sk, ptr) OPENSSL_sk_find(ossl_check_BIO_sk_type(sk), ossl_check_BIO_type(ptr))
#define
 sk_BIO_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_BIO_sk_type(sk), ossl_check_BIO_type(ptr))
#define sk_BIO_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_BIO_sk_type(sk),
ossl_check_BIO_type(ptr), pnum)
#define sk_BIO_sort(sk) OPENSSL_sk_sort(ossl_check_BIO_sk_type(sk))
#define sk_BIO_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_BIO_sk_type(sk))
#define sk_BIO_dup(sk) ((STACK_OF(BIO) *)OPENSSL_sk_dup(ossl_check_const_BIO_sk_type(sk)))
#define sk_BIO_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(BIO)
*)OPENSSL_sk_deep_copy(ossl_check_const_BIO_sk_type(sk), ossl_check_BIO_copyfunc_type(copyfunc),
ossl_check_BIO_freefunc_type(freefunc)))
#define sk_BIO_set_cmp_func(sk, cmp)
((sk_BIO_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_BIO_sk_type(sk),
ossl_check_BIO_compfunc_type(cmp)))



/* Prefix and suffix callback in ASN1 BIO */
typedef int asn1_ps_func (BIO *b, unsigned char **pbuf, int *plen,
                          void *parg);
```

```
typedef void
 (*BIO_dgram_sctp_notification_handler_fn) (BIO *b,
                                            void *context,
                                            void *buf);
# ifndef OPENSSL_NO_SCTP
/* SCTP parameter structs */
struct bio_dgram_sctp_sndinfo {
   uint16_t snd_sid;
   uint16_t snd_flags;
   uint32_t snd_ppid;
   uint32_t snd_context;
};

struct bio_dgram_sctp_rcvinfo {
   uint16_t rcv_sid;
   uint16_t rcv_ssn;
   uint16_t rcv_flags;
   uint32_t rcv_ppid;
   uint32_t rcv_tsn;
   uint32_t rcv_cumtsn;
   uint32_t rcv_context;
};

struct bio_dgram_sctp_prinfo {
   uint16_t pr_policy;
   uint32_t pr_value;
};
# endif

/*
* #define BIO_CONN_get_param_hostname BIO_ctrl
*/

# define BIO_C_SET_CONNECT                       100
# define BIO_C_DO_STATE_MACHINE                  101
# define BIO_C_SET_NBIO                          102
/* # define BIO_C_SET_PROXY_PARAM                 103 */
# define BIO_C_SET_FD                            104
# define
 BIO_C_GET_FD                                    105
# define BIO_C_SET_FILE_PTR                      106
# define BIO_C_GET_FILE_PTR                      107
# define BIO_C_SET_FILENAME                      108
# define BIO_C_SET_SSL                           109
# define BIO_C_GET_SSL                           110
# define BIO_C_SET_MD                            111
# define BIO_C_GET_MD                            112
```

```
# define BIO_C_GET_CIPHER_STATUS          113
# define BIO_C_SET_BUF_MEM                114
# define BIO_C_GET_BUF_MEM_PTR            115
# define BIO_C_GET_BUFF_NUM_LINES         116
# define BIO_C_SET_BUFF_SIZE              117
# define BIO_C_SET_ACCEPT                 118
# define BIO_C_SSL_MODE                   119
# define BIO_C_GET_MD_CTX                 120
/* # define BIO_C_GET_PROXY_PARAM          121 */
# define BIO_C_SET_BUFF_READ_DATA         122/* data to read first */
# define BIO_C_GET_CONNECT
                 123
# define BIO_C_GET_ACCEPT                 124
# define BIO_C_SET_SSL_RENEGOTIATE_BYTES  125
# define BIO_C_GET_SSL_NUM_RENEGOTIATES   126
# define BIO_C_SET_SSL_RENEGOTIATE_TIMEOUT 127
# define BIO_C_FILE_SEEK                  128
# define BIO_C_GET_CIPHER_CTX             129
# define BIO_C_SET_BUF_MEM_EOF_RETURN     130/* return end of input
                                          * value */
# define BIO_C_SET_BIND_MODE              131
# define BIO_C_GET_BIND_MODE              132
# define BIO_C_FILE_TELL                  133
# define BIO_C_GET_SOCKS                  134
# define BIO_C_SET_SOCKS                  135

# define BIO_C_SET_WRITE_BUF_SIZE         136/* for BIO_s_bio */
# define BIO_C_GET_WRITE_BUF_SIZE         137
# define BIO_C_MAKE_BIO_PAIR              138
# define BIO_C_DESTROY_BIO_PAIR           139
# define BIO_C_GET_WRITE_GUARANTEE
          140
# define BIO_C_GET_READ_REQUEST           141
# define BIO_C_SHUTDOWN_WR                142
# define BIO_C_NREAD0                     143
# define BIO_C_NREAD                      144
# define BIO_C_NWRITE0                    145
# define BIO_C_NWRITE                     146
# define BIO_C_RESET_READ_REQUEST         147
# define BIO_C_SET_MD_CTX                 148

# define BIO_C_SET_PREFIX                 149
# define BIO_C_GET_PREFIX                 150
# define BIO_C_SET_SUFFIX                 151
# define BIO_C_GET_SUFFIX                 152

# define BIO_C_SET_EX_ARG                 153
# define BIO_C_GET_EX_ARG                 154
```

```
# define BIO_C_SET_CONNECT_MODE                155

# define BIO_set_app_data(s,arg)         BIO_set_ex_data(s,0,arg)
# define BIO_get_app_data(s)             BIO_get_ex_data(s,0)

# define BIO_set_nbio(b,n)
        BIO_ctrl(b,BIO_C_SET_NBIO,(n),NULL)

# ifndef OPENSSL_NO_SOCK
/* IP families we support, for BIO_s_connect() and BIO_s_accept() */
/* Note: the underlying operating system may not support some of them */
#  define BIO_FAMILY_IPV4                      4
#  define BIO_FAMILY_IPV6                      6
#  define BIO_FAMILY_IPANY                       256

/* BIO_s_connect() */
#  define BIO_set_conn_hostname(b,name) BIO_ctrl(b,BIO_C_SET_CONNECT,0, \
                                    (char *)(name))
#  define BIO_set_conn_port(b,port)     BIO_ctrl(b,BIO_C_SET_CONNECT,1, \
                                    (char *)(port))
#  define BIO_set_conn_address(b,addr)  BIO_ctrl(b,BIO_C_SET_CONNECT,2, \
                                    (char *)(addr))
#  define BIO_set_conn_ip_family(b,f)   BIO_int_ctrl(b,BIO_C_SET_CONNECT,3,f)
#  define BIO_get_conn_hostname(b)      ((const char *)BIO_ptr_ctrl(b,BIO_C_GET_CONNECT,0))
#  define BIO_get_conn_port(b)
         ((const char *)BIO_ptr_ctrl(b,BIO_C_GET_CONNECT,1))
#  define BIO_get_conn_address(b)       ((const BIO_ADDR *)BIO_ptr_ctrl(b,BIO_C_GET_CONNECT,2))
#  define BIO_get_conn_ip_family(b)     BIO_ctrl(b,BIO_C_GET_CONNECT,3,NULL)
#  define BIO_set_conn_mode(b,n)        BIO_ctrl(b,BIO_C_SET_CONNECT_MODE,(n),NULL)

/* BIO_s_accept() */
#  define BIO_set_accept_name(b,name)   BIO_ctrl(b,BIO_C_SET_ACCEPT,0, \
                                    (char *)(name))
#  define BIO_set_accept_port(b,port)   BIO_ctrl(b,BIO_C_SET_ACCEPT,1, \
                                    (char *)(port))
#  define BIO_get_accept_name(b)        ((const char *)BIO_ptr_ctrl(b,BIO_C_GET_ACCEPT,0))
#  define BIO_get_accept_port(b)        ((const char *)BIO_ptr_ctrl(b,BIO_C_GET_ACCEPT,1))
#  define BIO_get_peer_name(b)          ((const char *)BIO_ptr_ctrl(b,BIO_C_GET_ACCEPT,2))
#  define BIO_get_peer_port(b)          ((const char *)BIO_ptr_ctrl(b,BIO_C_GET_ACCEPT,3))
/* #define
 BIO_set_nbio(b,n)    BIO_ctrl(b,BIO_C_SET_NBIO,(n),NULL) */
#  define BIO_set_nbio_accept(b,n)      BIO_ctrl(b,BIO_C_SET_ACCEPT,2,(n)?(void *)"a":NULL)
#  define BIO_set_accept_bios(b,bio)    BIO_ctrl(b,BIO_C_SET_ACCEPT,3, \
                                    (char *)(bio))
#  define BIO_set_accept_ip_family(b,f) BIO_int_ctrl(b,BIO_C_SET_ACCEPT,4,f)
#  define BIO_get_accept_ip_family(b)   BIO_ctrl(b,BIO_C_GET_ACCEPT,4,NULL)
```

```
/* Aliases kept for backward compatibility */
#  define BIO_BIND_NORMAL                 0
#  define BIO_BIND_REUSEADDR              BIO_SOCK_REUSEADDR
#  define BIO_BIND_REUSEADDR_IF_UNUSED    BIO_SOCK_REUSEADDR
#  define BIO_set_bind_mode(b,mode) BIO_ctrl(b,BIO_C_SET_BIND_MODE,mode,NULL)
#  define BIO_get_bind_mode(b)    BIO_ctrl(b,BIO_C_GET_BIND_MODE,0,NULL)
# endif /* OPENSSL_NO_SOCK */

# define BIO_do_connect(b)       BIO_do_handshake(b)
# define BIO_do_accept(b)        BIO_do_handshake(b)

# define BIO_do_handshake(b)     BIO_ctrl(b,BIO_C_DO_STATE_MACHINE,0,NULL)

/*
 BIO_s_datagram(), BIO_s_fd(), BIO_s_socket(), BIO_s_accept() and BIO_s_connect() */
# define BIO_set_fd(b,fd,c)      BIO_int_ctrl(b,BIO_C_SET_FD,c,fd)
# define BIO_get_fd(b,c)         BIO_ctrl(b,BIO_C_GET_FD,0,(char *)(c))

/* BIO_s_file() */
# define BIO_set_fp(b,fp,c)      BIO_ctrl(b,BIO_C_SET_FILE_PTR,c,(char *)(fp))
# define BIO_get_fp(b,fpp)       BIO_ctrl(b,BIO_C_GET_FILE_PTR,0,(char *)(fpp))

/* BIO_s_fd() and BIO_s_file() */
# define BIO_seek(b,ofs) (int)BIO_ctrl(b,BIO_C_FILE_SEEK,ofs,NULL)
# define BIO_tell(b)     (int)BIO_ctrl(b,BIO_C_FILE_TELL,0,NULL)

/*
* name is cast to lose const, but might be better to route through a
* function so we can do it safely
*/
# ifdef CONST_STRICT
/*
* If you are wondering why this isn't defined, its because CONST_STRICT is
* purely a compile-time kludge to allow const to be checked.
*/
int BIO_read_filename(BIO *b, const char *name);
# else
#  define BIO_read_filename(b,name) (int)BIO_ctrl(b,BIO_C_SET_FILENAME,
 \
            BIO_CLOSE|BIO_FP_READ,(char *)(name))
# endif
# define BIO_write_filename(b,name) (int)BIO_ctrl(b,BIO_C_SET_FILENAME, \
            BIO_CLOSE|BIO_FP_WRITE,name)
# define BIO_append_filename(b,name) (int)BIO_ctrl(b,BIO_C_SET_FILENAME, \
            BIO_CLOSE|BIO_FP_APPEND,name)
# define BIO_rw_filename(b,name) (int)BIO_ctrl(b,BIO_C_SET_FILENAME, \
            BIO_CLOSE|BIO_FP_READ|BIO_FP_WRITE,name)
```

```
/*
* WARNING WARNING, this ups the reference count on the read bio of the SSL
* structure.  This is because the ssl read BIO is now pointed to by the
* next_bio field in the bio.  So when you free the BIO, make sure you are
* doing a BIO_free_all() to catch the underlying BIO.
*/
# define BIO_set_ssl(b,ssl,c)    BIO_ctrl(b,BIO_C_SET_SSL,c,(char *)(ssl))
# define BIO_get_ssl(b,sslp)     BIO_ctrl(b,BIO_C_GET_SSL,0,(char *)(sslp))
# define BIO_set_ssl_mode(b,client)      BIO_ctrl(b,BIO_C_SSL_MODE,client,NULL)
# define BIO_set_ssl_renegotiate_bytes(b,num) \

      BIO_ctrl(b,BIO_C_SET_SSL_RENEGOTIATE_BYTES,num,NULL)
# define BIO_get_num_renegotiates(b) \
      BIO_ctrl(b,BIO_C_GET_SSL_NUM_RENEGOTIATES,0,NULL)
# define BIO_set_ssl_renegotiate_timeout(b,seconds) \
      BIO_ctrl(b,BIO_C_SET_SSL_RENEGOTIATE_TIMEOUT,seconds,NULL)

/* defined in evp.h */
/* #define BIO_set_md(b,md)     BIO_ctrl(b,BIO_C_SET_MD,1,(char *)(md)) */

# define BIO_get_mem_data(b,pp)  BIO_ctrl(b,BIO_CTRL_INFO,0,(char *)(pp))
# define BIO_set_mem_buf(b,bm,c) BIO_ctrl(b,BIO_C_SET_BUF_MEM,c,(char *)(bm))
# define BIO_get_mem_ptr(b,pp)   BIO_ctrl(b,BIO_C_GET_BUF_MEM_PTR,0, \
                                 (char *)(pp))
# define BIO_set_mem_eof_return(b,v) \
                         BIO_ctrl(b,BIO_C_SET_BUF_MEM_EOF_RETURN,v,NULL)

/* For the BIO_f_buffer() type */
# define BIO_get_buffer_num_lines(b)     BIO_ctrl(b,BIO_C_GET_BUFF_NUM_LINES,0,NULL)
# define BIO_set_buffer_size(b,size)     BIO_ctrl(b,BIO_C_SET_BUFF_SIZE,size,NULL)
# define BIO_set_read_buffer_size(b,size)
 BIO_int_ctrl(b,BIO_C_SET_BUFF_SIZE,size,0)
# define BIO_set_write_buffer_size(b,size) BIO_int_ctrl(b,BIO_C_SET_BUFF_SIZE,size,1)
# define BIO_set_buffer_read_data(b,buf,num) BIO_ctrl(b,BIO_C_SET_BUFF_READ_DATA,num,buf)

/* Don't use the next one unless you know what you are doing :-) */
# define BIO_dup_state(b,ret)    BIO_ctrl(b,BIO_CTRL_DUP,0,(char *)(ret))

# define BIO_reset(b)            (int)BIO_ctrl(b,BIO_CTRL_RESET,0,NULL)
# define BIO_eof(b)              (int)BIO_ctrl(b,BIO_CTRL_EOF,0,NULL)
# define BIO_set_close(b,c)      (int)BIO_ctrl(b,BIO_CTRL_SET_CLOSE,(c),NULL)
# define BIO_get_close(b)        (int)BIO_ctrl(b,BIO_CTRL_GET_CLOSE,0,NULL)
# define BIO_pending(b)          (int)BIO_ctrl(b,BIO_CTRL_PENDING,0,NULL)
# define BIO_wpending(b)         (int)BIO_ctrl(b,BIO_CTRL_WPENDING,0,NULL)
/* ...pending macros have inappropriate return type */
size_t BIO_ctrl_pending(BIO *b);
size_t BIO_ctrl_wpending(BIO *b);
# define BIO_flush(b)            (int)BIO_ctrl(b,BIO_CTRL_FLUSH,0,NULL)
```

```
#
 define BIO_get_info_callback(b,cbp) (int)BIO_ctrl(b,BIO_CTRL_GET_CALLBACK,0, \
                                        cbp)
# define BIO_set_info_callback(b,cb) (int)BIO_callback_ctrl(b,BIO_CTRL_SET_CALLBACK,cb)

/* For the BIO_f_buffer() type */
# define BIO_buffer_get_num_lines(b) BIO_ctrl(b,BIO_CTRL_GET,0,NULL)
# define BIO_buffer_peek(b,s,l) BIO_ctrl(b,BIO_CTRL_PEEK,(l),(s))

/* For BIO_s_bio() */
# define BIO_set_write_buf_size(b,size) (int)BIO_ctrl(b,BIO_C_SET_WRITE_BUF_SIZE,size,NULL)
# define BIO_get_write_buf_size(b,size) (size_t)BIO_ctrl(b,BIO_C_GET_WRITE_BUF_SIZE,size,NULL)
# define BIO_make_bio_pair(b1,b2)   (int)BIO_ctrl(b1,BIO_C_MAKE_BIO_PAIR,0,b2)
# define BIO_destroy_bio_pair(b)    (int)BIO_ctrl(b,BIO_C_DESTROY_BIO_PAIR,0,NULL)
# define BIO_shutdown_wr(b) (int)BIO_ctrl(b, BIO_C_SHUTDOWN_WR, 0, NULL)
/* macros with inappropriate type -- but ...pending macros use int too: */
# define BIO_get_write_guarantee(b) (int)BIO_ctrl(b,BIO_C_GET_WRITE_GUARANTEE,0,NULL)
#
 define BIO_get_read_request(b)    (int)BIO_ctrl(b,BIO_C_GET_READ_REQUEST,0,NULL)
size_t BIO_ctrl_get_write_guarantee(BIO *b);
size_t BIO_ctrl_get_read_request(BIO *b);
int BIO_ctrl_reset_read_request(BIO *b);

/* ctrl macros for dgram */
# define BIO_ctrl_dgram_connect(b,peer)  \
                (int)BIO_ctrl(b,BIO_CTRL_DGRAM_CONNECT,0, (char *)(peer))
# define BIO_ctrl_set_connected(b,peer) \
       (int)BIO_ctrl(b, BIO_CTRL_DGRAM_SET_CONNECTED, 0, (char *)(peer))
# define BIO_dgram_recv_timedout(b) \
       (int)BIO_ctrl(b, BIO_CTRL_DGRAM_GET_RECV_TIMER_EXP, 0, NULL)
# define BIO_dgram_send_timedout(b) \
       (int)BIO_ctrl(b, BIO_CTRL_DGRAM_GET_SEND_TIMER_EXP, 0, NULL)
# define BIO_dgram_get_peer(b,peer) \
       (int)BIO_ctrl(b, BIO_CTRL_DGRAM_GET_PEER, 0, (char *)(peer))
# define BIO_dgram_set_peer(b,peer) \
       (int)BIO_ctrl(b, BIO_CTRL_DGRAM_SET_PEER, 0, (char *)(peer))
# define BIO_dgram_get_mtu_overhead(b) \
       (unsigned int)BIO_ctrl((b),
 BIO_CTRL_DGRAM_GET_MTU_OVERHEAD, 0, NULL)

/* ctrl macros for BIO_f_prefix */
# define BIO_set_prefix(b,p) BIO_ctrl((b), BIO_CTRL_SET_PREFIX, 0, (void *)(p))
# define BIO_set_indent(b,i) BIO_ctrl((b), BIO_CTRL_SET_INDENT, (i), NULL)
# define BIO_get_indent(b) BIO_ctrl((b), BIO_CTRL_GET_INDENT, 0, NULL)

#define BIO_get_ex_new_index(l, p, newf, dupf, freef) \
   CRYPTO_get_ex_new_index(CRYPTO_EX_INDEX_BIO, l, p, newf, dupf, freef)
int BIO_set_ex_data(BIO *bio, int idx, void *data);
```

```
void *BIO_get_ex_data(const BIO *bio, int idx);
uint64_t BIO_number_read(BIO *bio);
uint64_t BIO_number_written(BIO *bio);

/* For BIO_f_asn1() */
int BIO_asn1_set_prefix(BIO *b, asn1_ps_func *prefix,
                        asn1_ps_func *prefix_free);
int BIO_asn1_get_prefix(BIO *b, asn1_ps_func **pprefix,
                        asn1_ps_func **pprefix_free);
int BIO_asn1_set_suffix(BIO *b, asn1_ps_func *suffix,
                        asn1_ps_func *suffix_free);
int BIO_asn1_get_suffix(BIO *b,
 asn1_ps_func **psuffix,
                        asn1_ps_func **psuffix_free);

const BIO_METHOD *BIO_s_file(void);
BIO *BIO_new_file(const char *filename, const char *mode);
BIO *BIO_new_from_core_bio(OSSL_LIB_CTX *libctx, OSSL_CORE_BIO *corebio);
# ifndef OPENSSL_NO_STDIO
BIO *BIO_new_fp(FILE *stream, int close_flag);
# endif
BIO *BIO_new_ex(OSSL_LIB_CTX *libctx, const BIO_METHOD *method);
BIO *BIO_new(const BIO_METHOD *type);
int BIO_free(BIO *a);
void BIO_set_data(BIO *a, void *ptr);
void *BIO_get_data(BIO *a);
void BIO_set_init(BIO *a, int init);
int BIO_get_init(BIO *a);
void BIO_set_shutdown(BIO *a, int shut);
int BIO_get_shutdown(BIO *a);
void BIO_vfree(BIO *a);
int BIO_up_ref(BIO *a);
int BIO_read(BIO *b, void *data, int dlen);
int BIO_read_ex(BIO *b, void *data, size_t dlen, size_t *readbytes);
int BIO_gets(BIO *bp, char *buf, int size);
int BIO_get_line(BIO *bio, char *buf, int size);
int BIO_write(BIO *b, const void *data, int dlen);
int BIO_write_ex(BIO *b, const void *data,
 size_t dlen, size_t *written);
int BIO_puts(BIO *bp, const char *buf);
int BIO_indent(BIO *b, int indent, int max);
long BIO_ctrl(BIO *bp, int cmd, long larg, void *parg);
long BIO_callback_ctrl(BIO *b, int cmd, BIO_info_cb *fp);
void *BIO_ptr_ctrl(BIO *bp, int cmd, long larg);
long BIO_int_ctrl(BIO *bp, int cmd, long larg, int iarg);
BIO *BIO_push(BIO *b, BIO *append);
BIO *BIO_pop(BIO *b);
void BIO_free_all(BIO *a);
```

```
BIO *BIO_find_type(BIO *b, int bio_type);
BIO *BIO_next(BIO *b);
void BIO_set_next(BIO *b, BIO *next);
BIO *BIO_get_retry_BIO(BIO *bio, int *reason);
int BIO_get_retry_reason(BIO *bio);
void BIO_set_retry_reason(BIO *bio, int reason);
BIO *BIO_dup_chain(BIO *in);

int BIO_nread0(BIO *bio, char **buf);
int BIO_nread(BIO *bio, char **buf, int num);
int BIO_nwrite0(BIO *bio, char **buf);
int BIO_nwrite(BIO *bio, char **buf, int num);

const BIO_METHOD *BIO_s_mem(void);
const BIO_METHOD *BIO_s_secmem(void);
BIO *BIO_new_mem_buf(const void *buf, int len);
# ifndef OPENSSL_NO_SOCK
const
 BIO_METHOD *BIO_s_socket(void);
const BIO_METHOD *BIO_s_connect(void);
const BIO_METHOD *BIO_s_accept(void);
# endif
const BIO_METHOD *BIO_s_fd(void);
const BIO_METHOD *BIO_s_log(void);
const BIO_METHOD *BIO_s_bio(void);
const BIO_METHOD *BIO_s_null(void);
const BIO_METHOD *BIO_f_null(void);
const BIO_METHOD *BIO_f_buffer(void);
const BIO_METHOD *BIO_f_readbuffer(void);
const BIO_METHOD *BIO_f_linebuffer(void);
const BIO_METHOD *BIO_f_nbio_test(void);
const BIO_METHOD *BIO_f_prefix(void);
const BIO_METHOD *BIO_s_core(void);
# ifndef OPENSSL_NO_DGRAM
const BIO_METHOD *BIO_s_datagram(void);
int BIO_dgram_non_fatal_error(int error);
BIO *BIO_new_dgram(int fd, int close_flag);
#  ifndef OPENSSL_NO_SCTP
const BIO_METHOD *BIO_s_datagram_sctp(void);
BIO *BIO_new_dgram_sctp(int fd, int close_flag);
int BIO_dgram_is_sctp(BIO *bio);
int BIO_dgram_sctp_notification_cb(BIO *b,
            BIO_dgram_sctp_notification_handler_fn handle_notifications,
            void *context);
int
 BIO_dgram_sctp_wait_for_dry(BIO *b);
int BIO_dgram_sctp_msg_waiting(BIO *b);
#  endif
```

```
# endif

# ifndef OPENSSL_NO_SOCK
int BIO_sock_should_retry(int i);
int BIO_sock_non_fatal_error(int error);
int BIO_socket_wait(int fd, int for_read, time_t max_time);
# endif
int BIO_wait(BIO *bio, time_t max_time, unsigned int nap_milliseconds);
int BIO_do_connect_retry(BIO *bio, int timeout, int nap_milliseconds);

int BIO_fd_should_retry(int i);
int BIO_fd_non_fatal_error(int error);
int BIO_dump_cb(int (*cb) (const void *data, size_t len, void *u),
            void *u, const void *s, int len);
int BIO_dump_indent_cb(int (*cb) (const void *data, size_t len, void *u),
                void *u, const void *s, int len, int indent);
int BIO_dump(BIO *b, const void *bytes, int len);
int BIO_dump_indent(BIO *b, const void *bytes, int len, int indent);
# ifndef OPENSSL_NO_STDIO
int BIO_dump_fp(FILE *fp, const void *s, int len);
int BIO_dump_indent_fp(FILE *fp, const void *s, int len, int indent);
#
 endif
int BIO_hex_string(BIO *out, int indent, int width, const void *data,
              int datalen);

# ifndef OPENSSL_NO_SOCK
BIO_ADDR *BIO_ADDR_new(void);
int BIO_ADDR_rawmake(BIO_ADDR *ap, int family,
                const void *where, size_t wherelen, unsigned short port);
void BIO_ADDR_free(BIO_ADDR *);
void BIO_ADDR_clear(BIO_ADDR *ap);
int BIO_ADDR_family(const BIO_ADDR *ap);
int BIO_ADDR_rawaddress(const BIO_ADDR *ap, void *p, size_t *l);
unsigned short BIO_ADDR_rawport(const BIO_ADDR *ap);
char *BIO_ADDR_hostname_string(const BIO_ADDR *ap, int numeric);
char *BIO_ADDR_service_string(const BIO_ADDR *ap, int numeric);
char *BIO_ADDR_path_string(const BIO_ADDR *ap);

const BIO_ADDRINFO *BIO_ADDRINFO_next(const BIO_ADDRINFO *bai);
int BIO_ADDRINFO_family(const BIO_ADDRINFO *bai);
int BIO_ADDRINFO_socktype(const BIO_ADDRINFO *bai);
int BIO_ADDRINFO_protocol(const BIO_ADDRINFO *bai);
const BIO_ADDR *BIO_ADDRINFO_address(const BIO_ADDRINFO *bai);
void BIO_ADDRINFO_free(BIO_ADDRINFO
 *bai);

enum BIO_hostserv_priorities {
```

```
  BIO_PARSE_PRIO_HOST, BIO_PARSE_PRIO_SERV
};
int BIO_parse_hostserv(const char *hostserv, char **host, char **service,
                       enum BIO_hostserv_priorities hostserv_prio);
enum BIO_lookup_type {
  BIO_LOOKUP_CLIENT, BIO_LOOKUP_SERVER
};
int BIO_lookup(const char *host, const char *service,
               enum BIO_lookup_type lookup_type,
               int family, int socktype, BIO_ADDRINFO **res);
int BIO_lookup_ex(const char *host, const char *service,
                  int lookup_type, int family, int socktype, int protocol,
                  BIO_ADDRINFO **res);
int BIO_sock_error(int sock);
int BIO_socket_ioctl(int fd, long type, void *arg);
int BIO_socket_nbio(int fd, int mode);
int BIO_sock_init(void);
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
#  define BIO_sock_cleanup() while(0) continue
# endif
int BIO_set_tcp_ndelay(int sock, int turn_on);
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0 struct
 hostent *BIO_gethostbyname(const char *name);
OSSL_DEPRECATEDIN_1_1_0 int BIO_get_port(const char *str, unsigned short *port_ptr);
OSSL_DEPRECATEDIN_1_1_0 int BIO_get_host_ip(const char *str, unsigned char *ip);
OSSL_DEPRECATEDIN_1_1_0 int BIO_get_accept_socket(char *host_port, int mode);
OSSL_DEPRECATEDIN_1_1_0 int BIO_accept(int sock, char **ip_port);
# endif

union BIO_sock_info_u {
  BIO_ADDR *addr;
};
enum BIO_sock_info_type {
  BIO_SOCK_INFO_ADDRESS
};
int BIO_sock_info(int sock,
                  enum BIO_sock_info_type type, union BIO_sock_info_u *info);

#  define BIO_SOCK_REUSEADDR    0x01
#  define BIO_SOCK_V6_ONLY      0x02
#  define BIO_SOCK_KEEPALIVE    0x04
#  define BIO_SOCK_NONBLOCK     0x08
#  define BIO_SOCK_NODELAY      0x10

int BIO_socket(int domain, int socktype, int protocol, int options);
int BIO_connect(int sock, const BIO_ADDR *addr, int options);
int BIO_bind(int sock, const BIO_ADDR *addr, int options);
```

```
int BIO_listen(int sock, const BIO_ADDR *addr,
 int options);
int BIO_accept_ex(int accept_sock, BIO_ADDR *addr, int options);
int BIO_closesocket(int sock);

BIO *BIO_new_socket(int sock, int close_flag);
BIO *BIO_new_connect(const char *host_port);
BIO *BIO_new_accept(const char *host_port);
# endif /* OPENSSL_NO_SOCK*/

BIO *BIO_new_fd(int fd, int close_flag);

int BIO_new_bio_pair(BIO **bio1, size_t writebuf1,
                     BIO **bio2, size_t writebuf2);
/*
* If successful, returns 1 and in *bio1, *bio2 two BIO pair endpoints.
* Otherwise returns 0 and sets *bio1 and *bio2 to NULL. Size 0 uses default
* value.
*/

void BIO_copy_next_retry(BIO *b);

/*
* long BIO_ghbn_ctrl(int cmd,int iarg,char *parg);
*/

# define ossl_bio__attr__(x)
# if defined(__GNUC__) && defined(__STDC_VERSION__) \
   && !defined(__MINGW32__) && !defined(__MINGW64__) \
   && !defined(__APPLE__)
   /*
    * Because we support the 'z' modifier, which made its appearance in C99,
    * we can't use __attribute__ with pre C99 dialects.

 */
#  if __STDC_VERSION__ >= 199901L
#   undef ossl_bio__attr__
#   define ossl_bio__attr__ __attribute__
#   if __GNUC__*10 + __GNUC_MINOR__ >= 44
#    define ossl_bio__printf__ __gnu_printf__
#   else
#    define ossl_bio__printf__ __printf__
#   endif
#  endif
# endif
int BIO_printf(BIO *bio, const char *format, ...)
ossl_bio__attr__((__format__(ossl_bio__printf__, 2, 3)));
int BIO_vprintf(BIO *bio, const char *format, va_list args)
```

```
ossl_bio__attr__((__format__(ossl_bio__printf__, 2, 0)));
int BIO_snprintf(char *buf, size_t n, const char *format, ...)
ossl_bio__attr__((__format__(ossl_bio__printf__, 3, 4)));
int BIO_vsnprintf(char *buf, size_t n, const char *format, va_list args)
ossl_bio__attr__((__format__(ossl_bio__printf__, 3, 0)));
# undef ossl_bio__attr__
# undef ossl_bio__printf__


BIO_METHOD *BIO_meth_new(int type, const char *name);
void BIO_meth_free(BIO_METHOD *biom);
int (*BIO_meth_get_write(const BIO_METHOD *biom)) (BIO *, const char *, int);
int (*BIO_meth_get_write_ex(const
 BIO_METHOD *biom)) (BIO *, const char *, size_t,
                                    size_t *);
int BIO_meth_set_write(BIO_METHOD *biom,
                    int (*write) (BIO *, const char *, int));
int BIO_meth_set_write_ex(BIO_METHOD *biom,
                    int (*bwrite) (BIO *, const char *, size_t, size_t *));
int (*BIO_meth_get_read(const BIO_METHOD *biom)) (BIO *, char *, int);
int (*BIO_meth_get_read_ex(const BIO_METHOD *biom)) (BIO *, char *, size_t, size_t *);
int BIO_meth_set_read(BIO_METHOD *biom,
                   int (*read) (BIO *, char *, int));
int BIO_meth_set_read_ex(BIO_METHOD *biom,
                     int (*bread) (BIO *, char *, size_t, size_t *));
int (*BIO_meth_get_puts(const BIO_METHOD *biom)) (BIO *, const char *);
int BIO_meth_set_puts(BIO_METHOD *biom,
                   int (*puts) (BIO *, const char *));
int (*BIO_meth_get_gets(const BIO_METHOD *biom)) (BIO *, char *, int);
int BIO_meth_set_gets(BIO_METHOD *biom,

                   int (*ossl_gets) (BIO *, char *, int));
long (*BIO_meth_get_ctrl(const BIO_METHOD *biom)) (BIO *, int, long, void *);
int BIO_meth_set_ctrl(BIO_METHOD *biom,
                   long (*ctrl) (BIO *, int, long, void *));
int (*BIO_meth_get_create(const BIO_METHOD *bion)) (BIO *);
int BIO_meth_set_create(BIO_METHOD *biom, int (*create) (BIO *));
int (*BIO_meth_get_destroy(const BIO_METHOD *biom)) (BIO *);
int BIO_meth_set_destroy(BIO_METHOD *biom, int (*destroy) (BIO *));
long (*BIO_meth_get_callback_ctrl(const BIO_METHOD *biom))
                          (BIO *, int, BIO_info_cb *);
int BIO_meth_set_callback_ctrl(BIO_METHOD *biom,
                        long (*callback_ctrl) (BIO *, int,
                                       BIO_info_cb *));

# ifdef  __cplusplus
}
# endif
```

#endif
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console.log('ok');
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/srp.h.in
*
* Copyright 2004-2021 The OpenSSL Project Authors. All Rights Reserved.
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*
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* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*
* Originally written by Christophe Renou and Peter Sylvester,
* for the EdelKey project.
*/

```
#ifndef OPENSSL_SRP_H
# define OPENSSL_SRP_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_SRP_H
# endif
```

```
#include <openssl/opensslconf.h>

#ifndef OPENSSL_NO_SRP
# include <stdio.h>
# include <string.h>
# include <openssl/safestack.h>
# include <openssl/bn.h>
# include <openssl/crypto.h>

# ifdef  __cplusplus
extern "C" {
# endif

# ifndef OPENSSL_NO_DEPRECATED_3_0

typedef
 struct SRP_gN_cache_st {
   char *b64_bn;
   BIGNUM *bn;
} SRP_gN_cache;
SKM_DEFINE_STACK_OF_INTERNAL(SRP_gN_cache, SRP_gN_cache, SRP_gN_cache)
#define sk_SRP_gN_cache_num(sk) OPENSSL_sk_num(ossl_check_const_SRP_gN_cache_sk_type(sk))
#define sk_SRP_gN_cache_value(sk, idx) ((SRP_gN_cache
*)OPENSSL_sk_value(ossl_check_const_SRP_gN_cache_sk_type(sk), (idx)))
#define sk_SRP_gN_cache_new(cmp) ((STACK_OF(SRP_gN_cache)
*)OPENSSL_sk_new(ossl_check_SRP_gN_cache_compfunc_type(cmp)))
#define sk_SRP_gN_cache_new_null() ((STACK_OF(SRP_gN_cache) *)OPENSSL_sk_new_null())
#define sk_SRP_gN_cache_new_reserve(cmp, n) ((STACK_OF(SRP_gN_cache)
*)OPENSSL_sk_new_reserve(ossl_check_SRP_gN_cache_compfunc_type(cmp), (n)))
#define sk_SRP_gN_cache_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_SRP_gN_cache_sk_type(sk), (n))
#define sk_SRP_gN_cache_free(sk) OPENSSL_sk_free(ossl_check_SRP_gN_cache_sk_type(sk))
#define sk_SRP_gN_cache_zero(sk) OPENSSL_sk_zero(ossl_check_SRP_gN_cache_sk_type(sk))
#define sk_SRP_gN_cache_delete(sk,
 i) ((SRP_gN_cache *)OPENSSL_sk_delete(ossl_check_SRP_gN_cache_sk_type(sk), (i)))
#define sk_SRP_gN_cache_delete_ptr(sk, ptr) ((SRP_gN_cache
*)OPENSSL_sk_delete_ptr(ossl_check_SRP_gN_cache_sk_type(sk), ossl_check_SRP_gN_cache_type(ptr)))
#define sk_SRP_gN_cache_push(sk, ptr) OPENSSL_sk_push(ossl_check_SRP_gN_cache_sk_type(sk),
ossl_check_SRP_gN_cache_type(ptr))
#define sk_SRP_gN_cache_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_SRP_gN_cache_sk_type(sk),
ossl_check_SRP_gN_cache_type(ptr))
#define sk_SRP_gN_cache_pop(sk) ((SRP_gN_cache
*)OPENSSL_sk_pop(ossl_check_SRP_gN_cache_sk_type(sk)))
#define sk_SRP_gN_cache_shift(sk) ((SRP_gN_cache
*)OPENSSL_sk_shift(ossl_check_SRP_gN_cache_sk_type(sk)))
#define sk_SRP_gN_cache_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_SRP_gN_cache_sk_type(sk),ossl_check_SRP_gN_cache_freefunc_type(freefu
nc))
#define sk_SRP_gN_cache_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_SRP_gN_cache_sk_type(sk),
```

```
ossl_check_SRP_gN_cache_type(ptr),
 (idx))
#define sk_SRP_gN_cache_set(sk, idx, ptr) ((SRP_gN_cache
*)OPENSSL_sk_set(ossl_check_SRP_gN_cache_sk_type(sk), (idx), ossl_check_SRP_gN_cache_type(ptr)))
#define sk_SRP_gN_cache_find(sk, ptr) OPENSSL_sk_find(ossl_check_SRP_gN_cache_sk_type(sk),
ossl_check_SRP_gN_cache_type(ptr))
#define sk_SRP_gN_cache_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_SRP_gN_cache_sk_type(sk),
ossl_check_SRP_gN_cache_type(ptr))
#define sk_SRP_gN_cache_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_SRP_gN_cache_sk_type(sk), ossl_check_SRP_gN_cache_type(ptr), pnum)
#define sk_SRP_gN_cache_sort(sk) OPENSSL_sk_sort(ossl_check_SRP_gN_cache_sk_type(sk))
#define sk_SRP_gN_cache_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_SRP_gN_cache_sk_type(sk))
#define sk_SRP_gN_cache_dup(sk) ((STACK_OF(SRP_gN_cache)
*)OPENSSL_sk_dup(ossl_check_const_SRP_gN_cache_sk_type(sk)))
#define sk_SRP_gN_cache_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(SRP_gN_cache)
*)OPENSSL_sk_deep_copy(ossl_check_const_SRP_gN_cache_sk_type(sk),
 ossl_check_SRP_gN_cache_copyfunc_type(copyfunc), ossl_check_SRP_gN_cache_freefunc_type(freefunc)))
#define sk_SRP_gN_cache_set_cmp_func(sk, cmp)
((sk_SRP_gN_cache_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_SRP_gN_cache_sk_type(sk),
ossl_check_SRP_gN_cache_compfunc_type(cmp)))



typedef struct SRP_user_pwd_st {
  /* Owned by us. */
  char *id;
  BIGNUM *s;
  BIGNUM *v;
  /* Not owned by us. */
  const BIGNUM *g;
  const BIGNUM *N;
  /* Owned by us. */
  char *info;
} SRP_user_pwd;
SKM_DEFINE_STACK_OF_INTERNAL(SRP_user_pwd, SRP_user_pwd, SRP_user_pwd)
#define sk_SRP_user_pwd_num(sk) OPENSSL_sk_num(ossl_check_const_SRP_user_pwd_sk_type(sk))
#define sk_SRP_user_pwd_value(sk, idx) ((SRP_user_pwd
*)OPENSSL_sk_value(ossl_check_const_SRP_user_pwd_sk_type(sk), (idx)))
#define sk_SRP_user_pwd_new(cmp) ((STACK_OF(SRP_user_pwd)
*)OPENSSL_sk_new(ossl_check_SRP_user_pwd_compfunc_type(cmp)))
#define sk_SRP_user_pwd_new_null() ((STACK_OF(SRP_user_pwd)
 *)OPENSSL_sk_new_null())
#define sk_SRP_user_pwd_new_reserve(cmp, n) ((STACK_OF(SRP_user_pwd)
*)OPENSSL_sk_new_reserve(ossl_check_SRP_user_pwd_compfunc_type(cmp), (n)))
#define sk_SRP_user_pwd_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_SRP_user_pwd_sk_type(sk), (n))
#define sk_SRP_user_pwd_free(sk) OPENSSL_sk_free(ossl_check_SRP_user_pwd_sk_type(sk))
#define sk_SRP_user_pwd_zero(sk) OPENSSL_sk_zero(ossl_check_SRP_user_pwd_sk_type(sk))
#define sk_SRP_user_pwd_delete(sk, i) ((SRP_user_pwd
```

```
*)OPENSSL_sk_delete(ossl_check_SRP_user_pwd_sk_type(sk), (i)))
#define sk_SRP_user_pwd_delete_ptr(sk, ptr) ((SRP_user_pwd
*)OPENSSL_sk_delete_ptr(ossl_check_SRP_user_pwd_sk_type(sk), ossl_check_SRP_user_pwd_type(ptr)))
#define sk_SRP_user_pwd_push(sk, ptr) OPENSSL_sk_push(ossl_check_SRP_user_pwd_sk_type(sk),
ossl_check_SRP_user_pwd_type(ptr))
#define sk_SRP_user_pwd_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_SRP_user_pwd_sk_type(sk),
ossl_check_SRP_user_pwd_type(ptr))
#define sk_SRP_user_pwd_pop(sk)
 ((SRP_user_pwd *)OPENSSL_sk_pop(ossl_check_SRP_user_pwd_sk_type(sk)))
#define sk_SRP_user_pwd_shift(sk) ((SRP_user_pwd
*)OPENSSL_sk_shift(ossl_check_SRP_user_pwd_sk_type(sk)))
#define sk_SRP_user_pwd_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_SRP_user_pwd_sk_type(sk),ossl_check_SRP_user_pwd_freefunc_type(freefu
nc))
#define sk_SRP_user_pwd_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_SRP_user_pwd_sk_type(sk),
ossl_check_SRP_user_pwd_type(ptr), (idx))
#define sk_SRP_user_pwd_set(sk, idx, ptr) ((SRP_user_pwd
*)OPENSSL_sk_set(ossl_check_SRP_user_pwd_sk_type(sk), (idx), ossl_check_SRP_user_pwd_type(ptr)))
#define sk_SRP_user_pwd_find(sk, ptr) OPENSSL_sk_find(ossl_check_SRP_user_pwd_sk_type(sk),
ossl_check_SRP_user_pwd_type(ptr))
#define sk_SRP_user_pwd_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_SRP_user_pwd_sk_type(sk),
ossl_check_SRP_user_pwd_type(ptr))
#define sk_SRP_user_pwd_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_SRP_user_pwd_sk_type(sk),
ossl_check_SRP_user_pwd_type(ptr),
 pnum)
#define sk_SRP_user_pwd_sort(sk) OPENSSL_sk_sort(ossl_check_SRP_user_pwd_sk_type(sk))
#define sk_SRP_user_pwd_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_SRP_user_pwd_sk_type(sk))
#define sk_SRP_user_pwd_dup(sk) ((STACK_OF(SRP_user_pwd)
*)OPENSSL_sk_dup(ossl_check_const_SRP_user_pwd_sk_type(sk)))
#define sk_SRP_user_pwd_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(SRP_user_pwd)
*)OPENSSL_sk_deep_copy(ossl_check_const_SRP_user_pwd_sk_type(sk),
ossl_check_SRP_user_pwd_copyfunc_type(copyfunc), ossl_check_SRP_user_pwd_freefunc_type(freefunc)))
#define sk_SRP_user_pwd_set_cmp_func(sk, cmp)
((sk_SRP_user_pwd_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_SRP_user_pwd_sk_type(sk),
ossl_check_SRP_user_pwd_compfunc_type(cmp)))


OSSL_DEPRECATEDIN_3_0
SRP_user_pwd *SRP_user_pwd_new(void);
OSSL_DEPRECATEDIN_3_0
void SRP_user_pwd_free(SRP_user_pwd *user_pwd);

OSSL_DEPRECATEDIN_3_0
void SRP_user_pwd_set_gN(SRP_user_pwd *user_pwd, const BIGNUM *g,

        const BIGNUM *N);
OSSL_DEPRECATEDIN_3_0
int SRP_user_pwd_set1_ids(SRP_user_pwd *user_pwd, const char *id,
```

```
                    const char *info);
OSSL_DEPRECATEDIN_3_0
int SRP_user_pwd_set0_sv(SRP_user_pwd *user_pwd, BIGNUM *s, BIGNUM *v);

typedef struct SRP_VBASE_st {
   STACK_OF(SRP_user_pwd) *users_pwd;
   STACK_OF(SRP_gN_cache) *gN_cache;
/* to simulate a user */
   char *seed_key;
   const BIGNUM *default_g;
   const BIGNUM *default_N;
} SRP_VBASE;

/*
* Internal structure storing N and g pair
*/
typedef struct SRP_gN_st {
   char *id;
   const BIGNUM *g;
   const BIGNUM *N;
} SRP_gN;
SKM_DEFINE_STACK_OF_INTERNAL(SRP_gN, SRP_gN, SRP_gN)
#define sk_SRP_gN_num(sk) OPENSSL_sk_num(ossl_check_const_SRP_gN_sk_type(sk))
#define sk_SRP_gN_value(sk, idx) ((SRP_gN *)OPENSSL_sk_value(ossl_check_const_SRP_gN_sk_type(sk),
(idx)))
#define sk_SRP_gN_new(cmp) ((STACK_OF(SRP_gN)
*)OPENSSL_sk_new(ossl_check_SRP_gN_compfunc_type(cmp)))
#define sk_SRP_gN_new_null() ((STACK_OF(SRP_gN)
 *)OPENSSL_sk_new_null())
#define sk_SRP_gN_new_reserve(cmp, n) ((STACK_OF(SRP_gN)
*)OPENSSL_sk_new_reserve(ossl_check_SRP_gN_compfunc_type(cmp), (n)))
#define sk_SRP_gN_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_SRP_gN_sk_type(sk), (n))
#define sk_SRP_gN_free(sk) OPENSSL_sk_free(ossl_check_SRP_gN_sk_type(sk))
#define sk_SRP_gN_zero(sk) OPENSSL_sk_zero(ossl_check_SRP_gN_sk_type(sk))
#define sk_SRP_gN_delete(sk, i) ((SRP_gN *)OPENSSL_sk_delete(ossl_check_SRP_gN_sk_type(sk), (i)))
#define sk_SRP_gN_delete_ptr(sk, ptr) ((SRP_gN *)OPENSSL_sk_delete_ptr(ossl_check_SRP_gN_sk_type(sk),
ossl_check_SRP_gN_type(ptr)))
#define sk_SRP_gN_push(sk, ptr) OPENSSL_sk_push(ossl_check_SRP_gN_sk_type(sk),
ossl_check_SRP_gN_type(ptr))
#define sk_SRP_gN_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_SRP_gN_sk_type(sk),
ossl_check_SRP_gN_type(ptr))
#define sk_SRP_gN_pop(sk) ((SRP_gN *)OPENSSL_sk_pop(ossl_check_SRP_gN_sk_type(sk)))
#define sk_SRP_gN_shift(sk) ((SRP_gN *)OPENSSL_sk_shift(ossl_check_SRP_gN_sk_type(sk)))
#define
 sk_SRP_gN_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_SRP_gN_sk_type(sk),ossl_check_SRP_gN_freefunc_type(freefunc))
#define sk_SRP_gN_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_SRP_gN_sk_type(sk),
ossl_check_SRP_gN_type(ptr), (idx))
```

```
#define sk_SRP_gN_set(sk, idx, ptr) ((SRP_gN *)OPENSSL_sk_set(ossl_check_SRP_gN_sk_type(sk), (idx),
ossl_check_SRP_gN_type(ptr)))
#define sk_SRP_gN_find(sk, ptr) OPENSSL_sk_find(ossl_check_SRP_gN_sk_type(sk),
ossl_check_SRP_gN_type(ptr))
#define sk_SRP_gN_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_SRP_gN_sk_type(sk),
ossl_check_SRP_gN_type(ptr))
#define sk_SRP_gN_find_all(sk, ptr, pnum) OPENSSL_sk_find_all(ossl_check_SRP_gN_sk_type(sk),
ossl_check_SRP_gN_type(ptr), pnum)
#define sk_SRP_gN_sort(sk) OPENSSL_sk_sort(ossl_check_SRP_gN_sk_type(sk))
#define sk_SRP_gN_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_SRP_gN_sk_type(sk))
#define sk_SRP_gN_dup(sk) ((STACK_OF(SRP_gN)
*)OPENSSL_sk_dup(ossl_check_const_SRP_gN_sk_type(sk)))
#define
 sk_SRP_gN_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(SRP_gN)
*)OPENSSL_sk_deep_copy(ossl_check_const_SRP_gN_sk_type(sk),
ossl_check_SRP_gN_copyfunc_type(copyfunc), ossl_check_SRP_gN_freefunc_type(freefunc)))
#define sk_SRP_gN_set_cmp_func(sk, cmp)
((sk_SRP_gN_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_SRP_gN_sk_type(sk),
ossl_check_SRP_gN_compfunc_type(cmp)))



OSSL_DEPRECATEDIN_3_0
SRP_VBASE *SRP_VBASE_new(char *seed_key);
OSSL_DEPRECATEDIN_3_0
void SRP_VBASE_free(SRP_VBASE *vb);
OSSL_DEPRECATEDIN_3_0
int SRP_VBASE_init(SRP_VBASE *vb, char *verifier_file);

OSSL_DEPRECATEDIN_3_0
int SRP_VBASE_add0_user(SRP_VBASE *vb, SRP_user_pwd *user_pwd);

/* NOTE: unlike in SRP_VBASE_get_by_user, caller owns the returned pointer.*/
OSSL_DEPRECATEDIN_3_0
SRP_user_pwd *SRP_VBASE_get1_by_user(SRP_VBASE *vb, char *username);

OSSL_DEPRECATEDIN_3_0
char *SRP_create_verifier_ex(const char *user, const char *pass, char **salt,
                        char **verifier,
 const char *N, const char *g,
                        OSSL_LIB_CTX *libctx, const char *propq);
OSSL_DEPRECATEDIN_3_0
char *SRP_create_verifier(const char *user, const char *pass, char **salt,
                      char **verifier, const char *N, const char *g);
OSSL_DEPRECATEDIN_3_0
int SRP_create_verifier_BN_ex(const char *user, const char *pass, BIGNUM **salt,
                         BIGNUM **verifier, const BIGNUM *N,
                         const BIGNUM *g, OSSL_LIB_CTX *libctx,
```

```
                        const char *propq);
OSSL_DEPRECATEDIN_3_0
int SRP_create_verifier_BN(const char *user, const char *pass, BIGNUM **salt,
                     BIGNUM **verifier, const BIGNUM *N,
                     const BIGNUM *g);

#  define SRP_NO_ERROR 0
#  define SRP_ERR_VBASE_INCOMPLETE_FILE 1
#  define SRP_ERR_VBASE_BN_LIB 2
#  define SRP_ERR_OPEN_FILE 3
#  define SRP_ERR_MEMORY 4

#  define DB_srptype      0
#  define DB_srpverifier  1
#  define DB_srpsalt
     2
#  define DB_srpid        3
#  define DB_srpgN        4
#  define DB_srpinfo      5
#  undef  DB_NUMBER
#  define DB_NUMBER       6

#  define DB_SRP_INDEX    'I'
#  define DB_SRP_VALID    'V'
#  define DB_SRP_REVOKED  'R'
#  define DB_SRP_MODIF    'v'

/* see srp.c */
OSSL_DEPRECATEDIN_3_0
char *SRP_check_known_gN_param(const BIGNUM *g, const BIGNUM *N);
OSSL_DEPRECATEDIN_3_0
SRP_gN *SRP_get_default_gN(const char *id);

/* server side .... */
OSSL_DEPRECATEDIN_3_0
BIGNUM *SRP_Calc_server_key(const BIGNUM *A, const BIGNUM *v, const BIGNUM *u,
                      const BIGNUM *b, const BIGNUM *N);
OSSL_DEPRECATEDIN_3_0
BIGNUM *SRP_Calc_B_ex(const BIGNUM *b, const BIGNUM *N, const BIGNUM *g,
                  const BIGNUM *v, OSSL_LIB_CTX *libctx, const char *propq);
OSSL_DEPRECATEDIN_3_0
BIGNUM *SRP_Calc_B(const BIGNUM *b, const BIGNUM *N, const BIGNUM *g,
                const BIGNUM *v);

OSSL_DEPRECATEDIN_3_0
int SRP_Verify_A_mod_N(const BIGNUM *A, const
 BIGNUM *N);
OSSL_DEPRECATEDIN_3_0
```

```
BIGNUM *SRP_Calc_u_ex(const BIGNUM *A, const BIGNUM *B, const BIGNUM *N,
                OSSL_LIB_CTX *libctx, const char *propq);
OSSL_DEPRECATEDIN_3_0
BIGNUM *SRP_Calc_u(const BIGNUM *A, const BIGNUM *B, const BIGNUM *N);

/* client side .... */

OSSL_DEPRECATEDIN_3_0
BIGNUM *SRP_Calc_x_ex(const BIGNUM *s, const char *user, const char *pass,
                OSSL_LIB_CTX *libctx, const char *propq);
OSSL_DEPRECATEDIN_3_0
BIGNUM *SRP_Calc_x(const BIGNUM *s, const char *user, const char *pass);
OSSL_DEPRECATEDIN_3_0
BIGNUM *SRP_Calc_A(const BIGNUM *a, const BIGNUM *N, const BIGNUM *g);
OSSL_DEPRECATEDIN_3_0
BIGNUM *SRP_Calc_client_key_ex(const BIGNUM *N, const BIGNUM *B, const BIGNUM *g,
                    const BIGNUM *x, const BIGNUM *a, const BIGNUM *u,
                    OSSL_LIB_CTX *libctx, const char *propq);
OSSL_DEPRECATEDIN_3_0
BIGNUM *SRP_Calc_client_key(const BIGNUM *N, const BIGNUM *B, const BIGNUM *g,

                const BIGNUM *x, const BIGNUM *a, const BIGNUM *u);
OSSL_DEPRECATEDIN_3_0
int SRP_Verify_B_mod_N(const BIGNUM *B, const BIGNUM *N);

#  define SRP_MINIMAL_N 1024

# endif /* OPENSSL_NO_DEPRECATED_3_0 */

/* This method ignores the configured seed and fails for an unknown user. */
# ifndef OPENSSL_NO_DEPRECATED_1_1_0
OSSL_DEPRECATEDIN_1_1_0
SRP_user_pwd *SRP_VBASE_get_by_user(SRP_VBASE *vb, char *username);
# endif

# ifdef  __cplusplus
}
# endif
# endif

#endif
```

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  'FIPS_MODULE',
],
'openssl_cflags_BSD-x86_64': [
  '-Wall -O3',
  '-pthread',
  '-Wall -O3',
],
'openssl_ex_libs_BSD-x86_64': [
  '-pthread',
```

```
  ],
  'linker_script': ''
 },
 'include_dirs': [
  '.',
  './include',
  './crypto',
  './crypto/include/internal',
  './providers/common/include',
 ],
 'defines': ['<@(openssl_defines_BSD-x86_64)'],
 'cflags': ['<@(openssl_cflags_BSD-x86_64)'],
 'libraries': ['<@(openssl_ex_libs_BSD-x86_64)'],

 'sources': ['<@(openssl_sources)', '<@(openssl_sources_BSD-x86_64)'],
 'direct_dependent_settings': {
  'include_dirs': ['./include', '.'],
  'defines': ['<@(openssl_defines_BSD-x86_64)'],
 },
}
/*
* WARNING: do not edit!
* Generated by configdata.pm from Configurations/common0.tmpl, Configurations/unix-Makefile.tmpl
* via Makefile.in
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* https://www.openssl.org/source/license.html
*/

#ifndef OPENSSL_CONFIGURATION_H
# define OPENSSL_CONFIGURATION_H
# pragma once

# ifdef  __cplusplus
extern "C" {
# endif

# ifdef OPENSSL_ALGORITHM_DEFINES
#  error OPENSSL_ALGORITHM_DEFINES no longer supported
# endif

/*
* OpenSSL was configured with the following options:
*/
```

```
# define OPENSSL_CONFIGURED_API 30000
# ifndef OPENSSL_RAND_SEED_OS
#  define OPENSSL_RAND_SEED_OS
# endif
# ifndef OPENSSL_THREADS
#  define OPENSSL_THREADS
# endif
# ifndef OPENSSL_NO_AFALGENG
#  define OPENSSL_NO_AFALGENG
# endif
# ifndef
 OPENSSL_NO_ASAN
#  define OPENSSL_NO_ASAN
# endif
# ifndef OPENSSL_NO_ASM
#  define OPENSSL_NO_ASM
# endif
# ifndef OPENSSL_NO_COMP
#  define OPENSSL_NO_COMP
# endif
# ifndef OPENSSL_NO_CRYPTO_MDEBUG
#  define OPENSSL_NO_CRYPTO_MDEBUG
# endif
# ifndef OPENSSL_NO_CRYPTO_MDEBUG_BACKTRACE
#  define OPENSSL_NO_CRYPTO_MDEBUG_BACKTRACE
# endif
# ifndef OPENSSL_NO_EC_NISTP_64_GCC_128
#  define OPENSSL_NO_EC_NISTP_64_GCC_128
# endif
# ifndef OPENSSL_NO_EGD
#  define OPENSSL_NO_EGD
# endif
# ifndef OPENSSL_NO_EXTERNAL_TESTS
#  define OPENSSL_NO_EXTERNAL_TESTS
# endif
# ifndef OPENSSL_NO_FUZZ_AFL
#  define OPENSSL_NO_FUZZ_AFL
# endif
# ifndef OPENSSL_NO_FUZZ_LIBFUZZER
#  define OPENSSL_NO_FUZZ_LIBFUZZER
# endif
# ifndef OPENSSL_NO_KTLS
#  define OPENSSL_NO_KTLS
# endif
# ifndef OPENSSL_NO_LOADERENG
#  define OPENSSL_NO_LOADERENG
# endif
```

```
# ifndef OPENSSL_NO_MD2
#  define OPENSSL_NO_MD2
# endif
# ifndef OPENSSL_NO_MSAN
#  define OPENSSL_NO_MSAN
# endif
# ifndef OPENSSL_NO_RC5
#  define OPENSSL_NO_RC5
#
 endif
# ifndef OPENSSL_NO_SCTP
#  define OPENSSL_NO_SCTP
# endif
# ifndef OPENSSL_NO_SSL3
#  define OPENSSL_NO_SSL3
# endif
# ifndef OPENSSL_NO_SSL3_METHOD
#  define OPENSSL_NO_SSL3_METHOD
# endif
# ifndef OPENSSL_NO_TRACE
#  define OPENSSL_NO_TRACE
# endif
# ifndef OPENSSL_NO_UBSAN
#  define OPENSSL_NO_UBSAN
# endif
# ifndef OPENSSL_NO_UNIT_TEST
#  define OPENSSL_NO_UNIT_TEST
# endif
# ifndef OPENSSL_NO_UPLINK
#  define OPENSSL_NO_UPLINK
# endif
# ifndef OPENSSL_NO_WEAK_SSL_CIPHERS
#  define OPENSSL_NO_WEAK_SSL_CIPHERS
# endif
# ifndef OPENSSL_NO_DYNAMIC_ENGINE
#  define OPENSSL_NO_DYNAMIC_ENGINE
# endif


/* Generate 80386 code? */
# undef I386_ONLY

/*
* The following are cipher-specific, but are part of the public API.
*/
# if !defined(OPENSSL_SYS_UEFI)
#  define BN_LLONG
/* Only one for the following should be defined */
```

```
#  undef SIXTY_FOUR_BIT_LONG
#  undef SIXTY_FOUR_BIT
#  define THIRTY_TWO_BIT
# endif

# define RC4_INT unsigned int

# ifdef  __cplusplus
}
# endif

#endif
                    /* OPENSSL_CONFIGURATION_H */
```

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SOFTWARE.
#ifndef SRC_PERMISSION_INSPECTOR_PERMISSION_H_
#define SRC_PERMISSION_INSPECTOR_PERMISSION_H_

#if defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS

#include <string>
#include "permission/permission_base.h"

namespace node {

namespace permission {

class InspectorPermission final : public PermissionBase {
public:
 void Apply(Environment* env,
            const std::vector<std::string>& allow,
            PermissionScope scope) override;
 bool is_granted(Environment* env,
                 PermissionScope perm,
                 const std::string_view& param = "") const override;

private:
 bool deny_all_;
};

}  // namespace permission

}  // namespace node

#endif  // defined(NODE_WANT_INTERNALS) && NODE_WANT_INTERNALS
#endif  // SRC_PERMISSION_INSPECTOR_PERMISSION_H_
```

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==========
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/asn1t.h.in
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```
* https://www.openssl.org/source/license.html
*/



#ifndef OPENSSL_ASN1T_H
# define OPENSSL_ASN1T_H
# pragma once

# include <openssl/macros.h>
# ifndef OPENSSL_NO_DEPRECATED_3_0
#  define HEADER_ASN1T_H
# endif

# include <stddef.h>
# include <openssl/e_os2.h>
# include <openssl/asn1.h>

# ifdef OPENSSL_BUILD_SHLIBCRYPTO
#  undef OPENSSL_EXTERN
#  define OPENSSL_EXTERN OPENSSL_EXPORT
# endif

/* ASN1 template defines, structures and functions */

#ifdef  __cplusplus
extern "C" {
#endif

/*-
* These are the possible values for the itype field of the
* ASN1_ITEM structure and determine how it is interpreted.
*
* For PRIMITIVE
 types the underlying type
* determines the behaviour if items is NULL.
*
* Otherwise templates must contain a single
* template and the type is treated in the
* same way as the type specified in the template.
*
* For SEQUENCE types the templates field points
* to the members, the size field is the
* structure size.
*
* For CHOICE types the templates field points
* to each possible member (typically a union)
* and the 'size' field is the offset of the
```

```
* selector.
*
* The 'funcs' field is used for application-specific
* data and functions.
*
* The EXTERN type uses a new style d2i/i2d.
* The new style should be used where possible
* because it avoids things like the d2i IMPLICIT
* hack.
*
* MSTRING is a multiple string type, it is used
* for a CHOICE of character strings where the
* actual strings all occupy an ASN1_STRING
* structure. In this case the 'utype' field
* has a special meaning, it is used as a mask
* of acceptable types using the B_ASN1 constants.
 *
* NDEF_SEQUENCE is the same as SEQUENCE except
* that it will use indefinite length constructed
* encoding if requested.
*
*/

# define ASN1_ITYPE_PRIMITIVE           0x0
# define ASN1_ITYPE_SEQUENCE            0x1
# define ASN1_ITYPE_CHOICE              0x2
/* unused value                       0x3 */
# define ASN1_ITYPE_EXTERN              0x4
# define ASN1_ITYPE_MSTRING             0x5
# define ASN1_ITYPE_NDEF_SEQUENCE       0x6

/* Macro to obtain ASN1_ADB pointer from a type (only used internally) */
# define ASN1_ADB_ptr(iptr) ((const ASN1_ADB *)((iptr)()))

/* Macros for start and end of ASN1_ITEM definition */

# define ASN1_ITEM_start(itname) \
	const ASN1_ITEM * itname##_it(void) \
	{ \
		static const ASN1_ITEM local_it = {

# define static_ASN1_ITEM_start(itname) \
	static ASN1_ITEM_start(itname)

# define ASN1_ITEM_end(itname) \
		}; \
	return &local_it; \
	}
```

```
/* Macros to aid ASN1 template
 writing */

# define ASN1_ITEM_TEMPLATE(tname) \
	static const ASN1_TEMPLATE tname##_item_tt

# define ASN1_ITEM_TEMPLATE_END(tname) \
	;\
	ASN1_ITEM_start(tname) \
		ASN1_ITYPE_PRIMITIVE,\
		-1,\
		&tname##_item_tt,\
		0,\
		NULL,\
		0,\
		#tname \
	ASN1_ITEM_end(tname)
# define static_ASN1_ITEM_TEMPLATE_END(tname) \
	;\
	static_ASN1_ITEM_start(tname) \
		ASN1_ITYPE_PRIMITIVE,\
		-1,\
		&tname##_item_tt,\
		0,\
		NULL,\
		0,\
		#tname \
	ASN1_ITEM_end(tname)

/* This is a ASN1 type which just embeds a template */

/*-
* This pair helps declare a SEQUENCE. We can do:
*
*	ASN1_SEQUENCE(stname) = {
*		... SEQUENCE components ...
*	} ASN1_SEQUENCE_END(stname)
*
*	This will produce an ASN1_ITEM called stname_it
 *	 for a structure called stname.
*
*	If you want the same structure but a different
*	name then use:
*
*	ASN1_SEQUENCE(itname) = {
*		... SEQUENCE components ...
*	} ASN1_SEQUENCE_END_name(stname, itname)
```

```
*
*      This will create an item called itname_it using
*      a structure called stname.
*/

# define ASN1_SEQUENCE(tname) \
      static const ASN1_TEMPLATE tname##_seq_tt[]

# define ASN1_SEQUENCE_END(stname) ASN1_SEQUENCE_END_name(stname, stname)

# define static_ASN1_SEQUENCE_END(stname) static_ASN1_SEQUENCE_END_name(stname, stname)

# define ASN1_SEQUENCE_END_name(stname, tname) \
      ;\
      ASN1_ITEM_start(tname) \
            ASN1_ITYPE_SEQUENCE,\
            V_ASN1_SEQUENCE,\
            tname##_seq_tt,\
            sizeof(tname##_seq_tt) / sizeof(ASN1_TEMPLATE),\
            NULL,\
            sizeof(stname),\
            #tname \
      ASN1_ITEM_end(tname)

# define static_ASN1_SEQUENCE_END_name(stname,
 tname) \
      ;\
      static_ASN1_ITEM_start(tname) \
            ASN1_ITYPE_SEQUENCE,\
            V_ASN1_SEQUENCE,\
            tname##_seq_tt,\
            sizeof(tname##_seq_tt) / sizeof(ASN1_TEMPLATE),\
            NULL,\
            sizeof(stname),\
            #stname \
      ASN1_ITEM_end(tname)

# define ASN1_NDEF_SEQUENCE(tname) \
      ASN1_SEQUENCE(tname)

# define ASN1_NDEF_SEQUENCE_cb(tname, cb) \
      ASN1_SEQUENCE_cb(tname, cb)

# define ASN1_SEQUENCE_cb(tname, cb) \
      static const ASN1_AUX tname##_aux = {NULL, 0, 0, 0, cb, 0, NULL}; \
      ASN1_SEQUENCE(tname)

# define ASN1_SEQUENCE_const_cb(tname, const_cb) \
```

```
	static const ASN1_AUX tname##_aux = \
	   {NULL, ASN1_AFLG_CONST_CB, 0, 0, NULL, 0, const_cb}; \
	ASN1_SEQUENCE(tname)

# define ASN1_SEQUENCE_cb_const_cb(tname, cb, const_cb) \
	static const ASN1_AUX tname##_aux = \
	   {NULL, ASN1_AFLG_CONST_CB, 0, 0, cb,
 0, const_cb}; \
	ASN1_SEQUENCE(tname)

# define ASN1_SEQUENCE_ref(tname, cb) \
	static const ASN1_AUX tname##_aux = {NULL, ASN1_AFLG_REFCOUNT, offsetof(tname, references),
offsetof(tname, lock), cb, 0, NULL}; \
	ASN1_SEQUENCE(tname)

# define ASN1_SEQUENCE_enc(tname, enc, cb) \
	static const ASN1_AUX tname##_aux = {NULL, ASN1_AFLG_ENCODING, 0, 0, cb, offsetof(tname, enc),
NULL}; \
	ASN1_SEQUENCE(tname)

# define ASN1_NDEF_SEQUENCE_END(tname) \
	;\
	ASN1_ITEM_start(tname) \
		ASN1_ITYPE_NDEF_SEQUENCE,\
		V_ASN1_SEQUENCE,\
		tname##_seq_tt,\
		sizeof(tname##_seq_tt) / sizeof(ASN1_TEMPLATE),\
		NULL,\
		sizeof(tname),\
		#tname \
	ASN1_ITEM_end(tname)
# define static_ASN1_NDEF_SEQUENCE_END(tname) \
	;\
	static_ASN1_ITEM_start(tname) \
		ASN1_ITYPE_NDEF_SEQUENCE,\
		V_ASN1_SEQUENCE,\

	tname##_seq_tt,\
		sizeof(tname##_seq_tt) / sizeof(ASN1_TEMPLATE),\
		NULL,\
		sizeof(tname),\
		#tname \
	ASN1_ITEM_end(tname)


# define ASN1_SEQUENCE_END_enc(stname, tname) ASN1_SEQUENCE_END_ref(stname, tname)

# define ASN1_SEQUENCE_END_cb(stname, tname) ASN1_SEQUENCE_END_ref(stname, tname)
```

```
# define static_ASN1_SEQUENCE_END_cb(stname, tname) static_ASN1_SEQUENCE_END_ref(stname, tname)

# define ASN1_SEQUENCE_END_ref(stname, tname) \
	;\
	ASN1_ITEM_start(tname) \
		ASN1_ITYPE_SEQUENCE,\
		V_ASN1_SEQUENCE,\
		tname##_seq_tt,\
		sizeof(tname##_seq_tt) / sizeof(ASN1_TEMPLATE),\
		&tname##_aux,\
		sizeof(stname),\
		#tname \
	ASN1_ITEM_end(tname)
# define static_ASN1_SEQUENCE_END_ref(stname, tname) \
	;\
	static_ASN1_ITEM_start(tname) \
		ASN1_ITYPE_SEQUENCE,\

  V_ASN1_SEQUENCE,\
		tname##_seq_tt,\
		sizeof(tname##_seq_tt) / sizeof(ASN1_TEMPLATE),\
		&tname##_aux,\
		sizeof(stname),\
		#stname \
	ASN1_ITEM_end(tname)

# define ASN1_NDEF_SEQUENCE_END_cb(stname, tname) \
	;\
	ASN1_ITEM_start(tname) \
		ASN1_ITYPE_NDEF_SEQUENCE,\
		V_ASN1_SEQUENCE,\
		tname##_seq_tt,\
		sizeof(tname##_seq_tt) / sizeof(ASN1_TEMPLATE),\
		&tname##_aux,\
		sizeof(stname),\
		#stname \
	ASN1_ITEM_end(tname)

/*-
* This pair helps declare a CHOICE type. We can do:
*
*	ASN1_CHOICE(chname) = {
*		... CHOICE options ...
*	ASN1_CHOICE_END(chname)
*
*	This will produce an ASN1_ITEM called chname_it
*	for a structure called chname. The structure
*	definition must look like this:
```

```
*     typedef struct {
*             int type;
*
          union {
*                     ASN1_SOMETHING *opt1;
*                     ASN1_SOMEOTHER *opt2;
*             } value;
*     } chname;
*
*     the name of the selector must be 'type'.
*     to use an alternative selector name use the
*     ASN1_CHOICE_END_selector() version.
*/

# define ASN1_CHOICE(tname) \
      static const ASN1_TEMPLATE tname##_ch_tt[]

# define ASN1_CHOICE_cb(tname, cb) \
      static const ASN1_AUX tname##_aux = {NULL, 0, 0, 0, cb, 0, NULL}; \
      ASN1_CHOICE(tname)

# define ASN1_CHOICE_END(stname) ASN1_CHOICE_END_name(stname, stname)

# define static_ASN1_CHOICE_END(stname) static_ASN1_CHOICE_END_name(stname, stname)

# define ASN1_CHOICE_END_name(stname, tname) ASN1_CHOICE_END_selector(stname, tname, type)

# define static_ASN1_CHOICE_END_name(stname, tname) static_ASN1_CHOICE_END_selector(stname, tname,
type)

# define ASN1_CHOICE_END_selector(stname, tname, selname) \
      ;\
      ASN1_ITEM_start(tname) \

    ASN1_ITYPE_CHOICE,\
            offsetof(stname,selname) ,\
            tname##_ch_tt,\
            sizeof(tname##_ch_tt) / sizeof(ASN1_TEMPLATE),\
            NULL,\
            sizeof(stname),\
            #stname \
      ASN1_ITEM_end(tname)

# define static_ASN1_CHOICE_END_selector(stname, tname, selname) \
      ;\
      static_ASN1_ITEM_start(tname) \
            ASN1_ITYPE_CHOICE,\
            offsetof(stname,selname) ,\
```

```
            tname##_ch_tt,\
            sizeof(tname##_ch_tt) / sizeof(ASN1_TEMPLATE),\
            NULL,\
            sizeof(stname),\
            #stname \
      ASN1_ITEM_end(tname)

# define ASN1_CHOICE_END_cb(stname, tname, selname) \
      ;\
      ASN1_ITEM_start(tname) \
            ASN1_ITYPE_CHOICE,\
            offsetof(stname,selname) ,\
            tname##_ch_tt,\
            sizeof(tname##_ch_tt) / sizeof(ASN1_TEMPLATE),\
            &tname##_aux,\

   sizeof(stname),\
            #stname \
      ASN1_ITEM_end(tname)

/* This helps with the template wrapper form of ASN1_ITEM */

# define ASN1_EX_TEMPLATE_TYPE(flags, tag, name, type) { \
      (flags), (tag), 0,\
      #name, ASN1_ITEM_ref(type) }

/* These help with SEQUENCE or CHOICE components */

/* used to declare other types */

# define ASN1_EX_TYPE(flags, tag, stname, field, type) { \
      (flags), (tag), offsetof(stname, field),\
      #field, ASN1_ITEM_ref(type) }

/* implicit and explicit helper macros */

# define ASN1_IMP_EX(stname, field, type, tag, ex) \
       ASN1_EX_TYPE(ASN1_TFLG_IMPLICIT | (ex), tag, stname, field, type)

# define ASN1_EXP_EX(stname, field, type, tag, ex) \
       ASN1_EX_TYPE(ASN1_TFLG_EXPLICIT | (ex), tag, stname, field, type)

/* Any defined by macros: the field used is in the table itself */

# define ASN1_ADB_OBJECT(tblname) { ASN1_TFLG_ADB_OID, -1, 0, #tblname, tblname##_adb }
# define ASN1_ADB_INTEGER(tblname) { ASN1_TFLG_ADB_INT,
 -1, 0, #tblname, tblname##_adb }
```

```
/* Plain simple type */
# define ASN1_SIMPLE(stname, field, type) ASN1_EX_TYPE(0,0, stname, field, type)
/* Embedded simple type */
# define ASN1_EMBED(stname, field, type) ASN1_EX_TYPE(ASN1_TFLG_EMBED,0, stname, field, type)

/* OPTIONAL simple type */
# define ASN1_OPT(stname, field, type) ASN1_EX_TYPE(ASN1_TFLG_OPTIONAL, 0, stname, field, type)
# define ASN1_OPT_EMBED(stname, field, type)
ASN1_EX_TYPE(ASN1_TFLG_OPTIONAL|ASN1_TFLG_EMBED, 0, stname, field, type)

/* IMPLICIT tagged simple type */
# define ASN1_IMP(stname, field, type, tag) ASN1_IMP_EX(stname, field, type, tag, 0)
# define ASN1_IMP_EMBED(stname, field, type, tag) ASN1_IMP_EX(stname, field, type, tag,
ASN1_TFLG_EMBED)

/* IMPLICIT tagged OPTIONAL simple type */
# define ASN1_IMP_OPT(stname, field, type, tag) ASN1_IMP_EX(stname, field, type, tag,
ASN1_TFLG_OPTIONAL)
# define ASN1_IMP_OPT_EMBED(stname, field, type, tag) ASN1_IMP_EX(stname, field, type, tag,
ASN1_TFLG_OPTIONAL|ASN1_TFLG_EMBED)

/*
 Same as above but EXPLICIT */

# define ASN1_EXP(stname, field, type, tag) ASN1_EXP_EX(stname, field, type, tag, 0)
# define ASN1_EXP_EMBED(stname, field, type, tag) ASN1_EXP_EX(stname, field, type, tag,
ASN1_TFLG_EMBED)
# define ASN1_EXP_OPT(stname, field, type, tag) ASN1_EXP_EX(stname, field, type, tag,
ASN1_TFLG_OPTIONAL)
# define ASN1_EXP_OPT_EMBED(stname, field, type, tag) ASN1_EXP_EX(stname, field, type, tag,
ASN1_TFLG_OPTIONAL|ASN1_TFLG_EMBED)

/* SEQUENCE OF type */
# define ASN1_SEQUENCE_OF(stname, field, type) \
        ASN1_EX_TYPE(ASN1_TFLG_SEQUENCE_OF, 0, stname, field, type)

/* OPTIONAL SEQUENCE OF */
# define ASN1_SEQUENCE_OF_OPT(stname, field, type) \
        ASN1_EX_TYPE(ASN1_TFLG_SEQUENCE_OF|ASN1_TFLG_OPTIONAL, 0, stname, field, type)

/* Same as above but for SET OF */

# define ASN1_SET_OF(stname, field, type) \
        ASN1_EX_TYPE(ASN1_TFLG_SET_OF, 0, stname, field, type)

# define ASN1_SET_OF_OPT(stname, field, type)
 \
        ASN1_EX_TYPE(ASN1_TFLG_SET_OF|ASN1_TFLG_OPTIONAL, 0, stname, field, type)
```

```
/* Finally compound types of SEQUENCE, SET, IMPLICIT, EXPLICIT and OPTIONAL */

# define ASN1_IMP_SET_OF(stname, field, type, tag) \
                ASN1_IMP_EX(stname, field, type, tag, ASN1_TFLG_SET_OF)

# define ASN1_EXP_SET_OF(stname, field, type, tag) \
                ASN1_EXP_EX(stname, field, type, tag, ASN1_TFLG_SET_OF)

# define ASN1_IMP_SET_OF_OPT(stname, field, type, tag) \
                ASN1_IMP_EX(stname, field, type, tag, ASN1_TFLG_SET_OF|ASN1_TFLG_OPTIONAL)

# define ASN1_EXP_SET_OF_OPT(stname, field, type, tag) \
                ASN1_EXP_EX(stname, field, type, tag, ASN1_TFLG_SET_OF|ASN1_TFLG_OPTIONAL)

# define ASN1_IMP_SEQUENCE_OF(stname, field, type, tag) \
                ASN1_IMP_EX(stname, field, type, tag, ASN1_TFLG_SEQUENCE_OF)

# define ASN1_IMP_SEQUENCE_OF_OPT(stname, field, type, tag) \
                ASN1_IMP_EX(stname,
 field, type, tag, ASN1_TFLG_SEQUENCE_OF|ASN1_TFLG_OPTIONAL)

# define ASN1_EXP_SEQUENCE_OF(stname, field, type, tag) \
                ASN1_EXP_EX(stname, field, type, tag, ASN1_TFLG_SEQUENCE_OF)

# define ASN1_EXP_SEQUENCE_OF_OPT(stname, field, type, tag) \
                ASN1_EXP_EX(stname, field, type, tag,
ASN1_TFLG_SEQUENCE_OF|ASN1_TFLG_OPTIONAL)

/* EXPLICIT using indefinite length constructed form */
# define ASN1_NDEF_EXP(stname, field, type, tag) \
                ASN1_EXP_EX(stname, field, type, tag, ASN1_TFLG_NDEF)

/* EXPLICIT OPTIONAL using indefinite length constructed form */
# define ASN1_NDEF_EXP_OPT(stname, field, type, tag) \
                ASN1_EXP_EX(stname, field, type, tag, ASN1_TFLG_OPTIONAL|ASN1_TFLG_NDEF)

/* Macros for the ASN1_ADB structure */

# define ASN1_ADB(name) \
      static const ASN1_ADB_TABLE name##_adbtbl[]

# define ASN1_ADB_END(name, flags, field, adb_cb, def, none) \
      ;\
      static const ASN1_ITEM
 *name##_adb(void) \
      { \
      static const ASN1_ADB internal_adb = \
```

```
            {\
            flags,\
            offsetof(name, field),\
            adb_cb,\
            name##_adbtbl,\
            sizeof(name##_adbtbl) / sizeof(ASN1_ADB_TABLE),\
            def,\
            none\
            }; \
            return (const ASN1_ITEM *) &internal_adb; \
        } \
        void dummy_function(void)

# define ADB_ENTRY(val, template) {val, template}

# define ASN1_ADB_TEMPLATE(name) \
        static const ASN1_TEMPLATE name##_tt

/*
* This is the ASN1 template structure that defines a wrapper round the
* actual type. It determines the actual position of the field in the value
* structure, various flags such as OPTIONAL and the field name.
*/

struct ASN1_TEMPLATE_st {
   unsigned long flags;        /* Various flags */
   long tag;                   /* tag, not used if no tagging */
   unsigned long offset;       /* Offset
 of this field in structure */
   const char *field_name;     /* Field name */
   ASN1_ITEM_EXP *item;        /* Relevant ASN1_ITEM or ASN1_ADB */
};

/* Macro to extract ASN1_ITEM and ASN1_ADB pointer from ASN1_TEMPLATE */

# define ASN1_TEMPLATE_item(t) (t->item_ptr)
# define ASN1_TEMPLATE_adb(t) (t->item_ptr)

typedef struct ASN1_ADB_TABLE_st ASN1_ADB_TABLE;
typedef struct ASN1_ADB_st ASN1_ADB;

struct ASN1_ADB_st {
   unsigned long flags;        /* Various flags */
   unsigned long offset;       /* Offset of selector field */
   int (*adb_cb)(long *psel);  /* Application callback */
   const ASN1_ADB_TABLE *tbl;  /* Table of possible types */
   long tblcount;              /* Number of entries in tbl */
   const ASN1_TEMPLATE *default_tt; /* Type to use if no match */
```

```
  const ASN1_TEMPLATE *null_tt; /* Type to use if selector is NULL */
};

struct ASN1_ADB_TABLE_st {
  long value;             /* NID for an object or value for an int */
  const ASN1_TEMPLATE tt;
  /* item for this value */
};

/* template flags */

/* Field is optional */
# define ASN1_TFLG_OPTIONAL      (0x1)

/* Field is a SET OF */
# define ASN1_TFLG_SET_OF        (0x1 << 1)

/* Field is a SEQUENCE OF */
# define ASN1_TFLG_SEQUENCE_OF   (0x2 << 1)

/*
* Special case: this refers to a SET OF that will be sorted into DER order
* when encoded *and* the corresponding STACK will be modified to match the
* new order.
*/
# define ASN1_TFLG_SET_ORDER     (0x3 << 1)

/* Mask for SET OF or SEQUENCE OF */
# define ASN1_TFLG_SK_MASK       (0x3 << 1)

/*
* These flags mean the tag should be taken from the tag field. If EXPLICIT
* then the underlying type is used for the inner tag.
*/

/* IMPLICIT tagging */
# define ASN1_TFLG_IMPTAG        (0x1 << 3)

/* EXPLICIT tagging, inner tag from underlying type */
# define ASN1_TFLG_EXPTAG        (0x2 << 3)

# define ASN1_TFLG_TAG_MASK      (0x3 << 3)

/* context specific IMPLICIT */
# define ASN1_TFLG_IMPLICIT      (ASN1_TFLG_IMPTAG|ASN1_TFLG_CONTEXT)

/*
```

```
 context specific EXPLICIT */
# define ASN1_TFLG_EXPLICIT      (ASN1_TFLG_EXPTAG|ASN1_TFLG_CONTEXT)

/*
* If tagging is in force these determine the type of tag to use. Otherwise
* the tag is determined by the underlying type. These values reflect the
* actual octet format.
*/

/* Universal tag */
# define ASN1_TFLG_UNIVERSAL     (0x0<<6)
/* Application tag */
# define ASN1_TFLG_APPLICATION   (0x1<<6)
/* Context specific tag */
# define ASN1_TFLG_CONTEXT       (0x2<<6)
/* Private tag */
# define ASN1_TFLG_PRIVATE       (0x3<<6)

# define ASN1_TFLG_TAG_CLASS     (0x3<<6)

/*
* These are for ANY DEFINED BY type. In this case the 'item' field points to
* an ASN1_ADB structure which contains a table of values to decode the
* relevant type
*/

# define ASN1_TFLG_ADB_MASK      (0x3<<8)

# define ASN1_TFLG_ADB_OID       (0x1<<8)

# define ASN1_TFLG_ADB_INT       (0x1<<9)

/*
* This flag when present in a SEQUENCE OF, SET OF or EXPLICIT causes
* indefinite length constructed
 encoding to be used if required.
*/

# define ASN1_TFLG_NDEF          (0x1<<11)

/* Field is embedded and not a pointer */
# define ASN1_TFLG_EMBED         (0x1 << 12)

/* This is the actual ASN1 item itself */

struct ASN1_ITEM_st {
   char itype;                /* The item type, primitive, SEQUENCE, CHOICE
                              * or extern */
```

```
  long utype;                /* underlying type */
  const ASN1_TEMPLATE *templates; /* If SEQUENCE or CHOICE this contains
                              * the contents */
  long tcount;               /* Number of templates if SEQUENCE or CHOICE */
  const void *funcs;         /* further data and type-specific functions */
  /* funcs can be ASN1_PRIMITIVE_FUNCS*, ASN1_EXTERN_FUNCS*, or ASN1_AUX* */
  long size;                 /* Structure size (usually) */
  const char *sname;         /* Structure name */
};

/*
* Cache for ASN1 tag and length, so we don't keep re-reading it for things
* like
 CHOICE
*/

struct ASN1_TLC_st {
  char valid;                /* Values below are valid */
  int ret;                   /* return value */
  long plen;                 /* length */
  int ptag;                  /* class value */
  int pclass;                /* class value */
  int hdrlen;                /* header length */
};

/* Typedefs for ASN1 function pointers */
typedef int ASN1_ex_d2i(ASN1_VALUE **pval, const unsigned char **in, long len,
                        const ASN1_ITEM *it, int tag, int aclass, char opt,
                        ASN1_TLC *ctx);

typedef int ASN1_ex_d2i_ex(ASN1_VALUE **pval, const unsigned char **in, long len,
                           const ASN1_ITEM *it, int tag, int aclass, char opt,
                           ASN1_TLC *ctx, OSSL_LIB_CTX *libctx,
                           const char *propq);
typedef int ASN1_ex_i2d(const ASN1_VALUE **pval, unsigned char **out,
                        const ASN1_ITEM *it, int tag, int aclass);
typedef
 int ASN1_ex_new_func(ASN1_VALUE **pval, const ASN1_ITEM *it);
typedef int ASN1_ex_new_ex_func(ASN1_VALUE **pval, const ASN1_ITEM *it,
                                OSSL_LIB_CTX *libctx, const char *propq);
typedef void ASN1_ex_free_func(ASN1_VALUE **pval, const ASN1_ITEM *it);

typedef int ASN1_ex_print_func(BIO *out, const ASN1_VALUE **pval,
                               int indent, const char *fname,
                               const ASN1_PCTX *pctx);

typedef int ASN1_primitive_i2c(const ASN1_VALUE **pval, unsigned char *cont,
                               int *putype, const ASN1_ITEM *it);
```

```
typedef int ASN1_primitive_c2i(ASN1_VALUE **pval, const unsigned char *cont,
                               int len, int utype, char *free_cont,
                               const ASN1_ITEM *it);
typedef int ASN1_primitive_print(BIO *out, const ASN1_VALUE **pval,
                                 const ASN1_ITEM *it, int indent,
                                 const ASN1_PCTX *pctx);

typedef
 struct ASN1_EXTERN_FUNCS_st {
   void *app_data;
   ASN1_ex_new_func *asn1_ex_new;
   ASN1_ex_free_func *asn1_ex_free;
   ASN1_ex_free_func *asn1_ex_clear;
   ASN1_ex_d2i *asn1_ex_d2i;
   ASN1_ex_i2d *asn1_ex_i2d;
   ASN1_ex_print_func *asn1_ex_print;
   ASN1_ex_new_ex_func *asn1_ex_new_ex;
   ASN1_ex_d2i_ex *asn1_ex_d2i_ex;
} ASN1_EXTERN_FUNCS;

typedef struct ASN1_PRIMITIVE_FUNCS_st {
   void *app_data;
   unsigned long flags;
   ASN1_ex_new_func *prim_new;
   ASN1_ex_free_func *prim_free;
   ASN1_ex_free_func *prim_clear;
   ASN1_primitive_c2i *prim_c2i;
   ASN1_primitive_i2c *prim_i2c;
   ASN1_primitive_print *prim_print;
} ASN1_PRIMITIVE_FUNCS;

/*
* This is the ASN1_AUX structure: it handles various miscellaneous
* requirements. For example the use of reference counts and an informational
* callback. The "informational callback" is called at various points during
* the ASN1 encoding and decoding. It can be used to provide minor
* customisation of the
 structures used. This is most useful where the
* supplied routines *almost* do the right thing but need some extra help at
* a few points. If the callback returns zero then it is assumed a fatal
* error has occurred and the main operation should be abandoned. If major
* changes in the default behaviour are required then an external type is
* more appropriate.
* For the operations ASN1_OP_I2D_PRE, ASN1_OP_I2D_POST, ASN1_OP_PRINT_PRE, and
* ASN1_OP_PRINT_POST, meanwhile a variant of the callback with const parameter
* 'in' is provided to make clear statically that its input is not modified. If
* and only if this variant is in use the flag ASN1_AFLG_CONST_CB must be set.
*/
```

```
typedef int ASN1_aux_cb(int operation, ASN1_VALUE **in, const ASN1_ITEM *it,
                        void *exarg);
typedef int ASN1_aux_const_cb(int operation, const ASN1_VALUE **in,
                              const ASN1_ITEM *it, void *exarg);

typedef struct ASN1_AUX_st {
   void *app_data;
   int flags;
    int ref_offset;            /* Offset of reference value */
   int ref_lock;               /* Offset of lock value */
   ASN1_aux_cb *asn1_cb;
   int enc_offset;             /* Offset of ASN1_ENCODING structure */
   ASN1_aux_const_cb *asn1_const_cb; /* for ASN1_OP_I2D_ and ASN1_OP_PRINT_ */
} ASN1_AUX;

/* For print related callbacks exarg points to this structure */
typedef struct ASN1_PRINT_ARG_st {
   BIO *out;
   int indent;
   const ASN1_PCTX *pctx;
} ASN1_PRINT_ARG;

/* For streaming related callbacks exarg points to this structure */
typedef struct ASN1_STREAM_ARG_st {
   /* BIO to stream through */
   BIO *out;
   /* BIO with filters appended */
   BIO *ndef_bio;
   /* Streaming I/O boundary */
   unsigned char **boundary;
} ASN1_STREAM_ARG;

/* Flags in ASN1_AUX */

/* Use a reference count */
# define ASN1_AFLG_REFCOUNT      1
/* Save the encoding of structure (useful for signatures) */
# define ASN1_AFLG_ENCODING      2
/* The Sequence length is invalid
 */
# define ASN1_AFLG_BROKEN        4
/* Use the new asn1_const_cb */
# define ASN1_AFLG_CONST_CB      8

/* operation values for asn1_cb */

# define ASN1_OP_NEW_PRE         0
```

```
# define ASN1_OP_NEW_POST        1
# define ASN1_OP_FREE_PRE        2
# define ASN1_OP_FREE_POST       3
# define ASN1_OP_D2I_PRE         4
# define ASN1_OP_D2I_POST        5
# define ASN1_OP_I2D_PRE         6
# define ASN1_OP_I2D_POST        7
# define ASN1_OP_PRINT_PRE       8
# define ASN1_OP_PRINT_POST      9
# define ASN1_OP_STREAM_PRE      10
# define ASN1_OP_STREAM_POST     11
# define ASN1_OP_DETACHED_PRE    12
# define ASN1_OP_DETACHED_POST   13
# define ASN1_OP_DUP_PRE         14
# define ASN1_OP_DUP_POST        15
# define ASN1_OP_GET0_LIBCTX     16
# define ASN1_OP_GET0_PROPQ      17

/* Macro to implement a primitive type */
# define IMPLEMENT_ASN1_TYPE(stname) IMPLEMENT_ASN1_TYPE_ex(stname, stname, 0)
# define IMPLEMENT_ASN1_TYPE_ex(itname, vname, ex) \
                        ASN1_ITEM_start(itname)
 \
                              ASN1_ITYPE_PRIMITIVE, V_##vname, NULL, 0, NULL, ex, #itname \
                        ASN1_ITEM_end(itname)

/* Macro to implement a multi string type */
# define IMPLEMENT_ASN1_MSTRING(itname, mask) \
                        ASN1_ITEM_start(itname) \
                              ASN1_ITYPE_MSTRING, mask, NULL, 0, NULL, sizeof(ASN1_STRING), #itname \
                        ASN1_ITEM_end(itname)

# define IMPLEMENT_EXTERN_ASN1(sname, tag, fptrs) \
      ASN1_ITEM_start(sname) \
            ASN1_ITYPE_EXTERN, \
            tag, \
            NULL, \
            0, \
            &fptrs, \
            0, \
            #sname \
      ASN1_ITEM_end(sname)

/* Macro to implement standard functions in terms of ASN1_ITEM structures */

# define IMPLEMENT_ASN1_FUNCTIONS(stname) IMPLEMENT_ASN1_FUNCTIONS_fname(stname,
stname, stname)
```

```
# define IMPLEMENT_ASN1_FUNCTIONS_name(stname,
 itname) IMPLEMENT_ASN1_FUNCTIONS_fname(stname, itname, itname)

# define IMPLEMENT_ASN1_FUNCTIONS_ENCODE_name(stname, itname) \
                IMPLEMENT_ASN1_FUNCTIONS_ENCODE_fname(stname, itname, itname)

# define IMPLEMENT_STATIC_ASN1_ALLOC_FUNCTIONS(stname) \
        IMPLEMENT_ASN1_ALLOC_FUNCTIONS_pfname(static, stname, stname, stname)

# define IMPLEMENT_ASN1_ALLOC_FUNCTIONS(stname) \
        IMPLEMENT_ASN1_ALLOC_FUNCTIONS_fname(stname, stname, stname)

# define IMPLEMENT_ASN1_ALLOC_FUNCTIONS_pfname(pre, stname, itname, fname) \
    pre stname *fname##_new(void) \
    { \
        return (stname *)ASN1_item_new(ASN1_ITEM_rptr(itname)); \
    } \
    pre void fname##_free(stname *a) \
    { \
        ASN1_item_free((ASN1_VALUE *)a, ASN1_ITEM_rptr(itname)); \
    }

# define IMPLEMENT_ASN1_ALLOC_FUNCTIONS_fname(stname, itname, fname) \
    stname *fname##_new(void) \
    { \
        return (stname *)ASN1_item_new(ASN1_ITEM_rptr(itname));
 \
    } \
    void fname##_free(stname *a) \
    { \
        ASN1_item_free((ASN1_VALUE *)a, ASN1_ITEM_rptr(itname)); \
    }

# define IMPLEMENT_ASN1_FUNCTIONS_fname(stname, itname, fname) \
    IMPLEMENT_ASN1_ENCODE_FUNCTIONS_fname(stname, itname, fname) \
    IMPLEMENT_ASN1_ALLOC_FUNCTIONS_fname(stname, itname, fname)

# define IMPLEMENT_ASN1_ENCODE_FUNCTIONS_fname(stname, itname, fname) \
    stname *d2i_##fname(stname **a, const unsigned char **in, long len) \
    { \
        return (stname *)ASN1_item_d2i((ASN1_VALUE **)a, in, len, ASN1_ITEM_rptr(itname));\
    } \
    int i2d_##fname(const stname *a, unsigned char **out) \
    { \
        return ASN1_item_i2d((const ASN1_VALUE *)a, out, ASN1_ITEM_rptr(itname));\
    }

# define IMPLEMENT_ASN1_NDEF_FUNCTION(stname) \
```

```
	int i2d_##stname##_NDEF(const stname *a, unsigned char **out) \
	{ \
		return
 ASN1_item_ndef_i2d((const ASN1_VALUE *)a, out, ASN1_ITEM_rptr(stname));\
	}

# define IMPLEMENT_STATIC_ASN1_ENCODE_FUNCTIONS(stname) \
	static stname *d2i_##stname(stname **a, \
				const unsigned char **in, long len) \
	{ \
		return (stname *)ASN1_item_d2i((ASN1_VALUE **)a, in, len, \
					ASN1_ITEM_rptr(stname)); \
	} \
	static int i2d_##stname(const stname *a, unsigned char **out) \
	{ \
		return ASN1_item_i2d((const ASN1_VALUE *)a, out, \
				ASN1_ITEM_rptr(stname)); \
	}

# define IMPLEMENT_ASN1_DUP_FUNCTION(stname) \
	stname * stname##_dup(const stname *x) \
	{ \
	return ASN1_item_dup(ASN1_ITEM_rptr(stname), x); \
	}

# define IMPLEMENT_ASN1_PRINT_FUNCTION(stname) \
	IMPLEMENT_ASN1_PRINT_FUNCTION_fname(stname, stname, stname)

# define IMPLEMENT_ASN1_PRINT_FUNCTION_fname(stname,
 itname, fname) \
	int fname##_print_ctx(BIO *out, const stname *x, int indent, \
					const ASN1_PCTX *pctx) \
	{ \
		return ASN1_item_print(out, (const ASN1_VALUE *)x, indent, \
			ASN1_ITEM_rptr(itname), pctx); \
	}

/* external definitions for primitive types */

DECLARE_ASN1_ITEM(ASN1_BOOLEAN)
DECLARE_ASN1_ITEM(ASN1_TBOOLEAN)
DECLARE_ASN1_ITEM(ASN1_FBOOLEAN)
DECLARE_ASN1_ITEM(ASN1_SEQUENCE)
DECLARE_ASN1_ITEM(CBIGNUM)
DECLARE_ASN1_ITEM(BIGNUM)
DECLARE_ASN1_ITEM(INT32)
DECLARE_ASN1_ITEM(ZINT32)
DECLARE_ASN1_ITEM(UINT32)
```

```
DECLARE_ASN1_ITEM(ZUINT32)
DECLARE_ASN1_ITEM(INT64)
DECLARE_ASN1_ITEM(ZINT64)
DECLARE_ASN1_ITEM(UINT64)
DECLARE_ASN1_ITEM(ZUINT64)

# ifndef OPENSSL_NO_DEPRECATED_3_0
/*
* LONG and ZLONG are strongly discouraged for use as stored data, as the
* underlying C type (long) differs in size depending on the architecture.
* They are designed with 32-bit longs
 in mind.
*/
DECLARE_ASN1_ITEM(LONG)
DECLARE_ASN1_ITEM(ZLONG)
# endif

SKM_DEFINE_STACK_OF_INTERNAL(ASN1_VALUE, ASN1_VALUE, ASN1_VALUE)
#define sk_ASN1_VALUE_num(sk) OPENSSL_sk_num(ossl_check_const_ASN1_VALUE_sk_type(sk))
#define sk_ASN1_VALUE_value(sk, idx) ((ASN1_VALUE
*)OPENSSL_sk_value(ossl_check_const_ASN1_VALUE_sk_type(sk), (idx)))
#define sk_ASN1_VALUE_new(cmp) ((STACK_OF(ASN1_VALUE)
*)OPENSSL_sk_new(ossl_check_ASN1_VALUE_compfunc_type(cmp)))
#define sk_ASN1_VALUE_new_null() ((STACK_OF(ASN1_VALUE) *)OPENSSL_sk_new_null())
#define sk_ASN1_VALUE_new_reserve(cmp, n) ((STACK_OF(ASN1_VALUE)
*)OPENSSL_sk_new_reserve(ossl_check_ASN1_VALUE_compfunc_type(cmp), (n)))
#define sk_ASN1_VALUE_reserve(sk, n) OPENSSL_sk_reserve(ossl_check_ASN1_VALUE_sk_type(sk), (n))
#define sk_ASN1_VALUE_free(sk) OPENSSL_sk_free(ossl_check_ASN1_VALUE_sk_type(sk))
#define sk_ASN1_VALUE_zero(sk) OPENSSL_sk_zero(ossl_check_ASN1_VALUE_sk_type(sk))
#define sk_ASN1_VALUE_delete(sk, i) ((ASN1_VALUE
*)OPENSSL_sk_delete(ossl_check_ASN1_VALUE_sk_type(sk),
 (i)))
#define sk_ASN1_VALUE_delete_ptr(sk, ptr) ((ASN1_VALUE
*)OPENSSL_sk_delete_ptr(ossl_check_ASN1_VALUE_sk_type(sk), ossl_check_ASN1_VALUE_type(ptr)))
#define sk_ASN1_VALUE_push(sk, ptr) OPENSSL_sk_push(ossl_check_ASN1_VALUE_sk_type(sk),
ossl_check_ASN1_VALUE_type(ptr))
#define sk_ASN1_VALUE_unshift(sk, ptr) OPENSSL_sk_unshift(ossl_check_ASN1_VALUE_sk_type(sk),
ossl_check_ASN1_VALUE_type(ptr))
#define sk_ASN1_VALUE_pop(sk) ((ASN1_VALUE
*)OPENSSL_sk_pop(ossl_check_ASN1_VALUE_sk_type(sk)))
#define sk_ASN1_VALUE_shift(sk) ((ASN1_VALUE
*)OPENSSL_sk_shift(ossl_check_ASN1_VALUE_sk_type(sk)))
#define sk_ASN1_VALUE_pop_free(sk, freefunc)
OPENSSL_sk_pop_free(ossl_check_ASN1_VALUE_sk_type(sk),ossl_check_ASN1_VALUE_freefunc_type(freef
unc))
#define sk_ASN1_VALUE_insert(sk, ptr, idx) OPENSSL_sk_insert(ossl_check_ASN1_VALUE_sk_type(sk),
ossl_check_ASN1_VALUE_type(ptr), (idx))
#define sk_ASN1_VALUE_set(sk, idx, ptr) ((ASN1_VALUE
```

```
*)OPENSSL_sk_set(ossl_check_ASN1_VALUE_sk_type(sk),
 (idx), ossl_check_ASN1_VALUE_type(ptr)))
#define sk_ASN1_VALUE_find(sk, ptr) OPENSSL_sk_find(ossl_check_ASN1_VALUE_sk_type(sk),
ossl_check_ASN1_VALUE_type(ptr))
#define sk_ASN1_VALUE_find_ex(sk, ptr) OPENSSL_sk_find_ex(ossl_check_ASN1_VALUE_sk_type(sk),
ossl_check_ASN1_VALUE_type(ptr))
#define sk_ASN1_VALUE_find_all(sk, ptr, pnum)
OPENSSL_sk_find_all(ossl_check_ASN1_VALUE_sk_type(sk), ossl_check_ASN1_VALUE_type(ptr), pnum)
#define sk_ASN1_VALUE_sort(sk) OPENSSL_sk_sort(ossl_check_ASN1_VALUE_sk_type(sk))
#define sk_ASN1_VALUE_is_sorted(sk) OPENSSL_sk_is_sorted(ossl_check_const_ASN1_VALUE_sk_type(sk))
#define sk_ASN1_VALUE_dup(sk) ((STACK_OF(ASN1_VALUE)
*)OPENSSL_sk_dup(ossl_check_const_ASN1_VALUE_sk_type(sk)))
#define sk_ASN1_VALUE_deep_copy(sk, copyfunc, freefunc) ((STACK_OF(ASN1_VALUE)
*)OPENSSL_sk_deep_copy(ossl_check_const_ASN1_VALUE_sk_type(sk),
ossl_check_ASN1_VALUE_copyfunc_type(copyfunc), ossl_check_ASN1_VALUE_freefunc_type(freefunc)))
#define sk_ASN1_VALUE_set_cmp_func(sk,
 cmp) ((sk_ASN1_VALUE_compfunc)OPENSSL_sk_set_cmp_func(ossl_check_ASN1_VALUE_sk_type(sk),
ossl_check_ASN1_VALUE_compfunc_type(cmp)))



/* Functions used internally by the ASN1 code */

int ASN1_item_ex_new(ASN1_VALUE **pval, const ASN1_ITEM *it);
void ASN1_item_ex_free(ASN1_VALUE **pval, const ASN1_ITEM *it);

int ASN1_item_ex_d2i(ASN1_VALUE **pval, const unsigned char **in, long len,
                const ASN1_ITEM *it, int tag, int aclass, char opt,
                ASN1_TLC *ctx);

int ASN1_item_ex_i2d(const ASN1_VALUE **pval, unsigned char **out,
                const ASN1_ITEM *it, int tag, int aclass);

/* Legacy compatibility */
# define IMPLEMENT_ASN1_FUNCTIONS_const(name) IMPLEMENT_ASN1_FUNCTIONS(name)
# define IMPLEMENT_ASN1_ENCODE_FUNCTIONS_const_fname(stname, itname, fname) \
      IMPLEMENT_ASN1_ENCODE_FUNCTIONS_fname(stname, itname, fname)

#ifdef  __cplusplus
}
#endif
#endif
```

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```
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  'openssl/providers/implementations/signature/ecdsa_sig.c',
  'openssl/providers/implementations/signature/eddsa_sig.c',
  'openssl/providers/implementations/signature/mac_legacy_sig.c',
  'openssl/providers/implementations/signature/rsa_sig.c',
  'openssl/ssl/s3_cbc.c',
  'openssl/providers/common/der/der_dsa_key.c',
  'openssl/providers/common/der/der_dsa_sig.c',
  'openssl/providers/common/der/der_ec_key.c',
  'openssl/providers/common/der/der_ec_sig.c',
  'openssl/providers/common/der/der_ecx_key.c',
  'openssl/providers/common/der/der_rsa_key.c',
  'openssl/providers/common/provider_ctx.c',
  'openssl/providers/common/provider_err.c',
  'openssl/providers/implementations/ciphers/ciphercommon.c',
  'openssl/providers/implementations/ciphers/ciphercommon_block.c',
  'openssl/providers/implementations/ciphers/ciphercommon_ccm.c',
  'openssl/providers/implementations/ciphers/ciphercommon_ccm_hw.c',
   'openssl/providers/implementations/ciphers/ciphercommon_gcm.c',
  'openssl/providers/implementations/ciphers/ciphercommon_gcm_hw.c',
  'openssl/providers/implementations/ciphers/ciphercommon_hw.c',
  'openssl/providers/implementations/digests/digestcommon.c',
  'openssl/ssl/record/tls_pad.c',
  'openssl/providers/fips/fips_entry.c',

],
'openssl_sources_BSD-x86_64': [
  './config/archs/BSD-x86_64/asm_avx2/crypto/aes/aes-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/aes/aesni-mb-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/aes/aesni-sha1-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/aes/aesni-sha256-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/aes/aesni-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/aes/bsaes-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/aes/vpaes-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/bn/rsaz-avx2.s',
   './config/archs/BSD-x86_64/asm_avx2/crypto/bn/rsaz-avx512.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/bn/rsaz-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/bn/x86_64-gf2m.s',
```

```
  './config/archs/BSD-x86_64/asm_avx2/crypto/bn/x86_64-mont.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/bn/x86_64-mont5.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/camellia/cmll-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/chacha/chacha-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/ec/ecp_nistz256-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/ec/x25519-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/x86_64cpuid.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/md5/md5-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/modes/aesni-gcm-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/modes/ghash-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/poly1305/poly1305-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/rc4/rc4-md5-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/rc4/rc4-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/sha/keccak1600-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/sha/sha1-mb-x86_64.s',
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  './config/archs/BSD-x86_64/asm_avx2/crypto/sha/sha256-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/sha/sha512-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/crypto/whrlpool/wp-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/engines/e_padlock-x86_64.s',
  './config/archs/BSD-x86_64/asm_avx2/providers/common/der/der_sm2_gen.c',
  './config/archs/BSD-x86_64/asm_avx2/providers/common/der/der_digests_gen.c',
  './config/archs/BSD-x86_64/asm_avx2/providers/common/der/der_dsa_gen.c',
  './config/archs/BSD-x86_64/asm_avx2/providers/common/der/der_ec_gen.c',
  './config/archs/BSD-x86_64/asm_avx2/providers/common/der/der_ecx_gen.c',
  './config/archs/BSD-x86_64/asm_avx2/providers/common/der/der_rsa_gen.c',
  './config/archs/BSD-x86_64/asm_avx2/providers/common/der/der_wrap_gen.c',
  './config/archs/BSD-x86_64/asm_avx2/providers/legacy.ld',
  './config/archs/BSD-x86_64/asm_avx2/providers/fips.ld',

],
'openssl_defines_BSD-x86_64': [
  'NDEBUG',
  'L_ENDIAN',
  'OPENSSL_BUILDING_OPENSSL',
  'AES_ASM',
  'BSAES_ASM',
  'ECP_NISTZ256_ASM',
  'FIPS_MODULE',
  'GHASH_ASM',
  'KECCAK1600_ASM',
  'OPENSSL_BN_ASM_GF2m',
  'OPENSSL_BN_ASM_MONT',
  'OPENSSL_BN_ASM_MONT5',
  'OPENSSL_CPUID_OBJ',
  'OPENSSL_IA32_SSE2',
  'SHA1_ASM',
```

```
    'SHA256_ASM',
    'SHA512_ASM',
    'VPAES_ASM',
    'X25519_ASM',
    'FIPS_MODULE',
  ],
  'openssl_cflags_BSD-x86_64': [
    '-Wa,--noexecstack',
     '-Wall -O3',
    '-pthread',
    '-Wall -O3',
  ],
  'openssl_ex_libs_BSD-x86_64': [
    '-pthread',
  ],
  'linker_script': ''
 },
 'include_dirs': [
  '.',
  './include',
  './crypto',
  './crypto/include/internal',
  './providers/common/include',
 ],
 'defines': ['<@(openssl_defines_BSD-x86_64)'],
 'cflags': ['<@(openssl_cflags_BSD-x86_64)'],
 'libraries': ['<@(openssl_ex_libs_BSD-x86_64)'],

 'sources': ['<@(openssl_sources)', '<@(openssl_sources_BSD-x86_64)'],
 'direct_dependent_settings': {
  'include_dirs': ['./include', '.'],
  'defines': ['<@(openssl_defines_BSD-x86_64)'],
 },
}
```

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Cambridge, England.

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```
/*
* WARNING: do not edit!
* Generated by Makefile from include/openssl/fipskey.h.in
*
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*
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* in the file LICENSE in the source distribution or at
* https://www.openssl.org/source/license.html
*/

#ifndef OPENSSL_FIPSKEY_H
# define OPENSSL_FIPSKEY_H
# pragma once

# ifdef  __cplusplus
extern "C" {
# endif

/*
* The FIPS validation HMAC key, usable as an array initializer.
*/
#define FIPS_KEY_ELEMENTS \
   0xf4, 0x55, 0x66, 0x50, 0xac, 0x31, 0xd3, 0x54, 0x61, 0x61, 0x0b, 0xac, 0x4e, 0xd8, 0x1b, 0x1a, 0x18, 0x1b,
0x2d, 0x8a, 0x43, 0xea, 0x28, 0x54, 0xcb, 0xae, 0x22, 0xca, 0x74, 0x56, 0x08, 0x13
```

```
/*
* The FIPS validation key, as a string.
*/
#define FIPS_KEY_STRING "f4556650ac31d35461610bac4ed81b1a181b2d8a43ea2854cbae22ca74560813"

# ifdef  __cplusplus
}
# endif

#endif
```

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1.4560 github.com/beevik/ntp 1.4.3

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1.4561 migrate 4.18.3

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1.4562 x-time 0.12.0

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1.4563 oras.land/oras-go/v2 2.6.0

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on:
 push:
   branches:
     - main
     - release-*
 pull_request:
   branches:
     - main
     - release-*

permissions:
 contents: write
 pull-requests: write

jobs:
 check-license:
   runs-on: ubuntu-latest
   steps:
     - name: Checkout
       uses: actions/checkout@v4
     - name: Check license header
       uses: apache/skywalking-eyes/header@v0.7.0
```

```
      with:
        mode:
check
        config: .github/licenserc.yml
    - name: Check dependencies license
      uses: apache/skywalking-eyes/dependency@v0.7.0
      with:
        config: .github/licenserc.yml
```

1.4564 oras-go 2.6.0

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name: License Checker

on:
 push:
```

```
  branches:
    - main
    - release-*
 pull_request:
  branches:
    - main
    - release-*

permissions:
 contents: write
 pull-requests: write

jobs:
 check-license:
  runs-on: ubuntu-latest
  steps:
    - name: Checkout
      uses: actions/checkout@v4
    - name: Check license header
      uses: apache/skywalking-eyes/header@v0.7.0
      with:
        mode:
 check
        config: .github/licenserc.yml
    - name: Check dependencies license
      uses: apache/skywalking-eyes/dependency@v0.7.0
      with:
        config: .github/licenserc.yml
```

1.4565 python-requests 2.31.0+dfsg-1ubuntu1.1

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1.4566 github.com/azure/azure-sdk-for-go/sdk/azidentity 1.10.0

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// +build go1.18

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package fake

import (
 "context"
 "errors"
 "fmt"
 azfake "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/fake/server"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
 "net/http"
 "net/url"
 "regexp"
)

// LicensesServer is a fake server for instances of the armhybridcompute.LicensesClient type.
type LicensesServer struct {
 // BeginCreateOrUpdate is the fake for method LicensesClient.BeginCreateOrUpdate
 // HTTP status codes to indicate success:
 http.StatusOK
 BeginCreateOrUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
armhybridcompute.License, options *armhybridcompute.LicensesClientBeginCreateOrUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse], errResp
azfake.ErrorResponder)

 // BeginDelete is the fake for method LicensesClient.BeginDelete
 // HTTP status codes to indicate success: http.StatusOK, http.StatusNoContent
 BeginDelete func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientBeginDeleteOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse], errResp azfake.ErrorResponder)
```

```
 // Get is the fake for method LicensesClient.Get
 // HTTP status codes to indicate success: http.StatusOK
 Get func(ctx context.Context, resourceGroupName string, licenseName string, options
*armhybridcompute.LicensesClientGetOptions) (resp
azfake.Responder[armhybridcompute.LicensesClientGetResponse],
 errResp azfake.ErrorResponder)

 // NewListByResourceGroupPager is the fake for method LicensesClient.NewListByResourceGroupPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListByResourceGroupPager func(resourceGroupName string, options
*armhybridcompute.LicensesClientListByResourceGroupOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse])

 // NewListBySubscriptionPager is the fake for method LicensesClient.NewListBySubscriptionPager
 // HTTP status codes to indicate success: http.StatusOK
 NewListBySubscriptionPager func(options *armhybridcompute.LicensesClientListBySubscriptionOptions) (resp
azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse])

 // BeginUpdate is the fake for method LicensesClient.BeginUpdate
 // HTTP status codes to indicate success: http.StatusOK
 BeginUpdate func(ctx context.Context, resourceGroupName string, licenseName string, parameters
 armhybridcompute.LicenseUpdate, options *armhybridcompute.LicensesClientBeginUpdateOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse], errResp azfake.ErrorResponder)

 // BeginValidateLicense is the fake for method LicensesClient.BeginValidateLicense
 // HTTP status codes to indicate success: http.StatusOK
 BeginValidateLicense func(ctx context.Context, parameters armhybridcompute.License, options
*armhybridcompute.LicensesClientBeginValidateLicenseOptions) (resp
azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse], errResp
azfake.ErrorResponder)
}

// NewLicensesServerTransport creates a new instance of LicensesServerTransport with the provided
implementation.
// The returned LicensesServerTransport instance is connected to an instance of armhybridcompute.LicensesClient
via the
// azcore.ClientOptions.Transporter field in the client's constructor parameters.
func NewLicensesServerTransport(srv *LicensesServer) *LicensesServerTransport
 {
 return &LicensesServerTransport{
  srv:                    srv,
  beginCreateOrUpdate:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]() ,
  beginDelete:            newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]() ,
  newListByResourceGroupPager:
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]() ,
  newListBySubscriptionPager:
```

```
newTracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]](),
  beginUpdate:                newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]](),
  beginValidateLicense:
newTracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]](),
 }
}

// LicensesServerTransport connects instances of armhybridcompute.LicensesClient to instances of LicensesServer.
// Don't use this type directly, use NewLicensesServerTransport
 instead.
type LicensesServerTransport struct {
 srv                         *LicensesServer
 beginCreateOrUpdate
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientCreateOrUpdateResponse]]
 beginDelete                 *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientDeleteResponse]]
 newListByResourceGroupPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListByResourceGroupResponse]]
 newListBySubscriptionPager
*tracker[azfake.PagerResponder[armhybridcompute.LicensesClientListBySubscriptionResponse]]
 beginUpdate                 *tracker[azfake.PollerResponder[armhybridcompute.LicensesClientUpdateResponse]]
 beginValidateLicense
*tracker[azfake.PollerResponder[armhybridcompute.LicensesClientValidateLicenseResponse]]
}

// Do implements the policy.Transporter interface for LicensesServerTransport.
func (l *LicensesServerTransport) Do(req *http.Request) (*http.Response, error) {
 rawMethod := req.Context().Value(runtime.CtxAPINameKey{})
 method,
 ok := rawMethod.(string)
 if !ok {
  return nil, nonRetriableError{errors.New("unable to dispatch request, missing value for CtxAPINameKey")}
 }

 var resp *http.Response
 var err error

 switch method {
 case "LicensesClient.BeginCreateOrUpdate":
  resp, err = l.dispatchBeginCreateOrUpdate(req)
 case "LicensesClient.BeginDelete":
  resp, err = l.dispatchBeginDelete(req)
 case "LicensesClient.Get":
  resp, err = l.dispatchGet(req)
 case "LicensesClient.NewListByResourceGroupPager":
  resp, err = l.dispatchNewListByResourceGroupPager(req)
 case "LicensesClient.NewListBySubscriptionPager":
  resp, err = l.dispatchNewListBySubscriptionPager(req)
 case "LicensesClient.BeginUpdate":
```

```
 resp, err = l.dispatchBeginUpdate(req)
 case "LicensesClient.BeginValidateLicense":
  resp, err = l.dispatchBeginValidateLicense(req)
 default:
  err = fmt.Errorf("unhandled API %s", method)
 }

 if err != nil {
  return nil, err
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginCreateOrUpdate(req
 *http.Request) (*http.Response, error) {
 if l.srv.BeginCreateOrUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginCreateOrUpdate not implemented")}
 }
 beginCreateOrUpdate := l.beginCreateOrUpdate.get(req)
 if beginCreateOrUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return
 nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginCreateOrUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body,
nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginCreateOrUpdate = &respr
```

```
 l.beginCreateOrUpdate.add(req, beginCreateOrUpdate)
 }

 resp, err := server.PollerResponderNext(beginCreateOrUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginCreateOrUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginCreateOrUpdate) {
  l.beginCreateOrUpdate.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginDelete(req *http.Request) (*http.Response, error) {
 if l.srv.BeginDelete
 == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginDelete not implemented")}
 }
 beginDelete := l.beginDelete.get(req)
 if beginDelete == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginDelete(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
  if
 respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
```

```
 beginDelete = &respr
 l.beginDelete.add(req, beginDelete)
 }

 resp, err := server.PollerResponderNext(beginDelete, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK, http.StatusNoContent}, resp.StatusCode) {
  l.beginDelete.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK,
http.StatusNoContent", resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginDelete) {
  l.beginDelete.remove(req)
 }

 return resp, nil
}

func (l *LicensesServerTransport) dispatchGet(req *http.Request) (*http.Response, error) {
 if l.srv.Get == nil {
  return nil, &nonRetriableError{errors.New("fake for method Get not implemented")}
 }
 const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
 regex
 := regexp.MustCompile(regexStr)
 matches := regex.FindStringSubmatch(req.URL.EscapedPath())
 if matches == nil || len(matches) < 3 {
  return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
 }
 resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
 if err != nil {
  return nil, err
 }
 licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
 if err != nil {
  return nil, err
 }
 respr, errRespr := l.srv.Get(req.Context(), resourceGroupNameParam, licenseNameParam, nil)
 if respErr := server.GetError(errRespr, req); respErr != nil {
  return nil, respErr
 }
 respContent := server.GetResponseContent(respr)
 if !contains([]int{http.StatusOK}, respContent.HTTPStatus) {
```

```
 return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
respContent.HTTPStatus)}
 }
 resp, err := server.MarshalResponseAsJSON(respContent,
 server.GetResponse(respr).License, req)
 if err != nil {
  return nil, err
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListByResourceGroupPager(req *http.Request) (*http.Response,
error) {
 if l.srv.NewListByResourceGroupPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListByResourceGroupPager not implemented")}
 }
 newListByResourceGroupPager := l.newListByResourceGroupPager.get(req)
 if newListByResourceGroupPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 2 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if
 err != nil {
   return nil, err
  }
  resp := l.srv.NewListByResourceGroupPager(resourceGroupNameParam, nil)
  newListByResourceGroupPager = &resp
  l.newListByResourceGroupPager.add(req, newListByResourceGroupPager)
  server.PagerResponderInjectNextLinks(newListByResourceGroupPager, req, func(page
*armhybridcompute.LicensesClientListByResourceGroupResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp, err := server.PagerResponderNext(newListByResourceGroupPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListByResourceGroupPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
```

```
 if !server.PagerResponderMore(newListByResourceGroupPager) {
  l.newListByResourceGroupPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchNewListBySubscriptionPager(req *http.Request)
 (*http.Response, error) {
 if l.srv.NewListBySubscriptionPager == nil {
  return nil, &nonRetriableError{errors.New("fake for method NewListBySubscriptionPager not implemented")}
 }
 newListBySubscriptionPager := l.newListBySubscriptionPager.get(req)
 if newListBySubscriptionPager == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  resp := l.srv.NewListBySubscriptionPager(nil)
  newListBySubscriptionPager = &resp
  l.newListBySubscriptionPager.add(req, newListBySubscriptionPager)
  server.PagerResponderInjectNextLinks(newListBySubscriptionPager, req, func(page
*armhybridcompute.LicensesClientListBySubscriptionResponse, createLink func() string) {
   page.NextLink = to.Ptr(createLink())
  })
 }
 resp,
 err := server.PagerResponderNext(newListBySubscriptionPager, req)
 if err != nil {
  return nil, err
 }
 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.newListBySubscriptionPager.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PagerResponderMore(newListBySubscriptionPager) {
  l.newListBySubscriptionPager.remove(req)
 }
 return resp, nil
}

func (l *LicensesServerTransport) dispatchBeginUpdate(req *http.Request) (*http.Response, error) {
 if l.srv.BeginUpdate == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginUpdate not implemented")}
 }
```

```
 beginUpdate := l.beginUpdate.get(req)
 if beginUpdate == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/resourceGroups/(?P<resourceGroupName>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/licenses/(?P<licenseName>[!#&$-;=?-\[\]_a-zA-Z0-9~%@]+)`
  regex
 := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 3 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body, err := server.UnmarshalRequestAsJSON[armhybridcompute.LicenseUpdate](req)
  if err != nil {
   return nil, err
  }
  resourceGroupNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("resourceGroupName")])
  if err != nil {
   return nil, err
  }
  licenseNameParam, err := url.PathUnescape(matches[regex.SubexpIndex("licenseName")])
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginUpdate(req.Context(), resourceGroupNameParam, licenseNameParam, body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginUpdate = &respr
  l.beginUpdate.add(req, beginUpdate)
 }

 resp, err := server.PollerResponderNext(beginUpdate, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK},
 resp.StatusCode) {
  l.beginUpdate.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginUpdate) {
  l.beginUpdate.remove(req)
 }

 return resp, nil
}
```

```
func (l *LicensesServerTransport) dispatchBeginValidateLicense(req *http.Request) (*http.Response, error) {
 if l.srv.BeginValidateLicense == nil {
  return nil, &nonRetriableError{errors.New("fake for method BeginValidateLicense not implemented")}
 }
 beginValidateLicense := l.beginValidateLicense.get(req)
 if beginValidateLicense == nil {
  const regexStr = `/subscriptions/(?P<subscriptionId>[!#&$-;=?-\[\]_a-zA-Z0-
9~%@]+)/providers/Microsoft\.HybridCompute/validateLicense`
  regex := regexp.MustCompile(regexStr)
  matches := regex.FindStringSubmatch(req.URL.EscapedPath())
  if matches == nil || len(matches) < 1 {
   return nil, fmt.Errorf("failed to parse path %s", req.URL.Path)
  }
  body,
 err := server.UnmarshalRequestAsJSON[armhybridcompute.License](req)
  if err != nil {
   return nil, err
  }
  respr, errRespr := l.srv.BeginValidateLicense(req.Context(), body, nil)
  if respErr := server.GetError(errRespr, req); respErr != nil {
   return nil, respErr
  }
  beginValidateLicense = &respr
  l.beginValidateLicense.add(req, beginValidateLicense)
 }

 resp, err := server.PollerResponderNext(beginValidateLicense, req)
 if err != nil {
  return nil, err
 }

 if !contains([]int{http.StatusOK}, resp.StatusCode) {
  l.beginValidateLicense.remove(req)
  return nil, &nonRetriableError{fmt.Errorf("unexpected status code %d. acceptable values are http.StatusOK",
resp.StatusCode)}
 }
 if !server.PollerResponderMore(beginValidateLicense) {
  l.beginValidateLicense.remove(req)
 }

 return resp, nil
}
```

azwebpubsub

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```
{
 "main": "dist/src/index.js",
 "dependencies": {
   "@azure-tools/typespec-go": "0.4.7"
 },
 "devDependencies": {
   "@azure-tools/typespec-autorest": "0.56.0",
   "@azure-tools/typespec-azure-core": "0.56.0",
   "@azure-tools/typespec-azure-resource-manager": "0.56.0",
   "@azure-tools/typespec-azure-rulesets": "0.56.0",
   "@azure-tools/typespec-client-generator-core": "0.56.2",
   "@azure-tools/typespec-liftr-base": "0.8.0",
   "@typespec/compiler": "1.0.0",
   "@typespec/events": "0.70.0",
   "@typespec/http": "1.0.1",
   "@typespec/openapi": "1.0.0",
   "@typespec/rest": "0.70.0",
   "@typespec/sse": "0.70.0",
   "@typespec/streams": "0.70.0",
   "@typespec/versioning": "0.70.0"
 }
}
```

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```
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator. DO NOT EDIT.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.

package armhybridcompute

import (
 "context"
 "errors"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/arm"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/policy"
 "github.com/Azure/azure-sdk-for-go/sdk/azcore/runtime"
 "net/http"
 "net/url"
 "strings"
)

// LicensesClient contains the methods for the Licenses group.
```

```
// Don't use this type directly, use NewLicensesClient() instead.
type LicensesClient struct {
 internal       *arm.Client
 subscriptionID string
}

// NewLicensesClient creates a new instance of LicensesClient with the specified values.
//   - subscriptionID - The ID of the target
 subscription.
//   - credential - used to authorize requests. Usually a credential from azidentity.
//   - options - pass nil to accept the default values.
func NewLicensesClient(subscriptionID string, credential azcore.TokenCredential, options *arm.ClientOptions)
(*LicensesClient, error) {
 cl, err := arm.NewClient(moduleName, moduleVersion, credential, options)
 if err != nil {
  return nil, err
 }
 client := &LicensesClient{
  subscriptionID: subscriptionID,
  internal:       cl,
 }
 return client, nil
}

// BeginCreateOrUpdate - The operation to create or update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - parameters - Parameters supplied to the Create license operation.
//   - options - LicensesClientBeginCreateOrUpdateOptions contains the optional parameters
 for the LicensesClient.BeginCreateOrUpdate
//     method.
func (client *LicensesClient) BeginCreateOrUpdate(ctx context.Context, resourceGroupName string, licenseName
string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions)
(*runtime.Poller[LicensesClientCreateOrUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.createOrUpdate(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
```

```
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientCreateOrUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
}

// CreateOrUpdate - The operation to create or update a license.
// If the
 operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) createOrUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginCreateOrUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.createOrUpdateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// createOrUpdateCreateRequest creates
 the CreateOrUpdate request.
func (client *LicensesClient) createOrUpdateCreateRequest(ctx context.Context, resourceGroupName string,
licenseName string, parameters License, options *LicensesClientBeginCreateOrUpdateOptions) (*policy.Request,
error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx,
 http.MethodPut, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginDelete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientBeginDeleteOptions contains the optional parameters for the
LicensesClient.BeginDelete method.
func (client *LicensesClient) BeginDelete(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*runtime.Poller[LicensesClientDeleteResponse],
 error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.deleteOperation(ctx, resourceGroupName, licenseName, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientDeleteResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
```

```
}

// Delete - The operation to delete a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) deleteOperation(ctx context.Context, resourceGroupName string, licenseName string,
options *LicensesClientBeginDeleteOptions) (*http.Response, error) {
 var err error
 const
 operationName = "LicensesClient.BeginDelete"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.deleteCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK, http.StatusNoContent) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// deleteCreateRequest creates the Delete request.
func (client *LicensesClient) deleteCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientBeginDeleteOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
```

```
 req, err := runtime.NewRequest(ctx, http.MethodDelete, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// Get - Retrieves information about the view of a license.
//
 If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName - The name of the license.
//   - options - LicensesClientGetOptions contains the optional parameters for the LicensesClient.Get method.
func (client *LicensesClient) Get(ctx context.Context, resourceGroupName string, licenseName string, options
*LicensesClientGetOptions) (LicensesClientGetResponse, error) {
 var err error
 const operationName = "LicensesClient.Get"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.getCreateRequest(ctx, resourceGroupName, licenseName, options)
 if err != nil {
  return LicensesClientGetResponse{}, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil
 {
  return LicensesClientGetResponse{}, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return LicensesClientGetResponse{}, err
 }
 resp, err := client.getHandleResponse(httpResp)
 return resp, err
}

// getCreateRequest creates the Get request.
func (client *LicensesClient) getCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, options *LicensesClientGetOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
```

```
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}", url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// getHandleResponse handles the Get response.
func (client *LicensesClient) getHandleResponse(resp *http.Response) (LicensesClientGetResponse, error) {
 result := LicensesClientGetResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.License); err != nil {
  return LicensesClientGetResponse{}, err
 }
 return result, nil
}

// NewListByResourceGroupPager - The operation to get all licenses of a non-Azure machine
//
// Generated from
 API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - options - LicensesClientListByResourceGroupOptions contains the optional parameters for the
LicensesClient.NewListByResourceGroupPager
//     method.
func (client *LicensesClient) NewListByResourceGroupPager(resourceGroupName string, options
*LicensesClientListByResourceGroupOptions) *runtime.Pager[LicensesClientListByResourceGroupResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListByResourceGroupResponse]{
  More: func(page LicensesClientListByResourceGroupResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
```

```
  Fetcher: func(ctx context.Context, page *LicensesClientListByResourceGroupResponse)
(LicensesClientListByResourceGroupResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListByResourceGroupPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listByResourceGroupCreateRequest(ctx, resourceGroupName, options)
   }, nil)
   if err != nil {
    return LicensesClientListByResourceGroupResponse{}, err
   }
   return client.listByResourceGroupHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listByResourceGroupCreateRequest creates the ListByResourceGroup request.
func (client *LicensesClient) listByResourceGroupCreateRequest(ctx context.Context, resourceGroupName string,
options *LicensesClientListByResourceGroupOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es"
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if
 client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listByResourceGroupHandleResponse handles the ListByResourceGroup response.
```

```
func (client *LicensesClient) listByResourceGroupHandleResponse(resp *http.Response)
(LicensesClientListByResourceGroupResponse, error) {
 result := LicensesClientListByResourceGroupResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListByResourceGroupResponse{}, err
 }
 return
 result, nil
}

// NewListBySubscriptionPager - The operation to get all licenses of a non-Azure machine
//
// Generated from API version 2024-07-31-preview
//   - options - LicensesClientListBySubscriptionOptions contains the optional parameters for the
LicensesClient.NewListBySubscriptionPager
//     method.
func (client *LicensesClient) NewListBySubscriptionPager(options *LicensesClientListBySubscriptionOptions)
*runtime.Pager[LicensesClientListBySubscriptionResponse] {
 return runtime.NewPager(runtime.PagingHandler[LicensesClientListBySubscriptionResponse]{
  More: func(page LicensesClientListBySubscriptionResponse) bool {
   return page.NextLink != nil && len(*page.NextLink) > 0
  },
  Fetcher: func(ctx context.Context, page *LicensesClientListBySubscriptionResponse)
(LicensesClientListBySubscriptionResponse, error) {
   ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, "LicensesClient.NewListBySubscriptionPager")
   nextLink := ""
   if page != nil {
    nextLink = *page.NextLink
   }
   resp,
 err := runtime.FetcherForNextLink(ctx, client.internal.Pipeline(), nextLink, func(ctx context.Context)
(*policy.Request, error) {
    return client.listBySubscriptionCreateRequest(ctx, options)
   }, nil)
   if err != nil {
    return LicensesClientListBySubscriptionResponse{}, err
   }
   return client.listBySubscriptionHandleResponse(resp)
  },
  Tracer: client.internal.Tracer(),
 })
}

// listBySubscriptionCreateRequest creates the ListBySubscription request.
func (client *LicensesClient) listBySubscriptionCreateRequest(ctx context.Context, options
*LicensesClientListBySubscriptionOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/licenses"
 if client.subscriptionID == "" {
```

```
 return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodGet,
 runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 return req, nil
}

// listBySubscriptionHandleResponse handles the ListBySubscription response.
func (client *LicensesClient) listBySubscriptionHandleResponse(resp *http.Response)
(LicensesClientListBySubscriptionResponse, error) {
 result := LicensesClientListBySubscriptionResponse{}
 if err := runtime.UnmarshalAsJSON(resp, &result.LicensesListResult); err != nil {
  return LicensesClientListBySubscriptionResponse{}, err
 }
 return result, nil
}

// BeginUpdate - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - resourceGroupName - The name of the resource group. The name is case insensitive.
//   - licenseName
 - The name of the license.
//   - parameters - Parameters supplied to the Update license operation.
//   - options - LicensesClientBeginUpdateOptions contains the optional parameters for the
LicensesClient.BeginUpdate method.
func (client *LicensesClient) BeginUpdate(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions)
(*runtime.Poller[LicensesClientUpdateResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.update(ctx, resourceGroupName, licenseName, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientUpdateResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
```

```
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientUpdateResponse]{
   Tracer:
 client.internal.Tracer(),
  })
 }
}

// Update - The operation to update a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) update(ctx context.Context, resourceGroupName string, licenseName string,
parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginUpdate"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.updateCreateRequest(ctx, resourceGroupName, licenseName, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return
 nil, err
 }
 return httpResp, nil
}

// updateCreateRequest creates the Update request.
func (client *LicensesClient) updateCreateRequest(ctx context.Context, resourceGroupName string, licenseName
string, parameters LicenseUpdate, options *LicensesClientBeginUpdateOptions) (*policy.Request, error) {
 urlPath :=
"/subscriptions/{subscriptionId}/resourceGroups/{resourceGroupName}/providers/Microsoft.HybridCompute/licens
es/{licenseName}"
 if client.subscriptionID == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 if resourceGroupName == "" {
  return nil, errors.New("parameter resourceGroupName cannot be empty")
```

```
 }
 urlPath = strings.ReplaceAll(urlPath, "{resourceGroupName}", url.PathEscape(resourceGroupName))
 if licenseName == "" {
  return nil, errors.New("parameter licenseName cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{licenseName}",
 url.PathEscape(licenseName))
 req, err := runtime.NewRequest(ctx, http.MethodPatch, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
 }
 return req, nil
}

// BeginValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
//   - parameters - Parameters supplied to the license validation operation.
//   - options - LicensesClientBeginValidateLicenseOptions contains the optional parameters for the
LicensesClient.BeginValidateLicense
//     method.
func (client *LicensesClient) BeginValidateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*runtime.Poller[LicensesClientValidateLicenseResponse], error) {
 if options == nil || options.ResumeToken == "" {
  resp, err := client.validateLicense(ctx, parameters, options)
  if err != nil {
   return nil, err
  }
  poller, err := runtime.NewPoller(resp, client.internal.Pipeline(),
&runtime.NewPollerOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
  return poller, err
 } else {
  return runtime.NewPollerFromResumeToken(options.ResumeToken, client.internal.Pipeline(),
&runtime.NewPollerFromResumeTokenOptions[LicensesClientValidateLicenseResponse]{
   Tracer: client.internal.Tracer(),
  })
 }
```

```
}

// ValidateLicense - The operation to validate a license.
// If the operation fails it returns an *azcore.ResponseError type.
//
// Generated from API version 2024-07-31-preview
func (client *LicensesClient) validateLicense(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions)
 (*http.Response, error) {
 var err error
 const operationName = "LicensesClient.BeginValidateLicense"
 ctx = context.WithValue(ctx, runtime.CtxAPINameKey{}, operationName)
 ctx, endSpan := runtime.StartSpan(ctx, operationName, client.internal.Tracer(), nil)
 defer func() { endSpan(err) }()
 req, err := client.validateLicenseCreateRequest(ctx, parameters, options)
 if err != nil {
  return nil, err
 }
 httpResp, err := client.internal.Pipeline().Do(req)
 if err != nil {
  return nil, err
 }
 if !runtime.HasStatusCode(httpResp, http.StatusOK) {
  err = runtime.NewResponseError(httpResp)
  return nil, err
 }
 return httpResp, nil
}

// validateLicenseCreateRequest creates the ValidateLicense request.
func (client *LicensesClient) validateLicenseCreateRequest(ctx context.Context, parameters License, options
*LicensesClientBeginValidateLicenseOptions) (*policy.Request, error) {
 urlPath := "/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/validateLicense"
 if client.subscriptionID
 == "" {
  return nil, errors.New("parameter client.subscriptionID cannot be empty")
 }
 urlPath = strings.ReplaceAll(urlPath, "{subscriptionId}", url.PathEscape(client.subscriptionID))
 req, err := runtime.NewRequest(ctx, http.MethodPost, runtime.JoinPaths(client.internal.Endpoint(), urlPath))
 if err != nil {
  return nil, err
 }
 reqQP := req.Raw().URL.Query()
 reqQP.Set("api-version", "2024-07-31-preview")
 req.Raw().URL.RawQuery = reqQP.Encode()
 req.Raw().Header["Accept"] = []string{"application/json"}
 if err := runtime.MarshalAsJSON(req, parameters); err != nil {
  return nil, err
```

```
 }
 return req, nil
}
```

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  SOFTWARE
//go:build go1.18
// +build go1.18

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// Code generated by Microsoft (R) AutoRest Code Generator.
// Changes may cause incorrect behavior and will be lost if the code is regenerated.
// DO NOT EDIT.

package armhybridcompute_test

import (
 "context"
 "log"

 "github.com/Azure/azure-sdk-for-go/sdk/azcore/to"
 "github.com/Azure/azure-sdk-for-go/sdk/azidentity"
 "github.com/Azure/azure-sdk-for-go/sdk/resourcemanager/hybridcompute/armhybridcompute/v2"
)

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_ValidateLicense.json
func ExampleLicensesClient_BeginValidateLicense() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err !=
 nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginValidateLicense(ctx, armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
```

```
 Properties: &armhybridcompute.LicenseProperties{
  LicenseDetails: &armhybridcompute.LicenseDetails{
   Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
   Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
   Processors: to.Ptr[int32](6),
   State:      to.Ptr(armhybridcompute.LicenseStateActivated),
   Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  },
  LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 },
}, nil)
if err != nil {
 log.Fatalf("failed to finish the request: %v", err)
}
res, err := poller.PollUntilDone(ctx, nil)
if err !=
nil {
 log.Fatalf("failed to pull the result: %v", err)
}
// You could use response here. We use blank identifier for just demo purposes.
_ = res
// If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
// res.License = armhybridcompute.License{
//  Name: to.Ptr("{licenseName}"),
//  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
//  ID: to.Ptr("/subscriptions/{subscriptionId}/providers/Microsoft.HybridCompute/Licenses/{licenseName}"),
//  Location: to.Ptr("eastus2euap"),
//  Properties: &armhybridcompute.LicenseProperties{
//   LicenseDetails: &armhybridcompute.LicenseDetails{
//    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
//    AssignedLicenses: to.Ptr[int32](2),
//    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
//    ImmutableID: to.Ptr("<generated Guid>"),
//    Processors: to.Ptr[int32](6),
//
   State: to.Ptr(armhybridcompute.LicenseStateActivated),
//    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
//   },
//   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
//   TenantID: to.Ptr("{tenandId}"),
//  },
// }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_CreateOrUpdate.json
```

```
func ExampleLicensesClient_BeginCreateOrUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginCreateOrUpdate(ctx, "myResourceGroup",
 "{licenseName}", armhybridcompute.License{
  Location: to.Ptr("eastus2euap"),
  Properties: &armhybridcompute.LicenseProperties{
   LicenseDetails: &armhybridcompute.LicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors: to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values
 in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](2),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
```

```
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated
 from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Update.json
func ExampleLicensesClient_BeginUpdate() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginUpdate(ctx, "myResourceGroup", "{licenseName}",
armhybridcompute.LicenseUpdate{
  Properties: &armhybridcompute.LicenseUpdateProperties{
   LicenseDetails: &armhybridcompute.LicenseUpdatePropertiesLicenseDetails{
    Type:       to.Ptr(armhybridcompute.LicenseCoreTypePCore),
    Edition:    to.Ptr(armhybridcompute.LicenseEditionDatacenter),
    Processors:
 to.Ptr[int32](6),
    State:      to.Ptr(armhybridcompute.LicenseStateActivated),
    Target:     to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
   },
   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
  },
 }, nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 res, err := poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
```

```
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/lice
nses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Get.json
func ExampleLicensesClient_Get() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 res, err := clientFactory.NewLicensesClient().Get(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 // You could use response here. We use blank identifier for just demo purposes.
 _ = res
 // If the HTTP response code is 200 as defined in example definition, your response structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
```

```
 // res.License = armhybridcompute.License{
 //  Name: to.Ptr("{licenseName}"),
 //  Type: to.Ptr("Microsoft.HybridCompute/licenses"),
 //  ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
 //
  Location: to.Ptr("eastus2euap"),
 //  Properties: &armhybridcompute.LicenseProperties{
 //   LicenseDetails: &armhybridcompute.LicenseDetails{
 //    Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
 //    AssignedLicenses: to.Ptr[int32](8),
 //    Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
 //    ImmutableID: to.Ptr("<generated Guid>"),
 //    Processors: to.Ptr[int32](6),
 //    State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //    Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //   },
 //   LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //   TenantID: to.Ptr("{tenandId}"),
 //  },
 // }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-preview/examples/license/License_Delete.json
func ExampleLicensesClient_BeginDelete()
 {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 poller, err := clientFactory.NewLicensesClient().BeginDelete(ctx, "myResourceGroup", "{licenseName}", nil)
 if err != nil {
  log.Fatalf("failed to finish the request: %v", err)
 }
 _, err = poller.PollUntilDone(ctx, nil)
 if err != nil {
  log.Fatalf("failed to pull the result: %v", err)
 }
}
```

```
// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListByResourceGroup.json
func ExampleLicensesClient_NewListByResourceGroupPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if
 err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListByResourceGroupPager("myResourceGroup", nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as follows.
Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //
   Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
  //      ImmutableID: to.Ptr("<generated Guid>"),
  //      Processors: to.Ptr[int32](6),
  //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
  //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
  //     },
  //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
```

```
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}

// Generated from example definition: https://github.com/Azure/azure-rest-api-
specs/blob/63d530d0def1c624f5d42d39170ff4ac196522e2/specification/hybridcompute/resource-
manager/Microsoft.HybridCompute/preview/2024-07-31-
preview/examples/license/License_ListBySubscription.json
func
 ExampleLicensesClient_NewListBySubscriptionPager() {
 cred, err := azidentity.NewDefaultAzureCredential(nil)
 if err != nil {
  log.Fatalf("failed to obtain a credential: %v", err)
 }
 ctx := context.Background()
 clientFactory, err := armhybridcompute.NewClientFactory("<subscription-id>", cred, nil)
 if err != nil {
  log.Fatalf("failed to create client: %v", err)
 }
 pager := clientFactory.NewLicensesClient().NewListBySubscriptionPager(nil)
 for pager.More() {
  page, err := pager.NextPage(ctx)
  if err != nil {
   log.Fatalf("failed to advance page: %v", err)
  }
  for _, v := range page.Value {
   // You could use page here. We use blank identifier for just demo purposes.
   _ = v
  }
  // If the HTTP response code is 200 as defined in example definition, your page structure would look as
 follows. Please pay attention that all the values in the output are fake values for just demo purposes.
  // page.LicensesListResult = armhybridcompute.LicensesListResult{
  //  Value: []*armhybridcompute.License{
  //   {
  //    Name: to.Ptr("{licenseName}"),
  //    Type: to.Ptr("Microsoft.HybridCompute/licenses"),
  //    ID:
to.Ptr("/subscriptions/{subscriptionId}/resourceGroups/myResourceGroup/providers/Microsoft.HybridCompute/Lic
enses/{licenseName}"),
  //    Location: to.Ptr("eastus2euap"),
  //    Properties: &armhybridcompute.LicenseProperties{
  //     LicenseDetails: &armhybridcompute.LicenseDetails{
  //      Type: to.Ptr(armhybridcompute.LicenseCoreTypePCore),
  //      AssignedLicenses: to.Ptr[int32](8),
  //      Edition: to.Ptr(armhybridcompute.LicenseEditionDatacenter),
```

```
 //      ImmutableID: to.Ptr("<generated Guid>"),
 //      Processors: to.Ptr[int32](6),
 //      State: to.Ptr(armhybridcompute.LicenseStateActivated),
 //      Target: to.Ptr(armhybridcompute.LicenseTargetWindowsServer2012),
 //
   },
 //     LicenseType: to.Ptr(armhybridcompute.LicenseTypeESU),
 //     TenantID: to.Ptr("{tenandId}"),
 //    },
 //  }},
 // }
 }
}
```

1.4567 cast 1.9.2

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1.4568 urllib3 2.5.0

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1.4569 pam 1.4.0-11ubuntu2.6

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1.4570 go-containerregistry 0.20.6

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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1.4572 pam 1.5.3-5ubuntu5.4

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1.4573 libpamg 1.4.0-11ubuntu2.6

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enable/disable tty auditing</title><meta name="generator" content="DocBook XSL Stylesheets V1.79.2"><link rel="home" href="Linux-PAM_SAG.html" title="The Linux-PAM System Administrators' Guide"><link rel="up" href="sag-module-reference.html" title="Chapter 6. A reference guide for available modules"><link rel="prev" href="sag-pam_timestamp.html" title="6.35. pam_timestamp - authenticate using cached successful authentication attempts"><link rel="next" href="sag-pam_umask.html" title="6.37. pam_umask - set the file mode creation mask"></head><body bgcolor="white" text="black" link="#0000FF" vlink="#840084" alink="#0000FF"> <table width="100%" summary="Navigation header"><tr><th colspan="3" align="center">6.36. pam_tty_audit - enable/disable tty auditing</th></tr><tr><td width="20%" align="left">Prev </td><th width="60%" align="center">Chapter 6. A reference guide for available modules</th><td width="20%" align="right"> Next</td></tr></table><hr> <h2 class="title" style="clear: both">6.36. pam_tty_audit - enable/disable tty auditing</h2> <code class="command">pam_tty_audit.so</code> [
 disable=<code>patterns</code>
    ] [
 enable=<code>patterns</code>
    ] <h3 class="title">6.36.1. DESCRIPTION</h3>
    The pam_tty_audit PAM module is used to enable or disable TTY auditing.
    By default, the kernel does not audit input on any TTY.
  <div
 class="section"> <h3 class="title">6.36.2. OPTIONS</h3> <dl class="variablelist"><dt>
        disable=patterns
      </dt><dd>
    For each user matching <code class="option"><code>patterns</code></code>,
    disable TTY auditing. This overrides any previous <code class="option">enable</code>
    option matching the same user name on the command line. See NOTES
    for further description of <code class="option"><code>patterns</code></code>.
        </dd><dt>
        enable=patterns
      </dt><dd>
    For each user matching <code class="option"><code>patterns</code></code>,
    enable TTY auditing. This overrides any previous <code class="option">disable</code>
    option matching the same user name on the
 command line. See NOTES
    for further description of <code class="option"><code>patterns</code></code>.
        </dd><dt>
        open_only
      </dt><dd>
        Set the TTY audit flag when opening the session, but do not restore
        it when closing the session. Using this option is necessary for
        some services that don't <code class="function">fork()</code> to run the
        authenticated session, such as sudo.
        </dd><dt>
        log_passwd

</dt><dd>
Log keystrokes when ECHO mode is off but ICANON mode is active.
This is the mode in which the tty is placed during password entry.
By default, passwords are not logged. This option may not be
available on older kernels (3.9?).
</dd></dl> <h3 class="title">6.36.3. MODULE TYPES PROVIDED</h3>
Only the session type is supported.
<h3 class="title">6.36.4. RETURN VALUES</h3> <dl class="variablelist"><dt>PAM_SESSION_ERR</dt><dd>
Error reading or modifying the TTY audit flag. See the system log
for more details.
</dd><dt>PAM_SUCCESS</dt><dd>
Success.
</dd></dl> <h3 class="title">6.36.5. NOTES</h3>
When TTY auditing is enabled, it is inherited by all processes started by
that user. In particular, daemons restarted by a user will still have
TTY auditing enabled, and audit TTY input even by other users unless
auditing for these users is explicitly disabled. Therefore, it is
recommended to use <code class="option">disable=*</code> as the first option for
most daemons using PAM.

To view the data that was logged by the kernel to audit use
the command aureport --tty.

The <code class="option"><code>patterns</code></code> are comma separated
lists of glob patterns or ranges of uids. A range is specified as
<code>min_uid</code>:<code>max_uid</code> where
one of these values can be empty. If <code>min_uid</code> is
empty only user with the uid <code>max_uid</code> will be
matched. If <code>max_uid</code> is empty users with the uid
greater than or equal to <code>min_uid</code> will be
matched.

Please note that passwords in some circumstances may be logged by TTY auditing
even if the <code class="option">log_passwd</code> is not used. For example, all input to
an ssh session will be logged - even if there is a password being typed into
some software running at the remote host because only the local TTY state
affects the local TTY auditing.
<h3 class="title">6.36.6. EXAMPLES</h3>
Audit all administrative actions.
<pre class="programlisting">

session required pam_tty_audit.so disable=* enable=root
</pre>
<h3 class="title">6.36.7. AUTHOR</h3>

pam_tty_audit was written by Miloslav Trma
<mitr@redhat.com>.
The log_passwd option was added by Richard Guy Briggs
<rgb@redhat.com>.
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] [
enable=<code>patterns</code>
] <h3 class="title">6.36.1. DESCRIPTION</h3>
The pam_tty_audit PAM module is used to enable or disable TTY auditing.
By default, the kernel does not audit input on any TTY.
<div
class="section"> <h3 class="title">6.36.2. OPTIONS</h3> <dl
class="variablelist"><dt>
disable=patterns
</dt><dd>
For each user matching <code class="option"><code>patterns</code></code>,
disable TTY auditing. This overrides any previous <code class="option">enable</code>
option matching the same user name on the command line. See NOTES
for further description of <code class="option"><code>patterns</code></code>.
</dd><dt>
enable=patterns
</dt><dd>
For each user matching <code class="option"><code>patterns</code></code>,
enable TTY auditing. This overrides any previous <code class="option">disable</code>
option matching the same user name on the
command line. See NOTES
for further description of <code class="option"><code>patterns</code></code>.
</dd><dt>
open_only
</dt><dd>
Set the TTY audit flag when opening the session, but do not restore
it when closing the session. Using this option is necessary for
some services that don't <code class="function">fork()</code> to run the
authenticated session, such as sudo.
</dd><dt>
log_passwd
</dt><dd>
Log keystrokes when ECHO mode is off but ICANON mode is active.
This is the mode in which the tty is placed during password entry.
By default, passwords are not logged. This option may not be
available on older kernels (3.9?).
</dd></dl> <h3 class="title">6.36.3. MODULE TYPES PROVIDED</h3>
Only the session type is supported.
<h3 class="title">6.36.4. RETURN VALUES</h3> <div
class="variablelist"><dl class="variablelist"><dt><span
class="term">PAM_SESSION_ERR</dt><dd>
Error reading or modifying the TTY audit flag. See the system log
for more details.
</dd><dt>PAM_SUCCESS</dt><dd>

Success.
</dd></dl> <h3 class="title">6.36.5. NOTES</h3>
When TTY auditing is enabled, it is inherited by all processes started by
that user. In particular, daemons restarted by a user will still have
TTY auditing enabled, and audit TTY input even by other users unless
auditing for these users is explicitly disabled. Therefore, it is
recommended to use <code class="option">disable=*</code> as the first option for
most daemons using PAM.

To view the data that was logged by the kernel to audit use
the command aureport --tty.

The <code class="option"><code>patterns</code></code> are comma separated
lists of glob patterns or ranges of uids. A range is specified as
<code>min_uid</code>:<code>max_uid</code> where
one of these values can be empty. If <code>min_uid</code> is
empty only user with the uid <code>max_uid</code> will be
matched. If <code>max_uid</code> is empty users with the uid
greater than or equal to <code>min_uid</code> will be
matched.

Please note that passwords in some circumstances may be logged by TTY auditing
even if the <code class="option">log_passwd</code> is not used. For example, all input to
an ssh session will be logged - even if there is a password being typed into
some software running at the remote host because only the local TTY state
affects the local TTY auditing.
<h3 class="title">6.36.6. EXAMPLES</h3>
Audit all administrative actions.
<pre class="programlisting">
session required pam_tty_audit.so disable=* enable=root
</pre>
<h3 class="title">6.36.7. AUTHOR</h3>

pam_tty_audit was written by Miloslav Trma <mitr@redhat.com>.
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package migration

import "fmt"

// Notice is a migration warning
type Notice struct {
 Plugin     string
 Option     string
 Severity   string // 'deprecated', 'removed', or 'unsupported'
 ReplacedBy string
 Additional string
 Version    string
}

func (n *Notice) ToString() string {
 s := ""
 if n.Option == "" {
  s += fmt.Sprintf(`Plugin "%v" `, n.Plugin)
 } else {
  s += fmt.Sprintf(`Option "%v" in plugin "%v" `, n.Option, n.Plugin)
 }
 if n.Severity == SevUnsupported {
  s += "is unsupported by this migration tool in " + n.Version + "."
 } else if n.Severity == SevNewDefault {
  s += "is added as a default in " + n.Version + "."
 } else {
  s += "is " + n.Severity + " in " + n.Version + "."
 }
 if n.ReplacedBy != "" {
  s += fmt.Sprintf(` It is replaced by "%v".`, n.ReplacedBy)
 }
 if n.Additional != "" {
  s += " " + n.Additional
 }
```

```
 return s
}

const (
 // The following statuses are used to indicate the state of support/deprecation in a given release.
 SevDeprecated  = "deprecated"
  // deprecated, but still completely functional
 SevIgnored     = "ignored"     // if included in the corefile, it will be ignored by CoreDNS
 SevRemoved     = "removed"     // completely removed from CoreDNS, and would cause CoreDNS to exit if present
in the Corefile
 SevNewDefault  = "newdefault"  // added to the default corefile.  CoreDNS may not function properly if it is not
present in the corefile.
 SevUnsupported = "unsupported" // the plugin/option is not supported by the migration tool

 // The following statuses are used for selecting/filtering notifications
 SevAll = "all" // show all statuses
)
```

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==========
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// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL string `json:"url,omitempty"`
}
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Protocol Buffers for Go with Gadgets

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procfs provides functions to retrieve system, kernel and process
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==========
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1.4578 oauthlib 3.3.1

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1.4579 sigs.k8s.io/gateway-api 1.3.0

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Contributor Ladder

Within the Kubernetes community, the concept of a contributor ladder has been
developed to define how individuals can earn formal roles within the project.
The Gateway API contributor ladder largely follows the [roles defined by the
broader Kubernetes
community](https://github.com/kubernetes/community/blob/master/community-membership.md),
though there are some aspects that are unique to this community.

Goals

We hope that this doc will provide an initial step towards the following goals:

* Ensure the long term health of the Gateway API community
* Encourage new contributors to work towards formal roles and responsibilities in the project
* Clearly define the path towards leadership roles
* Develop a strong leadership pipeline so we have great candidates to fill project leadership roles

Scope

The following repositories are covered by this doc:

* [kubernetes-sigs/gateway-api](https://github.com/kubernetes-sigs/gateway-api)
* [kubernetes-sigs/ingress2gateway](https://github.com/kubernetes-sigs/ingress2gateway)
* [kubernetes-sigs/gwctl](https://github.com/kubernetes-sigs/gwctl)
* [kubernetes-sigs/blixt](https://github.com/kubernetes-sigs/blixt)

Within each of these projects, there are opportunities to become an approver or reviewer for either the entire project, or a subset of that project. For example, you could become a reviewer or approver focused on just docs, GEPs, API changes, or conformance tests.

General Guidelines

1. Everyone is welcome

We appreciate all contributions. You dont need to have a formal role in the project to make or review pull requests, and help with issues or discussions. Accepting a formal role within the project is entirely optional.

2. These roles require continued contributions

Applying for one of the roles defined above should only be done if you intend to continue to contribute at a level that would merit that role. If for any reason you are unable to continue in one of the roles above, please resign. Members with an extended period away from the project with no activity will be removed from the Kubernetes GitHub Organizations and will be required to go through the org membership process again after re-familiarizing themselves with the current state.

3. Dont merge without consensus

If you have reason to believe that a change may be contentious, please wait for additional perspectives from others before merging any PRs. Even if you have access to merge a PR, it doesnt mean you should. Although we cant have PRs blocked indefinitely, we need to make sure everyone has had a chance to present their perspective.

4. Start a discussion

If youre interested in working towards one of these roles, please reach out to
a Gateway API maintainer on Slack.

Contributor Ladder

The Gateway API contributor ladder has the following steps:

1. Member
2. Reviewer
3. Approver
4. Maintainer

This is also a GAMMA-specific leadership role that does not fit as cleanly on
this ladder.
All of these roles will be defined in more detail below.

Member, Reviewer, and Approver

The first steps on the contributor ladder are already [clearly defined in the
upstream Kubernetes
Community](https://github.com/kubernetes/community/blob/master/community-membership.md#community-membership).
Gateway API follows those guidelines along with the rest of the Kubernetes
community. Within Gateway API, there are a variety of areas one can become a
reviewer or approver, this includes:

* Conformance
* Documentation
* GEPs

Maintainers and GAMMA Leads

The final steps on the contributor ladder represent large overall leadership
roles within the project as a whole. The spaces available for these roles are
limited (generally 3-4 people in each role is ideal). Wherever possible, we try
to ensure that different companies are represented in these roles.

Maintainers

Gateway API Maintainers are known as [Subproject
Owners](https://github.com/kubernetes/community/blob/master/community-membership.md#subproject-owner)
within
the Kubernetes community. To become a Gateway API Maintainer, the most
important things we expect are:

* Long term, sustained contributions to Gateway API for at least 6 months
* Deep understanding of technical goals and direction of the project
* Successfully authored and led significant enhancement proposals
* Approver for at least 3 months
* Ability to lead community meetings

In addition to all of the expectations described above, we expect maintainers to set the technical direction and goals for the project. This role is critical to the health of the project, maintainers should mentor new approvers and reviewers, and ensure that there are healthy processes in place for discussion and decision making. Finally, maintainers are ultimately responsible for releasing new versions of the API.

GAMMA Leads

The concept of GAMMA Leads does not have a perfect parallel on the upstream Kubernetes community ladder. They are essentially Subproject Owners, but for the GAMMA initiative, which is a major initiative within Gateway API.

To become a GAMMA lead, the most important thing we expect are:

* Significant experience with Service Mesh implementation(s)
* Deep understanding of technical goals and direction of the project
* Long term, sustained contributions to the GAMMA initiative for at least 6 months
* Ability to lead community meetings

In addition to all of the expectations described above, we expect GAMMA Leads to set the technical direction and goals for the GAMMA initiative. They should ensure that there are healthy processes in place for discussion and decision making and that the release goals and milestones are clearly defined.

1.4580 pygments 2.19.2

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```
---input---
!%$^*__--__._+++===-crazy-symbol

---tokens---
'!%$^*__--__._+++===-crazy-symbol' Name.Variable
'\n'        Text.Whitespace
'# Step 1 of 3: from Hakaru to Maple LO (linear operator)\n' Comment.Single

'\n'        Text.Whitespace

'toLO'      Name
' '         Text.Whitespace
```

```
':='          Operator
' '           Text.Whitespace
'module'      Keyword
'()'          Punctuation
'\n  '        Text.Whitespace
'export'      Keyword
'\n  '        Text.Whitespace
'ModuleApply' Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'proc'        Keyword
'('           Punctuation
'm'           Name
','           Operator
' '           Text.Whitespace
'$'           Operator
')'           Punctuation
'\n    '      Text.Whitespace
'local'       Keyword
' '           Text.Whitespace
'h'           Name
';'           Punctuation
'\n    '      Text.Whitespace
'h'           Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'gensym'      Name
'('           Punctuation
'"'           Punctuation
'h'           Name
'"'           Punctuation
');'          Punctuation
'\n
    '      Text.Whitespace
'_Env_HakaruSolve' Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'false'       Name
';'           Punctuation
'\n    '      Text.Whitespace
'LO'          Name
'('           Punctuation
'h'           Name
','           Operator
' '           Text.Whitespace
```

'integrate' Name
'(' Punctuation
'm' Name
',' Operator
' ' Text.Whitespace
'h' Name
',' Operator
' ' Text.Whitespace
'[]))' Punctuation
'\n ' Text.Whitespace
'end' Keyword
' ' Text.Whitespace
'proc' Keyword
';' Punctuation
'\n\n ' Text.Whitespace
'export' Keyword
'\n ' Text.Whitespace
'integrate' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'proc' Keyword
'(' Punctuation
'm' Name
',' Operator
' ' Text.Whitespace
'h'
  Name
',' Operator
' ' Text.Whitespace
'loops' Name
' ' Text.Whitespace
'::' Operator
' ' Text.Whitespace
'list' Name
'(' Punctuation
'name' Name
' ' Text.Whitespace
'=' Operator
' ' Text.Whitespace
'range' Name
')' Punctuation
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'[]' Punctuation
',' Operator
' ' Text.Whitespace

```
'$'         Operator
')'         Punctuation
'\n    '    Text.Whitespace
'local'     Keyword
' '         Text.Whitespace
'x'         Name
','         Operator
' '         Text.Whitespace
'n'         Name
','         Operator
' '         Text.Whitespace
'i'         Name
','         Operator
' '         Text.Whitespace
'res'       Name
','         Operator
' '         Text.Whitespace
'l'         Name
','         Operator
' '         Text.Whitespace
'br'
        Name
','         Operator
' '         Text.Whitespace
'm0'        Name
';'         Punctuation
'\n\n    '  Text.Whitespace
'if'        Keyword
' '         Text.Whitespace
'm'         Name
' '         Text.Whitespace
'::'        Operator
' '         Text.Whitespace
'known_continuous' Name
' '         Text.Whitespace
'then'      Keyword
'\n      '  Text.Whitespace
'integrate_known' Name
'('         Punctuation
'Int'       Name
','         Operator
' '         Text.Whitespace
'Ints'      Name
','         Operator
' '         Text.Whitespace
'"'         Punctuation
'xx'        Name
'"'         Punctuation
```

```
','         Operator
' '         Text.Whitespace
'm'         Name
','         Operator
' '         Text.Whitespace
'h'         Name
','         Operator
' '         Text.Whitespace
'loops'     Name
')'         Punctuation
'\n    '    Text.Whitespace
'elif'      Keyword
' '         Text.Whitespace
'm'
         Name
' '         Text.Whitespace
'::'        Operator
' '         Text.Whitespace
'known_discrete' Name
' '         Text.Whitespace
'then'      Keyword
'\n     '   Text.Whitespace
'integrate_known' Name
'('         Punctuation
'Sum'       Name
','         Operator
' '         Text.Whitespace
'Sums'      Name
','         Operator
' '         Text.Whitespace
'"'         Punctuation
'kk'        Name
'"'         Punctuation
','         Operator
' '         Text.Whitespace
'm'         Name
','         Operator
' '         Text.Whitespace
'h'         Name
','         Operator
' '         Text.Whitespace
'loops'     Name
')'         Punctuation
'\n    '    Text.Whitespace
'elif'      Keyword
' '         Text.Whitespace
'm'         Name
' '         Text.Whitespace
```

```
'::'        Operator
' '         Text.Whitespace
"""         Punctuation
'Ret'       Name
'('         Punctuation
'anything'  Name
')'
  Punctuation
"""         Punctuation
' '         Text.Whitespace
'then'      Keyword
'\n    '    Text.Whitespace
'applyintegrand' Name
'('         Punctuation
'h'         Name
','         Operator
' '         Text.Whitespace
'mk_ary'    Name
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
'1'         Literal.Number.Integer
','         Operator
'm'         Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'loops'     Name
'))'        Punctuation
'\n    '    Text.Whitespace
'elif'      Keyword
' '         Text.Whitespace
'm'         Name
' '         Text.Whitespace
'::'        Operator
' '         Text.Whitespace
"""         Punctuation
'Bind'      Name
'('         Punctuation
'anything'  Name
','         Operator
' '         Text.Whitespace
'name'      Name
','         Operator
' '         Text.Whitespace
'anything'  Name
')'         Punctuation
"""
```

```
   Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n     '    Text.Whitespace
'res'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'3'          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'mk_idx'     Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'loops'      Name
'));'        Punctuation
'\n
     '    Text.Whitespace
'res'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'Integrand'  Name
```

```
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'"'          Punctuation
'integrate'  Name
'"'          Punctuation
'('          Punctuation
'res'        Name
','          Operator
' '          Text.Whitespace
'x'          Name
','          Operator
' '          Text.Whitespace
'loops'      Name
'))'         Punctuation
','          Operator
' '          Text.Whitespace
'x'          Name
'='          Operator
'h'          Name
');'         Punctuation
'\n    '     Text.Whitespace
'integrate'  Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'1'
          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'res'        Name
','          Operator
' '          Text.Whitespace
'loops'      Name
');'         Punctuation
'\n    '     Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'm'          Name
```

```
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
"""          Punctuation
'specfunc'   Name
'('          Punctuation
'Msum'       Name
')'          Punctuation
"""          Punctuation
' '          Text.Whitespace
'and'        Keyword
' '          Text.Whitespace
'('          Punctuation
'nops'       Name.Builtin
'('          Punctuation
'loops'      Name
')'          Punctuation
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'0'          Literal.Number.Integer
' '          Text.Whitespace
'or'         Keyword
' '          Text.Whitespace
'nops'
       Name.Builtin
'('          Punctuation
'm'          Name
')'          Punctuation
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
')'          Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n     '    Text.Whitespace
'`+`'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'map'        Name.Builtin
'('          Punctuation
'integrate'  Name
','          Operator
' '          Text.Whitespace
'['          Punctuation
'op'         Name.Builtin
```

```
'('          Punctuation
'm'          Name
')]'         Punctuation
','          Operator
' '          Text.Whitespace
'h'          Name
','          Operator
' '          Text.Whitespace
'loops'      Name
')))'        Punctuation
'\n    '     Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'm'          Name
' '          Text.Whitespace
'::'         Operator
'
 '           Text.Whitespace
'''''        Punctuation
'Weight'     Name
'('          Punctuation
'anything'   Name
','          Operator
' '          Text.Whitespace
'anything'   Name
')'          Punctuation
'''''        Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n      '   Text.Whitespace
'foldl'      Name
'('          Punctuation
'product'    Name
','          Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'loops'      Name
'))'         Punctuation
' '          Text.Whitespace
```

```
'*'          Operator
' '          Text.Whitespace
'integrate'  Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'm'
          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'h'          Name
','          Operator
' '          Text.Whitespace
'loops'      Name
')'          Punctuation
'\n    '     Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'm'          Name
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
't_pw_or_part' Name
' '          Text.Whitespace
'then'       Keyword
'\n      '   Text.Whitespace
'Partition'  Name
':'          Operator
'-'          Operator
'AppPartOrPw' Name
'\n                ' Text.Whitespace
'('          Punctuation
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
'p'          Name
')'          Punctuation
'\n                    ' Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'not'        Keyword
' '          Text.Whitespace
'Partition'  Name
':'          Operator
'-'          Operator
```

```
'ConditionsDepend'
 Name
'('          Punctuation
'p'          Name
','          Operator
' '          Text.Whitespace
'lhs'        Name.Builtin
'~'          Operator
'('          Punctuation
'loops'      Name
'))'         Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n                        ' Text.Whitespace
'Partition'  Name
':'          Operator
'-'          Operator
'Pmap'       Name
'('          Punctuation
'z'          Name
'->'         Operator
'integrate'  Name
'('          Punctuation
'z'          Name
','          Operator
'h'          Name
','          Operator
'loops'      Name
')'          Punctuation
','          Operator
'p'          Name
')'          Punctuation
'\n                    ' Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n                  ' Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
'\n                '
 Text.Whitespace
','          Operator
' '          Text.Whitespace
'm'          Name
','          Operator
' '          Text.Whitespace
```

'[' Punctuation
'"' Punctuation
'no_split_disj' Name
'"' Punctuation
']);' Punctuation
'\n ' Text.Whitespace
'elif' Keyword
' ' Text.Whitespace
'm' Name
' ' Text.Whitespace
'::' Operator
' ' Text.Whitespace
't_case' Name
' ' Text.Whitespace
'and' Keyword
' ' Text.Whitespace
'not' Keyword
' ' Text.Whitespace
'depends' Name
'(' Punctuation
'op' Name.Builtin
'(' Punctuation
'1' Literal.Number.Integer
',' Operator
'm' Name
')' Punctuation
',' Operator
' ' Text.Whitespace
'map' Name.Builtin
'(' Punctuation
'lhs' Name.Builtin
',' Operator
' ' Text.Whitespace
'loops'
Name
'))' Punctuation
' ' Text.Whitespace
'then' Keyword
'\n ' Text.Whitespace
'subsop' Name.Builtin
'(' Punctuation
'2' Literal.Number.Integer
'=' Operator
'map' Name.Builtin
'(' Punctuation
'proc' Keyword
'(' Punctuation
'b' Name

```
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
'Branch'     Name
'('          Punctuation
'anything'   Name
','          Operator
' '          Text.Whitespace
'anything'   Name
'))'         Punctuation
'\n                  ' Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'subsop'     Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
'='          Operator
'"'          Punctuation
'integrate'  Name
'"'          Punctuation
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','
     Operator
'b'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'x'          Name
','          Operator
' '          Text.Whitespace
'loops'      Name
')'          Punctuation
','          Operator
'b'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'x'          Name
'='          Operator
'h'          Name
')'          Punctuation
'\n                  ' Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
```

```
','          Operator
'\n                ' Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'm'          Name
'))'         Punctuation
','          Operator
'\n            ' Text.Whitespace
'm'          Name
');'         Punctuation
'\n    '     Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'm'          Name
' '          Text.Whitespace
'::'
         Operator
' '          Text.Whitespace
'"'          Punctuation
'LO'         Name
'('          Punctuation
'name'       Name
','          Operator
' '          Text.Whitespace
'anything'   Name
')'          Punctuation
'"'          Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n      '   Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
```

' ' Text.Whitespace
'=' Operator
' ' Text.Whitespace
'h' Name
')' Punctuation
'\n ' Text.Whitespace
'elif' Keyword
' ' Text.Whitespace
'm'
  Name
' ' Text.Whitespace
'::' Operator
' ' Text.Whitespace
'"' Punctuation
'Plate' Name
'(' Punctuation
'nonnegint' Name
',' Operator
' ' Text.Whitespace
'name' Name
',' Operator
' ' Text.Whitespace
'anything' Name
')' Punctuation
'"' Punctuation
' ' Text.Whitespace
'then' Keyword
'\n ' Text.Whitespace
'# Unroll Plate when the bound is known. We unroll Plate here (instead\n' Comment.Single

' ' Text.Whitespace
'# of unrolling Ints in reduce, for example) because we have no other\n' Comment.Single

' ' Text.Whitespace
"# way to integrate certain Plates, namely those whose bodies' control\n" Comment.Single

' ' Text.Whitespace
'# flows depend on the index.\n' Comment.Single

' ' Text.Whitespace
'x' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'mk_sym'
  Name
'(' Punctuation
'"' Punctuation

'pp' Name
'''' Punctuation
',' Operator
' ' Text.Whitespace
'h' Name
');' Punctuation
'\n ' Text.Whitespace
'x' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'[' Punctuation
'seq' Name.Builtin
'(' Punctuation
'cat' Name.Builtin
'(' Punctuation
'x' Name
',' Operator
'i' Name
')' Punctuation
',' Operator
' ' Text.Whitespace
'i' Name
'=' Operator
'0' Literal.Number.Integer
'..' Punctuation
'op' Name.Builtin
'(' Punctuation
'1' Literal.Number.Integer
',' Operator
'm' Name
')' Punctuation
'-' Operator
'1' Literal.Number.Integer
')];' Punctuation
'\n ' Text.Whitespace
'if'
Keyword
' ' Text.Whitespace
'op' Name.Builtin
'(' Punctuation
'1' Literal.Number.Integer
',' Operator
'm' Name
')' Punctuation
' ' Text.Whitespace
'=' Operator
' ' Text.Whitespace

```
'0'          Literal.Number.Integer
' '          Text.Whitespace
'then'       Keyword
'\n      '   Text.Whitespace
'res'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'undefined'  Name
';'          Punctuation
'\n      '   Text.Whitespace
'else'       Keyword
'\n      '   Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
' '          Text.Whitespace
'then'
       Keyword
'\n          ' Text.Whitespace
'res'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'x'          Name
');'         Punctuation
'\n      '   Text.Whitespace
'else'       Keyword
'\n          ' Text.Whitespace
'res'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'idx'        Name
'('          Punctuation
```

```
'x'          Name
','          Operator
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'm'          Name
'));'        Punctuation
'\n'         Text.Whitespace

'#         res := piecewise(seq(op([op(2,m)=i-1, op(i,x)]), i=2..op(1,m)),\n' Comment.Single

'#                    op(1,x));\n' Comment.Single

'       '    Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'
         Keyword
';'          Punctuation
'\n       '  Text.Whitespace
'res'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'mk_idx'     Name
'('          Punctuation
'res'        Name
','          Operator
' '          Text.Whitespace
'loops'      Name
');'         Punctuation
'\n     '    Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n     '    Text.Whitespace
'res'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'applyintegrand' Name
'('          Punctuation
'h'          Name
','          Operator
' '          Text.Whitespace
'mk_ary'     Name
```

```
'('         Punctuation
'"'         Punctuation
'ary'       Name
'"'         Punctuation
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
'1'         Literal.Number.Integer
','         Operator
'm'         Name
')'
         Punctuation
','         Operator
' '         Text.Whitespace
'op'        Name.Builtin
'('         Punctuation
'2'         Literal.Number.Integer
','         Operator
'm'         Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'res'       Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'loops'     Name
'));'       Punctuation
'\n    '    Text.Whitespace
'for'       Keyword
' '         Text.Whitespace
'i'         Name
' '         Text.Whitespace
'from'      Keyword
' '         Text.Whitespace
'op'        Name.Builtin
'('         Punctuation
'1'         Literal.Number.Integer
','         Operator
'm'         Name
')'         Punctuation
' '         Text.Whitespace
'to'        Keyword
' '         Text.Whitespace
'1'         Literal.Number.Integer
' '         Text.Whitespace
'by'        Keyword
' '         Text.Whitespace
```

```
'-'          Operator
'1'
          Literal.Number.Integer
' '          Text.Whitespace
'do'         Keyword
'\n       '  Text.Whitespace
'res'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'integrate'   Name
'('          Punctuation
'eval'       Name.Builtin
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'3'          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'm'          Name
')'          Punctuation
'='          Operator
'i'          Name
'-'          Operator
'1'          Literal.Number.Integer
')'          Punctuation
','          Operator
'\n                      ' Text.Whitespace
'Integrand'   Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'i'          Name
','
          Operator
'x'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'res'        Name
')'          Punctuation
```

```
','         Operator
' '         Text.Whitespace
'loops'     Name
');'        Punctuation
'\n    '    Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'do'        Keyword
';'         Punctuation
'\n    '    Text.Whitespace
'res'       Name
'\n    '    Text.Whitespace
'elif'      Keyword
' '         Text.Whitespace
'm'         Name
' '         Text.Whitespace
'::'        Operator
' '         Text.Whitespace
'"'         Punctuation
'Plate'     Name
'('         Punctuation
'anything'  Name
','         Operator
' '         Text.Whitespace
'name'      Name
','         Operator
' '         Text.Whitespace
'anything'  Name
')'         Punctuation
'"'         Punctuation
' '         Text.Whitespace
'then'      Keyword
'\n    '    Text.Whitespace
'integrate'
  Name
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
'3'         Literal.Number.Integer
','         Operator
'm'         Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'h'         Name
','         Operator
' '         Text.Whitespace
'['         Punctuation
```

```
'op'        Name.Builtin
'('         Punctuation
'2'         Literal.Number.Integer
','         Operator
'm'         Name
')'         Punctuation
'='         Operator
'0'         Literal.Number.Integer
'..'        Punctuation
'op'        Name.Builtin
'('         Punctuation
'1'         Literal.Number.Integer
','         Operator
'm'         Name
')'         Punctuation
'-'         Operator
'1'         Literal.Number.Integer
','         Operator
' '         Text.Whitespace
'op'        Name.Builtin
'('         Punctuation
'loops'     Name
')])'       Punctuation
'\n    '    Text.Whitespace
'elif'
      Keyword
' '         Text.Whitespace
'm'         Name
' '         Text.Whitespace
'::'        Operator
' '         Text.Whitespace
"""         Punctuation
'Context'   Name
'('         Punctuation
'anything'  Name
','         Operator
' '         Text.Whitespace
'anything'  Name
')'         Punctuation
"""         Punctuation
' '         Text.Whitespace
'then'      Keyword
'\n     '   Text.Whitespace
'applyop'   Name
'('         Punctuation
'integrate' Name
','         Operator
' '         Text.Whitespace
```

```
'2'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'm'          Name
','          Operator
' '          Text.Whitespace
'h'          Name
','          Operator
' '          Text.Whitespace
'loops'      Name
')'          Punctuation
'\n    '     Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'h'          Name
' '          Text.Whitespace
'::'         Operator
' '
        Text.Whitespace
'appliable'   Name
' '          Text.Whitespace
'then'       Keyword
'\n      '   Text.Whitespace
'x'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'gensym'     Name
'('          Punctuation
'"'          Punctuation
'xa'         Name
'"'          Punctuation
');'         Punctuation
'\n      '   Text.Whitespace
'"'          Punctuation
'integrate'   Name
'"'          Punctuation
'('          Punctuation
'm'          Name
','          Operator
' '          Text.Whitespace
'Integrand'   Name
'('          Punctuation
'x'          Name
','          Operator
' '          Text.Whitespace
'h'          Name
'('          Punctuation
```

```
'x'            Name
'))'           Punctuation
','            Operator
' '            Text.Whitespace
'loops'        Name
')'            Punctuation
'\n    '       Text.Whitespace
'else'         Keyword
'\n      '     Text.Whitespace
'"'            Punctuation
'procname'     Name
'(_'
           Punctuation
'passed'       Name
')'            Punctuation
'"'            Punctuation
'\n    '       Text.Whitespace
'end'          Keyword
' '            Text.Whitespace
'if'           Keyword
'\n  '         Text.Whitespace
'end'          Keyword
' '            Text.Whitespace
'proc'         Keyword
';'            Punctuation
'\n\n\n  '     Text.Whitespace
'local'        Keyword
'\n  '         Text.Whitespace
'integrate_known' Name
' '            Text.Whitespace
':='           Operator
' '            Text.Whitespace
'proc'         Keyword
'('            Punctuation
'make'         Name
','            Operator
' '            Text.Whitespace
'makes'        Name
','            Operator
' '            Text.Whitespace
'var'          Name
','            Operator
' '            Text.Whitespace
'm'            Name
','            Operator
' '            Text.Whitespace
'h'            Name
','            Operator
```

```
' '          Text.Whitespace
'loops'      Name
' '          Text.Whitespace
'::'         Operator
'
 '           Text.Whitespace
'list'       Name
'('          Punctuation
'name'       Name
'='          Operator
'range'      Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n    '     Text.Whitespace
'local'      Keyword
' '          Text.Whitespace
'x'          Name
','          Operator
' '          Text.Whitespace
'dens'       Name
','          Operator
' '          Text.Whitespace
'bds'        Name
';'          Punctuation
'\n    '     Text.Whitespace
'x'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'mk_sym'     Name
'('          Punctuation
'var'        Name
','          Operator
' '          Text.Whitespace
'h'          Name
');'         Punctuation
'\n    '     Text.Whitespace
'dens'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'density'    Name
'['          Punctuation
'op'
```

```
        Name.Builtin
'('         Punctuation
'0'         Literal.Number.Integer
','         Operator
'm'         Name
')]('       Punctuation
'op'        Name.Builtin
'('         Punctuation
'm'         Name
'));'       Punctuation
'\n    '    Text.Whitespace
'bds'       Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'bounds'    Name
'['         Punctuation
'op'        Name.Builtin
'('         Punctuation
'0'         Literal.Number.Integer
','         Operator
'm'         Name
')]('       Punctuation
'op'        Name.Builtin
'('         Punctuation
'm'         Name
'));'       Punctuation
'\n    '    Text.Whitespace
'if'        Keyword
' '         Text.Whitespace
'loops'     Name
' '         Text.Whitespace
'='         Operator
' '         Text.Whitespace
'[]'        Punctuation
' '         Text.Whitespace
'then'      Keyword
'\n    '    Text.Whitespace
'make'      Name
'('
        Punctuation
'dens'      Name
'('         Punctuation
'x'         Name
')'         Punctuation
' '         Text.Whitespace
'*'         Operator
' '         Text.Whitespace
```

```
'applyintegrand' Name
'('          Punctuation
'h'          Name
','          Operator
' '          Text.Whitespace
'x'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'x'          Name
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'bds'        Name
');'         Punctuation
'\n    '     Text.Whitespace
'else'       Keyword
'\n      '   Text.Whitespace
'makes'      Name
'('          Punctuation
'foldl'      Name
'('          Punctuation
'product'    Name
','          Operator
' '          Text.Whitespace
'dens'       Name
'('          Punctuation
'mk_idx'     Name
'('          Punctuation
'x'          Name
','          Operator
'loops'      Name
'))'         Punctuation
','
    Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'loops'      Name
'))'         Punctuation
'\n            ' Text.Whitespace
'*'          Operator
' '          Text.Whitespace
'applyintegrand' Name
'('          Punctuation
'h'          Name
','          Operator
' '          Text.Whitespace
```

```
'x'          Name
')'          Punctuation
','          Operator
'\n            ' Text.Whitespace
'x'          Name
','          Operator
' '          Text.Whitespace
'bds'        Name
','          Operator
' '          Text.Whitespace
'loops'      Name
')'          Punctuation
'\n    '     Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n  '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n'         Text.Whitespace

'end'        Keyword
' '          Text.Whitespace
'module'     Keyword
';'
          Punctuation
' '          Text.Whitespace
'#toLO\n'    Comment.Single
# Teach Maple (through depends and eval) about our new binding forms.
# forall bind from 1st arg to 2nd arg.
# Ints,Sums,ints,sums bind from 2nd arg to 1st arg, and also from each element
#   of the 4th arg to the other elements on the left and to the 3rd arg.

`depends/forall` := proc(bvar, pred, x, $)
 depends(pred, x minus convert(bvar, 'set'))
end proc:

`depends/Ints` := proc(body, bvar, rng, loops, x, y, $)
 local xx, i;
 if nargs = 5 then
   xx := x; # y is ununsed and x lists the variables to look for
 else
   xx := y; # x is some KB and y lists the variables to look for
   if depends(x, y) then return true end if;
 end if;
```

```
 # don't remove bvar from xx!
 if depends(body, xx minus {bvar}) then return true end if;
 for i from nops(loops) to 1 by -1 do
   if depends(op([i,2],loops), xx) then return true end if;
   xx := xx minus {op([i,1],loops)};
 end do;
 depends(rng, xx)
end proc:
`depends/Sums` := eval(`depends/Ints`):
`depends/ints` := eval(`depends/Ints`):
`depends/sums`
 := eval(`depends/Ints`):

`eval/forall` := proc(e, eqs, $)
 local bvar, pred;
 bvar, pred := op(e);
 eval(op(0,e), eqs)(BindingTools:-generic_evalat(bvar, pred, eqs))
end proc:

`eval/Ints` := proc(e, eqs, $)
 local body, bvar, rng, loops, n, i;
 body, bvar, rng, loops := op(1..4, e);
 bvar, body := BindingTools:-generic_evalat(bvar, body, eqs);
 eval(op(0,e), eqs)(body, bvar,
                 BindingTools:-generic_evalatstar(rng, loops, eqs),
                 op(5..-1,e))
end proc:
`eval/Sums` := eval(`eval/Ints`):
`eval/ints` := eval(`eval/Ints`):
`eval/sums` := eval(`eval/Ints`):

`eval/Int` := proc(e, eqs, $)
 local body, bound, bvar;
 body, bound := op(1..2, e);
 if bound :: name then
   bound, body := BindingTools:-generic_evalat(bound, body, eqs);
 elif bound :: `=` then
   bvar := lhs(bound);
   bvar, body := BindingTools:-generic_evalat(bvar, body, eqs);
   bound := bvar = eval(rhs(bound), eqs);
 else
   body, bound := BindingTools:-generic_evalatstar(body,
 bound, eqs);
 end if;
 eval(op(0,e), eqs)(body, bound, op(eval([op(3..-1,e)], eqs)))
end proc:
`eval/Sum`     := eval(`eval/Int`):
`eval/Product` := eval(`eval/Int`):
```

```
`eval/int`     := eval(`eval/Int`):
`eval/sum`     := eval(`eval/Int`):
`eval/product` := eval(`eval/Int`):

##############################################################################

Loop := module ()
 option package;
 local intssums, enter_piecewise, wrap,
       t_peel, do_peel, do_split, do_graft, do_rebase_lower, do_rebase_upper,
       Binder, Stmt, t_binder, t_stmt, t_exp,
       ModuleLoad;
 export
    # These first few are smart constructors (for themselves):
        ints, sums,
    # while these are "proper functions"
        mk_HArray, genLoop, unproducts, unproduct,
        peel, split, graft, rebase_lower, rebase_upper, Print;
 # these names are not assigned (and should not be).  But they are
 # used as global names, so document that here.
 global Ints, Sums, csgn, sum, signum;
  uses Hakaru, KB, Utilities;

 t_binder := 'Binder(identical(product, Product, sum, Sum), t_kb)';
 t_stmt   := 'Stmt(anything, list, list)';
 t_exp    := '{Stmt(identical(exp), [], []),
              Stmt(identical(`^`), [anything], [])}';

 ints := proc() intssums('ints', 'int', _passed) end proc;
 sums := proc() intssums('sums', 'sum', _passed) end proc;

 Print := proc(kind::identical(Ints,Sums,ints,sums),e,v::name,r0::range,rs::list(name=range),$)
   local k;
   k := StringTools[Capitalize](StringTools[Chop](convert(kind,string)));
   k := parse(cat("`print/",eval(k),"`"));
   eval(k)(e,v[op(rs)]=r0);
 end proc;

 intssums := proc(makes::name, make::name,
                 e::anything, x::name, rr::range, ll::list(name=range),
                 kb::t_kb:=empty, $)
   local t, r, l, kb2, w0, pp, i;
   t := `if`(make=int, HReal(open_bounds(rr)), HInt(closed_bounds(rr)));
   r, l, kb2 := genLoop(rr, ll, kb, 'Integrand'(x,e));
   w0, pp := unproducts(e, x, l,
 kb2);
   if depends(w0, x) then
     'makes(e, x, rr, ll)'
```

```
  else
    pp := 'make'(pp, x=r);
    for i in l do pp := 'product'(pp, i) end do;
    NewSLO:-simplify_factor_assuming(w0 * pp, kb);
  end if
end proc;

mk_HArray := proc(t::t_type, loops::list(name=range), $)
  local res, i;
  res := t;
  for i in loops do res := HArray(res) end do;
  res
end proc;

genLoop := proc(e, loops::list(name=range), kb::t_kb)
  local kb1, rng, ind, do_subst, i;
  kb1 := kb;
  rng := table();
  ind := table();
  do_subst := e -> foldl(((e,eq) -> eval(e, op([lhs(eq),1],loops)=rhs(eq))),
                         e, entries(ind, 'pairs'));
  for i from nops(loops) to 1 by -1 do
    rng[i] := do_subst(op([i,2],loops));
    ind[i], kb1 := genType(op([i,1],loops), HInt(closed_bounds(rng[i])),
                           kb1, _rest);
  end do;
  do_subst(e), zip(`=`, [entries(ind, 'nolist')],
                       [entries(rng, 'nolist')]), kb1
end
proc;

unproducts := proc(w, x::name, loops::list(name=range), kb::t_kb, $)
  local w0, pp, j, w1, w2, loop;
  w0 := 1;
  pp := w;
  for j from nops(loops) to 1 by -1 do
    w1, pp := op(unproduct(pp, x, op(j,loops), [], `*`, kb, kb));
    # separate out each of the factors in w1, as they might have different
    # variable dependencies, which can be exploited by other routines
    w2 := convert(w1, 'list', '`*`');
    for loop in [op(j+1..-1, loops)] do
      w2 := map((w -> product(eval(w, x=idx(x,lhs(loop))), loop)), w2);
    end do;
    w0 := w0 * `*`(op(w2));
    # w0 := w0 * foldl(product, w1, op(j+1..-1, loops));
  end do;
  # Rewrite ... * piecewise(i<=kk-1, xs^2, 1)
  #      to ... * xs ^ (2*piecewise(i<=kk-1, 1))
```

```
  # because the latter is easier to integrate and recognize with respect to xs
  pp := for_poly(pp, # TODO: move this rewrite into eval_factor (then remove for_poly?)?
    proc (p)
      local n, s, r;
      if p :: 'And(specfunc(piecewise),
anyfunc(freeof(x), anything, 1))' then
        n := indets(op(1,p),name);
        if op(2,p) :: {'exp(anything)', '`^`'('freeof'(n),'anything')} then
          s, r := selectremove(depends, convert(op([2,-1],p),'list','`*`'), n);
          subsop(-1 = `*`(piecewise(op(1,p), `*`(op(s))), op(r)), op(2,p))
        else
          s, r := selectremove(depends, convert(op(2,p),'list','`*`'), n);
          `*`(op(r)) ^ piecewise(op(1,p), 1)
            * `if`(nops(s) > 0, piecewise(op(1,p), `*`(op(s)), 1), 1)
        end if
      else
        p
      end if
    end proc);
  w0, pp
end proc;

# Find [w1,pp] so that
#   wrap(heap,w,mode,kb1,kb0)
#   = w1*product(eval(pp,var=idx(var,lhs(loop))),loop)
# making w1 depend on var as little as possible.
# The flag "mode" should be `+` if "heap" contains an entry of the form
# t_exp, or `*` otherwise.
unproduct := proc(w, var::name, loop::(name=range),
                  heap::list, mode::identical(`*`,`+`),
                   kb1::t_kb, kb0::t_kb, $)
  local ind, res, dummy, kb, kbThen, i, w1, pp, s, r, x;
  if not depends(w, var) then
    return [wrap(heap, w, mode, kb1, kb0), 1]
  end if;
  # The `..' (indices) of all occurences of `idx(var,..)'
  ind := map2(op, 2, indets(w, 'idx(identical(var), anything)'));
  if nops(ind) = 1 then
    ind := op(ind);
    # Make sure ind contains no bound variables before lifting it!
    # So, check that "extract using indets" and "rename using eval" commute.
    s := indets(ind, 'name');
    s := map(proc(x,$) local y; `if`(depends(ind,x), x=y, NULL) end proc, s);
    if indets(eval(w, s), 'idx(identical(var), anything)')
            = {idx(var, eval(ind, s))} then
      # use kb as a local context, and 'solve' for the innermost bound var
      #   used in ind.
      kb  := assert(lhs(loop)=ind, kb1); # BUG! bijectivity assumed!
```

```
      # if the assertion makes the KB false, it isn't needed(?)
       ASSERT(type(kb, t_kb),
        sprintf("assert(%a,%a) produced a false KB!\n", lhs(loop)=ind,kb1)):
      res := subs(idx(var,ind) = idx(var,lhs(loop)), w);
      res := wrap(heap, res, mode, kb, kb0);
      res := subs(idx(var,lhs(loop))=dummy, res);
      if not depends(res, var) then
        return [1, subs(dummy=var, res)]
      end if
    end if
  end if;
  # distribute the unproduct over each part
  if w :: mode then
    res := map(unproduct, `if`(mode=`*`, list_of_mul(w), [op(w)]),
              var, loop, heap, mode, kb1, kb0);
    return [`*`(op(map2(op,1,res))), `*`(op(map2(op,2,res)))]
  end if;
  # for piecewise, just map right in (using KB for context tracking)
  if w :: 'specfunc(piecewise)' then
    kb := kb1;
    for i from 1 to nops(w) do
      if i :: even then
        kbThen := assert(    op(i-1,w) , kb);
        # accumulate the rest, regardless
        kb     := assert(Not(op(i-1,w)), kb);

        # if kbThen
is invalid, deal appropriately
        if not type(kbThen,t_kb) then next end if;

        w1[i], pp[i] := op(unproduct(op(i,w),var,loop,heap,mode,kbThen,kb0));
        # if kb is inconsistent, we're done
        if not type(kb,t_kb) then break end if;
      elif i = nops(w) then
        if not type(kb,t_kb) then next end if;
        w1[i], pp[i] := op(unproduct(op(i,w),var,loop,heap,mode,kb    ,kb0))
      end if
    end do;
    return [`*`(entries(w1,'nolist')), `*`(entries(pp,'nolist'))]
  end if;
  if mode = `*` then
    if w :: (anything^freeof(var)) then
      return unproduct(op(1,w), var, loop,
                    [op(heap), Stmt(`^`, [], [op(2,w)])], `*`, kb1, kb0)
    elif w :: exp(anything) then
      return unproduct(op(1,w), var, loop,
                    [op(heap), Stmt(exp, [], [])], `+`, kb1, kb0)
    elif w :: (freeof(var)^anything) then
```

```
      return unproduct(op(2,w), var, loop,
                    [op(heap), Stmt(`^`,
[op(1,w)], [])], `+`, kb1, kb0)
    end if
  end if;
  if mode = `+` and w :: `*` then
    s, r := selectremove(depends, w, var);
    if s :: `*` then
      # Nonlinear %1 (time to reread kiselyov-lifted?)
    else
      return unproduct(s, var, loop,
                    [op(heap), Stmt(`*`, [], [r])], `+`, kb1, kb0)
    end if
  end if;
  if w :: And(specfunc(`if`(mode = `*`, {product, Product}, {sum, Sum})),
            anyfunc(anything, name=range(freeof(var)))) then
    x, kb := genType(op([2,1],w), HInt(closed_bounds(op([2,2],w))), kb1,
                  w, var, loop, heap);
    return unproduct(eval(op(1,w), op([2,1],w)=x), var, loop,
                  [op(heap), Binder(op(0,w), kb1)], mode, kb, kb0)
  end if;
  if mode = `*` and w :: '{`+`, specfunc({sum, Sum})}' then
    # Maybe this w is one of those big sums involving products that are
    # always equal to 1, left behind by the density of Categorical
    w1 := graft(split(peel(w)));
     w1 := combine(rebase_upper(w1));
    w1 := combine(rebase_lower(w1));
    return [wrap(heap, w1, mode, kb1, kb0), 1]
  end if;
  return [wrap(heap, w, mode, kb1, kb0), 1]
end proc;

enter_piecewise := proc(ee, kb0::t_kb, mode::identical(`*`,`+`), $)
  local e, kb, mo;
  e  := ee;
  kb := kb0;
  mo := mode();
  while e :: 'specfunc(piecewise)' and nops(e) = 3 do
    if op(3,e) = mo then
      kb := assert(op(1,e), kb);
      e := op(2,e);
    elif op(2,e) = mo then
      kb := assert(Not(op(1,e)), kb);
      e := op(3,e);
    else
      break;
    end if;
  end do;
```

```
  ASSERT(type(kb,t_kb), "enter_piecewise: KB of piecewise conditions is not valid, so the input piecewise must
not be valid.");
  e, kb
end proc;

# heap is a list of t_binder and t_stmt
# one invariant to maintain:
#  wrap(heap, mode(a,b)) = wrap(heap,a) * wrap(heap,b)

# Also, a t_binder is a Product/product/Sum/sum.
# And, a t_stmt is a 1-hole
context of a (multiplicative) AST,
#   used for [a ^ hole, hole ^ b, exp(hole), c * hole].

wrap := proc(heap::list, e1, mode1::identical(`*`,`+`),
            kb1::t_kb, kb0::t_kb, $)
  local e, kb, mode, i, entry, rest, var, new_rng, make, logmake,
     dom_spec, w, wPow, wExp, arrrgs;
  e    := e1;
  kb   := kb1;
  mode := mode1;
  for i from nops(heap) to 1 by -1 do
    entry := op(i,heap);
    if entry :: t_binder then
      if not (op(1,entry) in `if`(mode=`+`, {sum,Sum},
                                  {product,Product})) then
        print("Warning: heap mode inconsistency", heap, mode1)
      end if;
      e, kb := enter_piecewise(e, kb, mode);
      rest := kb_subtract(kb, op(2,entry));
      new_rng, rest := selectremove(type, rest,
        {[identical(genType), name, specfunc(HInt)],
         [identical(genLet), name, anything]});
      if not (new_rng :: [list]) then
        error "kb_subtract should return exactly
one gen*"
      end if;
      new_rng := op(new_rng);
      var     := op(2,new_rng);
      if op(1,new_rng) = genType then
        make    := op(1,entry);
        new_rng := range_of_HInt(op(3,new_rng));
      else # op(1,new_rng) = genLet
        make    := eval;
        new_rng := op(3,new_rng);
      end if;
      dom_spec, rest := selectremove(depends,
        map(proc(a::[identical(assert),anything],$) op(2,a) end proc, rest),
```

```
      var);

    # Like e := make(piecewise(And(op(dom_spec)), e, mode()), var=new_rng);
    # but try to simplify by pushing the make and the piecewise into e
    (e, w) := selectremove(depends, convert(e, 'list', `*`), var);
    w := `*`(op(w));
    if mode = `*` then
      (wPow, e) := selectremove(type, e, '`^`'('freeof'(var), 'anything'));
      (wExp, e) := selectremove(type, e, 'exp(anything)');
      wExp := `+`(op(map2(op, 1, wExp)));
      wExp := expand(wExp, op(indets(wExp, function)));
       logmake := proc(t)
        local s, r;
        s, r := selectremove(depends, convert(t, 'list', `*`), var);
        `*`(op(r),
            `if`(make=eval,eval,Sum)
                (piecewise_And(dom_spec, `*`(op(s)), 0), var=new_rng));
      end proc;
      w := `*`( `if`(w = 1, 1, w ^ logmake(1))
              , op(map((f -> op(1,f) ^ logmake(op(2,f))), wPow))
              , `if`(wExp = 0, 1, exp(maptype(`+`,logmake,wExp))) );
    end if;
    e := w * make(piecewise_And(dom_spec, `*`(op(e)), mode()), var=new_rng);

    # `rest' originally comes from `entry', and this reinserts it after some
    # processing. The original KB was valid, so this one should also be valid.
    kb := foldr(assert, op(2,entry), op(rest));
    ASSERT(type(kb,t_kb), "Loop/wrap{t_binder}: rebuilding kb produced contradiction");

  elif entry :: t_stmt then
    # We evaluate arrrgs first, in case op(1,stmt) is an operation (such
as
    # piecewise) that looks ahead at how many arguments it is passed before
    # they are evaluated.
    arrrgs := op(op(2,entry)), e, op(op(3,entry));
    e      := op(1,entry)(arrrgs);
    if entry :: t_exp then
      if mode <> `+` then
        print("Warning: heap mode inconsistency?", heap, mode1)
      end if;
      mode := `*`;
    end if
  else error "Malformed heap entry %1", entry end if
end do;
if mode <> `*` then
  print("Warning: heap mode inconsistency??", heap, mode1)
end if;
e, kb := enter_piecewise(e, kb, mode);
```

```
  rest := kb_subtract(kb, kb0);
  rest := map(proc(a::[identical(assert),anything],$) op(2,a) end proc, rest);
  (wExp, e) := selectremove(type, convert(e, 'list', `*`), 'exp(anything)');
  wExp := `+`(op(map2(op, 1, wExp)));
  wExp := expand(wExp, op(indets(wExp, function)));
  logmake := (t -> t * piecewise_And(rest,1,0));
  `if`(wExp = 0, 1, exp(maptype(`+`,logmake,wExp)))

    * piecewise_And(rest,`*`(op(e)),1);
end proc;

# Rewrite product(...piecewise(i+42=lo+42,th,el)...,i=lo..hi)
# to eval(...th...,i=lo)*product(...el...,i=lo+1..hi)
t_peel := 'And(specfunc({sum,Sum,product,Product}),
              anyfunc(anything, name=range))';
peel := proc(e, $)
  subsindets(e, t_peel, do_peel);
end proc;
do_peel := proc(e, $)
  local make, body, x, r, cond, line, test, x0, r0, cond0, here, rest;
  if not (e :: t_peel) then return e end if;
  if   op(0,e) in '{sum    ,Sum    }' then make := `+`;
  elif op(0,e) in '{product,Product}' then make := `*`; end if;
  body, r := op(e);
  x, r    := op(r);
  for cond in indets(body, '{`=`(algebraic),`<`,`<=`}') do
    line := `-`(op(cond));
    if 1 <> degree(line, x) then next end if;
    if cond :: `=` then
      cond0 := true;
      if Testzero(eval(line, x=lhs(r))) then
        x0 := lhs(r); r0 := applyop(`+`, 1, r, 1);
      elif Testzero(eval(line, x=rhs(r))) then

    x0 := rhs(r); r0 := applyop(`-`, 2, r, 1);
      else next end if;
    else
      test := proc(x0, x1, $)
        local res;
        res := evalb(not op(0,cond)(eval(line, x=x1), 0));
        `if`(res in '{true,false}'
              and evalb(op(0,cond)(eval(line, x=x0), 0)) = res,
            res,
            FAIL)
      end proc;
      cond0 := test(lhs(r), lhs(r)+1);
      if cond0 <> FAIL then
        x0 := lhs(r); r0 := applyop(`+`, 1, r, 1);
```

```
      else
        cond0 := test(rhs(r), rhs(r)-1);
        if cond0 <> FAIL then
          x0 := rhs(r); r0 := applyop(`-`, 2, r, 1);
        else next end if;
      end if;
    end if;
    here := subs(cond =           cond0 , body);
    rest := subs(cond = evalb(not cond0), body);
    return make(eval(here, x=x0), do_peel(eval(subsop(1=rest, [2,2]=r0, e))));
  end do;
  return e;
end proc;

# Expand sum(a*(b-c),q) to sum(a*b,q)-sum(a*c,q)
split := proc(e, $)
  subsindets(e, 'And(specfunc({sum,Sum}),
                    anyfunc(And(`*`,Not(`*`(Not(`+`)))),name=anything))',
               do_split);
end proc;
do_split := proc(e, $)
  local terms, x;
  terms := convert(expand(op(1,e), op(indets(op(1,e), function))),
                  'list', `+`);
  x := op([2,1],e);
  `+`(op(map(proc(term, $)
    local s, r;
    s, r := selectremove(depends, convert(term, 'list', `*`), x);
    `*`(op(r), subsop(1=`*`(op(s)),e))
  end proc, terms)))
end proc;

# Simplify f(lo-1)*product(f(i),i=lo..hi) to product(f(i),i=lo-1..hi)
graft := proc(e, $)
  subsindets(e, 'Or(And(`*`,Not(`*`(Not(specfunc({product,Product})))),
                  And(`+`,Not(`+`(Not(specfunc({sum    ,Sum    }))))))',
               do_graft);
end proc;
do_graft := proc(e, $)
  local produce, factors, i, j;
  produce := `if`(e::`*`, '{product,Product}',
                        '{sum    ,Sum    }');
  factors := sort(convert(e,'list'),

          key = (factor -> -numboccur(factor,produce)));
  for i from nops(factors) to 2 by -1 do
    for j from i-1 to 1 by -1 do
      if op(j,factors) :: 'And'('specfunc'(produce),
```

```
                        'anyfunc(anything,name=range)') then
        if Testzero(op(i,factors) - eval(op([j,1],factors),
            op([j,2,1],factors)=op([j,2,2,1],factors)-1)) then
          factors := subsop(i=NULL,applyop(`-`,[j,2,2,1],factors,1));
          break
        elif Testzero(op(i,factors) - eval(op([j,1],factors),
              op([j,2,1],factors)=op([j,2,2,2],factors)+1)) then
          factors := subsop(i=NULL,applyop(`+`,[j,2,2,2],factors,1));
          break
        end if
      end if
    end do
  end do;
  op(0,e)(op(factors))
end proc;

# Normalize sum(f(i),i=2..hi) to sum(f(i+2),i=0..hi-2)
rebase_lower := proc(e, $)
  subsindets(e, 'And(specfunc({sum,Sum,product,Product}),
                anyfunc(anything,

        name=Not({0,SymbolicInfinity,undefined})..anything))',
              do_rebase_lower);
end proc;
do_rebase_lower := proc(e, $)
  subsop([2,2,1]=0,
        applyop(`-`,
              [2,2,2],
              applyop(eval, 1, e, op([2,1],e)=op([2,1],e)+op([2,2,1],e)),
              op([2,2,1],e)))
end proc;

# Normalize sum(f(i),i=lo..2) to sum(f(i+2),i=lo-2..0)
rebase_upper := proc(e, $)
  subsindets(e, 'And(specfunc({sum,Sum,product,Product}),
                anyfunc(anything,
                  name=anything..Not({0,SymbolicInfinity,undefined})))',
              do_rebase_upper);
end proc;
do_rebase_upper := proc(e, $)
  subsop([2,2,2]=0,
        applyop(`-`,
              [2,2,1],
              applyop(eval, 1, e, op([2,1],e)=op([2,1],e)+op([2,2,2],e)),
              op([2,2,2],e)))
end proc;

ModuleLoad := proc($)
```

```
  # Override csgn to work a little bit harder on piecewise and sum
  # (to get rid
of csgn(1/2+1/2*sum(piecewise(...,1,0),...))
  #  produced by int on a Gaussian mixture model)
  unprotect(csgn);
  csgn := overload([
    # Handle if the csgn of a piecewise doesn't depend on which branch
    proc(a :: specfunc(piecewise), $)
      option overload;
      local r, i;
      r := {seq(`if`(i::even or i=nops(a), csgn(op(i,a)), NULL),
              i=1..nops(a))};
      if nops(r)=1 then return op(r) end if;
      if not assigned(_Envsignum0) then
        r := r minus {0};
        if nops(r)=1 then return op(r) end if;
      end if;
      error "invalid input: cannot csgn %1", a;
    end proc,
    # Handle if the csgn of a sum doesn't depend on the bound variable
    proc(a :: And(specfunc({sum, Sum}), anyfunc(anything, name=range)), $)
      option overload;
      local r;
      r := csgn(op(1,a));
      if not depends(r,op([2,1],a)) then
        return signum(op([2,2,2],a)+1-op([2,2,1],a)) * r
      end if;
      error
"invalid input: cannot csgn %1", a;
    end proc,
    csgn]);
  protect(csgn);

  # Do the same to signum.
  unprotect(signum);
  signum := overload([
    # Handle if the signum of a piecewise doesn't depend on which branch
    proc(a :: specfunc(piecewise), $)
      option overload;
      local r, i;
      r := {seq(`if`(i::even or i=nops(a), signum(op(i,a)), NULL),
              i=1..nops(a))};
      if nops(r)=1 then return op(r) end if;
      if not assigned(_Envsignum0) then
        r := r minus {0};
        if nops(r)=1 then return op(r) end if;
      end if;
      error "invalid input: cannot signum %1", a;
```

```
    end proc,
    # Handle if the signum of a sum doesn't depend on the bound variable
    proc(a :: And(specfunc({sum, Sum}), anyfunc(anything, name=range)), $)
      option overload;
      local r;
      r := signum(op(1,a));
      if not depends(r,op([2,1],a)) then
        return signum(op([2,2,2],a)+1-op([2,2,1],a))
 * r
      end if;
      error "invalid input: cannot signum %1", a;
    end proc,
    signum]);
  protect(signum);

  # Override sum to fail faster
  unprotect(sum);
  sum := overload([
    proc(f :: Not({`+`,`+`^integer}),
         k :: name=And(range,Not(range(rational))), $)
      option overload;
      if not (`-`(op(rhs(k))) :: 'rational')
         and not (subsindets(f, 'anything^integer', f->op(1,f))
                 :: '{`+`,And(`*`,Not(`*`(Not(`+`))))}')
         and depends(indets(f, '{specfunc(idx), specindex(idx)}'), op(1,k))
      then
        'procname(_passed)'
      else
        error "invalid input: cannot fast-fail sum(%1, %2)", _passed
      end if
    end proc,
    sum]);
  protect(sum);

  :-`print/Ints` := curry(thismodule:-Print,Ints);
  :-`print/Sums` := curry(thismodule:-Print,Sums);
  :-`print/ints` := curry(thismodule:-Print,ints);
  :-`print/sums` := curry(thismodule:-Print,sums);

 end proc;
 ModuleLoad():
end
 module; # Loop
'# New ports collection makefile for:    python25\n' Comment

'# Date created:         3 July 2003\n' Comment

'# Whom:                 Hye-Shik Chang <perky@FreeBSD.org>\n' Comment
```

```
'#\n'        Comment

'# $FreeBSD: ports/lang/python25/Makefile,v 1.145 2007/10/03 23:22:04 edwin Exp $\n' Comment

'\n'         Text.Whitespace

'PORTNAME'    Name.Variable
'='          Operator
'\t'         Text.Whitespace
'python25'    Text
'\n'         Text.Whitespace

'PORTVERSION' Name.Variable
'='          Operator
'\t'         Text.Whitespace
'2'          Literal.Number
'.5.1'        Text
'\n'         Text.Whitespace

'CATEGORIES'  Name.Variable
'='          Operator
'\t'         Text.Whitespace
'lang'        Text
' '          Text.Whitespace
'python'      Text
' '          Text.Whitespace
'ipv6'        Text
'\n'         Text.Whitespace

'MASTER_SITES' Name.Variable
'='          Operator
'\t'         Text.Whitespace
'${'          Literal.String.Interpol
'PYTHON_MASTER_SITES' Name.Variable
'}'
          Literal.String.Interpol
'\n'         Text.Whitespace

'MASTER_SITE_SUBDIR' Name.Variable
'='          Operator
'\t'         Text.Whitespace
'${'          Literal.String.Interpol
'PYTHON_MASTER_SITE_SUBDIR' Name.Variable
'}'          Literal.String.Interpol
'\n'         Text.Whitespace

'DISTFILES'   Name.Variable
```

```
'='          Operator
'\t'         Text.Whitespace
'${'         Literal.String.Interpol
'PYTHON_DISTFILE' Name.Variable
'}'          Literal.String.Interpol
'\n'         Text.Whitespace

'\n'         Text.Whitespace

'MAINTAINER'  Name.Variable
'='          Operator
'\t'         Text.Whitespace
'python@FreeBSD.org' Text
'\n'         Text.Whitespace

'COMMENT'     Name.Variable
'?='         Operator
'\t'         Text.Whitespace
'An'         Text
' '          Text.Whitespace
'interpreted' Text
' '          Text.Whitespace
'object-oriented' Text
' '          Text.Whitespace
'programming' Text
' '          Text.Whitespace
'language'    Text
'\n'
         Text.Whitespace

'\n'         Text.Whitespace

'DIST_SUBDIR' Name.Variable
'='          Operator
'\t'         Text.Whitespace
'python'      Text
'\n'         Text.Whitespace

'WRKSRC'      Name.Variable
'='          Operator
'\t\t'       Text.Whitespace
'${'         Literal.String.Interpol
'PYTHON_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
'/portbld.static' Text
'\n'         Text.Whitespace

'PATCH_WRKSRC' Name.Variable
```

```
'='          Operator
'\t'         Text.Whitespace
'${'         Literal.String.Interpol
'PYTHON_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
'\n'         Text.Whitespace

'GNU_CONFIGURE' Name.Variable
'='          Operator
'\t'         Text.Whitespace
'yes'        Text
'\n'         Text.Whitespace

'CONFIGURE_TARGET' Name.Variable
'='          Operator
'\t'         Text.Whitespace
'--build'    Text
'='          Operator
'${'         Literal.String.Interpol
'MACHINE_ARCH' Name.Variable
'}'          Literal.String.Interpol
'-portbld-freebsd'
 Text
'${'         Literal.String.Interpol
'OSREL'      Name.Variable
'}'          Literal.String.Interpol
'\n'         Text.Whitespace

'CONFIGURE_SCRIPT' Name.Variable
'='          Operator
'\t'         Text.Whitespace
'../configure' Text
' '          Text.Whitespace
'# must be relative\n' Comment.Single

'CONFIGURE_ENV' Name.Variable
'='          Operator
'\t'         Text.Whitespace
'OPT'        Name.Variable
'='          Operator
'"'          Literal.String.Double
'${'         Literal.String.Interpol
'CFLAGS'     Name.Variable
'}'          Literal.String.Interpol
'"'          Literal.String.Double
' '          Text.Whitespace
'SVNVERSION'  Name.Variable
'='          Operator
```

'''echo freebsd''' Literal.String.Double
'\n' Text.Whitespace

'MAKE_ENV' Name.Variable
'=' Operator
'\t' Text.Whitespace
'VPATH' Name.Variable
'=' Operator
'"' Literal.String.Double
'${' Literal.String.Interpol
'PYTHON_WRKSRC'
Name.Variable
'}' Literal.String.Interpol
'"' Literal.String.Double
'\n' Text.Whitespace

'INSTALLS_SHLIB' Name.Variable
'=' Operator
'\t' Text.Whitespace
'yes' Text
'\n' Text.Whitespace

'INSTALL_TARGET' Name.Variable
'=' Operator
'\t' Text.Whitespace
'altinstall' Text
'\n' Text.Whitespace

'MAN1' Name.Variable
'=' Operator
'\t\t' Text.Whitespace
'${' Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}' Literal.String.Interpol
'.1' Text
'\n' Text.Whitespace

'\n' Text.Whitespace

'USE_PYTHON' Name.Variable
'=' Operator
'\t' Text.Whitespace
'yes' Text
'\n' Text.Whitespace

'PYTHON_VERSION' Name.Variable
'=' Operator
'\t' Text.Whitespace

```
'python2.5'   Text
'\n'          Text.Whitespace

'PYTHON_NO_DEPENDS' Name.Variable
'='
      Operator
'\t'          Text.Whitespace
'yes'         Text
'\n'          Text.Whitespace

'\n'          Text.Whitespace

'SHARED_WRKSRC' Name.Variable
'='           Operator
'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'PYTHON_WRKSRC' Name.Variable
'}'           Literal.String.Interpol
'/portbld.shared' Text
'\n'          Text.Whitespace

'PLIST'       Name.Variable
'='           Operator
'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'WRKDIR'      Name.Variable
'}'           Literal.String.Interpol
'/PLIST'      Text
'\n'          Text.Whitespace

'PLIST_TEMPLATE' Name.Variable
'?='          Operator
'${'          Literal.String.Interpol
'PKGDIR'      Name.Variable
'}'           Literal.String.Interpol
'/pkg-plist'  Text
'\n'          Text.Whitespace

'PLIST_SUB'   Name.Variable
'='           Operator
'\t'          Text.Whitespace
'PYVER'       Name.Variable
'='           Operator
'${'          Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
':'
          Punctuation
'S'           Name.Variable
```

```
'/python//'   Punctuation
'}'           Literal.String.Interpol
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'PYVER_WITHPAT' Name.Variable
'='           Operator
'${'          Literal.String.Interpol
'PORTVERSION' Name.Variable
':'           Punctuation
'S'           Name.Variable
'/.c/c/'      Punctuation
'}'           Literal.String.Interpol
'\n'          Text.Whitespace

'DEMODIR'     Name.Variable
'='           Operator
'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'PREFIX'      Name.Variable
'}'           Literal.String.Interpol
'/share/examples/' Text
'${'          Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'           Literal.String.Interpol
'\n'          Text.Whitespace

'TOOLSDIR'    Name.Variable
'='           Operator
'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'PREFIX'      Name.Variable
'}'
    Literal.String.Interpol
'/share/'     Text
'${'          Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'           Literal.String.Interpol
'\n'          Text.Whitespace

'\n'          Text.Whitespace

'BIN_SCRIPTS' Name.Variable
'='           Operator
'\t'          Text.Whitespace
'idle'        Text
' '           Text.Whitespace
```

```
'pydoc'       Text
' '           Text.Whitespace
'python'      Text
' '           Text.Whitespace
'python-shared' Text
' '           Text.Whitespace
'smtpd.py'    Text
' '           Text.Whitespace
'python-config' Text
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'python-shared-config' Text
'\n'          Text.Whitespace

'BINLINKS_SUB' Name.Variable
'='           Operator
'\t'          Text.Whitespace
'-e'          Text
' '           Text.Whitespace
'"s,smtpd,smtpd${PYTHON_VER},"' Literal.String.Single
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'-e'
          Text
' '           Text.Whitespace
'"s,(idle|pydoc|python-shared|python),\\1${PYTHON_VER},"' Literal.String.Single
'\n\n'        Text.Whitespace

'OPTIONS'     Name.Variable
'='           Operator
'\t'          Text.Whitespace
'THREADS'     Text
' '           Text.Whitespace
'"Enable thread support"' Literal.String.Double
' '           Text.Whitespace
'on'          Text
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'HUGE_STACK_SIZE' Text
' '           Text.Whitespace
'"Use a larger thread stack"' Literal.String.Double
' '           Text.Whitespace
```

```
'off'        Text
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'UCS4'       Text
' '          Text.Whitespace
'"Use UCS4 for unicode support"' Literal.String.Double
' '          Text.Whitespace
'on'         Text
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'PYMALLOC'
   Text
' '          Text.Whitespace
'"Use python\'s internal malloc"' Literal.String.Double
' '          Text.Whitespace
'on'         Text
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'IPV6'       Text
' '          Text.Whitespace
'"Enable IPv6 support"' Literal.String.Double
' '          Text.Whitespace
'on'         Text
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'FPECTL'     Text
' '          Text.Whitespace
'"Enable floating point exception handling"' Literal.String.Double
' '          Text.Whitespace
'off'        Text
'\n\n'       Text.Whitespace

'.include <bsd.port.pre.mk>\n' Comment.Preproc

'\n'         Text.Whitespace

'.if ${PYTHON_VERSION} == ${PYTHON_DEFAULT_VERSION}\n' Comment.Preproc

'MLINKS'     Name.Variable
'='          Operator
```

```
'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'           Literal.String.Interpol
'.1'
          Text
' '           Text.Whitespace
'python.1'    Text
'\n'          Text.Whitespace

'PLIST_SUB'   Name.Variable
'+='          Operator
'\t'          Text.Whitespace
'IF_DEFAULT'  Name.Variable
'='           Operator
'"'           Literal.String.Double
'\n'          Text.Whitespace

'.else\n'     Comment.Preproc

'PLIST_SUB'   Name.Variable
'+='          Operator
'\t'          Text.Whitespace
'IF_DEFAULT'  Name.Variable
'='           Operator
'"@comment "' Literal.String.Double
'\n'          Text.Whitespace

'.endif\n'    Comment.Preproc

'\n'          Text.Whitespace

'# workaround for a bug in base curses.h.\n' Comment

'CFLAGS'      Name.Variable
'+='          Operator
'\t'          Text.Whitespace
'-D__wchar_t' Text
'='           Operator
'wchar_t'     Text
'\n'          Text.Whitespace

'\n'          Text.Whitespace

'.if !defined(WITHOUT_THREADS)\n' Comment.Preproc

'CONFIGURE_ARGS' Name.Variable
'+='          Operator
```

```
'\t'          Text.Whitespace
'--with-threads'
 Text
'\n'          Text.Whitespace

'CFLAGS'      Name.Variable
'+='          Operator
'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'PTHREAD_CFLAGS' Name.Variable
'}'           Literal.String.Interpol
'\n'          Text.Whitespace

'.if defined(WITHOUT_HUGE_STACK_SIZE)\n' Comment.Preproc

'CFLAGS'      Name.Variable
'+='          Operator
'\t\t'        Text.Whitespace
'-DTHREAD_STACK_SIZE' Text
'='           Operator
'0x20000'     Text
'\n'          Text.Whitespace

'.else\n'     Comment.Preproc

'CFLAGS'      Name.Variable
'+='          Operator
'\t\t'        Text.Whitespace
'-DTHREAD_STACK_SIZE' Text
'='           Operator
'0x100000'    Text
'\n'          Text.Whitespace

'.endif # defined(WITHOUT_HUGE_STACK_SIZE)\n' Comment.Preproc

'CONFIGURE_ENV' Name.Variable
'+='          Operator
'\t\t'        Text.Whitespace
'LDFLAGS'     Name.Variable
'='           Operator
'"'           Literal.String.Double
'${'          Literal.String.Interpol
'PTHREAD_LIBS'
 Name.Variable
'}'           Literal.String.Interpol
' '           Literal.String.Double
'${'          Literal.String.Interpol
'LDFLAGS'     Name.Variable
```

```
'}'          Literal.String.Interpol
""           Literal.String.Double
'\n'         Text.Whitespace

'.else\n'    Comment.Preproc

'CONFIGURE_ARGS' Name.Variable
'+='         Operator
'\t'         Text.Whitespace
'--without-threads' Text
'\n'         Text.Whitespace

'.if defined(LDFLAGS)\n' Comment.Preproc

'CONFIGURE_ENV' Name.Variable
'+='         Operator
'\t\t'       Text.Whitespace
'LDFLAGS'    Name.Variable
'='          Operator
""           Literal.String.Double
'${'         Literal.String.Interpol
'LDFLAGS'    Name.Variable
'}'          Literal.String.Interpol
""           Literal.String.Double
'\n'         Text.Whitespace

'.endif # defined(LDFLAGS)\n' Comment.Preproc

'.endif # !defined(WITHOUT_THREADS)\n' Comment.Preproc

'\n'         Text.Whitespace

'.if !defined(WITHOUT_UCS4) && !defined(WITH_UCS2)\n'
 Comment.Preproc

'CONFIGURE_ARGS' Name.Variable
'+='         Operator
'\t'         Text.Whitespace
'--enable-unicode' Text
'='          Operator
'ucs4'       Text
'\n'         Text.Whitespace

'.endif\n'   Comment.Preproc

'\n'         Text.Whitespace

'.if defined(WITHOUT_PYMALLOC)\n' Comment.Preproc
```

'CONFIGURE_ARGS' Name.Variable
'+=' Operator
' ' Text.Whitespace
'--without-pymalloc' Text
'\n' Text.Whitespace

'.endif\n' Comment.Preproc

'\n' Text.Whitespace

'.if ${ARCH} == i386\n' Comment.Preproc

'PLIST_SUB' Name.Variable
'+=' Operator
'\t' Text.Whitespace
'X86_ONLY' Name.Variable
'=' Operator
'"' Literal.String.Double
'\n' Text.Whitespace

'.else\n' Comment.Preproc

'PLIST_SUB' Name.Variable
'+=' Operator
'\t' Text.Whitespace
'X86_ONLY' Name.Variable
'=' Operator
'"@comment "' Literal.String.Double
'\n' Text.Whitespace

'.endif\n'
  Comment.Preproc

'.if ${ARCH} == amd64 || ${ARCH} == ia64 || ${ARCH} == sparc64 || ${ARCH} == alpha\n' Comment.Preproc

'PLIST_SUB' Name.Variable
'+=' Operator
' ' Text.Whitespace
'32BIT_ONLY' Name.Variable
'=' Operator
'"@comment "' Literal.String.Double
'\n' Text.Whitespace

'.else\n' Comment.Preproc

'PLIST_SUB' Name.Variable
'+=' Operator

' ' Text.Whitespace
'32BIT_ONLY' Name.Variable
'=' Operator
'"' Literal.String.Double
'\n' Text.Whitespace

'.endif\n' Comment.Preproc

'.if ${ARCH} == sparc64\n' Comment.Preproc

'CFLAGS' Name.Variable
'+=' Operator
' ' Text.Whitespace
'-DPYTHON_DEFAULT_RECURSION_LIMIT' Text
'=' Operator
'900' Literal.Number
'\n' Text.Whitespace

'.endif\n' Comment.Preproc

'\n' Text.Whitespace

'.if !exists(/usr/bin/ypcat) # the world with NO_NIS\n' Comment.Preproc

'PLIST_SUB' Name.Variable
'+='
Operator
'\t' Text.Whitespace
'NO_NIS' Name.Variable
'=' Operator
'"@comment " Literal.String.Double
'\n' Text.Whitespace

'.else\n' Comment.Preproc

'PLIST_SUB' Name.Variable
'+=' Operator
'\t' Text.Whitespace
'NO_NIS' Name.Variable
'=' Operator
'"' Literal.String.Double
'\n' Text.Whitespace

'.endif\n' Comment.Preproc

'\n' Text.Whitespace

'.if !defined(WITHOUT_IPV6)\n' Comment.Preproc

'CONFIGURE_ARGS' Name.Variable
'+=' Operator
' ' Text.Whitespace
'--enable-ipv6' Text
'\n' Text.Whitespace

'.else\n' Comment.Preproc

'CONFIGURE_ARGS' Name.Variable
'+=' Operator
' ' Text.Whitespace
'--disable-ipv6' Text
'\n' Text.Whitespace

'.endif\n' Comment.Preproc

'\n' Text.Whitespace

'.if defined(WITH_FPECTL)\n' Comment.Preproc

'CONFIGURE_ARGS' Name.Variable
'+=' Operator
' ' Text.Whitespace
'--with-fpectl'
 Text
'\n' Text.Whitespace

'.endif\n' Comment.Preproc

'\n' Text.Whitespace

'.if ${OSVERSION} >= 700000\n' Comment.Preproc

'PLATFORMS' Name.Variable
'=' Operator
'plat-freebsd4' Text
' ' Text.Whitespace
'plat-freebsd5' Text
' ' Text.Whitespace
'plat-freebsd6' Text
'\n' Text.Whitespace

'.elif ${OSVERSION} >= 600000\n' Comment.Preproc

'PLATFORMS' Name.Variable
'=' Operator
'plat-freebsd4' Text

```
' '          Text.Whitespace
'plat-freebsd5' Text
' '          Text.Whitespace
'plat-freebsd7' Text
'\n'         Text.Whitespace

'.else\n'    Comment.Preproc

'PLATFORMS'   Name.Variable
'='          Operator
'plat-freebsd4' Text
' '          Text.Whitespace
'plat-freebsd6' Text
' '          Text.Whitespace
'plat-freebsd7' Text
'\n'         Text.Whitespace

'.endif\n'    Comment.Preproc

'\n'         Text.Whitespace

'pre-patch'   Name.Function
':'          Operator
'\n'         Text.Whitespace

'\t'
         Text.Whitespace
'${'         Literal.String.Interpol
'MKDIR'      Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'${'         Literal.String.Interpol
'WRKSRC'     Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'${'         Literal.String.Interpol
'SHARED_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
'/Modules'    Text
'\n\t'       Text.Whitespace
'${'         Literal.String.Interpol
'SED'        Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-e'         Text
' '          Text.Whitespace
'"1s,^.*$$,#!${PREFIX}/bin/${PYTHON_VERSION},"' Literal.String.Single
' '          Text.Whitespace
```

```
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'PATCH_WRKSRC' Name.Variable
'}'           Literal.String.Interpol
'/Tools/scripts/pydoc' Text
' '           Text.Whitespace
'>'           Text
' '
      Text.Whitespace
'${'          Literal.String.Interpol
'WRKDIR'      Name.Variable
'}'           Literal.String.Interpol
'/pydoc2.5'   Text
'\n\t'        Text.Whitespace
'${'          Literal.String.Interpol
'SED'         Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'-e'          Text
' '           Text.Whitespace
'"1s,^.*$$,#!${PREFIX}/bin/${PYTHON_VERSION},"' Literal.String.Single
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'PATCH_WRKSRC' Name.Variable
'}'           Literal.String.Interpol
'/Tools/scripts/idle' Text
' '           Text.Whitespace
'>'           Text
' '           Text.Whitespace
'${'          Literal.String.Interpol
'WRKDIR'      Name.Variable
'}'           Literal.String.Interpol
'/idle2.5'    Text
'\n\t'        Text.Whitespace
'${'          Literal.String.Interpol
'SED'         Name.Variable
'}'           Literal.String.Interpol
' '
       Text.Whitespace
'-e'          Text
' '           Text.Whitespace
'"1s,^.*$$,#!${PREFIX}/bin/${PYTHON_VERSION},"' Literal.String.Single
' '           Text.Whitespace
```

```
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'PATCH_WRKSRC' Name.Variable
'}'           Literal.String.Interpol
'/Lib/smtpd.py' Text
' '           Text.Whitespace
'>'           Text
' '           Text.Whitespace
'${'          Literal.String.Interpol
'WRKDIR'      Name.Variable
'}'           Literal.String.Interpol
'/smtpd2.5.py' Text
'\n\t'        Text.Whitespace
'${'          Literal.String.Interpol
'REINPLACE_CMD' Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'-e'          Text
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'"s,/usr/doc/python-docs-,${PREFIX}/share/doc/python,g"' Literal.String.Single
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'
        Text.Whitespace
'${'          Literal.String.Interpol
'PATCH_WRKSRC' Name.Variable
'}'           Literal.String.Interpol
'/Lib/pydoc.py' Text
'\n\t'        Text.Whitespace
'${'          Literal.String.Interpol
'REINPLACE_CMD' Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'-e'          Text
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'\'s|^\\( *prefixes = .*\\)\\]$$|\\1, "${X11BASE}"]|g\'' Literal.String.Single
' '           Text.Whitespace
'\\\n'        Literal.String.Escape
```

```
'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'PATCH_WRKSRC' Name.Variable
'}'           Literal.String.Interpol
'/Lib/site.py' Text
'\n\t'        Text.Whitespace
'${'          Literal.String.Interpol
'REINPLACE_CMD' Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'-e'          Text
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'
 Text.Whitespace
'''s|^\t\\(..ASDLGEN.*\\)$$|\t${TRUE}|g''' Literal.String.Single
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'PATCH_WRKSRC' Name.Variable
'}'           Literal.String.Interpol
'/Makefile.pre.in' Text
'\n\n\t'      Text.Whitespace
'${'          Literal.String.Interpol
'REINPLACE_CMD' Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'-e'          Text
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'''s|*\\(..INSTALL_SCRIPT.*\\)python-config$$|#port \\1|''' Literal.String.Single
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'PATCH_WRKSRC' Name.Variable
'}'           Literal.String.Interpol
'/Makefile.pre.in' Text
'\n\n\t'      Text.Whitespace
'${'          Literal.String.Interpol
'SED'         Name.Variable
'}'
```

```
    Literal.String.Interpol
' '          Text.Whitespace
'-e'         Text
' '          Text.Whitespace
'"s|^#!.*|#!${PREFIX}/bin/${PYTHON_VERSION}|"' Literal.String.Single
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'${'         Literal.String.Interpol
'PATCH_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
'/Misc/python-config.in' Text
' '          Text.Whitespace
'>'          Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'WRKDIR'     Name.Variable
'}'          Literal.String.Interpol
'/'          Text
'${'         Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'          Literal.String.Interpol
'-config'    Text
'\n\t'       Text.Whitespace
'${'         Literal.String.Interpol
'SED'        Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-e'         Text
' '          Text.Whitespace
'"s|^#!.*|#!${PREFIX}/bin/${PYTHON_VERSION:S/thon/thon-shared/}|"'
 Literal.String.Single
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'${'         Literal.String.Interpol
'PATCH_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
'/Misc/python-config.in' Text
' '          Text.Whitespace
'>'          Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'WRKDIR'     Name.Variable
'}'          Literal.String.Interpol
'/'          Text
```

```
'${'          Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
':'           Punctuation
'S'           Name.Variable
'/thon/thon-shared/' Punctuation
'}'           Literal.String.Interpol
'-config'     Text
'\n\n'        Text.Whitespace

'.if defined(WITH_FPECTL) && ${ARCH} == i386\n' Comment.Preproc

'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'MKDIR'       Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'${'          Literal.String.Interpol
'WRKSRC'      Name.Variable
'}'
          Literal.String.Interpol
'/Modules'    Text
'\n\t'        Text.Whitespace
'${'          Literal.String.Interpol
'ECHO'        Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'"fpectl fpectlmodule.c"' Literal.String.Double
' '           Text.Whitespace
'>>'          Text
' '           Text.Whitespace
'${'          Literal.String.Interpol
'WRKSRC'      Name.Variable
'}'           Literal.String.Interpol
'/Modules/Setup.dist' Text
'\n'          Text.Whitespace

'.endif\n'    Comment.Preproc

'\n'          Text.Whitespace

'post-configure' Name.Function
':'           Operator
'\n'          Text.Whitespace

'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'TAR'         Name.Variable
'}'           Literal.String.Interpol
```

```
' '          Text.Whitespace
'-C'         Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'WRKSRC'     Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-cf'
        Text
' '          Text.Whitespace
'-'          Text
' '          Text.Whitespace
'.'          Text
' '          Text.Whitespace
'|'          Punctuation
' '          Text.Whitespace
'${'         Literal.String.Interpol
'TAR'        Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-C'         Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'SHARED_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-xf'        Text
' '          Text.Whitespace
'-'          Text
'\n\t'       Text.Whitespace
'${'         Literal.String.Interpol
'LN'         Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-sf'        Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PYTHON_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
'/Lib'       Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'WRKSRC'
     Name.Variable
'}'          Literal.String.Interpol
'/Lib'       Text
'\n\t'       Text.Whitespace
'${'         Literal.String.Interpol
```

```
'SED'        Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-e'         Text
' '          Text.Whitespace
'"s,^\\(LDLIBRARY=\\).*$$,\\1libpython$$(VERSION).so,"' Literal.String.Single
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'-e'         Text
' '          Text.Whitespace
'"s,^\\(BLDLIBRARY=\\).*$$,\\1-L. -lpython$$(VERSION),"' Literal.String.Single
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'-e'         Text
' '          Text.Whitespace
'"s,^\\(CFLAGSFORSHARED=\\).*$$,\\1$$(CCSHARED),"' Literal.String.Single
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'-e'         Text
' '          Text.Whitespace
'"s,^\\(Makefile Modules/config.c:.*\\)Makefile.pre,\\1,"'
 Literal.String.Single
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'-e'         Text
' '          Text.Whitespace
'"s,^\\(.(BUILDPYTHON)\\: .*\\).(LIBRARY),\\1,"' Literal.String.Single
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'-e'         Text
' '          Text.Whitespace
'"s,^\\(.(BUILDPYTHON):.*\\).(LIBRARY),\\1,"' Literal.String.Single
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'${'         Literal.String.Interpol
'WRKSRC'     Name.Variable
```

```
'}'          Literal.String.Interpol
'/Makefile'   Text
' '          Text.Whitespace
'>'          Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'SHARED_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
'/Makefile'   Text
'\n\n'       Text.Whitespace

'pre-build'   Name.Function
':'          Operator
'\n'
        Text.Whitespace

'\t'         Text.Whitespace
'cd'         Name.Builtin
' '          Text.Whitespace
'${'         Literal.String.Interpol
'SHARED_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
';'          Punctuation
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t'         Text.Whitespace
'${'         Literal.String.Interpol
'SETENV'     Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'${'         Literal.String.Interpol
'MAKE_ENV'    Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'${'         Literal.String.Interpol
'MAKE'       Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'lib'        Text
'${'         Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'          Literal.String.Interpol
'.so'        Text
' '          Text.Whitespace
'python'     Text
';'          Punctuation
' '          Text.Whitespace
```

```
'\\\n'
        Literal.String.Escape

'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'LN'          Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'-f'          Text
' '           Text.Whitespace
'lib'         Text
'${'          Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'           Literal.String.Interpol
'.so'         Text
' '           Text.Whitespace
'lib'         Text
'${'          Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'           Literal.String.Interpol
'.so.1'       Text
';'           Punctuation
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'LN'          Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'-f'          Text
' '           Text.Whitespace
'python'      Text
' '           Text.Whitespace
'${'          Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
':'
  Punctuation
'S'           Name.Variable
'/thon/thon-shared/' Punctuation
'}'           Literal.String.Interpol
'\n\n'        Text.Whitespace

'pre-su-install' Name.Function
':'           Operator
'\n'          Text.Whitespace

'.for platform in ${PLATFORMS}\n' Comment.Preproc
```

```
'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'MKDIR'       Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'${'          Literal.String.Interpol
'PYTHONPREFIX_LIBDIR' Name.Variable
'}'           Literal.String.Interpol
'/'           Text
'${'          Literal.String.Interpol
'platform'    Name.Variable
'}'           Literal.String.Interpol
'\n'          Text.Whitespace

'.for file in IN.py regen\n' Comment.Preproc

'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'INSTALL_DATA' Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'${'          Literal.String.Interpol
'WRKSRC'      Name.Variable
'}'
 Literal.String.Interpol
'/Lib/'       Text
'${'          Literal.String.Interpol
'platform'    Name.Variable
'}'           Literal.String.Interpol
'/'           Text
'${'          Literal.String.Interpol
'file'        Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'PYTHONPREFIX_LIBDIR' Name.Variable
'}'           Literal.String.Interpol
'/'           Text
'${'          Literal.String.Interpol
'platform'    Name.Variable
'}'           Literal.String.Interpol
'/'           Text
'\n'          Text.Whitespace
```

```
'.endfor\n'   Comment.Preproc

'.endfor\n'   Comment.Preproc

'\n'          Text.Whitespace

'pre-install' Name.Function
':'           Operator
'\n'          Text.Whitespace

'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'CAT'         Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'${'
     Literal.String.Interpol
'PLIST_TEMPLATE' Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'|'           Punctuation
' '           Text.Whitespace
'${'          Literal.String.Interpol
'AWK'         Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'\'{ print $$0; } \\\n\t/LIBDIR.*\\.py$$/ && !/\\/bad/ { print $$0 "o"; print $$0 "c"; }\" Literal.String.Single
'\t'          Text.Whitespace
'>'           Text
' '           Text.Whitespace
'${'          Literal.String.Interpol
'PLIST'       Name.Variable
'}'           Literal.String.Interpol
'\n\n'        Text.Whitespace

"\t@# if openssl 0.9.8 is detected, _sha{256,512} module won't be installed\n" Comment

'\t'          Text.Whitespace
'('           Operator
'['           Operator
' '           Text.Whitespace
'-f'          Text
' '           Text.Whitespace
'${'          Literal.String.Interpol
'WRKSRC'      Name.Variable
'}'           Literal.String.Interpol
'/.without_own_sha'
```

```
 Text
' '          Text.Whitespace
']'          Operator
' '          Text.Whitespace
'&&'         Operator
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'${'         Literal.String.Interpol
'GREP'       Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-v'         Text
' '          Text.Whitespace
'"lib-dynload/_sha"' Literal.String.Single
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PLIST'      Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'>'          Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PLIST'      Name.Variable
'}'          Literal.String.Interpol
'.tmp'       Text
' '          Text.Whitespace
'&&'         Operator
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'${'         Literal.String.Interpol
'CAT'        Name.Variable
'}'
         Literal.String.Interpol
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PLIST'      Name.Variable
'}'          Literal.String.Interpol
'.tmp'       Text
' '          Text.Whitespace
'>'          Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PLIST'      Name.Variable
'}'          Literal.String.Interpol
```

```
')'          Operator
' '          Text.Whitespace
'||'         Operator
' '          Text.Whitespace
'${'         Literal.String.Interpol
'TRUE'       Name.Variable
'}'          Literal.String.Interpol
'\n\n'       Text.Whitespace

'post-install' Name.Function
':'          Operator
'\n'         Text.Whitespace

'\t@# install config providers\n' Comment

'\t'         Text.Whitespace
'${'         Literal.String.Interpol
'INSTALL_SCRIPT' Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'${'         Literal.String.Interpol
'WRKDIR'     Name.Variable
'}'          Literal.String.Interpol
'/'
          Text
'${'         Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'          Literal.String.Interpol
'-config'    Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PREFIX'     Name.Variable
'}'          Literal.String.Interpol
'/bin'       Text
'\n\t'       Text.Whitespace
'${'         Literal.String.Interpol
'INSTALL_SCRIPT' Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'${'         Literal.String.Interpol
'WRKDIR'     Name.Variable
'}'          Literal.String.Interpol
'/'          Text
'${'         Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
':'          Punctuation
'S'          Name.Variable
'/thon/thon-shared/' Punctuation
```

```
'}'          Literal.String.Interpol
'-config'    Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PREFIX'     Name.Variable
'}'          Literal.String.Interpol
'/bin'       Text
'\n\n'       Text.Whitespace

'\t@#
 shared version of executable and library\n' Comment

'\t'         Text.Whitespace
'${'         Literal.String.Interpol
'INSTALL_PROGRAM' Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'${'         Literal.String.Interpol
'SHARED_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
'/lib'       Text
'${'         Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'          Literal.String.Interpol
'.so.1'      Text
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'${'         Literal.String.Interpol
'PREFIX'     Name.Variable
'}'          Literal.String.Interpol
'/lib'       Text
'\n\t'       Text.Whitespace
'cd'         Name.Builtin
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PREFIX'     Name.Variable
'}'          Literal.String.Interpol
'/lib'       Text
';'          Punctuation
' '          Text.Whitespace
'${'         Literal.String.Interpol
'LN'
         Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-sf'        Text
```

```
' '          Text.Whitespace
'lib'        Text
'${'         Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'          Literal.String.Interpol
'.so.1'      Text
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'lib'        Text
'${'         Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'          Literal.String.Interpol
'.so'        Text
'\n\t'       Text.Whitespace
'${'         Literal.String.Interpol
'LN'         Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-sf'        Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PREFIX'     Name.Variable
'}'          Literal.String.Interpol
'/lib/lib'   Text
'${'         Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'          Literal.String.Interpol
'.so'        Text
' '
      Text.Whitespace
'${'         Literal.String.Interpol
'PYTHONPREFIX_LIBDIR' Name.Variable
'}'          Literal.String.Interpol
'/config'    Text
'\n\t'       Text.Whitespace
'${'         Literal.String.Interpol
'INSTALL_PROGRAM' Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'${'         Literal.String.Interpol
'SHARED_WRKSRC' Name.Variable
'}'          Literal.String.Interpol
'/'          Text
```

```
'${'          Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
':'           Punctuation
'S'           Name.Variable
'/thon/thon-shared/' Punctuation
'}'           Literal.String.Interpol
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'PREFIX'      Name.Variable
'}'           Literal.String.Interpol
'/bin'        Text
'\n\n'        Text.Whitespace

'\t@# additional files installing by ports\n'
 Comment

'\t'          Text.Whitespace
'${'          Literal.String.Interpol
'INSTALL_SCRIPT' Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'${'          Literal.String.Interpol
'WRKDIR'      Name.Variable
'}'           Literal.String.Interpol
'/pydoc2.5'   Text
' '           Text.Whitespace
'${'          Literal.String.Interpol
'WRKDIR'      Name.Variable
'}'           Literal.String.Interpol
'/idle2.5'    Text
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'${'          Literal.String.Interpol
'WRKDIR'      Name.Variable
'}'           Literal.String.Interpol
'/smtpd2.5.py' Text
' '           Text.Whitespace
'${'          Literal.String.Interpol
'PREFIX'      Name.Variable
'}'           Literal.String.Interpol
'/bin'        Text
'\n\t'        Text.Whitespace
'@'           Text
```

```
'${'        Literal.String.Interpol
'MKDIR'     Name.Variable
'}'         Literal.String.Interpol
' '         Text.Whitespace
'${'
        Literal.String.Interpol
'MANPREFIX'   Name.Variable
'}'         Literal.String.Interpol
'/man/man1'   Text
'\n\t'      Text.Whitespace
'${'        Literal.String.Interpol
'INSTALL_MAN' Name.Variable
'}'         Literal.String.Interpol
' '         Text.Whitespace
'${'        Literal.String.Interpol
'PYTHON_WRKSRC' Name.Variable
'}'         Literal.String.Interpol
'/Misc/python.man' Text
' '         Text.Whitespace
'\\\n'      Literal.String.Escape

'\t\t'      Text.Whitespace
'${'        Literal.String.Interpol
'MANPREFIX'   Name.Variable
'}'         Literal.String.Interpol
'/man/man1/'  Text
'${'        Literal.String.Interpol
'PYTHON_VERSION' Name.Variable
'}'         Literal.String.Interpol
'.1'        Text
'\n\n'      Text.Whitespace

'.if ${PYTHON_VERSION} == ${PYTHON_DEFAULT_VERSION}\n' Comment.Preproc

'\t'        Text.Whitespace
'for'       Keyword
' '         Text.Whitespace
'f'         Text
' '         Text.Whitespace
'in'
        Keyword
' '         Text.Whitespace
'${'        Literal.String.Interpol
'BIN_SCRIPTS' Name.Variable
'}'         Literal.String.Interpol
';'         Punctuation
' '         Text.Whitespace
'do'        Keyword
```

```
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'TARGET'     Name.Variable
'='          Operator
'`'          Literal.String.Backtick
'${'         Literal.String.Interpol
'ECHO_CMD'   Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'$$'         Name.Variable
'f'          Text
' '          Text.Whitespace
'|'          Punctuation
' '          Text.Whitespace
'${'         Literal.String.Interpol
'SED'        Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-E'         Text
' '          Text.Whitespace
'${'         Literal.String.Interpol
'BINLINKS_SUB' Name.Variable
'}'          Literal.String.Interpol
'`'          Literal.String.Backtick
';'
          Punctuation
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'cd'         Name.Builtin
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PREFIX'     Name.Variable
'}'          Literal.String.Interpol
'/bin'       Text
' '          Text.Whitespace
'&&'         Operator
' '          Text.Whitespace
'${'         Literal.String.Interpol
'LN'         Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-f'         Text
' '          Text.Whitespace
'$$'         Name.Variable
```

```
'TARGET'      Text
' '           Text.Whitespace
'$$'          Name.Variable
'f'           Text
';'           Punctuation
' '           Text.Whitespace
'\\\n'        Literal.String.Escape

'\t'          Text.Whitespace
'done'        Keyword
'\n'          Text.Whitespace

'.endif\n'    Comment.Preproc

'\n'          Text.Whitespace

'.if !defined(NOPORTDOCS)\n' Comment.Preproc

'\t'
          Text.Whitespace
'@'           Text
'${'          Literal.String.Interpol
'MKDIR'       Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'${'          Literal.String.Interpol
'TOOLSDIR'    Name.Variable
'}'           Literal.String.Interpol
'\n\t'        Text.Whitespace
'@cd'         Text
' '           Text.Whitespace
'${'          Literal.String.Interpol
'PYTHON_WRKSRC' Name.Variable
'}'           Literal.String.Interpol
';'           Punctuation
' '           Text.Whitespace
'${'          Literal.String.Interpol
'TAR'         Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'-cf'         Text
' '           Text.Whitespace
'-'           Text
' '           Text.Whitespace
'Tools'       Text
' '           Text.Whitespace
'|'           Punctuation
' '           Text.Whitespace
```

```
'\\\n'        Literal.String.Escape

'\t\t'        Text.Whitespace
'('           Operator
'cd'          Name.Builtin
' '           Text.Whitespace
'${'
          Literal.String.Interpol
'TOOLSDIR'    Name.Variable
'}'           Literal.String.Interpol
';'           Punctuation
' '           Text.Whitespace
'${'          Literal.String.Interpol
'TAR'         Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'-xf'         Text
' '           Text.Whitespace
'-'           Text
')'           Operator
'\n\t'        Text.Whitespace
'@'           Text
'${'          Literal.String.Interpol
'MKDIR'       Name.Variable
'}'           Literal.String.Interpol
' '           Text.Whitespace
'${'          Literal.String.Interpol
'DEMODIR'     Name.Variable
'}'           Literal.String.Interpol
'\n\t'        Text.Whitespace
'@cd'         Text
' '           Text.Whitespace
'${'          Literal.String.Interpol
'PYTHON_WRKSRC' Name.Variable
'}'           Literal.String.Interpol
'/Demo'       Text
';'           Punctuation
' '           Text.Whitespace
'${'          Literal.String.Interpol
'TAR'         Name.Variable
'}'
          Literal.String.Interpol
' '           Text.Whitespace
'-cf'         Text
' '           Text.Whitespace
'-'           Text
' '           Text.Whitespace
'*'           Text
```

```
' '          Text.Whitespace
'|'          Punctuation
' '          Text.Whitespace
'\\\n'       Literal.String.Escape

'\t\t'       Text.Whitespace
'('          Operator
'cd'         Name.Builtin
' '          Text.Whitespace
'${'         Literal.String.Interpol
'DEMODIR'    Name.Variable
'}'          Literal.String.Interpol
';'          Punctuation
' '          Text.Whitespace
'${'         Literal.String.Interpol
'TAR'        Name.Variable
'}'          Literal.String.Interpol
' '          Text.Whitespace
'-xf'        Text
' '          Text.Whitespace
'-'          Text
')'          Operator
'\n'         Text.Whitespace

'.endif\n'   Comment.Preproc

'\n\t'       Text.Whitespace
'@'          Text
'${'         Literal.String.Interpol
'CAT'        Name.Variable
'}'
    Literal.String.Interpol
' '          Text.Whitespace
'${'         Literal.String.Interpol
'PKGMESSAGE'  Name.Variable
'}'          Literal.String.Interpol
'\n\n'       Text.Whitespace

'.include <bsd.port.post.mk>\n' Comment.Preproc
# Step 1 of 3: from Hakaru to Maple LO (linear operator)

toLO := module()
 export
 ModuleApply := proc(m, $)
   local h;
   h := gensym('h');
   _Env_HakaruSolve := false;
   LO(h, integrate(m, h, []))
```

```
end proc;

export
integrate := proc(m, h, loops :: list(name = range) := [], $)
  local x, n, i, res, l, br, m0;

  if m :: known_continuous then
    integrate_known(Int, Ints, 'xx', m, h, loops)
  elif m :: known_discrete then
    integrate_known(Sum, Sums, 'kk', m, h, loops)
  elif m :: 'Ret(anything)' then
    applyintegrand(h, mk_ary(op(1,m), loops))
  elif m :: 'Bind(anything, name, anything)' then
    res := eval(op(3,m), op(2,m) = mk_idx(op(2,m), loops));
    res := eval(Integrand(op(2,m), 'integrate'(res, x, loops)), x=h);
    integrate(op(1,m), res, loops);
  elif m :: 'specfunc(Msum)' and (nops(loops) = 0 or nops(m) = 1) then
    `+`(op(map(integrate, [op(m)], h, loops)))
  elif m :: 'Weight(anything, anything)' then
    foldl(product,
op(1,m), op(loops)) * integrate(op(2,m), h, loops)
  elif m :: t_pw_or_part then
    Partition:-AppPartOrPw
              ( proc(p)
                  if not Partition:-ConditionsDepend(p, lhs~(loops)) then
                      Partition:-Pmap(z->integrate(z,h,loops),p)
                  end if;
                end proc
              , m, ['no_split_disj']);
  elif m :: t_case and not depends(op(1,m), map(lhs, loops)) then
    subsop(2=map(proc(b :: Branch(anything, anything))
                  eval(subsop(2='integrate'(op(2,b), x, loops),b), x=h)
                end proc,
                op(2,m)),
           m);
  elif m :: 'LO(name, anything)' then
    eval(op(2,m), op(1,m) = h)
  elif m :: 'Plate(nonnegint, name, anything)' then
    # Unroll Plate when the bound is known. We unroll Plate here (instead
    # of unrolling Ints in reduce, for example) because we have no other
    # way to integrate certain Plates, namely those whose
bodies' control
    # flows depend on the index.
    x := mk_sym('pp', h);
    x := [seq(cat(x,i), i=0..op(1,m)-1)];
    if op(1,m) = 0 then
      res := undefined;
    else
```

```
      if op(1,m) = 1 then
        res := op(1,x);
      else
         res := idx(x,op(2,m));
#          res := piecewise(seq(op([op(2,m)=i-1, op(i,x)]), i=2..op(1,m)),
#                        op(1,x));
      end if;
      res := mk_idx(res, loops);
    end if;
    res := applyintegrand(h, mk_ary('ary'(op(1,m), op(2,m), res), loops));
    for i from op(1,m) to 1 by -1 do
      res := integrate(eval(op(3,m), op(2,m)=i-1),
                    Integrand(op(i,x), res), loops);
    end do;
    res
  elif m :: 'Plate(anything, name, anything)' then
    integrate(op(3,m), h, [op(2,m)=0..op(1,m)-1, op(loops)])
  elif m :: 'Context(anything, anything)' then
    applyop(integrate, 2, m, h, loops)
  elif h :: appliable then
    x := gensym('xa');
    'integrate'(m, Integrand(x,
 h(x)), loops)
  else
    'procname(_passed)'
  end if
 end proc;


 local
 integrate_known := proc(make, makes, var, m, h, loops :: list(name=range), $)
  local x, dens, bds;
  x := mk_sym(var, h);
  dens := density[op(0,m)](op(m));
  bds := bounds[op(0,m)](op(m));
  if loops = [] then
    make(dens(x) * applyintegrand(h, x), x = bds);
  else
    makes(foldl(product, dens(mk_idx(x,loops)), op(loops))
           * applyintegrand(h, x),
          x, bds, loops)
  end if;
 end proc;
end module; #toLO
'# Teach Maple (through depends and eval) about our new binding forms.\n' Comment.Single

'# forall bind from 1st arg to 2nd arg.\n' Comment.Single
```

```
'# Ints,Sums,ints,sums bind from 2nd arg to 1st arg, and also from each element\n' Comment.Single

'#   of the 4th arg to the other elements on the left and to the 3rd arg.\n' Comment.Single

'\n'          Text.Whitespace

'`depends/forall`' Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'proc'        Keyword
'('           Punctuation
'bvar'        Name
','           Operator
' '           Text.Whitespace
'pred'        Name
','           Operator
' '           Text.Whitespace
'x'           Name
','           Operator
' '           Text.Whitespace
'$'           Operator
')'           Punctuation
'\n  '        Text.Whitespace
'depends'     Name
'('           Punctuation
'pred'        Name
','           Operator
' '           Text.Whitespace
'x'           Name
' '           Text.Whitespace
'minus'
  Keyword
' '           Text.Whitespace
'convert'     Name.Builtin
'('           Punctuation
'bvar'        Name
','           Operator
' '           Text.Whitespace
'"'           Punctuation
'set'         Name
'"'           Punctuation
'))'          Punctuation
'\n'          Text.Whitespace

'end'         Keyword
' '           Text.Whitespace
'proc'        Keyword
```

```
':'          Operator
'\n\n'       Text.Whitespace

'`depends/Ints`' Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
'body'       Name
','          Operator
' '          Text.Whitespace
'bvar'       Name
','          Operator
' '          Text.Whitespace
'rng'        Name
','          Operator
' '          Text.Whitespace
'loops'      Name
','          Operator
' '          Text.Whitespace
'x'          Name
','          Operator
' '          Text.Whitespace
'y'          Name
','          Operator
' '          Text.Whitespace
'$'
          Operator
')'          Punctuation
'\n  '       Text.Whitespace
'local'      Keyword
' '          Text.Whitespace
'xx'         Name
','          Operator
' '          Text.Whitespace
'i'          Name
';'          Punctuation
'\n  '       Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'nargs'      Name
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'5'          Literal.Number.Integer
' '          Text.Whitespace
'then'       Keyword
```

```
'\n    '      Text.Whitespace
'xx'          Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'x'           Name
';'           Punctuation
' '           Text.Whitespace
'# y is ununsed and x lists the variables to look for\n' Comment.Single

'  '          Text.Whitespace
'else'        Keyword
'\n    '      Text.Whitespace
'xx'          Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'y'
     Name
';'           Punctuation
' '           Text.Whitespace
'# x is some KB and y lists the variables to look for\n' Comment.Single

'    '        Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'depends'     Name
'('           Punctuation
'x'           Name
','           Operator
' '           Text.Whitespace
'y'           Name
')'           Punctuation
' '           Text.Whitespace
'then'        Keyword
' '           Text.Whitespace
'return'      Keyword
' '           Text.Whitespace
'true'        Name
' '           Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n  '        Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
```

```
';'          Punctuation
'\n  '        Text.Whitespace
"# don't remove bvar from xx!\n" Comment.Single

'  '         Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'depends'    Name
'('          Punctuation
'body'
        Name
','          Operator
' '          Text.Whitespace
'xx'         Name
' '          Text.Whitespace
'minus'      Keyword
' '          Text.Whitespace
'{'          Punctuation
'bvar'       Name
'})'         Punctuation
' '          Text.Whitespace
'then'       Keyword
' '          Text.Whitespace
'return'     Keyword
' '          Text.Whitespace
'true'       Name
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n  '        Text.Whitespace
'for'        Keyword
' '          Text.Whitespace
'i'          Name
' '          Text.Whitespace
'from'       Keyword
' '          Text.Whitespace
'nops'       Name.Builtin
'('          Punctuation
'loops'      Name
')'          Punctuation
' '          Text.Whitespace
'to'         Keyword
' '          Text.Whitespace
'1'          Literal.Number.Integer
' '          Text.Whitespace
'by'         Keyword
```

' ' Text.Whitespace
'-'
  Operator
'1' Literal.Number.Integer
' ' Text.Whitespace
'do' Keyword
'\n ' Text.Whitespace
'if' Keyword
' ' Text.Whitespace
'depends' Name
'(' Punctuation
'op' Name.Builtin
'([' Punctuation
'i' Name
',' Operator
'2' Literal.Number.Integer
']' Punctuation
',' Operator
'loops' Name
')' Punctuation
',' Operator
' ' Text.Whitespace
'xx' Name
')' Punctuation
' ' Text.Whitespace
'then' Keyword
' ' Text.Whitespace
'return' Keyword
' ' Text.Whitespace
'true' Name
' ' Text.Whitespace
'end' Keyword
' ' Text.Whitespace
'if' Keyword
';' Punctuation
'\n ' Text.Whitespace
'xx' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'xx'
  Name
' ' Text.Whitespace
'minus' Keyword
' ' Text.Whitespace
'{' Punctuation
'op' Name.Builtin
'([' Punctuation

```
'i'          Name
','          Operator
'1'          Literal.Number.Integer
']'          Punctuation
','          Operator
'loops'      Name
')};'        Punctuation
'\n  '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'do'         Keyword
';'          Punctuation
'\n  '       Text.Whitespace
'depends'    Name
'('          Punctuation
'rng'        Name
','          Operator
' '          Text.Whitespace
'xx'         Name
')'          Punctuation
'\n'         Text.Whitespace

'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
':'          Operator
'\n'         Text.Whitespace

'`depends/Sums`' Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'`depends/Ints`' Name
')'
          Punctuation
':'          Operator
'\n'         Text.Whitespace

'`depends/ints`' Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'`depends/Ints`' Name
')'          Punctuation
```

```
':'          Operator
'\n'         Text.Whitespace

'`depends/sums`' Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'`depends/Ints`' Name
')'          Punctuation
':'          Operator
'\n\n'       Text.Whitespace

'`eval/forall`' Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
'e'          Name
','          Operator
' '          Text.Whitespace
'eqs'        Name
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n  '       Text.Whitespace
'local'      Keyword
'
 '           Text.Whitespace
'bvar'       Name
','          Operator
' '          Text.Whitespace
'pred'       Name
';'          Punctuation
'\n  '       Text.Whitespace
'bvar'       Name
','          Operator
' '          Text.Whitespace
'pred'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'e'          Name
```

```
');'          Punctuation
'\n  '        Text.Whitespace
'eval'        Name.Builtin
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'0'           Literal.Number.Integer
','           Operator
'e'           Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'eqs'         Name
')('          Punctuation
'BindingTools' Name
':'           Operator
'-'           Operator
'generic_evalat' Name
'('           Punctuation
'bvar'        Name
','           Operator
' '           Text.Whitespace
'pred'        Name
','
      Operator
' '           Text.Whitespace
'eqs'         Name
'))'          Punctuation
'\n'          Text.Whitespace

'end'         Keyword
' '           Text.Whitespace
'proc'        Keyword
':'           Operator
'\n\n'        Text.Whitespace

'`eval/Ints`' Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'proc'        Keyword
'('           Punctuation
'e'           Name
','           Operator
' '           Text.Whitespace
'eqs'         Name
','           Operator
' '           Text.Whitespace
```

```
'$'          Operator
')'          Punctuation
'\n  '       Text.Whitespace
'local'      Keyword
' '          Text.Whitespace
'body'       Name
','          Operator
' '          Text.Whitespace
'bvar'       Name
','          Operator
' '          Text.Whitespace
'rng'        Name
','          Operator
' '          Text.Whitespace
'loops'      Name
','          Operator
' '          Text.Whitespace
'n'          Name
','          Operator
'
 '           Text.Whitespace
'i'          Name
';'          Punctuation
'\n  '       Text.Whitespace
'body'       Name
','          Operator
' '          Text.Whitespace
'bvar'       Name
','          Operator
' '          Text.Whitespace
'rng'        Name
','          Operator
' '          Text.Whitespace
'loops'      Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
'..'         Punctuation
'4'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'e'          Name
');'         Punctuation
'\n  '       Text.Whitespace
'bvar'       Name
```

```
','         Operator
' '         Text.Whitespace
'body'      Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'BindingTools' Name
':'         Operator
'-'         Operator
'generic_evalat' Name
'('         Punctuation
'bvar'
      Name
','         Operator
' '         Text.Whitespace
'body'      Name
','         Operator
' '         Text.Whitespace
'eqs'       Name
');'        Punctuation
'\n  '      Text.Whitespace
'eval'      Name.Builtin
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
'0'         Literal.Number.Integer
','         Operator
'e'         Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'eqs'       Name
')('        Punctuation
'body'      Name
','         Operator
' '         Text.Whitespace
'bvar'      Name
','         Operator
'\n                 ' Text.Whitespace
'BindingTools' Name
':'         Operator
'-'         Operator
'generic_evalatstar' Name
'('         Punctuation
'rng'       Name
','         Operator
' '         Text.Whitespace
'loops'     Name
```

```
','         Operator
' '         Text.Whitespace
'eqs'       Name
')'         Punctuation
','
  Operator
'\n                 ' Text.Whitespace
'op'        Name.Builtin
'('         Punctuation
'5'         Literal.Number.Integer
'..'        Punctuation
'-'         Operator
'1'         Literal.Number.Integer
','         Operator
'e'         Name
'))'        Punctuation
'\n'        Text.Whitespace

'end'       Keyword
' '         Text.Whitespace
'proc'      Keyword
':'         Operator
'\n'        Text.Whitespace

'`eval/Sums`' Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'eval'      Name.Builtin
'('         Punctuation
'`eval/Ints`' Name
')'         Punctuation
':'         Operator
'\n'        Text.Whitespace

'`eval/ints`' Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'eval'      Name.Builtin
'('         Punctuation
'`eval/Ints`' Name
')'         Punctuation
':'         Operator
'\n'        Text.Whitespace

'`eval/sums`' Name
' '         Text.Whitespace
```

```
':='
        Operator
' '         Text.Whitespace
'eval'      Name.Builtin
'('         Punctuation
'`eval/Ints`' Name
')'         Punctuation
':'         Operator
'\n\n'      Text.Whitespace

'`eval/Int`'  Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'proc'      Keyword
'('         Punctuation
'e'         Name
','         Operator
' '         Text.Whitespace
'eqs'       Name
','         Operator
' '         Text.Whitespace
'$'         Operator
')'         Punctuation
'\n  '      Text.Whitespace
'local'     Keyword
' '         Text.Whitespace
'body'      Name
','         Operator
' '         Text.Whitespace
'bound'     Name
','         Operator
' '         Text.Whitespace
'bvar'      Name
';'         Punctuation
'\n  '      Text.Whitespace
'body'      Name
','         Operator
' '         Text.Whitespace
'bound'     Name
' '         Text.Whitespace
':='        Operator
'
 '          Text.Whitespace
'op'        Name.Builtin
'('         Punctuation
'1'         Literal.Number.Integer
'..'        Punctuation
```

```
'2'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'e'          Name
');'         Punctuation
'\n  '       Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'bound'      Name
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
'name'       Name
' '          Text.Whitespace
'then'       Keyword
'\n    '     Text.Whitespace
'bound'      Name
','          Operator
' '          Text.Whitespace
'body'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'BindingTools' Name
':'          Operator
'-'          Operator
'generic_evalat' Name
'('          Punctuation
'bound'      Name
','          Operator
' '          Text.Whitespace
'body'       Name
','          Operator
' '          Text.Whitespace
'eqs'
        Name
');'         Punctuation
'\n  '       Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'bound'      Name
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
'`=`'        Name
' '          Text.Whitespace
'then'       Keyword
'\n    '     Text.Whitespace
```

```
'bvar'        Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'lhs'         Name.Builtin
'('           Punctuation
'bound'       Name
');'          Punctuation
'\n    '      Text.Whitespace
'bvar'        Name
','           Operator
' '           Text.Whitespace
'body'        Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'BindingTools' Name
':'           Operator
'-'           Operator
'generic_evalat' Name
'('           Punctuation
'bvar'        Name
','           Operator
' '           Text.Whitespace
'body'        Name
','           Operator
' '           Text.Whitespace
'eqs'
         Name
');'          Punctuation
'\n    '      Text.Whitespace
'bound'       Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'bvar'        Name
' '           Text.Whitespace
'='           Operator
' '           Text.Whitespace
'eval'        Name.Builtin
'('           Punctuation
'rhs'         Name.Builtin
'('           Punctuation
'bound'       Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'eqs'         Name
```

```
');'          Punctuation
'\n  '        Text.Whitespace
'else'        Keyword
'\n    '      Text.Whitespace
'body'        Name
','           Operator
' '           Text.Whitespace
'bound'       Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'BindingTools' Name
':'           Operator
'-'           Operator
'generic_evalatstar' Name
'('           Punctuation
'body'        Name
','           Operator
' '           Text.Whitespace
'bound'       Name
','
   Operator
' '           Text.Whitespace
'eqs'         Name
');'          Punctuation
'\n  '        Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n  '        Text.Whitespace
'eval'        Name.Builtin
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'0'           Literal.Number.Integer
','           Operator
'e'           Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'eqs'         Name
')('          Punctuation
'body'        Name
','           Operator
' '           Text.Whitespace
'bound'       Name
','           Operator
```

```
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'eval'       Name.Builtin
'(['         Punctuation
'op'         Name.Builtin
'('          Punctuation
'3'          Literal.Number.Integer
'..'         Punctuation
'-'          Operator
'1'          Literal.Number.Integer
','          Operator
'e'
          Name
')]'         Punctuation
','          Operator
' '          Text.Whitespace
'eqs'        Name
')))'        Punctuation
'\n'         Text.Whitespace

'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
':'          Operator
'\n'         Text.Whitespace

'`eval/Sum`'  Name
'    '       Text.Whitespace
':='         Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'`eval/Int`'  Name
')'          Punctuation
':'          Operator
'\n'         Text.Whitespace

'`eval/Product`' Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'`eval/Int`'  Name
')'          Punctuation
':'          Operator
'\n'         Text.Whitespace
```

```
'`eval/int`'  Name
'    '       Text.Whitespace
':='         Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'`eval/Int`'  Name
')'
     Punctuation
':'          Operator
'\n'         Text.Whitespace

'`eval/sum`'  Name
'    '       Text.Whitespace
':='         Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'`eval/Int`'  Name
')'          Punctuation
':'          Operator
'\n'         Text.Whitespace

'`eval/product`' Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'`eval/Int`'  Name
')'          Punctuation
':'          Operator
'\n\n'       Text.Whitespace

'################################################################################\n' Comment.Single

'\n'         Text.Whitespace

'Loop'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'module'     Keyword
' '          Text.Whitespace
'()'         Punctuation
'\n  '       Text.Whitespace
'option'     Keyword
```

' ' Text.Whitespace
'package' Name
';'
  Punctuation
'\n ' Text.Whitespace
'local' Keyword
' ' Text.Whitespace
'intssums' Name
',' Operator
' ' Text.Whitespace
'enter_piecewise' Name
',' Operator
' ' Text.Whitespace
'wrap' Name
',' Operator
'\n ' Text.Whitespace
't_peel' Name
',' Operator
' ' Text.Whitespace
'do_peel' Name
',' Operator
' ' Text.Whitespace
'do_split' Name
',' Operator
' ' Text.Whitespace
'do_graft' Name
',' Operator
' ' Text.Whitespace
'do_rebase_lower' Name
',' Operator
' ' Text.Whitespace
'do_rebase_upper' Name
',' Operator
'\n ' Text.Whitespace
'Binder' Name
',' Operator
' ' Text.Whitespace
'Stmt' Name
',' Operator
' ' Text.Whitespace
't_binder' Name
',' Operator
' ' Text.Whitespace
't_stmt' Name
','
  Operator
' ' Text.Whitespace
't_exp' Name

```
','         Operator
'\n       '  Text.Whitespace
'ModuleLoad'  Name
';'         Punctuation
'\n  '       Text.Whitespace
'export'      Keyword
'\n     '     Text.Whitespace
'# These first few are smart constructors (for themselves):\n' Comment.Single

'        '   Text.Whitespace
'ints'        Name
','         Operator
' '         Text.Whitespace
'sums'        Name
','         Operator
'\n     '     Text.Whitespace
'# while these are "proper functions"\n' Comment.Single

'        '   Text.Whitespace
'mk_HArray'   Name
','         Operator
' '         Text.Whitespace
'genLoop'     Name
','         Operator
' '         Text.Whitespace
'unproducts'  Name
','         Operator
' '         Text.Whitespace
'unproduct'   Name
','         Operator
'\n        ' Text.Whitespace
'peel'        Name
','         Operator
' '         Text.Whitespace
'split'       Name
','         Operator
' '
    Text.Whitespace
'graft'       Name
','         Operator
' '         Text.Whitespace
'rebase_lower' Name
','         Operator
' '         Text.Whitespace
'rebase_upper' Name
','         Operator
' '         Text.Whitespace
'Print'       Name
```

```
';'         Punctuation
'\n  '       Text.Whitespace
'# these names are not assigned (and should not be).  But they are\n' Comment.Single

'  '        Text.Whitespace
'# used as global names, so document that here.\n' Comment.Single

'  '        Text.Whitespace
'global'     Keyword
' '         Text.Whitespace
'Ints'       Name
','         Operator
' '         Text.Whitespace
'Sums'       Name
','         Operator
' '         Text.Whitespace
'csgn'       Name
','         Operator
' '         Text.Whitespace
'sum'        Name
','         Operator
' '         Text.Whitespace
'signum'     Name
';'         Punctuation
'\n  '       Text.Whitespace
'uses'       Keyword
' '         Text.Whitespace
'Hakaru'
     Name
','         Operator
' '         Text.Whitespace
'KB'         Name
','         Operator
' '         Text.Whitespace
'Utilities'   Name
';'         Punctuation
'\n\n  '     Text.Whitespace
't_binder'    Name
' '         Text.Whitespace
':='         Operator
' '         Text.Whitespace
'"'          Punctuation
'Binder'     Name
'('         Punctuation
'identical'   Name
'('         Punctuation
'product'    Name
','         Operator
```

```
' '          Text.Whitespace
'Product'    Name
','          Operator
' '          Text.Whitespace
'sum'        Name
','          Operator
' '          Text.Whitespace
'Sum'        Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
't_kb'       Name
')'          Punctuation
"""          Punctuation
';'          Punctuation
'\n  '       Text.Whitespace
't_stmt'     Name
'   '        Text.Whitespace
':='         Operator
' '          Text.Whitespace
"""          Punctuation
'Stmt'
       Name
'('          Punctuation
'anything'   Name
','          Operator
' '          Text.Whitespace
'list'       Name
','          Operator
' '          Text.Whitespace
'list'       Name
')'          Punctuation
"""          Punctuation
';'          Punctuation
'\n  '       Text.Whitespace
't_exp'      Name
'    '       Text.Whitespace
':='         Operator
' '          Text.Whitespace
"""          Punctuation
'{'          Punctuation
'Stmt'       Name
'('          Punctuation
'identical'  Name
'('          Punctuation
'exp'        Name
')'          Punctuation
','          Operator
```

```
' '          Text.Whitespace
'[]'         Punctuation
','          Operator
' '          Text.Whitespace
'[])'        Punctuation
','          Operator
'\n              ' Text.Whitespace
'Stmt'       Name
'('          Punctuation
'identical'  Name
'('          Punctuation
'`^`'        Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'['
          Punctuation
'anything'   Name
']'          Punctuation
','          Operator
' '          Text.Whitespace
'[])}'       Punctuation
'"'          Punctuation
';'          Punctuation
'\n\n  '     Text.Whitespace
'ints'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'proc'       Keyword
'()'         Punctuation
' '          Text.Whitespace
'intssums'   Name
'('          Punctuation
'"'          Punctuation
'ints'       Name
'"'          Punctuation
','          Operator
' '          Text.Whitespace
'"'          Punctuation
'int'        Name
'"'          Punctuation
','          Operator
' '          Text.Whitespace
'_passed'    Name
')'          Punctuation
' '          Text.Whitespace
'end'        Keyword
```

```
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n  '       Text.Whitespace
'sums'       Name
' '          Text.Whitespace
':='         Operator
' '
     Text.Whitespace
'proc'       Keyword
'()'         Punctuation
' '          Text.Whitespace
'intssums'   Name
'('          Punctuation
'"'          Punctuation
'sums'       Name
'"'          Punctuation
','          Operator
' '          Text.Whitespace
'"'          Punctuation
'sum'        Name
'"'          Punctuation
','          Operator
' '          Text.Whitespace
'_passed'    Name
')'          Punctuation
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n\n  '     Text.Whitespace
'Print'      Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
'kind'       Name
'::'         Operator
'identical'  Name
'('          Punctuation
'Ints'       Name
','          Operator
'Sums'       Name
','          Operator
'ints'       Name
','          Operator
```

```
'sums'        Name
')'           Punctuation
','
           Operator
'e'           Name
','           Operator
'v'           Name
'::'          Operator
'name'        Name
','           Operator
'r0'          Name
'::'          Operator
'range'       Name
','           Operator
'rs'          Name
'::'          Operator
'list'        Name
'('           Punctuation
'name'        Name
'='           Operator
'range'       Name
')'           Punctuation
','           Operator
'$'           Operator
')'           Punctuation
'\n    '      Text.Whitespace
'local'       Keyword
' '           Text.Whitespace
'k'           Name
';'           Punctuation
'\n    '      Text.Whitespace
'k'           Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'StringTools' Name
'['           Punctuation
'Capitalize'  Name
']('          Punctuation
'StringTools' Name
'['           Punctuation
'Chop'        Name
']('          Punctuation
'convert'     Name.Builtin
'('           Punctuation
'kind'        Name
','
```

Operator
'string' Name
'));' Punctuation
'\n ' Text.Whitespace
'k' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'parse' Name.Builtin
'(' Punctuation
'cat' Name.Builtin
'(' Punctuation
'"`print/"' Literal.String
',' Operator
'eval' Name.Builtin
'(' Punctuation
'k' Name
')' Punctuation
',' Operator
'"`"' Literal.String
'));' Punctuation
'\n ' Text.Whitespace
'eval' Name.Builtin
'(' Punctuation
'k' Name
')(' Punctuation
'e' Name
',' Operator
'v' Name
'[' Punctuation
'op' Name.Builtin
'(' Punctuation
'rs' Name
')]' Punctuation
'=' Operator
'r0' Name
');' Punctuation
'\n ' Text.Whitespace
'end' Keyword
' ' Text.Whitespace
'proc'
Keyword
';' Punctuation
'\n\n ' Text.Whitespace
'intssums' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace

```
'proc'        Keyword
'('           Punctuation
'makes'       Name
'::'          Operator
'name'        Name
','           Operator
' '           Text.Whitespace
'make'        Name
'::'          Operator
'name'        Name
','           Operator
'\n                 ' Text.Whitespace
'e'           Name
'::'          Operator
'anything'    Name
','           Operator
' '           Text.Whitespace
'x'           Name
'::'          Operator
'name'        Name
','           Operator
' '           Text.Whitespace
'rr'          Name
'::'          Operator
'range'       Name
','           Operator
' '           Text.Whitespace
'll'          Name
'::'          Operator
'list'        Name
'('           Punctuation
'name'        Name
'='           Operator
'range'       Name
')'           Punctuation
','           Operator
'\n
                  ' Text.Whitespace
'kb'          Name
'::'          Operator
't_kb'        Name
':='          Operator
'empty'       Name
','           Operator
' '           Text.Whitespace
'$'           Operator
')'           Punctuation
'\n    '      Text.Whitespace
```

```
'local'       Keyword
' '           Text.Whitespace
't'           Name
','           Operator
' '           Text.Whitespace
'r'           Name
','           Operator
' '           Text.Whitespace
'l'           Name
','           Operator
' '           Text.Whitespace
'kb2'         Name
','           Operator
' '           Text.Whitespace
'w0'          Name
','           Operator
' '           Text.Whitespace
'pp'          Name
','           Operator
' '           Text.Whitespace
'i'           Name
';'           Punctuation
'\n    '      Text.Whitespace
't'           Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'`if`'        Name
'('           Punctuation
'make'        Name
'='
           Operator
'int'         Name
','           Operator
' '           Text.Whitespace
'HReal'       Name
'('           Punctuation
'open_bounds' Name
'('           Punctuation
'rr'          Name
'))'          Punctuation
','           Operator
' '           Text.Whitespace
'HInt'        Name
'('           Punctuation
'closed_bounds' Name
'('           Punctuation
'rr'          Name
```

```
')));'        Punctuation
'\n    '      Text.Whitespace
'r'           Name
','           Operator
' '           Text.Whitespace
'l'           Name
','           Operator
' '           Text.Whitespace
'kb2'         Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'genLoop'     Name
'('           Punctuation
'rr'          Name
','           Operator
' '           Text.Whitespace
'll'          Name
','           Operator
' '           Text.Whitespace
'kb'          Name
','           Operator
' '           Text.Whitespace
'"'           Punctuation
'Integrand'   Name
'"'
          Punctuation
'('           Punctuation
'x'           Name
','           Operator
'e'           Name
'));'         Punctuation
'\n    '      Text.Whitespace
'w0'          Name
','           Operator
' '           Text.Whitespace
'pp'          Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'unproducts'  Name
'('           Punctuation
'e'           Name
','           Operator
' '           Text.Whitespace
'x'           Name
','           Operator
' '           Text.Whitespace
```

```
'l'          Name
','          Operator
' '          Text.Whitespace
'kb2'        Name
');'         Punctuation
'\n    '     Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'depends'    Name
'('          Punctuation
'w0'         Name
','          Operator
' '          Text.Whitespace
'x'          Name
')'          Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n      '   Text.Whitespace
'"'          Punctuation
'makes'
      Name
'('          Punctuation
'e'          Name
','          Operator
' '          Text.Whitespace
'x'          Name
','          Operator
' '          Text.Whitespace
'rr'         Name
','          Operator
' '          Text.Whitespace
'll'         Name
')'          Punctuation
'"'          Punctuation
'\n    '     Text.Whitespace
'else'       Keyword
'\n      '   Text.Whitespace
'pp'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'"'          Punctuation
'make'       Name
'"'          Punctuation
'('          Punctuation
'pp'         Name
','          Operator
' '          Text.Whitespace
```

```
'x'          Name
'='          Operator
'r'          Name
');'         Punctuation
'\n     '    Text.Whitespace
'for'        Keyword
' '          Text.Whitespace
'i'          Name
' '          Text.Whitespace
'in'         Keyword
' '          Text.Whitespace
'l'          Name
' '          Text.Whitespace
'do'
         Keyword
' '          Text.Whitespace
'pp'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
"""          Punctuation
'product'    Name
"""          Punctuation
'('          Punctuation
'pp'         Name
','          Operator
' '          Text.Whitespace
'i'          Name
')'          Punctuation
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'do'         Keyword
';'          Punctuation
'\n     '    Text.Whitespace
'NewSLO'     Name
':'          Operator
'-'          Operator
'simplify_factor_assuming' Name
'('          Punctuation
'w0'         Name
' '          Text.Whitespace
'*'          Operator
' '          Text.Whitespace
'pp'         Name
','          Operator
' '          Text.Whitespace
'kb'         Name
```

```
');'        Punctuation
'\n    '     Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
'\n  '       Text.Whitespace
'end'
        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n\n  '     Text.Whitespace
'mk_HArray'   Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
't'          Name
'::'         Operator
't_type'     Name
','          Operator
' '          Text.Whitespace
'loops'      Name
'::'         Operator
'list'       Name
'('          Punctuation
'name'       Name
'='          Operator
'range'      Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n    '     Text.Whitespace
'local'      Keyword
' '          Text.Whitespace
'res'        Name
','          Operator
' '          Text.Whitespace
'i'          Name
';'          Punctuation
'\n    '     Text.Whitespace
'res'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
```

```
't'
            Name
';'          Punctuation
'\n    '      Text.Whitespace
'for'         Keyword
' '           Text.Whitespace
'i'           Name
' '           Text.Whitespace
'in'          Keyword
' '           Text.Whitespace
'loops'       Name
' '           Text.Whitespace
'do'          Keyword
' '           Text.Whitespace
'res'         Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'HArray'      Name
'('           Punctuation
'res'         Name
')'           Punctuation
' '           Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'do'          Keyword
';'           Punctuation
'\n    '      Text.Whitespace
'res'         Name
'\n  '        Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'proc'        Keyword
';'           Punctuation
'\n\n  '      Text.Whitespace
'genLoop'     Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'proc'        Keyword
'('
        Punctuation
'e'           Name
','           Operator
' '           Text.Whitespace
'loops'       Name
'::'          Operator
'list'        Name
```

```
'('          Punctuation
'name'       Name
'='          Operator
'range'      Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'kb'         Name
'::'         Operator
't_kb'       Name
')'          Punctuation
'\n    '     Text.Whitespace
'local'      Keyword
' '          Text.Whitespace
'kb1'        Name
','          Operator
' '          Text.Whitespace
'rng'        Name
','          Operator
' '          Text.Whitespace
'ind'        Name
','          Operator
' '          Text.Whitespace
'do_subst'   Name
','          Operator
' '          Text.Whitespace
'i'          Name
';'          Punctuation
'\n    '     Text.Whitespace
'kb1'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'kb'         Name
';'          Punctuation
'\n
    '     Text.Whitespace
'rng'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'table'      Name.Builtin
'();'        Punctuation
'\n    '     Text.Whitespace
'ind'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
```

```
'table'       Name.Builtin
'();'         Punctuation
'\n    '      Text.Whitespace
'do_subst'    Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'e'           Name
' '           Text.Whitespace
'->'          Operator
' '           Text.Whitespace
'foldl'       Name
'((('         Punctuation
'e'           Name
','           Operator
'eq'          Name
')'           Punctuation
' '           Text.Whitespace
'->'          Operator
' '           Text.Whitespace
'eval'        Name.Builtin
'('           Punctuation
'e'           Name
','           Operator
' '           Text.Whitespace
'op'          Name.Builtin
'(['          Punctuation
'lhs'
        Name.Builtin
'('           Punctuation
'eq'          Name
')'           Punctuation
','           Operator
'1'           Literal.Number.Integer
']'           Punctuation
','           Operator
'loops'       Name
')'           Punctuation
'='           Operator
'rhs'         Name.Builtin
'('           Punctuation
'eq'          Name
')))'         Punctuation
','           Operator
'\n                         ' Text.Whitespace
'e'           Name
','           Operator
' '           Text.Whitespace
```

```
'entries'     Name.Builtin
'('           Punctuation
'ind'         Name
','           Operator
' '           Text.Whitespace
"""           Punctuation
'pairs'       Name
"""           Punctuation
'));'         Punctuation
'\n    '      Text.Whitespace
'for'         Keyword
' '           Text.Whitespace
'i'           Name
' '           Text.Whitespace
'from'        Keyword
' '           Text.Whitespace
'nops'        Name.Builtin
'('           Punctuation
'loops'       Name
')'
  Punctuation
' '           Text.Whitespace
'to'          Keyword
' '           Text.Whitespace
'1'           Literal.Number.Integer
' '           Text.Whitespace
'by'          Keyword
' '           Text.Whitespace
'-'           Operator
'1'           Literal.Number.Integer
' '           Text.Whitespace
'do'          Keyword
'\n      '    Text.Whitespace
'rng'         Name
'['           Punctuation
'i'           Name
']'           Punctuation
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'do_subst'    Name
'('           Punctuation
'op'          Name.Builtin
'(['          Punctuation
'i'           Name
','           Operator
'2'           Literal.Number.Integer
']'           Punctuation
```

```
','          Operator
'loops'      Name
'));'        Punctuation
'\n     '    Text.Whitespace
'ind'        Name
'['          Punctuation
'i'          Name
']'          Punctuation
','          Operator
' '          Text.Whitespace
'kb1'        Name
' '
      Text.Whitespace
':='         Operator
' '          Text.Whitespace
'genType'    Name
'('          Punctuation
'op'         Name.Builtin
'(['         Punctuation
'i'          Name
','          Operator
'1'          Literal.Number.Integer
']'          Punctuation
','          Operator
'loops'      Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'HInt'       Name
'('          Punctuation
'closed_bounds' Name
'('          Punctuation
'rng'        Name
'['          Punctuation
'i'          Name
']))'        Punctuation
','          Operator
'\n                          ' Text.Whitespace
'kb1'        Name
','          Operator
' '          Text.Whitespace
'_rest'      Name
');'         Punctuation
'\n    '     Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'do'         Keyword
';'          Punctuation
```

```
'\n    '      Text.Whitespace
'do_subst'    Name
'('           Punctuation
'e'           Name
')'
           Punctuation
','           Operator
' '           Text.Whitespace
'zip'         Name
'('           Punctuation
'`=`'         Name
','           Operator
' '           Text.Whitespace
'['           Punctuation
'entries'     Name.Builtin
'('           Punctuation
'ind'         Name
','           Operator
' '           Text.Whitespace
"""           Punctuation
'nolist'      Name
"""           Punctuation
')]'          Punctuation
','           Operator
'\n                         ' Text.Whitespace
'['           Punctuation
'entries'     Name.Builtin
'('           Punctuation
'rng'         Name
','           Operator
' '           Text.Whitespace
"""           Punctuation
'nolist'      Name
"""           Punctuation
')])'         Punctuation
','           Operator
' '           Text.Whitespace
'kb1'         Name
'\n  '        Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'proc'        Keyword
';'           Punctuation
'\n\n  '      Text.Whitespace
'unproducts'
  Name
' '           Text.Whitespace
':='          Operator
```

```
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
'w'          Name
','          Operator
' '          Text.Whitespace
'x'          Name
'::'         Operator
'name'       Name
','          Operator
' '          Text.Whitespace
'loops'      Name
'::'         Operator
'list'       Name
'('          Punctuation
'name'       Name
'='          Operator
'range'      Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'kb'         Name
'::'         Operator
't_kb'       Name
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n    '     Text.Whitespace
'local'      Keyword
' '          Text.Whitespace
'w0'         Name
','          Operator
' '          Text.Whitespace
'pp'         Name
','          Operator
' '          Text.Whitespace
'j'          Name
','          Operator
' '          Text.Whitespace
'w1'
         Name
','          Operator
' '          Text.Whitespace
'w2'         Name
','          Operator
' '          Text.Whitespace
'loop'       Name
```

```
';'         Punctuation
'\n    '     Text.Whitespace
'w0'         Name
' '         Text.Whitespace
':='         Operator
' '         Text.Whitespace
'1'          Literal.Number.Integer
';'         Punctuation
'\n    '     Text.Whitespace
'pp'         Name
' '         Text.Whitespace
':='         Operator
' '         Text.Whitespace
'w'          Name
';'         Punctuation
'\n    '     Text.Whitespace
'for'        Keyword
' '         Text.Whitespace
'j'         Name
' '         Text.Whitespace
'from'       Keyword
' '         Text.Whitespace
'nops'       Name.Builtin
'('         Punctuation
'loops'      Name
')'         Punctuation
' '         Text.Whitespace
'to'         Keyword
' '         Text.Whitespace
'1'          Literal.Number.Integer
' '         Text.Whitespace
'by'
        Keyword
' '         Text.Whitespace
'-'         Operator
'1'          Literal.Number.Integer
' '         Text.Whitespace
'do'         Keyword
'\n     '    Text.Whitespace
'w1'         Name
','         Operator
' '         Text.Whitespace
'pp'         Name
' '         Text.Whitespace
':='         Operator
' '         Text.Whitespace
'op'         Name.Builtin
'('         Punctuation
```

'unproduct' Name
'(' Punctuation
'pp' Name
',' Operator
' ' Text.Whitespace
'x' Name
',' Operator
' ' Text.Whitespace
'op' Name.Builtin
'(' Punctuation
'j' Name
',' Operator
'loops' Name
')' Punctuation
',' Operator
' ' Text.Whitespace
'[]' Punctuation
',' Operator
' ' Text.Whitespace
'`*`' Name
',' Operator
' ' Text.Whitespace
'kb' Name
',' Operator
'
 ' Text.Whitespace
'kb' Name
'));' Punctuation
'\n ' Text.Whitespace
'# separate out each of the factors in w1, as they might have different\n' Comment.Single

' ' Text.Whitespace
'# variable dependencies, which can be exploited by other routines\n' Comment.Single

' ' Text.Whitespace
'w2' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'convert' Name.Builtin
'(' Punctuation
'w1' Name
',' Operator
' ' Text.Whitespace
'"' Punctuation
'list' Name
'"' Punctuation
',' Operator

```
' '          Text.Whitespace
"""          Punctuation
'`*`'        Name
"""          Punctuation
');'         Punctuation
'\n      '   Text.Whitespace
'for'        Keyword
' '          Text.Whitespace
'loop'       Name
' '          Text.Whitespace
'in'         Keyword
' '          Text.Whitespace
'['          Punctuation
'op'
         Name.Builtin
'('          Punctuation
'j'          Name
'+'          Operator
'1'          Literal.Number.Integer
'..'         Punctuation
'-'          Operator
'1'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'loops'      Name
')]'         Punctuation
' '          Text.Whitespace
'do'         Keyword
'\n        ' Text.Whitespace
'w2'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'map'        Name.Builtin
'('          Punctuation
'w'          Name
' '          Text.Whitespace
'->'         Operator
' '          Text.Whitespace
'product'    Name
'('          Punctuation
'eval'       Name.Builtin
'('          Punctuation
'w'          Name
','          Operator
' '          Text.Whitespace
'x'          Name
'='          Operator
```

```
'idx'        Name
'('          Punctuation
'x'          Name
','          Operator
'lhs'        Name.Builtin
'('          Punctuation
'loop'
       Name
')))'        Punctuation
','          Operator
' '          Text.Whitespace
'loop'       Name
'))'         Punctuation
','          Operator
' '          Text.Whitespace
'w2'         Name
');'         Punctuation
'\n     '    Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'do'         Keyword
';'          Punctuation
'\n     '    Text.Whitespace
'w0'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'w0'         Name
' '          Text.Whitespace
'*'          Operator
' '          Text.Whitespace
'`*`'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'w2'         Name
'));'        Punctuation
'\n     '    Text.Whitespace
'# w0 := w0 * foldl(product, w1, op(j+1..-1, loops));\n' Comment.Single

'    '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'do'         Keyword
';'          Punctuation
'\n    '
   Text.Whitespace
'# Rewrite ... * piecewise(i<=kk-1, xs^2, 1)\n' Comment.Single
```

```
'    '        Text.Whitespace
'#      to ... * xs ^ (2*piecewise(i<=kk-1, 1))\n' Comment.Single

'    '        Text.Whitespace
'# because the latter is easier to integrate and recognize with respect to xs\n' Comment.Single

'    '        Text.Whitespace
'pp'          Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'for_poly'    Name
'('           Punctuation
'pp'          Name
','           Operator
' '           Text.Whitespace
'# TODO: move this rewrite into eval_factor (then remove for_poly?)?\n' Comment.Single

'      '      Text.Whitespace
'proc'        Keyword
' '           Text.Whitespace
'('           Punctuation
'p'           Name
')'           Punctuation
'\n        '  Text.Whitespace
'local'       Keyword
' '           Text.Whitespace
'n'           Name
','           Operator
' '           Text.Whitespace
's'           Name
','           Operator
' '
        Text.Whitespace
'r'           Name
';'           Punctuation
'\n        '  Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'p'           Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
'"'           Punctuation
'And'         Name
'('           Punctuation
'specfunc'    Name
```

```
'('          Punctuation
'piecewise'   Name.Builtin
')'          Punctuation
','          Operator
' '          Text.Whitespace
'anyfunc'     Name
'('          Punctuation
'freeof'      Name
'('          Punctuation
'x'           Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'anything'    Name
','          Operator
' '          Text.Whitespace
'1'           Literal.Number.Integer
'))'         Punctuation
'"'           Punctuation
' '          Text.Whitespace
'then'        Keyword
'\n          ' Text.Whitespace
'n'           Name
' '          Text.Whitespace
':='          Operator
' '          Text.Whitespace
'indets'
      Name.Builtin
'('          Punctuation
'op'          Name.Builtin
'('          Punctuation
'1'           Literal.Number.Integer
','          Operator
'p'           Name
')'          Punctuation
','          Operator
'name'        Name
');'         Punctuation
'\n          ' Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'op'          Name.Builtin
'('          Punctuation
'2'           Literal.Number.Integer
','          Operator
'p'           Name
')'          Punctuation
' '          Text.Whitespace
```

```
'::'          Operator
' '          Text.Whitespace
'{'          Punctuation
'"'          Punctuation
'exp'         Name
'('          Punctuation
'anything'    Name
')'          Punctuation
'"'          Punctuation
','          Operator
' '          Text.Whitespace
'"'          Punctuation
'`^`'        Name
'"'          Punctuation
'('          Punctuation
'"'          Punctuation
'freeof'      Name
'"'          Punctuation
'('
          Punctuation
'n'          Name
')'          Punctuation
','          Operator
'"'          Punctuation
'anything'    Name
'"'          Punctuation
')}'         Punctuation
' '          Text.Whitespace
'then'        Keyword
'\n           ' Text.Whitespace
's'          Name
','          Operator
' '          Text.Whitespace
'r'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'selectremove' Name.Builtin
'('          Punctuation
'depends'     Name
','          Operator
' '          Text.Whitespace
'convert'     Name.Builtin
'('          Punctuation
'op'          Name.Builtin
'(['         Punctuation
'2'          Literal.Number.Integer
','          Operator
```

```
'-'          Operator
'1'          Literal.Number.Integer
']'          Punctuation
','          Operator
'p'          Name
')'          Punctuation
','          Operator
'"'          Punctuation
'list'       Name
'"'          Punctuation
','
    Operator
'"'          Punctuation
'`*`'        Name
'"'          Punctuation
')'          Punctuation
','          Operator
' '          Text.Whitespace
'n'          Name
');'         Punctuation
'\n          ' Text.Whitespace
'subsop'     Name.Builtin
'('          Punctuation
'-'          Operator
'1'          Literal.Number.Integer
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'`*`'        Name
'('          Punctuation
'piecewise'  Name.Builtin
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'p'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'`*`'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
's'          Name
')))'        Punctuation
','          Operator
' '          Text.Whitespace
```

```
'op'        Name.Builtin
'('         Punctuation
'r'
        Name
'))'        Punctuation
','         Operator
' '         Text.Whitespace
'op'        Name.Builtin
'('         Punctuation
'2'         Literal.Number.Integer
','         Operator
'p'         Name
'))'        Punctuation
'\n         ' Text.Whitespace
'else'      Keyword
'\n         ' Text.Whitespace
's'         Name
','         Operator
' '         Text.Whitespace
'r'         Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'selectremove' Name.Builtin
'('         Punctuation
'depends'   Name
','         Operator
' '         Text.Whitespace
'convert'   Name.Builtin
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
'2'         Literal.Number.Integer
','         Operator
'p'         Name
')'         Punctuation
','         Operator
'"'         Punctuation
'list'      Name
'"'         Punctuation
','         Operator
'"'         Punctuation
'`*`'
    Name
'"'         Punctuation
')'         Punctuation
','         Operator
' '         Text.Whitespace
```

```
'n'          Name
');'         Punctuation
'\n          ' Text.Whitespace
'`*`'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'r'          Name
'))'         Punctuation
' '          Text.Whitespace
'^'          Operator
' '          Text.Whitespace
'piecewise'  Name.Builtin
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'p'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
')'          Punctuation
'\n          ' Text.Whitespace
'*'          Operator
' '          Text.Whitespace
'`if`'       Name
'('          Punctuation
'nops'       Name.Builtin
'('          Punctuation
's'          Name
')'          Punctuation
' '          Text.Whitespace
'>'
          Operator
' '          Text.Whitespace
'0'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'piecewise'  Name.Builtin
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'p'          Name
')'          Punctuation
```

```
','         Operator
' '         Text.Whitespace
'`*`'       Name
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
's'         Name
'))'        Punctuation
','         Operator
' '         Text.Whitespace
'1'         Literal.Number.Integer
')'         Punctuation
','         Operator
' '         Text.Whitespace
'1'         Literal.Number.Integer
')'         Punctuation
'\n         ' Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'if'        Keyword
'\n       '  Text.Whitespace
'else'      Keyword
'\n         ' Text.Whitespace
'p'         Name
'\n
       '  Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'if'        Keyword
'\n     '   Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'proc'      Keyword
');'        Punctuation
'\n   '     Text.Whitespace
'w0'        Name
','         Operator
' '         Text.Whitespace
'pp'        Name
'\n  '      Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'proc'      Keyword
';'         Punctuation
'\n\n  '    Text.Whitespace
'# Find [w1,pp] so that\n' Comment.Single

' '         Text.Whitespace
```

```
'#   wrap(heap,w,mode,kb1,kb0)\n' Comment.Single

' '          Text.Whitespace
'#   = w1*product(eval(pp,var=idx(var,lhs(loop))),loop)\n' Comment.Single

' '          Text.Whitespace
'# making w1 depend on var as little as possible.\n' Comment.Single

' '          Text.Whitespace
'# The flag "mode" should be `+` if "heap" contains an entry of the form\n' Comment.Single

' '          Text.Whitespace
'# t_exp,
 or `*` otherwise.\n' Comment.Single

' '          Text.Whitespace
'unproduct'   Name
' '          Text.Whitespace
':='          Operator
' '          Text.Whitespace
'proc'        Keyword
'('           Punctuation
'w'           Name
','           Operator
' '          Text.Whitespace
'var'         Name
'::'          Operator
'name'        Name
','           Operator
' '          Text.Whitespace
'loop'        Name
'::'          Operator
'('           Punctuation
'name'        Name
'='           Operator
'range'       Name
')'           Punctuation
','           Operator
'\n                  ' Text.Whitespace
'heap'        Name
'::'          Operator
'list'        Name
','           Operator
' '          Text.Whitespace
'mode'        Name
'::'          Operator
'identical'   Name
'('           Punctuation
```

```
'`*`'        Name
','          Operator
'`+`'        Name
')'          Punctuation
','          Operator
'\n                  ' Text.Whitespace
'kb1'        Name
'::'
       Operator
't_kb'       Name
','          Operator
' '          Text.Whitespace
'kb0'        Name
'::'         Operator
't_kb'       Name
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n    '     Text.Whitespace
'local'      Keyword
' '          Text.Whitespace
'ind'        Name
','          Operator
' '          Text.Whitespace
'res'        Name
','          Operator
' '          Text.Whitespace
'dummy'      Name
','          Operator
' '          Text.Whitespace
'kb'         Name
','          Operator
' '          Text.Whitespace
'kbThen'     Name
','          Operator
' '          Text.Whitespace
'i'          Name
','          Operator
' '          Text.Whitespace
'w1'         Name
','          Operator
' '          Text.Whitespace
'pp'         Name
','          Operator
' '          Text.Whitespace
's'          Name
','          Operator
```

' ' Text.Whitespace
'r' Name
','
  Operator
' ' Text.Whitespace
'x' Name
';' Punctuation
'\n ' Text.Whitespace
'if' Keyword
' ' Text.Whitespace
'not' Keyword
' ' Text.Whitespace
'depends' Name
'(' Punctuation
'w' Name
',' Operator
' ' Text.Whitespace
'var' Name
')' Punctuation
' ' Text.Whitespace
'then' Keyword
'\n ' Text.Whitespace
'return' Keyword
' ' Text.Whitespace
'[' Punctuation
'wrap' Name
'(' Punctuation
'heap' Name
',' Operator
' ' Text.Whitespace
'w' Name
',' Operator
' ' Text.Whitespace
'mode' Name
',' Operator
' ' Text.Whitespace
'kb1' Name
',' Operator
' ' Text.Whitespace
'kb0' Name
')' Punctuation
',' Operator
' ' Text.Whitespace
'1' Literal.Number.Integer
']'
  Punctuation
'\n ' Text.Whitespace
'end' Keyword

```
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n    '     Text.Whitespace
"# The `..' (indices) of all occurences of `idx(var,..)'\n" Comment.Single

'    '       Text.Whitespace
'ind'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'map2'       Name
'('          Punctuation
'op'         Name.Builtin
','          Operator
' '          Text.Whitespace
'2'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'indets'     Name.Builtin
'('          Punctuation
'w'          Name
','          Operator
' '          Text.Whitespace
"""          Punctuation
'idx'        Name
'('          Punctuation
'identical'  Name
'('          Punctuation
'var'        Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'anything'   Name
')'
   Punctuation
"""          Punctuation
'));'        Punctuation
'\n    '     Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'nops'       Name.Builtin
'('          Punctuation
'ind'        Name
')'          Punctuation
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
```

```
'1'          Literal.Number.Integer
' '          Text.Whitespace
'then'       Keyword
'\n    '     Text.Whitespace
'ind'        Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'ind'        Name
');'         Punctuation
'\n    '     Text.Whitespace
'# Make sure ind contains no bound variables before lifting it!\n' Comment.Single

'    '       Text.Whitespace
'# So, check that "extract using indets" and "rename using eval" commute.\n' Comment.Single

'    '       Text.Whitespace
's'          Name
' '          Text.Whitespace
':='         Operator
' '
  Text.Whitespace
'indets'     Name.Builtin
'('          Punctuation
'ind'        Name
','          Operator
' '          Text.Whitespace
'"'          Punctuation
'name'       Name
'"'          Punctuation
');'         Punctuation
'\n    '     Text.Whitespace
's'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'map'        Name.Builtin
'('          Punctuation
'proc'       Keyword
'('          Punctuation
'x'          Name
','          Operator
'$'          Operator
')'          Punctuation
' '          Text.Whitespace
'local'      Keyword
```

```
' '          Text.Whitespace
'y'          Name
';'          Punctuation
' '          Text.Whitespace
'`if`'       Name
'('          Punctuation
'depends'    Name
'('          Punctuation
'ind'        Name
','          Operator
'x'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'x'          Name
'='          Operator
'y'
      Name
','          Operator
' '          Text.Whitespace
'NULL'       Name
')'          Punctuation
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
','          Operator
' '          Text.Whitespace
's'          Name
');'         Punctuation
'\n     '    Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'indets'     Name.Builtin
'('          Punctuation
'eval'       Name.Builtin
'('          Punctuation
'w'          Name
','          Operator
' '          Text.Whitespace
's'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'"'          Punctuation
'idx'        Name
'('          Punctuation
'identical'  Name
```

```
'('          Punctuation
'var'        Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'anything'   Name
')'          Punctuation
"""          Punctuation
')'          Punctuation
'\n                '
 Text.Whitespace
'='          Operator
' '          Text.Whitespace
'{'          Punctuation
'idx'        Name
'('          Punctuation
'var'        Name
','          Operator
' '          Text.Whitespace
'eval'       Name.Builtin
'('          Punctuation
'ind'        Name
','          Operator
' '          Text.Whitespace
's'          Name
'))}'        Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n        '  Text.Whitespace
"# use kb as a local context, and 'solve' for the innermost bound var\n" Comment.Single

'        '   Text.Whitespace
'#   used in ind.\n' Comment.Single

'        '   Text.Whitespace
'kb'         Name
'  '         Text.Whitespace
':='         Operator
' '          Text.Whitespace
'assert'     Name
'('          Punctuation
'lhs'        Name.Builtin
'('          Punctuation
'loop'       Name
')'          Punctuation
'='          Operator
'ind'        Name
','          Operator
```

```
' '          Text.Whitespace
'kb1'
     Name
');'         Punctuation
' '          Text.Whitespace
'# BUG! bijectivity assumed!\n' Comment.Single

'       '    Text.Whitespace
"# if the assertion makes the KB false, it isn't needed(?)\n" Comment.Single

'       '    Text.Whitespace
'ASSERT'     Name.Builtin
'('          Punctuation
'type'       Name.Builtin
'('          Punctuation
'kb'         Name
','          Operator
' '          Text.Whitespace
't_kb'       Name
')'          Punctuation
','          Operator
'\n          ' Text.Whitespace
'sprintf'    Name
'('          Punctuation
'"assert(%a,%a) produced a false KB!\\n"' Literal.String
','          Operator
' '          Text.Whitespace
'lhs'        Name.Builtin
'('          Punctuation
'loop'       Name
')'          Punctuation
'='          Operator
'ind'        Name
','          Operator
'kb1'        Name
'))'         Punctuation
':'          Operator
'\n        '  Text.Whitespace
'res'        Name
' '          Text.Whitespace
':='
        Operator
' '          Text.Whitespace
'subs'       Name.Builtin
'('          Punctuation
'idx'        Name
'('          Punctuation
'var'        Name
```

```
','         Operator
'ind'       Name
')'         Punctuation
' '         Text.Whitespace
'='         Operator
' '         Text.Whitespace
'idx'       Name
'('         Punctuation
'var'       Name
','         Operator
'lhs'       Name.Builtin
'('         Punctuation
'loop'      Name
'))'        Punctuation
','         Operator
' '         Text.Whitespace
'w'         Name
');'        Punctuation
'\n       '  Text.Whitespace
'res'       Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'wrap'      Name
'('         Punctuation
'heap'      Name
','         Operator
' '         Text.Whitespace
'res'       Name
','         Operator
' '         Text.Whitespace
'mode'      Name
','         Operator
' '         Text.Whitespace
'kb'
    Name
','         Operator
' '         Text.Whitespace
'kb0'       Name
');'        Punctuation
'\n       '  Text.Whitespace
'res'       Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'subs'      Name.Builtin
'('         Punctuation
'idx'       Name
```

```
'('          Punctuation
'var'        Name
','          Operator
'lhs'        Name.Builtin
'('          Punctuation
'loop'       Name
'))'         Punctuation
'='          Operator
'dummy'      Name
','          Operator
' '          Text.Whitespace
'res'        Name
');'         Punctuation
'\n       '  Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'not'        Keyword
' '          Text.Whitespace
'depends'    Name
'('          Punctuation
'res'        Name
','          Operator
' '          Text.Whitespace
'var'        Name
')'          Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n         ' Text.Whitespace
'return'
     Keyword
' '          Text.Whitespace
'['          Punctuation
'1'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'subs'       Name.Builtin
'('          Punctuation
'dummy'      Name
'='          Operator
'var'        Name
','          Operator
' '          Text.Whitespace
'res'        Name
')]'         Punctuation
'\n       '  Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
```

```
'\n      '    Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
'\n    '      Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n    '      Text.Whitespace
'# distribute the unproduct over each part\n' Comment.Single

'    '        Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'w'           Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
'mode'
      Name
' '           Text.Whitespace
'then'        Keyword
'\n      '    Text.Whitespace
'res'         Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'map'         Name.Builtin
'('           Punctuation
'unproduct'   Name
','           Operator
' '           Text.Whitespace
'`if`'        Name
'('           Punctuation
'mode'        Name
'='           Operator
'`*`'         Name
','           Operator
' '           Text.Whitespace
'list_of_mul' Name
'('           Punctuation
'w'           Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'['           Punctuation
'op'          Name.Builtin
```

```
'('          Punctuation
'w'          Name
')])'        Punctuation
','          Operator
'\n                ' Text.Whitespace
'var'        Name
','          Operator
' '          Text.Whitespace
'loop'       Name
','          Operator
' '          Text.Whitespace
'heap'       Name
','          Operator
' '
       Text.Whitespace
'mode'       Name
','          Operator
' '          Text.Whitespace
'kb1'        Name
','          Operator
' '          Text.Whitespace
'kb0'        Name
');'         Punctuation
'\n     '    Text.Whitespace
'return'     Keyword
' '          Text.Whitespace
'['          Punctuation
'`*`'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'map2'       Name
'('          Punctuation
'op'         Name.Builtin
','          Operator
'1'          Literal.Number.Integer
','          Operator
'res'        Name
')))'        Punctuation
','          Operator
' '          Text.Whitespace
'`*`'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'map2'       Name
'('          Punctuation
'op'         Name.Builtin
```

```
','         Operator
'2'         Literal.Number.Integer
','         Operator
'res'       Name
')))]'      Punctuation
'\n    '    Text.Whitespace
'end'
        Keyword
' '         Text.Whitespace
'if'        Keyword
';'         Punctuation
'\n    '    Text.Whitespace
'# for piecewise, just map right in (using KB for context tracking)\n' Comment.Single

'    '      Text.Whitespace
'if'        Keyword
' '         Text.Whitespace
'w'         Name
' '         Text.Whitespace
'::'        Operator
' '         Text.Whitespace
'"'         Punctuation
'specfunc'  Name
'('         Punctuation
'piecewise' Name.Builtin
')'         Punctuation
'"'         Punctuation
' '         Text.Whitespace
'then'      Keyword
'\n      '  Text.Whitespace
'kb'        Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'kb1'       Name
';'         Punctuation
'\n      '  Text.Whitespace
'for'       Keyword
' '         Text.Whitespace
'i'         Name
' '         Text.Whitespace
'from'      Keyword
' '         Text.Whitespace
'1'         Literal.Number.Integer
'
 '          Text.Whitespace
'to'        Keyword
' '         Text.Whitespace
```

```
'nops'        Name.Builtin
'('           Punctuation
'w'           Name
')'           Punctuation
' '           Text.Whitespace
'do'          Keyword
'\n        '  Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'i'           Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
'even'        Name
' '           Text.Whitespace
'then'        Keyword
'\n          ' Text.Whitespace
'kbThen'      Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'assert'      Name
'('           Punctuation
'    '        Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
'i'           Name
'-'           Operator
'1'           Literal.Number.Integer
','           Operator
'w'           Name
')'           Punctuation
' '           Text.Whitespace
','           Operator
' '           Text.Whitespace
'kb'          Name
');'
          Punctuation
'\n          ' Text.Whitespace
'# accumulate the rest, regardless\n' Comment.Single

'          '  Text.Whitespace
'kb'          Name
'    '        Text.Whitespace
':='          Operator
' '           Text.Whitespace
'assert'      Name
'('           Punctuation
```

```
'Not'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'i'          Name
'-'          Operator
'1'          Literal.Number.Integer
','          Operator
'w'          Name
'))'         Punctuation
','          Operator
' '          Text.Whitespace
'kb'         Name
');'         Punctuation
'\n\n        ' Text.Whitespace
'# if kbThen is invalid, deal appropriately\n' Comment.Single

'        '  Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'not'        Keyword
' '          Text.Whitespace
'type'       Name.Builtin
'('          Punctuation
'kbThen'     Name
','          Operator
't_kb'       Name
')'          Punctuation
' '
          Text.Whitespace
'then'       Keyword
' '          Text.Whitespace
'next'       Keyword
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n\n        ' Text.Whitespace
'w1'         Name
'['          Punctuation
'i'          Name
']'          Punctuation
','          Operator
' '          Text.Whitespace
'pp'         Name
'['          Punctuation
'i'          Name
```

```
']'          Punctuation
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'unproduct'   Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'i'          Name
','          Operator
'w'          Name
')'          Punctuation
','          Operator
'var'        Name
','          Operator
'loop'       Name
','          Operator
'heap'       Name
','          Operator
'mode'       Name
','          Operator
'kbThen'
     Name
','          Operator
'kb0'        Name
'));'        Punctuation
'\n          ' Text.Whitespace
"# if kb is inconsistent, we're done\n" Comment.Single

'          '  Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'not'        Keyword
' '          Text.Whitespace
'type'       Name.Builtin
'('          Punctuation
'kb'         Name
','          Operator
't_kb'       Name
')'          Punctuation
' '          Text.Whitespace
'then'       Keyword
' '          Text.Whitespace
'break'      Keyword
' '          Text.Whitespace
'end'        Keyword
```

```
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n        '  Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'i'          Name
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'nops'       Name.Builtin
'('          Punctuation
'w'          Name
')'          Punctuation
' '          Text.Whitespace
'then'
       Keyword
'\n         ' Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'not'        Keyword
' '          Text.Whitespace
'type'       Name.Builtin
'('          Punctuation
'kb'         Name
','          Operator
't_kb'       Name
')'          Punctuation
' '          Text.Whitespace
'then'       Keyword
' '          Text.Whitespace
'next'       Keyword
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n         ' Text.Whitespace
'w1'         Name
'['          Punctuation
'i'          Name
']'          Punctuation
','          Operator
' '          Text.Whitespace
'pp'         Name
'['          Punctuation
'i'          Name
']'          Punctuation
```

```
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'unproduct'  Name
'('          Punctuation
'op'         Name.Builtin
'('
          Punctuation
'i'          Name
','          Operator
'w'          Name
')'          Punctuation
','          Operator
'var'        Name
','          Operator
'loop'       Name
','          Operator
'heap'       Name
','          Operator
'mode'       Name
','          Operator
'kb'         Name
'    '       Text.Whitespace
','          Operator
'kb0'        Name
'))'         Punctuation
'\n       '  Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
'\n     '    Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'do'         Keyword
';'          Punctuation
'\n     '    Text.Whitespace
'return'     Keyword
' '          Text.Whitespace
'['          Punctuation
'`*`'        Name
'('          Punctuation
'entries'    Name.Builtin
'('          Punctuation
'w1'         Name
','          Operator
'"'          Punctuation
```

```
'nolist'      Name
"""           Punctuation
'))'          Punctuation
','
            Operator
' '           Text.Whitespace
'`*`'         Name
'('           Punctuation
'entries'     Name.Builtin
'('           Punctuation
'pp'          Name
','           Operator
"""           Punctuation
'nolist'      Name
"""           Punctuation
'))]'         Punctuation
'\n    '      Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n    '      Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'mode'        Name
' '           Text.Whitespace
'='           Operator
' '           Text.Whitespace
'`*`'         Name
' '           Text.Whitespace
'then'        Keyword
'\n      '    Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'w'           Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
'('           Punctuation
'anything'    Name
'^'           Operator
'freeof'      Name
'('           Punctuation
'var'         Name
'))'
            Punctuation
' '           Text.Whitespace
'then'        Keyword
```

```
'\n        '  Text.Whitespace
'return'      Keyword
' '           Text.Whitespace
'unproduct'   Name
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'1'           Literal.Number.Integer
','           Operator
'w'           Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'var'         Name
','           Operator
' '           Text.Whitespace
'loop'        Name
','           Operator
'\n                       ' Text.Whitespace
'['           Punctuation
'op'          Name.Builtin
'('           Punctuation
'heap'        Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'Stmt'        Name
'('           Punctuation
'`^`'         Name
','           Operator
' '           Text.Whitespace
'[]'          Punctuation
','           Operator
' '           Text.Whitespace
'['           Punctuation
'op'          Name.Builtin
'('
          Punctuation
'2'           Literal.Number.Integer
','           Operator
'w'           Name
')])]'        Punctuation
','           Operator
' '           Text.Whitespace
'`*`'         Name
','           Operator
' '           Text.Whitespace
'kb1'         Name
```

```
','          Operator
' '          Text.Whitespace
'kb0'        Name
')'          Punctuation
'\n     '    Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'w'          Name
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
'exp'        Name
'('          Punctuation
'anything'   Name
')'          Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n       '  Text.Whitespace
'return'     Keyword
' '          Text.Whitespace
'unproduct'  Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'w'          Name
')'          Punctuation
','          Operator
'
 '           Text.Whitespace
'var'        Name
','          Operator
' '          Text.Whitespace
'loop'       Name
','          Operator
'\n                    ' Text.Whitespace
'['          Punctuation
'op'         Name.Builtin
'('          Punctuation
'heap'       Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'Stmt'       Name
'('          Punctuation
'exp'        Name
','          Operator
```

```
' '          Text.Whitespace
'[]'         Punctuation
','          Operator
' '          Text.Whitespace
'[])]'       Punctuation
','          Operator
' '          Text.Whitespace
'`+`'        Name
','          Operator
' '          Text.Whitespace
'kb1'        Name
','          Operator
' '          Text.Whitespace
'kb0'        Name
')'          Punctuation
'\n     '    Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'w'          Name
' '          Text.Whitespace
'::'         Operator
' '
     Text.Whitespace
'('          Punctuation
'freeof'     Name
'('          Punctuation
'var'        Name
')^'         Punctuation
'anything'   Name
')'          Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n       '  Text.Whitespace
'return'     Keyword
' '          Text.Whitespace
'unproduct'  Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'w'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'var'        Name
','          Operator
' '          Text.Whitespace
```

```
'loop'        Name
','           Operator
'\n                    ' Text.Whitespace
'['           Punctuation
'op'          Name.Builtin
'('           Punctuation
'heap'        Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'Stmt'        Name
'('           Punctuation
'`^`'         Name
','           Operator
' '
          Text.Whitespace
'['           Punctuation
'op'          Name.Builtin
'('           Punctuation
'1'           Literal.Number.Integer
','           Operator
'w'           Name
')]'          Punctuation
','           Operator
' '           Text.Whitespace
'[])]'        Punctuation
','           Operator
' '           Text.Whitespace
'`+`'         Name
','           Operator
' '           Text.Whitespace
'kb1'         Name
','           Operator
' '           Text.Whitespace
'kb0'         Name
')'           Punctuation
'\n     '     Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
'\n    '      Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n    '      Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
```

'mode' Name
' ' Text.Whitespace
'=' Operator
' ' Text.Whitespace
'`+`' Name
' ' Text.Whitespace
'and'
Keyword
' ' Text.Whitespace
'w' Name
' ' Text.Whitespace
'::' Operator
' ' Text.Whitespace
'`*`' Name
' ' Text.Whitespace
'then' Keyword
'\n ' Text.Whitespace
's' Name
',' Operator
' ' Text.Whitespace
'r' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'selectremove' Name.Builtin
'(' Punctuation
'depends' Name
',' Operator
' ' Text.Whitespace
'w' Name
',' Operator
' ' Text.Whitespace
'var' Name
');' Punctuation
'\n ' Text.Whitespace
'if' Keyword
' ' Text.Whitespace
's' Name
' ' Text.Whitespace
'::' Operator
' ' Text.Whitespace
'`*`' Name
' ' Text.Whitespace
'then' Keyword
'\n ' Text.Whitespace
'# Nonlinear %1 (time to reread kiselyov-lifted?)\n'
Comment.Single

```
'      '      Text.Whitespace
'else'        Keyword
'\n        '  Text.Whitespace
'return'      Keyword
' '           Text.Whitespace
'unproduct'   Name
'('           Punctuation
's'           Name
','           Operator
' '           Text.Whitespace
'var'         Name
','           Operator
' '           Text.Whitespace
'loop'        Name
','           Operator
'\n                      ' Text.Whitespace
'['           Punctuation
'op'          Name.Builtin
'('           Punctuation
'heap'        Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'Stmt'        Name
'('           Punctuation
'`*`'         Name
','           Operator
' '           Text.Whitespace
'[]'          Punctuation
','           Operator
' '           Text.Whitespace
'['           Punctuation
'r'           Name
'])]'         Punctuation
','           Operator
' '           Text.Whitespace
'`+`'         Name
','           Operator
' '           Text.Whitespace
'kb1'
         Name
','           Operator
' '           Text.Whitespace
'kb0'         Name
')'           Punctuation
'\n      '    Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
```

```
'if'          Keyword
'\n    '      Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n    '      Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'w'           Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
'And'         Name
'('           Punctuation
'specfunc'    Name
'('           Punctuation
'`if`'        Name
'('           Punctuation
'mode'        Name
' '           Text.Whitespace
'='           Operator
' '           Text.Whitespace
'`*`'         Name
','           Operator
' '           Text.Whitespace
'{'           Punctuation
'product'     Name
','           Operator
' '           Text.Whitespace
'Product'     Name
'}'           Punctuation
','
    Operator
' '           Text.Whitespace
'{'           Punctuation
'sum'         Name
','           Operator
' '           Text.Whitespace
'Sum'         Name
'}))'         Punctuation
','           Operator
'\n                ' Text.Whitespace
'anyfunc'     Name
'('           Punctuation
'anything'    Name
','           Operator
' '           Text.Whitespace
```

```
'name'        Name
'='           Operator
'range'       Name
'('           Punctuation
'freeof'      Name
'('           Punctuation
'var'         Name
'))))'        Punctuation
' '           Text.Whitespace
'then'        Keyword
'\n      '    Text.Whitespace
'x'           Name
','           Operator
' '           Text.Whitespace
'kb'          Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'genType'     Name
'('           Punctuation
'op'          Name.Builtin
'(['          Punctuation
'2'           Literal.Number.Integer
','           Operator
'1'           Literal.Number.Integer
']'
      Punctuation
','           Operator
'w'           Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'HInt'        Name
'('           Punctuation
'closed_bounds' Name
'('           Punctuation
'op'          Name.Builtin
'(['          Punctuation
'2'           Literal.Number.Integer
','           Operator
'2'           Literal.Number.Integer
']'           Punctuation
','           Operator
'w'           Name
')))'         Punctuation
','           Operator
' '           Text.Whitespace
'kb1'         Name
```

```
','         Operator
'\n                 ' Text.Whitespace
'w'         Name
','         Operator
' '         Text.Whitespace
'var'       Name
','         Operator
' '         Text.Whitespace
'loop'      Name
','         Operator
' '         Text.Whitespace
'heap'      Name
');'        Punctuation
'\n     '   Text.Whitespace
'return'    Keyword
' '         Text.Whitespace
'unproduct' Name
'('         Punctuation
'eval'
      Name.Builtin
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
'1'         Literal.Number.Integer
','         Operator
'w'         Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'op'        Name.Builtin
'(['        Punctuation
'2'         Literal.Number.Integer
','         Operator
'1'         Literal.Number.Integer
']'         Punctuation
','         Operator
'w'         Name
')'         Punctuation
'='         Operator
'x'         Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'var'       Name
','         Operator
' '         Text.Whitespace
'loop'      Name
','         Operator
```

```
'\n                    ' Text.Whitespace
'['          Punctuation
'op'         Name.Builtin
'('          Punctuation
'heap'       Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'Binder'     Name
'('          Punctuation
'op'
         Name.Builtin
'('          Punctuation
'0'          Literal.Number.Integer
','          Operator
'w'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'kb1'        Name
')]'         Punctuation
','          Operator
' '          Text.Whitespace
'mode'       Name
','          Operator
' '          Text.Whitespace
'kb'         Name
','          Operator
' '          Text.Whitespace
'kb0'        Name
')'          Punctuation
'\n    '     Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n    '     Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'mode'       Name
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'`*`'        Name
' '          Text.Whitespace
'and'        Keyword
' '          Text.Whitespace
'w'          Name
```

' ' Text.Whitespace
'::' Operator
' '
Text.Whitespace
""" Punctuation
'{' Punctuation
'`+`' Name
',' Operator
' ' Text.Whitespace
'specfunc' Name
'({' Punctuation
'sum' Name
',' Operator
' ' Text.Whitespace
'Sum' Name
'})}' Punctuation
""" Punctuation
' ' Text.Whitespace
'then' Keyword
'\n ' Text.Whitespace
'# Maybe this w is one of those big sums involving products that are\n' Comment.Single

' ' Text.Whitespace
'# always equal to 1, left behind by the density of Categorical\n' Comment.Single

' ' Text.Whitespace
'w1' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'graft' Name
'(' Punctuation
'split' Name
'(' Punctuation
'peel' Name
'(' Punctuation
'w' Name
')));' Punctuation
'\n ' Text.Whitespace
'w1' Name
' ' Text.Whitespace
':='
Operator
' ' Text.Whitespace
'combine' Name
'(' Punctuation
'rebase_upper' Name
'(' Punctuation

```
'w1'          Name
'));'         Punctuation
'\n     '     Text.Whitespace
'w1'          Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'combine'     Name
'('           Punctuation
'rebase_lower' Name
'('           Punctuation
'w1'          Name
'));'         Punctuation
'\n     '     Text.Whitespace
'return'      Keyword
' '           Text.Whitespace
'['           Punctuation
'wrap'        Name
'('           Punctuation
'heap'        Name
','           Operator
' '           Text.Whitespace
'w1'          Name
','           Operator
' '           Text.Whitespace
'mode'        Name
','           Operator
' '           Text.Whitespace
'kb1'         Name
','           Operator
' '           Text.Whitespace
'kb0'         Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'1'
          Literal.Number.Integer
']'           Punctuation
'\n    '      Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n    '      Text.Whitespace
'return'      Keyword
' '           Text.Whitespace
'['           Punctuation
'wrap'        Name
```

```
'('          Punctuation
'heap'       Name
','          Operator
' '          Text.Whitespace
'w'          Name
','          Operator
' '          Text.Whitespace
'mode'       Name
','          Operator
' '          Text.Whitespace
'kb1'        Name
','          Operator
' '          Text.Whitespace
'kb0'        Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
']'          Punctuation
'\n  '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n\n  '     Text.Whitespace
'enter_piecewise' Name
' '          Text.Whitespace
':='
         Operator
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
'ee'         Name
','          Operator
' '          Text.Whitespace
'kb0'        Name
'::'         Operator
't_kb'       Name
','          Operator
' '          Text.Whitespace
'mode'       Name
'::'         Operator
'identical'  Name
'('          Punctuation
'`*`'        Name
','          Operator
'`+`'        Name
')'          Punctuation
```

```
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n    '     Text.Whitespace
'local'      Keyword
' '          Text.Whitespace
'e'          Name
','          Operator
' '          Text.Whitespace
'kb'         Name
','          Operator
' '          Text.Whitespace
'mo'         Name
';'          Punctuation
'\n    '     Text.Whitespace
'e'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'ee'         Name
';'
          Punctuation
'\n    '     Text.Whitespace
'kb'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'kb0'        Name
';'          Punctuation
'\n    '     Text.Whitespace
'mo'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'mode'       Name
'();'        Punctuation
'\n    '     Text.Whitespace
'while'      Keyword
' '          Text.Whitespace
'e'          Name
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
'"'          Punctuation
'specfunc'   Name
'('          Punctuation
'piecewise'  Name.Builtin
```

```
')'          Punctuation
"""          Punctuation
' '          Text.Whitespace
'and'        Keyword
' '          Text.Whitespace
'nops'       Name.Builtin
'('          Punctuation
'e'          Name
')'          Punctuation
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'3'          Literal.Number.Integer
'
 '           Text.Whitespace
'do'         Keyword
'\n     '    Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'3'          Literal.Number.Integer
','          Operator
'e'          Name
')'          Punctuation
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'mo'         Name
' '          Text.Whitespace
'then'       Keyword
'\n        '  Text.Whitespace
'kb'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'assert'     Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'e'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'kb'         Name
');'         Punctuation
```

```
'\n        '  Text.Whitespace
'e'          Name
' '          Text.Whitespace
':='         Operator
' '
          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'e'          Name
');'         Punctuation
'\n      '    Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'e'          Name
')'          Punctuation
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'mo'         Name
' '          Text.Whitespace
'then'       Keyword
'\n        '  Text.Whitespace
'kb'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'assert'     Name
'('          Punctuation
'Not'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'e'          Name
'))'         Punctuation
','          Operator
' '          Text.Whitespace
'kb'
          Name
');'         Punctuation
'\n        '  Text.Whitespace
```

```
'e'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'3'          Literal.Number.Integer
','          Operator
'e'          Name
');'         Punctuation
'\n     '    Text.Whitespace
'else'       Keyword
'\n       '  Text.Whitespace
'break'      Keyword
';'          Punctuation
'\n     '    Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n    '     Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'do'         Keyword
';'          Punctuation
'\n    '     Text.Whitespace
'ASSERT'     Name.Builtin
'('          Punctuation
'type'       Name.Builtin
'('          Punctuation
'kb'         Name
','          Operator
't_kb'       Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'"enter_piecewise:
 KB of piecewise conditions is not valid, so the input piecewise must not be valid.'" Literal.String
');'         Punctuation
'\n    '     Text.Whitespace
'e'          Name
','          Operator
' '          Text.Whitespace
'kb'         Name
'\n  '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
```

```
';'         Punctuation
'\n\n  '      Text.Whitespace
'# heap is a list of t_binder and t_stmt\n' Comment.Single

'  '         Text.Whitespace
'# one invariant to maintain:\n' Comment.Single

'  '         Text.Whitespace
'#  wrap(heap, mode(a,b)) = wrap(heap,a) * wrap(heap,b)\n' Comment.Single

'\n  '        Text.Whitespace
'# Also, a t_binder is a Product/product/Sum/sum.\n' Comment.Single

'  '         Text.Whitespace
'# And, a t_stmt is a 1-hole context of a (multiplicative) AST,\n' Comment.Single

'  '         Text.Whitespace
'#   used for [a ^ hole, hole ^ b, exp(hole), c * hole].\n' Comment.Single

'\n
  '       Text.Whitespace
'wrap'        Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'proc'        Keyword
'('           Punctuation
'heap'        Name
'::'          Operator
'list'        Name
','           Operator
' '           Text.Whitespace
'e1'          Name
','           Operator
' '           Text.Whitespace
'mode1'       Name
'::'          Operator
'identical'   Name
'('           Punctuation
'`*`'         Name
','           Operator
'`+`'         Name
')'           Punctuation
','           Operator
'\n              ' Text.Whitespace
'kb1'         Name
'::'          Operator
't_kb'        Name
```

```
','          Operator
' '          Text.Whitespace
'kb0'        Name
'::'         Operator
't_kb'       Name
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n    '     Text.Whitespace
'local'      Keyword
' '          Text.Whitespace
'e'          Name
','          Operator
'
 '           Text.Whitespace
'kb'         Name
','          Operator
' '          Text.Whitespace
'mode'       Name
','          Operator
' '          Text.Whitespace
'i'          Name
','          Operator
' '          Text.Whitespace
'entry'      Name
','          Operator
' '          Text.Whitespace
'rest'       Name
','          Operator
' '          Text.Whitespace
'var'        Name
','          Operator
' '          Text.Whitespace
'new_rng'    Name
','          Operator
' '          Text.Whitespace
'make'       Name
','          Operator
' '          Text.Whitespace
'logmake'    Name
','          Operator
'\n      '   Text.Whitespace
'dom_spec'   Name
','          Operator
' '          Text.Whitespace
'w'          Name
','          Operator
```

```
' '          Text.Whitespace
'wPow'       Name
','          Operator
' '          Text.Whitespace
'wExp'       Name
','          Operator
' '          Text.Whitespace
'arrrgs'     Name
';'          Punctuation
'\n
    '      Text.Whitespace
'e'          Name
'    '       Text.Whitespace
':='         Operator
' '          Text.Whitespace
'e1'         Name
';'          Punctuation
'\n    '     Text.Whitespace
'kb'         Name
'   '        Text.Whitespace
':='         Operator
' '          Text.Whitespace
'kb1'        Name
';'          Punctuation
'\n    '     Text.Whitespace
'mode'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'mode1'      Name
';'          Punctuation
'\n    '     Text.Whitespace
'for'        Keyword
' '          Text.Whitespace
'i'          Name
' '          Text.Whitespace
'from'       Keyword
' '          Text.Whitespace
'nops'       Name.Builtin
'('          Punctuation
'heap'       Name
')'          Punctuation
' '          Text.Whitespace
'to'         Keyword
' '          Text.Whitespace
'1'          Literal.Number.Integer
' '          Text.Whitespace
'by'         Keyword
```

```
' '
        Text.Whitespace
'-'          Operator
'1'          Literal.Number.Integer
' '          Text.Whitespace
'do'         Keyword
'\n      '   Text.Whitespace
'entry'      Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'i'          Name
','          Operator
'heap'       Name
');'         Punctuation
'\n      '   Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'entry'      Name
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
't_binder'   Name
' '          Text.Whitespace
'then'       Keyword
'\n        ' Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'not'        Keyword
' '          Text.Whitespace
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'entry'      Name
')'          Punctuation
' '          Text.Whitespace
'in'
          Keyword
' '          Text.Whitespace
'`if`'       Name
'('          Punctuation
'mode'       Name
'='          Operator
'`+`'        Name
```

```
','          Operator
' '          Text.Whitespace
'{'          Punctuation
'sum'        Name
','          Operator
'Sum'        Name
'}'          Punctuation
','          Operator
'\n                                    ' Text.Whitespace
'{'          Punctuation
'product'    Name
','          Operator
'Product'    Name
'}))'        Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n          ' Text.Whitespace
'print'      Name.Builtin
'('          Punctuation
'"Warning: heap mode inconsistency"' Literal.String
','          Operator
' '          Text.Whitespace
'heap'       Name
','          Operator
' '          Text.Whitespace
'mode1'      Name
')'          Punctuation
'\n        '  Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'
          Punctuation
'\n        '  Text.Whitespace
'e'          Name
','          Operator
' '          Text.Whitespace
'kb'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'enter_piecewise' Name
'('          Punctuation
'e'          Name
','          Operator
' '          Text.Whitespace
'kb'         Name
','          Operator
```

```
' '          Text.Whitespace
'mode'       Name
');'         Punctuation
'\n        '  Text.Whitespace
'rest'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'kb_subtract' Name
'('          Punctuation
'kb'         Name
','          Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'entry'      Name
'));'        Punctuation
'\n        '  Text.Whitespace
'new_rng'    Name
','          Operator
' '          Text.Whitespace
'rest'       Name
' '
          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'selectremove' Name.Builtin
'('          Punctuation
'type'       Name.Builtin
','          Operator
' '          Text.Whitespace
'rest'       Name
','          Operator
'\n         ' Text.Whitespace
'{['         Punctuation
'identical'  Name
'('          Punctuation
'genType'    Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'name'       Name
','          Operator
' '          Text.Whitespace
'specfunc'   Name
'('          Punctuation
```

```
'HInt'        Name
')]'          Punctuation
','           Operator
'\n           ' Text.Whitespace
'['           Punctuation
'identical'   Name
'('           Punctuation
'genLet'      Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'name'        Name
','           Operator
' '           Text.Whitespace
'anything'    Name
']});'        Punctuation
'\n        '  Text.Whitespace
'if'
  Keyword
' '           Text.Whitespace
'not'         Keyword
' '           Text.Whitespace
'('           Punctuation
'new_rng'     Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
'['           Punctuation
'list'        Name
'])'          Punctuation
' '           Text.Whitespace
'then'        Keyword
'\n           ' Text.Whitespace
'error'       Keyword
' '           Text.Whitespace
'"kb_subtract should return exactly one gen*"' Literal.String
'\n        '  Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n        '  Text.Whitespace
'new_rng'     Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
```

```
'new_rng'     Name
');'          Punctuation
'\n        '  Text.Whitespace
'var'         Name
'     '       Text.Whitespace
':='          Operator
' '           Text.Whitespace
'op'          Name.Builtin
'('
           Punctuation
'2'           Literal.Number.Integer
','           Operator
'new_rng'     Name
');'          Punctuation
'\n        '  Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
'1'           Literal.Number.Integer
','           Operator
'new_rng'     Name
')'           Punctuation
' '           Text.Whitespace
'='           Operator
' '           Text.Whitespace
'genType'     Name
' '           Text.Whitespace
'then'        Keyword
'\n          ' Text.Whitespace
'make'        Name
'    '        Text.Whitespace
':='          Operator
' '           Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
'1'           Literal.Number.Integer
','           Operator
'entry'       Name
');'          Punctuation
'\n          ' Text.Whitespace
'new_rng'     Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'range_of_HInt' Name
'('           Punctuation
'op'
```

```
        Name.Builtin
'('         Punctuation
'3'         Literal.Number.Integer
','         Operator
'new_rng'   Name
'));'       Punctuation
'\n       '  Text.Whitespace
'else'      Keyword
' '         Text.Whitespace
'# op(1,new_rng) = genLet\n' Comment.Single

'         '  Text.Whitespace
'make'      Name
'   '       Text.Whitespace
':='        Operator
' '         Text.Whitespace
'eval'      Name.Builtin
';'         Punctuation
'\n         ' Text.Whitespace
'new_rng'   Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'op'        Name.Builtin
'('         Punctuation
'3'         Literal.Number.Integer
','         Operator
'new_rng'   Name
');'        Punctuation
'\n       '  Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'if'        Keyword
';'         Punctuation
'\n       '  Text.Whitespace
'dom_spec'  Name
','         Operator
' '         Text.Whitespace
'rest'
      Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'selectremove' Name.Builtin
'('         Punctuation
'depends'   Name
','         Operator
'\n         ' Text.Whitespace
```

'map' Name.Builtin
'(' Punctuation
'proc' Keyword
'(' Punctuation
'a' Name
'::' Operator
'[' Punctuation
'identical' Name
'(' Punctuation
'assert' Name
')' Punctuation
',' Operator
'anything' Name
']' Punctuation
',' Operator
'$' Operator
')' Punctuation
' ' Text.Whitespace
'op' Name.Builtin
'(' Punctuation
'2' Literal.Number.Integer
',' Operator
'a' Name
')' Punctuation
' ' Text.Whitespace
'end' Keyword
' ' Text.Whitespace
'proc' Keyword
',' Operator
' ' Text.Whitespace
'rest' Name
')'
Punctuation
',' Operator
'\n ' Text.Whitespace
'var' Name
');' Punctuation
'\n\n ' Text.Whitespace
'# Like e := make(piecewise(And(op(dom_spec)), e, mode()), var=new_rng);\n' Comment.Single

' ' Text.Whitespace
'# but try to simplify by pushing the make and the piecewise into e\n' Comment.Single

' ' Text.Whitespace
'(' Punctuation
'e' Name
',' Operator
' ' Text.Whitespace

```
'w'          Name
')'          Punctuation
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'selectremove' Name.Builtin
'('          Punctuation
'depends'    Name
','          Operator
' '          Text.Whitespace
'convert'    Name.Builtin
'('          Punctuation
'e'          Name
','          Operator
' '          Text.Whitespace
'"'          Punctuation
'list'       Name
'"'          Punctuation
','          Operator
' '          Text.Whitespace
'`*`'        Name
')'
          Punctuation
','          Operator
' '          Text.Whitespace
'var'        Name
');'         Punctuation
'\n       '  Text.Whitespace
'w'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'`*`'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'w'          Name
'));'        Punctuation
'\n       '  Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'mode'       Name
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'`*`'        Name
' '          Text.Whitespace
'then'       Keyword
```

```
'\n          ' Text.Whitespace
'('          Punctuation
'wPow'       Name
','          Operator
' '          Text.Whitespace
'e'          Name
')'          Punctuation
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'selectremove' Name.Builtin
'('          Punctuation
'type'       Name.Builtin
','
        Operator
' '          Text.Whitespace
'e'          Name
','          Operator
' '          Text.Whitespace
"""          Punctuation
'`^`'        Name
"""          Punctuation
'('          Punctuation
"""          Punctuation
'freeof'     Name
"""          Punctuation
'('          Punctuation
'var'        Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
"""          Punctuation
'anything'   Name
"""          Punctuation
'));'        Punctuation
'\n          ' Text.Whitespace
'('          Punctuation
'wExp'       Name
','          Operator
' '          Text.Whitespace
'e'          Name
')'          Punctuation
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'selectremove' Name.Builtin
'('          Punctuation
'type'       Name.Builtin
```

```
','         Operator
' '         Text.Whitespace
'e'         Name
','         Operator
' '         Text.Whitespace
'"'         Punctuation
'exp'
        Name
'('         Punctuation
'anything'    Name
')'         Punctuation
'"'         Punctuation
');'        Punctuation
'\n         ' Text.Whitespace
'wExp'      Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'`+`'       Name
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
'map2'      Name
'('         Punctuation
'op'        Name.Builtin
','         Operator
' '         Text.Whitespace
'1'         Literal.Number.Integer
','         Operator
' '         Text.Whitespace
'wExp'      Name
')));'      Punctuation
'\n         ' Text.Whitespace
'wExp'      Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'expand'    Name.Builtin
'('         Punctuation
'wExp'      Name
','         Operator
' '         Text.Whitespace
'op'        Name.Builtin
'('         Punctuation
'indets'    Name.Builtin
'('         Punctuation
'wExp'
```

```
        Name
','         Operator
' '         Text.Whitespace
'function'    Name
')));'       Punctuation
'\n         ' Text.Whitespace
'logmake'     Name
' '         Text.Whitespace
':='         Operator
' '         Text.Whitespace
'proc'       Keyword
'('         Punctuation
't'         Name
')'         Punctuation
'\n           ' Text.Whitespace
'local'      Keyword
' '         Text.Whitespace
's'          Name
','         Operator
' '         Text.Whitespace
'r'          Name
';'         Punctuation
'\n           ' Text.Whitespace
's'          Name
','         Operator
' '         Text.Whitespace
'r'          Name
' '         Text.Whitespace
':='         Operator
' '         Text.Whitespace
'selectremove' Name.Builtin
'('         Punctuation
'depends'     Name
','         Operator
' '         Text.Whitespace
'convert'     Name.Builtin
'('         Punctuation
't'         Name
','         Operator
' '         Text.Whitespace
'"'
          Punctuation
'list'       Name
'"'          Punctuation
','         Operator
' '         Text.Whitespace
'`*`'        Name
')'         Punctuation
```

```
','         Operator
' '         Text.Whitespace
'var'       Name
');'        Punctuation
'\n         ' Text.Whitespace
'`*`'       Name
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
'r'         Name
')'         Punctuation
','         Operator
'\n             ' Text.Whitespace
'`if`'      Name
'('         Punctuation
'make'      Name
'='         Operator
'eval'      Name.Builtin
','         Operator
'eval'      Name.Builtin
','         Operator
'Sum'       Name
')'         Punctuation
'\n                 ' Text.Whitespace
'('         Punctuation
'piecewise_And' Name
'('         Punctuation
'dom_spec'    Name
','         Operator
' '         Text.Whitespace
'`*`'       Name
'('         Punctuation
'op'        Name.Builtin
'('
    Punctuation
's'         Name
'))'        Punctuation
','         Operator
' '         Text.Whitespace
'0'         Literal.Number.Integer
')'         Punctuation
','         Operator
' '         Text.Whitespace
'var'       Name
'='         Operator
'new_rng'     Name
'));'       Punctuation
'\n         ' Text.Whitespace
```

```
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n          ' Text.Whitespace
'w'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'`*`'        Name
'('          Punctuation
' '          Text.Whitespace
'`if`'       Name
'('          Punctuation
'w'          Name
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'w'          Name
'
 '          Text.Whitespace
'^'          Operator
' '          Text.Whitespace
'logmake'    Name
'('          Punctuation
'1'          Literal.Number.Integer
'))'         Punctuation
'\n                ' Text.Whitespace
','          Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'map'        Name.Builtin
'((('        Punctuation
'f'          Name
' '          Text.Whitespace
'->'         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
```

```
'f'          Name
')'          Punctuation
' '          Text.Whitespace
'^'          Operator
' '          Text.Whitespace
'logmake'    Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
','          Operator
'f'          Name
')))'        Punctuation
','          Operator
' '          Text.Whitespace
'wPow'
    Name
'))'         Punctuation
'\n                ' Text.Whitespace
','          Operator
' '          Text.Whitespace
'`if`'       Name
'('          Punctuation
'wExp'       Name
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'0'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'exp'        Name
'('          Punctuation
'maptype'    Name
'('          Punctuation
'`+`'        Name
','          Operator
'logmake'    Name
','          Operator
'wExp'       Name
')))'        Punctuation
' '          Text.Whitespace
');'         Punctuation
'\n       '  Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
```

```
'if'          Keyword
';'           Punctuation
'\n        '  Text.Whitespace
'e'           Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'w'
      Name
' '           Text.Whitespace
'*'           Operator
' '           Text.Whitespace
'make'        Name
'('           Punctuation
'piecewise_And' Name
'('           Punctuation
'dom_spec'    Name
','           Operator
' '           Text.Whitespace
'`*`'         Name
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'e'           Name
'))'          Punctuation
','           Operator
' '           Text.Whitespace
'mode'        Name
'())'         Punctuation
','           Operator
' '           Text.Whitespace
'var'         Name
'='           Operator
'new_rng'     Name
');'          Punctuation
'\n\n        ' Text.Whitespace
"# `rest' originally comes from `entry', and this reinserts it after some\n" Comment.Single

'        '    Text.Whitespace
'# processing. The original KB was valid, so this one should also be valid.\n' Comment.Single

'        '    Text.Whitespace
'kb'          Name
' '           Text.Whitespace
':='          Operator
' '
    Text.Whitespace
'foldr'       Name
```

'(' Punctuation
'assert' Name
',' Operator
' ' Text.Whitespace
'op' Name.Builtin
'(' Punctuation
'2' Literal.Number.Integer
',' Operator
'entry' Name
')' Punctuation
',' Operator
' ' Text.Whitespace
'op' Name.Builtin
'(' Punctuation
'rest' Name
'));' Punctuation
'\n ' Text.Whitespace
'ASSERT' Name.Builtin
'(' Punctuation
'type' Name.Builtin
'(' Punctuation
'kb' Name
',' Operator
't_kb' Name
')' Punctuation
',' Operator
' ' Text.Whitespace
'"Loop/wrap{t_binder}: rebuilding kb produced contradiction"' Literal.String
');' Punctuation
'\n\n ' Text.Whitespace
'elif' Keyword
' ' Text.Whitespace
'entry' Name
' ' Text.Whitespace
'::' Operator
' ' Text.Whitespace
't_stmt'
  Name
' ' Text.Whitespace
'then' Keyword
'\n ' Text.Whitespace
'# We evaluate arrrgs first, in case op(1,stmt) is an operation (such as\n' Comment.Single

' ' Text.Whitespace
'# piecewise) that looks ahead at how many arguments it is passed before\n' Comment.Single

' ' Text.Whitespace
'# they are evaluated.\n' Comment.Single

```
'        '    Text.Whitespace
'arrrgs'      Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'2'           Literal.Number.Integer
','           Operator
'entry'       Name
'))'          Punctuation
','           Operator
' '           Text.Whitespace
'e'           Name
','           Operator
' '           Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'3'           Literal.Number.Integer
','
           Operator
'entry'       Name
'));'         Punctuation
'\n        '  Text.Whitespace
'e'           Name
'      '      Text.Whitespace
':='          Operator
' '           Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
'1'           Literal.Number.Integer
','           Operator
'entry'       Name
')('          Punctuation
'arrrgs'      Name
');'          Punctuation
'\n        '  Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'entry'       Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
```

```
't_exp'       Name
' '           Text.Whitespace
'then'        Keyword
'\n           ' Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'mode'        Name
' '           Text.Whitespace
'<>'          Operator
' '           Text.Whitespace
'`+`'         Name
' '           Text.Whitespace
'then'        Keyword
'\n           ' Text.Whitespace
'print'       Name.Builtin
'('           Punctuation
'"Warning:
 heap mode inconsistency?"' Literal.String
','           Operator
' '           Text.Whitespace
'heap'        Name
','           Operator
' '           Text.Whitespace
'mode1'       Name
')'           Punctuation
'\n           ' Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n           ' Text.Whitespace
'mode'        Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'`*`'         Name
';'           Punctuation
'\n        '  Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
'\n      '    Text.Whitespace
'else'        Keyword
' '           Text.Whitespace
'error'       Keyword
' '           Text.Whitespace
'"Malformed heap entry %1"' Literal.String
','           Operator
```

```
' '          Text.Whitespace
'entry'      Name
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
'\n
   '     Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'do'         Keyword
';'          Punctuation
'\n    '     Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'mode'       Name
' '          Text.Whitespace
'<>'         Operator
' '          Text.Whitespace
'`*`'        Name
' '          Text.Whitespace
'then'       Keyword
'\n      '   Text.Whitespace
'print'      Name.Builtin
'('          Punctuation
'"Warning: heap mode inconsistency??"' Literal.String
','          Operator
' '          Text.Whitespace
'heap'       Name
','          Operator
' '          Text.Whitespace
'mode1'      Name
')'          Punctuation
'\n    '     Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n    '     Text.Whitespace
'e'          Name
','          Operator
' '          Text.Whitespace
'kb'         Name
' '          Text.Whitespace
':='         Operator
' '
     Text.Whitespace
'enter_piecewise' Name
```

```
'('          Punctuation
'e'          Name
','          Operator
' '          Text.Whitespace
'kb'         Name
','          Operator
' '          Text.Whitespace
'mode'       Name
');'         Punctuation
'\n    '     Text.Whitespace
'rest'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'kb_subtract' Name
'('          Punctuation
'kb'         Name
','          Operator
' '          Text.Whitespace
'kb0'        Name
');'         Punctuation
'\n    '     Text.Whitespace
'rest'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'map'        Name.Builtin
'('          Punctuation
'proc'       Keyword
'('          Punctuation
'a'          Name
'::'         Operator
'['          Punctuation
'identical'   Name
'('          Punctuation
'assert'     Name
')'          Punctuation
','          Operator
'anything'    Name
']'
 Punctuation
','          Operator
'$'          Operator
')'          Punctuation
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'2'          Literal.Number.Integer
```

```
','         Operator
'a'         Name
')'         Punctuation
' '         Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'proc'      Keyword
','         Operator
' '         Text.Whitespace
'rest'      Name
');'        Punctuation
'\n    '    Text.Whitespace
'('         Punctuation
'wExp'      Name
','         Operator
' '         Text.Whitespace
'e'         Name
')'         Punctuation
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'selectremove' Name.Builtin
'('         Punctuation
'type'      Name.Builtin
','         Operator
' '         Text.Whitespace
'convert'   Name.Builtin
'('         Punctuation
'e'         Name
','         Operator
' '         Text.Whitespace
'"'
    Punctuation
'list'      Name
'"'         Punctuation
','         Operator
' '         Text.Whitespace
'`*`'       Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'"'         Punctuation
'exp'       Name
'('         Punctuation
'anything'  Name
')'         Punctuation
'"'         Punctuation
');'        Punctuation
```

```
'\n    '      Text.Whitespace
'wExp'        Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'`+`'         Name
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'map2'        Name
'('           Punctuation
'op'          Name.Builtin
','           Operator
' '           Text.Whitespace
'1'           Literal.Number.Integer
','           Operator
' '           Text.Whitespace
'wExp'        Name
')));'        Punctuation
'\n    '      Text.Whitespace
'wExp'        Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'expand'
      Name.Builtin
'('           Punctuation
'wExp'        Name
','           Operator
' '           Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
'indets'      Name.Builtin
'('           Punctuation
'wExp'        Name
','           Operator
' '           Text.Whitespace
'function'    Name
')));'        Punctuation
'\n    '      Text.Whitespace
'logmake'     Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'('           Punctuation
't'           Name
' '           Text.Whitespace
'->'          Operator
```

```
' '          Text.Whitespace
't'          Name
' '          Text.Whitespace
'*'          Operator
' '          Text.Whitespace
'piecewise_And' Name
'('          Punctuation
'rest'       Name
','          Operator
'1'          Literal.Number.Integer
','          Operator
'0'          Literal.Number.Integer
'));'        Punctuation
'\n    '     Text.Whitespace
'`if`'       Name
'('          Punctuation
'wExp'
       Name
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'0'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'exp'        Name
'('          Punctuation
'maptype'    Name
'('          Punctuation
'`+`'        Name
','          Operator
'logmake'    Name
','          Operator
'wExp'       Name
')))'        Punctuation
'\n     '    Text.Whitespace
'*'          Operator
' '          Text.Whitespace
'piecewise_And' Name
'('          Punctuation
'rest'       Name
','          Operator
'`*`'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
```

```
'e'          Name
'))'         Punctuation
','          Operator
'1'          Literal.Number.Integer
');'         Punctuation
'\n  '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'
          Punctuation
'\n\n  '     Text.Whitespace
'# Rewrite product(...piecewise(i+42=lo+42,th,el)...,i=lo..hi)\n' Comment.Single

'  '         Text.Whitespace
'# to eval(...th...,i=lo)*product(...el...,i=lo+1..hi)\n' Comment.Single

'  '         Text.Whitespace
't_peel'     Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'"'          Punctuation
'And'        Name
'('          Punctuation
'specfunc'   Name
'({'         Punctuation
'sum'        Name
','          Operator
'Sum'        Name
','          Operator
'product'    Name
','          Operator
'Product'    Name
'})'         Punctuation
','          Operator
'\n                ' Text.Whitespace
'anyfunc'    Name
'('          Punctuation
'anything'   Name
','          Operator
' '          Text.Whitespace
'name'       Name
'='          Operator
'range'      Name
'))'         Punctuation
'"'          Punctuation
';'          Punctuation
```

```
'\n  '        Text.Whitespace
'peel'
        Name
' '          Text.Whitespace
':='          Operator
' '          Text.Whitespace
'proc'        Keyword
'('           Punctuation
'e'           Name
','           Operator
' '          Text.Whitespace
'$'           Operator
')'           Punctuation
'\n    '      Text.Whitespace
'subsindets'  Name.Builtin
'('           Punctuation
'e'           Name
','           Operator
' '          Text.Whitespace
't_peel'      Name
','           Operator
' '          Text.Whitespace
'do_peel'     Name
');'          Punctuation
'\n  '        Text.Whitespace
'end'         Keyword
' '          Text.Whitespace
'proc'        Keyword
';'           Punctuation
'\n  '        Text.Whitespace
'do_peel'     Name
' '          Text.Whitespace
':='          Operator
' '          Text.Whitespace
'proc'        Keyword
'('           Punctuation
'e'           Name
','           Operator
' '          Text.Whitespace
'$'           Operator
')'           Punctuation
'\n    '
 Text.Whitespace
'local'       Keyword
' '          Text.Whitespace
'make'        Name
','           Operator
' '          Text.Whitespace
```

```
'body'        Name
','           Operator
' '           Text.Whitespace
'x'           Name
','           Operator
' '           Text.Whitespace
'r'           Name
','           Operator
' '           Text.Whitespace
'cond'        Name
','           Operator
' '           Text.Whitespace
'line'        Name
','           Operator
' '           Text.Whitespace
'test'        Name
','           Operator
' '           Text.Whitespace
'x0'          Name
','           Operator
' '           Text.Whitespace
'r0'          Name
','           Operator
' '           Text.Whitespace
'cond0'       Name
','           Operator
' '           Text.Whitespace
'here'        Name
','           Operator
' '           Text.Whitespace
'rest'        Name
';'           Punctuation
'\n    '      Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'not'
  Keyword
' '           Text.Whitespace
'('           Punctuation
'e'           Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
't_peel'      Name
')'           Punctuation
' '           Text.Whitespace
'then'        Keyword
' '           Text.Whitespace
```

```
'return'      Keyword
' '           Text.Whitespace
'e'           Name
' '           Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n    '      Text.Whitespace
'if'          Keyword
'   '         Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
'0'           Literal.Number.Integer
','           Operator
'e'           Name
')'           Punctuation
' '           Text.Whitespace
'in'          Keyword
' '           Text.Whitespace
"""           Punctuation
'{'           Punctuation
'sum'         Name
'    '        Text.Whitespace
','           Operator
'Sum'         Name
'    '        Text.Whitespace
'}'
     Punctuation
"""           Punctuation
' '           Text.Whitespace
'then'        Keyword
' '           Text.Whitespace
'make'        Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'`+`'         Name
';'           Punctuation
'\n    '      Text.Whitespace
'elif'        Keyword
' '           Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
'0'           Literal.Number.Integer
','           Operator
'e'           Name
')'           Punctuation
```

```
' '          Text.Whitespace
'in'         Keyword
' '          Text.Whitespace
"""          Punctuation
'{'          Punctuation
'product'    Name
','          Operator
'Product'    Name
'}'          Punctuation
"""          Punctuation
' '          Text.Whitespace
'then'       Keyword
' '          Text.Whitespace
'make'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'`*`'        Name
';'          Punctuation
' '
  Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n    '     Text.Whitespace
'body'       Name
','          Operator
' '          Text.Whitespace
'r'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'e'          Name
');'         Punctuation
'\n    '     Text.Whitespace
'x'          Name
','          Operator
' '          Text.Whitespace
'r'          Name
'    '       Text.Whitespace
':='         Operator
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'r'          Name
```

```
');'          Punctuation
'\n    '      Text.Whitespace
'for'         Keyword
' '           Text.Whitespace
'cond'        Name
' '           Text.Whitespace
'in'          Keyword
' '           Text.Whitespace
'indets'      Name.Builtin
'('           Punctuation
'body'        Name
','           Operator
'
 '           Text.Whitespace
"""           Punctuation
'{'           Punctuation
'`=`'         Name
'('           Punctuation
'algebraic'   Name
')'           Punctuation
','           Operator
'`<`'         Name
','           Operator
'`<=`'        Name
'}'           Punctuation
"""           Punctuation
')'           Punctuation
' '           Text.Whitespace
'do'          Keyword
'\n      '    Text.Whitespace
'line'        Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'`-`'         Name
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'cond'        Name
'));'         Punctuation
'\n      '    Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'1'           Literal.Number.Integer
' '           Text.Whitespace
'<>'          Operator
' '           Text.Whitespace
'degree'      Name.Builtin
```

```
'('          Punctuation
'line'       Name
','          Operator
' '          Text.Whitespace
'x'
  Name
')'          Punctuation
' '          Text.Whitespace
'then'       Keyword
' '          Text.Whitespace
'next'       Keyword
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n     '    Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'cond'       Name
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
'`=`'        Name
' '          Text.Whitespace
'then'       Keyword
'\n       '  Text.Whitespace
'cond0'      Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'true'       Name
';'          Punctuation
'\n       '  Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'Testzero'   Name
'('          Punctuation
'eval'       Name.Builtin
'('          Punctuation
'line'       Name
','          Operator
' '          Text.Whitespace
'x'          Name
'='          Operator
'lhs'
      Name.Builtin
'('          Punctuation
```

```
'r'          Name
')))'        Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n          ' Text.Whitespace
'x0'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'lhs'        Name.Builtin
'('          Punctuation
'r'          Name
');'         Punctuation
' '          Text.Whitespace
'r0'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'applyop'    Name
'('          Punctuation
'`+`'        Name
','          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'r'          Name
','          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
');'         Punctuation
'\n        '  Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'Testzero'   Name
'('          Punctuation
'eval'       Name.Builtin
'('
          Punctuation
'line'       Name
','          Operator
' '          Text.Whitespace
'x'          Name
'='          Operator
'rhs'        Name.Builtin
'('          Punctuation
'r'          Name
')))'        Punctuation
```

```
' '          Text.Whitespace
'then'       Keyword
'\n          ' Text.Whitespace
'x0'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'rhs'        Name.Builtin
'('          Punctuation
'r'          Name
');'         Punctuation
' '          Text.Whitespace
'r0'         Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'applyop'    Name
'('          Punctuation
'`-`'        Name
','          Operator
' '          Text.Whitespace
'2'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'r'          Name
','          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
');'         Punctuation
'\n
        '  Text.Whitespace
'else'       Keyword
' '          Text.Whitespace
'next'       Keyword
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n     '    Text.Whitespace
'else'       Keyword
'\n        '  Text.Whitespace
'test'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
```

```
'x0'        Name
','         Operator
' '         Text.Whitespace
'x1'        Name
','         Operator
' '         Text.Whitespace
'$'         Operator
')'         Punctuation
'\n         ' Text.Whitespace
'local'     Keyword
' '         Text.Whitespace
'res'       Name
';'         Punctuation
'\n         ' Text.Whitespace
'res'       Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'evalb'     Name.Builtin
'('         Punctuation
'not'       Keyword
' '
    Text.Whitespace
'op'        Name.Builtin
'('         Punctuation
'0'         Literal.Number.Integer
','         Operator
'cond'      Name
')('        Punctuation
'eval'      Name.Builtin
'('         Punctuation
'line'      Name
','         Operator
' '         Text.Whitespace
'x'         Name
'='         Operator
'x1'        Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'0'         Literal.Number.Integer
'));'       Punctuation
'\n         ' Text.Whitespace
'`if`'      Name
'('         Punctuation
'res'       Name
' '         Text.Whitespace
'in'        Keyword
```

```
' '          Text.Whitespace
"""          Punctuation
'{'          Punctuation
'true'       Name
','          Operator
'false'      Name
'}'          Punctuation
"""          Punctuation
'\n                ' Text.Whitespace
'and'        Keyword
' '          Text.Whitespace
'evalb'      Name.Builtin
'('          Punctuation
'op'
      Name.Builtin
'('          Punctuation
'0'          Literal.Number.Integer
','          Operator
'cond'       Name
')('         Punctuation
'eval'       Name.Builtin
'('          Punctuation
'line'       Name
','          Operator
' '          Text.Whitespace
'x'          Name
'='          Operator
'x0'         Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'0'          Literal.Number.Integer
'))'         Punctuation
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'res'        Name
','          Operator
'\n              ' Text.Whitespace
'res'        Name
','          Operator
'\n              ' Text.Whitespace
'FAIL'       Name
')'          Punctuation
'\n        '  Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
```

```
';'         Punctuation
'\n       '  Text.Whitespace
'cond0'       Name
' '         Text.Whitespace
':='         Operator
' '
        Text.Whitespace
'test'        Name
'('         Punctuation
'lhs'         Name.Builtin
'('         Punctuation
'r'         Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'lhs'         Name.Builtin
'('         Punctuation
'r'         Name
')'         Punctuation
'+'         Operator
'1'         Literal.Number.Integer
');'        Punctuation
'\n       '  Text.Whitespace
'if'        Keyword
' '         Text.Whitespace
'cond0'       Name
' '         Text.Whitespace
'<>'         Operator
' '         Text.Whitespace
'FAIL'        Name
' '         Text.Whitespace
'then'        Keyword
'\n         ' Text.Whitespace
'x0'         Name
' '         Text.Whitespace
':='         Operator
' '         Text.Whitespace
'lhs'         Name.Builtin
'('         Punctuation
'r'         Name
');'        Punctuation
' '         Text.Whitespace
'r0'         Name
' '         Text.Whitespace
':='         Operator
' '
       Text.Whitespace
'applyop'     Name
```

```
'('          Punctuation
'`+`'        Name
','          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
','          Operator
' '          Text.Whitespace
'r'          Name
','          Operator
' '          Text.Whitespace
'1'          Literal.Number.Integer
');'         Punctuation
'\n        '  Text.Whitespace
'else'       Keyword
'\n         ' Text.Whitespace
'cond0'      Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'test'       Name
'('          Punctuation
'rhs'        Name.Builtin
'('          Punctuation
'r'          Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'rhs'        Name.Builtin
'('          Punctuation
'r'          Name
')'          Punctuation
'-'          Operator
'1'          Literal.Number.Integer
');'         Punctuation
'\n         ' Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'cond0'
      Name
' '          Text.Whitespace
'<>'         Operator
' '          Text.Whitespace
'FAIL'       Name
' '          Text.Whitespace
'then'       Keyword
'\n           ' Text.Whitespace
'x0'         Name
' '          Text.Whitespace
```

```
':='        Operator
' '         Text.Whitespace
'rhs'       Name.Builtin
'('         Punctuation
'r'         Name
');'        Punctuation
' '         Text.Whitespace
'r0'        Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'applyop'   Name
'('         Punctuation
'`-`'       Name
','         Operator
' '         Text.Whitespace
'2'         Literal.Number.Integer
','         Operator
' '         Text.Whitespace
'r'         Name
','         Operator
' '         Text.Whitespace
'1'         Literal.Number.Integer
');'        Punctuation
'\n         ' Text.Whitespace
'else'      Keyword
' '         Text.Whitespace
'next'      Keyword
' '
            Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'if'        Keyword
';'         Punctuation
'\n       '  Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'if'        Keyword
';'         Punctuation
'\n     '   Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'if'        Keyword
';'         Punctuation
'\n     '   Text.Whitespace
'here'      Name
' '         Text.Whitespace
':='        Operator
```

```
' '          Text.Whitespace
'subs'       Name.Builtin
'('          Punctuation
'cond'       Name
' '          Text.Whitespace
'='          Operator
'          ' Text.Whitespace
'cond0'      Name
' '          Text.Whitespace
','          Operator
' '          Text.Whitespace
'body'       Name
');'         Punctuation
'\n     '    Text.Whitespace
'rest'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'subs'       Name.Builtin
'('          Punctuation
'cond'
       Name
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'evalb'      Name.Builtin
'('          Punctuation
'not'        Keyword
' '          Text.Whitespace
'cond0'      Name
')'          Punctuation
','          Operator
' '          Text.Whitespace
'body'       Name
');'         Punctuation
'\n     '    Text.Whitespace
'return'     Keyword
' '          Text.Whitespace
'make'       Name
'('          Punctuation
'eval'       Name.Builtin
'('          Punctuation
'here'       Name
','          Operator
' '          Text.Whitespace
'x'          Name
'='          Operator
'x0'         Name
```

```
')'          Punctuation
','          Operator
' '          Text.Whitespace
'do_peel'    Name
'('          Punctuation
'eval'       Name.Builtin
'('          Punctuation
'subsop'     Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
'='          Operator
'rest'       Name
','          Operator
'
 '           Text.Whitespace
'['          Punctuation
'2'          Literal.Number.Integer
','          Operator
'2'          Literal.Number.Integer
']'          Punctuation
'='          Operator
'r0'         Name
','          Operator
' '          Text.Whitespace
'e'          Name
'))));'      Punctuation
'\n    '     Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'do'         Keyword
';'          Punctuation
'\n    '     Text.Whitespace
'return'     Keyword
' '          Text.Whitespace
'e'          Name
';'          Punctuation
'\n  '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n\n  '     Text.Whitespace
'# Expand sum(a*(b-c),q) to sum(a*b,q)-sum(a*c,q)\n' Comment.Single

'  '         Text.Whitespace
'split'      Name
' '          Text.Whitespace
':='         Operator
```

```
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
'e'
 Name
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n    '     Text.Whitespace
'subsindets'  Name.Builtin
'('          Punctuation
'e'          Name
','          Operator
' '          Text.Whitespace
'"'          Punctuation
'And'        Name
'('          Punctuation
'specfunc'   Name
'({'         Punctuation
'sum'        Name
','          Operator
'Sum'        Name
'})'         Punctuation
','          Operator
'\n                    ' Text.Whitespace
'anyfunc'    Name
'('          Punctuation
'And'        Name
'('          Punctuation
'`*`'        Name
','          Operator
'Not'        Name
'('          Punctuation
'`*`'        Name
'('          Punctuation
'Not'        Name
'('          Punctuation
'`+`'        Name
'))))'       Punctuation
','          Operator
'name'       Name
'='          Operator
'anything'   Name
'))'         Punctuation
'"'          Punctuation
','          Operator
'\n
```

```
                ' Text.Whitespace
'do_split'    Name
');'          Punctuation
'\n  '        Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'proc'        Keyword
';'           Punctuation
'\n  '        Text.Whitespace
'do_split'    Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'proc'        Keyword
'('           Punctuation
'e'           Name
','           Operator
' '           Text.Whitespace
'$'           Operator
')'           Punctuation
'\n    '      Text.Whitespace
'local'       Keyword
' '           Text.Whitespace
'terms'       Name
','           Operator
' '           Text.Whitespace
'x'           Name
';'           Punctuation
'\n    '      Text.Whitespace
'terms'       Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'convert'     Name.Builtin
'('           Punctuation
'expand'      Name.Builtin
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'1'
          Literal.Number.Integer
','           Operator
'e'           Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
```

```
'indets'      Name.Builtin
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'1'           Literal.Number.Integer
','           Operator
'e'           Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'function'    Name
')))'         Punctuation
','           Operator
'\n                 ' Text.Whitespace
"""           Punctuation
'list'        Name
"""           Punctuation
','           Operator
' '           Text.Whitespace
'`+`'         Name
');'          Punctuation
'\n    '      Text.Whitespace
'x'           Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'op'          Name.Builtin
'(['          Punctuation
'2'           Literal.Number.Integer
','           Operator
'1'
          Literal.Number.Integer
']'           Punctuation
','           Operator
'e'           Name
');'          Punctuation
'\n    '      Text.Whitespace
'`+`'         Name
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'map'         Name.Builtin
'('           Punctuation
'proc'        Keyword
'('           Punctuation
'term'        Name
','           Operator
' '           Text.Whitespace
```

```
'$'         Operator
')'         Punctuation
'\n     '   Text.Whitespace
'local'     Keyword
' '         Text.Whitespace
's'         Name
','         Operator
' '         Text.Whitespace
'r'         Name
';'         Punctuation
'\n     '   Text.Whitespace
's'         Name
','         Operator
' '         Text.Whitespace
'r'         Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'selectremove' Name.Builtin
'('         Punctuation
'depends'   Name
','         Operator
' '
  Text.Whitespace
'convert'   Name.Builtin
'('         Punctuation
'term'      Name
','         Operator
' '         Text.Whitespace
'"'         Punctuation
'list'      Name
'"'         Punctuation
','         Operator
' '         Text.Whitespace
'`*`'       Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'x'         Name
');'        Punctuation
'\n     '   Text.Whitespace
'`*`'       Name
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
'r'         Name
')'         Punctuation
','         Operator
```

```
' '          Text.Whitespace
'subsop'     Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
'='          Operator
'`*`'        Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
's'          Name
'))'         Punctuation
','          Operator
'e'          Name
'))'         Punctuation
'\n    '     Text.Whitespace
'end'
    Keyword
' '          Text.Whitespace
'proc'       Keyword
','          Operator
' '          Text.Whitespace
'terms'      Name
')))'        Punctuation
'\n  '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n\n  '     Text.Whitespace
'# Simplify f(lo-1)*product(f(i),i=lo..hi) to product(f(i),i=lo-1..hi)\n' Comment.Single

'  '         Text.Whitespace
'graft'      Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
'e'          Name
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n    '     Text.Whitespace
'subsindets'  Name.Builtin
'('          Punctuation
'e'          Name
','          Operator
```

```
' '          Text.Whitespace
"""          Punctuation
'Or'         Name
'('          Punctuation
'And'        Name
'('          Punctuation
'`*`'        Name
','
          Operator
'Not'        Name
'('          Punctuation
'`*`'        Name
'('          Punctuation
'Not'        Name
'('          Punctuation
'specfunc'   Name
'({'         Punctuation
'product'    Name
','          Operator
'Product'    Name
'})))))'     Punctuation
','          Operator
'\n                    ' Text.Whitespace
'And'        Name
'('          Punctuation
'`+`'        Name
','          Operator
'Not'        Name
'('          Punctuation
'`+`'        Name
'('          Punctuation
'Not'        Name
'('          Punctuation
'specfunc'   Name
'({'         Punctuation
'sum'        Name
'   '        Text.Whitespace
','          Operator
'Sum'        Name
'   '        Text.Whitespace
'})))))'     Punctuation
"""          Punctuation
','          Operator
'\n                ' Text.Whitespace
'do_graft'   Name
');'         Punctuation
'\n  '       Text.Whitespace
'end'        Keyword
```

' ' Text.Whitespace
'proc'
  Keyword
';' Punctuation
'\n ' Text.Whitespace
'do_graft' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'proc' Keyword
'(' Punctuation
'e' Name
',' Operator
' ' Text.Whitespace
'$' Operator
')' Punctuation
'\n ' Text.Whitespace
'local' Keyword
' ' Text.Whitespace
'produce' Name
',' Operator
' ' Text.Whitespace
'factors' Name
',' Operator
' ' Text.Whitespace
'i' Name
',' Operator
' ' Text.Whitespace
'j' Name
';' Punctuation
'\n ' Text.Whitespace
'produce' Name
' ' Text.Whitespace
':=' Operator
' ' Text.Whitespace
'`if`' Name
'(' Punctuation
'e' Name
'::' Operator
'`*`' Name
',' Operator
' ' Text.Whitespace
'"' Punctuation
'{'
  Punctuation
'product' Name
',' Operator
'Product' Name

```
'}'          Punctuation
"""          Punctuation
','          Operator
'\n                        ' Text.Whitespace
"""          Punctuation
'{'          Punctuation
'sum'        Name
'    '       Text.Whitespace
','          Operator
'Sum'        Name
'    '       Text.Whitespace
'}'          Punctuation
"""          Punctuation
');'         Punctuation
'\n    '     Text.Whitespace
'factors'    Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'sort'       Name.Builtin
'('          Punctuation
'convert'    Name.Builtin
'('          Punctuation
'e'          Name
','          Operator
"""          Punctuation
'list'       Name
"""          Punctuation
')'          Punctuation
','          Operator
'\n                  ' Text.Whitespace
'key'        Name
' '          Text.Whitespace
'='          Operator
' '          Text.Whitespace
'('
          Punctuation
'factor'     Name
' '          Text.Whitespace
'->'         Operator
' '          Text.Whitespace
'-'          Operator
'numboccur'  Name.Builtin
'('          Punctuation
'factor'     Name
','          Operator
'produce'    Name
')));'       Punctuation
```

```
'\n    '      Text.Whitespace
'for'         Keyword
' '           Text.Whitespace
'i'           Name
' '           Text.Whitespace
'from'        Keyword
' '           Text.Whitespace
'nops'        Name.Builtin
'('           Punctuation
'factors'     Name
')'           Punctuation
' '           Text.Whitespace
'to'          Keyword
' '           Text.Whitespace
'2'           Literal.Number.Integer
' '           Text.Whitespace
'by'          Keyword
' '           Text.Whitespace
'-'           Operator
'1'           Literal.Number.Integer
' '           Text.Whitespace
'do'          Keyword
'\n      '    Text.Whitespace
'for'         Keyword
' '           Text.Whitespace
'j'           Name
' '
  Text.Whitespace
'from'        Keyword
' '           Text.Whitespace
'i'           Name
'-'           Operator
'1'           Literal.Number.Integer
' '           Text.Whitespace
'to'          Keyword
' '           Text.Whitespace
'1'           Literal.Number.Integer
' '           Text.Whitespace
'by'          Keyword
' '           Text.Whitespace
'-'           Operator
'1'           Literal.Number.Integer
' '           Text.Whitespace
'do'          Keyword
'\n        '  Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'op'          Name.Builtin
```

```
'('          Punctuation
'j'          Name
','          Operator
'factors'    Name
')'          Punctuation
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
'"'          Punctuation
'And'        Name
'"'          Punctuation
'('          Punctuation
'"'          Punctuation
'specfunc'   Name
'"'          Punctuation
'('          Punctuation
'produce'    Name
')'          Punctuation
','
          Operator
'\n                          ' Text.Whitespace
'"'          Punctuation
'anyfunc'    Name
'('          Punctuation
'anything'   Name
','          Operator
'name'       Name
'='          Operator
'range'      Name
')'          Punctuation
'"'          Punctuation
')'          Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n          ' Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'Testzero'   Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'i'          Name
','          Operator
'factors'    Name
')'          Punctuation
' '          Text.Whitespace
'-'          Operator
' '          Text.Whitespace
```

```
'eval'        Name.Builtin
'('           Punctuation
'op'          Name.Builtin
'(['          Punctuation
'j'           Name
','           Operator
'1'           Literal.Number.Integer
']'           Punctuation
','           Operator
'factors'     Name
')'
      Punctuation
','           Operator
'\n               ' Text.Whitespace
'op'          Name.Builtin
'(['          Punctuation
'j'           Name
','           Operator
'2'           Literal.Number.Integer
','           Operator
'1'           Literal.Number.Integer
']'           Punctuation
','           Operator
'factors'     Name
')'           Punctuation
'='           Operator
'op'          Name.Builtin
'(['          Punctuation
'j'           Name
','           Operator
'2'           Literal.Number.Integer
','           Operator
'2'           Literal.Number.Integer
','           Operator
'1'           Literal.Number.Integer
']'           Punctuation
','           Operator
'factors'     Name
')'           Punctuation
'-'           Operator
'1'           Literal.Number.Integer
'))'          Punctuation
' '           Text.Whitespace
'then'        Keyword
'\n           ' Text.Whitespace
'factors'     Name
' '           Text.Whitespace
':='          Operator
```

```
' '          Text.Whitespace
'subsop'
     Name.Builtin
'('          Punctuation
'i'          Name
'='          Operator
'NULL'       Name
','          Operator
'applyop'    Name
'('          Punctuation
'`-`'        Name
','          Operator
'['          Punctuation
'j'          Name
','          Operator
'2'          Literal.Number.Integer
','          Operator
'2'          Literal.Number.Integer
','          Operator
'1'          Literal.Number.Integer
']'          Punctuation
','          Operator
'factors'    Name
','          Operator
'1'          Literal.Number.Integer
'));'        Punctuation
'\n          ' Text.Whitespace
'break'      Keyword
'\n          ' Text.Whitespace
'elif'       Keyword
' '          Text.Whitespace
'Testzero'   Name
'('          Punctuation
'op'         Name.Builtin
'('          Punctuation
'i'          Name
','          Operator
'factors'    Name
')'          Punctuation
' '          Text.Whitespace
'-'          Operator
' '          Text.Whitespace
'eval'
       Name.Builtin
'('          Punctuation
'op'         Name.Builtin
'(['         Punctuation
'j'          Name
```

```
','          Operator
'1'          Literal.Number.Integer
']'          Punctuation
','          Operator
'factors'    Name
')'          Punctuation
','          Operator
'\n                ' Text.Whitespace
'op'         Name.Builtin
'(['         Punctuation
'j'          Name
','          Operator
'2'          Literal.Number.Integer
','          Operator
'1'          Literal.Number.Integer
']'          Punctuation
','          Operator
'factors'    Name
')'          Punctuation
'='          Operator
'op'         Name.Builtin
'(['         Punctuation
'j'          Name
','          Operator
'2'          Literal.Number.Integer
','          Operator
'2'          Literal.Number.Integer
','          Operator
'2'          Literal.Number.Integer
']'          Punctuation
','          Operator
'factors'    Name
')'          Punctuation
'+'
          Operator
'1'          Literal.Number.Integer
'))'         Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n            ' Text.Whitespace
'factors'    Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'subsop'     Name.Builtin
'('          Punctuation
'i'          Name
'='          Operator
```

```
'NULL'        Name
','           Operator
'applyop'     Name
'('           Punctuation
'`+`'         Name
','           Operator
'['           Punctuation
'j'           Name
','           Operator
'2'           Literal.Number.Integer
','           Operator
'2'           Literal.Number.Integer
','           Operator
'2'           Literal.Number.Integer
']'           Punctuation
','           Operator
'factors'     Name
','           Operator
'1'           Literal.Number.Integer
'));'         Punctuation
'\n           ' Text.Whitespace
'break'       Keyword
'\n          ' Text.Whitespace
'end'         Keyword
' '
       Text.Whitespace
'if'          Keyword
'\n        '  Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
'\n      '    Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'do'          Keyword
'\n    '      Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'do'          Keyword
';'           Punctuation
'\n    '      Text.Whitespace
'op'          Name.Builtin
'('           Punctuation
'0'           Literal.Number.Integer
','           Operator
'e'           Name
')('          Punctuation
'op'          Name.Builtin
```

```
'('          Punctuation
'factors'    Name
'))'         Punctuation
'\n  '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n\n  '     Text.Whitespace
'# Normalize sum(f(i),i=2..hi) to sum(f(i+2),i=0..hi-2)\n' Comment.Single

'  '         Text.Whitespace
'rebase_lower' Name
' '          Text.Whitespace
':='         Operator
'
 '           Text.Whitespace
'proc'       Keyword
'('          Punctuation
'e'          Name
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n    '     Text.Whitespace
'subsindets'  Name.Builtin
'('          Punctuation
'e'          Name
','          Operator
' '          Text.Whitespace
"""          Punctuation
'And'        Name
'('          Punctuation
'specfunc'   Name
'({'         Punctuation
'sum'        Name
','          Operator
'Sum'        Name
','          Operator
'product'    Name
','          Operator
'Product'    Name
'})'         Punctuation
','          Operator
'\n                    ' Text.Whitespace
'anyfunc'    Name
'('          Punctuation
'anything'   Name
```

```
','         Operator
'\n                    ' Text.Whitespace
'name'       Name
'='         Operator
'Not'        Name
'({'        Punctuation
'0'         Literal.Number.Integer
','         Operator
'SymbolicInfinity'
 Name
','         Operator
'undefined'   Name
'})'        Punctuation
'..'        Operator
'anything'    Name
'))'        Punctuation
"""         Punctuation
','         Operator
'\n                ' Text.Whitespace
'do_rebase_lower' Name
');'        Punctuation
'\n  '      Text.Whitespace
'end'        Keyword
' '         Text.Whitespace
'proc'       Keyword
';'         Punctuation
'\n  '      Text.Whitespace
'do_rebase_lower' Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'proc'       Keyword
'('         Punctuation
'e'         Name
','         Operator
' '         Text.Whitespace
'$'         Operator
')'         Punctuation
'\n    '    Text.Whitespace
'subsop'     Name.Builtin
'(['        Punctuation
'2'         Literal.Number.Integer
','         Operator
'2'         Literal.Number.Integer
','         Operator
'1'         Literal.Number.Integer
']'         Punctuation
'='
```

Operator
'0' Literal.Number.Integer
',' Operator
'\n ' Text.Whitespace
'applyop' Name
'(' Punctuation
'`-`' Name
',' Operator
'\n ' Text.Whitespace
'[' Punctuation
'2' Literal.Number.Integer
',' Operator
'2' Literal.Number.Integer
',' Operator
'2' Literal.Number.Integer
']' Punctuation
',' Operator
'\n ' Text.Whitespace
'applyop' Name
'(' Punctuation
'eval' Name.Builtin
',' Operator
' ' Text.Whitespace
'1' Literal.Number.Integer
',' Operator
' ' Text.Whitespace
'e' Name
',' Operator
' ' Text.Whitespace
'op' Name.Builtin
'([' Punctuation
'2' Literal.Number.Integer
',' Operator
'1' Literal.Number.Integer
']' Punctuation
',' Operator
'e'
Name
')' Punctuation
'=' Operator
'op' Name.Builtin
'([' Punctuation
'2' Literal.Number.Integer
',' Operator
'1' Literal.Number.Integer
']' Punctuation
',' Operator
'e' Name

```
')'          Punctuation
'+'          Operator
'op'         Name.Builtin
'(['         Punctuation
'2'          Literal.Number.Integer
','          Operator
'2'          Literal.Number.Integer
','          Operator
'1'          Literal.Number.Integer
']'          Punctuation
','          Operator
'e'          Name
'))'         Punctuation
','          Operator
'\n                ' Text.Whitespace
'op'         Name.Builtin
'(['         Punctuation
'2'          Literal.Number.Integer
','          Operator
'2'          Literal.Number.Integer
','          Operator
'1'          Literal.Number.Integer
']'          Punctuation
','          Operator
'e'          Name
')))'        Punctuation
'\n
  '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n\n  '     Text.Whitespace
'# Normalize sum(f(i),i=lo..2) to sum(f(i+2),i=lo-2..0)\n' Comment.Single

'  '         Text.Whitespace
'rebase_upper' Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'proc'       Keyword
'('          Punctuation
'e'          Name
','          Operator
' '          Text.Whitespace
'$'          Operator
')'          Punctuation
'\n    '     Text.Whitespace
```

```
'subsindets'  Name.Builtin
'('           Punctuation
'e'           Name
','           Operator
' '           Text.Whitespace
'"'           Punctuation
'And'         Name
'('           Punctuation
'specfunc'    Name
'({'          Punctuation
'sum'         Name
','           Operator
'Sum'         Name
','           Operator
'product'     Name
','           Operator
'Product'     Name
'})'          Punctuation
','           Operator
'\n
                    ' Text.Whitespace
'anyfunc'     Name
'('           Punctuation
'anything'    Name
','           Operator
'\n                    ' Text.Whitespace
'name'        Name
'='           Operator
'anything'    Name
'..'          Operator
'Not'         Name
'({'          Punctuation
'0'           Literal.Number.Integer
','           Operator
'SymbolicInfinity' Name
','           Operator
'undefined'   Name
'})))'        Punctuation
'"'           Punctuation
','           Operator
'\n                ' Text.Whitespace
'do_rebase_upper' Name
');'          Punctuation
'\n  '        Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'proc'        Keyword
';'           Punctuation
```

```
'\n  '        Text.Whitespace
'do_rebase_upper' Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'proc'        Keyword
'('           Punctuation
'e'           Name
','           Operator
' '           Text.Whitespace
'$'           Operator
')'
           Punctuation
'\n    '      Text.Whitespace
'subsop'      Name.Builtin
'(['          Punctuation
'2'           Literal.Number.Integer
','           Operator
'2'           Literal.Number.Integer
','           Operator
'2'           Literal.Number.Integer
']'           Punctuation
'='           Operator
'0'           Literal.Number.Integer
','           Operator
'\n           ' Text.Whitespace
'applyop'     Name
'('           Punctuation
'`-`'         Name
','           Operator
'\n                  ' Text.Whitespace
'['           Punctuation
'2'           Literal.Number.Integer
','           Operator
'2'           Literal.Number.Integer
','           Operator
'1'           Literal.Number.Integer
']'           Punctuation
','           Operator
'\n                  ' Text.Whitespace
'applyop'     Name
'('           Punctuation
'eval'        Name.Builtin
','           Operator
' '           Text.Whitespace
'1'           Literal.Number.Integer
','           Operator
' '
```

Text.Whitespace
'e' Name
',' Operator
' ' Text.Whitespace
'op' Name.Builtin
'([' Punctuation
'2' Literal.Number.Integer
',' Operator
'1' Literal.Number.Integer
']' Punctuation
',' Operator
'e' Name
')' Punctuation
'=' Operator
'op' Name.Builtin
'([' Punctuation
'2' Literal.Number.Integer
',' Operator
'1' Literal.Number.Integer
']' Punctuation
',' Operator
'e' Name
')' Punctuation
'+' Operator
'op' Name.Builtin
'([' Punctuation
'2' Literal.Number.Integer
',' Operator
'2' Literal.Number.Integer
',' Operator
'2' Literal.Number.Integer
']' Punctuation
',' Operator
'e' Name
'))' Punctuation
',' Operator
'\n ' Text.Whitespace
'op'
Name.Builtin
'([' Punctuation
'2' Literal.Number.Integer
',' Operator
'2' Literal.Number.Integer
',' Operator
'2' Literal.Number.Integer
']' Punctuation
',' Operator
'e' Name

```
')))'        Punctuation
'\n  '       Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'proc'       Keyword
';'          Punctuation
'\n\n  '     Text.Whitespace
'ModuleLoad'  Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'proc'       Keyword
'($)'        Punctuation
'\n    '     Text.Whitespace
'# Override csgn to work a little bit harder on piecewise and sum\n' Comment.Single

'    '       Text.Whitespace
'# (to get rid of csgn(1/2+1/2*sum(piecewise(...,1,0),...))\n' Comment.Single

'    '       Text.Whitespace
'#  produced by int on a Gaussian mixture model)\n' Comment.Single

'    '       Text.Whitespace
'unprotect'   Name
'('          Punctuation
'csgn'
       Name
');'         Punctuation
'\n    '     Text.Whitespace
'csgn'       Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'overload'    Name
'(['         Punctuation
'\n      '   Text.Whitespace
"# Handle if the csgn of a piecewise doesn't depend on which branch\n" Comment.Single

'      '     Text.Whitespace
'proc'       Keyword
'('          Punctuation
'a'          Name
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
'specfunc'    Name
'('          Punctuation
'piecewise'   Name.Builtin
```

```
')'         Punctuation
','         Operator
' '         Text.Whitespace
'$'         Operator
')'         Punctuation
'\n       '  Text.Whitespace
'option'     Keyword
' '         Text.Whitespace
'overload'   Name
';'         Punctuation
'\n       '  Text.Whitespace
'local'      Keyword
' '         Text.Whitespace
'r'         Name
','         Operator
' '         Text.Whitespace
'i'
         Name
';'         Punctuation
'\n       '  Text.Whitespace
'r'         Name
' '         Text.Whitespace
':='        Operator
' '         Text.Whitespace
'{'         Punctuation
'seq'       Name.Builtin
'('         Punctuation
'`if`'      Name
'('         Punctuation
'i'         Name
'::'        Operator
'even'      Name
' '         Text.Whitespace
'or'        Keyword
' '         Text.Whitespace
'i'         Name
'='         Operator
'nops'      Name.Builtin
'('         Punctuation
'a'         Name
')'         Punctuation
','         Operator
' '         Text.Whitespace
'csgn'      Name
'('         Punctuation
'op'        Name.Builtin
'('         Punctuation
'i'         Name
```

```
','         Operator
'a'         Name
'))'        Punctuation
','         Operator
' '         Text.Whitespace
'NULL'      Name
')'         Punctuation
','         Operator
'\n                ' Text.Whitespace
'i'
     Name
'='         Operator
'1'         Literal.Number.Integer
'..'        Punctuation
'nops'      Name.Builtin
'('         Punctuation
'a'         Name
'))};'      Punctuation
'\n       '  Text.Whitespace
'if'        Keyword
' '         Text.Whitespace
'nops'      Name.Builtin
'('         Punctuation
'r'         Name
')'         Punctuation
'='         Operator
'1'         Literal.Number.Integer
' '         Text.Whitespace
'then'      Keyword
' '         Text.Whitespace
'return'    Keyword
' '         Text.Whitespace
'op'        Name.Builtin
'('         Punctuation
'r'         Name
')'         Punctuation
' '         Text.Whitespace
'end'       Keyword
' '         Text.Whitespace
'if'        Keyword
';'         Punctuation
'\n       '  Text.Whitespace
'if'        Keyword
' '         Text.Whitespace
'not'       Keyword
' '         Text.Whitespace
'assigned'  Name.Builtin
'(_'        Punctuation
```

```
'Envsignum0'  Name
')'
          Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n          ' Text.Whitespace
'r'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'r'          Name
' '          Text.Whitespace
'minus'      Keyword
' '          Text.Whitespace
'{'          Punctuation
'0'          Literal.Number.Integer
'};'         Punctuation
'\n          ' Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'nops'       Name.Builtin
'('          Punctuation
'r'          Name
')'          Punctuation
'='          Operator
'1'          Literal.Number.Integer
' '          Text.Whitespace
'then'       Keyword
' '          Text.Whitespace
'return'     Keyword
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'r'          Name
')'          Punctuation
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n
        '  Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n        '  Text.Whitespace
'error'      Keyword
```

' ' Text.Whitespace
'"invalid input: cannot csgn %1"' Literal.String
',' Operator
' ' Text.Whitespace
'a' Name
';' Punctuation
'\n ' Text.Whitespace
'end' Keyword
' ' Text.Whitespace
'proc' Keyword
',' Operator
'\n ' Text.Whitespace
"# Handle if the csgn of a sum doesn't depend on the bound variable\n" Comment.Single

' ' Text.Whitespace
'proc' Keyword
'(' Punctuation
'a' Name
' ' Text.Whitespace
'::' Operator
' ' Text.Whitespace
'And' Name
'(' Punctuation
'specfunc' Name
'({' Punctuation
'sum' Name
',' Operator
' ' Text.Whitespace
'Sum' Name
'})' Punctuation
','
Operator
' ' Text.Whitespace
'anyfunc' Name
'(' Punctuation
'anything' Name
',' Operator
' ' Text.Whitespace
'name' Name
'=' Operator
'range' Name
'))' Punctuation
',' Operator
' ' Text.Whitespace
'$' Operator
')' Punctuation
'\n ' Text.Whitespace
'option' Keyword

```
' '          Text.Whitespace
'overload'    Name
';'          Punctuation
'\n        '  Text.Whitespace
'local'       Keyword
' '          Text.Whitespace
'r'          Name
';'          Punctuation
'\n        '  Text.Whitespace
'r'          Name
' '          Text.Whitespace
':='          Operator
' '          Text.Whitespace
'csgn'        Name
'('          Punctuation
'op'          Name.Builtin
'('          Punctuation
'1'           Literal.Number.Integer
','          Operator
'a'           Name
'));'         Punctuation
'\n        '  Text.Whitespace
'if'          Keyword
' '
          Text.Whitespace
'not'         Keyword
' '          Text.Whitespace
'depends'     Name
'('          Punctuation
'r'          Name
','          Operator
'op'          Name.Builtin
'(['         Punctuation
'2'           Literal.Number.Integer
','          Operator
'1'           Literal.Number.Integer
']'          Punctuation
','          Operator
'a'           Name
'))'         Punctuation
' '          Text.Whitespace
'then'        Keyword
'\n          ' Text.Whitespace
'return'      Keyword
' '          Text.Whitespace
'signum'      Name
'('          Punctuation
'op'          Name.Builtin
```

```
'([' Punctuation
'2' Literal.Number.Integer
',' Operator
'2' Literal.Number.Integer
',' Operator
'2' Literal.Number.Integer
']' Punctuation
',' Operator
'a' Name
')' Punctuation
'+' Operator
'1' Literal.Number.Integer
'-' Operator
'op' Name.Builtin
'([' Punctuation
'2' Literal.Number.Integer
',' Operator
'2' Literal.Number.Integer
',' Operator
'1' Literal.Number.Integer
']' Punctuation
',' Operator
'a' Name
'))' Punctuation
' ' Text.Whitespace
'*' Operator
' ' Text.Whitespace
'r' Name
'\n ' Text.Whitespace
'end' Keyword
' ' Text.Whitespace
'if' Keyword
';' Punctuation
'\n ' Text.Whitespace
'error' Keyword
' ' Text.Whitespace
'"invalid input: cannot csgn %1"' Literal.String
',' Operator
' ' Text.Whitespace
'a' Name
';' Punctuation
'\n ' Text.Whitespace
'end' Keyword
' ' Text.Whitespace
'proc' Keyword
',' Operator
'\n ' Text.Whitespace
```

```
'csgn'        Name
']);'         Punctuation
'\n    '      Text.Whitespace
'protect'     Name
'('
       Punctuation
'csgn'        Name
');'          Punctuation
'\n\n    '    Text.Whitespace
'# Do the same to signum.\n' Comment.Single

'    '        Text.Whitespace
'unprotect'   Name
'('           Punctuation
'signum'      Name
');'          Punctuation
'\n    '      Text.Whitespace
'signum'      Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'overload'    Name
'(['          Punctuation
'\n      '    Text.Whitespace
"# Handle if the signum of a piecewise doesn't depend on which branch\n" Comment.Single

'      '      Text.Whitespace
'proc'        Keyword
'('           Punctuation
'a'           Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
'specfunc'    Name
'('           Punctuation
'piecewise'   Name.Builtin
')'           Punctuation
','           Operator
' '           Text.Whitespace
'$'           Operator
')'           Punctuation
'\n        '  Text.Whitespace
'option'      Keyword
' '
 Text.Whitespace
'overload'    Name
';'           Punctuation
'\n        '  Text.Whitespace
```

```
'local'       Keyword
' '           Text.Whitespace
'r'           Name
','           Operator
' '           Text.Whitespace
'i'           Name
';'           Punctuation
'\n        '  Text.Whitespace
'r'           Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'{'           Punctuation
'seq'         Name.Builtin
'('           Punctuation
'`if`'        Name
'('           Punctuation
'i'           Name
'::'          Operator
'even'        Name
' '           Text.Whitespace
'or'          Keyword
' '           Text.Whitespace
'i'           Name
'='           Operator
'nops'        Name.Builtin
'('           Punctuation
'a'           Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'signum'      Name
'('           Punctuation
'op'          Name.Builtin
'('           Punctuation
'i'           Name
','           Operator
'a'
      Name
'))'          Punctuation
','           Operator
' '           Text.Whitespace
'NULL'        Name
')'           Punctuation
','           Operator
'\n                ' Text.Whitespace
'i'           Name
'='           Operator
```

```
'1'          Literal.Number.Integer
'..'         Punctuation
'nops'       Name.Builtin
'('          Punctuation
'a'          Name
'))};'       Punctuation
'\n        '  Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'nops'       Name.Builtin
'('          Punctuation
'r'          Name
')'          Punctuation
'='          Operator
'1'          Literal.Number.Integer
' '          Text.Whitespace
'then'       Keyword
' '          Text.Whitespace
'return'     Keyword
' '          Text.Whitespace
'op'         Name.Builtin
'('          Punctuation
'r'          Name
')'          Punctuation
' '          Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n
        '  Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'not'        Keyword
' '          Text.Whitespace
'assigned'   Name.Builtin
'(_'         Punctuation
'Envsignum0'  Name
')'          Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n          ' Text.Whitespace
'r'          Name
' '          Text.Whitespace
':='         Operator
' '          Text.Whitespace
'r'          Name
' '          Text.Whitespace
```

```
'minus'       Keyword
' '           Text.Whitespace
'{'           Punctuation
'0'           Literal.Number.Integer
'};'          Punctuation
'\n          ' Text.Whitespace
'if'          Keyword
' '           Text.Whitespace
'nops'        Name.Builtin
'('           Punctuation
'r'           Name
')'           Punctuation
'='           Operator
'1'           Literal.Number.Integer
' '           Text.Whitespace
'then'        Keyword
' '           Text.Whitespace
'return'      Keyword
' '           Text.Whitespace
'op'          Name.Builtin
'('
          Punctuation
'r'           Name
')'           Punctuation
' '           Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n        '  Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
';'           Punctuation
'\n        '  Text.Whitespace
'error'       Keyword
' '           Text.Whitespace
'"invalid input: cannot signum %1"' Literal.String
','           Operator
' '           Text.Whitespace
'a'           Name
';'           Punctuation
'\n      '    Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'proc'        Keyword
','           Operator
'\n      '    Text.Whitespace
```

"# Handle if the signum of a sum doesn't depend on the bound variable\n" Comment.Single

' ' Text.Whitespace
'proc' Keyword
'(' Punctuation
'a' Name
' ' Text.Whitespace
'::' Operator
' ' Text.Whitespace
'And'
  Name
'(' Punctuation
'specfunc' Name
'({' Punctuation
'sum' Name
',' Operator
' ' Text.Whitespace
'Sum' Name
'})' Punctuation
',' Operator
' ' Text.Whitespace
'anyfunc' Name
'(' Punctuation
'anything' Name
',' Operator
' ' Text.Whitespace
'name' Name
'=' Operator
'range' Name
'))' Punctuation
',' Operator
' ' Text.Whitespace
'$' Operator
')' Punctuation
'\n ' Text.Whitespace
'option' Keyword
' ' Text.Whitespace
'overload' Name
';' Punctuation
'\n ' Text.Whitespace
'local' Keyword
' ' Text.Whitespace
'r' Name
';' Punctuation
'\n ' Text.Whitespace
'r' Name
' ' Text.Whitespace
':=' Operator

```
' '          Text.Whitespace
'signum'     Name
'('          Punctuation
'op'
         Name.Builtin
'('          Punctuation
'1'          Literal.Number.Integer
','          Operator
'a'          Name
'));'        Punctuation
'\n       '  Text.Whitespace
'if'         Keyword
' '          Text.Whitespace
'not'        Keyword
' '          Text.Whitespace
'depends'    Name
'('          Punctuation
'r'          Name
','          Operator
'op'         Name.Builtin
'(['         Punctuation
'2'          Literal.Number.Integer
','          Operator
'1'          Literal.Number.Integer
']'          Punctuation
','          Operator
'a'          Name
'))'         Punctuation
' '          Text.Whitespace
'then'       Keyword
'\n         ' Text.Whitespace
'return'     Keyword
' '          Text.Whitespace
'signum'     Name
'('          Punctuation
'op'         Name.Builtin
'(['         Punctuation
'2'          Literal.Number.Integer
','          Operator
'2'          Literal.Number.Integer
','          Operator
'2'          Literal.Number.Integer
']'
         Punctuation
','          Operator
'a'          Name
')'          Punctuation
'+'          Operator
```

```
'1'          Literal.Number.Integer
'-'          Operator
'op'         Name.Builtin
'(['         Punctuation
'2'          Literal.Number.Integer
','          Operator
'2'          Literal.Number.Integer
','          Operator
'1'          Literal.Number.Integer
']'          Punctuation
','          Operator
'a'          Name
'))'         Punctuation
' '          Text.Whitespace
'*'          Operator
' '          Text.Whitespace
'r'          Name
'\n       '  Text.Whitespace
'end'        Keyword
' '          Text.Whitespace
'if'         Keyword
';'          Punctuation
'\n       '  Text.Whitespace
'error'      Keyword
' '          Text.Whitespace
'"invalid input: cannot signum %1"' Literal.String
','          Operator
' '          Text.Whitespace
'a'          Name
';'          Punctuation
'\n     '    Text.Whitespace
'end'        Keyword
'
 '          Text.Whitespace
'proc'       Keyword
','          Operator
'\n     '    Text.Whitespace
'signum'     Name
']);'        Punctuation
'\n    '     Text.Whitespace
'protect'    Name
'('          Punctuation
'signum'     Name
');'         Punctuation
'\n\n    '   Text.Whitespace
'# Override sum to fail faster\n' Comment.Single

'    '       Text.Whitespace
```

```
'unprotect'   Name
'('           Punctuation
'sum'         Name
');'          Punctuation
'\n    '      Text.Whitespace
'sum'         Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'overload'    Name
'(['          Punctuation
'\n      '    Text.Whitespace
'proc'        Keyword
'('           Punctuation
'f'           Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
'Not'         Name
'({'          Punctuation
'`+`'         Name
','           Operator
'`+`'         Name
'^'           Operator
'integer'     Name
'})'          Punctuation
','
           Operator
'\n           ' Text.Whitespace
'k'           Name
' '           Text.Whitespace
'::'          Operator
' '           Text.Whitespace
'name'        Name
'='           Operator
'And'         Name
'('           Punctuation
'range'       Name
','           Operator
'Not'         Name
'('           Punctuation
'range'       Name
'('           Punctuation
'rational'    Name
')))'         Punctuation
','           Operator
' '           Text.Whitespace
'$'           Operator
```

```
')'          Punctuation
'\n        '  Text.Whitespace
'option'      Keyword
' '          Text.Whitespace
'overload'    Name
';'          Punctuation
'\n        '  Text.Whitespace
'if'          Keyword
' '          Text.Whitespace
'not'         Keyword
' '          Text.Whitespace
'('          Punctuation
'`-`'         Name
'('          Punctuation
'op'          Name.Builtin
'('          Punctuation
'rhs'         Name.Builtin
'('          Punctuation
'k'           Name
')))'
 Punctuation
' '          Text.Whitespace
'::'         Operator
' '          Text.Whitespace
'"'           Punctuation
'rational'    Name
'"'           Punctuation
')'          Punctuation
'\n          ' Text.Whitespace
'and'         Keyword
' '          Text.Whitespace
'not'         Keyword
' '          Text.Whitespace
'('          Punctuation
'subsindets'  Name.Builtin
'('          Punctuation
'f'          Name
','          Operator
' '          Text.Whitespace
'"'           Punctuation
'anything'    Name
'^'          Operator
'integer'     Name
'"'           Punctuation
','          Operator
' '          Text.Whitespace
'f'          Name
'->'         Operator
```

```
'op'          Name.Builtin
'('           Punctuation
'1'           Literal.Number.Integer
','           Operator
'f'           Name
'))'          Punctuation
'\n                   ' Text.Whitespace
'::'          Operator
' '           Text.Whitespace
'"'           Punctuation
'{'           Punctuation
'`+`'
      Name
','           Operator
'And'         Name
'('           Punctuation
'`*`'         Name
','           Operator
'Not'         Name
'('           Punctuation
'`*`'         Name
'('           Punctuation
'Not'         Name
'('           Punctuation
'`+`'         Name
'))))}'       Punctuation
'"'           Punctuation
')'           Punctuation
'\n           ' Text.Whitespace
'and'         Keyword
' '           Text.Whitespace
'depends'     Name
'('           Punctuation
'indets'      Name.Builtin
'('           Punctuation
'f'           Name
','           Operator
' '           Text.Whitespace
'"'           Punctuation
'{'           Punctuation
'specfunc'    Name
'('           Punctuation
'idx'         Name
')'           Punctuation
','           Operator
' '           Text.Whitespace
'specindex'   Name
'('           Punctuation
```

```
'idx'         Name
')}'          Punctuation
"""           Punctuation
')'           Punctuation
','           Operator
' '           Text.Whitespace
'op'
          Name.Builtin
'('           Punctuation
'1'           Literal.Number.Integer
','           Operator
'k'           Name
'))'          Punctuation
'\n       '   Text.Whitespace
'then'        Keyword
'\n          ' Text.Whitespace
"""           Punctuation
'procname'    Name
'(_'          Punctuation
'passed'      Name
')'           Punctuation
"""           Punctuation
'\n       '   Text.Whitespace
'else'        Keyword
'\n          ' Text.Whitespace
'error'       Keyword
' '           Text.Whitespace
'"invalid input: cannot fast-fail sum(%1, %2)"' Literal.String
','           Operator
' '           Text.Whitespace
'_passed'     Name
'\n       '   Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'if'          Keyword
'\n     '     Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'proc'        Keyword
','           Operator
'\n     '     Text.Whitespace
'sum'         Name
']);'         Punctuation
'\n    '      Text.Whitespace
'protect'     Name
'('
          Punctuation
'sum'         Name
```

```
');'          Punctuation
'\n\n    '    Text.Whitespace
':'           Operator
'-'           Operator
'`print/Ints`' Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'curry'       Name
'('           Punctuation
'thismodule'  Name
':'           Operator
'-'           Operator
'Print'       Name
','           Operator
'Ints'        Name
');'          Punctuation
'\n    '      Text.Whitespace
':'           Operator
'-'           Operator
'`print/Sums`' Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'curry'       Name
'('           Punctuation
'thismodule'  Name
':'           Operator
'-'           Operator
'Print'       Name
','           Operator
'Sums'        Name
');'          Punctuation
'\n    '      Text.Whitespace
':'           Operator
'-'           Operator
'`print/ints`' Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'curry'
      Name
'('           Punctuation
'thismodule'  Name
':'           Operator
'-'           Operator
'Print'       Name
','           Operator
```

```
'ints'        Name
');'          Punctuation
'\n    '      Text.Whitespace
':'           Operator
'-'           Operator
'`print/sums`' Name
' '           Text.Whitespace
':='          Operator
' '           Text.Whitespace
'curry'       Name
'('           Punctuation
'thismodule'  Name
':'           Operator
'-'           Operator
'Print'       Name
','           Operator
'sums'        Name
');'          Punctuation
'\n\n  '      Text.Whitespace
'end'         Keyword
' '           Text.Whitespace
'proc'        Keyword
';'           Punctuation
'\n  '        Text.Whitespace
'ModuleLoad'  Name
'()'          Punctuation
':'           Operator
'\n'          Text.Whitespace

'end'         Keyword
' '           Text.Whitespace
'module'      Keyword
';'           Punctuation
' '           Text.Whitespace
'# Loop\n'    Comment.Single
```

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1.4581 github.com/sigstore/protobuf-specs 0.4.3

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1.4585 go-git-go-git 5.16.2

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1.4586 go-crypto 1.3.0

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1.4587 go.mongodb.org-mongo-driver 1.17.4

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1.4594 kubernetes/metrics 0.33.2

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1.4595 k8s-io-client-go 0.33.2

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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
```

```
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
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package spec

import "testing"

func TestIntegrationLicense(t *testing.T) {
 license := License{Name: "the name", URL: "the url"}
 const licenseJSON = `{"name":"the name","url":"the url"}`
 const licenseYAML = "name: the name\nurl: the url\n"

 assertSerializeJSON(t, license, licenseJSON)
 assertParsesJSON(t, licenseJSON, license)
}
```

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1.4597 github.com/go-viper/mapstructure/v2 2.3.0

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1.4598 k8s-io-apimachinery 0.33.2

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1.4601 mapstructure 2.3.0

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package spec

// License information for the exposed API.
//
// For more information: http://goo.gl/8us55a#licenseObject
type License struct {
 Name string `json:"name,omitempty"`
 URL  string `json:"url,omitempty"`
}
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// limitations under the License.

package spec

import "testing"

func TestIntegrationLicense(t *testing.T) {
 license := License{Name: "the name", URL: "the url"}
 const licenseJSON = `{"name":"the name","url":"the url"}`
 const licenseYAML = "name: the name\nurl: the url\n"

 assertSerializeJSON(t, license, licenseJSON)
 assertParsesJSON(t, licenseJSON, license)
}
```

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1.4603 kubernetes-apimachinery 0.33.2

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1.4604 google-api-go-client 0.238.0

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1.4605 expr 0.24.0

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1.4606 otel-exporters-otlp-otlptrace-otlptracegrpc 1.36.0

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